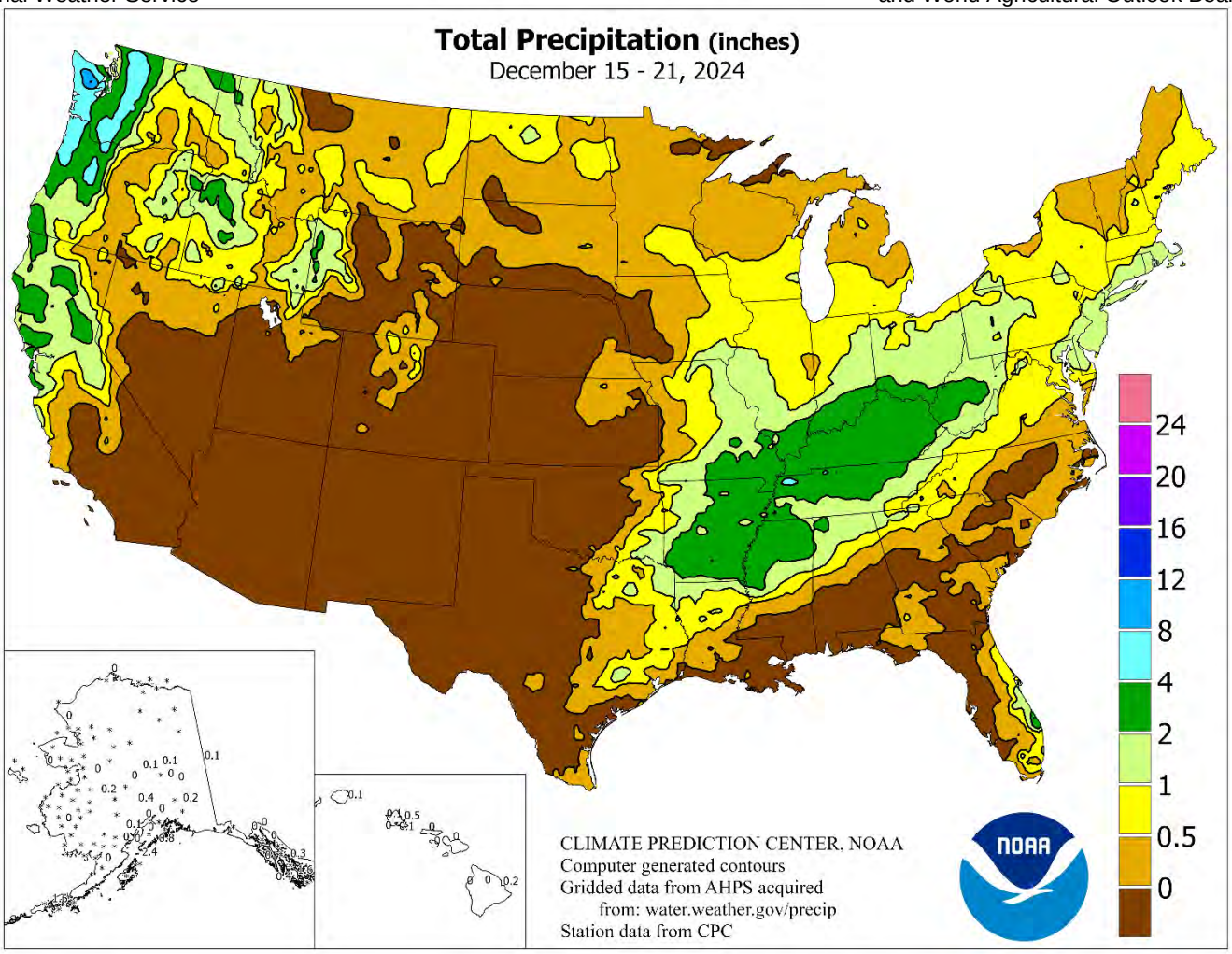
Volume 111, No. 52 www.usda.gov/oce/weather-drought-monitor December 26, 2024

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 15 – 21, 2024

Highlights provided by USDA/WAOB

Significant precipitation was confined to two primary areas, from the **mid-South into the Northeast**, and across **northern California** and the **Northwest**. Additionally, late-week snow—light to moderately heavy—blanketed parts of the **North**, extending southeastward from **eastern Montana** and the **Dakotas**. Even with the pre-holiday wintry weather, snow covered barely one-quarter (26.5 percent) of the **Lower 48 States** by the morning of December 22. Although much of the nation's winter

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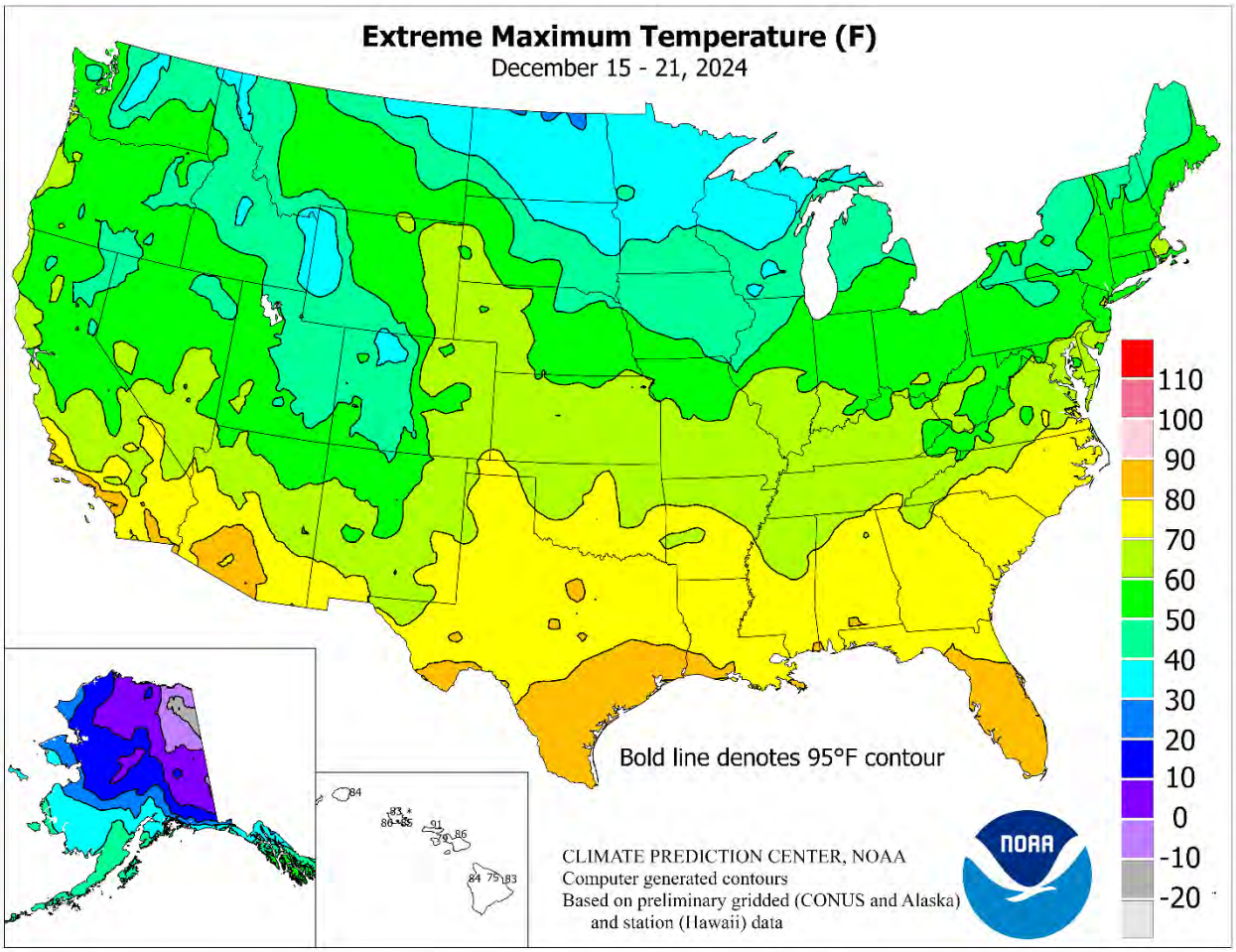
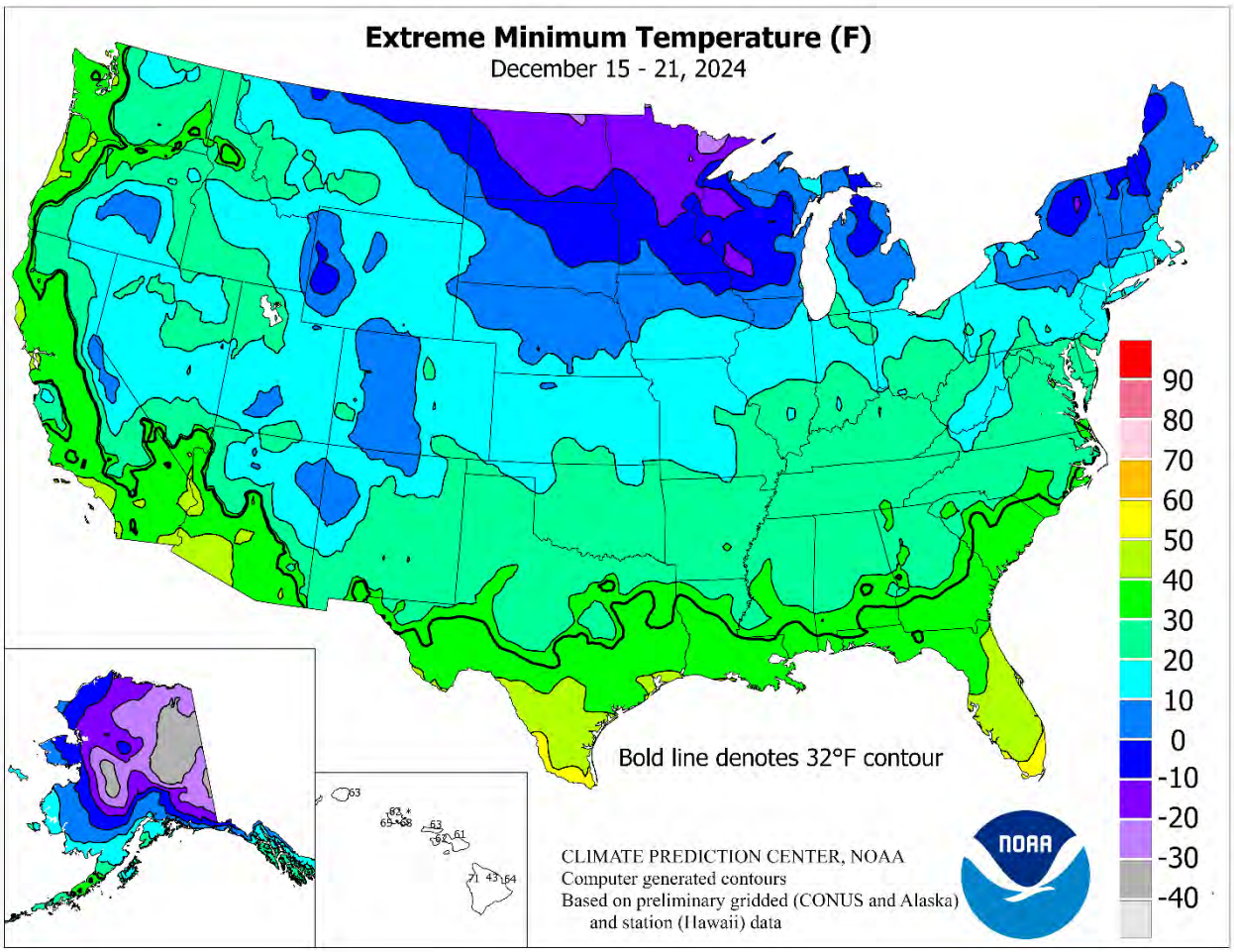
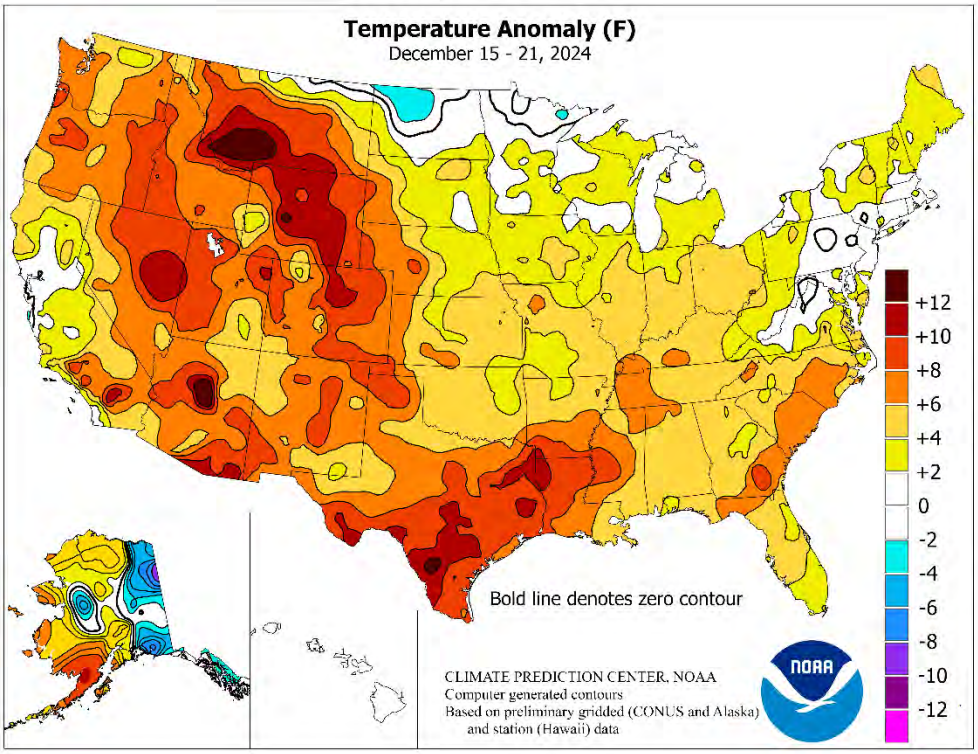

