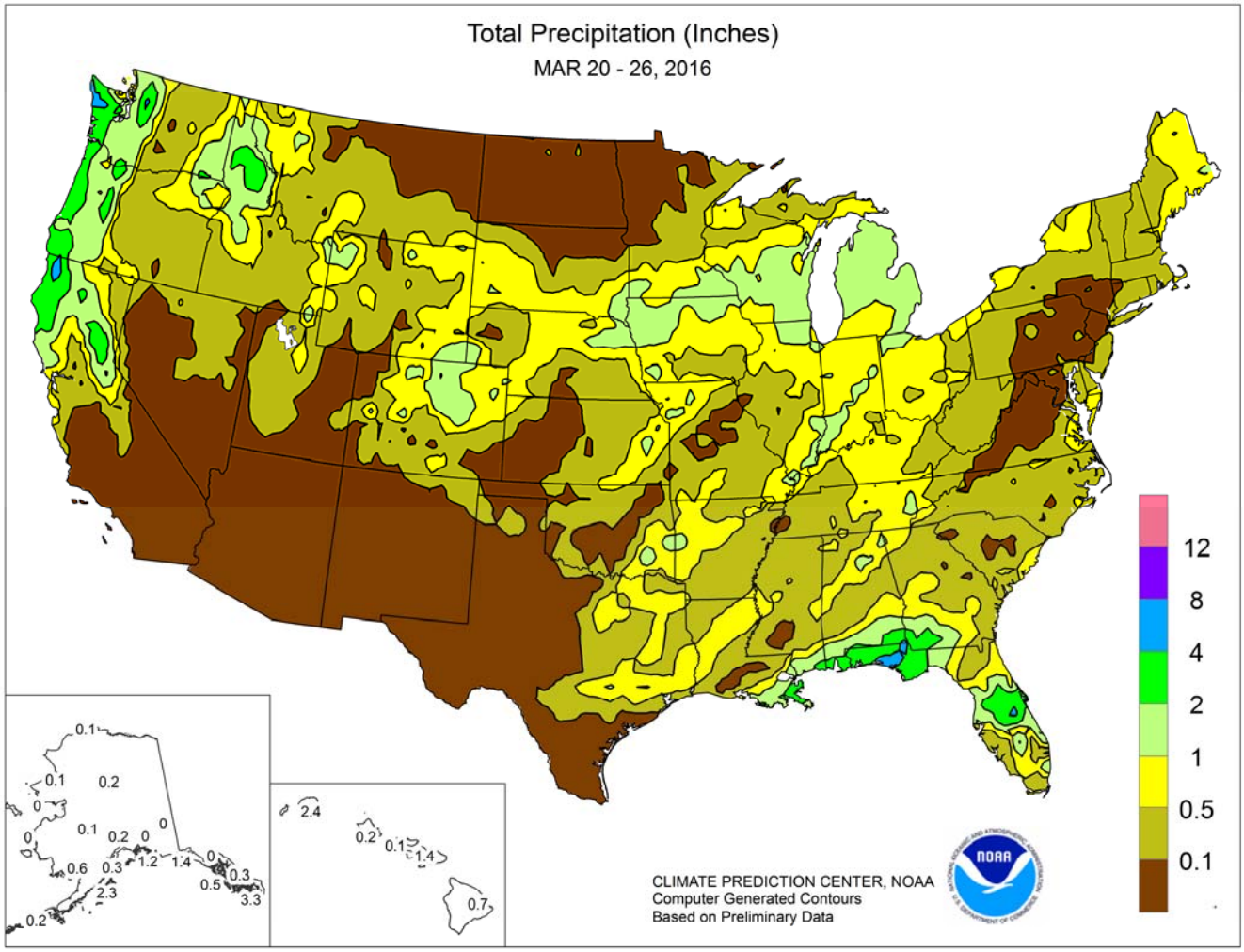
Volume 103, No. 13 http://www.usda.gov/oce/weather March 29, 2016

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

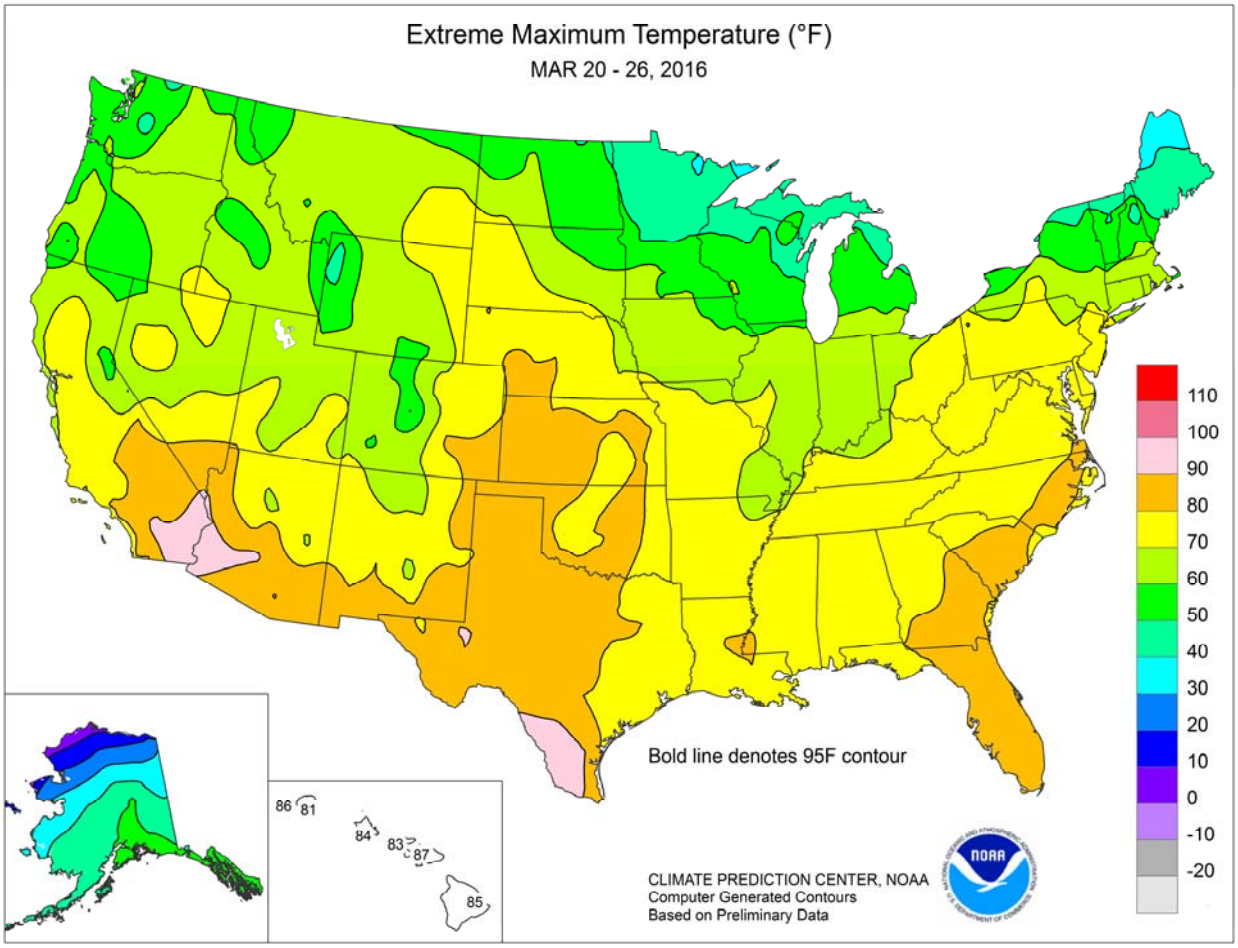
March 20 – 26, 2016

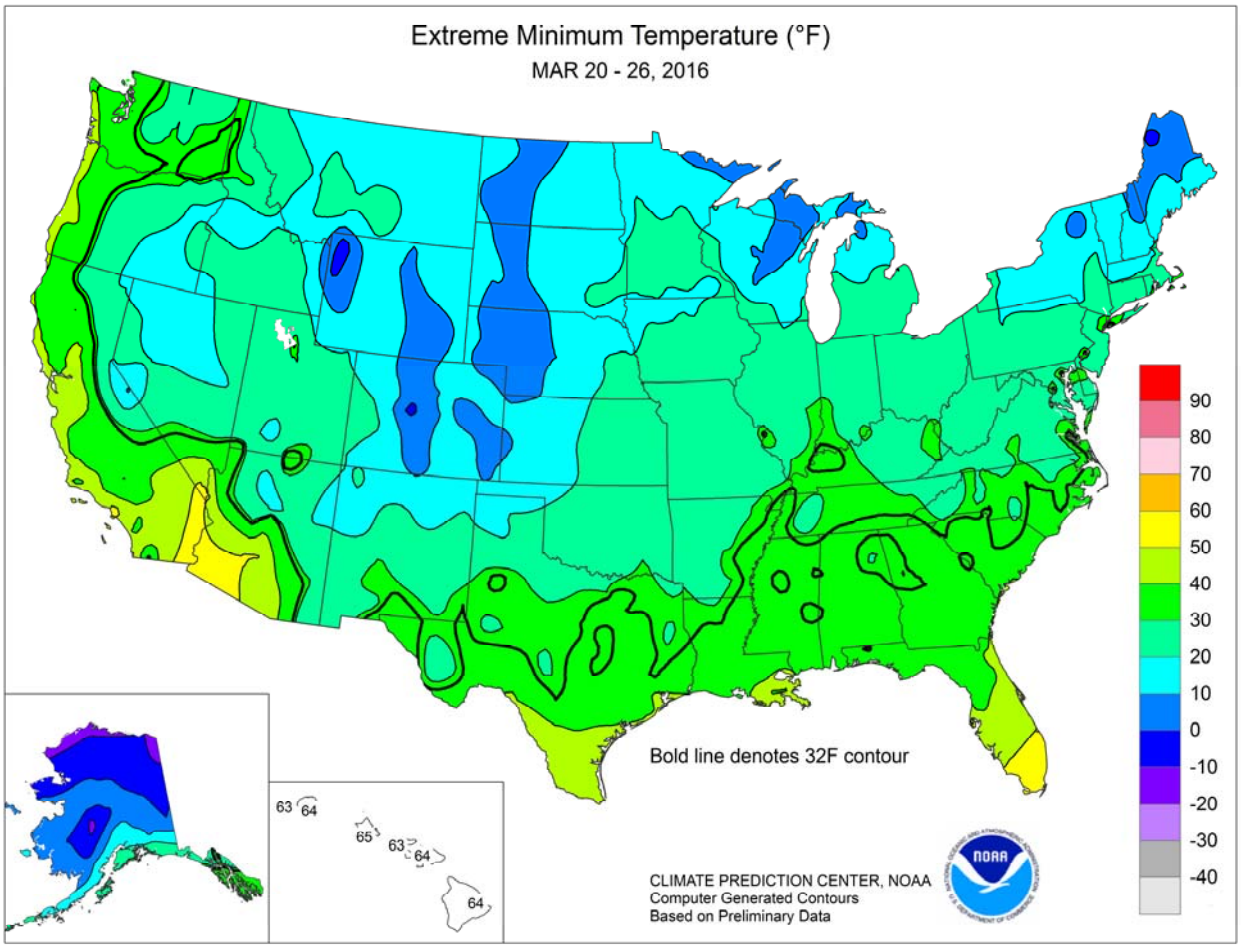
Highlights provided by USDA/WAOB

Heavy precipitation ended early in the week across **northern California** and the **Northwest**, while the focus for stormy weather gradually shifted into the **central and eastern U.S.** Despite an active storm track, several areas—including much of the **nation's southwestern quadrant**—remained unfavorably dry. The **Northwestern** storminess continued to provide relief from lingering drought by boosting high-elevation snowpack, improving runoff and reservoir storage, and recharging groundwater reserves. Benefits of the precipitation

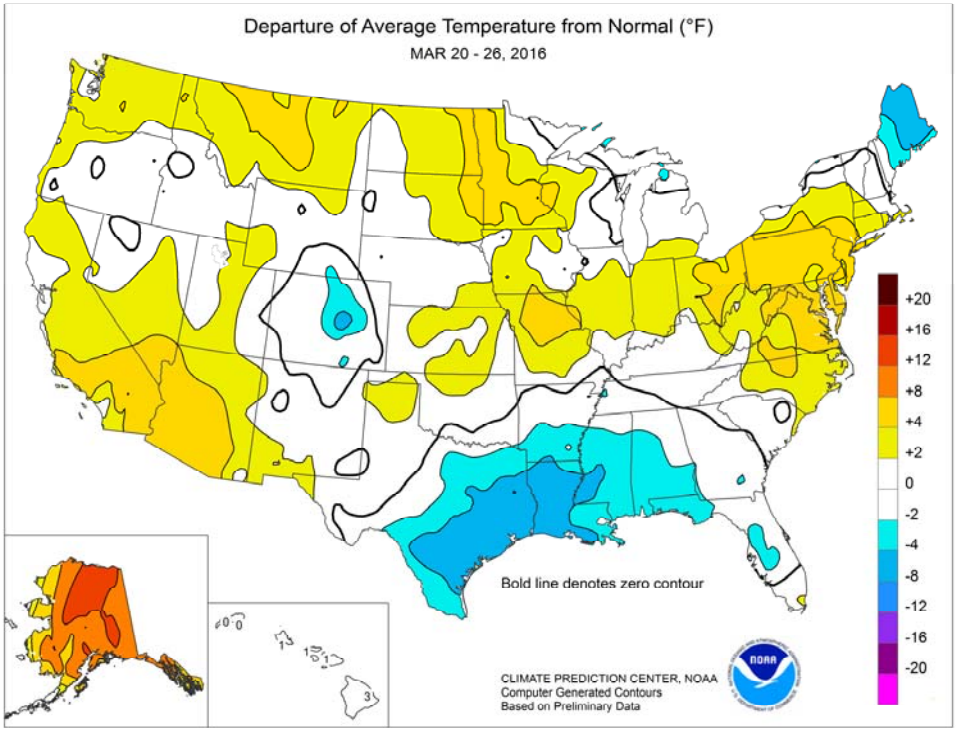
(Continued on page 3)

