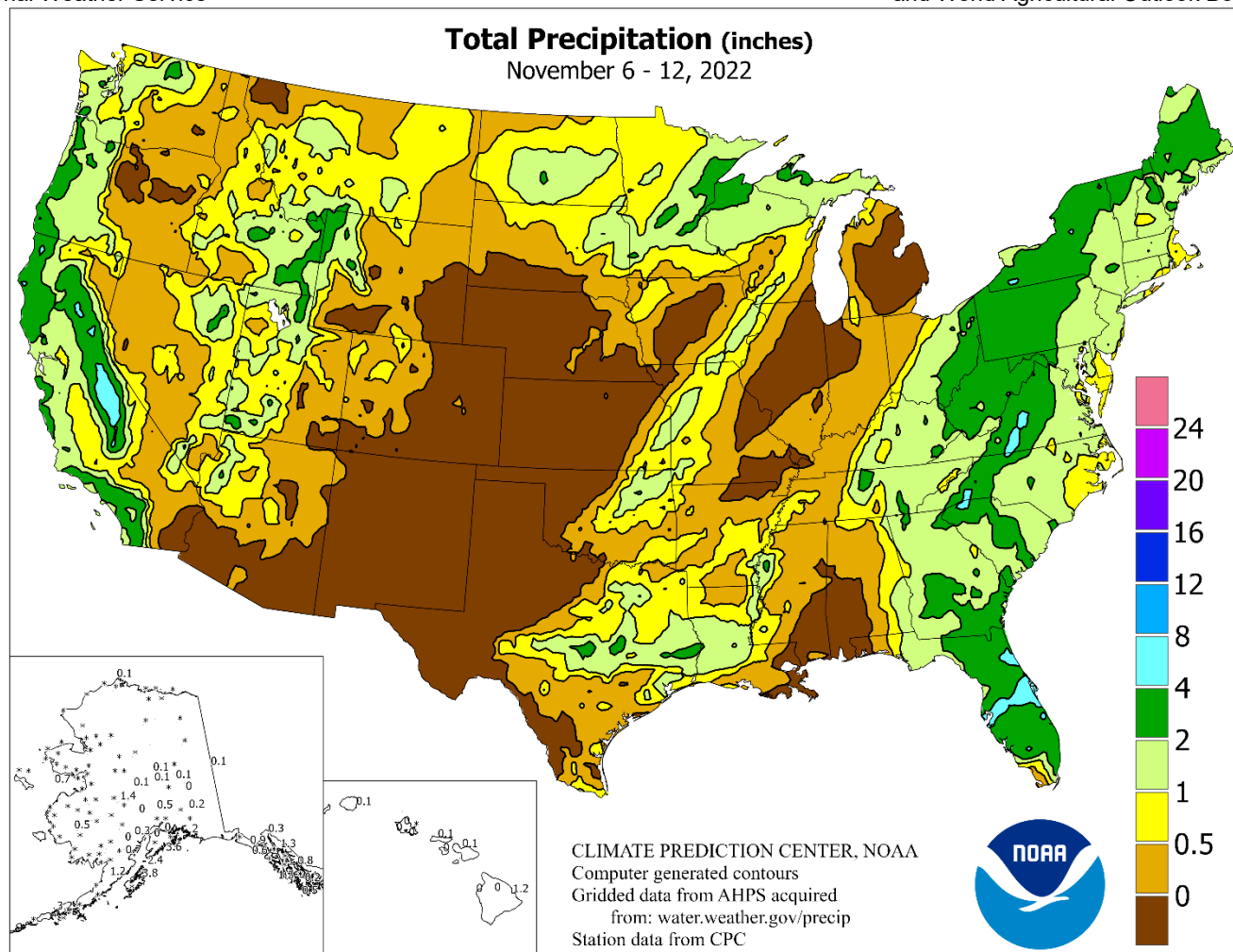


WEEKLY WEATHER AND CROP BULLETIN

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

November 6 – 12, 2022

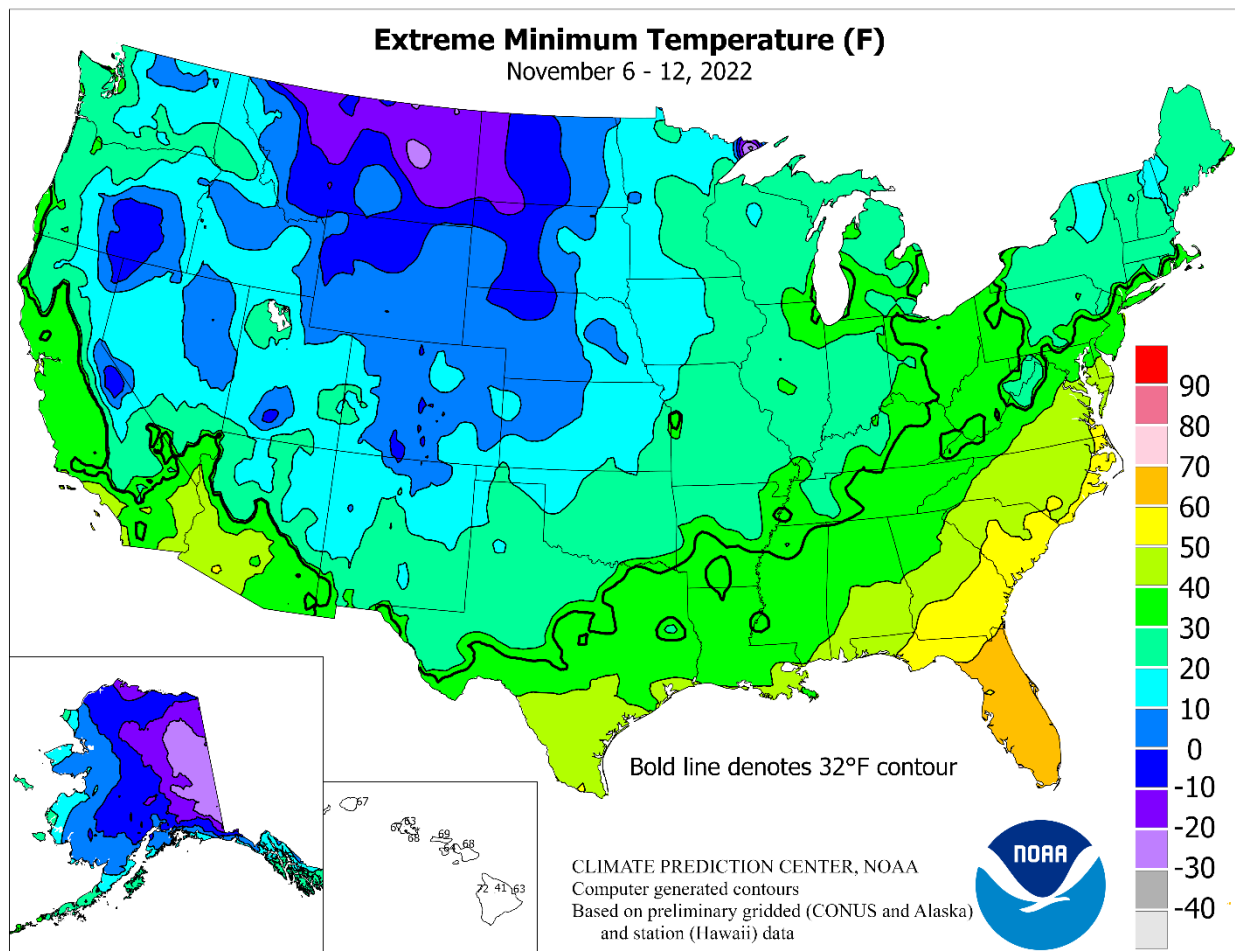
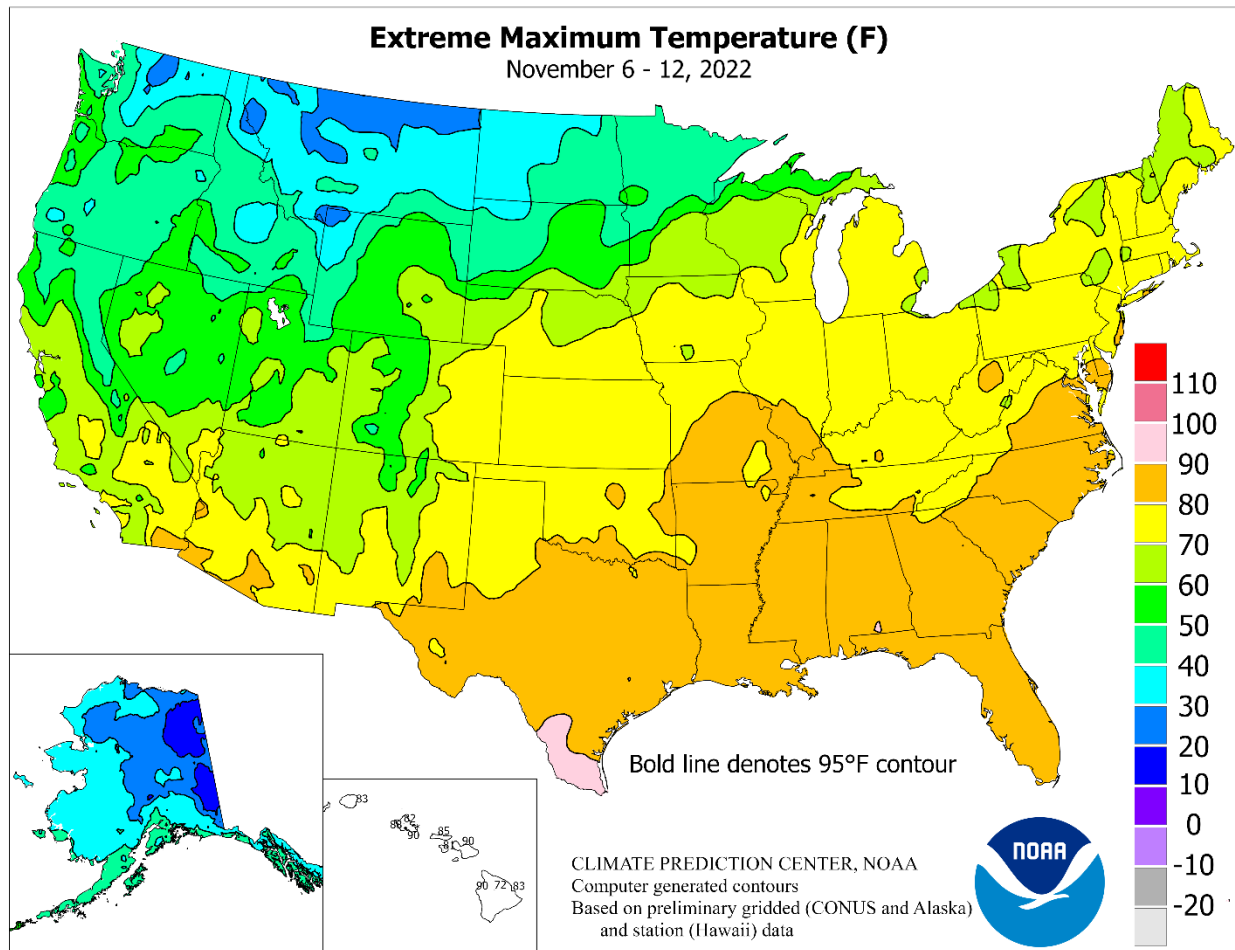
Highlights provided by USDA/WAOB

On the 10th, Nicole became the first November hurricane to make landfall on the U.S. mainland since 1985, when Kate struck near **Mexico Beach, FL**, on November 21. Nicole, a Category 1 hurricane with sustained winds near 75 mph, moved ashore just south of **Vero Beach, FL**, around 3 am EST. The entire state of **Florida**, except the western panhandle, was subjected to tropical storm-force winds (39 mph or greater), with possible impacts on a citrus crop already damaged by Hurricane Ian. **Florida's** sugarcane was spared a direct hit, with the highest winds

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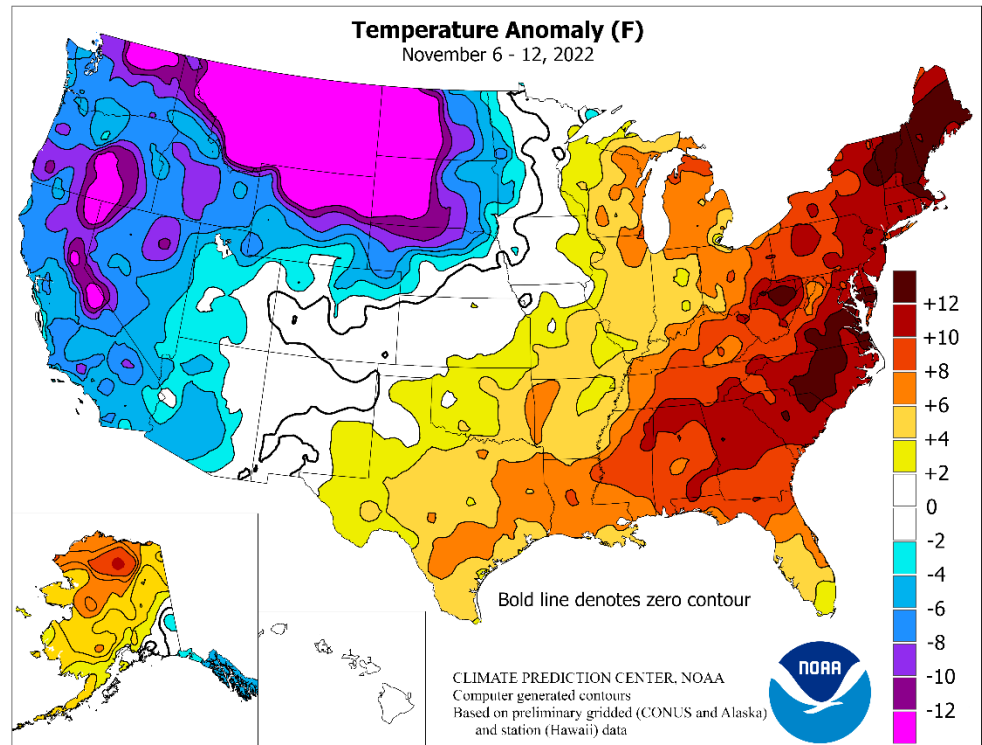
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(Continued from front cover)

and heaviest rain remaining to the north of the production area. Nicole's remnants eventually affected the entire **eastern U.S.**, providing varying degrees of relief from autumn dryness. Some of the heaviest rain, locally 4 inches or more, fell in the **central and southern Appalachians** and neighboring areas. The rain helped to boost streamflow in the upper reaches of the **Ohio River basin**, with runoff moving downstream as the week ended. Elsewhere, a late-week storm system produced heavy snow and local blizzard conditions in the **north-central U.S.**, while parts of the **West** received drought-easing precipitation. However, much of the remainder of the country received little or no precipitation. Weekly temperatures averaged at least 10 to 20°F below normal from the **northern Rockies to the western Dakotas**. In fact, colder-than-normal conditions dominated the **West**, as well as the **northern half of the Plains**. In contrast, warmer-than-normal weather prevailed along and east of a line from **Texas to Wisconsin**. Temperatures averaged 10 to 15°F above normal in much of the **eastern U.S.**

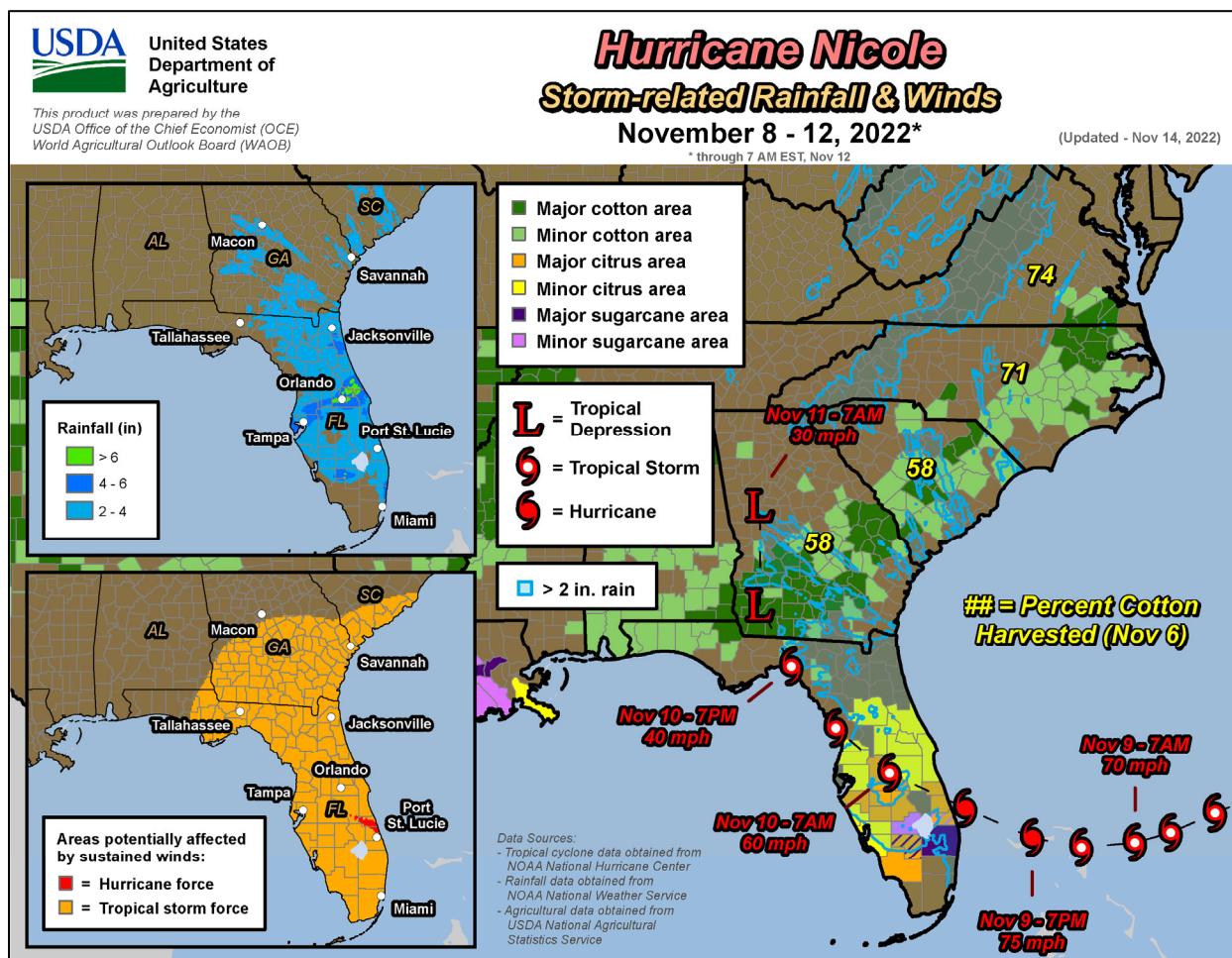


For much of the week, record-setting warmth dominated the **South and East**. **Baton Rouge, LA**, tied a monthly record with a high of 89°F on November 6. On the same date, temperatures soared to 80°F as far north as **Syracuse, NY**, and **Morgantown, WV**. For the first time on record in November, low temperatures (on the 6th) fell only to 65°F in **Scranton, PA**, and **Boston, MA**. Several monthly record highs were broken on November 7; among them: 89°F in **Vicksburg, MS**; 80°F in **Islip, NY**; and 79°F in **Bridgeport, CT**. **New Orleans, LA** (90°F on the 7th), achieved a 90-degree reading in November for the first time; previously, the latest observance of a 90-degree reading in that location had occurred on October 21, 1979. During the mid- to late-week period, a secondary surge of warmth occurred in advance of a strong cold front. By November 9, daily-record highs rose to 78°F in **Burlington, CO**, and **Springfield, IL**. Monthly record highs were established on November 10 in **Michigan** locations such as **Alpena** (78°F) and **Gaylord** (77°F). In **southern Texas**, highs in **McAllen** topped the 90-degree mark each day from November 6-11, with a daily-record high of 92°F occurring on the last day of the streak. Late in the week, sharply colder air arrived in the **Midwest**, while warmth lingered along the **northern Atlantic Coast**. On November 11-12, **Portland, ME**, closed the week with consecutive daily-record highs (69 and 73°F, respectively). In stark contrast, sub-zero temperatures occurred each day from November 7-12 in **Havre, MT**, highlighted by a reading of -18°F on the 11th. However, winter wheat in **Havre** and elsewhere on the **northern High Plains** was generally protected by an extensive snow cover. In **Glasgow, MT**, a daily-record low of -15°F on November 10 was preceded and accompanied by 11.5 inches of snow, starting on the 8th. Other sub-zero, daily-record lows in **Montana** included -15°F (on the 8th) in **Great Falls** and -17°F (on the 11th) in **Miles City**.

As the week began, a significant precipitation event unfolded across the **West**. On November 6, **Eugene, OR**, netted a daily-record total of 1.32 inches. Farther inland, **Spokane, WA**, measured a record-setting snowfall (3.8 inches) for November 7. Elsewhere on the 7th, **Elko, NV**, set daily records for precipitation (0.76 inch) and snowfall (7.5 inches). **Elko's** November 7-9 snowfall reached 13.1 inches. Similarly, **Alta, UT**, noted a 3-day (ending November 10) storm total of 27.7 inches. Precipitation spread to other areas of the **West** by November 8, when daily-record amounts in **southern California** included 1.44 inches at **Los Angeles International Airport** and 1.13 inches in **Burbank**. Elsewhere

in **southern California**, 48-hour totals on November 7-9 included 6.84 inches on **Palomar Mountain**, 6.76 inches at **Big Bear Lake**, and 4.80 inches in **Idyllwild**. In **Utah**, 24-hour precipitation totals on November 8-9 topped an inch in **Randolph** (1.20 inches), **Logan** (1.09 inches), and **Zion National Park** (1.05 inches). Daily-record snowfall on the 9th totaled 3.1 inches in **Pocatello, ID**, and 3.0 inches in **Kanab, UT**. During the extended period of unsettled weather, **Pocatello** noted 8.8 inches of snow from November 7-10. Meanwhile, tropical showers began to overspread **Florida**, where daily-record totals for November 8 included 1.23 inches in **Sanford** and 1.01 inches in **Orlando**. **Sanford** received another daily-record sum (1.95 inches) on the 9th, helping to boost its November 8-10 sum to 5.32 inches. On the 10th, the day Nicole moved ashore in **Florida**, daily-record totals reached 2.64 inches in **Jacksonville** and 2.51 inches in **Gainesville**. Closer to the point of landfall, peak gusts on the 10th reached 72 mph in **Melbourne** and 70 mph in **Daytona Beach**. As rain spread northward on the 11th, daily-record amounts topped 2 inches in many locations, including **Roanoke, VA** (2.88 inches); **Pittsburgh, PA** (2.36 inches); **Wheeling, WV** (2.30 inches); **Asheville, NC** (2.26 inches); and **Zanesville, OH** (2.20 inches). Rain in the **Northeast** lingered into the 12th, when **Houlton, ME** (1.89 inches), notched a daily-record sum. As the week ended, a strong cold front delivered some snow from the **southern Plains into the lower Midwest**; daily-record amounts included 0.4 inch (on the 11th) in **Oklahoma City, OK**; 1.9 inches (on the 12th) in **Dayton, OH**; and 2.7 inches (on the 12th) in **Indianapolis, IN**.

Mild weather accompanied occasional storminess across the **Alaskan mainland**, while cold weather lingered across the southeastern part of the state. **Bettles** received measurable snow each day from November 7-12, totaling 12.5 inches. Significant precipitation fell on the 7th in locations such as **McGrath** (0.70 inch) and **Nome** (0.58 inch). In the **Aleutians**, **Cold Bay** received rainfall totaling 1.83 inches on November 6-7, with wind gusts to 68 mph clocked both days. In **southeastern Alaska**, **Juneau** received 5.6 inches of snow on November 10-11. Farther south, mostly dry weather returned across **Hawaii**, following the previous week's heavy rain in some windward locations. On the **Big Island**, **Hilo's** month-to-date rainfall through November 12 climbed to 10.56 inches (191 percent of normal), although only 1.12 inches fell during the week. Meanwhile, **Kahului, Maui**, posted a daily record-tying high of 91°F on November 6.

