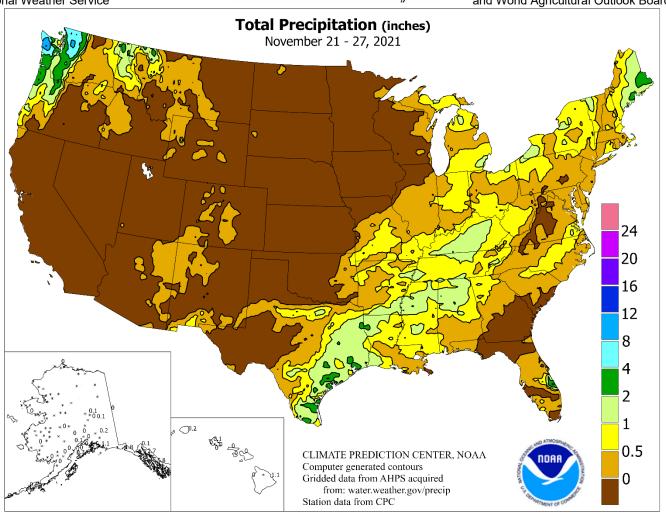
# WEEKEY MATHER AND CROP BULLETIN

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**

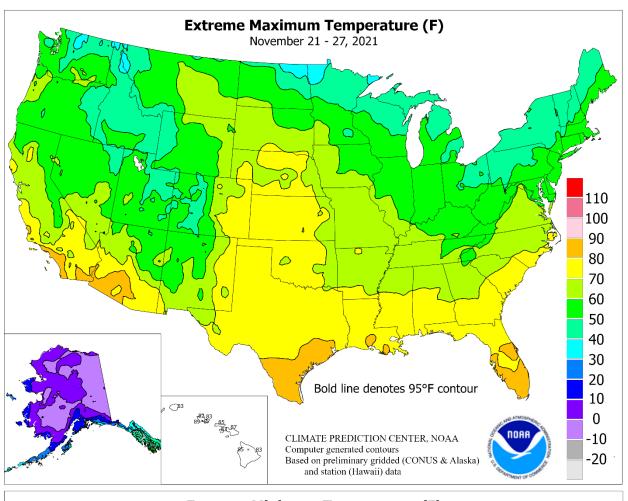
November 21 – 27, 2021

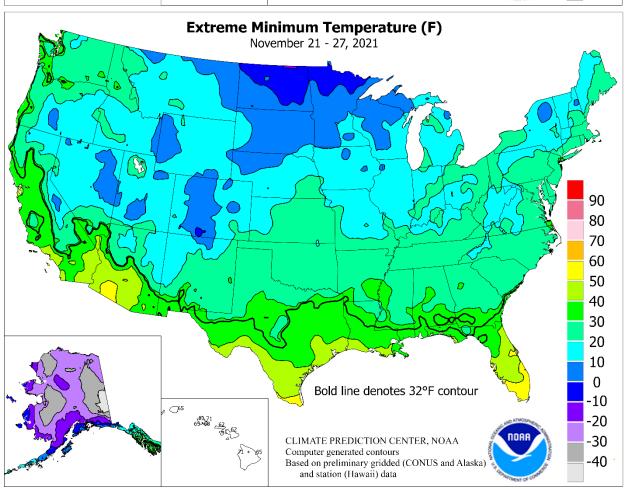
Highlights provided by USDA/WAOB

Idwestern corn and soybean harvests neared completion, although spotty rain and snow showers hampered end-of-season fieldwork in the Ohio Valley and lower Great Lakes region. Showers also extended southward through the Tennessee Valley and into the western and central Gulf Coast States, but rain fell only briefly. As a result, Southern producers continued to make good progress on late-autumn fieldwork, including winter wheat planting and cotton and peanut harvesting. Meanwhile, dry weather again dominated the Plains,

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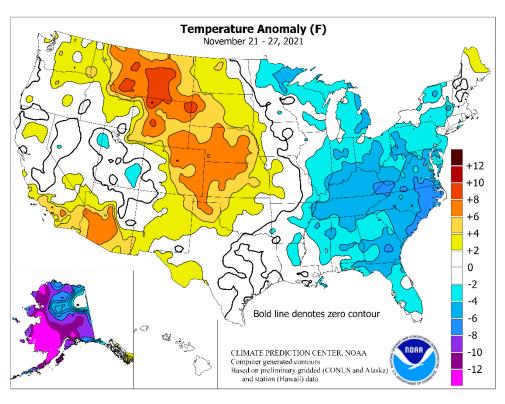
#### (Continued from front cover)

favoring late-autumn fieldwork but limiting moisture for winter wheat establishment. Late-season warmth aggravated the effects of ongoing dryness, leading to increased stress on a portion of the wheat crop. By the end of November, soil moisture shortages were particularly acute in parts of Montana and on the central and southern High **Plains.** Mild, dry conditions also prevailed in the western U.S., excluding the Pacific Northwest and the northernmost Rockies. In fact, no meaningful precipitation has fallen across northern and central California in more than a month, since the October 24-25 deluge. Meanwhile, soggy conditions persisted in western Washington, following mid-November flooding. Elsewhere, snow blanketed parts of northern New England, with nearly 6 inches falling on November 26 in Caribou, ME. Several days of cool weather throughout the eastern one-third of the **country** helped to hold weekly temperatures more than 5°F below normal in many locations from the lower Great Lakes region into the Southeast. Conversely,

readings averaged at least 5 to 10°F above normal throughout the **Plains**, with some of the warmest weather, relative to normal, stretching from **Montana to eastern Colorado and parts of Kansas**.

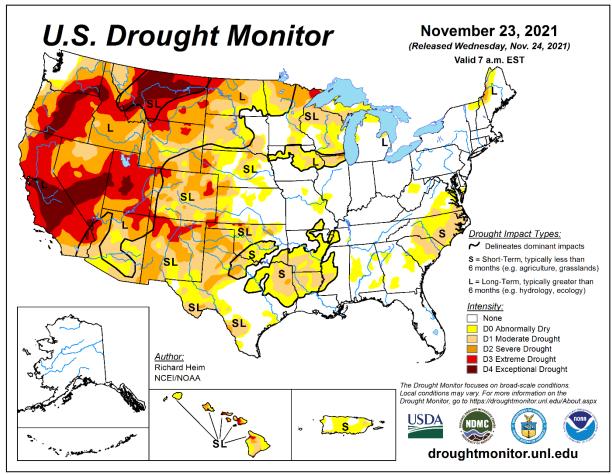
Several chilly days across the eastern U.S. led to freezes deep into the South, including parts of northern Florida and southern sections of Alabama and Mississippi. Tallahassee, FL, reported a low of 27°F (not a record for the date) on November 24. In southern Georgia, the first freeze of the autumn occurred on the 24th in Valdosta (30°F) and Albany (32°F). Farther north, early-week temperatures dipped below 0°F for the first time this season in parts of North Dakota and northern Minnesota. Sub-zero lows on November 25 included -5°F in International Falls, MN, and -1°F in Grand Forks, ND. In contrast, highs soared to daily-record levels on November 21 in southern California locations such as Vista (89°F) and Newport Beach (85°F). Two days later, a surge of warmth across the Plains and Midwest resulted in record-setting highs for November 23 in Valentine, NE (77°F); Burlington, CO (75°F); Goodland, KS (74°F); Sioux Falls, SD (68°F); and Sioux City, IA (68°F). Several days later, another round of impressive, late-season warmth overspread the western and central U.S. On November 27-28, consecutive dailyrecord highs were established in Northwestern locations such as Portland, OR (63°F both days), and Olympia, WA (58°F both days). Elsewhere on the 27th, Topeka, KS, logged a daily-record high of 71°F—the sixth day this month with a reading of 70°F or greater. For much of the week, southern California's coastal ranges were plagued by gusty, offshore winds, accompanied by warm weather and low humidity levels, leading to an elevated wildfire threat. Some of the highest winds (locally 70 to 90 mph) were observed on Thanksgiving Day, November 25. For example, a pre-dawn gust to 89 mph was clocked on the 25th in Browns Canyon, near Chatsworth, CA.

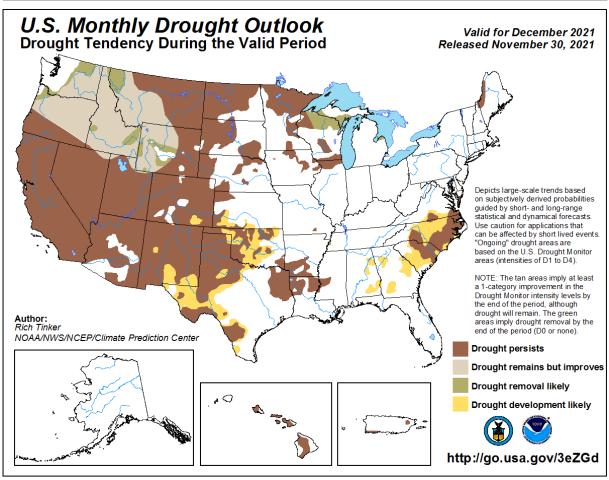
As the week began, spotty downpours lingered along **Florida's east coast**, where **Fort Pierce** tallied a daily-record sum (4.41 inches) for November 21. Early-week showers also dotted **Deep South Texas**, resulting in a record-setting total (2.11 inches) for November 22 in **McAllen**. Another round of rain arrived in the **western Gulf Coast** 



region on Thanksgiving Day, November 25, when Houston, TX, netted a daily-record total of 1.87 inches—the first measurable amount in that location since November 11. Meanwhile, periodic heavy rain continued to affect the western Washington, where daily-record totals for the 25th included 3.16 inches in Quillayute and 1.43 inches in Bellingham. Through the 27th, Bellingham's month-to-date rainfall climbed to 11.64 inches (248 percent of normal), surpassing the November 1990 record of 11.60 inches. In contrast, the November 1-27 period featured no measurable precipitation in locations such as San Diego, CA; Phoenix, AZ; Cedar City, UT; Las Vegas, NV; Roswell, NM; and Amarillo and Midland, TX. San Diego last received no measurable rainfall during November in 1980. In Cedar City, this year would mark only the second November on record—along with 2006—without measurable precipitation.

