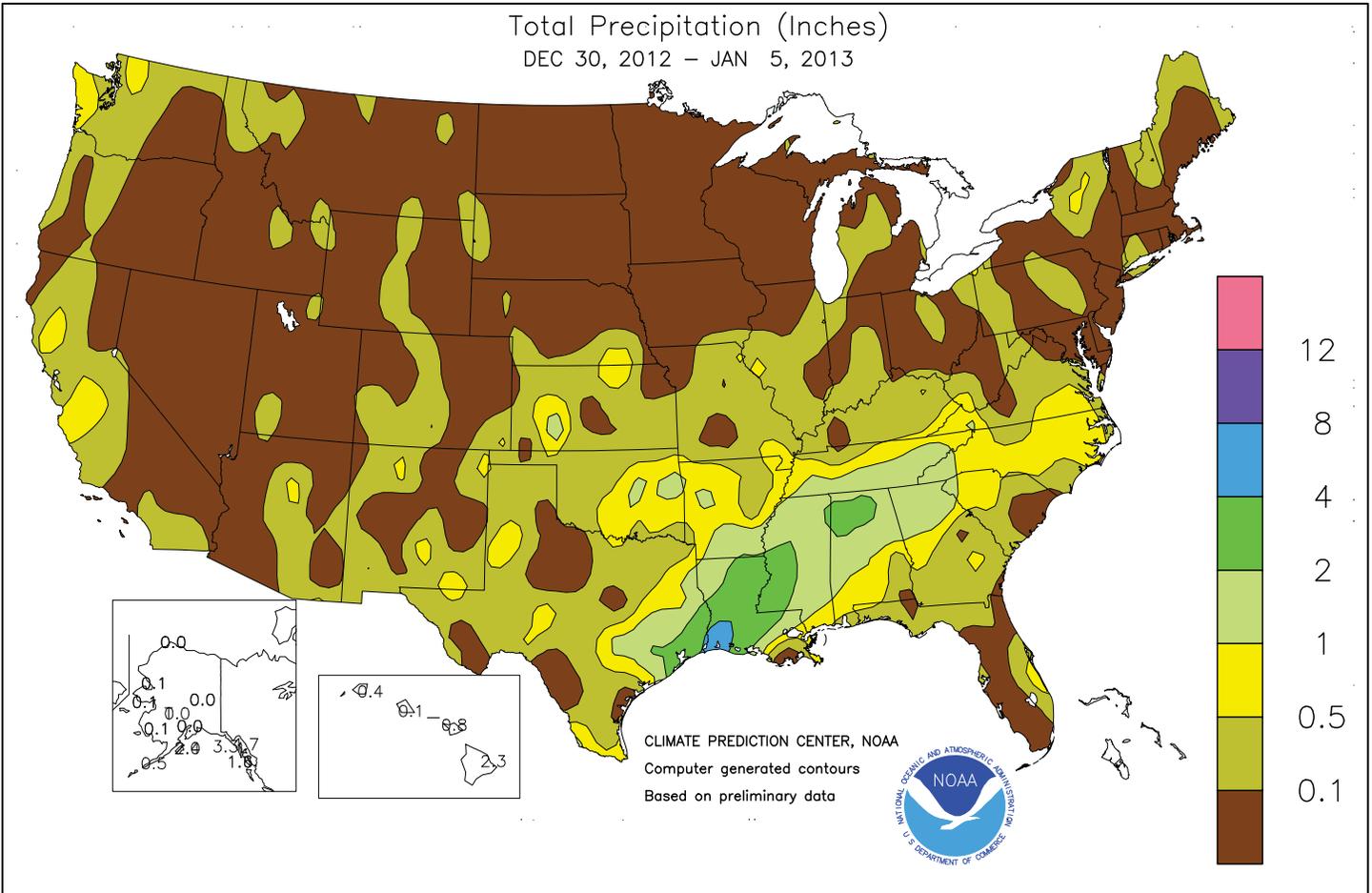


WEEKLY WEATHER AND CROP BULLETIN



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

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



HIGHLIGHTS

December 30, 2012 – January 5, 2013

Highlights provided by USDA/WAOB

Additional rain fell across the **South**, but significant precipitation largely bypassed some of the driest areas of the **southern Atlantic region**, including **Florida's peninsula**. In contrast, weekly rainfall totaled 2 to 4 inches or more in many locations from the **central Gulf Coast into northern Alabama**. Meanwhile, generally light precipitation fell across the **southern half of the Plains**, providing temporary drought relief. However, a significant portion of the hard red winter wheat crop continued to suffer from poor establishment and acute soil

(Continued on page 3)

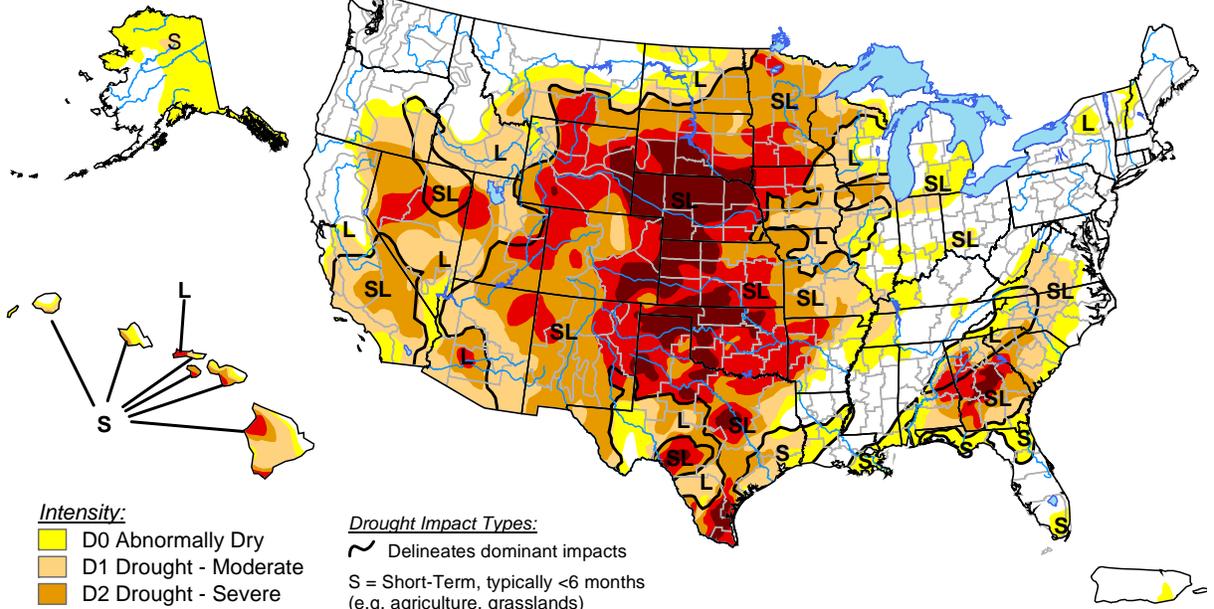
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U.S. Drought Monitor

January 1, 2013

Valid 7 a.m. EST



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



Released Thursday, January 3, 2013

Author: Richard Heim, NOAA/NESDIS/NCDC

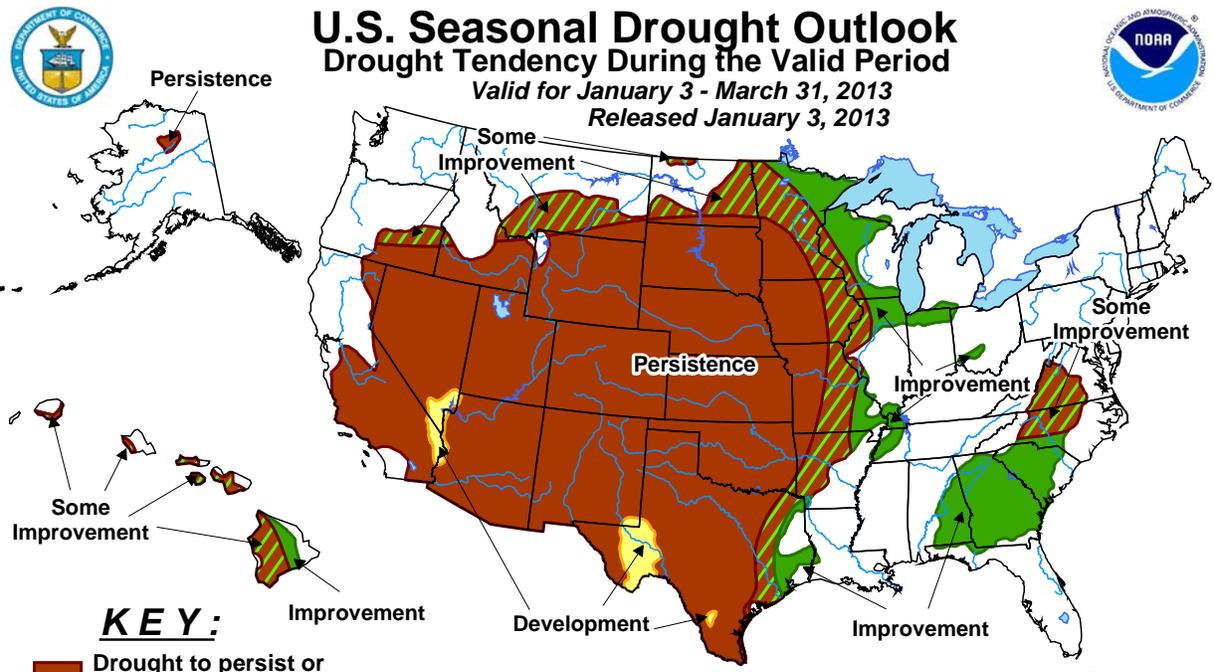
<http://droughtmonitor.unl.edu/>

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for January 3 - March 31, 2013

Released January 3, 2013



KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

No Drought Posted/Predicted

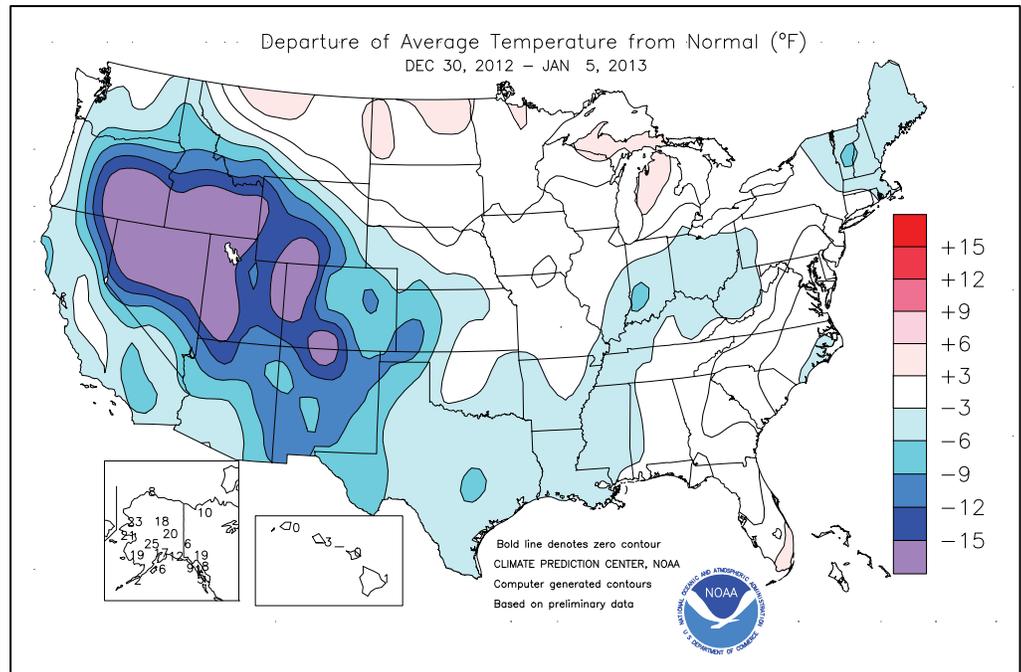
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

(Continued from front cover)

moisture shortages. In addition, late-week warmth began to erode wheat's protective snow cover on the **northern High Plains**. Much of the **Midwest** experienced a dry week, except for some light precipitation across the southern tier of the region. Nevertheless, snow remained on the ground in much of the **Corn Belt**, particularly across the **Ohio Valley** and the **upper Midwest**. Elsewhere, cold, mostly dry weather covered the **West**, with light precipitation confined to the **Rockies** and the **Pacific Coast States**. Weekly temperatures averaged at least 10 to 20°F below normal in snow-covered sections of the **Intermountain West**.

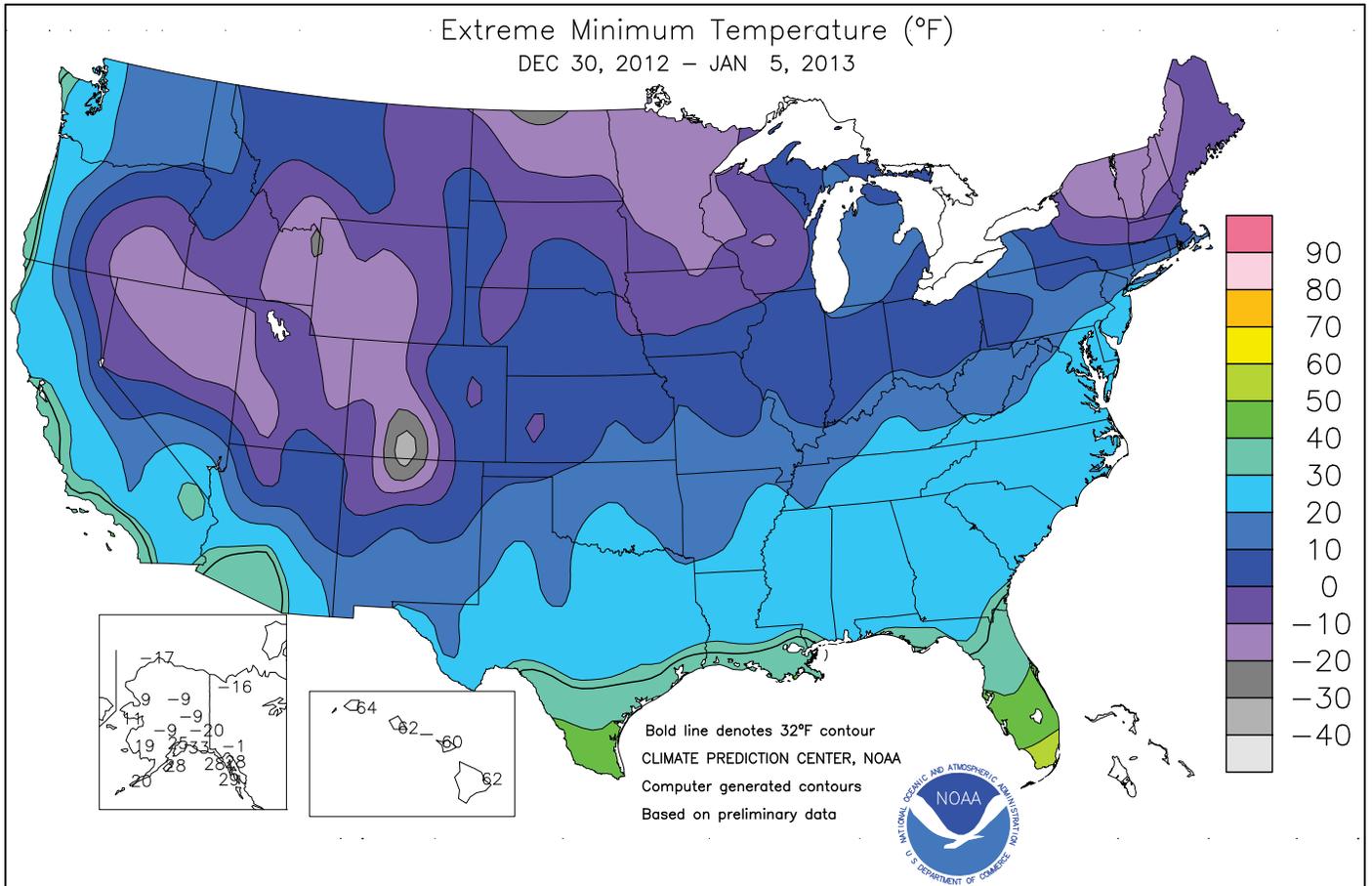
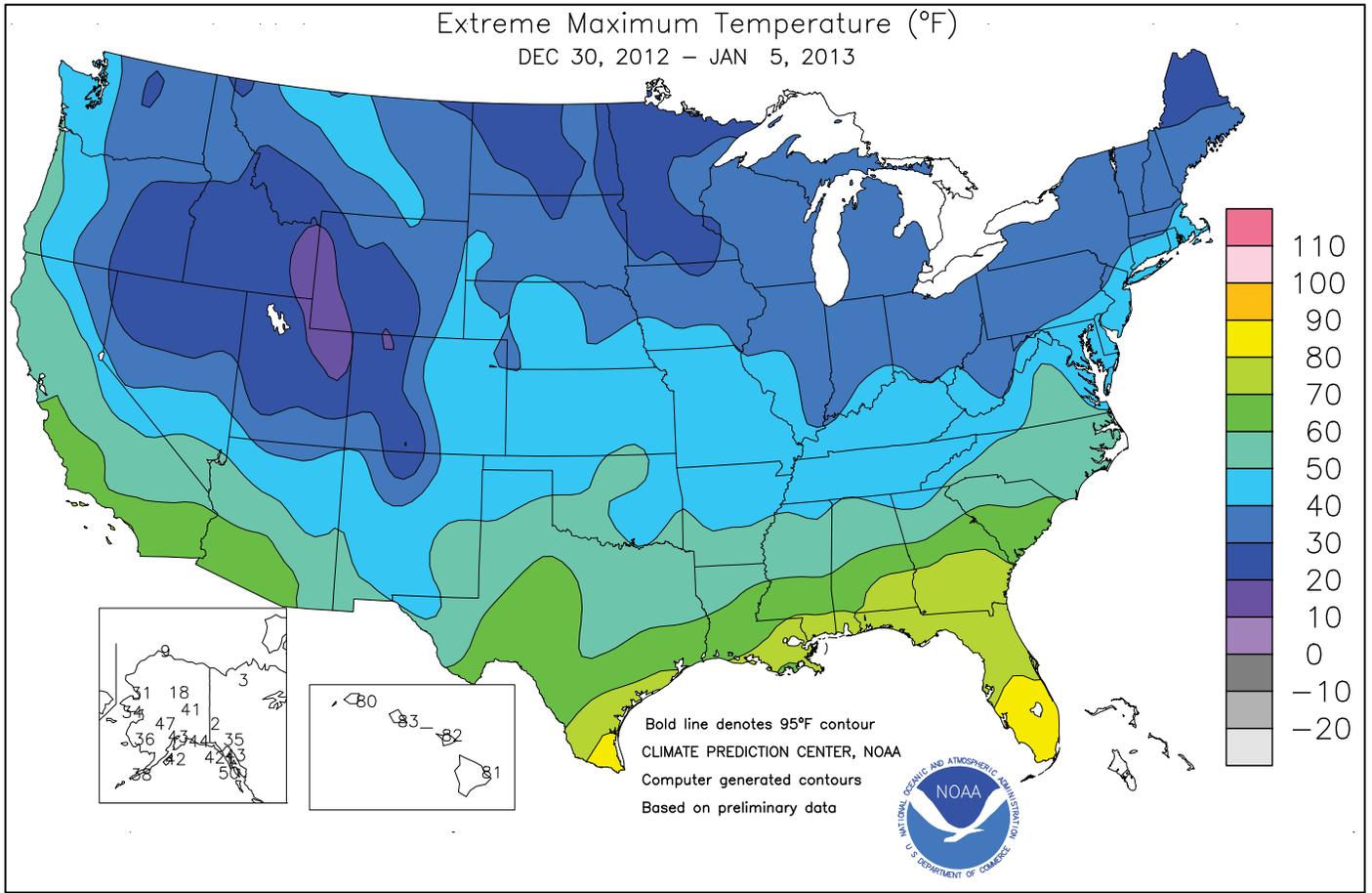
As 2012 ended, beneficial precipitation spread across the **south-central U.S.** On December 31, daily records for both precipitation and snowfall were established in locations such as **Concordia, KS** (0.48 and 7.5 inches), and **Alamosa, CO** (0.20 and 3.3 inches). Other daily-record snowfall totals for December 31 included 5.1 inches in **Dodge City, KS**, and 3.0 inches in **Dalhart, TX**. New Year's Day featured the first 4-inch rainfall total in **Galveston, TX**, since October 9, 2011, when 4.31 inches fell. Galveston's total for January 1 was 4.01 inches. Farther north, however, **Grand Island, NE**, completed its driest year on record. **Grand Island's** annual total of 11.55 inches (43 percent of normal) edged its 1940 standard of 12.01 inches. After mid-week, another disturbance crossed the **southern U.S.** In **Texas**, January 3-4 snowfall totaled 3.1 inches in **El Paso** and 2.8 inches in **San Angelo**. At week's end, storminess increased along the **Pacific Coast**. On January 5, **Stockton, CA** (0.73 inch), received a daily-record rainfall.

