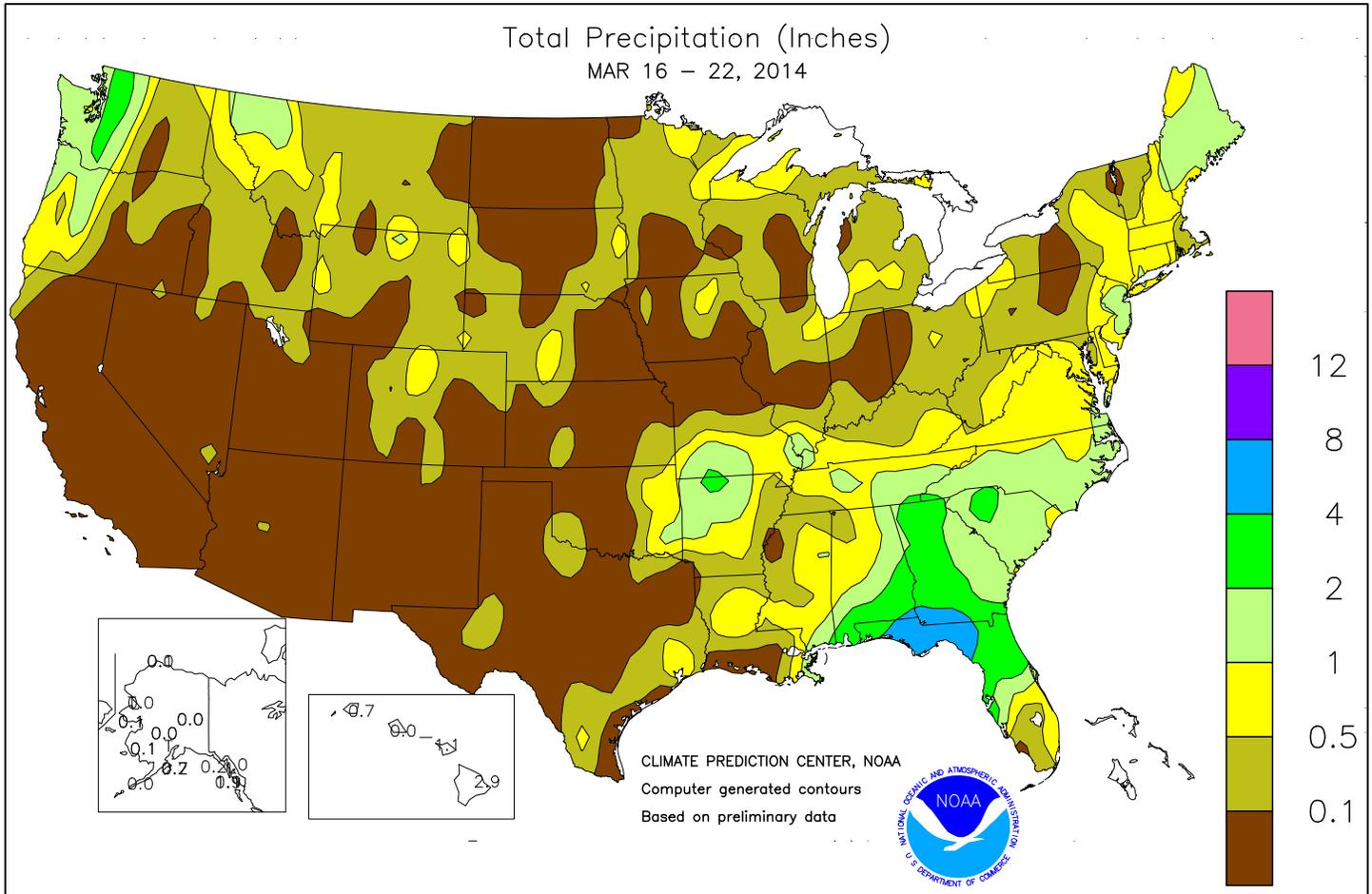


WEEKLY WEATHER AND CROP BULLETIN



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 16 - 22, 2014

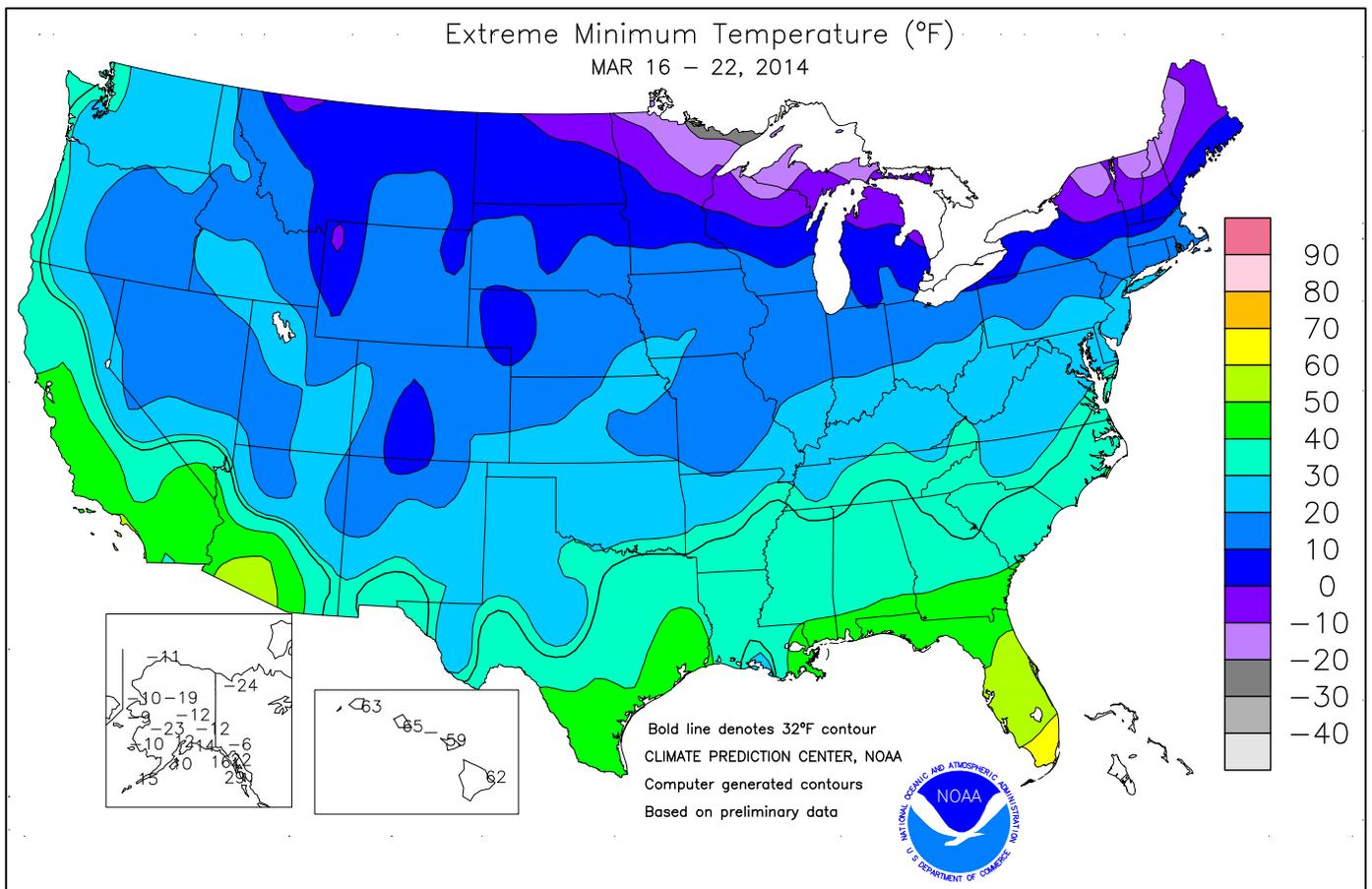
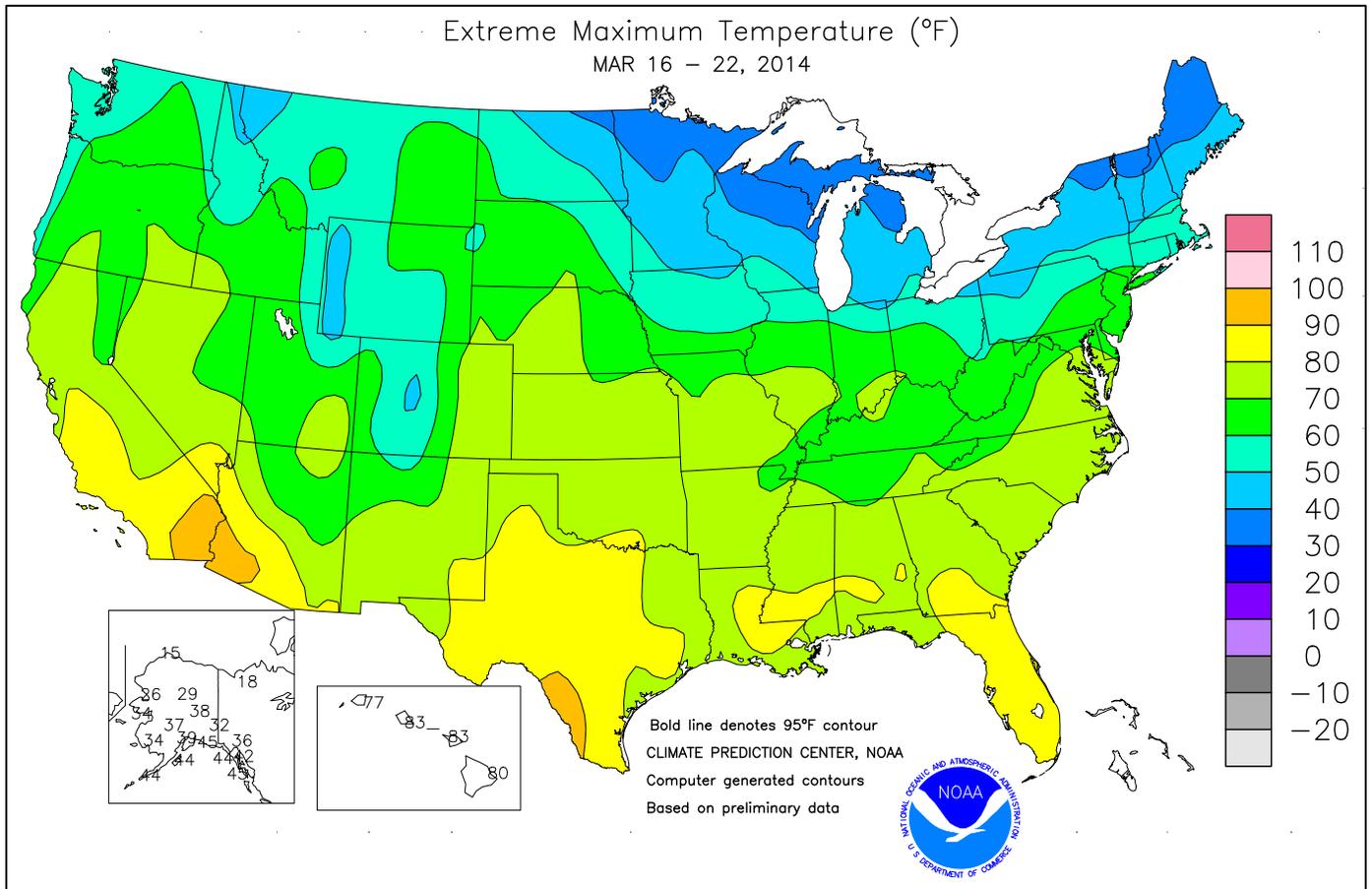
Highlights provided by USDA/WAOB

Cool, wet weather slowed or halted spring fieldwork in the **Southeast**. Weekly precipitation totaled 2 to 4 inches, with locally higher amounts, in **northern Florida**, **southern Alabama**, and much of **Georgia**. Farther north, a late-season snowfall blanketed parts of the **Mid-Atlantic region** on March 16-17. Occasional snow, albeit mostly light, also fell from the **Midwest into the Northeast**. However, there was enough warmth to melt much of the remaining **Midwestern** snow cover, except from **Minnesota to Michigan**. Snow also remained on the

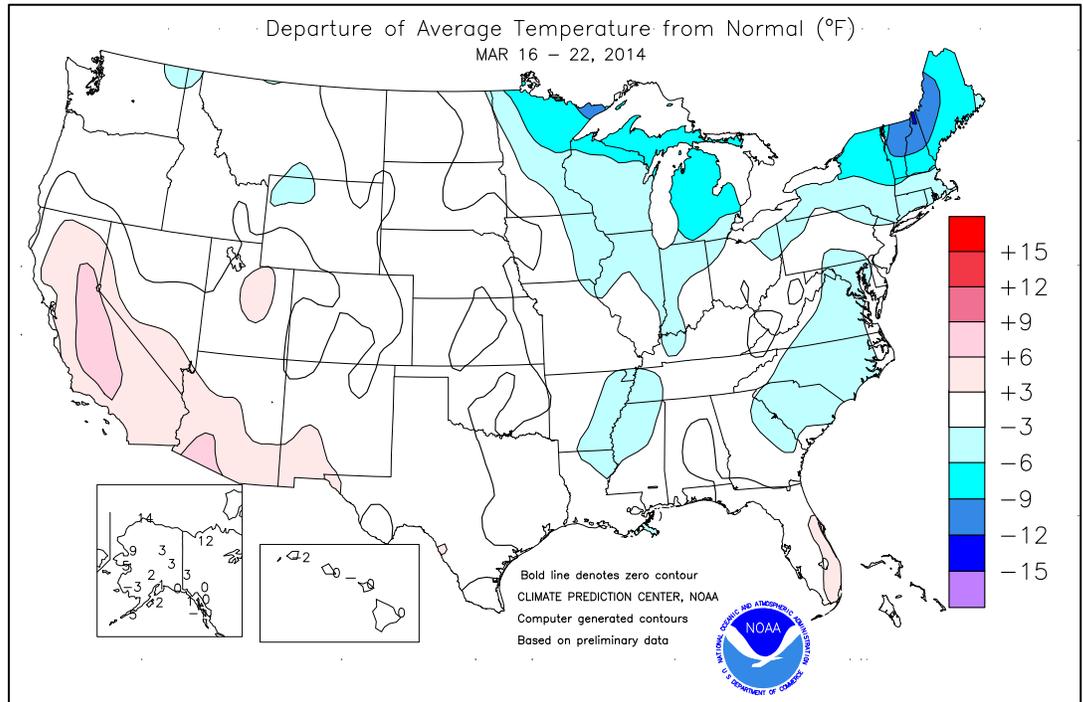
(Continued on page 3)

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(Continued from front cover) ground from **New York to New England**. Farther west, periods of light precipitation affected the **northern and central Plains**, but unfavorable dryness persisted on the **southern Plains**. On March 18, portions of the **southern High Plains** endured the latest in a string of dust storms, further stressing rangeland, pastures, and winter wheat. Elsewhere, precipitation was confined to the **Pacific Northwest** and **northern Rockies**, while dry weather stretched from **California to the southern Rockies**. **California's** dry weather, combined with above-normal temperatures, led to some premature melting of high-elevation snowpack. Weekly temperatures averaged at least 5°F above normal in much of **California's Central Valley** and parts of the **Desert Southwest**. In contrast, readings averaged more than 5°F below normal in some locations from the **Midwest into the Northeastern and Mid-Atlantic States**.



