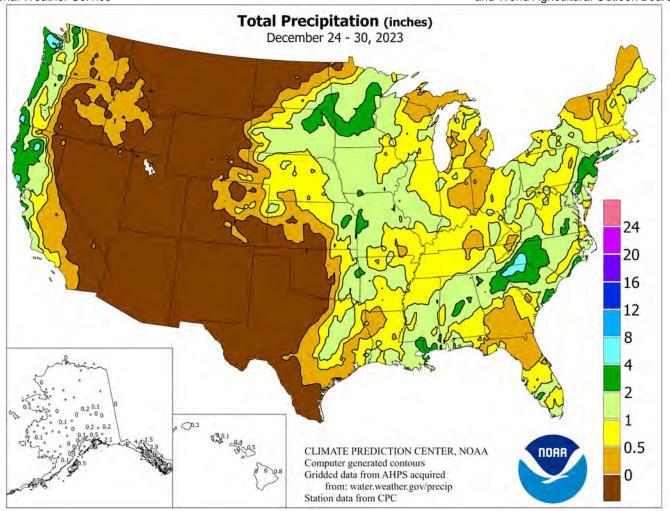
WEEKEMATHER AND CROPEBULLETIN

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

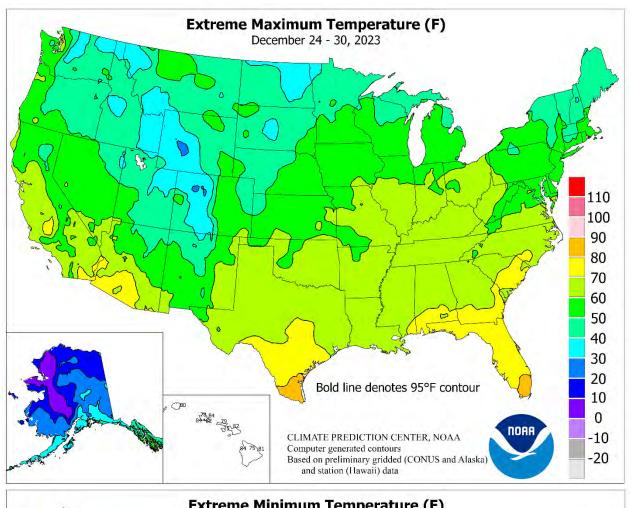
December 24 - 30, 2023

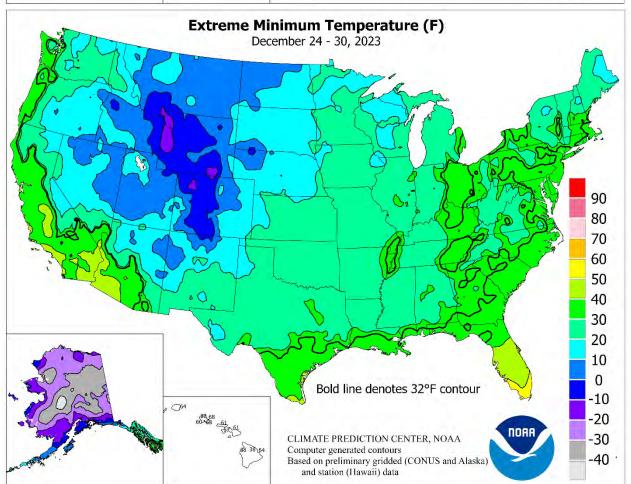
Highlights provided by USDA/WAOB

Widespread precipitation fell from the Plains eastward, generally benefiting rangeland, pastures, winter grains, and cover crops, but causing regional issues due to blizzard conditions (in the north-central U.S.), accumulations of freezing rain (in North Dakota and environs), and flash flooding (in parts of the East). The stormy weather also hampered holiday travel, especially in areas affected by snow, ice, or flooding. Meanwhile, much of the West experienced dry weather, except along and near the Pacific Coast. In fact, significant Western precipitation was

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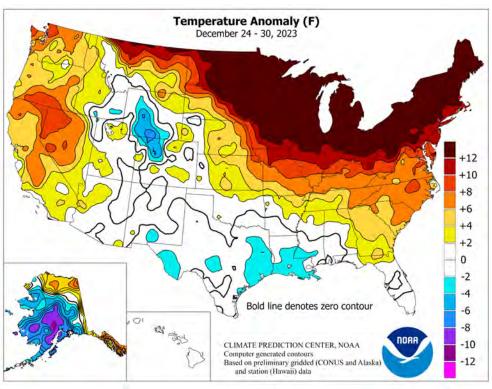
(Continued from front cover)

confined to northern California and the Pacific Northwest, with mild, dry weather covering large sections of the Rockies, Great Basin, Intermountain West, and Southwest. As 2023 ended, mountain snowpack was languishing in much of the West, owing to a combination of unusual warmth, lack of sustained storminess, or a combination of both. Although the remained Western storminess predominantly offshore, powerful lowpressure systems over the eastern Pacific **Ocean** generated massive waves, some of which inundated coastal communities. Parts of coastal California endured the brunt of the pounding surf, which lasted for Weekly temperatures several days. averaged at least 10 to 20°F above normal from northern Montana into the Northeast, capping the warmest December on record in many locations. In South Dakota alone, it was the warmest December in communities such as Huron, Mitchell, Mobridge, Sioux Sisseton, and Watertown, despite latemonth snow. Conversely, near- or belownormal temperatures prevailed in large

sections of the Rockies and across the western and central Gulf Coast States.

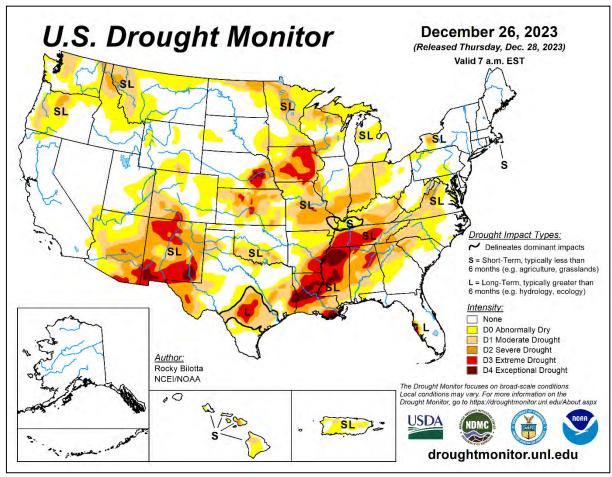
The week began with a slew of daily-record highs across the Midwest, with highs for Christmas Eve (December 24) climbing to 66°F in Carbondale, IL; 58°F in Cedar Rapids, IA; 56°F in Sioux Falls, SD; 55°F in Minneapolis-St. Paul, MN; and 54°F in Oshkosh, WI. Minneapolis-St. Paul posted another daily-record high (54°F) on December 25. Other locations in the upper Great Lakes States reporting a record-warm Christmas Day included Traverse City, MI (58°F), and Green Bay, WI (54°F). Warmth was also prominent along the Pacific Coast, where Quillayute, WA, collected four consecutive daily-record highs (56, 57, 60, and 55°F) from December 27-30. Elsewhere in Washington, Seattle closed with week with a trio of daily-record highs (56, 63, and 56°F) from December 28-30. In Oregon, record-setting highs for December 29 reached 68°F in Medford and 55°F in Klamath Falls. In California, consecutive daily-record highs occurred on December 28-29 in locations such as Fresno (67 and 69°F, respectively); Stockton (66 and 68°F); and Eureka (65 and 66°F).

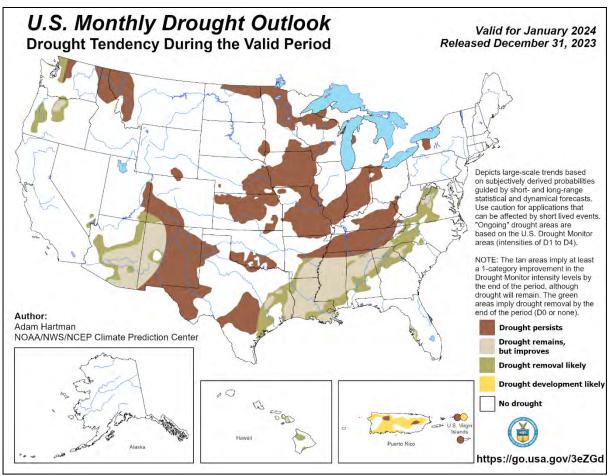
Around the holidays, a slow-moving, unusually wet weather system unfolded across the northern Plains and upper Midwest. December 23-27 precipitation totals reached 3.36 inches in Sisseton, SD; 2.83 inches in Fargo, ND; and 2.40 inches in St. Cloud, MN. The storm helped to propel all three locations to their wettest December on record, with 3.61 inches (602 percent of normal) in **Sisseton**, 3.35 inches (372 percent) in St. Cloud, and 3.00 inches (337 percent) in Fargo. In those locations, only a small amount of the precipitation fell as snow, with totals reaching 1.8 inches in Sisseton, 0.6 inch in Fargo, and a trace in St. Cloud. However, December 24-26 snowfall reached at least 5 inches in several locations in Nebraska, including North Platte (7.0 inches) and Valentine (5.4 inches), as well as many places in South Dakota. Huron, SD, received 6.5 inches of snow from December 24-26, while exactly 5 inches fell in **Aberdeen** and **Mitchell**. Christmas Day featured wind gusts to 50 mph or higher in several communities, including Valentine (55 mph) and Aberdeen (50 mph). Meanwhile, heavy showers in portions of the Gulf Coast States boosted dailyrecord totals for the 24th above 2 inches in Beaumont-Port Arthur, TX (2.65 inches), and New Orleans, LA (2.05 inches). It was the



wettest December 25 on record in **Florida** locations such as **Fort Pierce** (1.45 inches) and **Vero Beach** (1.08 inches). Significant rain fell in the **Southeast** on December 26, when daily-record totals reached exactly 2.74 inches in **Marathon, FL**, and **Athens, GA**. On December 27, **Eastern** daily-record amounts included 3.02 inches in **Wilmington, NC**; 2.05 inches in **Allentown, PA**; and 1.46 inches in **Richmond, VA**. **Allentown** (8.62 inches) and **Richmond** (8.87 inches) also noted record-high December precipitation totals. Finally, by December 28, rain began to exit the **East Coast**. However, **Islip, NY**—with 3.04 inches of rain on the 28th—experienced its wettest December day, surpassing 2.65 inches on December 11, 1992.

Cold air engulfed much of the Alaskan mainland, although mild conditions lingered along the Arctic Coast and the Canadian border. Weekly temperatures averaged at least 10 to 15°F below normal in central and south-central Alaska—but were as much as 10°F above normal in southeastern Alaska. From December 27-29, Ketchikan tallied a trio of daily-record highs (50, 50, and 53°F). Ketchikan also received heavy rain, with 9.25 inches falling from December 24-30. December precipitation in southeastern Alaska reached 22.45 inches (138 percent of normal) in Ketchikan, along with 15.28 inches (181 percent) in Sitka and 10.65 inches (163 percent) in Juneau. **Ketchikan** also reported its wettest Christmas Day on record, with 3.52 inches falling on December 25. Meanwhile in south-central Alaska, Anchorage completed its third-snowiest December on record, with 39.0 inches (214 percent of normal), despite a cold, dry finish to the month. December snowfall totals in Anchorage were higher in 1955, with 41.6 inches, and 2022, with 41.2 inches. Farther north, Bettles registered low temperatures ranging from -30 to -36°F each day from December 26-30, while McGrath recorded a low of -45°F on December 26. Elsewhere, **Bethel's** December average temperature of 4.9°F was 5.1°F below normal, aided by a reading of -30°F on December 25. Similarly, cool air settled across parts of **Hawaii**, with temperatures in Lihue, Kauai, remaining below 75°F on December 28-29. Despite some late-month showers, Hawaiian precipitation was mostly below average for December. At the state's major airport observation sites, December rainfall ranged from 0.88 inch (40 percent of normal) in Honolulu, Oahu, to 7.62 inches (63 percent) in Hilo, on the Big Island. Lihue fared better, with December rainfall totaling 3.94 inches (85 percent of normal).





National Weather Data for Selected Cities

Weather Data for the Week Ending December 30, 2023
Data Provided by Climate Prediction Center