Extreme Maximum Temperature (F)
December 15 - 21, 2024
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
December 15 - 21, 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)

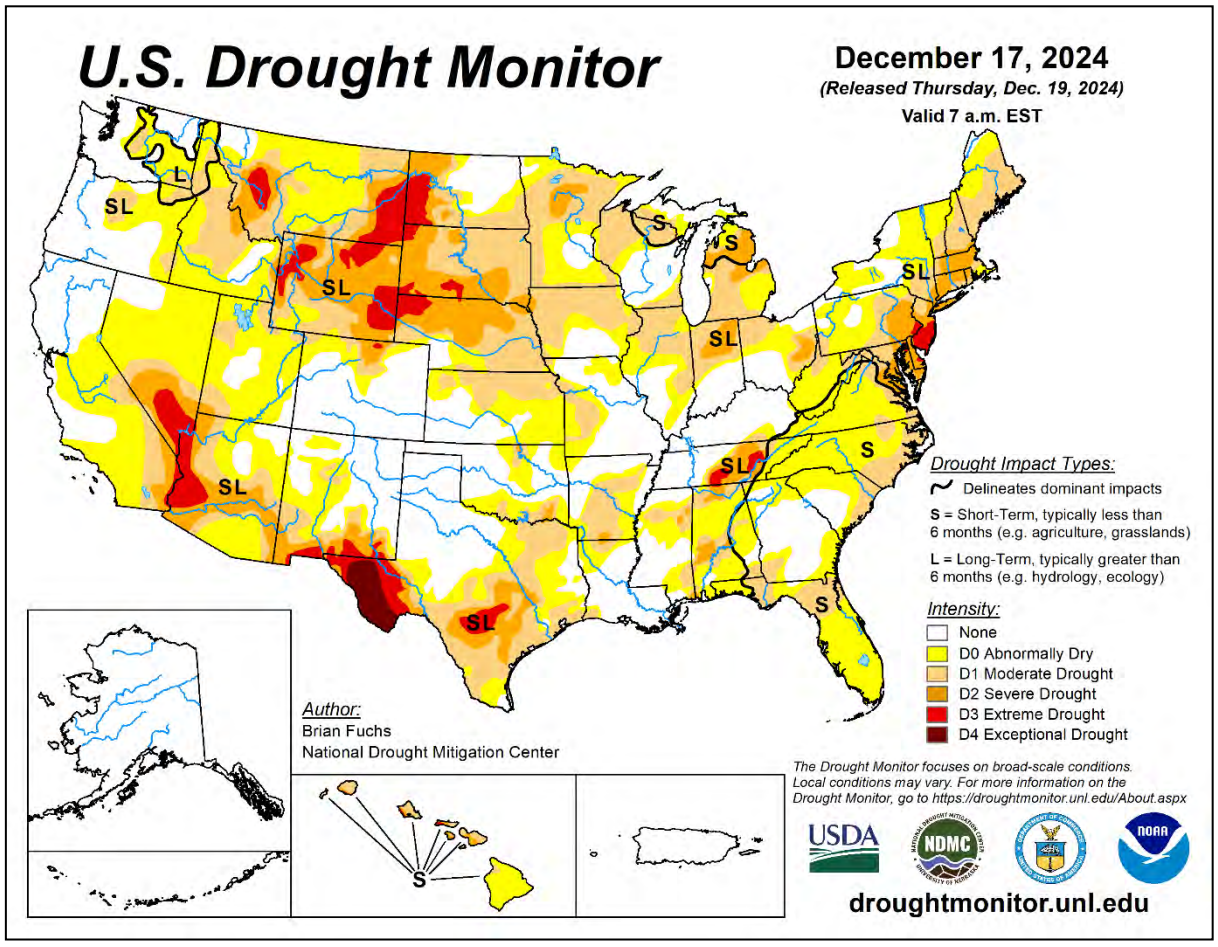
wheat remained devoid of a protective snow cover, most of the crop continued to overwinter well, amid ongoing mild weather and recent improvements in soil moisture. However, crop stress persisted in some production areas, including portions of the **northern Plains**, especially where wheat experienced drought-related uneven emergence and poor establishment. Elsewhere, ongoing **Western** warmth limited significant snow accumulations to high-elevation sites in **northern California** and the **Northwest**. **Western** snowpack continued to languish in several areas, including much of the **Southwest** and the **eastern slopes of the northern Rockies**. Concurrently, warmth was prevalent across the **West** and the **High Plains**, as well as the **western Gulf Coast region**. In fact, weekly temperatures averaged at least 10°F above normal in many locations from **southern and eastern Texas into the lower Mississippi Valley**, and throughout the **High Plains**. In contrast, temperatures averaged slightly below normal in the **north-central U.S.**, from **northeastern Montana into northern Minnesota**.

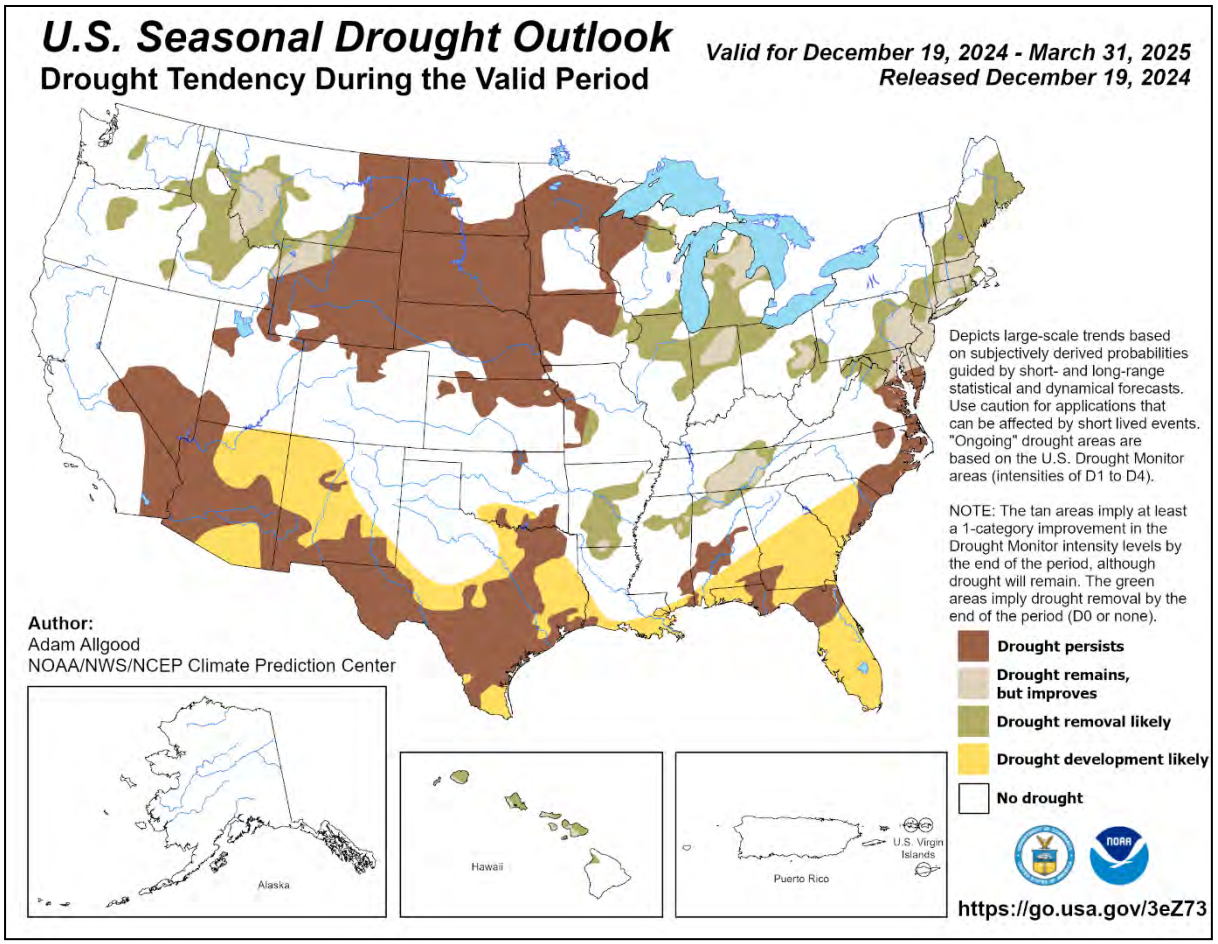


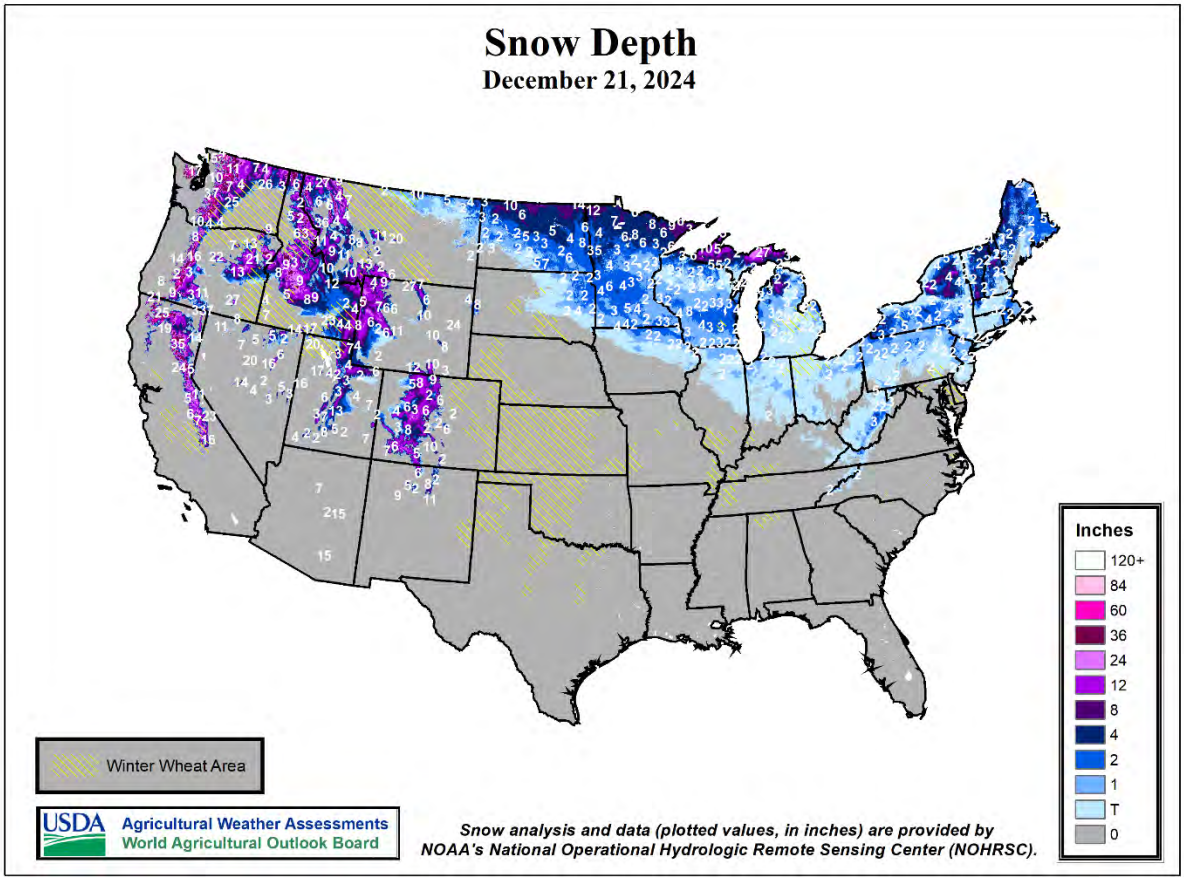
Early-week warmth was focused across the **western Gulf Coast region**, where **Victoria, TX**, tallied a trio of daily-record highs (86°F each day) from December 15-17. The last time a warmer December day occurred in **Victoria** was December 25, 1964, with a high of 88°F. Unusual warmth extended eastward across the **Deep South**, with daily-record highs reaching 81°F in **Louisiana** locations such as **Baton Rouge** (on the 15th) and **Lake Charles** (on the 16th). On December 17 in **Florida**, daily-record highs surged to 87°F in **Punta Gorda** and 86°F in **Ruskin**. During the mid- to late-week period, an expansive area of record-setting warmth stretched from the **Pacific Coast to the High Plains**. In **southern California**, daily-record highs for December 18 rose to 86°F in **Anaheim**, **Camarillo**, **Escondido**, and **Woodland Hills**. Elsewhere in **California**, **Palm Springs** logged three consecutive daily records (85, 85, and 82°F) from December 18-20. Warmth also extended into the **Great Basin** and **Northwest**, where consecutive daily-record highs occurred on December 19-20 in locations such as **Astoria, OR** (61 and 64°F, respectively), and **Tonopah, NV** (61°F both days). **Astoria's** reading of 64°F also tied a monthly record originally set on December 26, 1980. Finally, consistent **Southwestern** warmth pushed the maximum temperature in **Phoenix, AZ**, to 83°F from December 18-20, breaking a record each day. **Phoenix** has already set a station record with 4 December days reaching 83°F or higher; the previous record of 3 such days had been set in 1939. Similarly, **Tucson, AZ**, tied a 1939 record with 8 days of 80-degree warmth in December, including 5 in a row from the 18th through the 22nd. **Tucson** also registered four consecutive daily-record highs (82, 82, 82, and 83°F) from December 18-21. In contrast, a late-week cold blast sweeping across the **Midwest** led to consecutive daily-record lows (-15 and -21°F, respectively) in **Gaylord, MI**, on December 21 and 22. **Gaylord's** lows both occurred on the night of December 21-22, with the reading of -15°F being reported just before midnight.

