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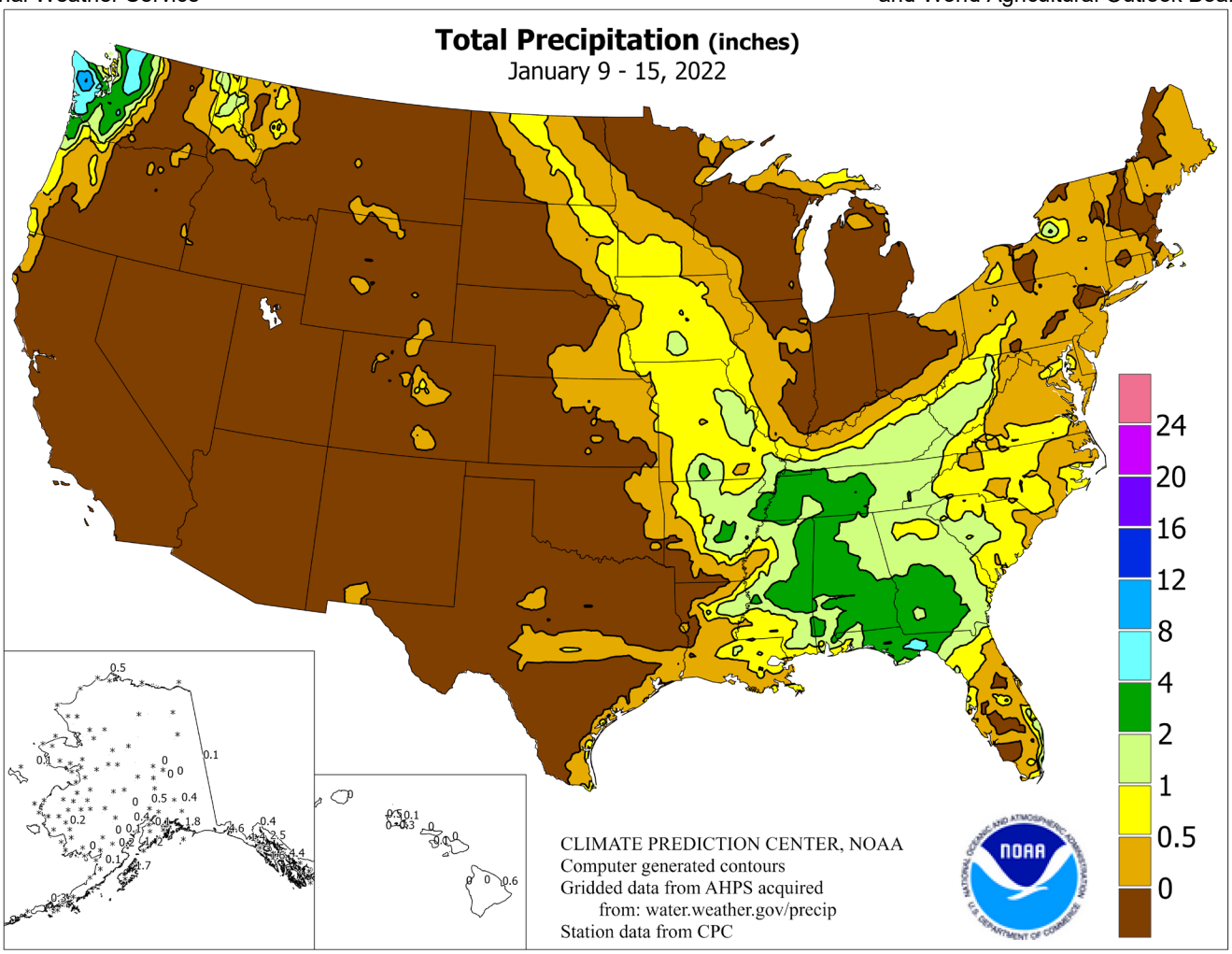
WEEKLY WEATHER AND CROP BULLETIN

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 9 – 15, 2022

Highlights provided by USDA/WAOB

Dry weather prevailed nearly nationwide for much of the week. During that period, significant precipitation was confined to the **Pacific Northwest**. In recent months, the **western U.S.** (excluding the **Pacific Northwest**) has experienced alternating periods of wet and dry weather, starting with a stormy October, followed by a warm, dry November; an exceptional period of rain and snow in mid- to late December; and a mostly dry first half of January. Late in the week, the last in a series of **Northwestern** storms crossed the **Canadian Prairies** before diving

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Water Supply Forecast for the Western United States

Highlights

Despite the presence of a "double-dip" La Niña, storminess engulfed much of the western U.S. in mid- to late December. The stormy regime established or improved mountain snowpack and boosted topsoil moisture at low-elevation sites.

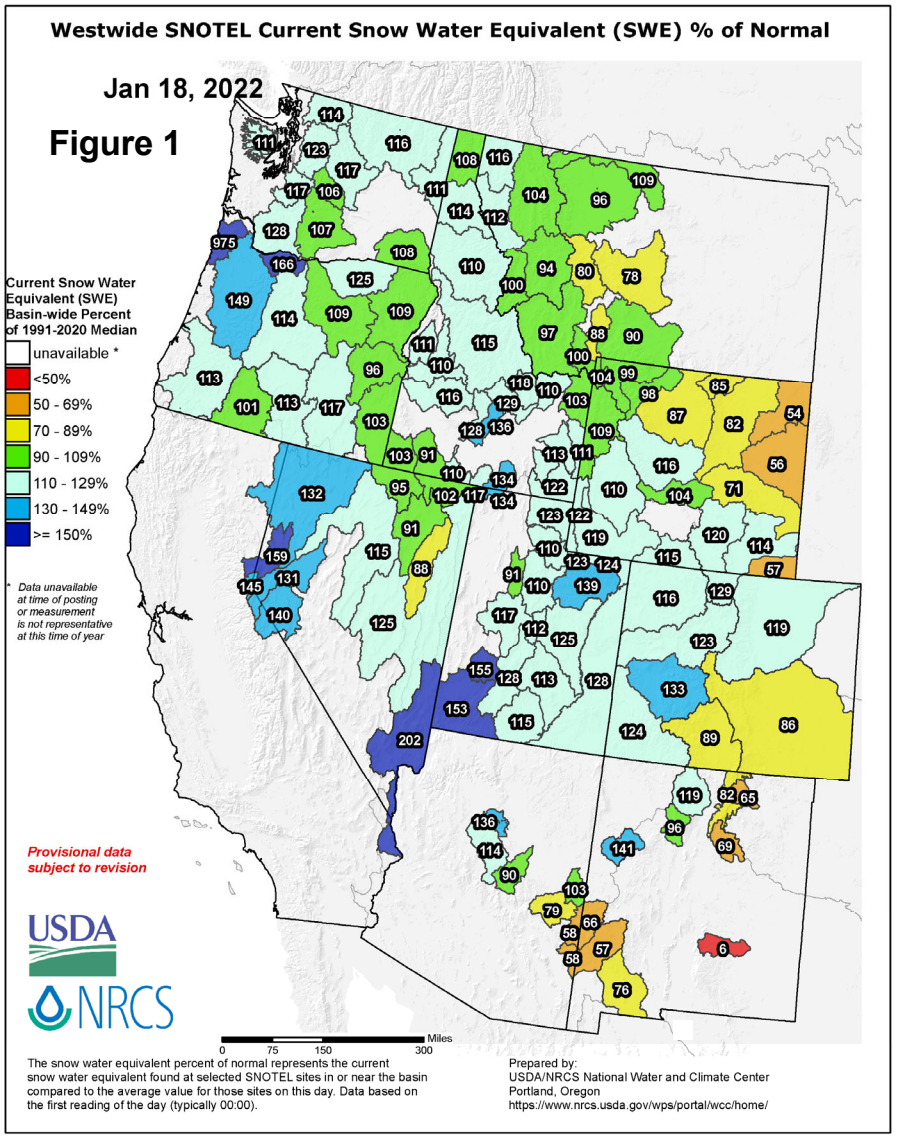
As a result, there was a reduction in the coverage of high-end drought categories, according to the *U.S. Drought Monitor*. In fact, coverage of extreme to exceptional drought (D3 to D4) in the 11-state Western region decreased from 44 to 20 percent between December 7 and January 11. Still, 88 percent of the West was experiencing some level of drought (D1 to D4) on January 11, down only slightly from nearly 95 percent in early December.

According to the California Department of Water Resources, the Sierra Nevada began the December stormy spell with a snow-water equivalency of just an inch. A month later, on January 10, the average water equivalency of the Sierra Nevada snowpack had increased to 16 inches, more than 130 percent of average for the date but only 57 percent of the normal end-of-season (April 1) value.

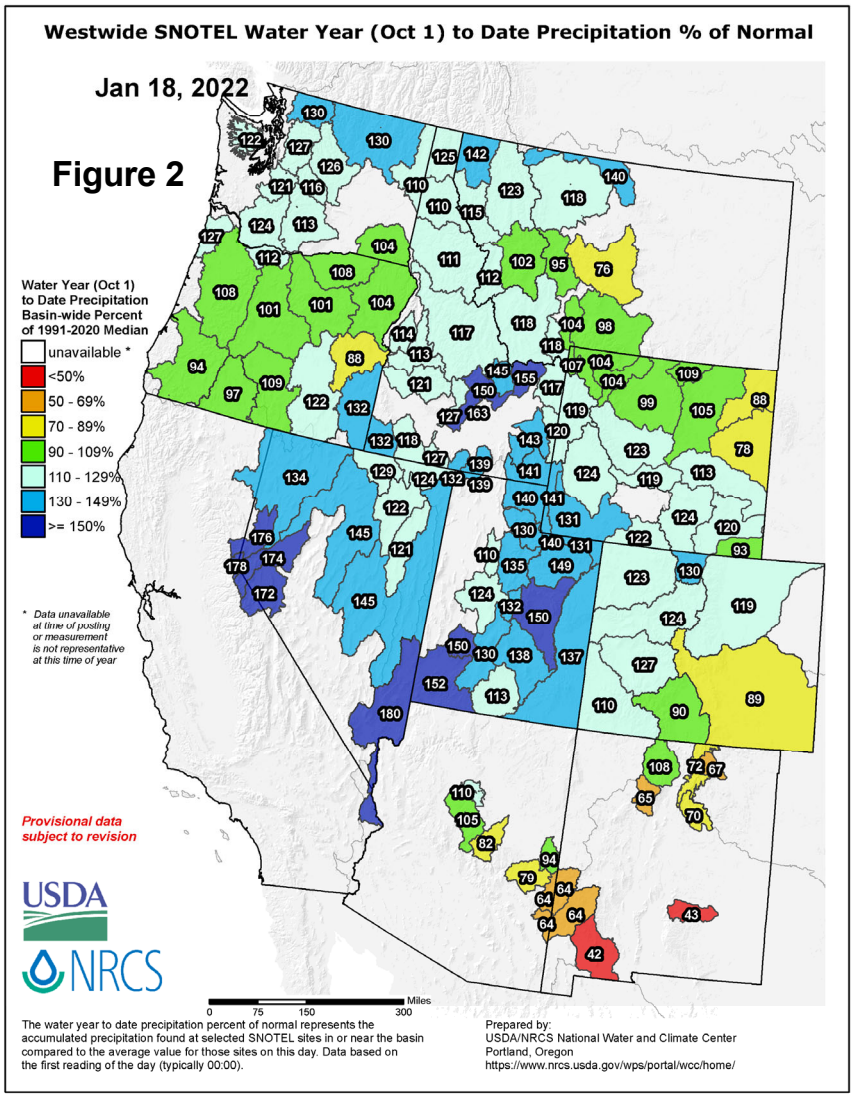
With La Niña back for a second consecutive winter, the jet-stream configuration across the West seemed to fall into a more typical configuration during the first half of January, with mostly dry weather stretching from California to the southern Plains and excessive wetness returning across the Pacific Northwest, especially in western Washington.

Snowpack and Precipitation

Robust December storminess left snowpack in good shape by mid-January across much of the West (figure 1). However, precipitation was not as heavy across the eastern slopes of the Rockies, leaving below-normal snowpack values in several basins from Montana to New Mexico. By January 18, some of the best basin-average snowpack numbers existed in the Pacific Northwest. Favorable, mid-winter snowpack—greater than 150 percent of average in a few basins—was also in place from the western Great Basin into the southern Intermountain West. However, A few areas in northern sections of the Great Basin and Intermountain West did not fare as well and were reporting near-average snowpack. In parts of New Mexico and eastern Wyoming, snowpack was less than 70 percent of average.



Season-to-date precipitation (October 1, 2021 – January 18, 2022) was above normal in many Western basins. In fact, precipitation was greater than 150 percent of average from the Great Basin into parts of the Intermountain West (figure 2). Another area of wetness stretched from the northernmost Rockies to the Pacific Northwest. In the latter region, significant flooding occurred across parts of western Washington in mid-November and early January. Farther south, however, season-to-date precipitation totaled 40 to 90 percent of normal in several Southwestern basins, including much of New Mexico.

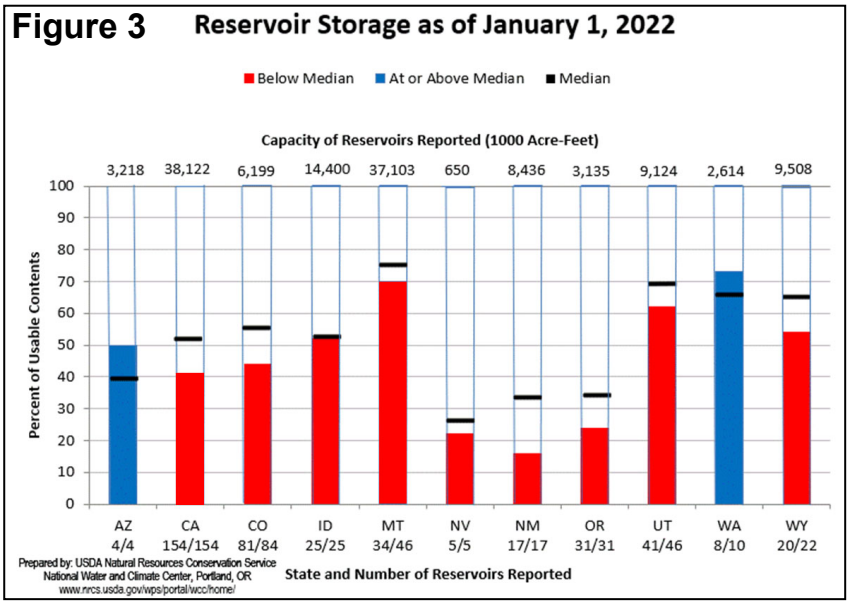


Spring and Summer Streamflow Forecasts

By January 1, 2022, projections for spring and summer streamflow were indicating the likelihood of mostly favorable runoff in several drought-affected areas from the Sierra Nevada to the Intermountain West. However, those areas will require additional precipitation during the second half of the Western winter wet season to ensure favorable runoff. Elsewhere, streamflow projections were less favorable in the Southwest, especially in basins where below-average precipitation occurred during the first half of the season. Runoff prospects were also generally less favorable east of the Continental Divide.

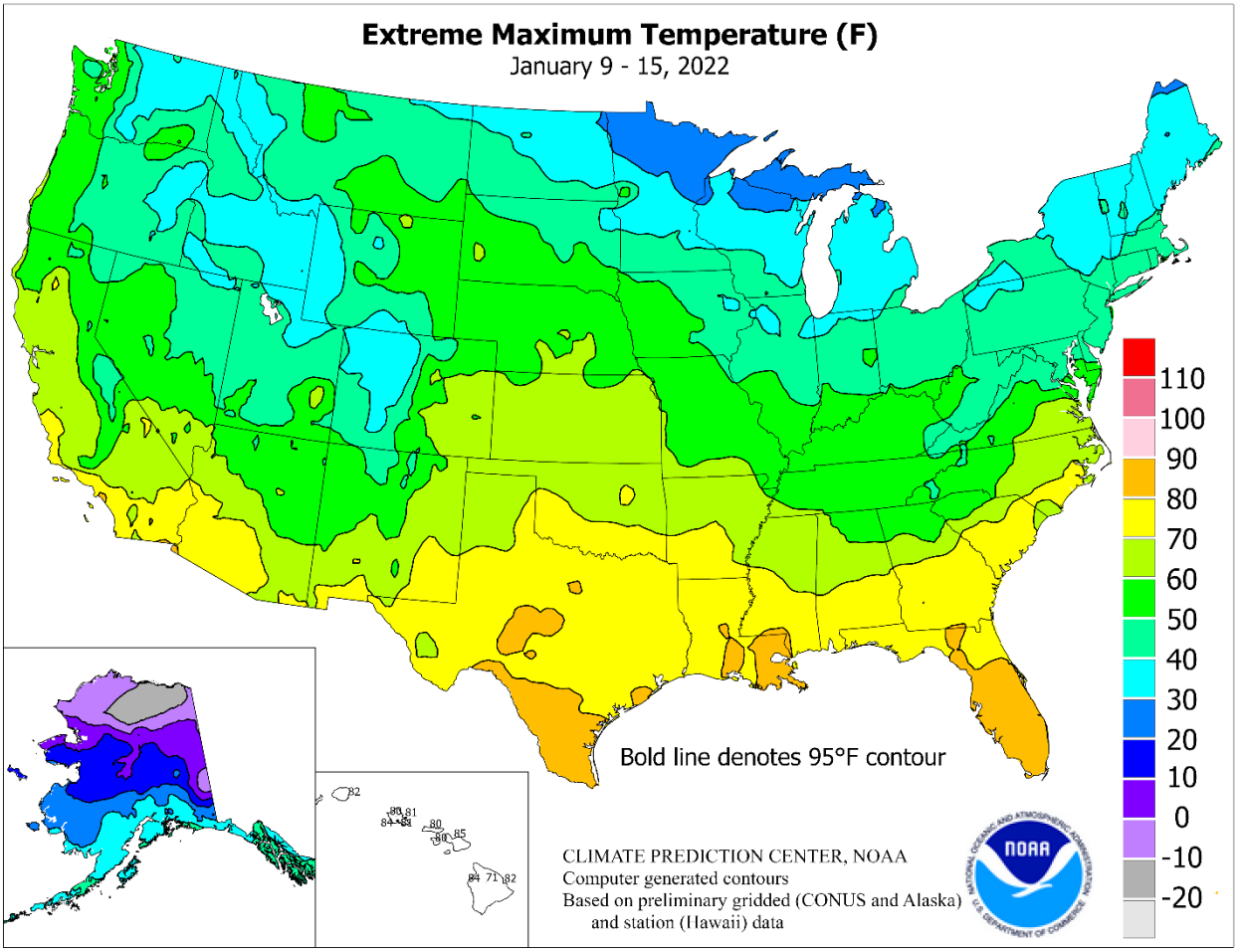
Reservoir Storage

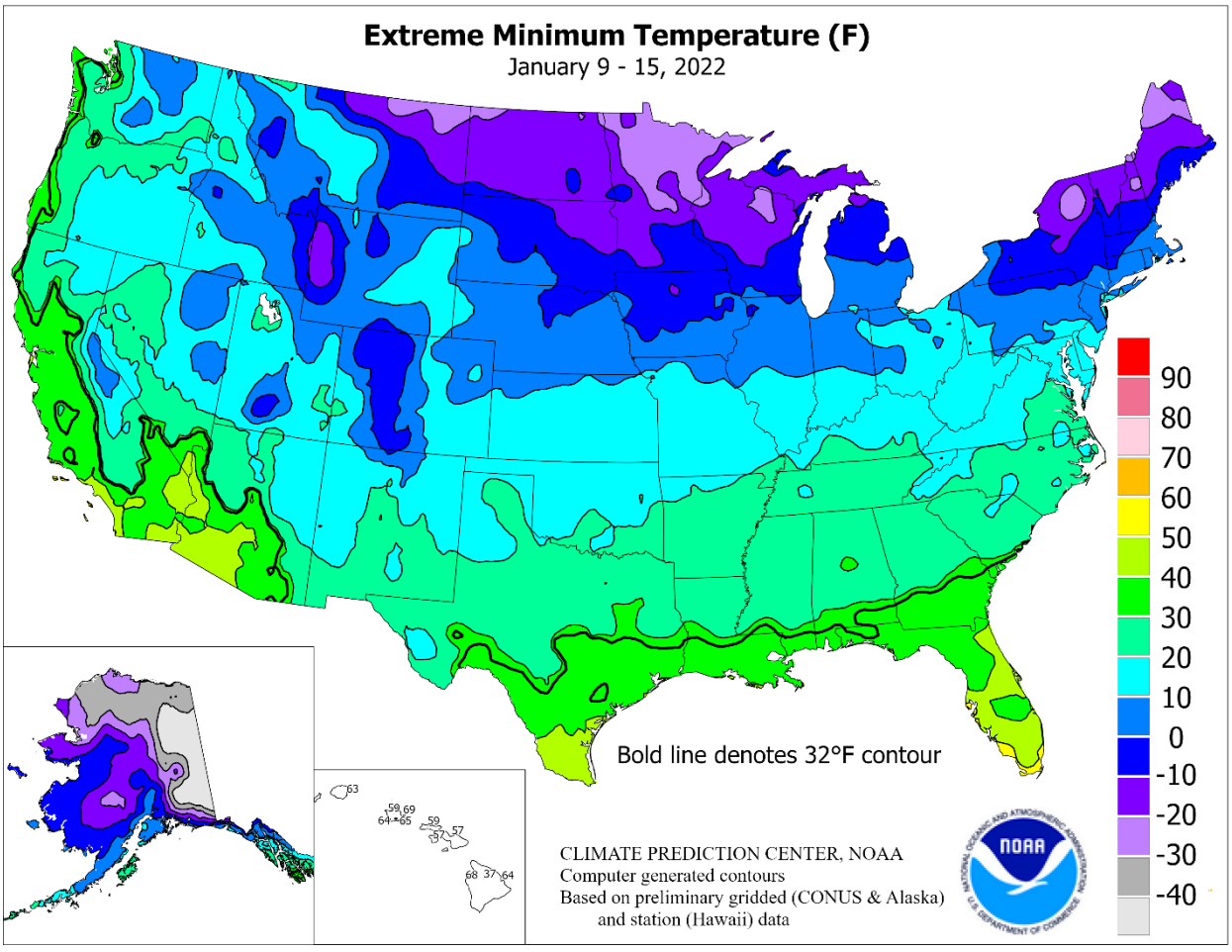
On January 1, 2022, statewide reservoir storage as a percent of average for the date was less than 50 percent in New Mexico (figure 3). California's storage stood at 76 percent of average. Below-average storage was also noted in Colorado, Montana, Nevada, Oregon, Utah, and Wyoming. Meanwhile, near- or above-average storage was reported in a few states, including Arizona, Idaho, and Washington.



