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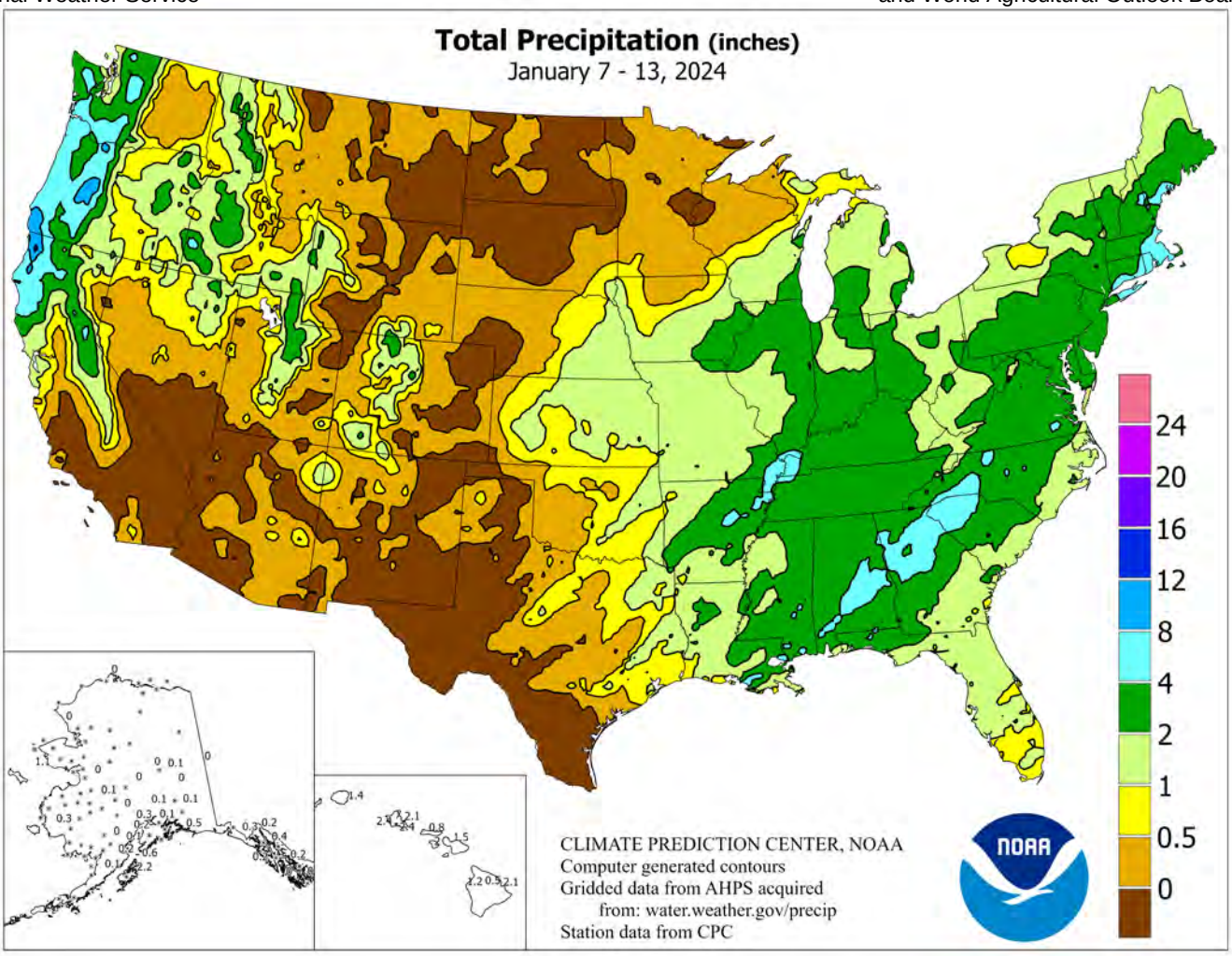
WEEKLY WEATHER AND CROP BULLETIN

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

January 7 – 13, 2024

Highlights provided by USDA/WAOB

Two significant winter storms followed a similar path across the country, starting in the **Northwest** and curving toward the **Southwest**, before tracking northeastward from the **central or southern Plains**. Livestock endured some hardship due to wintry weather, followed by bitterly cold conditions. Both storms produced substantial precipitation as far south as **northern California** and the **northern Intermountain West**, as well as heavy snow from the **central Plains into parts of the Midwest**. Meanwhile, heavy showers and locally severe thunderstorms swept

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Contents

Water Supply Forecast for the Western United States

Highlights

The western U.S. started the 2023-24 winter wet season with mostly abundant reservoir storage, except in the Colorado River basin and a few other areas, courtesy of the previous year's robust storminess. And, with El Niño already in place by autumn 2023, prospects for additional Southwestern drought relief seemed imminent. However, the early stages of the winter of 2023-24 featured below-average snowpack and precipitation in much of the West, due to anomalous warmth, lack of sustained storminess, or a combination of both.

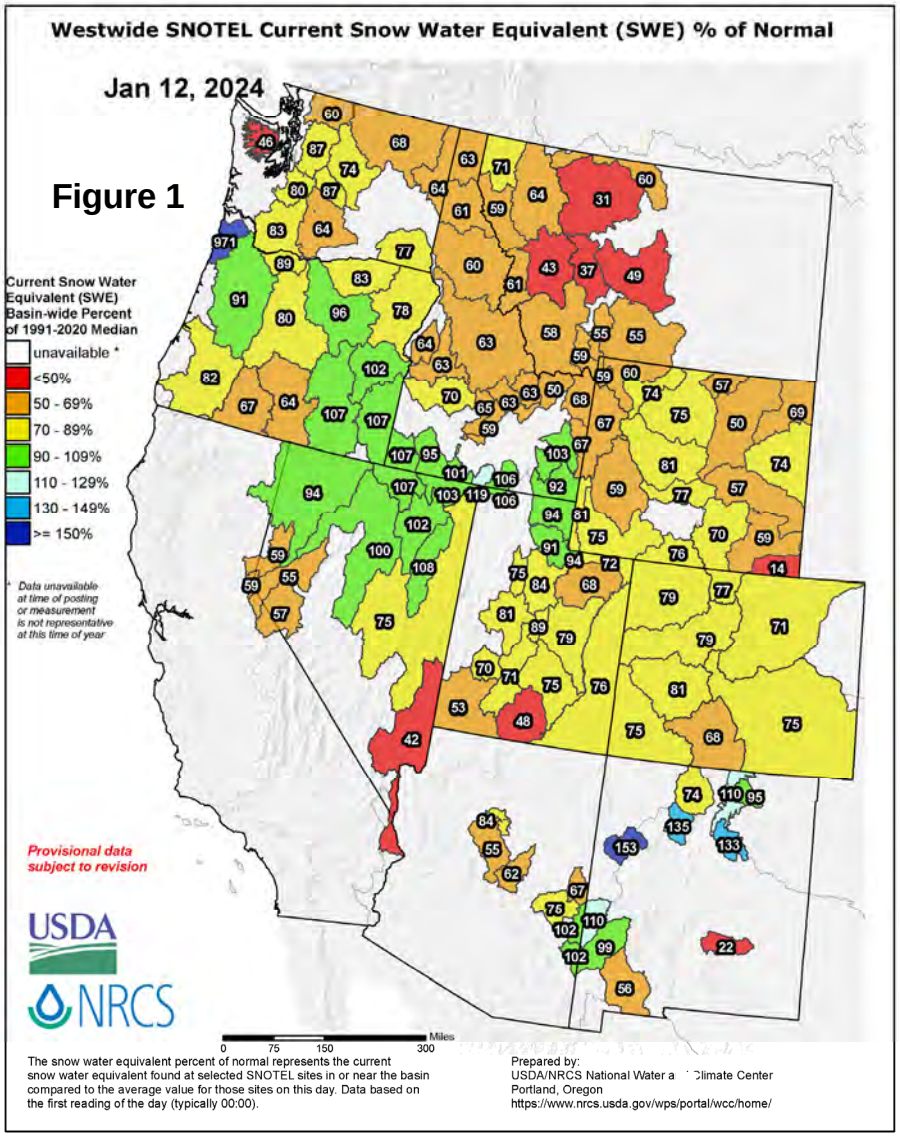
Despite a mostly favorable Western hydrological situation, there were still vestiges of long-term drought. For example, basin-wide storage in the Colorado River system stood at 59 percent of average (and 37 percent of capacity) by December 31, even with the surface elevation of Lake Mead having risen more than 27 feet (to 1,068.05 feet) since setting an end-of month record low of 1,040.92 feet in July 2022.

According to the California Department of Water Resources, the water equivalency of the Sierra Nevada snowpack stood near 2.5 inches (barely one-quarter of average for the date) at the end of December—but improved to 6.4 inches (50 percent of the mid-January average) during the first 2 weeks of 2024.

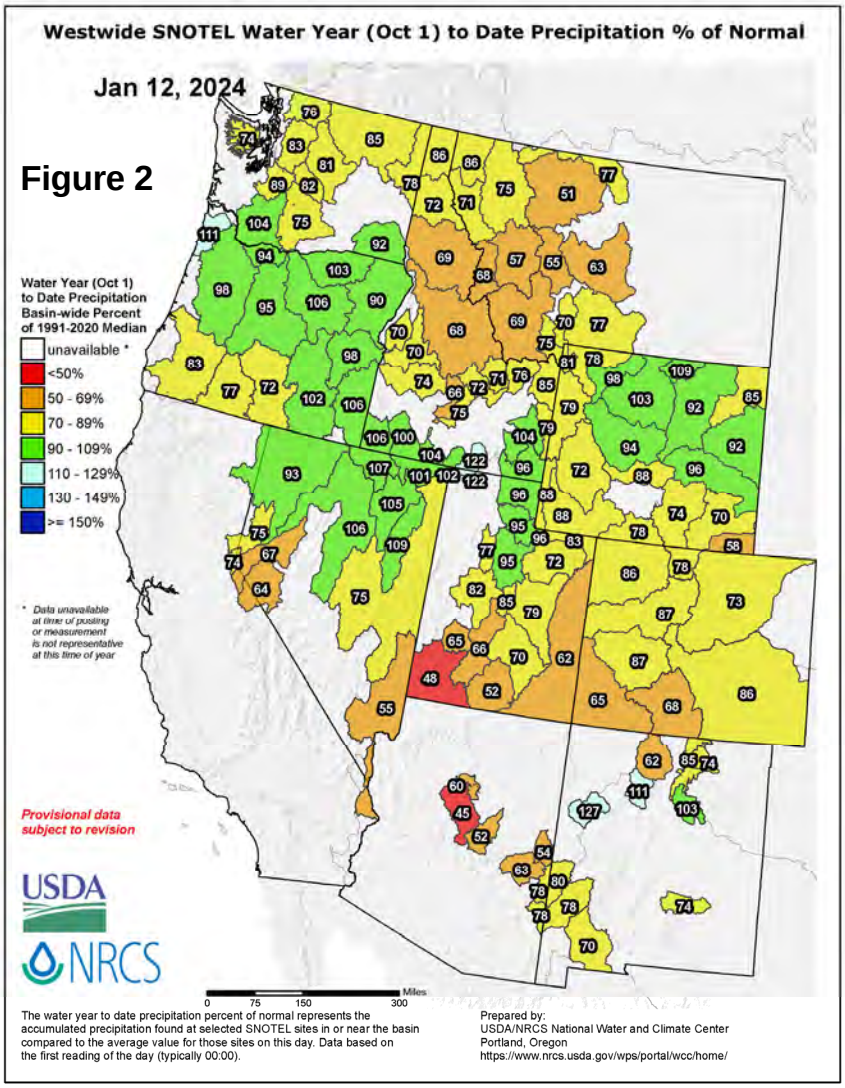
According to the *U.S. Drought Monitor*, drought coverage in the 11-state Western region dipped as low as 15 percent last summer—but ranged from 24 to 32 percent in October-December 2023, during the early part of the Western winter.

Snowpack and Precipitation

Disappointingly low snowpack accumulations were observed during the first 3 months of the Western water year, which began on October 1, 2023. However, modest, early-January improvement (to near-normal snowpack) was observed in some areas, especially from Oregon and the northern Great Basin across portions of the northern Intermountain West. By January 12, 2024, however, substantial snowpack deficits persisted in several areas, including the northern Rockies, where accumulations in some basins were less than 50 percent of average (figure 1). Conditions across the Southwest were mixed, with snowpack ranging from less than 50 percent of average in parts of southern New Mexico, southern Nevada, southern Utah, to greater than 130 percent in scattered basins across northern New Mexico. Notably, consistent Southwestern storminess sometimes associated with El Niño did not materialize during roughly the first half of the winter wet season.



Season-to-date (October 1, 2023 – January 12, 2024) precipitation was significantly below normal in several areas, including parts of the northern Rockies and the Southwest. However, recent storminess punching inland from the Pacific Northwest to the central Rockies has resulted in some local improvements in precipitation totals. Notably, season-to-date precipitation through mid-January had climbed to near-normal levels from much of Oregon and northern Nevada into parts of Wyoming, including northern sections of Utah's Wasatch Range (figure 2).

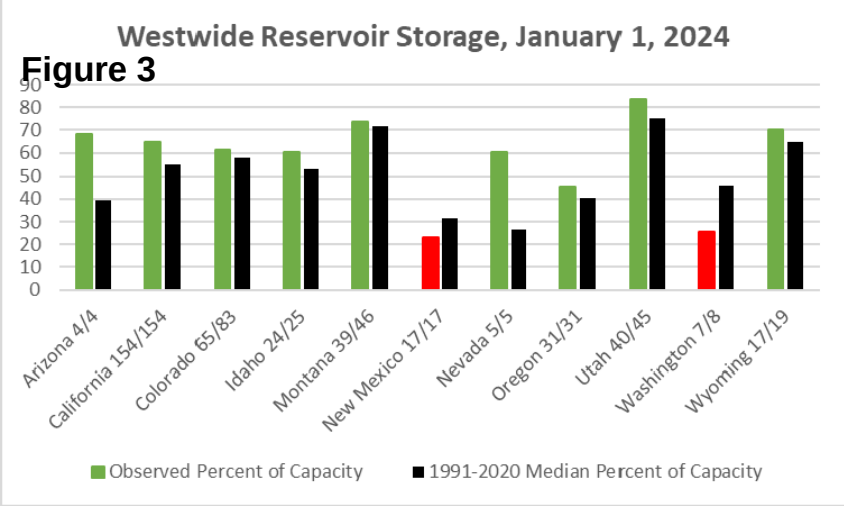


Spring and Summer Streamflow Forecasts

By January 1, 2024, projections for spring and summer streamflow were indicating some early concerns regarding runoff potential, especially in the Southwest. Poor retention of Western snowpack has been related to lack of storminess, unusual early-winter warmth, or a combination of both. However, recent storminess has begun to improve runoff prospects in some areas, especially from Oregon east-southeastward into portions of the central Rockies.

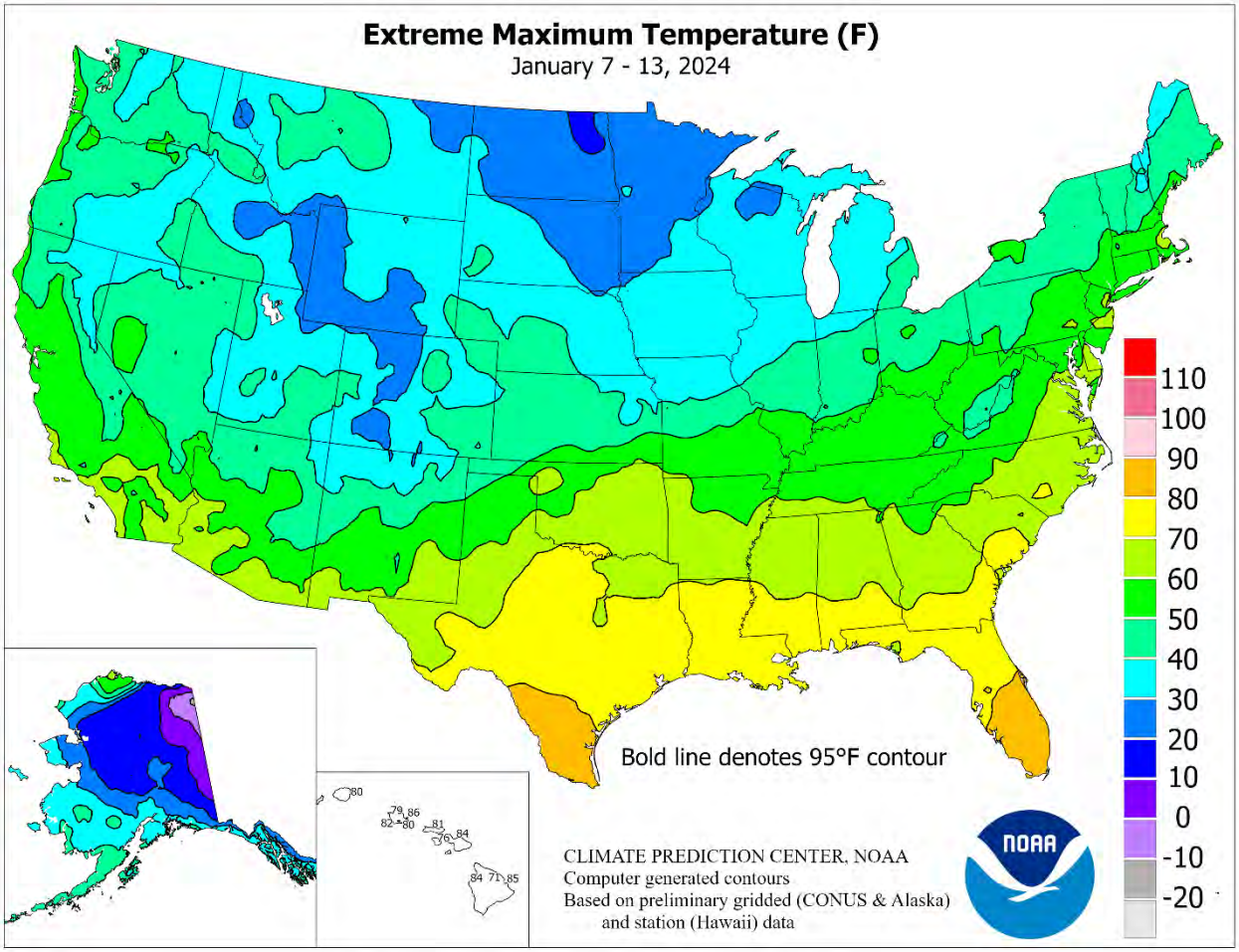
Reservoir Storage

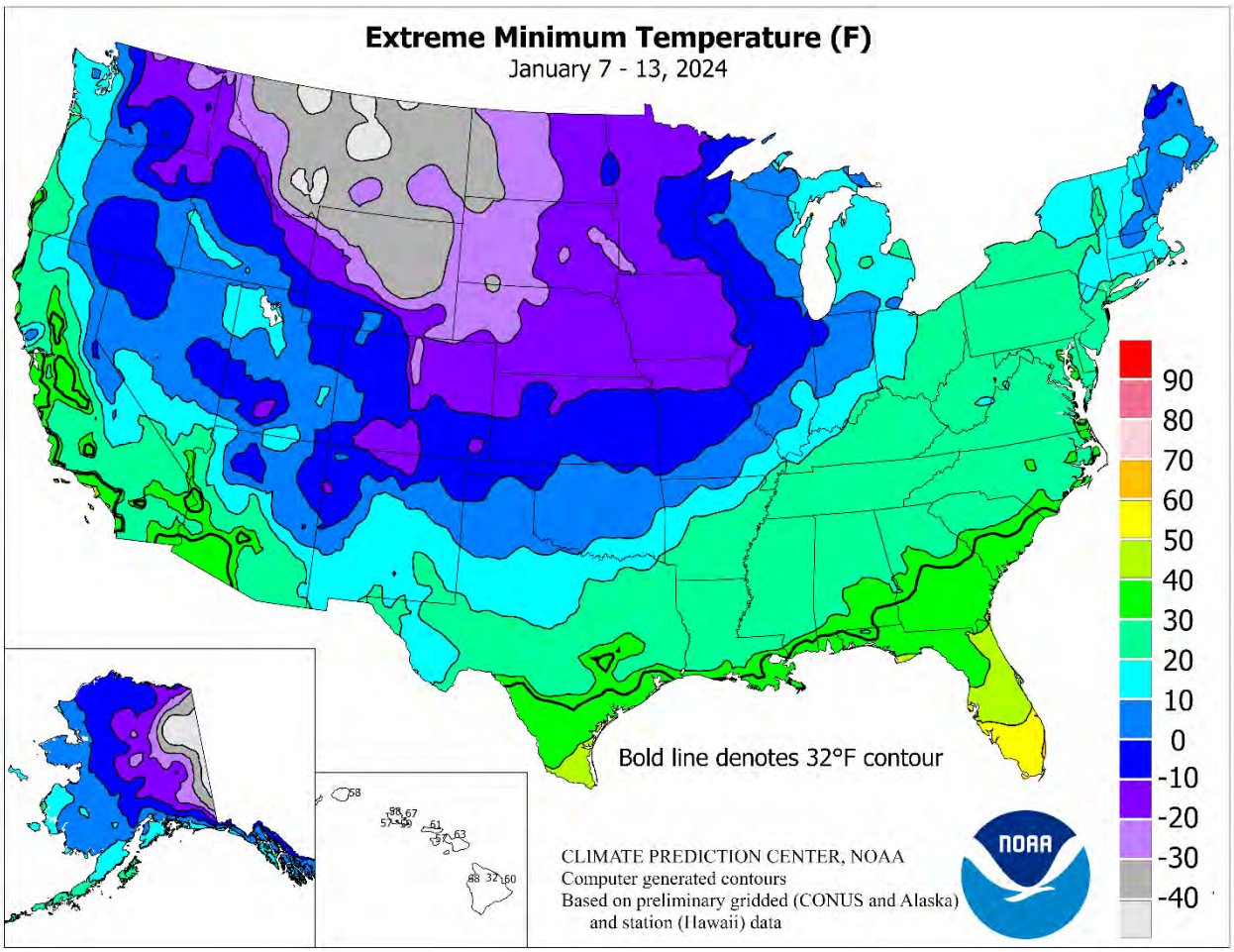
On January 1, 2024, statewide reservoir storage as a percent of average for the date reflected the ongoing benefit of last year's abundant wet season, with only New Mexico and Washington reporting below-average storage (figure 3). As 2024 began, California's 154 primary intrastate reservoirs held 24.6 million acre-feet of water, 117 percent of average. However, storage on January 1 in the Colorado River basin was 19.7 million acre-feet, just 59 percent of average.



