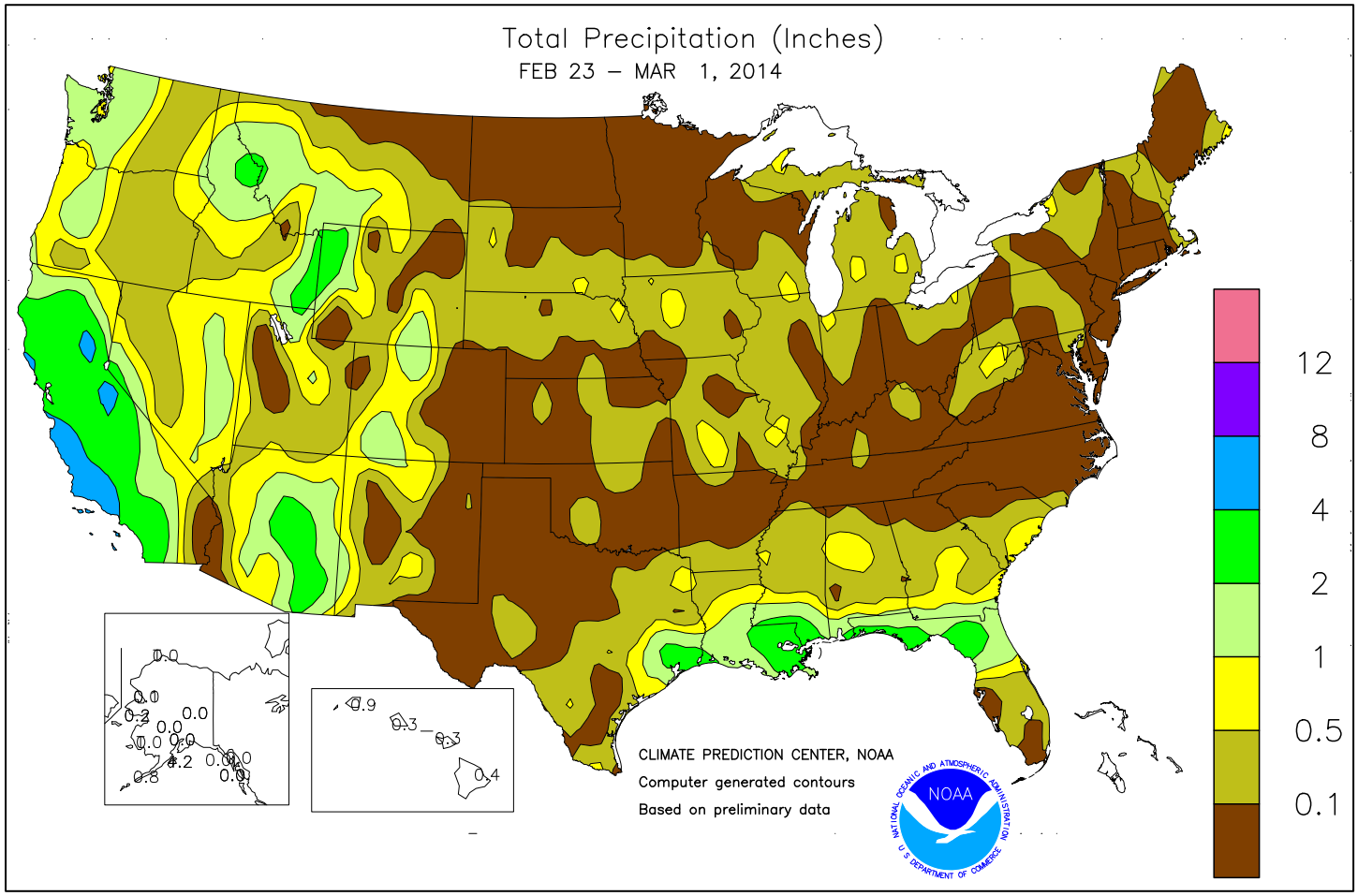
Volume 101, No. 9 http://www.usda.gov/oce/weather March 5, 2014

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

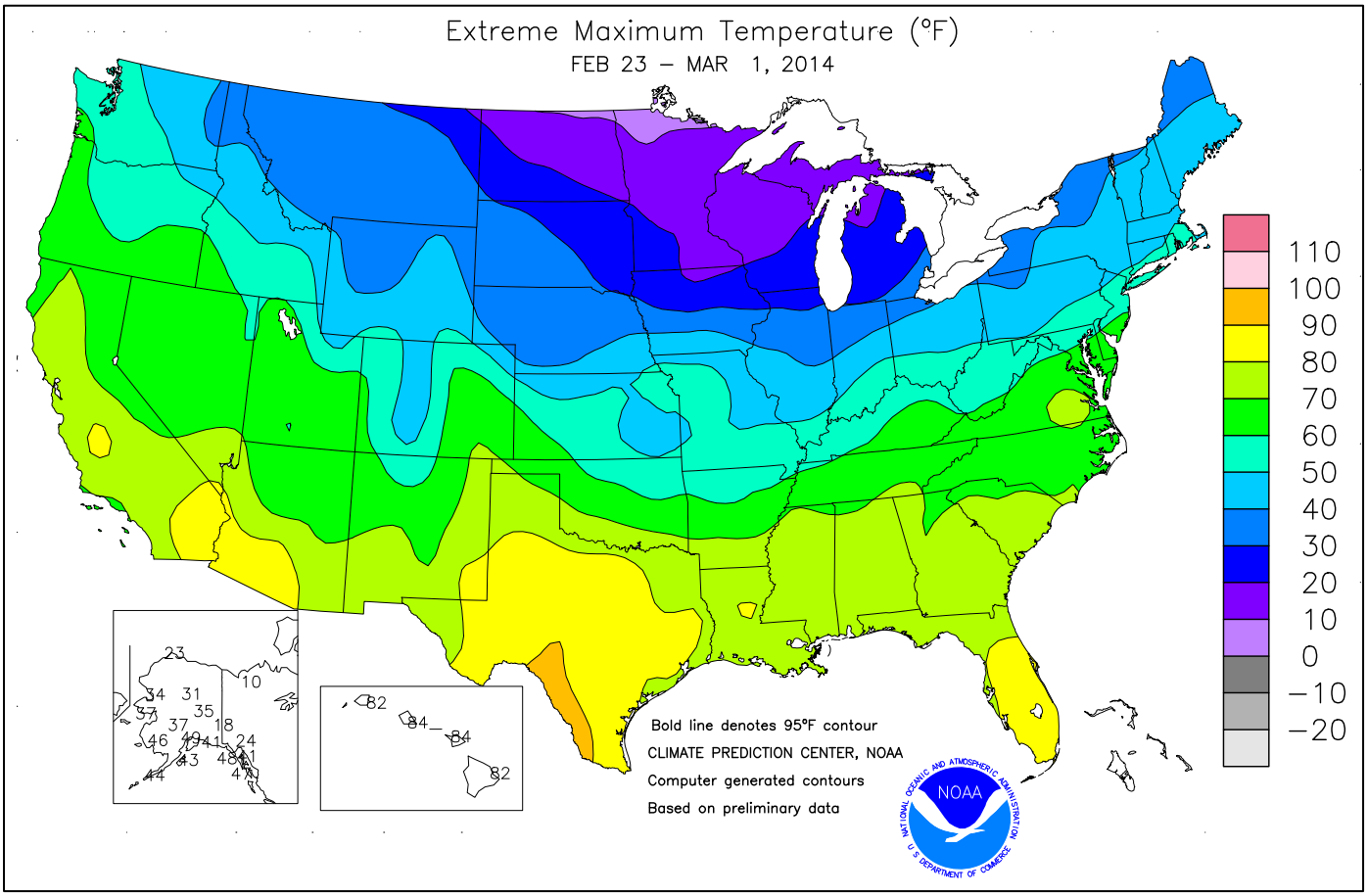
February 23 – March 1, 2014

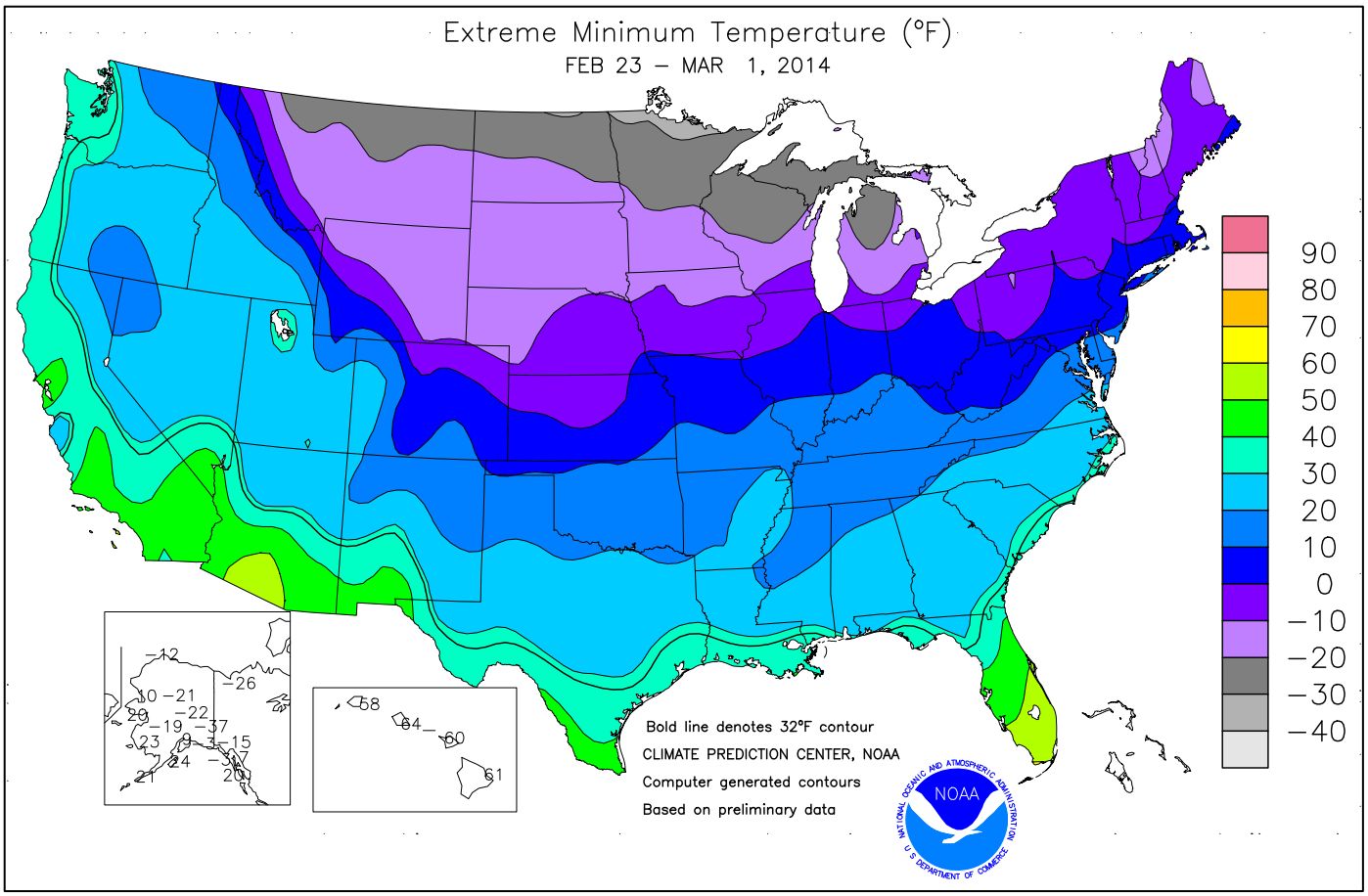
Highlights provided by USDA/WAOB

The most significant storm of the season crossed **California**, delivering drought-easing rainfall to coastal areas and much-needed snow in the **Sierra Nevada**. In addition, rain in **California's** agricultural regions eased irrigation requirements and aided drought-stressed rangeland and winter grains. However, spring and summer runoff prospects improved only slightly, as pre-storm snowpack values were near record lows and because drought-parched soils soaked up most of the available moisture. Most of the remainder of the **West** also

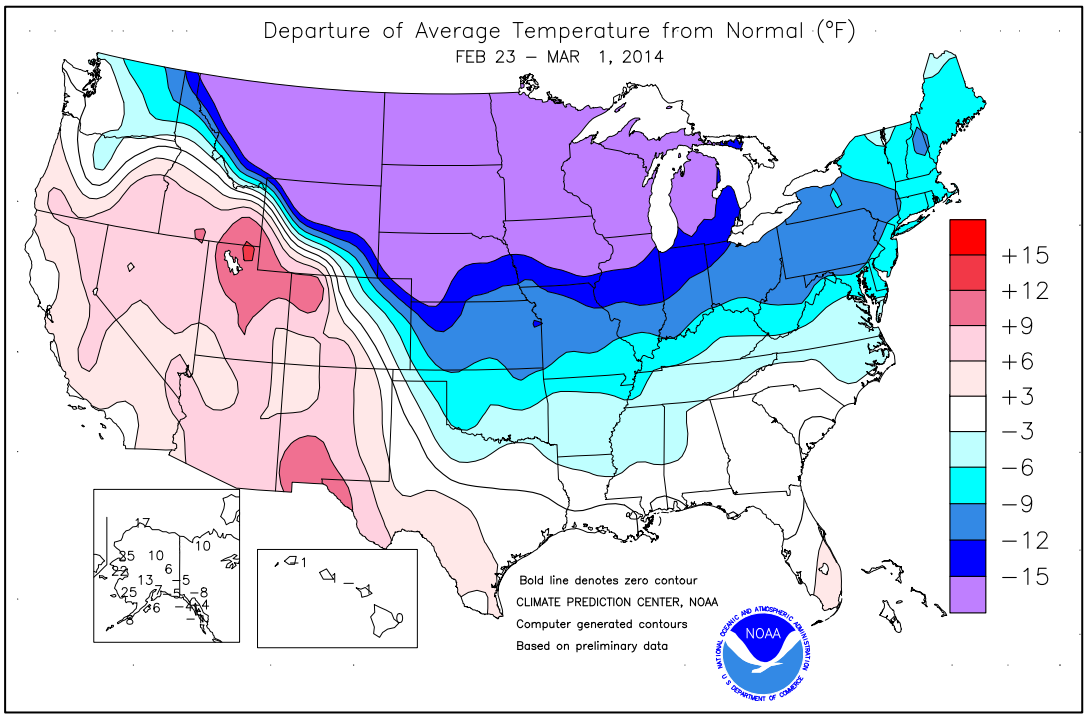
(Continued on page 3)

Contents


Extreme Maximum Temperature (°F)
FEB 23 – MAR 1, 2014
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
FEB 23 – MAR 1, 2014
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA

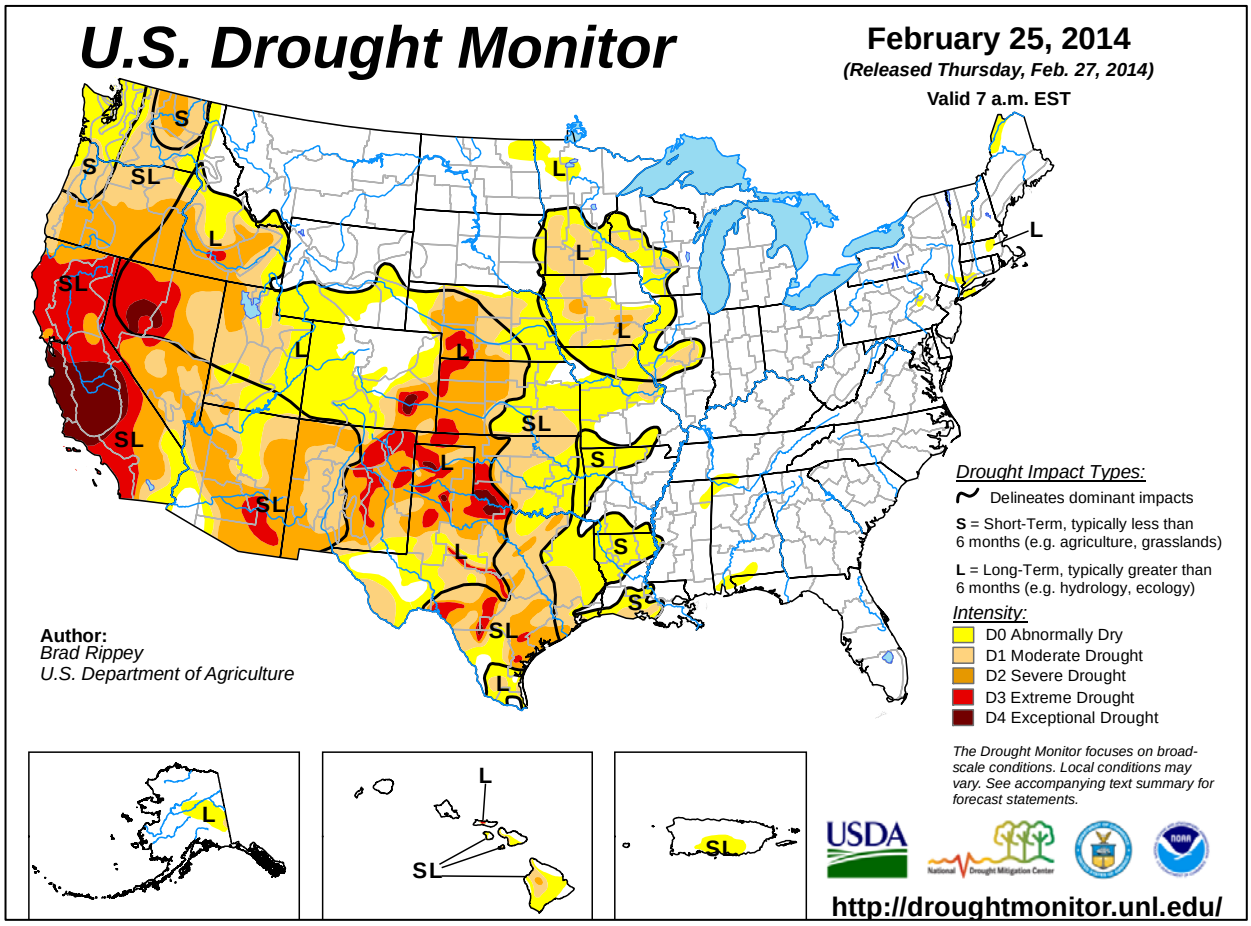
(Continued from front cover)
experienced stormy weather, with some of the heaviest precipitation occurring in **central Arizona**. Meanwhile, water-supply prospects further improved across the **northern tier of the West**. Farther east, heavy rain was confined to the **Gulf Coast region**, where totals reached 1 to 3 inches. In early March, a late-winter storm began to unfold across the **nation's mid-section**. Varying amounts of snow and sleet blanketed the **Plains**, **lower Midwest**, and **Mid-South** in advance of a record-setting March cold outbreak, helping to insulate winter wheat. Prior to the late-week storm, frigid conditions gripped the **Plains**, **Midwest**, and **Northeast**. Weekly temperatures averaged more than 20°F below normal from **Montana to Wisconsin**. Some cold air slipped across the **northern Rockies** into the **Northwest**, but most other areas of the **West** experienced mild, stormy weather. Weekly temperatures averaged at least 10°F above normal across portions of the **Intermountain West**.

