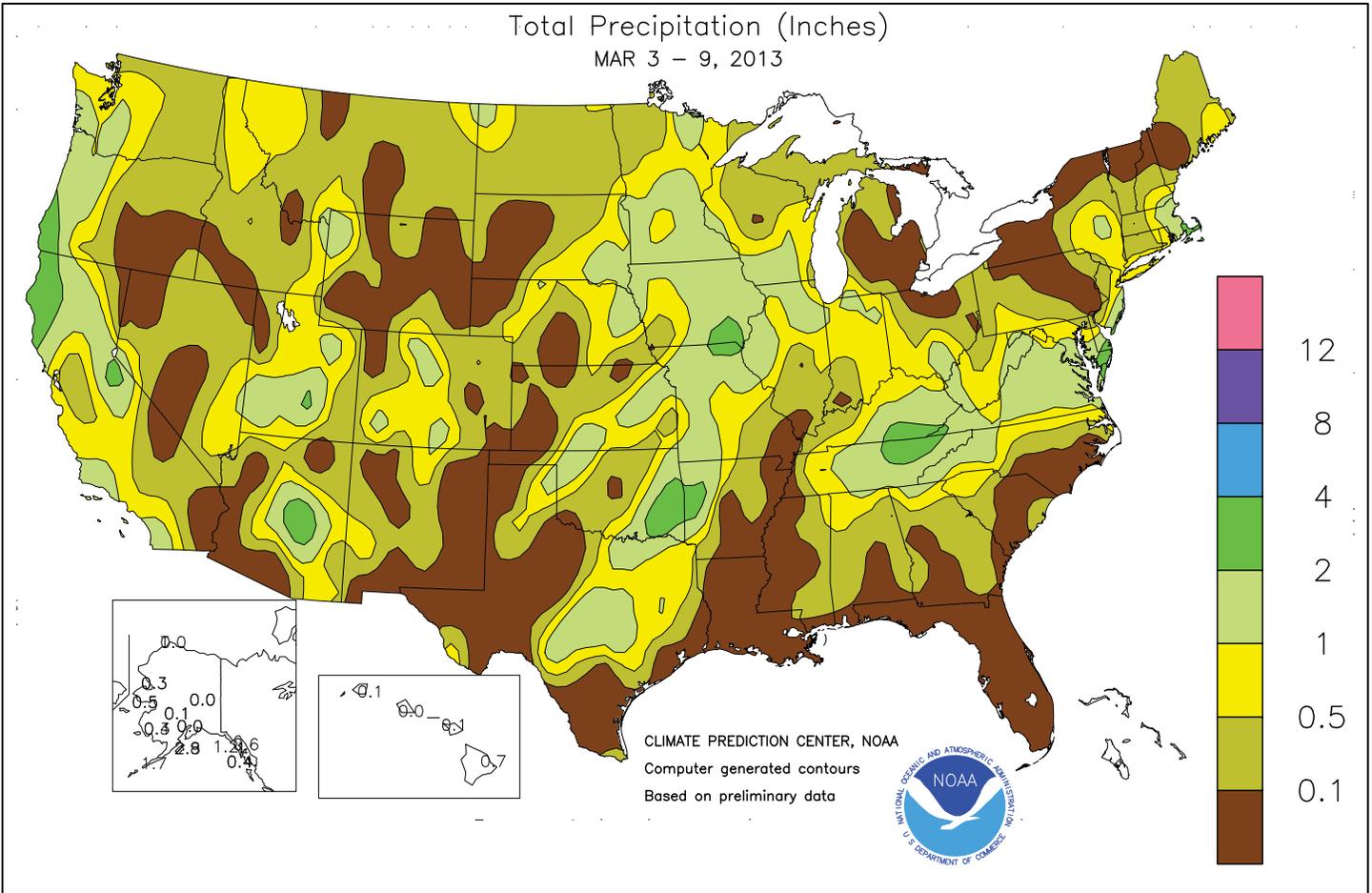


# WEEKLY WEATHER AND CROP BULLETIN



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 3 – 9, 2013

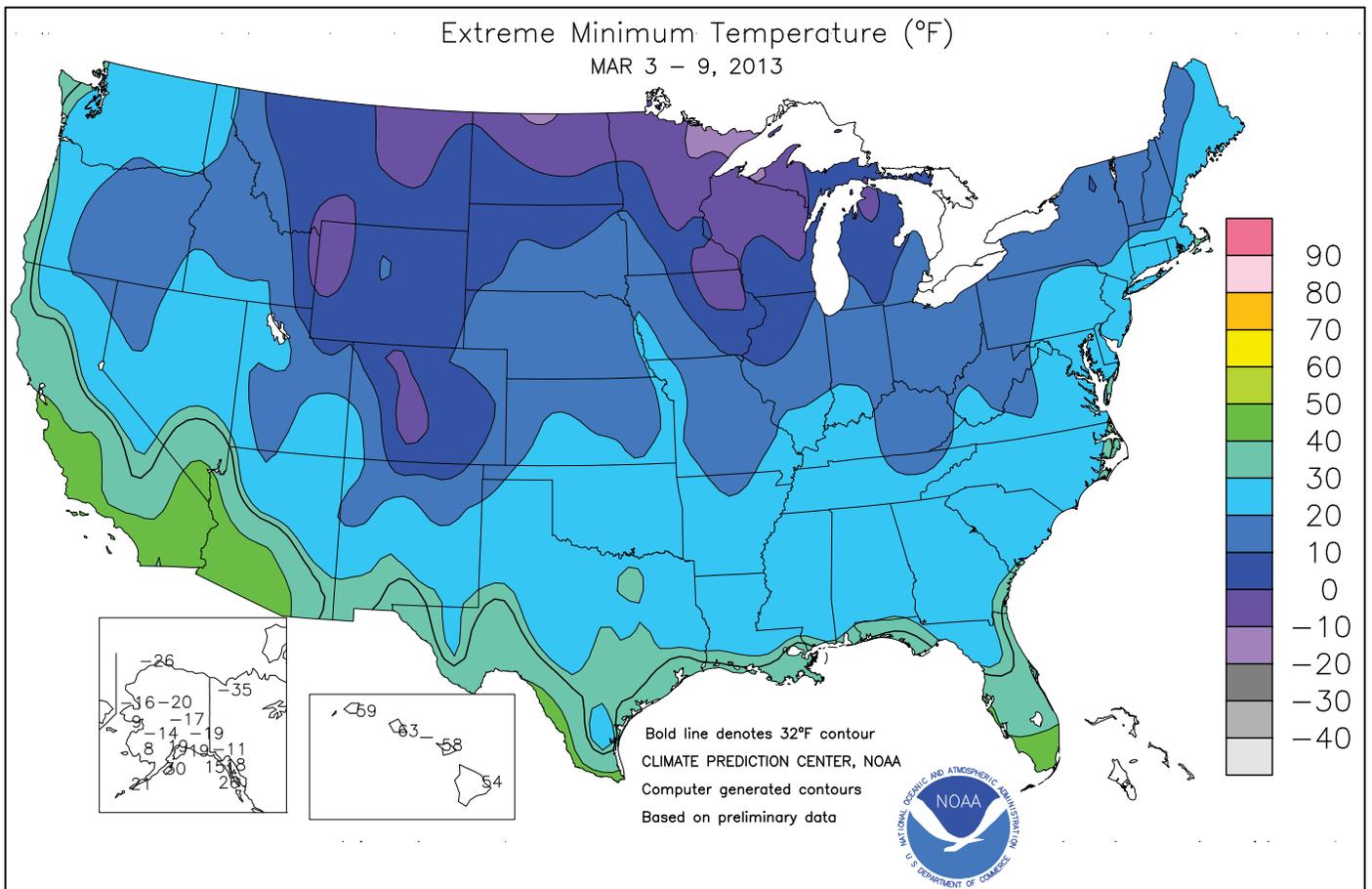
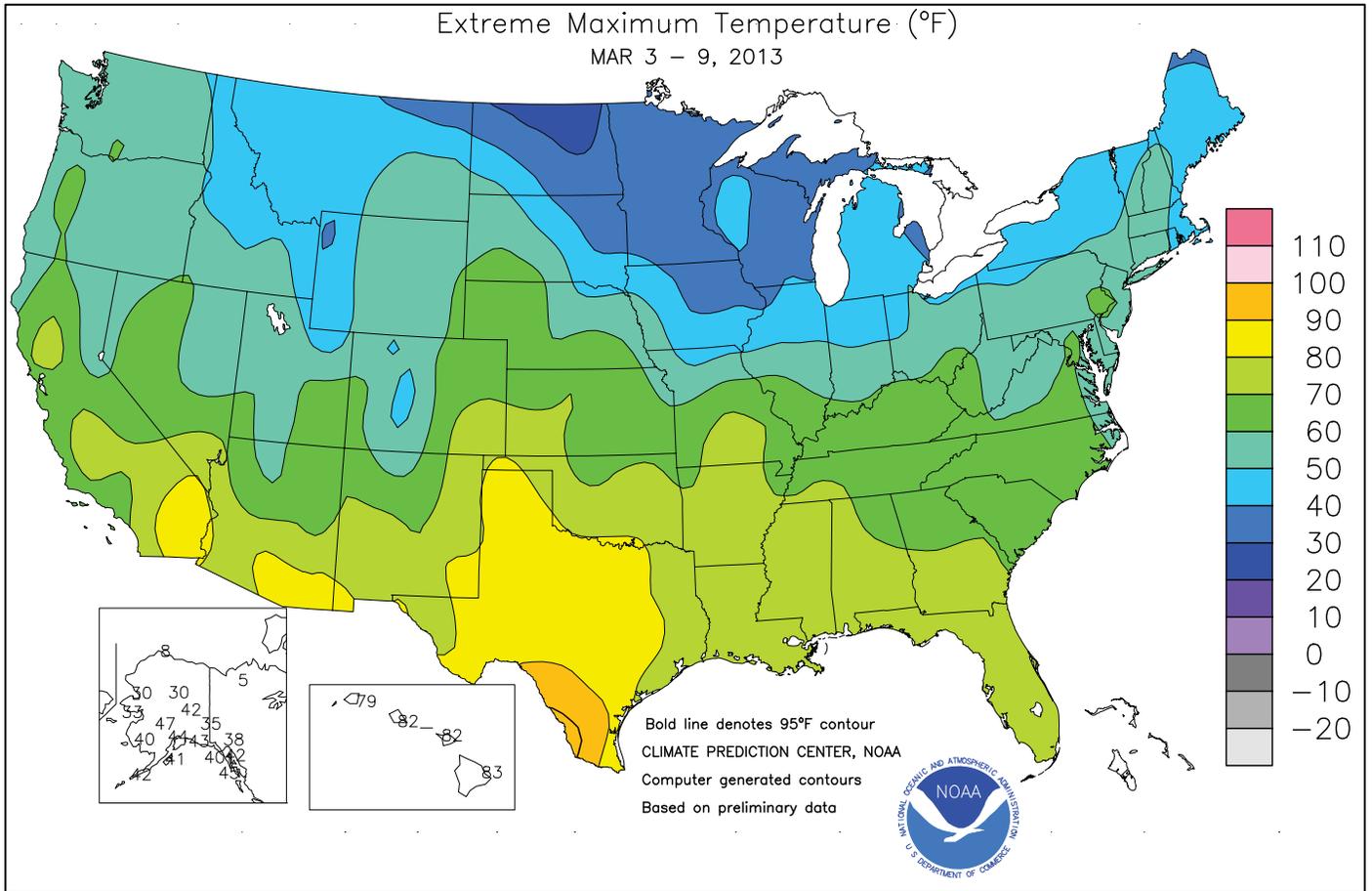
Highlights provided by USDA/WAOB

**D**ry weather finally returned to the **lower Southeast**, although low temperatures slowed evaporation rates from still-soggy fields. **Florida’s winter agricultural belt**—which was bypassed by most of February’s heavy rain—remained unfavorably dry and experienced unusually cool weather in early March. In fact, weekly temperatures averaged more than 10°F below normal in the **southern Atlantic region**, including **Florida’s peninsula**. In addition, widespread freezes were noted as far south as **northern Florida**, especially on March 3-4 and 7-8. In

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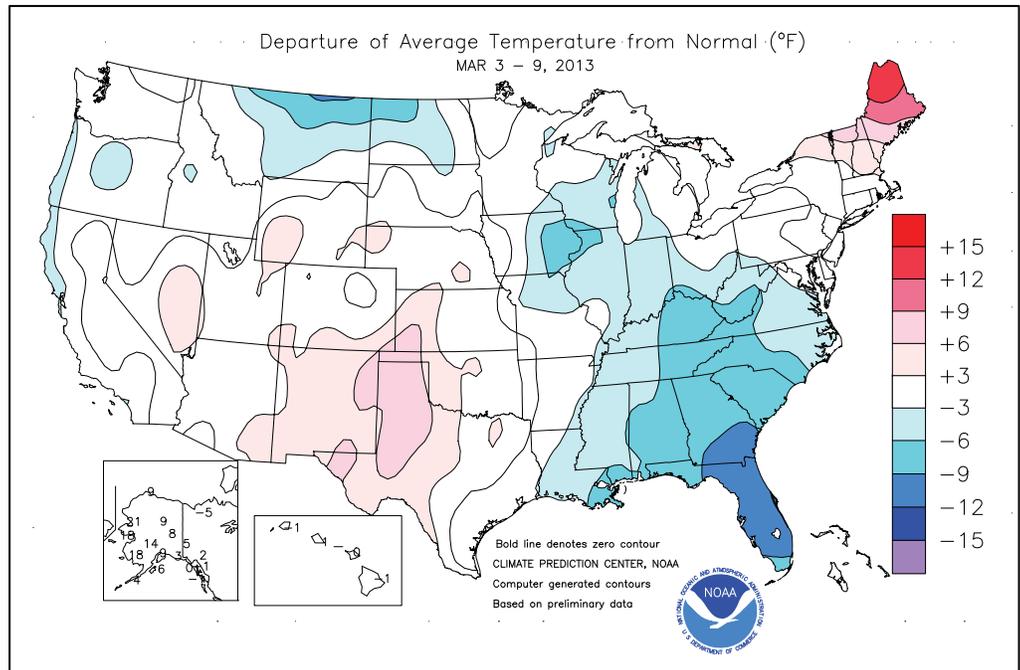
(Continued from front cover)

contrast, warmer-than-normal weather prevailed in **New England** and **central and southern portions of the Rockies and High Plains**. Weekly temperatures averaged more than 10°F above normal in **northern Maine**. Meanwhile, two storm systems provided additional drought relief in the **Corn Belt**. The first system produced widespread **Midwestern** snow, and later became a late-season winter storm from the **central Appalachians** into **southern New England**. The second system resulted in some late-week snow across the **upper Midwest**, but sparked rain across the remainder of the **Corn Belt**. Farther west, the late-week storm also produced some precipitation across the **nation's mid-section**, especially across the **central and southern**

**Plains**. The **Plains'** recent spate of storms has boosted topsoil moisture and aided rangeland, pastures, and winter wheat. Elsewhere, widespread but generally light precipitation fell across the **West**. Some of the highest amounts, locally in excess of 2 inches, were noted in **northern California** and **central Arizona**. According to the California Department of Water Resources, the average water content of the high-elevation **Sierra Nevada** snow pack increased to 18 inches (two-thirds of normal) by week's end, up from 16 inches on March 1.

Early in the week, cold air settled across the **Southeast**. On March 3, temperatures remained below the 50-degree mark as far south as **Jacksonville, FL**, where the high reached 47°F. The following day, on March 4, **Orlando, FL**, posted a daily-record low of 30°F. Meanwhile, record-setting heat developed across **Texas** in advance of a storm system. Daily-record highs in **Texas** on March 4 included 92°F in **Del Rio** and 88°F in **Dallas-Ft. Worth**. On the western fringe of the storm, chilly air returned to the **Northwest**. In **Oregon**, daily-record lows for March 4 dipped to 10°F in **Redmond** and 26°F in **Hillsboro**. The cold air reached the **nation's mid-section** by March 6, when **Waco, TX**, collected a daily-record low of 23°F—just 2 days after peaking at 81°F. The following day, however, highs attained daily-record levels for March 7 in **Texas** locations such as **Borger** (83°F) and **Dalhart** (82°F). Toward week's end, another surge of cool air overspread the **Northwest**, where daily-record lows fell to 13°F (on March 9) in **Redmond, OR**, and 27°F (on March 8) in **Vancouver, WA**.

A late-season snowstorm unfolded across the **northern Plains** and **upper Midwest** on March 4. On that date, snowfall totals in **North Dakota** reached 8.3 inches in **Grand Forks** and 5.0 inches in **Williston**. By March 5, daily-record **Midwestern** snowfall amounts included 9.6 inches in **Rockford, IL**, and 9.0 inches in **Ft. Wayne, IN**. In addition, **Ft. Wayne** received 10.4 inches of snow on March 5-6, representing its snowiest 2-day period since January 31 – February 1, 1982. With 9.2



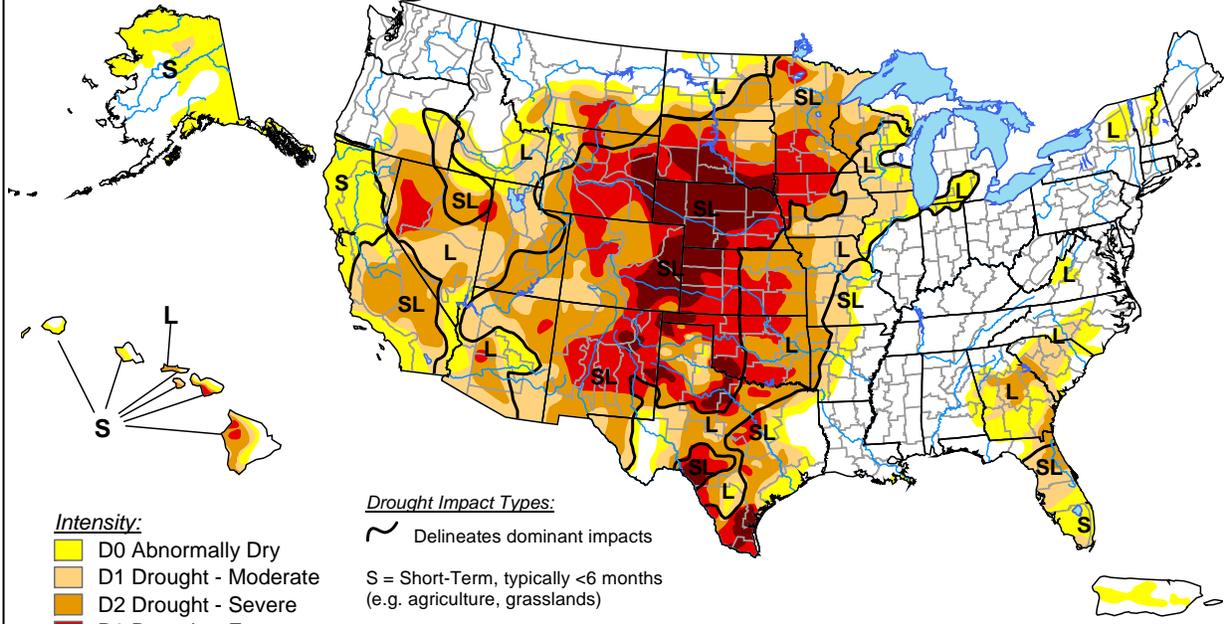
inches of snow on March 5, **Chicago, IL**, experienced its first 6-inch accumulation since February 1-2, 2011. At mid-week, howling winds accompanied rain and snow in the **Mid-Atlantic region**. On March 6, **Virginia's Dulles Airport** received 3.3 inches of snow, while wind gusts were clocked to 63 at **Wallops Island, VA**, and 61 mph in **Georgetown, DE**. Snow lingered for several days in parts of the **Northeast**, where record-setting totals for March 8 reached 14.9 inches in **Worcester, MA**; 10.5 inches in **Boston, MA**; 9.0 inches in **Bridgeport, CT**; and 6.5 inches in **Albany, NY**. **Worcester's** March 6-8 storm total climbed to 22.8 inches. Farther west, daily-record rainfall amounts for March 8 included 0.84 inch in **Phoenix, AZ**, and 0.83 inch in **Long Beach, CA**. **Flagstaff, AZ**, received 1.37 inches on March 8-9, including 15.2 inches of snow. By March 9, **Huron, SD**, set daily record for both precipitation (0.56 inch) and snowfall (4.8 inches). Daily-record precipitation totals topped an inch on March 9 in locations such as **Medicine Lodge, KS** (2.09 inches); **Ottumwa, IA** (1.26 inches); **Valentine, NE** (1.10 inches); and **Quincy, IL** (1.06 inches).

Unusually mild weather covered the **Alaskan mainland**, while widespread precipitation accompanied near-normal temperatures across the southern tier of the state. Weekly temperatures averaged at least 10 to 20°F above normal in **western Alaska**. On March 7-8, **McGrath** posted consecutive daily-record highs (44 and 47°F, respectively). **Valdez** closed the week with a daily-record high of 44°F on March 9. Meanwhile, weekly precipitation in **Kodiak** totaled 3.05 inches, including amounts greater than an inch on March 3 and 7. Farther south, **Hawaii's** early-March weather featured tranquil conditions. However, heavy showers developed across **Hawaii's western and central islands** at week's end. **Honolulu, Oahu**, netted rainfall totaling 0.52 inch on March 9, followed by a daily-record total of 1.67 inches on March 10. Elsewhere on **Oahu**, 24-hour totals on March 9-10 topped 2 inches in several locations, including **Kalaeloa Airport** (2.54 inches) and the **Wilson Tunnel** (2.18 inches).