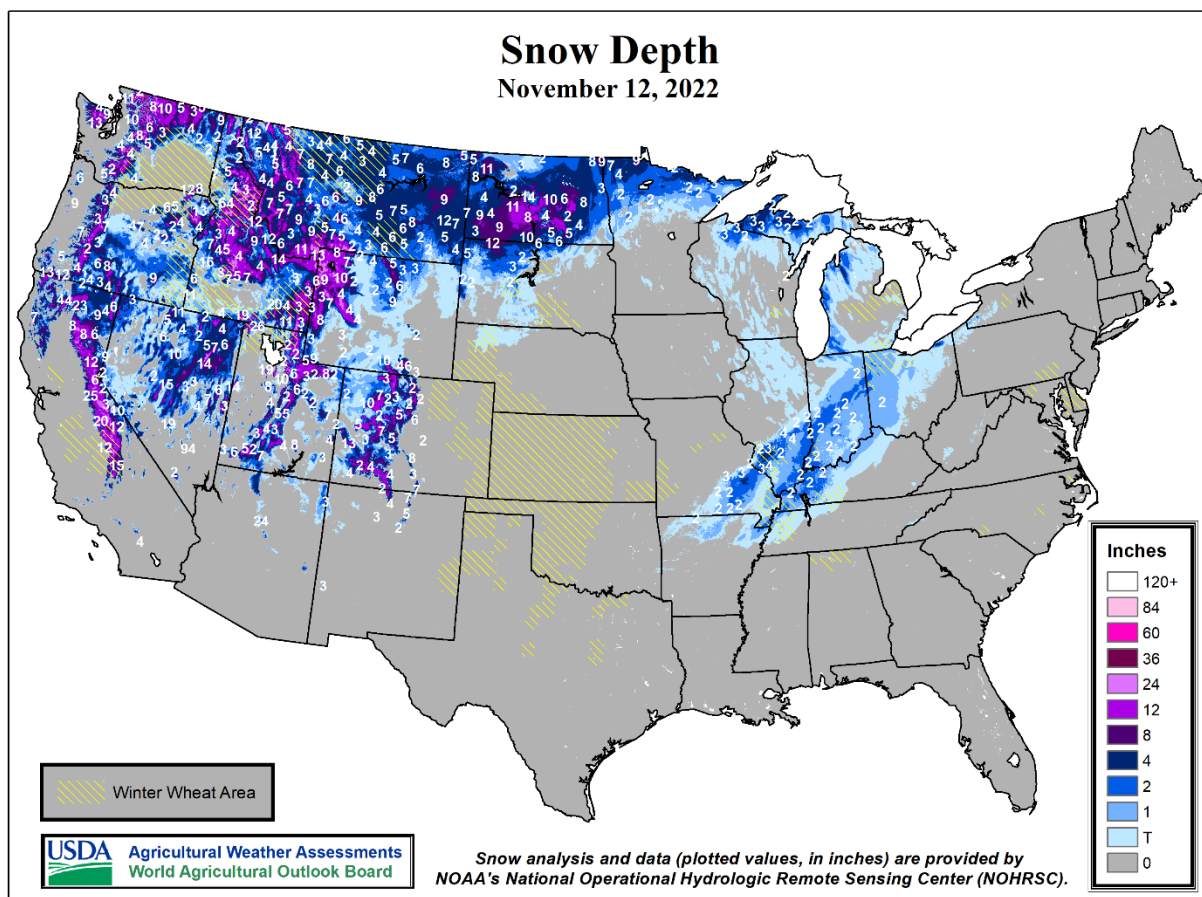
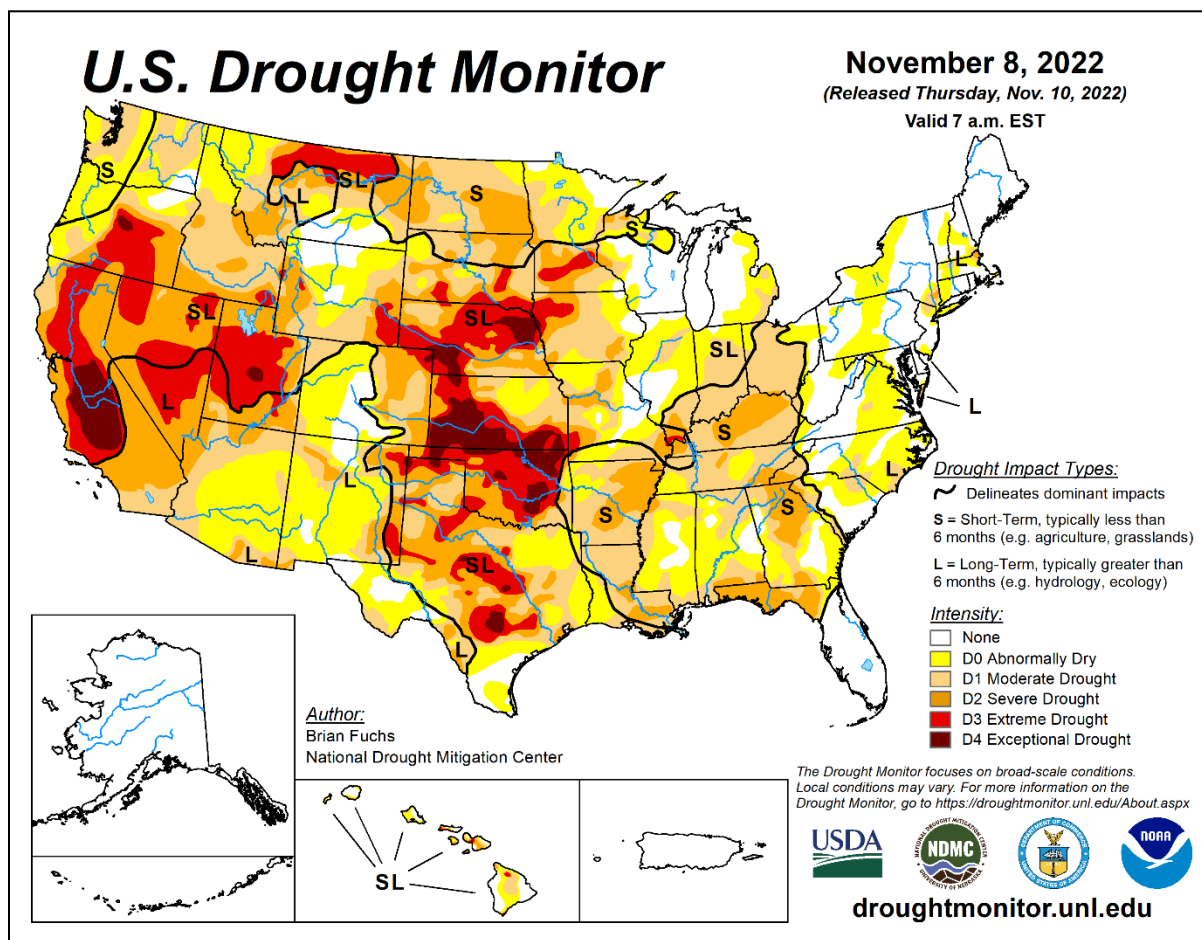


weather.msfc.nasa.gov

10 Nov 2022
18:16 UTC

GOES-East Visible
November 10, 2022
1:16 pm EST





National Weather Data for Selected Cities

Weather Data for the Week Ending November 12, 2022

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	PRECIP		
																			.01 INCH OR MORE	.50 INCH OR MORE	
AK	ANCHORAGE	31	21	43	5	26	1	0.10	-0.19	0.05	7.86	144	23.55	161	95	72	0	7	3	0	
	BARROW	28	8	32	-14	18	0	0.11	0.02	0.04	1.47	98	8.42	170	91	79	0	7	4	0	
	FAIRBANKS	19	4	25	-14	11	5	0.12	-0.06	0.06	2.39	98	6.97	65	85	72	0	7	3	0	
	JUNEAU	33	25	41	17	29	-6	1.35	-0.16	0.67	26.46	131	78.67	139	82	56	0	6	3	1	
	KODIAK	42	31	47	25	37	0	3.78	2.07	1.50	19.19	99	69.40	106	92	65	0	4	5	3	
AL	NOME	32	22	37	3	27	6	0.73	0.40	0.54	7.84	170	18.20	117	92	69	0	6	5	1	
	BIRMINGHAM	75	56	85	36	66	10	0.04	-0.91	0.03	4.54	50	42.96	87	88	53	0	0	2	0	
	HUNTSVILLE	74	53	84	34	64	9	0.40	-0.47	0.31	6.56	76	44.04	96	94	56	0	0	4	0	
	MOBILE	80	59	88	44	70	9	0.01	-1.08	0.01	5.35	48	48.96	83	86	48	0	0	1	0	
	MONTGOMERY	78	56	87	44	67	8	0.44	-0.39	0.43	3.73	46	44.67	102	95	55	0	0	2	0	
AR	FORT SMITH	73	51	84	30	62	7	0.17	-0.81	0.17	8.87	87	44.00	105	96	46	0	1	1	0	
	LITTLE ROCK	70	50	83	31	60	6	0.48	-0.61	0.18	4.32	46	36.93	87	87	51	0	1	3	0	
AZ	FLAGSTAFF	49	23	56	15	36	-3	0.41	0.06	0.41	3.81	96	14.89	84	86	38	0	6	1	0	
	PHOENIX	75	51	81	47	63	-5	0.04	-0.09	0.04	1.76	130	3.63	59	63	22	0	0	1	0	
	PRESCOTT	57	30	65	21	44	-6	0.01	-0.13	0.01	3.60	153	10.54	92	78	27	0	5	1	0	
CA	TUCSON	76	46	83	39	61	-3	0.00	-0.11	0.00	1.34	61	4.81	51	63	19	0	0	0	0	
	BAKERSFIELD	63	46	72	41	55	-4	0.39	0.28	0.24	0.65	128	2.50	50	87	49	0	0	3	0	
	EUREKA	51	39	55	36	46	-6	1.45	0.48	0.59	4.68	103	18.71	64	92	77	0	0	6	1	
	FRESNO	60	45	66	39	52	-5	0.52	0.33	0.30	0.72	77	1.80	20	90	54	0	0	4	0	
	LOS ANGELES	66	52	71	47	59	-5	1.58	1.43	1.30	2.10	251	3.57	37	85	49	0	0	3	1	
CO	REDDING	55	38	60	34	47	-8	1.52	0.83	1.19	3.35	96	8.24	33	93	53	0	0	5	1	
	SACRAMENTO	59	43	64	35	51	-5	0.81	0.50	0.71	1.23	84	3.42	25	94	50	0	0	3	1	
	SAN DIEGO	66	51	68	45	58	-6	0.98	0.83	0.82	1.79	208	4.27	56	86	51	0	0	3	1	
	SAN FRANCISCO	59	48	62	44	53	-5	1.27	0.90	1.19	1.86	126	3.68	26	92	51	0	0	4	1	
	STOCKTON	60	42	66	36	51	-6	0.94	0.66	0.50	1.28	102	2.88	28	94	48	0	0	3	1	
CT	ALAMOSA	53	17	64	0	35	2	0.00	-0.09	0.00	0.96	53	10.19	149	78	18	0	7	0	0	
	CO SPRINGS	55	28	74	13	41	-1	0.04	-0.06	0.02	0.69	30	10.69	69	75	25	0	4	2	0	
	DENVER INTL	53	26	74	12	40	-2	0.00	-0.16	0.00	1.83	68	10.04	72	79	26	0	5	0	0	
	GRAND JUNCTION	55	34	69	24	44	2	0.04	-0.11	0.04	4.57	185	7.90	97	77	31	0	4	1	0	
	PUEBLO	60	28	79	8	44	1	0.00	-0.12	0.00	0.65	40	9.00	78	66	21	0	4	0	0	
DC	BRIDGEPORT	67	48	79	38	58	10	0.75	0.07	0.75	9.70	108	29.47	77	89	52	0	0	1	1	
	HARTFORD	68	45	78	30	56	12	2.16	1.38	1.81	13.34	130	40.36	99	86	43	0	1	3	1	
DE	WASHINGTON	71	54	81	45	62	10	0.71	0.02	0.62	5.22	59	34.71	94	84	50	0	0	3	1	
FL	WILMINGTON	69	49	80	38	59	11	0.57	-0.12	0.46	7.70	83	33.95	85	87	51	0	0	3	0	
	DAYTONA BEACH	81	70	84	64	75	7	3.06	2.38	1.32	16.35	124	43.38	91	94	68	0	0	5	3	
	JACKSONVILLE	80	64	85	60	72	8	2.16	1.71	2.12	9.02	73	47.00	95	97	60	0	0	2	1	
	KEY WEST	83	75	86	73	79	2	0.75	0.29	0.38	15.35	110	34.16	91	94	72	0	0	3	0	
	MIAMI	85	71	88	69	78	3	2.26	1.34	1.27	18.80	96	62.38	98	97	61	0	0	5	2	
GA	ORLANDO	82	69	88	65	75	6	3.93	3.52	1.83	28.13	265	59.69	124	98	53	0	0	4	3	
	PENSACOLA	82	63	89	44	72	9	0.02	-0.97	0.02	3.67	28	53.80	89	86	50	0	0	1	0	
	TALLAHASSEE	81	63	88	58	72	10	1.04	0.37	1.02	2.54	27	50.49	96	92	46	0	0	2	1	
	TAMPA	82	69	89	67	75	4	3.36	3.06	2.45	15.52	173	52.49	114	93	64	0	0	5	2	
	WEST PALM BEACH	85	73	87	70	79	5	3.59	2.66	2.41	16.26	105	44.85	79	86	60	0	0	5	2	
HI	ATHENS	74	55	85	40	65	10	2.22	1.34	1.63	6.30	72	36.19	85	92	56	0	0	3	1	
	ATLANTA	75	58	83	40	67	11	0.70	-0.23	0.56	3.39	39	39.83	91	88	55	0	0	2	1	
	COLUMBUS	77	60	85	45	69	10	1.18	0.32	0.84	5.62	74	38.46	92	91	54	0	0	2	1	
	MACON	79	58	87	46	69	11	2.46	1.70	1.81	5.15	68	40.99	101	93	54	0	0	2	2	
	SAVANNAH	77	62	84	55	69	9	1.39	0.86	1.11	7.36	82	33.70	77	91	56	0	0	3	1	
IA	HILO	82	67	83	63	74	0	1.16	-2.11	0.47	21.98	89	79.06	79	90	61	0	0	7	0	
	HONOLULU	85	73	90	68	79	1	0.01	-0.53	0.01	1.26	37	10.31	79	80	49	1	0	1	0	
	KAHULUI	87	73	90	68	80	3	0.14	-0.24	0.13	0.95	50	1.78	14	73	44	1	0	2	0	
	LIHUE	82	73	83	67	78	1	0.09	-0.83	0.04	2.91	41	22.18	76	88	61	0	0	3	0	
	BURLINGTON	56	36	76	26	46	2	0.00	-0.57	0.00	7.72	101	24.12	69	78	50	0	2	0	0	
ID	CEDAR RAPIDS	54	32	76	20	43	3	0.93	0.43	0.84	5.94	82	22.21	66	86	53	0	4	2	1	
	DES MOINES	52	35	70	20	43	1	0.03	-0.43	0.03	5.34	78	27.35	80	76	51	0	3	1	0	
	DUBUQUE	53	34	71	25	44	4	0.77	0.25	0.59	4.33	56	26.93	76	85	56	0	3	2	1	
	SIOUX CITY	50	26	68	18	38	-1	0.46	0.17	0.39	1.76	31	12.89	46	85	52	0	5	3	0	
	WATERLOO	52	31	72	22	42	1	0.06	-0.39	0.03	4.76	70	31.79	94	81	50	0	5	2	0	
IL	BOISE	43	28	54	20	35	-7	0.92	0.66	0.53	2.68	160	8.23	89	85	53	0	5	4	1	
	LEWISTON	45	31	50	28	38	-5	0.19	-0.12	0.19	4.22	193	13.86	125	82	48	0	5	1	0	
	POCATELLO	39	22	51	13	31	-7	1.09	0.88	0.40	3.15	141	10.43	103	86	57	0	7	4	0	
	CHICAGO/O'HARE	59	43	76	32	51	7	0.00	-0.57	0.00	4.08	53	27.71	80	71	42	0	2	0	0	
	MOLINE	59	38	78	30	49	5	0.09	-0.45	0.05	6.41	90	28.96	83	78	47	0	2	2	0	
IN	PEORIA	60	40	77	30	50	5	0.01	-0.65	0.01	3.18	40	22.57	66	76	43	0	2	1	0	
	ROCKFORD	57	39	76	31	48	6	0.02	-0.50	0.01	8.45	117	36.26	106	84	49	0	2	2	0	
	SPRINGFIELD	61	40	78	30	50	4	0.00	-0.66	0.00	7.52	103	30.04	87	73	42	0	2	0	0	
	EVANSVILLE	66	42	78	29	54	5	0.20	-0.71	0.20	7.95	96	40.41	97	81	37	0	1	1	0	
	FORT WAYNE	62	37	74	30	49	6	0.21	-0.46	0.21	3.89	54	28.67	81	87	40	0	1	1	0	
KS	INDIANAPOLIS	61																			

Weather Data for the Week Ending November 12, 2022

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	TEMP. °F		PRECIP	
																	90 AND ABOVE	32 AND BELOW	01 INCH OR MORE	.50 INCH OR MORE
KY	LEXINGTON	69	46	79	32	57	9	0.71	-0.01	0.47	3.15	37	38.50	88	74	39	0	1	2	0
	LOUISVILLE	69	46	79	31	58	7	0.63	-0.10	0.43	4.24	48	35.59	84	75	34	0	1	2	0
	PADUCAH	67	46	83	30	56	6	0.36	-0.55	0.36	3.78	41	37.04	85	84	40	0	1	1	0
LA	BATON ROUGE	82	56	89	38	69	8	0.12	-0.83	0.08	2.86	26	35.57	65	97	47	0	0	2	0
	LAKE CHARLES	80	56	86	37	68	5	0.25	-0.76	0.14	5.06	43	28.88	54	98	53	0	0	2	0
	NEW ORLEANS	80	62	90	45	71	7	0.10	-0.80	0.10	4.86	46	42.17	75	96	53	0	0	1	0
MA	SHREVEPORT	76	56	84	37	66	8	0.00	-0.97	0.00	2.36	24	37.74	85	92	57	0	0	0	0
	BOSTON	67	49	76	36	58	12	0.45	-0.38	0.38	7.32	81	24.29	65	85	43	0	0	2	0
	WORCESTER	64	45	72	32	54	12	1.31	0.40	1.04	11.94	112	39.42	94	87	47	0	1	3	1
MD	BALTIMORE	70	51	81	40	61	12	0.80	0.05	0.65	8.76	90	40.12	101	86	50	0	0	3	1
ME	CARIBOU	53	39	71	28	46	11	2.09	1.31	1.55	8.28	94	36.23	103	83	55	0	2	5	1
	PORTLAND	64	44	73	26	54	12	1.19	0.24	1.14	13.13	122	47.15	114	87	42	0	1	3	1
	ALPENA	57	38	78	26	47	8	0.08	-0.40	0.06	5.66	84	26.27	98	85	49	0	2	3	0
MI	GRAND RAPIDS	58	38	75	31	48	5	0.00	-0.76	0.00	5.12	58	31.23	88	81	48	0	1	0	0
	HOUGHTON LAKE	54	35	71	25	44	6	0.03	-0.49	0.03	5.51	83	23.99	92	87	54	0	3	1	0
	LANSING	59	39	76	32	49	7	0.00	-0.59	0.00	4.08	58	30.61	102	74	44	0	1	0	0
MN	MUSKEGON	59	42	71	33	50	7	0.10	-0.59	0.10	7.78	93	29.91	96	76	47	0	0	1	0
	TRAVERSE CITY	58	41	77	32	49	8	0.01	-0.51	0.01	11.55	145	27.59	106	74	46	0	1	1	0
	DULUTH	39	30	47	20	35	2	2.74	2.26	1.87	6.27	86	28.81	100	89	68	0	5	4	2
MO	INT_L FALLS	35	27	42	20	31	1	0.74	0.37	0.29	3.90	66	30.59	129	89	68	0	6	5	0
	MINNEAPOLIS	48	32	68	25	40	2	0.96	0.58	0.55	1.69	26	19.51	66	81	56	0	4	4	1
	ROCHESTER	47	30	67	21	38	2	0.48	0.04	0.41	2.59	38	32.61	100	85	59	0	6	3	0
NC	ST. CLOUD	42	29	60	22	35	1	1.66	1.30	0.63	4.00	63	22.76	85	89	63	0	6	4	2
	COLUMBIA	63	41	82	27	52	4	0.07	-0.61	0.07	6.01	71	30.33	80	75	44	0	2	1	0
	KANSAS CITY	58	39	74	21	48	2	0.63	0.15	0.63	5.85	71	32.01	87	79	49	0	2	1	1
MS	SAINT LOUIS	64	45	82	30	55	5	0.00	-0.84	0.00	6.41	84	45.07	121	64	37	0	2	0	0
	SPRINGFIELD	65	43	81	22	54	5	0.33	-0.61	0.30	6.31	66	36.85	91	84	47	0	2	2	0
	JACKSON	79	53	87	36	66	9	1.81	0.81	1.65	5.56	62	52.24	105	96	49	0	0	3	1
MT	MERIDIAN	79	54	88	34	66	9	0.01	-0.93	0.01	5.52	63	45.85	94	95	50	0	0	1	0
	TUPELO	75	54	84	35	65	10	0.19	-0.69	0.16	5.69	62	41.71	85	86	53	0	0	2	0
	BILLINGS	25	12	39	7	19	-20	0.65	0.50	0.23	2.49	83	14.21	106	86	64	0	7	4	0
NE	BUTTE	25	3	36	-12	14	-16	0.14	-0.01	0.05	2.45	113	9.01	75	89	60	0	7	4	0
	CUT BANK	15	-5	30	-15	5	-27	0.00	-0.11	0.00	1.06	57	7.57	73	90	71	0	7	0	0
	GLASGOW	18	1	30	-15	9	-24	0.57	0.44	0.27	2.33	105	8.49	66	83	69	0	7	4	0
ND	GREAT FALLS	18	-1	32	-15	8	-27	0.72	0.55	0.29	4.81	178	13.11	94	90	71	0	7	4	0
	HAVRE	14	-7	26	-18	4	-30	0.38	0.26	0.16	2.27	112	8.80	78	85	70	0	7	4	0
	MISSOULA	28	15	39	4	22	-12	0.56	0.27	0.47	2.64	100	9.00	72	86	60	0	7	2	0
NC	ASHEVILLE	68	48	77	36	58	8	2.86	2.04	2.24	7.91	88	41.39	96	97	58	0	0	3	2
	CHARLOTTE	73	56	82	45	64	11	1.60	0.82	0.85	7.35	89	34.25	90	88	57	0	0	3	2
	GREENSBORO	71	53	82	44	62	11	1.94	1.17	1.71	8.66	96	39.72	102	89	57	0	0	3	1
ND	HATTERAS	74	65	79	59	69	9	0.89	-0.26	0.71	5.48	36	38.05	70	95	75	0	0	4	1
	RALEIGH	76	58	84	47	67	14	0.81	0.02	0.67	6.87	69	36.75	90	89	51	0	0	2	1
	WILMINGTON	77	61	84	52	69	11	0.92	0.09	0.89	6.54	44	36.85	67	93	61	0	0	2	1
NE	BISMARCK	28	12	43	-6	20	-13	0.92	0.74	0.84	2.35	67	25.33	140	87	63	0	7	2	1
	DICKINSON	21	4	33	-11	12	-20	0.04	-0.11	0.04	0.31	10	13.86	91	89	70	0	7	1	0
	FARGO	34	22	44	11	28	-5	0.41	0.15	0.32	1.05	19	18.31	81	86	67	0	6	3	0
NY	GRAND FORKS	32	21	42	14	27	-4	0.32	0.06	0.25	1.03	22	20.77	100	86	67	0	6	4	0
	JAMESTOWN	31	16	45	3	23	-8	0.21	0.06	0.14	1.02	25	14.82	77	86	66	0	7	2	0
	GRAND ISLAND	57	32	76	13	44	2	0.02	-0.24	0.02	1.39	31	11.59	46	80	35	0	4	1	0
OH	LINCOLN	56	31	78	8	44	1	0.04	-0.28	0.04	1.80	32	18.27	66	79	39	0	5	1	0
	NORFOLK	49	25	67	10	37	-2	0.07	-0.22	0.03	2.25	44	12.18	47	81	46	0	5	3	0
	NORTH PLATTE	53	24	76	6	39	-1	0.00	-0.14	0.00	1.57	44	12.38	60	78	35	0	5	0	0
OH	OMAHA	54	31	75	18	43	-1	0.01	-0.34	0.01	2.53	42	20.49	68	88	45	0	5	1	0
	SCOTTSBLUFF	44	21	63	8	33	-7	0.03	-0.13	0.03	1.44	52	8.05	54	83	41	0	6	1	0
	VALENTINE	41	14	71	-7	28	-11	0.04	-0.11	0.03	0.25	7	9.70	48	85	47	0	7	2	0
NJ	CONCORD	66	39	75	23	53	12	1.02	0.23	0.83	7.74	81	31.94	88	91	38	0	3	3	1
	ATLANTIC_CITY	69	49	81	34	59	10	0.64	-0.16	0.60	12.08	133	46.13	116	87	53	0	0	2	1
	NEWARK	70	52	81	38	61	12	0.81	0.06	0.76	9.06	101	32.00	79	80	42	0	0	3	1
NM	ALBUQUERQUE	61	35	71	24	48	0	0.00	-0.14	0.00	1.81	80	8.06	100	60	18	0	2	0	0
	ELY	42	23	51	5	33	-5	0.76	0.59	0.48	2.86	165	6.57	78	88	45	0	6	3	0
	LAS VEGAS	64	47	73	38	55	-5	0.10	0.04	0.10	0.59	80	1.72	48	51	23	0	0	1	0
NV	RENO	48	31	62	22	39	-7	0.30	0.17	0.21	0.65	71	3.06	52	83	35	0	5	3	0
	WINNEMUCCA	45	24	61	13	34	-6	0.17	-0.01	0.12	0.70	51	3.48	51	87	46	0	7	3	0
	ALBANY	64	42	72	27	53	10	1.41	0.73	0.65	9.89	112	39.32	110	87	46	0	3	3	2
NY	BINGHAMTON	6																		