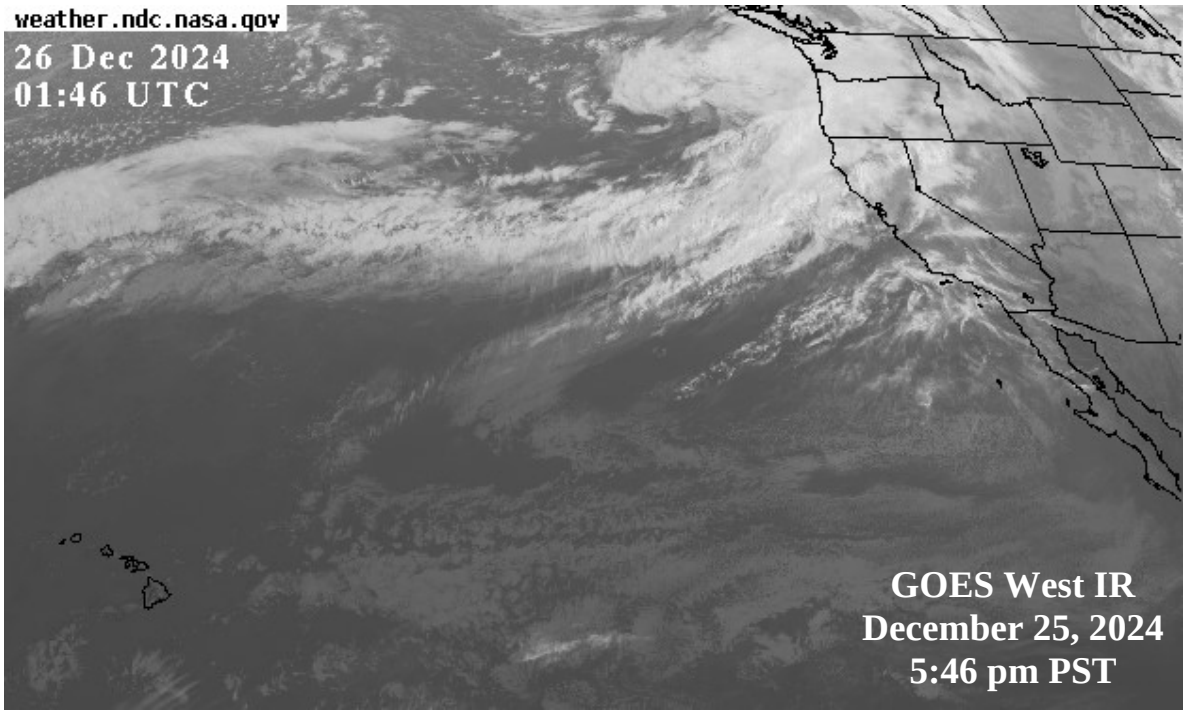
Northwestern precipitation was particularly heavy during the first half of the week. On December 17 in **western Washington**, daily-record precipitation totals reached 3.05 inches in **Hoquiam** and 2.36 inches in **Olympia**. Both locations received measurable rain each day during the week, totaling 5.12 inches in **Hoquiam** and 4.10 inches in **Olympia**. At times, precipitation fell as far east as the **northern Plains**, where **Montana** locations such as **Miles City** (0.44 inch) and **Townsend** (0.35 inch) collected daily-record amounts for December 15. On the 16th, daily-record amounts included 0.58 inch in **Burns, OR**, and 0.27 inch in **Twin Falls, ID**. Meanwhile, periods of precipitation—mostly rain—led to some daily-record totals in the **South** and **East**. On **Long Island, NY**, **Islip** collected a daily-record sum of 1.49 inches on December 16. Heavy showers dotted **Florida's east coast**, where **Fort Pierce** measured a record-setting total (3.05 inches) for December 17. A few days later, as colder air arrived, snow accumulated from the **northern Plains into the Northeast**. December 19 featured the first 1-inch snowfall of the season in **La Crosse, WI**, where 6.6 inches fell, as well as **Rochester, MN**, which received 5.9 inches. Cold weather trailing the snowfall resulted in a low of -12°F (not a record for the date) in **La Crosse** on December 21. Farther east, the first measurable snow of the season occurred on December 21 in **New York** locations such as **LaGuardia Airport** (2.8 inches) and **Islip** (2.0 inches), with both sites noting record-setting totals for the date.

Colder weather developed in much of **interior and eastern Alaska**, while mild conditions lingered across **southwestern Alaska**, the **North Slope**, and coastal areas of the **Bering and Chukchi Seas**. **Nome**, located on **Norton Sound** of the **Bering Sea**, has not yet dipped below 0°F this month; the lowest reading of 3°F occurred on December 16. The only year **Nome** failed to record a sub-zero December temperature was 1914, when the lowest reading of 3°F was noted on December 17. Late in the week, however, a temperature flip in **southeastern Alaska** resulted in warmer, wetter weather. By December 21, daily-record highs were set in locations such as **Ketchikan** (57°F), **Sitka** (55°F), and **Yakutat** (49°F). In addition, **Ketchikan** clocked a peak gust to 52 mph on that date. Earlier, winds had also raked parts of **southwestern and south-central Alaska**, with gusts reaching 72 mph (on the 17th) in **Cold Bay** and 62 mph (on the 20th) in **Kodiak**. Farther south, dry weather remained firmly in place across **Hawaii**, with even typically wetter windward sites receiving minimal rain. Through December 21, month-to-date rainfall at Hawaii's major airport observation sites ranged from 0.08 inch (6 percent of normal) in **Honolulu, Oahu**, to 1.92 inches (22 percent) in **Hilo**, on the **Big Island**.


U.S. Drought Monitor
December 17, 2024
(Released Thursday, Dec. 19, 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:
Brian Fuchs
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


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for December 19, 2024 - March 31, 2025
Released December 19, 2024
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).
Drought persists
Drought remains, but improves
Drought removal likely
Drought development likely
No drought
Author:
Adam Allgood
NOAA/NWS/NCEP Climate Prediction Center
Alaska
Hawaii
U.S. Virgin Islands
Puerto Rico
https://go.usa.gov/3eZ73





Though La Niña has not officially developed, according to the latest diagnostic discussion issued by the Climate Prediction Center of the National Weather Service, atmospheric patterns in recent weeks across the North Pacific Ocean and North America have been consistent with those often observed during La Niña. In the United States, recent trends have included an active Pacific jet stream delivering significant precipitation across the Pacific Northwest, as shown above; occasional Northern cold outbreaks, primarily from the northern Plains eastward; and warmer- and drier-than-normal weather across the Deep South, especially from southern California to the southern High Plains and across the lower Southeast, including much of Florida.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 21, 2024

Accessible Data Available from the 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	25	17	35	14	21	2	0.20	-0.06	0.20	0.63	76	21.51	133	86	71	0	7	1	0
	BARROW	2	-5	10	-9	-1	0	0.00	-0.05	0.00	0.00	0	0.02	0	81	69	0	7	0	0
	FAIRBANKS	1	-17	11	-32	-8	-3	0.11	-0.02	0.11	0.80	208	18.89	164	80	67	0	7	1	0
	JUNEAU	30	22	35	14	26	-5	0.01	-1.43	0.01	6.81	147	75.79	116	94	68	0	7	1	0
	KODIAK	42	36	44	21	39	7	2.39	0.31	1.04	11.11	188	82.38	109	99	84	0	1	6	2
	NOME	26	12	34	3	19	11	0.02	-0.22	0.02	0.67	91	25.32	149	73	49	0	7	1	0
AL	BIRMINGHAM	60	43	75	28	51	5	0.41	-0.71	0.21	3.11	95	50.04	90	92	60	0	2	2	0
	HUNTSVILLE	56	42	71	28	49	4	1.35	0.00	0.48	2.59	63	51.78	98	97	70	0	2	4	0
	MOBILE	69	46	80	32	58	5	0.00	-1.26	0.00	2.78	79	60.97	93	95	55	0	1	0	0
	MONTGOMERY	67	43	79	32	55	5	0.00	-1.17	0.00	2.93	89	49.80	100	94	52	0	1	0	0
AR	FORT SMITH	57	36	74	27	46	4	0.30	-0.48	0.28	1.47	61	54.21	116	94	51	0	3	2	0
	LITTLE ROCK	56	42	70	26	49	7	1.17	0.02	0.69	2.89	82	54.88	111	97	64	0	2	4	1
AZ	FLAGSTAFF	59	19	62	12	39	10	0.00	-0.42	0.00	0.00	0	20.31	101	62	14	0	7	0	0
	PHOENIX	78	48	83	45	63	8	0.00	-0.16	0.00	0.00	0	4.43	63	40	12	0	0	0	0
	PRESCOTT	64	28	68	23	46	8	0.00	-0.22	0.00	0.00	0	11.36	90	49	12	0	7	0	0
	TUCSON	80	46	83	36	63	10	0.00	-0.22	0.00	0.00	0	13.36	129	29	9	0	0	0	0
CA	BAKERSFIELD	60	41	68	35	51	2	0.00	-0.26	0.00	0.11	16	6.64	110	91	57	0	0	0	0
	EUREKA	59	45	67	39	52	5	1.24	-0.70	0.57	4.06	73	46.47	122	98	62	0	0	5	1
	FRESNO	57	43	67	38	50	3	0.00	-0.43	0.00	0.27	24	11.20	108	96	64	0	0	0	0
	LOS ANGELES	67	49	82	47	58	1	0.00	-0.52	0.00	0.00	0	15.39	134	89	45	0	0	0	0
	REDDING	53	43	65	38	48	2	0.93	-0.55	0.54	4.44	103	36.29	114	94	74	0	0	3	1
	SACRAMENTO	51	42	56	37	47	0	0.55	-0.23	0.44	2.76	122	18.64	109	98	82	0	0	2	0
	SAN DIEGO	67	48	71	45	57	0	0.00	-0.38	0.00	0.01	1	11.07	119	95	56	0	0	0	0
	SAN FRANCISCO	57	47	59	44	52	1	0.44	-0.53	0.35	3.22	116	21.70	117	98	79	0	0	2	0
	STOCKTON	51	43	54	35	47	0	0.35	-0.20	0.21	1.43	90	14.07	110	97	83	0	0	2	0
CO	ALAMOSA	47	5	50	2	26	9	0.00	-0.07	0.00	0.14	57	11.18	153	87	24	0	7	0	0
	CO SPRINGS	55	26	60	21	40	9	0.00	-0.05	0.00	0.27	170	19.57	123	69	18	0	7	0	0
	DENVER INTL	58	23	68	18	41	10	0.00	-0.07	0.00	0.00	0	15.54	108	67	18	0	7	0	0
	GRAND JUNCTION	49	23	51	21	36	9	0.00	-0.13	0.00	0.00	0	9.45	106	72	29	0	7	0	0
	PUEBLO	55	19	63	15	37	6	0.00	-0.06	0.00	0.12	59	15.20	127	83	26	0	7	0	0
CT	BRIDGEPORT	44	30	54	18	37	1	1.77	0.86	0.99	3.96	141	46.25	107	91	61	0	4	6	1
	HARTFORD	43	26	60	15	35	3	1.22	0.32	0.53	3.61	126	47.44	103	84	49	0	6	6	1
DC	WASHINGTON	50	37	65	29	43	2	0.88	0.11	0.38	1.97	81	36.15	88	82	55	0	1	4	0
DE	WILMINGTON	47	31	61	20	39	1	1.26	0.40	0.72	2.27	83	43.37	97	90	57	0	4	4	1
FL	DAYTONA BEACH	73	58	79	44	65	4	0.78	0.23	0.54	1.74	112	63.79	126	98	68	0	0	2	1
	JACKSONVILLE	71	53	79	36	62	6	0.20	-0.46	0.10	1.00	52	66.30	125	98	61	0	0	2	0
	KEY WEST	77	69	82	62	73	0	0.15	-0.34	0.09	0.35	23	48.34	121	97	74	0	0	2	0
	MIAMI	80	68	85	54	74	3	0.40	-0.17	0.29	0.50	28	70.94	106	92	60	0	0	4	0
	ORLANDO	77	58	83	47	68	5	0.61	0.00	0.32	0.69	40	40.70	80	98	58	0	0	2	0
	PENSACOLA	68	49	78	34	58	3	0.00	-1.22	0.00	1.75	47	63.52	95	88	53	0	0	0	0
	TALLAHASSEE	71	51	78	31	61	7	0.05	-0.91	0.04	0.51	18	64.94	112	92	54	0	1	2	0
	TAMPA	76	60	85	47	68	4	0.00	-0.64	0.00	0.08	4	83.20	170	95	60	0	0	0	0
	WEST PALM BEACH	79	65	82	50	72	3	0.37	-0.43	0.19	0.54	22	67.14	110	96	67	0	0	4	0
GA	ATHENS	60	40	73	30	50	4	0.25	-0.77	0.20	3.09	107	53.11	112	93	57	0	1	2	0
	ATLANTA	61	42	74	30	52	5	0.00	-1.07	0.00	2.17	72	63.46	129	89	53	0	1	0	0
	AUGUSTA	62	44	74	29	53	4	0.00	-0.94	0.00	1.11	44	47.96	113	95	59	0	1	0	0
	COLUMBUS	65	44	78	35	55	5	0.00	-1.10	0.00	4.10	129	59.74	134	90	50	0	0	0	0
	MACON	64	40	77	29	52	3	0.00	-1.08	0.00	1.94	65	48.65	107	98	58	0	1	0	0
	SAVANNAH	70	50	80	35	60	8	0.24	-0.52	0.14	0.48	22	57.20	121	94	52	0	0	2	0
HI	HILO	82	65	83	64	74	1	0.20	-2.46	0.19	1.99	22	96.52	82	98	65	0	0	2	0
	HONOLULU	83	70	85	68	76	1	0.13	-0.39	0.13	0.21	14	11.73	74	89	60	0	0	1	0
	KAHULUI	85	63	86	61	74	-1	0.00	-0.69	0.00	0.44	24	11.26	73	89	54	0	0	0	0
	LIHUE	81	67	84	63	74	0	0.06	-1.05	0.04	1.11	34	32.90	94	100	72	0	0	2	0
IA	BURLINGTON	39	26	48	16	33	4	0.00	-0.43	0.00	0.42	34	35.35	94	93	66	0	5	0	0
	CEDAR RAPIDS	35	24	46	12	29	5	0.01	-0.34	0.01	0.01	1	33.45	94	96	76	0	7	1	0
	DES MOINES	37	24	50	18	31	4	0.05	-0.30	0.05	0.59	51	38.72	107	93	66	0	7	1	0
	DUBUQUE	32	23	42	5	28	4	0.16	-0.24	0.10	0.58	44	36.06	95	97	75	0	6	3	0
	SIOUX CITY	38	17	50	7	27	4	0.02	-0.19	0.01	0.11	16	32.36	111	91	57	0	7	2	0
	WATERLOO	34	21	47	5	28	3	0.24	-0.08	0.16	0.63	62	39.24	109	90	71	0	7	2	0
ID	BOISE	47	33	59	30	40	9	0.56	0.20	0.30	0.91	87	13.52	122	91	54	0	3	4	0
	LEWISTON	50	37	59	32	43	9	0.35	0.09	0.19	0.90	118	11.02	87	82	49	0	1	4	0
	POCATELLO	42	24	49	20	33	8	0.75	0.50	0.38	1.14	146	13.67	118	91	60	0	7	3	0
IL	CHICAGO/O_HARE	38	28	51	14	33	3	0.42	-0.03	0.21	0.76	51	35.12	94	91	68	0	4	4	0
	MOLINE	38	26	42	14	32	4	0.54	0.08	0.51	1.35	94	32.89	87	91	67	0	6	3	1
	PEORIA	41	28	54	18	35	5	0.04	-0.43	0.04	1.16	77	33.41	90	89	63	0	5	1	0
	ROCKFORD	35	24	44	4	30	3	0.52	0.11	0.19	0.93	67	35.61	96	90	68	0	5	5	0
	SPRINGFIELD	44	27	62	18	36	4	0.00	-0.45	0.00	0.09	6	22.72	61	94	62	0	5	0	0
IN	EVANSVILLE	51	35	62	24	43	6	2.71	1.91	1.75	3.83	147	46.43	99	91	56	0	3	4	2
	FORT WAYNE	40	30	56	23	35	5	1.03	0.50	0.60	2.05	124	34.59	89	91	69	0	5	3	1
	INDIANAPOLIS	44	32	59	24	38	6	1.35	0.73	0.73	2.57	134	42.12	98	91	65	0	4	4	1
	SOUTH BEND	39	29	54	23	34	5	0.59	0.07	0.20	1.07	67	40.63	105	92	71	0	5	4	0
KS	CONCORDIA	48	24	60	15	36	6	0.00	-0.24	0.00	1.31	176	24.64	88	87	45	0	6	0	0
	DODGE CITY	54	25	67	15	39	6	0.00	-0.24	0.00	0.00	0	32.22	148	78	30	0	7	0	0
	GOODLAND	54	20	64	15	37	7	0.00	-0.11	0.00	0.00	0	15.44	82	76	29	0	7	0	0
	TOPEKA	50	24	64	13	37	4	0.00	-0.33	0.00	0.28	25	27.22	75	91	38	0	6	0	0

