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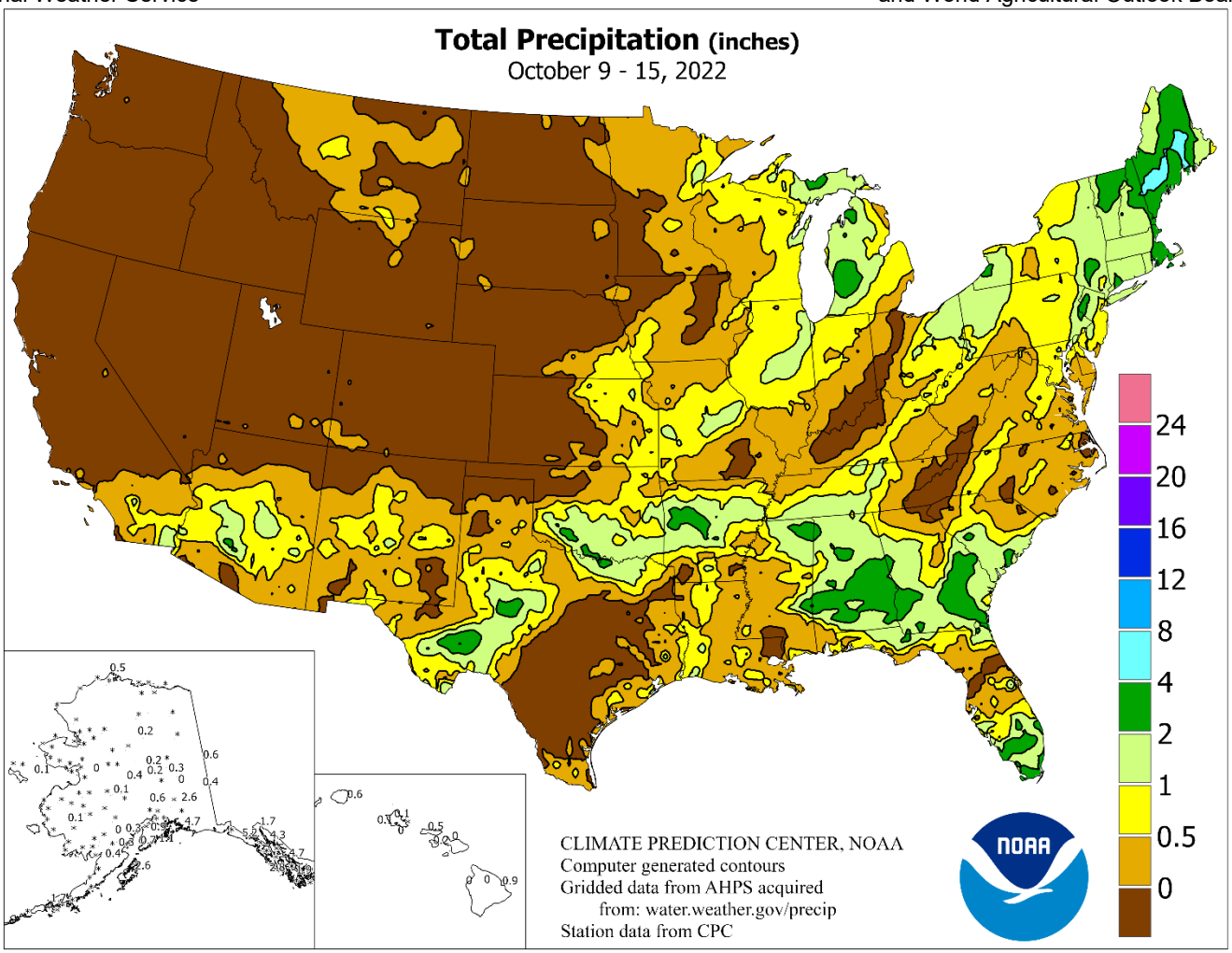
Weekly Weather and Crop Bulletin

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
October 9 – 15, 2022

Highlights provided by USDA/WAOB

Another week with minimal precipitation in many of the nation's key production areas continued to favor summer crop harvesting and other autumn fieldwork. However, lack of topsoil moisture remained an impediment to the even emergence and proper establishment of recently planted winter grains and cover crops. Expansive dryness also contributed to poor rangeland and pasture conditions, as well as ongoing low water levels in the **Mississippi River Basin**. Rain fell in a few areas, however, including parts of the **Northeast** and **Southeast**. In fact, rain fell

(Continued on page 5)

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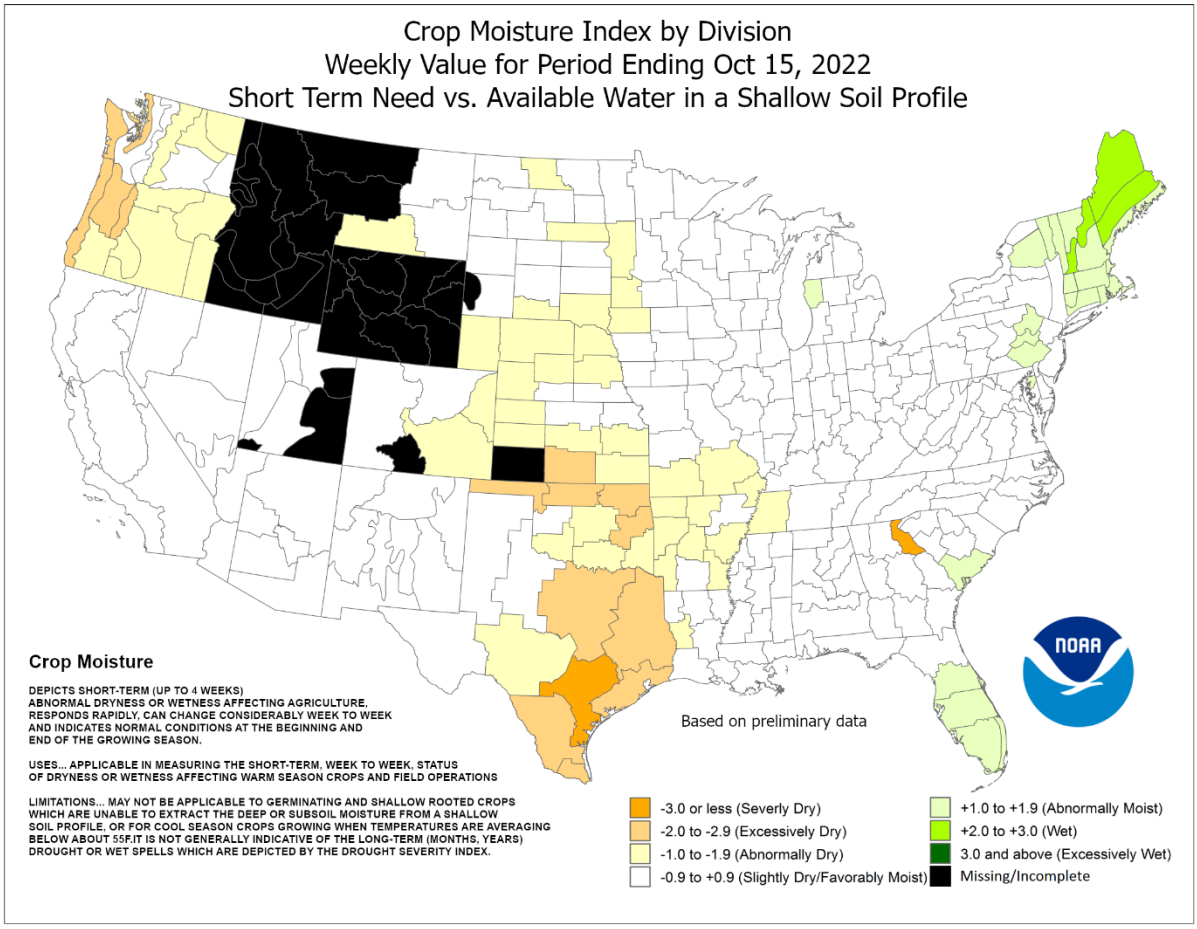
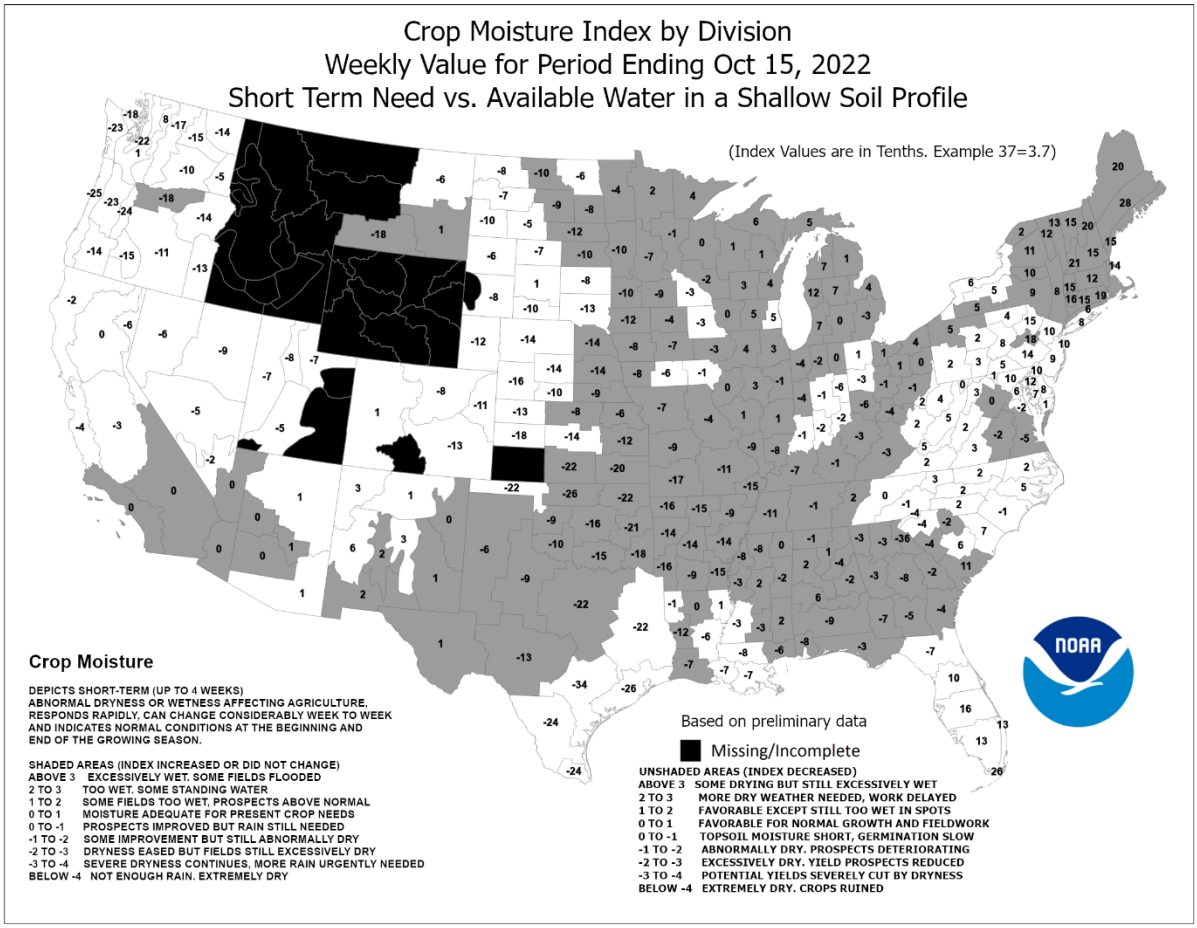
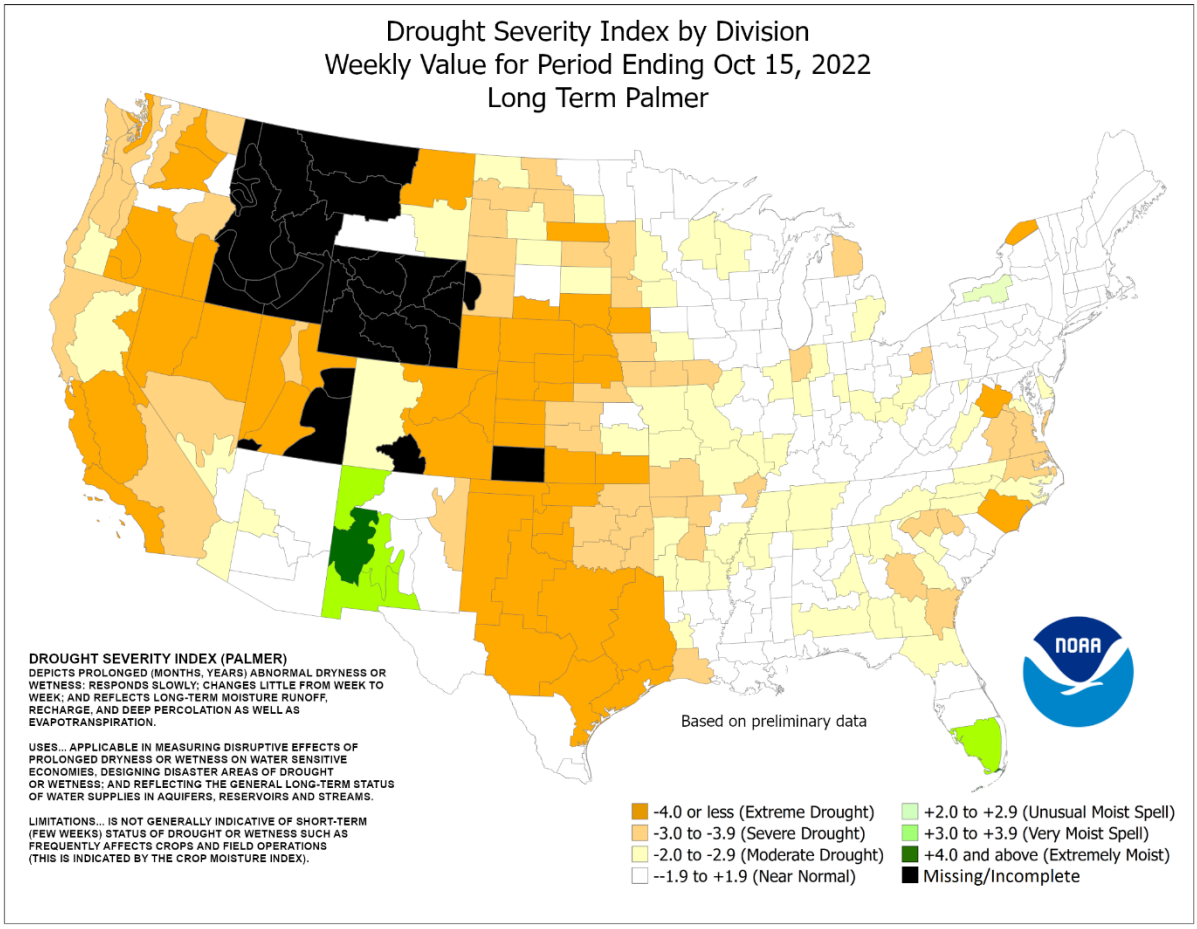
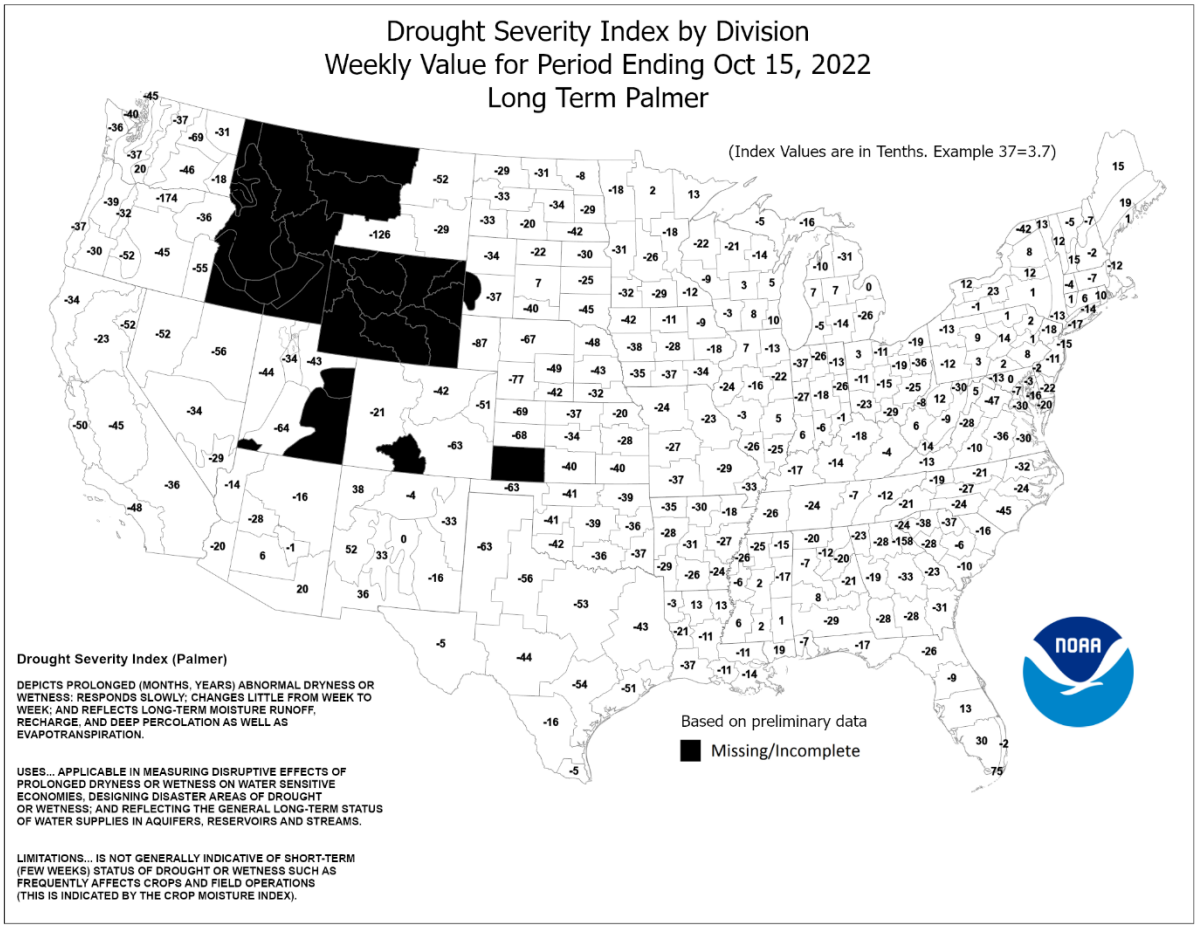

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 15, 2022
Short Term Need vs. Available Water in a Shallow Soil Profile
Crop Moisture
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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
NOAA


Crop Moisture Index by Division
Weekly Value for Period Ending Oct 15, 2022
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
NOAA


Drought Severity Index by Division
Weekly Value for Period Ending Oct 15, 2022
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)
Missing/Incomplete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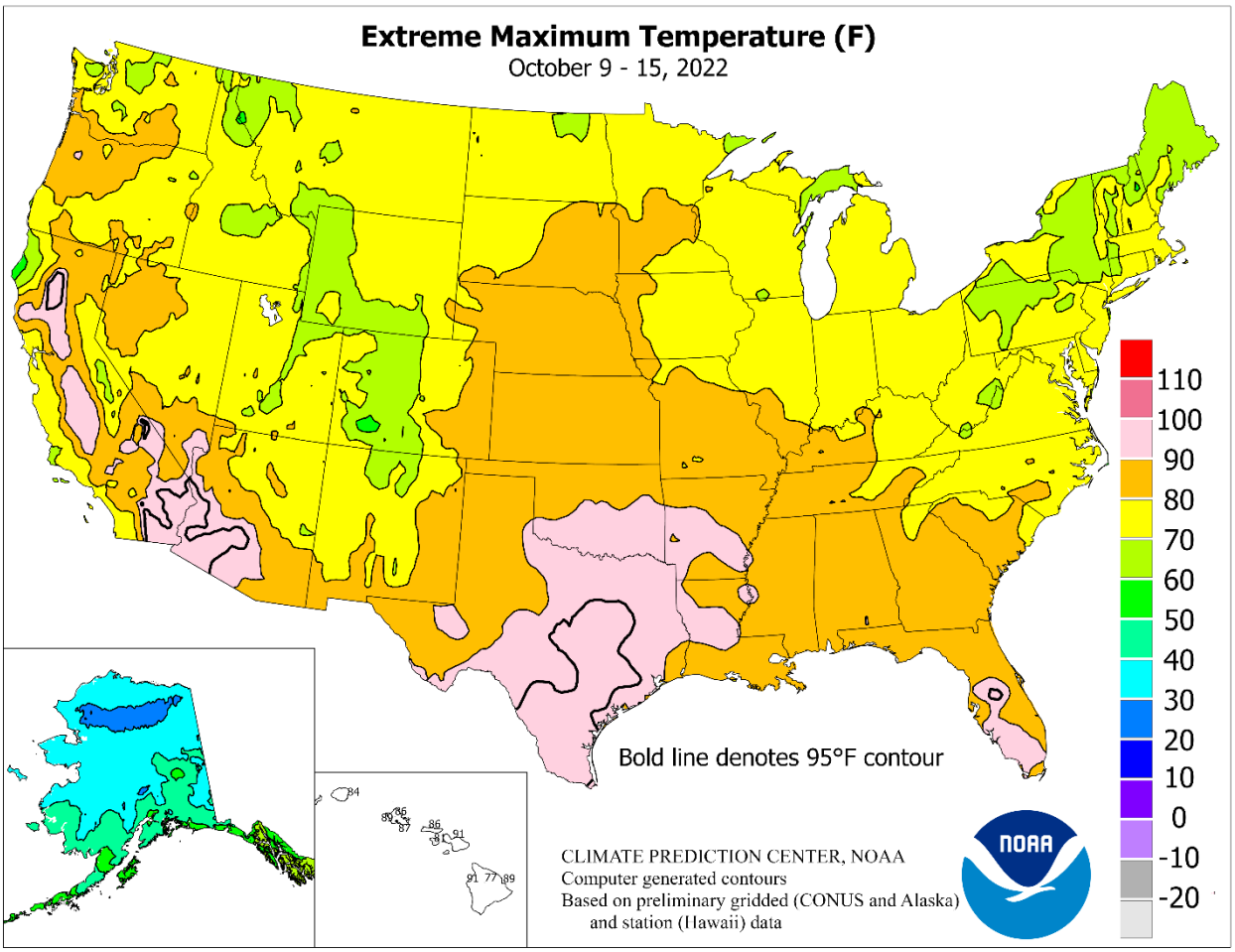
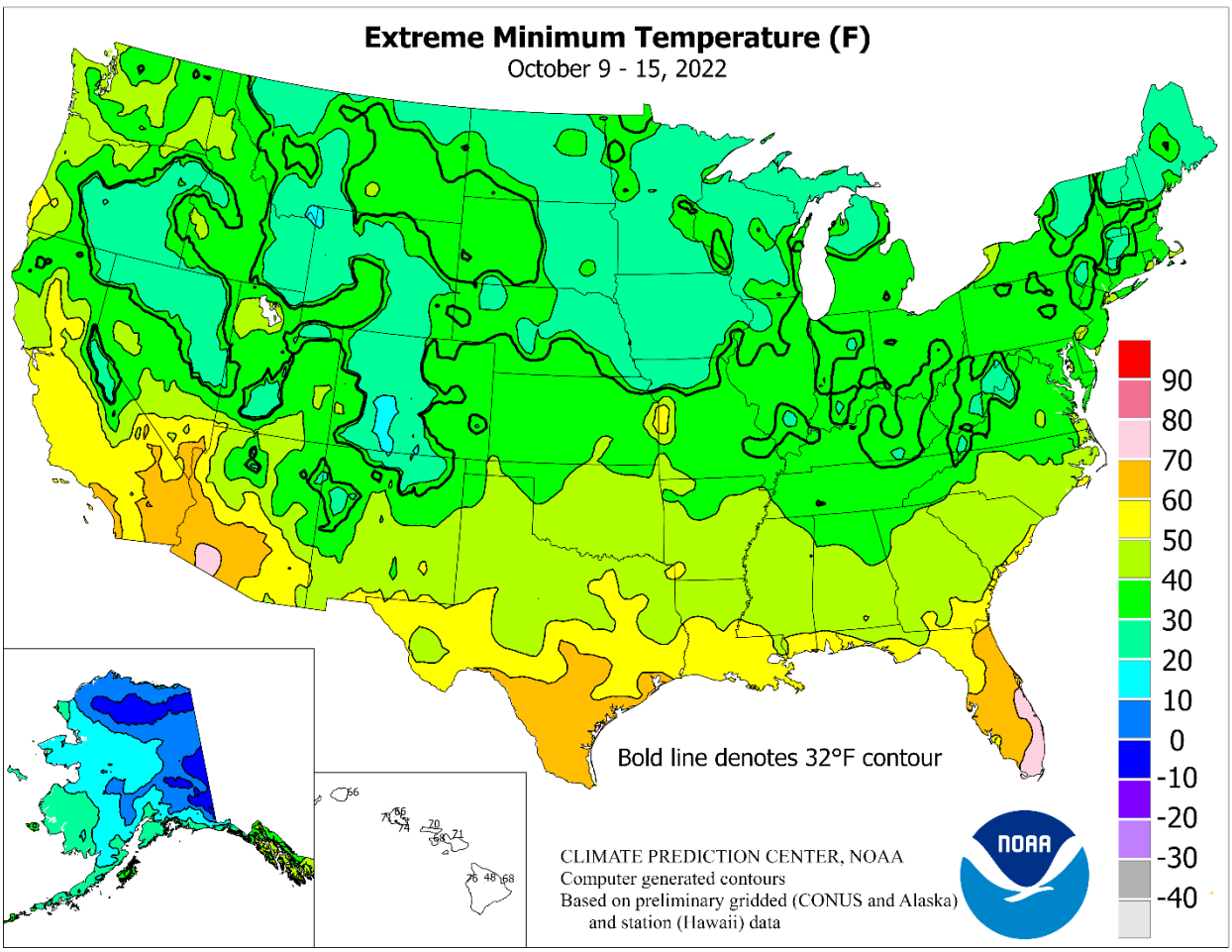
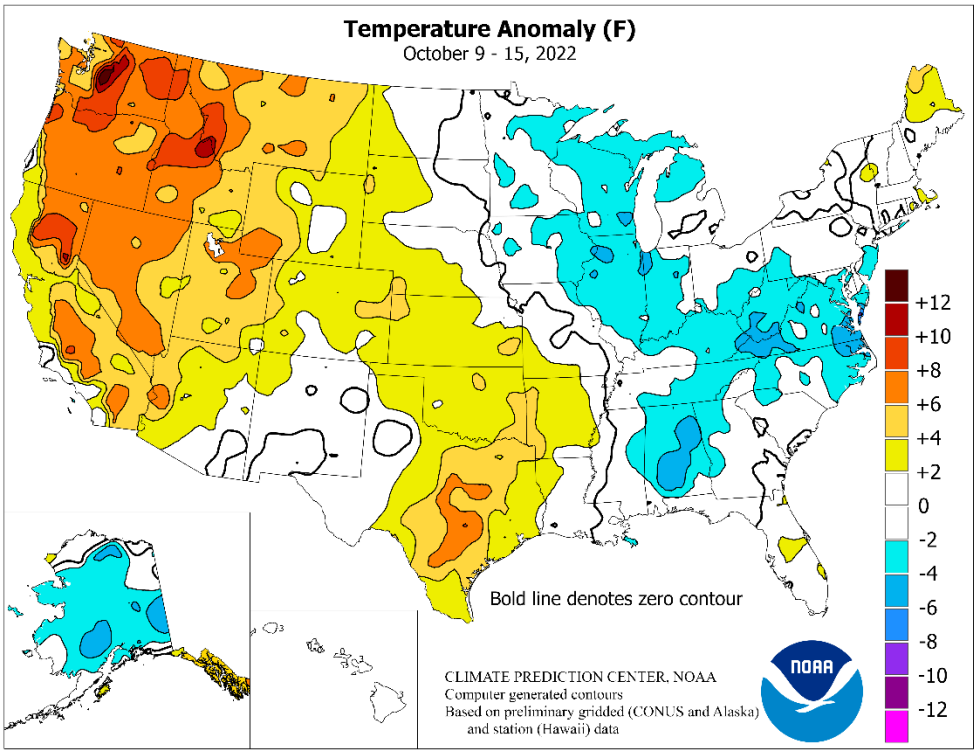