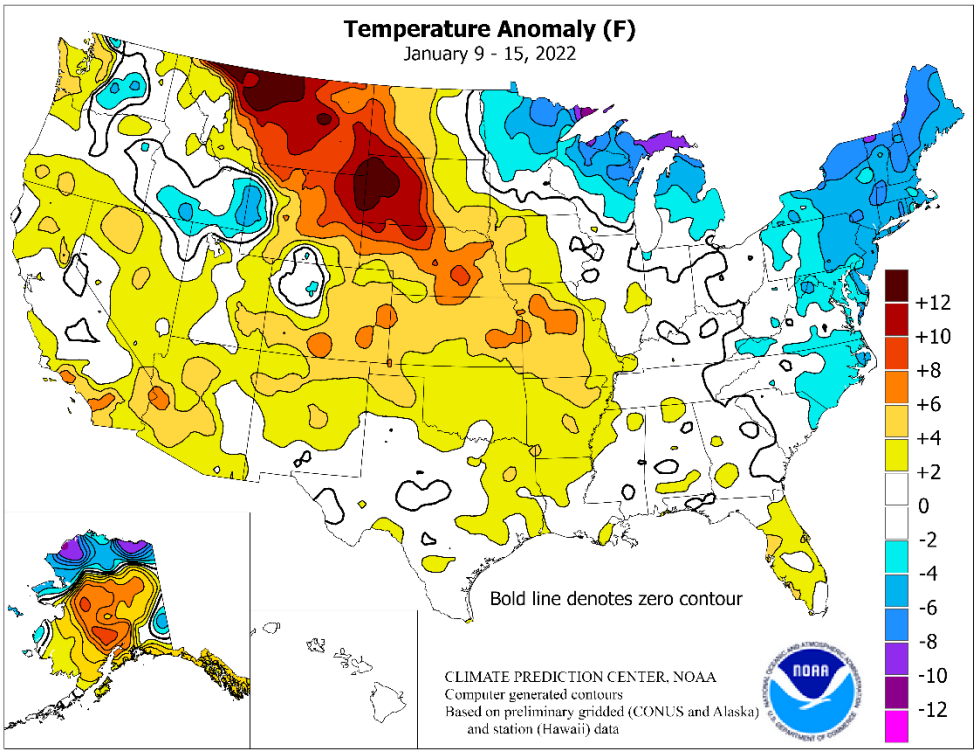
For More Information

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 9 - 15, 2022
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)
January 9 - 15, 2022
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 & Alaska)
and station (Hawaii) data
NOAA

(Continued from front cover)

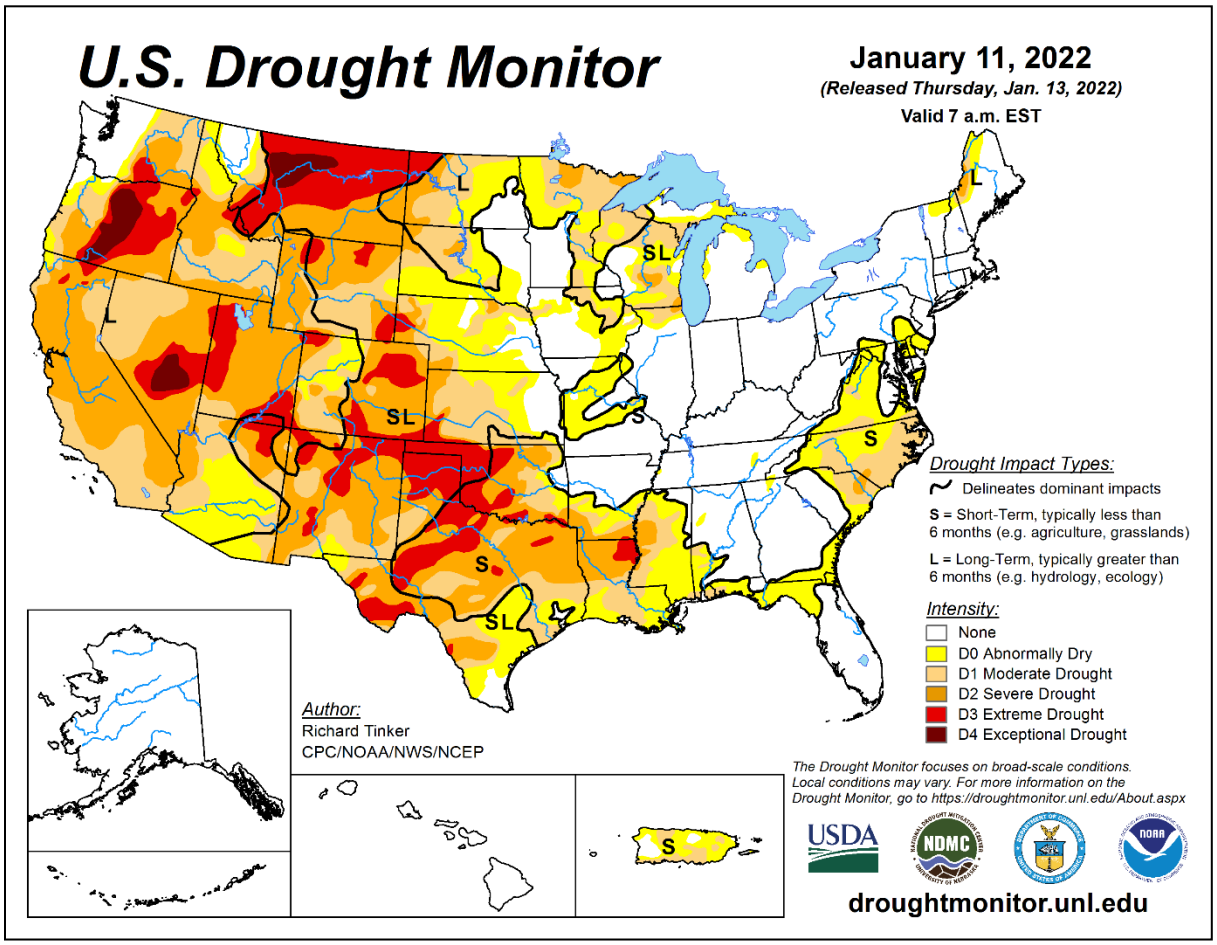


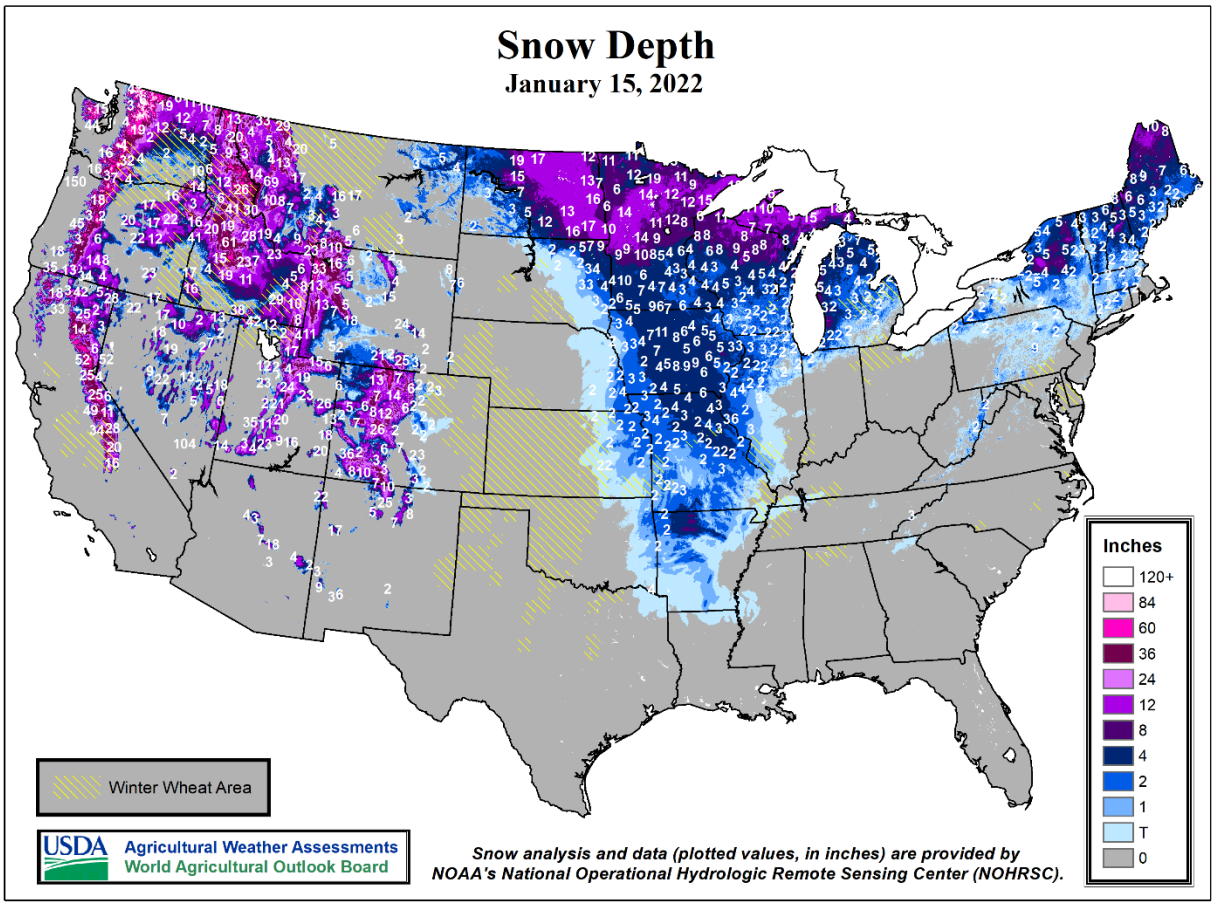
southeastward into the **upper Midwest**. Wind-driven snow accompanied the storm, leading to travel disruptions and increased livestock stress. During the weekend, the storm system traversed the **South**, delivering snow across the **Ozark Plateau**, **Tennessee Valley**, and **southern Appalachians**, as well as thunderstorms in the **Deep South**. A few tornadoes were reported in **Florida** on the morning of Sunday, January 16. Elsewhere on the 16th, significant accumulations of snow and ice spread further across the **interior Southeast** and into the **mid-Atlantic**. This portion of the storm will be covered in greater detail next week. Meanwhile, mild weather—featuring near- or above-normal temperatures—prevailed for several days across much of the country. The warmest weather, relative to normal, affected the **northern High Plains**, where weekly temperatures averaged at least 10°F above normal from **central Montana to northwestern Nebraska**. Warmth also covered the **Far West**, although chilly conditions, dense fog, and air stagnation affected some **interior Western valleys**. Farther east, cold conditions remained in place for much of the week across the **nation's northern tier**, **east of the Rockies**. Temperatures broadly averaged 5 to 10°F below normal along and near the **Canadian border** from **northern Minnesota to northern New England**.

Early-week warmth was prominent in the **western half of the Gulf Coast region**, where daily-record highs for January 9 surged to 82°F in **New Orleans, LA**, and 80°F in **Galveston, TX**. The 80-degree reading marked only the second time on record—along with 81°F on January 1, 2022—that **Galveston** had reached or exceeded 80°F in January, with records back to 1875. Warmth also covered **Florida's peninsula**, where **Fort Myers** posted a daily-record high of 87°F on January 10. Meanwhile, a surge of mild air accompanied heavy precipitation in the P**acific Northwest**, where **Salem, OR**, tied a daily record on January 11 with a high of 59°F. Unusual warmth also briefly developed across the **upper Midwest**; daily-record highs for the 11th rose to 58°F in **Sioux City, IA**, and 52°F in **Sioux Falls, SD**. Farther south, warm weather in advance of a cold front led to record-setting highs for January 13 in locations such as **Del Rio, TX** (82°F), and **Lawton, OK** (76°F). Lingering **Southern** warmth on January 14 resulted in daily-record highs in **Roswell, NM** (76°F), and **El Paso, TX** (71°F). General **Western** warmth contributed to several daily-record highs, including 65°F (on January 12) in **Mount Shasta City, CA**, and 64°F (on January 13) in **Reno, NV**. In contrast, late-week temperatures tumbled across the **upper Midwest**. In **Sisseton, SD**, the temperature fell from 42 to -17°F between January 12 and 15. Similarly, the temperature in **Waterloo, IA** fell more than 50°F between January 13 and 15—from 46 to -8°F.

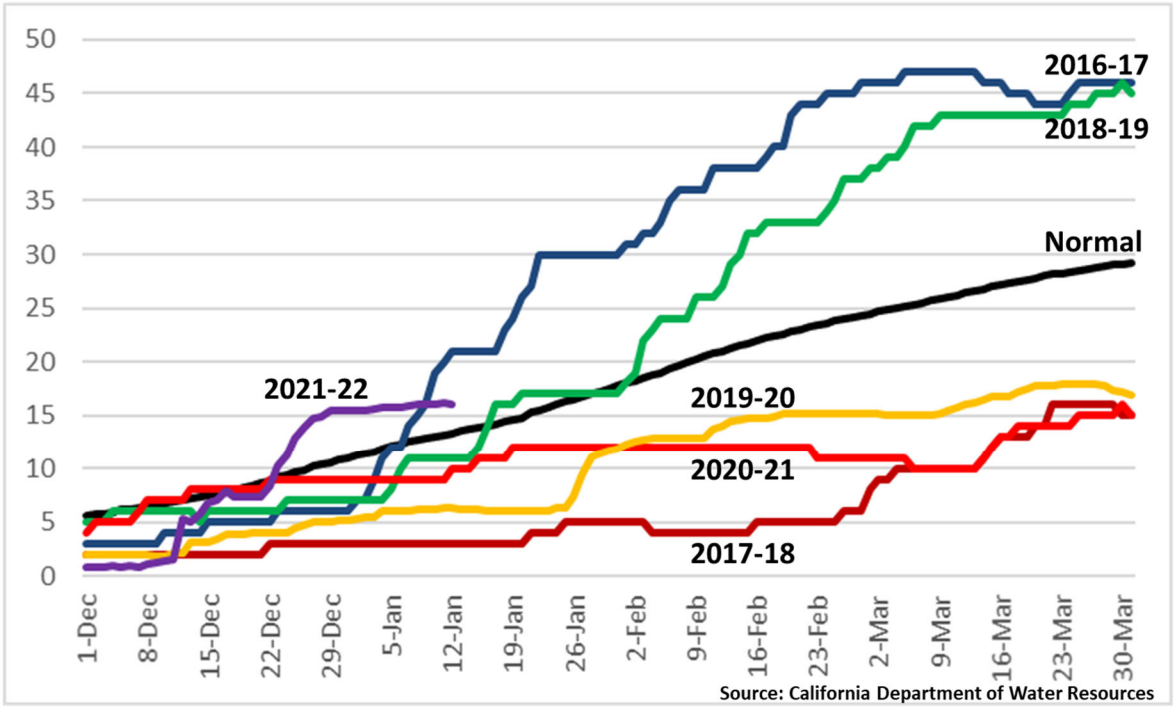
Wind-blown snow accompanied the **upper Midwestern** temperature plunge. For example, **Sisseton** netted 5.7 inches of snow on January 14, followed the next day by a wind gust to 41 mph. **Waterloo** received 7.1 inches on January 14-15, along with a gust to 39 mph. During the storm, east-northeasterly wind gusts peaked above 35 mph in **Iowa** locations such as **Mason City** (8.3 inches of snow and a gust to 36 mph) and **Ottumwa** (7.1 inches and 39 mph). **Des Moines, IA**, bore the brunt of the January 14-15 storm, with 14.3 inches of snow (1.27 inches of liquid equivalency) and a peak gust to 42 mph. Meanwhile in **Missouri**, winds also broadly gusted to 30 mph or higher, with storm-total snowfall reaching 4.8 inches in **Springfield**, 3.6 inches in **Columbia**, and 3.2 inches in **Kansas City**. As the storm moved into the **mid-South**, snowfall amounts were highly dependent on elevation. In **Arkansas**, for example, 12.0 inches blanketed **Harrison** on the 15th, while 1.3 inches fell in **North Little Rock**. Additional details regarding the storm's January 16-17 snowfall and related impacts across the **eastern U.S.** will appear next week. Earlier, the focus for heavy precipitation had been the **Pacific Northwest**. The week's wettest day was January 11, when daily-record amounts across **western Washington** totaled 2.84 inches in **Hoquiam** and 1.70 inches in **Seattle**. During the first 15 days of January, **Hoquiam's** rainfall totaled 14.03 inches (251 percent of normal). Elsewhere, the week began with some showers and thunderstorms sweeping across the **South** and snow squalls downwind of the Gr**eat Lakes**. Record-setting rainfall amounts for January 9 included 3.87 inches in **Houston, TX**, and 1.73 inches in **Jackson, KY**, while **Sault Sainte Marie, MI**, reported a January 9-10 snowfall total of 16.1 inches. Conversely, critically dry weather persisted on the **southern High Plains**. In **northern Texas**, **Amarillo** had ended the year on an 80-day streak (October 13 – December 31) without any precipitation—a dry spell broken only by a dusting of snow (liquid equivalency of 0.04 inch) on January 1.

Mild weather arrived across roughly the **southern half of Alaska**, while significant precipitation fell in some southern locations. On January 9, the week began with daily-record precipitation totals in **Ketchikan** (2.58 inches) and **Juneau** (0.96 inches). On that date, **Juneau** also reported a daily-record snowfall of 9.1 inches. Later, rain and mild weather, including a high of 42°F on January 14, reduced **Juneau's** snow depth from 26 to 9 inches between January 10 and 16. In the 10-day period from January 7-16, **Ketchikan** received precipitation totaling 8.57 inches. Elsewhere, **Kodiak** netted a daily-record total of 1.61 inches on January 13. Farther south, mostly dry weather returned across **Hawaii**, following the previous week's heavy showers on the western islands. Through January 15, month-to-date rainfall totaled 6.32 inches (620 percent of normal) in **Honolulu, Oahu**, and 5.53 inches (381 percent) in **Lihue, Kauai**. During the same 15-day period, **Kahului, Maui**, reported just 0.08 inch (7 percent of normal). On the **Big Island**, **Hilo** recorded 0.76 inch (22 percent of normal) from January 1-15.


U.S. Drought Monitor
January 11, 2022
(Released Thursday, Jan. 13, 2022)
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:
Richard Tinker
CPC/NOAA/NWS/NCEP
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
droughtmonitor.unl.edu


Snow Depth
January 15, 2022
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 (158%)	**2011**	8.75 (111%)
2011-12	5.75 (73%)	**2012**	11.54 (146%)
2012-13	6.52 (83%)	**2013**	11.49 (145%)
2013-14	4.17 (53%)	**2014**	7.75 (98%)
2014-15	6.46 (82%)	**2015**	7.13 (90%)
2015-16	14.68 (186%)	**2016**	7.88 (100%)
2016-17	15.00 (190%)	**2017**	8.77 (111%)
2017-18	6.88 (87%)	**2018**	10.84 (137%)
2018-19	14.05 (178%)	**2019**	10.00 (127%)
2019-20	4.59 (58%)	**2020**	10.63 (135%)
2020-21	1.67 (21%)	**2021**	7.16 (91%)
2021-22	3.42 (N/A)	**2022**	N/A (N/A)
Avg.	**7.90**	**Avg.**	**7.90**

Notes: Recharge and withdrawal values are based on end-of-month statistics, not daily readings. Recharge data for 2021-22 is updated through Dec. 31.

National Weather Data for Selected Cities

Weather Data for the Week Ending January 15, 2022

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	32	23	39	10	27	10	0.43	0.28	0.28	1.36	91	0.43	117	76	58	0	7	3	0
	BARROW	-8	-17	-1	-20	-12	0	0.48	0.45	0.27	1.59	639	0.48	585	80	69	0	7	4	0
	FAIRBANKS	11	-9	21	-37	1	0	0.03	-0.10	0.03	6.55	698	0.11	36	79	65	0	7	1	0
	JUNEAU	40	31	41	11	35	7	2.46	1.28	0.98	5.88	69	3.13	121	89	78	0	2	7	2
	KODIAK	38	29	40	25	33	3	1.68	-0.22	1.56	2.97	23	1.70	40	89	67	0	6	4	1
	NOME	14	-1	22	-9	7	2	0.05	-0.18	0.05	3.96	248	0.05	10	72	50	0	7	1	0
AL	BIRMINGHAM	55	35	63	28	45	1	0.00	-1.08	0.00	0.00	0	0.00	0	94	41	0	2	0	0
	HUNTSVILLE	53	32	60	26	42	1	0.98	-0.14	0.58	8.37	102	3.70	154	89	47	0	4	2	1
	MOBILE	66	38	79	32	52	2	0.63	-0.67	0.48	5.59	72	0.91	34	96	45	0	1	2	0
	MONTGOMERY	62	35	74	29	49	3	2.02	1.00	1.09	7.40	106	2.94	142	88	37	0	3	2	2
AR	FORT SMITH	58	29	67	23	44	5	0.22	-0.38	0.22	6.14	134	1.70	130	90	40	0	4	1	0
	LITTLE ROCK	61	34	72	27	47	7	2.35	1.59	1.75	8.31	122	4.24	237	82	36	0	3	2	2
AZ	FLAGSTAFF	46	19	55	11	32	2	0.00	-0.48	0.00	4.63	158	0.20	18	81	27	0	7	0	0
	PHOENIX	72	48	74	44	60	4	0.00	-0.23	0.00	1.59	113	0.08	16	57	17	0	0	0	0
	PRESCOTT	58	25	62	21	41	3	0.00	-0.26	0.00	2.13	135	0.31	54	72	18	0	7	0	0
	TUCSON	71	42	75	36	56	4	0.00	-0.22	0.00	1.52	105	0.23	48	58	16	0	0	0	0
CA	BAKERSFIELD	59	40	63	38	49	2	0.00	-0.26	0.00	2.56	160	0.00	0	98	63	0	0	0	0
	EUREKA	55	40	61	35	47	-1	0.11	-1.43	0.11	7.06	61	1.98	59	95	84	0	0	1	0
	FRESNO	60	38	66	35	49	3	0.00	-0.52	0.00	3.58	124	0.00	0	99	58	0	0	0	0
	LOS ANGELES	73	53	78	46	63	7	0.01	-0.63	0.01	8.23	241	0.01	0	68	22	0	0	1	0
	REDDING	66	37	72	32	52	6	0.00	-1.44	0.00	6.49	70	1.15	38	86	33	0	1	0	0
	SACRAMENTO	59	37	65	34	48	2	0.00	-0.85	0.00	7.05	141	0.05	2	100	60	0	0	0	0
	SAN DIEGO	71	49	76	45	60	3	0.03	-0.42	0.03	2.59	102	0.03	3	81	28	0	0	1	0
	SAN FRANCISCO	59	46	62	41	52	3	0.00	-1.02	0.00	10.13	164	0.41	19	92	63	0	0	0	0
	STOCKTON	61	37	63	35	49	4	0.00	-0.65	0.00	3.82	108	0.00	0	99	58	0	0	0	0
CO	ALAMOSA	45	2	53	-4	24	8	0.00	-0.07	0.00	0.19	35	0.16	111	88	22	0	7	0	0
	CO SPRINGS	52	23	61	18	38	7	0.01	-0.06	0.01	0.23	42	0.17	100	65	20	0	6	1	0
	DENVER INTL	52	25	62	18	38	8	0.00	-0.10	0.00	0.51	83	0.36	165	71	28	0	6	0	0
	GRAND JUNCTION	41	19	43	16	30	3	0.00	-0.14	0.00	2.08	236	0.03	10	87	46	0	7	0	0
	PUEBLO	55	17	66	9	36	6	0.00	-0.09	0.00	0.32	52	0.20	104	75	23	0	7	0	0
CT	BRIDGEPORT	35	19	46	6	27	-3	0.19	-0.56	0.19	3.06	62	1.35	86	74	43	0	7	1	0
	HARTFORD	34	10	46	2	22	-4	0.08	-0.65	0.08	3.91	79	0.98	63	75	37	0	7	1	0
DC	WASHINGTON	43	26	52	19	35	-1	0.50	-0.15	0.50	2.85	64	2.22	164	68	38	0	7	1	1
DE	WILMINGTON	39	21	49	13	30	-2	0.26	-0.43	0.13	3.48	71	1.18	82	70	39	0	7	2	0
FL	DAYTONA BEACH	73	52	80	42	63	5	0.00	-0.63	0.00	3.65	92	0.00	0	90	43	0	0	0	0
	JACKSONVILLE	67	41	79	36	54	1	0.14	-0.62	0.14	1.84	43	0.25	17	99	53	0	0	1	0
	KEY WEST	78	68	81	63	73	4	0.00	-0.50	0.00	1.10	34	0.17	17	91	66	0	0	0	0
	MIAMI	77	63	82	51	70	2	0.98	0.63	0.94	2.65	94	1.50	197	93	55	0	0	3	1
	ORLANDO	75	53	83	43	64	5	0.00	-0.54	0.00	2.08	56	0.01	1	91	43	0	0	0	0
	PENSACOLA	66	44	75	38	55	4	0.62	-0.39	0.50	2.86	42	1.22	58	86	46	0	0	2	1
	TALLAHASSEE	67	41	76	34	54	3	2.20	1.26	1.38	3.08	53	2.31	119	93	37	0	0	2	2
	TAMPA	77	56	84	50	67	6	0.00	-0.47	0.00	0.34	9	0.02	1	78	44	0	0	0	0
	WEST PALM BEACH	76	60	82	48	68	3	1.66	0.93	1.18	3.78	75	1.66	102	95	52	0	0	3	1
GA	ATHENS	55	33	59	25	44	1	0.43	-0.46	0.33	5.41	97	1.74	94	87	38	0	3	2	0
	ATLANTA	56	37	65	30	46	3	0.77	-0.15	0.49	8.45	146	2.37	126	76	39	0	2	2	0
	AUGUSTA	61	32	77	25	46	1	0.66	-0.22	0.54	7.74	148	2.21	120	92	30	0	4	3	1
	COLUMBUS	62	37	74	30	49	3	1.64	0.80	1.18	6.80	112	1.98	111	86	31	0	2	2	1
	MACON	62	35	73	27	49	3	1.22	0.27	1.12	7.02	116	2.02	102	93	37	0	2	2	1
	SAVANNAH	62	37	76	32	50	1	0.38	-0.45	0.27	1.84	40	0.70	41	95	47	0	1	2	0
HI	HILO	82	66	82	64	74	2	0.65	-1.25	0.33	25.28	160	0.75	18	87	60	0	0	2	0
	HONOLULU	79	66	81	65	73	-1	0.28	-0.27	0.20	17.50	387	6.86	531	90	60	0	0	2	0
	KAHULUI	83	62	85	57	73	1	0.03	-0.61	0.03	7.48	156	0.08	5	87	52	0	0	1	0
	LIHUE	79	64	82	63	72	0	0.00	-0.84	0.00	13.44	188	6.87	361	96	62	0	0	0	0
IA	BURLINGTON	35	16	45	5	25	0	0.14	-0.13	0.14	0.84	31	0.19	29	88	63	0	7	1	0
	CEDAR RAPIDS	29	10	40	-2	20	1	0.07	-0.13	0.07	1.23	65	0.07	15	95	71	0	7	1	0
	DES MOINES	36	16	53	5	26	3	3.22	2.99	2.20	4.14	216	3.38	686	80	54	0	7	2	2
	DUBUQUE	30	11	41	0	20	2	0.12	-0.14	0.10	1.70	70	0.19	34	86	65	0	7	2	0
	SIOUX CITY	39	15	58	6	27	7	0.06	-0.07	0.05	0.73	65	0.07	25	76	42	0	7	2	0
	WATERLOO	31	10	46	-8	20	2	0.45	0.27	0.44	1.73	106	0.45	109	82	59	0	7	2	0
ID	BOISE	37	24	40	20	31	0	0.00	-0.29	0.00	2.46	109	0.89	134	83	61	0	7	0	0
	LEWISTON	43	31	49	21	37	2	0.01	-0.24	0.01	2.82	182	1.05	192	77	55	0	5	1	0
	POCATELLO	34	16	39	10	25	1	0.02	-0.22	0.02	1.56	88	0.27	50	87	61	0	7	1	0
IL	CHICAGO/O_HARE	33	17	41	4	25	1	0.03	-0.37	0.02	2.59	82	0.30	33	81	55	0	7	2	0
	MOLINE	35	13	45	1	24	1	1.65	1.30	1.50	3.19	108	1.95	252	85	59	0	7	2	1
	PEORIA	35	18	43	7	26	2	0.04	-0.37	0.02	2.06	61	0.53	57	83	60	0	7	2	0
	ROCKFORD	33	13	42	1	23	2	0.09	-0.23	0.05	2.60	96	0.22	30	81	56	0	7	3	0
	SPRINGFIELD	39	20	52	12	29	3	0.00	-0.41	0.00	2.41	69	0.46	49	90	58	0	6	0	0
IN	EVANSVILLE	43	26	53	18	34	2	0.78	0.11	0.78	7.52	144	3.48	238	86	55	0	6	1	1
	FORT WAYNE	33	17	42	11	26	1	0.08	-0.44	0.07	4.72	120	0.49	42	87	60	0	7	2	0
	INDIANAPOLIS	38	21	48	10	29	2	0.39	-0.20	0.35	5.15	114	1.01	73	85	54	0	7	2	0
	SOUTH BEND	32	17	40	7	24	0	0.13	-0.41	0.09	4.38	115	0.53	43	85	60	0	7	2	0
KS	CONCORDIA	46	23	60	13	35	6	0.09	-0.02	0.09	0.47	42	0.30	123	79	44	0	5	1	0
	DODGE CITY	52	21	65	12	37	5	0.00	-0.12	0.00	0.17	14	0.17	62	72	28	0	6	0	0
	GOODLAND	51	21	61	10	36	6	0.00	-0.08	0.00	0.31	45	0.26	132	78	28	0	6	0	0
	TOPEKA	49	21	64	14	35	5	0.23	0.07	0.12	0.63	36	0.52	141	82	40	0	7	2	0

