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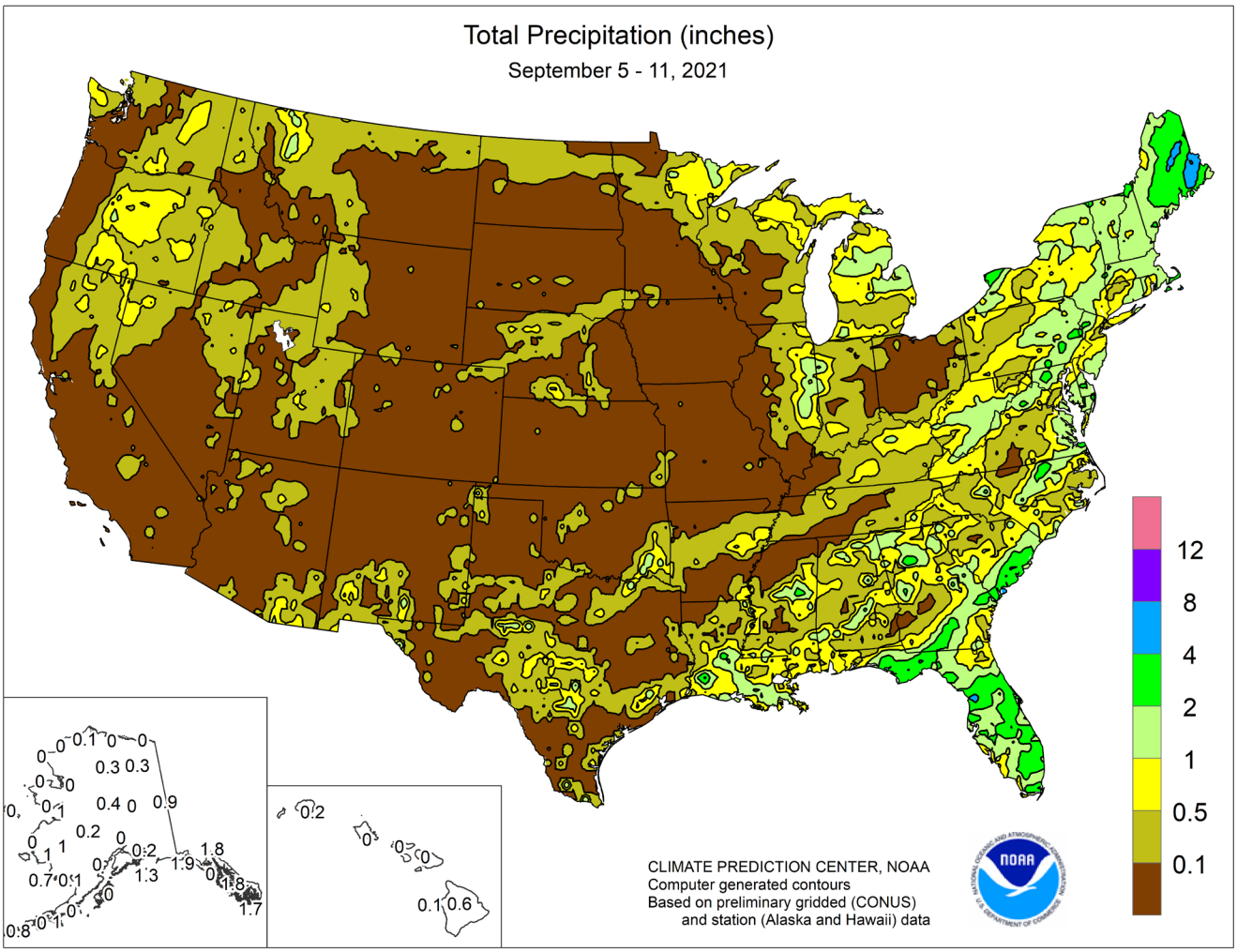
Weekly Weather and Crop Bulletin

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS
September 5 – 11, 2021

Highlights provided by USDA/WAOB

Open weather across much of the country favored summer crop maturation and fieldwork, including harvest efforts and winter wheat planting. By September 12, more than one-third (37 percent) of the U.S. corn was fully mature, while 38 percent of the soybeans were dropping leaves, versus respective 5-year averages of 31 and 29 percent. Meanwhile, among the 13 major production states that have planted some winter wheat, all except **Oregon** were at or ahead of the 5-year average pace. **Oregon's** delay—4 percent planted, versus 7 percent on average—can be

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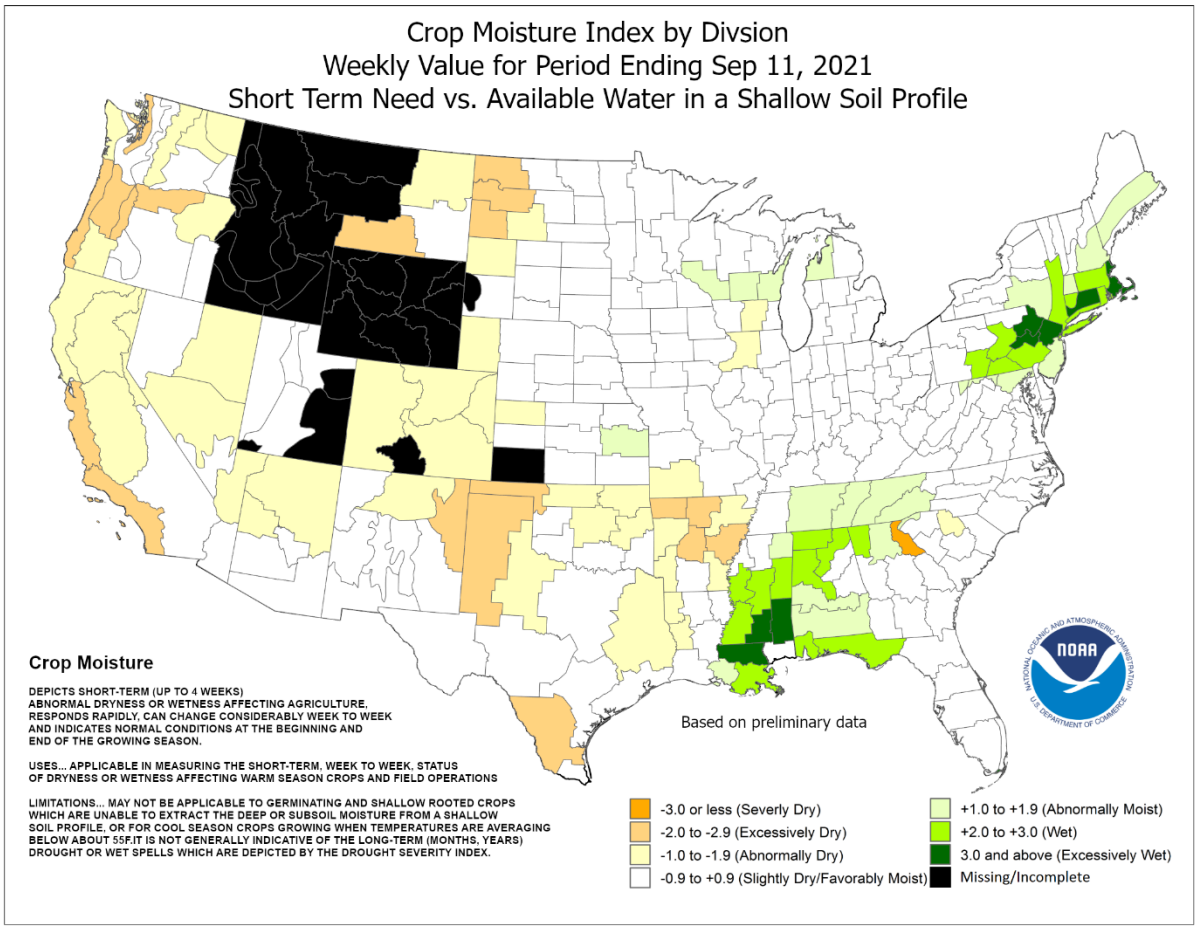
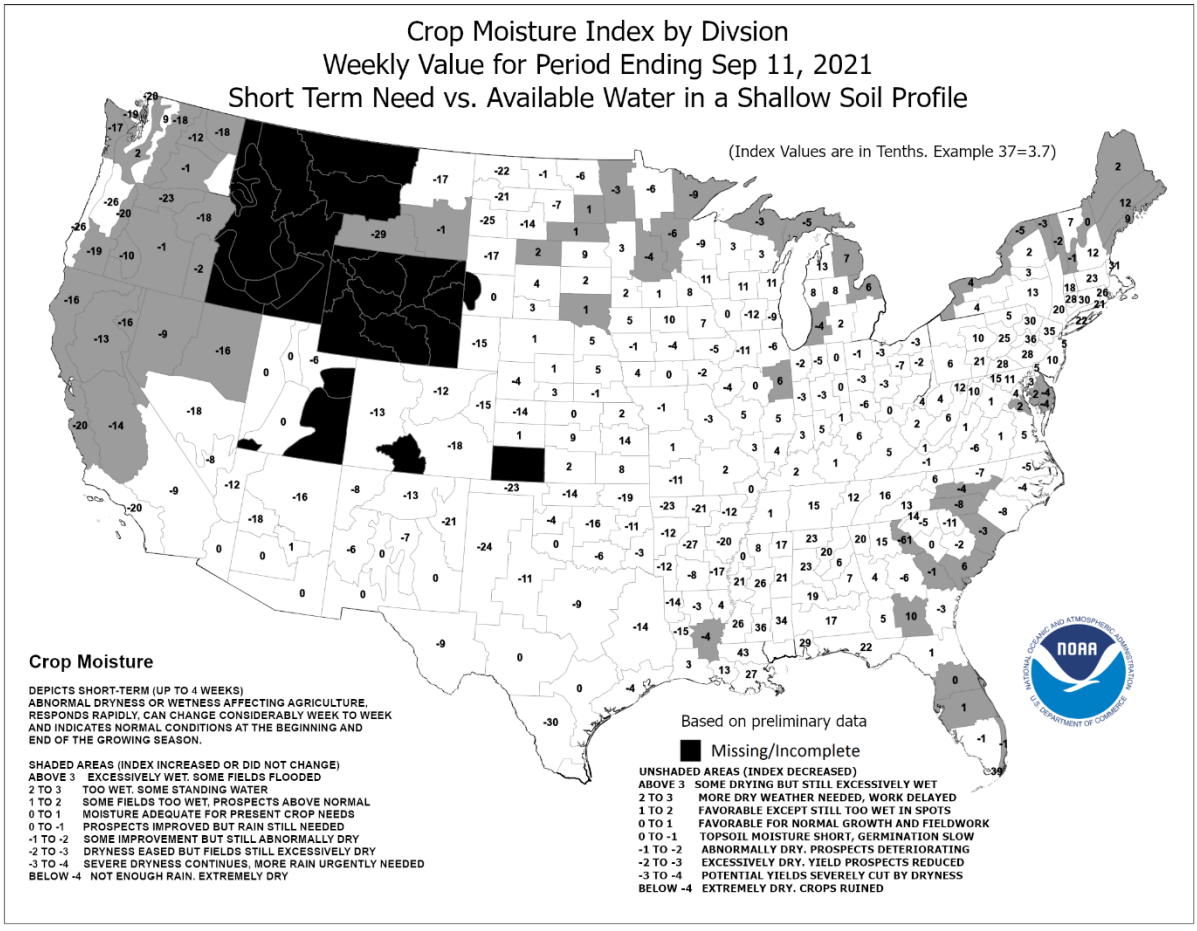
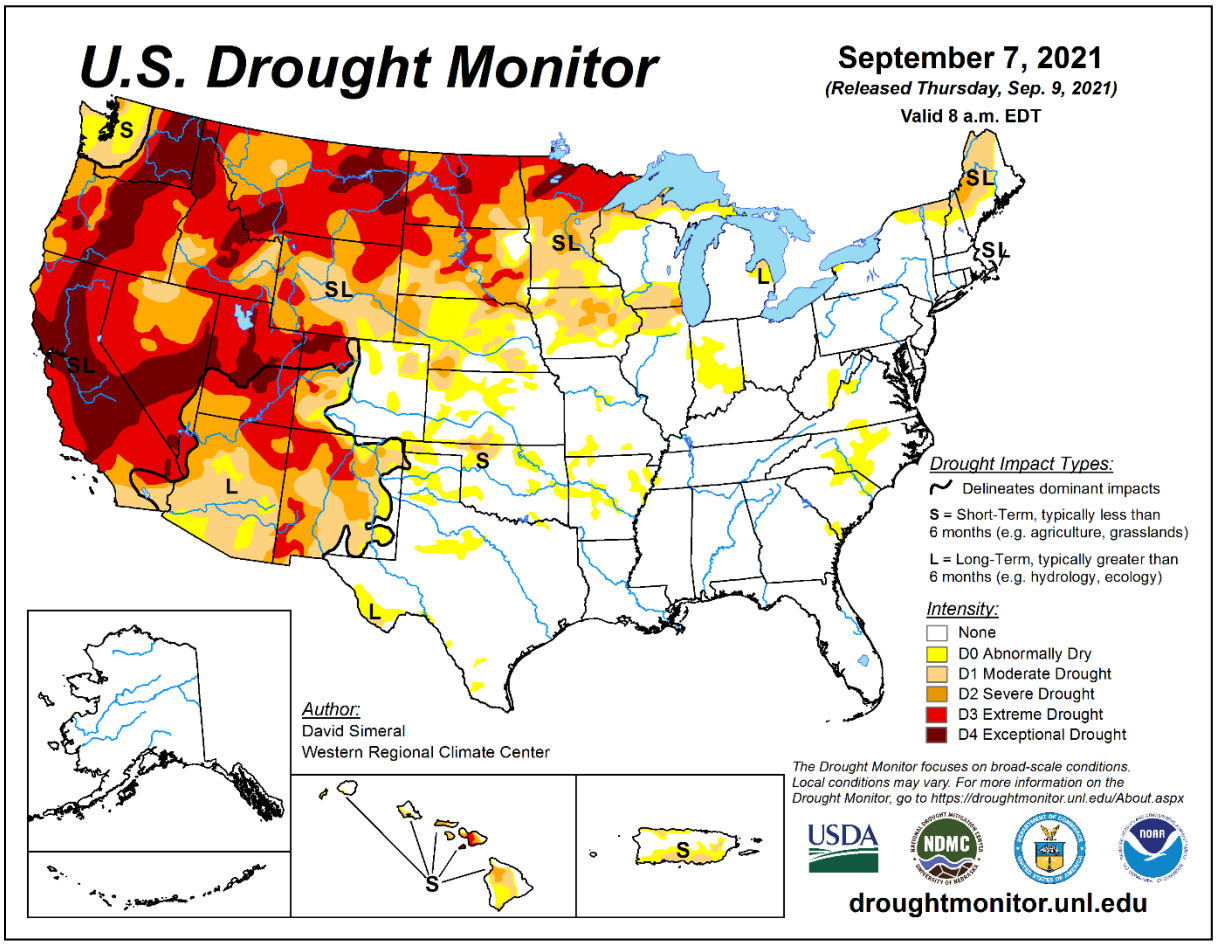
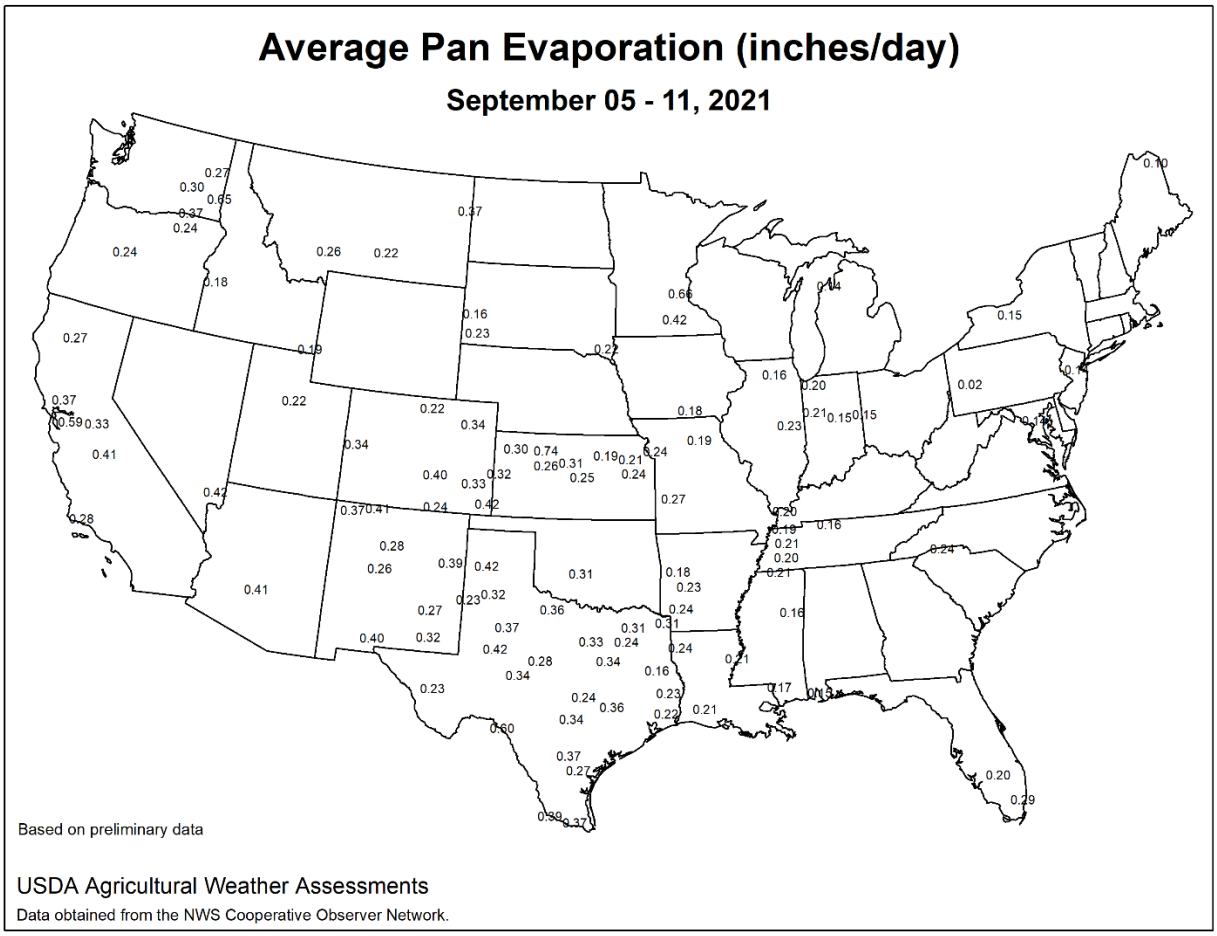
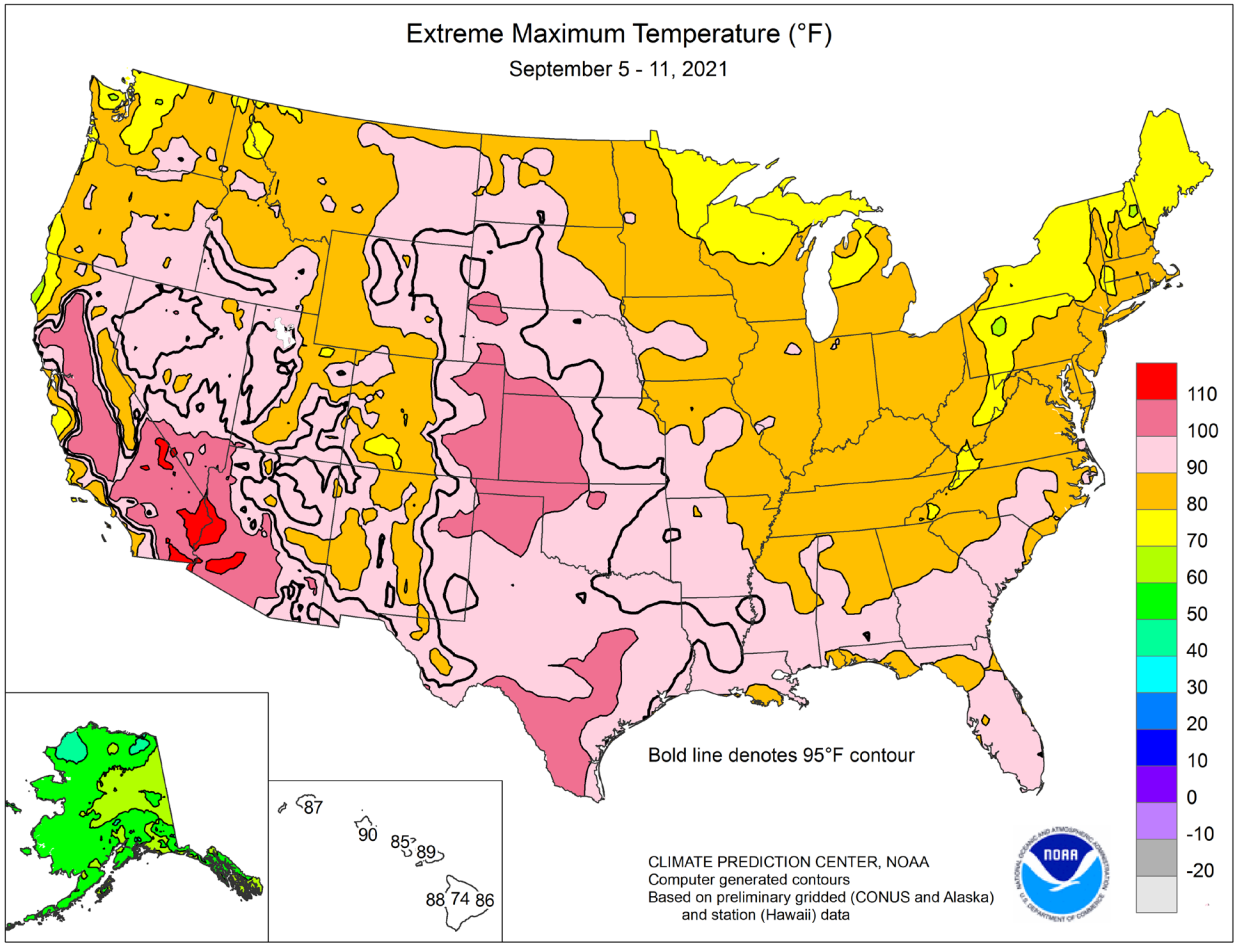
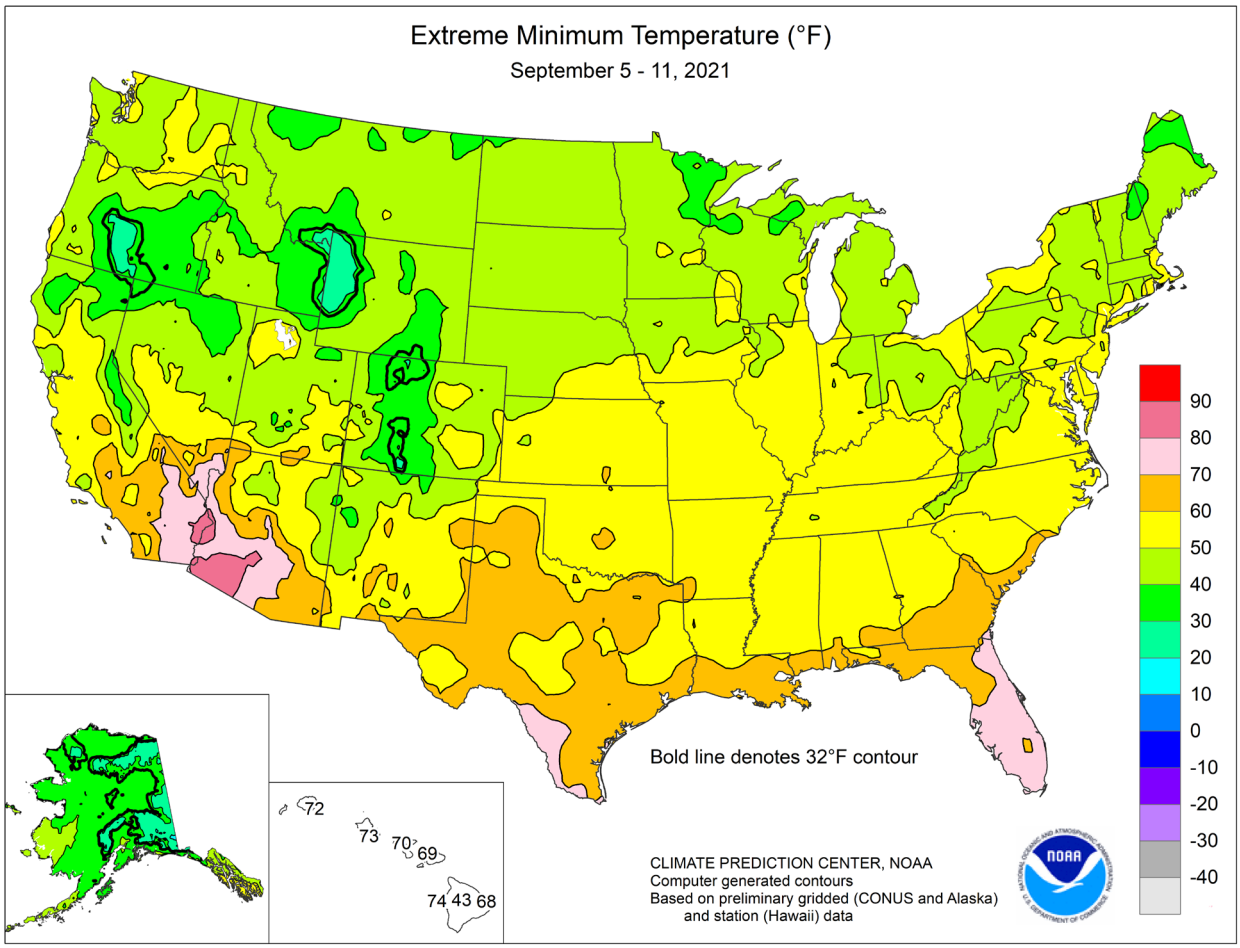

Crop Moisture Index by Divsion
Weekly Value for Period Ending Sep 11, 2021
Short Term Need vs. Available Water in a Shallow Soil Profile
Crop Moisture
DEPICTS SHORT-TERM (UP TO 4 WEEKS)
ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE.
RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK
AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND
END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS
OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS
WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW
SOIL PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING
BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS)
DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)
Missing/Incomplete


Crop Moisture Index by Divsion
Weekly Value for Period Ending Sep 11, 2021
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
Crop Moisture
DEPICTS SHORT-TERM (UP TO 4 WEEKS)
ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE.
RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK
AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND
END OF THE GROWING SEASON.
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. EXTREMELY DRY
Based on preliminary data
Missing/Incomplete
UNSHADED AREAS (INDEX DECREASED)
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. CROPS RUINED


U.S. Drought Monitor
September 7, 2021
(Released Thursday, Sep. 9, 2021)
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:
David Simeral
Western Regional Climate 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

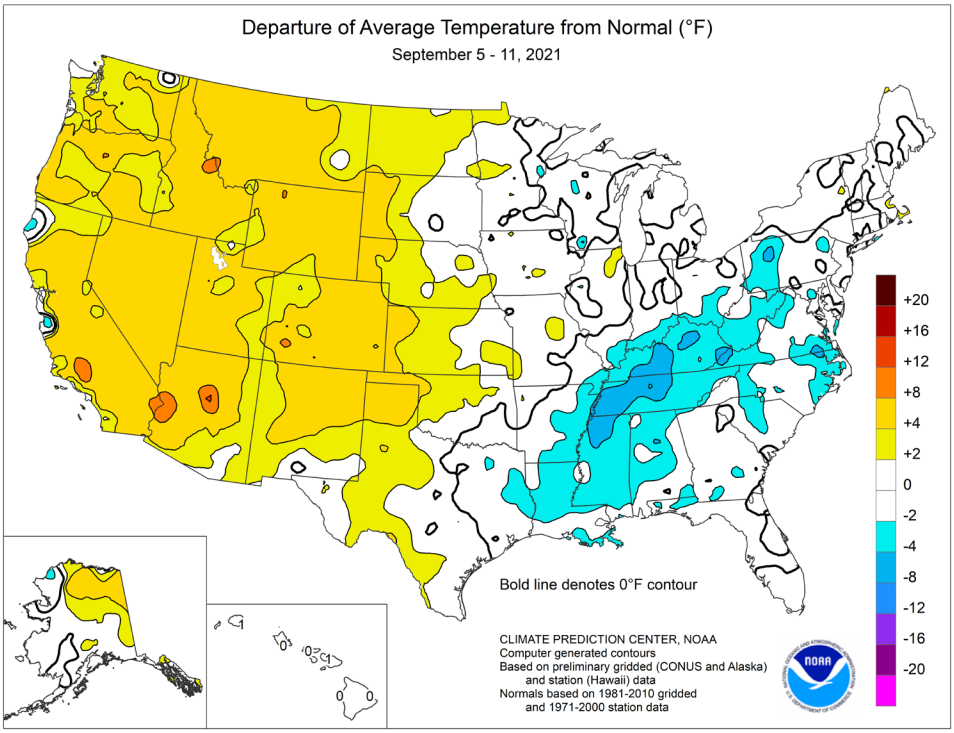

Average Pan Evaporation (inches/day)
September 05 - 11, 2021
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Extreme Maximum Temperature (°F)
September 5 - 11, 2021
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
87
90
85
89
88
74
86
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
September 5 - 11, 2021
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
72
73
70
69
74
43
68
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

(Continued from front cover)

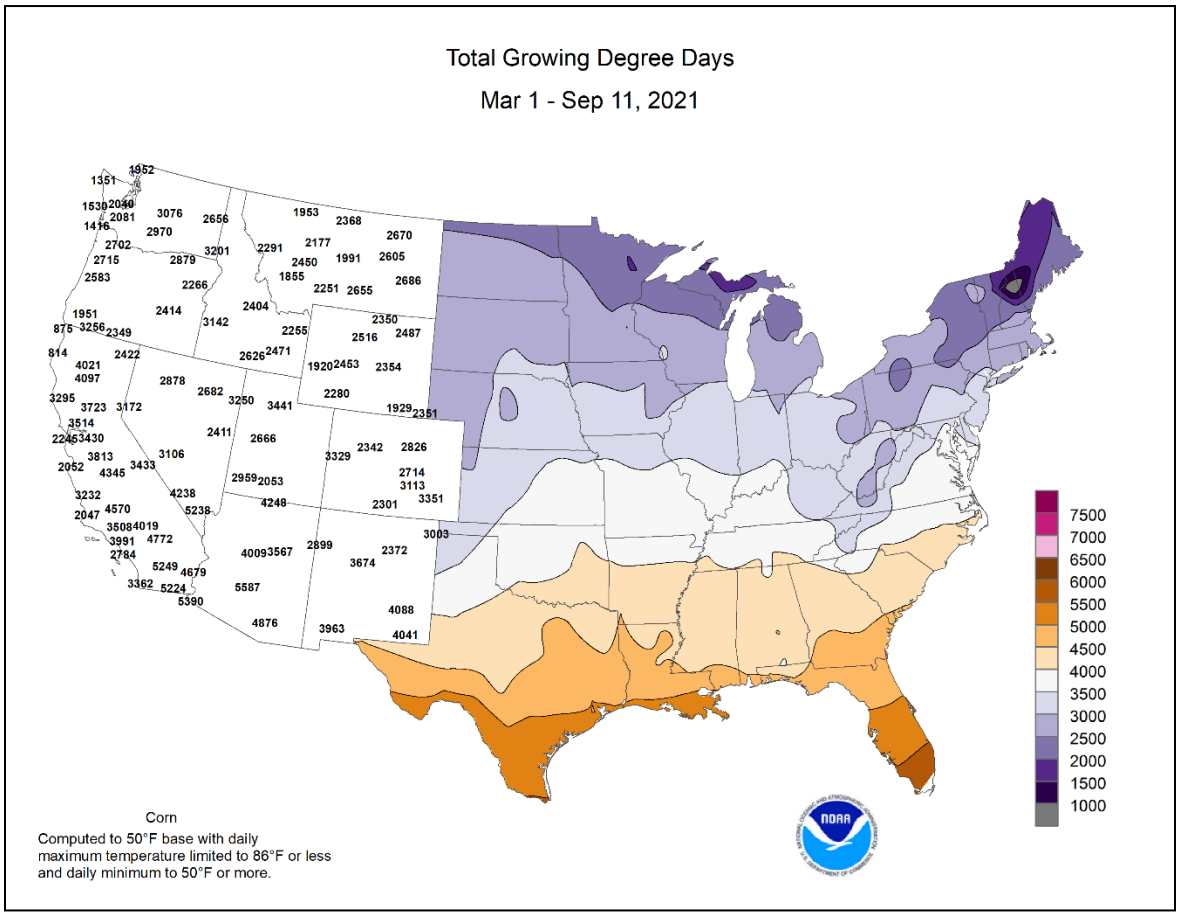
attributed to hesitancy to sow winter wheat due to extreme dryness. Rain was observed, however, in several regions, including much of the **East**. Some of the heaviest rain (locally 4 inches or more) fell in **northern New England**, chipping away at lingering, long-term drought. Locally heavy showers also dotted the **lower Southeast**, including **Florida's peninsula**. Elsewhere, late-week rain briefly dampened some of the driest areas of the **West**, temporarily aiding wildfire containment efforts. On September 10, the heaviest rain in months—up to an inch—fell in parts of **northern California** and the **interior Northwest**. However, hot, dry weather soon returned across the **West**, limiting the overall impact of the precipitation. In fact, weekly temperatures broadly averaged at least 5°F above normal across the **western half of the country**—and up to 10°F above normal in parts of **California**, the **Rockies**, and the **Great Basin**. Meanwhile, temperatures averaged as much as 5°F below normal across portions of the **interior Southeast**, particularly in the **Tennessee Valley**.