Extremely cold weather continued to grip the Alaskan mainland, while mild, wet weather covered the southeastern part of the state. On November 24 in southeastern Alaska, Ketchikan received rainfall totaling 2.75 inches and clocked a peak wind gust to 56 mph. However, for the second week in a row, temperatures averaged 20 to 30°F below normal in southwestern Alaska. King Salmon reported sub-zero minimum temperatures each day starting November 11, along with a daily-record low of -22°F on November 23. Dailyrecord lows were established on November 27 in **Kotzebue** (-27°F) and Kodiak (5°F). The cold spell further deepened by the morning of the 28th, when King Salmon's low of -28°F tied a monthly record previously set on November 28, 1917, and November 22, 1988. Elsewhere on the 28th, Kotzebue (-31°F) reported its lowest November reading since November 15, 1956, when it was -32°F. Farther south, warm, mostly dry conditions dominated Hawaii. Honolulu, Oahu, posted daily record-tying highs of 87°F on November 23 and 25. With dry weather in place, Kahului, Maui, collected a daily record-tying low of 60°F on the 25th. Through November 27, month-to-date rainfall at the state's major airport observation sites ranged from 0.04 inch (3 percent of normal) in Kahului to 3.41 inches (26 percent) in Hilo, on the Big Island.





### National Weather Data for Selected Cities

Weather Data for the Week Ending November 27, 2021
Data Provided by Climate Prediction Center

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5	STATIONS	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	ART.	WEEKLY TOTAL, IN.	ART A NO	ATES IOUR	TOTAL, IN., SINCE SEP	NOF SE SI	TOTAL, SINCE J	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	ID AE	ID BE	.01 INCH OR MORE	.50 INCH OR MORE
		A A	₹₽	Ä	Ä	ΑV	DEPARTURE FROM NORMAL	₹ 5	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	70 SINC	PCT. NORMAL SINCE SEP 1	SIN	PCT.	A A	₹ Ø	90 AN	32 AN	0.0	3.
AK	ANCHORAGE	13	1	20	-7	7	-13	0.08	-0.19	0.07	4.25	70	13.67	88	76	52	0	7	2	0
	BARROW	-2	-10	4	-19	-6	0	0.01	-0.04	0.01	2.91	206	6.38	136	79	70	0	7	1	0
	FAIRBANKS JUNEAU	-4 39	-19 32	3 44	-27 25	-12 35	0 3	0.06 2.72	-0.09 1.32	0.06 1.01	2.09 24.87	80 109	12.61 70.28	122 126	71 89	57 78	0	7	1 7	0 2
	KODIAK	23	11	33	6	17	-15	0.00	-1.67	0.00	3.74	17	48.12	70	68	46	0	7	0	0
	NOME	5	-9	14	-21	-2	-16	0.00	-0.27	0.00	3.91	75 70	19.22	122	72	52	0	7	0	0
AL	BIRMINGHAM HUNTSVILLE	61 58	38 31	70 65	31 25	49 44	-3 -6	0.00 1.04	-1.24 -0.24	0.00 0.70	9.18 10.88	78 93	61.73 58.05	126 120	91 93	34 33	0	2 5	0 2	0
	MOBILE	67	41	76	32	54	-3	0.63	-0.53	0.55	12.99	96	76.30	126	96	41	0	1	2	1
4.0	MONTGOMERY	65	36	72	30	51	-3	0.72	-0.45	0.47	12.18	111	48.87	102	90	35	0	3	3	0
AR	FORT SMITH LITTLE ROCK	63 60	36 37	68 69	29 29	49 48	2 -1	0.51 0.17	-0.49 -1.11	0.39 0.17	13.04 7.01	104 54	44.78 37.87	107 85	90 85	36 42	0	2	2	0
AZ	FLAGSTAFF	49	23	58	17	36	2	0.16	-0.29	0.16	2.97	52	20.60	103	78	29	0	7	1	0
	PHOENIX	78	56	82	51	67	7	0.00	-0.19	0.00	1.07	59	5.29	73	42	17	0	0	0	0
	PRESCOTT TUCSON	59 76	29 54	65 81	22 45	44 65	1 8	0.03 0.01	-0.21 -0.15	0.03 0.01	3.08 0.74	92 27	11.61 11.72	88 108	73 50	22 22	0	6	1	0
CA	BAKERSFIELD	64	42	70	37	53	1	0.00	-0.17	0.00	0.95	94	2.92	52	86	42	0	0	0	0
	EUREKA	57	40	62	35	48	-1	0.02	-1.51	0.02	7.74	99	21.53	68	93	62	0	0	1	0
	FRESNO LOS ANGELES	64 77	42 54	67 87	39 51	53 66	2 6	0.00	-0.27 -0.31	0.00	1.56 0.46	85 25	6.67 3.80	68 35	95 70	52 16	0	0	0	0
	REDDING	67	39	72	34	53	5	0.00	-1.22	0.00	8.58	129	17.77	64	80	29	0	0	0	0
	SACRAMENTO	64	39	67	36	52	1	0.00	-0.55	0.00	7.44	240	11.93	79	99	46	0	0	0	0
	SAN DIEGO SAN FRANCISCO	77 65	52 48	96 67	46 47	64 56	5 3	0.00	-0.29 -0.64	0.00	1.48 6.40	89 197	5.22 11.83	59 71	81 85	26 44	1	0	0	0
	STOCKTON	65	39	68	36	52	2	0.00	-0.41	0.00	4.29	160	10.20	86	96	50	0	0	0	0
CO	ALAMOSA	52	7	58	-1	29	4	0.00	-0.10	0.00	0.70	35	5.55	78	80	19	0	7	0	0
	CO SPRINGS DENVER INTL	59 62	28 28	70 71	16 16	44 44	9 10	0.03	-0.06 -0.11	0.03	1.24 0.44	50 16	14.43 11.34	88 80	61 60	16 14	0	5 5	1	0
	GRAND JUNCTION	49	23	52	20	36	1	0.00	-0.16	0.00	3.44	116	7.60	84	72	27	0	7	0	0
	PUEBLO	62	24	72	17	43	8	0.02	-0.09	0.02	1.10	56	16.05	130	74	19	0	6	1	0
СТ	BRIDGEPORT HARTFORD	49 47	32 28	56 56	28 22	41 38	-2 -2	0.28 0.24	-0.56 -0.69	0.13 0.19	14.47 13.26	143 112	42.72 51.37	109 122	80 83	40 36	0	5 6	3	0
DC	WASHINGTON	51	34	59	30	42	-4	0.17	-0.57	0.13	8.28	83	41.72	115	75	35	0	2	4	0
DE	WILMINGTON	49	30	55	24	40	-4	0.26	-0.51	0.17	17.02	162	42.28	108	83	41	0	5	4	0
FL	DAYTONA BEACH JACKSONVILLE	72 67	54 44	80 74	45 35	63 55	-2 -5	0.00 0.16	-0.56 -0.28	0.00 0.16	12.73 12.01	93 85	43.58 49.22	93 99	91 96	51 51	0	0	0	0
	KEY WEST	77	68	81	64	73	-3 -2	0.16	-0.28	0.16	8.60	62	28.44	76	91	66	0	0	1	0
	MIAMI	79	64	84	58	71	-2	0.50	-0.09	0.50	20.07	104	54.55	91	90	52	0	0	1	1
	ORLANDO PENSACOLA	75 68	56 47	81 74	50 37	65 57	-1 -1	0.11 0.29	-0.38 -0.76	0.11 0.22	12.96 24.54	114 158	42.78 84.97	89 140	88 87	45 43	0	0	1 2	0
	TALLAHASSEE	69	38	76	27	53	-5	0.00	-0.70	0.22	14.06	128	46.91	85	91	37	0	3	0	0
	TAMPA	76	57	83	50	67	-1	0.04	-0.31	0.04	12.16	122	48.07	110	82	42	0	0	1	0
GA	WEST PALM BEACH ATHENS	78 62	61 35	83 67	52 28	69 48	-2 -3	0.04 0.17	-0.88 -0.79	0.04 0.12	22.06 9.24	123 85	49.32 44.85	84 106	95 86	50 28	0	0	1	0
GA	ATLANTA	61	36	69	32	49	-3	0.17	-0.79	0.12	8.40	73	47.38	104	80	30	0	1	3	0
	AUGUSTA	65	31	72	23	48	-5	0.09	-0.61	0.08	8.26	92	48.78	122	92	29	0	5	2	0
	COLUMBUS MACON	63 65	37 34	69 70	31 27	50 49	-5 -4	0.43 0.12	-0.66 -0.71	0.37 0.09	15.35 11.41	166 123	52.26 45.44	124 110	90 94	32 34	0	2	3 2	0
	SAVANNAH	64	38	74	29	51	-6	0.01	-0.52	0.01	15.01	144	47.66	106	96	37	0	2	1	0
HI	HILO	81	67	83	65	74	1	1.11	-2.43	0.88	21.54	63	109.44	96	89	58	0	0	5	1
	HONOLULU KAHULUI	85 85	71 66	87 87	68 62	78 75	2 0	0.01 0.00	-0.50 -0.61	0.01 0.00	0.24 0.67	5 19	9.83 15.22	71 106	78 82	43 51	0	0	1	0
	LIHUE	82	72	83	65	77	2	0.00	-0.81	0.00	4.20	42	27.30	87	89	62	0	0	1	0
IA	BURLINGTON	49	24	60	14	37	-1	0.00	-0.57	0.00	7.35	83	36.93	102	76	37	0	6	0	0
	CEDAR RAPIDS DES MOINES	46 49	18 23	56 60	8 15	32 36	-1 2	0.01 0.01	-0.46 -0.44	0.01 0.01	8.34 8.57	108 111	20.70 26.54	62 77	86 71	39 34	0	6 7	1	0
	DUBUQUE	44	21	52	12	32	0	0.01	-0.52	0.01	6.31	77	27.47	80	79	40	0	6	1	0
	SIOUX CITY	50	23	68	16	37	6	0.00	-0.30	0.00	5.31	84	21.50	80	73	34	0	7	0	0
ID	WATERLOO BOISE	47 47	22 28	59 52	14 25	34 38	3 1	0.00 0.08	-0.43 -0.27	0.00 0.08	6.41 3.11	92 121	23.09 10.25	69 100	72 86	35 53	0	7 7	0	0
	LEWISTON	52	37	58	31	45	6	0.06	-0.27	0.08	3.11	113	6.52	57	79	45	0	2	2	0
	POCATELLO	47	20	52	14	34	3	0.00	-0.29	0.00	3.28	118	9.67	88	86	37	0	7	0	0
IL	CHICAGO/O_HARE MOLINE	44 49	26 24	55 59	18 16	35 37	-1 1	0.04 0.01	-0.70 -0.56	0.04 0.01	7.67 6.23	84 75	26.67 32.89	78 92	74 74	40 37	0	6	1	0
	PEORIA	49	25	58	18	36	-1	0.01	-0.50	0.01	11.10	126	41.79	124	76	42	0	6	3	0
	ROCKFORD	45	22	56	14	34	-1	0.02	-0.56	0.02	6.15	74	21.35	62	78	41	0	6	1	0
IN	SPRINGFIELD EVANSVILLE	49 50	25 28	60 60	17 20	37 39	-2 -4	0.17 0.77	-0.59 -0.29	0.12 0.45	10.17 9.69	114 95	43.09 40.74	124 99	81 85	42 46	0	6 5	2 2	0
118	FORT WAYNE	42	27	53	20	35	-4 -3	0.77	-0.29	0.45	12.07	143	39.17	111	83	55	0	6	3	0
	INDIANAPOLIS	45	26	55	20	36	-4	0.58	-0.30	0.31	13.63	143	44.37	114	82	42	0	7	2	0
KS	SOUTH BEND CONCORDIA	44 60	27 33	53 73	21 27	36 47	-1 10	0.38	-0.39 -0.23	0.35 0.00	9.69 4.27	99 73	37.94 22.67	108 84	81 67	47 27	0	5 4	2	0
11.0	DODGE CITY	63	30	73	22	47	8	0.00	-0.23 -0.15	0.00	5.25	127	18.59	90	71	22	0	5	0	0
	GOODLAND	62	27	74	13	45	10	0.00	-0.14	0.00	0.49	14	12.16	64	70	17	0	5	0	0
	TOPEKA	59	29	71	22	44	5	0.00	-0.38	0.00	9.20	110	36.26	103	79	32	0	5	0	0