Extreme Maximum Temperature (F)
October 9 - 15, 2022
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
October 9 - 15, 2022
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

(Continued from front cover)

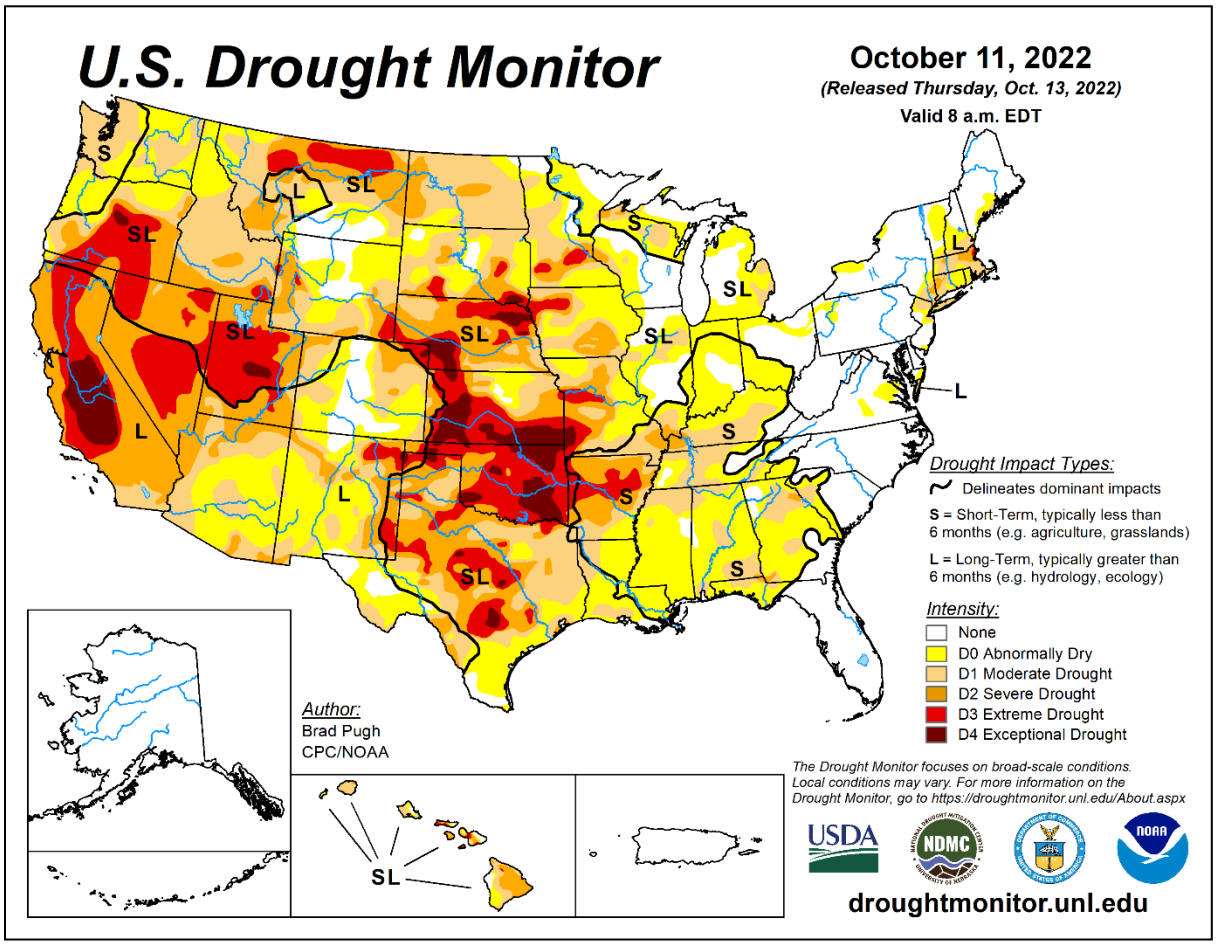
heavily in **New England**, where 2- to 4-inch totals were common. **Southeastern** rainfall was generally heaviest in parts of **Alabama** and **Georgia**. Portions of the **Midwest** also received some precipitation, with rain and snow showers noted downwind of the **Great Lakes**. Late in the week, additional rain developed across the **South**. Spotty showers occurred from **southern California to the southern Rockies**, while locally heavy rain fell from **western Texas into the mid-South**. For the second week in a row, temperatures averaged at least 5 to 10°F above normal in many locations from the **Pacific Coast to the northern High Plains**. A secondary area of warmth covered the **south-central U.S.**, where temperatures in parts of **central, eastern, and southern Texas** averaged more than 5°F above normal. In contrast, readings averaged as much as 5°F below normal in the **eastern Corn Belt**, **Ohio Valley**, **Southeast**, and **mid-Atlantic**. Exceptions to the **Eastern** cool pattern included lingering warmth in **southern Florida** and **northern New England**. Following the previous week's **Midwestern** cold snap, ongoing chilly weather led to additional frost and freezes. In fact, hard freezes (28°F or below) were noted in much of the **upper Midwest**, extending as far south as **Iowa**, **eastern Nebraska**, and **northern Missouri**.

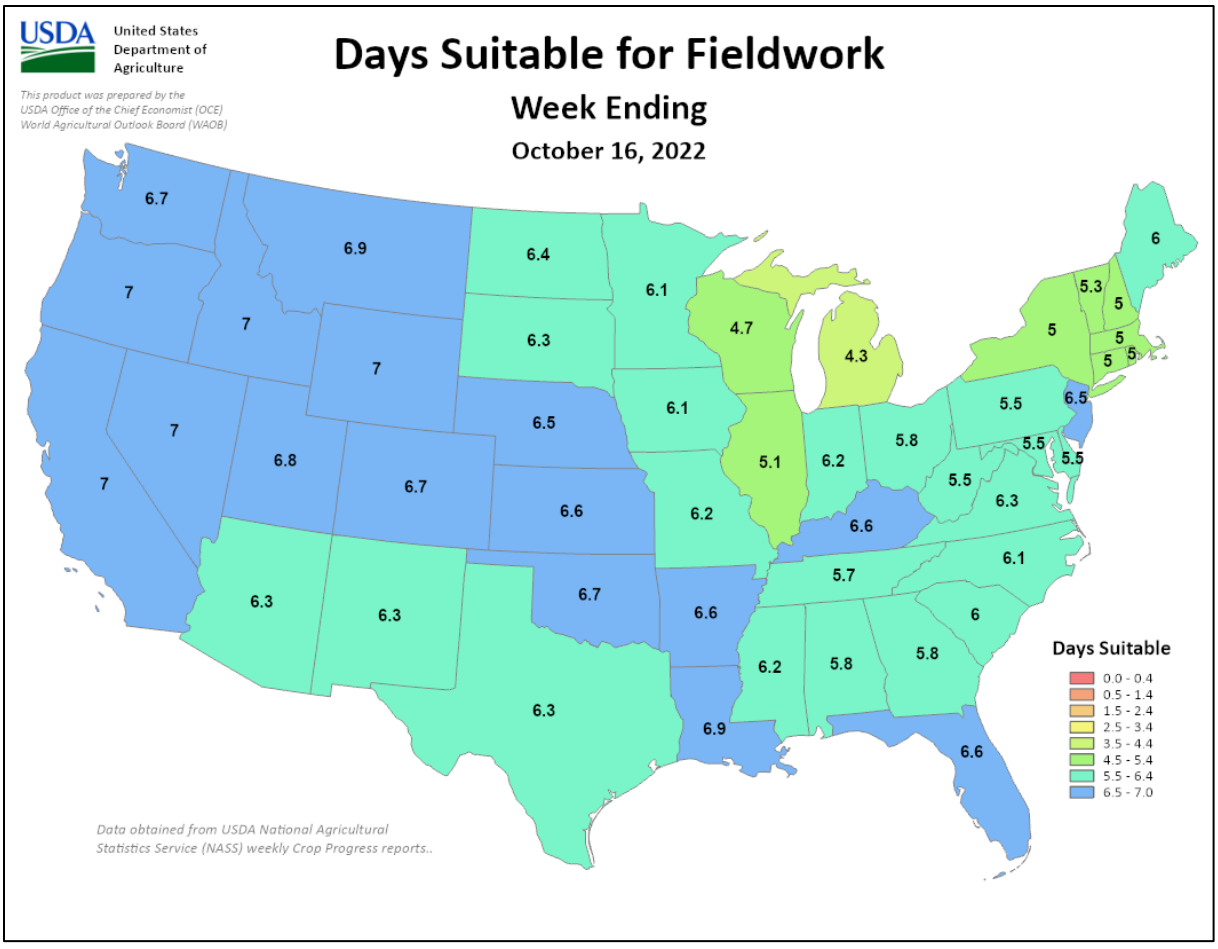


As the week began, frosty conditions settled across the **Ohio Valley** and **mid-Atlantic**. In **Kentucky**, daily-record lows for October 9 dipped to 30°F in **Frankfort** and 31°F in **Lexington**. **Parkersburg, WV**, collected consecutive daily-record lows (32 and 33°F, respectively) on October 9-10. By mid-week, a cold front crossing the **North** generated some high winds, including **South Dakota** gusts to 71 mph in **Buffalo** and 61 mph in **Faith**. Subsequently, chilly weather and snow showers engulfed portions of the **Great Lakes States**. On October 14, high temperatures peaked at 34°F in **Wisconsin** locations such as **Antigo**, **Stevens Point**, **Merrill**, and **Rhinelander**. In addition, **Rhinelander** received a daily-record snowfall of 2.0 inches on the 14th. **Duluth, MN**, also measured 2.0 inches of snow on that date, helping to boost its October 14-16 total to 5.1 inches. Elsewhere, record-setting snowfall totals for October 14 included 0.4 inch in **Minneapolis-St. Paul, MN**, and 0.3 inches in **Eau Claire, WI**. In contrast, record-setting warmth dominated the **Northwest**. From October 8-10, **Dallesport, WA**, tallied a trio of daily-record highs (88, 87, and 88°F). Similarly, **Portland, OR**, posted a pair of daily-record highs (87 and 85°F, respectively) on October 8-9, followed by another five consecutive records (80, 84, 82, 87, and 86°F) from October 12-16. In addition, **Portland** recorded maxima of 80°F or higher on 12 of the first 16 days of the month, breaking the October record of 6 days, set in 1952, 1980, and 1991. **Portland** also continued to await its first measurable rain of the month. Farther south, **Red Bluff, CA**, logged a daily-record high of 100°F on October 12. Late-season warmth also lingered in the **Deep South**, where **Fort Myers, FL** (94°F on the 11th), notched a daily-record high. In **Texas**, **Waco's** high of 100°F on October 12 marked the latest triple-digit heat on record in that location (previously, 100°F on October 4, 1983). Back in the **Northwest**, **Dallesport, WA**, registered another string of daily-record highs (83, 83, and 82°F) from October 12-14. With a high of 92°F on the 15th, **Salem, OR**, came within 1°F of its highest October reading on record (93°F on October 3, 1932, and October 2, 1970. Prior to this year, **Salem's** latest 90-degree reading had occurred on October 10, 1934.

Precipitation across the country was scarce until mid-week, when heavy showers developed across the **central Gulf Coast States**. In **Mississippi**, record-setting rainfall totals for October 12 included 3.18 inches in **Meridian** and 1.89 inches in **Gulfport**. Showers soon swept into the **East**; daily-record totals for the 13th included 1.57 inches in **Allentown, PA**, and 1.41 inches on **St. Simons Island, GA**. Rain lingered in **New England**, particularly across **Maine**. **Bangor, ME**, received exactly 5 inches of rain on October 14-15, aided by a daily-record sum of 3.20 inches on the latter date. Elsewhere in **Maine**, October 13-15 rainfall totaled 3.33 inches in **Augusta**, 3.32 inches in **Millinocket**, and 3.27 inches in **Portland**. Late in the week, showers developed over the **southwestern and south-central U.S.** **Phoenix, AZ**, received a 2-day (October 15-16) total of 0.94 inch. Daily-record amounts for October 15 reached 0.28 inch in **Winslow, AZ**, and 0.15 inch in **Barstow-Daggett, CA**. Meanwhile, the **Mississippi River** fell to record-low levels in mid-October at several gauge sites between **New Madrid, MO, and Greenville, MS**. In **Missouri**, stages of -5.51 feet (on the 15th) in **New Madrid** and -1.82 feet (on the 16th) in **Caruthersville** broke records set on August 30, 2012. Farther downstream, the gauge in **Osceola, AR**, recorded -11.66 feet on October 17, more than a foot below the record set on July 11, 1988. The **Mississippi River at Memphis, TN**, also edged a July 1988 standard, falling to a stage of -10.79 feet on October 17. Meanwhile, the **Ohio River at Cairo, IL** (4.88 feet on October 17), fell to its lowest level since 1901.

Colder weather suddenly arrived across much of the **Alaskan mainland**, while warmth lingered in the southeastern part of the state. **Juneau** started and ended the week with daily-record highs (61 and 56°F, respectively, on October 9 and 15. Other **Alaskan** daily-record highs on the 15th included 66°F in **Ketchikan** and 63°F in **Sitka**. Between the warm days, considerable precipitation pelted **southeastern Alaska**, with **Juneau** measuring a weekly sum of 4.29 inches. Similarly, **Sitka** received an October 9-15 total of 5.44 inches. High winds accompanied some of the storminess across **southern Alaska**, with **Cold Bay** clocking a wind gust to 68 mph on October 10. Farther south, trade-wind flow briefly broke down across **Hawaii**, as a cold front approached and dissipated. **Lihue, Kauai**, received rainfall totaling 0.53 inch on October 11-12. In advance of the front, **Hilo** (on the **Big Island**) registered a daily-record high of 89°F on October 10. Through the 15th, month-to-date rainfall at the state's major airport observation sites ranged from 0.05 inch (9 percent of normal) in **Honolulu, Oahu**, to 1.43 inches (31 percent) in **Hilo**.


U.S. Drought Monitor
October 11, 2022
(Released Thursday, Oct. 13, 2022)
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:
Brad Pugh
CPC/NOAA
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


USDA United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Days Suitable for Fieldwork
Week Ending
October 16, 2022
Days Suitable
0.0 - 0.4
0.5 - 1.4
1.5 - 2.4
2.5 - 3.4
3.5 - 4.4
4.5 - 5.4
5.5 - 6.4
6.5 - 7.0
Data obtained from USDA National Agricultural Statistics Service (NASS) weekly Crop Progress reports..

National Weather Data for Selected Cities

Weather Data for the Week Ending October 15, 2022

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. ˚F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AK	ANCHORAGE	41	30	52	24	36	-3	0.85	0.42	0.66	6.64	160	22.33	167	88	43	0	6	3	1
	BARROW	29	20	34	2	25	0	0.45	0.33	0.18	0.82	77	7.76	172	91	69	0	7	6	0
	FAIRBANKS	35	23	47	15	29	-1	0.20	0.03	0.18	1.94	110	6.52	65	87	62	0	6	3	0
	JUNEAU	53	45	60	40	49	5	4.26	2.32	1.62	17.50	130	69.71	140	98	80	0	0	7	3
	KODIAK	51	40	59	35	46	3	2.61	0.61	1.68	10.94	92	61.15	105	84	48	0	0	4	2
	NOME	36	24	38	18	30	-2	0.06	-0.38	0.04	6.05	191	16.41	117	81	57	0	7	2	0
AL	BIRMINGHAM	76	48	83	42	62	-4	2.03	1.34	1.08	3.81	68	42.24	92	88	36	0	0	2	2
	HUNTSVILLE	76	46	83	35	61	-4	1.47	0.73	1.44	4.98	96	42.46	100	93	34	0	0	2	1
	MOBILE	85	58	87	53	71	1	0.64	-0.23	0.33	1.86	25	45.47	82	84	32	0	0	2	0
	MONTGOMERY	79	49	84	43	64	-5	1.41	0.77	1.25	2.95	57	43.90	107	96	41	0	0	2	1
AR	FORT SMITH	85	54	93	43	69	5	2.41	1.48	2.41	3.01	50	38.13	101	81	27	1	0	1	1
	LITTLE ROCK	86	53	92	46	70	5	0.51	-0.40	0.50	1.14	23	33.75	88	80	28	2	0	2	1
AZ	FLAGSTAFF	69	35	73	30	52	3	0.24	-0.11	0.24	2.22	86	13.30	81	89	27	0	2	1	0
	PHOENIX	93	70	98	65	81	2	0.61	0.48	0.61	1.41	165	3.28	58	54	20	6	0	1	1
	PRESCOTT	75	46	79	44	61	2	0.42	0.22	0.41	3.29	195	10.23	95	84	27	0	0	2	0
	TUCSON	88	62	92	59	75	1	0.10	-0.05	0.10	1.34	81	4.81	54	67	23	2	0	1	0
CA	BAKERSFIELD	89	66	92	63	78	8	0.00	-0.04	0.00	0.00	0	1.85	40	51	24	3	0	0	0
	EUREKA	54	47	57	42	51	-4	0.00	-0.46	0.00	0.44	29	14.48	55	99	92	0	0	0	0
	FRESNO	90	63	93	60	77	9	0.00	-0.09	0.00	0.06	29	1.15	14	69	23	3	0	0	0
	LOS ANGELES	72	65	75	63	68	1	0.23	0.15	0.19	0.35	130	1.82	20	90	69	0	0	2	0
	REDDING	97	54	100	52	76	9	0.00	-0.38	0.00	0.91	81	5.80	25	61	10	7	0	0	0
	SACRAMENTO	85	54	92	50	70	4	0.00	-0.15	0.00	0.28	78	2.46	19	90	32	2	0	0	0
	SAN DIEGO	72	66	75	64	69	1	0.04	-0.06	0.02	0.69	238	3.16	45	86	66	0	0	2	0
	SAN FRANCISCO	65	54	68	52	60	-4	0.00	-0.14	0.00	0.28	85	2.09	16	95	68	0	0	0	0
	STOCKTON	86	55	90	53	71	4	0.00	-0.13	0.00	0.06	19	1.66	18	88	31	2	0	0	0
CO	ALAMOSA	68	25	70	22	47	1	0.00	-0.15	0.00	0.93	71	10.16	160	89	18	0	6	0	0
	CO SPRINGS	73	39	78	34	56	4	0.00	-0.19	0.00	0.62	35	10.61	71	67	17	0	0	0	0
	DENVER INTL	71	41	77	35	56	3	0.00	-0.24	0.00	1.57	83	9.78	75	67	18	0	0	0	0
	GRAND JUNCTION	75	45	77	42	60	5	0.00	-0.24	0.00	2.89	170	6.22	84	62	21	0	0	0	0
	PUEBLO	79	37	84	34	58	3	0.00	-0.18	0.00	0.65	64	9.00	82	66	14	0	0	0	0
CT	BRIDGEPORT	68	46	71	39	57	-1	0.80	-0.08	0.72	7.45	126	27.22	77	92	51	0	0	2	1
	HARTFORD	70	41	74	34	55	1	1.06	0.00	0.57	9.61	143	36.63	98	92	41	0	0	2	1
DC	WASHINGTON	71	49	76	41	60	-2	0.58	-0.23	0.58	4.08	71	33.57	99	89	43	0	0	1	1
DE	WILMINGTON	71	44	75	38	57	-1	0.10	-0.72	0.10	6.19	99	32.44	88	93	42	0	0	1	0
FL	DAYTONA BEACH	85	69	87	64	77	1	0.00	-1.26	0.00	12.10	119	39.13	88	94	60	0	0	0	0
	JACKSONVILLE	85	62	88	57	74	1	1.44	0.34	0.87	6.69	64	44.67	94	97	51	0	0	3	2
	KEY WEST	87	78	87	74	82	0	1.41	-0.06	0.88	12.68	122	31.49	93	96	78	0	0	6	1
	MIAMI	89	77	91	76	83	2	4.17	2.20	2.22	15.97	108	59.55	102	92	64	4	0	4	2
	ORLANDO	88	71	90	66	80	3	0.00	-0.86	0.00	22.01	260	53.56	117	93	56	2	0	0	0
	PENSACOLA	84	62	86	57	73	0	0.14	-0.91	0.08	2.34	26	52.47	93	80	39	0	0	2	0
	TALLAHASSEE	87	56	89	48	71	-1	0.14	-0.61	0.14	1.43	21	49.38	98	88	32	0	0	1	0
	TAMPA	87	72	90	66	80	1	0.32	-0.24	0.30	10.48	138	47.45	106	89	58	2	0	2	0
	WEST PALM BEACH	88	76	89	73	82	3	2.24	0.80	1.60	12.31	110	40.90	78	90	64	0	0	3	2
GA	ATHENS	77	50	83	43	63	-2	0.76	0.02	0.56	3.38	60	33.26	85	96	43	0	0	2	1
	ATLANTA	76	52	81	45	64	-2	1.11	0.42	0.64	2.09	38	38.54	95	85	43	0	0	2	1
	AUGUSTA	79	53	82	43	66	-2	1.82	1.26	1.82	4.00	80	40.93	112	98	45	0	0	1	1
	COLUMBUS	79	53	83	48	66	-3	1.43	0.81	1.14	4.01	84	36.85	95	84	39	0	0	2	1
	MACON	82	51	85	43	66	-2	0.47	-0.08	0.31	2.53	50	38.37	101	95	39	0	0	2	0
	SAVANNAH	81	59	82	49	70	0	0.92	-0.04	0.88	5.88	89	32.22	78	95	49	0	0	2	1
HI	HILO	87	71	89	68	79	3	0.90	-1.30	0.85	5.96	44	63.04	71	93	60	0	0	3	1
	HONOLULU	86	75	87	74	81	0	0.02	-0.28	0.01	0.48	33	9.54	86	86	60	0	0	2	0
	KAHULUI	90	75	91	71	82	3	0.00	-0.15	0.00	0.61	82	1.43	13	80	53	4	0	0	0
	LIHUE	83	71	84	66	77	-3	0.55	-0.17	0.34	1.77	48	21.04	81	94	67	0	0	4	0
IA	BURLINGTON	65	38	76	30	52	-4	0.55	-0.17	0.44	5.96	116	22.35	69	90	37	0	3	3	0
	CEDAR RAPIDS	65	34	76	26	49	-3	0.66	-0.01	0.65	1.50	30	17.77	57	90	34	0	3	2	1
	DES MOINES	68	40	78	29	54	-1	0.08	-0.58	0.08	1.89	40	23.89	75	80	30	0	2	1	0
	DUBUQUE	62	36	72	27	49	-3	0.22	-0.46	0.14	0.87	16	23.46	71	93	40	0	3	3	0
	SIOUX CITY	70	32	84	22	51	-1	0.00	-0.56	0.00	0.79	19	11.91	45	80	26	0	4	0	0
	WATERLOO	66	36	77	28	51	-2	0.04	-0.61	0.04	1.42	30	28.45	89	82	32	0	3	1	0
ID	BOISE	77	47	78	44	62	7	0.00	-0.17	0.00	0.11	14	5.67	68	53	20	0	0	0	0
	LEWISTON	75	49	78	45	62	8	0.00	-0.22	0.00	1.35	129	10.99	111	78	31	0	0	0	0
	POCATELLO	72	34	76	29	53	5	0.00	-0.23	0.00	1.09	79	8.38	90	74	20	0	3	0	0
IL	CHICAGO/O_HARE	63	42	73	35	53	-3	0.76	-0.04	0.47	3.00	61	26.63	84	84	37	0	0	3	0
	MOLINE	65	38	76	32	51	-4	0.26	-0.38	0.23	3.99	85	26.54	81	87	37	0	2	2	0
	PEORIA	65	41	77	33	53	-3	0.14	-0.57	0.14	0.93	18	20.33	65	85	34	0	0	1	0
	ROCKFORD	63	38	72	31	50	-4	0.76	0.18	0.41	6.62	134	34.43	108	93	43	0	1	3	0
	SPRINGFIELD	67	40	79	33	53	-4	0.81	0.07	0.63	4.45	100	26.98	86	88	35	0	0	3	1
IN	EVANSVILLE	73	42	80	34	57	-3	0.03	-0.67	0.03	6.18	126	38.63	101	89	29	0	0	1	0
	FORT WAYNE	66	38	76	32	53	-2	0.19	-0.48	0.10	2.16	48	26.94	82	87	32	0	1	3	0
	INDIANAPOLIS	67	41	74	34	54	-3	0.02	-0.68	0.02	2.12	45	28.57	80	84	31	0	0	1	0
	SOUTH BEND	65	40	76	33	52	-1	0.57	-0.28	0.26	2.99	56	26.20	81	91	35	0	0	4	0
KS	CONCORDIA	78	45	86	40	61	4	0.54	0.08	0.54	2.58	65	18.94	74	72	23	0	0	1	1
	DODGE CITY	80	44	87	38	62	3	0.00	-0.49	0.00	2.66	115	10.89	56	77	21	0	0	0	0
	GOODLAND	76	40	85	36	58	4	0.00	-0.33	0.00	0.74	35	10.09	57	77	16	0	0	0	0
	TOPEKA	78	43	84	34	61	2	0.59	-0.06	0.59	1.80	35	26.52	83	87	25	0	0	1	1