Early in the week, a late-winter storm unfolded across the **Mid-Atlantic States**. **Atlantic City, NJ**, netted consecutive daily-record snowfall amounts on March 16-17, totaling 5.9 inches. Meanwhile, **Virginia's Dulles Airport** received a March 16-17 storm total of 11.1 inches of snow. **Dulles** also secured its snowiest March on record, with 16.0 inches (previously, 15.5 inches in 1993), and fourth-snowiest season in the last half-century. **Dulles'** seasonal total climbed to 49.0 inches (230 percent of normal), behind only 73.2 inches in 2009-10; 61.9 inches in 1995-96; and 50.1 inches in 2002-03. Elsewhere, heavy showers soaked parts of the **South**, where daily-record totals for March 16 included 4.53 inches in **Tallahassee, FL**; 2.28 inches in **Harrison, AR**; and 1.63 inches in **Springfield, MO**. **Sarasota-Bradenton, FL**, netted a daily-record total of 3.04 inches on March 17. Later, periods of snow affected the **nation's northern tier**. **Flint, MI**, inched closer to an all-time seasonal snowfall record—82.9 inches in 1974-75. Flint's weekly sum of 0.5 inch left its season-to-date total at 82.3 inches (188 percent of normal). Elsewhere in **Michigan**, **Detroit's** season-to-date snowfall of 90.7 inches (230 percent of normal) was less than 3 inches shy of its 1880-81 all-time record. However, enough warmth reached the **Great Lakes region** to end record-setting durations with at least an inch of snow cover in both **Flint** and **Detroit**. **Flint's** snow cover lasted for 101 days (December 9 – March 19), surpassing the 1962-63 record of 88 days. **Detroit's** snow cover survived for 77 days (December 31 – March 17), edging the 1977-78 standard of 73 days. **Lansing, MI**, retained a 2-inch snow cover at week's end, and thus continued to set records for snow-cover duration. Lansing's streak with at least an inch of snow on the ground reached 104 days by March 22, bettering the 1962-63 mark of 101 days. During the second half of the week, heavy snow affected portions of the **upper Great Lakes region** and **northern New England**. **Caribou, ME**, received 10.2 inches of snow on March 20. The following day, record-setting snowfall totals in **Minnesota** included 10.4 inches in **International Falls** and 6.9 inches in **Duluth**. Farther west, the cumulative effect of recent

heavy rainfall led to a deadly landslide in **Snohomish County, WA**. Through March 22, month-to-date rainfall climbed to 11.17 inches (223 percent of normal) in **Hoquiam** and 7.71 inches (285 percent) in **Seattle**.

Record-setting, early-week warmth in **California** contrasted with lingering cold across the **North**. Daily-record highs in **California** on March 16 soared to 92°F in **Elsinore**, 91°F in **Escondido**, and 89°F in **Santa Maria**. Warmth also lingered early in the week across **southern Florida**, where **Miami** posted a daily-record high (88°F) on March 17. In contrast, **Montpelier, VT**, opened the week with consecutive daily-record lows (-5 and -13°F, respectively) on March 16-17. Other daily-record lows included -23°F (on March 16) in **International Falls, MN**, and -13°F (on March 17) in **Pellston, MI**. During the mid- to late-week period, cooler air overspread much of the **West**. Daily-record lows dipped to 10°F (on March 19) in **Cedar City, UT**, and 25°F (on March 21) in **Pendleton, OR**. In **Washington**, daily-record lows for March 22 included 21°F in **Whitman Mission** and 24°F in **Olympia**. Sub-zero temperatures returned to the **northern High Plains** on March 22, when **Gold Butte, MT**, collected a daily-record low of -15°F. Farther south, the **southern High Plains** endured another dust storm on March 18, when visibilities dropped to a half-mile or below in **Texas** locations such as **Amarillo** and **Lubbock**. On that date, wind gusts were clocked to 49 mph in **Amarillo** and 58 mph in **Lubbock**.

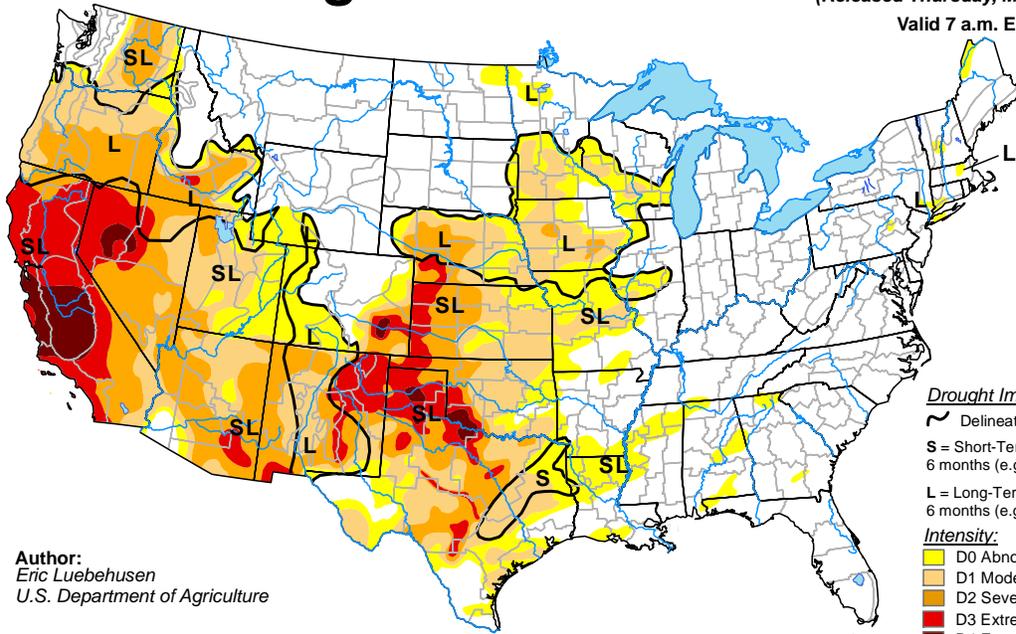
Generally dry weather covered **mainland Alaska**, although warmer-than-normal weather in northern areas contrasted with near- to below-normal temperatures across the southern tier of the state. There was some precipitation, however, in **southern Alaska**. From March 16-19, **Juneau** received precipitation totaling 0.98 inch, including 3.8 inches of snow. Farther south, showers were locally heavy in windward areas of **Hawaii**, while little or no rain fell across the remainder of the state. On the **Big Island**, **Hilo's** weekly rainfall of 2.74 inches boosted its March 1-22 total to 9.51 inches (101 percent of normal). Elsewhere on the **Big Island**, 24-hour totals topped 3 inches in locations such as **Laupahoehoe** (3.44 inches on March 20-21) and **Honokaa** (3.11 inches on March 21-22).

U.S. Drought Monitor

March 18, 2014

(Released Thursday, Mar. 20, 2014)

Valid 7 a.m. EDT



Author:
Eric Luebehusen
U.S. Department of Agriculture

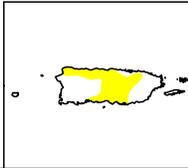
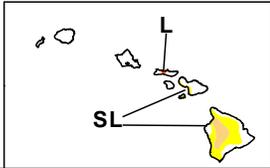
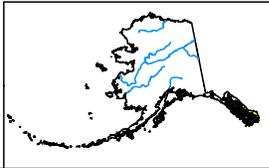
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

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

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



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

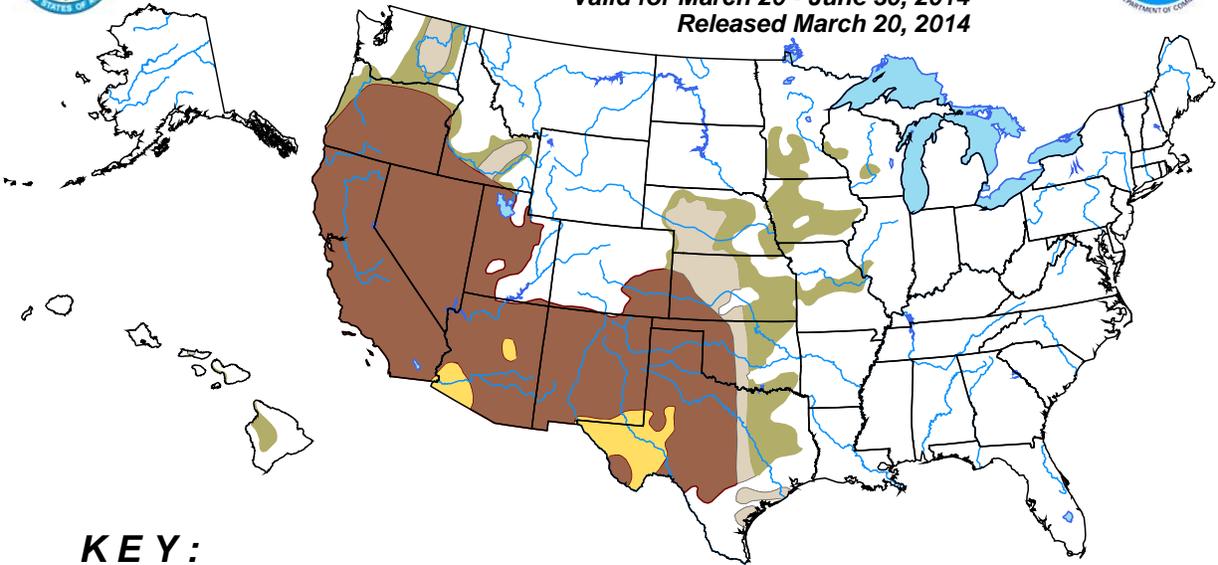


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for March 20 - June 30, 2014

Released March 20, 2014

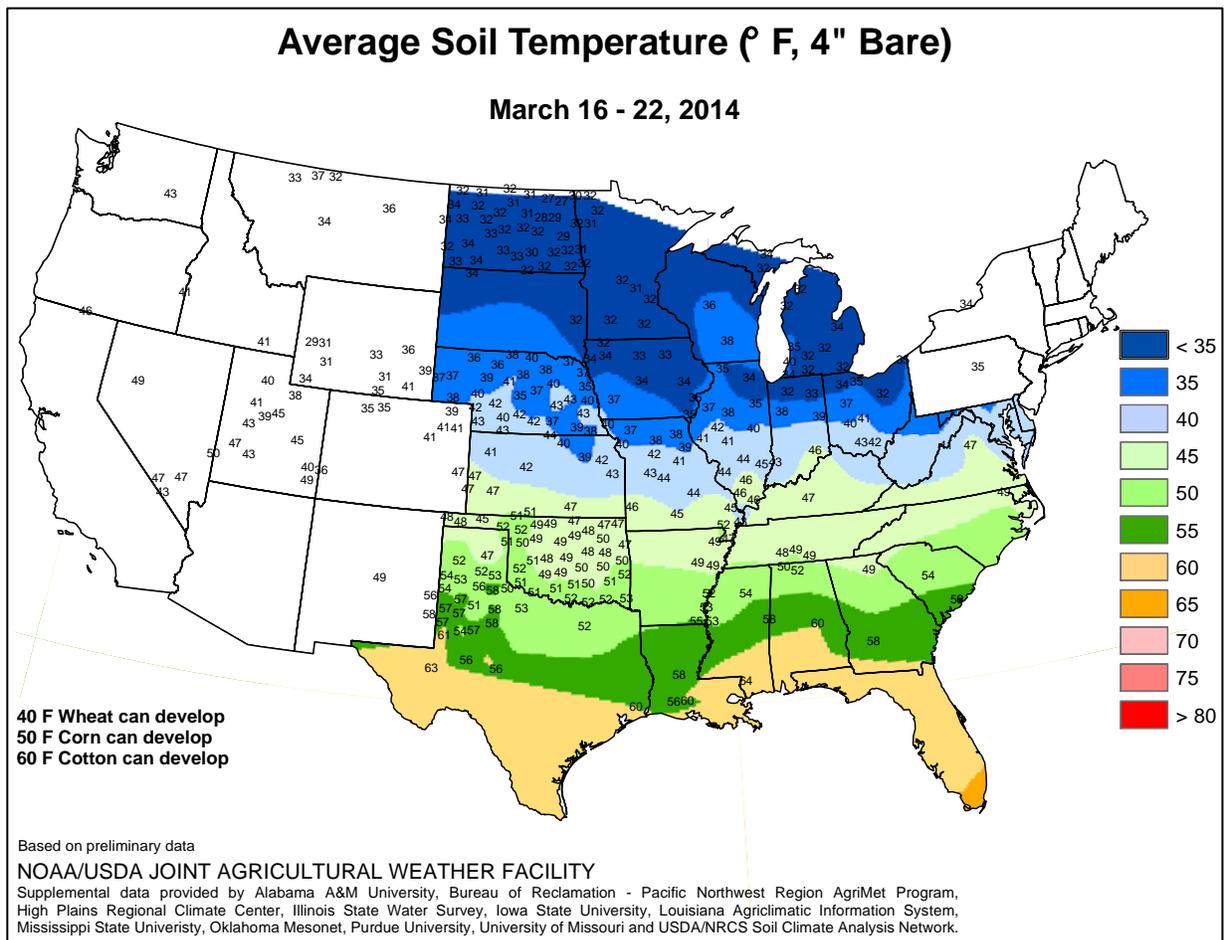
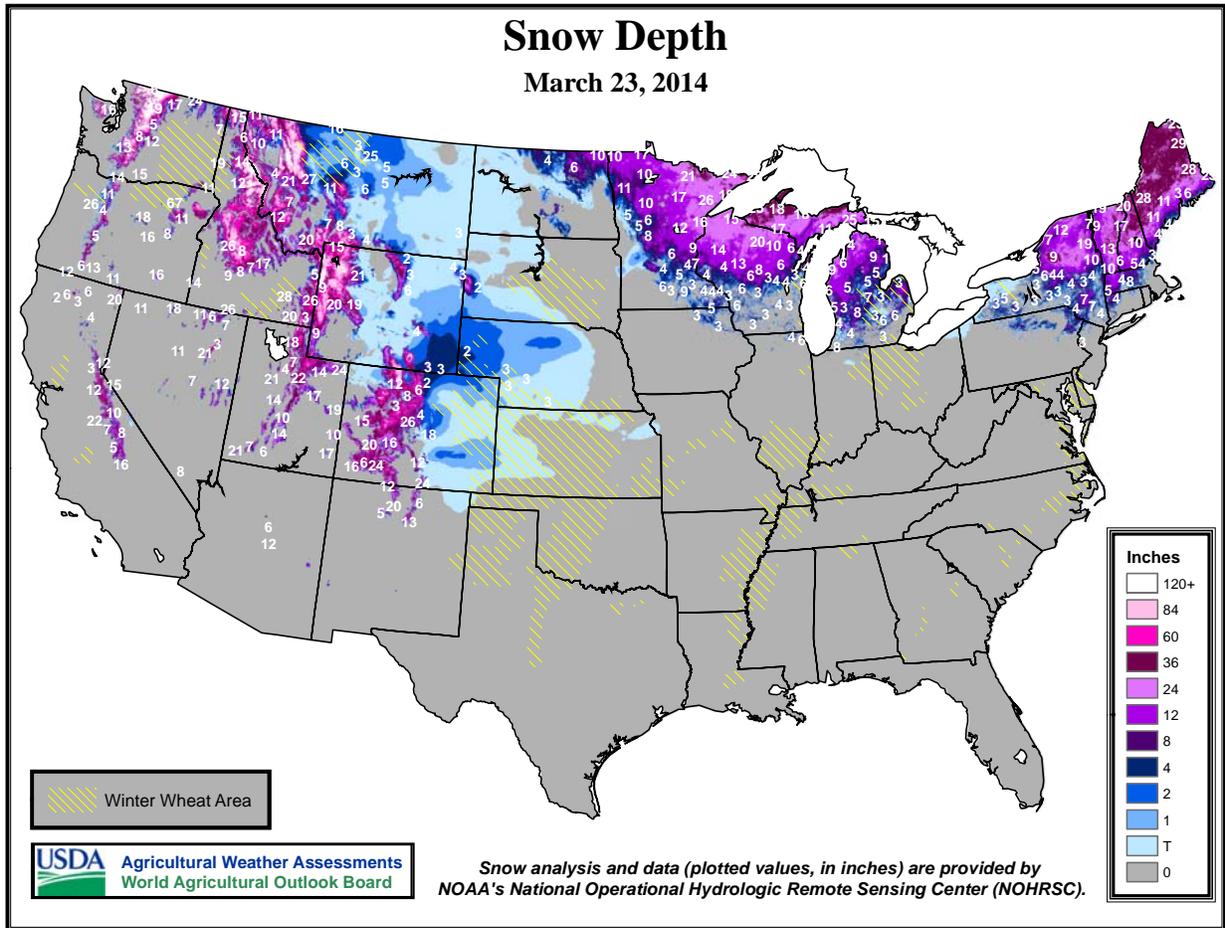