		_													REL	ATIVE	NUN	IBEK	UF D	AYS
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4	STATES														FER	CENT				
s	AND TATIONS	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 DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
		` '	Ì	,	,	`	PR		ĀŖ	97	L SI	PC S	, S	PC S.	` `		06	8		
AK	ANCHORAGE BARROW	14 4	3 -9	33 16	-5 -20	8 -3	-9 0	0.20 0.00	-0.03 -0.04	0.16 0.00	1.82 0.00	161 0	25.67 4.59	156 86	92 87	74 75	0	7 7	2	0
	FAIRBANKS	-2	-17	28	-30	-10	-3	0.06	-0.07	0.04	0.94	171	10.43	89	77	65	0	7	2	0
	JUNEAU	42	34	48	27	38	9	2.85	1.53	0.97	10.46	165	75.57	113	95	68	0	3	6	2
	KODIAK NOME	31 11	10 -2	37 22	7 -12	20 5	-11 -2	0.51 0.10	-1.52 -0.12	0.30 0.05	6.03 0.43	70 41	64.30 21.82	82 127	90 82	68 57	0	7 7	2	0
AL	BIRMINGHAM	55	39	67	30	47	1	2.09	0.96	2.02	4.70	99	48.23	85	88	56	0	1	3	1
	HUNTSVILLE	54	38	67	30	46	2	1.31	0.07	1.30	4.95	86	43.56	80	98	63	0	3	2	1
	MOBILE MONTGOMERY	61 58	42 40	74 70	31 29	51 49	0 1	1.58 1.11	0.19 -0.09	1.26 0.92	6.05 1.57	115 32	55.87 46.33	83 90	91 93	41 59	0	1 2	2	1
AR	FORT SMITH	51	35	65	26	43	2	1.43	0.68	1.43	1.94	57	41.52	87	87	55	0	3	1	1
	LITTLE ROCK	54	37	63	30	45	4	1.01	-0.07	0.79	1.42	28	53.70	106	83	50	0	3	2	1
ΑZ	FLAGSTAFF PHOENIX	48 68	15 46	52 76	9 43	32 57	3 2	0.00	-0.48 -0.18	0.00	0.54 0.74	29 105	24.41 3.98	119 55	77 72	18 27	0	7 0	0	0
	PRESCOTT	55	25	59	21	40	2	0.00	-0.16	0.00	0.60	63	9.90	77	74	19	0	7	0	0
1	TUCSON	66	40	74	36	53	1	0.00	-0.22	0.00	1.22	130	9.86	93	76	24	0	0	0	0
CA	BAKERSFIELD	64	46	75 66	44	55	7	0.17	-0.12	0.17	0.64	60	9.23	146	90	49	0	0	1	0
1	EUREKA FRESNO	59 63	47 47	66 69	37 44	53 55	6 8	1.50 0.16	-0.28 -0.32	0.63 0.16	6.19 0.67	78 38	34.39 13.49	85 123	93 90	60 55	0	0	5 1	1 0
1	LOS ANGELES	63	52	64	49	57	0	0.62	-0.03	0.62	3.56	166	25.37	208	97	66	0	0	1	1
1	REDDING	56	45	60	34	51	5	2.83	1.41	1.15	7.40	121	39.74	119	90	67	0	0	4	3
	SACRAMENTO SAN DIEGO	60 64	44 51	65 67	37 49	52 58	5 0	1.24 0.27	0.42 -0.17	0.58 0.27	4.69 0.83	141 51	19.03 14.20	105 146	98 97	65 67	0	0	4 1	1 0
	SAN FRANCISCO	60	51	65	45	56	5	1.37	0.40	0.93	3.82	95	25.16	128	89	69	0	0	4	1
1	STOCKTON	62	44	67	37	53	6	1.16	0.58	0.56	2.64	113	16.58	124	99	62	0	0	4	1
CO	ALAMOSA	33 46	-1 22	37 58	-8	16	0	0.00	-0.07 -0.05	0.00	0.39	116 264	4.23	57	87 65	36	0	7 7	0	0
1	CO SPRINGS DENVER INTL	44	20	58	12 8	34 32	3 1	0.00	-0.05	0.00	0.58 0.13	36	25.46 18.48	160 127	67	25 26	0	7	0	0
	GRAND JUNCTION	41	19	59	15	30	3	0.00	-0.13	0.00	0.54	94	7.41	81	81	38	0	7	0	0
ОТ	PUEBLO	48	19	59	16	33	3	0.39	0.33	0.39	1.30	459	12.73	105	84	29	0	7	1	0
СТ	BRIDGEPORT HARTFORD	48 46	38 38	53 49	32 32	43 42	9 12	1.60 1.31	0.78 0.46	1.46 1.06	8.20 7.41	211 187	51.46 63.93	117 136	97 95	81 79	0	1	4	1
DC	WASHINGTON	55	44	61	37	49	10	1.20	0.50	1.03	6.24	188	35.38	84	87	64	0	0	4	1
DE	WILMINGTON	51	40	54	36	46	10	1.91	1.12	1.84	7.98	212	51.32	113	92	70	0	0	3	1
FL	DAYTONA BEACH JACKSONVILLE	67 65	54 50	73 76	41 32	61 58	1	0.43 0.40	-0.11 -0.21	0.20 0.24	4.66 6.45	206 239	60.29 51.69	117 96	100 93	64 57	0	0	4 2	0
	KEY WEST	74	65	79	58	70	-2	2.56	2.11	1.46	5.89	281	34.69	86	98	72	0	0	4	2
	MIAMI	74	64	83	55	69	-1	1.41	0.95	0.69	3.81	160	77.51	115	92	60	0	0	4	2
	ORLANDO PENSACOLA	69 62	56 45	77 78	46 35	62 54	1 0	0.44 0.68	-0.09 -0.54	0.35 0.61	3.66 4.74	152 90	48.55 57.86	94 84	97 83	64 45	0	0	4	0
1	TALLAHASSEE	66	46	74	31	56	3	0.41	-0.54	0.35	10.62	259	59.35	101	96	54	0	2	2	0
1	TAMPA	69	57	75	49	63	0	0.53	-0.07	0.30	4.43	179	36.46	73	91	64	0	0	3	0
0.0	WEST PALM BEACH	73	61	79	51	67	-1	0.33	-0.43	0.26	3.86	114	72.26	117	95	62	0	0	3	0
GA	ATHENS ATLANTA	57 57	43 44	64 65	32 33	50 50	5 5	3.09 1.97	2.00 0.86	2.73 1.83	4.18 3.63	98 82	49.07 40.69	100 80	92 89	62 63	0	1 0	2	1
	AUGUSTA	60	44	69	29	52	4	0.44	-0.52	0.31	4.29	114	61.76	140	96	60	0	1	2	0
1	COLUMBUS	60	44	67	34	52	3	0.41	-0.72	0.20	1.86	40	46.57	95	94	57	0	0	3	0
	MACON SAVANNAH	62 63	44 49	69 70	30 35	53 56	5 5	0.28 0.79	-0.83 0.07	0.20 0.72	1.90 4.57	43 147	43.56 41.42	93 86	94 92	56 58	0	1 0	2	0
н	HILO	79	65	81	64	72	1	0.80	-1.52	0.69	7.71	65	100.96	84	97	61	0	0	4	1
1	HONOLULU	80	67	82	63	74	-1	0.00	-0.54	0.00	0.89	42	13.41	82	92	58	0	0	0	0
1	KAHULUI LIHUE	80 77	65 66	82 80	61 64	72 72	-1 -1	0.53 0.30	-0.13 -0.69	0.22 0.25	0.99 4.21	36 93	11.46 42.30	71 117	92 92	60 63	0	0	3	0
IA	BURLINGTON	44	33	60	25	38	12	0.77	0.41	0.37	2.04	111	27.17	71	96	77	0	3	4	0
1	CEDAR RAPIDS	43	31	58	22	37	15	0.30	0.00	0.14	0.93	59	18.24	50	98	82	0	5	5	0
1	DES MOINES DUBUQUE	44 42	31 29	58 54	25 12	38 35	13 14	1.31 1.09	1.00 0.74	0.80 0.59	1.52 1.95	98 110	24.77 31.33	67 82	92 97	72 79	0	6 5	3	1
1	SIOUX CITY	37	22	55	16	30	9	1.10	0.74	0.56	1.57	163	24.74	84	97	80	0	6	2	2
l	WATERLOO	44	30	57	22	37	15	0.63	0.33	0.46	0.75	53	22.15	61	89	72	0	5	2	0
ID	BOISE LEWISTON	41 45	26 34	49 52	21 27	34 40	3 5	0.06 0.09	-0.29 -0.17	0.06 0.08	1.26 1.07	84 97	10.93 10.50	95 81	84 79	55 54	0	7	1 2	0
1	POCATELLO	45 32	34 12	40	3	22	-2	0.09	-0.17 -0.25	0.08	1.07	97	14.08	119	92	66	0	7	0	0
IL	CHICAGO/O_HARE	46	35	59	27	41	13	0.67	0.23	0.39	2.88	141	33.18	87	96	75	0	4	4	0
1	MOLINE	45	33	59	23	39	13	0.85	0.43	0.48	2.61	131	28.70	75	95	73	0	4	5	0
1	PEORIA ROCKFORD	47 43	35 32	62 57	26 21	41 38	13 14	0.88 0.91	0.38 0.52	0.60 0.57	2.84 3.07	132 163	33.24 31.94	88 85	94 96	68 76	0	3 5	5 3	1
1	SPRINGFIELD	47	36	63	29	41	11	0.93	0.44	0.58	2.98	143	33.74	88	98	72	0	3	4	1
IN	EVANSVILLE	50	37	65	27	44	8	0.65	-0.18	0.47	1.95	53	40.06	84	94	65	0	2	4	0
1	FORT WAYNE INDIANAPOLIS	48 48	37 37	59 61	32 29	43 42	15 12	0.21 0.30	-0.37 -0.40	0.09 0.20	1.62 1.15	67 40	33.01 33.95	83 78	94 98	75 72	0	1 2	3 5	0
1	SOUTH BEND	48	36	59	29 25	42	15	0.30	0.04	0.20	2.63	113	39.03	99	96	77	0	3	3	0
KS	CONCORDIA	41	27	59	21	34	5	0.63	0.42	0.39	1.46	143	23.86	84	89	67	0	6	3	0
1	DODGE CITY GOODLAND	45 36	27 21	60 46	25 17	36 29	-1	0.13 0.49	-0.09 0.39	0.06 0.39	2.35 0.96	251 209	23.42 20.71	106 108	92 89	62 63	0	6 7	3 4	0
1	TOPEKA	46	33	61	30	39	8	1.63	1.35	1.38	2.81	193	23.60	64	88	64	0	4	4	1

Based on 1991-2020 normals

Weekly Weather and Crop Bulletin
Weather Data for the Week Ending December 30, 2023

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		1	ГЕМБ	PERA	TUR	Ε°	F		PRECIPITATION								TEMP. °F			CIP
	STATES		1		1				1	PER	CENT									
S	AND STATIONS		AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 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	45 50	29 40	58 66	27 34	37 45	3 10	0.98 0.51	0.73 -0.39	0.98 0.45	2.61 2.00	218 50	30.39 40.37	88 81	88 90	59 66	0	6	1	1
	LOUISVILLE	52	41	67	34	46	9	0.54	-0.37	0.46	1.79	44	38.44	79	88	57	0	0	5	0
LA	PADUCAH BATON ROUGE	51 61	37 43	66 68	29 33	44 52	6 0	0.63 1.68	-0.31 0.30	0.58 1.68	1.89 6.49	45 126	54.10 48.81	107 79	90 87	60 51	0	2	3	1
LA	LAKE CHARLES	60	40	67	32	50	-3	1.11	-0.09	1.11	2.37	54	42.62	71	94	49	0	1	1	1
	NEW ORLEANS	60	47	68	36	53	-2	2.00	0.73	2.00	9.37	202	39.36	62	90	59	0	0	1	1
MA	SHREVEPORT BOSTON	58 47	38 39	64 53	28 35	48 43	0 10	0.81	-0.08	0.67	5.71	136	47.22	108	86 100	44 83	0	1	5	1
IVIZ	WORCESTER	48	37	53	33	42	15	0.77	-0.11	0.54	7.40	177	63.13	131	95	74	0	0	5	1
MD	BALTIMORE	53	42	59	37	48	11	1.65	0.88	1.59	6.99	193	41.76	93	89	68	0	0	3	1
ME	CARIBOU PORTLAND	38 43	28 34	46 49	23 30	33 38	17 11	0.31 0.97	-0.45 0.02	0.16 0.69	3.33 6.56	95 150	39.35 55.04	96 114	84 100	59 87	0	6	2 5	0
MI	ALPENA	42	36	48	25	39	15	0.81	0.41	0.46	1.54	85	29.28	98	100	89	0	2	3	0
	GRAND RAPIDS	47	37	54	25	42	14	0.27	-0.28	0.17	1.72	71	35.05	89	98	83	0	2	5	0
	LANSING MUSKEGON	47 50	38 38	54 59	27 26	42 44	16 15	0.44 0.35	0.00 -0.16	0.21 0.15	2.12 1.59	115 68	36.18 30.74	108 87	98 89	84 71	0	2	4 5	0
	TRAVERSE CITY	47	38	58	29	43	17	0.75	0.39	0.43	1.23	70	24.19	83	92	72	0	2	4	0
MN	DULUTH INT L FALLS	39 35	31 27	48 47	23	35 31	21 24	1.94 1.11	1.64 0.89	0.84	3.09	216	34.65	111	94 95	79 94	0	4 6	5 5	2
	MINNEAPOLIS	35 44	32	47 55	21 25	31	24 19	1.11 1.62	1.38	0.89 1.00	1.19 2.26	124 197	23.86 29.13	94 92	95 94	84 71	0	4	5 4	1
	ROCHESTER	40	30	53	23	35	18	1.03	0.78	0.64	1.11	88	29.24	84	99	84	0	5	3	1
МО	ST. CLOUD COLUMBIA	41 47	30 34	52 61	20 26	36 40	21 8	2.40 0.90	2.22 0.43	1.46 0.39	3.34 2.74	394 135	27.65 33.35	97 80	92 95	78 66	0	4	5 5	2
IVIO	KANSAS CITY	43	31	58	26	37	6	1.53	1.22	0.39	3.02	197	35.27	89	97	73	0	6	5	1
	SAINT LOUIS	51	37	68	31	44	10	0.94	0.34	0.44	2.17	89	32.02	76	85	57	0	1	4	0
	SPRINGFIELD	46 58	32 38	59 64	23 27	39 48	4 0	0.66 1.47	0.06 0.27	0.36 0.83	1.11 3.26	44 65	42.79 39.96	95	94 91	63 47	0	4 2	5 2	0 2
MS	JACKSON MERIDIAN	57	36	64	27	48	-2	1.47	-0.15	0.83	2.72	53	54.04	69 95	91	47	0	4	2	2
	TUPELO	56	38	65	30	47	3	1.01	-0.19	0.85	2.47	42	45.96	79	89	52	0	2	2	1
MT	BILLINGS BUTTE	37 31	20 -2	44 42	13 -15	28 15	2 -4	0.00	-0.14 -0.11	0.00	0.35 0.32	63 68	16.88 17.63	118 138	76 90	48 54	0	7 7	0	0
	CUT BANK	45	17	51	9	31	10	0.00	-0.08	0.00	0.02	6	7.83	72	82	40	0	7	0	0
	GLASGOW	38	13	42	9	26	10	0.00	-0.11	0.00	0.08	19	12.81	95	89	49	0	7	0	0
	GREAT FALLS HAVRE	45 42	24 13	53 54	16 6	35 28	10 9	0.00	-0.13 -0.11	0.00	0.08 0.20	16 52	17.16 11.32	116 95	76 91	35 46	0	7 7	0	0
	MISSOULA	33	14	42	8	24	1	0.00	-0.11	0.00	0.47	44	12.95	91	93	63	0	7	0	0
NC	ASHEVILLE	53	38	62	31	46	6	2.66	1.72	1.35	6.33	156	37.99	76	93	62	0	3	3	2
	CHARLOTTE GREENSBORO	58 56	43 40	67 65	35 28	51 48	8 7	2.42 1.73	1.57 1.02	1.71 1.17	6.27 7.05	181 229	45.08 44.64	103 101	87 92	56 62	0	0	3	2
	HATTERAS	61	50	68	43	56	5	2.38	1.35	2.38	7.08	154	49.52	81	92	60	0	0	1	1
	RALEIGH	62	42	68	31	52	9	1.07	0.27	0.64	6.79	206	44.33	96	87	55	0	1	2	1
ND	WILMINGTON BISMARCK	64 35	46 21	70 44	37 15	55 28	7 14	3.19 0.21	2.34 0.07	2.83 0.21	8.12 0.43	227 73	57.91 20.38	96 107	89 90	58 58	0	0 7	3	1 0
	DICKINSON	39	17	50	12	28	11	0.00	-0.05	0.00	0.15	84	14.78	94	88	40	0	7	0	0
	FARGO GRAND FORKS	37 33	27 22	46 38	20	32 27	20 18	1.89 0.69	1.67 0.54	0.79 0.44	2.63 0.93	304 145	21.35 14.74	89 67	89 89	78	0	5 7	5 4	2
	JAMESTOWN	35	22	39	18 14	28	16	0.69	0.34	0.44	0.58	175	16.47	83	89	75 73	0	7	3	0
NE	GRAND ISLAND	37	24	55	18	31	4	0.63	0.45	0.35	1.24	151	15.50	58	91	69	0	7	3	0
	LINCOLN NORFOLK	40 37	25 22	58 56	18 15	33 30	6 6	0.72 1.28	0.47 1.11	0.41 1.02	1.48 1.53	128 186	19.76 26.38	67 98	91 90	63 71	0	6 7	3 2	0
	NORTH PLATTE	38	22	48	12	30	4	0.31	0.20	0.28	0.39	88	21.26	100	88	61	0	7	4	0
	OMAHA	39	27	57	22	33	7	1.36	1.11	0.83	1.66	139	24.75	77	94	76	0	6	3	1
	SCOTTSBLUFF VALENTINE	44 34	19 21	55 42	13 9	31 27	4	0.03 0.38	-0.09 0.30	0.02 0.15	0.11 0.58	22 138	19.56 31.45	125 150	80 92	35 65	0	7 7	2 4	0
NH	CONCORD	43	35	46	30	39	14	0.74	-0.04	0.13	6.89	191	41.46	99	100	87	0	2	5	1
NJ	ATLANTIC_CITY	53	41	57	35	47	11	1.06	0.16	0.57	6.58	151	41.20	89	94	71	0	0	3	1
NM	NEWARK ALBUQUERQUE	51 45	43 25	57 48	37 21	47 35	12 -1	1.87 0.00	1.00 -0.11	1.29 0.00	7.49 1.00	186 193	50.63 5.30	108 59	90 68	72 28	0	0 7	3	2
NV	ELY	46	12	55	1	29	3	0.00	-0.17	0.00	0.04	5	11.43	121	80	31	0	7	0	0
	LAS VEGAS	59 53	42	63	38	50	3	0.00	-0.13	0.00	0.06	14 35	4.21	101	54	20	0	0	0	0
	RENO WINNEMUCCA	53 50	33 25	63 57	24 8	43 37	8 7	0.00	-0.29 -0.24	0.00	0.38 0.28	35 27	10.47 8.33	143 112	85 83	41 42	0	1 6	0	0
NY	ALBANY	47	38	51	32	42	15	0.75	0.06	0.28	5.65	178	46.56	114	93	74	0	1	6	0
	BINGHAMTON BUFFALO	46 47	37 40	51 57	30 32	41 44	16 15	1.09 1.10	0.43 0.24	0.68 0.87	5.89 3.76	197 103	45.21 39.39	107 97	95 99	81 80	0	1	6	1
	ROCHESTER	48	39	57 57	33	44	15	0.98	0.24	0.87	2.76	103	39.39	103	99	75	0	0	6	1
	SYRACUSE	45	36	53	29	40	13	1.42	0.69	0.80	5.09	160	43.67	109	98	83	0	2	6	1
ОН	AKRON-CANTON CINCINNATI	48 49	38 38	60 61	28 33	43 44	13 10	0.92 0.45	0.27 -0.40	0.65 0.34	2.37 1.88	84 52	36.88 38.91	88 86	98 100	80 75	0	2	6	1
	CLEVELAND	51	42	63	31	47	15	0.43	0.21	0.34	3.09	107	43.69	106	94	73	0	1	6	1
	COLUMBUS	51	41	62	34	46	14	0.86	0.12	0.31	3.19	105	40.97	98	99	77	0	0	5	0
	DAYTON MANSFIELD	50 49	39 39	60 61	34 31	45 44	13 15	0.23 0.78	-0.50 0.08	0.20 0.36	1.89 2.32	64 79	34.08 41.67	82 98	92 98	69 77	0	0 2	3 6	0
L	TOLEDO	50	41	59	34	46	16	0.78	-0.35	0.36	1.63	68	30.70	96 87	93	75	0	0	3	0