Based on 1991-2020 normals

***** Not Available**

Weather Data for the Week Ending December 21, 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	52	26	64	20	39	4	0.00	-0.28	0.00	0.02	2	31.64	93	84	42	0	7	0	0
KY	LEXINGTON	49	37	59	22	43	6	2.76	1.83	1.33	3.82	130	47.41	97	88	65	0	2	4	3
	LOUISVILLE	50	39	61	27	45	6	1.72	0.80	0.76	2.60	91	51.06	108	80	53	0	1	4	2
	PADUCAH	54	37	65	24	45	6	2.88	1.94	1.48	4.38	148	53.87	109	91	53	0	3	4	2
LA	BATON ROUGE	73	51	81	35	62	8	0.03	-1.20	0.03	5.63	167	68.23	113	91	49	0	0	1	0
	LAKE CHARLES	74	51	81	37	62	7	0.00	-0.98	0.00	3.31	114	64.14	110	95	49	0	0	0	0
	NEW ORLEANS	70	52	79	40	61	5	0.04	-1.04	0.02	2.60	85	79.56	129	96	63	0	0	2	0
	SHREVEPORT	68	51	79	34	60	11	***	***	***	***	***	***	***	93	51	0	0	***	***
MA	BOSTON	44	30	60	15	37	2	1.37	0.39	0.63	5.06	168	45.34	106	89	53	0	5	4	2
	WORCESTER	40	26	55	11	33	3	1.14	0.19	0.44	4.45	148	51.47	109	86	53	0	5	6	0
MD	BALTIMORE	48	33	64	25	40	2	0.85	0.00	0.33	2.05	78	35.24	80	91	57	0	4	4	0
ME	CARIBOU	32	14	50	5	23	4	1.03	0.24	0.46	3.82	152	35.76	90	88	61	0	7	5	0
	PORTLAND	40	23	56	11	31	2	0.94	-0.08	0.51	4.37	139	44.74	95	91	51	0	6	4	1
MI	ALPENA	33	24	45	7	29	3	0.61	0.21	0.16	1.67	129	34.26	117	97	66	0	6	5	0
	GRAND RAPIDS	36	28	50	9	32	2	0.67	0.14	0.22	1.55	91	36.21	93	92	71	0	5	4	0
	HOUGHTON LAKE	31	21	44	-6	26	1	0.65	0.28	0.18	2.06	165	19.35	84	94	71	0	6	6	0
	LANSING	36	26	51	5	31	3	0.74	0.35	0.28	1.28	99	33.16	101	93	68	0	4	5	0
	MUSKEGON	38	30	49	15	34	3	0.44	-0.09	0.14	1.49	88	34.33	99	84	65	0	4	4	0
	TRAVERSE CITY	35	27	46	9	31	2	0.47	0.07	0.20	2.00	157	24.75	86	84	62	0	5	3	0
MN	DULUTH	24	10	34	-9	17	1	0.43	0.11	0.21	1.02	98	28.42	92	86	67	0	7	4	0
	INT_L FALLS	19	1	34	-18	10	0	0.51	0.29	0.33	1.65	246	28.81	114	89	71	0	7	3	0
	MINNEAPOLIS	29	18	40	0	23	2	0.24	-0.02	0.23	0.76	91	36.21	115	89	67	0	7	2	0
	ROCHESTER	28	17	42	-4	23	3	0.26	-0.02	0.24	0.39	41	35.21	102	92	74	0	7	2	0
	ST. CLOUD	27	12	36	-14	19	3	0.33	0.13	0.33	0.43	71	34.92	123	87	67	0	7	1	0
MO	COLUMBIA	47	29	56	21	38	4	0.00	-0.46	0.00	2.00	141	41.88	102	93	54	0	5	0	0
	KANSAS CITY	47	26	57	15	37	4	0.00	-0.35	0.00	0.31	27	35.11	90	89	44	0	5	0	0
	SAINT LOUIS	50	33	67	25	42	6	0.21	-0.32	0.16	1.87	114	48.85	119	81	50	0	4	2	0
	SPRINGFIELD	51	26	63	17	39	2	1.11	0.54	1.11	1.97	112	42.84	97	91	45	0	6	1	1
MS	JACKSON	68	48	77	31	58	9	0.28	-0.91	0.15	2.21	64	68.75	123	97	55	0	1	3	0
	MERIDIAN	65	44	76	29	54	5	0.10	-1.12	0.08	1.62	46	49.20	89	96	60	0	2	2	0
	TUPELO	57	45	65	29	51	5	2.40	1.08	0.74	5.23	123	51.87	92	94	71	0	1	4	3
MT	BILLINGS	47	26	58	22	36	10	0.27	0.15	0.27	0.34	91	12.61	89	81	37	0	6	1	0
	BUTTE	38	15	45	6	27	8	0.09	-0.02	0.09	0.12	37	9.89	79	90	49	0	7	1	0
	CUT BANK	40	17	54	4	29	7	0.00	-0.07	0.00	0.00	0	7.41	69	84	49	0	7	0	0
	GLASGOW	28	12	42	2	20	3	0.07	-0.03	0.04	0.28	104	12.06	90	79	62	0	7	2	0
	GREAT FALLS	46	24	59	12	35	9	0.00	-0.11	0.00	0.00	0	15.00	102	85	43	0	5	0	0
	HAVRE	33	13	48	2	23	3	0.10	0.01	0.06	0.14	57	16.23	139	92	61	0	7	2	0
	MISSOULA	38	27	48	22	32	9	0.24	0.00	0.08	0.26	36	11.71	84	96	67	0	7	4	0
NC	ASHEVILLE	55	38	70	27	46	5	0.59	-0.34	0.41	3.04	106	64.67	133	93	62	0	2	4	0
	CHARLOTTE	58	41	71	31	49	5	0.28	-0.54	0.14	2.75	117	52.62	123	89	59	0	1	3	0
	GREENSBORO	54	38	69	27	46	4	0.02	-0.68	0.01	1.60	75	55.97	130	92	64	0	1	2	0
	HATTERAS	63	52	71	38	58	6	1.12	0.00	0.59	2.46	75	51.09	85	97	74	0	0	5	1
	RALEIGH	60	42	73	30	51	7	0.21	-0.58	0.20	2.48	110	55.76	123	90	58	0	1	2	0
	WILMINGTON	65	46	76	34	56	6	0.23	-0.62	0.16	1.10	44	55.18	93	97	62	0	0	2	0
ND	BISMARCK	27	8	34	-12	17	0	0.35	0.21	0.17	0.61	154	18.44	97	90	66	0	7	4	0
	DICKINSON	33	9	45	-7	21	2	0.06	0.02	0.05	0.06	53	12.92	83	90	68	0	7	2	0
	FARGO	23	11	34	-10	17	2	0.51	0.31	0.45	1.08	183	22.90	96	89	73	0	7	2	0
	GRAND FORKS	21	7	34	-14	14	2	0.58	0.43	0.33	1.31	294	25.96	120	83	71	0	7	4	0
	JAMESTOWN	22	9	32	-11	16	1	0.13	0.06	0.07	0.38	170	20.38	103	93	72	0	7	2	0
NE	GRAND ISLAND	43	17	56	8	30	2	0.00	-0.19	0.00	0.00	0	27.81	105	88	42	0	7	0	0
	LINCOLN	45	19	59	9	32	4	0.00	-0.27	0.00	1.17	141	27.85	99	84	43	0	7	0	0
	NORFOLK	41	17	54	8	29	4	0.00	-0.19	0.00	0.11	18	26.89	100	83	49	0	7	0	0
	NORTH PLATTE	51	18	64	10	35	8	0.00	-0.11	0.00	0.00	0	21.78	104	76	27	0	7	0	0
	OMAHA	40	20	57	10	30	2	0.00	-0.28	0.00	0.18	21	32.94	104	89	52	0	7	0	0
	SCOTTSBLUFF	53	18	65	13	36	9	0.00	-0.12	0.00	0.00	0	12.96	83	77	26	0	7	0	0
	VALENTINE	46	13	60	2	29	4	0.00	-0.09	0.00	0.06	19	17.01	81	89	37	0	7	0	0
NH	CONCORD	38	21	56	5	30	2	0.82	-0.02	0.27	2.75	106	41.17	100	95	54	0	6	6	0
NJ	ATLANTIC_CITY	49	31	61	19	40	2	1.17	0.10	0.78	2.39	76	42.28	94	92	59	0	4	7	1
	NEWARK	47	33	61	18	40	3	1.39	0.45	0.80	2.57	89	40.45	89	86	53	0	2	7	1
NM	ALBUQUERQUE	57	28	60	24	42	6	0.00	-0.12	0.00	0.00	0	8.72	100	53	20	0	7	0	0
NV	ELY	52	20	61	17	36	11	0.00	-0.15	0.00	0.02	4	9.57	104	77	27	0	7	0	0
	LAS VEGAS	64	44	68	40	54	6	0.00	-0.11	0.00	0.00	0	2.15	53	36	16	0	0	0	0
	RENO	51	27	57	23	39	4	0.13	-0.11	0.13	0.54	76	7.45	106	90	39	0	7	1	0
	WINNEMUCCA	50	26	54	20	38	8	0.01	-0.23	0.01	0.12	17	10.10	133	83	43	0	7	1	0
NY	ALBANY	40	25	56	7	33	3	0.87	0.16	0.31	3.33	146	43.91	110	89	59	0	5	6	0
	BINGHAMTON	35	24	49	8	29	2	1.16	0.50	0.30	3.44	161	45.57	110	95	74	0	6	6	0
	BUFFALO	38	27	52	10	32	2	0.73	-0.10	0.28	2.96	117	35.14	88	87	67	0	4	4	0
	ROCHESTER	39	28	52	12	33	2	1.24	0.67	0.36	2.90	158	37.27	108	86	66	0	4	6	0
	SYRACUSE	39	27	53	7	33	4	0.90	0.19	0.19	3.31	148	44.81	115	85	62	0	4	7	0
OH	AKRON-CANTON	40	30	55	19	35	3	1.63	1.01	0.64	2.74	140	39.29	96	94	67	0	6	5	1
	CINCINNATI	45	35	58	20	40	5	1.86	1.05	0.73	3.01	119	43.33	98	95	65	0	2	4	1
	CLEVELAND	42	32	57	22	37	3	0.93	0.30	0.38	2.20	109	34.29	85	88	63	0	4	5	0
	COLUMBUS	43	33	58	23	38	4	1.34	0.66	0.52	2.12	102	34.89	85	95	68	0	4	4	1
	DAYTON	44	33	58	21	38	5	1.33	0.69	0.55	2.30	114	39.49	97	96	70	0	3	4	1
	MANSFIELD	41	30	56	17	35	4	0.84	0.19	0.45	1.80	89	33.00	79	92	70	0	5	3	0