As 2013 began, frigid conditions became established across the **Intermountain West**. In **Alamosa, CO**, lows dipped to -30°F or below on 5 consecutive days (January 2-6) for the first time on record. Previously, **Alamosa's** longest such streak had been 4 days—from January 18-21, 1984. **Alamosa** also posted daily record lows on January 3-4 (-33 and -34°F, respectively). Other **Western** daily-record lows included -22°F (on January 4) in **Randolph, UT**; -16°F



(on January 3) in **Winnemucca, NV**; -15°F (on January 3) in **Pocatello, ID**; and -13°F (on January 2) in **Burns, OR**. Meanwhile, high temperatures above 80°F were confined to **southern sections of Texas and Florida**. On December 30, however, the nation's highest temperature was just 73°F in **Harlingen, TX**.

Suddenly mild weather in **Alaska** boosted weekly temperatures more than 20°F above normal at some interior and western locations. Following 9 consecutive days (December 15-23) with lows of -40°F or below, **Fairbanks** warmed to 34°F on December 31 and January 1. On the same dates, **McGrath** posted consecutive daily-record highs (45 and 47°F, respectively). Meanwhile, parts of **southern Alaska** received significant precipitation. **Juneau's** weekly precipitation total of 1.57 inches (2.9 inches of snow) was aided by a daily-record rainfall of 0.81 inch on December 30. Weekly precipitation reached 3.30 inches on **Annette Island** and 3.09 inches in **Yakutat**. Farther south, wetter and increasingly windy conditions prevailed in **Hawaii**. On **Oahu, Honolulu** followed its driest December on record (0.01 inch, or 3.23 inches below normal), with rainfall totaling 0.14 inch from January 1-5. **Kahului, Maui**, also received more rain from January 1-5 (0.81 inch) than during all of December (0.24 inch, or 3.11 inches below normal). Twenty-four hour rainfall totals topped 4 inches in a few spots, including **Kilohana, Kauai**, where 4.62 inches fell on December 31 – January 1. At week's end, trade wind gusts to 44 mph were clocked on January 5 at the **Molokai Airport**, along with **Honolulu and Kahului**.



National Weather Data for Selected Cities

Weather Data for the Week Ending January 5, 2013

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	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	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OF MORE	.50 INCH OF MORE	
AL BIRMINGHAM	50	32	55	26	41	-2	1.48	0.33	1.40	7.97	150	1.48	178	89	49	0	4	2	1	
HUNTSVILLE	47	31	52	27	39	-1	1.58	0.33	1.52	8.33	128	1.58	176	90	63	0	5	2	1	
MOBILE	57	38	76	27	48	-2	0.50	-0.64	0.33	3.98	73	0.50	61	78	62	0	1	3	0	
AK MONTGOMERY	56	35	69	26	45	-2	0.47	-0.57	0.30	7.13	125	0.47	64	85	50	0	3	4	0	
ANCHORAGE	38	28	43	25	33	17	0.00	-0.18	0.00	1.72	147	0.00	0	80	67	0	7	0	0	
BARROW	-1	-9	9	-17	-5	8	0.00	0.00	0.00	0.09	75	0.00	0	86	75	0	7	0	0	
FAIRBANKS	22	0	41	-9	11	20	0.00	-0.14	0.00	0.00	0	0.00	0	85	77	0	7	0	0	
JUNEAU	37	32	43	28	35	8	1.67	0.50	0.83	5.58	89	0.64	77	96	91	0	4	6	1	
KODIAK	39	33	42	28	36	6	2.37	0.49	0.68	6.97	78	1.32	99	96	84	0	3	7	2	
NOME	32	22	34	11	27	21	0.12	-0.07	0.08	0.64	56	0.04	29	85	66	0	7	4	0	
AZ FLAGSTAFF	33	7	49	-1	20	-9	0.00	-0.43	0.00	***	***	0.00	0	79	43	0	7	0	0	
PHOENIX	60	39	63	35	50	-3	0.01	-0.20	0.01	0.87	81	0.00	0	55	36	0	0	1	0	
TUCSON	58	34	63	30	46	-5	0.25	0.00	0.17	1.22	101	0.00	0	73	44	0	3	2	0	
YUMA	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	0	0	0	0	
AR FORT SMITH	44	27	51	19	35	-3	0.59	0.05	0.58	2.76	73	0.00	0	89	54	0	5	2	1	
LITTLE ROCK	44	29	50	20	36	-4	0.42	-0.42	0.42	5.54	105	0.00	0	92	59	0	5	1	0	
CA BAKERSFIELD	56	32	65	28	44	-2	0.00	-0.22	0.00	0.65	71	0.00	0	84	70	0	4	0	0	
FRESNO	56	34	62	31	45	1	0.00	-0.40	0.00	1.71	105	0.00	0	87	74	0	2	0	0	
LOS ANGELES	62	43	70	41	53	-4	0.00	-0.53	0.00	2.82	129	0.00	0	65	33	0	0	0	0	
REDDING	53	28	58	24	41	-4	0.00	-1.31	0.00	10.02	179	0.00	0	80	59	0	6	0	0	
SACRAMENTO	53	30	57	26	42	-3	0.30	-0.40	0.30	5.28	178	0.30	59	92	49	0	7	1	0	
SAN DIEGO	62	43	67	41	53	-4	0.10	-0.32	0.10	2.23	138	0.00	0	67	45	0	0	1	0	
SAN FRANCISCO	54	39	55	37	47	-1	0.08	-0.75	0.08	6.29	180	0.08	13	80	65	0	0	1	0	
STOCKTON	53	29	56	27	41	-3	0.34	-0.16	0.33	4.32	198	0.34	94	97	85	0	7	2	0	
CO ALAMOSA	14	-24	22	-34	-5	-19	0.21	0.15	0.20	0.83	224	0.01	25	85	73	0	7	2	0	
CO SPRINGS	37	11	50	5	24	-4	0.00	-0.08	0.00	0.27	56	0.00	0	66	25	0	7	0	0	
DENVER INTL	34	12	47	5	23	-5	0.00	-0.07	0.00	0.27	73	0.00	0	67	34	0	7	0	0	
GRAND JUNCTION	20	-4	23	-8	8	-17	0.07	-0.07	0.06	1.08	174	0.01	10	90	75	0	7	2	0	
PUEBLO	40	6	51	1	23	-6	0.01	-0.07	0.01	0.26	58	0.01	17	71	41	0	7	1	0	
CT BRIDGEPORT	37	24	45	15	30	-1	0.22	-0.61	0.22	3.91	96	0.00	0	68	50	0	7	1	0	
HARTFORD	34	16	39	0	25	-2	0.00	-0.84	0.00	4.14	99	0.00	0	67	48	0	7	0	0	
DC WASHINGTON	43	31	46	27	37	1	0.01	-0.72	0.01	3.07	86	0.01	2	65	40	0	6	1	0	
DE WILMINGTON	39	28	42	23	33	1	0.00	-0.78	0.00	3.93	99	0.00	0	70	47	0	6	0	0	
FL DAYTONA BEACH	69	49	79	38	59	0	0.16	-0.51	0.10	2.19	69	0.16	33	96	65	0	0	2	0	
JACKSONVILLE	64	42	76	32	53	0	0.28	-0.44	0.17	2.60	82	0.28	54	95	64	0	2	2	0	
KEY WEST	77	68	82	59	73	2	0.00	-0.52	0.00	0.68	27	0.00	0	90	70	0	0	0	0	
MIAMI	79	65	83	53	72	4	0.01	-0.39	0.01	0.41	17	0.01	4	86	59	0	0	1	0	
ORLANDO	72	51	81	39	62	1	0.04	-0.47	0.03	1.34	50	0.04	11	93	69	0	0	2	0	
PENSACOLA	59	42	74	31	51	-1	0.35	-0.72	0.34	2.46	52	0.35	45	80	57	0	1	2	0	
TALLAHASSEE	63	41	73	30	52	0	0.34	-0.79	0.29	3.63	74	0.33	40	87	61	0	2	4	0	
TAMPA	71	53	77	40	62	0	0.37	-0.10	0.28	2.61	99	0.37	112	91	60	0	0	2	0	
GA WEST PALM BEACH	78	62	82	49	70	3	0.00	-0.69	0.00	1.13	31	0.00	0	84	63	0	0	0	0	
ATHENS	53	32	57	24	42	0	1.07	0.11	0.96	6.94	158	1.07	155	89	53	0	4	3	1	
ATLANTA	50	34	53	30	42	-1	1.06	0.09	1.04	6.99	155	1.06	151	79	53	0	4	3	1	
AUGUSTA	58	34	69	22	46	1	0.09	-0.82	0.05	4.77	126	0.09	14	91	53	0	4	3	0	
COLUMBUS	58	37	70	28	47	0	0.43	-0.60	0.27	5.67	110	0.43	58	84	41	0	1	2	0	
MACON	58	33	70	26	46	1	0.20	-0.82	0.10	5.07	109	0.20	27	95	45	0	5	3	0	
SAVANNAH	60	39	70	27	50	1	0.20	-0.62	0.19	2.12	62	0.20	34	89	59	0	2	2	0	
HI HILO	79	65	81	62	72	0	2.33	0.34	1.21	13.62	114	1.60	112	85	82	0	0	4	1	
HONOLULU	78	64	83	62	71	-3	0.14	-0.50	0.09	0.14	4	0.14	31	92	80	0	0	2	0	
KAHULUI	79	66	82	60	73	1	0.81	-0.01	0.43	1.02	28	0.81	137	90	82	0	0	4	0	
LIHUE	77	68	80	64	72	0	0.38	-0.71	0.16	4.74	85	0.37	47	85	75	0	0	6	0	
ID BOISE	24	9	26	3	16	-13	0.02	-0.28	0.02	1.12	70	0.00	0	84	73	0	7	1	0	
LEWISTON	35	26	41	19	30	-3	0.00	-0.22	0.00	0.85	70	0.00	0	77	61	0	7	0	0	
POCATELLO	17	-6	23	-15	6	-18	0.08	-0.17	0.08	1.35	105	0.00	0	89	79	0	7	1	0	
IL CHICAGO/O'HARE	32	15	39	10	24	1	0.03	-0.38	0.03	2.83	104	0.03	10	77	60	0	7	1	0	
MOLINE	32	10	37	5	21	-1	0.04	-0.35	0.04	2.62	106	0.04	14	81	66	0	7	1	0	
PEORIA	32	12	37	6	22	-1	0.14	-0.23	0.11	2.03	76	0.03	12	87	62	0	7	2	0	
ROCKFORD	31	11	36	5	21	1	0.03	-0.30	0.03	2.52	110	0.03	13	83	67	0	7	1	0	
SPRINGFIELD	34	13	42	1	23	-3	0.26	-0.17	0.24	2.97	105	0.02	7	91	63	0	7	2	0	
IN EVANSVILLE	35	18	39	12	27	-5	0.16	-0.47	0.15	3.48	87	0.01	2	85	66	0	7	2	0	
FORT WAYNE	28	13	34	2	21	-4	0.09	-0.41	0.08	2.23	71	0.01	3	91	72	0	7	2	0	
INDIANAPOLIS	30	15	38	5	23	-4	0.07	-0.50	0.05	2.66	78	0.02	5	91	66	0	7	3	0	
SOUTH BEND	31	16	36	10	23	-1	0.01	-0.55	0.01	3.17	91	0.01	3	77	68	0	7	1	0	
IA BURLINGTON	33	13	37	8	23	0	0.03	-0.29	0.03	0.87	37	0.03	13	86	61	0	7	1	0	
CEDAR RAPIDS	27	8	36	0	18	-1	0.00	-0.22	0.00	0.59	36	0.00	0	91	73	0	7	0	0	
DES MOINES	32	10	40	1	21	0	0.00	-0.22	0.00	1.74	117	0.00	0	79	66	0	7	0	0	
DUBUQUE	27	5	34	-1	16	-2	0.01	-0.27	0.01	2.28	121	0.01	5	83						

Weather Data for the Week Ending January 5, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	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 JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
WICHITA	40	17	49	10	29	-1	0.19	-0.05	0.16	0.37	24	0.03	18	88	64	0	7	2	0	
KY JACKSON	38	25	42	21	31	-3	0.28	-0.54	0.24	6.59	136	0.24	41	90	57	0	7	2	0	
LEXINGTON	36	23	44	19	30	-3	0.28	-0.54	0.14	6.61	143	0.14	24	89	71	0	7	2	0	
LOUISVILLE	39	25	46	20	32	-2	0.20	-0.54	0.17	7.22	171	0.03	6	86	57	0	7	2	0	
PADUCAH	39	22	43	17	31	-2	0.37	-0.39	0.37	3.92	80	0.00	0	93	59	0	6	1	0	
LA BATON ROUGE	56	38	66	28	47	-3	1.54	0.27	1.46	9.64	156	1.54	169	90	54	0	1	3	1	
LAKE CHARLES	55	42	67	31	48	-3	5.30	4.12	3.97	10.13	186	5.30	624	85	62	0	1	3	2	
NEW ORLEANS	57	43	78	35	50	-3	0.53	-0.57	0.25	5.71	97	0.53	66	76	61	0	0	3	0	
SHREVEPORT	49	35	54	23	42	-4	1.58	0.59	1.36	5.95	113	0.22	31	92	62	0	2	4	1	
ME CARIBOU	17	-1	24	-8	8	-3	0.79	0.07	0.67	3.78	102	0.74	145	83	60	0	7	4	1	
PORTLAND	30	9	36	0	20	-3	0.07	-0.87	0.07	8.29	169	0.00	0	73	45	0	7	1	0	
MD BALTIMORE	41	27	44	22	34	1	0.00	-0.79	0.00	3.11	79	0.00	0	67	45	0	6	0	0	
MA BOSTON	34	18	42	7	26	-5	0.00	-0.85	0.00	5.90	136	0.00	0	66	44	0	7	0	0	
WORCESTER	29	14	37	2	22	-3	0.01	-0.90	0.01	5.07	114	0.00	0	74	50	0	7	1	0	
MI ALPENA	29	16	35	11	23	3	0.01	-0.40	0.01	2.55	120	0.01	3	84	64	0	7	1	0	
GRAND RAPIDS	32	21	37	17	26	2	0.06	-0.40	0.03	2.66	88	0.06	18	81	67	0	7	2	0	
HOUGHTON LAKE	26	18	33	12	22	3	0.02	-0.34	0.02	2.44	121	0.02	8	89	79	0	7	1	0	
LANSING	30	19	35	16	25	2	0.02	-0.33	0.02	1.80	74	0.02	8	79	66	0	7	1	0	
MUSKEGON	34	23	39	20	29	4	0.12	-0.40	0.11	3.03	101	0.12	32	76	70	0	7	2	0	
TRAVERSE CITY	30	21	37	18	25	3	0.00	-0.64	0.00	2.54	81	0.00	0	84	67	0	7	0	0	
MN DULUTH	22	4	34	-9	13	4	0.04	-0.14	0.01	1.50	140	0.04	31	83	68	0	7	2	0	
INT'L FALLS	18	-5	26	-18	7	4	0.13	-0.01	0.07	1.19	149	0.06	60	88	77	0	7	2	0	
MINNEAPOLIS	23	7	30	-5	15	1	0.01	-0.19	0.01	1.10	96	0.01	7	87	73	0	7	1	0	
ROCHESTER	23	2	27	-10	13	1	0.03	-0.14	0.01	7.11	618	0.02	15	81	70	0	7	3	0	
ST. CLOUD	20	-1	29	-18	10	1	0.05	-0.09	0.05	1.34	170	0.05	50	88	66	0	7	1	0	
MS JACKSON	51	32	60	22	42	-3	2.02	0.78	1.87	10.74	172	2.02	227	88	59	0	3	2	1	
MERIDIAN	51	32	58	24	42	-4	1.85	0.60	1.73	11.03	178	1.85	206	95	60	0	5	3	1	
TUPELO	46	30	49	21	38	-3	1.25	-0.03	1.15	8.27	118	1.17	129	86	61	0	5	3	1	
MO COLUMBIA	36	17	44	6	27	-1	0.34	-0.03	0.32	1.67	61	0.02	8	87	54	0	7	2	0	
KANSAS CITY	36	17	44	9	27	0	0.11	-0.17	0.11	1.34	73	0.00	0	79	55	0	7	1	0	
SAINT LOUIS	39	23	46	15	31	1	0.22	-0.26	0.22	2.01	63	0.00	0	74	54	0	7	1	0	
SPRINGFIELD	40	20	45	14	30	-2	0.16	-0.29	0.16	1.16	33	0.00	0	89	66	0	7	1	0	
MT BILLINGS	33	17	38	9	25	1	0.01	-0.16	0.01	0.29	37	0.01	8	64	48	0	7	1	0	
BUTTE	21	-4	26	-10	8	-9	0.00	-0.11	0.00	0.22	36	0.00	0	87	62	0	7	0	0	
GLASGOW	24	2	29	-4	13	2	0.08	0.00	0.06	***	***	0.07	117	88	79	0	7	3	0	
GREAT FALLS	33	17	41	10	25	3	0.04	-0.13	0.04	0.57	72	0.00	0	73	51	0	7	1	0	
HAVRE	35	10	48	5	22	7	0.18	0.07	0.18	0.55	93	0.18	225	83	58	0	7	1	0	
KALISPELL	27	16	33	5	21	0	0.04	-0.29	0.03	1.09	58	0.03	13	95	72	0	7	2	0	
MISSOULA	24	11	28	4	18	-4	0.00	-0.25	0.00	1.25	94	0.00	0	87	80	0	7	0	0	
NE GRAND ISLAND	31	12	41	6	22	-1	0.00	-0.11	0.00	1.70	230	0.00	0	84	75	0	7	0	0	
LINCOLN	31	11	42	4	21	-2	0.03	-0.14	0.03	1.50	153	0.00	0	84	72	0	7	1	0	
NORFOLK	30	6	37	-2	18	-3	0.00	-0.11	0.00	0.89	122	0.00	0	84	69	0	7	0	0	
NORTH PLATTE	32	7	42	3	20	-3	0.01	-0.07	0.01	0.24	52	0.00	0	87	60	0	7	1	0	
OMAHA	32	11	44	1	21	-1	0.00	-0.15	0.00	1.59	154	0.00	0	83	69	0	7	0	0	
SCOTTSBLUFF	36	10	44	5	23	-1	0.02	-0.09	0.02	0.22	34	0.02	25	84	61	0	7	1	0	
VALENTINE	32	9	42	1	21	0	0.00	-0.06	0.00	0.31	84	0.00	0	82	64	0	7	0	0	
NV ELY	26	-7	37	-14	10	-14	0.01	-0.13	0.01	1.71	285	0.00	0	83	69	0	7	1	0	
LAS VEGAS	50	32	53	29	41	-5	0.00	-0.10	0.00	0.49	102	0.00	0	44	27	0	5	0	0	
RENO	31	13	33	10	22	-10	0.07	-0.12	0.07	1.70	167	0.00	0	81	73	0	7	1	0	
WINNEMUCCA	20	-11	25	-16	5	-24	0.10	-0.09	0.08	1.58	166	0.01	7	85	75	0	7	3	0	
NH CONCORD	29	6	36	-6	17	-4	0.02	-0.63	0.02	4.26	124	0.00	0	82	48	0	7	1	0	
NJ NEWARK	38	27	44	24	33	1	0.00	-0.85	0.00	5.06	121	0.00	0	63	46	0	7	0	0	
NM ALBUQUERQUE	38	17	42	11	28	-7	0.03	-0.08	0.03	0.13	23	0.00	0	68	34	0	7	1	0	
NY ALBANY	31	11	37	-5	21	-3	0.01	-0.54	0.01	3.98	130	0.00	0	78	54	0	7	1	0	
BINGHAMTON	28	16	32	8	22	-1	0.09	-0.47	0.05	5.18	151	0.03	8	80	65	0	7	4	0	
BUFFALO	32	22	36	17	27	1	0.04	-0.71	0.04	3.19	74	0.04	8	79	66	0	7	1	0	
ROCHESTER	32	19	35	7	25	0	0.06	-0.46	0.03	3.44	111	0.06	16	76	66	0	7	3	0	
SYRACUSE	32	18	36	0	25	1	0.10	-0.48	0.04	7.45	211	0.06	15	76	56	0	7	4	0	
NC ASHEVILLE	44	29	51	24	37	1	0.32	-0.50	0.31	4.71	118	0.32	54	82	55	0	5	2	0	
CHARLOTTE	50	31	53	22	40	-2	0.49	-0.35	0.39	4.32	114	0.49	82	88	45	0	5	2	0	
GREENSBORO	47	30	49	23	38	0	0.42	-0.33	0.28	3.06	85	0.42	78	79	41	0	5	2	0	
HATTERAS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	0	0	0	0	0
RALEIGH	49	31	53	25	40	0	0.47	-0.35	0.24	3.49	96	0.47	80	81	51	0	5	2	0	
WILMINGTON	52	34	56	25	43	-3	0.23	-0.72	0.12	4.82	108	0.23	33	92	52	0	4	3	0	
ND BISMARCK	25	2	30	-6	14	3	0.05	-0.03	0.03	0.78	156	0.04	67	82	71	0	7	3	0	
DICKINSON	26	11	29	1	18	4	0.01	-0.05	0.01	0.27	71	0.01	25	86	67	0	7	1	0	
FARGO	21	-1	29	-12	10	2	0.00	-0.15	0.00	0.36	53	0.00	0	83	69	0	7	0	0	
GRAND FORKS	21	-2	31	-13	10	4	0.01	-0.13	0.01	0.34	52	0.01	10	88	68	0	7	1	0	
JAMESTOWN	23	0	29	-11	12	3	0.00	-0.11	0.00	0.10	19	0.00	0	87	67	0	7	0	0	
WILLISTON	23	7	29	3	15	7	0.08	-0.03	0.05	0.57	88	0.07	88	92	83	0	7	3	0	
OH AKRON-CANTON	32	15	46	5	24	-2	0.18	-0.40	0.14	4.18	123	0.03	7	86	70	0	7	3	0	
CINCINNATI	34	20	40	12	27	-3	0.03	-0.65	0.03	5.69	151	0.00	0	86	63	0	7	1	0	
CLEVELAND	30	17	35	6	23	-4	0.18	-0.38	0.15	3.94	111	0.00	0	82	65	0	7	2	0	
COLUMBUS	31	17	37	9	24	-5	0.21	-0.36	0.17	5.75	173	0.04	10	88	67	0	7	2	0	
DAYTON	30	17	38	9	24	-3	0.03	-0.58	0.02	3.76	107	0.01	2	87	64	0	7	2	0	
MANSFIELD	29	14	34	6	21	-4	0.07	-0.54	0.07	3.59	97	0.00	0	92	65	0	7	1	0	

