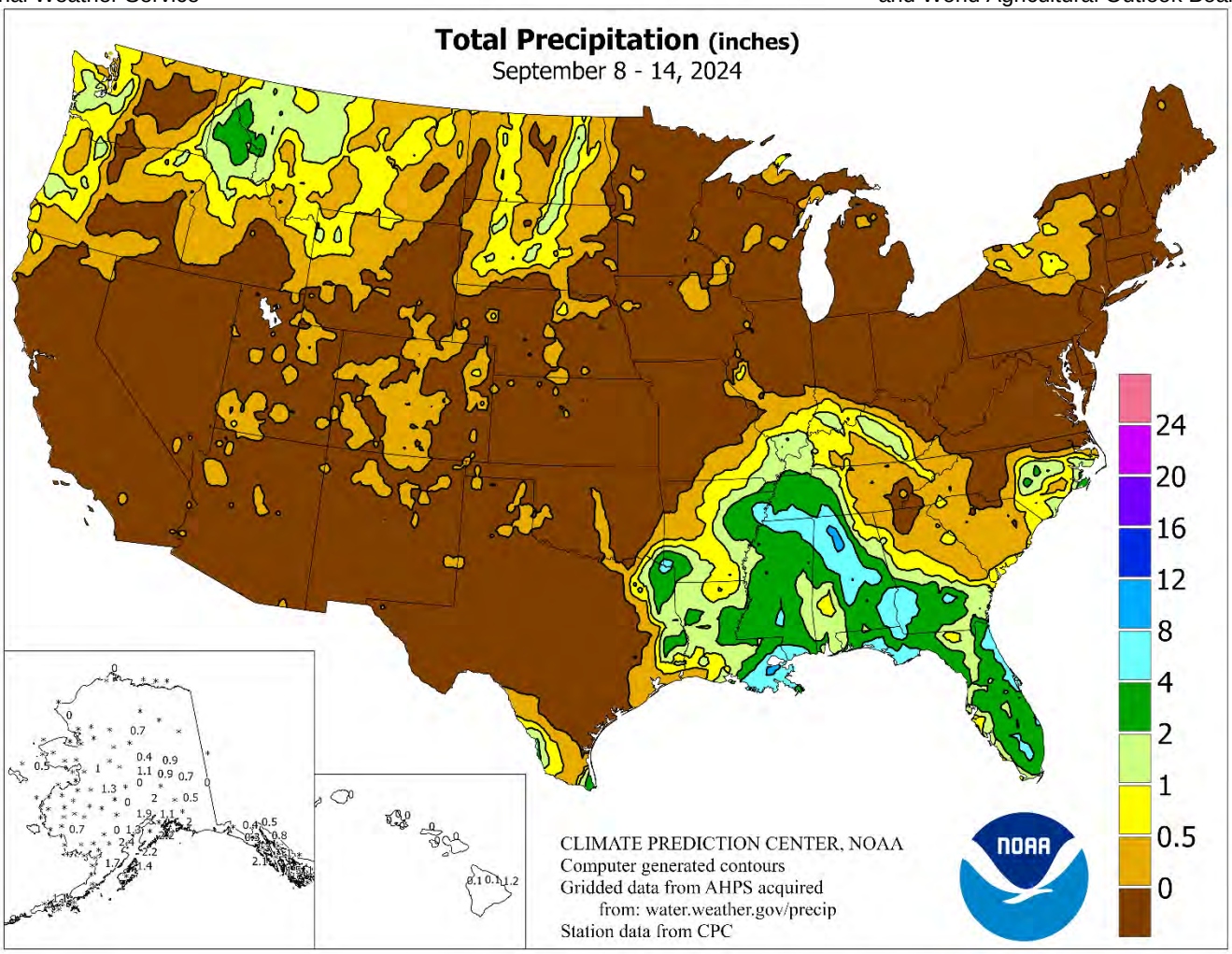
Volume 111, No. 38 www.usda.gov/oce/weather-drought-monitor September 17, 2024

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

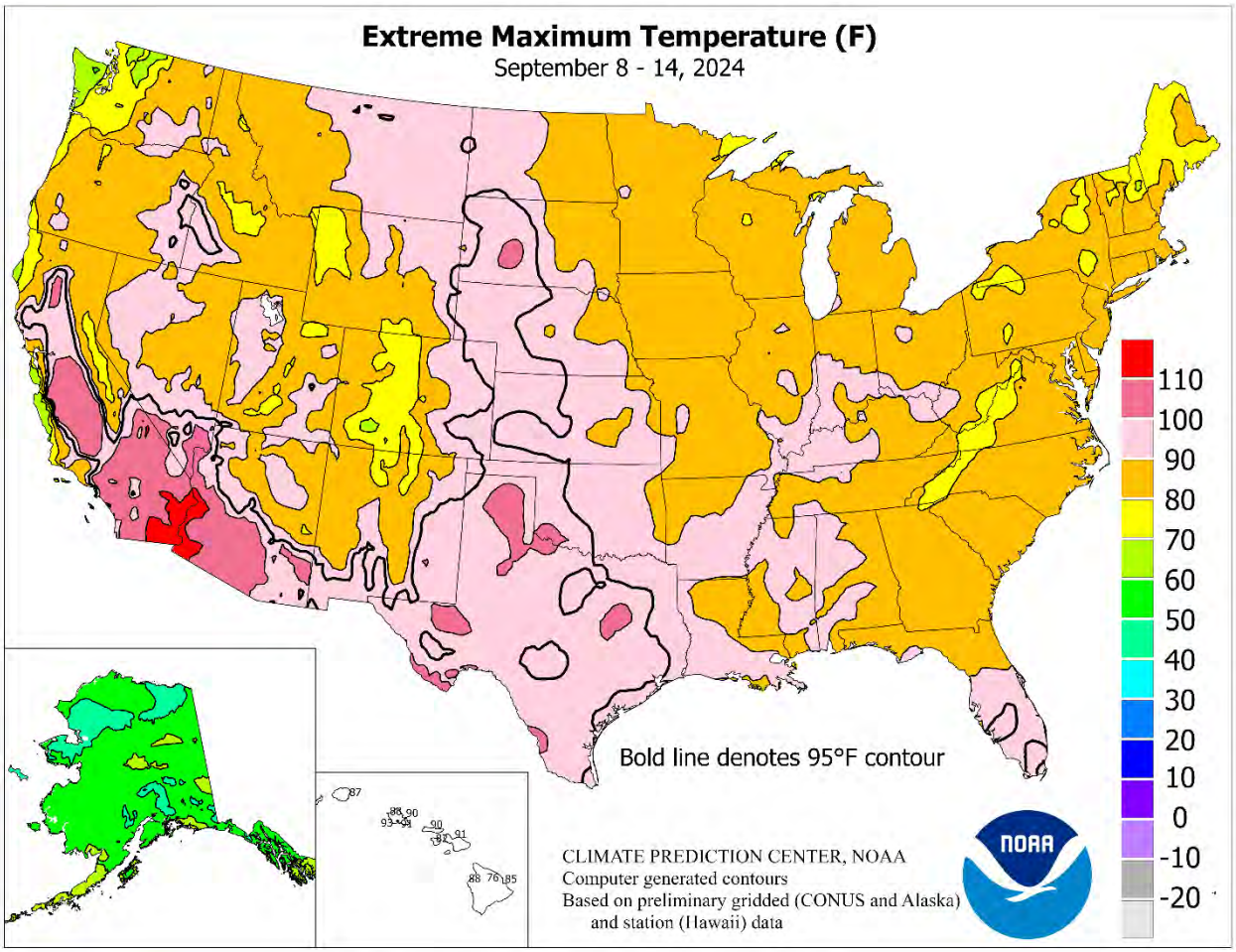
September 8 – 14, 2024

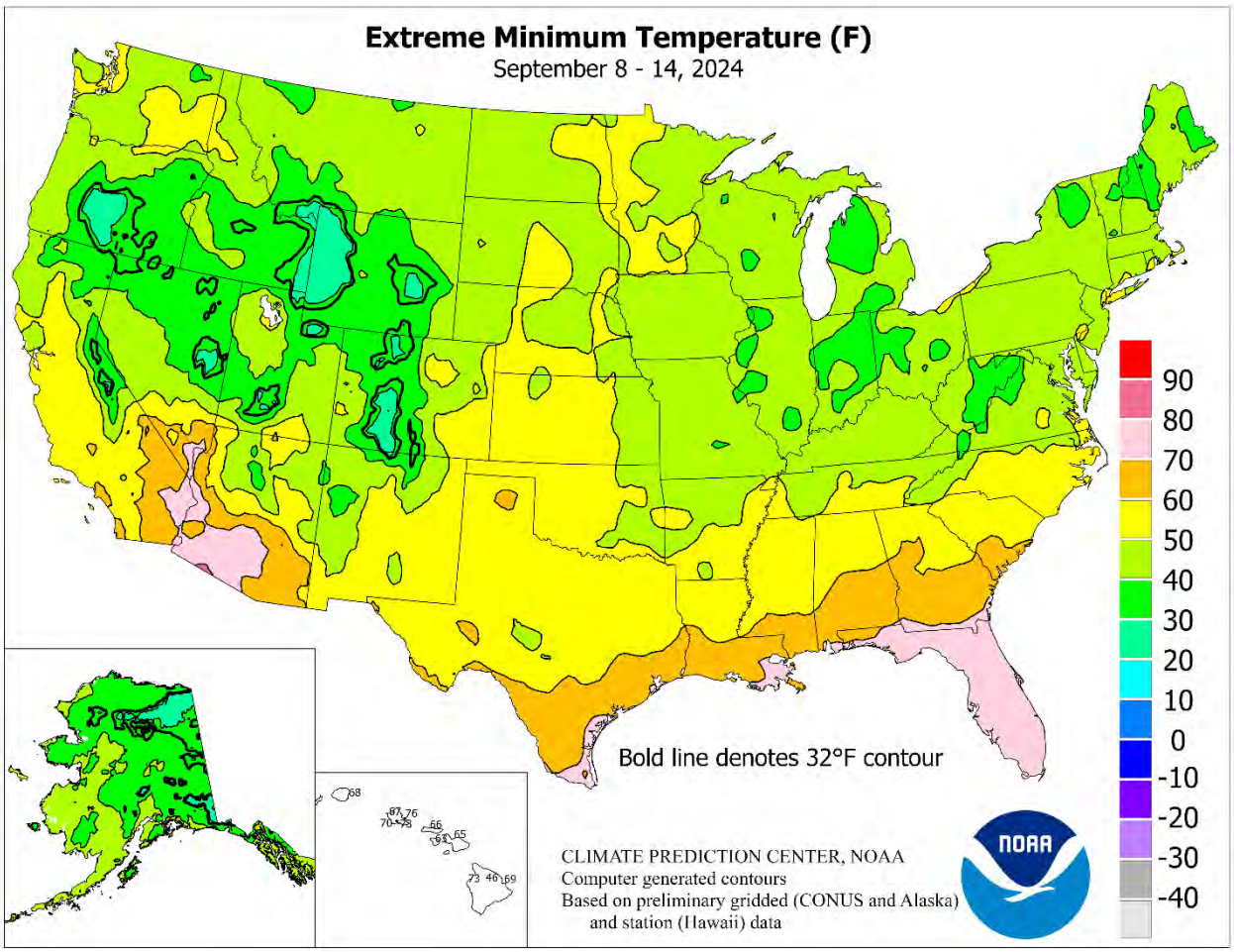
Highlights provided by USDA/WAOB

On September 11, Francine became the third and strongest hurricane of the season to strike the **U.S. Gulf Coast**, following Beryl (in **Texas**) in early July and Debby (in **Florida**) in early August. Francine briefly achieved sustained winds near 100 mph while making landfall around 5 pm CDT in **Louisiana's Terrebonne Parish**. Hurricane-force wind gusts (74 mph or higher) spread as far inland as **New Orleans**, where a gust to 78 mph was clocked at **Louis Armstrong International Airport**. **Louisiana's** sugarcane producers assessed wind- and rain-

(Continued on page 3)

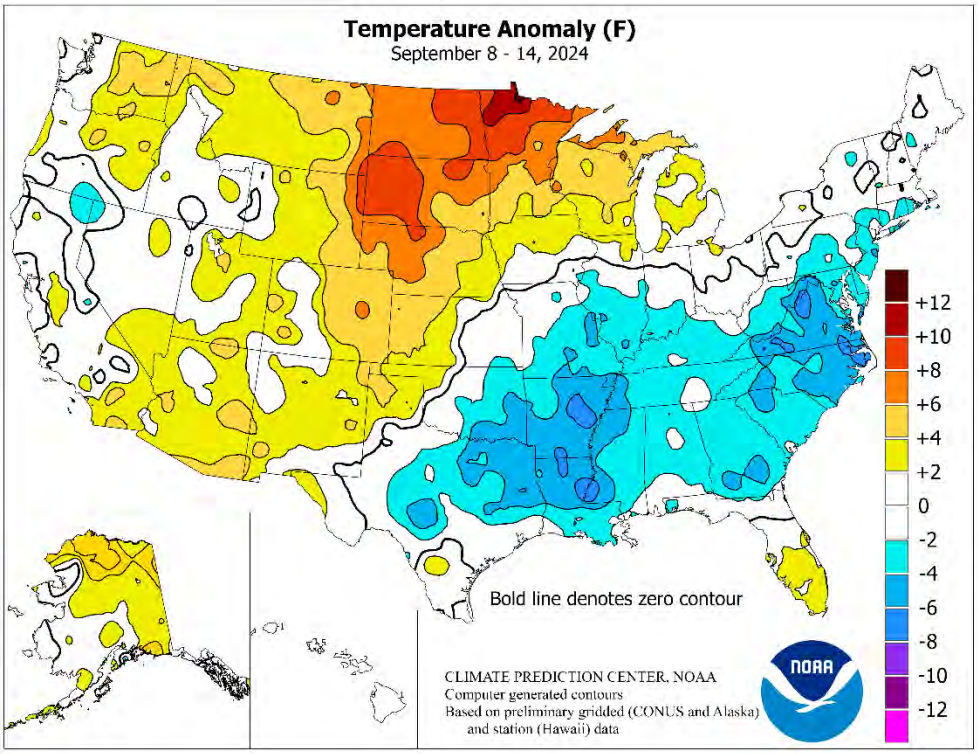
Contents


Extreme Maximum Temperature (F)
September 8 - 14, 2024
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
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 8 - 14, 2024
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
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

(Continued from front cover)

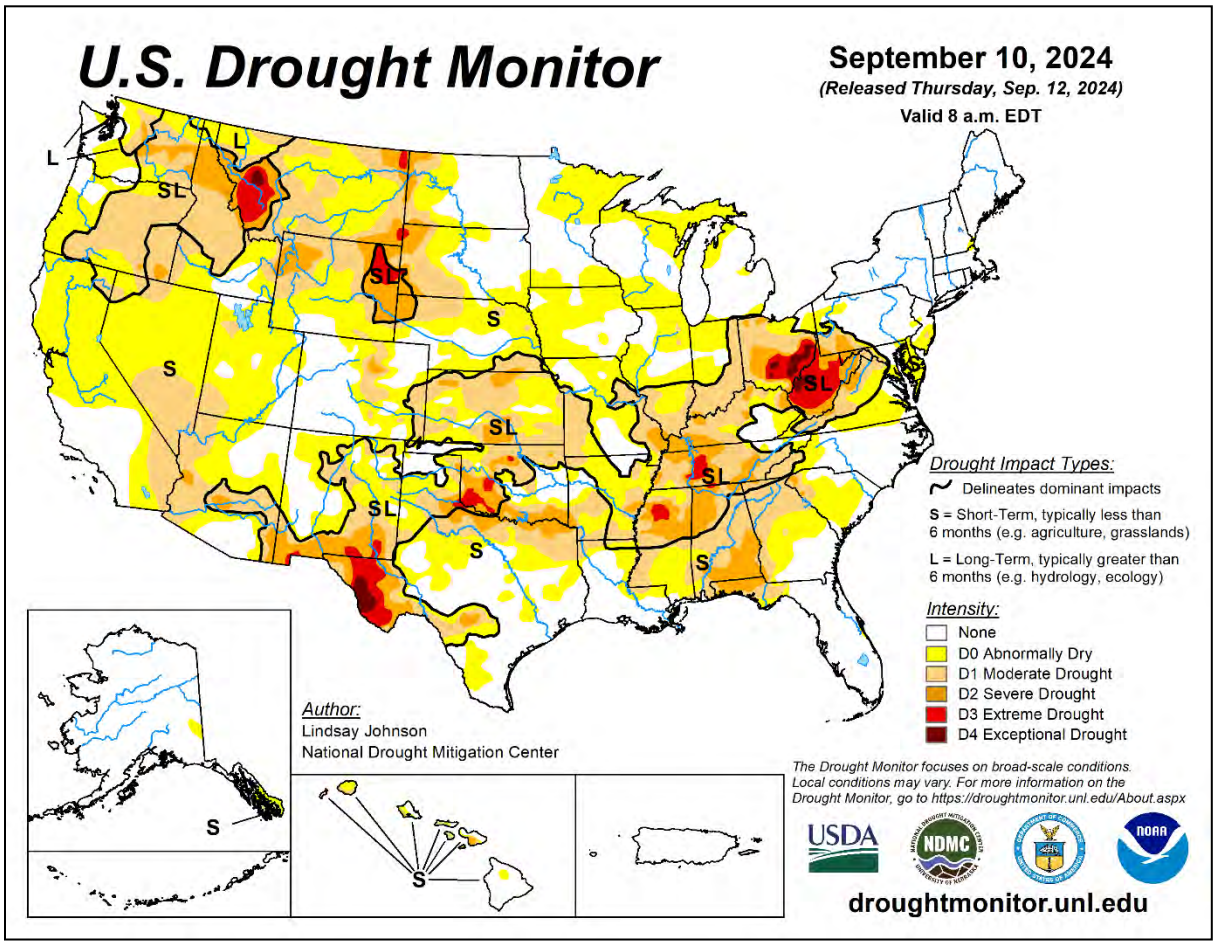
related impacts, including flooded fields (from as much as 8 to 12 inches of rain) and lodging of the crop. Meanwhile in the **Mississippi Delta**, antecedent dryness minimized flooding, although localized wind gusts briefly topped 50 mph. Still, spotty rainfall totals of 4 to 6 inches and squally winds led to crop-quality concerns and fieldwork disruptions. As the former hurricane drifted farther inland over the **mid-South**, cloudy, rainy weather led to harvest delays for crops such as rice and soybeans. Much of the remainder of the country experienced dry weather, favoring summer crop maturation and harvesting, as well as winter wheat planting. However, soil moisture shortages were a concern across parts of the **Plains**, **Midwest**, and **Northwest** with respect to germination and proper establishment of winter grains and cover crops. In the **western U.S.**, a cooling trend was accompanied by a few showers, which became more widespread late in the week as a cold front began to entrain moisture associated with former **Eastern Pacific** Tropical Storm Ileana. As the **Western** heat wave subsided, late-season warmth replaced previously cool conditions across the **Plains**, **Midwest**, and **Northeast**. Weekly temperatures averaged more than 5°F above normal from the **northwestern half of the Plains into the upper Great Lakes region**, with parts of **northern Minnesota** averaging more than 10°F above normal. In contrast, temperatures averaged at least 5°F below normal across portions of the **South**, **East**, and **lower Midwest**. Hot, humid weather lingered, however, across **southern Florida**.

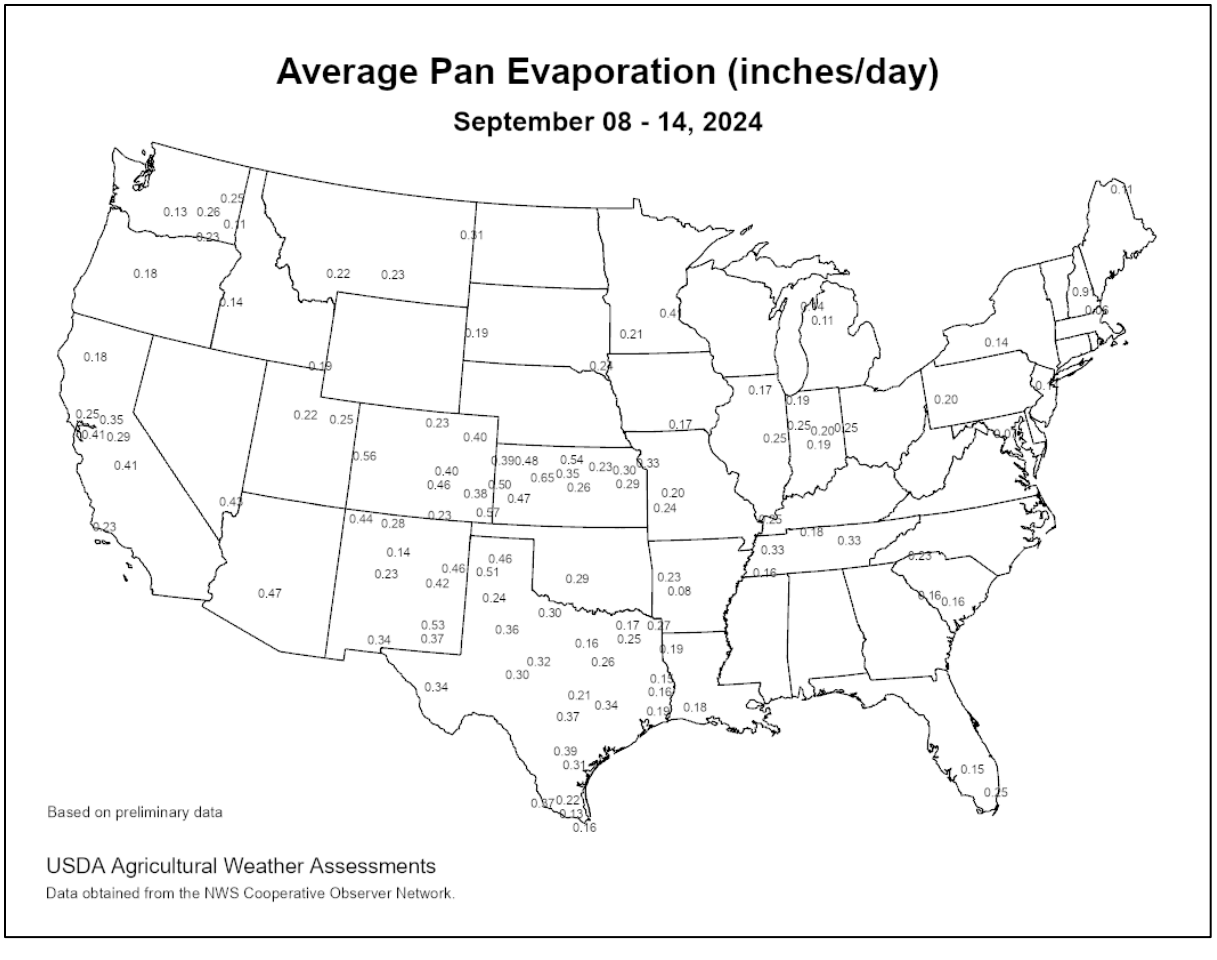


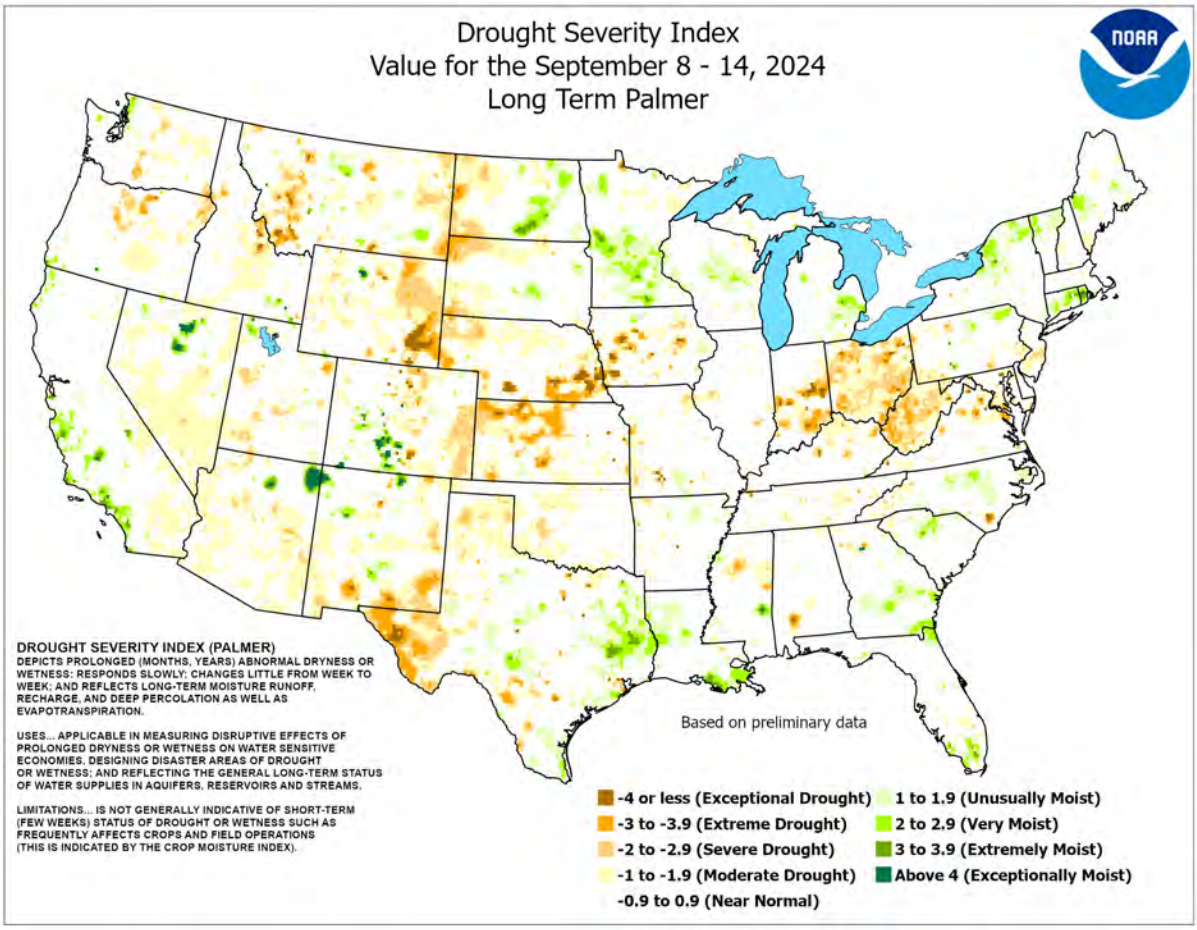
Long Beach, CA, achieved five consecutive triple-digit readings (103, 109, 101, 106, and 100°F) from September 5-9, setting a station record (previously, 4 days in a row from June 9-12, 1979, and three earlier occasions). On September 8, daily-record highs soared to 111°F in **Woodland Hills, CA**, and 110°F in **Phoenix, AZ**, and **Riverside, CA**. In fact, high temperatures in **Phoenix** reached 110°F or higher each day from September 4-10, boosting record-shattering tally of 110-degree readings so far this year to 61 days (previously, 55 days in 2023). On the September 9, the final day of extreme heat in **California**, daily-record highs included 108°F in **Hanford** and 105°F in **downtown Los Angeles**. Meanwhile, daily-record highs in **Florida** included 97°F (on September 9) in **Punta Gorda**; 96°F (on September 13) in **West Palm Beach**; and 95°F (on September 14) in **Fort Myers**. During the mid- to late-week period, heat appeared on the **Plains** and spread eastward. **Rapid City, SD**, posted a daily-record high (97°F) for September 11. Two days later in **Texas**, record-setting highs for September 13 included 102°F in **Borger** and 101°F in **Amarillo**. For **Amarillo**, it was the latest triple-digit reading on record, supplanting 101°F on September 11, 1910. Both **Borger** (101°F) and **Amarillo** (100°F) logged triple-digit, daily-record highs again on September 14. Meanwhile in **Michigan**, **Pellston** (85°F) posted a daily-record high for September 14, just 6 days after **Kalamazoo** (40°F) collected a daily-record low. Other record-setting lows for September 8 included 38°F in **New Philadelphia, OH**; 41°F in **Ottumwa, IA**; and 42°F in **Vichy-Rolla, MO**. Daily-record minima for September 9 dipped to 35°F in **Elkins, WV**, and 40°F in **Lincoln, IL**. Elsewhere in **West Virginia**, **Parkersburg** opened the week with consecutive daily-record lows of 42°F on September 8-9.