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending January 15, 2022

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	22	64	13	37	5	0.06	-0.10	0.06	0.11	7	0.10	28	77	34	0	7	1	0
KY	LEXINGTON	41	24	50	15	32	0	1.54	0.84	1.54	9.03	165	4.39	285	82	52	0	7	1	1
	LOUISVILLE	44	28	54	19	36	1	1.23	0.51	1.23	7.65	142	4.08	259	80	46	0	5	1	1
	PADUCAH	48	28	55	19	38	4	1.33	0.53	1.14	9.24	145	5.28	299	83	46	0	6	2	1
LA	BATON ROUGE	66	39	81	34	53	-1	0.94	-0.18	0.93	4.48	66	0.99	42	90	39	0	0	2	1
	LAKE CHARLES	67	42	79	33	54	3	0.13	-1.10	0.13	2.59	35	0.38	14	89	38	0	0	1	0
	NEW ORLEANS	66	46	82	38	56	3	0.60	-0.56	0.49	3.76	48	0.72	29	85	40	0	0	3	0
	SHREVEPORT	66	37	74	29	51	5	0.14	-0.73	0.14	2.54	37	0.25	13	76	27	0	2	1	0
MA	BOSTON	35	15	46	4	25	-4	0.01	-0.77	0.01	3.21	59	0.90	54	72	37	0	7	1	0
	WORCESTER	31	10	43	-1	20	-3	0.09	-0.68	0.08	4.71	86	1.11	67	78	43	0	7	2	0
MD	BALTIMORE	40	23	49	17	32	-1	0.33	-0.37	0.33	3.09	64	2.30	157	69	38	0	7	1	0
ME	CARIBOU	17	-5	32	-16	6	-4	0.22	-0.39	0.12	4.08	89	0.75	56	80	58	0	7	5	0
	PORTLAND	29	9	39	0	19	-3	0.02	-0.75	0.02	4.43	78	0.72	43	73	43	0	7	1	0
MI	ALPENA	23	6	30	-8	14	-5	0.11	-0.28	0.05	2.89	110	0.41	47	85	63	0	7	4	0
	GRAND RAPIDS	30	15	38	4	22	-2	0.03	-0.47	0.02	2.78	77	0.55	48	88	68	0	7	2	0
	HOUGHTON LAKE	24	7	32	-8	16	-3	0.00	-0.37	0.00	2.71	110	0.18	22	85	63	0	7	0	0
	LANSING	31	14	39	4	22	-1	0.01	-0.39	0.01	2.41	88	0.33	37	81	60	0	7	1	0
	MUSKEGON	33	17	40	5	25	-1	0.02	-0.45	0.01	2.97	82	0.74	69	79	58	0	7	2	0
	TRAVERSE CITY	27	12	34	1	19	-2	0.00	-0.68	0.00	1.63	41	0.07	4	82	57	0	7	0	0
MN	DULUTH	17	-2	28	-18	7	-3	0.11	-0.14	0.07	3.04	174	0.33	63	82	61	0	7	2	0
	INT_L FALLS	11	-13	23	-26	-1	-5	0.10	-0.05	0.06	2.03	172	0.22	65	81	57	0	7	2	0
	MINNEAPOLIS	23	8	40	-9	15	0	0.24	0.03	0.24	2.27	138	0.35	74	80	56	0	7	1	0
	ROCHESTER	26	8	42	-8	17	0	0.44	0.24	0.44	1.85	110	0.46	108	84	61	0	7	1	0
	ST. CLOUD	20	1	36	-16	11	-1	0.20	0.04	0.20	2.43	203	0.41	116	84	56	0	7	1	0
MO	COLUMBIA	49	26	58	17	38	8	0.63	0.22	0.55	3.14	93	1.11	120	82	43	0	4	2	1
	KANSAS CITY	48	24	60	16	36	7	0.49	0.28	0.29	1.28	63	0.78	163	80	44	0	6	2	0
	SAINT LOUIS	47	25	59	17	36	5	0.56	0.04	0.28	4.06	100	1.33	109	82	46	0	6	4	0
	SPRINGFIELD	51	26	58	16	39	6	0.57	0.02	0.47	2.57	60	1.28	102	85	46	0	5	2	0
MS	JACKSON	61	34	73	28	48	2	1.12	0.05	0.74	4.39	59	1.39	61	89	34	0	4	2	1
	MERIDIAN	62	34	71	28	47	3	2.01	0.91	1.17	6.19	84	2.94	131	88	34	0	3	2	2
	TUPELO	57	34	67	27	46	4	1.63	0.65	1.28	7.90	93	3.25	148	82	38	0	3	2	1
MT	BILLINGS	47	28	53	2	37	10	0.00	-0.11	0.00	1.23	163	0.28	116	64	35	0	5	0	0
	BUTTE	37	6	50	-6	22	2	0.00	-0.11	0.00	0.87	112	0.51	206	84	50	0	7	0	0
	CUT BANK	45	30	56	22	37	15	0.00	-0.05	0.00	0.21	55	0.00	3	76	46	0	5	0	0
	GLASGOW	30	13	44	-15	22	8	0.02	-0.08	0.02	1.04	157	0.11	49	81	68	0	7	1	0
	GREAT FALLS	46	32	53	19	39	14	0.01	-0.11	0.01	1.33	162	0.43	161	67	42	0	3	1	0
	HAVRE	42	19	49	-14	30	13	0.00	-0.09	0.00	0.82	126	0.06	30	85	56	0	6	0	0
	MISSOULA	30	12	40	-3	21	-4	0.03	-0.17	0.03	2.17	143	1.07	233	94	77	0	7	1	0
NC	ASHEVILLE	47	27	55	20	37	0	0.40	-0.42	0.39	2.92	55	2.00	117	82	38	0	6	2	0
	CHARLOTTE	52	30	59	23	41	2	0.23	-0.57	0.23	4.67	95	2.57	152	74	33	0	5	1	0
	GREENSBORO	49	29	60	23	39	0	0.43	-0.30	0.43	4.91	110	3.45	230	70	33	0	5	1	0
	HATTERAS	54	36	67	30	45	0	0.43	-0.80	0.43	4.97	72	1.79	70	81	44	0	2	1	0
	RALEIGH	52	30	66	25	41	0	0.62	-0.19	0.62	5.72	121	4.14	246	76	35	0	5	1	1
	WILMINGTON	60	31	73	27	46	0	0.20	-0.65	0.16	3.92	72	1.51	84	88	35	0	4	2	0
ND	BISMARCK	28	8	42	-14	18	5	0.05	-0.06	0.05	1.18	157	0.15	63	88	66	0	7	1	0
	DICKINSON	36	15	44	-10	25	9	0.00	-0.08	0.00	0.27	57	0.03	17	84	62	0	7	0	0
	FARGO	18	-4	34	-19	7	-2	0.19	0.01	0.19	1.98	159	0.37	99	83	63	0	7	1	0
	GRAND FORKS	16	-5	34	-18	5	-1	0.02	-0.11	0.02	1.57	178	0.21	74	84	69	0	7	1	0
	JAMESTOWN	24	2	39	-9	13	3	0.06	-0.06	0.06	0.63	91	0.07	28	82	64	0	7	1	0
NE	GRAND ISLAND	49	19	61	6	34	9	0.01	-0.10	0.01	0.29	32	0.07	28	75	32	0	6	1	0
	LINCOLN	44	17	59	7	30	6	0.09	-0.04	0.09	0.41	32	0.17	58	76	40	0	7	1	0
	NORFOLK	43	16	58	2	29	7	0.00	-0.12	0.00	0.52	50	0.02	7	76	39	0	7	0	0
	NORTH PLATTE	48	15	60	3	32	7	0.00	-0.08	0.00	0.67	105	0.27	140	86	40	0	7	0	0
	OMAHA	40	17	58	5	29	6	0.27	0.12	0.23	0.69	50	0.32	96	81	46	0	7	2	0
	SCOTTSBLUFF	48	20	54	12	34	7	0.00	-0.10	0.00	0.69	93	0.44	203	76	38	0	7	0	0
	VALENTINE	50	21	58	2	36	12	0.00	-0.07	0.00	0.74	129	0.03	20	77	36	0	7	0	0
NH	CONCORD	29	3	38	-7	16	-5	0.04	-0.56	0.03	4.52	101	0.70	53	80	44	0	7	2	0
NJ	ATLANTIC_CITY	40	17	49	11	28	-5	0.30	-0.45	0.30	2.83	54	2.19	137	80	38	0	7	1	0
	NEWARK	36	18	47	9	27	-5	0.08	-0.74	0.08	2.71	48	1.34	76	73	41	0	7	1	0
NM	ALBUQUERQUE	53	28	58	23	40	4	0.00	-0.10	0.00	0.22	30	0.10	47	68	26	0	6	0	0
NV	ELY	43	14	49	6	28	3	0.00	-0.16	0.00	2.01	212	0.01	3	87	40	0	7	0	0
	LAS VEGAS	62	41	66	38	51	3	0.00	-0.12	0.00	0.27	34	0.00	0	44	18	0	0	0	0
	RENO	52	26	64	25	39	4	0.00	-0.27	0.00	2.90	180	0.00	0	82	37	0	7	0	0
	WINNEMUCCA	48	26	56	24	37	7	0.00	-0.22	0.00	2.33	161	0.00	0	89	46	0	7	0	0
NY	ALBANY	28	10	39	-3	19	-3	0.22	-0.35	0.22	3.09	74	0.48	38	80	49	0	7	1	0
	BINGHAMTON	26	8	40	-8	17	-5	0.19	-0.36	0.09	3.28	82	0.47	39	87	56	0	7	4	0
	BUFFALO	30	14	41	3	22	-3	0.21	-0.50	0.15	3.75	68	1.44	88	85	55	0	6	5	0
	ROCHESTER	29	13	42	-1	21	-4	0.19	-0.36	0.07	2.62	68	0.68	56	88	57	0	7	4	0
	SYRACUSE	29	11	42	-6	20	-3	0.29	-0.29	0.17	2.98	66	0.85	66	89	54	0	6	5	0
OH	AKRON-CANTON	35	20	43	10	27	1	0.50	-0.08	0.43	4.73	115	1.13	88	78	51	0	7	6	0
	CINCINNATI	39	24	49	13	32	1	0.61	-0.06	0.60	5.39	112	1.97	134	78	47	0	6	2	1
	CLEVELAND	35	20	46	12	28	0	0.49	-0.14	0.44	3.83	85	1.04	74	80	53	0	7	3	0
	COLUMBUS	36	21	46	13	29	-1	0.60	-0.02	0.60	6.53	151	2.05	149	83	50	0	7	1	1
	DAYTON	37	21	46	10	29	1	0.60	-0.04	0.60	6.26	139	1.81	128	74	48	0	7	1	1
	MANSFIELD	34	19	45	8	26	1	0.70	0.04	0.69	7.74	163	1.30	89	89	58	0	7	2	1

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending January 15, 2022

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	34	17	41	6	25	0	0.02	-0.45	0.02	3.76	100	0.32	29	79	51	0	7	1	0
	YOUNGSTOWN	33	18	41	10	25	0	0.63	0.04	0.51	4.16	97	1.13	86	86	54	0	7	4	1
OK	OKLAHOMA CITY	55	27	67	20	41	2	0.00	-0.26	0.00	0.57	23	0.39	66	78	28	0	6	0	0
	TULSA	55	28	70	19	42	4	0.06	-0.27	0.03	2.19	67	0.54	69	79	34	0	5	2	0
OR	ASTORIA	55	43	60	35	49	6	3.34	0.95	1.07	23.77	157	11.29	218	94	69	0	0	4	3
	BURNS	36	19	41	16	28	3	0.00	-0.29	0.00	2.36	106	0.76	118	92	69	0	7	0	0
	EUGENE	49	37	58	30	43	3	0.13	-1.52	0.11	14.54	127	3.55	99	99	78	0	1	2	0
	MEDFORD	55	32	57	27	44	4	0.00	-0.60	0.00	4.56	95	0.61	45	96	49	0	3	0	0
	PENDLETON	46	30	56	24	38	3	0.03	-0.31	0.03	3.32	147	1.35	178	94	57	0	6	1	0
	PORTLAND	49	39	55	30	44	3	0.29	-0.87	0.14	11.19	139	4.25	169	89	65	0	1	3	0
	SALEM	51	36	59	30	44	3	0.17	-1.22	0.10	13.66	137	3.85	126	94	68	0	3	3	0
PA	ALLENTOWN	33	15	42	5	24	-4	0.12	-0.56	0.12	2.24	44	0.98	68	78	45	0	7	1	0
	ERIE	33	21	43	10	27	0	0.50	-0.18	0.45	4.90	93	1.26	81	80	52	0	6	4	0
	MIDDLETOWN	33	19	42	12	26	-4	0.25	-0.42	0.25	2.30	49	1.44	102	72	45	0	7	1	0
	PHILADELPHIA	40	22	50	14	31	-1	0.19	-0.50	0.19	2.70	54	1.07	73	66	35	0	7	1	0
	PITTSBURGH	34	20	43	12	27	-1	0.40	-0.22	0.36	4.49	108	1.52	114	82	48	0	6	2	0
	WILKES-BARRE	31	14	46	1	22	-3	0.12	-0.41	0.12	2.05	54	0.72	65	75	46	0	7	1	0
	WILLIAMSPORT	32	15	43	4	24	-3	0.19	-0.43	0.17	2.03	48	0.68	53	76	43	0	7	3	0
RI	PROVIDENCE	37	15	48	7	26	-3	0.09	-0.82	0.09	2.85	46	1.14	61	71	36	0	7	1	0
SC	CHARLESTON	61	35	74	29	48	0	0.12	-0.73	0.08	3.43	70	0.47	26	95	39	0	2	2	0
	COLUMBIA	57	31	71	23	44	0	0.48	-0.31	0.43	6.13	125	2.22	131	89	31	0	4	3	0
	FLORENCE	58	31	73	23	44	0	0.28	-0.46	0.24	4.19	91	2.22	140	81	30	0	4	2	0
	GREENVILLE	50	32	56	25	41	-1	0.42	-0.45	0.42	5.52	92	2.67	144	75	35	0	3	1	0
SD	ABERDEEN	27	4	44	-13	15	3	0.16	0.04	0.16	1.01	127	0.22	85	82	62	0	7	1	0
	HURON	32	6	51	-8	19	3	0.14	0.03	0.14	0.36	45	0.14	55	81	56	0	7	1	0
	RAPID CITY	53	21	61	3	37	12	0.00	-0.08	0.00	0.60	93	0.00	0	77	33	0	6	0	0
	SIOUX FALLS	34	12	52	-4	23	7	0.13	0.00	0.13	1.44	146	0.13	45	80	48	0	7	1	0
TN	BRISTOL	46	23	50	19	34	-1	0.89	0.13	0.89	5.16	104	3.33	210	85	41	0	7	1	1
	CHATTANOOGA	51	33	55	25	42	2	0.86	-0.28	0.79	7.72	106	3.07	130	83	37	0	4	2	1
	KNOXVILLE	48	28	53	22	38	0	1.14	0.14	1.14	7.93	120	4.41	212	86	43	0	6	1	1
	MEMPHIS	56	34	66	25	45	5	1.56	0.73	0.91	7.57	98	3.06	157	78	39	0	3	2	2
	NASHVILLE	50	30	57	24	40	3	1.56	0.75	1.39	7.37	123	4.10	236	73	39	0	5	2	1
TX	ABILENE	61	32	80	27	46	2	0.12	-0.09	0.12	0.22	12	0.18	39	68	23	0	4	1	0
	AMARILLO	56	26	68	19	41	4	0.00	-0.13	0.00	0.04	3	0.04	13	60	19	0	6	0	0
	AUSTIN	65	42	78	40	54	3	0.00	-0.47	0.00	1.82	52	0.13	12	72	27	0	0	0	0
	BEAUMONT	68	42	78	34	55	3	0.41	-0.80	0.41	1.94	24	0.53	19	91	38	0	0	1	0
	BROWNSVILLE	73	55	86	49	64	3	0.46	0.19	0.39	1.76	103	0.46	83	90	51	0	0	3	0
	CORPUS CHRISTI	72	46	83	39	59	2	0.02	-0.32	0.01	0.75	28	0.10	13	92	39	0	0	2	0
	DEL RIO	72	43	83	37	58	6	0.01	-0.14	0.01	0.26	26	0.01	3	54	18	0	0	1	0
	EL PASO	58	35	71	26	46	2	0.00	-0.09	0.00	0.59	58	0.02	9	61	22	0	3	0	0
	FORT WORTH	64	35	79	29	49	4	0.00	-0.42	0.00	0.52	14	0.07	7	75	23	0	3	0	0
	GALVESTON	69	51	80	41	60	5	0.00	0.00	0.00	1.27	0	0.07	0	80	43	0	0	0	0
	HOUSTON	66	43	75	36	55	2	3.88	3.14	3.88	8.38	158	6.30	401	86	36	0	0	1	1
	LUBBOCK	60	26	73	20	43	3	0.00	-0.12	0.00	0.40	38	0.17	62	60	18	0	6	0	0
	MIDLAND	60	29	77	23	45	1	0.00	-0.11	0.00	0.07	8	0.04	16	54	18	0	4	0	0
	SAN ANGELO	62	31	81	28	46	0	0.05	-0.15	0.05	0.09	7	0.06	14	70	20	0	5	1	0
	SAN ANTONIO	66	40	77	36	53	1	0.01	-0.35	0.01	1.06	39	0.17	21	70	25	0	0	1	0
	VICTORIA	70	40	79	31	55	1	0.00	-0.57	0.00	0.80	22	0.24	19	90	33	0	1	0	0
	WACO	64	33	79	25	48	2	0.01	-0.41	0.01	0.11	2	0.06	6	82	26	0	4	1	0
	WICHITA FALLS	61	29	75	21	45	3	0.00	-0.23	0.00	0.62	28	0.33	63	78	22	0	5	0	0
UT	SALT LAKE CITY	42	26	45	24	34	5	0.00	-0.28	0.00	1.99	97	0.39	61	87	52	0	7	0	0
VA	LYNCHBURG	47	24	54	18	35	0	0.44	-0.28	0.44	3.52	74	2.63	176	78	33	0	7	1	0
	NORFOLK	49	27	65	21	38	-2	0.31	-0.48	0.28	4.24	86	2.46	150	87	43	0	6	2	0
	RICHMOND	49	26	63	21	37	0	0.25	-0.44	0.25	3.67	78	2.60	178	77	36	0	6	1	0
	ROANOKE	47	27	56	19	37	1	0.15	-0.52	0.15	2.87	66	2.19	156	72	33	0	5	1	0
	WASH/DULLES	42	23	50	16	33	0	0.32	-0.28	0.32	2.43	57	1.99	159	72	39	0	7	1	0
VT	BURLINGTON	23	4	38	-9	14	-5	0.07	-0.39	0.04	2.90	85	0.31	31	80	50	0	7	3	0
WA	OLYMPIA	52	37	61	27	45	5	2.50	0.64	1.02	18.90	166	10.00	256	93	71	0	2	4	2
	QUILLAYUTE	52	41	56	33	47	5	7.18	3.70	4.15	25.80	127	12.50	172	100	77	0	0	5	3
	SEATTLE-TACOMA	50	40	55	33	45	3	2.33	1.00	1.56	10.71	130	6.45	228	98	70	0	0	4	1
	SPOKANE	37	26	41	20	31	2	0.16	-0.28	0.11	2.59	79	1.26	133	93	75	0	7	2	0
	YAKIMA	36	19	42	7	28	-3	0.03	-0.24	0.03	1.72	79	1.38	222	96	74	0	7	1	0
WI	EAU CLAIRE	23	4	36	-15	13	-1	0.01	-0.20	0.01	0.33	22	0.01	2	81	53	0	7	1	0
	GREEN BAY	23	4	34	-10	14	-3	0.01	-0.26	0.01	1.85	88	0.19	32	80	55	0	7	1	0
	LA CROSSE	29	10	42	-5	19	2	0.18	-0.07	0.18	1.91	101	0.20	38	79	53	0	7	1	0
	MADISON	29	9	42	-5	19	1	0.01	-0.26	0.01	1.77	75	0.09	14	86	57	0	7	1	0
	MILWAUKEE	32	17	42	2	24	2	0.00	-0.41	0.00	2.52	86	0.18	20	72	51	0	7	0	0
WV	BECKLEY	38	23	47	12	30	0	0.67	0.04	0.67	6.27	144	3.84	279	82	47	0	7	1	1
	CHARLESTON	42	24	51	16	33	-1	1.20	0.53	1.20	7.19	153	4.14	289	88	45	0	7	1	1
	ELKINS	39	20	50	13	29	0	1.01	0.28	1.01	6.47	135	4.15	269	82	44	0	7	1	1
	HUNTINGTON	43	27	55	16	35	2	0.85	0.19	0.85	6.61	140	3.20	225	75	45	0	6	1	1
WY	CASPER	44	24	52	13	34	9	0.00	-0.12	0.00	0.87	113	0.25	98	65	33	0	7	0	0
	CHEYENNE	47	24	54	13	36	7	0.00	-0.08	0.00	0.83	119	0.43	229	66	26	0	6	0	0
	LANDER	40	17	54	9	28	6	0.04	-0.06	0.04	0.75	92	0.37	166	82	44	0	7	1	0
	SHERIDAN	49	19	62	6	33	10	0.02	-0.10	0.02	1.11	136	0.11	41	79	40	0	7	1	0