For More Information

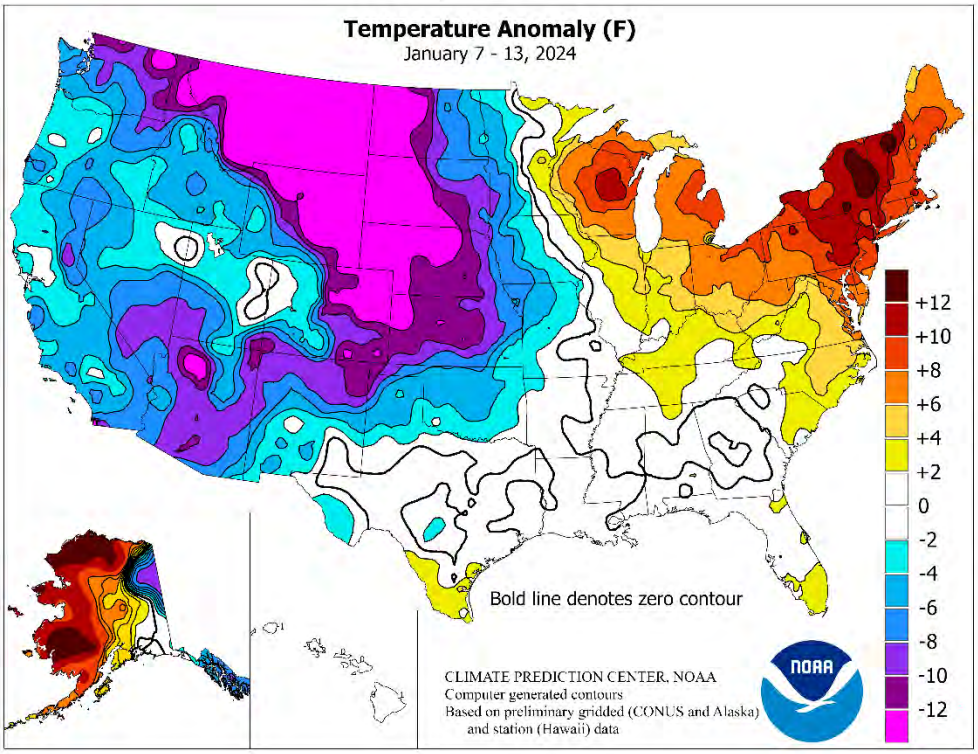
The National Water and Climate Center homepage provides the latest available snowpack and water supply information. Please visit: http://www.wcc.nrcs.usda.gov


Extreme Maximum Temperature (F)
January 7 - 13, 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)
January 7 - 13, 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)

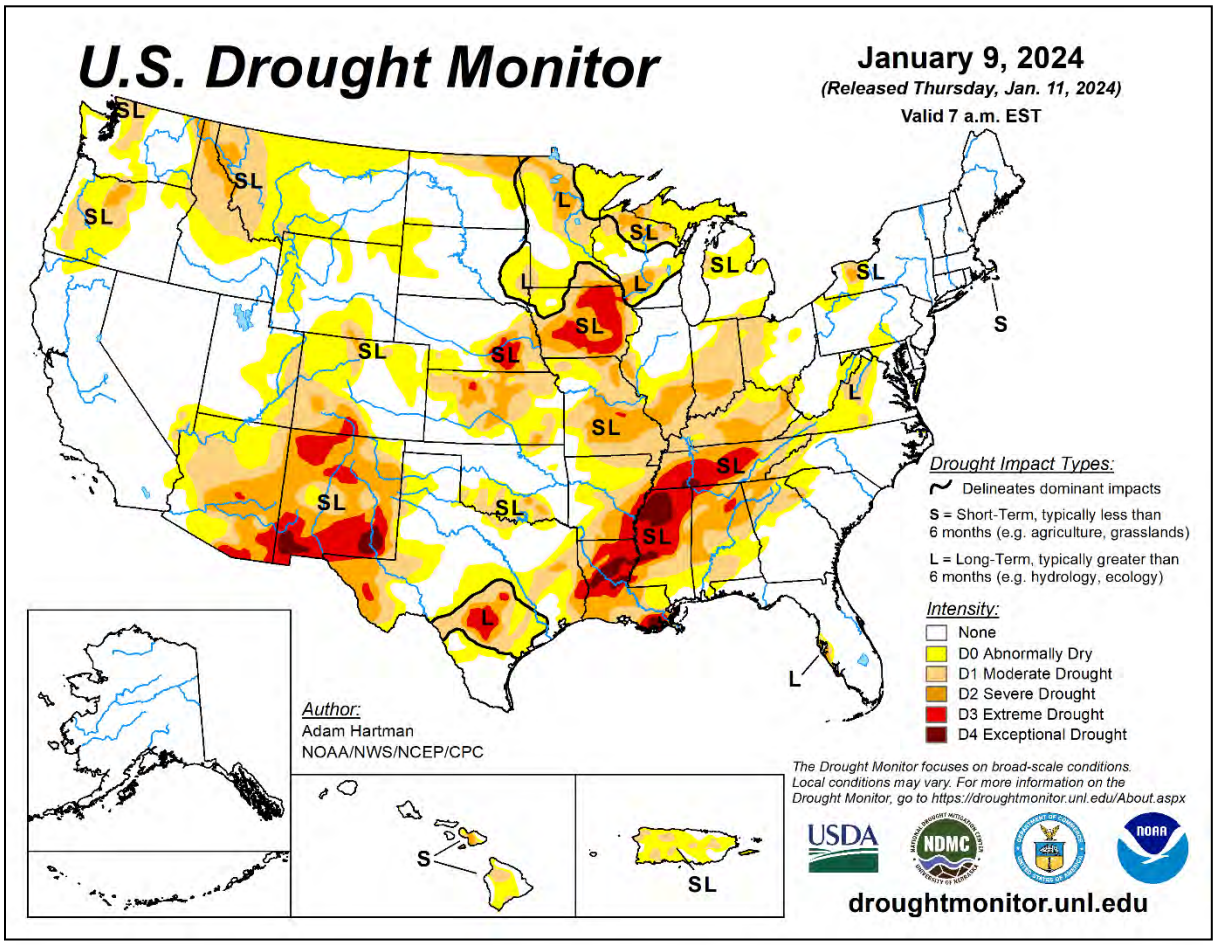
across the **South**, with two-storm rainfall totals topping 4 inches in some areas from **Alabama to the Carolinas**. In the **middle and northern Atlantic States**, two rounds of heavy precipitation falling on saturated soils resulted in fresh-water flooding, while strong southeasterly winds contributed to coastal flooding. Weekly precipitation also exceeded in 4 inches in parts of **coastal New England**. Elsewhere, only light precipitation was observed across the **High Plains** and **far upper Midwest**. In **Montana** and environs, winter wheat had only a patchy or shallow protective snow cover when late-week temperatures plunged to -30°F or below, raising concerns regarding the potential for winterkill. The suddenly and dramatically cold air sent weekly temperatures at least 10 to 20°F below normal across the **northern and central Plains** and parts of the **West**. The frigid conditions ended a long-running warm spell that had resulted in the nation's warmest December during the 1895-2023 period of record. The coldest weather, both in absolute terms and relative to normal, was focused across the **northern High Plains**. Very cold air also spilled across the **northern Rockies**, with some of the greatest impacts noted across the interior Northwest. In contrast, weekly readings averaged at least 10°F above normal in portions of the **Great Lakes States** and much of the **Northeast**, although sharply colder air invaded those regions late in the week.

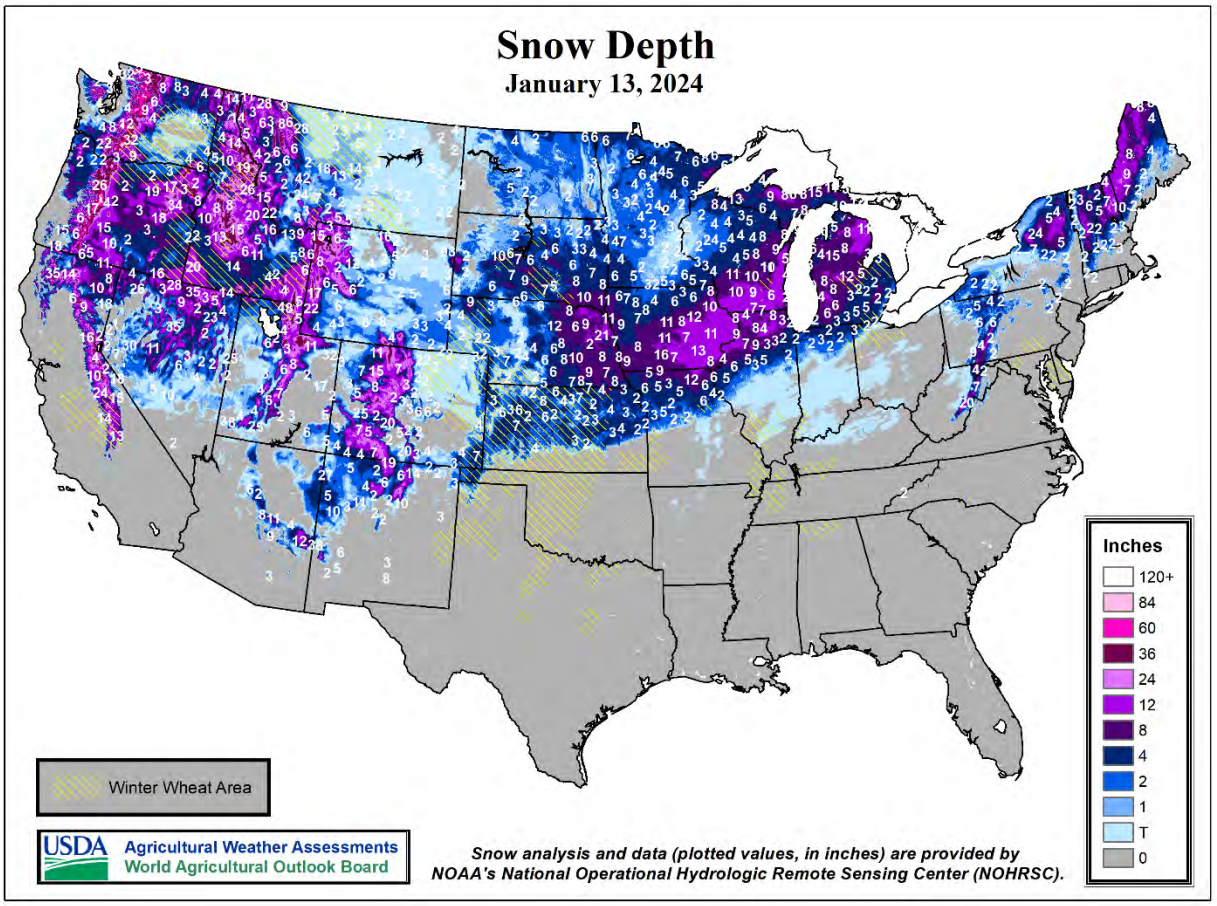


With warm air still in place as the week began, there were a handful of records. Notably, a brief surge of spring-like heat into **southern Texas** on January 8 led to a daily-record high of 91°F in **McAllen**. Later, warmth raced into the **Atlantic Coast States** in advance of a cold front. On January 10, daily-record highs included 59°F in **Harrisburg, PA**, and 52°F in **Portland, ME**. Two days later, lingering warmth in **southern Florida** led to daily-record highs of 87°F in **Miami** and **West Palm Beach**. Meanwhile, the early stages of a cold outbreak appeared in the **West**. In **California**, **Campo** collected consecutive daily-record lows (19 and 17°F, respectively) on January 8-9. Frigid air made a much stronger push at week's end across the **western and central U.S.** For example, **Glasgow, MT**, experienced its latest-ever first sub-zero reading of the winter on January 8, breaking a record set on January 2, 1998. Subsequently, **Glasgow** plunged to -35°F on January 13, a record low for the date. Elsewhere in **Montana**, the 13th featured daily-record lows of -48°F in **Dunkirk**; -45°F in **Bozeman**; -45°F in **Butte**; -43°F in **Lewistown**; -42°F in **Havre**; and -41°F in **Cut Bank**. **Great Falls, MT**, reported a January 13 minimum temperature of -37°F with an official snow depth of just 1 inch, leading to concerns for winter wheat exposure. On that date, the coldest air in 27 years settled across **Sheridan, WY** (-31°F), and **Billings, MT** (-26°F); on January 12, 1997, respective lows had dipped to -35 and -30°F. Maximum temperatures did not appreciably recover on January 13, peaking at sub-zero levels as far south as **Goodland, KS** (-2°F), and **Grand Island, NE** (-1°F). More details on the **Arctic** outbreak, which continued for several days, will appear next week.

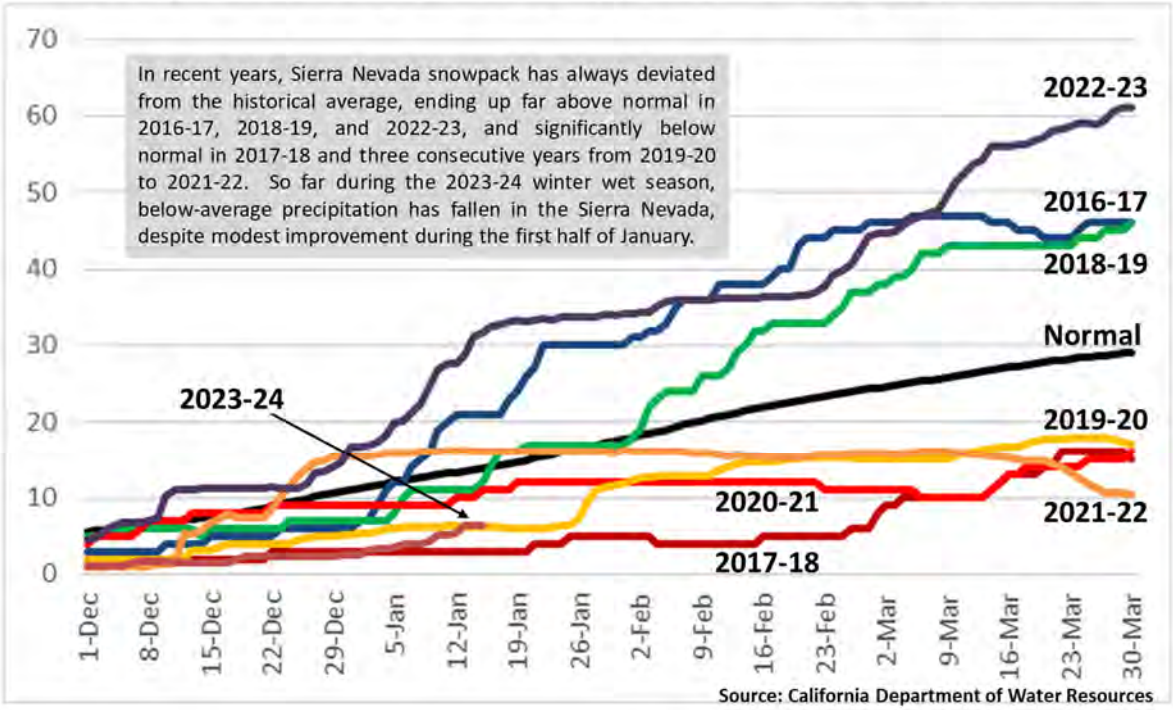
As the week began, a weather system from the previous week was winding down across the **Northeast**. January 6-7 snowfall topped a foot in a few **Northeastern** locations, including **Worcester, MA** (15.5 inches), and **Portland, ME** (12.8 inches). Meanwhile, two additional major storms began to affect the country only 3 to 4 days apart. By January 8, high winds were observed in the **Southwest**, with gusts in **New Mexico** clocked to 67 mph in **Raton** and 64 mph in **Clayton**. Farther north, daily snowfall records for the 8th topped the 10-inch mark in **Sioux Falls, SD**, and **Norfolk, NE**, with both locations receiving 10.5 inches. Daily records for the 8th in **Kansas** reached 8.1 inches in **Dodge City** and 6.9 inches in **Goodland**. In **Iowa**, record-setting snowfall totals for January 9 included 11.5 inches in **Waterloo** and 8.3 inches in D**es Moines**. In fact, **Des Moines** received measurable snow each day from January 7 -13, totaling 23.0 inches, marking its snowiest week since December 28, 1941 – January 3, 1942, when 24.7 inches fell. Meanwhile, the first tornado-related deaths of the year were noted on January 9, with one fatality apiece in **Houston County, AL**, and **Catawba County, NC**. Additionally, dozens of daily precipitation records were established on the 9th across the **South**, **East**, and **lower Midwest**, with amounts ranging from 1 to 4 inches or more. Rainfall records for the 9th topped the 3-inch mark in **Athens, GA** (4.56 inches); **Greenville-Spartanburg, SC** (4.38 inches); **Asheville, NC** (3.98 inches); **Mount Pocono, PA** (3.19 inches); and **Hattiesburg, MS** (3.17 inches). In **Indianapolis, IN**, a barometric pressure record for January was set on the 9th, with a minimum reading of 981.0 millibars, or 28.97 inches (previously, 984.4 millibars on January 26, 1978). With southeasterly winds battering the **Atlantic Coast** on the night of January 9-10, storm-surge flooding was impressive in several areas. On the **Maryland side of the Chesapeake Bay**, a top-three flood was observed in **Cambridge** (stage of 5.25 feet) and along the **Severn River at Annapolis** (5.10 feet). Those levels were 0.93 and 2.06 feet, respectively, below the high-water marks established during Hurricane Isabel on September 19, 2003. In **northern New England**, storm-surge flooding occurred on January 10 and 13, with **Portland, ME**, recording a record-high surge (14.57 feet) on the latter date and a top-four surge (13.84 feet) on the 10th. The mid- to late-week storm delivered additional snow, starting in the **Northwest**, with **Boise, ID**, measuring 5.2 inches on January 10. By the 12th, **Midwestern** daily-record snowfall totals included 11.8 inches in **Green Bay, WI**, and 10.0 inches in **Waterloo, IA**. **Midwestern** blizzard conditions were common, as wind gusts frequently topped 40 mph. **Green Bay's** snow on the 12th was accompanied by a gust to 54 mph. By January 13, a new **Pacific** storm system punched inland across the **West**. In **northern California**, record-setting rainfall amounts for January 13 reached 2.81 inches in **Crescent City** and 2.45 inches in **Eureka**. Farther east, **Boise, ID** (6.8 inches on the 13th), noted its second daily-record snowfall in 4 days, while **Alta, UT**, saw its snowfall for the first half of January climb to 99.0 inches.

Frigid weather in **Alaska** was confined to areas along and near the **Canadian border**. Meanwhile, weekly temperatures averaged at least 10 to 20°F above normal in parts of **western Alaska**. Active weather accompanied **western Alaska's** mild conditions, with peak easterly wind gusts on January 11 reaching 67 mph in **Kotzebue** and 56 mph in **Nome**. In the **Aleutians**, **Cold Bay** measured more than an inch of rain each day from January 10-12, totaling 4.12 inches, along with a peak southeasterly wind gust to 88 mph on the 12th. In **south-central Alaska**, a daily-record snowfall of 4.9 inches in **Anchorage** on January 7 helped to boost the snow depth to 28 inches. At week's end, heavy snow arrived in parts of **southeastern Alaska**, where **Juneau** measured 29.3 inches from January 12-15. Farther south, **Hawaii** experienced heavy rain and flash flooding early in the week, followed by a spell of cool, dry weather. The temperature in **Lihue, Kauai**, dipped to 56°F by the morning of January 14, the lowest temperature in that location since an identical reading occurred on February 6, 2021. Prior to the cool wave, daily rainfall topped the 2-inch mark in **Honolulu, Oahu** (2.38 inches on January 8), and **Kahului, Maui** (2.08 inches on January 9). **Kahului's** heavy rain was accompanied by a southerly wind gust to 53 mph.


U.S. Drought Monitor
January 9, 2024
(Released Thursday, Jan. 11, 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:
Adam Hartman
NOAA/NWS/NCEP/CPC
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
USDA
NDMC
NOAA
droughtmonitor.unl.edu


Snow Depth
January 13, 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).

Daily Sierra Nevada Snowpack (Inches) vs. Normal



California Reservoirs, Recharge and Withdrawal

Million Acre-Feet and Percent of Average

	Recharge		Withdrawal
2010-11	12.47 (142%)	**2011**	8.75 (100%)
2011-12	5.75 (66%)	**2012**	11.54 (131%)
2012-13	6.52 (74%)	**2013**	11.49 (131%)
2013-14	4.17 (48%)	**2014**	7.75 (88%)
2014-15	6.46 (74%)	**2015**	7.13 (81%)
2015-16	14.68 (167%)	**2016**	7.88 (90%)
2016-17	15.00 (171%)	**2017**	8.77 (100%)
2017-18	6.88 (78%)	**2018**	10.84 (123%)
2018-19	14.05 (160%)	**2019**	10.00 (114%)
2019-20	4.59 (52%)	**2020**	10.60 (121%)
2020-21	1.67 (19%)	**2021**	7.17 (82%)
2021-22	7.79 (89%)	**2022**	7.00 (80%)
2022-23	19.54 (223%)	**2023**	8.49 (97%)
Avg.	**8.78**	**Avg.**	**8.78**

Notes: Recharge and withdrawal values are based on end-of-month statistics, not daily readings. Data is updated through December 31, 2023.