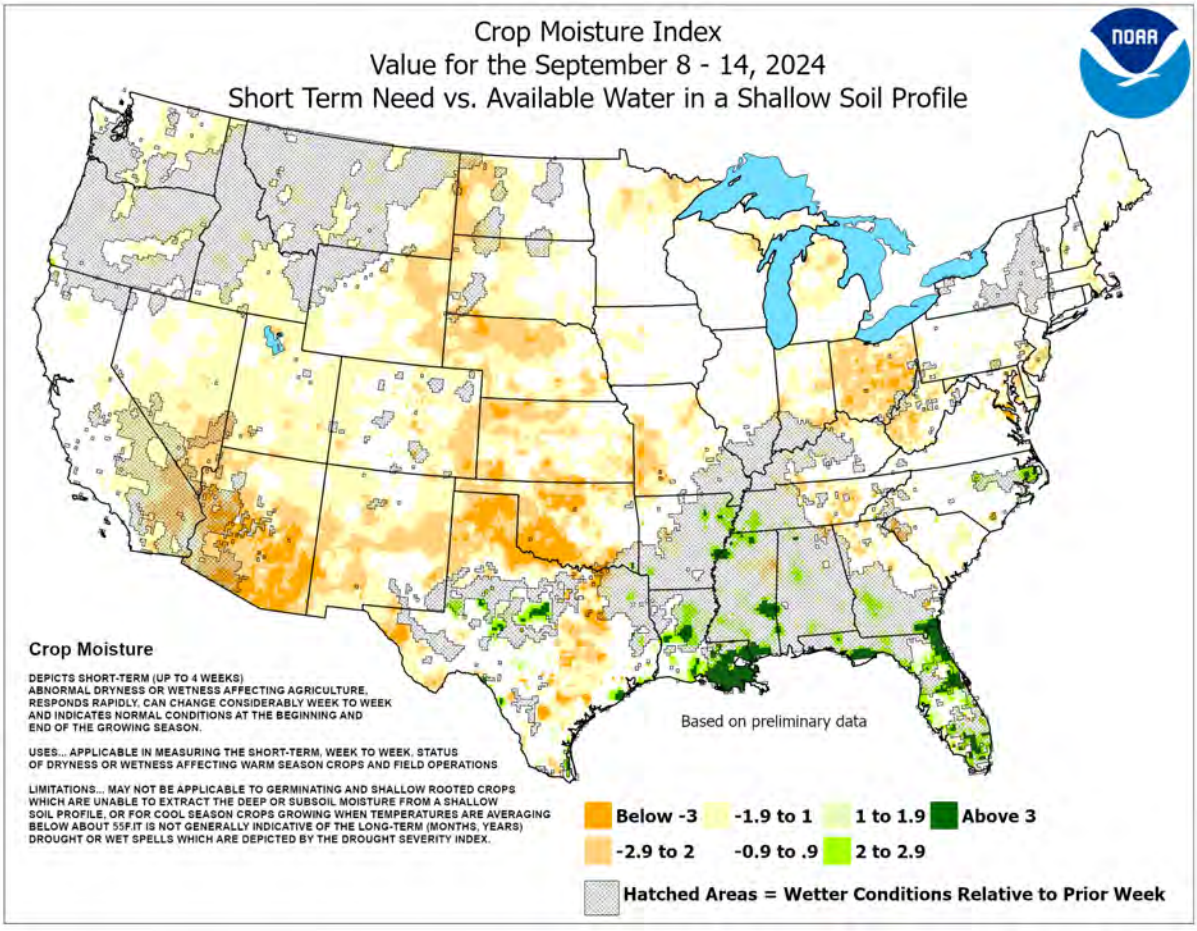
Precipitation highlights were scarce until Hurricane Francine arrived along the **Gulf Coast**. On September 11, daily-record totals included 7.33 inches in **New Orleans, LA**, and 4.14 inches in **Gulfport, MS**. For **New Orleans**, it was the second-wettest September day on record, behind only 7.52 inches on September 25, 2002. Peak wind gusts on September 12 associated with Francine's squalls were clocked to 57 mph in **Memphis, TN**; 51 mph in **Huntsville, AL**; and 50 mph in **Jonesboro, AR**. On September 12, **Apalachicola, FL**, received a daily-record sum of 6.29 inches, helping to boost the 3-day (September 11-13) total to 12.77 inches. Elsewhere on the 12th, daily-record totals reached 4.22 inches in **Memphis, TN**; 3.95 inches in **Jonesboro, AR**; and 3.05 inches in **Tupelo, MS**. By September 13, rain loosely associated with the remnants of Francine spread as far east as **Georgia**, where **Columbus** collected a daily-record total of 3.22 inches. In **Alabama**, daily-record amounts for September 14 totaled 4.72 inches in **Muscle Shoals** and 3.63 inches in **Birmingham**. Meanwhile, heavy showers developed along the **middle Atlantic Coast**, where **Cape Hatteras, NC**, netted a daily-record sum (4.59 inches) for September 13. Farther west, a pattern-changing cold front delivered some **Northwestern** moisture, including high-elevation snow, with daily-record totals for September 11 being set in locations such as **Olympia, WA** (0.93 inch); **Roseburg, OR** (0.54 inch); and **Alturas, CA** (0.35 inch). Late in the week, cooler, more humid weather aided wildfire containment efforts in **southern California**, where the Bridge, Line, and Airport Fires collectively burned more than 115,000 acres of vegetation during the first half of September.

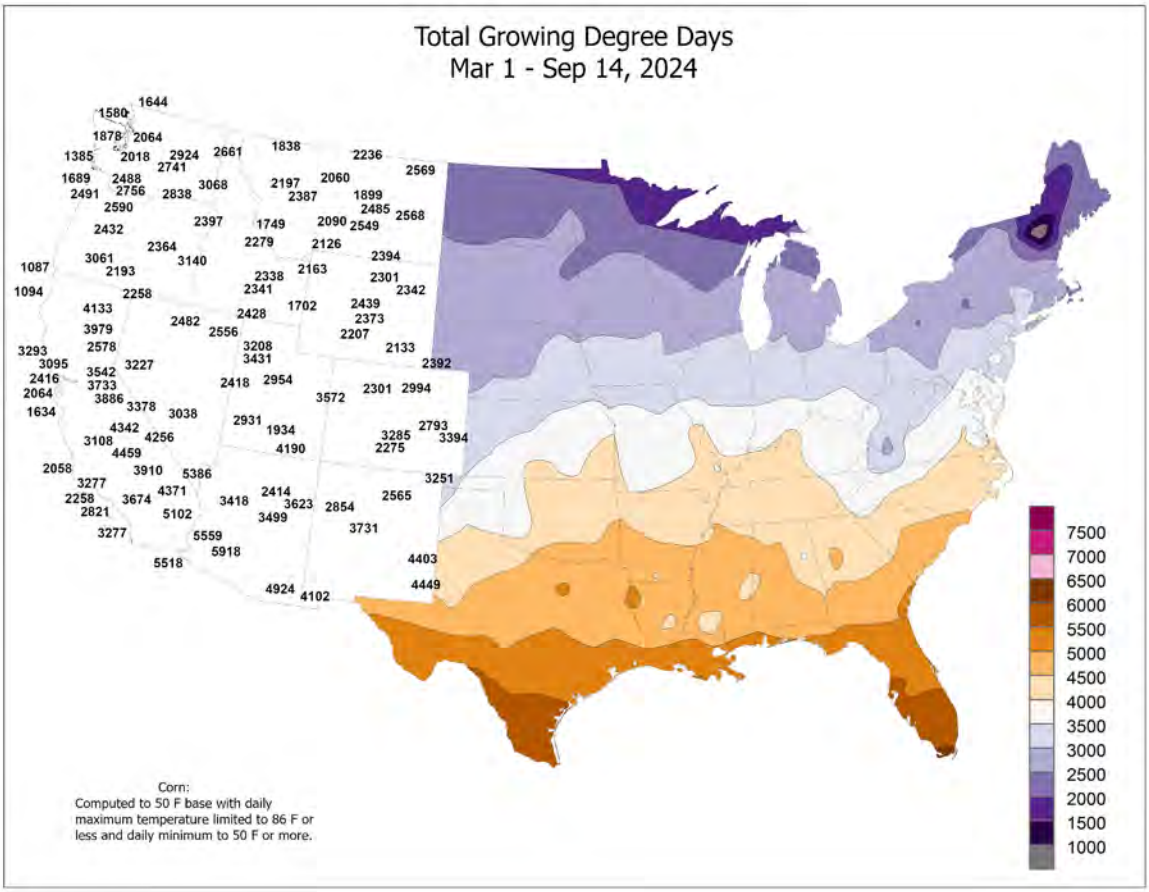
Near- or above-normal temperatures dominated **Alaska**. In the **Aleutians**, **Cold Bay** posted a daily-record high of 65°F on September 14. The warmth also came with some precipitation, as **Bethel** received a daily-record sum of 0.62 inch on the 14th. During the first half of September, precipitation totaled 2.69 inches in **Anchorage**, 2.05 inches in **King Salmon**, and 2.04 inches in **McGrath**. Farther south, very warm, mostly dry weather prevailed in **Hawaii**. September 1-14 rainfall at the state's major airport observation sites ranged from a trace in **Honolulu, Oahu**, and **Kahului, Maui**, to 2.30 inches (55 percent of normal) in **Hilo**, on the **Big Island**.

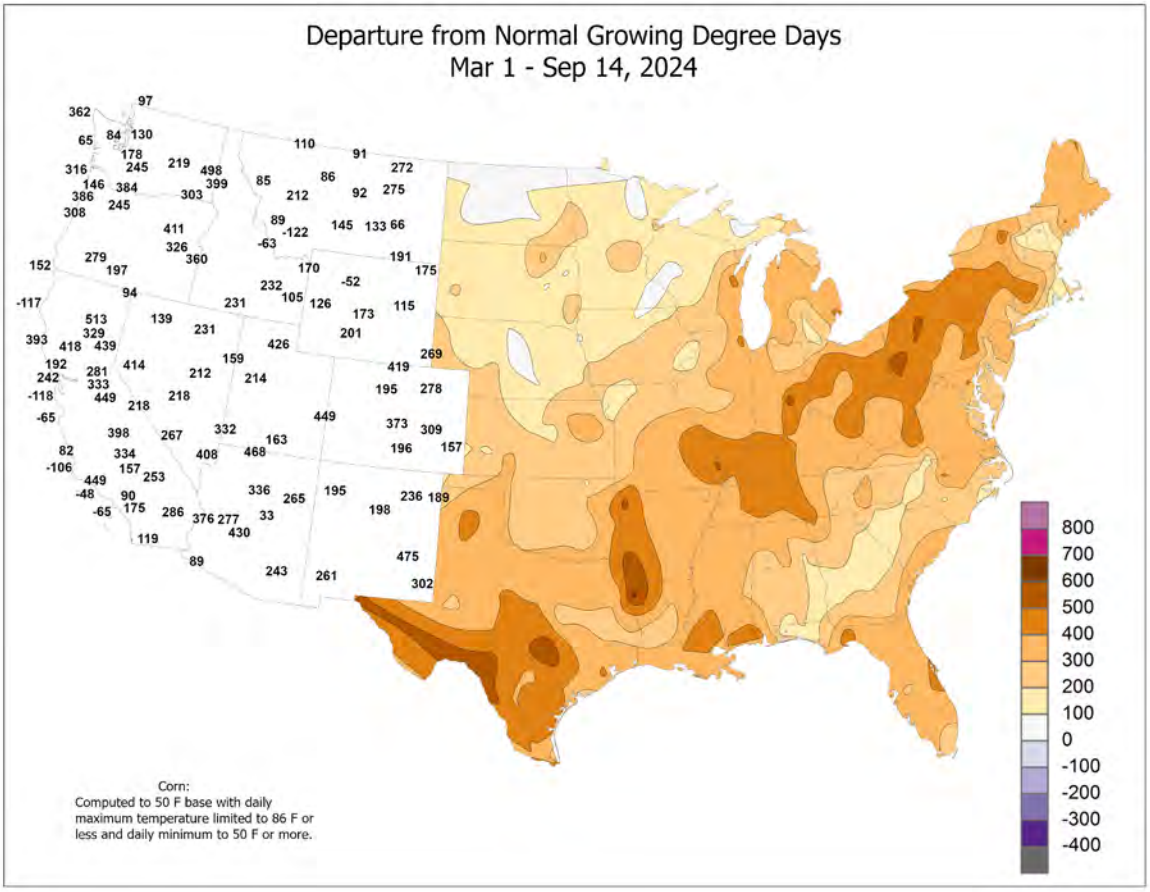

U.S. Drought Monitor
September 10, 2024
(Released Thursday, Sep. 12, 2024)
Valid 8 a.m. EDT
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
Lindsay Johnson
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

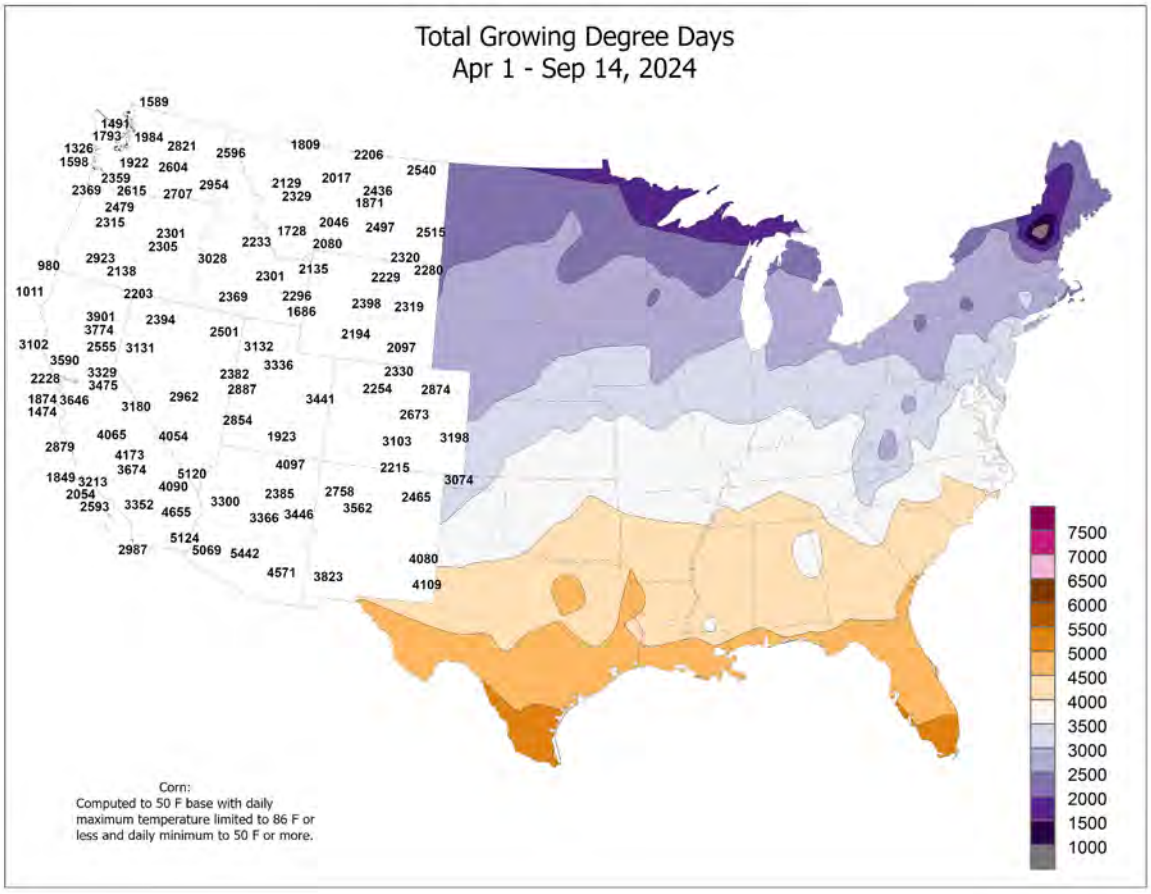

Average Pan Evaporation (inches/day)
September 08 - 14, 2024
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.

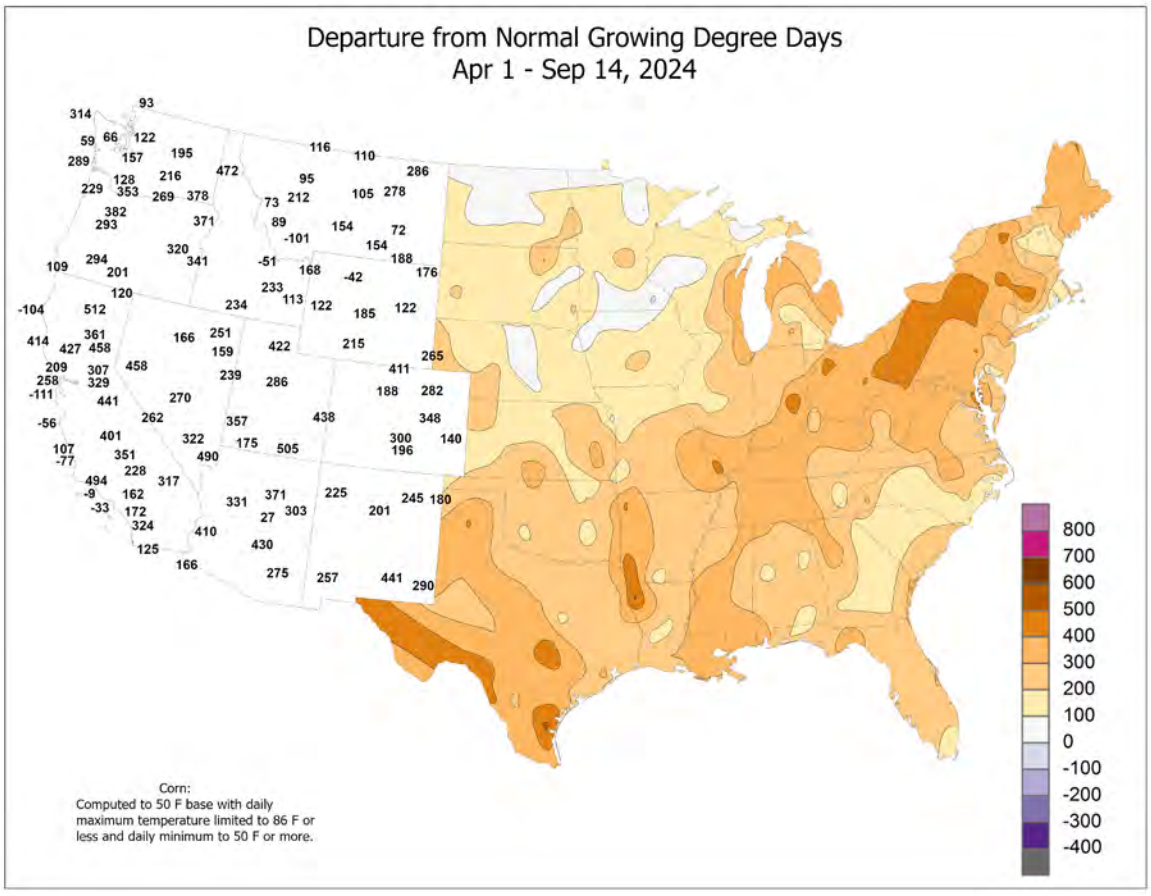

Drought Severity Index
Value for the September 8 - 14, 2024
Long Term Palmer
NOAA
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
-4 or less (Exceptional Drought)
-3 to -3.9 (Extreme Drought)
-2 to -2.9 (Severe Drought)
-1 to -1.9 (Moderate Drought)
-0.9 to 0.9 (Near Normal)
1 to 1.9 (Unusually Moist)
2 to 2.9 (Very Moist)
3 to 3.9 (Extremely Moist)
Above 4 (Exceptionally Moist)


Crop Moisture Index
Value for the September 8 - 14, 2024
Short Term Need vs. Available Water in a Shallow Soil Profile
NOAA
Crop Moisture
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
Below -3
-2.9 to 2
-1.9 to 1
-0.9 to .9
1 to 1.9
2 to 2.9
Above 3
Hatched Areas = Wetter Conditions Relative to Prior Week


Total Growing Degree Days
Mar 1 - Sep 14, 2024
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.


Departure from Normal Growing Degree Days
Mar 1 - Sep 14, 2024
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.


Total Growing Degree Days
Apr 1 - Sep 14, 2024
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000


Departure from Normal Growing Degree Days
Apr 1 - Sep 14, 2024
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400

National Weather Data for Selected Cities

Weather Data for the Week Ending September 14, 2024

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	55	50	58	48	53	2	2.28	1.55	1.03	2.90	199	17.21	161	93	75	0	0	6	1
	BARROW	46	38	54	36	42	0	0.00	-0.19	0.00	0.00	0	0.02	0	93	81	0	0	0	0
	FAIRBANKS	56	45	60	42	51	3	0.93	0.59	0.28	1.10	158	12.19	135	93	68	0	0	5	0
	JUNEAU	57	45	60	38	51	0	0.84	-1.31	0.61	3.52	85	50.33	124	98	72	0	0	3	1
	KODIAK	58	47	62	41	52	0	1.44	-0.27	0.77	3.85	121	57.29	115	95	74	0	0	6	1
	NOME	49	42	52	37	45	0	0.54	0.00	0.23	1.39	123	21.41	178	98	83	0	0	5	0
AL	BIRMINGHAM	84	67	91	56	75	-2	4.33	3.32	3.63	4.76	242	40.94	96	80	50	1	0	4	1
	HUNTSVILLE	85	63	91	55	74	-2	2.35	1.49	1.61	2.56	160	43.28	111	88	44	2	0	3	1
	MOBILE	86	71	91	69	78	-1	1.89	0.61	0.88	2.94	114	51.21	101	90	62	3	0	4	2
	MONTGOMERY	84	69	91	64	76	-3	2.03	1.16	0.96	2.82	160	42.41	112	93	59	1	0	4	2
AR	FORT SMITH	85	61	89	52	73	-4	0.59	-0.40	0.59	0.72	37	39.19	116	90	43	0	0	1	1
	LITTLE ROCK	83	63	92	55	73	-3	1.20	0.45	0.93	1.47	101	45.72	131	82	40	1	0	3	1
AZ	FLAGSTAFF	79	43	83	39	61	1	0.02	-0.44	0.02	0.09	8	16.30	110	67	19	0	0	1	0
	PHOENIX	109	83	110	78	96	5	0.00	-0.14	0.00	0.00	0	4.43	86	23	7	7	0	0	0
	PRESCOTT	88	58	91	52	73	2	0.00	-0.32	0.00	0.27	36	9.97	101	54	14	3	0	0	0
	TUCSON	101	74	104	68	88	4	0.00	-0.34	0.00	0.00	0	12.87	163	34	13	7	0	0	0
CA	BAKERSFIELD	95	67	107	62	81	1	0.00	-0.01	0.00	0.00	0	5.40	120	53	20	4	0	0	0
	EUREKA	62	51	67	47	56	-1	0.08	-0.04	0.08	0.08	37	31.37	126	100	81	0	0	1	0
	FRESNO	95	66	105	61	81	2	0.00	0.00	0.00	0.00	0	9.06	116	63	18	5	0	0	0
	LOS ANGELES	79	66	91	62	72	2	0.00	-0.02	0.00	0.00	0	15.37	176	87	52	1	0	0	0
	REDDING	94	62	101	58	78	1	0.00	-0.09	0.00	0.00	0	20.98	96	54	15	5	0	0	0
	SACRAMENTO	90	58	98	54	74	1	0.00	-0.02	0.00	0.00	0	12.00	97	79	22	4	0	0	0
	SAN DIEGO	80	70	94	67	75	3	0.00	-0.02	0.00	0.00	0	10.89	159	79	52	2	0	0	0
	SAN FRANCISCO	69	52	72	51	61	-5	0.00	-0.01	0.00	0.00	0	14.41	113	98	62	0	0	0	0
	STOCKTON	93	60	101	57	76	1	0.00	-0.01	0.00	0.00	0	10.69	119	77	22	4	0	0	0
CO	ALAMOSA	80	37	81	32	58	1	0.11	-0.14	0.11	0.37	71	8.08	145	88	17	0	2	1	0
	CO SPRINGS	85	55	87	50	70	5	0.00	-0.34	0.00	0.51	66	15.91	113	62	16	0	0	0	0
	DENVER INTL	89	57	93	52	73	6	0.00	-0.31	0.00	0.30	49	12.38	105	55	13	4	0	0	0
	GRAND JUNCTION	89	60	92	53	74	5	0.00	-0.28	0.00	0.00	0	6.56	105	38	13	4	0	0	0
	PUEBLO	92	56	95	50	74	5	0.00	-0.15	0.00	0.26	75	11.83	115	60	14	6	0	0	0
CT	BRIDGEPORT	76	56	80	53	66	-3	0.00	-0.90	0.00	0.41	23	38.54	124	87	43	0	0	0	0
	HARTFORD	81	53	88	49	67	0	0.00	-0.97	0.00	0.31	16	40.60	124	87	36	0	0	0	0
DC	WASHINGTON	83	62	87	56	73	-2	0.00	-0.92	0.00	0.02	1	28.18	94	79	35	0	0	0	0
DE	WILMINGTON	80	54	86	48	67	-3	0.00	-1.00	0.00	0.01	0	37.82	116	94	37	0	0	0	0
FL	DAYTONA BEACH	87	76	92	75	82	1	7.09	5.40	3.53	13.35	403	45.39	120	100	77	1	0	6	4
	JACKSONVILLE	83	74	87	72	79	-1	8.75	7.03	4.91	10.73	306	59.46	146	96	77	0	0	6	3
	KEY WEST	91	85	94	82	88	3	0.00	-1.66	0.00	0.00	0	37.65	140	91	69	6	0	0	0
	MIAMI	92	79	95	77	85	2	1.98	-0.36	0.87	6.27	130	58.78	121	92	64	6	0	5	2
	ORLANDO	89	75	91	73	82	1	0.02	-1.57	0.02	0.26	8	33.85	83	100	65	1	0	1	0
	PENSACOLA	83	72	88	70	78	-3	3.44	1.84	2.48	5.69	181	50.50	100	93	64	0	0	5	1
	TALLAHASSEE	84	75	90	74	80	-1	3.45	2.25	1.74	4.72	187	54.06	117	92	69	1	0	4	3
	TAMPA	91	78	94	77	85	1	0.94	-0.63	0.50	10.82	328	63.47	156	94	62	6	0	5	1
	WEST PALM BEACH	91	78	93	76	85	3	3.77	1.90	1.81	8.65	219	52.71	117	97	62	6	0	5	3
GA	ATHENS	80	63	86	58	71	-4	0.31	-0.54	0.25	0.60	35	42.19	119	87	52	0	0	2	0
	ATLANTA	79	67	86	64	73	-3	0.45	-0.46	0.19	1.40	78	46.93	127	85	55	0	0	4	0
	AUGUSTA	83	64	87	56	73	-4	0.33	-0.52	0.19	0.85	50	33.87	101	91	49	0	0	2	0
	COLUMBUS	81	69	89	66	75	-4	5.13	4.37	3.30	5.53	363	45.10	137	92	63	0	0	4	3
	MACON	81	66	88	59	74	-4	0.95	0.07	0.71	1.16	66	34.95	101	98	61	0	0	2	1
	SAVANNAH	82	70	86	66	76	-3	0.97	-0.05	0.76	2.55	117	46.96	127	91	65	0	0	3	1
HI	HILO	83	71	85	69	77	1	1.21	-0.74	0.52	2.30	55	68.76	86	98	67	0	0	5	1
	HONOLULU	88	75	91	73	82	0	0.00	-0.20	0.00	0.00	0	9.87	97	78	47	2	0	0	0
	KAHULUI	89	70	91	65	79	-2	0.00	-0.10	0.00	0.00	0	9.97	93	87	53	3	0	0	0
	LIHUE	86	73	87	68	79	-1	0.04	-0.40	0.03	0.12	12	26.26	113	88	62	0	0	2	0
IA	BURLINGTON	81	53	87	41	67	-1	0.00	-0.83	0.00	0.00	0	29.48	102	93	41	0	0	0	0
	CEDAR RAPIDS	81	54	85	41	67	2	0.00	-0.82	0.00	0.00	0	27.11	97	93	44	0	0	0	0
	DES MOINES	83	60	87	52	71	3	0.00	-0.77	0.00	0.00	0	32.58	113	77	39	0	0	0	0
	DUBUQUE	80	53	84	41	67	2	0.00	-0.90	0.00	0.04	2	28.30	96	89	44	0	0	0	0
	SIOUX CITY	85	54	88	46	70	4	0.00	-0.67	0.00	0.00	0	28.21	120	92	38	0	0	0	0
	WATERLOO	84	55	88	44	70	3	0.09	-0.66	0.09	0.09	5	32.83	114	86	37	0	0	1	0
ID	BOISE	83	58	98	48	71	3	0.12	0.03	0.08	0.12	75	10.55	136	56	22	3	0	3	0
	LEWISTON	82	61	95	57	71	3	0.80	0.68	0.50	0.80	313	7.52	82	65	21	1	0	2	0
	POCATELLO	80	46	90	35	63	2	0.00	-0.20	0.00	0.05	12	10.29	124	77	20	1	0	0	0
IL	CHICAGO/O_HARE	83	60	88	49	71	3	0.00	-0.72	0.00	0.04	2	27.76	98	75	35	0	0	0	0
	MOLINE	83	51	90	42	67	-1	0.00	-0.80	0.00	0.00	0	27.69	93	92	40	1	0	0	0
	PEORIA	82	55	90	45	69	-1	0.00	-0.86	0.00	0.04	2	26.19	94	90	37	1	0	0	0
	ROCKFORD	83	53	89	40	68	2	0.00	-0.87	0.00	0.00	0	29.67	103	93	37	0	0	0	0
	SPRINGFIELD	82	51	89	40	66	-4	0.00	-0.71	0.00	0.00	0	22.20	79	97	38	0	0	0	0
IN	EVANSVILLE	85	56	91	46	71	-1	0.59	-0.22	0.36	0.59	39	32.06	91	86	30	2	0	2	0
	FORT WAYNE	84	52	89	40	68	1	0.00	-0.70	0.00	0.50	34	28.56	96	92	34	0	0	0	0
	INDIANAPOLIS	83	57	90	45	70	1	0.00	-0.77	0.00	0.10	6	33.24	102	79	30	1	0	0	0
	SOUTH BEND	83	54	89	43	69	3	0.00	-0.80	0.00	0.00	0	30.81	107	85	34	0	0	0	0
KS	CONCORDIA	88	57	93	51	72	2	0.00	-0.66	0.00	0.00	0	17.76	79	80	31	3	0	0	0
	DODGE CITY	91	61	93	56	76	4	0.00	-0.31	0.00	0.10	14	23.02	130	70	27	6	0	0	0
	GOODLAND	92	56	97	51	74	7	0.00	-0.34	0.00	0.01	1	11.16	71	36	12	6	0	0	0
	TOPEKA	87	55	92	48	71	0	0.00	-0.85	0.00	0.00	0	18.65	65	86	32	2	0	0	0

