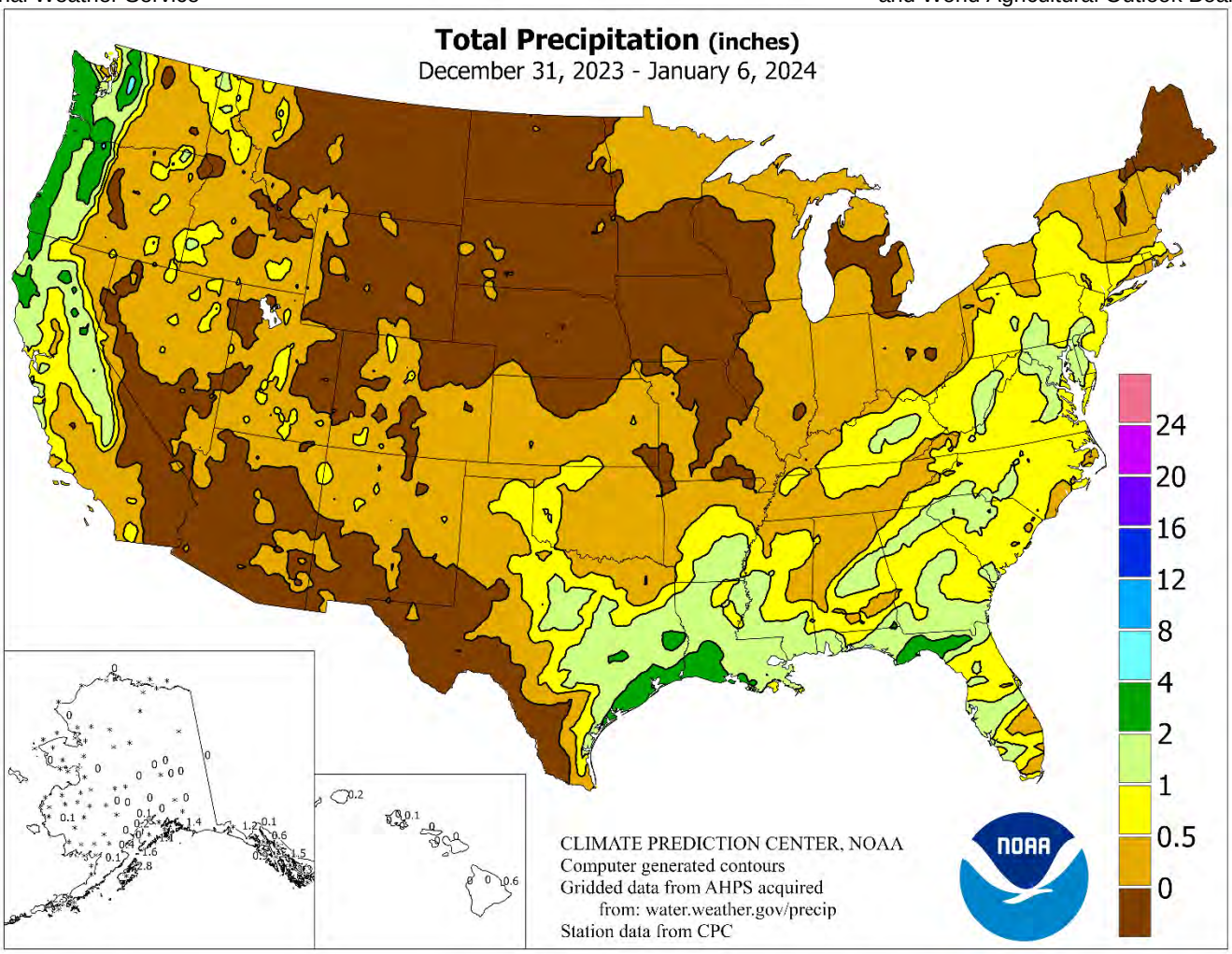
Volume 111, No. 2 www.usda.gov/oce/weather-drought-monitor January 9, 2024

WEEKLY WEATHER AND CROP BULLETIN

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

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



HIGHLIGHTS

December 31, 2023 – January 6, 2024

Highlights provided by USDA/WAOB

The New Year began on a remarkably quiet note, a tranquil period in advance of a barrage of storms, with mild weather and negligible precipitation. However, mid- to late-week changes included increasing storminess in the **Pacific Coast States**, which eventually spread farther inland across the **Great Basin** and **Southwest**. Late in the week, an initial round of significant precipitation emerged from the **Four Corners States**, reaching portions of the **central and southern Plains**. Locally more than a foot of snow fell in the **southern Rockies**, while modest

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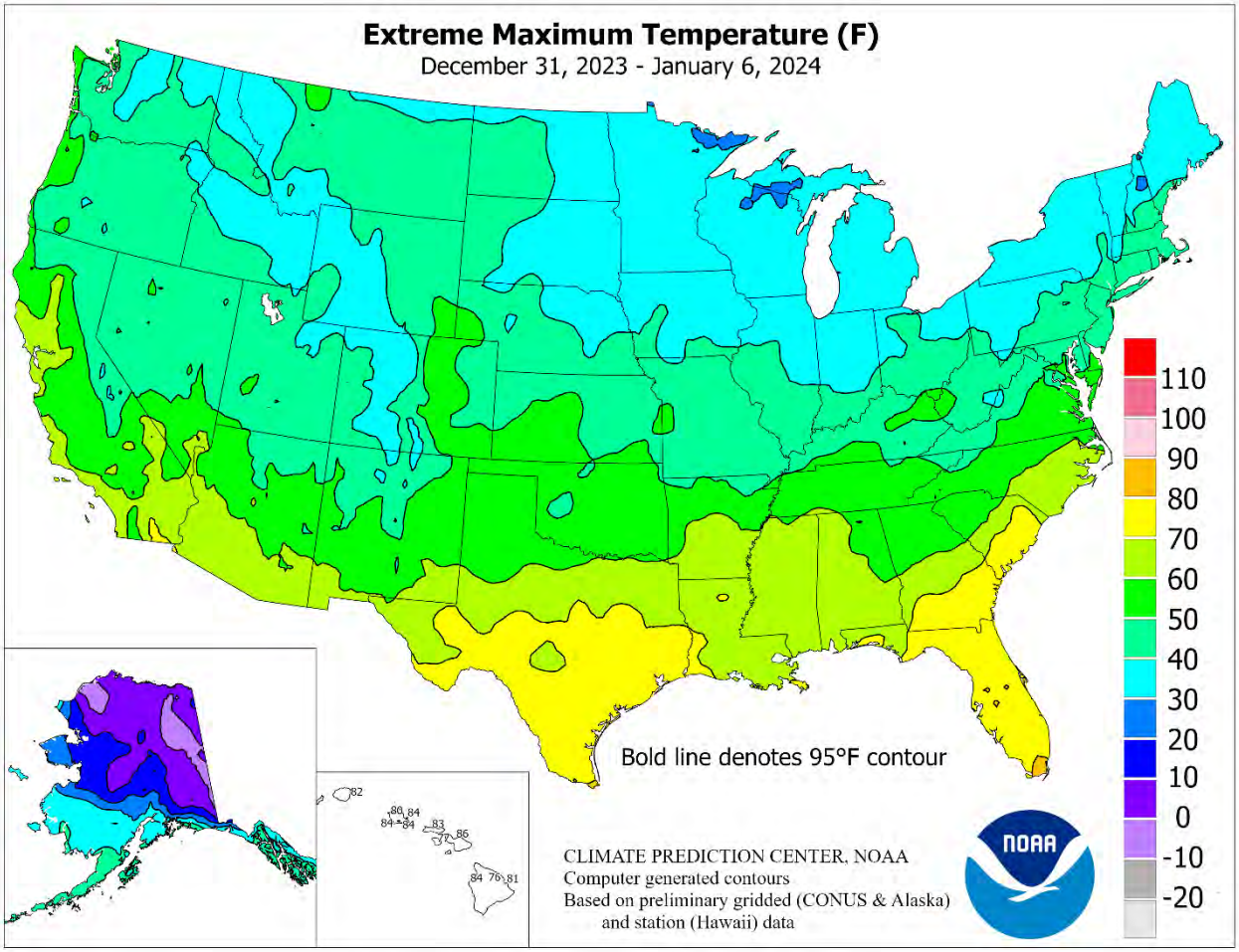
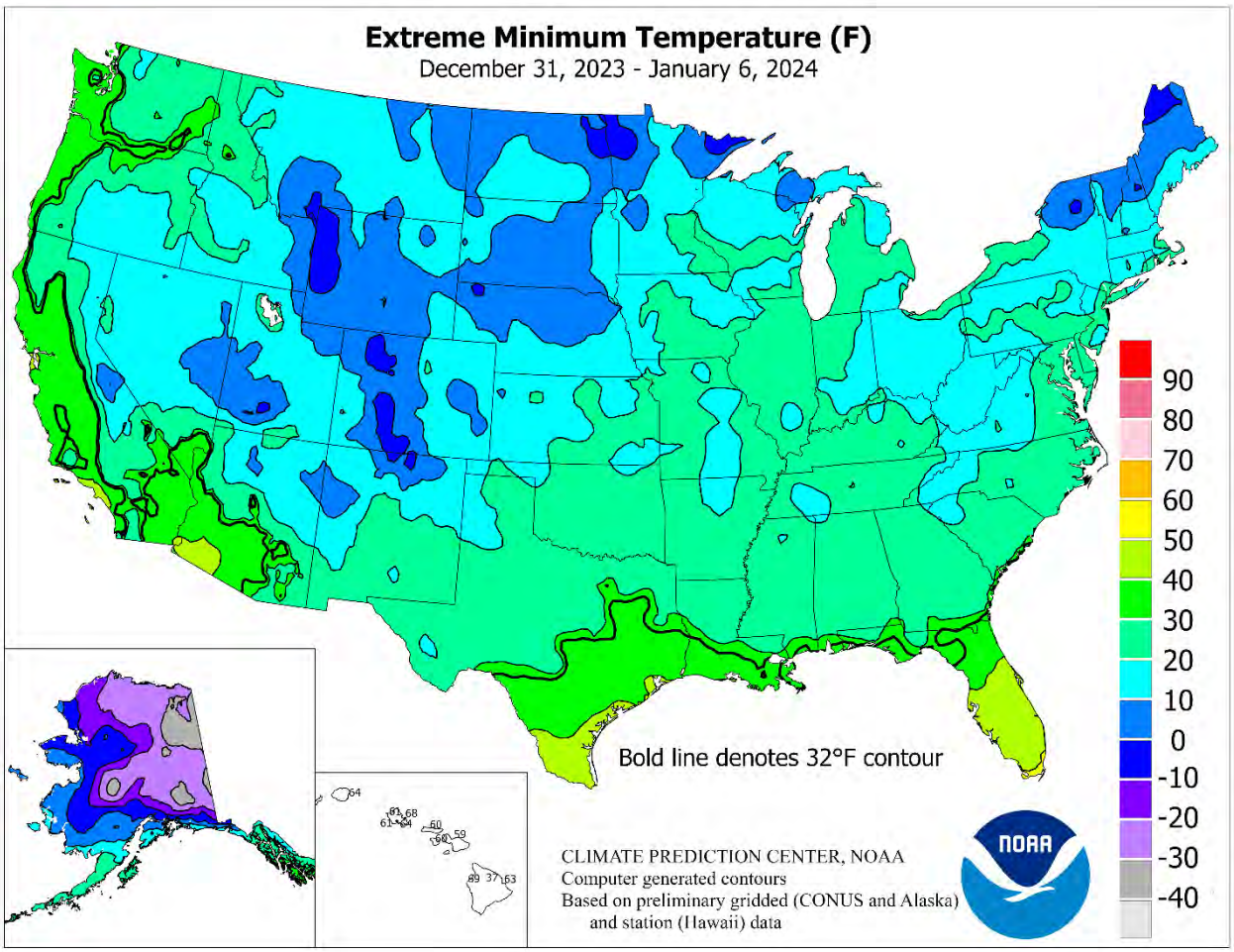
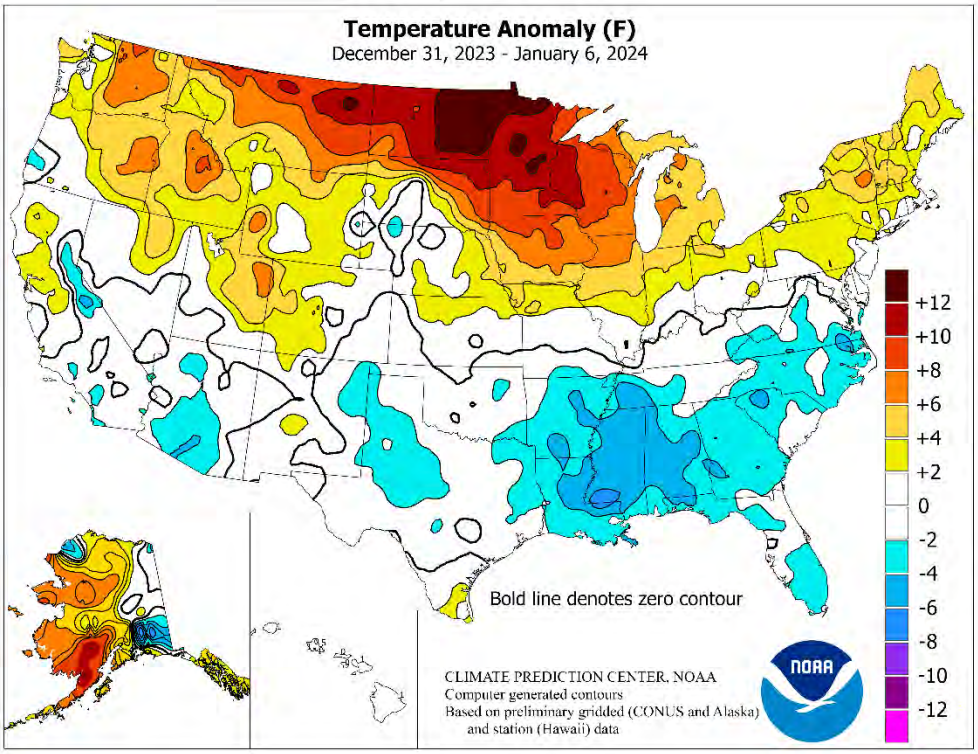

Extreme Maximum Temperature (F)
December 31, 2023 - January 6, 2024
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS & Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
December 31, 2023 - January 6, 2024
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

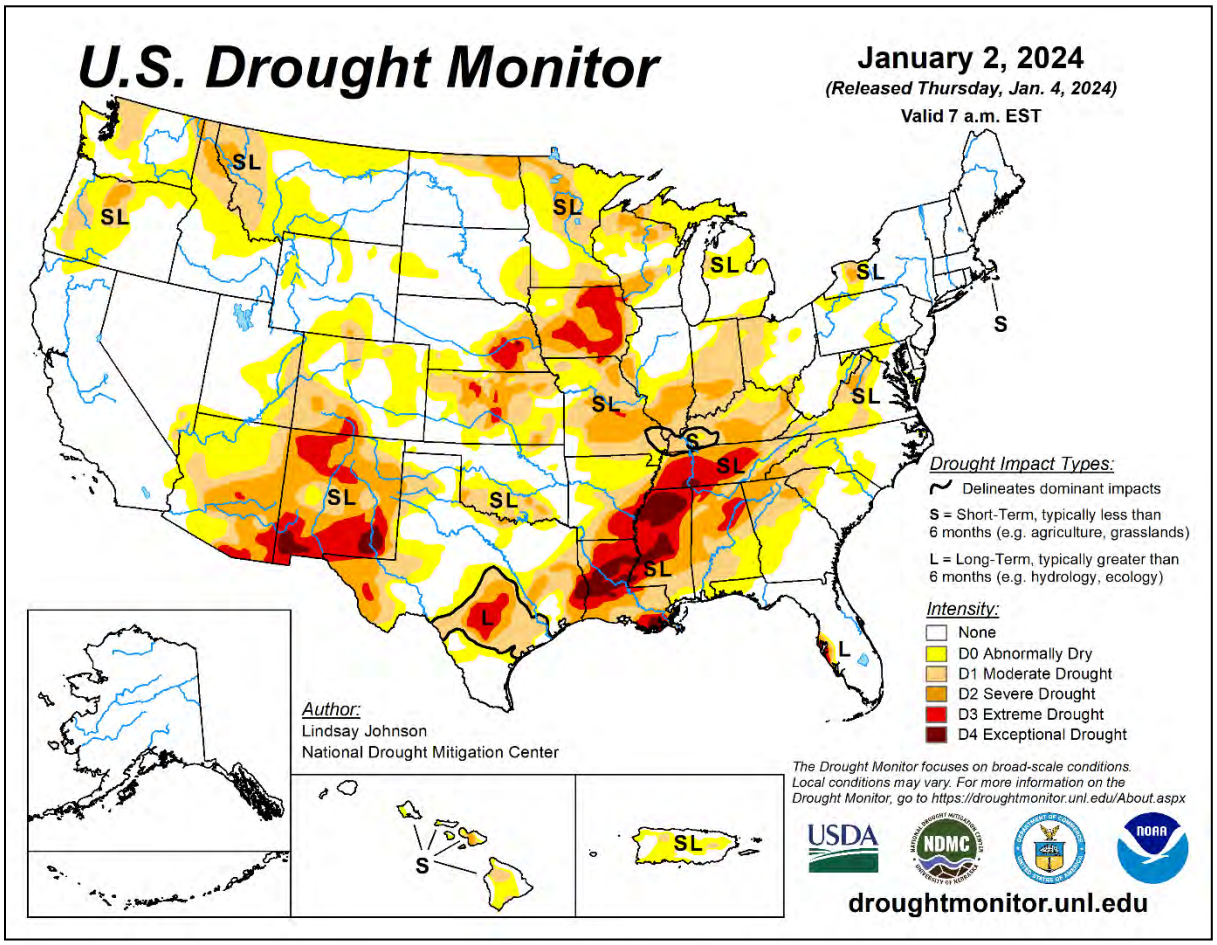
(Continued from front cover)
accumulations were noted across portions of the **central and southern Plains**. At the end of the week, heavy showers quickly spread across the **southern and eastern U.S.**, while snow blanketed portions of the **Northeast**. In contrast, mostly dry weather prevailed across the **northern Plains** and much of the **Midwest**. Meanwhile, temperatures exhibited a classic El Niño signature, with mild weather across the **northern U.S.** contrasting with near- or below-normal temperatures in the **South**. Weekly temperatures averaged more than 10°F above normal across parts of the **nation's northern tier**, from **northern Montana to the upper Great Lakes region**, while readings averaged at least 5°F below normal in scattered locations across the **South**, primarily in the **Desert Southwest** and the **central Gulf Coast States**. Although freezes reached into the **South**, key winter agricultural regions in **California**, **Florida**, **Texas**, and the **Desert Southwest** remained above 32°F.