Based on 1981-2010 normals

Weekly Weather and Crop Bulletin
Weather Data for the Week Ending November 27, 2021

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		7	ГЕМБ	PERA	TUR	E °	F			PREC	CIPITA	ATION	ı		HUM	IIDITY		IP. °F		CIP
	STATES			ı	ı						1	1		ı	PER	CENT				-0
ş	AND STATIONS	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
KY	WICHITA LEXINGTON	61 47	29 29	70 55	24 19	45 38	4 -5	0.00 1.07	-0.30 0.20	0.00 0.85	8.43 11.68	116 127	30.07 51.96	96 127	77 82	32 44	0	6 5	0 2	0
	LOUISVILLE	50	31	59	26	41	-5	0.62	-0.28	0.33	10.03	106	43.43	106	79	40	0	5	2	0
LA	PADUCAH BATON ROUGE	53 68	30 44	63 78	23 34	42 56	-3 -6	0.71 0.41	-0.37 -0.37	0.44 0.40	8.28 10.64	72 81	43.37 73.65	98 135	78 96	36 46	0	5 0	2 2	0
LA	LAKE CHARLES	69	48	78	41	58	0	0.56	-0.43	0.35	11.37	80	67.20	128	92	50	0	0	2	0
	NEW ORLEANS	69	51	79	43	60	0	0.31	-0.76	0.28	12.28	98	79.49	140	92	47	0	0	2	0
MA	SHREVEPORT BOSTON	65 48	43 33	77 57	33 27	54 40	0 -2	1.02 0.24	0.02 -0.70	0.55 0.20	5.76 13.43	47 123	42.80 47.19	92 119	84 73	47 40	0	0	3	1 0
IVIZ	WORCESTER	43	28	51	23	35	-2	0.28	-0.74	0.14	16.37	130	53.64	122	81	44	0	6	3	0
MD	BALTIMORE	50	31	57	28	41	-3	0.16	-0.62	0.08	12.57	122	39.48	103	82	33	0	5	4	0
ME	CARIBOU PORTLAND	38 45	26 28	48 54	21 23	32 37	4 0	1.14 1.17	0.30 0.06	0.68 0.47	10.89 14.68	108 112	32.19 40.11	92 93	83 88	56 49	0	7 5	4	1 0
MI	ALPENA	37	21	48	8	29	-4	0.25	-0.23	0.11	5.63	76	23.69	90	89	61	0	7	5	0
	GRAND RAPIDS	40	26	51	18	33	-4	0.33	-0.44	0.27	11.45	107	34.42	97	89	58	0	6	2	0
	HOUGHTON LAKE LANSING	35 41	25 26	45 53	23 19	30 34	-2 -3	0.25 0.49	-0.27 -0.13	0.09 0.24	6.75 9.84	97 115	25.70 32.06	99 108	82 82	60 52	0	7 6	3	0
	MUSKEGON	44	28	53	19	35	-2	0.15	-0.60	0.10	6.76	67	28.15	92	78	50	0	6	4	0
N 48.	TRAVERSE CITY	39 31	27	51 43	22 5	33 22	-1 -2	0.13 0.02	-0.48	0.07 0.01	5.32	58 82	25.67	85 76	82 81	58 48	0	6 7	3 2	0
MN	DULUTH INT L FALLS	31 29	13 8	43 41	-5	19	-2 -1	0.02	-0.41 -0.20	0.01	7.35 7.70	121	22.60 17.94	76 77	81 84	48 51	0	7	2	0
	MINNEAPOLIS	39	20	54	14	30	1	0.00	-0.39	0.00	4.16	58	23.73	81	69	38	0	7	0	0
	ROCHESTER ST. CLOUD	40 37	18 16	52 53	11 8	29 27	0 1	0.00	-0.43 -0.30	0.00	5.07 7.47	68 103	25.80 23.63	81 88	75 77	41 42	0	7 7	0	0
МО	COLUMBIA	55	31	62	20	43	3	0.73	-0.03	0.62	10.36	103	48.13	120	75	36	0	5	2	1
	KANSAS CITY	56	29	68	20	43	3	0.00	-0.46	0.00	8.41	86	39.89	107	72	34	0	5	0	0
	SAINT LOUIS SPRINGFIELD	55 59	30 32	67 66	22 20	43 46	0 3	0.17 0.83	-0.76 -0.14	0.16 0.47	5.97 9.51	60 79	37.69 45.19	100 107	71 82	34 40	0	5 3	2 2	0
MS	JACKSON	65	38	75	29	51	-2	0.63	-0.14	0.47	4.63	41	45.19	93	88	41	0	1	3	1
	MERIDIAN	66	37	76	31	51	-1	0.49	-0.74	0.24	9.90	86	64.00	126	90	35	0	2	3	0
МТ	TUPELO BILLINGS	59 53	35 33	67 62	29 20	47 43	-3 11	1.61 0.13	0.31 -0.01	1.24 0.13	7.41 1.69	63 54	65.26 8.96	135 67	88 68	35 30	0	3	2	1 0
IVII	BUTTE	46	21	54	10	34	10	0.00	-0.13	0.00	0.86	36	5.78	47	71	28	0	6	0	0
	CUT BANK	46	25	53	14	36	9	0.04	-0.05	0.03	0.52	25	5.16	47	75	35	0	5	2	0
	GLASGOW GREAT FALLS	44 50	21 30	56 57	10 21	32 40	8 10	0.01 0.27	-0.08 0.14	0.01 0.25	0.55 0.64	25 23	5.20 10.33	45 73	81 69	46 29	0	6 4	1 2	0
	HAVRE	46	22	60	11	34	8	0.25	0.14	0.23	1.09	51	6.81	62	85	43	0	7	2	0
	MISSOULA	44	26	53	18	35	6	0.04	-0.21	0.02	2.42	80	9.76	74	88	55	0	5	2	0
NC	ASHEVILLE CHARLOTTE	54 59	27 29	63 64	21 23	40 44	-5 -4	0.11 0.28	-0.83 -0.48	0.11 0.24	8.87 4.77	89 50	53.34 32.91	128 86	87 87	32 26	0	7 6	1 2	0
	GREENSBORO	54	29	62	24	41	-6	0.06	-0.65	0.04	6.61	65	37.22	96	76	27	0	6	2	0
	HATTERAS	59	43	73	33	51	-4	0.27	-0.77	0.21	12.81	79	56.66	106	81	45	0	0	2	0
	RALEIGH WILMINGTON	56 63	30 35	64 75	24 27	43 49	-7 -6	0.65 0.24	-0.07 -0.56	0.51 0.16	11.04 12.24	106 83	41.94 57.36	105 107	88 89	32 38	0	5 4	2 2	1 0
ND	BISMARCK	44	15	59	2	30	5	0.00	-0.13	0.00	4.59	130	11.20	64	86	43	0	7	0	0
	DICKINSON	44	18	59	1	31	6	0.00	-0.09	0.00	3.22	98	12.76	81	79	42	0	7	0	0
	FARGO GRAND FORKS	36 32	15 12	48 42	2 -1	25 22	2 1	0.00	-0.21 -0.16	0.00	6.81 5.87	120 119	16.51 17.69	76 87	78 84	48 61	0	7 7	0	0
	JAMESTOWN	41	15	54	0	28	5	0.01	-0.10	0.01	4.18	101	11.24	61	81	46	0	7	1	0
NE	GRAND ISLAND LINCOLN	57 56	29 28	71 70	19 22	43 42	10 8	0.00	-0.25 -0.30	0.00	3.91 5.13	75 81	26.44 25.71	101 92	72 73	28 31	0	5 6	0	0
	NORFOLK	55	28 27	70	19	42	9	0.00	-0.30	0.00	3.94	65	24.46	92 92	73	30	0	7	0	0
	NORTH PLATTE	61	20	69	11	40	9	0.00	-0.12	0.00	3.24	90	22.00	110	81	20	0	7	0	0
	OMAHA SCOTTSBLUFF	53 59	28 23	67 69	23 12	41 41	6 10	0.00	-0.35 -0.14	0.00	7.62 2.24	120 76	32.20 9.63	109 63	73 72	34 21	0	6 6	0	0
	VALENTINE	56	27	77	23	42	11	0.00	-0.14	0.00	5.04	144	20.57	104	67	26	0	4	0	0
NH	CONCORD	43	27	51	22	35	0	0.44	-0.40	0.38	9.55	88	38.00	103	86	47	0	5	3	0
NJ	ATLANTIC_CITY NEWARK	51 51	32 36	58 59	23 32	41 43	-3 -1	0.40 0.11	-0.38 -0.76	0.35 0.07	9.76 16.08	103 151	44.89 52.41	119 124	86 72	44 35	0	4	3	0
NM	ALBUQUERQUE	56	34	62	28	45	3	0.11	-0.70	0.12	1.29	48	5.16	57	67	28	0	3	1	0
NV	ELY	52	13	62	5	33	3	0.00	-0.14	0.00	1.47	57	6.09	64	66	13	0	7	0	0
	LAS VEGAS RENO	66 55	46 27	70 61	41 23	56 41	3 1	0.00	-0.10 -0.22	0.00	0.19 3.28	19 197	1.33 5.02	33 77	26 74	10 25	0	0 7	0	0
	WINNEMUCCA	53	17	58	12	35	1	0.00	-0.23	0.00	3.17	161	8.00	107	80	24	0	7	0	0
NY	ALBANY	42	27	49 45	19	34	-3	0.26	-0.52	0.21	14.55	147	41.58	115	86	51 56	0	6	3	0
	BINGHAMTON BUFFALO	38 43	25 32	45 50	19 28	31 38	-4 0	0.25 0.68	-0.52 -0.26	0.18 0.32	11.72 13.76	124 124	46.28 34.05	130 94	92 82	56 48	0	7 5	4 5	0
	ROCHESTER	43	31	49	24	37	-1	0.31	-0.38	0.12	12.02	138	31.88	102	90	53	0	5	6	0
0	SYRACUSE	44	29	51	21	37	-1	0.42	-0.39	0.24	12.96	126	42.97	123	94	55	0	6	5	0
ОН	AKRON-CANTON CINCINNATI	42 46	29 28	50 55	22 19	35 37	-3 -4	0.54 0.55	-0.25 -0.30	0.21 0.40	8.28 10.06	89 112	36.93 45.33	101 117	78 79	50 42	0	5 5	4 2	0
	CLEVELAND	42	29	50	25	36	-5	0.80	-0.04	0.47	8.79	87	37.58	106	75	48	0	6	4	0
	COLUMBUS	43	28	50 52	22	36 36	-5 3	0.58	-0.20 0.37	0.28	7.37	88	35.48	98 95	85 75	50	0	5	4	0
	DAYTON MANSFIELD	45 40	28 28	52 49	20 22	36 34	-3 -4	0.46 0.46	-0.37 -0.43	0.25 0.28	9.42 6.42	102 66	35.83 34.02	95 83	75 85	44 54	0	5 5	2	0
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Based on 1981-2010 normals