Based on 1991-2020 normals

***** Not Available**

Weather Data for the Week Ending September 14, 2024

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	89	57	91	53	73	-1	0.00	-0.69	0.00	0.00	0	22.31	81	80	30	3	0	0	0
KY	LEXINGTON	83	55	90	45	69	-2	0.61	-0.21	0.61	0.81	52	33.24	90	85	37	1	0	1	1
	LOUISVILLE	85	60	92	50	73	-1	1.44	0.56	1.44	1.52	95	33.99	96	76	30	3	0	1	1
	PADUCAH	83	56	93	44	70	-3	1.71	0.85	0.83	1.72	111	37.01	102	93	38	1	0	3	2
LA	BATON ROUGE	87	72	91	68	80	0	1.94	0.83	1.40	7.03	306	53.09	115	88	59	4	0	5	1
	LAKE CHARLES	88	71	93	66	80	-2	0.21	-1.12	0.14	1.06	39	56.80	129	87	52	3	0	2	0
	NEW ORLEANS	84	74	90	73	79	-3	6.61	5.24	5.55	13.54	473	68.35	139	95	65	1	0	3	2
	SHREVEPORT	87	67	93	61	77	-3	***	***	***	***	***	***	***	81	44	2	0	***	***
MA	BOSTON	77	59	83	56	68	1	0.00	-0.78	0.00	0.00	0	34.51	116	79	39	0	0	0	0
	WORCESTER	76	55	83	49	65	2	0.00	-0.96	0.00	0.05	2	42.00	127	86	39	0	0	0	0
MD	BALTIMORE	82	55	87	46	68	-3	0.00	-1.02	0.00	0.01	0	27.76	87	96	36	0	0	0	0
ME	CARIBOU	69	47	80	44	58	0	0.01	-0.78	0.01	0.44	27	26.91	96	95	52	0	0	1	0
	PORTLAND	74	49	81	43	62	-2	0.00	-0.81	0.00	0.03	1	33.78	105	95	42	0	0	0	0
MI	ALPENA	79	48	87	43	64	3	0.00	-0.68	0.00	0.20	14	27.59	129	98	46	0	0	0	0
	GRAND RAPIDS	82	53	87	42	67	2	0.00	-0.76	0.00	0.28	18	28.26	101	93	39	0	0	0	0
	HOUGHTON LAKE	78	44	85	36	61	1	0.00	-0.57	0.00	0.26	21	12.62	84	100	47	0	0	0	0
	LANSING	81	53	85	42	67	3	0.00	-0.62	0.00	0.19	15	27.43	112	98	44	0	0	0	0
	MUSKEGON	82	54	90	42	68	3	0.00	-0.74	0.00	0.17	11	23.56	97	88	39	1	0	0	0
	TRAVERSE CITY	84	52	90	41	68	4	0.00	-0.78	0.00	0.14	8	17.95	90	90	39	1	0	0	0
MN	DULUTH	78	56	84	50	67	7	0.00	-0.83	0.00	0.08	4	22.99	99	92	55	0	0	0	0
	INT_L FALLS	80	52	83	45	66	10	0.00	-0.73	0.00	0.23	16	19.77	102	97	51	0	0	0	0
	MINNEAPOLIS	82	62	86	55	72	6	0.08	-0.62	0.08	0.09	6	31.77	128	77	44	0	0	1	0
	ROCHESTER	79	55	81	47	67	4	0.01	-0.86	0.01	0.09	5	30.74	112	92	50	0	0	1	0
	ST. CLOUD	82	55	86	47	69	7	0.00	-0.72	0.00	0.16	10	30.75	138	91	48	0	0	0	0
MO	COLUMBIA	81	56	88	45	69	-2	0.00	-0.93	0.00	0.00	0	32.42	103	83	39	0	0	0	0
	KANSAS CITY	84	56	89	46	70	0	0.00	-0.97	0.00	0.00	0	26.63	87	82	37	0	0	0	0
	SAINT LOUIS	83	59	90	48	71	-2	0.13	-0.61	0.13	0.13	8	31.21	99	76	35	1	0	1	0
	SPRINGFIELD	81	57	88	46	69	-3	0.04	-1.05	0.04	0.04	1	31.48	95	83	38	0	0	1	0
MS	JACKSON	83	66	91	58	74	-4	3.04	2.19	2.91	4.88	288	60.33	142	89	57	1	0	2	1
	MERIDIAN	83	66	90	58	75	-4	1.15	0.38	0.65	3.19	212	37.83	91	94	58	1	0	4	1
	TUPELO	84	62	92	50	73	-4	3.14	2.26	3.05	3.23	198	41.74	100	89	51	3	0	3	1
MT	BILLINGS	79	55	92	46	67	4	0.39	0.07	0.39	0.71	119	10.02	90	67	27	2	0	1	0
	BUTTE	72	41	85	36	56	2	0.52	0.26	0.29	0.62	115	8.28	81	86	30	0	0	3	0
	CUT BANK	72	46	91	42	59	3	0.76	0.48	0.32	0.76	139	6.59	73	81	37	1	0	3	0
	GLASGOW	80	57	94	51	68	6	0.57	0.33	0.43	0.57	110	9.96	90	70	32	1	0	2	0
	GREAT FALLS	75	48	91	42	61	3	1.16	0.86	0.67	1.19	187	13.43	113	81	39	1	0	4	1
	HAVRE	78	51	95	46	64	5	0.69	0.44	0.53	0.69	139	13.66	141	79	37	2	0	2	1
	MISSOULA	75	48	89	43	62	2	0.80	0.57	0.52	0.80	174	9.71	95	85	36	0	0	2	1
NC	ASHEVILLE	75	55	79	49	65	-5	0.59	-0.37	0.31	1.01	53	43.96	121	96	50	0	0	2	0
	CHARLOTTE	82	63	86	56	72	-2	0.00	-0.85	0.00	0.44	25	38.31	121	85	42	0	0	0	0
	GREENSBORO	78	59	83	54	69	-4	0.10	-1.04	0.10	0.52	23	44.86	139	92	47	0	0	1	0
	HATTERAS	79	67	85	63	73	-5	4.97	3.04	4.59	6.76	179	40.43	95	90	64	0	0	3	1
	RALEIGH	82	61	85	55	71	-3	1.60	0.29	1.60	4.39	173	41.48	124	92	47	0	0	1	1
	WILMINGTON	80	64	84	56	72	-5	1.59	-0.52	0.75	1.97	46	45.68	103	91	58	0	0	4	1
ND	BISMARCK	86	53	90	46	69	7	0.04	-0.38	0.02	0.08	9	15.52	100	92	37	3	0	2	0
	DICKINSON	86	51	93	45	68	8	0.14	-0.24	0.14	0.14	18	12.18	94	88	27	1	0	1	0
	FARGO	85	60	87	52	72	10	0.06	-0.62	0.06	0.06	4	18.98	101	88	41	0	0	1	0
	GRAND FORKS	84	58	88	52	71	11	0.21	-0.35	0.21	0.21	18	21.80	126	88	42	0	0	1	0
	JAMESTOWN	81	53	85	46	67	7	0.54	0.00	0.49	0.54	50	17.56	107	96	49	0	0	2	0
NE	GRAND ISLAND	88	58	93	50	73	4	0.00	-0.46	0.00	0.00	0	23.89	110	81	34	3	0	0	0
	LINCOLN	89	57	95	48	73	4	0.00	-0.72	0.00	0.00	0	20.52	91	78	30	5	0	0	0
	NORFOLK	85	59	88	52	72	6	0.00	-0.53	0.00	0.00	0	24.17	112	76	37	0	0	0	0
	NORTH PLATTE	89	58	95	50	73	7	0.00	-0.36	0.00	0.02	2	19.15	108	77	30	3	0	0	0
	OMAHA	86	60	88	52	73	3	0.00	-0.70	0.00	0.00	0	27.84	109	79	35	0	0	0	0
	SCOTTSBLUFF	91	53	98	49	72	6	0.08	-0.19	0.08	0.08	14	12.46	98	74	17	6	0	1	0
	VALENTINE	91	57	97	52	74	8	0.00	-0.41	0.00	0.03	4	15.92	90	81	26	4	0	0	0
NH	CONCORD	78	46	85	40	62	-1	0.00	-0.80	0.00	0.08	5	32.31	113	99	37	0	0	0	0
NJ	ATLANTIC_CITY	79	53	83	45	66	-4	0.00	-0.80	0.00	0.07	4	36.90	114	93	41	0	0	0	0
	NEWARK	81	58	87	51	70	-1	0.00	-0.86	0.00	0.17	9	33.74	101	80	34	0	0	0	0
NM	ALBUQUERQUE	89	62	92	59	76	4	0.00	-0.27	0.00	0.00	0	6.86	109	40	15	4	0	0	0
NV	ELY	80	43	85	29	61	1	0.08	-0.07	0.08	0.08	25	8.37	119	59	14	0	1	1	0
	LAS VEGAS	98	78	101	71	88	2	0.00	-0.08	0.00	0.00	0	2.15	72	24	11	7	0	0	0
	RENO	84	52	92	49	68	-1	0.00	-0.04	0.00	0.00	0	6.06	120	54	12	2	0	0	0
	WINNEMUCCA	85	42	93	34	64	0	0.06	-0.02	0.06	0.06	46	7.23	138	62	13	3	0	1	0
NY	ALBANY	77	52	85	47	64	-1	0.05	-0.78	0.05	0.65	40	34.45	120	92	43	0	0	1	0
	BINGHAMTON	73	50	80	42	62	0	0.22	-0.69	0.22	0.92	50	35.26	117	96	50	0	0	1	0
	BUFFALO	77	56	85	49	67	1	0.79	-0.08	0.79	2.04	122	26.42	97	85	43	0	0	1	1
	ROCHESTER	77	54	83	47	65	0	0.20	-0.52	0.20	2.80	196	27.46	110	93	46	0	0	1	0
	SYRACUSE	78	54	85	48	66	1	0.55	-0.20	0.46	1.03	67	32.53	117	91	45	0	0	2	0
OH	AKRON-CANTON	80	54	84	43	67	0	0.00	-0.81	0.00	0.31	19	28.24	92	84	36	0	0	0	0
	CINCINNATI	85	56	90	44	70	0	0.00	-0.77	0.00	0.17	11	29.27	87	78	29	1	0	0	0
	CLEVELAND	80	56	85	45	68	0	0.00	-0.91	0.00	1.28	71	23.55	81	84	40	0	0	0	0
	COLUMBUS	85	55	89	44	70	1	0.00	-0.77	0.00	0.08	5	26.03	83	81	27	0	0	0	0
	DAYTON	84	54	89	42	69	0	0.00	-0.80	0.00	0.00	0	28.07	91	84	30	0	0	0	0
	MANSFIELD	82	53	87	43	67	1	0.00	-0.76	0.00	0.21	13	24.34	77	85	33	0	0	0	0

Based on 1991-2020 normals ***** Not Available**

Weather Data for the Week Ending September 14, 2024

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	82	54	86	43	68	0	0.00	-0.69	0.00	0.28	20	29.65	114	96	41	0	0	0	0
	YOUNGSTOWN	79	51	83	43	65	0	0.00	-0.93	0.00	0.95	51	33.82	113	93	42	0	0	0	0
OK	OKLAHOMA CITY	87	57	91	49	72	-2	0.00	-0.93	0.00	0.00	0	27.37	98	84	33	2	0	0	0
	TULSA	88	58	92	51	73	-3	0.00	-0.94	0.00	0.00	0	33.61	111	91	31	4	0	0	0
OR	ASTORIA	69	56	71	51	62	2	0.50	-0.01	0.26	0.57	58	45.39	112	90	65	0	0	5	0
	BURNS	80	43	92	35	62	2	0.04	-0.04	0.04	0.07	46	7.39	107	69	21	1	0	1	0
	EUGENE	79	53	90	46	66	2	0.40	0.13	0.40	0.40	78	20.71	87	94	37	1	0	1	0
	MEDFORD	84	55	96	48	69	0	0.08	-0.02	0.08	0.08	46	12.02	110	81	22	2	0	1	0
	PENDLETON	81	58	92	52	70	5	0.45	0.34	0.33	0.45	221	9.32	108	68	25	2	0	2	0
	PORTLAND	76	59	84	53	68	1	0.23	-0.06	0.11	0.46	86	23.08	107	85	46	0	0	3	0
	SALEM	79	56	90	52	68	2	0.31	0.02	0.21	0.31	59	25.11	109	86	38	1	0	3	0
PA	ALLENTOWN	79	50	84	44	64	-4	0.00	-1.04	0.00	0.43	20	34.57	103	92	38	0	0	0	0
	ERIE	76	59	81	56	67	1	0.00	-0.96	0.00	1.29	69	26.41	93	82	48	0	0	0	0
	MIDDLETOWN	81	55	89	49	68	-2	0.00	-1.13	0.00	0.29	13	34.20	108	87	34	0	0	0	0
	PHILADELPHIA	82	59	87	54	70	-1	0.00	-1.04	0.00	0.44	21	34.21	108	88	33	0	0	0	0
	PITTSBURGH	81	55	86	45	68	1	0.00	-0.76	0.00	0.57	36	34.48	117	82	35	0	0	0	0
	WILKES-BARRE	78	52	86	46	65	-1	0.02	-0.94	0.02	0.61	33	33.33	122	90	41	0	0	1	0
	WILLIAMSPORT	79	50	85	42	65	-2	0.00	-1.12	0.00	0.23	10	37.50	121	96	40	0	0	0	0
RI	PROVIDENCE	76	53	84	51	65	-3	0.00	-0.95	0.00	0.02	1	47.91	148	93	44	0	0	0	0
SC	CHARLESTON	82	67	85	61	74	-4	1.15	-0.28	0.70	1.78	60	47.79	122	94	64	0	0	2	1
	COLUMBIA	83	64	85	55	73	-4	0.58	-0.32	0.54	0.83	47	41.97	124	94	50	0	0	2	1
	FLORENCE	83	64	87	54	74	-3	0.20	-0.87	0.16	0.89	41	38.24	114	90	50	0	0	2	0
	GREENVILLE	80	59	84	53	70	-5	0.27	-0.56	0.22	1.01	60	37.81	105	92	47	0	0	2	0
SD	ABERDEEN	85	58	88	47	72	9	0.13	-0.35	0.13	0.16	16	18.66	107	88	45	0	0	1	0
	HURON	86	58	88	49	72	7	0.10	-0.51	0.08	0.10	8	19.79	106	87	38	0	0	2	0
	RAPID CITY	92	55	98	49	74	11	0.82	0.54	0.82	0.97	175	12.95	88	72	18	6	0	1	1
	SIOUX FALLS	84	60	87	53	72	6	0.02	-0.63	0.02	0.02	1	27.59	125	75	42	0	0	1	0
TN	BRISTOL	82	52	87	42	67	-3	0.13	-0.52	0.07	0.15	11	30.74	92	96	34	0	0	2	0
	CHATTANOOGA	85	64	89	57	74	-1	0.23	-0.80	0.21	0.30	16	31.68	80	78	41	0	0	2	0
	KNOXVILLE	84	57	89	51	71	-3	0.01	-0.87	0.01	0.13	8	43.32	113	88	35	0	0	1	0
	MEMPHIS	82	63	90	56	73	-5	4.83	4.09	4.20	5.47	394	41.22	104	82	48	1	0	3	2
	NASHVILLE	84	62	91	52	73	-2	0.75	-0.21	0.55	2.25	126	34.61	93	80	36	2	0	3	1
TX	ABILENE	90	63	96	55	76	-2	0.00	-0.65	0.00	3.91	303	18.06	98	80	31	2	0	0	0
	AMARILLO	93	61	100	57	77	4	0.00	-0.39	0.00	0.00	0	16.72	107	71	19	7	0	0	0
	AUSTIN	93	69	99	60	81	-1	0.00	-0.89	0.00	0.36	20	24.60	98	82	32	6	0	0	0
	BEAUMONT	90	70	94	65	80	-1	0.02	-1.76	0.01	0.65	18	62.35	139	89	51	3	0	2	0
	BROWNSVILLE	88	77	93	73	82	-2	7.31	5.89	3.75	7.96	296	33.18	195	93	68	3	0	4	2
	CORPUS CHRISTI	93	74	96	72	84	1	0.00	-1.39	0.00	4.13	152	23.92	108	92	52	6	0	0	0
	DEL RIO	95	70	100	62	83	0	0.00	-0.61	0.00	6.53	497	10.67	73	75	29	7	0	0	0
	EL PASO	94	67	98	61	81	3	0.00	-0.41	0.00	0.44	53	5.75	89	39	14	5	0	0	0
	FORT WORTH	87	68	93	59	77	-3	0.25	-0.47	0.25	1.74	124	34.14	130	75	40	2	0	1	0
	GALVESTON	87	75	90	71	81	-2	0.34	-1.44	0.33	5.07	141	42.57	139	94	66	1	0	2	0
	HOUSTON	91	72	97	67	81	-1	0.15	-1.06	0.14	2.47	102	52.40	144	86	49	3	0	2	0
	LUBBOCK	89	60	99	56	74	1	0.00	-0.62	0.00	2.06	171	17.95	128	77	24	2	0	0	0
	MIDLAND	88	62	98	57	75	-2	0.00	-0.41	0.00	4.28	543	8.87	89	74	25	3	0	0	0
	SAN ANGELO	90	60	99	50	75	-3	0.00	-0.61	0.00	4.85	394	12.96	85	87	30	4	0	0	0
	SAN ANTONIO	93	71	96	63	82	1	0.00	-0.97	0.00	1.51	79	19.65	86	78	37	5	0	0	0
	VICTORIA	92	71	96	67	82	0	0.10	-1.07	0.10	1.83	78	31.13	107	94	49	5	0	1	0
	WACO	92	62	100	50	77	-3	0.00	-0.69	0.00	1.00	73	32.37	129	88	32	4	0	0	0
	WICHITA FALLS	93	60	99	53	77	-1	0.00	-0.74	0.00	0.35	25	24.90	122	80	27	5	0	0	0
UT	SALT LAKE CITY	87	63	96	52	75	4	0.01	-0.22	0.01	0.06	14	10.91	99	46	17	4	0	1	0
VA	LYNCHBURG	78	55	82	44	67	-3	0.00	-0.91	0.00	0.00	0	29.87	97	88	39	0	0	0	0
	NORFOLK	78	63	83	55	71	-5	0.00	-1.36	0.00	1.89	69	44.26	121	86	53	0	0	0	0
	RICHMOND	82	58	85	52	70	-3	0.00	-1.15	0.00	0.08	3	43.15	129	91	42	0	0	0	0
	ROANOKE	79	53	82	45	66	-5	0.00	-0.93	0.00	0.00	0	26.57	84	87	35	0	0	0	0
	WASH/DULLES	82	52	86	43	67	-4	0.00	-0.90	0.00	0.00	0	27.16	87	93	36	0	0	0	0
VT	BURLINGTON	75	52	84	48	64	-1	0.05	-0.78	0.05	0.88	54	30.57	115	90	43	0	0	1	0
WA	OLYMPIA	71	52	76	46	61	1	1.52	1.11	0.97	1.54	196	28.33	99	98	56	0	0	5	1
	QUILLAYUTE	65	53	68	50	59	1	1.13	0.19	0.50	1.14	64	60.79	102	97	70	0	0	4	1
	SEATTLE-TACOMA	68	56	74	53	62	-2	0.42	0.08	0.23	0.42	65	19.84	88	95	59	0	0	3	0
	SPOKANE	77	58	89	53	68	5	0.24	0.12	0.24	0.24	100	8.09	77	78	30	0	0	1	0
	YAKIMA	82	53	91	45	67	3	0.06	0.02	0.05	0.06	64	3.80	76	82	28	2	0	2	0
WI	EAU CLAIRE	82	55	85	46	69	6	0.15	-0.75	0.07	0.16	9	30.19	118	94	46	0	0	2	0
	GREEN BAY	81	55	86	47	68	5	0.02	-0.75	0.02	0.36	23	26.63	112	91	48	0	0	1	0
	LA CROSSE	82	58	86	49	70	3	0.15	-0.74	0.15	0.39	22	26.97	97	88	42	0	0	1	0
	MADISON	82	54	87	43	68	5	0.00	-0.79	0.00	0.07	4	35.93	124	92	37	0	0	0	0
	MILWAUKEE	81	60	85	51	70	4	0.00	-0.72	0.00	0.02	1	31.89	122	85	46	0	0	0	0
WV	BECKLEY	77	51	82	39	64	-3	0.00	-0.77	0.00	0.09	6	26.04	78	78	32	0	0	0	0
	CHARLESTON	85	50	92	42	67	-3	0.00	-0.83	0.00	0.06	3	30.51	87	89	24	2	0	0	0
	ELKINS	79	42	85	35	60	-5	0.00	-0.79	0.00	0.97	61	32.65	91	100	35	0	0	0	0
	HUNTINGTON	86	53	92	44	69	-1	0.01	-0.76	0.01	0.36	23	31.10	91	83	27	2	0	1	0
WY	CASPER	84	47	90	30	65	5	0.11	-0.09	0.11	0.30	83	8.36	90	59	14	1	1	1	0
	CHEYENNE	83	51	86	46	67	5	0.00	-0.35	0.00	0.37	52	9.91	78	65	16	0	0	0	0
	LANDER	81	50	88	39	65	4	0.05	-0.13	0.04	0.37	113	8.44	86	54	16	0	0	2	0
	SHERIDAN	85	48	95	40	66	5	0.15	-0.17	0.15	0.19	32	9.55	85	73	22	3	0	1	0

Based on 1991-2020 normals ***** Not Available**

U.S. Crop Production Highlights

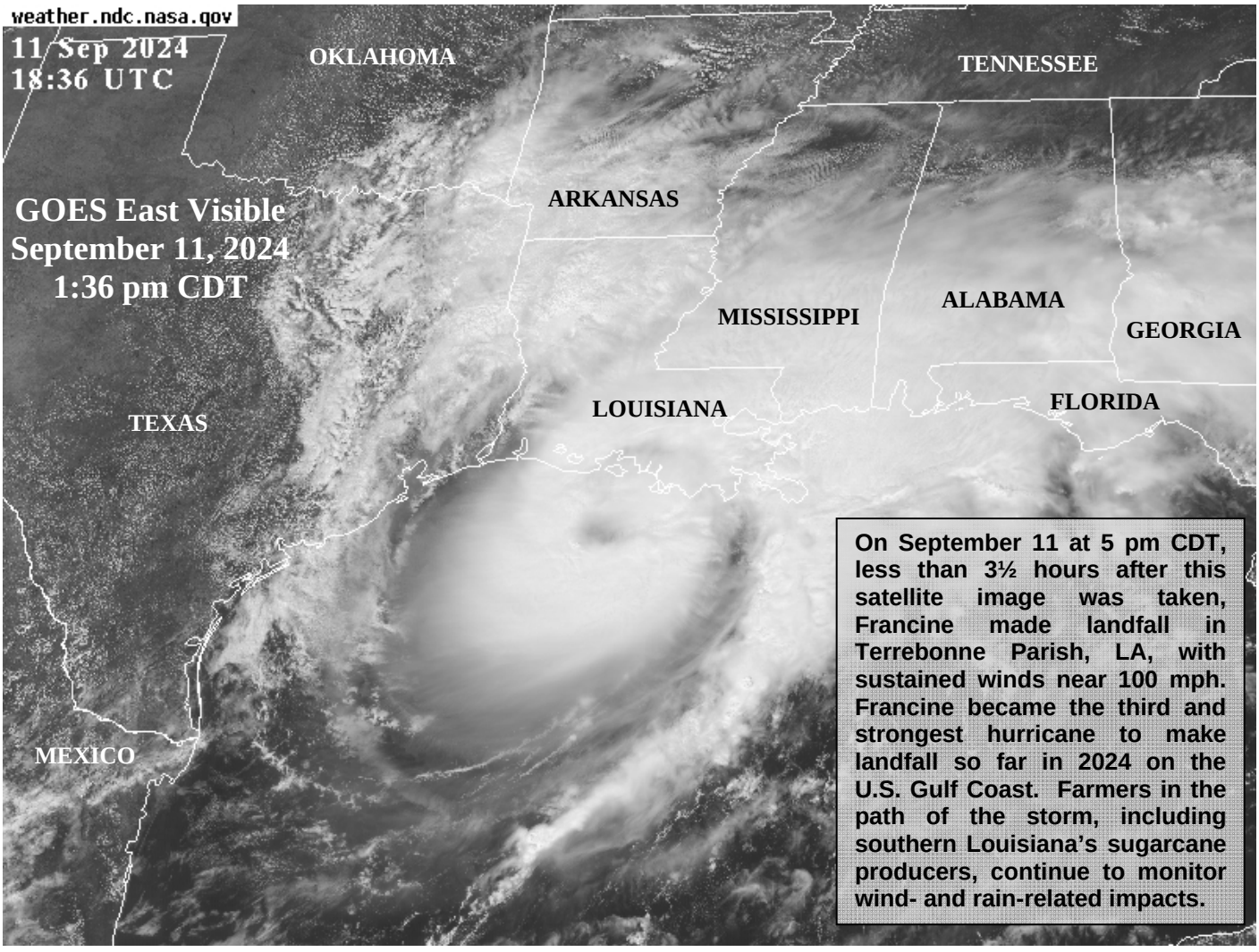
The following information was released by USDA's Agricultural Statistics Board on Sep. 12, 2024. Forecasts refer to Sep. 1.

Corn production for grain is forecast at 15.2 billion bushels, up less than 1 percent from the previous forecast but down 1 percent from last year. U.S. yields are expected to average a record-high 183.6 bushels per harvested acre, up 0.5 bushel from the previous forecast and up 6.3 bushels from last year. Area harvested for grain is forecast at 82.7 million acres, unchanged from the previous forecast but down 4 percent from 2023.

Soybean production for beans is forecast at a record-high 4.59 billion bushels, down slightly from the previous forecast but up 10 percent from 2023. U.S. yields are expected to average a record-high 53.2 bushels per acre, unchanged from the previous forecast but up 2.6 bushels from 2023. Area harvested for beans in the U.S. is forecast at 86.3 million acres, unchanged from the previous forecast but up 5 percent from 2023.

All cotton production is forecast at 14.5 million 480-pound bales, down 4 percent from the previous forecast but up 20 percent from 2023. U.S. yields are expected to average 807 pounds per harvested acre, down 33 pounds from the previous forecast and down 92 pounds from 2023. Upland cotton production is forecast at 14.0 million 480-pound bales, down 4 percent from the previous forecast but up 19 percent from 2023. Pima cotton production is forecast at 547,000 bales, down 1 percent from the previous forecast but up 73 percent from 2023. All cotton area harvested is forecast at 8.63 million acres, up slightly from the previous forecast and up 34 percent from 2023. All cotton planted area totaled 11.2 million acres, up slightly from the previous forecast and up 9 percent from 2023.