Based on 1991-2020 normals

***** Not Available**

Weather Data for the Week Ending October 15, 2022

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	81	48	87	39	65	4	0.08	-0.58	0.06	0.74	16	24.91	82	82	26	0	0	2	0
KY	LEXINGTON	72	43	80	31	57	-2	0.17	-0.63	0.17	1.67	32	37.02	91	81	26	0	1	1	0
	LOUISVILLE	73	46	81	37	60	-2	0.00	-0.83	0.00	2.06	37	33.42	85	79	26	0	0	0	0
	PADUCAH	76	43	83	33	60	-2	0.19	-0.65	0.19	0.85	15	34.11	85	87	27	0	0	1	0
LA	BATON ROUGE	87	57	90	53	72	1	0.08	-0.98	0.08	0.94	14	33.65	67	93	35	1	0	1	0
	LAKE CHARLES	85	58	86	54	72	-1	0.41	-0.58	0.39	2.10	28	25.92	53	95	41	0	0	2	0
	NEW ORLEANS	84	64	88	59	74	0	0.18	-0.61	0.18	2.64	38	39.94	75	92	41	0	0	1	0
	SHREVEPORT	88	56	92	48	72	3	0.00	-0.96	0.00	2.27	40	37.65	94	83	32	2	0	0	0
MA	BOSTON	68	51	75	44	59	3	2.25	1.35	1.17	5.72	104	22.69	67	90	44	0	0	3	2
	WORCESTER	64	46	69	34	55	3	1.29	0.20	0.82	8.70	132	36.18	96	94	54	0	0	3	1
MD	BALTIMORE	71	44	76	36	58	-1	0.78	-0.10	0.78	7.60	118	38.96	107	94	39	0	0	1	1
ME	CARIBOU	60	39	67	27	49	3	1.79	0.88	1.74	3.72	69	31.67	100	89	55	0	4	2	1
	PORTLAND	61	41	66	32	51	-1	3.30	2.07	2.78	7.60	121	41.62	113	99	64	0	1	3	1
MI	ALPENA	58	34	74	30	46	-3	0.16	-0.53	0.15	1.96	45	22.57	93	94	48	0	4	2	0
	GRAND RAPIDS	62	39	75	36	51	-2	1.61	0.69	0.59	2.91	54	29.02	91	91	44	0	0	5	2
	HOUGHTON LAKE	57	35	73	26	46	-2	0.59	-0.13	0.46	3.49	85	21.97	93	95	53	0	2	4	0
	LANSING	64	41	76	39	52	0	0.68	-0.06	0.34	2.87	65	29.40	107	88	39	0	0	4	0
	MUSKEGON	62	42	72	38	52	-1	2.21	1.32	0.87	4.85	94	26.98	97	85	49	0	0	4	2
	TRAVERSE CITY	58	39	79	33	48	-3	1.35	0.47	0.80	6.84	131	22.88	98	89	54	0	0	4	1
MN	DULUTH	54	34	77	31	44	-2	0.40	-0.29	0.23	3.13	62	25.68	97	92	56	0	5	4	0
	INT_L FALLS	53	32	75	25	42	-1	0.33	-0.17	0.13	2.77	67	29.46	134	93	55	0	5	4	0
	MINNEAPOLIS	60	41	80	31	50	-1	0.13	-0.52	0.07	0.40	8	18.22	65	77	39	0	2	2	0
	ROCHESTER	61	35	77	26	48	-2	0.07	-0.48	0.04	1.09	22	31.11	102	86	42	0	3	2	0
	ST. CLOUD	59	36	81	29	47	-1	0.20	-0.44	0.10	2.23	50	20.99	84	92	47	0	4	3	0
MO	COLUMBIA	72	45	84	36	59	0	0.82	0.05	0.70	2.59	46	26.91	77	83	33	0	0	2	1
	KANSAS CITY	76	46	83	35	61	3	0.33	-0.46	0.31	1.15	19	27.31	79	74	25	0	0	2	0
	SAINT LOUIS	74	49	83	41	61	1	0.29	-0.38	0.18	2.00	45	40.66	119	73	30	0	0	2	0
	SPRINGFIELD	75	47	80	36	61	1	0.20	-0.52	0.14	1.34	22	31.89	87	81	31	0	0	3	0
MS	JACKSON	83	51	88	48	67	-1	0.31	-0.45	0.28	0.89	17	47.57	104	92	31	0	0	2	0
	MERIDIAN	81	49	85	45	65	-3	3.20	2.39	3.18	3.61	73	43.94	97	98	38	0	0	2	1
	TUPELO	81	48	85	42	65	-1	1.83	0.98	1.81	2.43	44	38.45	84	87	29	0	0	2	1
MT	BILLINGS	69	44	77	42	56	6	0.00	-0.35	0.00	1.52	71	13.24	105	70	26	0	0	0	0
	BUTTE	66	33	69	24	49	7	0.00	-0.20	0.00	2.05	136	8.61	76	82	22	0	5	0	0
	CUT BANK	67	35	73	27	51	7	0.10	-0.03	0.07	0.82	59	7.33	74	87	25	0	1	2	0
	GLASGOW	66	40	77	31	53	6	0.03	-0.20	0.02	0.87	54	7.03	58	69	29	0	1	2	0
	GREAT FALLS	67	37	74	30	52	5	0.23	-0.04	0.23	2.87	150	11.17	85	84	29	0	1	1	0
	HAVRE	69	36	80	32	52	6	0.03	-0.15	0.03	0.46	31	6.99	65	80	25	0	2	1	0
	MISSOULA	72	38	76	32	55	9	0.00	-0.25	0.00	1.41	94	7.76	69	84	29	0	1	0	0
NC	ASHEVILLE	70	44	79	37	57	-2	0.01	-0.72	0.01	4.29	73	37.77	94	95	43	0	0	1	0
	CHARLOTTE	74	50	79	44	62	-1	0.11	-0.60	0.11	4.85	90	31.75	90	92	45	0	0	1	0
	GREENSBORO	71	47	77	43	59	-3	0.09	-0.59	0.06	5.82	94	36.88	102	90	42	0	0	2	0
	HATTERAS	72	56	78	47	64	-5	0.35	-0.90	0.35	2.63	24	35.20	71	96	58	0	0	1	0
	RALEIGH	76	48	80	42	62	-1	0.10	-0.66	0.08	4.96	71	34.83	92	97	38	0	0	2	0
	WILMINGTON	76	55	81	49	65	-2	0.35	-0.81	0.35	5.39	47	35.69	69	96	51	0	0	1	0
ND	BISMARCK	62	34	76	29	48	1	0.01	-0.33	0.01	1.02	41	24.00	140	74	25	0	2	1	0
	DICKINSON	60	37	72	29	49	3	0.00	-0.28	0.00	0.16	7	13.70	95	70	29	0	1	0	0
	FARGO	57	35	77	28	46	-2	0.00	-0.52	0.00	0.51	13	17.78	84	78	41	0	3	0	0
	GRAND FORKS	57	35	76	28	46	0	0.04	-0.40	0.03	0.66	20	20.40	105	82	45	0	3	2	0
	JAMESTOWN	58	32	72	27	45	-1	0.00	-0.40	0.00	0.77	25	14.57	80	79	36	0	4	0	0
NE	GRAND ISLAND	75	40	85	34	58	3	0.00	-0.50	0.00	0.80	25	10.99	46	74	21	0	0	0	0
	LINCOLN	74	40	85	29	57	1	0.51	-0.02	0.50	1.48	36	17.95	69	77	25	0	2	2	1
	NORFOLK	72	36	85	22	54	1	0.00	-0.55	0.00	1.47	40	11.40	47	73	22	0	2	0	0
	NORTH PLATTE	74	33	87	28	54	2	0.00	-0.41	0.00	1.37	54	12.18	62	85	20	0	3	0	0
	OMAHA	72	40	83	31	56	0	0.35	-0.20	0.31	1.86	43	19.82	70	84	28	0	1	2	0
	SCOTTSBLUFF	71	36	82	33	53	3	0.00	-0.30	0.00	1.13	59	7.73	55	79	22	0	0	0	0
	VALENTINE	69	32	84	30	51	0	0.00	-0.34	0.00	0.21	8	9.66	50	78	23	0	5	0	0
NH	CONCORD	65	37	75	28	51	0	1.61	0.59	0.83	5.73	99	29.93	92	98	54	0	1	3	2
NJ	ATLANTIC_CITY	69	43	74	38	56	-3	0.36	-0.54	0.36	9.67	176	43.72	121	92	41	0	0	1	0
	NEWARK	69	46	73	37	57	-2	0.39	-0.45	0.38	6.44	114	29.38	79	90	41	0	0	2	0
NM	ALBUQUERQUE	74	48	79	46	61	1	0.21	0.00	0.16	1.11	68	7.37	100	75	25	0	0	2	0
NV	ELY	73	30	76	25	51	4	0.00	-0.18	0.00	1.59	158	5.31	69	59	13	0	5	0	0
	LAS VEGAS	89	67	90	65	78	6	0.00	-0.07	0.00	0.46	100	1.59	49	35	14	3	0	0	0
	RENO	82	46	83	42	64	8	0.00	-0.11	0.00	0.25	56	2.66	49	57	13	0	0	0	0
	WINNEMUCCA	81	32	84	27	56	5	0.00	-0.14	0.00	0.40	60	3.18	52	56	11	0	4	0	0
NY	ALBANY	67	40	71	36	54	1	1.56	0.63	1.26	7.43	131	36.86	113	97	47	0	0	3	1
	BINGHAMTON	61	40	67	33	50	0	0.80	-0.06	0.80	8.71	148	34.95	102	92	51	0	0	1	1
	BUFFALO	64	46	72	43	55	2	1.69	0.75	1.37	5.72	93	27.98	89	85	43	0	0	5	1
	ROCHESTER	64	41	73	37	52	-1	0.65	-0.09	0.60	3.44	72	22.42	80	94	45	0	0	3	1
	SYRACUSE	67	43	73	35	55	2	0.75	-0.13	0.71	4.72	90	27.99	89	84	42	0	0	3	1
OH	AKRON-CANTON	66	44	73	35	55	0	1.36	0.60	1.11	4.27	83	31.25	92	78	35	0	0	2	1
	CINCINNATI	69	43	78	35	56	-2	0.06	-0.68	0.03	1.97	42	38.97	106	85	29	0	0	2	0
	CLEVELAND	65	45	74	38	55	-1	1.57	0.77	1.57	5.00	88	33.76	102	78	36	0	0	1	1
	COLUMBUS	67	43	76	35	55	-1	0.17	-0.48	0.16	3.28	72	37.53	109	87	30	0	0	2	0
	DAYTON	68	44	75	36	56	-2	0.08	-0.58	0.08	2.20	46	31.52	93	76	27	0	0	1	0
	MANSFIELD	64	42	72	36	53	-1	0.63	-0.07	0.63	6.29	128	37.77	108	81	35	0	0	1	1

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

Weather Data for the Week Ending October 15, 2022

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	67	43	76	38	55	-1	0.06	-0.52	0.03	2.88	68	34.72	121	83	33	0	0	2	0
	YOUNGSTOWN	65	41	72	32	53	-1	0.92	0.16	0.73	3.74	68	35.57	106	86	38	0	1	2	1
OK	OKLAHOMA CITY	80	53	90	43	66	4	0.50	-0.25	0.38	2.20	41	18.95	60	88	35	1	0	4	0
	TULSA	80	53	87	46	67	3	0.40	-0.42	0.16	2.32	41	26.67	78	86	33	0	0	4	0
OR	ASTORIA	72	47	83	44	59	6	0.04	-1.33	0.04	0.77	14	42.42	95	99	57	0	0	1	0
	BURNS	78	32	80	27	55	8	0.00	-0.17	0.00	0.21	30	4.52	61	67	16	0	4	0	0
	EUGENE	81	43	86	39	62	8	0.00	-0.62	0.00	0.13	5	18.83	73	95	32	0	0	0	0
	MEDFORD	87	48	90	45	68	10	0.00	-0.23	0.00	0.52	56	7.69	66	75	17	2	0	0	0
	PENDLETON	77	48	83	44	63	10	0.00	-0.22	0.00	0.09	9	11.04	118	70	26	0	0	0	0
	PORTLAND	81	51	87	49	66	9	0.00	-0.68	0.00	0.31	11	23.19	98	87	35	0	0	0	0
	SALEM	81	48	92	45	65	9	0.00	-0.69	0.00	0.29	10	24.55	98	92	31	1	0	0	0
PA	ALLENTOWN	67	40	71	33	53	-3	1.56	0.57	1.56	7.87	111	37.94	99	95	43	0	0	1	1
	ERIE	63	46	73	41	54	-2	1.85	0.83	1.06	10.27	158	36.49	111	82	42	0	0	2	2
	MIDDLETOWN	69	44	73	37	57	-1	0.51	-0.35	0.51	6.61	97	32.80	91	92	43	0	0	1	1
	PHILADELPHIA	71	48	74	43	59	0	0.59	-0.19	0.59	6.46	105	30.48	85	93	40	0	0	1	1
	PITTSBURGH	64	40	71	35	52	-3	0.35	-0.28	0.20	4.57	97	31.04	95	84	38	0	0	2	0
	WILKES-BARRE	67	42	71	34	55	0	0.19	-0.67	0.18	8.21	136	33.86	108	94	43	0	0	2	0
	WILLIAMSPORT	67	42	70	34	54	0	0.90	0.05	0.90	7.44	111	30.26	85	96	47	0	0	1	1
RI	PROVIDENCE	69	47	73	38	58	2	1.60	0.67	1.01	9.31	150	33.57	92	95	48	0	0	2	2
SC	CHARLESTON	79	60	83	50	69	0	0.68	-0.42	0.42	8.54	99	43.74	97	95	53	0	0	2	0
	COLUMBIA	76	56	82	45	66	0	0.82	0.09	0.82	3.97	70	33.92	90	90	50	0	0	1	1
	FLORENCE	77	54	81	44	65	-2	0.08	-0.76	0.07	4.50	70	31.27	83	93	47	0	0	2	0
	GREENVILLE	73	48	81	40	60	-3	0.17	-0.64	0.17	5.18	92	40.89	103	90	45	0	0	1	0
SD	ABERDEEN	64	29	82	21	47	-2	0.00	-0.52	0.00	0.19	6	17.09	87	79	28	0	5	0	0
	HURON	67	35	85	28	51	1	0.00	-0.46	0.00	0.31	8	14.05	67	73	23	0	2	0	0
	RAPID CITY	67	37	77	30	52	3	0.02	-0.35	0.02	0.83	40	14.66	91	79	29	0	1	1	0
	SIOUX FALLS	67	37	84	27	52	0	0.02	-0.59	0.02	2.02	48	20.76	83	72	24	0	2	1	0
TN	BRISTOL	73	38	79	35	56	-3	0.00	-0.53	0.00	3.27	80	34.06	95	91	34	0	0	0	0
	CHATTANOOGA	75	45	83	40	60	-4	0.29	-0.45	0.20	3.30	55	41.53	96	88	34	0	0	2	0
	KNOXVILLE	76	43	83	37	59	-3	0.11	-0.44	0.10	2.50	51	40.51	98	88	33	0	0	2	0
	MEMPHIS	78	54	85	46	66	0	1.46	0.64	0.90	3.68	76	40.76	95	81	32	0	0	2	2
	NASHVILLE	77	48	83	38	62	-1	0.30	-0.41	0.29	1.69	31	41.68	102	76	25	0	0	2	0
TX	ABILENE	83	59	89	51	71	3	1.05	0.39	0.60	2.07	51	9.68	45	84	37	0	0	3	1
	AMARILLO	76	49	84	41	63	2	0.32	-0.12	0.32	2.70	101	13.90	79	85	32	0	0	1	0
	AUSTIN	92	68	98	64	80	6	0.00	-0.86	0.00	0.46	8	12.84	45	81	31	7	0	0	0
	BEAUMONT	86	63	87	57	74	1	0.68	-0.49	0.43	1.20	12	30.96	61	99	46	0	0	2	0
	BROWNSVILLE	92	72	94	67	82	3	0.03	-0.87	0.02	4.54	58	20.38	92	94	51	6	0	2	0
	CORPUS CHRISTI	92	71	98	69	82	6	0.00	-0.68	0.00	1.65	23	17.42	66	87	48	6	0	0	0
	DEL RIO	90	67	95	63	78	5	0.00	-0.50	0.00	1.32	34	5.57	32	78	35	3	0	0	0
	EL PASO	82	57	89	55	69	1	0.39	0.25	0.26	3.26	177	8.86	118	80	32	0	0	2	0
	FORT WORTH	87	63	95	56	75	6	0.00	-0.98	0.00	0.33	7	26.49	90	72	30	2	0	0	0
	GALVESTON	85	73	88	70	79	2	0.20	-0.95	0.13	3.00	33	24.88	69	89	53	0	0	2	0
	HOUSTON	89	62	94	60	76	3	0.00	-1.17	0.00	0.75	10	29.83	72	96	40	3	0	0	0
	LUBBOCK	75	52	84	46	64	0	0.75	0.39	0.52	1.90	56	11.49	71	85	43	0	0	2	1
	MIDLAND	80	56	87	51	68	0	0.22	-0.07	0.13	1.11	47	6.95	59	90	36	0	0	3	0
	SAN ANGELO	87	57	92	45	72	3	0.29	-0.26	0.23	2.07	55	7.79	44	87	32	2	0	2	0
	SAN ANTONIO	90	68	94	64	79	6	0.00	-0.87	0.00	0.94	16	7.94	30	83	34	4	0	0	0
	VICTORIA	93	65	97	60	79	5	0.04	-0.87	0.04	1.00	15	15.23	46	97	44	6	0	1	0
	WACO	92	61	100	48	76	6	0.00	-1.05	0.00	0.39	8	11.62	40	78	26	6	0	0	0
	WICHITA FALLS	85	56	94	48	70	4	0.18	-0.46	0.12	0.30	7	11.93	51	81	29	1	0	2	0
UT	SALT LAKE CITY	76	51	81	47	64	8	0.00	-0.28	0.00	0.78	47	7.04	58	55	20	0	0	0	0
VA	LYNCHBURG	73	43	78	36	58	-1	0.83	0.14	0.82	2.35	42	34.95	101	90	32	0	0	2	1
	NORFOLK	71	50	78	47	60	-5	0.31	-0.56	0.30	5.00	67	28.93	70	97	48	0	0	2	0
	RICHMOND	73	45	79	38	59	-3	0.06	-0.70	0.06	2.32	36	29.52	79	92	37	0	0	1	0
	ROANOKE	73	42	81	35	57	-3	0.20	-0.49	0.20	6.49	115	36.24	102	88	34	0	0	1	0
	WASH/DULLES	72	41	76	34	56	-2	0.61	-0.20	0.61	5.22	90	32.19	92	95	39	0	0	1	1
VT	BURLINGTON	64	40	71	33	52	0	1.78	0.87	1.35	8.11	144	31.63	103	94	43	0	0	4	1
WA	OLYMPIA	73	40	76	38	57	5	0.00	-1.01	0.00	0.13	3	31.96	101	98	42	0	0	0	0
	QUILLAYUTE	70	42	82	40	56	5	0.00	-2.19	0.00	1.07	12	60.84	92	99	54	0	0	0	0
	SEATTLE-TACOMA	71	51	75	49	61	6	0.01	-0.76	0.01	0.26	8	24.98	100	90	44	0	0	1	0
	SPOKANE	73	47	75	44	60	10	0.00	-0.27	0.00	0.54	48	9.95	88	76	25	0	0	0	0
	YAKIMA	78	42	81	39	60	9	0.00	-0.13	0.00	0.12	25	4.12	77	82	28	0	0	0	0
WI	EAU CLAIRE	59	37	77	32	48	-1	0.22	-0.37	0.13	2.52	50	17.63	61	89	48	0	2	2	0
	GREEN BAY	60	39	81	33	49	-1	0.80	0.17	0.73	4.15	90	26.93	101	86	52	0	0	3	1
	LA CROSSE	63	40	77	34	51	-2	0.09	-0.49	0.08	0.77	15	21.83	71	88	41	0	0	2	0
	MADISON	60	39	72	31	49	-2	0.34	-0.31	0.29	4.29	88	29.69	93	90	45	0	1	3	0
	MILWAUKEE	62	42	76	35	52	-2	0.70	0.04	0.55	6.92	150	30.03	103	84	46	0	0	2	1
WV	BECKLEY	64	39	71	30	52	-4	0.01	-0.58	0.01	4.93	109	40.70	113	88	42	0	2	1	0
	CHARLESTON	70	38	78	34	54	-5	0.03	-0.60	0.03	2.35	48	48.06	126	99	34	0	0	1	0
	ELKINS	67	32	73	27	49	-5	0.29	-0.41	0.29	4.71	93	47.61	121	96	40	0	5	1	0
	HUNTINGTON	70	40	79	32	55	-3	0.00	-0.66	0.00	2.15	46	38.81	105	88	29	0	1	0	0
WY	CASPER	66	32	75	27	49	2	0.00	-0.30	0.00	0.88	54	11.10	106	75	24	0	5	0	0
	CHEYENNE	66	36	75	32	51	3	0.00	-0.24	0.00	1.18	58	7.69	55	71	21	0	1	0	0
	LANDER	66	38	74	34	52	5	0.00	-0.35	0.00	1.78	102	11.20	100	68	25	0	0	0	0
	SHERIDAN	66	37	77	32	52	5	0.06	-0.33	0.04	2.93	123	16.39	126	79	33	0	1	2	0

Based on 1991-2020 normals

***** Not Available**

National Agricultural Summary

October 10 – 16, 2022

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the nation remained drier than normal, although parts of Michigan, New England, the southern Plains, Southeast, and Southwest recorded at least twice the normal amount of weekly precipitation. Some locations in Maine and along the border of Oklahoma and Arkansas received more than 4 inches of rain. Meanwhile, most of the western half of the U.S. recorded above-normal weekly temperatures. Parts of the Pacific Northwest and Montana recorded temperatures 9°F or more above normal. In contrast, much of the eastern half of the nation was cooler than normal. Portions of the mid-Atlantic, Midwest, and Mississippi Valley noted temperatures 3°F or more below normal.

Corn: Ninety-four percent of the nation's corn acreage was mature by October 16, three percentage points behind last year but 2 points ahead of the 5-year average. Forty-five percent of the 2022 corn acreage was harvested by week's end, 5 percentage points behind last year but 5 points ahead of the average pace. Harvest progress advanced 15 percentage points or more for the week in Illinois, Iowa, Minnesota, and South Dakota. On October 16, fifty-three percent of the nation's corn acreage was rated in good to excellent condition, 1 percentage point below the previous week and 7 points below the same time last year.

Soybeans: Nationally, leaf drop was 96 percent complete by October 16, two percentage points ahead of both last year and the 5-year average. Soybean harvest across the nation was 63 percent complete by October 16, five percentage points ahead of last year and 11 points ahead of average. Harvest progress advanced 15 percentage points or more for the week in 14 of the 18 estimating states. On October 16, fifty-seven percent of the nation's soybean acreage was rated in good to excellent condition, equal to the previous week but 2 percentage points below the previous year.

Winter Wheat: Nationwide, producers had sown 69 percent of the intended 2023 winter wheat acreage by October 16, equal to last year but 1 percentage point ahead of the 5-year average. Planting progress advanced by 20 percentage points or more during the week in Illinois, Indiana, Missouri, Ohio, and Oregon. Nationwide, 38 percent of the winter wheat acreage had emerged by October 16, four percentage points behind last year and 6 points behind average. Winter wheat emergence advanced by 15 percentage points or more during the week in Idaho, Michigan, Nebraska, South Dakota, and Washington.

Cotton: By October 16, eighty-nine percent of the nation's cotton had open bolls, 4 percentage points ahead of last year and 2 points ahead of the 5-year average. By October 16, thirty-seven percent of the nation's cotton acreage was harvested, 10 percentage points ahead of last year and 5 points ahead of average. Cotton harvest advanced 16 percentage points or more during the week in Arkansas, Missouri, Tennessee, and Virginia. On October 16, thirty-one percent of the 2022 cotton acreage was rated in good to excellent condition, 1 percentage point above the previous week but 33 points below the same time last year.

Sorghum: By October 16, eighty-nine percent of the nation's sorghum acreage was mature, 3 percentage points behind last year but 2 points ahead of the 5-year average. Fifty-seven percent of the 2022 sorghum acreage had been harvested by October 16, one percentage point behind last year but 8 points ahead of average. Sorghum harvest advanced 10 percentage points or more during the week in five of the six estimating states.

Rice: Nationally, 89 percent of the rice acreage was harvested by October 16, one percentage point behind both the previous year and the 5-year average. California showed an increase of 25 percentage points from the previous week.

Other Crops: Fifty-five percent of the nation's peanut acreage was harvested as of October 16, eighteen percentage points ahead of last year and 8 points ahead of the 5-year average. Peanut harvest advanced 10 percentage points or more during the week in seven of the eight estimating states. On October 16, sixty-two percent of the nation's peanut acreage was rated in good to excellent condition, 1 percentage point below the previous week and 9 points below the same time last year.

By October 16, sugarbeet producers had harvested 67 percent of the nation's crop, 29 percentage points ahead of last year and 13 points ahead of the 5-year average. During the week, sugarbeet harvest advanced 50 and 43 percentage points, respectively, in Minnesota and North Dakota.

By October 16, twenty-two percent of this year's sunflower crop was harvested, 6 percentage points behind last year but 3 points ahead of the 5-year average. Sunflower harvest advanced 11 percentage points or more during the week in all estimating states.

Crop Progress and Condition

Week Ending October 16, 2022

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
CO	90	80	95	87
IL	98	75	88	94
IN	97	84	92	92
IA	97	92	96	93
KS	99	95	97	96
KY	98	95	99	98
MI	92	75	86	81
MN	99	92	96	92
MO	99	93	97	98
NE	95	91	94	94
NC	100	100	100	100
ND	96	86	93	85
OH	94	71	84	84
PA	88	70	80	88
SD	96	87	97	88
TN	100	99	100	100
TX	100	99	100	95
WI	95	85	92	82
18 Sts	97	87	94	92

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

Corn Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
CO	43	19	27	34
IL	61	27	47	55
IN	44	27	39	42
IA	41	23	38	29
KS	74	61	73	64
KY	68	67	78	77
MI	31	16	22	21
MN	51	14	36	29
MO	73	53	67	65
NE	39	34	46	32
NC	93	88	91	92
ND	40	12	25	23
OH	24	15	24	25
PA	22	9	17	31
SD	48	28	44	29
TN	76	82	89	86
TX	90	85	88	82
WI	31	7	14	18
18 Sts	50	31	45	40

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	18	25	34	21	2
IL	3	4	20	53	20
IN	3	8	31	50	8
IA	2	7	26	51	14
KS	28	26	24	20	2
KY	11	16	32	36	5
MI	2	5	31	47	15
MN	3	7	28	48	14
MO	9	15	26	41	9
NE	18	18	25	32	7
NC	21	25	25	22	7
ND	2	7	33	52	6
OH	4	9	25	50	12
PA	1	10	31	47	11
SD	13	18	30	35	4
TN	16	27	32	24	1
TX	29	23	31	14	3
WI	0	4	18	57	21
18 Sts	9	12	26	42	11
Prev Wk	8	12	26	43	11
Prev Yr	4	10	26	45	15

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AR	91	85	91	92
IL	91	89	96	93
IN	97	91	96	95
IA	98	93	96	96
KS	89	82	90	90
KY	79	70	81	81
LA	94	99	100	98
MI	99	95	98	95
MN	99	96	99	98
MS	89	94	96	95
MO	87	88	94	84
NE	100	96	100	98
NC	85	80	90	81
ND	100	97	100	99
OH	94	92	96	93
SD	100	97	100	98
TN	86	85	93	90
WI	98	92	97	93
18 Sts	94	91	96	94

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AR	54	47	62	56
IL	50	31	55	58
IN	47	36	57	53
IA	68	55	74	49
KS	39	30	45	34
KY	35	31	48	40
LA	81	87	93	89
MI	39	32	49	43
MN	90	63	83	61
MS	63	73	84	74
MO	29	22	38	29
NE	74	54	76	57
NC	19	23	31	22
ND	80	53	76	61
OH	51	30	51	52
SD	84	56	82	56
TN	30	32	46	42
WI	57	37	56	43
18 Sts	58	44	63	52

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	5	8	28	49	10
IL	4	4	21	53	18
IN	3	8	31	49	9
IA	2	8	28	51	11
KS	25	26	28	19	2
KY	4	12	32	42	10
LA	20	26	34	19	1
MI	1	3	29	52	15
MN	2	6	28	52	12
MS	0	8	24	59	9
MO	5	11	33	43	8
NE	13	20	27	32	8
NC	2	5	31	57	5
ND	2	5	36	50	7
OH	3	9	27	49	12
SD	10	19	30	38	3
TN	2	10	39	38	11
WI	1	4	20	53	22
18 Sts	5	10	28	47	10
Prev Wk	5	10	28	47	10
Prev Yr	4	10	27	46	13

Crop Progress and Condition

Week Ending October 16, 2022

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AL	82	92	94	89
AZ	100	99	100	100
AR	100	99	100	100
CA	95	80	85	86
GA	86	87	92	92
KS	89	81	88	83
LA	100	100	100	100
MS	92	94	96	96
MO	95	98	99	97
NC	93	94	96	93
OK	89	89	93	90
SC	89	89	94	91
TN	84	80	93	94
TX	81	78	85	82
VA	96	96	97	96
15 Sts	85	84	89	87

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AL	16	24	33	28
AZ	31	24	33	26
AR	32	34	50	52
CA	32	20	30	21
GA	14	19	27	25
KS	3	16	26	4
LA	51	75	87	68
MS	30	54	63	48
MO	29	14	30	40
NC	17	17	26	21
OK	13	1	7	14
SC	8	17	26	21
TN	13	13	32	36
TX	34	35	40	33
VA	17	24	42	23
15 Sts	27	29	37	32

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	7	24	65	4
AZ	1	0	0	40	59
AR	6	5	15	51	23
CA	0	0	5	95	0
GA	1	6	27	55	11
KS	11	41	31	16	1
LA	6	17	44	31	2
MS	0	6	27	63	4
MO	6	6	28	57	3
NC	0	6	27	62	5
OK	43	7	46	4	0
SC	1	8	23	66	2
TN	3	10	33	47	7
TX	25	46	19	8	2
VA	0	1	21	76	2
15 Sts	17	29	23	26	5
Prev Wk	15	32	23	25	5
Prev Yr	1	4	31	53	11

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
CO	93	70	80	83
KS	87	70	83	84
NE	93	75	87	93
OK	92	76	90	85
SD	98	93	98	81
TX	100	100	100	94
6 Sts	92	80	89	87

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
CO	41	25	39	29
KS	42	25	39	28
NE	55	16	34	36
OK	46	30	40	44
SD	70	40	61	38
TX	91	95	98	87
6 Sts	58	46	57	49

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
ID	49	32	43	45
MI	44	30	34	36
MN	35	32	82	59
ND	29	36	79	61
4 Sts	38	33	67	54

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
CO	28	10	21	30
KS	38	14	32	24
ND	19	10	26	19
SD	33	7	18	17
4 Sts	28	9	22	19

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AL	38	43	58	53
FL	52	61	73	67
GA	35	47	59	50
NC	38	34	52	40
OK	17	5	15	26
SC	34	28	42	43
TX	23	18	25	19
VA	54	58	75	53
8 Sts	37	43	55	47

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	0	4	79	17
FL	1	5	43	51	0
GA	1	7	32	51	9
NC	1	2	24	68	5
OK	0	0	16	84	0
SC	0	1	15	72	12
TX	0	11	58	30	1
VA	0	1	16	80	3
8 Sts	1	6	31	54	8
Prev Wk	1	6	30	55	8
Prev Yr	0	3	26	60	11