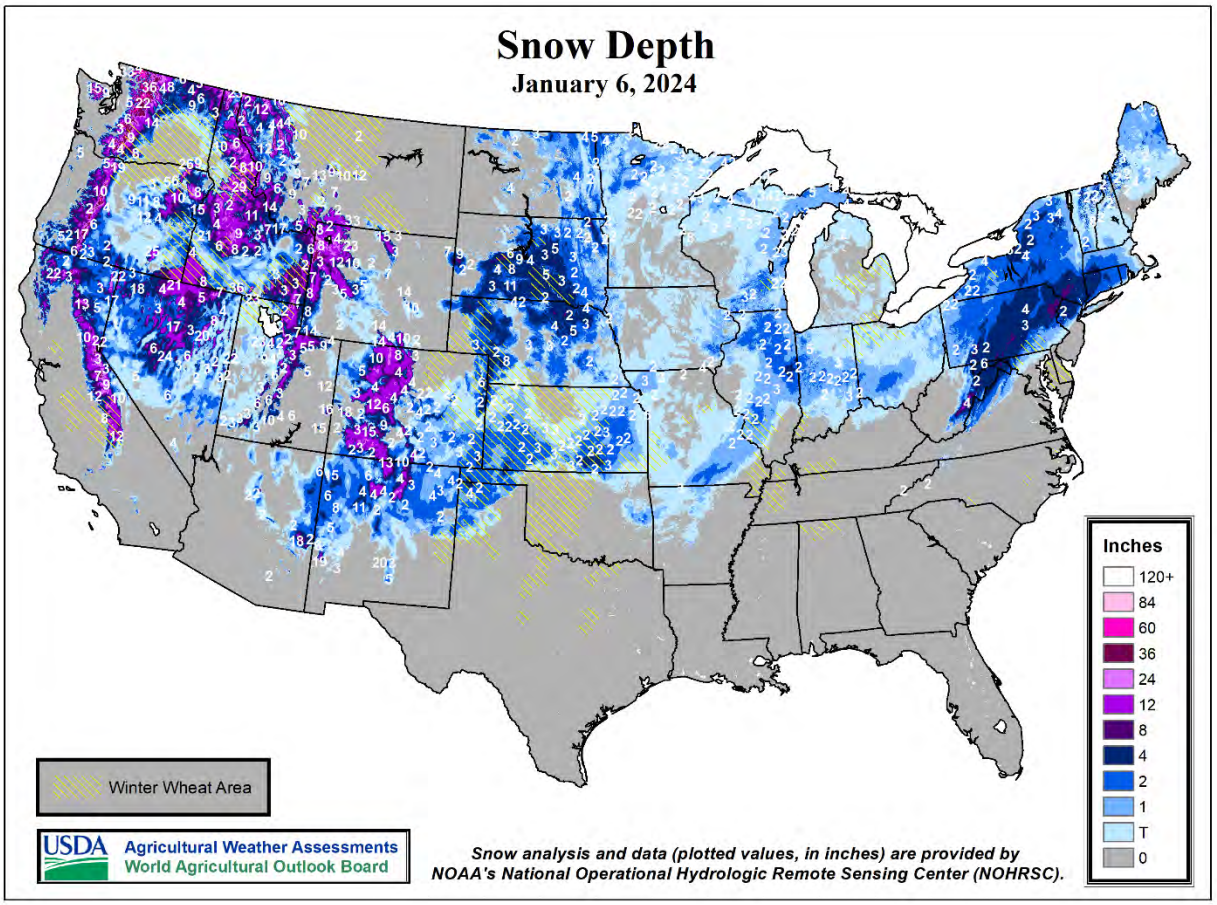


While mild weather covered much of the country, temperatures early in 2024 rarely strayed into record-setting territory. Still, many communities in the **north-central U.S.**, including **Glasgow, MT**, and **Rochester, MN**, completed a record-warm December, and continued to experience unusually warm weather during the first few days of 2024. Additionally, the U.S. overall experienced record-shattering December warmth, with a national average temperature (40.0°F) that was 7.3°F above the 1901-2000 mean. Late in the week, cooler air—drawn southward by the first in a series of winter storms—began to overspread the **West**. By January 6, **Ramona, CA**, posted a daily-record low of 26°F.

The first days of 2024 were equally quiet in terms of precipitation. However, significant changes began to occur during the mid- to late-week period. In **Nevada**, **Winnemucca** reported daily-record precipitation and snowfall totals—0.56 and 4.9 inches, respectively—on January 3. In **Alta, UT**, snow began to fall on January 4, with 28.5 inches reported in a 5-day period ending the 8th. Farther south, January 4 snowfall in **New Mexico** totaled 2.5 inches in **Clayton** and 2.2 inches in **Albuquerque**. Late in the week, rain and snow arrived on the **central and southern Plains**. In **Kansas**, daily-record precipitation totals for January 5 included 0.59 inch in **Medicine Lodge** and 0.45 inch in **Wichita**. On the same date, **Kansas** snowfall amounts reached 3.3 inches in **Wichita**, 3.1 inches in **Dodge City**, and 2.5 inches in **Goodland**. Meanwhile, heavy showers in **coastal Texas** led to daily-record totals for the 5th in **Palacios** (1.56 inches) and **Houston** (1.44 inches). At week's end, precipitation swept into the **East**. In **Florida**, daily-record amounts for January 6 topped the 2-inch mark in **St. Petersburg** (2.71 inches) and **Apalachicola** (2.42 inches). Most (2.04 inches) of **St. Petersburg's** rain fell in an hour, from 9 to 10 am EST. Farther north, daily-record totals for January 6 included 0.97 inch at **Virginia's Dulles Airport** and 0.89 inch in **Bluefield, WV**. In **Pennsylvania**, January 6 featured snowfall totaling 5.3 inches in **Allentown** and 3.3 inches in **Harrisburg**. For **Harrisburg**, it was the first accumulating snow since January 25, 2023, ending a record-setting, 345-day streak without measurable snow. In **New England**, January 6-7 snowfall topped a foot in several locations, including **Worcester, MA** (15.5 inches), and **Portland, ME** (12.8 inches).

Near- or above-normal temperatures covered much of **Alaska**, while precipitation was negligible except across the **southern tier of the state**. Weekly temperatures averaged at least 10°F above normal in parts of **western and southwestern Alaska**, with **King Salmon** posting a daily-record high of 46°F on January 6. In the **Aleutians**, stormy weather in **Cold Bay** resulted in peak wind gusts to 72 and 71 mph, respectively, on January 5 and 6. **Cold Bay** also netted a daily-record precipitation total of 1.05 inches on January 6. Elsewhere on the 6th, **Kodiak** (1.73 inches) also measured a daily-record sum. Meanwhile in **southeastern Alaska**, more than an inch of rain fell in **Ketchikan** on January 3 and 5. Farther south, **Hawaiian** shower activity generally increased in windward locations, while mostly dry weather prevailed on leeward slopes. On the **Big Island**, **Hilo** received 1.04 inches of rain during the first 6 days of 2024, followed by a 1.01-inch total on January 7. Unusual warmth prevailed in some of the drier areas, with **Kahului, Maui**, tallying a trio of daily-record highs (86, 86, and 87°F) from January 4-6.


U.S. Drought Monitor
January 2, 2024
(Released Thursday, Jan. 4, 2024)
Valid 7 a.m. EST
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
Lindsay Johnson
National Drought Mitigation Center
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
droughtmonitor.unl.edu


Snow Depth
January 6, 2024
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending January 6, 2024

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. ˚F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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
AK	ANCHORAGE	26	15	31	2	20	3	0.21	0.02	0.21	2.03	154	0.21	135	85	66	0	7	1	0
	BARROW	-3	-9	3	-20	-6	0	0.00	-0.04	0.00	0.00	0	0.00	0	83	72	0	7	0	0
	FAIRBANKS	-1	-17	10	-25	-9	-1	0.00	-0.14	0.00	0.94	136	0.00	0	74	64	0	7	0	0
	JUNEAU	35	30	39	22	33	4	0.58	-0.78	0.26	11.04	143	0.58	49	97	85	0	7	4	0
	KODIAK	40	30	42	24	35	4	2.80	0.76	1.28	8.83	83	2.76	159	98	83	0	6	7	2
	NOME	25	15	30	7	20	14	0.04	-0.18	0.02	0.46	37	0.04	21	74	55	0	7	2	0
AL	BIRMINGHAM	51	31	60	26	41	-4	0.43	-0.70	0.39	5.13	87	0.43	44	86	45	0	6	2	0
	HUNTSVILLE	48	29	60	22	38	-5	0.23	-0.96	0.15	5.18	75	0.23	22	96	58	0	5	2	0
	MOBILE	61	36	66	30	49	-2	1.89	0.55	1.40	7.94	120	1.89	164	93	42	0	2	3	1
	MONTGOMERY	56	32	63	24	44	-4	0.73	-0.33	0.51	2.30	39	0.73	80	95	50	0	5	3	1
AR	FORT SMITH	48	30	59	27	39	-1	0.16	-0.55	0.16	2.10	51	0.16	26	93	55	0	5	1	0
	LITTLE ROCK	48	31	65	26	40	-1	0.80	-0.17	0.80	2.22	37	0.80	96	83	52	0	4	1	1
AZ	FLAGSTAFF	40	14	48	4	27	-3	0.35	-0.15	0.35	0.89	38	0.35	80	87	43	0	7	1	0
	PHOENIX	62	44	66	40	53	-2	0.01	-0.19	0.01	0.76	82	0.01	6	72	35	0	0	1	0
	PRESCOTT	47	25	54	22	36	-3	0.04	-0.26	0.03	0.65	51	0.04	16	87	39	0	7	2	0
	TUCSON	61	38	68	34	50	-3	0.02	-0.19	0.02	1.24	109	0.02	11	76	29	0	0	1	0
CA	BAKERSFIELD	55	40	58	37	48	-1	0.16	-0.13	0.14	0.80	59	0.16	64	94	61	0	0	2	0
	EUREKA	53	42	56	37	48	0	1.69	0.07	0.62	7.88	83	1.65	120	96	74	0	0	6	1
	FRESNO	54	43	58	38	48	1	0.43	-0.07	0.35	1.10	49	0.43	99	98	68	0	0	2	0
	LOS ANGELES	63	49	66	44	56	-2	0.20	-0.50	0.20	3.76	132	0.20	32	85	47	0	0	1	0
	REDDING	58	40	65	37	49	3	0.65	-0.68	0.44	8.05	108	0.63	55	90	53	0	0	4	0
	SACRAMENTO	56	42	60	36	49	2	0.60	-0.19	0.45	5.29	128	0.59	86	97	65	0	0	4	0
	SAN DIEGO	63	47	65	42	55	-3	0.14	-0.35	0.12	0.96	46	0.12	28	93	52	0	0	2	0
	SAN FRANCISCO	60	48	63	45	54	3	0.57	-0.32	0.24	4.39	89	0.57	75	86	62	0	0	3	0
	STOCKTON	56	43	61	39	49	3	0.72	0.14	0.43	3.36	115	0.72	144	98	66	0	0	3	0
CO	ALAMOSA	35	2	40	-3	18	3	0.09	0.02	0.09	0.48	118	0.09	143	92	45	0	7	1	0
	CO SPRINGS	42	21	56	18	32	0	0.15	0.09	0.13	0.73	265	0.15	316	85	41	0	7	2	0
	DENVER INTL	44	20	55	16	32	1	0.00	-0.09	0.00	0.13	29	0.00	0	79	35	0	7	0	0
	GRAND JUNCTION	46	23	51	20	35	9	0.00	-0.14	0.00	0.54	75	0.00	0	74	34	0	7	0	0
	PUEBLO	42	20	52	15	31	0	0.15	0.09	0.14	1.45	424	0.15	292	92	47	0	7	2	0
CT	BRIDGEPORT	42	25	45	21	34	1	0.31	-0.45	0.31	8.52	183	0.31	48	81	49	0	7	1	0
	HARTFORD	40	24	44	19	32	4	0.42	-0.39	0.42	7.83	164	0.42	61	84	49	0	6	1	0
DC	WASHINGTON	45	34	51	27	39	1	1.02	0.36	1.02	7.26	182	1.02	179	75	48	0	2	1	1
DE	WILMINGTON	43	28	48	20	36	1	1.08	0.36	1.08	9.06	202	1.08	174	86	53	0	5	1	1
FL	DAYTONA BEACH	68	46	80	39	57	-2	0.39	-0.22	0.21	5.05	175	0.39	73	99	55	0	0	3	0
	JACKSONVILLE	66	38	78	32	52	-2	0.99	0.37	0.74	7.44	224	0.99	183	95	48	0	2	3	1
	KEY WEST	74	61	79	55	67	-4	0.00	-0.44	0.00	5.89	232	0.00	0	98	70	0	0	0	0
	MIAMI	75	58	80	52	67	-2	0.08	-0.34	0.08	3.89	139	0.08	22	91	55	0	0	1	0
	ORLANDO	71	49	80	42	60	-1	0.59	0.06	0.58	4.25	144	0.59	130	95	51	0	0	2	1
	PENSACOLA	61	39	71	34	50	-3	1.58	0.41	1.13	6.32	98	1.58	158	86	41	0	0	3	1
	TALLAHASSEE	65	35	74	28	50	-3	2.39	1.42	1.65	13.02	256	2.39	286	96	43	0	3	3	1
	TAMPA	70	52	76	49	61	-2	1.26	0.70	0.98	5.69	187	1.26	264	92	55	0	0	3	1
	WEST PALM BEACH	73	55	78	47	64	-3	0.40	-0.36	0.37	4.26	102	0.40	60	97	57	0	0	2	0
GA	ATHENS	52	30	58	26	41	-3	0.82	-0.23	0.81	5.00	94	0.82	91	85	40	0	6	2	1
	ATLANTA	52	33	57	30	42	-3	0.82	-0.25	0.47	4.45	81	0.82	90	85	45	0	4	3	0
	AUGUSTA	56	29	61	24	42	-5	0.70	-0.23	0.70	4.99	107	0.70	88	96	45	0	6	1	1
	COLUMBUS	56	33	61	28	45	-4	0.38	-0.67	0.16	2.24	39	0.38	42	95	44	0	3	3	0
	MACON	58	30	64	25	44	-3	1.20	0.16	1.09	3.10	56	1.20	136	93	38	0	5	3	1
	SAVANNAH	62	36	75	28	49	-2	0.71	0.01	0.67	5.28	139	0.71	120	91	40	0	2	2	1
HI	HILO	79	65	81	63	72	1	0.63	-1.17	0.28	8.35	61	0.62	41	96	65	0	0	5	0
	HONOLULU	82	68	84	64	74	1	0.00	-0.52	0.00	0.89	33	0.00	0	93	57	0	0	0	0
	KAHULUI	84	63	86	59	74	1	0.00	-0.61	0.00	0.99	30	0.00	0	86	48	0	0	0	0
	LIHUE	80	67	82	64	74	1	0.20	-0.57	0.18	4.41	83	0.20	31	89	62	0	0	2	0
IA	BURLINGTON	35	26	41	23	31	5	0.01	-0.32	0.01	2.05	94	0.01	4	92	73	0	7	1	0
	CEDAR RAPIDS	34	23	36	19	28	8	0.00	-0.24	0.00	0.93	51	0.00	0	92	73	0	7	0	0
	DES MOINES	35	25	39	23	30	7	0.01	-0.24	0.01	1.54	85	0.01	5	88	66	0	7	1	0
	DUBUQUE	32	22	33	17	27	7	0.01	-0.28	0.01	1.96	95	0.01	4	90	73	0	7	1	0
	SIOUX CITY	32	19	36	9	25	5	0.04	-0.13	0.03	1.61	141	0.04	28	95	78	0	7	2	0
	WATERLOO	34	23	38	18	29	8	0.03	-0.23	0.02	0.78	47	0.02	8	85	65	0	7	2	0
ID	BOISE	42	29	47	25	35	5	0.47	0.12	0.27	1.73	94	0.47	158	95	60	0	7	3	0
	LEWISTON	44	34	47	32	39	4	0.11	-0.15	0.09	1.18	87	0.02	8	87	68	0	1	2	0
	POCATELLO	35	20	40	13	28	3	0.17	-0.08	0.10	1.19	88	0.17	78	94	68	0	7	3	0
IL	CHICAGO/O_HARE	36	28	39	24	32	6	0.30	-0.17	0.22	3.18	126	0.22	55	88	66	0	7	2	0
	MOLINE	36	26	38	22	31	7	0.05	-0.35	0.04	2.66	111	0.04	11	88	68	0	7	2	0
	PEORIA	37	28	42	24	32	6	0.09	-0.43	0.07	2.94	110	0.09	21	90	66	0	7	2	0
	ROCKFORD	33	26	35	20	29	6	0.12	-0.26	0.09	3.20	141	0.09	27	92	72	0	7	2	0
	SPRINGFIELD	36	28	41	25	32	3	0.00	-0.45	0.00	2.98	118	0.00	0	92	67	0	5	0	0
IN	EVANSVILLE	42	30	47	23	36	1	0.22	-0.64	0.20	2.17	48	0.22	29	86	62	0	4	2	0
	FORT WAYNE	35	27	37	19	31	4	0.07	-0.56	0.05	1.70	56	0.02	4	89	71	0	7	2	0
	INDIANAPOLIS	36	27	38	21	31	2	0.24	-0.56	0.24	1.39	38	0.24	34	93	72	0	7	1	0
	SOUTH BEND	36	28	37	21	32	6	0.11	-0.54	0.09	2.74	92	0.02	4	89	68	0	7	3	0
KS	CONCORDIA	38	26	48	22	32	3	0.07	-0.08	0.07	1.53	130	0.07	54	92	74	0	7	1	0
	DODGE CITY	41	24	53	20	32	0	0.29	0.13	0.26	2.65	240	0.29	217	97	64	0	7	2	0
	GOODLAND	38	20	47	9	29	-1	0.24	0.17	0.24	1.19	226	0.24	400	92	67	0	7	1	0
	TOPEKA	39	27	45	21	33	2	0.22	-0.01	0.22	3.02	180	0.22	114	91	66	0	7	1	0