California Navel orange production for the 2024-2025 season is forecast at 39.0 million boxes (1.56 million tons), up 2 percent from last season. The initial forecast is based on an objective measurement survey conducted in California's Central Valley from mid-June to the beginning of September. The objective measurement survey indicated that fruit set was up 24 percent from last year, but that the average fruit size was down 5 percent from last year. Harvest is expected to begin in October.



August Crop Summary

The monthly crop summary was provided by USDA/NASS.

August was warmer than average for much of the nation, with parts of the southern Plains and Southwest recording temperatures 4°F or more above normal. In contrast, parts of North Dakota and Oregon recorded temperatures 4°F or more below normal. Meanwhile, much of the South and Southwest received below-normal August rainfall. However, parts of the Great Basin, East Coast, Great Plains, Pacific Northwest, and Rockies recorded at least twice the normal amount precipitation. Debby, which made landfall as a Category 1 hurricane in Florida's Big Bend region at the beginning of the month, caused flooding along the East Coast. Sone areas along the Florida Gulf Coast and the southeast Atlantic Coast recorded more than a foot of rain during the month.

By August 4, eighty-eight percent of the nation's corn acreage had reached the silking stage, 2 percentage points behind last year but equal to the 5-year average. Forty-six percent of the corn was at or beyond the dough stage, 4 percentage points ahead of last year and 8 points ahead of average. Seven percent of this year's corn was denting, equal to last year but 2 percentage points ahead of average. By August 18, ninety-seven percent of the corn had reached the silking stage, 1 percentage point behind both last year and the average. Seventy-four percent of the corn acreage was at or beyond the dough stage, equal to last year but 3 percentage points ahead of average. Thirty percent of this year's corn acreage was denting, equal to last year but 4 percentage points ahead of average. Five percent of the corn acreage was mature by August 18, two percentage points ahead of both last year and the 5-year average. By September 1, ninety percent of the corn acreage was at or beyond the dough stage, 2 percentage points behind last year but equal to the average. Sixty percent of this year's corn acreage was denting, 2 percentage points behind last year but 2 points ahead of average. Nineteen percent of the corn acreage was mature by September 1, four percentage points ahead of last year and 6 points ahead of average. On September 1, sixty-five percent of the corn acreage was rated in good to excellent condition, 12 percentage points above the same time last year.

By August 4, eighty-six percent of the nation's soybean acreage had reached the blooming stage, 2 percentage points behind last year but 2 points ahead of the 5-year average. Fifty-nine percent of the soybean acreage had begun setting pods, 2 percentage points behind last year but 3 points ahead of average. On August 18, ninety-five percent of the soybean acreage had reached the blooming stage, equal to both last year and the average. Eighty-one percent of the soybean acreage had begun setting pods, 3 percentage points behind last year but 1 point ahead of average. Nationally, 94 percent of the soybean acreage had begun setting pods by September 1, equal to last year but 1 point ahead of average. Leaf drop was 13 percent complete by September 1, equal to last year but 3 percentage points ahead of average. On September 1, sixty-five percent of the soybean acreage was rated in good to excellent condition, 12 percentage points above the same time last year.

Eighty-eight percent of the 2024 winter wheat acreage had been harvested by August 4, three percentage points ahead of last year and 2 points ahead of the 5-year average. Ninety-six percent of the winter wheat had been harvested by August 18, one percentage point ahead of both last year and the average. Nationwide, producers had sown 2 percent of the intended 2025 winter wheat acreage by September 1, one percentage point ahead of last year but equal to the average.

Ninety-one percent of the nation's cotton acreage had reached the squaring stage by August 4, one percentage point ahead of last year but equal to the 5-year average. By August 4, sixty percent of the cotton acreage had begun setting bolls, 2 percentage points ahead of last year and 1 point ahead of average. Eight percent of the cotton had open bolls, 1 percentage point ahead of both last year and the average. By August 18, eighty-four percent of the cotton acreage had begun setting bolls, 6 percentage points ahead of last year and 3 points ahead of average. Nineteen percent of the cotton had open bolls, 2 percentage points ahead of both last year and the average. By September 1, ninety-five percent of the cotton acreage had begun setting bolls, 2 percentage points ahead of last year and 1 point ahead of average. On that date, thirty-seven percent of the cotton had open bolls, 7 percentage points ahead of last year and 6 points ahead of average. On September 1, forty-four percent of the cotton acreage was rated in good to excellent condition, 13 percentage points above the previous year.

By August 4, sixty-three percent of the nation's sorghum acreage had reached the headed stage, 8 percentage points ahead of last year and 9 points ahead of the 5-year average. Twenty-five percent of the sorghum was at or beyond the coloring stage by August 4, equal to last year but 1 percentage point ahead of average. By August 18, eighty-three percent of the sorghum had reached the headed stage, 5 percentage points ahead of last year and 3 points ahead of average. Thirty-nine percent of the sorghum was at or beyond the coloring stage by August 18, three percentage points ahead of last year and 4 points ahead of average. By August 18, nineteen percent of the sorghum was mature, 1 percentage point ahead of last year but equal to the average. On September 1, ninety-five percent of the sorghum had reached the headed stage, 3 percentage points ahead of last year and 1 point ahead of average. Sixty-two percent of the sorghum was at or beyond the coloring stage by September 1, five percentage points ahead of last year and 3 points ahead of average. By September 1, thirty percent of the sorghum was mature, 4 percentage points ahead of both last year and the average. Nineteen percent of the sorghum had been harvested by September 1, one percentage point ahead of last year but 1 point behind average. Fifty percent of the sorghum was rated in good to excellent condition on September 1, six percentage points above the same time last year.

By August 4, eighty percent of the nation's rice acreage had reached the headed stage, 9 percentage points ahead of the previous year and 16 points ahead of the 5-year average. Seven percent of the rice was harvested by August 4, one percentage point behind last year but 2 points ahead of average. By August 18, ninety-four percent of the rice had reached the headed stage, 2 percentage points ahead of the previous year and 5 points ahead of the average. Twenty-one percent of the rice was harvested by August 18, four percentage points ahead of last year and 8 points ahead of average. Forty-three percent of the rice was harvested by September 1, twelve percentage points ahead of last year and 19 points ahead of average. On September 1, seventy-seven percent of the rice was rated in good to excellent condition, 7 percentage points above the same time last year.

Forty-seven percent of the nation's oat acreage had been harvested by August 4, two percentage points ahead of both last year and the 5-year average. On August 4, sixty-seven percent of the oats were rated in good to excellent condition, 23 percentage points above the same time last year. Sixty-seven percent of the oats had been harvested by August 18, equal to last year but 3 percentage points behind average. Eighty-nine percent of the oats had been harvested by September 1, one percentage point ahead of last year but equal to the average.

Ninety-seven percent of the nation's barley acreage had reached the headed stage by August 4, one percentage point behind last year and 2 points behind the 5-year average. On that date, producers had harvested 7 percent of the barley, 6 percentage points behind last year and 4 points behind average. By August 18, producers had harvested 30 percent of the barley, 13 percentage points behind both last year and the 5-year average. On August 25, sixty-five percent of the barley was rated in good to excellent condition, 16 percentage points above the same time last year. By September 1, producers had harvested 75 percent of the barley, equal to last year but 1 percentage point behind average.

By August 4, ninety-seven percent of the spring wheat crop had reached the headed stage, 1 percentage point behind the previous year and 2 points behind the 5-year average. Six percent of the spring wheat had been harvested, 2 percentage points behind the previous year and 4 points behind average. By August 18, thirty-one percent of the spring wheat had been harvested, 4 percentage points behind the previous year and 5 points behind average. On August 25, sixty-nine percent of the spring wheat was rated in good to excellent condition, 32 percentage points above the previous year. By September 1, seventy percent of the spring wheat had been harvested, 2 percentage points ahead of the previous year but equal to the 5-year average.

By August 11, ninety-five percent of the peanut crop had reached the pegging stage, 1 percentage point ahead of both the previous year and the 5-year average. On September 1, sixty-one percent of the peanut acreage was rated in good to excellent condition, 5 percentage points above the same time last year.

Summer Weather Review

Weather summary provided by USDA/WAOB

Highlights: A protective dip in the jet stream kept heat out of the Corn Belt for much of the summer, allowing many Midwestern crops to flourish, despite an August drying trend. However, maturation of some corn and soybeans in the eastern Corn Belt was accelerated by diminishing soil moisture reserves, possibly at the expense of yield potential, while early-summer wetness (and cooler-than-optimal conditions) slowed upper Midwestern crop growth.

Most other areas of the country experienced above-normal summer temperatures. Hotter- and drier-than-normal summer weather was especially prominent in much of the West, highlighted by a July heat wave that led to a rash of wildfire activity. By summer's end, year-to-date U.S. wildfires had scorched some 6.3 million acres of vegetation, nearly 125 percent of the 10-year average. This included the nearly 430,000-acre Park Fire, which became California's fourth-largest wildfire in the modern era.

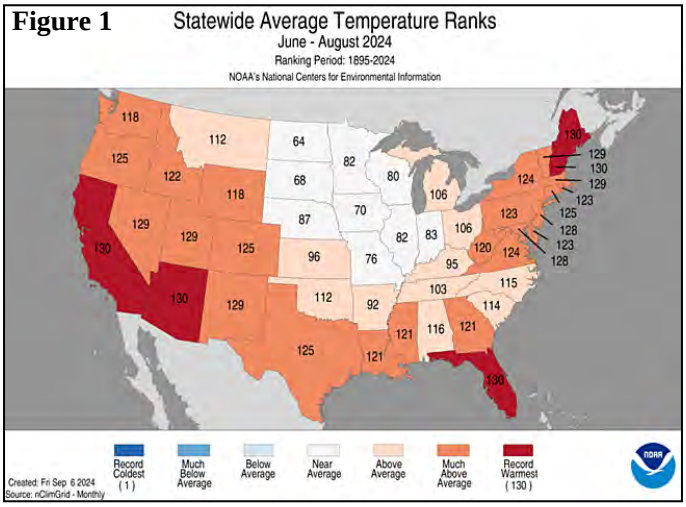
Starting in late June, heat was also consistently observed across the East and Deep South. In areas where summer rainfall was scarce, the hot weather contributed to drought development or expansion, with locally to regionally significant impacts on pastures and crops. According to statistics from the *U.S. Drought Monitor*, drought coverage dipped to 11.77 percent of the Lower 48 States on June 11, 2024. Not since March 3, 2020, when drought was affecting 11.52 percent of the country, had national coverage been lower. By September 3, however, drought coverage had grown to 29.95 percent, an increase of more than 18 percentage points in just 12 weeks.

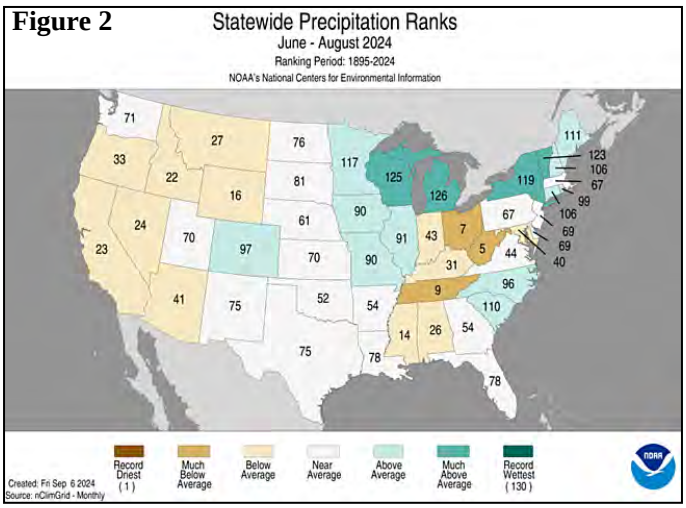
Despite the increase in drought coverage, condition reports painted a mostly favorable picture of the 2024 U.S. growing season. On September 1, nearly two-thirds (65 percent) of both U.S. corn and soybeans were rated in good to excellent condition. In the South, rice fared extremely well, with 77 percent of the national crop rated good to excellent on that date. On the central and southern Plains, sorghum (50 percent good to excellent, nationally, on September 1) and cotton (44 percent) struggled with late-summer heat and dryness—but were still in better shape than the same time a year ago. Farther north, spring wheat ended the reporting season (on August 25) with 69 percent of the crop rated good to excellent, far above last year's value of 37 percent.

Tropical activity affecting the mainland U.S. during the summer of 2024 was limited to two category 1 hurricanes—Beryl and Debby—which struck different areas of the Gulf Coast about a month apart. Beryl moved inland on July 8 near Matagorda, TX, following by Debby on August 5 near Steinhatchee, FL. Neither hurricane had a national impact on crops, although both caused some local- or regional-scale damage, mostly due to flooding or high winds.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, consistent warmth propelled the nation to its fourth-warmest summer during the 130-year period of record, with an average temperature of 73.83°F (2.45°F above the 1901-2000 mean). June-August 1936 and 2021 remain in a statistical tie for the nation's hottest summer on record, with an average temperature of 73.98°F. Rounding out the top five are 2022 (73.92°F), 2024 (73.83°F), and 2012 (73.68°F). Meanwhile, the national average summer precipitation of 8.30 inches was very close to the 20th century mean of 8.32 inches. It was the 58th-driest summer in the last 130 years.

All states but North Dakota (64th-coolest summer) ranked within the "warm" half of the historical distribution. States ranking in the top ten for summer warmth were clustered across the West, Deep South, and East—25 states in all—including Vermont; all Western States except Montana, Washington, and Wyoming; all Southern Tier States except Alabama; and all Atlantic Coast States except the Carolinas (figure 1). Meanwhile, statewide precipitation rankings ranged from the fifth-driest summer in West Virginia to top-ten wetness in Wisconsin, Michigan, and Vermont (figure 2). Joining West Virginia on the top-ten list for summer dryness were Ohio and Tennessee.





June: A ridge of high pressure developed across the continental U.S. during June, driving temperatures to broadly above-normal levels and cutting off moisture from reaching several key crop production areas. Notably, June temperatures averaged at least 5°F above normal in numerous communities from California to the central and southern High Plains. Above-normal temperatures also dominated the East and Deep South, fueled by a late-month heat wave that sent temperatures soaring to 100°F or higher as far north as the middle Mississippi Valley and the middle Atlantic States. In contrast, near- or below-normal June temperatures were observed across portions of the nation's northern tier, mainly from northern Washington into the upper Great Lakes region.

Starting on June 20, torrential rain accompanied the upper Midwestern cool spell, with record flooding developing in the Big Sioux and Little Sioux River basins, as well as neighboring watersheds in eastern South Dakota, southern Minnesota, and northwestern Iowa. Around the same time, Tropical Storm Alberto made landfall along Mexico's Gulf Coast near Tampico, about 250 miles south of Brownsville, TX. Still, showers overspread southern Texas, with remnant moisture later being entrained by the fledgling Southwestern monsoon circulation and eventually enhancing rainfall across the upper Midwest. Earlier, southern Florida had been one of the first U.S. areas to experience semi-organized tropical moisture, with drought-breaking rainfall totaling 10 to 20 inches or more in numerous locations from June 7-15.

Outside the wetter areas, June rainfall was lacking. Among the driest areas were the Southeast and lower Midwest, with USDA/NASS reporting topsoil moisture more than 70 percent very short to short by June 30 in six Atlantic Coast States from Georgia to Delaware. Dryness extended across the Appalachians, where West Virginia's soil moisture was rated 85 percent very short to short. On the same date, topsoil moisture was rated at least 40 percent very short to short in Illinois, Indiana, and Ohio, along with Alabama, Arkansas, and Mississippi. Spotty dryness affected portions of the Plains and Rockies, where topsoil moisture was rated more than 40 percent very short to short in Colorado, New Mexico, Texas, and Wyoming. Conversely, topsoil moisture was rated more than one-half surplus on June 30 in rain-soaked Minnesota (53 percent) and Wisconsin (52 percent).

Corresponding to heat, dryness, or wetness, crop conditions generally declined during June. Notably, the portion of the national peanut crop rated good to excellent fell from 63 to 53 percent between June 2 and 30, largely due to rapidly developing Southeastern drought. During the same 4-week period, good to excellent ratings fell from 61 to 50 percent for cotton and from 75 to 67 percent for corn. However, some crops—including rice and spring wheat—experienced favorable growing conditions during June and exhibited little overall change in condition. Elsewhere, maturing winter wheat was quickly cut, with 54 percent of the crop harvested by June 30, versus the 5-year average of 39 percent.

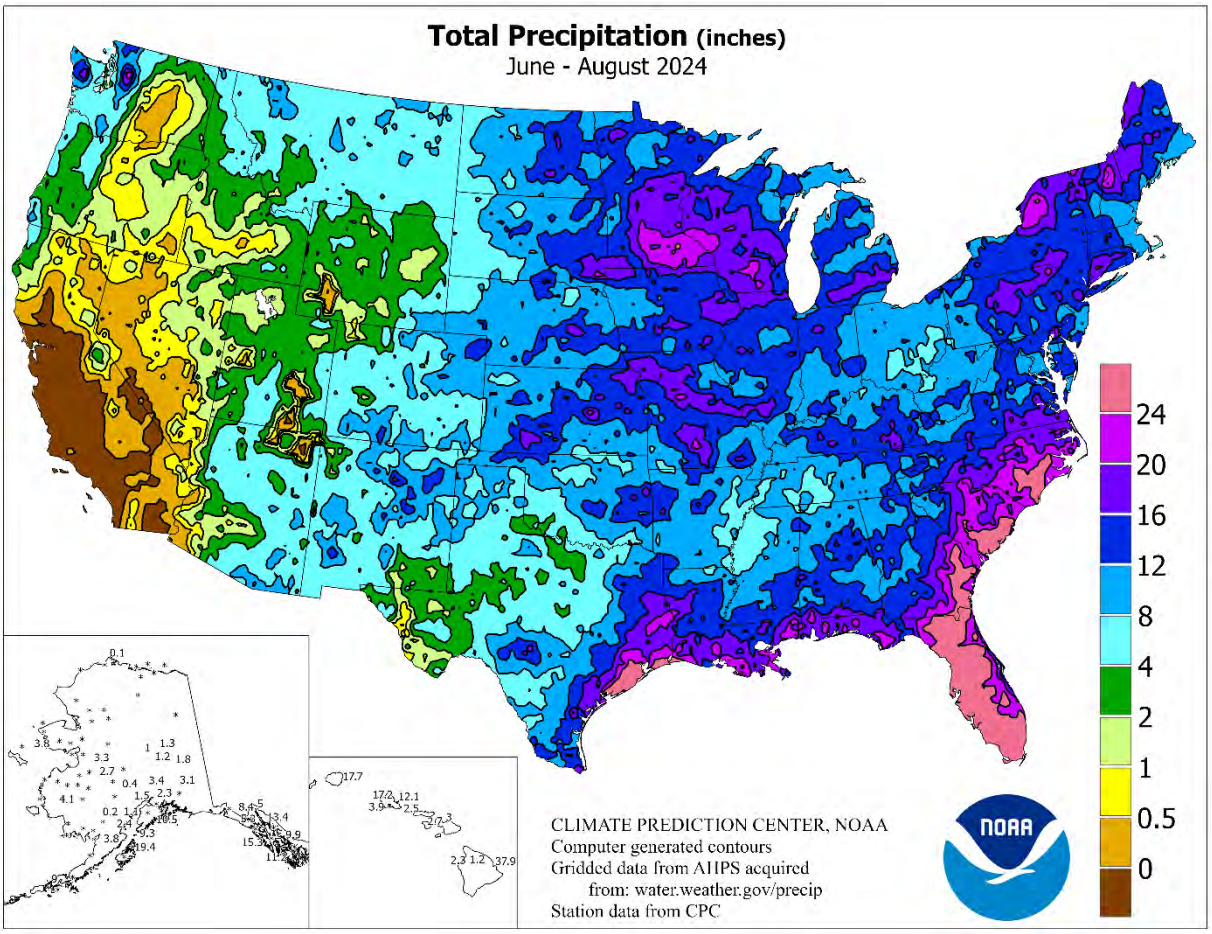
July: A Southeastern pattern change delivered cooler, wetter weather late in the month, following a hot spell that had halted pasture growth and severely stressed earlier-planted summer crops, such as corn. By July 14, more than 40 percent of the pastures were rated in very poor to poor condition in West Virginia and each Atlantic Coast State from Georgia to Maryland. Farther west, however, much of the Midwest received plenty of rain during a critical month for crops, despite a late-July drying trend. In fact, parts of the upper Midwest remained too wet. Midwestern temperatures stayed mostly below stressful levels for corn and soybeans, allowing crops to generally flourish. By the 28th, more than two-thirds of both corn (68 percent) and soybeans (67 percent) were rated good to excellent—the best late-July ratings since 2020. In the South, ratings for rice (83 percent good to excellent on June 16 and 23, along with July 21 and 28) were the best of the 21st century. Elsewhere, late-July rainfall and cooler conditions in the Southeast allowed U.S. peanuts to rebound from 53 to 68 percent good to excellent between June 30 and July 28.

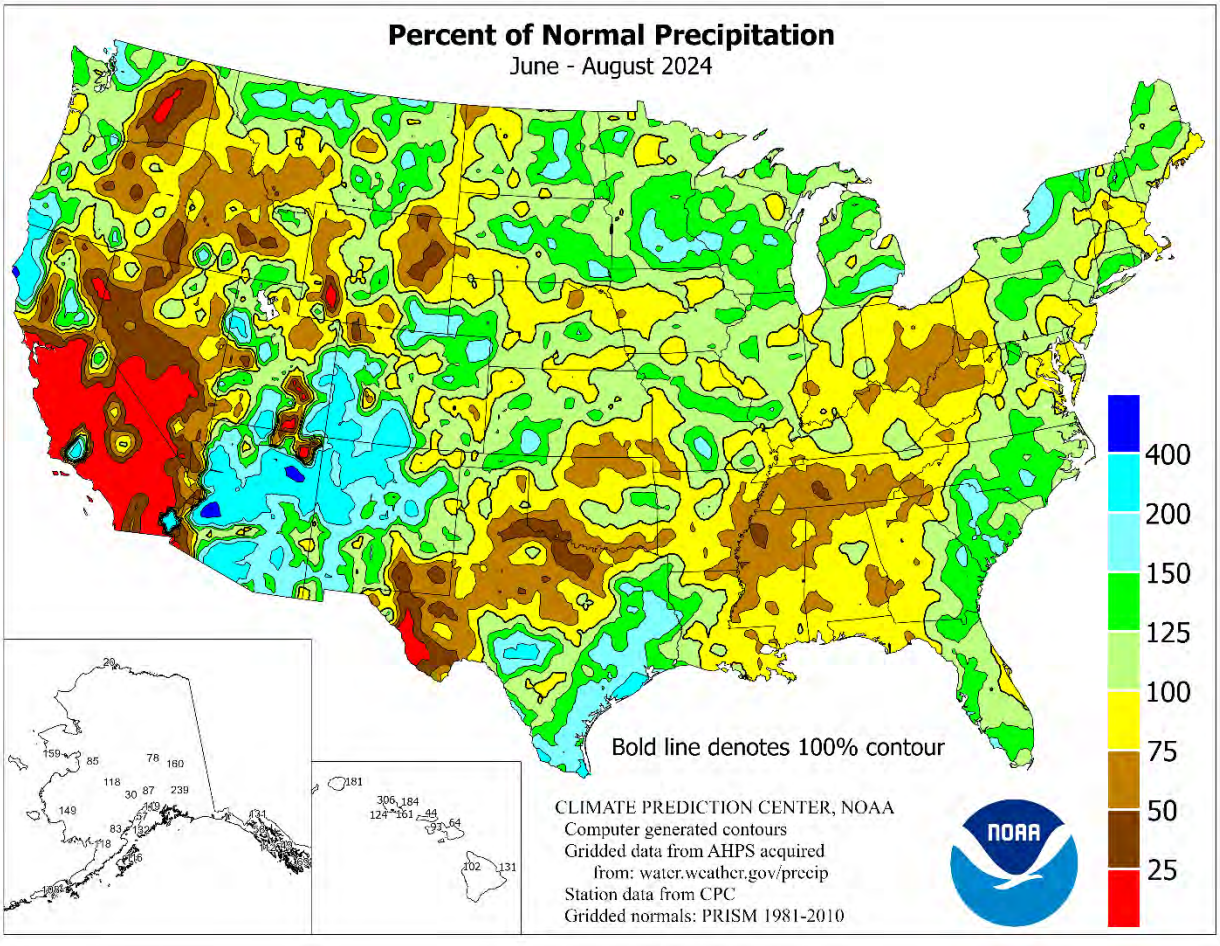
Beryl arrived on the Gulf Coast on July 8 near Matagorda, TX, as a Category 1 hurricane, with sustained winds near 80 mph. Still, Beryl was responsible for flash flooding and coastal flooding, along with a loss of electricity for more than 2.7 million customers in eastern Texas due to widespread wind gusts of 80 to 90 mph. For some, power outages persisted for a week or more, complicating recovery efforts during a post-storm spell of hot, humid weather. The remnants of Beryl curved northeastward, delivering a narrow band of briefly heavy but mostly beneficial rain across the mid-South and lower Midwest.

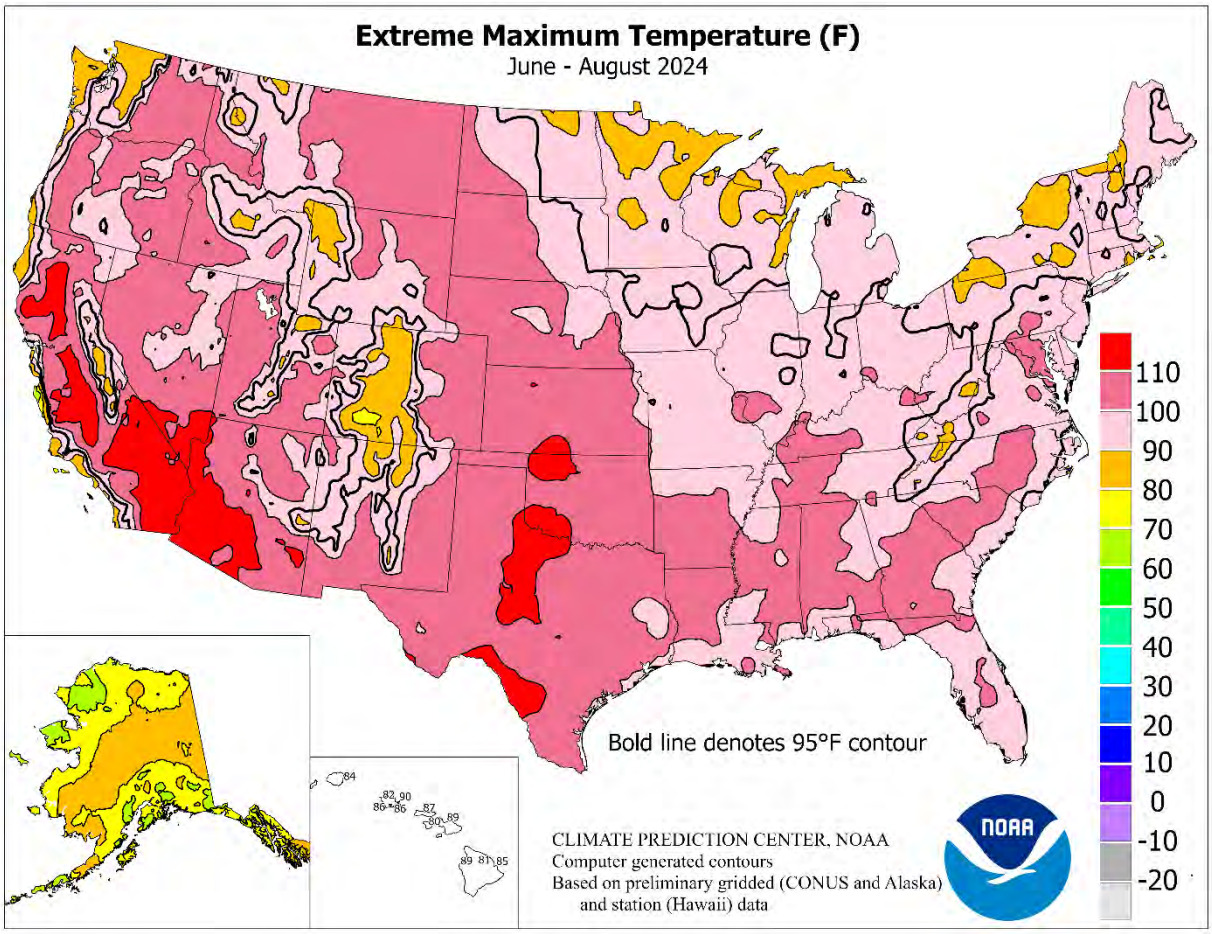
However, rain largely bypassed the central Appalachians and neighboring areas in the Ohio Valley and mid-Atlantic. By July 28, topsoil moisture was rated 94 percent very short to short in West Virginia, along with 62 percent in Ohio and Maryland. Meanwhile, a drying trend across much of the Plains and Rockies left topsoil moisture rated more than one-third very short to short by July 28, except in the Dakotas, led by Wyoming (79 percent), New Mexico (69 percent), Colorado (68 percent), Montana (59 percent), and Texas (51 percent). Colorado led the U.S. on that date with 33 percent of its sorghum rated very poor to poor, while Texas led with 31 percent of its cotton in those two categories. Additionally, 39 percent of the rangeland and pastures in Texas were rated very poor to poor on July 28, with only seven states reporting higher values: West Virginia (65 percent), Virginia (64 percent), Washington (59 percent), Wyoming (57 percent), New Mexico (50 percent), Oregon (49 percent), and Maryland (43 percent).