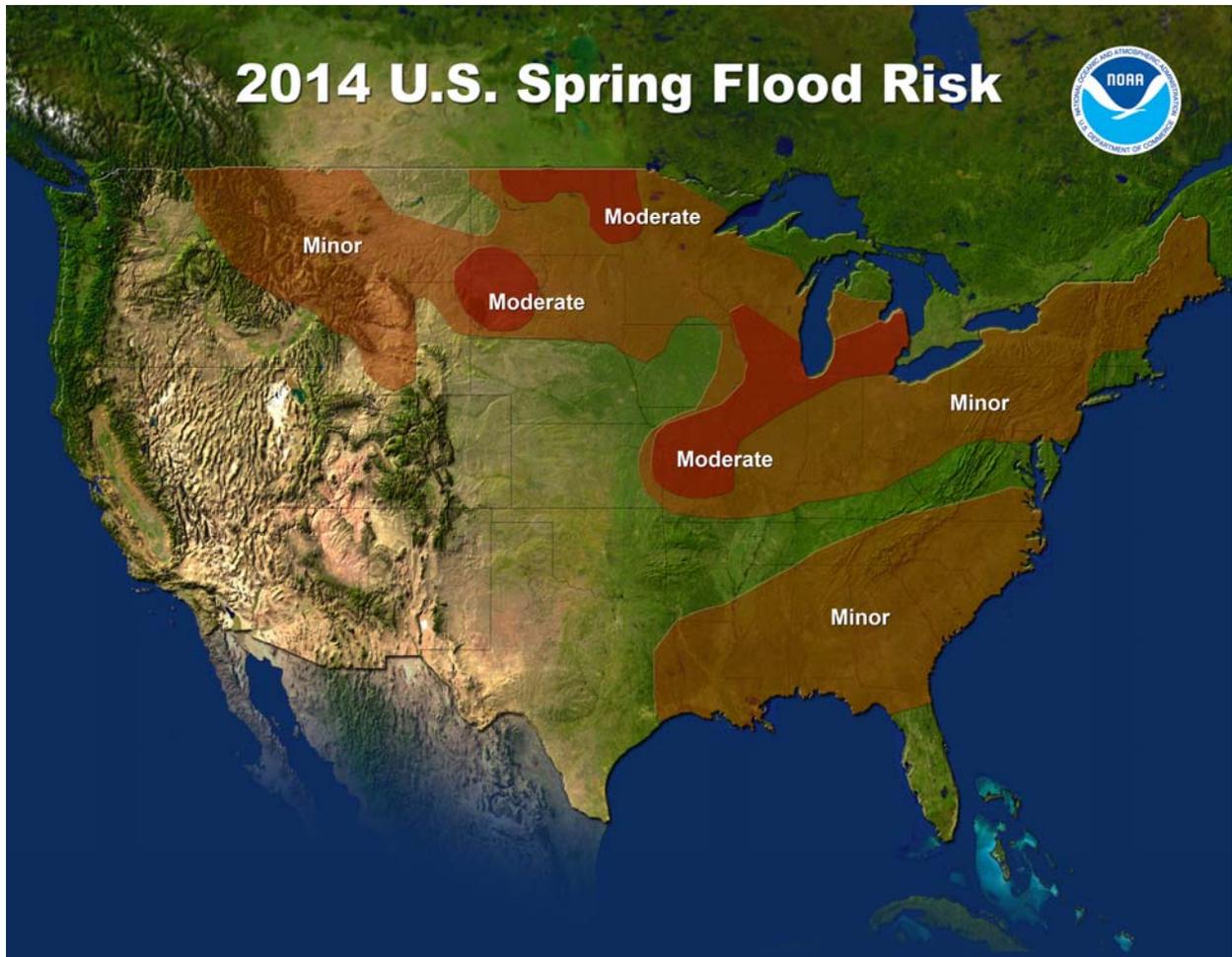
KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

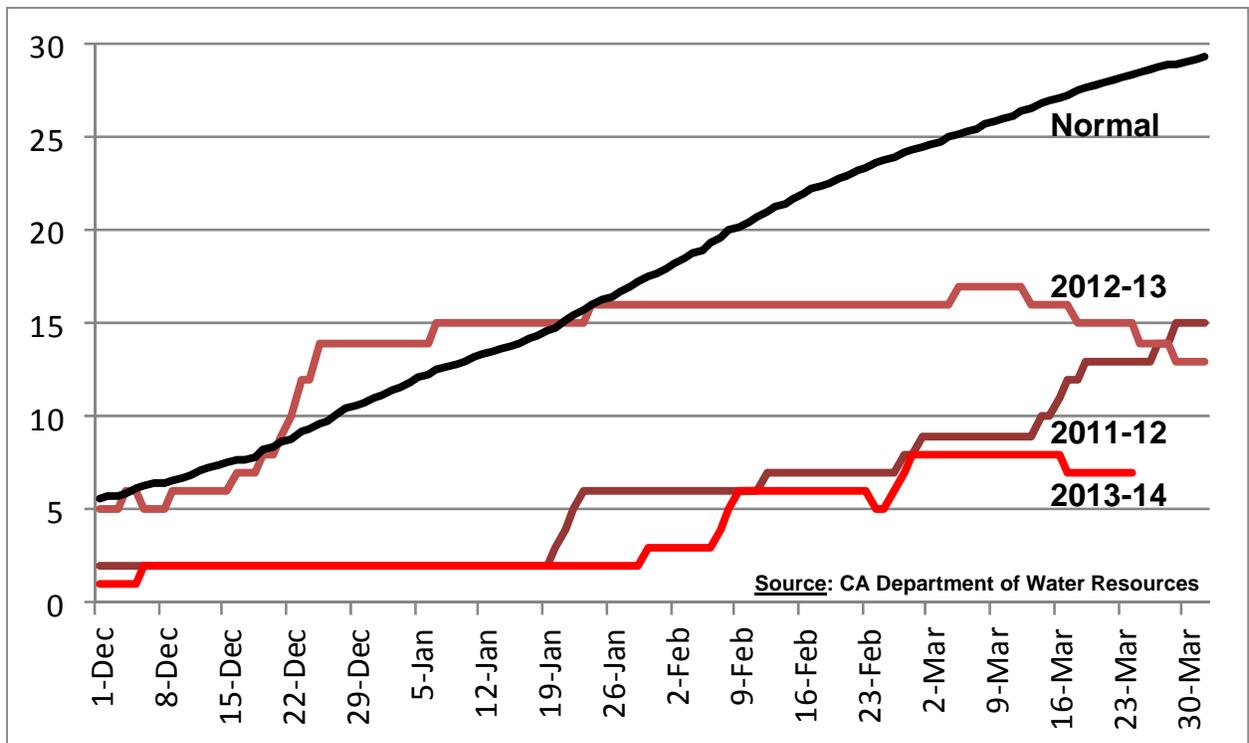
Author: Anthony Artusa, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none)





Daily Sierra Nevada Snowpack (Inches) vs. Normal



National Weather Data for Selected Cities

Weather Data for the Week Ending March 22, 2014

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		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OF MORE	.50 INCH OF MORE
AL BIRMINGHAM	66	44	78	35	55	0	1.61	0.18	1.59	2.51	59	9.44	68	90	49	0	0	2	1
HUNTSVILLE	60	41	70	35	50	-3	1.16	-0.40	1.16	1.98	41	11.85	78	86	61	0	0	1	1
MOBILE	71	48	79	43	59	-2	1.30	-0.40	1.29	2.62	51	9.73	61	96	57	0	0	2	1
AK MONTGOMERY	71	47	78	38	59	1	1.39	-0.07	1.30	2.97	63	10.64	70	91	47	0	0	3	1
ANCHORAGE	35	20	39	12	28	2	0.03	-0.10	0.02	0.49	107	2.51	134	63	50	0	7	2	0
BARROW	7	-7	15	-11	0	14	0.05	0.05	0.04	0.07	700	0.91	379	87	74	0	7	2	0
FAIRBANKS	32	-3	38	-12	14	2	0.00	-0.06	0.00	0.00	0	0.62	57	74	55	0	7	0	0
JUNEAU	38	28	42	22	33	0	1.00	0.24	0.40	3.49	132	15.62	136	93	73	0	7	4	0
KODIAK	41	28	44	10	34	1	0.73	-0.43	0.35	3.95	107	25.20	143	81	68	0	5	4	0
NOME	25	3	34	-9	14	5	0.13	0.02	0.12	0.53	139	2.70	132	79	64	0	7	2	0
AZ FLAGSTAFF	58	22	61	11	40	3	0.00	-0.58	0.00	1.24	62	1.84	27	53	13	0	6	0	0
PHOENIX	83	56	87	54	70	7	0.00	-0.24	0.00	0.99	124	0.99	41	28	13	0	0	0	0
PRESCOTT	67	33	70	29	50	6	0.00	-0.43	0.00	0.56	37	0.73	15	37	9	0	4	0	0
TUCSON	81	49	84	47	65	6	0.00	-0.17	0.00	0.58	92	0.59	24	25	11	0	0	0	0
AR FORT SMITH	67	39	77	32	53	0	1.08	0.17	0.93	3.33	122	5.10	66	82	38	0	1	4	1
LITTLE ROCK	65	38	76	32	51	-3	0.73	-0.38	0.40	3.39	106	8.95	88	88	42	0	2	3	0
CA BAKERSFIELD	79	51	85	47	65	8	0.00	-0.32	0.00	0.04	4	0.48	14	51	31	0	0	0	0
FRESNO	79	51	85	46	65	9	0.00	-0.50	0.00	0.02	1	2.69	45	64	37	0	0	0	0
LOS ANGELES	70	57	83	56	64	6	0.00	-0.53	0.00	0.35	18	3.14	39	76	58	0	0	0	0
REDDING	73	43	76	36	58	5	0.00	-1.17	0.00	3.39	87	11.89	75	59	31	0	0	0	0
SACRAMENTO	75	46	78	42	60	6	0.00	-0.62	0.00	0.60	27	4.89	51	84	25	0	0	0	0
SAN DIEGO	71	60	87	58	66	6	0.00	-0.52	0.00	1.27	77	2.28	38	69	54	0	0	0	0
SAN FRANCISCO	68	50	73	47	59	5	0.00	-0.72	0.00	0.43	17	4.20	38	79	66	0	0	0	0
STOCKTON	75	45	82	40	60	5	0.00	-0.51	0.00	0.60	35	3.68	53	78	48	0	0	0	0
CO ALAMOSA	55	16	62	9	35	2	0.00	-0.09	0.00	0.40	154	0.52	72	67	20	0	7	0	0
CO SPRINGS	54	24	69	16	39	1	0.10	-0.13	0.10	0.42	69	1.31	106	67	16	0	7	1	0
DENVER INTL	55	24	72	17	39	0	0.06	-0.14	0.06	0.68	110	1.81	168	66	23	0	6	1	0
GRAND JUNCTION	57	27	66	22	42	-2	0.01	-0.21	0.01	0.08	12	1.46	83	61	31	0	6	1	0
PUEBLO	60	28	74	22	44	2	0.12	-0.10	0.12	0.76	138	1.49	131	62	27	0	5	1	0
CT BRIDGEPORT	46	29	63	22	37	-3	0.99	0.04	0.99	1.33	48	8.30	88	76	40	0	6	1	1
HARTFORD	45	22	59	17	34	-4	0.88	-0.01	0.80	1.21	46	8.58	91	65	39	0	6	2	1
DC WASHINGTON	51	36	73	27	44	-3	1.05	0.22	0.37	1.87	73	8.47	101	80	42	0	3	3	0
DE WILMINGTON	50	31	69	24	41	-2	0.94	0.03	0.62	1.53	55	10.11	112	86	36	0	4	2	1
FL DAYTONA BEACH	77	59	85	55	68	3	3.00	2.12	2.11	3.20	122	9.78	115	94	55	0	0	2	2
JACKSONVILLE	72	52	84	47	62	0	2.35	1.45	1.82	3.76	140	13.47	141	99	61	0	0	3	2
KEY WEST	80	70	82	63	75	1	0.31	-0.10	0.31	2.35	197	9.95	202	85	68	0	0	1	0
MIAMI	84	68	88	64	76	4	0.20	-0.35	0.16	0.69	43	3.76	68	85	57	0	0	2	0
ORLANDO	81	61	86	56	71	3	2.08	1.25	1.22	2.46	101	7.49	104	92	50	0	0	2	2
PENSACOLA	71	53	78	47	62	1	2.74	1.24	2.60	4.17	92	15.50	106	90	58	0	0	2	1
TALLAHASSEE	75	53	83	46	64	3	5.83	4.31	4.68	8.38	180	16.43	112	87	52	0	0	3	2
TAMPA	77	61	85	54	69	1	1.11	0.48	1.09	2.58	123	7.53	107	91	57	0	0	3	1
GA WEST PALM BEACH	82	67	85	62	74	3	0.26	-0.60	0.22	0.70	30	12.17	141	85	61	0	0	2	0
ATHENS	62	39	78	32	51	-3	1.40	0.26	1.00	2.98	82	11.61	91	90	67	0	1	3	1
ATLANTA	63	44	75	36	54	-1	1.63	0.39	1.30	2.56	65	9.72	71	85	60	0	0	3	1
AUGUSTA	66	41	80	32	53	-3	1.41	0.36	1.27	2.12	64	8.33	70	89	66	0	1	2	1
COLUMBUS	68	46	78	38	57	-1	2.72	1.39	2.36	3.40	82	11.72	87	90	48	0	0	2	1
MACON	67	41	78	32	54	-2	2.03	0.92	1.62	2.78	78	10.61	81	98	56	0	1	2	1
SAVANNAH	68	47	77	40	58	-2	0.72	-0.11	0.54	2.28	95	6.39	69	90	64	0	0	3	1
HI HILO	78	66	80	62	72	0	2.86	-0.50	2.25	9.51	100	17.74	63	91	81	0	0	5	1
HONOLULU	81	67	83	65	74	0	0.00	-0.41	0.00	2.40	164	6.08	93	70	62	0	0	0	0
KAHULUI	80	66	83	59	73	0	1.10	0.58	0.57	3.12	195	9.77	127	84	69	0	0	3	1
LIHUE	76	66	77	63	71	-2	0.73	-0.07	0.36	1.83	72	12.22	118	83	73	0	0	4	0
ID BOISE	54	31	69	24	43	-1	0.01	-0.29	0.01	1.28	136	4.31	124	65	41	0	4	1	0
LEWISTON	54	32	60	25	43	-2	0.04	-0.21	0.02	0.65	90	3.06	109	60	42	0	3	2	0
POCATELLO	52	24	66	15	38	0	0.01	-0.29	0.01	1.36	145	3.07	99	60	30	0	7	1	0
IL CHICAGO/O'HARE	45	27	58	19	36	-2	0.21	-0.38	0.19	1.50	95	6.80	137	72	52	0	6	2	0
MOLINE	47	24	62	15	35	-4	0.05	-0.61	0.04	0.51	29	4.52	93	83	60	0	7	2	0
PEORIA	48	27	63	18	38	-2	0.30	-0.34	0.26	1.35	73	6.21	124	79	47	0	6	2	0
ROCKFORD	43	24	54	14	34	-3	0.12	-0.41	0.10	0.70	50	4.44	107	82	61	0	6	2	0
SPRINGFIELD	53	28	74	17	40	-2	0.05	-0.67	0.05	1.27	61	6.70	122	79	39	0	6	1	0
IN EVANSVILLE	56	34	69	28	45	-1	0.33	-0.64	0.29	1.34	46	5.29	59	78	57	0	4	2	0
FORT WAYNE	46	25	56	12	35	-4	0.06	-0.57	0.05	1.43	79	7.51	129	83	60	0	6	2	0
INDIANAPOLIS	51	28	68	18	39	-3	0.00	-0.78	0.00	1.58	68	6.36	88	79	48	0	4	0	0
SOUTH BEND	43	24	53	12	34	-4	0.52	-0.12	0.48	1.48	82	7.42	123	75	56	0	6	2	0
IA BURLINGTON	48	26	61	9	37	-3	0.08	-0.59	0.08	0.59	31	5.04	106	86	48	0	5	1	0
CEDAR RAPIDS	44	24	58	18	34	-3	0.02	-0.48	0.02	0.04	3	1.79	52	85	46	0	7	1	0
DES MOINES	47	28	60	21	37	-2	0.03	-0.46	0.03	0.29	22	2.63	75	70	54	0	6	1	0
DUBUQUE	41	22																	