Based on 1991-2020 normals

*** Not Available

Weekly Weather and Crop Bulletin
Weather Data for the Week Ending December 30, 2023

			'	reat		Juli	1101		CON E	iiuiiig	DCCC	IIIDCI	30, 20	,20	RELA	ATIVE	NUN	/IBER	OF D	AYS
	STATES	7	ГЕМБ	PERA	TUR	E °	F			PREC	CIPITA	ATION	I			IDITY CENT	TEMP. °F		PRE	ECIP
Ş	AND STATIONS		AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ОК	YOUNGSTOWN OKLAHOMA CITY	50 50	41 29	60 64	30 24	45 39	16 1	1.03 0.68	0.30 0.31	0.84 0.68	2.51 1.73	81 99	35.72 34.78	86 95	94 84	73 44	0	1 5	5 1	1
	TULSA	49	32	62	25	41	2	1.11	0.61	1.11	1.80	76	36.85	90	82	52	0	5	1	1
OR	ASTORIA BURNS	54	45 25	58	36	50	7	2.08 0.10	-0.37	0.97	12.50	120	57.80	82	92 92	64	0	0	7	1
	EUGENE	37 53	25 41	42 57	14 34	31 47	6 6	0.10	-0.23 -1.07	0.06 0.10	1.62 6.21	110 88	13.67 28.07	132 69	92 96	70 77	0	7	2 7	0
	MEDFORD	55	41	68	28	48	9	0.26	-0.49	0.11	2.20	64	12.99	70	91	58	0	1	5	0
	PENDLETON	39	29	47	23	35	1	0.19	-0.15	0.09	1.46	100	9.99	78	95	80	0	5	3	0
	PORTLAND	48	42	54	34	45	4	0.91	-0.30	0.31	8.59	153	35.29	96	86	60	0	0	7	0
PA	SALEM ALLENTOWN	51 48	40 38	54 52	34 31	46 43	5 11	0.84 2.44	-0.66 1.66	0.44 2.28	7.53 8.48	111 225	35.94 45.85	90 97	98 89	75 73	0	0 2	6 3	0
PA	ERIE	50	41	61	34	43	14	0.86	-0.08	0.60	3.13	77	45.85	97 97	96	73	0	0	5	1
	MIDDLETOWN	51	38	55	32	45	11	0.73	0.02	0.62	5.12	153	37.48	85	87	67	0	1	2	1
	PHILADELPHIA	51	42	54	37	47	11	1.70	0.89	1.64	7.78	201	41.70	94	92	69	0	0	3	1
	PITTSBURGH	51	42	60	32	47	15	1.13	0.48	0.88	2.49	90	30.80	77	90	66	0	1	5	1
1	WILKES-BARRE WILLIAMSPORT	49 50	38 38	55 54	34 30	44 44	13 14	0.80 1.00	0.22 0.33	0.51 0.73	5.77 5.13	212 161	45.36 41.26	117 95	91 90	71 67	0	0 2	5 3	1
RI	PROVIDENCE	48	37	55	31	42	10	1.15	0.33	1.06	6.80	150	56.64	119	100	84	0	1	4	1
SC	CHARLESTON	65	49	73	38	57	6	3.45	2.69	1.64	6.85	211	53.54	102	90	57	0	0	3	2
	COLUMBIA	60	42	70	32	51	5	1.57	0.67	0.94	4.57	128	54.66	121	98	63	0	1	3	2
	FLORENCE GREENVILLE	63 57	44 40	72 66	35 29	53 49	6 5	0.47 2.80	-0.37 1.74	0.34 1.89	3.25 4.87	97 110	40.66 50.42	90 101	94 87	56 57	0	0 2	3 4	0 2
SD	ABERDEEN	37	23	46	14	30	5 15	1.56	1.74	0.62	1.82	308	23.58	101	93	73	0	6	4	1
	HURON	37	22	46	12	29	12	0.84	0.69	0.42	1.22	190	18.60	79	95	82	0	7	3	0
	RAPID CITY	39	20	53	17	29	5	0.30	0.21	0.25	0.30	87	20.89	119	78	49	0	7	3	0
	SIOUX FALLS	39	28	56	21	33	14	1.50	1.32	0.79	1.81	223	18.61	66	89	71	0	7	3	2
TN	BRISTOL CHATTANOOGA	54 55	36 43	67 67	30 36	45 49	7 6	0.37 1.94	-0.41 0.85	0.30 1.90	3.60 6.14	98 120	38.90 46.89	88 85	94 90	61 55	0	2	4 3	0
	KNOXVILLE	54	40	66	35	47	7	1.07	0.03	0.87	5.98	123	46.37	89	92	62	0	0	3	1
	MEMPHIS	53	38	65	32	46	3	0.97	-0.17	0.86	2.57	48	53.88	98	87	56	0	1	2	1
	NASHVILLE	52	39	68	31	45	5	0.76	-0.12	0.75	2.76	64	37.09	73	86	57	0	2	2	1
TX	ABILENE	58	31	70	27	44	-1	0.26	-0.01	0.26	1.40	114	22.61	89	84	33	0	6	1	0
	AMARILLO AUSTIN	50 63	24 38	64 72	19 33	37 51	-1 -1	0.00 1.02	-0.17 0.38	0.00 1.02	1.72 2.09	253 79	17.37 25.18	88 69	79 89	33 35	0	6 0	0	0
	BEAUMONT	62	40	68	31	51	-3	2.64	1.47	2.64	4.01	83	39.75	64	94	46	0	1	1	1
	BROWNSVILLE	73	52	84	43	63	0	0.00	-0.27	0.00	0.11	9	20.86	78	96	52	0	0	0	0
	CORPUS CHRISTI	70	46	81	35	58	0	0.00	-0.44	0.00	0.51	27	26.23	82	91	40	0	0	0	0
	DEL RIO	67	39	75 50	31	53	1	0.19	0.05	0.19	0.61	88	14.72	74	84	27	0	1	1	0
	EL PASO FORT WORTH	57 57	30 36	59 66	26 31	44 46	-1 0	0.00 1.51	-0.13 0.86	0.00 1.51	0.19 3.54	30 128	4.21 28.23	47 76	59 81	19 40	0	5 1	0	0
	GALVESTON	62	49	72	44	56	-1	0.81	-0.04	0.81	2.94	71	28.44	60	86	51	0	0	1	1
	HOUSTON	61	42	68	35	52	-2	0.73	-0.14	0.73	2.54	64	40.81	78	88	44	0	0	1	1
	LUBBOCK	54	26	67	24	40	0	0.00	-0.17	0.00	0.58	79	16.46	89	84	30	0	7	0	0
	MIDLAND SAN ANGELO	55 60	30 30	64 70	26 26	43 45	-2 -2	0.00 0.10	-0.13 -0.10	0.00 0.10	0.56 2.13	97 245	7.40 19.13	54 91	89 93	32 32	0	6	0	0
1	SAN ANTONIO	65	40	75	35	52	0	0.10	0.11	0.10	1.09	56	19.13	60	95 85	34	0	0	1	1
	VICTORIA	66	41	75	33	53	-1	0.05	-0.50	0.05	0.68	30	29.84	74	91	42	0	0	1	0
1	WACO	60	33	69	27	46	-1	1.83	1.13	1.83	3.11	111	28.90	79	94	41	0	5	1	1
UT	WICHITA FALLS SALT LAKE CITY	55 40	31 25	66 46	24 20	43 33	1 2	0.31 0.00	0.00 -0.31	0.31 0.00	1.38 0.96	91 70	21.59 17.56	77 113	84 83	42 54	0	5 7	1 0	0
VA	LYNCHBURG	54	36	63	29	45	8	0.66	-0.06	0.00	5.04	148	43.01	100	97	62	0	4	3	0
1	NORFOLK	58	44	63	35	51	6	0.34	-0.39	0.25	6.40	201	48.51	98	96	68	0	0	3	0
1	RICHMOND	57	40	62	33	49	9	1.78	1.04	1.37	8.81	258	42.79	94	93	62	0	0	5	1
	ROANOKE WASH/DULLES	54 55	39 39	66 62	35 30	47 47	7 11	1.74 1.01	1.11 0.33	0.93 0.69	4.16 5.68	139 177	32.98 34.58	77 80	86 89	60 63	0	0	3	2
VT	BURLINGTON	55 44	39 36	50	30 28	47	11	0.69	0.33	0.69	5.66	233	34.58 43.99	117	94	78	0	1	5	0
WA	OLYMPIA	52	41	56	35	47	8	1.13	-0.68	0.48	10.36	136	40.63	80	92	77	0	0	6	0
	QUILLAYUTE	55	47	60	36	51	10	2.71	-0.45	0.85	14.73	110	81.25	80	85	75	0	0	7	2
1	SEATTLE-TACOMA SPOKANE	53 37	44 30	62 44	30 23	48	7	0.92 0.08	-0.38 -0.45	0.34 0.08	8.29 3.29	149 145	34.42 13.41	87 81	84 92	47 71	0	1 6	5	0
1	YAKIMA	37 41	30	51	20	34 36	6 6	0.08	-0.45 -0.19	0.08	3.29 1.42	145	6.93	81 86	92	71	0	6	1 5	0
WI	EAU CLAIRE	44	31	53	21	38	20	0.93	0.66	0.53	1.41	107	26.09	79	93	71	0	4	3	1
	GREEN BAY	46	33	54	22	39	18	0.68	0.31	0.40	1.23	72	25.50	80	94	71	0	3	4	0
	LA CROSSE	45	33	54	25	39	17	0.61	0.32	0.36	0.92	63	23.31	66	95	65	0	4	4	0
1	MADISON MILWAUKEE	44 46	32 37	54 53	19 29	38 41	15 15	0.87 0.60	0.56 0.21	0.44 0.33	1.58 2.19	99 120	29.28 33.00	78 95	96 90	75 68	0	5	4	0
wv	BECKLEY	48	38	60	27	43	9	0.57	-0.11	0.33	2.73	85	40.09	92	92	71	0	3	6	0
	CHARLESTON	54	38	67	27	46	10	0.50	-0.24	0.21	2.05	59	35.25	76	99	63	0	1	5	0
	ELKINS	51	37	61	29	44	12	0.57	-0.18	0.33	2.59	74	42.06	89	95	64	0	3	6	0
1407	HUNTINGTON	54	40	68	31	47	11	0.67	-0.08	0.30	1.68	48	32.04	71	88	62	0	1	4	0
WY	CASPER CHEYENNE	34 38	16 21	45 53	0 10	25 29	1 1	0.01 0.04	-0.13 -0.06	0.01 0.04	0.07 0.11	11 24	15.26 18.77	124 121	73 68	44 34	0	7	1	0
	LANDER	24	4	29	-1	14	-6	0.13	0.00	0.13	0.71	116	17.76	134	83	57	0	7	1	0
	SHERIDAN	46	15	54	7	30	7	0.00	-0.12	0.00	0.10	19	22.33	149	77	32	0	7	0	0

Based on 1991-2020 normals

*** Not Available

December State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Crop Progress and Condition Reports published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop reports are available on the Internet through the NASS Home Page on the World Wide Web at http://www.nass.usda.gov.