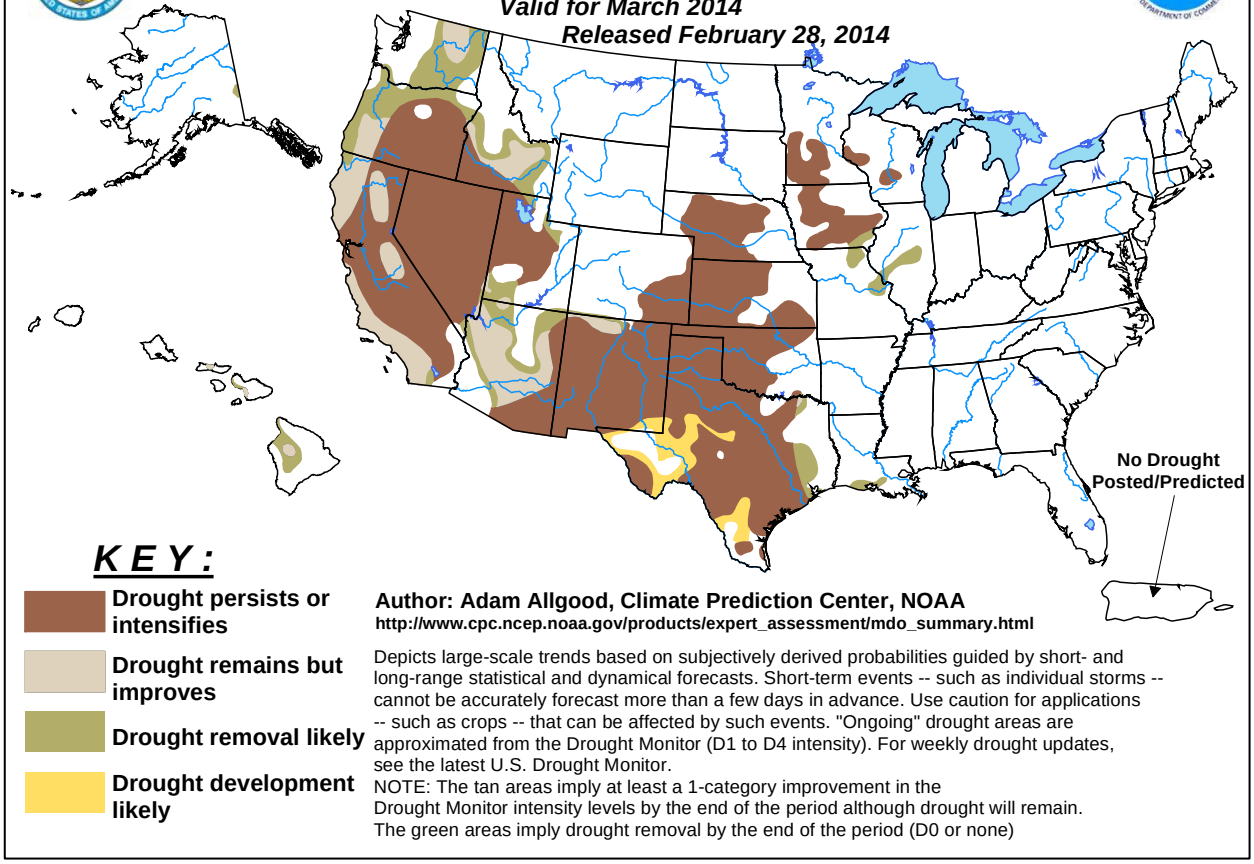


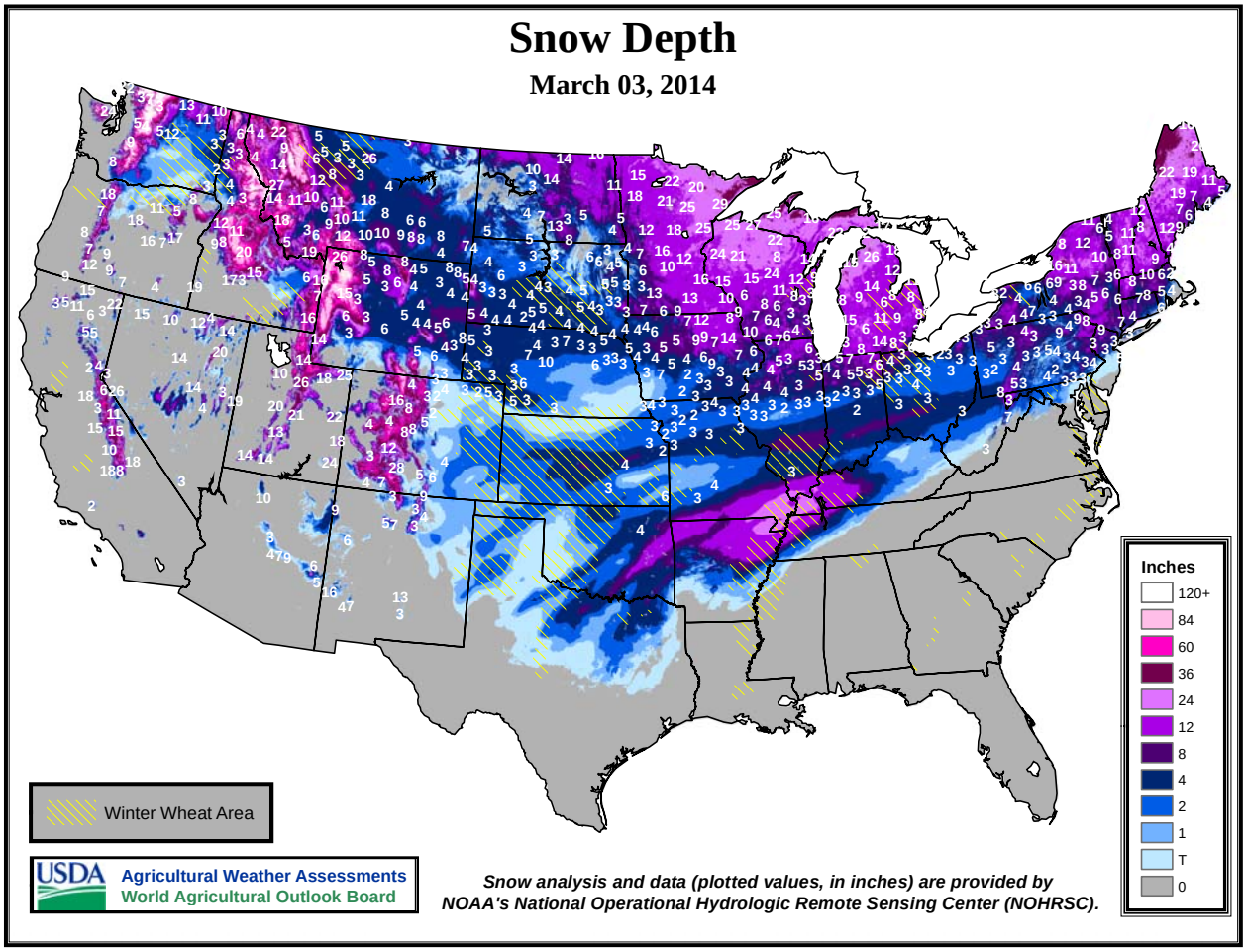
Early in the week, **Western** warmth lingered in advance of a pair of **Pacific** storms. **Fresno, CA**, completed its warmest February on record, with an average temperature of 56.8°F (5.3°F above normal). Previously, **Fresno's** warmest February had occurred in 1963, with an average of 56.4°F. Elsewhere in **California**, **Sandberg** posted its seventh 70-degree reading of the month with a high of 71°F on February 24. **Sandberg's** former February record had been 4 days in 1963. On February 25, the last day of widespread warmth in **California**, records for the date included 80°F in **Fresno** and 79°F in **Hanford**. In contrast, bitterly cold air returned to the **Plains** and **Midwest**. Daily-record lows for February 26 plunged to -12°F in **Dubuque, IA**, and -8°F in **Russell, KS**. At the end of February, the late-winter chill deepened across the **Great Lakes region**. In **Michigan**, for example, **Gaylord** (-24 and -29°F) and **Pellston** (-29 and -33°F) ended the month with consecutive daily-record lows on February 27-28. With a low of -28°F on February 28, **Marquette, MI**, recorded its lowest temperature since March 3, 2003—when the mercury dipped to -30°F. Other sub-zero, daily-record lows on February 28 included -8°F in **Youngstown, OH**; -6°F in **Dubois, PA**; and -4°F in **South Bend, IN**. Meanwhile, **Marquette** tied a February 1979 record with lows at or below 0°F on 20 days, and experienced its lowest February average temperature (5.6°F, or 9.9°F below normal; previously, 5.7°F in 1963). As March began, an even more intense cold outbreak began to affect the **northern Plains**. In **South Dakota**, **Pierre** (-20°F on March 1 and 2) smashed a monthly record previously established with a low of -19°F on March 11, 1998. In **Montana**, record-breaking lows for March 1 included -31°F in **Gold Butte**; -19°F in **Lewistown**; and -18°F in **Billings**.

As the week began, snow blanketed parts of the **Northwest**. **Billings, MT**, received a daily-record snowfall of 8.8 inches on February 23—and later completed its snowiest February on record (37.0 inches; previously, 22.4 inches in 1978). Elsewhere in **Montana**, **Missoula** received 7.9 inches of snow, a record for the date, on February 24. Snow eventually overspread portions of the **Plains**, with daily-record amounts reaching 4.9 inches (on February 25) in **Cheyenne, WY**, and 2.9 inches (on February 24) in **Norfolk, NE**. Enough snow—1.7 inches from February 25-27—fell in **Scranton, PA**, to set a February snowfall record of 29.3 inches (previously, 27.9 inches in 1914). Similarly, weekly snowfall totaled 1.6 inches in **Wausau, WI**, capping that city's snowiest winter on record. Prior to this winter's 64.5-inch total, **Wausau's** highest December-February amount had been 64.1 inches in 1961-62. Farther south, occasionally heavy rain affected the **Gulf Coast region**. Selected daily-record totals included 1.97 inches (on February 23) in **Apalachicola, FL**, and 1.08 inches (on February 26) in **New Iberia, LA**. Meanwhile, the first of two storms arrived in **California** at mid-week. On February 26, **Modesto, CA**, netted a daily-record rainfall of 0.60 inch. As the storm moved inland, record-setting precipitation amounts for February 27 included 0.56 inch in **Salt Lake City, UT**, and 0.30 inch in **Eureka, NV**. The second, stronger storm struck **California** on February 28, dumping heavy rain and high-elevation snow. **Bishop, CA**, received 1.71 inches of rain from February 26-28, topping its 2013 precipitation total of 1.33 inches. Elsewhere in **southern California**, rainfall from February 26 – March 2 accounted for more than 75 percent of the season-to-date precipitation in locations such as **Burbank** (4.78 of 5.28 inches); downtown **Los Angeles** (4.52 of 5.72 inches); **Camarillo** (3.66 of 4.85 inches); and **Sandberg** (3.04 of 3.93 inches). However, even after the precipitation ended, season-to-date (July 1 – March 3) totals were just 40 percent of normal in **Burbank**, **Camarillo**, and **Sandberg**, and 49 percent of normal in downtown **Los Angeles**. At the height of the second storm, on February 28, **Los Angeles**—with 2.24 inches—experienced its wettest day since March 20, 2011. **Los Angeles** also received at least an inch of rain on 3 consecutive days (February 27 – March 1) for the first time since December 18-20, 2010. Farther inland, **Phoenix, AZ**, collected a daily-record rainfall of 0.94 inch on March 1. Elsewhere on March 1, wintry precipitation began to spread **east of the Rockies**. Daily-record snowfall totals for March 1 reached 4.6 inches in **Rockford, IL**, and 2.4 inches in **Grand Rapids, MI**. More details on wintry precipitation in early March and a subsequent late-season Arctic outbreak will appear next week.

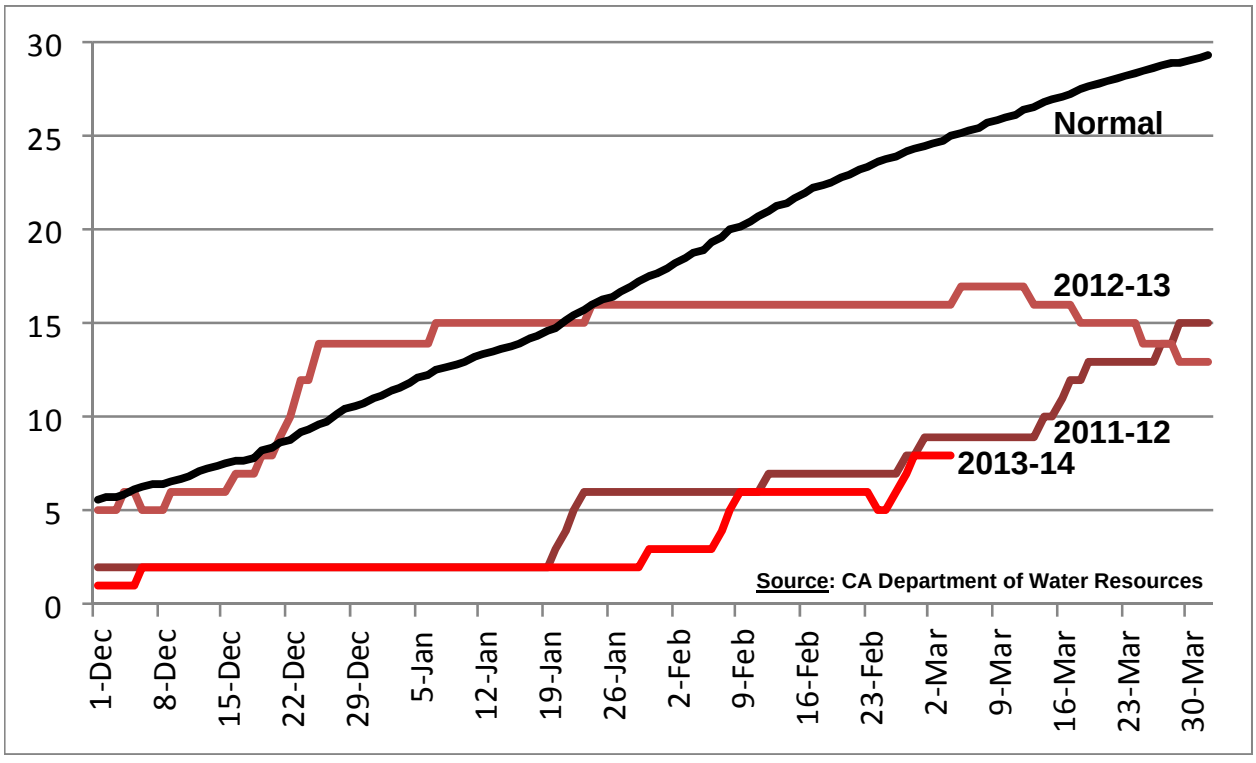
Western Alaska experienced generally dry weather and unusual warmth, with weekly temperatures averaging more than 20°F above normal. **Kotzebue** closed the month with consecutive daily-record highs (31 and 34°F, respectively) on February 27-28. On February 27, **Anchorage** (49°F) and **Bethel** (46°F) also posted daily-record highs. Two days later, **King Salmon** (52°F) notched a record-breaking high for March 1. One exception to **Alaska's** dry pattern occurred on **Kodiak Island**, where a daily-record precipitation total of 2.51 inches was noted on February 26. Meanwhile, cold, mostly dry conditions prevailed in **southeastern Alaska**. Farther south, generous cold frontal rains continued to chip away at lingering drought in **Hawaii**. However, windward sections of the **Big Island** have trended dry in recent weeks due to weak trade winds. In **Hilo**, for example, February rainfall totaled just 2.57 inches (27 percent of normal).


U.S. Drought Monitor
February 25, 2014
(Released Thursday, Feb. 27, 2014)
Valid 7 a.m. EST
Author:
Brad Rippey
U.S. Department of Agriculture
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/


U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period
Valid for March 2014
Released February 28, 2014
No Drought Posted/Predicted
KEY:
Drought persists or intensifies
Drought remains but improves
Drought removal likely
Drought development likely
Author: Adam Allgood, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/mdo_summary.html
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 tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The green areas imply drought removal by the end of the period (D0 or none)



Daily Sierra Nevada Snowpack (Inches) vs. Normal



National Weather Data for Selected Cities

Weather Data for the Week Ending March 1, 2014

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	59	34	72	20	47	-2	0.45	-0.66	0.38	0.00	0	6.49	66	77	32	0	3	3	0
	HUNTSVILLE	56	32	70	19	44	-3	0.14	-1.22	0.12	0.00	0	**	**	70	42	0	3	2	0
	MOBILE	66	43	75	28	55	-1	0.49	-0.89	0.24	0.00	0	5.59	51	96	57	0	2	3	0
	MONTGOMERY	64	40	74	24	52	-1	0.25	-1.20	0.24	0.00	0	7.71	72	86	39	0	2	2	0
AK	ANCHORAGE	35	19	49	9	27	6	0.00	-0.19	0.00	0.00	0	**	**	71	63	0	7	0	0
	BARROW	8	-6	23	-12	1	17	0.04	0.03	0.02	0.00	0	0.67	279	83	73	0	7	3	0
	FAIRBANKS	24	-11	35	-22	6	6	0.00	-0.07	0.00	0.00	0	0.22	24	76	69	0	7	0	0
	JUNEAU	38	15	41	7	26	-5	0.00	-0.97	0.00	0.00	0	13.44	150	82	69	0	7	0	0
	KODIAK	40	33	43	24	37	7	4.20	2.94	3.20	0.00	0	21.12	150	93	83	0	2	5	1
	NOME	32	25	37	20	28	22	0.23	0.08	0.13	0.00	0	2.56	151	92	78	0	7	5	0
AZ	FLAGSTAFF	53	27	59	21	40	7	1.38	0.70	1.17	1.17	1170	1.67	35	80	36	0	6	2	1
	PHOENIX	80	55	84	53	68	8	0.91	0.68	0.91	0.91	2275	0.91	55	44	31	0	0	1	1
	PRESCOTT	63	35	68	30	49	8	0.63	0.13	0.56	0.56	800	0.68	19	64	29	0	2	2	1
	TUCSON	77	51	82	48	64	8	0.45	0.23	0.45	0.45	1500	0.46	24	45	25	0	0	1	0
AR	FORT SMITH	52	32	60	20	42	-5	0.04	-0.70	0.04	0.00	0	1.78	35	74	40	0	4	1	0
	LITTLE ROCK	54	33	65	22	44	-4	0.05	-0.82	0.04	0.00	0	5.56	79	69	33	0	4	2	0
CA	BAKERSFIELD	73	50	81	45	62	7	0.32	0.01	0.26	0.04	80	0.48	20	63	44	0	0	4	0
	FRESNO	72	51	80	47	62	9	1.11	0.59	0.58	0.00	0	2.58	59	74	51	0	0	3	1
	LOS ANGELES	66	55	67	50	60	2	2.91	2.17	1.62	0.35	350	3.15	51	85	68	0	0	3	2
	REDDING	63	43	73	34	53	3	3.67	2.37	1.27	0.69	363	9.14	75	92	68	0	0	4	4
	SACRAMENTO	68	47	75	41	58	5	1.36	0.55	0.86	0.00	0	4.28	57	93	44	0	0	3	1
	SAN DIEGO	67	57	70	49	62	3	1.67	1.17	1.02	1.02	1457	2.03	46	80	65	0	0	3	2
	SAN FRANCISCO	64	51	71	45	57	4	1.30	0.38	0.66	0.16	123	3.91	46	89	79	0	0	4	1
	STOCKTON	68	46	75	38	57	4	1.62	1.04	1.45	0.00	0	3.10	59	90	74	0	0	3	1
CO	ALAMOSA	54	19	56	15	36	10	0.01	-0.05	0.01	0.00	0	0.13	28	84	34	0	7	1	0
	CO SPRINGS	50	18	63	8	34	1	0.03	-0.09	0.03	0.03	150	0.94	145	84	33	0	7	1	0
	DENVER INTL	48	14	64	1	31	-2	0.06	-0.06	0.03	0.03	150	1.17	244	90	48	0	7	2	0
	GRAND JUNCTION	56	31	60	27	44	6	0.12	-0.03	0.10	0.02	100	1.42	127	76	42	0	5	2	0
	PUEBLO	53	19	70	11	36	-1	0.00	-0.09	0.00	0.00	0	0.74	121	80	53	0	7	0	0
CT	BRIDGEPORT	35	18	47	9	27	-7	0.02	-0.72	0.02	0.00	0	7.27	108	66	44	0	7	1	0
	HARTFORD	33	11	49	0	22	-9	0.00	-0.73	0.00	0.00	0	**	**	63	40	0	7	0	0
DC	WASHINGTON	44	27	64	14	36	-4	0.20	-0.51	0.12	0.00	0	6.85	115	63	28	0	5	2	0
DE	WILMINGTON	39	19	59	8	29	-7	0.07	-0.68	0.05	0.00	0	8.40	132	77	32	0	6	3	0
FL	DAYTONA BEACH	71	54	82	46	62	1	1.38	0.66	0.98	0.00	0	6.59	110	95	61	0	0	2	1
	JACKSONVILLE	67	46	78	33	57	-1	1.01	0.25	0.51	0.00	0	9.71	140	99	54	0	0	2	2
	KEY WEST	78	69	82	65	74	2	0.17	-0.16	0.10	0.00	0	7.60	201	90	72	0	0	2	0
	MIAMI	83	66	86	60	75	5	0.22	-0.27	0.21	0.00	0	3.78	94	91	53	0	0	2	0
	ORLANDO	77	56	87	48	67	3	0.45	-0.19	0.41	0.00	0	5.04	103	89	61	0	0	2	0
	PENSACOLA	67	47	77	32	57	0	3.44	2.20	2.22	0.00	0	11.33	111	83	49	0	1	2	2
	TALLAHASSEE	69	42	81	27	55	-2	1.55	0.29	0.93	0.00	0	8.05	79	87	48	0	2	2	2
	TAMPA	74	58	79	48	66	2	0.22	-0.47	0.22	0.00	0	4.98	99	90	60	0	0	1	0
	WEST PALM BEACH	81	64	86	56	73	5	0.26	-0.30	0.14	0.00	0	11.49	180	92	55	0	0	3	0
GA	ATHENS	61	35	71	27	48	0	0.07	-1.05	0.05	0.00	0	8.64	93	69	35	0	2	2	0
	ATLANTA	58	36	69	25	47	-2	0.21	-0.98	0.17	0.00	0	7.17	73	63	37	0	3	3	0
	AUGUSTA	64	33	73	22	49	-2	0.27	-0.76	0.27	0.00	0	6.21	71	89	40	0	2	1	0
	COLUMBUS	63	41	74	28	52	-1	0.31	-0.89	0.30	0.00	0	8.32	88	77	30	0	2	2	0
	MACON	65	36	75	22	50	-1	0.61	-0.52	0.61	0.00	0	7.83	81	87	32	0	2	1	1
	SAVANNAH	68	44	79	31	56	1	0.41	-0.26	0.41	0.00	0	4.13	59	86	47	0	1	1	0
HI	HILO	80	63	82	61	72	0	0.36	-2.01	0.21	0.00	0	8.25	44	90	71	0	0	2	0
	HONOLULU	81	67	84	64	74	1	0.34	-0.22	0.34	0.34	425	4.11	80	78	65	0	0	1	0
	KAHULUI	82	64	84	60	73	1	0.28	-0.22	0.14	0.07	100	5.77	94	91	73	0	0	4	0
	LIHUE	78	65	82	58	71	-1	0.93	0.15	0.68	0.00	0	10.43	131	88	77	0	0	3	1
ID	BOISE	55	37	59	33	46	7	0.16	-0.12	0.14	0.02	50	2.99	116	85	66	0	0	2	0
	LEWISTON	40	31	44	24	36	-5	0.63	0.41	0.21	0.00	0	2.42	114	82	74	0	3	5	0
	POCATELLO	51	30	56	20	40	7	0.87	0.61	0.76	0.76	1900	2.48	113	78	59	0	5	2	1
IL	CHICAGO/O'HARE	25	8	31	1	16	-14	0.40	-0.01	0.40	0.40	667	**	**	59	45	0	7	1	0
	MOLINE	26	6	35	-3	16	-15	0.23	-0.19	0.22	0.22	367	4.02	128	70	48	0	7	2	0
	PEORIA	28	10	40	0	19	-13	0.17	-0.31	0.15	0.15	214	4.92	152	69	47	0	7	2	0
	ROCKFORD	21	2	27	-6	11	-17	0.33	0.00	0.33	0.33	660	7.79	278	71	55	0	7	1	0
	SPRINGFIELD	31	14	43	3	22	-12	0.03	-0.51	0.03	0.00	0	4.85	139	73	43	0	7	1	0
IN	EVANSVILLE	38	22	52	14	30	-9	0.02	-0.81	0.02	0.00	0	3.95	64	67	45	0	6	1	0
	FORT WAYNE	26	10	36	-1	18	-13	0.05	-0.45	0.05	0.05	71	**	**	78	53	0	7	1	0
	INDIANAPOLIS	31	14	49	4	23	-11	0.00	-0.65	0.00	0.00	0	7.16	144	76	43	0	7	0	0
	SOUTH BEND	25	9	30	-4	17	-13	0.11	-0.39	0.09	0.09	129	6.03	140	72	58	0	7	3	0
IA	BURLINGTON	28	8	41	-2	18	-14	0.06	-0.40	0.05	0.05	71	3.79	130	75	47	0	7	2	0
	CEDAR RAPIDS	19	0	30	-8	10	-18	0.01	-0.28	0.01	0.01	25	1.63	74	79	57	0	7	1	0
	DES MOINES	26	4	43	-6	15	-15	0.30	-0.01	0.14	0.14	280	4.01	177	72	54	0	7	3	0
	DUBUQUE	16	-2	25	-12	7	-20	0.36	-0.02	0.26	0.26	433	2.65	96	78	62	0	7	3	0
	SIOUX CITY	24	2	33	-11	13	-16	0.26	0.05	0.17	0.17	425	0.87	70	74	57	0	7	2	0
	WATERLOO	16	-4	26	-10	6	-21	0.37	0.08	0.19	0.19	475	2.83	147	77	61	0	7	3	0
KS	CONCORDIA	35	14	53	1	24	-11	0.09	-0.21	0.04	0.02	40	1.16	81	78	59	0	7	3	0
	DODGE CITY	40	14	58	4	27	-12	0.00	-0.22	0.00	0.00	0	0.79	60	82	47	0	7	0	0
	GOODLAND	40	11	58	-3	25	-10	0.08	-0.09	0.07	0.01	33	0.90	100	85	70	0	7	2	0
	TOPEKA	36	18	52	7	27	-10	0.13	-0.25	0.12	0.12	200	1.53	70	71	47	0	7	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 1, 2014