Crop Progress and Condition

Week Ending October 16, 2022

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AR	32	8	23	32
CA	14	15	17	17
CO	91	85	95	91
ID	95	72	83	87
IL	47	16	39	51
IN	46	27	47	52
KS	73	50	64	66
MI	52	55	74	61
MO	33	12	34	30
MT	76	77	89	76
NE	92	86	94	92
NC	13	9	11	11
OH	57	37	66	66
OK	56	38	53	66
OR	55	47	71	65
SD	94	79	91	91
TX	63	58	70	63
WA	92	80	89	86
18 Sts	69	55	69	68

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AR	11	0	3	15
CA	2	0	2	3
CO	56	46	60	62
ID	56	23	40	50
IL	30	2	8	22
IN	21	5	11	22
KS	45	19	33	44
MI	39	21	37	37
MO	14	3	9	14
MT	48	50	63	48
NE	74	52	73	72
NC	4	1	3	3
OH	26	2	10	34
OK	35	20	30	46
OR	19	12	23	27
SD	50	38	54	64
TX	38	28	37	38
WA	57	46	64	57
18 Sts	42	26	38	44

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

Rice Percent Harvested

	Prev Year	Prev Week	Oct 16 2022	5-Yr Avg
AR	88	90	95	91
CA	91	35	60	74
LA	100	97	99	100
MS	90	86	89	92
MO	75	78	88	84
TX	100	99	100	100
6 Sts	90	81	89	90

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

Crop Progress and Condition

Week Ending October 16, 2022

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

Pasture and Range Condition by Percent
Week Ending Oct 16, 2022

	VP	P	F	G	EX		VP	P	F	G	EX
AL	3	21	42	34	0	NH	0	0	60	40	0
AZ	4	4	45	25	22	NJ	0	15	33	52	0
AR	34	29	27	10	0	NM	3	24	38	25	10
CA	25	20	35	20	0	NY	4	9	26	54	7
CO	13	24	29	30	4	NC	1	4	28	65	2
CT	0	0	100	0	0	ND	5	23	44	27	1
DE	2	38	43	11	6	OH	2	6	30	59	3
FL	4	15	26	35	20	OK	40	38	20	2	0
GA	5	18	42	32	3	OR	28	24	37	10	1
ID	10	28	29	33	0	PA	2	5	25	59	9
IL	17	18	36	27	2	RI	0	0	64	36	0
IN	9	23	43	23	2	SC	5	18	33	41	3
IA	13	24	34	26	3	SD	30	33	26	11	0
KS	47	29	18	6	0	TN	8	23	40	28	1
KY	15	33	35	14	3	TX	31	27	29	10	3
LA	11	20	26	32	11	UT	7	30	30	31	2
ME	0	0	0	100	0	VT	1	2	3	93	1
MD	4	12	32	46	6	VA	4	8	44	40	4
MA	0	0	65	35	0	WA	3	43	31	21	2
MI	3	17	37	37	6	WV	0	8	23	62	7
MN	6	15	30	40	9	WI	2	11	30	43	14
MS	6	21	36	35	2	WY	17	24	30	28	1
MO	25	39	24	12	0	48 Sts	23	25	29	19	4
MT	27	15	30	28	0						
NE	52	31	14	3	0	Prev Wk	22	24	31	19	4
NV	25	25	35	15	0	Prev Yr	22	23	30	20	5

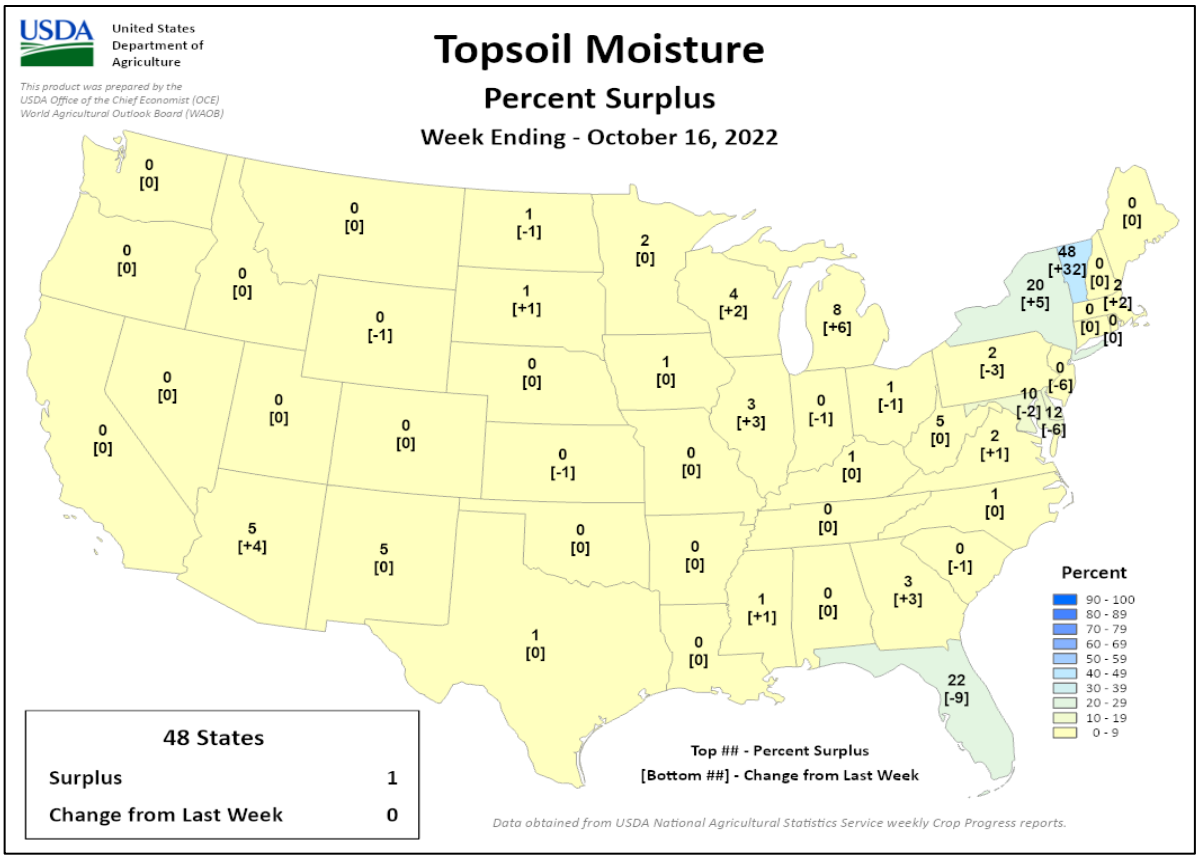
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

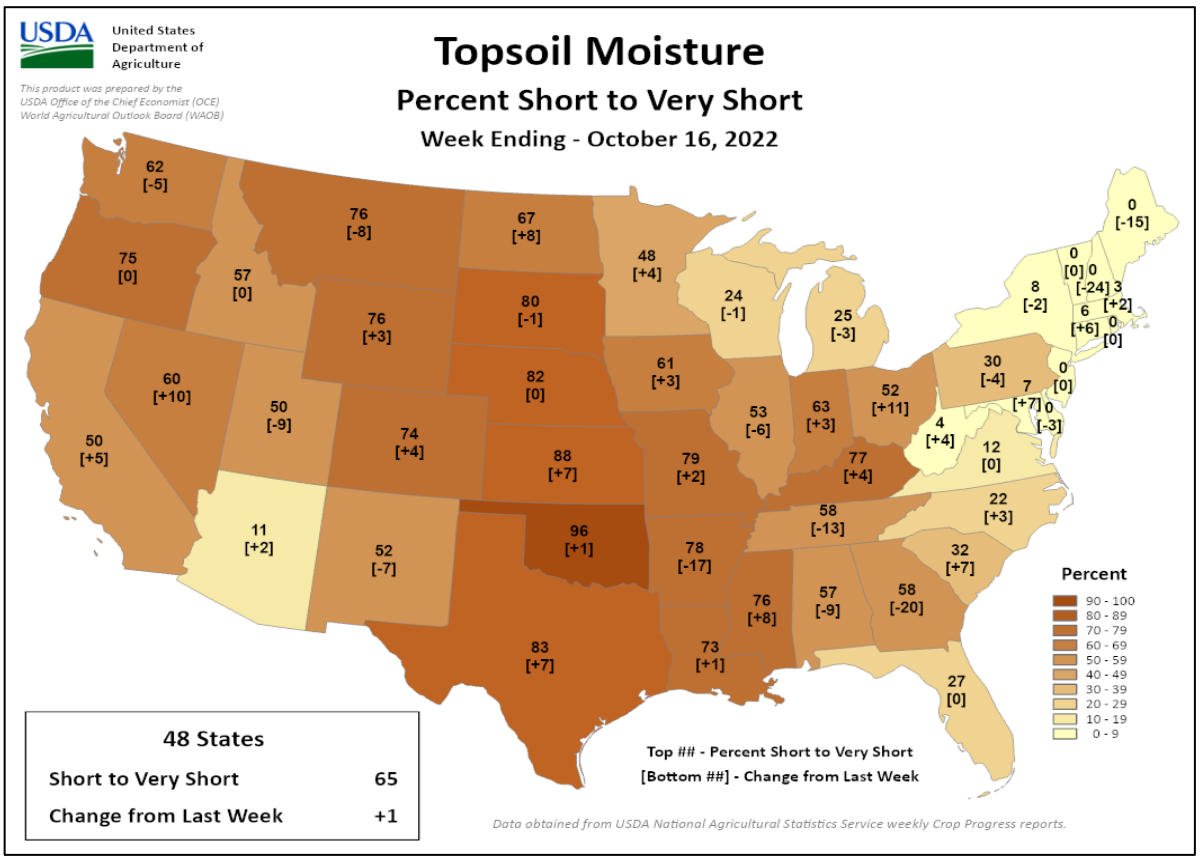
NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending October 16, 2022

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

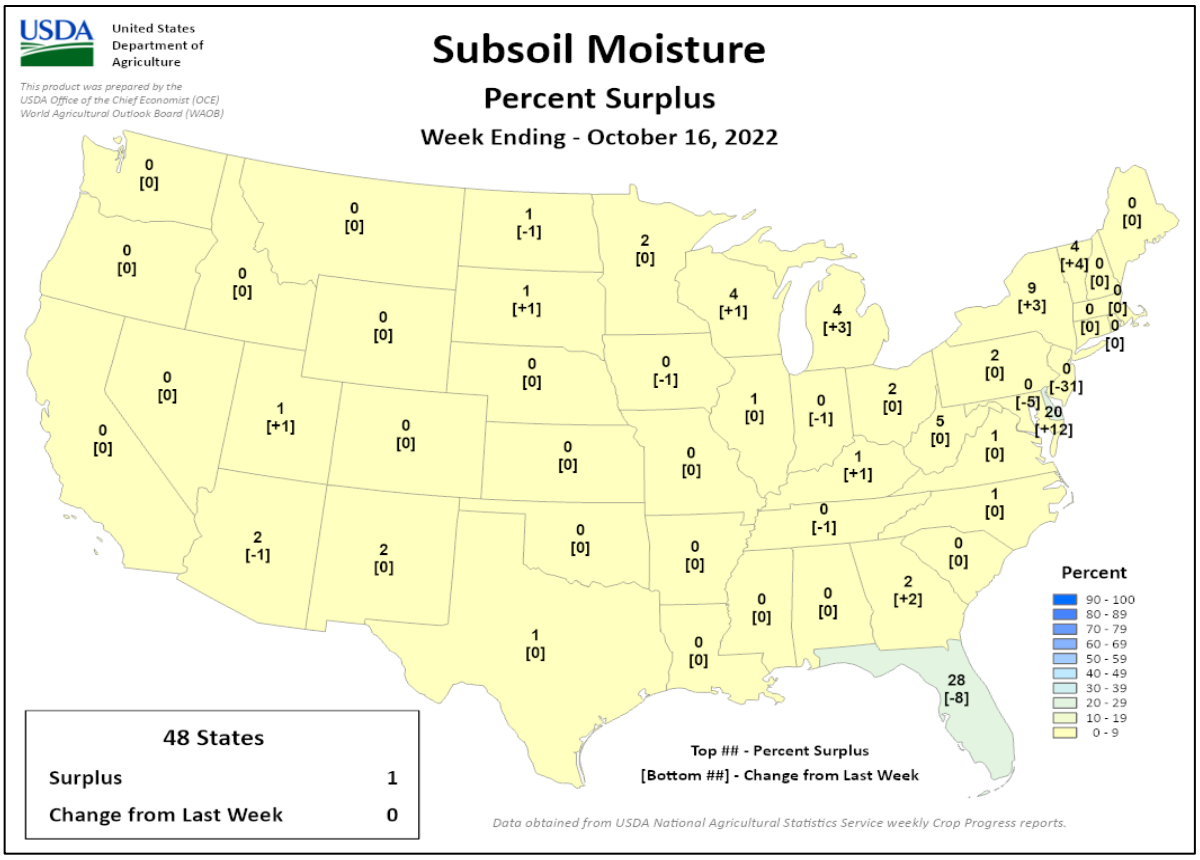


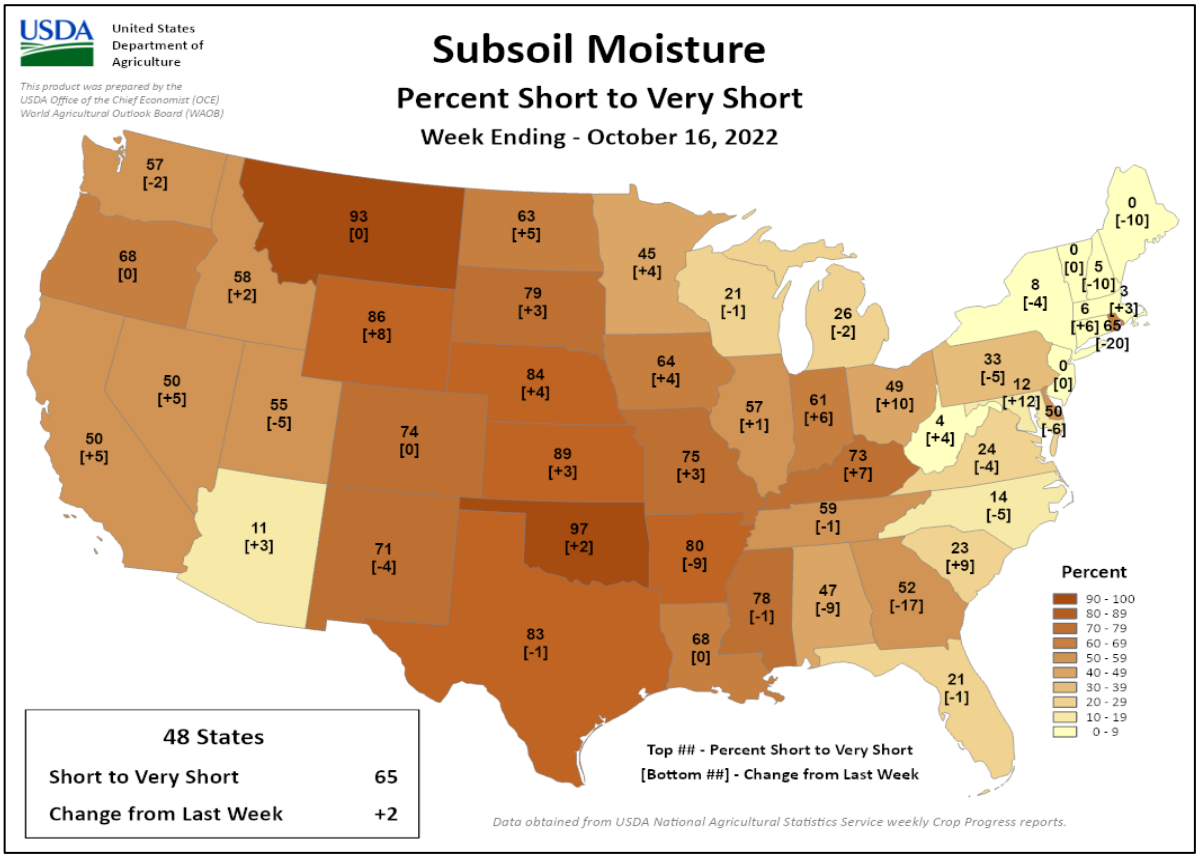


Crop Progress and Condition

Week Ending October 16, 2022

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





October 13 ENSO Diagnostic Discussion

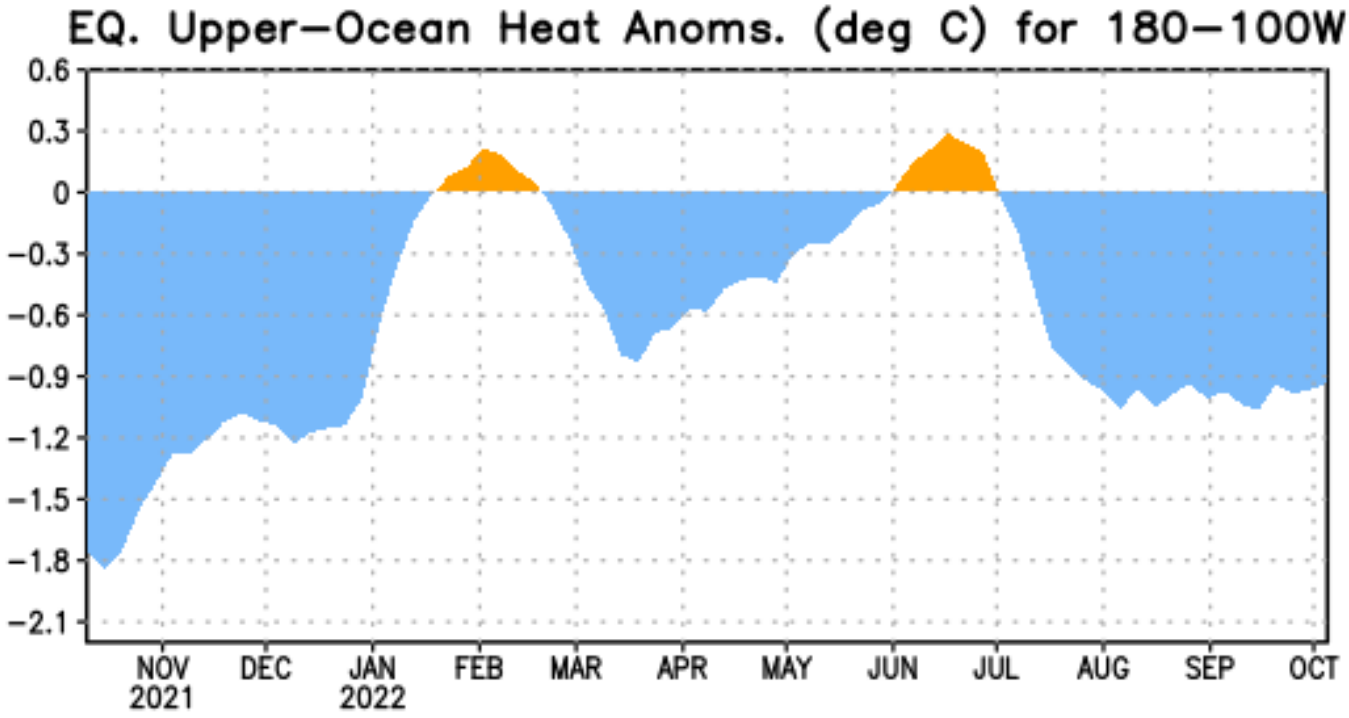


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: La Niña Advisory

Synopsis: There is a 75% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a 54% chance for ENSO-neutral in February-April 2023.

Below-average sea surface temperatures (SSTs) continued across the central and eastern equatorial Pacific Ocean during September. Most of the Niño indices decreased during the past month, with the latest weekly index values spanning -0.8ºC to -1.6ºC. For the last couple of months, negative subsurface temperature anomalies remained mostly unchanged (Fig. 1), reflecting the persistence of below-average temperatures across the eastern Pacific Ocean. Low-level easterly wind anomalies and upper-level westerly wind anomalies prevailed across most of the equatorial Pacific. Convection was suppressed over the western and central tropical Pacific and was enhanced over Indonesia. Overall, the coupled ocean-atmosphere system continued to reflect La Niña.

The most recent IRI plume forecast of the Niño-3.4 SST index indicates La Niña will persist into the Northern Hemisphere winter 2022-23, and then transition to ENSO-neutral in January-March 2023. The forecaster consensus for this month favors a slightly later transition to ENSO-neutral, during February-April 2023, which is consistent with the latest North American Multi-Model Ensemble (NMME). However, predicting the timing of transitions is challenging, and there continues to be uncertainty over how long La Niña may last. In summary, there is a 75% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a 54% chance for ENSO-neutral in February-April 2023.

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 **10 November 2022**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

October 9-15, 2022

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

HIGHLIGHTS

EUROPE: Widespread, locally heavy showers in western and southern portions of the continent contrasted with dry weather in eastern growing areas.

WESTERN FSU: Favorably dry weather promoted summer crop harvesting in western and central Ukraine, while rain returned to eastern Ukraine and much of western Russia.

MIDDLE EAST: Light showers in parts of Turkey moistened soils for winter grain planting and establishment, while seasonably dry weather prevailed elsewhere.

SOUTH ASIA: A slow withdrawal of the southwest monsoon allowed showers to continue in many parts of India, supporting most kharif crops.

EAST ASIA: Cool, dry weather supported fieldwork across eastern and southern China.

SOUTHEAST ASIA: A pair of tropical cyclones brought locally heavy showers to Vietnam and the Philippines.

AUSTRALIA: Soaking rain in the south and east kept winter crops well watered but caused local flooding and delayed fieldwork.

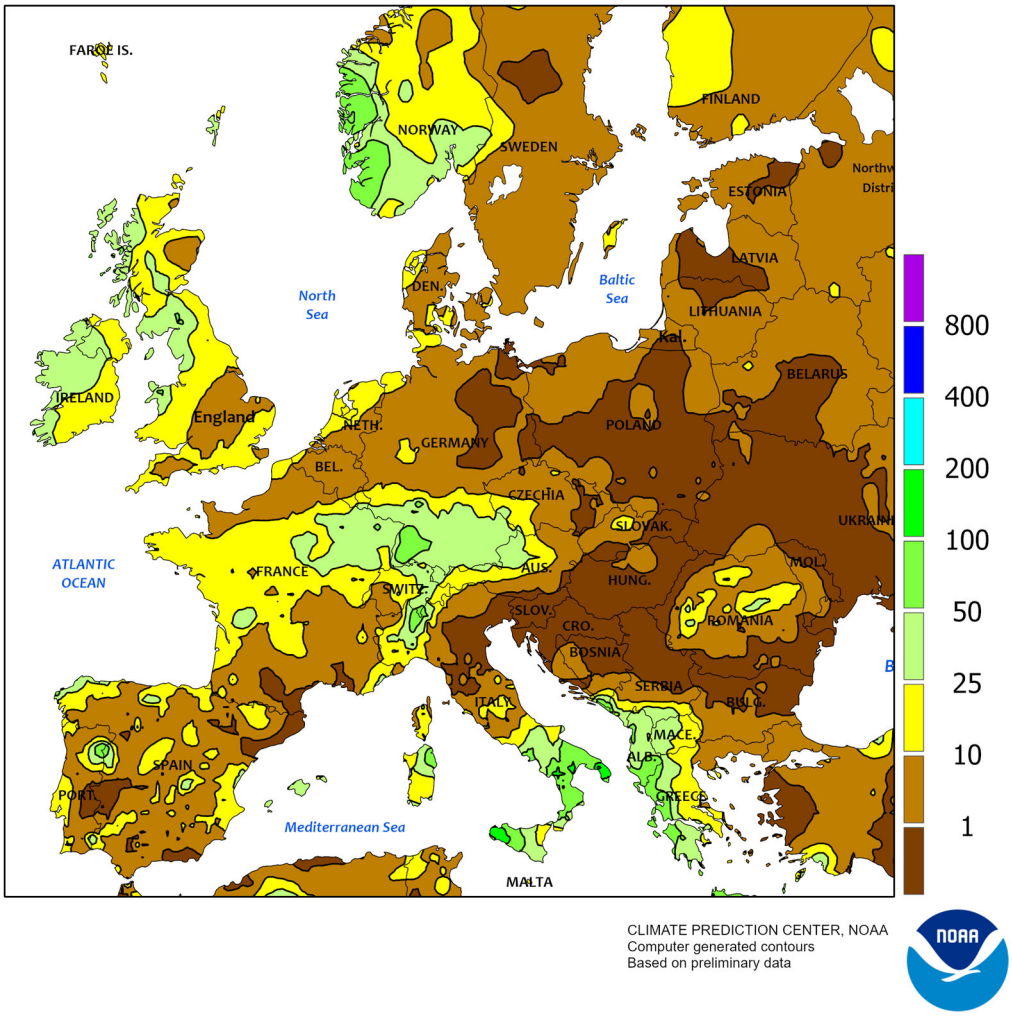
ARGENTINA: An untimely freeze raised concern for additional potential damage to winter grains in drought-stricken portions of central Argentina.

BRAZIL: Showers maintained favorable soybean prospects in southern and central Brazil.

MEXICO: Warm, sunny weather aided maturation of summer crops from the southern plateau northward.

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

EUROPE
Total Precipitation(mm)
October 9 - 15, 2022



EUROPE

Showers across western and southern Europe contrasted with dry conditions in eastern portions of the continent. Rain totaled 5 to 25 mm over much of England, France, southern Germany, and northwestern Italy, though amounts were higher near the coast as well as the elevated terrain of southern and central Europe. Highly variable showers were also noted in Spain, though the country's primary growing areas remained mostly dry. While moisture conditions have improved over recent weeks in many of these western growing areas, long-term drought impacts — such as unusually low reservoir levels and reduced river flows — lingered. Heavy showers (25-130 m) were reported over southern and western Greece, slowing or halting late cotton harvesting and raising quality concerns where rain was heaviest. Conversely, mostly dry weather across the rest of eastern Europe facilitated winter crop establishment after a wet September. Temperatures generally averaged near to above normal, with the greatest anomalies (2-4°C above normal) noted from Spain and southwestern France into the northern Balkans.

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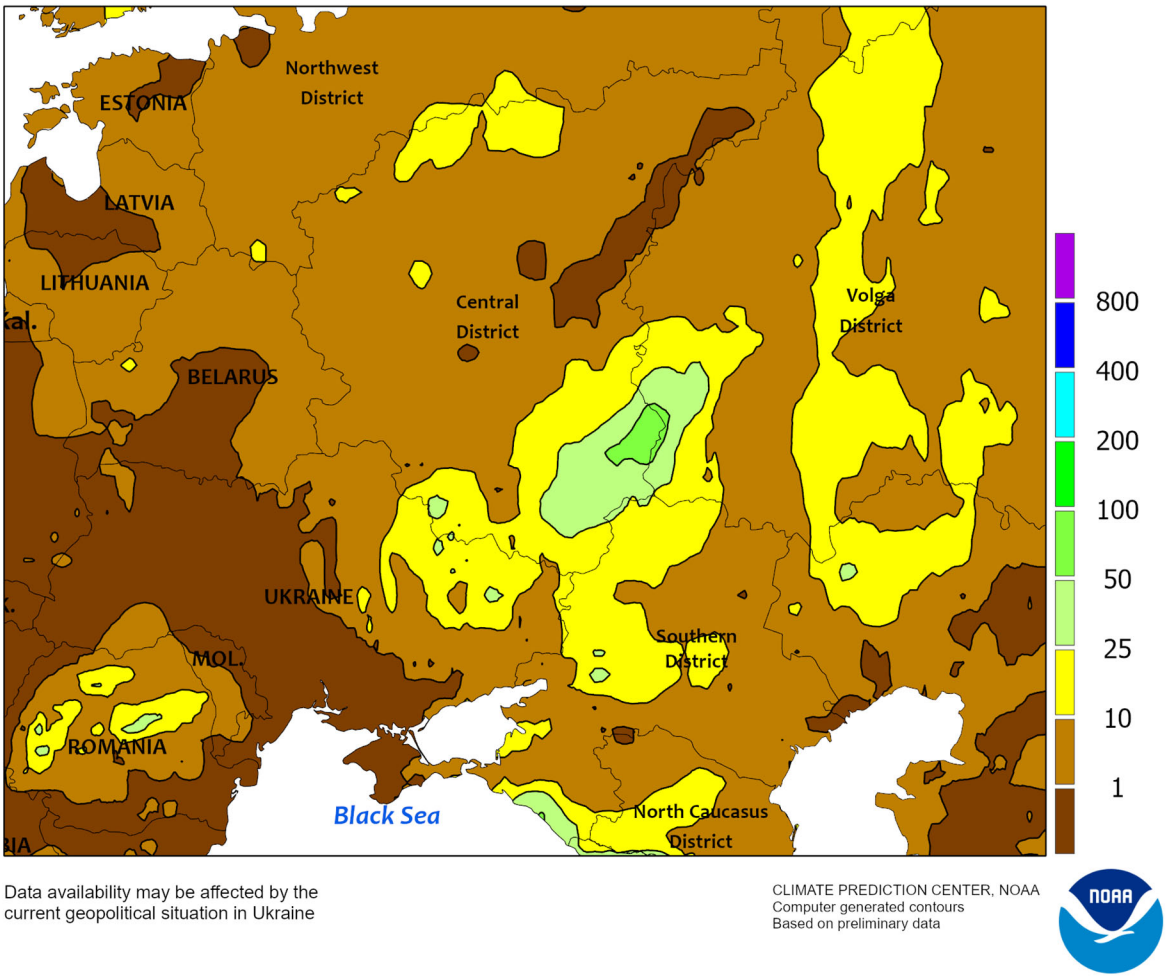
WESTERN FSU
Total Precipitation(mm)
October 9 - 15, 2022



Data availability may be affected by the current geopolitical situation in Ukraine

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

WESTERN FSU

Sunny skies facilitated summer crop harvesting in the west, while rain returned to central and eastern growing areas. Following a very wet September and early October, sunny skies across Moldova, Belarus, as well as central and western Ukraine allowed summer crop harvesting and other seasonal fieldwork to gain momentum. Conversely, a slow-moving storm system triggered widespread moderate to heavy showers (10-45 mm) from eastern Ukraine into Russia, slowing late summer crop harvesting but boosting moisture supplies for winter wheat establishment. Temperatures during the week averaged near normal, allowing winter grains and oilseeds to add vegetative growth prior to the onset of dormancy in late October or early November.