\*\*\* Not Available

\*\*\* Not Available

Weekly Weather and Crop Bulletin
Weather Data for the Week Ending November 27, 2021

										naing			,		RELA	ATIVE	NUN	/BER	OF D	AYS
	STATES	7	ГЕМБ	PERA	TUR	E °	F			PREC	CIPITA	ATION				IDITY CENT	TEM	IP. °F	PRE	ECIP
	AND						<u>=</u> 4∠		= 47	× ×	1	1	1	1 / 1			J/E	8		
5	STATIONS	AVERAGE MAXIMUM	AVERAGE	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	46	31	56	25	38	0	0.53	-0.15	0.22	14.79	187	38.56	124	73	43	0	4	4	0
ок	YOUNGSTOWN OKLAHOMA CITY	41 62	28 33	48 70	24 23	35 48	-4 1	0.57 0.00	-0.20 -0.39	0.23 0.00	9.05 4.57	97 47	41.06 28.18	115 81	84 78	51 28	0	6 3	5 0	0
	TULSA	63	36	71	27	50	3	0.23	-0.32	0.23	7.84	73	35.63	93	81	33	0	3	1	0
OR	ASTORIA BURNS	51 47	39 20	57 54	31 17	45 34	0 4	2.28 0.02	-0.52 -0.28	0.63 0.02	25.57 2.80	141 121	63.81 8.44	113 89	98 88	77 42	0	1 7	6 1	2
	EUGENE	53	38	62	29	45	2	0.02	-1.61	0.02	10.35	91	24.75	66	99	71	0	2	4	0
	MEDFORD	52	34	58	28	43	1	0.02	-0.76	0.02	5.10	117	11.46	78	99	54	0	3	1	0
	PENDLETON PORTLAND	49 52	33 41	65 63	25 34	41 47	3 2	0.07 0.95	-0.30 -0.46	0.07 0.45	2.85	95 143	7.10 28.21	63 94	92 93	57 69	0	4 0	1 5	0
	SALEM	52 52	39	65	30	47	2	0.95	-1.00	0.45	13.57 10.72	106	29.77	94 92	93 97	71	0	1	4	0
PA	ALLENTOWN	46	29	54	24	37	-2	0.11	-0.76	0.07	10.39	89	39.03	94	84	41	0	5	2	0
	ERIE	44	33 31	49	28 28	38 39	-2 -1	0.78	-0.16	0.23 0.05	12.93	106	37.32	98	76 81	47 39	0	4 5	6	0
	MIDDLETOWN PHILADELPHIA	47 50	36	53 57	29	43	-1 -2	0.10 0.20	-0.70 -0.53	0.05	15.10 9.70	148 101	44.64 41.55	120 111	75	38	0	2	5 3	0
	PITTSBURGH	42	28	49	21	35	-5	0.20	-0.56	0.11	8.09	97	34.29	98	86	43	0	5	4	0
	WILKES-BARRE	44	28	55 40	22	36	-2	0.28	-0.45	0.17	14.98	159	42.10	122	87	45	0	6	4	0
RI	WILLIAMSPORT PROVIDENCE	44 50	28 31	49 59	22 27	36 41	-3 -1	0.12 0.26	-0.81 -0.85	0.06 0.14	15.83 12.93	144 108	42.82 44.39	113 104	84 76	43 40	0	5 4	3	0
SC	CHARLESTON	63	35	75	28	49	-7	0.04	-0.50	0.03	12.09	100	53.83	113	92	36	0	3	2	0
	COLUMBIA	62	31	70	25	46	-6	0.14	-0.53	0.12	5.81	63	43.55	106	91	28	0	5	2	0
	FLORENCE GREENVILLE	62 58	32 32	73 63	25 25	47 45	-6 -5	0.18 0.16	-0.46 -0.78	0.12 0.15	3.66 7.21	40 71	38.94 40.39	98 95	82 80	26 26	0	4 3	2	0
SD	ABERDEEN	43	16	55	3	29	5	0.00	-0.15	0.00	6.60	135	18.07	85	80	41	0	7	0	0
	HURON	46	19	61	5	32	5	0.00	-0.17	0.00	8.26	162	18.57	83	80	40	0	7	0	0
	RAPID CITY SIOUX FALLS	54 47	22 21	69 68	11 12	38 34	7 6	0.00	-0.10 -0.31	0.00	3.58 5.72	111 92	15.12 25.38	94 99	79 76	31 38	0	7 7	0	0
TN	BRISTOL	51	25	56	20	38	-6	0.50	-0.27	0.25	6.61	84	38.04	102	90	32	0	7	4	0
	CHATTANOOGA	57	30	64	26	44	-5	0.42	-0.88	0.24	12.09	103	57.76	122	89	31	0	5	3	0
	KNOXVILLE MEMPHIS	54 57	28 37	61 67	24 29	41 47	-6 -3	0.80 0.89	-0.24 -0.52	0.50 0.44	6.96 8.79	75 73	42.09 47.67	98 100	94 81	33 42	0	7 1	3	1 0
	NASHVILLE	54	32	62	25	43	-4	0.65	-0.48	0.36	9.96	97	54.08	127	79	31	0	5	2	0
TX	ABILENE	66	41	76	31	54	3	0.07	-0.20	0.07	4.31	66	20.66	88	72	27	0	1	1	0
	AMARILLO AUSTIN	65 68	32 47	72 78	27 39	49 58	6 0	0.00 0.67	-0.16 0.05	0.00 0.60	1.29 8.22	29 94	14.36 32.87	73 106	65 86	19 38	0	3 0	0 2	0
	BEAUMONT	70	51	79	44	60	1	1.46	0.03	1.30	17.92	115	63.82	116	95	54	0	0	2	1
	BROWNSVILLE	76	59	86	54	68	1	0.28	-0.07	0.16	17.52	154	35.24	134	91	61	0	0	2	0
	CORPUS CHRISTI DEL RIO	73 71	53 52	85 80	43 46	63 62	-1 5	0.44 0.11	0.07 -0.09	0.31 0.10	12.71 0.96	121 18	42.74 13.96	143 75	90 78	55 35	0	0	3	0
	EL PASO	63	44	70	34	53	4	0.11	0.22	0.10	0.90	35	11.54	127	62	27	0	0	4	0
	FORT WORTH	66	44	77	35	55	2	0.61	0.09	0.61	7.27	78	32.59	97	83	35	0	0	1	1
	GALVESTON HOUSTON	72 71	61 49	80 81	52 43	66 60	4 0	0.22 2.00	0.00 1.03	0.09 1.87	12.30 15.63	0 113	40.69 48.00	0 105	78 89	54 47	0	0	3	0
	LUBBOCK	64	34	74	28	49	3	0.38	0.20	0.38	1.59	30	19.92	103	63	21	0	3	1	0
	MIDLAND	65	39	73	29	52	3	0.00	-0.15	0.00	0.16	3	13.59	97	64	23	0	2	0	0
	SAN ANGELO SAN ANTONIO	68 68	41 49	76 76	31 38	55 58	3 0	0.00 0.70	-0.20 0.26	0.00 0.39	4.02 10.17	64 110	22.93 32.59	112 108	76 84	28 39	0	1 0	0 2	0
	VICTORIA	72	48	84	37	60	0	1.19	0.47	0.63	7.98	68	54.33	140	91	52	0	0	2	2
	WACO	68	44	78	32	56	1	0.41	-0.17	0.41	5.67	59	28.56	90	87	38	0	1	1	0
UT	WICHITA FALLS SALT LAKE CITY	67 47	37 28	75 50	23 26	52 37	3 1	0.00	-0.32 -0.32	0.00	3.13 3.84	42 93	24.75 13.09	91 89	81 83	27 44	0	3 7	0	0
VA	LYNCHBURG	53	26	65	20	40	-4	0.00	-0.72	0.00	6.35	63	32.06	84	79	28	0	6	3	0
	NORFOLK	52	35	59	30	44	-7	0.23	-0.48	0.15	5.79	52	35.26	82	83	42	0	3	2	0
	RICHMOND ROANOKE	54 52	30 29	63 67	25 24	42 41	-6 -5	0.23 0.00	-0.52 -0.78	0.19 0.00	12.03 8.89	120 90	45.87 36.77	114 97	82 69	32 31	0	5 6	2	0