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

Weather Data for the Week Ending December 21, 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	40	29	56	14	35	3	1.33	0.81	0.66	1.43	87	35.76	104	95	72	0	5	3	2
	YOUNGSTOWN	40	29	56	18	34	3	1.45	0.76	0.35	3.01	141	46.24	114	93	67	0	6	5	0
OK	OKLAHOMA CITY	57	31	69	24	44	5	0.00	-0.42	0.00	0.10	7	38.07	106	88	38	0	4	0	0
	TULSA	56	30	67	20	43	3	0.25	-0.31	0.25	0.48	28	48.56	120	91	45	0	5	1	0
OR	ASTORIA	60	55	64	54	58	15	0.00	-1.01	0.00	0.00	0	62.57	97	84	66	0	0	0	0
	BURNS	41	23	51	7	32	7	0.61	0.25	0.55	1.35	129	13.11	131	89	70	0	7	3	1
	EUGENE	55	44	62	41	49	9	2.12	0.46	1.07	3.38	67	35.70	92	96	70	0	0	5	1
	MEDFORD	52	39	63	28	46	7	0.89	0.05	0.55	1.87	76	19.85	114	96	68	0	1	4	1
	PENDLETON	49	35	59	32	42	9	0.65	0.30	0.32	1.11	109	13.85	111	95	62	0	1	3	0
	PORTLAND	54	44	58	42	49	8	1.79	0.47	0.89	3.37	83	37.22	105	88	65	0	0	5	1
	SALEM	55	45	62	42	50	10	1.57	-0.02	0.50	2.98	61	39.94	104	90	68	0	0	5	0
PA	ALLENTOWN	41	26	54	15	33	-1	0.91	0.07	0.40	2.35	85	40.26	86	91	61	0	7	4	0
	ERIE	40	31	55	17	35	2	0.86	-0.07	0.33	3.09	109	37.65	90	86	66	0	4	5	0
	MIDDLETOWN	41	28	53	19	35	-1	0.70	-0.05	0.24	3.10	128	44.74	103	91	63	0	7	4	0
	PHILADELPHIA	48	32	63	20	40	2	1.23	0.32	0.71	2.33	83	39.93	92	91	53	0	2	6	1
	PITTSBURGH	43	31	58	20	37	4	1.11	0.51	0.29	2.31	120	43.12	111	86	61	0	4	6	0
	WILKES-BARRE	40	25	52	10	33	0	0.70	0.10	0.24	2.62	134	41.98	110	95	62	0	7	6	0
	WILLIAMSPORT	38	26	45	15	32	0	0.79	0.11	0.24	2.69	116	45.39	106	91	67	0	6	5	0
RI	PROVIDENCE	44	28	61	16	36	1	1.31	0.27	0.51	7.27	219	60.77	131	96	57	0	5	5	1
SC	CHARLESTON	69	48	79	36	59	7	0.01	-0.78	0.01	0.46	20	53.42	103	95	55	0	0	1	0
	COLUMBIA	63	44	76	35	54	6	0.24	-0.64	0.24	1.54	64	53.46	121	94	58	0	0	1	0
	FLORENCE	64	46	75	35	55	6	0.06	-0.79	0.06	1.15	51	48.84	110	90	63	0	0	1	0
	GREENVILLE	58	40	73	29	49	5	0.35	-0.69	0.29	3.87	126	54.44	113	96	58	0	1	3	0
SD	ABERDEEN	29	14	38	-4	22	4	0.19	0.06	0.11	0.45	111	21.61	99	89	70	0	7	3	0
	HURON	31	11	43	-5	21	1	0.36	0.22	0.24	0.44	97	21.83	94	91	68	0	7	3	0
	RAPID CITY	47	17	59	7	32	7	0.03	-0.05	0.03	0.32	141	14.47	83	79	38	0	7	1	0
	SIOUX FALLS	32	14	45	2	23	1	0.26	0.08	0.21	0.64	110	31.19	112	89	66	0	7	2	0
TN	BRISTOL	51	39	60	23	45	6	0.78	-0.06	0.33	2.25	85	43.66	101	97	74	0	2	6	0
	CHATTANOOGA	56	42	71	31	49	5	0.85	-0.30	0.39	1.73	47	42.65	79	91	65	0	2	4	0
	KNOXVILLE	54	41	69	26	47	6	1.37	0.27	0.75	4.22	120	56.43	111	96	69	0	1	4	1
	MEMPHIS	57	43	68	29	50	6	1.55	0.32	0.96	3.73	96	55.65	104	93	64	0	2	3	1
	NASHVILLE	54	42	64	29	48	6	1.73	0.76	1.09	3.34	105	47.88	96	87	63	0	1	3	1
TX	ABILENE	68	38	78	31	53	7	0.00	-0.30	0.00	0.39	45	24.00	96	83	39	0	2	0	0
	AMARILLO	61	31	72	26	46	8	0.00	-0.17	0.00	0.00	0	22.83	117	61	21	0	5	0	0
	AUSTIN	72	52	80	36	62	9	0.12	-0.50	0.07	1.31	72	28.31	79	91	43	0	0	3	0
	BEAUMONT	74	54	81	40	64	9	0.02	-1.09	0.02	1.20	36	67.50	111	94	53	0	0	1	0
	BROWNSVILLE	81	64	86	55	72	8	0.61	0.33	0.59	4.93	599	43.10	163	91	58	0	0	2	1
	CORPUS CHRISTI	79	56	85	46	67	8	0.00	-0.46	0.00	1.61	123	27.60	88	98	55	0	0	0	0
	DEL RIO	75	53	81	42	64	11	0.02	-0.16	0.02	0.24	47	11.36	58	79	42	0	0	1	0
	EL PASO	67	37	69	31	52	7	0.00	-0.15	0.00	0.00	0	6.76	78	40	16	0	1	0	0
	FORT WORTH	68	43	78	33	55	8	1.61	0.95	1.48	2.84	148	38.01	104	84	47	0	0	3	1
	GALVESTON	71	59	78	47	65	7	0.17	-0.77	0.17	0.96	32	47.69	103	97	72	0	0	1	0
	HOUSTON	74	54	82	39	64	9	0.13	-0.80	0.13	1.20	42	58.19	114	93	51	0	0	1	0
	LUBBOCK	65	33	72	29	49	8	0.00	-0.19	0.00	0.00	0	23.34	128	67	24	0	4	0	0
	MIDLAND	66	35	74	30	50	4	0.00	-0.13	0.00	0.00	0	10.35	78	85	30	0	3	0	0
	SAN ANGELO	71	38	79	29	55	7	0.00	-0.21	0.00	0.23	37	18.20	87	91	38	0	3	0	0
	SAN ANTONIO	73	56	80	44	65	12	0.15	-0.30	0.15	1.23	89	23.25	73	86	46	0	0	1	0
	VICTORIA	80	52	86	36	66	10	0.02	-0.49	0.02	0.87	55	33.16	83	95	40	0	0	1	0
	WACO	68	43	79	26	56	7	0.22	-0.43	0.11	1.25	66	36.90	103	95	49	0	2	3	0
	WICHITA FALLS	63	33	75	25	48	5	0.01	-0.33	0.01	0.05	4	32.96	119	84	38	0	3	1	0
UT	SALT LAKE CITY	49	30	54	26	40	8	0.00	-0.32	0.00	0.15	15	13.74	90	81	43	0	5	0	0
VA	LYNCHBURG	50	35	66	24	42	4	0.63	-0.14	0.44	3.11	125	39.74	95	90	62	0	1	2	0
	NORFOLK	58	45	73	34	51	6	0.46	-0.32	0.33	3.48	156	52.52	108	87	60	0	0	3	0
	RICHMOND	54	37	71	25	45	4	0.38	-0.43	0.22	2.04	83	51.35	115	96	58	0	2	3	0
	ROANOKE	48	35	66	25	41	1	0.59	-0.07	0.53	2.51	114	39.80	94	89	59	0	1	2	1
	WASH/DULLES	47	33	62	28	40	3	0.83	0.09	0.46	2.62	112	35.95	84	86	57	0	3	3	0
VT	BURLINGTON	37	24	53	6	30	3	0.48	-0.06	0.13	3.02	174	40.04	108	88	57	0	5	6	0
WA	OLYMPIA	51	39	55	36	45	6	4.13	2.44	2.33	6.31	119	46.01	95	100	80	0	0	7	3
	QUILLAYUTE	54	43	58	36	48	7	6.46	3.44	2.57	11.37	122	101.26	104	95	78	0	0	7	3
	SEATTLE-TACOMA	54	43	58	39	48	7	2.06	0.80	0.84	3.53	91	31.83	84	91	62	0	0	7	1
	SPOKANE	40	32	50	30	36	8	1.00	0.47	0.36	1.70	107	15.41	97	100	81	0	6	5	0
	YAKIMA	42	29	54	23	36	6	0.61	0.26	0.35	1.01	105	7.33	96	94	73	0	5	4	0
WI	EAU CLAIRE	29	16	40	-10	22	3	0.17	-0.13	0.15	0.17	17	35.13	107	88	65	0	6	2	0
	GREEN BAY	33	20	42	-1	27	3	0.31	-0.07	0.27	0.44	35	33.41	107	87	63	0	5	3	0
	LA CROSSE	31	19	43	-12	25	1	0.35	0.02	0.32	0.65	61	34.59	99	85	64	0	5	2	0
	MADISON	31	22	41	0	27	2	0.36	0.01	0.26	0.59	49	48.17	131	92	68	0	5	5	0
	MILWAUKEE	38	29	47	15	33	5	0.44	0.04	0.27	0.67	50	39.09	114	81	60	0	4	4	0
WV	BECKLEY	45	30	60	18	38	2	1.32	0.60	0.43	2.89	125	38.37	89	91	72	0	6	6	0
	CHARLESTON	49	33	62	23	41	3	2.00	1.22	1.01	3.40	135	41.33	91	91	61	0	4	5	2
	ELKINS	46	28	60	19	37	3	1.59	0.80	0.64	3.72	148	46.96	101	97	67	0	5	6	2
	HUNTINGTON	48	36	60	23	42	4	1.84	1.06	0.70	3.02	120	43.19	97	85	62	0	1	4	2
WY	CASPER	48	22	57	17	35	11	0.00	-0.14	0.00	0.06	13	10.22	84	76	29	0	7	0	0
	CHEYENNE	49	22	61	15	35	7	0.00	-0.11	0.00	0.00	0	10.50	68	65	21	0	7	0	0
	LANDER	47	20	56	12	33	13	0.00	-0.13	0.00	0.00	0	10.39	79	63	27	0	7	0	0
	SHERIDAN	51	20	62	16	35	12	0.00	-0.12	0.00	0.19	50	11.67	79	80	29	0	7	0	0

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

International Weather and Crop Summary

December 15-21, 2024

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

HIGHLIGHTS

EUROPE: Widespread showers and warmer temperatures continued over much of Europe, though short-term dryness has developed in southwestern growing areas.