Weather Data for the Week Ending November 12, 2022

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	TEMP. °F		PRECIP		
																	90 AND ABOVE	32 AND BELOW	01 INCH OR MORE	50 INCH OR MORE	
OK	YOUNGSTOWN	63	42	72	33	53	9	2.31	1.64	2.28	7.08	84	38.91	107	78	44	0	0	3	1	
	OKLAHOMA CITY	65	46	79	25	56	4	0.50	0.06	0.43	4.48	57	21.22	62	95	55	0	2	2	0	
	TULSA	67	46	78	26	56	4	0.77	0.07	0.47	5.61	63	29.95	80	88	50	0	2	3	0	
OR	ASTORIA	49	36	52	31	43	-5	1.94	-0.54	1.22	12.94	96	54.58	103	94	65	0	1	5	2	
	BURNS	37	12	50	0	25	-12	0.31	0.10	0.22	0.97	64	5.28	64	88	58	0	7	2	0	
	EUGENE	49	32	52	27	40	-7	1.56	0.26	1.32	5.35	81	24.06	81	96	67	0	4	3	1	
PA	MEDFORD	49	36	56	33	42	-5	0.75	0.20	0.35	2.79	107	9.95	75	96	61	0	0	4	0	
	PENDLETON	44	30	55	23	37	-5	0.12	-0.21	0.12	2.68	123	13.63	129	88	50	0	5	1	0	
	PORTLAND	50	37	53	33	44	-5	0.79	-0.45	0.64	6.42	92	29.30	105	87	58	0	0	2	1	
	SALEM	49	32	53	29	40	-7	3.13	1.82	1.59	7.37	105	31.63	108	98	65	0	3	4	2	
	ALLENTOWN	66	44	73	30	55	9	0.81	0.11	0.54	9.47	92	39.54	95	86	50	0	2	3	1	
	ERIE	61	44	70	35	52	6	3.07	2.21	2.48	16.22	158	42.44	116	79	47	0	0	3	1	
	MIDDLETOWN	67	46	76	33	57	10	1.23	0.54	1.04	8.79	89	34.98	89	88	52	0	0	3	1	
	PHILADELPHIA	70	51	79	40	60	11	0.50	-0.15	0.43	8.40	93	32.42	84	84	50	0	0	2	0	
	PITTSBURGH	64	43	74	34	53	8	2.51	1.85	2.35	7.84	107	34.31	97	79	46	0	0	2	1	
	WILKES-BARRE	67	44	72	30	55	10	1.27	0.60	0.56	10.33	114	35.98	105	88	47	0	2	4	2	
RI	WILLIAMSPORT	66	42	74	29	54	10	2.69	1.98	1.81	10.50	108	33.33	87	91	47	0	2	2	2	
	PROVIDENCE	68	46	79	34	57	10	0.79	-0.16	0.61	12.45	125	36.71	91	89	46	0	0	2	1	
	CHARLESTON	79	62	85	53	70	10	2.46	1.85	1.37	11.05	96	46.25	97	89	54	0	0	2	2	
SD	COLUMBIA	76	60	83	52	68	12	2.07	1.42	1.11	6.34	78	36.29	91	92	57	0	0	4	1	
	FLORENCE	78	59	85	51	69	12	2.03	1.42	1.46	6.93	78	33.70	84	92	51	0	0	4	2	
	GREENVILLE	72	55	82	43	64	10	2.42	1.56	1.70	10.26	117	45.96	107	87	56	0	0	3	2	
TN	ABERDEEN	38	23	55	10	31	-3	0.57	0.38	0.35	0.76	16	17.65	84	91	66	0	5	2	0	
	HURON	37	21	53	11	29	-7	0.42	0.22	0.37	0.88	18	14.62	65	86	60	0	5	3	0	
	RAPID CITY	34	13	48	2	23	-14	0.04	-0.09	0.03	0.93	32	14.77	87	86	53	0	7	2	0	
TX	SIOUX FALLS	45	26	63	19	35	-2	0.33	0.06	0.31	2.74	49	21.48	81	81	55	0	5	2	0	
	BRISTOL	74	47	84	39	60	12	0.58	-0.09	0.51	4.42	68	35.21	92	89	48	0	0	4	1	
	CHATTANOOGA	74	51	81	35	63	10	1.64	0.65	1.31	6.26	66	44.49	95	91	51	0	0	3	1	
UT	KNOXVILLE	72	51	80	37	62	11	0.57	-0.28	0.46	4.88	63	42.89	97	91	55	0	0	4	0	
	MEMPHIS	70	51	82	31	60	6	0.36	-0.64	0.19	8.59	98	45.67	98	93	55	0	1	2	0	
	NASHVILLE	73	51	81	32	62	10	1.57	0.80	1.44	4.19	49	44.19	101	76	41	0	1	3	1	
	ABILENE	74	50	83	29	62	4	0.00	-0.37	0.00	4.90	78	12.50	53	83	43	0	1	0	0	
	AMARILLO	63	40	75	20	51	1	0.00	-0.20	0.00	4.40	115	15.61	84	89	41	0	2	0	0	
	AUSTIN	77	59	84	39	68	5	0.05	-0.70	0.04	3.19	36	15.57	48	97	60	0	0	2	0	
	BEAUMONT	81	57	86	40	69	6	0.57	-0.37	0.50	7.61	55	37.37	68	99	55	0	0	2	1	
	BROWNSVILLE	85	65	90	47	75	3	0.54	0.06	0.43	7.71	74	23.55	95	99	59	1	0	3	0	
	CORPUS CHRISTI	82	63	86	46	72	5	0.02	-0.52	0.01	5.42	57	21.19	73	96	64	0	0	2	0	
	DEL RIO	77	58	87	40	68	4	0.01	-0.22	0.01	1.36	26	5.61	30	88	49	0	0	1	0	
VA	EL PASO	73	45	82	35	59	2	0.00	-0.09	0.00	3.54	154	9.14	115	49	17	0	0	0	0	
	FORT WORTH	75	56	83	35	65	6	0.55	-0.07	0.52	8.25	99	34.42	104	93	55	0	0	2	1	
	GALVESTON	78	65	82	49	71	4	0.01	-1.00	0.01	5.56	40	27.43	67	95	68	0	0	1	0	
	HOUSTON	81	57	86	39	69	5	1.11	0.14	1.10	3.95	33	33.03	72	97	55	0	0	2	1	
	LUBBOCK	67	43	78	24	55	3	0.01	-0.19	0.01	3.20	71	12.79	74	85	36	0	2	1	0	
	MIDLAND	72	48	81	26	60	3	0.00	-0.16	0.00	2.10	66	7.94	63	83	38	0	1	0	0	
	SAN ANGELO	75	50	85	29	62	4	0.55	0.22	0.55	4.63	83	10.35	53	86	42	0	1	1	1	
	SAN ANTONIO	80	60	87	41	70	7	0.07	-0.45	0.04	2.07	24	9.07	31	86	50	0	0	3	0	
	VICTORIA	83	60	89	41	72	7	0.11	-0.63	0.11	4.28	44	18.50	50	97	58	0	0	1	0	
	WACO	74	54	85	30	64	5	0.65	-0.03	0.62	4.51	52	15.74	49	98	64	0	1	2	1	
WY	WICHITA FALLS	70	49	81	29	59	4	0.00	-0.41	0.00	3.85	58	15.48	60	89	47	0	2	0	0	
	SALT LAKE CITY	48	34	61	26	41	-3	1.12	0.81	0.68	3.32	116	9.57	71	84	44	0	3	3	1	
	LYNCHBURG	72	51	84	41	62	13	2.40	1.63	2.10	5.85	69	38.46	103	86	51	0	0	4	1	
WV	NORFOLK	73	61	82	56	67	12	0.76	-0.03	0.75	6.80	64	30.73	69	92	64	0	0	2	1	
	RICHMOND	74	54	84	42	64	13	1.28	0.55	1.28	4.83	52	32.03	79	88	50	0	0	1	1	
	ROANOKE	70	50	83	37	60	10	3.99	3.33	2.74	11.41	140	41.16	108	86	48	0	0	4	2	
	WASH/DULLES	71	49	79	33	60	12	1.14	0.39	0.81	6.57	74	33.54	88	87	48	0	0	3	1	
	BURLINGTON	64	45	76	27	55	13	2.06	1.43	0.87	10.74	124	34.27	102	85	40	0	2	3	2	
	OLYMPIA	46	30	51	22	38	-6	1.20	-0.69	1.00	8.43	82	40.26	106	98	65	0	5	3	1	
	QUILLAYUTE	46	33	52	28	40	-6	1.36	-2.18	1.32	14.31	67	74.07	94	96	66	0	4	3	1	
	SEATTLE-TACOMA	46	36	50	33	41	-7	0.97	-0.50	0.63	4.37	55	29.09	97	85	57	0	0	2	1	
	SPOKANE	36	21	43	17	29	-10	0.36	-0.11	0.36	2.85	104	12.26	95	88	57	0	7	1	0	
	YAKIMA	44	24	48	19	34	-6	0.19	0.00	0.11	0.67	56	4.67	77	92	54	0	7	2	0	
WI	EAU CLAIRE	50	33	69	25	41	5	1.15	0.72	0.54	4.83	70	19.95	65	85	55	0	4	4	1	
	GREEN BAY	53	38	72	28	46	7	0.43	-0.03	0.35	6.70	100	29.48	102	84	55	0	2	2	0	
	LA CROSSE	52	35	69	25	44	3	0.04	-0.39	0.03	3.34	48	24.40	74	80	51	0	3	2	0	
WY	MADISON	54	37	71	30	46	6	0.63	0.12	0.58	7.50	105	32.91	96	81	51	0	2	3	1	
	MILWAUKEE	59	43	77	33	51	8	0.00	-0.50	0.00	8.39	122	31.51	100	73	45	0	0	0	0	
	BECKLEY	66	45	79	31	56	10	1.30	0.67	1.20	8.00	114	43.78	113	86	51	0	1	4	1	
WY	CHARLESTON	69	45	79	33	57	8	1.48	0.77	1.33	4.65	61	50.35	123	93	47	0	0	3	1	
	ELKINS	70	39</																		

National Agricultural Summary

November 7 – 13, 2022

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Large parts of the Nation recorded above-normal weekly precipitation. In the West, much of the Pacific Northwest, Rockies, and Southwest recorded at least twice the normal amount of precipitation. Some areas near the central California Coast recorded 6 inches of rain or more. In the nation's mid-section, much of the Great Lakes, Midwest, and northern Plains, as well as some locations on the southern Plains, recorded at least twice the normal amount of precipitation. In the East, the remnants of Hurricane Nicole brought at least twice the normal amount of weekly precipitation to much of the mid-Atlantic, Northeast, Ohio Valley, and Southeast.

Central Florida, where Hurricane Nicole made landfall, largely recorded 4 inches or more of rain. Parts of North Carolina and Virginia also received 4 inches of rain or more. Meanwhile, except for the southern Plains, most of the western and central U.S. recorded below-normal weekly temperatures. Much of the northern Plains and northern Rockies, as well as parts of the Pacific Northwest, recorded temperatures 10°F or more below normal. In contrast, most of the East was warmer than normal. Large parts of the mid-Atlantic, Northeast, and Southeast recorded temperatures 10°F or more above normal.

Corn: Ninety-three percent of the 2022 corn acreage was harvested as of November 13, three percentage points ahead of last year and 8 points ahead of the 5-year average. Harvest progress was complete or nearing completion in 13 of the 18 estimating states.

Soybean: Soybean harvest across the nation was 96 percent complete by November 13, five percentage points ahead of both last year and the 5-year average. Harvest progress was complete or nearing completion in 15 of the 18 estimating states.

Winter Wheat: Nationwide, producers had sown 96 percent of the intended 2023 winter wheat acreage by November 13, two percentage points ahead of last year and 3 points ahead of the 5-year average. Planting progress was complete or nearing completion in 15 of the 18 estimating states. Nationwide, 81 percent of the winter wheat acreage had emerged by November 13, one percentage point ahead of last year but equal to the 5-year average. Winter wheat emergence advanced 10 percentage points or more during the week in nine of the 18 estimating states. As of November 13, thirty-two percent of the 2023 winter wheat acreage was reported in good to excellent condition, 2 percentage points above the previous week but 14 points below the same time last year.

Cotton: By November 13, seventy-one percent of the nation's

cotton acreage was harvested, 7 percentage points ahead of last year and 8 points ahead of the 5-year average. Cotton harvest advanced 10 percentage points or more for the week in seven of the 15 estimating states.

Sorghum: Ninety-three percent of the 2022 sorghum acreage had been harvested by November 13, four percentage points ahead of last year and 7 points ahead of the 5-year average. Harvest progress was ahead of the 5-year average pace in all six estimating states.

Other Crops: Ninety-one percent of the nation's peanut acreage was harvested as of November 13, six percentage points ahead of last year and 4 points ahead of the 5-year average. Peanut harvest progress was ahead of the 5-year average pace in all eight estimating states.

By November 13, sugarbeet producers had harvested 98 percent of the nation's crop, 1 percentage point behind last year but equal to the 5-year average. Sugarbeet harvest advanced 21 percentage points during the week in Michigan.

By November 13, ninety-one percent of this year's sunflower crop was harvested, 10 percentage points ahead of last year and 20 points ahead of the 5-year average. Sunflower harvest advanced 20 percentage points during the week in Colorado.

Crop Progress and Condition**Week Ending November 13, 2022**

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

Corn Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
CO	93	65	84	86
IL	94	88	94	91
IN	84	83	91	84
IA	90	89	95	85
KS	95	93	96	93
KY	91	94	96	94
MI	74	60	78	66
MN	96	92	96	86
MO	94	90	94	91
NE	89	90	95	86
NC	100	98	100	100
ND	89	91	96	69
OH	76	75	87	74
PA	79	55	65	73
SD	88	91	96	77
TN	97	99	100	99
TX	100	100	100	96
WI	85	55	71	67
18 Sts	90	87	93	85
These 18 States harvested 93% of last year's corn acreage.				

Sorghum Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
CO	96	79	90	84
KS	82	82	90	80
NE	90	87	93	87
OK	84	80	92	81
SD	93	89	96	84
TX	100	100	100	96
6 Sts	89	87	93	86
These 6 States harvested 100% of last year's sorghum acreage.				

Soybeans Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
AR	93	94	96	90
IL	92	94	98	94
IN	86	93	96	91
IA	97	97	99	96
KS	84	88	93	86
KY	75	80	86	76
LA	100	100	100	99
MI	78	89	95	83
MN	100	100	100	98
MS	94	96	97	96
MO	80	86	92	80
NE	98	100	100	98
NC	65	55	66	56
ND	100	100	100	94
OH	87	92	96	89
SD	99	99	100	97
TN	75	80	87	77
WI	96	95	97	89
18 Sts	91	94	96	91
These 18 States harvested 96% of last year's soybean acreage.				

Peanuts Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
AL	84	87	92	88
FL	96	94	99	97
GA	87	89	93	89
NC	91	89	96	86
OK	79	70	85	78
SC	76	80	87	81
TX	67	60	70	68
VA	96	98	99	93
8 Sts	85	86	91	87
These 8 States harvested 96% of last year's peanut acreage.				

Cotton Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
AL	64	70	81	70
AZ	57	49	53	54
AR	93	97	99	93
CA	94	70	80	68
GA	54	58	68	64
KS	28	65	79	30
LA	92	98	100	96
MS	81	92	97	88
MO	84	92	93	84
NC	69	71	81	72
OK	59	45	61	50
SC	50	58	63	62
TN	69	74	83	75
TX	59	51	61	56
VA	60	74	82	69
15 Sts	64	62	71	63
These 15 States harvested 99% of last year's cotton acreage.				

Sugarbeets Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
ID	97	92	97	96
MI	93	71	92	90
MN	100	100	100	100
ND	100	100	100	100
4 Sts	99	94	98	98
These 4 States harvested 84% of last year's sugarbeet acreage.				

Sunflowers Percent Harvested				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
CO	79	53	73	81
KS	88	78	88	80
ND	81	82	91	71
SD	81	84	93	70
4 Sts	81	81	91	71
These 4 States harvested 86% of last year's sunflower acreage.				

Crop Progress and Condition

Week Ending November 13, 2022

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

Winter Wheat Percent Planted				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
AR	79	67	81	81
CA	58	45	60	49
CO	100	99	100	100
ID	100	99	100	100
IL	85	95	95	93
IN	91	90	96	93
KS	96	93	96	96
MI	89	98	100	94
MO	85	83	93	81
MT	100	99	100	98
NE	100	100	100	100
NC	65	54	69	60
OH	91	97	99	97
OK	93	90	95	93
OR	96	98	99	98
SD	100	100	100	100
TX	88	88	93	85
WA	100	99	100	99
18 Sts	94	92	96	93
These 18 States planted 89% of last year's winter wheat acreage.				

Winter Wheat Percent Emerged				
	Prev Year	Prev Week	Nov 13 2022	5-Yr Avg
AR	67	43	59	66
CA	29	15	25	25
CO	88	85	97	92
ID	95	88	91	93
IL	69	45	74	81
IN	74	63	77	79
KS	85	68	75	83
MI	80	91	94	84
MO	70	57	72	63
MT	81	93	95	84
NE	97	96	100	97
NC	41	32	48	42
OH	83	73	83	88
OK	81	75	82	83
OR	55	63	73	67
SD	97	75	78	95
TX	70	67	75	71
WA	91	90	93	89
18 Sts	80	73	81	81
These 18 States planted 89% of last year's winter wheat acreage.				

Winter Wheat Condition by Percent					
	VP	P	F	G	EX
AR	1	2	28	40	29
CA	0	0	5	65	30
CO	18	27	34	20	1
ID	3	4	52	37	4
IL	2	6	57	28	7
IN	2	5	30	53	10
KS	19	21	36	23	1
MI	1	6	28	50	15
MO	1	11	34	51	3
MT	1	13	45	29	12
NE	19	19	40	20	2
NC	0	2	12	83	3
OH	5	7	33	41	14
OK	22	20	39	17	2
OR	2	4	21	37	36
SD	10	27	39	24	0
TX	21	27	34	15	3
WA	1	7	31	52	9
18 Sts	14	18	36	27	5
Prev Wk	15	19	36	25	5
Prev Yr	7	13	34	39	7

VP - Very Poor;

P - Poor;

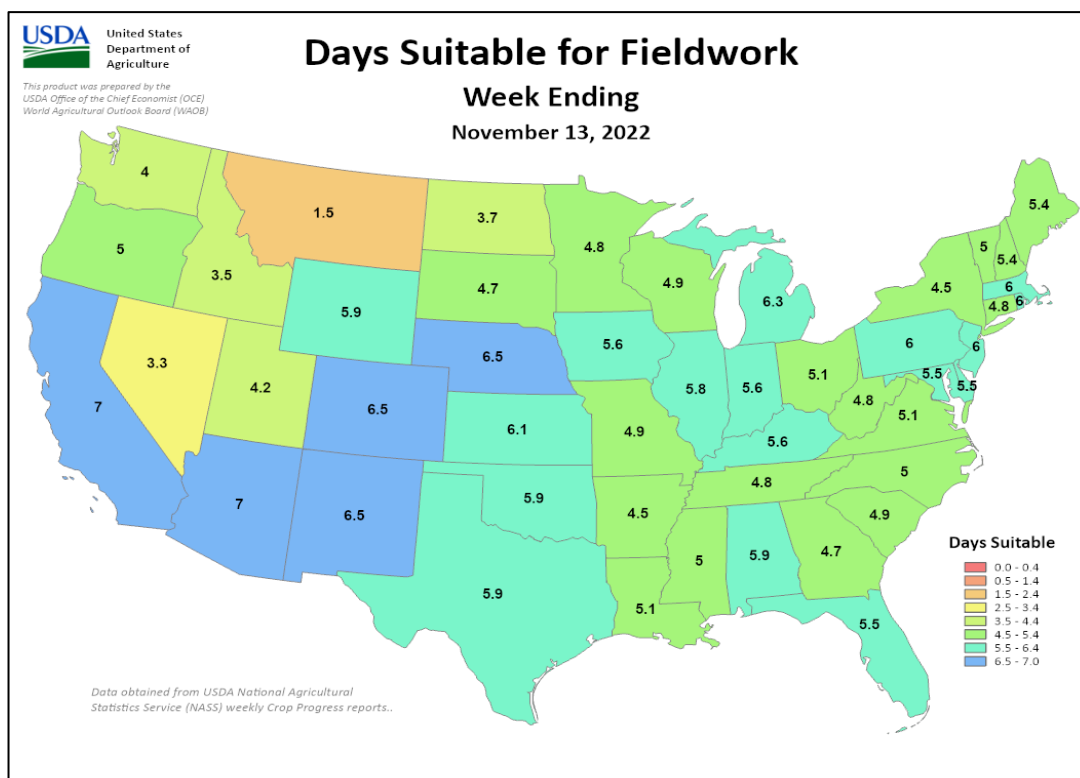
F - Fair;

G - Good;

EX - Excellent

NA - Not Available;