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

Weather Data for the Week Ending January 6, 2024

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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
	WICHITA	40	26	49	22	33	0	0.44	0.24	0.44	3.05	218	0.44	256	93	67	0	7	1	0
KY	LEXINGTON	42	29	47	22	35	1	0.46	-0.35	0.46	2.46	51	0.46	66	89	61	0	5	1	0
	LOUISVILLE	43	29	46	25	36	0	0.44	-0.40	0.44	2.23	46	0.44	61	80	56	0	6	1	0
	PADUCAH	44	30	49	23	37	0	0.43	-0.53	0.33	2.32	45	0.43	51	87	60	0	4	2	0
LA	BATON ROUGE	63	36	71	31	49	-3	1.51	0.09	1.11	8.00	122	1.51	124	89	48	0	1	2	1
	LAKE CHARLES	61	39	70	34	50	-3	1.93	0.55	0.79	4.30	74	1.93	159	95	54	0	0	3	2
	NEW ORLEANS	61	44	69	37	52	-2	1.50	0.22	1.05	10.87	183	1.50	136	94	53	0	0	2	1
	SHREVEPORT	56	35	70	30	46	-2	***	***	***	***	***	***	***	88	47	0	2	***	***
MA	BOSTON	40	27	45	20	33	2	0.16	-0.68	0.16	5.87	117	0.16	22	79	47	0	6	1	0
	WORCESTER	36	23	40	16	29	3	0.21	-0.63	0.20	7.61	152	0.21	29	80	52	0	7	2	0
MD	BALTIMORE	45	30	51	22	37	2	1.21	0.50	1.18	8.20	190	1.21	199	79	49	0	5	2	1
ME	CARIBOU	24	13	34	1	19	5	0.09	-0.63	0.09	3.42	81	0.09	14	86	64	0	7	1	0
	PORTLAND	35	19	43	15	27	1	0.00	-0.86	0.00	6.56	125	0.00	0	84	54	0	7	0	0
MI	ALPENA	32	22	37	16	27	5	0.21	-0.22	0.11	1.75	78	0.13	35	91	66	0	7	3	0
	GRAND RAPIDS	34	29	37	24	31	5	0.07	-0.52	0.06	1.79	59	0.01	2	86	67	0	7	2	0
	HOUGHTON LAKE	29	23	30	22	26	6	0.03	-0.09	0.03	0.17	16	0.03	26	92	77	0	2	1	0
	LANSING	33	27	36	22	30	5	0.07	-0.43	0.04	2.19	93	0.03	7	86	67	0	7	2	0
	MUSKEGON	37	32	40	29	34	6	0.13	-0.44	0.06	1.72	59	0.07	15	77	61	0	5	3	0
	TRAVERSE CITY	34	29	37	26	31	6	0.07	-0.34	0.03	1.31	60	0.04	11	85	64	0	7	3	0
MN	DULUTH	27	16	31	5	22	9	0.30	0.04	0.17	3.39	200	0.30	135	89	74	0	7	3	0
	INT_L FALLS	26	15	32	11	20	14	0.29	0.08	0.16	1.48	127	0.29	160	88	72	0	7	2	0
	MINNEAPOLIS	32	24	37	21	28	11	0.04	-0.18	0.02	2.30	168	0.02	12	84	66	0	7	3	0
	ROCHESTER	30	22	36	20	26	10	0.02	-0.20	0.02	1.13	76	0.00	0	94	77	0	7	1	0
	ST. CLOUD	30	22	35	20	26	13	0.07	-0.11	0.06	3.41	334	0.06	37	86	71	0	7	2	0
MO	COLUMBIA	38	26	42	20	32	0	0.08	-0.42	0.06	2.81	111	0.08	18	96	68	0	7	2	0
	KANSAS CITY	37	26	43	22	31	2	0.14	-0.14	0.14	3.16	174	0.14	58	96	72	0	7	1	0
	SAINT LOUIS	41	31	45	28	36	3	0.19	-0.48	0.15	2.35	76	0.19	32	78	56	0	5	2	0
	SPRINGFIELD	41	25	48	21	33	-1	0.02	-0.65	0.01	1.14	35	0.02	4	94	66	0	7	2	0
MS	JACKSON	55	30	66	25	43	-4	0.63	-0.57	0.62	3.89	63	0.63	61	92	45	0	5	2	1
	MERIDIAN	55	29	65	23	42	-5	0.62	-0.61	0.60	3.33	52	0.62	58	94	47	0	5	2	1
	TUPELO	48	28	64	23	38	-5	0.65	-0.47	0.41	3.12	45	0.65	68	90	55	0	6	3	0
MT	BILLINGS	42	22	46	18	32	6	0.00	-0.13	0.00	0.35	51	0.00	0	78	43	0	7	0	0
	BUTTE	34	7	41	-3	21	2	0.00	-0.10	0.00	0.32	56	0.00	0	89	52	0	7	0	0
	CUT BANK	42	19	52	13	30	9	0.00	-0.06	0.00	0.02	5	0.00	0	87	44	0	7	0	0
	GLASGOW	32	17	40	11	24	10	0.00	-0.11	0.00	0.08	15	0.00	0	95	73	0	7	0	0
	GREAT FALLS	43	21	50	16	32	8	0.00	-0.13	0.00	0.08	13	0.00	0	80	41	0	7	0	0
	HAVRE	37	17	42	14	27	10	0.00	-0.11	0.00	0.20	40	0.00	0	93	62	0	7	0	0
	MISSOULA	32	22	39	18	27	4	0.05	-0.19	0.01	0.52	40	0.04	17	97	74	0	7	4	0
NC	ASHEVILLE	46	27	54	18	37	-2	0.93	-0.05	0.93	7.26	144	0.93	110	84	48	0	7	1	1
	CHARLOTTE	51	29	54	24	40	-2	1.08	0.23	1.08	7.35	171	1.08	148	81	44	0	6	1	1
	GREENSBORO	47	26	51	21	37	-3	1.03	0.26	1.03	8.08	210	1.03	154	85	43	0	6	1	1
	HATTERAS	52	39	63	33	46	-4	0.62	-0.44	0.51	7.70	136	0.62	67	95	60	0	0	2	1
	RALEIGH	53	30	58	25	42	0	0.86	0.05	0.85	7.65	187	0.86	123	81	40	0	5	2	1
	WILMINGTON	57	32	66	27	45	-3	0.52	-0.33	0.30	8.64	195	0.52	71	87	43	0	5	3	0
ND	BISMARCK	30	19	45	13	25	11	0.07	-0.06	0.04	0.50	70	0.07	64	92	72	0	7	2	0
	DICKINSON	34	17	48	11	25	9	0.00	-0.06	0.00	0.15	63	0.00	0	96	70	0	7	0	0
	FARGO	32	19	37	6	25	15	0.03	-0.17	0.02	2.66	250	0.03	19	87	69	0	7	2	0
	GRAND FORKS	28	17	34	-2	22	15	0.12	-0.02	0.12	1.05	135	0.12	103	85	72	0	7	1	0
	JAMESTOWN	31	18	37	14	24	13	0.00	-0.08	0.00	0.58	140	0.00	0	87	72	0	7	0	0
NE	GRAND ISLAND	34	22	42	13	28	2	0.03	-0.11	0.02	1.27	132	0.03	26	94	76	0	7	2	0
	LINCOLN	36	22	44	13	29	4	0.00	-0.18	0.00	1.48	111	0.00	0	93	70	0	7	0	0
	NORFOLK	32	20	38	9	26	3	0.03	-0.11	0.02	1.56	161	0.03	25	92	74	0	7	2	0
	NORTH PLATTE	38	18	44	13	28	2	0.03	-0.06	0.03	0.42	78	0.03	40	93	67	0	7	1	0
	OMAHA	34	23	42	17	28	3	0.02	-0.17	0.02	1.68	122	0.02	12	94	70	0	7	1	0
	SCOTTSBLUFF	43	15	52	12	29	2	0.00	-0.10	0.00	0.11	19	0.00	0	90	48	0	7	0	0
	VALENTINE	34	15	43	4	24	0	0.05	-0.02	0.04	0.63	130	0.05	92	95	73	0	7	2	0
NH	CONCORD	37	19	44	14	28	5	0.04	-0.66	0.04	6.93	161	0.04	6	83	47	0	7	1	0
NJ	ATLANTIC_CITY	45	26	48	18	36	0	1.04	0.24	1.03	7.62	148	1.04	153	87	51	0	6	2	1
	NEWARK	45	30	50	25	38	4	0.47	-0.35	0.47	7.96	164	0.47	67	73	46	0	5	1	0
NM	ALBUQUERQUE	46	26	52	24	36	0	0.22	0.13	0.21	1.22	200	0.22	285	81	37	0	7	2	0
NV	ELY	39	10	48	3	25	-1	0.23	0.06	0.12	0.27	33	0.23	159	84	41	0	7	4	0
	LAS VEGAS	57	42	61	38	49	1	0.04	-0.10	0.04	0.10	17	0.04	33	62	28	0	0	1	0
	RENO	45	27	50	24	36	0	0.13	-0.17	0.12	0.51	37	0.13	50	83	41	0	6	2	0
	WINNEMUCCA	42	19	50	11	30	-1	0.69	0.45	0.54	0.96	78	0.69	348	90	54	0	7	3	1
NY	ALBANY	37	25	43	16	31	5	0.15	-0.49	0.15	5.80	152	0.15	27	78	56	0	6	1	0
	BINGHAMTON	32	23	35	17	28	4	0.46	-0.18	0.42	6.35	175	0.44	81	86	68	0	7	3	0
	BUFFALO	34	28	37	24	31	3	0.63	-0.22	0.52	4.39	98	0.61	84	91	70	0	7	3	1
	ROCHESTER	34	28	38	23	31	3	0.28	-0.32	0.22	3.05	95	0.25	48	83	67	0	6	3	0
	SYRACUSE	33	26	38	22	29	4	0.70	0.02	0.59	5.79	149	0.68	117	86	63	0	6	4	1
OH	AKRON-CANTON	34	26	37	18	30	1	0.24	-0.48	0.17	2.61	74	0.07	10	94	69	0	7	5	0
	CINCINNATI	39	27	43	22	33	1	0.23	-0.59	0.23	2.11	47	0.23	32	95	64	0	7	1	0
	CLEVELAND	36	29	39	23	33	3	0.42	-0.33	0.20	3.51	96	0.22	33	88	65	0	6	4	0
	COLUMBUS	37	26	42	18	32	1	0.16	-0.60	0.08	3.35	88	0.13	19	96	64	0	7	4	0
	DAYTON	37	27	41	19	32	2	0.13	-0.65	0.09	2.02	54	0.10	15	87	62	0	7	3	0
	MANSFIELD	33	26	37	17	29	2	0.10	-0.69	0.07	2.43	65	0.03	4	94	71	0	7	2	0

Based on 1991-2020 normals

***** Not Available**

Weather Data for the Week Ending January 6, 2024

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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
	TOLEDO	36	28	40	16	32	3	0.11	-0.49	0.08	1.74	58	0.03	6	87	66	0	4	2	0
	YOUNGSTOWN	34	27	36	19	31	3	0.23	-0.54	0.13	2.74	71	0.10	15	91	66	0	6	4	0
OK	OKLAHOMA CITY	47	29	53	24	38	0	0.30	-0.01	0.22	2.03	99	0.30	113	92	60	0	6	2	0
	TULSA	44	27	52	23	36	-3	0.31	-0.12	0.31	2.11	75	0.31	84	91	60	0	5	1	0
OR	ASTORIA	50	39	52	33	45	1	1.96	-0.56	0.69	14.46	112	1.96	90	94	74	0	0	5	2
	BURNS	38	24	44	16	31	5	0.29	-0.03	0.15	1.91	106	0.29	107	93	70	0	7	5	0
	EUGENE	47	38	52	33	42	2	0.97	-0.51	0.66	7.18	84	0.97	76	96	81	0	0	4	1
	MEDFORD	48	36	58	33	42	3	0.84	0.15	0.38	3.04	73	0.84	143	98	69	0	0	4	0
	PENDLETON	43	34	49	32	38	5	0.41	0.04	0.23	1.87	102	0.41	128	88	69	0	3	3	0
	PORTLAND	48	39	51	37	44	3	1.56	0.35	0.92	10.15	149	1.56	150	89	68	0	0	5	1
	SALEM	46	37	51	34	42	1	1.34	-0.11	0.92	8.87	108	1.34	107	98	79	0	0	4	1
PA	ALLENTOWN	40	25	43	18	32	1	1.03	0.28	1.03	9.51	211	1.03	160	85	53	0	6	1	1
	ERIE	35	28	39	21	32	2	0.28	-0.61	0.09	3.41	69	0.20	26	87	65	0	6	4	0
	MIDDLETOWN	42	30	45	24	36	4	1.10	0.44	1.00	6.22	156	1.06	188	82	53	0	5	3	1
	PHILADELPHIA	44	30	47	25	37	3	1.02	0.30	1.02	8.80	191	1.02	164	79	50	0	5	1	1
	PITTSBURGH	37	29	41	20	33	4	0.33	-0.36	0.21	2.81	81	0.31	53	85	59	0	6	3	0
	WILKES-BARRE	37	27	41	22	32	3	0.94	0.33	0.94	6.71	202	0.94	180	82	55	0	6	1	1
	WILLIAMSPORT	39	27	42	21	33	4	0.61	-0.07	0.56	5.74	148	0.60	102	87	55	0	5	3	1
RI	PROVIDENCE	41	24	46	20	33	1	0.22	-0.71	0.22	7.02	128	0.22	27	86	47	0	6	1	0
SC	CHARLESTON	61	37	75	29	49	-1	0.31	-0.43	0.28	7.17	179	0.31	49	85	38	0	2	2	0
	COLUMBIA	55	30	60	24	43	-3	0.56	-0.31	0.55	5.13	115	0.56	75	94	43	0	5	2	1
	FLORENCE	57	31	72	23	44	-3	0.63	-0.15	0.61	3.88	93	0.63	95	91	43	0	5	2	1
	GREENVILLE	50	26	56	22	38	-4	1.14	0.11	1.14	6.01	110	1.14	129	82	41	0	6	1	1
SD	ABERDEEN	31	16	36	9	23	10	0.03	-0.12	0.03	1.85	250	0.03	25	90	72	0	7	1	0
	HURON	31	18	35	10	24	8	0.06	-0.08	0.05	1.29	163	0.06	50	95	75	0	7	2	0
	RAPID CITY	37	18	47	13	28	3	0.00	-0.08	0.00	0.30	71	0.00	0	91	61	0	7	0	0
	SIOUX FALLS	32	22	37	19	27	9	0.06	-0.09	0.06	1.87	194	0.06	48	90	68	0	7	1	0
TN	BRISTOL	45	27	52	16	36	-1	0.61	-0.19	0.55	4.21	94	0.61	88	90	54	0	4	2	1
	CHATTANOOGA	49	31	59	25	40	-2	0.30	-0.85	0.18	6.44	103	0.30	30	86	47	0	5	2	0
	KNOXVILLE	46	30	55	24	38	-1	0.47	-0.59	0.47	6.45	109	0.47	51	87	54	0	5	1	0
	MEMPHIS	47	32	61	27	39	-3	0.47	-0.55	0.43	3.04	47	0.47	54	85	55	0	5	2	0
	NASHVILLE	47	31	59	24	39	-1	0.50	-0.39	0.50	3.26	62	0.50	65	81	52	0	5	1	1
TX	ABILENE	51	33	66	29	42	-3	0.81	0.57	0.62	2.21	150	0.81	390	95	58	0	3	2	1
	AMARILLO	45	25	53	19	35	-3	0.20	0.04	0.19	1.93	227	0.20	141	93	53	0	7	2	0
	AUSTIN	59	41	72	38	50	-2	1.37	0.70	1.26	3.46	105	1.37	238	97	53	0	0	3	1
	BEAUMONT	63	41	74	36	52	-1	2.40	1.22	1.35	6.41	107	2.40	237	96	54	0	0	3	2
	BROWNSVILLE	76	52	81	45	64	2	0.70	0.45	0.70	0.81	56	0.70	329	98	55	0	0	1	1
	CORPUS CHRISTI	69	49	77	42	59	1	2.07	1.71	1.11	2.58	115	2.07	693	99	62	0	0	3	2
	DEL RIO	65	41	74	35	53	1	0.05	-0.08	0.04	0.67	80	0.05	46	86	39	0	0	2	0
	EL PASO	58	35	64	29	47	2	0.00	-0.11	0.00	0.19	26	0.00	0	59	23	0	3	0	0
	FORT WORTH	54	38	67	33	46	0	0.80	0.17	0.43	4.33	128	0.80	148	89	54	0	0	3	0
	GALVESTON	63	49	71	47	56	0	3.48	2.54	1.73	6.42	127	3.48	426	97	66	0	0	3	3
	HOUSTON	63	41	73	38	52	-1	2.48	1.66	1.42	5.02	105	2.48	350	96	54	0	0	4	2
	LUBBOCK	49	28	56	22	38	-2	0.00	-0.16	0.00	0.58	65	0.00	0	96	50	0	7	0	0
	MIDLAND	51	32	67	27	42	-3	0.00	-0.14	0.00	0.56	78	0.00	0	96	53	0	4	0	0
	SAN ANGELO	54	33	73	28	44	-3	0.12	-0.07	0.12	2.25	212	0.12	71	94	55	0	5	1	0
	SAN ANTONIO	60	42	72	37	51	-1	0.72	0.29	0.59	1.81	76	0.72	196	96	52	0	0	3	1
	VICTORIA	64	44	76	38	54	0	1.46	0.86	0.81	2.14	74	1.46	281	96	58	0	0	4	2
	WACO	57	35	70	29	46	-1	1.33	0.67	1.02	4.43	129	1.33	235	95	55	0	1	4	1
	WICHITA FALLS	52	31	56	26	42	0	0.47	0.18	0.43	1.85	102	0.47	190	92	58	0	5	2	0
UT	SALT LAKE CITY	40	26	45	23	33	2	0.16	-0.16	0.15	1.13	67	0.16	58	92	62	0	7	2	0
VA	LYNCHBURG	46	23	51	16	35	-2	0.01	-0.75	0.01	5.05	121	0.01	1	88	45	0	7	0	0
	NORFOLK	49	33	58	29	41	-2	0.96	0.21	0.89	7.36	187	0.96	148	89	55	0	5	3	1
	RICHMOND	48	28	51	25	38	-1	1.07	0.33	1.05	9.89	238	1.07	168	87	48	0	6	2	1
	ROANOKE	46	30	53	22	38	0	0.71	0.03	0.71	4.87	132	0.71	120	75	41	0	6	1	1
	WASH/DULLES	45	29	51	20	37	2	0.98	0.33	0.97	6.66	172	0.98	175	78	46	0	5	2	1
VT	BURLINGTON	33	22	39	13	27	4	0.09	-0.44	0.07	5.75	194	0.09	20	78	60	0	6	2	0
WA	OLYMPIA	47	38	50	35	43	4	1.17	-0.64	0.47	11.53	122	1.17	75	92	76	0	0	5	0
	QUILLAYUTE	52	41	53	34	46	5	2.07	-1.39	0.62	16.80	99	2.05	68	86	72	0	0	6	1
	SEATTLE-TACOMA	47	39	49	35	43	1	1.09	-0.24	0.43	9.38	136	1.09	94	94	71	0	0	5	0
	SPOKANE	38	32	40	31	35	6	0.27	-0.23	0.18	3.56	129	0.26	60	96	80	0	5	4	0
	YAKIMA	41	32	46	26	37	6	0.18	-0.12	0.10	1.59	94	0.18	69	91	73	0	3	2	0
WI	EAU CLAIRE	31	23	35	17	27	11	0.03	-0.22	0.03	1.44	92	0.03	14	85	67	0	7	1	0
	GREEN BAY	31	24	35	17	28	8	0.34	-0.01	0.27	1.57	76	0.27	90	86	68	0	7	2	0
	LA CROSSE	34	26	37	23	30	10	0.03	-0.25	0.03	0.95	54	0.00	0	82	63	0	7	1	0
	MADISON	32	24	35	18	28	7	0.13	-0.19	0.09	1.71	89	0.09	32	89	70	0	7	2	0
	MILWAUKEE	37	29	39	24	33	7	0.27	-0.14	0.26	2.46	110	0.26	72	76	58	0	6	2	0
WV	BECKLEY	37	24	44	17	31	-2	0.45	-0.24	0.41	3.18	81	0.44	73	89	60	0	7	4	0
	CHARLESTON	43	28	50	19	35	-1	0.48	-0.24	0.48	2.53	60	0.48	77	94	54	0	6	1	0
	ELKINS	38	25	46	14	32	0	0.59	-0.14	0.30	3.18	75	0.51	81	95	64	0	7	4	0
	HUNTINGTON	44	27	52	19	35	0	0.96	0.25	0.93	2.64	63	0.96	158	84	54	0	5	2	1
WY	CASPER	40	15	46	9	28	3	0.04	-0.08	0.04	0.11	14	0.04	38	87	40	0	7	1	0
	CHEYENNE	41	18	52	13	30	1	0.01	-0.07	0.01	0.13	22	0.01	16	81	35	0	7	1	0
	LANDER	30	11	34	9	21	0	0.00	-0.12	0.00	0.71	97	0.00	0	82	58	0	7	0	0
	SHERIDAN	44	15	47	11	30	6	0.02	-0.10	0.02	0.12	19	0.02	18	81	40	0	7	1	0

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

December Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: As December began, producers had completed most harvest activities for 2023 crops. By November 26, only 4 percent of the U.S. corn acreage had not been harvested, compared to the 5-year average of 5 percent. On the same date, the U.S. cotton harvest was 83 percent complete, ahead of the 5-year average of 79 percent. Thereafter, December featured periods of significant precipitation in several areas of the country, including large sections of the Plains, upper Midwest, and Atlantic Coast States. However, drier-than-normal December weather dominated the mid-South and interior sections of the western U.S. In the latter region, mountain snowpack was slow to build, due to a combination of mild weather and lack of storminess. According to the California Department of Water Resources, the average water equivalency of the Sierra Nevada snowpack stood at 2.5 inches by month's end, approximately one quarter of the end-of-December average.