The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.

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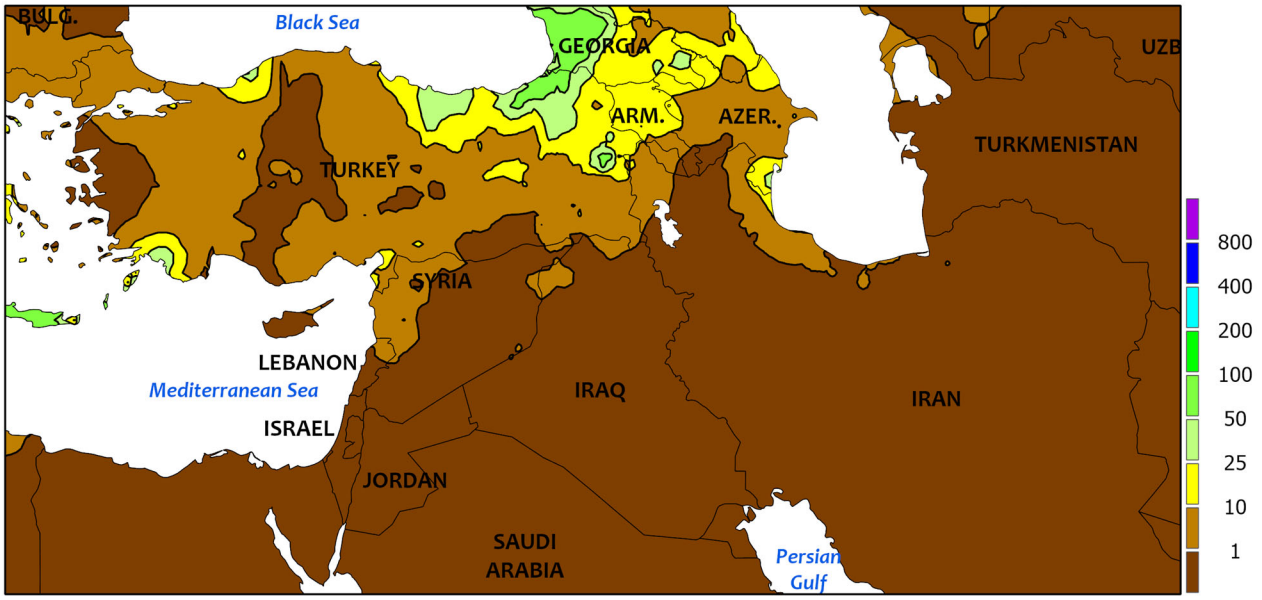
MIDDLE EAST
Total Precipitation(mm)
October 9 - 15, 2022



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

MIDDLE EAST

Scattered very light showers in Turkey contrasted with seasonably dry weather elsewhere. In Turkey, most of the country's primary growing areas reported 1 to 5 mm of rain for the week, though some locales were completely dry. The showers moistened soils where they were heaviest, but fieldwork was able to proceed without significant delay. Nevertheless, 5 to 40 mm of rain in the Armenian Highlands of eastern Turkey boosted irrigation reserves, while locally heavy showers lingered near the Black Sea Coast. Otherwise, seasonably sunny skies prevailed across the rest of the Middle East; agricultural activity remained in a lull before the onset of winter grain sowing in late October and November, coincident with the arrival of cool-season rains.

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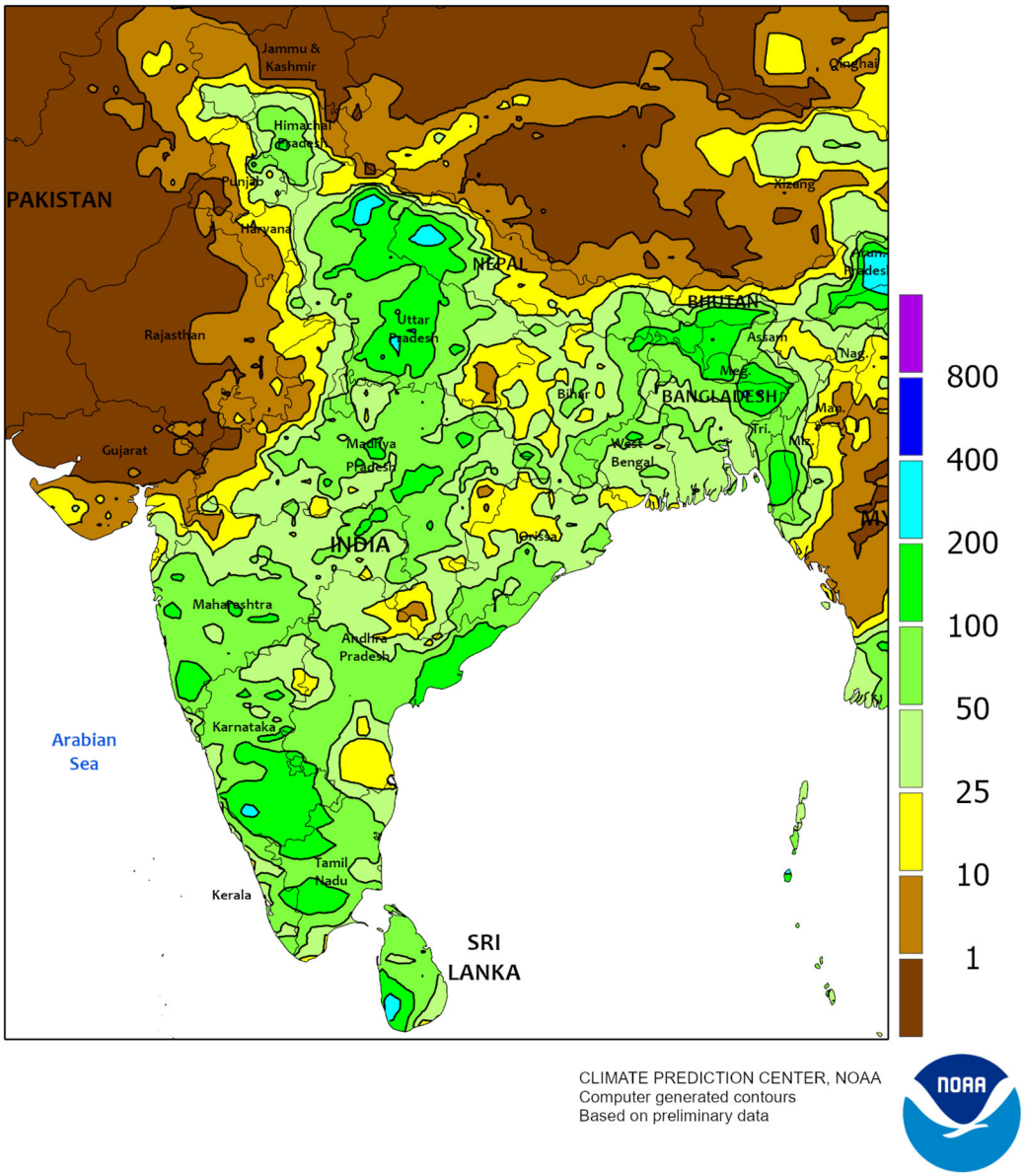
SOUTH ASIA
Total Precipitation(mm)
October 9 - 15, 2022

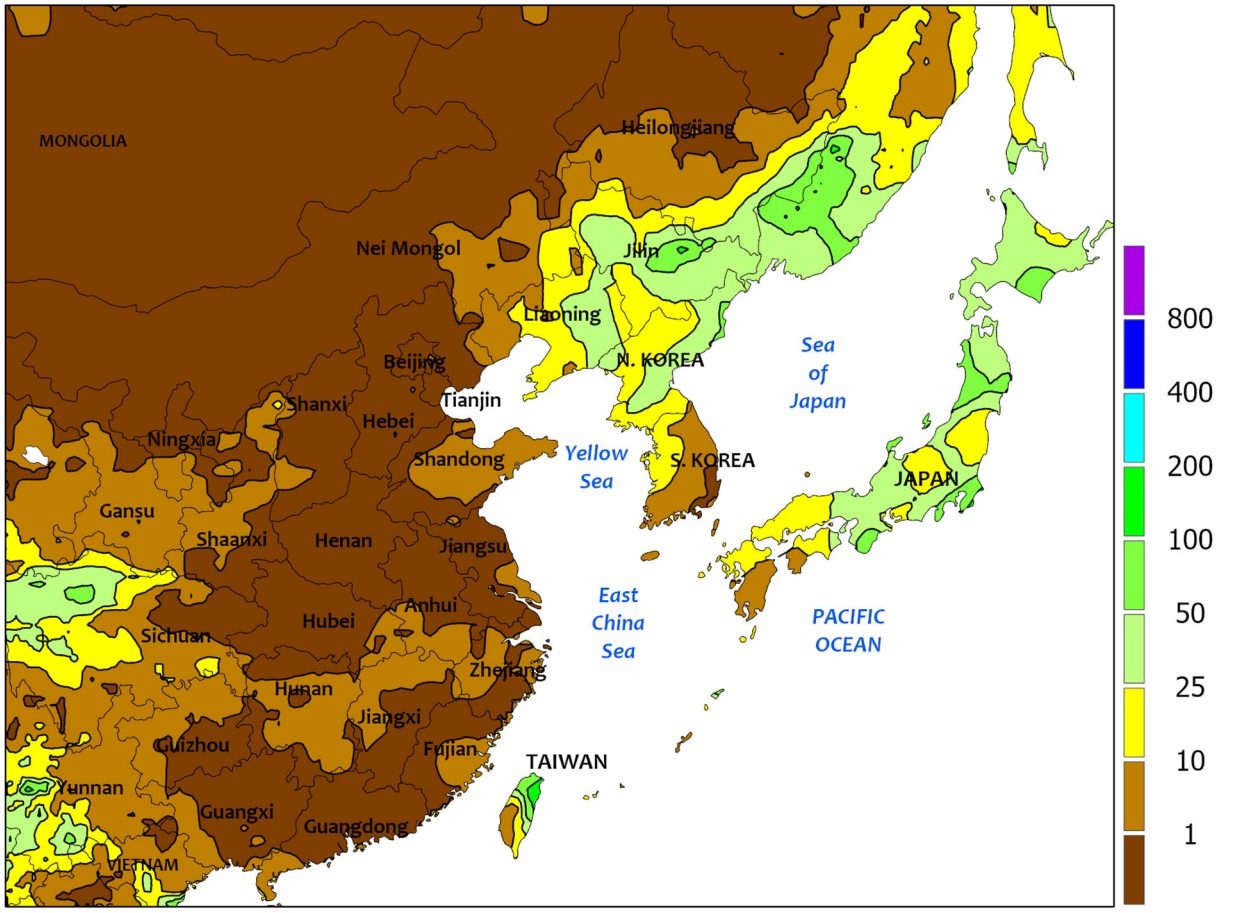


SOUTH ASIA

A slower-than-normal withdrawal of the southwest monsoon allowed showers to continue in many parts of India. Although most of the northwest was dry (including Pakistan), many other areas recorded 25 to 100 mm (or more) of rain. While the moisture benefited immature kharif crops in India, it was unwelcome for mature cotton and rice in the north. Nonetheless, drier weather began moving into northern growing areas by week's end. Typically, the southwest monsoon has fully withdrawn from the region by mid-October.

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

EASTERN ASIA
Total Precipitation(mm)
October 9 - 15, 2022



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

EASTERN ASIA

Mostly dry weather prevailed across China, supporting summer crop harvesting as well as winter wheat and rapeseed sowing in the east and south. One notable exception was lingering showers (10-50 mm) in portions of the northeast where usually wet autumn weather has occurred thus far; the wetness extended onto the Korean Peninsula and into Japan as well. Meanwhile, below-average temperatures (as much as 4°C below average) prevailed in most locales, with freezing temperatures extending into northern- and western-most sections of the North China Plain. While not detrimental to harvest activities, the cooler-than-normal weather slowed emergence of any early planted winter crops.

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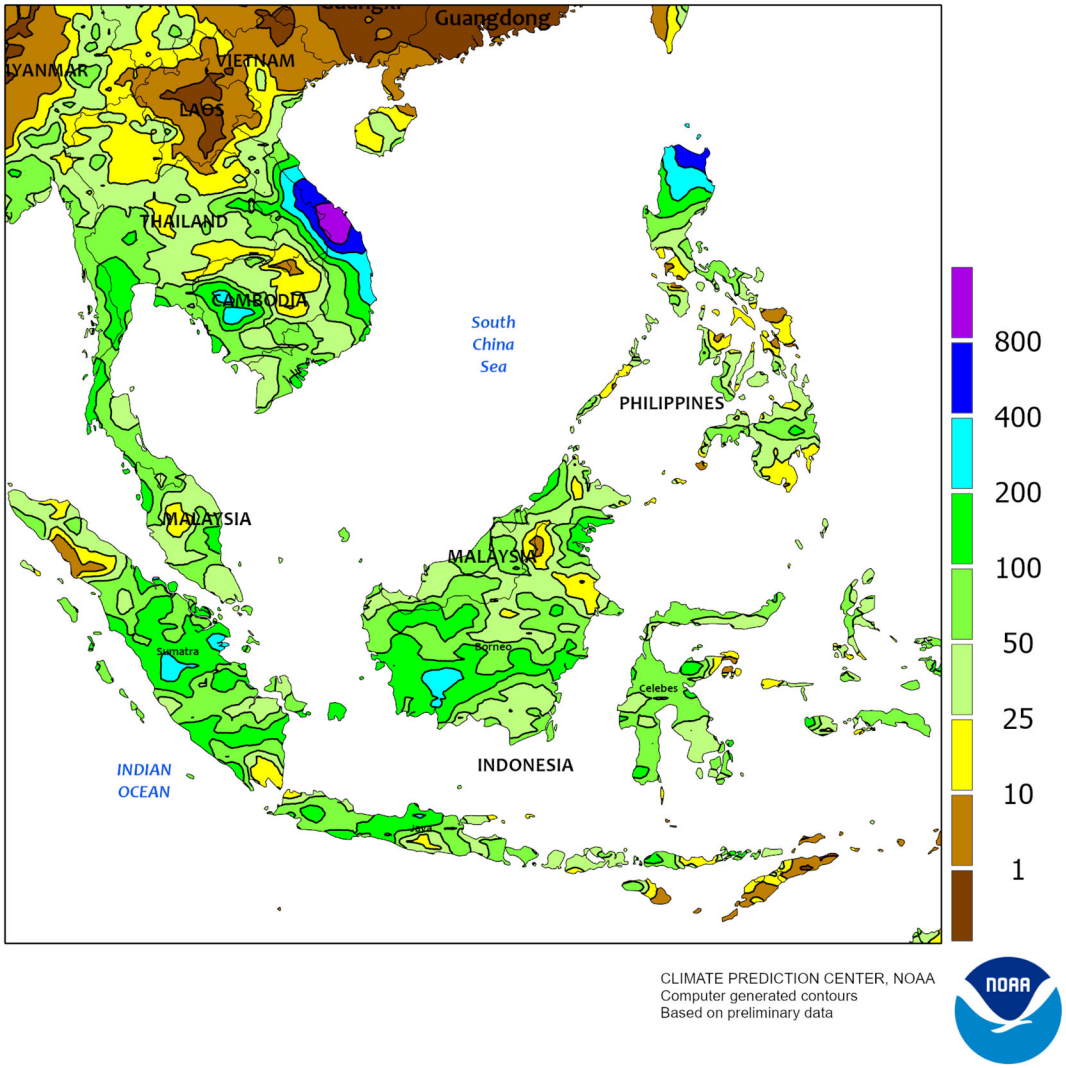
SOUTHEAST ASIA
Total Precipitation(mm)
October 9 - 15, 2022



SOUTHEAST ASIA

A pair of tropical cyclones moved through the area bringing downpours and localized flooding. The first tropical cyclone (Sonca, 35 kt maximum sustained winds) moved into central Vietnam toward the end of the week producing over 500 mm of rain, while Typhoon Nesat (45 kt maximum sustained winds) neared the northern Philippines by week's end with heavy showers (over 150 mm) already being reported. Rainfall from both storms generally avoided major rice areas but likely affected other minor crop-producing locales. Meanwhile, drier weather occurred in portions of northern Thailand and the surrounding sections of Indochina, benefiting ripening rice. Farther south, heavy showers (25-100 mm) slowed oil palm harvesting in Malaysia and nearby reaches of Indonesia but encouraged seasonal rice sowing and establishment. In fact, the rainy season across Java (Indonesia), a major rice producer, began nearly a month earlier than normal and is the earliest start since 2016.

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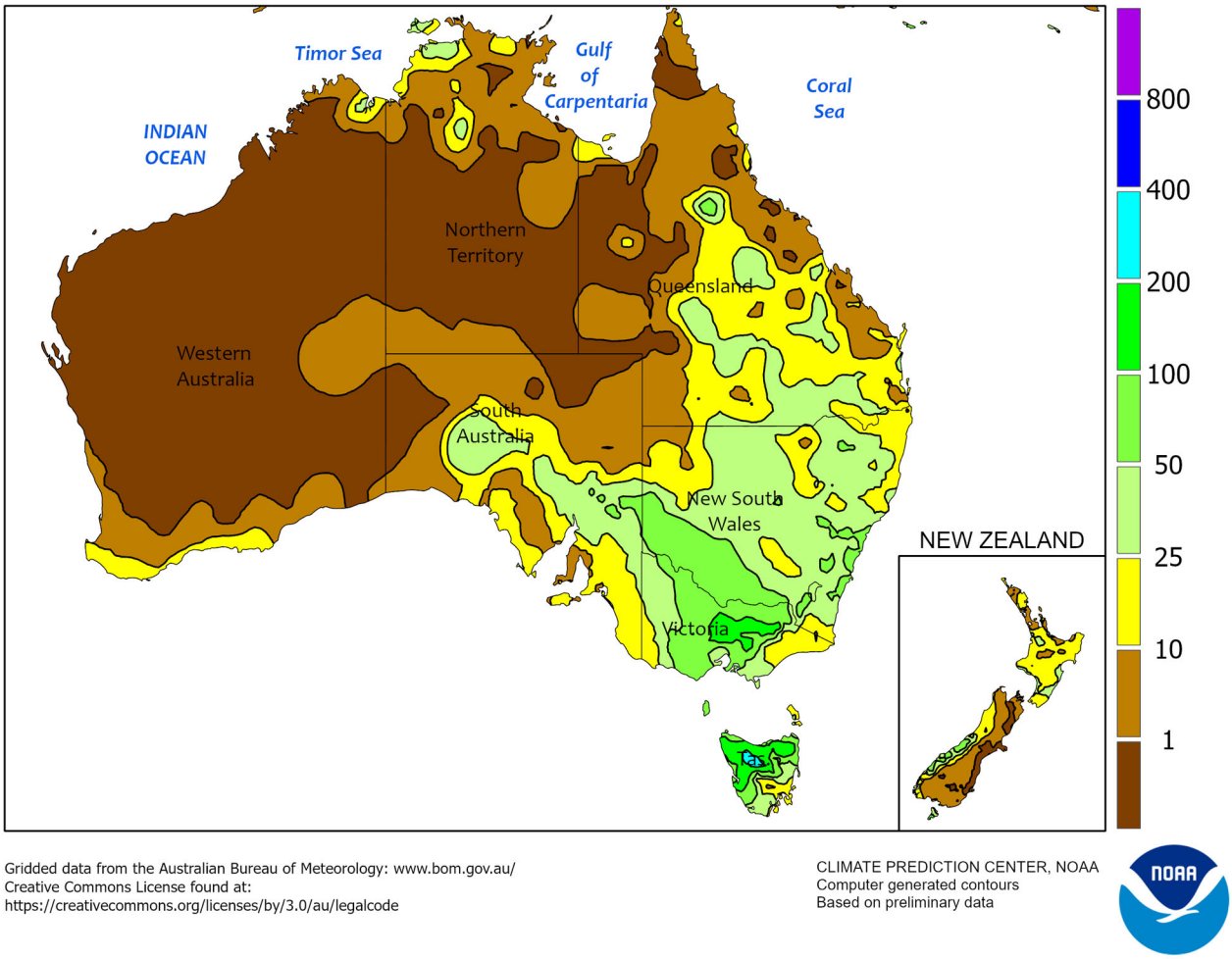

AUSTRALIA

Moderate to heavy rain (25-50 mm or more) fell across a large portion of southern and eastern Australia, keeping immature winter grains and oilseeds well watered but hampering drydown and harvesting of the earliest maturing varieties. The rain increased the risk of disease and raised concerns about crop quality as well while also causing local flooding and slowing summer crop planting. In contrast, aside from showers (5-15 mm) along the south coast, dry weather covered the Western Australia wheat belt. The sunny, mild weather benefited immature wheat, barley, and canola, while the showers in the south aided later-maturing crops. Temperatures averaged below normal (2-4°C below normal) throughout Australia's wheat belt, with maximum temperatures in the upper 10s to middle 20s (degrees C) in most areas.

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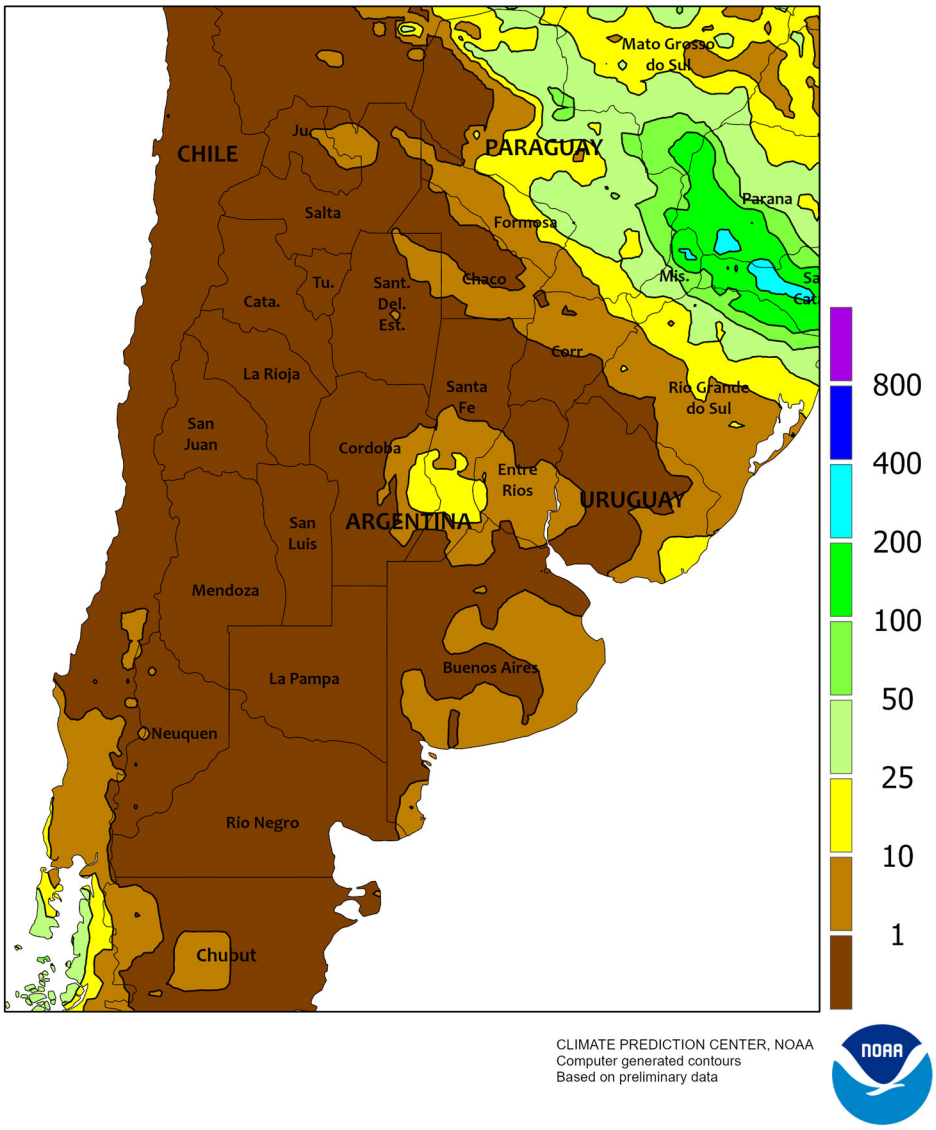
ARGENTINA
Total Precipitation(mm)
October 9 - 15, 2022



ARGENTINA

Unseasonably cold weather dominated the country, slowing winter grain growth and possibly damaging reproductive crops in southern farming areas. Weekly average temperatures ranged from 1 to 2°C below normal to as much as 6°C below normal in and around southern Paraguay. Nighttime lows dropped below freezing as far north as central Santa Fe. Most farming areas were dry, though pockets of moderate rain (greater than 10 mm) were scattered throughout the region. According to the government of Argentina, sunflowers and corn were 26 and 16 percent planted, respectively, as of October 13. Corn was just 6 percent planted in Buenos Aires, compared with 31 percent last year, due to the dry conditions. Visible damage was noted in several delegations from last week's freeze, but no quantitative estimates were provided.