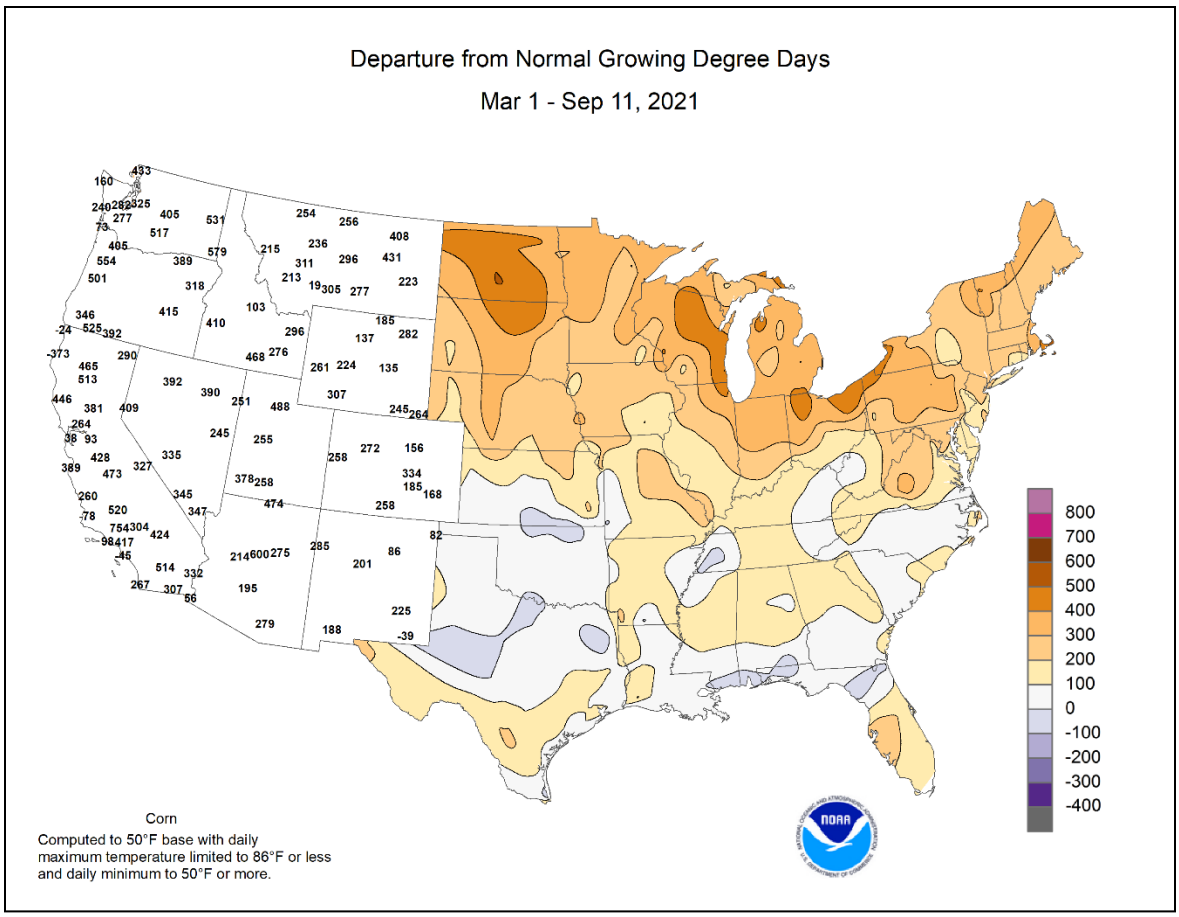


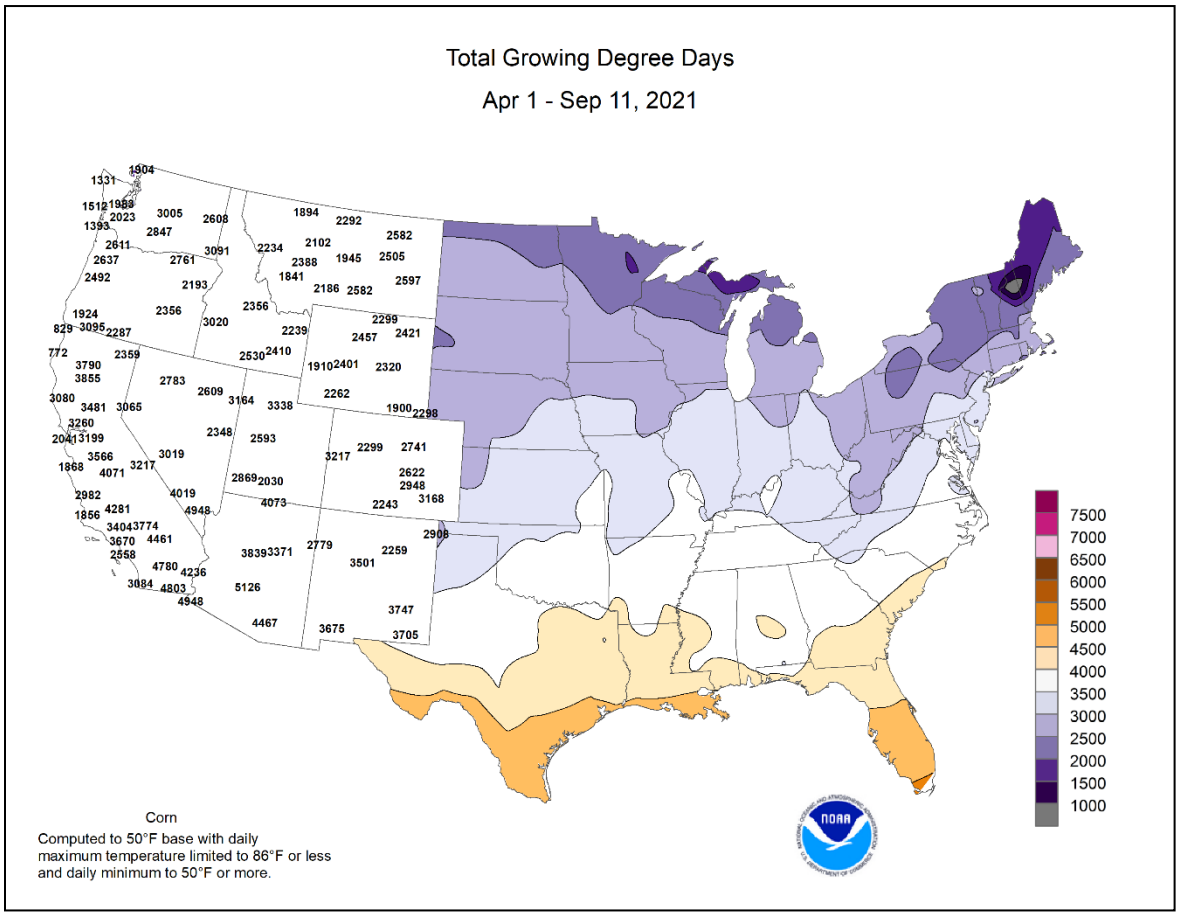
Late-summer heat gripped much of the **central and western U.S.**, boosting temperatures to 100°F or higher as far north as **California's Central Valley** and the **central High Plains**. However, the week had begun on a cool note across parts of the **Intermountain West**, where **Randolph, UT**, posted a daily-record low of 23°F on September 5. The parade of **Western** high-temperature records began on September 6, with highs of 104°F in **Gilroy, CA**, and 96°F in **Reno, NV**. **Reno** logged another daily-record high (98°F) on September 7. Elsewhere in **Nevada**, **Winnemucca** registered daily-record highs each day (98, 99, 99, and 101°F) from September 6-9. **Death Valley, CA**, collected consecutive daily-record highs (122 and 120°F, respectively) on September 7-8. In **New Mexico**, **Farmington** tallied five consecutive daily-record highs (95, 96, 94, 91, and 91°F) from September 7-11. With a high of 106°F on the 10th, **Borger, TX**, edged the monthly record of 105°F, originally set on September 5, 1995. A monthly record of 89°F was tied on September 10 in **Alamosa, CO**. **Alamosa** again reached 89°F on September 11, tying the record first set on September 5 and 6, 2020, while **Colorado Springs, CO**, achieved a new September standard (98°F; previously, 97°F on September 6, 2020). Across the **High Plains**, the week ended on September 10-11 with consecutive triple-digit, daily-record highs in communities such as **McCook, NE** (102 and 104°F); **Goodland, KS** (103 and 102°F); and **Burlington, CO** (101 and 100°F). **Dodge City, KS** (105°F on the 11th), achieved a 105-degree reading in September for only the third time on record, following 106°F on September 3, 1947, and 107°F on September 1, 2011. Heat also lingered across the **Deep South**, where **Del Rio, TX**, noted highs of 100°F or greater on each of the first 10 days in September. **Del Rio** also reported several daily-record highs, including a reading of 105°F on September 8.

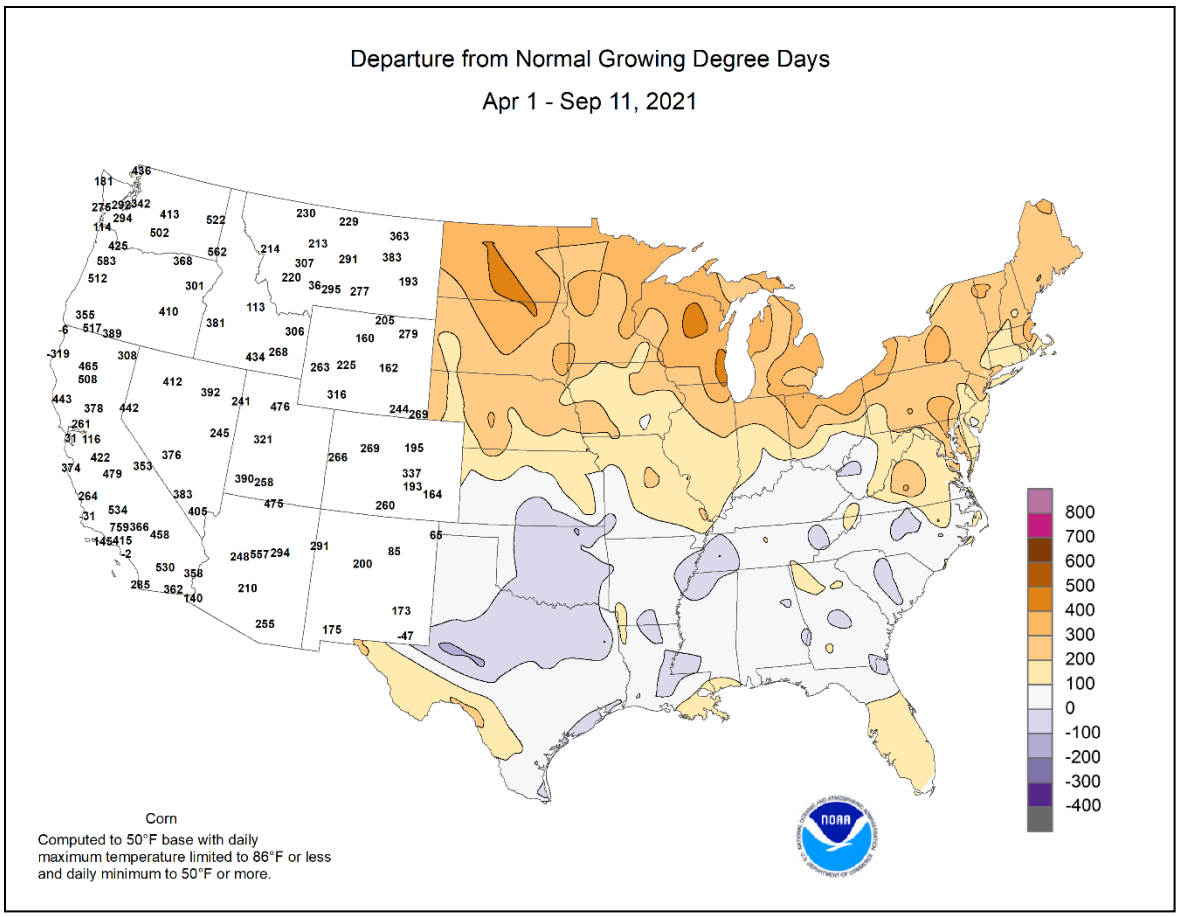
Until late in the week, scattered to widespread showers were mostly limited to the **South**, **East**, and **lower Midwest**. Daily-record totals were set in a few locations, including **Houghton Lake, MI** (1.62 inches on September 7), and **Louisville, KY** (1.10 inches). Heavier rain fell in **northern New England**, where **Bangor, ME**, measured 3.34 inches on September 9-10. Meanwhile, rainfall across the **lower Southeast** was enhanced by the arrival of minimal Tropical Storm Mindy, which officially made landfall on **St. Vincent Island, FL**, on September 8 at 8:15 pm CDT. Mindy's sustained winds were briefly near 45 mph, followed by weakening the following day as the remnant circulation moved northeastward across **northern Florida** and **southeastern Georgia**. On September 8, **Tallahassee, FL**, received 2.80 inches of rain and clocked a peak gust to 40 mph. Elsewhere in **Florida** on the 8th, **Apalachicola** noted 2.10 inches of rain and had a gust to 42 mph. Toward week's end, beneficial rain overspread **northern California** and the **Northwest**. With 0.37 inch on September 10, **Redding, CA**, experienced its wettest day since April 25, when 0.39 inch fell. Record-setting rainfall totals for September 10 included 0.63 inch in **Ephrata, WA**; 0.61 inch **in Redmond, OR**; and 0.26 inch in **Red Bluff, CA**.

Mild, occasionally showery weather prevailed in **Alaska**. The warmest weather, relative to normal, covered **northeastern Alaska**, where weekly temperatures averaged as much as 5°F above normal. With a high of 57°F (on September 8), **St. Paul Island** was among the **Alaskan** communities reporting a daily-record high. Farther south, mostly tranquil weather covered **Hawaii**, except for some windward locations. Through September 11, month-to-date rainfall at the state's major airport observation sites ranged from a trace in **Honolulu, Oahu**, to 1.52 inches (46 percent of normal) in **Hilo**, on the **Big Island**.


Total Growing Degree Days
Mar 1 - Sep 11, 2021
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 11, 2021
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 11, 2021
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
NOAA
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
Apr 1 - Sep 11, 2021
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
NOAA
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending September 11, 2021

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE 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	60	49	62	42	54	3	0.29	-0.41	0.14	0.79	70	10.21	97	89	64	0	0	5	0
	BARROW	45	35	52	33	40	5	0.07	-0.13	0.03	0.18	56	3.66	102	92	74	0	0	3	0
	FAIRBANKS	62	43	68	40	53	4	0.03	-0.27	0.03	0.12	24	10.64	130	88	47	0	0	1	0
	JUNEAU	57	51	59	46	54	2	2.89	0.99	0.80	4.81	165	50.23	139	93	80	0	0	7	3
	KODIAK	59	47	63	39	53	2	0.04	-1.50	0.04	2.66	116	47.04	95	91	64	0	0	1	0
	NOME	50	44	54	39	47	1	0.93	0.29	0.48	0.94	93	16.25	140	93	75	0	0	5	0
AL	BIRMINGHAM	85	61	89	22	73	-4	0.09	-0.83	0.08	0.09	6	52.64	136	87	52	0	1	2	0
	HUNTSVILLE	85	61	88	54	73	-4	0.30	-0.55	0.28	0.67	52	47.84	127	96	50	0	0	2	0
	MOBILE	87	68	89	61	78	-2	1.19	-0.02	0.77	1.51	78	64.82	132	98	52	0	0	4	1
	MONTGOMERY	88	67	91	58	78	-1	0.72	-0.26	0.71	0.92	59	37.61	98	94	52	2	0	2	1
AR	FORT SMITH	92	65	96	59	79	2	1.82	0.93	1.68	1.82	132	33.56	109	90	33	6	0	2	1
	LITTLE ROCK	89	63	92	60	76	-2	0.01	-0.71	0.01	0.01	1	30.87	94	85	34	5	0	1	0
AZ	FLAGSTAFF	82	48	85	43	65	5	0.19	-0.41	0.19	0.78	81	18.41	121	85	22	0	0	1	0
	PHOENIX	107	84	111	82	96	5	0.00	-0.17	0.00	0.44	160	4.65	81	46	18	7	0	0	0
	PRESCOTT	91	60	94	59	76	6	0.00	-0.37	0.00	0.34	54	8.86	85	70	20	6	0	0	0
	TUCSON	101	74	103	70	87	4	0.33	-0.01	0.33	0.34	60	11.32	130	68	21	7	0	1	0
CA	BAKERSFIELD	101	76	107	70	88	10	0.00	-0.01	0.00	0.00	0	1.97	43	39	17	7	0	0	0
	EUREKA	61	48	65	46	55	-3	0.00	-0.11	0.00	0.00	0	13.79	57	98	86	0	0	0	0
	FRESNO	102	72	106	66	87	9	0.00	-0.02	0.00	0.00	0	5.11	63	51	15	7	0	0	0
	LOS ANGELES	79	65	84	62	72	2	0.00	-0.02	0.00	0.00	0	3.33	37	90	55	0	0	0	0
	REDDING	100	64	107	56	82	6	0.38	0.24	0.38	0.38	186	9.57	45	57	14	6	0	1	0
	SACRAMENTO	98	62	104	57	80	7	0.05	-0.01	0.04	0.05	61	4.54	37	77	16	6	0	2	0
	SAN DIEGO	81	70	84	68	76	4	0.00	-0.02	0.00	0.00	0	3.74	52	84	58	0	0	0	0
	SAN FRANCISCO	73	57	78	53	65	0	0.00	-0.02	0.00	0.00	0	5.43	41	90	53	0	0	0	0
	STOCKTON	96	62	101	56	79	5	0.01	-0.04	0.01	0.01	20	5.93	64	68	16	6	0	1	0
CO	ALAMOSA	87	38	89	35	63	5	0.00	-0.25	0.00	0.26	64	5.11	93	77	10	0	0	0	0
	CO SPRINGS	92	57	98	53	75	11	0.00	-0.35	0.00	0.56	92	13.75	95	55	8	4	0	0	0
	DENVER INTL	92	58	99	55	75	9	0.00	-0.24	0.00	0.05	13	10.95	92	45	10	4	0	0	0
	GRAND JUNCTION	92	56	94	53	74	5	0.04	-0.22	0.04	0.80	196	4.96	77	42	11	6	0	1	0
	PUEBLO	95	54	101	51	75	7	0.00	-0.21	0.00	0.87	235	15.82	147	67	12	5	0	0	0
CT	BRIDGEPORT	79	62	84	55	70	1	0.57	-0.23	0.51	6.50	522	34.74	115	88	54	0	0	2	1
	HARTFORD	78	56	84	50	67	0	0.19	-0.58	0.14	5.43	450	43.53	138	97	56	0	0	2	0
DC	WASHINGTON	82	66	87	61	74	1	0.25	-0.54	0.24	1.59	130	35.03	127	84	47	0	0	2	0
DE	WILMINGTON	80	61	87	55	71	0	0.96	0.07	0.38	2.08	153	27.35	91	93	53	0	0	5	0
FL	DAYTONA BEACH	89	73	92	69	81	1	1.58	-0.08	0.64	1.80	68	32.65	91	97	60	4	0	6	2
	JACKSONVILLE	89	71	92	69	80	0	0.24	-1.73	0.12	0.24	7	37.45	97	99	57	4	0	2	0
	KEY WEST	89	80	92	77	85	1	0.47	-1.05	0.20	0.62	26	20.46	78	84	54	3	0	4	0
	MIAMI	92	76	95	76	84	1	1.08	-1.13	0.51	3.82	108	38.30	87	95	57	7	0	3	1
	ORLANDO	92	75	94	75	83	2	2.40	0.94	1.75	3.60	155	33.42	86	93	53	6	0	5	1
	PENSACOLA	88	72	90	65	80	0	0.90	-0.47	0.82	1.60	73	62.02	131	94	57	2	0	2	1
	TALLAHASSEE	88	70	91	67	79	-1	3.79	2.61	3.13	4.61	241	37.46	81	97	56	3	0	3	1
	TAMPA	89	78	92	76	84	1	0.39	-1.29	0.21	4.09	151	40.01	109	86	61	3	0	3	0
	WEST PALM BEACH	91	75	94	73	83	1	0.36	-1.56	0.30	1.91	62	29.17	66	94	56	7	0	4	0
GA	ATHENS	88	64	89	58	76	0	0.04	-0.78	0.01	0.04	2	35.65	109	91	47	0	0	3	0
	ATLANTA	84	66	86	61	75	-1	0.17	-0.87	0.17	0.17	10	39.15	110	86	51	0	0	1	0
	AUGUSTA	89	64	93	58	77	0	1.79	1.04	1.71	1.80	151	42.32	132	95	45	4	0	3	1
	COLUMBUS	88	68	92	61	78	-1	0.26	-0.48	0.16	0.40	33	37.31	110	87	46	2	0	2	0
	MACON	89	64	93	58	77	-1	0.01	-0.87	0.01	0.01	0	34.04	101	96	48	3	0	1	0
	SAVANNAH	88	69	92	63	79	0	1.02	-0.17	0.51	1.02	53	33.67	93	99	50	3	0	3	1
HI	HILO	84	69	86	68	77	0	1.25	-0.97	0.80	1.47	42	89.38	107	89	57	0	0	7	1
	HONOLULU	89	74	90	73	82	0	0.00	-0.14	0.00	0.00	0	9.60	104	75	43	1	0	0	0
	KAHULUI	88	72	89	69	80	1	0.00	-0.10	0.00	0.02	13	14.57	133	79	50	0	0	0	0
	LIHUE	86	75	87	72	80	1	0.22	-0.18	0.10	0.34	52	23.43	106	85	60	0	0	4	0
IA	BURLINGTON	84	58	88	53	71	1	0.00	-0.86	0.00	0.33	23	29.91	104	94	45	0	0	0	0
	CEDAR RAPIDS	82	52	87	48	67	1	0.00	-0.80	0.00	1.27	101	13.64	51	96	41	0	0	0	0
	DES MOINES	85	60	91	52	72	3	0.04	-0.73	0.04	0.33	27	18.30	65	87	38	1	0	1	0
	DUBUQUE	79	53	85	51	66	1	0.00	-0.80	0.00	0.32	24	21.48	78	95	48	0	0	0	0
	SIOUX CITY	83	54	91	45	69	2	0.00	-0.71	0.00	1.03	91	17.22	79	93	46	1	0	0	0
	WATERLOO	82	53	88	49	67	1	0.00	-0.65	0.00	0.52	50	17.19	62	90	40	0	0	0	0
ID	BOISE	89	58	98	53	74	6	0.09	-0.03	0.09	0.09	51	7.23	92	55	16	5	0	1	0
	LEWISTON	87	61	92	57	74	6	0.04	-0.11	0.02	0.04	14	3.48	39	56	23	3	0	2	0
	POCATELLO	90	47	95	39	68	6	0.07	-0.13	0.04	0.07	23	6.46	76	67	13	4	0	2	0
IL	CHICAGO/O_HARE	82	61	88	58	72	4	0.00	-0.77	0.00	0.01	1	19.00	72	82	39	0	0	0	0
	MOLINE	84	57	88	52	70	2	0.00	-0.75	0.00	0.09	7	26.74	94	91	43	0	0	0	0
	PEORIA	84	60	89	55	72	2	0.00	-0.78	0.00	0.03	2	30.72	118	88	43	0	0	0	0
	ROCKFORD	84	54	89	51	69	2	0.13	-0.67	0.13	0.17	13	15.37	57	86	36	0	0	1	0
	SPRINGFIELD	82	57	87	51	70	0	0.00	-0.69	0.00	2.36	220	35.28	132	92	45	0	0	0	0
IN	EVANSVILLE	83	59	87	55	71	-1	1.52	0.81	0.89	2.58	236	33.63	105	95	38	0	0	3	2
	FORT WAYNE	80	55	86	48	68	0	0.13	-0.53	0.12	0.46	44	27.56	99	96	43	0	0	2	0
	INDIANAPOLIS	82	59	86	56	71	0	0.01	-0.71	0.01	0.93	83	31.67	104	88	39	0	0	1	0
	SOUTH BEND	82	57	91	51	70	3	0.04	-0.77	0.04	0.06	4	28.31	107	87	36	1	0	1	0
KS	CONCORDIA	89	61	95	57	75	4	0.00	-0.67	0.00	0.79	74	19.18	86	84	37	3	0	0	0
	DODGE CITY	94	59	105	53	77	4	0.00	-0.44	0.00	0.98	134	14.32	83	84	27	5	0	0	0
	GOODLAND	96	55	103	49	76	8	0.00	-0.29	0.00	0.19	38	11.86	74	81	13	6	0	0	0
	TOPEKA	88	60	92	57	74	3	0.00	-0.86	0.00	2.56	190	29.61	105	87	40	2	0	0	0