Mild December weather covered not only the West, but also the remainder of the country. Characteristic of El Niño, which developed several months ago but only recently began to strongly influence North American weather patterns, the warmest weather—with temperatures averaging at least 6 to 12°F above normal—stretched from the northern and central Plains into the Northeast. Even relatively cooler areas, such as the lower Southeast, noted near- or slightly above-normal December temperatures. For parts of the northern Plains and upper Midwest, it was the warmest December on record. In South Dakota alone, it was the warmest December in dozens of communities, including Huron, Mitchell, Mobridge, Sioux Falls, Sisseton, and Watertown. In each of those locations, previous records for December warmth had been set in 1939 or earlier.

The mild weather, accompanied by periods of rain and snow, favored overwintering wheat, despite lingering pockets of drought. Based on *U.S. Drought Monitor*-derived statistics, drought covered 30 percent of the nation's winter wheat production area on December 26, down from a recent (October 2023) peak of 49 percent. According to USDA/NASS, winter wheat rated in very poor to poor condition improved in a few key production states between November 26 and the end of December. For example, winter wheat rated very poor to poor in Kansas decreased from 32 to 21 percent during that 5-week period. At the same time, wheat rated good to excellent jumped from 53 to 67 percent in Oklahoma and from 32 to 43 percent in Kansas.

Nationally, drought coverage decreased from 36 to 32 percent between November 28 and December 26, according to the *U.S. Drought Monitor*. General improvement in the drought situation was noted across the central and southern Plains, upper Midwest, and Pacific Northwest, as well as an area stretching from the central Gulf Coast into the middle Atlantic States. Record-setting December wetness affected portions of the mid-Atlantic, including Richmond, VA, and Allentown, PA. However, those improvements were partially offset by worsening drought in a few areas, including the mid-South, lower Midwest, and portions of the northern Rockies and environs.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its warmest December during the 129-year period of record, with a monthly average temperature of 40.0°F that was 7.3°F above the 1901-2000 mean. Until 2023, the top-three listing for highest December average temperature included 2021 (39.4°F); 2015 (38.7°F); and 1939 (37.7°F). Meanwhile, it was the nation's 54th-wettest December on record, with a monthly average precipitation of 2.55 inches, 109 percent of the long-term mean.

All states were solidly within the warmest one-third of December's historical temperature distribution. Florida, the "coolest" state, experienced its 42nd-warmest December. It was the warmest December on record in Iowa, Minnesota, Montana, Nebraska, Wisconsin, and the Dakotas, and among the ten warmest in every state across the Plains, Midwest, Northeast, and West, except New Mexico (figure 1).

State precipitation rankings ranged from the 14th-driest December in Wyoming to the wettest on record in Delaware, Minnesota, and New Jersey (figure 2). Additionally, top-ten rankings for December wetness were noted in Kansas and North Dakota, along with Maryland, New York, North Carolina, Virginia, and all six states in New England.

Figure 1 Statewide Average Temperature Ranks
December 2023
Period: 1895–2023

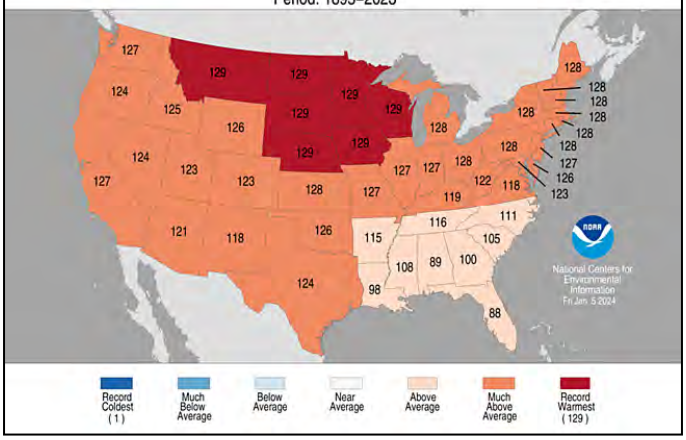
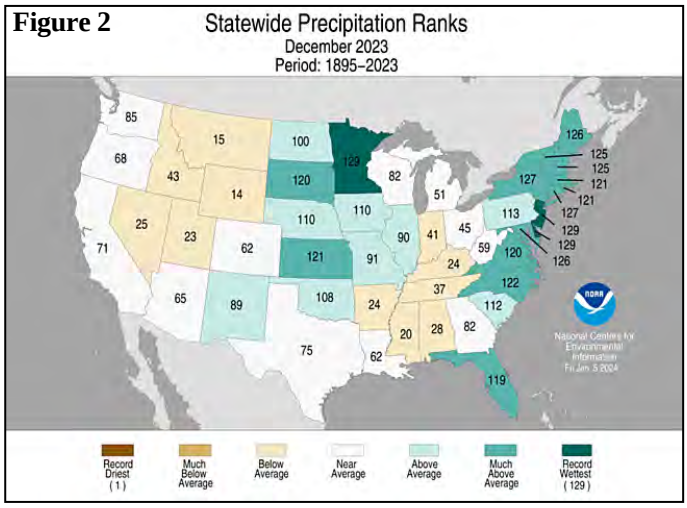


Figure 2



Summary: Early-month warmth was prominent across Florida, where record-setting highs for December 2 soared to 88°F in Punta Gorda, 87°F in Brooksville, and 86°F in Miami. The following day, on December 3, Miami's high of 89°F tied a monthly record mostly recently achieved on December 10, 2009. However, record-setting warmth soon pivoted to the Northwest, where Portland, OR, set a monthly record with a high of 67°F on December 4. Previously, Portland's highest December reading had occurred in 1993, with a temperature of 65°F on December 10. Pacific Northwestern warmth generally peaked on December 4-5, with consecutive daily-record highs in locations such as Vancouver, WA (66 and 64°F), and Hillsboro, OR (63 and 61°F). Warmth also expanded to other areas of the West, with Phoenix, AZ, notching a pair of daily-record highs (82 and 84°F, respectively) on December 5-6. In California's Central Valley, record-setting highs for December 6 reached 80°F in Bakersfield and 77°F in Fresno. The high in Fresno also tied a monthly record originally set on December 8, 2006. By the 6th, record-setting warmth arrived on the Plains, where Bismarck, ND (66°F), tied a monthly record previously set on December 6, 1939, and December 1, 2021. Daily-record highs on the 6th rose to 77°F in Pueblo, CO; 72°F in Russell, KS; and 64°F in Great Falls, MT. December 7 was another balmy day across the nation's mid-section, with daily-record highs soaring to 80°F in Gage, OK; 77°F in Borger, TX; 76°F in Garden City, KS; and 73°F in Broken Bow, NE. Later, warmth briefly overspread the South, East, and lower Midwest. Dallas-Ft. Worth, TX, collected a daily record-tying high of 80°F on December 8. The following day, Southern record-setting highs for the 9th climbed to 84°F in Victoria, TX, and Baton Rouge, LA. Elsewhere on the 9th, daily-record highs surged to 82°F in Monticello, AR; 65°F in Indianapolis, IN; and 63°F in Flint, MI. In contrast, lingering cold weather in northern New England followed some early-month snow. In Maine, Bangor reported a trio of sub-zero minimum temperatures (-2, -1, and -2°F) from December 6-8, shortly after snowfall totaled 6.4 inches on December 4.

As downpours shifted eastward along and near the Gulf Coast early in the month, Lafayette, LA (6.56 inches on the 1st), endured its second-wettest December day on record, behind only 7.10 inches on New Year's Eve 1933. Daily-record amounts in Louisiana on December 1 reached 5.54 inches in New Iberia and 2.53 inches in New Orleans. An additional 2.76 inches in New Orleans on December 2 boosted the city's 2-day total to 5.29 inches. Similarly, Gulfport, MS, measured 6.23 inches on December 1-2, aided by a 5.65-inch sum on the latter date. For Gulfport, it was the wettest December day since 1994, when 5.80 inches fell on the 3rd. Soon, precipitation—mostly rain—was widespread across the eastern one-third of the U.S., while periods of stormy weather arrived across the Northwest and Intermountain West. On December 2, daily-record totals topped the 2-inch mark in locations such as Mobile, AL (3.10 inches), and Knoxville, TN (2.26 inches). Meanwhile, Spokane, WA, received 5.6 inches of snow from November 30 – December 2. In Utah, Alta received more snow during the first 4 days of December—36.3 inches—than during all of November, when the total of 35.2 inches was 65 percent of normal. Alta's early-month snow, along with an additional 27.3 inches from December 7-9, accounted for most of the monthly total of 72.0 inches (90 percent of normal).

Farther west, however, heavy rain and melting snow sparked Northwestern flooding, especially in western sections of Washington and Oregon. Sudden Northwestern warmth melted lower- and middle-elevation snow that had fallen days earlier, adding runoff to already rain-swollen rivers. On the night of December 5-6, the Skagit River at Concrete, WA, rose 5.83 feet above flood stage—the highest water level at that gauge site since mid-November 2021. In advance of the flooding, daily-record rainfall totals for December 4 in western Washington included 4.19 inches in Quillayute and 2.93 inches in Hoquiam. Daily records were set on December 5 with totals of 2.96 inches in Olympia, WA, and 2.52 inches in Astoria, OR. During the first 10 days of December, rainfall topped the 8-inch mark in Quillayute (8.95 inches), Olympia (8.75 inches), and Hoquiam (8.22 inches). Eventually, precipitation spread eastward, with Bismarck, ND, reporting a 2.5-inch snowfall on December 8. The Western storm energy also sparked a Southern severe

thunderstorm outbreak, which peaked on December 9 with more than three dozen tornadoes and seven fatalities reported. On the 9th, a pair of deadly tornadoes touched down in Tennessee, with the first—an EF3 with estimated winds near 150 mph and a path length of more than 11 miles—tracking from Montgomery County, TN, where four fatalities occurred, into Todd County, KY. The second deadly tornado, an EF2 with estimated winds near 125 mph, resulted in three fatalities (in Davidson County, TN) while traversing a nearly 30-mile path from about 5 miles north of Nashville into Sumner County. Elsewhere, a period of windy weather in southern California led to widespread gusts above 60 mph. Sandberg, CA, clocked a gust to 66 mph on December 7, followed by a gust to 64 mph two days later.

Around the middle of December, back-to-back storms affected the eastern U.S. The initial system, which primarily struck on December 10-11, featured a rain-to-snow transition in portions of the middle and northern Atlantic States. The 10th was the wettest December day on record in Richmond, VA, where 2.73 inches fell. Previously, Richmond's wettest December day had occurred in 2008, when 2.62 inches fell on the 11th. Elsewhere in the East on December 10, daily-record totals ranged from 2 to 3 inches in locations such as Greensboro, NC (2.86 inches); Bridgeport, CT (2.75 inches); New York's JFK Airport (2.38 inches); and Danville, VA (2.09 inches). The following day, December 11, daily-record totals in New England included 1.81 inches in Bangor, ME, and 1.75 inches in Boston, MA. Despite some wet snow at storm's end, streaks of not experiencing a calendar-day snowfall of an inch or greater continued in several mid-Atlantic cities. In Washington, DC, and Richmond, VA, a 1-inch snowfall last occurred on January 16, 2022, with streaks reaching 714 days by December 31, 2023. In Maryland, Baltimore's streak—which started on January 29, 2022—reached 702 days by year's end. Other "snowless" streaks—no calendar-day totals of an inch or greater—climbed to 701 days by December 31 in Philadelphia, PA, and 686 days at New York's Central Park. The second storm, which arrived in the East on December 16-17, delivered heavy rain from Florida northward. Before reaching the East, the late-week system also produced significant precipitation in the south-central U.S. For example, consecutive daily-record precipitation totals occurred on December 13-14 in locations such as Borger, TX (1.01 and 1.72 inches, respectively), and Guymon, OK (1.25 inches both days). Meanwhile in Colorado, December 13-14 snowfall totaled 5.4 inches in Pueblo and 4.1 inches in Colorado Springs. However, mostly rain fell as far north as the upper Great Lakes region, where—on December 15—Duluth, MN, noted a daily-record precipitation sum of 0.80 inch, including snowfall totaling 0.2 inch. Eventually, an intensifying low-pressure system moving northward from the Gulf of Mexico delivered heavy rain and gusty winds across Florida. Leesburg, FL, experienced its wettest December day on record, with 2.97 inches falling on the 16th. Previously, Leesburg's wettest December day occurred in 1983, with 2.38 inches falling on the 12th. Elsewhere in Florida, daily-record rainfall totals for December 16 reached 3.06 inches in Melbourne, 2.57 inches in Daytona Beach, 2.46 inches in Sarasota-Bradenton, and 2.33 inches in Orlando. As the second storm moved northward, portions of the Atlantic Coast States were pounded with heavy rain and high winds. Once-in-a-generation flooding struck parts of Maine, with water rising to the highest levels since April 1987 along portions of the Androscoggin and Kennebec Rivers. At the height of the storm, tens of thousands of customers in Maine lost electrical service. Additionally, an impressive storm surge occurred in some coastal locations. On December 17 in South Carolina, Charleston Harbor experienced its fourth-highest water level on record—2.86 feet above flood stage—behind only the hurricane-induced high-water marks of September 22, 1989 (Hugo); August 11, 1940 (unnamed hurricane); and September 11, 2017 (Irma). Meanwhile, daily-record rainfall totals for the 17th ranged from 3 to 4 inches or more in locations such as Lumberton, NC (4.08 inches); downtown Charleston, SC (3.92 inches); Wilmington, NC (3.23 inches); and Savannah, GA (3.16 inches). For Lumberton, it was the wettest December day on record, topping 3.30 inches on December 26, 1943. Downtown Charleston also had a historically wet day, edging the monthly record of 3.82 inches, originally set on December 18, 2009. For the second time this month, Richmond, VA, experienced its wettest December day on record. Richmond netted 2.73 and 2.74 inches, respectively, on December 10 and 17. In North Carolina, peak wind gusts on December 17 were clocked to 66 mph on Cherry Point and 64 mph at Billy Mitchell Airport, near Cape Hatteras. The following day, the 18th, Northeastern peak gusts included 90 mph at the Blue Hill Observatory near Milton, MA; 81 mph in Eastport, ME; 71 mph in Bangor, ME; 68 mph in Boston, MA; and 63 mph in Providence, RI. On December 17-18, Salisbury, MD, netted 5.18 inches of rain and reported a wind gust to 59 mph. With 4.04 inches on the 18th, it was also Salisbury's wettest December day (previously, 3.56 inches on December 18, 1977). Elsewhere on the 18th, daily-record totals included 3.00 inches in Mount Pocono, PA; 2.83 inches in Worcester, MA; 2.75 inches in Newark, NJ; 2.73 inches in Concord,

NH; 2.52 inches in Bangor, ME; and 2.43 inches in Providence, RI. A surge of warmth accompanying the Eastern storminess led to daily-record highs for the 18th soaring to 64°F in Hartford, CT; 63°F in Boston, MA; 62°F in Concord, NH, and 61°F in Bangor, ME.

Any lingering cool weather quickly disappeared by mid-December, following scattered daily-record lows such as 24°F (on December 11) in Austin, TX, and 27°F (on December 12) in Ramona, CA. In other areas, the mid-month period featured warm weather, but only a few record-setting temperatures. In Arizona, Nogales posted a daily-record high of 78°F on December 11. Two days later in Montana, record-setting highs for the 13th reached 58°F in Cut Bank and 53°F in Glasgow. By the 14th, warmth shifted into the upper Midwest, where daily-record highs rose to 54°F in Ashland, WI, and Sisseton, SD. Later, significant warmth appeared along the Pacific Coast. Quillayute, WA, attained 57°F each day from December 15-17, resulting in a trio of daily-record highs. In California, Anaheim collected a daily-record high (86°F) for December 16. As Western warmth spread eastward across the High Plains, daily-record highs topped the 65-degree mark on December 19 in locations such as Goodland, KS (68°F); Denver, CO (67°F); and Sidney, NE (66°F). The warmth lingered for days, with Phoenix, AZ, logging a daily-record high of 78°F on December 21. From December 20-22, Livington, MT, tallied a trio of daily-record highs (56, 57, and 56°F). Soon, warmth shifted further into the Midwest, where daily-record highs for the 23rd reached 56°F in Aberdeen, SD, and 52°F in Waterloo, IA.

During the latter part of December, storminess was geographically limited until a holiday blizzard unfolded across the nation's mid-section. On December 18, storminess clipping California produced daily-record totals in Redding (2.45 inches) and Red Bluff (2.05 inches). By December 20, heavy showers shifted into southern California, where daily-record amounts reached 1.68 inches in Santa Maria and 1.37 inches in Paso Robles. Southern California's wet weather continued through December 21, when daily-record amounts included 2.78 inches in Oxnard and 2.60 inches in Santa Barbara. Parts of southern Arizona received more than an inch of rain on December 22-23, with 2-day totals reaching 1.27 inches in Tucson, 1.19 inches in Safford, and 1.15 inches in Nogales. Farther east, daily-record amounts included 0.77 inch (on the 22nd) in Ottumwa, IA, and 0.57 inch (on the 23rd) in Pueblo, CO. Thereafter, an unusually wet weather system stalled 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), sharply reducing visibility in snow and blowing snow. Meanwhile, heavy showers in portions of the Gulf Coast States boosted daily-record 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.

The last full week of the year (December 24-30) featured 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 collected 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).

Occasionally frigid weather engulfed southwestern and interior Alaska, holding monthly temperatures more than 5°F below normal in several locations. Bethel's monthly average temperature of 4.9°F was 5.1°F below normal, aided by a minimum reading of -30°F on December 25. Farther north, Bettles registered minimum temperatures ranging from -30 to -36°F each day from December 26-30, while McGrath recorded a low of -45°F on December 26. In contrast, above-normal temperatures dominated the Arctic Coast, as well as areas along and near the Canadian border. Near the boundary between frigid and mild air, as well as southeastern Alaska, several heavy precipitation events unfolded. 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. Southeastern Alaska's storminess generally peaked on December 12, when peak wind gusts were clocked at 65 mph in Juneau and 63 mph in Sitka. 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. Periods of warmth accompanied the storminess, with Ketchikan tallying a trio of daily-record highs (50, 50, and 53°F) from December 27-29. Juneau's monthly average temperature of 35.9°F was 5.6°F above normal.