ALABAMA: December temperatures were generally on par with historical averages. Total rainfall for the month ranged from 0.9 inch in Chilton County to 7.3 inches in Mobile County. The limited rainfall did alleviate drought conditions in the southern part of the State but most of the State remained in a drought. According to the U.S. Drought Monitor, 89.9 percent of the State had abnormally dry conditions by month's end, compared to 99.1 percent at the month's beginning. Some fall seeded crops were not planted because of the lack of rainfall and early planted crops were reported to have poor stand because of the lack of soil moisture. Fall forages were also slow to grow and the lack of growth caused producers to feed more hay than usual. Hay shortages were reported in parts of the State with some producers reporting they might run out of hay by the end of January. Producers were optimistic about completing off-season fieldwork before spring planting begins. Pastures were reported to be in fair to poor condition and needed rainfall to bolster growth. Cattle conditions were reported to be mostly fair as the lack of quality winter forage took its toll.

ALASKA: DATA NOT AVAILABLE

ARIZONA: This report for Arizona is for the month of December 2023. Responses were based on the entire month, with consideration for any weather-related impacts that are forecast between now and month's end. By month's end, Arizona cotton harvest had progressed to 99 percent complete, up one percentage point from the previous year's levels. Twenty-five percent of the State's barley has been planted, and 25 percent of the crop has emerged. Similarly, 20 percent of Arizona's Durum wheat has been planted; 18 percent of the crop has emerged. Arizona's alfalfa crop was rated in mostly good to excellent condition, with only 22 percent of the crop rated fair to poor. As native forages have fully matured or continue to mature toward vegetative dormancy, 23 percent of the State's pasture and rangeland was rated very poor, 31 percent was rated poor, 35 percent was rated fair, and 11 percent was rated good. Topsoil moisture levels remained mostly adequate, with 18 percent rated very short, 23 percent rated short, and 59 percent rated adequate. Subsoil moisture levels followed a similar trend. Throughout the month of December, measurable precipitation was received across much of the State. According to National Oceanic and Atmospheric Administration (NOAA) data, much of the precipitation received was realized throughout southern regions where approximately 1.25 inches was recorded while northern areas of Arizona received anywhere between 0.10 and 0.80 inch of precipitation. The drought information statements for southwest Arizona and southeastern California, northern Arizona, and southeastern Arizona all remained in effect and were updated on December 22, December 24, and December 30, respectively, in response to below normal precipitation and above normal temperatures. According to the National Weather Service, rainfall across southern portions of Arizona has been less than 50 percent of normal over the last six months. Despite a disappointing monsoon season, the seasonal precipitation outlook for January, February, and March of 2024 shows that odds are slightly tilted toward wetter than normal conditions throughout most of the State with the exception being southeastern Arizona. Subsequently, Arizona's long-term drought outlook shows that conditions are expected to improve or end throughout all areas of the State excluding southeastern regions. As of December 26, the U.S. Drought Monitor showed a slight improvement from the previous report. Abnormally dry conditions (D0) spanned 36 percent of the State, moderate drought (D1) enveloped 20 percent, severe drought (D2) encompassed 28 percent, and extreme drought (D3) remained at 6 percent of the State's total land area. Arizona once again remained free of exceptional (D4) drought. Throughout the month of December, temperatures across much of the State increased according to the High Plains Regional Climate Center (HPRCC). Daytime highs throughout Arizona ranged from 2 to 8 degrees above normal and ranged from the low 40s in Coconino County to the low to mid-70s across southwestern regions of Arizona. Overnight lows ranged from 4 degrees below to 5 degrees above normal and ranged from 15 to 40 degrees across northern and eastern counties, whereas counties within the Sonoran Desert experienced lows of 40 to 50 degrees Fahrenheit.

ARKANSAS: For the week ending December 31, 2023, topsoil moisture 5% short, 26% adequate, 69% surplus. Subsoil moisture 2% very short, 5% short, 29% adequate, 66% surplus. Days suitable for fieldwork during the month of December were 17.0 days. December conditions for the State were mild with average rainfall. Soil samples are being taken from row crop fields and planning for the coming year is on the way. A lot of ground was prepared with good fall weather and will be ready to plant as conditions become favorable this spring. Livestock producers are feeding hay, for the most part, ground is dry.

CALIFORNIA: For the week ending December 31, 2023 - Days suitable for fieldwork 6.2. Topsoil moisture 5% short, 85% adequate, 10% surplus. Subsoil moisture 5% very short, 20% short, and 75% adequate. Winter wheat condition 25% good and 75% excellent. As of December 29th, Snowpack content ranged from 1.4 to 2.7 inches in the Northern, Southern and Central Sierras, well below average for this time of year. Winter wheat and oats were planted. Winter forage planting continued. Alfalfa was bagged or put into piles for haylage. Cotton harvest was completed, and fields were shredded and disced under. Garlic, squash, broccoli, and brussel sprouts were harvested along the Central Coast. Lettuce was harvested in the Imperial Valley. Lemons, navel orange, tangerine, grapefruit, and lime harvests continued but were slowed at the end of December due to rain. Growers utilized micro sprinklers and drip irrigation to deliver warmer groundwater to the soil surface to raise field temperatures. Fans were used to prevent cold damage before harvest. Table grape, pomegranate, and persimmon harvests were winding down. Kiwi harvest was ongoing. Stone fruit orchards and vineyards were pruned. Blueberries and blackberries are now dormant and nursery stock was received for planting. Bee hives continued to be moved into the State for overwintering. Despite adequate rain, foothill pastures remained dry, and many ranchers fed their grazing cattle supplemental hay and/or feed.

COLORADO: This report for Colorado is for the entire month of December 2023. Topsoil moisture 16% very short, 29% short, 55% adequate. Subsoil moisture 12% very short, 34% short, 54% adequate. Winter wheat condition 4% very poor, 7% poor, 28% fair, 56% good, 5% excellent. Livestock condition 1% poor, 6% fair, 86% good, 7% excellent. Pasture and range condition 4% very poor, 8%

poor, 16% fair, 67% good, 5% excellent. Above average temperatures and dry weather across the State during the month of December was interspersed with a few productive snowstorms. According to the U.S. Drought Monitor report published on December 28th, just over 63 percent of the State was abnormally dry or in a state of drought. Just under 9 percent of the State was in severe to exceptional drought, a better start than 2023 when over 30 percent of the State was under severe to exceptional drought conditions. Areas of Alamosa, Conejos, Costilla, and Rio Grande counties are experiencing extreme drought conditions after continued below average precipitation. Productive snowstorms during the latter half of December improved moisture across the State, but moisture levels continued significantly behind the previous year. Temperatures across the State for the month of December trended above average. Several northeastern counties realized temperatures more than six degrees above normal. Most of the high country experienced above average temperatures, while areas of Mineral County realizing temperatures more than 2 degrees below average. Northeastern counties remained very dry, but received beneficial moisture at the end of December, accumulating at least one inch of precipitation in several areas. Reporters noted warm conditions have allowed cattle to thoroughly utilize corn stalks and winter grazing. Winter wheat conditions in the district are mixed, with earlier planted wheat in better condition and other areas yet to come up. Below average moisture in southwestern counties since the end of the growing season have worsened drought conditions, with most counties in a moderate drought or worse. Livestock producers continued to utilize winter grazing arrangements where available. In southeastern counties, recent snow events had provided good topsoil moisture. The San Luis Valley has received limited snowfall this winter, leaving soils dry and rangeland deteriorating. According to county reports, limited snow in the region has allowed open pastures and good livestock condition, and a good hay supply. Statewide, winter wheat condition declined, with 61 percent of the crop rated good to excellent, compared with 65 percent good to excellent from the previous report and 50 percent good to excellent last year. As of December 31, 2023, snowpack in Colorado was 69 percent measured as percent of median snowfall.

DELAWARE: December temperatures were mild and overall, above freezing for most of the month. Soil temperatures finally started to drop below 60 degrees. Frost on ground many mornings but not below 20 degrees for extended times. Most days were dry, with few days experiencing rainfall. Rainstorms were heavy when they did occur, with several inches falling at a time, particularly at the beginning of the month. Farmers reported harvest problems with late soybeans still being green and not drying down.

FLORIDA: December temperatures were on par with historical averages, with the temperatures becoming gradually cooler as the month progressed. Total rainfall for the month ranged from 2.5 inches of rain in Polk County to over 11 inches in Leon County. According to the U.S. Drought Monitor, 8.1 percent of the State had abnormally dry conditions by month's end, compared to 21.1 percent at the month's beginning. Most of the State received moderate amounts of rainfall last month, which improved overall drought conditions in the State. Pasture conditions remained mostly fair to good, with pastures improving due to overall rain received. Livestock remained in mostly fair to good condition as well, improving as pasture conditions recovered. Sugarcane planting and harvest progressed well throughout December. Citrus grove activities throughout the month included spraying pesticides and nutritionals, laying herbicide, fertilizing, mowing, hedging, topping, removal of dead trees, replanting young trees, and general grove maintenance. Eleven packinghouses were active in early December

with thirteen active in late December. Crops that were planted and harvested include sugarcane, green beans, yellow squash, zucchini, sweet corn, eggplant, peppers, boniato, bitter melon, other Asian vegetables, avocado, and other tropical fruits.

GEORGIA: December temperatures were 1.0 to 2.6 degrees warmer than historical averages depending on location. Total rainfall for the month ranged from 1.7 inches in Butts County to 12.3 inches in Rabun County. According to the U.S. Drought Monitor, 48 percent of the State had abnormally dry conditions. 28 percent had moderate drought conditions and 11 percent had severe drought conditions by month's end, compared to 62 percent abnormally dry, 41 percent with moderate drought, 20 percent with severe drought and 9 percent with extreme drought at the month's beginning. Good rainfall amounts helped improve overall field conditions throughout the State. Livestock were reported to be in good condition; however, hay supplies were reported to be running low due to the drought in the fall. The fall drought left many producers unable to establish adequate winter grazing, although some attempted late seeding throughout December that has yet to fully establish. For this reason, many cattle producers were also feeding supplements in hopes to extend hay supplies into the spring. Planting of winter wheat also carried on into December, with emergence aided by sufficient rainfall in most areas. Harvest of cotton continued throughout the month as conditions allowed. The Vidalia onion crop was reported to be looking good and progressing well

HAWAII: DATA NOT AVAILABLE

IDAHO: The average temperatures in Idaho were above normal for the month of December. Accumulated precipitation was normal to below normal across the majority of Idaho, with parts of southeast Idaho slightly above normal. In northern Idaho, unusually warm weather and little moisture was reported. In Elmore and Owyhee Counties, all crops had been harvested. Subsoil moisture appeared deficient with frozen topsoil. An absence of measurable snow was reported at low to mid elevations. Beef cattle started to calve with favorable conditions. Jerome and Twin Falls Counties reported warm and dry conditions for the month, with some concern about the lack of winter moisture accumulation. Field activities included hauling manure from dairies to fields. Blaine County reported dry conditions which allowed livestock to graze longer into the winter months than normal. Bonneville and Madison Counties reported reservoir levels were good with an adequate snowpack. Hay stocks were adequate. Northeast Idaho had higher than normal temperatures with low snowfall for the year.

ILLINOIS: For the month of December 2023. Topsoil moisture supply was rated 8 percent very short, 20 percent short, 61 percent adequate, and 11 percent surplus. Subsoil moisture supply was rated 12 percent very short, 48 percent short, 38 percent adequate, and 2 percent surplus. Winter wheat condition was rated 2 percent very poor, 9 percent poor, 34 percent fair, 40 percent good, and 15 percent excellent. Statewide, the average temperature was 39.2 degrees, 9.4 degrees above normal. Precipitation averaged 2.85 inches; 0.16 inch above normal.

INDIANA: Topsoil moisture for the month of December was 8% very short, 32% short, 54% adequate, and 6% surplus. Subsoil moisture for the month was 14% very short, 41% short, 42% adequate, and 3% surplus. Winter wheat condition was rated 2% very poor, 4% poor, 28% fair, 56% good, and 10% excellent. Statewide temperatures averaged 39.7 degrees, 8.6 degrees above normal for the month of December. Statewide average precipitation was 2.26 inches, 0.80 inch below normal. Precipitation was all in the

form of rain in December. There was no snow cover in Indiana. Subsoils are still very dry in most areas and additional precipitation is needed to replenish subsoils. Overall, winter wheat is in good condition. A warmer than normal early December should assist wheat planted later than normal. Hay is reported to be in short supply in some areas of the State. Some hay producers have sold out of all their hay. Other activities for the month included equipment maintenance, grain hauling, and getting paperwork ready for taxes.

IOWA: Significantly warmer than normal temperatures were experienced for much of December. The State received some much-needed precipitation during December after a very dry year. Many reporters described December as mild, which allowed more fertilizer, lime, and manure application. Some limited tile work also continued. Livestock conditions throughout the State were generally described as good, with no reports of death loss. Livestock producers' concerns included water and hay supplies, as well as pasture conditions going into next year. Grain movement was not hindered by the weather, and there were reports of operators hauling grain. Soil moisture levels continue to be the primary concern as farmers look forward to the 2024 crop year.