Based on 1981-2010 normals

***** Not Available**

Weather Data for the Week Ending September 11, 2021

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	90	63	97	60	77	2	0.00	-0.74	0.00	2.13	180	23.78	94	82	38	4	0	0	0
KY	LEXINGTON	78	55	82	52	67	-5	0.77	0.08	0.46	0.93	87	41.21	126	95	54	0	0	2	0
	LOUISVILLE	84	62	87	59	73	-1	1.19	0.50	1.09	1.19	112	34.58	107	88	39	0	0	2	1
	PADUCAH	85	57	87	52	71	-2	0.55	-0.29	0.55	0.58	46	35.67	105	89	36	0	0	1	1
LA	BATON ROUGE	88	68	93	61	78	-4	0.03	-1.59	0.03	0.03	1	63.04	143	98	53	1	0	1	0
	LAKE CHARLES	90	70	94	63	80	-1	0.65	-0.73	0.41	0.78	36	56.61	140	96	43	4	0	2	0
	NEW ORLEANS	89	74	92	68	81	0	0.09	-1.22	0.07	0.09	4	67.31	145	93	49	2	0	2	0
	SHREVEPORT	93	64	97	59	79	-1	0.08	-0.64	0.08	0.08	7	37.12	105	84	30	7	0	1	0
MA	BOSTON	80	64	85	59	72	5	1.20	0.47	1.13	5.44	481	39.20	132	86	49	0	0	3	1
	WORCESTER	73	56	79	50	65	1	1.49	0.69	1.44	5.92	472	43.19	132	93	59	0	0	2	1
MD	BALTIMORE	83	61	90	54	72	1	0.54	-0.31	0.35	4.66	351	31.57	108	90	46	1	0	4	0
ME	CARIBOU	70	50	78	39	60	2	3.16	2.43	1.61	3.31	289	24.61	95	91	58	0	0	4	3
	PORTLAND	74	54	78	48	64	1	1.40	0.65	0.88	3.18	273	28.62	92	99	64	0	0	4	1
MI	ALPENA	73	50	83	44	62	1	0.98	0.29	0.39	1.03	94	19.09	96	97	53	0	0	3	0
	GRAND RAPIDS	79	54	86	50	67	1	0.35	-0.63	0.29	0.39	25	23.36	89	95	43	0	0	2	0
	HOUGHTON LAKE	71	50	78	44	61	1	1.74	1.03	1.61	1.74	156	20.70	103	94	50	0	0	3	1
	LANSING	79	55	87	50	67	2	0.19	-0.59	0.19	0.22	18	22.45	101	91	41	0	0	1	0
	MUSKEGON	76	55	81	51	66	1	0.30	-0.59	0.26	0.35	25	21.74	99	93	52	0	0	2	0
	TRAVERSE CITY	75	55	83	51	65	2	1.13	0.31	0.95	1.23	96	21.57	96	92	51	0	0	3	1
MN	DULUTH	72	50	77	42	61	3	0.32	-0.67	0.18	0.35	22	15.60	70	95	48	0	0	3	0
	INT_L FALLS	70	47	78	39	58	1	0.32	-0.37	0.12	0.51	46	10.75	59	97	56	0	0	4	0
	MINNEAPOLIS	78	58	82	55	69	3	0.00	-0.75	0.00	0.96	81	20.54	87	83	40	0	0	0	0
	ROCHESTER	77	52	83	49	65	0	0.02	-0.83	0.02	1.06	79	21.78	85	93	47	0	0	1	0
	ST. CLOUD	77	50	82	45	64	2	0.03	-0.83	0.03	0.50	35	16.66	79	95	38	0	0	1	0
MO	COLUMBIA	87	61	92	55	74	3	0.00	-0.90	0.00	0.62	43	38.39	123	90	36	3	0	0	0
	KANSAS CITY	84	61	89	54	73	1	0.00	-1.11	0.00	1.67	97	33.14	113	84	46	0	0	0	0
	SAINT LOUIS	86	65	92	59	76	2	0.00	-0.71	0.00	0.89	79	32.61	113	76	36	1	0	0	0
	SPRINGFIELD	87	60	92	54	74	1	0.00	-1.07	0.00	0.57	34	36.25	114	87	34	3	0	0	0
MS	JACKSON	88	65	93	56	76	-2	0.18	-0.49	0.18	0.57	52	41.35	107	94	43	3	0	1	0
	MERIDIAN	85	64	90	55	74	-3	0.16	-0.65	0.16	0.83	66	54.93	136	99	53	1	0	1	0
	TUPELO	87	64	92	59	75	-1	0.87	0.13	0.87	0.87	78	58.72	156	91	41	2	0	1	1
MT	BILLINGS	87	56	91	51	72	8	0.00	-0.30	0.00	0.01	2	7.28	69	51	16	3	0	0	0
	BUTTE	82	40	89	36	61	6	0.07	-0.18	0.07	0.07	17	4.99	48	91	24	0	0	1	0
	CUT BANK	79	48	86	40	64	7	0.12	-0.20	0.12	0.12	24	4.76	51	66	24	0	0	1	0
	GLASGOW	84	53	92	49	68	7	0.01	-0.22	0.01	0.01	3	4.66	48	66	24	2	0	1	0
	GREAT FALLS	83	49	87	45	66	7	0.01	-0.34	0.01	0.01	2	9.70	81	65	21	0	0	1	0
	HAVRE	84	49	92	39	66	7	0.04	-0.23	0.04	0.04	9	5.76	62	68	22	2	0	1	0
	MISSOULA	84	47	90	44	65	5	0.00	-0.30	0.00	0.00	0	7.34	69	76	22	1	0	0	0
NC	ASHEVILLE	79	59	82	51	69	0	0.16	-0.78	0.16	0.43	28	44.89	135	97	49	0	0	1	0
	CHARLOTTE	85	62	89	56	74	1	0.08	-0.67	0.07	1.85	154	30.00	101	91	43	0	0	2	0
	GREENSBORO	82	61	86	57	71	-1	0.51	-0.56	0.51	1.51	90	32.12	106	89	45	0	0	1	1
	HATTERAS	84	70	87	63	77	1	0.34	-1.22	0.33	0.72	29	44.56	112	90	59	0	0	2	0
	RALEIGH	85	63	93	56	74	-1	1.60	0.48	1.60	1.81	103	32.71	104	96	47	2	0	1	1
	WILMINGTON	86	67	92	60	76	0	0.76	-1.15	0.46	1.22	40	46.35	110	95	52	2	0	4	0
ND	BISMARCK	84	50	95	48	67	5	0.00	-0.39	0.00	0.52	80	7.14	49	85	27	2	0	0	0
	DICKINSON	84	49	92	43	66	6	0.00	-0.35	0.00	0.11	20	9.65	74	75	22	2	0	0	0
	FARGO	79	52	87	45	65	3	0.00	-0.67	0.00	2.09	197	11.79	69	86	34	0	0	0	0
	GRAND FORKS	78	50	89	44	64	4	0.02	-0.50	0.02	0.74	89	12.56	78	87	34	0	0	1	0
	JAMESTOWN	80	48	89	44	64	3	0.00	-0.54	0.00	0.78	93	7.83	52	88	32	0	0	0	0
NE	GRAND ISLAND	87	57	99	50	72	3	0.12	-0.40	0.12	0.31	36	22.84	105	90	38	2	0	1	0
	LINCOLN	88	57	95	52	72	3	0.00	-0.74	0.00	0.25	20	20.83	91	90	39	3	0	0	0
	NORFOLK	86	56	94	46	71	4	0.00	-0.62	0.00	0.15	15	20.67	96	88	39	2	0	0	0
	NORTH PLATTE	89	52	99	47	71	5	0.01	-0.33	0.01	0.86	159	19.62	116	91	35	3	0	1	0
	OMAHA	86	61	91	52	73	5	0.00	-0.68	0.00	0.82	76	25.40	105	92	40	2	0	0	0
	SCOTTSBLUFF	94	50	100	47	72	6	0.02	-0.27	0.02	0.20	45	7.59	59	78	14	5	0	1	0
	VALENTINE	88	52	96	46	70	4	0.02	-0.37	0.02	2.33	400	17.87	107	86	28	2	0	1	0
NH	CONCORD	76	52	84	44	64	1	1.36	0.65	0.89	3.13	280	31.58	115	98	55	0	0	4	1
NJ	ATLANTIC_CITY	79	64	83	52	71	1	1.61	0.97	1.61	2.26	217	37.39	128	86	55	0	0	1	1
	NEWARK	82	64	87	57	73	2	0.15	-0.66	0.15	8.59	688	44.92	137	81	45	0	0	1	0
NM	ALBUQUERQUE	92	66	94	64	79	7	0.00	-0.26	0.00	0.48	116	4.35	64	53	15	6	0	0	0
NV	ELY	89	46	93	41	67	8	0.09	-0.08	0.08	0.11	40	4.73	66	57	11	4	0	2	0
	LAS VEGAS	104	82	108	77	93	7	0.12	0.04	0.12	0.12	90	1.26	40	28	12	7	0	1	0
	RENO	92	59	97	52	75	8	0.09	0.03	0.06	0.09	95	1.83	37	53	14	5	0	2	0
	WINNEMUCCA	95	47	100	41	71	8	0.02	-0.07	0.02	0.02	14	4.85	85	51	12	5	0	1	0
NY	ALBANY	76	54	92	48	65	0	0.51	-0.20	0.39	2.02	182	29.05	107	100	51	1	0	2	0
	BINGHAMTON	0	0	0	0	0	0	0.00	-0.35	0.00	0.66	81	35.22	131	55	55	0	0	0	0
	BUFFALO	76	59	81	55	68	3	1.11	0.31	0.38	1.11	87	21.39	81	90	48	0	0	5	0
	ROCHESTER	77	55	79	52	66	1	0.54	-0.22	0.34	0.54	44	20.40	86	97	43	0	0	4	0
	SYRACUSE	77	58	80	52	68	3	0.24	-0.57	0.13	0.24	19	30.26	117	96	55	0	0	3	0
OH	AKRON-CANTON	79	57	84	53	68	2	0.19	-0.62	0.19	0.58	45	29.24	103	84	44	0	0	1	0
	CINCINNATI	81	58	83	55	69	-2	0.59	-0.03	0.51	0.86	88	36.13	117	86	41	0	0	2	1
	CLEVELAND	78	57	85	54	68	0	0.07	-0.78	0.07	0.11	8	28.90	108	85	44	0	0	1	0
	COLUMBUS	80	57	84	52	68	-1	0.09	-0.59	0.06	0.65	59	28.76	100	92	40	0	0	2	0
	DAYTON	81	59	86	53	70	1	0.04	-0.74	0.04	0.37	29	26.79	90	78	37	0	0	1	0
	MANSFIELD	79	56	85	50	68	2	0.04	-0.74	0.04	0.15	11	27.76	86	85	42	0	0	1	0

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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	57	89	52	69	2	0.24	-0.41	0.22	0.40	38	24.17	99	84	35	0	0	2	0
	YOUNGSTOWN	76	53	82	50	65	0	0.25	-0.64	0.24	0.43	31	32.44	117	92	47	0	0	2	0
OK	OKLAHOMA CITY	91	63	95	58	77	0	0.00	-0.98	0.00	0.35	23	23.96	90	81	29	5	0	0	0
	TULSA	93	67	95	60	80	4	0.00	-0.98	0.00	0.04	2	27.83	96	75	27	7	0	0	0
OR	ASTORIA	70	52	77	48	61	2	0.08	-0.33	0.04	0.08	12	38.32	98	98	58	0	0	2	0
	BURNS	86	43	94	38	65	6	0.43	0.32	0.43	0.43	263	6.07	83	65	19	4	0	1	0
	EUGENE	84	53	91	46	69	5	0.00	-0.25	0.00	0.00	0	14.40	54	85	33	2	0	0	0
	MEDFORD	90	58	94	54	74	5	0.16	0.04	0.16	0.16	88	6.52	62	72	20	3	0	1	0
	PENDLETON	84	58	90	54	71	5	0.09	-0.03	0.09	0.09	48	4.34	51	65	26	1	0	1	0
	PORTLAND	83	61	89	57	72	6	0.00	-0.30	0.00	0.00	0	14.63	70	77	35	0	0	0	0
	SALEM	84	56	90	51	70	6	0.00	-0.24	0.00	0.00	0	19.05	84	82	32	1	0	0	0
PA	ALLENTOWN	77	55	86	49	66	-1	1.76	0.82	1.54	3.02	207	31.65	101	95	53	0	0	3	1
	ERIE	76	60	85	57	68	1	1.18	0.19	0.31	1.30	85	25.69	94	85	50	0	0	6	0
	MIDDLETOWN	79	61	86	56	70	1	1.56	0.71	1.07	8.20	622	37.75	134	87	48	0	0	3	1
	PHILADELPHIA	80	63	86	58	71	-1	0.55	-0.28	0.29	2.89	226	34.73	119	90	49	0	0	4	0
	PITTSBURGH	75	56	80	51	65	-2	0.63	-0.13	0.31	2.89	240	29.09	104	96	55	0	0	3	0
	WILKES-BARRE	0	0	0	0	0	0	0.00	0.00	0.00	5.07	810	32.20	125	0	0	0	0	0	0
	WILLIAMSPORT	78	56	82	52	67	1	1.89	0.91	0.98	3.78	250	30.77	108	94	50	0	0	3	2
RI	PROVIDENCE	79	60	84	53	69	2	0.52	-0.37	0.50	4.40	323	35.86	112	96	56	0	0	3	0
SC	CHARLESTON	87	68	92	63	78	0	1.58	-0.02	1.28	1.60	63	43.33	113	97	53	2	0	4	1
	COLUMBIA	86	64	90	56	75	-2	0.89	0.00	0.55	0.91	64	38.64	116	95	49	1	0	4	1
	FLORENCE	88	66	93	58	77	1	0.46	-0.45	0.38	0.46	31	35.74	112	89	41	3	0	2	0
	GREENVILLE	84	62	88	56	73	-2	0.71	-0.10	0.63	1.56	119	34.74	103	88	44	0	0	2	1
SD	ABERDEEN	81	49	88	42	65	3	0.00	-0.53	0.00	1.43	173	12.90	75	88	36	0	0	0	0
	HURON	82	52	90	46	67	2	0.00	-0.63	0.00	1.84	192	12.15	66	92	35	1	0	0	0
	RAPID CITY	87	53	96	49	70	5	0.00	-0.30	0.00	0.29	62	11.83	89	68	24	2	0	0	0
	SIOUX FALLS	83	54	90	47	68	4	0.09	-0.58	0.09	0.43	40	20.09	98	89	40	1	0	1	0
TN	BRISTOL	82	57	87	52	70	0	0.39	-0.31	0.30	0.92	80	32.35	106	95	41	0	0	3	0
	CHATTANOOGA	85	63	90	58	74	-1	1.25	0.32	1.18	1.25	89	46.91	127	90	44	1	0	2	1
	KNOXVILLE	83	61	87	55	72	-2	0.11	-0.63	0.07	0.20	17	35.33	101	97	48	0	0	2	0
	MEMPHIS	86	64	90	60	75	-3	0.01	-0.66	0.01	0.05	5	38.93	107	84	38	1	0	1	0
	NASHVILLE	84	60	87	56	72	-2	0.05	-0.70	0.04	0.05	4	44.18	132	87	40	0	0	2	0
TX	ABILENE	96	69	98	65	83	5	0.11	-0.45	0.09	0.11	12	16.46	92	74	33	7	0	2	0
	AMARILLO	95	63	102	60	79	6	0.00	-0.47	0.00	0.63	83	13.70	85	79	23	5	0	0	0
	AUSTIN	98	70	102	65	84	2	0.10	-0.70	0.10	0.10	7	24.76	106	78	26	7	0	1	0
	BEAUMONT	90	68	94	64	79	-2	0.43	-1.05	0.43	0.86	37	46.76	112	97	48	3	0	1	0
	BROWNSVILLE	96	75	98	71	86	3	1.23	-0.18	0.62	1.23	59	18.95	112	90	46	7	0	4	1
	CORPUS CHRISTI	97	71	99	68	84	1	0.00	-1.29	0.00	0.00	0	30.03	141	94	40	7	0	0	0
	DEL RIO	102	77	105	71	89	7	0.00	-0.56	0.00	0.00	0	13.00	92	66	25	7	0	0	0
	EL PASO	93	68	96	65	80	3	0.08	-0.31	0.08	0.24	40	10.87	153	62	23	6	0	1	0
	FORT WORTH	93	70	96	66	82	1	0.17	-0.49	0.09	0.17	16	25.50	101	75	31	7	0	2	0
	GALVESTON	92	80	94	77	86	3	0.00	0.00	0.00	0.64	0	29.03	0	74	46	7	0	0	0
	HOUSTON	93	70	96	62	81	-1	1.77	0.73	1.77	3.28	202	35.66	106	86	37	7	0	1	1
	LUBBOCK	93	66	99	63	80	5	0.00	-0.63	0.00	0.03	3	18.36	130	75	30	6	0	0	0
	MIDLAND	95	67	97	65	81	4	0.02	-0.46	0.02	0.02	2	13.45	128	75	25	7	0	1	0
	SAN ANGELO	96	64	98	58	80	2	0.03	-0.62	0.02	0.03	3	18.94	125	88	31	7	0	2	0
	SAN ANTONIO	97	71	100	67	84	2	0.12	-0.65	0.12	0.12	9	22.54	101	87	28	7	0	1	0
	VICTORIA	97	69	100	61	83	2	0.00	-1.08	0.00	0.10	5	46.44	162	91	36	7	0	0	0
	WACO	94	67	101	59	81	0	0.00	-0.71	0.00	0.00	0	22.89	98	83	33	7	0	0	0
	WICHITA FALLS	94	65	96	60	80	1	0.00	-0.70	0.00	0.00	0	21.62	104	84	33	7	0	0	0
UT	SALT LAKE CITY	92	62	97	59	77	7	0.10	-0.15	0.08	0.10	26	9.35	85	51	14	6	0	2	0
VA	LYNCHBURG	84	57	87	52	71	1	0.02	-0.90	0.02	0.69	47	26.40	90	90	40	0	0	1	0
	NORFOLK	82	63	90	59	73	-2	1.57	0.41	0.88	1.86	99	31.33	92	97	52	1	0	2	2
	RICHMOND	83	62	87	56	73	-1	1.22	0.20	0.74	1.78	112	35.63	113	97	50	0	0	3	1
	ROANOKE	84	60	89	53	72	1	0.02	-0.91	0.01	0.69	46	28.57	96	88	40	0	0	2	0
	WASH/DULLES	82	60	89	51	71	0	0.49	-0.35	0.31	2.34	179	26.42	90	94	47	0	0	4	0
VT	BURLINGTON	74	57	83	52	66	2	1.71	0.93	0.95	1.73	142	22.13	87	91	56	0	0	3	2
WA	OLYMPIA	78	54	82	45	66	5	0.00	-0.37	0.00	0.00	0	28.09	99	93	45	0	0	0	0
	QUILLAYUTE	69	52	86	49	61	3	0.86	0.11	0.52	1.64	142	45.29	78	100	67	0	0	4	1
	SEATTLE-TACOMA	76	59	80	56	67	4	0.00	-0.30	0.00	0.00	0	19.81	94	84	48	0	0	0	0
	SPOKANE	81	58	86	54	69	6	0.24	0.10	0.14	0.24	103	5.14	49	64	25	0	0	2	0
	YAKIMA	84	52	91	46	68	5	0.04	-0.05	0.04	0.04	27	2.78	54	85	25	2	0	1	0
WI	EAU CLAIRE	77	52	81	47	65	1	0.17	-0.73	0.09	0.56	40	18.17	77	94	43	0	0	2	0
	GREEN BAY	77	52	84	48	65	2	0.18	-0.51	0.18	0.41	37	23.97	111	92	48	0	0	1	0
	LA CROSSE	82	58	89	54	70	4	0.00	-0.86	0.00	0.49	36	30.53	120	90	41	0	0	0	0
	MADISON	79	53	85	49	66	1	0.15	-0.62	0.15	0.25	20	16.60	63	94	41	0	0	1	0
	MILWAUKEE	80	60	87	57	70	4	0.10	-0.61	0.09	0.11	10	11.65	46	81	41	0	0	2	0
WV	BECKLEY	74	54	80	49	64	-1	1.26	0.58	0.83	1.56	144	31.41	102	98	52	0	0	3	1
	CHARLESTON	79	57	84	51	68	-2	0.83	0.07	0.48	1.33	109	28.94	89	100	49	0	0	2	0
	ELKINS	73	53	80	46	63	-2	1.18	0.37	0.87	3.00	228	28.91	84	93	52	0	0	3	1
	HUNTINGTON	78	58	83	52	68	-2	0.98	0.30	0.74	1.25	114	39.24	125	97	50	0	0	2	1
WY	CASPER	89	46	95	40	68	6	0.00	-0.24	0.00	0.07	20	10.28	108	55	10	2	0	0	0
	CHEYENNE	88	53	96	48	70	9	0.00	-0.37	0.00	0.12	20	9.43	72	49	10	3	0	0	0
	LANDER	88	54	94	48	71	9	0.00	-0.21	0.00	0.29	101	10.58	114	46	13	3	0	0	0
	SHERIDAN	90	48	95	43	69	8	0.00	-0.29	0.00	0.00	0	8.82	84	67	15	4	0	0	0

Based on 1981-2010 normals

***** Not Available**

August Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Much of the country experienced relatively wet weather during August, with significantly above-normal rainfall noted in large sections of the eastern U.S., as well as portions of the northern Plains and upper Midwest. However, rain across the northern Plains arrived too late for drought-stricken small grains, which were largely harvested when precipitation began to boost topsoil moisture and slowly revive rangeland and pastures. By August 29, eighty-eight percent of the U.S. spring wheat and 85 percent of the barley had been harvested, compared to respective 5-year averages of 71 and 78 percent.

Tropical systems greatly contributed to Eastern wetness, with Hurricane Ida and Tropical Storms Fred and Henri making landfall during August. Following more than a month without an Atlantic tropical cyclone, Fred was named while passing south of Puerto Rico on August 10. Six days later, after surviving treks across Hispaniola and Cuba, Tropical Storm Fred made landfall near Cape San Blas, FL, with sustained winds near 65 mph. Later, Henri took a circuitous route into the Northeast after developing near Bermuda on August 16. After briefly becoming a hurricane, Henri weakened before making landfall on August 22—with sustained winds of 60 mph—near Westerly, RI. Meanwhile, unrelated to tropical activity, catastrophic flooding unfolded on August 21 in parts of middle Tennessee.

On August 29, Hurricane Ida became the strongest storm on record—tied with Laura in 2020 and the Last Island hurricane of 1856—to strike the Louisiana coastline. In fact, with sustained winds estimated at 150 mph, category 4 Ida's landfall at Port Fourchon, Louisiana, represented the sixth-strongest hurricane, based on sustained winds, to strike a Gulf or Atlantic Coast State, behind the Labor Day hurricane of 1935; Hurricane Camille (1969); Hurricane Andrew (1992); the Okeechobee hurricane of 1928; and Hurricane Michael (2018). Hurricane Ida's impacts, which included flooding rains, damaging winds, power outages, and a coastal storm surge, were still being assessed as the month ended. Ida moved through the eastern side of Louisiana's sugarcane production area, shortly before harvest was due to begin.

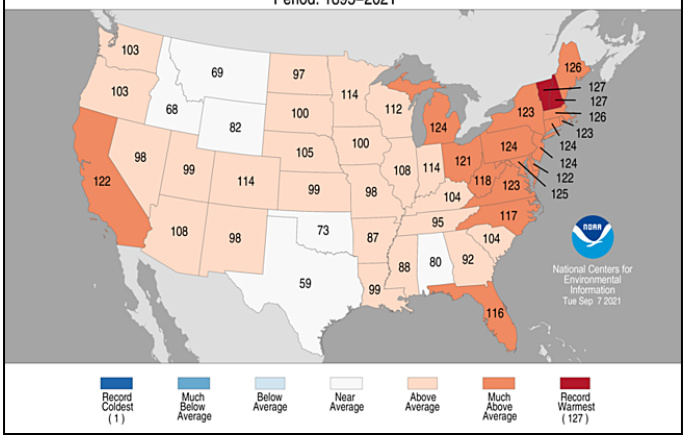
Significant August rainfall bypassed a few areas, including the Far West and portions of the central and southern Plains. Western drought, combined with periods of hot, windy weather, led to further escalation of wildfire activity, particularly in northern California. By early September, three of California's active wildfires—the Dixie (927,000 acres), Caldor (218,000 acres), and Monument Fires (199,000 acres)—were among the twenty largest blazes in state history. Those fires and dozens of others broadly reduced Northwestern air quality for much of the month. Meanwhile on the central and southern Plains, late-season heat and a turn toward drier conditions reduced topsoil moisture and locally increased stress on immature summer crops.

Elsewhere, late-summer showers associated with the Southwestern monsoon circulation continued to provide drought relief in the Four Corners States, while warm weather and ample rainfall helped to push Midwestern summer crops toward maturity. By August 29, more than half (59 percent) of the U.S. corn had dented, versus the 5-year average of 55 percent. On the same date, 9 percent of the nation's corn was fully mature, while 9 percent of the soybeans were dropping leaves. August average temperatures were mostly close to normal values, although a ribbon of anomalous warmth stretched from the central Plains into the Northeast.

During the 4-week period ending August 31, drought coverage in the contiguous U.S. remained nearly unchanged at 46 to 47 percent, according to the *U.S. Drought Monitor*. However, August improvement in the Southwest and upper Midwest was offset by worsening drought in the Northwest and pockets of developing drought on the central Plains. Despite drought being mostly restricted to the northwestern half of the country, overall coverage has been elevated for months—and was last below 40 percent in late-September 2020.

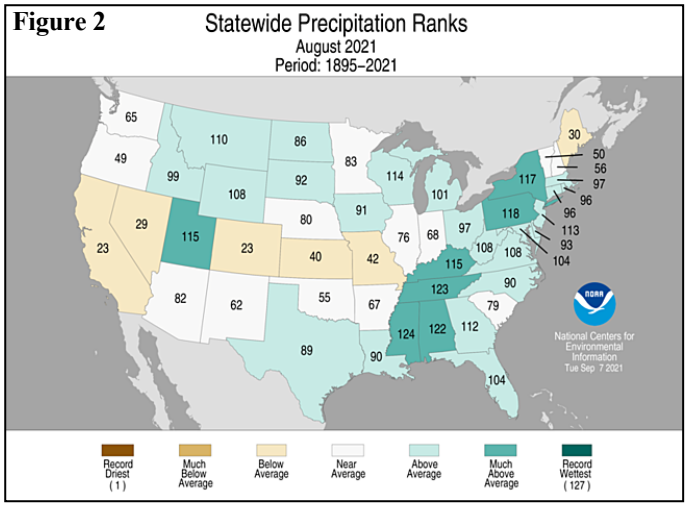
Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 14th-hottest, 14th-wettest August during the 1895-2021 period of record. The nation's monthly average temperature of 74.0°F was 1.9°F above the 1901-2000 mean, while precipitation averaged 3.09 inches—118 percent of normal.

Figure 1 Statewide Average Temperature Ranks
August 2021
Period: 1895–2021



State temperature rankings ranged from the 59th-coolest August in Texas to the hottest on record in Vermont and New Hampshire (figure 1). Top-ten rankings for August warmth were also observed in California and all states along and northeast of a line from Michigan to Virginia. Meanwhile, precipitation rankings ranged from the 23rd-driest August in California and Colorado to top-ten wetness in Alabama, Mississippi, Pennsylvania, and Tennessee (figure 2).

Figure 2



Summary: With dozens of summer wildfires burning from northern California and the Pacific Northwest to the northern Rockies, air-quality degradation and reductions in visibility were common through August. In Montana, records were set for the number of June-August hours with visibility below 10 miles in locations such as Cut Bank (735 hours; previously, 480 hours in 2018) and Great Falls (388 hours; previously, 271 hours in 2017). Many of August's noteworthy wildfires scorched thousands of acres of timber, brush, and grass across northern California. The Dixie Fire, initially sparked on July 13, burned a vast area near Lake Almanor and made several impressive runs while threatening to become the largest wildfire in California history. That blaze also destroyed more than 1,300 structures. The Caldor Fire, which was ignited on August 14 just south of Grizzly Flats, CA, crept perilously close to the community of South Lake Tahoe. Still, the Caldor Fire, which burned through nearly one-quarter million acres of vegetation by early September, destroyed more than 1,000 structures—only the seventeenth wildfire in state history to do so.

Impressive heat briefly returned across the Desert Southwest in early August, during a break in the monsoon. On August 2, Anaheim, CA, notched a daily-record high of 100°F. Consecutive daily-record highs occurred on August 3-4 in California locations such as Palm Springs (119 and 122°F) and Imperial (117 and 119°F). Palm Springs reached or exceeded the 120-degree mark for the fifth time this year—other occurrences were July 10 and June 15, 17, and 27—tying the annual record set in 2020. Thermal, CA, achieved a high of 122°F on the 4th, breaking by 1°F a monthly record originally set on August 5, 1997. Heat extended into the Great Basin, where Tonopah, NV, registered consecutive daily-record highs of 100°F on August 4-5. In Arizona, record-setting highs for August 4 soared to 117°F in Yuma and 107°F in Kingman. In contrast, unusually cool air settled across the Plains and Midwest. Daily-record lows for August 2 included 50°F in Sioux City, IA, and 54°F in Dodge City, KS. Childress, TX, posted consecutive daily-record lows (62 and 61°F, respectively) on August 3-4. Elsewhere in Texas, daily-record lows dipped to 59°F (on August 3) in Abilene; 58°F (on August 4) in Midland; and 54°F (on August 5) in Dalhart.