MIDDLE EAST: Rain in Turkey contrasted with mostly dry and cold weather in Iran.

NORTHWESTERN AFRICA: Intensifying drought in Morocco and western Algeria juxtaposed with additional favorable rainfall in northeastern portions of the region.

SOUTHEAST ASIA: Widespread showers continued although lighter in some areas previously soaked by downpours.

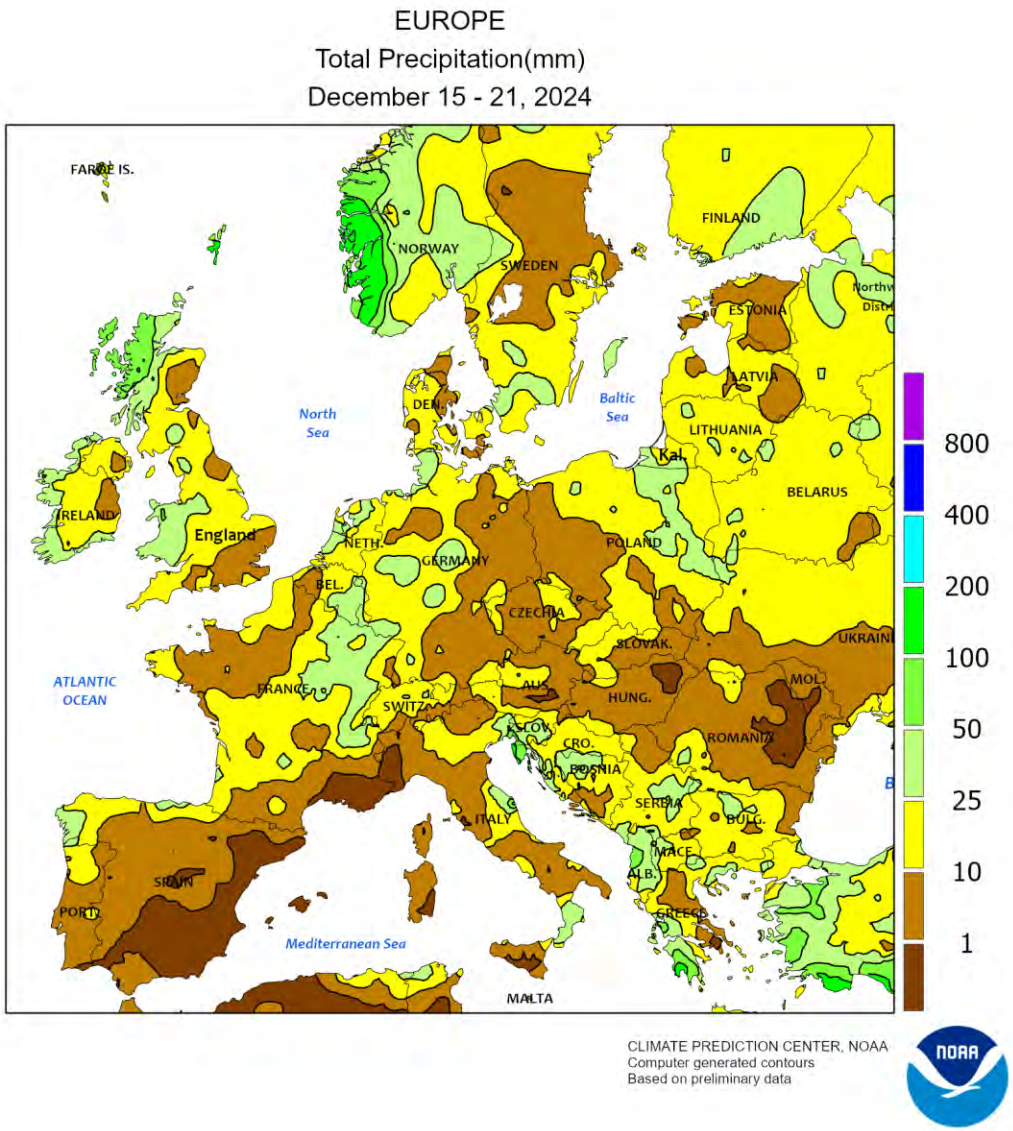
AUSTRALIA: Rain in the northeast further benefited summer crops, which are reportedly in good condition.

SOUTH AFRICA: Warm weather with beneficial showers throughout much of the corn belt created more favorable conditions for corn and other rain-fed summer crops.

ARGENTINA: Beneficial rain continued in western production areas, but dryness lingered over Buenos Aires.

BRAZIL: Conditions favored soybeans in most major production areas, although moisture was likely becoming limited for summer crops in Rio Grande do Sul.

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



EUROPE

Widespread showers and warmer temperatures prevailed during the monitoring period, though short-term dryness lingered in Spain. Periods of rain continued over most of the continent, with weekly totals averaging 5 to 40 mm from England and France eastward. However, short-term dryness has developed over much of Spain since the beginning of November, reducing topsoil moisture for winter grain emergence and establishment. Furthermore, highly localized albeit extreme drought persisted in Hungary and environs; precipitation since October 1 in southwestern Hungary (Transdanubia) stood at 34 percent of normal and remained the driest of the past 30 years. Temperatures averaged 2 to 7°C above normal over most of central, northern, and eastern Europe, with near-normal temperatures confined to southwestern portions of the continent. Consequently, most primary winter crop areas remained devoid of a protective snow cover, though minimum temperatures remained well above the threshold for burnback or winterkill.

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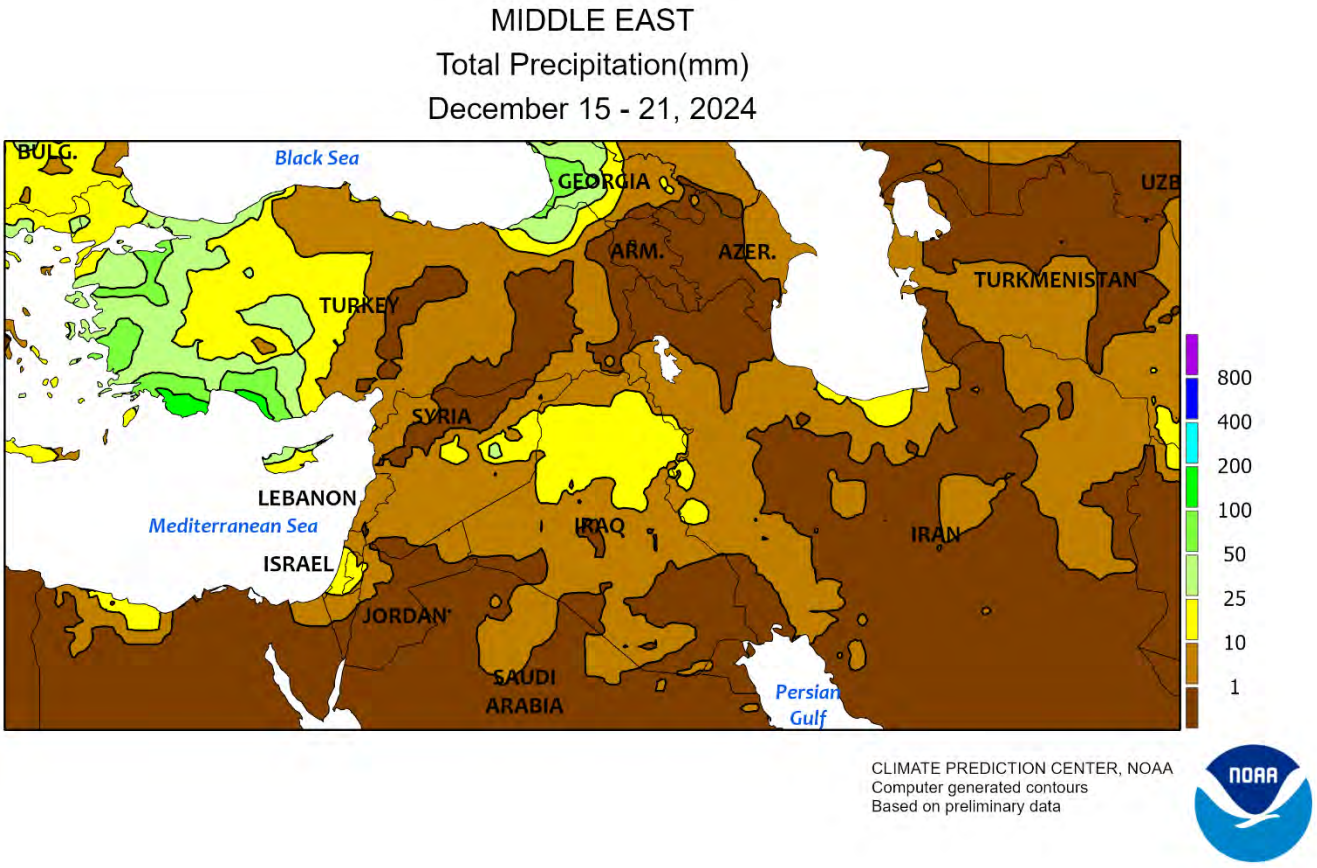

MIDDLE EAST

Rain and near-normal temperatures over Turkey contrasted with colder and mostly drier weather elsewhere. The recent spell of wet weather continued in Turkey, with precipitation (mostly in the form of rain) totaling 10 to 65 mm from the Anatolian Plateau westward. Furthermore, totals exceeded 100 mm in southwestern Turkey (locally up to 250 mm) for a third consecutive week. However, the country's southeastern GAP Region remained completely dry, also for a third consecutive week. Temperatures in Turkey averaged near normal in central and western portions of the country but up to 4°C below normal in the east. From the eastern Mediterranean Coast into Iran, light to moderate rainfall (5-25 mm) was mostly confined to northern Iraq and environs. Topsoil moisture has become limited from Syria into Jordan and central Iraq due to short-term dryness, while moisture supplies were mostly favorable in western and northeastern Iran. Anomalous cold (up to 6°C below normal) expanded across Iran into Iraq, with minimum temperatures between -19° and -10°C noted over much of western and northeastern Iran. However, primary winter crop areas remained above the threshold for burnback or winterkill.

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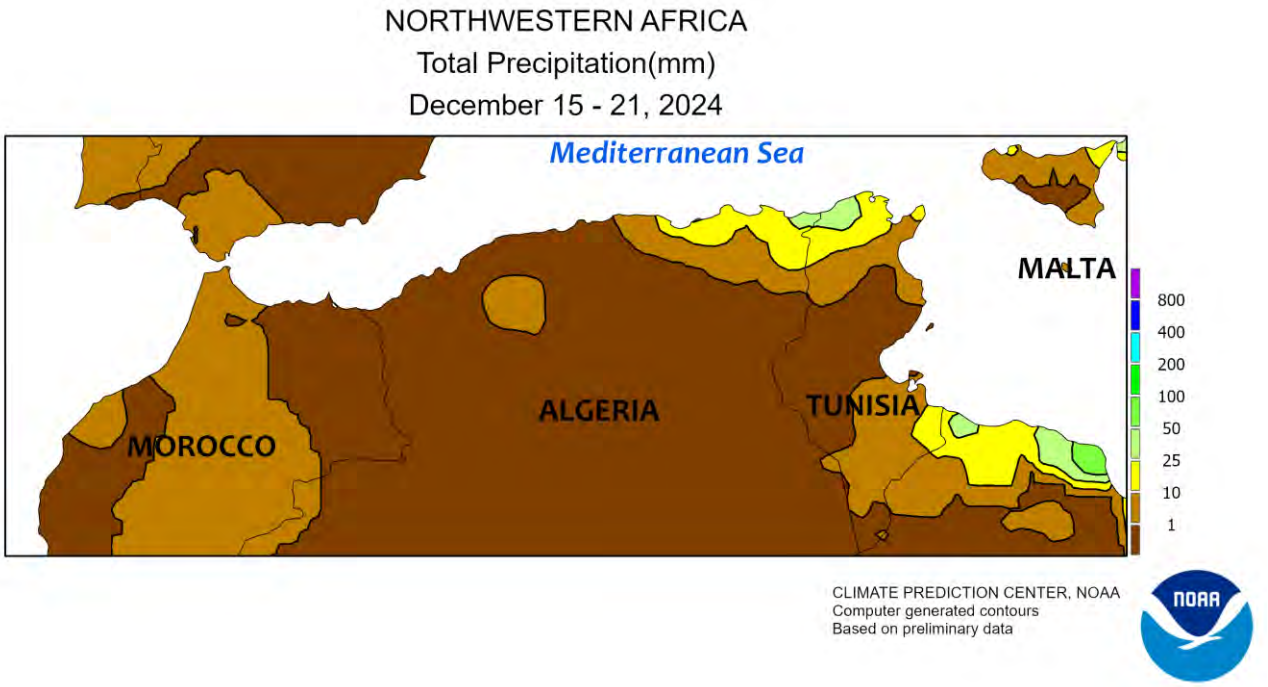

NORTHWESTERN AFRICA

Intensifying drought in the west contrasted with additional beneficial rain in the northeast. Isolated light showers in Morocco (5 mm or less) offered no relief from severe to extreme drought. Rainfall since the onset of the 2024-25 Water Year (September 1) over Morocco's primary growing areas along the central Atlantic Coast remained below 45 percent of normal, marking the fourth time with drought to start the winter grain growing campaign over the past five years. The drought extended into western Algeria, where little to no rain was reported. Furthermore, temperatures up to 3°C above normal in Morocco heightened soil moisture losses and evapotranspiration rates. The satellite-derived Vegetation Health Index averaged over Morocco's croplands was the lowest on record for this time of year, dating back to 1982. Meanwhile, moderate to heavy showers (10-50 mm) adjacent to the Mediterranean Coast from central Algeria into northern Tunisia maintained favorable prospects for emerging to vegetative winter grains. Conversely, increasingly dry conditions (30-day rainfall less than 25 percent of normal) persisted farther inland over the Hautes Plateau of eastern Algeria and the Steppe Region of northern Tunisia, raising concerns of a return to drought.