KANSAS: For the week ending December 31, 2023, topsoil moisture supplies rated 16% very short, 31% short, 46% adequate, 7% surplus. Subsoil moisture supplies rated 23% very short, 36% short, 40% adequate, 1% surplus. Winter wheat condition rated 9% very poor, 12% poor, 36% fair, 38% good, 5% excellent.

KENTUCKY: For the month of December, Kentucky saw above normal temperatures and much below normal precipitation. The State has now received below normal precipitation for four months straight. There were periodic rounds of rain, but accumulation puts 2023 as one of the driest Decembers on record. The U.S. drought monitor places 87% of the State as abnormally dry. This December is also in the top 10 warmest recorded. With unseasonably warm weather, the South-Central portion of the State experienced tornadic activity around mid-month. Temperatures for the period averaged 43 degrees across the State, 5 degrees above normal. Precipitation (liq. equ.) for the period totaled 2.39 inches Statewide, which was 2.06 inches below normal and 54% of normal. Drought stunted fall pasture growth causing many farmers to begin feeding hay early. For the month, hay supplies 10% very short, 29% short, 57% adequate, 4% surplus. Livestock condition 2% poor, 27% fair, 64% good, 7% excellent. Condition of winter wheat 2% poor, 24% fair, 63% good, 11% excellent. Tobacco stripping 87% complete.

LOUISIANA: For the month ending December 31, 2023, Topsoil moisture supplies were 19 percent very short, 45 percent short, 34 percent adequate, and 2 percent surplus. Subsoil moisture supplies were 31 percent very short, 41 percent short, 27 percent adequate, and 1 percent surplus. There were 22 days suitable for fieldwork. Many operators are preparing for early spring planting and spring calving, flooding crawfish ponds, and placing crawfish traps. Throughout December, dry conditions persisted, and many cattle producers continued to reduce herds due to hay shortages. Sugarcane farmers near the end of harvest, with a significantly reduced yield due to drought conditions in summer and fall. No major cold events were reported. As a result, cattle are in generally good condition, and harvests were completed with minimal damage to crops.

MARYLAND: Temperatures in December were average to above average. Precipitation was adequate and alleviated minor drought conditions. Some areas experienced localized flooding due to two days of heavy precipitation during the third week of the month.

Small grains, pasture, and cover crops look good for the most part. All grains were harvested.

MICHIGAN: Topsoil moisture 1% very short, 5% short, 46% adequate, 48% surplus. Subsoil moisture 2% very short, 19% short, 62% adequate, 17% surplus. Winter wheat condition rated 6% poor, 52% fair, 40% good, 2% excellent. Precipitation for the month of December averaged 1.94 inches throughout the State, 0.31 inch below normal. Temperature for the month of December averaged 35.4 degrees, 10.5 degrees above normal. Approximately 59 percent of the State experienced abnormally dry conditions or worse, with 7 percent experiencing moderate drought and 1 percent experiencing severe drought conditions, according to the US Drought Monitor. The driest areas include the Upper Peninsula and north and middle counties of the Lower Peninsula spanning from the west to east coast of the State. December has been unusually warm across the State and lack of snow has brought moisture concerns for spring to the forefront. Late plantings of winter wheat are showing emergence. Corn is still being harvested in the southeast with reports of vomitoxin being present. Many areas are waiting for a good freeze to finish harvesting. Other activities for the month included tiling work, purchasing seed, preparing equipment for spring, and tending livestock.

MINNESOTA: Above average temperatures and 2 to 4 inches of rain across the State created muddy feedlots. Lambing and calving were proceeding well, although there were some reports of respiratory illness in livestock. Farmers were able to complete more tillage and tiling with the mild weather.

MISSISSIPPI: For the week ending December 31, 2023, topsoil moisture supplies were 9% very short, 43% short, 45% adequate, and 3% surplus. Subsoil moisture supplies were 16% very short, 44% short, 38% adequate, and 2% surplus. Days suitable for fieldwork during the month of December were 18.0 days. Some fieldwork is being done to prep for spring. Overall, temperatures for most of December have been mild. Most of the State is experiencing drought conditions and are looking for rain. Cooler temperatures paired with below average moisture supplies have resulted in slow growth on winter grasses.

MISSOURI: For the week ending December 31, 2023. Topsoil moisture 6% very short, 22% short, 71% adequate, and 1% surplus. Subsoil moisture 19% very short, 41% short, 39% adequate, and 1% surplus. Winter wheat condition 0% very poor, 2% poor, 25% fair, 63% good, and 10% excellent. Statewide, precipitation averaged 2.91 inches for the month of December, 0.15 inch above average. Temperatures averaged 71.2 degrees, 8.1 degrees below normal

MONTANA: This report for Montana is for the entire month of December 2023. Topsoil moisture 46% very short, 33% short, 21% adequate. Subsoil moisture 48% very short, 31% short, 21% adequate. Winter wheat condition 8% very poor, 13% poor, 36% fair, 26% good, 17% excellent. Winter wheat wind damage 24% moderate, 3% light, 73% none. Winter wheat freeze damage 27% light, 73% none. Snow cover 87% very poor, 10% poor, 1% fair, 2% good. Pasture and range condition 36% very poor, 24% poor, 17% fair, 21% good, 2% excellent. Grazing accessibility 87% open, 5% difficult, 8% closed. Cattle receiving supplemental feed 73%. Sheep receiving supplemental feed 72%. The month of December brought above average temperatures and mostly below normal precipitation to Montana. Data from the High Plains Regional Climate Center (HPRCC) indicate that temperatures ran about 6 degrees above average in the west, and as much as 12-15 degrees above average moving north and east. Moisture received was about 0.75 inch below average to normal for the majority of Montana. In some parts of the northwest, moisture levels were as much as 1.5 inches or more below normal. Only isolated areas of the State received precipitation levels that were slightly above normal. Drought conditions changed significantly according to the U.S. Drought Monitor report released on December 28, 2023. The amount of land rated drought free fell to 44 percent, compared to 61 percent as reported on November 30. Abnormal dryness was found in 37 percent of Montana, compared to 26 percent on the same November release. Moderate drought stood at 16 percent, and severe drought was found in 3 percent of the State. These conditions were rated 8 and 5 percent, respectively, at the end of November. No major snow events have occurred in Broadwater County since October. The winter thus far has been very mild, especially as compared to last December. Producers were concerned about the future effects of the lack of moisture on the upcoming season. Temperatures were running well above normal in Mineral, Missoula, and Ravalli Counties. Moisture levels were below normal. Snowpack in Ravalli County was reportedly 40 percent of normal. Foggy conditions and inversions occurred in Northern Ravalli County, and in parts of Missoula County. Livestock were doing well for this time of year. There was, however, a report of a wolf attack in Ravalli County that resulted in the death of a cow. Lack of moisture remained a concern for the new irrigation season. A reporter from Valley County also indicated that the winter has so far been mild, and moisture was needed.

NEBRASKA: For the week ending December 31, 2023, topsoil moisture supplies rated 17% very short, 35% short, 44% adequate, and 4% surplus. Subsoil moisture supplies rated 28% very short, 38% short, 34% adequate, and 0% surplus. Winter wheat condition rated 4% very poor, 12% poor, 36% fair, 35% good, and 13% excellent.

NEVADA: For the week ending December 31, 2023 - Days suitable for fieldwork 7.0. Topsoil moisture 10% very short, 45% short, and 45% adequate. Subsoil moisture 35% short, 65% adequate. Pasture and range condition 55% poor and 45% fair. There was little to no precipitation during the month. The US Drought Monitor showed nearly 95% of the State had zero precipitation for the entire month. Temperatures remained normal to slightly above normal.

NEW ENGLAND: New England States experienced variable weather - snow, rain, and periods of warmth. Northern New England was among the regions with the greatest odds of seeing warmerthan-average conditions. A mid-December storm inundated the New England States under as much as 7 inches of rain and battered it with high winds. Some producers in Maine reported that their crop fields were flooded and filled with silt. Very little freezing reported in Vermont. However, continued wet weather and warm conditions could impact sod crops for 2024. Producers were looking forward to 2024 and how to deal with high input costs in crop production and changing weather patterns. Most producers spent time doing general farm maintenance as well as administrative activities such as income tax planning. Orchardists prepared for pruning apple trees and Christmas tree growers finished up their season. Fresh greens were sold at winter farmers markets. Farm activities varied in December and included combining corn and spreading manure (CT), shipping potato crops (ME), planning for the 2024 season (NH) harvesting some cold crops and seeding winter rye (RI), and some maple syrup production (VT).

NEW JERSEY: Rain was extremely heavy this month with no snow. Most land left dry from drought earlier in the year has absorbed this excess rain, however some major and minor flooding has occurred in some areas of the State. Temperatures were warmer than

average. Overwinter crops appear to be looking good, with some harvest occurring of crops such as leeks.

NEW MEXICO: This report for New Mexico is for the month of December 2023. Topsoil moisture 50% very short, 32% short, 15% adequate, 3% surplus. Subsoil moisture 49% very short, 40% short, 10% adequate, 1% surplus. Pecans harvested 50%, 84% last year. Winter wheat condition 31% poor, 46% fair, 14% good, 9% excellent. Cattle condition 11% poor, 39% fair, 35% good, 15% excellent. Sheep and lambs condition 2% very poor, 4% poor, 43% fair, 50% good, 1% excellent. Hay and roughage supplies 38% very short, 43% short, 19% adequate. Stock water supplies 36% very short, 26% short, 37% adequate, 1% surplus. Snow helped with dry conditions in parts of New Mexico, but dry, warm weather prevailed in others during the month of December. Row crop harvest wrapped up in most areas. Cotton harvest at the end of the month was ahead of last year, while pecan harvest was behind last year's progress. Comments from several counites in the northeastern part of the State noted wet snow fell mid-month that helped with soil moistures. Southcentral counties noted conditions remained dry and windier than normal. Winter wheat condition declined, with 23 percent of the crop rated in good to excellent condition, compared with 28 percent at the end of November and 20 percent for December 2022. Converted moisture totals during the past month ranged from no precipitation to approximately 3 inches. Significant precipitation was mostly confined to the central counties, but most of the State only received 1 inch or less. Most counties saw slightly below average precipitation during December. Isolated areas continued to register yearly rainfall accumulation at or below 50 percent of normal. Conversely, yearly precipitation for areas in northwestern and central part of the State totaled 150 percent of normal or more. Average temperatures during December were generally normal except for the southeastern corner of the State that were below normal. According to the United States Drought Monitor for December 26, exceptional drought (D4) continued in parts of southern New Mexico including most of Eddy County and parts of Grant, Hildalgo, and Luna Counties. Extreme drought (D3) was noted across 35 percent of the State, severe drought (D2) covered 41 percent, moderate drought (D1) covered 12 percent, and abnormal dryness (D0) covered 5 percent. Drought-free conditions covered less than 1 percent of the State. Hay and roughage supplies were reported as 38 percent very short, 43 percent short, and 19 percent adequate, compared with 32 percent very short, 46 percent short, 21 percent adequate, and 1 percent surplus on November 26. Stock water supplies were reported as 36 percent very short, 26 percent short, 37 percent adequate, and 1 percent surplus, compared with 27 percent very short, 41 percent short, 31 percent adequate, and 1 percent surplus on November 26.

NEW YORK: December overall experienced more mild temperatures for most areas with moderate to significant rainfall throughout the State. Some locations reported flooding in spots. In addition to a lack of snowfall, the mild weather was also a concern for keeping bee populations fed through winter as they were eating through feed much faster. Yields of corn were reported as excellent overall but that late harvested was hard to dry. There were positive outlooks on soybeans and winter wheat as well. Grapes had reports of low sugar content in one area with producers speculating cause as low light conditions due to forest fires in Canada.

NORTH CAROLINA: For the month ending December 31, 2023 - Subsoil moisture 2% very short, 4% short, 69% adequate and 25% surplus. Topsoil moisture 2% very short, 3% short, 62% adequate and 33% surplus. Barley condition 3% poor, 20% fair, 72% good and 5% excellent. Hay and roughage supplies 3% very short, 7% short, 86% adequate and 4% surplus. Oats condition 14% fair, 85%

good and 1% excellent. Pasture and range condition 2% very poor, 12% poor, 38% fair, 47% good and 1% excellent. Winter wheat condition 1% poor, 14% fair, 84% good and 1% excellent. Throughout December, conditions have turned from very dry to very wet over the past two weeks. There are a few acres of soybeans remaining. It may be awhile before they can be harvested. Small grains are looking very good at this point.

NORTH DAKOTA: For the week ending December 31, 2023, topsoil moisture supplies rated 6% very short, 21% short, 71% adequate, 2% surplus. Subsoil moisture supplies rated 11% very short, 27% short, 61% adequate, 1% surplus. Winter wheat condition rated 0% very poor, 5% poor, 45% fair, 48% good, 2% excellent. Corn harvested 99%. Sunflowers harvested 97%. Cattle and calf conditions, 1% very poor, 2% poor, 22% fair, 70% good, 5% excellent. Sheep and lamb conditions, 0% very poor, 5% poor, 30% fair, 59% good, 6% excellent. Hay and roughage supplies, 2% very short, 18% short, 75% adequate, 5% surplus. Stock water supplies, 2% very short, 14% short, 83% adequate, 1% surplus.

OHIO: Topsoil moisture for the month was 2% very short, 8% short, 66% adequate, 24% surplus. Subsoil moisture for the month was 3% very short, 26% short, 61% adequate, 10% surplus. Winter wheat condition was rated 4% poor, 25% fair, 54% good, 17% excellent. The Statewide average temperature was 40.0 degrees, 8.3 degrees above normal. Precipitation averaged 2.48 inches Statewide, 0.44 inch below normal for December. Abnormally mild temperatures were observed across much of the State. The December monthly average temperature was the third highest on record, with negligible amounts of snow cover recorded. The moderate temperatures enabled growers to continue to harvest corn. A round of late-month rain events helped to replenish soil moisture. Reporters noted that field activities were hampered by the relatively warm and damp soil conditions. Livestock farmers described muddy and deteriorated pastures, with operations having transitioned to the use of stored forage.