Heavy rain drenched portions of the Atlantic Coast States in early August. For example, Wilmington, NC, received 6.36 inches of rain during the first 7 days of the month, aided by a daily-record sum of 2.97 inches on August 3. Elsewhere in North Carolina, August 1-7 rainfall totaled 8.46 inches on Cape Hatteras, 7.92 inches in New Bern, 6.62 inches in Beaufort, and 5.99 inches in Elizabeth City. More than two-thirds of the rain on Cape Hatteras—5.73 inches—fell on August 4, representing the wettest day in that location since May 30, 2016, when 7.09 inches fell. Farther west, a 20-day (July 16 – August 4) spell without measurable rain in Cedar Rapids, IA, ended with a 0.28-inch total on August 5. Sioux City, IA, also experienced a 20-day (July 15 – August 3) streak without measurable rain, followed by 0.76 inch from August 4-7. Eventually, more widespread rain returned across the Midwest. On August 7, daily-record totals in Wisconsin included 3.81 inches in Eau Claire, 2.77 inches in Marshfield, and 2.25 inches in Wisconsin Rapids, while La Crosse (5.59 inches) observed its highest calendar-day total on record. Previously, the wettest day on record in La Crosse had been September 6, 1884, when 5.55 inches fell. Upper Midwestern downpours continued into August 8, when more than three inches fell in Green Bay, WI (3.42 inches), and Sisseton, SD (3.26 inches). La Crosse received 7.36 inches on August 7-8, marking its wettest-ever 2-day period (previously, 7.27 inches on October 27-28, 1900). By August 9 in Illinois, daily-record totals included 2.52 inches in Rockford and 2.18 inches in Springfield. On August 10-11, strong thunderstorms in the Great Lakes region produced wind gusts to 60 mph in Rockford, IL, and 62 mph in the Michigan cities of Detroit and Grand Rapids. Meanwhile, a few showers dotted the Northwest, where Ephrata, WA (0.71 inch on August 8), noted its wettest day since May 18, 2020, when 1.11 inches fell. The same cold front responsible for the Northwestern showers also produced high winds; in Wyoming, gusts on August 8 were clocked to 69 mph in Buffalo and 58 mph in Greybull. Farther south, the latest surge of monsoon-related moisture contributed to a daily-record rainfall total of 1.38 inches (on August 10) in Flagstaff, AZ. Cloudiness and showers briefly overspread southern California, where record-setting totals for August 11 reached 0.23 inch in San Diego and 0.16 inch in Thermal.

Heat across the central and southern Plains slowly subsided, but other regions, including the East and Northwest, remained hot. On August 9, before the Plains' heat broke, daily-record highs in Texas soared to 105°F in Borger and 104°F in Amarillo and Dalhart. On the same date, record-setting highs in Colorado reached 98°F in Denver and 96°F in Colorado Springs. With heat shifting into the East, Virginia's Dulles Airport tallied a trio of daily-record highs (99, 100, and 99°F) from August 11-13. Raleigh-Durham, NC (100°F on August 13), also noted a triple-digit, daily-record high. Meanwhile in Washington, Bellingham (100°F on August 12) reported a triple-digit high for the first time on record. Bellingham had attained 99°F on June 28, 2021; prior to that, the station record had been 96°F on July 29, 2009. From August 12-15, four consecutive daily-record highs (101, 100, 98, and 101°F) were set in Burns, OR. Elsewhere in Oregon, Portland recorded 2 days of triple-digit heat (102 and 103°F, respectively, on August 11-12), to go along with 3 such days in June. Portland's five days of triple-digit heat this year tied the annual record previously set in 1941 and 1977. Salem, OR, and Spokane, WA, set records for number of 90-degree readings in a year—38 and 42 days, respectively, through

August. Previous annual records, both set in 1958, had been 34 and 39 days. In Montana, Helena noted 10 days of 90-degree heat during August—all during the first 16 days of the month—boosting the year-to-date sum to 49 days. Previously, Helena's annual record of days with 90-degree readings was set in 2001, with 47 such days.

Tropical Storms Fred and Henri made U.S. landfalls on August 16 and 22, respectively. Fred crossed the Gulf Coast near Cape San Blas, FL, with sustained winds near 65 mph. Six days later, Henri—packing winds near 60 mph—passed over Block Island, RI, before reaching the mainland near Westerly, RI. Both storms sparked heavy rain and local flooding, with Fred delivering more than 8 inches of rain in parts of the southern Appalachians. Around the same time, an upper-level disturbance moving into the East enhanced rainfall in several areas. In Tennessee, for example, heavy rain (locally a foot or more) erupted across a small area on August 21, leading to catastrophic flooding in parts of Dickson, Hickman, Humphreys, and Houston Counties. In advance of Tropical Storm Fred's arrival, heavy showers dotted the East. Record-setting rainfall totals for August 15 reached 4.08 inches in Charleston, SC; 2.79 inches in Roanoke, VA; and 2.29 inches in Chattanooga, TN. Heavy rain also fell on August 15 in parts of Texas, leading to daily-record amounts in San Angelo (1.77 inches) and Waco (1.60 inches). Waco received another deluge on August 18, when 4.76 inches fell. Prior to that event, Waco's wettest August day had been August 24, 1958, with 4.10 inches. On August 16, the day of Fred's arrival on the Gulf Coast, Apalachicola, FL, collected a daily-record sum of 3.71 inches. Farther inland, the French Broad River in Rosman, NC, crested on August 17 at 5.18 feet above flood stage, the second-highest level on record in that location behind the October 1964 high-water mark. Following Fred's departure, occasionally heavy showers persisted across the southern and eastern U.S. Daily-record amounts topped the two-inch mark in Del Rio, TX (2.17 inches on August 17); Mount Pocono, PA (2.74 inches on August 18); and Zanesville, OH (2.99 inches on August 18). Meanwhile, the latest surge of monsoonal moisture spread northward from Arizona. On August 16, Phoenix, AZ, clocked a thunderstorm wind gust to 69 mph, along with blowing dust. During a 48-hour period from August 17-19, rainfall in Utah totaled 3.51 inches at Bryce Canyon Airport and 2.85 inches at Deer Creek Dam. In Montana, Great Falls received rainfall totaling 1.62 inches on August 17-18. In Idaho, August 18-19 rainfall reached 1.26 inches in Pocatello and 1.24 inches in Idaho Falls. Elsewhere, heavy showers continued to pepper areas from the Ohio and Tennessee Valleys into the East. Frankfort, KY, collected a record-setting sum (3.97 inches) for August 19. Before dawn on August 21, severe flooding developed in parts of middle Tennessee, resulting in more than 20 fatalities. Unofficial 24-hour rainfall totals of 10 to 18 inches were reported in several Tennessee communities, including McEwen (Humphreys County), Dickson (Dickson County), and Centerville (Hickman County). Piney River near Vernon, TN, crested at a record-shattering 17.8 feet above flood stage on August 21, with the water level rising more than 28 feet in just a few hours. In advance of Tropical Storm Henri's arrival, heavy rain overspread the northern Atlantic Coast. On August 21, New York's Central Park netted 4.45 inches, marking the city's wettest day since April 30, 2014. From August 21-23, Central Park received rainfall totaling 8.19 inches. On August 22, the day of Henri's landfall, daily-record rainfall totals ranged from 2 to 5 inches in locations such as Mount Pocono, PA (4.53 inches); Hartford, CT (2.82 inches); Newark, NJ (2.51 inches); and Binghamton, NY (2.18 inches). Farther south, heavy showers lingered in the southern Atlantic States, where Columbia, SC, netted 5.13 inches on August 22. It was Columbia's wettest August day on record, surpassing the 5.03-inch total of August 18, 1965. Heavy rain associated with the remnants of Henri lingered into August 23 across Maine, where daily-record amounts reached 1.15 inches in Millinocket and 0.95 inch in Houlton.

Although hot weather persisted across many parts of the country into September, the year's last spell of ferocious heat peaked in mid-August. In California on August 15, temperatures rose to daily-record levels in locations such as Redding (116°F), Red Bluff (112°F), Ukiah (109°F), and Montague (105°F). For Redding, it was the hottest day since July 2, 2013, when it was also 116°F. In addition, it was Redding's hottest August day since August 8, 1981. Meanwhile in the Great Basin, Winnemucca, NV, registered four consecutive daily-record highs (103, 103, 103, and 104°F) from August 13-16. Farther east, Billings, MT (100°F on August 16), recorded its tenth triple-digit reading of the year, tying 1988 for its second-highest annual total. Only 1936, with 15 days of 100-degree heat in Billings, had more. On August 15-16, consecutive triple-digit, daily-record highs (103 and 104°F, respectively) occurred in Minot, ND. Elsewhere in North Dakota on August 16, daily-record highs topped the 100-degree mark in Dickinson (103°F) and Bismarck (102°F). In fact, Bismarck reported 4 consecutive days of triple-digit heat from August 15-18, boosting its 2021 total to a record-high 15 days. Bismarck's previous annual standard of 14 days had been set in 1936. Farther east, International Falls, MN, recorded a high of 90°F or greater each day from August 15-20, boosting its year-to-date total to 17 days. International Falls' only year with a greater number of 90-degree readings was 1921, with 18 such days. Later, sharply cooler air overspread the northern Plains and parts of the West. Great Falls, MT, reported a high of 48°F on August 18, just 3 days after attaining 98°F. By August 20, daily-record lows in Utah dipped to 39°F in Monticello and 45°F in Cedar City.

On August 29, Hurricane Ida became the third tropical cyclone to make a U.S. landfall in less than 2 weeks and the sixth of the season, following Tropical Storms Claudette, Danny, Elsa, Fred, and Henri. Ida cut a destructive swath from the central Gulf Coast region into the Northeast, spending parts of 5 days (August 29 – September 2) inland. Initially, primary hurricane impacts included high winds and a coastal storm surge, which resulted in extensive damage and power outages across southeastern Louisiana. Once inland, the focus turned to freshwater flooding and heavy rain, which totaled 4 to 8 inches or more in portions of the central Gulf Coast States. Despite significant weakening (to a tropical depression after spending a little more than 24 hours inland), Ida spawned more than a dozen tornadoes and sparked catastrophic mid-Atlantic flooding on September 1-2, as the remnant circulation merged with a cold front. As Ida roared ashore near Port Fourchon, a ship in port recorded a gust to 172 mph. Several other coastal Louisiana wind gusts exceeded 120 mph, including a report of 122 mph at a University of Florida meso-network tower installed near Galliano, LA. Farther inland, wind gusts were clocked to 90 mph in New Orleans, LA, and 68 mph in Gulfport, MS. On Lake Borgne, LA, at Chef Menteur Pass, the peak water level on August 29 rose to within 2.37 feet of the record set during Hurricane Betsy on September 10, 1965. Farther north, the Biloxi River near Lyman, MS, crested 5.24 feet above flood stage on August 31, marking the highest level in that location since April 28, 2016. Water pushing inland from the Gulf of Mexico led to the sixth-highest crest on record along the Mississippi River at Venice, LA. Ida's August 29 crest in Venice was 2.75 feet lower than the record associated with Hurricane Camille on August 17, 1969—and was also lower than water levels observed with Georges (1998), Betsy (1965),

Ida (2009), and Gustav (2008). In Mobile, AL, the last 3 days of August featured 9.37 inches of rain. Record-setting rainfall totals for August 31 included 2.21 inches in Frankfort, KY, and 2.18 inches in Chattanooga, TN. Separately, a cold front crossing the Midwest contributed to a daily-record sum (2.56 inches on August 31) in Moline, IL.

Meanwhile, late-August rain also fell across portions of the Plains, Southwest, and Midwest, due to the interaction between the monsoon circulation and Northern cold fronts. On the 24th, Waterloo, IA, received 1.80 inches of rain and clocked a thunderstorm wind gust to 61 mph. Two days later in South Dakota, gusts reached 75 mph in Watertown and 72 mph in Huron. On August 28, a gust to 75 mph was recorded in Spencer, IA. Record-setting rainfall totals in South Dakota included 3.35 inches (on August 28) in Sioux Falls and 1.88 inches (on August 27) in Huron. Elsewhere on the 27th, daily-record totals topped the 3-inch mark in Marshfield, WI (3.55 inches), and Rochester, MN (3.51 inches). Unsettled weather also prevailed in the East, where daily-record amounts included 3.26 inches (on August 28) in Martinsburg, WV, and 3.17 inches (on August 27) in Philadelphia, PA. Mid- to late-August downpours from Fred, Henri, and non-tropical sources saturated Northeastern soils and primed the mid-Atlantic for deadly flooding on September 1-2, when Ida's deluge arrived.

Late-month heat on the central and southern Plains generally peaked from August 23-25. In Kansas, daily-record highs for August 24 soared to 106°F in Garden City and 104°F in Russell. With a high of 100°F, Burlington, CO, also posted a triple-digit, daily-record high on August 24—and again on the 31st. Dalhart, TX, notched consecutive daily-record highs (103 and 101°F, respectively) on August 24-25. Meanwhile, hot, humid weather prevailed in the South and East. From August 23-25, Vicksburg, MS, tallied a trio of triple-digit readings, including a daily-record high of 102°F on the 25th. On August 26, Eastern daily-record highs reached 95°F in Lynchburg, VA, and 90°F in Caribou, ME. Southern and Eastern humidity levels did not allow for much cooling at night; lows of 84°F (on August 24 and 28) in Miami, FL, tied a station record for highest-ever minimum temperature. In contrast, a cold front knocked down Western heat, following a final flurry of record-setting temperatures. On August 30, daily-record highs in California's San Joaquin Valley soared to 108°F in Merced and Madera. Farther east, strong thunderstorms sweeping across Montana resulted in a wind gust to 79 mph (on August 30) at Bozeman Airport—a record for that location. Previously, Bozeman's highest gust (78 mph) had occurred during a thunderstorm on July 30, 1957. Although cooler air overspread the West, end-of-month heat persisted across the Deep South. In Texas, daily-record highs included 97°F (on August 30) in Galveston and 105°F (on August 31) in Del Rio. Cooler air also arrived in New England at the end of the month, but it was not enough to prevent Maine locations such as Caribou (69.5°F, or 4.6°F above normal) and Houlton (69.2°F, or 4.8°F above normal) from experiencing record-high August average temperatures.

August started on a warm note in much of Alaska, but cooler weather soon arrived and persisted for the remainder of the month. Fairbanks logged consecutive daily-record highs (88 and 89°F, respectively) on August 2-3. Kotzebue achieved a high of 80°F on the 4th, tying a monthly record originally set on August 6, 1968. More than a week later, daily-record lows were set in several Alaskan locations, including Nome (31°F on August 12) and Cold Bay (39°F on August 14). Nome had last reported an August freeze on August 20, 2017. By the morning of August 22, low temperatures near or below the freezing mark were noted in locations such as Northway (31°F), McGrath (33°F), and Delta Junction (34°F). Widespread Alaskan freezes occurred in late August, especially across northern and interior sections of the state. King Salmon noted consecutive daily-record lows (32 and 26°F, respectively) on August 27-28. The 28th also featured the month's lowest readings in locations such as Bettles (30°F) and Delta Junction (33°F). Despite the cool conditions, periods of precipitation—including high-elevation snow—occurred throughout the month. Anchorage received measurable rain each day from August 8-12, totaling 2.01 inches, aided by a daily-record sum (1.25 inches) on the 8th. That marked the wettest day in Anchorage since September 29, 2015, when 1.56 inches fell. The week of August 15-21 featured precipitation totaling more than an inch in Fairbanks (1.72 inches) and Tanana (1.60 inches). In southeastern Alaska, Sitka collected a daily-record sum (1.64 inches) for August 28.

Hawaiian rainfall briefly increased when the remnants of former Hurricane Linda moved north of Maui, across Molokai, and just south of Oahu on August 23. In a 48-hour period ending the morning of August 24, rainfall totals included 7.12 inches on Kauai's Mount Waialeale and 7.10 inches on Oahu at the Manoa Lyon Arboretum. A few wind gusts exceeding 40 mph were reported on several islands, with Lanai Airport clocking 38 mph. During drier periods, there were sometimes unusually large temperature swings. Prior to Linda's arrival, Kahului, Maui, noted consecutive daily-record lows (63 and 64°F, respectively) on August 16-17. A few days later, on August 21, Hilo (on the Big Island) tallied a daily record-tying high of 87°F. At the state's major airport observation sites, August rainfall ranged from 0.29 inch (35 percent of normal) in Honolulu, Oahu, to 7.34 inches (65 percent) in Hilo. In Kahului, where monthly rainfall totaled 0.66 inch (125 percent of normal), a 74-day spell without measurable rain ended on August 3.

Fieldwork

Fieldwork summary provided by USDA/NASS

August was warmer than average for much of the nation. Large areas of the Great Lakes, mid-Atlantic, Northeast, Pacific Northwest, and the Plains recorded monthly temperatures 2°F or more above normal. In contrast, portions of the Rockies, Southwest, and Texas were cooler than normal. Meanwhile, most of California, Nevada, and the Pacific Northwest remained drier than normal, but at least twice the average amount of rain fell in parts of the Rockies. Many areas in the Great Lakes, mid-Atlantic, Midwest, South, and Southwest also recorded higher-than-normal amounts of August precipitation.

By August 1, ninety-one percent of the nation's corn had reached the silking stage, equal to last year but 5 percentage points ahead of the 5-year average. On August 1, thirty-eight percent of the corn was at or beyond the dough stage, 1 percentage point ahead of last year and 5 points ahead of average. By August 15, seventy-three percent of the corn was at or beyond the dough stage, 1 percentage point behind last year but 5 points ahead of average. On August 15, twenty-two percent of this year's corn was denting, 1 percentage point ahead of last year but equal to the average. By August 29, ninety-one percent of the corn acreage was at or beyond the dough stage, 2 percentage points behind last year but 2 points ahead of average. By August 29, fifty-nine percent of the corn was denting, 1 percentage point behind last year but 4 points ahead of average. Nine percent of the nation's corn was mature by August 29, two percentage points behind last year

and 1 point behind average. On August 29, sixty percent of the nation's corn was rated in good to excellent condition, 2 percentage points below the same time last year.

By August 1, eighty-six percent of the nation's soybeans had reached the blooming stage, 2 percentage points ahead of last year and 4 points ahead of the 5-year average. By August 1, fifty-eight percent of the soybeans had begun setting pods, 1 percentage point ahead of last year and 6 points ahead of average. By August 15, ninety-four percent of the soybeans had reached the blooming stage, 1 percentage point behind last year but equal to the average. By August 15, eighty-one percent of the soybeans had begun setting pods, 2 percentage points behind last year but 2 points ahead of average. By August 29, ninety-three percent of the soybeans had begun setting pods, 2 percentage points behind last year but 1 point ahead of the average. Nationally, leaf drop was 9 percent complete by August 29, two percentage points ahead of both last year and the average. On August 29, fifty-six percent of the nation's soybeans were rated in good to excellent condition, 10 percentage points below the same time last year.

Ninety-five percent of the 2021 winter wheat acreage had been harvested by August 8, six percentage points ahead of last year and 4 points ahead of the 5-year average. During that week, winter wheat harvest progress advanced at least 10 percentage points from the previous week in Idaho, Montana, and Washington.

Eighty-two percent of the nation's cotton had reached the squaring stage by August 1, eight percentage points behind both last year and the 5-year average. By August 1, fifty percent of the cotton had begun setting bolls, 2 percentage points behind last year and 3 points behind average. Ninety-three percent of the cotton acreage had reached the squaring stage by August 15, six percentage points behind both last year and the average. By August 15, seventy-five percent of the cotton had begun setting bolls, 4 percentage points behind last year and 7 points behind average. By August 15, ten percent of the nation's cotton had open bolls, 4 percentage points behind last year and 5 points behind average. By August 29, eighty-six percent of the cotton had begun setting bolls, 6 percentage points behind last year and 8 points behind average. By August 29, twenty-one percent of the cotton had open bolls, 7 percentage points behind last year and 5 points behind average. On August 29, seventy percent of the cotton acreage was rated in good to excellent condition, 26 percentage points above the same time last year.

By August 1, fifty-seven percent of the sorghum acreage had reached the headed stage, 4 percentage points ahead of last year and 3 points ahead of the 5-year average. Twenty-two percent of the sorghum was at or beyond the coloring stage by August 1, one percentage point behind last year and 3 points behind average. By August 15, eighty-two percent of the sorghum had reached the headed stage, 1 percentage point ahead of last year and 3 points ahead of average. Thirty-one percent of the sorghum was at or beyond the coloring stage by August 15, two percentage points behind last year and 5 points behind average. By August 29, ninety-five percent of the sorghum had reached the headed stage, equal to last year but 2 percentage points ahead of average. Fifty-nine percent of the sorghum was at or beyond the coloring stage by August 29, three percentage points ahead of both last year and the 5-year average. By August 29, twenty-three percent of the sorghum acreage was mature, 1 percentage point behind last year and 5 points behind average. Seventy-five percent of Texas' sorghum acreage was mature by August 29, two percentage points ahead of both last year and the average. Eighteen percent of the nation's sorghum acreage had been harvested by August 29, three percentage points behind last year and 2 points behind average. Fifty-eight percent of the sorghum acreage was rated in good to excellent condition on August 29, eight percentage points above the same time last year.

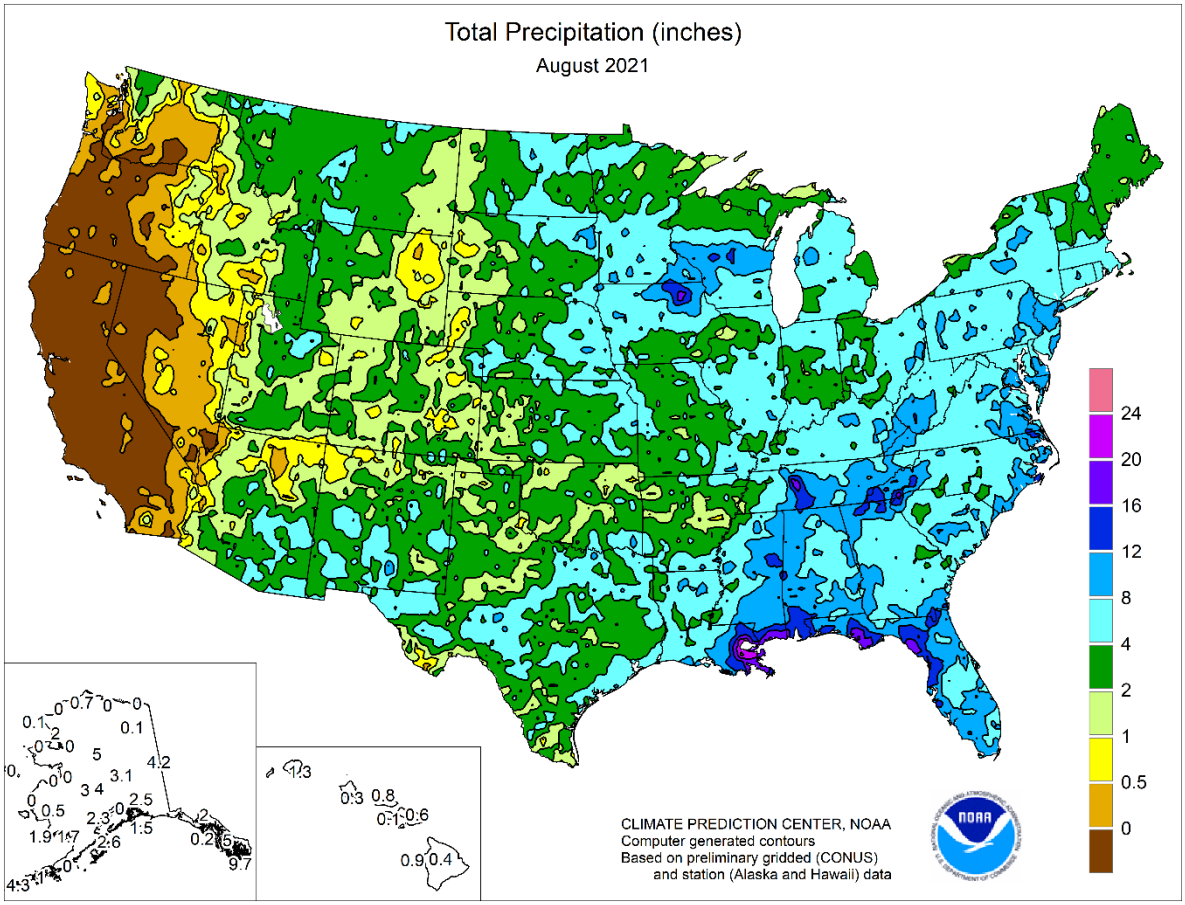
By August 1, fifty-nine percent of the nation's rice acreage had reached the headed stage, 2 percentage points ahead of the previous year but 6 points behind the 5-year average. By August 15, eighty-six percent of the rice had reached the headed stage, 2 percentage points ahead of the previous year but 3 points behind average. Nationally, 12 percent of the rice was harvested by August 15, one percentage point behind last year but equal to the average. By August 29, ninety-seven percent of the rice had reached the headed stage, 1 percentage point ahead of the previous year but 1 point behind average. Nationally, 19 percent of the rice was harvested by August 29, one percentage point behind last year and 3 points behind average. On August 29, seventy-seven percent of the rice was rated in good to excellent condition, 1 percentage point above the same time last year.

Forty-eight percent of the nation's oat acreage had been harvested by August 1, one percentage point ahead of last year and 6 points ahead of the 5-year average. On August 1, thirty-six percent of the oats were rated in good to excellent condition, 26 percentage points below the same time last year. Seventy-five percent of the oats had been harvested by August 15, two percentage points ahead of last year and 5 points ahead of average. Ninety-two percent of the oats had been harvested by August 29, two percentage points ahead of last year and 3 points ahead of average.

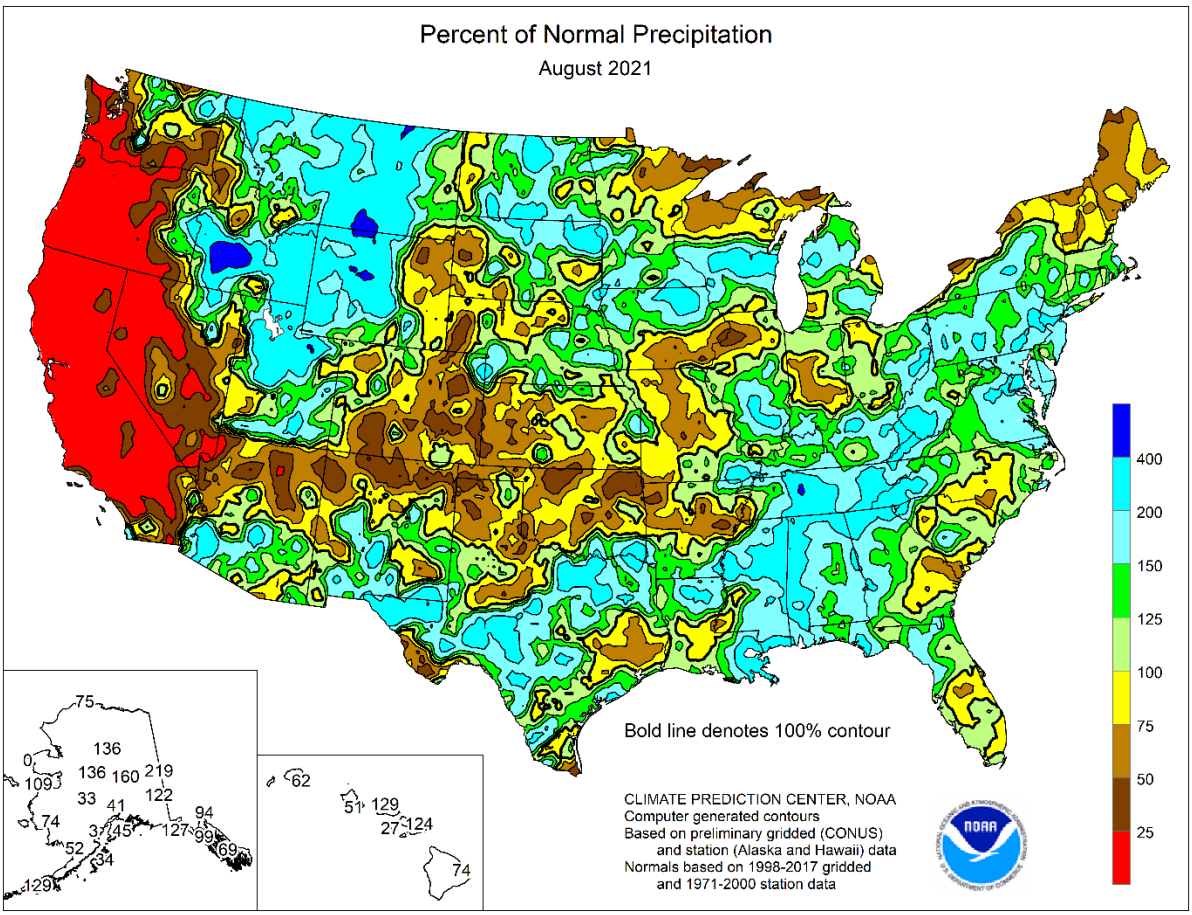
By August 1, producers had harvested 13 percent of the nation's barley, 9 percentage points ahead of last year and 5 points ahead of the 5-year average. By August 15, barley producers had harvested 54 percent of the nation's crop, 23 percentage points ahead of last year and 10 points ahead of average. On August 15, twenty-three percent of the barley was rated in good to excellent condition, 54 percentage points below the same time last year. By August 29, barley producers had harvested 85 percent of the crop, 14 percentage points ahead of last year and 7 points ahead of average. Harvest progress was ahead of the 5-year average in all five estimating states.

By August 1, seventeen percent of the nation's spring wheat had been harvested, 13 percentage points ahead of the previous year and 9 points ahead of the 5-year average. By August 15, fifty-eight percent of the spring wheat had been harvested, 30 percentage points ahead of the previous year and 22 points ahead of average. On August 15, eleven percent of the spring wheat was rated in good to excellent condition, 59 percentage points below the same time last year. By August 29, eighty-eight percent of the spring wheat had been harvested, 22 percentage points ahead of the previous year and 17 points ahead of average. Harvest progress was ahead of average in all six estimating states.