Based on 1981-2010 normals ***** Not Available**

January 13 ENSO Diagnostic Discussion

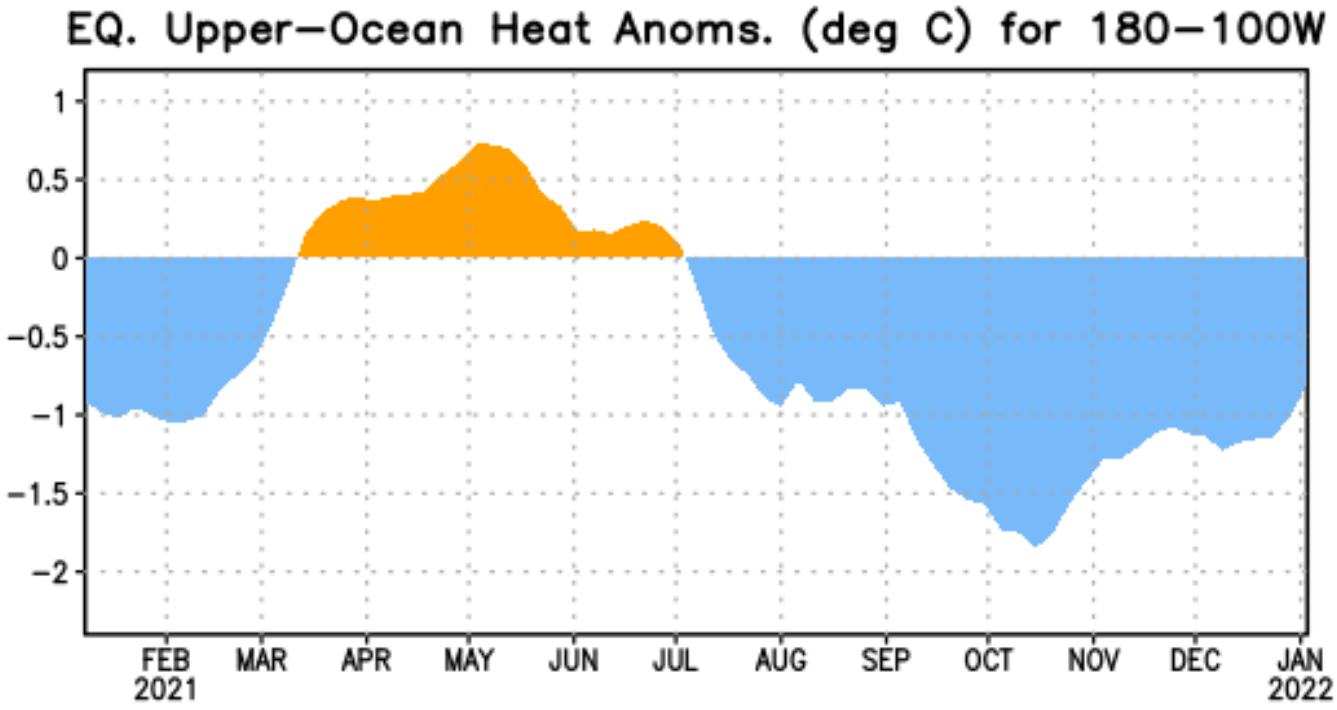


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: La Niña Advisory

Synopsis: La Niña is likely to continue into the Northern Hemisphere spring (67% chance during March-May 2022) and then transition to ENSO-neutral (51% chance during April-June 2022).

In December 2021, below-average sea surface temperatures (SSTs) across the central and eastern equatorial Pacific Ocean were consistent with a mature La Niña. With the exception of the westernmost Niño-4 region, which warmed to -0.4ºC at the end of the December, the other Niño indices were between -0.9ºC and -1.4ºC during the last week. Below-average subsurface temperatures weakened east of the Date Line (Fig. 1), reflecting the slow eastward movement of positive temperature anomalies, at depth, from the western into the central Pacific Ocean. However, below-average subsurface temperatures still dominated the eastern Pacific from ~200m to the surface. Low-level easterly wind anomalies and upper-level westerly wind anomalies prevailed over the east-central and eastern Pacific Ocean. Enhanced convection persisted near Indonesia and the western Pacific, while suppressed convection remained over the Date Line. Overall, the coupled ocean-atmosphere system reflected a mature La Niña.

The IRI/CPC plume average for the Niño-3.4 SST index continues to forecast a transition to ENSO-neutral during the Northern Hemisphere spring. The forecaster consensus this month favors the continuation of La Niña through March-May 2022, with a transition to ENSO-neutral occurring in April-June 2022 (51% chance). ENSO-neutral is then expected to persist through the Northern Hemisphere summer, though chances do not exceed 57% (for May-July 2022), which is consistent with the generally lower confidence forecasts made through the spring. In summary, La Niña is likely to continue into the Northern Hemisphere spring (67% chance during March-May 2022) and then transition to ENSO-neutral (51% chance during April-June; click CPC/IRI consensus forecast for the chances in each 3-month period).

La Niña is anticipated to affect temperature and precipitation across the United States during the upcoming months (the 3-month seasonal temperature and precipitation outlooks will be updated on Thursday January 20).

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 web site (El Niño/La Niña Current Conditions and Expert Discussions). Additional perspectives and analysis are also available in an ENSO blog. A probabilistic strength forecast is available here. The next ENSO Diagnostics Discussion is scheduled for **10 February 2022**. 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 9-15, 2022

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

HIGHLIGHTS

EUROPE: Drier but milder weather settled over much of Europe, favoring dormant winter crops.

MIDDLE EAST: Widespread moderate to heavy rain boosted moisture supplies for dormant (north) to vegetative (south) winter grains.

NORTHWESTERN AFRICA: Drought intensified in Morocco while showers favored wheat and barley across northeastern growing areas.

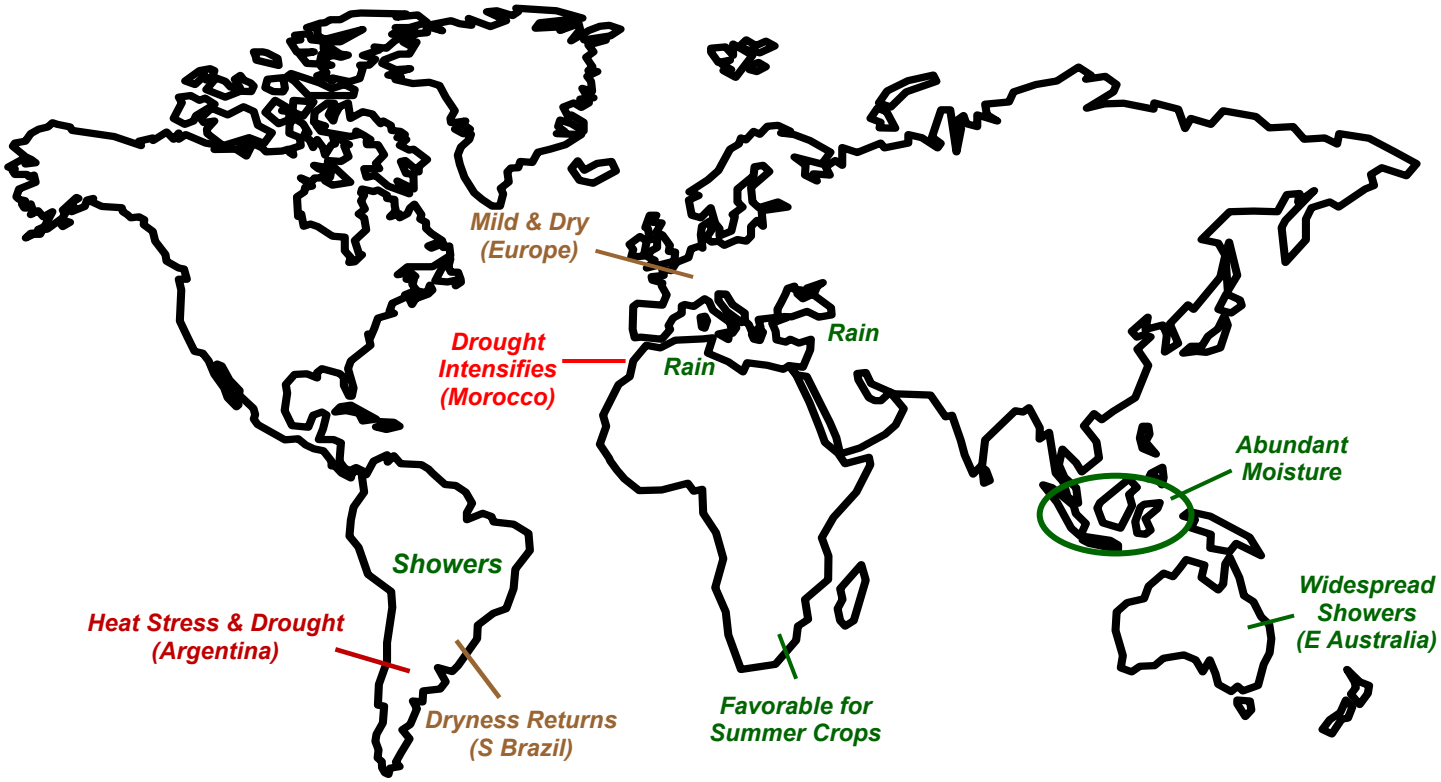
SOUTHEAST ASIA: Showery weather continued across southern sections of the region, maintaining record wetness in parts of Indonesia.

AUSTRALIA: Widespread showers in the east kept summer crops well watered.

SOUTH AFRICA: Conditions remained overall favorable for corn and other summer crops.

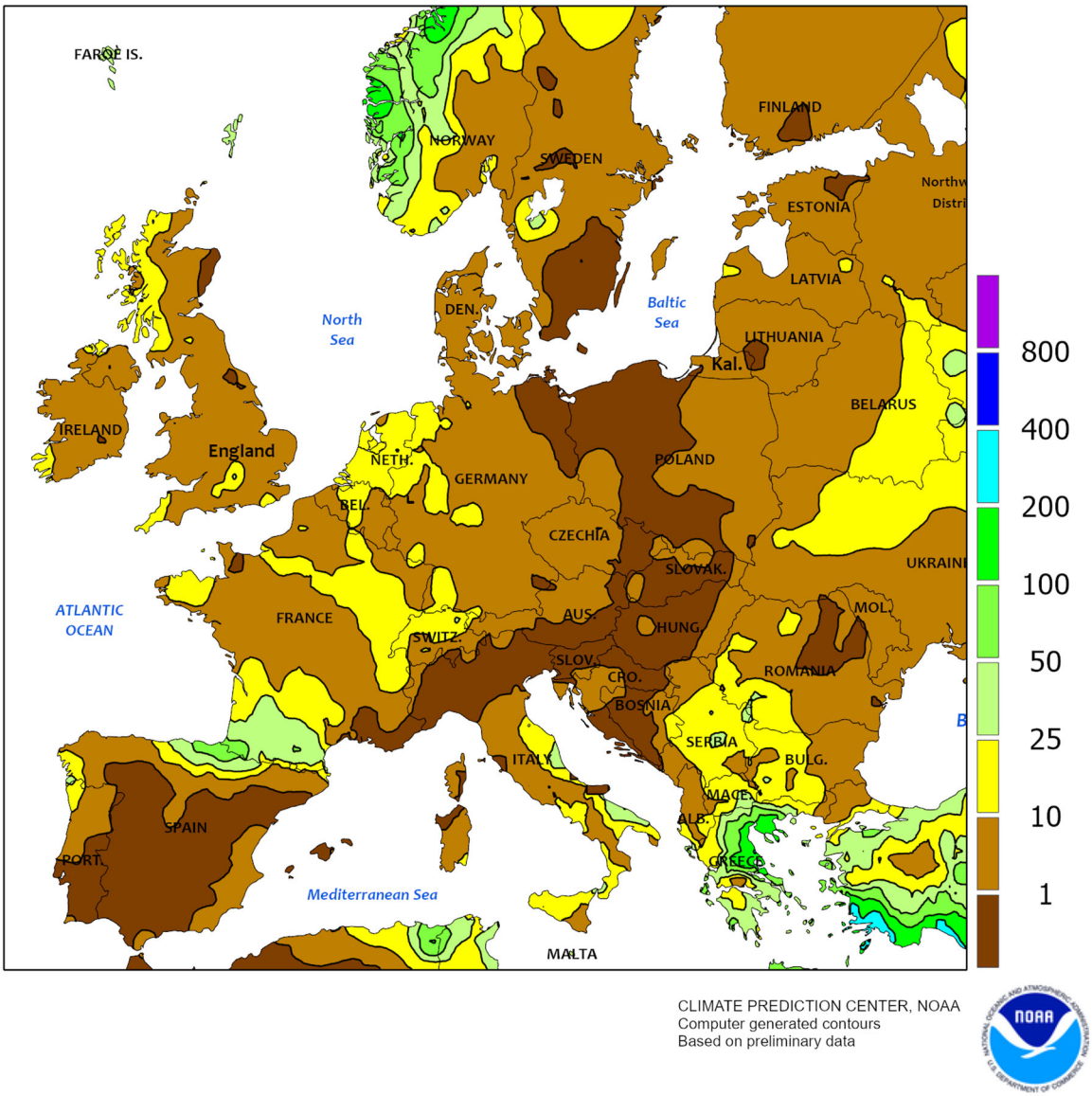
ARGENTINA: A heat wave compounded stress on summer crops.

BRAZIL: Warmth and dryness returned to much of the south, as more seasonable conditions prevailed farther north.



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

EUROPE
Total Precipitation(mm)
January 9 - 15, 2022



EUROPE

Drier weather settled over much of the continent, although locally heavy rain fell in some southern crop areas. Mostly sunny skies (5 mm or less) returned to central and northern Europe, though showers (2-15 mm) were noted early in the week over the continent's northwestern quadrant. On the heels of a favorably wet autumn, moisture reserves remained good to excellent for dormant winter grains and oilseeds from England and France eastward. While most winter crops remained devoid of a protective snow cover, nighttime lows ranging from -10 to -2°C remained well above the threshold for winterkill. Farther south, dry weather over Spain and northern Italy contrasted with moderate to heavy showers (10-70 mm) over southern Italy, Greece, and the southern Balkans. Rain across these southeasterly growing areas boosted soil moisture for semi-dormant to vegetative winter grains and improved irrigation supplies in Greece for warm-season crops.

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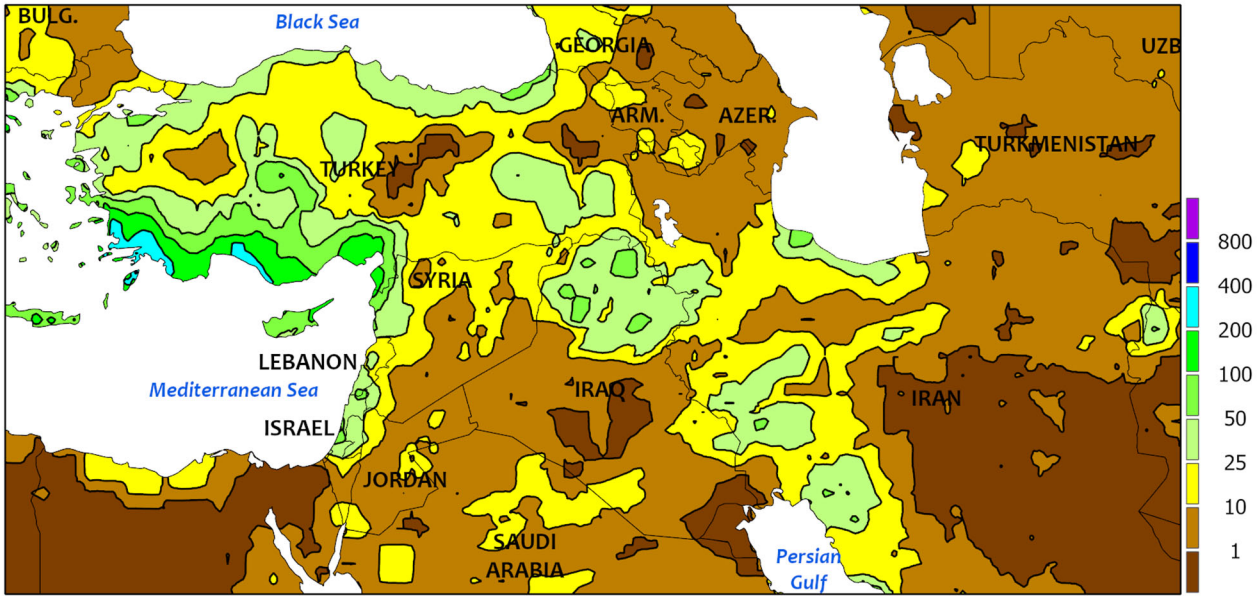
MIDDLE EAST
Total Precipitation(mm)
January 9 - 15, 2022



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

MIDDLE EAST

A slow-moving Mediterranean storm triggered widespread moderate to heavy rainfall across the region. Torrential downpours were noted along the southern coast of Turkey, where numerous stations reported 100 to nearly 400 mm of rainfall during the 7-day monitoring period. Central Turkey's Anatolian Plateau — a primary wheat and barley area — received much less, though the 4 to 40 mm of rain was nevertheless beneficial for dormant winter crops. Meanwhile, a good soaking (10-80 mm) was noted from the southern and eastern Mediterranean Coast into Iraq and western Iran, boosting moisture reserves for dormant (north) to vegetative (central and south) winter grains. The moisture mostly bypassed Khorasan in northeastern Iran (1-10 mm), although this region reported beneficial drought-easing rain the previous week.

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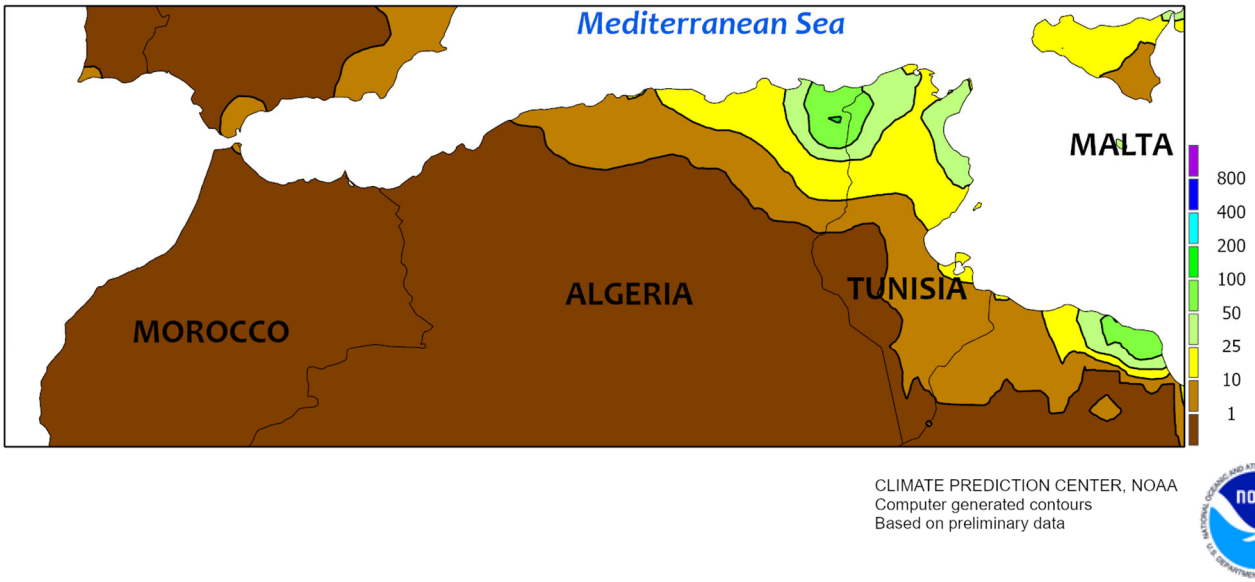
NORTHWESTERN AFRICA
Total Precipitation(mm)
January 9 - 15, 2022



NORTHWESTERN AFRICA

Intensifying drought in Morocco contrasted with rain in eastern crop areas. Morocco slipped further into severe drought, with the country's central and southern growing areas reporting the driest first half to the winter crop growing campaign (September – May) over the past 30 years. Regional-average rainfall deficits since September have topped 175 mm across Morocco's primary croplands between the central Atlantic Coast and Atlas Mountains. Dry weather extended into Algeria's Western and Central Tell Regions, though the latter is coming off a very wet period from early November into the first week of December. Farther east, moderate to heavy showers (10-50 mm, locally more) across northeastern Algeria and central and northern Tunisia maintained or improved moisture supplies for vegetative winter grains; despite the wet weather, the Steppe Region of central Tunisia continued to wrestle with lingering drought (season-to-date precipitation deficits near 100 mm, or 35 percent of normal), with more rain needed for vegetative barley and wheat.