Contents


Extreme Maximum Temperature (°F)
MAR 20 - 26, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
86
81
84
83
87
85
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
MAR 20 - 26, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
63
64
65
63
64
64
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

(Continued from front cover)



extended as far south as **northern California**. Meanwhile, a spring storm produced heavy snow from the **central Rockies to northern Lower Michigan**, briefly disrupting travel and stressing livestock. The same weather system sparked scattered showers and thunderstorms across the **eastern half of the U.S.** and raised dust across the **southern High Plains** and the **Southwest**. There was also a concurrent increase in wildfire activity, including the 400,000-acre Anderson Creek fire near the **Kansas-Oklahoma border**. Precipitation returned to the **nation's mid-section** at week's end, when some spotty but beneficial snow fell on the **central and southern Plains**. Nearly a week before the snow fell, however, low temperatures on March 20 ranged from 5 to 20°F in parts of a five-state area centered on the **Oklahoma panhandle**. Shortly after the freeze struck the **High Plains**, high temperatures on March 21-22 generally ranged from 80 to 90°F—only to return to sub-freezing levels by week's end. Elsewhere on March 21-22, widespread **Southeastern** frost and scattered freezes briefly threatened crops such as winter wheat and blooming fruits.

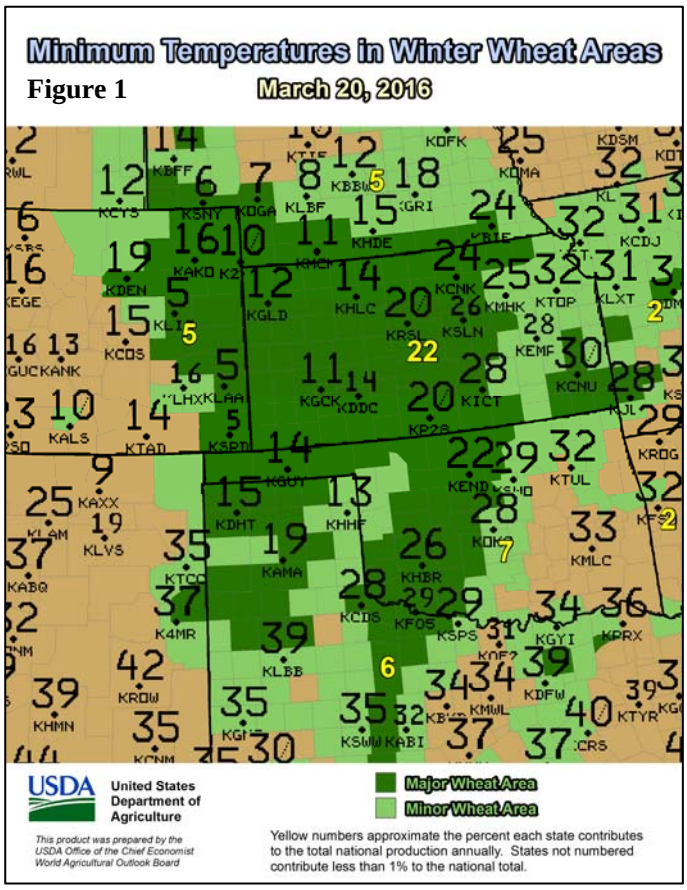
Garden City, KS, opened the week with a daily-record low of 10°F, part of a broader cold outbreak that threatened winter wheat on the **southern High Plains**. The following day, however, daily-record highs climbed to 91°F in **Tucson, AZ**; 82°F in **Pueblo, CO**; and 81°F in **Chadron, NE**. And, on March 22, **Garden City's** daily-record high of 88°F occurred less than 31 hours after the aforementioned low of 10°F. Other record-setting highs for March 22 included 87°F in both **Roswell, TX**, and **Lubbock, TX**. For many locations on the **southern Plains**, winds peaked on March 23, when **Dalhart, TX**, clocked a gust to 60 mph. Meanwhile, cool conditions briefly settled into the **Southeast**. On March 22, freezes were noted as far south as **Crestview, FL** (30°F), and **Augusta, GA** (31°F). However, warmth also quickly returned to the **eastern U.S.**, where record-setting highs for March 24 reached 79°F in **Morgantown, WV**, and 76°F in **Georgetown, DE**. **New Bern, NC**, posted a daily record-tying high of 84°F on March 25. At week's end, in the wake of a departing storm, chilly air returned to the **High Plains** and **Intermountain West**. On March 26-27, **Alamosa, CO**, notched consecutive daily-record lows (-2 and -3°F, respectively).

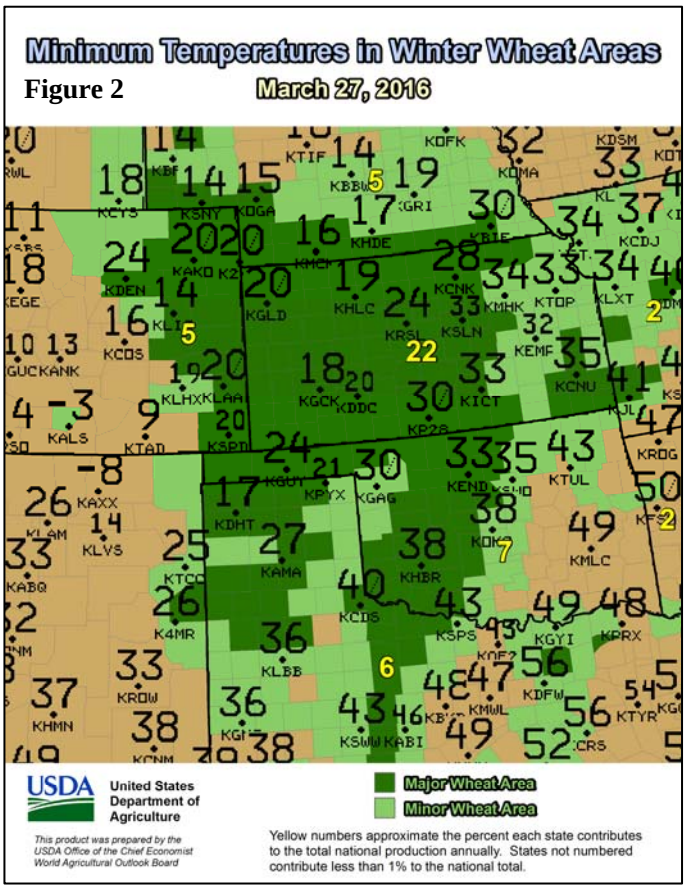
As the week began, a departing storm produced snow along the **northern Atlantic Coast**, with daily-record totals reported in **Bangor, ME** (5.6 inches), and **Islip, NY** (1.8 inches). The next storm produced heavy precipitation in the **Northwest** and an impressive band of snow from the **central Rockies into northern Lower Michigan**. Daily-record totals for March 22 included 0.94 inch in **Pullman, WA**, and 0.62 inch in **Lewiston, ID**. The following day, record-setting snowfall totals for March 23 reached 14.1 inches in **Cheyenne, WY**; 7.5 inches in **Norfolk, NE**; and 6.1 inches in **Eau Claire, WI**. Elsewhere in **Wisconsin**, **Green Bay** measured 8.1 inches of snow on March 23-24, including a daily-record sum (6.0 inches) on the 24th. **Alpena, MI**, netted a daily-record snowfall of 10.1 inches on March 24. Just to the south, heavy precipitation led to record-setting amounts for March 24 in **Detroit, MI** (1.49 inches of rain), and **Milwaukee, WI** (0.95 inch, including 2.0 inches of snow and sleet). Toward week's end, precipitation returned to parts of the **western and central U.S.** On March 25, **Rapid City, SD**, noted a daily-record snowfall of 3.0 inches. Elsewhere in **South Dakota**, Sioux Falls measured 6.4 inches of snow on the 26th. Farther south, **Alamosa, CO**, tallied a daily-record snowfall (7.0 inches) for March 26. And, on the night of March 26-27, patchy snow across the **southern half of the Plains** totaled 3.5 inches in **Wichita, KS**, and 1.3 inches in **Amarillo, TX**.

Record-setting warmth returned to **Alaska**, boosting weekly temperatures 10 to 15°F above normal in many mainland locations. **Fairbanks** posted a daily-record high of 51°F on March 24, representing its first reading above the 50-degree mark since September 11, 2015. Meanwhile, **Anchorage** received a daily-record snowfall (6.4 inches) on March 20, followed by a trio of daily-record highs (49, 50, and 51°F) from March 22-24. In **southeastern Alaska**, daily-record highs included 56°F (on March 20) in **Sitka** and 53°F (on March 21 and 23) in **Yakutat**. Most of **Alaska** received some precipitation, although higher amounts were limited to the state's southern tier. **Kodiak's** weekly precipitation totaled 2.29 inches, including 2.7 inches of snow. Farther south, heavy, late-week showers stabilized **Hawaii's** drought situation, especially on **Kauai**. In fact, widespread 5- to 10-inch totals occurred on **Kauai's** windward slopes on March 24-25. Rainfall totals on March 25 reached 2.59 inches in **Lihue, Kauai**, and 1.37 inches in **Kahului, Maui**. Showers were not as heavy on the **Big Island**, where **Hilo's** month-to-date rainfall through March 26 stood at 4.88 inches (44 percent of normal).