Weather Data for the Week Ending March 22, 2014

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
WICHITA	61	33	73	23	47	1	0.00	-0.63	0.00	0.40	22	1.39	38	68	34	0	4	0	0
KY JACKSON	57	35	71	25	46	-1	0.73	-0.26	0.70	3.64	115	11.25	108	78	41	0	2	2	1
LEXINGTON	55	35	69	26	45	-1	0.20	-0.81	0.20	1.75	55	8.79	90	75	54	0	3	1	0
LOUISVILLE	57	35	73	29	46	-1	0.24	-0.77	0.19	1.24	40	7.40	77	72	43	0	3	2	0
PADUCAH	60	35	71	29	47	-1	0.92	-0.02	0.92	2.49	84	7.67	74	79	41	0	3	1	1
LA BATON ROUGE	74	47	84	38	61	0	0.14	-0.98	0.14	1.51	43	10.77	73	88	40	0	0	1	0
LAKE CHARLES	69	48	77	39	59	-2	0.24	-0.57	0.24	1.61	67	8.40	75	97	59	0	0	1	0
NEW ORLEANS	72	52	79	42	62	-1	0.28	-0.88	0.28	1.02	28	10.05	67	91	65	0	0	1	0
SHREVEPORT	70	44	80	38	57	-2	0.00	-0.91	0.00	1.63	55	5.07	43	84	43	0	0	0	0
ME CARIBOU	28	6	36	-8	17	-8	1.15	0.57	0.98	2.27	131	8.49	126	83	49	0	7	5	1
PORTLAND	37	18	47	10	28	-6	0.77	-0.17	0.75	1.89	69	10.21	102	73	44	0	7	2	1
MD BALTIMORE	48	31	69	24	40	-4	0.76	-0.14	0.24	1.78	63	9.07	98	86	55	0	4	4	0
MA BOSTON	42	26	57	16	34	-5	0.29	-0.58	0.23	0.75	29	8.12	83	67	37	0	5	2	0
WORCESTER	39	20	51	11	30	-5	0.56	-0.41	0.38	1.19	41	8.37	83	75	35	0	7	2	0
MI ALPENA	30	13	36	-3	21	-7	0.34	-0.14	0.24	0.61	44	3.14	70	90	56	0	7	4	0
GRAND RAPIDS	37	20	44	7	28	-7	0.47	-0.12	0.25	0.99	64	6.74	132	83	56	0	6	2	0
HOUGHTON LAKE	32	12	40	0	22	-8	0.25	-0.21	0.13	0.49	38	3.49	84	87	57	0	7	2	0
LANSING	37	19	45	6	28	-6	0.46	-0.06	0.24	1.41	103	5.33	120	81	60	0	7	2	0
MUSKOGON	37	20	44	8	28	-6	0.27	-0.26	0.18	0.62	43	5.75	110	73	54	0	6	2	0
TRaverse CITY	34	15	44	2	24	-7	0.18	-0.25	0.11	0.30	26	4.75	80	86	46	0	7	2	0
MN DULUTH	29	13	42	-6	21	-5	0.71	0.32	0.57	0.92	94	3.76	128	77	62	0	7	4	1
INT'L FALLS	29	6	40	-23	18	-6	1.01	0.80	0.86	1.18	219	2.95	146	81	54	0	7	3	1
MINNEAPOLIS	35	20	45	8	27	-5	0.32	-0.11	0.16	0.34	31	3.17	109	80	60	0	7	3	0
ROCHESTER	35	21	46	9	28	-3	0.02	-0.40	0.01	0.92	88	3.68	135	79	65	0	7	2	0
ST. CLOUD	33	16	43	6	25	-4	0.54	0.20	0.54	0.65	81	3.15	147	80	57	0	7	1	1
MS JACKSON	69	43	78	37	56	-1	0.49	-0.81	0.49	1.91	50	8.96	64	89	46	0	0	1	0
MERIDIAN	69	42	79	34	56	-2	0.91	-0.69	0.88	2.14	44	11.49	71	90	53	0	0	2	1
TUPELO	66	39	74	34	52	-1	0.53	-0.92	0.52	1.43	32	7.53	53	86	57	0	0	2	1
MO COLUMBIA	58	30	78	16	44	0	0.02	-0.69	0.02	0.57	27	2.83	47	77	35	0	4	1	0
KANSAS CITY	56	31	71	18	43	-1	0.02	-0.53	0.01	1.34	83	3.09	76	75	33	0	3	2	0
SAINT LOUIS	58	33	77	20	46	0	0.01	-0.81	0.01	1.35	56	4.50	66	67	45	0	3	1	0
SPRINGFIELD	60	32	75	15	46	0	1.06	0.19	1.06	1.57	64	3.36	49	76	53	0	3	1	1
MT BILLINGS	43	28	54	15	36	-1	0.11	-0.13	0.08	0.51	77	3.59	176	74	43	0	4	2	0
BUTTE	40	17	55	10	29	-2	0.00	-0.19	0.00	0.76	146	1.62	107	83	32	0	7	0	0
CUT BANK	38	21	55	5	30	-1	0.08	-0.03	0.06	0.25	81	0.85	87	84	48	0	6	3	0
GLASGOW	45	23	64	9	34	3	0.29	0.20	0.16	0.59	227	0.94	108	91	63	0	7	4	0
GREAT FALLS	42	23	60	8	32	-1	0.21	-0.01	0.14	1.05	169	3.46	191	82	39	0	6	2	0
HAVRE	41	25	60	10	33	0	0.61	0.45	0.39	0.87	198	1.53	120	79	65	0	6	3	0
MISSOULA	47	26	63	22	37	-1	0.02	-0.19	0.02	1.12	178	4.47	182	76	54	0	6	1	0
NE GRAND ISLAND	53	25	67	16	39	0	0.02	-0.45	0.01	0.03	2	0.68	27	74	42	0	7	2	0
LINCOLN	54	25	69	19	40	0	0.00	-0.51	0.00	0.05	4	0.91	34	72	36	0	7	0	0
NORFOLK	51	24	65	14	38	1	0.02	-0.43	0.02	0.25	21	0.81	32	77	42	0	7	1	0
NORTH PLATTE	55	22	75	8	38	0	0.34	0.06	0.19	0.40	53	1.45	87	85	38	0	7	2	0
OMAHA	52	26	64	20	39	-1	0.03	-0.46	0.03	0.11	8	0.97	34	77	39	0	7	1	0
SCOTTSBLUFF	53	23	72	16	38	1	0.26	0.00	0.20	0.56	81	2.16	119	83	46	0	6	2	0
VALENTINE	50	23	68	11	36	1	0.03	-0.21	0.02	0.34	51	1.00	69	82	60	0	6	2	0
NV ELY	55	18	67	10	37	1	0.00	-0.23	0.00	0.10	14	1.83	83	63	23	0	7	0	0
LAS VEGAS	75	51	86	46	63	5	0.00	-0.12	0.00	0.00	0	0.30	17	20	11	0	0	0	0
RENO	65	34	77	28	49	6	0.00	-0.18	0.00	0.08	12	1.15	41	48	26	0	2	0	0
WINNEMUCCA	59	21	73	15	40	-1	0.00	-0.19	0.00	0.52	93	2.13	106	54	34	0	7	0	0
NH CONCORD	38	15	44	4	27	-7	0.67	-0.02	0.36	1.73	85	9.12	124	83	39	0	7	3	0
NJ NEWARK	49	32	66	23	40	-3	0.62	-0.36	0.62	0.89	31	8.61	88	62	35	0	4	1	1
NM ALBUQUERQUE	64	34	75	27	49	1	0.00	-0.14	0.00	0.22	54	0.40	30	33	11	0	2	0	0
NY ALBANY	38	20	50	12	29	-6	0.25	-0.45	0.24	0.98	48	6.77	101	74	41	0	6	2	0
BINGHAMTON	37	20	48	7	29	-4	0.04	-0.61	0.03	1.08	55	6.77	97	69	46	0	7	2	0
BUFFALO	39	22	51	10	31	-4	0.25	-0.42	0.20	1.45	73	8.23	109	79	53	0	6	3	0
ROCHESTER	39	23	51	10	31	-3	0.37	-0.20	0.31	0.65	38	4.27	70	72	56	0	7	3	0
SYRACUSE	36	18	46	4	27	-7	0.05	-0.64	0.03	3.82	196	9.37	140	85	47	0	7	3	0
NC ASHEVILLE	54	34	69	28	44	-2	0.81	-0.24	0.50	1.59	49	6.94	62	90	64	0	3	2	1
CHARLOTTE	57	36	74	30	47	-6	1.63	0.62	1.15	3.96	125	10.88	101	88	55	0	3	3	1
GREENSBORO	55	34	74	28	44	-5	0.89	0.01	0.44	3.73	137	9.95	106	84	50	0	3	4	0
HATTERAS	59	44	64	42	52	0	1.57	0.41	0.83	4.33	124	14.42	109	99	75	0	0	4	1
RALEIGH	55	36	76	30	45	-6	0.89	-0.04	0.48	3.87	131	8.83	84	86	58	0	3	4	0
WILMINGTON	62	43	79	37	52	-3	0.85	-0.12	0.46	3.07	100	8.54	76	92	56	0	0	4	0
ND BISMARCK	43	20	58	8	31	1	0.09	-0.09	0.08	0.23	47	0.80	55	85	62	0	7	2	0
DICKINSON	44	18	58	5	31	0	0.07	-0.06	0.06	0.22	79	0.39	36	89	42	0	7	2	0
FARGO	36	17	46	2	27	0	0.13	-0.13	0.12	0.19	27	1.07	52	88	59	0	7	2	0
GRAND FORKS	33	15	43	0	24	-2	0.31	0.12	0.30	0.53	100	1.79	100	90	63	0	7	2	0
JAMESTOWN	38	18	54	5	28	0	0.03	-0.16	0.02	0.03	6	0.42	25	93	60	0	7	2	0
WILLISTON	45	21	62	5	33	4	0.01	-0.16	0.01	0.20	45	0.64	47	88	58	0	7	1	0
OH AKRON-CANTON	44	26	54	12	35	-3	0.43	-0.28	0.29	1.17	55	4.68	68	81	62	0	5	2	0
CINCINNATI	53	31	69	24	42	-2	0.33	-0.56	0.33	1.27	48	6.81	82	75	54	0	4	1	0
CLEVELAND	44	27	55	14	35	-3	0.29	-0.36	0.28	1.14	59	6.17	92	76	54	0	4	2	0
COLUMBUS	52	32	67	21	42	0	0.37	-0.28	0.37	1.32	68	6.11	92	73	53	0	3	1	0
DAYTON	51	29	68	19	40	-1	0.18	-0.56	0.18	1.26	60	6.24	89	77	50	0	3	1	0
MANSFIELD	46	24	56	12	35	-2	0.26	-0.50	0.24	1.20	57	5.53	80	87	52	0	5	2	0