Hawaii's heaviest rain fell during the second half of the month, resulting in some improvement in the drought situation. According to the U.S. Drought Monitor, Hawaii's drought coverage fell from 94 to 22 percent between November 28 and December 26, based on some well-targeted showers. In Lihue, Kauai, the December 17-23 weekly rainfall total of 2.23 inches included a daily-record sum of 1.66 inches on the 20th. On the Big Island, Hilo received more than an inch of rain on December 20 and 22. 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).

Fieldwork

Fieldwork summary provided by USDA/NASS

Most of the nation was warmer than normal during December. Large parts of the upper Midwest, northern Plains, and northern Rockies recorded monthly temperatures 9°F or more above normal. Portions of Minnesota recorded temperatures 12°F or more above normal. Meanwhile, most of the Great Basin and northern Rockies, as well as large parts of the Great Lakes, Ohio Valley, South, and Southwest, were drier than normal during December. In contrast, much of the Atlantic Coast, Gulf Coast, New England, and Great Plains recorded at least twice the normal amount of December precipitation. Some locations in the Rockies and Southwest also recorded at least twice the normal amount of precipitation.

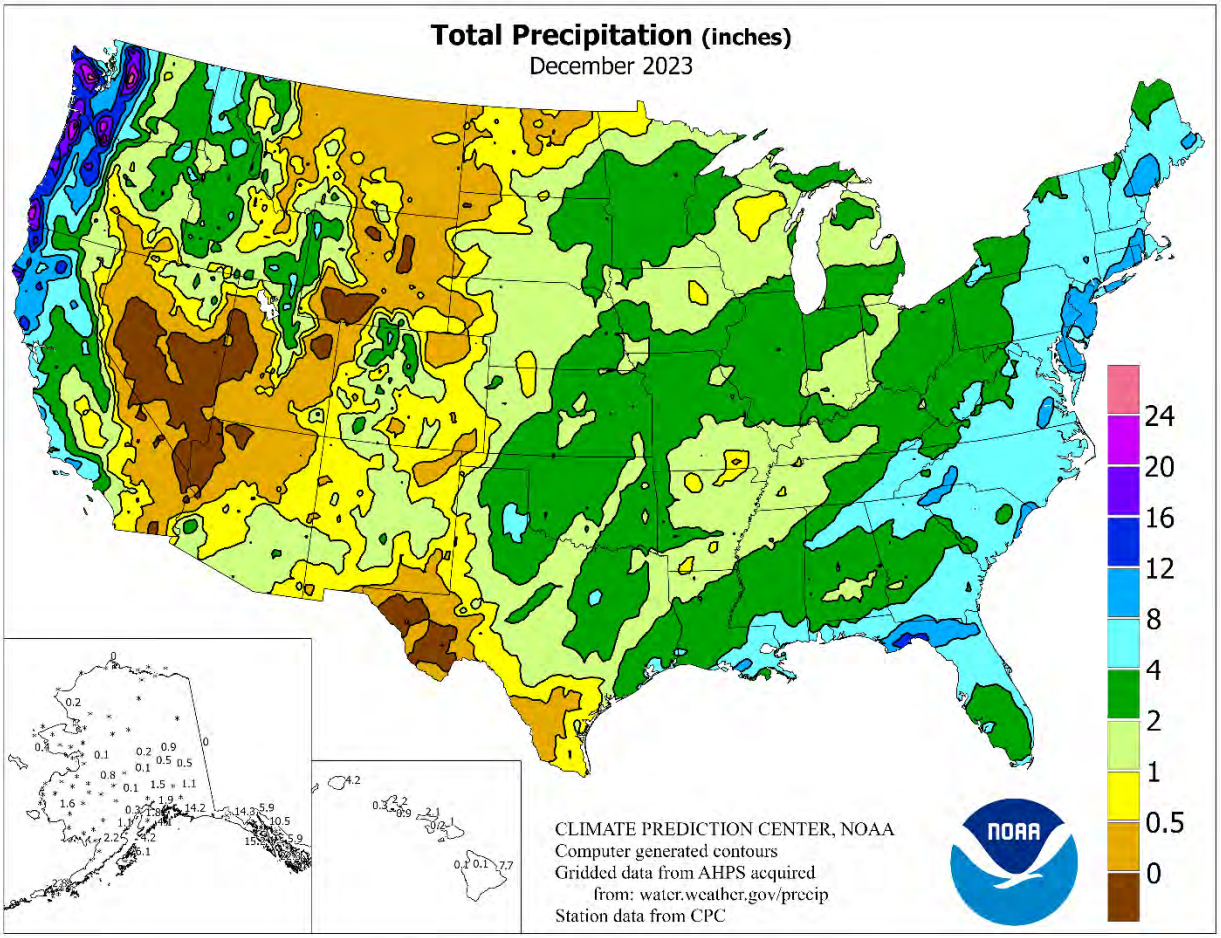
Ninety-six percent of the 2023 corn acreage was harvested by November 26, three percentage points behind last year but 1 point ahead of the 5-year average pace.

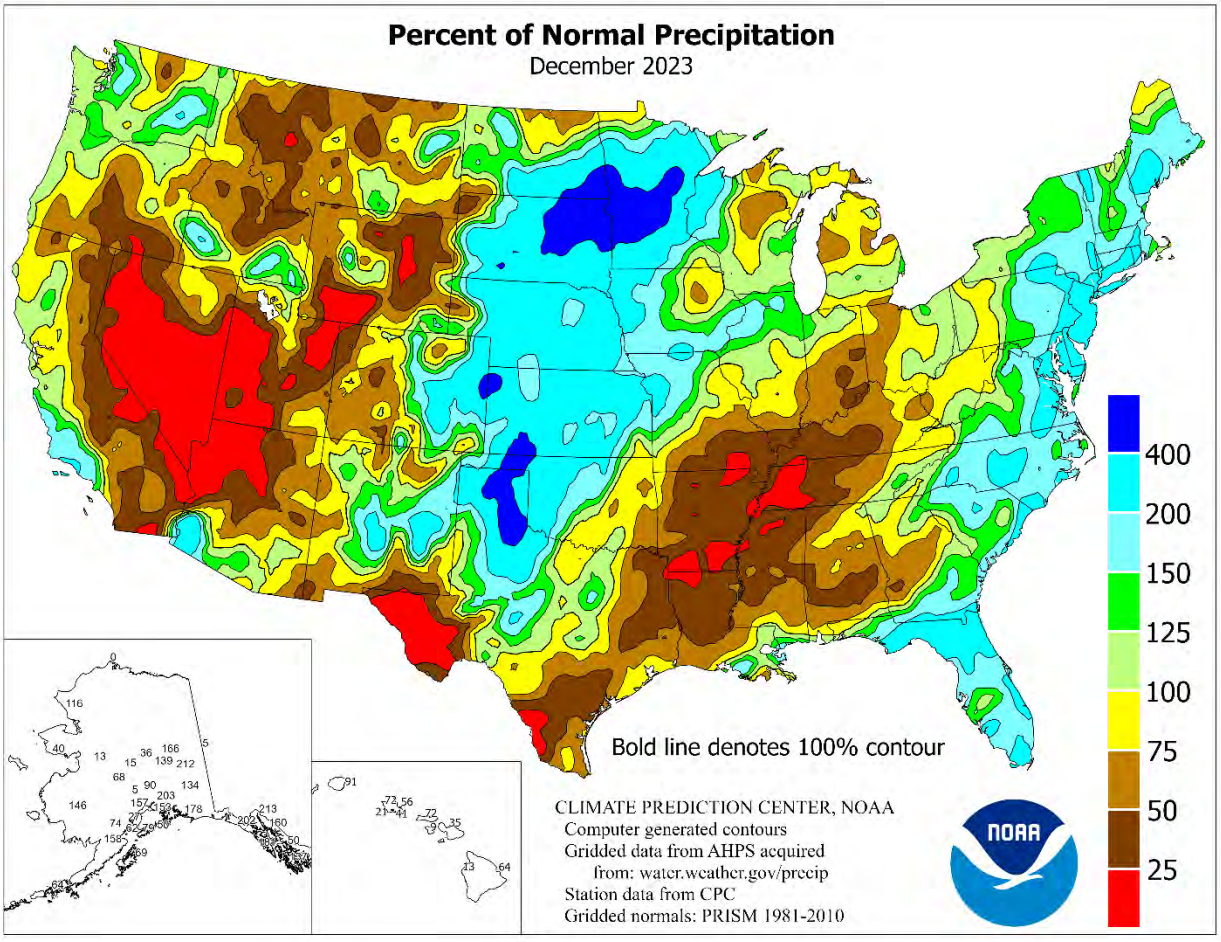
Nationwide, 91 percent of the winter wheat acreage had emerged by November 26, one percentage point ahead of last year and 2 points ahead of the 5-year average. As of November 26, fifty percent of the 2024 winter wheat acreage was reported in good to excellent condition, 16 percentage points above the same time last year.

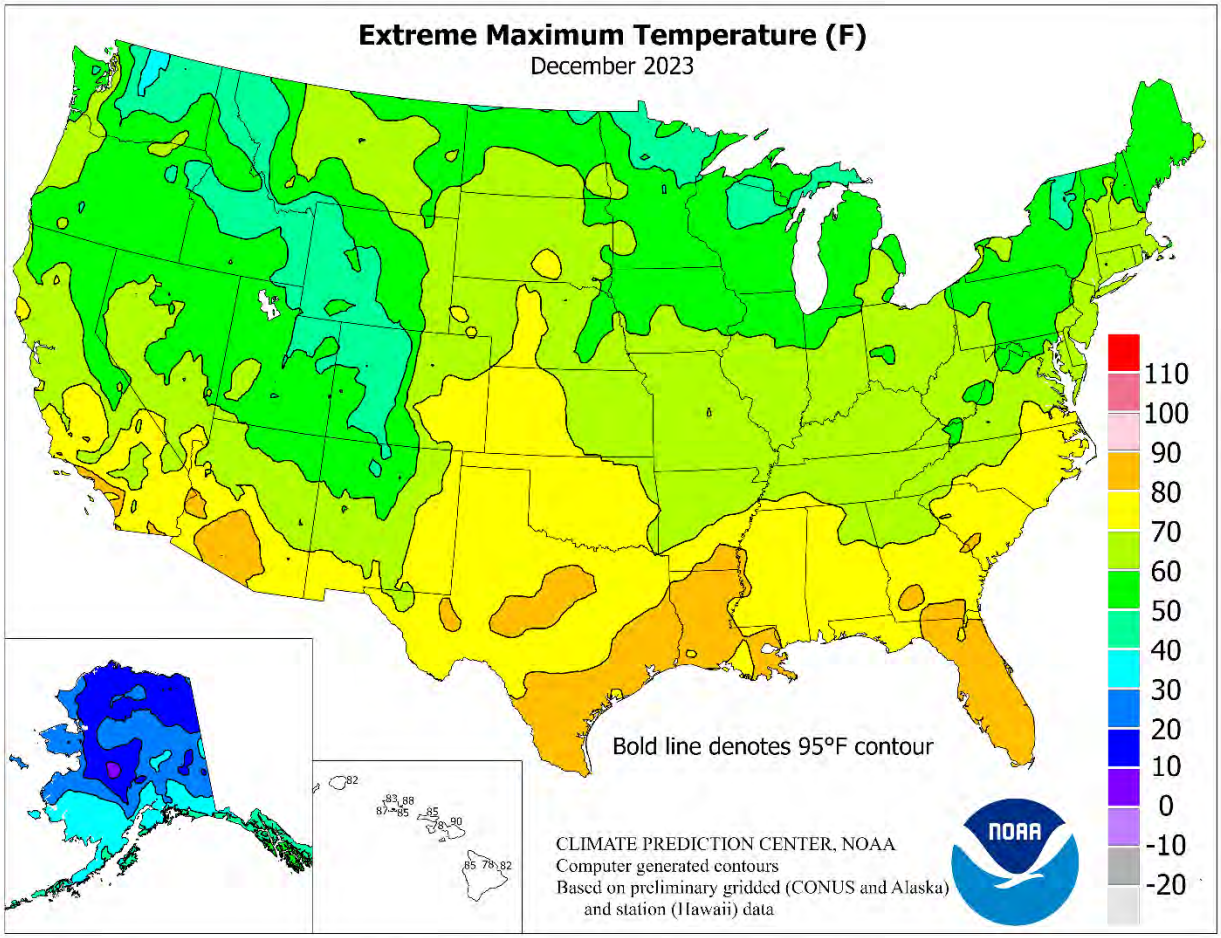
By November 26, eighty-three percent of the nation's cotton acreage was harvested, equal to last year but 4 percentage points ahead of the 5-year average.

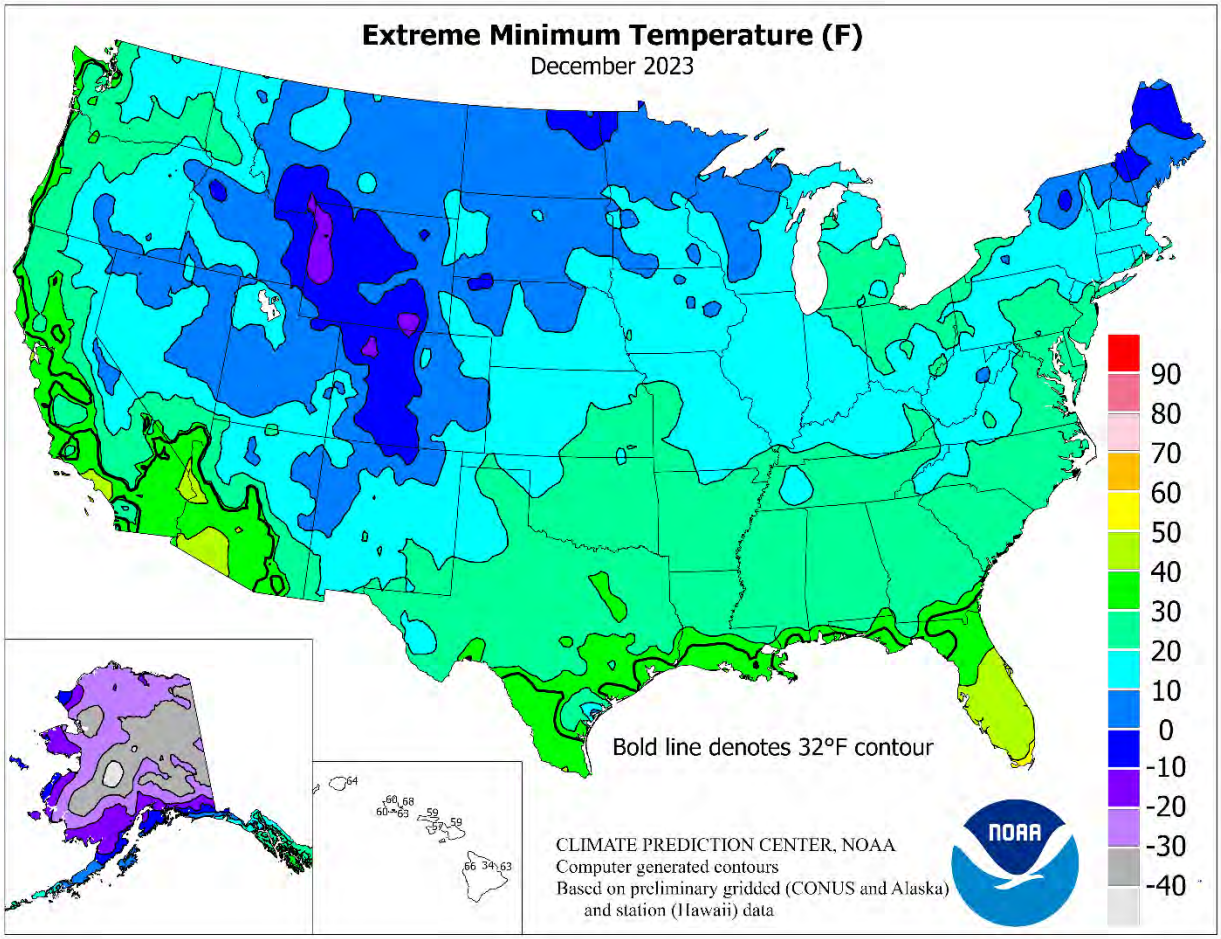
Ninety-six percent of the nation's peanut acreage was harvested as of November 26, one percentage point behind last year but 1 point ahead of the 5-year average.

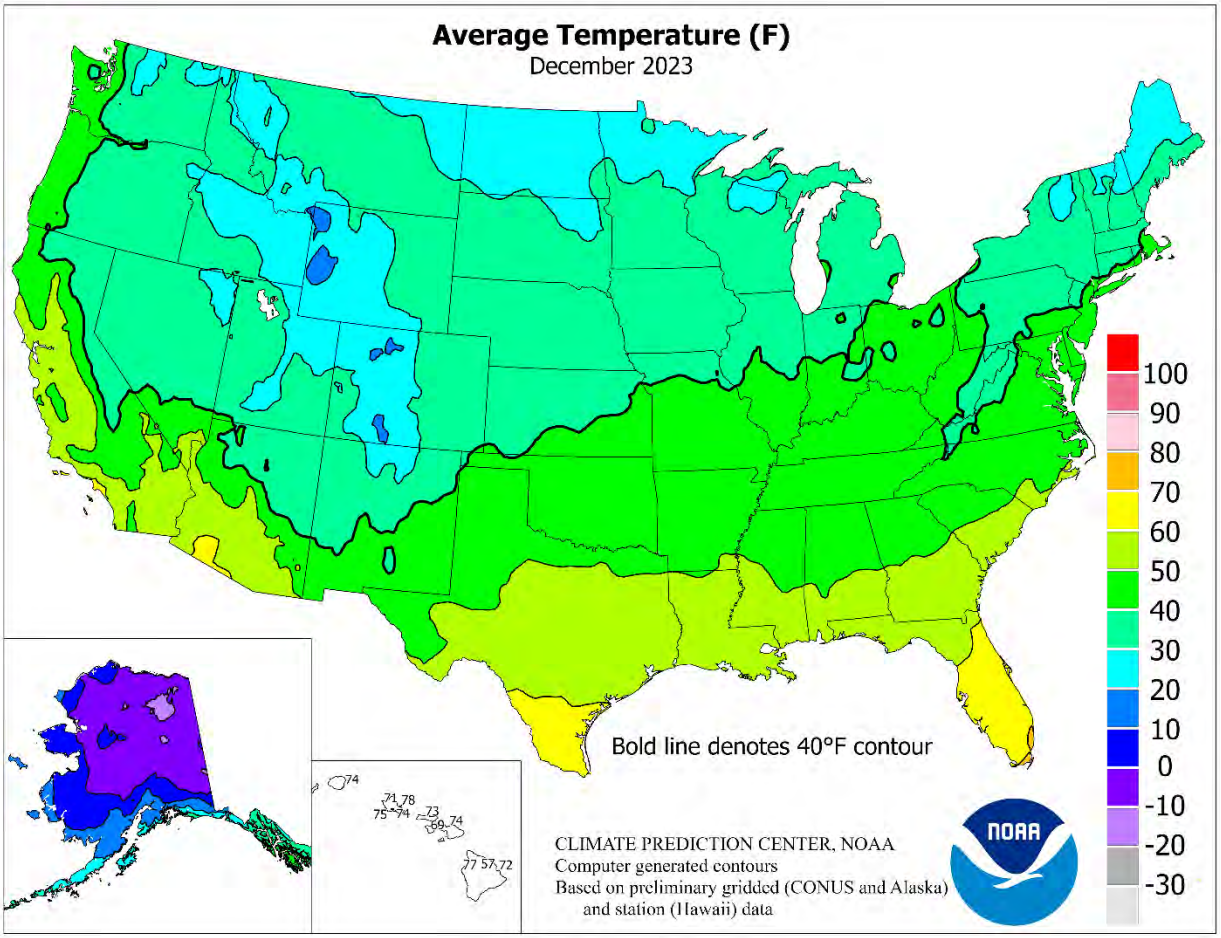
By November 26, eighty-six percent of the 2023 sunflower crop was harvested, 12 percentage points behind last year but 2 points ahead of the 5-year average.