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	43	20	50	8	31	-8	0.02	-0.36	0.02	0.00	0	2.46	128	76	53	0	6	1	0
KY	JACKSON	46	23	64	13	34	-7	0.14	-0.85	0.08	0.00	0	7.62	103	73	30	0	6	2	0
	LEXINGTON	42	22	58	14	32	-7	0.11	-0.81	0.09	0.00	0	7.05	104	71	43	0	7	2	0
	LOUISVILLE	41	23	57	17	32	-8	0.07	-0.83	0.06	0.00	0	6.84	103	67	34	0	6	2	0
	PADUCAH	45	26	57	19	36	-5	0.00	-0.98	0.00	0.00	0	5.19	69	69	32	0	6	0	0
LA	BATON ROUGE	67	45	80	30	56	0	1.57	0.42	0.58	0.00	0	9.22	81	93	52	0	2	3	2
	LAKE CHARLES	65	49	76	33	57	1	1.58	0.89	0.91	0.00	0	6.80	76	95	72	0	0	3	1
	NEW ORLEANS	67	49	77	35	58	0	2.70	1.48	1.50	0.00	0	9.05	79	90	75	0	0	3	2
	SHREVEPORT	62	41	80	26	52	-2	0.39	-0.61	0.22	0.01	7	3.45	39	81	49	0	2	3	0
ME	CARIBOU	20	-1	36	-11	9	-7	0.06	-0.44	0.03	0.03	43	6.10	120	79	46	0	7	3	0
	PORTLAND	30	10	47	3	20	-7	0.00	-0.76	0.00	0.00	0	8.33	113	66	37	0	7	0	0
MD	BALTIMORE	41	21	60	11	31	-7	0.11	-0.70	0.06	0.00	0	7.74	117	73	41	0	6	3	0
MA	BOSTON	36	19	52	10	27	-6	0.02	-0.78	0.02	0.00	0	7.00	95	57	30	0	6	1	0
	WORCESTER	29	11	44	2	20	-8	0.02	-0.76	0.02	0.00	0	6.70	92	67	34	0	6	1	0
MI	ALPENA	16	-5	24	-23	6	-15	0.14	-0.21	0.08	0.03	60	2.61	83	83	45	0	7	3	0
	GRAND RAPIDS	21	6	25	-12	13	-15	0.33	-0.04	0.26	0.26	433	5.62	155	77	58	0	7	3	0
	HOUGHTON LAKE	14	-6	20	-29	4	-18	0.23	-0.08	0.08	0.08	160	2.97	102	79	58	0	7	4	0
	LANSING	20	5	26	-11	12	-15	0.37	0.04	0.30	0.30	600	4.31	139	74	59	0	7	3	0
	MUSKEGON	21	7	25	-7	14	-14	0.22	-0.15	0.19	0.19	317	5.10	132	73	59	0	7	3	0
	TRAVERSE CITY	16	0	21	-18	8	-16	0.05	-0.28	0.01	0.01	20	3.77	78	84	53	0	7	5	0
MN	DULUTH	7	-12	17	-22	-2	-20	0.00	-0.19	0.00	0.00	0	**	**	69	51	0	7	0	0
	INT'L FALLS	2	-17	9	-36	-7	-22	0.05	-0.09	0.03	0.00	0	1.93	129	75	51	0	7	2	0
	MINNEAPOLIS	11	-7	20	-14	2	-22	0.05	-0.15	0.04	0.00	0	**	**	74	55	0	7	2	0
	ROCHESTER	10	-10	16	-18	0	-22	0.14	-0.05	0.11	0.02	67	2.61	152	71	60	0	7	3	0
	ST. CLOUD	9	-10	19	-20	-1	-21	0.03	-0.11	0.03	0.00	0	2.54	185	68	47	0	7	1	0
MS	JACKSON	62	39	78	21	51	-1	0.21	-0.88	0.15	0.00	0	7.06	68	84	44	0	3	2	0
	MERIDIAN	62	36	76	22	49	-4	0.40	-1.00	0.20	0.00	0	9.41	82	93	46	0	3	2	0
	TUPELO	58	32	72	19	45	-2	0.35	-0.95	0.24	0.00	0	6.22	62	76	45	0	3	3	0
MO	COLUMBIA	35	17	50	6	26	-11	0.00	-0.60	0.00	0.00	0	2.27	56	74	41	0	7	0	0
	KANSAS CITY	34	15	53	5	25	-12	0.17	-0.23	0.17	0.17	283	3.53	140	71	39	0	7	1	0
	SAINT LOUIS	37	20	48	11	28	-11	0.00	-0.64	0.00	0.00	0	3.73	83	62	41	0	7	0	0
	SPRINGFIELD	44	23	51	14	33	-7	0.00	-0.61	0.00	0.00	0	1.80	40	70	41	0	7	0	0
MT	BILLINGS	18	0	37	-17	9	-23	1.31	1.16	0.35	0.05	250	6.37	455	85	67	0	7	6	0
	BUTTE	21	-3	35	-19	9	-16	0.32	0.19	0.11	0.03	150	0.91	89	88	66	0	7	6	0
	CUT BANK	14	-12	38	-21	1	-25	0.00	-0.06	0.00	0.00	0	0.51	75	81	55	0	7	0	0
	GLASGOW	14	-8	33	-21	3	-20	0.09	0.03	0.09	0.00	0	0.38	61	76	64	0	7	1	0
	GREAT FALLS	15	-5	33	-17	5	-24	0.66	0.52	0.33	0.04	200	2.47	204	90	62	0	7	5	0
	HAVRE	16	-6	33	-18	5	-21	0.09	-0.01	0.05	0.00	0	0.60	71	72	60	0	7	2	0
	MISSOULA	21	8	29	-2	15	-17	1.24	1.05	0.39	0.02	67	3.48	187	83	69	0	7	6	0
NE	GRAND ISLAND	28	9	38	0	19	-12	0.06	-0.18	0.04	0.01	25	0.61	48	72	61	0	7	3	0
	LINCOLN	30	10	46	-3	20	-12	0.07	-0.17	0.03	0.03	75	0.79	58	73	57	0	7	3	0
	NORFOLK	23	4	34	-9	13	-17	0.23	-0.01	0.12	0.11	275	0.67	49	72	57	0	7	2	0
	NORTH PLATTE	25	4	32	-7	14	-18	0.19	0.03	0.16	0.00	0	0.99	106	84	67	0	7	2	0
	OMAHA	28	9	41	0	19	-13	0.08	-0.18	0.03	0.03	75	1.68	104	72	49	0	7	4	0
	SCOTTSBLUFF	24	1	31	-17	13	-19	0.36	0.20	0.15	0.10	500	1.58	139	87	75	0	7	4	0
	VALENTINE	24	-1	36	-13	11	-19	0.48	0.33	0.31	0.31	1550	0.92	115	81	65	0	7	5	0
NV	ELY	53	25	62	19	39	7	0.61	0.41	0.31	0.05	167	1.76	116	82	45	0	6	3	0
	LAS VEGAS	71	52	76	48	61	7	0.30	0.13	0.30	0.00	0	0.30	23	43	24	0	0	1	0
	RENO	61	35	69	28	48	8	0.35	0.10	0.18	0.00	0	1.08	50	72	48	0	2	3	0
	WINNEMUCCA	58	29	66	19	43	5	0.16	0.02	0.11	0.02	100	1.67	114	83	48	0	5	3	0
NH	CONCORD	29	5	47	-5	17	-9	0.01	-0.56	0.01	0.00	0	7.39	137	81	34	0	7	1	0
NJ	NEWARK	38	20	54	9	29	-7	0.03	-0.72	0.03	0.00	0	12.67	180	59	38	0	6	1	0
NM	ALBUQUERQUE	65	34	68	30	50	6	0.02	-0.09	0.02	0.02	100	0.27	28	54	21	0	3	1	0
NY	ALBANY	29	11	46	1	20	-8	0.01	-0.54	0.01	0.00	0	**	**	66	38	0	7	1	0
	BINGHAMTON	24	8	42	-4	16	-10	0.01	-0.60	0.01	0.00	0	5.70	111	69	50	0	7	1	0
	BUFFALO	24	10	35	-3	17	-11	0.26	-0.32	0.15	0.07	88	**	**	79	50	0	7	4	0
	ROCHESTER	26	12	40	1	19	-9	0.11	-0.39	0.07	0.01	14	**	**	75	51	0	7	4	0
	SYRACUSE	26	11	42	3	19	-8	0.21	-0.31	0.08	0.01	14	**	**	81	48	0	7	5	0
NC	ASHEVILLE	52	27	68	20	39	-2	0.00	-0.98	0.00	0.00	0	5.35	67	70	30	0	7	0	0
	CHARLOTTE	59	34	68	29	46	-1	0.00	-0.93	0.00	0.00	0	6.92	90	61	27	0	4	0	0
	GREENSBORO	54	29	69	21	42	-1	0.00	-0.79	0.00	0.00	0	6.23	92	60	23	0	5	0	0
	HATTERAS	53	40	61	34	47	-1	0.13	-0.83	0.13	0.00	0	10.09	102	88	59	0	0	1	0
	RALEIGH	55	30	67	24	42	-3	0.00	-0.88	0.00	0.00	0	4.98	65	62	34	0	5	0	0
	WILMINGTON	60	36	74	30	48	-2	0.18	-0.74	0.18	0.00	0	5.49	66	89	41	0	2	1	0
ND	BISMARCK	11	-8	24	-14	1	-21	0.07	-0.06	0.07	0.00	0	0.57	58	72	57	0	7	1	0
	DICKINSON	13	-8	27	-17	3	-22	0.03	-0.04	0.03	0.00	0	0.18	22	78	49	0	7	1	0
	FARGO	5	-11	16	-20	-3	-21	0.00	-0.15	0.00	0.00	0	3.74	273	68	59	0	7	0	0
	GRAND FORKS	2	-17	13	-29	-8	-25	0.02	-0.12	0.02	0.00	0	1.29	101	77	60	0	7	1	0
	JAMESTOWN	6	-10	17	-18	-2	-22	0.00	-0.12	0.00	0.00	0	0.39	34	79	61	0	7	0	0
	WILLISTON	11	-10	24	-22	1	-20	0.03	-0.06	0.03	0.00	0	0.45	47	74	57	0	7	1	0
OH	AKRON-CANTON	30	14	47	0	22	-9	0.09	-0.51	0.06	0.00	0	**	**	70	49	0	7	3	0
	CINCINNATI	36	18	53	10	27	-10	0.04	-0.70	0.03	0.00	0	7.06	122	73	44	0	7	2	0
	CLEVELAND	29	14	45	1	22	-9	0.26	-0.30	0.15	0.03	38	**	**	73	44	0	7	5	0
	COLUMBUS	34	17	49	5	25	-10	0.01	-0.54	0.01	0.00	0	6.88	143	66	43	0	7	1	0
	DAYTON	33	16	50	5	24	-9	0.00	-0.57	0.00	0.00	0	6.35	128	74	42	0	7	0	0
	MANSFIELD	28	13	46	-2	20	-10	0.08	-0.46	0.03	0.01	13	4.46	91	86	46	0	7	4	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 1, 2014

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	24	9	34	-7	17	-13	0.17	-0.30	0.13	0.13	186	7.37	190	79	56	0	7	2	0
	YOUNGSTOWN	28	10	45	-8	19	-11	0.23	-0.29	0.09	0.00	0	**	**	76	51	0	7	4	0
OK	OKLAHOMA CITY	51	28	66	18	40	-5	0.00	-0.52	0.00	0.00	0	0.43	15	68	41	0	5	0	0
	TULSA	48	26	54	16	37	-8	0.04	-0.57	0.04	0.00	0	0.45	12	69	41	0	5	1	0
OR	ASTORIA	55	40	64	31	48	3	0.61	-1.23	0.44	0.00	0	13.80	78	89	72	0	1	3	0
	BURNS	54	29	62	23	41	8	0.10	-0.18	0.05	0.05	125	2.19	94	96	71	0	7	3	0
	EUGENE	54	40	63	31	47	3	0.68	-0.80	0.28	0.28	133	10.48	74	92	85	0	1	5	0
	MEDFORD	64	40	72	29	52	7	0.07	-0.41	0.04	0.04	57	5.37	116	88	52	0	1	2	0
	PENDLETON	39	30	51	24	35	-6	0.21	-0.07	0.12	0.07	175	2.39	88	93	82	0	5	4	0
	PORTLAND	50	38	58	33	44	-1	0.41	-0.56	0.26	0.01	8	8.46	90	88	69	0	0	3	0
	SALEM	54	40	61	28	47	3	0.46	-0.71	0.20	0.07	44	8.81	79	86	73	0	1	4	0
PA	ALLENTOWN	33	12	49	3	22	-10	0.00	-0.69	0.00	0.00	0	8.99	142	68	40	0	7	0	0
	ERIE	26	12	41	-7	19	-11	0.25	-0.33	0.09	0.09	113	5.64	115	76	48	0	7	4	0
	MIDDLETOWN	34	15	53	8	25	-9	0.02	-0.72	0.02	0.00	0	6.71	114	70	38	0	7	1	0
	PHILADELPHIA	38	22	57	10	30	-7	0.09	-0.62	0.09	0.00	0	8.65	136	61	33	0	6	1	0
	PITTSBURGH	32	15	47	1	23	-10	0.00	-0.61	0.00	0.00	0	4.31	84	74	42	0	7	0	0
	WILKES-BARRE	30	11	46	-2	20	-11	0.00	-0.50	0.00	0.00	0	4.90	106	70	40	0	7	0	0
	WILLIAMSPORT	31	14	50	2	22	-9	0.00	-0.63	0.00	0.00	0	3.81	69	64	41	0	7	0	0
RI	PROVIDENCE	35	16	50	8	26	-7	0.03	-0.80	0.03	0.00	0	8.38	106	61	41	0	7	1	0
SC	BEAUFORT	66	44	77	32	55	3	0.11	-0.58	0.11	0.00	0	3.85	53	91	44	0	1	1	0
	CHARLESTON	66	43	79	32	55	2	0.53	-0.23	0.53	0.00	0	4.87	67	87	43	0	1	1	1
	COLUMBIA	63	36	70	29	50	0	0.14	-0.81	0.14	0.00	0	6.37	74	82	43	0	2	1	0
	GREENVILLE	61	34	70	27	47	0	0.00	-1.16	0.00	0.00	0	6.25	71	62	25	0	2	0	0
SD	ABERDEEN	12	-10	25	-18	1	-22	0.10	-0.05	0.10	0.00	0	0.44	45	78	57	0	7	1	0
	HURON	17	-6	29	-14	5	-20	0.18	-0.01	0.13	0.03	100	0.62	57	77	54	0	7	3	0
	RAPID CITY	24	-2	41	-16	11	-19	0.29	0.16	0.25	0.25	1250	0.68	80	83	56	0	7	3	0
	SIOUX FALLS	16	-4	25	-11	6	-19	0.34	0.17	0.17	0.16	533	2.09	199	76	61	0	7	3	0
TN	BRISTOL	50	24	66	16	37	-3	0.00	-0.89	0.00	0.00	0	5.07	72	67	23	0	7	0	0
	CHATTANOOGA	56	32	72	21	44	-2	0.01	-1.26	0.01	0.00	0	7.61	73	68	30	0	3	1	0
	KNOXVILLE	52	29	68	16	40	-4	0.02	-1.05	0.02	0.02	13	7.39	85	67	28	0	3	1	0
	MEMPHIS	55	33	71	22	44	-4	0.14	-0.99	0.08	0.00	0	8.12	93	66	31	0	4	2	0
	NASHVILLE	51	28	69	16	40	-4	0.00	-1.00	0.00	0.00	0	7.71	99	70	28	0	5	0	0
TX	ABILENE	63	35	85	24	49	-2	0.02	-0.28	0.02	0.00	0	0.49	23	77	42	0	2	1	0
	AMARILLO	59	23	74	15	41	-2	0.02	-0.14	0.01	0.00	0	0.39	33	82	36	0	6	2	0
	AUSTIN	70	42	84	25	56	-1	0.30	-0.25	0.27	0.01	13	1.13	29	83	61	0	2	3	0
	BEAUMONT	68	51	79	36	59	1	3.16	2.44	1.90	0.00	0	6.72	73	95	66	0	0	3	2
	BROWNSVILLE	76	59	81	43	68	3	0.00	-0.20	0.00	0.00	0	0.77	30	96	81	0	0	0	0
	CORPUS CHRISTI	77	54	88	38	65	3	0.13	-0.33	0.11	0.00	0	0.91	26	90	75	0	0	2	0
	DEL RIO	77	52	92	40	64	5	0.20	-0.04	0.20	0.00	0	0.23	15	88	69	1	0	1	0
	EL PASO	75	51	78	47	63	10	0.01	-0.07	0.01	0.00	0	0.01	1	38	16	0	0	1	0
	FORT WORTH	64	40	84	25	52	0	0.03	-0.68	0.03	0.00	0	0.74	17	78	41	0	2	1	0
	GALVESTON	66	53	77	41	60	0	0.38	-0.17	0.38	0.00	0	3.05	45	98	80	0	0	1	0
	HOUSTON	70	50	83	33	60	2	1.13	0.41	0.70	0.00	0	3.36	50	93	74	0	0	4	1
	LUBBOCK	65	32	85	21	48	2	0.00	-0.17	0.00	0.00	0	0.16	13	69	35	0	4	0	0
	MIDLAND	69	38	83	27	54	3	0.02	-0.12	0.02	0.00	0	0.26	23	72	49	0	2	1	0
	SAN ANGELO	71	39	87	24	55	3	0.00	-0.30	0.00	0.00	0	0.08	4	77	51	0	2	0	0
	SAN ANTONIO	74	49	86	32	62	5	0.22	-0.22	0.13	0.00	0	0.68	20	89	52	0	1	2	0
	VICTORIA	74	51	85	32	62	3	0.31	-0.19	0.22	0.00	0	1.67	37	94	75	0	1	3	0
	WACO	66	39	84	21	53	0	0.19	-0.47	0.18	0.00	0	0.76	17	90	65	0	2	2	0
	WICHITA FALLS	55	30	77	20	43	-6	0.01	-0.45	0.01	0.01	14	0.39	14	74	58	0	4	1	0
UT	SALT LAKE CITY	61	40	65	34	50	13	0.69	0.34	0.56	0.07	140	2.80	102	75	31	0	0	3	1
VT	BURLINGTON	27	10	46	1	18	-5	0.05	-0.34	0.03	0.00	0	4.29	109	68	36	0	7	3	0
VA	LYNCHBURG	49	22	69	15	36	-4	0.00	-0.80	0.00	0.00	0	7.08	105	61	25	0	7	0	0
	NORFOLK	48	31	70	24	39	-5	0.00	-0.84	0.00	0.00	0	6.33	86	77	43	0	4	0	0
	RICHMOND	51	26	71	18	38	-4	0.00	-0.81	0.00	0.00	0	6.31	95	71	34	0	6	0	0
	ROANOKE	47	25	68	18	36	-5	0.00	-0.79	0.00	0.00	0	7.39	115	51	28	0	6	0	0
	WASH/DULLES	40	19	57	10	30	-7	0.11	-0.61	0.06	0.00	0	6.51	110	78	39	0	6	2	0
WA	OLYMPIA	50	35	55	28	43	2	1.01	-0.38	0.82	0.00	0	13.04	94	96	82	0	3	3	1
	QUILLAYUTE	51	40	58	36	46	3	2.05	-0.91	1.08	0.00	0	22.57	85	82	72	0	0	3	2
	SEATTLE-TACOMA	51	40	58	38	46	2	0.78	-0.17	0.51	0.02	15	9.90	105	84	64	0	0	4	1
	SPOKANE	31	19	36	11	25	-10	0.46	0.10	0.21	0.05	100	4.40	130	88	58	0	7	4	0
	YAKIMA	45	30	51	24	37	-1	0.08	-0.09	0.08	0.00	0	1.78	89	77	55	0	4	1	0
WV	BECKLEY	40	20	60	9	30	-6	0.10	-0.67	0.06	0.00	0	7.86	125	63	43	0	7	2	0
	CHARLESTON	40	22	57	11	31	-8	0.25	-0.59	0.14	0.00	0	8.16	124	82	39	0	7	2	0
	ELKINS	35	11	57	-3	23	-11	0.45	-0.38	0.29	0.00	0	6.26	93	84	38	0	7	3	0
	HUNTINGTON	42	19	55	0	30	-10	0.14	-0.69	0.10	0.00	0	7.36	115	75	35	0	7	2	0
WI	EAU CLAIRE	10	-10	17	-23	0	-23	0.14	-0.05	0.14	0.00	0	2.77	148	78	49	0	7	1	0
	GREEN BAY	14	-5	20	-21	5	-19	0.30	0.04	0.25	0.03	75	2.86	127	76	48	0	7	3	0
	LA CROSSE	15	-4	18	-10	5	-21	0.14	-0.08	0.11	0.03	100	2.38	108	76	48	0	7	2	0
	MADISON	19	0	25	-9	10	-16	0.15	-0.16	0.07	0.07	140	1.96	76	70	49	0	7	4	0
	MILWAUKEE	21	5	26	-2	13	-15	0.19	-0.20	0.18	0.18	300	**	**	64	49	0	7	2	0
WY	CASPER	27	-1	49	-16	13	-17	0.59	0.42	0.22	0.22	1100	1.69	136	82	71	0	7	4	0
	CHEYENNE	36	6	51	-11	21	-10	0.43	0.30	0.21	0.08	400	2.16	237	88	71	0	7	3	0
	LANDER	29	7	38	-2	18	-11	0.28	0.13	0.23	0.23	1150	1.04	96	89	62	0	7	3	0
	SHERIDAN	21	-3	37	-16	9	-21	0.61	0.47	0.21	0.14	700	2.03	149	80	62	0	7	5	0

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

February 24 – March 2, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Mostly dry conditions extended across much of the nation. Only parts of California recorded weekly precipitation totals in excess of 4 inches. Temperatures were below normal in the eastern U.S., while areas west of the Rocky Mountains experienced warmer-than-normal weather. The northern Great Plains and northern Corn Belt experienced temperatures more than 15°F below normal.