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending March 22, 2014

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	42	22	50	11	32	-6	0.08	-0.50	0.07	0.96	58	8.14	149	84	64	0	7	2	0	
OK YOUNGSTOWN	42	24	51	12	33	-4	0.29	-0.40	0.26	1.04	52	5.73	90	79	63	0	6	2	0	
OK OKLAHOMA CITY	65	38	76	25	51	0	0.17	-0.49	0.17	1.02	50	1.45	30	67	27	0	2	1	0	
OR TULSA	65	37	77	24	51	-1	0.86	0.03	0.83	2.15	88	2.60	43	69	44	0	2	2	1	
OR ASTORIA	52	38	56	30	45	-1	1.82	0.17	1.47	7.97	147	21.73	95	91	76	0	2	4	1	
OR BURNS	53	20	70	12	37	0	0.01	-0.26	0.01	0.77	85	2.89	90	83	41	0	7	1	0	
OR EUGENE	57	34	63	28	45	-1	0.18	-1.12	0.16	3.21	74	13.76	75	88	70	0	3	3	0	
OR MEDFORD	64	35	73	30	49	2	0.14	-0.26	0.14	2.47	182	7.80	132	82	39	0	3	1	0	
OR PENDLETON	55	31	68	24	43	-2	0.15	-0.13	0.15	1.26	145	3.62	102	75	45	0	4	1	0	
OR PORTLAND	56	38	63	32	47	0	0.77	-0.05	0.69	4.25	155	12.07	101	87	68	0	1	4	1	
OR SALEM	58	35	62	30	46	-1	0.51	-0.40	0.50	4.49	142	13.38	95	85	62	0	2	2	1	
PA ALLENTOWN	47	28	63	22	37	-2	0.43	-0.38	0.43	0.89	36	9.87	114	63	39	0	6	1	0	
PA ERIE	40	24	51	11	32	-5	0.38	-0.32	0.35	1.71	84	7.70	113	75	56	0	5	2	0	
PA MIDDLETOWN	48	32	64	23	40	-2	0.17	-0.56	0.17	0.50	22	7.21	89	75	29	0	4	1	0	
PA PHILADELPHIA	50	32	68	23	41	-2	0.83	-0.05	0.67	1.49	57	10.16	114	74	40	0	3	2	1	
PA PITTSBURGH	45	29	55	24	37	-3	0.31	-0.41	0.25	1.12	52	5.55	77	77	48	0	5	2	0	
PA WILKES-BARRE	44	27	60	17	36	-2	0.14	-0.46	0.14	0.35	20	5.22	83	65	31	0	4	1	0	
PA WILLIAMSPORT	45	28	59	18	36	-2	0.02	-0.70	0.02	0.73	34	4.53	60	59	31	0	5	1	0	
RI PROVIDENCE	45	25	60	17	35	-4	0.77	-0.24	0.62	1.33	45	9.73	90	68	40	0	6	2	1	
SC BEAUFORT	66	45	76	39	56	-2	0.71	-0.13	0.47	1.78	73	5.64	59	94	59	0	0	4	0	
SC CHARLESTON	66	45	79	38	56	-2	1.32	0.39	0.89	3.08	112	7.93	80	92	59	0	0	2	1	
SC COLUMBIA	65	42	79	34	53	-3	1.33	0.28	1.15	3.34	104	9.66	82	86	71	0	0	2	1	
SC GREENVILLE	60	38	75	33	49	-3	1.47	0.24	1.19	3.57	91	9.81	78	87	49	0	0	2	1	
SD ABERDEEN	41	18	56	8	29	-2	0.11	-0.19	0.04	0.48	62	0.92	53	94	68	0	7	4	0	
SD HURON	45	22	58	13	33	0	0.01	-0.37	0.01	0.39	40	0.96	47	86	47	0	7	1	0	
SD RAPID CITY	48	23	63	13	36	1	0.35	0.13	0.29	0.85	144	1.32	93	84	46	0	6	2	0	
SD SIOUX FALLS	44	22	57	14	33	0	0.25	-0.17	0.25	0.54	53	1.53	75	83	62	0	7	1	0	
TN BRISTOL	60	34	68	27	47	0	0.36	-0.53	0.29	1.56	55	6.62	68	80	38	0	2	2	0	
TN CHATTANOOGA	61	43	72	33	52	0	1.26	-0.18	1.24	1.60	36	9.19	63	89	60	0	0	2	1	
TN KNOXVILLE	59	39	70	31	49	-1	0.64	-0.55	0.47	1.66	45	9.72	79	87	54	0	1	2	0	
TN MEMPHIS	63	40	73	33	52	-2	0.54	-0.72	0.40	2.99	78	11.11	90	79	45	0	0	2	0	
TN NASHVILLE	60	38	70	31	49	-2	0.68	-0.44	0.66	3.14	90	10.84	97	82	45	0	1	2	1	
TX ABILENE	71	43	88	30	57	0	0.00	-0.30	0.00	0.64	67	1.13	37	58	35	0	1	0	0	
TX AMARILLO	64	31	78	26	48	0	0.00	-0.25	0.00	0.09	13	0.48	26	55	19	0	4	0	0	
TX AUSTIN	74	45	82	37	60	-2	0.00	-0.46	0.00	1.36	86	2.45	45	72	46	0	0	0	0	
TX BEAUMONT	72	51	79	42	62	0	0.48	-0.37	0.48	1.53	60	8.25	71	96	54	0	0	1	0	
TX BROWNSVILLE	78	58	85	46	68	-1	0.00	-0.18	0.00	1.29	253	2.05	67	96	60	0	0	0	0	
TX CORPUS CHRISTI	78	57	82	45	67	1	0.00	-0.36	0.00	1.43	115	2.34	50	89	62	0	0	0	0	
TX DEL RIO	79	52	90	39	65	1	0.00	-0.19	0.00	0.22	35	0.44	20	59	33	1	0	0	0	
TX EL PASO	75	49	80	39	62	5	0.00	-0.04	0.00	0.18	100	0.18	18	25	9	0	0	0	0	
TX FORT WORTH	69	45	82	35	57	-1	0.00	-0.68	0.00	1.39	62	2.13	33	68	34	0	0	0	0	
TX GALVESTON	70	56	73	45	63	-1	0.00	-0.63	0.00	1.49	79	4.54	53	97	68	0	0	0	0	
TX HOUSTON	74	51	81	43	63	0	0.00	-0.74	0.00	2.23	97	5.58	62	87	61	0	0	0	0	
TX LUBBOCK	70	35	83	25	53	2	0.00	-0.14	0.00	0.01	2	0.17	10	52	24	0	3	0	0	
TX MIDLAND	73	42	86	32	58	2	0.01	-0.06	0.01	0.10	31	0.36	25	52	23	0	1	1	0	
TX SAN ANGELO	75	43	89	28	59	2	0.00	-0.19	0.00	0.02	3	0.08	3	53	27	0	2	0	0	
TX SAN ANTONIO	77	50	86	42	64	2	0.01	-0.40	0.01	0.64	48	1.29	27	78	32	0	0	1	0	
TX VICTORIA	76	50	80	38	63	-1	0.09	-0.41	0.09	1.04	67	2.70	45	94	63	0	0	1	0	
TX WACO	70	43	81	33	57	-2	0.00	-0.53	0.00	0.42	23	1.18	19	81	48	0	0	0	0	
TX WICHITA FALLS	67	40	79	28	54	0	0.00	-0.50	0.00	1.94	126	2.29	54	61	38	0	1	0	0	
UT SALT LAKE CITY	59	36	67	30	47	3	0.00	-0.43	0.00	0.39	30	3.16	79	53	21	0	1	0	0	
VT BURLINGTON	35	11	43	-8	23	-8	0.13	-0.39	0.12	1.06	73	5.34	100	78	39	0	6	2	0	
VA LYNCHBURG	55	34	75	29	45	-1	0.62	-0.25	0.38	1.85	69	8.93	96	76	47	0	3	4	0	
VA NORFOLK	56	39	76	33	48	-1	1.13	0.19	0.50	2.32	81	8.62	85	86	54	0	0	4	1	
VA RICHMOND	55	36	77	30	45	-3	0.67	-0.27	0.37	1.48	51	7.79	83	75	54	0	2	4	0	
VA ROANOKE	52	35	69	27	44	-3	0.55	-0.33	0.41	1.81	67	8.08	90	74	53	0	3	4	0	
WA WASH/DULLES	48	30	69	23	39	-5	0.86	0.06	0.44	1.79	72	8.29	100	88	53	0	3	5	0	
WA OLYMPIA	53	34	60	24	43	-1	0.75	-0.42	0.61	7.14	183	20.18	115	91	71	0	2	2	1	
WA QUILLAYUTE	50	36	52	29	43	-1	2.07	-0.38	1.36	12.17	147	34.74	101	99	81	0	3	6	1	
WA SEATTLE-TACOMA	51	37	52	34	44	-2	1.16	0.33	1.13	7.71	281	17.52	145	87	69	0	0	3	1	
WA SPOKANE	49	30	56	23	39	-1	0.08	-0.25	0.05	2.56	235	5.38	122	79	38	0	5	3	0	
WA YAKIMA	59	29	69	22	44	1	0.00	-0.14	0.00	0.57	124	2.30	95	69	41	0	5	0	0	
WV BECKLEY	52	33	66	27	43	1	0.52	-0.30	0.44	5.77	224	13.67	156	76	54	0	3	3	0	
WV CHARLESTON	57	36	69	28	47	1	0.47	-0.42	0.47	1.80	64	8.86	96	80	40	0	2	1	0	
WV ELKINS	52	32	62	22	42	2	0.64	-0.25	0.45	1.96	71	8.22	87	79	41	0	2	3	0	
WV HUNTINGTON	56	34	69	25	45	-1	0.36	-0.51	0.33	1.76	64	9.12	101	79	43	0	2	2	0	
WI EAU CLAIRE	34	18	41	4	26	-5	0.11	-0.31	0.08	0.11	11	3.31	116	84	54	0	7	2	0	
WI GREEN BAY	34	20	41	5	27	-5	0.21	-0.26	0.20	0.38	31	3.17	92	87	64	0	7	2	0	
WI LA CROSSE	41	22	52	13	32	-3	0.18	-0.26	0.11	0.63	59	2.99	92	80	45	0	7	2	0	
WI MADISON	40	21	50	11	31	-3	0.23	-0.27	0.12	0.71	54	2.60	68	81	55	0	6	2	0	
WI MILWAUKEE	37	25	45	16	31	-4	0.07	-0.50	0.07	0.50	33	3.24	65	81	59	0	6	1	0	
WY CASPER	44	23	59	14	34	-1	0.37	0.18	0.25	1.00	169	2.48	137	81	48	0	7	3	0	
WY CHEYENNE	46	22	63	16	34	0	0.31	0.08	0.28	0.60	94	2.76	180	78	44	0	7	2	0	
WY LANDER	47	24	60	18	36	0	0.19	-0.08	0.16	0.81	113	1.61	90	81	30	0	7	3	0	
WY SHERIDAN	44	24	64	10	34	-1	0.48	0.27	0.31	1.22	218	3.07	162	79	50	0	7	4	0	

Based on 1971-2000 normals

*** Not Available

National Agricultural Summary

March 17 - 23, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Very dry conditions impacted the western United States, with the majority of locations west of the Mississippi River receiving no precipitation and only limited areas recording more than one-half inch. In contrast, portions of the Florida panhandle and southern Georgia reported more than 4 inches of rain. The weather was generally cool, with most of the country recording below-average temperatures. Exceptions included the Southwest and Florida where temperatures averaged as much as 6°F above normal.

Dry, breezy conditions affected California. The only rain was associated with a weather disturbance in the extreme northern coastal region at the start of the week. Alfalfa was cut and baled throughout the state. Fields were monitored for aphids and weevils. Winter grains in Siskiyou County showed good quality due to recent storms. Winter wheat fields have begun to head out. Cotton planting had begun, but less than one-quarter of the fields were planted. Fumigation began for potatoes in the North and fields were planted in the Central Valley. Ground preparation for corn continued. Bloom on peach, nectarine, plum, cherry and apricot trees was decreasing, as trees began to leaf out and develop fruit. Fruit thinning began on early stone fruit varieties. Grape vines continued to leaf out and vine shoots were elongating. Grape growers began applying mildew sprays. Olive tree pruning remained active. Blueberries were blooming and pushing new growth. Navel and Valencia oranges, Murcott tangerines, grapefruit, lemons and Minneola tangelos were harvested. Early bloom was noted in some citrus groves due to the warm weather. Nets were placed over mandarin trees to prevent pollination from bees. Young citrus trees were pruned. Almond and walnut growers applied fungicides to trees in advance of future precipitation. Walnut catkins developed. Nutlets continued to grow on almond trees, and trees leafed out. Bud swell increased on pistachio trees. In Fresno County, processing tomato beds received fumigation in preparation for spring transplant. Spring lettuce received insecticide applications and was growing nicely. Bell peppers were planted. Carrots, onions, and tomatoes were irrigated. Mustard seed blooming was nearly done. Onion fields were sprayed with herbicide. Cucumbers, baby spinach, onions, and squash were growing well. Producers were preparing fields and greenhouses for summer vegetables. Range and pastures have not been producing an adequate amount of grass due to the drought. Supplemental feeding of cattle and sheep continued. Some ranchers reduced herds to lower supplemental feeding costs. Bee hives moving into stone fruit orchards remained active.

Arizona's alfalfa condition was rated in poor to excellent condition, depending on location. Harvesting occurred on over three-quarters of the alfalfa acreage across the state. Sheep continued to graze on alfalfa fields in many areas. Barley conditions were fair to excellent. Durum wheat conditions were fair to mostly excellent, with 100 percent of the crop

planted—5 percentage points ahead of both last year and the 5-year average. Winter wheat conditions were poor to excellent, depending on location. Ninety-one percent of the crop was planted, 6 percentage points ahead of last year and 5 points ahead of the 5-year average. Cotton planting was 11 percent complete, 8 percentage points behind last year but equal to the 5-year average. Range conditions continued to dry out throughout the state, as more moisture is needed to promote new forage. Range and pastures were rated in very poor to good condition, depending on location.

Warmer weather was reported early in the week in Texas. Winter wheat on the Southern Low Plains and the Edwards Plateau continued to show signs of stress brought on by dry, windy conditions. In the Coastal Bend, winter wheat was entering the boot stage. Wet field conditions delayed corn planting in the Blacklands. Producers in South Central Texas finished planting corn and turned their attention to planting cotton and sorghum. Rice planting was progressing well. Cotton fields continued to be prepared on the Northern Low Plains. Fall-planted onions continued to grow and expand in size in the Trans-Pecos. Vegetables continued to be planted, although low overnight temperatures affected intentions in North East Texas. Producers in the Edwards Plateau began pruning and training grape vines. Livestock continued to be sold at local auctions. Cattle grazed winter pastures in the Blacklands. Fire danger remained high in the Trans-Pecos.

In Florida, over half of the state received 1 to 4 inches of rain. Field corn planting has started in Jackson County. Some farmers in the Panhandle are 2 weeks behind on preparing for planting due to rain. Levy County farmers hope to start planting peanuts. Sugarcane harvest was nearing its finish. Flagler and Putnam County farmers have finished planting potatoes and continued to harvest cabbage. Dixie and Suwannee County farmers started planting watermelons, and Levy County has finished planting watermelons. Miami-Dade County farmers were harvesting green beans, squash, sweet corn, and tomatoes. Rain was widespread in the citrus area. Daytime temperatures were unseasonably warm, reaching the mid-80s in all citrus-producing counties. Grove activity included irrigating on several days during the week, hedging, topping and spraying. Growers were continuing to plant new trees in existing groves. Full bloom was evident in all areas on both oranges and grapefruit. Some trees were bearing very small fruit already for next season's crop. Several processing plants have closed temporarily and are waiting for Valencia oranges to start coming in. A few plants were running grapefruit only. Warmer weather has improved pasture quality; however, some pasture remains wet in the Panhandle from recent heavy rain. Pasture in the southwest was aided by timely rains and warm weather. The cattle condition for the state primarily ranged from fair to good but the pasture condition was mostly fair.

International Weather and Crop Summary

March 16-22, 2014

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

HIGHLIGHTS

EUROPE: Warmer-than-normal weather accelerated winter crop development, while late-week showers improved soil moisture in eastern growing areas.

WESTERN FSU: Above-normal temperatures ushered winter crops out of dormancy across western and southern growing areas.

MIDDLE EAST: Widespread showers provided much-needed moisture for vegetative winter grains in eastern Iran.

NORTHWEST AFRICA: Sunny skies promoted winter grain development after several weeks of rainy weather.

EAST ASIA: Brief showers provided some additional moisture to winter crops, while warm weather accelerated crop development.

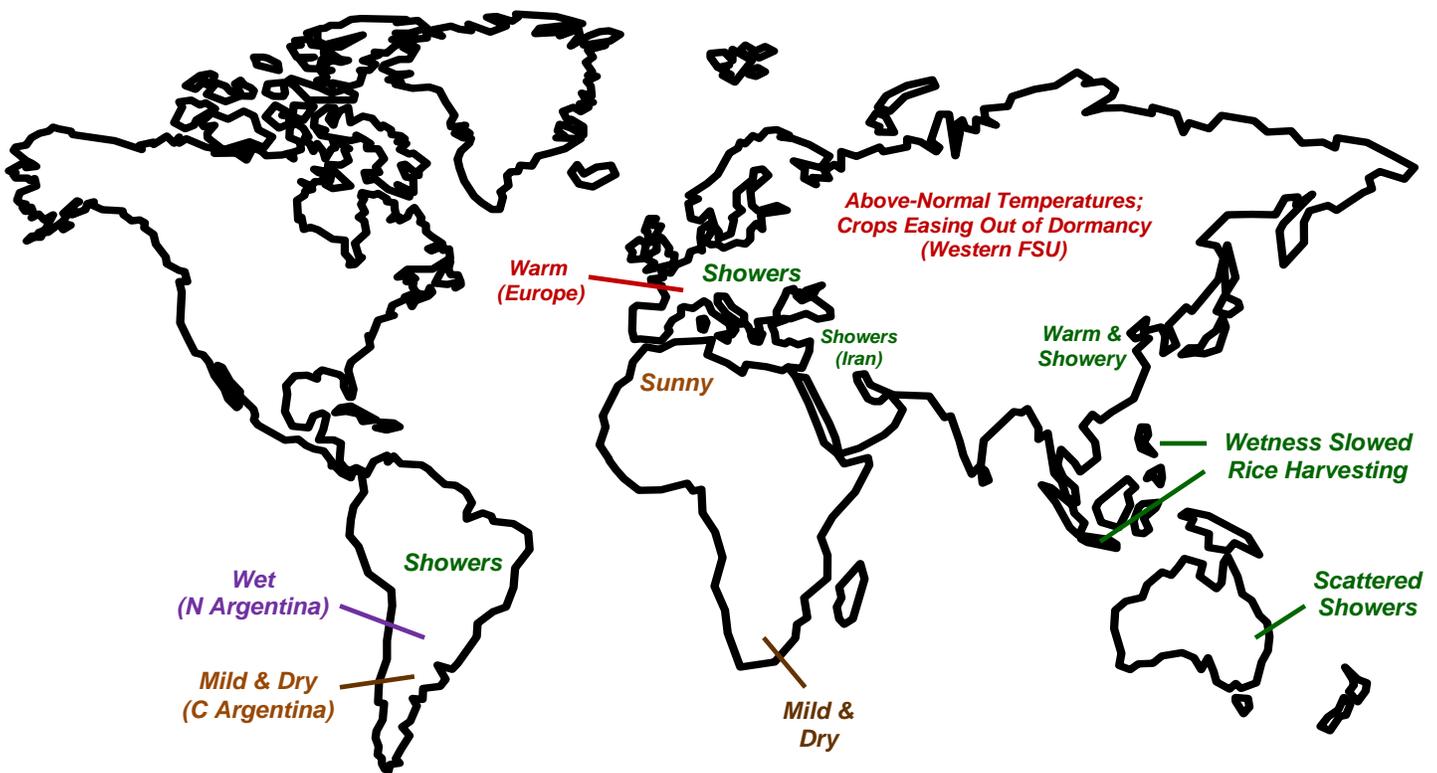
SOUTHEAST ASIA: Wet weather continued to slow rice harvesting across the region.

AUSTRALIA: Scattered showers may have caused temporary delays in summer crop harvesting.