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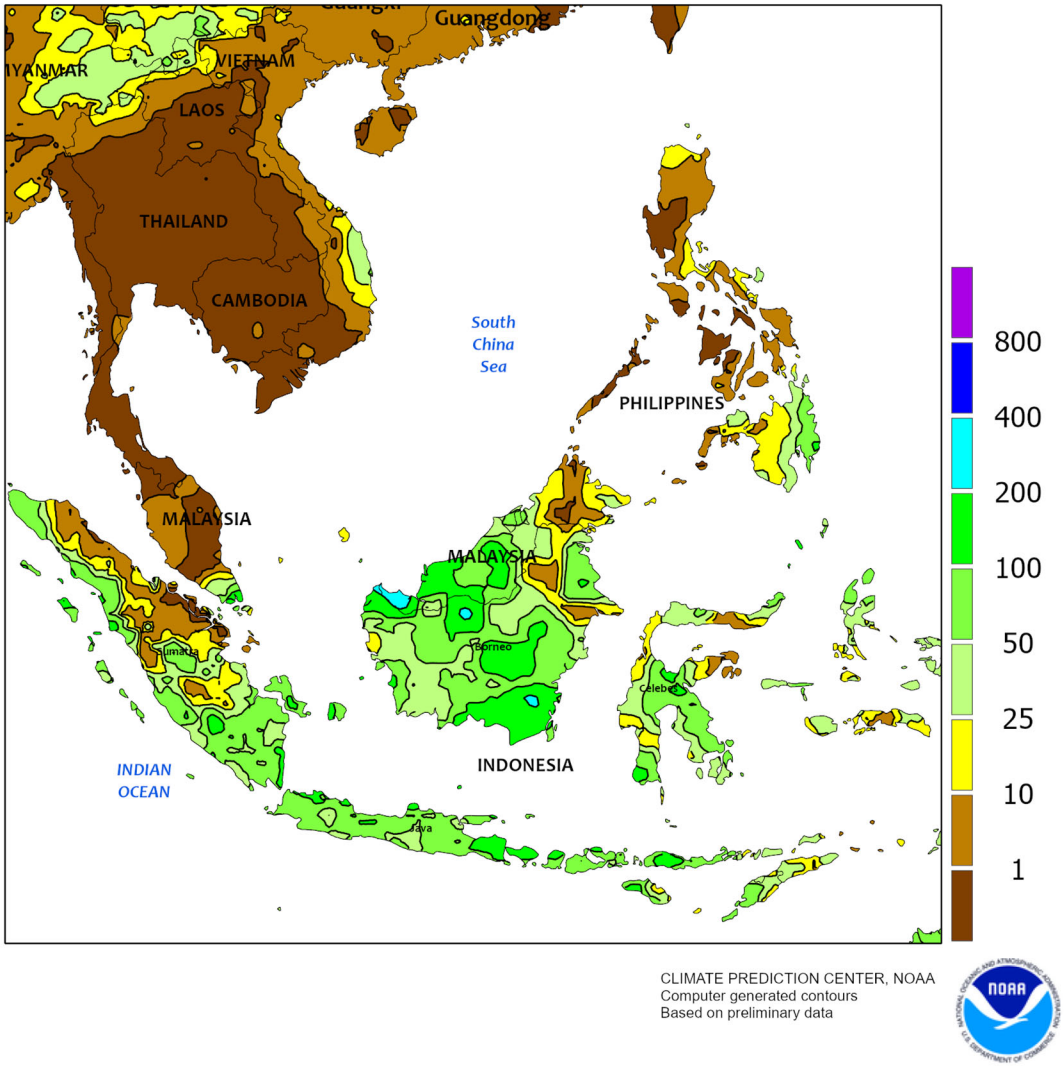
SOUTHEAST ASIA
Total Precipitation(mm)
January 9 - 15, 2022



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

SOUTHEAST ASIA

Showers were mainly limited to the seasonably wetter southern reaches of the region. Southern and eastern Indonesia recorded 25 to 100 mm of rain, maintaining ample moisture for oil palm (Kalimantan) and rice (Java). In particular, the rainfall in Java continued the record (30 years) wetness being experienced there. In contrast, much of western Indonesia (Sumatra) and most of Malaysia were unseasonably dry, which had little impact on long-term soil moisture for oil palm and was beneficial for harvesting. Meanwhile, all but southern-most portions of the Philippines were dry, exacerbating seasonal dryness in key northern growing areas.

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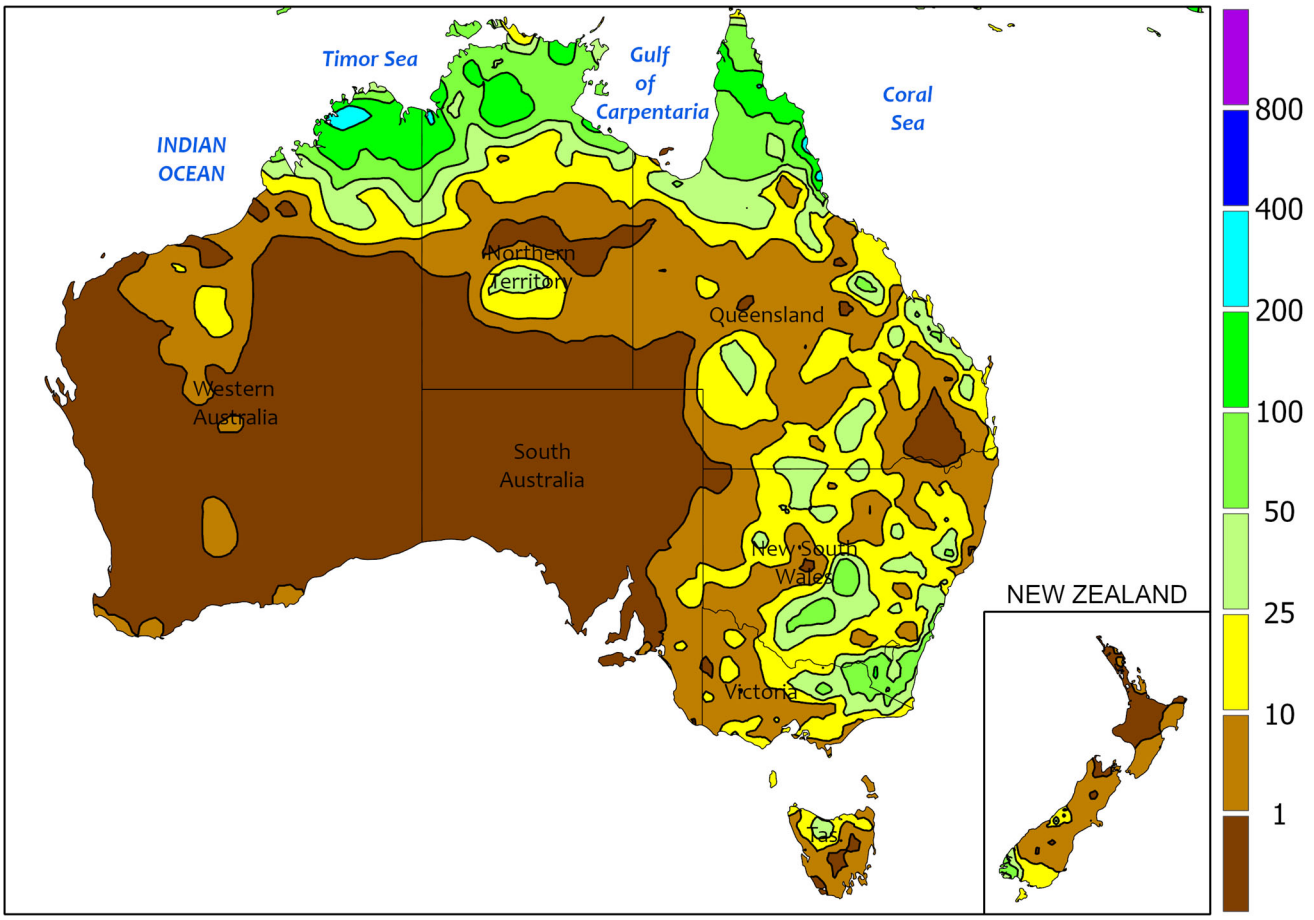
AUSTRALIA
Total Precipitation(mm)
January 9 - 15, 2022



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

AUSTRALIA

Aside from a pocket of dry weather in southern Queensland, widespread showers (5-25 mm, locally more) kept summer crops well watered throughout eastern Australia. The local dryness in southern Queensland favored fieldwork, which reportedly included additional sorghum planting, while sunny skies and abundant moisture supplies promoted cotton and other summer crop development. The rain in New South Wales, however, continued to hamper final winter crop harvests. Temperatures averaged near normal (within 1ºC of normal) in eastern Australia, with maximum temperatures generally in the 30s (degrees C) in major summer crop producing areas. Elsewhere in the wheat belt, mostly dry weather in southern and western Australia favored winter crop harvesting as it rapidly neared completion.

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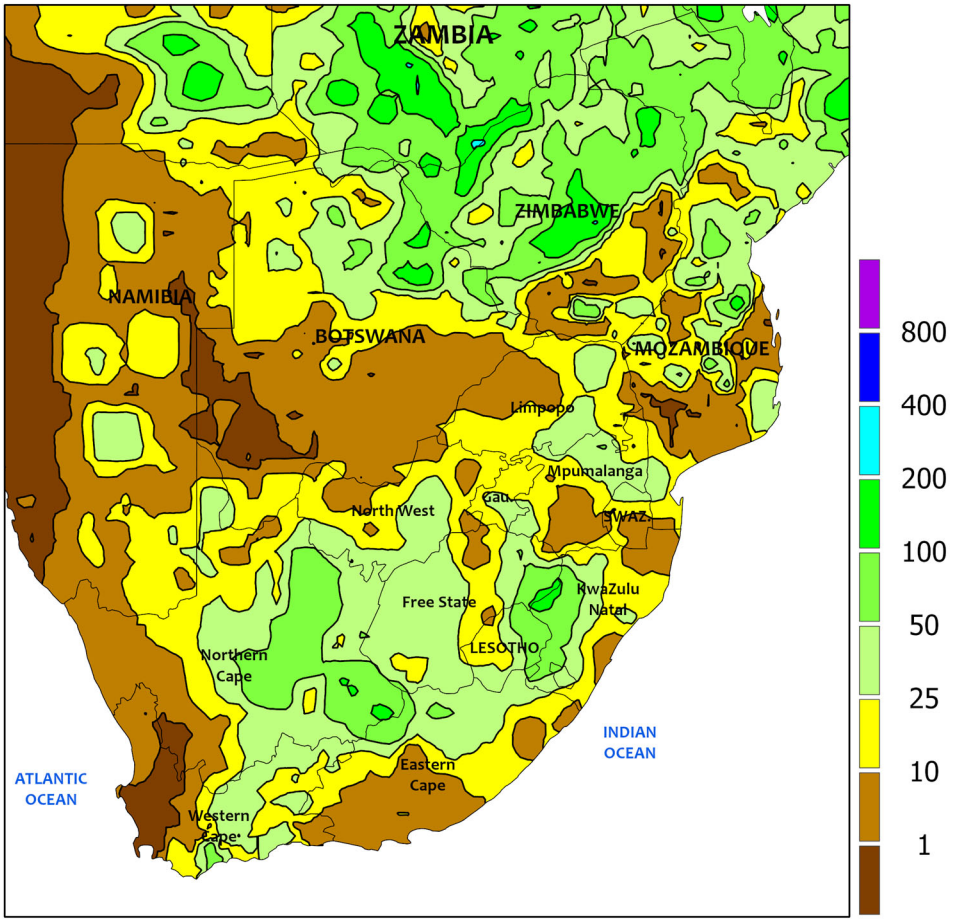
SOUTH AFRICA
Total Precipitation(mm)
January 9 - 15, 2022



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

SOUTH AFRICA

Widespread, locally heavy rain maintained overall favorable conditions for corn and other rain-fed, commercially-grown summer crops. Rainfall continued to be highly variable, although much of the corn belt (notably western farming areas of North West and Free State, and higher-yielding production areas in and around southern Mpumalanga) received 25 to locally more than 50 mm. Unseasonably mild weather accompanied the moisture, with much of the aforementioned area reporting highest daytime temperatures only reaching the upper 20s (degrees C). Elsewhere, lighter rain (5-25 mm) fell in most sugarcane areas in KwaZulu-Natal and eastern Mpumalanga, where highs reached the lower 30s. Farther west, heavy rain (25-100 mm) increased irrigation reserves for corn, cotton, and other crops grown in the Orange Valley of Northern Cape. In contrast, dry, occasionally hot weather spurred rapid development of tree and vine crops in Western Cape.

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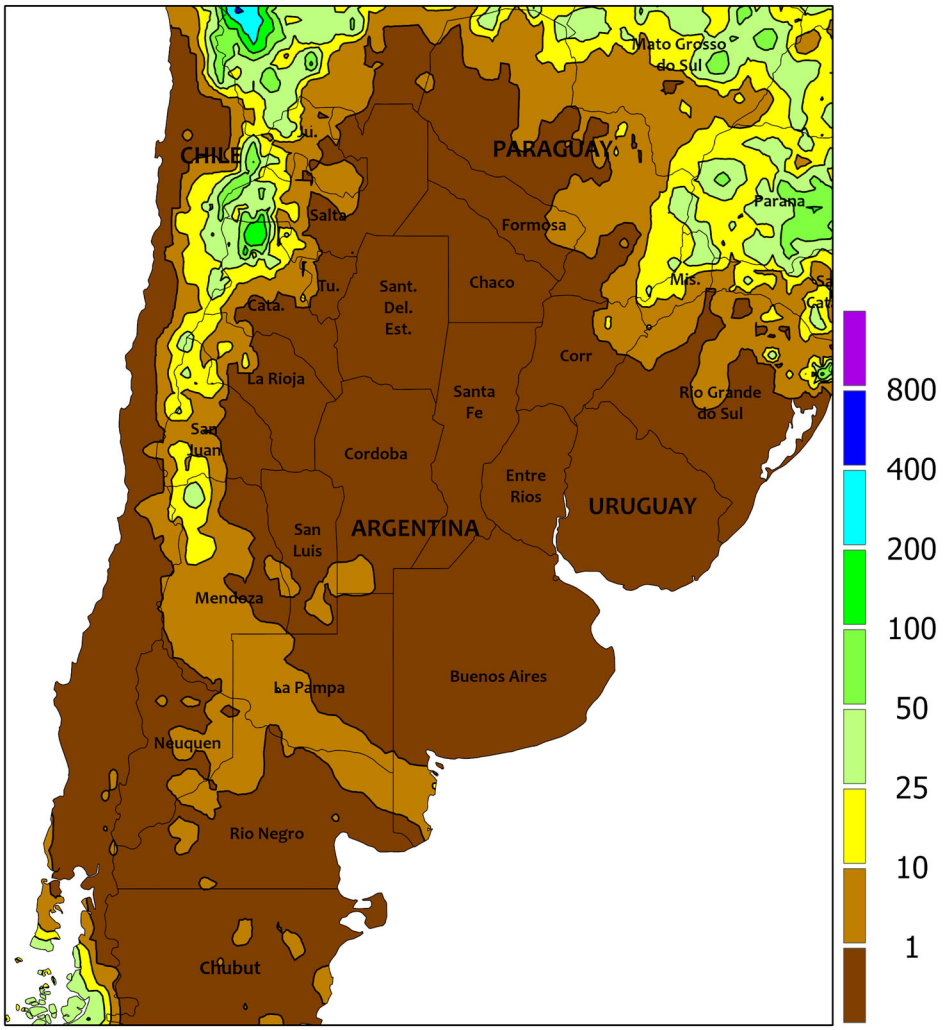
ARGENTINA
Total Precipitation(mm)
January 9 - 15, 2022



ARGENTINA

Oppressive heat raised stress levels on vegetative to reproductive summer crops that have already been impacted by varying degrees of drought. At week's end, highs reached the lower 40s (degrees C) on several days in nearly all major agricultural areas, including usually cooler locations in southern Buenos Aires. High pressure generating the heat also prevented the development of rain, continuing a trend of near complete dryness that began in mid-December. Temperatures recorded between December 15 and January 15 averaged the highest in at least the last 30 years, although until this past week, few locations in central Argentina had readings in excess of 40°C. According to the government of Argentina, cotton was 99 percent planted as of January 13; corn and soybeans were 85 and 95 percent planted, respectively, as farmers awaited rain to provide soil moisture needed for germination.

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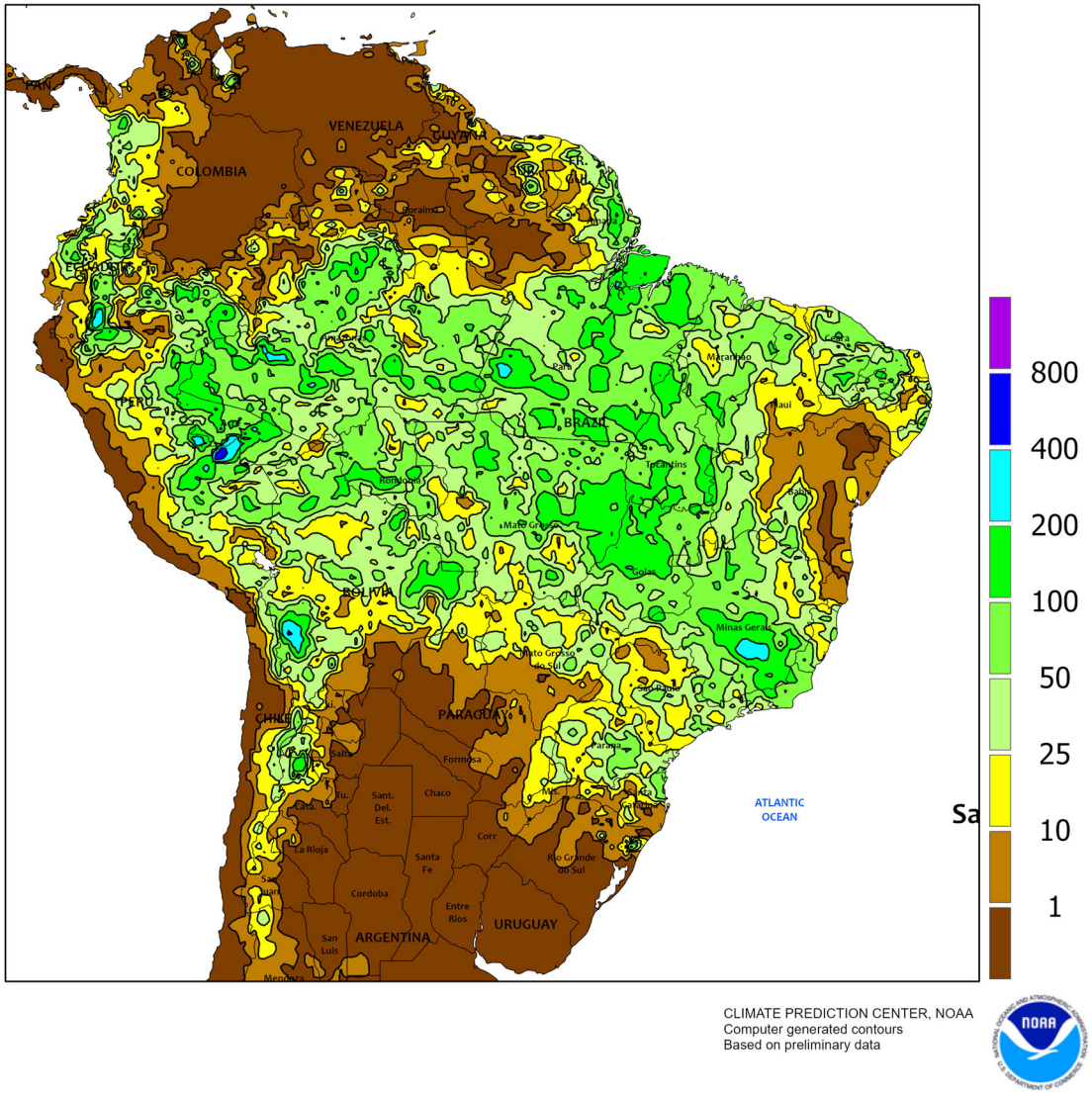
BRAZIL
Total Precipitation(mm)
January 9 - 15, 2022



BRAZIL

Warmer- and drier-than-normal weather dominated much of southern Brazil, maintaining generally poor prospects of main-season summer crops. Unseasonable dryness (less than 25 mm) covered much of the region south of Mato Grosso do Sul, with many areas – including most of Rio Grande do Sul – receiving no rain at all. Daytime highs again reached the middle and upper 30s (degrees C), increasing crop moisture demands and losses through evaporation. According to the government of Paraná, the majority of soybeans and corn were in filling stages of development as of January 10; the earliest-planted crops were maturing, with soybeans 2 percent harvested. In Rio Grande do Sul, corn was 95 percent planted as of January 13, with 35 percent of the emerged crop ranging from flowering to mature (48 percent mature or harvested); soybeans were 95 percent planted and 31 percent of the crop had reached flowering. Meanwhile, moderate to heavy showers (rainfall totaling 25-100 mm) maintained favorable conditions for soybeans and other immature crops farther north, while maintaining favorable soil moisture reserves for secondary plantings. According to the government of Mato Grosso, soybeans were 4 percent harvested, on par with the 5-year average pace; corn and cotton were 2 and 21 percent planted, respectively.

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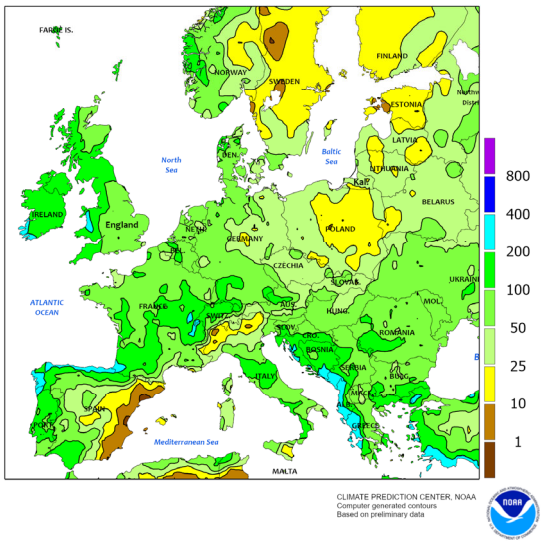
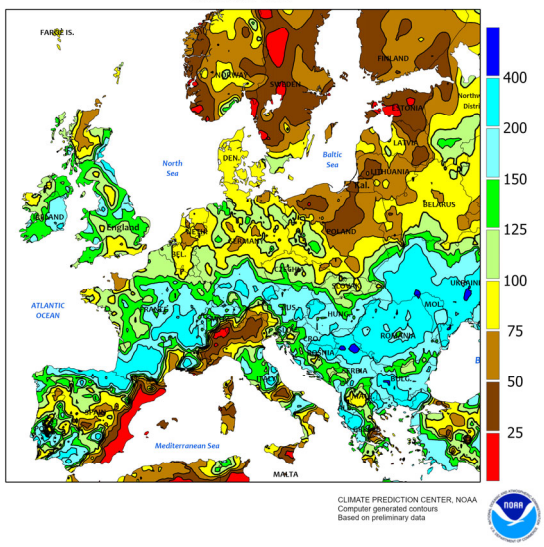
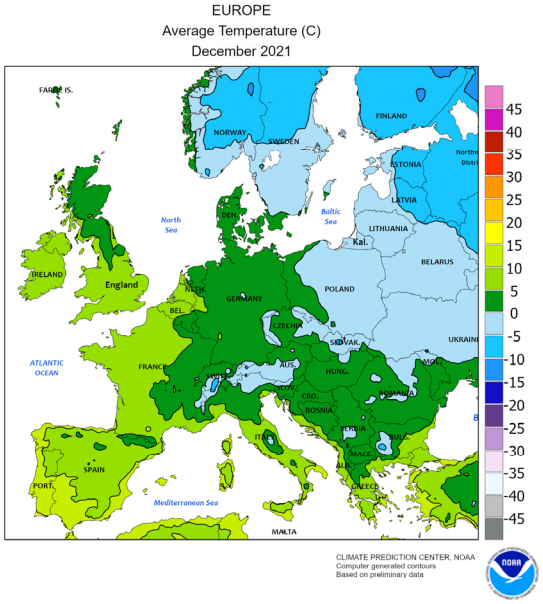
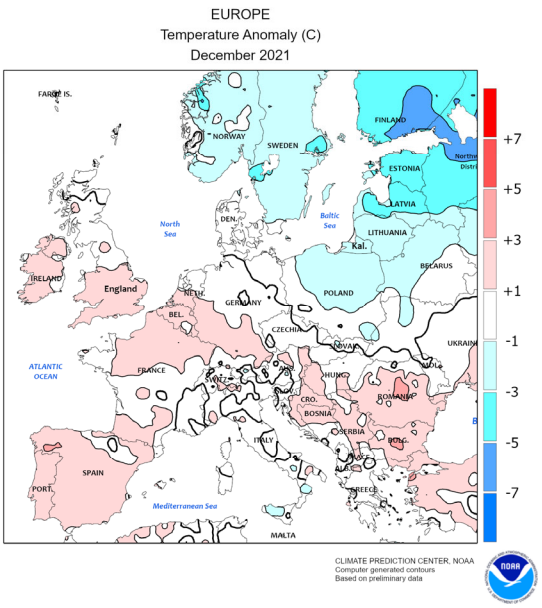
December International Temperature and Precipitation Maps









EUROPE

Mostly wet, unsettled weather prevailed during December, though pockets of dryness were noted in northeastern and southwestern crop areas. Near- to above-normal precipitation and temperatures (1-3°C above normal) prevailed from England and France southeastward into the Balkans, maintaining or improving moisture reserves for dormant winter crops but minimizing the risk of freeze damage or winterkill. Dry weather (40-75 percent of normal) was noted across Poland and the Baltic States, though impacts were minimal due to the accompanying below-normal temperatures (up to 6°C below normal) and occasional snow. Precipitation was hit and miss on the Iberian Peninsula, although primary wheat and barley areas of central and northern Spain generally reported favorable showers throughout the month. In Italy, northern dryness contrasted with favorable rain (up to 175 percent of normal) in primary wheat areas farther south. Overall, wheat, barley, and rapeseed were overwintering well over the region's primary central, northern, and eastern growing areas.