National Weather Data for Selected Cities

Weather Data for the Week Ending January 13, 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	17	33	13	22	5	0.20	0.04	0.16	2.22	151	0.41	130	93	75	0	7	2	0
	BARROW	25	3	63	-2	14	0	0.00	-0.04	0.00	0.00	0	0.00	0	86	67	0	7	0	0
	FAIRBANKS	5	-13	20	-23	-4	6	0.04	-0.11	0.04	0.98	117	0.04	14	79	68	0	7	1	0
	JUNEAU	25	15	33	2	20	-8	0.39	-0.94	0.31	11.43	126	0.97	38	78	58	0	7	3	0
	KODIAK	39	30	42	25	34	3	2.21	0.24	1.11	11.04	88	4.97	134	97	68	0	4	4	2
	NOME	29	18	33	4	23	18	1.07	0.84	0.63	1.53	104	1.11	270	94	83	0	7	6	1
AL	BIRMINGHAM	55	36	64	29	45	1	2.46	1.33	1.30	7.59	109	2.89	138	81	43	0	1	3	2
	HUNTSVILLE	53	33	62	29	43	1	2.59	1.43	1.47	7.76	96	2.81	128	91	50	0	4	3	2
	MOBILE	66	40	77	33	53	3	3.36	2.02	1.80	11.30	142	5.25	210	94	34	0	0	3	2
	MONTGOMERY	60	35	72	30	47	0	4.35	3.33	3.25	6.65	96	5.08	264	92	45	0	1	3	2
AR	FORT SMITH	52	27	64	14	40	0	1.36	0.69	1.04	3.46	72	1.52	118	91	47	0	6	4	1
	LITTLE ROCK	55	30	65	24	42	2	2.51	1.68	1.27	4.73	70	3.31	199	88	47	0	6	4	2
AZ	FLAGSTAFF	36	6	46	-2	21	-9	0.59	0.08	0.41	1.48	52	0.94	100	80	39	0	7	2	0
	PHOENIX	57	38	62	35	48	-9	0.02	-0.19	0.01	0.78	69	0.04	9	61	21	0	0	2	0
	PRESCOTT	42	17	54	12	30	-10	0.17	-0.11	0.09	0.81	52	0.21	38	78	36	0	7	2	0
	TUCSON	57	32	66	28	45	-9	0.14	-0.06	0.14	1.38	102	0.16	42	72	20	0	4	1	0
CA	BAKERSFIELD	53	35	56	33	44	-5	0.07	-0.21	0.06	0.87	53	0.23	43	85	45	0	0	2	0
	EUREKA	50	39	55	33	45	-3	3.59	1.97	1.89	11.46	103	5.23	175	96	78	0	0	7	3
	FRESNO	51	37	55	33	44	-3	0.36	-0.18	0.19	1.46	52	0.79	81	91	54	0	0	4	0
	LOS ANGELES	60	46	63	42	53	-5	0.00	-0.70	0.00	3.76	106	0.20	15	76	29	0	0	0	0
	REDDING	51	35	54	29	43	-4	1.74	0.31	1.50	9.79	110	2.37	92	88	54	0	1	3	1
	SACRAMENTO	52	38	55	34	45	-2	0.28	-0.61	0.28	5.57	111	0.87	55	87	51	0	0	1	0
	SAN DIEGO	62	43	63	39	52	-6	0.15	-0.32	0.12	1.11	43	0.27	30	83	36	0	0	2	0
	SAN FRANCISCO	56	44	58	40	50	-1	0.75	-0.20	0.49	5.14	87	1.32	77	82	61	0	0	3	0
	STOCKTON	54	37	57	33	45	-2	0.37	-0.28	0.28	3.72	105	1.08	95	89	49	0	0	3	0
CO	ALAMOSA	28	-3	36	-18	12	-4	0.14	0.07	0.14	0.63	131	0.23	178	84	41	0	7	1	0
	CO SPRINGS	35	11	43	-6	23	-8	0.01	-0.04	0.01	0.74	225	0.16	157	67	25	0	7	1	0
	DENVER INTL	30	4	43	-13	17	-15	0.11	0.04	0.09	0.24	47	0.11	74	72	34	0	7	2	0
	GRAND JUNCTION	36	16	45	4	26	-1	0.11	-0.03	0.08	0.65	76	0.11	41	79	37	0	7	3	0
	PUEBLO	37	8	45	-1	23	-9	0.01	-0.05	0.01	1.46	364	0.16	146	83	31	0	7	1	0
CT	BRIDGEPORT	48	33	56	26	41	9	3.46	2.71	1.67	11.98	222	3.78	270	94	56	0	4	5	2
	HARTFORD	46	27	55	14	36	9	5.00	4.24	2.23	12.83	232	5.42	375	92	53	0	5	5	4
DC	WASHINGTON	55	36	59	32	45	7	2.58	1.93	2.22	9.84	212	3.60	295	88	46	0	1	3	1
DE	WILMINGTON	52	31	57	25	42	8	3.13	2.40	2.51	12.19	234	4.21	312	93	52	0	5	4	2
FL	DAYTONA BEACH	70	51	78	44	60	2	1.81	1.23	0.93	6.85	198	2.20	197	94	55	0	0	5	2
	JACKSONVILLE	66	42	75	37	54	0	1.54	0.87	1.41	8.98	225	2.53	209	90	57	0	0	3	1
	KEY WEST	77	68	80	66	72	2	0.55	0.17	0.42	6.44	220	0.55	72	97	79	0	0	5	0
	MIAMI	78	65	87	60	72	3	0.61	0.25	0.37	4.51	142	0.69	96	94	64	0	0	4	0
	ORLANDO	72	52	80	46	62	2	0.65	0.11	0.46	4.89	141	1.24	125	92	55	0	0	5	0
	PENSACOLA	64	45	73	36	54	1	3.10	1.98	2.92	9.42	125	4.69	221	92	40	0	0	3	1
	TALLAHASSEE	64	42	75	38	53	1	1.58	0.63	1.44	14.59	242	3.97	222	95	50	0	0	3	1
	TAMPA	70	53	79	50	62	0	1.28	0.74	0.77	6.97	195	2.54	251	92	60	0	0	5	1
	WEST PALM BEACH	77	62	87	59	70	3	0.69	-0.06	0.39	4.94	101	1.09	77	94	60	0	0	4	0
GA	ATHENS	53	32	62	27	42	-2	5.44	4.48	4.44	10.44	166	6.26	337	89	48	0	4	3	2
	ATLANTA	54	36	62	31	45	1	3.37	2.35	2.52	7.82	120	4.19	216	84	48	0	1	3	2
	AUGUSTA	58	32	67	27	45	-2	1.36	0.50	0.69	6.35	115	2.06	125	95	50	0	5	3	2
	COLUMBUS	58	37	65	32	47	-1	3.63	2.69	2.82	5.87	88	4.01	218	91	45	0	1	3	1
	MACON	58	34	66	31	46	-1	3.63	2.70	3.23	6.73	105	4.83	266	92	43	0	3	3	1
	SAVANNAH	62	40	72	36	51	1	1.91	1.23	0.99	7.19	160	2.62	205	86	49	0	0	3	2
HI	HILO	79	66	85	60	72	1	2.10	0.51	1.40	10.45	69	2.72	88	97	62	0	0	4	2
	HONOLULU	78	64	80	59	71	-3	2.40	1.94	2.04	3.28	106	2.40	267	95	60	0	0	4	1
	KAHULUI	79	67	84	63	73	0	1.54	1.00	0.80	2.53	65	1.54	147	92	57	0	0	5	2
	LIHUE	77	64	80	58	71	-1	1.36	0.72	1.08	5.78	97	1.56	121	85	56	0	0	5	1
IA	BURLINGTON	29	18	36	-11	24	-1	0.96	0.63	0.52	3.01	120	0.98	156	96	79	0	7	5	1
	CEDAR RAPIDS	28	14	35	-14	21	1	0.22	0.01	0.09	1.15	57	0.22	53	95	81	0	7	3	0
	DES MOINES	26	13	36	-15	19	-3	1.24	1.01	0.42	2.78	136	1.26	277	90	76	0	7	7	0
	DUBUQUE	29	17	33	-9	23	5	0.88	0.59	0.44	2.84	121	0.89	165	94	80	0	7	5	0
	SIOUX CITY	20	6	33	-15	13	-7	1.17	1.00	0.77	2.78	213	1.21	385	90	75	0	7	5	1
	WATERLOO	27	15	36	-12	21	1	0.66	0.41	0.29	1.44	75	0.68	145	86	73	0	7	4	0
ID	BOISE	34	19	42	10	27	-5	1.00	0.67	0.50	2.73	126	1.47	235	90	57	0	7	5	1
	LEWISTON	34	21	47	-10	28	-8	0.55	0.30	0.43	1.73	107	0.57	120	81	51	0	6	3	0
	POCATELLO	27	17	33	3	22	-3	0.38	0.12	0.19	1.57	97	0.55	114	91	68	0	7	4	0
IL	CHICAGO/O_HARE	35	26	36	1	30	5	1.76	1.29	0.92	4.94	165	1.99	225	93	73	0	6	6	2
	MOLINE	32	20	36	-8	26	3	1.74	1.35	0.95	4.40	158	1.78	243	92	78	0	7	4	2
	PEORIA	33	23	37	-6	28	2	1.58	1.09	0.92	4.52	143	1.67	177	91	74	0	6	4	1
	ROCKFORD	33	22	35	-4	27	5	1.48	1.11	0.82	4.68	177	1.57	224	93	76	0	7	5	2
	SPRINGFIELD	35	22	43	-3	29	1	1.73	1.33	0.64	4.72	161	1.73	222	95	75	0	5	5	2
IN	EVANSVILLE	44	28	51	17	36	3	3.15	2.36	1.60	5.31	100	3.37	220	88	64	0	6	4	3
	FORT WAYNE	36	27	44	8	32	6	1.78	1.15	1.26	3.47	95	1.80	153	91	73	0	6	4	1
	INDIANAPOLIS	38	27	45	7	32	4	2.11	1.35	0.98	3.50	80	2.35	161	94	73	0	5	6	2
	SOUTH BEND	35	27	37	3	31	6	1.91	1.26	0.98	4.65	128	1.93	159	92	74	0	6	7	2
KS	CONCORDIA	28	10	41	-10	19	-10	1.11	0.96	0.96	2.63	200	1.18	433	86	64	0	7	4	1
	DODGE CITY	32	13	42	-4	22	-10	0.39	0.27	0.39	3.04	249	0.69	267	93	66	0	6	1	0
	GOODLAND	25	7	40	-12	16	-14	0.10	0.03	0.06	1.29	217	0.33	265	86	58	0	7	2	0
	TOPEKA	32	15	41	-6	23	-7	0.79	0.61	0.67	3.81	205	1.01	269	89	64	0	6	4	1

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

Weather Data for the Week Ending January 13, 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	35	14	49	-2	24	-8	1.07	0.90	1.06	4.13	262	1.52	433	86	56	0	7	2	1
KY	LEXINGTON	44	31	52	24	38	4	2.43	1.67	1.17	4.89	88	2.90	198	92	60	0	3	4	2
	LOUISVILLE	46	31	53	24	38	3	3.01	2.22	1.26	5.24	92	3.46	227	83	57	0	4	6	2
	PADUCAH	47	29	56	19	38	2	4.56	3.66	2.63	6.88	114	4.99	288	87	55	0	4	3	3
LA	BATON ROUGE	67	39	77	31	53	1	0.77	-0.73	0.74	8.77	109	2.28	83	87	43	0	2	3	1
	LAKE CHARLES	64	38	74	29	51	-2	1.20	-0.26	1.16	5.50	76	3.13	117	96	46	0	2	2	1
	NEW ORLEANS	66	44	77	37	55	1	2.02	0.77	1.18	12.89	179	3.52	149	92	45	0	0	3	2
	SHREVEPORT	62	34	73	27	48	1	***	***	***	***	***	***	***	87	40	0	4	***	***
MA	BOSTON	47	32	60	23	40	9	4.67	3.87	1.52	10.54	181	4.82	319	94	59	0	3	4	4
	WORCESTER	44	29	57	21	36	11	4.80	4.00	1.38	12.41	214	5.01	331	90	58	0	4	4	4
MD	BALTIMORE	55	33	59	28	44	9	2.29	1.59	1.82	10.48	209	3.50	269	89	47	0	3	3	1
ME	CARIBOU	29	9	41	1	19	7	1.17	0.49	0.70	4.58	93	1.26	97	86	58	0	7	2	1
	PORTLAND	41	24	52	7	32	8	6.05	5.25	2.42	12.61	209	6.05	396	96	60	0	5	4	4
MI	ALPENA	32	24	36	14	28	8	1.63	1.20	0.62	3.38	126	1.76	219	96	79	0	7	6	1
	GRAND RAPIDS	35	28	37	18	31	6	3.90	3.30	2.58	5.69	158	3.91	350	95	77	0	7	6	2
	HOUGHTON LAKE	33	29	34	25	31	11	0.01	-0.22	0.01	0.19	14	0.04	12	95	81	0	3	1	0
	LANSING	34	28	35	12	31	7	1.54	1.03	0.77	3.72	131	1.57	166	93	75	0	7	6	1
	MUSKEGON	37	31	39	22	34	7	1.50	0.93	0.76	3.22	92	1.58	149	87	69	0	3	6	1
	TRAVERSE CITY	34	27	37	21	31	7	0.50	0.10	0.19	1.81	70	0.54	71	89	72	0	7	6	0
MN	DULUTH	22	6	28	-7	14	3	0.37	0.14	0.29	3.76	195	0.67	147	88	72	0	7	4	0
	INT_L FALLS	15	3	22	-11	9	4	0.13	-0.07	0.11	1.61	118	0.43	111	88	72	0	7	2	0
	MINNEAPOLIS	25	15	31	-6	20	4	0.11	-0.10	0.05	2.41	152	0.13	32	81	68	0	7	4	0
	ROCHESTER	24	13	31	-11	18	3	0.46	0.23	0.24	1.59	93	0.46	110	96	81	0	7	4	0
	ST. CLOUD	21	10	28	-7	15	3	0.15	-0.01	0.11	3.56	300	0.21	67	83	71	0	7	3	0
MO	COLUMBIA	35	19	43	-6	27	-4	0.98	0.49	0.53	3.80	126	1.06	114	94	71	0	7	4	1
	KANSAS CITY	29	14	37	-11	22	-7	0.81	0.57	0.52	3.97	193	0.95	198	95	73	0	7	5	1
	SAINT LOUIS	42	26	51	1	34	2	1.52	0.91	0.67	3.87	104	1.71	143	80	58	0	5	4	1
	SPRINGFIELD	43	21	55	-1	32	-2	0.61	-0.01	0.35	1.74	45	0.63	52	94	55	0	6	3	0
MS	JACKSON	61	34	70	26	47	1	1.60	0.40	1.29	5.49	74	2.23	99	88	41	0	2	3	1
	MERIDIAN	61	32	71	28	47	-1	3.29	2.06	2.10	6.62	87	3.91	170	91	41	0	2	3	2
	TUPELO	55	35	64	27	45	1	1.48	0.39	1.47	4.61	57	2.14	104	84	45	0	4	2	1
MT	BILLINGS	18	-3	38	-26	8	-19	0.17	0.04	0.10	0.52	63	0.17	69	79	51	0	7	3	0
	BUTTE	16	-9	33	-45	3	-17	0.12	0.02	0.04	0.44	65	0.12	62	87	52	0	7	4	0
	CUT BANK	7	-15	40	-41	-4	-25	0.00	-0.06	0.00	0.02	4	0.00	0	82	59	0	7	0	0
	GLASGOW	10	-10	34	-35	0	-14	0.18	0.06	0.07	0.26	40	0.18	84	88	59	0	7	4	0
	GREAT FALLS	13	-10	41	-37	1	-24	0.19	0.05	0.10	0.27	34	0.19	77	81	58	0	7	3	0
	HAVRE	8	-19	44	-42	-5	-23	0.37	0.26	0.14	0.57	94	0.37	180	90	59	0	7	3	0
	MISSOULA	23	8	40	-22	16	-8	0.21	-0.02	0.11	0.73	48	0.25	57	86	50	0	7	3	0
NC	ASHEVILLE	48	28	57	24	38	-1	4.76	3.83	3.86	12.02	201	5.70	321	93	47	0	5	3	2
	CHARLOTTE	55	34	63	31	45	3	3.43	2.61	2.54	10.77	210	4.50	292	85	43	0	3	2	2
	GREENSBORO	53	30	59	25	41	2	3.26	2.46	2.45	11.33	245	4.28	294	92	43	0	6	3	2
	HATTERAS	59	44	68	38	52	3	1.17	0.08	0.98	8.87	131	1.79	89	93	56	0	0	4	1
	RALEIGH	60	35	68	31	47	6	2.36	1.56	1.37	10.01	204	3.22	214	80	38	0	3	2	2
	WILMINGTON	62	38	70	30	50	3	0.92	0.11	0.80	9.56	182	1.44	93	86	46	0	1	2	1
ND	BISMARCK	10	-5	23	-27	2	-10	0.19	0.07	0.14	0.69	83	0.26	113	83	65	0	7	3	0
	DICKINSON	10	-9	30	-33	1	-15	0.00	-0.06	0.00	0.15	50	0.00	0	83	64	0	7	0	0
	FARGO	11	1	24	-7	6	-3	0.09	-0.09	0.07	2.75	221	0.13	36	76	65	0	7	3	0
	GRAND FORKS	9	-3	21	-9	3	-4	0.05	-0.07	0.05	1.10	122	0.17	70	79	67	0	7	1	0
	JAMESTOWN	9	-4	22	-18	3	-7	0.00	-0.08	0.00	0.58	116	0.00	0	79	68	0	7	0	0
NE	GRAND ISLAND	22	6	38	-16	14	-11	0.58	0.45	0.28	1.85	169	0.61	246	88	68	0	7	6	0
	LINCOLN	22	9	36	-14	15	-10	0.82	0.66	0.58	2.30	154	0.82	264	82	64	0	7	5	1
	NORFOLK	20	5	37	-16	13	-9	1.10	0.96	0.70	2.66	241	1.13	441	83	68	0	7	6	1
	NORTH PLATTE	26	5	44	-19	15	-11	0.17	0.09	0.07	0.59	95	0.20	123	85	55	0	7	4	0
	OMAHA	24	10	34	-15	17	-8	0.71	0.55	0.22	2.39	155	0.73	226	90	71	0	7	5	0
	SCOTTSBLUFF	24	-1	44	-23	12	-16	0.22	0.14	0.17	0.34	49	0.22	132	80	45	0	7	3	0
	VALENTINE	18	0	37	-21	9	-16	0.38	0.31	0.19	1.01	181	0.43	340	87	65	0	7	5	0
NH	CONCORD	40	22	50	8	31	9	3.85	3.21	1.30	10.77	218	3.89	316	98	57	0	5	4	4
NJ	ATLANTIC_CITY	53	30	58	24	42	7	3.71	2.94	2.40	11.33	191	4.75	327	94	48	0	4	5	2
	NEWARK	52	36	61	31	44	11	2.61	1.81	2.19	10.57	187	3.08	204	85	47	0	2	5	1
NM	ALBUQUERQUE	42	22	50	14	32	-5	0.00	-0.09	0.00	1.22	174	0.22	132	70	31	0	7	0	0
NV	ELY	31	4	41	-6	18	-9	0.45	0.29	0.22	0.72	73	0.69	220	87	47	0	7	3	0
	LAS VEGAS	49	35	53	31	42	-7	0.00	-0.14	0.00	0.10	14	0.04	15	48	21	0	2	0	0
	RENO	42	20	51	9	31	-6	0.85	0.52	0.85	1.36	80	0.98	167	85	43	0	6	1	1
	WINNEMUCCA	36	17	43	-4	26	-5	0.66	0.43	0.44	1.62	112	1.35	316	85	59	0	7	3	0
NY	ALBANY	45	30	53	19	37	13	2.39	1.78	1.08	8.19	185	2.54	219	89	57	0	3	5	2
	BINGHAMTON	40	29	47	27	35	12	1.21	0.60	0.51	7.57	178	1.65	143	91	64	0	7	6	1
	BUFFALO	42	30	52	24	36	10	1.12	0.34	0.42	5.51	104	1.74	115	93	65	0	6	6	0
	ROCHESTER	43	31	52	27	37	10	0.83	0.24	0.26	3.88	102	1.08	97	87	65	0	3	6	0
	SYRACUSE	39	30	43	25	35	10	0.94	0.33	0.37	6.72	150	1.62	136	90	64	0	5	5	0
OH	AKRON-CANTON	40	28	46	21	34	6	1.15	0.47	0.69	3.76	89	1.22	93	94	71	0	7	5	1
	CINCINNATI	41	29	50	19	35	4	2.60	1.83	1.38	4.71	90	2.83	191	97	74	0	6	5	2
	CLEVELAND	42	30	49	23	36	7	1.05	0.33	0.52	4.56	104	1.27	93	87	67	0	4	6	1
	COLUMBUS	42	30	49	22	36	6	2.07	1.36	1.44	5.43	120	2.20	161	93	70	0	5	5	2
	DAYTON	41	30	50	18	35	6	2.47	1.72	1.62	4.49	100	2.57	180	93	73	0	4	4	2
	MANSFIELD	39	27	47	20	33	6	1.91	1.15	1.14	4.33	97	1.94	134	94	72	0	7	6	1

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Weather Data for the Week Ending January 13, 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	48	15	35	7	2.49	1.91	1.31	4.23	119	2.52	228	88	71	0	4	6	2
	YOUNGSTOWN	42	30	47	24	36	9	1.30	0.58	0.80	4.04	88	1.41	101	91	67	0	5	6	1
OK	OKLAHOMA CITY	47	20	64	3	33	-5	0.50	0.23	0.50	2.53	109	0.80	150	86	40	0	7	1	1
	TULSA	46	22	60	2	34	-4	0.93	0.56	0.85	3.04	96	1.24	169	86	45	0	6	2	1
OR	ASTORIA	46	35	54	24	40	-4	3.51	1.04	1.04	17.97	117	5.47	117	91	67	0	2	6	3
	BURNS	34	10	38	-2	22	-4	0.97	0.65	0.65	2.88	136	1.26	213	88	59	0	7	5	1
	EUGENE	46	35	51	20	40	-1	2.94	1.48	1.06	10.11	101	3.91	143	93	78	0	1	7	2
	MEDFORD	44	35	52	31	40	0	2.15	1.44	1.33	5.19	107	2.99	232	97	70	0	2	6	1
	PENDLETON	36	21	51	-4	28	-6	0.67	0.31	0.37	2.54	116	1.08	160	84	56	0	5	6	0
	PORTLAND	44	33	52	15	38	-3	2.12	0.94	1.02	12.27	153	3.68	165	84	67	0	2	7	1
	SALEM	43	32	50	16	38	-4	2.92	1.49	1.45	11.79	122	4.26	159	91	76	0	2	7	2
PA	ALLENTOWN	49	30	58	24	40	9	2.33	1.59	1.34	11.83	226	3.36	243	88	54	0	5	5	2
	ERIE	42	31	49	24	37	8	1.27	0.46	0.36	4.69	81	1.48	93	91	65	0	4	6	0
	MIDDLETOWN	49	33	59	28	41	10	2.68	2.00	1.58	8.90	190	3.74	301	86	52	0	4	4	2
	PHILADELPHIA	53	35	59	30	44	10	2.87	2.16	2.08	11.67	220	3.90	292	90	49	0	3	4	2
	PITTSBURGH	43	32	50	27	37	8	1.40	0.70	0.98	4.21	102	1.71	133	87	60	0	2	5	1
	WILKES-BARRE	47	32	56	29	39	11	2.31	1.71	1.57	9.02	230	3.25	288	84	55	0	4	5	1
	WILLIAMSPORT	45	32	53	28	38	11	3.09	2.41	2.07	8.84	194	3.70	290	88	58	0	5	4	2
RI	PROVIDENCE	47	28	58	16	38	7	5.07	4.14	2.15	12.09	189	5.29	306	97	57	0	5	4	3
SC	CHARLESTON	63	40	72	36	51	2	1.32	0.61	1.25	8.49	180	1.63	121	83	46	0	0	2	1
	COLUMBIA	60	33	69	29	47	1	1.56	0.78	1.06	6.69	128	2.11	140	94	52	0	4	2	1
	FLORENCE	62	35	70	30	48	2	1.86	1.19	1.50	5.74	119	2.49	187	88	49	0	1	4	1
	GREENVILLE	52	31	60	28	42	-1	5.30	4.36	4.25	11.30	176	6.43	354	85	44	0	5	3	2
SD	ABERDEEN	11	1	25	-18	6	-7	0.04	-0.10	0.03	1.90	215	0.07	27	81	68	0	7	2	0
	HURON	11	1	24	-18	6	-10	0.30	0.17	0.29	1.59	172	0.36	139	84	71	0	7	2	0
	RAPID CITY	19	-1	42	-21	9	-15	0.02	-0.05	0.02	0.32	65	0.02	14	84	57	0	7	1	0
	SIOUX FALLS	17	4	26	-17	10	-8	0.91	0.78	0.67	2.78	253	0.98	364	80	68	0	7	5	1
TN	BRISTOL	50	27	57	22	38	2	0.48	-0.31	0.26	4.69	89	1.09	73	91	52	0	5	3	0
	CHATTANOOGA	52	31	60	27	42	0	3.16	2.04	2.56	9.60	130	3.46	163	87	43	0	5	4	1
	KNOXVILLE	51	30	59	26	40	1	2.71	1.64	2.33	9.16	131	3.19	160	89	49	0	5	4	1
	MEMPHIS	54	32	66	26	43	1	2.39	1.45	1.46	5.43	74	2.86	158	87	50	0	3	3	2
	NASHVILLE	52	32	59	27	42	3	2.14	1.24	1.10	5.40	88	2.64	158	79	44	0	4	3	2
TX	ABILENE	62	31	74	17	47	1	0.49	0.27	0.49	2.70	160	1.31	304	68	21	0	3	1	0
	AMARILLO	46	18	58	1	32	-6	0.00	-0.14	0.00	1.93	195	0.20	71	78	26	0	7	0	0
	AUSTIN	65	36	73	32	51	-1	0.22	-0.39	0.22	3.68	94	1.59	134	86	32	0	1	1	0
	BEAUMONT	66	38	77	30	52	-1	0.28	-0.98	0.22	6.69	92	2.68	117	93	47	0	2	3	0
	BROWNSVILLE	76	53	83	45	65	2	0.00	-0.24	0.00	0.81	48	0.70	156	93	38	0	0	0	0
	CORPUS CHRISTI	72	46	82	38	59	2	0.00	-0.31	0.00	2.58	101	2.07	340	95	46	0	0	0	0
	DEL RIO	69	38	79	32	54	1	0.00	-0.13	0.00	0.67	70	0.05	21	54	17	0	2	0	0
	EL PASO	57	32	66	22	44	-1	0.03	-0.05	0.02	0.22	27	0.03	18	51	15	0	3	2	0
	FORT WORTH	62	32	71	21	47	1	0.49	-0.08	0.47	4.82	122	1.29	116	81	30	0	4	2	0
	GALVESTON	65	48	72	41	57	1	0.24	-0.75	0.23	6.66	110	3.72	206	90	54	0	0	2	0
	HOUSTON	68	39	78	32	54	1	0.33	-0.53	0.31	5.34	95	2.81	179	90	39	0	1	2	0
	LUBBOCK	55	24	64	11	40	-1	0.01	-0.12	0.01	0.59	57	0.01	4	71	22	0	6	1	0
	MIDLAND	59	29	67	19	44	-1	0.00	-0.13	0.00	0.56	66	0.00	0	66	17	0	5	0	0
	SAN ANGELO	63	30	74	22	47	0	0.16	-0.02	0.16	2.41	194	0.28	79	74	19	0	5	1	0
	SAN ANTONIO	65	36	74	30	51	-1	0.01	-0.40	0.01	1.82	65	0.73	94	75	31	0	2	1	0
	VICTORIA	70	41	78	33	56	2	0.31	-0.31	0.31	2.45	70	1.77	155	89	43	0	0	1	0
	WACO	63	31	69	26	47	0	0.27	-0.31	0.19	4.70	117	1.59	139	89	32	0	5	2	0
	WICHITA FALLS	56	26	73	10	41	-1	0.24	-0.02	0.24	2.09	101	0.71	141	78	30	0	6	1	0
UT	SALT LAKE CITY	34	21	39	14	28	-3	0.30	-0.02	0.14	1.43	71	0.46	77	92	53	0	7	4	0
VA	LYNCHBURG	51	28	56	24	40	4	3.02	2.24	2.52	8.07	163	3.03	210	92	44	0	6	2	2
	NORFOLK	60	37	68	33	49	6	1.79	1.04	1.58	9.15	195	2.75	196	86	50	0	0	3	1
	RICHMOND	58	31	63	27	45	6	2.27	1.54	1.51	12.15	249	3.34	245	89	44	0	5	3	2
	ROANOKE	50	31	57	26	40	3	2.15	1.45	1.96	7.02	160	2.86	222	85	42	0	4	3	1
	WASH/DULLES	52	31	59	27	42	8	2.64	1.98	1.75	9.30	205	3.62	297	89	46	0	5	3	2
VT	BURLINGTON	39	26	47	21	32	11	1.50	1.01	0.43	7.26	210	1.59	168	91	63	0	6	5	0
WA	OLYMPIA	41	29	50	17	35	-4	1.87	0.06	0.83	13.39	119	3.04	90	87	64	0	4	5	2
	QUILLAYUTE	43	31	54	19	37	-4	2.09	-1.55	1.40	18.89	92	4.14	62	77	57	0	4	4	1
	SEATTLE-TACOMA	39	29	49	15	34	-8	1.14	-0.19	0.54	10.52	128	2.23	89	81	62	0	3	4	1
	SPOKANE	26	14	39	-10	20	-9	0.37	-0.11	0.24	3.92	121	0.62	69	82	61	0	7	2	0
	YAKIMA	34	18	47	2	26	-5	0.21	-0.09	0.11	1.80	90	0.39	69	86	48	0	7	6	0
WI	EAU CLAIRE	28	18	34	-1	23	9	0.11	-0.12	0.07	1.56	86	0.14	31	87	69	0	7	2	0
	GREEN BAY	32	25	35	13	29	10	0.37	0.05	0.12	1.94	81	0.63	103	89	71	0	7	5	0
	LA CROSSE	30	20	34	-3	25	6	0.68	0.40	0.37	1.63	81	0.68	131	87	70	0	7	5	0
	MADISON	31	23	33	-1	27	7	1.24	0.92	0.50	2.95	132	1.33	222	93	75	0	7	5	1
	MILWAUKEE	36	28	38	5	32	8	2.09	1.67	0.94	4.55	171	2.35	302	87	66	0	5	5	2
WV	BECKLEY	43	28	48	21	35	3	1.50	0.80	1.25	4.68	102	1.94	150	87	59	0	6	5	1
	CHARLESTON	48	31	55	26	39	5	1.17	0.43	0.73	3.70	75	1.65	121	92	53	0	4	4	1
	ELKINS	45	28	54	21	37	6	1.03	0.28	0.63	4.21	84	1.54	111	95	56	0	6	5	1
	HUNTINGTON	48	31	56	25	40	5	1.51	0.82	1.08	4.15	85	2.46	190	85	55	0	4	5	1
WY	CASPER	20	-3	29	-37	8	-17	0.25	0.14	0.14	0.36	43	0.29	137	86	58	0	7	4	0
	CHEYENNE	24	2	37	-23	13	-16	0.15	0.07	0.08	0.28	43	0.16	110	79	44	0	7	3	0
	LANDER	22	0	39	-24	11	-10	0.39	0.28	0.14	1.10	131	0.39	186	84	48	0	7	5	0
	SHERIDAN	21	-3	41	-31	9	-15	0.11	-0.01	0.08	0.24	30	0.13	58	79	50	0	7	3	0