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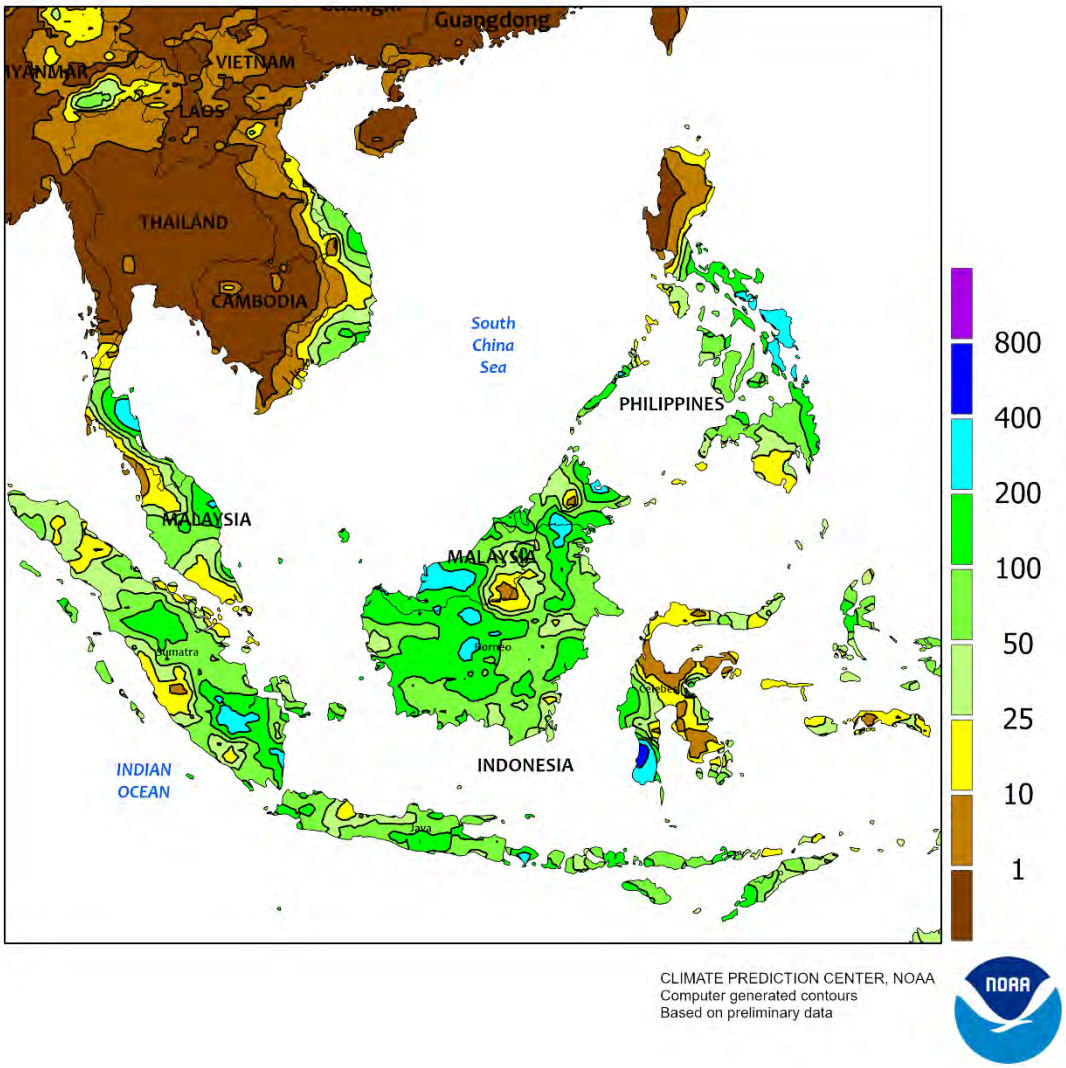
SOUTHEAST ASIA
Total Precipitation(mm)
December 15 - 21, 2024



SOUTHEAST ASIA

A strong easterly flow continued to inundate eastern sections of the region, most notably the eastern Philippines. Rainfall totals topped 150 mm from southern Luzon to Mindanao in the Philippines, submerging some rice in the early stages of development but not causing widespread damage. Heavy showers also continued in southern sections of the region (Malaysia and Indonesia), although totals were more seasonable than the inundations of the previous weeks. The relatively lighter rainfall allowed some oil palm harvesting to resume and limited further yield losses. Meanwhile, seasonably wet weather in Java, Indonesia, sustained ample moisture for vegetative wet-season rice.

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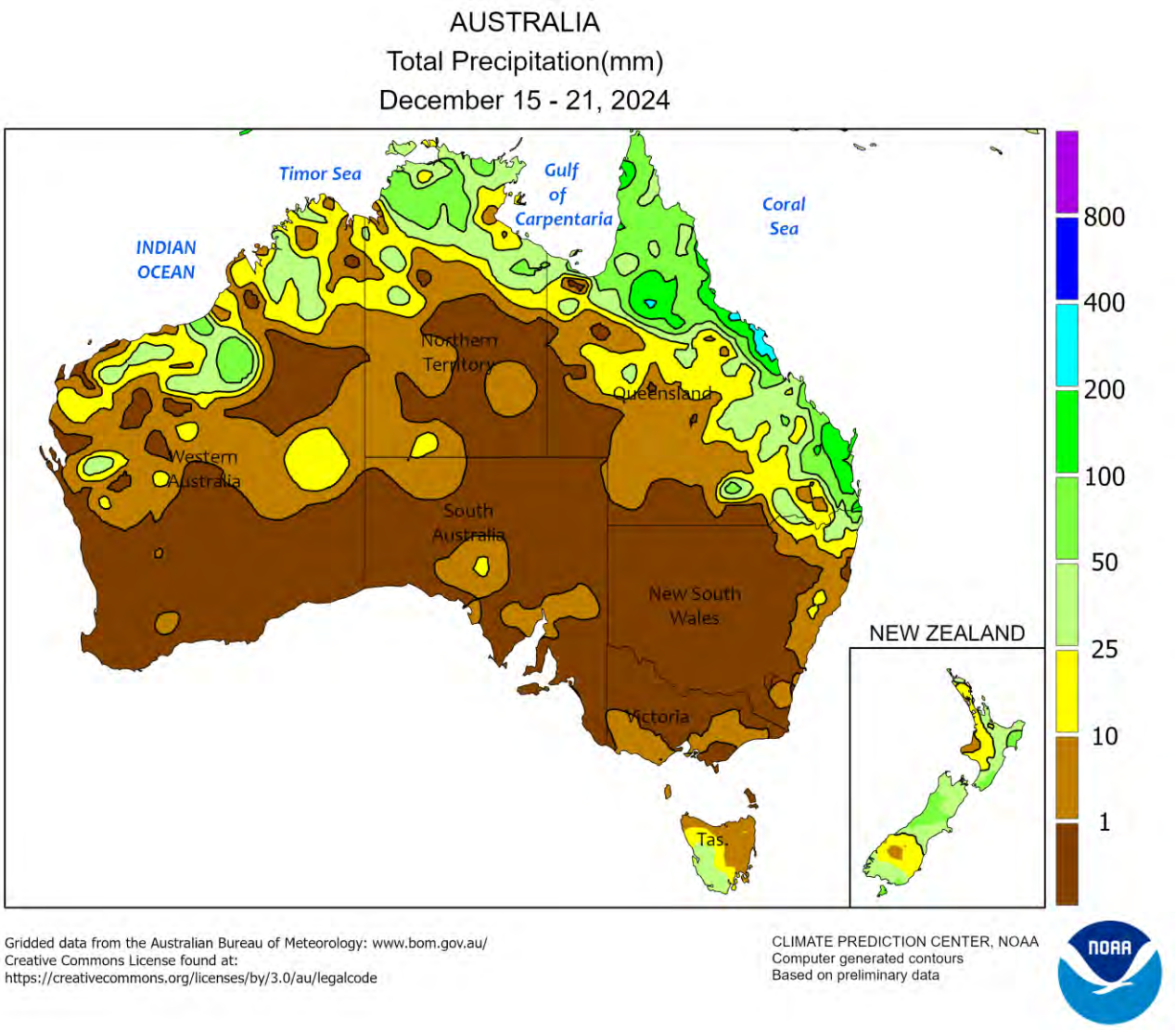

AUSTRALIA

In southern Queensland and northeastern New South Wales, widespread, locally heavy showers (10-50 mm or more) maintained adequate to abundant moisture supplies for summer crop development. The rain likely slowed additional sorghum planting, but the wet weather was beneficial overall, with summer crops reportedly in good condition. Farther south, hot, mostly dry weather throughout the remainder of New South Wales and Victoria helped dry mature winter grains which were awaiting harvest. Harvesting was well advanced in southeastern Australia, however, temporary fire bans associated with occasional extreme heat were periodically interrupting the harvest. Elsewhere in the wheat belt, hot, mostly dry weather in South Australia and Western Australia favored final winter crop harvesting, which was reportedly nearly complete. Maximum temperatures in the west approached 40°C on the hottest days, but in the southeast, temperatures climbed even higher with maxima in the middle 40s degrees C. In the northeast, temperatures averaged near normal with maxima primarily in the 30s degrees C.

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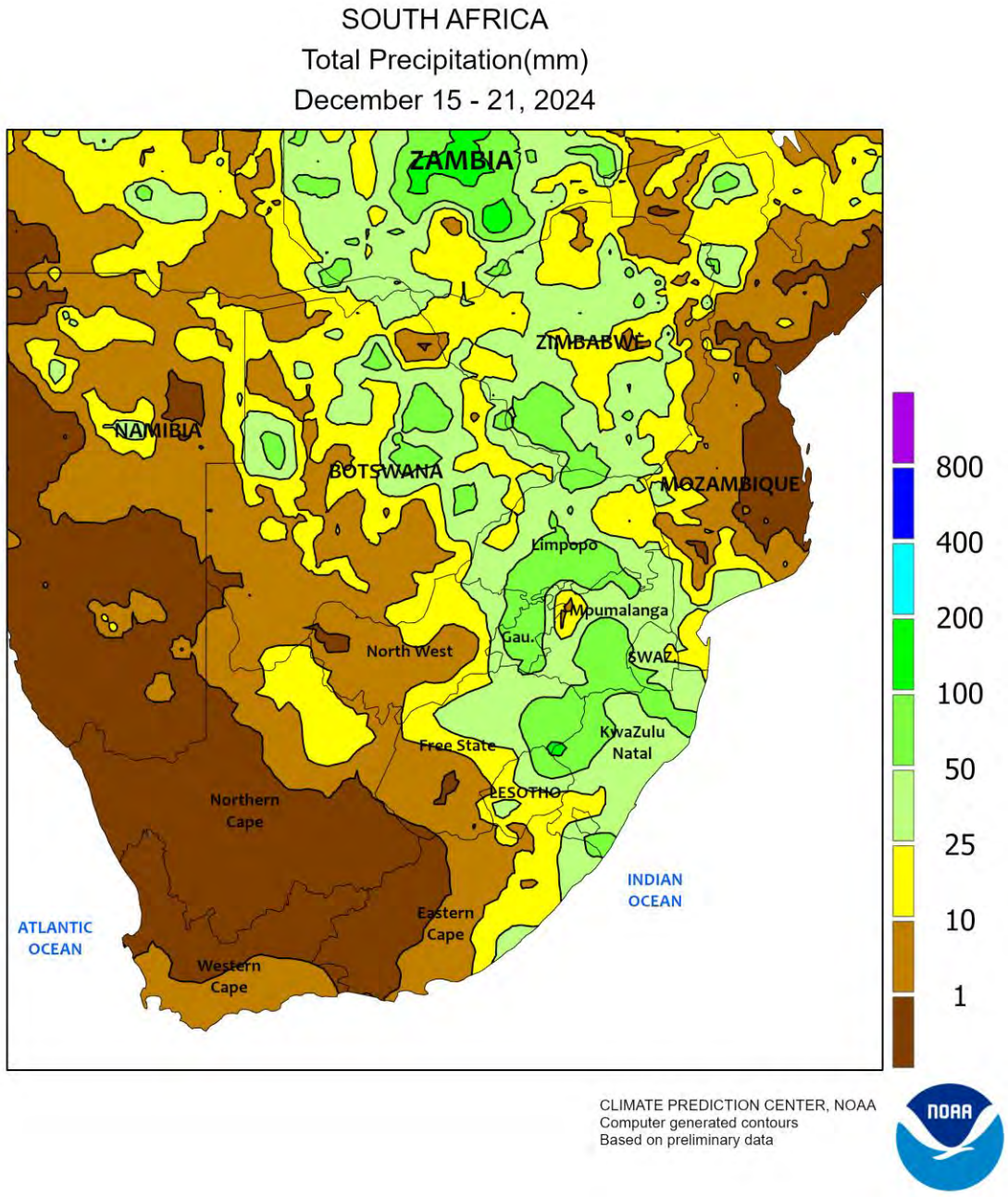

SOUTH AFRICA

Warm temperatures continued across the region but were slightly cooler than last week, averaging only 1 to 3°C above normal. Daytime highs were in the middle to upper 30s (degrees C) for most of the region, with lower to middle 30s from Gauteng to Mpumalanga and south toward the coastal areas of KwaZulu-Natal. Rainfall totaled 25 to 100 mm for much of the area from Limpopo to eastern North West to the coastal areas of KwaZulu-Natal and Eastern Cape, providing relief to any corn planted in northwest KwaZulu-Natal and Gauteng. A pocket of slightly heavier rain (118 mm) was recorded in southern Mpumalanga and northern KwaZulu-Natal. The western corn belt received some much-needed rain totaling 10 to 50 mm, but more will be needed for germination.