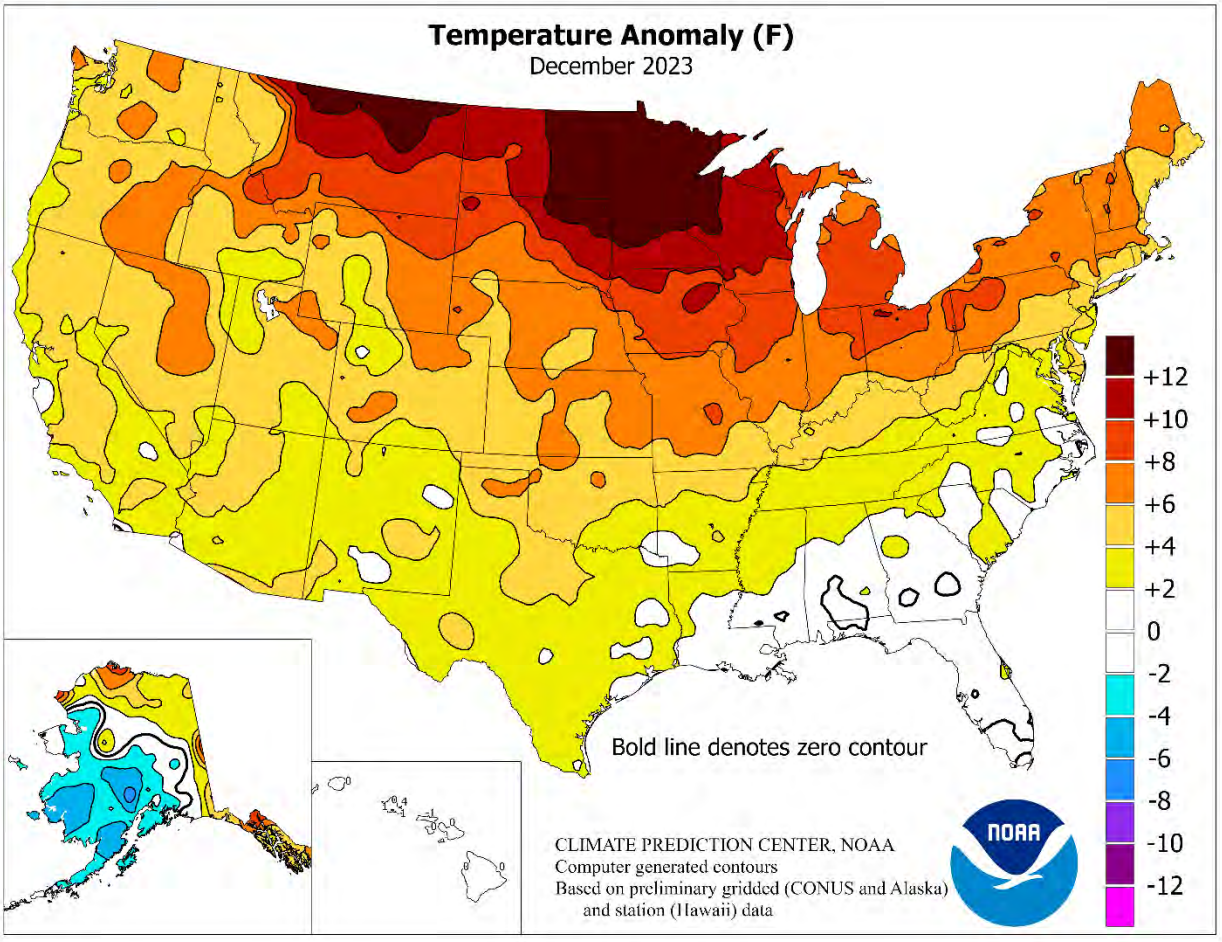

Total Precipitation (inches)
December 2023
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
NOAA


Percent of Normal Precipitation
December 2023
400
200
150
125
100
75
50
25
Bold line denotes 100% contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
Gridded normals: PRISM 1981-2010
NOAA


Extreme Maximum Temperature (F)
December 2023
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
December 2023
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Average Temperature (F)
December 2023
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Temperature Anomaly (F)
December 2023
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes zero contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

National Weather Data for Selected Cities

December 2023

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, ˚F		PRECIP.		STATES AND STATIONS	TEMP, ˚F		PRECIP.		STATES AND STATIONS	TEMP, ˚F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AK ANCHORAGE	17	-2	1.82	0.66	WICHITA	41	5	2.61	1.38	TOLEDO	42	9	1.71	-0.74
BARROW	2	0	0.00	-0.22	KY LEXINGTON	44	7	2.00	-2.07	YOUNGSTOWN	41	8	2.64	-0.54
FAIRBANKS	-4	0	0.94	0.37	LOUISVILLE	45	5	1.79	-2.34	OK OKLAHOMA CITY	45	5	1.73	-0.06
JUNEAU	36	6	10.46	3.93	PADUCAH	44	5	1.89	-2.41	TULSA	45	4	1.80	-0.63
KODIAK	27	-4	6.06	-2.74	LA BATON ROUGE	56	3	6.49	1.17	OR ASTORIA	47	4	12.50	1.82
NOME	7	-2	0.43	-0.63	LAKE CHARLES	56	1	2.37	-2.19	BURNS	33	7	1.62	0.10
AL BIRMINGHAM	49	2	4.70	-0.17	NEW ORLEANS	58	1	9.37	4.55	EUGENE	46	5	6.21	-1.00
HUNTSVILLE	47	2	4.95	-0.93	SHREVEPORT	53	4	***	***	MEDFORD	45	5	2.20	-1.33
MOBILE	55	2	6.05	0.60	MA BOSTON	41	5	5.71	1.41	PENDLETON	39	5	1.46	-0.04
MONTGOMERY	51	0	1.57	-3.43	WORCESTER	38	8	7.40	3.11	PORTLAND	46	5	8.59	2.82
AR FORT SMITH	47	4	1.94	-1.53	MD BALTIMORE	44	5	6.99	3.28	SALEM	45	4	7.53	0.57
LITTLE ROCK	49	6	1.42	-3.66	ME CARIBOU	27	7	3.33	-0.28	PA ALLENTOWN	39	4	8.48	4.62
AZ FLAGSTAFF	34	4	0.54	-1.36	PORTLAND	35	4	6.56	2.06	ERIE	41	7	3.21	-0.96
PHOENIX	61	5	0.74	0.01	MI ALPENA	35	8	1.62	-0.25	MIDDLETOWN	41	5	5.16	1.73
PRESCOTT	43	4	0.60	-0.39	GRAND RAPIDS	38	8	1.78	-0.70	PHILADELPHIA	43	5	7.78	3.81
TUCSON	57	4	1.22	0.26	HOUGHTON LAKE	32	6	0.14	-0.80	PITTSBURGH	43	9	2.50	-0.34
CA BAKERSFIELD	54	5	0.64	-0.46	LANSING	38	9	2.15	0.26	WILKES-BARRE	39	6	5.77	2.98
EUREKA	51	3	6.23	-1.87	MUSKEGON	41	9	1.64	-0.77	WILLIAMSPORT	40	7	5.14	1.87
FRESNO	53	6	0.67	-1.12	TRAVERSE CITY	38	9	1.26	-0.53	RI PROVIDENCE	40	4	6.80	2.15
LOS ANGELES	60	3	3.56	1.33	MN DULUTH	30	13	3.09	1.61	SC CHARLESTON	54	2	6.85	3.50
REDDING	52	5	7.42	1.11	INT_L FALLS	28	16	1.19	0.20	COLUMBIA	49	1	4.57	0.88
SACRAMENTO	51	4	4.70	1.27	MINNEAPOLIS	34	12	2.28	1.10	FLORENCE	50	1	3.25	-0.22
SAN DIEGO	59	1	0.85	-0.83	ROCHESTER	32	11	1.13	-0.15	GREENVILLE	46	1	4.87	0.29
SAN FRANCISCO	56	5	3.82	-0.32	ST. CLOUD	32	14	3.35	2.48	SD ABERDEEN	30	12	1.82	1.21
STOCKTON	52	4	2.64	0.23	MO COLUMBIA	42	7	2.74	0.65	HURON	31	11	1.22	0.56
CO ALAMOSA	22	4	0.39	0.05	KANSAS CITY	40	7	3.02	1.45	RAPID CITY	33	8	0.30	-0.06
CO SPRINGS	37	6	0.58	0.35	SAINT LOUIS	45	8	2.17	-0.33	SIOUX FALLS	34	11	1.81	0.98
DENVER INTL	37	6	0.13	-0.23	SPRINGFIELD	43	6	1.11	-1.50	TN BRISTOL	42	3	3.60	-0.16
GRAND JUNCTION	34	6	0.54	-0.05	MS JACKSON	51	2	3.26	-1.87	CHATTANOOGA	47	3	6.14	0.89
PUEBLO	36	4	1.30	1.01	MERIDIAN	50	0	2.72	-2.56	KNOXVILLE	45	3	5.98	0.98
CT BRIDGEPORT	41	4	8.20	4.22	TUPELO	49	3	2.47	-3.47	MEMPHIS	49	4	2.57	-2.92
HARTFORD	39	6	7.41	3.33	MT BILLINGS	37	9	0.35	-0.22	NASHVILLE	46	3	2.76	-1.67
DC WASHINGTON	45	4	6.24	2.83	BUTTE	25	6	0.32	-0.16	TX ABILENE	52	4	1.40	0.14
DE WILMINGTON	42	4	7.98	4.13	CUT BANK	35	12	0.02	-0.29	AMARILLO	43	4	1.72	1.02
FL DAYTONA BEACH	63	1	4.66	2.32	GLASGOW	31	13	0.08	-0.35	AUSTIN	56	2	2.09	-0.63
JACKSONVILLE	57	1	6.45	3.67	GREAT FALLS	38	12	0.08	-0.44	BEAUMONT	57	2	4.01	-0.97
KEY WEST	72	-1	5.89	3.73	HAVRE	33	12	0.20	-0.20	BROWNSVILLE	67	2	0.11	-1.10
MIAMI	71	0	3.81	1.37	MISSOULA	29	5	0.48	-0.60	CORPUS CHRISTI	63	3	0.51	-1.43
ORLANDO	65	2	3.66	1.18	NC ASHEVILLE	44	2	6.33	2.14	DEL RIO	58	5	0.61	-0.10
PENSACOLA	57	1	4.74	-0.67	CHARLOTTE	47	3	6.27	2.70	EL PASO	50	4	0.19	-0.44
TALLAHASSEE	56	1	10.62	6.38	GREENSBORO	45	2	7.05	3.89	FORT WORTH	53	5	3.54	0.70
TAMPA	65	0	4.43	1.87	HATTERAS	53	1	7.08	2.34	GALVESTON	61	2	2.94	-1.29
WEST PALM BEACH	69	0	3.86	0.38	RALEIGH	49	4	6.79	3.40	HOUSTON	57	2	2.54	-1.50
GA ATHENS	48	1	4.18	-0.24	WILMINGTON	51	2	8.12	4.43	LUBBOCK	46	4	0.58	-0.17
ATLANTA	50	2	3.63	-0.94	ND BISMARCK	28	10	0.43	-0.17	MIDLAND	49	3	0.56	-0.03
AUGUSTA	49	0	4.29	0.42	DICKINSON	30	10	0.15	-0.04	SAN ANGELO	51	3	2.13	1.24
COLUMBUS	51	0	1.86	-2.93	FARGO	31	16	2.63	1.73	SAN ANTONIO	57	3	1.09	-0.91
MACON	51	1	1.90	-2.67	GRAND FORKS	26	14	0.93	0.27	VICTORIA	59	2	0.68	-1.66
SAVANNAH	54	1	4.57	1.37	JAMESTOWN	29	13	0.58	0.24	WACO	52	3	3.11	0.24
HI HILO	73	0	7.72	-4.35	NE GRAND ISLAND	34	5	1.24	0.40	WICHITA FALLS	48	5	1.38	-0.18
HONOLULU	74	-1	0.89	-1.29	LINCOLN	35	6	1.48	0.30	UT SALT LAKE CITY	37	4	0.96	-0.44
KAHULUI	74	0	0.99	-1.81	NORFOLK	33	8	1.53	0.69	VA LYNCHBURG	42	3	5.04	1.54
LIHUE	74	0	4.21	-0.43	NORTH PLATTE	34	6	0.39	-0.07	NORFOLK	48	2	6.40	3.12
IA BURLINGTON	38	8	2.04	0.16	OMAHA	35	6	1.66	0.44	RICHMOND	45	3	8.81	5.31
CEDAR RAPIDS	35	10	0.93	-0.66	SCOTTSBLUFF	36	8	0.11	-0.41	ROANOKE	45	4	4.16	1.08
DES MOINES	37	10	1.52	-0.06	VALENTINE	32	6	0.58	0.15	WASH/DULLES	43	5	5.68	2.38
DUBUQUE	34	10	1.95	0.15	NH CONCORD	35	7	6.89	3.19	VT BURLINGTON	35	7	5.66	3.16
SIOUX CITY	33	9	1.57	0.58	NJ ATLANTIC_CITY	43	4	6.58	2.11	WA OLYMPIA	45	6	10.36	2.50
WATERLOO	35	9	0.76	-0.68	NEWARK	44	6	7.49	3.35	QUILLAYUTE	48	7	14.75	0.91
ID BOISE	36	4	1.26	-0.28	NM ALBUQUERQUE	40	3	1.00	0.46	SEATTLE-TACOMA	45	3	8.29	2.57
LEWISTON	41	6	1.16	0.03	NV ELY	32	6	0.04	-0.63	SPOKANE	35	6	3.30	0.96
POCATELLO	29	3	1.02	-0.11	LAS VEGAS	53	5	0.06	-0.39	YAKIMA	38	7	1.42	-0.02
IL CHICAGO/O_HARE	39	8	2.96	0.85	RENO	40	4	0.38	-0.72	WI EAU CLAIRE	33	13	1.41	0.06
MOLINE	38	9	2.62	0.58	WINNEMUCCA	36	5	0.28	-0.75	GREEN BAY	35	10	1.30	-0.45
PEORIA	40	9	2.84	0.63	NY ALBANY	37	7	5.65	2.39	LA CROSSE	35	10	0.95	-0.54
ROCKFORD	36	9	3.11	1.18	BINGHAMTON	37	9	5.91	2.83	MADISON	35	9	1.62	-0.01
SPRINGFIELD	40	7	2.98	0.84	BUFFALO	39	8	3.78	0.02	MILWAUKEE	39	10	2.20	0.32
IN EVANSVILLE	43	6	1.95	-1.83	ROCHESTER	40	8	2.80	0.12	WV BECKLEY	40	4	2.74	-0.54
FORT WAYNE	40	9	1.67	-0.80	SYRACUSE	38	8	5.11	1.82	CHARLESTON	43	4	2.05	-1.52
INDIANAPOLIS	41	7	1.15	-1.77	OH AKRON-CANTON	39	6	2.54	-0.35	ELKINS	39	5	2.67	-0.91
SOUTH BEND	39	10	2.72	0.31	CINCINNATI	41	6	1.88	-1.85	HUNTINGTON	44	6	1.68	-1.89
KS CONCORDIA	39	8	1.46	0.42	CLEVELAND	42	7	3.29	0.30	WY CASPER	32	7	0.07	-0.54
DODGE CITY	40	6	2.35	1.39	COLUMBUS	42	7	3.22	0.09	CHEYENNE	34	6	0.11	-0.37
GOODLAND	36	5	0.96	0.49	DAYTON	42	7	1.92	-1.13	LANDER	25	3	0.71	0.08
TOPEKA	41	7	2.81	1.32	MANSFIELD	39	8	2.39	-0.63	SHERIDAN	35	10	0.10	-0.43

Based on 1991-2020 normals

***** Not Available**

International Weather and Crop Summary

December 31, 2023 - January 6, 2024

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

HIGHLIGHTS

EUROPE: Unseasonable warmth persisted nearly everywhere save for northeastern-most portions of the continent, with additional heavy rain causing flooding in northern France and southern England.

MIDDLE EAST: Warmer-than-normal weather continued, accompanied by the resumption of showers from Turkey into northwestern Iran.

NORTHWESTERN AFRICA: Showers further eased drought in the east but provided only limited drought relief in Morocco and western Algeria.

SOUTHEAST ASIA: Additional rainfall in Java, Indonesia, further improved short-term moisture conditions for rice, but more rain is needed to alleviate seasonal drought.

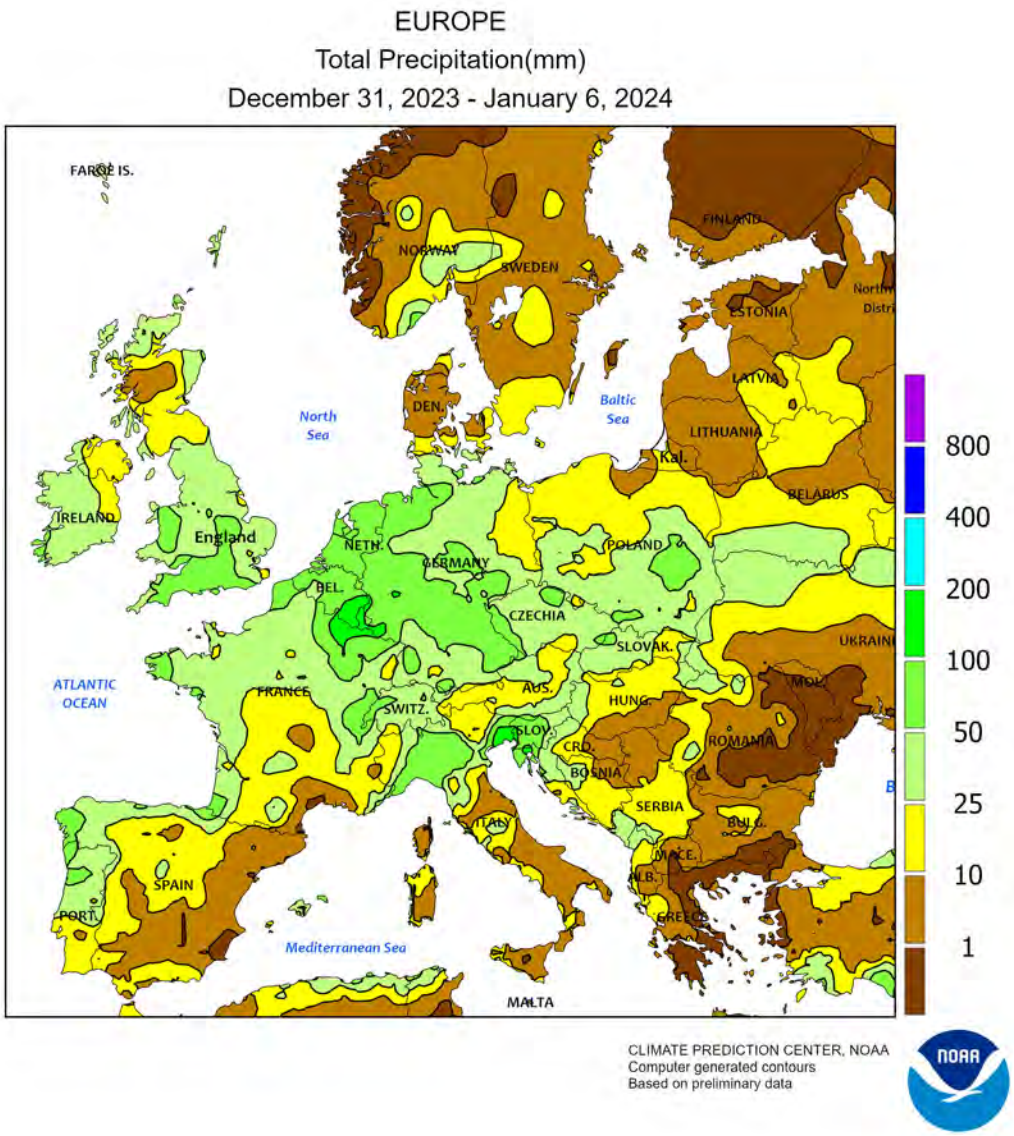
AUSTRALIA: Showers kept summer crops well watered in the east.