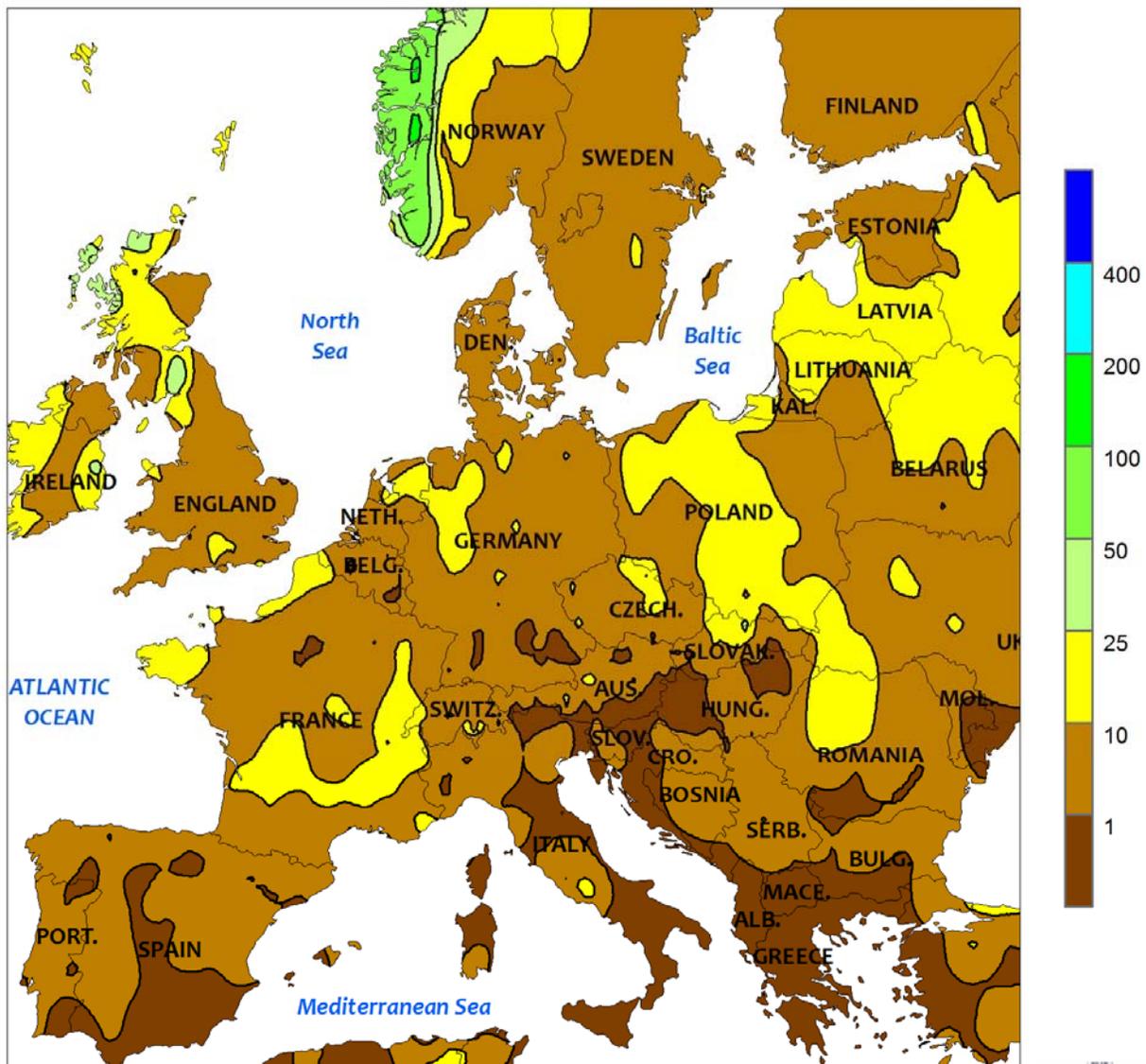
SOUTH AFRICA: Mostly dry, seasonably mild weather favored development of filling to maturing corn.

ARGENTINA: Mild, mostly dry weather helped to alleviate excessive wetness in corn and soybean areas of central Argentina, but locally heavy rain continued in the northern cotton belt.

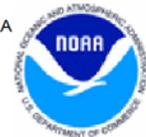
BRAZIL: Locally heavy showers maintained adequate to abundant levels of moisture for corn and immature soybeans.



EUROPE
Total Precipitation (mm)
MAR 16 - 22, 2014



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

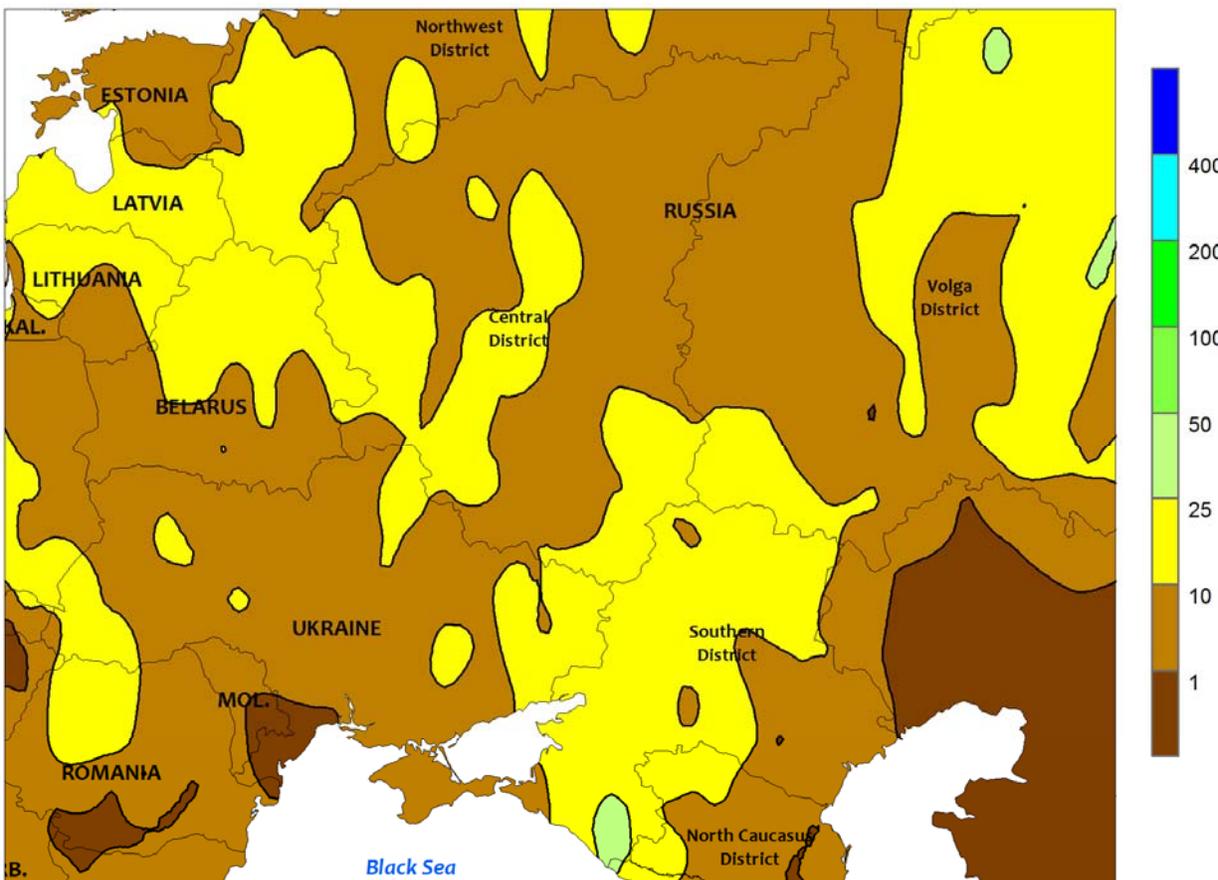


EUROPE

Unseasonably warm weather prevailed, while late-week rain provided much-needed soil moisture to eastern growing areas. Temperatures averaged up to 8°C above normal, with daytime highs topping 20°C over all but the northern-most portions of the region; consequently, winter crops added vegetative growth at a faster-than-normal pace while recently-sown small grains rapidly emerged. In addition, sunny skies for much of the week across northern Europe promoted additional sowing of small grains and sugarbeets. By week’s end, a cold front

generated showers (2-15 mm) from France and the United Kingdom into Germany and the Low Countries, maintaining favorable soil moisture for vegetative winter crops. As the front stalled over eastern Europe, a beneficial soaking (10-24 mm) improved soil moisture for winter crops in Poland and the Czech Republic. Meanwhile, dry weather lingered across Spain, Italy, and the Balkans, favoring summer crop planting but reducing soil moisture for heading winter crops on the Iberian Peninsula.

WESTERN FSU
Total Precipitation (mm)
MAR 16 - 22, 2014



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

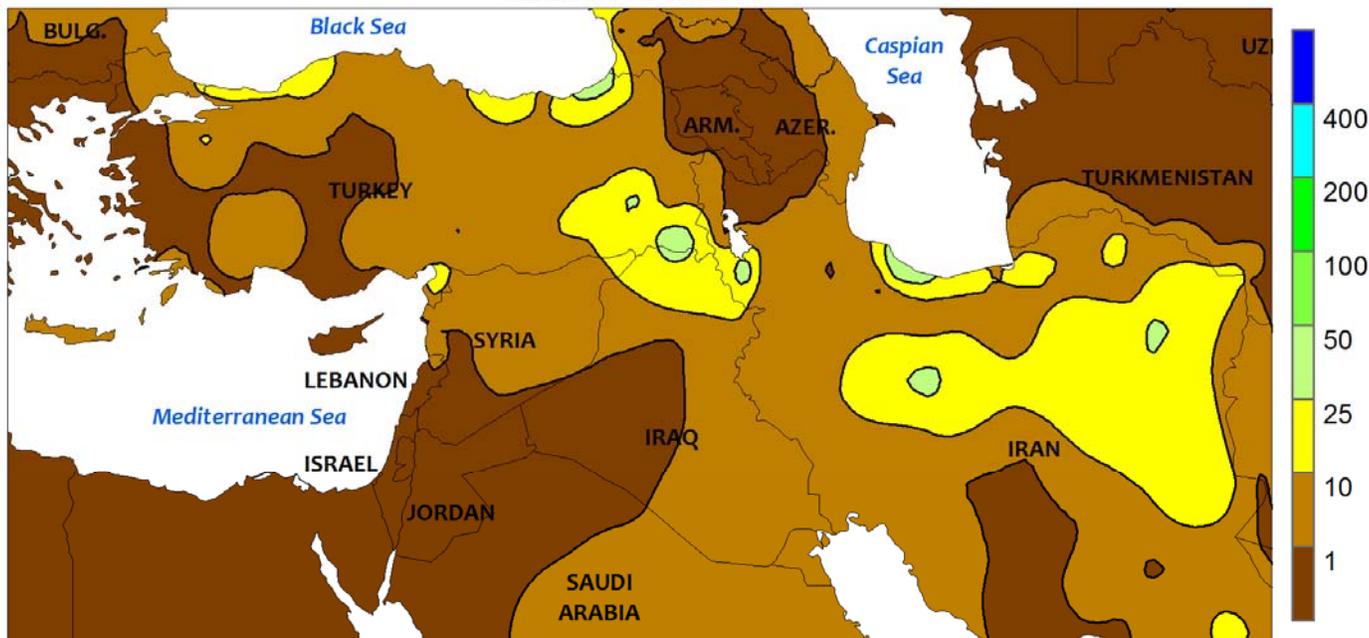


WESTERN FSU

Unseasonably warm conditions persisted, while showers expanded across the region. Temperatures averaged up to 7°C above normal, causing winter crops to add vegetative growth over southern growing areas and break dormancy from northern Ukraine into central portions of Russia’s Southern District. The region’s snowpack likewise continued to melt much earlier than normal, with snow confined to southern and eastern sections of Russia’s Volga District at week’s end.

Daytime highs topped 15°C (locally above 20°C) in western and southern crop regions, rapidly warming soils for spring grain planting and emergence. Meanwhile, widespread showers (10-20 mm) improved soil moisture for greening to vegetative winter grains across Belarus, northern Ukraine, and western Russia. However, rain was lighter (less than 10 mm) in southern Ukraine, where producers are in need of moisture due to a dry spell which began in late October.

MIDDLE EAST
Total Precipitation (mm)
MAR 16 - 22, 2014



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

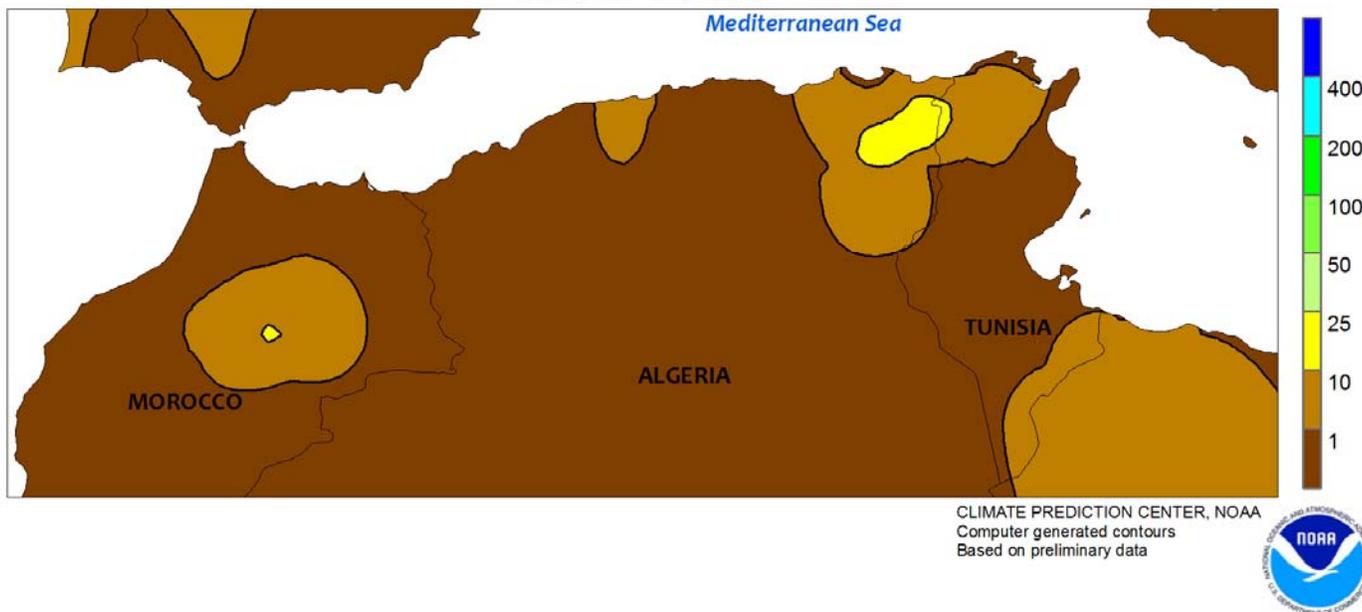


MIDDLE EAST

Wet weather shifted east, while dry, mild conditions returned to western growing areas. A slow-moving Mediterranean storm generated moderate to heavy rain (10-40 mm, locally more) in southeastern Turkey, northern Iraq, and central Iran, boosting soil moisture for vegetative winter wheat and barley. Rain from this storm system spread into eastern Iran, providing producers in this part of the country their first significant precipitation since the onset of the water year (October 1). However, more

rain will be needed in eastern Iran to stabilize winter crop prospects following one of the driest winters in the last 25 years. Across western portions of the Middle East, mild, drier weather returned in the wake of the departing storm, promoting fieldwork and winter wheat development. However, satellite-derived vegetation health data indicated wheat on Turkey's Anatolian Plateau was in poor condition, the result of a very dry autumn and a sharp cold snap in December.