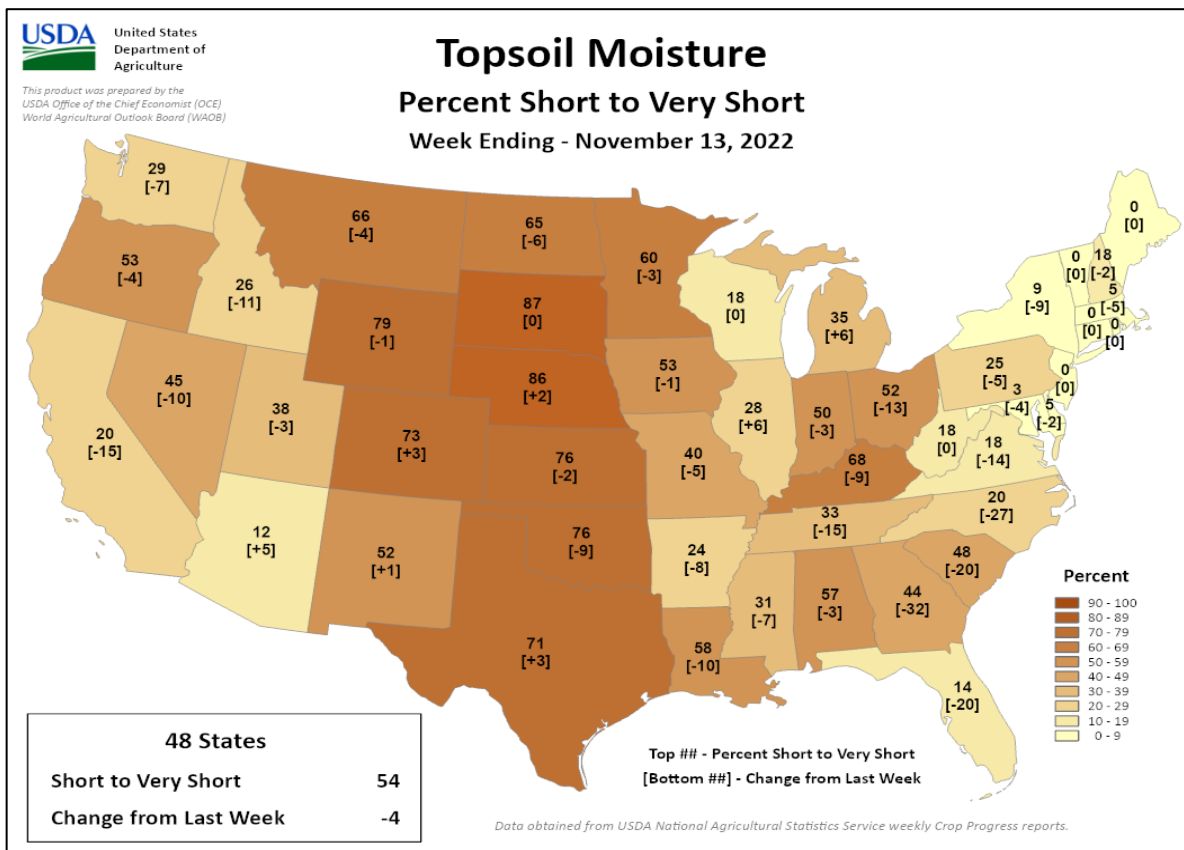
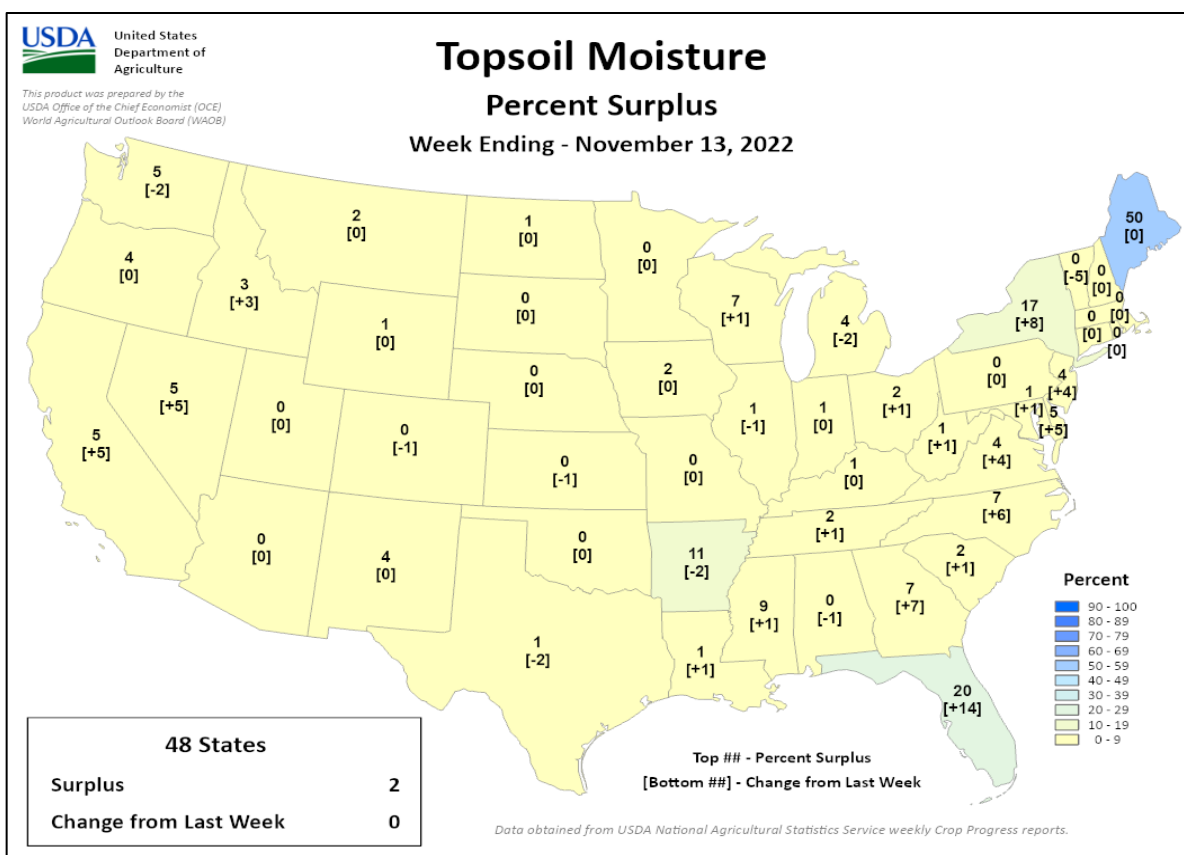
*Revised



Crop Progress and Condition

Week Ending November 13, 2022

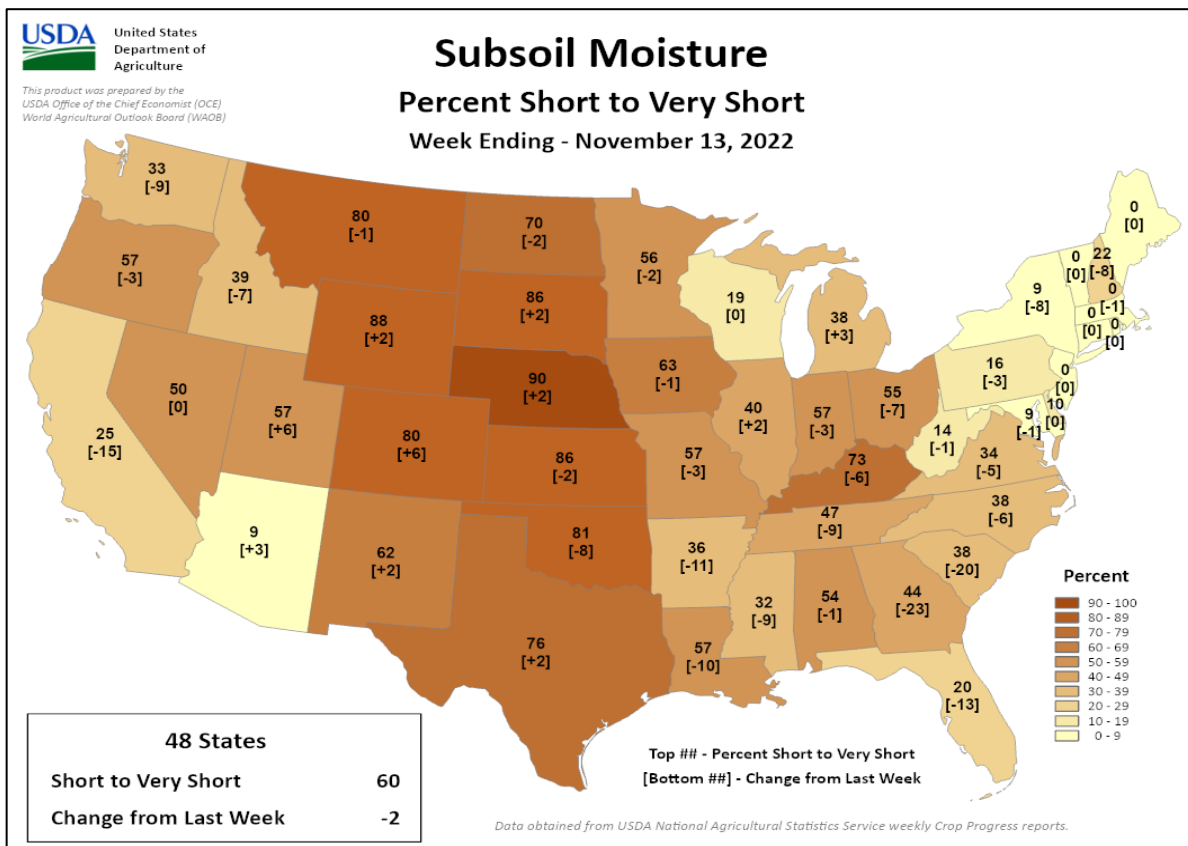
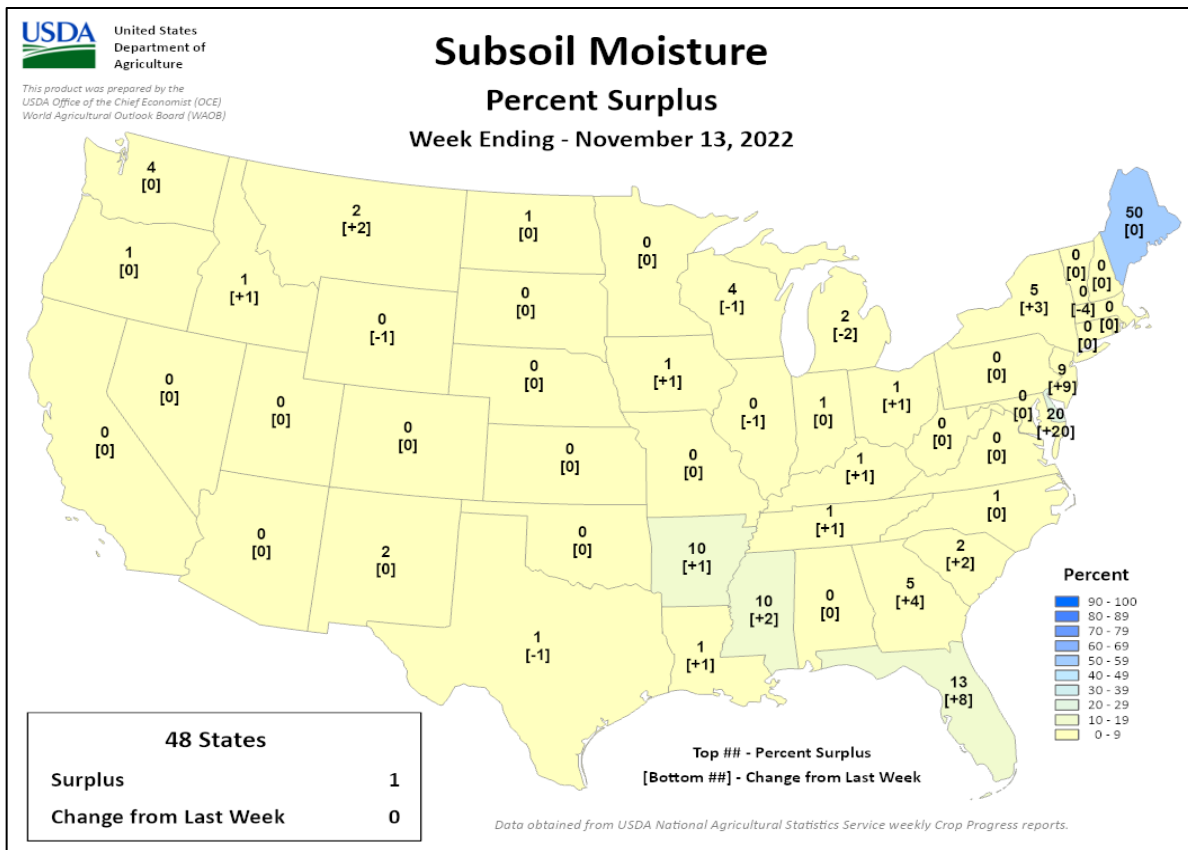
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending November 13, 2022

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



November 10 ENSO Diagnostic Discussion

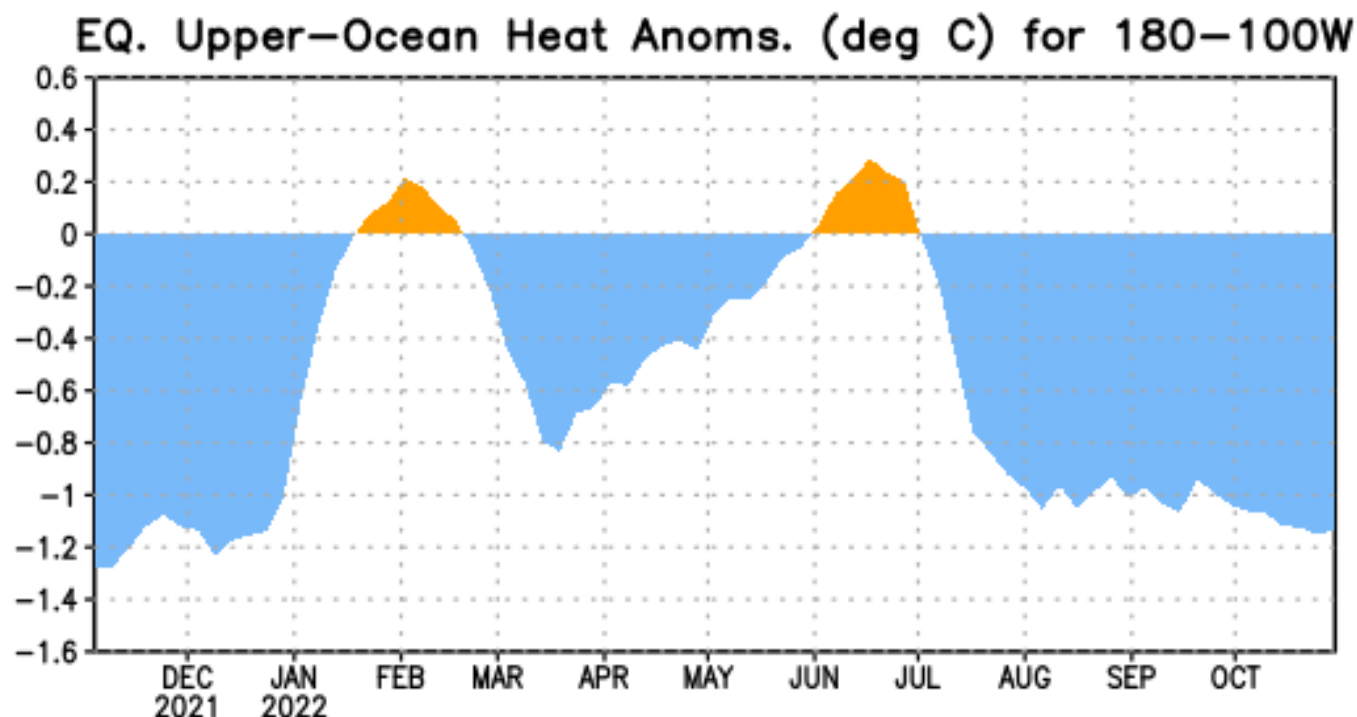


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: **La Niña Advisory**

Synopsis: There is a 76% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a transition to ENSO-neutral favored in February-April 2023 (57% chance).

Below-average sea surface temperatures (SSTs) strengthened in the east-central Pacific Ocean during the past month. All of the latest weekly Niño index values were near -1.0°C, with the exception of Niño-1+2 which was at -1.8°C. Since late July 2022, negative subsurface temperature anomalies have been quite persistent (Fig. 1), reflecting the stationary pattern of below-average temperatures across the eastern Pacific Ocean. For the monthly average, low-level easterly wind anomalies and upper-level westerly wind anomalies were evident across most of the equatorial Pacific. However, in the last week, the low-level trade winds weakened in association with sub-seasonal tropical variability. Convection remained suppressed over the western and central tropical Pacific and 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 February-April 2023. The forecaster consensus, which also considers the North American

Multi-Model Ensemble (NMME), is in agreement with the timing of this transition. The recent weakening of the trade winds suggest below-average SSTs may be near their minimum, though considerable uncertainty remains over how gradually the anomalies will decay. In summary, there is a 76% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a transition to ENSO-neutral favored in February-April 2023 (57% chance).

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

International Weather and Crop Summary

November 6-12, 2022

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

HIGHLIGHTS

EUROPE: Warm, showery weather prevailed over much of Europe, though dry conditions prevailed in northeastern growing areas.

MIDDLE EAST: Expanding showers in Iran and Iraq contrasted with developing dryness in western and central Turkey.

NORTHWESTERN AFRICA: Intensifying drought left soils devoid of moisture for winter grain planting and establishment over much of the region.

SOUTH ASIA: Seasonably dry weather across much of India and Pakistan continued to promote rabi crop sowing and other fieldwork.

SOUTHEAST ASIA: Widespread showers in the southern portions of the region maintained abundant moisture for oil palm and rice.

AUSTRALIA: Passing showers temporarily interrupted fieldwork, including winter crop harvesting and summer crop planting.

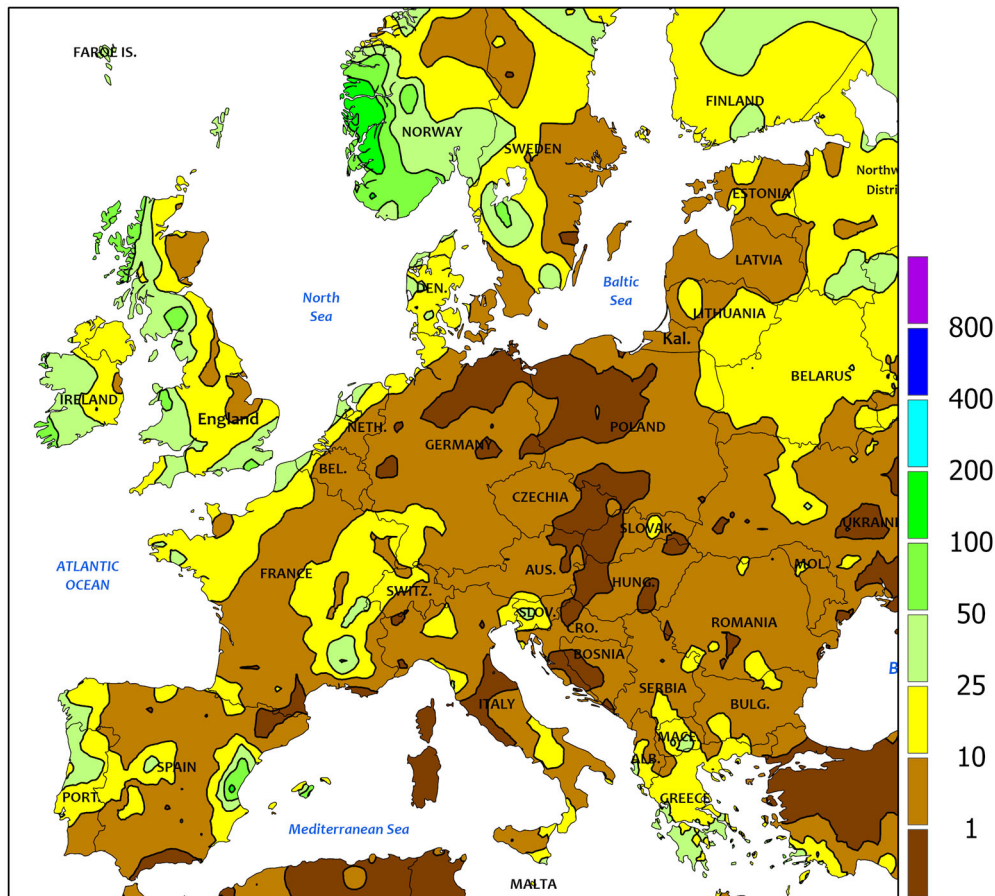
SOUTH AFRICA: Above-normal rainfall maintained favorable prospects for corn and other rain-fed summer crops.

ARGENTINA: Showers benefited immature winter grains in western production areas.

BRAZIL: Showers tapered off from recent weeks, promoting fieldwork but sustaining a drying trend in southern production areas.



EUROPE
Total Precipitation(mm)
November 6 - 12, 2022



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

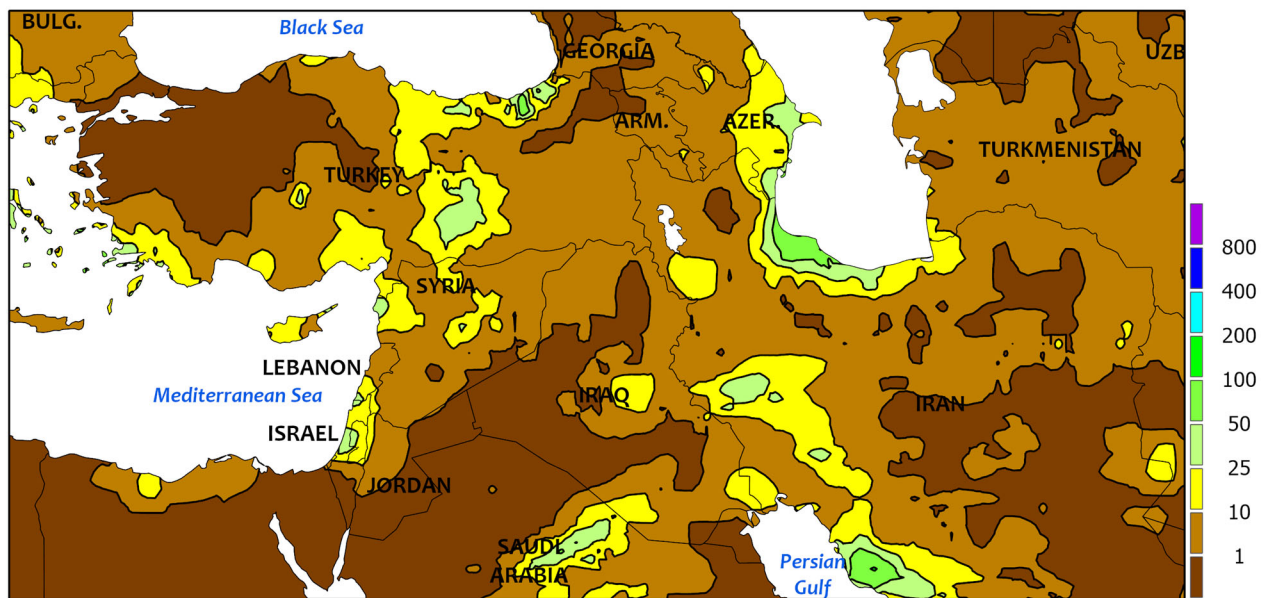


EUROPE

Warm and showery weather persisted, though northeastern growing areas were dry. Rainfall during the monitoring period was highly variable, with most of western and central Europe's primary winter crop areas reporting 2 to 25 mm. However, windward locales of northern and western Europe totaled 25 to 100 mm, while heavy to excessive rainfall in parts of eastern Spain (up to 210 mm) and southeastern France (50-100 mm, much of which fell over a few hours on November 9) caused flooding and damage to infrastructure. Nevertheless, the light to moderate showers

over primary winter crop areas benefited barley, wheat, and rapeseed but did little to ease long-term drought in central and southern Spain, western and southern France, as well as central and northern Italy. Conversely, dry weather prevailed from Poland into Hungary, though soil moisture remained favorable following a wet first half of autumn. Temperatures averaged 2 to 5°C above normal over most of the continent and up to 8°C above normal in Scandinavia; the warmth kept winter crops from going dormant, even in the typically colder northeastern climates.

MIDDLE EAST
Total Precipitation(mm)
November 6 - 12, 2022



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



MIDDLE EAST

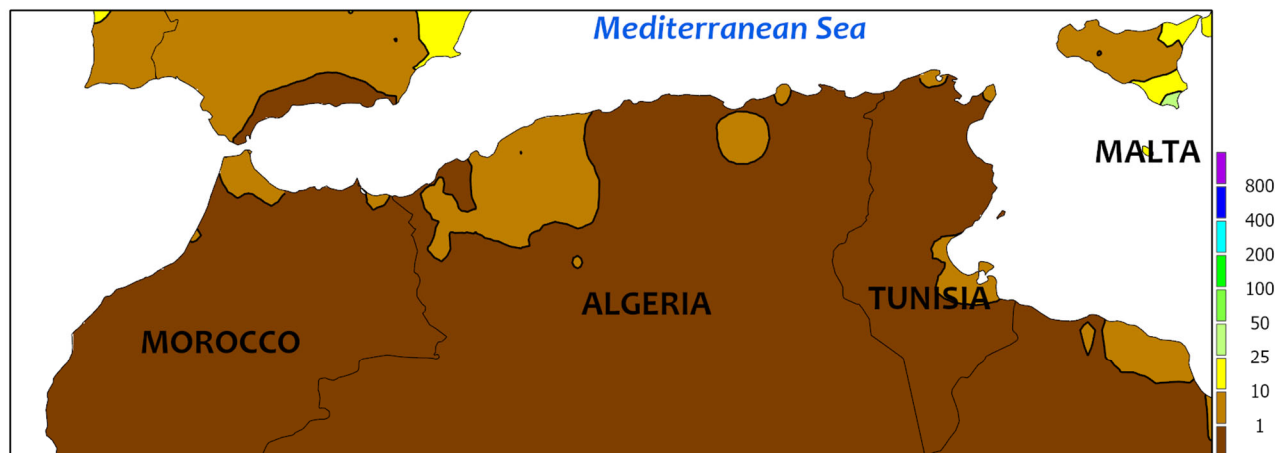
Expanding showers in Iran and Iraq contrasted with increasing short-term dryness in western and central Turkey. Little to no rainfall was recorded from the Aegean Sea into central Turkey; season-to-date precipitation (since September 1) has totaled 35 and 70 percent of normal in Thrace (northwest) and on the Anatolian Plateau, respectively. However, highly variable showers (5-45 mm) from southeastern Turkey's GAP Region into the Armenian Highlands improved soil moisture for winter crops and summer crop irrigation reserves. Showers (5-45 mm) benefitted winter grains along the immediate eastern

Mediterranean Coast, but primary crop areas farther inland — from Aleppo, Syria eastward into northern Iraq — remained unfavorably dry. Meanwhile, moderate to heavy rain (5-50 mm) in southern Iraq and southwestern Iran boosted establishment prospects for wheat and barley, while lighter showers (2-20 mm) in northern Iran moistened soils locally for winter crops. Temperatures averaged within 1 to 2°C of normal across most of the Middle East, though cold conditions (up to 4°C below normal) were noted in northeastern Iran's Khorasan Province.