# U.S. Drought Monitor

March 5, 2012

Valid 7 a.m. EST



**Intensity:**

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

**Drought Impact Types:**

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

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



Released Thursday, March 7, 2012

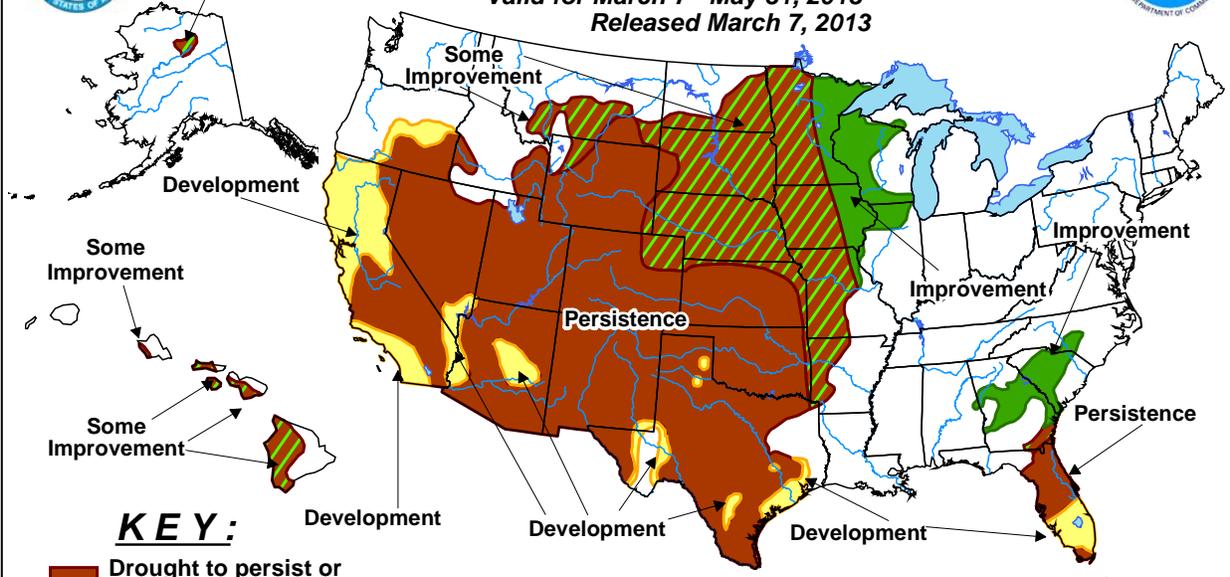
Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC

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



## U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period  
Valid for March 7 - May 31, 2013  
Released March 7, 2013

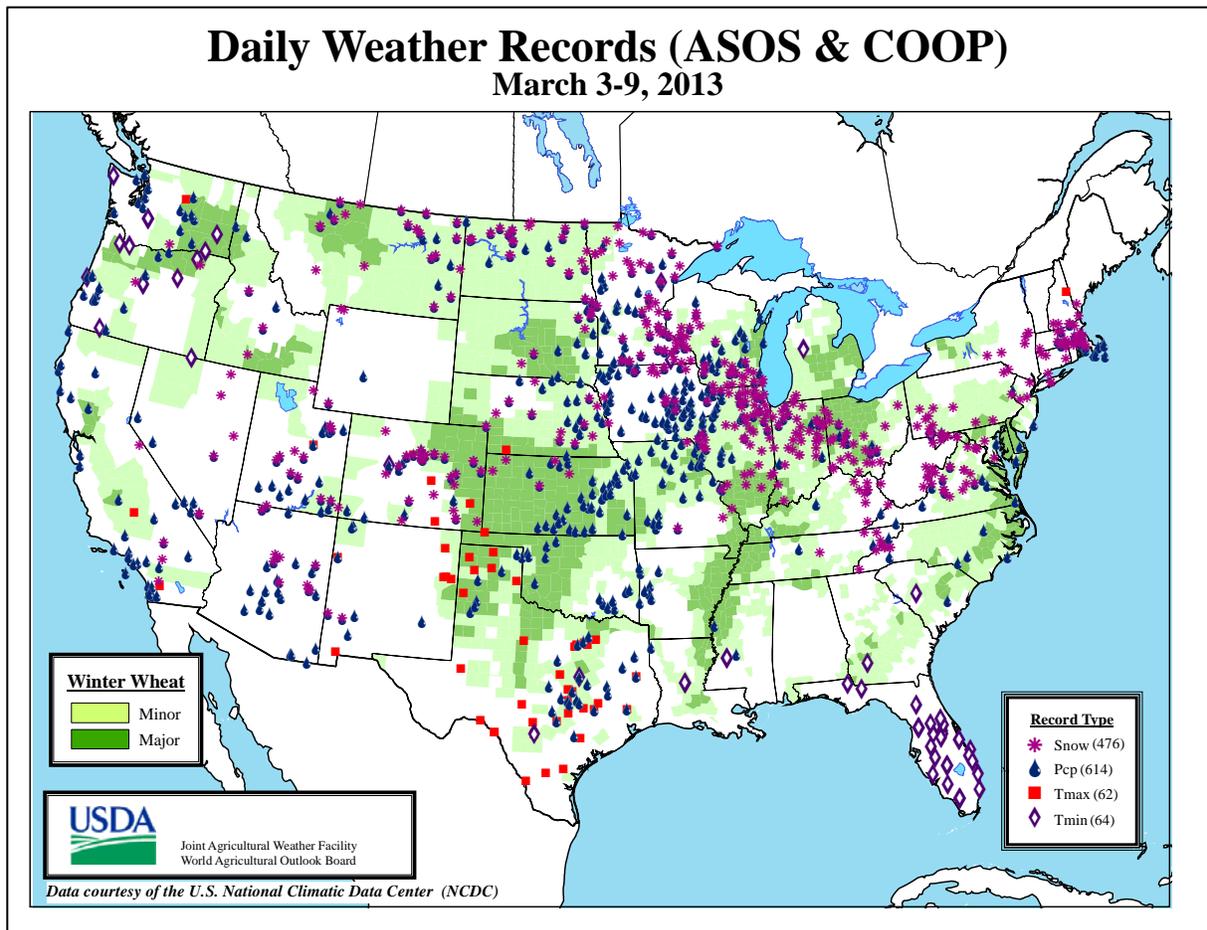
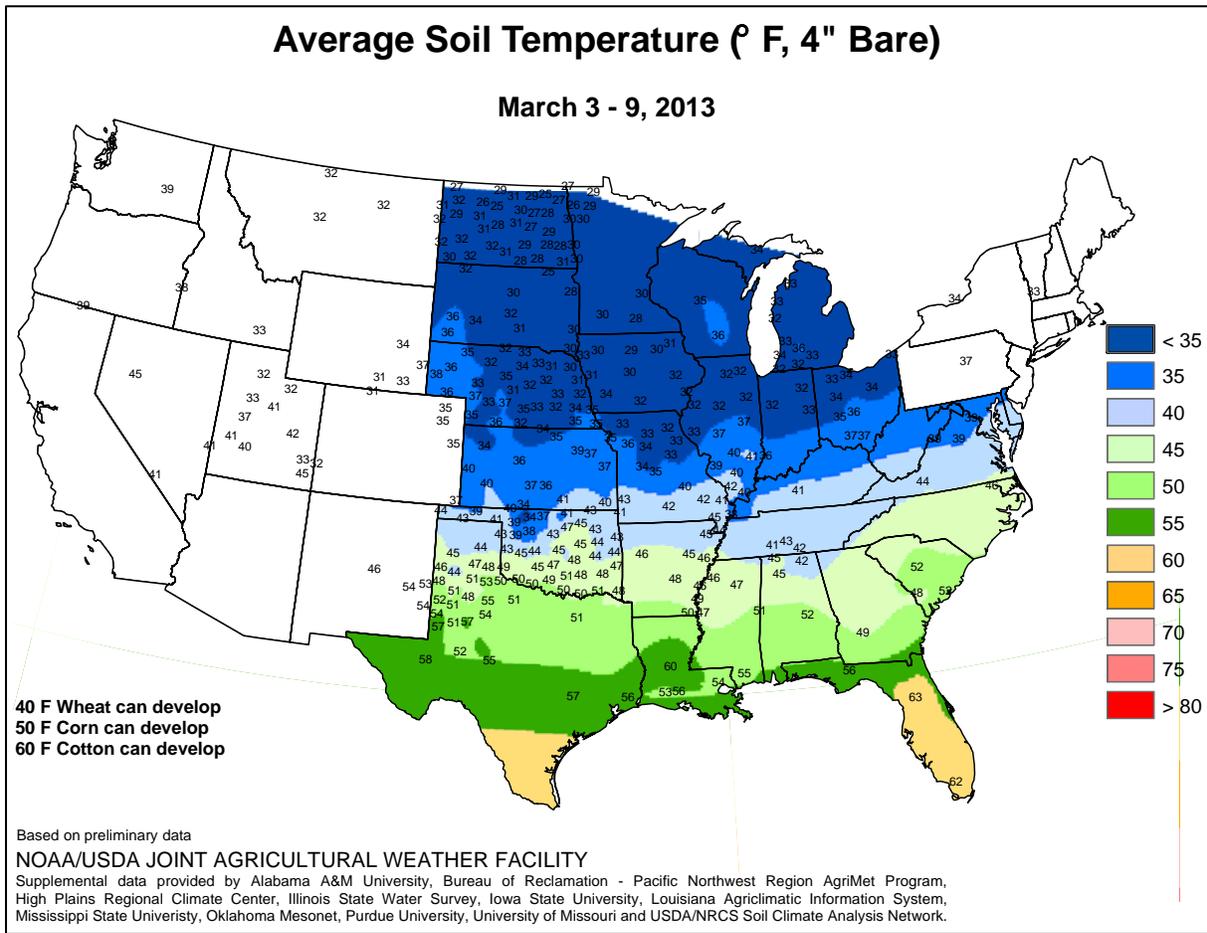


**KEY:**

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

No Drought Posted/Predicted

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



National Weather Data for Selected Cities

Weather Data for the Week Ending March 9, 2013

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F			
																90 AND ABOVE	82 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	60	33	69	26	46	-6	0.24	-1.04	0.24	0.24	15	14.83	132	77	33	0	5	1	0
HUNTSVILLE	56	31	67	27	44	-5	0.79	-0.72	0.79	0.79	41	12.67	102	80	44	0	5	1	1
MOBILE	66	37	74	27	52	-6	0.00	-1.57	0.00	0.00	0	14.18	110	79	38	0	1	0	0
AK MONTGOMERY	65	35	75	29	50	-5	0.06	-1.45	0.06	0.06	3	16.83	136	76	32	0	3	1	0
ANCHORAGE	38	25	44	19	31	8	0.00	-0.17	0.00	0.02	10	2.48	152	79	62	0	6	0	0
BARROW	-3	-11	8	-26	-7	9	0.01	0.01	0.01	0.01	100	0.14	58	83	71	0	7	1	0
FAIRBANKS	28	-3	42	-17	12	8	0.00	-0.06	0.00	0.00	0	1.27	128	81	74	0	7	0	0
JUNEAU	39	23	42	18	31	-1	0.60	-0.30	0.58	0.84	72	15.15	152	90	83	0	7	2	1
KODIAK	39	34	41	30	37	6	2.93	1.73	1.16	2.94	190	19.12	124	94	85	0	1	6	2
NOME	30	21	33	9	25	18	0.51	0.38	0.25	0.51	300	2.03	110	92	83	0	7	5	0
AZ FLAGSTAFF	48	23	55	20	36	1	1.37	0.70	1.24	1.37	157	4.87	87	86	37	0	7	2	1
PHOENIX	75	52	82	44	63	2	0.85	0.59	0.82	0.85	258	2.55	132	56	35	0	0	2	1
PRESCOTT	58	32	65	30	45	3	0.24	-0.27	0.22	0.24	36	2.56	62	75	29	0	4	2	0
TUCSON	75	49	87	44	62	5	0.01	-0.21	0.01	0.01	4	1.61	75	45	25	0	0	1	0
AR FORT SMITH	64	39	72	29	51	2	0.51	-0.32	0.50	0.51	48	8.94	149	74	32	0	2	2	1
LITTLE ROCK	62	36	75	23	49	-1	0.10	-0.85	0.08	0.10	8	9.66	119	84	35	0	2	2	0
CA BAKERSFIELD	66	47	76	43	56	0	0.80	0.47	0.78	0.80	186	2.23	79	72	56	0	0	2	1
FRESNO	65	49	75	45	57	3	0.32	-0.23	0.17	0.32	46	1.79	36	79	64	0	0	2	0
LOS ANGELES	61	52	64	48	57	-1	0.66	-0.02	0.61	0.66	74	2.16	31	83	67	0	0	2	1
REDDING	64	41	71	34	53	2	1.29	0.01	0.87	1.29	78	2.80	21	76	53	0	0	2	1
SACRAMENTO	63	43	70	37	53	-1	0.23	-0.52	0.22	0.23	24	1.55	19	86	44	0	0	2	0
SAN DIEGO	62	54	71	50	58	-1	1.22	0.69	1.09	1.22	179	3.06	61	74	57	0	0	2	1
SAN FRANCISCO	57	46	61	43	51	-2	0.30	-0.56	0.13	0.30	27	1.17	12	81	69	0	0	4	0
STOCKTON	65	42	70	36	53	0	0.11	-0.46	0.11	0.11	15	1.61	27	90	65	0	0	1	0
CO ALAMOSA	51	17	59	6	34	5	0.27	0.19	0.26	0.27	300	0.49	89	78	35	0	7	2	0
CO SPRINGS	52	24	66	9	38	3	0.08	-0.09	0.08	0.08	40	1.16	140	76	31	0	7	1	0
DENVER INTL	49	22	62	4	35	-1	0.36	0.17	0.27	0.36	157	1.44	209	76	38	0	6	2	0
GRAND JUNCTION	54	30	66	20	42	2	0.24	0.05	0.11	0.24	100	1.24	93	65	41	0	6	3	0
PUEBLO	58	22	71	4	40	1	0.10	-0.05	0.09	0.10	56	0.79	103	74	49	0	7	2	0
CT BRIDGEPORT	44	32	54	29	38	2	0.87	0.04	0.69	0.87	83	7.89	102	80	54	0	5	2	1
HARTFORD	43	29	57	26	36	2	0.34	-0.45	0.17	0.34	34	5.85	75	80	57	0	7	2	0
DC WASHINGTON	50	34	62	30	42	-1	1.03	0.23	1.00	1.03	101	5.23	76	70	36	0	3	2	1
DE WILMINGTON	47	32	64	28	39	0	0.24	-0.61	0.24	0.24	22	6.25	85	70	41	0	3	1	0
FL DAYTONA BEACH	65	39	76	31	52	-11	0.00	-0.80	0.00	0.00	0	1.88	27	88	33	0	2	0	0
JACKSONVILLE	64	35	77	29	50	-9	0.06	-0.76	0.06	0.06	6	5.79	73	87	34	0	2	1	0
KEY WEST	71	59	78	56	65	-7	0.15	-0.20	0.15	0.17	38	1.71	41	82	55	0	0	1	0
MIAMI	74	52	79	45	63	-8	0.00	-0.47	0.00	0.00	0	2.39	52	78	39	0	0	0	0
ORLANDO	70	41	78	30	56	-10	0.00	-0.73	0.00	0.00	0	0.91	16	87	32	0	1	0	0
PENSACOLA	65	41	76	33	53	-6	0.00	-1.39	0.00	0.00	0	14.26	121	75	41	0	0	0	0
TALLAHASSEE	66	34	75	27	50	-9	0.08	-1.36	0.08	0.08	4	13.29	113	79	29	0	4	1	0
TAMPA	67	46	77	43	56	-10	0.01	-0.68	0.01	0.01	1	1.57	27	78	39	0	0	1	0
WEST PALM BEACH	71	47	76	38	59	-10	0.00	-0.66	0.00	0.00	0	3.19	45	84	42	0	0	0	0
GA ATHENS	60	31	70	26	45	-5	0.11	-1.06	0.11	0.11	7	11.43	108	71	35	0	5	1	0
ATLANTA	57	33	65	28	45	-6	0.13	-1.13	0.13	0.13	8	12.53	111	68	52	0	5	1	0
AUGUSTA	61	29	70	24	45	-8	0.24	-0.81	0.24	0.24	18	10.23	103	81	35	0	6	1	0
COLUMBUS	63	36	73	29	49	-6	0.08	-1.22	0.08	0.08	5	15.77	144	71	28	0	2	1	0
MACON	60	30	70	24	45	-8	0.11	-1.04	0.11	0.11	7	15.03	136	88	35	0	5	1	0
SAVANNAH	61	34	70	29	48	-9	0.04	-0.67	0.04	0.04	4	10.34	133	78	34	0	3	1	0
HI HILO	80	62	83	54	71	-1	0.70	-2.07	0.32	0.70	20	32.20	146	81	67	0	0	4	0
HONOLULU	81	68	82	63	74	0	0.00	-0.51	0.00	0.00	0	3.07	53	71	62	0	0	0	0
KAHULUI	81	64	82	58	72	-1	0.05	-0.45	0.03	0.06	9	5.01	74	79	73	0	0	2	0
LIHUE	77	66	79	59	71	-1	0.12	-0.68	0.08	0.13	13	7.01	79	77	66	0	0	2	0
ID BOISE	52	29	58	23	41	0	0.03	-0.27	0.02	0.03	8	1.87	64	68	47	0	6	2	0
LEWISTON	54	33	59	28	44	2	0.02	-0.20	0.02	0.02	7	1.60	68	68	57	0	4	1	0
POCATELLO	45	25	54	22	35	0	0.32	0.02	0.27	0.33	87	1.41	56	84	57	0	7	3	0
IL CHICAGO/O'HARE	37	24	44	15	30	-3	0.70	0.26	0.66	0.72	129	7.31	186	84	64	0	7	2	1
MOLINE	34	20	41	1	27	-7	0.75	0.25	0.46	0.77	122	6.17	166	86	70	0	6	3	0
PEORIA	38	25	51	10	32	-3	0.73	0.18	0.42	0.74	107	7.47	194	85	63	0	6	3	0
ROCKFORD	34	18	40	2	26	-6	1.06	0.68	0.95	1.06	221	7.13	221	82	69	0	7	2	1
SPRINGFIELD	40	27	57	13	34	-3	0.27	-0.36	0.12	0.32	41	6.04	143	87	61	0	6	4	0
IN EVANSVILLE	46	28	60	20	37	-5	0.10	-0.80	0.09	0.25	22	9.79	137	74	57	0	6	2	0
FORT WAYNE	36	23	40	17	29	-5	1.06	0.52	0.91	1.06	154	6.35	136	90	63	0	7	4	1
INDIANAPOLIS	39	26	54	21	32	-5	0.52	-0.19	0.48	0.55	60	8.35	144	86	59	0	7	2	0
SOUTH BEND	36	21	42	13	28	-5	0.74	0.21	0.72	0.74	110	8.29	168	83	60	0	7	3	1
IA BURLINGTON	35	24	43	4	29	-6	1.16	0.60	0.84	1.22	174	5.18	146	93	66	0	6	3	1
CEDAR RAPIDS	32	16	42	1	24	-8	1.55	1.19	1.27	1.60	356	3.55	137	97	73	0	6	6	1
DES MOINES	38	26	44	18	32	-2	0.61	0.26	0.42	0.62	138	3.47	130	84	70	0	6	5	0
DUBUQUE	31	15	39	1	23	-7	1.47	1.02	0.99	1.47	258	4.91	150	92	76	0	7	3	1
SIOUX CITY	41	24	53	20	33	1	0.80	0.49	0.61	0.80	205	2.00	125	85	73	0	7	2	1
WATERLOO	31	13	38	-4	22	-8	1.14	0.80	0.76	1.14	265	4.22	182	89	76	0	6	3	1
KS CONCORDIA	52	26	64	17	39	1	0.09	-0.34	0.05	0.09	17	1.57	81	85	61	0	6	2	0
DODGE CITY	59	30	70	22	45	4	0.08	-0.23	0.06	0.08	21	1.46	87	80	37	0	4	2	0
GOODLAND	55	23	67	14	39	2	0.19	-0.05	0.15	0.19	66	1.04	90	80	52	0	6	2	0
TOPEKA	51	31	63	20	41	1	1.28	0.81	1.28	1.28	217	3.72	137	75	56	0	4	1	1