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending January 5, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS					
	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 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP	
																		01 INCH OR MORE	50 INCH OR MORE	01 INCH OR MORE	50 INCH OR MORE
OK TOLEDO	29	14	34	7	22	-3	0.02	-0.44	0.02	2.15	73	0.00	0	79	66	0	7	1	0	0	
OK YOUNGSTOWN	29	16	33	4	23	-3	0.34	-0.20	0.19	5.20	156	0.02	5	82	66	0	7	3	0	0	
OK OKLAHOMA CITY	43	26	50	20	34	-3	0.35	-0.01	0.35	0.68	32	0.00	0	86	57	0	6	1	0	0	
OR TULSA	43	22	50	17	33	-3	0.71	0.32	0.71	0.87	32	0.00	0	87	68	0	6	1	1	1	
OR ASTORIA	46	35	51	32	41	-1	0.48	-1.67	0.24	15.03	126	0.44	29	84	74	0	2	4	0	0	
OR BURNS	17	-7	20	-13	5	-19	0.00	-0.28	0.00	1.72	115	0.00	0	88	81	0	7	0	0	0	
OR EUGENE	42	28	53	20	35	-4	0.00	-1.68	0.00	7.47	79	0.00	0	97	89	0	4	0	0	0	
OR MEDFORD	45	26	49	20	35	-3	0.07	-0.48	0.06	5.78	176	0.06	15	94	70	0	7	2	0	0	
OR PENDLETON	29	20	32	13	25	-8	0.00	-0.30	0.00	1.19	70	0.00	0	95	82	0	7	0	0	0	
OR PORTLAND	40	31	44	23	35	-4	0.02	-1.13	0.02	7.62	117	0.02	2	85	64	0	5	1	0	0	
OR SALEM	42	27	49	22	35	-5	0.01	-1.28	0.01	7.56	102	0.01	1	94	80	0	5	1	0	0	
PA ALLENTOWN	36	24	40	18	30	2	0.00	-0.76	0.00	4.34	110	0.00	0	68	55	0	7	0	0	0	
PA ERIE	32	24	35	20	28	-1	0.46	-0.18	0.31	4.86	116	0.33	73	75	65	0	7	4	0	0	
PA MIDDLETOWN	36	26	39	20	31	1	0.00	-0.61	0.00	3.80	104	0.00	0	72	53	0	7	0	0	0	
PA PHILADELPHIA	39	29	42	25	34	1	0.00	-0.78	0.00	4.40	114	0.00	0	63	43	0	7	0	0	0	
PA PITTSBURGH	31	19	35	6	25	-4	0.12	-0.46	0.06	5.03	154	0.06	15	82	59	0	7	2	0	0	
PA WILKES-BARRE	32	20	37	14	26	-1	0.03	-0.47	0.02	3.99	137	0.03	8	76	56	0	7	2	0	0	
PA WILLIAMSPORT	34	22	37	9	28	1	0.00	-0.58	0.00	5.58	167	0.00	0	73	56	0	7	0	0	0	
RI PROVIDENCE	34	18	42	9	26	-4	0.00	-0.95	0.00	5.59	116	0.00	0	69	48	0	7	0	0	0	
SC BEAUFORT	58	39	64	28	49	0	0.25	-0.62	0.23	2.99	80	0.25	40	94	55	0	2	2	0	0	
SC CHARLESTON	59	36	68	26	48	0	0.13	-0.74	0.13	3.70	96	0.13	21	93	53	0	4	1	0	0	
SC COLUMBIA	55	35	59	26	45	1	0.29	-0.67	0.12	3.83	94	0.29	42	90	53	0	4	3	0	0	
SC GREENVILLE	51	34	53	26	42	1	0.59	-0.36	0.51	6.42	141	0.59	86	85	44	0	4	3	1	1	
SD ABERDEEN	24	2	33	-3	13	2	0.00	-0.11	0.00	0.76	165	0.00	0	82	76	0	7	0	0	0	
SD HURON	25	6	33	-1	16	1	0.01	-0.07	0.01	1.17	260	0.00	0	89	73	0	7	1	0	0	
SD RAPID CITY	33	10	41	2	21	-1	0.00	-0.08	0.00	0.22	48	0.00	0	81	58	0	7	0	0	0	
SD SIOUX FALLS	26	2	31	-6	14	0	0.00	-0.09	0.00	1.30	224	0.00	0	87	75	0	7	0	0	0	
TN BRISTOL	41	25	45	18	33	-1	0.55	-0.20	0.51	4.56	116	0.55	102	91	58	0	5	3	1	1	
TN CHATTANOOGA	48	31	49	26	39	-1	0.92	-0.21	0.88	6.51	116	0.92	114	90	58	0	5	2	1	1	
TN KNOXVILLE	44	28	47	22	36	-2	1.32	0.30	1.19	7.59	145	1.31	179	88	56	0	5	4	1	1	
TN MEMPHIS	44	28	49	21	36	-4	0.73	-0.26	0.43	4.02	63	0.30	43	89	54	0	6	2	0	0	
TN NASHVILLE	43	25	47	21	34	-3	0.40	-0.52	0.35	5.07	98	0.35	54	89	52	0	6	2	0	0	
TX ABILENE	50	28	64	18	39	-4	0.09	-0.17	0.06	0.10	7	0.06	33	80	57	0	6	2	0	0	
TX AMARILLO	39	21	49	17	30	-5	0.30	0.13	0.21	0.58	79	0.01	8	79	56	0	7	3	0	0	
TX AUSTIN	51	33	60	21	42	-8	0.73	0.24	0.35	1.22	44	0.38	109	86	68	0	4	4	0	0	
TX BEAUMONT	55	42	68	33	48	-4	3.19	1.89	2.48	9.78	158	3.08	331	91	64	0	0	7	2	2	
TX BROWNSVILLE	61	48	81	43	55	-4	0.67	0.45	0.57	1.00	79	0.67	419	88	72	0	0	4	1	1	
TX CORPUS CHRISTI	61	48	80	42	54	-2	0.28	-0.08	0.18	0.32	16	0.27	104	76	64	0	0	4	0	0	
TX DEL RIO	55	41	66	37	48	-3	0.08	-0.03	0.04	0.11	13	0.07	88	74	54	0	0	3	0	0	
TX EL PASO	43	30	49	22	36	-8	0.30	0.17	0.27	0.39	45	0.30	333	75	47	0	5	2	0	0	
TX FORT WORTH	48	34	54	27	41	-3	0.20	-0.32	0.19	1.97	67	0.01	3	82	52	0	3	2	0	0	
TX GALVESTON	55	45	69	39	50	-6	4.80	3.95	4.01	7.54	182	4.80	774	93	76	0	0	4	2	2	
TX HOUSTON	55	41	67	30	48	-4	1.54	0.71	0.84	3.86	90	0.97	164	81	68	0	1	3	2	2	
TX LUBBOCK	44	26	55	22	35	-3	0.51	0.40	0.48	0.69	93	0.00	0	85	60	0	7	2	0	0	
TX MIDLAND	47	29	60	22	38	-5	0.14	0.02	0.08	0.14	19	0.05	63	84	59	0	5	4	0	0	
TX SAN ANGELO	49	32	65	22	41	-4	0.54	0.37	0.31	0.57	54	0.39	325	83	58	0	4	4	0	0	
TX SAN ANTONIO	53	39	61	30	46	-4	0.57	0.18	0.24	0.69	31	0.31	111	91	63	0	1	4	0	0	
TX VICTORIA	56	43	71	33	50	-3	0.62	0.07	0.27	1.94	68	0.46	118	82	70	0	0	4	0	0	
TX WACO	50	31	57	21	40	-6	0.21	-0.28	0.11	0.91	29	0.10	29	90	66	0	4	4	0	0	
TX WICHITA FALLS	45	28	53	23	36	-4	0.17	-0.13	0.17	0.66	35	0.00	0	88	66	0	6	1	0	0	
UT SALT LAKE CITY	24	11	29	6	17	-12	0.01	-0.27	0.01	1.47	103	0.00	0	88	68	0	7	1	0	0	
VT BURLINGTON	27	5	36	-10	16	-4	0.19	-0.27	0.11	3.41	134	0.07	21	78	59	0	7	4	0	0	
VA LYNCHBURG	45	26	50	21	36	1	0.33	-0.43	0.25	2.99	79	0.33	60	73	38	0	6	3	0	0	
VA NORFOLK	45	32	49	25	39	-2	0.38	-0.44	0.19	4.87	135	0.38	64	82	46	0	4	2	0	0	
VA RICHMOND	46	28	50	22	37	0	0.26	-0.53	0.19	3.09	84	0.26	46	79	45	0	5	2	0	0	
VA ROANOKE	46	32	52	28	39	3	0.02	-0.63	0.02	2.61	78	0.02	4	61	41	0	4	1	0	0	
WA WASH/DULLES	41	25	45	21	33	1	0.00	-0.68	0.00	2.86	80	0.00	0	69	47	0	7	0	0	0	
WA OLYMPIA	41	29	49	20	35	-2	0.29	-1.35	0.12	9.89	109	0.17	15	97	91	0	5	4	0	0	
WA QUILLAYUTE	46	33	49	25	40	0	1.20	-1.83	0.41	18.58	111	0.97	45	97	91	0	3	4	0	0	
WA SEATTLE-TACOMA	43	32	50	27	38	-2	0.32	-0.81	0.17	7.16	111	0.32	40	87	68	0	4	3	0	0	
WA SPOKANE	26	13	33	6	20	-6	0.01	-0.41	0.01	2.86	112	0.01	3	95	82	0	7	1	0	0	
WA YAKIMA	31	23	34	12	27	-1	0.09	-0.19	0.09	2.25	142	0.09	45	80	71	0	7	1	0	0	
WV BECKLEY	33	20	42	15	27	-4	0.18	-0.52	0.15	3.35	93	0.15	30	85	66	0	7	2	0	0	
WV CHARLESTON	37	24	42	20	31	-3	0.19	-0.50	0.15	4.83	127	0.16	33	86	58	0	7	3	0	0	
WV ELKINS	33	16	40	5	25	-4	0.14	-0.60	0.08	4.28	108	0.10	19	87	57	0	7	3	0	0	
WV HUNTINGTON	38	24	43	21	31	-2	0.15	-0.57	0.12	3.48	90	0.12	24	87	57	0	7	2	0	0	
WI EAU CLAIRE	21	2	28	-10	12	0	0.00	-0.19	0.00	1.50	128	0.00	0	89	64	0	7	0	0	0	
WI GREEN BAY	25	6	31	-6	15	-2	0.00	-0.25	0.00	1.38	87	0.00	0	80	66	0	7	0	0	0	
WI LA CROSSE	24	3	33	-10	14	-3	0.00	-0.21	0.00	1.53	110	0.00	0	86	61	0	7	0	0	0	
WI MADISON	28	7	36	-7	17	-1	0.00	-0.26	0.00	2.61	141	0.00	0	84	68	0	7	0	0	0	
WI MILWAUKEE	29	12	36	7	21	-1	0.05	-0.34	0.05	3.95	158	0.05	18	78	66	0	7	1	0	0	
WY CASPER	26	1	30	-11	13	-9	0.00	-0.11	0.00	0.40	57	0.00	0	63	52	0	7	0	0	0	
WY CHEYENNE	31	11	46	2	21	-5	0.00	-0.08	0.00	0.50	96	0.00	0	60	41	0	7	0	0	0	
WY LANDER	18	-3	30	-10	8	-12	0.00	-0.11	0.00	0.40	58	0.00	0	84	56	0	7	0	0	0	
WY SHERIDAN	34																				

December Weather Summary

Summary provided by USDA/WAOB

Highlights: Despite occasional December precipitation across the nation's mid-section, hard red winter wheat conditions remained mostly steady or declined due to poor crop establishment and acute soil moisture shortages. In addition, drought intensified across southern portions of the Plains, especially from southern Texas into eastern Kansas. By December 30, the portion of the Plains' wheat rated in very poor to poor condition included 61 percent in Oklahoma, 49 percent in Nebraska, and 31 percent in Kansas. However, enough snow fell across the northern and central Plains to provide some degree of insulation from temperatures that locally and periodically fell to -10°F or lower.

In contrast, significant precipitation fell in much of the soft red winter wheat belt, particularly across the Ohio Valley. As a result, most of the wheat continued to thrive across the Mid-South and lower Midwest. By month's end, 70 percent of the Illinois wheat crop was rated good to excellent. In both the Ohio Valley and the upper Midwest, enough of December's precipitation fell in the frozen form to establish a substantial snow cover.

Meanwhile, widespread precipitation also fell in much of the East, although rain was spotty across Florida. Some of the heaviest precipitation, relative to normal, fell in the Northeast and from the central Gulf Coast into the southern Appalachians.

Elsewhere, much of the West experienced unsettled weather during December. Precipitation was especially heavy from northern California to the Intermountain West. For example, the average water content of the high-elevation Sierra Nevada snow pack increased by 10 inches during the month, reaching 14 inches (137 percent of normal) by the end of December.

The nation's winter agricultural regions escaped significant freezes during December, although there were several chilly mornings—particularly from December 19-21—in California and the Desert Southwest. Florida's coldest morning, for the most part, occurred on December 23. Overall, December temperatures were highly variable in the West but mostly above normal across the eastern half of the nation. Western temperatures were influenced by snow cover, mainly in parts of the Intermountain region.

Figure 1

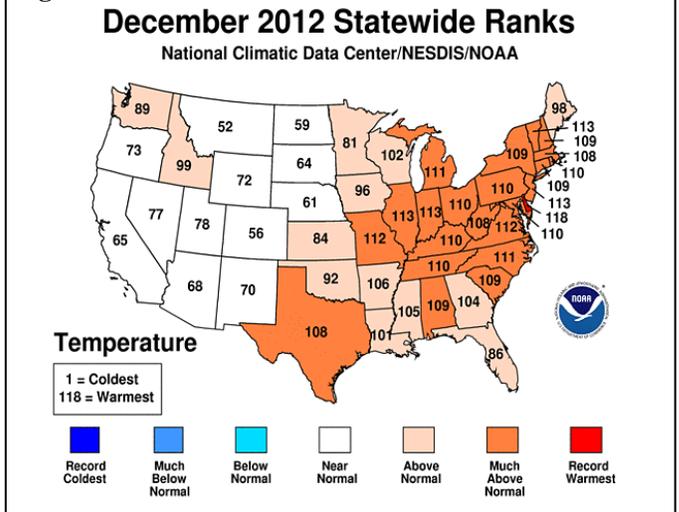
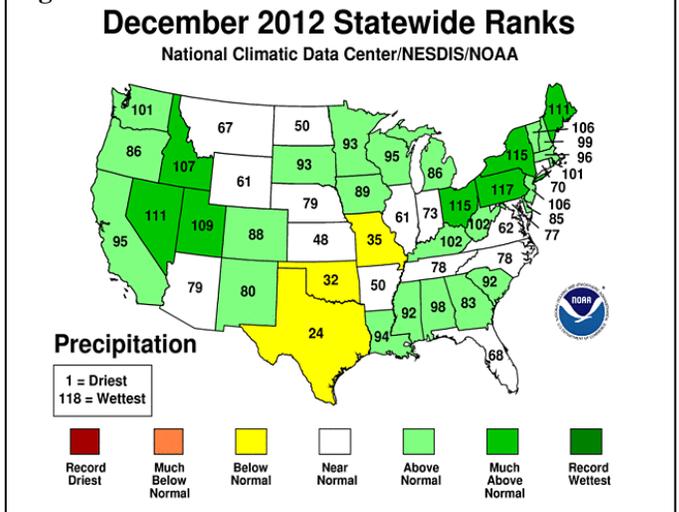


Figure 2



Historical Perspective: According to preliminary data provided by the National Climatic Data Center, the contiguous U.S. experienced its 10th-warmest, 20th-wettest December on record. The nation's average temperature of 36.4°F was 3.4°F above the 1901-2000 mean, while the average precipitation of 2.74 inches was 123 percent of normal. Delaware noted its warmest December, while 19 other states in the eastern half of the U.S. registered a top-ten ranking for December warmth (figure 1). Meanwhile, state precipitation rankings ranged from the 24th-driest December in Texas to the second-wettest December in Pennsylvania (figure 2). Top-ten rankings for December wetness were also noted in Nevada, Utah, Ohio, New York, and Maine.

Summary: Multiple episodes of heavy precipitation hammered northern California and portions of the Pacific Northwest in late November and early December. At lower elevations of northern California, heavy rain caused some flash flooding and halted fieldwork, but provided much-needed moisture for rangeland, pastures, and winter grains. However, high-elevation snowfall was limited by the high freezing levels associated with the Pacific storms. By the time precipitation finally ended in northern California, late-November and early-December rainfall totals topped 20 inches in locations such as Honeydew (Humboldt County) and Brandy Creek (Shasta County). On December 2, daily-record rainfall totals in California included 1.23 inches in Stockton and 1.18 inches in Alturas. November 28 - December 5 multi-storm totals in those two locations reached 3.58 inches in Stockton and 1.89 inches in Alturas. During the same 8-day period, totals in northwestern California reached 9.80 inches in Crescent City and 9.27 inches in Ukiah. Farther inland, 1.82 inches of precipitation fell in Stanley, ID, during the first 5 days of the month, aided by daily-record totals on December 2 and 5 (0.89 and 0.47 inch, respectively). Later, heavy rain erupted in the Ohio Valley, while snow overspread northern portions of the Rockies and Plains. On December 7, Louisville, KY, netted a daily-record precipitation total of 1.80 inches. Farther west, Missoula, MT (7.7 inches on December 7), experienced its earliest 7-inch, calendar-day snowfall on record, previously set with a 9.5-inch total on December 16, 1955. Elsewhere in Montana, Great Falls (5.7 inches on December 8) received a daily-record snowfall.