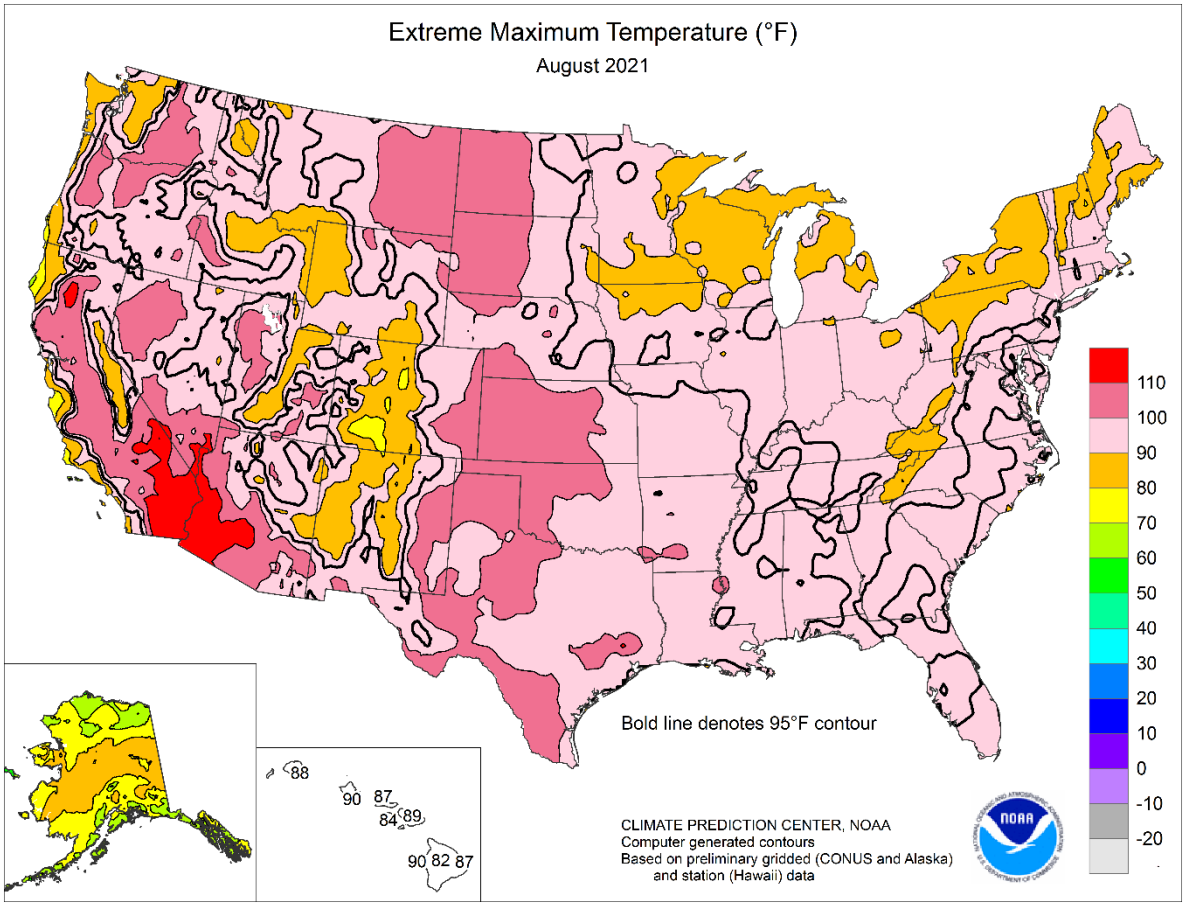
By August 1, eighty-eight percent of the nation's peanut crop had reached the pegging stage, 1 percentage point behind both the previous year and the 5-year average. By August 15, ninety-five percent of the peanuts had reached the pegging stage, 1 percentage point behind both the previous year and the average. On August 29, seventy-six percent of the peanut acreage was rated in good to excellent condition, unchanged from the same time last year.

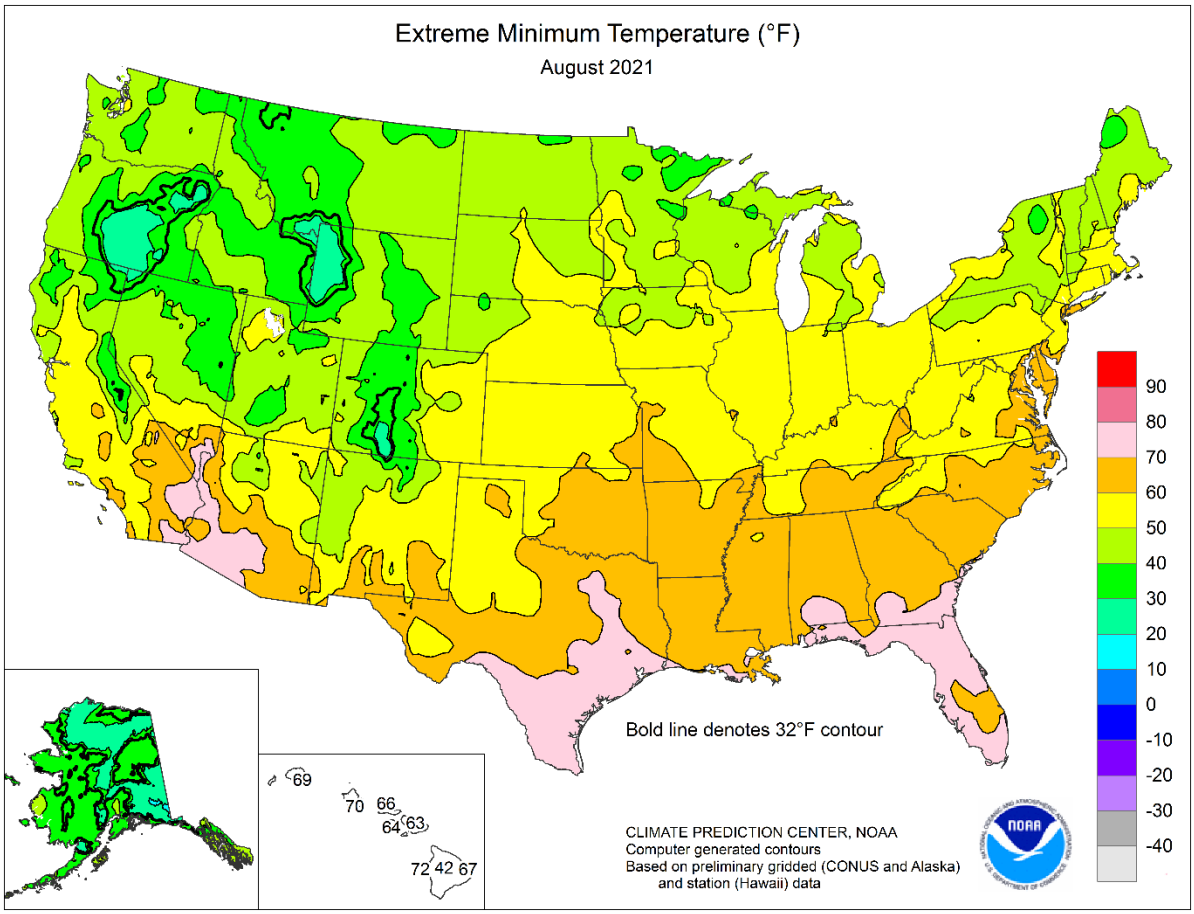


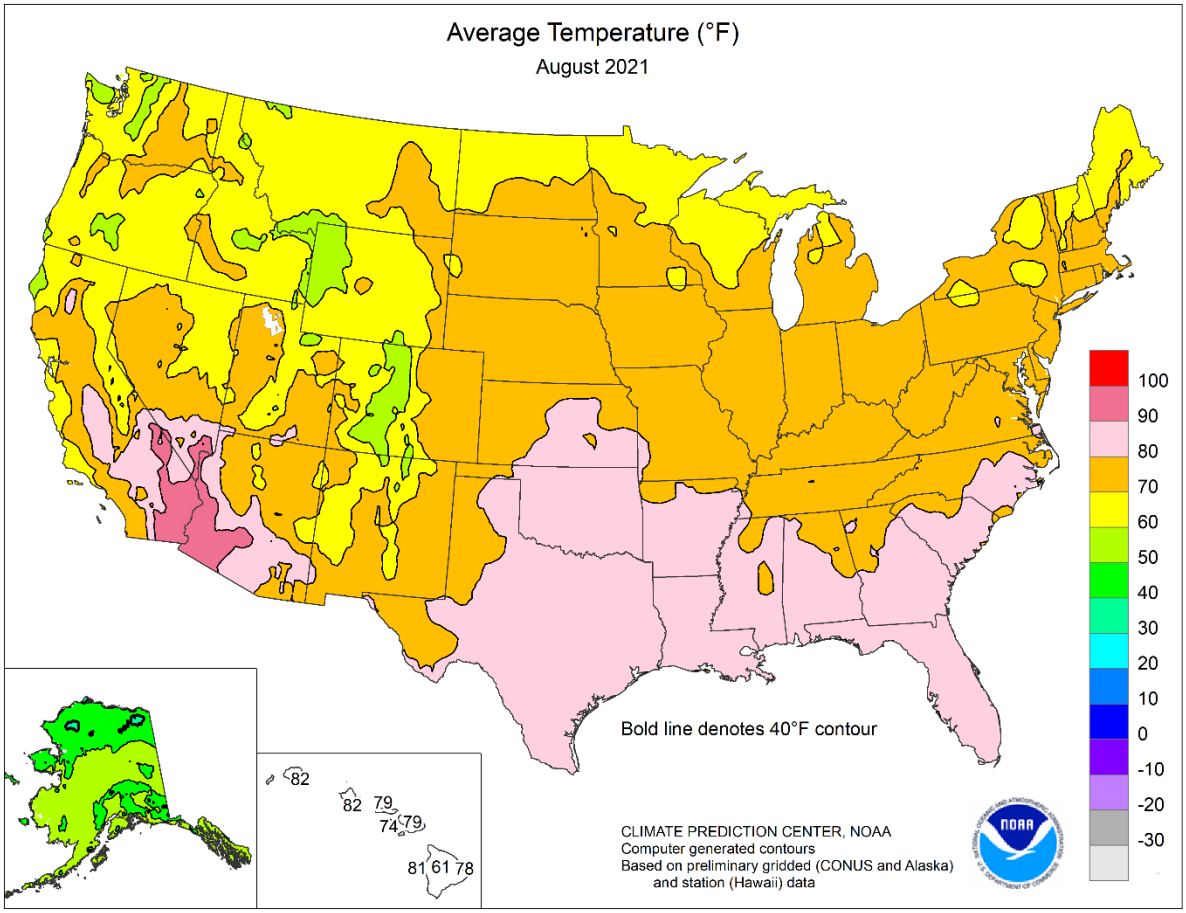
CPC gridded precipitation data supplemented with AHPS (water.weather.gov/precip/) for quality control purposes

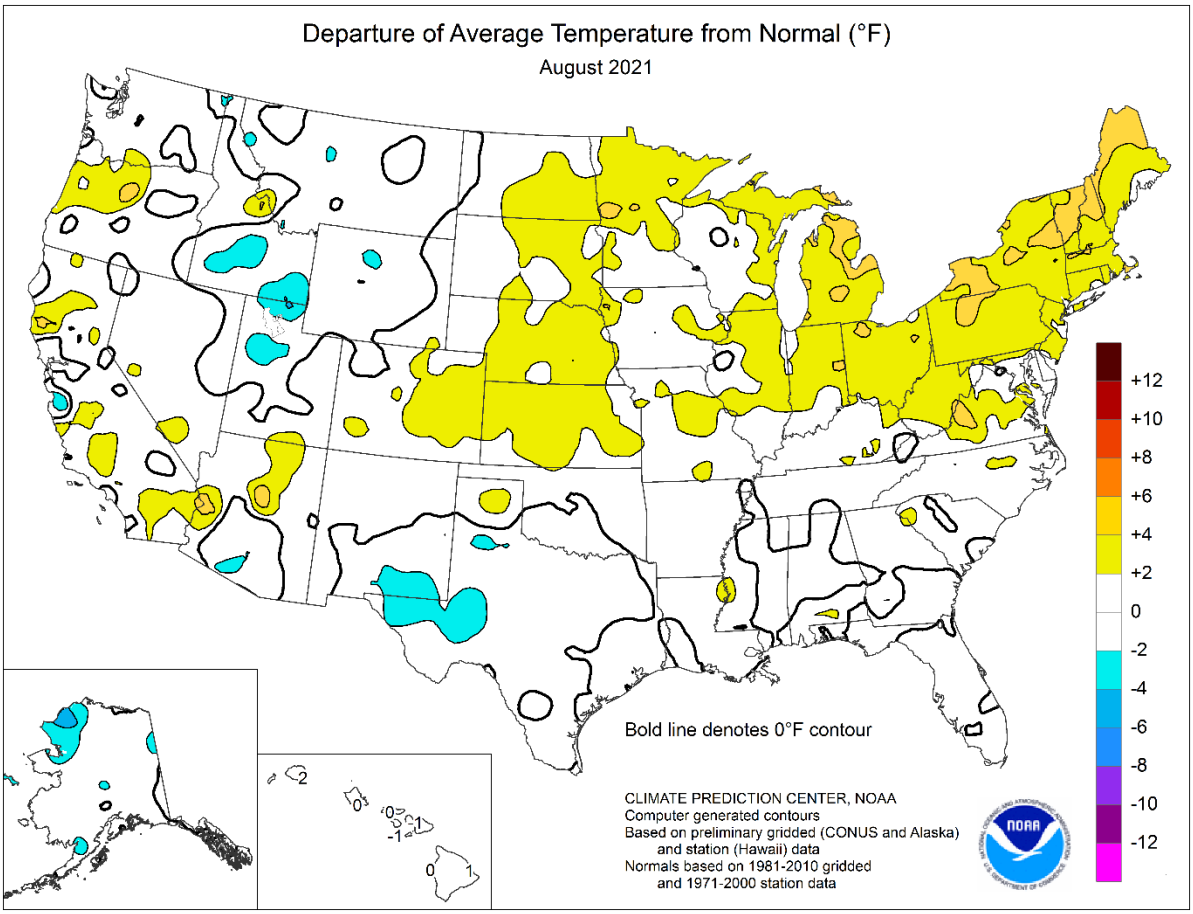


CPC gridded precipitation data supplemented with AHPS (water.weather.gov/precip/) for quality control purposes


Extreme Maximum Temperature (°F)
August 2021
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
88
90 87
84 89
90 82 87
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)
August 2021
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
69
70 66
64 63
72 42 67
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)
August 2021
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
82
82 79
74 79
81 61 78
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Departure of Average Temperature from Normal (°F)
August 2021
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes 0°F contour
2
0
0
-1
1
0
1
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
Normals based on 1981-2010 gridded
and 1971-2000 station data

National Weather Data for Selected Cities

August 2021

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AK ANCHORAGE	58	1	4.25	1.02
BARROW	39	0	0.79	-0.28
FAIRBANKS	57	1	3.62	1.74
JUNEAU	57	1	8.41	2.68
KODIAK	56	1	1.55	-3.04
NOME	49	-1	3.50	0.30
AL BIRMINGHAM	81	0	7.70	3.78
HUNTSVILLE	79	-1	6.36	2.78
MOBILE	81	0	13.09	6.12
MONTGOMERY	82	1	5.20	1.26
AR FORT SMITH	84	1	0.86	-1.72
LITTLE ROCK	82	0	1.31	-1.27
AZ FLAGSTAFF	65	1	3.50	0.41
PHOENIX	93	-1	1.52	0.49
PRESCOTT	74	0	3.58	0.97
TUCSON	86	0	3.78	1.39
CA BAKERSFIELD	86	4	0.00	-0.05
EUREKA	56	-2	0.01	-0.33
FRESNO	85	4	0.00	-0.01
LOS ANGELES	69	0	0.02	-0.04
REDDING	83	3	0.00	-0.21
SACRAMENTO	76	1	0.00	-0.06
SAN DIEGO	73	2	0.23	0.20
SAN FRANCISCO	65	1	0.00	-0.05
STOCKTON	76	0	0.00	-0.01
CO ALAMOSA	65	2	0.11	-1.14
CO SPRINGS	74	5	0.24	-3.08
DENVER INTL	75	3	0.29	-1.40
GRAND JUNCTION	76	1	1.54	0.55
PUEBLO	76	3	3.22	0.91
CT BRIDGEPORT	76	3	2.20	-1.77
HARTFORD	75	3	8.74	4.82
DC WASHINGTON	81	3	7.96	5.03
DE WILMINGTON	78	3	4.66	1.44
FL DAYTONA BEACH	83	2	8.31	1.93
JACKSONVILLE	82	0	5.88	-0.92
KEY WEST	85	0	4.11	-1.28
MIAMI	85	1	6.79	-2.11
ORLANDO	85	2	6.10	-1.03
PENSACOLA	84	2	11.00	4.24
TALLAHASSEE	82	1	5.55	-1.80
TAMPA	85	2	7.30	-0.49
WEST PALM BEACH	84	1	8.93	0.96
GA ATHENS	81	2	6.79	3.28
ATLANTA	80	1	6.93	3.04
AUGUSTA	82	2	5.76	1.44
COLUMBUS	81	-1	7.26	3.51
MACON	81	1	5.43	1.32
SAVANNAH	82	0	3.59	-2.96
HI HILO	78	1	7.30	-2.55
HONOLULU	81	0	0.29	-0.28
KAHULUI	79	0	0.62	0.10
LIHUE	82	2	1.33	-0.80
IA BURLINGTON	75	0	3.54	-0.75
CEDAR RAPIDS	73	2	2.36	-2.16
DES MOINES	76	2	2.08	-2.06
DUBUQUE	72	2	5.50	1.07
SIOUX CITY	74	2	3.95	0.74
WATERLOO	74	3	6.62	2.34
ID BOISE	74	0	0.28	0.00
LEWISTON	76	2	0.22	-0.48
POCATELLO	68	-1	1.46	0.85
IL CHICAGO/O_HARE	77	5	4.50	-0.41
MOLINE	76	2	3.95	-0.60
PEORIA	77	3	3.55	0.34
ROCKFORD	75	3	3.61	-1.00
SPRINGFIELD	76	2	5.24	2.03
IN EVANSVILLE	79	2	6.71	3.74
FORT WAYNE	74	3	2.35	-1.26
INDIANAPOLIS	77	3	2.02	-1.08
SOUTH BEND	75	4	5.44	1.72
KS CONCORDIA	80	3	3.35	0.22
DODGE CITY	80	2	1.22	-1.52
GOODLAND	77	3	0.57	-2.13
TOPEKA	79	2	4.02	-0.25
WICHITA	82	2	1.71	-1.97
KY LEXINGTON	75	0	7.44	4.21
LOUISVILLE	81	2	3.25	-0.07
PADUCAH	79	1	2.25	-0.49
LA BATON ROUGE	81	-2	8.26	0.76
LAKE CHARLES	84	1	7.25	2.38
NEW ORLEANS	85	2	8.02	2.03
SHREVEPORT	85	2	3.61	0.91
MA BOSTON	77	5	5.83	2.52
WORCESTER	72	4	5.42	1.72
MD BALTIMORE	80	4	4.36	1.10
ME CARIBOU	69	6	2.36	-1.37
PORTLAND	71	3	2.07	-1.04
MI ALPENA	71	6	2.46	-0.75
GRAND RAPIDS	74	3	2.19	-1.37
HOUGHTON LAKE	70	5	4.83	1.45
LANSING	75	6	5.09	1.88
MUSKEGON	74	4	4.49	1.12
TRAVERSE CITY	73	6	4.24	0.86
MN DULUTH	69	5	2.41	-1.26
INT_L FALLS	67	4	2.77	-0.03
MINNEAPOLIS	74	3	6.79	2.49
ROCHESTER	69	0	6.69	2.14
ST. CLOUD	70	2	3.64	-0.13
MO COLUMBIA	80	3	1.24	-3.14
KANSAS CITY	80	3	5.23	1.36
SAINT LOUIS	81	2	4.85	1.87
SPRINGFIELD	79	1	1.62	-1.91
MS JACKSON	82	1	2.83	-1.42
MERIDIAN	80	0	6.30	2.31
TUPELO	82	1	6.51	3.08
MT BILLINGS	71	-1	2.40	1.64
BUTTE	61	-1	1.20	-0.16
CUT BANK	63	0	1.68	0.50
GLASGOW	71	1	1.68	0.43
GREAT FALLS	66	0	2.19	0.61
HAVRE	68	0	1.04	-0.08
MISSOULA	67	0	1.50	0.30
NC ASHEVILLE	74	1	11.41	6.98
CHARLOTTE	80	3	2.99	-1.24
GREENSBORO	78	1	3.85	-0.03
HATTERAS	82	3	11.15	4.22
RALEIGH	81	2	3.24	-1.02
WILMINGTON	82	2	9.85	2.44
ND BISMARCK	73	3	1.06	-1.22
DICKINSON	69	1	1.57	0.00
FARGO	72	3	2.85	0.30
GRAND FORKS	70	2	5.07	2.20
JAMESTOWN	71	3	1.83	-0.26
NE GRAND ISLAND	76	2	4.49	1.37
LINCOLN	78	3	3.36	-0.10
NORFOLK	76	3	3.73	0.50
NORTH PLATTE	76	4	3.08	0.80
OMAHA	78	3	5.29	1.48
SCOTTSBLUFF	74	2	0.28	-1.02
VALENTINE	76	4	2.40	0.22
NH CONCORD	72	4	3.35	0.19
NJ ATLANTIC_CITY	77	3	6.26	2.14
NEWARK	80	4	7.17	3.49
NM ALBUQUERQUE	77	1	0.36	-1.22
NV ELY	67	0	0.13	-0.80
LAS VEGAS	93	2	0.00	-0.38
RENO	75	2	0.00	-0.27
WINNEMUCCA	72	2	0.00	-0.21
NY ALBANY	71	1	3.26	-0.18
BINGHAMTON	70	3	6.21	2.78
BUFFALO	76	6	3.62	0.39
ROCHESTER	74	4	2.52	-0.92
SYRACUSE	75	5	6.18	2.63
OH AKRON-CANTON	76	5	3.72	0.18
CINCINNATI	77	2	5.02	1.63
CLEVELAND	75	3	6.91	3.42
COLUMBUS	77	3	7.14	3.84
DAYTON	77	4	2.88	-0.09
MANSFIELD	76	6	3.78	-0.62
TOLEDO	77	5	2.11	-1.01
YOUNGSTOWN	73	4	9.41	6.18
OK OKLAHOMA CITY	81	-2	3.51	0.26
TULSA	84	2	0.79	-2.11
OR ASTORIA	61	0	0.50	-0.67
BURNS	68	3	0.01	-0.39
EUGENE	71	4	0.00	-0.64
MEDFORD	76	3	0.00	-0.44
PENDLETON	73	2	0.01	-0.41
PORTLAND	73	3	0.05	-0.64
SALEM	73	5	0.02	-0.46
PA ALLENTOWN	75	3	7.81	4.14
ERIE	75	5	3.33	-0.13
MIDDLETOWN	78	4	5.89	2.72
PHILADELPHIA	79	3	6.17	2.70
PITTSBURGH	74	3	6.18	2.72
WILKES-BARRE	75	5	6.07	2.69
WILLIAMSPORT	76	4	3.89	0.06
RI PROVIDENCE	75	3	4.83	1.26
SC CHARLESTON	81	0	10.84	3.69
COLUMBIA	81	0	9.54	4.28
FLORENCE	82	2	7.36	2.12
GREENVILLE	79	0	3.20	-1.29
SD ABERDEEN	73	4	3.91	1.51
HURON	74	2	2.10	-0.32
RAPID CITY	72	0	2.17	0.61
SIOUX FALLS	74	4	6.26	3.23
TN BRISTOL	77	3	5.00	1.56
CHATTANOOGA	80	1	11.47	8.01
KNOXVILLE	79	1	10.04	6.79
MEMPHIS	83	1	2.25	-0.62
NASHVILLE	81	2	6.93	3.79
TX ABILENE	83	1	0.57	-2.00
AMARILLO	79	3	0.84	-2.06
AUSTIN	86	0	3.28	0.94
BEAUMONT	84	1	5.65	0.26
BROWNSVILLE	88	2	0.49	-1.94
CORPUS CHRISTI	85	0	1.49	-1.42
DEL RIO	89	3	2.87	0.70
EL PASO	81	0	2.38	0.37
FORT WORTH	85	-1	4.52	2.61
GALVESTON	87	2	3.51	0.00
HOUSTON	86	1	0.82	-2.93
LUBBOCK	79	1	3.61	1.71
MIDLAND	80	-1	0.84	-1.00
SAN ANGELO	82	-1	5.19	2.93
SAN ANTONIO	85	0	1.28	-0.81
VICTORIA	85	1	2.43	-0.41
WACO	85	0	2.52	0.48
WICHITA FALLS	83	-1	4.78	2.30
UT SALT LAKE CITY	77	0	2.28	1.58
VA LYNCHBURG	79	5	2.48	-0.75
NORFOLK	79	1	6.19	0.66
RICHMOND	80	2	7.16	2.48
ROANOKE	79	4	5.39	1.86
WASH/DULLES	78	3	4.59	1.09
VT BURLINGTON	74	5	4.36	0.44
WA OLYMPIA	66	2	0.01	-0.94
QUILLAYUTE	60	1	0.78	-1.70
SEATTLE-TACOMA	67	1	0.11	-0.78
SPOKANE	71	2	0.14	-0.45
YAKIMA	72	3	0.03	-0.28
WI EAU CLAIRE	71	1	3.69	-0.78
GREEN BAY	71	4	8.07	4.72
LA CROSSE	74	3	10.34	6.03
MADISON	73	3	3.23	-1.05
MILWAUKEE	75	5	1.63	-2.34
WV BECKLEY	73	3	4.75	1.28
CHARLESTON	77	3	6.00	2.27
ELKINS	73	4	3.68	-0.14
HUNTINGTON	77	2	6.62	2.90
WY CASPER	68	-1	0.92	0.06
CHEYENNE	70	3	0.48	-1.47
LANDER	69	-1	0.72	0.09
SHERIDAN	69	0	0.90	0.17

Based on 1981-2010 normals

***** Not Available**

National Agricultural Summary

September 6 – 12, 2021

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the nation experienced drier-than-normal weather. In contrast, much of California and the Pacific Northwest recorded at least twice the normal amount of precipitation, along with many locations in the Great Lakes, New England, and Southeast. Parts of Florida, Georgia, Maine, and South Carolina recorded 3 inches of rain or more for the week. Meanwhile, the western half of the country was warmer than normal during the week. Most of California and Nevada, as well as large areas of the High Plains, Rockies, and Southwest, recorded temperatures 6°F or more above normal. Elsewhere, portions of the eastern half of the nation were cooler than normal. Parts of Kentucky, Mississippi, and Tennessee recorded weekly temperatures at least 4°F below normal.

Corn: By September 12, eighty-seven percent of this year's corn acreage was denting, 1 percentage point behind last year but 6 points ahead of the 5-year average. During the week, denting progress advanced 10 percentage points or more in 14 of the 18 estimating states. Thirty-seven percent of the nation's corn was mature by September 12, two percentage points behind last year but 6 points ahead of average. Four percent of the 2021 corn acreage was harvested by week's end, 1 percentage point behind both last year and the average harvest pace. Harvest was underway in 12 of the 18 estimating states. On September 12, fifty-eight percent of the corn acreage was rated in good to excellent condition, 1 percentage point below the previous week and 2 points below the same time last year. In Iowa, 59 percent of the corn was rated in good to excellent condition.

Soybean: Nationally, leaf drop was 38 percent complete by September 12, three percentage points ahead of last year and 9 points ahead of the 5-year average. During the week, leaf drop advanced 10 percentage points or more in 16 of the 18 estimating states. On September 12, fifty-seven percent of the nation's soybean acreage was rated in good to excellent condition, unchanged from the previous week but 6 percentage points below the same time last year.

Winter Wheat: Nationwide, producers had sown 12 percent of the intended 2022 winter wheat acreage by September 12, three percentage points ahead of last year and 4 points ahead of the 5-year average. Planting progress was most advanced in Washington at 53 percent, 11 percentage points ahead of last year and 21 points ahead of average.

Cotton: By September 12, ninety-six percent of the nation's cotton acreage had begun setting bolls, 3 percentage points behind both last year and the 5-year average. By September 12, thirty-six percent of the nation's cotton had open bolls, 10 percentage points behind last year and 7 points behind average. By September 12, five percent of the cotton acreage was harvested, 1 percentage point behind last year and 3 points behind average. On September 12, sixty-four percent of the cotton acreage was rated in good to excellent condition, 3 percentage points above the previous week and 19 points above the same time last year.

Sorghum: Eighty-three percent of the nation's sorghum acreage was at or beyond the coloring stage by September 12, equal to last year but 3 percentage points ahead of the 5-year average. By September 12, thirty-nine percent of the sorghum was mature, 1 percentage point ahead of both last year and the average. Eighty percent of Texas' sorghum acreage was mature by September 12, equal to last year but 1 percentage point ahead of average. Twenty-one percent of the 2021 sorghum acreage had been harvested by September 12, two percentage points behind last year and 4 points behind average. Fifty-seven percent of the nation's sorghum acreage was rated in good to excellent condition on September 12, unchanged from the previous week but 5 percentage points above the same time last year.

Rice: Nationally, 40 percent of the rice acreage was harvested by September 12, seven percentage points ahead of last year but 3 points behind the 5-year average. On September 12, seventy-four percent of the nation's rice was rated in good to excellent condition, 1 percentage point below the previous week but 2 points above the same time last year.

Small Grains: By September 12, barley producers had harvested 97 percent of the nation's crop, 3 percentage points ahead of last year and 4 points ahead of the 5-year average. Harvesting of barley was complete or nearing completion in all five estimating states.

Other Crops: Two percent of the nation's peanut acreage was harvested as of September 12, two percentage points behind last year and 1 point behind the 5-year average. On September 12, seventy-seven percent of the peanut acreage was rated in good to excellent condition, 3 percentage points above the previous week and 6 points above the same time last year.