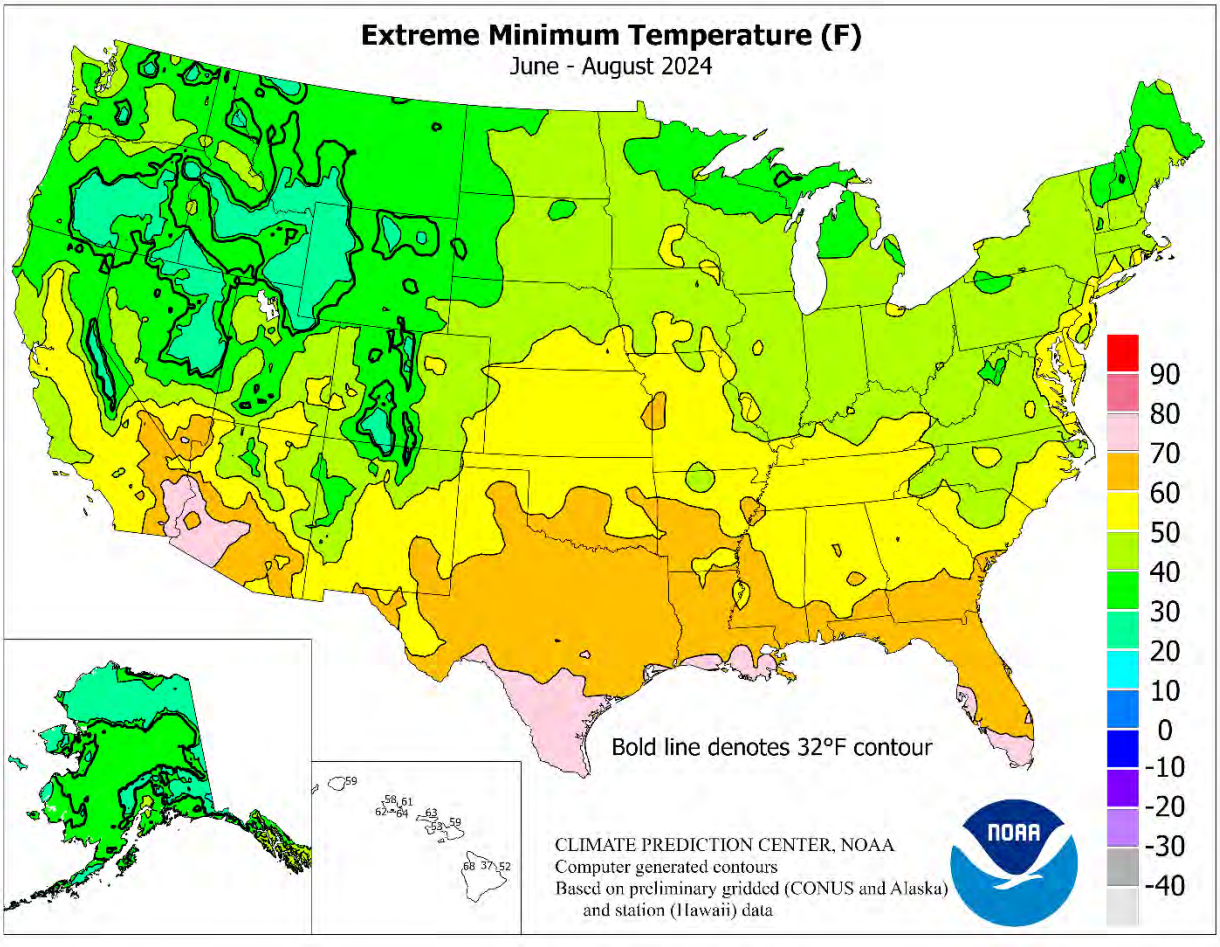
The first half of the month featured a record-setting Western heat wave that helped to dry out the landscape and led to heavy irrigation demands and declining pasture conditions. Following two wet Western winters and last year's limited wildfire activity (only 2.7 million acres burned, nationally, in 2023), an abundance of fine fuels—including brush and grass—were cured by summer's heat. During July, dozens of large wildfires, sparked by lightning strikes or human activity, flared across the West, resulting in reduced air quality and threats to several communities. By month's end, year-to-date U.S. wildfires had burned nearly 4.5 million acres, above the 10-year average of 3.6 million acres but well below the annual record of 10.1 million acres, set in 2015 and nearly tied in 2017 and 2020.

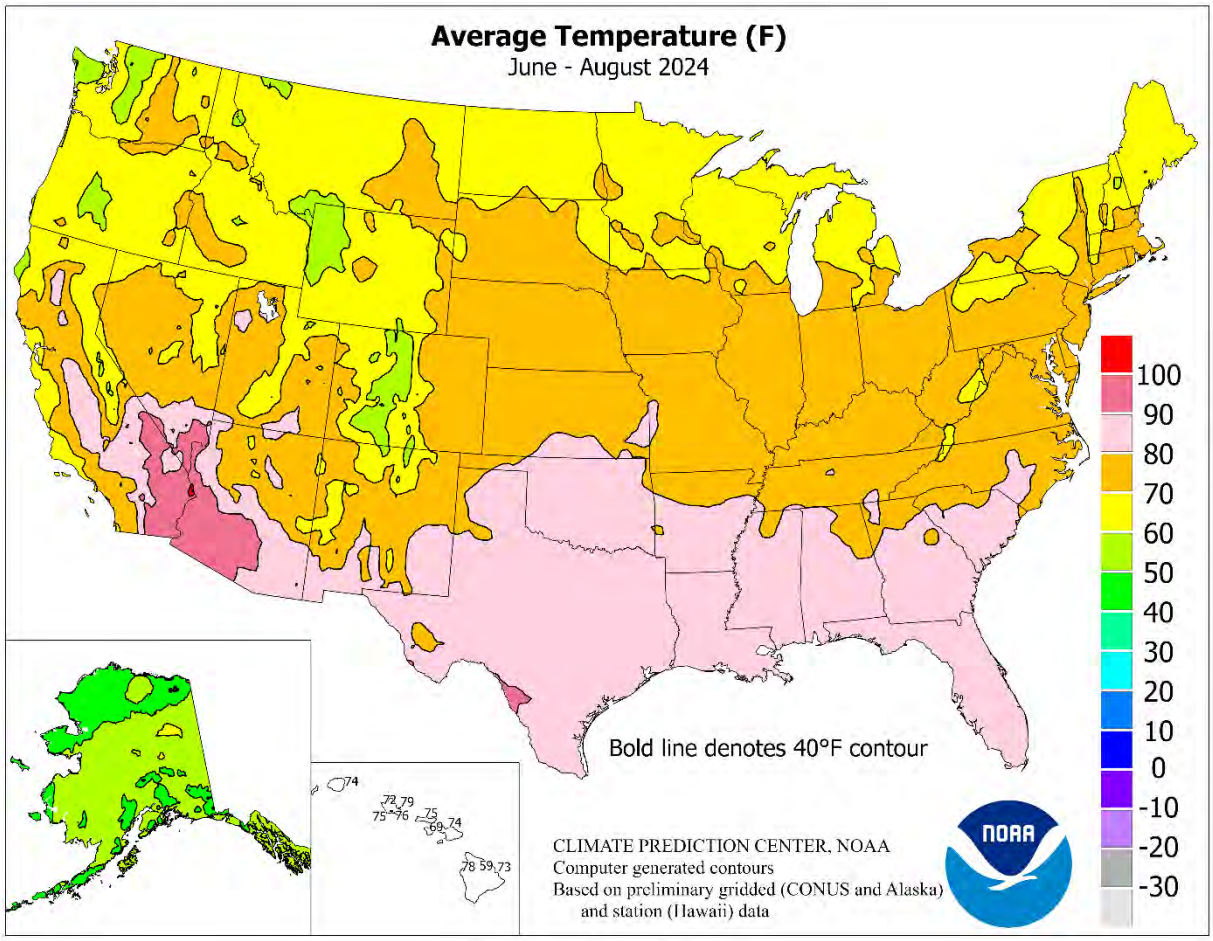
August: A complete summary appeared last week.

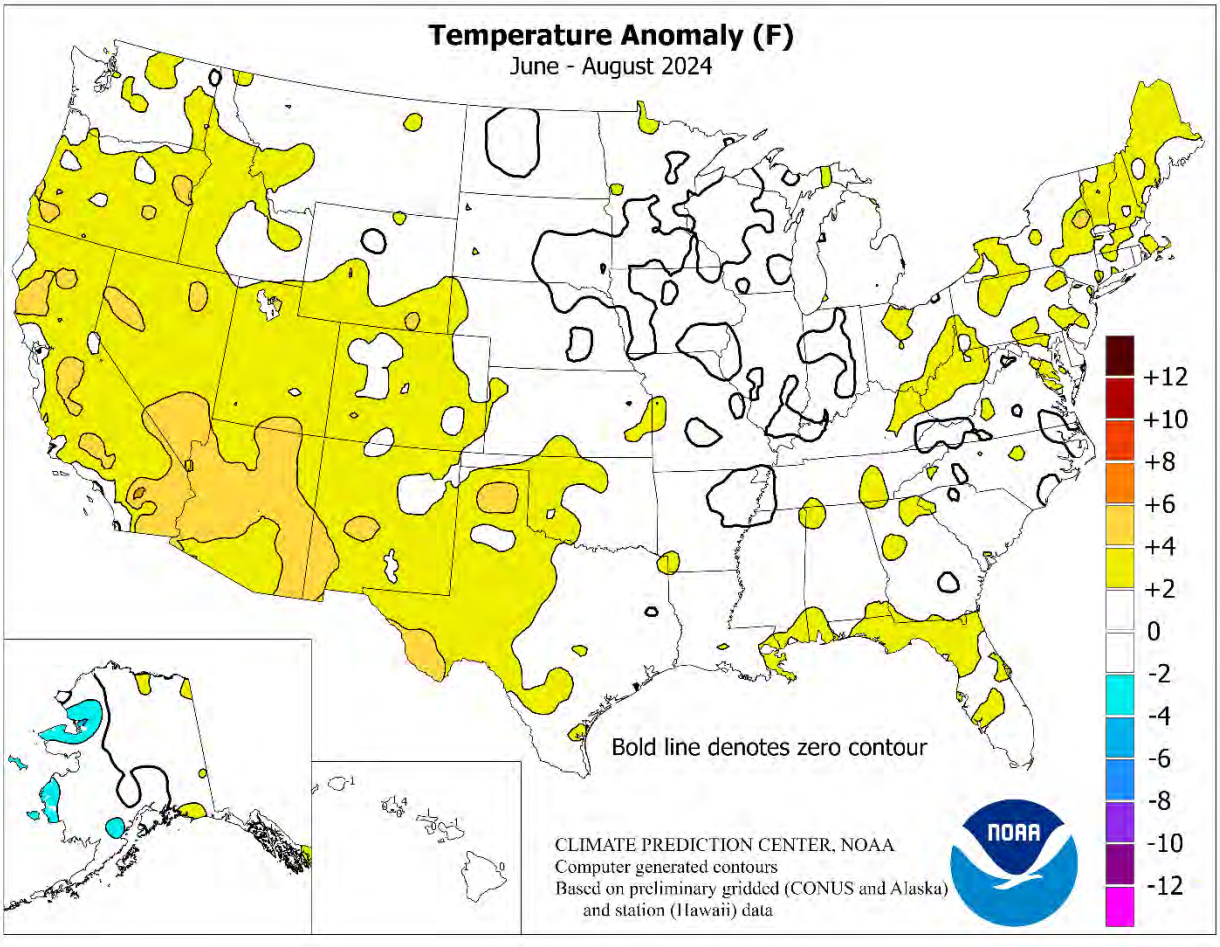

Total Precipitation (inches)
June - August 2024
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
NOAA


Percent of Normal Precipitation
June - August 2024
400
200
150
125
100
75
50
25
Bold line denotes 100% contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
Gridded normals: PRISM 1981-2010
NOAA


Extreme Maximum Temperature (F)
June - August 2024
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
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)
June - August 2024
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
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)
June - August 2024
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Temperature Anomaly (F)
June - August 2024
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes zero contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

National Weather Data for Selected Cities

June - August 2024

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	37	1	4.96	-1.18	WICHITA	58	-1	4.44	-2.88	TOLEDO	55	2	7.33	-0.85
BARROW	26	6	2.23	0.80	KY LEXINGTON	57	0	10.96	1.44	YOUNGSTOWN	54	2	14.33	4.69
FAIRBANKS	26	-1	3.39	0.74	LOUISVILLE	61	1	10.89	1.07	OK OKLAHOMA CITY	60	-2	6.61	-3.13
JUNEAU	41	-1	17.90	-5.39	PADUCAH	60	1	16.36	4.36	TULSA	62	0	11.45	0.48
KODIAK	43	2	22.98	0.48	LA BATON ROUGE	71	-1	14.94	1.50	OR ASTORIA	54	1	17.37	-1.91
NOME	35	5	6.84	1.56	LAKE CHARLES	69	0	8.15	-6.29	BURNS	47	2	1.51	-0.92
AL BIRMINGHAM	67	2	8.87	-3.31	NEW ORLEANS	74	2	12.87	-0.12	EUGENE	55	2	9.65	-2.61
HUNTSVILLE	64	1	12.05	-0.18	SHREVEPORT	68	2	***	***	MEDFORD	59	3	2.47	-2.24
MOBILE	70	2	11.33	-2.60	MA BOSTON	56	1	10.20	-1.14	PENDLETON	54	2	3.63	0.48
MONTGOMERY	69	3	12.60	1.10	WORCESTER	53	3	14.32	1.38	PORTLAND	57	1	8.94	-1.15
AR FORT SMITH	63	0	16.19	3.33	MD BALTIMORE	60	3	15.31	4.67	SALEM	55	1	8.92	-1.89
LITTLE ROCK	63	-1	7.68	-5.69	ME CARIBOU	46	2	10.92	0.52	PA ALLENTOWN	55	2	12.36	0.37
AZ FLAGSTAFF	50	3	0.78	-5.01	PORTLAND	51	2	9.66	-3.85	ERIE	56	3	14.19	1.60
PHOENIX	80	4	0.00	-1.88	MI ALPENA	48	1	7.15	-0.45	MIDDLETOWN	58	4	7.30	-3.22
PRESCOTT	60	4	0.19	-3.24	GRAND RAPIDS	51	0	7.85	-3.18	PHILADELPHIA	60	2	13.18	3.28
TUCSON	76	5	0.15	-2.62	HOUGHTON LAKE	46	0	6.33	-1.58	PITTSBURGH	55	2	5.99	-2.61
CA BAKERSFIELD	69	2	0.39	-0.67	LANSING	51	0	9.08	0.31	WILKES-BARRE	56	4	8.96	-1.56
EUREKA	53	-1	3.67	-4.79	MUSKEGON	53	2	8.39	-1.92	WILLIAMSPORT	55	2	6.70	-4.63
FRESNO	69	3	0.28	-1.66	TRAVERSE CITY	50	2	10.43	1.03	RI PROVIDENCE	56	2	13.61	1.24
LOS ANGELES	67	1	0.10	-1.85	MN DULUTH	41	-1	6.07	-2.98	SC CHARLESTON	71	4	12.08	-0.17
REDDING	67	4	1.49	-5.73	INT_L FALLS	39	-1	5.00	-1.43	COLUMBIA	67	3	9.06	-0.36
SACRAMENTO	66	3	0.54	-2.83	MINNEAPOLIS	48	-1	4.63	-2.61	FLORENCE	67	2	12.39	3.00
SAN DIEGO	69	3	0.40	-1.39	ROCHESTER	46	0	6.28	-1.28	GREENVILLE	63	1	16.81	6.28
SAN FRANCISCO	63	3	0.31	-3.22	ST. CLOUD	44	-1	6.44	-0.89	SD ABERDEEN	46	1	3.20	-1.73
STOCKTON	67	4	0.09	-2.76	MO COLUMBIA	57	1	9.18	-1.21	HURON	47	0	1.98	-3.15
CO ALAMOSA	44	2	1.35	-0.53	KANSAS CITY	56	0	3.30	-6.61	RAPID CITY	47	-1	2.27	-0.99
CO SPRINGS	53	3	0.62	-1.86	SAINT LOUIS	59	1	8.46	-1.88	SIOUX FALLS	49	2	2.54	-3.76
DENVER INTL	53	2	1.59	-1.06	SPRINGFIELD	58	1	8.88	-3.54	TN BRISTOL	59	3	10.55	2.38
GRAND JUNCTION	54	1	1.92	-1.09	MS JACKSON	68	3	11.41	-0.29	CHATTANOOGA	65	3	16.12	3.80
PUEBLO	54	2	1.46	-0.53	MERIDIAN	68	3	12.89	0.79	KNOXVILLE	62	2	11.55	1.80
CT BRIDGEPORT	58	3	10.83	0.41	TUPELO	65	2	11.18	-1.08	MEMPHIS	64	0	8.06	-4.46
HARTFORD	55	2	13.50	1.35	MT BILLINGS	49	1	3.23	0.10	NASHVILLE	63	2	8.46	-2.24
DC WASHINGTON	62	2	15.49	5.22	BUTTE	41	1	1.71	-0.70	TX ABILENE	66	0	1.83	-4.76
DE WILMINGTON	59	2	13.75	2.96	CUT BANK	43	0	1.54	-0.56	AMARILLO	59	1	3.23	-1.15
FL DAYTONA BEACH	77	4	17.67	3.83	GLASGOW	44	0	2.70	0.52	AUSTIN	72	1	5.61	-4.19
JACKSONVILLE	73	3	13.19	-1.05	GREAT FALLS	46	1	3.48	0.58	BEAUMONT	72	1	13.64	-2.31
KEY WEST	82	2	27.14	13.22	HAVRE	43	0	3.07	0.90	BROWNSVILLE	78	2	6.39	-5.09
MIAMI	81	2	31.62	12.17	MISSOULA	45	0	4.04	0.92	CORPUS CHRISTI	75	1	6.96	-3.61
ORLANDO	78	3	18.65	7.13	NC ASHEVILLE	59	3	18.19	7.83	DEL RIO	74	3	3.43	-1.93
PENSACOLA	73	4	11.37	-4.60	CHARLOTTE	64	3	17.09	7.37	EL PASO	68	4	0.80	-1.83
TALLAHASSEE	73	4	16.41	5.04	GREENSBORO	61	1	16.09	5.72	FORT WORTH	67	-1	6.71	-2.73
TAMPA	80	4	11.82	1.69	HATTERAS	69	3	17.47	0.89	GALVESTON	76	2	9.26	0.00
WEST PALM BEACH	81	3	28.22	9.96	RALEIGH	63	2	13.14	2.46	HOUSTON	73	2	13.09	-1.09
GA ATHENS	67	3	14.15	2.87	WILMINGTON	69	3	21.22	6.22	LUBBOCK	62	1	1.48	-3.83
ATLANTA	67	3	16.87	4.91	ND BISMARCK	45	1	1.59	-1.98	MIDLAND	65	1	1.35	-2.94
AUGUSTA	69	4	8.67	-0.59	DICKINSON	44	0	1.37	-1.94	SAN ANGELO	66	0	5.45	-0.88
COLUMBUS	70	3	15.77	6.07	FARGO	43	-1	2.17	-3.54	SAN ANTONIO	72	2	4.06	-5.33
MACON	68	3	14.76	5.09	GRAND FORKS	42	0	0.80	-4.18	VICTORIA	73	2	8.00	-4.02
SAVANNAH	73	5	10.92	0.28	JAMESTOWN	44	1	0.61	-3.57	WACO	67	-1	10.50	0.76
HI HILO	78	3	29.84	-5.37	NE GRAND ISLAND	54	2	1.31	-3.95	WICHITA FALLS	63	-1	6.44	-1.09
HONOLULU	81	1	3.50	-1.47	LINCOLN	52	0	3.20	-3.20	UT SALT LAKE CITY	56	3	1.17	-3.07
KAHULUI	81	3	0.81	-3.03	NORFOLK	51	1	4.17	-1.98	VA LYNCHBURG	60	4	20.26	9.91
LIHUE	79	1	9.08	-1.32	NORTH PLATTE	51	2	1.27	-2.37	NORFOLK	66	4	15.88	4.59
IA BURLINGTON	54	-1	7.36	-1.73	OMAHA	53	0	4.53	-1.93	RICHMOND	62	2	17.09	6.75
CEDAR RAPIDS	49	-1	10.31	2.45	SCOTTSBLUFF	50	1	1.43	-1.54	ROANOKE	60	3	15.80	5.65
DES MOINES	52	0	10.53	2.69	VALENTINE	50	2	2.21	-1.35	WASH/DULLES	59	2	9.52	-1.01
DUBUQUE	49	0	14.35	5.95	NH CONCORD	50	2	9.25	-1.84	VT BURLINGTON	52	3	7.92	-2.40
SIOUX CITY	49	-1	4.89	-1.49	NJ ATLANTIC_CITY	59	2	16.01	6.21	WA OLYMPIA	52	2	16.46	1.52
WATERLOO	50	0	9.67	2.58	NEWARK	59	2	12.43	1.41	QUILLAYUTE	52	2	27.60	-2.23
ID BOISE	54	2	2.15	-0.56	NM ALBUQUERQUE	59	2	1.05	-1.65	SEATTLE-TACOMA	55	2	10.16	-1.37
LEWISTON	55	2	3.03	0.20	NV ELY	48	2	0.61	-1.99	SPOKANE	50	2	3.61	-0.54
POCATELLO	48	1	1.57	-1.31	LAS VEGAS	73	4	0.00	-1.01	YAKIMA	52	3	1.45	-0.57
IL CHICAGO/O_HARE	55	2	8.53	-0.91	RENO	57	3	0.57	-1.18	WI EAU CLAIRE	46	-1	5.31	-2.50
MOLINE	53	1	10.74	2.19	WINNEMUCCA	52	3	1.90	-0.16	GREEN BAY	48	1	8.67	1.10
PEORIA	54	0	9.79	0.72	NY ALBANY	50	-1	8.95	-1.24	LA CROSSE	50	0	7.63	-0.08
ROCKFORD	53	1	10.63	2.07	BINGHAMTON	51	2	9.44	-0.76	MADISON	49	0	8.80	0.94
SPRINGFIELD	55	0	5.63	-3.56	BUFFALO	54	3	9.56	-1.87	MILWAUKEE	53	2	5.53	-2.98
IN EVANSVILLE	59	2	12.72	2.12	ROCHESTER	52	2	7.44	-1.55	WV BECKLEY	56	2	6.91	-1.55
FORT WAYNE	53	0	10.31	1.60	SYRACUSE	53	2	7.50	-3.07	CHARLESTON	58	1	6.91	-2.69
INDIANAPOLIS	57	1	8.84	-1.04	OH AKRON-CANTON	55	3	9.85	0.32	ELKINS	55	3	8.58	-1.22
SOUTH BEND	53	1	6.42	-3.63	CINCINNATI	58	1	9.76	0.45	HUNTINGTON	58	1	7.68	-1.30
KS CONCORDIA	58	3	4.22	-1.71	CLEVELAND	55	1	16.17	5.73	WY CASPER	46	0	1.00	-1.99
DODGE CITY	57	1	3.71	-0.47	COLUMBUS	56	1	10.60	2.00	CHEYENNE	48	2	1.00	-2.03
GOODLAND	53	1	0.98	-2.34	DAYTON	57	3	7.75	-1.81	LANDER	47	2	1.35	-1.90
TOPEKA	56	0	4.63	-3.86	MANSFIELD	54	2	13.44	3.41	SHERIDAN	47	1	4.11	0.54

Based on 1991-2020 normals

***** Not Available**

National Agricultural Summary

September 9 – 15, 2024

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Much of the nation remained drier than normal, while large parts of the lower Mississippi Valley and Southeast, as well as parts of the Pacific Northwest, northern Plains, and northern Rockies, recorded at least twice the normal amount of weekly precipitation. Hurricane Francine, which made landfall on September 11 in Louisiana, brought heavy rains to large parts of the South. Some areas in the Florida Panhandle recorded more than 12 inches of rain. Meanwhile, most of the Midwest, Great Plains, and West were warmer than normal. Parts of the upper Midwest and northern Plains recorded temperatures 9°F or more above normal. In contrast, most of the mid-Atlantic and South were cooler than normal. Some locations in Arkansas, Louisiana, and eastern Texas recorded temperatures 6°F or more below normal.

Corn: By September 15, eighty-five percent of this year's corn acreage was denting, 3 percentage points behind last year but 1 point ahead of the 5-year average. Forty-five percent of the nation's corn acreage was mature by September 15, three percentage points behind last year but 7 points ahead of average. Nine percent of the 2024 corn acreage was harvested by week's end, 1 percentage point ahead of last year and 3 points ahead of average. Harvest was underway in 15 of the 18 estimating states. On September 15, sixty-five percent of the nation's corn acreage was rated in good to excellent condition, 1 percentage point above the previous week and 14 points above the previous year. In Iowa, the largest corn-producing state, 77 percent of the corn crop was rated in good to excellent condition.

Soybeans: Nationally, leaf drop was 44 percent complete by September 15, three percentage points behind last year but 7 points ahead of the 5-year average. Soybean harvest across the nation was 6 percent complete by September 15, two percentage points ahead of last year and 3 points ahead of average. Harvest was underway in 17 of the 18 estimating states. On September 15, sixty-four percent of the nation's soybean acreage was rated in good to excellent condition, 1 percentage point below the previous week but 12 points above the previous year.

Winter Wheat: Nationwide, producers had sown 14 percent of the intended 2025 winter wheat acreage by September 15, one percentage point ahead of both last year and the 5-year average. Planting progress was most advanced in Washington at 43 percent planted, 5 percentage points ahead of last year and 2 points ahead of average.

Cotton: By September 15, fifty-four percent of the nation's cotton had open bolls, 2 percentage points ahead of last year and 4 points ahead of the 5-year average. On that date, 10 percent of the cotton acreage was harvested, 1 percentage point ahead of last year and 2 points ahead of average. On September 15, thirty-nine percent of the 2024 cotton acreage was rated in good to excellent condition, 1 percentage point below the previous week but 10 points above the previous year.

Sorghum: Eighty-four percent of the nation's sorghum acreage was at or beyond the coloring stage by September 15, two percentage points ahead of last year and 1 point ahead of the 5-year average. On that date, 46 percent of the sorghum acreage was mature, 2 percentage points ahead of last year and 5 points ahead of average. Twenty-four percent of the 2024 sorghum acreage had been harvested by September 15, one percentage point ahead of last year but equal to the average. Eighty-one percent of the Texas sorghum acreage had been harvested by September 15, seven percentage points ahead of last year and 5 points ahead of average. Forty-four percent of the nation's sorghum acreage was rated in good to excellent condition on September 15, four percentage points below the previous week but 1 point above the previous year.

Rice: Nationally, 64 percent of the rice acreage was harvested by September 15, ten percentage points ahead of last year and 20 points ahead of the 5-year average. The rice harvest pace was ahead of the average in all six estimating states.

Small Grains: Ninety-seven percent of the nation's oat acreage had been harvested by September 15, equal to both last year and the 5-year average. Harvesting of oats was complete or nearing completion in eight of the nine estimating states.

By September 15, producers had harvested 94 percent of the nation's barley crop, 2 percentage points ahead of last year and 1 point ahead of the 5-year average. Harvesting of barley was complete or nearing completion in all five estimating states.

By September 15, ninety-two percent of the nation's spring wheat had been harvested, 1 percentage point ahead of the previous year and 2 points ahead of the 5-year average. Harvesting of spring wheat was complete or nearing completion in five of the six estimating states.