	WASH/DULLES	50	28	60	22	39	-4	0.12	-0.68	0.06	9.81	96	33.89	89	82	35	0	7	3	0
VT	BURLINGTON	40	28	49	20	34	-1	0.89	0.20	0.70	11.63	115	32.04	94	85	50	0	6	5	1
WA	OLYMPIA QUILLAYUTE	49 50	38 38	58 54	32 30	44 44	2 1	1.67 4.74	-0.44 1.03	0.74 3.13	18.80 49.84	133 176	46.89 93.49	112 110	99 100	79 84	0	2	6 6	2 2
	SEATTLE-TACOMA	49	40	58	34	45	1	2.19	0.63	0.89	18.54	170	38.35	122	97	75	0	0	6	2
	SPOKANE	43	32	51	28	37	5	0.49	-0.08	0.25	4.96	127	9.86	70 70	98	68	0	5	3	0
WI	YAKIMA EAU CLAIRE	45 39	31 17	62 54	25 8	38 28	4 0	0.17 0.00	-0.10 -0.41	0.15 0.00	2.71 4.44	143 58	5.45 22.06	79 74	95 75	65 35	0	5 6	2	0
I	GREEN BAY	39	22	48	14	30	0	0.06	-0.44	0.03	2.70	36	26.25	94	77	44	0	6	3	0
	LA CROSSE	43	23	57	14	33	2	0.00	-0.47	0.00	4.06	54	34.10	108	72	36	0	6	0	0
	MADISON MILWAUKEE	42 43	22 26	52 54	13 18	32 35	0	0.01 0.03	-0.53 -0.60	0.01 0.02	4.51 5.70	59 69	20.86 17.24	64 53	75 68	40 36	0	6 6	1 2	0
wv	BECKLEY	47	25	55	19	36	-5	0.03	-0.31	0.02	5.83	71	35.69	94	93	38	0	6	4	0
	CHARLESTON	50	27	59	21	38	-6	0.49	-0.39	0.25	7.08	76	34.69	86	96	38	0	5	2	0
	ELKINS HUNTINGTON	47 48	23 30	53 57	15 22	35 39	-4 -5	0.40 0.71	-0.39 -0.11	0.13 0.55	9.29 6.80	98 78	35.20 44.79	83 115	84 87	37 37	0	7 5	4 3	0
WY	CASPER	49	25	58	17	37	8	0.12	-0.03	0.33	3.82	130	14.04	116	66	24	0	5	1	0
	CHEYENNE	55	27	63	13	41	9	0.00	-0.14	0.00	1.09	36	10.41	67	60	15	0	4	0	0
	LANDER SHERIDAN	52 55	23 23	58 67	13 14	37 39	11 10	0.09	-0.09 -0.15	0.09 0.00	4.17 2.83	131 80	14.46 11.65	118 85	72 78	22 32	0	7 6	1 0	0
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Based on 1981-2010 normals

# **National Agricultural Summary**

#### November 22 - 28, 2021

Weekly National Agricultural Summary provided by USDA/NASS

#### **HIGHLIGHTS**

Most of the nation was drier than normal during the week ending November 28. In contrast, parts of Colorado, Montana, New Mexico, Texas, and Washington recorded at least twice the normal amount of precipitation. Parts of coastal Washington recorded weekly rainfall totaling 7 inches or more. Meanwhile, much of the western half of the country

recorded above-normal weekly temperatures. Large sections of Montana and Wyoming recorded temperatures 9°F or more above normal. Conversely, most of the eastern half of the nation was cooler than normal. Parts of the mid Atlantic, Ohio Valley, and Southeast recorded temperatures 6°F or more below normal for the week.

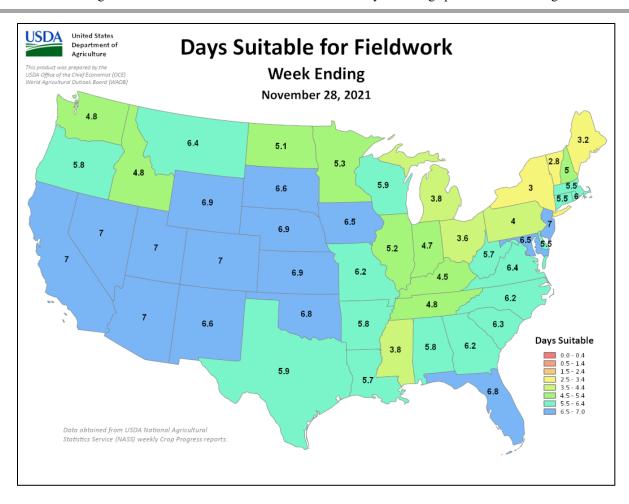
Winter Wheat: Nationwide, 92 percent of the winter wheat acreage had emerged by November 28, equal to last year but 1 percentage point ahead of the 5-year average. Winter wheat emergence advanced by 10 percentage points or more during the week in Arkansas, California, Illinois, and North Carolina. As of November 28, forty-four percent of the 2022 winter wheat acreage was reported in good to excellent condition, unchanged from the previous week but 2 percentage points below the same time last year.

**Cotton:** By November 28, eighty-five percent of the nation's cotton acreage had been harvested, 2 percentage points ahead of last year and 6 points ahead of the 5-year average. Cotton harvest advanced 10 percentage points or more during the week in six of the 15 estimating states.

**Sorghum:** Ninety-seven percent of the 2021 sorghum acreage had been harvested by November 28, two percentage points behind last year but 1 point ahead of the 5-year average. Harvest progress was complete or nearing completion in all estimating states.

**Other Crops:** Ninety-six percent of the nation's peanut acreage was harvested as of November 28, equal to both last year and the 5-year average. Harvest progress was complete or nearing completion in seven of the eight estimating states.

By November 28, ninety-four percent of this year's sunflower crop was harvested, 2 percentage points behind last year but 8 points ahead of the 5-year average. Harvest progress was ahead of the 5-year average pace in all estimating states.



# **Crop Progress and Condition**

#### Week Ending November 28, 2021

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

Cotton	Perce	nt Har	vested					
	Prev	Prev	Nov 28	5-Yr				
	Year	Week	2021	Avg				
AL	88	78	85	86				
AZ	74	71	78	74				
AR	100	97	99	99				
CA	89	97	99	87				
GA	79	67	76	83				
KS	60	47	70	60				
LA	100	98	100	100				
MS	98	91	96	97				
МО	94	94	97	97				
NC	73	82	89	85				
ок	78	74	84	76				
sc	76	67	80	82				
TN	95	83	93	95				
ΤX	81	70	82	69				
VA	60	74	86	87				
15 Sts	83	75	85	79				
These 15 States harvested 99%								
of last year's cotton acreage.								