Southern Plains' Winter Wheat Threatened by Cold Waves

Weather maps and summary provided by USDA/WAOB



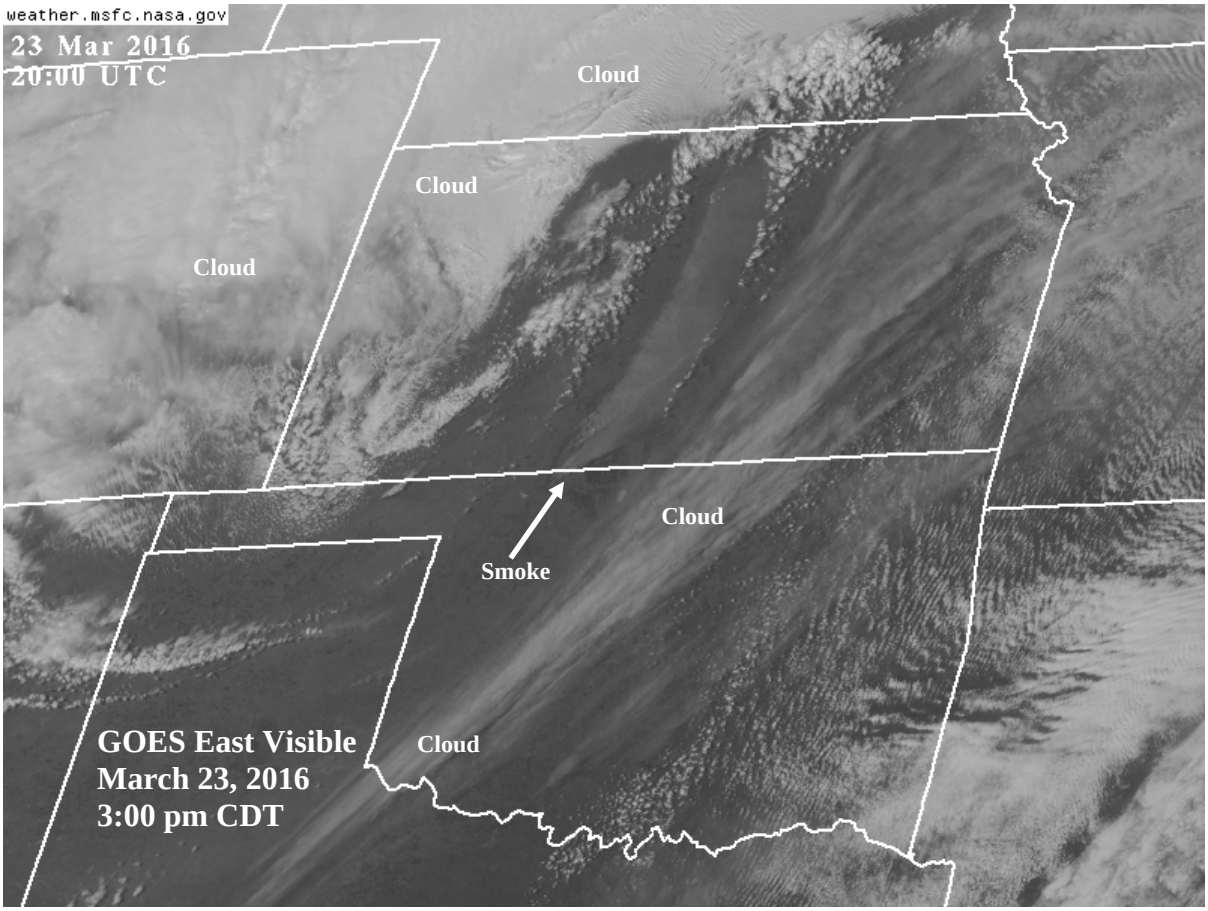


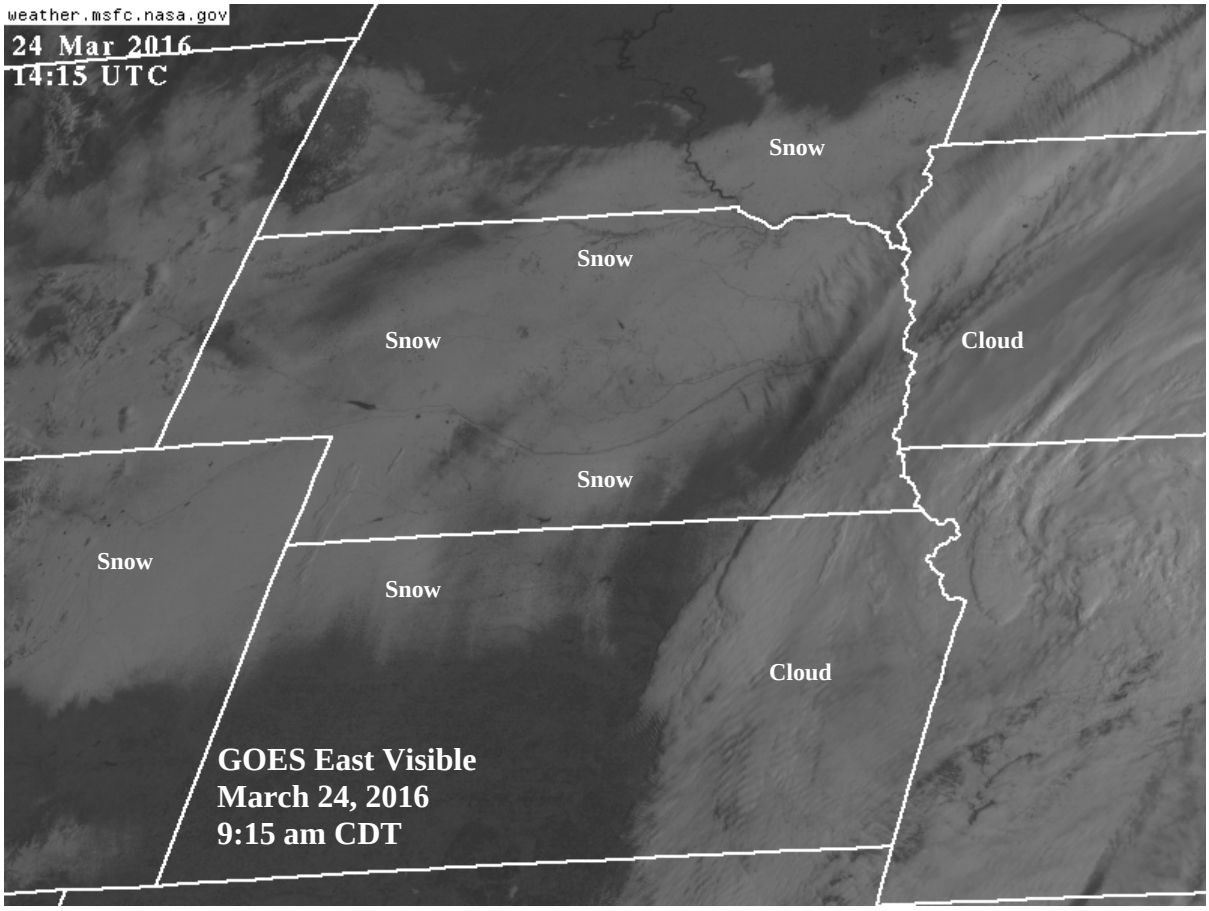
Key winter wheat production areas on the southern High Plains were hit with multiple cold outbreaks and large temperature extremes during the second half of March. During the height of the first outbreak, on March 20, low temperatures ranged from 5 to 20°F in parts of a five-state area centered on the Oklahoma panhandle (figure 1). By March 20, the portion of the winter wheat that had reached the jointing stage of development included 38% in Oklahoma and 20% in Kansas. Two hours below 24°F is often cited as a damage threshold for jointing wheat. However, wheat that is just starting to joint can withstand lower readings, often below 20°F.

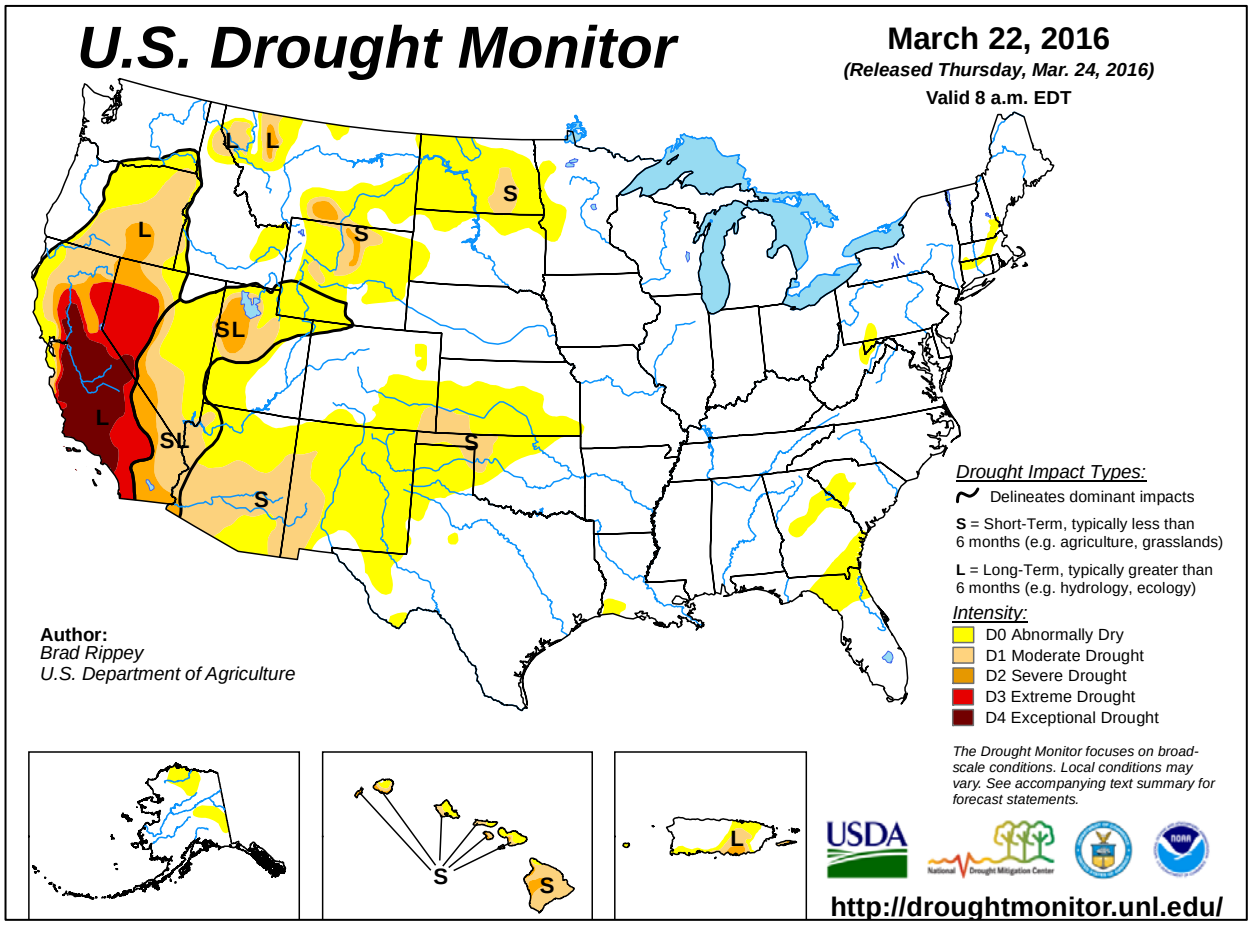
In the wake of the initial cold outbreak, temperatures suddenly soared. Garden City, Kansas, reported a daily-record high of 88°F on March 22, less than 31 hours after noting a daily-record low (10°F on March 20). With the sudden warming came high winds that contributed to the nearly 400,000-acre Anderson Creek fire, which originated in Woods County, Oklahoma, on March 22, before spreading into neighboring Comanche and Barber Counties in Kansas. On March 23, a huge plume of smoke was visible on satellite imagery, extending northward across Kansas (see next page). Thereafter, cooler, more humid, less windy weather aided wildfire containment efforts.

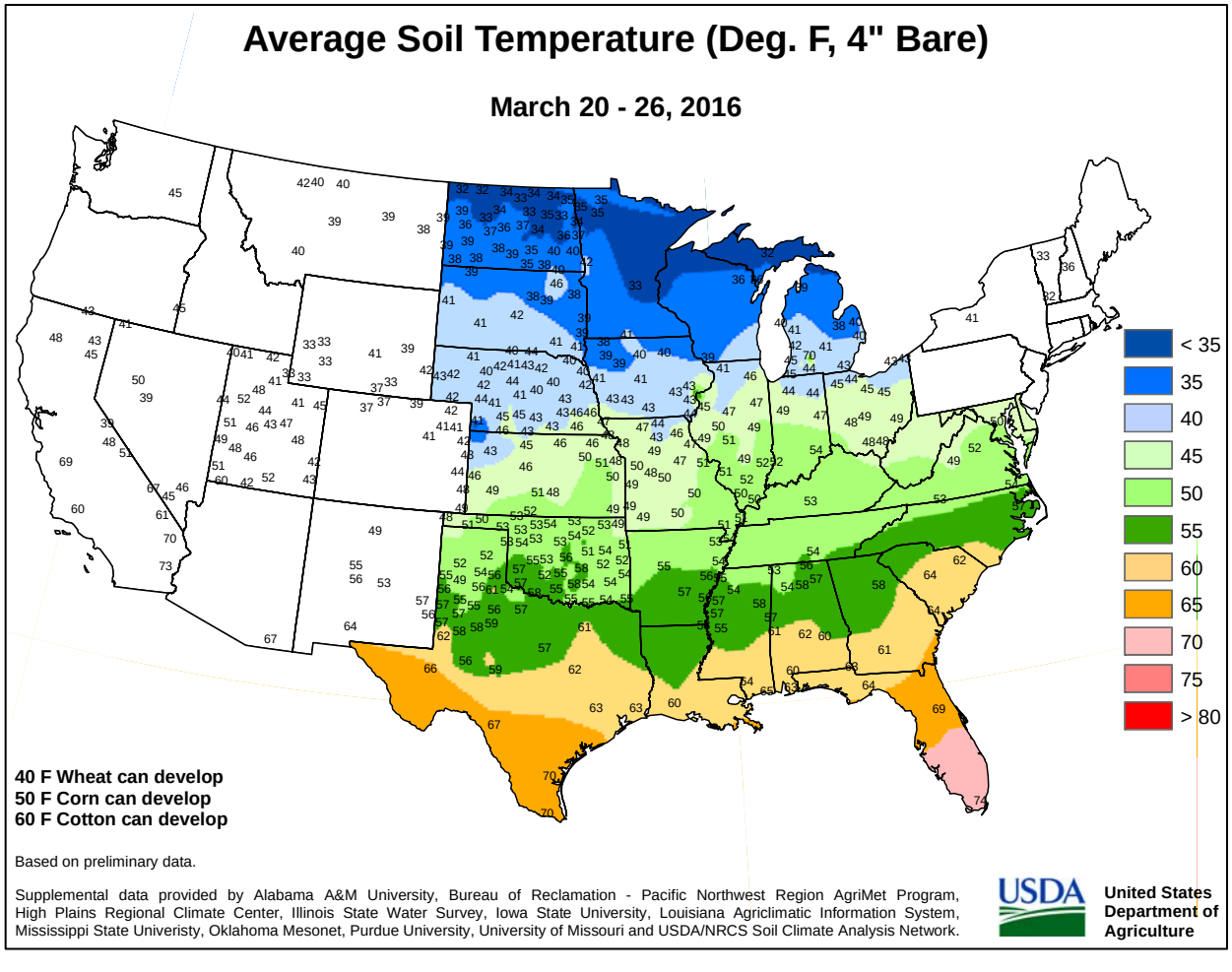
However, the return to cool weather culminated in another freeze event on March 27 (figure 2). Temperatures were not as low during the latter event, and some areas—especially in Texas' northern panhandle—received a blanket of insulating snow in advance of the coldest weather. Still, much of the wheat in southwestern Kansas was again exposed to cold weather, and the wheat crop had developed further compared to the previous week. On March 27, the portion of the wheat that was jointing included 45% in Oklahoma, 30% in Kansas, and 2% in Colorado. Garden City's roller-coaster temperatures continued, with an official March 27 low of 15°F.