Weather Data for the Week Ending March 9, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL IN. SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
KY WICHITA	55	33	67	21	44	2	0.81	0.29	0.77	0.81	125	3.83	153	77	59	0	4	2	1
KY JACKSON	42	26	64	20	34	-9	0.89	-0.13	0.73	1.36	104	9.00	105	92	53	0	7	3	1
KY LEXINGTON	43	20	64	1	32	-10	0.13	-0.87	0.09	0.19	15	6.17	78	76	61	0	7	3	0
KY LOUISVILLE	46	30	63	23	38	-5	0.42	-0.56	0.42	0.51	41	7.53	97	82	47	0	6	1	0
LA PADUCAH	51	30	68	21	41	-3	0.16	-0.79	0.13	0.27	22	12.02	139	84	41	0	4	2	0
LA BATON ROUGE	68	39	74	26	53	-5	0.00	-1.10	0.00	0.00	0	22.04	173	85	34	0	2	0	0
LA LAKE CHARLES	69	44	73	31	56	-2	0.00	-0.73	0.00	0.00	0	16.59	171	89	39	0	1	0	0
LA NEW ORLEANS	67	44	76	35	56	-4	0.00	-1.15	0.00	0.00	0	13.80	108	79	55	0	0	0	0
LA SHREVEPORT	68	41	78	26	55	-1	0.02	-0.94	0.02	0.02	2	7.46	74	78	31	0	1	1	0
ME CARIBOU	38	28	41	22	33	13	0.12	-0.41	0.09	0.23	34	6.13	108	83	60	0	6	2	0
ME PORTLAND	41	31	46	27	36	6	0.14	-0.69	0.09	0.24	23	7.67	93	86	57	0	7	3	0
MD BALTIMORE	47	31	62	27	39	-1	0.75	-0.14	0.75	0.75	66	6.34	83	68	40	0	3	1	1
MA BOSTON	41	31	43	28	36	1	0.52	-0.29	0.34	0.52	50	6.86	83	86	60	0	5	3	0
MA WORCESTER	38	27	50	23	33	2	1.40	0.53	0.81	1.40	127	8.27	100	89	56	0	7	3	1
MI ALPENA	33	14	42	-1	24	0	0.05	-0.35	0.02	0.05	10	4.53	125	87	64	0	7	4	0
MI GRAND RAPIDS	37	20	42	11	29	-1	0.00	-0.43	0.00	0.00	0	7.06	172	80	55	0	7	0	0
MI HOUGHTON LAKE	35	10	41	-1	22	-3	0.07	-0.29	0.03	0.07	15	5.33	161	83	59	0	7	3	0
MI LANSING	36	20	43	11	28	-2	0.00	-0.37	0.00	0.00	0	5.22	147	80	57	0	7	0	0
MI MUSKOGON	36	18	42	8	27	-3	0.00	-0.41	0.00	0.00	0	9.44	219	77	59	0	7	0	0
MI TRAVERSE CITY	35	15	44	6	25	-2	0.23	-0.09	0.22	0.23	56	7.44	144	85	51	0	7	2	0
MN DULUTH	29	12	38	-8	20	-1	1.08	0.82	0.62	1.08	338	3.63	160	86	66	0	7	3	1
MN INT'L FALLS	30	8	33	-11	19	1	3.02	2.87	2.38	3.02	1589	6.68	400	85	59	0	7	4	1
MN MINNEAPOLIS	33	20	39	11	27	0	1.39	1.11	0.61	1.39	397	3.58	164	87	69	0	6	3	1
MN ROCHESTER	31	16	38	-4	24	-1	1.54	1.28	0.87	1.54	481	3.54	176	83	71	0	6	3	1
MN ST. CLOUD	31	14	36	-4	22	-1	1.53	1.34	0.75	1.53	638	3.31	208	87	59	0	7	3	1
MS JACKSON	64	35	75	22	50	-4	0.00	-1.16	0.00	0.00	0	17.43	150	83	30	0	2	0	0
MS MERIDIAN	65	32	74	25	48	-7	0.01	-1.50	0.01	0.01	1	18.84	143	93	48	0	5	1	0
MS TUPELO	59	33	73	26	46	-4	0.20	-1.21	0.20	0.20	11	12.63	109	74	45	0	4	1	0
MO COLUMBIA	46	27	67	13	37	-3	0.72	0.08	0.67	0.73	89	6.97	147	86	48	0	5	3	1
MO KANSAS CITY	44	30	54	21	37	-3	1.09	0.61	1.05	1.09	179	3.98	130	80	55	0	4	4	1
MO SAINT LOUIS	49	29	68	19	39	-3	0.71	-0.01	0.44	0.79	86	7.18	134	78	54	0	5	3	0
MO SPRINGFIELD	56	32	72	19	44	1	0.78	0.07	0.70	0.78	88	6.12	116	75	53	0	4	3	1
MT BILLINGS	42	20	54	6	31	-3	0.17	-0.01	0.17	0.17	74	1.04	65	80	47	0	7	1	0
MT BUTTE	38	15	41	5	26	-1	0.05	-0.10	0.03	0.05	26	0.45	38	86	38	0	7	2	0
MT CUT BANK	32	13	42	2	23	-5	0.02	-0.06	0.01	0.02	18	0.75	96	92	58	0	7	2	0
MT GLASGOW	29	12	41	0	21	-5	0.16	0.08	0.13	0.16	160	0.82	115	88	77	0	7	2	0
MT GREAT FALLS	40	18	50	9	29	-2	0.05	-0.13	0.03	0.05	23	1.09	77	87	44	0	7	3	0
MT HAVRE	33	15	47	8	24	-5	0.15	0.02	0.11	0.15	94	1.67	169	84	73	0	7	3	0
MT MISSOULA	44	23	50	16	34	0	0.20	0.01	0.15	0.23	92	1.70	82	82	60	0	7	3	0
NE GRAND ISLAND	49	24	66	16	37	3	0.38	0.03	0.37	0.38	88	1.51	92	89	67	0	7	2	0
NE LINCOLN	49	23	62	15	36	1	0.29	-0.08	0.14	0.29	64	1.56	88	83	63	0	6	3	0
NE NORFOLK	45	23	53	14	34	1	0.60	0.27	0.60	0.60	146	1.50	86	84	64	0	7	1	1
NE NORTH PLATTE	51	21	66	13	36	1	0.05	-0.16	0.05	0.08	30	1.36	116	87	45	0	7	1	0
NE OMAHA	44	27	54	20	36	1	0.71	0.35	0.55	0.71	158	2.00	99	79	63	0	6	2	1
NE SCOTTSBLUFF	53	22	67	11	37	3	0.07	-0.13	0.07	0.07	29	0.64	47	80	42	0	7	1	0
NE VALENTINE	48	23	65	15	36	4	1.10	0.91	1.10	1.11	463	2.34	229	85	54	0	7	1	1
NV ELY	46	28	53	24	37	3	0.10	-0.12	0.05	0.10	36	1.55	88	83	56	0	6	3	0
NV LAS VEGAS	68	51	78	44	60	4	0.15	-0.02	0.15	0.15	71	0.58	39	51	31	0	0	1	0
NV RENO	54	33	62	30	44	2	0.13	-0.10	0.11	0.13	43	0.25	10	74	51	0	4	2	0
NV WINNEMUCCA	51	25	63	21	38	-2	0.17	0.00	0.13	0.17	81	0.63	38	73	47	0	6	2	0
NH CONCORD	41	26	55	15	33	4	0.35	-0.27	0.21	0.35	44	5.44	89	88	52	0	7	4	0
NJ NEWARK	45	32	57	27	38	0	1.15	0.29	0.91	1.15	106	7.49	93	75	54	0	4	2	1
NM ALBUQUERQUE	62	38	69	32	50	5	0.16	0.04	0.15	0.16	107	0.51	47	52	21	0	1	2	0
NY ALBANY	39	26	50	20	33	2	0.72	0.11	0.48	0.75	97	3.88	71	84	53	0	7	3	0
NY BINGHAMTON	34	22	47	18	28	-1	0.17	-0.44	0.11	0.17	22	4.72	81	81	61	0	7	2	0
NY BUFFALO	37	24	49	17	30	-1	0.18	-0.42	0.14	0.18	23	5.73	90	87	59	0	7	3	0
NY ROCHESTER	36	24	49	21	30	0	0.04	-0.47	0.04	0.12	18	4.45	88	83	64	0	7	1	0
NY SYRACUSE	37	24	48	20	30	1	0.15	-0.42	0.07	0.16	22	4.58	84	82	54	0	7	4	0
NC ASHEVILLE	47	27	62	23	37	-6	0.68	-0.35	0.68	0.69	52	12.83	139	77	52	0	6	1	1
NC CHARLOTTE	55	27	63	21	41	-9	0.37	-0.63	0.37	0.55	43	8.30	94	80	31	0	6	1	0
NC GREENSBORO	52	30	61	22	41	-5	0.44	-0.41	0.38	0.44	41	9.11	118	75	31	0	5	2	0
NC HATTERAS	52	41	57	37	46	-4	0.24	-0.83	0.12	0.24	18	9.97	90	74	45	0	0	2	0
NC RALEIGH	51	31	62	26	41	-6	0.42	-0.52	0.41	0.42	35	7.60	87	73	40	0	4	2	0
NC WILMINGTON	58	34	66	29	46	-6	0.07	-0.91	0.07	0.07	6	7.34	78	79	30	0	3	1	0
ND BISMARCK	30	14	42	1	22	-3	0.49	0.35	0.25	0.49	272	1.08	95	89	78	0	7	2	0
ND DICKINSON	33	17	49	9	25	-2	0.22	0.16	0.21	0.22	314	0.30	34	93	74	0	7	2	0
ND FARGO	29	17	33	6	23	1	0.38	0.18	0.21	0.38	152	2.57	161	83	70	0	7	3	0
ND GRAND FORKS	28	13	32	-5	21	0	0.39	0.24	0.34	0.39	205	1.18	81	92	70	0	7	3	0
ND JAMESTOWN	26	11	31	-1	19	-4	0.12	-0.02	0.06	0.12	67	0.61	46	94	76	0	7	2	0
ND WILLISTON	26	11	35	4	19	-5	0.72	0.60	0.51	0.72	480	1.29	119	92	82	0	7	3	1
OH AKRON-CANTON	40	23	54	14	32	-2	0.19	-0.46	0.14	0.26	31	4.45	79	86	62	0	7	2	0
OH CINCINNATI	41	25	57	17	33	-7	0.62	-0.18	0.57	0.68	67	6.28	94	87	64	0	7	3	1
OH CLEVELAND	38	23	52	15	30	-4	0.10	-0.48	0.07	0.20	27	4.67	85	90	65	0	7	2	0
OH COLUMBUS	42	28	57	18	35	-3	0.78	0.19	0.57	0.79	105	4.86	89	83	55	0	6	3	1
OH DAYTON	39	25	52	17	32	-4	0.58	-0.04	0.43	0.58	73	4.97	88	89	58	0	7	3	0
OH MANSFIELD	40	22	53	13	31	-2	0.22	-0.39	0.17	0.27	35	5.00	90	94	58	0	7	4	0

Based on 1971-2000 normals

\*\*\* Not Available

Weather Data for the Week Ending March 9, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL IN., SINCE JAN 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP
																		01 INCH OR MORE	50 INCH OR MORE	
OK TOLEDO	39	22	49	15	30	-3	0.00	-0.48	0.00	0.00	0	6.44	145	82	54	0	7	0	0	
OK YOUNGSTOWN	40	23	53	15	32	-1	0.10	-0.49	0.07	0.16	22	4.46	87	86	62	0	7	3	0	
OK OKLAHOMA CITY	62	36	71	26	49	1	0.31	-0.32	0.31	0.31	39	4.17	115	76	35	0	2	1	0	
OR TULSA	61	38	73	24	49	1	0.29	-0.44	0.28	0.29	31	5.01	112	70	47	0	3	2	0	
OR ASTORIA	50	34	57	29	42	-3	1.11	-0.66	0.57	1.37	60	16.73	85	97	83	0	3	4	1	
OR BURNS	46	21	52	14	34	-1	0.00	-0.30	0.00	0.00	0	0.74	28	81	50	0	7	0	0	
OR EUGENE	54	32	61	28	43	-2	0.98	-0.44	0.54	0.98	53	3.94	25	94	81	0	4	3	1	
OR MEDFORD	57	33	64	26	45	-1	0.17	-0.29	0.12	0.18	31	1.63	32	90	48	0	4	4	0	
OR PENDLETON	51	29	56	23	40	-3	0.20	-0.08	0.16	0.20	57	1.57	52	83	60	0	5	2	0	
OR PORTLAND	53	35	59	29	44	-2	0.50	-0.41	0.36	0.50	42	5.25	50	91	67	0	3	2	0	
OR SALEM	54	32	61	27	43	-2	0.62	-0.45	0.32	0.62	45	3.67	30	94	77	0	5	2	0	
PA ALLENTOWN	46	30	63	24	38	3	0.01	-0.74	0.01	0.01	1	6.08	84	68	49	0	5	1	0	
PA ERIE	35	24	49	16	30	-3	0.40	-0.21	0.34	0.41	53	6.90	123	88	75	0	7	3	0	
PA MIDDLETOWN	44	30	56	26	37	0	0.21	-0.53	0.21	0.21	22	5.16	77	74	43	0	4	1	0	
PA PHILADELPHIA	47	33	62	29	40	1	0.13	-0.67	0.13	0.13	13	5.58	77	66	47	0	4	1	0	
PA PITTSBURGH	41	26	54	20	33	-3	0.20	-0.46	0.13	0.21	25	4.78	81	79	50	0	7	3	0	
PA WILKES-BARRE	40	26	54	22	33	-1	0.12	-0.40	0.10	0.12	18	3.45	66	78	49	0	7	3	0	
PA WILLIAMSPORT	43	28	57	25	36	2	0.00	-0.65	0.00	0.00	0	4.46	71	68	45	0	7	0	0	
RI PROVIDENCE	43	31	48	28	37	2	0.17	-0.72	0.09	0.17	15	7.13	80	81	56	0	7	3	0	
SC BEAUFORT	59	36	65	31	47	-7	0.02	-0.71	0.02	0.02	2	11.95	148	85	31	0	1	1	0	
SC CHARLESTON	60	34	67	27	47	-8	0.01	-0.82	0.01	0.01	1	10.83	132	80	29	0	3	1	0	
SC COLUMBIA	61	32	72	24	46	-6	0.02	-0.99	0.02	0.02	2	6.74	69	70	32	0	4	1	0	
SC GREENVILLE	56	30	63	26	43	-6	0.47	-0.78	0.47	0.54	34	9.69	95	75	31	0	6	1	0	
SD ABERDEEN	30	14	36	4	22	-4	0.17	-0.03	0.10	0.17	68	2.00	165	86	77	0	7	4	0	
SD HURON	33	20	39	14	27	-1	0.59	0.33	0.54	0.59	184	1.98	145	93	77	0	7	3	1	
SD RAPID CITY	46	20	60	5	33	1	0.00	-0.17	0.00	0.00	0	0.61	59	83	36	0	6	0	0	
SD SIOUX FALLS	34	22	43	15	28	0	0.30	0.04	0.19	0.30	97	1.65	124	91	77	0	7	4	0	
TN BRISTOL	44	27	65	21	36	-7	1.25	0.34	1.23	1.31	112	13.16	163	86	47	0	6	2	1	
TN CHATTANOOGA	53	32	62	27	43	-5	0.44	-0.94	0.43	0.44	25	14.12	118	79	56	0	3	2	0	
TN KNOXVILLE	46	29	63	20	38	-8	1.44	0.27	1.43	1.59	107	16.68	166	82	46	0	5	2	1	
TN MEMPHIS	60	36	72	22	48	-2	0.41	-0.77	0.41	0.42	28	13.99	139	69	33	0	1	1	0	
TN NASHVILLE	53	31	68	25	42	-5	0.83	-0.27	0.83	0.92	66	10.64	117	76	40	0	4	1	1	
TX ABILENE	72	45	86	25	59	6	0.00	-0.30	0.00	0.00	0	1.89	76	54	32	0	2	0	0	
TX AMARILLO	68	35	81	25	52	7	0.13	-0.07	0.10	0.13	52	3.42	239	69	24	0	2	2	0	
TX AUSTIN	73	42	87	29	58	-1	0.08	-0.46	0.08	0.08	11	3.43	75	65	46	0	3	1	0	
TX BEAUMONT	69	45	73	30	57	-3	0.00	-0.76	0.00	0.00	0	11.52	115	93	42	0	1	0	0	
TX BROWNSVILLE	78	57	82	42	68	2	0.26	0.10	0.26	0.26	124	1.74	63	88	56	0	0	1	0	
TX CORPUS CHRISTI	78	54	93	37	66	2	0.00	-0.42	0.00	0.00	0	1.69	42	76	44	1	0	0	0	
TX DEL RIO	78	51	92	41	65	4	0.00	-0.21	0.00	0.00	0	1.33	74	59	34	2	0	0	0	
TX EL PASO	73	47	81	39	60	6	0.00	-0.07	0.00	0.00	0	0.71	76	39	15	0	0	0	0	
TX FORT WORTH	69	45	88	33	57	3	0.01	-0.73	0.01	0.01	1	5.75	110	65	31	0	0	1	0	
TX GALVESTON	69	55	74	45	62	1	0.00	-0.57	0.00	0.00	0	9.42	127	85	52	0	0	0	0	
TX HOUSTON	72	46	80	31	59	-1	0.00	-0.72	0.00	0.00	0	4.53	60	80	43	0	1	0	0	
TX LUBBOCK	71	38	82	28	55	7	0.00	-0.15	0.00	0.00	0	2.23	158	61	34	0	2	0	0	
TX MIDLAND	75	46	85	34	60	7	0.00	-0.12	0.00	0.00	0	1.53	120	48	22	0	0	0	0	
TX SAN ANGELO	76	43	85	27	60	6	0.00	-0.26	0.00	0.00	0	1.82	78	54	28	0	1	0	0	
TX SAN ANTONIO	74	46	87	35	60	1	0.11	-0.32	0.09	0.11	20	3.04	77	80	38	0	0	2	0	
TX VICTORIA	74	46	81	29	60	-1	0.00	-0.50	0.00	0.00	0	4.09	80	85	48	0	1	0	0	
TX WACO	70	41	81	23	56	1	1.34	0.71	1.32	1.34	163	8.48	165	71	46	0	3	2	1	
TX WICHITA FALLS	70	41	81	27	56	5	0.27	-0.22	0.27	0.27	44	2.96	89	67	48	0	1	1	0	
UT SALT LAKE CITY	48	32	62	25	40	0	0.36	-0.03	0.23	0.36	72	2.56	80	84	52	0	2	3	0	
VT BURLINGTON	38	24	47	22	31	5	0.06	-0.37	0.05	0.17	31	2.60	59	83	55	0	7	2	0	
VA LYNCHBURG	51	28	64	19	39	-3	0.99	0.15	0.73	0.99	92	8.62	112	70	35	0	5	2	1	
VA NORFOLK	48	35	51	27	42	-4	0.93	0.03	0.56	0.93	81	8.49	101	72	44	0	2	2	1	
VA RICHMOND	50	31	62	24	41	-3	2.52	1.62	2.02	2.52	219	10.45	136	71	40	0	3	2	2	
VA ROANOKE	47	31	61	26	39	-4	0.93	0.09	0.82	0.93	87	10.22	138	68	44	0	3	2	1	
VA WASH/DULLES	47	30	60	27	39	-1	0.95	0.18	0.87	0.95	97	6.28	92	70	42	0	4	2	1	
WA OLYMPIA	51	32	57	25	42	0	0.86	-0.44	0.37	1.04	62	8.99	58	96	82	0	5	3	0	
WA QUILLAYUTE	51	33	54	29	42	-1	0.62	-2.16	0.44	4.03	112	26.14	88	88	77	0	3	4	0	
WA SEATTLE-TACOMA	52	38	56	32	45	0	0.76	-0.14	0.43	0.99	85	6.73	64	87	65	0	1	2	0	
WA SPOKANE	44	29	50	26	37	0	0.37	0.01	0.20	0.38	83	2.75	73	86	55	0	6	2	0	
WA YAKIMA	53	27	60	20	40	0	0.50	0.34	0.47	0.50	250	0.63	29	73	55	0	6	2	0	
WV BECKLEY	38	24	56	18	31	-8	0.50	-0.32	0.46	0.52	50	6.71	93	83	65	0	7	4	0	
WV CHARLESTON	45	28	66	22	36	-6	0.58	-0.31	0.50	0.59	52	6.62	87	83	52	0	7	4	1	
WV ELKINS	39	22	60	15	31	-5	0.53	-0.35	0.29	0.55	49	7.15	92	88	56	0	7	4	0	
WV HUNTINGTON	45	27	64	19	36	-6	0.66	-0.22	0.60	0.70	63	6.38	86	86	52	0	7	3	1	
WI EAU CLAIRE	33	13	40	0	23	-3	0.63	0.37	0.31	0.63	197	3.20	148	89	53	0	7	3	0	
WI GREEN BAY	32	14	37	2	23	-4	0.46	0.13	0.46	0.46	112	5.11	194	84	66	0	7	1	0	
WI LA CROSSE	34	14	41	-4	24	-6	0.73	0.46	0.45	0.73	221	3.13	125	91	54	0	7	3	0	
WI MADISON	33	13	39	-3	23	-6	0.93	0.58	0.52	0.94	209	6.22	209	85	67	0	7	3	1	
WI MILWAUKEE	34	22	39	13	28	-3	0.43	0.02	0.40	0.43	83	6.63	165	82	68	0	7	2	0	
WY CASPER	47	18	57	5	32	0	0.00	-0.19	0.00	0.00	0	0.77	53	68	39	0	7	0	0	
WY CHEYENNE	47	21	59	8	34	2	0.06	-0.12	0.05	0.06	27	1.00	90	73	54	0	6	2	0	
WY LANDER	43	23	54	10	33	1	0.00	-0.20	0.00	0.00	0	1.98	151	76	37	0	7	0	0	
WY SHERIDAN	41	19	52	5	30	-2	0.02	-0.13	0.02	0.02	11	1.77	116	81	63	0	7	1	0	

Based on 1971-2000 normals

\*\*\* Not Available

# February Weather and Crop Summary

## Weather

*Weather summary provided by USDA/WAOB*

**Highlights:** For many areas east of the Rockies, particularly across the Midwestern and Mid-Atlantic States, February was the coldest month during the winter of 2012-13. Warmth continued, however, across the Deep South, from southern Texas to Florida’s peninsula, where some early planting activities and blooming were noted by the end of February.