In advance of the Pacific storminess, Lubbock, TX, posted three consecutive daily-record highs (78, 81, and 79°F) from November 29 - December 1. Elsewhere in Texas, Corpus Christi tallied consecutive daily-record highs (85 and 87°F, respectively) on November 30 - December 1. Other record-setting highs in Texas for December 1 included 86°F in Childress and 83°F in Dallas-Ft. Worth, Houston, San Angelo, Waco, and Wichita Falls. A few days later, record-setting warmth expanded across the South, East, and Midwest. On December 3, monthly record highs were established in locations such as Quincy, IL (74°F; previously, 71°F on December 9, 1940, and December 3, 1970); Rockford, IL (69°F; previously, 67°F on December 5, 2001); Muskegon, MI (66°F; previously, 64°F on December 2, 1982); and Madison, WI (65°F; previously, 64°F on December 5, 2001). In addition, monthly record highs were tied on December 3 in Kansas City, MO (74°F); Springfield, IL (74°F); Ottumwa, IA (71°F); and Traverse City, MI (64°F). Peoria, IL (70°F on December 3), reached the 70-degree mark in December for the first time since December 28, 1984. Farther south, highs soared to daily-record levels on December 2 in Texas locations such as Corpus Christi (87°F), Victoria (85°F), Houston (84°F), and Dallas-Ft. Worth (83°F). Highs reached 70°F on December 2 as far north as Kennebec, SD, where a daily-record high was tied. In Texas, warmth continued through December 4, when Brownsville (87°F) and Houston (83°F) posted daily-record highs. Meanwhile in the East, selected daily-record highs for December 4 included 74°F in Danville, VA, and 70°F in Syracuse, NY. Warmth also briefly shifted into the West, where Phoenix, AZ (82°F), collected a daily-record high. However, warmth quickly returned to the south-central U.S., where both Midland and San Angelo, TX, posted daily-record highs of 81°F on December 6. Two days later, on December 8, additional daily-record highs in Texas included 83°F in Houston and 85°F in both Corpus Christi and Victoria.

By December 9-10, the first significant snow storm of the season blanketed the upper Midwest. Storm-total snowfall ranged from 10 to 16 inches in several locations, including Eau Claire, WI (14.7 inches), and Minneapolis-St. Paul, MN (10.6 inches). Snow started earlier on the northern Plains, where December 7-10 amounts in South Dakota reached 10.8 inches in Aberdeen and 9.9 inches in Huron. The vast majority of the upper Midwestern snow fell on December 9, when daily-record totals included 12.5 inches in Eau Claire and 10.5 inches in Minneapolis-St. Paul. Meanwhile, heavy rain and locally severe thunderstorms swept

across the South. Record-setting rainfall amounts for December 9 reached 1.85 inches in College Station, TX; 1.83 inches in Hot Springs, AR; and 1.49 inches in Jackson, KY. The following day, record-setting totals for December 10 climbed to 3.56 inches in Gainesville, FL, and 2.65 inches in Vicksburg, MS. A few days later, a second round of rain overspread the lower Southeast, where Melbourne, FL (0.91 inch on December 12) received a daily-record amount. By mid-December, heavy precipitation developed in the Southwest. San Diego, CA (1.56 inches), collected a record-setting rainfall total for December 13. In Nevada, Las Vegas netted consecutive daily-record amounts on December 13-14, totaling 0.49 inch. On December 13, Las Vegas experienced its 25th day with thunder in 2012, just a day shy of its all-time record (26 days in 1938). Elsewhere, record-setting snowfall totals for December 14 included 3.0 inches in Alamosa, CO, and 2.8 inches in Ely, NV. Flagstaff, AZ, was buried by 20.3 inches of snow on December 14-15, including a daily-record total of 11.7 inches on the latter date. Toward week's end, beneficial precipitation, mostly rain, overspread the Plains and Midwest. Daily-record precipitation totals were established in locations such as Garden City, KS (0.53 inch on December 14), and Sioux City, IA (0.96 inch on December 15).

Warmth prevailed for a few more days across the lower Southeast, where record-setting highs for December 10 reached 86°F in Vero Beach FL, and 80°F in Mobile, AL. The following day, additional records in Florida included 86°F in West Palm Beach and 85°F in Miami. In contrast, cold air settled across the Rockies and Plains. Record-breaking lows for December 10 plunged to -24°F in Alamosa, CO, and -3°F in Santa Fe, NM. The next day, McAlester, OK (13°F), tallied a record-tying low for December 11. Cool conditions lingered through December 12, when Waco, TX (18°F), posted a daily-record low. A few days later, however, warmth returned to the Deep South. In Texas, daily-record highs for December 15 soared to 85°F in Brownsville and 83°F in Victoria. During the second half of the month, periodic freezes were noted in several winter agricultural regions, including California's San Joaquin Valley (on December 19-20) and portions of the Desert Southwest (on December 20-21). However, temperatures were not low enough to pose a significant threat to citrus or vegetables. Across the Intermountain West, daily-record lows for December 19 dipped to -18°F in Ely, NV, and -13°F in Challis, ID. On the same date, record-breaking lows in California included 30°F in Salinas and 32°F in San Rafael. Farther inland, Cedar City, UT (-10°F), collected a daily-record low for December 20. Meanwhile, another round of record-setting warmth arrived across the South. December 18 featured daily-record highs in Texas locations such as Laredo (89°F), Corpus Christi (87°F), Brownsville (85°F), and San Angelo (83°F). By December 19, record-setting highs included 89°F in McAllen, TX, and 78°F in Vicksburg, MS.

As the second half of December began, showers and thunderstorms swept across the South. Record-setting rainfall totals for December 16 reached 2.46 inches in Huntsville, AL, and 2.16 inches in Vicksburg, MS. Meanwhile, a new storm arrived in the Pacific Northwest on December 16, resulting in wind gusts to 84 mph on Cape Disappointment, WA, and 81 mph in Lincoln City, OR. Later, snow developed across portions of the northern Plains and much of the West. Record-breaking snowfall totals for December 18 included 11.0 inches in Ely, NV, and 3.6 inches in Sioux Falls, SD. Rangely, CO, received 8.5 inches of snow in a 24-hour period on December 18-19. On December 19-20, significant snow blanketed the central Plains and the upper Midwest. Des Moines, IA, netted 12.4 inches, setting daily snowfall records on both December 19 and 20 (5.6 and 6.8 inches, respectively). Other record-setting snowfall totals for December 19 reached 5.5 inches in Waterloo, IA, and 4.2 inches in Goodland, KS. The storm also brought drought-easing moisture and blizzard-inducing high winds; Des Moines reported a storm-total liquid equivalent of 1.18 inches but clocked a peak wind gust to 54 mph. Farther south, December 19 wind gusts to near 60 mph raised dust on the southern High Plains, where Clovis, NM, clocked a gust to 64 mph. On

December 20, Midwestern snowfall totals attained daily-record levels in locations such as Gaylord, MI (13.8 inches), and Madison, WI (13.3 inches). In Illinois, the season's first accumulating snowfall occurred on December 20 in Rockford (1.4 inches) and Chicago (0.2 inch). Both Rockford and Chicago experienced a record-high 290 days (March 5 - December 19) without measurable snow; previous records had been 287 days (in 1922) in Rockford and 280 days (in 1994) in Chicago. In addition, Chicago experienced its latest first measurable snowfall on record (previously, December 16, 1965). Milwaukee, WI, which received 2.16 inches of liquid and 2.8 inches of snow on December 20, reported its second-wettest December day on record behind only 2.24 inches on December 2, 1982. Later, Northeastern daily-record precipitation totals for December 21 included 1.44 inches in Allentown, PA, and 1.01 inches in Binghamton, NY. Farther west, another Pacific storm arrived on December 19, when Astoria, OR (2.71 inches), collected a daily-record rainfall and wind gusts reached 75 mph in Garibaldi, OR, and 67 mph on Cape Disappointment, WA. Very heavy snow blanketed the interior Northwest on December 19-20, when 24-hour totals in Washington reached 24.0 inches in Stehekin and 12.1 inches in Mazama. For Stehekin, it was the greatest 24-hour snowfall total in December since December 1-2, 1979, when 28.0 inches fell.

As the month drew to a close, an active weather pattern continued in the West, as well as the South, East, and lower Midwest. However, significant storminess bypassed the nation's mid-section, including the drought-stricken hard red winter wheat belt. A rapid-fire series of three storms delivered wintry precipitation from the Mid-South into the Northeast. The strongest winter storm, the middle of the three weather systems, resulted in significant travel disruptions from December 25-27. Of particular note were historic, Christmas Day snow accumulations across the Mid-South and a severe weather outbreak on the same date that spanned several dozen tornadoes from eastern Texas to Alabama. In the storm's wake, cold air made its strongest southward push on December 26, when sub-zero readings were common and a few readings below -10°F were noted as far south as the central High Plains. At the time of the coldest weather, the central High Plains' winter wheat crop had only a shallow snow cover for insulation. Wheat's protective snow cover was somewhat more substantial on the northern Plains. Late-month warmth was mostly confined to the Deep South, where Brownsville, TX (88°F on December 25) posted a daily-record high. Farther east, Vero Beach, FL (85°F), collected a record-setting high for December 29. In contrast, much of the nation was blanketed by cold air in the wake of a sprawling storm. In Kansas, Goodland achieved a record-setting low (-9°F) for December 25 late in the day, followed by another daily-record low (-10°F) on December 26. At the time, Goodland had a 4-inch snow depth, helping to insulate winter wheat. Elsewhere on the 26th, daily-record lows included -15°F in Alliance, NE, and 7°F in Borger, TX. Later, cold air intensified across the West, where South Lake Tahoe, CA, collected a daily-record low of -5°F on December 28.

Late-month storms maintained unsettled conditions across a broad swath of the nation. Record-setting snowfall totals for December 24 included 4.4 inches in Ely, NV, and 4.0 inches in Havre, MT. Elsewhere in Montana, Billings (3.4 inches) not only measured a record-setting total for Christmas Eve, but also experienced its first measurable snowfall on December 24 since 1996. The following day, a record-setting snow storm developed across the Mid-South. In Little Rock, AR, the December 25 total of 9.0 inches easily surpassed its Christmas Day record of 4.2 inches, established in 1926. With 10.3 inches on December 25-26, Little Rock also set a 24-hour snowfall record for December (previously, 9.8 inches on December 22, 1963). Snow also dusted the southern Plains, where record-breaking December 25 totals in Texas included 2.5 inches in Wichita Falls and 1.0 inch in Dalhart. Meanwhile, severe thunderstorms ripped across the Deep South, while wintry precipitation spread from the Ohio Valley into the Northeast. Preliminary reports indicated that there were more than 50 tornadoes on December 25

in the Gulf Coast States, including an EF-3 twister (estimated winds near 140 mph) with a 61-mile path length through five counties in southern Mississippi. A day later, daily-record snowfall totals for December 26 reached 8.5 inches in Rochester, NY; 7.7 inches in Evansville, IN; 7.0 inches in Dayton, OH; and 4.6 inches in Paducah, KY. Closer to the Atlantic Seaboard, record-setting precipitation totals for December 26 included 2.60 inches in Atlantic City, NJ, and 1.83 inches in Wilmington, NC. In northern New England, heavy snow continued through December 27, when daily-record totals in Maine reached 11.6 inches in Portland and 6.2 inches in Caribou. The multi-storm (December 24-30) combination resulted in more than 20 inches of snow in several Northeastern locations, including Burlington, VT (26.0 inches), and Syracuse, NY (20.9 inches). During the same period, more than 10 inches blanketed parts of the Ohio Valley, including Columbus, OH (10.8 inches), and Pittsburgh, PA (10.2 inches). Both Columbus (5.9 inches) and Pittsburgh (4.4 inches) received daily-record snowfall totals for December 29. In addition, Columbus achieved its second-snowiest December on record with 14.9 inches, behind only 17.3 inches in 1960. High winds accompanied and trailed the Eastern storms; for example, Nantucket, MA, clocked wind gusts to 61 mph on December 27 and 58 mph on December 29. Farther west, isolated locations in northern California received in excess of 10 inches of rain from December 20-24, while more than 5 feet of snow fell in parts of the Sierra Nevada. According to the California Department of Water Resources, the average water content of the high-elevation Sierra Nevada snow pack climbed to 14 inches (137 percent of normal) by December 31, up from just 6 inches in mid-December. Additional Western snow fell late in the month; up to 2 feet fell in Utah's Wasatch Range from December 26-28, with 23 inches reported in Alta and 6.2 inches noted in the valley at Salt Lake City. Elsewhere, Elko, NV, received measurable snow on 6 consecutive days from December 22-27, totaling 15.8 inches.

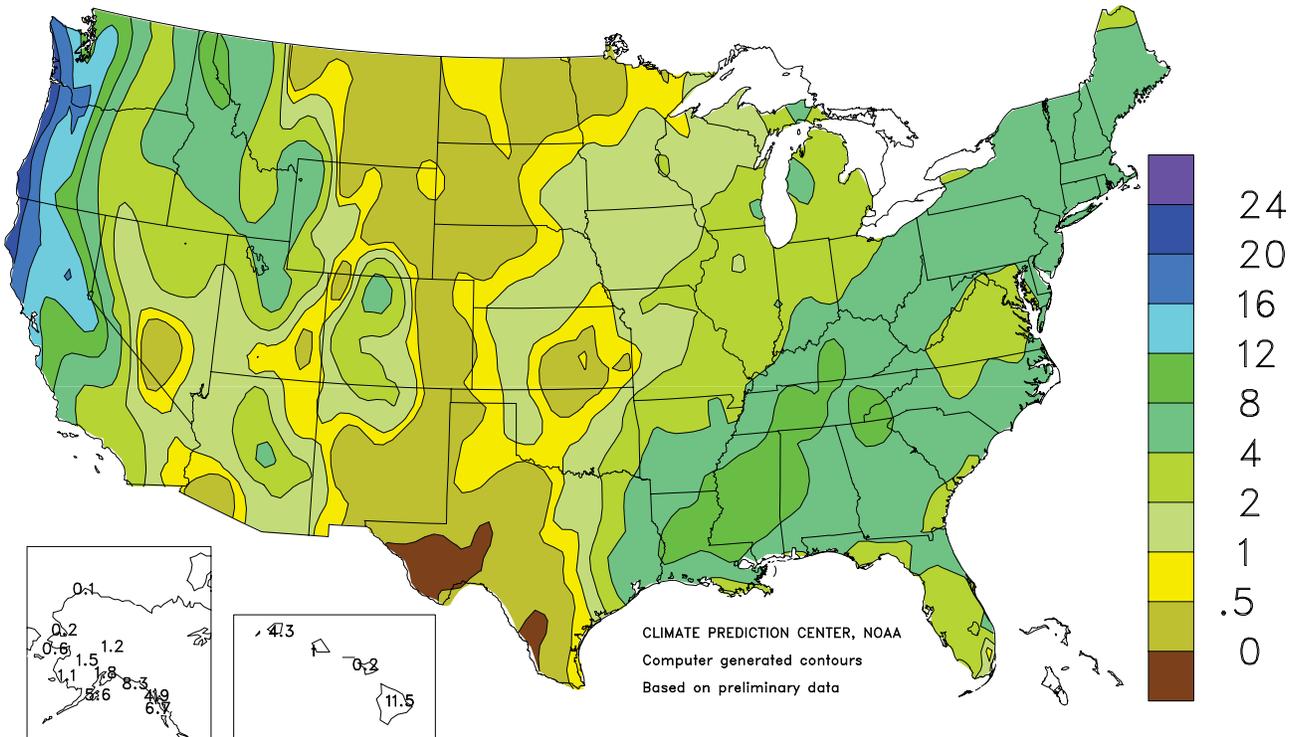
As 2012 ended, beneficial precipitation spread across the south-central U.S. On December 31, daily records for both precipitation and snowfall were established in locations such as Concordia, KS (0.48 and 7.5 inches), and Alamosa, CO (0.20 and 3.3 inches). Other daily-record snowfall totals for December 31 included 5.1 inches in Dodge City, KS, and 3.0 inches in Dalhart, TX. Farther north, however, Grand Island, NE, completed its driest year on record. Grand Island's annual total of 11.55 inches (43 percent of normal) edged its 1940 standard of 12.01 inches.

Much of Alaska endured an extended December cold wave, holding monthly temperatures more than 10°F below normal at some interior locations. Fairbanks experienced 10 days with lows of -40°F or below, including nine in a row from December 15-23. The last time Fairbanks recorded more than ten -40°F days in December was 1975. However, widespread snow preceded the temperature plunge. For example, Fairbanks collected 18.2 inches of snow from December 9-14, but also reported a 73-degree temperature plunge—from 31°F on the morning of December 13 to -42°F during the evening of December 15. Elsewhere on the 15th, Bettles (-50°F) posted a daily-record low. When Fairbanks fell to -48°F on the 17th, it represented the lowest pre-Christmas reading in that location since 1977, when the low plunged to -52°F on December 13. Alaskan daily-record lows included readings of -49°F (on December 16) in McGrath and -57°F (on December 22) in Tok. Markedly milder air arrived in Alaska at month's end.

Aside from Lihue, Kauai, which received 3.85 inches (157 percent of normal) during the first half of the month, December 1-15 rainfall totals at the state's major airport observation sites were significantly below normal. Wetter conditions developed in windward locations during the second half of the month, boosting the December rainfall to 11.49 inches (99 percent of normal) in Hilo, on the Big Island. Nearly all (9.99 inches) of Hilo's rain fell from December 16-31. In contrast, Honolulu, Oahu, completed its driest December on record, with a monthly total of 0.01 inch (3.23 inches below normal). Previously, Honolulu's driest December had occurred in 2002, when 0.04 inch fell.