OKLAHOMA: For the month of December, rainfall totals averaged 2.70 inches throughout the State, with the West Central district recording the highest precipitation at 3.40 inches and the Southeast district recording the lowest precipitation at 2.35 inches. According to the December 26th, US Drought Monitor Report, 46 percent of the State was in the abnormally dry to exceptional drought category, down 52 points from the previous year. Additionally, 21 percent of the State was in the moderate drought to exceptional drought category, down 69 points from the previous year. Statewide temperatures averaged in the upper 30's to upper 40's, with the lowest recording of 10 degrees at Kenton on Saturday, December 2nd, and the highest recording of 80 degrees at Burneyville on Friday, December 8th. Topsoil and subsoil moisture conditions were rated mostly adequate to short.

OREGON: Temperatures throughout the State were above average for the month of December. Moisture conditions throughout the State ranged from dry to wet for December. Columbia, Multnomah, and Washington Counties reported below average rainfall, but sufficient for fall planted crops. Pastures were in good condition headed into the fall. Nursery and berry crops were also reported in good condition. Benton and Lincoln Counties reported that rainfall was lower than average throughout the month with mild temperatures. However, there were a few large storms that brought roughly 10 inches of rain within a few days and caused some localized flooding. There were no days reported with snow and a few days of freezing temperatures. Many livestock producers were operating under a feed shortage due to the summer drought and some operators sold livestock if they were not able to acquire

enough hay to last through the winter. Clatsop and Tillamook Counties reported that manure was spread as a necessity due to tank overfill. The rain and temperatures were reported to be average. Hood River, Sherman, and Wasco Counties reported warmer than normal temperatures for this time of year with a fair amount of precipitation. Livestock were doing well in the warmer temperatures and required less supplemental hay. Morrow County reported that December rainfall wet the seed-zone adequately. Mountain snow was limited and much less than last year. Baker and Grant Counties reported warm temperatures and very little snow compared to normal years. Umatilla County reported precipitation was well below average, and temperatures were above average, with snowpack in the Blue Mountains far below average for this time of year. Crops and livestock were doing well so far this season. Douglas, Jackson, and Josephine Counties reported that pasture had ample water supply, steady rain, and average grazing conditions. Malheur County reported less than average precipitation with snow levels below average for this time of year. Temperatures were consistently above average which left the valley floors free of snow. Foggy conditions with high pressure systems created poor air quality for a portion of the month.

PENNSYLVANIA: The State has experienced a mild winter so far with rainy conditions. The warm conditions and frequent rains allowed for the soil to be able to get a good recharge of ground water. After a late planting season this year, some producers reported that the 2023 crop production was excellent along with good corn and soybean yields. The tobacco farmers were in the process of stripping and baling this year's crop, reporting that tobacco quality was good and prices were strong. Cover crops and small grains were continuing to grow due to warmer conditions.

SOUTH CAROLINA: December temperatures were 1.0 to 3.6 degrees warmer than historic averages depending on location. Total rainfall during the month ranged from 3.6 inches in Florence County to 14.0 inches in Georgetown County. According to the U.S. Drought Monitor, 50 percent of the State had abnormally dry conditions, 23 percent had moderate drought conditions and 5 percent had severe drought conditions by month's end, compared to 69 percent abnormally dry, 41 percent with moderate drought, 15 percent with severe drought and 3 percent with extreme drought at the month's beginning. Harvest of cotton and soybeans continued throughout the month as conditions allowed. Planting of winter wheat also carried on into December, with emergence aided by sufficient rainfall in most areas. Good weather conditions allowed farmers to start taking soil samples and begin preparing for the spring.

SOUTH DAKOTA: For the week ending December 31, 2023, topsoil moisture supplies rated 3% very short, 18% short, 71% adequate, 8% surplus. Subsoil moisture supplies rated 5% very short, 26% short, 65% adequate, 4% surplus. Winter wheat condition rated 1% very poor, 7% poor, 38% fair, 48% good, and 6% excellent.

TENNESSEE: For the week ending December 31, Days suitable 4.8. Topsoil moisture 7% very short, 37% short, 55% adequate, 1% surplus. Subsoil moisture 8% very short, 39% short, 52% adequate, 1% surplus. Winter wheat condition 4% very poor, 6% poor, 38% fair, 40% good, 12% excellent. Pasture and Range condition 14% very poor, 30% poor, 40% fair, 15% good, 1% excellent. Cattle condition 1% very poor, 5% poor, 28% fair, 60% good, and 6% excellent. Hay and roughage supplies are 7% very short, 32% short, 57% adequate, 4% surplus. Tennessee experienced mild weather with minimal rainfall throughout the month. Temperatures have been near average or slightly above average. Re-seeded pastures

and winter wheat are a bit behind coming out of the fall drought, but soil moisture levels are slowly starting to recover. Producers report natural water sources remain below normal levels as well.

TEXAS: For the month of December, precipitation ranged from trace amounts to upwards of 6 inches, with the Northern Low Plains, the Blacklands, and the Upper Coast receiving the most. Cotton harvest was near complete across the State. Pecan harvest continued in the Cross Timbers and South-Central districts. Citrus, sugarcane, vegetable, and strawberries were being harvested in South Texas and the Lower Valley. Small grains planting was near completion, however, crop development was on track with fields benefiting from recent rains. Range and Pasture conditions were rated 65 percent poor to very poor. Supplemental feeding continued across the State.

UTAH: This report for Utah is for the entire month of December 2023. Topsoil moisture 5% very short, 7% short, 77% adequate, 11% surplus. Subsoil moisture 1% very short, 10% short, 79% adequate, 10% surplus. Pasture and range condition 1% poor, 12% fair, 85% good, 2% excellent. Winter wheat condition 24% fair, 68% good, 8% excellent. Hay and roughage supplies 1% short, 63% adequate, 36% surplus. Stock water supplies 1% very short, 1% short, 74% adequate, 24% surplus. Cattle and calves condition 10% fair, 75% good, 15% excellent. Sheep and lambs condition 15% fair, 67% good, 18% excellent. Livestock receiving supplemental feed for cattle 65%. Livestock receiving supplemental feed for sheep 54%. Cows calved 1%. As of December 31, 2023, snowpack in Utah was 68 percent measured as percent of median snowfall. Beaver, Box Elder, Cache, and Grand Counties noted mild warm weather along with limited moisture. Beaver and Box Elders Counties noted that livestock producers were still grazing cattle instead of feeding hay due to mild weather. Box Elder County reports lack of snow cover for winter wheat before upcoming colder weather.

VIRGINIA: For week ending December 31, 2023. Topsoil moisture 2% very short, 9% short, 77% adequate, 12% surplus. Subsoil moisture 2% very short, 29% short, 58% adequate, 11% surplus. Winter wheat condition 2% poor, 19% fair, 78% good, 1% excellent. Barley condition 43% fair, 57% good. Livestock condition 2% poor, 28% fair, 62% good, 8% excellent. Pasture and Range condition 4% very poor, 25% poor, 31% fair, 40% good. Hay and roughage supplies 6% very short, 31% short, 62% adequate, 1% surplus. Percent of feed obtained from pastures 17%. Virginia experienced above normal temperatures and precipitation in December. The rain was too late to stimulate grass growth, so pastures are short in many areas. Excessive rainfall in several areas has saturated the fields which resulted in muddy ground and standing water in some areas. Wet pastures are getting torn up by livestock that do not have alternative paddocks to move to. Hay and roughage supplies are mostly adequate to short. Primary activities for the month include equipment maintenance and purchasing seed and fertilizer.

WASHINGTON: Washington experienced warmer than average temperatures across the State. Accumulated precipitation varied from below average in western Washington to slightly above average in eastern Washington. Skagit County has had a mild winter to date and winter crops looked good. Whatcom County was drier than normal. Klickitat and Yakima Counties were warmer than normal with not many nights below freezing. A small amount of snow was received towards the end of the month, followed by rain. Fall seeding was halted due to wet fields. Many cattle were moved to feedlots for the winter, with any on pasture being heavily supplemented. Vegetable and fruit producers used

the mild winter to clean up and prepare fields, orchards, vineyards and hopyards for next season. Tree and vine pruning activities took place over the month. Okanogan County reported a lack of snow cover and warmer than normal temperatures. Pend Oreille and Spokane Counties have had a mild winter to date. Some cattle were observed grazing. Winter crops looked to be in fair condition. Mild weather was reported, with no unusual weather systems for Grant County. Adams and Lincoln Counties experienced warmer than normal temperatures with good precipitation for the month. Asotin and Garfield Counties received a lot of rain with some snow at high elevations.

WEST VIRGINIA: For the week ending December 31, Topsoil moisture 14% very short, 14% short, 55% adequate, and 17% surplus. Subsoil moisture 17% very short, 20% short, 57% adequate, and 6% surplus. Hay and roughage supplies 3% very short, 10% short, 79% adequate, and 8% surplus. Feed grain supplies 7% short, 89% adequate, and 4% surplus. Winter wheat condition 14% poor, 45% fair, 40% good, and 1% excellent. Cattle and calves condition 1% very poor, 4% poor, 21% fair, 59% good, and 15% excellent. Sheep and lambs condition 1% poor, 24% fair, 66% good, and 9% excellent. Weather conditions for the month have been a mix of cold and warm temperatures with rain and snow. Farming activities for the month included preparing for cold weather and planning for the next growing season.

WISCONSIN: December was unseasonably warm across Wisconsin, averaging 32.1 degrees, 13.0 degrees above normal. The State averaged 1.56 inches of precipitation throughout the month, 0.22 inch above normal. However, most precipitation was rain due to warmer weather, and much of the State still lacks snow cover and frost. This allowed for many farmers to finish their fall fieldwork such as tilling fields and applying manure. In some Northern counties, a little corn remained unharvested due to storage being at capacity. In warmer areas, some alfalfa fields broke dormancy, raising concerns about potential damage later in the winter.

WYOMING: This report for Wyoming is for the entire month of December 2023. Topsoil moisture 12% very short, 34% short, 53% adequate, 1% surplus. Subsoil moisture 17% very short, 40% short, 43% adequate. Winter wheat condition 7% very poor, 7% poor, 53% fair, 32% good, 1 percent excellent. Hay and roughage supplies 1% very short, 12% short, 86% adequate, 1 percent surplus. Livestock condition 1% very poor, 1% poor, 2% fair, 85% good, 11% excellent. Stock water supplies 3% very short, 11% short, 86% adequate. Pasture and range condition 4% very poor, 8% poor, 33% fair, 51% good, 4% surplus. Wyoming received little relief from the ongoing drought conditions during the month of December, according to the Mountain Regional Field Office of the National Agricultural Statistics Service, USDA. Rainfall was scattered and total accumulations varied, ranging from a trace to as much as 4 inches during the month, according to the National Oceanic and Atmospheric Administration (NOAA). Some areas received no measurable rainfall. Temperatures ran above normal for most of the State, ranging from no change to 8 degrees above average. There was little change in drought conditions during December according to the United States Drought Monitor report published on December 26, 2023. The amount of land rated drought free equaled 75 percent, compared with 88 percent on November 28, 2023. Abnormally dry conditions covered 22 percent of Wyoming, and moderate drought was found in 3 percent. Reports from Goshen County indicated the dry conditions have been favorable for cattle on feed. Platte County reporters noted little moisture received in the last month, with unseasonably warm weather for this time of year.

International Weather and Crop Summary

December 24-20, 2023

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

EUROPE: Unseasonable warmth persisted, with additional rain in northern Europe contrasting with dry weather in western and southern growing areas.

MIDDLE EAST: Warm and dry weather promoted winter grain growth in the west, while showers favored winter grains over central growing areas.

NORTHWESTERN AFRICA: Drought intensified across Morocco and western Algeria, while sunny skies promoted winter grain development after recent rain in eastern croplands.

SOUTHEAST ASIA: Showers returned to Java, Indonesia, after an extended lull, but more consistent rain is needed to stem yield reductions in rice.

AUSTRALIA: Showers continued to benefit summer crops in the east but slowed final winter crop harvests in the south.

SOUTH AFRICA: Widespread, locally heavy rain benefited corn and other summer crops in early stages of development.

ARGENTINA: Showers sustained adequate to abundant levels of moisture for emerging to vegetative summer crops.

BRAZIL: Above-normal temperatures and patchy dryness maintained concerns for soybeans in areas suffering from moisture deficits.