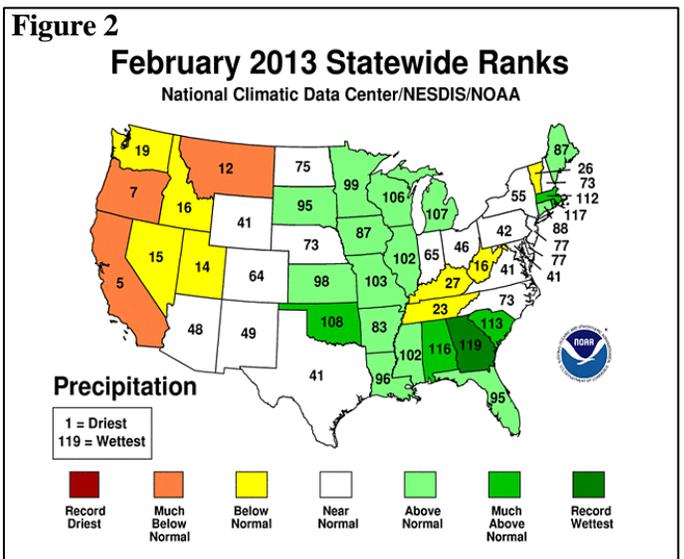
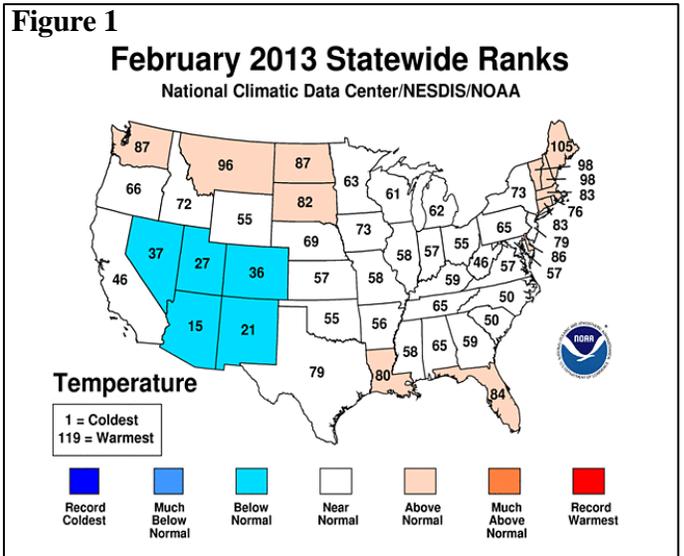
February precipitation highlights included heavy rain in the lower Southeast and several late-winter storms across the Plains and Midwest. Southeastern storms led to some record-high February precipitation totals and lowland flooding. However, rainfall largely bypassed Florida’s peninsula, where producers continued to irrigate citrus and other crops.

Across the Plains and Midwest, the most impressive storms struck during the second half of the month, from February 20-22 and 25-27. Both late-month storms produced heavy, wind-driven snow in various parts of the central and southern Plains and Midwest, stressing livestock and disrupting travel, but providing beneficial topsoil moisture and insulation for drought-stressed rangeland, pastures, and winter wheat.

Elsewhere, drier-than-normal weather dominated during February across southern Texas and nearly all areas west of the Rockies. In fact, disappointing amounts of precipitation have fallen across much of the West since the beginning of 2013, dimming prospects for spring and summer runoff and increasing water-supply concerns from California to the central and southern Rockies.

**Historical Perspective:** According to preliminary information provided by the National Climatic Data Center, the contiguous U.S. experienced its 49<sup>th</sup>-warmest, 58<sup>th</sup>-driest February during the 119-year period of record. The nation’s average temperature of 34.8°F was 0.8°F above the 1901-2000 mean, while the average precipitation of 2.00 inches was 99 percent of normal.

However, warmth was focused from the across the nation’s northern tier and the lower Southeast, while chilly conditions prevailed in the Southwest. State temperature rankings ranged from the 15<sup>th</sup>-coldest February in Arizona to the 15<sup>th</sup>-warmest February in Maine (figure 1). Meanwhile, dryness in the West contrasted with wetness in parts of the Plains, Midwest, Southeast, and Northeast. State precipitation rankings ranged from the fifth-driest February in California to the wettest February on record in Georgia (figure 2).



**Summary:** Frigid weather lingered across the nation's northern tier early in the month, when lows in northern Minnesota dipped to -39°F in Embarrass (on February 2 and 4) and International Falls (on February 2). Farther south, McAllen, Texas, registered a high of 88°F on February 4, resulting in a 127-degree daily spread in U.S. temperatures. Later, mild weather returned to the remainder of the U.S. On February 7, highs climbed to daily-record levels in Texas locations such as Brownsville and Waco (both 85°F). By February 9, however, colder weather in the West led to daily-record lows in southern California locations such as Camarillo (34°F) and Long Beach (38°F).

Early-February precipitation was persistent but rarely heavy, except downwind of the Great Lakes. For example, La Crosse, WI, received measurable precipitation on 10 consecutive days from January 27 – February 5, totaling 1.19 inches. This tied La Crosse's second-longest such streak on record, behind an 11-day wet spell from February 17-27, 1962. Meanwhile, Chicago, Illinois, measured 7.2 inches of snow during the first eight days of February, en route to a monthly total of 16.1 inches. Prior to February, Chicago had received a season-to-date snowfall of just 3.5 inches. By February 7, drought-easing precipitation overspread the Plains, Midwest, and Southeast. Record-setting precipitation totals for February 7 were established in locations such as Augusta, GA (3.10 inches); Salina, KS (1.14 inches); and Muskegon, MI (0.96 inch). On the same date, Muskegon also netted a daily-record snowfall, reporting 9.7 inches.

On February 8, a pair of storms began to merge along the Mid-Atlantic Coast, where Cape Hatteras, NC, tallied a daily-record rainfall of 2.82 inches. Farther north, February 8-9 snowfall topped 2 feet in many communities from Connecticut to coastal Maine, officially reaching 31.9 inches in Portland, ME; 30.0 inches in Bridgeport, CT; 28.7 inches in Worcester, MA; 27.8 inches in Islip, NY; and 24.0 inches in Concord, NH. New York City barely escaped the worst of the storm, with amounts in many urban locations ranging from 6 to 12 inches. For Portland, however, it was the greatest single-storm snowfall on record, surpassing the 27.1-inch total on January 17-18, 1979. In Boston, MA, where 24.9 inches of snow fell, a peak wind gust to 76 mph was clocked late on February 8. Other peak gusts reported during the February 8-9 event

included 63 mph in Providence, RI (18.0 inches of snow), and Hartford, CT (22.8 inches); 56 mph in Portland; 51 mph in Worcester; and 48 mph in Islip.

Even while New England's blizzard wound down, another storm quickly began to take shape across the Intermountain West. On February 9, Lander, WY, set daily records for both snowfall (10.8 inches) and precipitation (0.47 inch). Later, snow blanketed the upper Midwest, while heavy rain soaked the Deep South. Record-setting snowfall totals for February 10 included 12.0 inches in Sisseton, SD; 9.3 inches in Fargo, ND; 6.7 inches in St. Cloud, MN; and 4.4 inches in North Platte, NE. From February 9-11, snowfall in South Dakota reached 17.3 inches in Sisseton, 13.2 inches in Aberdeen, and 9.9 inches in Mitchell, with the bulk of the accumulation occurring on the 10th. Farther south, daily-record rainfall totals for February 10 reached 3.90 inches in Hattiesburg, MS, and 2.49 inches in Longview, TX. Hattiesburg's 4-day total, from February 10-13, climbed to 6.31 inches. Elsewhere in Mississippi, February 10-12 totals included 6.38 inches in Meridian and 5.77 inches in Vicksburg. Meanwhile, high winds raked the Southwest, including New Mexico, where gusts on February 10 were clocked to 68 mph in Las Vegas and Tucumcari. By February 12, however, parts of the southern High Plains received much-needed moisture in the form of wet snow. In northern Texas, daily-record snowfall totals for the 12<sup>th</sup> reached 8.0 inches in Dalhart and 4.7 inches in Borger and Amarillo. With a 4.0-inch snowfall total, Guymon, OK, also received a daily-record amount on February 12.

Multiple rounds of heavy rain affected the Deep South. In Alabama, Montgomery received more than 2 inches of rain on 3 consecutive days from February 10-12, totaling 7.50 inches. Similarly, Columbus, GA, netted 6.02 inches of rain from February 10-13. Later, daily-record totals in Florida for February 14 reached 1.56 inches in Naples, 0.87 inch in Fort Lauderdale, and 0.85 inch in Melbourne. Impacts from the Southern storminess included flooding and localized wind damage. The Leaf River near McLain, MS, climbed 9.14 feet above flood stage on February 14, the highest water level in that location since April 1980. The Chickasawhay River at Leaksville, MS, rose 9.18 feet above flood stage on February 14, marking the highest level in that location since February 1990. Southern

Mississippi and neighboring areas also experienced a tornado outbreak on February 10. One tornado, an EF-4 with winds estimated near 170 mph, cut a 21-mile swath—up to three-quarters of a mile wide—through Hattiesburg and neighboring communities.

Very warm weather prevailed on February 10 across Deep South Texas, where McAllen posted a daily-record high of 96°F. Two days later, Melbourne, FL, tied a daily-record high for February 12 with a high of 85°F. Additional daily-record highs across the lower Southeast occurred on February 13 in locations such as Orlando, FL (89°F); Melbourne (88°F); and Savannah, GA (80°F). Meanwhile, markedly colder air overspread the Southwest, resulting in consecutive daily-record lows of 17°F (on February 10-11) in Douglas, AZ. Another daily-record low (18°F) occurred in Douglas on February 13. Along the Pacific Coast, however, warmth developed. On February 15, highs climbed to daily-record levels in Camarillo, CA (85°F), and Medford, OR (69°F). The following day, additional record-setting highs in California (for February 16) included 86°F in El Cajon and 79°F in Santa Barbara.

As the second half of the month began, snow affected the nation's northern tier, while rain showers spread across the eastern one-third of the U.S. On February 18, International Falls, MN, noted records for both precipitation and snowfall (0.41 and 6.4 inches, respectively). Farther east, Caribou, ME, collected a daily-record snowfall (6.2 inches) for February 20. Meanwhile, snow squalls developed downwind of the Great Lakes. Record-setting snowfall totals in Michigan for February 19 included 6.9 inches in Muskegon and 9.5 inches in Sault Sainte Marie. Muskegon's monthly snowfall eventually climbed to 53.3 inches, breaking its February 1981 record of 45.8 inches. In addition, Muskegon's season-to-date snowfall jumped to 92.9 inches, nearly all (83.3 inches) of which fell in the 40-day period from January 20 – February 28).

By February 20-21, a significant, late-winter storm emerged from the Southwest, where storm-total snowfall in Arizona included 6.3 inches in Flagstaff and a trace in Tucson. Record-setting snowfall totals for February 20 reached 7.3 inches in Colorado Springs, CO, and 6.2 inches in Wichita, KS. Wichita's February

20-21 total climbed to 14.2 inches, representing the second-highest, single-storm snowfall on record. On January 17-18, 1962, Wichita had received 15.0 inches. Other February 20-21 storm totals included 11.1 inches in Dodge City, KS; 10.2 inches in Columbia, MO; and 10.0 inches in Grand Island, NE. Similarly, February 21-22 snowfall totals across the upper Midwest reached 8.9 inches in Sioux City, IA, and 7.3 inches in Rochester, MN. For Rochester, it was the greatest 2-day snowfall in more than 2 years, since 16.0 inches fell on December 10-11, 2010. Meanwhile, heavy rain returned to the Southeast. Daily-record rainfall amounts for February 22 totaled 4.75 inches in Tallahassee, FL, and 1.66 inches in Mobile, AL. The following day, record-setting totals for February 23 included 2.44 inches in Charleston, SC, and 2.30 inches in Alma, GA. Eventually, heavy snow blanketed parts of New England, where daily-record totals for February 24 included 13.1 inches in Concord, NH, and 10.7 inches in Portland, ME. The February 24 accumulations, in combination with the early-month blizzard, boosted February snowfall totals to 43.6 inches in Concord and 49.5 inches in Portland. In the storm's wake, cold air settled across the western and central U.S. On February 20, Sacramento, CA, posted a daily-record low of 30°F. Later, snow-covered sections of the Great Plains experienced daily-record lows. In Kansas, record-setting lows for February 22 dipped to 1°F in Garden City; 3°F in Medicine Lodge; and 5°F in Hill City. Additional record-breaking lows in Kansas on February 23 included -2°F in Salina and 1°F in Medicine Lodge. In contrast, record-setting warmth lingered across the lower Southeast. Gainesville, FL, collected a daily-record high of 86°F on February 22. Elsewhere in Florida, record-setting highs for February 23 soared to 89°F in Orlando and 87°F in Daytona Beach.

Meanwhile, a new storm took aim on the nation's mid-section. On February 25, daily-record snowfall totals reached 19.0 inches in Amarillo, TX; 16.0 inches in Borger, TX; and 4.8 inches in Wichita, KS. It was also Amarillo's snowiest February day on record, surpassing 12.0 inches on February 16, 1893. In addition, Amarillo set a record with a 17-inch snow depth on the morning of February 26, exceeding the 15-inch standard set on December 27, 2000. Wichita, which received snowfall totals of 14.2 and 7.0 inches on February 20-21 and 25-27, respectively, set a record for

any month with 21.2 inches of snow. Previously, Wichita's snowiest month had been 20.5 inches in February 1913. On February 25, high winds associated with the storm gusted to 69 mph in Raton, NM; 63 mph in Corpus Christi, TX; and 62 mph in Dalhart, TX. Later, heavy snow overspread the Midwest, where record-breaking amounts for February 26 included 8.4 inches in Kansas City, MO, and 4.8 inches in Chicago, IL. Waterloo, IA, set consecutive daily snowfall records on February 26-27, totaling 10.4 inches. As precipitation spread from the Midwest into the Northeast, daily-record snowfall totals for February 27 reached 5.4 inches in Milwaukee, WI, and 3.6 inches in Albany, NY. In Maine, Caribou collected a daily-record snowfall (13.6 inches) for February 28. Meanwhile, Northeastern precipitation totals reached daily-record levels for February 27 in locations such as New York's Central Park (1.56 inches) and Providence, RI (1.39 inches). Elsewhere, heavy rain returned to the Deep South. Record-setting totals for February 25 reached 3.95 inches in Tallahassee, FL; 1.88 inches in Charleston, SC; and 1.74 inches in Savannah, GA. Tallahassee (12.36 inches), Charleston (10.47 inches), and Savannah (9.75 inches) also set records for February wetness. Previously, records had been 12.22 inches (in 1914) in Tallahassee, 10.17 inches (in 1998) in Charleston, and 9.71 inches (in 1874) in Savannah. Like the earlier storm, the second system dragged cold air across the western and central U.S. In California, daily-record lows for February 24 included 17°F in Montague and 31°F in Eureka. The following day, Western record lows for February 25 dipped to 3°F in Cedar City, UT, and 31°F in Barstow-Daggett, CA. With a low of 18°F, Douglas, AZ, posted a daily-record low for February 26. Warmth lingered, however, for a few more days across Florida's peninsula, where West Palm Beach (88°F) collected a daily-record high for February 24. The following day, additional daily-record highs in Florida soared to 87°F in Melbourne and 86°F in Vero Beach.

A February cold snap was most severe and long-lasting in western Alaska. Across the remainder of the state, periods of mild weather helped to balance monthly temperatures. On February 19, Fairbanks (-43°F) reported its lowest temperature since January 28. Less than a week later, Nome's low of -30°F (on February 25) represented its lowest temperature since December 19. February precipitation was widespread and

occasionally heavy across southern Alaska, but generally light elsewhere. Monthly precipitation totaled 6.93 inches (120 percent of normal) in Valdez, including 96.3 inches of snow. Yakutat's monthly total reached 14.49 inches (133 percent of normal), aided by a daily-record total of 2.58 inches on February 9. Similarly, monthly rainfall totaled 13.36 inches (183 percent of normal) on Annette Island. King Salmon's monthly snowfall sum of 27.9 inches was padded by daily-record amounts on February 7, 12, and 19 (2.9, 3.5, and 5.7 inches, respectively).

Some very heavy rain fell across Hawaii's windward locations, especially during the latter half of February. During the week of February 17-23, rainfall totaled 18.06 inches at Kilohana, Kauai, and 14.43 inches at Hilo, on the Big Island. Much of Hilo's rain occurred from February 21-23, when 11.39 inches fell. In addition, Hilo's month-to-date rainfall reached 23.12 inches (242 percent of normal). At times, strong trade winds buffeted Hawaii; on February 18, airport gusts were clocked to 58 mph on Lanai and 51 mph on Molokai. However, leeward areas remained mostly dry. For example, February rainfall totaled just 0.65 inch (33 percent of normal) in Honolulu, Oahu, and 1.00 inch (32 percent) in Lihue, Kauai.

## Fieldwork

*Fieldwork summary provided by USDA/NASS*

Near-normal temperatures blanketed much of the United States during February. However, beginning around mid-month, a series of strong cold fronts delivered sub-freezing temperatures to many regions. Conversely, portions of Montana and New England recorded monthly temperatures averaging more than 6°F above normal. For much of the West, February was a relatively dry month, compounding the effects of pre-existing soil moisture shortages. Monthly precipitation in portions of the northern Rocky Mountains and Southwest totaled less than 25 percent of normal. Elsewhere, beneficial rain and snow aided developing small grain crops in the central and southern Great Plains, as well as in the Southeast.

Mild weather coupled with mostly dry conditions allowed producers in the southern half of the country ample time to prepare farm equipment and fields for spring planting. Hay was steadily harvested from more than half of Arizona's alfalfa fields throughout the month. In Texas, row crop producers in the Plains regions applied fertilizers and herbicides ahead of forecasted precipitation, while dry conditions in the Edwards Plateau and South Central regions delayed cotton planting. Sugarcane harvest continued in Florida and Texas throughout the month.

Late-month storms delivered much-needed moisture to the hard red winter wheat growing region in the central and southern Great Plains, helping to improve crop condition. On February 24, thirty-six percent of Kansas' winter wheat was reported in very poor to poor condition, compared with 39 percent on January 27. Additionally, 86 percent of the crop was free of freeze damage following cold weather toward month's end, despite limited snow cover. Fifty-four percent of the wheat crop in Oklahoma was reported in very poor to poor condition on February 24, compared with 69 percent on January 27. In California, small grain crops in southern locations were irrigated due to unfavorably dry conditions, while cool weather limited crop growth in northern portions of the state.

Warm weather in Florida prompted an early month start to bud swell and bloom development in early variety tree fruit crops. Elsewhere, citrus producers in the San Joaquin Valley used wind machines and irrigation to protect their crops as overnight temperatures dipped to near freezing. Florida's early and midseason citrus harvest neared completion by mid-month, while the

Valencia harvest gained speed toward month's end. General orchard and grove maintenance was ongoing throughout February.

### U.S. Crop Production Highlights

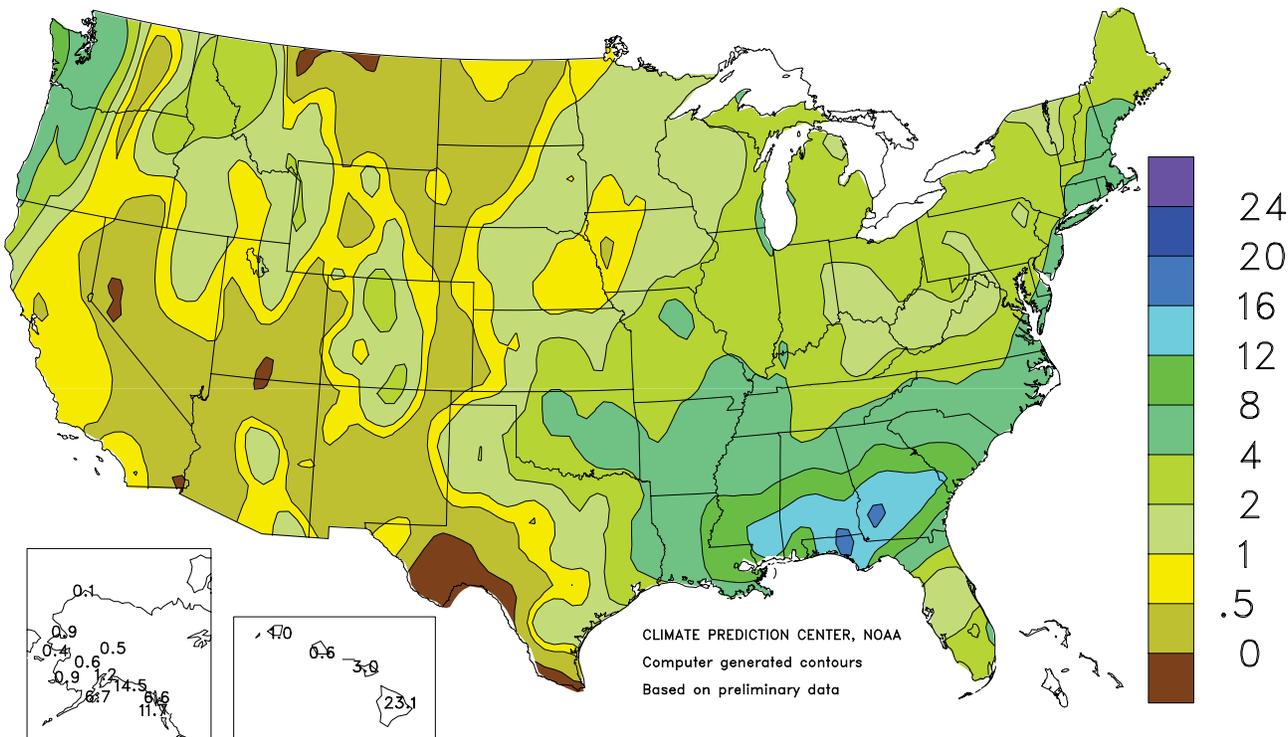
*The following information was released by USDA's Agricultural Statistics Board on March 8, 2013. Forecasts refer to March 1.*

The U.S. **all orange** forecast for the 2012-2013 season is 8.68 million tons, down 1 percent from the previous forecast and down 4 percent from the 2011-2012 final utilization. The Florida all orange forecast, at 139 million boxes (6.26 million tons), is down 1 percent from the February forecast and down 5 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 67.0 million boxes (3.02 million tons), up 2 percent from the February forecast but down 10 percent from last season. This increase was based on utilization data as of March 1. The Florida Valencia orange forecast, at 72.0 million boxes (3.24 million tons), is down 4 percent from the February forecast due to a sharp increase in droppage.