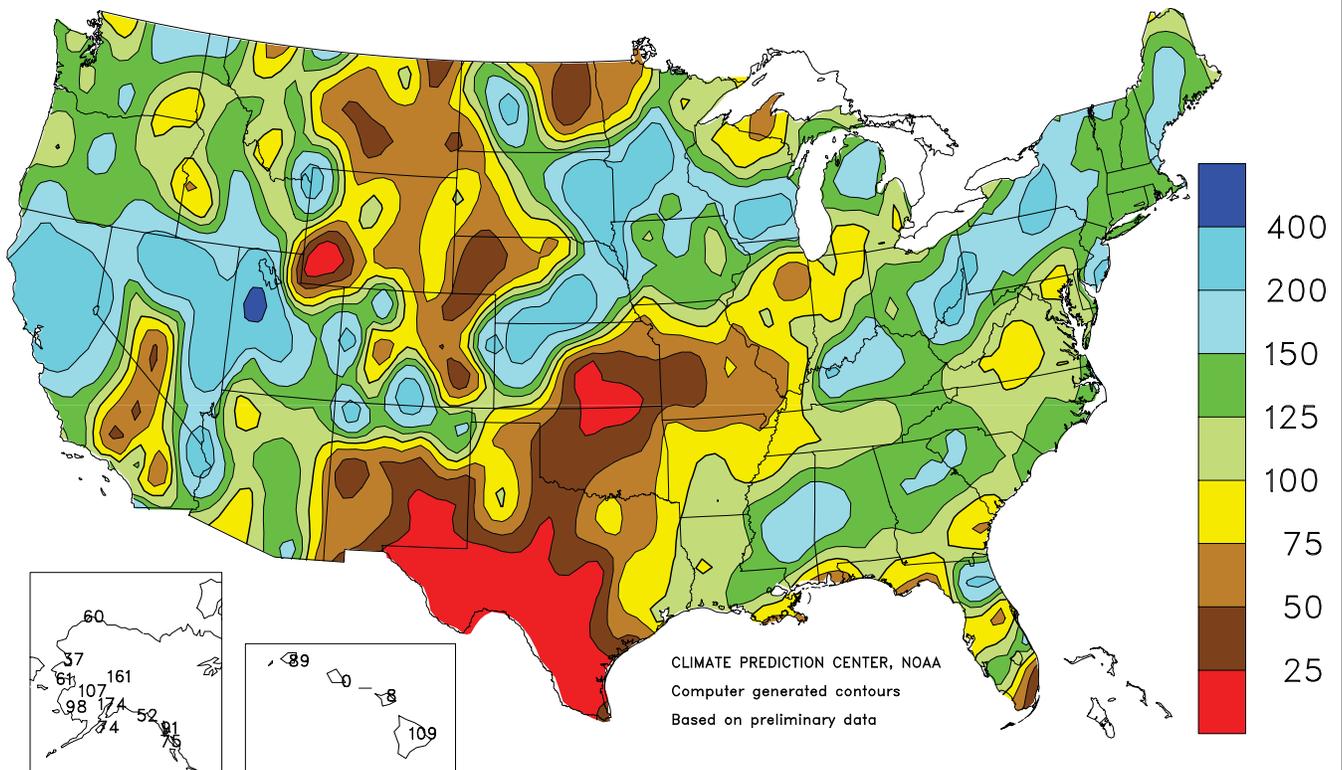
Total Precipitation (Inches)

December 2012



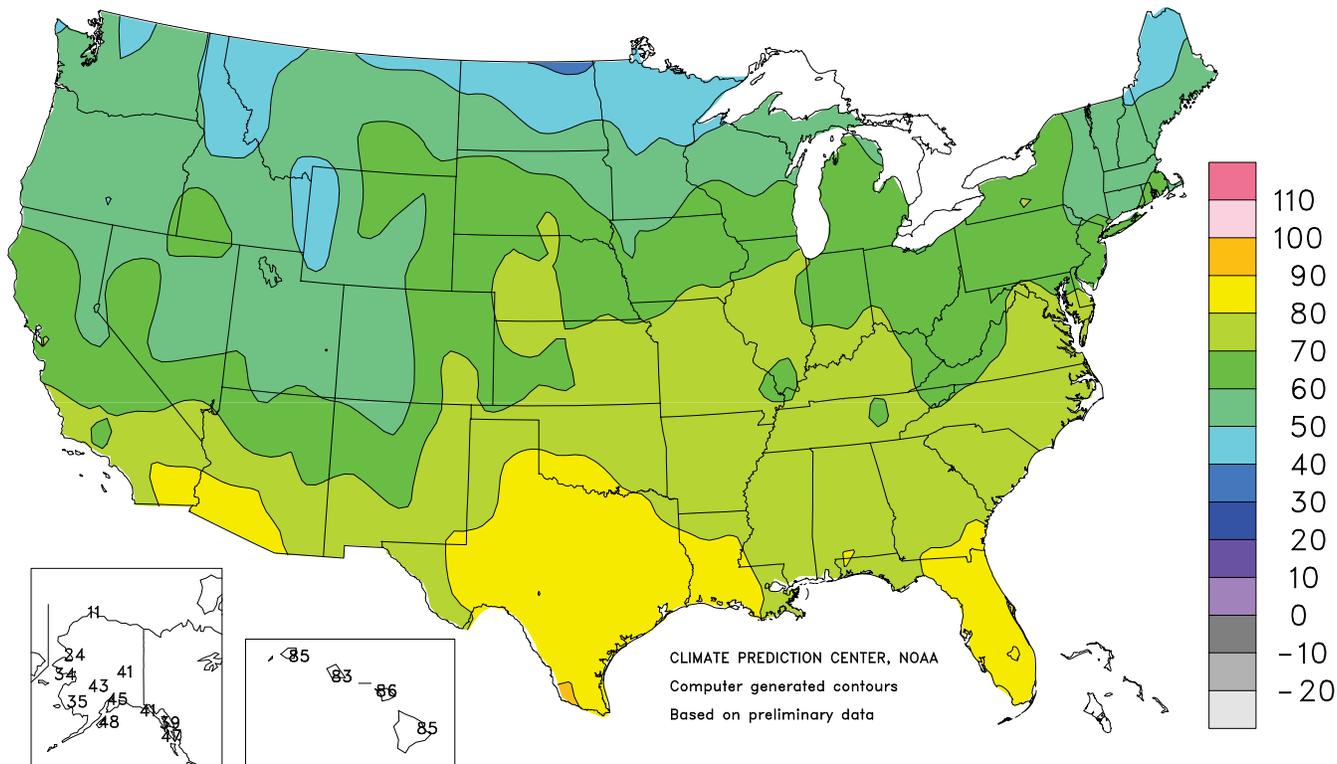
Percent Of Normal Precipitation

December 2012



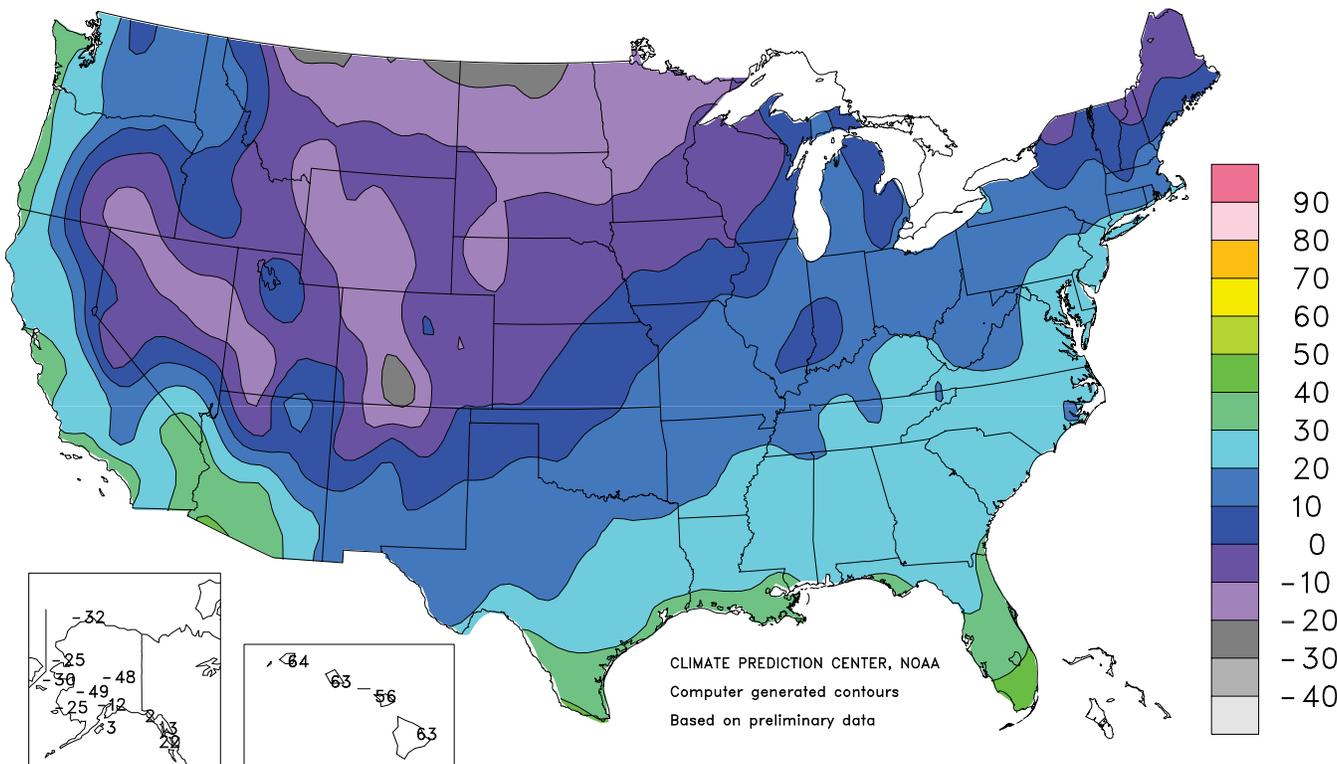
Extreme Maximum Temperature (°F)

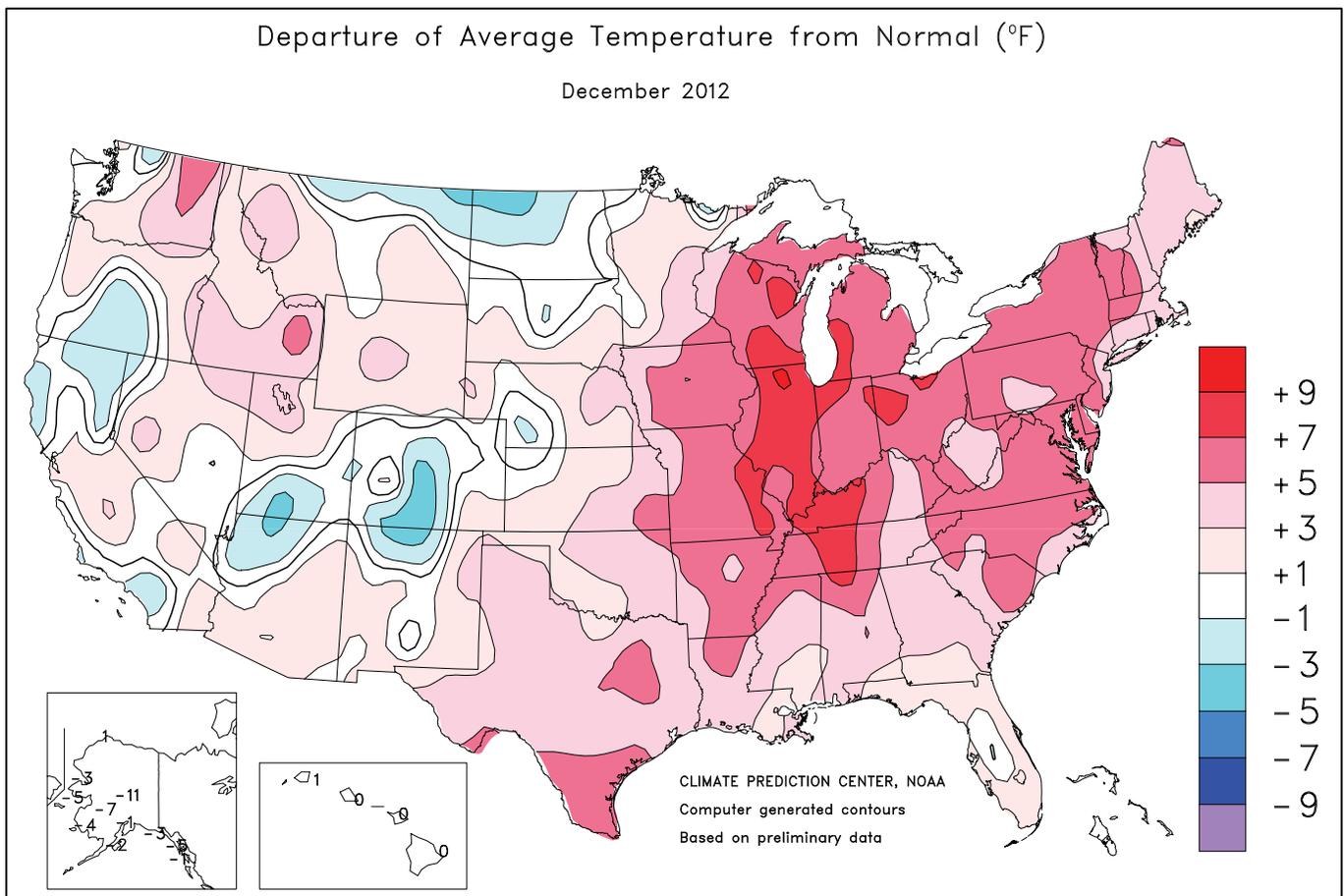
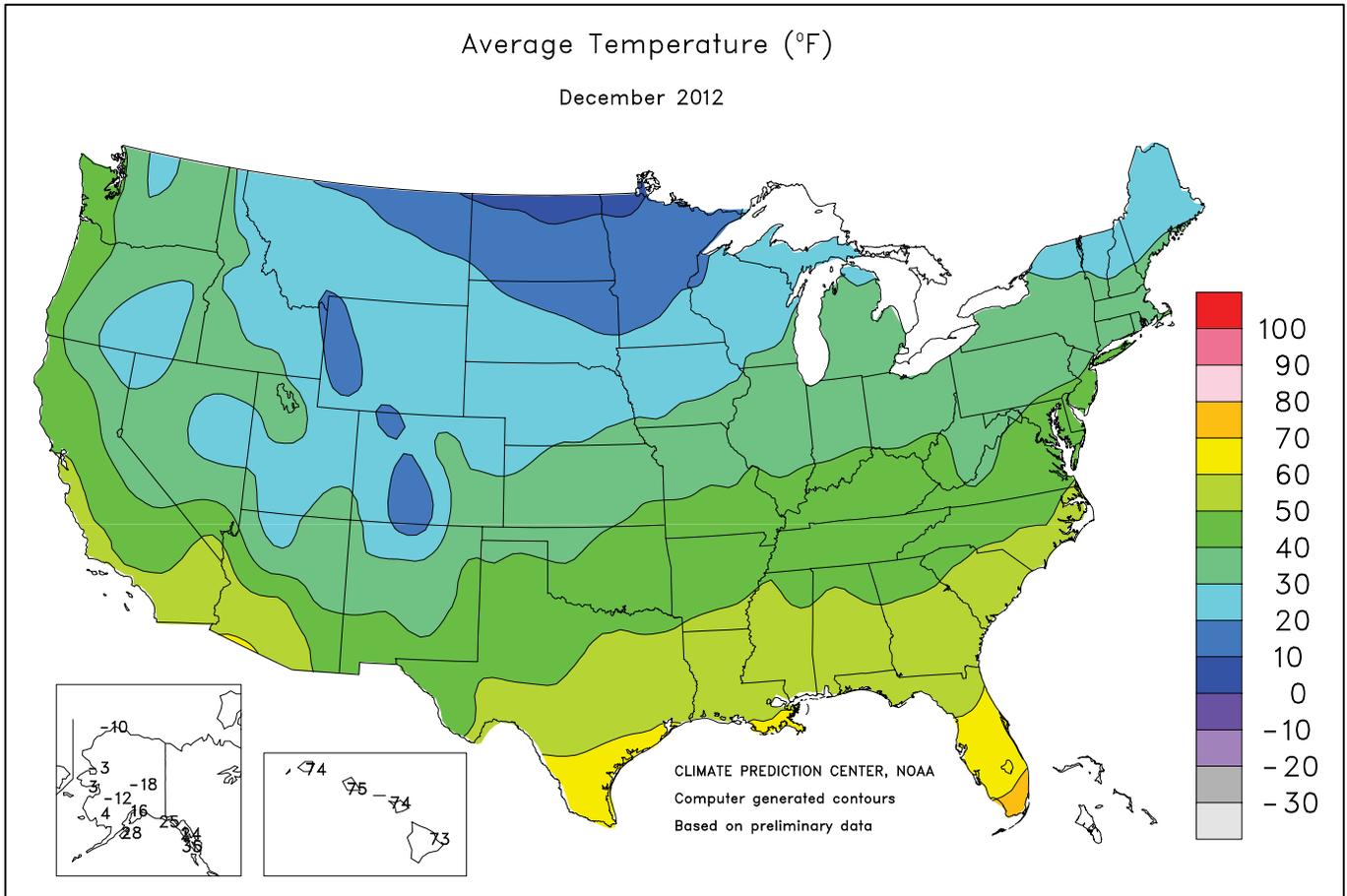
December 2012



Extreme Minimum Temperature (°F)