Based on 1991-2020 normals

***** Not Available**

January 11 ENSO Diagnostic Discussion

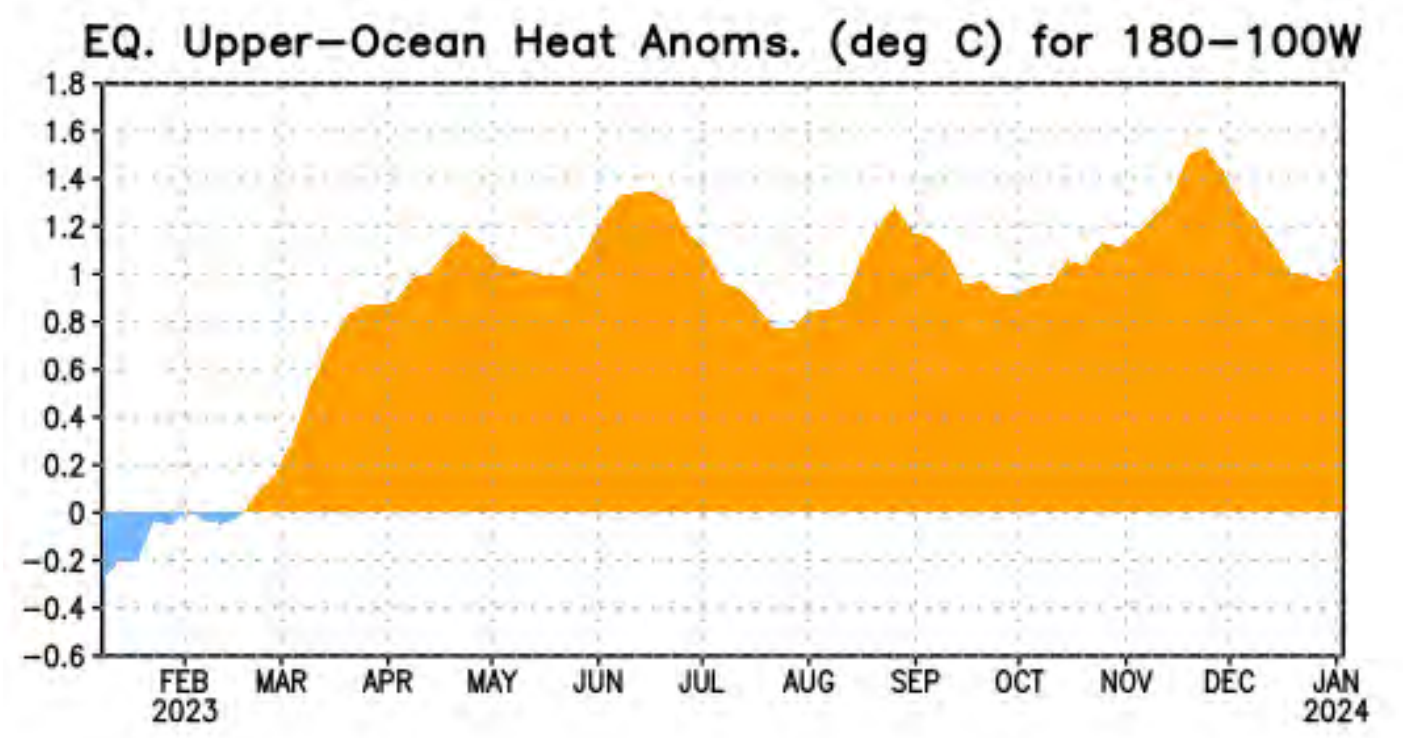


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: El Niño Advisory

Synopsis: El Niño is expected to continue for the next several seasons, with ENSO-neutral favored during April-June 2024 (73% chance).

Above-average sea surface temperatures (SST) persisted across the equatorial Pacific Ocean, with the largest anomalies observed in the central and east-central Pacific. The latest weekly Niño index values remained at +1.4ºC in Niño-4, +1.9ºC in Niño-3.4, and +2.0ºC in Niño-3, while Niño-1+2 weakened to +1.0ºC. Area-averaged positive subsurface temperature anomalies decreased in December (Fig. 1), reflecting the strengthening and eastward expansion of below-average subsurface temperatures in the western Pacific. Over the east-central Pacific Ocean, low-level wind anomalies were westerly, while upper-level wind anomalies were easterly. Convection/rainfall remained enhanced at the Date Line and was suppressed around Indonesia. The equatorial and station-based SOI were negative. Collectively, the coupled ocean-atmosphere system reflected a strong and mature El Niño.

The most recent IRI plume indicates El Niño will gradually weaken and then transition to ENSO-neutral during spring 2024. Some state-of the-art dynamical climate models suggest a transition to ENSO-neutral as soon as March-May 2024. The forecast team, however, delays this timing and strongly favors a transition to ENSO-neutral in April-June 2024. There are also increasing odds of La Niña in the seasons following a shift to ENSO-neutral. It is typical for El Niño to peak in December/early January, but despite weakening, its impacts on the United States could last through April (see CPC seasonal outlooks for probabilities of temperature and precipitation). In summary, El Niño is expected to continue for the next several seasons, with ENSO-neutral favored during April-June 2024 (73% chance).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center website (El Niño/La Niña Current Conditions and Expert Discussions). Additional perspectives and analyses are also available in an ENSO blog. A probabilistic strength forecast is available here. The next ENSO Diagnostics Discussion is scheduled for **8 February 2024**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

January 7-13, 2024

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

HIGHLIGHTS

EUROPE: Colder and drier weather settled over much of the continent, though pockets of locally heavy rain lingered in southern Europe.

MIDDLE EAST: Warmer-than-normal weather continued, accompanied by additional locally heavy rain from Turkey into northwestern Iran.

NORTHWESTERN AFRICA: Intensifying drought in the west contrasted with additional moderate to heavy rain in the east.

SOUTHEAST ASIA: Rainfall across Indonesia and Malaysia continued to provide beneficial moisture to oil palm and rice.

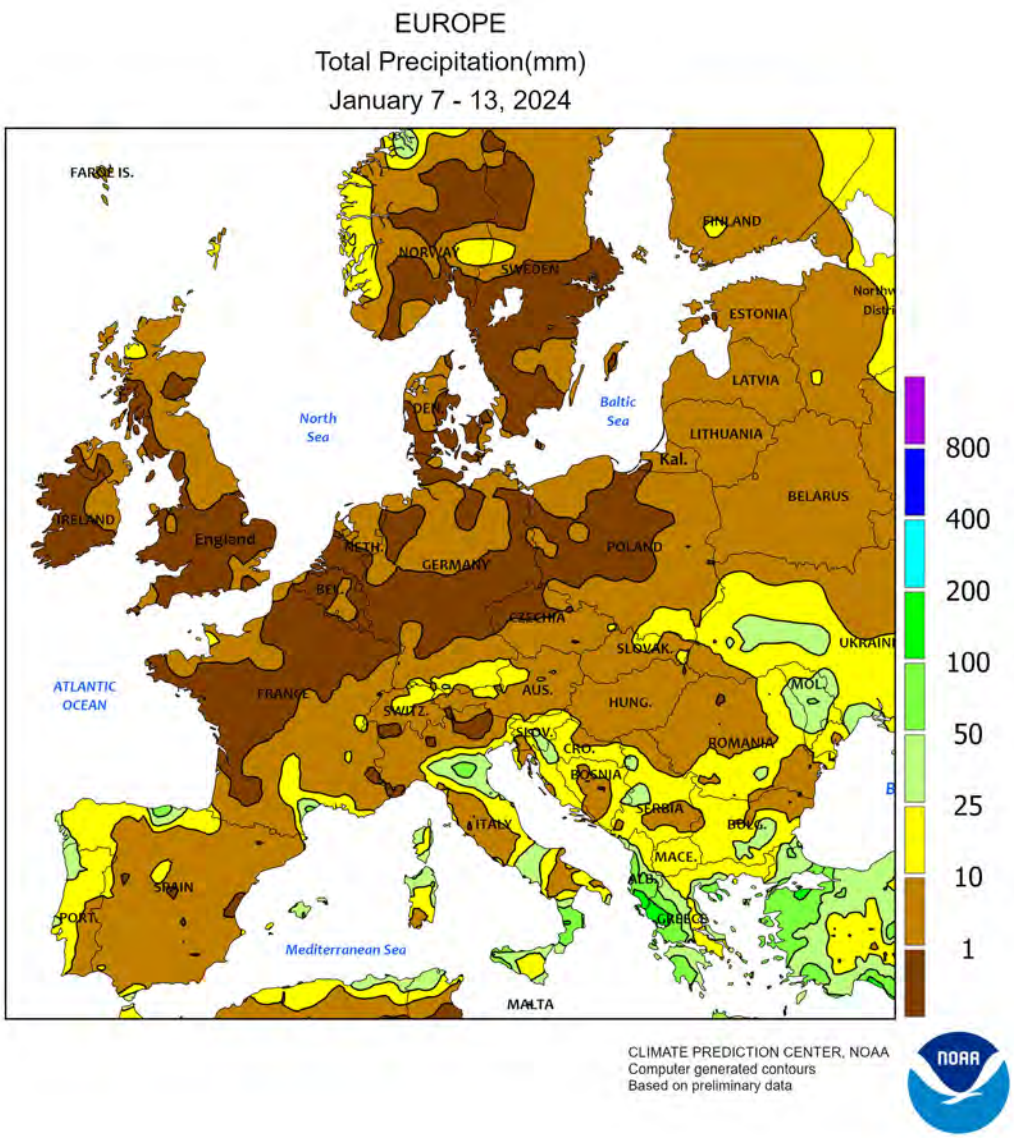
AUSTRALIA: Widespread showers continued to benefit vegetative to reproductive summer crops.

SOUTH AFRICA: Locally heavy showers maintained overall favorable conditions for corn, soybeans, and other rain-fed summer crops.

ARGENTINA: Warm, showery weather benefited emerging to vegetative summer grains, oilseeds, and cotton.

BRAZIL: Showers brought additional relief from dryness to immature soybeans.

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



EUROPE

Colder and drier weather replaced recent rain and anomalous warmth, though locally heavy showers lingered in southern portions of the continent. Temperatures during the monitoring period averaged 3 to 6°C below normal over central and northern Europe and up to 10°C below normal in southern Scandinavia. Nevertheless, most of the continent's primary winter crop areas remained devoid of a protective snow cover save for northeastern Europe and parts of the Balkans. Mostly dry weather allowed floodwaters to recede in southern England and northern France following recent heavy to excessive rainfall and facilitated the resumption of previously delayed fieldwork. Farther south, light to moderate showers (2-30 mm) in Portugal and Spain kept soils favorably moist for semi-dormant winter grains, while heavier rain (10-75 mm, locally more) in Italy and Greece boosted moisture reserves for spring growth.

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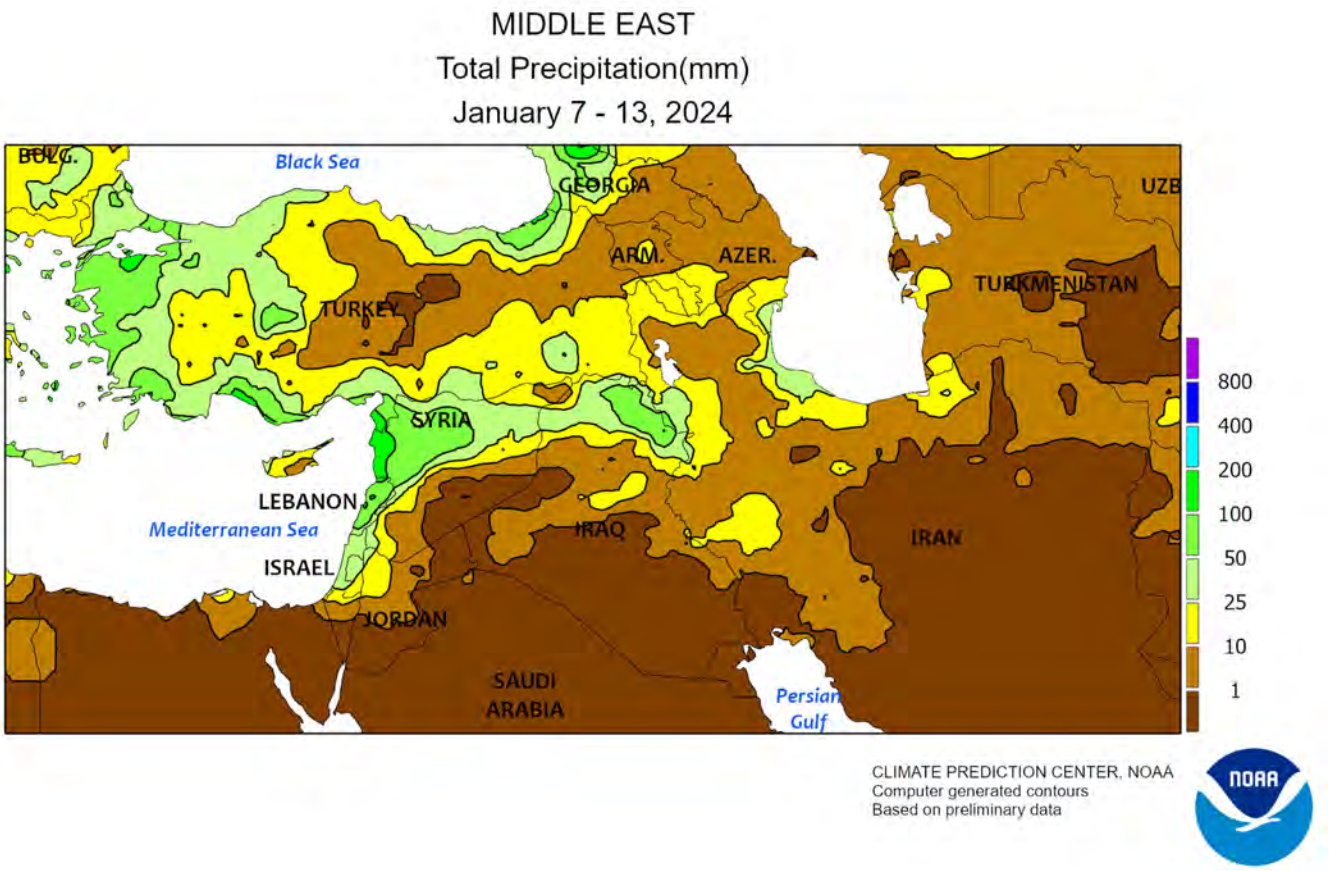

MIDDLE EAST

Unseasonable warmth persisted across the region along with additional moderate to heavy rain in western and central growing areas. Temperatures averaged 3 to 8°C above normal nearly everywhere, though readings within 2°C of normal were noted in western and southeastern Turkey. As a result, the region's colder northern croplands — including central Turkey's Anatolian Plateau and northwestern Iran — remained devoid of snow cover. Moderate to heavy showers across western and central portions of the region maintained adequate to abundant moisture supplies for dormant (north) to vegetative (south) winter wheat and barley. Notable weekly totals included: 95 to 110 mm in western Turkey; 50 to 140 mm in western Syria; and up to 80 mm along the southeastern Mediterranean Coast. Showers were lighter albeit still beneficial for dormant winter crops on central Turkey's Anatolian Plateau (5-30 mm), northern Iraq (15-30 mm), and northwestern Iran (5-40 mm). On the other hand, light showers (1-10 mm) in northeastern Iran's Khorasan Province moistened soils locally but did little to ease the region's developing drought.

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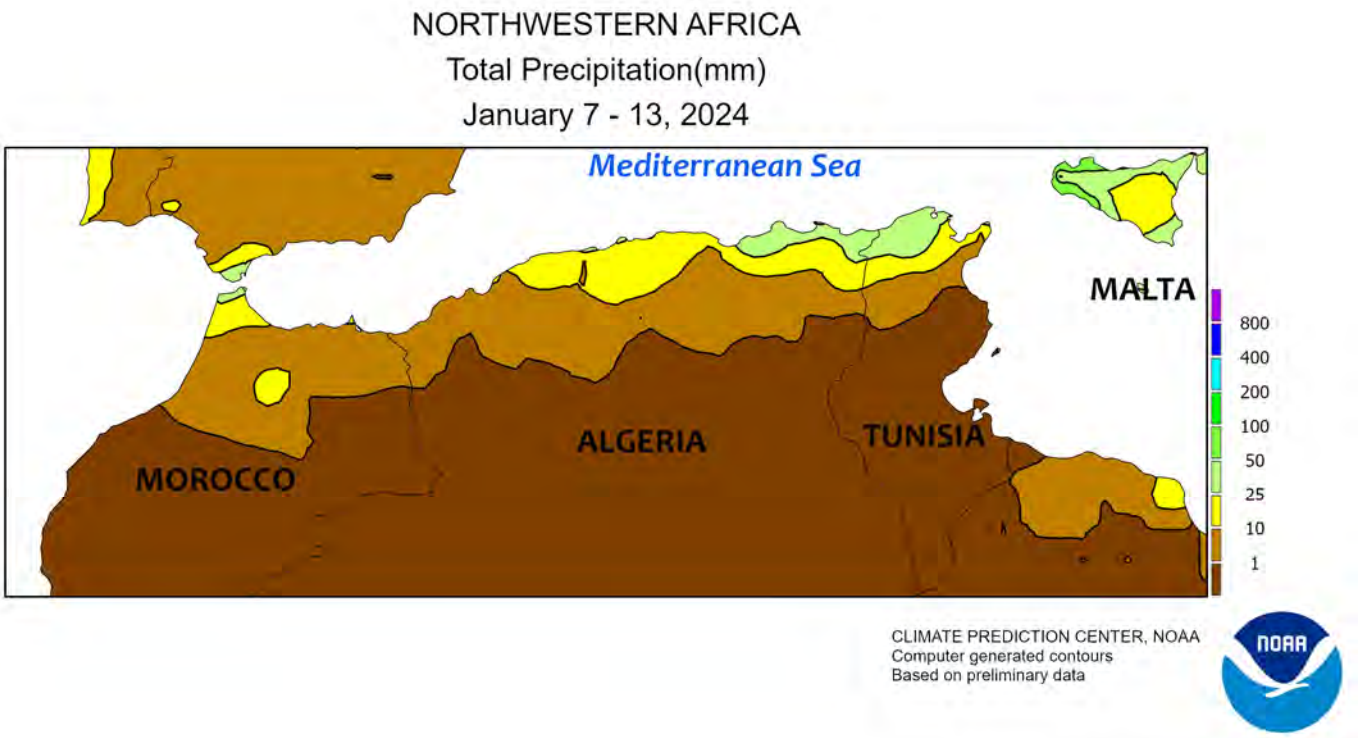

NORTHWESTERN AFRICA

Eastern rain contrasted sharply with intensifying drought in the west. Additional moderate to heavy showers from north-central Algeria (10-25 mm) into northern Tunisia (20-130 mm) further eased drought and improved prospects for winter wheat and barley development. In contrast, light showers in western Algeria (1-6 mm) and northeastern Morocco (2-10 mm) offered little — if any — drought relief. Morocco's primary croplands adjacent to the country's central Atlantic coast were completely dry and slipped deeper into drought; since September 1, rainfall in this key wheat and barley area slipped to 41 percent of normal (deficit of more than 150 mm), the second lowest of the past 30 years. Seasonal rainfall remained 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, with some producers already making the switch to less-water-intensive specialty crops with shorter growing seasons.

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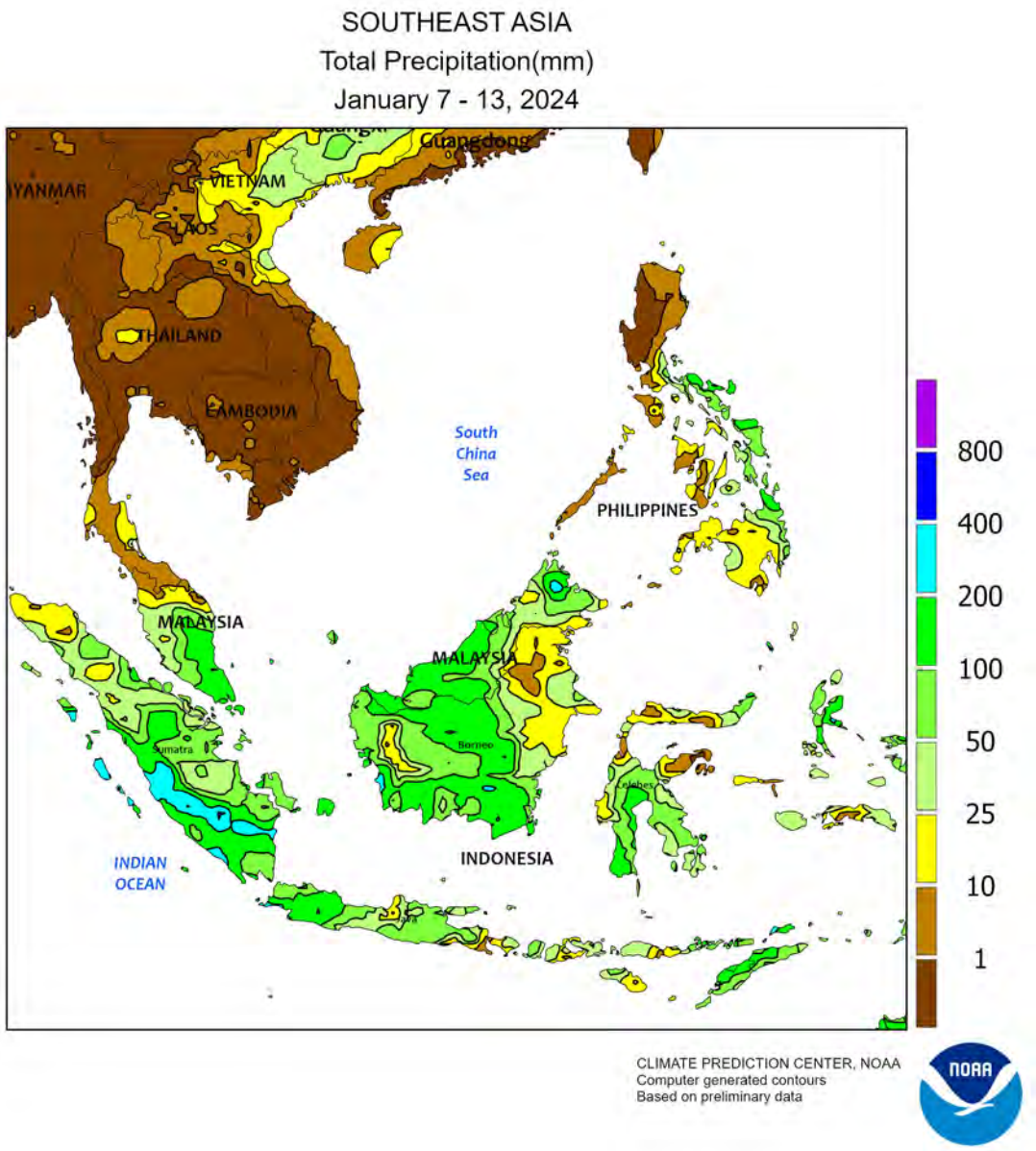

SOUTHEAST ASIA

Showery weather (topping 150 mm locally) prevailed across Malaysia and Indonesia, further benefiting oil palm and rice. Rainfall amounts over the last three weeks in Java, Indonesia, have been nearer to normal, but seasonal (since August 1) totals remained well below average (60 percent of normal), limiting irrigation recharge. Meanwhile in the Philippines, 25 to 100 mm of rain was recorded along seasonally wetter eastern locales with lesser amounts elsewhere and little if any across northern sections (Luzon); seasonal (since November 1) rainfall has trended below average in key northern agricultural regions.