Other Crops: Two percent of the nation's peanut acreage was harvested as of September 15, one percentage point behind last year and 2 points behind the 5-year average. On that date, 60 percent of the nation's peanut acreage was rated in good to excellent condition, 2 percentage points above the previous week and 7 points above the same time last year.

By September 15, sugarbeet producers had harvested 8 percent of the nation's crop, 1 percentage point behind both last year and the 5-year average.

Crop Progress and Condition

Week Ending September 15, 2024

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

Corn Percent Dented

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	68	52	65	71
IL	92	82	93	84
IN	81	79	90	79
IA	94	74	85	88
KS	94	88	94	90
KY	89	88	92	89
MI	67	66	80	68
MN	91	55	69	83
MO	96	91	95	93
NE	94	83	91	90
NC	97	95	97	98
ND	81	34	59	68
OH	63	78	88	69
PA	52	57	65	66
SD	84	63	79	80
TN	97	93	97	97
TX	96	99	100	96
WI	76	58	73	72
18 Sts	88	74	85	84

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

Corn Percent Mature

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	12	3	16	17
IL	62	40	63	40
IN	26	25	48	29
IA	56	20	41	38
KS	70	55	72	55
KY	58	67	78	67
MI	16	8	26	19
MN	53	12	27	33
MO	65	62	74	52
NE	52	30	45	43
NC	91	83	86	91
ND	18	3	5	19
OH	19	28	45	21
PA	9	4	13	15
SD	29	10	24	31
TN	75	76	85	72
TX	79	93	97	78
WI	27	5	18	21
18 Sts	48	29	45	38

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

Corn Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	0	0	0	1
IL	5	2	7	3
IN	1	1	5	2
IA	4	0	2	2
KS	24	14	26	17
KY	17	22	33	20
MI	1	0	2	1
MN	5	0	1	2
MO	16	13	25	10
NE	6	1	5	4
NC	60	33	47	59
ND	0	0	0	0
OH	0	0	6	0
PA	0	0	1	1
SD	4	0	1	2
TN	22	31	46	24
TX	66	75	80	65
WI	1	0	0	0
18 Sts	8	5	9	6

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	13	21	32	28	6
IL	1	4	18	56	21
IN	3	7	27	50	13
IA	1	4	18	57	20
KS	14	18	30	29	9
KY	2	8	20	55	15
MI	4	5	25	43	23
MN	3	7	27	50	13
MO	2	3	11	63	21
NE	4	8	20	44	24
NC	52	25	11	12	0
ND	3	7	25	57	8
OH	7	18	36	35	4
PA	0	3	20	64	13
SD	3	7	25	51	14
TN	9	14	32	31	14
TX	9	22	28	33	8
WI	2	8	27	43	20
18 Sts	4	8	23	49	16
Prev Wk	4	8	24	48	16
Prev Yr	7	13	29	43	8

Sorghum Percent Coloring

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	74	56	70	78
KS	77	67	80	77
NE	92	89	93	89
OK	60	59	68	72
SD	86	86	94	86
TX	95	95	97	95
6 Sts	82	75	84	83

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

Sorghum Percent Mature

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	21	3	7	25
KS	31	22	35	21
NE	24	8	12	23
OK	22	20	34	30
SD	39	5	27	31
TX	84	85	90	85
6 Sts	44	36	46	41

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
CO	0	0	0	2
KS	6	2	5	3
NE	1	0	1	1
OK	6	10	18	4
SD	0	0	1	2
TX	74	77	81	76
6 Sts	23	21	24	24

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

Sorghum Condition by Percent

	VP	P	F	G	EX
CO	25	19	22	33	1
KS	10	15	37	33	5
NE	0	6	22	49	23
OK	7	9	25	51	8
SD	3	7	30	58	2
TX	6	16	31	35	12
6 Sts	9	14	33	37	7
Prev Wk	7	13	32	40	8
Prev Yr	11	16	30	34	9

Crop Progress and Condition

Week Ending September 15, 2024

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

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AR	53	59	66	40
IL	55	35	62	31
IN	34	33	51	34
IA	44	9	31	32
KS	48	23	37	32
KY	24	29	41	27
LA	86	68	74	76
MI	27	26	48	40
MN	51	4	23	39
MS	77	68	77	60
MO	32	23	35	16
NE	67	24	44	54
NC	38	19	27	31
ND	63	15	39	58
OH	22	30	59	26
SD	52	16	32	47
TN	41	46	58	35
WI	23	10	41	22
18 Sts	47	25	44	37

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AR	14	24	29	10
IL	1	1	6	1
IN	1	1	6	1
IA	2	NA	1	1
KS	3	NA	0	1
KY	5	3	11	5
LA	60	40	46	47
MI	1	0	2	1
MN	4	NA	1	3
MS	38	32	44	24
MO	0	2	4	0
NE	3	NA	1	3
NC	1	0	1	2
ND	3	NA	1	3
OH	0	0	4	0
SD	1	NA	1	1
TN	8	11	22	6
WI	0	NA	1	0
18 Sts	4	NA	6	3

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	1	11	22	54	12
IL	2	5	21	54	18
IN	3	7	27	51	12
IA	1	4	18	58	19
KS	6	13	30	44	7
KY	2	10	32	46	10
LA	0	7	20	69	4
MI	7	9	24	48	12
MN	1	7	26	54	12
MS	4	6	29	50	11
MO	2	7	20	59	12
NE	3	6	26	48	17
NC	4	18	32	41	5
ND	2	6	30	55	7
OH	9	19	32	36	4
SD	3	8	28	50	11
TN	7	16	32	36	9
WI	1	8	29	47	15
18 Sts	3	8	25	52	12
Prev Wk	3	7	25	52	13
Prev Yr	6	12	30	44	8

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AL	48	46	62	52
AZ	71	87	90	85
AR	80	83	92	76
CA	17	25	30	33
GA	49	44	57	55
KS	74	44	53	42
LA	89	72	75	83
MS	76	69	79	65
MO	38	44	54	42
NC	40	35	45	49
OK	41	28	41	41
SC	42	52	67	45
TN	39	57	67	35
TX	49	40	47	47
VA	62	52	63	52
15 Sts	52	45	54	50

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

Cotton Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AL	1	0	1	1
AZ	13	9	17	9
AR	1	0	3	1
CA	0	0	0	0
GA	0	0	0	1
KS	0	0	0	0
LA	12	2	6	8
MS	2	0	2	2
MO	0	0	0	0
NC	0	0	0	0
OK	0	0	0	0
SC	0	0	1	0
TN	2	0	1	1
TX	20	18	22	17
VA	1	0	1	0
15 Sts	9	8	10	8

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	3	10	38	48	1
AZ	0	1	0	39	60
AR	1	13	19	44	23
CA	0	0	0	95	5
GA	1	11	35	44	9
KS	8	21	31	35	5
LA	0	0	19	81	0
MS	3	9	39	47	2
MO	5	11	29	55	0
NC	2	3	21	63	11
OK	10	7	47	35	1
SC	2	11	35	50	2
TN	11	15	27	38	9
TX	15	21	36	25	3
VA	0	8	27	64	1
15 Sts	10	16	35	34	5
Prev Wk	12	16	32	34	6
Prev Yr	20	23	28	24	5

Crop Progress and Condition

Week Ending September 15, 2024

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AL	5	1	3	4
FL	13	5	8	15
GA	2	1	2	3
NC	0	0	0	0
OK	0	0	0	0
SC	3	0	2	3
TX	0	0	0	0
VA	2	0	1	2
8 Sts	3	1	2	4

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	1	4	34	60	1
FL	0	5	38	55	2
GA	1	9	33	47	10
NC	2	5	12	67	14
OK	5	10	24	56	5
SC	3	8	30	55	4
TX	0	1	39	52	8
VA	0	0	15	76	9
8 Sts	1	7	32	52	8
Prev Wk	2	8	32	51	7
Prev Yr	3	9	35	47	6

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
ID	2	2	5	5
MI	6	5	10	11
MN	11	6	7	9
ND	12	9	11	10
4 Sts	9	NA	8	9

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

Rice Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AR	53	56	68	40
CA	4	2	15	7
LA	92	89	93	89
MS	68	67	80	52
MO	23	28	40	16
TX	89	89	93	91
6 Sts	54	54	64	44

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

Oats Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
IA	100	100	100	100
MN	99	94	97	98
NE	100	100	100	100
ND	92	81	89	91
OH	100	100	100	100
PA	97	94	97	96
SD	100	100	100	99
TX	100	100	100	100
WI	97	98	99	95
9 Sts	97	94	97	97

These 9 States harvested 71% of last year's oat acreage.

Winter Wheat Percent Planted

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
AR	1	0	1	1
CA	0	0	0	0
CO	26	17	35	29
ID	12	6	11	15
IL	6	0	0	1
IN	2	2	3	2
KS	7	4	9	7
MI	2	2	10	4
MO	2	0	1	0
MT	13	2	23	16
NE	18	7	21	18
NC	1	0	1	1
OH	1	0	1	1
OK	10	0	6	10
OR	11	4	12	10
SD	29	12	25	21
TX	13	7	15	13
WA	38	34	43	41
18 Sts	13	6	14	13

These 18 States planted 89% of last year's winter wheat acreage.

Spring Wheat Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
ID	84	88	95	91
MN	97	89	99	92
MT	93	91	95	91
ND	88	79	88	87
SD	100	97	100	99
WA	97	96	100	93
6 Sts	91	85	92	90

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

Barley Percent Harvested

	Prev Year	Prev Week	Sep 15 2024	5-Yr Avg
ID	87	89	95	93
MN	97	90	95	96
MT	91	89	93	92
ND	96	89	95	94
WA	97	98	100	90
5 Sts	92	89	94	93

These 5 States harvested 89% of last year's barley acreage.

Crop Progress and Condition

Week Ending September 15, 2024

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

Pasture and Range Condition by Percent
Week Ending Sep 15, 2024

	VP	P	F	G	EX		VP	P	F	G	EX
AL	7	17	38	35	3	NH	0	0	9	91	0
AZ	26	25	24	10	15	NJ	10	20	33	28	9
AR	10	24	32	32	2	NM	8	38	33	6	15
CA	5	15	50	30	0	NY	3	3	24	55	15
CO	7	15	24	42	12	NC	1	13	40	44	2
CT	0	0	10	90	0	ND	8	14	26	48	4
DE	17	26	31	24	2	OH	46	29	22	3	0
FL	0	3	15	48	34	OK	17	18	31	32	2
GA	18	26	34	21	1	OR	42	25	19	11	3
ID	4	44	19	28	5	PA	6	14	22	50	8
IL	11	27	36	25	1	RI	0	0	20	70	10
IN	9	23	37	29	2	SC	12	25	38	23	2
IA	2	8	38	44	8	SD	18	24	28	24	6
KS	11	21	36	28	4	TN	21	32	32	14	1
KY	11	21	34	32	2	TX	18	30	33	16	3
LA	0	4	33	60	3	UT	1	2	33	63	1
ME	0	11	21	60	8	VT	0	0	50	50	0
MD	26	28	30	14	2	VA	18	32	30	19	1
MA	0	0	22	70	8	WA	11	57	14	18	0
MI	5	23	30	32	10	WV	60	38	2	0	0
MN	3	6	27	50	14	WI	3	7	36	44	10
MS	8	13	40	36	3	WY	46	24	12	18	0
MO	3	10	37	46	4	48 Sts	18	26	29	21	6
MT	27	30	36	6	1						
NE	13	32	27	20	8	Prev Wk	15	24	32	23	6
NV	30	10	15	25	20	Prev Yr	18	21	27	27	7

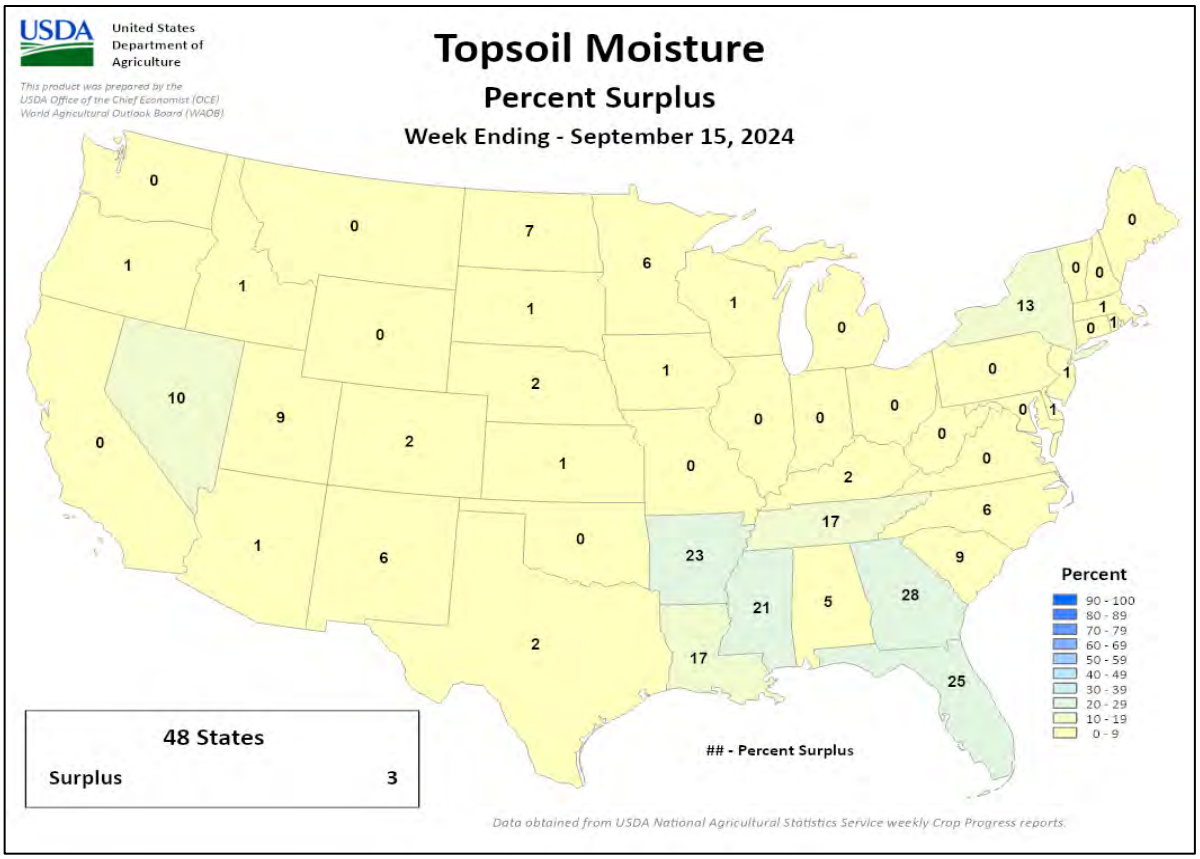
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

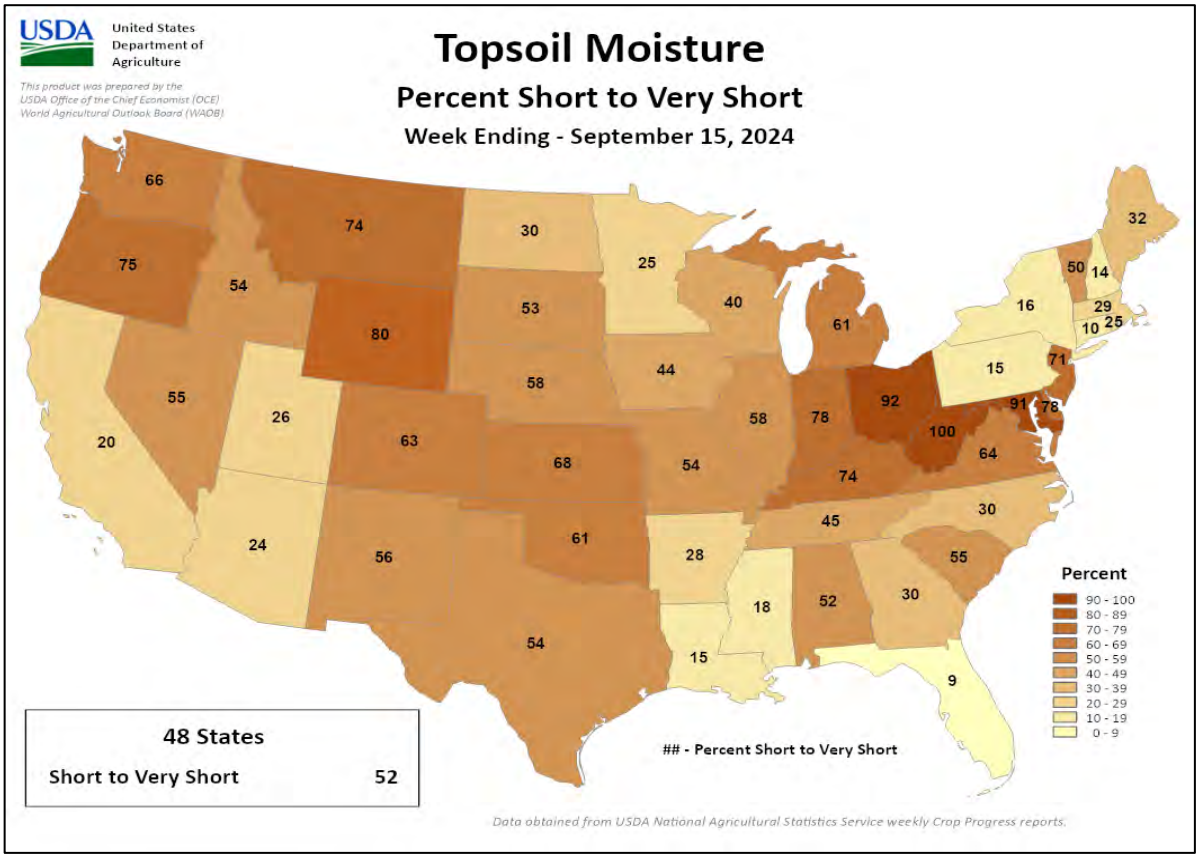
NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending September 15, 2024

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

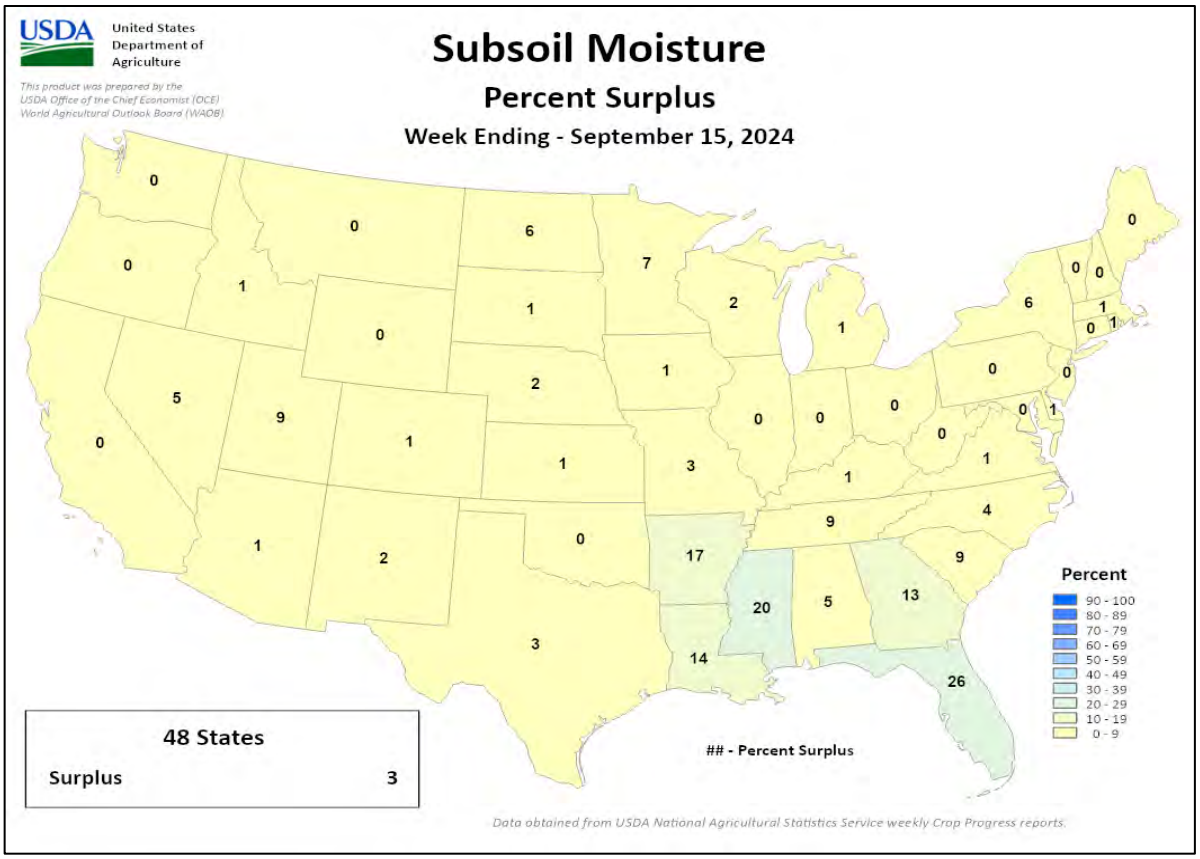


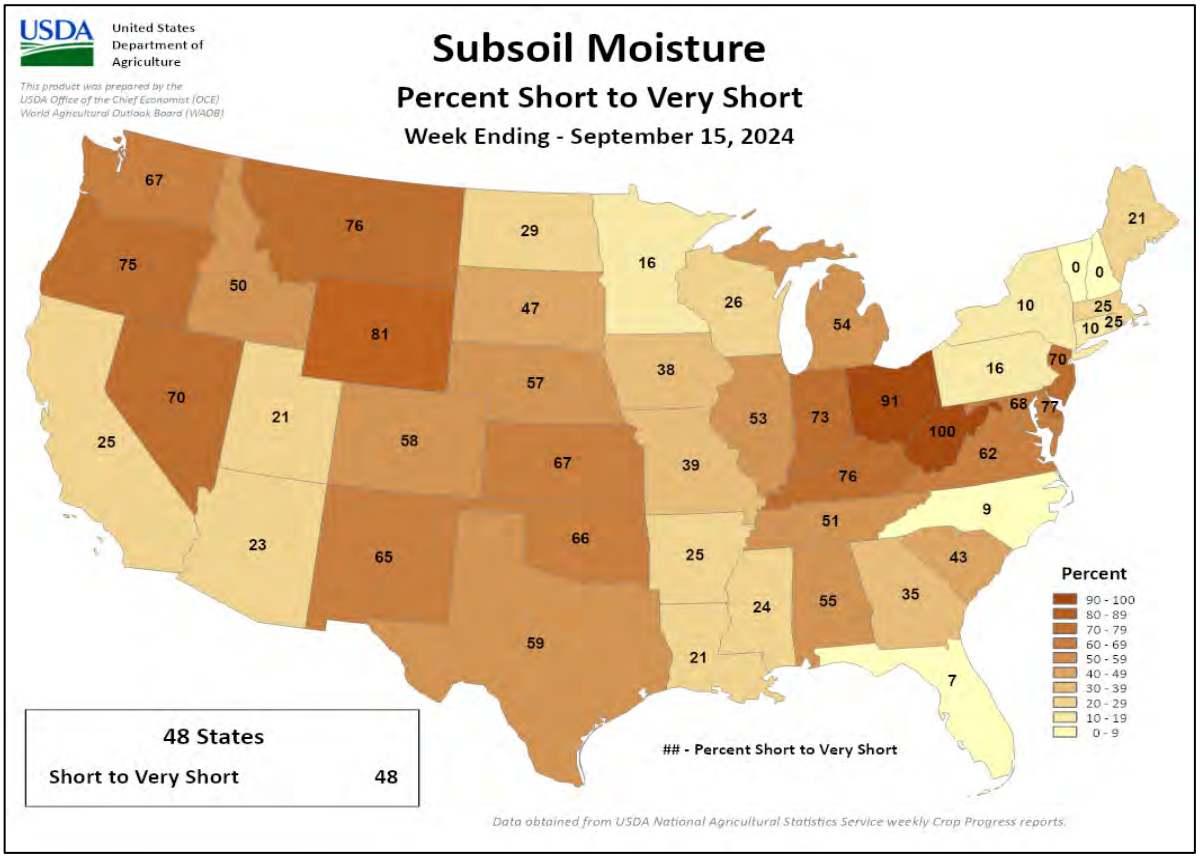


Crop Progress and Condition

Week Ending September 15, 2024

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





September 12 ENSO Diagnostic Discussion

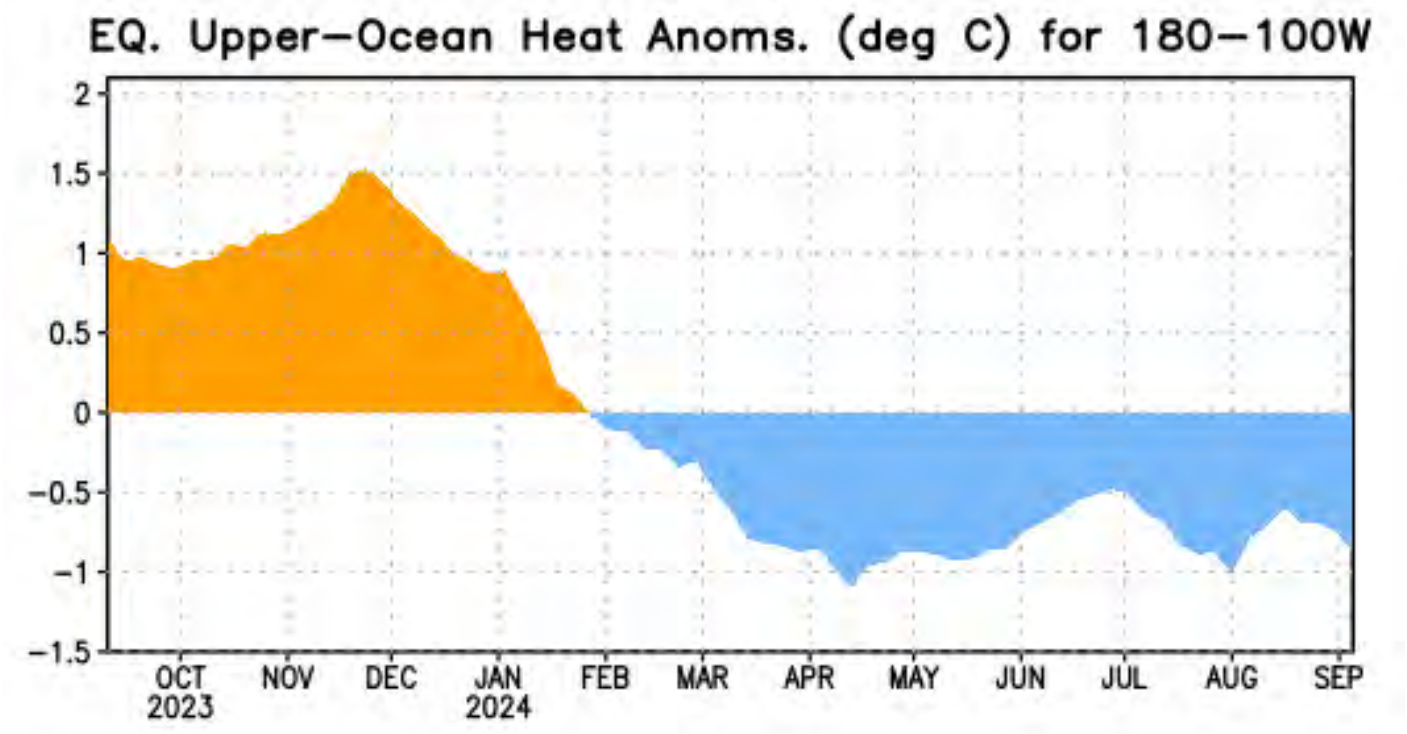


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: La Niña Watch

Synopsis: La Niña is favored to emerge in September-November (71% chance) and is expected to persist through January-March 2025.

ENSO-neutral continued during August 2024, with near-average sea surface temperatures (SSTs) observed across most of the equatorial Pacific Ocean. The weekly Niño indices did not change substantially during the month, with the latest weekly index values varying between +0.2°C (Niño-4) and -0.4°C (Niño-1+2). Below-average subsurface temperatures were also similar to those in early August (area-averaged index in Fig. 1). Negative temperature anomalies continued to dominate across most of the subsurface equatorial Pacific Ocean. Low-level wind anomalies were easterly over most of the equatorial Pacific, and upper-level wind anomalies were easterly over the east-central Pacific. Convection was slightly enhanced over parts of Indonesia and was near average near the Date Line. Both the Southern Oscillation index and the equatorial Southern Oscillation indices were positive. Collectively, the coupled ocean-atmosphere system reflected ENSO-neutral.