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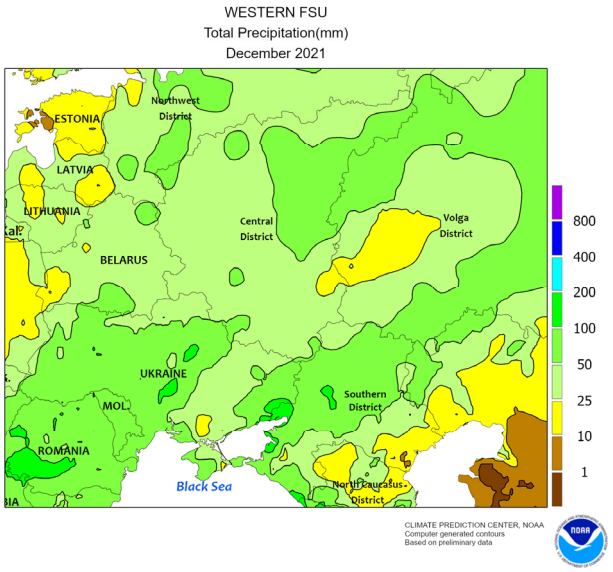

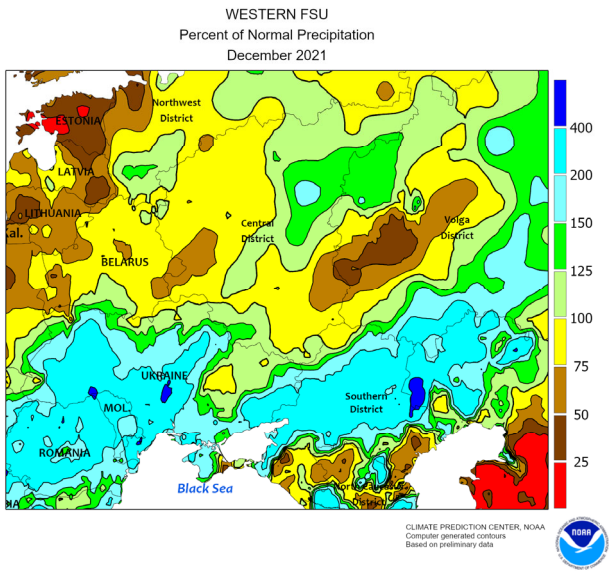

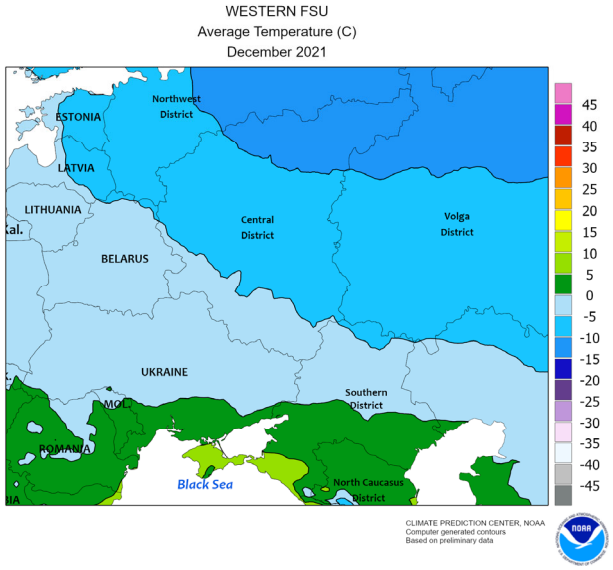

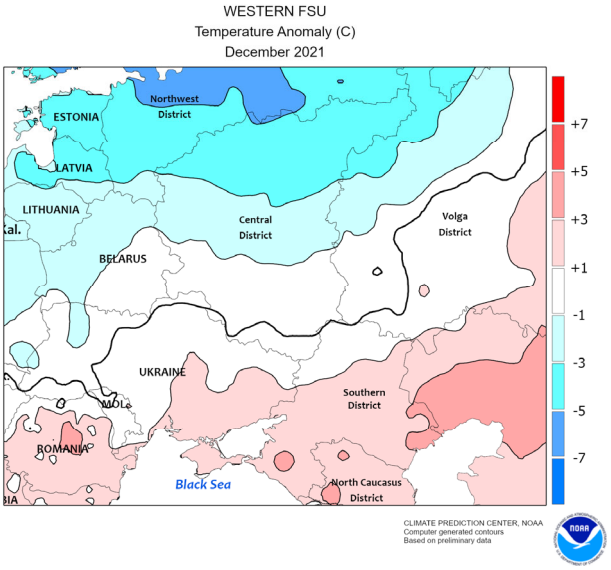

WESTERN FSU

Wet, relatively mild weather maintained favorable prospects for dormant winter crops across the region. Following autumn drought in Moldova and western Ukraine, resurgent moisture during December (100-400 percent of normal) eased or erased lingering deficits and boosted moisture reserves for spring growth. Farther east, near- to above-normal precipitation in central and eastern Ukraine alleviated lingering dryness concerns and improved soil moisture reserves for winter crops. Similar precipitation over much of western and southwestern Russia (southern rain and northern snow) maintained good to excellent prospects for winter wheat. Temperatures averaged 1 to 4°C above normal, though most central and northern crop areas were insulated by a moderate to deep snowpack.

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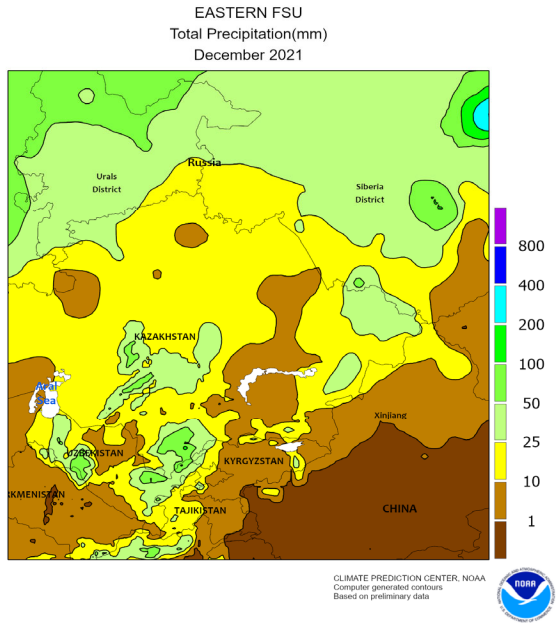
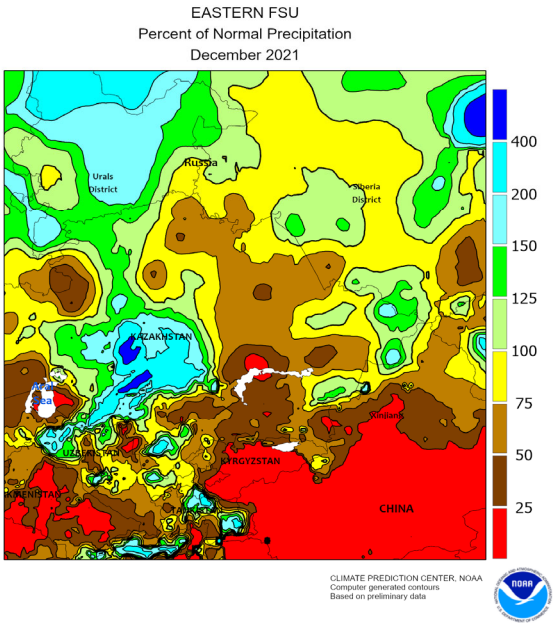
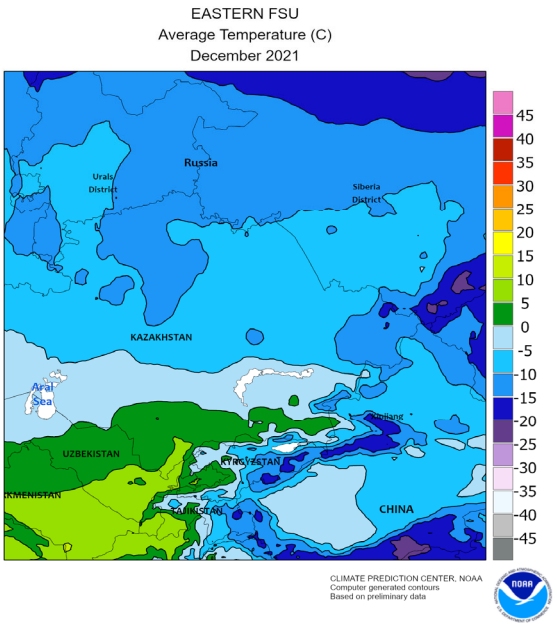
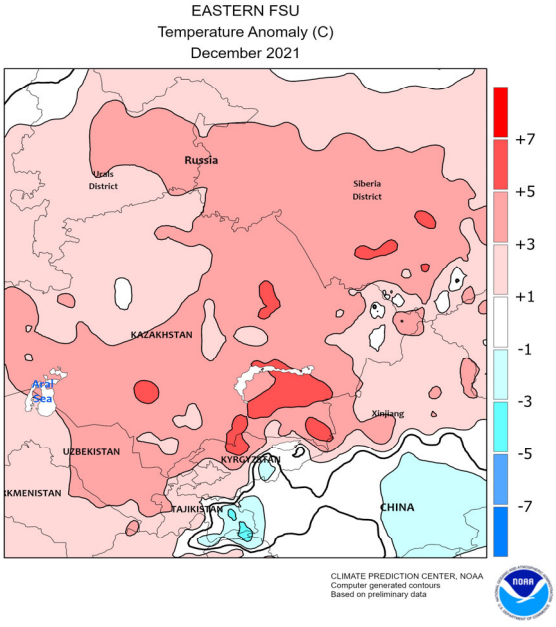


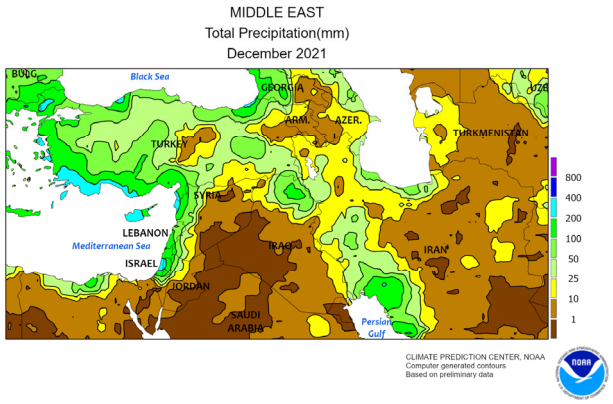


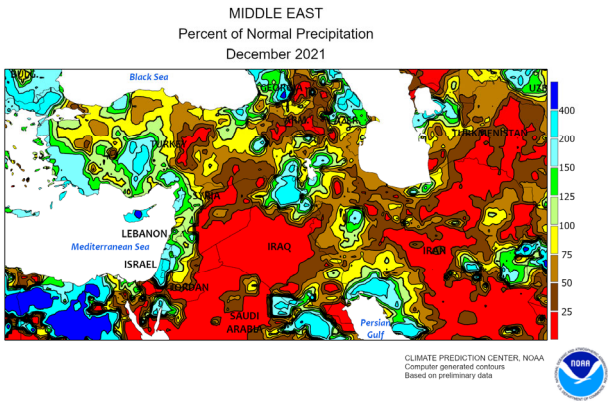


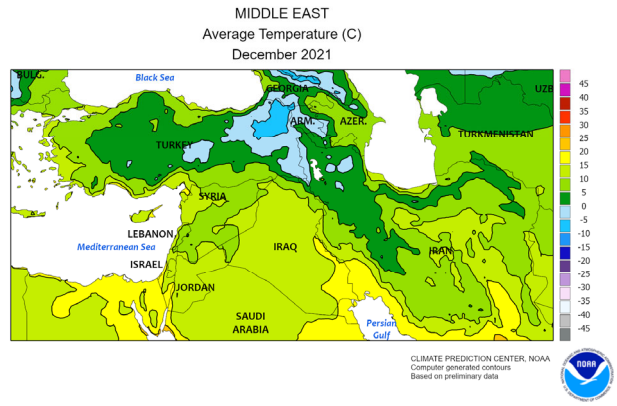


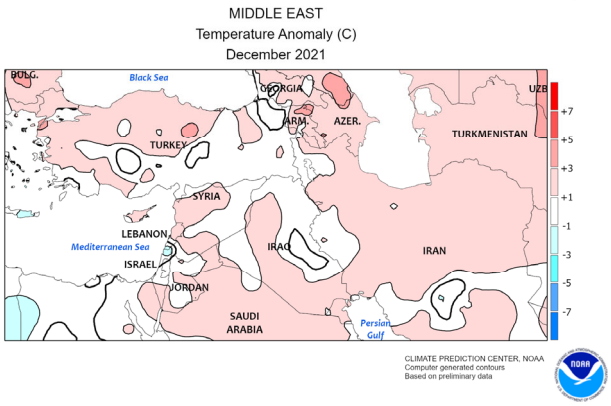
EASTERN FSU

Seasonal cold and snow prevailed over the north while dry conditions lingered in southern cotton and winter wheat areas. During December, widespread snow was reported across central Russia and northern Kazakhstan despite temperatures averaging 2 to 5°C above normal. Even with the relative warmth, nighttime lows still plunged below -30°C during the latter half of the month. Agricultural activity is non-existent during the spring grain belt's bitterly cold winter months. Farther south, a second consecutive month of unfavorably dry weather across the cotton belt (Uzbekistan and neighboring environs) heightened concerns heading into January of another subpar water year. However, precipitation (rain and mountain snow) rebounded during the first half of January, easing season-to-date deficits and improving prospects for the 2021-22 Water Year. By the middle of January, the watersheds of the Amu and Syr Darya Rivers — vital for summer crop irrigation — were reporting near- to above-normal precipitation since September 1.





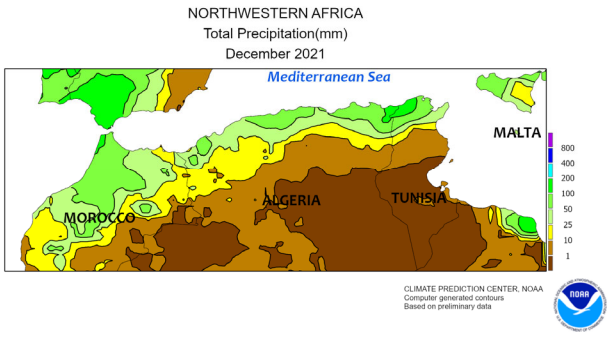


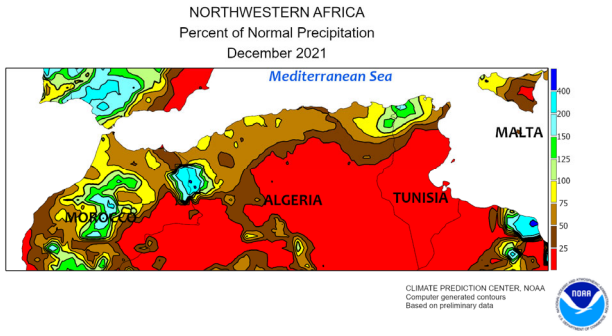


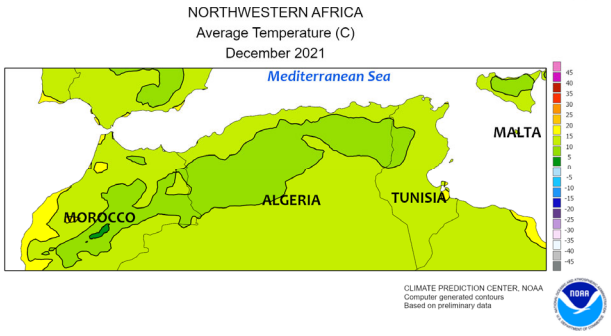
MIDDLE EAST

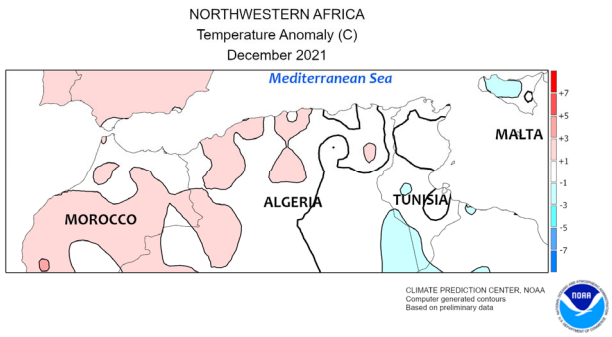
During December, wet weather near the Mediterranean Sea and Persian Gulf contrasted with dry conditions elsewhere. Increasing storminess across the eastern Mediterranean (locally approaching 200 percent of normal) improved moisture supplies for dormant (north) to vegetative (south) winter grains from western and central Turkey southward into Israel and western Jordan. Another area of moderate to heavy rainfall (50-100 mm, locally more) across southwestern Iran benefited winter crop establishment. In contrast, dry conditions (10-50 percent of normal) from eastern Turkey into Iraq as well as northern and eastern Iran left many areas with insufficient soil moisture for winter grain emergence and establishment.

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





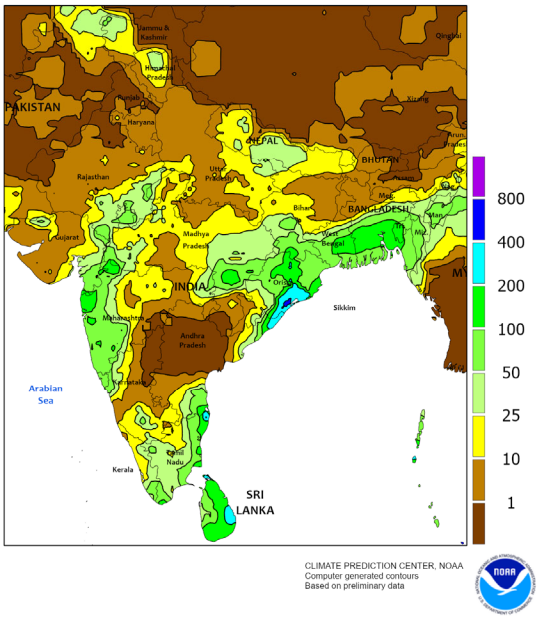




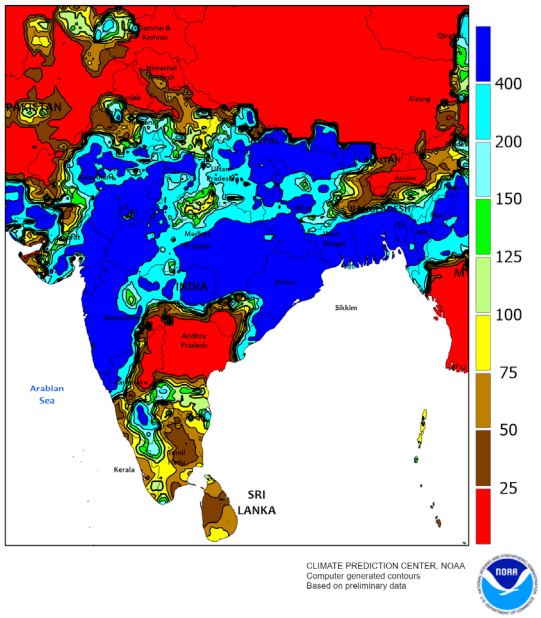
NORTHWESTERN AFRICA

During December, intensifying drought in Morocco and central Tunisia gave way to locally heavy rain in northeastern growing areas. Monthly rainfall in Morocco totaled 20 to 50 percent of normal over the country's primary growing areas, exacerbating drought and further lowering prospects for emerging to vegetative winter grains. In Algeria, drier-than-normal conditions were noted over much of the country, allowing soils to dry in central Algeria but reducing topsoil moisture in western growing areas. However, 50 to 190 mm of rainfall from northeastern Algeria into northern Tunisia maintained good to excellent conditions for wheat and barley development. Conversely, acute but severe drought continued to afflict central Tunisia's Steppe Region, where monthly rain tallied a meager 5 to 20 percent of normal.