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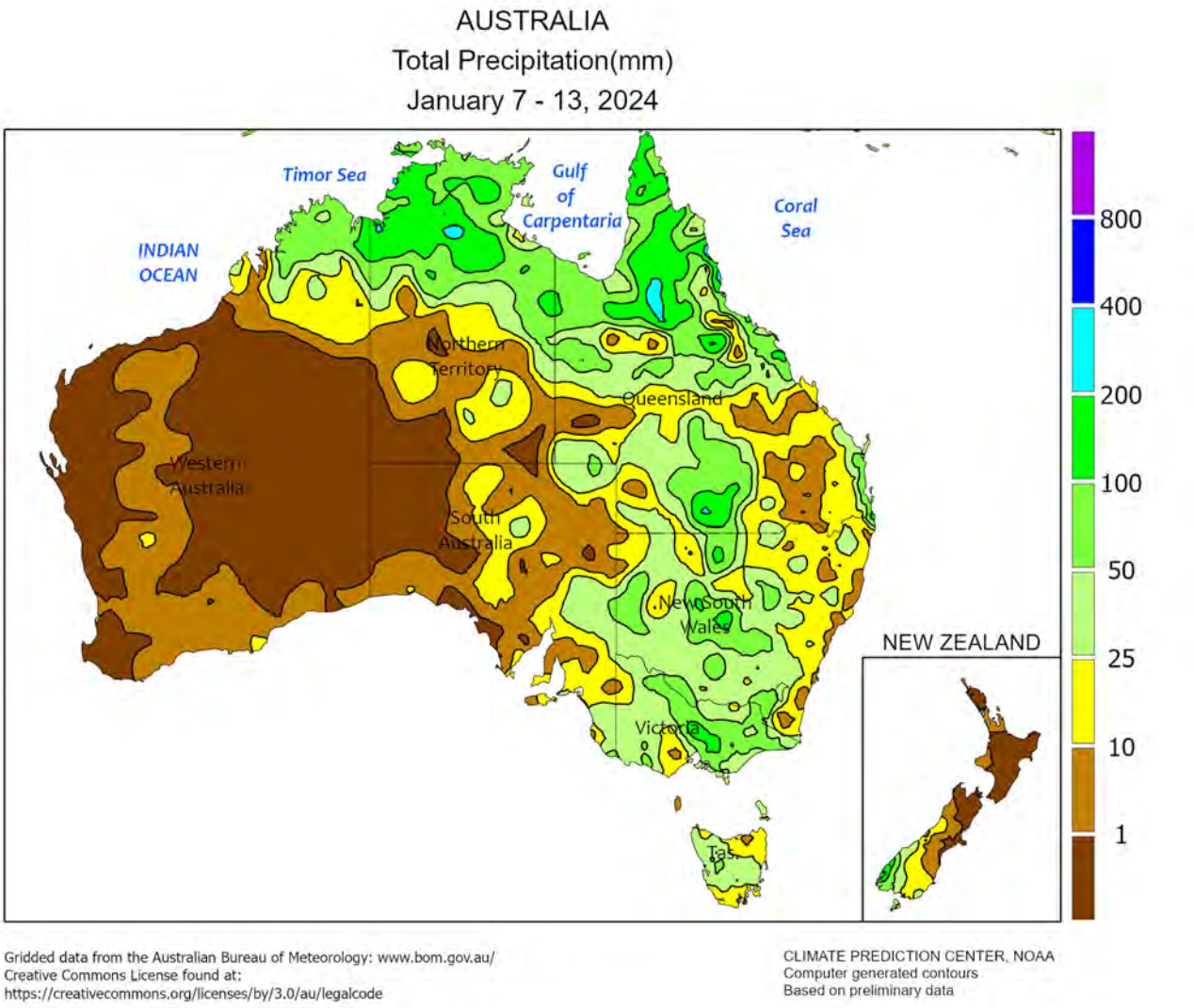

AUSTRALIA

Widespread showers continued across eastern Australia, benefiting cotton, sorghum, and other vegetative to reproductive summer crops. The heaviest rain fell across New South Wales and Victoria, where amounts of 25 to 50 mm or more were common. The persistent wetness further hampered late winter crop harvesting in western Victoria and southeastern South Australia, but the vast majority of winter crops had been harvested nonetheless. Although wet weather has slowed fieldwork in the east, the rain has been overall beneficial, improving summer crop prospects while helping to replenish soil moisture in some areas hit hard by drought during the 2023 winter crop growing season. Temperatures were generally seasonable in major summer crop producing areas, with maximum temperatures mostly in the middle 30s (degrees C).

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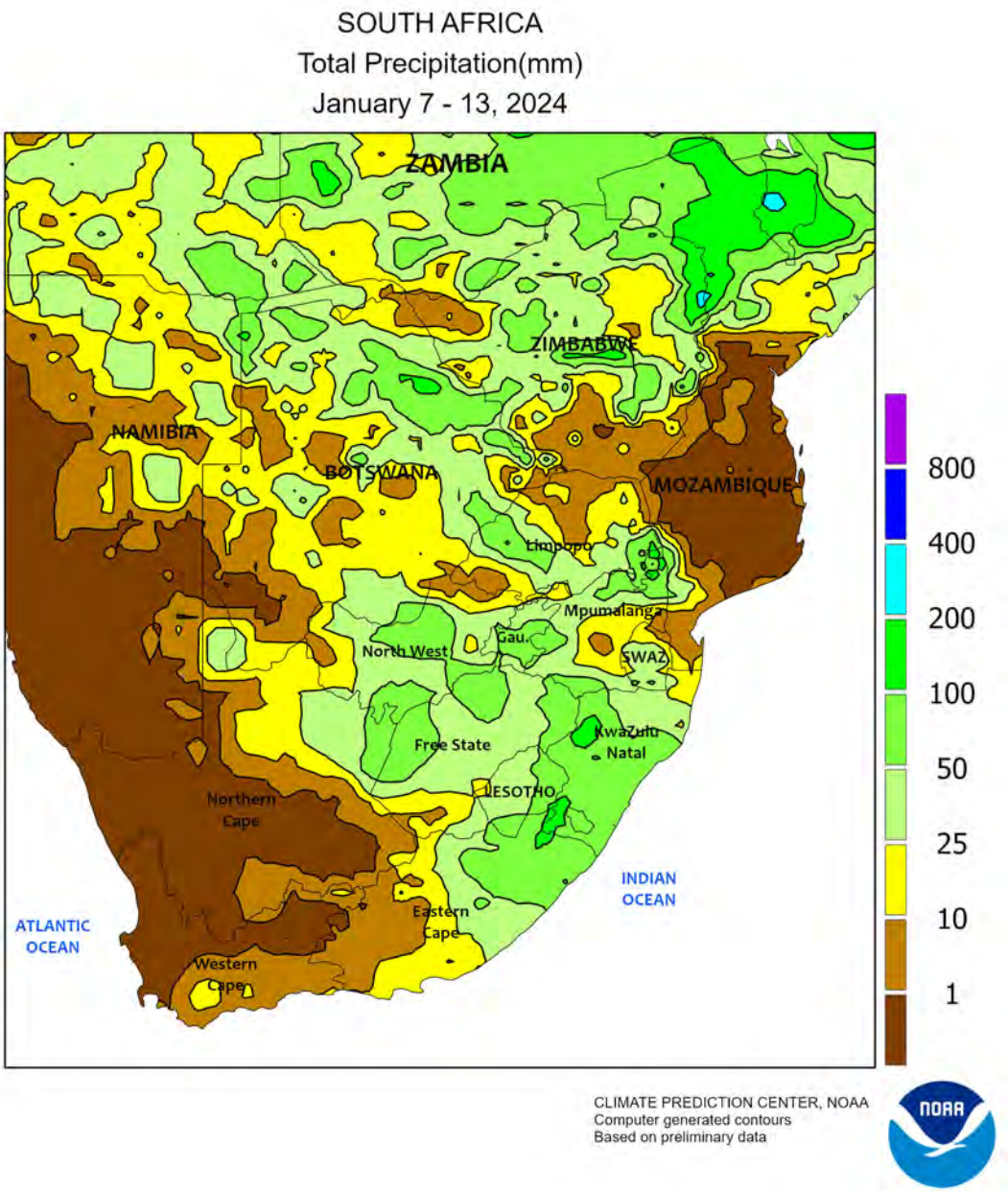

SOUTH AFRICA

Widespread, locally heavy showers overspread the region, increasing moisture for corn and other summer crops in or approaching reproduction. Most farming areas from North West and Limpopo southward recorded 25 to 75 mm, with similar amounts extending westward into Northern Cape. The moisture maintained overall favorable prospects for corn and other rain-fed summer crops while also increasing irrigation reserves for summer crops in the Orange River Valley and along other key tributaries. Weekly temperatures averaging near to above normal (highest daytime temperatures reaching the lower and middle 30s degrees C) fostered rapid crop development along with high water losses through evaporation. Crops in eastern section of the corn belt (Mpumalanga and environs) are planted earliest and are likely advancing through reproduction with adequate levels of moisture for normal development. Meanwhile, warm, generally sunny weather favored growth of irrigated crops in Western Cape.

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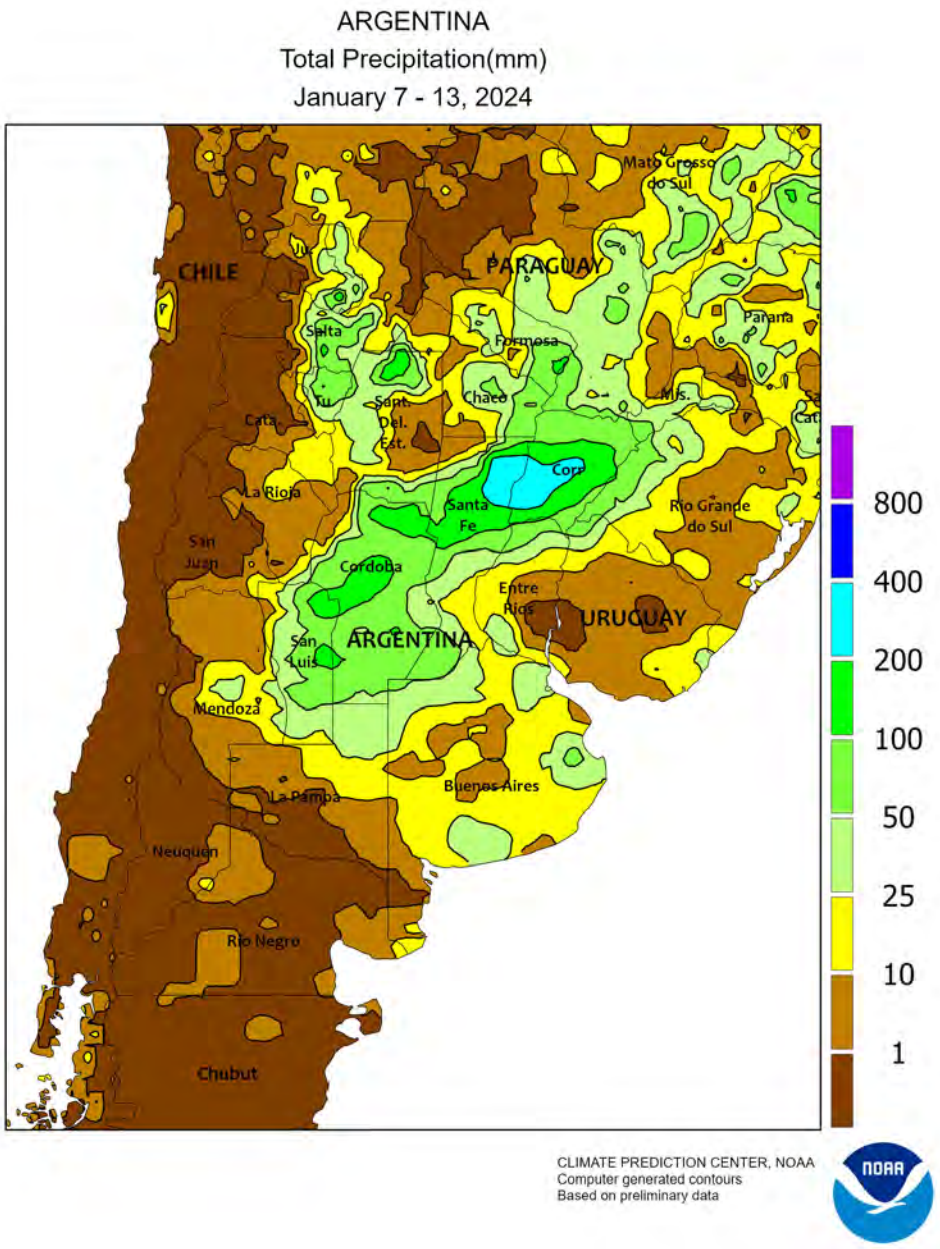

ARGENTINA

Moderate to heavy showers continued in most farming areas, helping to further recharge subsoil moisture reserves after years of drought. Rainfall totaled 25 to 100 mm from Córdoba north and northeastward, with similar amounts recorded locally in La Pampa and Buenos Aires. Weekly average temperatures varied from 1 to 2°C below normal in southern and northeastern farming areas to as much as 3°C above normal in the far north, where highs again reached the upper 30s and lower 40s (degrees C). According to the government of Argentina, corn and soybeans were 88 and 95 percent planted, respectively, as of January 11; cotton was 92 percent planted, compared with 81 percent last year, while wheat and barley harvests were nearing 97 and 98 percent complete, respectively.

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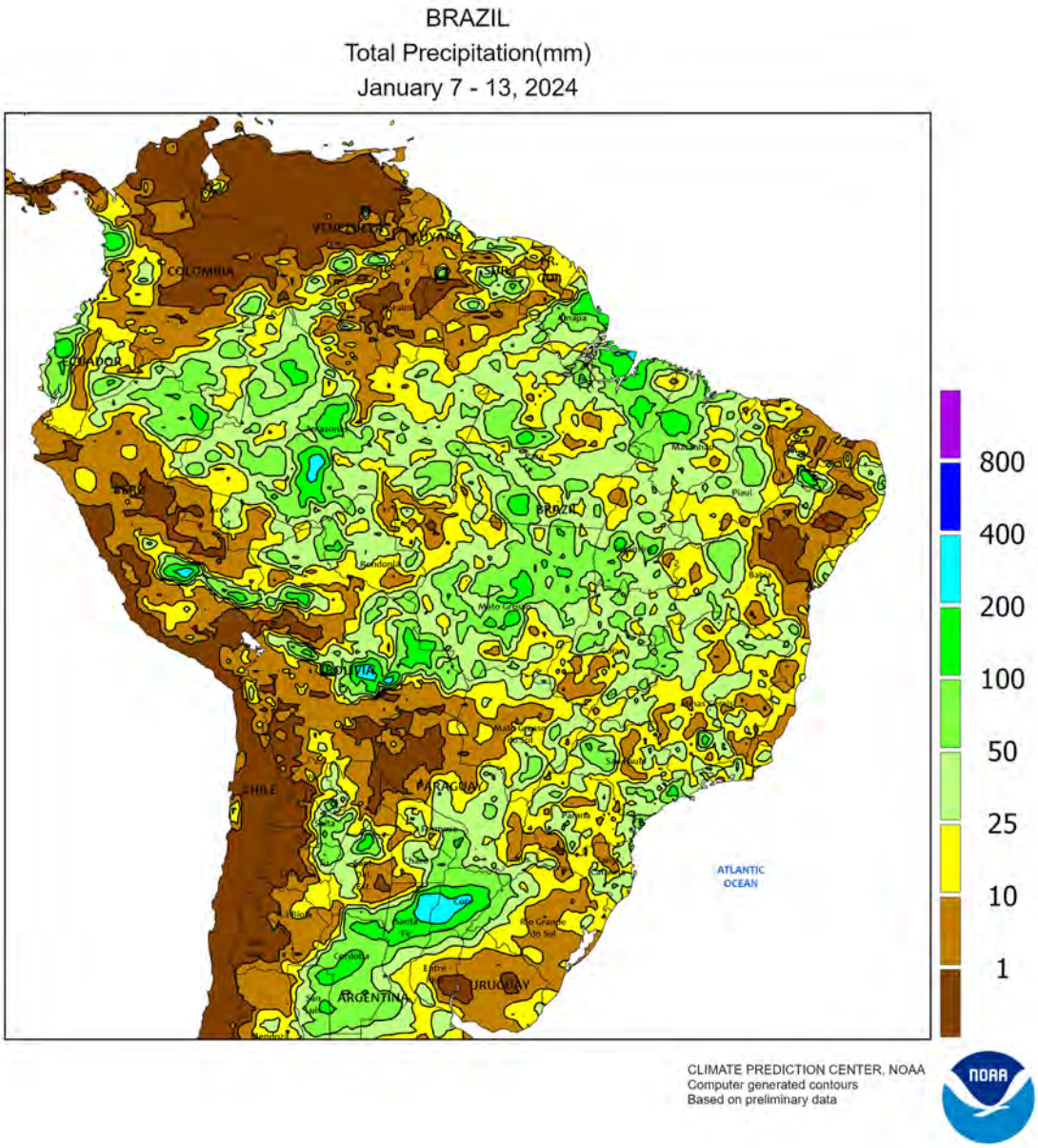

BRAZIL

Widely scattered, locally heavy showers helped to stabilize the condition of soybeans and other summer crops in areas still experiencing the effects of earlier periods of heat and dryness. Rainfall (5-50 mm) was particularly timely in southern farming areas that turned warmer and drier following a wet start to the rainy season; prior to the onset of the rain, highest daytime temperatures reached the upper 30s (degrees C) in and around Paraná, one of the more notable areas experiencing the flash drought. According to government reports, Paraná's first-crop corn and soybeans were 31 and 16 percent mature, respectively, as of January 8, with 1 percent of both crops harvested. In Rio Grande do Sul, corn was 94 percent planted as of January 11, with 75 percent of the crop currently in the ground ranging from flowering to mature and 13 percent harvested; 99 percent of soybeans were planted, but only 13 percent were flowering. Farther north, showers (25-100 mm, most locations) and seasonable temperatures benefited earlier-planted soybeans while also helping to moisten topsoils for corn and cotton planting. In Mato Grosso, soybeans were 6 percent harvested as of January 12, compared with 2 percent last year; corn and cotton planting were 1 and 36 completed, respectively, ahead of last year's pace for both crops.

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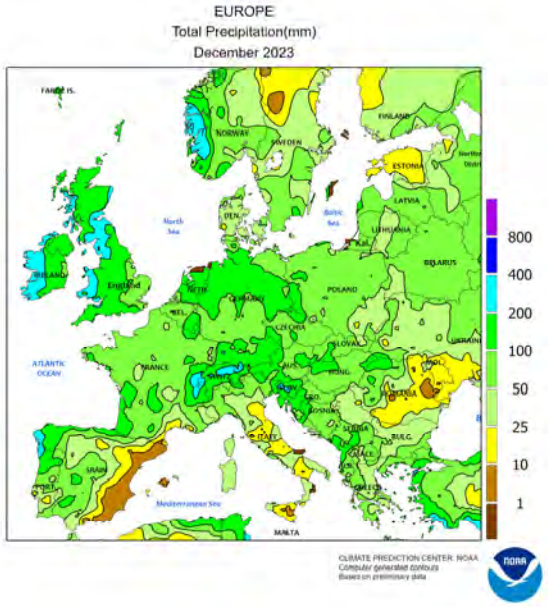
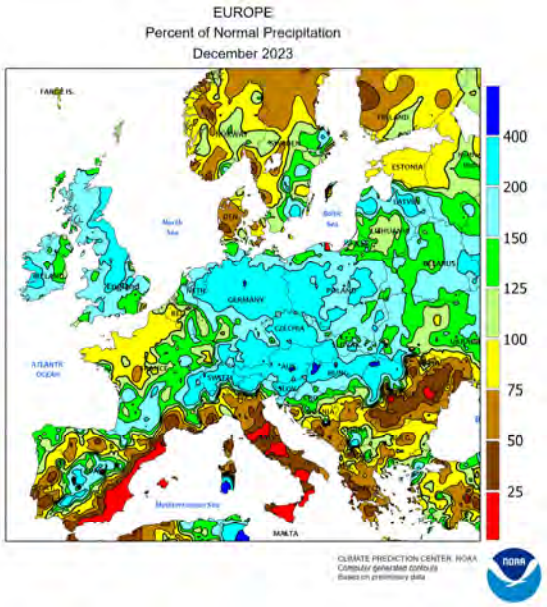
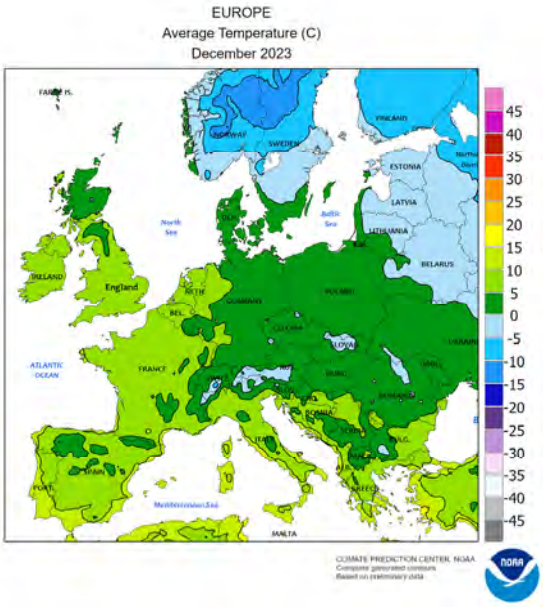
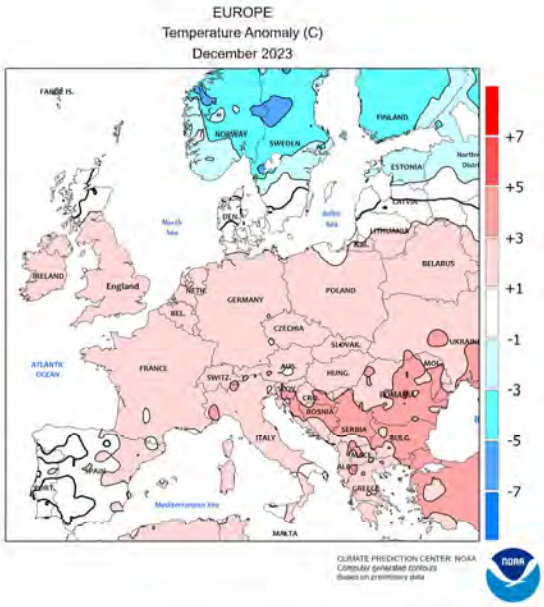
December International Temperature and Precipitation Maps









EUROPE

Wet and warm weather prevailed across much of the continent during December, though dry conditions settled over the Mediterranean Basin. Rainfall totaled 125 to 250 percent of normal from England and Germany eastward into Poland and the Baltic States, maintaining abundant moisture reserves for dormant winter crops. Precipitation was lighter in France (near normal), but heavy rain returned to northern portions of the country in early January. Farther south, mostly sunny skies favored fieldwork and winter grain development across central and northern Spain after recent rain, while short-term dryness — heightened by a lack of rain during December — was becoming a concern in southern Spain and Italy. Dry weather also returned to Greece and the southern Balkans, though most winter crops were dormant save for southern-most growing areas. Temperatures rapidly rebounded from a cold start to the month to average 2 to 4°C above normal, though near-normal temperatures were noted in Spain while cold conditions (up to 5°C below normal) settled over northern portions of Scandinavia and the Baltic States.

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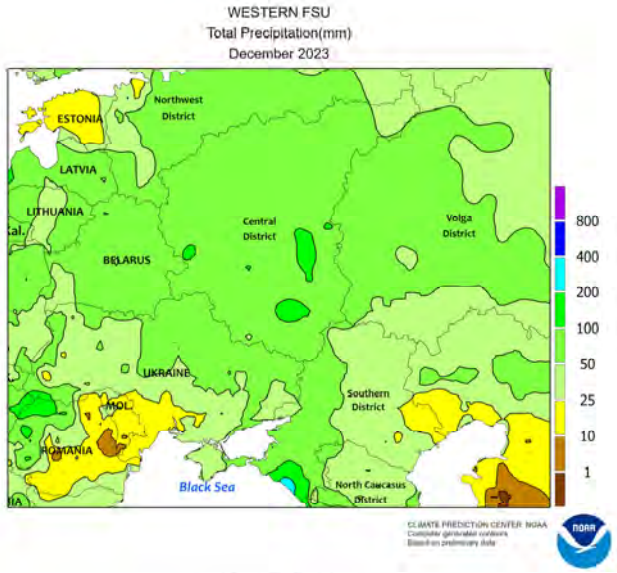

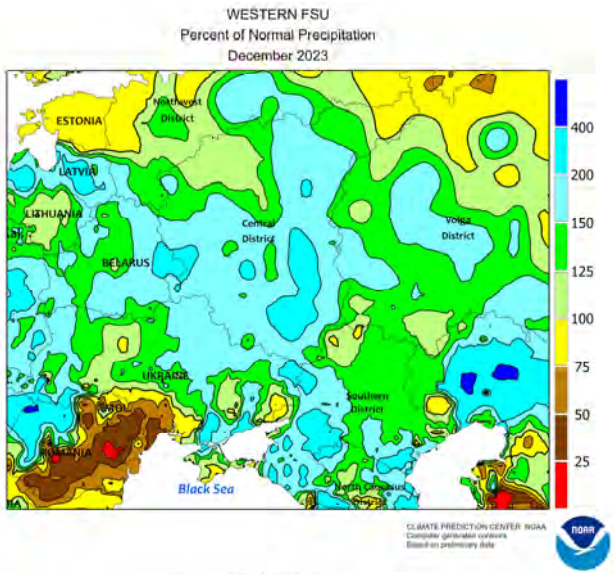

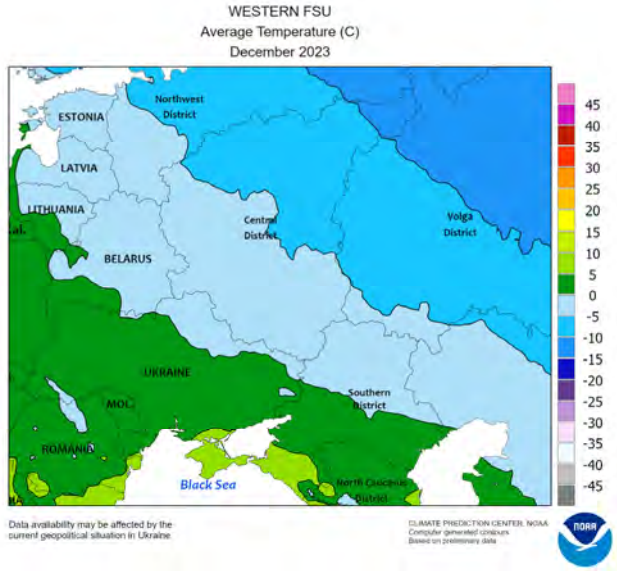

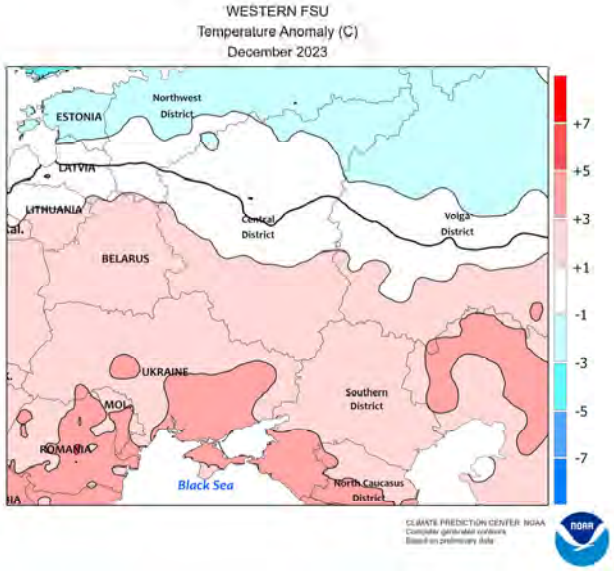

WESTERN FSU

Wet and increasingly warm weather prevailed across the region during December. Rain and northern snow (50-75 mm liquid equivalent, locally more than 200 mm along the Black Sea Coast) averaged 90 to 250 percent of normal over most of Belarus, Ukraine, and western Russia, boosting moisture reserves for dormant winter grains and oilseeds but further hampering the extremely delayed final stages of summer crop harvesting. Despite the wet weather pattern, dry conditions were noted in Moldova and adjacent portions of southwestern Ukraine, though impacts on dormant winter crops were negligible. A cold snap during the first week of December was followed by extremely warm conditions, netting monthly average temperatures up to 5°C above normal across central and southern growing areas.

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

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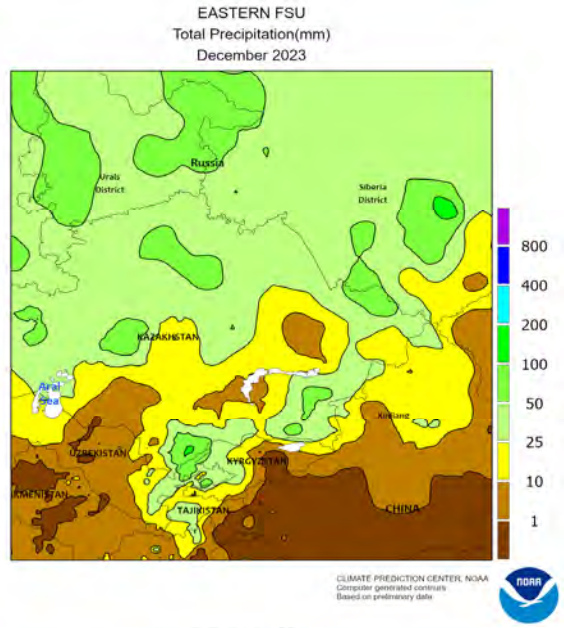

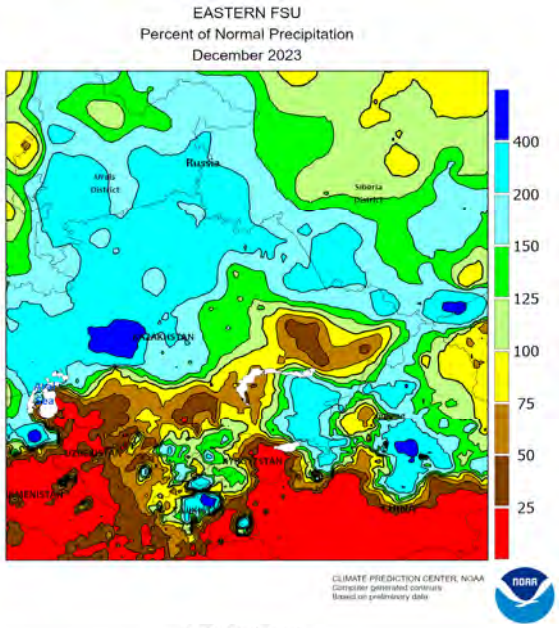

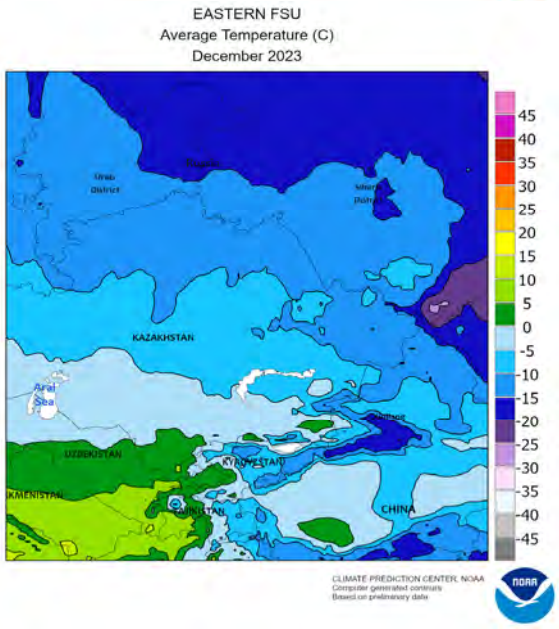

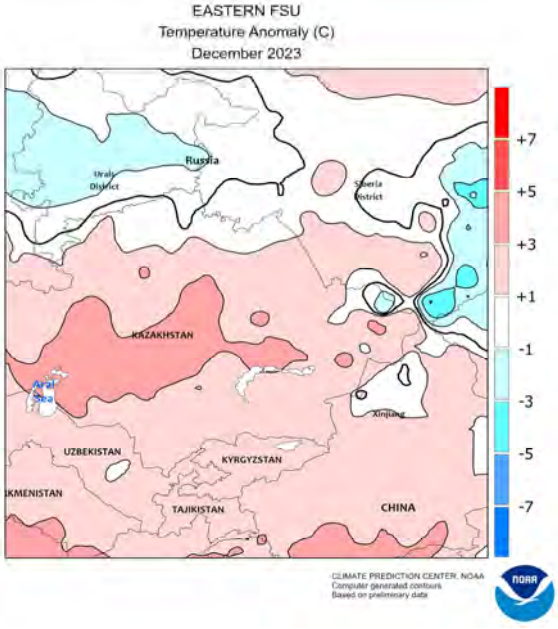

EASTERN FSU

Unsettled weather in the north contrasted with increasingly warm and dry conditions over southern portions of the region. Precipitation — mainly in the form of snow — averaged near to above normal over central Russia and northern Kazakhstan. While temperatures were near normal, the region's bitter cold winter temperatures became firmly established (minima of -42 to -32°C). The cold weather and increasingly deep snowpack abruptly ended agricultural activities; seasonal fieldwork will resume in late spring once the snowpack has melted. Farther south across the Commonwealth of Independent States (CIS), mostly dry and very warm conditions persisted for a second consecutive month. The sunny skies promoted seasonal fieldwork but reduced soil moisture reserves for spring growth of winter wheat. More importantly, temperatures up to 5°C above normal across the CIS limited the recharge of mountain snowpacks, which are vital for summer crop irrigation. The 2023-24 Water Year (beginning September 1) was off to the warmest start on record in both the mountains and lower-lying terrain, heightening concerns over premature snowpack melt and spring runoff prospects. For example, the season-to-date average temperature (since September 1) as of early January over Uzbekistan's croplands was 13.3°C, more than 2°C above normal and nearly 1.5°C above the previous record set in 2005. Furthermore, precipitation in the watersheds of the Syr and Amu Darya Rivers remained below normal, raising concerns over developing drought.

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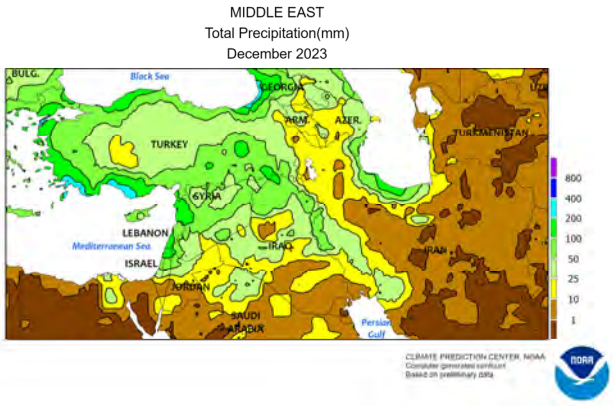

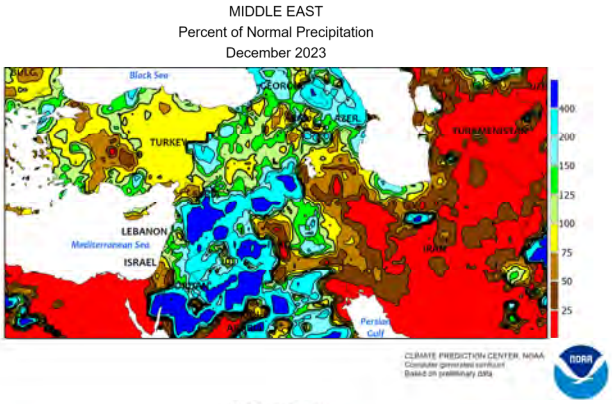

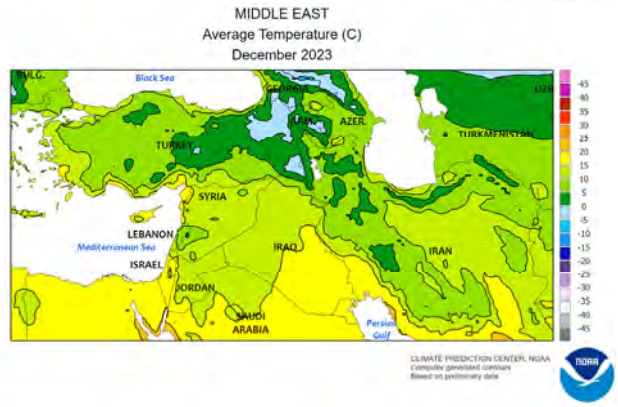

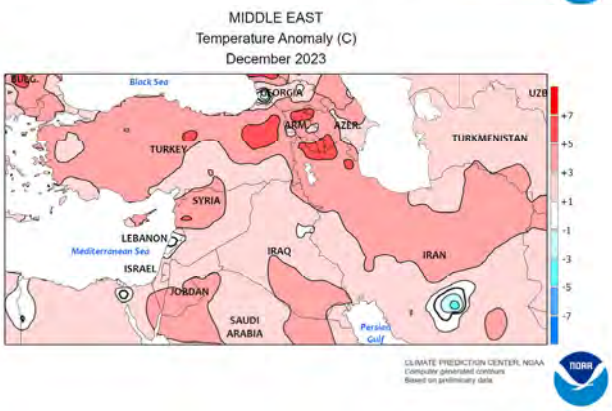

MIDDLE EAST

Variable precipitation and above-normal temperatures prevailed across much of the region during December. In Turkey, moderate to heavy rain (50-100 mm, locally more) rimmed the country's perimeter, while drier conditions were noted on the Anatolian Plateau in the country's interior. In the latter, winter grains went dormant in mostly favorable condition, while wheat and barley in the northwest and southeast benefited from the wet weather. Near- to above-normal rainfall was also noted from the eastern Mediterranean Coast into Saudi Arabia and southwestern Iraq. Conversely, drier-than-normal conditions from eastern Syria into Iraq and Iran lowered moisture reserves for dormant (north) to vegetative (central and south) winter grains. Temperatures averaged 2 to 5°C above normal over most of the region's primary growing areas, keeping climatologically colder areas devoid of snow while encouraging wheat and barley vegetative growth in warmer southern locales.

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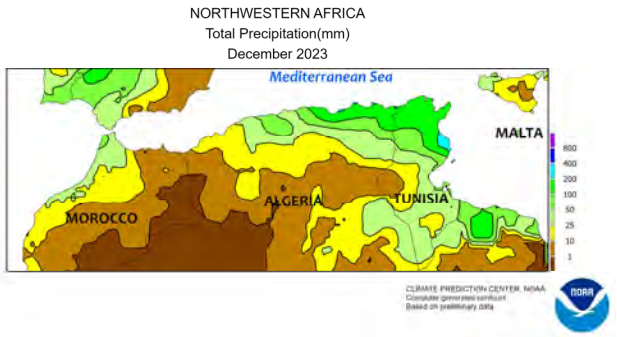

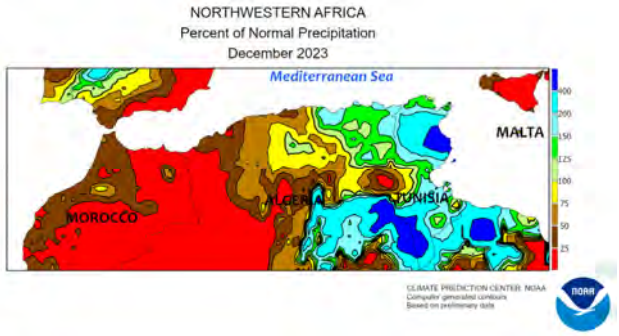

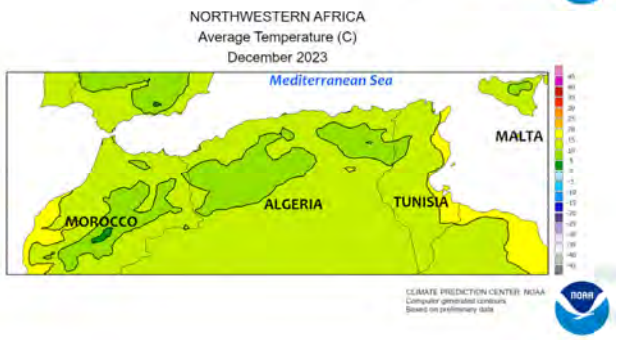

NORTHWESTERN AFRICA

Intensifying drought in the west juxtaposed with additional much-needed rain in the east during December. In Morocco and western Algeria, acute dryness for a second consecutive month plunged western croplands deeper into drought and further lowered wheat and barley prospects. Conversely, moderate to heavy rain (25-125 mm) from north-central Algeria into much of Tunisia alleviated drought and improved soil moisture for winter wheat and barley. Temperatures across the entire region averaged 1 to 2°C above normal, encouraging crop growth in areas with sufficient moisture supplies.

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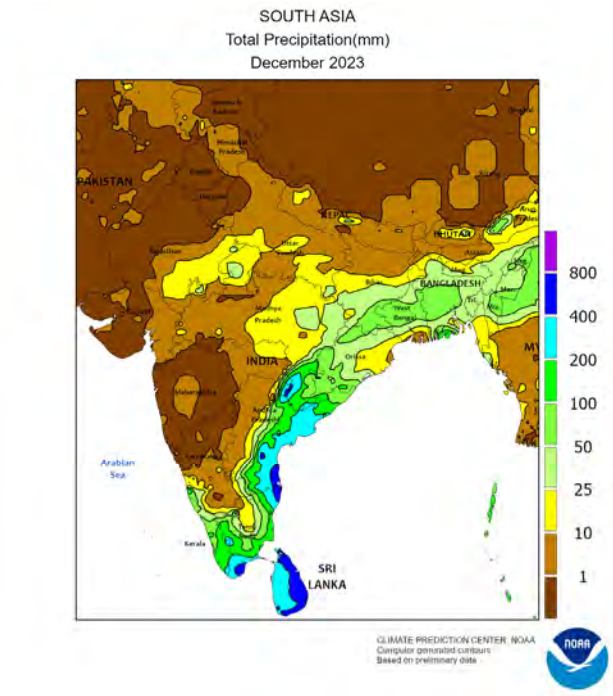

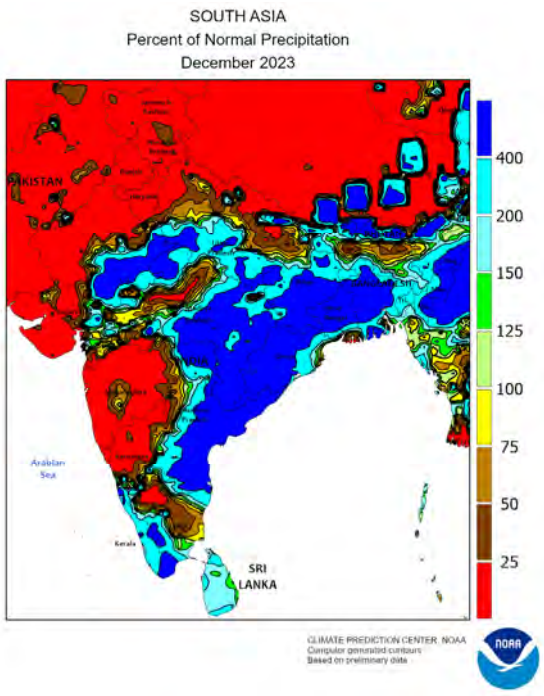

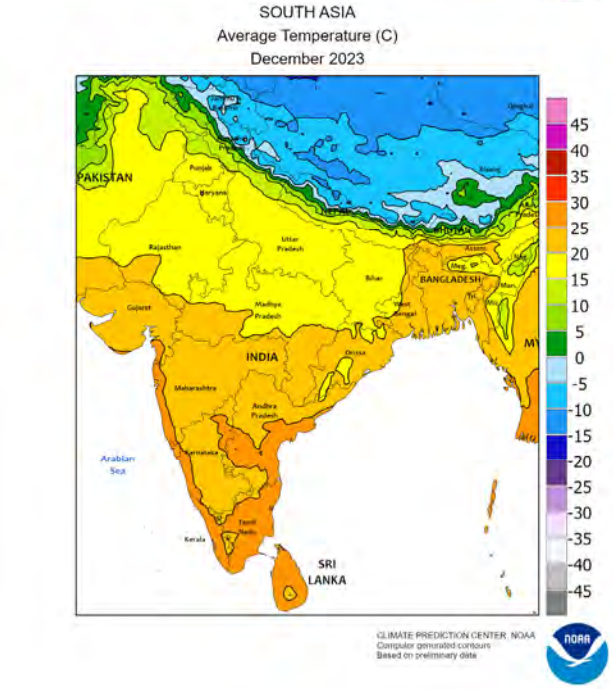

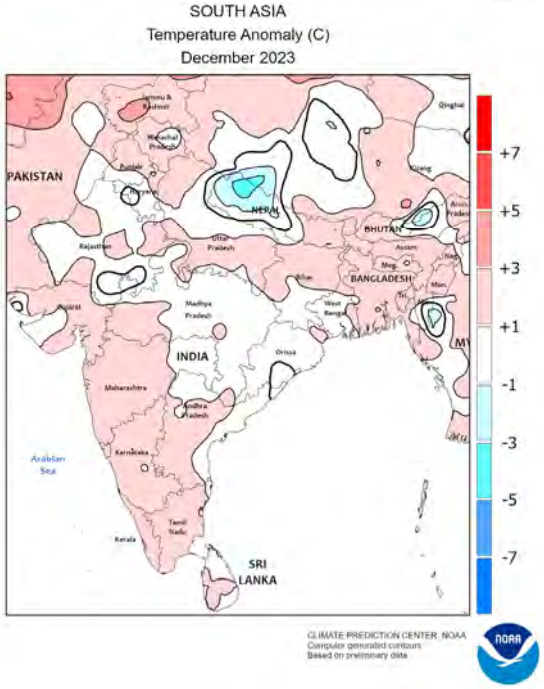

SOUTH ASIA

Seasonably dry weather prevailed throughout most of India and Pakistan during December, providing ample sunshine and warm weather for rabi crops. However, an early month tropical cyclone grazed southeastern India, pushing monthly rainfall totals over 150 mm in Tamil Nadu and Andhra Pradesh, with 25 to 100 mm totals common in inland areas and into northeastern sections of India (including Bangladesh). While locally excessive wetness was unfavorable for rabi crops, the moisture was mostly welcome for rice and other crops in varying stages of development.