December 2012





National Weather Data for Selected Cities

December 2012

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	51	5	6.49	2.02	LEXINGTON	42	6	6.55	2.52	COLUMBUS	39	6	5.70	2.77
HUNTSVILLE	50	7	6.75	1.16	LONDON-CORBIN	43	5	5.83	1.52	DAYTON	38	7	3.77	0.69
MOBILE	56	4	3.48	-1.18	LOUISVILLE	44	6	7.14	3.45	MANSFIELD	37	7	3.86	0.60
MONTGOMERY	54	5	6.65	1.68	PADUCAH	44	7	3.92	-0.46	TOLEDO	35	6	2.15	-0.49
AK ANCHORAGE	16	-1	1.83	0.78	LA BATON ROUGE	56	4	8.10	2.84	YOUNGSTOWN	36	6	5.19	2.23
BARROW	-10	1	0.07	-0.05	LAKE CHARLES	58	5	4.82	0.22	OK OKLAHOMA CITY	43	3	0.67	-1.22
COLD BAY	28	-3	3.67	-0.66	NEW ORLEANS	59	4	5.13	0.06	TULSA	44	4	0.85	-1.58
FAIRBANKS	-18	-12	1.19	0.45	SHREVEPORT	53	5	5.66	1.11	OR ASTORIA	44	1	14.63	4.23
JUNEAU	24	-5	4.92	-0.49	ME BANGOR	26	2	4.59	1.26	BURNS	26	1	1.73	0.43
KING SALMON	13	-4	2.05	0.66	CARIBOU	21	5	3.07	-0.12	EUGENE	42	2	7.45	-0.84
KODIAK	28	-3	5.64	-2.00	PORTLAND	32	4	8.30	4.06	MEDFORD	39	1	5.66	2.76
NOME	3	-5	0.62	-0.39	MD BALTIMORE	43	6	3.11	-0.24	PENDLETON	38	4	1.19	-0.29
AZ FLAGSTAFF	29	-1	2.08	0.25	MA BOSTON	38	3	5.93	2.20	PORTLAND	43	3	7.56	1.85
PHOENIX	57	3	0.87	-0.05	WORCESTER	34	5	5.11	1.31	SALEM	42	2	7.40	0.94
TUCSON	53	1	1.17	0.14	MI ALPENA	30	6	2.84	1.01	PA ALLENTOWN	38	6	4.31	0.92
AR FORT SMITH	46	5	2.75	-0.64	DETROIT	36	6	2.64	0.13	ERIE	38	5	4.81	1.08
LITTLE ROCK	48	5	5.60	0.89	FLINT	33	6	2.58	0.40	MIDDLETOWN	39	5	3.79	0.55
CA BAKERSFIELD	50	3	0.65	-0.11	GRAND RAPIDS	35	7	2.85	0.15	PHILADELPHIA	43	6	4.42	1.11
EUREKA	45	-3	10.97	4.62	HOUGHTON LAKE	29	5	2.91	1.16	PITTSBURGH	38	5	5.53	2.67
FRESNO	51	6	2.03	0.69	LANSING	33	6	1.98	-0.19	WILKES-BARRE	36	5	3.92	1.37
LOS ANGELES	57	-1	2.82	1.03	MUSKEGON	36	7	3.04	0.40	WILLIAMSPORT	36	5	5.61	2.67
REDDING	45	0	10.04	5.37	TRAVERSE CITY	33	7	2.99	0.33	PR SAN JUAN	79	1	5.31	0.74
SACRAMENTO	47	1	6.15	3.70	MN DULUTH	19	5	1.44	0.50	RI PROVIDENCE	38	4	5.55	1.41
SAN DIEGO	58	0	2.19	0.88	INT'L FALLS	11	3	1.14	0.44	SC CHARLESTON	55	4	3.56	0.32
SAN FRANCISCO	52	3	6.24	3.35	MINNEAPOLIS	23	4	1.64	0.64	COLUMBIA	52	5	3.51	0.13
STOCKTON	47	2	4.30	2.48	ROCHESTER	24	7	1.79	0.77	FLORENCE	54	7	4.09	0.62
CO ALAMOSA	12	-5	0.81	0.48	ST. CLOUD	18	4	1.52	0.83	GREENVILLE	49	5	5.81	1.95
CO SPRINGS	31	2	0.26	-0.16	MS JACKSON	53	5	8.71	3.37	MYRTLE BEACH	53	4	3.70	0.25
DENVER	31	2	0.27	-0.04	MERIDIAN	51	2	9.08	3.77	SD ABERDEEN	15	-1	0.75	0.37
GRAND JUNCTION	26	-2	1.05	0.53	TUPELO	50	7	7.09	0.97	HURON	20	1	1.12	0.73
PUEBLO	30	0	0.30	-0.09	MO COLUMBIA	39	7	1.64	-0.83	RAPID CITY	25	0	1.25	-0.15
CT BRIDGEPORT	40	5	4.32	0.85	JOPLIN	42	5	1.07	-1.89	SIOUX FALLS	22	4	0.31	0.79
HARTFORD	35	4	4.55	0.95	KANSAS CITY	36	5	1.34	-0.30	TN BRISTOL	43	6	4.00	0.61
DC WASHINGTON	45	5	3.03	-0.02	SPRINGFIELD	41	5	1.10	-2.07	CHATTANOOGA	48	6	5.57	0.76
DE WILMINGTON	42	6	3.92	0.52	ST JOSEPH	33	2	0.96	-0.48	JACKSON	47	5	4.38	-0.98
FL DAYTONA BEACH	62	1	1.99	-0.72	ST LOUIS	42	8	2.00	-0.86	KNOXVILLE	46	5	6.18	1.69
FT LAUDERDALE	72	3	0.75	-1.90	MT BILLINGS	28	2	0.27	-0.40	MEMPHIS	50	7	3.73	-1.95
FT MYERS	68	2	2.18	0.60	BUTTE	20	2	0.30	-0.23	NASHVILLE	47	7	4.71	0.17
JACKSONVILLE	58	3	2.31	-0.33	GLASGOW	14	-2	0.49	0.12	TX ABILENE	49	4	0.04	-1.23
KEY WEST	73	1	0.67	-1.47	GREAT FALLS	26	2	0.55	-0.12	AMARILLO	42	5	0.54	-0.07
MELBOURNE	66	3	2.14	-0.17	HELENA	25	4	0.87	0.41	AUSTIN	55	3	0.83	-1.61
MIAMI	72	2	0.51	-1.67	KALISPELL	28	5	1.19	-0.46	BEAUMONT	59	5	6.40	1.15
ORLANDO	65	2	1.28	-1.03	MILES CITY	23	2	0.20	-0.25	BROWNSVILLE	67	6	0.32	-0.79
PENSACOLA	58	4	2.08	-1.89	MISSOULA	29	6	1.65	0.50	COLLEGE STATION	57	5	3.73	0.50
ST PETERSBURG	65	1	2.26	-0.34	NE GRAND ISLAND	29	3	1.66	1.00	CORPUS CHRISTI	65	7	0.03	-1.72
TALLAHASSEE	56	2	3.27	-0.83	HASTINGS	28	1	1.69	0.96	DALLAS/FT WORTH	51	4	1.95	-0.62
TAMPA	65	2	2.20	-0.10	LINCOLN	28	2	1.50	0.64	DEL RIO	56	4	0.04	-0.71
WEST PALM BEACH	71	3	1.14	-2.00	MCCOOK	27	-2	1.28	0.75	EL PASO	47	2	0.10	-0.67
GA ATHENS	50	5	5.86	2.15	NORFOLK	26	2	1.13	0.48	GALVESTON	62	4	2.87	-0.66
ATLANTA	51	6	5.93	2.11	NORTH PLATTE	25	-1	0.37	-0.03	HOUSTON	59	5	2.85	-0.84
AUGUSTA	51	4	4.67	1.53	OMAHA/EPPLEY	29	3	1.85	0.93	LUBBOCK	43	3	0.68	0.01
COLUMBUS	54	5	5.23	0.83	SCOTTSBLUFF	29	3	0.19	-0.37	MIDLAND	48	3	0.08	-0.57
MACON	52	4	4.86	0.93	VALENTINE	27	3	0.29	-0.04	SAN ANGELO	52	6	0.18	-0.76
SAVANNAH	56	5	1.91	-0.90	NV ELKO	29	3	2.18	1.25	SAN ANTONIO	57	5	0.37	-1.59
HI HILO	73	1	11.49	0.99	ELY	26	0	1.72	1.22	VICTORIA	60	5	1.46	-1.01
HONOLULU	75	0	0.01	-2.84	LAS VEGAS	49	2	0.49	0.09	WACO	52	4	0.81	-1.95
KAHULUI	74	1	0.24	-2.84	RENO	37	3	2.10	1.22	WICHITA FALLS	45	2	0.60	-1.08
LIHUE	74	1	4.25	-0.53	WINNEMUCCA	31	1	1.69	0.88	UT SALT LAKE CITY	35	5	1.38	0.15
ID BOISE	36	5	1.09	-0.29	NH CONCORD	31	5	4.23	1.27	VT BURLINGTON	31	6	3.30	1.08
LEWISTON	38	4	0.86	-0.19	NJ ATLANTIC CITY	43	6	7.15	4.00	VA LYNCHBURG	43	5	2.65	-0.58
POCATELLO	29	4	1.41	0.31	NEWARK	41	5	5.06	1.49	NORFOLK	50	6	4.48	1.45
IL CHICAGO/O'HARE	36	9	2.21	-0.22	NM ALBUQUERQUE	37	1	0.12	-0.37	RICHMOND	47	7	2.83	-0.29
MOLINE	33	7	2.67	0.47	NY ALBANY	33	5	4.05	1.38	ROANOKE	44	5	2.58	-0.28
PEORIA	35	7	1.98	-0.42	BINGHAMTON	32	5	5.20	2.17	WASH/DULLES	42	6	2.87	-0.20
ROCKFORD	33	9	2.49	0.43	BUFFALO	36	6	3.64	-0.16	WA OLYMPIA	40	2	9.74	1.85
SPRINGFIELD	38	8	3.28	0.74	ROCHESTER	36	7	3.57	0.84	QUILLAYUTE	41	0	17.53	3.03
EVANSVILLE	43	7	3.47	-0.07	SYRACUSE	35	6	7.57	4.45	SEATTLE-TACOMA	42	1	6.85	1.23
FORT WAYNE	36	7	2.20	-0.57	NC ASHEVILLE	44	5	4.38	0.99	SPOKANE	31	4	2.58	0.33
INDIANAPOLIS	38	6	2.58	-0.45	CHARLOTTE	49	5	3.84	0.66	YAKIMA	34	5	2.13	0.75
SOUTH BEND	36	7	3.43	0.34	GREENSBORO	47	6	2.72	-0.34	WV BECKLEY	40	5	3.19	0.10
BURLINGTON	34	6	2.79	0.69	HATTERAS	54	4	6.51	1.95	CHARLESTON	42	4	4.86	1.54
CEDAR RAPIDS	29	5	1.40	-0.08	RALEIGH	49	6	2.94	-0.10	ELKINS	37	4	4.34	0.90
DES MOINES	31	6	1.93	0.60	WILMINGTON	53	4	4.80	0.82	HUNTINGTON	42	5	4.90	1.53
DUBUQUE	28	6	2.36	0.67	ND BISMARCK	15	0	0.63	0.19	WI EAU CLAIRE	22	4	1.85	0.82
SIOUX CITY	26	4	1.67	1.01	DICKINSON	18	0	0.26	-0.08	GREEN BAY	29	8	2.54	1.13
WATERLOO	26	4	1.74	0.63	FARGO	15	2	0.37	-0.20	LA CROSSE	26	4	1.98	0.75
KS CONCORDIA	33	3	0.93	0.07	GRAND FORKS	12	1	0.31	-0.24	MADISON	30	7	2.60	0.94
DODGE CITY	34	1	0.87	0.10	JAMESTOWN	13	-1	0.09	-0.35	MILWAUKEE	34	8	3.87	1.65
GOODLAND	29	-1	0.57	0.17	MINOT	11	-4	0.62	-0.01	WAUSAU	25	6	1.61	0.28
HILL CITY	32	1	0.79	0.32	WILLISTON	13	0	0.57	0.00	WY CASPER	27	3	0.39	-0.23
TOPEKA	36	5	0.79	-0.63	OH AKRON-CANTON	37	6	4.21	1.23	CHEYENNE	27	0	0.57	0.11
WICHITA	38	4	0.34	-1.01	CINCINNATI	40	5	5.75	2.47	LANDER	24	3	0.40	-0.21
KY JACKSON	44	6	6.39	2.12	CLEVELAND	38	7	3.93	0.79	SHERIDAN	24	2	0.50	-0.18

National Agricultural Summary

December 31, 2012 – January 6, 2013

Weekly National Agricultural Summary provided by USDA/NASS

Near-normal temperatures prevailed across much of the country during the week, while readings averaged more than 20°F below normal in parts of the Great Basin and Rocky Mountains. Above-average precipitation was mostly limited to the south-central United States, where portions of Louisiana and eastern Texas received more than 3 inches of rain.

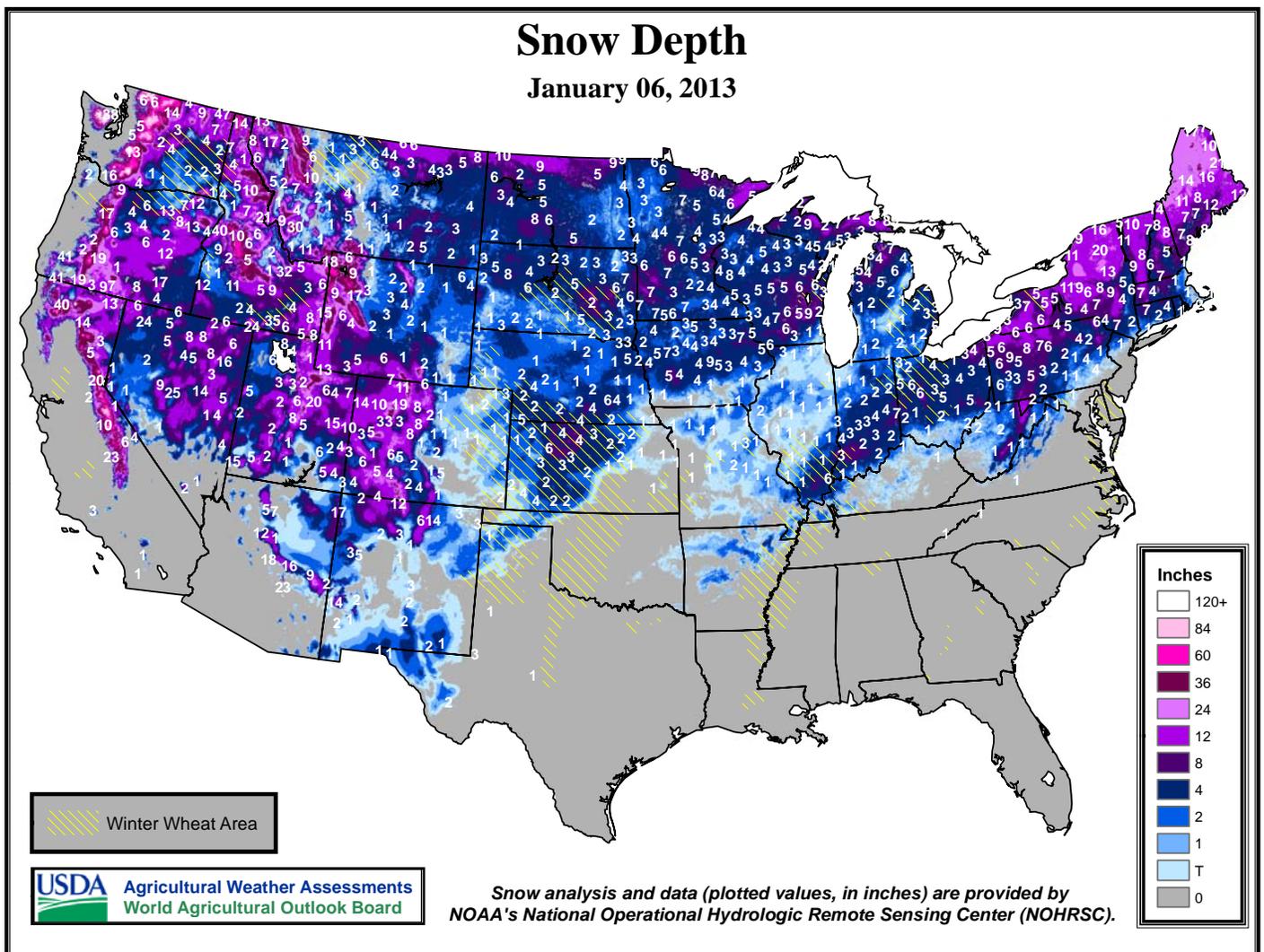
In Florida, warm weather coupled with light, scattered rainfall provided producers ample time to harvest citrus, sugarcane, and vegetables. Moisture received in recent weeks aided small grain growth, and boosted soil moisture levels in fields prepared for spring crops. Following prolonged exposure to unseasonably high temperatures, bud development was evident on a variety of trees, with avocados, mangos, and peaches already in bloom. In Dixie County, pecan trees were stressed due to above-average temperatures, while late blight was reported in some potato and

tomato fields. Early and mid-season citrus crops continued to be harvested at a heavy pace. With the exception of pre-harvest moving and irrigation, and general orchard maintenance, producer activity was light.

Dry, chilly weather gave way to widespread, light precipitation across California by week's end. Small grain development slowed due to steadily below-average temperatures in recent weeks; however, condition ratings remained mostly good to excellent due to beneficial moisture. Winter forage harvest in the Central Valley was complete. Fruit growers applied fumigants, herbicides, and pesticides to vineyards and stone fruit orchards. Apples and a variety of citrus crops continued to be harvested. Dormant sprays were completed in nut orchards. Adequate soil moisture aided winter vegetable growth, as broccoli, carrots, cauliflower, and lettuce were harvested.

Snow Depth

January 06, 2013



International Weather and Crop Summary

December 30, 2012 - January 5, 2013

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

HIGHLIGHTS

EUROPE: Mild, wet weather continued, maintaining generally favorable conditions for dormant winter crops in central and northern Europe.

WESTERN FSU: A fresh snowfall afforded winter crops additional protection against potential incursions of bitter cold.

MIDDLE EAST: Warm weather kept most crop areas devoid of a protective snowpack.

NORTHWEST AFRICA: Showers across central and eastern crop areas improved soil moisture for vegetative winter wheat and barley.

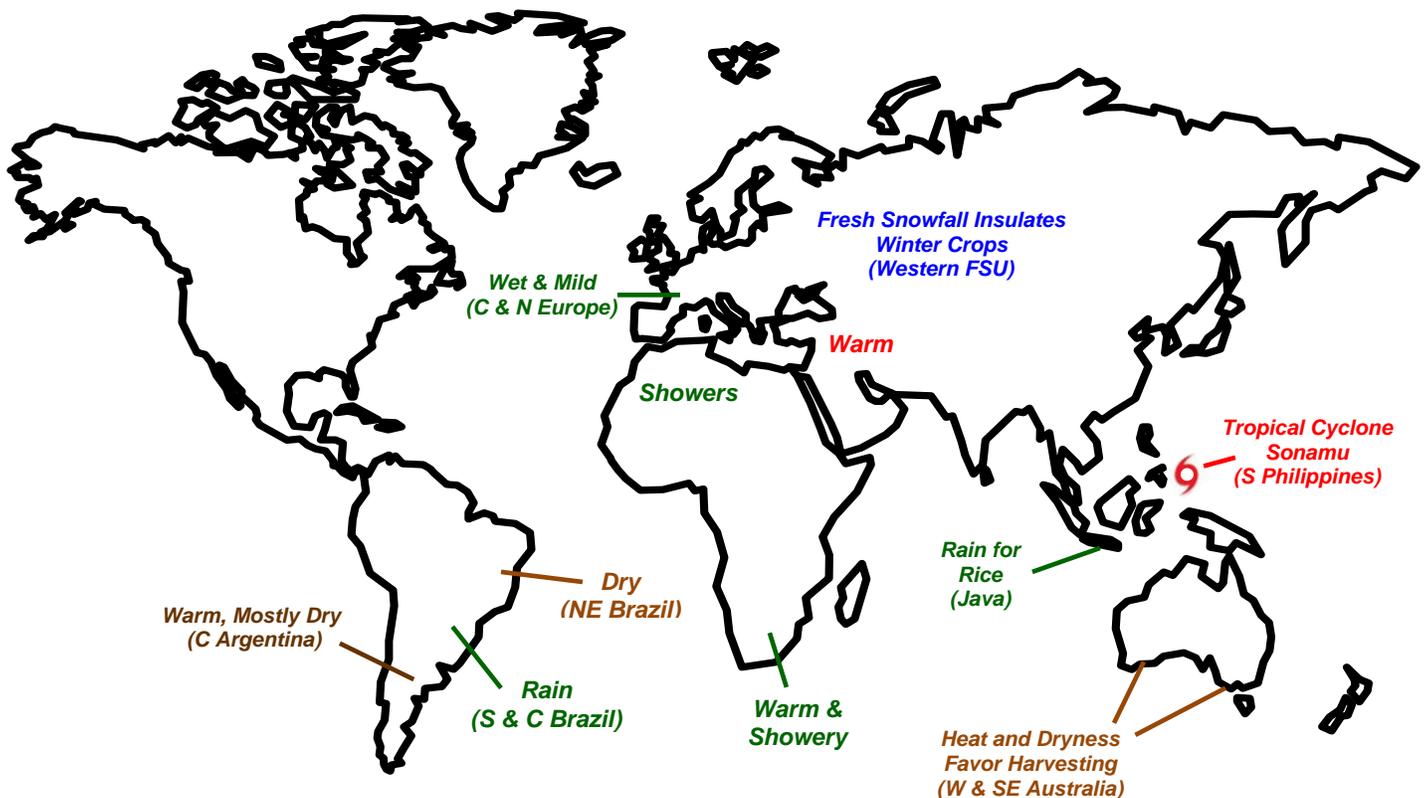
SOUTHEAST ASIA: Widespread showers boosted moisture supplies for rice across Java, Indonesia, while Tropical Cyclone Sonamu brought heavy rainfall to the southern Philippines.

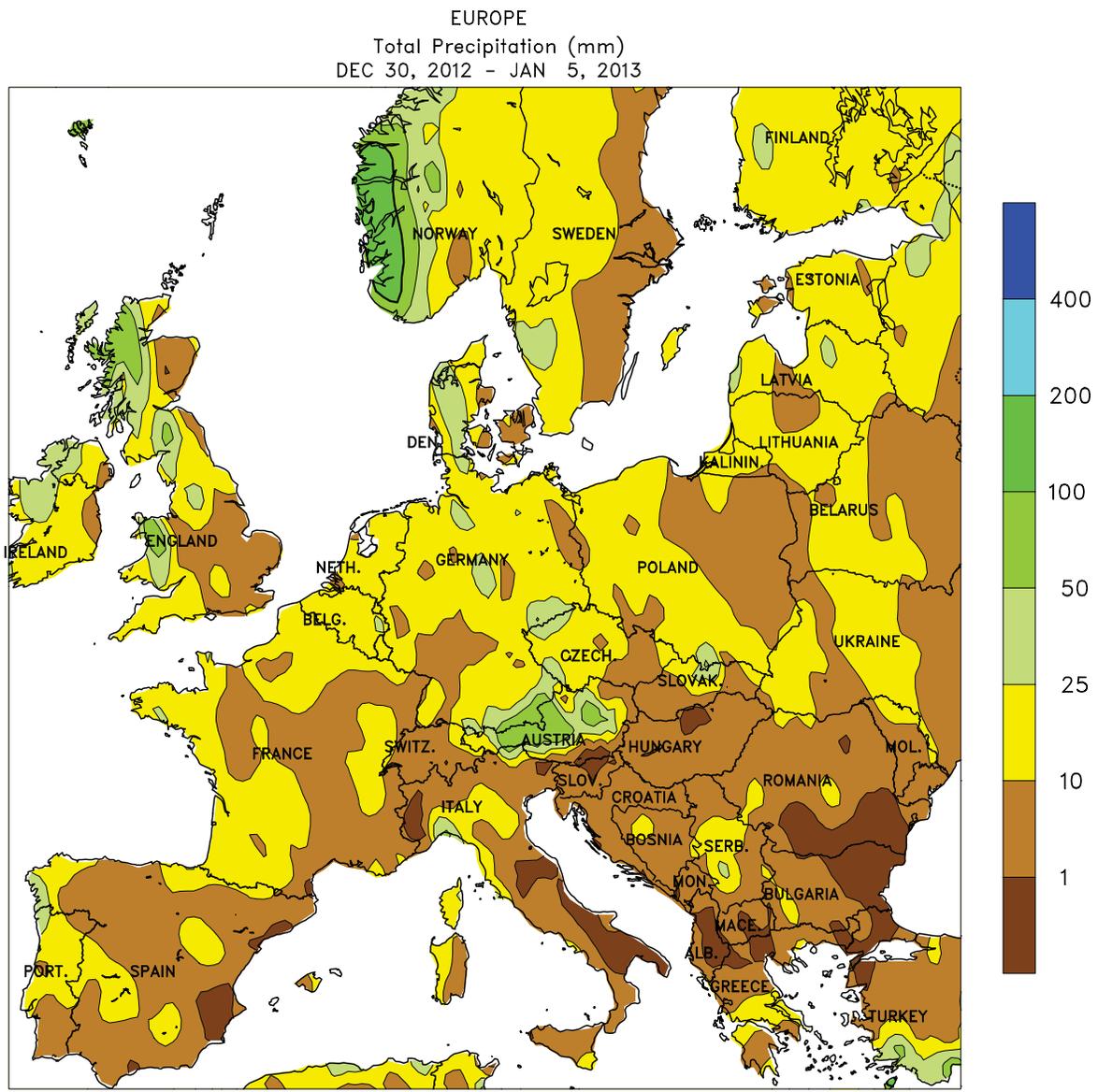
AUSTRALIA: Hot, dry weather favored late winter wheat harvesting, but increased irrigation requirements for summer crops.