The IRI plume predicts a weak and a short duration La Niña, as indicated by the Niño-3.4 index values less than -0.5°C. This month, the team relies more on the latest North American Multi-Model Ensemble (NMME) guidance, which predicts La Niña to emerge in the next couple of months and continue through the Northern Hemisphere winter. The continuation of negative subsurface temperatures and enhanced low-level easterly wind anomalies supports the formation of a weak La Niña. A weaker La Niña implies that it would be less likely to result in conventional winter impacts, though predictable signals could still influence the forecast guidance (e.g., CPC's seasonal outlooks). In summary, La Niña is favored to emerge in September-November (71% chance) and is expected to persist through January-March 2025.

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 website (El Niño/La Niña Current Conditions and Expert Discussions). Additional perspectives and analyses are also available in an ENSO blog. A probabilistic strength forecast is available here. The next ENSO Diagnostics Discussion is scheduled for **10 October 2024**. 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

September 8-14, 2024

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

HIGHLIGHTS

EUROPE: Heavy to excessive rain over central and eastern Europe brought an abrupt end to drought and heat but triggered widespread, locally catastrophic flooding.

WESTERN FSU: Drought and late-season warmth favored summer crop harvesting but left soils devoid of moisture for winter crop establishment in Russia and Ukraine.

MIDDLE EAST: Localized showers in Turkey contrasted with seasonably warm and dry conditions elsewhere.

SOUTH ASIA: A monsoon low tracking across India produced soaking rain from eastern rice areas to northern cotton locales.

EAST ASIA: Hot, dry weather across eastern China gave way to periods of showers and cooler conditions as summer crops mature.

SOUTHEAST ASIA: The remnants of Super Typhoon Yagi spawned flooding rainfall in northern Vietnam.

AUSTRALIA: Scattered showers maintained local moisture supplies for reproductive winter crops, but more rain would be welcome.

ARGENTINA: Moisture was needed in western farming areas as winter grains neared reproduction.

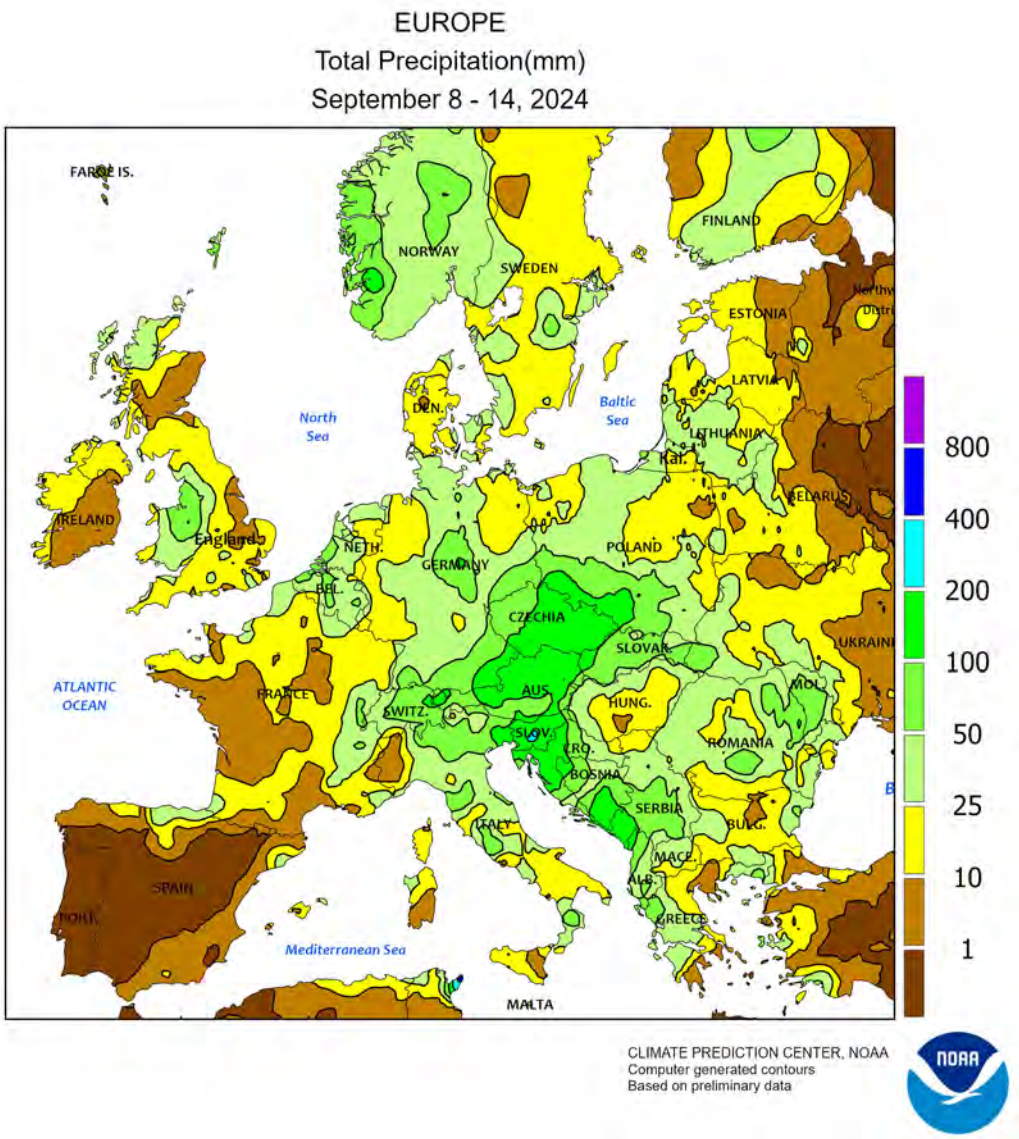
BRAZIL: Light showers continued over southern agricultural districts.

MEXICO: Seasonal showers continued over the south, while warm, overall drier conditions prevailed in many more northerly production areas.

CANADIAN PRAIRIES: Heavy showers disrupted harvesting in Alberta.

SOUTHEASTERN CANADA: Warm, sunny weather benefited maturing summer crops while also supporting the early stages of winter wheat planting.

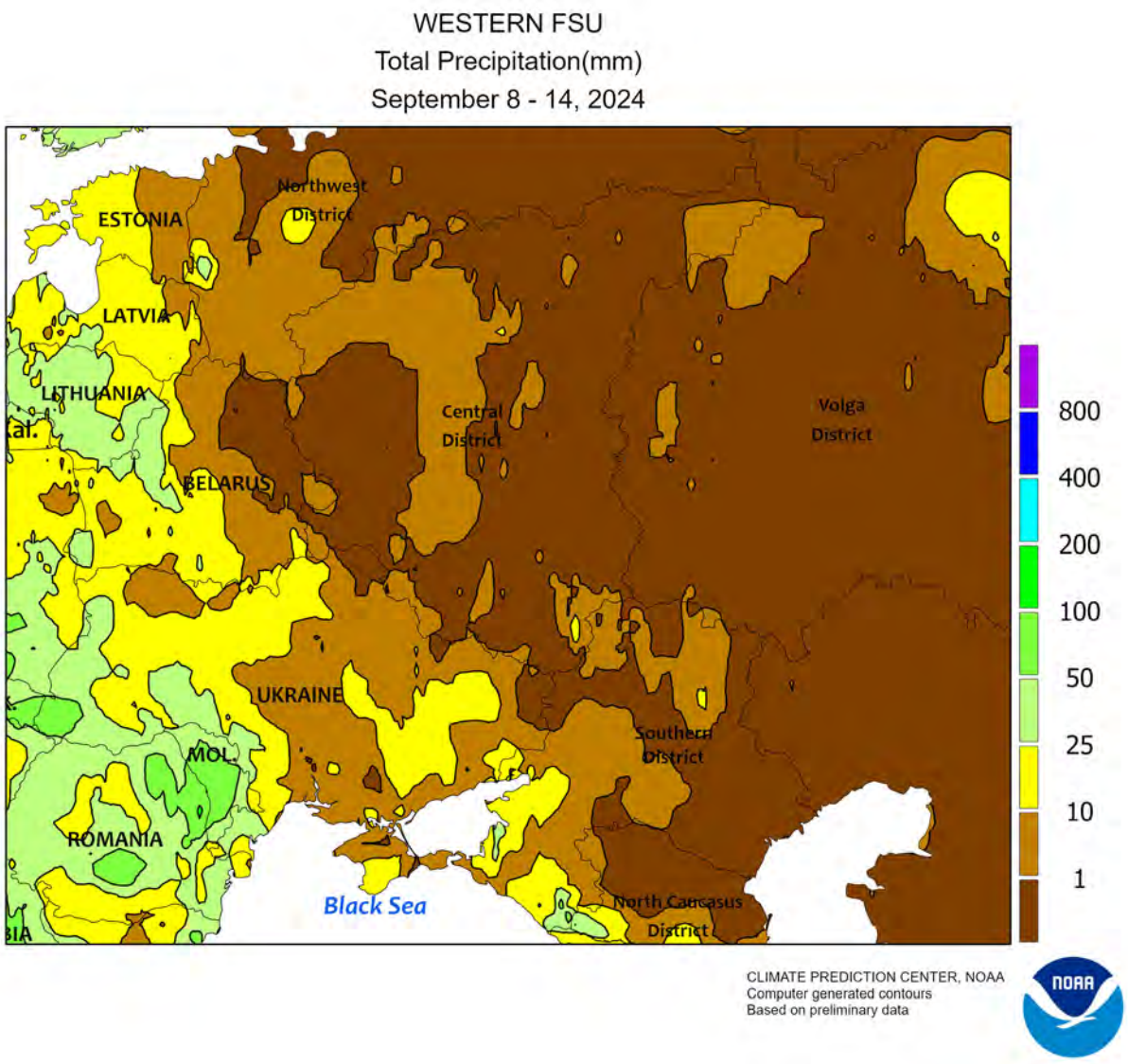
For additional information contact: mark.brusberg@usda.gov



EUROPE

A blocking high over western Russia caused a moisture-laden storm system to stall over eastern Europe, producing heavy to extreme rainfall and widespread flooding. Weekly rainfall topped 100 mm from the Alps and southern Germany eastward into southwestern Poland as well as the western Balkans. Some of the highest totals were noted in southwestern Poland (150-200 mm), the Czech Republic (as high as 340 mm), Austria (up to 313 mm), Slovenia (286 mm), Croatia (257 mm), western Slovakia (242 mm), and northeastern Italy (164 mm). There were widespread reports of flooding and damage to infrastructure along with numerous fatalities. The rain also brought an abrupt end to the heat wave and drought that had afflicted eastern Europe during the latter half of summer. The extent of crop impacts and damage will not be known until floodwaters recede and producers can return to fields. Before reaching eastern Europe, the same slow-moving storm system generated moderate to heavy showers (10-100 mm, locally more) in England, France, northern Germany, and the Low Countries. A trailing cold front produced heavy showers and thunderstorms — some severe — over northern and central Italy (25-135 mm). Moderate to heavy rain (10-130 mm) associated with the storm also overspread the Balkans, though drought-afflicted growing areas of the lower Danube River Valley reported far less (5-20 mm). Likewise, drought-riddled Hungary saw only 5 to 25 mm of rain from the storm during the monitoring period; most of southern Hungary's primary crop areas lie in the rain shadow of mountains, which often causes rain to dissipate as it moves into the country. Much cooler weather (2-6°C below normal) trailed the storm over western and central Europe, while early-week heat (highs in the lower to middle 30s degrees C) preceded the storm over eastern Europe.

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



WESTERN FSU

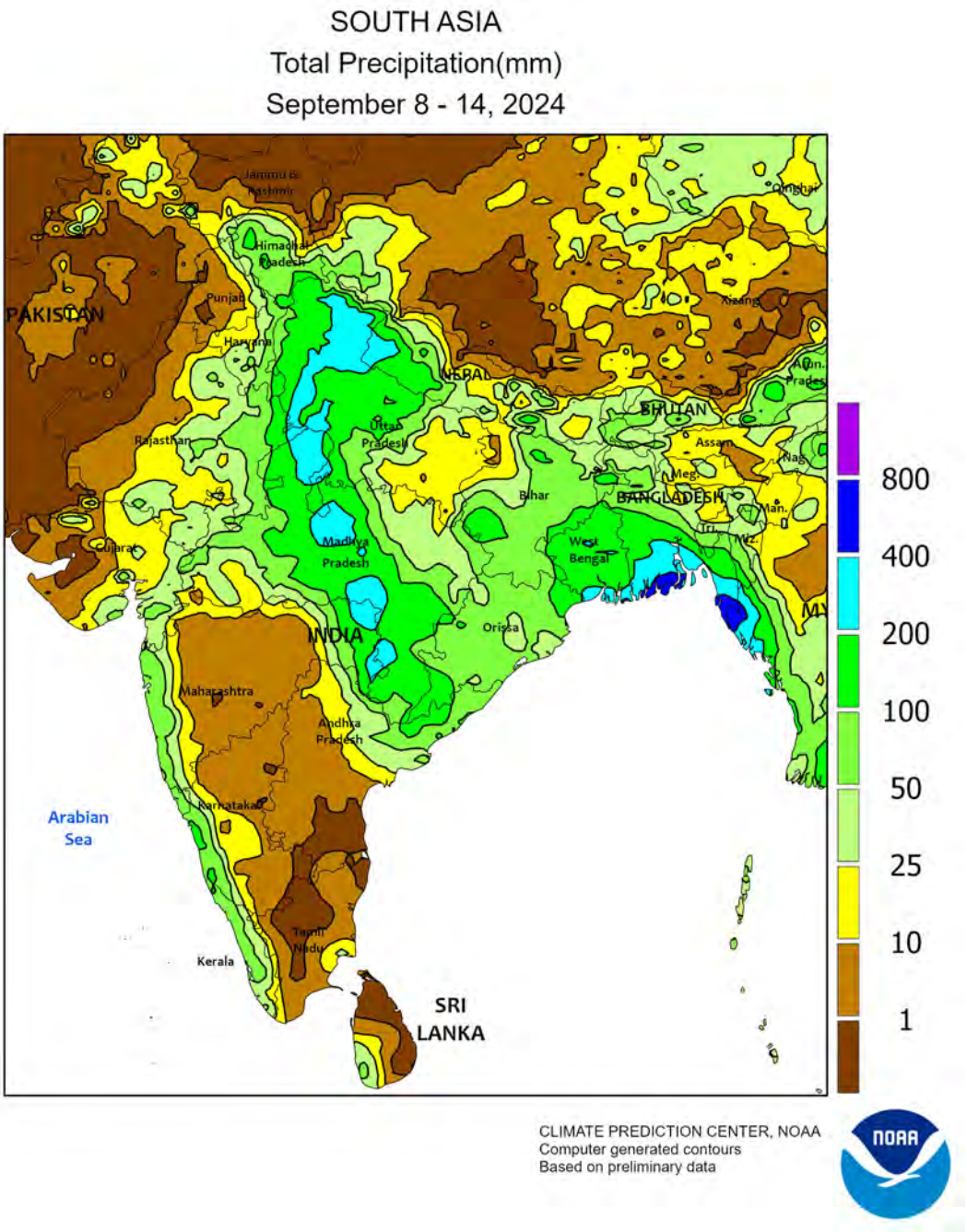
Drought and heat continued save for moderate to heavy rain in westernmost growing areas. A strong blocking high over western Russia maintained sunny skies and above-normal temperatures (up to 7°C above normal) across Belarus, Ukraine, and western Russia. The dry and hot weather (30-36°C) favored a rapid pace of summer crop harvesting but exacerbated drought for winter crop planting and establishment. However, the leading edge of a slow-moving storm system over eastern Europe pushed into westernmost portions of the region, with moderate to heavy rain in Moldova (40-110 mm) and western portions of Ukraine (20-40 mm) and Belarus (10-85 mm) easing or eradicating drought concerns for winter crops.

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

MIDDLE EAST

Showers in Turkey contrasted with dry and increasingly warm weather elsewhere. Highly variable but locally heavy showers and thunderstorms — some severe — in western and northern Turkey (5-65 mm) conditioned soils for winter grain sowing. However, central and southeastern portions of the country were dry, allowing summer crop harvesting and winter grain sowing to proceed without delay. Elsewhere in the Middle East, seasonably dry weather prevailed; cool season rain typically arrives in October from the eastern Mediterranean Coast into Iran. Anomalous warmth (2-5°C above normal) expanded across most of the region, though chilly weather (up to 2°C below normal) lingered in northeastern Iran.

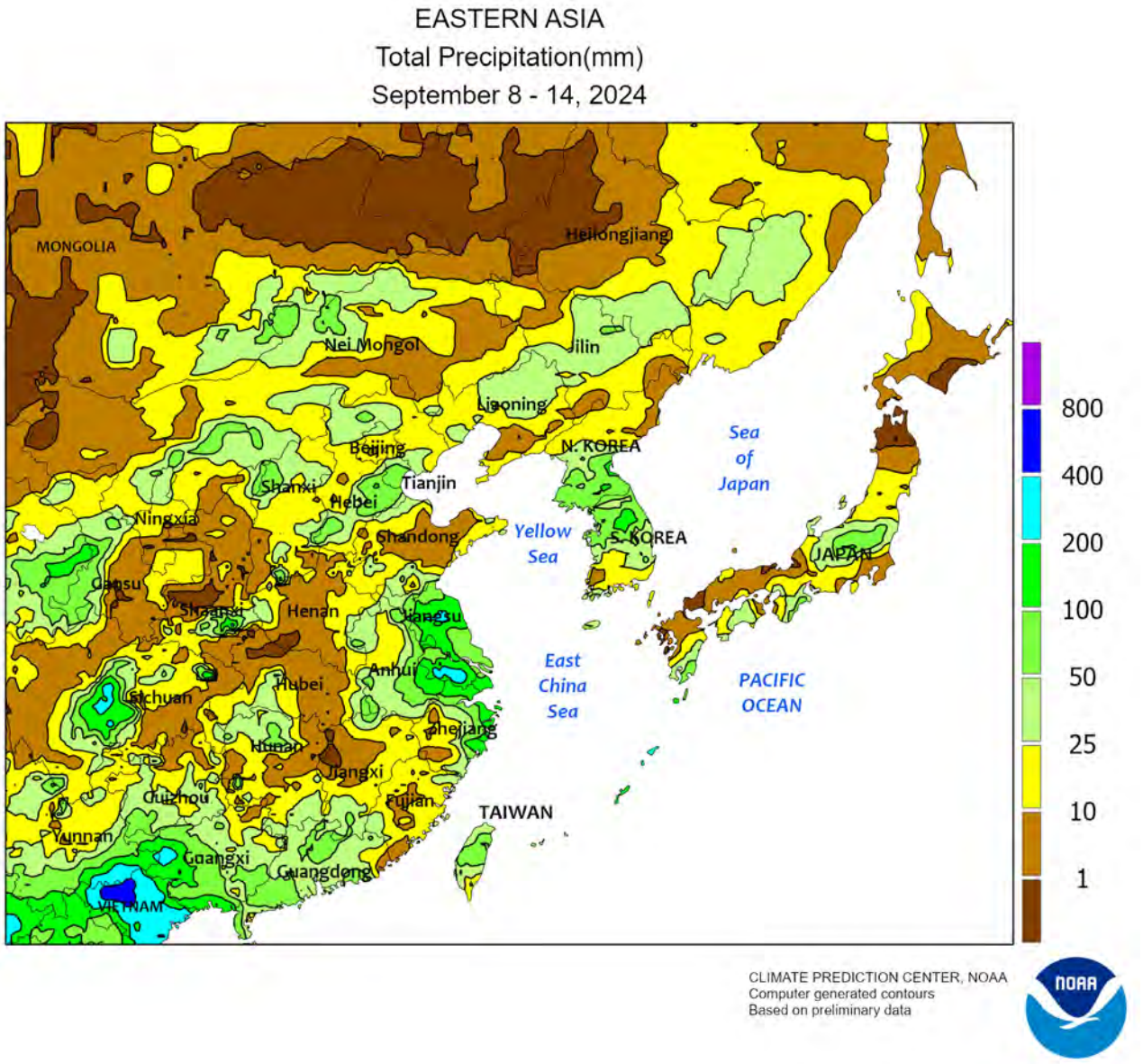
For additional information contact: mark.brusberg@usda.gov



SOUTH ASIA

A strong monsoon low developed along the eastern coast of India early in the period and moved inland, bringing heavy showers as it tracked northwestward. A narrow band of rainfall totals surpassing 50 mm and topping 200 mm locally extended from the environs of Telangana and Odisha into the northern reaches of India. While the moisture was welcome for rice in the east and reproductive kharif crops in interior sections, it was ill timed for maturing cotton in the north. However, key cotton zones in the northwest and into Pakistan were spared the untimely rain. Furthermore, the remainder of India experienced drier weather that aided development of kharif crops. Toward the end of the period, a tropical depression formed in the northernmost portion of the Bay of Bengal and lashed already soaked areas of southern Bangladesh with rainfall amounts over 200 mm (reportedly topping 700 mm in one location).

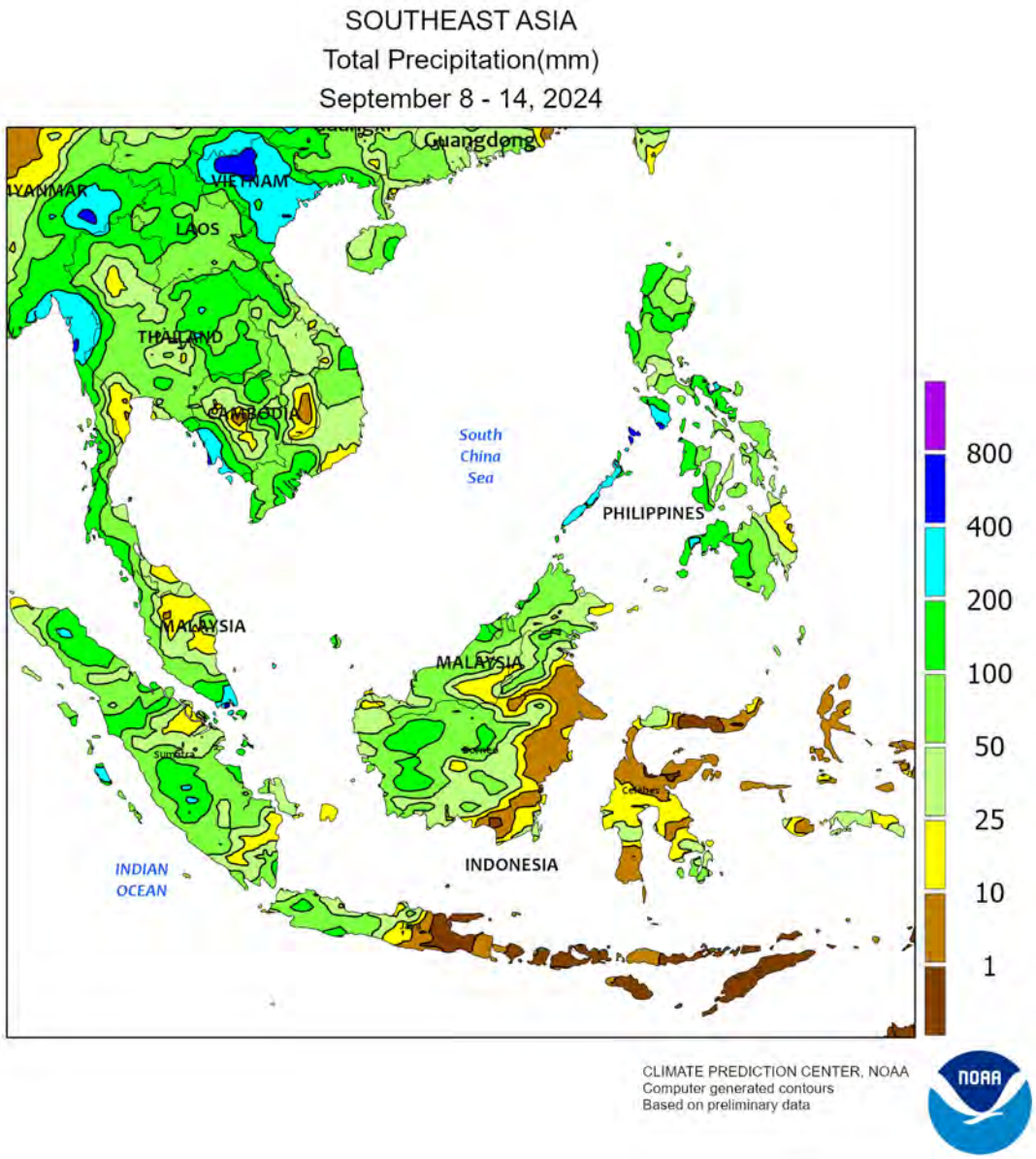
For additional information contact: mark.brusberg@usda.gov



EASTERN ASIA

High pressure dominated eastern summer crop areas of China early in the period, providing dry conditions and maintaining summer-like temperatures (approaching 40°C in some locations) for maturing crops. However, a shift in the weather pattern by mid-week brought rainfall and cooler weather. Most locales recorded some measurable rain, with amounts greater than 25 mm scattered throughout. While warm, dry weather is preferable for maturing summer crops, the wet weather boosted moisture reserves ahead of winter crop sowing that begins in October. Meanwhile, harvest weather was overall beneficial for cotton in western China (Xinjiang), maintaining above-average yield prospects. Elsewhere, drier weather in Japan eased lingering wetness in the south from Typhoon Shanshan earlier in the month, as heavy showers along the border of North and South Korea did little to alleviate drought in southernmost South Korea and only exacerbated extreme wetness in North Korea.

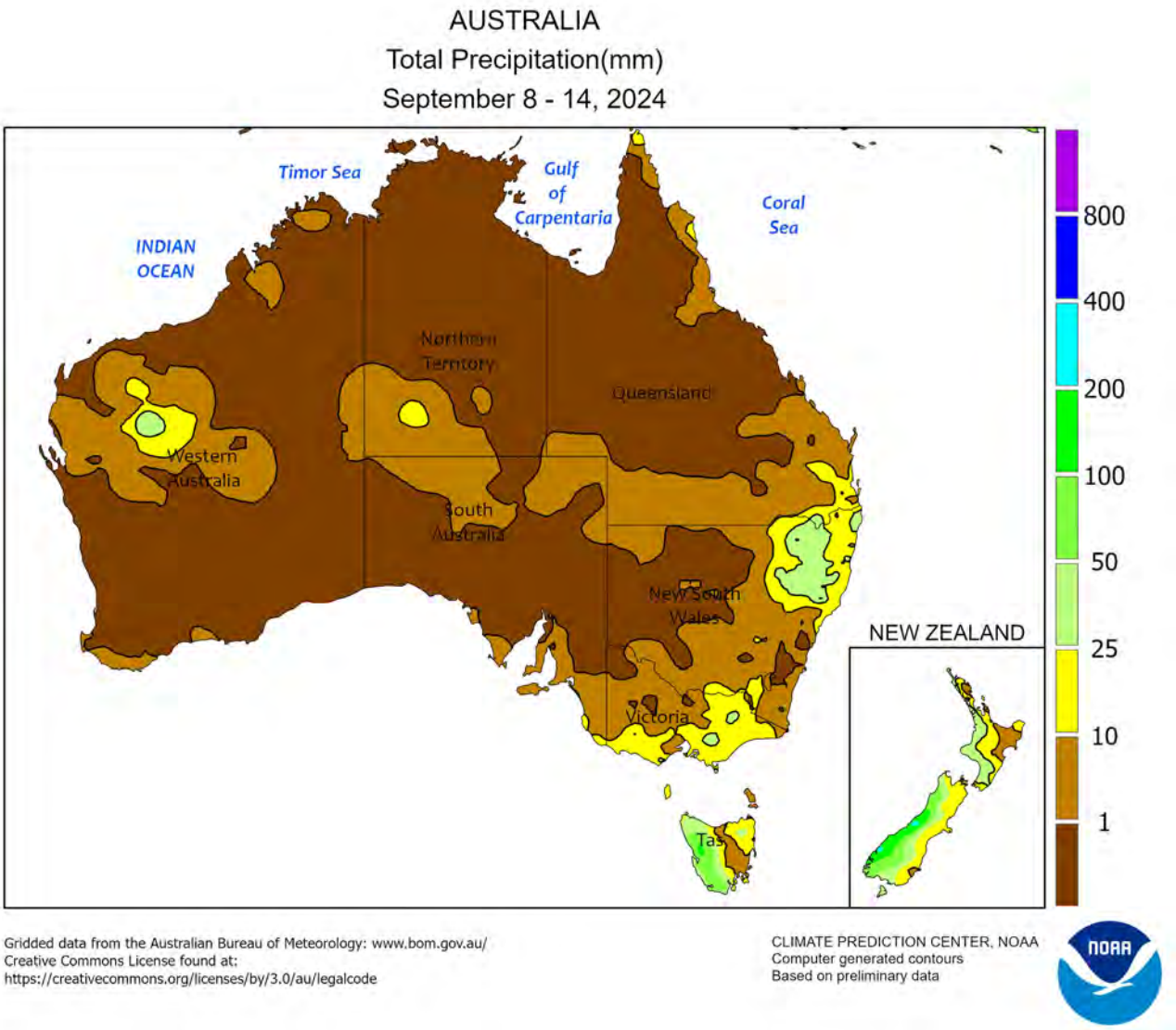
For additional information contact: mark.brusberg@usda.gov



SOUTHEAST ASIA

The remnants of Super Typhoon Yagi moved into northern Vietnam, with some locales totaling over 600 mm of storm-related rainfall. Additionally, the storm spawned heavy showers (50-100 mm or more) across most of Indochina, causing some flooding but mostly benefiting seasonal rice and irrigation supplies. Meanwhile, monsoon showers flared throughout the Philippines, where most districts reported at least 50 mm and some western locations totaled over 200 mm. Despite occasional periods of drier-than-normal weather over the course of the season in the Philippines, moisture conditions have been favorable for rice and corn. Elsewhere, wet weather in oil palm areas of Malaysia and Indonesia maintained favorable soil moisture but slowed fieldwork as the main harvest period (September-October) gets underway. Furthermore, showers have increased in western portions of Java, Indonesia, benefiting third-crop rice and bolstering moisture reserves for first-crop rice sown in November.