SOUTH AFRICA: Warm, showery weather maintained overall favorable prospects for corn and other summer crops advancing toward reproduction.

ARGENTINA: Showers helped to replenish soil moisture reserves in western and southern farming areas.

BRAZIL: Heavy rain brought much-needed relief from heat and dryness to soybeans in central and northeastern production areas.

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



EUROPE

Unseasonably warm and wet weather continued over most of the continent, with heavy rain causing flooding in parts of France and England. Temperatures during the monitoring period averaged 3 to 9°C above normal nearly everywhere (warmest in the southeast), though bitter cold (8-20°C below normal) settled over Scandinavia and the Baltic States. Consequently, the continent's primary winter crop areas remained devoid of a protective snow cover save for northeastern Europe, where rain changed to snow from Poland and northeastern Germany northward. Moderate to heavy rain (25-100 mm) fell on already saturated soils in southern England and northern France, leading to significant lowland and river flooding. Farther south, showers and thunderstorms (5-60 mm) in Portugal, Spain, and Italy sustained favorable moisture supplies for winter grain establishment.

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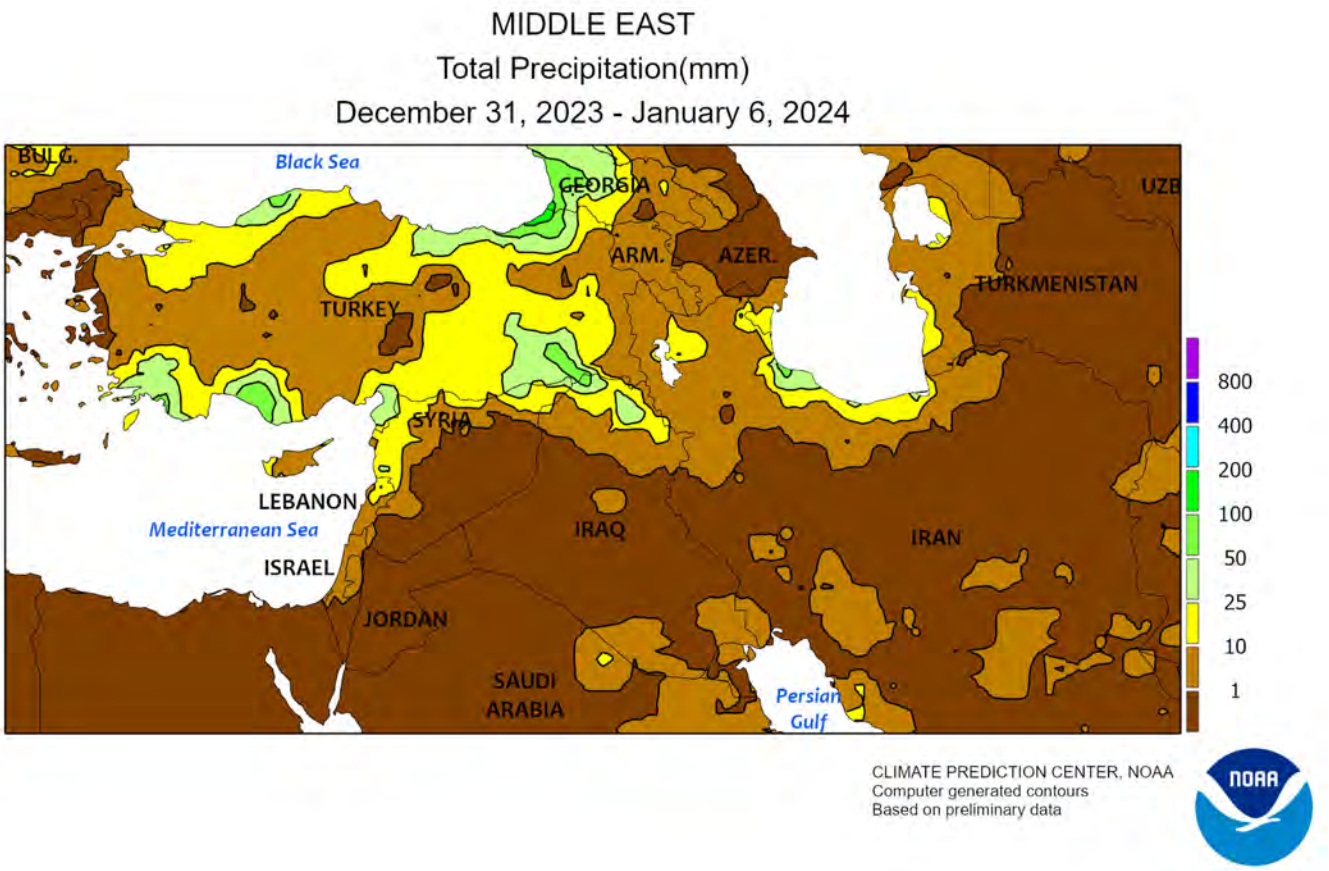

MIDDLE EAST

Continued warm weather accompanied the resumption of seasonal rains in western and central growing areas. Temperatures averaged 4 to 8°C above normal nearly everywhere, though readings closer to normal (1-4°C above normal) were noted from southeastern Turkey to the Persian Gulf. Consequently, the region's colder northern growing areas — most notably central Turkey's Anatolian Plateau and northwestern Iran — remained devoid of snow cover. Moderate to heavy showers (5-75 mm, locally more) returned from southern Turkey into Syria and northwestern Iran, boosting moisture supplies in warmer climates where wheat and barley were vegetative. Conversely, continued dryness in northeastern Iran raised drought concerns but otherwise had little impact on dormant winter crops.

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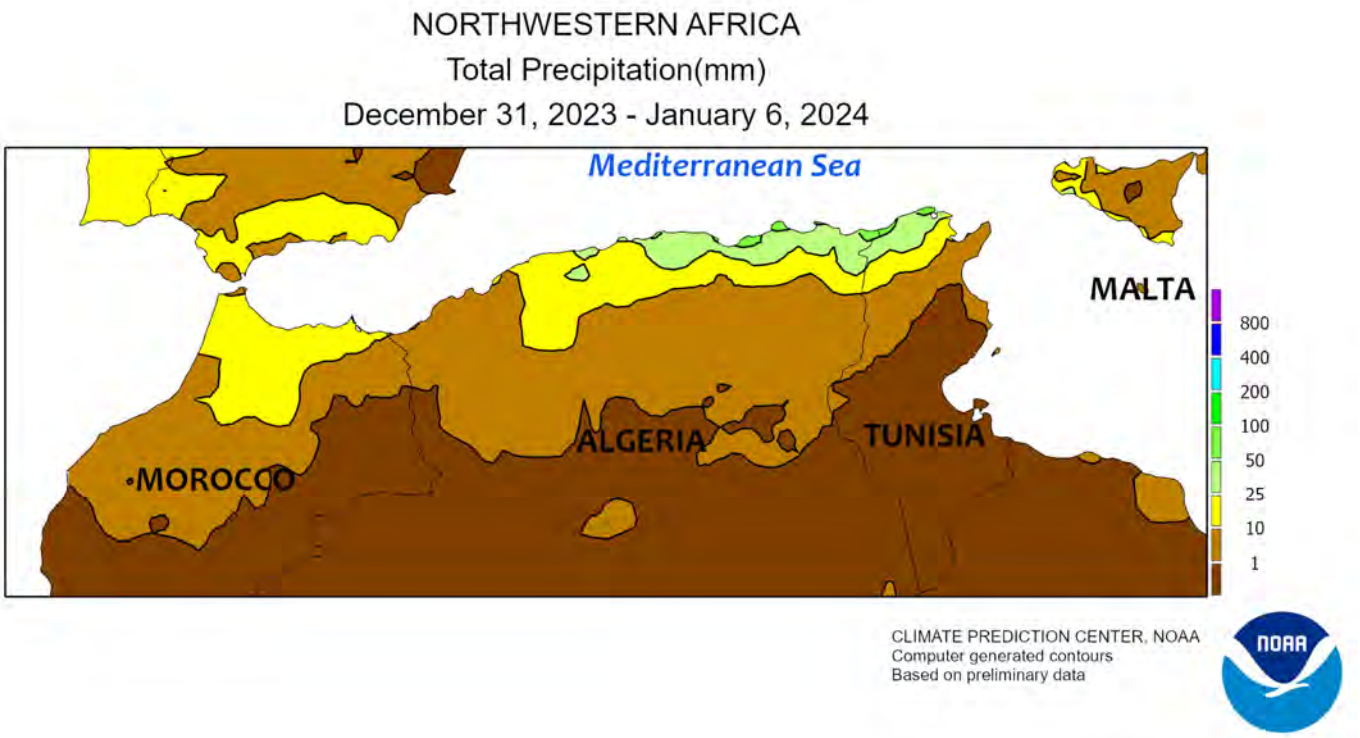

NORTHWESTERN AFRICA

Rain returned, easing drought in the east but doing little to stem the increasingly severe drought in Morocco and western Algeria. Moderate to heavy showers (10-50 mm) from north-central Algeria into northern Tunisia eased drought and improved prospects for winter wheat and barley development. In contrast, highly variable showers (1-30 mm) in Morocco and western Algeria provided localized drought relief but were mostly insufficient to reverse the severe dryness that has plagued western growing areas since November. In particular, Morocco's primary growing areas adjacent to the country's central Atlantic coast largely missed out on the rain; since September 1, rainfall in this key wheat and barley area slipped to 43 percent of normal (deficit of more than 140 mm), the second lowest of the past 30 years. Seasonal rainfall has been only marginally better in neighboring western Algeria, averaging 48 percent of normal since the onset of autumn. Time is quickly running out in western growing areas for the 2023-24 growing campaign, and reports from the field indicate some farmers have forgone planting winter grains entirely and switched to less-water-intensive specialty crops with shorter growing seasons.

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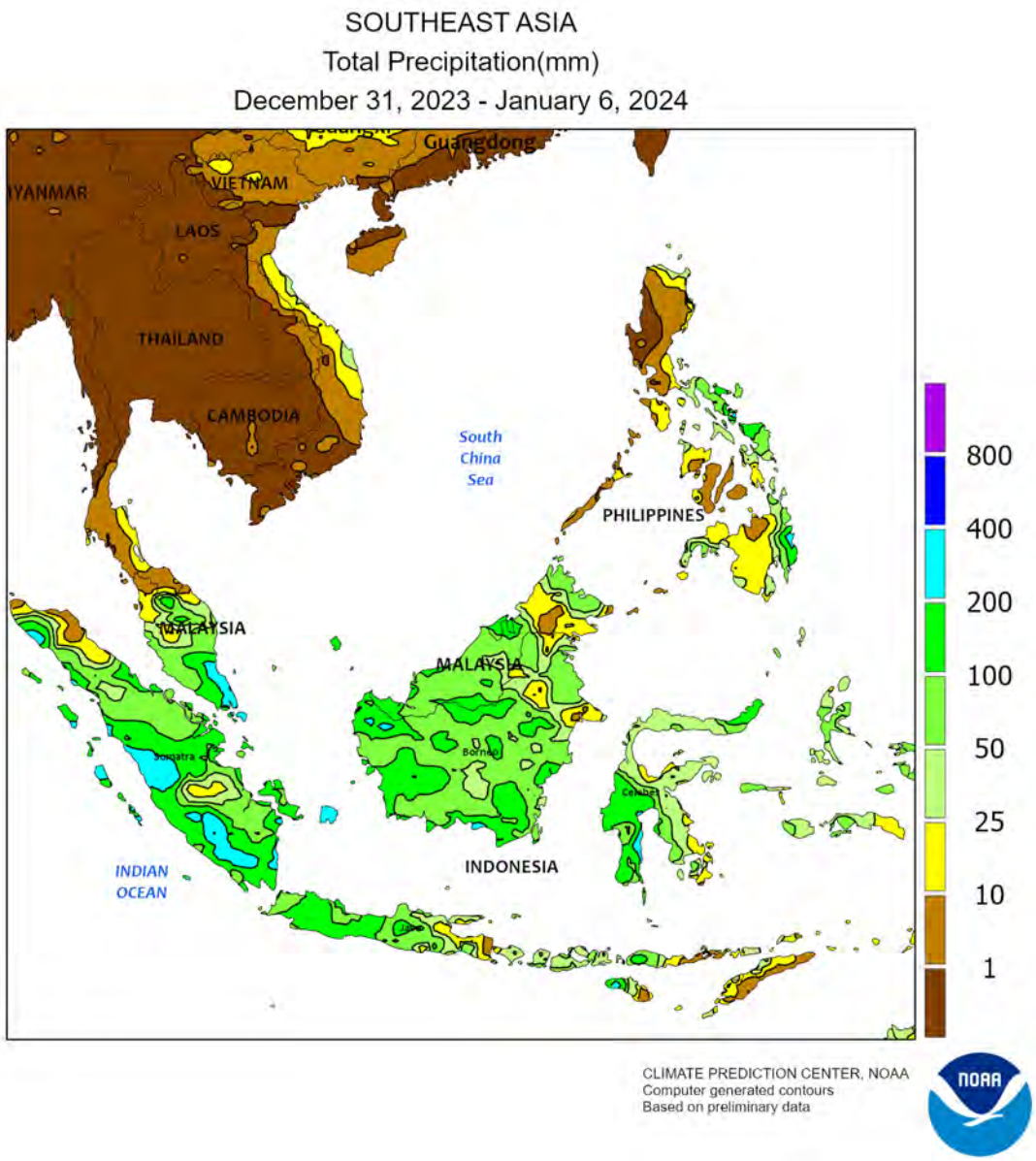

SOUTHEAST ASIA

Seasonably wet weather continued across Java, Indonesia, further improving moisture conditions for rice. However, seasonal rainfall totals remained little more than 50 percent of normal, with more precipitation needed to fully alleviate the drought for the current crop and increase irrigation reserves for subsequent crops. Meanwhile, moisture conditions for oil palm in the remainder of Indonesia and into neighboring Malaysia remained favorable with the exception of long-term rainfall deficits in eastern-most Malaysia (Sabah). Elsewhere, rainfall (25-100 mm) in the Philippines was generally limited to traditionally wetter eastern locales, favoring rice and corn in these areas, although key-producing areas in the northeast received only spotty amounts.

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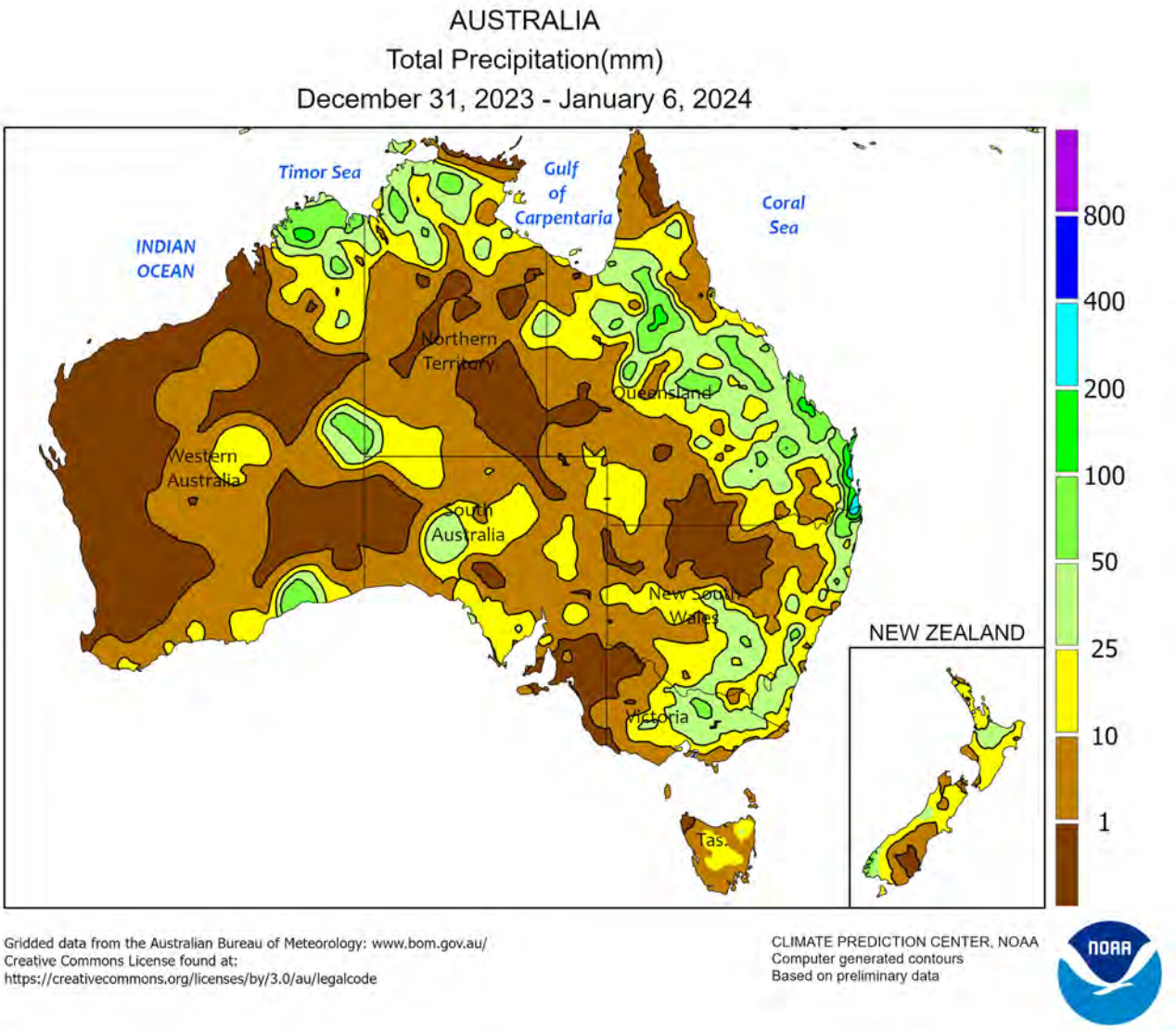

AUSTRALIA

Widespread showers (15-50 mm, locally more) kept vegetative to reproductive summer crops well watered throughout much of eastern Australia. Soil moisture remained near to above normal, which favored cotton and sorghum development and helped maintain good yield prospects. Although a pocket of drier weather was observed in northern New South Wales, good crop conditions and prospects persisted as sunny skies and ample soil moisture spurred summer crop growth. Seasonably hot weather covered major summer crop producing areas in the east. Temperatures generally averaged within 1°C of normal with maxima mostly in the middle 30s (degrees C).