SOUTH AFRICA: Warm, showery weather maintained overall favorable conditions for rain-fed summer crops.

ARGENTINA: Warm, mostly dry weather aided late fieldwork in sections of central Argentina.

BRAZIL: Beneficial rain continued in most major soybean areas, with pockets of warmth and dryness confined to more minor production areas of the northeastern interior.





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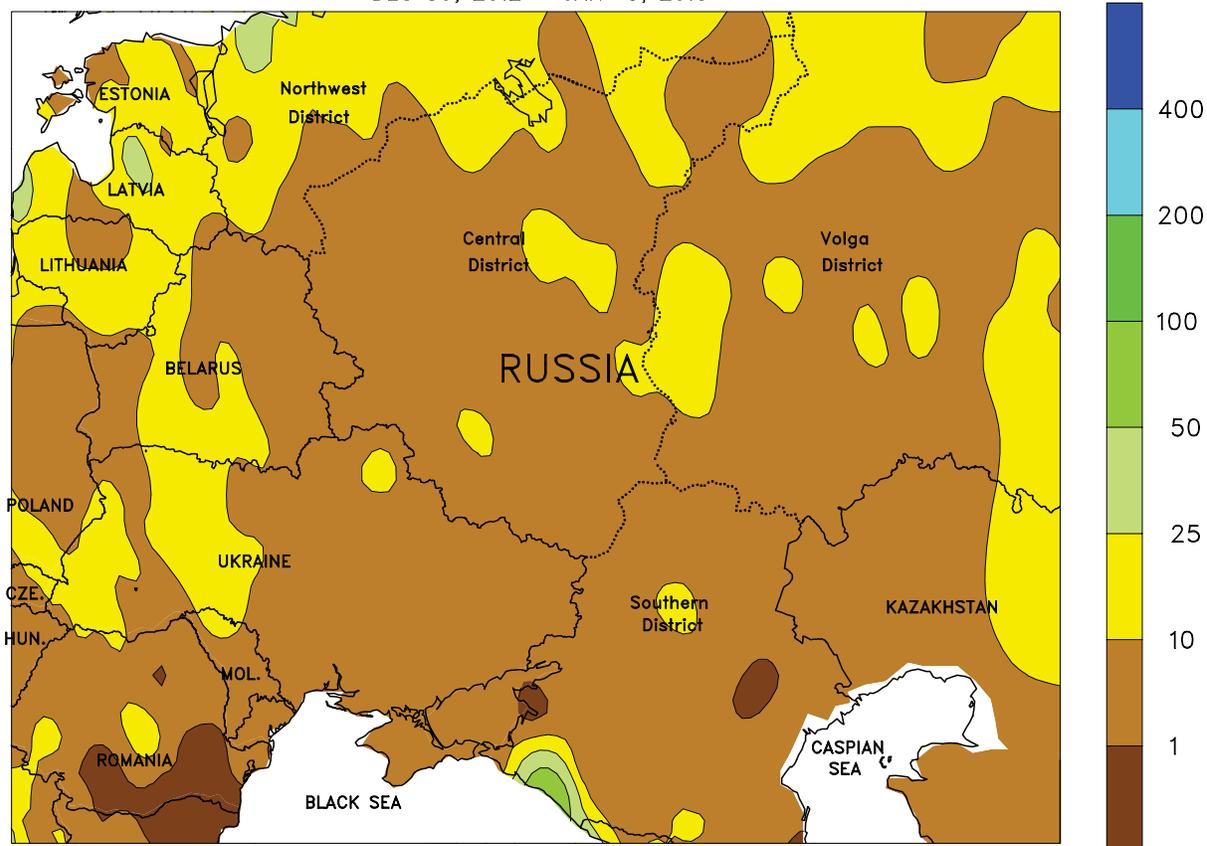


EUROPE

Mild, showery weather persisted, maintaining favorable conditions for winter grains and oilseeds. A pair of Atlantic storms produced occasional showers (5-25 mm) from northern France and southern England into western Poland and the northern Balkans, boosting soil moisture reserves for dormant

winter crops. Temperatures averaged up to 7°C above normal in northern Europe, keeping growing areas devoid of snow cover. In southern Europe, light to moderate showers (2-15 mm) benefited winter wheat and barley in Spain and northern Italy but was not heavy enough to delay citrus harvesting.

WESTERN FSU
Total Precipitation (mm)
DEC 30, 2012 - JAN 5, 2013



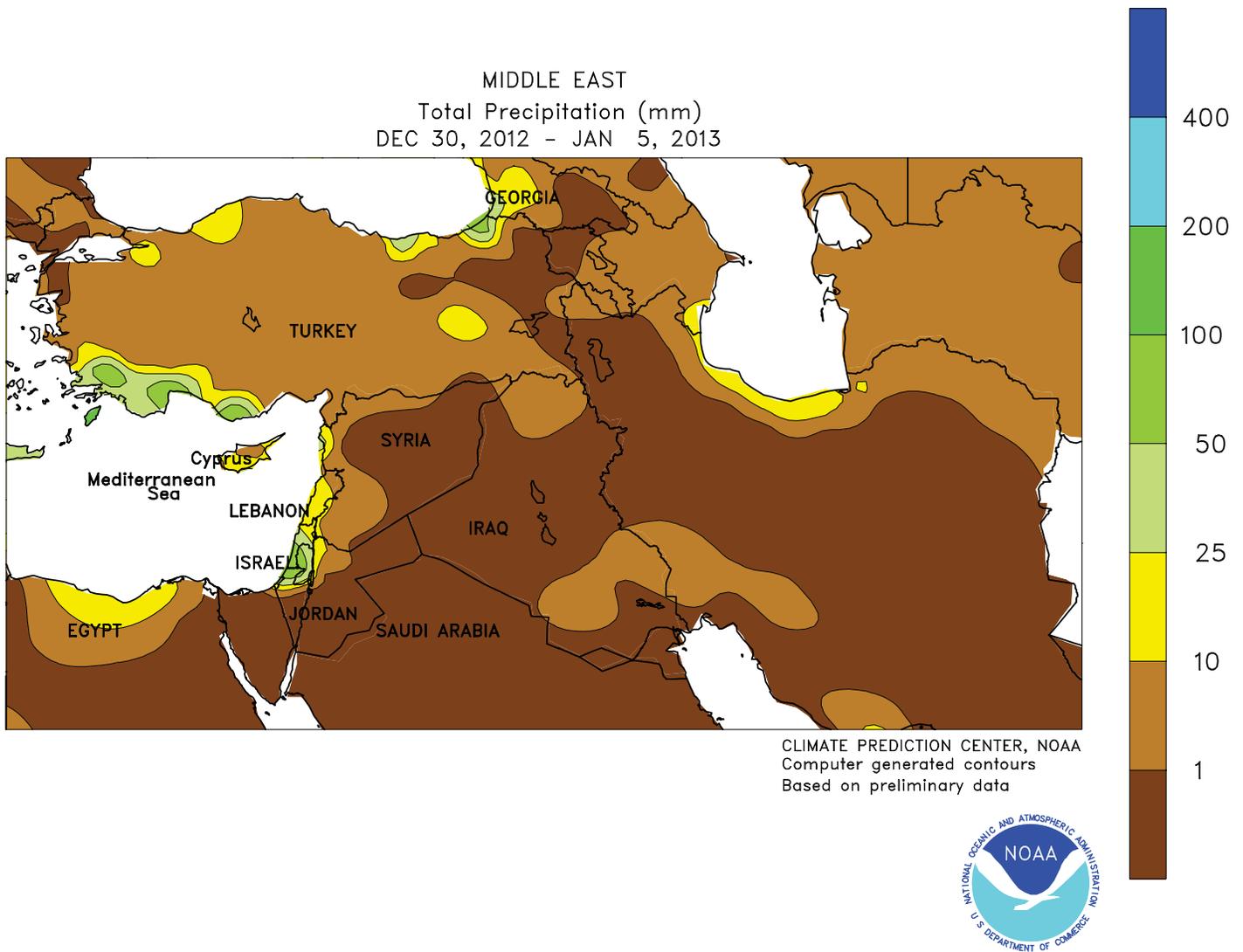
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WESTERN FSU

A fresh snowfall along with somewhat milder weather benefited winter grains. Light to moderate snow (2-12 mm liquid equivalent) provided dormant winter crops additional insulation from potential incursions of bitter cold. By week's end, most primary winter wheat areas

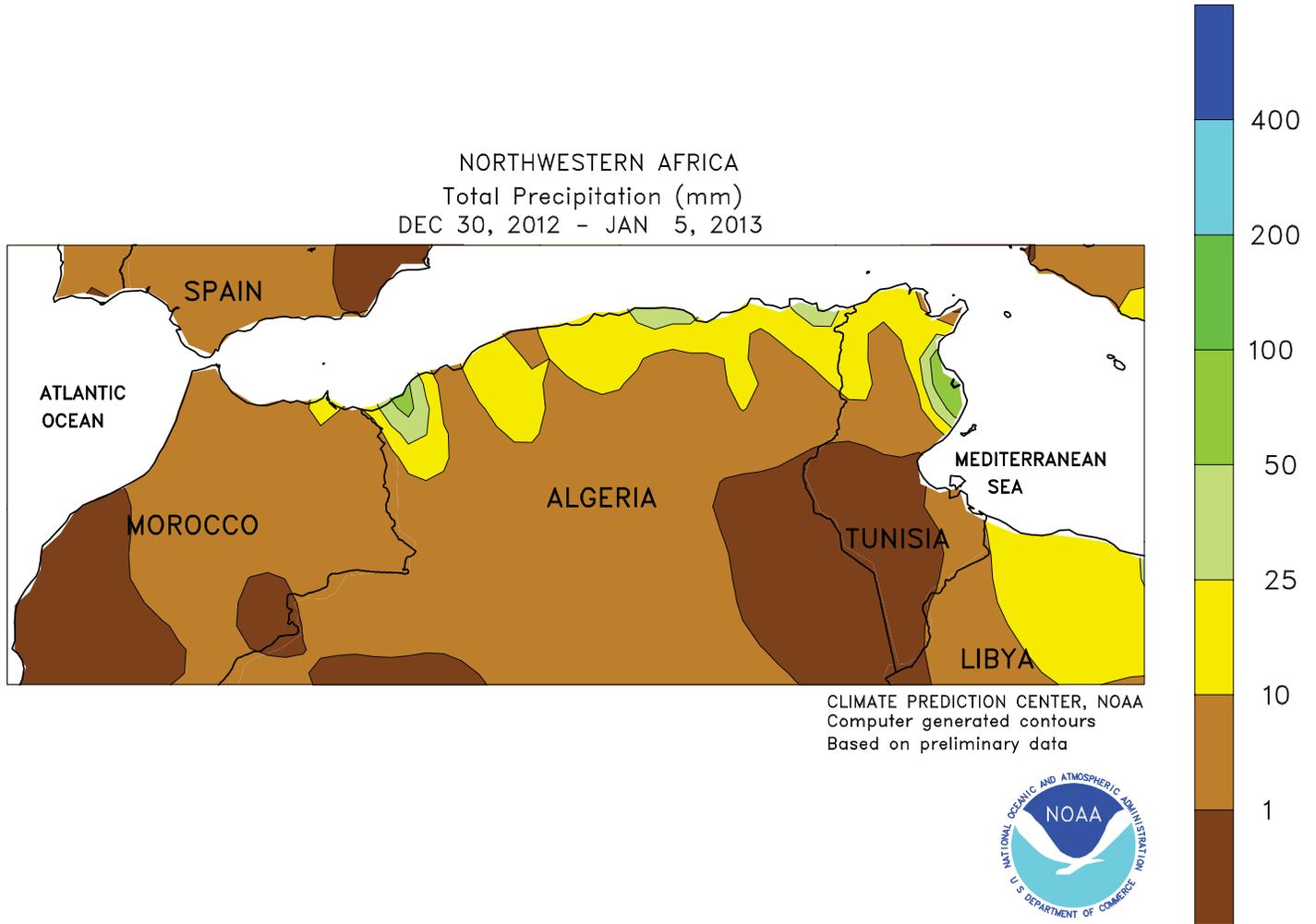
were under at least 5 cm of snow, with bare areas confined to the southwestern corner of the Southern District. Temperatures averaged 1 to 3°C above normal, minimizing the risk for any additional freeze damage or winterkill.



MIDDLE EAST

Mostly dry, mild weather prevailed, although precipitation was approaching the region at week's end. Temperatures averaged 2 to 5°C above normal from Turkey into western Iran, keeping most primary wheat areas devoid of a protective snow cover. At the end of the period, a slow-

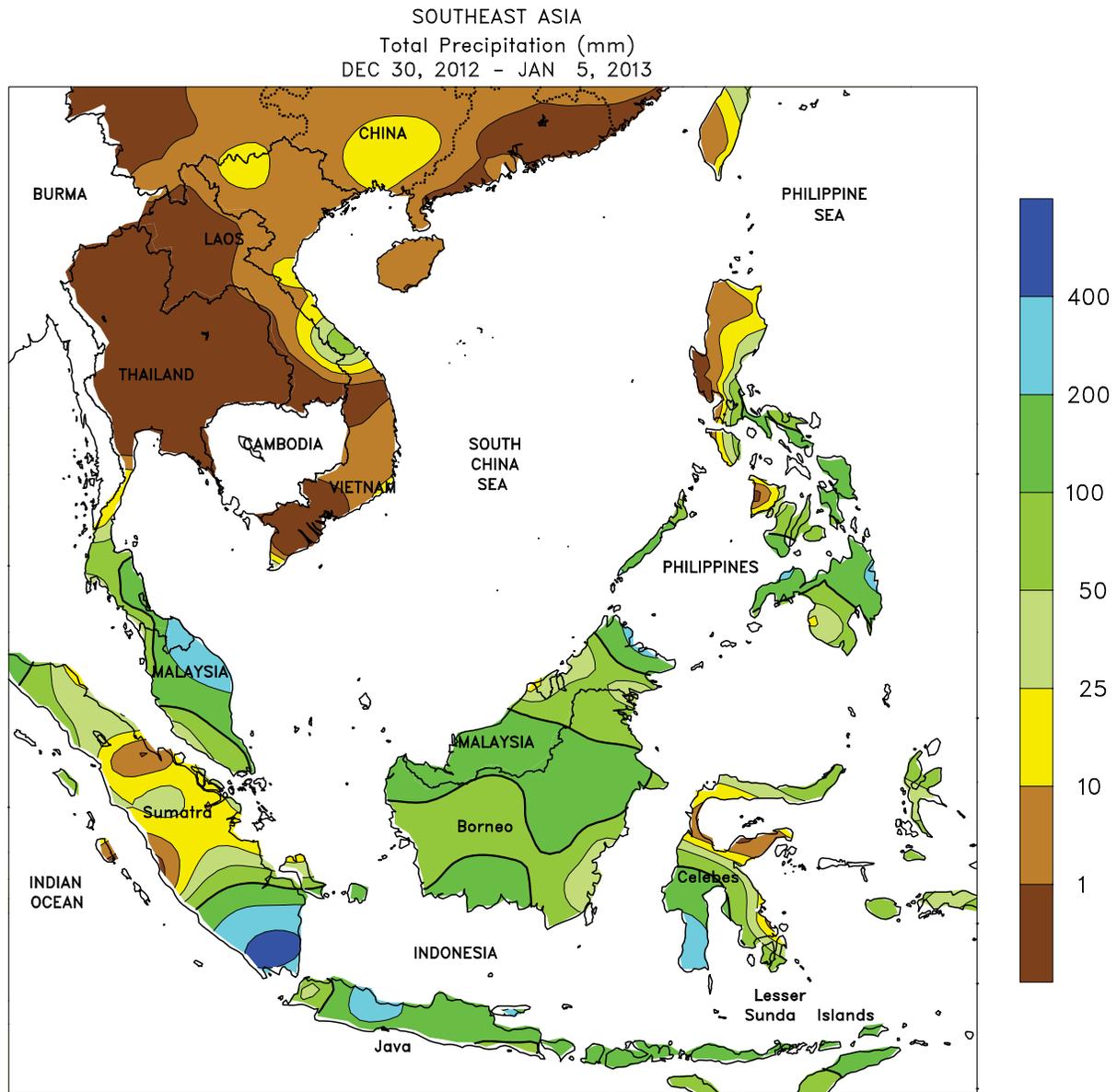
moving Mediterranean storm system generated rain and mountain snow (5-50 mm liquid equivalent) across central and southern Turkey and the eastern Mediterranean Coast, boosting moisture reserves for dormant (north) to vegetative (south) winter grains.



NORTHWEST AFRICA

Showers shifted into central and eastern crop districts, while drier weather returned to Morocco. A slow-moving cold front generated light to moderate rainfall (2-50 mm) across Algeria and Tunisia, improving topsoil moisture for vegetative winter

wheat and barley. Rain was lighter (5 mm or less) in Morocco, where generally sunny skies promoted wheat development. Temperatures averaged near normal, with nighttime temperatures well above freezing.



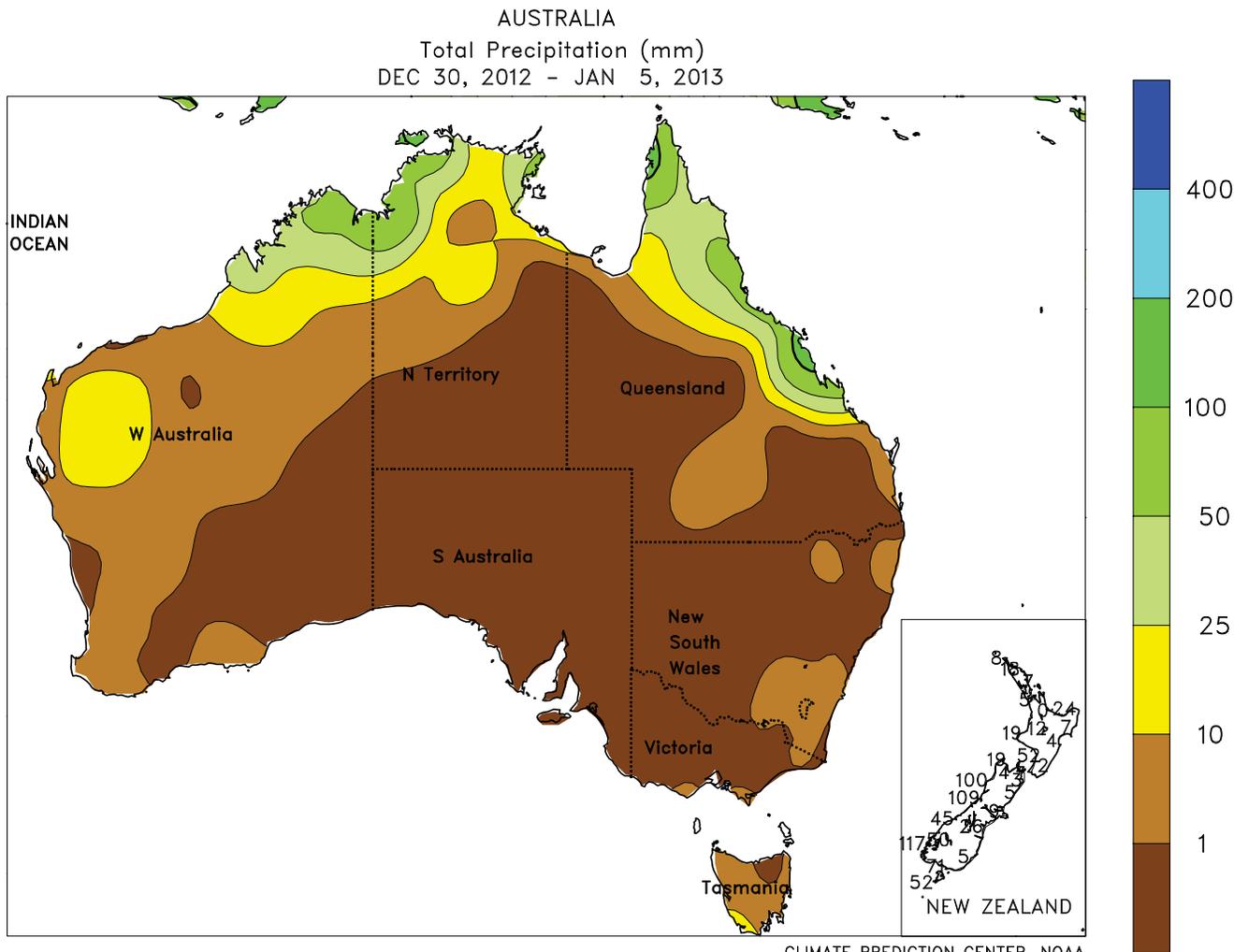
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SOUTHEAST ASIA

Heavy showers prevailed across Java, Indonesia, following a slow start to the rainy season; however, moisture conditions were near normal in all growing areas for the first time this season. Widespread seasonable rainfall (100-200 mm) boosted moisture supplies for vegetative to reproductive rice and improved crop prospects. Oil palm in Indonesia and Malaysia also benefited from rainfall totals ranging from 50 to 200 mm.