A complicating factor is that drought has developed across portions of the southern High Plains. Garden City last received measurable precipitation on February 2, and has recorded less than one-quarter inch since the beginning of the year. So, in addition to the potential for freeze-injury symptoms, such as death of the growing point; splitting or bending of the lower stem; and leaf yellowing or burning, producers will be monitoring wheat for signs of drought stress. The final outcome for the southern Plains' 2016 wheat crop will be determined by a variety of factors, including the extent of freeze injury, if any, as well as future weather conditions.


weather.msfc.nasa.gov
23 Mar 2016
20:00 UTC
Cloud
Cloud
Cloud
Cloud
Smoke
Cloud
GOES East Visible
March 23, 2016
3:00 pm CDT


weather.msfc.nasa.gov
24 Mar 2016
14:15 UTC
Snow
Snow
Snow
Cloud
Snow
Snow
Snow
Cloud
GOES East Visible
March 24, 2016
9:15 am CDT


U.S. Drought Monitor
March 22, 2016
(Released Thursday, Mar. 24, 2016)
Valid 8 a.m. EDT
Author:
Brad Rippey
U.S. Department of Agriculture
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/


Average Soil Temperature (Deg. F, 4" Bare)
March 20 - 26, 2016
< 35
35
40
45
50
55
60
65
70
75
> 80
40 F Wheat can develop
50 F Corn can develop
60 F Cotton can develop
Based on preliminary data.
Supplemental data provided by Alabama A&M University, Bureau of Reclamation - Pacific Northwest Region AgriMet Program, High Plains Regional Climate Center, Illinois State Water Survey, Iowa State University, Louisiana Agriclimatic Information System, Mississippi State Univeristy, Oklahoma Mesonet, Purdue University, University of Missouri and USDA/NRCS Soil Climate Analysis Network.
United States Department of Agriculture

National Weather Data for Selected Cities

Weather Data for the Week Ending March 26, 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	66	44	74	33	55	-1	1.58	0.17	1.58	4.73	93	15.47	105	88	42	0	0	1	1
	HUNTSVILLE	66	41	77	33	54	0	0.14	-1.35	0.14	2.64	47	12.59	78	82	49	0	0	1	0
	MOBILE	71	48	77	35	59	-3	3.38	1.74	3.19	8.56	141	18.01	106	93	58	0	0	3	1
	MONTGOMERY	71	47	77	35	59	0	0.42	-0.97	0.42	3.24	59	13.90	87	85	41	0	0	1	0
AK	ANCHORAGE	45	30	51	17	37	9	0.19	0.08	0.12	0.81	156	1.39	72	87	73	0	5	3	0
	BARROW	1	-6	4	-13	-2	11	0.13	0.13	0.07	0.13	1300	1.29	538	88	76	0	7	4	0
	FAIRBANKS	42	13	51	3	27	12	0.00	-0.06	0.00	0.00	0	0.06	5	79	65	0	7	0	0
	JUNEAU	50	36	54	30	43	8	0.42	-0.29	0.24	1.39	46	11.18	94	90	78	0	1	2	0
	KODIAK	44	36	48	30	40	7	2.30	1.14	0.73	6.03	139	29.32	161	98	81	0	2	6	1
	NOME	22	8	29	1	15	5	0.02	-0.09	0.02	0.04	9	1.06	50	80	71	0	7	1	0
AZ	FLAGSTAFF	58	26	65	15	42	4	0.00	-0.53	0.00	0.22	10	4.00	57	55	13	0	6	0	0
	PHOENIX	84	59	92	52	72	8	0.00	-0.21	0.00	0.00	0	1.31	52	24	13	2	0	0	0
	PRESCOTT	69	36	75	29	52	7	0.00	-0.37	0.00	0.16	10	1.64	32	45	10	0	2	0	0
	TUCSON	83	50	91	42	66	6	0.00	-0.14	0.00	0.12	17	1.83	71	25	10	1	0	0	0
AR	FORT SMITH	67	39	78	27	53	-1	0.49	-0.41	0.48	4.65	143	6.80	83	81	33	0	2	2	0
	LITTLE ROCK	65	41	73	32	53	-2	0.14	-1.02	0.14	8.22	210	13.91	128	79	40	0	1	1	0
CA	BAKERSFIELD	74	49	80	40	61	3	0.00	-0.29	0.00	0.45	38	2.58	72	68	47	0	0	0	0
	FRESNO	71	48	78	40	60	4	0.00	-0.46	0.00	2.93	154	7.68	124	85	62	0	0	0	0
	LOS ANGELES	71	55	77	52	63	5	0.00	-0.45	0.00	1.40	65	5.07	62	79	48	0	0	0	0
	REDDING	69	46	76	41	58	5	1.63	0.55	0.92	9.69	217	23.28	141	82	52	0	0	2	2
	SACRAMENTO	70	47	76	42	58	3	0.10	-0.46	0.08	5.07	206	11.33	115	90	38	0	0	2	0
	SAN DIEGO	71	58	76	54	64	4	0.00	-0.48	0.00	0.45	23	3.71	59	68	48	0	0	0	0
	SAN FRANCISCO	65	51	66	48	58	4	0.12	-0.53	0.11	5.16	181	11.59	102	88	70	0	0	2	0
	STOCKTON	72	46	77	42	59	3	0.01	-0.46	0.01	3.53	180	8.92	125	87	63	0	0	1	0
CO	ALAMOSA	52	17	68	7	34	0	0.48	0.37	0.45	0.48	145	1.46	185	66	30	0	6	2	0
	CO SPRINGS	54	24	74	15	39	0	0.56	0.30	0.26	0.73	94	2.27	161	73	24	0	6	3	0
	DENVER INTL	53	24	73	10	39	-1	0.52	0.34	0.49	0.81	111	1.79	150	71	41	0	5	2	0
	GRAND JUNCTION	57	31	68	27	44	-1	0.38	0.16	0.22	0.79	101	2.16	115	65	34	0	6	2	0
	PUEBLO	63	24	82	14	44	1	0.48	0.24	0.36	0.58	82	1.45	112	69	36	0	6	3	0
CT	BRIDGEPORT	52	36	63	30	44	3	0.20	-0.77	0.11	1.58	47	8.74	87	77	49	0	2	3	0
	HARTFORD	54	33	68	22	43	3	0.16	-0.75	0.10	1.55	49	8.38	84	74	39	0	3	3	0
DC	WASHINGTON	64	43	77	35	53	5	0.03	-0.77	0.03	0.83	27	7.30	82	69	37	0	0	1	0
DE	WILMINGTON	60	37	72	30	49	5	0.12	-0.78	0.12	1.32	40	8.04	84	81	36	0	2	1	0
FL	DAYTONA BEACH	77	55	83	42	66	0	0.66	-0.22	0.21	0.78	25	11.49	127	96	48	0	0	4	0
	JACKSONVILLE	76	50	83	37	63	0	0.55	-0.36	0.28	1.12	35	8.77	87	94	41	0	0	3	0
	KEY WEST	79	68	82	60	74	0	0.19	-0.24	0.09	0.30	21	7.38	142	95	71	0	0	3	0
	MIAMI	82	68	87	57	75	2	0.22	-0.39	0.19	0.24	12	10.66	180	82	54	0	0	2	0
	ORLANDO	79	55	87	43	67	-1	4.64	3.82	3.43	4.83	165	12.17	158	89	47	0	0	4	2
	PENSACOLA	67	55	71	43	61	-1	0.00	-1.46	0.00	0.00	0	8.65	56	81	57	0	0	0	0
	TALLAHASSEE	72	49	80	34	61	-1	2.03	0.57	1.14	3.98	72	12.67	82	84	51	0	0	3	2
	TAMPA	77	59	85	48	68	0	0.79	0.20	0.41	1.36	56	10.07	137	83	51	0	0	2	0
	WEST PALM BEACH	80	66	85	55	73	2	0.28	-0.63	0.11	0.42	14	12.97	141	78	56	0	0	4	0
GA	ATHENS	69	44	78	32	57	2	0.31	-0.77	0.20	1.57	37	9.73	73	86	52	0	1	2	0
	ATLANTA	67	47	75	37	57	1	0.24	-0.93	0.22	1.89	41	14.42	101	78	48	0	0	2	0
	AUGUSTA	70	44	81	31	57	0	0.15	-0.87	0.15	1.63	42	7.05	56	92	53	0	1	1	0
	COLUMBUS	69	46	78	34	57	-2	0.58	-0.70	0.53	2.13	44	9.56	68	87	40	0	0	2	1
	MACON	69	44	76	32	57	-1	0.52	-0.54	0.37	2.21	53	7.94	58	89	49	0	1	2	0
	SAVANNAH	74	50	82	39	62	1	0.13	-0.74	0.12	1.01	35	7.42	76	86	46	0	0	2	0
HI	HILO	83	67	85	64	75	3	0.73	-2.75	0.27	4.88	42	9.46	31	85	74	0	0	6	0
	HONOLULU	81	69	84	65	75	0	0.20	-0.16	0.19	0.22	13	0.66	10	82	72	0	0	2	0
	KAHULUI	84	65	87	64	75	2	1.41	0.89	1.38	1.94	102	3.49	44	88	79	0	0	2	1
	LIHUE	80	67	81	64	73	0	2.39	1.60	2.39	2.59	87	3.76	35	85	77	0	0	1	1
ID	BOISE	57	37	70	27	47	2	0.34	0.04	0.27	1.15	104	2.65	73	70	51	0	1	2	0
	LEWISTON	57	39	67	33	48	2	1.29	1.04	0.88	2.02	232	3.60	122	84	62	0	0	5	1
	POCATELLO	52	30	67	21	41	2	0.46	0.16	0.25	2.43	217	3.71	113	84	55	0	4	3	0
IL	CHICAGO/O'HARE	48	32	63	28	40	1	1.20	0.54	1.09	2.50	125	4.57	85	89	58	0	5	2	1
	MOLINE	53	34	68	24	43	2	1.07	0.35	0.77	2.05	92	3.38	63	81	55	0	3	2	1
	PEORIA	58	36	70	27	47	5	0.33	-0.34	0.27	1.75	78	3.13	58	80	46	0	2	2	0
	ROCKFORD	48	30	62	21	39	1	1.04	0.44	0.98	3.07	172	4.60	102	83	60	0	5	2	1
	SPRINGFIELD	61	38	71	29	49	5	1.16	0.42	1.16	3.02	119	5.35	90	82	45	0	2	1	1
IN	EVANSVILLE	59	38	67	32	49	1	0.80	-0.19	0.78	4.73	135	11.07	116	78	62	0	1	2	1
	FORT WAYNE	55	32	68	25	44	4	0.74	0.06	0.74	2.45	109	5.50	88	83	48	0	4	1	1
	INDIANAPOLIS	57	36	66	28	47	3	0.95	0.15	0.95	2.85	102	6.56	85	76	41	0	3	1	1
	SOUTH BEND	54	31	65	21	43	3	0.76	0.06	0.59	2.62	117	6.40	99	88	57	0	5	2	1
IA	BURLINGTON	54	34	67	25	44	1	0.58	-0.12	0.30	2.37	101	3.75	72	92	53	0	4	2	0
	CEDAR RAPIDS	49	30	61	22	40	1	0.50	-0.06	0.49	1.67	99	3.20	84	95	57	0	5	2	0
	DES MOINES	54	34	65	24	44	3	0.47	-0.09	0.36	1.90	115	3.67	95	76	56	0	3	2	0
	DUBUQUE	48	29	58	23	38	1	0.70	0.07	0.51	2.05	104	3.13	67	91	69	0	6	2	1
	SIOUX CITY	52	27	69	15	40	1	1.70	1.20	1.15	2.18	144	4.02	148	81	53	0	5	2	2
	WATERLOO	50	30	61	21	40	2	0.92	0.39	0.90	2.35	148	4.07	117	85	61	0	5	3	1
KS	CONCORDIA	62	33	78	22	47	3	0.33	-0.22	0.25	0.45	24	2.00	61	70	44	0	4	3	0
	DODGE CITY	65	30	85	12	48	2	0.00	-0.45	0.00	0.04	3	0.63	23	64	22	0	5	0	0
	GOODLAND	60	26	81	12	43	2	0.19	-0.08	0.19	0.28	29	1.14	62	70	47	0	5	1	0
	TOPEKA	64	35	80	24	50	4	0.17	-0.44	0.16	2.03	100	3.30	80	73	48	0	4	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 26, 2016