Sorghum Percent Harvested									
	Prev	Prev	Nov 28	5-Yr					
	Year	Week	2021	Avg					
СО	100	99	100	96					
KS	97	91	95	94					
NE	100	95	98	98					
ОК	95	93	98	94					
SD	100	94	95	95					
TX	100	100	100	98					
6 Sts	99	94	97	96					
These 6 States harvested 100%									
of last year's sorghum acreage.									

Sunflowers Percent Harvested								
	Prev	Prev	Nov 28	5-Yr				
	Year	Week	2021	Avg				
СО	100	94	97	96				
KS	98	93	95	93				
ND	98	90	96	84				
SD	95	90	92	86				
4 Sts	96	90	94	86				
These 4 States harvested 87%								
of last year's sunflower acreage.								

Peanu	ts Perc	ent Ha	rvested	i				
	Prev	Prev	Nov 28	5-Yr				
	Year	Week	2021	Avg				
AL	98	94	97	97				
FL	100	99	100	100				
GA	98	94	97	98				
NC	91	96	98	95				
ок	95	91	96	94				
sc	93	84	93	94				
TX	89	79	88	88				
VA	97	97	99	99				
8 Sts	96	92	96	96				
These 8 States harvested 96%								
of last year's peanut acreage.								

Winter Wheat Percent Emerged								
	Prev	Prev	Nov 28	5-Yr				
	Year	Week	2021	Avg				
AR	87	80	93	85				
CA	54	40	55	52				
СО	95	92	94	97				
ID	98	97	99	98				
IL	99	75	92	95				
IN	94	85	91	93				
KS	95	89	96	93				
МІ	100	86	89	94				
МО	88	80	86	81				
MT	96	85	88	92				
NE	100	100	100	100				
NC	72	52	71	64				
ОН	100	90	94	97				
ок	95	90	96	94				
OR	88	64	71	85				
SD	98	99	100	99				
TX	80	75	83	80				
WA	99	96	99	95				
18 Sts 92 86 92 91								
These 18 States planted 90%								
of last year's winter wheat acreage.								

Winter Wheat Condition by									
		Perc	ent						
	VP	Р	F	G	EX				
AR	1	6	31	47	15				
CA	0	5	15	55	25				
СО	10	23	29	35	3				
ID	1	2	58	29	10				
IL	3	3	12	68	14				
IN	2	4	26	56	12				
KS	3	7	28	52	10				
MI	7	18	25	42	8				
МО	0	4	34	56	6				
MT	21	35	37	5	2				
NE	2	11	23	52	12				
NC	1	5	24	62	8				
ОН	6	7	26	47	14				
OK	5	11	36	45	3				
OR	21	27	27	24	1				
SD	5	21	38	34	2				
TX	18	27	35	15	5				
WA	5	16	57	22	0				
18 Sts	8	15	33	38	6				
Prev Wk	8	14	34	37	7				
Prev Yr	5	13	36	40	6				

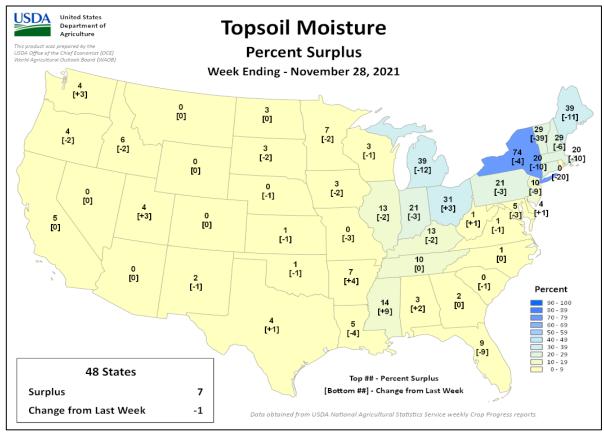
VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent

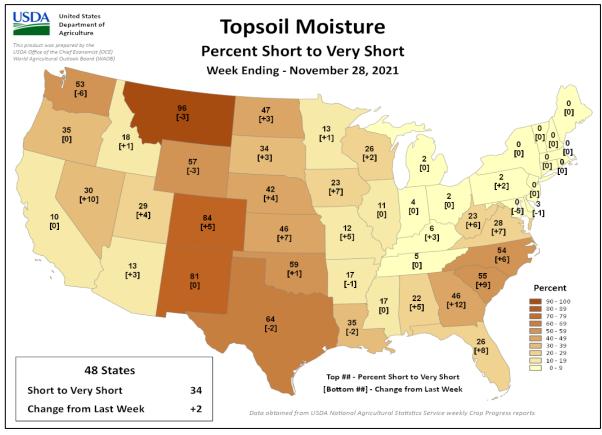
> NA - Not Available \* Revised

### **Crop Progress and Condition**

#### Week Ending November 28, 2021

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

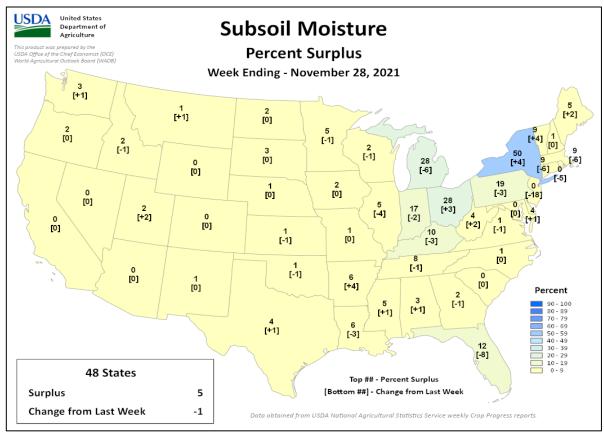


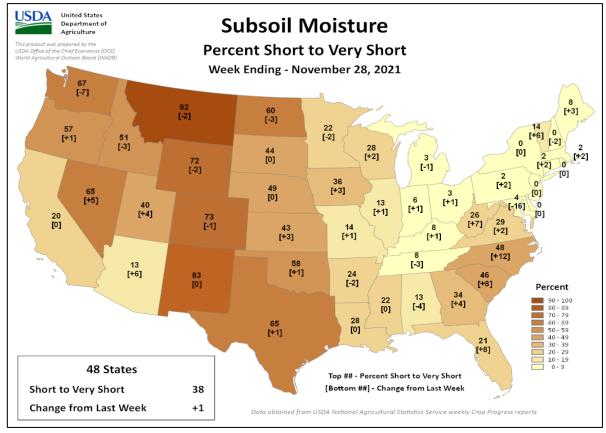


## **Crop Progress and Condition**

#### Week Ending November 28, 2021

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





# **International Weather and Crop Summary**

#### November 21-27, 2021

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

#### **HIGHLIGHTS**

**EUROPE:** Locally heavy rain continued over parts of southern Europe, while near- to below-normal temperatures eased winter crops toward dormancy elsewhere.

**MIDDLE EAST:** Rain provided timely moisture for winter grain establishment in much of Turkey, though drought concerns lingered along the eastern Mediterranean Coast.

**NORTHWESTERN AFRICA:** Showers provided sorely needed topsoil moisture in drought-afflicted Morocco while maintaining adequate to abundant soil moisture in western and central Algeria.

**EASTERN ASIA:** Continued mild weather in eastern and southern China promoted winter crop establishment.

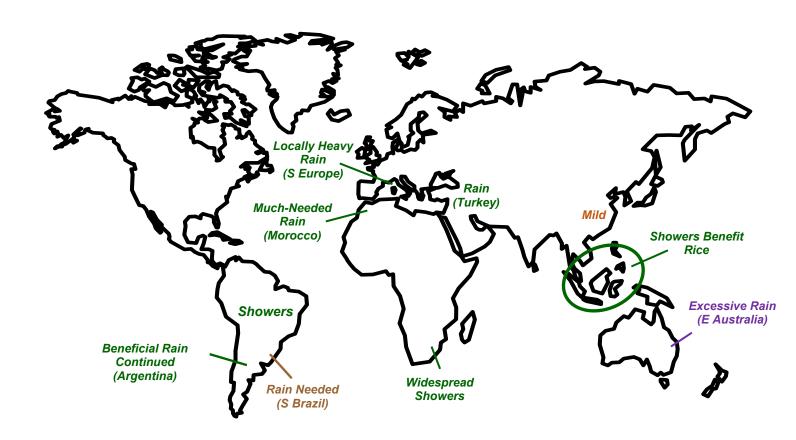
**SOUTHEAST ASIA:** Downpours were reported across much of the region, aiding rice and other seasonal crops.

**AUSTRALIA:** Heavy rain halted the winter crop harvest in the east and caused local flooding.

**SOUTH AFRICA:** Locally heavy rain overspread the corn belt, sustaining generally favorable prospects for rain-fed summer crops.

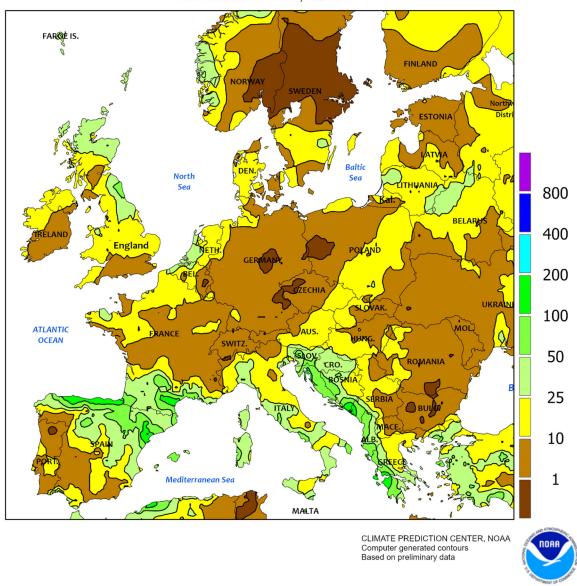
**ARGENTINA:** Beneficial rain continued throughout much of Argentina, although a few locations need additional moisture to ensure proper summer crop establishment.