NORTHWESTERN AFRICA

Total Precipitation(mm)

November 6 - 12, 2022



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



NORTHWESTERN AFRICA

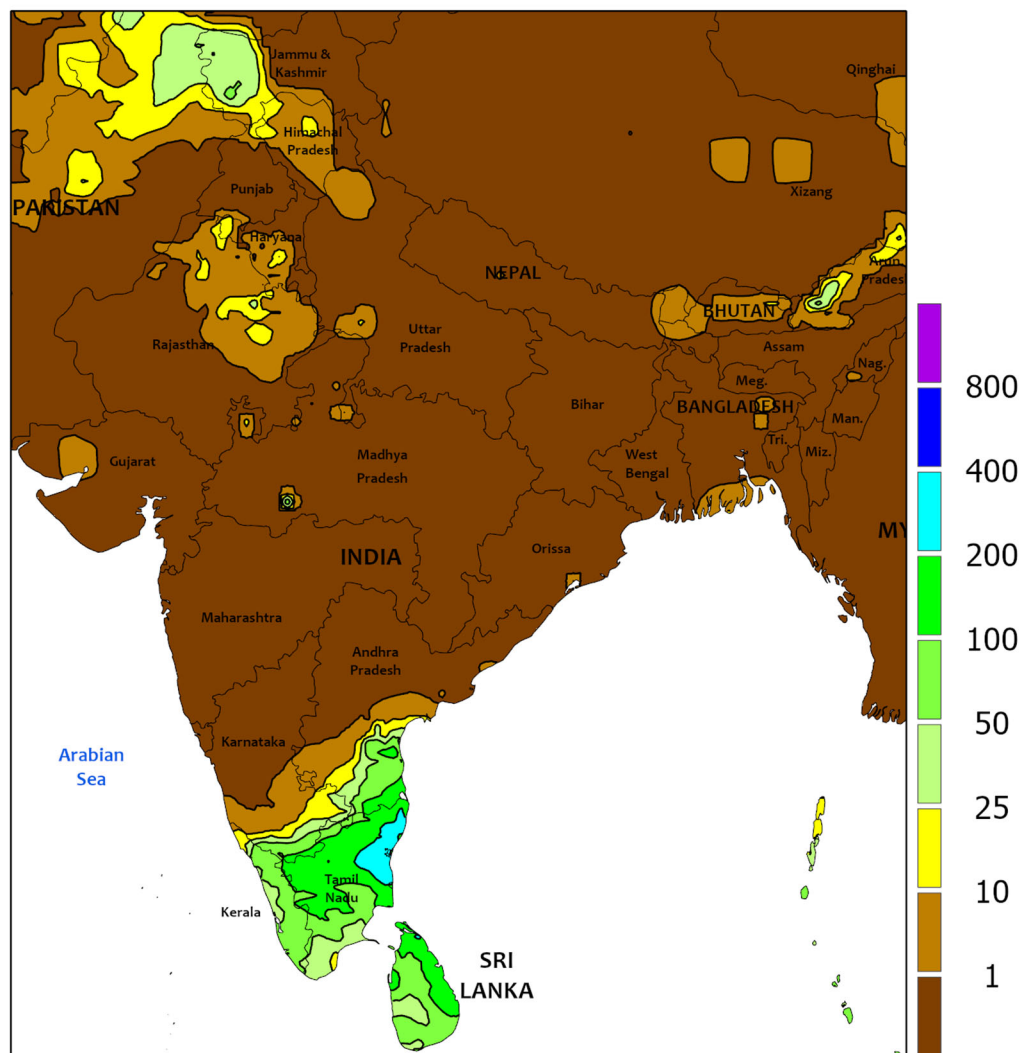
Drought intensified across much of the region. Outside of spotty light showers in western Algeria (1-6 mm) and eastern Tunisia (1-5 mm, locally more near the coast), no rain was reported during the monitoring period from Morocco into Tunisia. Season-to-date (since September 1) rainfall in Morocco's primary croplands remained mired below 20 mm, a deficit of 80 mm (less than 20 percent of normal) and the second driest start to the autumn-winter growing campaign over the past 30 years; last year's

historic drought in Morocco was marginally worse at this same time. Other notable season-to-date deficits have developed in eastern Algeria's Tell Region (deficit greater than 80 mm, or 35 percent of normal) and northern Tunisia (-70 mm, or 50 percent of normal). Exacerbating the impacts of the acute dryness were temperatures averaging up to 5°C above normal, with daytime highs approaching or topping 30°C region wide (as high as 35°C in southwestern Morocco).

SOUTH ASIA

Total Precipitation(mm)

November 6 - 12, 2022



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

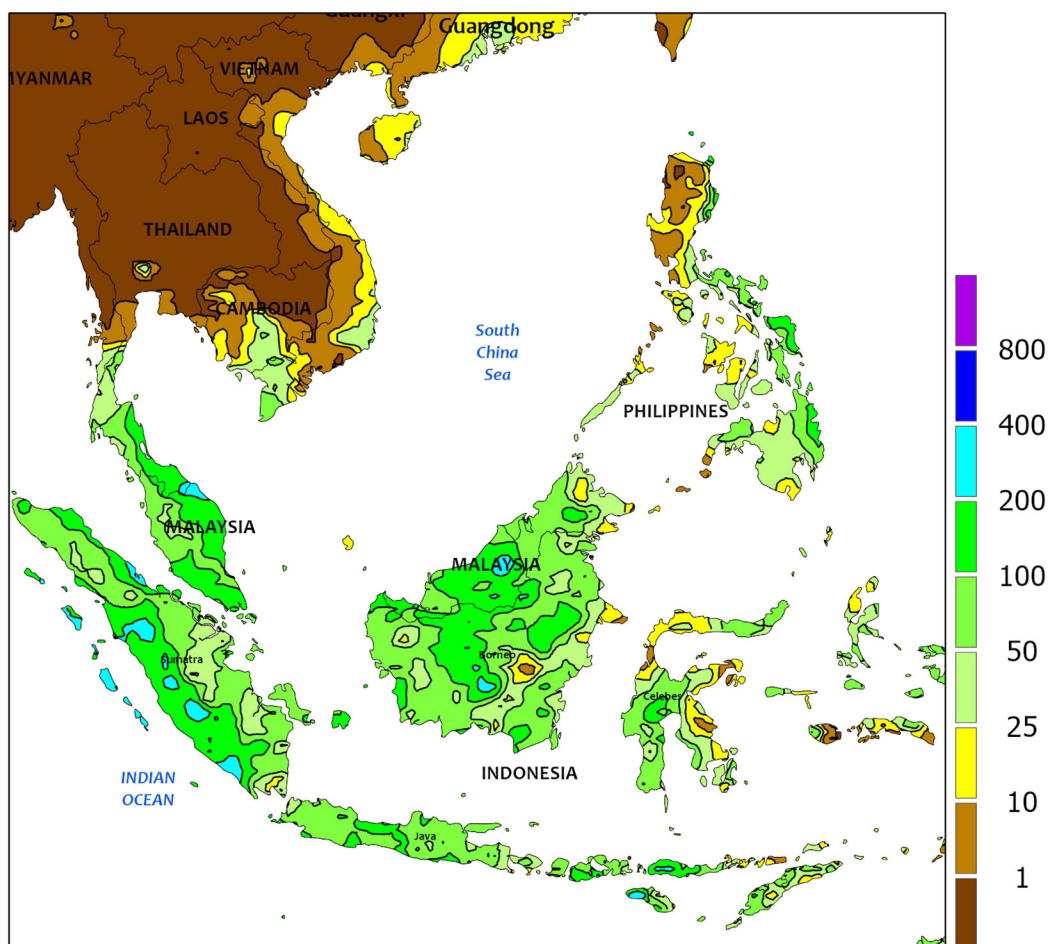


SOUTH ASIA

Seasonably dry weather prevailed throughout much of the region, supporting rabi crop sowing in India and Pakistan. In India, most grain and oilseed sowing was ahead of last year as of November 11, bolstered by favorable moisture conditions from above-average

rainfall during the southwest monsoon. Meanwhile, rainfall (25-100 mm) for the current period was limited to southern-most India and Sri Lanka, boosting moisture reserves for rabi crops in India and aman rice establishment in Sri Lanka.

SOUTHEAST ASIA
Total Precipitation(mm)
November 6 - 12, 2022



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

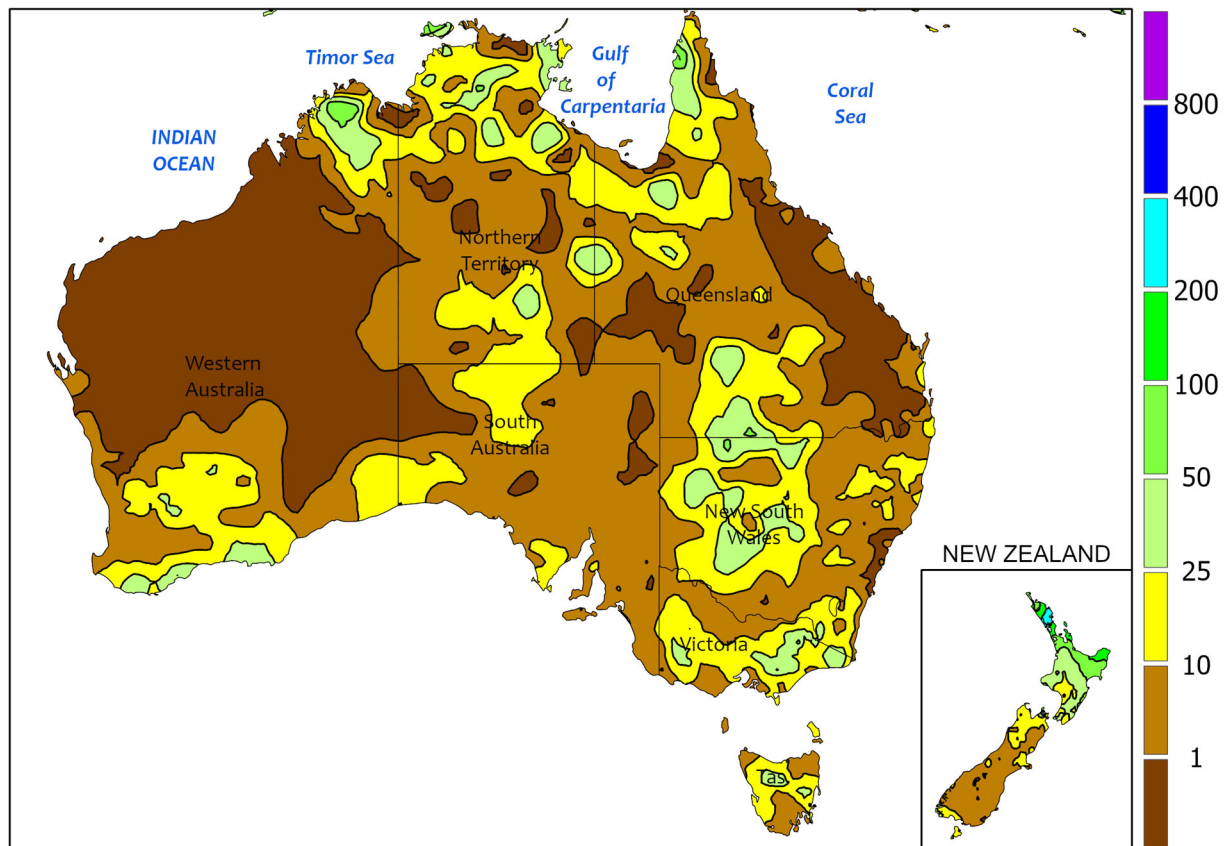


SOUTHEAST ASIA

Widespread showers (25-100 mm or more) continued across Malaysia and Indonesia, sustaining ample moisture for oil palm and rice. In southern Indonesia (Java), it continued to be the third wettest start (525 mm) to the rainy season in 30 years and the wettest since the record in 2016 (612 mm). Heavy showers

(25-100 mm) also prevailed in the seasonably wetter eastern and southern portions of the Philippines, aiding establishment of the next rice crop. Meanwhile, seasonably dry weather in Thailand and environs benefited harvesting of summer-grown rice and fieldwork ahead of the next cropping cycle.

AUSTRALIA
Total Precipitation(mm)
November 6 - 12, 2022



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

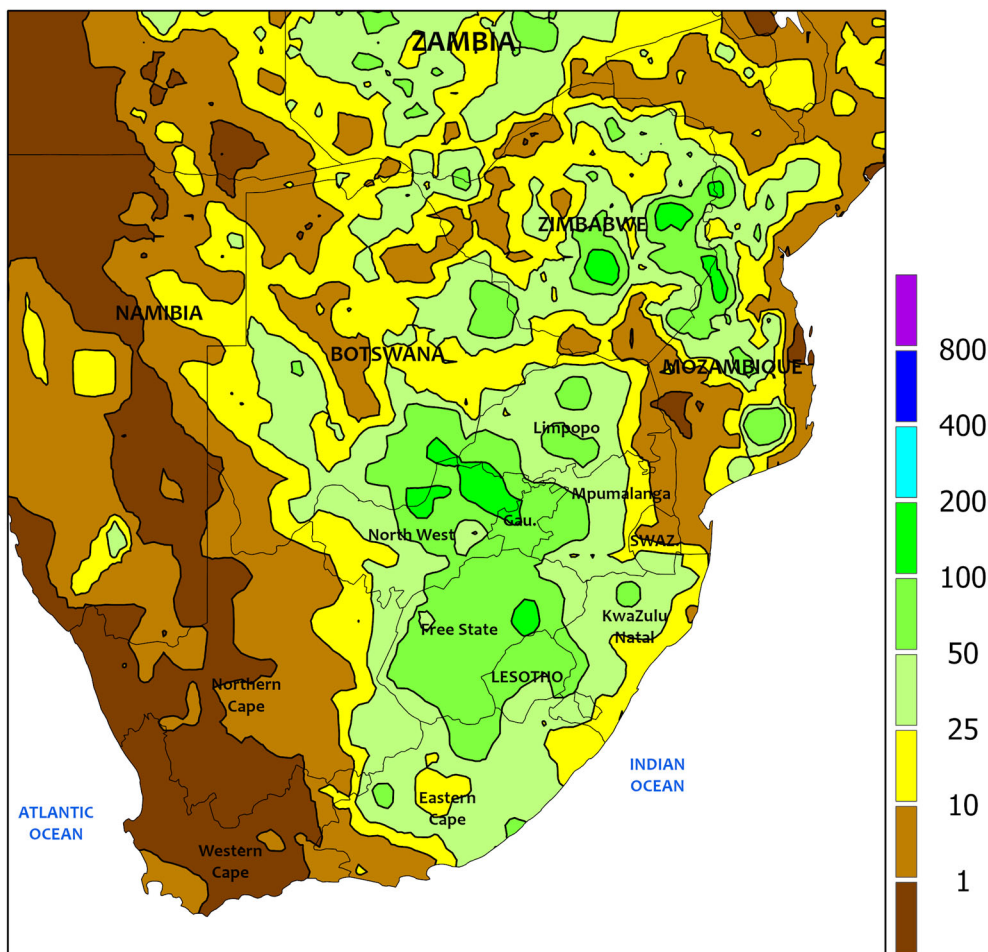


AUSTRALIA

Passing showers (5-15 mm, locally near 25 mm) fell across most of the wheat belt, temporarily interrupting fieldwork in the south and west while further hampering fieldwork in the waterlogged east. In Western Australia and South Australia, the rain caused local delays in winter crop harvesting, but harvesting likely resumed relatively soon thereafter. In Victoria and New South Wales, where some areas are excessively wet, the additional rain was unwelcome. Some locations were mostly dry, however,

allowing wheat, barley, and canola harvesting to progress and floodwaters to recede, albeit slowly. Elsewhere in the wheat belt, mostly dry weather in southern Queensland benefited wheat and other winter crop harvesting and helped sorghum and other summer crop sowing to move forward. Temperatures averaged 2 to 4°C below normal in the west and northeast and 2 to 4°C above normal in the south, with maximum temperatures ranging from the middle 20s to lower 30s (degrees C).

SOUTH AFRICA
Total Precipitation(mm)
November 6 - 12, 2022



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

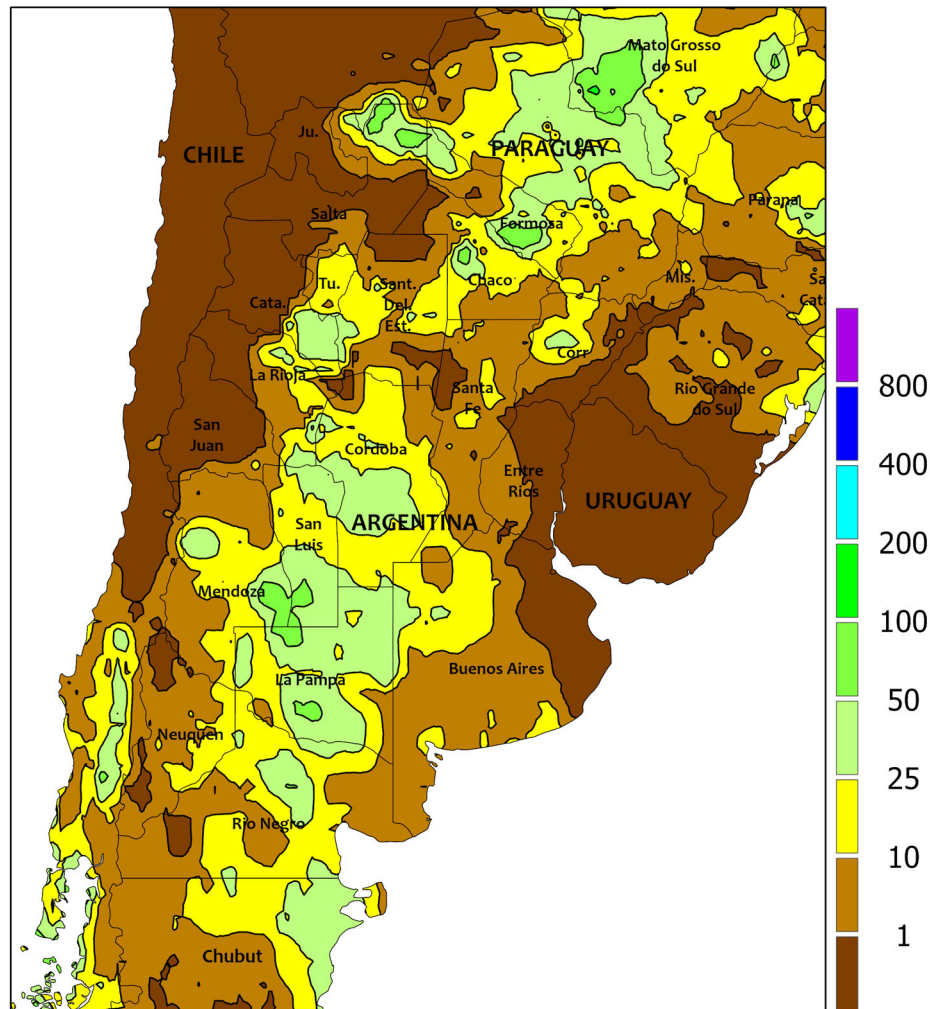


SOUTH AFRICA

Widespread, locally heavy showers maintained favorable prospects for corn and other summer crops. Rainfall totaled 50 mm over a large area stretching from Limpopo and North West southward to Eastern Cape. Other locations recorded 10 to 50 mm, including sugarcane areas of KwaZulu-Natal. An exception was in traditionally drier locations farther west,

where warm (daytime highs in the 30s degrees C), sunny weather promoted growth of irrigated crops, including tree and vine crops in Western Cape. In contrast, weekly average temperatures were near to below normal across the corn belt (North West and Free State to Mpumalanga), with highest daytime temperatures ranging from the upper 20s to lower 30s.

ARGENTINA
Total Precipitation(mm)
November 6 - 12, 2022



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



ARGENTINA

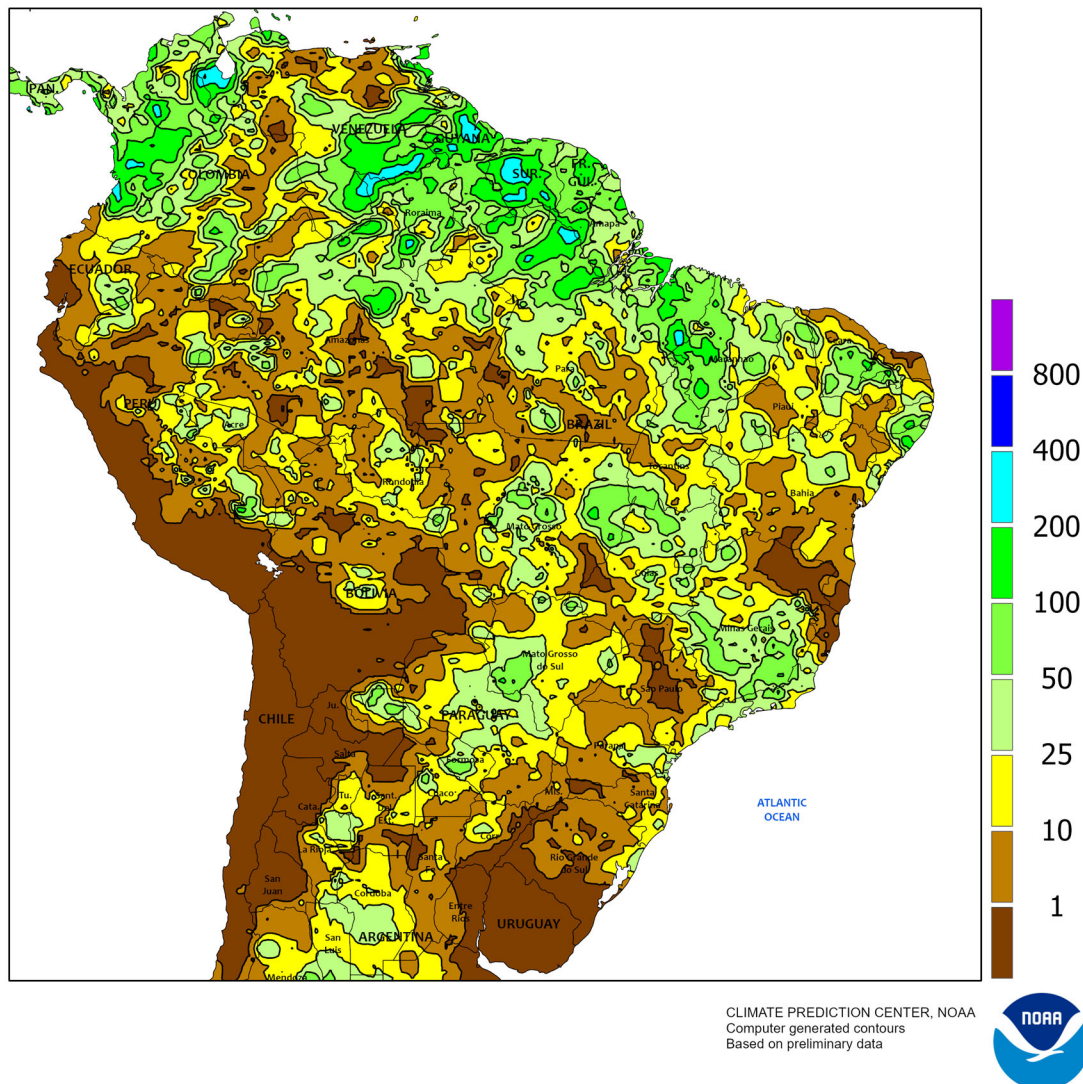
Much-needed rain fell in western farming areas of central Argentina, benefiting immature winter grains and providing timely moisture for summer crop planting. At week's end, rainfall totaled 10 to 35 mm from La Pampa and western Buenos Aires northward, ending an extended period of dryness. However, the rain had not yet reached other locations where moisture remained limited for crop development (*additional information will appear in next week's bulletin*). Near- to

above-normal temperatures ahead of the rain-producing front spurred growing of winter grains and emerging summer grains and oilseeds, ending a period of cool weather that resulted in patchy freezes. According to the government of Argentina, sunflowers and corn were 53 and 26 percent planted, respectively, as of November 10; corn was 23 percent planted in Buenos Aires, compared with 63 percent last year. In addition, cotton was 19 percent sown versus 29 percent last year.