NORTHWESTERN AFRICA
 Total Precipitation (mm)
 MAR 16 - 22, 2014

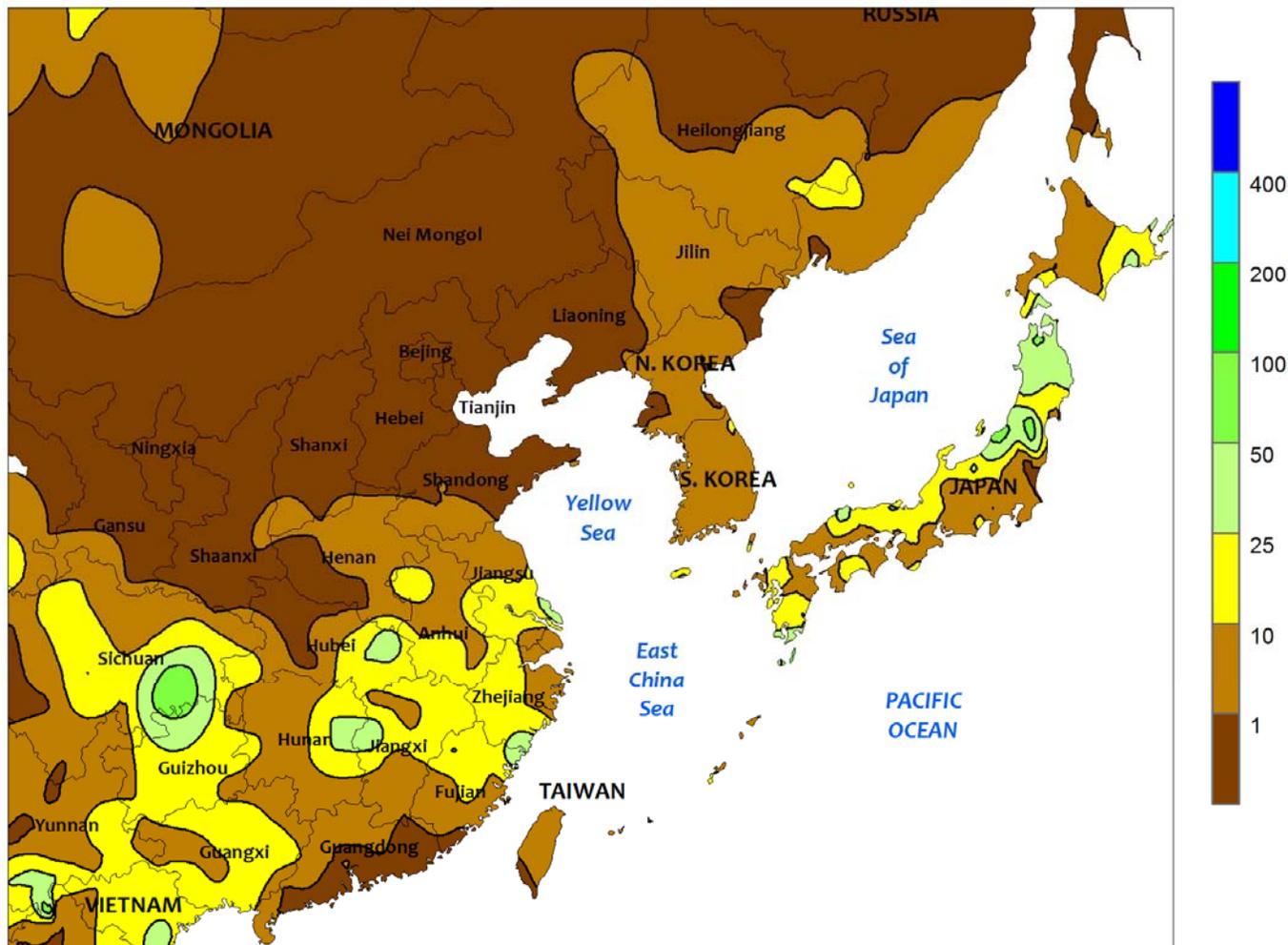


NORTHWESTERN AFRICA

The favorable winter crop growing campaign continued, with sunny skies following last week’s locally heavy rain. With adequate to abundant soil moisture from recent soaking rains, the drier weather was welcomed for

fieldwork and winter crop development. However, drier-than-normal conditions and periods of heat (30°C or greater) have trimmed prospects for heading winter wheat in southern Morocco.

EASTERN ASIA
Total Precipitation (mm)
MAR 16 - 22, 2014



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

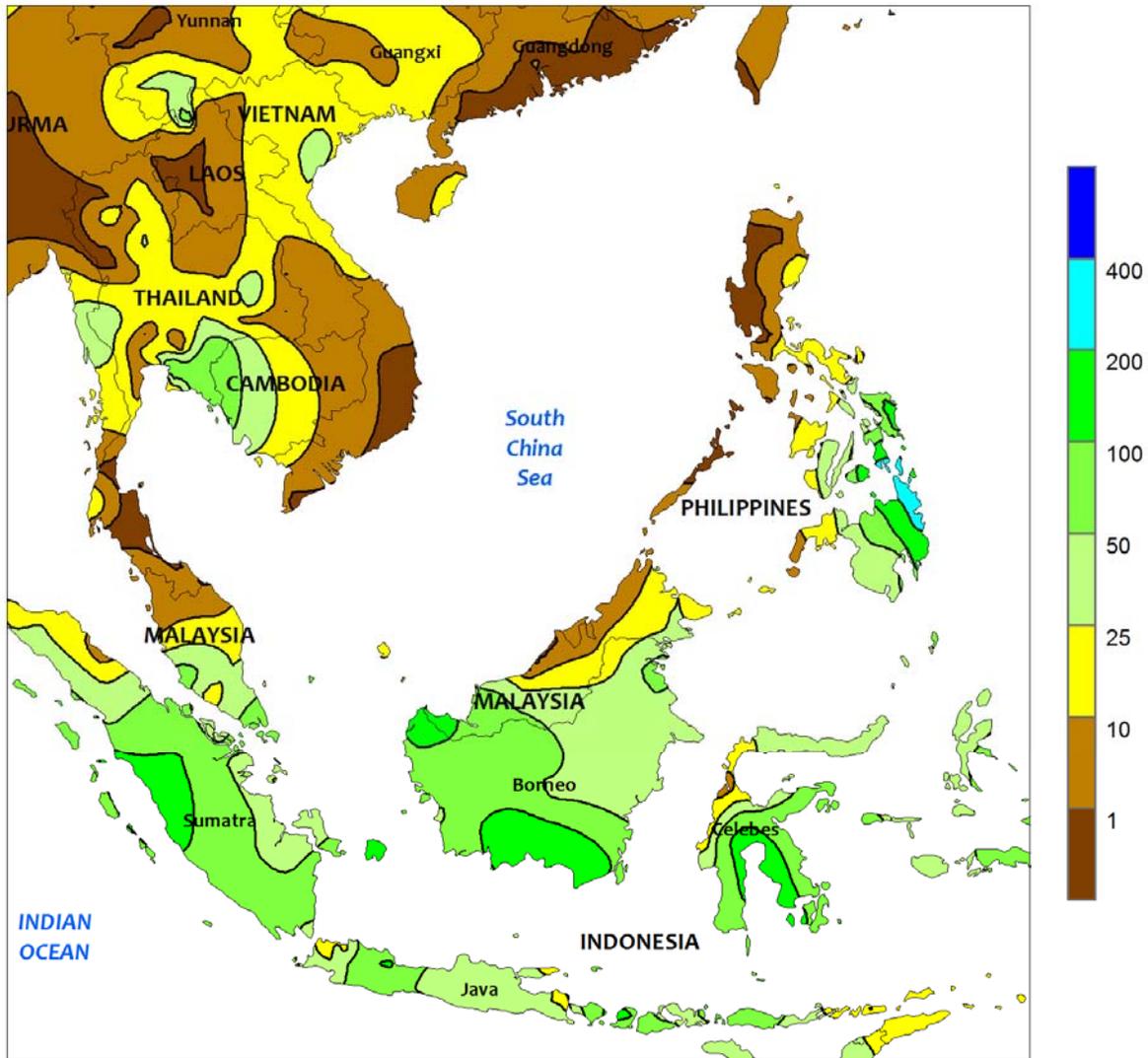


EASTERN ASIA

Brief showers provided additional moisture to winter and spring crops across China. Light, early-week showers (less than 10 mm) added to soil moisture on the North China Plain, where winter wheat was rapidly approaching reproduction. In the Yangtze Valley, similar rainfall totals occurred, with localized amounts between 25 and 35 mm benefiting winter rapeseed beginning to flower. Across much of southern China, meanwhile, rainfall amounts

varied between 1 to nearly 100 mm and did little to improve overall moisture conditions for early-crop rice. In general, March rainfall thus far has been below normal in most areas, most notably in the south where increased showers would be welcomed to recharge irrigation supplies. In addition, temperatures were over 5°C above normal in many areas, accelerating winter crop development as well as increasing moisture demands.

SOUTHEAST ASIA
Total Precipitation (mm)
MAR 16 - 22, 2014



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

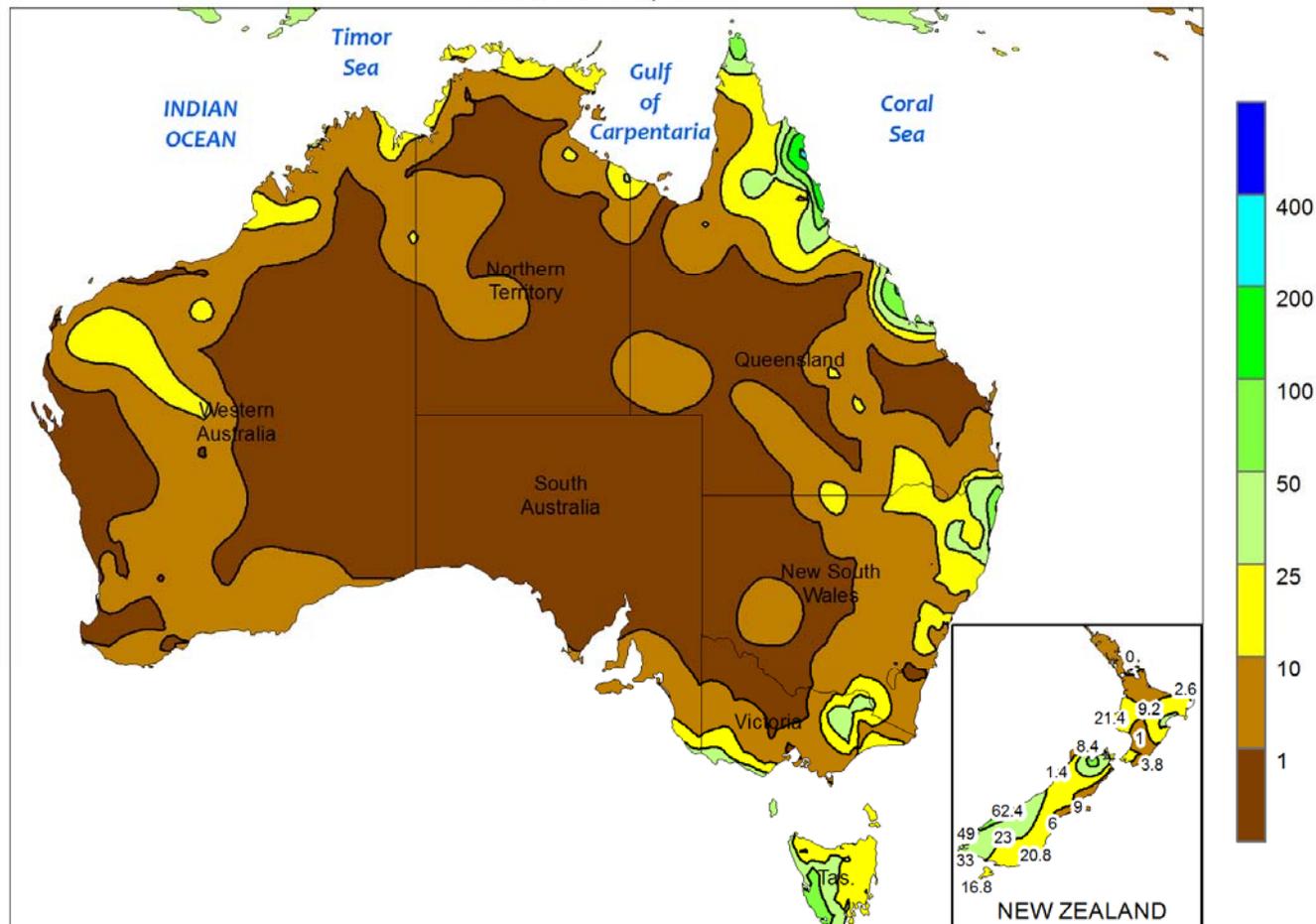


SOUTHEAST ASIA

Unseasonably wet weather continued to slow rice harvesting throughout much of the region. In Java, Indonesia, rainfall totals over 100 mm hampered rice harvesting in the western and central growing areas, while more seasonable amounts (averaging 30 mm) in the east benefited rice that won't be harvested until May. In Indonesian oil palm areas, widespread showers (40-100 mm) provided a much-needed boost to soil moisture after a prolonged period with little rainfall. The moisture improvements extended into Peninsular Malaysia, but unfavorably dry weather continued in eastern Malaysia. In the

Philippines, heavy showers (upwards of 250 mm) predominantly in the east slowed or halted rice (and corn) harvesting, while mostly dry weather favored fieldwork in the north. Elsewhere, sunny, warm weather facilitated spring rice harvesting in southern Vietnam, as rainfall totals approaching 50 mm favored spring rice that will be harvested in June. At the same time, unseasonable rain (10-30 mm) in Thailand slowed second-season rice harvesting but boosted irrigation reserves for a main-season crop that will be transplanted in May and June.

AUSTRALIA
Total Precipitation (mm)
MAR 16 - 22, 2014



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

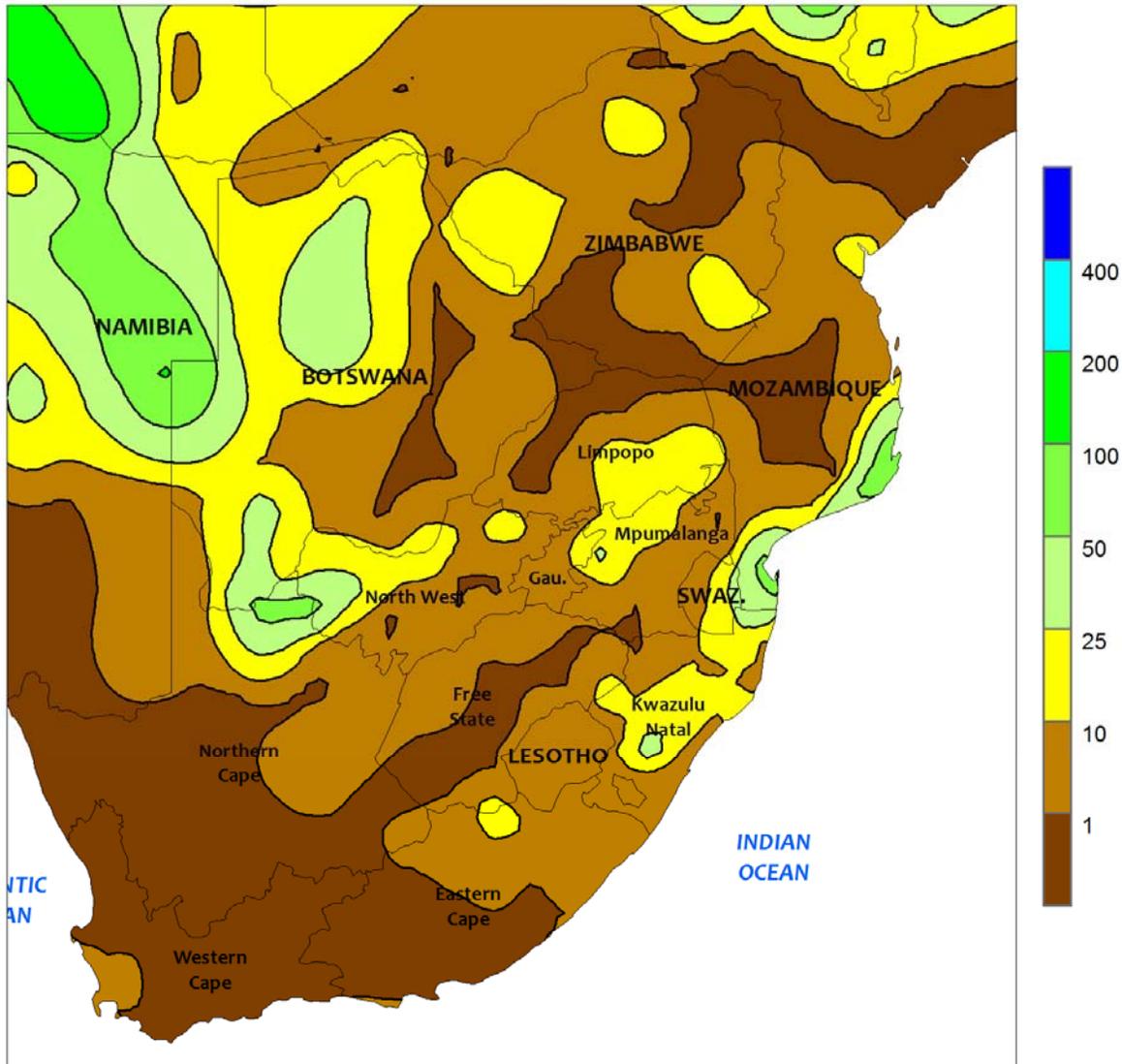


AUSTRALIA

Unseasonably warm, mostly dry weather continued to favor summer crop maturation and harvesting in southern Queensland. Temperatures averaged about 1 to 2°C above normal, with maximum temperatures in the lower to middle 30s degrees C. Farther south, scattered showers (2-15 mm)

may have slowed local cotton and sorghum harvesting in New South Wales, but any delays were likely temporary. Temperatures were generally seasonable in New South Wales, with maximum temperatures in the upper 20s to lower 30s degrees C.