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	66	34	78	25	50	2	0.09	-0.54	0.09	1.00	46	1.74	43	68	32	0	4	1	0
KY	JACKSON	64	40	75	30	52	3	0.36	-0.58	0.36	1.52	41	11.08	101	76	34	0	2	1	0
	LEXINGTON	61	37	69	28	49	1	0.33	-0.64	0.33	1.91	51	8.25	80	77	50	0	3	1	0
	LOUISVILLE	62	41	70	34	51	2	0.54	-0.44	0.54	3.46	94	9.28	91	69	36	0	0	1	1
	PADUCAH	61	40	69	32	51	1	0.68	-0.27	0.64	6.06	173	11.52	106	79	42	0	2	2	1
LA	BATON ROUGE	72	46	80	34	59	-3	0.00	-1.15	0.00	8.70	210	18.01	117	86	38	0	0	0	0
	LAKE CHARLES	69	48	76	34	59	-3	0.27	-0.55	0.27	1.48	51	7.65	65	87	45	0	0	1	0
	NEW ORLEANS	71	53	78	44	62	-2	0.20	-0.99	0.20	3.20	74	11.33	72	77	52	0	0	1	0
	SHREVEPORT	70	44	79	31	57	-3	0.30	-0.61	0.29	12.49	361	17.51	143	83	37	0	1	2	0
ME	CARIBOU	30	13	39	4	21	-6	0.86	0.28	0.68	3.00	145	8.47	119	75	43	0	7	3	1
	PORTLAND	41	28	52	20	34	-2	0.53	-0.45	0.31	3.45	103	10.99	104	77	44	0	6	3	0
MD	BALTIMORE	62	38	77	28	50	5	0.01	-0.86	0.01	1.80	55	11.00	112	74	39	0	2	1	0
MA	BOSTON	46	34	63	26	40	-1	0.40	-0.48	0.21	2.79	89	10.23	99	85	49	0	2	3	0
	WORCESTER	46	29	60	20	38	2	0.49	-0.50	0.28	2.70	78	10.08	95	91	42	0	6	5	0
MI	ALPENA	39	22	45	14	31	1	1.14	0.64	0.89	3.22	192	7.75	162	88	53	0	7	4	1
	GRAND RAPIDS	47	29	57	24	38	1	1.14	0.49	0.94	3.33	170	8.26	150	86	52	0	5	2	1
	HOUGHTON LAKE	42	24	53	18	33	1	1.03	0.53	0.72	2.86	180	5.98	134	86	52	0	6	2	1
	LANSING	47	28	60	22	38	2	0.78	0.19	0.64	2.97	171	6.13	128	80	60	0	5	2	1
	MUSKEGON	45	29	55	25	37	1	1.39	0.81	1.01	2.74	151	6.95	124	79	58	0	5	2	1
	TRAVERSE CITY	43	26	53	20	35	2	0.86	0.37	0.68	2.00	136	5.78	93	86	45	0	6	2	1
MN	DULUTH	36	22	45	17	29	1	0.30	-0.13	0.28	3.19	253	5.07	158	81	59	0	7	3	0
	INT'L FALLS	36	16	41	8	26	0	0.12	-0.11	0.12	2.57	372	3.93	181	80	36	0	7	1	0
	MINNEAPOLIS	48	30	55	26	39	4	0.43	-0.04	0.31	1.50	107	2.90	90	78	48	0	5	2	0
	ROCHESTER	46	27	59	15	36	3	0.88	0.39	0.51	2.41	177	3.81	125	87	65	0	5	3	1
	ST. CLOUD	44	26	49	21	35	4	0.33	-0.07	0.26	0.87	81	1.83	76	86	45	0	7	2	0
MS	JACKSON	69	42	80	34	56	-2	0.18	-1.17	0.18	10.29	221	21.88	148	85	41	0	0	1	0
	MERIDIAN	69	41	80	31	55	-4	0.83	-0.74	0.83	9.07	157	16.56	97	91	45	0	2	1	1
	TUPELO	66	40	77	34	53	-2	0.55	-0.86	0.55	4.52	85	11.69	77	79	48	0	0	1	1
MO	COLUMBIA	64	38	76	29	51	5	0.05	-0.69	0.04	1.25	49	2.90	45	76	41	0	2	2	0
	KANSAS CITY	62	36	78	26	49	3	0.56	0.01	0.38	1.72	89	2.88	65	85	46	0	3	4	0
	SAINT LOUIS	63	41	76	33	52	4	0.28	-0.55	0.16	1.10	38	2.70	37	71	48	0	0	2	0
	SPRINGFIELD	64	37	76	26	50	2	0.05	-0.88	0.04	1.93	64	3.21	43	75	48	0	3	2	0
MT	BILLINGS	54	31	69	26	43	5	0.42	0.15	0.16	0.47	57	1.00	45	75	39	0	6	4	0
	BUTTE	46	25	59	17	35	3	0.05	-0.14	0.05	0.45	70	0.92	56	86	33	0	6	1	0
	CUT BANK	50	24	67	16	37	5	0.07	-0.06	0.07	0.07	18	0.55	52	83	40	0	6	1	0
	GLASGOW	51	23	63	17	37	4	0.00	-0.11	0.00	0.44	133	1.11	118	78	58	0	7	0	0
	GREAT FALLS	52	27	68	22	40	5	0.28	0.05	0.23	0.41	54	1.06	54	78	34	0	5	3	0
	HAVRE	54	22	66	13	38	3	0.00	-0.16	0.00	0.22	42	0.68	50	84	52	0	7	0	0
	MISSOULA	53	32	66	24	42	3	0.14	-0.05	0.06	0.83	112	1.94	75	83	59	0	4	4	0
NE	GRAND ISLAND	55	29	73	17	42	2	0.17	-0.33	0.07	0.36	23	2.54	91	73	49	0	6	3	0
	LINCOLN	58	30	70	21	44	2	0.33	-0.21	0.33	0.91	54	2.50	83	73	45	0	5	1	0
	NORFOLK	52	25	71	15	39	0	0.89	0.41	0.55	1.14	75	3.29	116	80	59	0	6	2	1
	NORTH PLATTE	58	22	80	8	40	0	0.14	-0.15	0.14	0.21	22	1.47	80	81	41	0	7	1	0
	OMAHA	56	32	68	24	44	2	0.58	0.06	0.43	0.97	59	2.69	84	78	52	0	4	2	0
	SCOTTSBLUFF	57	24	77	12	41	2	0.01	-0.27	0.01	0.21	24	0.98	49	74	51	0	6	1	0
	VALENTINE	53	21	78	7	37	0	0.30	0.04	0.25	0.32	39	1.00	62	81	55	0	6	2	0
NV	ELY	54	24	67	19	39	2	0.06	-0.16	0.05	0.34	40	3.37	144	71	35	0	6	2	0
	LAS VEGAS	77	56	87	49	66	7	0.00	-0.10	0.00	0.00	0	0.55	31	22	13	0	0	0	0
	RENO	62	35	68	28	48	4	0.01	-0.14	0.01	0.29	39	2.41	84	60	33	0	1	1	0
	WINNEMUCCA	58	25	69	13	41	-1	0.02	-0.17	0.02	0.48	72	2.59	122	75	42	0	5	1	0
NH	CONCORD	48	28	61	14	38	3	0.32	-0.38	0.20	2.06	84	7.84	101	79	34	0	6	2	0
NJ	NEWARK	59	39	74	33	49	5	0.18	-0.80	0.11	1.00	29	9.05	87	78	46	0	0	2	0
NM	ALBUQUERQUE	66	36	77	32	51	2	0.00	-0.13	0.00	0.00	0	0.42	30	41	15	0	3	0	0
NY	ALBANY	52	31	61	22	42	5	0.05	-0.68	0.05	0.82	33	6.13	86	71	36	0	3	1	0
	BINGHAMTON	51	26	66	16	39	4	0.11	-0.58	0.08	1.06	45	6.77	91	81	46	0	5	3	0
	BUFFALO	48	28	54	21	38	2	0.86	0.17	0.65	2.39	100	7.67	96	80	53	0	6	4	1
	ROCHESTER	46	26	52	18	36	0	0.53	-0.07	0.29	1.43	70	6.73	105	86	61	0	6	3	0
	SYRACUSE	51	28	65	17	39	3	0.22	-0.50	0.10	2.09	87	8.81	124	91	51	0	5	4	0
NC	ASHEVILLE	62	38	72	27	50	2	0.18	-0.84	0.15	1.07	28	10.05	86	76	44	0	2	2	0
	CHARLOTTE	67	46	78	33	56	2	0.16	-0.81	0.11	0.45	12	7.23	64	80	38	0	0	2	0
	GREENSBORO	66	44	76	31	55	4	0.10	-0.76	0.07	0.57	18	6.71	68	80	37	0	1	2	0
	HATTERAS	64	54	72	43	59	5	0.23	-0.90	0.20	3.59	87	16.70	120	89	58	0	0	2	0
	RALEIGH	66	47	78	32	57	5	0.19	-0.68	0.09	3.23	94	9.63	88	82	51	0	1	3	0
	WILMINGTON	69	50	82	36	60	3	0.69	-0.23	0.65	1.99	55	14.05	119	88	45	0	0	3	1
ND	BISMARCK	50	19	61	12	34	2	0.03	-0.17	0.03	0.23	38	0.87	55	84	47	0	7	1	0
	DICKINSON	49	16	63	7	32	0	0.00	-0.18	0.00	0.10	24	0.52	43	88	34	0	7	0	0
	FARGO	46	25	51	15	35	5	0.14	-0.14	0.14	0.37	42	1.36	61	79	39	0	7	1	0
	GRAND FORKS	44	24	51	18	34	6	0.00	-0.20	0.00	0.53	80	1.11	58	81	42	0	7	0	0
	JAMESTOWN	44	21	54	14	33	3	0.00	-0.21	0.00	0.32	49	0.51	28	85	39	0	7	0	0
	WILLISTON	48	19	56	12	34	3	0.01	-0.16	0.01	0.09	17	1.22	83	82	57	0	7	1	0
OH	AKRON-CANTON	54	33	72	23	44	4	0.82	0.10	0.82	3.40	133	7.99	109	74	58	0	5	1	1
	CINCINNATI	58	37	69	28	47	1	0.61	-0.30	0.61	3.14	99	9.77	111	72	49	0	3	1	1
	CLEVELAND	53	33	72	24	43	3	0.48	-0.21	0.48	3.24	138	7.83	110	82	50	0	5	1	0
	COLUMBUS	57	37	71	26	47	3	0.71	0.05	0.71	3.38	145	7.79	110	65	44	0	2	1	1
	DAYTON	56	34	68	23	45	3	0.50	-0.29	0.50	3.75	145	8.57	115	78	44	0	4	1	1
	MANSFIELD	54	34	72	26	44	5	0.66	-0.16	0.62	3.02	115	7.92	107	84	49	0	5	2	1