The California Valencia orange forecast is 12.5 million boxes (500,000 tons), down 4 percent from the previous forecast. This brings California's all orange forecast to 59.0 million boxes (2.36 million tons), down 1 percent from the January forecast. Objective survey measurements taken during January and February indicated that fruit set per tree was higher than the previous year, but measured average fruit size was smaller than the previous year. The forecast for Texas is carried forward from January.

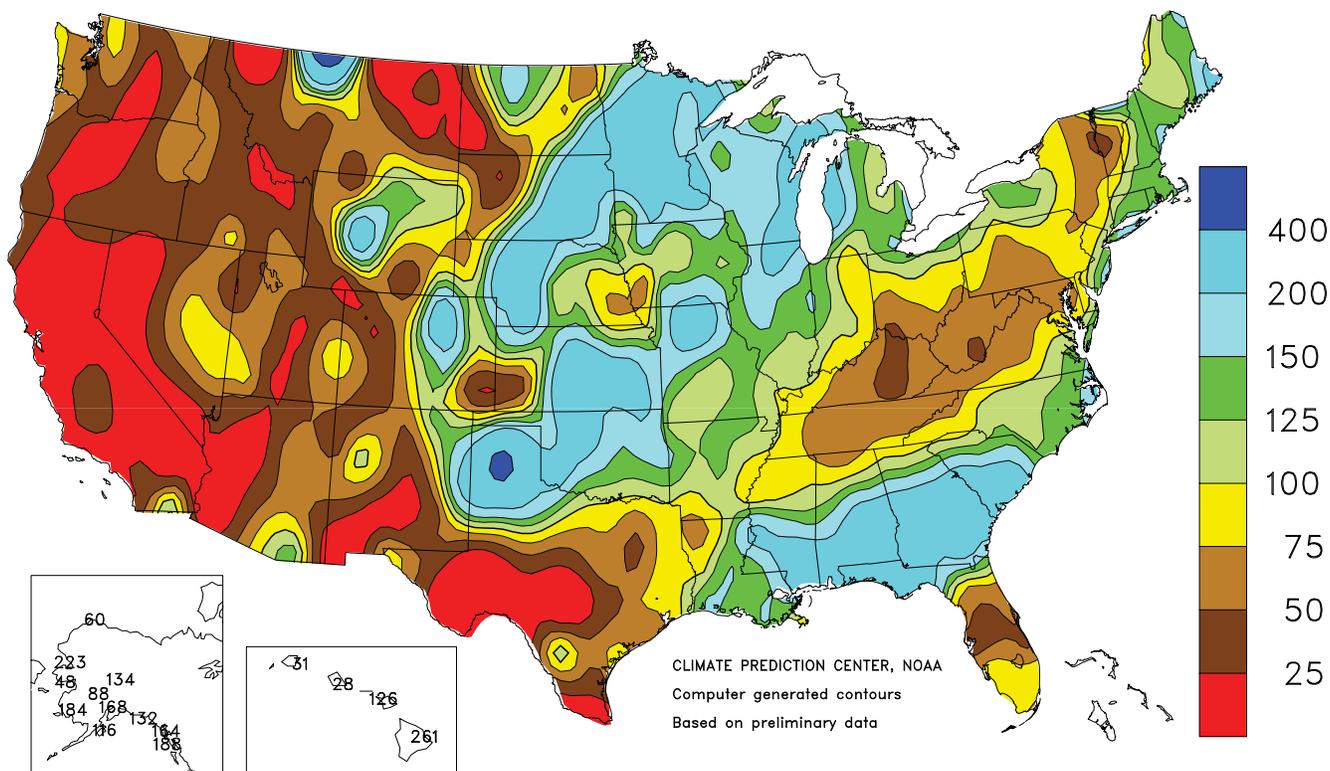
### Total Precipitation (Inches)

February 2013



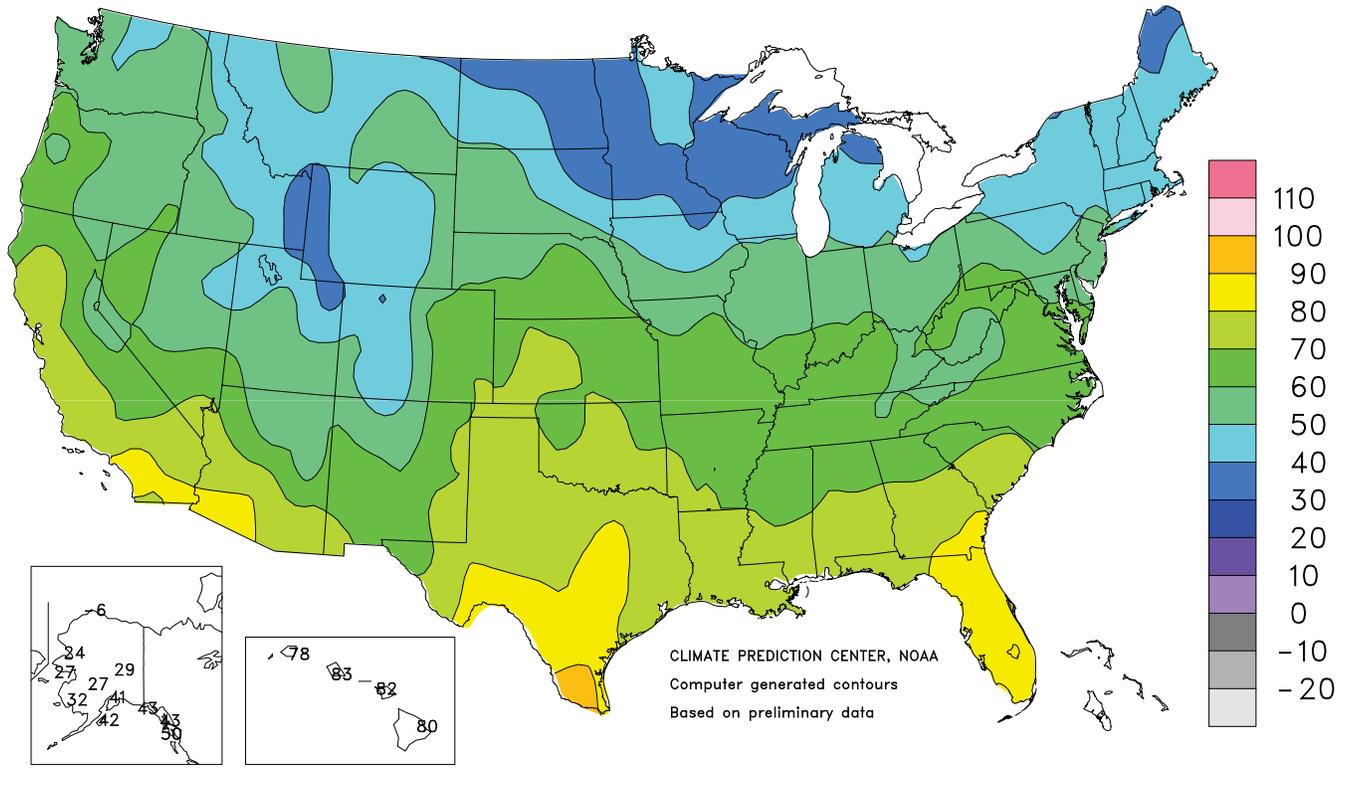
### Percent Of Normal Precipitation

February 2013



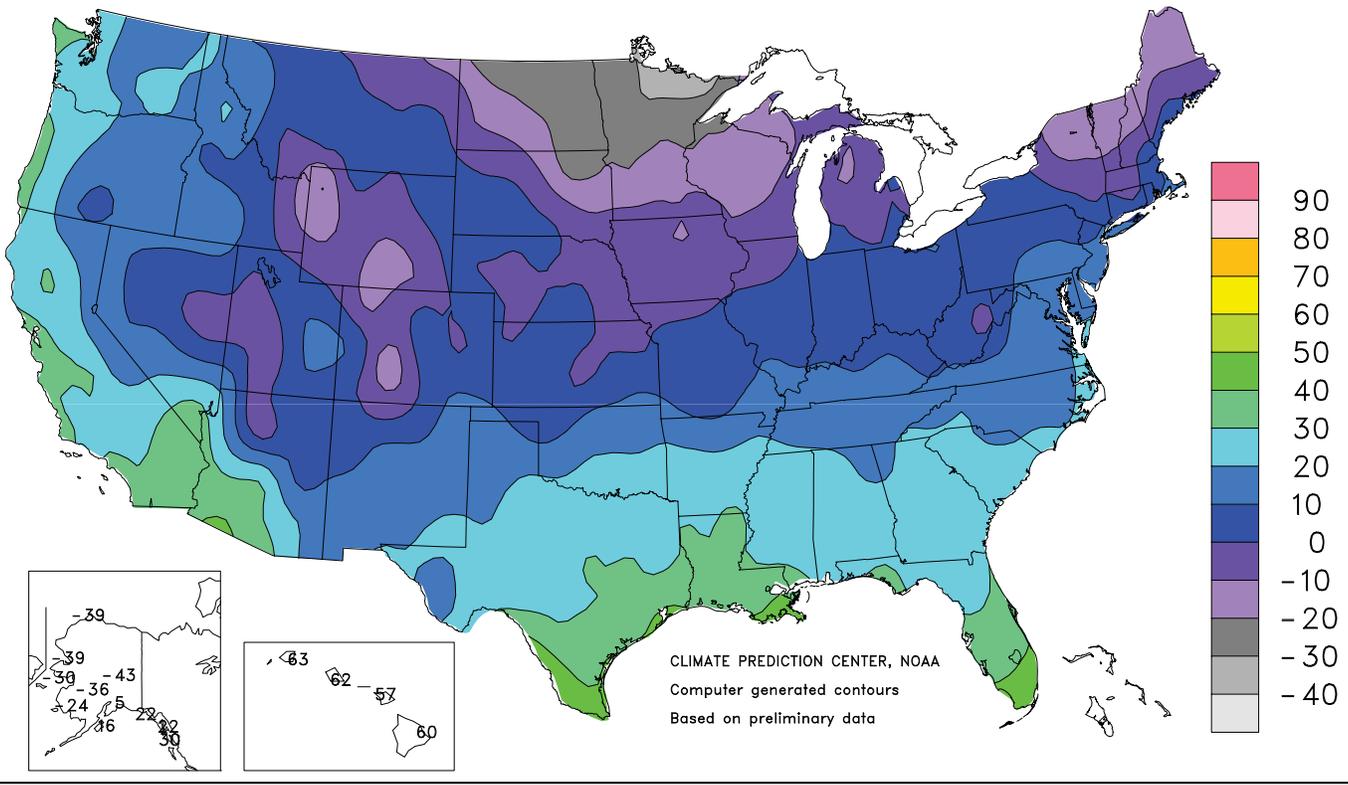
### Extreme Maximum Temperature (°F)

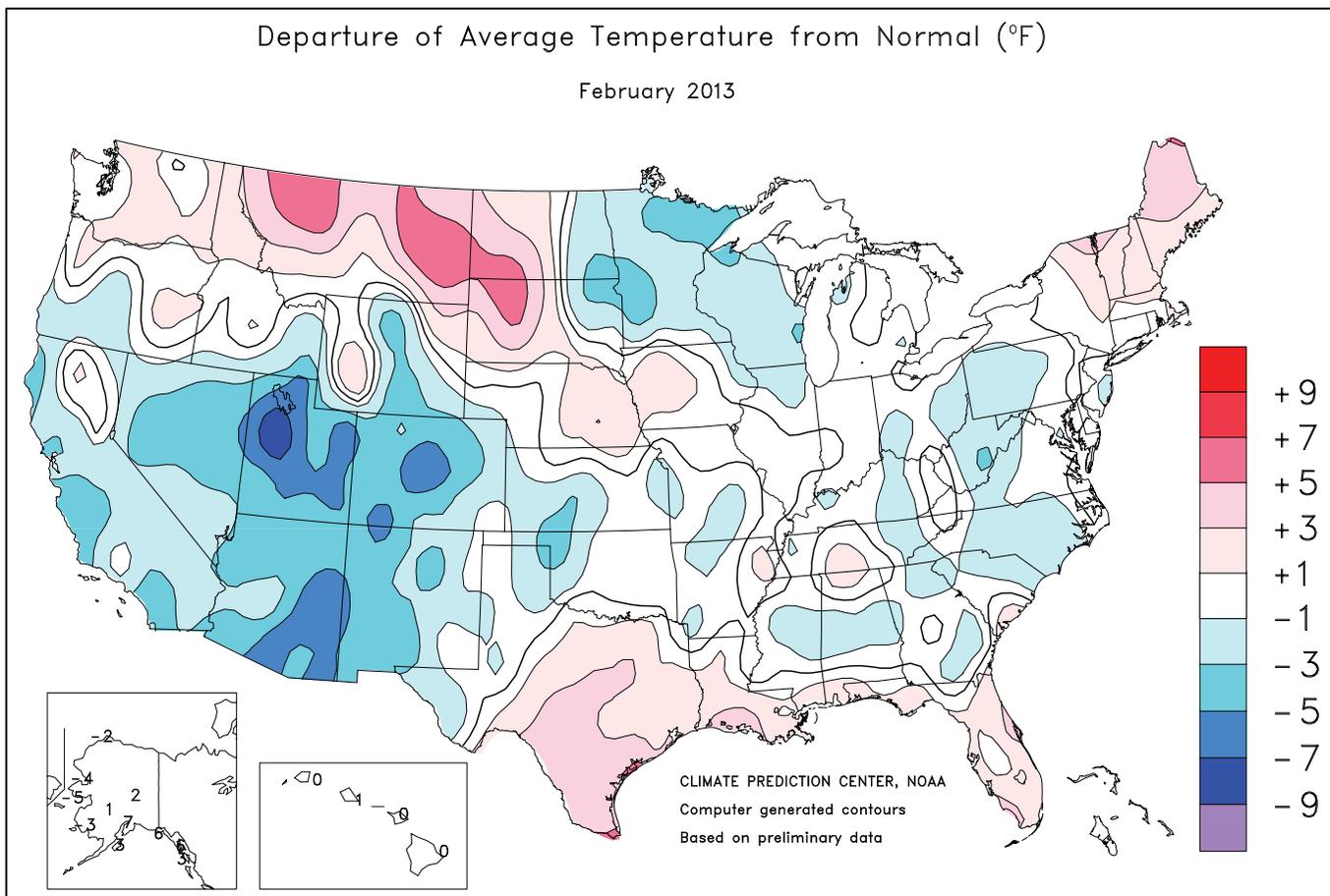
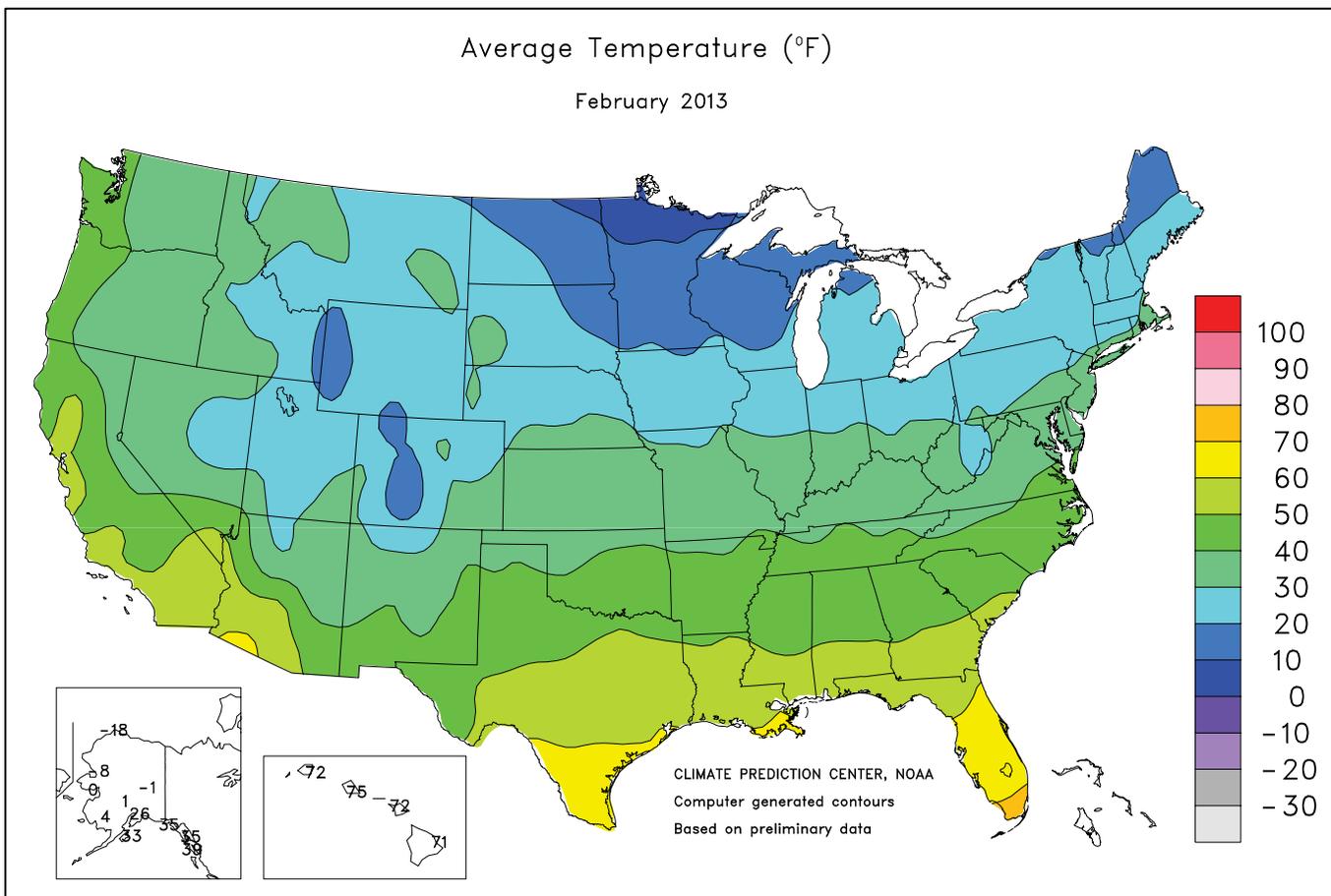
February 2013