Crop Progress and Condition

Week Ending September 12, 2021

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

Corn Percent Dented

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	83	42	77	71
IL	91	83	93	85
IN	80	72	88	78
IA	89	77	87	83
KS	90	76	89	88
KY	91	72	83	90
MI	76	61	70	63
MN	94	71	86	80
MO	95	84	95	92
NE	93	78	90	87
NC	96	97	98	97
ND	66	63	77	65
OH	74	73	84	68
PA	66	41	52	69
SD	86	68	86	74
TN	95	91	95	96
TX	96	89	93	92
WI	75	65	82	65
18 Sts	88	74	87	81

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

Corn Percent Mature

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	25	10	19	14
IL	35	30	51	37
IN	32	15	34	32
IA	43	14	32	28
KS	46	26	45	47
KY	68	43	60	71
MI	18	5	24	13
MN	42	18	34	20
MO	41	31	50	50
NE	45	18	35	29
NC	89	86	92	91
ND	16	12	22	17
OH	13	10	28	20
PA	16	1	3	22
SD	44	18	33	22
TN	59	38	60	76
TX	78	66	75	71
WI	24	7	15	18
18 Sts	39	21	37	31

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

Corn Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	1	NA	1	0
IL	2	NA	1	3
IN	1	NA	2	2
IA	1	NA	0	1
KS	7	4	11	10
KY	12	5	15	23
MI	0	NA	0	0
MN	0	0	3	0
MO	5	1	7	12
NE	4	NA	1	2
NC	45	34	49	58
ND	0	NA	0	0
OH	0	NA	0	0
PA	0	NA	0	2
SD	1	NA	1	0
TN	11	7	15	29
TX	66	53	63	61
WI	0	NA	0	0
18 Sts	5	NA	4	5

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	6	14	27	41	12
IL	3	6	29	41	21
IN	2	6	23	57	12
IA	2	8	31	50	9
KS	9	13	25	44	9
KY	1	3	15	63	18
MI	1	4	22	48	25
MN	8	17	36	32	7
MO	2	7	27	54	10
NE	4	9	21	43	23
NC	1	2	16	62	19
ND	15	27	41	17	0
OH	1	5	24	54	16
PA	0	1	14	67	18
SD	14	30	31	24	1
TN	1	3	17	59	20
TX	1	9	29	44	17
WI	3	6	17	43	31
18 Sts	5	10	27	44	14
Prev Wk	4	10	27	45	14
Prev Yr	5	10	25	46	14

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AR	33	21	35	38
IL	15	9	33	19
IN	36	18	39	30
IA	38	10	30	22
KS	30	12	20	20
KY	23	10	27	21
LA	78	43	61	73
MI	34	22	51	24
MN	37	25	49	26
MS	50	36	53	53
MO	5	4	10	9
NE	58	20	47	37
NC	17	11	23	21
ND	54	44	67	53
OH	31	10	30	25
SD	58	37	58	40
TN	23	16	26	31
WI	23	6	22	17
18 Sts	35	18	38	29

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	2	5	28	45	20
IL	4	7	28	41	20
IN	3	6	24	57	10
IA	2	6	30	52	10
KS	6	8	27	52	7
KY	1	4	16	62	17
LA	0	2	13	73	12
MI	1	6	26	47	20
MN	8	17	38	31	6
MS	2	2	18	66	12
MO	2	6	31	53	8
NE	2	7	22	50	19
NC	2	8	24	58	8
ND	15	27	42	15	1
OH	1	5	24	56	14
SD	10	31	39	19	1
TN	1	5	19	57	18
WI	3	6	18	50	23
18 Sts	4	10	29	45	12
Prev Wk	4	10	29	46	11
Prev Yr	3	8	26	50	13

Crop Progress and Condition

Week Ending September 12, 2021

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

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AL	100	99	100	100
AZ	100	100	100	100
AR	100	100	100	100
CA	100	100	100	92
GA	100	97	99	100
KS	95	93	96	89
LA	100	100	100	100
MS	98	94	96	100
MO	94	98	99	98
NC	96	96	97	98
OK	99	90	95	99
SC	96	99	100	99
TN	100	100	100	100
TX	99	92	95	100
VA	99	93	95	99
15 Sts	99	94	96	99

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AL	52	21	27	56
AZ	95	88	93	83
AR	82	35	47	75
CA	19	30	50	21
GA	50	34	43	57
KS	25	27	38	22
LA	82	58	71	85
MS	52	55	59	59
MO	29	18	28	45
NC	37	22	37	45
OK	34	15	23	35
SC	18	17	36	42
TN	27	7	11	46
TX	44	28	33	35
VA	33	16	34	36
15 Sts	46	29	36	43

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

Cotton Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AL	0	NA	0	0
AZ	6	3	8	8
AR	0	NA	0	1
CA	0	NA	0	0
GA	0	NA	0	1
KS	0	NA	0	0
LA	2	0	1	5
MS	1	0	1	1
MO	0	NA	0	0
NC	0	NA	0	0
OK	0	NA	0	0
SC	0	NA	0	0
TN	0	NA	0	0
TX	13	NA	11	14
VA	0	NA	1	0
15 Sts	6	NA	5	8

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	3	14	74	9
AZ	0	4	9	52	35
AR	0	1	10	39	50
CA	0	5	15	80	0
GA	2	6	23	55	14
KS	2	7	44	44	3
LA	0	2	30	64	4
MS	4	4	22	60	10
MO	0	6	19	75	0
NC	2	8	27	56	7
OK	1	1	26	71	1
SC	0	0	17	64	19
TN	6	11	19	52	12
TX	1	5	36	43	15
VA	0	2	12	84	2
15 Sts	1	5	30	50	14
Prev Wk	1	6	32	50	11
Prev Yr	7	20	28	36	9

Sorghum Percent Coloring

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	72	76	85	70
KS	80	64	79	76
NE	83	81	94	85
OK	71	59	68	71
SD	92	81	92	74
TX	91	88	91	89
6 Sts	83	73	83	80

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

Sorghum Percent Mature

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	32	21	27	13
KS	16	11	20	14
NE	24	6	27	18
OK	25	14	26	33
SD	29	23	31	17
TX	80	77	80	79
6 Sts	38	32	39	38

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
CO	3	0	0	1
KS	1	0	1	1
NE	1	0	2	0
OK	2	0	0	9
SD	0	0	2	0
TX	76	66	69	69
6 Sts	23	19	21	25

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

Sorghum Condition by Percent

	VP	P	F	G	EX
CO	3	7	21	58	11
KS	5	10	29	48	8
NE	8	15	29	36	12
OK	4	9	30	50	7
SD	10	35	41	14	0
TX	1	8	28	48	15
6 Sts	4	10	29	47	10
Prev Wk	3	10	30	47	10
Prev Yr	6	11	31	40	12

Crop Progress and Condition

Week Ending September 12, 2021

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AL	3	NA	1	2
FL	19	10	13	14
GA	2	NA	1	3
NC	0	NA	0	0
OK	0	NA	0	0
SC	3	NA	1	2
TX	0	NA	0	0
VA	0	NA	1	1
8 Sts	4	NA	2	3

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	0	11	72	17
FL	2	2	22	74	0
GA	1	3	17	61	18
NC	1	5	18	69	7
OK	0	0	33	67	0
SC	0	0	4	79	17
TX	0	1	48	50	1
VA	0	0	12	83	5
8 Sts	1	2	20	65	12
Prev Wk	0	2	24	64	10
Prev Yr	2	6	21	57	14

Barley Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
ID	95	92	95	95
MN	97	100	100	99
MT	93	89	96	90
ND	95	96	100	94
WA	90	96	100	88
5 Sts	94	92	97	93

These 5 States harvested 81% of last year's barley acreage.

Rice Percent Harvested

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AR	22	18	33	39
CA	5	3	8	4
LA	89	80	89	88
MS	26	18	50	46
MO	1	6	17	17
TX	96	84	89	93
6 Sts	33	28	40	43

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	2	5	27	45	21
CA	0	0	10	80	10
LA	0	0	15	79	6
MS	1	3	18	71	7
MO	0	3	31	56	10
TX	1	1	24	58	16
6 Sts	1	3	22	59	15
Prev Wk	1	3	21	60	15
Prev Yr	1	4	23	56	16

Winter Wheat Percent Planted

	Prev Year	Prev Week	Sep 12 2021	5-Yr Avg
AR	0	0	0	0
CA	0	0	0	1
CO	28	22	29	18
ID	8	9	16	10
IL	0	0	0	0
IN	1	0	4	1
KS	2	0	4	4
MI	3	0	4	2
MO	0	0	0	0
MT	12	3	14	7
NE	8	1	17	13
NC	0	0	0	0
OH	1	0	1	0
OK	5	0	8	5
OR	8	3	4	7
SD	18	3	13	12
TX	7	1	9	6
WA	42	36	53	32
18 Sts	9	5	12	8

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

Crop Progress and Condition

Week Ending September 12, 2021

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

Pasture and Range Condition by Percent
Week Ending Sep 12, 2021

	VP	P	F	G	EX			VP	P	F	G	EX
AL	1	1	8	83	7		NH	0	0	10	70	20
AZ	1	3	48	38	10		NJ	0	2	9	89	0
AR	7	23	37	28	5		NM	12	21	50	14	3
CA	40	25	20	15	0		NY	1	13	17	45	24
CO	11	22	31	27	9		NC	3	19	34	41	3
CT	0	0	25	50	25		ND	47	30	19	4	0
DE	0	10	66	19	5		OH	0	9	36	49	6
FL	1	3	13	55	28		OK	4	12	41	40	3
GA	2	7	25	57	9		OR	71	16	10	3	0
ID	26	33	28	12	1		PA	0	6	24	64	6
IL	8	10	35	38	9		RI	0	0	0	50	50
IN	5	15	38	38	4		SC	0	3	26	59	12
IA	6	18	41	33	2		SD	39	41	15	5	0
KS	8	15	35	40	2		TN	3	9	27	51	10
KY	2	5	26	55	12		TX	8	20	38	28	6
LA	0	4	36	57	3		UT	19	40	33	8	0
ME	0	5	25	55	15		VT	0	5	15	60	20
MD	0	2	53	32	13		VA	3	17	55	21	4
MA	0	0	0	50	50		WA	81	15	4	0	0
MI	8	19	29	36	8		WV	2	9	39	49	1
MN	32	31	28	6	3		WI	7	12	21	40	20
MS	1	6	33	52	8		WY	31	39	26	4	0
MO	1	8	28	58	5		48 Sts	20	22	33	21	4
MT	54	34	12	0	0							
NE	12	18	51	17	2		Prev Wk	20	21	30	24	5
NV	45	25	30	0	0		Prev Yr	17	25	34	22	2

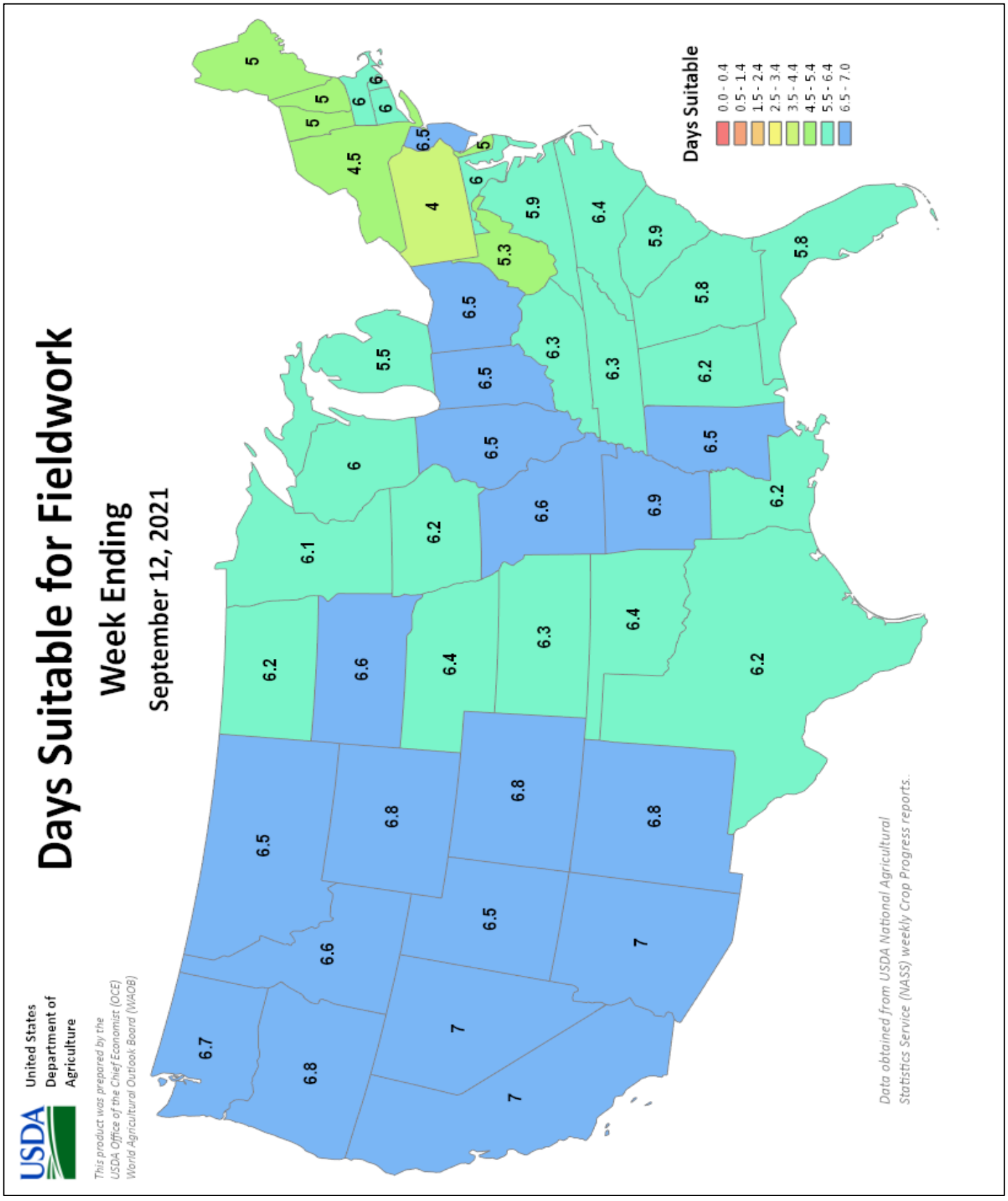
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending September 12, 2021

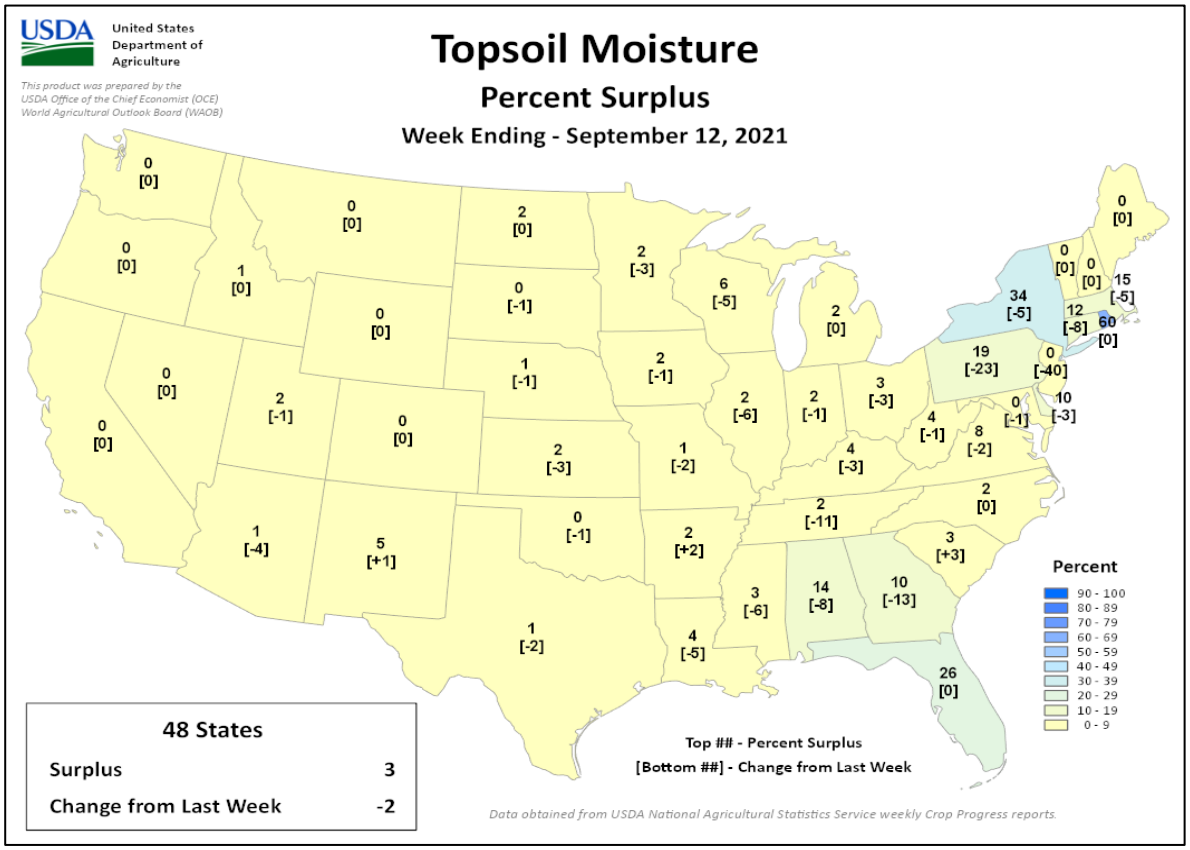
Weekly U.S. Progress and Condition Data provided by USDA/NASS

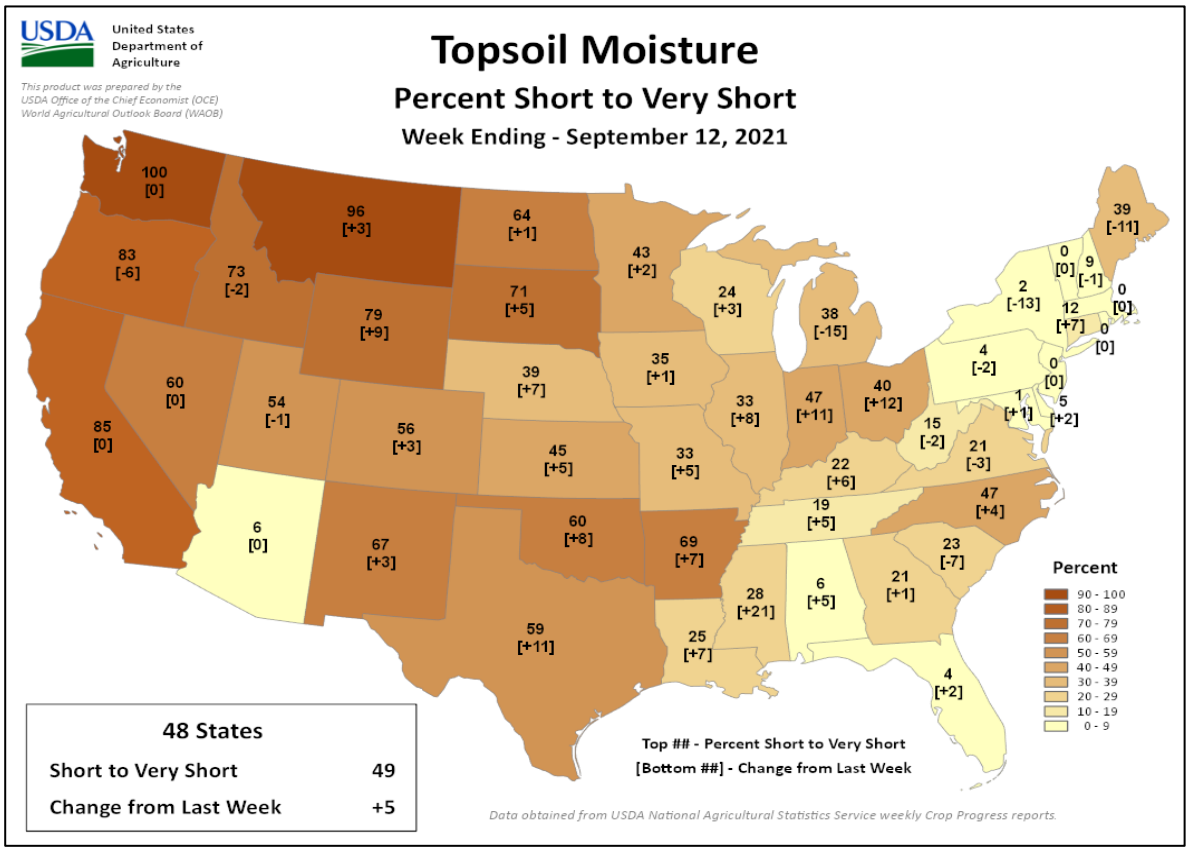


Crop Progress and Condition

Week Ending September 12, 2021

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

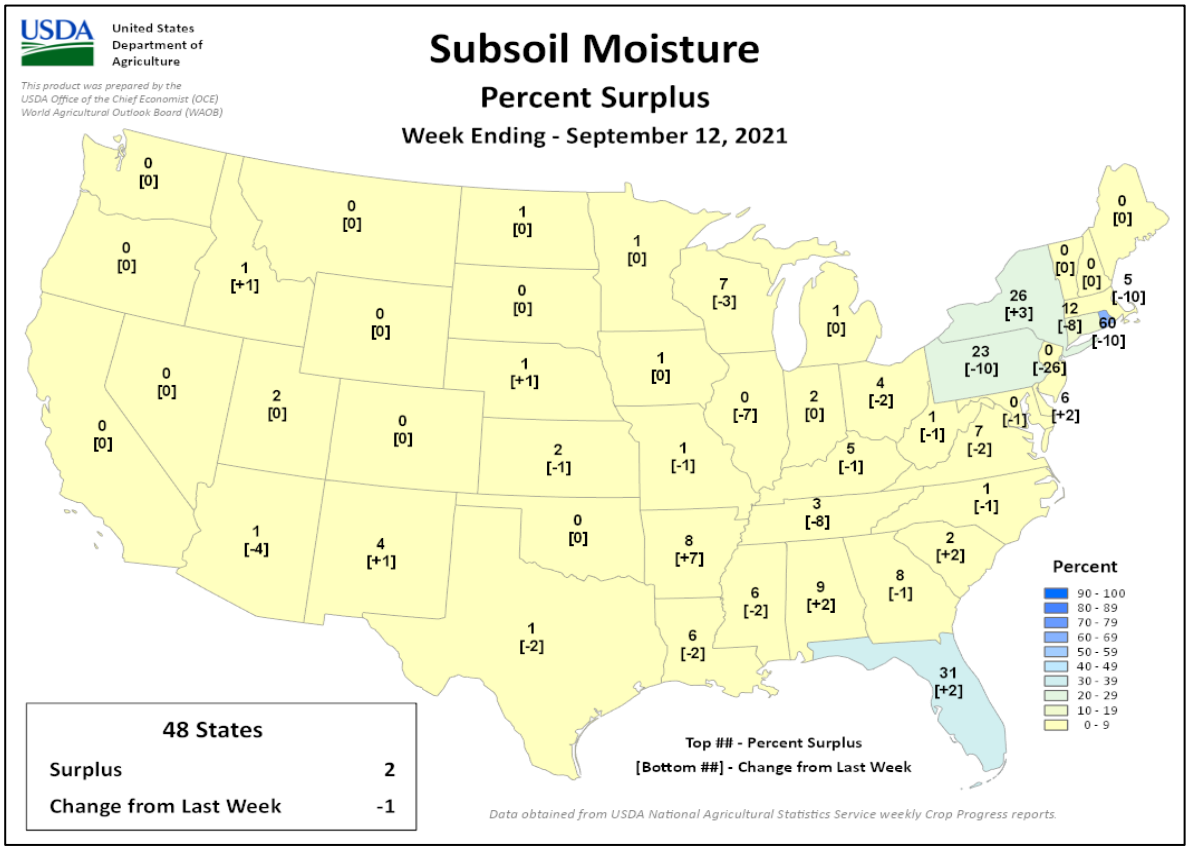


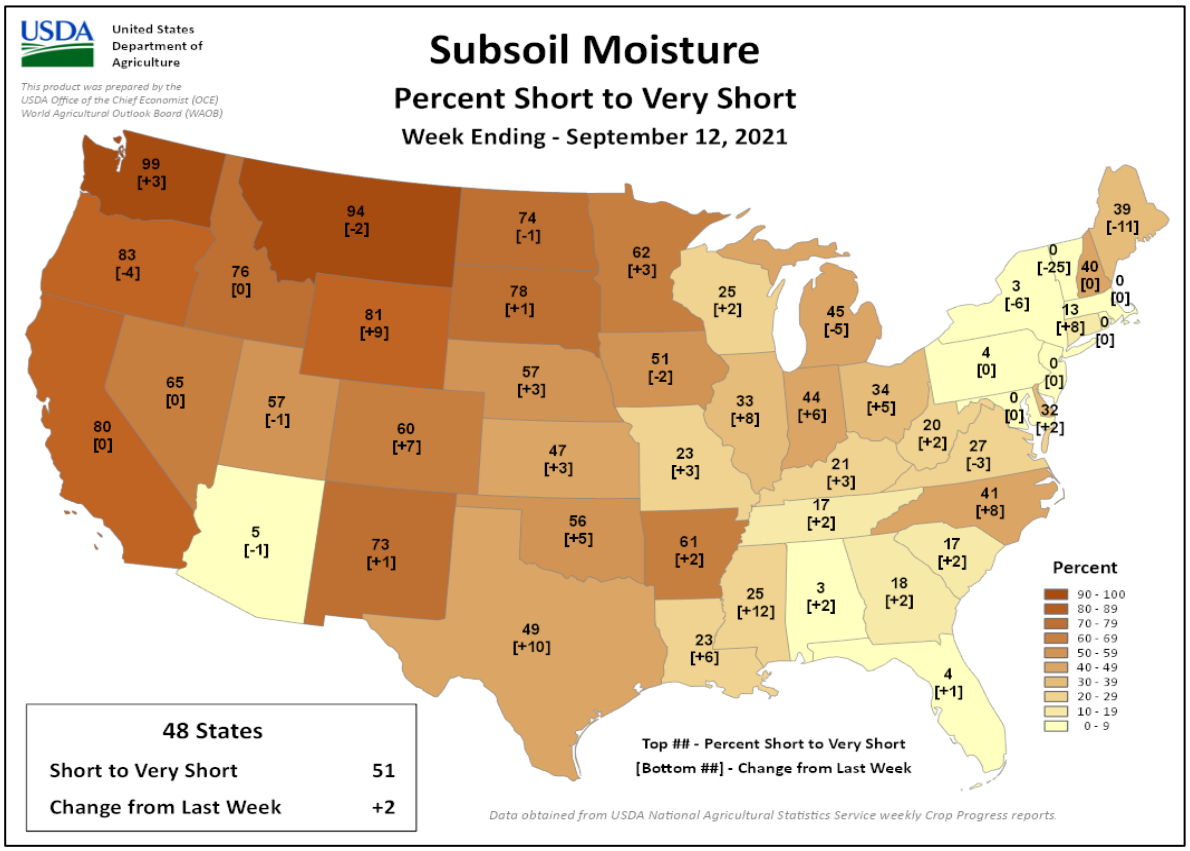


Crop Progress and Condition

Week Ending September 12, 2021

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





September 9 ENSO Diagnostic Discussion

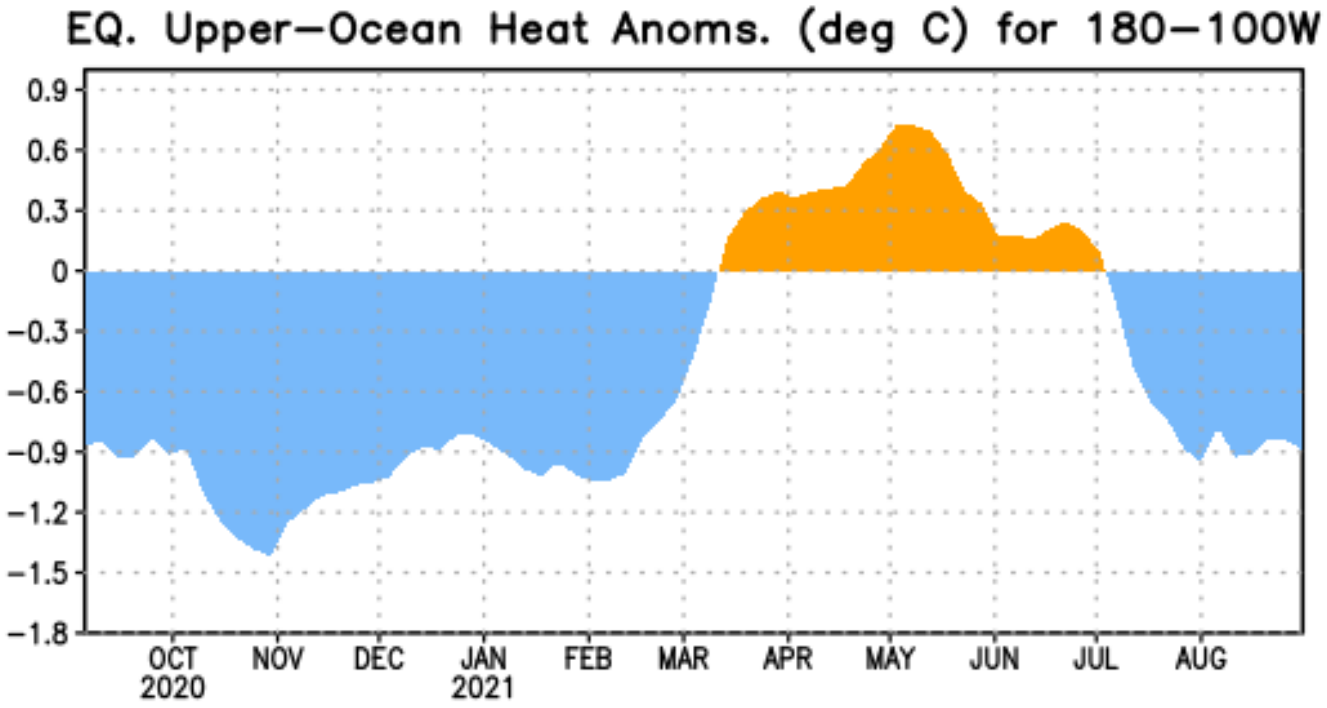


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: La Niña Watch

Synopsis: A transition from ENSO-neutral to La Niña is favored in the next couple of months, with a 70-80% chance of La Niña during the Northern Hemisphere winter 2021-22.