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

Weather Data for the Week Ending March 26, 2016

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	52	30	64	25	41	2	1.31	0.68	1.30	2.95	145	6.17	105	84	54	0	5	2	1
	YOUNGSTOWN	55	36	73	23	45	6	0.52	-0.20	0.52	2.94	121	8.13	120	72	53	0	5	1	1
OK	OKLAHOMA CITY	68	39	81	27	53	0	0.00	-0.65	0.00	0.89	37	2.35	45	72	28	0	3	0	0
	TULSA	68	42	82	32	55	2	0.00	-0.83	0.00	2.04	70	3.23	50	69	42	0	1	0	0
OR	ASTORIA	55	45	57	42	50	4	2.37	0.78	1.10	12.15	194	34.43	145	93	77	0	0	7	1
	BURNS	52	27	62	18	40	2	0.26	0.01	0.15	1.33	128	3.05	92	83	53	0	6	3	0
	EUGENE	57	42	61	39	49	2	1.77	0.54	0.60	5.70	115	15.54	82	91	79	0	0	6	2
	MEDFORD	57	42	62	38	50	2	0.81	0.43	0.39	2.45	157	7.69	125	89	55	0	0	6	0
	PENDLETON	58	37	62	32	48	2	0.56	0.28	0.25	1.46	143	3.83	104	81	53	0	1	5	0
	PORTLAND	57	45	59	41	51	3	0.66	-0.12	0.23	4.79	152	16.12	130	87	70	0	0	7	0
	SALEM	56	42	61	37	49	2	1.42	0.57	0.43	6.31	175	17.04	117	86	74	0	0	7	0
PA	ALLENTOWN	59	32	71	26	46	5	0.05	-0.76	0.05	0.53	18	9.56	104	72	38	0	5	1	0
	ERIE	53	32	74	28	42	4	0.90	0.16	0.89	2.28	92	8.49	116	77	56	0	5	2	1
	MIDDLETOWN	60	34	74	28	47	4	0.08	-0.63	0.08	0.83	31	10.75	127	73	32	0	2	1	0
	PHILADELPHIA	61	40	73	33	51	6	0.07	-0.81	0.07	1.53	49	8.52	91	70	37	0	0	1	0
	PITTSBURGH	57	36	75	25	47	5	0.30	-0.42	0.26	2.09	81	7.02	92	77	37	0	3	3	0
	WILKES-BARRE	57	33	69	23	45	5	0.03	-0.60	0.03	1.39	65	7.19	108	68	32	0	4	1	0
	WILLIAMSPORT	59	32	74	23	45	5	0.16	-0.58	0.16	0.77	30	7.19	90	78	41	0	3	1	0
RI	PROVIDENCE	52	34	68	26	43	2	0.26	-0.78	0.23	2.35	66	10.72	94	75	46	0	4	2	0
SC	BEAUFORT	72	51	81	38	62	3	0.23	-0.64	0.21	1.33	45	7.31	72	90	49	0	0	2	0
	CHARLESTON	72	50	81	39	61	2	1.01	0.08	0.96	1.81	55	10.10	96	89	46	0	0	2	1
	COLUMBIA	70	48	82	34	59	2	0.12	-0.92	0.12	1.11	29	7.74	63	78	46	0	0	1	0
	GREENVILLE	67	45	76	33	56	3	0.05	-1.10	0.04	1.30	29	9.55	72	79	40	0	0	2	0
SD	ABERDEEN	50	24	57	17	37	4	0.00	-0.33	0.00	0.24	24	0.93	48	75	45	0	7	0	0
	HURON	50	26	62	18	38	3	0.59	0.17	0.38	0.72	58	1.59	69	86	43	0	7	4	0
	RAPID CITY	52	22	78	10	37	1	0.65	0.40	0.30	0.69	92	1.55	98	85	48	0	6	4	0
	SIOUX FALLS	50	27	67	20	39	4	0.88	0.41	0.63	1.01	76	2.69	114	75	59	0	6	2	1
TN	BRISTOL	64	35	77	26	49	1	0.15	-0.69	0.10	0.90	27	8.30	81	86	32	0	3	2	0
	CHATTANOOGA	65	42	72	33	54	1	0.89	-0.50	0.89	2.42	46	13.16	85	81	44	0	0	1	1
	KNOXVILLE	64	41	77	31	52	1	0.72	-0.43	0.44	2.24	51	12.13	94	85	39	0	2	3	0
	MEMPHIS	65	43	75	34	54	-1	0.24	-1.04	0.24	12.01	263	19.86	151	72	40	0	0	1	0
	NASHVILLE	63	41	75	35	52	0	0.74	-0.34	0.74	3.47	85	10.10	86	78	38	0	0	1	1
TX	ABILENE	72	43	85	31	58	0	0.00	-0.30	0.00	2.31	204	3.03	94	70	40	0	1	0	0
	AMARILLO	70	34	85	18	52	3	0.12	-0.15	0.12	0.14	16	0.83	41	61	18	0	3	1	0
	AUSTIN	72	42	81	32	57	-6	0.55	0.12	0.51	3.81	210	5.99	105	83	46	0	1	2	1
	BEAUMONT	71	48	78	36	60	-4	0.57	-0.31	0.57	4.69	154	10.65	88	89	44	0	0	1	1
	BROWNSVILLE	76	56	82	47	66	-4	0.03	-0.19	0.03	2.67	411	4.55	143	90	61	0	0	1	0
	CORPUS CHRISTI	73	56	80	48	64	-3	0.00	-0.36	0.00	6.16	431	8.45	173	76	51	0	0	0	0
	DEL RIO	72	50	88	42	61	-4	0.00	-0.20	0.00	2.08	281	2.83	125	68	45	0	0	0	0
	EL PASO	75	47	84	39	61	3	0.00	-0.03	0.00	0.01	5	0.54	52	30	11	0	0	0	0
	FORT WORTH	70	45	82	34	57	-2	0.43	-0.21	0.43	2.53	97	5.77	84	68	35	0	0	1	0
	GALVESTON	68	56	73	47	62	-3	0.01	-0.62	0.01	1.26	56	5.22	58	82	53	0	0	1	0
	HOUSTON	69	46	76	34	58	-6	0.41	-0.35	0.38	3.11	114	7.22	77	90	46	0	0	2	0
	LUBBOCK	72	39	87	33	56	3	0.00	-0.16	0.00	0.20	36	0.59	33	50	28	0	0	0	0
	MIDLAND	76	40	89	29	58	1	0.00	-0.06	0.00	0.34	100	0.82	57	62	31	0	1	0	0
	SAN ANGELO	75	42	86	31	58	-1	0.00	-0.19	0.00	3.35	414	4.15	148	71	39	0	1	0	0
	SAN ANTONIO	72	47	81	36	59	-4	0.37	-0.04	0.37	3.46	223	6.39	129	83	41	0	0	1	0
	VICTORIA	72	48	76	36	60	-5	0.04	-0.46	0.04	4.26	232	9.20	146	93	50	0	0	1	0
	WACO	69	41	80	30	55	-5	0.33	-0.17	0.27	4.91	233	7.36	114	85	48	0	1	2	0
	WICHITA FALLS	71	39	82	29	55	-1	0.00	-0.50	0.00	0.82	45	2.52	56	72	35	0	2	0	0
UT	SALT LAKE CITY	58	37	70	33	47	2	0.53	0.09	0.53	1.42	92	3.88	91	72	35	0	0	1	1
VT	BURLINGTON	44	27	53	18	35	2	0.37	-0.19	0.20	1.67	92	6.00	105	78	40	0	6	3	0
VA	LYNCHBURG	63	39	76	31	51	3	0.06	-0.79	0.06	2.46	77	9.75	99	72	38	0	2	1	0
	NORFOLK	66	46	82	34	56	6	0.49	-0.43	0.37	2.20	65	13.07	122	80	44	0	0	4	0
	RICHMOND	65	40	78	29	53	4	0.11	-0.81	0.06	0.81	24	8.46	85	77	42	0	2	2	0
	ROANOKE	64	42	78	36	53	4	0.01	-0.85	0.01	1.87	59	10.10	106	66	41	0	0	1	0
	WASH/DULLES	63	38	77	26	50	5	0.00	-0.80	0.00	1.03	35	9.28	106	72	37	0	2	0	0
WA	OLYMPIA	55	41	60	35	48	4	1.39	0.26	0.31	8.63	191	23.77	130	92	79	0	0	7	0
	QUILLAYUTE	54	43	59	40	49	5	4.06	1.75	2.15	13.55	142	45.02	127	99	83	0	0	7	2
	SEATTLE-TACOMA	55	45	58	42	50	3	0.75	-0.05	0.39	5.26	166	18.68	150	87	74	0	0	6	0
	SPOKANE	52	36	62	33	44	3	0.92	0.60	0.71	2.95	232	6.41	139	90	52	0	0	5	1
	YAKIMA	61	37	64	31	49	5	0.00	-0.14	0.00	1.82	337	4.54	181	69	40	0	2	0	0
WV	BECKLEY	59	24	73	1	41	-3	0.13	-0.67	0.07	1.69	56	7.98	87	73	45	0	5	2	0
	CHARLESTON	65	38	81	28	52	5	0.24	-0.61	0.17	2.30	70	9.47	97	78	34	0	2	2	0
	ELKINS	60	31	76	25	46	4	0.33	-0.54	0.21	2.03	62	7.70	78	86	39	0	4	2	0
	HUNTINGTON	64	40	76	31	52	4	0.44	-0.40	0.43	2.36	73	9.82	103	73	36	0	2	2	0
WI	EAU CLAIRE	47	26	58	16	36	3	0.58	0.09	0.28	2.69	199	4.07	128	87	39	0	5	3	0
	GREEN BAY	41	24	48	12	33	-1	0.59	0.07	0.37	2.38	154	4.86	129	89	62	0	6	3	0
	LA CROSSE	49	30	61	21	40	3	0.82	0.29	0.51	2.69	188	4.86	135	84	48	0	5	3	1
	MADISON	45	27	56	18	36	0	0.83	0.25	0.48	2.29	136	4.52	107	86	62	0	6	2	0
	MILWAUKEE	43	29	57	24	36	-1	1.30	0.64	0.95	2.66	138	4.97	92	87	63	0	6	2	1
WY	CASPER	50	24	67	7	37	0	0.08	-0.11	0.05	0.41	58	1.87	97	71	45	0	6	2	0
	CHEYENNE	48	25	66	12	36	1	0.25	0.00	0.24	0.76	95	1.96	116	67	49	0	5	2	0
	LANDER	50	27	67	19	38	1	1.01	0.71	0.66	1.62	178	2.54	129	84	35	0	6	3	1
	SHERIDAN	53	26	71	9	40	3	0.83	0.59	0.75	0.85	118	2.30	112	78	51	0	7	4	1

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

National Agricultural Summary

March 21 – 27, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Conditions were mostly dry across the U.S., but some locations on the Gulf Coast and in the Pacific Northwest recorded more than 1.5 inches of precipitation for the week. Temperatures were generally above average in the Southwest, Ohio Valley, and Mid-Atlantic States, with portions of Ohio more than 8°F above normal for the week. Elsewhere, cooler-than-normal weather prevailed in the Delta, Colorado, Maine, and eastern Texas.

Arizona: Alfalfa conditions were rated mostly good to excellent, depending on location. Harvesting continued on slightly more than two-thirds of the state's alfalfa acreage. Cotton planting was 15 percent complete, 7 percentage points ahead of last year and slightly ahead of the 5-year average. Rangeland conditions varied widely, depending on location, but were rated mostly fair to good. Central Arizona growers shipped broccoli, cabbage (green and red), cilantro, kale greens, and parsley. Western Arizona growers shipped anise, arugula, Bok Choy, broccoli, cabbage (green and red), cauliflower, celery, Chinese cabbage, cilantro, endive, escarole, kale greens, varieties of lettuce (Boston, Iceberg, green leaf, red leaf, romaine and other), parsley, radicchio, and spinach. Ongoing winds continued to contribute to drought conditions, depleting soil moisture throughout the state.

California: Temperatures averaged 2 to 4°F above normal in the northern and central portions of the state and 4 to 8°F above normal in the southern region. Most of the precipitation occurred early in the week over areas. Some winter forage crops were starting to be harvested and groundwork continued for spring plantings. Winter wheat continued to mature. Alfalfa growth was good and some fields were cut and baled. In Colusa County, safflower, sunflower, and corn were planted, while dry weather allowed resumption of tomato planting. In Sutter County, orchard maintenance continued but was hampered by the weather. Application of bloom sprays continued in anticipation of additional rain. Navel and Valencia oranges and tangerines continued to be harvested. Navel oranges and kiwifruit were packed and shipped. In Fresno County, processing tomatoes were planted, cultivated, irrigated, and fertilized. Earlier planted fields looked good. In Tulare County, broccoli, cabbage, cauliflower, carrots, and Brussels sprouts were harvested and sold at farmer's markets. In Sutter County, pastures and rangeland continued to improve. In Tulare County, warmer weather continued to increase rangeland forage growth, thus reducing the need for supplemental feed. Some beehives remained in prune orchards.

Colorado: Snow and rain were received in abundance, reducing field activity and improving moisture conditions. Precipitation in the northeastern district replenished moisture for stressed wheat crops. However, parts of the eastern and southeastern districts remained relatively dry, and wheat quality concerns persisted in certain localities. Several cases of stripe rust were reported in the eastern and southeastern districts. Stored feed supplies were rated 6 percent short, 76 percent adequate, and 18 percent surplus. Sheep death loss was 58 percent average and 42 percent light. Cattle death loss was 1 percent heavy, 77 percent average, and 22 percent light.

Florida: Many parts of the state reported heavy rain, high water tables, and some flooding. Peanut farmers were making good progress with land preparation in Jackson County. Due to heavy rain, much of the ground in Washington County may need to be re-worked prior to planting, and some corn that had been planted prior to the heavy rain may need to be replanted. Sugarcane harvest is ongoing. All processing plants were running Valencia oranges at full capacity. Red and white grapefruit were being harvested mostly for the processed market. Packinghouse activity focused on Valencia oranges, Honey tangerines and red grapefruit. Most citrus trees were in full bloom. Some were in the beginning stages of petal drop. Trees that bloomed early in the season were developing fruit for next year's crop. Other grove activities included hedging, topping, mowing, and general grove maintenance. Pasture conditions ranged from some turning green to some showing drought stress. Cattle were being moved to unused pastures, as cattlemen attempted to cut down on supplemental feeding in St. Lucie County.

Kansas: Temperatures were near average during the week. Portions of the state received 5 inches of snow or more, with only the central and southwest regions remaining dry. Range fires occurred in parts of the state. There were 5.7 days suitable for fieldwork. Winter wheat condition was rated 1 percent very poor, 6 percent poor, 37 percent fair, 49 percent good, and 7 percent excellent. Thirty percent of the winter wheat acreage was jointed. Corn planting was underway in southern counties and was 2 percent complete for the state. Cattle and calf condition was rated 2 percent poor, 23 percent fair, 69 percent good, and 6 percent excellent. Calving progress was 74 percent complete. Hay and roughage supplies were rated 5 percent short, 85 percent adequate, and 10 percent surplus.

Oklahoma: The state continued to see little rainfall and high winds throughout the week. There was an increase to 14 percent in moderate drought, up 6 percentage points from last week. Topsoil and subsoil moisture conditions were rated mostly adequate to short. There were 5.5 days suitable for fieldwork. Winter wheat jointing reached 45 percent, down 1 percentage point from the previous year and down 7 percentage points from normal. Canola blooming reached 21 percent, up 21 percentage points from the previous year and up slightly from normal. Rye jointing reached 38 percent, down slightly from the previous year and down 14 percentage points from normal. Oats jointing reached 18 percent, up 18 percentage points from the previous year and up 10 points from normal. Condition of pasture and range was rated at 82 percent good to fair. Livestock condition was rated at 88 percent good to fair.