### Extreme Minimum Temperature (°F)

February 2013





National Weather Data for Selected Cities

February 2013

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	6.21	2.00	LEXINGTON	35	-1	1.52	-1.75	COLUMBUS	31	-1	1.82	-0.38
HUNTSVILLE	45	1	3.29	-1.66	LONDON-CORBIN	37	-2	1.55	-2.17	DAYTON	30	0	1.29	-1.00
MOBILE	55	2	11.31	6.21	LOUISVILLE	38	0	1.92	-1.33	MANSFIELD	28	1	2.15	-0.02
MONTGOMERY	51	0	13.36	7.91	PADUCAH	38	0	3.70	-0.23	TOLEDO	27	0	2.82	0.94
AK ANCHORAGE	26	7	1.24	0.50	LA BATON ROUGE	56	3	7.37	2.27	YOUNGSTOWN	26	-2	2.49	0.46
BARROW	-18	-2	0.07	-0.05	LAKE CHARLES	58	4	5.21	1.93	OK OKLAHOMA CITY	43	1	2.72	1.16
COLD BAY	29	1	2.32	-0.27	NEW ORLEANS	58	2	7.21	1.74	TULSA	41	-1	3.18	1.23
FAIRBANKS	-1	3	0.48	0.12	SHREVEPORT	51	0	2.68	-1.53	OR ASTORIA	45	1	6.26	-1.61
JUNEAU	35	6	6.61	2.59	ME BANGOR	23	2	2.04	-0.50	BURNS	31	1	0.35	-0.76
KING SALMON	24	8	1.93	1.21	CARIBOU	17	4	3.51	1.45	EUGENE	43	0	1.61	-4.74
KODIAK	33	3	6.65	0.93	PORTLAND	28	3	6.07	2.93	MEDFORD	42	-2	0.49	-1.61
NOME	0	-6	0.36	-0.39	MD BALTIMORE	35	0	1.95	-1.07	PENDLETON	40	1	0.39	-0.83
AZ FLAGSTAFF	28	-4	0.86	-1.70	MA BOSTON	31	0	5.26	1.96	PORTLAND	45	2	1.26	-2.92
PHOENIX	57	-1	0.31	-0.46	WORCESTER	27	1	4.92	1.82	SALEM	44	1	1.42	-3.67
TUCSON	51	-4	0.79	-0.09	MI ALPENA	20	1	1.71	0.36	PA ALLENTOWN	30	0	2.07	-0.68
AR FORT SMITH	45	1	4.46	1.87	DETROIT	27	0	2.83	0.95	ERIE	27	-1	3.19	0.91
LITTLE ROCK	45	0	4.75	1.42	FLINT	25	1	1.56	0.21	MIDDLETOWN	32	1	1.74	-1.19
CA BAKERSFIELD	51	-2	0.60	-0.61	GRAND RAPIDS	25	0	3.05	1.52	PHILADELPHIA	35	0	2.11	-0.63
EUREKA	44	-5	1.78	-3.73	HOUGHTON LAKE	20	0	1.70	0.45	PITTSBURGH	28	-3	2.13	-0.24
FRESNO	51	0	0.89	-1.23	LANSING	25	1	1.78	0.33	WILKES-BARRE	29	0	1.31	-0.77
LOS ANGELES	56	-2	0.20	-2.91	MUSKEGON	25	0	3.96	2.38	WILLIAMSPORT	29	0	1.82	-0.79
REDDING	50	1	0.58	-4.91	TRAVERSE CITY	23	1	3.21	1.42	PR SAN JUAN	78	1	2.32	0.02
SACRAMENTO	49	-2	0.36	-3.18	MN DULUTH	15	0	1.16	0.33	RI PROVIDENCE	31	0	5.03	1.58
SAN DIEGO	56	-3	0.63	-1.41	INT'L FALLS	8	-3	1.51	0.87	SC CHARLESTON	51	0	10.47	7.39
SAN FRANCISCO	51	-1	0.67	-3.34	MINNEAPOLIS	19	-1	1.33	0.54	COLUMBIA	47	-1	5.51	1.67
STOCKTON	49	-2	0.22	-2.24	ROCHESTER	19	1	1.22	0.47	FLORENCE	47	-1	5.02	2.00
CO ALAMOSA	21	-1	0.15	-0.06	ST. CLOUD	15	-1	1.33	0.74	GREENVILLE	44	0	3.88	-0.36
CO SPRINGS	30	-2	0.90	0.55	MS JACKSON	50	1	8.85	4.35	MYRTLE BEACH	47	-2	4.40	0.90
DENVER	30	-1	0.77	0.54	MERIDIAN	49	-1	9.07	3.72	SD ABERDEEN	15	-4	1.05	0.57
GRAND JUNCTION	32	-2	0.39	-0.11	TUPELO	45	0	3.72	-0.96	HURON	20	-1	1.10	0.53
PUEBLO	32	-3	0.48	0.22	MO COLUMBIA	34	0	3.86	1.66	RAPID CITY	29	2	0.18	-0.28
CT BRIDGEPORT	31	-1	5.02	2.10	JOPLIN	38	-1	2.70	0.45	SIOUX FALLS	22	1	0.94	0.43
HARTFORD	29	0	3.76	0.80	KANSAS CITY	33	0	1.86	0.55	TN BRISTOL	38	0	1.86	-1.54
DC WASHINGTON	38	0	1.67	-0.96	SPRINGFIELD	37	0	2.28	0.00	CHATTANOOGA	44	1	3.94	-0.91
DE WILMINGTON	35	1	2.31	-0.50	ST JOSEPH	31	-1	0.87	-0.26	JACKSON	42	-1	3.65	-0.60
FL DAYTONA BEACH	62	2	1.40	-1.34	ST LOUIS	36	1	3.27	0.99	KNOXVILLE	42	0	2.42	-1.59
FT LAUDERDALE	71	3	2.14	-0.56	MT BILLINGS	33	3	0.29	-0.28	MEMPHIS	45	0	3.85	-0.46
FT MYERS	68	2	1.86	-0.24	BUTTE	22	0	0.13	-0.34	NASHVILLE	42	1	2.58	-1.11
JACKSONVILLE	58	2	4.71	1.56	GLASGOW	24	5	0.10	-0.16	TX ABILENE	50	1	0.58	-0.55
KEY WEST	73	2	1.25	-0.26	GREAT FALLS	33	7	0.43	-0.08	AMARILLO	40	-1	2.53	1.98
MELBOURNE	65	3	1.00	-1.49	HELENA	32	6	0.32	-0.06	AUSTIN	56	1	0.64	-1.35
MIAMI	72	3	1.85	-0.22	KALISPELL	32	5	0.18	-0.97	BEAUMONT	58	2	3.30	-0.05
ORLANDO	65	2	0.67	-1.68	MILES CITY	32	7	0.01	-0.33	BROWNSVILLE	69	6	0.01	-1.17
PENSACOLA	58	3	11.91	7.23	MISSOULA	33	4	0.32	-0.45	COLLEGE STATION	58	3	1.10	-1.28
ST PETERSBURG	66	3	0.61	-2.26	NE GRAND ISLAND	31	3	0.97	0.29	CORPUS CHRISTI	65	5	0.44	-1.40
TALLAHASSEE	56	1	12.36	7.73	HASTINGS	30	0	0.90	0.23	DALLAS/FT WORTH	52	3	1.68	-0.69
TAMPA	65	2	0.93	-1.74	LINCOLN	30	2	0.54	-0.12	DEL RIO	60	4	0.00	-0.96
WEST PALM BEACH	69	2	2.40	-0.15	MCCOOK	32	0	1.54	0.90	EL PASO	48	-3	0.41	0.02
GA ATHENS	45	-1	6.36	1.97	NORFOLK	28	2	0.66	-0.10	GALVESTON	62	4	2.24	-0.37
ATLANTA	46	-1	7.50	2.82	NORTH PLATTE	29	0	1.04	0.53	HOUSTON	58	3	1.32	-1.66
AUGUSTA	47	-1	9.39	5.28	OMAHA/EPPLEY	29	1	0.79	-0.01	LUBBOCK	44	1	1.31	0.60
COLUMBUS	51	1	12.47	7.99	SCOTTSBLUFF	31	1	0.31	-0.27	MIDLAND	48	-1	0.08	-0.50
MACON	48	-1	12.87	8.32	VALENTINE	28	1	0.98	0.50	SAN ANGELO	52	2	0.39	-0.79
SAVANNAH	53	0	9.75	6.83	NV ELKO	28	-3	0.56	-0.32	SAN ANTONIO	59	4	0.10	-1.65
HI HILO	71	0	23.12	14.26	ELY	26	-4	0.65	-0.10	VICTORIA	60	3	1.36	-0.68
HONOLULU	75	2	0.65	-1.70	LAS VEGAS	52	0	0.00	-0.69	WACO	53	2	2.09	-0.34
KAHULUI	72	0	2.96	0.60	RENO	38	0	0.00	-1.06	WICHITA FALLS	46	0	2.05	0.48
LIHUE	72	0	1.00	-2.26	WINNEMUCCA	34	-2	0.09	-0.53	UT SALT LAKE CITY	29	-6	0.68	-0.65
ID BOISE	36	-1	0.63	-0.51	NH CONCORD	25	2	3.54	1.18	VT BURLINGTON	24	4	1.32	-0.35
LEWISTON	41	3	0.68	-0.27	NJ ATLANTIC CITY	34	0	5.16	2.31	VA LYNCHBURG	38	0	1.57	-1.53
POCATELLO	29	-1	0.51	-0.50	NEWARK	34	0	3.85	0.89	NORFOLK	43	1	4.80	1.46
IL CHICAGO/O'HARE	26	-1	2.96	1.33	NM ALBUQUERQUE	39	-2	0.24	-0.20	RICHMOND	40	0	2.60	-0.38
MOLINE	27	0	2.54	1.03	NY ALBANY	27	2	1.67	-0.50	ROANOKE	39	0	2.08	-1.00
PEORIA	29	1	2.90	1.23	BINGHAMTON	24	0	2.30	-0.16	WASH/DULLES	35	0	1.63	-1.14
ROCKFORD	24	-1	2.98	1.64	BUFFALO	26	0	3.05	0.63	WA OLYMPIA	42	2	4.04	-2.13
SPRINGFIELD	31	0	3.00	1.20	ROCHESTER	27	2	2.86	0.82	QUILLAYUTE	44	2	11.77	-0.58
EVANSVILLE	36	0	2.77	-0.33	SYRACUSE	25	1	2.71	0.59	SEATTLE-TACOMA	44	1	1.58	-2.60
FORT WAYNE	28	1	1.86	-0.08	NC ASHEVILLE	40	1	3.56	-0.27	SPOKANE	34	1	0.74	-0.77
INDIANAPOLIS	31	0	2.27	-0.14	CHARLOTTE	43	-2	3.46	-0.09	YAKIMA	40	5	0.03	-0.77
SOUTH BEND	27	0	2.49	0.51	GREENSBORO	40	-1	3.20	0.10	WV BECKLEY	33	-1	1.42	-1.54
BURLINGTON	29	1	1.87	0.33	HATTERAS	48	1	7.56	3.62	CHARLESTON	36	-1	1.82	-1.37
CEDAR RAPIDS	25	0	1.01	-0.09	RALEIGH	42	-1	4.08	0.61	ELKINS	29	-3	2.09	-1.11
DES MOINES	28	1	1.74	0.55	WILMINGTON	47	-2	5.14	1.48	HUNTINGTON	37	0	1.76	-1.33
DUBUQUE	22	-1	1.70	0.28	ND BISMARCK	22	4	0.34	-0.17	WI EAU CLAIRE	18	-1	1.49	0.69
SIoux CITY	26	1	1.01	0.39	DICKINSON	26	5	0.00	-0.43	GREEN BAY	19	-1	2.30	1.29
WATERLOO	23	0	1.78	0.73	FARGO	13	-1	1.22	0.63	LA CROSSE	20	-3	1.31	0.32
KS CONCORDIA	32	0	0.79	0.06	GRAND FORKS	11	-2	0.37	-0.21	MADISON	21	-2	2.41	1.13
DODGE CITY	34	-2	0.90	0.24	JAMESTOWN	14	-2	0.31	-0.21	MILWAUKEE	24	-1	3.03	1.38
GOODLAND	31	-1	0.78	0.34	MINOT	17	0	0.73	0.20	WAUSAU	17	-2	1.47	0.57
HILL CITY	33	1	0.52	-0.08	WILLISTON	22	5	0.14	-0.25	WY CASPER	26	-1	0.50	-0.14
TOPEKA	34	1	1.89	0.71	OH AKRON-CANTON	28	0	2.03	-0.25	CHEYENNE	26	-3	0.70	0.26
WICHITA	36	0	2.45	1.43	CINCINNATI	33	-1	2.21	-0.54	LANDER	24	-2	1.28	0.74
KY JACKSON	37	-1	1.91	-1.77	CLEVELAND	28	0	2.30	0.01	SHERIDAN	25	-2	0.79	0.22

# National Agricultural Summary

March 4 – 10, 2013

Weekly National Agricultural Summary provided by USDA/NASS

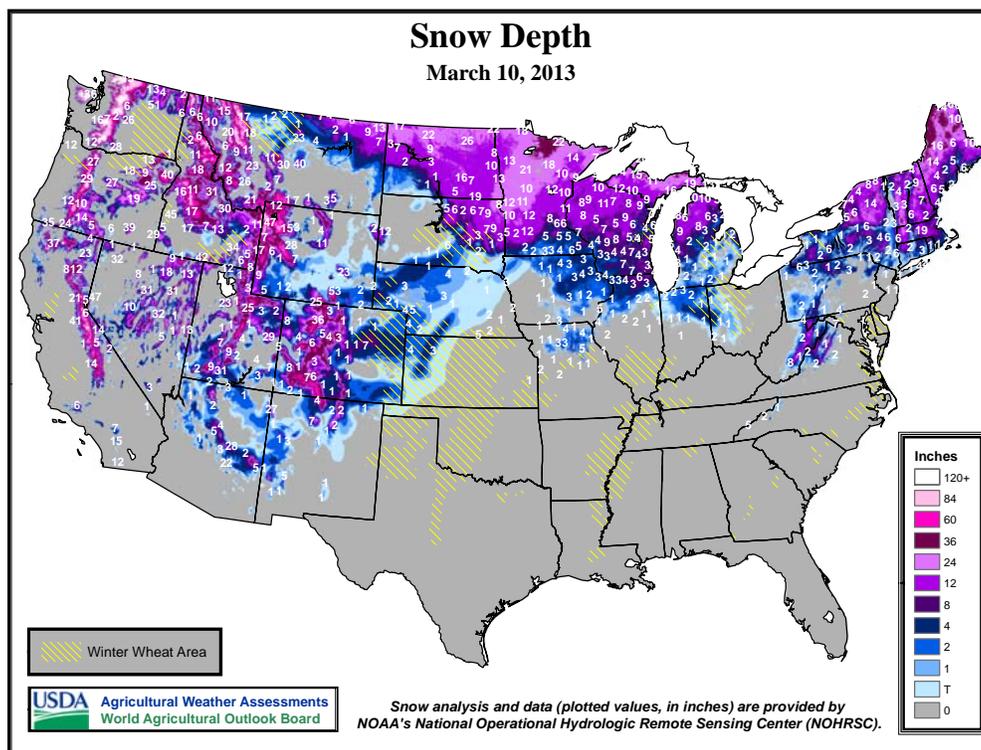
Near-normal temperatures blanketed much of the country during the week, but portions of the Northern Tier and Southeast recorded temperatures more than 9°F below average. Conversely, weekly temperatures in portions of New England were more than 9°F above average. Much of the Great Lakes region, as well as the Corn Belt and northern Great Plains received weekly precipitation totaling at least 200 percent of normal. Similarly, beneficial moisture in recent weeks has led to improvement in winter wheat conditions throughout much of the central and southern Great Plains; however, a large portion of the crop remained in very poor or poor condition.

Cold weather hit Florida for a third consecutive week, with more than half of the state recording sub-freezing overnight lows. Although the panhandle was drought-free following significant rainfall last week, dry conditions continued to plague the peninsula. This caused citrus producers to maintain heavy irrigation in their orchards as bloom progressed. Seasonal fieldwork continued where conditions allowed. Vegetable growers were busy assessing fields for damage caused by previous cold snaps and strong winds. Winter vegetable harvest was in full swing, while producers in

Gilchrist and Levy Counties planted sweet corn and watermelons.

In Texas, rainfall boosted soil moisture levels in the Blacklands and Cross Timbers, while the rest of the state remained mostly dry. High winds continued to blow, quickly drying topsoil moisture in many fields. Producers from the Plains regions into North East Texas top-dressed small grain crops and applied pesticides. Warm weather following last week's precipitation led to green up in some wheat fields. Despite unfavorably dry soils, producers statewide were either planting or preparing to plant row crops.

Mild, mostly dry weather continued in California during the week. Small grain producers continued to irrigate developing crops. While some areas received rainfall during the week, less-than-adequate soil moisture levels hampered growth in dryland fields. As bloom gained speed in most almond orchards, petal fall was evident for early varieties. Citrus harvest continued. Producers made dormant sprays on cherries. Warm weather increased bloom for tree fruits and aided blueberry and strawberry growth. Winter vegetables continued to be harvested, while producers prepared fields and planted spring crops.



## March 7 ENSO Update

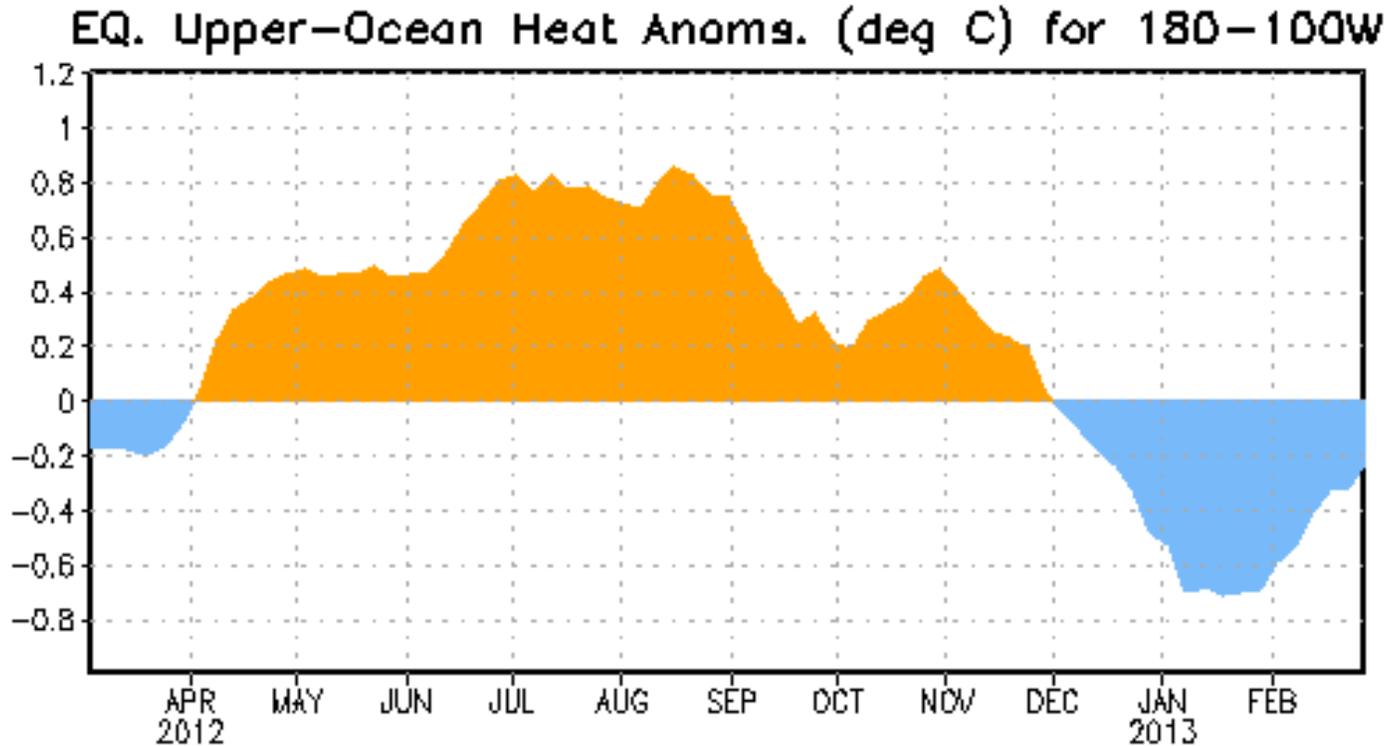


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

### ENSO Alert System Status: Not Active

#### **Synopsis: ENSO-neutral is favored into the Northern Hemisphere summer 2013.**

During February 2013, ENSO-neutral continued although SSTs remained below average across the eastern half of the equatorial Pacific Ocean. The Niño 3.4 index remained near -0.5°C, while the Niño 3 index became less negative as the month progressed. The oceanic heat content (average temperature in the upper 300m of the ocean) similarly increased during the month (Fig. 1), largely due to the eastward push of above-average temperatures at depth. The Madden-Julian Oscillation (MJO) again contributed to increased atmospheric variability over the tropical Pacific during February. Anomalous low-level winds were primarily easterly over the west-central equatorial Pacific, while upper-level winds remained near average, but with some intramonthly variability. Over Indonesia, anomalous convection remained enhanced north of the equator and suppressed south of the equator. Due to the lack of persistent atmosphere-ocean coupling, the tropical Pacific continues to reflect ENSO-neutral.

Most models forecast Niño-3.4 SSTs to remain between 0°C and -0.5°C through Northern Hemisphere spring and to

remain ENSO-neutral (between -0.5°C and +0.5°C) into the fall. However, there is increasing model spread and overall less confidence in the forecast during the last half of the year, partly because of the so-called “spring barrier,” which historically leads to lower model skill beginning in late spring. Thus, ENSO-neutral is favored into the Northern Hemisphere summer 2013 (see [CPC/IRI consensus forecast](#)).

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 4 April 2013. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: [ncep.list.ens-update@noaa.gov](mailto:ncep.list.ens-update@noaa.gov).

## International Weather and Crop Summary

March 3-9, 2013

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

### HIGHLIGHTS

**EUROPE:** Mild weather returned to the continent, while locally heavy rain benefited winter grains in southern Europe.

**WESTERN FSU:** Warmer-than-normal weather persisted in the south, while colder conditions in northern growing areas kept winter crops dormant under a moderate to deep snowpack.

**MIDDLE EAST:** Mild, showery weather benefited winter grains, although locally heavy rain boosted moisture reserves in Iran.

**NORTHWEST AFRICA:** Locally heavy downpours in Morocco alleviated dryness in southern portions of the country and boosted soil moisture in key northern crop districts.

**SOUTHEAST ASIA:** Mostly dry weather in western Java, Indonesia, aided rice maturation and harvesting.

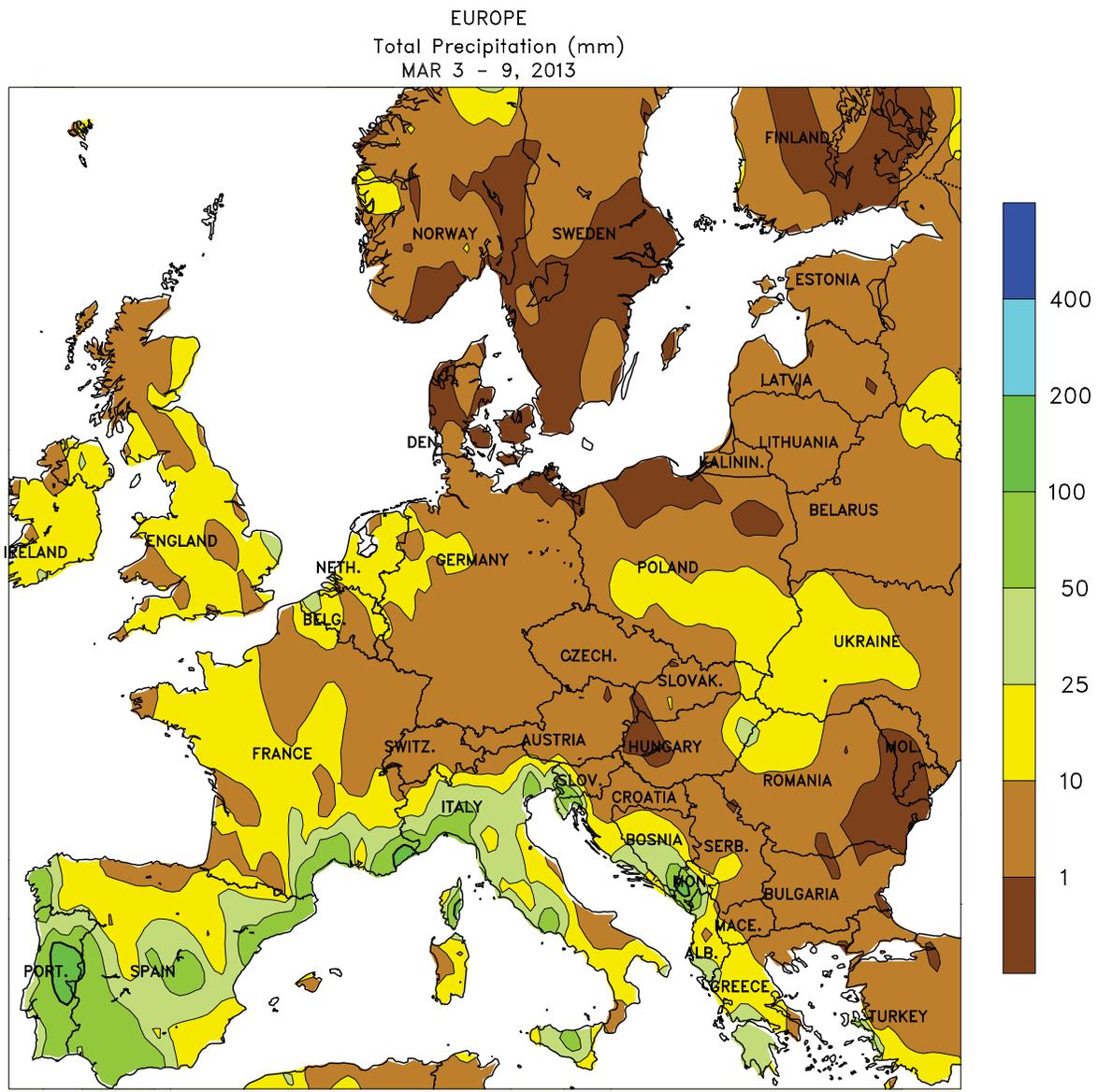
**AUSTRALIA:** Following last week's soaking rains, drier weather overspread eastern Australia, favoring summer crop maturation and early harvesting.