In the last month, ENSO-neutral continued with near-to-below average sea surface temperatures (SSTs) persisting in the central and eastern equatorial Pacific. In the last week, all of the Niño index values ranged from -0.2ºC to -0.3ºC. Negative subsurface temperature anomalies (averaged from 180-100ºW) remained steady in August (Fig. 1), reflecting below-average temperatures that extended from the surface to ~250m depth in the eastern Pacific Ocean. Low-level wind anomalies were easterly over the western Pacific Ocean, while upper-level wind anomalies were westerly over the western and east-central Pacific. Tropical convection was suppressed near and west of the Date Line and enhanced over Indonesia. Given these conditions, the ocean-atmosphere system reflected ENSO-neutral, but is edging toward La Niña.

The IRI/CPC plume average of forecasts for the Niño-3.4 SST region from the last month favored borderline or weak La Niña during the fall and winter 2021-22. The forecaster consensus this month, however, favors the latest predictions from the NCEP CFSv2 and the North American Multi-Model Ensemble, which suggest higher chances for the emergence of La Niña. At this time, forecasters anticipate La Niña to be of weak strength (seasonal average Niño-3.4 index values between -0.5ºC to -0.9ºC). In summary, a transition from ENSO-neutral to La Niña is favored in the next couple of months, with a 70-80% chance of La Niña during the Northern Hemisphere winter 2021-22 (click CPC/IRI consensus forecast for the chances in each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Additional perspectives and analysis are also available in an ENSO blog. A probabilistic strength forecast is available here. The next ENSO Diagnostics Discussion is scheduled for **14 October 2021**. 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 5-11, 2021

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

HIGHLIGHTS

EUROPE: The return of dry weather to much of central and eastern Europe allowed winter crop planting and summer crop harvesting to resume, while beneficial showers arrived in France.

WESTERN FSU: A respite from recent heavy rain promoted summer crop drydown and harvesting as well as winter crop sowing.

MIDDLE EAST: Seasonably dry weather favored summer crop harvesting over much of southern and eastern Turkey, with most of the region still a month or so away from the onset of the cool-season rains.

SOUTH ASIA: More wet weather supported kharif crops in India, particularly in previously drier western cotton and oilseed areas.

EASTERN ASIA: Showers in northeastern China provided a late-season boost of moisture to immature corn and soybeans, while drier weather elsewhere benefited summer crop maturation and harvesting.

SOUTHEAST ASIA: A tropical cyclone (Conson) brought widespread heavy rainfall to the Philippines and Indochina, including Thailand.

AUSTRALIA: Passing showers in the west and east benefited reproductive winter grains and oilseeds.

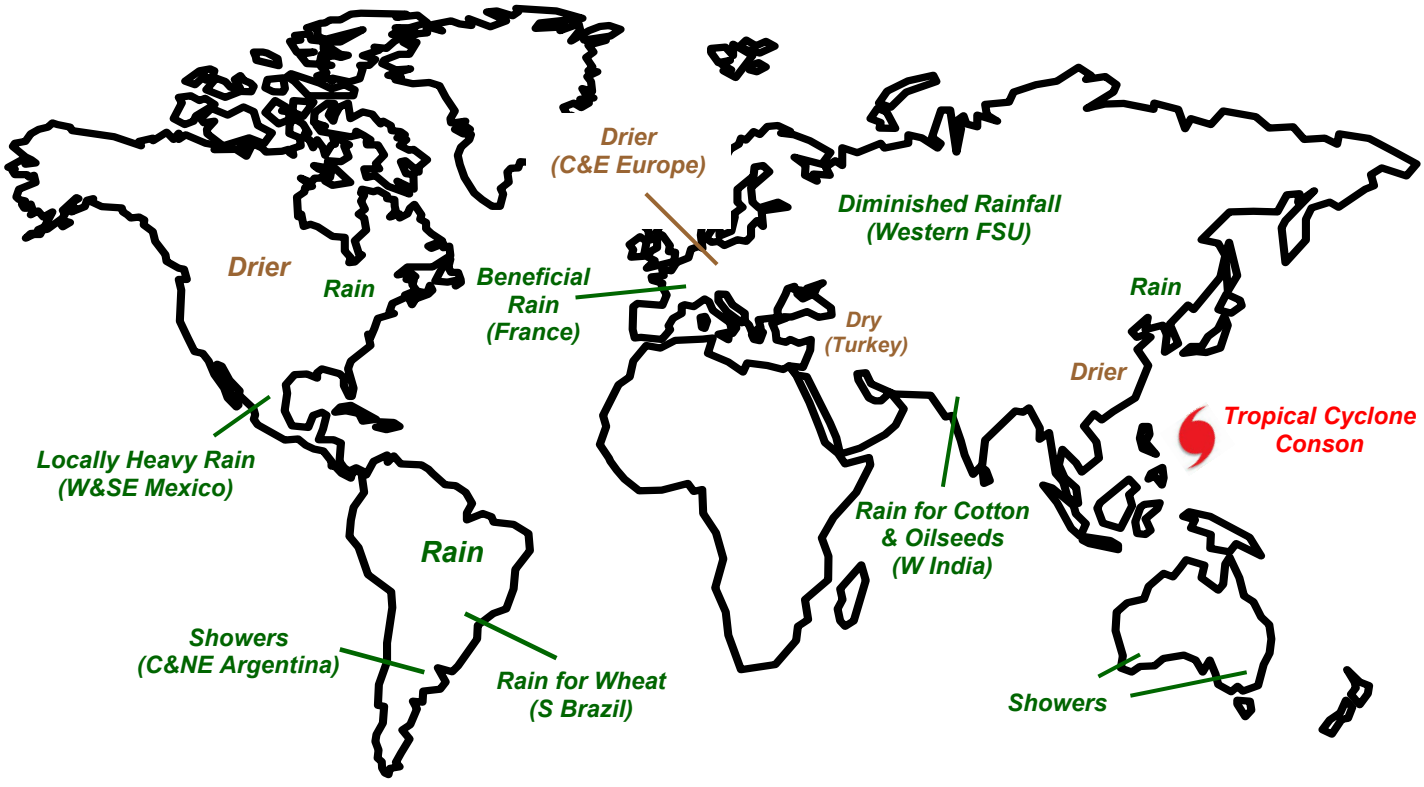
ARGENTINA: Rain benefited winter grains in central and northeastern Argentina.

BRAZIL: Showers provided timely moisture for southern wheat.

MEXICO: Heavy rain overspread the southeast, benefiting summer crops while increasing reservoir levels.

CANADIAN PRAIRIES: Mostly dry weather supported spring crop harvests.

SOUTHEASTERN CANADA: Moderate to heavy rain provided much-needed moisture for germination and establishment of winter wheat.



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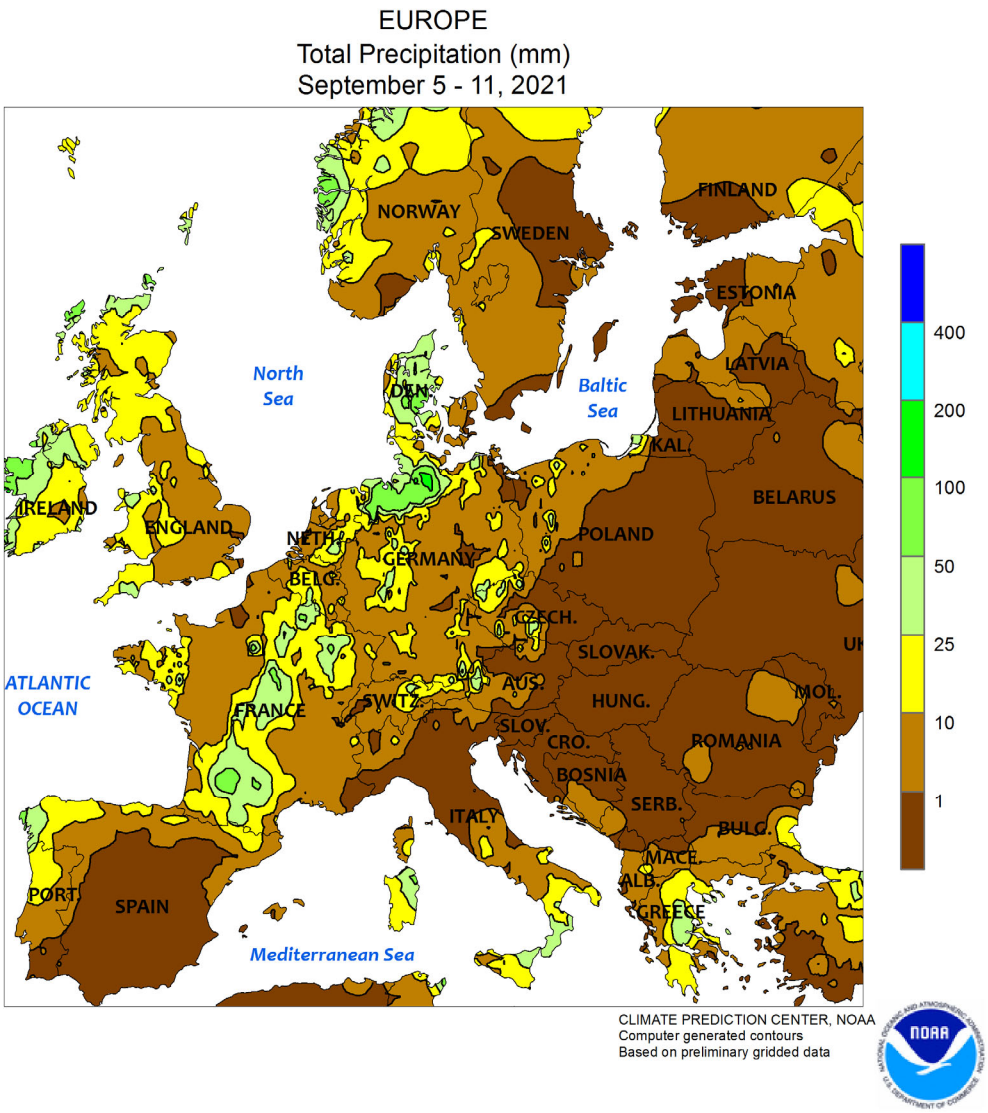

EUROPE

Drier weather across central and eastern Europe contrasted with beneficial showers in France. After recent heavy rain, sunny skies and warm temperatures (2-4°C above normal) from Germany eastward enabled a resumption of fieldwork, including summer crop harvesting and winter crop sowing. However, cooler weather was noted in southeastern Europe, where temperatures averaged up to 4°C below normal. Conversely, widespread albeit highly variable showers (5-130 mm) overspread France, improving soil moisture for winter wheat, barley, and rapeseed establishment but slowing summer crop drydown and harvesting. Rainfall was lighter in northern-most France and southeastern England (10 mm or less), where short-term dryness has reduced topsoil moisture for winter crop planting; however, longer-term moisture supplies remained overall favorable. Farther south, light to moderate showers (1-45 mm) arrived on northern and western portions of the Iberian Peninsula, with weather radar imagery indicating rain overspreading the remainder of Spain and Portugal after the end of the monitoring period.

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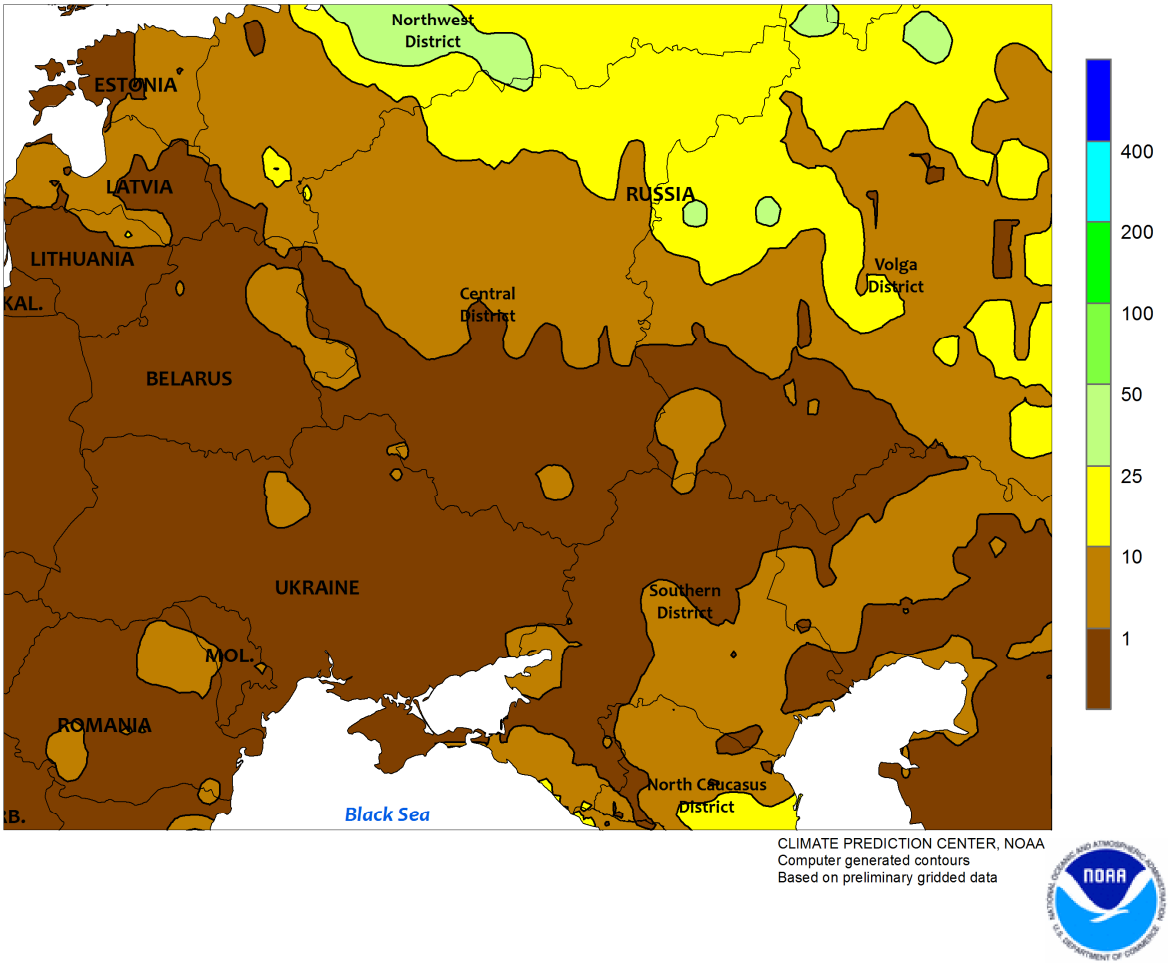
WESTERN FSU
Total Precipitation (mm)
September 5 - 11, 2021



WESTERN FSU

Drier weather promoted seasonal fieldwork following recent heavy rain. On the heels of last week's moderate to heavy showers, sunny skies and cool temperatures (2-5°C below normal) favored summer crop maturation and harvesting as well as winter wheat, barley, and rapeseed sowing across the region's primary growing areas. Soil moisture remained overall favorable for winter crop establishment, though a few pockets of pesky short-term dryness (60-day rainfall less than 50 percent of normal) were noted in southern Ukraine (Kherson) as well as Ukraine's northeastern oblasts adjacent the Belarus border.

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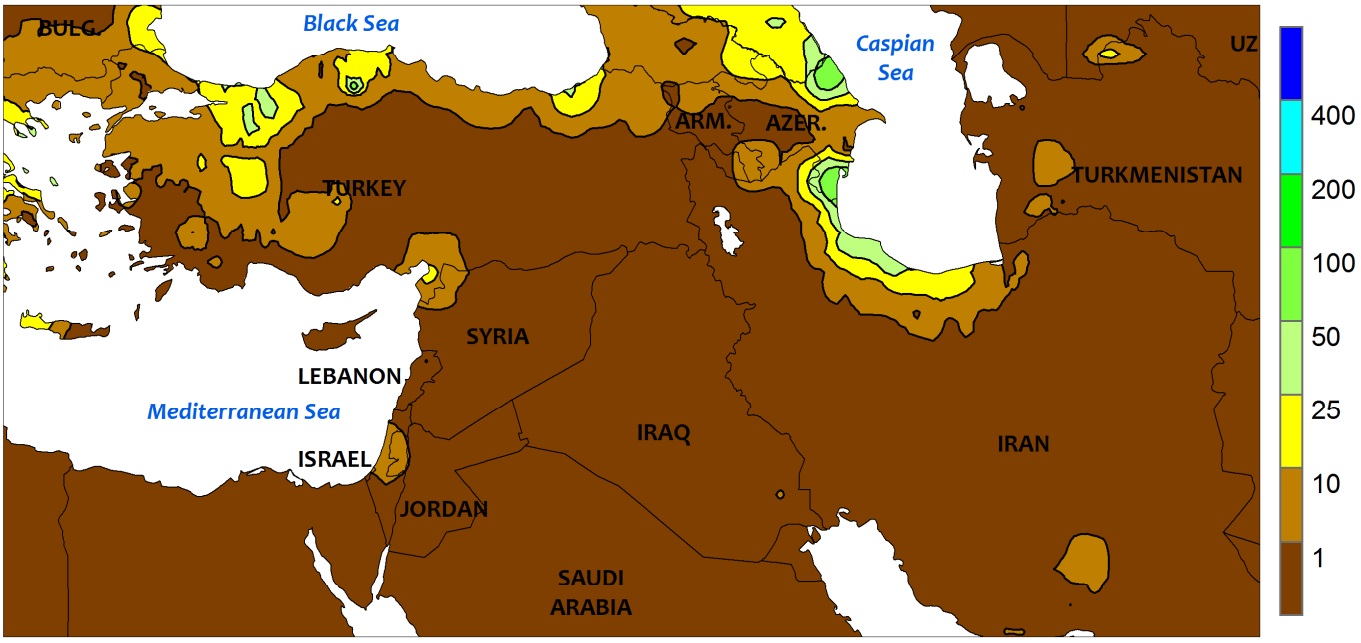
MIDDLE EAST
Total Precipitation (mm)
September 5 - 11, 2021



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

MIDDLE EAST

Despite a few showers in northern and western Turkey, seasonably dry weather prevailed across most of the region. Light to moderate showers (2-35 mm, locally more) were reported along Turkey's Black Sea Coast as well as the western Anatolian Plateau, hampering summer crop harvesting locally but providing early-season moisture for winter grain sowing. However, most of Turkey's primary summer crop areas in the west, south, and southeast were dry, facilitating cotton, corn, and sunflower harvesting. The region remained in the seasonal lull between the summer crop growing season and the sowing of winter grains, the latter of which gains momentum during October with the onset of cool-season rains.

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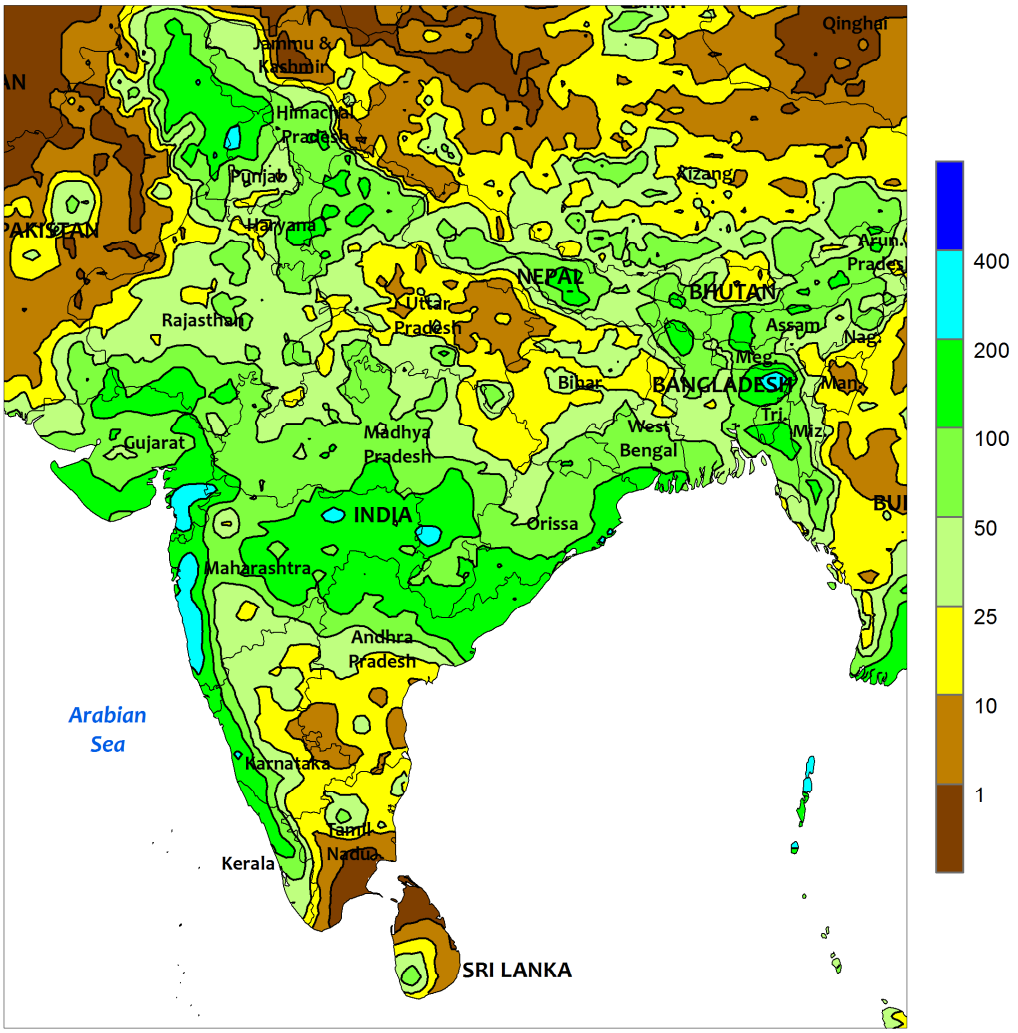
SOUTH ASIA
Total Precipitation (mm)
September 5 - 11, 2021



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

SOUTH ASIA

Showers remained widespread across India with only isolated pockets of dry weather. Most areas recorded rainfall totals of 25 to 100 mm, benefiting kharif crops. In particular, the wet weather aided cotton and oilseeds in western India following season-long subpar rainfall. Additionally, some eastern rice areas also benefited from the increase in moisture after prolonged dryness. While aiding crops throughout most of India, the rainfall was less welcome in the north and into Pakistan where irrigated rice and cotton were maturing and in need of drier weather. The southwest monsoon typically begins to withdraw in September with a complete cessation of the wet season by mid-October.

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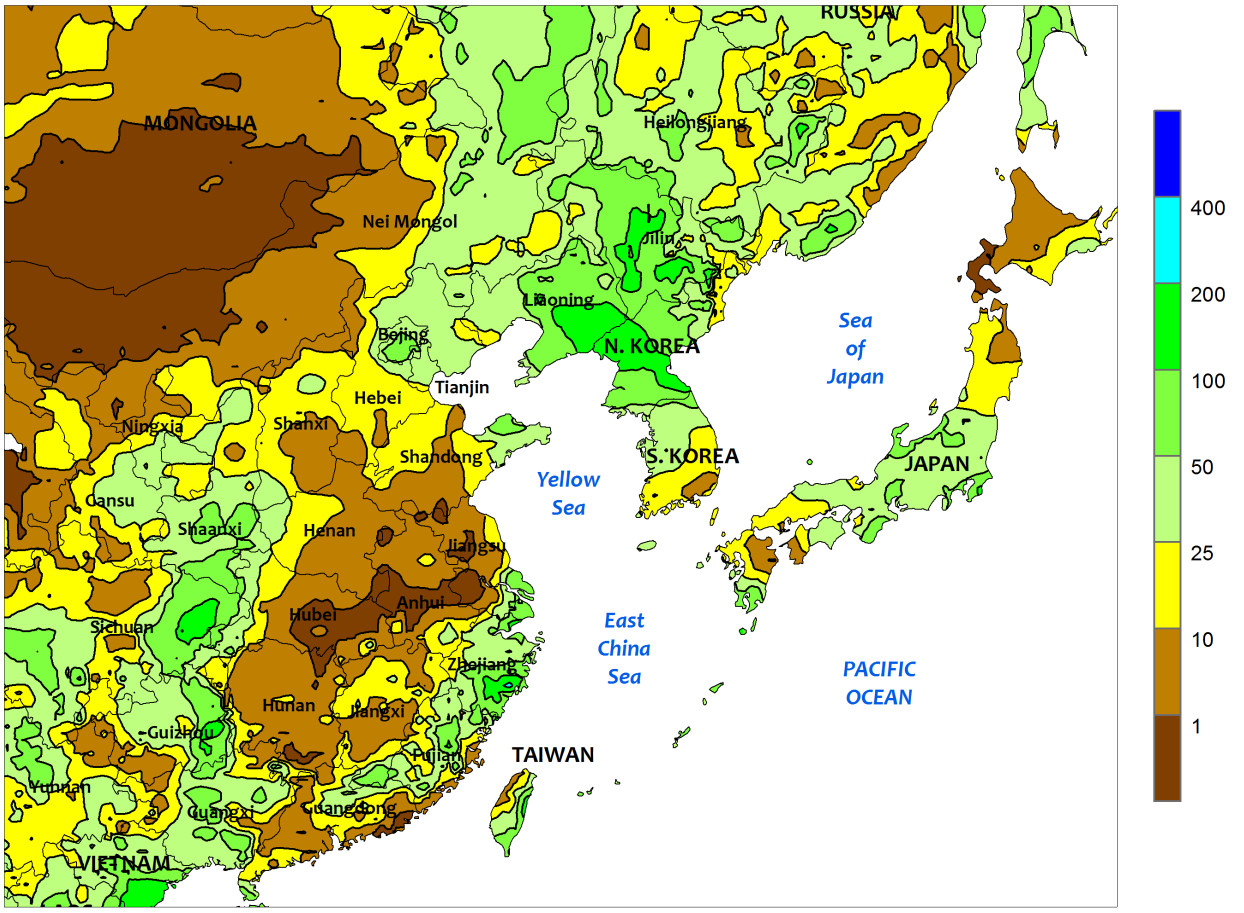
EASTERN ASIA
Total Precipitation (mm)
September 5 - 11, 2021



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

EASTERN ASIA

Showers (10-50 mm or more) continued across northeastern China, providing late-season moisture to immature corn and soybeans. However, drier weather will soon be needed to aid maturation of the crops. In other parts of China, warm, mostly dry weather promoted summer crop maturation and early harvest activities, including late-crop rice in the south and cotton in the far west. Elsewhere in the region, wet weather (25-100 mm) prevailed across the Korean Peninsula and central Japan but likely came too late in the season to significantly benefit rice and other summer crops.

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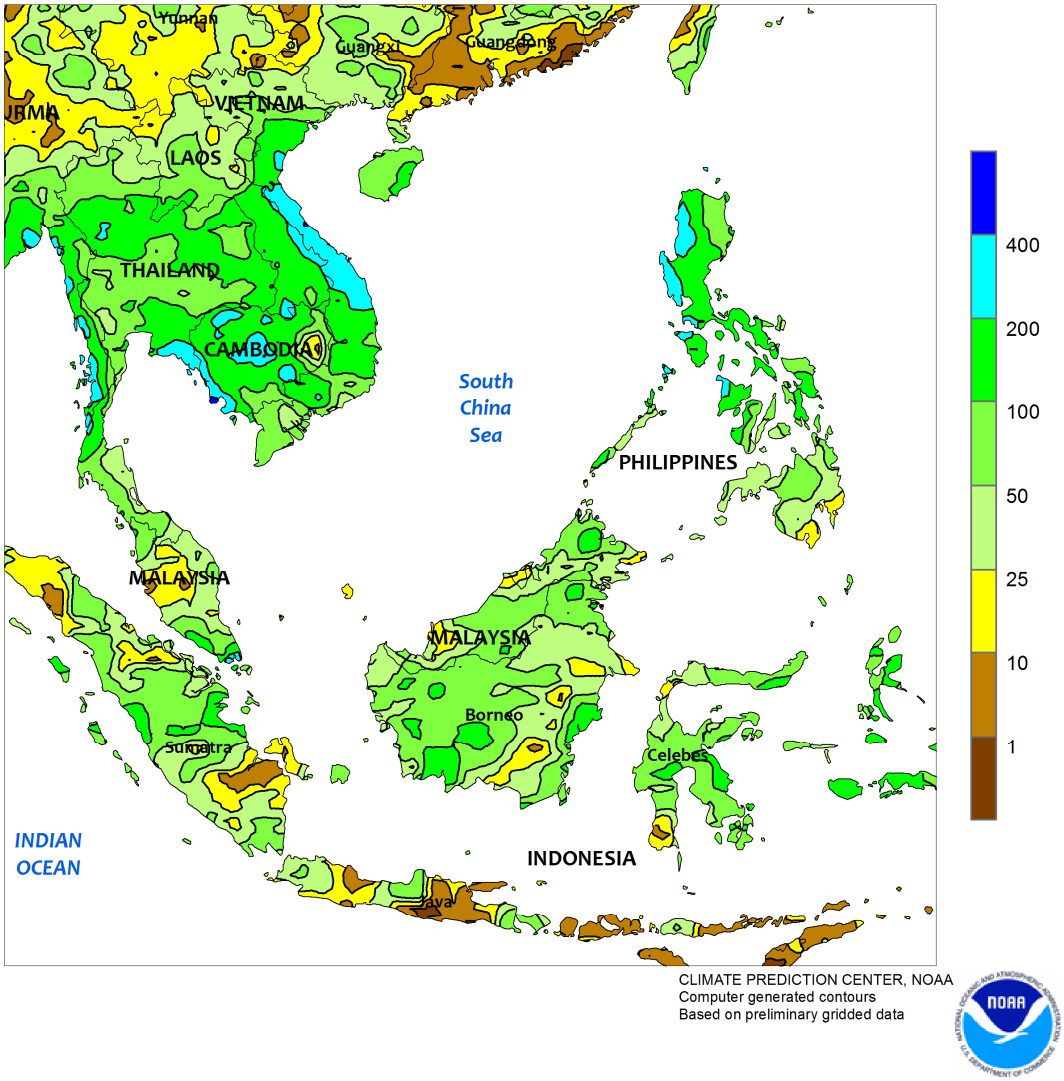
SOUTHEAST ASIA
Total Precipitation (mm)
September 5 - 11, 2021



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

SOUTHEAST ASIA

A slow-moving tropical cyclone (Conson) tracked across the Philippines early in the week and into Vietnam by week's end. The storm brought deluges to parts of the northern Philippines and contributed to the high weekly rainfall totals (150-300 mm) along western sections of the country. Additionally, downpours (150-400 mm) were recorded throughout the minor agricultural areas of central Vietnam as the storm moved inland. In all, rainfall from Conson was observed across large sections of the Philippines, Indochina, and Thailand, causing localized flooding, but greatly boosting moisture supplies for rice and other crops. Elsewhere, seasonable showers (50-100 mm) prevailed in eastern oil palm areas of Malaysia (Sabah) and throughout Indonesia (Sumatra and Kalimantan) but were sparse in the western reaches of Malaysia. Over the last 60 to 90 days, moisture conditions for oil palm remained near to above normal and better than last year in most places.

