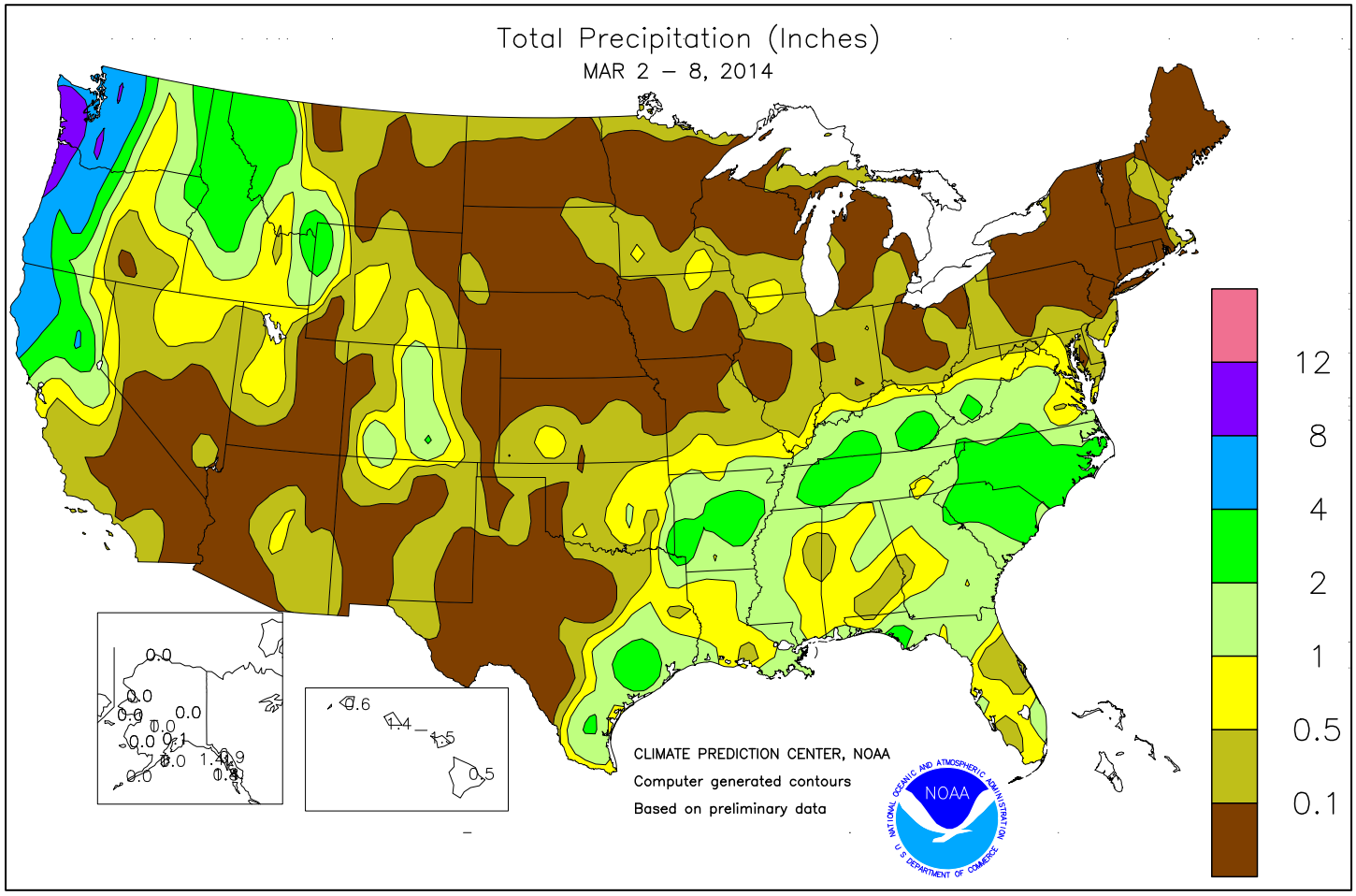
Volume 101, No. 10 http://www.usda.gov/oce/weather March 11, 2014

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

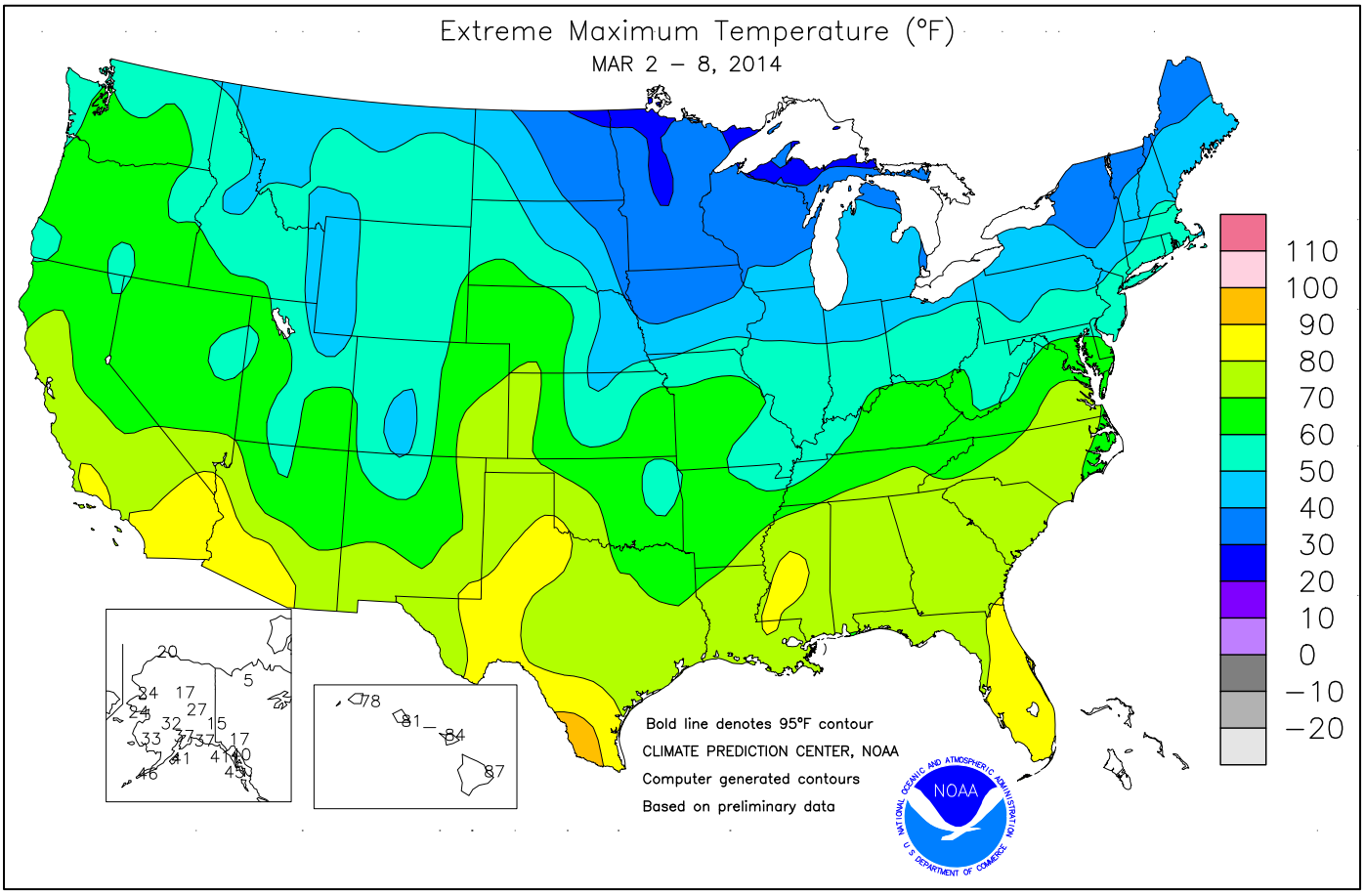
March 2 – 8, 2014

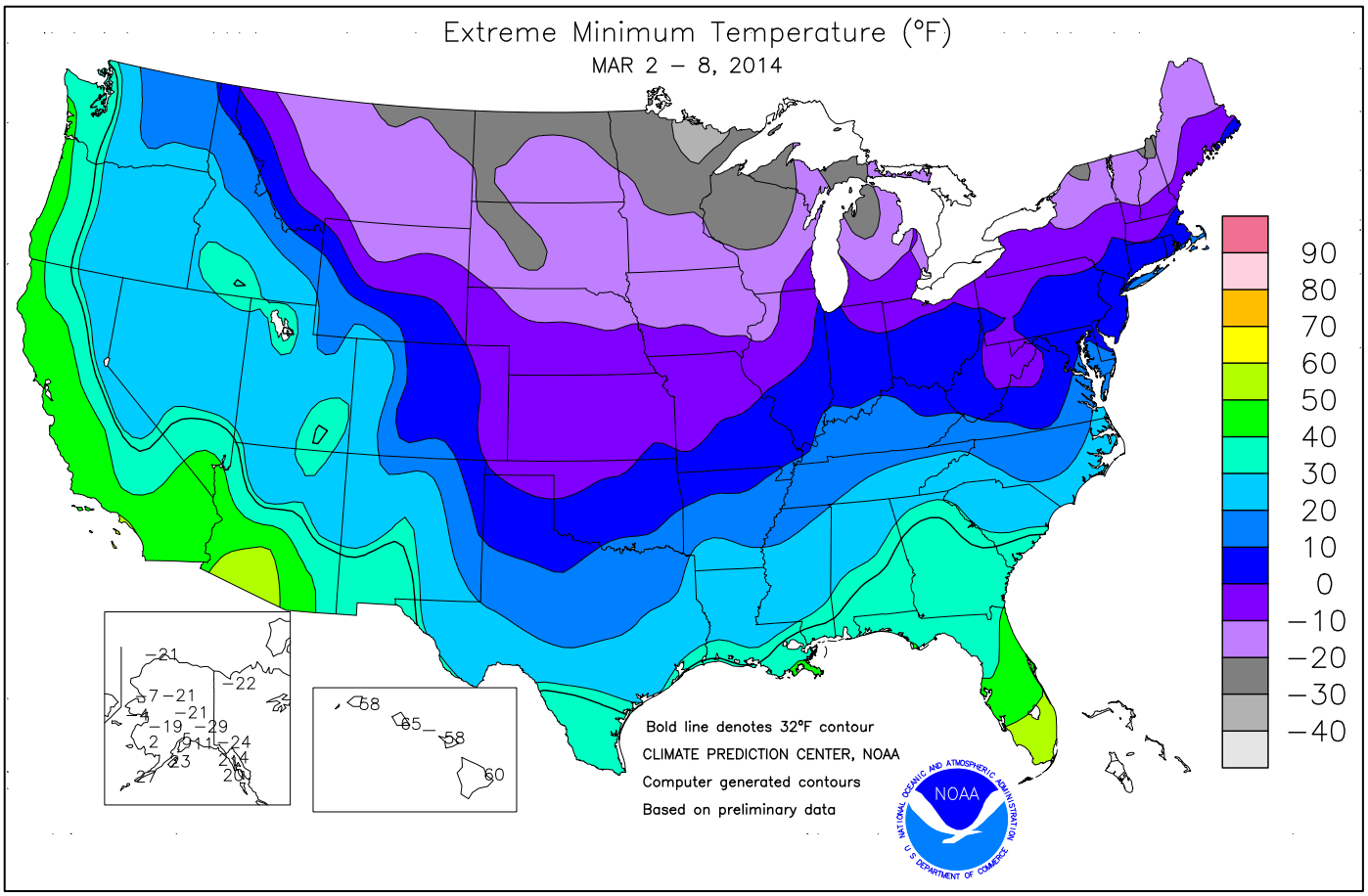
Highlights provided by USDA/WAOB

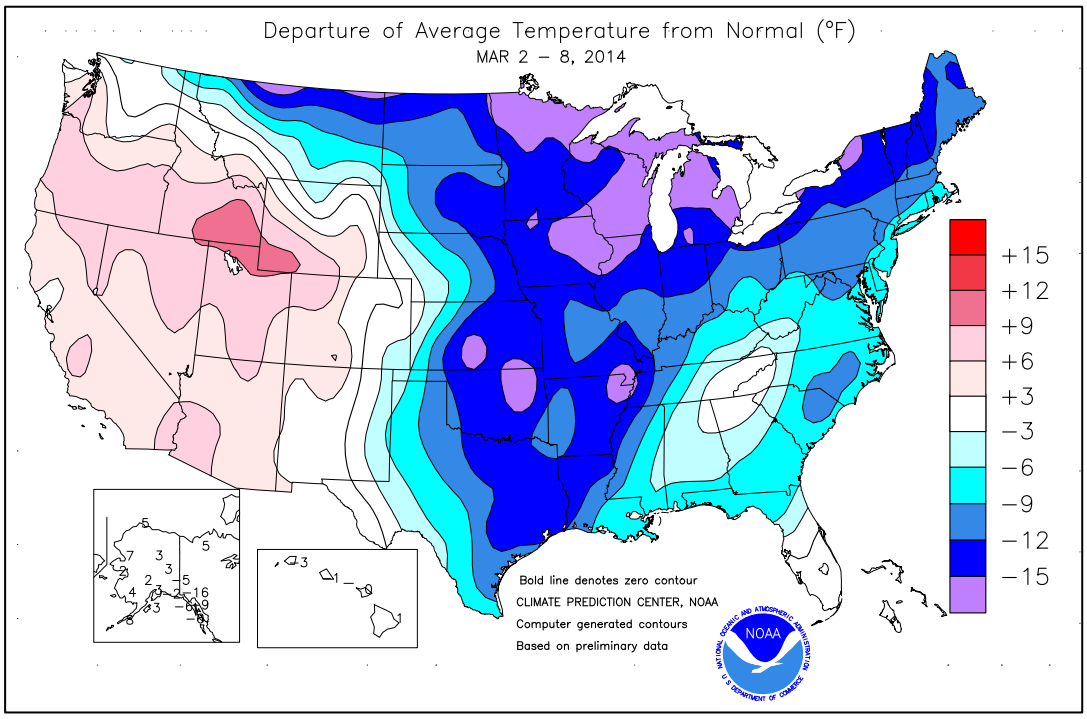
In early March, snow, sleet, and record-setting cold covered a large area of the country, including portions of the **Plains**, **Midwest**, **Mid-South**, and **Mid-Atlantic region**. Some of the coldest March weather on record trailed the late-winter storm, with temperatures plunging below -20°F across parts of the **northern Plains** and **upper Midwest**, and falling to sub-zero levels as far south as **northern Oklahoma**. Across the **Plains** and **lower Midwest**, a variable snow cover provided some insulation for winter wheat during the late-season cold outbreak. As

(Continued on page 3)

Contents


Extreme Maximum Temperature (°F)
MAR 2 – 8, 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)
MAR 2 – 8, 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

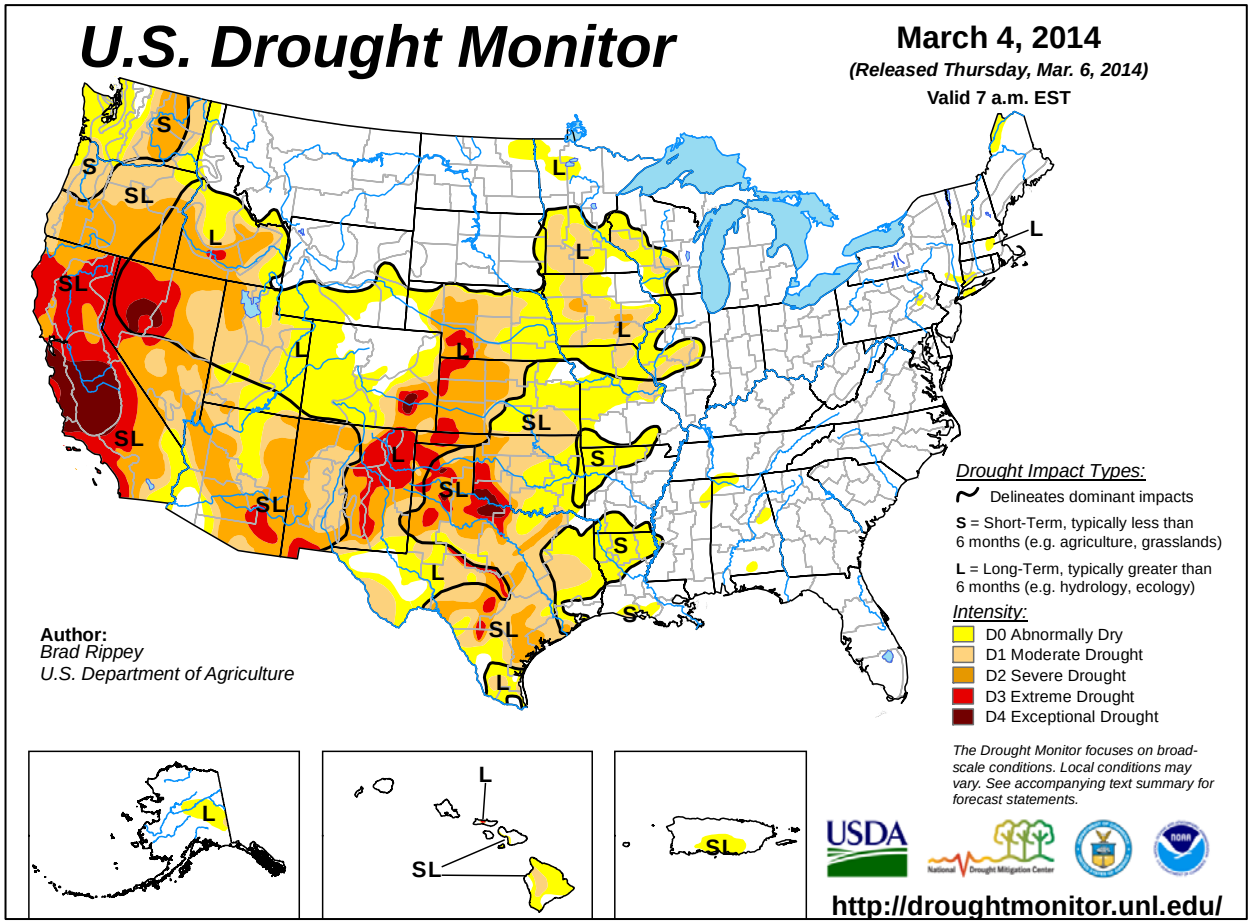


(Continued from front cover) the week progressed, warmer weather eroded or eliminated much of the snow, although extensive coverage remained across the **Great Lakes region**. Meanwhile, frequent precipitation events across the **South** boosted moisture in preparation for spring planting, but cool, wet conditions hampered pre-planting fieldwork. Although most of the **Southern** precipitation fell as rain, some areas reported snow, sleet, and freezing rain. Elsewhere, **Western** precipitation shifted northward, following the previous week's **California** deluge. With the return of warm, mostly dry weather to **California** and the **Southwest**, odds increased that the winter wet season will soon end with substantial season-to-date and 3-year precipitation deficits still intact. In contrast, the combination of heavy rain and melting snow led to river rises and local flooding from the **Pacific Northwest to the northern Rockies**.

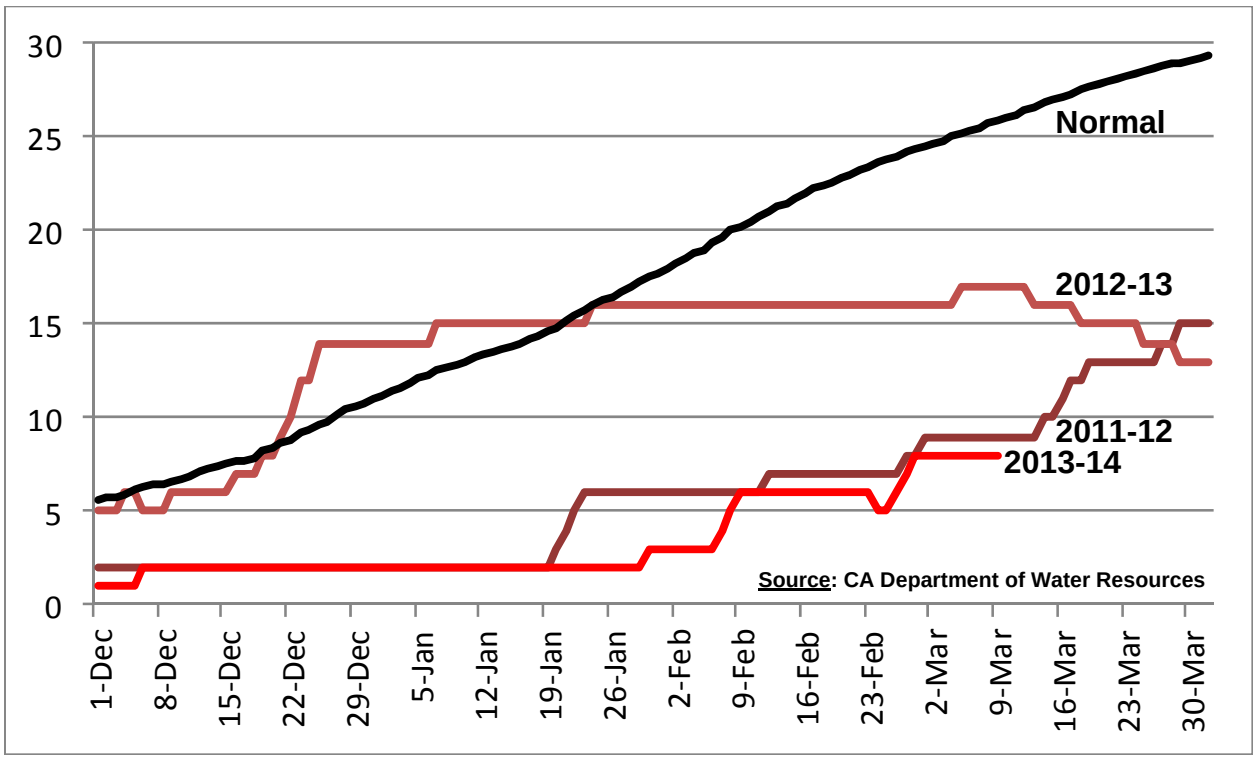
Early in the week, a severe, late-season cold outbreak continued **east of the Rockies**. In **northern Minnesota**, **Embarrass** opened the week with lows of -44 and -40°F, respectively, on March 2-3. Daily-record lows fell below -20°F in locations such as **International Falls, MN** (-33°F on March 3); **Gaylord, MI** (-26°F on March 3); **Kennebec, SD** (-22°F on March 2); and **Valentine, NE** (-21°F on March 2). All-time monthly low temperature records were broken on March 2 in **Billings, MT** (-21°F), and **Pierre, SD** (-20°F). **Pierre** again recorded -20°F on March 3. Elsewhere on the 3rd, monthly record lows included -16°F in **Flint, MI** (previously, -12°F on March 2, 1978), and **Rockford, IL** (tied -11°F on March 1, 1962). With a minimum of -24°F on March 2, **Green Bay, WI**, experienced its lowest temperature since February 4, 1996 (also -24°F), and second-lowest March reading behind -29°F on March 1, 1962. By March 4, monthly record lows in the **Mid-Atlantic region** dipped to 4°F in **Baltimore, MD** (previously, 5°F on March 4, 1873), and -1°F at **Dulles Airport, VA** (previously, -1°F on March 15, 1993). Sub-zero readings occurred deep into the **Plains**, especially on March 3, when daily-record lows included -5°F in **Gage, OK**, and **Garden City, KS**. **Bartlesville, OK**, notched consecutive daily-record lows (1 and 0°F, respectively) on March 3-4. For the first time on record in March, high temperatures on the 2nd failed to reach zero in **Waterloo, IA** (-1°F); did not exceed the 5-degree mark in **Lincoln, NE**, and **Concordia, KS** (both 5°F); and did not attain the 10-degree mark in **Rockford, IL** (9°F). On March 3, highs of 26°F in **Tyler** and **Longview, TX**, set or tied monthly records. The cold weather lingered into March 4, when **Lake Charles, LA** (high of 35°F), failed to top the 35-degree mark in March for the first time on record. In contrast, several daily-record highs were established in the **Northwest**. In **Washington**, record-setting highs included 66°F (on March 4) in **Yakima** and 63°F (on March 5) in **Ephrata**. Meanwhile, cold weather was slow to erode from the **Great Lakes States into the Northeast**. Daily-record lows for March 6 included -24°F in **Pellston, MI**, and -23°F in **Massena, NY**. Elsewhere in **New York** on March 6, **Rochester** (-9°F) achieved a monthly record low.

Early-month snow and sleet was initially heaviest across the **Midwest** but later spread to other areas. Daily-record snowfall totals for March 2 reached 4.0 inches in **Fort Wayne, IN**, and 2.7 inches in **Dayton, OH**. On the strength of a 3.2-inch snowfall on March 1-2, **Peoria, IL**, achieved its snowiest season on record. **Peoria's** July 1 – March 8 total of 54.6 inches surpassed its July 2010 – June 2011 seasonal standard of 52.5 inches. Record-setting snowfall amounts for March 3 included 4.9 inches at **Dulles Airport, VA**; 4.6 inches in **Lexington, KY**; and 2.5 inches in **Harrison, AR**. Farther south, **Alexandria, LA**, received a daily-record snowfall (0.2 inch) on March 4. Heavy rain prior to the changeover to snow and sleet contributed to daily-record precipitation totals for March 2 in locations such as **Memphis, TN** (2.39 inches), and **Bowling Green, KY** (2.03 inches). Meanwhile in the **Northwest**, snow changed to heavy rain as warmer weather arrived. On March 2, daily-record snowfall amounts climbed to 10.0 inches in **Kalispell, MT**, and 1.6 inches in **Yakima, WA**. Three days later, daily-record precipitation totals included 1.65 inches in **Quillayute, WA**, and 1.46 inches in **Salem, OR**. **Quillayute** tallied another daily-record total (2.70 inches) on March 8, and during the first 8 days of March received 7.80 inches. Toward week's end, rain returned to the **Southeast**, with some wintry precipitation in northern sections of the region. On March 7, **Greensboro, NC**, set daily records for both precipitation (1.79 inches) and snowfall (3.0 inches). Other record-setting totals for March 7 were 2.10 inches in **Cape Hatteras, NC**, and 1.28 inches in **Danville, VA**.

Generally dry weather covered **Alaska**, although near- to above-normal temperatures across the mainland contrasted with cold conditions across the southeastern part of the state. Toward week's end, however, rain and snow replaced cold weather in **southeastern Alaska**, where March 7-8 precipitation totals reached 2.52 inches on **Annette Island** and 0.98 inch—along with 2.2 inches of snow—in **Juneau**. Farther south, heavy showers returned to **Hawaii** late in the week, following a brief lull. Rainfall was especially heavy on **Oahu**, where 24-hour totals on March 8-9 reached 6.46 inches at the **Oahu Forest National Wildlife Refuge** and 3.75 inches at the **Wilson Tunnel**. Earlier rains had resulted in a daily-record total (0.77 inch on March 2) in **Kahului, Maui**. During the period between showers, **Hilo**—on the **Big Island**—collected a daily-record high of 87°F on March 6.



Daily Sierra Nevada Snowpack (Inches) vs. Normal



National Weather Data for Selected Cities

Weather Data for the Week Ending March 8, 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	61	36	76	27	49	-2	0.73	-0.53	0.45	0.73	51	7.66	69	92	48	0	2	2	0
	HUNTSVILLE	58	32	74	24	45	-4	0.78	-0.71	0.76	0.78	46	10.65	88	90	63	0	3	2	1
	MOBILE	60	39	72	31	49	-8	0.63	-0.92	0.33	0.63	36	7.74	61	97	70	0	2	4	0
	MONTGOMERY	62	39	79	33	51	-4	0.85	-0.65	0.50	0.85	49	8.52	70	91	57	0	0	3	1
AK	ANCHORAGE	33	19	37	5	26	4	0.06	-0.11	0.06	0.06	32	2.08	129	86	72	0	7	1	0
	BARROW	-5	-17	20	-21	-11	5	0.00	0.00	0.00	0.00	0	0.84	350	80	70	0	7	0	0
	FAIRBANKS	21	-8	27	-21	6	2	0.00	-0.06	0.00	0.00	0	0.62	63	78	67	0	7	0	0
	JUNEAU	31	15	40	4	23	-9	0.89	-0.02	0.81	0.89	86	13.02	132	63	52	0	7	2	1
	KODIAK	39	30	41	23	34	3	0.03	-1.17	0.02	0.03	2	21.28	139	81	73	0	5	2	0
	NOME	17	2	24	-4	10	3	0.00	-0.14	0.00	0.00	0	2.17	119	68	56	0	7	0	0
AZ	FLAGSTAFF	53	29	57	25	41	7	0.06	-0.62	0.06	1.23	158	1.83	33	85	32	0	6	1	0
	PHOENIX	77	55	82	53	66	5	0.08	-0.18	0.08	0.99	341	0.99	52	67	38	0	0	1	0
	PRESCOTT	62	36	66	31	49	7	0.00	-0.51	0.00	0.56	95	0.73	18	74	21	0	1	0	0
	TUCSON	75	50	83	47	62	5	0.13	-0.09	0.13	0.58	232	0.59	28	72	39	0	0	1	0
AR	FORT SMITH	51	26	67	12	38	-11	1.05	0.22	1.03	1.05	112	2.82	48	90	52	0	5	3	1
	LITTLE ROCK	47	26	67	16	36	-14	2.29	1.35	2.09	2.29	214	7.85	98	91	59	0	6	2	1
CA	BAKERSFIELD	70	49	79	42	60	4	0.00	-0.33	0.00	0.04	11	0.48	17	80	59	0	0	0	0
	FRESNO	70	53	77	47	61	7	0.02	-0.53	0.02	0.02	3	2.69	55	83	67	0	0	1	0
	LOS ANGELES	67	55	76	53	61	3	0.00	-0.69	0.00	0.35	44	3.14	46	86	65	0	0	0	0
	REDDING	63	47	71	40	55	4	2.04	0.75	1.19	2.73	186	11.23	83	97	77	0	0	6	1
	SACRAMENTO	66	49	71	42	58	5	0.48	-0.28	0.25	0.48	55	4.77	58	98	59	0	0	5	0
	SAN DIEGO	70	57	82	52	63	4	0.25	-0.27	0.25	1.27	212	2.28	46	83	70	0	0	1	0
	SAN FRANCISCO	63	51	68	48	57	4	0.27	-0.60	0.16	0.43	43	4.20	44	97	82	0	0	4	0
	STOCKTON	67	48	71	43	58	5	0.59	0.02	0.24	0.59	89	3.67	63	95	79	0	0	5	0
CO	ALAMOSA	50	22	54	18	36	7	0.40	0.33	0.21	0.40	500	0.52	96	90	53	0	7	3	0
	CO SPRINGS	51	23	65	6	37	2	0.29	0.13	0.29	0.32	178	1.21	149	83	27	0	7	1	0
	DENVER INTL	51	25	62	4	38	3	0.58	0.40	0.32	0.61	305	1.74	264	86	38	0	6	4	0
	GRAND JUNCTION	56	33	60	27	44	4	0.05	-0.14	0.04	0.07	33	1.45	111	76	48	0	2	2	0
	PUEBLO	54	23	72	6	38	-1	0.64	0.50	0.57	0.64	427	1.37	185	77	55	0	6	3	1
CT	BRIDGEPORT	35	20	54	11	28	-8	0.00	-0.82	0.00	0.00	0	6.97	92	67	47	0	7	0	0
	HARTFORD	33	13	50	3	23	-10	0.00	-0.78	0.00	0.00	0	7.37	96	61	43	0	7	0	0
DC	WASHINGTON	46	25	67	14	36	-7	0.78	-0.01	0.48	0.78	87	7.38	109	70	40	0	6	2	0
DE	WILMINGTON	40	21	59	8	31	-8	0.35	-0.49	0.24	0.35	36	8.93	124	80	42	0	7	2	0
FL	DAYTONA BEACH	71	53	83	48	62	-1	0.04	-0.75	0.03	0.04	4	6.62	98	96	59	0	0	2	0
	JACKSONVILLE	63	44	81	37	54	-5	1.15	0.34	0.99	1.15	124	10.86	140	100	67	0	0	3	1
	KEY WEST	79	68	81	63	74	2	0.89	0.54	0.82	0.89	222	8.49	206	86	65	0	0	2	1
	MIAMI	81	64	86	57	73	2	0.48	0.01	0.45	0.48	89	3.55	79	86	51	0	0	2	0
	ORLANDO	76	55	84	48	65	0	0.37	-0.35	0.25	0.37	46	5.40	97	90	61	0	0	2	0
	PENSACOLA	62	43	71	36	52	-6	1.31	-0.07	1.06	1.31	84	12.64	109	90	65	0	0	3	1
	TALLAHASSEE	64	42	79	34	53	-6	2.25	0.83	1.51	2.25	140	10.30	89	87	66	0	0	3	2
	TAMPA	73	57	78	45	65	0	1.19	0.50	1.18	1.19	151	6.14	107	93	63	0	0	2	1
	WEST PALM BEACH	80	60	84	51	70	1	0.26	-0.38	0.20	0.26	36	11.73	167	91	54	0	0	2	0
GA	ATHENS	58	36	75	32	47	-3	1.18	0.01	0.64	1.18	89	9.81	94	87	53	0	1	5	1
	ATLANTA	59	37	74	33	48	-3	0.65	-0.60	0.23	0.65	45	7.81	70	85	57	0	0	4	0
	AUGUSTA	57	34	75	29	45	-8	0.55	-0.50	0.42	0.55	46	6.76	69	87	63	0	2	3	0
	COLUMBUS	61	38	75	36	49	-5	0.33	-0.97	0.19	0.33	22	8.65	81	93	52	0	0	4	0
	MACON	59	35	75	31	47	-6	0.56	-0.59	0.47	0.56	43	8.39	77	95	62	0	1	4	0
	SAVANNAH	58	39	77	36	49	-7	1.23	0.53	0.76	1.23	154	5.34	70	88	67	0	0	4	1
HI	HILO	79	65	87	60	72	0	0.49	-2.23	0.24	0.49	16	8.72	40	92	78	0	0	5	0
	HONOLULU	78	66	81	65	72	-2	1.35	0.84	0.63	1.69	286	5.37	95	82	72	0	0	3	1
	KAHULUI	80	65	84	58	72	-1	1.48	0.98	0.63	1.55	272	8.20	123	91	78	0	0	4	1
	LIHUE	75	62	78	58	69	-3	0.65	-0.15	0.20	0.65	71	11.04	126	89	79	0	0	5	0
ID	BOISE	56	41	60	35	49	8	0.89	0.60	0.42	0.91	276	3.94	138	81	61	0	0	4	0
	LEWISTON	54	37	63	25	45	3	0.30	0.08	0.16	0.30	120	2.71	116	78	64	0	2	5	0
	POCATELLO	53	35	57	25	44	9	0.47	0.17	0.29	1.23	373	2.94	119	79	65	0	2	3	0
IL	CHICAGO/O'HARE	29	11	47	-2	20	-13	0.27	-0.17	0.15	0.67	134	5.97	154	69	57	0	7	3	0
	MOLINE	27	7	47	-12	17	-16	0.15	-0.34	0.13	0.37	67	4.38	120	78	60	0	7	3	0
	PEORIA	31	14	51	-6	23	-12	0.33	-0.21	0.22	0.48	79	5.34	141	79	52	0	7	2	0
	ROCKFORD	25	8	41	-11	16	-15	0.17	-0.20	0.11	0.50	116	4.24	133	78	64	0	7	3	0
	SPRINGFIELD	36	16	57	-2	26	-11	0.15	-0.46	0.15	0.15	21	5.58	135	80	47	0	7	1	0
IN	EVANSVILLE	43	20	57	11	32	-9	0.86	-0.03	0.75	0.86	84	4.81	68	82	62	0	6	3	1
	FORT WAYNE	27	9	45	-3	18	-15	0.41	-0.13	0.28	0.46	75	6.54	142	82	62	0	7	3	0
	INDIANAPOLIS	36	15	55	7	26	-11	0.29	-0.41	0.29	0.29	36	5.07	89	82	50	0	7	1	0
	SOUTH BEND	29	10	45	-4	19	-14	0.38	-0.14	0.17	0.47	80	6.41	132	75	62	0	7	3	0
IA	BURLINGTON	28	12	50	-8	20	-15	0.08	-0.47	0.05	0.13	21	4.58	132	84	53	0	7	3	0
	CEDAR RAPIDS	24	8	41	-15	16	-15	0.01	-0.34	0.01	0.02	5	1.77	70	80	56	0	7	1	0
	DES MOINES	29	13	46	-7	21	-12	0.00	-0.35	0.00	0.14	36	2.48	95	71	58	0	7	0	0
	DUBUQUE	22	5	40	-11	14	-16	0.26	-0.18	0.16	0.52	104	3.00	94	82	67	0	7	3	0
	SIOUX CITY	28	9	41	-14	18	-13	0.00	-0.30	0.00	0.17	52	0.94	61	81	64	0	7	0	0
	WATERLOO	21	6	39	-19	14	-16	0.13	-0.20	0.12	0.32	84	2.95	130	82	67	0	7	2	0
KS	CONCORDIA	35	13	49	-6	24	-14	0.05	-0.37	0.05	0.07	15	1.26	68	80	62	0	7	1	0
	DODGE CITY	38	15	66	-5	27	-14	0.26	-0.04	0.19	0.26	76	1.10	68	85	64	0	7	3	0
	GOODLAND	50	20	72	-1	35	-1	0.05	-0.18	0.03	0.06	23	1.00	88	87	68	0	7	2	0
	TOPEKA	39	18	64	-3	28	-12	0.06	-0.40	0.06	0.18	35	1.84	69	75	51	0	6	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 8, 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	37	18	62	0	28	-14	0.20	-0.30	0.20	0.20	35	1.19	49	79	65	0	6	1	0
KY	JACKSON	48	25	64	8	37	-6	2.61	1.59	1.66	2.61	223	10.22	122	82	49	0	5	2	2
	LEXINGTON	44	20	61	8	32	-10	1.44	0.45	1.07	1.44	127	8.48	110	83	63	0	6	2	1
	LOUISVILLE	47	23	63	14	35	-8	0.94	-0.03	0.81	0.94	85	7.10	93	77	46	0	6	2	1
	PADUCAH	43	21	53	8	32	-11	1.57	0.62	1.33	1.57	144	6.75	80	87	57	0	7	2	1
LA	BATON ROUGE	62	41	82	29	51	-6	0.71	-0.39	0.37	0.71	56	9.97	79	90	62	0	2	3	0
	LAKE CHARLES	56	38	77	31	47	-11	0.69	-0.04	0.44	0.69	83	7.48	78	95	74	0	1	3	0
	NEW ORLEANS	60	44	77	35	52	-8	0.49	-0.66	0.46	0.49	37	9.52	75	94	81	0	0	3	0
	SHREVEPORT	54	32	71	25	43	-13	0.53	-0.43	0.40	0.54	49	3.98	40	90	60	0	4	3	0
ME	CARIBOU	21	-10	37	-19	6	-13	0.00	-0.52	0.00	0.03	5	6.25	111	71	31	0	7	0	0
	PORTLAND	31	7	47	-2	19	-11	0.07	-0.75	0.07	0.07	8	8.39	103	69	33	0	7	1	0
MD	BALTIMORE	41	19	62	4	30	-10	0.92	0.04	0.55	0.92	92	8.21	110	78	52	0	7	2	1
MA	BOSTON	35	18	55	11	27	-8	0.00	-0.81	0.00	0.00	0	7.37	91	61	35	0	7	0	0
	WORCESTER	31	12	48	2	21	-9	0.01	-0.84	0.01	0.01	1	7.19	88	69	35	0	7	1	0
MI	ALPENA	23	-6	44	-19	9	-15	0.17	-0.23	0.15	0.20	44	2.73	77	82	51	0	7	3	0
	GRAND RAPIDS	26	6	46	-8	16	-14	0.05	-0.36	0.03	0.31	66	6.06	150	77	48	0	7	2	0
	HOUGHTON LAKE	23	-7	42	-24	8	-17	0.14	-0.21	0.14	0.22	55	3.22	99	82	53	0	7	1	0
	LANSING	25	4	44	-9	15	-14	0.06	-0.31	0.05	0.36	86	4.28	123	76	56	0	7	2	0
	MUSKEGON	26	6	41	-5	16	-14	0.16	-0.25	0.14	0.35	76	5.48	129	77	54	0	7	2	0
	TRAVERSE CITY	24	-5	47	-18	9	-17	0.01	-0.31	0.01	0.02	5	4.47	87	87	48	0	7	1	0
MN	DULUTH	19	-5	32	-23	7	-14	0.14	-0.11	0.06	0.14	50	2.98	134	76	55	0	7	5	0
	INT'L FALLS	19	-13	34	-33	3	-15	0.16	0.02	0.14	0.16	100	1.93	118	84	47	0	7	2	0
	MINNEAPOLIS	21	6	33	-15	14	-13	0.02	-0.26	0.02	0.02	6	2.85	133	78	61	0	7	1	0
	ROCHESTER	18	3	35	-15	11	-14	0.60	0.35	0.39	0.62	221	3.38	172	78	65	0	7	3	0
	ST. CLOUD	20	2	31	-19	11	-12	0.11	-0.08	0.11	0.11	52	2.61	167	79	53	0	7	1	0
MS	JACKSON	61	37	79	26	49	-5	0.75	-0.40	0.60	0.75	57	7.80	68	91	60	0	3	3	1
	MERIDIAN	60	37	76	28	49	-5	0.72	-0.78	0.41	0.72	42	10.07	78	93	77	0	2	4	0
	TUPELO	55	30	77	22	42	-7	0.83	-0.58	0.59	0.83	52	6.93	61	90	74	0	4	6	1
MO	COLUMBIA	42	18	63	-2	30	-9	0.05	-0.59	0.05	0.05	7	2.31	50	75	40	0	7	1	0
	KANSAS CITY	36	16	62	-7	26	-13	0.12	-0.36	0.11	0.29	54	2.04	68	76	46	0	7	2	0
	SAINT LOUIS	41	19	62	4	30	-11	0.32	-0.40	0.32	0.32	40	3.47	66	73	55	0	6	1	0
	SPRINGFIELD	43	18	62	2	31	-11	0.51	-0.19	0.27	0.51	65	2.30	44	73	50	0	6	3	0
MT	BILLINGS	39	14	53	-21	27	-7	0.00	-0.18	0.00	0.05	25	3.13	198	81	56	0	6	0	0
	BUTTE	43	19	47	-4	31	4	0.35	0.20	0.21	0.38	224	1.24	106	90	50	0	7	2	0
	CUT BANK	26	2	47	-15	14	-14	0.00	-0.08	0.00	0.00	0	0.60	79	85	64	0	6	0	0
	GLASGOW	25	4	52	-6	14	-12	0.24	0.16	0.12	0.24	267	0.59	84	85	72	0	7	4	0
	GREAT FALLS	34	10	51	-15	22	-8	0.07	-0.10	0.04	0.11	55	2.52	181	87	56	0	6	2	0
	HAVRE	24	1	47	-9	12	-16	0.26	0.13	0.15	0.26	186	0.92	95	82	71	0	7	3	0
	MISSOULA	42	24	50	4	33	-1	0.63	0.44	0.33	0.65	295	4.00	195	90	79	0	4	5	0
NE	GRAND ISLAND	36	13	50	-5	24	-10	0.00	-0.33	0.00	0.01	3	0.66	42	75	62	0	7	0	0
	LINCOLN	33	12	44	-7	22	-12	0.00	-0.35	0.00	0.03	8	0.89	52	76	52	0	7	0	0
	NORFOLK	31	8	49	-14	19	-13	0.03	-0.29	0.03	0.14	39	0.70	41	78	63	0	7	1	0
	NORTH PLATTE	43	15	65	-5	29	-5	0.04	-0.17	0.04	0.04	17	1.09	96	84	56	0	7	1	0
	OMAHA	30	13	43	-6	22	-12	0.02	-0.33	0.02	0.05	13	0.91	46	75	59	0	7	1	0
	SCOTTSBLUFF	48	20	66	-3	34	0	0.18	-0.01	0.18	0.28	133	1.88	141	89	64	0	6	1	0
	VALENTINE	39	9	61	-21	24	-8	0.00	-0.19	0.00	0.31	148	0.97	98	81	63	0	7	0	0
NV	ELY	53	27	58	21	40	7	0.05	-0.17	0.05	0.10	40	1.83	105	84	57	0	6	1	0
	LAS VEGAS	71	52	77	45	62	6	0.00	-0.17	0.00	0.00	0	0.30	20	47	32	0	0	0	0
	RENO	60	36	67	32	48	6	0.08	-0.16	0.08	0.08	30	1.15	48	77	53	0	2	1	0
	WINNEMUCCA	57	33	63	24	45	6	0.38	0.21	0.33	0.40	211	2.01	123	87	58	0	2	2	0
NH	CONCORD	31	2	49	-9	16	-13	0.02	-0.59	0.02	0.02	3	7.41	123	79	36	0	7	1	0
NJ	NEWARK	39	22	59	12	31	-7	0.01	-0.84	0.01	0.01	1	7.73	98	60	42	0	6	1	0
NM	ALBUQUERQUE	59	36	64	30	47	2	0.06	-0.05	0.04	0.08	62	0.26	25	67	28	0	1	2	0
NY	ALBANY	30	8	44	1	19	-11	0.00	-0.60	0.00	0.00	0	5.79	108	73	43	0	7	0	0
	BINGHAMTON	28	8	42	-3	18	-10	0.03	-0.58	0.02	0.03	4	5.72	100	81	57	0	7	2	0
	BUFFALO	24	7	43	-3	16	-14	0.14	-0.46	0.12	0.21	31	6.99	112	80	51	0	7	3	0
	ROCHESTER	26	6	46	-9	16	-14	0.09	-0.42	0.04	0.10	17	3.72	75	78	54	0	7	5	0
	SYRACUSE	27	5	42	-8	16	-13	0.18	-0.38	0.17	0.19	30	5.74	107	81	54	0	7	2	0
NC	ASHEVILLE	55	29	69	27	42	-1	0.78	-0.25	0.30	0.78	67	6.13	68	89	59	0	7	3	0
	CHARLOTTE	55	29	73	20	42	-7	2.28	1.28	1.17	2.28	202	9.20	106	83	47	0	6	3	2
	GREENSBORO	51	26	70	13	38	-7	2.54	1.70	1.69	2.54	265	8.76	115	84	48	0	7	3	1
	HATTERAS	52	37	61	34	45	-4	2.74	1.68	1.99	2.74	228	12.83	117	98	74	0	0	5	1
	RALEIGH	51	26	71	16	39	-8	2.63	1.69	1.65	2.63	246	7.59	89	78	58	0	6	3	2
	WILMINGTON	56	34	75	25	45	-7	2.18	1.20	1.32	2.18	196	7.65	82	86	57	0	2	3	2
ND	BISMARCK	24	8	44	-13	16	-9	0.10	-0.04	0.10	0.10	63	0.67	60	75	62	0	7	1	0
	DICKINSON	28	5	53	-17	17	-10	0.04	-0.02	0.03	0.04	67	0.21	24	82	54	0	7	2	0
	FARGO	20	0	35	-19	10	-11	0.05	-0.14	0.02	0.05	23	0.93	59	80	64	0	7	3	0
	GRAND FORKS	16	-8	33	-23	4	-16	0.22	0.07	0.12	0.22	129	1.48	103	86	69	0	7	3	0
	JAMESTOWN	21	4	39	-18	12	-11	0.00	-0.14	0.00	0.00	0	0.39	30	88	68	0	7	0	0
	WILLISTON	24	2	50	-21	13	-11	0.13	0.01	0.06	0.13	100	0.57	54	78	66	0	7	3	0
OH	AKRON-CANTON	34	13	54	1	23	-10	0.26	-0.39	0.14	0.26	35	3.77	68	76	57	0	7	2	0
	CINCINNATI	42	19	59	9	31	-9	0.57	-0.22	0.52	0.57	63	6.11	93	80	57	0	7	2	1
	CLEVELAND	30	14	53	0	22	-11	0.22	-0.36	0.13	0.25	38	5.28	97	72	51	0	7	2	0
	COLUMBUS	40	18	56	7	29	-9	0.22	-0.37	0.22	0.22	33	5.01	93	71	45	0	7	1	0
	DAYTON	38	16	57	5	27	-9	0.24	-0.38	0.24	0.24	34	5.22	93	82	48	0	7	1	0
	MANSFIELD	33	13	53	1	23	-9	0.26	-0.34	0.17	0.27	40	4.60	84	85	52	0	7	3	0

Based on 1971-2000 normals ***** Not Available**

Weather Data for the Week Ending March 8, 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	26	8	44	-4	17	-15	0.27	-0.21	0.16	0.40	73	7.58	174	85	66	0	7	2	0
	YOUNGSTOWN	31	9	51	-5	20	-12	0.20	-0.38	0.11	0.20	30	4.89	97	73	51	0	7	2	0
OK	OKLAHOMA CITY	46	24	69	6	35	-12	0.36	-0.25	0.20	0.36	51	0.79	22	81	52	0	4	2	0
	TULSA	42	21	60	4	32	-15	1.02	0.30	0.60	1.02	126	1.47	34	81	59	0	4	4	1
OR	ASTORIA	55	46	58	41	51	6	4.16	2.38	1.44	4.16	204	17.92	92	91	84	0	0	7	3
	BURNS	55	29	60	22	42	8	0.28	-0.02	0.13	0.33	94	2.45	93	91	69	0	5	4	0
	EUGENE	60	46	65	41	53	8	1.63	0.20	0.71	1.91	116	12.46	80	93	77	0	0	5	2
	MEDFORD	61	45	67	38	53	7	0.84	0.38	0.44	0.88	166	6.21	122	91	60	0	0	3	0
	PENDLETON	56	34	64	22	45	2	0.35	0.07	0.15	0.42	135	2.78	93	81	58	0	2	4	0
	PORTLAND	59	43	62	33	51	5	2.50	1.58	1.29	2.51	237	10.33	100	90	81	0	0	5	1
	SALEM	60	44	64	39	52	7	3.32	2.24	1.45	3.39	273	12.28	101	90	81	0	0	6	3
PA	ALLENTOWN	36	16	50	5	26	-8	0.01	-0.73	0.01	0.01	1	8.99	127	66	47	0	7	1	0
	ERIE	26	9	47	-4	17	-15	0.38	-0.23	0.30	0.47	68	6.46	117	76	61	0	7	2	0
	MIDDLETOWN	38	20	53	12	29	-7	0.11	-0.63	0.11	0.11	13	6.82	103	76	42	0	7	1	0
	PHILADELPHIA	40	23	58	12	31	-8	0.37	-0.41	0.31	0.37	42	9.04	126	67	45	0	6	2	0
	PITTSBURGH	38	16	53	5	27	-8	0.13	-0.52	0.09	0.13	18	4.56	78	74	42	0	7	2	0
	WILKES-BARRE	33	11	49	0	22	-12	0.00	-0.51	0.00	0.00	0	4.87	95	77	43	0	7	0	0
	WILLIAMSPORT	34	13	48	3	23	-10	0.00	-0.64	0.00	0.00	0	3.80	61	76	45	0	7	0	0
RI	PROVIDENCE	37	18	59	10	28	-7	0.00	-0.88	0.00	0.00	0	8.40	95	65	40	0	7	0	0
SC	BEAUFORT	56	38	74	35	47	-7	0.74	0.02	0.46	0.74	89	4.60	58	92	61	0	0	4	0
	CHARLESTON	56	38	75	33	47	-8	1.58	0.75	0.78	1.58	168	6.43	79	89	58	0	0	4	2
	COLUMBIA	56	33	76	28	44	-8	2.00	1.00	1.40	2.00	175	8.32	86	85	65	0	2	4	2
	GREENVILLE	56	33	73	25	45	-3	2.00	0.76	1.30	2.00	142	8.24	82	85	43	0	2	3	2
SD	ABERDEEN	22	5	36	-16	14	-12	0.33	0.13	0.30	0.33	150	0.77	65	82	68	0	7	2	0
	HURON	26	4	45	-18	15	-13	0.19	-0.06	0.19	0.22	79	0.79	59	82	57	0	7	1	0
	RAPID CITY	36	9	59	-18	23	-9	0.03	-0.13	0.03	0.28	156	0.75	74	89	66	0	7	1	0
	SIOUX FALLS	23	3	36	-16	13	-14	0.02	-0.22	0.02	0.18	67	1.17	91	83	67	0	7	1	0
TN	BRISTOL	56	29	66	20	43	0	1.14	0.23	0.91	1.14	110	6.20	78	87	41	0	5	3	1
	CHATTANOOGA	62	35	74	29	48	0	0.34	-1.03	0.32	0.34	22	7.93	67	87	55	0	3	2	0
	KNOXVILLE	58	33	69	25	46	0	0.92	-0.24	0.92	0.94	72	9.00	91	88	49	0	4	1	1
	MEMPHIS	48	28	66	15	38	-12	2.40	1.23	2.39	2.40	179	10.52	106	90	65	0	5	2	1
	NASHVILLE	52	27	69	19	40	-6	2.41	1.32	1.96	2.41	194	10.11	114	93	58	0	6	2	1
TX	ABILENE	57	29	78	11	43	-10	0.03	-0.27	0.03	0.03	9	0.52	21	75	57	0	3	1	0
	AMARILLO	51	21	72	3	36	-9	0.09	-0.10	0.07	0.09	41	0.48	34	84	40	0	6	2	0
	AUSTIN	58	33	72	23	46	-13	1.17	0.63	0.58	1.18	190	2.27	50	86	67	0	4	4	1
	BEAUMONT	57	39	78	32	48	-11	0.77	0.01	0.69	0.77	90	7.49	76	93	65	0	1	4	1
	BROWNSVILLE	70	49	85	37	60	-6	0.59	0.43	0.31	0.59	311	1.35	49	95	74	0	0	3	0
	CORPUS CHRISTI	64	42	82	34	53	-10	0.86	0.43	0.86	0.86	176	1.77	45	86	70	0	0	1	1
	DEL RIO	68	43	78	30	55	-6	0.02	-0.19	0.02	0.02	8	0.24	14	75	43	0	1	1	0
	EL PASO	68	46	77	39	57	3	0.16	0.09	0.16	0.16	178	0.16	17	55	26	0	0	1	0
	FORT WORTH	56	30	71	16	43	-11	0.10	-0.64	0.09	0.10	12	0.84	16	80	50	0	4	2	0
	GALVESTON	57	43	72	34	50	-11	1.34	0.77	1.02	1.34	206	4.39	60	97	76	0	0	3	1
	HOUSTON	58	37	77	27	48	-11	1.23	0.51	1.03	1.23	150	4.58	61	91	68	0	2	5	1
	LUBBOCK	57	25	83	9	41	-7	0.01	-0.15	0.01	0.01	6	0.17	12	68	42	0	6	1	0
	MIDLAND	64	31	81	18	48	-5	0.00	-0.13	0.00	0.00	0	0.26	21	69	44	0	4	0	0
	SAN ANGELO	64	33	76	17	48	-6	0.02	-0.24	0.02	0.02	7	0.08	3	68	48	0	4	1	0
	SAN ANTONIO	63	37	80	27	50	-9	0.31	-0.12	0.30	0.31	63	0.96	25	83	54	0	2	2	0
	VICTORIA	60	38	77	28	49	-12	0.75	0.25	0.64	0.75	132	2.41	48	93	74	0	2	2	1
	WACO	56	29	69	17	42	-13	0.05	-0.59	0.03	0.05	7	0.81	16	84	64	0	5	2	0
	WICHITA FALLS	50	25	77	9	38	-13	0.09	-0.39	0.05	0.10	18	0.45	14	84	61	0	4	2	0
UT	SALT LAKE CITY	58	42	62	34	50	10	0.27	-0.12	0.17	0.34	77	3.11	99	83	41	0	0	3	0
VT	BURLINGTON	25	3	36	-7	14	-12	0.04	-0.38	0.03	0.04	8	4.32	99	77	42	0	7	2	0
VA	LYNCHBURG	50	22	70	9	36	-6	1.00	0.16	0.72	1.00	104	8.08	106	84	44	0	7	3	1
	NORFOLK	47	31	73	24	39	-7	0.99	0.10	0.80	0.99	97	7.29	88	88	58	0	4	3	1
	RICHMOND	48	26	73	11	37	-7	0.74	-0.15	0.50	0.74	73	7.05	94	75	61	0	6	3	1
	ROANOKE	51	25	67	13	38	-5	1.25	0.42	0.89	1.25	132	7.52	104	81	58	0	6	4	1
	WASH/DULLES	42	16	62	-1	29	-10	0.88	0.12	0.56	0.88	101	7.38	110	83	54	0	7	2	1
WA	OLYMPIA	55	43	60	33	49	7	5.12	3.81	1.65	5.12	341	18.16	119	95	89	0	0	7	4
	QUILLAYUTE	51	44	55	38	48	5	6.70	3.90	2.56	6.70	208	29.27	100	92	86	0	0	7	4
	SEATTLE-TACOMA	57	46	60	37	52	7	4.93	4.03	1.72	4.95	476	14.76	143	90	83	0	0	6	4
	SPOKANE	44	30	53	11	37	0	1.72	1.36	0.52	1.77	432	4.59	123	94	69	0	3	5	1
	YAKIMA	54	30	66	21	42	2	0.57	0.41	0.43	0.57	300	2.30	106	85	67	0	4	3	0
WV	BECKLEY	45	20	58	-1	32	-6	5.12	4.31	4.19	5.12	551	13.02	183	82	56	0	7	2	2
	CHARLESTON	47	20	62	4	34	-7	1.14	0.25	0.72	1.14	113	8.20	110	93	45	0	7	2	1
	ELKINS	45	12	57	-10	29	-7	0.87	0.00	0.56	0.87	87	7.13	93	89	42	0	7	2	1
	HUNTINGTON	46	20	61	5	33	-9	1.17	0.30	0.76	1.17	117	8.53	117	90	43	0	7	2	1
WI	EAU CLAIRE	20	2	35	-21	11	-14	0.00	-0.25	0.00	0.00	0	3.20	151	79	52	0	7	0	0
	GREEN BAY	21	-5	37	-24	8	-18	0.14	-0.17	0.13	0.17	49	2.96	115	84	55	0	7	2	0
	LA CROSSE	23	4	39	-21	13	-16	0.28	0.02	0.13	0.31	107	2.67	108	81	49	0	7	3	0
	MADISON	24	4	43	-8	14	-15	0.37	0.02	0.22	0.44	113	2.33	80	75	54	0	7	2	0
	MILWAUKEE	24	11	44	-1	18	-13	0.19	-0.22	0.15	0.37	80	3.11	79	76	63	0	7	3	0
WY	CASPER	43	21	55	-3	32	0	0.32	0.13	0.32	0.54	257	2.02	141	85	63	0	6	1	0
	CHEYENNE	47	25	61	-1	36	4	0.19	0.01	0.10	0.27	135	2.43	223	80	54	0	5	2	0
	LANDER	48	21	58	-6	34	3	0.06	-0.13	0.04	0.29	132	1.09	85	84	33	0	7	2	0
	SHERIDAN	41	17	56	-14	29	-3	0.05	-0.10	0.04	0.19	112	2.04	135	78	55	0	6	2	0

Based on 1971-2000 normals ***** Not Available**

February Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: California experienced an unusual February, with record-setting warmth occurring between early- and late-month storminess. The rain and snow, while significant, failed to appreciably dent California's 3-year drought. However, the precipitation aided drought-stressed rangeland, pastures, and winter grains, and temporarily eased irrigation requirements. At month's end, beneficial precipitation also overspread other drought-affected areas of the West, including the Great Basin and parts of the Southwest. Meanwhile, a sustained stretch of stormy weather improved water-supply prospects in the Northwest.

Farther east, snowy conditions on the northern High Plains contrasted with drier-than-normal weather on the southern Plains. During February, the Plains' winter wheat condition remained steady or declined due to a combination of drought, temperature extremes, occasional high winds, and exposure to bitter cold without the benefit of a protective snow cover. By month's end, nearly half (46 percent) of the wheat was rated in very poor to poor condition in Texas, along with 31 percent in Oklahoma, 22 percent in Kansas, and 18 percent in Nebraska.

Meanwhile in the Corn Belt, bitterly cold, often snowy weather hampered rural travel and maintained stress on winter-weary livestock. Many individual station records for seasonal snowfall and days with sub-zero temperatures were approached, tied, or broken, especially in the Great Lakes States, as Midwestern communities experienced their harshest winter since at least the 1970s.

Elsewhere, much of the South and East were also exposed to periodic bouts of wintry weather and frigid conditions. However, winter agricultural regions of Deep South Texas and peninsular Florida continued to escape without a significant freeze.

Summary: Early-month precipitation was initially heaviest across the Deep South, where record-setting precipitation totals for February 2 included 1.95 inches in Greenwood, MS, and 1.47 inches in Little Rock, AR. Farther north and west, however, precipitation changed to snow. Daily-record snowfall totals for February 2 reached 6.2 inches in Paducah, KY, and 4.0 inches in Wichita Falls, TX. Snow quickly spread into the northern Mid-Atlantic States by February 3, when daily-record totals included 9.3 inches in Allentown, PA; 8.0 inches in New York's Central Park; and 7.7 inches in Newark, NJ. Farther south, record-setting precipitation totals for February 3 climbed to 1.89 inches in Roanoke, VA, and 1.34 inches in Baltimore, MD. By February 4, a second storm quickly followed the first. Heavy rain developed across the Mid-South, leading to daily-record amounts for February 4 in Tennessee locations such as Memphis (2.88 inches) and Jackson (2.58 inches). From the central Plains into the Midwest, daily-record snowfall amounts for February 4 totaled 12.9 inches in Topeka, KS; 7.5 inches in Kansas City, MO; 6.9 inches in Columbus, OH; and 6.8 inches in Indianapolis, IN.

Meanwhile, the Northeast endured its second winter storm in 3 days. In New York, daily-record snowfall amounts for February 5 reached 13.2 inches in Binghamton; 12.7 inches in Rochester; and 10.4 inches in Albany. Just to the south, parts of Pennsylvania were especially hard hit by freezing rain, which accumulated up to an inch. At the height of the storm on February 5, more than three-quarters of a million customers in Pennsylvania and Maryland lost power. Precipitation lingered into February 6 across the Deep South, where daily-record snowfall amounts included 0.5 inch in Meridian, MS, and 0.3 inch in Alexandria, LA, and San Antonio, TX. Eventually, the focus for wintry precipitation shifted into the Northwest. In Oregon, daily-record snowfall totals included 3.8 inches (on February 6) at Portland and 6.8 inches (on February 7) at Eugene. Daily-record snowfall totals for February 8 reached 9.7 inches in Yakima, WA; 5.3 inches in Lewiston, ID; and 5.0 inches in Pendleton, OR. Snow coverage in the contiguous U.S., which had been just 34 percent on January 28, topped 50 percent on February 1 and peaked at 67 percent on February 7.

In Illinois, Chicago's season-to-date snowfall through February climbed to 68.3 inches (231 percent of normal). The only seasons featuring more snow in Chicago were July 1978 – June 1979 (89.7 inches), 1977-78 (82.3 inches), 1969-70 (77.0 inches), and 1966-67 (68.4 inches). In a similar vein, December-February snowfall totaled 52.2 inches (237 percent of normal) in Indianapolis, IN, surpassing the winter of 1981-82 record of 51.0 inches. Wausau, WI, also set a winter snowfall record, with the 64.5-inch total edging the December 1961 – February 1962 record of 64.1 inches. In Michigan, Grand Rapids' snow depth climbed to 23 inches from February 7-10, tying a February record originally set on February 16-17, 1936. Grand Rapid's depth later reached 24 inches on February 18, following a 5.6-inch snowfall the previous day, erasing the previous records. Grand Rapids also set a record with a snow depth of 20 inches or greater on 16 consecutive days from February 5-20. The previous mark had been 9 days in a row from February 13-21, 1936, and January 14-22, 1979. Farther east, Scranton, PA, experienced its snowiest February and fifth-snowiest month. Scranton's 29.3-inch monthly total surpassed the February 1914 standard of 27.9 inches.

Early-month warmth prevailed across the lower Southeast in advance of a series of storms. In Florida, record-setting highs for February 3 soared to 86°F in Orlando and 83°F in Vero Beach. Florida's warmth lingered for a few more days, resulting in daily-record highs in locations such as Ft. Myers (88°F on February 4), Orlando (87°F on February 4), and Vero Beach (87°F on February 5). Meanwhile, bitterly cold air overspread the Plains, Midwest, and Northwest. In Montana, consecutive daily-record lows were established on February 5-6 in locations such as Great Falls (-27 and -34°F) and Lewistown (-29 and -33°F). For Great Falls, it was the coldest reading since February 2, 1996, when the low dipped to -35°F. Elsewhere in Montana, lows on February 6 plummeted to -47°F in West Yellowstone and -50°F in Elk Park, north of Butte. Elk Park's minimum represented the lowest reading in Montana since January 12, 2007, when West Yellowstone reported -51°F. Daily-record lows were also widespread across other regions. Selected records included -28°F (on February 6) in Sheridan, WY; -16°F (on February 7) in Lincoln, IL; -13°F (on February 7) in Fort Wayne, IN; -4°F (on February 7) in Yakima, WA; and 3°F (on February 6) in Gage, OK.

Following a brief surge of precipitation into drought-stricken California and the Great Basin, precipitation again waned. Daily-record totals for February 9 included 1.75 inches in Red Bluff, CA, and 0.92 inch in Elko, NV. Meanwhile, the focus for heavy precipitation shifted into the Northwest. On February 9-10, Monument, OR, received 12.0 inches of snow in a 24-hour period, tying an all-time record originally set on January 9-10, 1975. Elsewhere in the Northwest, record-setting snowfall totals for February 9 reached 6.1 inches in Missoula, MT, and 3.0 inches in Lewiston, ID. Lewiston's 4-day (February 6-9) snowfall climbed to 10.4 inches. By February 10, snowfall spread to parts of the Plains, where daily-record amounts included 4.2 inches in Wichita, KS, and 1.0 inch in Borger, TX. From February 11-13, a complex storm system evolved across the South and East. An initial surge of snow produced daily-record totals on February 11 in North Carolina locations such as New Bern (10.0 inches) and Cape Hatteras (5.5 inches). Meanwhile, heavy rain in the central Gulf Coast region led to a record-setting total (2.11 inches) for February 11 in New Iberia, LA. By February 12-13, a more extensive snowfall struck the East. Daily-record amounts for February 12 totaled 7.0 inches in Greensboro, NC, and 3.9 inches in Huntsville, AL. At the same time, freezing rain glazed parts of northern Georgia and the Carolinas. On February 13, record-high daily amounts climbed to 17.8 inches at Allentown, PA; 11.7 inches at Virginia's Dulles Airport; 10.5 inches at Worcester, MA; and 9.5 inches at both Bridgeport, CT, and Wilmington, DE. In the wake of the big storm, several fast-moving disturbances crossed the Midwest and Northeast. On February 14, for example, record-setting snowfall totals reached 5.5 inches in both Indianapolis, IN, and Springfield, IL.

The Northwest rapidly warmed in mid-February, but frigid conditions persisted in the Midwest. Record-setting lows for February 10 dipped to -19°F in Cedar Rapids, IA, and -16°F in Moline, IL. Even colder conditions arrived by February 11, when daily-record lows included -22°F in Moline and -21°F in Cedar Rapids. Other daily-record lows for February 11 plunged to -26°F in Pellston, MI; -25°F in Waterloo, IA; and -16°F in Lincoln, IL. Marquette, MI (-23°F on February 11), reported its lowest reading since December 25, 2004, when the low dipped to -24°F. In Indiana, Fort Wayne posted consecutive daily-record lows (-16 and -15°F, respectively) on February 11-12. Very cold conditions lingered for several more days across the deeply snow-covered Midwest and Northeast, resulting in daily-record lows in locations such as Watertown, NY (-27°F on February 12); Toledo, OH (-14°F on February 12); and Lincoln, IL (-14°F on February 15). In stark contrast, warmth dominated California and the Southwest. Palmdale, CA, tied a monthly record with a high of 81°F on February 12, and shattered the record with highs of 84°F on February 13 and 14. Other monthly record highs in California on February 13 included 88°F in Barstow-Daggett; 84°F in Lancaster; and 81°F in Bishop—erasing marks from late-February 1986 in all three locations. Barstow-Daggett attained 88°F again on February 14. Both Lancaster and Bishop reached or exceeded the 80-degree mark on 4 days in a row from February 12-15, tying records first set from February 25-28, 1986. Highs topped the 90-degree mark in several locations from southern California to southern Texas, resulting in daily-record highs in locations such as Elsinore, CA (91°F on February 13), and San Antonio, TX (92°F on February 14). Elsinore also collected a trio of daily-record highs (91, 90, and 90°F) from February 13-15, while Phoenix, AZ, notched three consecutive daily-record highs (85, 86, and 84°F) from February 14-16.

The year's first widespread severe weather outbreak, accompanied by locally heavy showers, struck the Southeast and lower Midwest on February 20-21. Preliminary data suggested that there were more than three dozen tornadoes, along with several hundred reports of straight-line wind damage. In the central and eastern Corn Belt, heavy rain combined with melting snow to produce minor to locally moderate flooding. The same storm was responsible for wind-driven snow, which created blizzard conditions on February 20-21 in some areas from Iowa northward into the upper Great Lakes region. Prior to the severe weather outbreak, widespread snow affected the Midwest. Record-setting snowfall totals for February 17 reached 6.7 inches in Milwaukee, WI; 5.6 inches in Grand Rapids, MI; and 4.7 inches in Waterloo, IA. By February 18, snow shifted into the Northeast, where Concord, NH, received a daily-record total of 12.2 inches. A few days later, the severe weather outbreak hit Illinois particularly hard, but also affected most areas from the middle and lower Mississippi Valley eastward. Springfield, IL, noted a wind gust to 64 mph on February 20, supplanting its

monthly record of 63 mph set on February 27, 1948. Elsewhere on the 20th, daily-record rainfall totals reached 2.14 inches in Huntsville, AL, and 1.64 inches in South Bend, IN. Meanwhile in Minnesota, Rochester set daily records on February 20 for both precipitation (0.99 inch) and snowfall (8.8 inches). Mason City, IA, received 7.1 inches of snow on February 20-21 to increase its depth to 19 inches, while Minneapolis-St. Paul, MN, collected 9.9 inches to boost its depth to 24 inches. By February 21, showers and gusty winds swept into the East, resulting in daily-record totals in locations such as Watertown, NY (0.86 inch), and Burlington, VT (0.65 inch).

On February 19, Marquette, MI, warmed to 41°F, marking its first reading above the freezing mark since December 5. Marquette's spell at or below 32°F, which lasted 75 days, broke a record originally set with a 72-day cold spell in 1978-79. For other areas east of the Rockies, brief warmth also dominated, while spring-like weather covered the West. In Arizona, Phoenix posted five consecutive daily-record highs (85, 86, 84, 88, and 86°F) from February 14-18. Similarly, Tucson, AZ, reported three daily-record highs in a row (88, 85, and 86°F) from February 15-17. On February 19, Needles, CA, tallied its earliest 90-degree reading on record. Prior to this year, Needles' earliest 90-degree reading had occurred on February 24, 1904. Warmth also spread into the South and East in advance of a cold front. On February 20, Columbia, SC (84°F), tied a monthly record most recently achieved on February 28, 2011. Elsewhere, daily-record highs included 82°F (on February 20) in Hattiesburg, MS, and 87°F (on February 21) in Vero Beach, FL.

Late in the month, Western warmth persisted 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).

Toward month's end, 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. 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. 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.

During February, mild weather prevailed across the western half of Alaska, while near to below-normal temperatures covered much of the remainder of the state. In the Aleutians, Cold Bay posted consecutive daily-record highs of 46°F on February 4-5. Later, strong winds accompanied slightly cooler weather across parts of mainland Alaska, where February 7 gusts were clocked gust to 55 mph in Bethel and 53 mph in King Salmon. Meanwhile in southeastern Alaska, Annette Island posted four consecutive daily-record lows (13, 11, 13, and 10°F) from February 6-9. Warmth became more notable across western Alaska in late February, when Kotzebue closed the month with consecutive daily-record highs (31 and 34°F, respectively). On February 27, Anchorage (49°F) and Bethel (46°F) also posted daily-record highs.

In Hawaii, an active weather pattern—featuring several cold fronts—further eased drought concerns. During the second full week of the month (February 9-15) rainfall on Kauai reached 11.16 inches in Kapahi and 9.46 inches in Wainiha. Elsewhere on Kauai, Lihue's monthly rainfall of 8.69 inches (275 percent of normal) was aided by 1- to 2-inch totals on February 5, 13, and 16. However, weaker-than-normal trade winds left some windward areas dry. On the Big Island, for example, February rainfall in Hilo totaled just 2.57 inches (27 percent of normal).

Fieldwork

Fieldwork summary provided by USDA/NASS

During February, below-normal temperatures were recorded for much of the central United States between the Rocky and Appalachian Mountains. Particularly cold weather was noted in the northern Corn Belt, with average temperatures in parts of Illinois, Iowa, Minnesota and Wisconsin more than 10°F below normal. Precipitation was generally close to normal across the nation, with small pockets of above-average moisture in the Pacific Northwest and the Mississippi Delta. However, the lack of winter precipitation in southern California and along the Red River in Oklahoma and Texas has exacerbated drought conditions in those areas.

Producers in California welcomed February precipitation and reported improved conditions due to recent rains, with winter forage, small grains, wheat, and alfalfa progressing. However, dryland crops continued to suffer from drought conditions, as seasonal precipitation still remained below normal. Rangeland and non-irrigated pasture conditions continued to be rated in mostly poor to fair condition.

Below-average moisture on the southern Plains continued to have a negative impact on winter wheat conditions. As of March 2, thirty-one percent of the winter wheat acreage in Oklahoma was rated in good to excellent condition, down 5 percentage points from the February 2 estimate. Fifteen percent of the Texas winter wheat acreage was rated in good to excellent condition on March 2, down 4 percentage points from February 2.

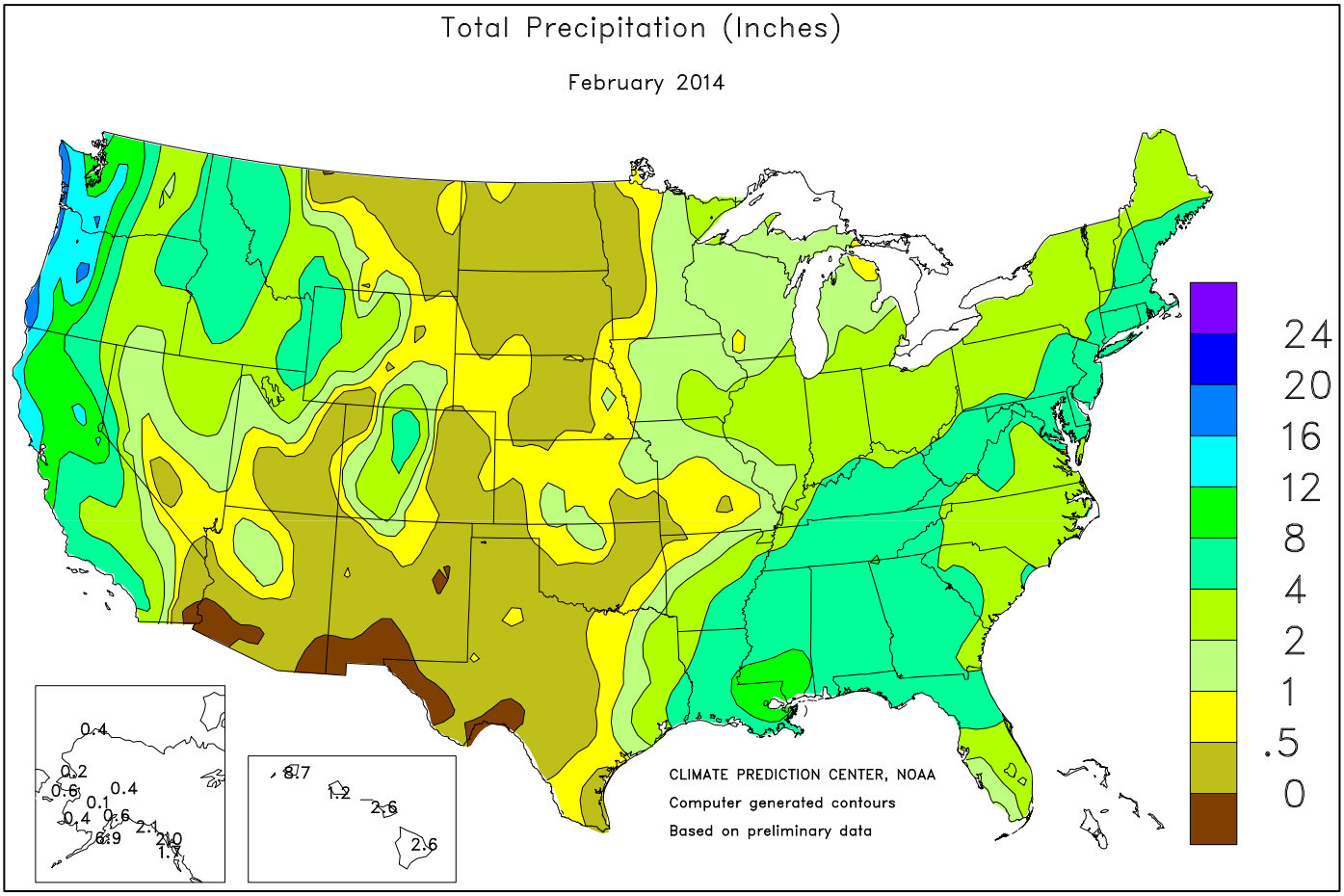
During the mid- to late-month period, bloom was noted in several of the southern citrus-growing areas in Florida, signaling the beginning of next year's crop. Growers in the Indian River area experimented with tenting young trees to eradicate or control the psyllid population that is causing greening. Other methods are also being used or tested to keep unaffected trees from getting the Huanglongbing (HLB, Citrus Greening) virus.

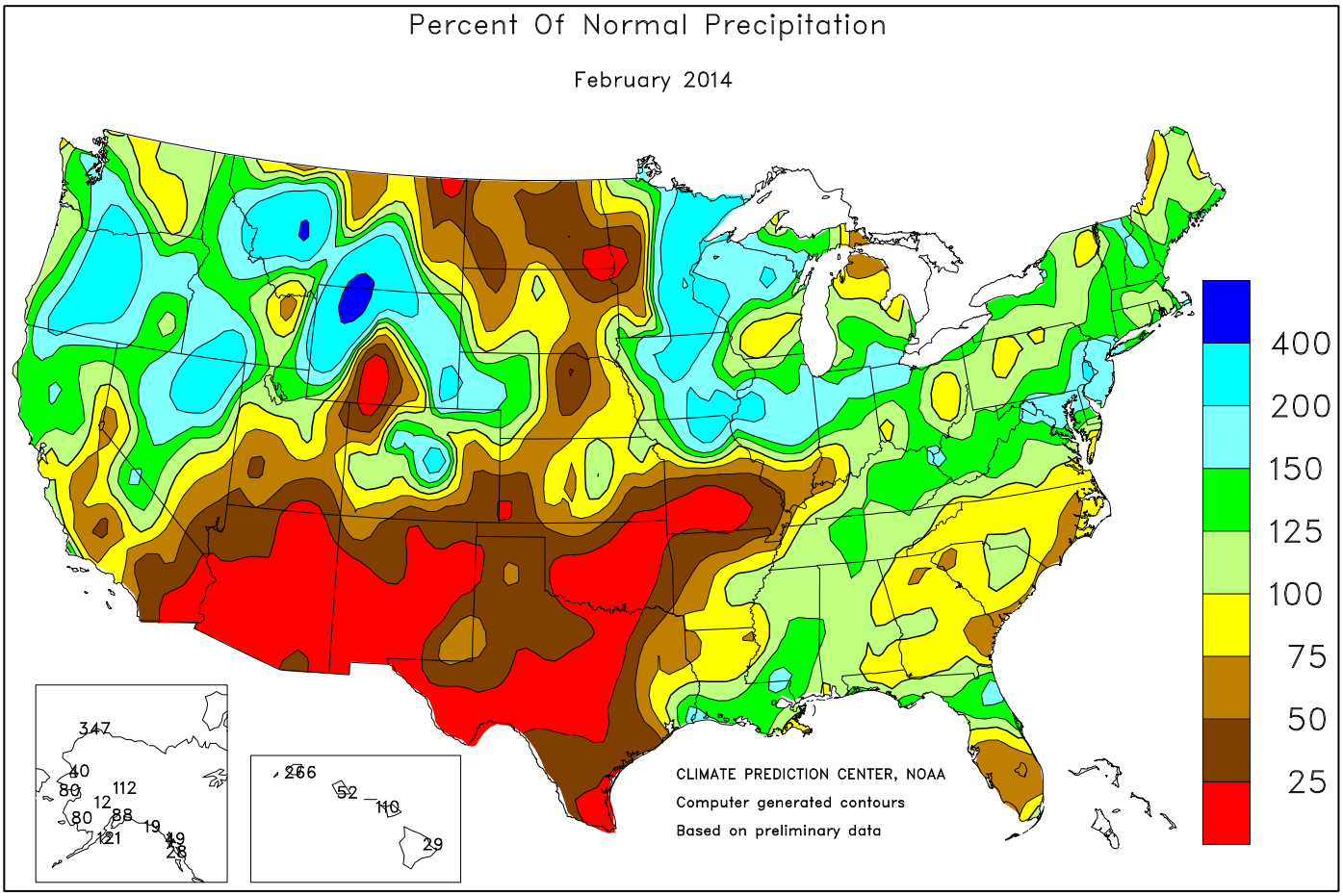
U.S. Crop Production Highlights

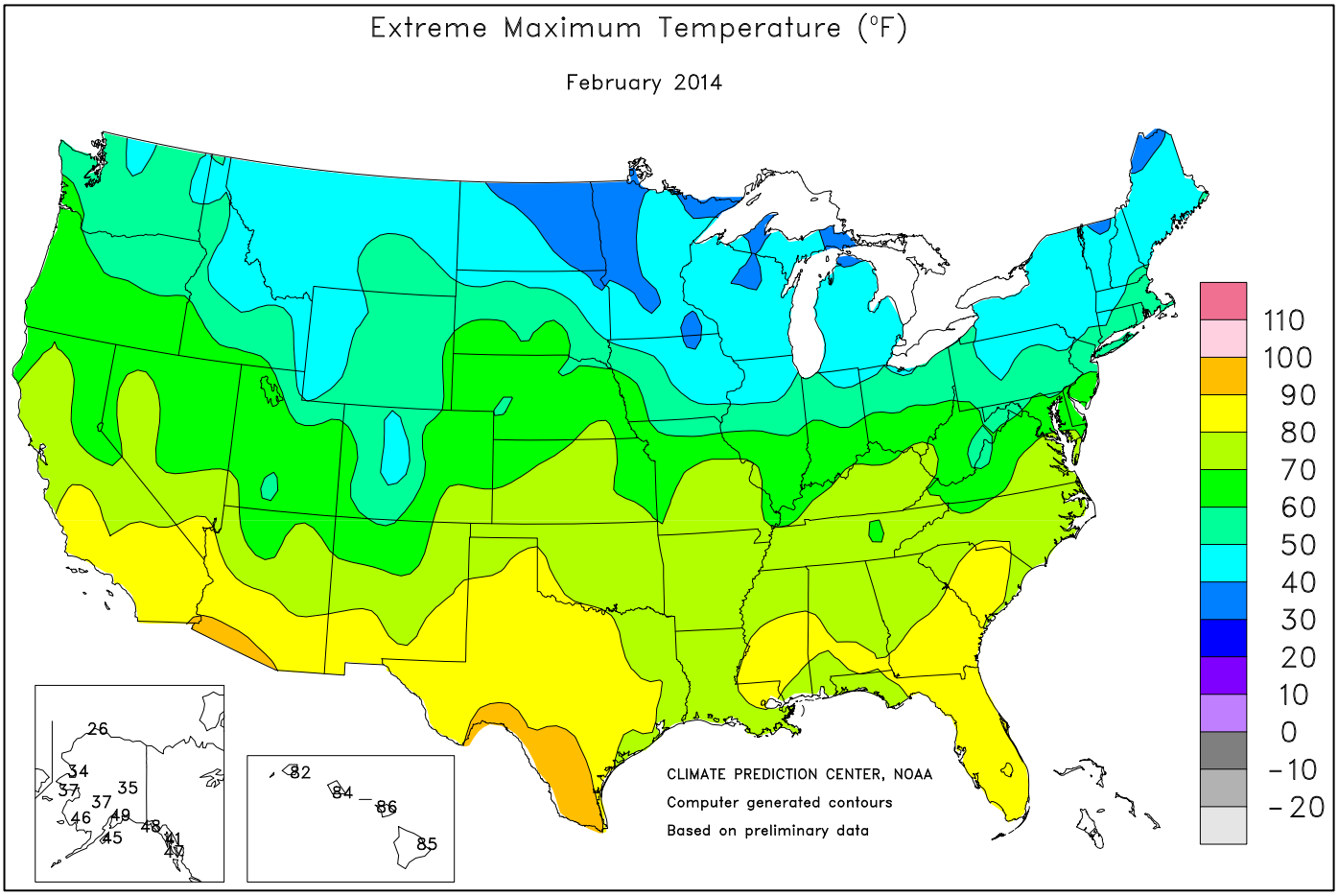
The following information was released by USDA's Agricultural Statistics Board on March 10, 2014. Forecasts refer to March 1.

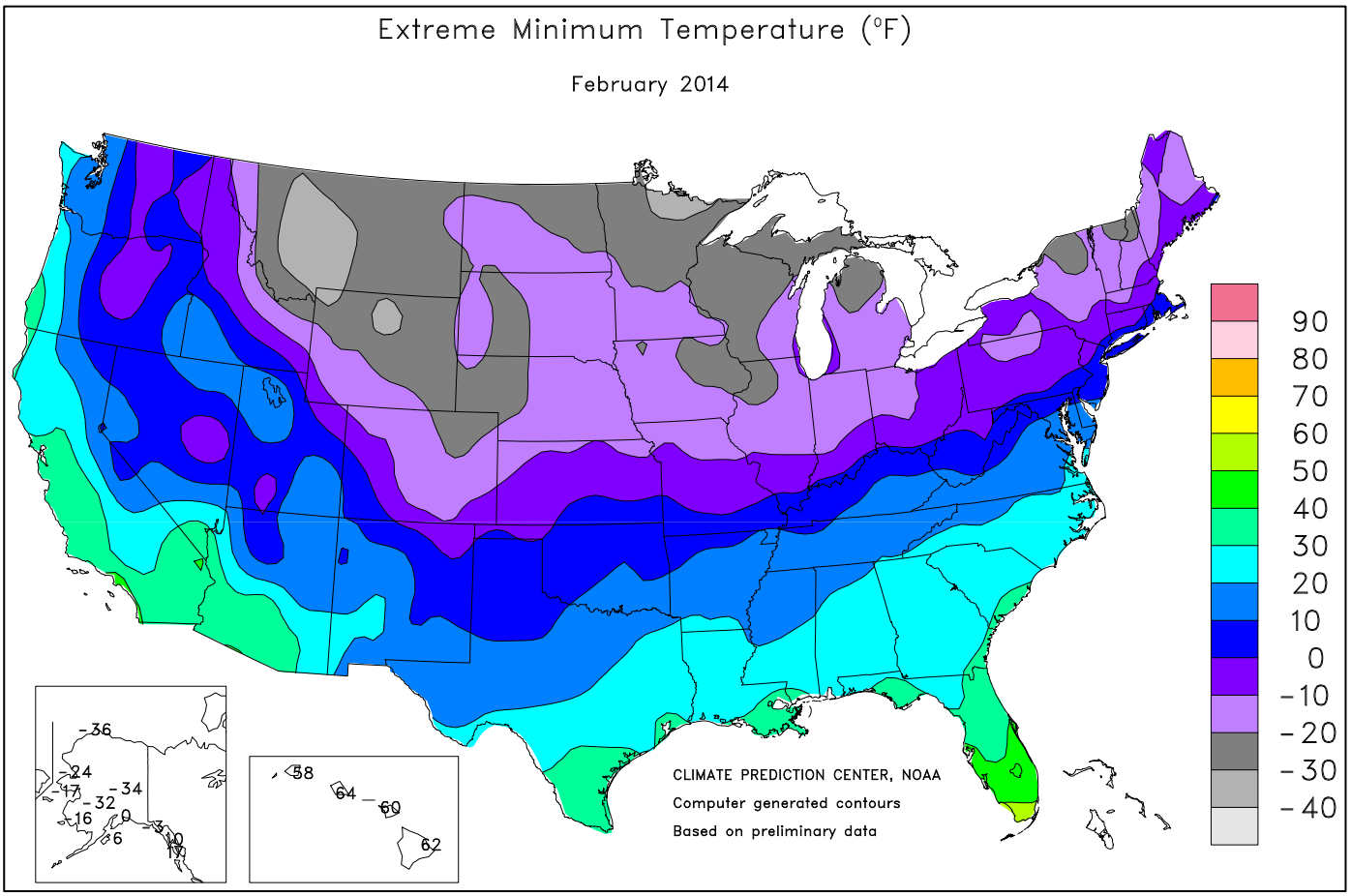
The U.S. **all orange** forecast for the 2013-2014 season is 7.37 million tons, down slightly from the previous forecast and down 12 percent from the 2012-2013 final utilization. The Florida all orange forecast, at 114 million boxes (5.13 million tons), is down 1 percent from the previous forecast and down 15 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 53.0 million boxes (2.39 million tons), down 2 percent from the previous forecast and down 21 percent from last season. The Row Count Survey conducted on February 25-26, 2014, showed that about 98 percent of the Early-Midseason rows had been harvested. The Florida Valencia orange forecast, at 61.0 million boxes (2.75 million tons), is unchanged from the previous forecast but down 8 percent from last season's final utilization.

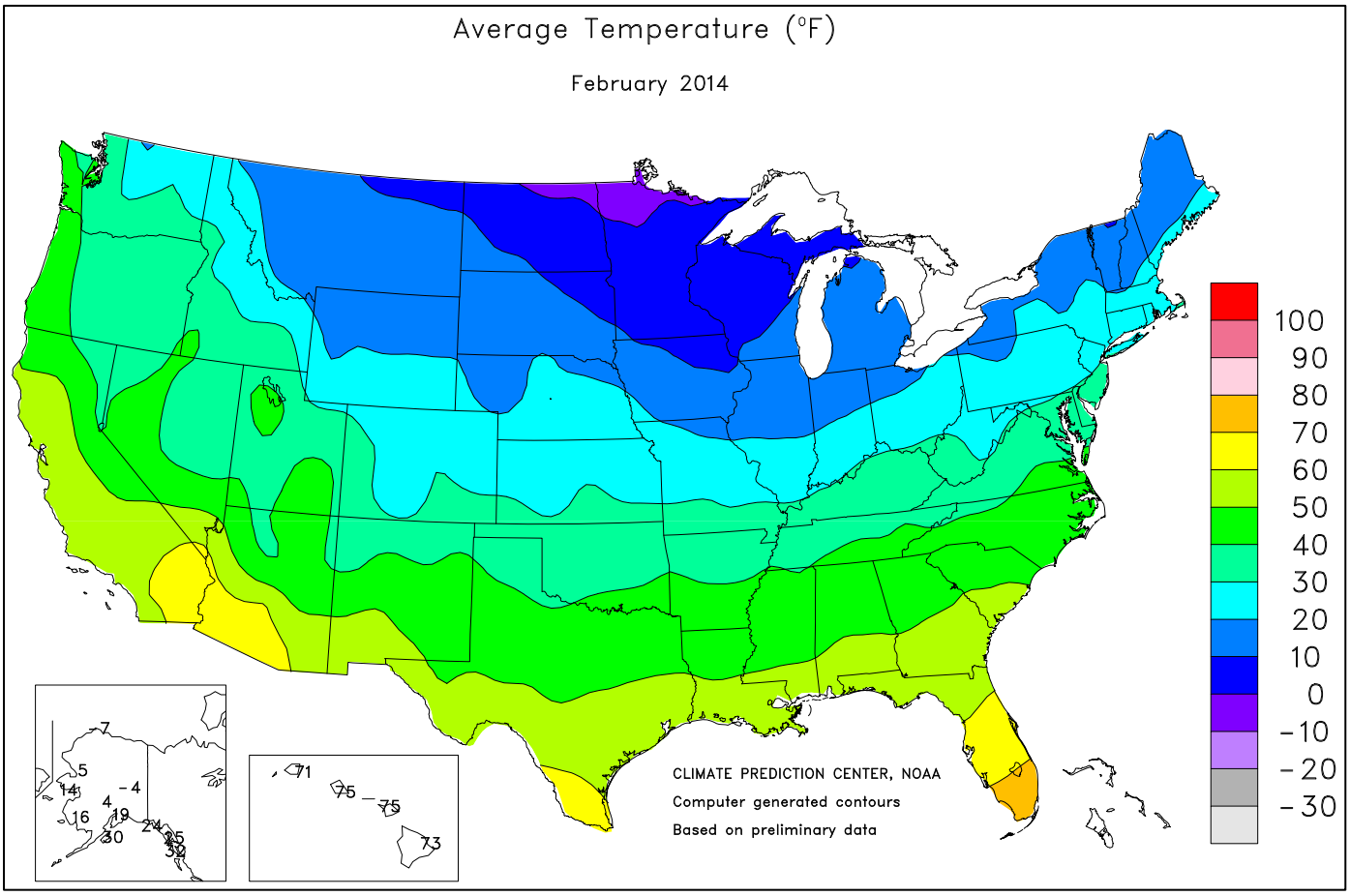
The California Valencia orange forecast is 12.0 million boxes (480,000 tons), up 4 percent from the previous forecast. This brings California's all orange forecast to 54.0 million boxes (2.16 million tons), up 1 percent from the January forecast. Objective survey measurements taken during January and February indicated that fruit set per tree was lower than the previous year, but the measured average fruit size was larger than the previous year. The forecast for Texas is carried forward from January.

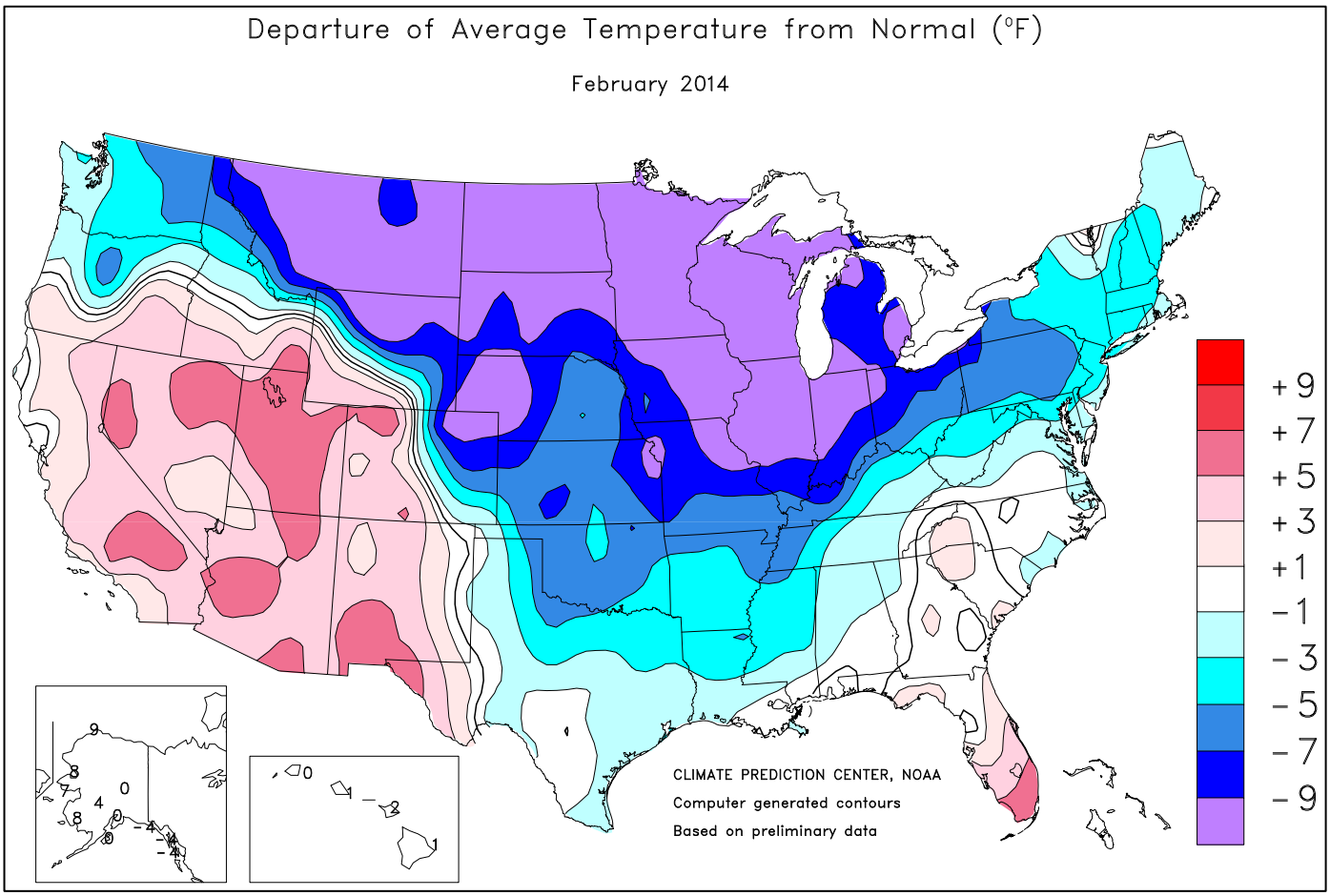

Total Precipitation (Inches)
February 2014
24
20
16
12
8
4
2
1
.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Percent Of Normal Precipitation
February 2014
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Maximum Temperature (°F)
February 2014
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
26
34
37
35
37
46
49
48
45
41
82
84
86
85
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Minimum Temperature (°F)
February 2014
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-36
-24
-17
-34
-32
-16
0
6
58
64
60
62
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Average Temperature (°F)
February 2014
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Departure of Average Temperature from Normal (°F)
February 2014
+9
+7
+5
+3
+1
-1
-3
-5
-7
-9
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

National Weather Data for Selected Cities

February 2014

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	46	-1	5.37	1.16	LEXINGTON	32	-4	4.73	1.46	COLUMBUS	26	-6	2.39	0.19
HUNTSVILLE	43	-1	6.57	1.62	LONDON-CORBIN	37	-2	4.23	0.51	DAYTON	24	-6	2.14	-0.15
MOBILE	53	0	4.19	-0.91	LOUISVILLE	33	-5	3.75	0.50	MANSFIELD	21	-6	2.31	0.14
MONTGOMERY	51	0	5.15	-0.30	PADUCAH	32	-6	3.15	-0.78	TOLEDO	17	-10	3.89	2.01
AK ANCHORAGE	19	0	0.65	-0.09	LA BATON ROUGE	53	0	7.18	2.08	YOUNGSTOWN	21	-7	2.26	0.23
BARROW	-7	9	0.41	0.29	LAKE CHARLES	53	-1	4.50	1.22	OK OKLAHOMA CITY	38	-4	0.36	-1.20
COLD BAY	31	3	4.12	1.53	NEW ORLEANS	56	0	6.31	0.84	TULSA	37	-5	0.32	-1.63
FAIRBANKS	-4	0	0.40	0.04	SHREVEPORT	48	-3	2.62	-1.59	OR ASTORIA	42	-2	7.40	-0.47
JUNEAU	25	-4	1.98	-2.04	ME BANGOR	18	-3	2.39	-0.15	BURNS	34	4	1.62	0.51
KING SALMON	23	7	0.06	-0.66	CARIBOU	12	-1	2.23	0.17	EUGENE	42	-1	7.97	1.62
KODIAK	30	0	6.95	1.23	PORTLAND	22	-3	4.27	1.13	MEDFORD	46	2	4.55	2.45
NOME	14	8	0.60	-0.15	MD BALTIMORE	33	-2	4.58	1.56	PENDLETON	33	-6	1.63	0.41
AZ FLAGSTAFF	37	5	0.43	-2.13	MA BOSTON	29	-2	4.13	0.83	PORTLAND	40	-3	5.12	0.94
PHOENIX	64	6	0.00	-0.77	WORCESTER	23	-3	4.08	0.98	SALEM	42	-1	7.01	1.92
TUCSON	61	6	0.01	-0.87	MI ALPENA	11	-8	1.08	-0.27	PA ALLENTOWN	24	-6	4.44	1.69
AR FORT SMITH	40	-4	0.98	-1.61	DETROIT	19	-8	2.82	0.94	ERIE	20	-8	3.43	1.15
LITTLE ROCK	41	-4	3.23	-0.10	FLINT	16	-8	1.48	0.13	MIDDLETOWN	27	-4	4.27	1.34
CA BAKERSFIELD	57	4	0.32	-0.89	GRAND RAPIDS	18	-7	2.34	0.81	PHILADELPHIA	32	-3	5.12	2.38
EUREKA	49	0	6.09	0.58	HOUGHTON LAKE	11	-9	1.19	-0.06	PITTSBURGH	26	-5	2.25	-0.12
FRESNO	57	6	2.10	-0.02	LANSING	17	-7	1.76	0.31	WILKES-BARRE	23	-6	2.77	0.69
LOS ANGELES	60	2	2.79	-0.32	MUSKEGON	18	-7	1.81	0.23	WILLIAMSPORT	23	-6	2.55	-0.06
REDDING	51	2	8.08	2.59	TRAVERSE CITY	14	-8	1.13	-0.66	PR SAN JUAN	79	2	3.50	1.20
SACRAMENTO	54	3	4.14	0.60	MN DULUTH	5	-10	2.11	1.28	RI PROVIDENCE	28	-3	4.71	1.26
SAN DIEGO	61	2	1.00	-1.04	INT'L FALLS	0	-11	0.93	0.29	SC CHARLESTON	53	2	2.18	-0.90
SAN FRANCISCO	55	3	3.76	-0.25	MINNEAPOLIS	9	-11	1.41	0.62	COLUMBIA	49	1	2.92	-0.92
STOCKTON	53	2	2.87	0.41	ROCHESTER	7	-11	1.76	1.01	FLORENCE	48	0	3.36	0.34
CO ALAMOSA	28	6	0.05	-0.16	ST. CLOUD	6	-10	1.16	0.57	GREENVILLE	46	2	3.08	-1.16
CO SPRINGS	31	-1	0.22	-0.13	MS JACKSON	48	-1	5.44	0.94	MYRTLE BEACH	48	-1	2.19	-1.31
DENVER	28	-3	0.19	-0.04	MERIDIAN	47	-3	6.88	1.53	SD ABERDEEN	7	-12	0.16	-0.32
GRAND JUNCTION	35	1	0.71	0.21	TUPELO	43	-2	4.33	-0.35	HURON	13	-8	0.42	-0.15
PUEBLO	32	-3	0.28	0.02	MO COLUMBIA	25	-9	1.36	-0.84	RAPID CITY	19	-8	0.27	-0.19
CT BRIDGEPORT	29	-3	4.19	1.27	JOPLIN	32	-7	0.26	-1.99	SIOUX FALLS	12	-9	0.68	0.17
HARTFORD	24	-5	3.96	1.00	KANSAS CITY	25	-8	1.36	0.05	TN BRISTOL	38	0	3.26	-0.14
DC WASHINGTON	38	0	4.02	1.39	SPRINGFIELD	32	-5	0.50	-1.78	CHATTANOOGA	44	1	5.19	0.34
DE WILMINGTON	31	-3	5.35	2.54	ST JOSEPH	22	-10	0.81	-0.32	JACKSON	38	-5	5.15	0.90
FL DAYTONA BEACH	63	3	3.81	1.07	ST LOUIS	27	-8	1.48	-0.80	KNOXVILLE	41	-1	4.94	0.93
FT LAUDERDALE	73	5	1.35	-1.35	MT BILLINGS	19	-11	2.06	1.49	MEMPHIS	41	-4	4.96	0.65
FT MYERS	70	4	1.28	-0.82	BUTTE	14	-8	0.63	0.16	NASHVILLE	39	-2	5.09	1.40
JACKSONVILLE	57	1	2.74	-0.41	GLASGOW	11	-8	0.22	-0.04	TX ABILENE	45	-4	0.49	-0.64
KEY WEST	74	3	0.92	-0.59	GREAT FALLS	15	-11	1.12	0.61	AMARILLO	38	-3	0.36	-0.19
MELBOURNE	67	5	1.28	-1.21	HELENA	17	-9	1.98	1.60	AUSTIN	52	-3	0.52	-1.47
MIAMI	74	5	1.16	-0.91	KALISPELL	18	-9	1.09	-0.06	BEAUMONT	55	-1	5.45	2.10
ORLANDO	66	3	2.11	-0.24	MILES CITY	14	-11	0.11	-0.23	BROWNSVILLE	62	-1	0.08	-1.10
PENSACOLA	56	1	7.88	3.20	MISSOULA	20	-9	2.47	1.70	COLLEGE STATION	52	-3	0.89	-1.49
ST PETERSBURG	65	2	1.46	-1.41	NE GRAND ISLAND	24	-4	0.33	-0.35	CORPUS CHRISTI	59	-1	0.24	-1.60
TALLAHASSEE	57	2	4.38	-0.25	HASTINGS	24	-6	0.34	-0.33	DALLAS/FT WORTH	47	-2	0.41	-1.96
TAMPA	65	2	1.81	-0.86	LINCOLN	22	-6	0.62	-0.04	DEL RIO	57	1	0.22	-0.74
WEST PALM BEACH	72	5	1.05	-1.50	MCCOOK	23	-9	0.29	-0.35	EL PASO	57	6	0.00	-0.39
GA ATHENS	47	1	3.96	-0.43	NORFOLK	20	-6	0.42	-0.34	GALVESTON	55	-3	1.69	-0.92
ATLANTA	47	0	3.81	-0.87	NORTH PLATTE	20	-9	0.73	0.22	HOUSTON	55	0	2.39	-0.59
AUGUSTA	48	0	3.73	-0.38	OMAHA/EPPLEY	22	-6	0.72	-0.08	LUBBOCK	43	0	0.16	-0.55
COLUMBUS	51	1	5.41	0.93	SCOTTSBLUFF	21	-9	1.14	0.56	MIDLAND	48	-1	0.26	-0.32
MACON	49	0	4.60	0.05	VALENTINE	19	-8	0.62	0.14	SAN ANGELO	49	-1	0.06	-1.12
SAVANNAH	55	2	1.70	-1.22	NV ELKO	37	6	1.92	1.04	SAN ANTONIO	58	3	0.42	-1.33
HI HILO	73	2	2.57	-6.29	ELY	33	3	0.94	0.19	VICTORIA	56	-1	0.52	-1.52
HONOLULU	75	2	1.23	-1.12	LAS VEGAS	57	5	0.30	-0.39	WACO	48	-3	0.46	-1.97
KAHULUI	75	3	2.60	0.24	RENO	45	7	0.69	-0.37	WICHITA FALLS	41	-5	0.35	-1.22
LIHUE	71	-1	8.68	5.42	WINNEMUCCA	40	4	1.12	0.50	UT SALT LAKE CITY	42	7	1.57	0.24
ID BOISE	39	2	2.22	1.08	NH CONCORD	19	-4	4.11	1.75	VT BURLINGTON	20	0	1.83	0.16
LEWISTON	34	-4	1.37	0.42	NJ ATLANTIC CITY	32	-2	5.30	2.45	VA LYNCHBURG	37	-1	3.81	0.71
POCATELLO	34	4	1.08	0.07	NEWARK	30	-4	4.94	1.98	NORFOLK	41	-1	3.06	-0.28
IL CHICAGO/O'HARE	17	-10	2.48	0.85	NM ALBUQUERQUE	45	4	0.18	-0.26	RICHMOND	40	0	3.03	0.05
MOLINE	15	-12	2.85	1.34	NY ALBANY	22	-3	3.48	1.31	ROANOKE	38	-1	4.46	1.38
PEORIA	18	-10	2.77	1.10	BINGHAMTON	20	-4	2.75	0.29	WASH/DULLES	32	-3	3.81	1.04
ROCKFORD	13	-12	1.76	0.42	BUFFALO	20	-6	3.62	1.20	WA OLYMPIA	39	-1	8.35	2.18
SPRINGFIELD	20	-11	3.19	1.39	ROCHESTER	21	-4	2.39	0.35	QUILLAYUTE	42	0	10.64	-1.71
IN EVANSVILLE	30	-6	2.26	-0.84	SYRACUSE	21	-3	3.35	1.23	SEATTLE-TACOMA	42	-1	6.11	1.93
FORT WAYNE	17	-10	3.49	1.55	NC ASHEVILLE	40	1	3.02	-0.81	SPOKANE	26	-7	1.81	0.30
INDIANAPOLIS	22	-9	2.45	0.04	CHARLOTTE	45	0	4.01	0.46	YAKIMA	33	-2	1.43	0.63
SOUTH BEND	18	-9	2.82	0.84	GREENSBORO	42	1	2.24	-0.86	WV BECKLEY	31	-3	3.21	0.25
IA BURLINGTON	17	-11	3.29	1.75	HATTERAS	47	0	4.75	0.81	CHARLESTON	34	-3	4.56	1.37
CEDAR RAPIDS	12	-13	1.31	0.21	RALEIGH	43	0	3.00	-0.47	ELKINS	28	-4	4.11	0.91
DES MOINES	18	-9	1.84	0.65	WILMINGTON	48	-1	2.69	-0.97	HUNTINGTON	34	-3	5.06	1.97
DUBUQUE	10	-13	1.53	0.11	ND BISMARCK	10	-8	0.19	-0.32	WI EAU CLAIRE	6	-13	1.62	0.82
SIOUX CITY	19	-6	0.58	-0.04	DICKINSON	11	-10	0.13	-0.30	GREEN BAY	8	-12	1.46	0.45
WATERLOO	9	-14	1.97	0.92	FARGO	4	-10	0.11	-0.48	LA CROSSE	10	-13	1.38	0.39
KS CONCORDIA	26	-6	0.76	0.03	GRAND FORKS	1	-12	0.57	-0.01	MADISON	12	-11	1.24	-0.04
DODGE CITY	28	-8	0.60	-0.06	JAMESTOWN	6	-10	0.10	-0.42	MILWAUKEE	17	-8	1.63	-0.02
GOODLAND	26	-6	0.37	-0.07	MINOT	6	-11	0.17	-0.36	WAUSAU	6	-13	1.39	0.49
HILL CITY	27	-5	0.36	-0.24	WILLISTON	10	-7	0.26	-0.13	WY CASPER	19	-8	0.74	0.10
TOPEKA	27	-6	1.29	0.11	OH AKRON-CANTON	23	-5	1.59	-0.69	CHEYENNE	23	-6	1.15	0.71
WICHITA	31	-5	0.86	-0.16	CINCINNATI	28	-6	2.74	-0.01	LANDER	21	-5	0.19	-0.35
KY JACKSON	35	-3	4.46	0.78	CLEVELAND	22	-6	3.03	0.74	SHERIDAN	17	-10	1.21	0.64

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

March 3 - 9, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Temperatures were generally below normal in the eastern United States, with only southern Florida and western North Carolina recording above-average temperatures. Readings averaging more than 10°F below normal extended across the Mississippi and Ohio Valleys and New England. Most of the western United States recorded above-average temperatures. Generally dry conditions continued, with only the Pacific Northwest and the Southeast recording more than 2 inches of precipitation for the week.

A weather disturbance that spread showers across California moved out of the state at the beginning of the week. High pressure developed over southern California, bringing mild, dry conditions to that part of the state. Meanwhile, a series of weak frontal systems pushed through northern California. Late in the week, a moderate Santa Ana wind episode developed, resulting in warm, dry conditions for the Southland. Alfalfa fields were sprayed for aphids and weevils. Aphids have subsided and favorable conditions were reported. Imperial County farmers are working on their second cutting of hay. Field corn was planted in the Southland. Wheat irrigation continued and is ahead of schedule due to drought. Growers in the Sacramento Valley applied herbicides. Cotton fields were prepared for planting in Fresno County. Warm weather caused early bloom in orchards. Peach, nectarine, plum, cherry and apricot trees were in bloom. Pruning was complete in most grape vineyards. Bud swell occurred early due to unusually warm weather. Some vines began to leaf out. Kiwi plantings were showing bud break. Valencia orange harvest was underway in a few locations. Sampling for freeze damage continued in Fresno County. Nets were placed over mandarin trees to prevent pollination from bees. Young citrus trees were pruned. Almond leaf out began on a wider scale as petal fall began to wind down. Growers applied fungicides to protect trees. Pruning remained active in walnut, pecan, and pistachio orchards. Pistachio orchards were sprayed with herbicides. Asparagus fields emerged. Onions and garlic progressed. Carrots were in all stages of progression, from planting to harvesting. Processing tomato beds received fumigation in preparation for spring transplant. Spring lettuce received insecticide applications. Sweet potato hot beds were planted in Merced County. Broccoli and spinach were harvested. Broccoli was also planted. February's precipitation provided ranchers with emerging grass, though the amount is still inadequate due to the drought. Range and non-irrigated pastures were in poor to fair condition. Typically livestock supplemental feeding of hay and grain declines in the spring, but it continued unabated due to the lack of quality forage. Sheep grazed on harvested carrot fields and alfalfa. Bees were active as weather permitted. The quality of many hives was stronger than last year. As almond bloom drew to a close, bees were moved to stone fruit orchards for pollination.

Arizona's alfalfa condition was rated poor to excellent, depending on location. Harvesting occurred on over three-quarters of the alfalfa acreage across the state. Sheep continue to graze on various alfalfa fields in many areas. Barley conditions are mostly fair to excellent. Winter wheat conditions are very poor to excellent, depending on location. Fifty-seven percent of the winter crop is planted, 27 percentage points behind last year and 21 points behind the 5-year average. Recent rains brought some needed moisture throughout the state, but not enough to diminish drought. Range and pastures were rated in very poor to good condition, depending on location.

Cold weather returned to Texas early in the week, as a winter storm brought a variety of precipitation ranging from ice to snow and sleet to rain in many areas of the state. Warmer weather was seen toward the end of the week. One to 2 inches of precipitation was observed in the Upper Coast and the Coastal Bend. The remainder of the state received precipitation ranging from a trace up to an inch. Wheat suffered from the effects of cold weather on the Northern Low Plains. Producers in the Cross Timbers reported that cold weather has slowed development of wheat. Low temperatures continued to delay the oat crop on the Edwards Plateau. Dry conditions in South Texas allowed for fieldwork in preparation for cotton and sorghum planting. Early-planted corn fields began to emerge. Dry soils continued to delay corn planting in the Blacklands. Cotton fields continued to see declining soil moisture on the Northern Low Plains. Reseeding of alfalfa in the Trans-Pecos continued. Recent cold weather has been affecting the peach crop on the Edwards Plateau. Pecan orchards continued to be hedged, with a few producers preparing for the upcoming irrigation cycle. Vegetables began to show signs of freeze damage in South East Texas. Harvest of citrus and sugarcane continued in the Lower Valley. Cattle producers reported hay was in short supply on the Northern Low Plains. Lambing continued on the Edwards Plateau. Range and pasture were in mostly fair to poor condition. Cold weather damaged pastures in some areas.

Maximum temperatures in Florida ranged from the 70s to the 80s. Farmers in Walton County were preparing fields for corn. One of the three sugar companies was almost finished with their sugarcane harvest. Dixie County farmers started planting melons. Potato planting in Flagler and Putnam counties was coming to a close. Miami-Dade County farmers were planting green beans, squash, and zucchini. Harvesting of cabbage continued in Flagler and Putnam Counties. Rain was widespread in the citrus area. Nearly all stations recorded at least one-quarter of an inch of rainfall. Grove activity included irrigating on several days, hedging, topping, and spraying. Growers continued to plant new trees in existing groves. Partial blooms were evident in all areas on both oranges and grapefruit. Some trees were already bearing very small fruit for next season's crop. Several processing plants closed temporarily and were waiting for Valencia oranges to start coming in. A few plants were running grapefruit only. Almost all packing houses were open and shipping fruit in limited quantities; some had transitioned to gift fruit packing only. Pasture quality was aided by warmer weather and a boost in soil moisture. Calving continued throughout the state. Cattle condition primarily ranged from fair to good, but pastures were mostly fair.

March 6 ENSO Update

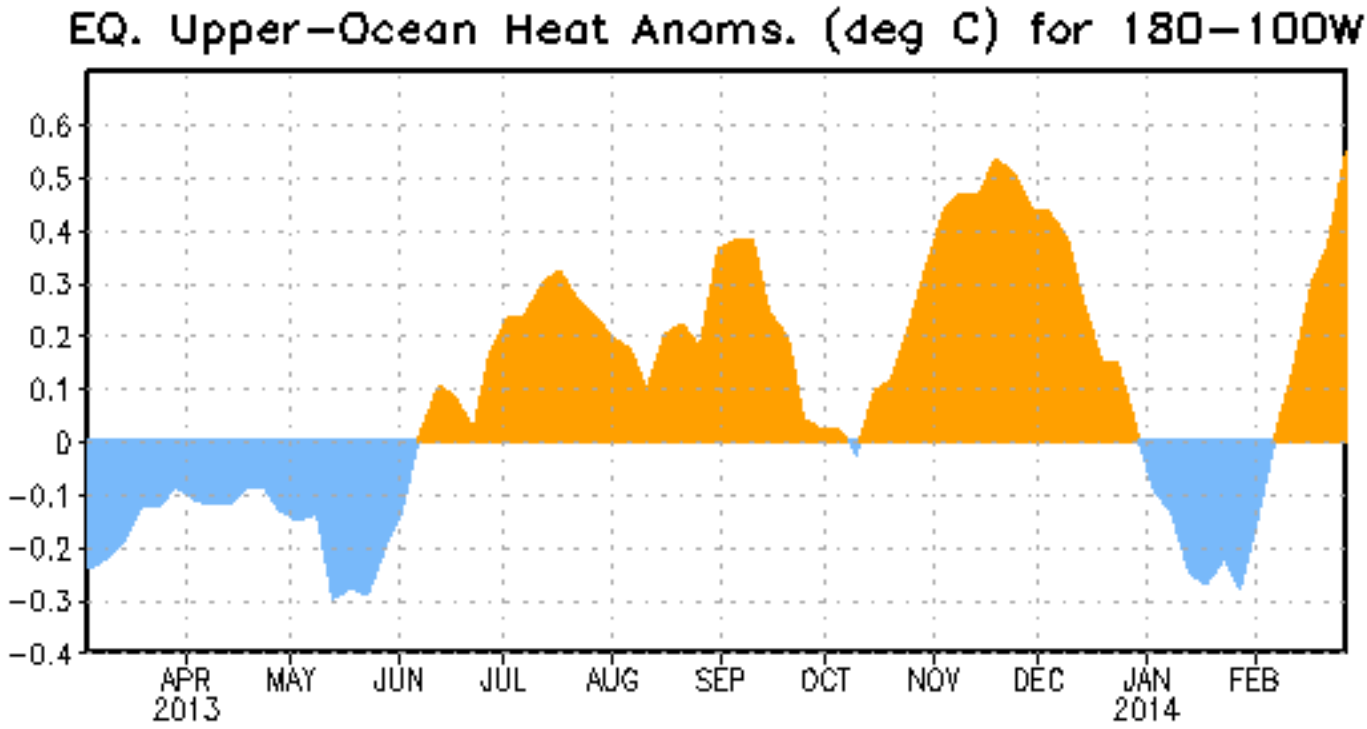


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: El Niño Watch

Synopsis: ENSO-neutral is expected to continue through the Northern Hemisphere spring 2014, with about a 50% chance of El Niño developing during the summer or fall.

ENSO-neutral continued during February 2014, with below-average sea surface temperatures (SST) continuing in the eastern equatorial Pacific Ocean and above-average SSTs increasing near the International Date Line. Overall, the weekly Niño indices were variable during the month, with most indices remaining less than -0.5°C. A significant downwelling oceanic Kelvin wave increased the oceanic heat content (Fig. 1) and produced large positive subsurface temperature anomalies across the central and east-central Pacific. In addition, toward the end of the month, strong low-level westerly winds re-appeared over the western equatorial Pacific. Convection was suppressed over western Indonesia and the central equatorial Pacific. Collectively, these atmospheric and oceanic conditions reflect ENSO-neutral.

The model predictions of ENSO for this summer and beyond are relatively unchanged from last month. Almost all the models indicate that ENSO-neutral (Niño-3.4 index between -0.5°C and 0.5°C) will persist through the rest of the Northern Hemisphere spring 2014. While all models predict warming in the tropical Pacific, there is considerable uncertainty as to whether El Niño will develop during the summer or fall. If westerly winds continue to emerge in the western equatorial Pacific, the development of El Niño would become more likely. However, the lower forecast skill during the spring and overall propensity for cooler conditions over the last decade still justify significant probabilities for ENSO-neutral. The consensus forecast is for ENSO-neutral to continue through the Northern Hemisphere spring 2014, with about a 50% chance of El Niño developing during the summer or fall (click CPC/IRI consensus forecast for the chance of each outcome).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts for the evolution of El Niño/La Niña are updated monthly in the Forecast Forum section of CPC's Climate Diagnostics Bulletin. The next ENSO Diagnostics Discussion is scheduled for 10 April 2014. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

March 2-8, 2014

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

HIGHLIGHTS

EUROPE: Wet weather favored winter grains in southern Europe, while unseasonably warm conditions in eastern growing areas continued to usher winter crops out of dormancy up to a month earlier than normal.

WESTERN FSU: Unseasonable warmth kept the region uncharacteristically devoid of snow cover and eased winter wheat out of dormancy in the south.

MIDDLE EAST: Persistent warmth accelerated Iranian winter crops out of dormancy up to a month earlier than normal, while much-needed rain returned to Turkey.

NORTHWEST AFRICA: Showers maintained abundant soil moisture for vegetative to heading winter grains in northern growing areas, while increasing heat and dryness lowered crop prospects in southern Morocco.

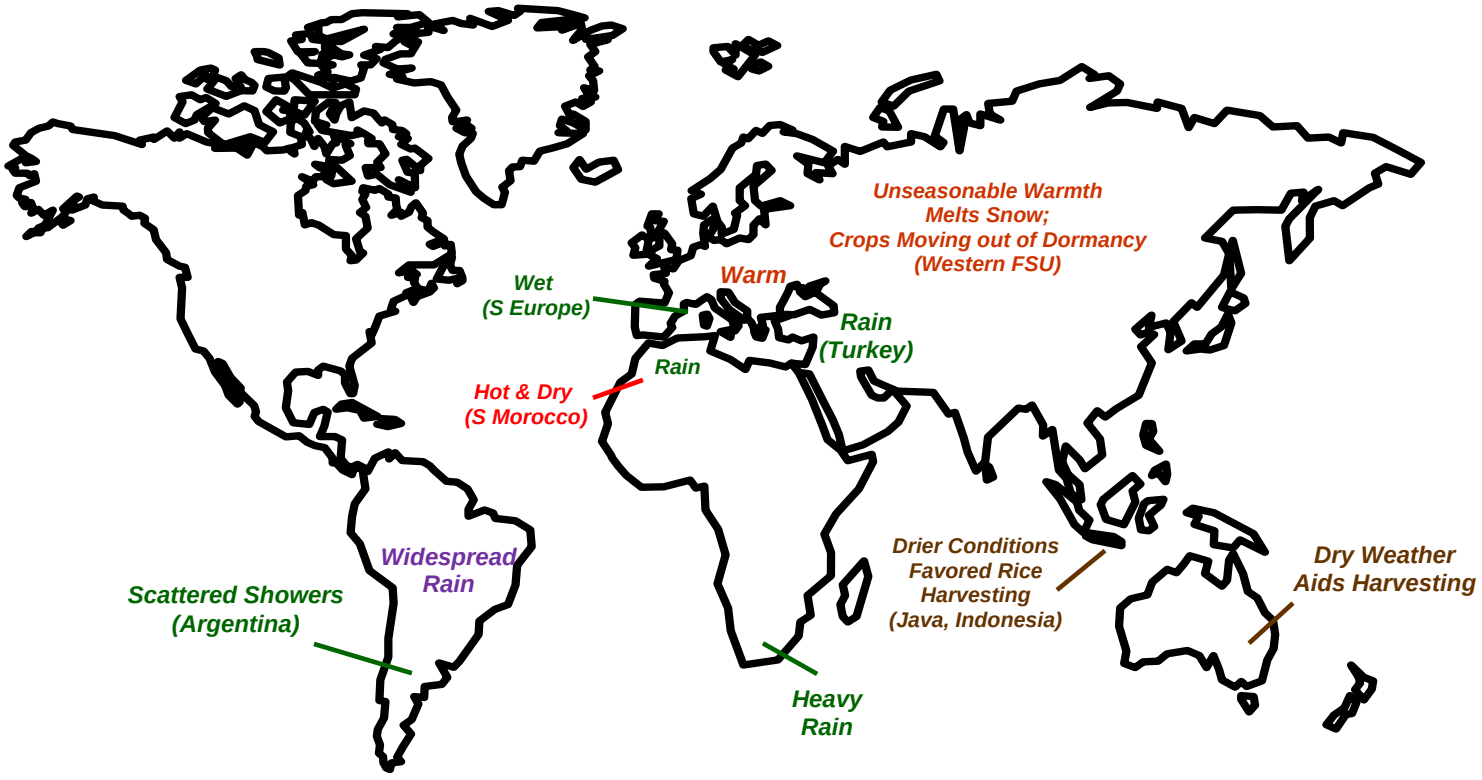
SOUTHEAST ASIA: Somewhat drier conditions prevailed across the region, promoting rice harvesting.

AUSTRALIA: Relatively dry weather aided summer crop drydown and harvesting and helped maintain crop quality.

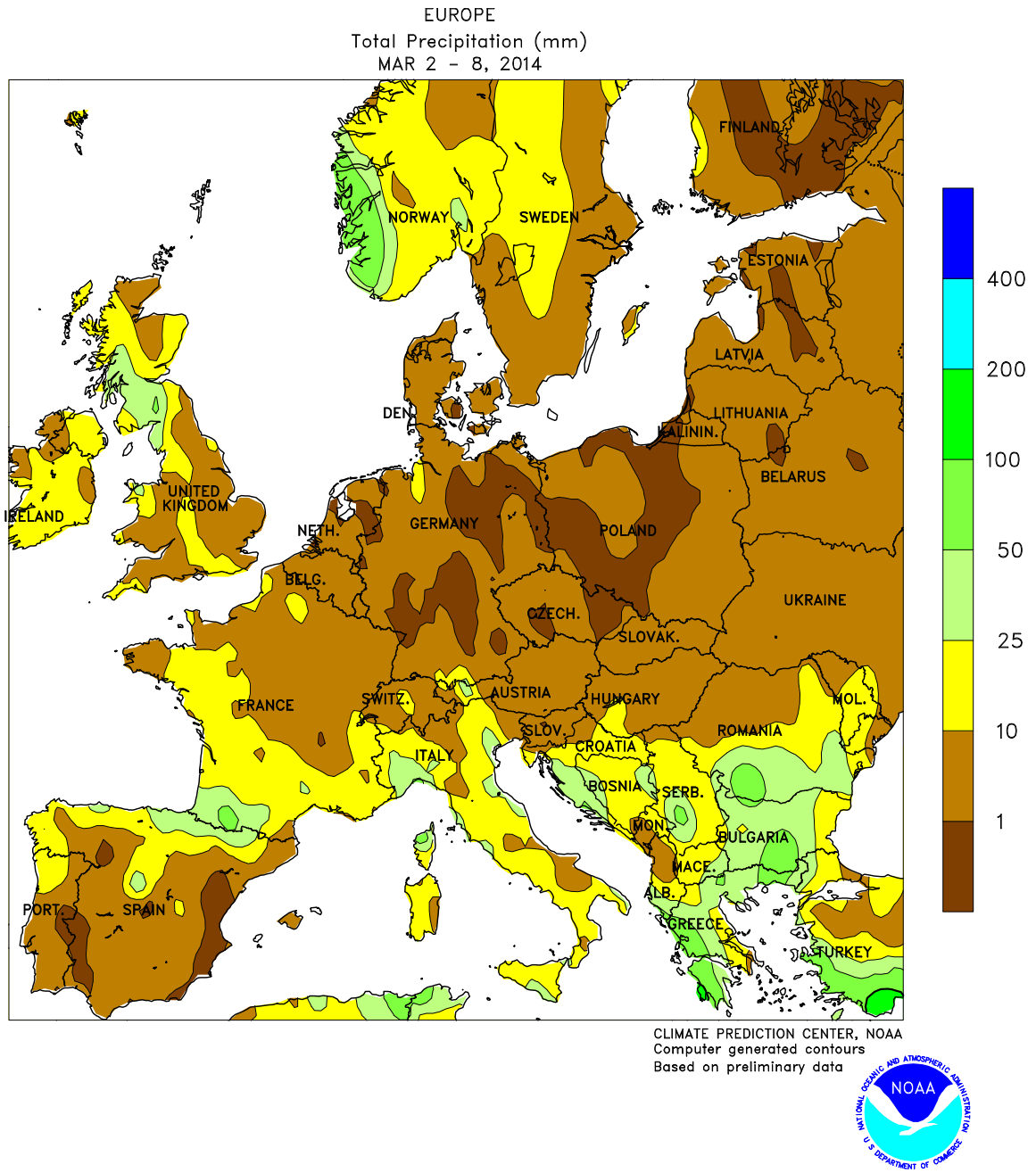
SOUTH AFRICA: Unseasonably heavy rain increased moisture for corn and other rain-fed summer crops.

ARGENTINA: Pockets of dryness persisted in southern-most corn and soybean areas, but scattered showers continued elsewhere.

BRAZIL: Widespread rain benefited summer row crops, as well as coffee, sugarcane, and citrus.



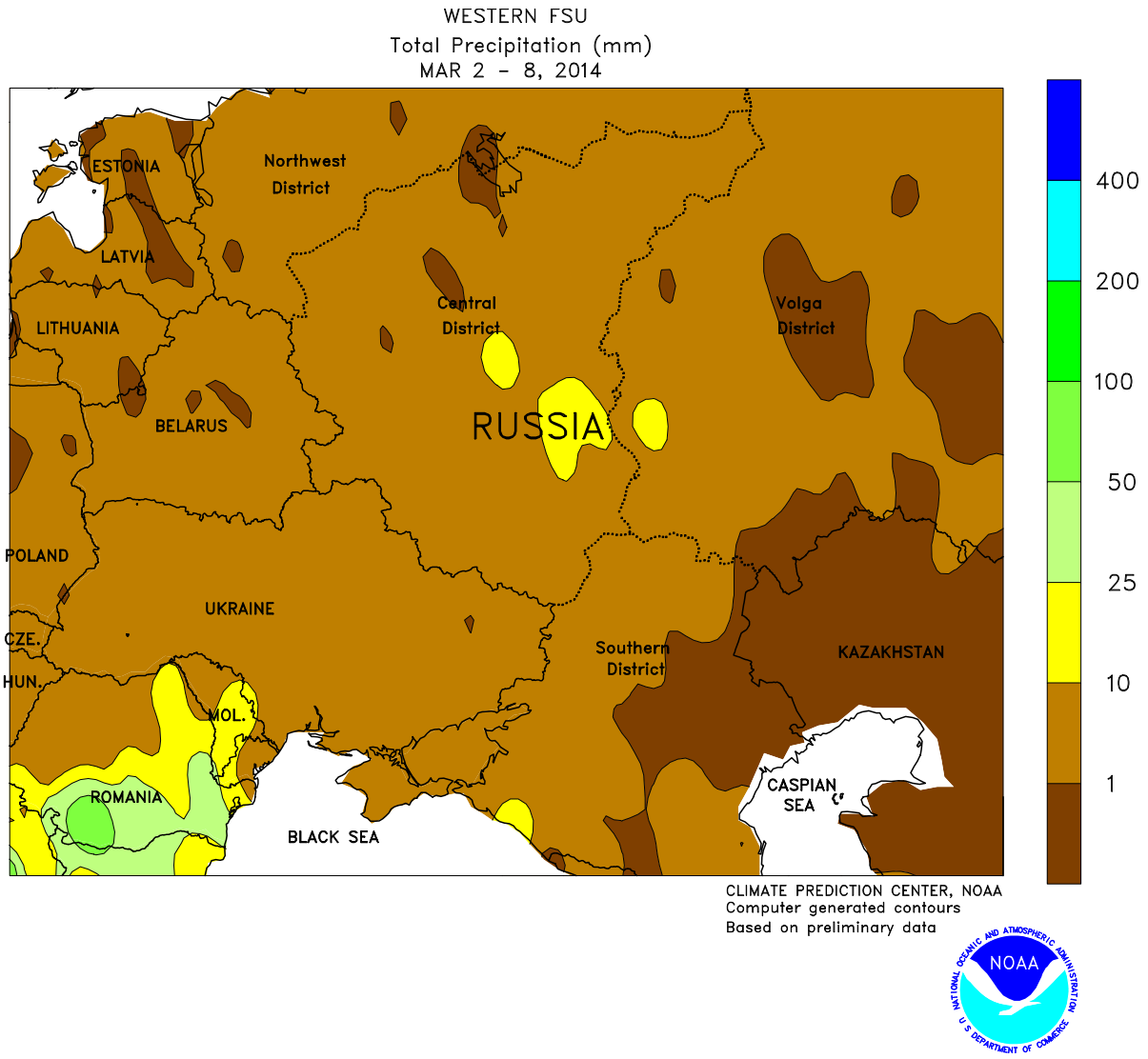
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Unsettled weather prevailed across southern and western Europe, while warmer-than-normal conditions continued over eastern growing areas. Atlantic storms continued to generate widespread showers from Ireland and the United Kingdom (5-30 mm) southward into France (2-10 mm) and northern Spain (10-50 mm). Soil moisture reserves remained adequate to abundant for vegetative winter crops in France and the United Kingdom, while prospects for vegetative to heading wheat and barley in Spain remained good to excellent. Meanwhile, another slow-moving Mediterranean storm system generated rain and mountain snow (10-40 mm liquid equivalent) in Italy, sustaining abundant to excessive soil moisture for winter wheat while further boosting mountain snowpacks and reservoir levels for irrigated summer crops. Moderate to heavy rain (25-50 mm, locally more) spread into Greece and the Balkans, easing short-term dryness and providing timely moisture for greening winter crops. In contrast, generally dry weather prevailed from Germany into Poland, with a much drier-than-normal winter (December-February) noted across southern Germany, the Czech Republic, and southwestern Poland. Temperatures across central and eastern Europe averaged 2 to 5°C above normal, further easing winter crops from western Poland into southeastern Europe out of dormancy up to a month earlier than normal.

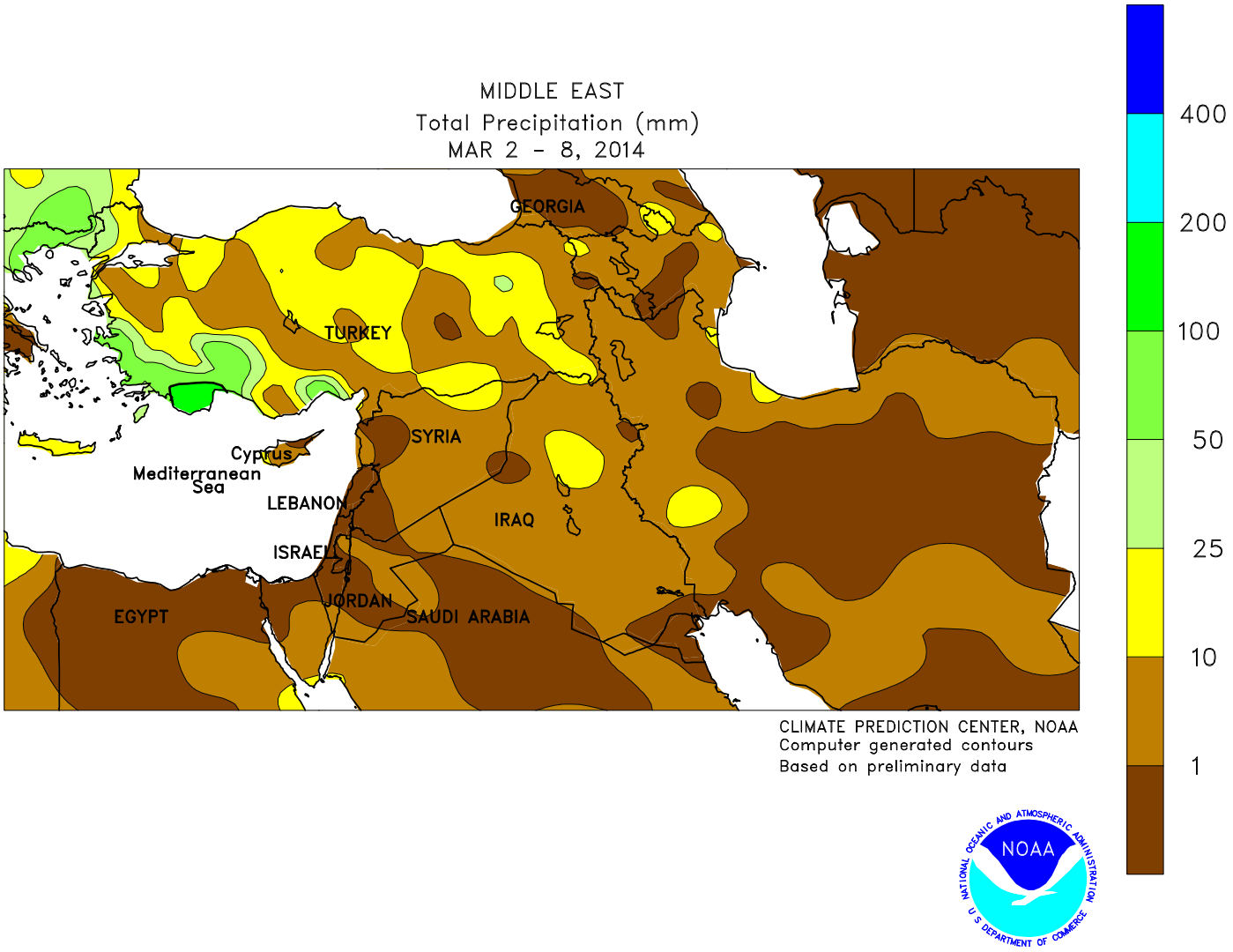
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

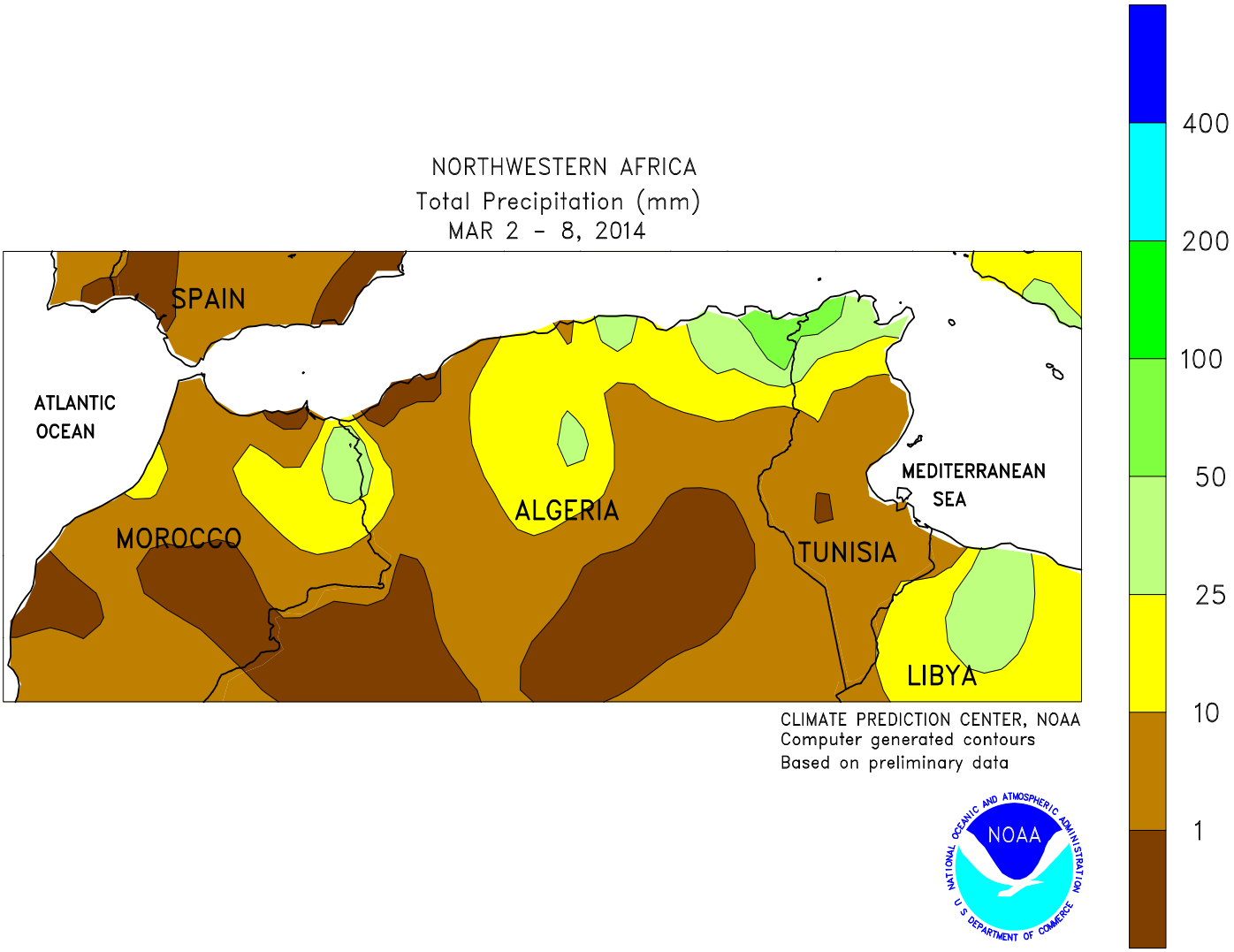
Unseasonably warm conditions persisted, with spotty, mostly light precipitation reported. Temperatures averaged 4 to 7°C above normal for the week, causing winter crops across southern portions of Ukraine and Russia to break dormancy up to a month ahead of normal. The region's snowpack likewise continued to melt much earlier than normal, with snow cover (10-50 cm) mostly confined to Russia's Volga District by week's end. Daytime highs topped 10°C across most major winter wheat areas, and exceeded 15°C in Crimea and southern portions of Russia's Southern District. Concerns over an abnormally dry winter — particularly in central and southern Ukraine — have been heightened by winter crops breaking dormancy. Despite spotty, light showers (2-6 mm) moistening topsoils in Ukraine over the past week, more rain will be needed as crops add vegetative growth.

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



MIDDLE EAST

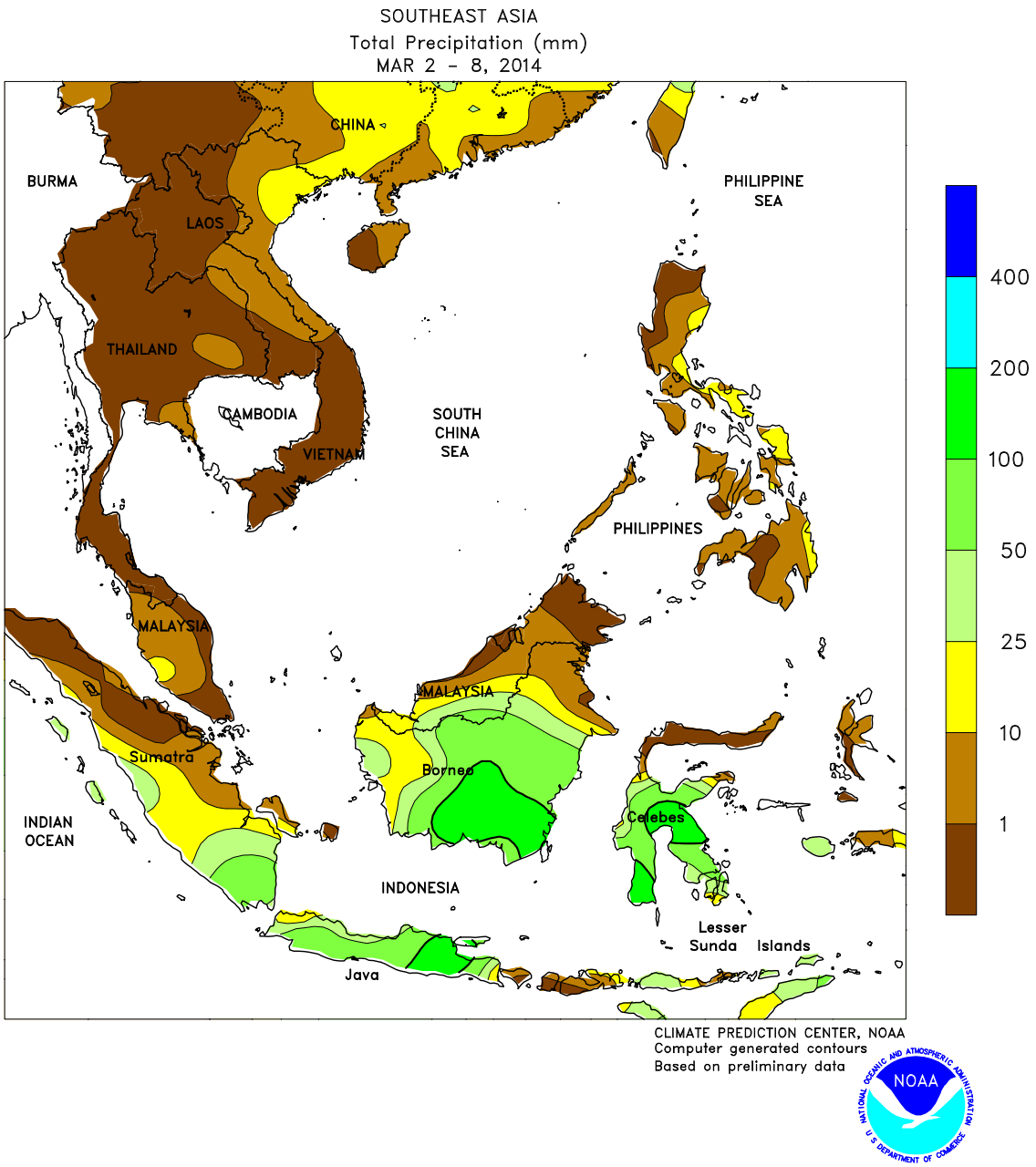
Unseasonably warm weather was accompanied by much-needed rain in Turkey. Temperatures averaged 5 to 10°C above normal, causing winter grains to add vegetative growth from Turkey into Iran. Meanwhile, a slow-moving Mediterranean storm generated moderate to heavy rain (10-50 mm, with locally higher totals) in Turkey, providing much-needed soil moisture for winter crops. Showers (1-10 mm) spread into Iraq and western Iran, although amounts were generally disappointing. Meanwhile, a much-drier-than-normal winter in northeastern Iran has reduced prospects for winter grains, which due to unseasonable warmth (highs topping 20°C) are experiencing higher-than-normal water requirements.



NORTHWESTERN AFRICA

Additional showers maintained favorable conditions for winter wheat and barley. Moderate to heavy rain (10-70 mm, locally more) persisted from northern Morocco into Algeria, sustaining abundant to locally excessive soil moisture for vegetative to heading winter grains. Dry, increasingly hot weather (highs reaching 32°C) prevailed in southern Morocco, promoting fieldwork but increasing stress on heading winter wheat and barley. Elsewhere, daytime highs (18-23°C) were nearly ideal for wheat growth across the north-African wheat belt.

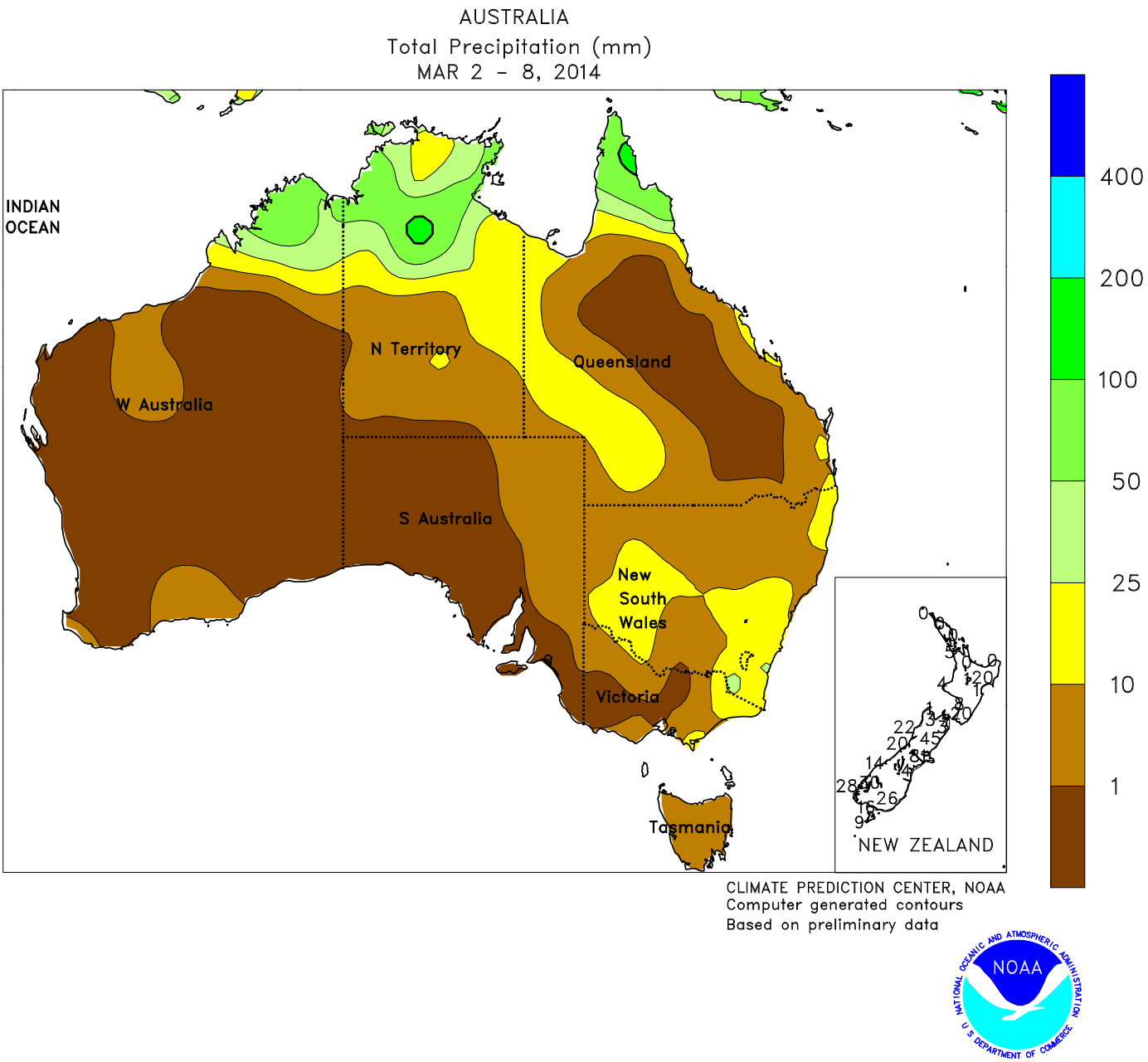
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

Rainfall was generally lighter than in previous weeks across the region as the Inter-Tropical Convergence Zone slowly progressed northward from Indonesia. Lighter showers (weekly totals averaging 30-40 mm) in western and central Java, Indonesia, eased some of the excessive wetness for maturing rice and allowed harvesting to proceed with fewer delays, although rice prospects continued to be a concern. Heavier rainfall (averaging 100 mm) in eastern Java continued to benefit rice in various stages of development, however, drier weather will be needed here as well when rice begins to mature at the end of the month. Elsewhere in Indonesia, unfavorably dry weather further reduced soil moisture and yield prospects for oil palm in Sumatra, while favorably wet weather (upwards of 125 mm of rain) in Kalimantan boosted moisture supplies for oil palm. Moisture conditions for oil palm across Malaysia were similar to those in Sumatra, Indonesia, with drier-than-usual weather reducing crop prospects. In the Philippines, mostly dry weather aided rice and corn harvesting, although scattered showers (10-30 mm) maintained beneficial moisture supplies for the remainder of the crop that can still benefit from additional moisture. In Vietnam, warm, sunny weather promoted spring rice harvesting in the Mekong Delta, while showers (10-25 mm) maintained good moisture for rice in the Red River Delta, where harvesting begins in June.

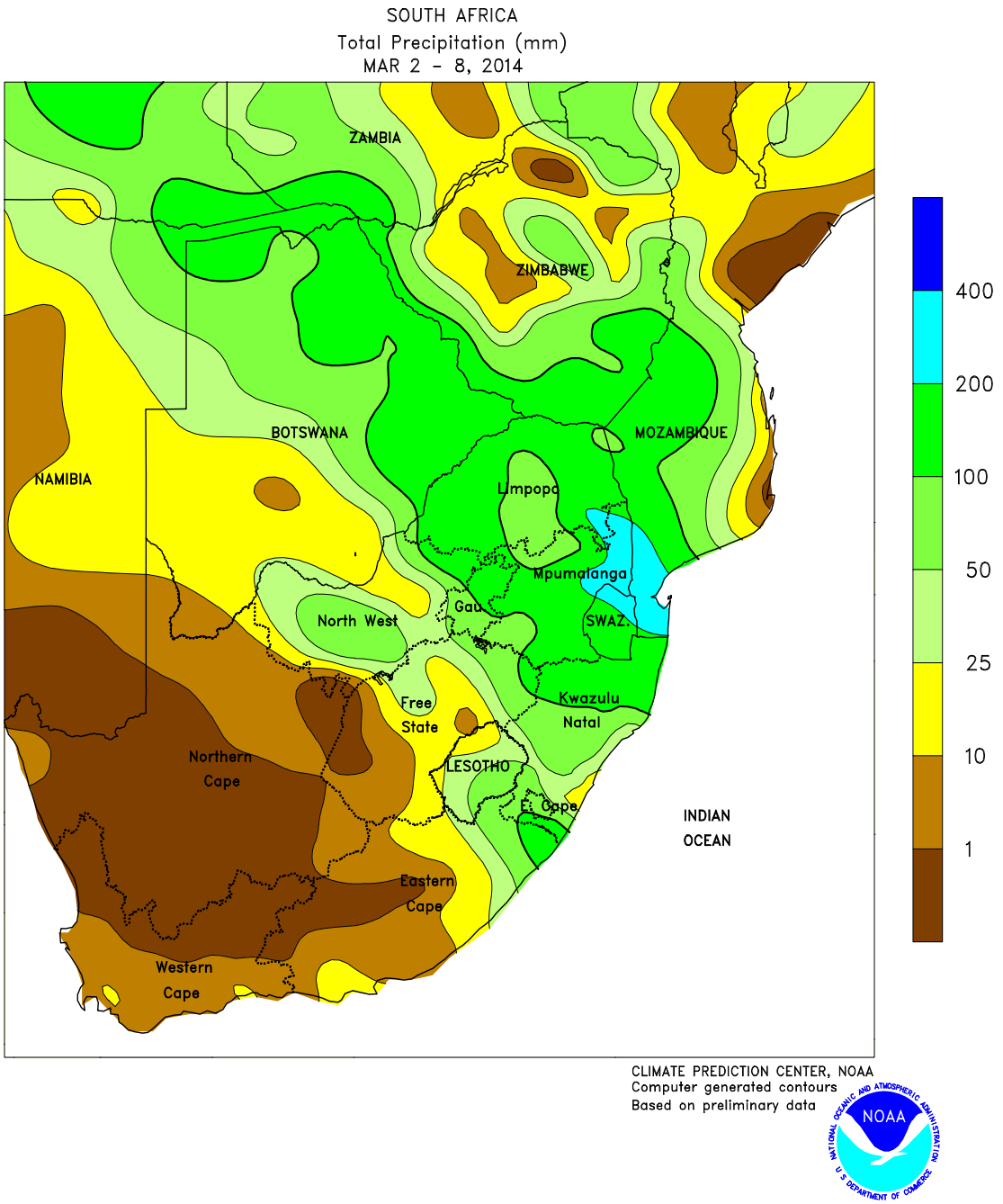
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

Widely scattered, light showers (generally less than 5 mm) in southern Queensland and northern New South Wales provided little additional moisture for immature summer crops. Cotton and sorghum development is well advanced, however, with many crops approaching maturation. Although below-normal rainfall reduced yield prospects throughout much of the growing season, the relatively dry weather is benefiting crops by aiding drydown and harvesting and helping to maintain crop quality. Temperatures in eastern Australia averaged within 1°C of normal, with maximum temperatures generally in the upper 20s to lower 30s degrees C.

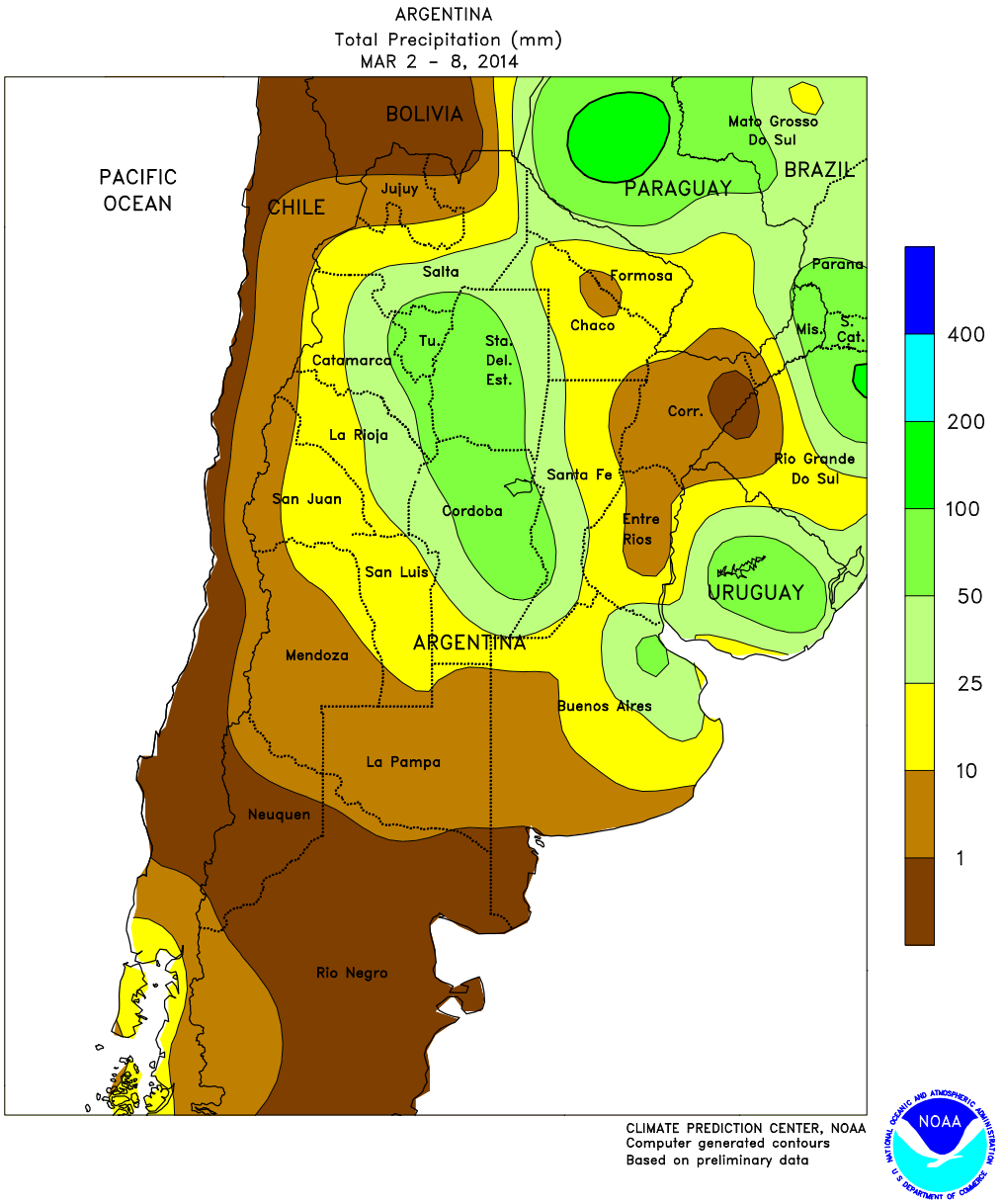
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Widespread, locally heavy rain overspread eastern agricultural areas, giving a late-season boost in moisture to corn and other rain-fed summer crops. Rainfall totaled more than 100 mm over a large area stretching from Limpopo to northern KwaZulu-Natal, increasing moisture reserves for sugarcane and other irrigated crops but likely causing some localized flooding. The wetness in eastern sections of the corn belt (in and around southern Mpumalanga) came as most crops were filling to maturing, limiting the benefit of the moisture to rain-fed summer crops. However, moderate to heavy rain (25-100 mm) falling in western and central sections of the corn belt (North West, southern Gauteng, and Free State) were timely for later-planted crops in reproductive to filling stages of development. Similar amounts favored rain-fed sugarcane in southern KwaZulu-Natal and neighboring locations in Eastern Cape. Weekly average temperatures were within 1°C of normal throughout the east; daytime highs ranged from the upper teens (degrees C) to the middle 20s in the east, and the lower to upper 20s in the west. Temperatures reached the 30s on several days in KwaZulu-Natal, fostering sugarcane development. Dry, seasonably warm weather dominated irrigated farmlands in the Cape Provinces, promoting development of corn, cotton, and other summer row crops and supporting harvests of tree and vine crops.

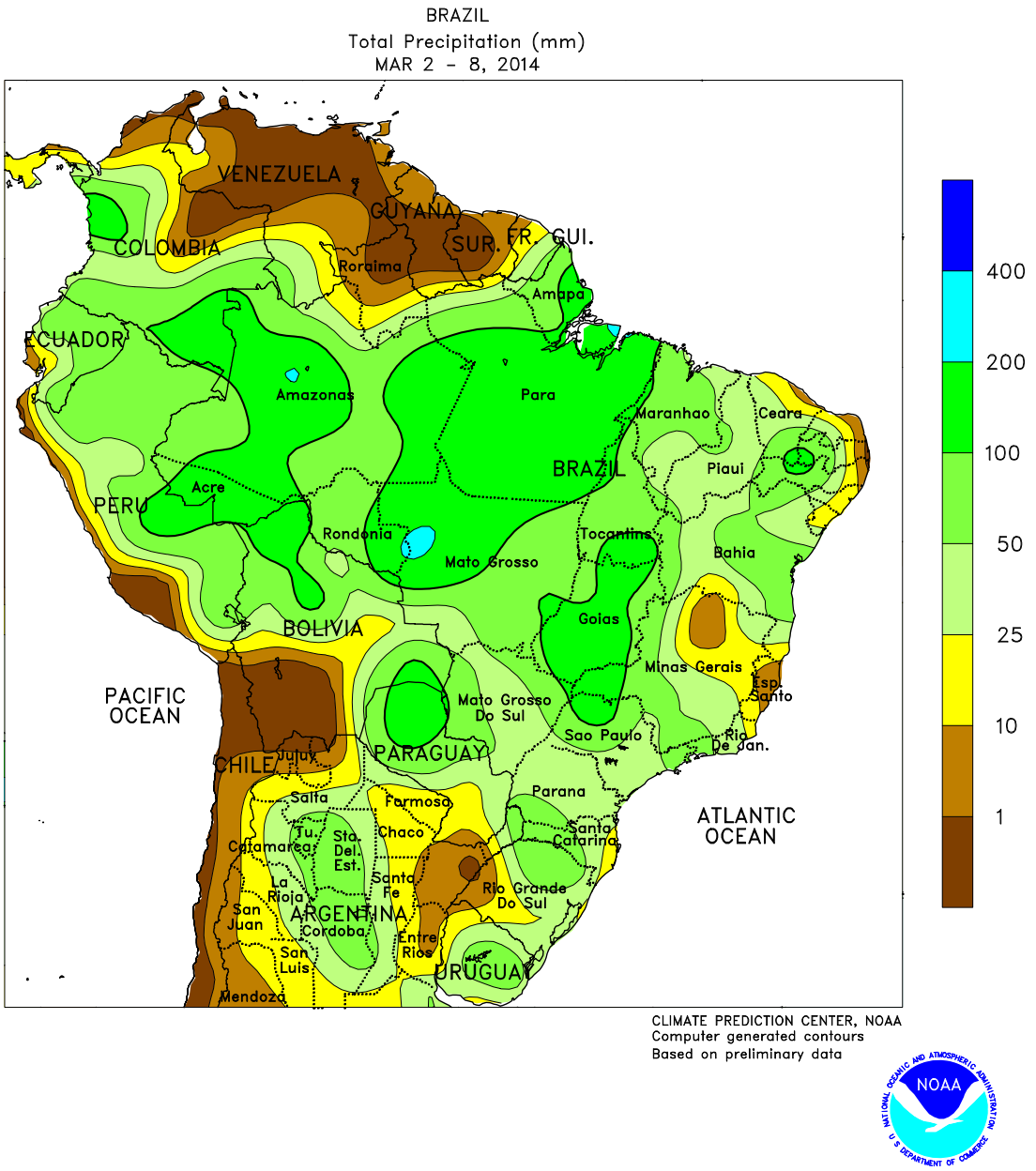
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Mild, showery weather continued throughout much of the region, although pockets of dryness persisted in southern-most farming areas. Rainfall totaled 10 to 50 mm in high-yielding corn and soybeans areas stretching from central and southern Cordoba to northeastern Buenos Aires. In contrast, unfavorably light rainfall (less than 10 mm) persisted in La Pampa and southwestern Buenos Aires, where moisture remained limited for normal development of lower-yielding corn and soybeans. Weekly temperatures averaged near to slightly below normal in these areas, with daytime highs reaching the upper 20s and lower 30s (degrees C). Farther north, moderate to heavy rain continued in western agricultural districts (Santiago del Estero northward), but drier conditions (rainfall totaling less than 10 mm) prevailed in the northeast (notably Corrientes and northern Entre Rios). The continuation of rainfall in the northwest maintained mostly favorable levels of moisture for later-planted corn and soybeans while farther east, the drier conditions helped to alleviate flooding and excessive field wetness caused by last week's inundation. Weekly temperatures averaged 1 to 2°C below normal across the north, with daytime highs reaching the lower and middle 30s during the latter half of the week. According to Argentina's Ministry of Agriculture, sunflowers were 38 percent harvested as of March 6, compared with 45 percent last year.

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



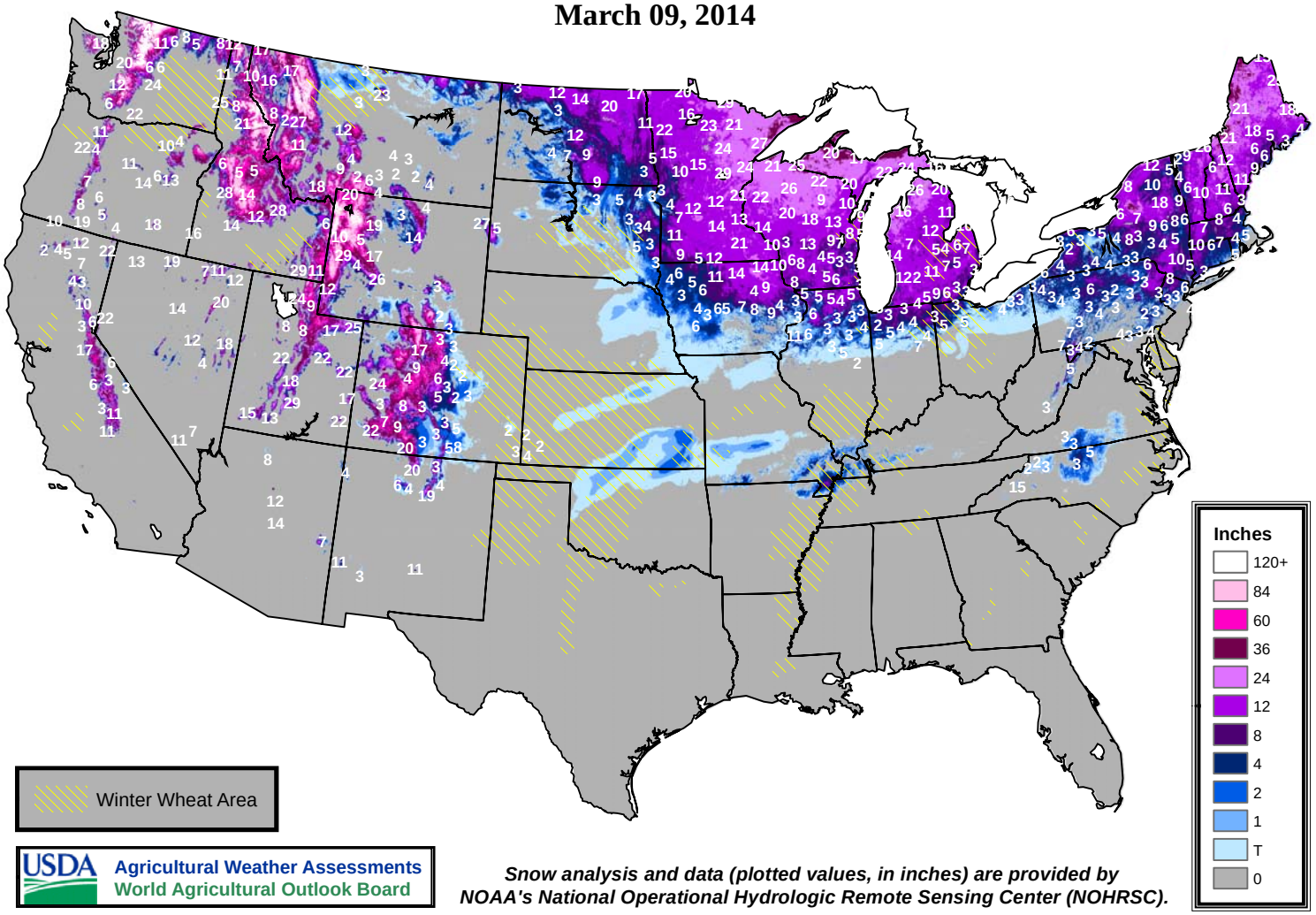
BRAZIL

Beneficial rainfall covered nearly all major agricultural areas, although sections of central Brazil are struggling with the effects of too much rain. Most of the south recorded more than 50 mm, the exception being western Rio Grande do Sul and farming districts in southeastern Paraguay, where some locations recorded less than 10 mm. Weekly temperatures averaged near to slightly below normal in these areas, although daytime highs occasionally reached the lower 30s (degrees C) on some of the drier days. Farther north, rainfall intensified from the previous week, with most major production areas recording 50 to 150 mm. The moisture was particularly welcome for immature corn and coffee in southern sections of Minas Gerais, which have been affected by warmer- and drier-than-normal weather for much of the season. Similarly, the rainfall increased moisture levels for crops in Sao Paulo — including sugarcane and citrus — but pockets of dryness lingered in eastern-most coffee areas in and around Espirito Santo. In the Center-West Region (notably Mato Grosso) the continuation of above-normal rainfall hampered fieldwork, including planting of safrinha corn and other second-season crops and spraying for pests and diseases. This week, the wet weather pushed eastward through western Bahia, improving prospects of cotton and safrinha crops but coming too late for most main-season soybeans. Similar amounts boosted irrigation reserves for sugarcane and cocoa in usually drier locations closer to the coast.

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

Snow Depth

March 09, 2014



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