**BRAZIL:** Unseasonable warmth and dryness maintained concern for soybeans and corn in southern production areas.



For additional information contact:  $\underline{\texttt{mark.brusberg@usda.gov}}$ 

EUROPE
Total Precipitation(mm)
November 21 - 27, 2021

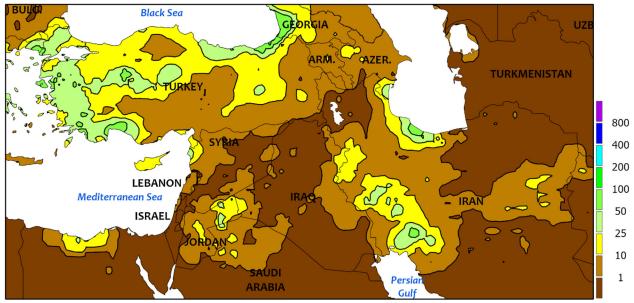


#### **EUROPE**

Locally heavy rain continued over parts of southern Europe, while colder weather eased winter crops toward dormancy elsewhere. A meandering storm system triggered moderate to heavy rain and mountain snow over much of Spain (10-150 mm liquid equivalent, locally more than 200 mm), though southwestern portions of the country were mostly dry; consequently, early-season prospects for winter wheat and barley remained favorable. Farther east, another slow-moving storm system produced similar amounts of rain and mountain snow across Italy and the western Balkans, boosting spring runoff prospects and moisture supplies for winter crops but hampering seasonal fieldwork. In the

colder air to the north, the first snow of the season (2-20 cm, more in the higher elevations) was reported from Austria northeastward into Poland and the Baltic States. Moderate to heavy showers (10-50 mm) were likewise noted over northern-most growing areas, sustaining favorable moisture reserves for winter crops. In central Europe, light to moderate precipitation (1-10 mm) sustained good soil moisture supplies for spring growth. Near- to below-normal temperatures (up to 3°C below normal) coupled with 7-day average temperatures less than 5°C over much of northern, central, and eastern Europe eased winter wheat, barley, and rapeseed toward dormancy.

# MIDDLE EAST Total Precipitation(mm) November 21 - 27, 2021



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



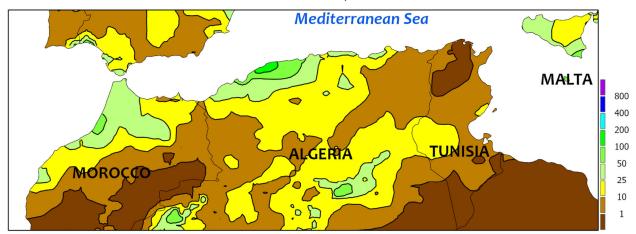
#### MIDDLE EAST

Timely rain in Turkey and western Iran contrasted with intensifying short-term drought across the eastern Mediterranean Region. A slow-moving disturbance generated moderate to heavy showers and thunderstorms across much of Turkey (10-100 mm, locally more near the southwestern coast), easing short-term dryness and improving soil moisture for winter grain establishment. Conversely, mostly dry weather (5 mm or less) in southeastern Turkey maintained drought (90-day rainfall locally less than 25 percent of normal), further depleting soil

moisture for wheat and barley emergence. Similar conditions prevailed from Syria into Israel, though locales along the immediate coast have fared better. Farther east, widespread showers (10-60 mm) over western Iran and southeastern Iraq favored vegetative winter crops, while dry weather kept soils unfavorably dry over much of northwestern and northeastern Iran. Meanwhile, unusually heavy rain (10-40 mm) was reported over Egypt's Nile River Delta, representing more than 40 percent of this region's scant cool-season (October-April) total precipitation.

# NORTHWESTERN AFRICA Total Precipitation(mm)

November 21 - 27, 2021



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

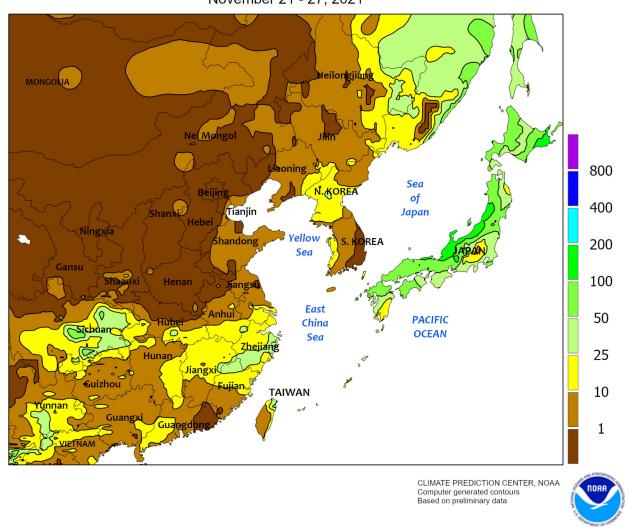


#### **NORTHWESTERN AFRICA**

Widespread rain across the western half of the region gave way to increasingly dry conditions in the east. The first appreciable showers of the season were observed in the primary crop areas of west-central Morocco, though amounts were highly variable (4-80 mm). More widespread, consistent rainfall will be needed to alleviate the severe drought that has afflicted much of Morocco since the onset of the rainy season (September-May). Even with this week's showers, cumulative rainfall deficits since September 1 remained near 100 mm (30 percent of normal) in the lowlands between the coast and the Atlas Mountains. While it is still early in the winter grain growing campaign, the latest satellite-derived Vegetation Health Index indicated either bare soils or very poor crop

establishment in Morocco. Farther east, another round of soaking rain (10-100 mm) across western and central Algeria maintained adequate to abundant moisture supplies for winter crops; as of November 28, the 2021-22 Water Year ranked as the second wettest over the past 30 years in the Central Tell Region of Tunisia with more than 300 mm reported (180 percent of normal). Conversely, dryness concerns have expanded across eastern portions of the region (northeastern Algeria into Tunisia), with this week's scant rain (5 mm or less) exacerbating the dryness. Season-to-date rainfall deficits were approaching 90 mm in eastern Algeria's Tell Region (50 percent of normal) and 80 mm over Tunisia's inland Steppe Region (20 percent of normal).

### EASTERN ASIA Total Precipitation(mm) November 21 - 27, 2021



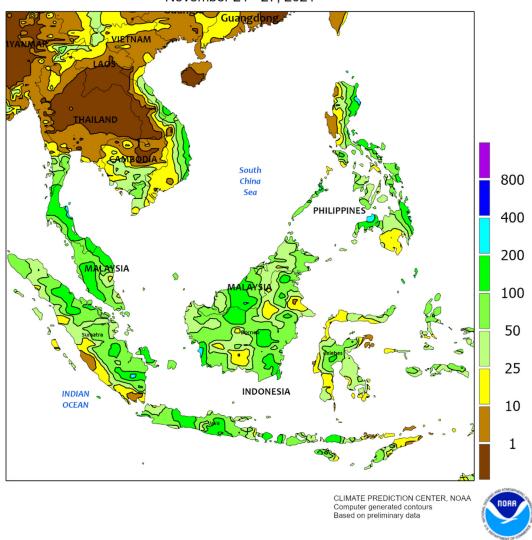
#### **EASTERN ASIA**

Generally mild conditions across eastern and southern China have promoted vegetative growth for wheat and rapeseed. Temperatures were above normal (as much as 3°C above normal) along parts of the North China Plain and central Yangtze Valley, allowing winter crops to become better established prior to entering dormancy; dormancy typically occurs in early to mid-December.

Rainfall was generally confined to southern-most China (typical for this time of year), aiding sugarcane and seasonal crops.

This will be the last weekly summary for East Asia. Coverage will resume in March 2022 to coincide with winter crops breaking dormancy.

SOUTHEAST ASIA Total Precipitation(mm) November 21 - 27, 2021

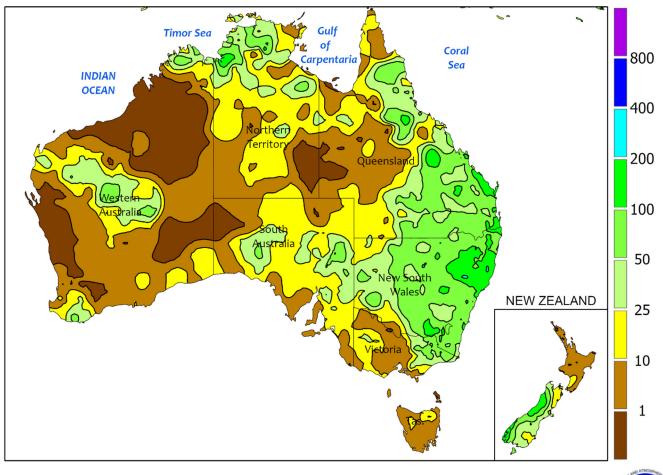


#### **SOUTHEAST ASIA**

A strong easterly fetch, enhanced by La Niña conditions, produced deluges across large sections of the region. Rainfall amounts locally exceeded 200 mm, while the majority of areas recorded 25 to 100 mm. Notable locales receiving beneficial rainfall include key rice areas in the northern Philippines that experienced little if any rainfall from mid-October to mid-November.

Additionally, showers throughout Malaysia and Indonesia supported oil palm and maintained good moisture supplies for main-season rice, particularly in southern Indonesia (Java). Meanwhile, the unseasonably heavy downpours plaguing Vietnam shifted to the north, allowing drier weather to ease excessive wetness in the Central Highlands and aid coffee harvesting.