Early in the week, high pressure aloft brought sunny, warm conditions to most of California. A strong low-pressure system moved into a position off the West Coast by mid-week. This feature generated a series of cold fronts, the first of which pushed into California at mid-week. The first storm system produced light to moderate amounts of rain on Wednesday and Thursday. A second, stronger storm pushed through the state on Friday and Saturday. The second storm brought especially heavy rain to Southern California. In the unstable atmosphere behind these fronts, scattered showers developed and brought more showers to the state, along with scattered thunderstorms and even an isolated funnel cloud. The last surge of showers brought some stations to normal precipitation for the month of February, although all stations are still far below the seasonal norm. Heavy rains caused many growers to begin applying fungicides to protect from brown rot. Clingstone peach bloom began. A few growers were still pruning prune trees; prune growers were also finishing dormant sprays. Cherries were starting to show bud break. Many stone fruit growers were applying weed and bloom sprays to their orchards. Canes continued to be pruned and tied in kiwi and grape vineyards. Navel orange, Murcott tangerine, lemon, and Minneola tangelo harvests continued. Valencia orange harvest began in a few locations. Young citrus trees were pruned. Almond bloom was finishing; trees were beginning to leaf out. Heavy rains knocked some petals off. Growers were applying fungicides to protect trees. Pruning remained active in walnut, pecan, and pistachio orchards. Tulare County reported significant growth for broccoli, squash, cauliflower, peas, cabbage, and onion. Certified organic producers were preparing fields for spring planting. In Fresno County, wet conditions slowed fieldwork. Asparagus began to emerge in San Joaquin County. Stanislaus County reported parsley, onion, spinach, and broccoli were growing well. Harvest of lettuce, broccoli, and cauliflower was winding down in Imperial County. Carrot harvest continued. Melon and watermelon were planted. Range and non-irrigated pastures were reported to be in poor to fair condition. Extreme drought conditions continued across much of the state. More precipitation is needed to sustain grass growth. Supplemental feeding of hay and grain for livestock continued. Bees were active in most almond orchards throughout the state.

Arizona's alfalfa condition was rated in poor to excellent condition, depending on location. Harvesting occurred on over three-quarters of the alfalfa acreage across the state. Sheep continued to graze on various alfalfa fields in many areas. Barley conditions were mostly fair to excellent. Winter wheat conditions were very poor to excellent, depending on location, and 57 percent of the crop was planted. This was 27 percentage points behind last year and 21 points behind the 5-year average. Central Arizona growers shipped Bok Choy, broccoli, cilantro, green and red cabbage, Chinese cabbage, kale, lemons, and parsley. Western Arizona growers shipped anise, arugula, broccoli, Bok Choy, green and red cabbage, cauliflower, celery, Chinese cabbage, cilantro, endive, escarole, frisee, kale, parsley, radicchio, spinach, and various lettuce, including Boston, iceberg, romaine, green and red leaf lettuce. Warm weather continued to deteriorate range conditions throughout the state, with little to no new forage. Range and pastures were rated in very poor to good condition, depending on location.

A mixed bag of weather was reported across Texas. Most areas saw a return to warmer conditions, with highs in the 80's at mid-week. However, the High Plains recorded sub-freezing temperatures, with snow and sleet, at week's end. Winter wheat conditions improved on the Northern High Plains and the Edwards Plateau where precipitation was received. Irrigation aided the progress of oats in South Texas. The passage of a cold front delayed corn planting in the Blacklands. Corn planting continued in South Central Texas, despite dry conditions. Sorghum planting was in full swing in the Lower Valley. Sorghum and cotton growers in the Coastal Bend delayed planting in hopes of receiving needed moisture. Herbicide application continued in the Northern Low Plains in preparation for cotton planting. Fruit trees continued to be pruned in North East Texas. Pecan hedging had been completed in the Trans-Pecos. Producers in the Lower Valley continued to transplant vegetables and began preparations for the upcoming onion harvest. Calving season continued in full swing. Supplemental feeding of livestock continued. Feral hogs continued to cause problems throughout East Texas. Fire danger remained high for most of the state's rangeland.

Maximum temperatures in Florida ranged from the 70s to the 80s. Farmers in Walton County were preparing fields for corn. Several sugarcane mills in Palm Beach County were finishing their harvest. Dixie and Gilchrist County farmers were getting fields ready for planting melons. Manatee County farmers continued to plant tomatoes. Harvesting of cabbage continued in Flagler and Putnam Counties, and replanting of potatoes continued in these counties. Green beans, tomatoes, squash, eggplant, peppers, sweet corn, Asian vegetables, herbs, and Cuban sweet potatoes (boniatos) were being harvested in Miami-Dade County. Vegetables and fruits marketed in the state included beets, cabbage, collards, eggplant, kale, peppers, potatoes, squash, tomatoes, herbs, and a variety of specialty vegetables. Rain was widespread, but generally light in the citrus area. Field workers reported small sizes on all orange varieties. Some growers were noticing various sizes in the same blocks, from slightly larger than golf ball size to larger than baseball size. Grove activity included harvesting on mostly early oranges and grapefruit, hedging and topping after harvest, care for new trees, and pulling out declining or dead trees. Bloom has been noted in several of the more southern areas of the citrus growing region, signaling the beginning of next year's crop. Growers in the Indian River area are experimenting with tenting young trees to eradicate or control the psyllid population that is causing greening. Other methods are being used or tested to keep unaffected trees from getting the Huanglongbing (HLB, Citrus Greening) virus. Pasture quality has been aided by warmer weather and improved soil moisture. Calving continues throughout the state. Cattle condition for the state was good but the pasture condition was mostly fair. Cattlemen were feeding hay across the state.

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Crop Progress and Condition Reports published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop reports are available on the Internet through the NASS Home Page on the World Wide Web at http://www.nass.usda.gov.

ALABAMA: Temperatures experienced during the first two weeks of February were cold but began warming towards the end of the month. Topsoil moisture was adequate or surplus over most of the state. The US Drought Monitor released on February 25, 2014 indicated that 9.80 percent of the state of Alabama was abnormally dry, compared to 2.65 percent at the start of the calendar year and 11.44 percent a year ago. The remainder of the state rated free from drought conditions. The average mean temperature for the month ranged from 39.2°F in Moulton to 51.2°F in Geneva; total precipitation ranged from 3.95 inches in Anniston to 6.57 inches in Huntsville and Bankhead. With the precipitation received during the month, field preparation for spring planting was running behind schedule. The colder temperatures during the last two months have provided adequate chill hours for the peach crop. Winter grazing and forage crops were in fair condition. Livestock producers were still feeding hay and supplements as pastures had not yet begun to grow.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Temperatures fluctuated from normal in the first week of February, to mostly below normal in the second week, above normal in the third week and mostly above normal for the last week. Temperatures were in the 80s°F during the month, with the third week at 91°F. Much needed precipitation fell in the beginning of the month and continued throughout February. More precipitation is needed to help drought conditions. Pasture areas are in poor to good condition, depending on location. Barley plantings were complete by February, while winter wheat is half planted. Alfalfa harvesting was active on about three-quarters of the fields and sheeping off continued on various alfalfa fields across the State. Vegetable and citrus harvesting activities continued throughout the month.

ARKANSAS: February began with average temperatures somewhat below normal. Several winter storms occurred throughout the month bringing severe weather to many parts of the state. Northern Arkansas was wrought with snow and freezing rain for much of the month. Precipitation reports were mostly below normal near the end of the month. Temperatures, on the other hand, were up to 13°F higher than normal. Major field activities included applying fertilizers and pesticides to winter wheat and applying burn down herbicides. Livestock producers continued feeding hay.

CALIFORNIA: A low pressure system dropped southward from the Pacific Northwest and spread showers across the State providing showers primarily to the coastal regions of California and some light rain to the interior valleys during the first week of February. During the second week of February periods of heavy rain fell across much of the State, with focus across the Central Coast, the Sacramento Valley, and on the western slopes of the Sierra Nevada Mountains. Dry and warm conditions were reported across Southern California during the third week of February due to a high pressure building, which resulted in widespread rainfall in the higher elevations in Northern California, with limited showers in northern valley locations. Towards the end of the month, a high pressure began to build off the West Coast which has produced a warming trend for the State with daytime highs reaching the upper 60s and lower 70s across the northern interior valleys, and reaching the low 80s in Southern California. Non-irrigated wheat and small grains have exhibited positive response to recent rains, but still lagged behind schedule. Dry land oat conditions remain below average due to early lack of precipitation. Harvest continued for oranges, tangerines, lemons, grapefruit and pommelo. Numerous reports were received of fruit crops blooming early due to unseasonably warm weather; these would include blueberries in San Joaquin Valley, grapes in the Central Valley experienced early bud swell, and stone fruit orchards which continued to bloom throughout the month of February. Canes were reported being tied to kiwi and grape vineyards beginning in mid-February. The winter shake was complete on pistachios the first week of February, with pruning remaining active on walnut, pecan, and pistachio orchards through the month. The almond bloom was well underway by the third week of the month. In Tulare County, fields were prepared and planted with winter vegetables. Onion, broccoli, cauliflower and cabbage continued to grow well. In Fresno County, the harvest of winter vegetables slowed due to wet conditions. In San Joaquin County, early asparagus has began to emerge. Range and non-irrigated pasture remain in fair to poor condition. Supplemental feeding of hay and grain for livestock continued. Many bee hives have been placed for pollination.

COLORADO: Precipitation during February was concentrated primarily along the Front Range and into higher altitudes west of the Front Range. Statewide, mountain snowpack is 111% of average as of February 26. Temperatures were near to below normal along the Front Range, above normal west of the Front Range, and below normal in large swaths of the East Central and Northeast districts. A local expert commented that snow protection was adequate for winter wheat as were soil moisture supplies. No concerns were noted regarding wind impacts on soil moisture or snow cover.

DELAWARE: Extremely cold weather was experienced during the month, snow is still covering much of the state. Some reporters are worried that the low temperatures may have damaged some fruit. Soil moisture levels remain mostly adequate throughout the state. Hay supplies were reported as ranging from very short to adequate. Pasture conditions are poor to good. Very little, if any, field activities occurred during the month as many counties still had too much snow cover to work.

FLORIDA: Icy, wet weather received first part of month hampered field work in Panhandle, delayed sugarcane harvest in south. End of month, Washington, Gadsden, Walton county farmers prepared land for peanut, corn planting. Rain received was none to four inches. Low

temperatures 15 to 27 degrees, high temperatures 60s to 80s. Strawberry harvest continued in Bradford County. Rain, foggy weather early in month increased disease in vegetables, blight on tomatoes, potatoes in southwest Florida. By end of month, harvesting began green beans, tomatoes, squash, peppers, eggplant, sweet corn, Chinese vegetables, boniato (Cuban sweet potatoes) in Miami-Dade County. Gadsden County farmers laid plastic for tomatoes. Cabbage harvesting continued in Flagler, Putnam counties. Tomatoes being planted, harvesting of squash, strawberries continued. Vegetables, fruits marketed included tomatoes, peppers, herbs, cucumbers, eggplant, squash, strawberries, sweet corn, sweet potatoes, snap beans, radishes, escarole, lettuce, kale. Pasture, winter forage condition down due to cold temperatures, freezing temperatures. By end of month, pasture condition improving. Calving continued throughout State. Cattle condition primarily fair to good. Hay, supplements fed to cattle in majority of the State. In citrus growing area, February temperatures ranged from 50s to 80s. Rainfall scattered, generally light, dry season continued. Growers in Indian River area experimented with tenting young trees to eradicate or control psyllid population causing greening. By end of month, blooms noted in southern growing area signaling beginning of next year's crop. Field workers reported small sizes on all varieties. Grove activity included harvesting, resetting new trees, pushing dead groves, replanting new citrus, mowing, fertilizing, psyllid control. Most packinghouses open, shipping small quantities of fruit. Sixteen of 19 processing plants open.

GEORGIA: The month of February started with temperatures near normal and ended with temperatures above normal. Precipitation continued to be below normal or near normal throughout the state. On February 11, a wintery mix of snow and ice also covered northern parts of the state. So far this year the amount of chill hours for fruit is nearly double the amount needed for blueberries and peaches. With the recent warm weather those crops are preparing to bloom and may be at risk if Georgia has a late frost. The cold weather has delayed growth of small grains. The use of hay and supplemental feed has increased. Other activities included preparing for spring planting, fertilizing, spreading lime, testing soil, completing rental contracts, and the routine care of poultry and livestock.

HAWAII: The month of February began with approximately 55 percent of the state rated as abnormally dry or drier according to the U.S. Drought Monitor. Throughout the month, several storm systems passed through the islands dropping large quantities of precipitation over brief periods of time. These heavy showers resulted in several flash flood warnings being issued within the various counties throughout the month. While storm systems were absent, typical trade wind weather prevailed with intermittent overcast skies and average daytime high temperatures in the mid eighties. As the month of February comes to a close, state irrigation reservoirs are filled to capacity, and overall drought conditions have decreased by 11 percentage points. Weekly summaries follow. During the first week in February, a large front brought heavy rains to Kauai Island on Thursday. The latter half of the week was marked by typical trade wind systems, with conditions fluctuating between overcast and clear. Daytime high temperatures were in the upper seventies to low eighties for most areas. The average weekly total rainfall across the state was 1.57 inches. The second week the average weekly total rainfall across the State was 1.11 inch of measurable precipitation with the bulk of total rainfall falling on Kauai Island on Thursday through Sunday. Other precipitation measurements were scattered throughout the week. The total drought-free area in the State was 43.06 percent on February 11, 2014, up 1.82 percentage points from previous week. Dry drought ratings were down 1.82 percentage points to the previous reference day and moderate drought ratings were down 3.28 percentage points. Extreme drought was rated for a small northern portion of Molokai Island. Weather during the third week brought scattered showers. The average weekly total rainfall across the State was 0.85 inch of measurable precipitation. The total drought-free area in the State was 45.38 percent on February 18, 2014, up 2.32 percentage points from previous week. Extreme drought was rated for a small northern portion of Molokai Island. Pastures on the leeward coasts and slopes showed more forage growth due to recent rainfall. The final week in February was light in most areas except for mountainous areas of Hawaii Island. Weekly total rainfall across the state was 0.66 inches. Total drought-free area in the State was unchanged from the third week. Increased day length and precipitation have spurred growth of crops and pastures. Pasture conditions continued to be improving with increased rainfall and daylight length.

IDAHO: 45%, 38% 2013, 31% avg. Lambing complete: 47%, 38% 2013, 40% avg. University of Idaho extension educators from northern Idaho reported normal to above normal precipitation for the month of February. Jerome County respondent saw the first grain drill in the field over the weekend, signaling planting season has started. Reporter comments suggest February having major lambing activity. Calving is well under way while cool weather conditions and bare wet ground are posing challenges for ranchers.

ILLINOIS: For the month of February, topsoil moisture was rated at 2 percent very short, 14 percent short, 70 percent adequate, and 14 percent surplus. Subsoil moisture was rated at 6 percent very short, 32 percent short, 60 percent adequate, and 2 percent surplus. Temperatures averaged 18.8°F, 11.4°F below normal. Precipitation was slightly below normal in the Southwest and Southeast districts, but slightly above normal in the rest of the state. Statewide precipitation averaged 2.28 inches, 0.35 inches above normal.

INDIANA: The weather during February has been very cold in Indiana, with daily temperatures averaging 9.3°F below normal statewide. Average precipitation amounts of 2.31 inches were about normal for the state but fell mostly as snow and freezing rain, with northern districts seeing a surplus of around one inch. Nearly all winter wheat is observed to be in fair or better condition, but prolonged cold temperatures, ice accumulation, and a brief thaw in the third week of February have contributed to concerns about its viability. The extent of winter damage to wheat and alfalfa will not be known until the spring thaw after dormancy breaks. Soil and subsoil moisture levels are expected to be adequate or surplus, and conditions for pasture that hasn't ponded or iced over are likewise observed to be fair or better. Livestock continue to be stressed most by the frigid conditions, with higher than usual losses being seen during calving and lambing. Ongoing propane shortages and burst pipes are contributing to difficulties in many barns. Outdoor activity is limited to care of livestock and some limited application of fertilizers. Other activities include tax preparations, hauling grain, and attending trade shows.

IOWA: Topsoil moisture 14% very short, 39% short, 46% adequate, and 1% surplus. Iowa experienced below normal temperatures throughout most of February causing water lines to freeze. Precipitation fell often across the State in the form of snow. High winds blew throughout the month. Livestock losses have been mostly normal. Calving has started in parts of Iowa. Some pork producers are concerned about PEDV and the resulting heavier than normal losses.

KANSAS: For the month of February 2014, cold, snowy weather at the beginning of the month resulted in over a foot in some northeast areas. Monthly precipitation totals were within a half inch of normal across much of the state. Average temperatures were colder than normal, with most areas averaging six to ten degrees colder than normal. As the snow melted, wheat fields started to green up and show signs of growth. Some concerns continue regarding the potential for winterkill due to the extremely cold temperatures. Topsoil moisture supplies rated 17 percent very short, 38 short, 44 adequate, and 1 surplus. Subsoil moisture supplies rated 21 percent very short, 40 short, 39 adequate, and 0 surplus. Winter wheat condition rated 4 percent very poor, 18 poor, 44 fair, 32 good, and 2 excellent. Sheep and lamb conditions were 0 percent very poor, 2 poor, 42 fair, 52 good, and 4 excellent. Sheep and lamb losses were 9 percent below normal, 88 normal, and 3 above normal. Cattle and calf conditions were 1 percent very poor, 3 poor, 48 fair, 46 good, and 2 excellent. Cattle and calf losses were 8 percent below normal, 88 normal, and 4 above normal. Hay and forage supplies rated 7 percent very short, 10 short, 77 adequate, and 6 surplus. Stock water supplies were rated 14 percent very short, 21 short, 65 adequate, and 0 surplus.

KENTUCKY: The Commonwealth experienced mixed weather conditions during February. The state recorded temperatures from well below normal to unseasonably warm. The second and last weeks of February saw below normal rainfall, while precipitation for the first and third weeks of the month was above normal. Farmers were kept busy tending to their livestock and performing routine equipment maintenance. Producers marketed their grain and tobacco crops and attended various commodity meetings across the state. Farmers continue making planting decisions for the upcoming 2014 crop season.

LOUISIANA: Most of the state was in the adequate to surplus range as far as soil moisture is concerned. As a whole, temperatures were below normal. Field crop producers were preparing fields for spring planting as weather conditions permitted as well as getting equipment ready for the upcoming season. Strawberry producers continued harvesting and selling their crop. Crawfish producers were active but catches were light due to cool water temperatures. Livestock producers were feeding hay and preparing to fertilize pastures.

MARYLAND: Extremely cold weather experienced during the month, snow is still covering much of the state. Some reporters are worried that the low temperatures may have damaged some fruit. Soil moisture levels remain mostly adequate throughout the state. Hay supplies were reported as ranging from very short to adequate. Pasture conditions are poor to good. Very little if any field activities occurred during the month as many counties still had too much snow cover to work. There were reports from one Maryland county that was some frost seeding of legumes and grass seed on pasture and hay fields.

MICHIGAN: Persistent low temperatures and snow cover have limited field work while providing protection for wheat and alfalfa. Precipitation for the last four weeks ending March 2 ranged between 1.09 inches and 1.88 inches in the Upper Peninsula and between 1.58 inches and 2.19 inches in the Lower Peninsula. Temperatures ranged from 16.7 to 26.4°F, with a state average of 21.9°F. Deep penetrations of frost have been observed even where there was thick snow cover. Winter wheat condition rated 4% poor, 32% fair, 56% good, and 8% excellent. Range and pasture conditions rated 31% very poor, 8% poor, 30% fair, 30% good, and 1% excellent. Despite the extreme temperatures, livestock are faring well although lambing and calving have been difficult with higher than normal death loss. A significant amount of time was spent spreading manure, plowing snow, and tending to livestock needs. Damage to fruit trees and bushes has been reported, but the extent is unknown. Also, the status of corn left standing is still unknown.

MINNESOTA: February 2014 ranked among the 8 coldest months of February since 1895. This has been the coldest winter since 1978-1979. Excluding Alaska, Minnesota reported the coldest temperature in the nation for 13 days during the month. Record monthly snowfall was reported in six locations. As February came to a close, unusual snow depths were reported in multiple locations including 37 inches at Grand Marais. High winds and blowing snow have frequently led to difficult traveling conditions. During the week ending February 9, the North Central District had an average temperature of -5.3°F. The Northeast District had the highest average precipitation during the second week and an average temperature of 3.0°F. Average temperatures increased in all districts during the third week in February, with the highest average temperature in the Southwest District at 23.2°F. A large winter storm during the third week contributed to all districts reporting their highest precipitation totals compared to the other weeks.