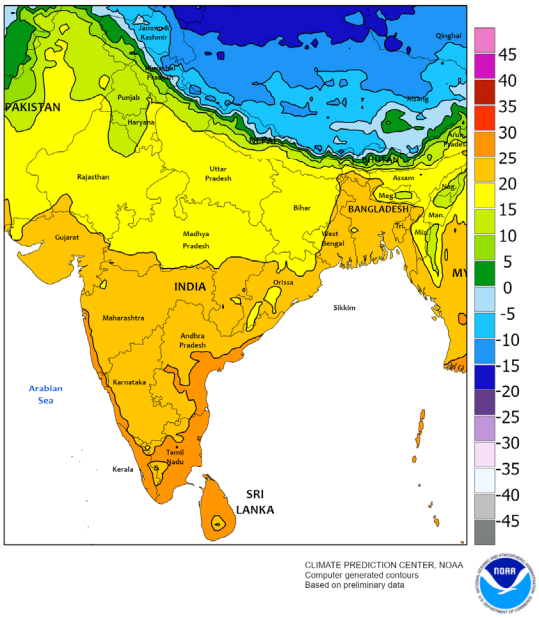
SOUTH ASIA
Total Precipitation(mm)
December 2021



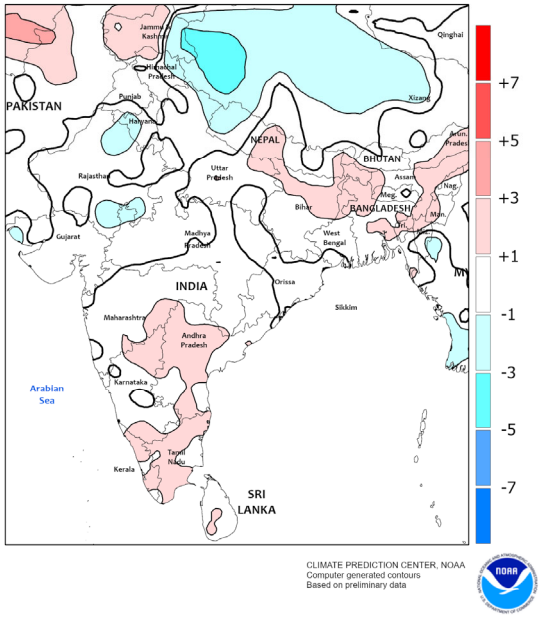
SOUTH ASIA
Percent of Normal Precipitation
December 2021



SOUTH ASIA
Average Temperature (C)
December 2021



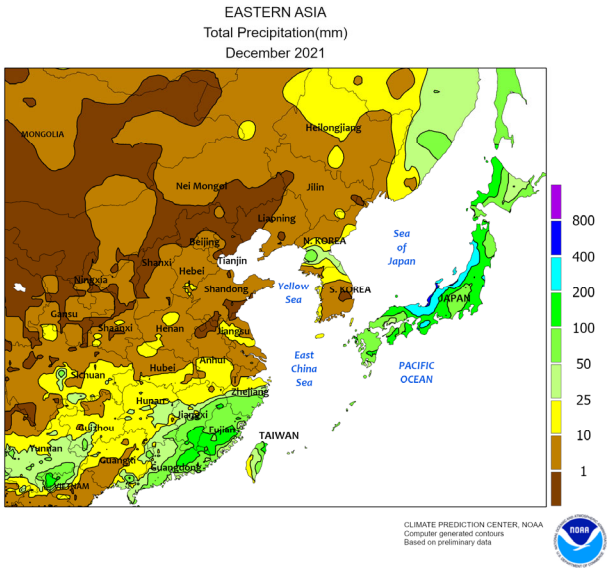
SOUTH ASIA
Temperature Anomaly (C)
December 2021

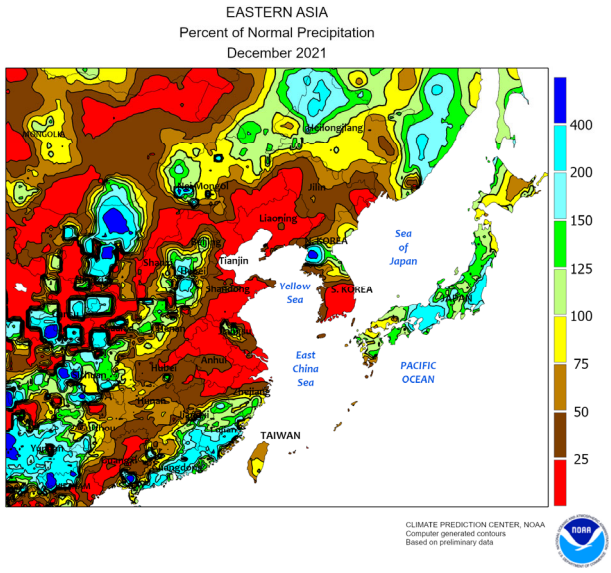


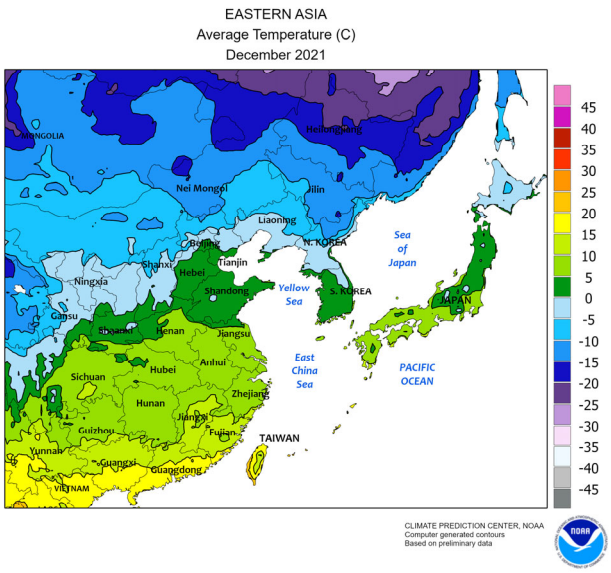
SOUTH ASIA

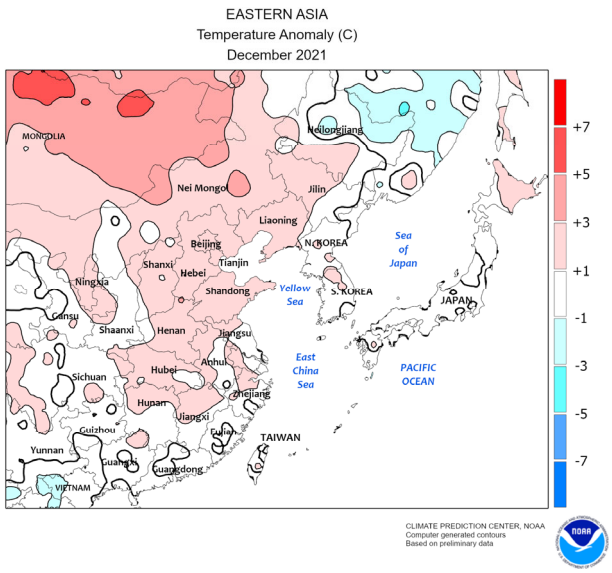
In December, wetter-than-normal weather prevailed across much of India, slowing some rabi crop planting but boosting moisture reserves. An early month tropical cyclone (Jawad) added to the wetness in eastern India (and southern Bangladesh), where 25 to 100 mm (or more) of rainfall was recorded. Similar amounts occurred in pockets around southern and western India as a result of unusually heavy showers for the time of year. The remainder of India reported more seasonable rainfall (less than 25 mm), as did Pakistan.

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



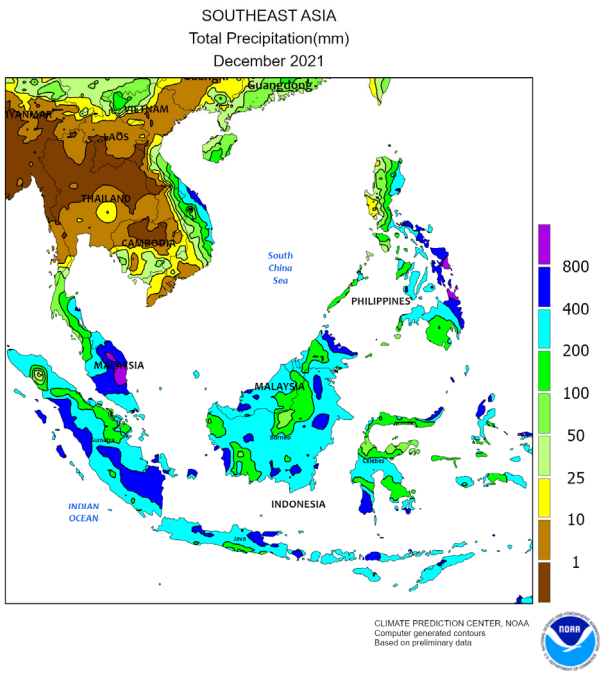


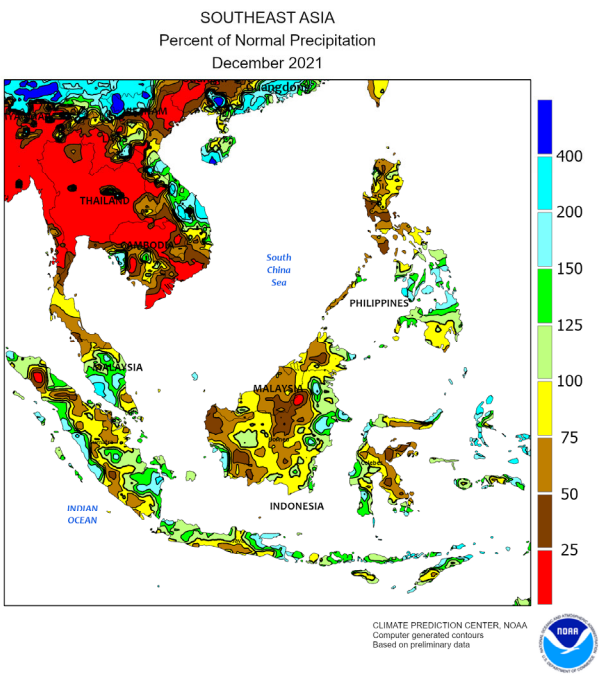


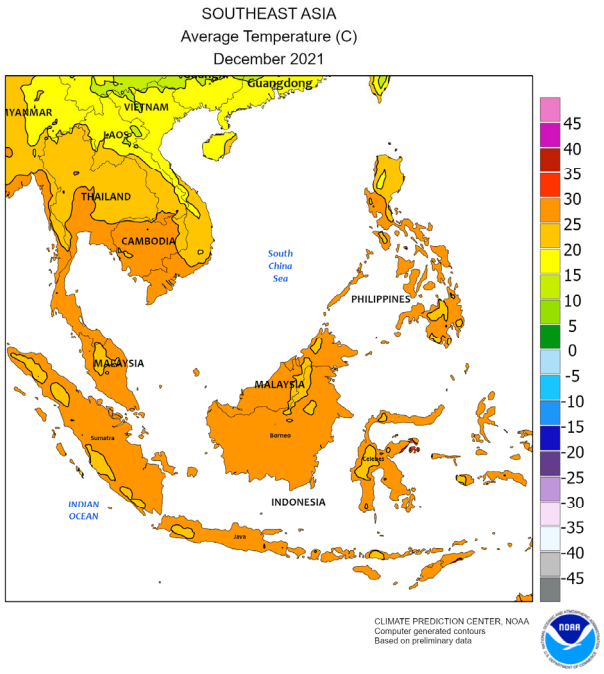


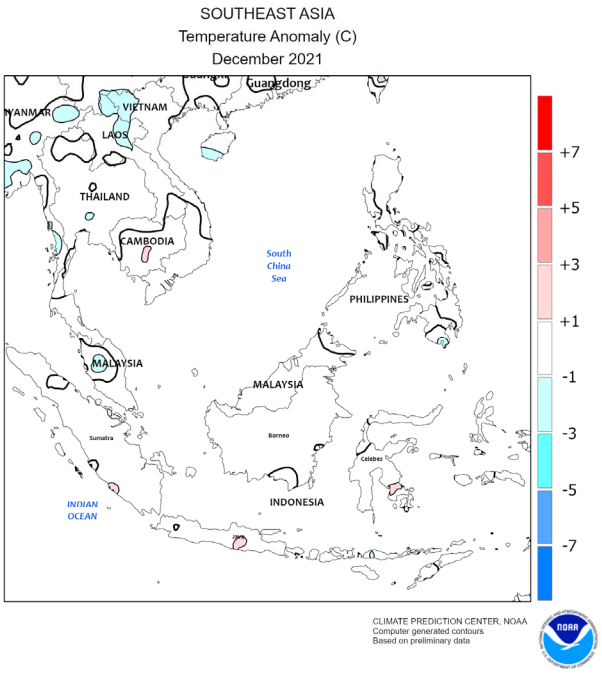
EASTERN ASIA

December was generally mild and drier than normal across eastern China. Rainfall totals were less than 25 mm on the North China Plain and temperatures averaged 2 to 4°C above normal (locally higher). The conditions were overall favorable for overwintering wheat. Although, a sudden cold snap at the end of the month may have caused minor damage, due in large part to the fact that the crop was just beginning to go dormant (nearly three weeks later than usual). Similarly, dry, mild weather with a late-month cold snap occurred within the Yangtze Valley as well, with similar impacts to rapeseed.





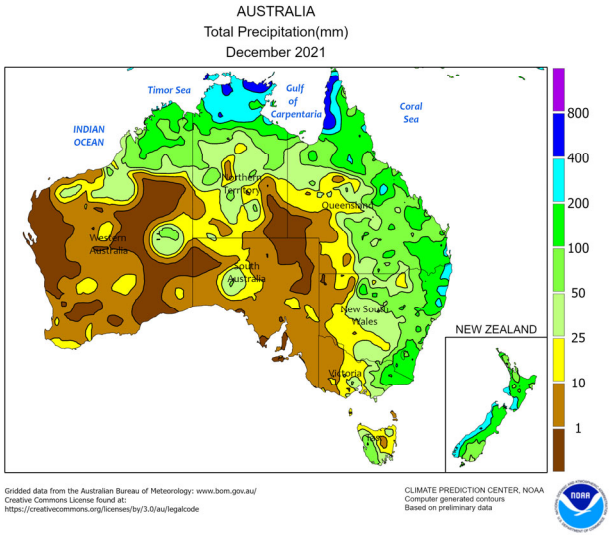


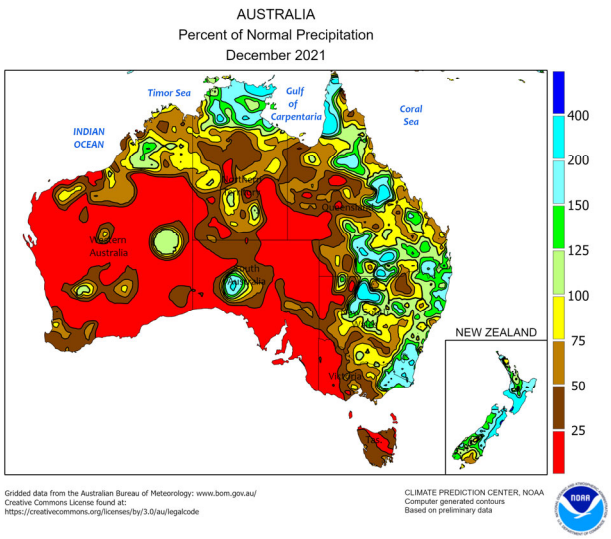


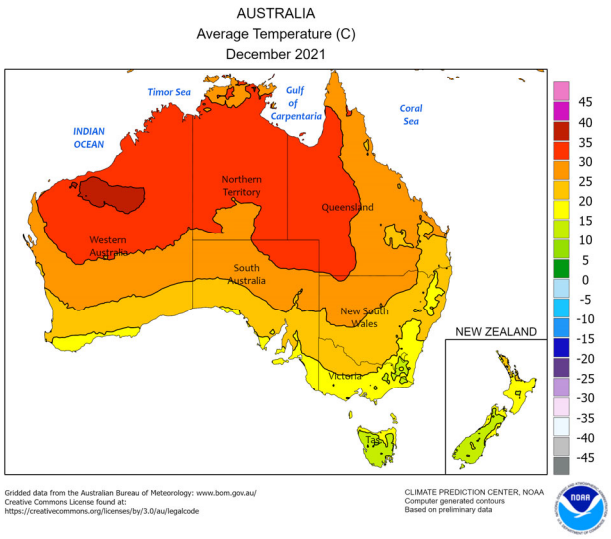
SOUTHEAST ASIA

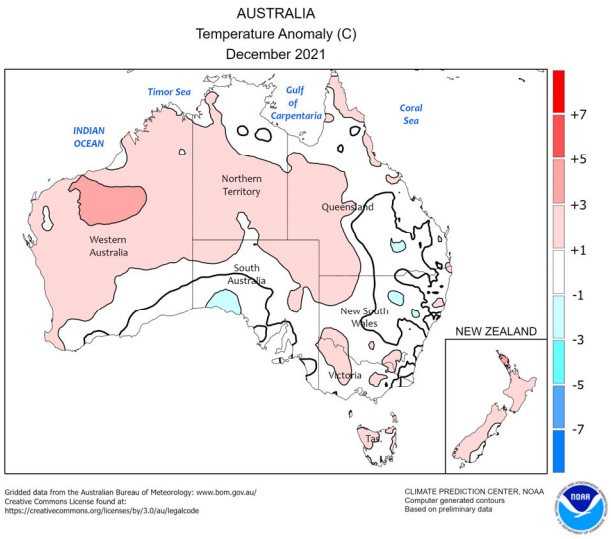
Super Typhoon Rai cut a path through the central Philippines in the middle part of December. The rapid pace of the storm kept flooding rainfall to a minimum except along eastern-most sections of the country where Rai made landfall. Nevertheless, the downpours associated with the storm ensured above-average monthly rainfall along its path (200-600 mm, 125-200 percent of normal). Most agricultural damage was related to the intensity of Rai's winds (over 140 kts at landfall), which were the strongest since Super Typhoon Nock-Ten (2016). After initially weakening, Rai re-intensified into a super typhoon (winds in excess of 145 kts), making it the strongest December storm within the South China Sea in history (based on data from the Joint Typhoon Warning Center). Afterwards, the storm weakened and dissipated as it tracked toward central Vietnam, but not before adding to monthly rainfall totals (150-400 mm, 125-250 percent of normal) in that locale. Elsewhere, exceedingly wet weather (over 600 mm) in parts of western Malaysia halted oil palm harvesting, while drier-than-normal conditions in the remainder of Malaysia and into Indonesia benefited harvest activities. Meanwhile, showers remained above average in southern Indonesia (Java), maintaining ample moisture supplies for vegetative rice.

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



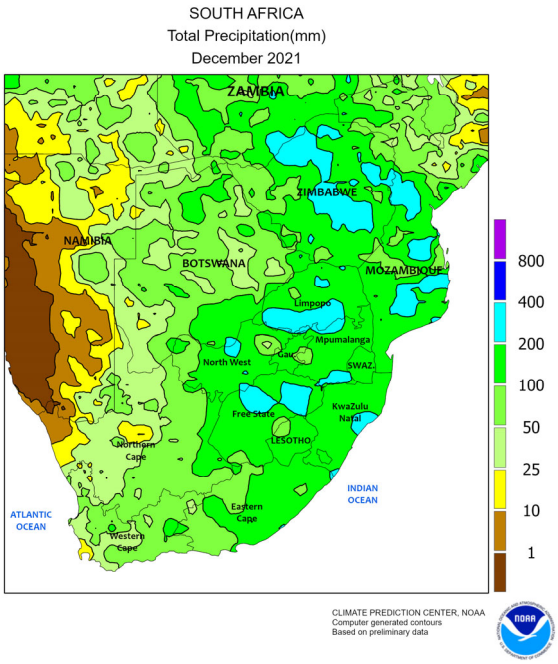


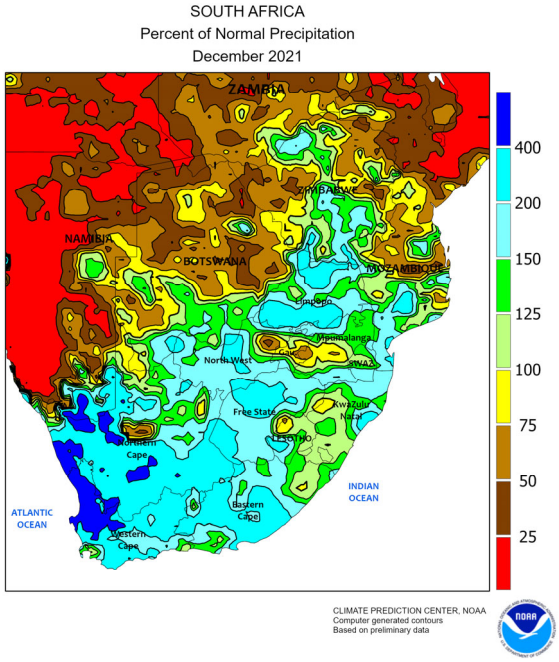


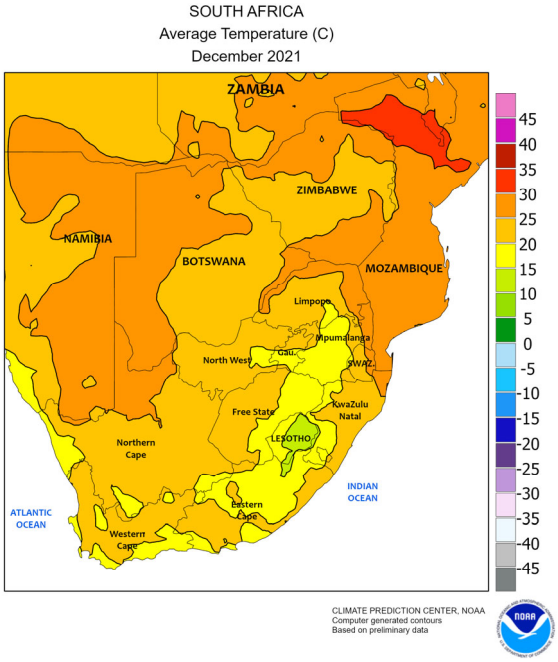


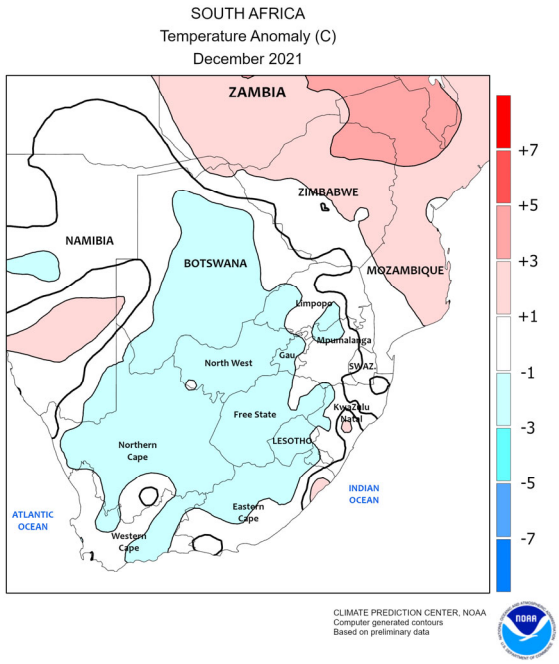
AUSTRALIA

Following an excessively wet November, rainfall returned to more normal levels in eastern Australia during December. The somewhat drier weather enabled local floodwaters to slowly recede and allowed winter crop harvesting to gradually regain momentum. The increased sunshine and abundant moisture supplies promoted cotton, sorghum, and other summer crop development as well, while helping to maintain good to excellent crop prospects. Farther south and west, below-normal rainfall in Victoria, South Australia, and Western Australia aided fieldwork. The dryness allowed wheat, barley, and canola harvesting to proceed rapidly and helped maintain the quality of crops that awaited harvest.





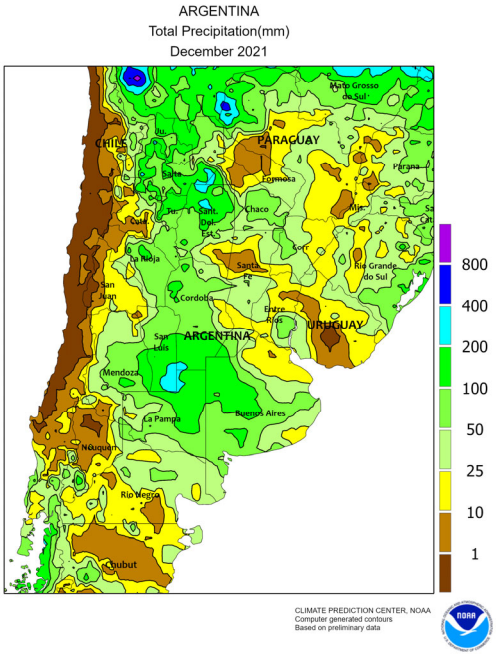


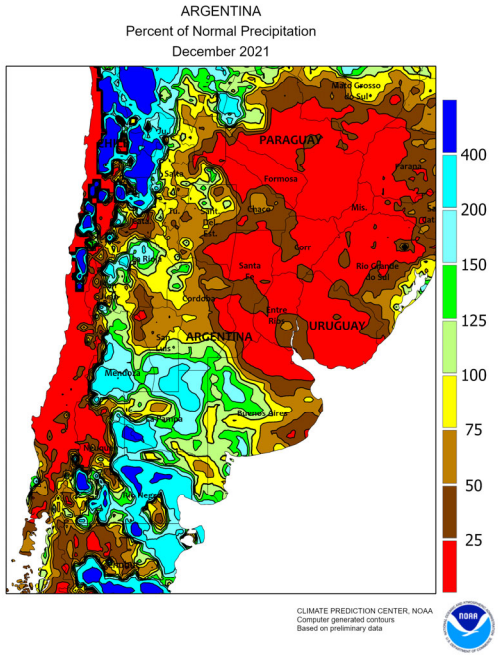


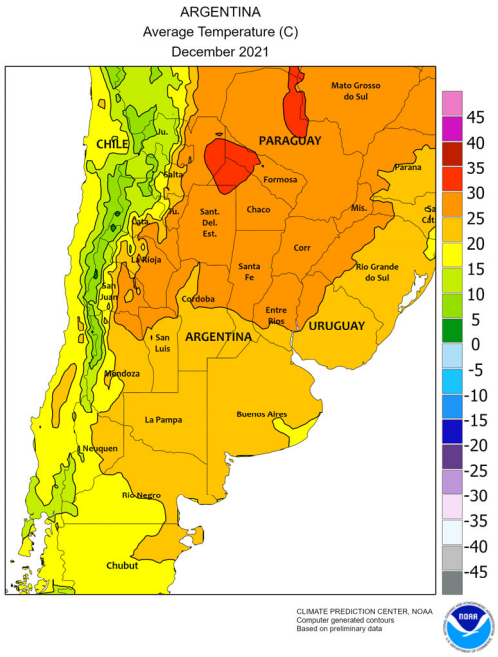
SOUTH AFRICA

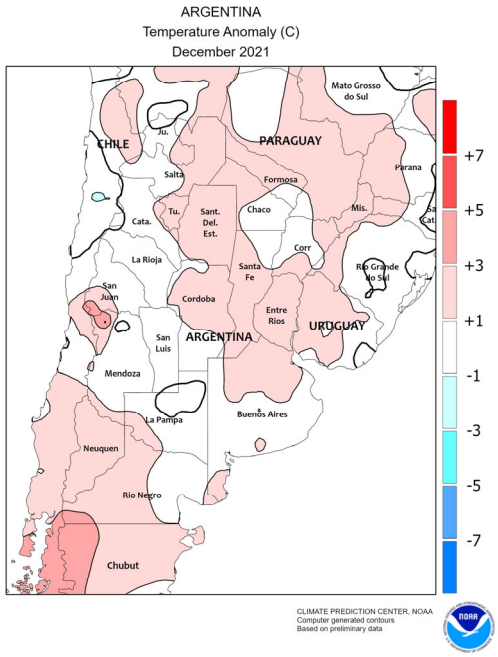
Throughout December, widespread, locally heavy rainfall maintained favorable prospects for corn and other rain-fed summer crops throughout major South African commercial production areas. Monthly rainfall accumulations exceeded 100 mm across the corn belt (North West and Free State eastward to western Mpumalanga and environs), with many locations recording amounts in excess of 200 mm. The rainfall coincided with the normal window for planting corn in commercial white corn areas of North West and western Free State, making its arrival particularly timely. Mild weather (monthly temperatures averaging as much as 2°C below normal) accompanied the wetness, with highest daytime temperatures confined to the upper 20s and lower 30s (degrees C) in the more intense farming areas. Similar conditions prevailed in rainfed sugarcane areas of southern KwaZulu-Natal, although warmer weather (daytime highs reaching 40°C) was recorded in irrigated production areas in northern KwaZulu-Natal and eastern Mpumalanga. Above-normal December rainfall also sustained favorable moisture reserves for agriculture in the Cape Provinces, including the Orange River Valley. In Western Cape, early-month heavy rain gave way to drier, warmer weather favoring wheat harvesting and developing tree and vine crops.

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









ARGENTINA

Intensifying drought during the latter half of December stressed early-planted grains and oilseeds advancing toward reproductive stages of development. As dryness gripped major production areas of central Argentina (La Pampa, Buenos Aires, and from Cordoba to Entre Rios), daytime highs approaching 40°C compounded stress on corn and soybeans, including crops grown in traditionally high-yielding farming areas in and around the lower Parana River Valley. Similar conditions prevailed in much of the north, with temperatures spiking well into the lower 40s (degrees C) throughout the cotton belt (Santiago del Estero eastward into Corrientes) during the last week of December and into early January. The rapid decline in conditions offset a generally favorable first half of the month and resulted in most agricultural areas recording a warmer- and drier-than-normal month of December. However, the wide planting window helped to potentially mitigate the full impacts of the stressful weather on national production; planting of corn, soybeans, and cotton was still underway at month's end, and a return to a more normal pattern of rain and summer warmth would benefit later plantings.

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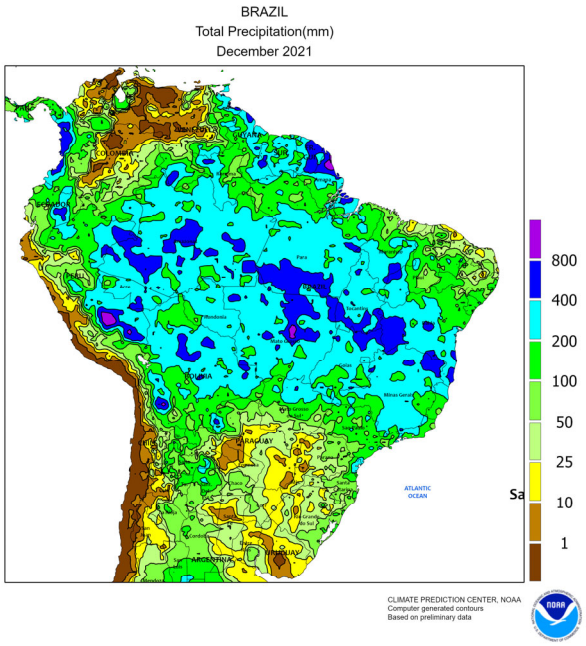

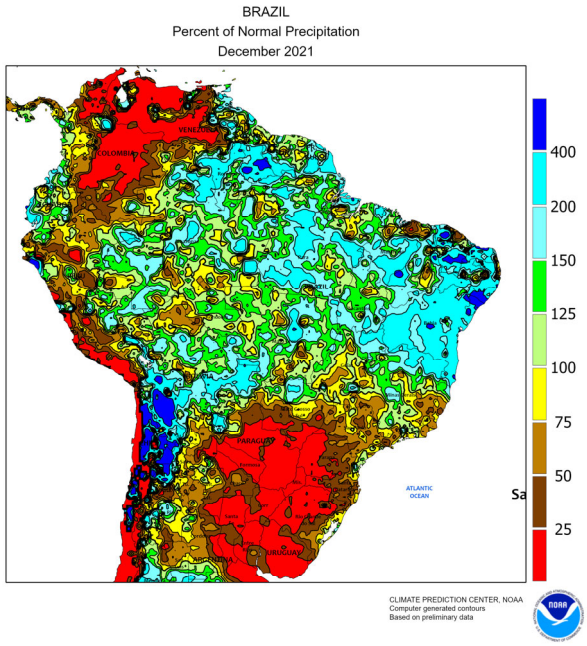

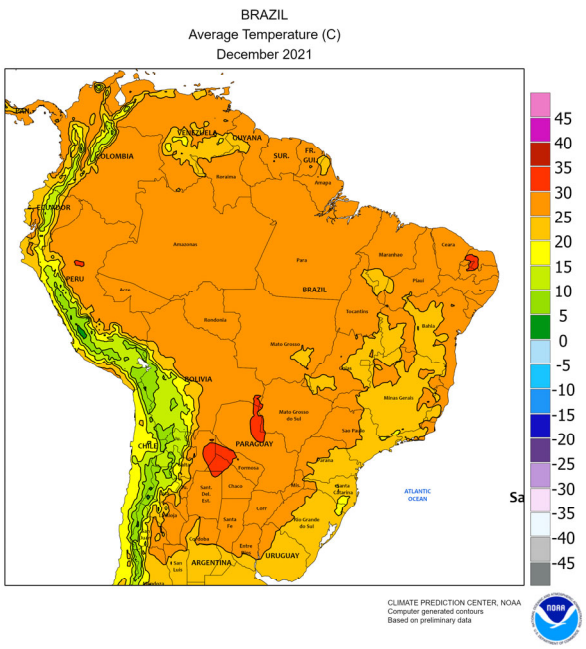

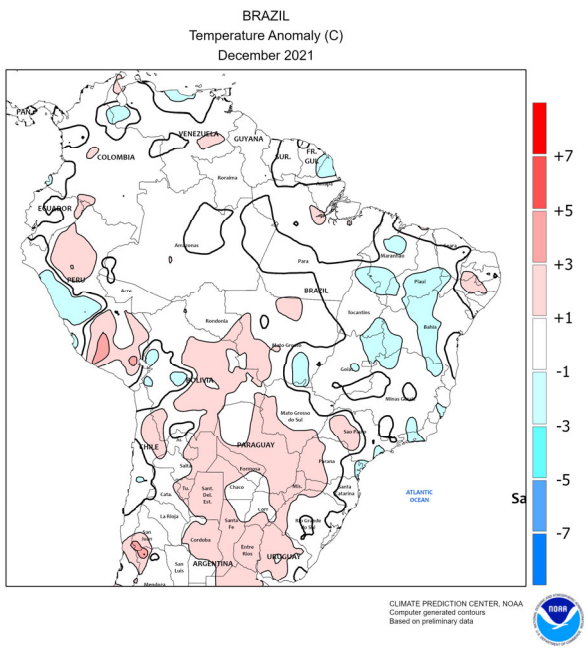

BRAZIL

In December, drought in southern farming areas contrasted with abundant rainfall farther north. A large portion of the region from Paraná southward – including much of Paraguay – recorded monthly rainfall totaling less than half of the normal amounts, with many locations receiving less than 25 mm. Unseasonable warmth (temperatures averaging 1-2°C above normal, with daytime highs reaching the upper 30s degrees C) compounded the stress on the region's reproductive to filling soybeans and corn. Unseasonable warmth and dryness also dominated much of Mato Grosso do Sul and São Paulo but farther north, near- to above-normal rainfall and seasonable warmth maintained favorable conditions for immature soybeans while also sustaining favorable levels of soil moisture for germination of second-crop corn and cotton.

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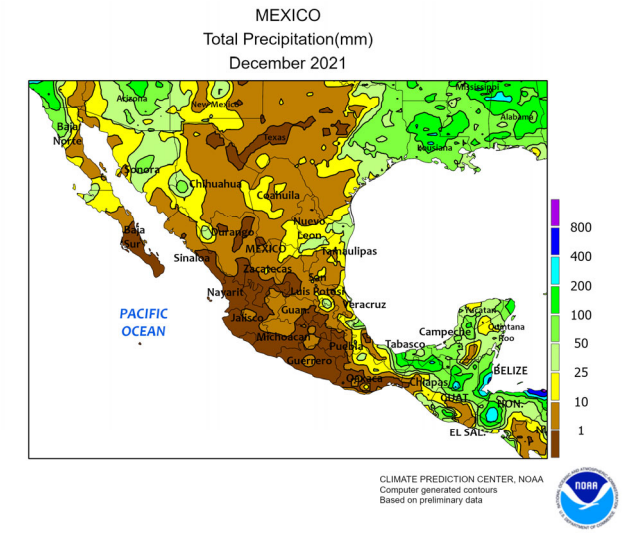
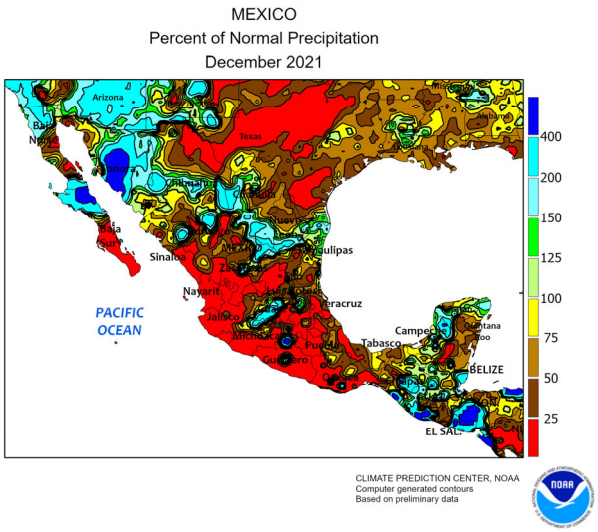
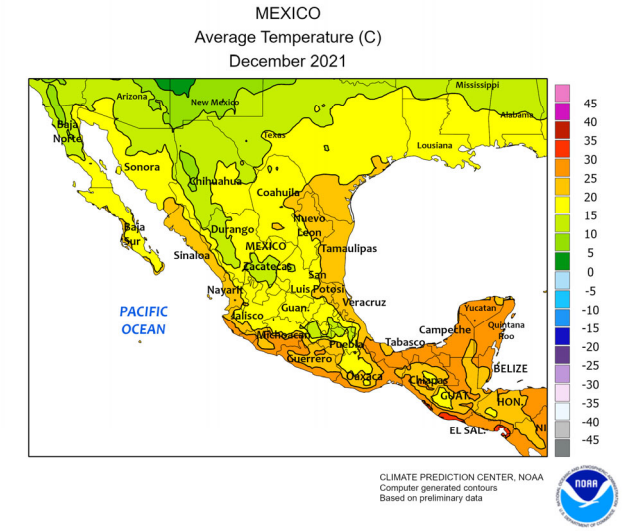
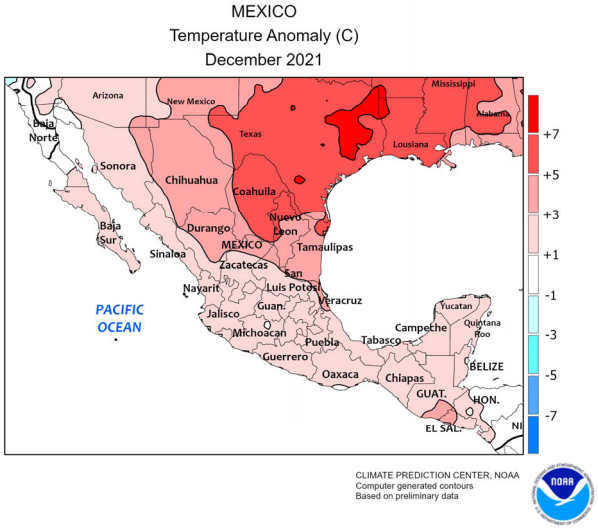




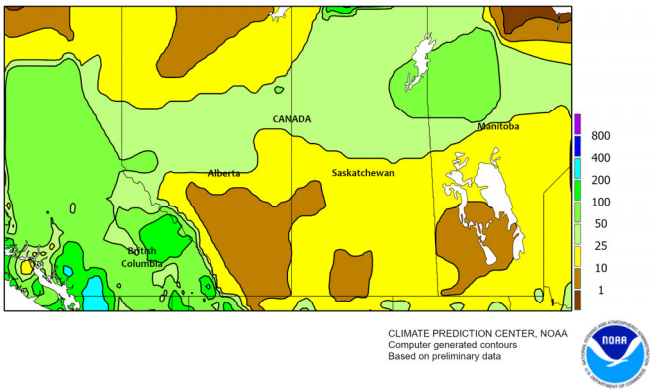




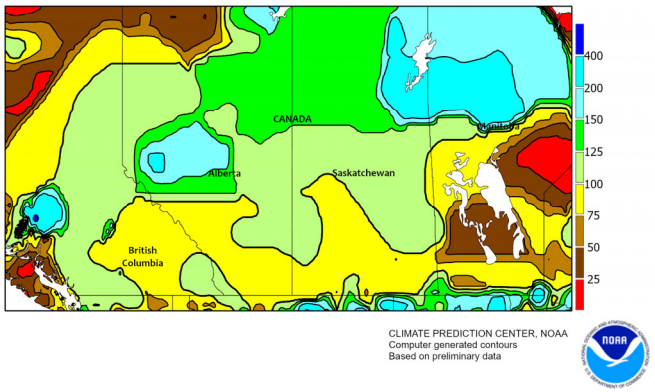
MEXICO

Unseasonably heavy showers developed over northwestern watersheds during December, providing a late-season boost in irrigation supplies for crops including winter wheat and corn. The heaviest rain fell at month's end and lingered into the first few days of January, with coverage extending as far south as northern Sinaloa. Elsewhere, the recurrence of heavy rain (monthly accumulations totaling 50-150 mm) maintained high reservoir levels in the vicinity of Tabasco and northern Chiapas. Elsewhere, showers were generally scattered and light, with near-complete dryness supporting drydown and harvesting of corn and other summer crops across the southern plateau (Jalisco to Puebla). According to the government of Mexico, national reservoir levels were 65 percent of capacity as of December 31, with northwestern supplies ranging from 38 percent (Sonora) to 42 percent (Sinaloa).

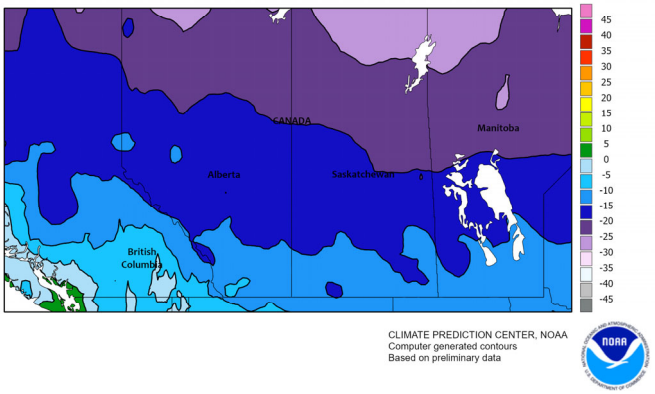
CANADIAN PRAIRIES
Total Precipitation(mm)
December 2021



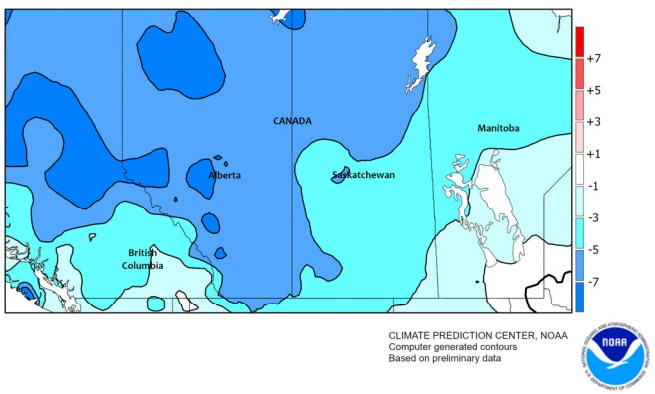
CANADIAN PRAIRIES
Percent of Normal Precipitation
December 2021



CANADIAN PRAIRIES
Average Temperature (C)
December 2021

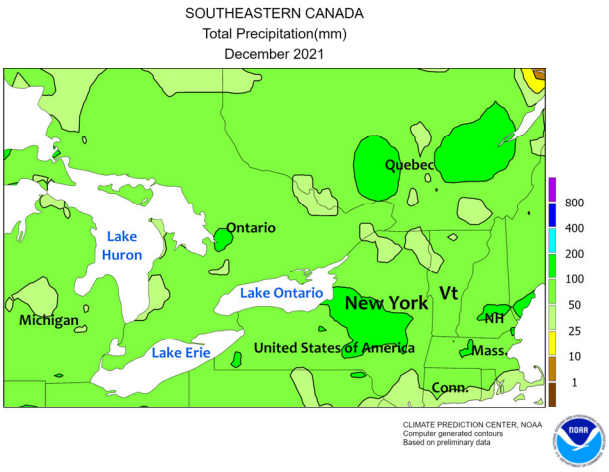


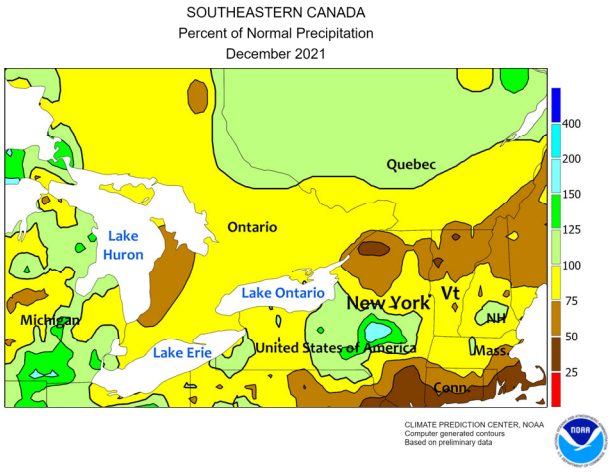
CANADIAN PRAIRIES
Temperature Anomaly (C)
December 2021

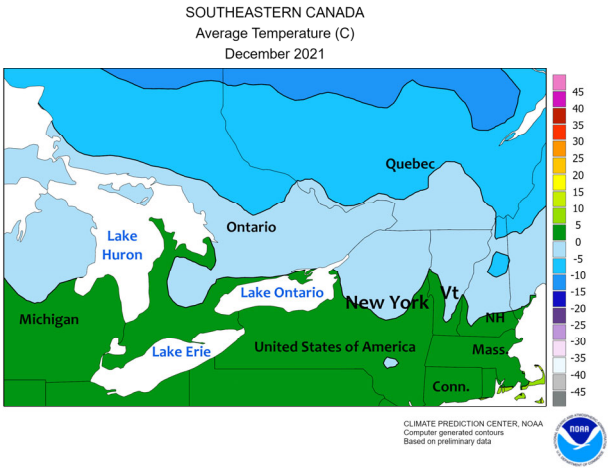


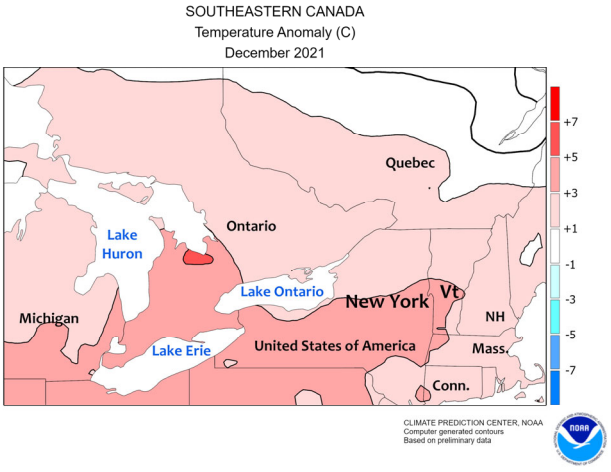
CANADIAN PRAIRIES

Mostly dry, colder-than-normal weather prevailed during December, with several outbreaks of bitter cold (nighttime lows dropping well below -20°C) lasting days at a time. Although snowfall preceded most of the outbreaks, accumulations of snow in the southern Prairies were frequently patchy and light, raising the potential for winterkill on winter wheat and pastures; this was particularly true for parts of Saskatchewan and Alberta, as snow accumulations were more uniform in Manitoba. December precipitation totaled between 10 and 25 mm in most agricultural districts; although much of precipitation came in the form of snow, southern agricultural districts in Alberta and Saskatchewan were void of snow at month's end.









SOUTHEASTERN CANADA

A warmer-than-normal December favored overwintering wheat and pastures across the region. Monthly average temperatures were 2 to 4°C above normal in the main agricultural districts of both Ontario and Quebec, although average temperatures were likely not high enough to cause a loss in winter hardiness. Nighttime lows dropped below the threshold for potential damage of dormant grains (-17°C) on several occasions, but snow cover was generally sufficient to protect most crops. December precipitation was near to below normal, with much of the precipitation falling as rain during the first part of the month. On December 31, snow cover was patchy and light in nearly all Ontario farming areas; Quebec snowcover was generally more favorable, although accumulations were estimated to be light (less than 5 mm) in many southern farming districts.

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U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 12, 2022. Forecasts refer to January 1.

The **U.S. all orange** forecast for the 2021-2022 season is 3.92 million tons, up 2 percent from the previous forecast but down 11 percent from the 2020-2021 final utilization. The Florida all orange forecast, at 44.5 million boxes (2.00 million tons), is down 3 percent from the previous forecast and down 16 percent from last season. In Florida, early, midseason, and Navel varieties are forecast at 17.5 million boxes (788,000 tons), down 3 percent from the previous forecast and down 23 percent from last season. The Florida Valencia orange forecast, at 27.0 million boxes (1.22 million tons), is down 4 percent from the previous forecast and down 10 percent from last season's final utilization.

The California all orange forecast is 47.6 million boxes (1.90 million tons), is up 9 percent from previous forecast but down 5 percent from last season's final utilization. The California Navel orange forecast is 39.0 million boxes (1.56 million tons), is up 11 percent from the previous forecast but down 4 percent from last season's final utilization. The California Valencia orange forecast is 8.60 million boxes (344,000 tons), is up 1 percent from the previous forecast but down 9 percent from last season's final utilization. The Texas all orange forecast, at 400,000 boxes (17,000 tons), is down 27 percent from the previous forecast and down 62 percent from last season's final utilization.

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