BRAZIL

Total Precipitation(mm)

November 6 - 12, 2022

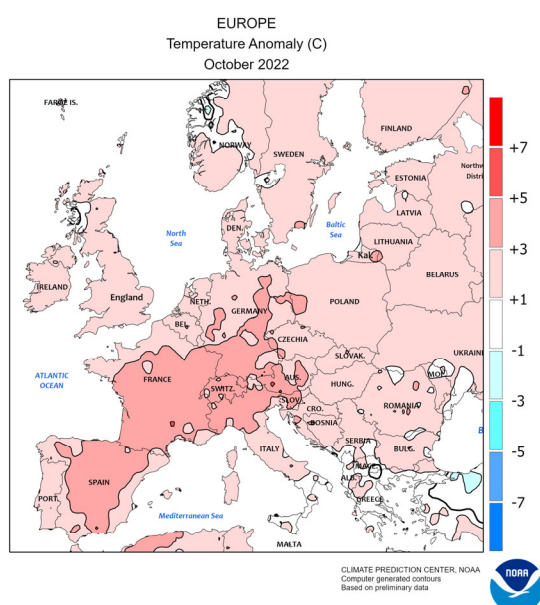
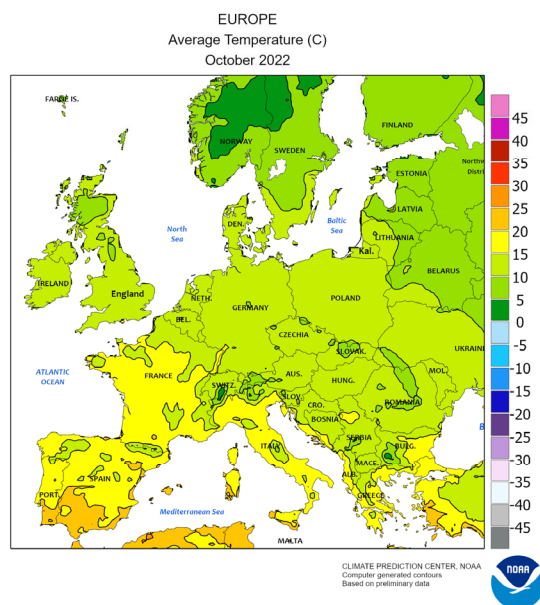
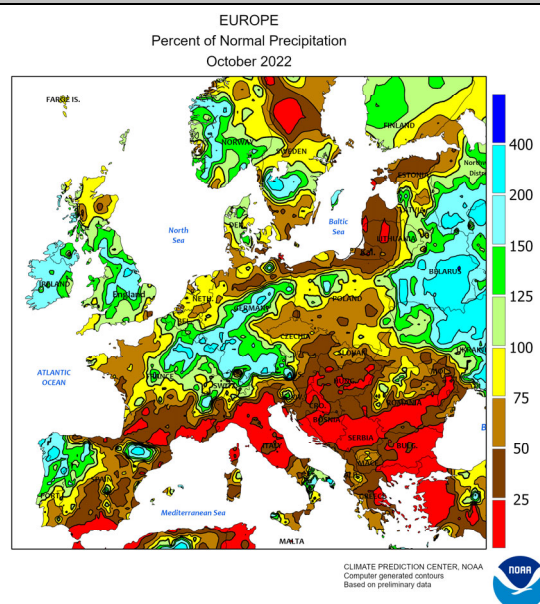
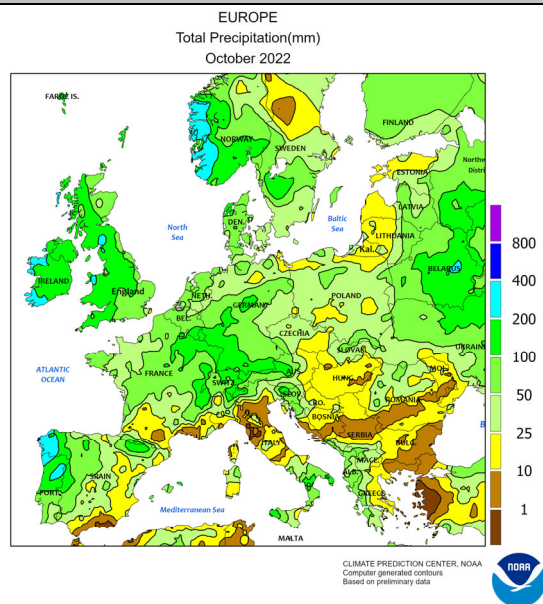


BRAZIL

Diminished rainfall supported a rapid pace of fieldwork, although rain was becoming limited for summer crops in some locales. Rainfall was below normal in most major corn and soybean areas, exceptions being scattered locations in and around Mato Grosso and Minas Gerais. According to the government of Mato Grosso, soybean planting was 96 percent completed as of November 11, underscoring the need for a return to seasonal rainfall. Meanwhile, mostly dry

weather (rainfall totaling below 5 mm) dominated from Mato Grosso do Sul and São Paulo southward. In Paraná, first-crop corn and soybeans were 93 and 79 percent planted, respectively, as of November 7; in addition, wheat was 82 percent harvested. Unlike other southern farming areas, Rio Grande do Sul has been trending dry since early October and will need rain soon to ensure uniform germination of corn and to help condition fields for soybean planting.

October International Temperature and Precipitation Maps

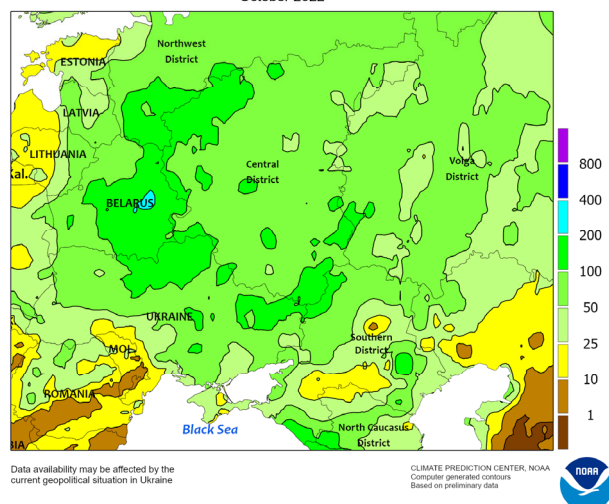


EUROPE

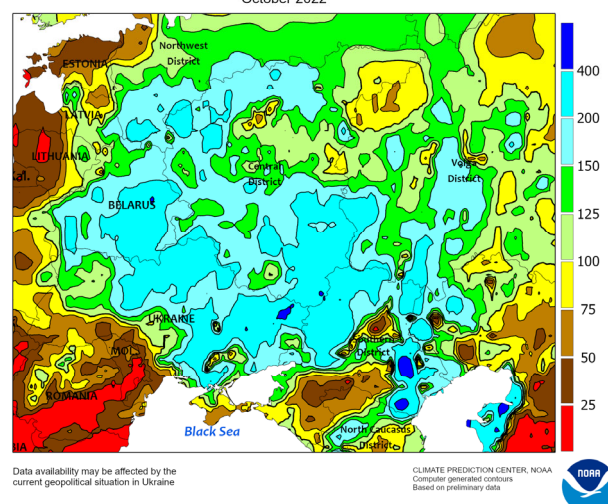
During October, dry conditions over southern Europe contrasted with near- to above-normal rainfall over northern and western portions of the continent. Rainfall was sparse (10-50 percent of normal, locally less) from southern France and eastern Spain eastward into Italy and the Balkans, maintaining long-term drought in the western and central Mediterranean Region while reducing topsoil moisture in the Danube River Valley. The dryness also encompassed the rest of eastern Europe, though deficits were not as pronounced save for the Baltic States (20-40 percent of normal). Conversely, above-

normal rainfall over England and Scandinavia (locally as much as twice the monthly normal) sustained adequate to abundant moisture supplies for winter crops; another area of beneficial rain (75-150 percent of normal) from northeastern France into southern Germany favored winter grains and oilseeds in these locales. Showers also improved winter grain prospects in northwestern Spain (Castilla y León). Warm weather during October (2-5°C above normal) across much of Europe kept winter crops from entering dormancy, with near-normal temperatures confined to Greece and immediate environs.

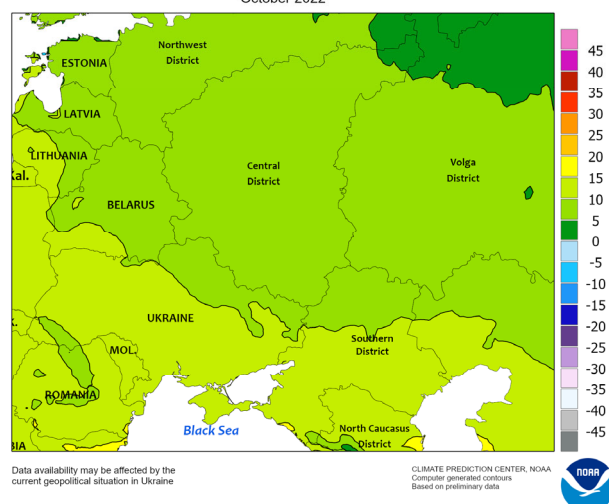
WESTERN FSU
Total Precipitation(mm)
October 2022



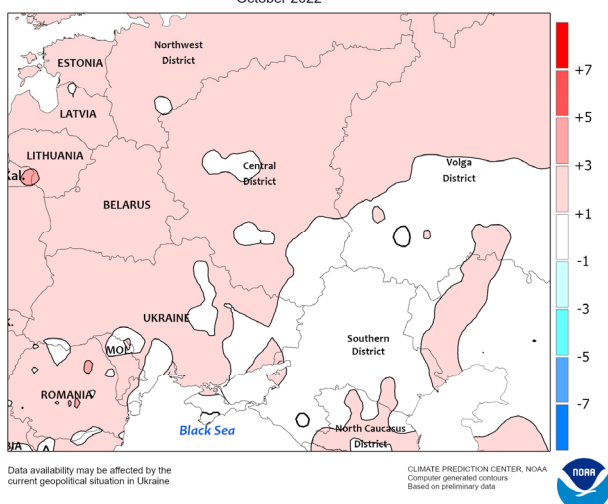
WESTERN FSU
Percent of Normal Precipitation
October 2022



WESTERN FSU
Average Temperature (C)
October 2022



WESTERN FSU
Temperature Anomaly (C)
October 2022



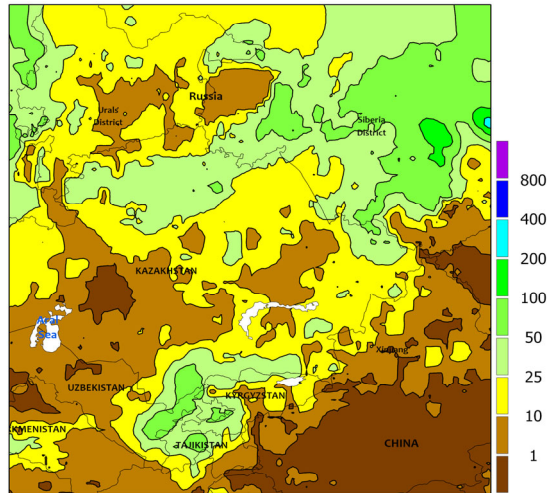
WESTERN FSU

Wet but mild conditions prevailed over much of the region during October. Moderate to very heavy rainfall (50-150 mm, or 140 to 470 percent of normal) fell from Belarus into much of western and southern Russia, slowing or halting late summer crop harvesting but boosting moisture supplies for winter crop establishment. However, weather data from Ukraine was not available due to Russian attacks on infrastructure, and subsequent analyses will be highly reliant on satellite and radar imagery from the region. The satellite-derived monthly precipitation estimates for October indicated above-normal rainfall over most of

Ukraine (heaviest in the east) save for drier weather adjacent to Moldova; the corresponding rainfall data in areas surrounding Ukraine matched the satellite data well, boosting confidence in the Ukrainian rainfall estimates. Temperatures during the month averaged 1 to 3°C above normal from Moldova and Belarus into Russia, though winter crops went dormant at month's end everywhere but southern-most growing areas.

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

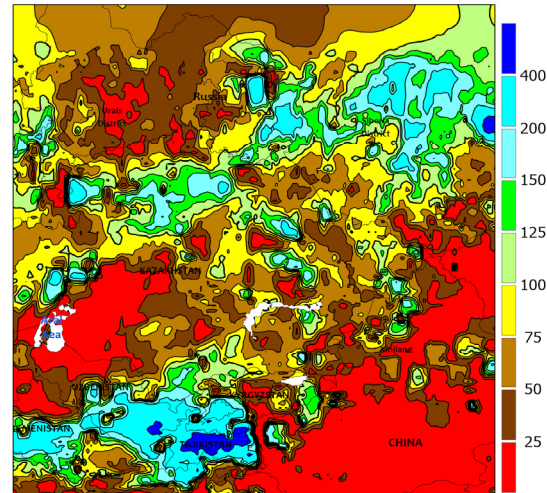
EASTERN FSU
Total Precipitation(mm)
October 2022



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



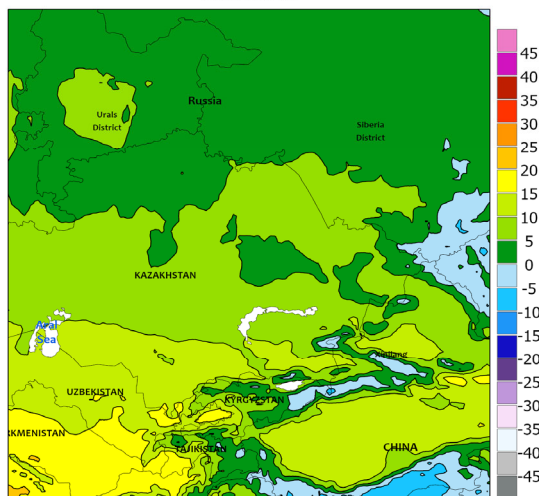
EASTERN FSU
Percent of Normal Precipitation
October 2022



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



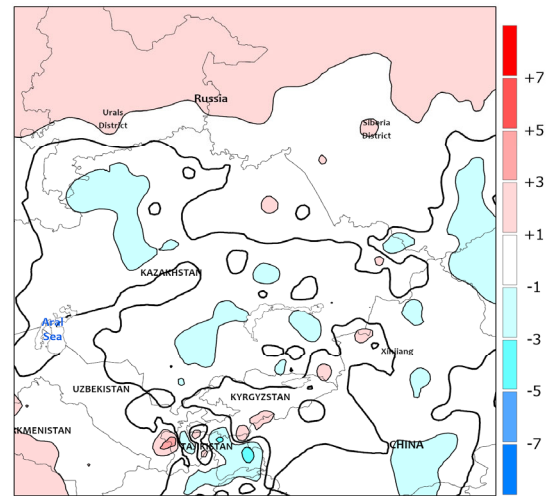
EASTERN FSU
Average Temperature (C)
October 2022



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



EASTERN FSU
Temperature Anomaly (C)
October 2022



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

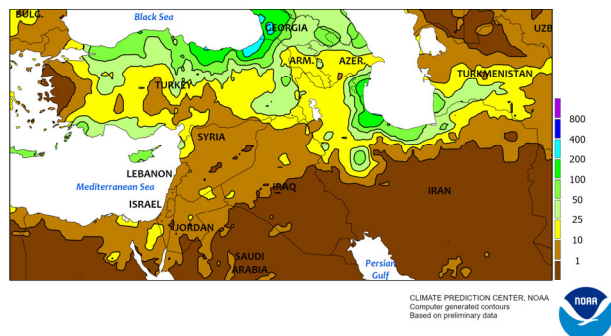


EASTERN FSU

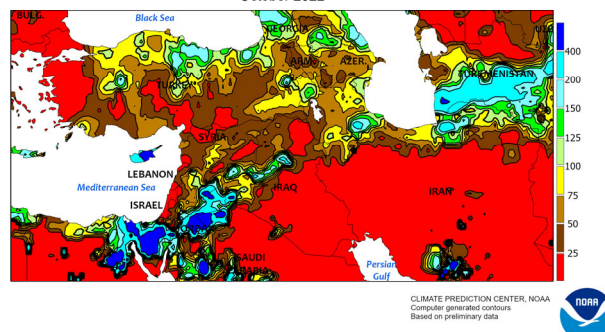
The arrival of seasonably cold and snowy weather in the north juxtaposed with a very wet October in the south. Across northern Kazakhstan and central Russia, near- to below-normal temperatures (up to 2°C below normal) along with the arrival of bitter cold (-18 to -10°C) and snowy weather signaled an end to any late agricultural activity. Furthermore, winter weather has no bearing on spring grain prospects. Across Uzbekistan, Turkmenistan, Tajikistan, and Kyrgyzstan, the arrival of very wet weather during October (up to 4 times the monthly normal)

signaled an abrupt reversal to the very dry September to start the water year. As of November 12, season-to-date (since September 1) precipitation in the catchment basins of the Amu (south) and Syr (north) Darya Rivers — primary sources of summer crop irrigation — stood at 400 and 200 percent of normal, respectively. Historically, the Amu Darya's very wet start (100 mm, 75 mm surplus) was by far the wettest of the past 30 years, while the Syr Darya's 200 percent of normal was enough to rank as the 2nd wettest start to the water year of the past 30 years.

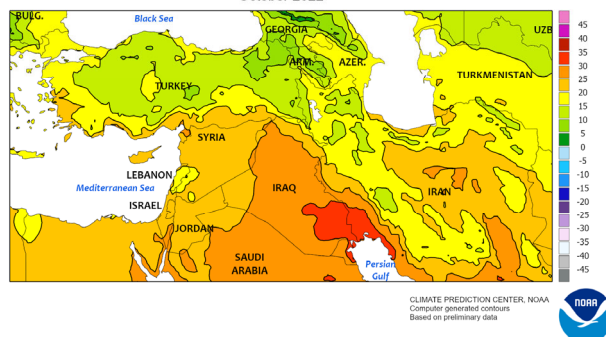
MIDDLE EAST
Total Precipitation(mm)
October 2022



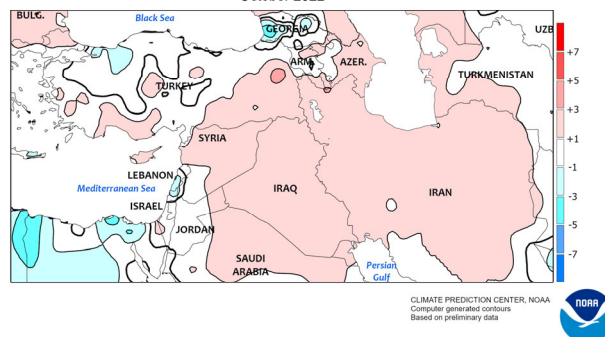
MIDDLE EAST
Percent of Normal Precipitation
October 2022



MIDDLE EAST
Average Temperature (C)
October 2022



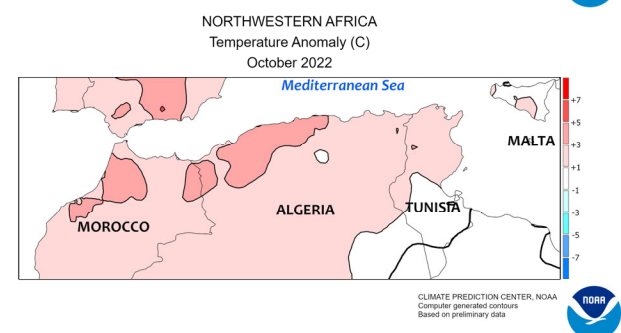
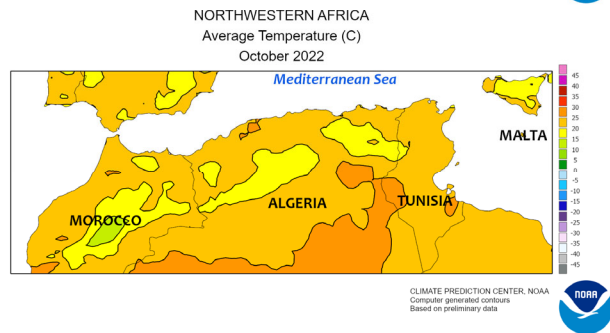
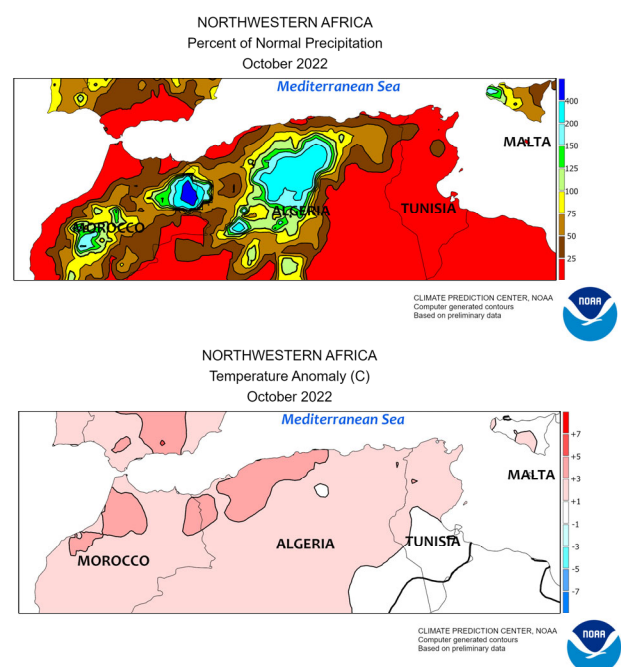
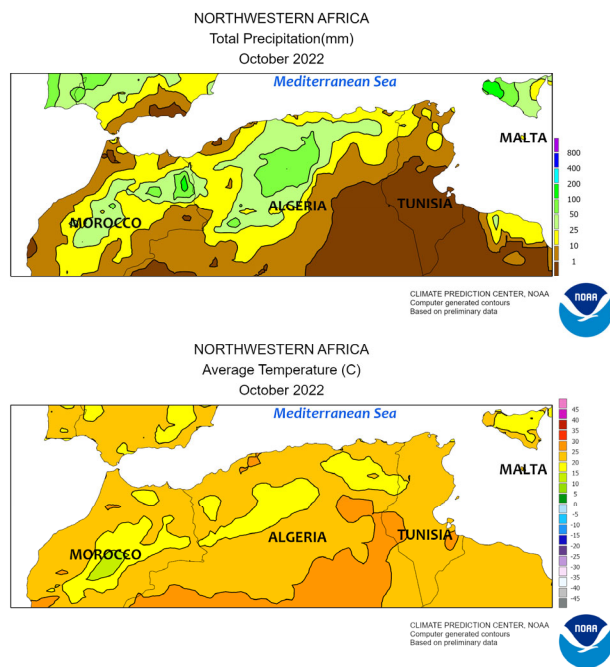
MIDDLE EAST
Temperature Anomaly (C)
October 2022



MIDDLE EAST

Drier-than-normal weather across the western half of the region contrasted with areas of beneficial rainfall in northern Iran. In Turkey, no rain was reported in the Aegean Region, while precipitation was very light in the country's northwestern Thrace Region (5-20 mm, less than 25 percent of normal). While some rain was reported on central Turkey's Anatolian Plateau, amounts were mostly less than half of normal (locally less than 25 percent). Consequently, establishment prospects for winter wheat and barley began to slip, especially in the country's northwestern winter crop areas.

Dry weather was also noted from southeastern Turkey's GAP Region southward across the eastern Mediterranean Coast, leaving soils devoid of moisture for wheat and barley establishment. Similar unfavorable dryness extended from eastern Syria into Iraq. Conversely, light to moderate showers in northern Iran (10-30 mm, locally more than 100 percent of normal) moistened soils for winter grains, while dry weather prevailed in southwestern Iran. Temperatures averaged near normal in western and central Turkey to as much as 3°C above normal from eastern Turkey into Iran.

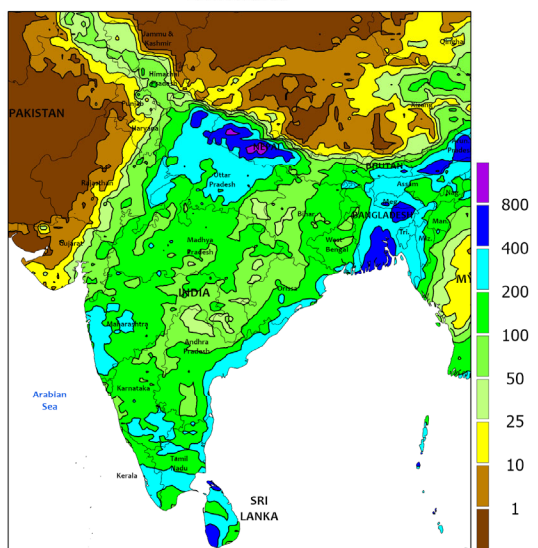


NORTHWESTERN AFRICA

During October, early-season rain in central Algeria contrasted with mostly dry weather elsewhere. Rainfall totaled 25 to 100 mm (locally more than 300 percent of normal) across central Algeria, conditioning soils for early winter grain sowing. However, the rain's heavy intensity likely diminished the soil moisture benefits somewhat due to runoff. Conversely, dry

weather prevailed across Morocco, western- and eastern-most Algeria, and Tunisia. The 2022-23 Water Year has gotten off to an abysmal start for a second consecutive year over many of these crop areas, and producers will need uniform soaking rainfall soon for wheat and barley establishment. Winter grains are primarily sown during November and December.