MISSISSIPPI: Average temperatures in Mississippi for the month of February ranged from the mid 30s°F in the northern part of the state to the low 50s°F near the Gulf Coast. Temperatures were almost entirely below normal for the month for the state. The highest areas of precipitation occurred in the southwest corner of the state with some areas recording over 10 inches of precipitation for the month. Farmers and ranchers spent the month caring for their livestock during the extreme cold periods and preparing for spring planting.

MISSOURI: February was colder and drier than normal. Average temperatures were 4 to 12°F below normal. February was the 9th coldest on record. Precipitation averaged 1.30 inches compared to the 30 year average of 2.27 inches. On February 4th and 5th, the northern half of Missouri received 4 to 12 inches of snow. The condition of dormant winter wheat crop ranges from poor to good with the majority rated fair. Above average temperatures in the middle of February improved wheat conditions.

MONTANA: Topsoil moisture 5% very short, 15% last year; 17% short, 30% last year; 73% adequate, 51% last year; 5% surplus, 4% last year. Subsoil moisture 4% very short, 25%

last year; 16% short, 35% last year; 76% adequate, 39% last year; 4% surplus, 1% last year. Winter wheat condition 1% very poor, 3% last year; 8% poor, 7% last year; 38% fair, 52% last year; 42% good, 36% last year; 11% excellent, 2% last year. Winter wheat – wind damage 74% none, 65% last year; 19% light, 30% last year; 6% moderate, 4% last year; 1% heavy, 1% last year. Winter wheat – freeze & drought damage 76% none, 69% last year; 16% light, 24% last year; 7% moderate, 6% last year; 1% heavy, 1% last year. Winter wheat – protectiveness of snow cover 6% very poor, 17% last year; 22% poor, 36% last year; 40% fair, 29% last year; 25% good, 16% last year; 7% excellent, 2% last year. Livestock grazing 17% open, 45% last year; 31% difficult, 22% last year; 52% closed, 33% last year. Livestock receiving supplemental feed – cattle & calves 99%, 98% last year. Livestock receiving supplemental feed – sheep & lambs 97%, 98% last year. Livestock birthing – calving completed 12%, 16% last year. Livestock birthing – lambing completed 6%, 8% last year. Montana had a mild period mid-month that was bookended with two bitterly cold and snowy spells during the month of February. Alberton received the highest amount of precipitation for the month with 3.96 inches of moisture. Most other stations reported receiving 0.05 to 3.91 inches of precipitation. High temperatures ranged from the upper 40s to lower 50s, with the state-wide high temperature of 53 degrees recorded at Billings, Joliet, Roundup, and Townsend. Most stations reported lows below 0 degrees with the coldest being Wisdom at -48 degrees, followed by West Yellowstone with -47 degrees.

NEBRASKA: For the month of February, 2014, temperatures 6 to 9°F below normal during the month were hard on livestock and created challenges for livestock producers. Crop producer activities revolved around tax work and machinery preparations for the spring planting season. Grains were being moved to market and seed was being delivered for the upcoming planting season. Available soil moisture continues to be a concern going into spring. Topsoil moisture supplies rated 15 percent very short, 42 short, 43 adequate, and 0 surplus. Subsoil moisture supplies rated 16 percent very short, 39 short, 45 adequate, and 0 surplus. Hay and forage supplies rated 1 percent very short, 7 short, 88 adequate, 4 surplus. Stock water supplies rated 6 percent very short, 8 short, 86 adequate, and 0 surplus. Winter wheat rated 3 percent very poor, 15 poor, 39 fair, 36 good, and 7 excellent. Cattle and calf condition rated 0 percent very poor, 4 poor, 19 fair, 70 good, and 7 excellent. Cattle and calf losses 5 percent below average, 91 average, 4 above average. Sheep and lamb condition rated 0 percent very poor, 0 poor, 23 fair, 73 good, 4 excellent. Sheep and lamb losses 1 percent below average, 97 average, 2 above average. Percentage of cows calved since Jan 1 was 18 percent.

NEVADA: Several storm systems passed through the State during February, greatly improving the water supply outlook for the coming season. Accumulated precipitation for the water year, however, remained well below normal. Precipitation during February ranged from .55 inch in Tonopah to 1.92 inch in Elko. Reno and Las Vegas had less than normal February precipitation while the rest of the State was generally above normal. Temperatures averaged about 4 degrees above normal statewide. Snotel measurements at the end of February showed the Sierra snowpack at less than 50 percent of normal and eastern Nevada notable better but still below normal. Calving and lambing were gaining momentum. Main farm and ranch activities were tending livestock, equipment repair, and marketing crops from storage.

NEW ENGLAND: Across the New England states, the average monthly temperature for February 2014 was 21.2 degrees Fahrenheit. That is 2.0 degrees below normal. The low temperature in the region was -4.0°F in Augusta, Maine, and the high was 55.0°F in Boston. Total precipitation for the month averaged 2.92 inches across the New England states. That is a 0.14 inch departure from normal. There were 19 days recorded at or below a maximum of 32 degrees in the New England States during February 2014. There were 13 days with precipitation greater than 0.01 inches and 8 days greater recorded with greater than 0.10 inches. There were 2 days with greater than 1.0 inches recorded in February at a New England weather station. Producers across the region completed some field work, attended meetings, and tended livestock.

NEW JERSEY: Temperatures on average statewide in February were 5°F below normal. Precipitation was well above normal in every county, from 1.6 inches above normal in Sussex County to 3.3 inches above normal in Salem County. Every county received snow accumulation during the month. Producer activities included attending meetings, equipment repair, greenhouse work, and feeding stored hay to livestock.

NEW MEXICO: February began with a warming trend that had temperatures normal to above normal. Temperatures increased well above average and so did winds, causing fire concerns statewide. Highest sustained winds reported were 48 mph for Clines Corner and 39 mph for Raton and Taos. Highest wind gusts reported were 61 mph at Clines Corner and 58 mph for Raton. February ended with a wind advisory ahead of a very active storm system. Northern and central New Mexico had snow and rain. Gallup, Chama and Cuba received over an inch of rain.

NEW YORK: New York has continued to stay cold throughout the month of February with significant amounts of snow accumulating in several parts of the state. There were some days of warming and thaw occurred, which then froze again as temperatures dropped below freezing towards the end of the month. Most of the crops in fields are buried under the snow still with farmers not stating too much about the condition of these crops. Farmers growing anything in greenhouses have had a hard time keeping the greenhouses warm with the extreme cold, which is having an impact on crops. There is some concern among dairy farmers about how the cold is affecting their cows and calves, while sheep farmers are worried about how the cold will affect the lambing season. Bee and honey producers are concerned about the survival of their bees and hives after this harsh winter. The biggest affect of this winter seems to be hitting the fruit producers the hardest, as they are reporting significant damage to most fruit trees. Areas near the Great Lakes have reported damage to grape vines which may impact grape and wine production in the future. Overall, this cold, long, tough winter has been hard for many farmers in the Northeast this year and February did not change that pattern. Farmers are busy spreading manure, fixing machinery, moving crops to market, buying seed, attending workshops and starting to plan for this spring's planting season. There are reports of maple

producers collecting sap. As of February 28, 2014, the Albany area received 28.1 inches of snow for the month, with the greatest snowfall on February 14th with 14.4 inches of snow. The highest temperature of 51°F occurred on February 22nd, while the lowest temperature of -8°F occurred on the 12th. The average temperature was 21.9°F, which is 4.0°F below normal. A total of 3.48 inches of rain fell, which is 1.28 inches above the average. Albany has dealt with fog or mist, sleet, rain and snow throughout most of the month of February.

NORTH CAROLINA: There were 3.6 days suitable for field work for the week ending March 2nd compared to 1.5 for the week ending February 2nd. Statewide soil moisture levels were rated at 2% short, 68% adequate and 30% surplus. The weather pattern during the month of February has been up and down. The state has experienced bitterly cold temperatures with sleet and snow and warm, sunny conditions with highs into the 70s all within the same week. The cold wet temperatures have kept farmers out of the fields in some parts of the state as well as delayed small grain growth. There have been some indications of freeze damage to fruit trees but the extent of the damage will take time to determine. However, tobacco greenhouses are being seeded in preparation for the 2014 crop year. Small grains are rated fair to good, hay supply is recorded as adequate and pasture conditions are rated at 44% fair. With another round of cold, wet conditions expected this coming week, farmers will have to plan on a day-to-day basis.

NORTH DAKOTA: Topsoil moisture 1% very short, 7% short, 83% adequate, 9% surplus. Subsoil moisture 1% very short, 5% short, 83% adequate, 11% surplus. Winter wheat conditions 2% very poor, 5% poor, 46% fair, 43% good, 4% excellent. Cattle/Calf conditions 1% very poor, 4% poor, 25% fair, 65% good, and 5% excellent. Calving 9% complete. Cattle/Calf death loss 12% below normal, 83% normal, 5% above normal. Sheep/Lamb conditions 1% very poor, 2% poor, 23% fair, 66% good, and 8% excellent. Lambing 16% complete. Sheep/Lamb death loss 7% below normal, 91% normal, 2% above normal. Stock water supplies 0% very short, 4% short, 86% adequate, and 10% surplus. Hay & forage supplies 1% very short, 6% short, 79% adequate, and 14% surplus. Below normal temperatures and precipitation are causing a concern for winter wheat fields that are lacking snow cover. Livestock producers are also noticing the effect with increased feed requirements and possible increase in calving and lambing losses if conditions don't improve. Agriculture activities included caring for livestock and preparing equipment for spring.

OHIO: The February 2014 statewide average temperature was 22.9°F, 7 degrees below normal. February saw snowfall at the beginning and end of the month, bracketing a brief warm period where much of the snow cover melted. Producers are concerned about winter wheat condition, as there was a period after the snowmelt where winter wheat was exposed to extreme cold without snow cover. Melting also caused flooding in many fields, with some fields now encased in ice. In addition to wheat, here is also worry of damage to alfalfa fields, but it is too early to judge any damage to either crop due to current snow cover and overall winter conditions. Producers are having calves born. Livestock have been stressed by the continued winter conditions, and some reporters noted animal loss due to the extreme cold. Reports of pasture condition are mixed. Fruit growers are anticipating damage to bushes, vines and trees, but the extent of any damage is still unknown.

OKLAHOMA: Topsoil moisture 51% very short, 36% short, 13% adequate, 0% surplus. Subsoil moisture 49% very short, 34% short, 17% adequate, 0% surplus. Wheat 6% very poor, 25% poor, 38% fair, 28% good, 3% excellent; grazed 42% this month, 26% last year, 36% average. Canola 15% very poor, 31% poor, 34% fair, 18% good, 2% excellent. Rye 9% very poor, 28% poor, 30% fair, 30% good, 3% excellent; grazed 70% this month, 37% last year, 60% average. Oats 11% very poor, 28% poor, 34% fair, 25% good, 2% excellent; grazed 30% this month, 14% last year, 21% average. Livestock 2% very poor, 9% poor, 39% fair, 44% good, 6% excellent. Pasture and Range 18% very poor, 28% poor, 40% fair, 13% good, 1% excellent. The month began with cold temperatures and several bouts of snow. Oklahoma welcomed the snow with hopes that the added precipitation would help to alleviate drought conditions. After the first few weeks of February, there was still no improvement. Producers in Roger Mills County were in desperate need of precipitation to bring small grain crops to harvest. During the latter part of the month, high winds and worsening drought conditions contributed the extreme fire danger and the overall damage to crops and topsoil moisture. Toward the middle of the month, temperatures increased slightly. Most areas of the state were in the 40's to 50's while the Panhandle reached a high of 70 degrees on the 24th. Wildfires occurred in parts of the state, but were not widespread. According to the most recent drought monitor, the majority of the state was rated severe drought to abnormally dry, while the Panhandle and the far Southwest districts were rated in extreme to exceptional drought. Some canola was lost to winter kill. The Southeast district averaged just over an inch of rainfall for the month, while the Northeast district averaged less than half an inch. All nine districts were still below normal precipitation for the period since September 1st. Small grain condition ratings and pasture conditions were mostly fair to poor for the month of February. Topsoil and subsoil moisture conditions were rated 87 percent and 83 percent short to very short, respectively. Thirteen percent of topsoil moisture and 17 percent of subsoil moisture were rated adequate and none were rated surplus.

OREGON: In Coos and Curry Counties grass growth had begun slowly. In Lane and Linn Counties winter wheat was showing signs of disease. In Klamath County grass and winter grains were starting to green up and showing a little growth. Fruits and Nuts: In Coos and Curry Counties early crop fruit trees had started to flower in some areas and pollination began. In Lane County hazelnuts were blooming. Nurseries and Greenhouses: In Yamhill County snow and freezing rain in the early part of the month damaged a few greenhouses. Livestock, Range and Pasture: In Linn County pastures were looking good. In Lake County spring calving had taken place.

PENNSYLVANIA: February saw below average temperatures for this time of the year. Most counties reported extreme winter weather. Snow started melting in the latter part of February but there are still more snow piles around than usual for this time of year. Producers have been busy with snow removal and preventing pipes from freezing in order to care for livestock. They are unsure of what wheat and barley crops look like since the majority has been covered by snow for most of the winter season. Producers are also working on farm equipment in preparation for the spring. Some have reported building damage due to the weight of

snow. Overall, producers have stayed busy. As of February 28, 2014, the Harrisburg area received 21.6 inches of snow for the month, with the greatest snowfall on February 13th at 9.0 inches. The highest temperature of 54 degrees Fahrenheit occurred on February 22nd, while the lowest temperature of 2 degrees Fahrenheit occurred on February 12th. The average temperature was 27.1 degrees which is 5.8 degrees below normal. A total of 4.27 inches of rain fell, which is 1.88 inches above the average. There was also fog, mist, or haze throughout the month. High wind speeds were also an issue, with wind speeds approaching 43 miles per hour on the 19th of February.

SOUTH CAROLINA: Mild to warm temperatures were reported statewide on Monday, March 3, 2014. A wedge of colder air dropped south along the Eastern Seaboard on Tuesday with sharply falling temperatures. The back and forth character of the weather was quite evident on Wednesday when a warm boundary and areas of rain moved north into the state. The southern end of another cold front arrived on Thursday with pre-frontal showers. The state average temperature for the seven-day period was three degrees above the long-term average. The state average rainfall for the seven-day period was 0.4 inches. On Monday afternoon, February 10th, the Beaufort Marine Corps Air Station reported a high temperature of 70 degrees. Wintertime returned overnight for the Piedmont and Midlands. At 5:00 a.m. on Tuesday, light snow was falling in many areas. A more energetic winter storm arrived as the calendar day began on Wednesday. A band of heavy snow fell across the Foothills and into the northern Midlands. Heavy sleet fell over Lexington and Richland counties separating the snowfall from a damaging ice storm over the southern Midlands. The heaviest snowfall amount measured was at Clover with 10.0 inches. The blanket of snow near Silverstreet and Heath Springs was measured at 8 inches. Antreville, Chester, Winnsboro and Bethune received snowfalls of 6.0 inches. The town of Irmo measured 4 inches of sleet. Light snow ended on Thursday morning. Gentle southwest winds on Friday helped to diminish the ice cover. More agreeable weather was observed on a mostly clear Sunday. The state average temperature for the seven-day period was seven degrees below the long-term average. The highest official temperature reported was 69 degrees at Allendale and Charleston AP on February 10. The lowest official temperature reported was 21 degrees at Jocassee on February 12. The heaviest official 24-hour rainfall reported was 2.00 inches at Cedar Creek and Georgetown County AP ending at 7:00 a.m. on February 13. The state average rainfall for the seven-day period was 1.6 inches. Middle 60-degree Monday, February 17th, afternoon temperatures moved into the 70's on Tuesday. Areas of rain moved through parts of the Foothills and Piedmont early Wednesday. At 2:00 p.m., a sunny Orangeburg reported 80 degrees with southwest winds of 25 mph gusting to 36 mph. Thursday was much the same with steady southwest winds and record high temperatures for the date. The Columbia Metro AP noted a record 84 degrees and Florence reached a record 83 degrees. A weak frontal boundary moved over the state on Friday morning with thundershowers. Freezing temperatures on Saturday were reported as far south as McCormick (32 degrees) and Cedar Creek (29 degrees). The state average temperature for the seven-day period was seven degrees above the long-term average. The highest official temperature reported was 84 degrees at Dillon and the Columbia Metro AP on February 20. The lowest official temperature reported was 26 degrees at Ninety Nine Islands on February 17. The heaviest official 24-hour rainfall reported was 1.38 inches at Caesars Head ending at 7:00 a.m. on February 21. The state average rainfall for the seven-day period was 0.6 inches.

SOUTH DAKOTA: Topsoil moisture 1% very short, 20% short, 78% adequate, 1% surplus. Subsoil moisture 1% very short, 13% short, 83% adequate, 3% surplus. Winter wheat conditions 4% very poor, 7% poor, 26% fair, 58% good, 5% excellent. Cattle/Calf conditions 0% very poor, 2% poor, 24% fair, 69% good, 5% excellent. Calving 11% complete. Cattle/Calf death loss 3% below normal, 94% normal, 3% above normal. Sheep/Lamb conditions 0% very poor, 2% poor, 20% fair, 75% good, 3% excellent. Lambing 42% complete. Sheep/Lamb death loss 4% below normal, 91% normal, 5% above normal. Stock water supplies 1% very short, 10% short, 86% adequate, 3% surplus. Hay & forage supplies 0% very short, 5% short, 89% adequate, and 6% surplus. Below normal precipitation and temperatures persisted across most of the state during the month of February. Agricultural activities included caring for livestock, marketing grain, and preparing for spring planting season.

TENNESSEE: Days suitable 4.0. Topsoil moisture 3% short, 80% adequate, 17% surplus. Subsoil moisture 2% short, 78% adequate, 20% surplus. Cattle condition 1% very poor, 6% poor, 35% fair, 52% good, 6% excellent. Extremely cold weather resulted in increased hay feeding, winter wheat damage. Wheat freeze damage 23% none, 44% light, 27% moderate, 6% severe. Farm activities included some wheat top dressing. Pasture conditions mostly fair to good.

TEXAS: Cold temperatures continued throughout Texas as several winter storms moved across the state. Areas of South East Texas, the Upper Coast and the Southern Low Plains received significant rainfall. The Coastal Bend received 1 to 1.5 inches of precipitation. Fertilizer was applied to recently grazed winter wheat fields. Preparations were underway in the Upper Coast for a late February corn planting date. In the Cross-Timbers pecan harvest wrapped up, with many growers placing nuts in cold storage due to low prices and a slow marketing period. Producers in the Northern High Plains prepared fields for corn, sorghum and cotton planting. Lice problems were causing some concern in the Northern High Plains and North East Texas. Supplemental feeding of livestock continued in areas with declining pasture conditions. Cattle continued to graze on wheat and oat fields.

UTAH: Farm work in Beaver County was about a month ahead of normal because of mild weather. Farmers are concerned about the lack of water. Livestock were doing well. February was a great month for precipitation in Box Elder County as storms brought much needed water. Temperatures were warm causing mucky conditions for calving. The winter wheat looked good. There was some concern about early blossoming of fruit trees but apricot buds still appear tight. In Duchesne County, February temperatures were mild and late storms brought some much needed precipitation. Calving started and has gone well so far. Farm flocks began lambing. Extremely dry conditions persist in Garfield and Kane Counties. Some precipitation was received near the end of the month but a lot more is needed to get out of the moisture deficit. Dry conditions will hurt ranges, pasture, and cropland in the long run. Dry conditions have been good for calving. There were good fall rains in San Juan County but winter moisture has been short. Soil moisture is adequate and winter

wheat looks good but more precipitation is needed to keep the crop going. The snow pack in the mountains is below normal. Mild weather in Utah County was conducive to calving. Mountain snowpack is still very low. More precipitation is needed before summer. Fruit trees are on schedule; early blossoming is not an issue at this point.

VIRGINIA: Topsoil moisture 1% short, 64% adequate, 35% surplus. Subsoil moisture 72% adequate, 28% surplus. Beef cattle forage obtained from pastures 13%. Milk cow forage obtained from pastures 5%. Sheep forage obtained from pastures 8%. Livestock 4% poor, 34% fair, 59% good, 3% excellent. Small grain and winter grazing crops 2% very poor, 6% poor, 24% fair, 61% good, 7% excellent. February was another cold and snowy month for the Old Dominion. Nighttime lows were in the teens, with some areas much colder; parts of the Commonwealth approached record-breaking lows. Due to the abnormally long span of cold weather, most of Virginia was covered with snow during the month. However, there were occasional days of warm weather accompanied with rain. Livestock producers heavily supplemented feed for the month, and there was some concern of feed shortages. The majority of small grains were in good to fair condition. Some topdressing was done as the weather permitted, but there were applications that were delayed or missed due to the weather. Other farming activities for the month included pruning orchards and vineyards, maintaining farm equipment, and plowing snow.

WASHINGTON: In Western Washington, most farmers were busy getting their livestock undercover and on higher ground during the recent rain storm throughout the area. Blueberry and tree fruit pruning was halted due to the high ground water tables. Vegetable farmers were kept inside and began seedlings and transplanting in greenhouses. Sheep farmers reported a great lambing season despite the torrential downpours and heavy frosts. Pastures were saturated with ponding in the lower areas. Many vegetable and grain producers began early season cultivation. Livestock producers prepared equipment for spreading lime. Many early tree fruit, like plums, were beginning to bud out a few weeks early. In Central Washington, average temperatures were generally colder than normal, varying from 26 degrees below normal to 8 degrees above normal. Precipitation for the month of February was about 1.43 inch. Fruit producers were completing their annual pruning and training of orchards. Conditions were rather dry with only a couple of snowstorms received since the start of the year. Precipitation in the mountain areas alleviated some of the concerns of drought. So far, there were no reports of crop damage. The month of February began with cold temperatures between 10 and 27 degrees below normal. Mild weather settled into the area mid-month bringing warmer temperatures and precipitation. The high for the month was 51 degrees and the low was -3 degrees. Some producers were concerned about winter kill during the cold spell. Most crops were in decent shape with no major losses reported.