Texas: Cold front passages and high winds were reported throughout the state, with most of the precipitation concentrated towards eastern areas. Some producers in the Northern High Plains began irrigating wheat. Winter wheat in parts of the Northern and Southern Low Plains and Cross Timbers continued to progress; however, most areas could benefit from more rain. Oats entered the heading stage in South Texas. Corn planting continued in parts of the Southern High Plains and the Blacklands. In portions of the Northern Low Plains, cotton producers began field preparations. In South Texas, sorghum planting continued. Vegetable planting was active in parts of Northeast Texas. Onion harvest in portions of the Lower Valley continued, while the potato crop entered flowering stage in South Texas. Pecans began blooming in parts of the Blacklands. Livestock producers in South Texas reported that supplemental feeding was limited due to more abundant grazing. Pastures improved over the past week and began greening up from recent rainfall in many areas of the state. Pasture and range conditions were rated good to fair.

State Agricultural Summaries

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

ALABAMA: Temperatures were average to a few degrees above average for most of the State. Precipitation was also slightly above average for this time of the year with some reports of significant rainfall. A few farmers have already started planting corn, but the majority will hold off until the first week of April due to wet conditions. Topsoil and subsoil moisture was adequate to surplus. For the most part, wheat, pasture, and hay land were in good condition. Precipitation estimates for the month ranged from 2.62 inches in Auburn to 10.11 inches in Mobile. Average mean temperatures for the month ranged from 55°F in Decatur to 63°F in Mobile.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Temperatures across the State were mostly above normal for the month of March. The temperatures for March were in the upper 90s in several parts of the State and a low of 12°F at Window Rock. No precipitation reported for the last 2 weeks of March from the 50 reporting stations. Cotton planting was under way in March. Alfalfa harvesting was active on about three-fourths of the alfalfa acreage. Vegetable and citrus harvesting activities continued throughout the month.

ARKANSAS: Throughout March temperatures were above the normal range and participation was also well above normal for the month .Weather patterns of warmer than normal temperatures have energized an early spring pattern of growth. However, rain during the last week slowed row crop progress. Planting of corn and rice has begun. Wheat is beginning to get a growth spurt. Soil temperatures still below optimum for planting crops. Livestock producers continue to feed hay and/or utilize winter grazing pastures.

CALIFORNIA: Temperatures averaged 2 to 4°F above normal in the north and central portions of the State and 4 to 8°F above normal in the southern region during the week. Most of the precipitation occurred early in the week and over the northern parts of the State. Some winter forage crops were starting to be harvested and groundwork continued for spring plantings. Winter wheat continued to mature. Alfalfa growth was good and some fields were cut and baled. In Colusa County, safflower, sunflower, and corn were planted. In Sutter County, orchard maintenance continued but was hampered by the weather. Application of bloom sprays continued in anticipation of additional rain. Navel and Valencia oranges and tangerines continued to be harvested. Navel oranges and kiwifruit were packed and shipped. In Colusa County, dry weather conditions allowed resumption of tomato planting. In Fresno County, processing tomatoes were planted, cultivated, irrigated, and fertilized. Earlier planted fields looked good. In Tulare County, broccoli, cabbage, cauliflower, carrots, and Brussels sprouts were harvested and sold at farmer's markets. In Sutter County, pastures and rangeland continued to improve. In Tulare County, warmer weather continued to increase rangeland forage growth, thus reducing the need for supplemental feed. Some beehives remained in prune orchards.

COLORADO: Snow and rain were received in abundance, reducing field activity and improving moisture conditions. Precipitation in the north eastern district replenished moisture stressed wheat crops. However, areas in the eastern and south eastern districts remained relatively dry, where wheat quality concerns persisted in certain localities. Several cases of stripe rust were reported between the eastern and southeastern districts. Stored feed supplies were rated 6% short, 76% adequate, and 18% surplus. Sheep death loss was 58% average and 42% light. Cattle death loss was 1% heavy, 77% average, and 22% light.

DELAWARE: Overall, the month of March started a snowy, cold, breezy, rainy, and foggy pattern on most part of the region. There were 15 episodes of precipitation with maximum of 0.56 of an inch of rain for a single day. Maryland registered maximum temperatures reaching 82°F and minimum temperature reaching 22°F. Delaware reported maximum temperatures reaching 81°F, and minimum reaching 24°F. Generally pastures were greening up, and cool season weeds were starting the process of growing. Some reporters indicated farmers were able to do their first fertilizer application on corn ground as well as small grains. Winter wheat greening up while other area presented muddy conditions. Some comments stated "farmers were top dressing small grain, spreading manure and fertilizer. Other doing some early disking and ground working. Most farmers reported decent field conditions – not too wet - not too dry and no major livestock concerns came to light.

FLORIDA: Field work and soil preparation for spring plantings was active in Panhandle area. Flagler, Putnam county farmers started harvesting cabbage. By mid-month, farmers in Washington, Madison, and Suwannee counties began planting corn. Sugarcane harvest continued in Highlands, St. Lucie, Palm Beach, Glades, and Hendry counties. Potato planting was complete in Flagler and Putnam counties. Green beans, pole beans, yellow squash, zucchini, tomatoes, peppers, eggplant, sweet corn, boniato, malanga, strawberries, bitter melon, and herbs were harvested in Miami-Dade County. Cold weather and dry conditions in some north Florida locations delayed growth of grass in pastures. Cattle were provided supplemental feed due to lack of forage crops. Ranchers fertilized pastures to revitalize them. By mid-month, warmer weather and longer days boosted pasture growth in Panhandle, north, and central Florida. Southwest Florida pasture quality declined due to dry soil conditions. In citrus growing counties, warm, dry conditions existed at the start of March. Processing plants finished with early and midseason oranges, began running grapefruit or transitioning to late orange harvesting. Valencia harvest lagging behind last season due to low maturity levels. Honey tangerines, colored grapefruit, white grapefruit, midseason oranges, Temples, and Valencias were going fresh. Early, mid-season orange harvest was complete. Grove activities included fertilizing, irrigating, some hedging and topping of trees after harvest, applying of herbicide, and removing brush. Citrus trees were in full bloom, petal drop began, and small pea size fruit was apparent on early variety citrus trees.

GEORGIA: Precipitation totals for the month ranged from 1.3 inches in the southeastern region to 6.2 inches in the southcentral region near Valdosta. The majority of the State received 2 inches less rain than normal for March, allowing time for fields to dry from the previous months' excess rain.

Overall, soil moisture was adequate to slightly short, making for easy field work, such as tilling, fertilizing, and adding weed control and lime applications. Cool-season forages and small grains recovered quickly from January and February rains and made good progress in March. Livestock producers were able to cut back on supplemental feeding. Cattle condition was fair to good. An unseasonably warm winter created concern over insect and disease pressure. Warmer than normal soil temperatures allowed for an early planting season. Watermelon, cantaloupe, and tobacco transplanting began. Corn planting was well underway. Fruit trees were in bloom. Highbush Blueberries were almost done blooming and were setting fruit. Rabbiteye Blueberries were beginning to bloom. Onions were progressing well and in good condition.

HAWAII: DATA NOT AVAILABLE

IDAHO: March brought mild weather to the State with daytime highs in the 70s and average temperatures ranging from 1 to 7°F Fahrenheit above normal. There was plenty of moisture throughout the month in the form of snowfall and rain. Snow was either not sticking, melting, or completely gone in many areas. However snow still covered the fields in some parts of the south central region. In the southwest, field prep was moving along quickly. Ada County reported that topsoil moisture was dry enough to work fields, but wet enough to maintain crops. Winter wheat was looking good. Calving was going well and approximately 65% complete in the south west. The fields in the south east were beginning to break dormancy and spring plants were starting to emerge. Local livestock was in good condition. The Jefferson and Madison County area was on the lookout for barley yellow dwarf disease in the fields. Significant rain in the south central region slowed spring cereal planting. Winter wheat looked good in the area. Blaine and Jerome counties reported issues with damage from voles for some producers. Jerome County reported that pastures and ranges were just starting to green up and grow. There were no other reports of adverse crop or livestock conditions for the month.

ILLINOIS: Topsoil moisture 4% short, 77% adequate, 19% surplus. Subsoil moisture 3% short, 87% adequate, 10% surplus. Winter wheat condition 5% poor, 28% fair, 50% good, 17% excellent. Statewide, temperatures for the month of March averaged 46.1°F, 5.9°F above normal. Precipitation averaged 2.33 inches, 0.26 inches below normal. Preparation for spring planting is in full swing across Illinois, with operators applying fertilizer and performing spring fieldwork.

INDIANA: Topsoil moisture 2% short, 70% adequate, 28% surplus. Subsoil moisture 1% very short, 7% short, 73% adequate, 19% surplus. Winter wheat condition, 1% very poor, 2% poor, 18% fair, 61% good, 18% excellent. Temperatures for the month averaged 46.8°F, 7.0°F above normal. Statewide average precipitation was 3.40 inches, 0.63 inches above normal. A mild winter season came to wet close by the end of March, with an unexpected snow storm at the beginning of the month followed by heavy rains towards the end of the month. The above average precipitation and unseasonably warm temperatures brought much of the winter wheat crop out of dormancy. Despite some reports of burnt tips on wheat, farmers have reported an improvement in the color and have begun to topdress the crop with nitrogen. Pastures were beginning to green up with the spring conditions and there seems to be adequate hay supplies and forage for livestock coming out of winter. Spring calving is well underway for most of the State. Spring rains have saturated soils and have led to localized flooding in low lying areas, limiting early fieldwork activities for farmers. When conditions have permitted, farmers have been applying fertilizer to fields, spraying herbicides on cover crops, replacing drain tile, burning ditch banks and fencerows, tilling fields, hauling grain, and signing up for FSA farm programs.

IOWA: Topsoil moisture 0% very short, 2% short, 80% adequate, and 18% surplus. Iowa experienced above normal temperatures for the month of March. Frequent showers and snow the last week of the month left fields and roads soft and muddy. Average statewide snow depth as March came to a close was 0 inches. Fieldwork activities for the month of March included dry fertilizer and anhydrous applications. Grain movement in March rated 35 percent moderate to heavy, up from the previous month but similar to the previous year. Hay and roughage supplies were 92% adequate to surplus, comparable to last year at this time. Calving is underway in many parts of the State.

KANSAS: At the end of the month, topsoil moisture supplies rated 10% very short, 38% short, 51% adequate, and 1% surplus. Subsoil moisture supplies rated 8% very short, 30% short, 61% adequate, and 1% surplus. Winter wheat condition rated 1% very poor, 6% poor, 37% fair, 49% good and 1% excellent; jointing, 30%, 12% 2015, 16% avg. Corn planted 2%, 0% 2015, 0% avg. Hay and Roughage supplies were rated 0% very short, 5% short, 85% adequate, 10% surplus. Stock water supplies were rated 4% very short, 15% short, 80% adequate, and 1% surplus. Cattle and Calves condition rated 0% very poor, 2% poor, 23% fair, 69% good and 6% excellent. Cattle and Calves death loss rated 1% heavy, 59% average and 40% light. Calving progress 74% Sheep and Lambs condition rated 0% very poor, 0% poor, 29% fair, 68% good and 3% excellent. Sheep and lambs death loss rated 0% heavy, 67% average and 33% light. March temperatures averaged four to six degrees above normal. Precipitation was below normal, with most areas receiving 1-2 inches of precipitation. At the end of the month, range fires were active in parts of the State.

KENTUCKY: For the month of March, the Commonwealth experienced mostly above normal temperatures and below normal rainfall. For the week ending March 27, 2016, days suitable for field work were 4.2. Topsoil moisture 3% short, 78% adequate and 19% surplus. Subsoil moisture 1% very short, 4% short, 83% adequate and 12% surplus. Wheat and canola producers remain optimistic about the crop. Some growers were spraying for weeds and applying nitrogen. Winter wheat condition 2% very poor, 3% poor, 12% fair, 63% good, and 20% excellent. A relatively mild winter has helped most producers to have adequate hay stocks on hand. Hay is still being fed where available. Hay and roughage supplies 2% very short, 14% short, 76% adequate, and 8% surplus. At the end of February, 83% of supplies were rated as adequate to surplus, compared to 84% currently. Spring calving is going well. Livestock condition 1% very poor, 2% poor, 15% fair, 69% good, and 13% excellent. Producers marketed their grain and tobacco crops and attended various commodity meetings across the State. Farmers were busy performing routine equipment maintenance in preparation for the upcoming planting season. Some producers have applied burndown applications in preparation for corn and soybean planting.