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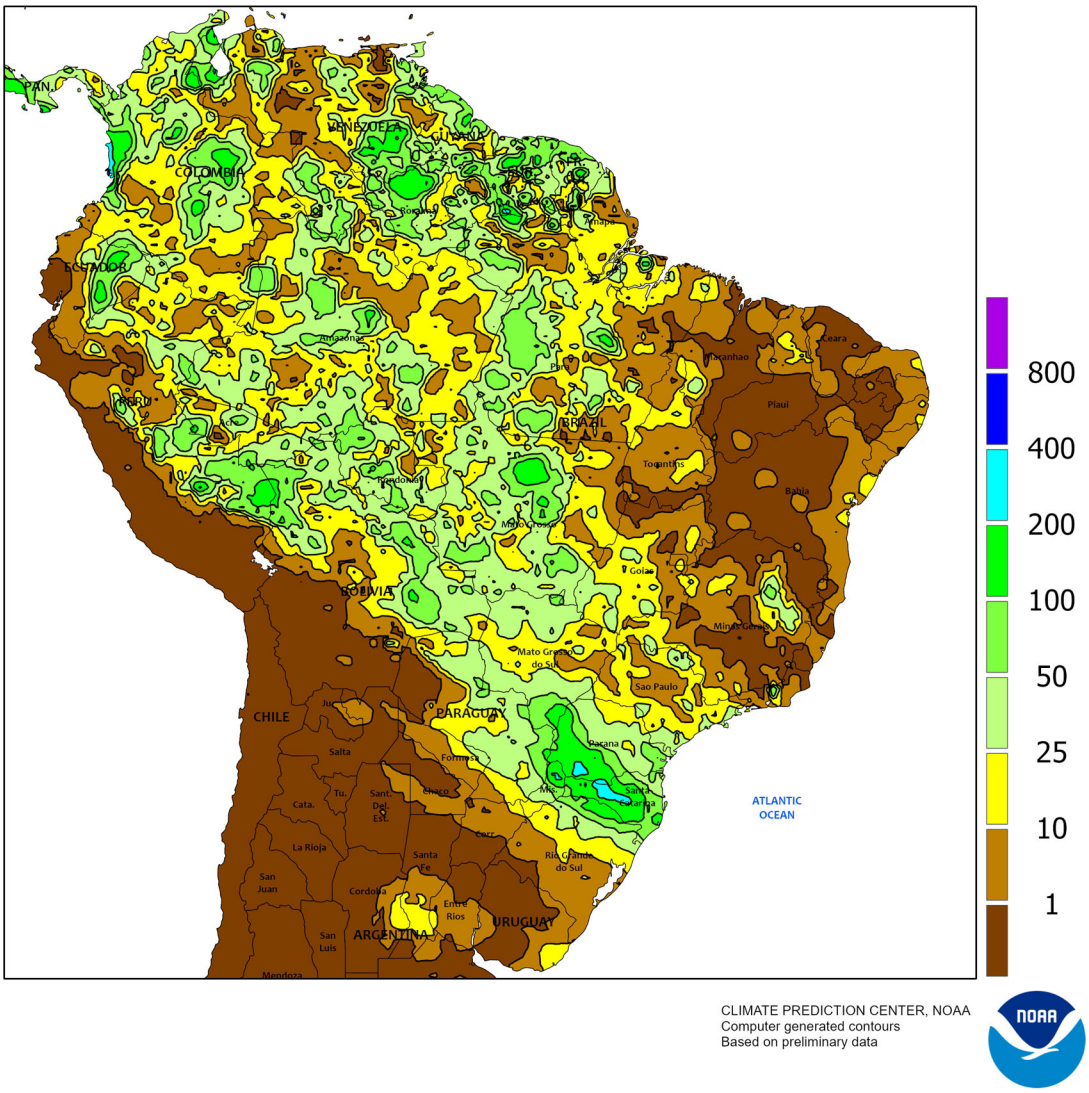
BRAZIL
Total Precipitation(mm)
October 9 - 15, 2022



BRAZIL

Showers maintained overall favorable levels of moisture for germination of soybeans and other main-season summer crops in key production areas of central and southern Brazil. Rainfall totaled 10 to 50 mm over a large area from Rio Grande do Sul northward through Mato Grosso. Similar amounts were recorded in Goiás, São Paulo, and Minas Gerais, but rain was patchy and generally lighter than in recent weeks. Drier conditions continued, however, in the northeastern interior (in and around western Bahia); summer heat (daytime highs approaching 40°C) maintained high evaporative losses from Mato Grosso eastward, and additional rainfall would be welcome as planting advances. According to the government of Mato Grosso, soybeans were 41 percent planted as of October 14, compared with 45 percent last year and the 5-year average of 24 percent. Seasonal fieldwork was also making good progress farther south; according to the government of Paraná, first-crop corn and soybeans were 75 and 26 percent planted, respectively, as of October 10; in addition, wheat was 50 percent harvested. In Mato Grosso do Sul, soybeans were 9 percent planted as of October 14.

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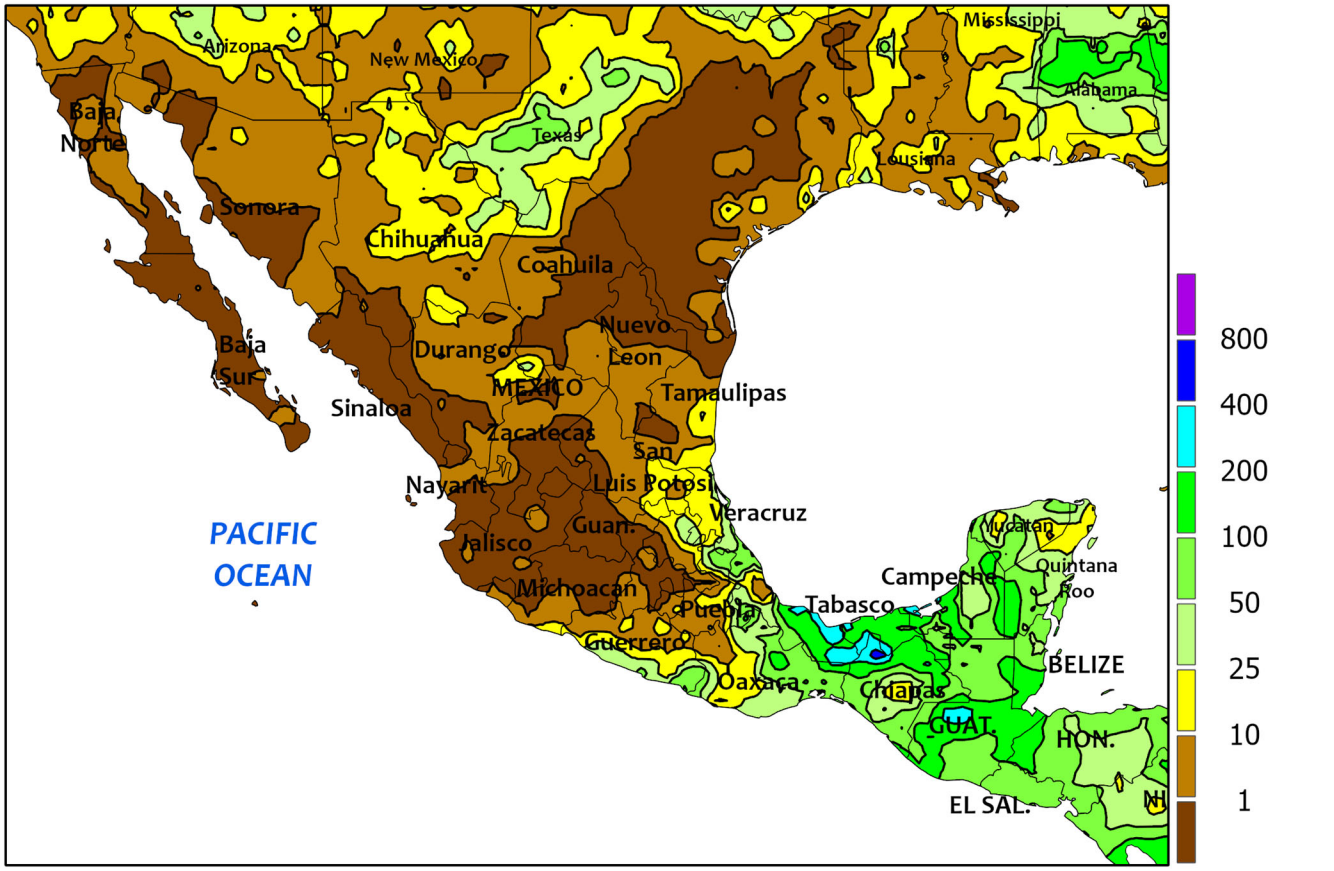
MEXICO
Total Precipitation(mm)
October 9 - 15, 2022



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

MEXICO

Following last week's wetness, warm, sunny weather aided maturation and drydown of summer crops in key rain-fed production areas. Dry weather dominated most of the region from the southern Plateau (Jalisco and Puebla) northward. Notable exceptions included northern Chihuahua and farming areas centered over southern Tamaulipas and northern Veracruz; although moisture in these locations came too late for most summer row crops, the late-season boost to local reservoirs was welcomed. Near- to above-normal weekly average temperatures — with daytime highs reaching the upper 30s (degrees C) in far northern production areas — helped to advance crops toward maturity, in conjunction with the sunnier weather. Elsewhere, locally heavy showers (50-200 mm, locally higher) concentrated over southern Veracruz and Tabasco maintained abundant moisture reserves for winter farming as the dry season approaches.

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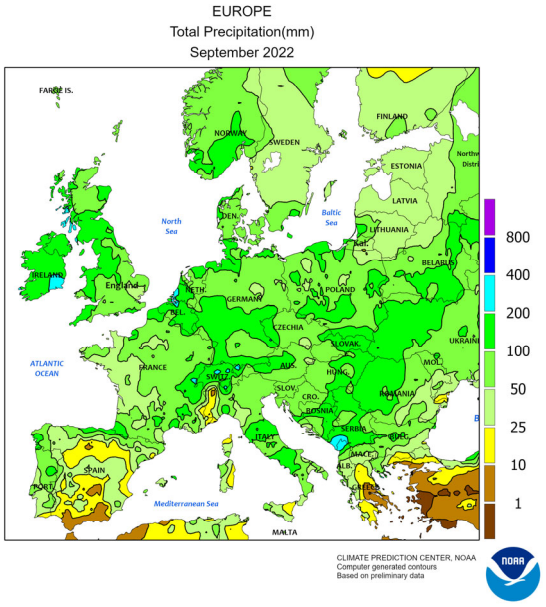
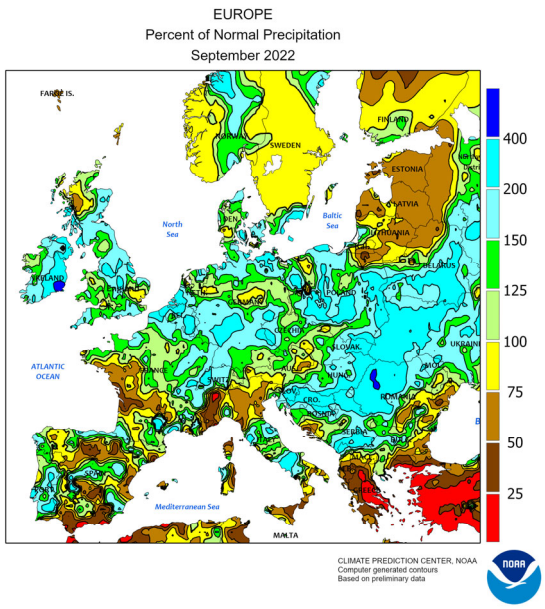
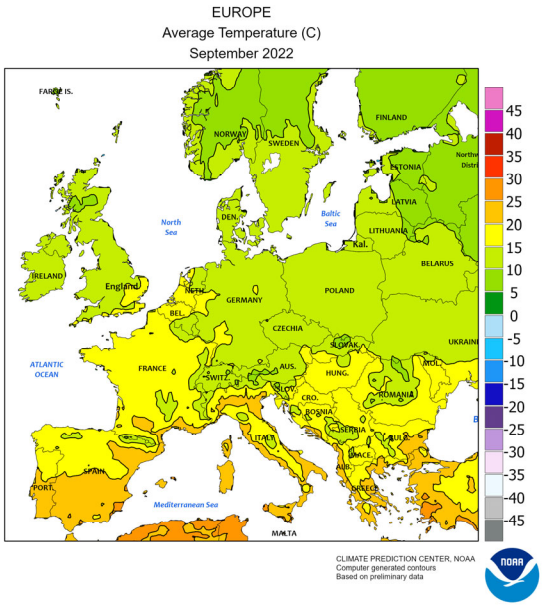
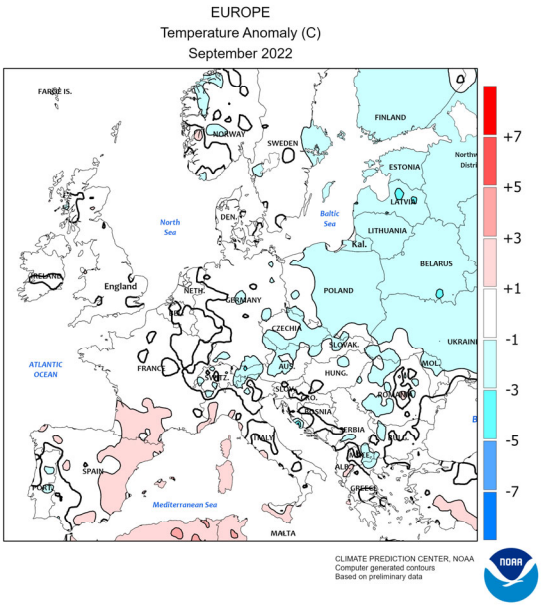
September International Temperature and Precipitation Maps









EUROPE

During September, very wet weather overspread much of the continent, with chilly conditions in the northeast and southwest contrasting with near-normal temperatures elsewhere. Rainfall totaled 50 to 200 mm over central and eastern Europe, representing 100 to locally more than 300 percent of normal. The moisture helped ease drought in Germany and erased drought concerns in the Balkans. Rain was highly variable in Spain and France, however, with pockets of excessive wetness (100-300 percent of normal) juxtaposed with little to no moisture (less than 25 percent of normal). Showers were likewise variable in southeastern England but mostly beneficial for winter wheat and rapeseed. Italy saw unfavorable dryness exacerbate year-long drought in the north, while rains soaked the southern peninsula (240-340 percent of normal); year-to-date rainfall in the Po River Valley (325 mm) stood at 55 percent of normal as of October 15, the second driest of the past 30 years and less than 10 mm above the driest (2003). Conditions were likewise highly divergent in Greece, with wet weather in Macedonia (up to 240 percent of normal) giving way to very dry conditions in western and southern Greece. Temperatures averaged near normal over most of the continent, though chilly readings (2-4°C below normal) were noted in southwestern Spain as well as Poland and the Baltic States.

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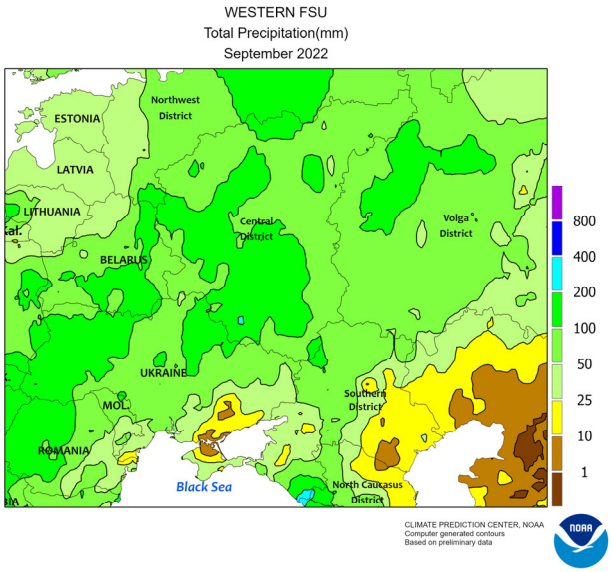

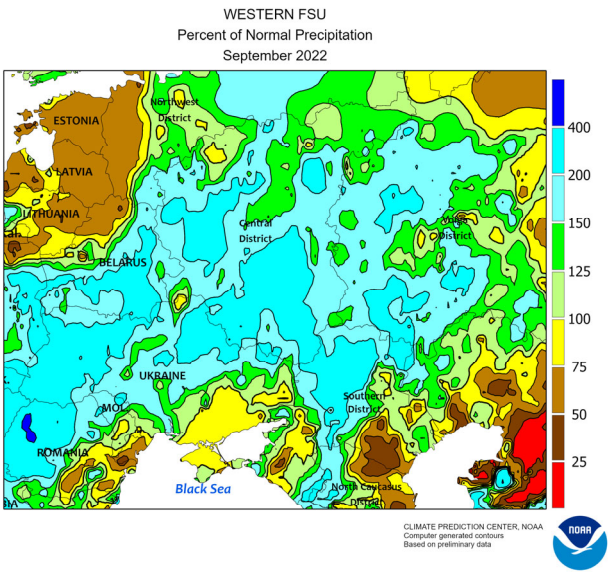

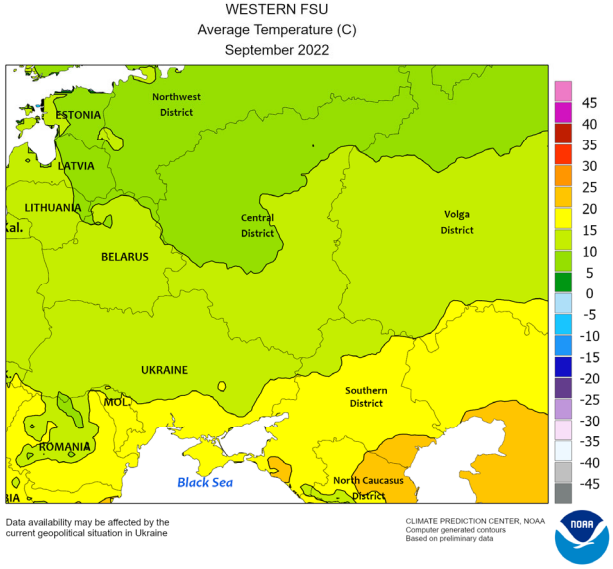

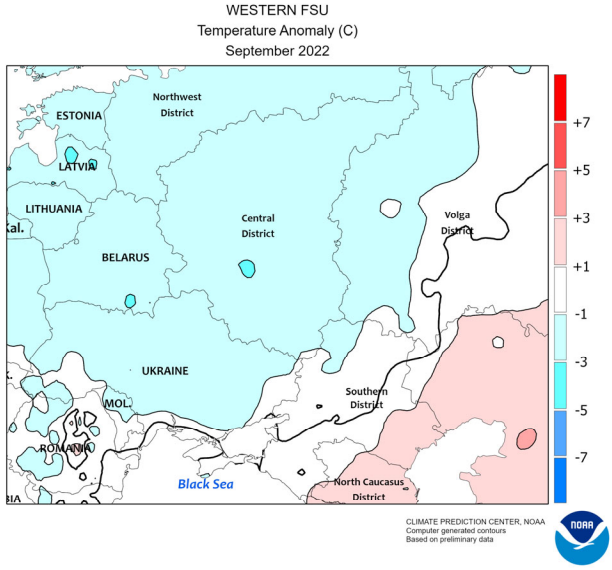

WESTERN FSU

Wet and chilly conditions overspread much of the region during September. Moderate to very heavy rainfall (65-135 mm, locally more than 300 percent of normal) fell from Belarus and western Ukraine eastward into much of western and southern Russia, slowing or halting summer crop harvesting and other seasonal fieldwork but boosting moisture supplies for winter crop establishment. However, somewhat drier conditions (70-100 percent of normal) were noted near the Black Sea Coast, allowing fieldwork to proceed with only minor delays in these southern growing areas. Temperatures during the month averaged 2 to 4°C below normal over the northern two thirds of the region, while near-normal readings were noted in the south.

The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.

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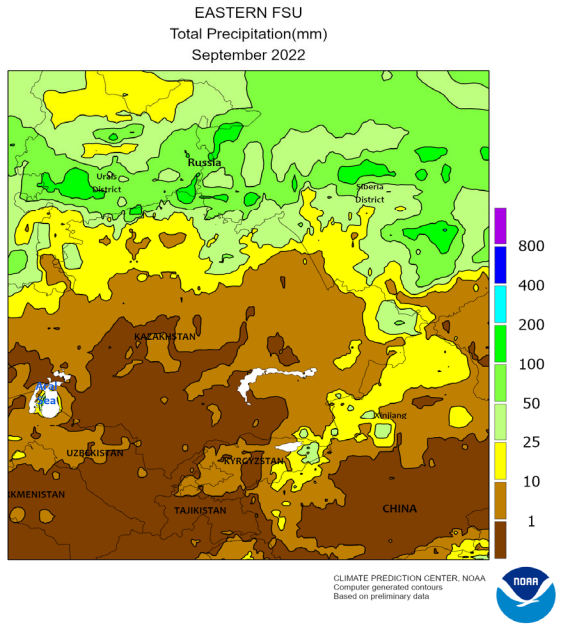
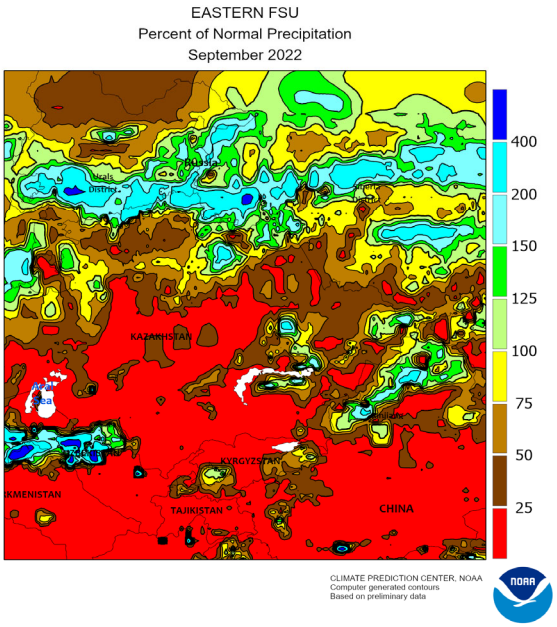
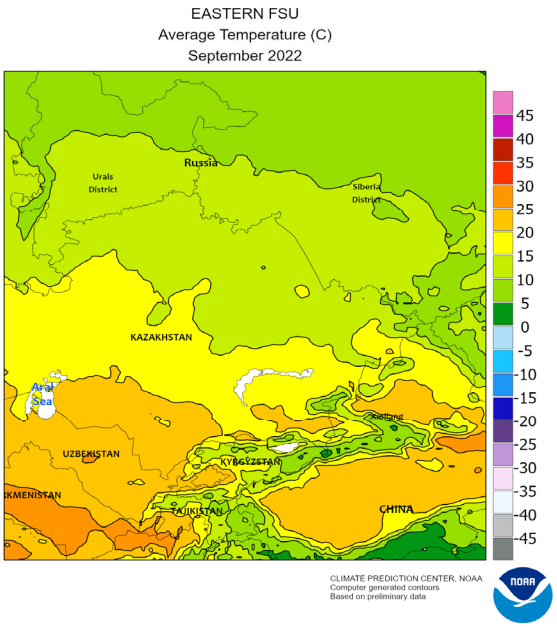
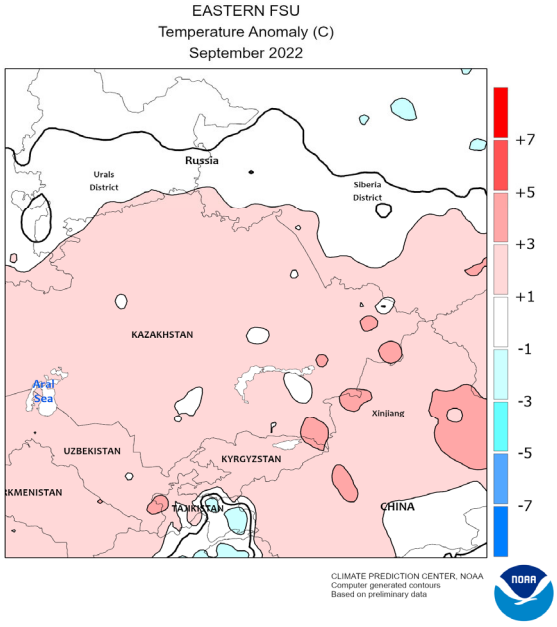


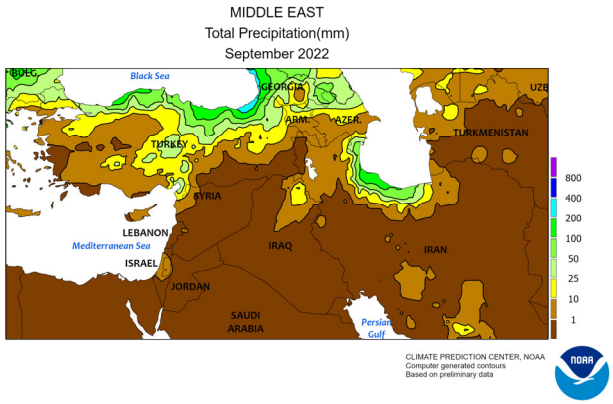


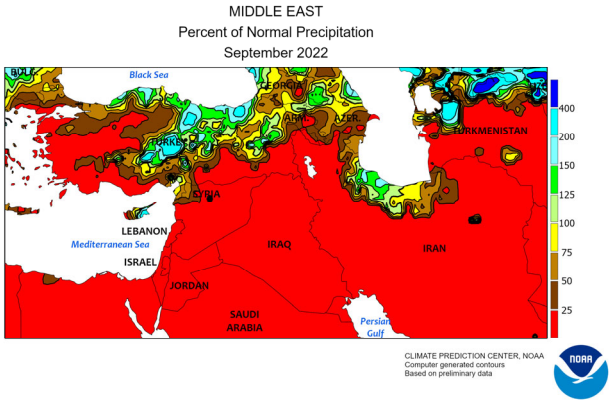


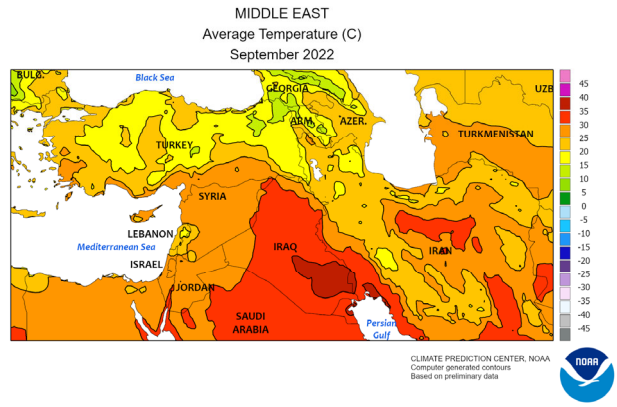


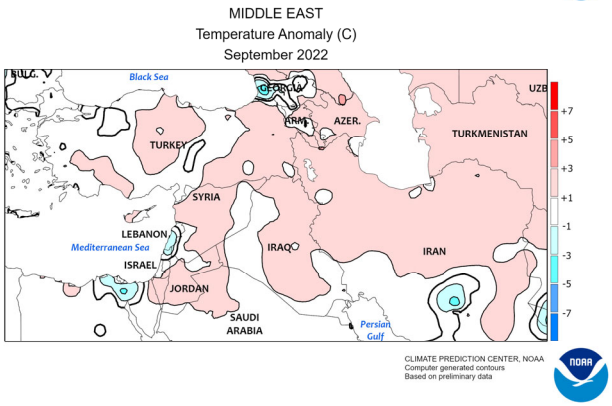
EASTERN FSU

Variable rainfall in the north gave way to a dry start to the 2022-23 Water Year in the south. Across northern Kazakhstan and central Russia, rainfall during September ranged from less than 50 percent of normal in northwestern Kazakhstan and the southwestern Siberia District in Russia to more than 100 percent of normal in northeastern Kazakhstan and adjacent portions of central Russia. The region's spring grain growing campaign has ended and agricultural activity shuts down during the autumn as the bitterly cold winter months approach. Across Uzbekistan, Turkmenistan, Tajikistan, and Kyrgyzstan, dry and very warm weather (up to 4°C above normal) signaled an inauspicious start to the water year, though most of the cold-season rain and snow falls from November through May.



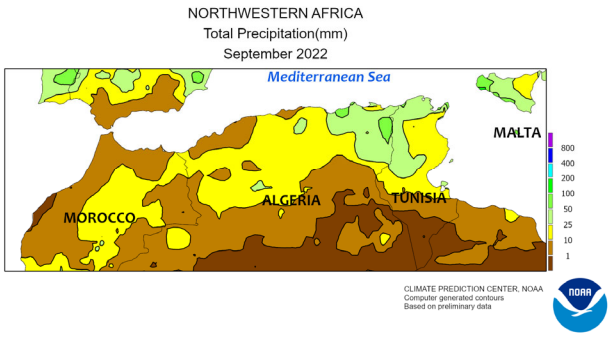


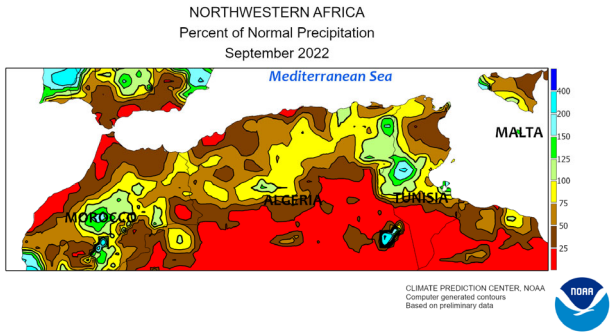


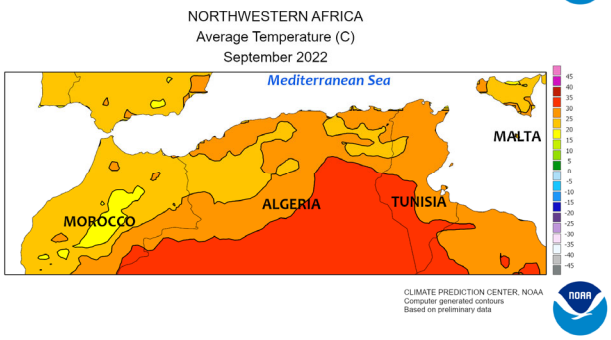


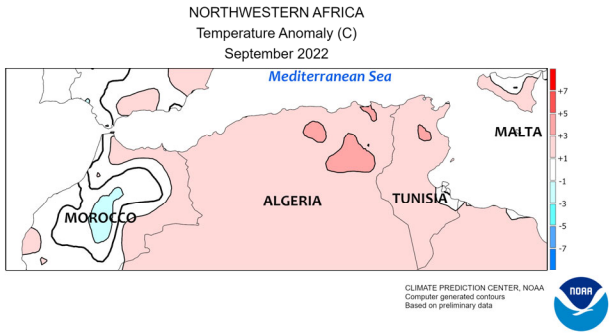
MIDDLE EAST

Pockets of wet weather in Turkey juxtaposed with seasonably dry conditions elsewhere. Moderate to heavy rainfall from the southern and eastern Anatolian Plateau (locally more than 40 mm) northeastward to the climatologically wetter Black Sea Coast (90-350 mm) moistened soils for winter grain planting in the south but slowed fieldwork where rain was heaviest in the far north. However, dry weather in the Aegean and GAP Regions of Turkey favored cotton maturation and harvesting. Seasonably sunny skies prevailed elsewhere in the region, though heavy showers continued near the Persian Sea Coast in Iran. Temperatures averaged near normal in western Turkey to as much as 3°C above normal from central Turkey into Iran.





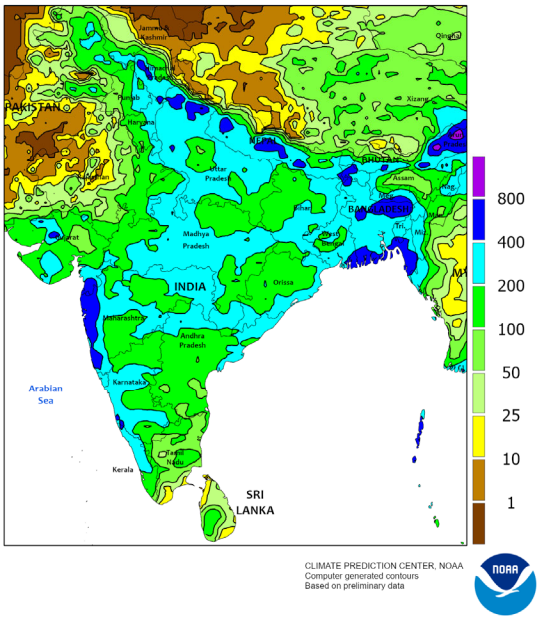




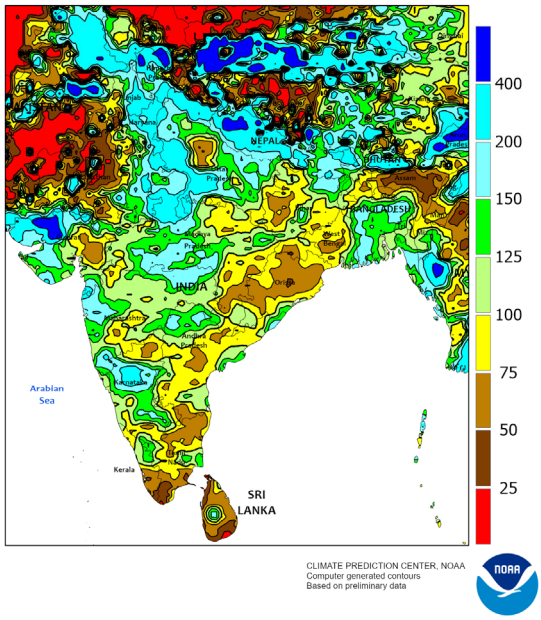
NORTHWESTERN AFRICA

During September, early-season showers in central and eastern growing areas contrasted with mostly dry weather in Morocco. Rainfall totaled 20 to 90 mm from central Algeria into western Tunisia, conditioning soils for early winter grain sowing. Conversely, dry weather prevailed across much of Morocco and western Algeria. Water-year rainfall typically starts during September in Tunisia and eastern Algeria, and then spreads west across central Algeria in October before arriving in Morocco by early November. Winter grains are primarily sown during November and December.

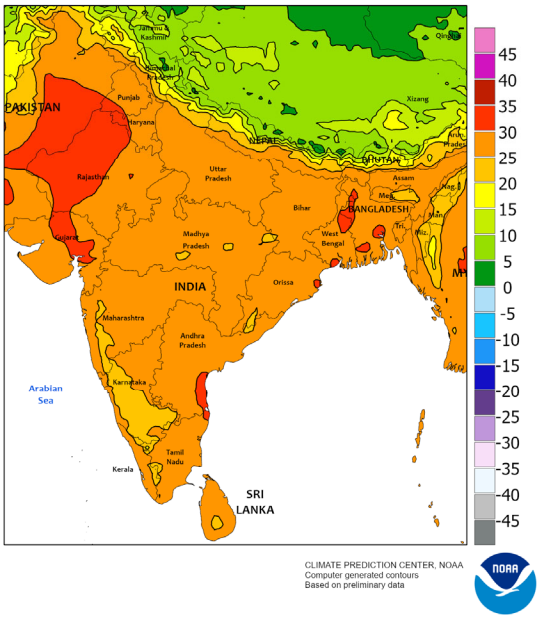
SOUTH ASIA
Total Precipitation(mm)
September 2022



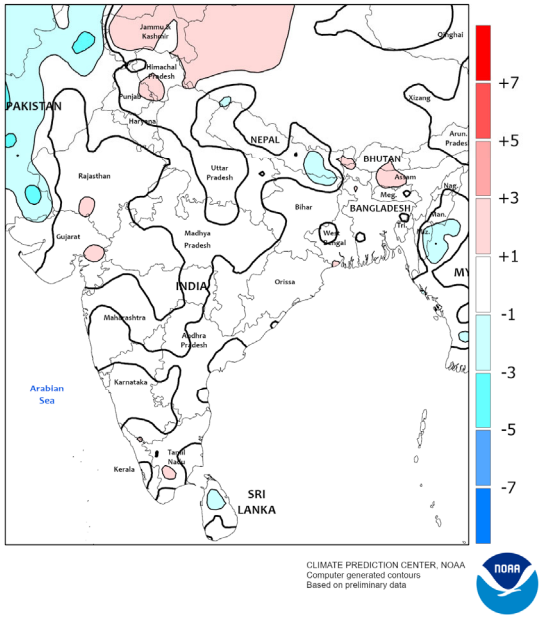
SOUTH ASIA
Percent of Normal Precipitation
September 2022



SOUTH ASIA
Average Temperature (C)
September 2022



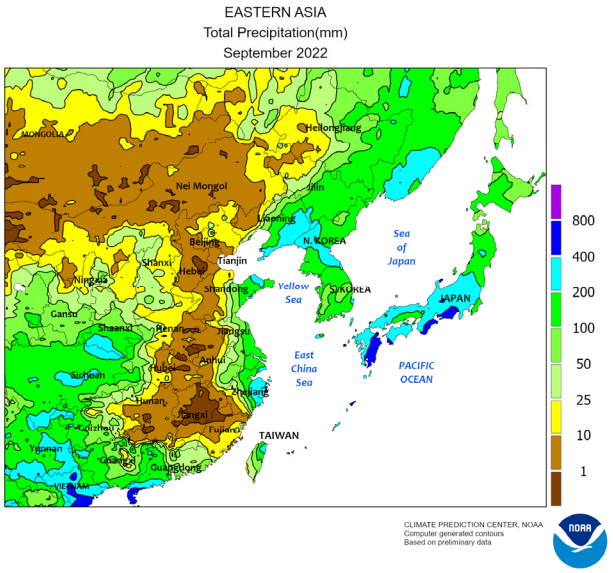
SOUTH ASIA
Temperature Anomaly (C)
September 2022

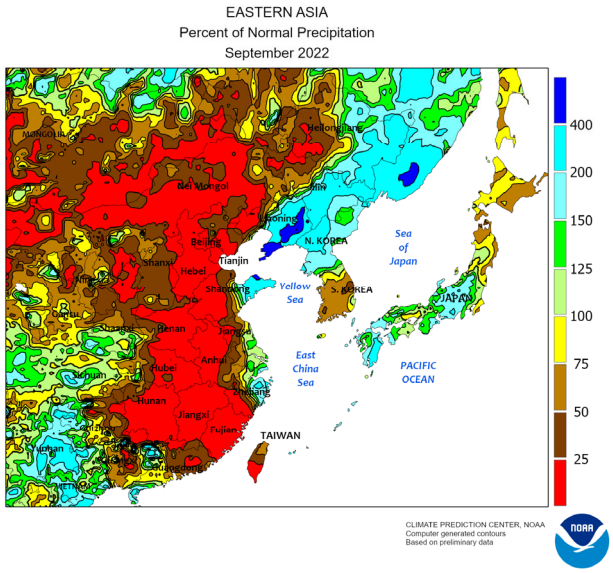


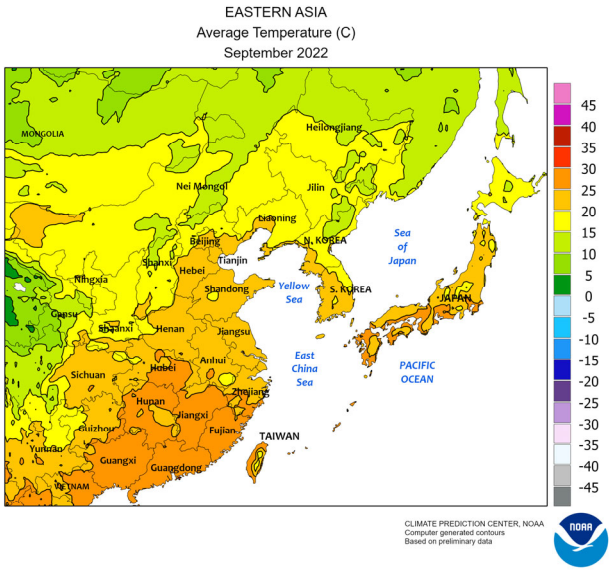
SOUTH ASIA

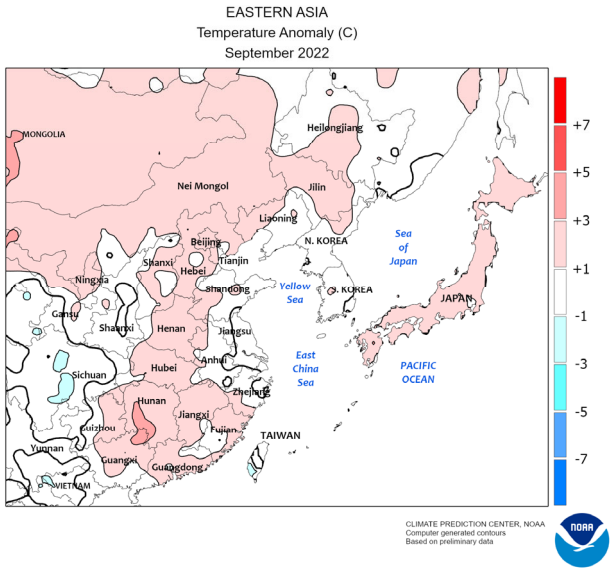
Monsoon showers continued across the region during the first half of September, but by the latter half of the month the monsoon had begun to withdraw from northwestern sections. The drier weather beginning around mid-month was particularly welcome in southern Pakistan after historic rainfall and flooding in July and August, and along with seasonable warmth (mid-30s degrees C) allowed flood waters to begin receding. Meanwhile, above-average showers (over 200 percent of normal in some locales) continued across much of India. The wet weather was generally favorable for kharif crops but was ill-timed for maturing cotton and rice in the north. The southwest monsoon typically departs the region by mid-October, ushering in drier weather to most areas.

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



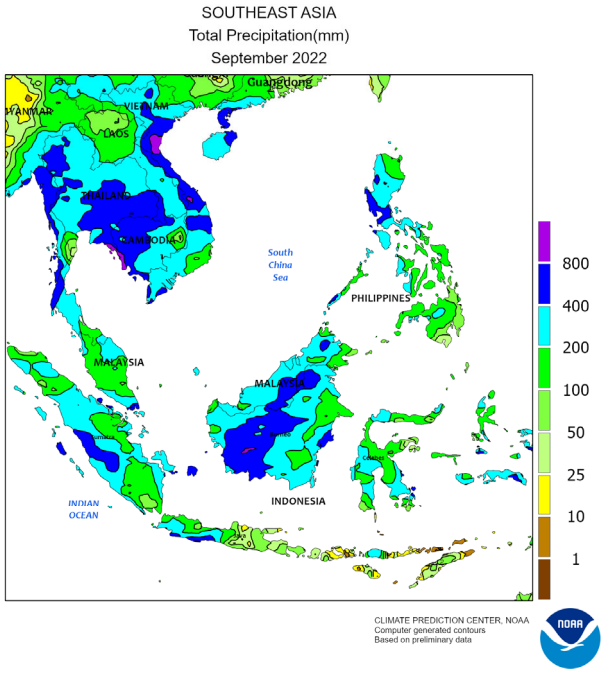


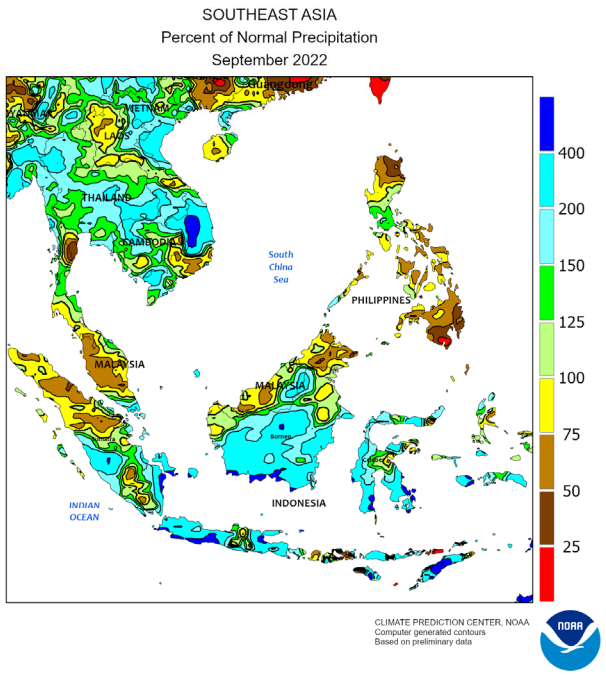


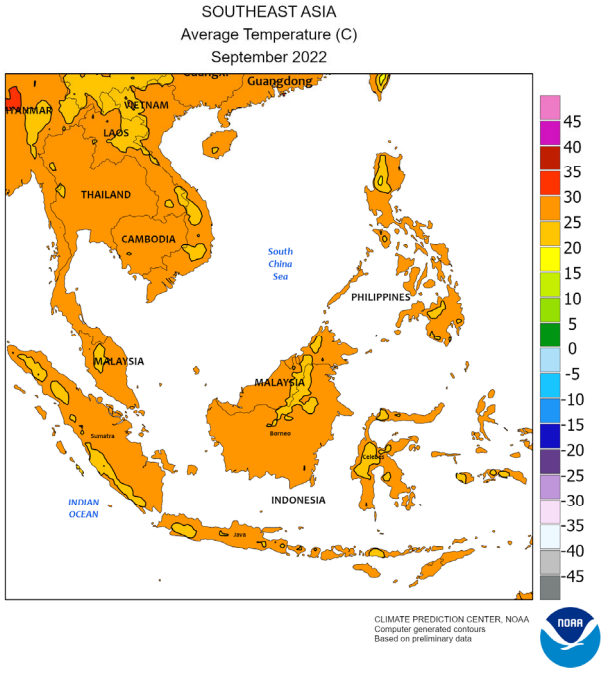


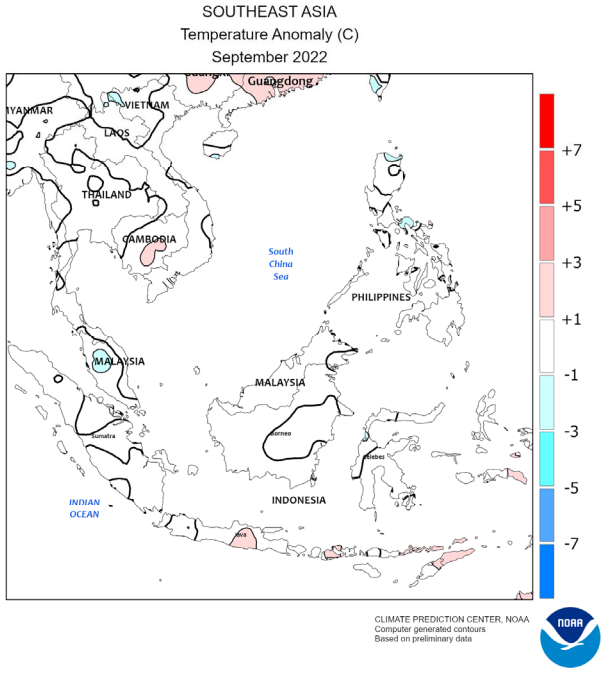
EASTERN ASIA

During September, drier-than-normal weather prevailed across most crop areas of eastern and southern China, facilitating maturation and harvesting (by month's end) of summer grains and oilseeds. However, the dryness along with temperatures near 40°C exacerbated drought conditions for late-crop rice in the southeast. In contrast, consistent showers (over 100 mm, more than 100 percent of normal) in the upper Yangtze Valley all but eradicated late summer drought. Additionally, rainfall in the northeast surpassed 200 percent of normal and was associated with a pair of typhoons moving through the area in the first half of the month. The wet weather generally benefited immature crops, but a localized freeze toward the end of the month ended the growing season for some corn and soybean growers, possibly lowering yield potential. Elsewhere, seasonably dry, warmer-than-normal weather in western China (Xinjiang) supported cotton harvesting.





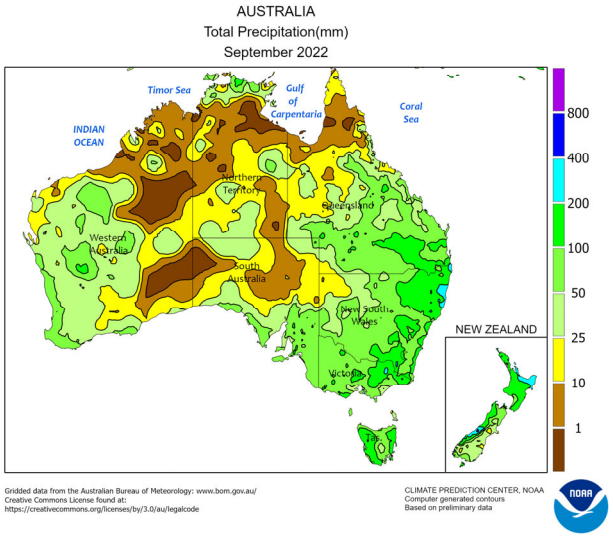


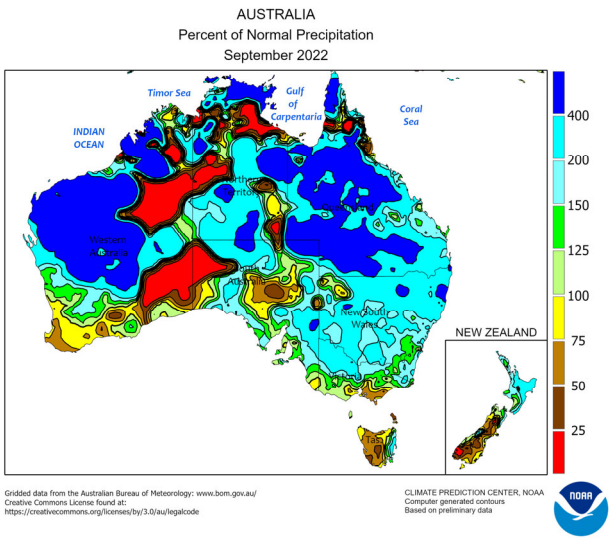


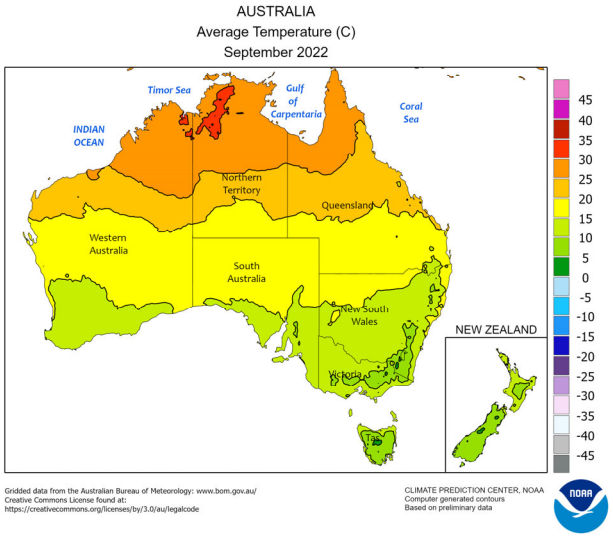
SOUTHEAST ASIA

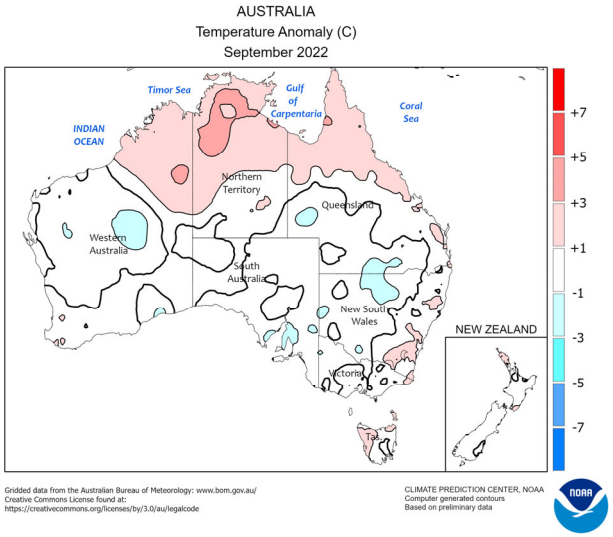
Much of Thailand and the surrounding areas of Indochina recorded above-average rainfall in September. Showery weather (over 150 mm, more than 125 percent of normal) supported reproductive seasonal rice (vegetative winter paddy in northern Vietnam). In contrast, much of the Philippines reported below-average rainfall (25-75 percent of normal) despite similar totals and the passage of Super Typhoon Noru late in the month; Noru caused localized damage to rice and other crops in the northern Philippines. Nevertheless, moisture conditions over the last 90 days remained adequate for crops. Elsewhere, drier-than-normal weather in Malaysia and neighboring sections of Indonesia benefited maturing oil palm fruit bunches and promoted harvesting during the peak harvest period (September-October). Meanwhile in southern Indonesia (Java), the rainy season was off to an earlier-than-usual start (one month earlier than normal), as unseasonably heavy showers (over 150 mm, more than 200 percent of normal) prevailed in western Java. The early start encouraged rice sowing to begin in earnest.

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







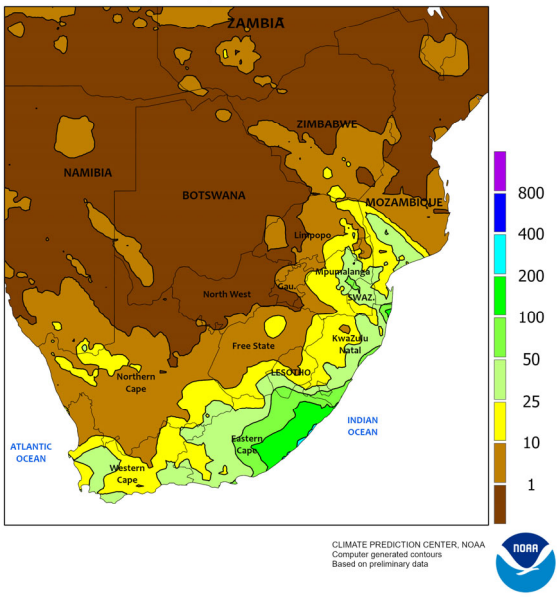


AUSTRALIA

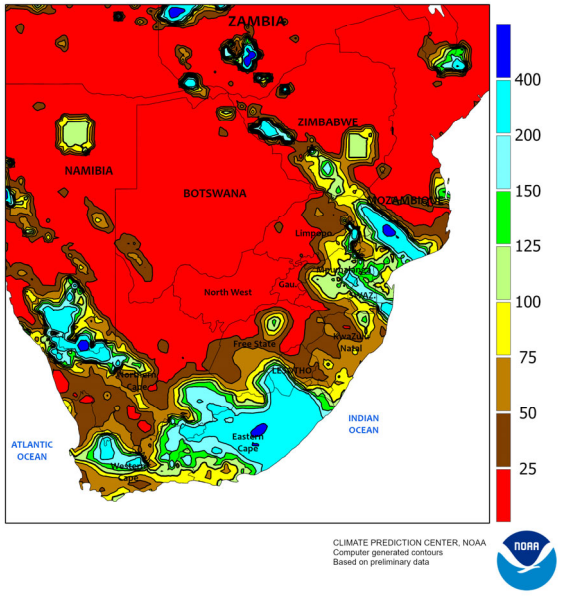
During September, widespread rain and relatively mild weather benefited reproductive winter grains and oilseeds. The heaviest rain fell across southern and eastern portions of the wheat belt, causing local flooding and delaying early summer crop planting. Although the rainfall was locally excessive (locally more than 300 percent of normal) it was overall beneficial nonetheless, promoting winter crop development. Elsewhere in the wheat belt, after a wet start to September, drier weather overspread Western Australia by month's end. The gradual drying trend created near ideal conditions for wheat, barley, and canola development, helping to sustain good to excellent crop conditions and yield prospects. Temperatures were generally seasonable in the west and averaged somewhat below normal (up to 1°C below normal) in the south and east. During September, daily maximum temperatures were routinely in the 20s (degrees C) while extreme minimum temperatures remained above freezing in all but a few isolated locations.