WEST VIRGINIA: Topsoil moisture was 2% short, 81% adequate, and 17% surplus compared to 1% very short, 10% short, 87% adequate, and 2% surplus last year. Hay and roughage supplies were 3% very short, 10% short, 85% adequate, and 2% surplus compared to 21% short, 76% adequate, and 3% surplus last year. Feed grain supplies were 1% very short, 5% short, 93% adequate, and 1% surplus compared to 3% short, 96% adequate, and 1% surplus last year. Winter wheat conditions were 2% poor, 9% fair, 87% good, and 2% excellent. Cattle and calves were 2% poor, 20% fair, 76% good, and 2% excellent. Calving was 29% complete, compared to 27% last year. Sheep and lambs were 1% very poor, 2% poor, 32% fair, 62% good, and 3% excellent. Lambing was 33% complete, compared to 29% last year. The long, hard winter continued through the month of February; weather was mostly wintry with very cold temperatures, but there were some periods of warmer weather as several reporting stations reached daytime temperatures in the 60s and 70s during the later part of the month. The state of emergency that was declared on Thursday, January 9th, by Governor Earl Ray Tomblin for nine counties after a chemical leaked into the water system in Charleston, officially ended on February 28th. For several days, residents in the counties were under a water ban. Farming activities included calving and lambing, increased feeding of livestock due to the cold weather conditions, and cleaning up after the winter storms.

WISCONSIN: February average temperatures ranged from 10 to 14 degrees below normal. Average high temperatures ranged from 17 to 24 degrees. Average low temperatures ranged from -5 to 9°F. Full month precipitation ranged from 1.24 inches in Madison to 1.63 inches in Milwaukee. The entire state received snow in February. Of the reporting stations, Green Bay received the most snow, with 17.7 inches since February 1.

WYOMING: Topsoil moisture 1% very short, 22% short, 74% adequate, 3% surplus. Subsoil moisture 1% very short, 26% short, 72% adequate, 1% surplus. Average snow depth cover 3.70 inches. Hay and roughage supplies 1% very short, 11% short, 87% adequate, and 1% surplus. Stock water supplies 22% short, 77% adequate, and 1 percent surplus. Cattle condition 3% poor, 27% fair, 68% good, 2% excellent. Calf losses 50% light, 50% normal. Sheep condition 5% poor, 30% fair, 65% good. Lamb losses 37% light, 63% normal. Winter Wheat condition 2% poor, 22% fair, 72% good, 4% excellent; wind damage 62% light, 3% moderate, 35% none; freeze damage 17% light, 83% none. Below normal temperatures covered the State. According to NRCS Monday morning snow report, the snow water equivalent is at 136 percent compared to 85 percent last year. February's high temperatures ranged from 41 degrees at Jackson Hole to 67 degrees in Torrington. Low temperatures ranged from negative 36 degrees in Lake Yellowstone to negative 3 degrees in Evanston. Lake Yellowstone received the most precipitation for the month at 2.97 inches followed by Afton at 2.40 inches. Supplemental feeding is in full swing. Johnson County reported livestock holding up despite cold conditions and no deep snow. Teton County reported 100 inches of heavy snowfall in the mountains. Converse County reported some brutal conditions for early calvers in February. The Laramie Mountain Range has an average snow pack. Niobrara County reported cold, windy and snowy for the month of February. Average temperatures ranged from 13 degrees at Powell, Worland, and Shirley Basin to 28 degrees in Rock Springs. Temperatures were below normal in 25 of the 33 reporting stations. Temperatures ranged from 13 degrees below normal in Powell, Worland, and Old Fort Laramie to 7 degrees above normal in Jackson Hole. All 33 reporting stations reported some precipitation, ranging from 0.13 inch in Jeffrey City to 2.97 inches in Lake Yellowstone. Twenty-one stations are reporting above normal precipitation for the year thus far.

International Weather and Crop Summary

February 23 - March 1, 2014

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

EUROPE: Wet weather persisted across western Europe, while unseasonably warm conditions in eastern growing areas continued to ease winter crops out of dormancy up to a month earlier than normal.

FSU-WESTERN: Unseasonable warmth kept the region uncharacteristically devoid of snow cover and further reduced winter crop cold hardiness.

MIDDLE EAST: Unseasonably warm weather accelerated Iranian winter crops out of dormancy up to a month earlier than normal.

NORTHWEST AFRICA: Showers maintained abundant soil moisture for vegetative to heading winter grains.

SOUTHEAST ASIA: Persistent heavy showers hampered rice maturation in western Java, Indonesia.

AUSTRALIA: Dry weather in southern Queensland and northeastern New South Wales spurred summer crop maturation and early harvesting.

SOUTH AFRICA: Warm, showery weather continued across the corn belt, boosting moisture for later-planted, immature crops.

ARGENTINA: Drier conditions helped to alleviate excessive wetness in central Argentina, but heavy rain continued across northern summer crop areas.

BRAZIL: Beneficial rain returned to southern Brazil, although pockets of dryness redeveloped in the southeastern coffee belt.

February 2014

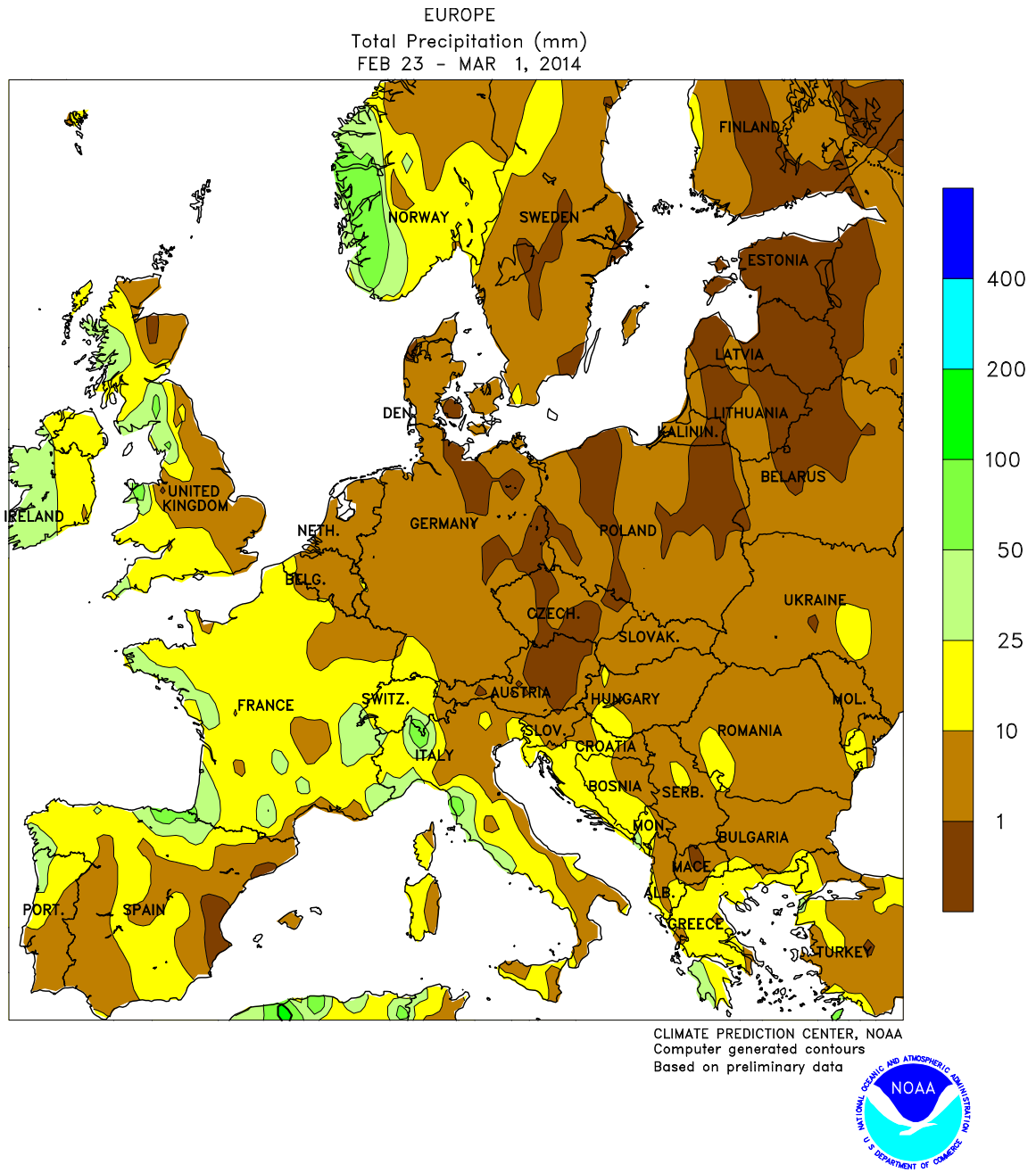
COUNTRY	CITY	TEMPERATURE (C)						PRECIP. (MM)	
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ALGERI	ALGER	19	8	27	1	14	2.3	55	-12
	BATNA	16	2	23	-3	9	2.5	14	-9
ARGENT	IGUAZU	34	21	39	16	27	1.9	63	-139
	FORMOSA	34	23	40	15	29	1.7	106	-24
	CERES	30	20	40	12	25	0.7	172	36
	CORDOBA	26	17	35	12	22	-0.6	270	142
	RIO CUARTO	25	16	33	10	21	-1	162	59
	ROSARIO	27	19	35	11	23	-0.1	249	123
	BUENOS AIRES	26	17	33	9	22	-0.4	210	111
	SANTA ROSA	28	15	36	6	21	-0.7	175	97
	TRES ARROYOS	27	15	33	7	21	0.3	50	-31
AUSTRA	DARWIN	31	26	32	22	28	0.2	126	-213
	BRISBANE	28	22	32	18	25	0	18	-154
	PERTH	33	18	38	13	25	0.5	0	-18
	CEDUNA	28	17	44	11	22	0.5	1	-10
	ADELAIDE	27	17	41	11	22	-0.2	21	-19
	MELBOURNE	26	15	39	10	21	0.5	16	-28
	WAGGA	32	19	42	9	26	1.8	46	6
	CANBERRA	29	14	38	5	21	0.9	75	19
AUSTRI	VIENNA	7	1	12	-4	4	2.9	32	-1
	INNSBRUCK	10	0	14	-4	5	4.1	33	-10
BAHAMA	NASSAU	28	21	31	17	25	3.1	35	-7
BARBAD	BRIDGETOWN	29	23	29	1	26	0.1	35	-6
BELARU	MINSK	1	-3	5	-15	-1	3.8	16	-18
BERMUD	ST GEORGES	22	18	24	14	20	1.6	199	88
BOLIVI	LA PAZ	15	4	19	0	10	0.7	49	-53
BRAZIL	FORTALEZA	30	25	32	22	27	-0.8	110	-103
	RECIFE	30	25	31	23	27	-2.1	113	11
	CAMPO GRANDE	30	21	34	19	25	-0.4	59	-108
	FRANCA	30	20	33	18	25	2.1	115	-113
	RIO DE JANEIRO	35	24	40	22	29	1.6	21	-104
	LONDRINA	33	21	39	18	27	2.9	180	-4
	SANTA MARIA	32	21	40	15	27	1.7	109	-22
	TORRES	29	22	32	17	25	-1	436	283
BULGAR	SOFIA	11	1	21	-5	6	4.3	8	-25
BURKIN	OUAGADOUGOU	36	21	40	15	29	0.9	0	-1
CANADA	TORONTO	-4	-12	6	-21	-8	-3	54	13
	MONTREAL	-5	-13	6	-23	-9	-0.6	62	3
	WINNIPEG	-15	-25	0	-34	-20	-6.1	0	-13
	REGINA	-14	-25	2	-35	-20	-8	0	-12
	SASKATOON	-14	-24	1	-32	-19	-6.3	0	-10
	LETHBRIDGE	-6	-19	8	-38	-12	-7.9	3	-10
	CALGARY	-7	-17	6	-28	-12	-6.3	4	-4
	EDMONTON	-10	-19	4	-28	-15	-6.5	5	-9
	VANCOUVER	6	-1	13	-10	3	-2.3	142	21
CANARY	LAS PALMAS	21	16	23	10	18	0.1	30	10
CHILE	SANTIAGO	29	12	33	9	21	1.1	0	-5
CHINA	HARBIN	-8	-23	7	-31	-15	-2.7	1	-4
	HAMI	3	-11	11	-17	-4	-0.5	0	-1
	BEIJING	4	-4	10	-11	0	-0.1	5	0
	TIENTSIN	5	-4	16	-11	1	0.5	4	0
	LHASA	12	-3	16	-10	4	2.7	0	-1
	KUNMING	20	6	23	0	13	2.5	19	2
	CHENGCHOW	6	0	15	-9	3	-0.2	25	13
	YEHCHANG	7	3	18	-5	5	-1.9	43	12
	HANKOW	8	3	20	-6	6	-1.1	98	39
	CHUNGKING	12	8	18	2	10	-0.5	18	-2
	CHIHKIANG	8	4	25	-5	6	-0.6	59	9
	WU HU	9	3	24	-5	6	0.9	128	67
	SHANGHAI	9	4	25	-2	6	0.3	156	95
	NANCHANG	10	5	26	-3	8	0.5	145	45
	TAIPEI	19	15	26	8	17	0.6	116	-87
	CANTON	18	10	28	2	14	-0.5	34	-35
	NANNING	16	10	27	-1	13	-0.7	16	-27
COLOMB	BOGOTA	20	9	24	4	14	1.1	62	23
COTE D	ABIDJAN	31	25	32	22	28	0.4	31	-10
CUBA	HAVANA	29	17	31	9	23	1.1	0	-41
CYPRUS	LARNACA	19	9	22	4	14	2	16	-28
CZECHR	PRAGUE	7	-1	11	-7	3	3.3	1	-18
DENMAR	COPENHAGEN	6	2	10	-2	4	2.9	32	8

Based on Preliminary Reports

February 2014

COUNTRY	CITY	TEMPERATURE (C)						PRECIP. (MM)	
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
EGYPT	CAIRO	21	11	29	8	16	0.9	8	5
	ASWAN	27	13	34	10	20	2.7	0	0
ESTONI	TALLINN	1	-2	7	-9	0	4.2	19	-17
ETHIOP	ADDIS ABABA	25	12	27	2	18	1.7	43	6
F GUIA	CAYENNE	29	24	30	22	27	0.8	394	75
FIJI	NAUSORI	32	23	33	20	28	1.1	445	184
FINLAN	HELSINKI	1	-2	4	-10	0	5.6	22	-11
FRANCE	PARIS/ORLY	11	5	15	0	8	3.0	60	19
	STRASBOURG	10	2	15	-2	6	3.7	25	-7
	BOURGES	11	4	17	-2	8	3.0	63	7
	BORDEAUX	13	6	19	3	10	2.5	106	31
	TOULOUSE	12	5	17	0	9	1.6	41	-6
	MARSEILLE	14	6	18	1	10	2.4	84	41
GABON	LIBREVILLE	30	25	31	24	28	0.8	173	-99
GERMAN	HAMBURG	9	2	14	-4	5	3.7	153	111
	BERLIN	9	2	13	-2	6	4.3	5	-28
	DUSSELDORF	10	4	14	-2	7	3.8	38	-13
	LEIPZIG	10	1	15	-4	6	5.6	13	-18
	DRESDEN	8	2	12	-1	5	4.9	172	136
	STUTTGART	9	1	14	-4	5	3.7	25	-11
	NURNBERG	9	0	14	-6	4	3.3	27	-7
	AUGSBURG	8	-1	16	-7	4	3.5	8	-31
GREECE	THESSALONIKA	13	6	17	-1	10	2.7	32	-8
	LARISSA	15	4	23	0	10	3.0	17	-22
GUADEL	RAIZET	29	21	30	19	25	0.4	59	-7
HONGKO	HONG KONG INT	19	14	26	6	16	-0.4	28	-15
HUNGAR	BUDAPEST	8	2	12	-5	5	3.5	40	15
ICELAN	REYKJAVIK	***	***	6	3	***	*****	*****	******
INDIA	AMRITSAR	20	6	23	1	13	-1.2	9	-26
	NEW DELHI	23	10	28	5	16	-0.8	59	38
	AHMEDABAD	30	15	34	8	22	0.0	0	******
	INDORE	26	13	31	9	19	-0.9	20	17
	CALCUTTA	28	16	32	11	22	-0.6	38	13
	VERAVAL	30	17	34	14	24	0.9	0	-1
	BOMBAY	31	19	35	15	25	0.2	0	******
	POONA	31	13	34	8	22	-0.2	0	-2
	BEGAMPET	31	18	34	16	25	-0.4	1	-9
	VISHAKHAPATNAM	29	21	32	20	25	-0.9	0	-13
	MADRAS	31	21	33	18	26	-0.3	7	-8
	MANGALORE	33	22	35	19	28	0.1	0	-3
INDONE	SERANG	30	24	32	22	27	-0.3	214	-10
IRELAN	DUBLIN	8	4	12	-3	6	0.5	62	11
ITALY	MILAN	10	4	16	1	7	2.7	68	19
	VERONA	12	6	15	1	9	4.5	138	96
	VENICE	12	6	14	2	9	4.5	162	117
	GENOA	13	8	17	5	11	1.5	103	57
	ROME	16	8	22	2	12	2.8	80	14
	NAPLES	16	9	23	4	13	3.4	111	26
JAMAIC	KINGSTON	31	23	32	22	27	1.1	18	-6
JAPAN	SAPPORO	-1	-7	8	-14	-4	-0.2	73	-23
	NAGOYA	11	2	19	-3	6	1.2	60	-7
	TOKYO	9	3	19	-1	6	0.1	124	63
	YOKOHAMA	9	3	19	-1	6	-0.2	81	12
	KYOTO	9	2	15	-1	6	0.3	31	-52
	OSAKA	10	3	17	0	6	0.2	37	-23
KAZAKH	KUSTANAY	-13	-21	-1	-37	-17	-2.6	0	-14
	TSELINOGRAD	-15	-23	-3	-34	-19	-4.4	0	-13
	KARAGANDA	-14	-22	-1	-33	-18	-4.7	0	-19
KENYA	NAIROBI	27	15	31	12	21	0.9	68	21
LIBYA	TRIPOLI	21	9	30	2	15	1.8	46	12
	BENGHAZI	18	11	23	5	15	1.8	24	-21
LITHUA	KAUNAS	3	-2	9	-12	0	3.3	25	-6
LUXEMB	LUXEMBOURG	7	2	12	-3	4	2.9	34	-33
MALAYS	KUALA LUMPUR	35	24	36	22	29	2.3	7	-169
MALI	BAMAKO	35	21	40	16	28	-0.6	0	-1
MARSHA	MAJURO	30	27	32	25	28	1.0	276	97
MARTIN	LAMENTIN	29	23	29	22	26	1.2	123	-28
MAURIT	NOUAKCHOTT	31	17	34	14	24	1.3	0	-3
MEXICO	GUADALAJARA	25	10	29	7	17	0.7	0	-7
	TLAXCALA	24	7	27	4	16	1.4	0	-5
	ORIZABA	24	13	29	8	18	2.4	6	-27
MOROCC	CASABLANCA	18	10	21	2	14	0.3	42	1
	MARRAKECH	20	8	26	2	14	-0.1	8	-24
MOZAMB	MAPUTO	***	***	34	21	***	*****	*****	******
N KORE	PYONGYANG	4	-6	13	-14	-1	1.5	3	-11
NEW CA	NOUMEA	28	23	31	19	25	-0.6	103	-21
NIGER	NIAMEY	35	19	39	14	27	0.2	1	0
NORWAY	OSLO	2	-1	6	-8	1	6.2	61	16
NZEALA	AUCKLAND	25	16	28	13	20	*****	11	******
	WELLINGTON	20	14	24	10	17	*****	22	******
P RICO	SAN JUAN	29	23	32	22	26	1.4	92	34
PAKIST	KARACHI	28	14	31	9	21	0.3	0	-10
PERU	LIMA	27	20	29	19	24	0.2	0	0
PHILIP	MANILA	30	23	33	20	27	-0.9	5	-8
PNEWGU	PORT MORESBY	30	25	34	23	27	0.7	166	-32
POLAND	WARSAW	6	-2	10	-10	2	3.2	11	-11
	LODZ	7	-1	11	-7	3	3.8	13	-17
	KATOWICE	9	-1	13	-7	4	4.0	27	-9
PORTUG	LISBON	14	***	17	1	***	*****	32	-52
ROMANI	BUCHAREST	6	-2	19	-14	2	1.7	1	-29
RUSSIA	ST.PETERSBURG	1	-1	7	-10	0	5.8	27	-4
	KAZAN	-8	-13	2	-27	-10	0.2	48	16
	MOSCOW	0	-4	4	-19	-2	4.6	15	-21
	YEKATERINBURG	-12	-17	2	-30	-14	-2.6	18	-1
	OMSK	-15	-23	2	-32	-19	-3.6	17	1
	BARNAUL	-14	-23	0	-36	-18	-4.4	15	-5
	KHABAROVSK	-12	-22	3	-33	-17	-1.3	10	-1
	VLADIVOSTOK	-6	-14	5	-21	-10	-0.6	0	-16
	VOLGOGRAD	-2	-9	2	-28	-6	1.1	20	-3
	ASTRAKHAN	1	-7	9	-22	-3	1.6	0	-8
	ORENBURG	-12	-20	2	-33	-16	-3.2	13	-6
S AFRI	PRETORIA	29	18	32	16	24	1.2	239	137
	JOHANNESBURG	26	15	29	12	20	1.4	110	2
	BETHAL	27	14	30	10	20	1.0	43	-42
	DURBAN	30	21	34	18	26	1.8	86	-46
	CAPE TOWN	28	18	36	13	23	2.5	3	-12
S KORE	SEOUL	7	-2	16	-11	3	2.2	29	3
SAMOA	PAGO PAGO	31	26	33	24	29	0.9	293	-15
SENEGA	DAKAR	24	17	29	16	20	-0.3	0	0
SPAIN	VALLADOLID	10	2	15	-2	6	-0.2	45	12
	MADRID	12	4	17	-2	8	0.6	49	24
	SEVILLE	17	8	21	2	13	0.1	68	27
SWITZE	ZURICH	8	2	13	-2	5	3.4	54	-15
	GENEVA	9	2	15	-4	5	2.6	88	16
SYRIA	DAMASCUS	17	1	25	-4	9	1.5	5	-19
TAHITI	PAPEETE	30	24	31	23	27	-0.2	460	244
TANZAN	DAR ES SALAAM	33	24	35	1	28	0.2	179	121
THAILA	PHITSANULOK	33	21	35	18	27	-0.4	1	-10
	BANGKOK	33	25	35	23	29	0.7	2	-16
TOGO	LOME	31	26	33	22	29	0.8	0	-32
TRINID	PORT OF SPAIN	32	23	33	21	27	1.7	39	3
TUNISI	TUNIS	19	9	28	5	14	2.4	16	-41
TURKEY	ISTANBUL	12	7	19	1	9	3.6	12	-46
	ANKARA	12	-3	18	-9	4	4.3	21	-11
TURKME	ASHKHABAD	7	-4	19	-18	1	-3.1	0	-29
UKINGD	ABERDEEN	8	3	11	-3	5	1.6	46	-7
	LONDON	11	5	15	2	8	2.5	54	17
UKRAIN	KIEV	3	-3	10	-20	0	3.1	12	-27
	LVOV	5	-3	10	-16	1	3.4	27	-15
	KIROVOGRAD	2	-4	10	-21	-1	2.2	2	-23
	ODESSA	3	-2	11	-12	1	0.8	8	-27
	YALTA	8	1	12	-5	5	0.7	15	-49
	KHARKOV	1	-4	9	-23	-2	3.0	16	-17
UZBEKI	TASHKENT	3	-6	15	-17	-2	-4.2	26	-30
VENEZU	CARACAS	30	23	35	21	27	1.7	16	4
YUGOSL	BELGRADE	12	4	23	-7	8	4.8	24	-14
ZIMBAB	KADOMA	27	18	31	14	22	-1.2	186	23