Some areas, however, experienced severe flooding, with localized rainfall amounts approaching 500 mm for the week. Meanwhile, Tropical Cyclone Sonamu formed off the southwestern islands of the Philippines late in the period, producing over 200 mm of rain in portions of Mindanao. With the recent rain, moisture availability remained high for winter rice and corn throughout the southern half of the Philippines.



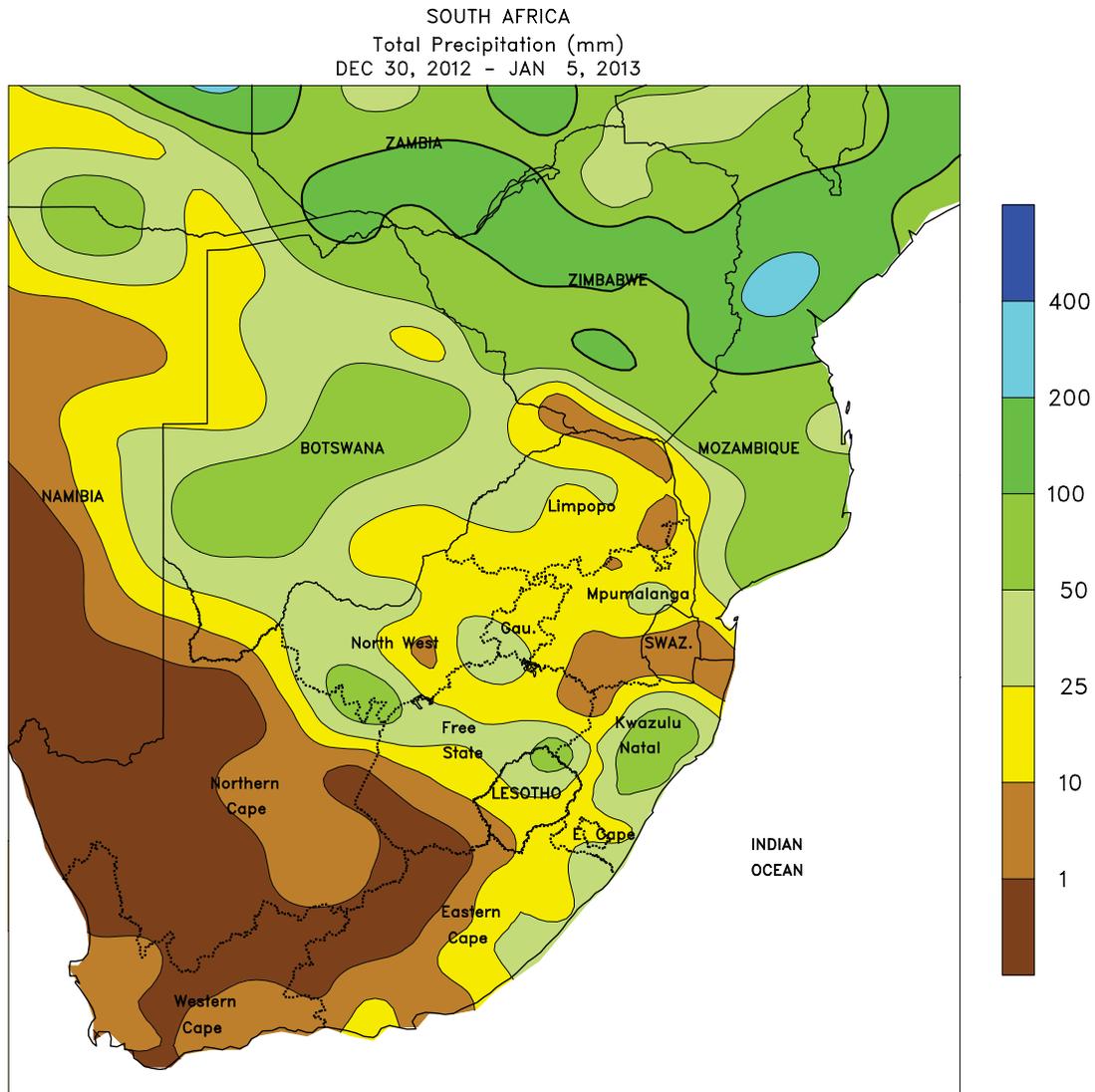
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AUSTRALIA

In western and southeastern Australia, hot, dry weather favored winter wheat harvesting, allowing fieldwork to continue without delay. Reports indicated harvesting is rapidly approaching completion in western and southern Australia, and that harvesting has already concluded across much of eastern Australia. In northern New South Wales and southern Queensland, hot, mostly dry weather elevated evaporation rates, increasing irrigation

requirements for cotton and reducing soil moisture for dryland summer crops, including sorghum. Temperatures in major summer crop producing areas averaged 1 to 2°C above normal, with maximum temperatures generally in the middle to upper 30s (degrees C). In western and southeastern Australia, temperatures averaged 3 to 4°C above normal, with maximum temperatures in the lower 40s in most areas.



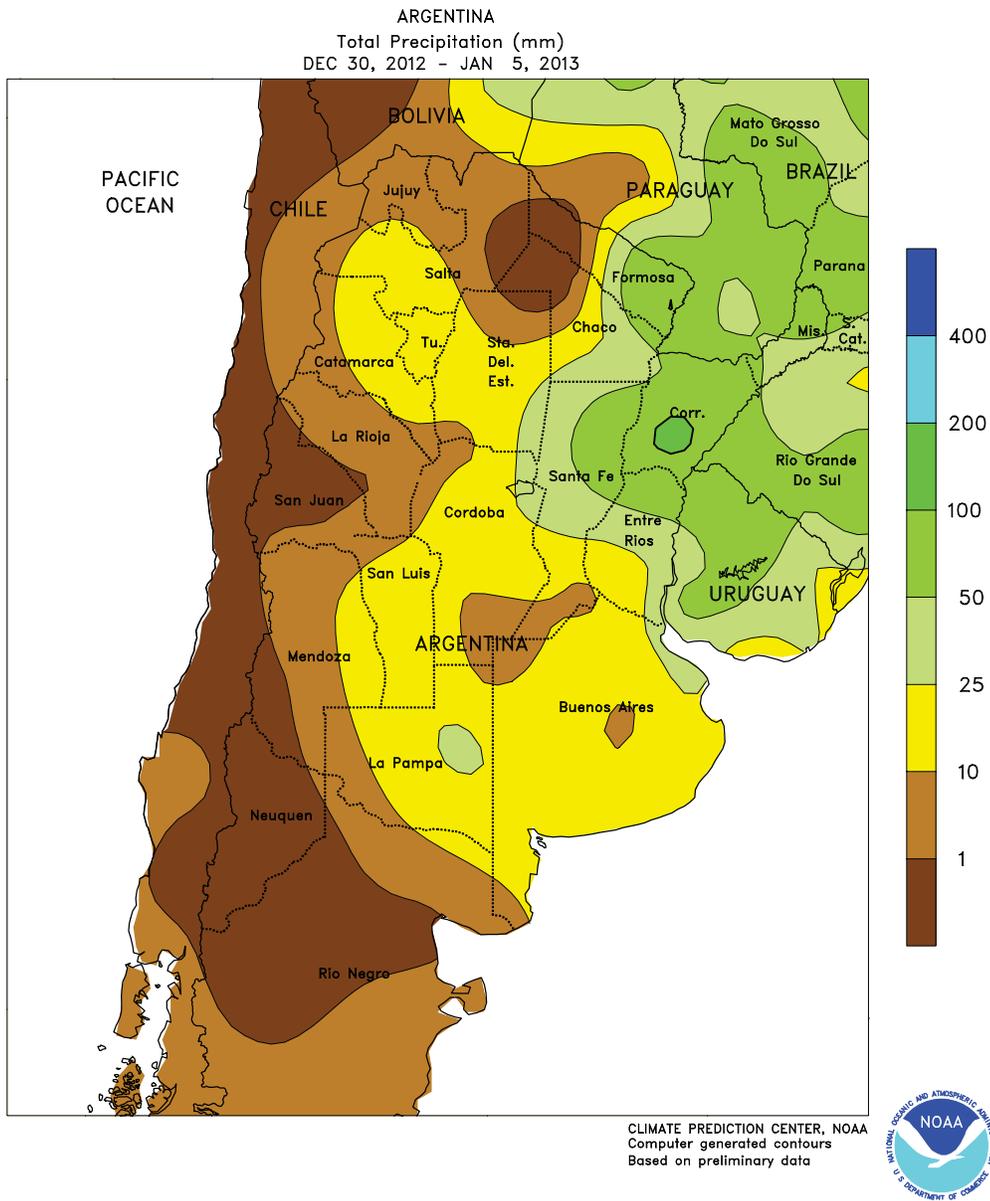
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SOUTH AFRICA

Warm, showery weather continued, benefiting corn, sugarcane, and other rain-fed summer crops. Rainfall totaled 10 to more than 25 mm across the corn belt (North West to southern Mpumalanga), although pockets of dryness lingered in some eastern production areas. Above-normal temperatures (daytime highs in the lower and middle 30s degrees C) were recorded across the corn belt early in the week, but the rain brought seasonably cooler weather the remainder of the week,

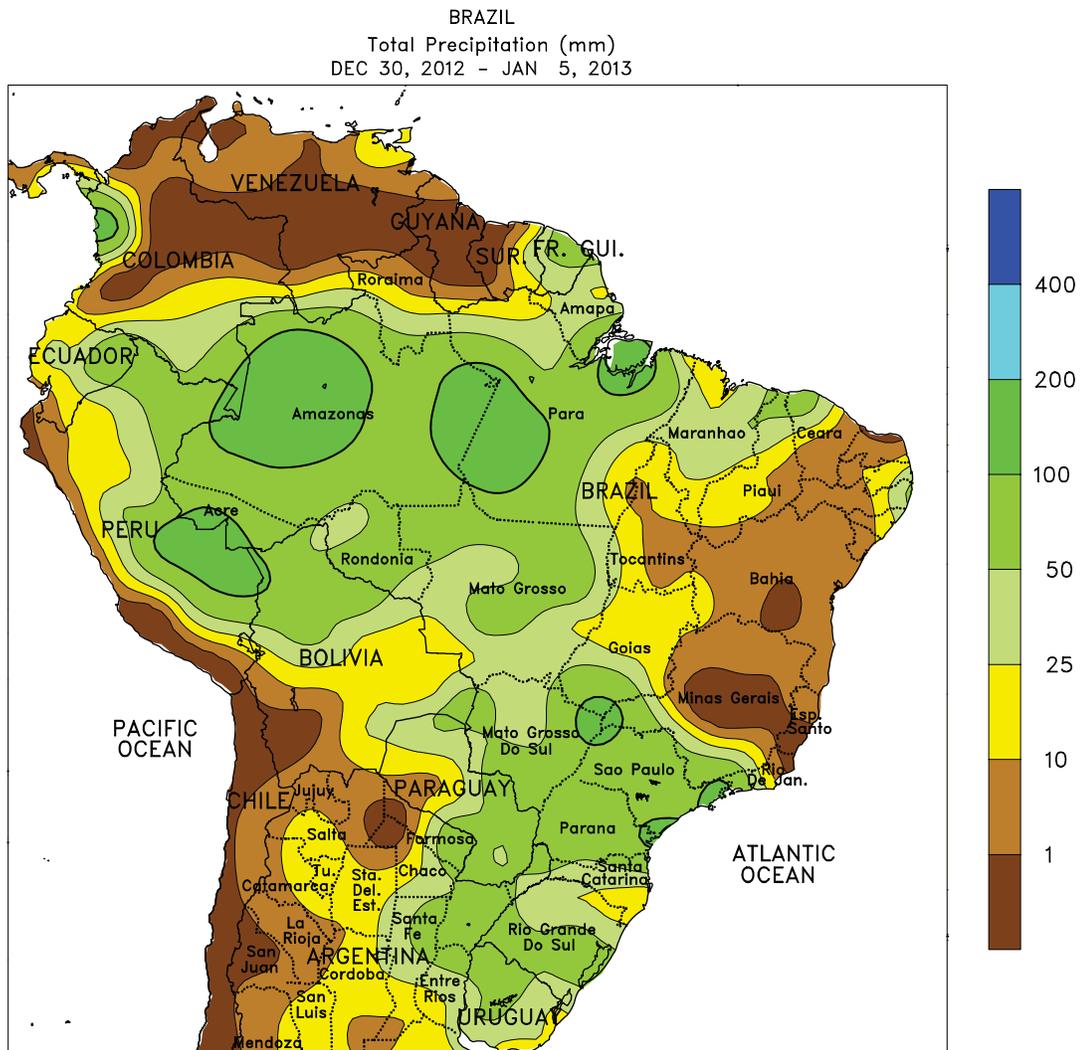
with daytime highs falling below 20°C in some of the traditionally cooler eastern farming areas. Meanwhile, locally heavy showers (greater than 50 mm) returned to sugarcane areas of KwaZulu-Natal after several weeks of unseasonable dryness. The rain extended southward into eastern sections of Eastern Cape, but mostly dry, seasonably warm weather dominated the remainder of the Cape Provinces, with daytime highs reaching the middle and upper 30s on several days.



ARGENTINA

Rainfall tapered off across southern farming areas, aiding seasonal fieldwork even though some areas remained excessively wet from lingering patches of standing water. Rainfall totaled 10 to 25 mm in Buenos Aires and most of La Pampa, spurring the final stages of corn and soybean planting as well as harvesting of winter wheat and barley. Similar amounts were recorded from Cordoba to southern Entre Rios, where little to no rain fell last week. Weekly temperatures averaged several degrees C above normal, with daytime highs ranging from the lower 30s (degrees C) in southeastern Buenos Aires to the middle 30s farther north and west. Wet weather continued in eastern sections of northern Argentina, with

rainfall in excess of 25 mm stretching from northern Entre Rios and northern Santa Fe northeastward through Paraguay and southern Brazil. Drier conditions prevailed farther west (Santiago del Estero northward), where daytime highs again reached 40°C. According to Argentina’s Ministry of Agriculture, corn and soybeans were 85 and 90 percent planted, respectively, as of January 3, lagging last year’s pace for both crops. Winter wheat was 82 percent harvested, an increase of 12 points from last week but still 8 points behind last year. In Buenos Aires, Argentina’s largest producer of wheat, harvesting advanced 21 points, although progress was 20 points behind last year at 66 percent complete.



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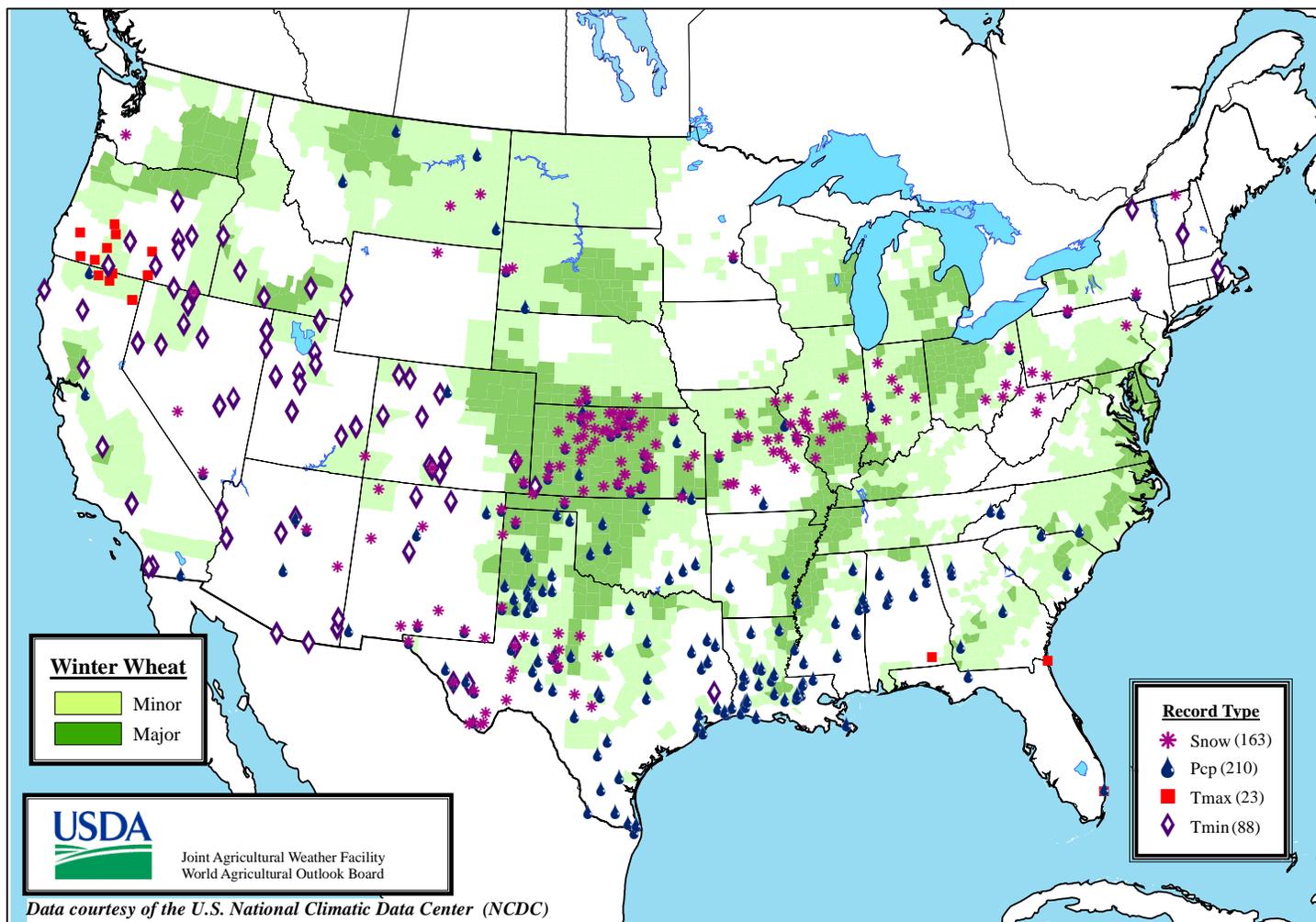
BRAZIL

Beneficial rain continued in the main soybean production areas of southern and central Brazil. Rainfall totaled 25 to 100 mm over a broad area stretching from Rio Grande do Sul to Mato Grosso, maintaining generally favorable levels of moisture for soybeans, corn, and other summer crops. The rain spread eastward into Sao Paulo and southern Minas Gerais, benefiting sugarcane and coffee, as well as southern sections of Goias. Weekly average temperatures were 1 to 2°C above normal in these areas, with daytime highs ranging from the lower 30s (degrees C) in the south and in the mid and upper 30s in the

traditionally warmer locations of Mato Grosso. Elsewhere, drier conditions continued to dominate the northeast, with little to no rain falling from Espirito Santo and central Minas Gerais to Tocantins. The continuation of unseasonable warmth (daytime highs reaching the middle and upper 30s) and dryness in the northeastern interior further limited moisture for normal development of soybeans and cotton. The dryness along the coast fostered harvesting of sugarcane and cocoa, although additional moisture would be welcome following a drier-than-normal winter.

Daily Weather Records (ASOS & COOP)

December 30, 2012-January 5, 2013



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