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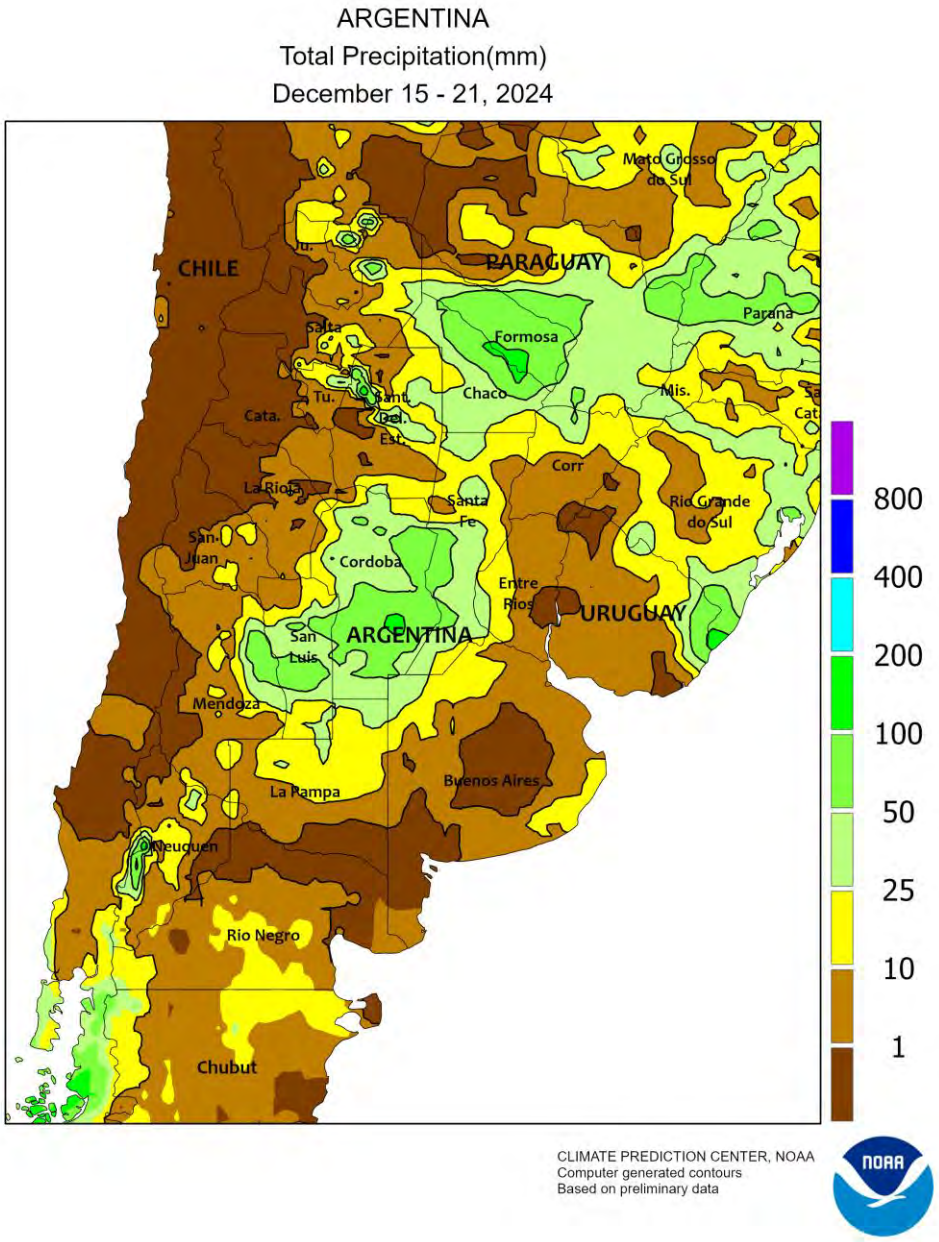

ARGENTINA

Showers continued throughout the region, with the highest rainfall concentrated over previously dry western farming areas. Amounts totaled 25 to 50 mm over Córdoba, southern Santa Fe, and in neighboring farmlands from northern La Pampa to western Entre Rios. In contrast, mostly dry weather prevailed over Buenos Airies, including northern delegations that had been trending dry during December; while favoring fieldwork, including winter grain harvesting, additional rain will be needed soon as early-planted corn and soybeans enter reproduction. Weekly temperatures averaged near to slightly below normal throughout central Argentina, with highest daytime temperatures mostly in the lower 30s (degrees C). Warm, showery weather also prevailed across the north, although heavy rain (25-100 mm) was mostly confined to Formosa and Chaco. Highest daytime temperatures reached the upper 30s in traditionally warmer northwestern delegations (Santiago del Estero northward through Paraguay), hastening emergence of summer crops, including cotton. According to the government of Argentina, corn and soybeans were 76 and 77 percent planted, respectively, as of December 19. Additionally, cotton was 84 percent planted, while wheat and barley were 73 and 47 percent harvested, respectively.

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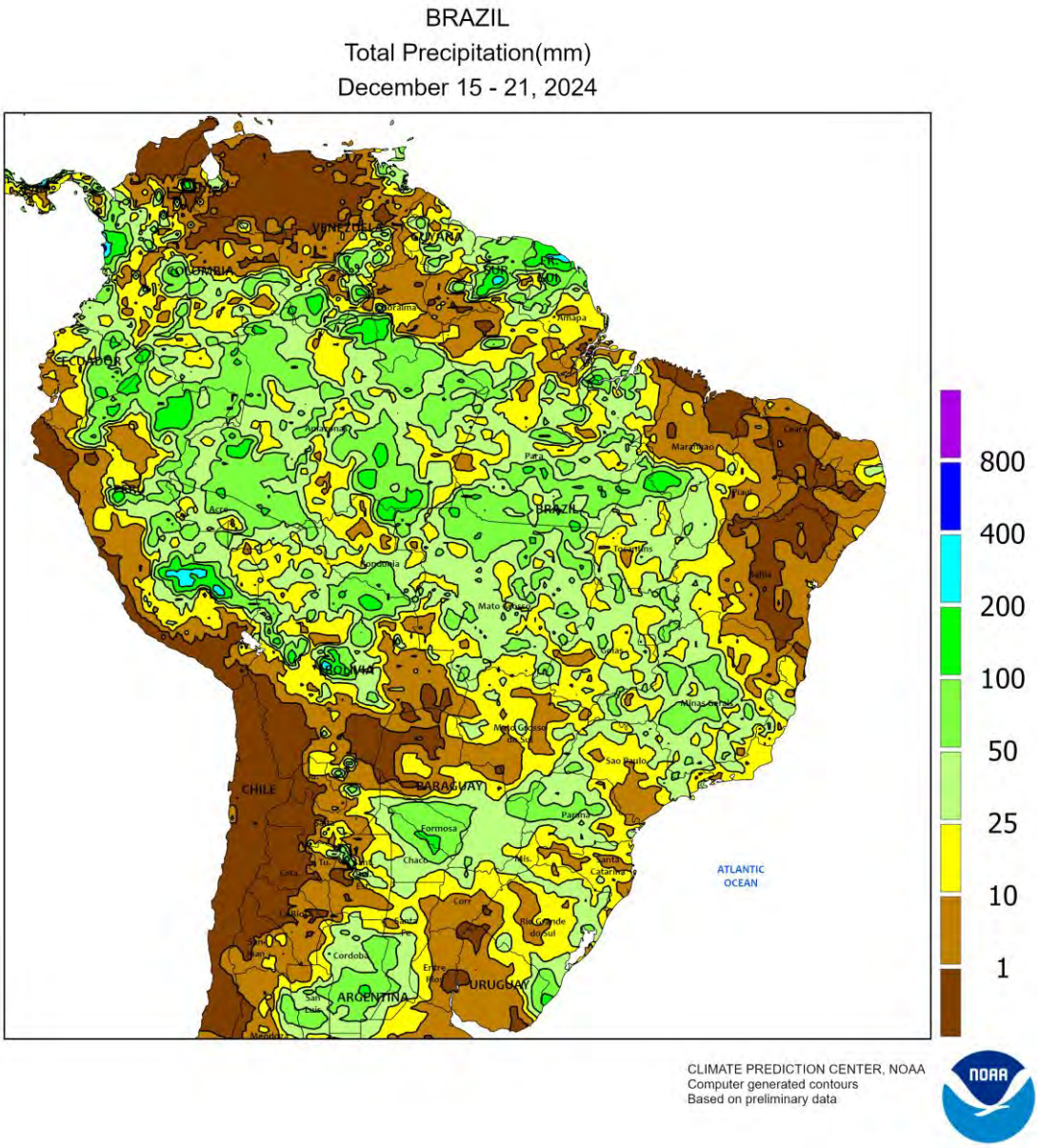

BRAZIL

Widespread showers maintained overall favorable conditions for soybeans and other summer crops, although rainfall was highly variable. Amounts totaled 25 to 100 mm in most farming areas from Mato Grosso eastward through Minas Gerais, reaching as far north as Maranhão. However, several small pockets of dryness (rainfall below 25 mm) occurred elsewhere in the region. Near-normal temperatures (highest daytime temperatures reaching the lower to middle 30s degrees C) favored development of vegetative to filling soybeans, even in the drier locations. Showers were generally lighter farther south, although moderate to heavy rain (greater than 25 mm) fell over western Paraná, providing timely moisture for reproductive corn and soybeans. Despite the patchy nature of the showers, weekly temperatures averaged 1 to 3°C below normal, with highest daytime temperatures mostly in the lower 30s. According to the government of Paraná, first-crop corn and soybeans were 87 and 78 percent flowering or filling, respectively, as of December 16. In Rio Grande do Sul, corn was 94 percent planted as of December 19, and harvesting of the earliest planted fields was underway; meanwhile 94 percent of soybeans were planted, with the earliest planted crops beginning to flower.

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

Chief Meteorologist Mark Brusberg Retires After 40-Year Federal Career

USDA Chief Meteorologist Mark Brusberg will retire at the end of 2024, following a 40-year federal career. During his tenure with the federal government, he has written for and helped to assemble more than 2,000 editions of the *Weekly Weather and Crop Bulletin*, maintaining operational responsibilities for Canada, Mexico, Brazil, Argentina, and South Africa even after becoming the department's top meteorologist.

Mark, a native of the Baltimore area, completed his schooling at the University of Maryland, earning his undergraduate degree (B.S. in Physical Sciences) in 1985 and his master's degree (M.S. in Meteorology) in 1987. While still a student, he joined the National Oceanic and Atmospheric Administration (NOAA) in autumn 1984. During his time with NOAA, Mark worked with the Joint Agricultural Weather Facility (JAWF) at the USDA South Building in Washington, D.C. – and later briefly with the Techniques Development Laboratory (TDL) in Suitland, Maryland. While on the NOAA side of JAWF, Mark worked alongside Don Haddock, Lyle Denny, Wes Byrd, Ray McInturff, and Jim Williams.

When Ron Lundine left JAWF and a full-time meteorology position opened in the summer of 1986, Mark joined the USDA section of the unit, working with fellow meteorologists Ray Motha—a future Chief Meteorologist—and Tom Puterbaugh. Mark spent the remainder of his career with USDA, the last 10 years as Chief Meteorologist. In that position, he helped to coordinate the activities of USDA agencies responsible for weather- and climate-related issues and served as a liaison with other organizations having similar interests, notably NOAA. Since 2000, Mark has been a leading figure in the USDA's drought assessment and mitigation activities and has worked toward improving the performance of the *U.S. Drought Monitor*. He was active in the design and implementation of the NOAA-led National Integrated Drought Information System and currently serves on its Executive Council. In 2013, he began serving in a leadership capacity with the National Drought Resilience Partnership, an advisory group supporting the Executive Office of the President.

In retirement, Mark and his wife, Marcia, plan to remain in Maryland to be near their adult sons and hope to be able to spend more time on travel and hobbies.

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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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U.S. DEPARTMENT OF AGRICULTURE
World Agricultural Outlook Board
Managing Editor..... ***Brad Rippey*** (202) 720-2397
Production Editor..... ***Brian Morris*** (202) 720-3062
International Editor..... ***Mark Brusberg*** (202) 720-2012
Agricultural Weather Analysts..... ***Harlan Shannon, Eric Luebehusen, and Maureen Sartini***

National Agricultural Statistics Service
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Irwin Anolik (202) 720-7621

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