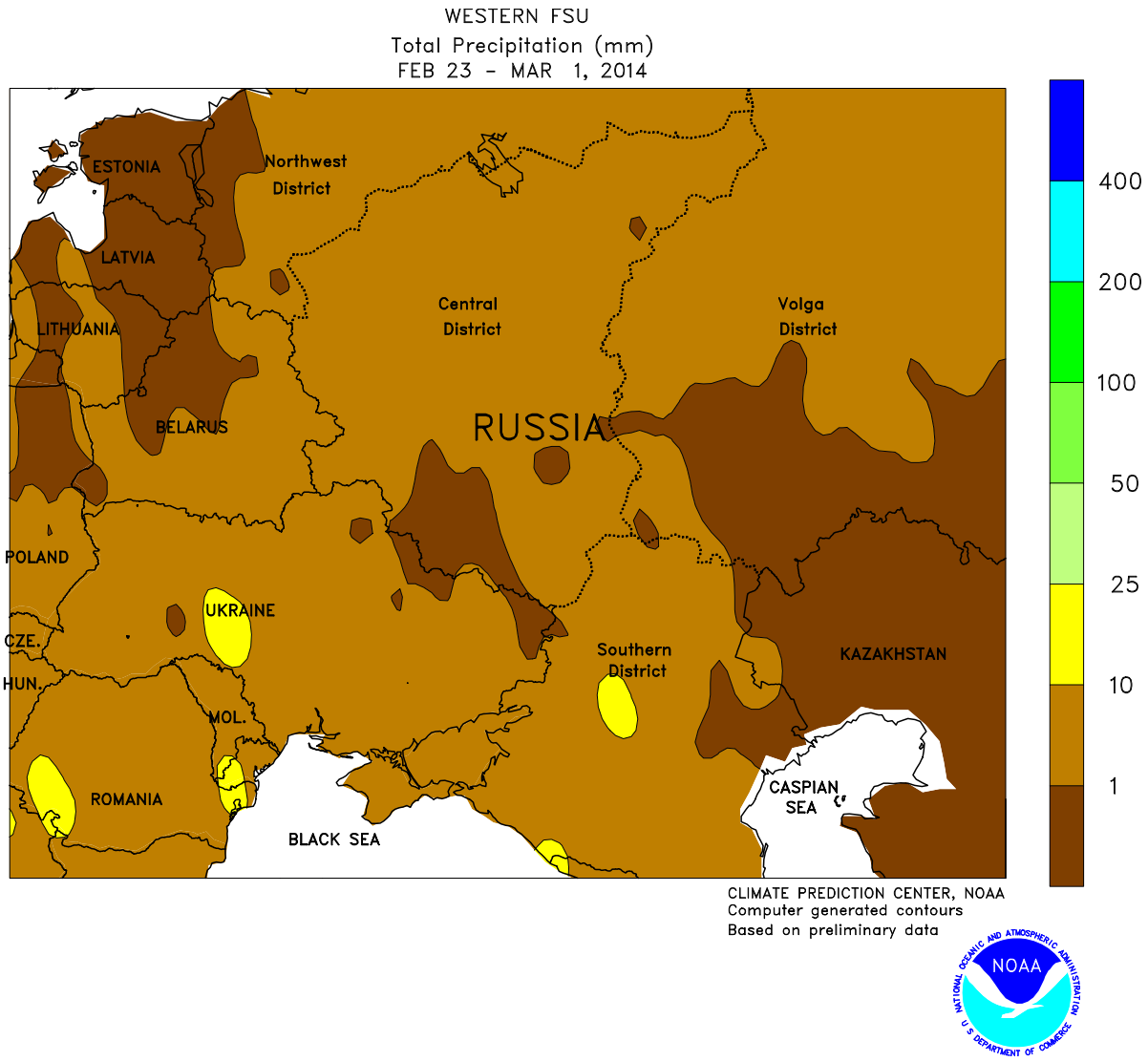
Based on Preliminary Reports



EUROPE

Unsettled weather prevailed across western Europe, while warmer-than-normal conditions continued over eastern growing areas. Atlantic storms continued to generate periods of rain from Ireland and the western United Kingdom (3-40 mm) southward into France (10-25 mm) and Spain (4-20 mm). Soil moisture reserves remained adequate to abundant for greening winter crops in France and the United Kingdom, while prospects for vegetative wheat and barley in Spain remained good to excellent. Meanwhile, another slow-moving Mediterranean storm system generated rain and mountain snow (5-50 mm liquid equivalent) in Italy, sustaining abundant to excessive soil moisture for winter wheat while boosting mountain snowpacks and reservoir levels for irrigated summer crops. In contrast, generally dry weather prevailed from Germany into Poland and the Balkans, although light to moderate showers (2-13 mm) lingered in western and northern portions of the Danube River Valley. Temperatures across central and eastern Europe averaged 3 to 7°C above normal, further easing winter crops out of dormancy up to a month earlier than normal from western Poland into southeastern Europe.

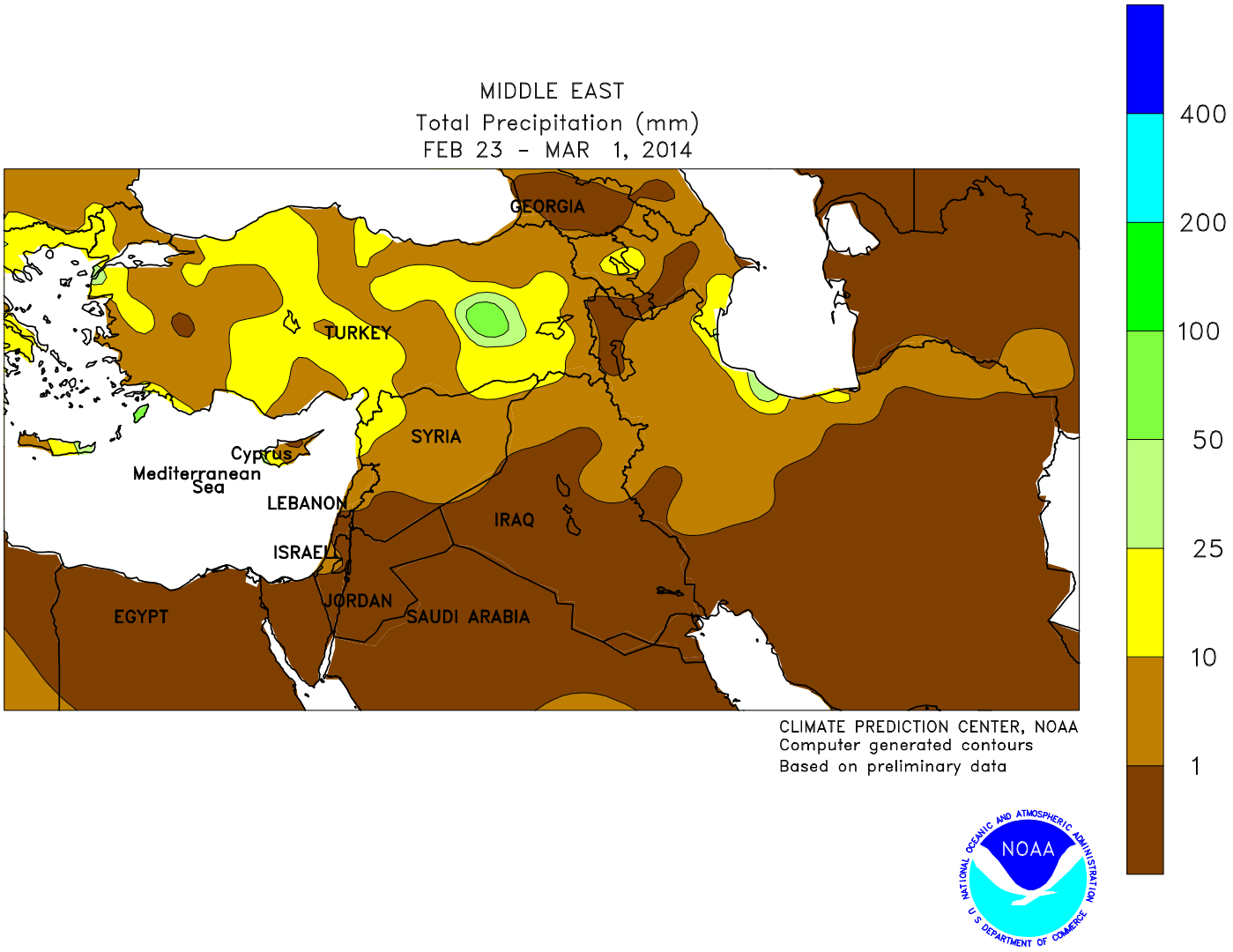
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

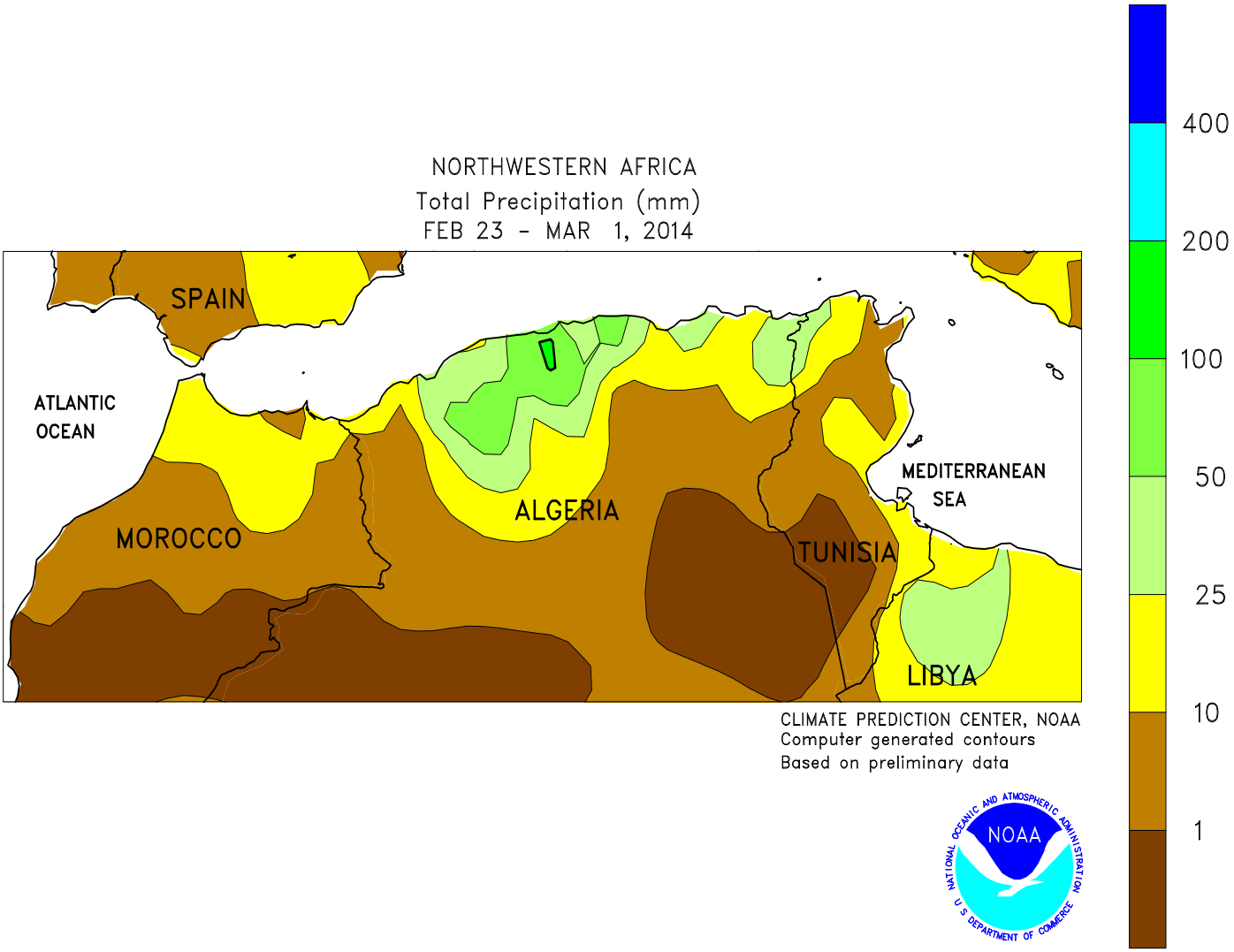
Unseasonable warmth persisted, with spotty, mostly light precipitation reported. Temperatures averaged 3 to 6°C above normal for the week, causing additional winter crop greening in southern Russia while keeping the region uncharacteristically devoid of snow cover. At week's end, snow was confined to Russia's Volga District and surrounding environs, while Belarus, Ukraine, and southwestern Russia were snow free up to a month ahead of normal. Daytime highs topped 10°C in southern-most crop areas in Russia, easing winter wheat out of dormancy in the warmest locales. Precipitation — which fell primarily as rain — was less than 10 mm, with most crop areas reporting less than 2 mm.

For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

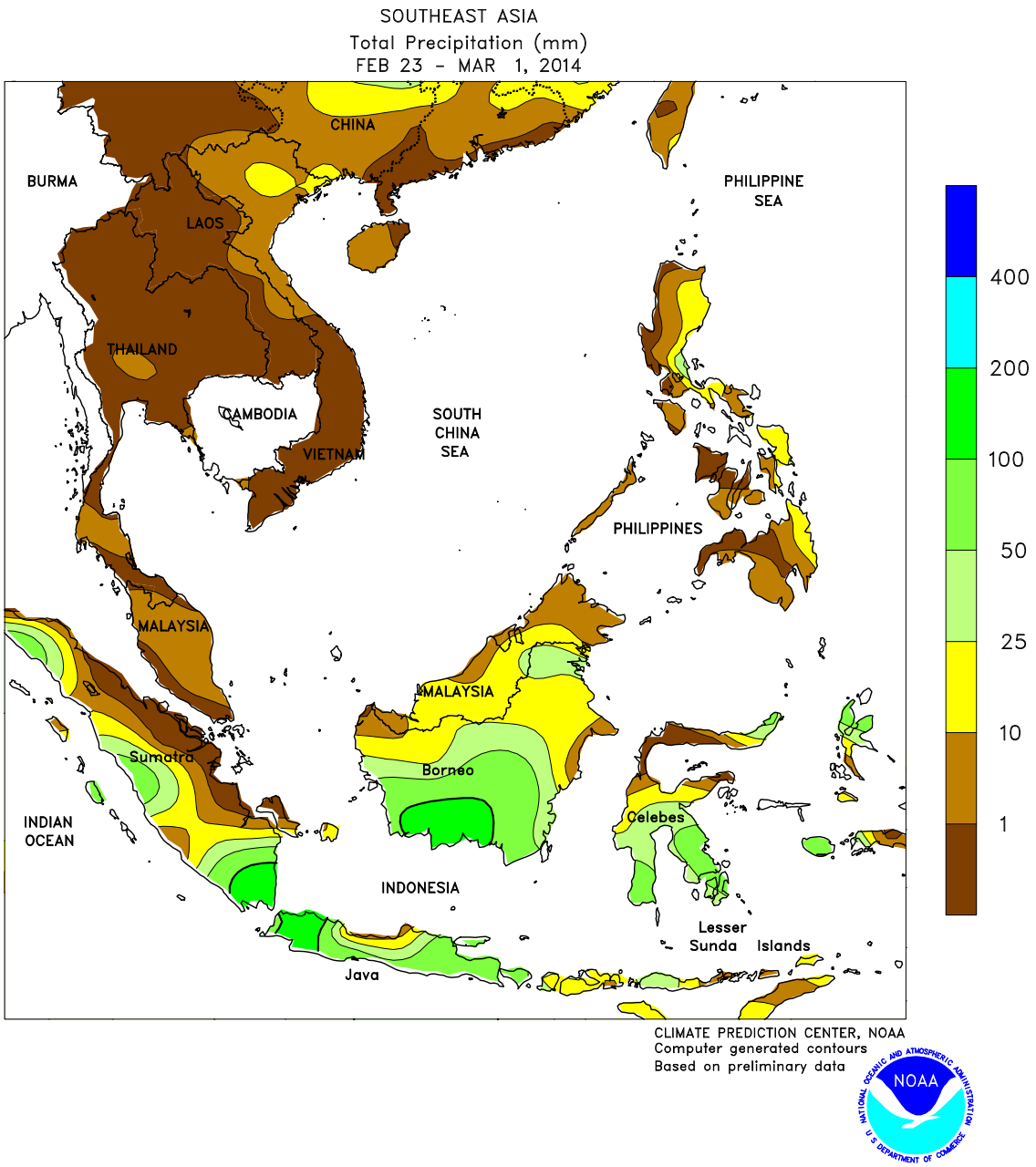
Unseasonably warm weather was accompanied by increasingly unsettled conditions in western and northern portions of the region. Temperatures averaged up to 8°C above normal, causing winter grains to add vegetative growth on Turkey's Anatolian Plateau while accelerating winter crops in northern and western Iran out of dormancy up to a month ahead of normal. Meanwhile, a Mediterranean storm generated light to moderate showers (2-24 mm) in Turkey, providing much-needed soil moisture for winter crops. At the end of the period, rain began spreading into northern portions of Iraq and Iran, with satellite imagery depicting locally heavy showers in northern Iraq as of March 4.



NORTHWESTERN AFRICA

Wet weather maintained favorable conditions for winter wheat and barley. Additional moderate to heavy showers (10-50 mm, locally more) from northern Morocco into Algeria sustained abundant to locally excessive soil moisture for vegetative to heading winter grains. Dry weather prevailed in southern Morocco, promoting fieldwork but reducing soil moisture for crop development. Daytime highs (18-23°C) were nearly ideal for wheat growth across the north-African wheat belt, with no excessive heat or untimely freezes observed.

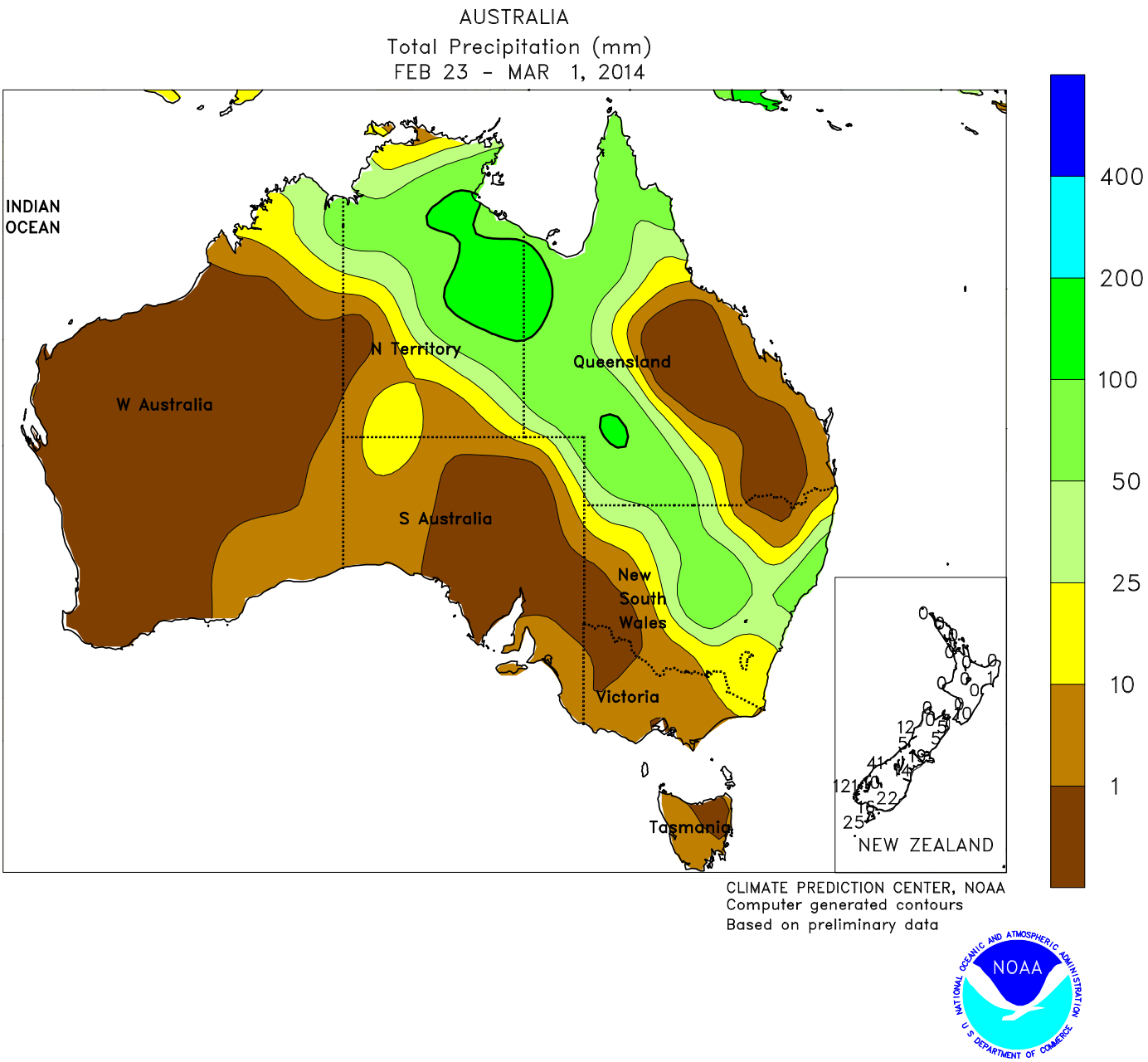
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

Above-normal rainfall continued across western Java, Indonesia, providing unfavorably wet conditions for maturing rice, especially where consistent flooding has occurred. Weekly rainfall totals in the west averaged 90 mm, with localized amounts in excess of 170 mm delaying the start of rice harvesting. Drier conditions (less than 10 mm) in central Java aided rice maturation, while rainfall totals averaging 85 mm in the east benefited crops in the filling stage of development. In oil palm areas of Indonesia and Malaysia, mostly dry conditions prevailed (except in Kalimantan, Indonesia, where 25 to 100 mm of rain occurred), reducing moisture supplies for oil palm. Rainfall for the season has been highly inconsistent for oil palm, resulting in reduced prospects. Meanwhile in the Philippines, wetter weather (upwards of 50 mm of rain) moved into the northeast, with drier conditions occurring across much of the south. Rice and corn were in various stages of development, although the majority of the winter-grown crops were likely beginning to fill. In Vietnam, spring rice harvesting was underway in the south, benefited by warm, sunny weather, as rainfall (10-20 mm) in the north favored vegetative to reproductive rice.