**SOUTH AFRICA:** Dry, seasonably warm weather limited moisture for immature corn.

**ARGENTINA:** Sunny skies promoted summer crop development, following last week's soaking rain.

**BRAZIL:** Conditions remained overall favorable for corn and soybeans, although dryness returned to farming areas of the northeastern interior.





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Computer generated contours  
Based on preliminary data

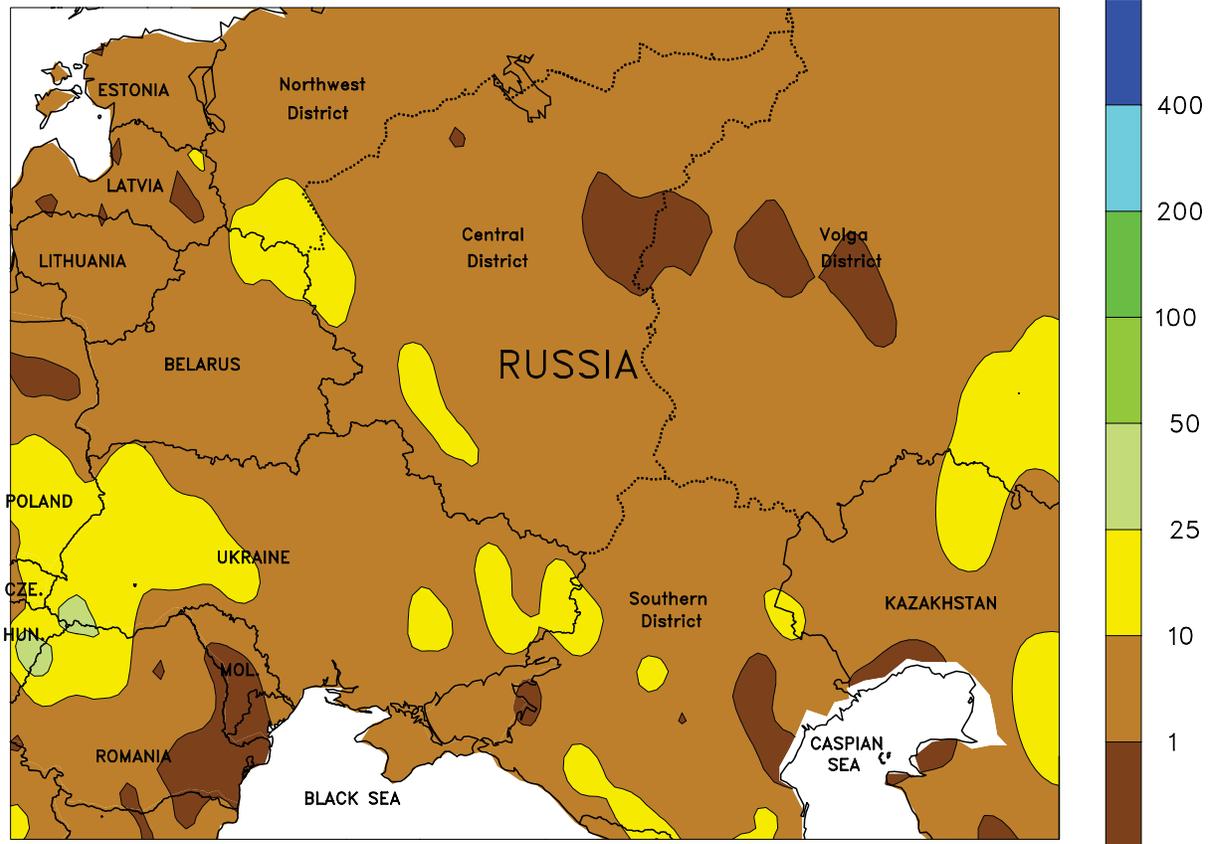


**EUROPE**

Warmer weather returned to the region, while locally heavy rain fell across much of southern Europe. A large area of high pressure maintained mostly dry (2-5 mm), increasingly warm weather from eastern France into northern Poland and the Baltic States. Winter crops remained dormant in Poland and Germany, while wheat and rapeseed began to break dormancy in northern France and southern England. Meanwhile, a slow-moving storm system approached

western and southern Europe, generating widespread showers (10-25 mm) across France and the United Kingdom. As the storm drifted east, heavier rain (25-100 mm, locally more) fell in Spain, southern France, and Italy, boosting soil moisture for vegetative winter grains while increasing irrigation reserves for warm-season crops. Dry, mild weather prevailed in the Balkans, encouraging early spring fieldwork and winter crop growth.

WESTERN FSU  
Total Precipitation (mm)  
MAR 3 - 9, 2013



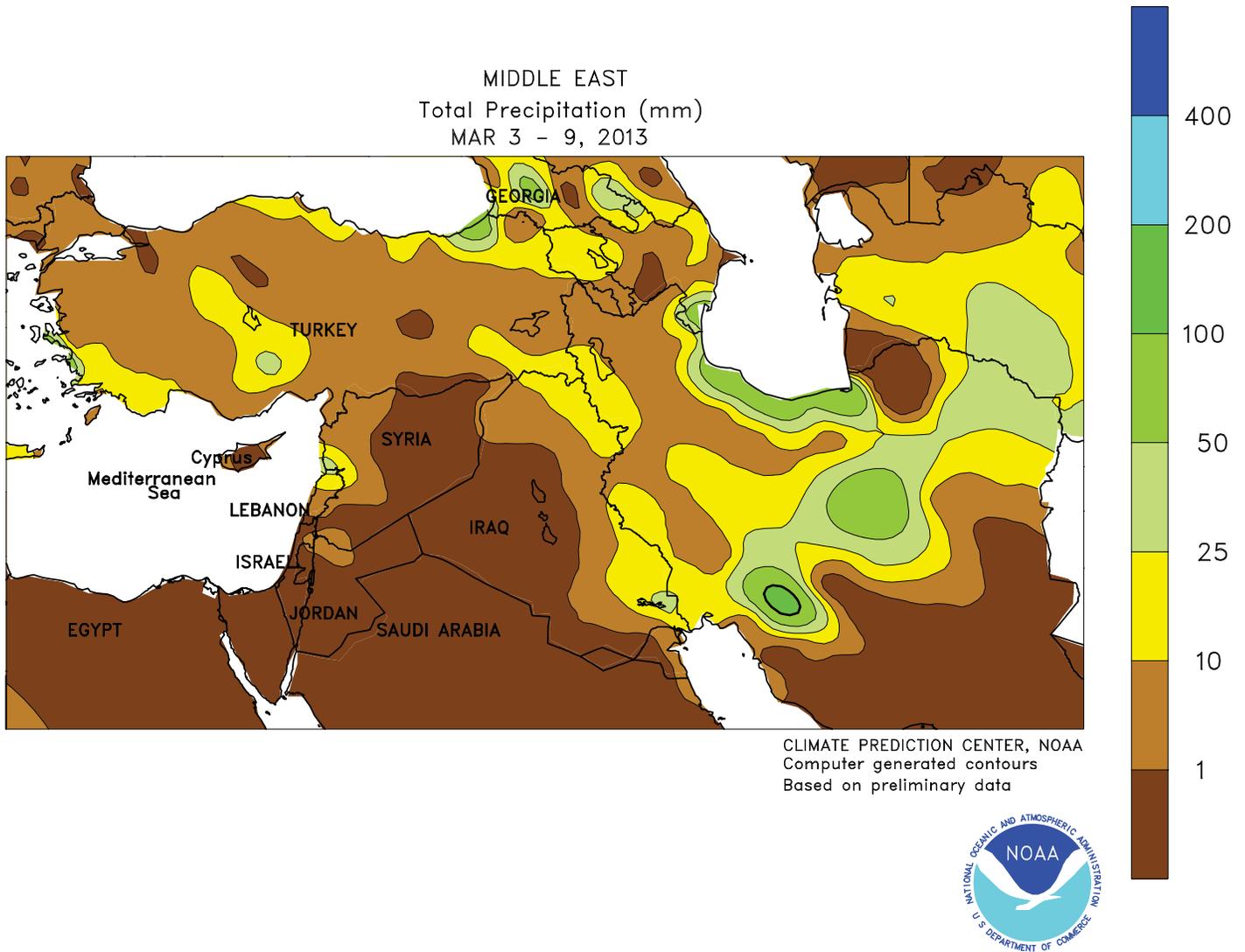
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Computer generated contours  
Based on preliminary data



**WESTERN FSU**

Persistent warmth in the south contrasted with seasonably cold weather in the north. Temperatures up to 4°C above normal across the region’s southern tier caused additional winter crop greening and encouraged producers to continue sowing spring grains several weeks earlier than normal, especially in southern Ukraine. The weather was generally dry in the south, although an approaching storm system was bringing rain to these areas as of March 11. Meanwhile, cold

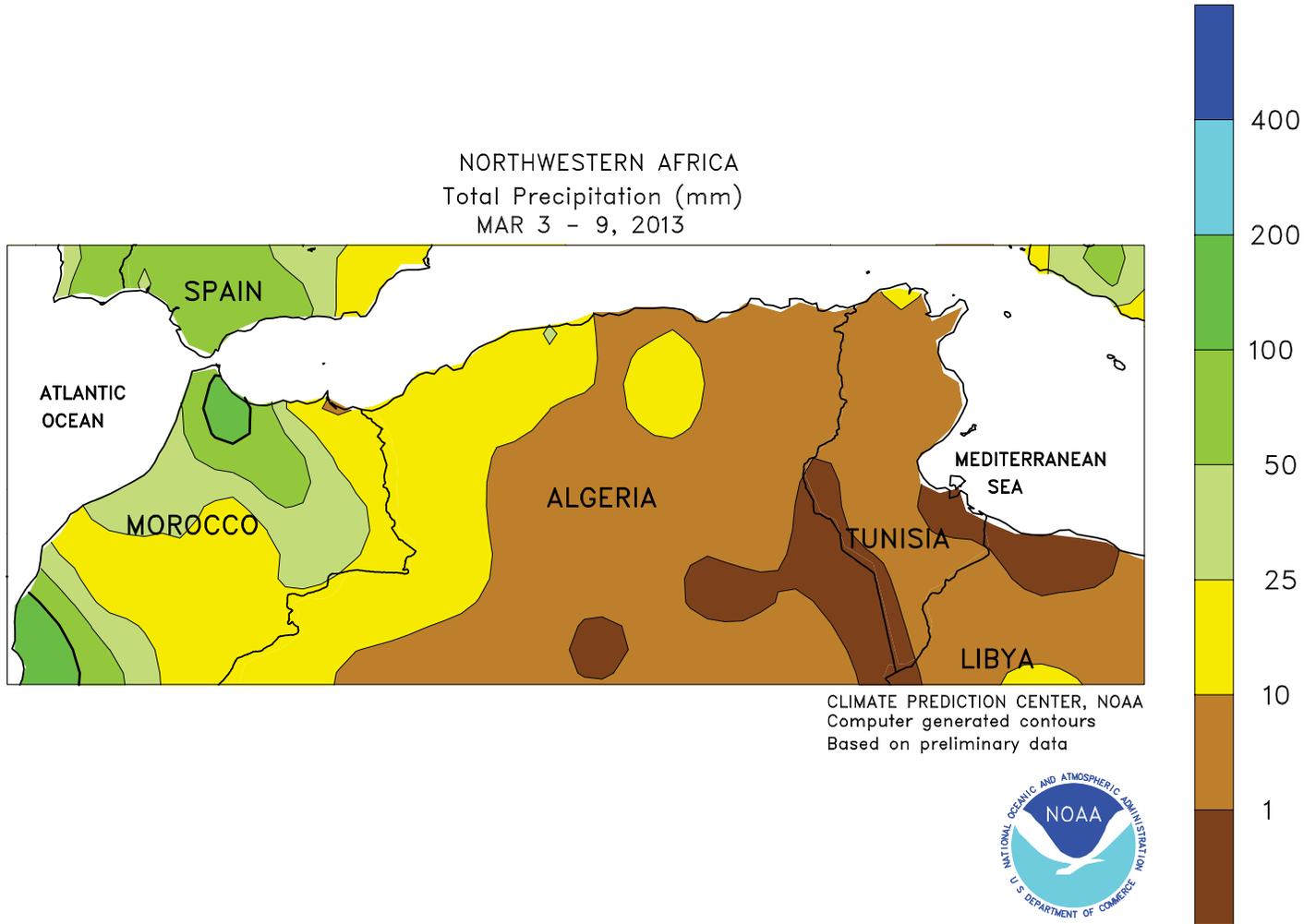
conditions (temperatures averaging 1-5°C below normal) prevailed over the northern half of the region, accompanied by additional light to moderate snowfall (2-11 mm liquid equivalent). By week’s end, winter wheat areas in central and southern portions of Ukraine and Russia’s Southern District remained free of snow cover, while snow depths averaged 10 to 50 cm from Belarus and northern Ukraine into Russia’s Volga District.



**MIDDLE EAST**

Mild, showery weather prevailed across most of the region, with locally heavy rain falling in eastern crop areas. A Mediterranean storm tracked across the region, producing light to moderate rain and mountain snow (2-30 mm liquid equivalent) from southern and central Turkey into northern Iraq and western Iran that maintained adequate moisture supplies for greening to vegetative winter grains. Farther east, moderate to heavy rain and mountain snow (10-110 mm liquid

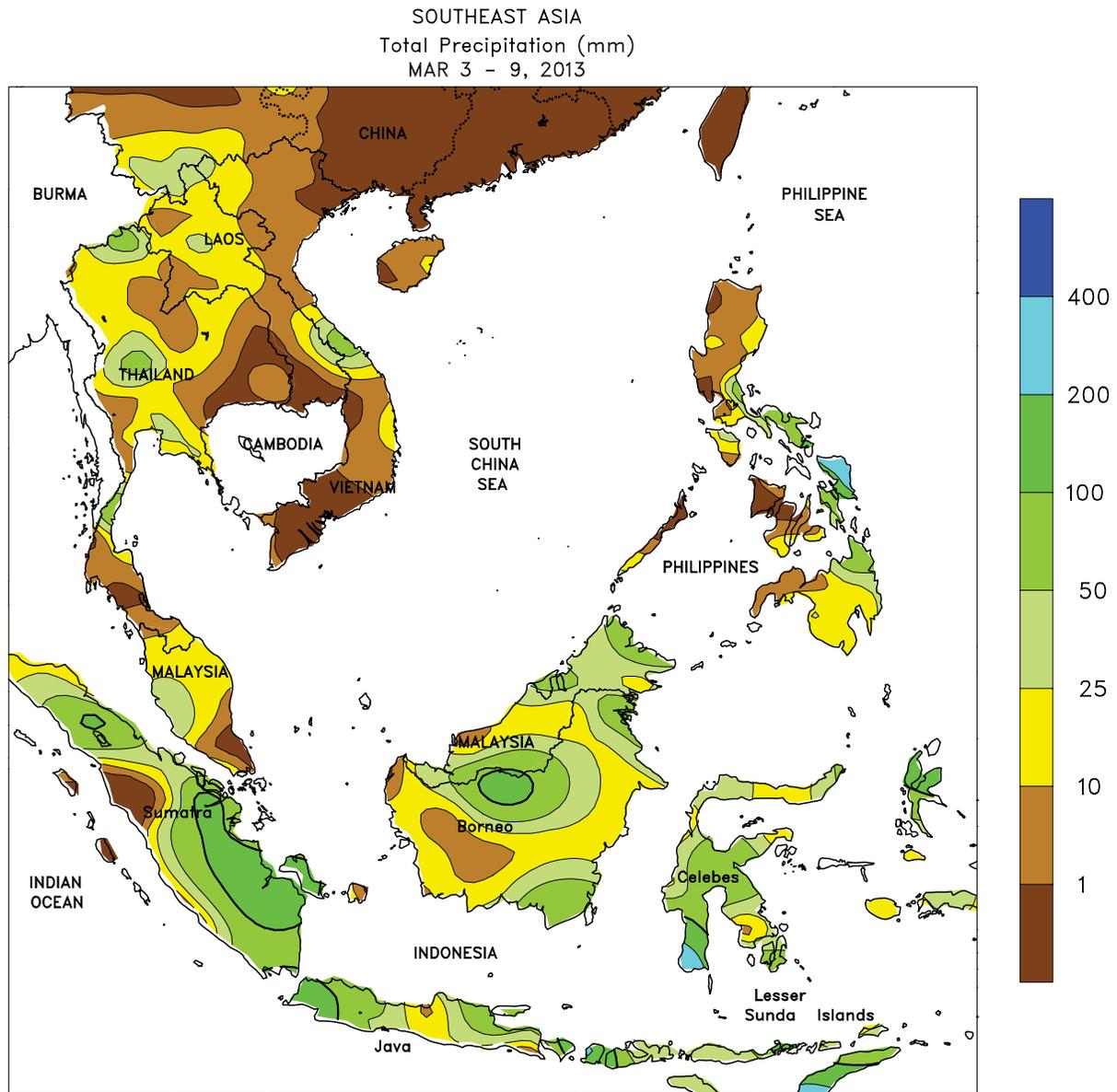
equivalent) fell across much of central and eastern Iran — including the Caspian Sea Coast — supplying additional moisture for winter wheat and barley while further boosting irrigation reserves for warm-season crops. Temperatures averaged 1 to 3°C above normal over most of the region, with weekly average temperatures above 5°C supporting winter grain growth in all primary wheat districts except for the Anatolian Plateau.



**NORTHWEST AFRICA**

Heavy rain in the west contrasted with drier conditions in eastern growing areas. A slow-moving storm system produced moderate to heavy rainfall (25-180 mm) in Morocco, boosting soil moisture in the north and alleviating concerns over developing dryness in southern portions of the country. However, some lowland flooding likely resulted from the

locally heavy downpours. Rain amounts diminished farther east, with totals ranging from 10 to 30 mm in western Algeria to less than 5 mm in northern Tunisia. Nevertheless, winter grains continued to develop favorably with adequate to abundant soil moisture and above-normal temperatures (2-5°C above normal).



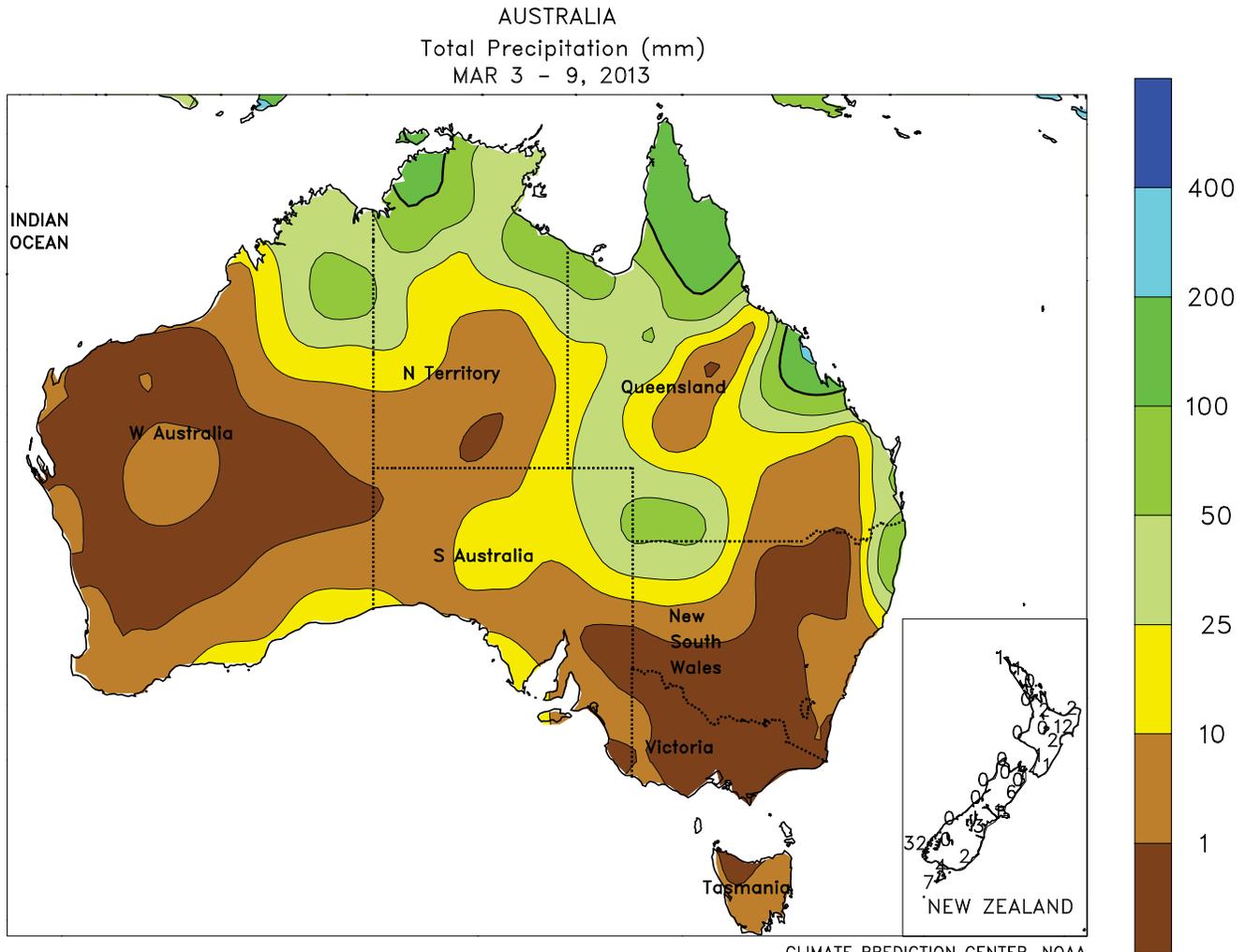
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Computer generated contours  
Based on preliminary data



**SOUTHEAST ASIA**

Early week showers (50-100 mm or more) gave way to beneficially drier weather in western Java, Indonesia, as rice maturation and harvesting progressed. Rainfall was generally lighter (25-50 mm) in eastern growing areas of Java, where filling rice could still benefit from the added moisture. In the Philippines, 25 to 50 mm of rainfall prevailed across eastern

rice and corn areas, while seasonably dry weather occurred throughout the remainder of the country. Meanwhile in Indochina, winter-spring rice harvesting continued in southern Vietnam under beneficially dry weather. In contrast, unseasonable rainfall (10-50 mm) in Thailand provided an unexpected boost to reservoir levels.



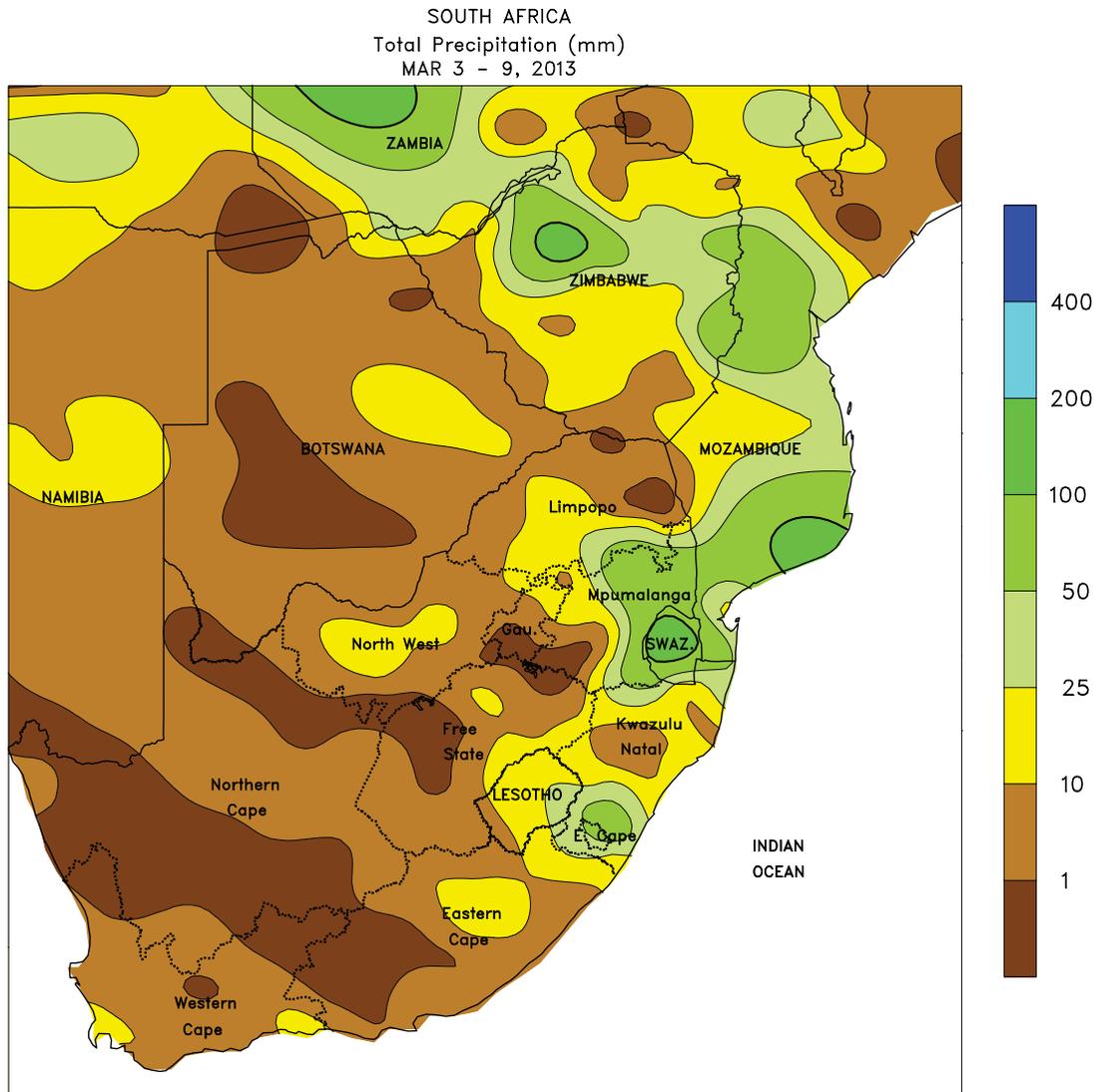
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Computer generated contours  
Based on preliminary data



**AUSTRALIA**

Following last week's soaking rains, drier weather (generally less than 5 mm, with greater amounts farther north) overspread interior portions of southern Queensland and northern New South Wales. The drier weather aided summer crop maturation and early harvesting, while sunny skies

promoted the continued development of later planted cotton and sorghum. Temperatures in major summer crop areas continued to average about 1 to 2°C below normal, with maximum temperatures generally in the middle 20s to lower 30s degrees C.



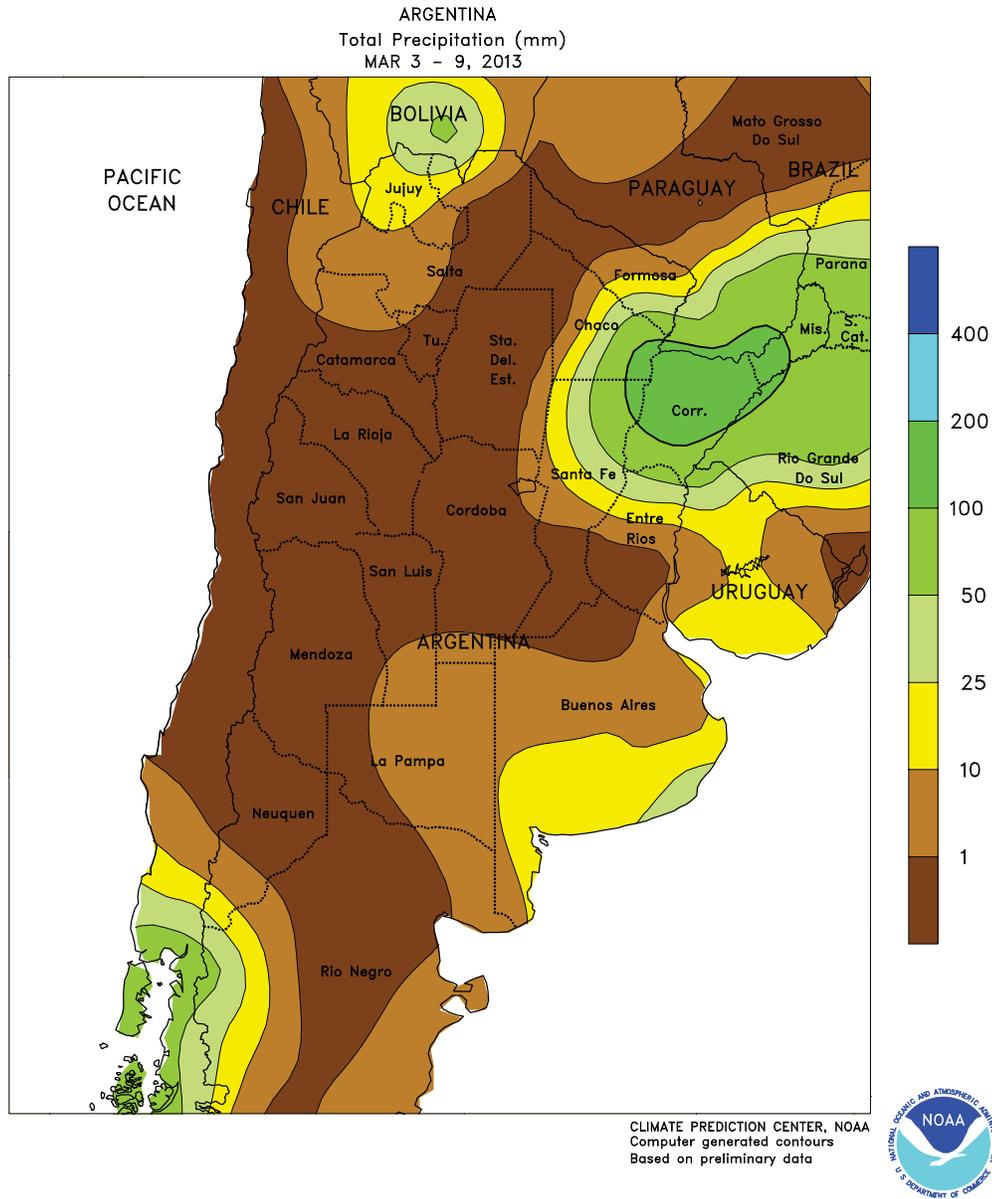
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**SOUTH AFRICA**

Unseasonable warmth and dryness dominated the corn belt, reducing moisture for immature, rain-fed summer crops that have struggled with bouts of heat and dryness since January. Rainfall totaled below 10 mm over a large portion of the corn belt, with heavier rain (10-25 mm) generally confined to outlying production areas in North West, Limpopo, and KwaZulu-Natal. In addition, rainfall in excess of 50 mm was recorded in eastern Mpumalanga, benefiting corn but also boosting irrigation reserves for sugarcane. Weekly temperatures averaged 2 to 3°C above normal in central and western sections of the corn belt (North West, Gauteng, and Free State), with

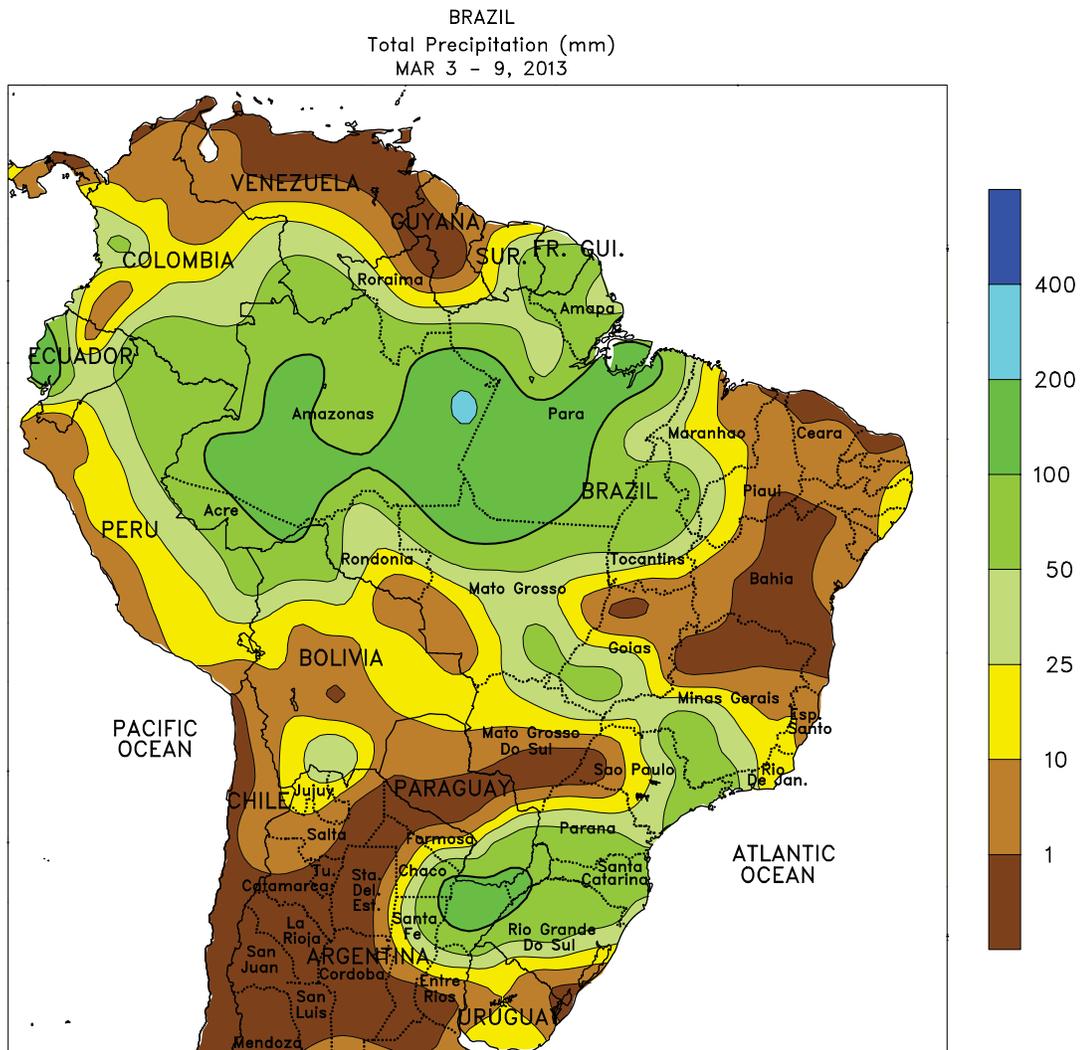
daytime highs in the lower and middle 30s (degrees C). Rainfall was also unseasonably light (less than 25 mm) at most locations in the rain-fed sugarcane areas of KwaZulu-Natal, with weekly average temperatures averaging 1°C above normal (highs reaching the lower 30s). Warm, mostly dry weather also dominated the Cape Provinces, with only a few locations recording rainfall in excess of 10 mm. Daytime highs reaching the middle 30s fostered rapid maturation of corn, cotton, and other irrigated row crops in the Orange Valley, while in Western Cape, hot weather (temperatures reaching 40°C) promoted drydown and harvesting of tree and vine crops.



**ARGENTINA**

Following last week’s soaking rain, mostly dry, occasionally warm weather promoted development of summer grains and oilseeds. Showers (greater than 10 mm) lingered early in the week over southern production areas of La Pampa and Buenos Aires, but little to no rain fell from the remainder of central Argentina northward through Salta. Moderate to heavy rain (25-100 mm) overspread the northeast (northern Santa Fe and Chaco eastward through Misiones), increasing moisture for cotton and other crops. Weekly temperatures averaged 1 to 2°C below normal in central and northeastern Argentina, with daytime highs reaching the lower 30s

(degrees C) in most areas. In contrast, unseasonable warmth (weekly temperatures averaging up to 2°C above normal, with local highs in excess of 40°C) continued in the northwest (northern Cordoba through Salta), stressing late-planted summer row crops. According to Argentina’s Ministry of Agriculture, sunflowers were 44 percent harvested as of March 7, 5 percentage points ahead of last season. Fieldwork has begun in key production areas of central Argentina; harvesting in Buenos Aires, the country’s largest producer of sunflowers, was at 9 percent, compared with 15 percent last year.



CLIMATE PREDICTION CENTER, NOAA  
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Based on preliminary data

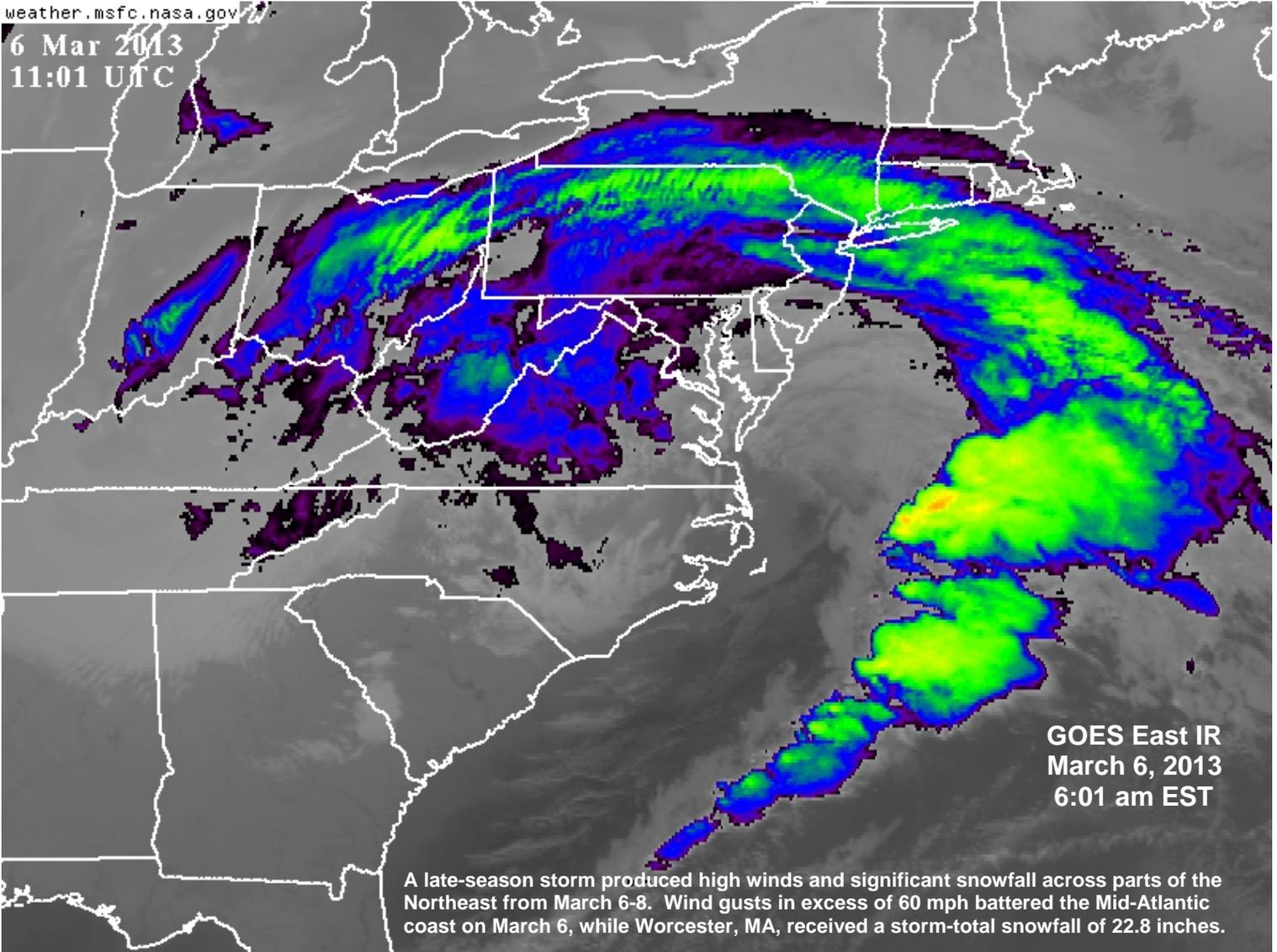


**BRAZIL**

Beneficial rain returned to previously dry sections of southern Brazil, but unseasonable warmth and dryness continued to be a problem for farmers in the northeastern interior. Rainfall totaling 25 to 100 mm boosted moisture for soybeans and corn from Rio Grande do Sul to Parana and southern Mato Grosso do Sul; similar amounts were recorded from Mato Grosso southeastward to southern Minas Gerais, but the rainfall was patchy in some areas, including important sugarcane areas of Sao Paulo. Elsewhere, dry weather dominating the

northeastward again spread westward into interior soybean and cotton areas (western Bahia, and nearby locations in Goias, Tocantins, Piaui, and Maranhao), renewing this season's trend of erratic rainfall. Weekly temperatures averaged 2 to 4°C above normal in the vicinity of the northeastern dryness, with daytime highs reaching the upper 30s (degrees C) exacerbating the effects of the dryness on immature row crops. In contrast, weekly temperatures averaged up to 3°C below normal in Rio Grande do Sul, where highs ranged from 28 to 32°C.

6 Mar 2013  
11:01 UTC



GOES East IR  
March 6, 2013  
6:01 am EST

A late-season storm produced high winds and significant snowfall across parts of the Northeast from March 6-8. Wind gusts in excess of 60 mph battered the Mid-Atlantic coast on March 6, while Worcester, MA, received a storm-total snowfall of 22.8 inches.

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