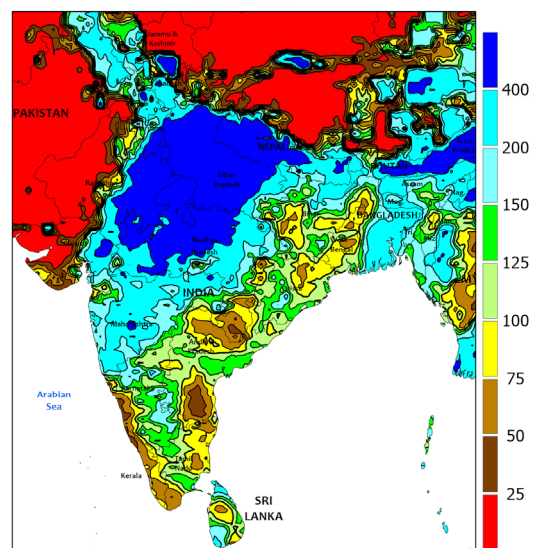
SOUTH ASIA
Total Precipitation(mm)
October 2022



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



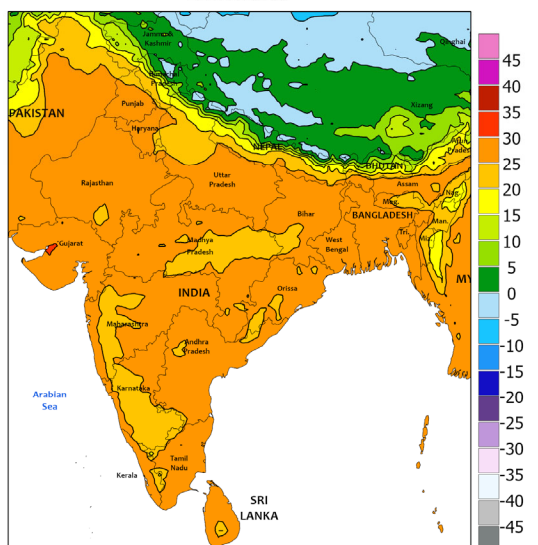
SOUTH ASIA
Percent of Normal Precipitation
October 2022



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



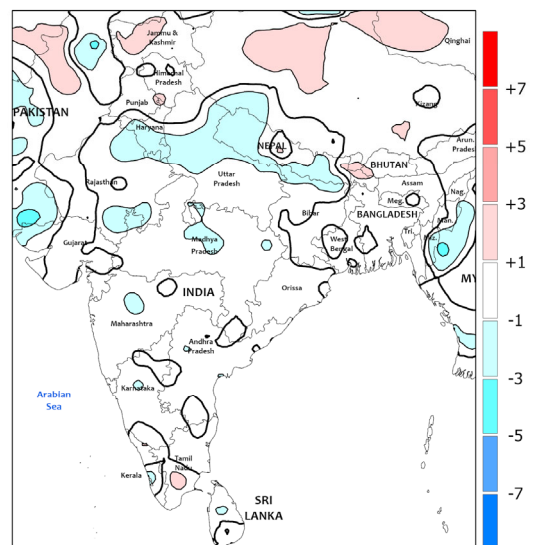
SOUTH ASIA
Average Temperature (C)
October 2022



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



SOUTH ASIA
Temperature Anomaly (C)
October 2022



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

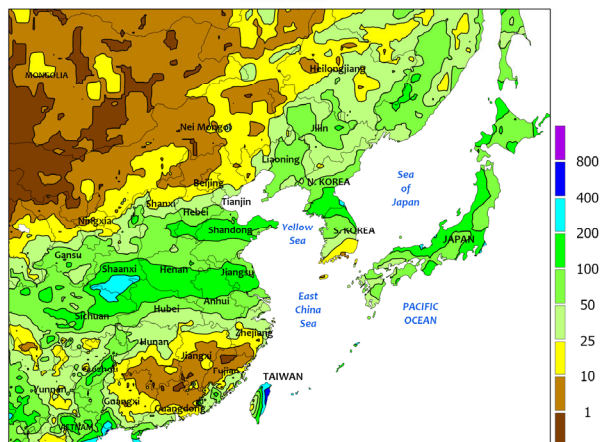


SOUTH ASIA

A slower-than-normal withdrawal of the southwest monsoon in October meant above-average rainfall for many areas in India. In fact, rainfall in northern India was well above normal (over 400 percent of normal) from the lingering wet weather. While the unseasonable wetness benefited immature kharif crops elsewhere, it was unwelcome for mature cotton and rice in the north. However, by month's end the monsoon fully withdrew from the region and

seasonably drier weather prevailed. Meanwhile, the withdrawal of monsoonal rains in Pakistan earlier in the month ushered in drier weather, aiding southern locales still impacted from severe flooding that occurred in July and August. Elsewhere in the region, a tropical cyclone (Sitrang) brought drenching showers to Bangladesh, pushing monthly totals well in excess of 150 mm (over 200 percent of normal) and causing localized damage to the aman rice crop.

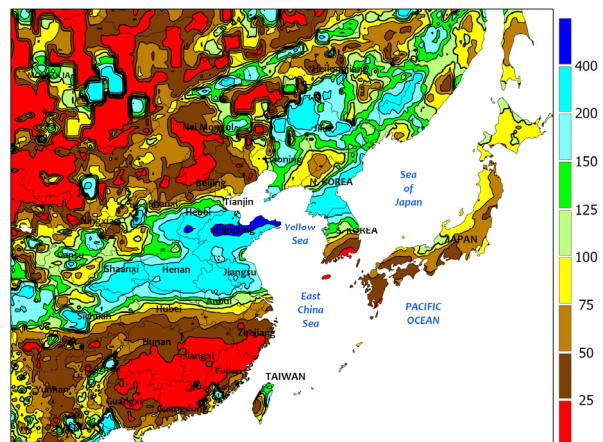
EASTERN ASIA
Total Precipitation(mm)
October 2022



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



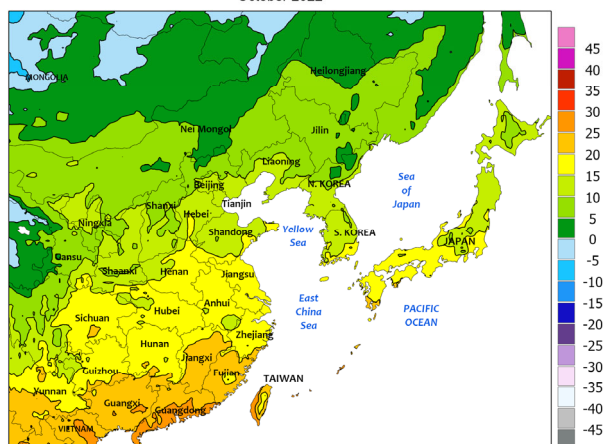
EASTERN ASIA
Percent of Normal Precipitation
October 2022



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



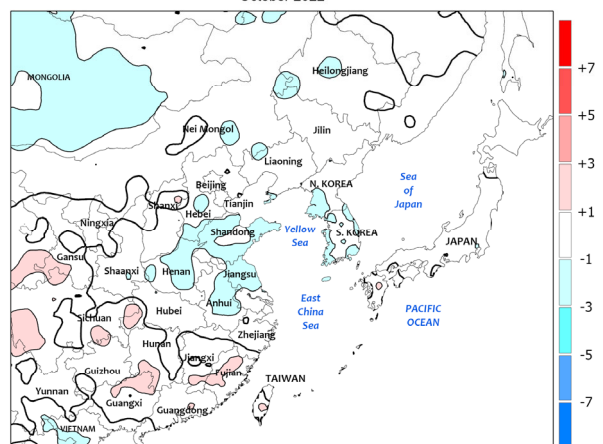
EASTERN ASIA
Average Temperature (C)
October 2022



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



EASTERN ASIA
Temperature Anomaly (C)
October 2022



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

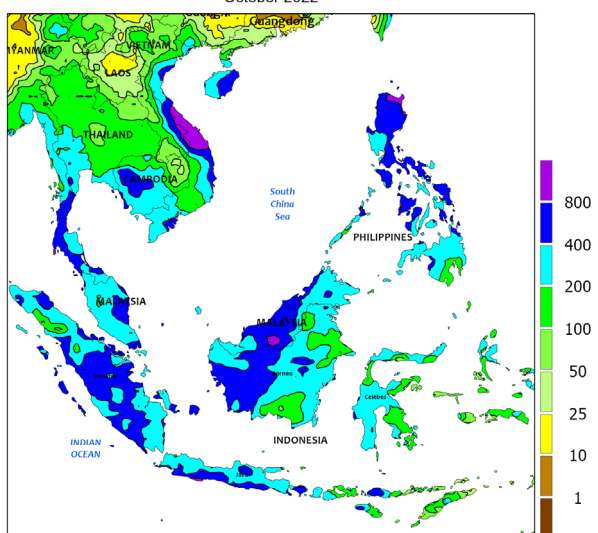


EASTERN ASIA

Rainfall in eastern and southern China prevailed almost exclusively in the first few days of October. The highest totals (50-150 mm or more, over 200 percent of normal) occurred in a narrow band stretching from the North China Plain into the Yangtze Valley. Although slowing some seasonal fieldwork, the wet weather boosted soil moisture for wheat and rapeseed sown later in the month. Rainfall was

nearly non-existent in some areas afterwards, but seasonably cooler weather allowed soils to retain much of the moisture. Meanwhile, drought that has gone unabated in southeastern China since late summer continued with little, if any, rain during the month. While the dry conditions promoted ripening of drought-plagued late-crop rice, little moisture existed for row crops grown over the winter months.

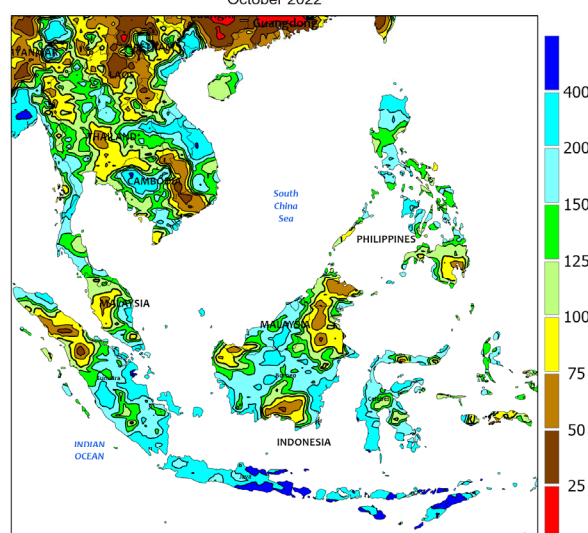
SOUTHEAST ASIA
Total Precipitation(mm)
October 2022



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



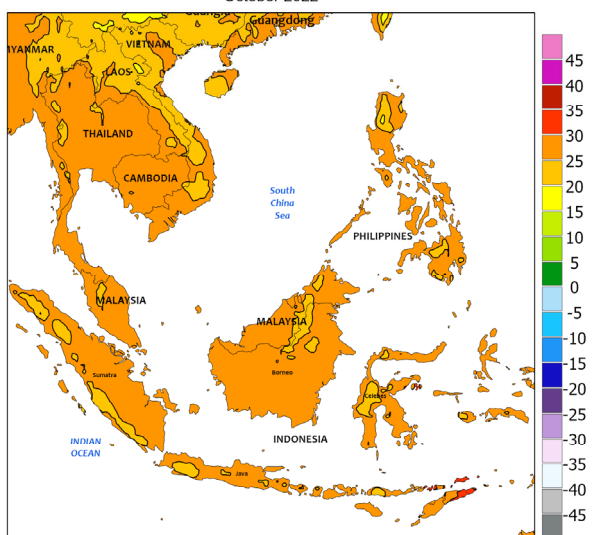
SOUTHEAST ASIA
Percent of Normal Precipitation
October 2022



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



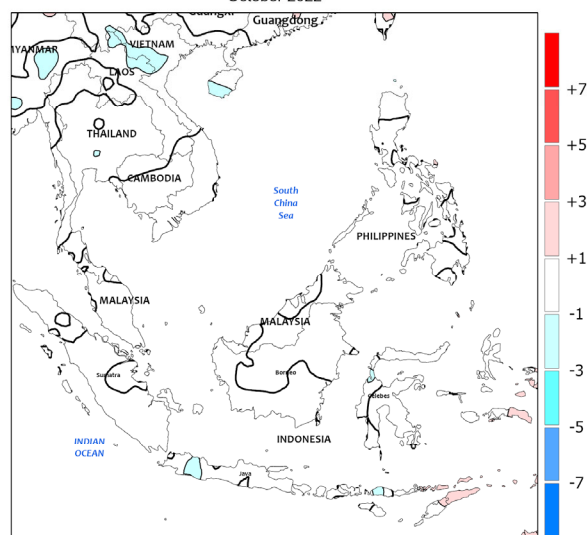
SOUTHEAST ASIA
Average Temperature (C)
October 2022



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



SOUTHEAST ASIA
Temperature Anomaly (C)
October 2022



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

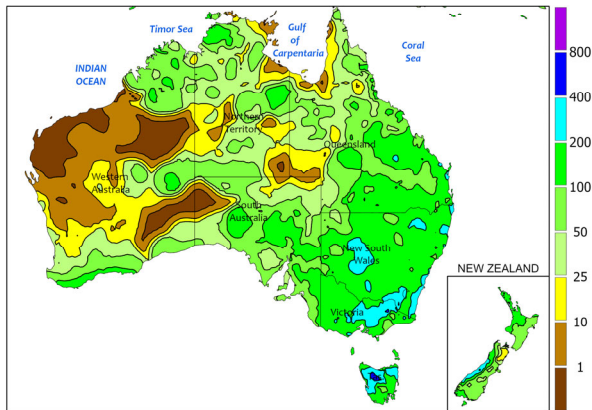


SOUTHEAST ASIA

During October, showery weather (over 100 mm, 100-200 percent of normal) continued across Thailand and the surrounding areas in the first half of the month, further benefiting immature rice planted later in the growing season and bolstering irrigation reserves for the upcoming dry-season crop. By month's end seasonably drier weather prevailed, aiding ripening of rice and allowing harvesting to begin in the earlier planted areas. Meanwhile, a pair of tropical cyclones (Nesat and Nalgae) traversing the northern Philippines in the latter half of October brought downpours (monthly totals exceeding 200 percent of normal) to northern and central

growing areas. The wetness was unwelcome for the current season's maturing rice and harvesting but ensured ample moisture for the start of the next cropping cycle. Elsewhere, occasional deluges in Malaysia and Indonesia pushed totals over 200 mm (nearly 200 percent of normal in some locales), keeping a slow harvest pace for oil palm. Additionally, the unusually wet weather meant an early start to southern Indonesia's (Java's) rainy season (over a month earlier than normal and the earliest since 2016). While the rainfall bolstered moisture reserves for seasonal rice, growers likely had difficulties sowing in the overly wet conditions.

AUSTRALIA
Total Precipitation(mm)
October 2022

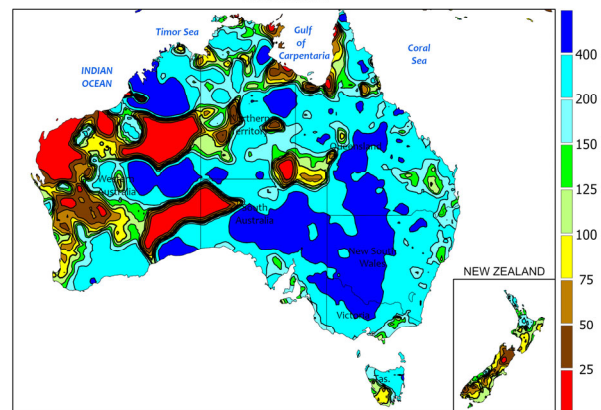


Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



AUSTRALIA
Percent of Normal Precipitation
October 2022

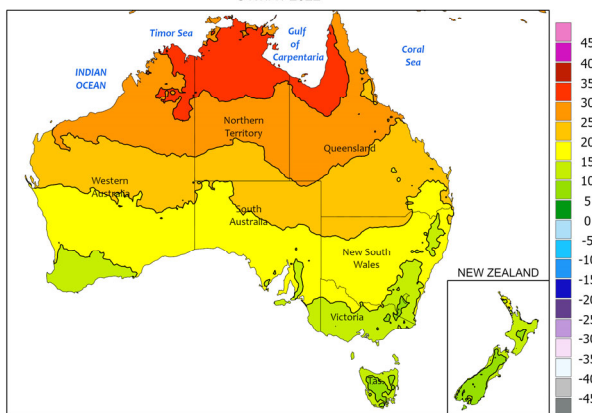


Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



AUSTRALIA
Average Temperature (C)
October 2022

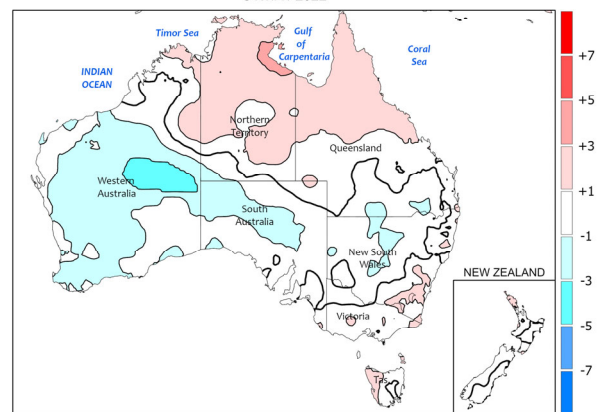


Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



AUSTRALIA
Temperature Anomaly (C)
October 2022



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

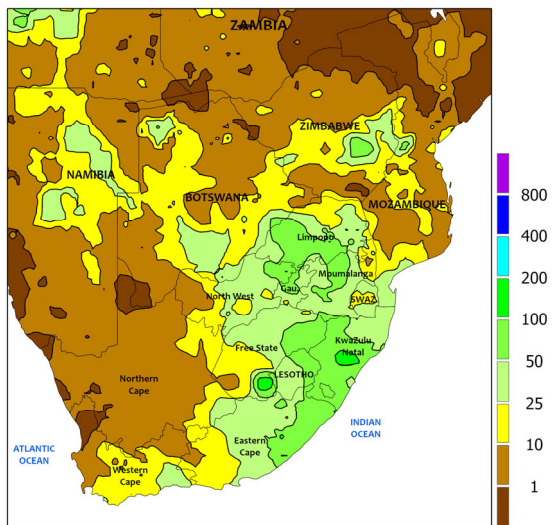


AUSTRALIA

During October, above-normal rainfall (locally more than 400 percent of normal) kept filling winter grains and oilseeds well watered, helping to maintain good to excellent yield prospects. The most favorable weather was in southern and western Australia, where intermittent rain and sun promoted development of immature winter crops while simultaneously aiding drydown and harvesting of the earliest maturing

varieties. Elsewhere in the wheat belt, heavy rain in the east caused local flooding and raised concerns about winter crop quality. Additionally, the rain caused frequent disruptions in fieldwork, including early winter crop harvesting and summer crop planting. Temperatures averaged near to below normal (up to 2°C below normal) during October, with maximum temperatures mostly in the 20s (degrees C).

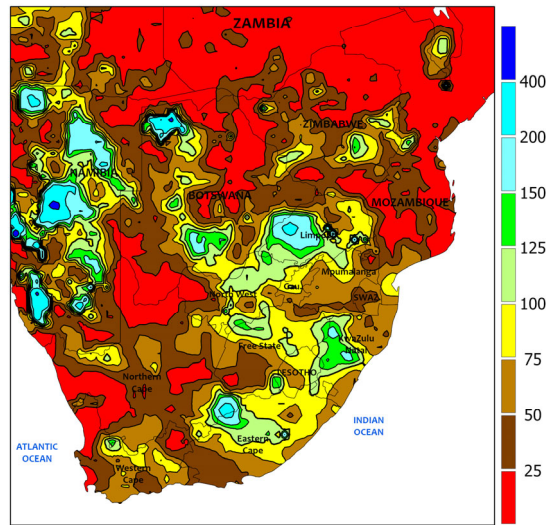
SOUTH AFRICA
Total Precipitation(mm)
October 2022



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



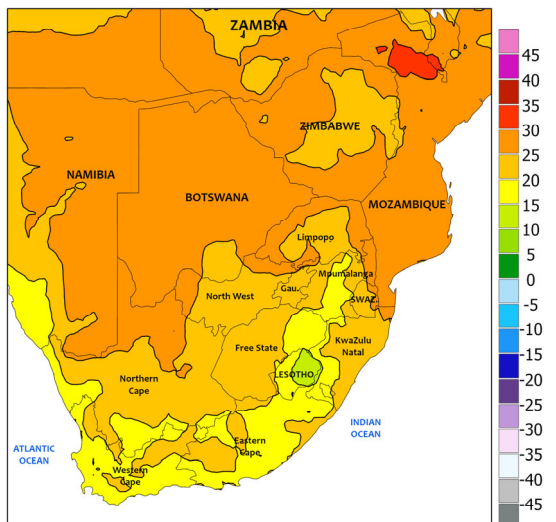
SOUTH AFRICA
Percent of Normal Precipitation
October 2022



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



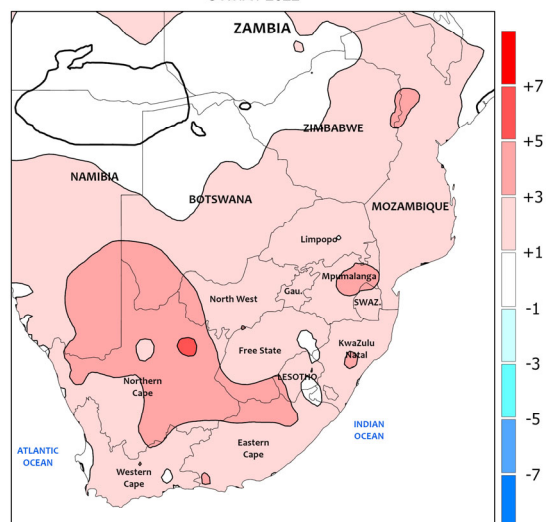
SOUTH AFRICA
Average Temperature (C)
October 2022



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



SOUTH AFRICA
Temperature Anomaly (C)
October 2022



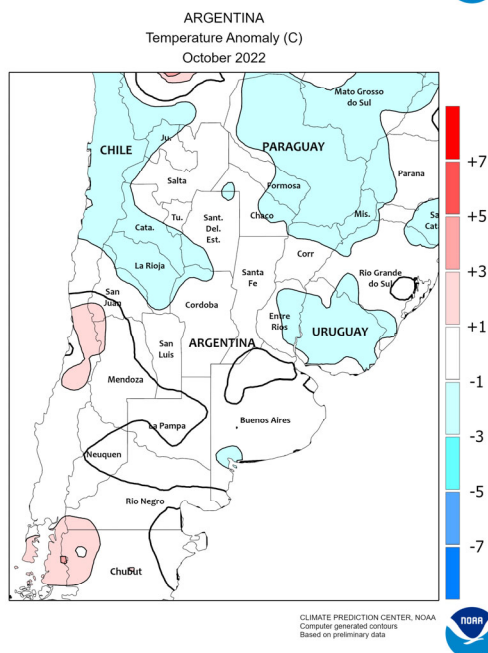
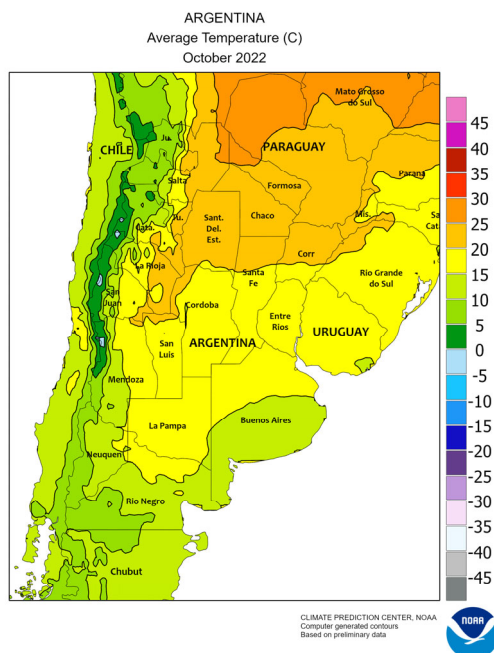
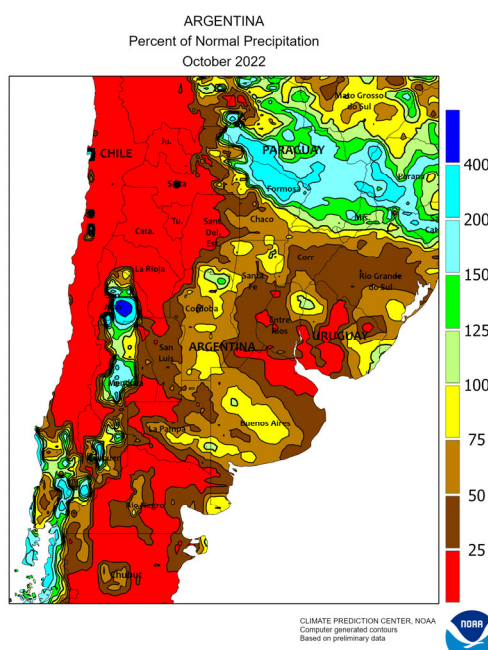
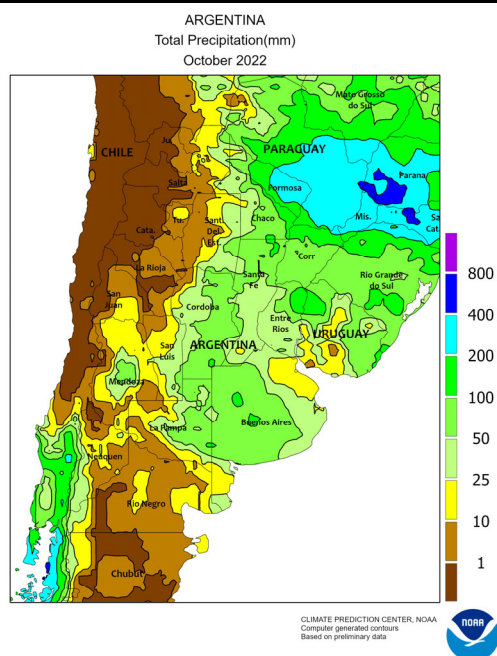
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTH AFRICA