# AUSTRALIA Total Precipitation(mm) November 21 - 27, 2021



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/ Creative Commons License found at: https://creativecommons.org/licenses/by/3.0/au/legalcode CLIMATE PREDICTION CENTER, NOAA Computer generated contours Based on preliminary data

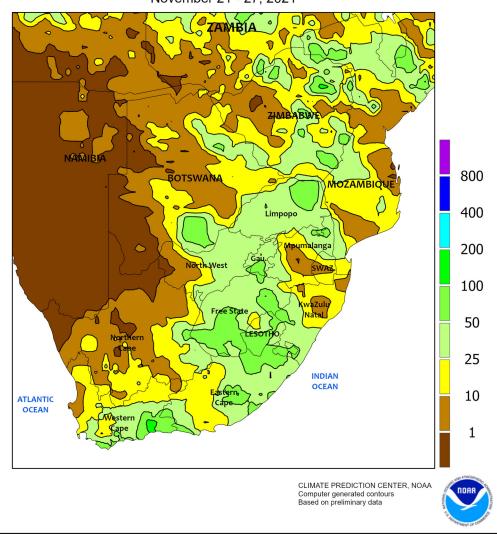


#### **AUSTRALIA**

Following the previous week's somewhat drier weather, heavy rain (50-100 mm, locally more) swept across southern Queensland and New South Wales, soaking mature winter grains and oilseeds and causing flooding, some of which was locally significant. The excessively wet weather halted most fieldwork, including winter crop harvesting, and likely caused further reductions in crop quality. The heavy rain and resultant flooding will likely necessitate the replanting of some summer crops as well. The sowing window for sorghum typically extends through the summer months, providing a lengthy

replanting opportunity. In contrast, the planting window for cotton typically closes near the end of November, limiting replanting prospects. Elsewhere in the wheat belt, the rain (5-25 mm, locally more) in Victoria, South Australia, and Western Australia was less widespread, likely leading to fewer delays in the winter crop harvest. Cooler-than-normal weather persisted across a large portion of the wheat belt. Temperatures averaged 1 to 3°C below normal in New South Wales and Victoria and generally within 1°C of normal in most of southern Queensland, South Australia, and Western Australia.

#### SOUTH AFRICA Total Precipitation(mm) November 21 - 27, 2021

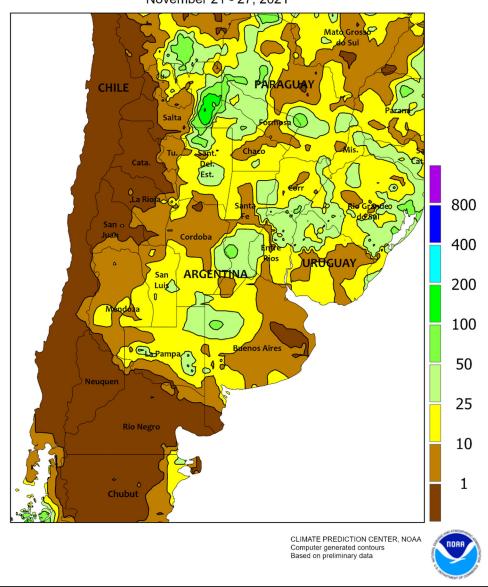


#### **SOUTH AFRICA**

Widespread, locally heavy showers improved summer crop prospects nearly regionwide. Rainfall totaled 25 to 65 mm over a large area stretching from North West and Limpopo southward to Eastern Cape, with most other eastern farming areas reporting at least 10 mm. The moisture was particularly timely for emerging to vegetative corn in central and eastern parts of the corn belt (notably western Mpumalanga, Gauteng, and eastern Free State) and will help to condition fields for planting farther west. The rainfall also improved irrigation reserves for sugarcane in eastern Mpumalanga and benefited rain-fed crops in southern KwaZulu-Natal, but drier conditions (rainfall totaling less than 25 mm) prevailed in irrigated

sugarcane areas of northern KwaZulu-Natal and Swaziland. Weekly temperatures averaged as much as 4°C below normal in the aforementioned areas, with highest daytime temperatures mostly ranging from the middle 20s to lower 30s (degrees C). Similar conditions in the Orange River watershed increased moisture available for both local farming and commercial production of irrigated corn and cotton in Northern Cape. In Western Cape, unseasonably heavy rain (10-50 mm, locally higher) further improved long-term moisture reserves but caused some disruptions to fieldwork, including early wheat harvesting and treatments for pests and diseases on tree and vine crops.

# ARGENTINA Total Precipitation(mm) November 21 - 27, 2021



#### ARGENTINA

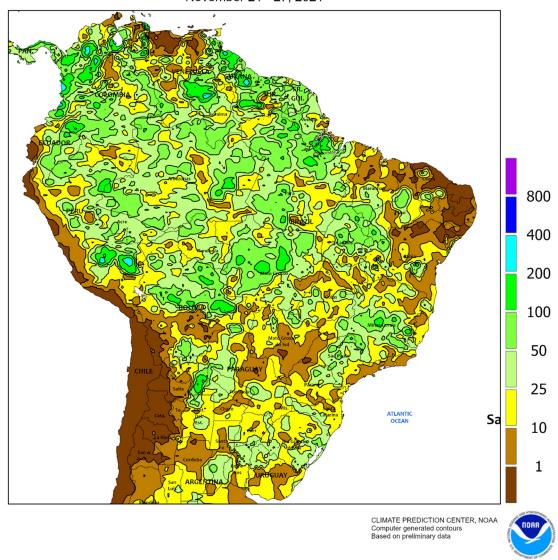
Beneficial rain continued throughout much of the region, further improving conditions for emerging summer crops in many key production areas. In central Argentina, the heaviest rainfall (25-50 mm) was concentrated between northern La Pampa and Entre Rios, including many high-yielding corn and soybean delegations in Cordoba, Santa Fe, and northwestern Buenos Aires. Drier conditions prevailed, however, in southern and eastern Buenos Aires, where longer-term moisture reserves remained limited for summer crop establishment. Light to moderate rain (10-50 mm) overspread the north, coming too late for maturing winter grains but

maintaining generally favorable levels of moisture for cotton germination. Weekly temperatures averaged 1 to 4°C above normal throughout the country, with highest daytime temperatures ranging from the middle 30s (degrees C) in central Argentina to the upper 30s and lower 40s in the northwest. According to the government of Argentina, sunflowers were 94 percent planted as of November 25, 4 points behind last year's pace; cotton was 37 percent planted, equal to last year. Corn and soybeans were 51 and 41 percent planted, respectively, while wheat was 32 percent harvested, outpacing last year by 5 points.

BRAZIL

Total Precipitation(mm)

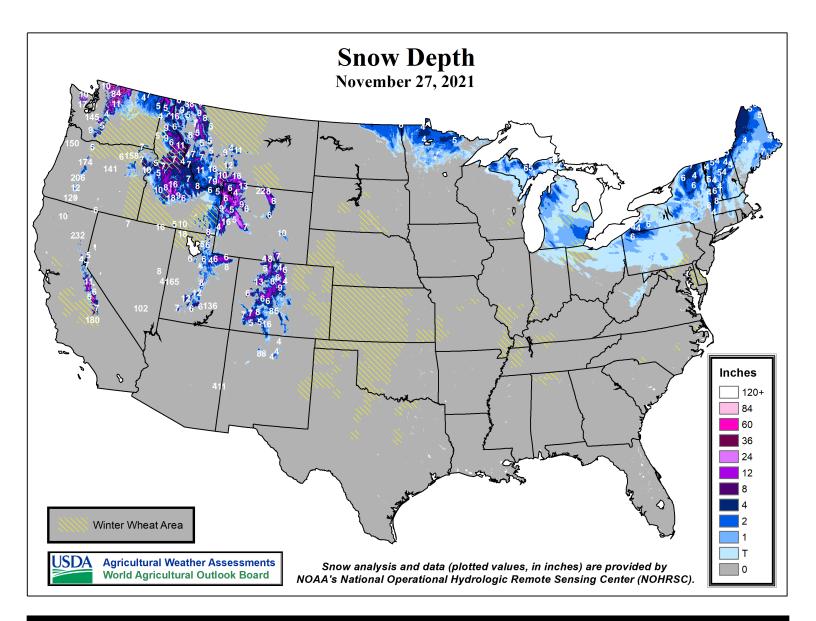
November 21 - 27, 2021



#### BRAZIL

Locally heavy showers benefited soybeans and other summer crops in northern production areas, while pockets of dryness became more prevalent farther south. Rainfall totaled 25 to 50 mm – locally approaching 100 mm – over central and northern Mato Grosso, and in many northeastern interior farming areas, notably those in Tocantins, Piauí, and Maranhão. However, rainfall tapered off from recent weeks in other parts of central Brazil, including most areas in and around Goiás, northern Minas Gerais, and western Bahia. Summer warmth (daytime highs reaching the lower and middle 30s degrees C) maintained high evapotranspiration rates in the aforementioned locations, and a return to a more normal pattern of rainfall and temperatures is needed to ensure the current favorable yield prospects. Meanwhile, unseasonable warmth and dryness

increased concern for summer crops in portions of southern Brazil that have been trending dry since late October. Rainfall totaled less than 25 mm from Mato Grosso do Sul and western São Paulo southward through Uruguay, accompanied by above-normal temperatures (highs reaching the middle 30s) that exacerbated the impact of the dryness on crops in or nearing reproduction. According to the Government of Paraná, seasonal fieldwork (wheat and barley harvesting; summer grain and oilseed planting) was nearly complete as of November 22, with the earliest planted corn and soybeans entering reproduction. Similarly, wheat in Rio Grande do Sul was 97 percent harvested as of November 25; corn and soybeans were 86 and 68 percent planted, respectively, with 45 percent of emerged corn either flowering or entering filling.



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