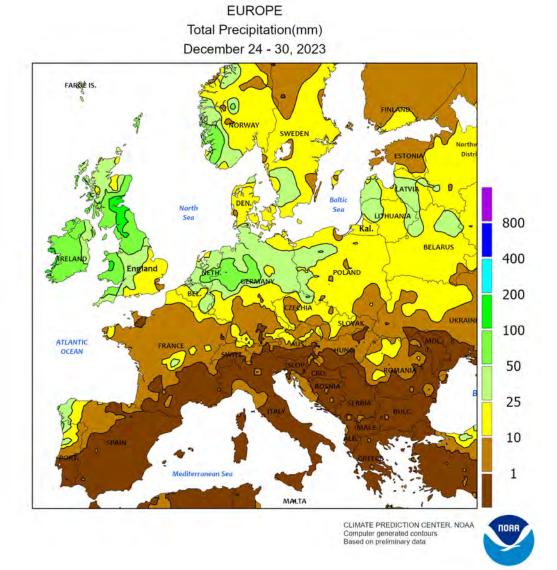
December 2023

COUNTRY	CITY				RATUR	E		PRI	ECIP.
				(C)			(1)	ИM)
		41/0	۸۱/۵				DED		DED
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ALGERI	ALGER	19	8	27	3	14	1.1	74	-14
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	BATNA	14	3	23	-2	9	1.7	40	12
ARGENT	IGUAZU	31	22	37	15	26	0.8	212	8
	FORMOSA	32	23	39	19	28	0.8	401	222
	CERES	30	20	38	14	25	-0.1	237	104
	CORDOBA	29	17	39	11	23	0.4	67	-79
	RIO CUARTO	27	17	36	10	22	-0.7	140	7
	ROSARIO	28	18	37	12	23	-0.5	172	45
	BUENOS AIRES	27	16	33	8	22	-1	269	170
	SANTA ROSA	28	15	34	6	21	-1.4	150	60
ALIOTDA	TRES ARROYOS	28	14	34	3	20	-0.3	114	34
AUSTRA	DARWIN BRISBANE	34	27	35	22	30	1.5	226	
	PERTH	29	22	34	18	25	1.2	144	21
	CEDUNA	32 24	18 15	38 38	14 6	25 20	1.9 -1.7	0	-10 *****
	ADELAIDE	24	15	34	11	20	-1.2	****	*****
	MELBOURNE	23	14	34	10	19	0.2	103	58
	WAGGA	30	16	38	10	23	0.9	85	39
	CANBERRA	26	13	34	8	20	0.4	97	29
AUSTRI	VIENNA	6	1	15	-11	4	2.4	90	55
	INNSBRUCK	6	-1	13	-12	2	2	115	61
BAHAMA	NASSAU	26	21	31	18	24	0.7	106	69
BARBAD	BRIDGETOWN	30	24	31	23	27	0.5	147	63
BELARU	MINSK	0	-2	6	-13	-1	2.2	67	20
BERMUD	ST GEORGES	21	17	25	13	19	0.3	89	-14
BOLIVI	LA PAZ	16	5	18	3	10	0.9	143	42
BRAZIL	FORTALEZA	31	26	32	25	29	0.5	18	-7
	RECIFE	30	26	32	23	28	-0.7	66	33
	CAMPO GRANDE	33	23	36	18	28	1.6	165	-4
	FRANCA	31	20	34	18	26	2.5	127	-172
	RIO DE JANEI	32	24	39	21	28	1.1	74	-36
	LONDRINA SANTA MARIA	***		37	18	***		126	-75 65
BULGAR	SOFIA	30 8	20 0	38 19	13 -6	25 4	0.2 3.1	226 56	65 16
BURKIN	OUAGADOUGOU	35	17	39	0	26	-0.3	0	16
CANADA	LETHBRIDGE	8	-4	17	-13	20	*****	5	*****
	REGINA	2	-10	9	-15	-4	8.3	4	-4
	WINNIPEG	- -1	-8	7	-16	-4	7	6	-18
	TORONTO	5	0	13	-5	3	4.2	80	23
	MONTREAL	2	-4	9	-13	-1	3.5	143	50
	PRINCE ALBER	-1	-13	4	-20	-7	7.6	10	-4
	CALGARY	6	-5	17	-14	0	7	21	7
	VANCOUVER	9	5	13	-1	7	3	185	18
CANARY	LAS PALMAS	24	18	27	14	21	1.5	22	*****
CHILE	SANTIAGO	29	12	36	8	20	0	0	*****
CHINA	HARBIN	-11	-20	4	-30	-16	-0.9	7	0
	HAMI	-2	-13	7	-21	-7	0.2	5	2
	BEIJING	2	-8	12	-16	-3	-2.2	15	12
	TIENTSIN	2	-8	13	-18	-3	-2.5	17	13
	LHASA KUNMING	10 17	-4	17	-8 2	3 12	1.2 2.4	6 24	4
	CHENGCHOW	8	8 -2	21 27	-8	3	-0.8	36	8 25
	YEHCHANG	11	- <u>-</u> 2	26	-o -4	3 7	0.4	44	25 25
	HANKOW	11	1	24	- 4 -7	6	0.4	66	34
	CHUNGKING	13	9	19	5	11	1.5	5	-19
	CHIHKIANG	13	4	27	-4	9	0.9	21	-14
	WU HU	10	2	26	-9	6	-0.3	70	24
	SHANGHAI	12	3	24	-6	7	-0.3	39	-10
	NANCHANG	12	5	24	-4	9	0.3	15	-41
	TAIPEI	21	17	30	10	19	0.6	70	-11
	CANTON	21	12	30	3	16	0.6	10	-25
	NANNING	20	12	28	4	16	0.9	22	-12
COLOMB	BOGOTA	21	9	23	2	15	1.2	14	-44
COTE D	ABIDJAN	32	25	35	21	29	1.1	41	-32
CUBA	CAMAGUEY	***	***	28	0	***	****	****	*****
CYPRUS	LARNACA	22	12	25	8	17	2.9	36	*****
CZECHR	PRAGUE	5	1	10	-10	3	2.6	66	40
DENMAR	COPENHAGEN	5	2	9	-3	4	0.8	35	-11
EGYPT	CAIRO	23	15	28	12	19	2.7	54	*****
	ASWAN	27	14	33	11	21	3.1	0	*

Based on Preliminary Reports

December 2023

December 2023																			
COUNTRY	CITY				RATUR C)	E			ECIP. MM)	COUNTRY	CITY				RATUR C)	Е			ECIP. MM)
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	тот	DEP NRM			AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	тот	DEP NRM
ESTONI	TALLINN	-2	-4	6	-14	-3	-2.0	18	-41		MARRAKECH	23	8	29	4	16	1.8	6	*****
ETHIOP	ADDIS ABABA	***	***	24	9	***	****	****	*****	MOZAMB	MAPUTO	29	22	34	18	26	-0.9	226	126
F GUIA	CAYENNE	32	24	33	22	28	1.0	286	-66	N KORE	PYONGYANG	2	-6	15	-18	-2	1.2	53	36
FIJI	NAUSORI	31	23	33	18	27	1.2	190	-150	NEW CA	NOUMEA	31	23	36	20	27	1.7	4	-49
FINLAN	HELSINKI	-3	-6	5	-17	-5	-2.9	55	-7	NIGER	NIAMEY	34	17	40	13	25	-0.4	0	*****
FRANCE	PARIS/ORLY	10	6	13	-2	8	2.4	57	0	NORWAY	OSLO	-4	-9	4	-17	-6	-3.0	69	2
	STRASBOURG BOURGES	8	4	14	-6	6	2.6	23	-22	NZEALA	AUCKLAND WELLINGTON	23	16	27	11	20	1.2	147	65
	BORDEAUX	10	5	14	-6	7	2.0	55	-13	P RICO	SAN JUAN	20	14	25	8	17	0.8	42	-27
	TOULOUSE	12 12	6 5	16 19	-1 -2	9 8	1.5 1.3	85 35	-21 -15	PAKIST	KARACHI	29 29	24 17	32 31	22 13	26 23	0.5 2.2	188 0	65 *****
	MARSEILLE	13	5	17	-2 -2	9	0.9	15	-15	PERU	LIMA	24	20	27	18	22	1.0	0	*****
GABON	LIBREVILLE	31	25	32	19	28	1.1	294	-26	PHILIP	MANILA	***	***	29	26	***	*****	****	*****
GERMAN	HAMBURG	6	3	12	-8	4	1.7	136	64	PNEWGU	PORT MORESBY	32	26	34	24	29	0.9	113	1
	BERLIN	6	2	12	-8	4	1.7	114	69	POLAND	WARSAW	4	0	10	-9	2	1.8	62	26
	DUSSELDORF	8	5	12	-3	7	2.6	116	46		LODZ	4	0	10	-10	2	1.9	60	17
	LEIPZIG	6	2	11	-7	4	2.4	92	57		KATOWICE	4	0	11	-8	2	2.5	85	40
	DRESDEN	6	2	12	-6	4	2.5	107	63	PORTUG	LISBON	15	9	20	4	12	0.1	28	-69
	STUTTGART	7	2	12	-10	4	2.5	61	16	ROMANI	BUCHAREST	9	0	18	-6	4	4.0	23	-24
	NURNBERG	6	2	12	-9	4	2.8	56	7	RUSSIA	ST.PETERSBUR	-3	-6	4	-17	-5	-1.8	56	5
	AUGSBURG	6	1	12	-18	4	2.9	94	44		KAZAN	-7	-10	4	-25	-9	-1.1	63	14
GREECE	THESSALONIKA	14	5	21	-1	9	1.9	29	-28		MOSCOW	-3	-6	4	-14	-4	0.0	64	13
	LARISSA	15	3	23	-3	9	2.1	34	-17		YEKATERINBUR	-11	-15	4	-34	-13	-2.6	61	33
OLIABEI	ATHENS	18	11	23	8	15	2.8	14	*****		OMSK	-10	-17	3	-39	-14	0.2	50	21
GUADEL HONGKO	RAIZET HONG KONG IN	30	21	31	19	26	0.3	69	-58		BARNAUL KHABAROVSK	-9 40	-15	4	-33	-12	1.1	44	12
HUNGAR	BUDAPEST	22 6	17 0	30 11	8 -7	20 3	0.8 1.9	0 116	-32 78		VLADIVOSTOK	-16 -7	-24 -12	2 5	-37 -23	-20 -10	-2.7 -1.0	6 7	-12 -14
ICELAN	REYKJAVIK	1	-2	8	-10	ა -1	-1.5	113	18		VOLGOGRAD	0	-12 -4	11	-23 -14	-10	2.8	0	-14
INDIA	AMRITSAR	21	- <u>-</u> 2	24	4	14	1.5	0	-15		ASTRAKHAN	3	- -1	16	-11	1	2.6	30	12
	NEW DELHI	24	9	26	5	16	0.7	0	-14		ORENBURG	-4	-8	5	-26	-6	3.3	50	19
	AHMEDABAD	28	17	30	13	23	1.4	0	*****	S AFRI	JOHANNESBURG	26	16	32	11	21	1.1	203	*****
	INDORE	26	15	29	12	20	1.6	4	-9		DURBAN	26	20	32	16	23	-1.2	151	26
	CALCUTTA	26	17	31	14	22	2.3	40	*****		CAPE TOWN	26	16	33	11	21	1.2	1	-12
	VERAVAL	31	20	35	18	25	1.1	0	*****	S KORE	SEOUL	5	-2	17	-15	2	1.1	88	65
	BOMBAY	33	21	36	19	27	1.0	0	*****	SAMOA	PAGO PAGO	31	26	33	22	28	0.1	630	266
	POONA	30	14	36	11	22	1.4	0	*****	SENEGA	DAKAR	30	22	37	19	26	2.2	0	*****
	BEGAMPET	28	18	31	12	23	0.4	4	*****	SPAIN	VALLADOLID	8	2	15	-3	5	0.0	34	-11
	VISHAKHAPATN	28	22	31	19	25	0.6	223	*****		MADRID	12	2	15	-4	7	0.3	63	29
	MADRAS	30	23	33	19	26	0.7	534	346	014/1775	SEVILLE	16	6	20	0	11	-0.7	34	*****
INDONE	MANGALORE SERANG	33	24	35	21	28	1.1	74		SWITZE	ZURICH GENEVA	6	2	11	-7	4	2.2	143	60
IRELAN	DUBLIN	34 9	24 6	37	21 -2	29 8	1.6 2.5	108 68	-56	SYRIA	DAMASCUS	8	***	14 22	-4 -1	5 ***	2.4	127 17	39
ITALY	MILAN	10	3	14 18	-2 -4	6	2.5	26	-4 -15	TAHITI	PAPEETE	31	25	33	23	28	0.4	170	-101
117121	VERONA	10	1	19	-4	6	2.5	24	-35	TANZAN	DAR ES SALAA	32	26	35	24	29	0.8	144	22
	VENICE	10	3	14	-1	6	1.3	41	-12	THAILA	PHITSANULOK	33	21	35	14	27	1.5	0	-23
	GENOA	14	9	18	3	11	1.1	72	*****		BANGKOK	34	25	37	20	30	1.6	12	-7
	ROME	16	8	20	1	12	1.9	26	-47	TOGO	TABLIGBO	36	23	38	18	29	0.9	****	*****
	NAPLES	16	9	20	2	12	1.8	50	-42	TRINID	PORT OF SPAI	32	23	35	22	28	0.9	114	-38
JAMAIC	KINGSTON	32	22	34	-31	27	-0.2	5	-36	TUNISI	TUNIS	19	12	26	6	15	1.7	68	2
JAPAN	SAPPORO	2	-3	11	-8	0	0.5	47	-68	TURKEY	ISTANBUL	13	9	20	3	11	3.3	60	-20
	NAGOYA	13	5	20	-1	9	1.4	61	4		ANKARA	11	0	16	-5	6	4.2	48	0
	TOKYO	14	5	21	0	10	1.5	20	-39	TURKME	ASHKHABAD	13	3	26	-5	8	3.8	0	-18
	YOKOHAMA	14	7	24	2	11	2.1	29	-39	UKINGD	ABERDEEN	7	2	13	-8	5	0.6	245	178
	КУОТО	13	5	20	-1	9	1.8	22	-36		LONDON	10	6	15	-3	8	2.4	83	26
	OSAKA	13	6	20	0	10	1.0	20	-36	UKRAIN	KIEV	2	-1	11	-9	1	2.6	66	19
KAZAKH	KUSTANAY	-8	-14	3	-33	-11	1.7	36	12		LVOV	3	-1	11	-12	1	2.5	72	22
	TSELINOGRAD	-6	-11	5	-33	-9	3.2	61	38		KIROVOGRAD	4	0	12	-7	2	3.4	43	10
KENIVA	KARAGANDA NAIROBI	-5 00	-11	6	-31	-8	3.4	42	12		ODESSA KHARKOV	7	3	16	-3	5	3.3	15	-22
KENYA LIBYA	BENGHAZI	26	16	27	13	21	0.5	51 27	*****	UZBEKI	TASHKENT	2	-1	8	-8 16	0	3.0	79 61	39
LITHUA	KAUNAS	20 2	13 -1	23 8	10 -10	17 0	2.2 1.7	37 48	1	YUGOSL	BELGRADE	10 11	2	22 23	-16 -4	6 7	1.5 4.1	61 33	3 -20
LUXEMB	LUXEMBOURG	6	3	10	-10 -7	5	2.3	105	15	ZAMBIA	LUSAKA	***	***	23 35	-4 17	***	4.1	*****	-20 *****
MALAYS	KUALA LUMPUR	32	25	34	-7 24	5 29	0.8	469	188	ZIMBAB	KADOMA	***	***	35 37	***	***	****	****	*****
MALI	TIMBUKTU	***	***	***	***	***	****	****	*****					0,					
	BAMAKO	34	15	38	10	25	0.2	0	*****										
MARSHA	MAJURO	30	27	31	25	29	0.8	186	-116										
MARTIN	LAMENTIN	30	24	31	19	27	0.6	184	29	I									
MEXICO	GUADALAJARA	21	10	25	5	16	-0.2	48	*****	I									
	TLAXCALA	20	7	26	0	14	0.0	24	*****	I									
			1.1	31	6	17	0.2	50	*****										
	ORIZABA	21	14	31	U														
MOROCC	ORIZABA CASABLANCA	21 20	12	26	8	16	1.1	35	*****										

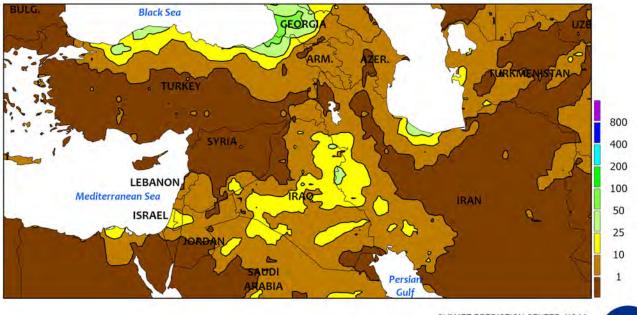


EUROPE

Unseasonable warmth persisted for a third consecutive week, with continued wet weather in northern Europe contrasting with dry conditions in the west and south. Temperatures during the monitoring period averaged 4 to 9°C above normal nearly everywhere save for the western Iberian Peninsula (up to 2°C below normal). Consequently, the continent's primary winter crop areas were devoid of a protective snow cover except for portions of northeastern Poland and the Baltic

States. Moderate to heavy showers (10-100 mm, locally more) continued from England and the Low Countries eastward, boosting moisture reserves for dormant winter crops. Conversely, dry weather over France allowed previously delayed fieldwork to gain momentum. Sunny skies also promoted seasonal fieldwork and winter grain development across the Mediterranean Basin, where moisture reserves remained favorable following a wet autumn.