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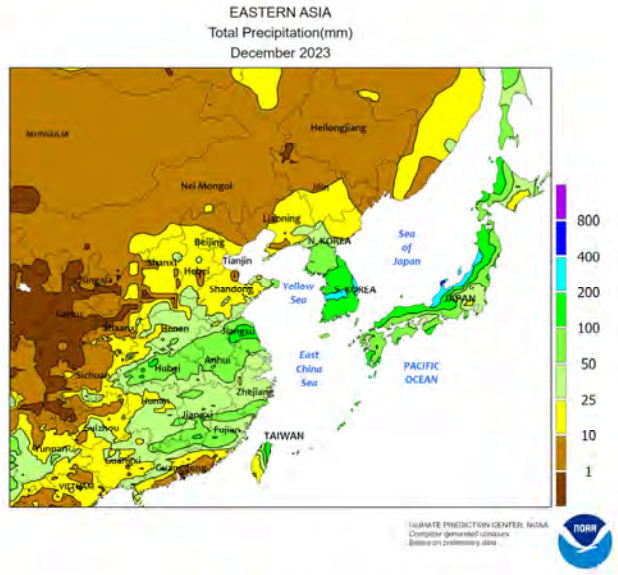

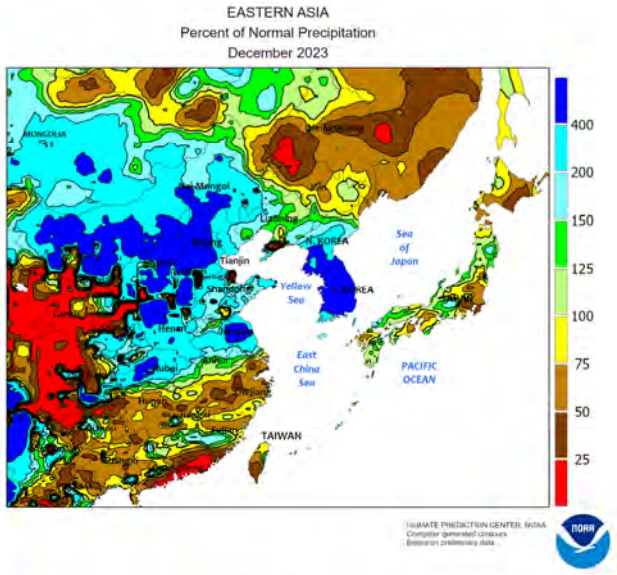

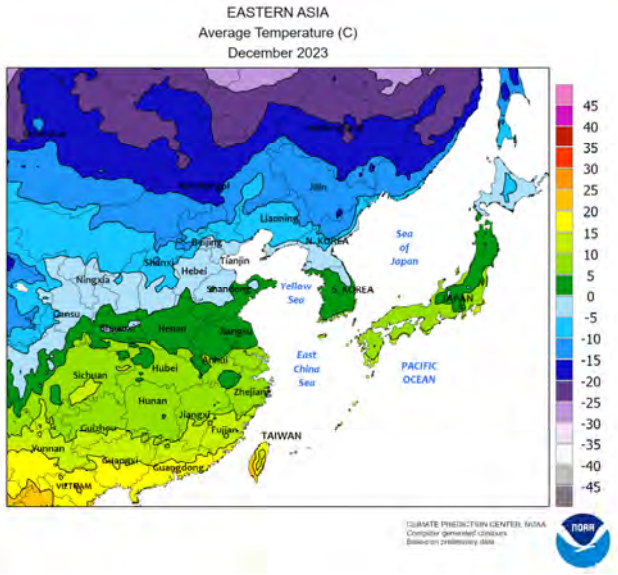

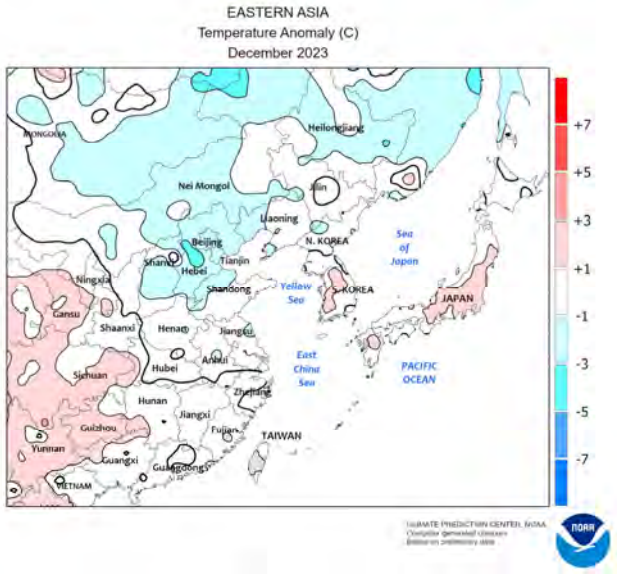

EASTERN ASIA

During December, a strong storm system moved through eastern China around mid-month, producing heavy rain (south) and snow (north). Though below average, rainfall south of the Yangtze River topped 25 mm, while snow on the North China Plain topped 10 cm. The precipitation boosted moisture reserves for overwintering crops, with the northern snow offering dormant wheat protection from the bitter cold (below -15°C). By month's end, seasonably drier weather prevailed with more near-normal temperatures.

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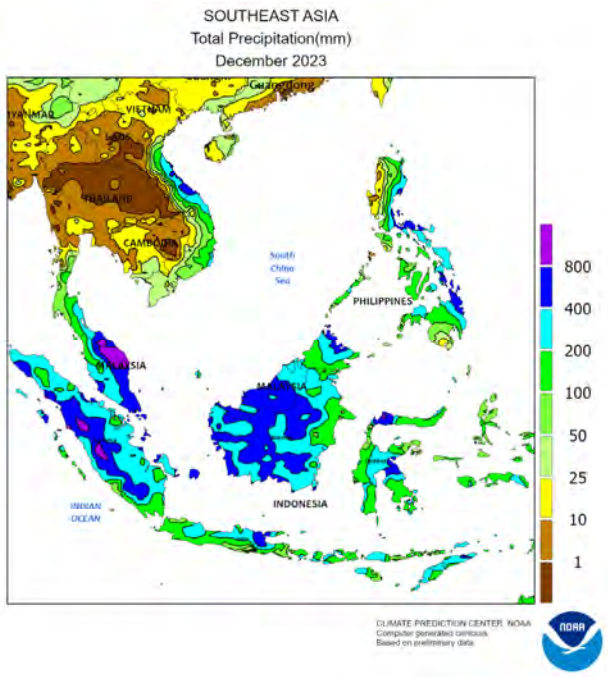

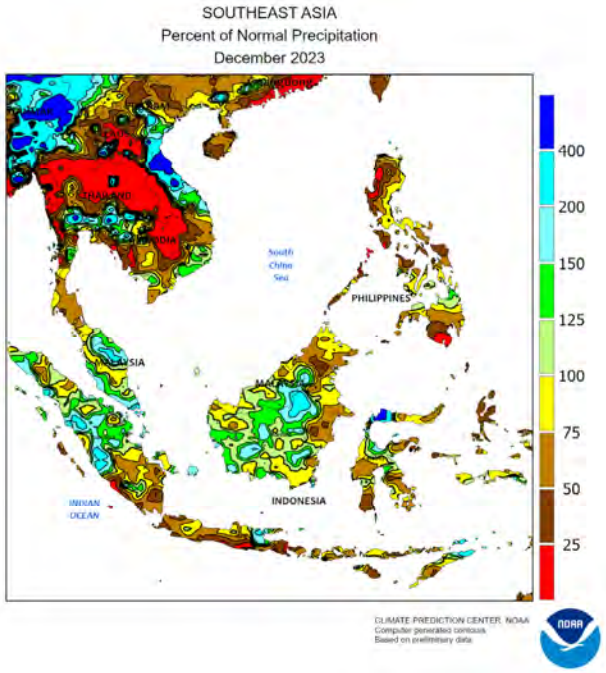

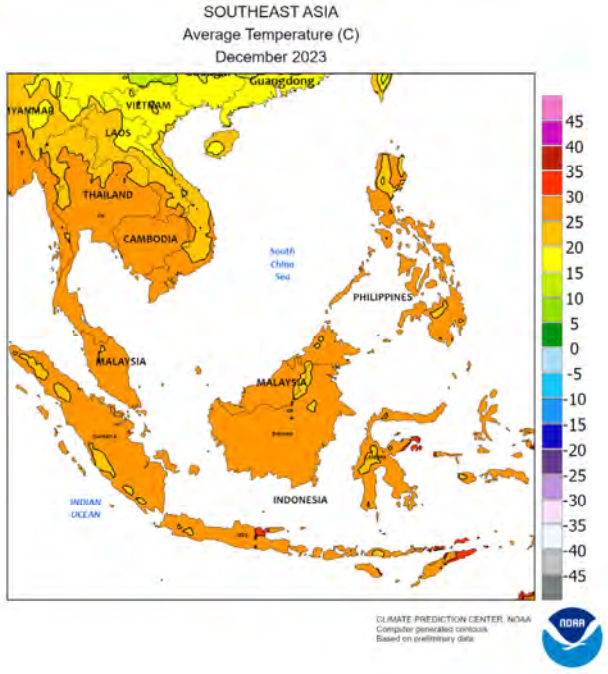

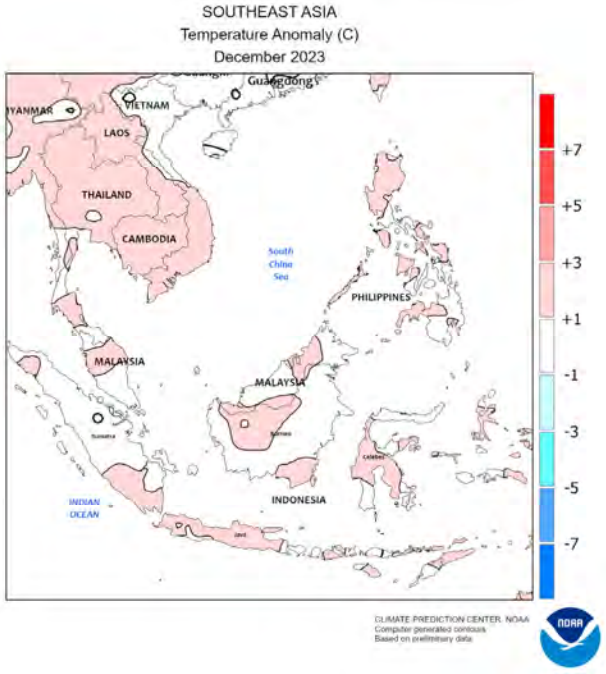

SOUTHEAST ASIA

Irregular rainfall plagued Java, Indonesia, during December sustaining poor moisture for the main growing season. Although monthly rainfall totals topped 150 mm in most locales, this amount represents less than 70 percent of normal and plunged the area further into a hydrologic drought, affecting not only this season's rice crop but also the next two cropping cycles. In contrast, oil palm in northern sections of Indonesia and neighboring Malaysia benefited from near- to above-normal precipitation; eastern-most Malaysia continued to receive below-average rain, though. Meanwhile in the Philippines, although showers topped 100 mm across most reaches, the amounts averaged less than 70 percent of normal. Nevertheless, seasonal moisture conditions remained adequate for winter rice and corn.

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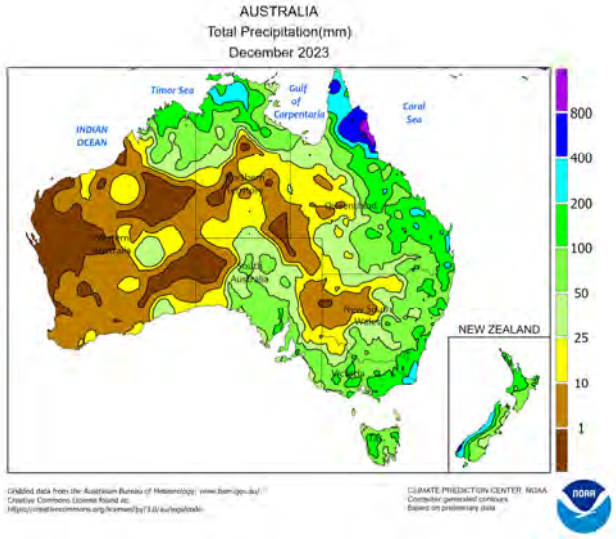

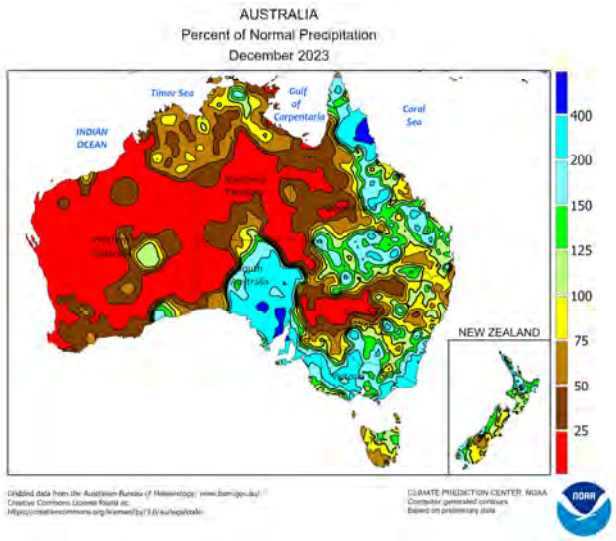

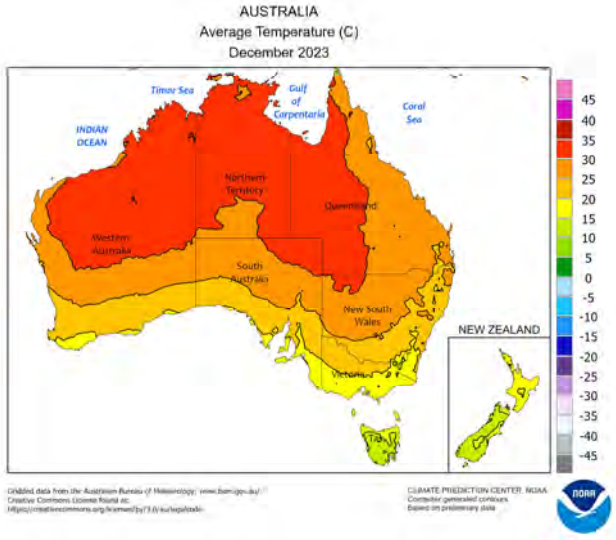

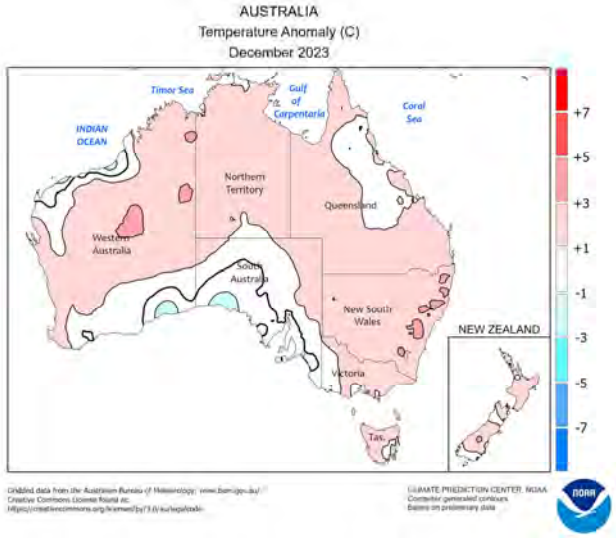

AUSTRALIA

During December, near-normal rainfall in southern Queensland and northern New South Wales sustained adequate moisture supplies for early summer crop development. The rainfall arrived too late to increase cotton acreage, but the wet weather reportedly triggered additional sorghum planting in its wake. Farther south, above-normal rainfall in South Australia, Victoria, and southern New South Wales aided summer crop germination, emergence, and establishment. However, the rain slowed final wheat, barley, and canola harvesting and caused local reductions in winter crop quality. Elsewhere in the wheat belt, below-normal rainfall in Western Australia favored rapid winter crop harvesting, which was reportedly nearing completion at month's end. Temperatures averaged near normal in South Australia but 1 to 2°C above normal in western and eastern portions of the wheat belt.

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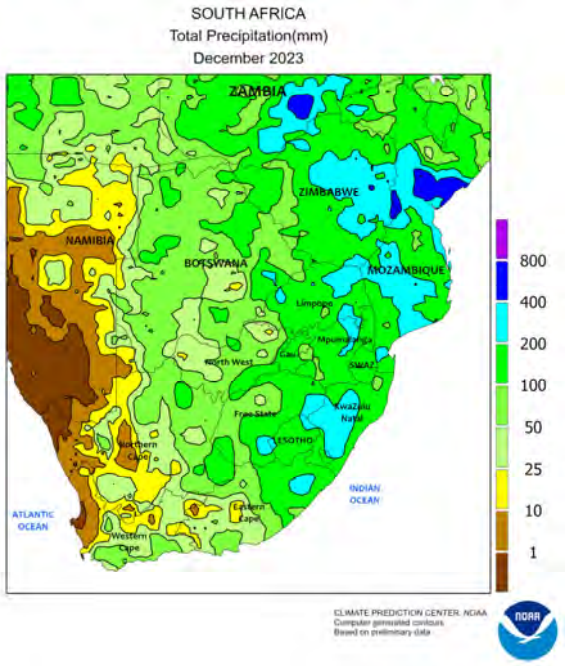
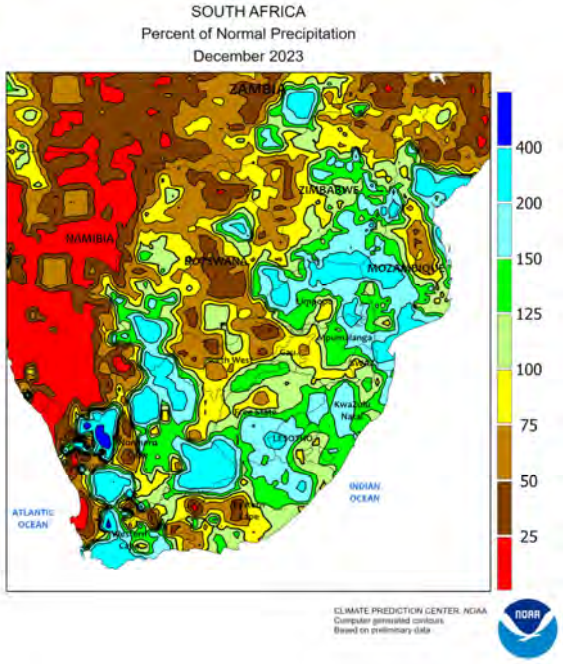
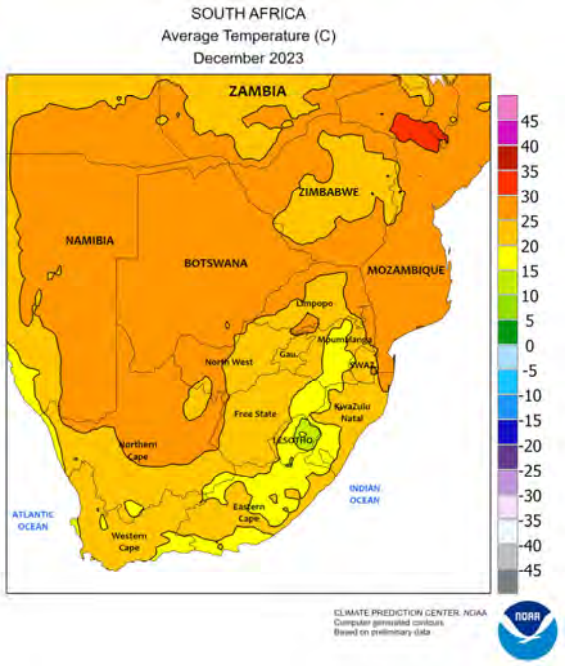
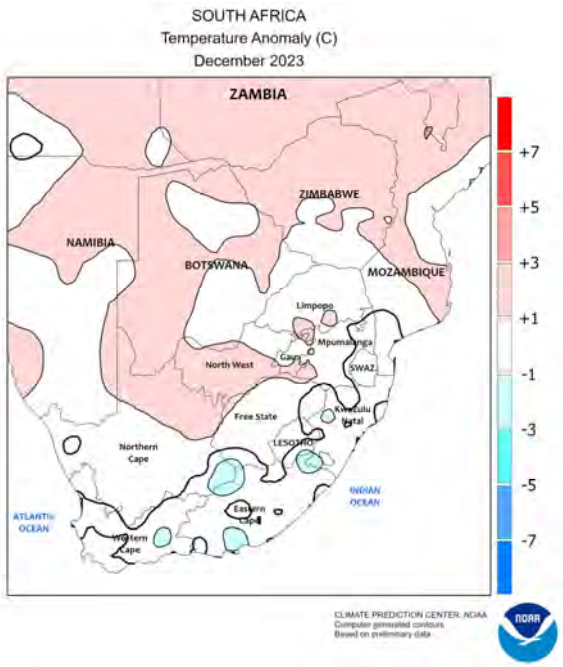


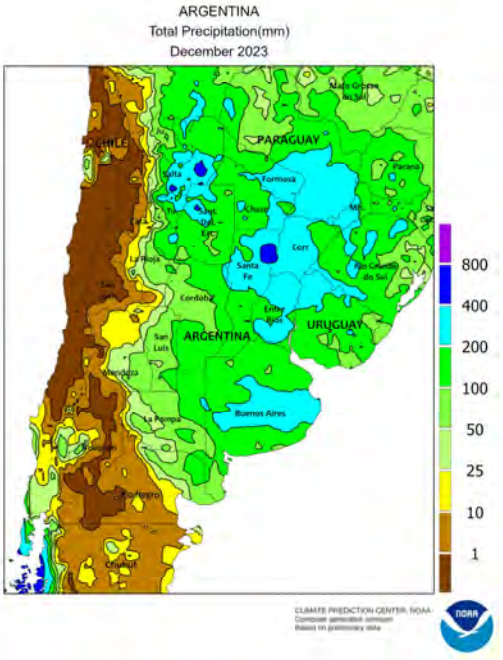


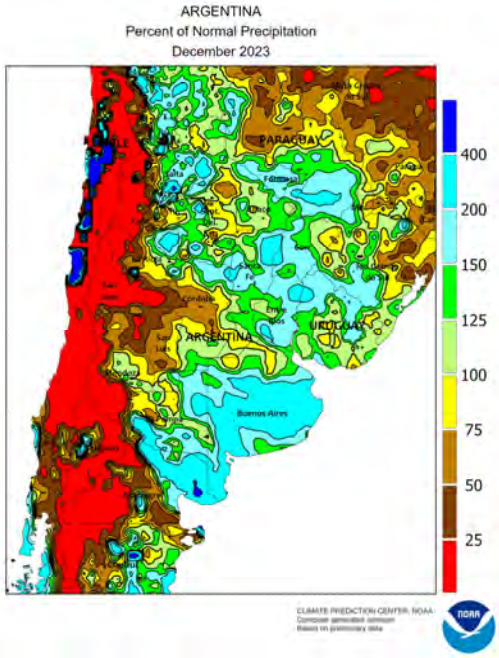


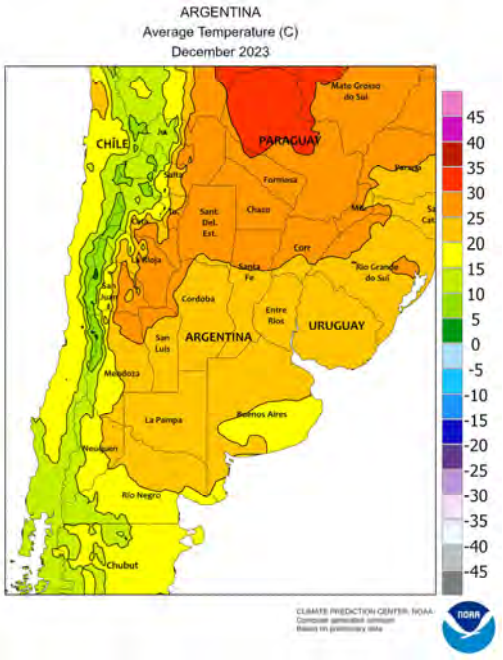


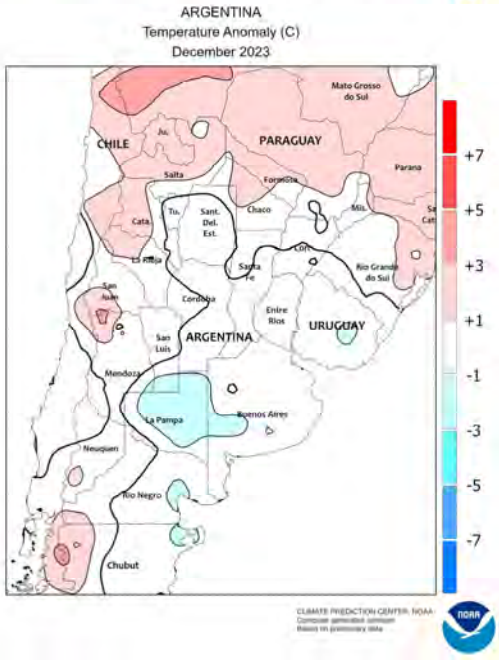
SOUTH AFRICA

December showers provided timely moisture for germination and establishment of corn and other rain-fed crops. The rainfall was particularly beneficial for crops in western and central sections of the corn belt, following a drying trend that began in November. An increase in rainfall also benefited sugarcane in KwaZulu-Natal and irrigated farmlands in eastern Mpumalanga. Monthly average temperatures were generally within 1°C of normal, although temperatures occasionally reached or approached 40°C in climatologically warmer western and northern farming areas (notably Limpopo and western agricultural areas of North West and Free State). Elsewhere, the generally wet pattern brought abundant rainfall (locally exceeding 200 percent of normal) to the Orange River Valley and its watersheds, increasing irrigation reserves for corn and cotton. Meanwhile, lighter albeit unseasonably heavy rain (25-50 mm, locally higher) reduced irrigation requirements for tree and vine crops in Western Cape.