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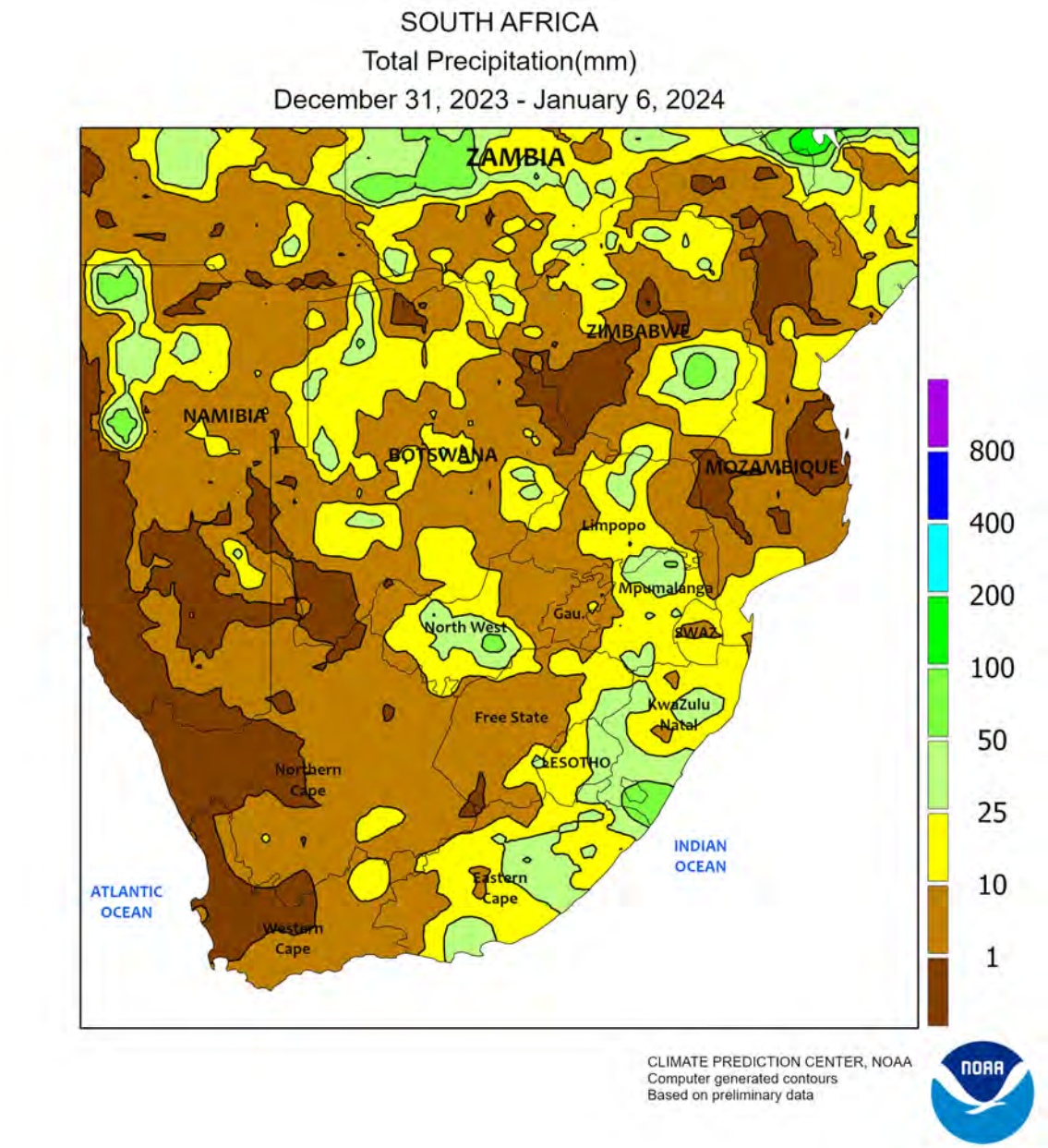

SOUTH AFRICA

Warm, showery weather maintained generally favorable prospects for corn and other rain-fed summer crops advancing toward reproduction. Rainfall was lighter than last week's unseasonably high amounts, totaling 10 to 50 mm from Limpopo southward to the Indian Coast and in parts of North West. A large section of the corn belt – including Gauteng and neighboring locations in North West and Free State – recorded less than 10 mm. Despite the overall drier pattern, temperatures were seasonable, averaging within 1°C of normal in the aforementioned areas; highest daytime temperatures ranged from the upper 20s to lower 30s (degrees C), advancing growth of corn and other summer crops in the absence of stressful heat. Farther west, warm (temperatures reaching the middle and upper 30s), sunny weather promoted growth of irrigated summer crops, including corn and cotton grown along the Orange River and tree and vine crops in Western Cape.

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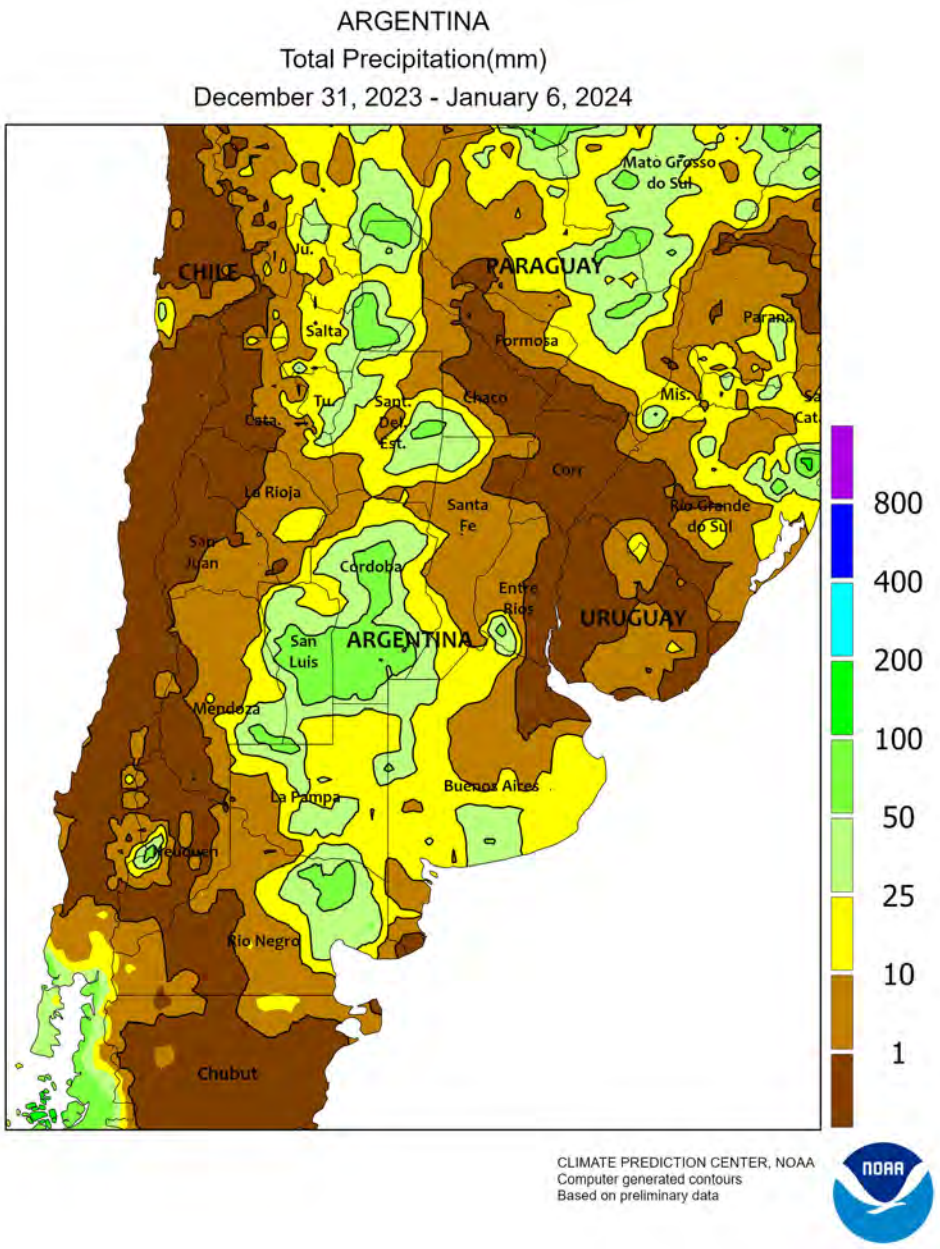

ARGENTINA

Showers in key western and southern farming areas helped to recharge moisture reserves in areas still recovering from a multi-year drought. Rainfall totaled 25 to 50 mm in southern Buenos Aires and Córdoba, with lighter amounts (locally below 10 mm) elsewhere in central Argentina. While likely slowing fieldwork, the rain maintained adequate to abundant levels of moisture for corn and soybeans. Showers were generally patchy and light elsewhere, with amounts exceeding 10 mm confined to the far northwest and northeast, mostly outside of the main production areas. The drier weather aided in the planting of cotton and other summer crops, which had been delayed by earlier periods of wetness. Weekly average temperatures ranged from near normal to as much as 2°C above normal in some of the more westerly farming regions, with daytime temperatures again reaching the upper 30s and lower 40s (degrees C) in the climatologically warmer northwest. According to the government of Argentina, corn and soybeans were 84 and 89 percent planted, respectively, as of January 4; cotton was 90 percent planted, compared with 80 percent last year, while wheat was 89 percent harvested, 10 points behind last year's pace.

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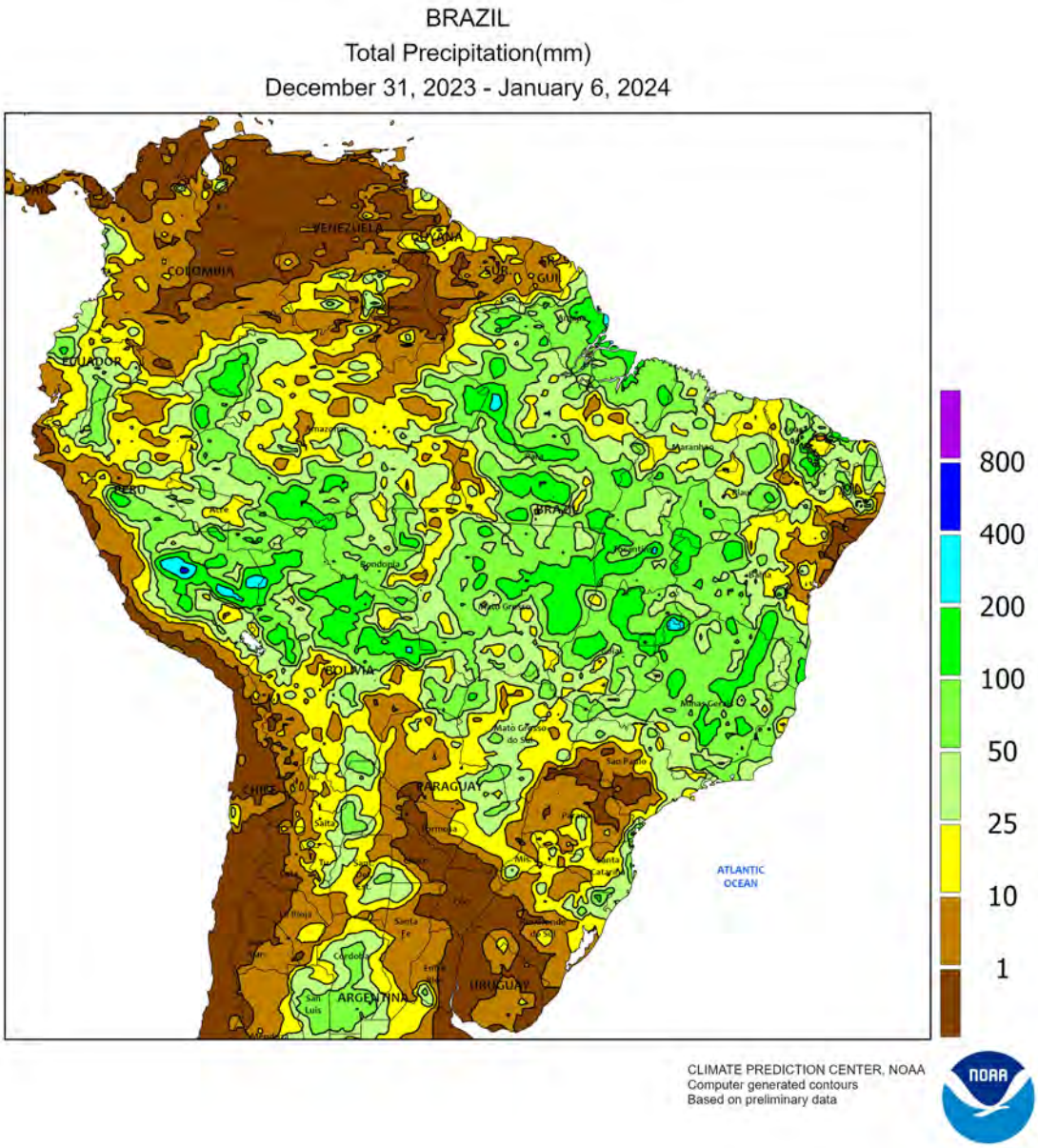

BRAZIL

Widespread, soaking rain provided significant relief from warmth and dryness to most major farming areas of central and northeastern Brazil. Rainfall totaled 25 to 100 mm – locally higher – from Mato Grosso eastward, including previously dry eastern farmlands from Minas Gerais to Maranhão. Consequently, weekly average temperatures were mostly within 1°C of normal, with highest daytime temperatures capped in the lower 30s (degrees C) at most locations. While harvesting of the earliest-planted fields was underway, immature soybeans benefited from the abundant albeit late-arriving rainfall. Conditions were more variable farther south, as most locations from southern Mato Grosso and São Paulo to Uruguay reported less than 25 mm. Several days of unseasonable warmth (daytime highs in the middle 30s degrees C) along the border between Mato Grosso do Sul and Paraná enhanced the impacts of the drying from evaporative losses while also fostering a rapid pace of growth for main-season summer crops. According to the government of Paraná, over 95 percent of the first-crop corn had reached reproduction of January 2, as had 85 percent of soybeans. In Rio Grande do Sul, corn was 92 percent planted as of January 4, with 67 percent of the crop currently in the ground ranging from flowering to mature and 5 percent harvested; 98 percent of soybeans were planted, but only 8 percent of crops were flowering.

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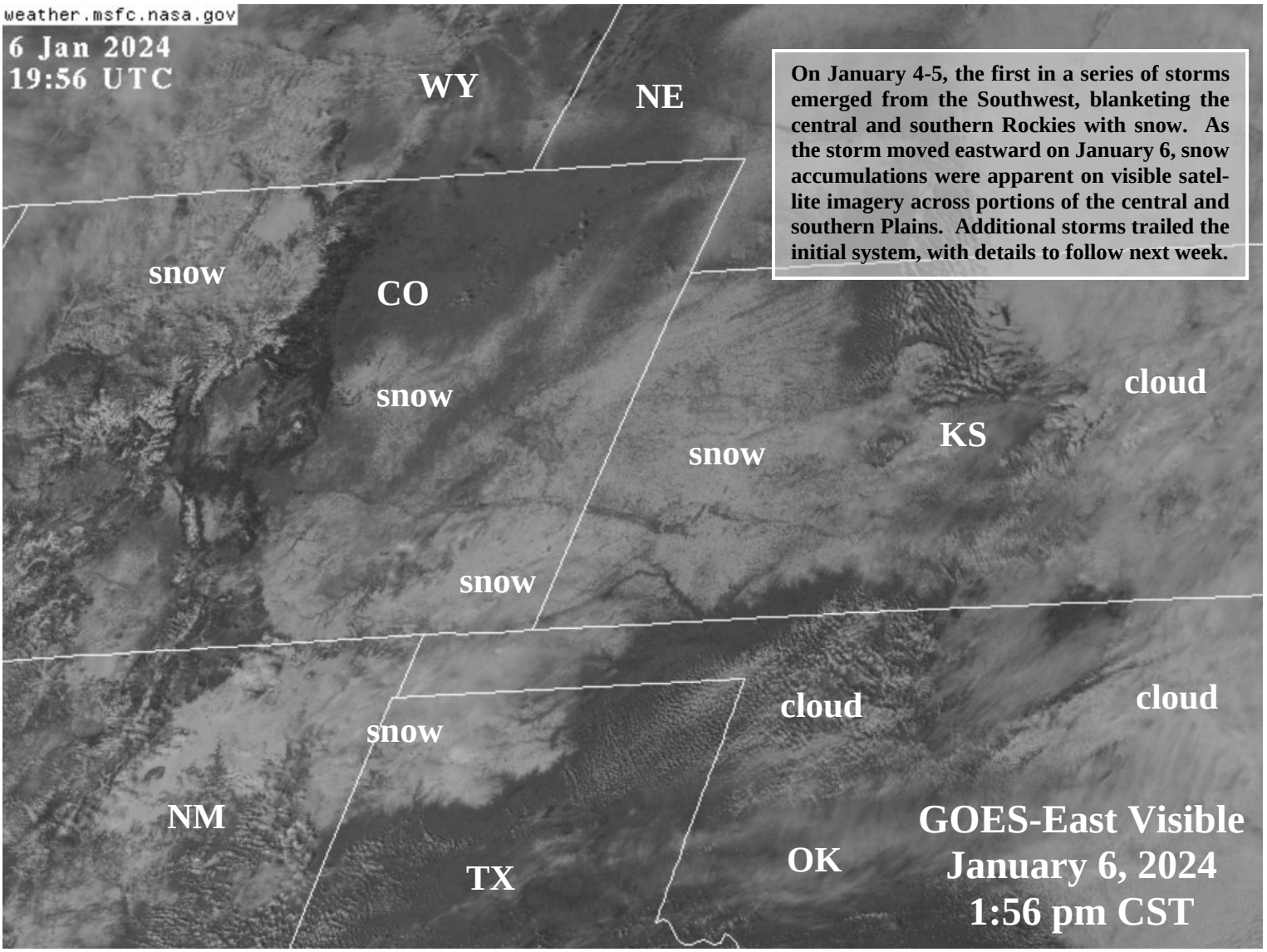

On January 4-5, the first in a series of storms emerged from the Southwest, blanketing the central and southern Rockies with snow. As the storm moved eastward on January 6, snow accumulations were apparent on visible satellite imagery across portions of the central and southern Plains. Additional storms trailed the initial system, with details to follow next week.

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Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**
Internet URL: **www.usda.gov/oce/weather-drought-monitor**
E-mail address: ***brad.rippey@usda.gov***

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