MIDDLE EAST Total Precipitation(mm) December 24 - 30, 2023



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



MIDDLE EAST

Warm weather prevailed over much of the region, with additional rain in central growing areas contrasting with dry conditions elsewhere. Temperatures averaged 3 to 6°C above normal nearly everywhere, though readings closer to normal (1-3°C above normal) were noted in northern Iraq and environs. Even with the persistent anomalous warmth, winter crops finally went dormant over central Turkey and northern Iran. After recent rain in Turkey, sunny skies favored winter

wheat and barley establishment in warmer southern growing areas but kept the country's typically colder Anatolian Plateau devoid of snow cover. Continued dryness in northern and eastern Iran raised drought concerns but otherwise had little impact on dormant winter crops. Meanwhile, light to moderate showers (5-35 mm) from the southeastern Mediterranean Coast into western Iran boosted soil moisture for winter grain establishment.

NORTHWESTERN AFRICA Total Precipitation(mm)

December 24 - 30, 2023



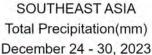
CLIMATE PREDICTION CENTER, NOAA Computer generated contours Based on preliminary data

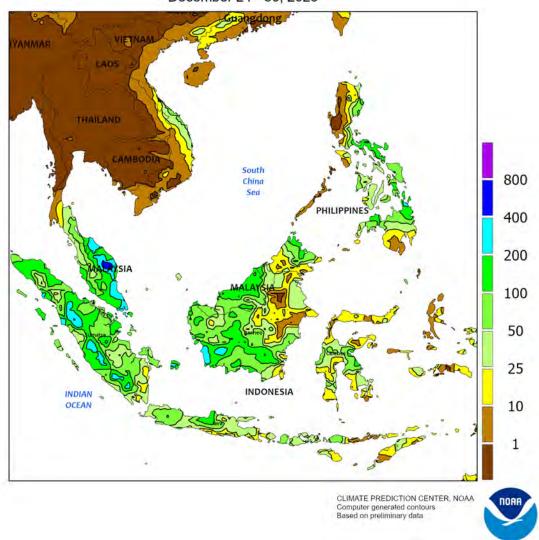


NORTHWESTERN AFRICA

Sunny skies exacerbated western drought but favored winter grain development in the east. After a recent spell of moderate to heavy rain in eastern crop areas, dry weather from north-central Algeria into northern Tunisia encouraged winter grain development. However, significant long-term deficits persisted despite December's rain; in northern Tunisia's Tell Region, season-to-date (since September 1) rainfall was the second lowest of the past 30 years at 63 percent of normal

(deficit of 105 mm). Meanwhile, drought intensified in Morocco and western Algeria. Since September 1, rainfall in Morocco's primary growing areas slipped to 40 percent of normal, the second driest of the past 30 years. Likewise, season-to-date rainfall in western Algeria dropped to 43 percent of normal, the driest of the past 30 years. Time is quickly running out for drought-afflicted western growing areas to receive moisture for this season's wheat and barley.



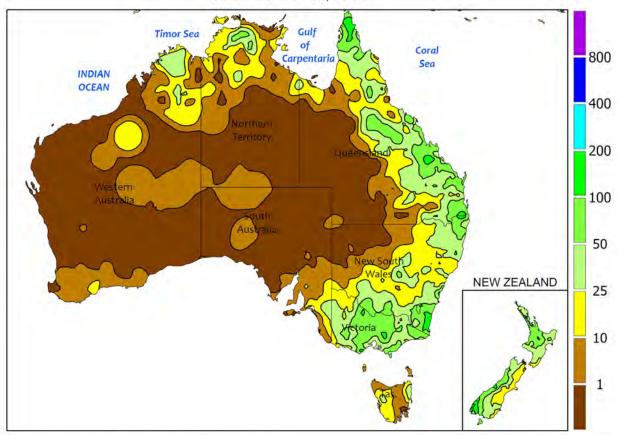


SOUTHEAST ASIA

Seasonable showers returned to Java, Indonesia, after an extended lull in precipitation. Rainfall amounts averaged around 50 mm in Java, benefiting rice, but more consistent rain is needed to fully alleviate poor seasonal moisture conditions; rainfall totals since August 1 are near 50 percent of normal. Meanwhile, wet weather (50-150 mm) in oil palm areas of Indonesia and Malaysia further improved soil moisture for

trees following poor rainfall during much of the autumn months. Although, portions of eastern Malaysia continued to experience drier-than-normal conditions, going on three consecutive months with below-average rainfall. Elsewhere, showery weather in the central Philippines supported rice and corn development, though more rain would be welcome in key northern growing areas.

AUSTRALIA Total Precipitation(mm) December 24 - 30, 2023



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

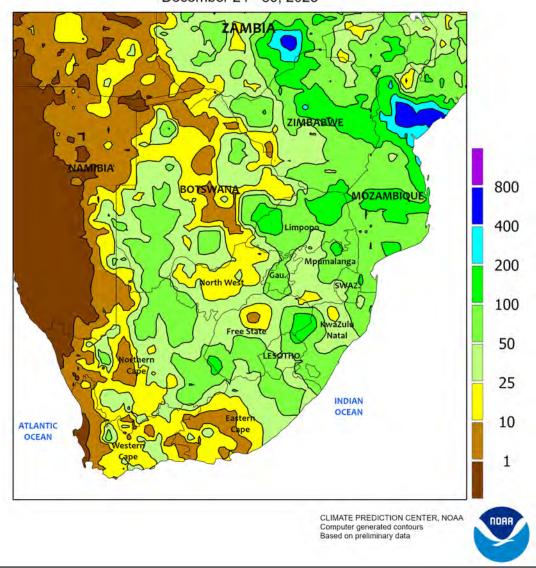


AUSTRALIA

Widespread showers (10-50 mm, locally more) in eastern Australia maintained near- to above-normal root zone soil moisture for summer crops. The rain hampered final winter crop harvests in the south and likely caused local declines in crop quality, but the wet weather promoted cotton, sorghum, and rice development in major summer crop producing areas. Elsewhere in the wheat belt, mostly

dry weather in Western Australia and much of South Australia favored final wheat, barley, and canola harvesting. Temperatures averaged within 2°C of normal in Western Australia, southern Queensland, and far northern New South Wales. In most of New South Wales, Victoria, and South Australia, temperatures averaged 2 to 4°C below normal.

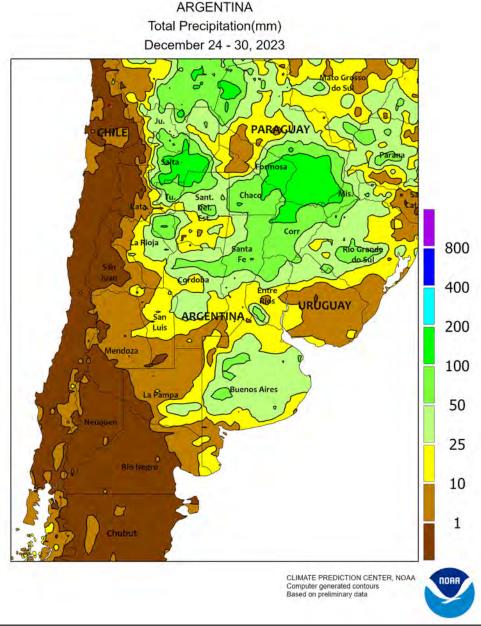
SOUTH AFRICA Total Precipitation(mm) December 24 - 30, 2023



SOUTH AFRICA

Widespread, locally heavy rain provided timely moisture for corn and other summer crops in early stages of development. Rainfall totaled well over 50 mm over large sections of the region, including climatologically drier locations in Limpopo and Northern Cape, with most of the corn belt (North West and Free State eastward) recording at least 25 mm. In fact, unseasonable wetness extended as far west as Western Cape, though amounts there were considerably less (5-35 mm). Regionwide, cooler

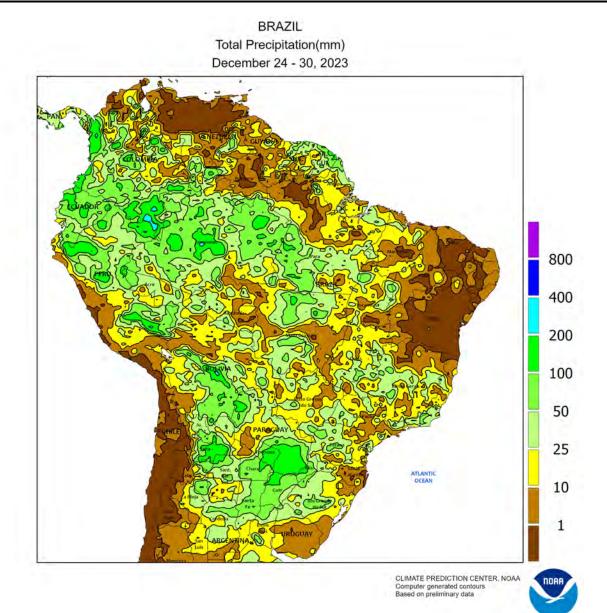
conditions accompanied the wetness, with weekly average temperatures ranging from 2 to 4°C below normal. Although highest daytime temperatures locally reached 40°C in traditionally warmer locations of Northern Cape and North West, temperatures were seasonably milder (highs reaching the upper 20s and lower 30s degrees C) farther east, including nearly all major corn and sugarcane areas. Early planted summer crops will enter reproductive phases of development in the upcoming weeks.



ARGENTINA

Locally heavy showers maintained adequate to locally excessive levels of moisture for germination and establishment of summer crops. The heaviest rainfall (25-75 mm, locally exceeding 100 mm) was concentrated over two regions: central Buenos Aires and the north (Salta eastward through southern Paraguay). The northern rainfall maintained adequate to locally excessive levels of moisture for emerging to vegetative summer grains, oilseeds, and cotton, although planting was likely slowed in the wettest fields. In the south, the moisture will eventually benefit later-planted summer crops —

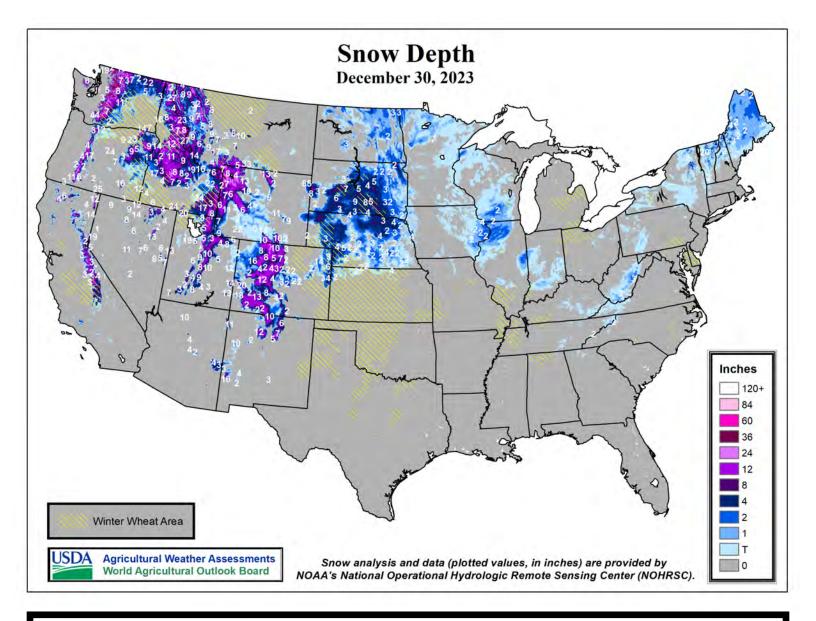
particularly soybeans – but harvesting of winter grains may experience additional delays. Weekly average temperatures ranged from 1 to 2°C below normal in eastern farming areas and 1 to 2°C above normal in the west, where daytime temperatures reached or exceeded 40°C on several days. According to the government of Argentina, corn and soybeans were 79 and 81 percent planted, respectively, as of December 28; cotton was 77 percent planted, compared with 74 percent last year, while wheat was 78 percent harvested, 16 points behind last year's pace.



BRAZIL

Showers were widely scattered and locally light, maintaining mixed prospects for soybeans and other predominantly rain-fed crops. Rainfall was highly variable, with large sections of the Center-West and northeastern interior – including farming areas of Mato Grosso and western Bahia – recording less than 15 mm. As a result, weekly average temperatures again rose into the upper 30s and lower 40s (degrees C), hastening soybean development while contributing to the impacts of the dryness on immature crops. According to the government of Mato Grosso, soybean harvesting began several weeks ago,

which would imply some crops had already experienced irreversible declines in yield. Farther south, showers (10-50 mm, locally higher) and more seasonable temperatures (highs reaching the lower and middle 30s) maintained generally favorable conditions for summer crops in varying stages of development. According to the government of Rio Grande do Sul, corn was 90 percent planted as of December 28, with 70 percent of the crop currently in the ground ranging from flowering to mature; 94 percent of soybeans were planted, but only 3 percent of crops were flowering.



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