SOUTH AFRICA
Total Precipitation (mm)
MAR 16 - 22, 2014



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

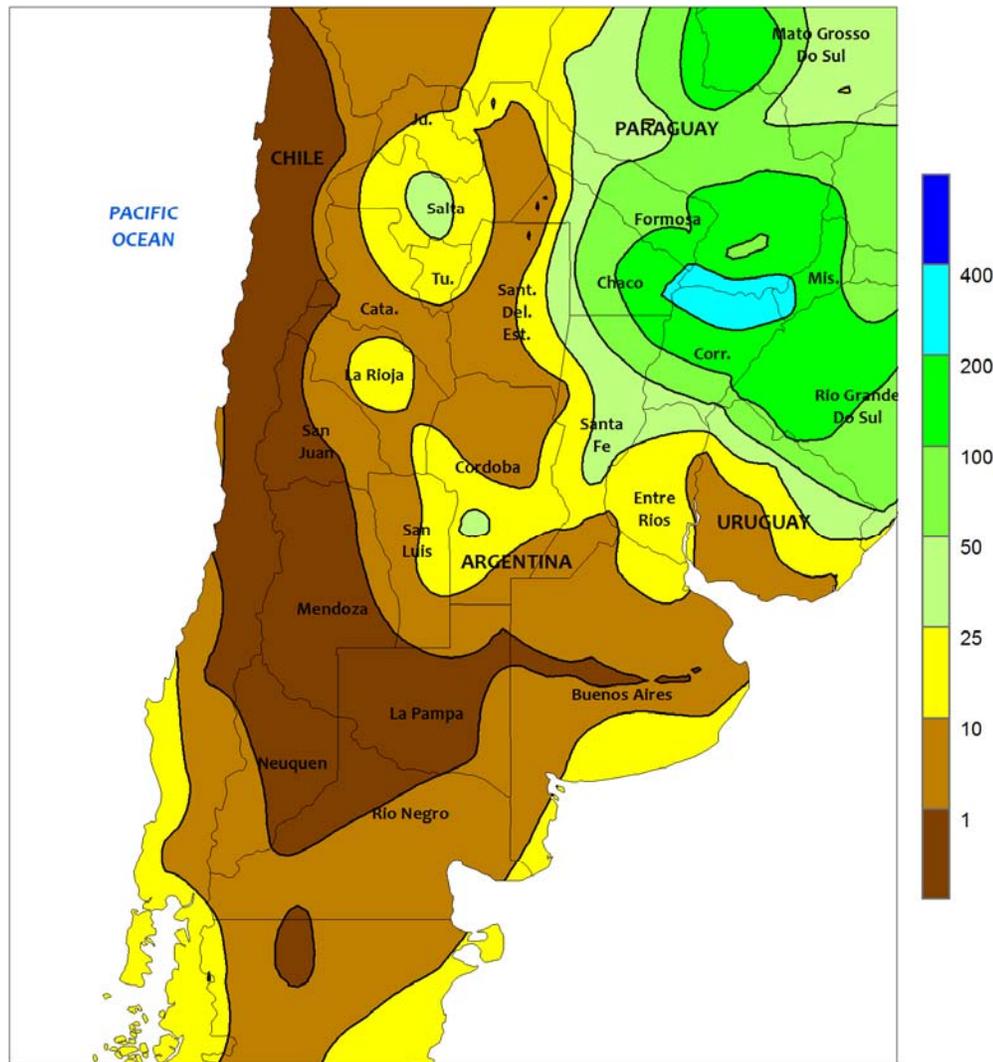


SOUTH AFRICA

Mostly dry, seasonably warm weather dominated the corn belt, favoring late-season development of filling to maturing summer crops. Rainfall totaled below 10 mm over much of the region, with just a few local reports in excess of 25 mm. Weekly temperatures averaged near to slightly above normal, with daytime highs reaching the upper 20s and lower 30s (degrees C) nearly every day. Similar conditions prevailed in sugarcane areas of KwaZulu-Natal and eastern Mpumalanga, with rainfall totaling 5 to 25 mm and

temperatures averaging slightly above normal (daytime highs only briefly reaching the lower and middle 30s). In the Cape Provinces, mild, mostly dry weather prevailed, with just a few isolated light showers (generally 5 mm or less) scattered throughout eastern agricultural areas and far western sections of Western Cape. Harvesting of most Western Cape tree and vine crops should be nearing completion under the mostly mild (daytime highs ranging from the middle 20s to lower 30s) sunny conditions.

ARGENTINA
Total Precipitation (mm)
MAR 16 - 22, 2014



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

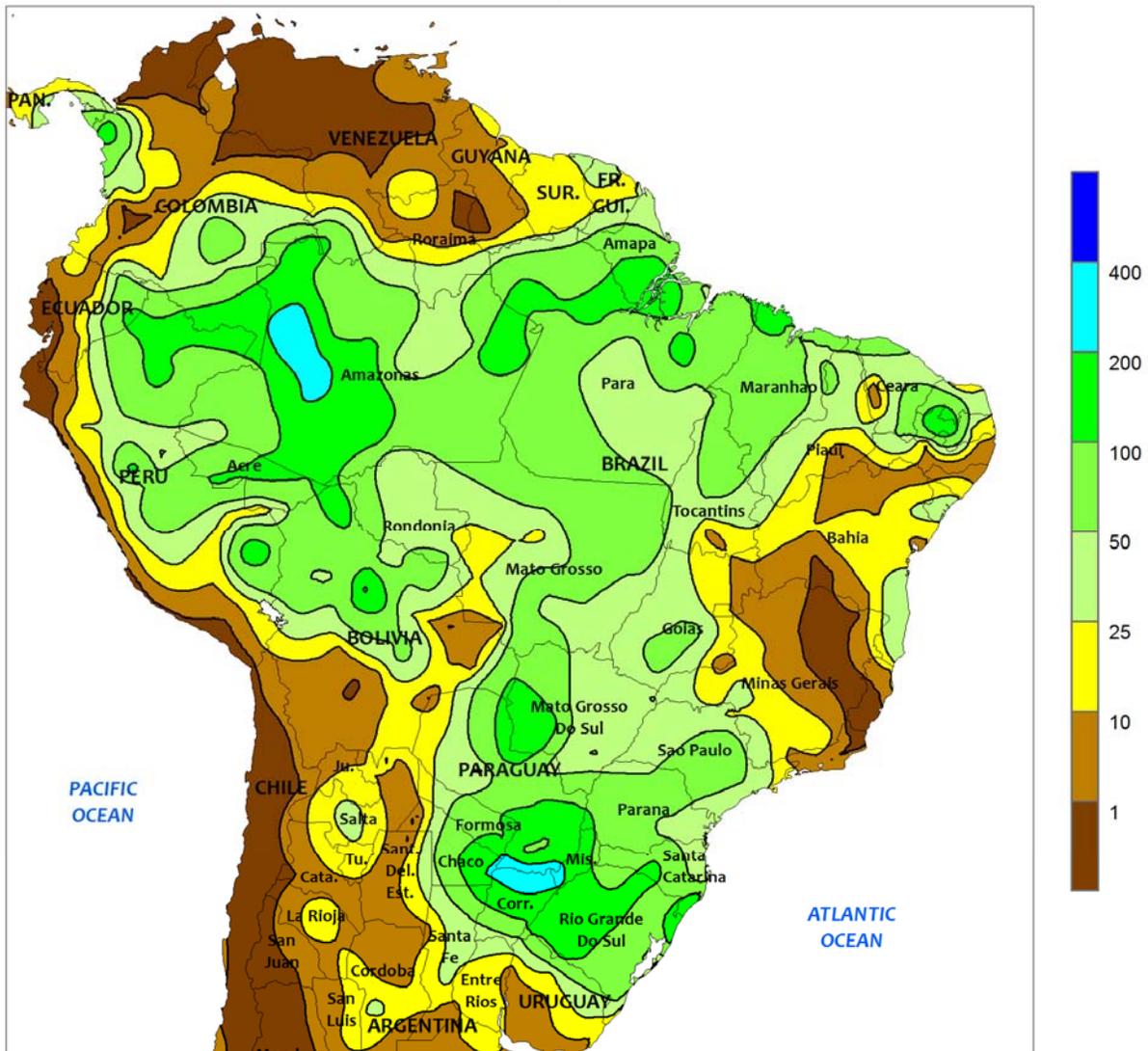


ARGENTINA

Favorably drier conditions prevailed in central Argentina, while unseasonable wetness intensified in northeastern cotton areas. Following last week's heavy showers, virtually no rain fell in La Pampa and central Buenos Aires, with amounts in excess of 10 mm confined to southeastern Buenos Aires and from central Cordoba to the lower Parana River Valley (northeastern Buenos Aires and southern sections of Santa Fe and Entre Rios). However, weekly temperatures averaging 3 to 4°C below normal slowed the drying process. Temperatures reached the middle and upper 20s (degrees C) at the beginning of the week, but the passage of a cold front ushered cooler weather into the region; daytime highs failed to reach 20°C on several days and nighttime lows fell below 5°C at week's end over a large portion of the region. Cooler-than-normal conditions (weekly temperatures averaging 2-

3°C below normal) also prevailed across the north, with daytime highs reaching the lower 30s on several days before the arrival of cooler weather. However, unlike central Argentina, locally heavy rain accompanied the frontal passage, with rainfall exceeding 100 mm in key cotton producing areas of Chaco and Formosa. Elsewhere in the north, rainfall totaled 10 to 100 mm, with declining amounts as one moved westward (Jujuy, Tucuman, and Catamarca). According to Argentina's Ministry of Agriculture, sunflowers were 57 percent harvested, compared with 77 percent last year. Harvesting of sunseed in Buenos Aires — the country's largest producer — reached 35 percent complete versus 57 percent last year. In addition, the wet weather in northern areas was reportedly affecting cotton fieldwork, including harvesting and spraying of defoliants.

BRAZIL
Total Precipitation (mm)
MAR 16 - 22, 2014



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



BRAZIL

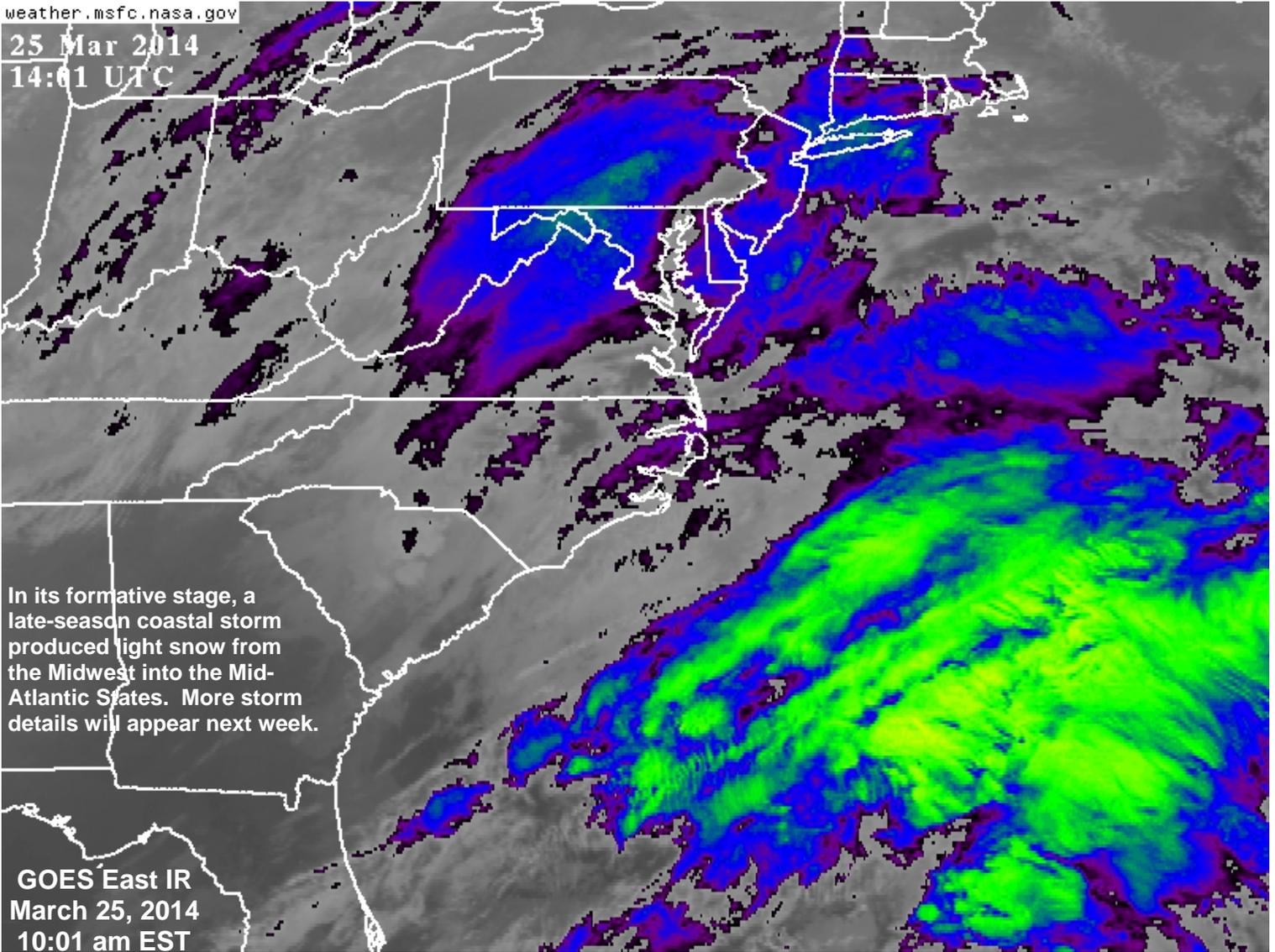
Rain maintained adequate to abundant moisture for immature summer crops in key production areas of southern and central Brazil. Rainfall totaled 25 to 75 mm in most areas, although amounts exceeded 100 mm throughout Rio Grande do Sul and southeastern Paraguay. The moisture was overall favorable for establishment of second-season (safrinha) corn and cotton but the rain was untimely for seasonal fieldwork, including the final stages of soybean harvesting and safrinha plantings, as well as spraying for pests and diseases. Later-planted soybeans in Rio Grande do Sul could still benefit from rain, although the intensity of this week's showers may have created

problems with excessive wetness. More seasonable amounts of rainfall (25-50 mm) benefited sugarcane, citrus, and other crops in Sao Paulo, but drier conditions prevailed in coffee areas of southern Minas Gerais and Espirito Santo, where above-normal temperatures (daytime highs in the low 30s degrees C) maintained high evapotranspiration rates. The area of dryness extended northward into western Bahia and southern Tocantins, with some locations recording less than 10 mm. Meanwhile, showers increased moisture for coffee and cocoa in southeastern Bahia, while boosting irrigation reserves in summer row crop areas in Brazil's northeastern tip.

25 Mar 2014
14:01 UTC

In its formative stage, a late-season coastal storm produced light snow from the Midwest into the Mid-Atlantic States. More storm details will appear next week.

GOES East IR
March 25, 2014
10:01 am EST



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