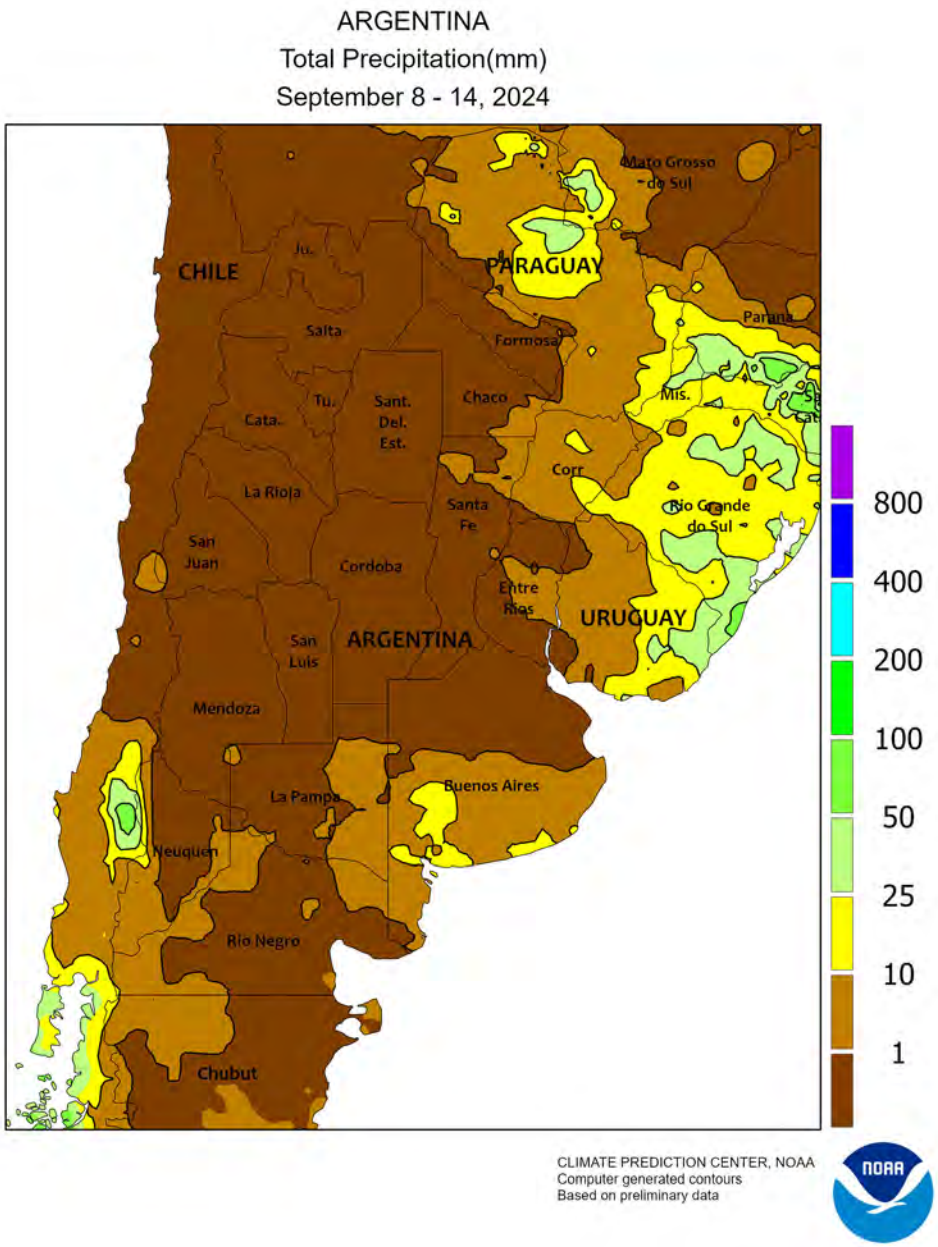
For additional information contact: mark.brusberg@usda.gov



AUSTRALIA

Scattered showers in southern and eastern Australia helped maintain local moisture supplies for reproductive winter grains and oilseeds but allowed early summer crop planting to proceed with little delay. Rainfall totals ranged from 1 to 10 mm in many areas, with isolated greater amounts (up to 50 mm in northern New South Wales). The showers helped sustain current winter crop prospects, which are good throughout much of the eastern wheat belt. However, more rain is needed in the south to help curb recent dryness and boost soil moisture for reproductive wheat, barley, and canola. Elsewhere in the wheat belt, sunny skies and generally adequate moisture supplies favored winter grain and oilseed development in the west. Temperatures were somewhat above average throughout much of the wheat belt, averaging 1 to 3°C above normal in most major crop producing areas.

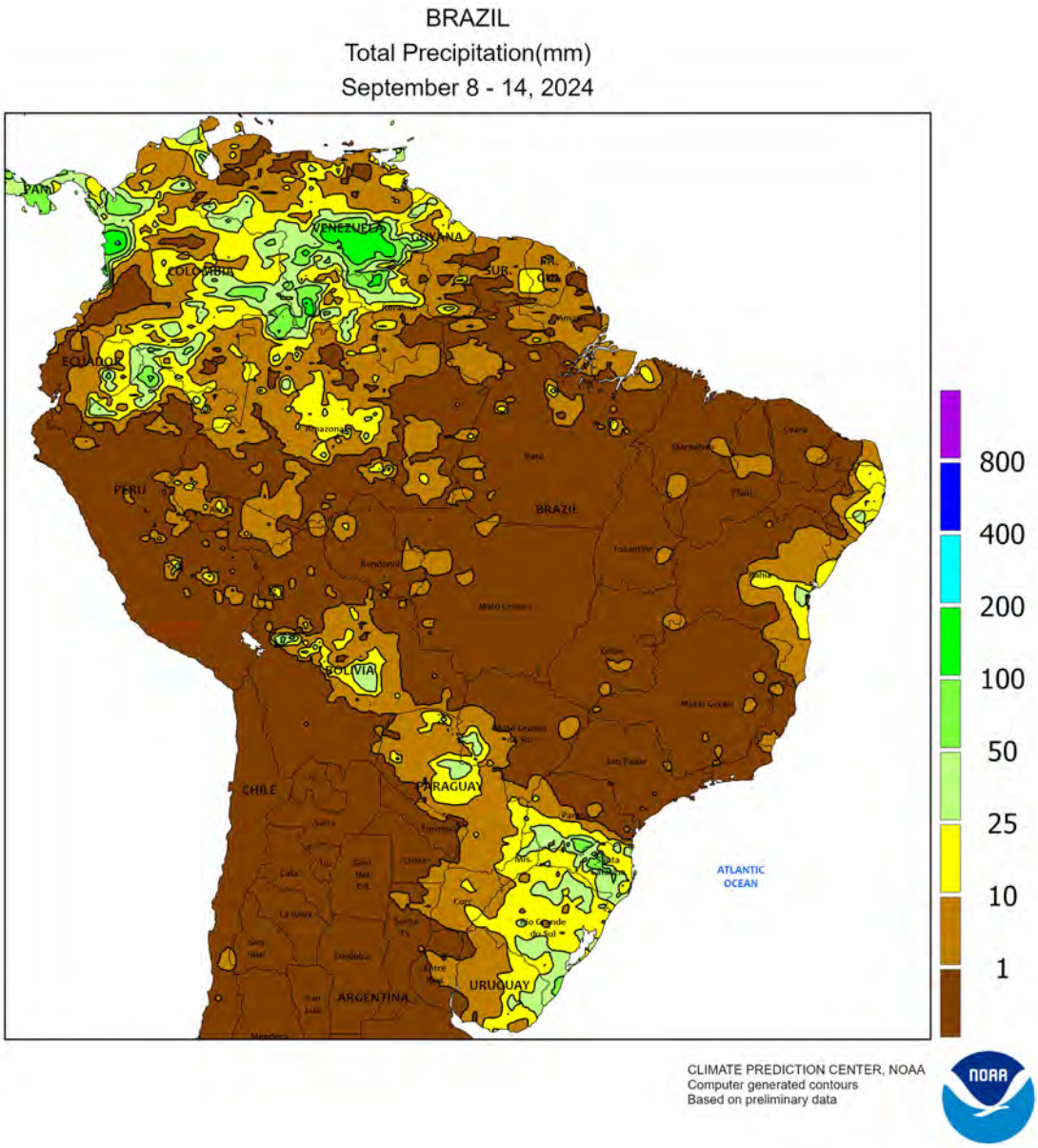
For additional information contact: mark.brusberg@usda.gov



ARGENTINA

Warm, mostly dry weather prevailed in Argentina's western production areas, as winter grains growing with limited soil moisture neared reproduction. Agricultural delegations from Santa Fe and Córdoba northward were completely dry, and weekly temperatures averaged 1 to 2°C above normal. Highest daytime temperatures in the aforementioned areas reached the upper 20s and lower 30s (degrees C), and freezes were becoming less frequent in and around Córdoba, helping to advance winter grain development and necessitating a timely onset of spring rainfall. Elsewhere, light showers (2-10 mm, locally higher) kept topsoils moist for winter grains as well as early planted summer crops. According to the government of Argentina, sunflowers were 15 percent planted as of September 5, with fieldwork now underway in Córdoba.

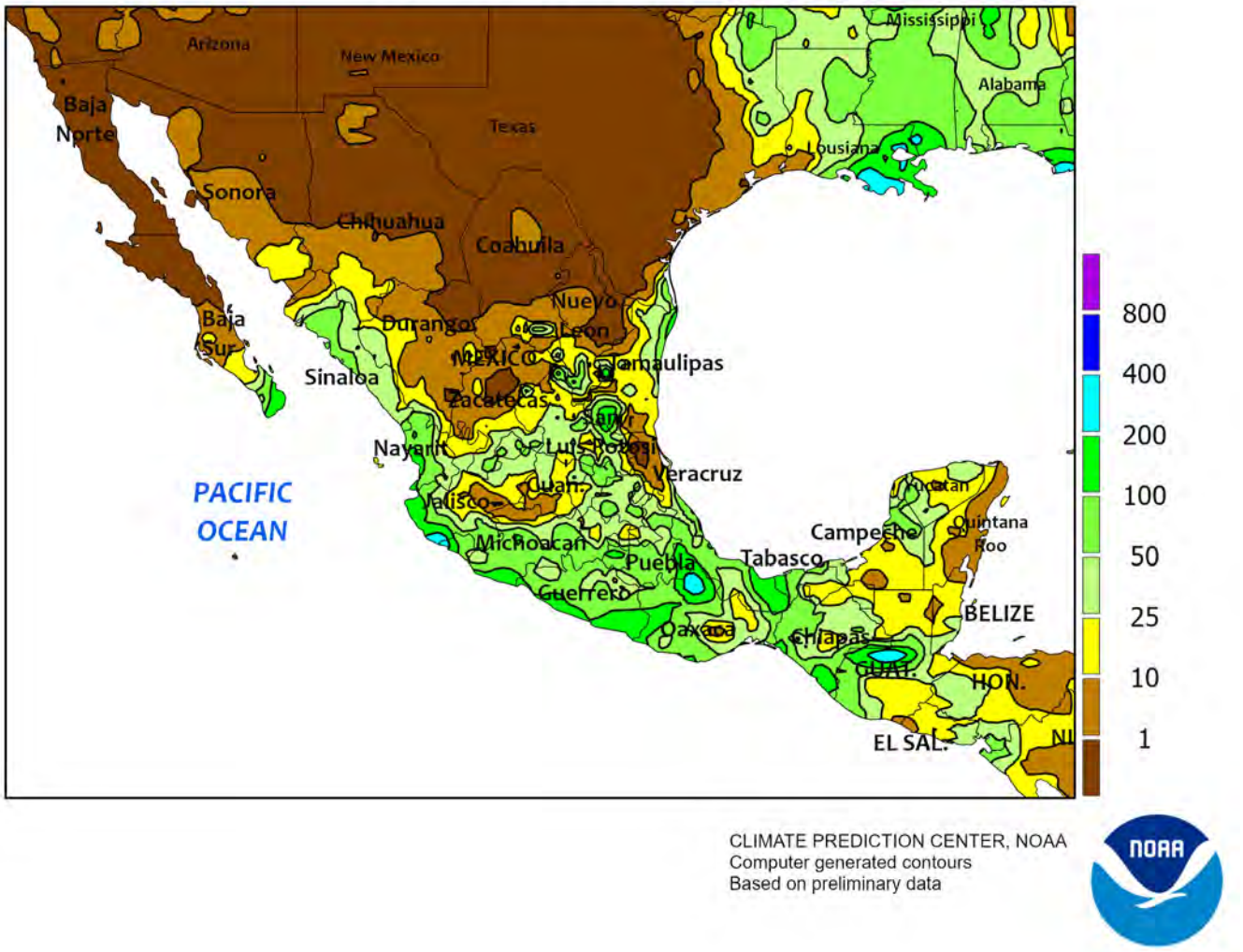
For additional information contact: mark.brusberg@usda.gov



BRAZIL

Light showers lingered over southern Brazil, sustaining generally favorable levels of moisture for wheat and emerging summer crops. Rainfall totaled 5 to 35 mm – locally reaching 50 mm – as far north as southern Paraná, accompanied by above-normal temperatures (daytime highs reaching the upper 30s degrees C in the warmest locations) that promoted rapid crop growth. According to the government of Rio Grande do Sul, 57 percent of wheat had flowered as of September 12, compared with the 5-year average of 67 percent; meanwhile, corn was 37 percent planted, on par with the average pace (38 percent). In Paraná, nearly all wheat had reached flowering as of September 9, with 18 percent harvested; first-crop corn was 29 percent planted. Warm (temperatures reaching 40°C locally), dry weather prevailed in central and interior northeastern farming areas, as producers made preparations for planting soybeans and other summer crops upon the arrival of seasonal rainfall.

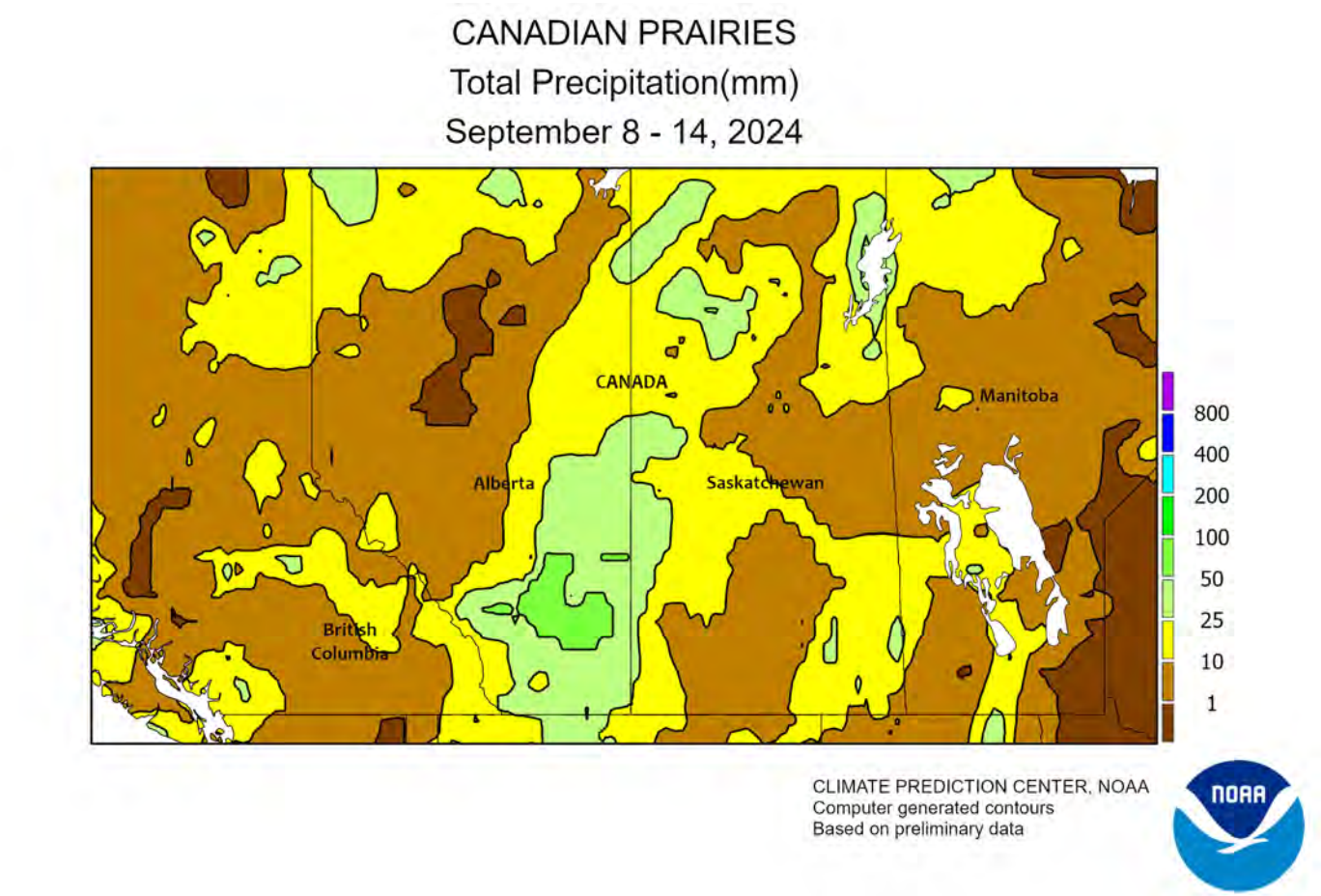
For additional information contact: mark.brusberg@usda.gov



MEXICO

Seasonal showers maintained generally favorable conditions for rain-fed summer crops, but rainfall diminished farther north. Amounts totaled 25 to 100 mm over most of the southern plateau (Jalisco to Puebla), along the southern Pacific Coast, and in key southeastern farming areas. The moisture extended northward into Veracruz and farming areas in and around San Luis Potosí, but drier weather returned to Mexico's northern interior. Monsoon showers also diminished throughout northwestern Mexico, although heavy rain (25-100 mm, locally exceeding 200 mm) from remnants of Tropical Storm Ileana provided a needed boost to local reservoirs in Sinaloa. Meanwhile, summer warmth (daytime highs reaching the upper 30s and lower 40s degrees C) maintained high evaporative losses in northwestern watersheds and along the U.S. border.

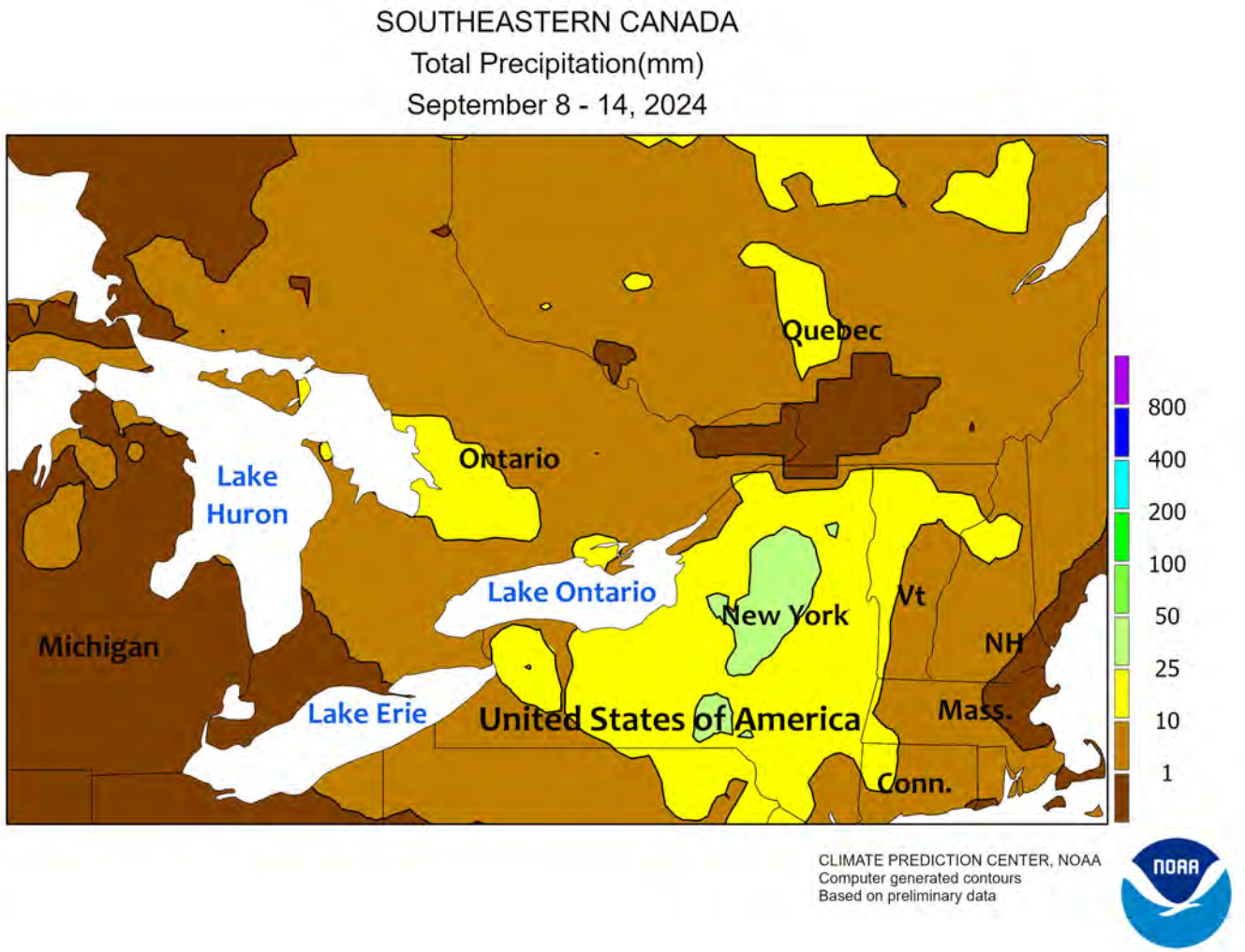
For additional information contact: mark.brusberg@usda.gov



CANADIAN PRAIRIES

Heavy showers stalled fieldwork in Alberta, following an extended period of favorable weather. Rainfall totaled 25 to 70 mm over Alberta's southern and eastern farming areas, reaching into neighboring districts in Saskatchewan, with the heaviest rain falling over a two-day period. The intensity of the showers also raised concern for possible losses due to lodging and scattering of windrows. According to the government of Alberta, crops were 55 percent harvested as of September 10 – before the arrival of the soaking rain — versus the 5-year average of 32 percent. Showers were generally light elsewhere, although some locations recorded more than 10 mm. Unseasonable warmth prevailed regionwide, with average temperatures ranging from 1 to 2°C above normal in Alberta to as much as 6°C above normal in Manitoba. Nighttime lows dropped below freezing in Alberta's Peace River Valley, aiding drydown of maturing spring crops but coming too late in the season to cause damage.

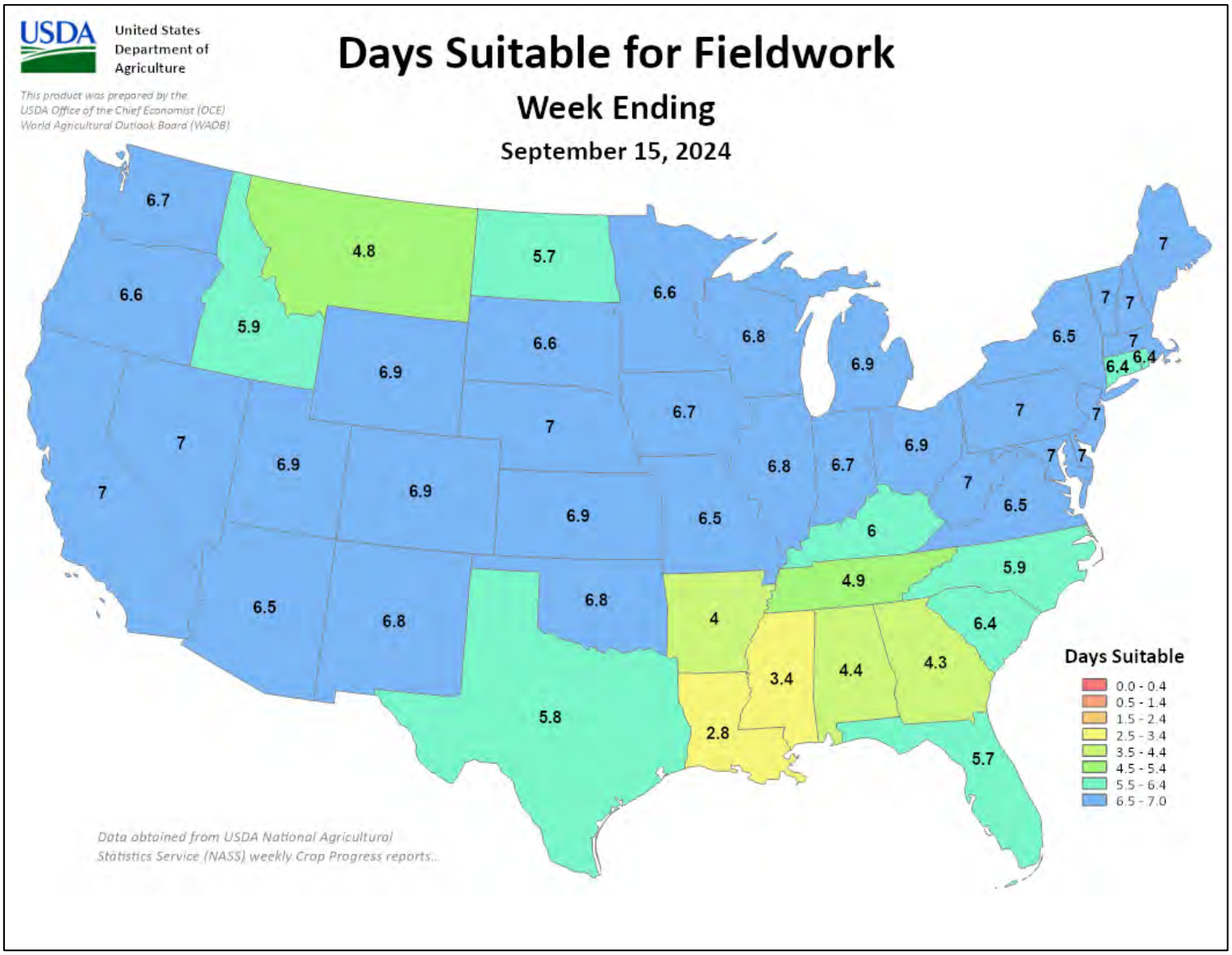
For additional information contact: mark.brusberg@usda.gov



SOUTHEASTERN CANADA

Dryness and seasonable warmth favored maturing summer crops while also supporting winter wheat planting in areas with sufficient moisture. Weekly average temperatures were generally within 1°C of normal regionwide, with highest daytime temperatures reaching the middle and upper 20s (degrees C); nighttime lows dropped into the low single digits locally, but no freeze was reported. Rainfall was widely scattered and generally light, although a few locations recorded more than 10 mm. Winter wheat planting was likely becoming more widespread, although the optimal period for planting in southernmost Ontario is several weeks away.

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



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*".