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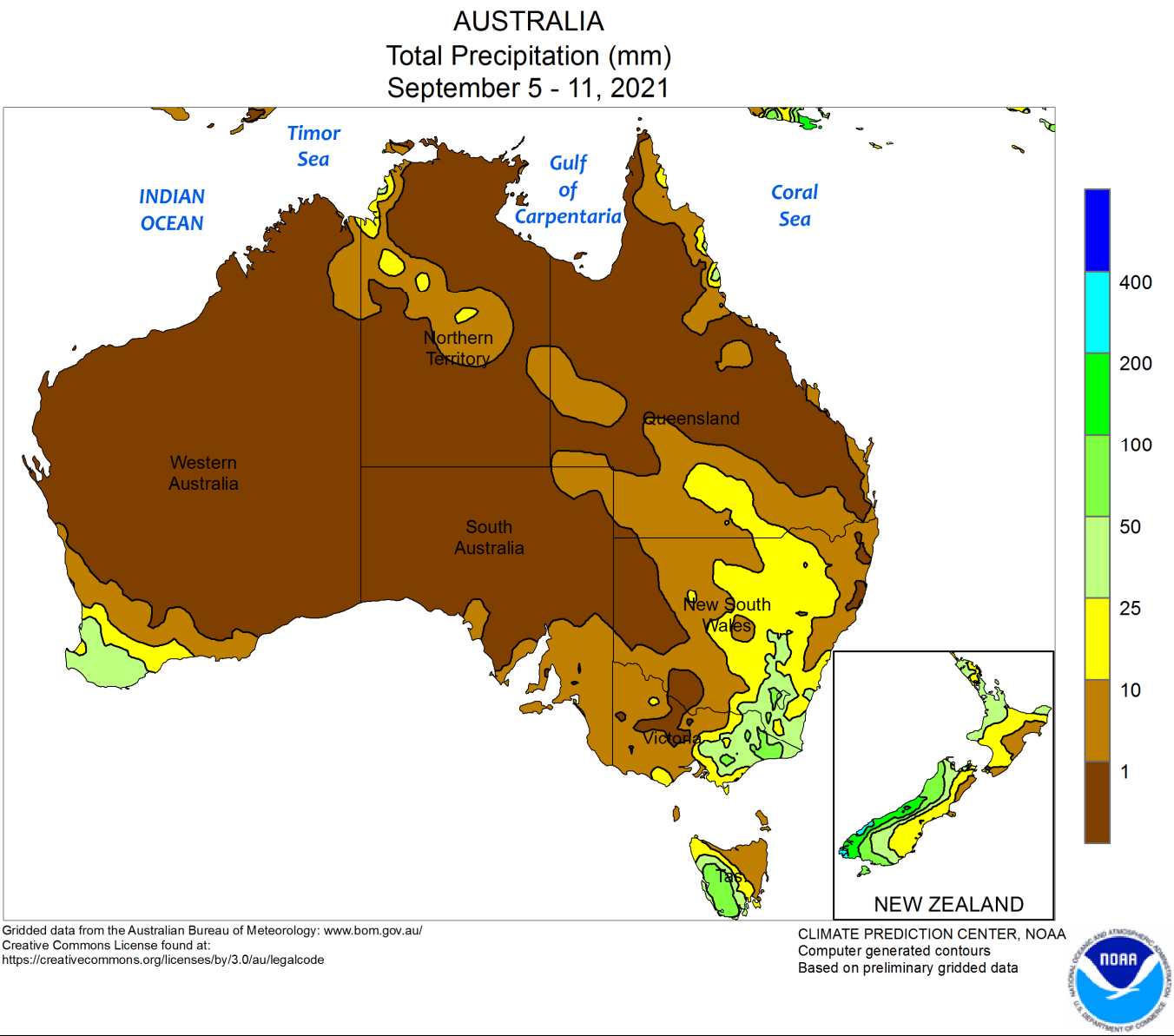

AUSTRALIA

During much of the week, warm, dry weather covered southern and western Australia, spurring winter grain and oilseed development. However, scattered showers (5-20 mm) passed through Western Australia during the latter half of the week, benefitting reproductive winter crops, while dry weather persisted in South Australia and most of Victoria. Farther east, rain (10-25 mm, locally more) in New South Wales favored wheat, barley, and canola development, helping to maintain good to excellent yield prospects. Elsewhere, warm, sunny weather in southern Queensland promoted wheat and other winter crop development, while the mostly dry weather aided early summer crop sowing. Temperatures averaged near normal in southern and eastern Australia and about 2 to 3ºC above normal in the west.

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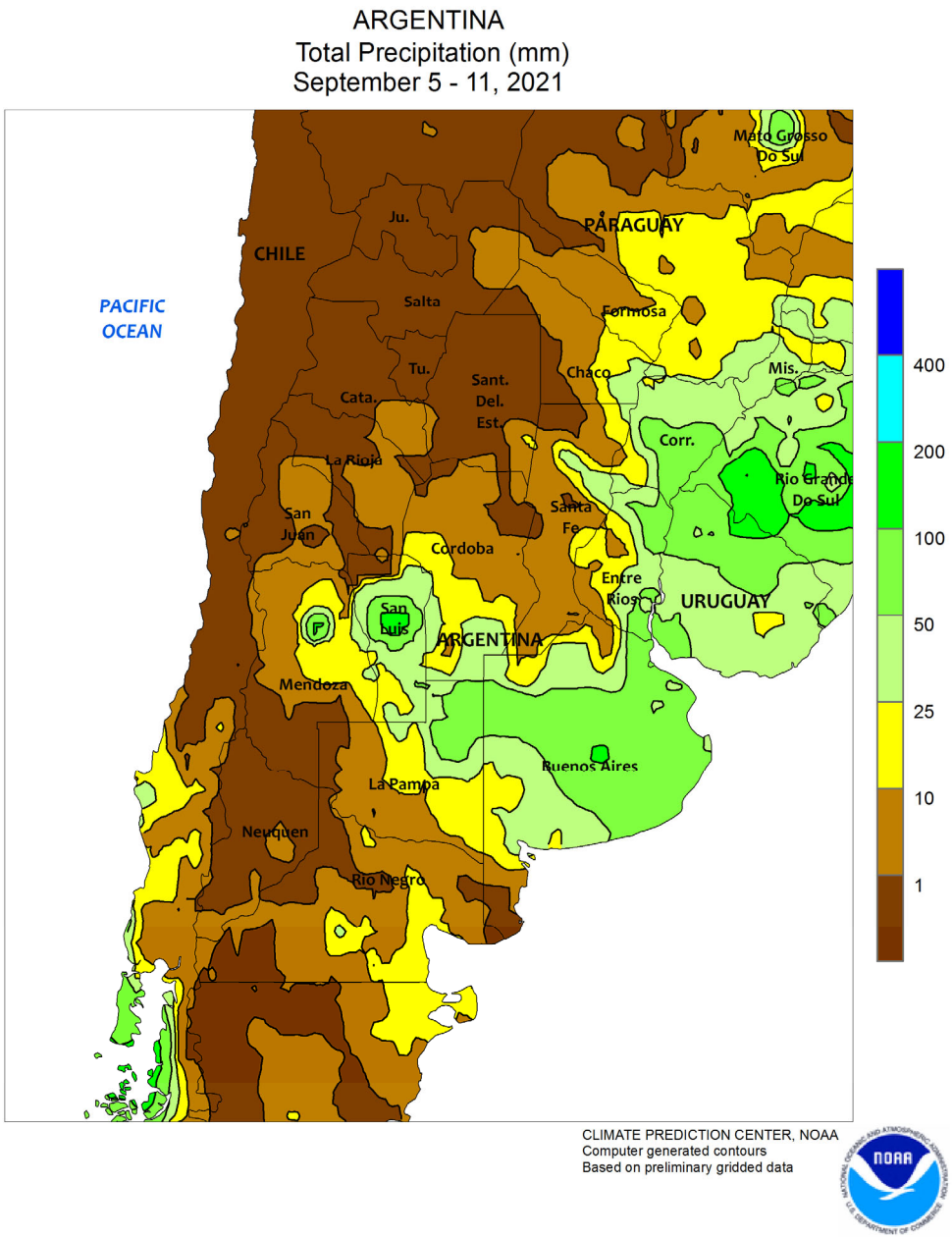

ARGENTINA

For a second week, beneficial rain increased moisture for vegetative winter grains in key farming areas of central Argentina. Rainfall totaled 25 to 100 mm across La Pampa and Buenos Aires, with similar amounts extending northeastward through Corrientes and Uruguay. Lighter amounts (less than 10 mm) were recorded over northwestern agricultural districts, including much of Cordoba and Santa Fe. Weekly average temperatures ranged from near to as much as 4°C above normal throughout the aforementioned areas, with no widespread freeze and daytime highs reaching the upper 20s and lower 30s (degrees C). As seasonal warming continues, the drier northwestern farming areas will need moisture as winter grains advance through reproduction and summer crop planting increases. According to the government of Argentina, sunflowers were 11 percent planted as of September 9, lagging last year's pace by 3 points; to date, little to no planting has been recorded in Buenos Aires, La Pampa, or Cordoba.

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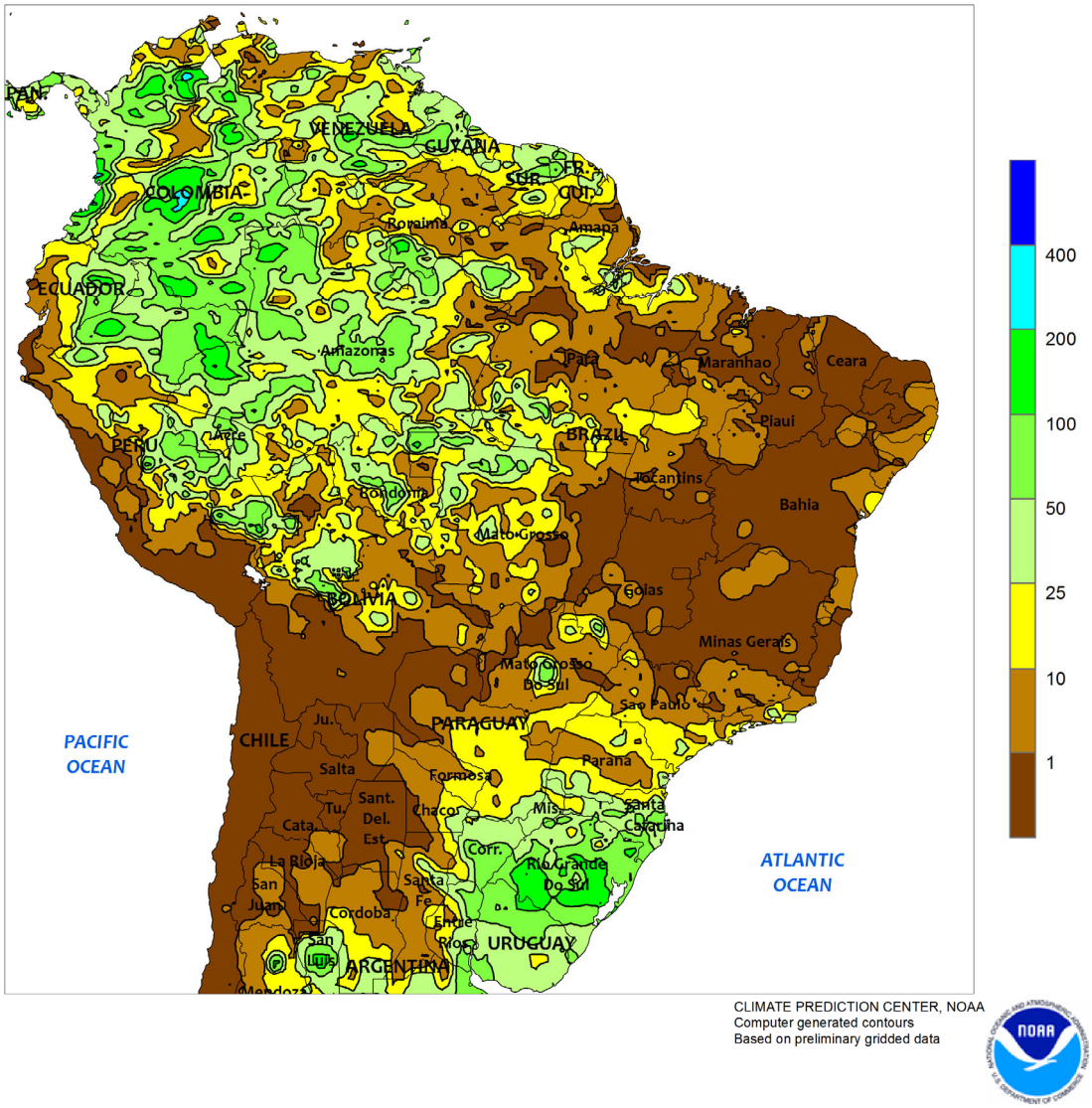
BRAZIL
Total Precipitation (mm)
September 5 - 11, 2021



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

BRAZIL

Showers provided timely moisture for reproductive wheat in southern Brazil. Rainfall totaled more than 25 mm over most of Rio Grande do Sul, with amounts of 5 to 25 mm in Parana. Mild weather prevailed in the wetter southern locations, but daytime highs occasionally reached the middle 30s (degrees C) in northern Parana, maintaining high moisture demands of reproductive to filling wheat. According to the government of Rio Grande do Sul, 52 percent of the wheat crop had reached flowering as of September 9. Farther north, light showers (5-25 mm) were scattered throughout the Center West region (notably Mato Grosso and northern Mato Grosso do Sul), helping to condition fields for soybean planting, which will become more widespread upon the arrival of seasonal rainfall. According to the government of Mato Grosso, cotton was 99 percent harvested as of September 10.

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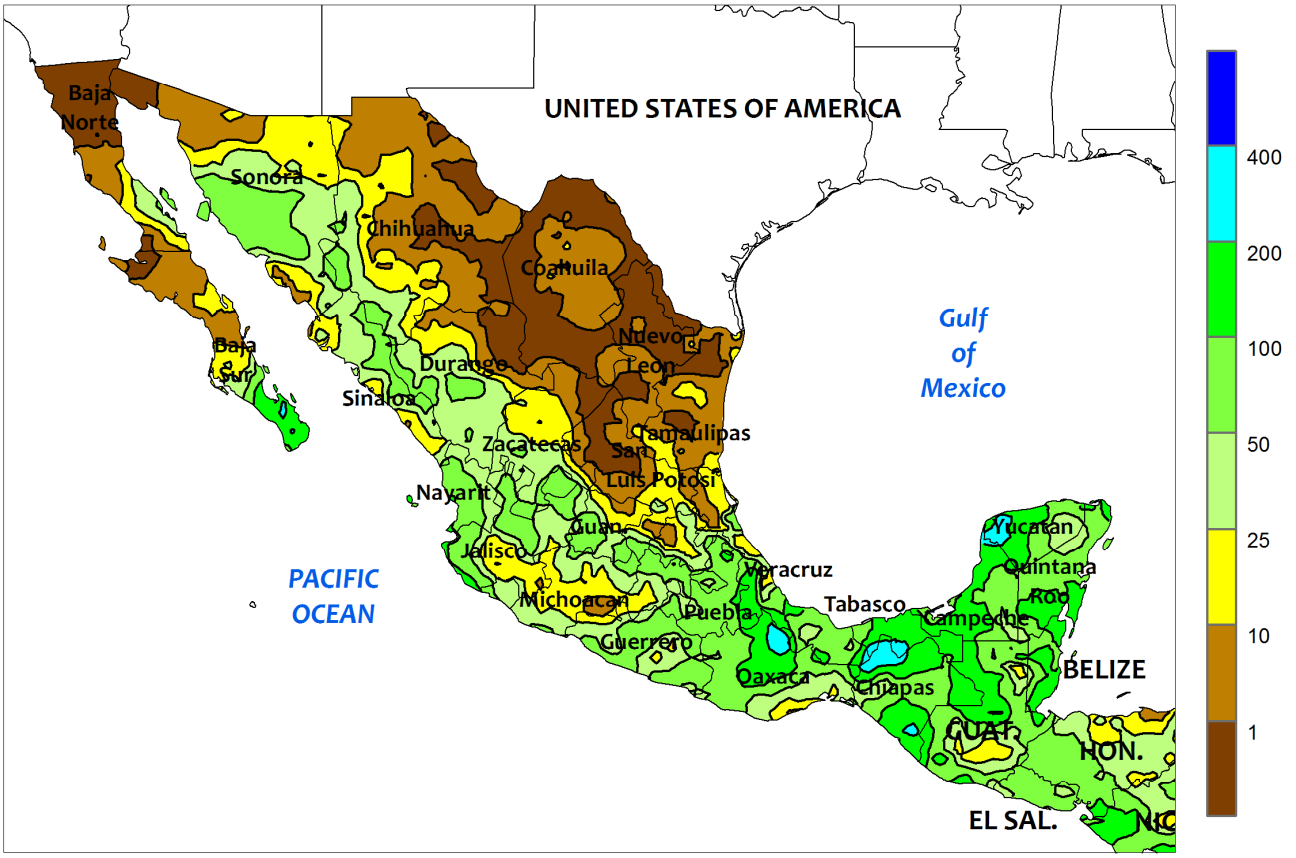
MEXICO
Total Precipitation (mm)
September 5 - 11, 2021



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

MEXICO

Locally heavy showers overspread the southeast, benefiting immature summer crops and helping to recharge reservoirs ahead of the winter cropping season. Rainfall totaled 50 to 100 mm – locally much higher – from western sections of the southern plateau (including portions of Jalisco) eastward through the Yucatan Peninsula. The highest amounts (locally more than 200 mm) were concentrated in and around southern Veracruz and in parts of Tabasco and Chiapas. Farther west, monsoon showers continued in northwestern watersheds, although amounts diminished over northern sections of Sonora and Chihuahua compared with prior weeks. Meanwhile, dry, warmer-than-normal weather (weekly temperatures averaging 1-2°C above normal, with highs approaching 40°C) maintained high crop irrigation requirements and water demands of livestock.

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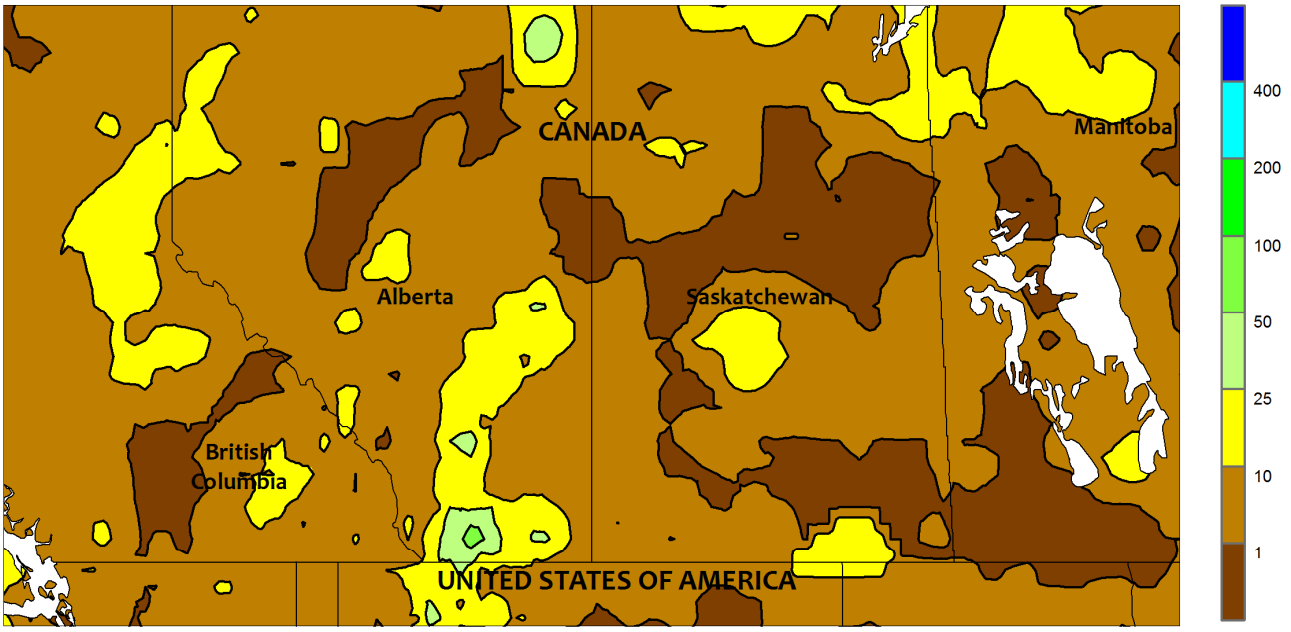
CANADIAN PRAIRIES
Total Precipitation (mm)
September 5 - 11, 2021



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

CANADIAN PRAIRIES

Warm, dry weather dominated the Prairies for much of the week, supporting fieldwork and favoring rapid development and drydown of the remaining crops. Weekly temperatures averaged 1 to 4°C above normal in nearly all agricultural districts, with highest daytime temperatures ranging from the lower 20s (degrees C) in Alberta's northern farming areas to the lower 30s along the southern border. Showers were generally scattered and light until moderate rain (5-25 mm) moved into Alberta at week's end, slowing fieldwork after an extended period of favorable dryness. According to provincial reports released during the final days of September, harvesting of all crops reached 45 percent in Alberta; 56 percent in Saskatchewan; and 50 percent in Manitoba.

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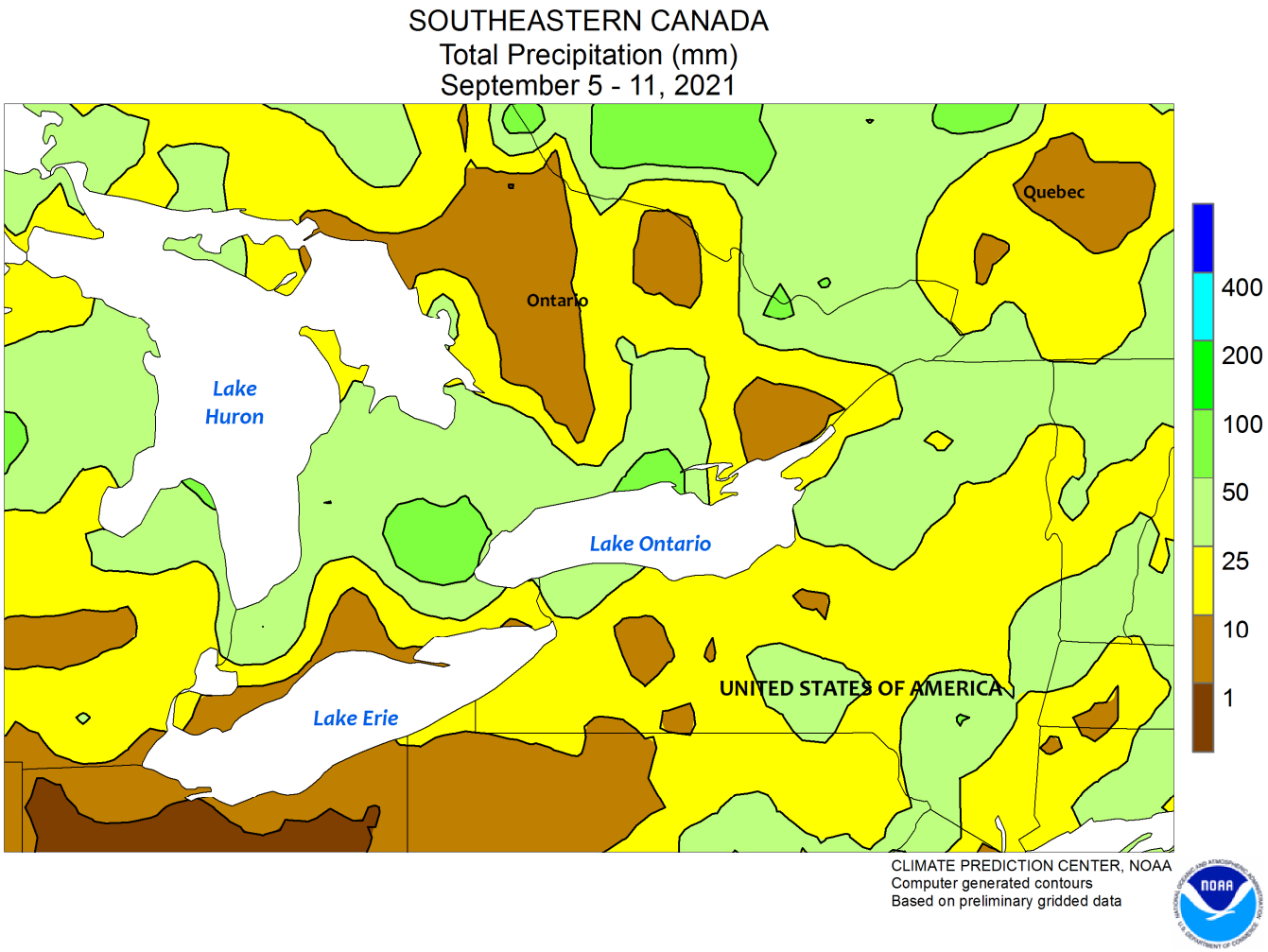

SOUTHEASTERN CANADA

Moderate to heavy showers provided timely moisture for germination and establishment of winter wheat. Rainfall totaled 25 to 75 mm over large sections of southern Ontario, notably the region between Lake Huron and Lake Ontario, with most other locations recording at least 10 mm. Somewhat lighter rain also fell in Quebec, although outlying agricultural districts recorded more than 25 mm. Weekly temperatures generally averaged within 1°C of normal, with highest daytime temperatures ranging from the lower 20s (degrees C) in Quebec to the upper 20s in Ontario's southern-most farming areas. No freezes were reported, although nighttime lows dropped below 5°C in a few of the more northerly locations.

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U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on September 10, 2021. Forecasts refer to September 1.

Corn production for grain is forecast at 15.0 billion bushels, up 2 percent from the previous forecast and up 6 percent from 2020. U.S. yields are expected to average 176.3 bushels per harvested acre, up 1.7 bushels from the previous forecast and up 4.3 bushels from last year. Acreage updates were made in several states based on a thorough review of all available data. Total planted area, at 93.3 million acres, is up 1 percent from the previous estimate and up 3 percent from the previous year. Area harvested for grain is forecast at 85.1 million acres, up 1 percent from the previous forecast and up 3 percent from the previous year.

Soybean production for beans is forecast at 4.37 billion bushels, up 1 percent from the previous forecast and up 6 percent from 2020. U.S. yields are expected to average 50.6 bushels per harvested acre, up 0.6 bushel from the previous forecast and up 0.4 bushel from 2020. Total planted area, at 87.2 million acres, is down less than 1 percent from the previous estimate but up 5 percent from the previous year. U.S. area harvested for beans is forecast at 86.4 million acres, down less than 1 percent from the previous forecast but up 5 percent from 2020. Acreage updates were made in several states based on a thorough review of all available data.

All cotton production is forecast at 18.5 million 480-pound bales, up 7 percent from the previous forecast and up 27 percent from 2020. U.S. yields are expected to average 895 pounds per harvested acre, up 95 pounds from the previous forecast and up 48 pounds from 2020. Upland cotton production is forecast at 18.2 million 480-pound bales, up 8 percent from the previous forecast and up 29 percent from 2020. Pima cotton production is forecast at 335,000 bales, down 10 percent from the previous forecast and down 39 percent from 2020. All cotton planted area totaled 11.2 million acres, down 5 percent from the previous forecast and down 7 percent from 2020. All cotton area harvested is forecast at 9.92 million acres, down 4 percent from the previous forecast but up 20 percent from 2020. Acreage updates were made in several states based on a thorough review of all available data.

California Navel orange production for the 2021-2022 season is forecast at 1.40 million tons (35.0 million boxes), down 14 percent from last season. This 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 down 25 percent from last year and that the average fruit size was down 2 percent. Harvest is expected to begin in October.

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