In October, the timely onset of seasonal rainfall allowed planting of corn and other rain-fed summer crops to begin on schedule. Monthly accumulations ranged from 50 to 100 mm from Limpopo southeastward through KwaZulu-Natal, prompting fieldwork in and around Mpumalanga. Rainfall totaled at least 25 mm in western production areas (North West and central Free State), although the

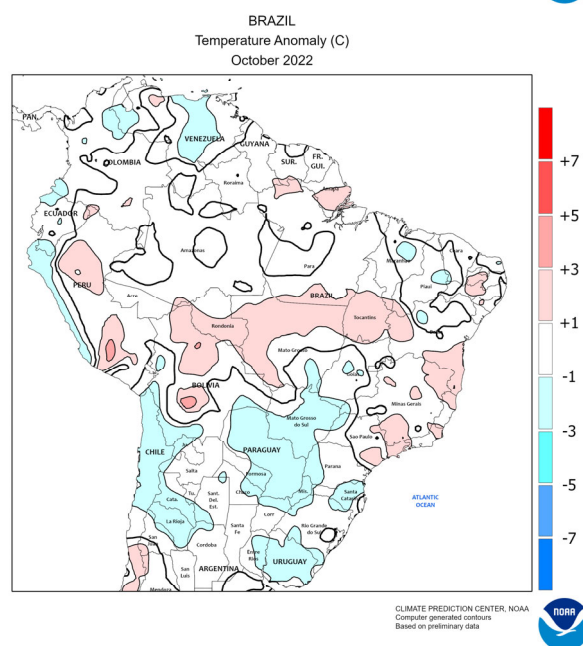
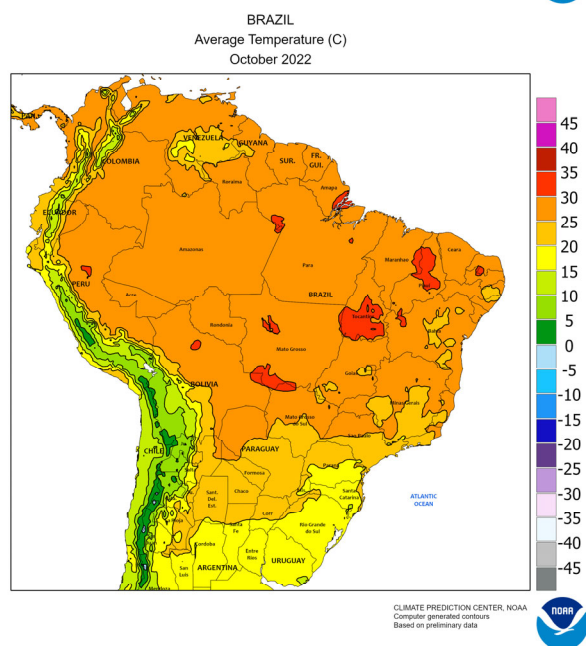
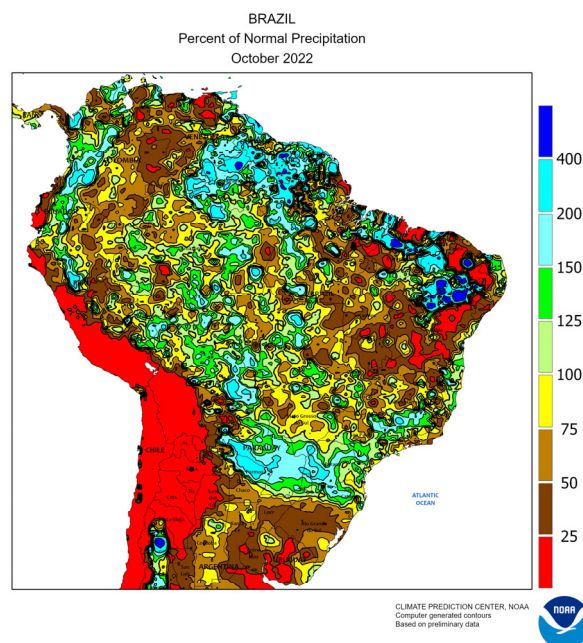
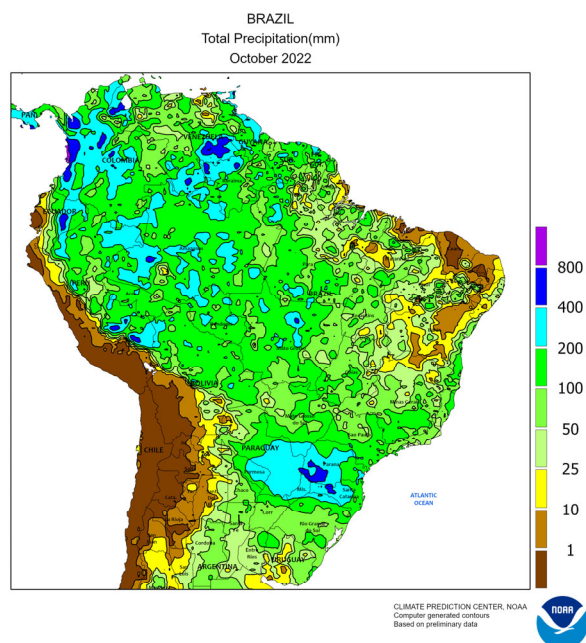
moisture came too early in the growing season to trigger fieldwork. Monthly temperatures averaged 1 to 3°C above normal throughout the region, due mainly to an outbreak of summer heat (daytime highs reaching the middle and upper 30s degrees C) before the arrival of the heaviest rainfall. In Western Cape, the continuing pattern of warm, sunny weather aided development of tree and vine crops.



ARGENTINA

In October, ongoing drought limited the yield potential of winter grains as more crops advanced through reproduction. Although a few locations recorded timely, locally heavy showers during the latter half of the month, amounts and coverage were insufficient to reverse damage already incurred by the extended dryness. Furthermore, patchy frost

(nighttime lows dropping near or below freezing) may have resulted in additional localized damage to crops in vulnerable stages of development in portions of central Argentina. The heaviest rain (greater than 100 mm) was concentrated along the border with Paraguay as well as in sections of the southwest in the vicinity of northwestern Buenos Aires.

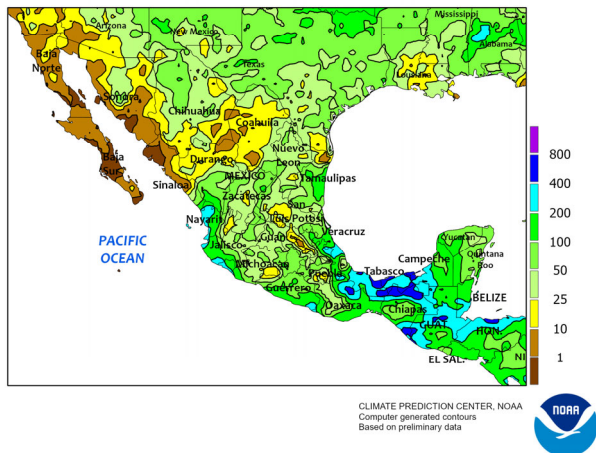


BRAZIL

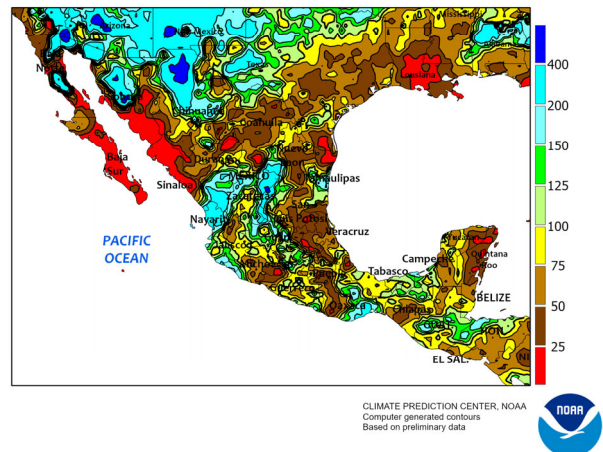
October rainfall provided timely moisture for summer crop planting throughout Brazil, although the amounts and date of arrival were variable. In the south, the most consistent rainfall compared with normal was recorded in and around Paraná, coinciding with the early stages of corn and soybean planting. In contrast, rainfall was sporadic over Rio Grande do Sul, although moisture was likely adequate for immature wheat.

Farther north, showers returned to Mato Grosso after a decline in seasonal rainfall beginning in late September. Elsewhere, showers finally developed in the northeastern interior (western Bahia and environs) following a delayed start. While the moisture was timely for sowing soybeans and other summer row crops, the rainfall also helped to lower temperatures below stressful levels recorded earlier in the month (middle and upper 30s degrees C).

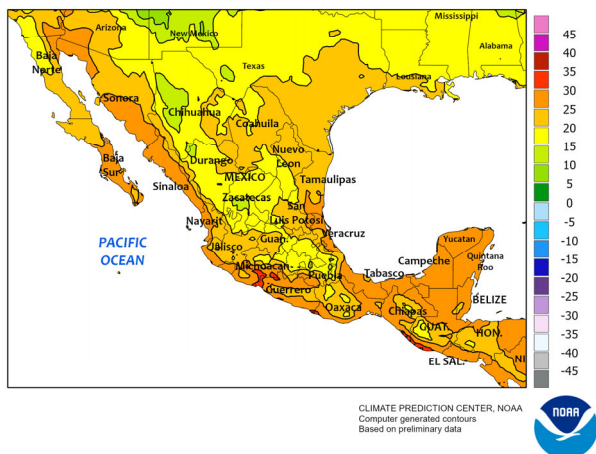
MEXICO
Total Precipitation(mm)
October 2022



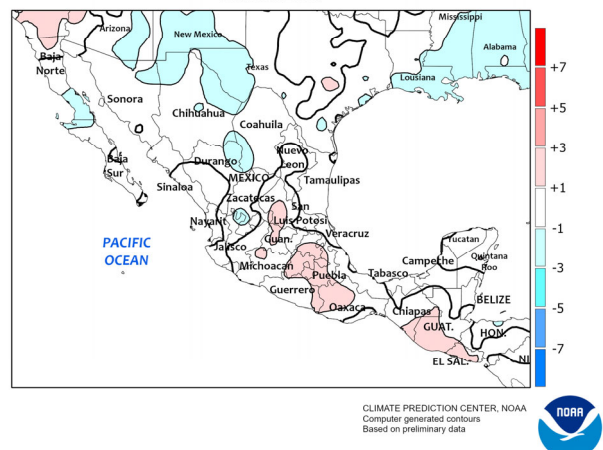
MEXICO
Percent of Normal Precipitation
October 2022



MEXICO
Average Temperature (C)
October 2022



MEXICO
Temperature Anomaly (C)
October 2022

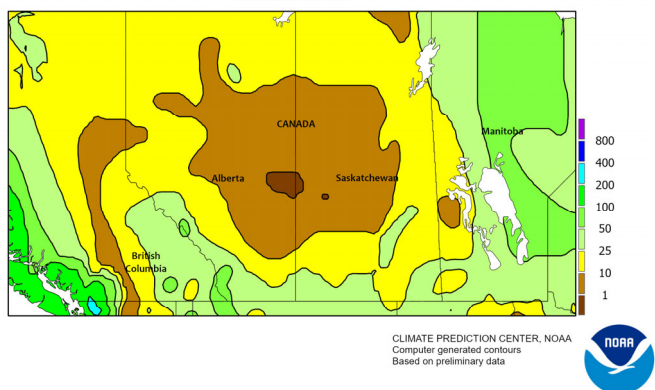


MEXICO

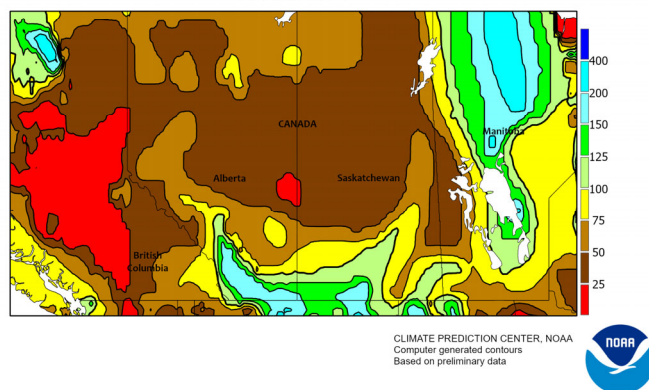
Seasonal dryness enveloped much of Mexico by month's end, as the monsoon weakened and tropical activity shifted southward. However, the gradual nature of the drying allowed several watersheds – including parts of the northeast suffering from lingering drought – to acquire a late-season boost in moisture that will benefit winter-grown crops. Several tropical storm systems made landfall in October, including two along the southwest coast (Orlene and Roslyn)

that ushered moisture into the central interior. Meanwhile, heavy tropical showers (monthly accumulations exceeding 200 mm, locally more than 400 mm) lingered for much of the month over the southeast, including Tabasco and portions of Veracruz. According to the government of Mexico, national reservoir levels were at 69 percent capacity as of October 31. In the northwest, reservoir capacity ranged from 72 percent in Sinaloa to 84 percent in Chihuahua.

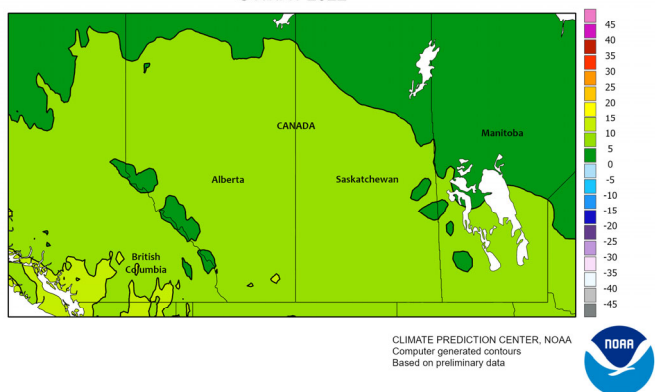
CANADIAN PRAIRIES
Total Precipitation(mm)
October 2022



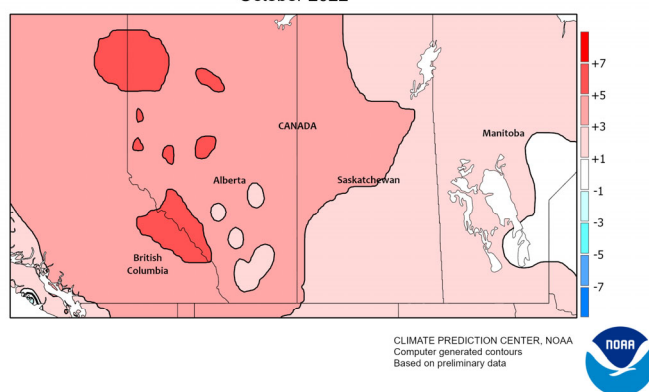
CANADIAN PRAIRIES
Percent of Normal Precipitation
October 2022



CANADIAN PRAIRIES
Average Temperature (C)
October 2022



CANADIAN PRAIRIES
Temperature Anomaly (C)
October 2022

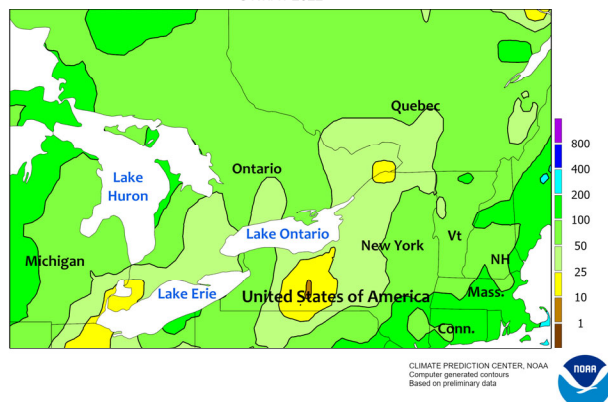


CANADIAN PRAIRIES

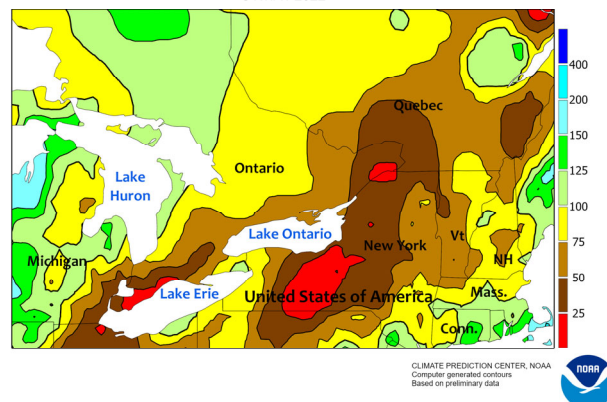
Except for a brief period in late October, above-normal temperatures kept the Prairies free from snow for much of the month, favoring the late stages of spring crop harvesting. Monthly average temperatures ranged from 1 to 2°C above normal in Manitoba to locally more than 5°C above normal in Alberta. According to the government of

Manitoba, harvesting of all crops reached 95 percent completion as of October 25, reflecting this season's unusually slow pace of fieldwork. October precipitation was mostly light (less than 25 mm), although total monthly accumulations of 50 mm were recorded at the eastern edge of the main agricultural production areas.

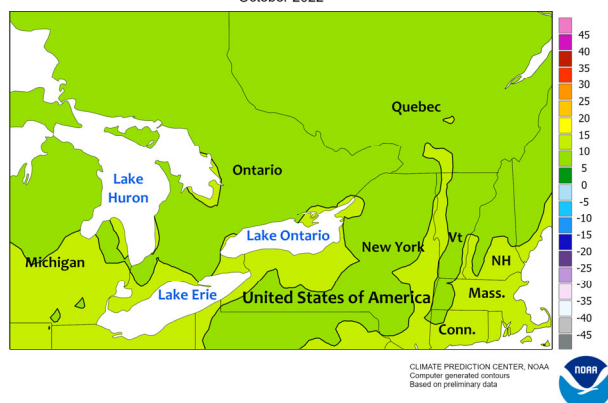
SOUTHEASTERN CANADA
Total Precipitation(mm)
October 2022



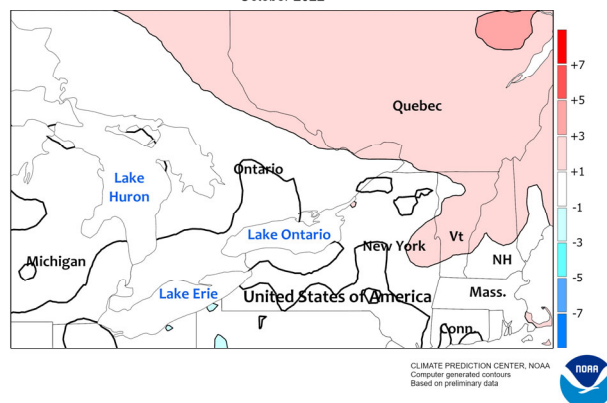
SOUTHEASTERN CANADA
Percent of Normal Precipitation
October 2022



SOUTHEASTERN CANADA
Average Temperature (C)
October 2022



SOUTHEASTERN CANADA
Temperature Anomaly (C)
October 2022



SOUTHEASTERN CANADA

Dry, seasonably mild October weather favored summer crop harvesting and early development of winter wheat. Aside from a brief period of locally heavy mid-month showers, dryness enabled corn and soybean harvesting – as well as the later stages of winter wheat planting – to advance

toward completion. Monthly temperatures generally averaged within 1°C of normal across the region, and the progression of seasonal cooling ensured nearly all locations recorded a season-ending freeze (nighttime lows dropping to -2°C or lower) by month's end.

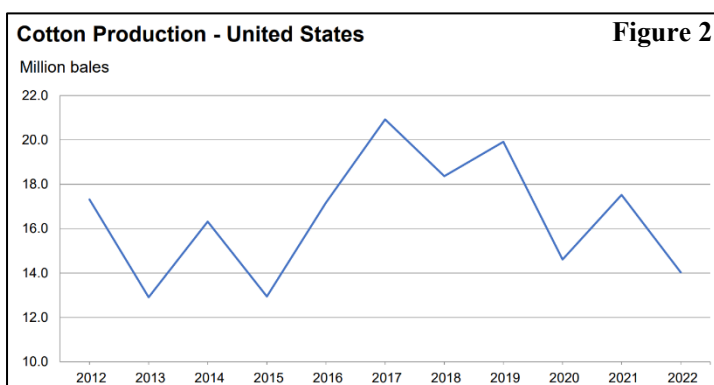
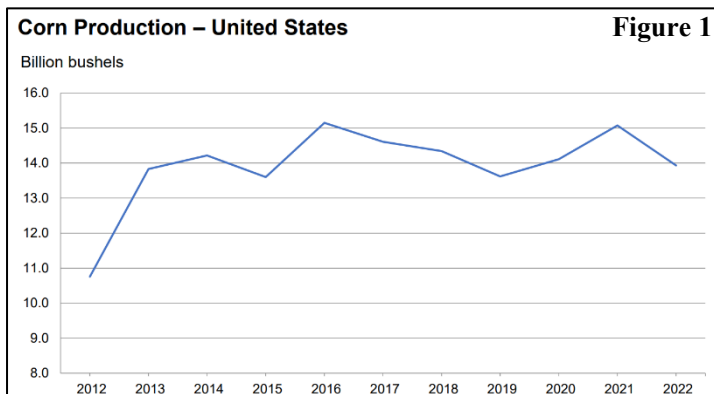
U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on November 9, 2022. Forecasts refer to November 1.

Corn production for grain is forecast at 13.9 billion bushels, up less than 1 percent from the previous forecast but down 8 percent from 2021 (figure 1). U.S. yields are expected to average 172.3 bushels per harvested acre, up 0.4 bushel from the previous forecast but down 4.4 bushels from last year. Area harvested for grain, forecast at 80.8 million acres, is unchanged from the previous forecast but down 5 percent from the previous year.

Soybean production for beans is forecast at 4.35 billion bushels, up 1 percent from the previous forecast but down 3 percent from last year. U.S. yields are expected to average 50.2 bushels per harvested acre, up 0.4 bushel from the previous forecast but down 1.5 bushels from 2021. U.S. area harvested for beans is forecast at 86.6 million acres, unchanged from the previous forecast but up less than 1 percent from 2021.

All cotton production is forecast at 14.0 million 480-pound bales, up 2 percent from the previous forecast but down 20 percent from 2021 (figure 2). U.S. yields are expected to average 855 pounds per harvested acre, up 13 pounds from the previous forecast and up 36 pounds from 2021. Upland cotton production is forecast at 13.6 million 480-pound bales, up 2 percent from the previous forecast but down 21 percent from 2021. Pima cotton production is forecast at 470,000 bales, up less than 1 percent from the previous forecast and up 42 percent from 2021. All cotton area harvested is forecast at 7.88 million acres, unchanged from the previous forecast but down 23 percent from 2021.



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Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**

Internet URL: www.usda.gov/oce/weather-drought-monitor

E-mail address: brad.rippey@usda.gov

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World Agricultural Outlook Board

Managing Editor..... **Brad Rippey** (202) 720-2397

Production Editor..... **Brian Morris** (202) 720-3062

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Agricultural Weather Analysts..... **Harlan Shannon**
and **Eric Luebehusen**

National Agricultural Statistics Service

Agricultural Statistician and State Summaries Editor.....

Irwin Anolik (202) 720-7621

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National Oceanic and Atmospheric Administration

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Meteorologists.....**Brad Pugh, Adam Allgood, and Rich Tinker**

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