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

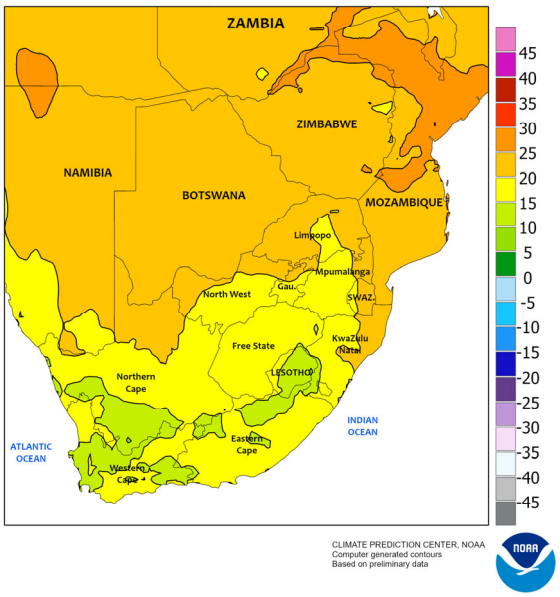
SOUTH AFRICA
Total Precipitation(mm)
September 2022



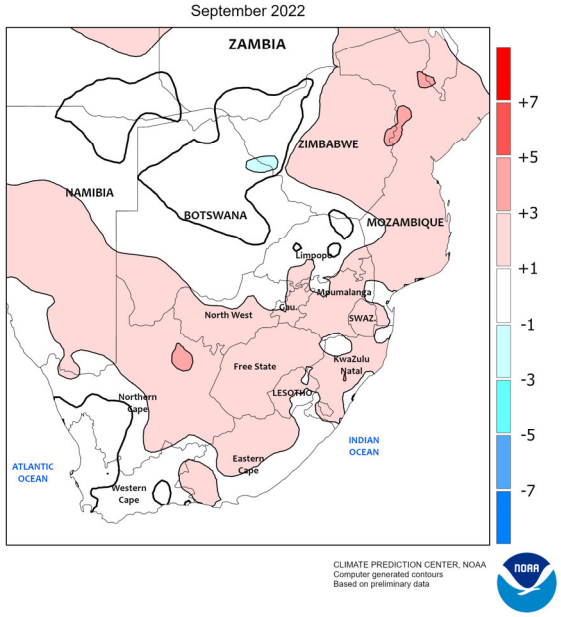
SOUTH AFRICA
Percent of Normal Precipitation
September 2022



SOUTH AFRICA
Average Temperature (C)
September 2022



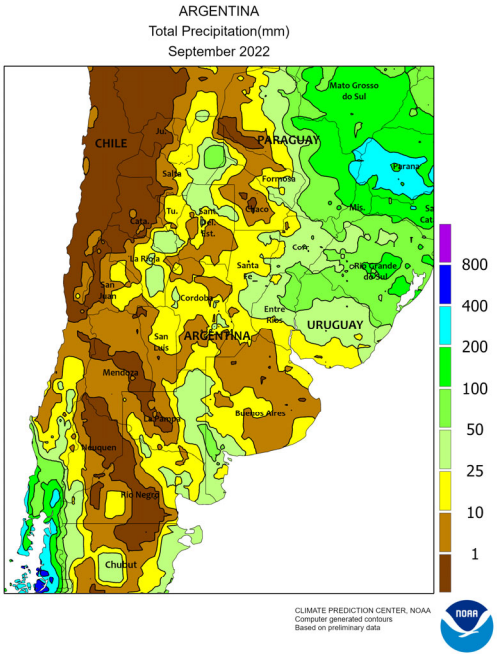
SOUTH AFRICA
Temperature Anomaly (C)
September 2022

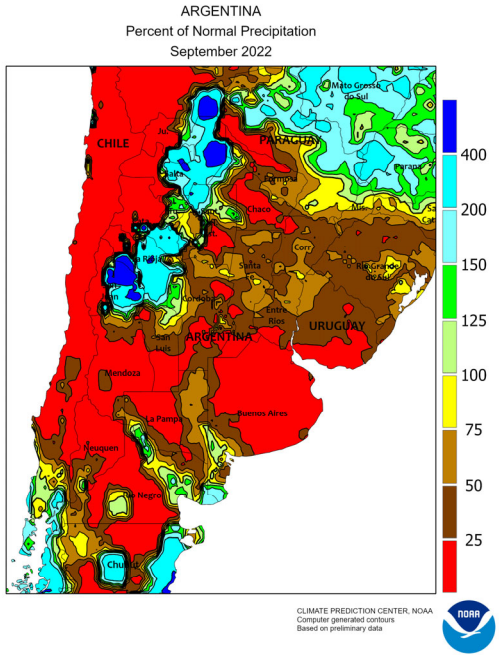


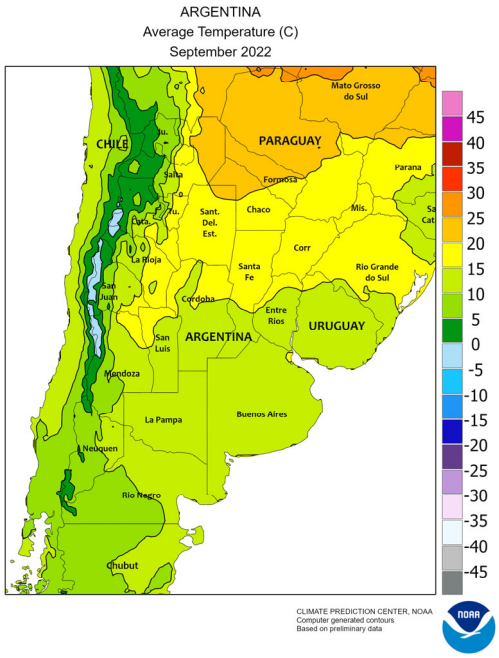
SOUTH AFRICA

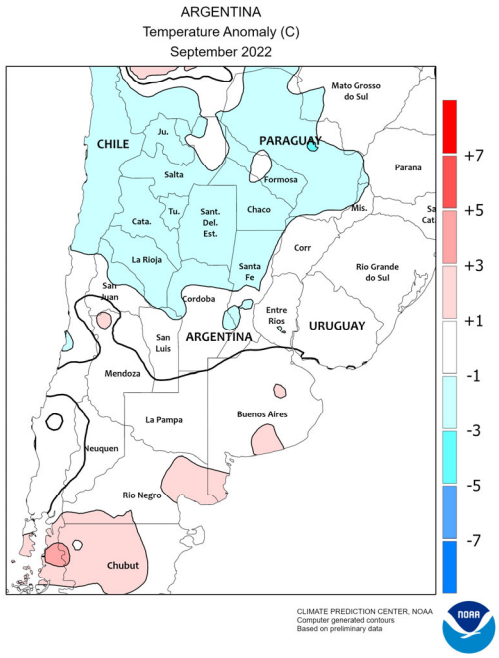
During September, showers sweeping along the southern coast supplied additional moisture to immature winter-grown crops while providing an early boost to summer crops. The heaviest monthly rainfall (50-100 mm, locally exceeding 150 mm) was concentrated over non-commercial agricultural areas in Eastern Cape and watersheds feeding the Orange River. Lighter amounts (10-25 mm) benefited immature wheat in Western Cape and early sugarcane growth in KwaZulu-Natal; similar amounts helped to condition fields for corn planting in Mpumalanga, while seasonably drier conditions prevailed elsewhere in the interior. Monthly average temperatures were near to above normal across the country, with lingering freezes in traditionally cooler interior locations.

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



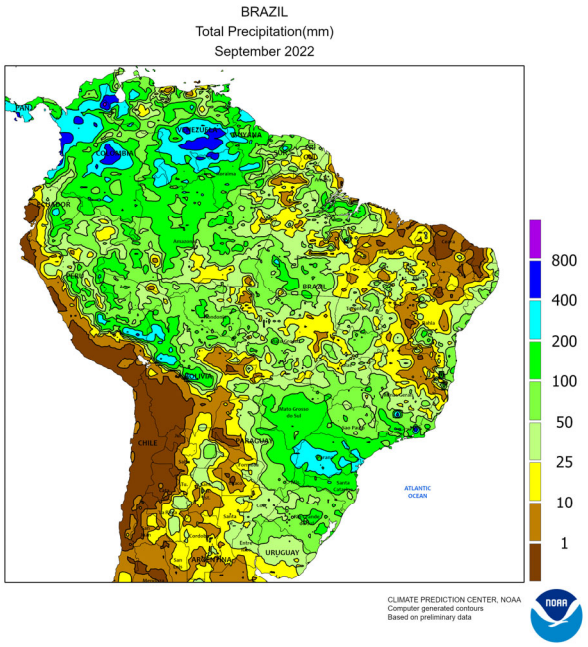


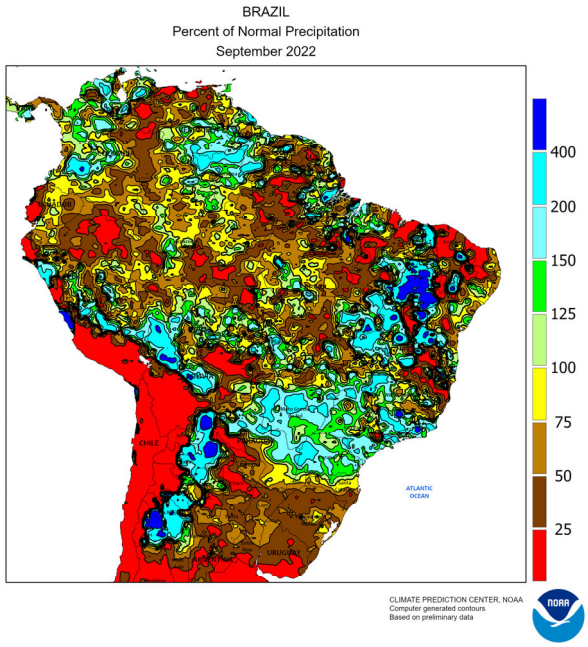


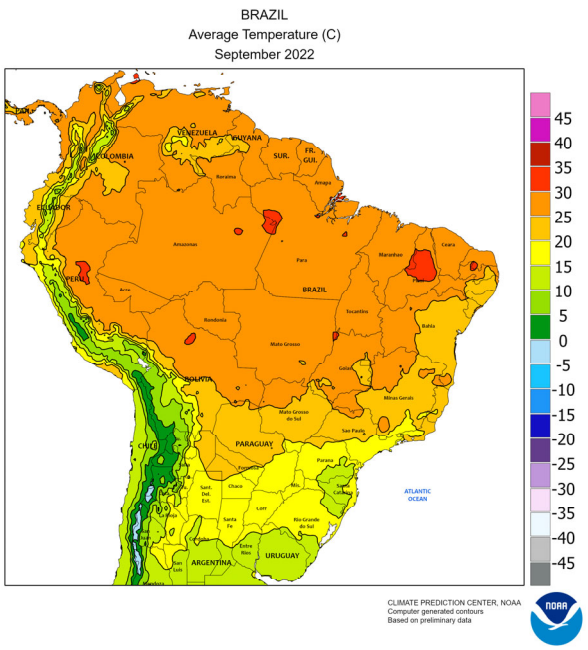


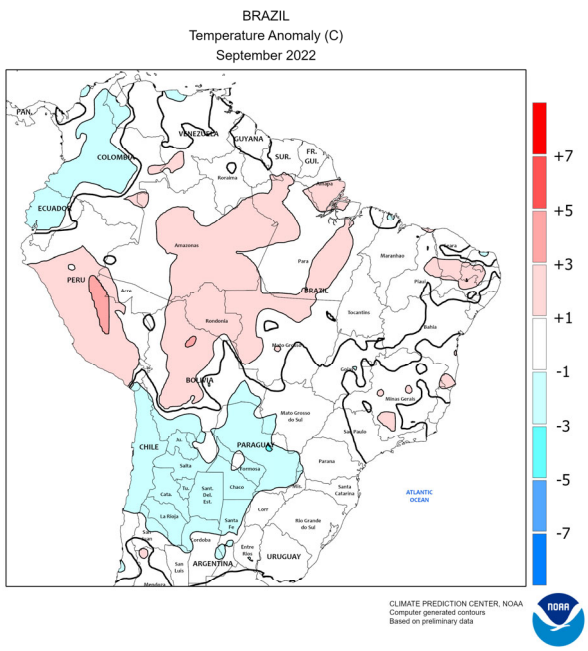
ARGENTINA

Mid-September showers brought temporary relief from dryness to key farming areas in central and northeastern Argentina before a rapid return to unseasonably drier conditions. Monthly accumulations totaled as much as 25 to 50 mm in the aforementioned locations, although pockets of dryness (less than 10 mm) persisted in southern Cordoba and large sections of Buenos Aires. Freezes became less frequent during the latter half of September in southern farming areas, spurring a more rapid pace of growth and increasing moisture demands of winter grains nearing reproduction. In northwestern Argentina (Salta and environs), a late-month surge in rainfall benefited immature winter grains, although some wheat had already reached maturity due to climatologically warmer conditions in the preceding weeks.





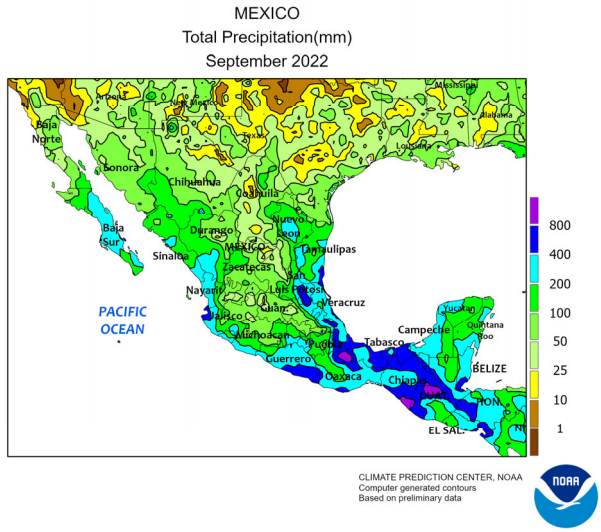


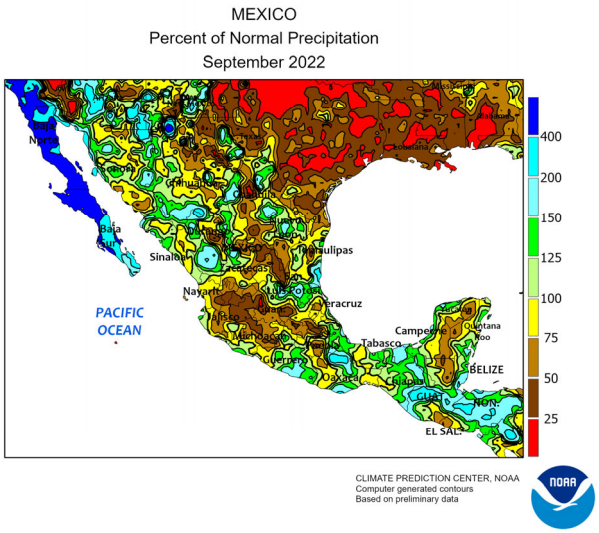


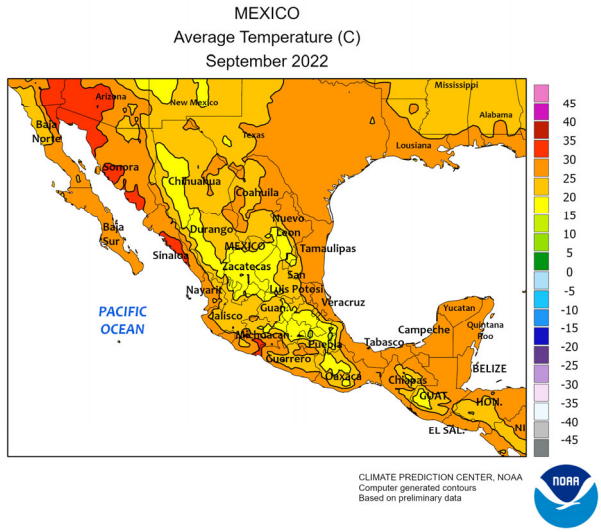
BRAZIL

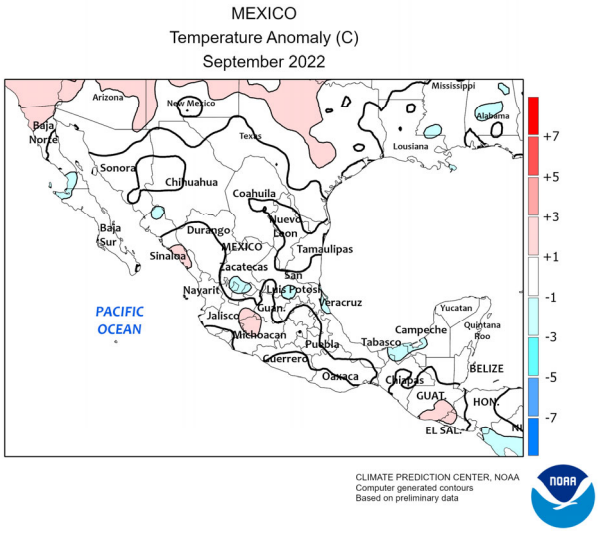
September rainfall provided timely moisture for germination of main-season summer row crops. Included in the areas receiving sufficient moisture for planting activities were farming areas in southern Mato Grosso, where the moisture encouraged the start of soybean planting. The arrival of rainier weather also helped to lower temperatures, although daytime highs occasionally reached the upper 30s (degrees C) on drier days during the latter half of the month. Meanwhile, beneficial rain also maintained favorable prospects for first-crop corn, sugarcane, and coffee from Mato Grosso do Sul and Paraná eastward through southern Minas Gerais. Monthly accumulations were below normal in Rio Grande do Sul, but moisture reserves were likely favorable for wheat development due to abundant rainfall earlier in the growing season. Elsewhere, seasonal rainfall was patchy and light in the northeastern interior as farmers awaited more consistent moisture to initiate planting.

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





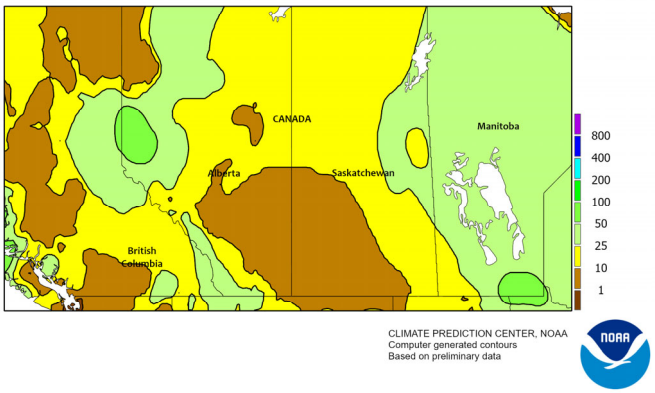




MEXICO

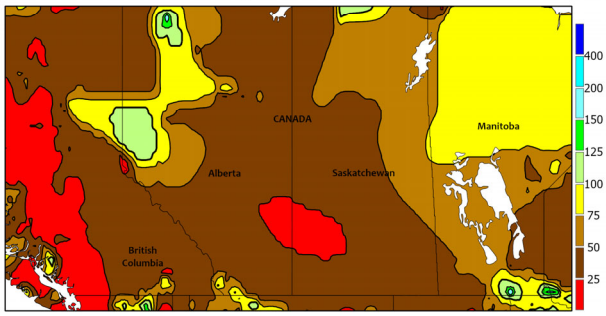
In September, a resurgent monsoon and an increase in tropical activity resulted in widespread, locally heavy rainfall across the region. Monsoon showers diminished over northwestern watersheds early in the month, but scattered showers eventually returned, although intensity and coverage were commensurate with the end of the rainy season. Meanwhile, tropical storm activity – including several land-falling systems – generated heavy rain along the Pacific Coast, while channeling tropical moisture inland. As a result, immature summer crops received a needed boost in moisture; this was particularly true in previously dry northeastern production areas, including soybean and sugarcane areas in the vicinity of northern Veracruz and eastern San Luis Potosí. Additionally, winter farming areas are entering the dry season with relatively high levels of available irrigation. According to the government of Mexico, reservoirs were at 69 percent capacity as of September 30, an increase of 16 points over the previous month; reservoir levels in the northwest (Chihuahua, Sinaloa, and Sonora) rose 29 points since the end of August.

CANADIAN PRAIRIES
Total Precipitation(mm)
September 2022



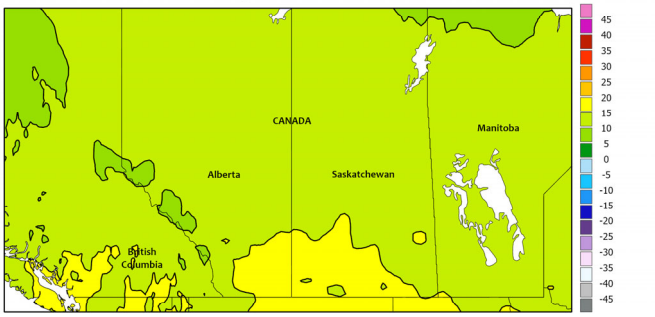
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES
Percent of Normal Precipitation
September 2022



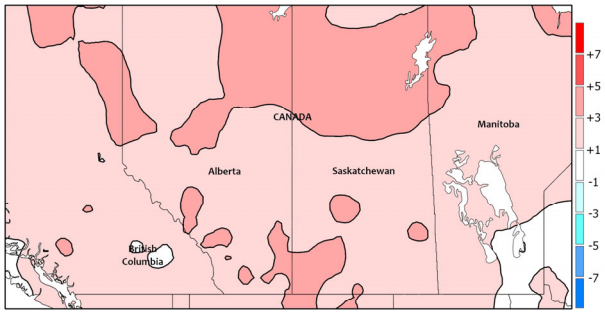
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES
Average Temperature (C)
September 2022



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

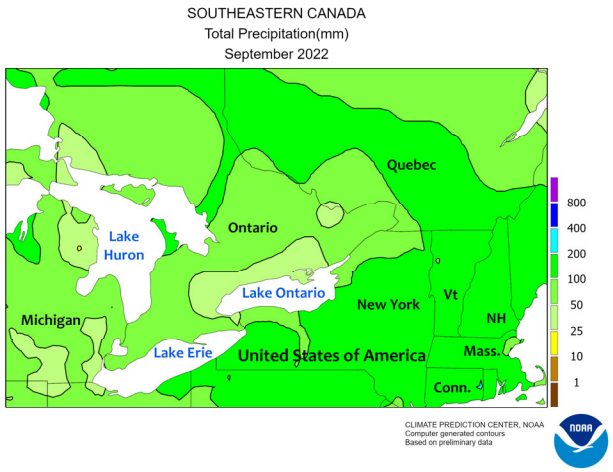
CANADIAN PRAIRIES
Temperature Anomaly (C)
September 2022

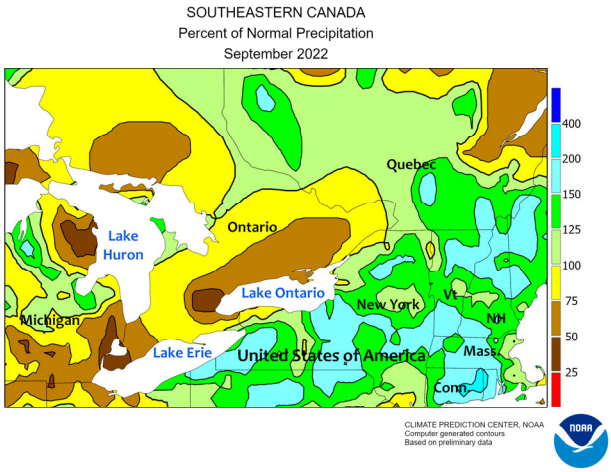


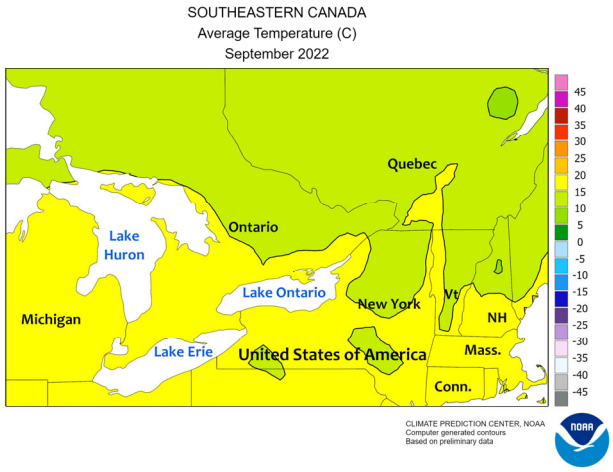
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

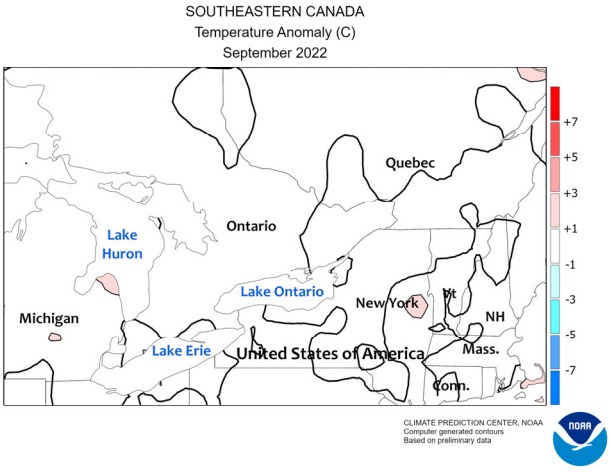
CANADIAN PRAIRIES

In September, warmer- and drier-than-normal weather spurred rapid drydown and harvesting of spring crops in the western Prairies. Monthly rainfall accumulations totaled below 10 mm over large sections of southern Alberta and Saskatchewan, with most other locations in those provinces recording less than 25 mm. Monthly temperatures averaging 2 to 4°C above normal advanced spring grains and oilseeds toward maturity in the aforementioned areas, aided by several cold outbreaks that dropped temperatures below -2°C. Meanwhile, locally heavy showers (locally totaling more than 50 mm) caused further disruptions to fieldwork in Manitoba, which recorded a season-ending freeze during the latter half of the month.





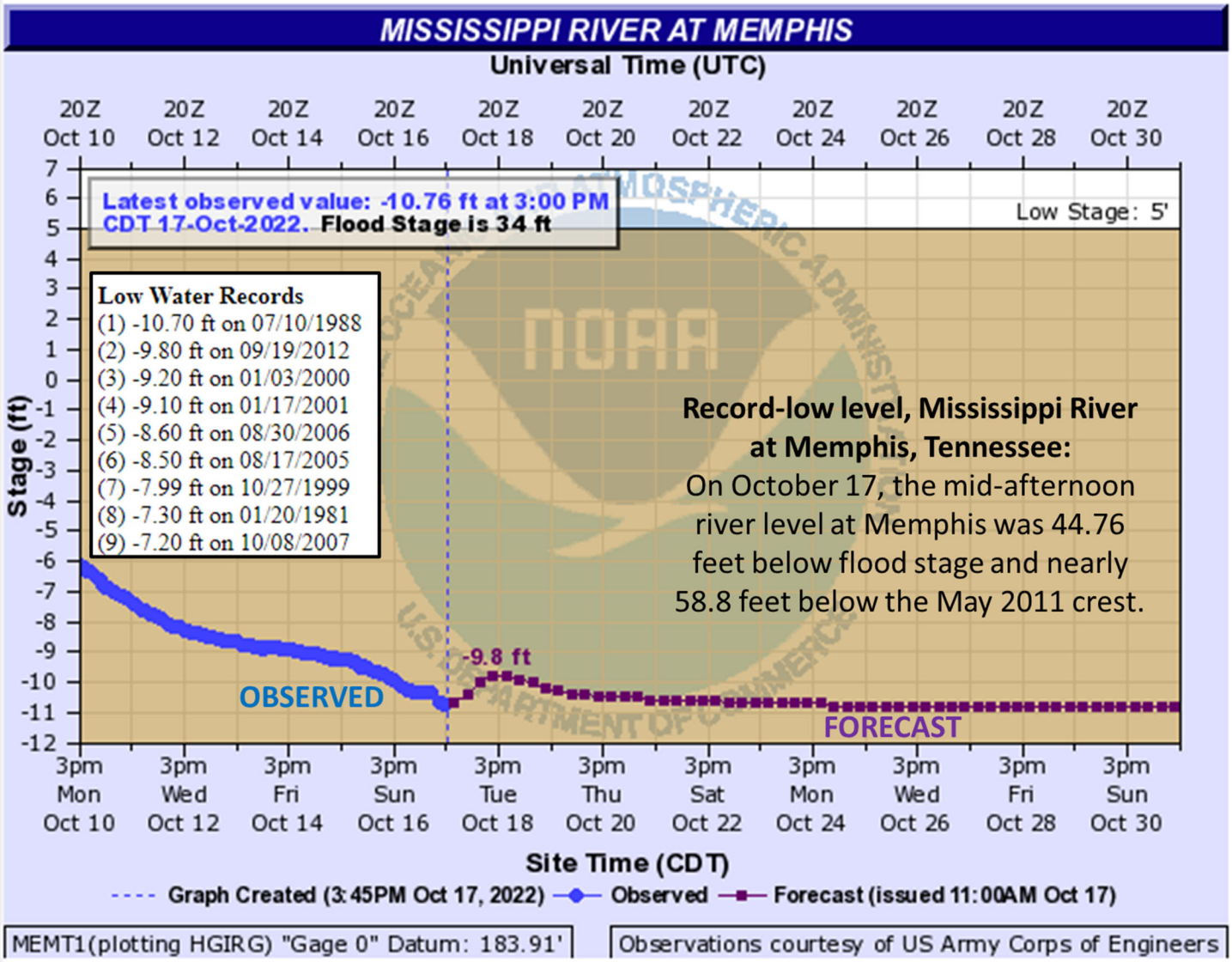




SOUTHEASTERN CANADA

In September, showers provided timely moisture for winter wheat germination, although portions of the region remained drier than normal. Despite several periods of moderate to heavy rain (10-25 mm per event), rainfall totaled below normal over large sections of Ontario, particularly in the far southern production areas. In contrast, seasonably heavier rain maintained adequate to locally excessive levels of moisture elsewhere in Ontario and in Quebec. Monthly temperatures averaged within 1°C of normal, with freezes generally confined to climatologically cooler outlying production areas. The mild weather and periodic rain favored emerging wheat but came too late in the growing season to significantly improve summer crop prospects in areas that had been drier-than-normal for extended periods of time.

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



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