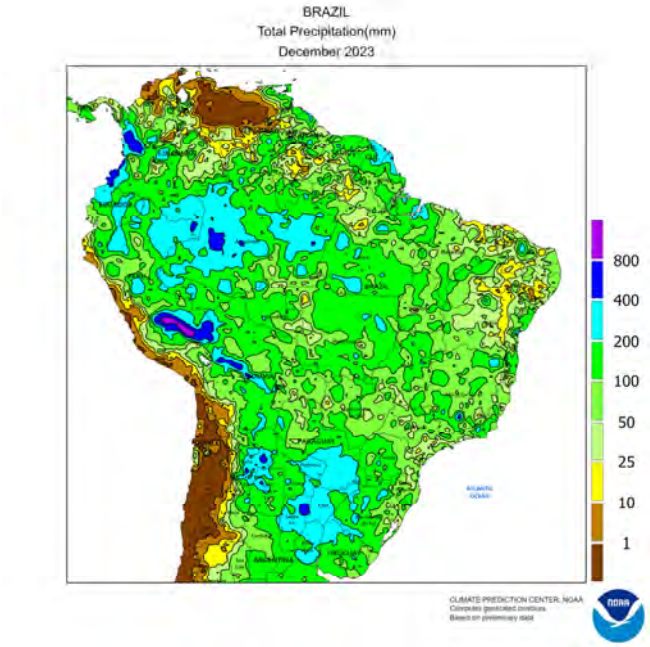


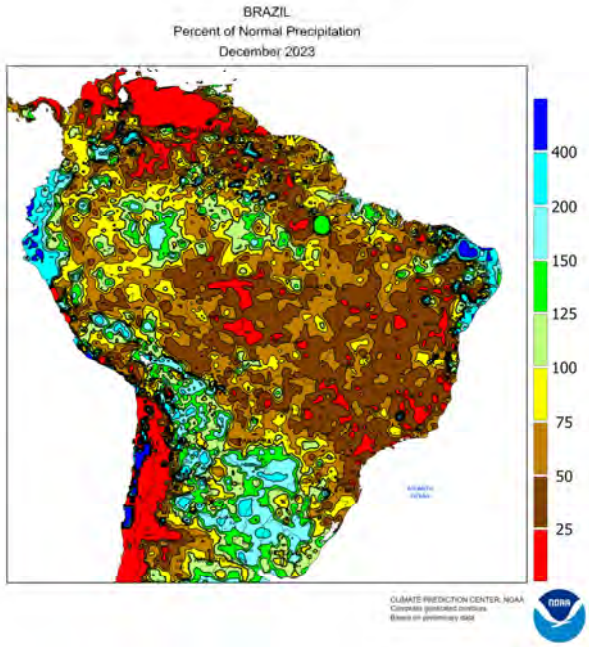


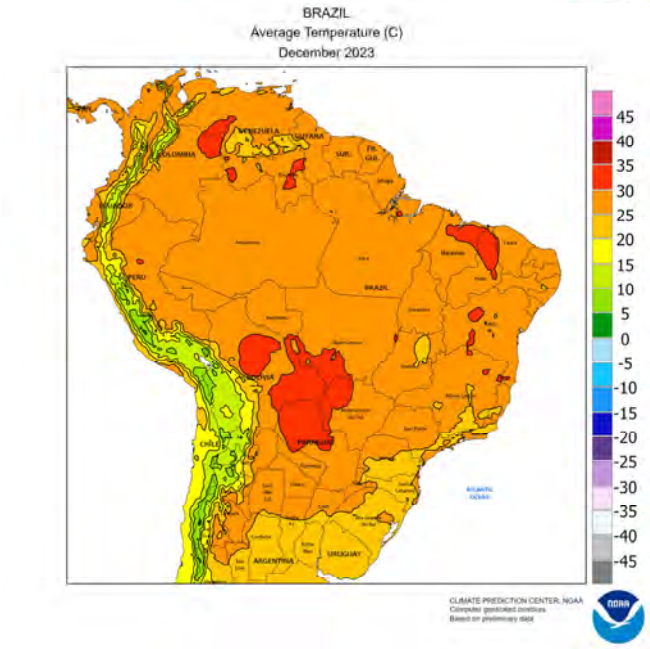


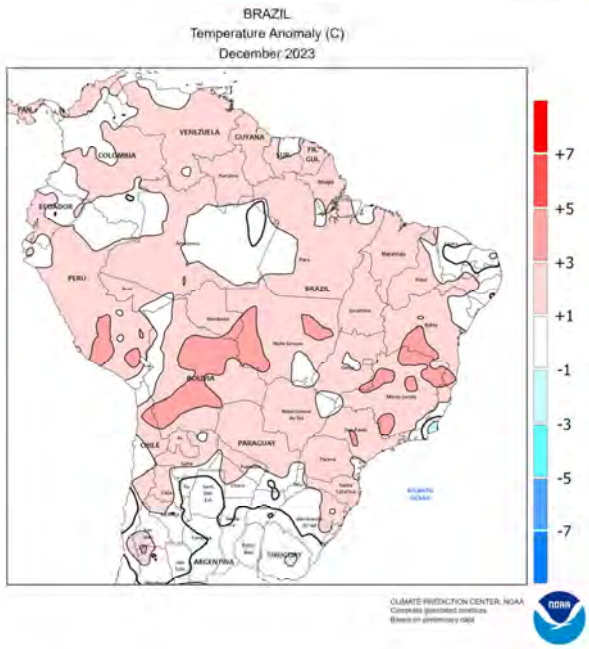
ARGENTINA

During December, widespread, frequently heavy showers helped to recharge moisture reserves in farming areas still recovering from the effects of long-term drought. All major agricultural districts recorded near- to above-normal monthly accumulations, with the highest amounts relative to normal (greater than 200 percent of normal locally) concentrated in the east, including Buenos Aires and eastern cotton areas (Santa Fe to eastern Formosa). The moisture was timely for summer crop planting, particularly in western states (notably Córdoba) lacking adequate soil moisture for uniform germination, though delays in winter grain harvesting and other fieldwork were reported. December average temperatures were within 1°C of normal in all but the far north, where warmer weather prevailed, including several incursions of hot weather (daytime highs reaching 40°C) that spanned large sections of the northwest.









BRAZIL

Late-December rainfall brought much-needed relief from heat and dryness to soybeans in key northern production areas, including Mato Grosso, Brazil's leading producer. However, despite the increased frequency of showers throughout both central Brazil and the northeast, temperatures still occasionally spiked into the upper 30s and lower 40s (degrees C), maintaining high evaporative losses and pushing early-planted crops rapidly toward maturation. Farther south, unseasonable wetness continued in Rio Grande do Sul, but rainfall was more sporadic elsewhere, including most of the region spanning Mato Grosso do Sul and northern Paraná eastward through Minas Gerais. Some crops in the aforementioned drier southern farming areas likely experienced declines in yield potential, especially in locations that were both drier- and hotter-than-normal (highs reaching the upper 30s) for this time of year.

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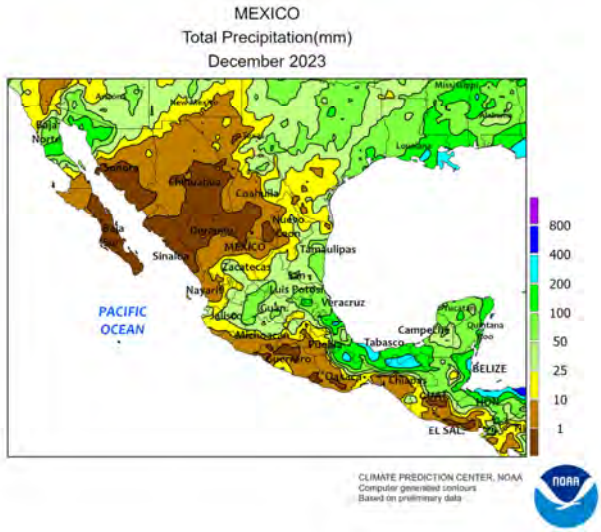

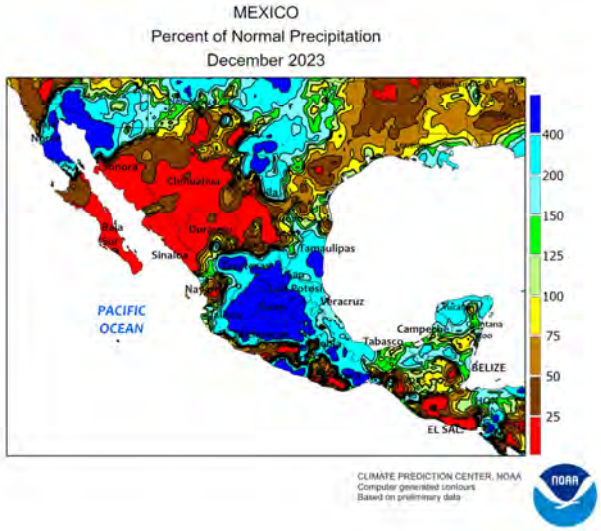

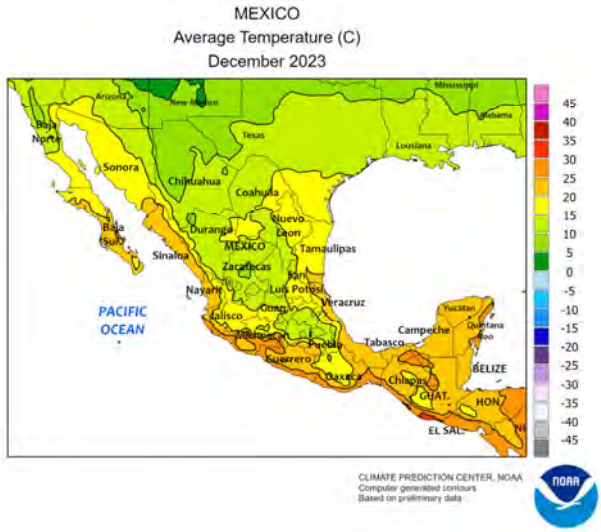

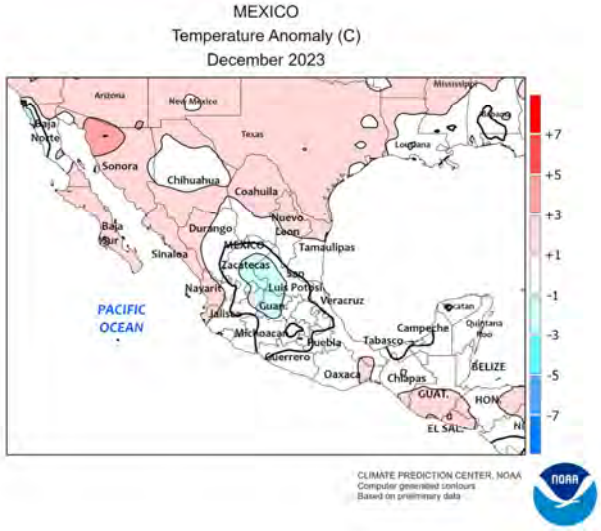

MEXICO

In December, above-normal rainfall in central farming areas contrasted with seasonal dryness throughout much of the northwest. Near- to above-normal temperatures accompanied the northwestern dryness, promoting rapid growth of corn and other predominantly irrigated winter crops while also increasing the need for water. Meanwhile, winter-grown grains on and around the southern plateau (Jalisco to Puebla, extending northward into Zacatecas) received a needed boost in irrigation in areas still experiencing the effects of long-term drought. Elsewhere, more seasonable amounts of rainfall (monthly accumulations ranging from 50 to well over 100 mm) benefited winter crops from Veracruz south and eastward into the Yucatan Peninsula. According to the government of Mexico, reservoirs were at 50 percent of capacity nationally as of December 31; in the northwest, reservoir levels ranged from 28 percent in Sonora to 41 percent in Chihuahua.

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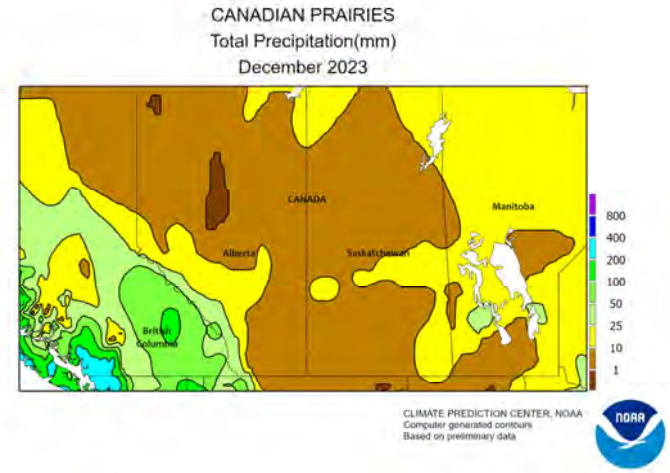
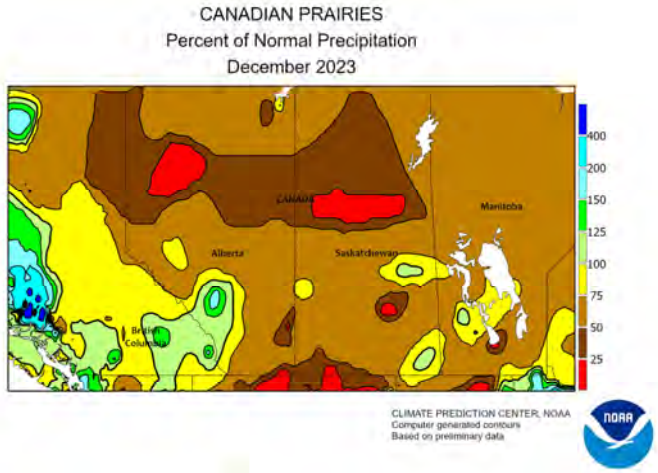
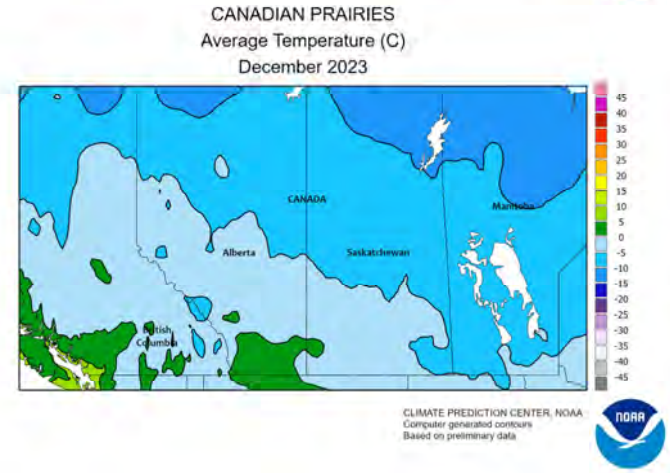
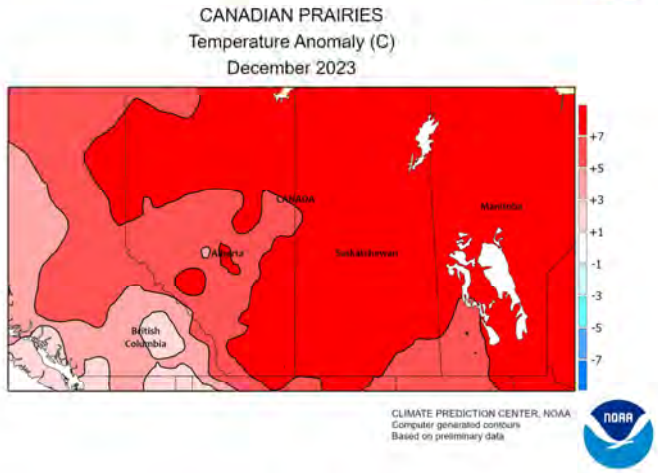






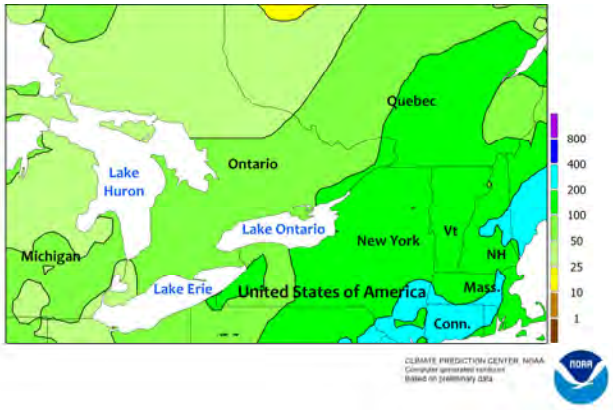


CANADIAN PRAIRIES

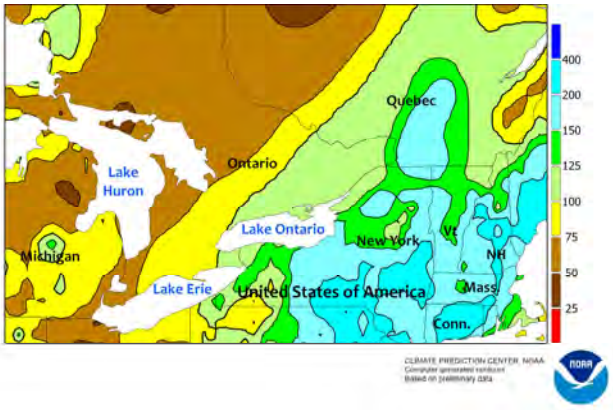
Mostly dry, warmer-than-normal conditions prevailed across the Prairies during December, keeping many agricultural districts void of snow cover for extended periods. Monthly average temperatures ranged from 6 to 8°C above normal regionwide; lowest nighttime temperatures ranged from -10°C or so in the vicinity of southern Alberta to as low as -20°C in a few of the more northerly locations. Precipitation was generally light, with monthly accumulations totaling below 10 mm in most areas, an exception being Manitoba and neighboring locations in Saskatchewan. At month's end, only the wetter eastern locations enjoyed a protective layer of snow cover (depths of 5 cm or greater), though coverage was patchy. According to the Canadian Drought Monitor, dryness and drought lingered throughout the Prairies as of December 31, with Extreme (D3) and Exceptional (D4) Drought persisting in southern Alberta.

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

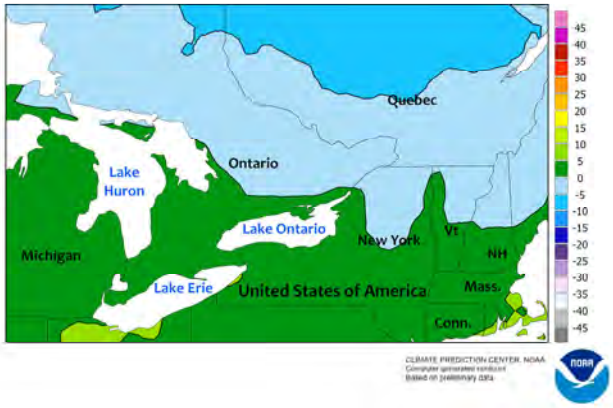
SOUTHEASTERN CANADA
Total Precipitation(mm)
December 2023



SOUTHEASTERN CANADA
Percent of Normal Precipitation
December 2023



SOUTHEASTERN CANADA
Average Temperature (C)
December 2023



SOUTHEASTERN CANADA
Temperature Anomaly (C)
December 2023

SOUTHEASTERN CANADA

An unusually warm December favored overwintering wheat and pastures, although most agricultural districts lacked a protective layer of snow cover at month's end. Monthly temperatures averaged 4 to 5°C above normal regionwide, with nighttime lows dropping below -17°C - generally considered the threshold for potential damage to dormant wheat – only in Quebec and Ontario's northernmost farming areas. Near- to above-normal precipitation accompanied the warmth in the main production areas of both Ontario and Quebec, although long-term moisture deficits lingered over portions of Ontario; according to the Canadian Drought Monitor, Moderate (D1) Drought extended from Toronto to Ottawa as of December 31, with varying levels of dryness elsewhere in the province.

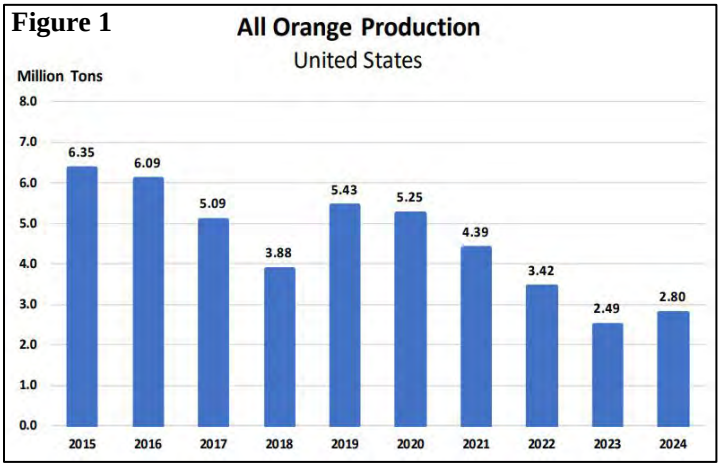
For additional information contact: mark.brusberg@usda.gov

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 12, 2024. Forecasts refer to January 1.

The **U.S all orange** forecast for the 2023-2024 season is 2.80 million tons, up 2 percent from the previous forecast and up 12 percent from the 2022-2023 final utilization (figure 1).

Figure 1



The Florida all orange forecast, at 20.5 million boxes (923,000 tons), is unchanged from the previous forecast but up 30 percent from last season's final utilization. In Florida, early, midseason, and Navel varieties are forecast at 7.50 million boxes (338,000 tons), unchanged from the previous forecast but up 22 percent from last season's final utilization. The Florida Valencia orange forecast, at 13.0 million boxes (585,000 tons), is unchanged from the previous forecast but up 35 percent from last season's final utilization.

The California all orange forecast is 45.8 million boxes (1.83 million tons), is up 3 percent from previous forecast and up 6 percent from last season's final utilization. The California Navel orange forecast is 38.0 million boxes (1.52 million tons), up 3 percent from the previous forecast and up 4 percent from last season's final utilization. The California Valencia orange forecast is 7.80 million boxes (312,000 tons), up 4 percent from the previous forecast and up 16 percent from last season's final utilization.

The Texas all orange forecast, at 950,000 boxes (41,000 tons) is up 19 percent from the previous forecast but down 16 percent from last season's final utilization.

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