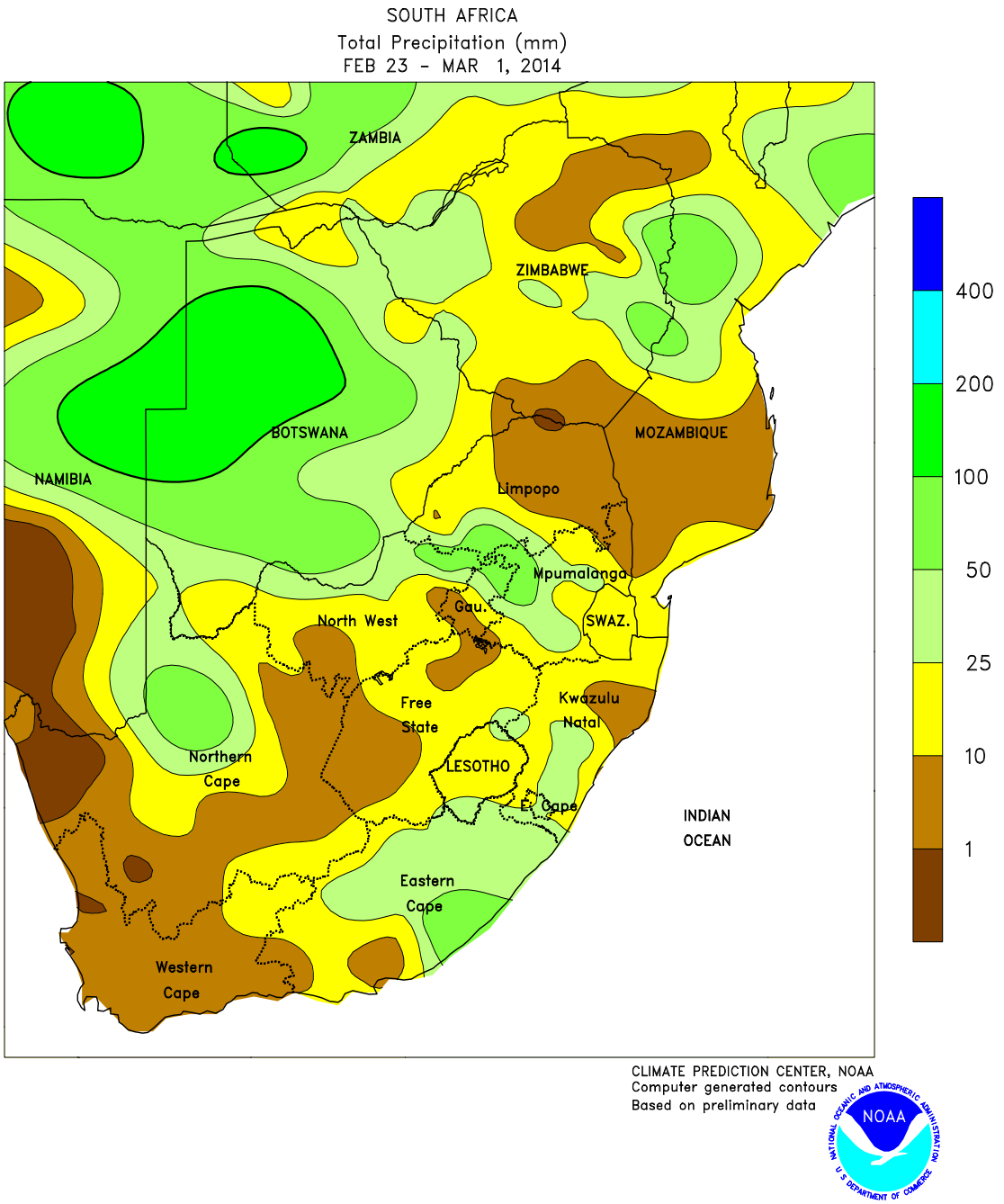
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

Below-normal rainfall during the past 3 months maintained irrigation requirements for cotton while slowly but steadily reducing prospects for dryland summer crops. The cumulative effect of the drier-than-normal weather has been an acceleration of dryland crop development, likely causing harvesting to begin early in many areas. During the last week, dry weather in southern Queensland and northeastern New South Wales continued to spur summer crop maturation and early harvesting. Farther south, locally heavy rain (5-50 mm, locally more than 75 mm) hampered summer crop drydown in central New South Wales while arriving too late to significantly improve the yield potential of immature crops. Temperatures in eastern Australia were generally seasonable, averaging within about 1°C of normal.

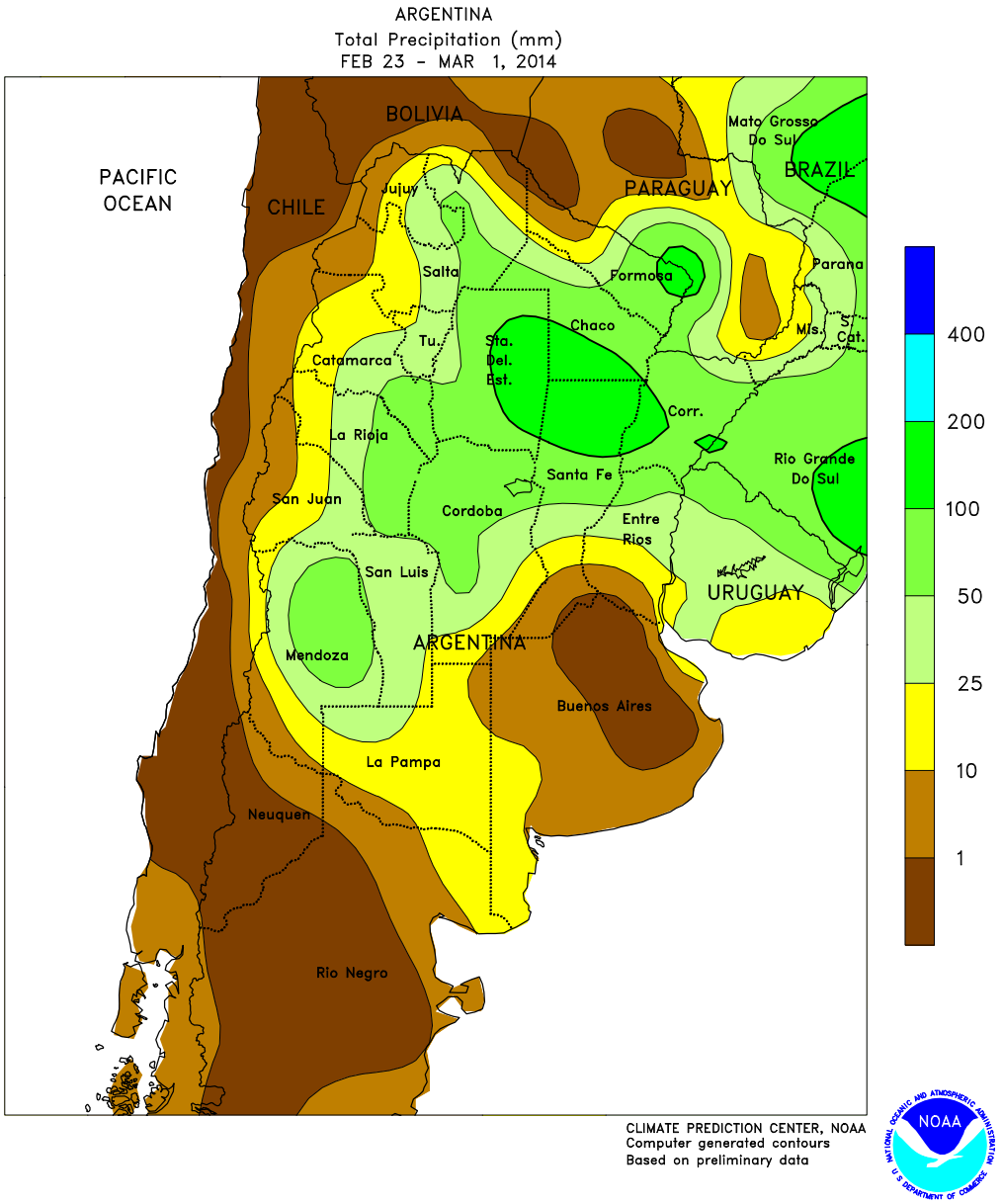
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Showers continued across the corn belt, providing a late-season boost in moisture for immature summer crops. The heaviest rain (25-75 mm) fell across the more northerly production areas of North West, Gauteng, and western Mpumalanga; in western production areas, moisture benefited later-planted corn and other rain-fed summer crops still in moisture-sensitive stages of development. Drier conditions (many locations recording less than 10 mm) prevailed from central Free State through northern KwaZulu-Natal, including southern production areas of Mpumalanga. While rain would have been welcomed in western production areas, crops in the east, which were planted the earliest, are closer to maturity. Temperatures averaged near to slightly above normal across the corn belt, with daytime highs mostly in the middle and upper 20s (degrees C). Elsewhere, moderate to heavy rain (10-50 mm) benefited rain-fed sugarcane and other summer crops in southern KwaZulu-Natal and Eastern Cape. Scattered showers (locally exceeding 25 mm) boosted irrigation reserves in Northern Cape — particularly along the Orange River. In contrast, mostly dry, occasionally hot weather (daytime highs approaching 40°C) continued to dominate tree and vine crop areas of Western Cape, fostering late-season development and supporting rapid harvesting.

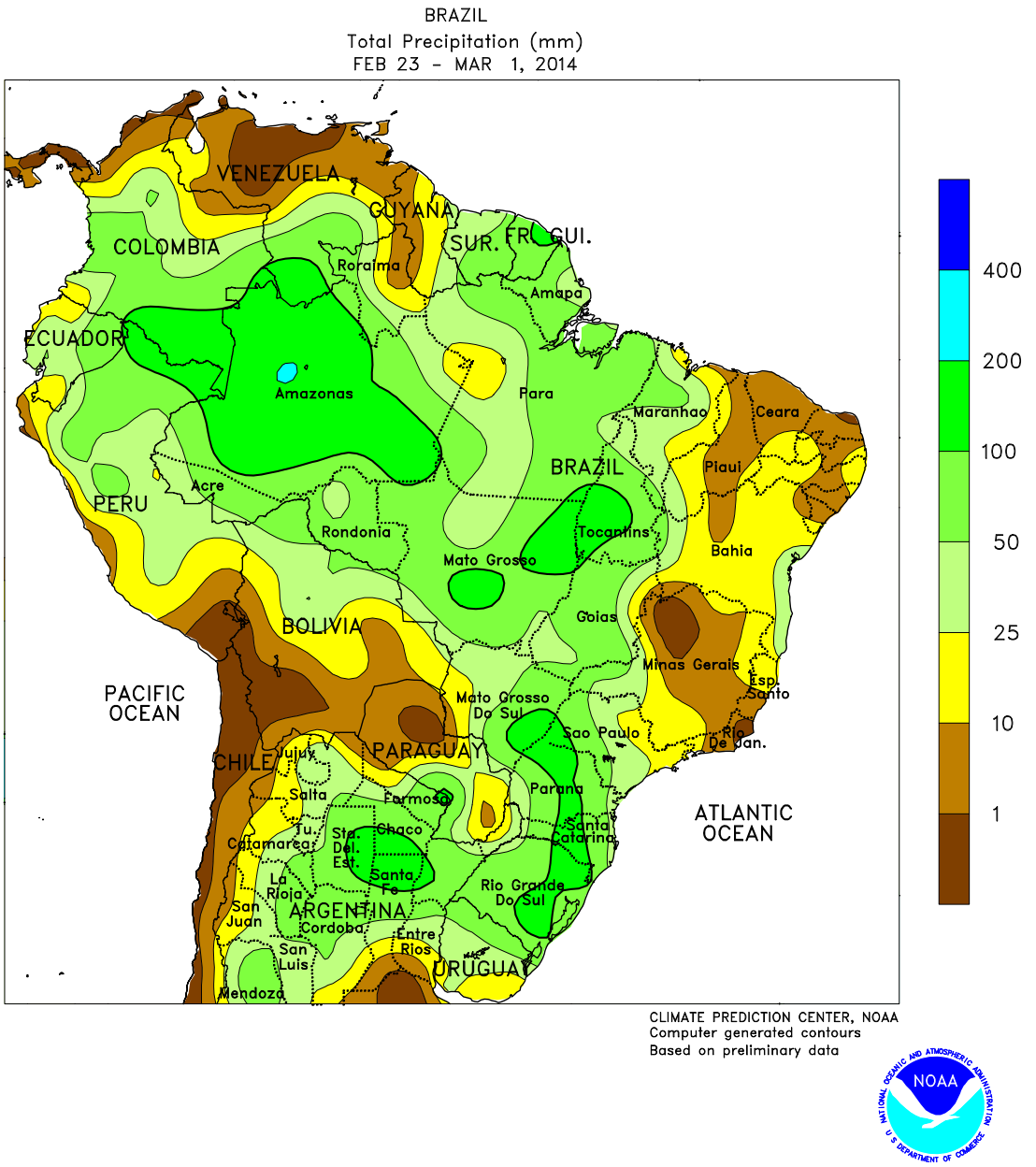
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Favorably drier conditions prevailed in central Argentina, but wet weather continued farther north. After many weeks of locally heavy rain, little to no rain fell in Buenos Aires and nearby locations in La Pampa, Cordoba, Santa Fe, and Entre Rios. The dryness was welcomed in and around northernmost Buenos Aires, which has experienced flooding in low-lying farmlands along the Parana River. However, additional rain would have been welcomed in farming areas in the vicinity of southwestern Buenos Aires that until recently had been too dry for normal development of summer grains and oilseeds. In contrast to the southern dryness, near- to above-normal rainfall continued farther north, with most major agricultural areas recording 25 to 100 mm. After a brief respite from wetness, heavy rain (locally in excess of 100 mm) returned to the middle Parana River Valley (Corrientes and nearby locations in Entre Rios and Santa Fe), likely renewing lowland flooding. Otherwise, the northern rainfall maintained abundant to locally excessive moisture for development of summer grains, oilseeds, and cotton. Weekly average temperatures were 2 to 4°C below normal throughout Argentina, with daytime highs ranging from the middle 20s (degrees C) in the traditionally cooler locations of southeastern Buenos Aires to near 40°C in Formosa. According to Argentina's Ministry of Agriculture, sunflowers were 28 percent harvested as of February 27, compared with 40 percent last year. Harvesting was reportedly underway in Buenos Aires (1 percent complete).

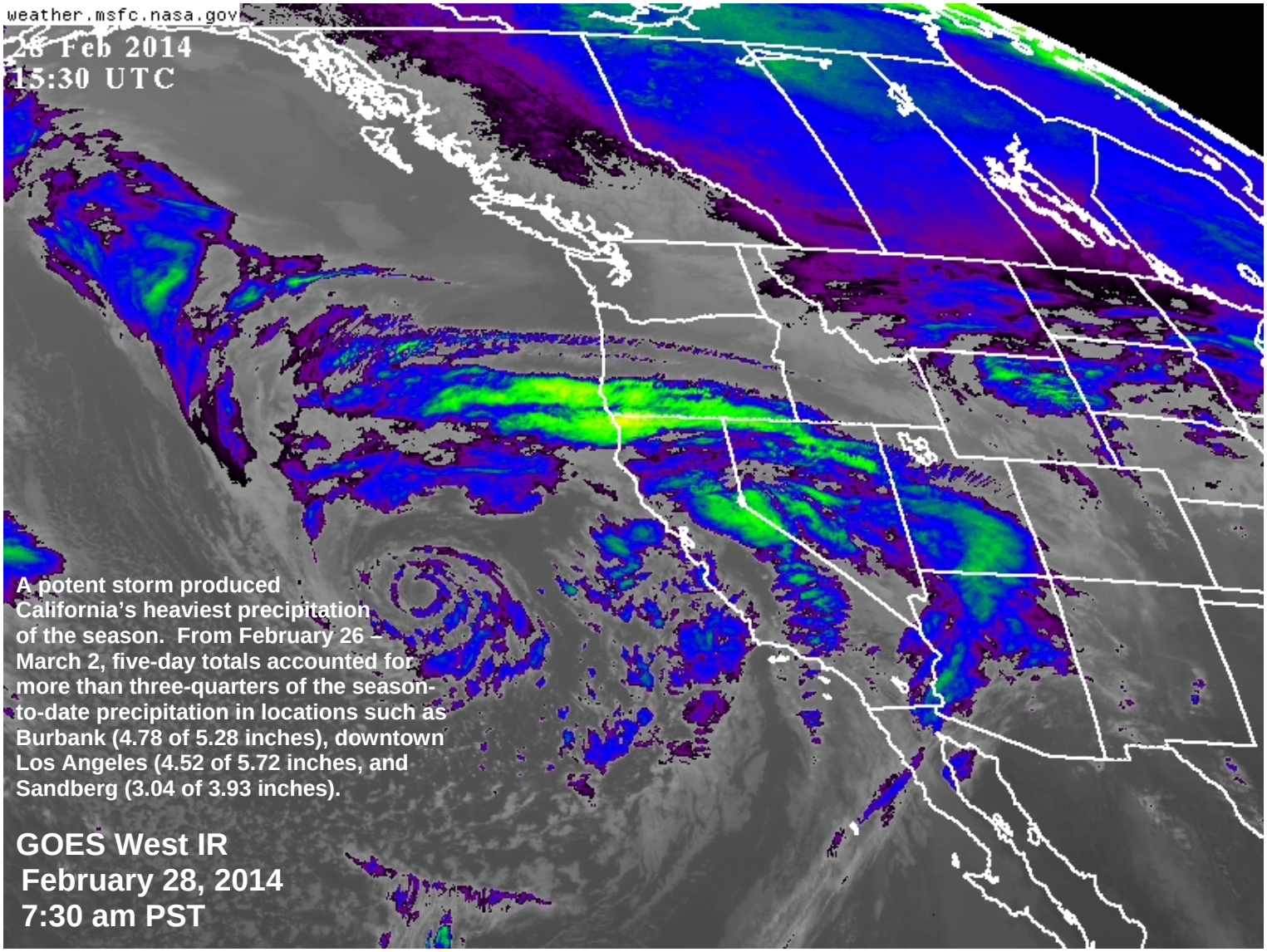
For additional information contact: mbrusberg@oce.usda.gov



BRAZIL

Beneficial rain returned to Brazil's southern corn, soybean, and sugarcane areas, but untimely dryness renewed concerns for coffee. Rainfall totaled 25 to 100 mm (locally higher) from western Sao Paulo and Mato Grosso do Sul southward through Rio Grande do Sul, greatly increasing moisture reserves for growth of immature summer crops after weeks of sporadic rainfall. In addition, near- to slightly below-normal temperatures (daytime highs in the upper 20s and lower 30s degrees C) lowered crop moisture demands and evaporative losses, helping to recharge moisture in the top layers of soil. Similar amounts of rainfall extended northward into the Center-West and northwestern interior regions (notably Mato Grosso, Goias, Tocantins, and western Bahia), but seasonably warmer conditions (daytime highs reaching the middle and upper 30s) maintained high crop moisture requirements. In Mato Grosso, the wetness was untimely for soybean harvesting and planting of second-crop (safrinha) corn. In contrast to the wet weather in southern and central Brazil, drier conditions dominated a large section of the east, stretching from eastern Sao Paulo to Brazil's northeastern tip. This dry region included a large portion of the southeastern coffee belt (notably southern Minas Gerais and Espirito Santo), which has been trending drier than normal since the end of January. Weekly average temperatures in the southeastern coffee region were up to 3°C above normal, with daytime highs reaching the lower and middle 30s before showers developed at week's end.

For additional information contact: mbrusberg@oce.usda.gov



The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. The contents may be redistributed freely with proper credit.

Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**
Internet URL: **http://www.usda.gov/oce/weather**
E-mail address: ***brippey@oce.usda.gov***

The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:
http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm