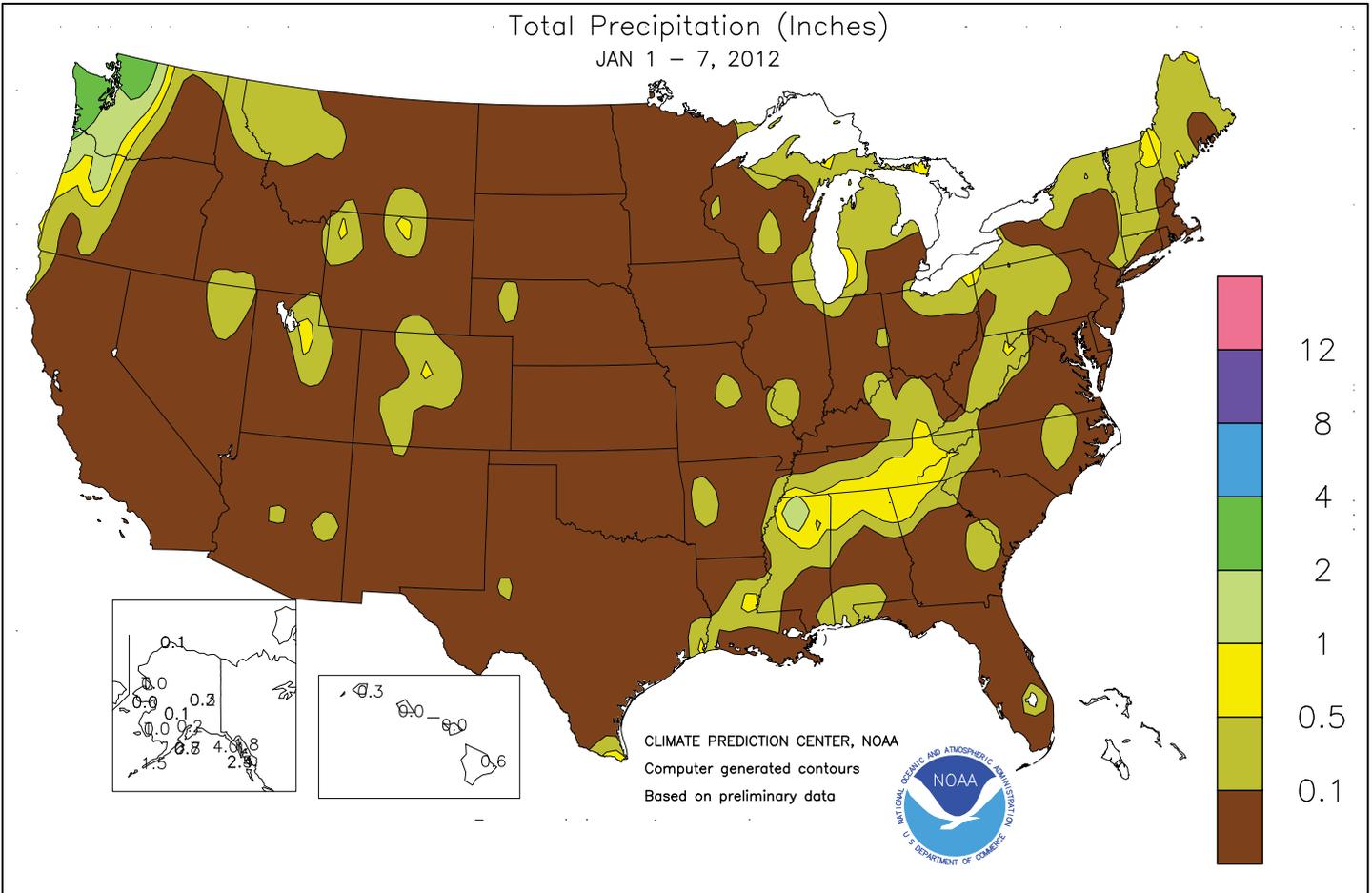


WEEKLY WEATHER AND CROP BULLETIN



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 1 - 7, 2012

Highlights provided by USDA/WAOB

Mild, dry weather dominated the nation during the first week of 2012. Generally light rain and snow fell in the **Pacific Northwest**, but little or no precipitation occurred elsewhere across the **western two-thirds of the U.S.** **California's** primary agricultural and watershed areas remained dry, boosting supplemental feeding demands for livestock and raising the specter of sub-par runoff from high-elevation snow packs during the spring and summer months. Farther east, the **Plains'** winter wheat remained exposed to potential extremes. In addition, some

(Continued on page 5)

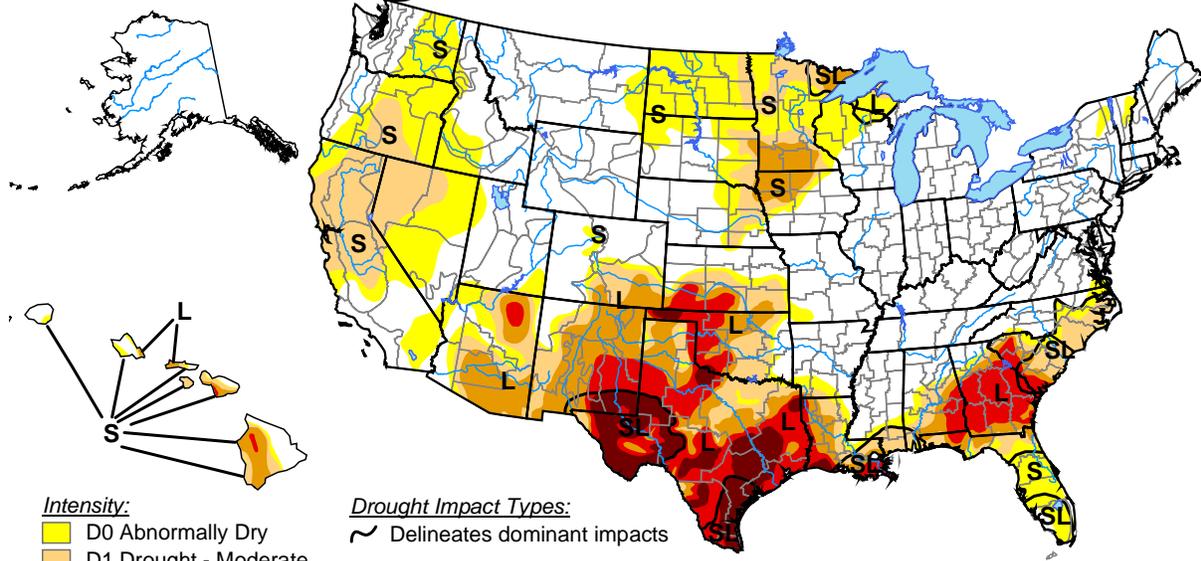
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U.S. Drought Monitor

January 3, 2012

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.



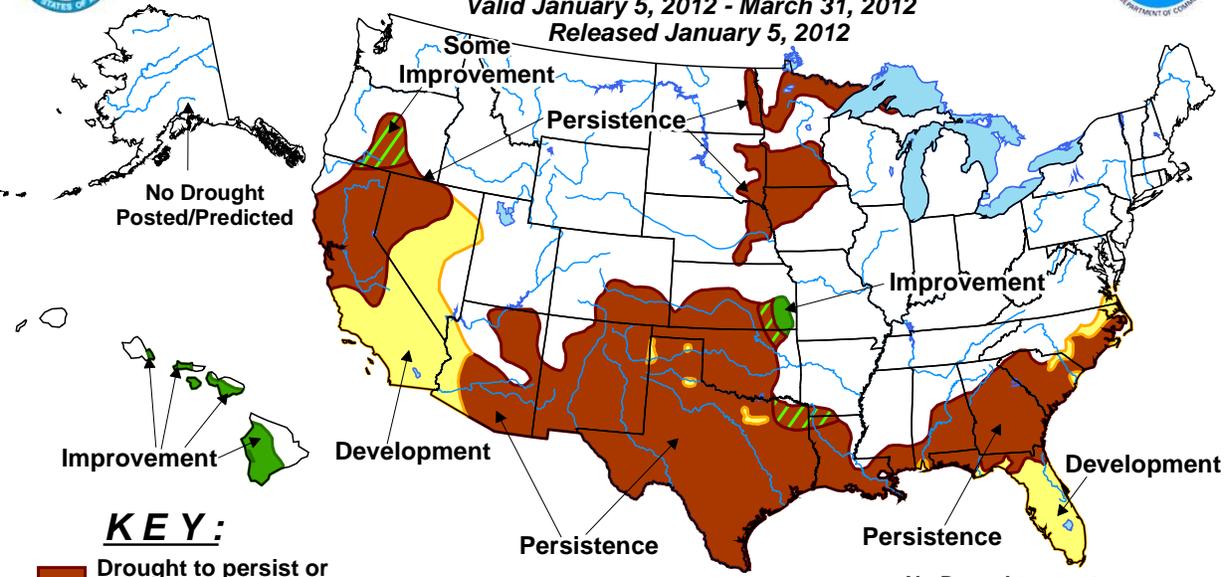
Released Thursday, January 5, 2012

Author: Brad Rippey, U.S. Department of Agriculture

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

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

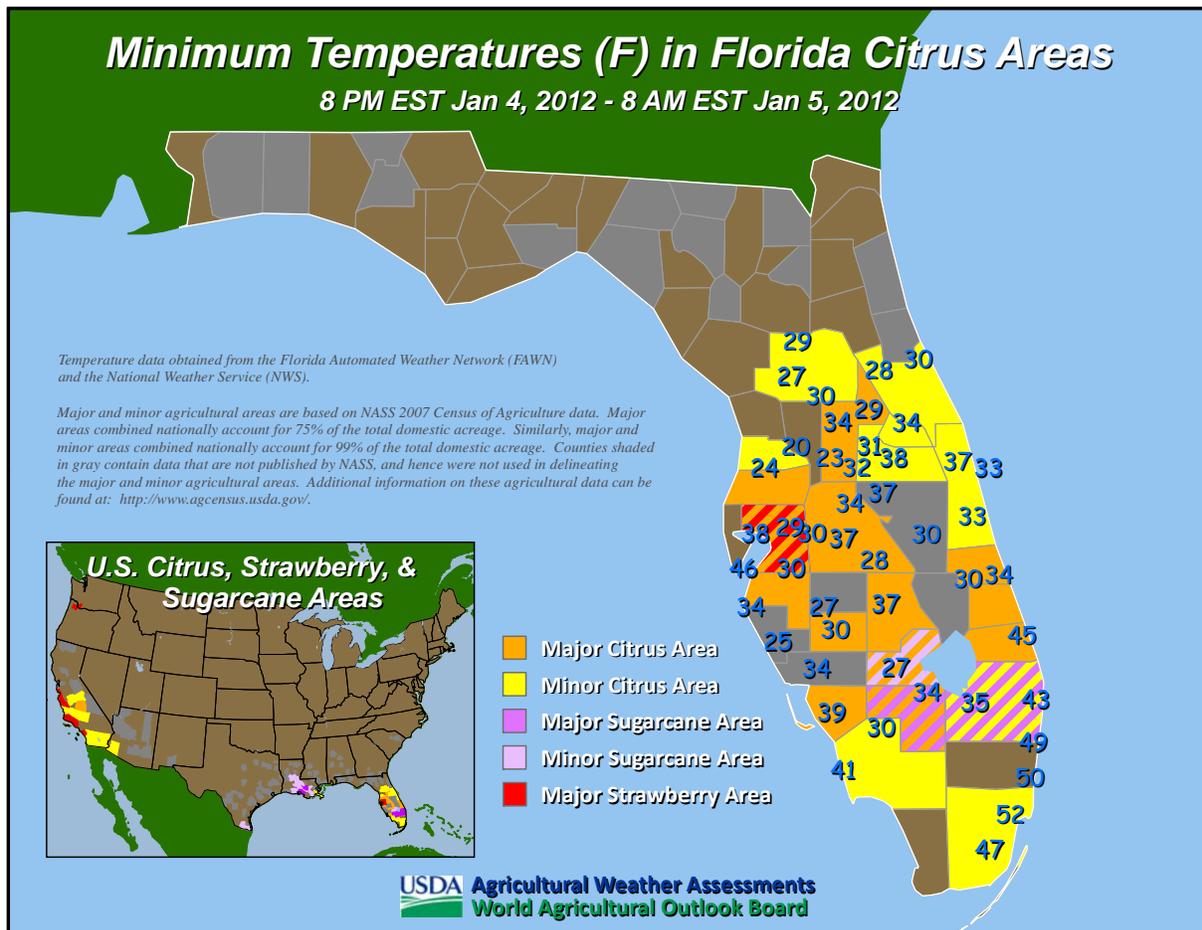
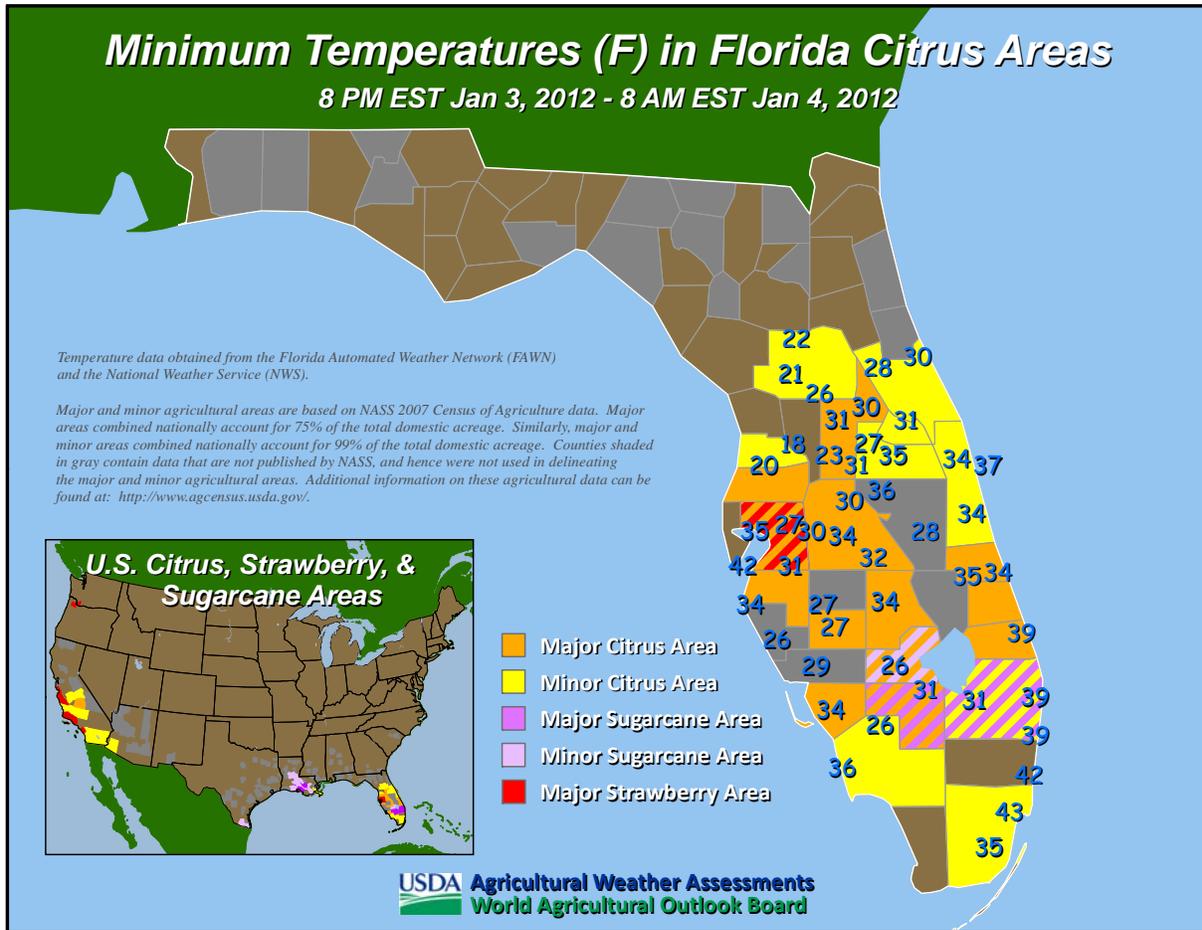
Valid January 5, 2012 - March 31, 2012
Released January 5, 2012

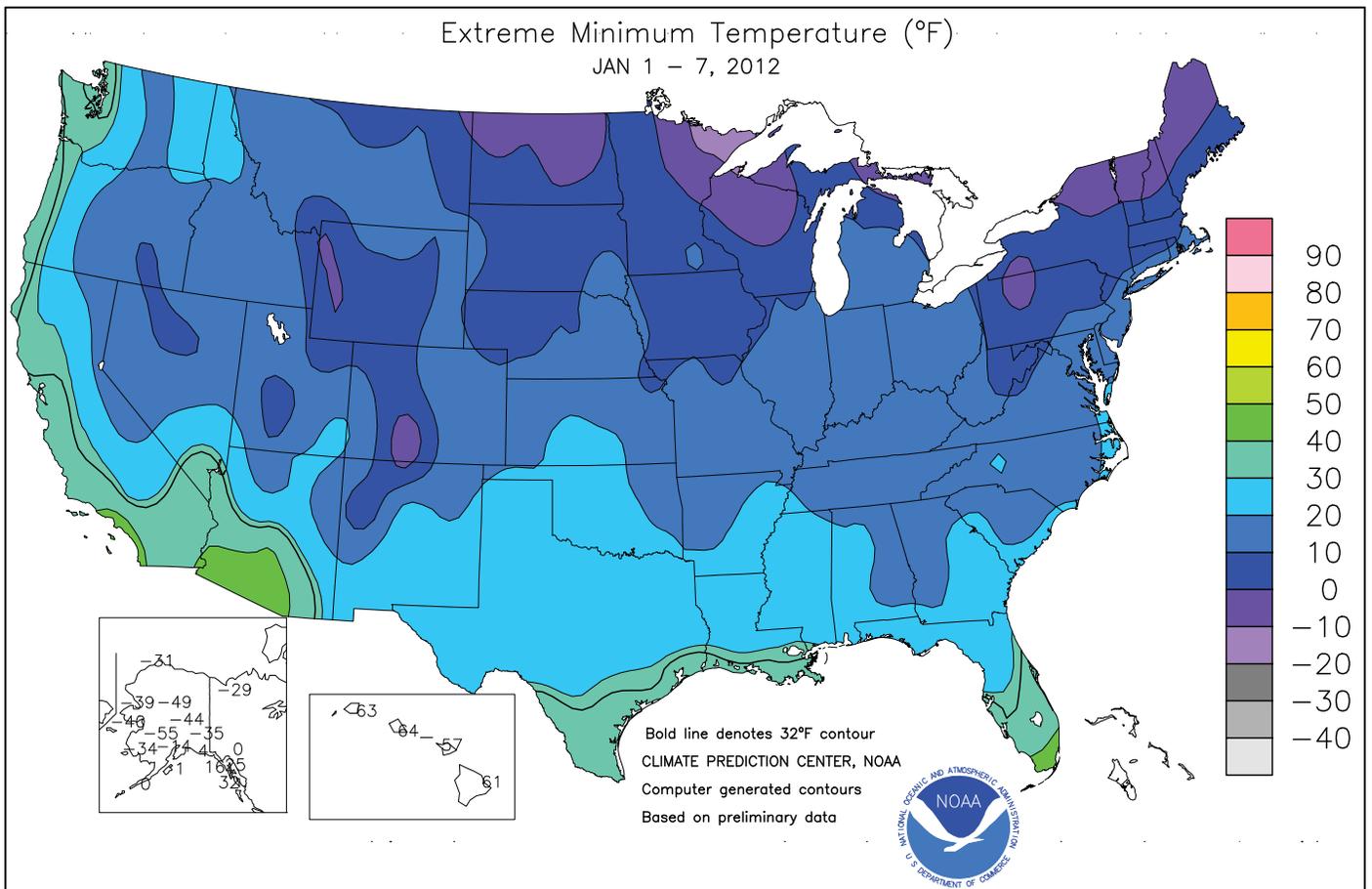
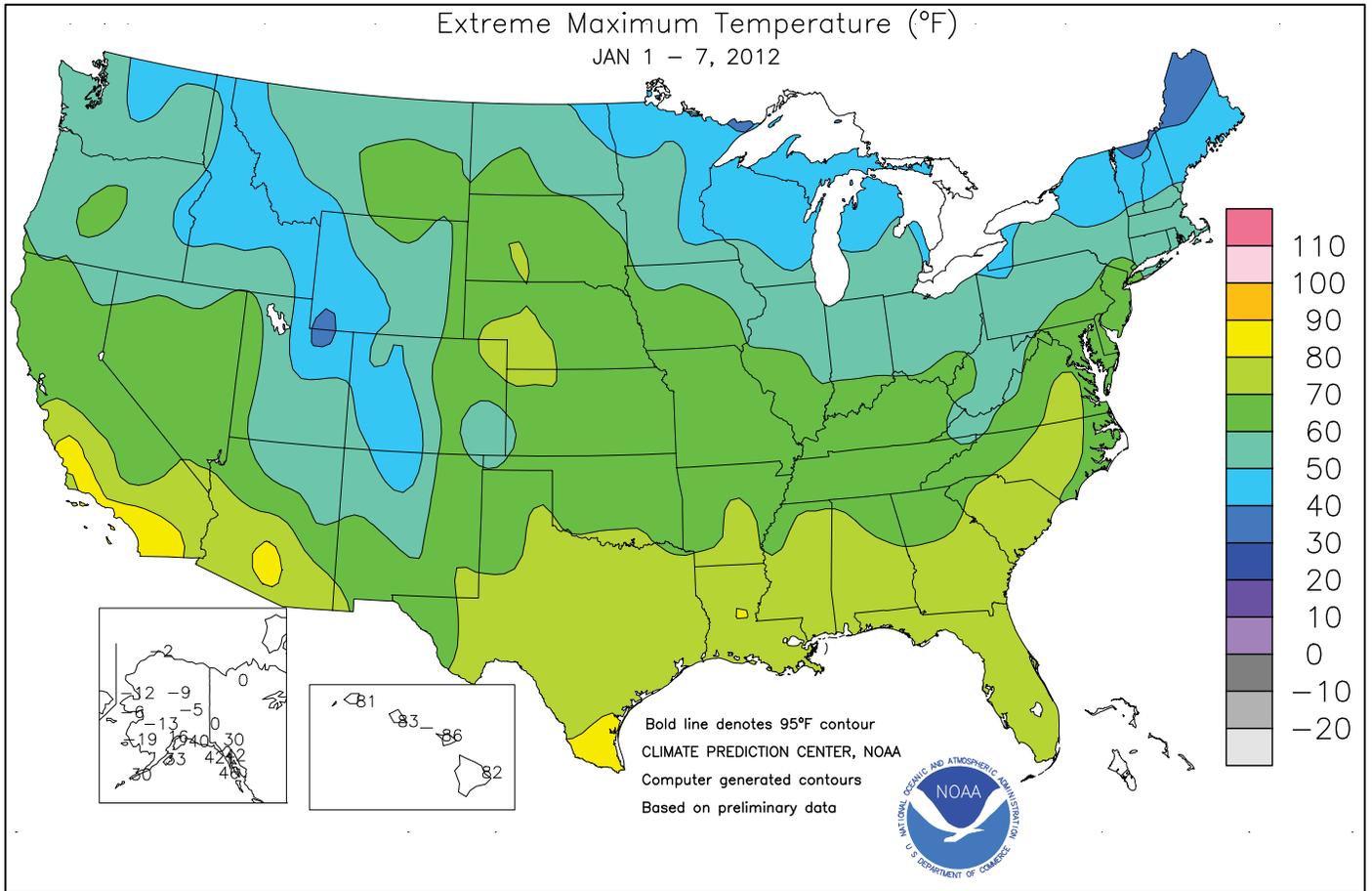


KEY:

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

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.



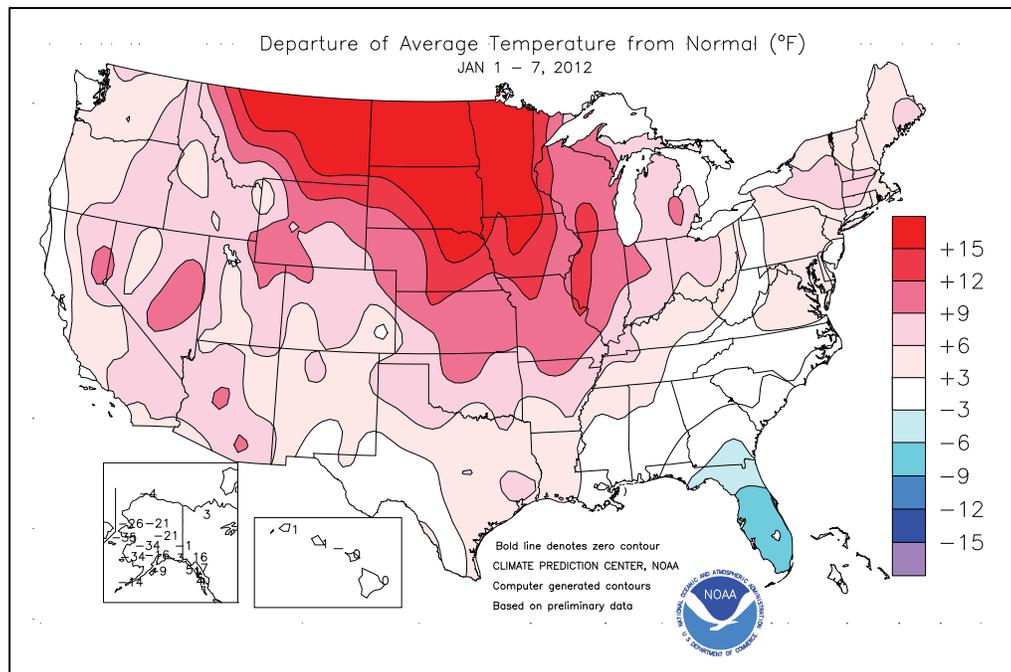


(Continued from front cover)

producers were concerned about wheat beginning to lose winter hardiness due to record-setting warmth. In fact, readings soared to 70°F or higher as far north as **South Dakota**, while weekly temperatures averaged more than 20°F above normal across parts of the **northern Plains**. Elsewhere, snow showers and squalls affected parts of the **Great Lakes and Northeastern States**, especially early in the week, while late-week showers followed a brief cold snap in the **Southeast**. Weekly temperatures averaged as much as 10°F below normal across **Florida's peninsula**, where freezes struck some areas on January 4-5. The cold blast forced some of **Florida's** producers to take protective measures to help guard against freeze damage to commodities such as citrus, sugarcane, strawberries, vegetables, and nursery crops.

Abysmally low mountain snow packs remained a serious concern across **California** and much of the **Intermountain West**. According to the California Department of Water Resources, the average water content of the high-elevation **Sierra Nevada** snow pack stood at 2 inches on January 6, just 15 percent of average for the date. However, **California** has a temporary buffer against this year's lack of precipitation, since the state's 154 reservoirs held 125 percent of their normal water volume on December 1. Meanwhile in **Iowa**, **Des Moines** received no precipitation during the first 7 days of a calendar year for the first time since 1933.

However, a bigger story was the record-setting warmth across the **northern Plains** and the **upper Midwest**. With January 5 highs of 61°F in **Marshall, Canby, and Madison, Minnesota** experienced 60-degree warmth during the first week of a calendar year for the first time on record. In fact, the 5th was the warmest January day on record in a multitude of locations, including **Sidney, NE** (74°F; tied January 27, 1982); **Kennebec, SD** (70°F; tied January 16, 1974); and **Minot, ND** (61°F; previously, 59°F on January 28, 1906). **Sioux Falls, SD** (62°F on January 5), attained 60°F earlier than ever before in the year, breaking the record originally set on January 13, 1987. Similarly, **Sioux City, IA** (68°F on January 5), had never reached or exceeded the 68-degree mark earlier than January 24, 1944. Earlier in the week, record-setting warmth had originated in the **West**. On January 2, **Bakersfield, CA** (82°F), tied a record previously achieved on January 16, 1923, and January 31, 1984. Readings briefly topped 90°F in parts of **southern California**, with **San Gabriel** (91°F) accomplishing the feat on January 4. At the height of the mid-winter "heat wave,"



Sisseton, SD (49, 49, 59, and 48°F), set four consecutive daily-record highs. In stark contrast, **Lakeland, FL** (30 and 29°F) was one of several locations across **Florida's peninsula** to report consecutive freezes on January 4-5. In **southern Florida**, January 4 lows dipped to 26°F in **Palmdale (Glades County)** and **Immokalee (Collier County)**. Elsewhere, daily-record lows for January 4 included 16°F in **Florence, SC**, and 19°F in both **Alma, GA**, and **Inverness, FL**. By week's end, however, warmth returned to the **East**, where daily-record highs for January 7 climbed to 71°F in **Greenville-Spartanburg, SC**, and 66°F in **Trenton, NJ**.

Frigid weather gripped **Alaska**, holding weekly temperatures 20 to 35°F below normal at many mainland locations. **Nome** (-40°F on January 5) reported its lowest reading since February 1, 1999, when the temperature fell to -41°F. **Nome** also experienced readings of -30°F or lower on 12 consecutive days (December 28 - January 8), the longest such spell in that location since the record-setting cold wave of January 15-30, 1989. Numerous readings below -50°F were noted across **interior Alaska**, with **Galena, McGrath, and Tanana** starting the New Year with lows of -53°F on January 1. Later, **Galena** (-54°F) notched a daily-record low for January 7. From December 31 - January 7, **McGrath** endured seven lows of -50°F or below in an 8-day span, including a reading of -55°F on January 4. Incredibly, no daily-record lows were broken during **McGrath's** cold snap. Meanwhile, record-setting snowfall returned to parts of **southern Alaska**. **Valdez**, on the heels of its snowiest December on record, received 51.7 inches during the first week of January. Daily-record snowfall totals in **Valdez** included 19.2 and 19.3 inches on January 5 and 6, respectively. Farther south, generally tranquil weather prevailed in **Hawaii**. On the **Big Island**, January 1-7 rainfall totaled just 0.57 inch (29 percent of normal) in **Hilo**.

National Weather Data for Selected Cities

Weather Data for the Week Ending January 7, 2012

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

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	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
AL BIRMINGHAM	58	33	70	22	46	3	0.04	-1.14	0.04	5.29	94	0.04	3	84	34	0	5	1	0	0	
HUNTSVILLE	54	30	68	20	42	2	0.62	-0.64	0.62	6.99	102	0.62	49	79	54	0	5	1	1	1	
MOBILE	65	38	74	25	52	2	0.00	-1.17	0.00	1.89	32	0.00	0	84	47	0	2	0	0	0	
MONTGOMERY	62	35	75	19	48	2	0.00	-1.04	0.00	3.46	58	0.00	0	86	32	0	3	0	0	0	
AK ANCHORAGE	8	-7	16	-14	1	-15	0.20	0.03	0.09	2.94	241	0.20	118	83	74	0	7	3	0	0	
BARROW	-9	-25	-2	-31	-17	-4	0.13	0.13	0.07	0.77	642	0.13	1300	84	72	0	7	4	0	0	
FAIRBANKS	-20	-39	-5	-44	-30	-21	0.20	0.06	0.11	1.16	132	0.20	143	75	72	0	7	6	0	0	
JUNEAU	38	29	42	25	34	8	1.75	0.59	0.77	9.87	150	1.75	151	97	84	0	6	7	1	1	
KODIAK	28	14	33	1	21	-9	0.80	-1.09	0.64	6.71	70	0.80	42	72	53	0	7	4	1	1	
NOME	-22	-36	-6	-40	-29	-35	0.00	-0.19	0.00	2.17	181	0.00	0	68	64	0	7	0	0	0	
AZ FLAGSTAFF	53	20	59	15	37	8	0.00	-0.43	0.00	2.75	122	0.00	0	83	21	0	7	0	0	0	
PHOENIX	76	50	81	46	63	10	0.00	-0.20	0.00	1.08	96	0.00	0	46	26	0	0	0	0	0	
TUCSON	76	45	80	40	61	10	0.00	-0.25	0.00	4.11	321	0.00	0	41	20	0	0	0	0	0	
YUMA	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	0	0	0	0	0	
AR FORT SMITH	58	31	69	20	45	7	0.02	-0.52	0.02	3.46	88	0.02	4	76	31	0	5	1	0	0	
LITTLE ROCK	59	33	71	22	46	6	0.00	-0.83	0.00	7.72	139	0.00	0	81	29	0	4	0	0	0	
CA BAKERSFIELD	69	38	82	33	54	8	0.00	-0.23	0.00	0.00	0	0.00	0	78	59	0	0	0	0	0	
FRESNO	62	36	65	34	49	5	0.00	-0.42	0.00	0.00	0	0.00	0	90	77	0	0	0	0	0	
LOS ANGELES	76	51	85	46	64	7	0.00	-0.55	0.00	0.67	29	0.00	0	75	53	0	0	0	0	0	
REDDING	64	33	67	29	48	3	0.00	-1.34	0.00	0.38	6	0.00	0	86	74	0	5	0	0	0	
SACRAMENTO	63	34	66	32	49	4	0.00	-0.72	0.00	0.27	9	0.00	0	97	44	0	1	0	0	0	
SAN DIEGO	71	50	83	47	61	4	0.01	-0.43	0.01	0.87	50	0.01	2	83	56	0	0	1	0	0	
SAN FRANCISCO	58	44	64	41	51	2	0.00	-0.85	0.00	0.13	3	0.00	0	89	72	0	0	0	0	0	
STOCKTON	62	34	67	31	48	4	0.01	-0.51	0.01	0.21	9	0.01	2	95	78	0	1	1	0	0	
CO ALAMOSA	40	-1	44	-4	20	6	0.00	-0.06	0.00	0.28	72	0.00	0	81	55	0	7	0	0	0	
CO SPRINGS	52	25	64	16	38	10	0.00	-0.08	0.00	0.46	92	0.00	0	65	23	0	7	0	0	0	
DENVER INTL	51	25	65	18	38	10	0.08	0.00	0.08	0.86	221	0.08	100	69	32	0	6	1	0	0	
GRAND JUNCTION	45	19	47	16	32	7	0.00	-0.14	0.00	0.35	53	0.00	0	72	52	0	7	0	0	0	
PUEBLO	50	21	63	17	36	7	0.01	-0.07	0.01	0.86	183	0.01	13	84	53	0	7	1	0	0	
CT BRIDGEPORT	44	26	55	12	35	4	0.11	-0.73	0.11	3.82	89	0.11	13	66	44	0	6	1	0	0	
HARTFORD	44	22	61	7	33	7	0.11	-0.74	0.11	5.13	115	0.11	13	74	46	0	7	1	0	0	
DC WASHINGTON	51	29	68	17	40	5	0.00	-0.74	0.00	4.93	130	0.00	0	67	36	0	4	0	0	0	
DE WILMINGTON	47	25	64	13	36	4	0.03	-0.76	0.02	4.47	107	0.03	4	86	40	0	6	2	0	0	
FL DAYTONA BEACH	65	38	76	31	52	-7	0.00	-0.68	0.00	3.08	91	0.00	0	90	36	0	3	0	0	0	
JACKSONVILLE	64	35	73	22	49	-4	0.00	-0.74	0.00	1.82	54	0.00	0	85	32	0	3	0	0	0	
KEY WEST	71	57	79	49	64	-6	0.00	-0.52	0.00	0.38	14	0.00	0	78	51	0	0	0	0	0	
MIAMI	71	51	80	43	61	-7	0.00	-0.39	0.00	1.13	44	0.00	0	72	36	0	0	0	0	0	
ORLANDO	66	40	78	31	53	-8	0.00	-0.52	0.00	0.81	29	0.00	0	85	53	0	2	0	0	0	
PENSACOLA	65	43	76	28	54	2	0.13	-0.97	0.06	8.06	159	0.13	12	83	48	0	2	4	0	0	
TALLAHASSEE	66	34	77	18	50	-2	0.00	-1.16	0.00	4.43	84	0.00	0	87	49	0	3	0	0	0	
TAMPA	67	46	76	35	56	-5	0.00	-0.47	0.00	0.20	7	0.00	0	84	45	0	0	0	0	0	
WEST PALM BEACH	70	46	79	39	58	-9	0.00	-0.72	0.00	1.07	28	0.00	0	82	55	0	0	0	0	0	
GA ATHENS	57	30	67	19	43	1	0.08	-0.89	0.08	3.76	80	0.08	8	70	40	0	4	1	0	0	
ATLANTA	57	34	69	22	45	3	0.00	-1.00	0.00	4.44	92	0.00	0	67	39	0	3	0	0	0	
AUGUSTA	60	27	73	17	44	-1	0.00	-0.93	0.00	1.29	32	0.00	0	82	46	0	5	0	0	0	
COLUMBUS	61	34	72	22	47	0	0.02	-1.02	0.02	5.04	93	0.02	2	82	29	0	3	1	0	0	
MACON	60	30	72	18	45	0	0.00	-1.04	0.00	3.03	61	0.00	0	84	31	0	4	0	0	0	
SAVANNAH	62	34	73	22	48	-1	0.02	-0.82	0.02	1.17	32	0.02	2	73	39	0	2	1	0	0	
HI HILO	79	64	82	61	72	1	0.56	-1.47	0.44	19.82	158	0.56	28	89	74	0	0	3	0	0	
HONOLULU	82	68	83	64	75	2	0.00	-0.63	0.00	1.14	33	0.00	0	81	72	0	0	0	0	0	
KAHULUI	83	62	86	57	72	0	0.00	-0.84	0.00	0.06	2	0.00	0	78	69	0	0	0	0	0	
LIHUE	79	67	81	63	73	1	0.27	-0.82	0.05	2.16	37	0.27	25	86	79	0	0	7	0	0	
ID BOISE	46	26	49	20	36	7	0.00	-0.30	0.00	0.38	23	0.00	0	78	63	0	7	0	0	0	
LEWISTON	47	31	57	24	39	6	0.00	-0.23	0.00	0.22	17	0.00	0	77	63	0	4	0	0	0	
POCATELLO	42	17	55	13	30	6	0.00	-0.25	0.00	0.21	16	0.00	0	88	66	0	7	0	0	0	
IL CHICAGO/O'HARE	41	25	55	13	33	11	0.05	-0.35	0.04	2.72	96	0.05	13	71	52	0	6	2	0	0	
MOLINE	43	22	57	10	33	12	0.14	-0.24	0.14	2.82	109	0.14	37	78	52	0	7	1	0	0	
PEORIA	44	24	57	11	34	11	0.07	-0.29	0.06	2.98	108	0.07	19	80	44	0	6	2	0	0	
ROCKFORD	41	21	57	9	31	11	0.09	-0.23	0.08	2.21	93	0.09	28	76	52	0	7	2	0	0	
SPRINGFIELD	48	27	64	11	37	11	0.02	-0.39	0.02	2.59	88	0.02	5	76	39	0	6	1	0	0	
IN EVANSVILLE	49	28	62	17	39	8	0.00	-0.63	0.00	6.04	145	0.00	0	70	45	0	5	0	0	0	
FORT WAYNE	41	25	54	15	33	9	0.12	-0.36	0.09	3.90	120	0.12	25	81	60	0	6	3	0	0	
INDIANAPOLIS	44	26	58	13	35	8	0.04	-0.52	0.01	5.17	144	0.04	7	79	50	0	5	1	0	0	
SOUTH BEND	39	25	52	19	32	8	0.37	-0.17	0.26	2.97	82	0.37	69	76	65	0	6	2	0	0	
IA BURLINGTON	44	24	58	9	34	11	0.06	-0.25	0.06	3.40	141	0.06	19	82	44	0					

Weather Data for the Week Ending January 7, 2012

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	
KY WICHITA	54	27	61	21	41	11	0.00	-0.24	0.00	3.70	233	0.00	0	74	41	0	7	0	0	
JACKSON	50	28	65	17	39	5	0.02	-0.79	0.01	4.22	83	0.02	2	71	33	0	4	2	0	
LEXINGTON	47	26	61	14	37	5	0.00	-0.81	0.00	4.43	92	0.00	0	71	48	0	5	0	0	
LOUISVILLE	50	29	64	17	40	7	0.00	-0.74	0.00	5.22	118	0.00	0	70	33	0	4	0	0	
PADUCAH	51	29	65	17	40	7	0.00	-0.74	0.00	7.30	143	0.00	0	79	32	0	4	0	0	
LA BATON ROUGE	67	40	77	28	54	4	0.02	-1.27	0.02	2.85	44	0.02	2	90	39	0	2	1	0	
LAKE CHARLES	69	45	77	32	57	6	0.02	-1.18	0.02	4.75	82	0.02	2	87	46	0	1	1	0	
NEW ORLEANS	67	47	75	33	57	4	0.02	-1.11	0.02	1.33	21	0.02	2	77	55	0	0	1	0	
SHREVEPORT	65	38	73	24	52	6	0.00	-0.99	0.00	7.90	143	0.00	0	78	37	0	3	0	0	
ME CARIBOU	22	7	35	-4	15	4	0.56	-0.16	0.32	3.72	95	0.56	78	85	69	0	7	4	0	
PORTLAND	37	19	47	7	28	5	0.32	-0.62	0.22	3.83	74	0.32	34	78	53	0	7	3	0	
MD BALTIMORE	49	25	66	13	37	4	0.03	-0.77	0.03	4.53	109	0.03	4	74	43	0	6	1	0	
MA BOSTON	45	25	60	10	35	5	0.02	-0.83	0.02	4.04	88	0.02	2	72	42	0	5	1	0	
WORCESTER	40	22	56	5	31	7	0.09	-0.83	0.08	5.25	111	0.09	10	78	45	0	5	2	0	
MI ALPENA	34	20	51	2	27	8	0.27	-0.14	0.13	1.27	57	0.27	66	85	64	0	7	4	0	
GRAND RAPIDS	40	26	54	18	33	10	0.08	-0.37	0.06	2.74	87	0.08	18	80	61	0	6	2	0	
HOUGHTON LAKE	33	20	45	10	27	8	0.25	-0.11	0.11	1.21	57	0.25	69	83	71	0	6	3	0	
LANSING	39	25	53	15	32	9	0.02	-0.33	0.02	2.26	90	0.02	6	76	63	0	6	1	0	
MUSKOGON	41	28	52	19	34	9	0.28	-0.23	0.20	2.62	83	0.28	55	78	63	0	6	2	0	
TRAVERSE CITY	35	23	47	16	29	7	0.24	-0.41	0.17	1.74	53	0.24	37	89	61	0	7	2	0	
MN DULUTH	32	13	48	-3	23	14	0.02	-0.17	0.01	0.61	54	0.02	11	74	63	0	7	2	0	
INT'L FALLS	30	10	46	-9	20	17	0.02	-0.13	0.02	0.52	61	0.02	13	83	60	0	7	1	0	
MINNEAPOLIS	35	21	46	10	28	15	0.00	-0.21	0.00	1.01	83	0.00	0	79	61	0	6	0	0	
ROCHESTER	37	20	55	8	28	16	0.03	-0.15	0.02	1.18	98	0.03	17	81	66	0	6	2	0	
ST. CLOUD	36	17	53	6	26	17	0.00	-0.14	0.00	0.42	51	0.00	0	85	55	0	7	0	0	
MS JACKSON	63	36	74	26	50	5	0.24	-1.01	0.24	6.92	105	0.24	19	82	38	0	2	1	0	
MERIDIAN	62	34	72	21	48	2	0.00	-1.27	0.00	5.44	83	0.00	0	87	54	0	4	0	0	
TUPELO	58	32	69	22	45	5	0.12	-1.14	0.10	5.92	80	0.12	10	77	49	0	5	2	0	
MO COLUMBIA	50	27	68	11	39	11	0.68	0.31	0.13	5.85	206	0.68	184	70	32	0	6	7	0	
KANSAS CITY	50	27	65	13	38	11	0.02	-0.25	0.02	3.07	161	0.02	7	67	30	0	5	1	0	
SAINT LOUIS	53	32	70	18	42	12	0.00	-0.47	0.00	3.13	94	0.00	0	64	38	0	2	0	0	
SPRINGFIELD	52	27	66	13	40	8	0.00	-0.44	0.00	2.84	79	0.00	0	67	38	0	5	0	0	
MT BILLINGS	48	30	64	19	39	15	0.00	-0.17	0.00	0.22	26	0.00	0	49	29	0	4	0	0	
BUTTE	37	14	48	8	26	9	0.00	-0.11	0.00	0.29	45	0.00	0	85	47	0	7	0	0	
GLASGOW	41	23	56	14	32	21	0.00	-0.08	0.00	0.38	84	0.00	0	69	52	0	6	0	0	
GREAT FALLS	48	29	59	16	39	17	0.48	0.31	0.48	1.40	167	0.48	282	58	30	0	4	1	0	
HAVRE	46	19	60	3	33	18	0.00	-0.11	0.00	0.13	21	0.00	0	64	52	0	6	0	0	
KALISPELL	42	22	52	16	32	11	0.01	-0.32	0.01	0.76	38	0.01	3	88	50	0	7	1	0	
MISSOULA	39	21	49	17	30	7	0.01	-0.24	0.01	0.57	41	0.01	4	84	75	0	7	1	0	
NE GRAND ISLAND	52	22	68	13	37	15	0.00	-0.11	0.00	1.13	147	0.00	0	67	38	0	7	0	0	
LINCOLN	50	18	68	9	34	11	0.00	-0.17	0.00	1.59	154	0.00	0	72	39	0	7	0	0	
NORFOLK	50	22	70	14	36	16	0.00	-0.11	0.00	0.80	105	0.00	0	64	37	0	7	0	0	
NORTH PLATTE	50	15	69	7	33	10	0.07	-0.01	0.07	0.40	83	0.07	88	86	35	0	7	1	0	
OMAHA	47	24	66	15	36	14	0.00	-0.16	0.00	1.75	162	0.00	0	74	43	0	7	0	0	
SCOTTSBLUFF	52	15	66	6	34	10	0.01	-0.10	0.01	0.33	49	0.01	9	74	45	0	7	1	0	
VALENTINE	50	16	69	2	33	12	0.00	-0.06	0.00	0.20	51	0.00	0	79	36	0	7	0	0	
NV ELY	56	18	63	15	37	13	0.01	-0.13	0.01	0.23	36	0.01	7	61	35	0	7	1	0	
LAS VEGAS	66	42	68	39	54	8	0.00	-0.11	0.00	0.21	41	0.00	0	35	24	0	0	0	0	
RENO	60	26	69	22	43	11	0.00	-0.20	0.00	0.00	0	0.00	0	56	45	0	6	0	0	
WINNEMUCCA	54	13	63	9	34	5	0.02	-0.17	0.01	0.15	15	0.02	11	67	43	0	7	2	0	
NH CONCORD	37	16	48	3	27	6	0.11	-0.55	0.10	4.13	114	0.11	17	82	50	0	7	2	0	
NJ NEWARK	46	27	64	12	36	4	0.06	-0.81	0.06	4.58	103	0.06	7	65	39	0	5	1	0	
NM ALBUQUERQUE	53	27	55	25	40	5	0.00	-0.11	0.00	1.18	197	0.00	0	65	26	0	6	0	0	
NY ALBANY	39	20	51	4	29	6	0.02	-0.53	0.01	3.79	118	0.02	4	80	51	0	7	2	0	
BINGHAMTON	36	20	50	-1	28	5	0.10	-0.46	0.05	3.23	90	0.10	18	75	60	0	5	4	0	
BUFFALO	38	23	50	3	30	4	0.17	-0.57	0.10	3.81	84	0.17	23	79	60	0	4	3	0	
ROCHESTER	39	22	53	3	30	5	0.08	-0.44	0.06	2.48	76	0.08	15	73	57	0	5	3	0	
SYRACUSE	41	24	53	8	32	8	0.24	-0.34	0.09	2.74	74	0.24	41	79	52	0	5	5	0	
NC ASHEVILLE	51	22	67	13	36	0	0.08	-0.75	0.08	5.20	123	0.08	10	73	44	0	7	1	0	
CHARLOTTE	56	28	71	16	42	0	0.00	-0.85	0.00	3.42	85	0.00	0	73	29	0	5	0	0	
GREENSBORO	53	27	68	17	40	2	0.01	-0.75	0.01	2.97	78	0.01	1	64	31	0	5	1	0	
HATTERAS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	0	0	0	0	0
RALEIGH	56	30	72	19	43	3	0.01	-0.83	0.01	2.06	53	0.01	1	62	33	0	4	1	0	
WILMINGTON	59	33	71	20	46	0	0.00	-0.97	0.00	0.59	12	0.00	0	83	28	0	3	0	0	
ND BISMARCK	44	18	59	2	31	21	0.00	-0.08	0.00	0.48	92	0.00	0	74	50	0	7	0	0	
DICKINSON	44	18	62	2	31	17	0.00	-0.06	0.00	0.22	55	0.00	0	75	34	0	7	0	0	
FARGO	37	17	55	2	27	20	0.00	-0.16	0.00	0.37	51	0.00	0	79	59	0	7	0	0	
GRAND FORKS	35	13	47	0	24	18	0.01	-0.13	0.01	0.67	97	0.01	7	90	66	0	7	1	0	
JAMESTOWN	39	18	56	0	28	19	0.00	-0.11	0.00	0.26	47	0.00	0	83	54	0	7	0	0	
WILLISTON	42	18	58	1	30	22	0.00	-0.11	0.00	0.19	28	0.00	0	80	53	0	7	0	0	
OH AKRON-CANTON	39	25	55	13	32	6	0.11	-0.46	0.06	4.87	137	0.11	19	75	57	0	5	3	0	
CINCINNATI	45	26	59	15	36	6	0.01	-0.66	0.01	6.54	166	0.01	1	71	57	0	5	1	0	
CLEVELAND	40	28	54	18	34	7	0.18	-0.38	0.07	5.16	139	0.18	32	79	57	0	5	3	0	
COLUMBUS	43	26	57	18	34	5	0.06	-0.50	0.04	5.44	156	0.06	11	76	57	0	6	2	0	
DAYTON	40	24	55	17	32	5	0.01	-0.59	0.01	5.36	146	0.01	2	84	55	0	6	1	0	
MANSFIELD	39	25	52	12	32	7	0.16	-0.45	0.08	5.27	136	0.16	26	87	59	0	5	3	0	

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending January 7, 2012

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	40	26	52	15	33	8	0.04	-0.41	0.02	3.42	111	0.04	9	78	60	0	5	2	0		
OK YOUNGSTOWN	38	24	53	9	31	5	0.48	-0.05	0.29	4.91	141	0.48	91	78	57	0	5	3	0		
OK OKLAHOMA CITY	58	32	67	24	45	9	0.00	-0.35	0.00	1.86	83	0.00	0	67	27	0	4	0	0		
OR TULSA	59	31	69	21	45	9	0.00	-0.38	0.00	1.45	52	0.00	0	64	33	0	4	0	0		
OR ASTORIA	52	39	58	32	46	4	1.33	-0.82	0.79	5.85	47	1.33	62	91	68	0	1	5	1		
OR BURNS	44	17	53	9	31	7	0.00	-0.28	0.00	0.37	23	0.00	0	88	73	0	7	0	0		
OR EUGENE	51	34	62	31	43	4	0.10	-1.58	0.05	5.11	51	0.10	6	95	87	0	2	4	0		
OR MEDFORD	51	30	61	27	41	3	0.01	-0.54	0.01	0.95	28	0.01	2	96	65	0	6	1	0		
OR PENDLETON	49	26	69	19	38	5	0.00	-0.30	0.00	0.41	23	0.00	0	91	73	0	6	0	0		
OR PORTLAND	50	37	54	31	43	4	0.31	-0.83	0.16	2.84	41	0.31	27	88	76	0	1	4	0		
OR SALEM	52	34	60	30	43	3	0.54	-0.74	0.35	3.87	50	0.54	42	91	82	0	4	4	0		
PA ALLENTOWN	44	20	61	9	32	4	0.03	-0.74	0.03	2.66	64	0.03	4	79	51	0	7	1	0		
PA ERIE	39	24	51	7	32	4	0.40	-0.23	0.17	5.55	127	0.40	63	74	61	0	5	3	0		
PA MIDDLETOWN	45	23	60	11	34	5	0.04	-0.57	0.04	3.30	86	0.04	7	81	42	0	7	1	0		
PA PHILADELPHIA	46	27	63	14	37	4	0.03	-0.76	0.02	4.40	107	0.03	4	68	38	0	4	2	0		
PA PITTSBURGH	41	24	56	9	33	5	0.08	-0.51	0.05	2.49	72	0.08	14	76	49	0	5	3	0		
PA WILKES-BARRE	40	22	55	5	31	4	0.11	-0.40	0.11	3.24	106	0.11	22	77	49	0	6	1	0		
PA WILLIAMSPORT	41	20	54	7	31	5	0.19	-0.39	0.14	3.94	112	0.19	33	74	61	0	6	2	0		
RI PROVIDENCE	45	23	61	11	34	4	0.05	-0.91	0.05	4.01	79	0.05	5	70	41	0	7	1	0		
SC BEAUFORT	62	34	73	21	48	-1	0.05	-0.83	0.05	1.12	28	0.05	6	77	30	0	2	1	0		
SC CHARLESTON	61	32	74	20	47	-1	0.00	-0.89	0.00	0.65	16	0.00	0	77	31	0	3	0	0		
SC COLUMBIA	61	30	73	19	46	2	0.00	-0.98	0.00	1.10	25	0.00	0	77	34	0	6	0	0		
SC GREENVILLE	57	29	71	18	43	2	0.03	-0.94	0.03	4.01	83	0.03	3	72	29	0	5	1	0		
SD ABERDEEN	45	16	63	7	31	20	0.01	-0.10	0.01	0.34	69	0.01	9	77	50	0	7	1	0		
SD HURON	46	18	65	8	32	18	0.00	-0.08	0.00	0.22	47	0.00	0	79	35	0	7	0	0		
SD RAPID CITY	50	19	73	9	34	12	0.00	-0.08	0.00	0.31	65	0.00	0	73	27	0	7	0	0		
SD SIOUX FALLS	43	20	62	9	32	18	0.00	-0.09	0.00	0.64	105	0.00	0	74	52	0	7	0	0		
TN BRISTOL	47	22	59	13	34	0	0.20	-0.56	0.10	4.30	104	0.20	26	89	42	0	7	3	0		
TN CHATTANOOGA	54	29	65	19	42	3	0.19	-0.96	0.11	6.75	113	0.19	17	78	51	0	5	3	0		
TN KNOXVILLE	50	29	62	18	40	2	0.84	-0.19	0.48	5.75	104	0.84	82	78	41	0	5	2	0		
TN MEMPHIS	57	36	69	23	46	6	0.00	-0.97	0.00	8.50	128	0.00	0	75	35	0	4	0	0		
TN NASHVILLE	53	29	67	20	41	4	0.01	-0.90	0.01	4.26	78	0.01	1	71	32	0	5	1	0		
TX ABILENE	62	33	74	23	47	4	0.00	-0.25	0.00	1.99	131	0.00	0	72	37	0	4	0	0		
TX AMARILLO	58	26	67	21	42	7	0.00	-0.17	0.00	1.59	204	0.00	0	73	24	0	7	0	0		
TX AUSTIN	67	37	75	25	52	2	0.00	-0.48	0.00	4.95	170	0.00	0	78	38	0	3	0	0		
TX BEAUMONT	71	47	79	36	59	7	0.74	-0.57	0.66	5.00	76	0.74	56	89	39	0	0	6	1		
TX BROWNSVILLE	74	50	81	37	62	3	0.24	0.01	0.19	1.75	131	0.24	104	96	58	0	0	3	0		
TX CORPUS CHRISTI	74	46	81	33	60	4	0.00	-0.36	0.00	1.20	57	0.00	0	84	47	0	0	0	0		
TX DEL RIO	66	37	73	32	51	0	0.00	-0.10	0.00	1.04	122	0.00	0	73	41	0	1	0	0		
TX EL PASO	62	31	67	28	47	3	0.00	-0.12	0.00	0.78	88	0.00	0	65	19	0	6	0	0		
TX FORT WORTH	62	37	73	28	50	6	0.00	-0.50	0.00	4.37	142	0.00	0	76	33	0	2	0	0		
TX GALVESTON	68	54	75	44	61	5	0.05	-0.82	0.04	4.51	103	0.05	6	87	55	0	0	2	0		
TX HOUSTON	70	46	76	32	58	6	0.01	-0.82	0.01	4.36	96	0.01	1	76	49	0	1	1	0		
TX LUBBOCK	60	26	68	23	43	5	0.00	-0.10	0.00	1.52	197	0.00	0	71	36	0	7	0	0		
TX MIDLAND	61	29	72	24	45	2	0.00	-0.11	0.00	1.68	221	0.00	0	72	34	0	6	0	0		
TX SAN ANGELO	64	30	73	20	47	2	0.00	-0.17	0.00	1.03	93	0.00	0	66	36	0	4	0	0		
TX SAN ANTONIO	68	43	74	31	55	5	0.00	-0.38	0.00	2.91	124	0.00	0	78	35	0	1	0	0		
TX VICTORIA	71	44	77	31	58	5	0.00	-0.55	0.00	1.37	45	0.00	0	84	47	0	1	0	0		
TX WACO	64	34	74	24	49	3	0.00	-0.47	0.00	5.00	155	0.00	0	83	46	0	3	0	0		
TX WICHITA FALLS	61	33	72	27	47	7	0.00	-0.29	0.00	1.48	75	0.00	0	74	41	0	3	0	0		
UT SALT LAKE CITY	45	22	50	20	33	4	0.25	-0.03	0.25	0.27	18	0.25	89	84	44	0	7	1	0		
VT BURLINGTON	33	15	45	1	24	5	0.31	-0.16	0.13	2.63	98	0.31	66	80	59	0	7	5	0		
VA LYNCHBURG	51	24	67	13	38	3	0.01	-0.76	0.01	4.62	116	0.01	1	65	33	0	7	1	0		
VA NORFOLK	56	33	69	24	45	4	0.00	-0.83	0.00	1.56	40	0.00	0	61	31	0	2	0	0		
VA RICHMOND	54	30	69	17	42	5	0.00	-0.81	0.00	2.03	52	0.00	0	65	36	0	5	0	0		
VA ROANOKE	50	31	65	20	40	4	0.02	-0.65	0.01	4.23	120	0.02	3	58	35	0	4	2	0		
WA WASH/DULLES	49	25	64	14	37	5	0.04	-0.65	0.04	4.50	120	0.04	6	66	44	0	7	1	0		
WA OLYMPIA	48	33	54	29	41	4	1.20	-0.45	0.64	5.90	62	1.20	73	92	81	0	3	6	1		
WA QUILLAYUTE	49	40	60	33	45	5	3.66	0.63	2.39	11.55	66	3.66	121	94	74	0	0	7	2		
WA SEATTLE-TACOMA	50	39	55	36	44	4	1.41	0.28	0.80	3.67	54	1.41	125	82	72	0	0	5	1		
WA SPOKANE	40	28	53	24	34	8	0.02	-0.39	0.02	1.06	40	0.02	5	90	66	0	7	1	0		
WA YAKIMA	47	24	56	18	35	7	0.00	-0.28	0.00	0.35	21	0.00	0	84	75	0	7	0	0		
WV BECKLEY	43	23	57	10	33	2	0.24	-0.47	0.12	4.27	112	0.24	34	71	55	0	6	4	0		
WV CHARLESTON	47	26	63	12	36	2	0.13	-0.56	0.07	3.58	89	0.13	19	79	40	0	5	3	0		
WV ELKINS	41	20	58	2	30	1	0.30	-0.44	0.17	4.05	97	0.30	41	86	46	0	7	4	0		
WV HUNTINGTON	48	28	64	16	38	5	0.03	-0.69	0.03	3.41	83	0.03	4	74	38	0	5	1	0		
WI EAU CLAIRE	33	13	45	-1	23	11	0.09	-0.11	0.09	1.28	104	0.09	45	89	57	0	7	1	0		
WI GREEN BAY	34	19	47	5	27	11	0.15	-0.10	0.15	1.54	93	0.15	60	79	60	0	6	1	0		
WI LA CROSSE	38	19	53	8	28	12	0.12	-0.10	0.12	1.45	100	0.12	55	88	49	0	6	1	0		
WI MADISON	38	21	51	8	30	12	0.10	-0.16	0.10	2.34	122	0.10	38	80	57	0	6	1	0		
WI MILWAUKEE	38	24	51	10	31	10	0.12	-0.27	0.12	2.36	90	0.12	31	73	53	0	6	1	0		
WY CASPER	41	20	51	7	30	8	0.00	-0.11	0.00	0.75	103	0.00	0	65	47	0	6	0	0		
WY CHEYENNE	49	22	62	14	36	10	0.00	-0.08	0.00	0.32	59	0.00	0	59	33	0	6	0	0		
WY LANDER	38	15	50	7	27	7	0.00	-0.11	0.00	1.00	139	0.00	0	77	44	0	7	0	0		
WY SHERIDAN	47	21	67	13	34	13	0.00	-0.17	0.00	0.66	78	0.00	0	76	54	0	7	0	0		

Based on 1971-2000 normals

*** Not Available

December Weather and Crop Summary

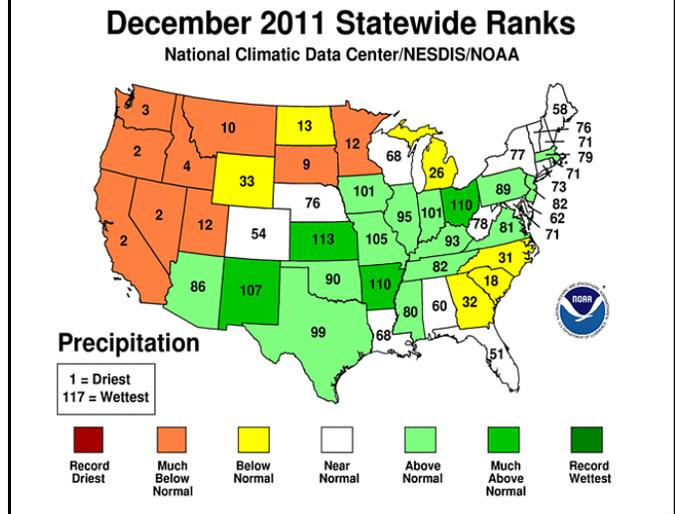
Weather

Weather summary provided by USDA/WAOB

Highlights: During December, mostly dry weather prevailed from the Pacific Coast into the north-central United States. In California and neighboring areas, extremely dry conditions stunted pasture growth and raised concerns about sub-par spring and summer runoff from meager mountain snow packs. On the northern Plains, mild, dry weather left winter wheat exposed to potential weather extremes. In contrast, widespread precipitation boosted high-elevation snow packs and benefited winter wheat and drought-damaged pastures and rangeland from Arizona to the southern half of the Plains. Wetness also extended into parts of the Midwest, where producers in the eastern Corn Belt continued to wait for fields to freeze before being able to proceed with final corn harvest efforts. Elsewhere, highly variable conditions existed across the Southeast, ranging from wet weather in the Mid-South to dryness in the southern Atlantic region and along the central Gulf Coast.

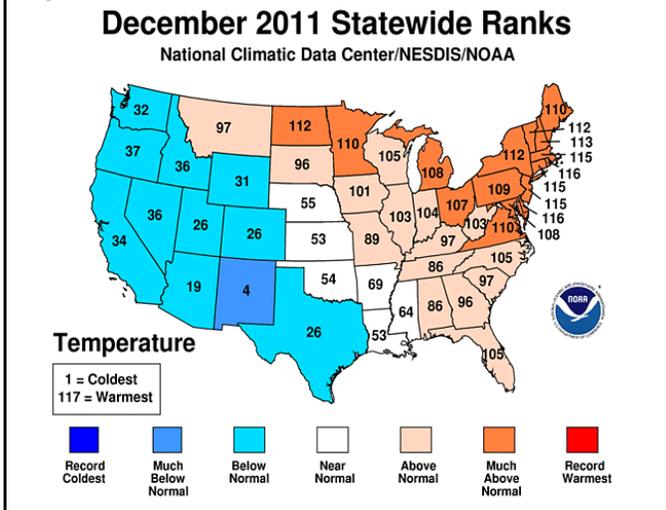
Historical Perspective: According to preliminary information provided by the National Climatic Data Center, the contiguous U.S. experienced its 34th-warmest, 46th-driest December on record. The nation's average temperature of 35.0°F was 1.7°F above the 1901-2000 mean, while the average precipitation of 2.08 inches was 93 percent of the long-term mean. It was the nation's warmest December since 2006, and the driest December since 2000. State temperature rankings ranged from the fourth-coldest December in New Mexico to the second-warmest December in Delaware and Rhode Island (figure 1). Top-ten rankings for December warmth were also noted in thirteen other states from North Dakota to Maine, and southward along the Atlantic Coast to Virginia. Meanwhile, top-ten December dryness in Montana, South Dakota, Idaho, Nevada, and the Pacific Coast States contrasted with top-ten wetness in Arkansas, Kansas, and Ohio (figure 2). It was the second-driest December in both California (behind only 1989) and Oregon (behind only 1976).

Figure 2



Summary: Early in the month, windy, colder weather swept into the West. The first day of December featured gusts to 102 mph in Centerville, UT; 94 mph in Cedar Ridge, CA; and 69 mph in Albuquerque, NM. The storm responsible for the Western winds triggered rain and snow from the Southwest to the Midwest. December 1-3 snowfall totaled 13.1 inches in Flagstaff, AZ. Daily-record snowfall totals for December 3 reached 6.5 inches in Goodland, KS, and 5.1 inches in Hastings, NE. Elsewhere on the 3rd, daily-record precipitation totals were broken in Des Moines, IA (1.38 inches); Concordia, KS (1.27 inches); and Waterloo, IA (1.13 inches). For Des Moines, it was the fourth-wettest December day on record, and the wettest since December 6, 1994. For Waterloo, it was the wettest December day since December 5, 1982, when 1.68 inches fell. Later, daily-record precipitation totals for December 4 included 3.30 inches in Pine Bluff, AR; 2.63 inches in Paducah, KY; and 2.58 inches in Memphis, TN. Memphis set another daily-record on December 5, boosting its 2-day total to 5.42 inches. Little Rock, AR, also netted consecutive daily-record amounts on December 4-5, totaling 5.07 inches. Little Rock's early-December deluge came on the heels of its wettest November on record (14.57 inches; previously, 13.14 inches in 1988). Enough rain fell in Ohio to eclipse the state's annual precipitation record. The record, originally set with a 70.82-inch total in 1870 in the Lake County community of Little Mountain, was first broken by several Hamilton County locations and later elsewhere in the state. By December 6-7, precipitation ended as snow in the Mid-South, where Little Rock received 1.6 inches. Later, Caribou, ME, reported 9.0 inches of snow on December 7-8, including a daily-record amount (8.2 inches) on the latter date. A few snow showers developed in the Midwest, where Chicago's 0.5-inch total on December 9 represented its fifth-latest first accumulation on record, behind December 16, 1965; December 14, 2001; December 12, 1946; and December 10, 2003. Farther south, much-needed precipitation overspread southern Texas, where McAllen's December 10-12 rainfall of 1.94 inches represented nearly one-fifth—or 19 percent—of its year-to-date total of 10.26 inches (47 of normal). Showers also developed along Florida's east coast, resulting in daily-record

Figure 1



totals for December 10 in Vero Beach (2.80 inches) and Melbourne (1.98 inches).

Meanwhile, cold air surged into the western and central U.S. In California, Santa Maria (29°F) posted a daily-record low for December 4, followed the next day by records in locations such as Paso Robles (24°F) and Stockton (27°F). Both Paso Robles (22°F on December 7 and 8) and Stockton (26°F on December 6 and 9) turned even colder before a slow warming trend commenced around mid-month. In California's San Joaquin Valley, Bakersfield reported nine consecutive freezes, with lows ranging from 28 to 32°F, from December 3-11. Farther inland, daily-record lows included -1°F (on December 6) in Dalhart, TX; -6°F (on December 6) in Cedar City, UT; -13°F (on December 5) in Broken Bow, NE; -23°F (on December 6) in Crested Butte, CO; and -27°F (on December 6) in Laramie, WY. Later, cold air settled into southern Texas, where Del Rio (23°F) notched a daily-record low for December 7. The following day, records in Texas for December 8 included 26°F in Victoria and 30°F in Corpus Christi. Farther east, readings of 76°F (on December 6) in New Bern, NC, and 79°F (on December 7) in St. Simons Island, GA, were among a smattering of daily-record highs. However, the Eastern warmth was swept away in the wake of an intensifying coastal storm that produced December 8 wind gusts to 69 mph in Westhampton, NY, and 55 mph in Milton (Blue Hill Observatory), MA.

Prior to mid-month, another round of significant precipitation spread into the Southwest. In Arizona, daily-record amounts for December 13 included 1.14 inches in Tucson and 1.12 inches in Yuma. Tucson also noted its seventh-wettest December day on record and was ensured of an above-normal annual precipitation total for the first time since 2000. Elsewhere in Arizona, Flagstaff received 17.6 inches of snow from December 12-14. By mid-month, rain returned to the Midwest, where record-setting amounts for December 14 reached 1.46 inches in Peoria, IL, and 1.30 inches in South Bend, IN. Chicago, IL, with 1.43 inches on the 14th, experienced its first December day with at least an inch of precipitation since December 27, 2008. In contrast, dry conditions persisted across the upper Midwest. From August 1 - December 15, the 4.94-inch total in Rochester, MN, was just 45 percent of normal and marked the driest such period since 2003 (4.46 inches). Short-term dryness continued to intensify along the Pacific Coast, where Eureka, CA, set a record with no measurable precipitation during the first 13 days of December. Eureka's streak ended with a 0.47-inch total on December 14-15. Similarly, Seattle, WA, noted record-low precipitation during the first 2 weeks of December (0.03 inch; previously, 0.07 inch in 1919).

Elsewhere at mid-month, record-setting warmth covered the north-central U.S. Daily-record highs for December 18 included 60°F in Huron, SD, and 56°F in Bismarck, ND. A few days later, warmth reached the East, where record-setting highs for December 21 reached 63°F in Atlantic City, NJ, and 62°F in Baltimore, MD. Southeastern daily-record highs for December 22 included 82°F in both Gainesville, FL, and Savannah, GA. However, the warm spell ended with a round of severe weather,

featuring more than a dozen tornadoes on December 22 from southeastern Louisiana to northern Georgia. Meanwhile, cold air trailed a series of storms into the West, accompanied by high winds. A northeasterly gust to 98 mph was clocked on December 22 atop southern California's Laguna Peak. Daily-record lows for December 23 dipped to -22°F in Laramie, WY, and 20°F in Campo, CA. The following day, Mitchell, SD (51°F on December 24), posted a daily-record high. Warmth also lingered across Florida's peninsula, where Tampa (83°F on December 24) notched a daily-record high. In contrast, dry air contributed to persistently low overnight temperatures in California's Central Valley, where Bakersfield reported 19 freezes during December. Bakersfield's lowest reading of 28°F occurred on multiple dates: December 3, 6, and 23-26.

On December 19-20, a significant winter storm unfolded across the central and southern Plains. In Kansas, daily-record precipitation totals for the 19th included 1.89 inches in Wichita and 1.66 inches in Medicine Lodge. The following day, Lufkin, TX (1.82 inches), netted a record-setting total for December 20. Storm-total snowfall, all on December 19-20, reached 7.0 inches in Dalhart, TX, and 5.8 inches in Dodge City, KS. More than 17 inches blanketed Clayton, NM. High winds accompanying the snow resulted in blizzard conditions, with December 19 gusts clocked to 55 mph in Dalhart and 52 mph in Dodge City. Later, a second storm plunged southward across the Rockies and adjacent High Plains. In Wyoming, Lander received a daily-record snowfall (8.4 inches) for December 21. Pueblo, CO, affected by both storms, reported 16.0 inches of snow from December 19-22. Eventually, heavy snow overspread southern portions of the Rockies and Plains. December 22-24 snowfall reached 10.0 inches in Roswell, NM, and 6.4 inches in Midland, TX. By the morning of December 25, snow depths included 8 inches at Roswell and Clayton, NM, as well as Pueblo, CO. Meanwhile, many other areas east of the Rockies had little or no snow on the ground for the holidays. In New York, both Buffalo (3.0 inches) and Rochester (2.2 inches) set all-time records for their lowest respective July 1 - December 24 snowfall totals. Records had been 3.1 inches (in 1998) in Buffalo and 2.6 inches (in 1939) in Rochester.

Farther south, Pensacola, FL, received 5.33 inches of rain from December 19-22. In Louisiana, December 19-25 rainfall reached 4.19 inches in Monroe and 3.82 inches in Shreveport. Rain shifted into the East by December 27, when Cape Hatteras, NC (2.20 inches); Greenville-Spartanburg, SC (1.29 inches); and Newark, NJ (1.21 inches), were among a large number of Eastern stations reporting daily-record amounts. High winds accompanied and trailed the rain, with a gust to 78 mph reported late on the 27th in Milton (Blue Hill Observatory), MA. Toward month's end, the focus for heavy precipitation shifted to the Northwest. Eugene, OR, was soaked by 4.75 inches of rain from December 27-30, aided by a daily-record total of 2.38 inches on the 28th. Similarly, Stanley, ID, received 2.58 inches from December 27-31, assisted by a daily-record amount of 1.26 inches on the 30th. High winds accompanied the Northwestern storminess, with Cheyenne, WY, recording its third- and fifth-highest cold-season gusts on record. Cheyenne's gusts were

clocked to 77 and 76 mph on December 29 and 31, respectively. A few wind gusts in excess of 100 mph were reported during both wind events in the northern and central Rockies. Farther south, the driest December on record came to a close in locations such as Reno, NV (0.00 inch; tied the record set in 1883 and earlier), and Fresno, CA (0.00 inch; tied the record set in 1989).

As the year neared an end, record-setting warmth again expanded across the north-central U.S. Daily-record highs for December 26 included 57°F in Mitchell, SD, and 52°F in Minneapolis-St. Paul, MN. Significant late-month warmth also developed across the West in advance of a series of Pacific storms. Daily-record highs for December 28 reached 63°F in both Medford, OR, and Reno, NV. In California, El Cajon (80°F) also collected a daily-record high for December 28. Later, warmth expanded across the Plains, where record-setting highs for December 29 included 67°F in Burlington, CO, and 68°F in both Imperial, NE, and Goodland, KS (68°F). Reno reached 63°F again on December 30, while daily-record highs soared to 78°F in both Douglas, AZ, and Campo, CA. A winter “heat wave” arrived on New Year’s Eve across the central and southern Plains, where record highs for December 31 included 83°F in Childress, TX, and 66°F in Topeka, KS. Highs also topped 80°F in parts of southern California, where both Ramona and Santa Maria achieved highs of 82°F on the 31st.

The final tally of U.S. stations reporting their warmest year on record was impressive, stretching across the Deep South from Arizona to Florida and northward along the Eastern Seaboard to the Mid-Atlantic Coast. The list included Douglas, AZ; Houston, TX; Miami, FL; and Trenton, NJ. Perhaps even more remarkable was the list of cities and towns that endured their wettest year on record. In Michigan, Detroit (47.70 inches) edged a record that had stood since 1880. Youngstown, OH (54.01 inches), clipped a 1911 standard, while records from 1935 were broken in Kentucky locations such as Lexington (66.35 inches) and Frankfort (65.46 inches). Perhaps most amazing were the annual precipitation records broken by more than 10 inches (e.g. Harrisburg, PA, with 73.73 inches; Cincinnati, OH, with 73.28 inches; Binghamton, NY, with 68.05 inches; and Cleveland, OH, with 65.32 inches). In stark contrast, 1917 records for record-low annual precipitation were demolished in Texas locations such as Lubbock (5.86 inches) and Laredo (6.66 inches).

The majority of December featured mild, sometimes stormy weather in Alaska, but a severe cold wave arrived late in the month. On December 3, daily-record highs were set in locations such as King Salmon (51°F) and Delta Junction (46°F). Fairbanks had completed its sixth-coldest November in more than a century, but warmed to 47°F on December 4. Elsewhere on December 4, monthly record highs were set or tied in locations such as North Pole (49°F; previously, 47°F on December 29, 1982) and Eielson Air Force Base (48°F; tied the record originally set on December 24, 1985). Farther south, a wind gust to 118 mph battered Glen Alps, near Anchorage, on December 4. Stormy weather became a common theme across

southern Alaska, where Valdez received a December-record snowfall of 152.2 inches (previously 137.1 inches in 1991). Valdez ended the year with a 58-inch snow depth. Meanwhile, December snowfall records were also broken in locations such as Kotzebue (34.9 inches; previously, 33.9 inches in 2004) and Barrow (15.8 inches; previously, 12.3 inches in 2005). During the last week of December, dramatically colder air covered the Alaskan mainland. Nome reported its lowest readings of the year, -32°F on December 29 and 31. It was also Nome’s lowest reading since March 1, 2010, when the temperature dipped to -32°F. King Salmon notched a daily-record low of -29°F on December 30, followed by a low of -31°F on New Year’s Eve. Isolated readings dipped below -50°F across the Alaskan mainland during the final days of 2011. Valdez ended the year with a 58-inch snow depth.

Most of Hawaii received beneficial rainfall during December. Some of the heaviest rain fell just prior to mid-month, when Oahu’s Manoa Lyon Arboretum received 5.89 inches in a 12-hour period on December 12-13. On the Big Island, monthly totals in excess of 30 inches at a few windward locations, including Mountain View (30.95 inches) and Glenwood (30.64 inches), represented the wettest month since March 2009. Quiet weather returned toward the end of December, but Hilo (on the Big Island) closed the month with 20.26 inches (175 percent of normal).

Fieldwork

Fieldwork summary provided by USDA/NASS

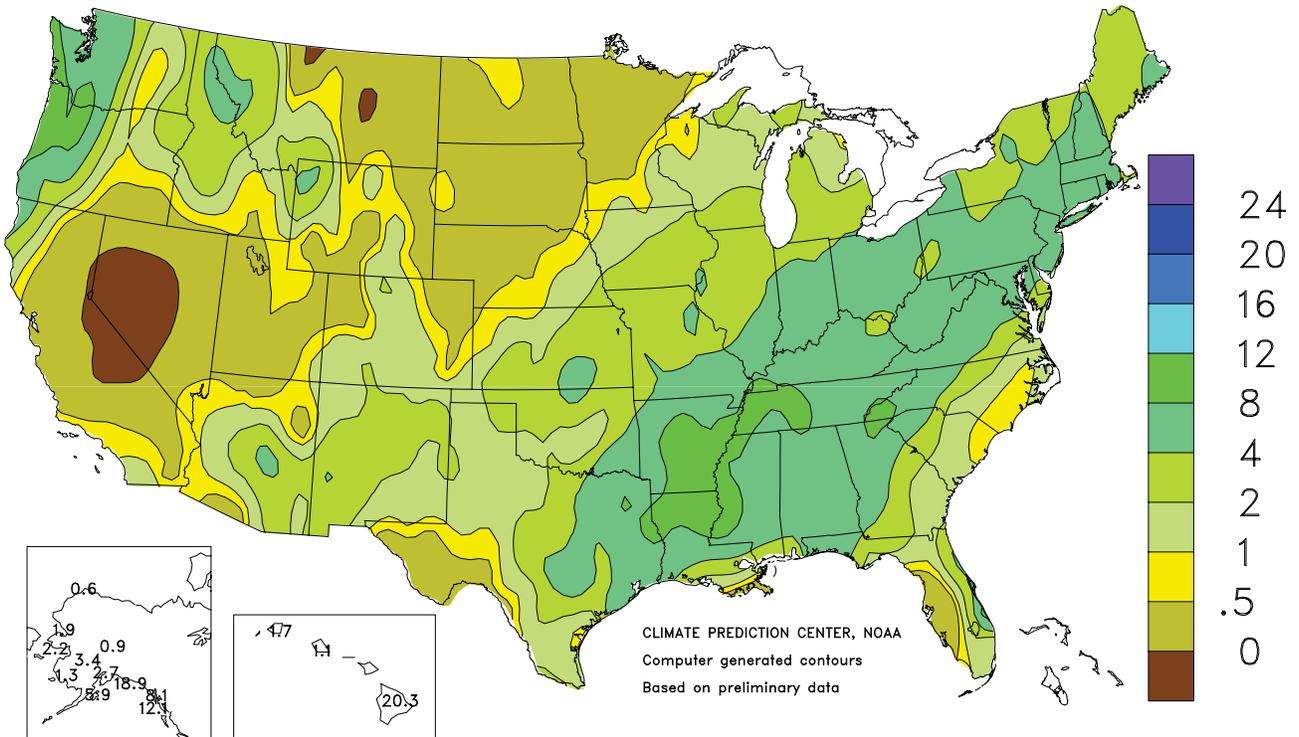
From the northern Rocky Mountains to the Southeast and along the Atlantic Coast, temperatures were well above average during December, giving many producers additional time to complete late-season fieldwork. Most notably, portions of Montana, North Dakota, and Minnesota recorded temperatures more than 10°F above normal. Elsewhere, fruit and vegetable producers across much of California ran freeze protection, especially late in the month, as temperatures dropped below 30°F in major producing areas.

Precipitation was well above normal for much of the Corn Belt, Four Corners region, southern Great Plains, and Ohio Valley during December. In Ohio, topsoil moisture levels were reported as 86 percent surplus on December 11, leaving producers waiting for the ground to freeze before harvesting any remaining corn or soybeans.

Late-season row crop harvesting continued in many Southern States during December, but was mostly complete by month’s end. In Arizona, small grain producers were busy seeding barley and Durum wheat, with nearly half and over one-quarter of the crops in the ground, respectively. Fruit and vegetable producers in the major producing states harvested and shipped a variety of crops throughout the month, with replanting ongoing as conditions allowed.

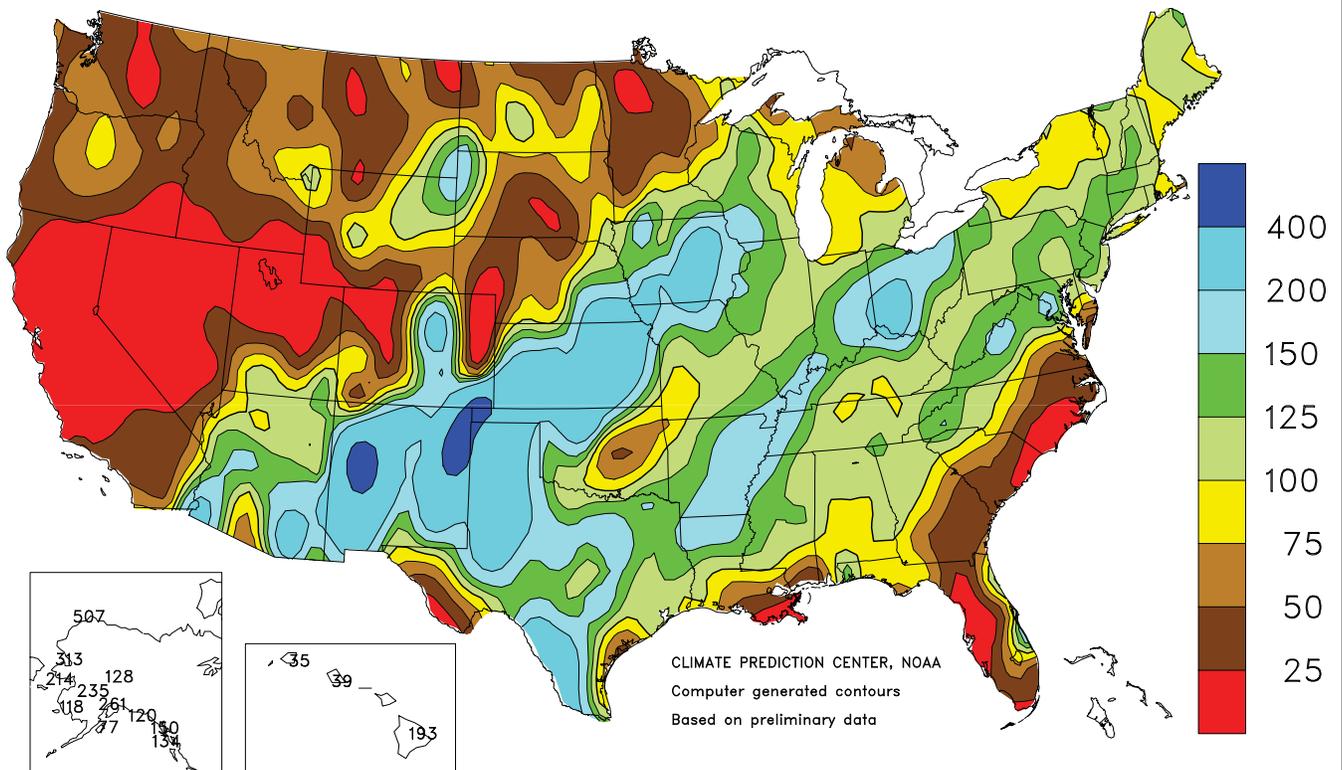
Total Precipitation (Inches)

December 2011



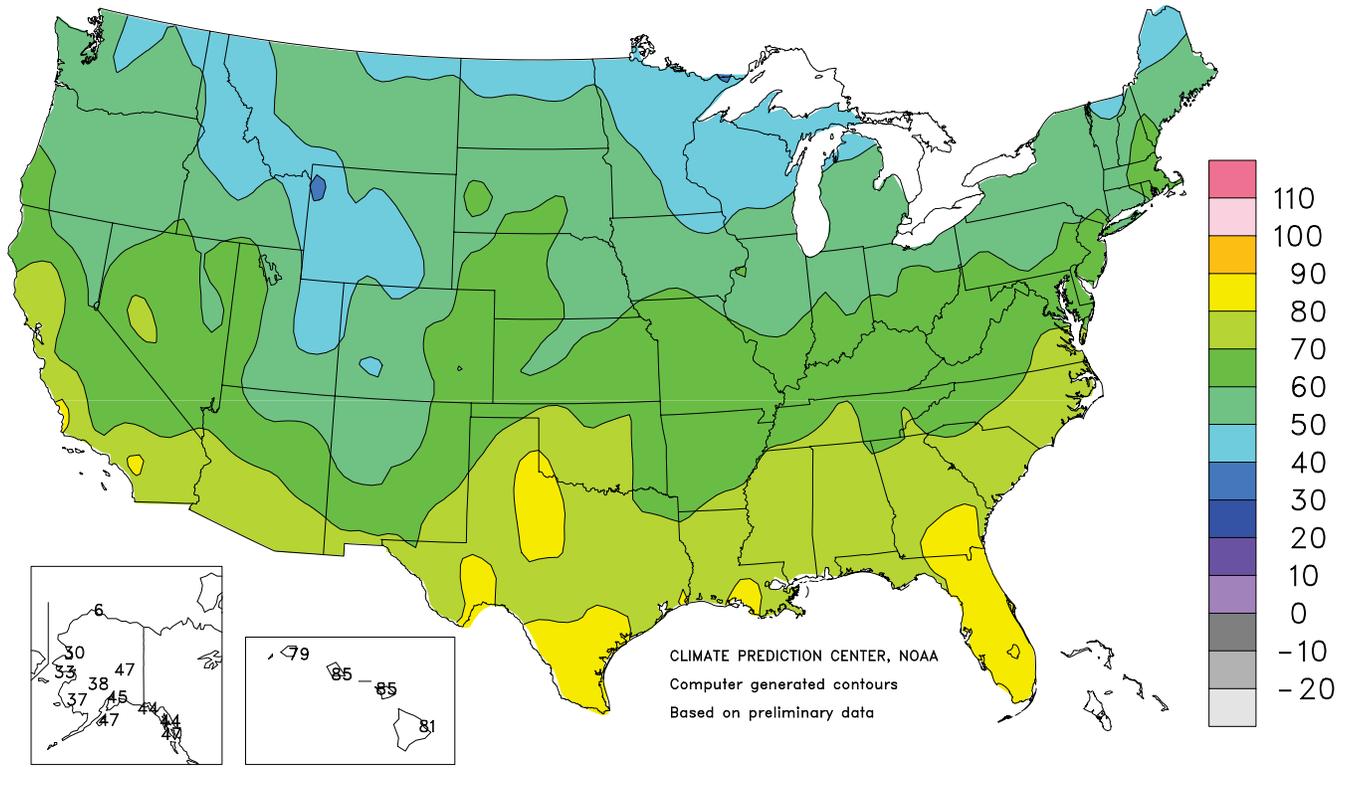
Percent Of Normal Precipitation

December 2011



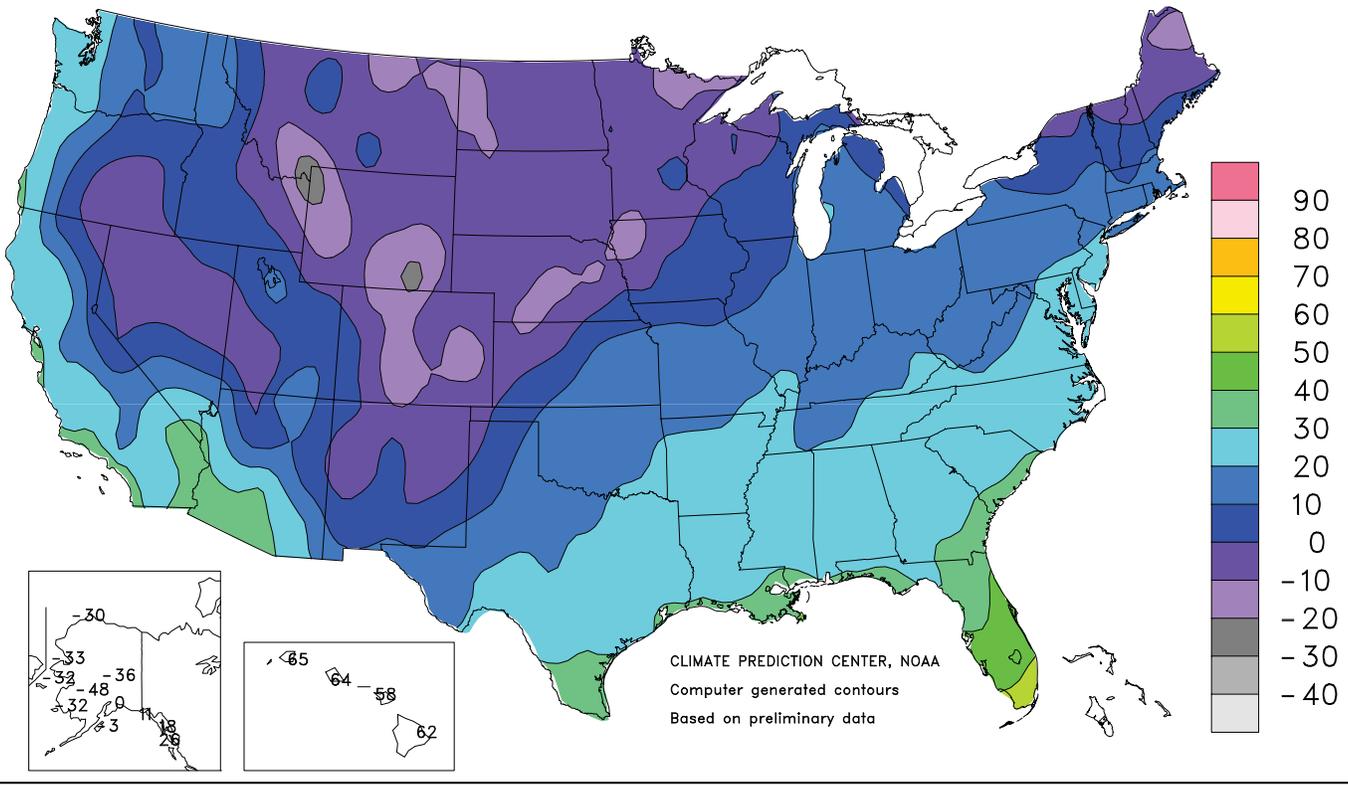
Extreme Maximum Temperature (°F)

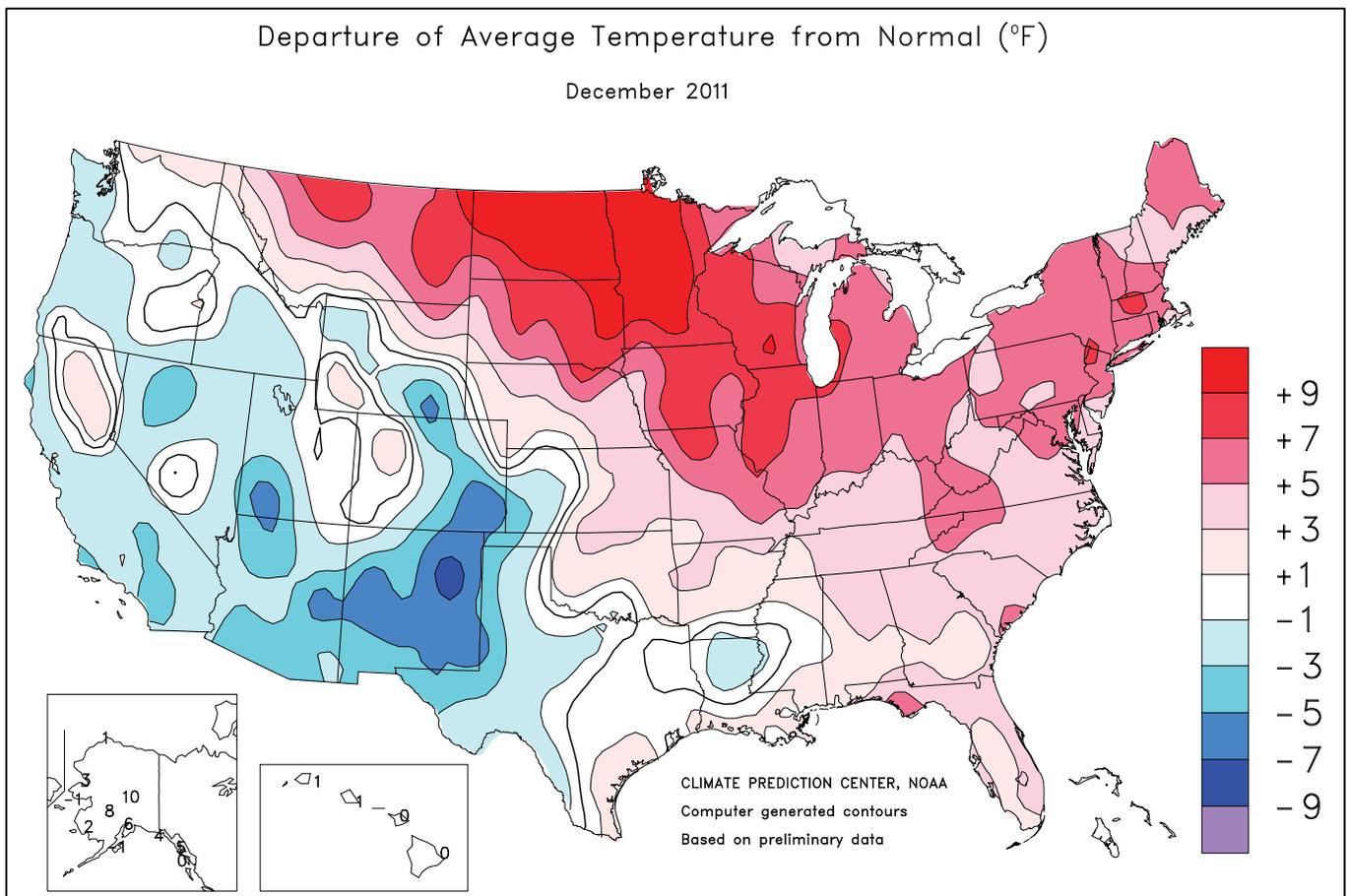
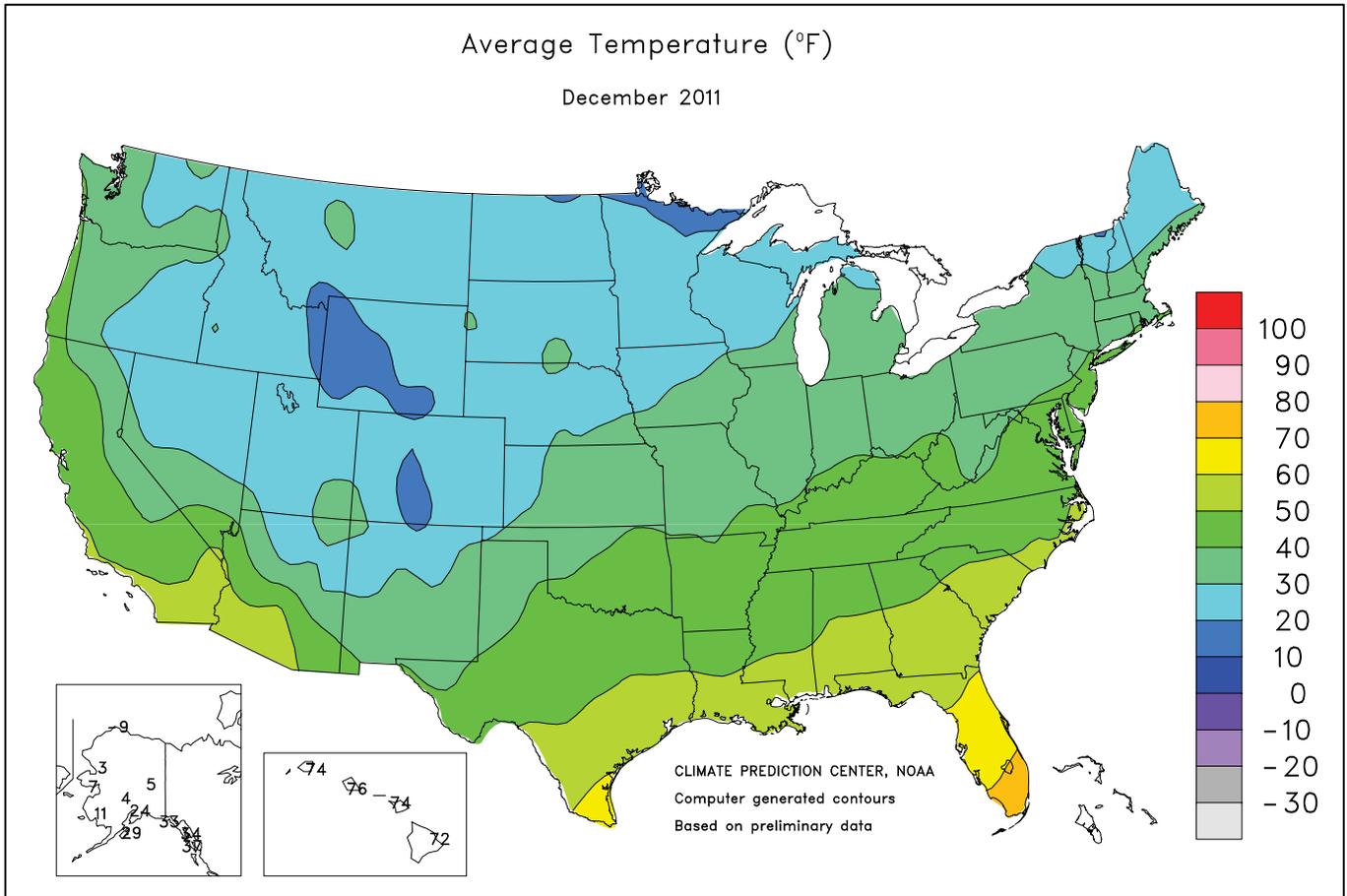
December 2011



Extreme Minimum Temperature (°F)

December 2011





National Weather Data for Selected Cities

December 2011

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

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	49	3	5.24	0.77	LEXINGTON	41	5	4.42	0.39	COLUMBUS	39	6	5.44	2.51
HUNTSVILLE	47	4	6.37	0.78	LONDON-CORBIN	42	4	4.40	0.09	DAYTON	36	5	5.34	2.26
MOBILE	55	3	1.88	-2.78	LOUISVILLE	43	5	5.21	1.52	MANSFIELD	36	6	5.09	1.83
MONTGOMERY	52	3	3.42	-1.55	PADUCAH	42	5	7.29	2.91	TOLEDO	35	6	3.37	0.73
AK ANCHORAGE	24	7	2.74	1.69	LA BATON ROUGE	54	2	2.82	-2.44	YOUNGSTOWN	36	6	4.42	1.46
BARROW	-9	2	0.60	0.48	LAKE CHARLES	55	2	4.69	0.09	OK OKLAHOMA CITY	41	1	1.86	-0.03
COLD BAY	29	-2	6.68	2.35	NEW ORLEANS	58	3	1.30	-3.77	TULSA	42	2	1.45	-0.98
FAIRBANKS	5	11	0.95	0.21	SHREVEPORT	49	1	7.88	3.33	OR ASTORIA	40	-3	4.85	-5.55
JUNEAU	34	5	8.12	2.71	ME BANGOR	29	5	3.85	0.52	BURNS	25	0	0.35	-0.95
KING SALMON	18	1	1.64	0.25	CARIBOU	22	6	3.32	0.13	EUGENE	38	-2	5.01	-3.28
KODIAK	29	-2	5.92	-1.72	PORTLAND	33	5	3.51	-0.73	MEDFORD	35	-3	0.94	-1.96
NOME	7	-1	2.17	1.16	MD BALTIMORE	42	5	4.50	1.15	PENDLETON	32	-2	0.40	-1.08
AZ FLAGSTAFF	26	-4	2.16	0.33	MA BOSTON	40	5	3.97	0.24	PORTLAND	39	-1	2.51	-3.20
PHOENIX	53	-1	1.10	0.18	WORCESTER	36	7	5.16	1.36	SALEM	39	-1	3.32	-3.14
TUCSON	49	-3	2.03	1.00	MI ALPENA	29	5	1.00	-0.83	PA ALLENTOWN	38	6	4.17	0.78
AR FORT SMITH	45	4	3.44	0.05	DETROIT	35	5	2.79	0.28	ERIE	38	5	5.26	1.53
LITTLE ROCK	46	3	7.74	3.03	FLINT	33	6	2.07	-0.11	MIDDLETOWN	39	5	3.26	0.02
CA BAKERSFIELD	46	-1	0.00	-0.76	GRAND RAPIDS	35	7	2.59	-0.11	PHILADELPHIA	43	6	4.37	1.06
EUREKA	43	-5	2.22	-4.13	HOUGHTON LAKE	30	6	1.10	-0.65	PITTSBURGH	37	4	2.47	-0.39
FRESNO	46	1	0.00	-1.34	LANSING	33	6	2.22	0.05	WILKES-BARRE	36	5	3.11	0.56
LOS ANGELES	55	-3	0.67	-1.12	MUSKEGON	36	7	2.33	-0.31	WILLIAMSPORT	37	6	3.68	0.74
REDDING	47	2	0.38	-4.29	TRAVERSE CITY	33	7	1.50	-1.16	PR SAN JUAN	78	0	8.19	3.62
SACRAMENTO	46	0	0.27	-2.18	MN DULUTH	22	8	0.55	-0.39	RI PROVIDENCE	39	5	3.95	-0.19
SAN DIEGO	56	-2	0.86	-0.45	INT'L FALLS	19	11	0.49	-0.21	SC CHARLESTON	55	4	0.65	-2.59
SAN FRANCISCO	49	0	0.13	-2.76	MINNEAPOLIS	28	9	0.99	-0.01	COLUMBIA	51	4	1.11	-2.27
STOCKTON	44	-1	0.16	-1.66	ROCHESTER	26	9	1.21	0.19	FLORENCE	52	5	1.27	-2.20
CO ALAMOSA	14	-3	0.27	-0.06	ST. CLOUD	25	11	0.40	-0.29	GREENVILLE	48	4	3.96	0.10
CO SPRINGS	29	0	0.46	0.04	MS JACKSON	50	2	6.67	1.33	MYRTLE BEACH	52	3	0.46	-2.99
DENVER	27	-2	0.78	0.47	MERIDIAN	49	0	5.41	0.10	SD ABERDEEN	25	9	0.33	-0.05
GRAND JUNCTION	29	1	0.35	-0.17	TUPELO	46	3	5.76	-0.36	HURON	27	8	0.24	-0.15
PUEBLO	25	-5	0.84	0.45	MO COLUMBIA	38	6	3.51	1.04	RAPID CITY	28	3	0.29	-0.11
CT BRIDGEPORT	41	6	3.70	0.23	JOPLIN	40	3	2.76	-0.20	SIOUX FALLS	27	9	0.62	0.10
HARTFORD	37	6	5.00	1.40	KANSAS CITY	36	5	3.03	1.39	TN BRISTOL	43	6	4.10	0.71
DC WASHINGTON	45	5	4.90	1.85	SPRINGFIELD	38	2	2.83	-0.34	CHATTANOOGA	46	4	6.53	1.72
DE WILMINGTON	41	5	4.44	1.04	ST JOSEPH	35	4	2.54	1.10	JACKSON	43	1	7.66	2.30
FL DAYTONA BEACH	65	4	3.08	0.37	ST LOUIS	41	7	3.12	0.26	KNOXVILLE	45	4	4.91	0.42
FT LAUDERDALE	73	4	1.33	-1.32	MT BILLINGS	31	5	0.21	-0.46	MEMPHIS	47	4	8.55	2.87
FT MYERS	70	4	0.38	-1.20	BUTTE	19	1	0.29	-0.24	NASHVILLE	44	4	4.25	-0.29
JACKSONVILLE	59	4	1.84	-0.80	GLASGOW	24	8	0.35	-0.02	TX ABILENE	44	-1	1.93	0.66
KEY WEST	74	2	0.40	-1.74	GREAT FALLS	32	8	0.20	-0.47	AMARILLO	35	-2	1.54	0.93
MELBOURNE	68	5	3.29	0.98	HELENA	26	5	0.07	-0.39	AUSTIN	51	-1	4.89	2.45
MIAMI	73	3	1.04	-1.14	KALISPELL	27	4	0.74	-0.91	BEAUMONT	57	3	4.00	-1.25
ORLANDO	66	3	0.80	-1.51	MILES CITY	29	8	0.31	-0.14	BROWNSVILLE	63	2	1.55	0.44
PENSACOLA	58	4	7.70	3.73	MISSOULA	26	3	0.57	-0.58	COLLEGE STATION	53	1	3.43	0.20
ST PETERSBURG	67	3	0.28	-2.32	NE GRAND ISLAND	29	3	1.11	0.45	CORPUS CHRISTI	59	1	1.17	-0.58
TALLAHASSEE	57	3	4.40	0.30	HASTINGS	29	2	1.00	0.27	DALLAS/FT WORTH	47	0	4.35	1.78
TAMPA	67	4	0.19	-2.11	LINCOLN	29	3	1.58	0.72	DEL RIO	51	-1	0.98	0.23
WEST PALM BEACH	72	4	0.90	-2.24	MCCOOK	28	-1	0.52	-0.01	EL PASO	42	-3	0.74	-0.03
GA ATHENS	49	4	3.68	-0.03	NORFOLK	28	4	0.79	0.14	GALVESTON	58	0	4.41	0.88
ATLANTA	50	5	4.42	0.60	NORTH PLATTE	28	2	0.32	-0.08	HOUSTON	55	1	4.28	0.59
AUGUSTA	51	4	1.28	-1.86	OMAHA/EPPLEY	30	4	1.71	0.79	LUBBOCK	38	-2	1.52	0.85
COLUMBUS	53	4	5.02	0.62	SCOTTSBLUFF	26	0	0.34	-0.22	MIDLAND	42	-3	1.63	0.98
MACON	51	3	3.03	-0.90	VALENTINE	29	5	0.20	-0.13	SAN ANGELO	46	0	1.00	0.06
SAVANNAH	56	5	1.15	-1.66	NV ELKO	26	0	0.00	-0.93	SAN ANTONIO	54	2	2.84	0.88
HI HILO	72	0	20.26	9.76	ELY	26	0	0.22	-0.28	VICTORIA	57	2	1.35	-1.12
HONOLULU	76	1	1.10	-1.75	LAS VEGAS	46	-1	0.14	-0.26	WACO	48	0	4.96	2.20
KAHULUI	74	1	0.00	-3.08	RENO	34	0	0.00	-0.88	WICHITA FALLS	43	0	1.45	-0.23
LIHUE	74	1	1.68	-3.10	WINNEMUCCA	25	-5	0.01	-0.80	UT SALT LAKE CITY	30	0	0.03	-1.20
ID BOISE	31	0	0.36	-1.02	NH CONCORD	31	5	4.08	1.12	VT BURLINGTON	31	6	2.23	0.01
LEWISTON	33	-1	0.21	-0.84	NJ ATLANTIC CITY	43	6	3.65	0.50	VA LYNCHBURG	43	5	4.61	1.38
POCATELLO	22	-3	0.20	-0.90	NEWARK	42	6	4.51	0.94	NORFOLK	50	6	1.56	-1.47
IL CHICAGO/O'HARE	35	8	2.65	0.22	NM ALBUQUERQUE	34	-2	1.20	0.71	RICHMOND	46	6	2.03	-1.09
MOLINE	34	8	2.66	0.46	NY ALBANY	34	6	3.76	1.09	ROANOKE	44	5	4.19	1.33
PEORIA	35	7	2.88	0.48	BINGHAMTON	33	6	3.11	0.08	WASH/DULLES	41	5	4.46	1.39
ROCKFORD	33	9	2.06	0.00	BUFFALO	35	5	3.62	-0.18	WA OLYMPIA	37	-1	4.69	-3.20
SPRINGFIELD	38	8	2.62	0.08	ROCHESTER	35	6	2.51	-0.22	QUILLAYUTE	40	-1	7.90	-6.60
EVANSVILLE	41	5	6.04	2.50	SYRACUSE	36	7	2.48	-0.64	SEATTLE-TACOMA	39	-2	2.24	-3.38
FORT WAYNE	35	6	3.77	1.00	NC ASHEVILLE	44	5	5.11	1.72	SPOKANE	29	2	1.01	-1.24
INDIANAPOLIS	38	6	5.10	2.07	CHARLOTTE	48	4	3.41	0.23	YAKIMA	29	0	0.34	-1.04
SOUTH BEND	35	6	2.62	-0.47	GREENSBORO	47	6	3.02	-0.04	WV BECKLEY	40	5	4.03	0.92
BURLINGTON	34	6	3.32	1.22	HATTERAS	54	4	3.16	-1.40	CHARLESTON	42	4	3.41	0.11
CEDAR RAPIDS	31	7	2.88	1.40	RALEIGH	48	5	2.05	-0.99	ELKINS	37	4	3.74	0.30
DES MOINES	33	8	2.53	1.20	WILMINGTON	53	4	0.58	-3.20	HUNTINGTON	42	5	3.33	-0.04
DUBUQUE	30	8	2.68	0.99	ND BISMARCK	25	10	0.47	0.03	WI EAU CLAIRE	25	7	1.20	0.17
SIoux CITY	27	5	0.78	0.12	DICKINSON	25	7	0.12	-0.22	GREEN BAY	29	8	1.40	-0.01
WATERLOO	30	8	2.38	1.27	FARGO	25	12	0.36	-0.21	LA CROSSE	28	6	1.41	0.18
KS CONCORDIA	34	4	1.87	1.01	GRAND FORKS	22	11	0.65	0.10	MADISON	31	8	2.23	0.57
DODGE CITY	32	-1	2.13	1.36	JAMESTOWN	24	10	0.26	-0.18	MILWAUKEE	33	7	2.23	0.01
GOODLAND	30	0	0.41	0.01	MINOT	26	11	0.26	-0.37	WAUSAU	25	6	1.52	0.19
HILL CITY	31	0	0.55	0.08	WILLISTON	25	12	0.18	-0.39	WY CASPER	24	0	0.71	0.09
TOPEKA	37	6	3.41	1.99	OH AKRON-CANTON	36	5	4.75	1.77	CHEYENNE	26	-1	0.43	-0.03
WICHITA	37	3	3.69	2.34	CINCINNATI	39	4	6.52	3.24	LANDER	17	-4	0.97	0.36
KY JACKSON	44	6	4.17	-0.10	CLEVELAND	38	7	4.96	1.82	SHERIDAN	26	4	0.58	-0.10

National Agricultural Summary

January 2 – 8, 2012

Weekly National Agricultural Summary provided by USDA/NASS

With the exception of the lower Southeast, temperatures were near to above average during the week. Most notably, temperatures were more than 20°F above normal across parts of the northern Great Plains. Thawing fields in the eastern Corn Belt limited fieldwork, as producers worked to harvest their remaining corn crop. Precipitation was scarce across much of the nation, with many locations recording less than 5 percent of their normal weekly total.

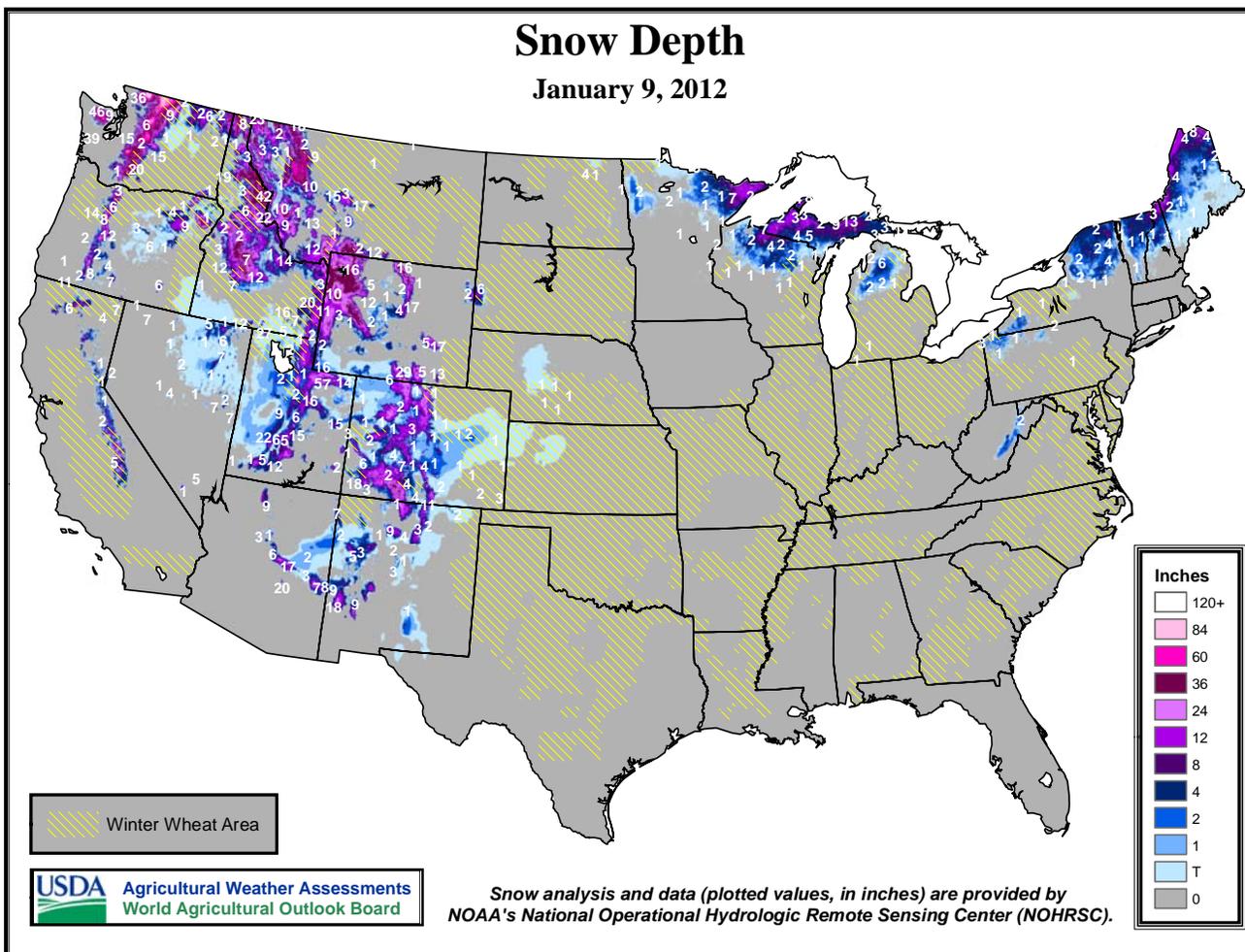
Temperatures dipped below the freezing mark in Florida at mid-week, with little to no rainfall reported across much of the state. Sugarcane harvest continued, while growers assessed damage from the recent cold weather. Damage was greatest in the interior region, where temperatures fell into the mid-20s. Fruit and vegetable growers reported freeze damage to snap beans and squash plants that were flowering. In Palm Beach County, green beans in all stages of development suffered significant damage, with approximately half of the crop destroyed. Producers in Miami-Dade County continued to harvest and replant a variety of winter vegetables.

In Texas, temperatures were near to above average. The Coastal Bend, Lower Valley, and Upper Coast received up to 0.5 inch of rain, while the remainder of the state was mostly dry. Winter wheat was growing well in many areas, but

additional precipitation was needed to replenish depleted soil moisture. Producers in the Blacklands were busy fertilizing wheat fields. Pecan harvest in the Trans-Pecos continued, while harvest neared completion across the rest of the state.

Above-average temperatures and dry conditions dominated Arizona during the week. Cotton producers worked to wrap up the 2011 harvest season, while small grain producers continued to seed barley and Durum wheat. Alfalfa harvest was active in some locations, but sheep have been turned out on many fields to graze and lamb over the winter. A variety of vegetables, including broccoli, cabbage, and lettuce, were shipped from both central and western producers during the week.

Mild to unusually warm weather blanketed California during the week, while strong winds blew across the southern portion of the state. Mostly dry conditions left dryland small grain fields in need of more rain to continue developing, while early-seeded and irrigated fields were growing well. Producers were busy cultivating seedbeds and applying fertilizers and herbicides in preparation for spring planting. Dry conditions left fruit growers waiting to make pre-emergent and dormant spray to their crops. Apple harvest was nearing completion, with very little frost damage reported. As internal maturity improved, Navel orange harvest gained speed.



January 5 ENSO Update

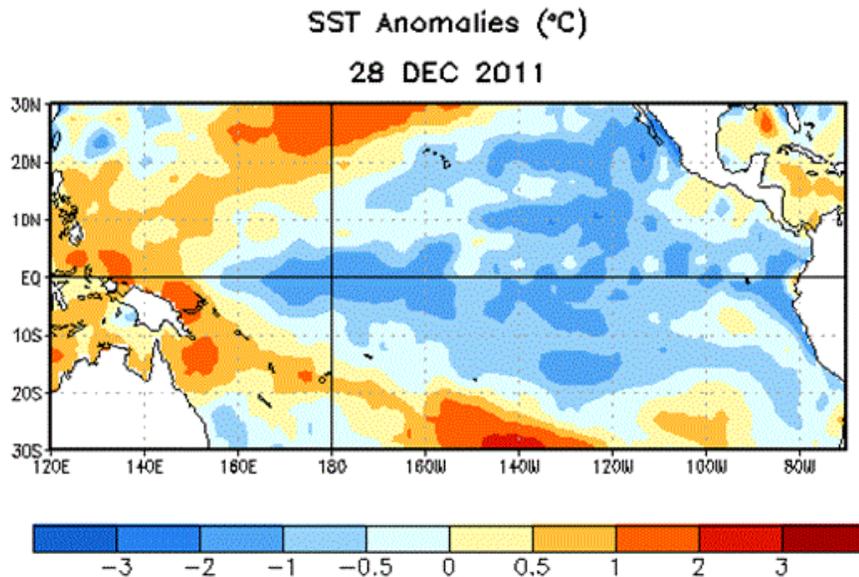


Figure 1: Average sea surface temperature (SST) anomalies (°C) for the week centered on 28 December 2011. Anomalies are computed with respect to the 1971-2000 base period weekly means (Xue et al. 2003, *J. Climate*, **16**, 1601-1612).

ENSO Alert System Status: [La Niña Advisory](#)

Synopsis: La Niña is expected to continue into the Northern spring 2012.

During December 2011, below-average sea surface temperatures (SST) associated with La Niña continued across the eastern and central equatorial Pacific Ocean (figure 1). The weekly SST index in the Niño-3.4 region remained near -1.0°C throughout the month, indicating a weak to moderate La Niña. The oceanic heat content (average temperature in the upper 300m of the ocean) anomalies strengthened across the eastern Pacific, reflecting a large area of below-average temperatures in the subsurface. In the atmosphere, anomalous low-level easterly and upper-level westerly winds strengthened over the central and west-central Pacific. Convection remained suppressed in the western and central Pacific and enhanced over northern Australia and parts of Indonesia and the Philippine Islands. Consistent with these conditions, the Southern Oscillation Index (SOI) also strengthened. This evolution is consistent with past events, in which the atmospheric components of La Niña become strongest and most well-defined during the Northern Hemisphere winter. Collectively, the ongoing oceanic and atmospheric patterns reflect the continuation of a weak to moderate La Niña.

A majority of models predict a weak or moderate strength La Niña to peak during the December – February season, and then to continue into early Northern Hemisphere spring season before dissipating during the March to May period. A slight majority of models predict La Niña to remain weak (3-month average SST anomaly in the Niño-3.4 region between -0.5 and -0.9°C) this winter, while several others predict a moderate-strength

episode (anomaly in the Niño-3.4 region between -1.0 and -1.4°C). The latest observations, combined with model forecasts, suggest that La Niña will be of weak-to-moderate strength this winter, and will continue thereafter as a weak event until it likely dissipates sometime between March and May.

During January - March 2012, there is an increased chance of above-average temperatures across the south-central and southeastern U.S., and below-average temperatures over the western and the northwest-central U.S. Also, above-average precipitation is favored across most of the northern tier of states and in the Ohio and Tennessee Valleys, and drier-than-average conditions are more likely across the southern tier of the U.S. (see [3-month seasonal outlook](#) released on 15 December 2011).

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](#)). Forecasts for the evolution of El Niño/La Niña are updated monthly in the [Forecast Forum](#) section of CPC's Climate Diagnostics Bulletin. The next ENSO Diagnostics Discussion is scheduled for 9 February 2012. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ensu-update@noaa.gov.

International Weather and Crop Summary

January 1-7, 2012

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

HIGHLIGHTS

EUROPE: Wet, warm weather persisted across much of the continent, maintaining favorable soil moisture but reducing winter crop cold hardiness.

WESTERN FSU: Despite warmer-than-normal weather, additional snow maintained adequate insulation for dormant winter crops against potential incursions of bitter cold.

MIDDLE EAST: Rain and snow maintained excellent prospects for winter grains across northern and western growing areas.

NORTHWESTERN AFRICA: Locally heavy rain in eastern crop areas contrasted with increasingly dry conditions in the west.

SOUTH ASIA: The remnants of Tropical Cyclone Thane spawned unseasonably heavy showers in northeastern India and provided a late-season boost to moisture supplies for rabi grains.

EAST ASIA: Sunny, colder weather overspread eastern China, with little effect on well hardened winter crops.

SOUTHEAST ASIA: More flooding in the Philippines raised concerns over reduced corn prospects.

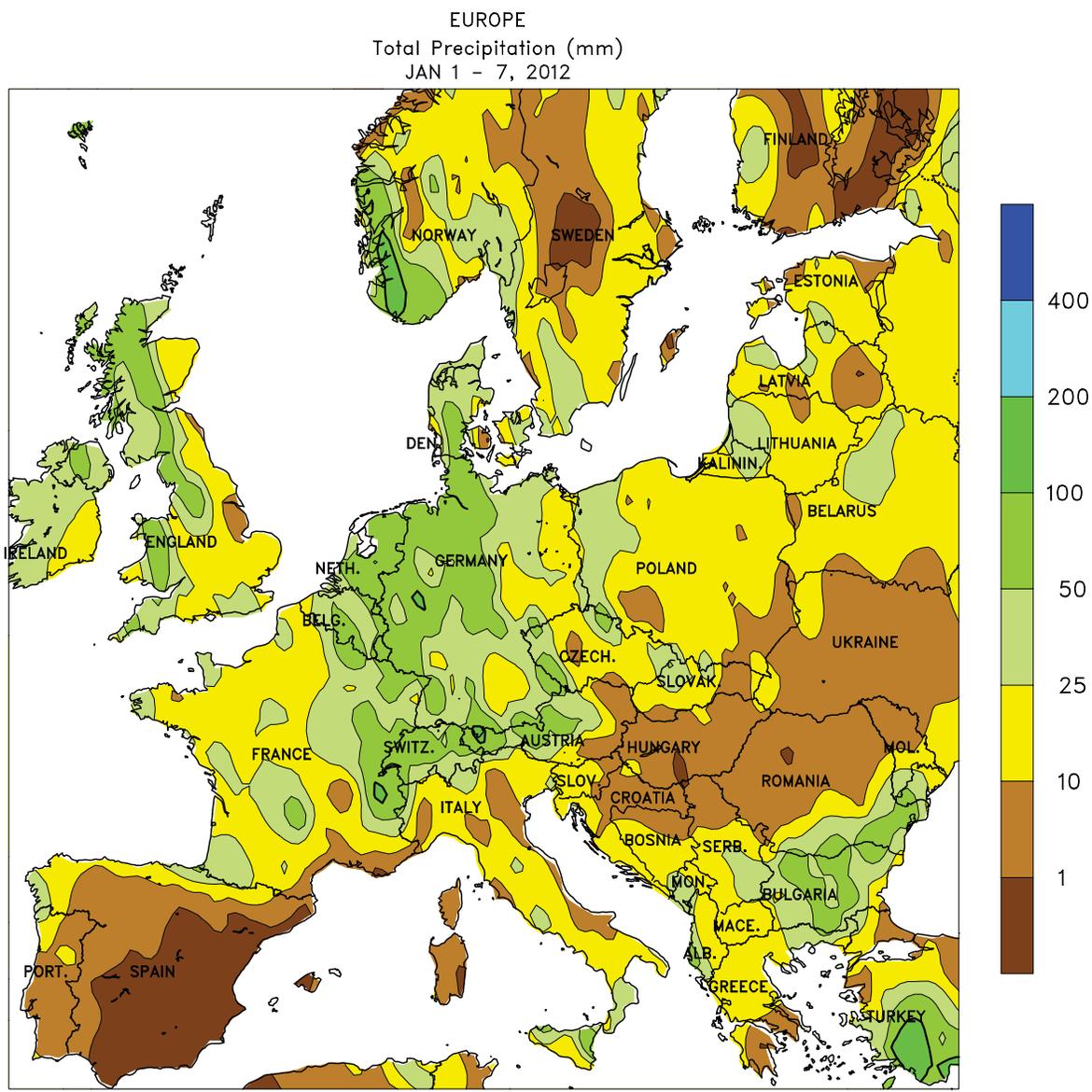
AUSTRALIA: Showers continued to favor summer crop development but had minimal impact on winter crop harvesting, which is nearing completion.

SOUTH AFRICA: Warm, mostly dry weather advanced development of corn and other summer crops.

ARGENTINA: Heat and dryness stressed reproductive corn and other crops in or nearing reproduction.

BRAZIL: Drier weather returned to the south, but overall favorable conditions continued in central Brazil's main soybean and cotton areas.





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

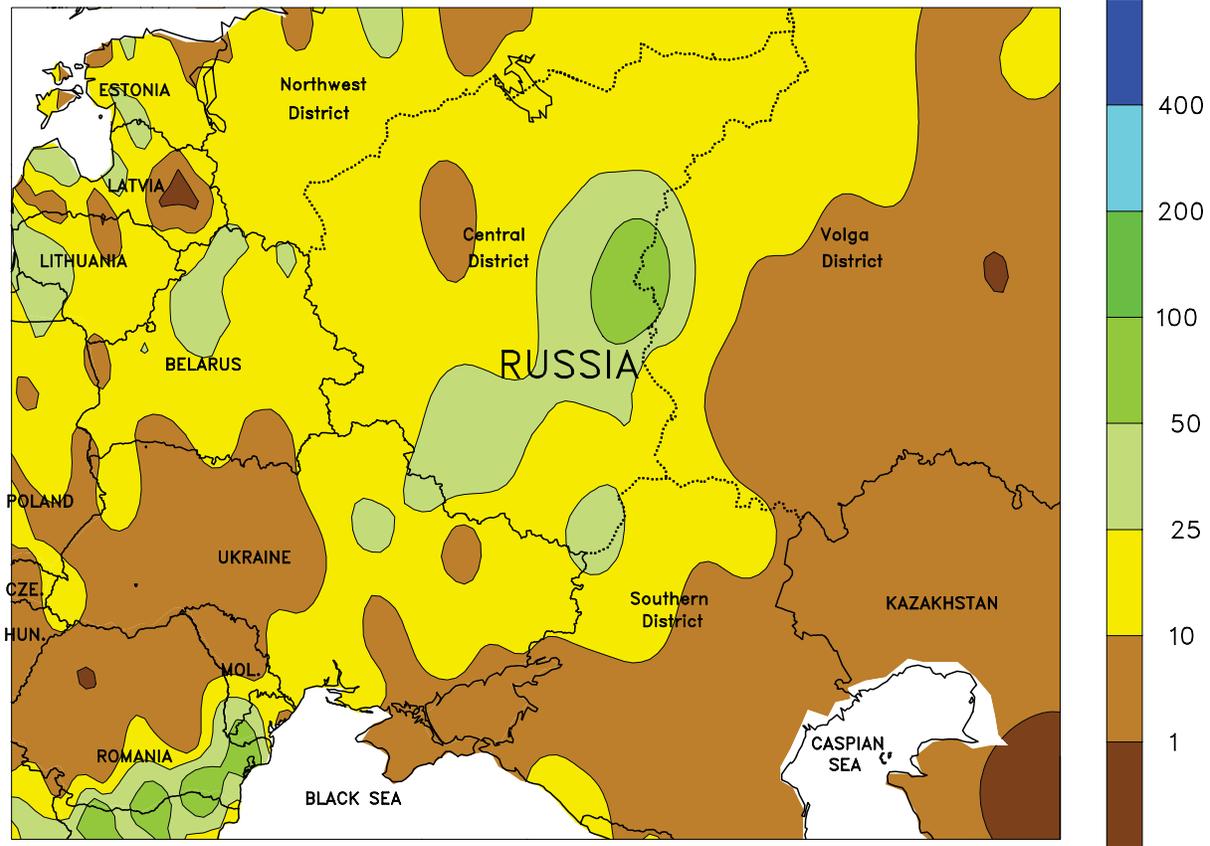


EUROPE

Wet, unseasonably mild weather continued over most major growing areas. A pair of Atlantic storms generated widespread, locally heavy rain (10-95 mm) from France and England into Poland and the Baltic States, maintaining abundant moisture reserves for winter grains and oilseeds. However, temperatures continued to average up to 6°C above normal, keeping the region devoid of protective snow cover

and further reducing crop cold hardiness. In contrast, dry weather promoted winter crop development and citrus harvesting from Spain into northern Italy, while additional showers (10-25 mm) favored winter crops in southern Italy. Concerns are increasing in Spain over declining soil moisture and irrigation reserves, although it is still early in the winter growing season.

WESTERN FSU
Total Precipitation (mm)
JAN 1 - 7, 2012



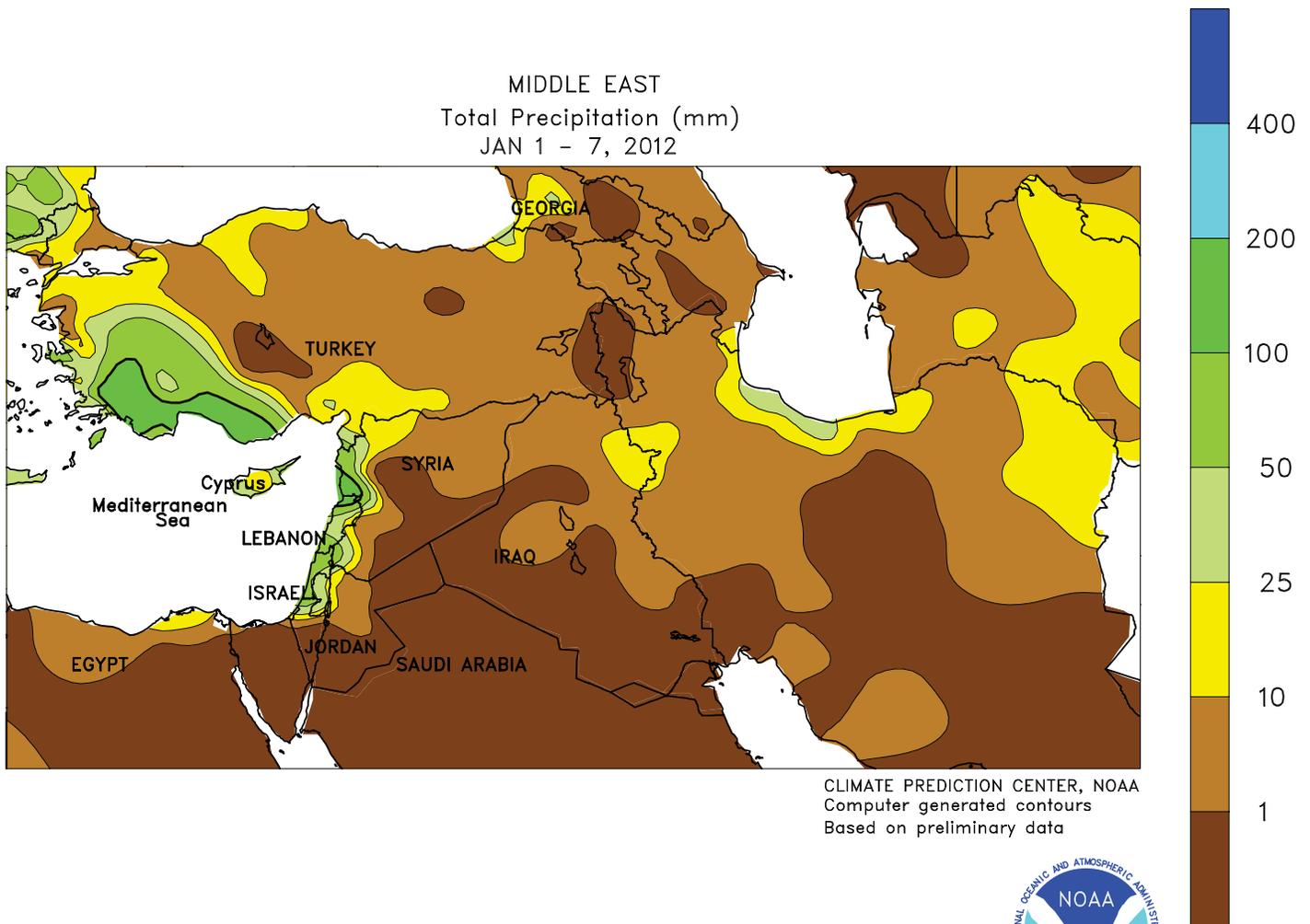
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



WESTERN FSU

Generally favorable overwintering conditions prevailed for dormant winter grains and oilseeds. Additional rain and snow (10-60 mm, liquid equivalent) boosted soil moisture reserves from Belarus and Ukraine into central and northern Russia. Temperatures averaged 5 to 8°C above normal,

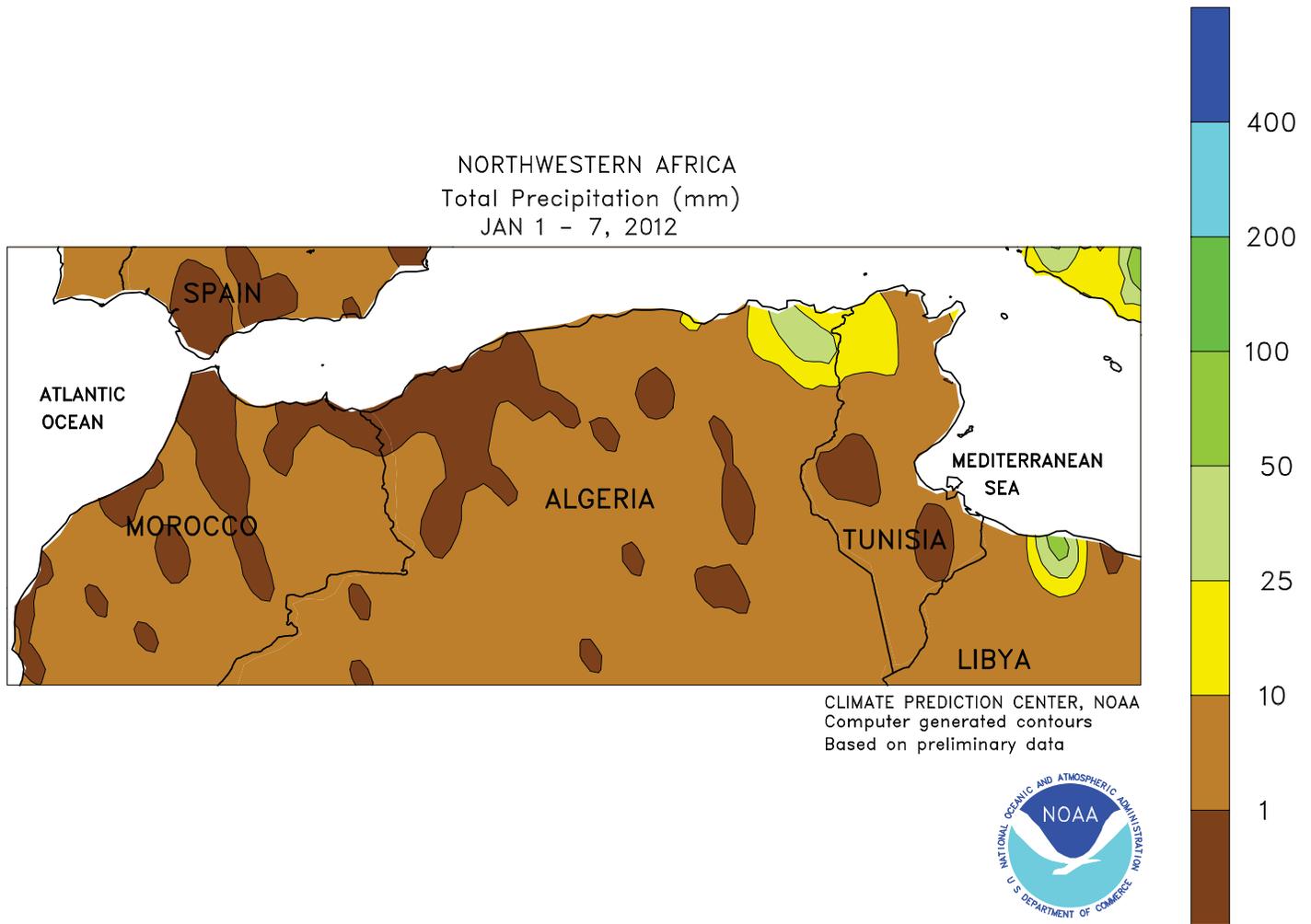
minimizing the risk of winterkill. Daytime highs well above freezing (5-8°C) in Belarus and Ukraine kept these growing areas devoid of snow cover, while a shallow snowpack (2-25 cm) persisted across much of Russia, where highs were closer to freezing.



MIDDLE EAST

Rain and snow continued across northern and western crop districts, while dry weather prevailed over southern growing areas. A strong, slow-moving Mediterranean storm produced moderate to heavy rain and mountain snow (10-140 mm liquid equivalent) in western and southern Turkey and along the eastern Mediterranean coast, maintaining excellent soil moisture for dormant (north) to vegetative (south) winter crops. Rain and high-

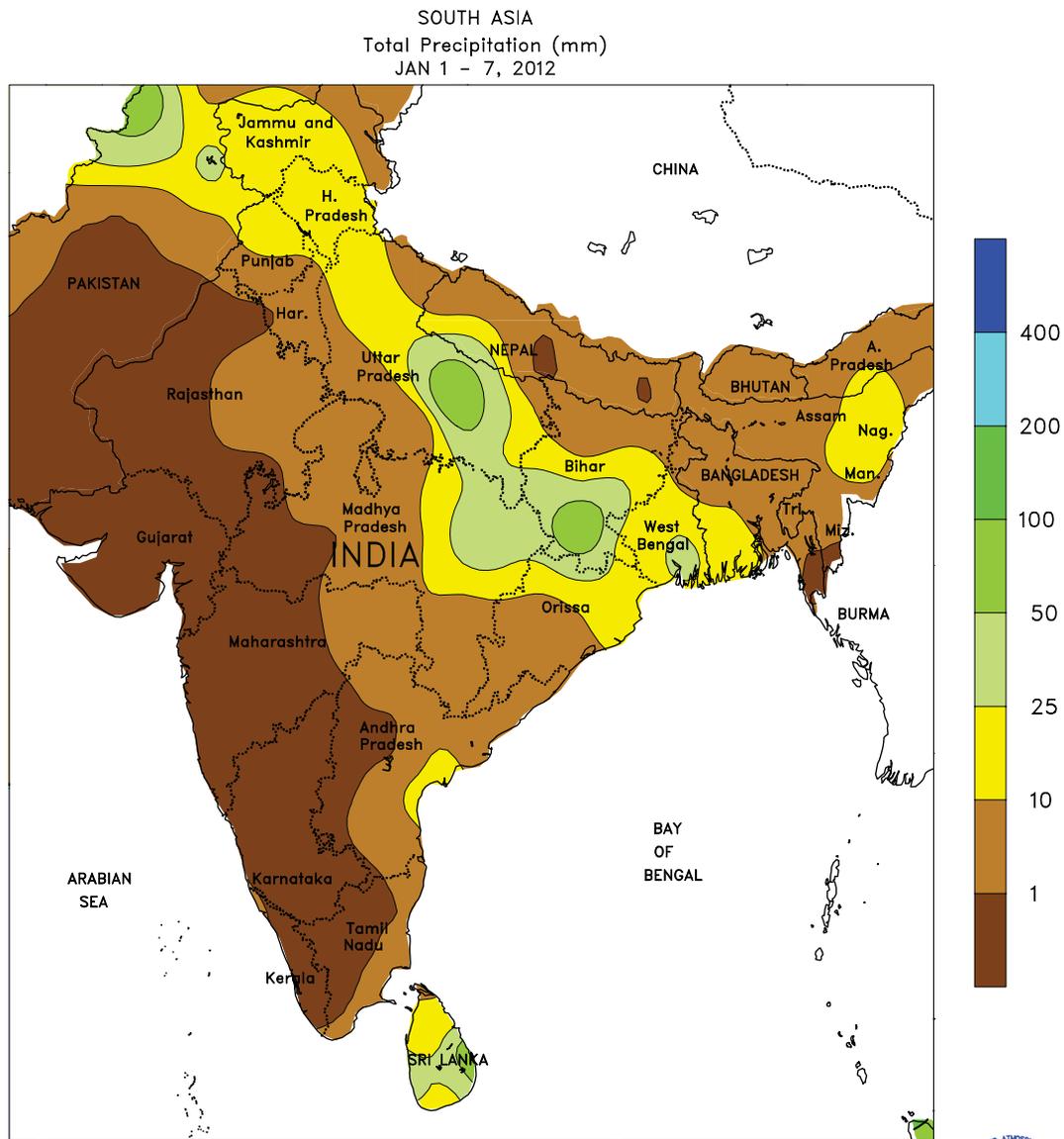
elevation snow (2-20 mm liquid equivalent) was also reported from central Turkey into northern and central portions of Iraq and Iran, favoring winter wheat and barley. In contrast, sunny skies encouraged winter crop growth in southern portions of Iraq and Iran. Temperatures averaged 2 to 5°C above normal from southern Turkey into western Iran, while chilly conditions (1-2°C below normal) shifted into eastern Iran.



NORTHWESTERN AFRICA

Locally heavy showers in eastern crop districts contrasted with increasingly dry conditions in western crop areas. Persistent onshore flow led to additional light to moderate showers (2-50 mm) over eastern Algeria and northern Tunisia, maintaining abundant soil moisture for vegetative winter wheat and barley.

Meanwhile, sunny skies promoted winter crop growth in Morocco, although a month-long dry spell has reduced soil moisture for winter grain development. Warmer-than-normal weather returned (1-3°C above normal), with no untimely heat or freezes reported.



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

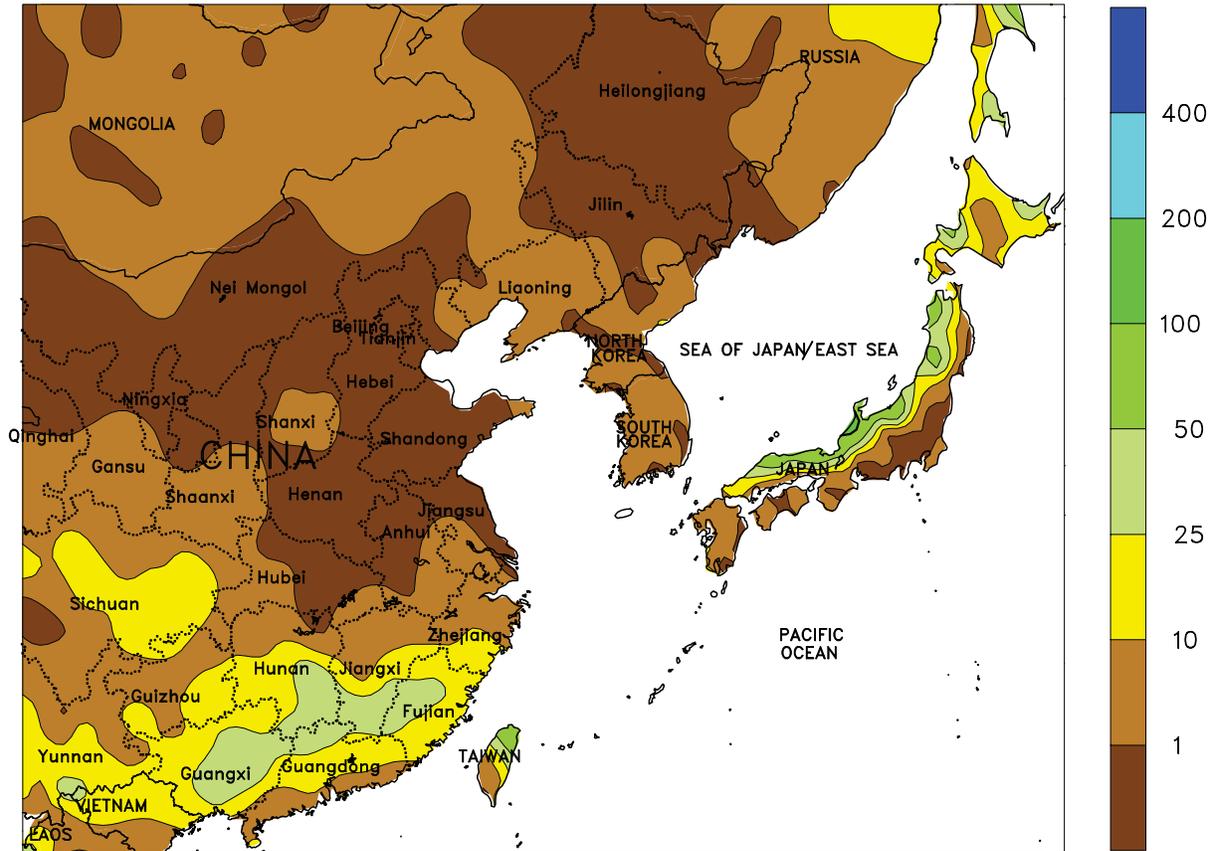


SOUTH ASIA

Unseasonably heavy rainfall (20-50 mm) provided a beneficial late-season boost to moisture supplies from Uttar Pradesh southward into Bihar and eastern Madhya Pradesh, benefiting rabi rice and other grains. The unusual rainfall was in part a result of the remnants from

last week's tropical cyclone. Most other areas in India and into Pakistan saw seasonably sunny, mild weather, with winter rapeseed and wheat benefiting from weekly average temperatures of 15°C and minimum temperatures above freezing.

EASTERN ASIA
Total Precipitation (mm)
JAN 1 - 7, 2012



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

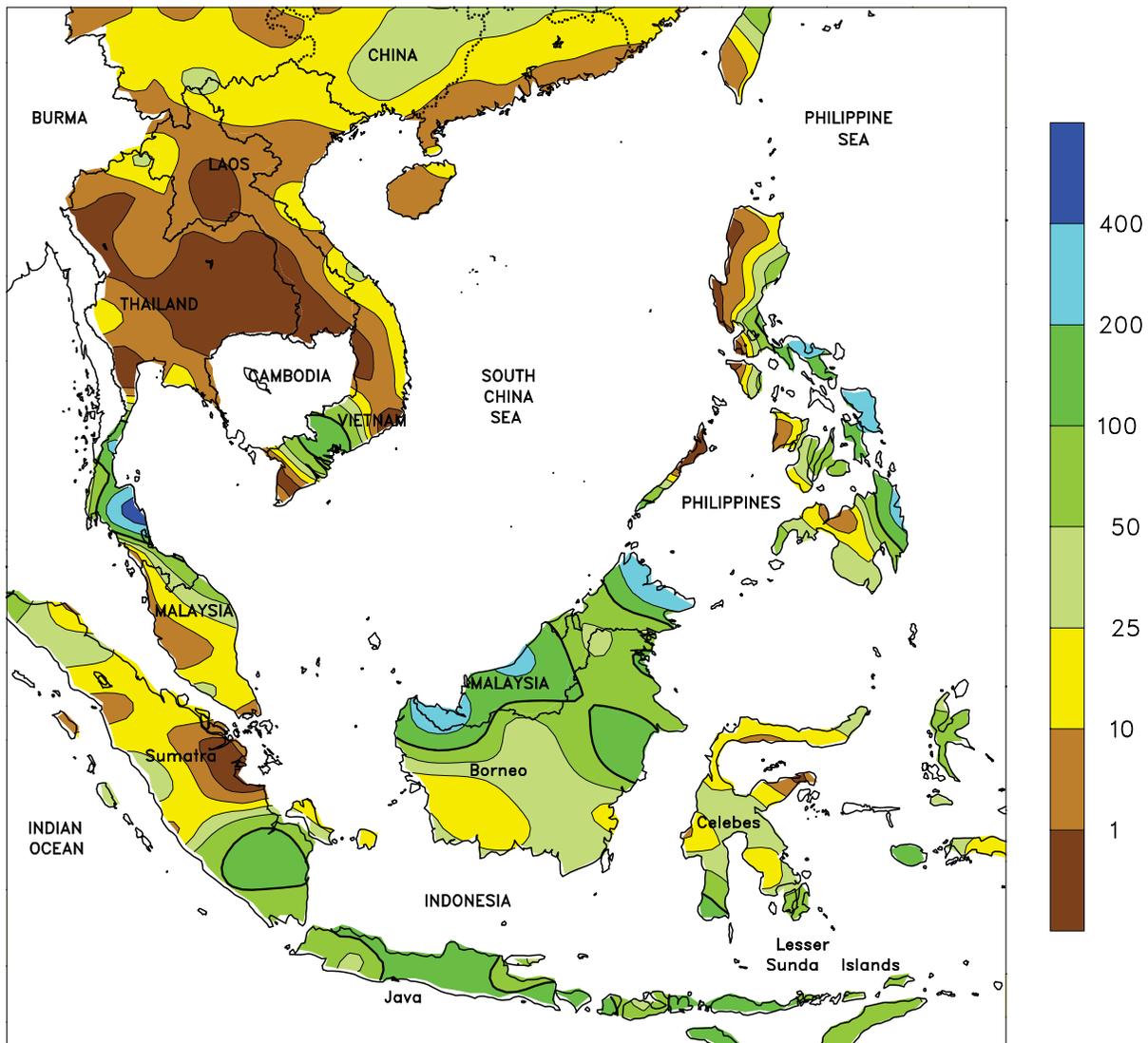


EASTERN ASIA

An area of high pressure moved over eastern China, allowing nighttime temperatures to steadily decline throughout the week. Weekly minimum temperatures dipped to -10°C in key winter wheat areas of the North China Plain, while hovering just below freezing in rapeseed areas of the Yangtze Valley. Despite the lack of snow cover, the cold weather had little

effect on the well hardened winter crops. Additionally, under building high pressure, mostly sunny weather prevailed from the eastern Yangtze Valley northward. Rainfall was confined to the seasonally wetter areas of China (Sichuan and southern provinces) where 10 to almost 50 mm occurred, benefiting sugarcane and winter-grown vegetables.

SOUTHEAST ASIA
Total Precipitation (mm)
JAN 1 - 7, 2012



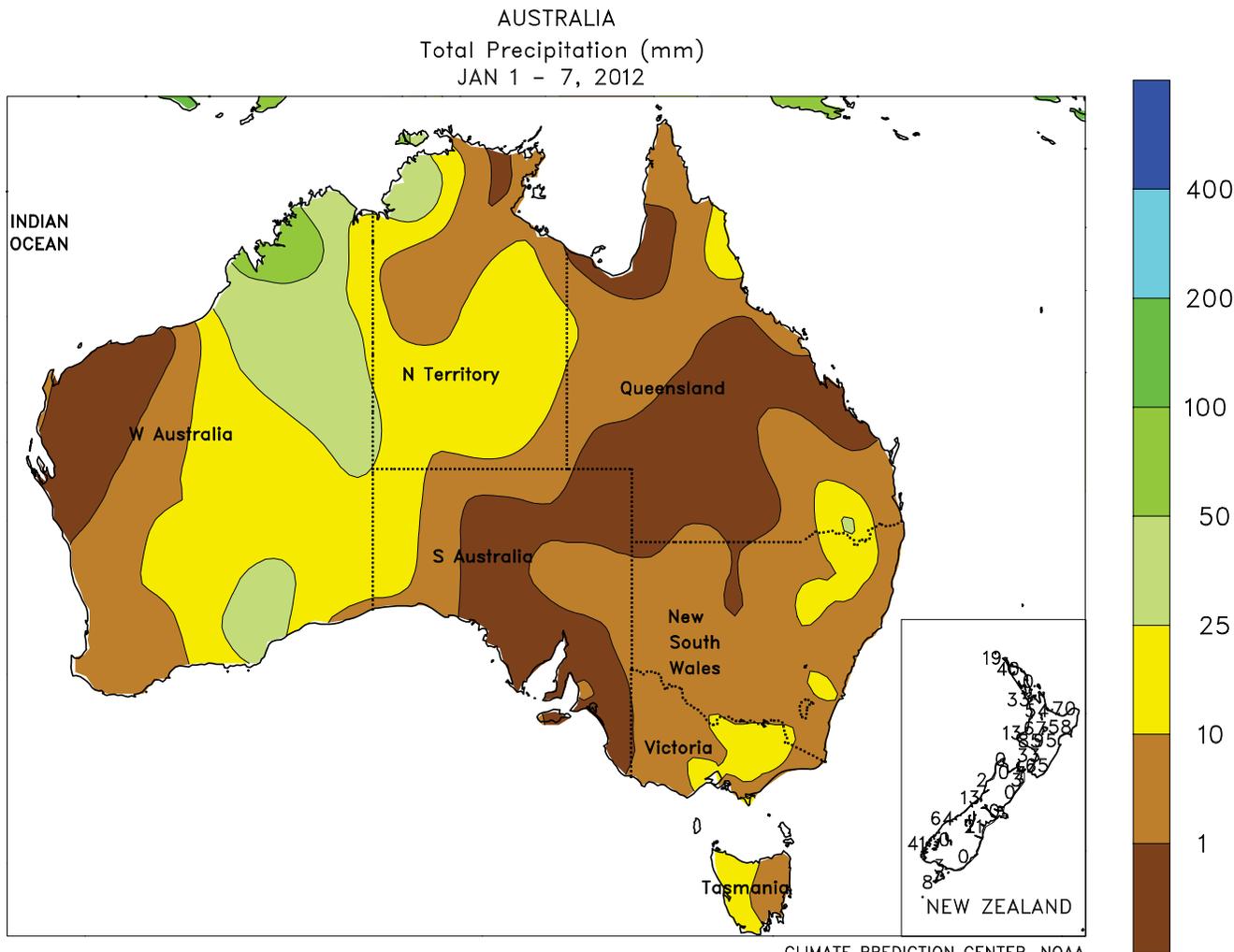
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTHEAST ASIA

Flooding showers moved into the northern Philippines, where over 300 mm of rain exacerbated wetness for corn but had little impact on rice. Saturated conditions continued across the eastern Visayas and into eastern Mindanao as waves of tropical moisture brought more flooding to the coast and lowland areas. As in the north, the wetness had little impact on rice but raised disease and pest concerns for corn. Meanwhile in southern Vietnam, nearly 200 mm of rain caused localized flooding but boosted moisture supplies for winter-spring rice. In northern Vietnam, weekly average temperatures remained up to 5°C

below normal, creating unfavorably cool conditions for rice. In Malaysia, showers were generally light (less than 25 mm) on the peninsula, favoring oil palm harvesting. However, eastern growing areas received flooding rainfall (over 200 mm), which caused significant delays in oil palm harvesting. In Indonesia, rainfall was more seasonable (25-100 mm), maintaining favorable moisture supplies for oil palm, while causing few harvest delays. In addition, upwards of 100 mm of rain in Java maintained abundant moisture supplies for reproductive rice.



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

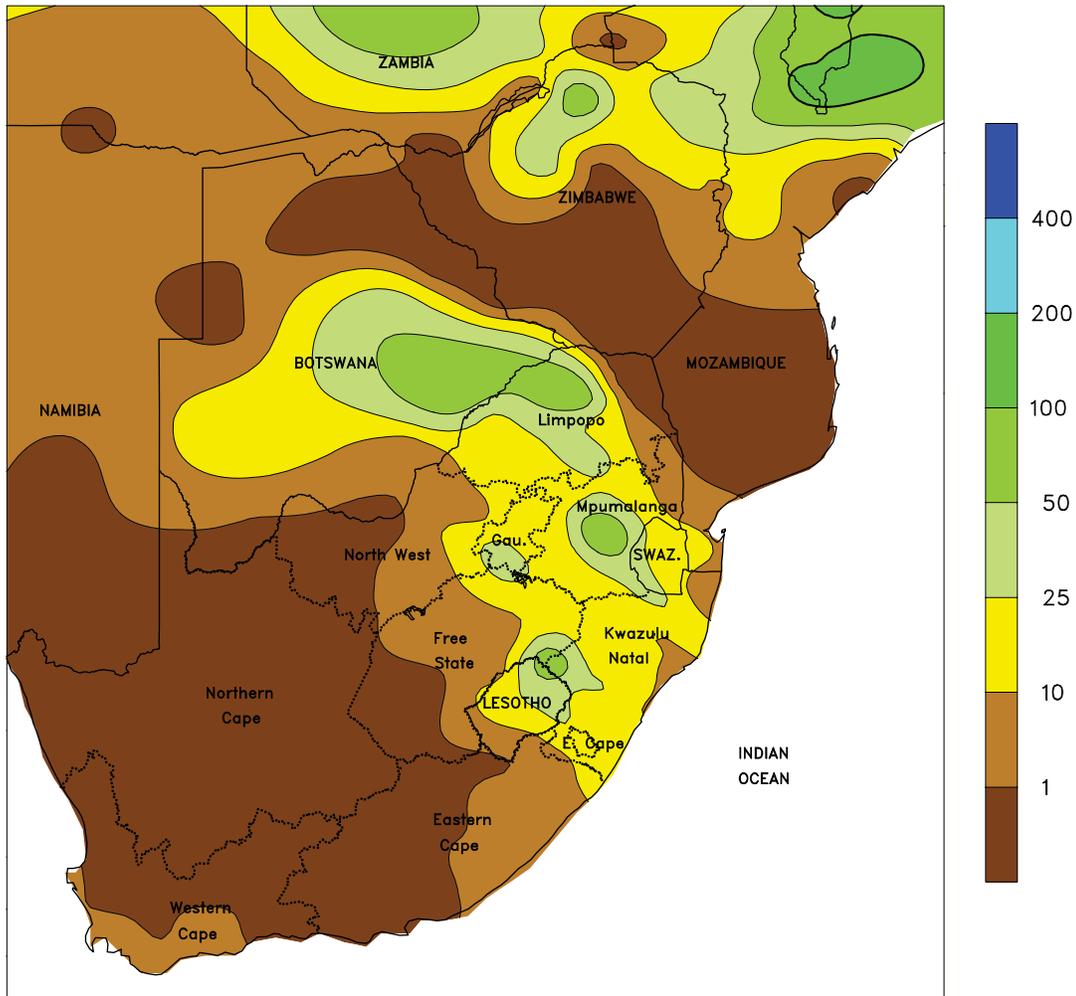


AUSTRALIA

Most areas in the wheat belt had rain (2-15 mm, locally more) during the week, but the rain was generally light, causing only minor fieldwork delays. Scattered showers favored vegetative to reproductive summer crops in eastern Australia. Winter crop harvesting is nearing completion throughout the wheat belt. As a result, passing

showers in southern and western Australia had minimal impact on late winter crop harvesting. Temperatures averaged 1 to 2°C below normal in Western Australia, about 1 to 2°C above normal in southeastern Australia, and near normal in northern New South Wales and southern Queensland.

SOUTH AFRICA
 Total Precipitation (mm)
 JAN 1 - 7, 2012



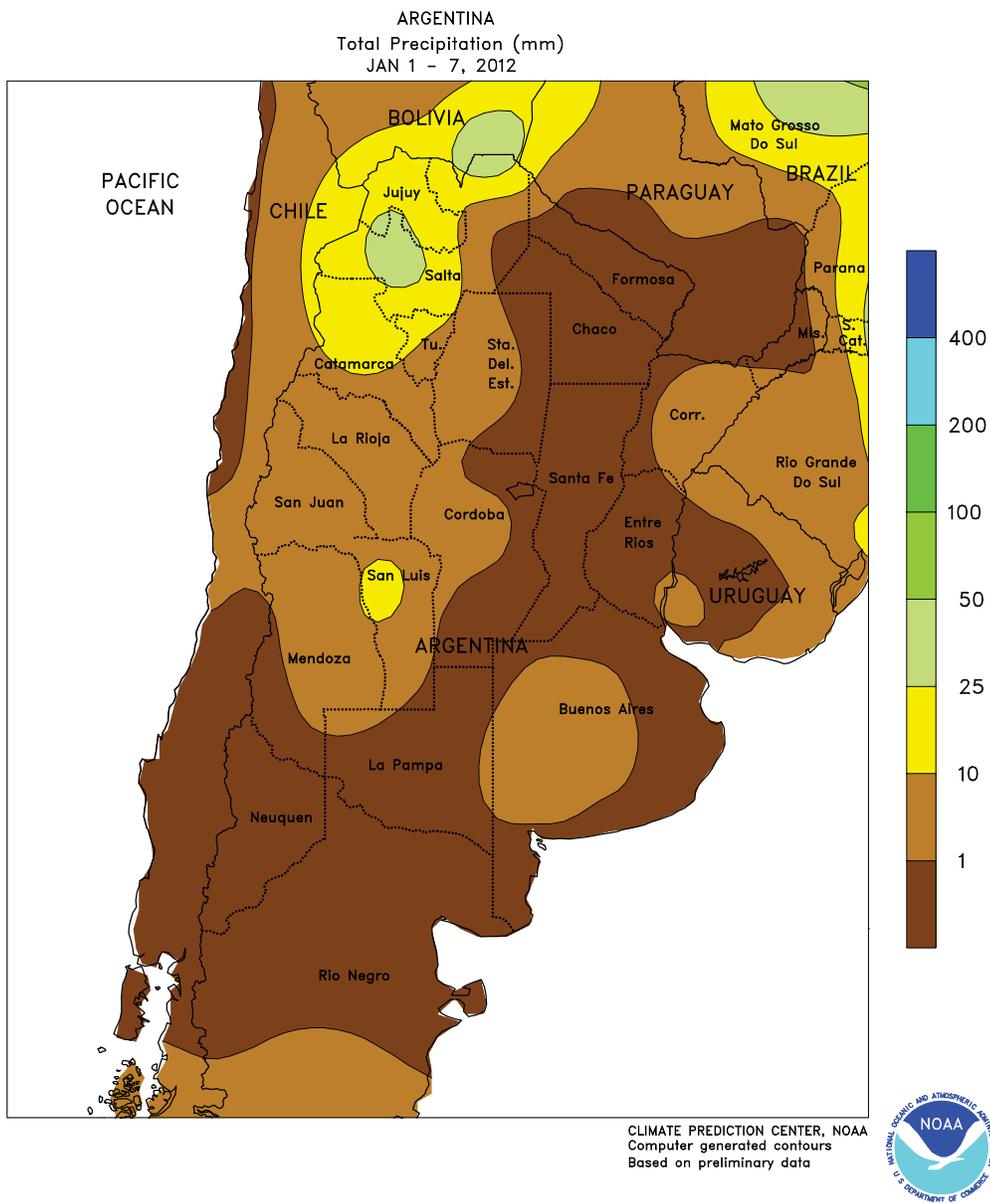
CLIMATE PREDICTION CENTER, NOAA
 Computer generated contours
 Based on preliminary data



SOUTH AFRICA

Mostly dry, warmer-than-normal weather dominated the region, enhancing growth of corn and other summer crops following recent periods of beneficial rain. Weekly temperatures averaged 2°C or more above normal in the heart of the corn belt (eastern Free State and neighboring locations in Mpumalanga, Gauteng, and North West), with highs mostly ranging from the upper 20s (degrees C) in eastern production areas to the lower 30s farther west. However, temperatures reached 35°C in key commercial production areas of North West and Free State on several days prior to the arrival of mid-

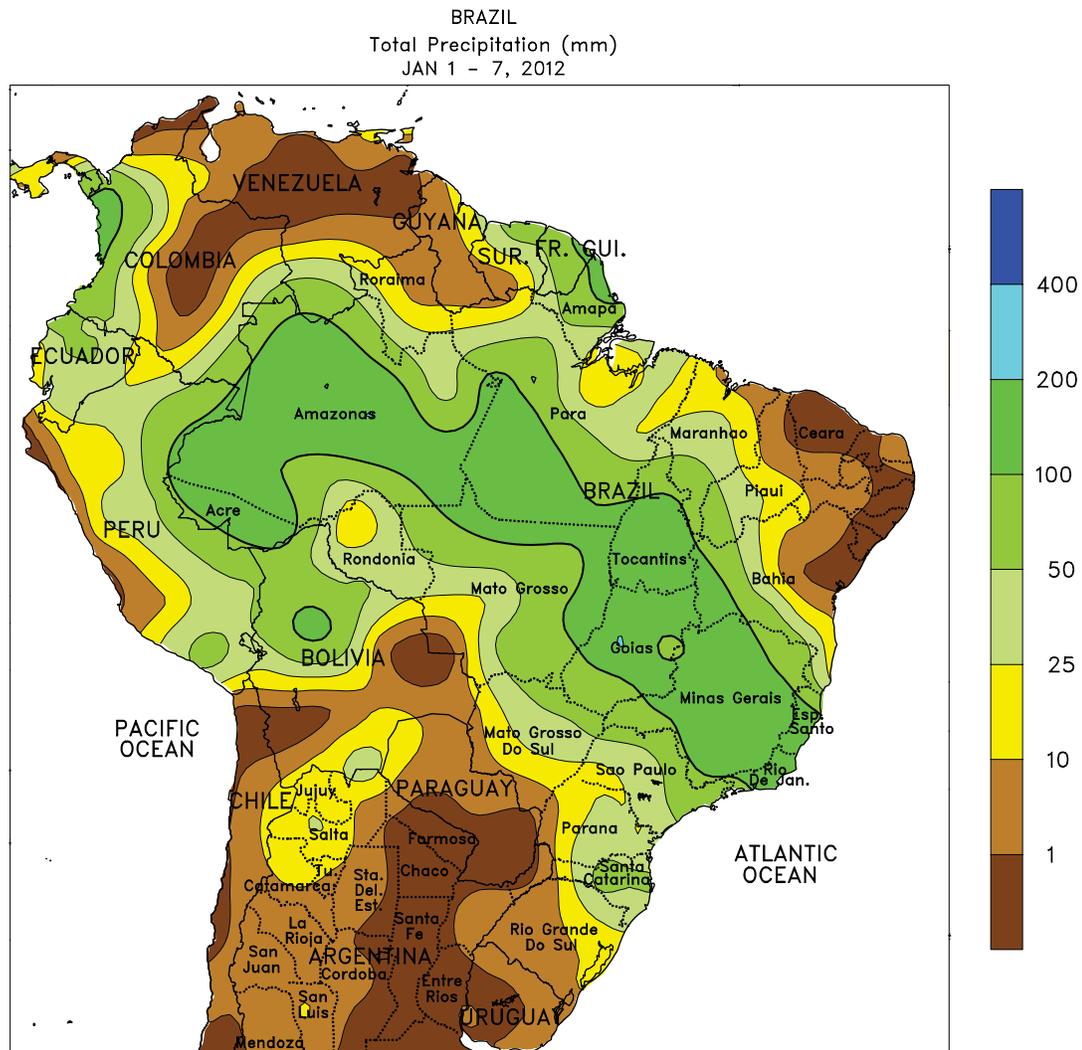
week showers (5-25 mm or more). Elsewhere, somewhat milder, wetter conditions were observed in KwaZulu-Natal, with rainfall totaling more than 10 mm in southern rain-fed sugarcane areas and daytime highs generally in the upper 20s and lower 30s. Meanwhile, warm, dry weather dominated the Cape Provinces, aiding development of irrigated summer row crops and tree and vine crops. Weekly average temperatures were about 1°C above normal, with highs reaching the upper 30s in major agricultural areas of Western and Northern Cape Provinces by week's end.



ARGENTINA

Heat and dryness increased stress on corn, soybeans, and other summer crops advancing through moisture- and temperature-sensitive stages of development. A dome of high pressure dominated the region throughout the week and, as a result, major production areas of both northern and central Argentina received virtually no rain. Unseasonably hot weather compounded the impact of the dryness on crops, with highs ranging from 35 to 40°C or more in all major summer grain, oilseed, and cotton producing areas. In total, weekly average temperatures were 3 to 6°C above normal in western farming areas from La Pampa and western Buenos Aires northward

through Cordoba, and generally 2°C or less above normal in the north and east. Rain was approaching the region at week's end (additional information will appear in next week's *Weekly Weather and Crop Bulletin*). However, a more consistent pattern of rain and less stressful summer warmth are needed immediately to prevent additional, significant declines in crop yield potential and to allow for the final stages of summer grain and oilseed planting. According to Argentina's Ministry of Agriculture, corn and soybeans were 88 and 89 percent planted, respectively, as of January 5. Winter wheat was 91 percent complete compared with 88 percent last year.



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



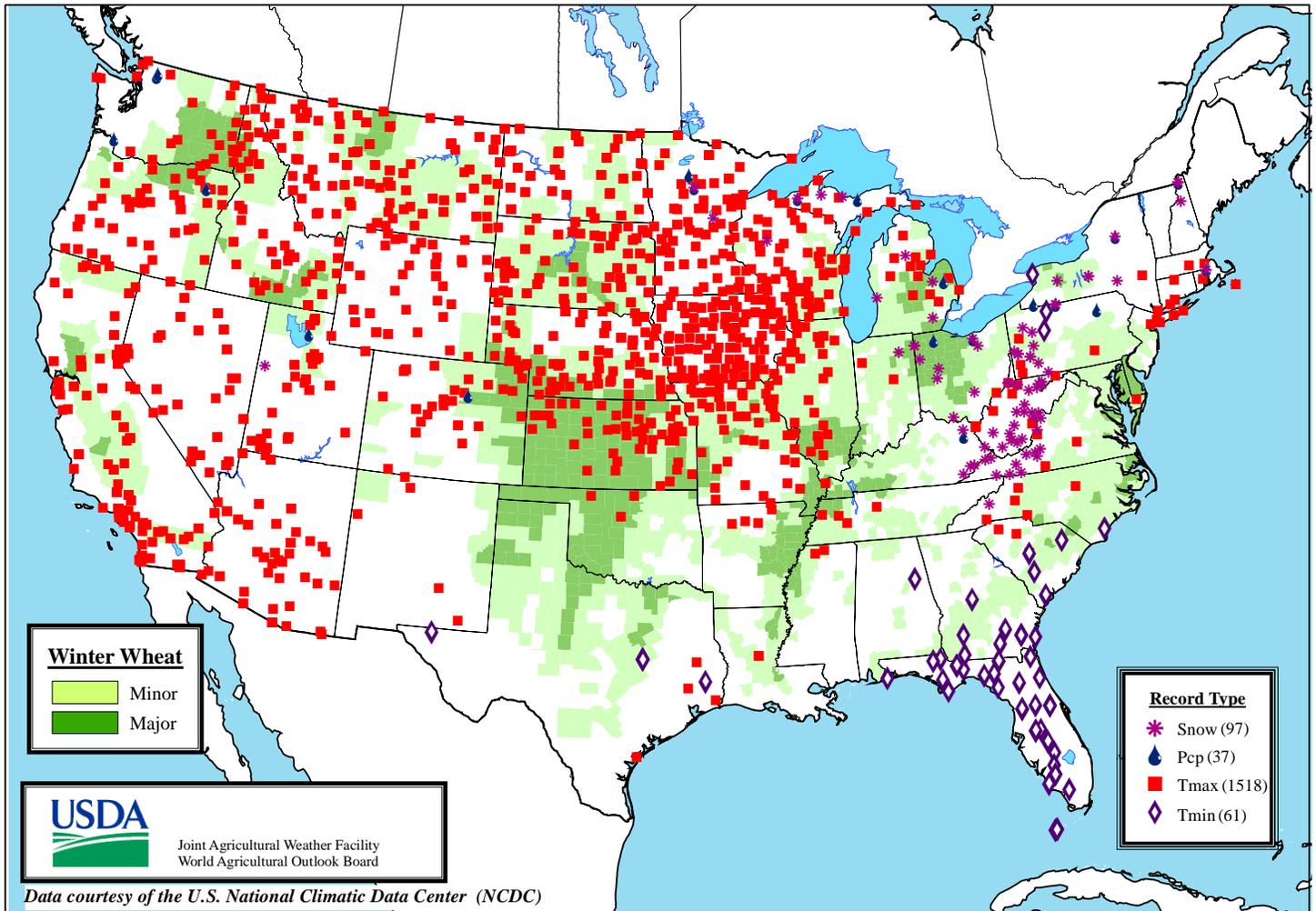
BRAZIL

Drier weather returned to much of southern Brazil, maintaining concern for soybeans and corn growing with limited levels of moisture. Rainfall totaled below 25 mm in major farming areas of Rio Grande do Sul, western Parana, and southern Mato Grosso do Sul. Somewhat heavier rain (25-50 mm or more) fell in eastern Parana and from northern Mato Grosso do Sul to southeastern Sao Paulo, although amounts were still below normal. Near- to above-normal temperatures maintained high evapotranspiration rates and enhanced summer crop development, with daytime highs reaching, or exceeding, 35°C in some of the driest locations during the latter part of the week. A return

to a more consistent pattern of summer rains is needed to prevent additional declines in yield potential as more corn and soybeans advance through reproductive and filling stages of development. Elsewhere, locally heavy rain (25-100 mm or more) continued from Mato Grosso eastward through western Bahia and Minas Gerais, maintaining overall favorable conditions for soybeans and cotton. The wet weather in southern Minas Gerais and northeastern sections of Sao Paulo sustained adequate to abundant moisture for coffee and sugarcane. Meanwhile, seasonable warmth and dryness aided seasonal fieldwork in sugarcane and cocoa areas of far northeastern Brazil.

Daily Weather Records (ASOS & COOP)

January 1-7, 2012



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