LOUISIANA: The State averaged 2.37 inches of rain over the last four weeks. Corn, sorghum and rice have been planted in many areas with corn starting to emerge across the State. However, the significant rainfall at the latter part of the month has slowed down field crop plantings and some fields will need to be replanted. Wheat across the State has started to head. Producers continue spraying and harvesting strawberries. Vegetable producers have been busy preparing for spring and summer crops. Crawfish producers have

reported an improvement in size of crawfish in their catches. Livestock producers were fertilizing pasture and feeding hay.

MARYLAND: Overall, the month of March started a snowy, cold, breezy, rainy, and foggy pattern on most part of the region. There were 15 episodes of precipitation with maximum of 0.56 of an inch of rain for a single day. Maryland registered maximum temperatures reaching 82.0°F and minimum temperature reaching 22.0°F. Delaware reported maximum temperatures reaching 81.0°F, and minimum reaching 24.0°F. Generally pastures were greening up, and cool season weeds were starting the process of growing. Some reporters indicated farmers were able to do their first fertilizer application on corn ground as well as small grains. Winter wheat greening up while other area presented muddy conditions. Some comments stated "farmers were top dressing small grain, spreading manure and fertilizer. Other doing some early disking and ground working. Most farmers reporting decent field conditions – not too wet - not too dry and no major livestock concerns have come to light.

MICHIGAN: Topsoil moisture 1% short, 49% adequate, and 50% surplus. Subsoil moisture 4% short, 72% adequate, and 24% surplus. Winter wheat condition rated 1% very poor, 2% poor, 23% fair, 47% good, and 27% excellent. Temperatures remained above average for most of the month. Daytime high temperatures during the second week of March peaked in the 60s and 70s on multiple days. No counties were classified as either abnormally dry or in drought during March, as above average precipitation throughout the month coupled with snow melt kept topsoil and subsoil moisture levels higher than normal. The month began with a major storm which brought heavy wet snow to much of the State on March 1-2. A large portion of the Lower Peninsula received 4-8 inches of snow, but snowfall totals in the Central and Thumb regions reported receiving up to 14 inches of snow. A slow moving storm system also brought ¾ to 1 ½ inches of precipitation to the State on March 15-17, with some areas of the Upper Peninsula reporting 2-3 inches, much of this in the form of snow. Another storm system on March 23-24 brought rain and snow from the Central Lower Peninsula to the Eastern Upper Peninsula. As this system pushed northward, warmer air allowed the precipitation to turn to liquid, which caused some icing to occur; between a tenth-inch and a quarter-inch of ice were reported in areas around the Saginaw Valley and the Thumb, bringing concerns of damage to exposed winter wheat. By month's end, fields in the north were still snow covered while fields further south were mostly too wet to work. Winter wheat has been greening up and is starting to grow. Some fertilizer was applied to wheat fields where dry conditions existed. Maple syrup season started normally but ended early with lower than normal sap flow due to warm nights in mid-March. Fruit growers reported that with the early warmup, many perennial fruit crops were at the swollen bud and bud burst stage, and a late-season cold snap could cause some damage. Fruit growers were busy finishing up winter pruning and pushing brush out of orchards. Other activities included frost seeding of red clover in wheat, manure spreading, preparing for spring fertilizer applications, and getting equipment ready for field work.

MINNESOTA: A cold and snowy start to March gave way to a period of warmer than normal temperatures. The March 1 snowstorm brought a few inches of snow to much of southern Minnesota and many communities in northern Minnesota experienced subzero temperatures. Sunshine and strong winds brought short-lived record warmth to many parts of the State on March 8, in some areas lasting just a few hours before dropping by 30°F or more. Ahead of the warm front, thunderstorms and hail were reported in northeast Minnesota. Record high temperatures were also seen March 12 and 13, with high temperatures rising into the upper 60's and 70's. A period of heavy precipitation followed, mostly as rain, but with some significant snowfall in northeastern Minnesota. A snowstorm on March 23-24 brought snowfall amounts ranging mostly from 2 to 9 inches across southern Minnesota, with 11.2 inches reported at Wabasha and 11 inches reported at Ellendale. Most of the snow melted, with little snow cover remaining by the end of the month. The preliminary statewide average temperature for the month was 7.8°F above average. The preliminary statewide average precipitation was .56 inches above normal, driven by higher than normal precipitation in the eastern portion of the State. Some areas in western and central Minnesota experienced below normal levels of precipitation. With continued warm temperatures, many areas report little to no snow cover remaining. As a result, field work has begun early in some areas this year. Reported activities include manure and fertilizer application, tillage, and readying equipment. Livestock producers have continued calving and lambing. Livestock conditions were generally described as very good. Feed supply continues to be adequate.

MISSISSIPPI: Abnormal amounts of rain continued in Mississippi for the month. As flood waters subsided producers awaited for conditions to improve, but frequent rains limited most prep work. This caused saturated soil conditions and will result in most corn having to be replanted. However, livestock operators have welcomed this rain which has helped with their grazing conditions.

MISSOURI: Topsoil moisture 7% very short, 13% short, 70% adequate, 10% surplus. Subsoil moisture 7% very short, 13% short, 76% adequate, 4% surplus. Hay and roughage supplies 1% very short, 12% short, 78% adequate, 9% surplus. Stock water supplies 1% very short, 14% short, 83% adequate, 2% surplus. Winter Wheat condition 1% very poor, 4% poor, 25% fair, 62% good, 8% excellent. Corn planting has started. Some producers expressed concern about the lack of rain and dry conditions.

MONTANA: Topsoil moisture 25% very short, 6% last year; 28% short, 22% last year; 47% adequate, 56% last year; 0% surplus, 16% last year. Subsoil moisture 23% very short, 6% last year; 41% short, 23% last year; 36% adequate, 48% last year; 0% surplus, 23% last year. Winter wheat – wind damage 77% none, 75% last year; 14% light, 18% last year; 8% moderate, 5% last year; 1% heavy, 2% last year. Winter wheat – freeze and drought damage 75% none, 70% last year; 16% light, 21% last year; 8% moderate, 7% last year; 1% heavy, 2% last year. Winter wheat – protectiveness of snow cover 52% very poor, 69% last year; 20% poor, 17% last year; 16% fair, 14% last year; 4% good, 0% last year; 8% excellent, 0% last year. Livestock grazing accessibility – 72% open, 67% last year; 9% difficult, 24% last year; 19% closed, 9% last year. Livestock receiving supplemental feed – cattle and calves 96% fed, 96% last year. Livestock birthing – calving complete 13%, 23% last year. Livestock receiving supplemental feed – sheep and lambs 95% fed, 96% last year. Livestock birthing – lambing complete 11%, 15% last year. March was largely mild and dry with limited moisture across Montana. High temperatures ranged from the mid 50s to the middle 70s and low temperatures ranged from -17°F to 24°F. Most of the State recorded at least some precipitation but the amount received varied widely, with the highest recorded this month in Heron with 4.61 inches of moisture, and other reporting stations recording between 0.02 to 3.42 inches of moisture.

NEBRASKA: Topsoil moisture 2% very short, 15% short, 79% adequate, and 4% surplus. Subsoil moisture 3% very

short, 14% short, 78% adequate, and 5% surplus. Winter wheat condition 0% very poor, 2% poor, 35% fair, 49% good, 14% excellent. Stock water supplies 0% very short, 3% short, 94% adequate, and 3% surplus. Hay and roughage supplies 0% very short, 4% short, 92% adequate, 4% surplus. Cattle and calves condition, 0% very poor, 1% poor, 10% fair, 70% good, 19% excellent. Calving, 50% complete. Cattle and calves death loss, 1% heavy, 67% average, 32% heavy. Sheep and lamb condition, 0% very poor, 1% poor, 8% fair, 83% good, 8% excellent. Sheep and lamb death loss, 0% heavy, 69% average, 31% light. Temperatures averaged two to eight degrees above normal. Late in the month, snowfall of varying amounts was experienced in portions of the State. Fieldwork activities included tillage and fertilizer application.

NEVADA: Above average temperatures occurred in the northern and central regions of the State the first week of March, then moderated with a low front crossing the latter part of the week, bringing some moisture and cooler temperatures. During the next several weeks, several lows fronts passed through the region adding little moisture, but providing plenty of wind. The Sierra Mountains received much needed additional snowpack at mid-month. In between the low fronts the weather was mild with above average temperatures throughout the northern and central regions. The southern region of Nevada received rising daily high temperatures, with daily highs increasing from 65°F to 74°F over the course of the month, exceeding 84°F or dropping below 56°F only one day.

NEW ENGLAND: Warmer than average temperatures continued throughout March in New England. A few areas reported some snow cover on the ground, especially in woods and around the edges. However, other areas reported no or minimal snow cover on the ground. In Maine, maple syrup production seemed to be doing well, with syrup reported being darker and deeper in flavor. In some locations throughout New Hampshire, maple syrup operations continued to collect sap as temperatures allowed, while others were already pulling their taps for the season. In Rhode Island, maple sap had stopped running about a week ago. In Massachusetts, asparagus fields were burned off where allowed and cranberry bogs still appeared in good shape for the upcoming season. Many locations throughout the region had manure storages approaching capacity; some places have already begun spreading manure while others were preparing their machinery for spreading manure soon. Farm activities included beginning spring tillage (CT), maintenance on farm equipment (all States), some seeding houses being turned back on (NH), some tomatoes being planted for transplants in high tunnels (NH & RI), pruning fruit trees and bushes (NH), and some vegetables were being planted (RI).

NEW JERSEY: Soil groundwork and planting and transplanting started the first week of March and continues for the following vegetables: spinach, radishes, lettuce, escarole, endive, beets, cilantro, parsley, Swiss chard and sweet corn. Sweet Corn under plastic has emerged in protected areas. Overwinter spinach looks very good. Some field work being done as the weather permits. Frequent changes in weather, hot then cold wet. Soil saturation is hindering spring field work. Activities include spreading potash on 2016 bean ground, lime and fertilizing where needed. Commodity prices were steady. Due to warmer weather pastures should be checked for pH and fertilizer needs to optimize pasture growth. Even just some rule of thumb fertilizer applications after you collect the soil and before you get the results back would be advisable.

NEW MEXICO: Warm, very dry weather dominated the State during March. With the exception of Antelope Wells, where year-to-date precipitation was 0.58 inch above normal, all weather stations reported moisture deficits since January 1. Most notably, Chama was already 4.37 inches below normal for the year, followed by Red River at -2.72 inches and El Morro at -2.23 inches. Virtually statewide, reporter comments indicated an extreme need for moisture as the spring planting season neared. Reports from Curry County noted that dry, windy conditions slowed, if not halted dryland winter wheat growth, and have negated the potential for an average production year in some irrigated fields. Average temperatures ranged from 1 degree below to 9°F above normal. Daytime highs ranged from 61°F at Chama to 87°F at Artesia and Roswell. Overnight lows varied from -5°F at Eagle Nest to 36°F at Truth or Consequences. Native pastures and rangeland feedstuffs had become depleted due to the abnormally dry first quarter. As such, most ranchers were having to provide supplemental feed to their herds to sustain herd health prior to the availability of forest service allotments. Additionally, it was reported that loco weed has become a problem in some herds in Union County. Topsoil moisture 9% very short, 74% short, 17% adequate. Subsoil moisture 8% very short, 36% short, 56% adequate. Alfalfa hay condition 2% poor, 58% fair, 24% good, 16% excellent. Chile planted 24%, 50% last year. Onions planted 54%, 90% last year. Winter wheat condition 4% very poor, 17% poor, 46% fair, 33% good. Cows calved 20%, 15% last month, 16% last year. Cattle receiving supplemental feed 81%, 83% last month, 84% last year. Cattle condition 2% very poor, 4% poor, 46% fair, 45% good, 3% excellent. Ewes lambed 18%, 12% last month, 8% last year. Sheep receiving supplemental feed 42%, 77% last month, 77% last year. Sheep and lamb condition 27% very poor, 20% poor, 11% fair, 41% good, 1% excellent. Feed and concentrate supplies 1% very short, 14% short, 85% adequate. Hay and roughage supplies 1% very short, 8% short, 84% adequate, 7% surplus. Stock water supplies 5% very short, 20% short, 63% adequate, 12% surplus.

NEW YORK: Spring is underway for the State. The maple season is progressing well, and fall seeded crops were showing new growth. Weather has been warm but irregular with little precipitation. Some soil is still frozen, and soil moisture is low. There were concerns over potential damage to crops from low temperatures without snow cover. There is also worry about the possibility of a future cold snap causing damage, especially for fruit producers. There have been no reported livestock issues. Field activities for the month include tending livestock, trees, and vines, and fixing and maintaining machinery and structures, tillage, and manure and fertilizer application.

NORTH CAROLINA: Days suitable for field work 5.8. Topsoil moisture 10% short, 71% adequate and 19% surplus. Subsoil moisture 9% short, 71% adequate and 20% surplus. North Carolina saw dryer conditions during March which allowed farmers to plow and prepare fields for upcoming planting. Winter wheat condition 5% very poor, 14% poor, 31% fair, 42% good, 8% excellent. Oats condition 1% very poor, 8% poor, 31% fair, 56% good, 4% excellent. Barley condition 5% poor, 30% fair, 59% good, 6% excellent. Pasture conditions 3% very poor, 8% poor, 40% fair, 40% good, 9% excellent. Hay and roughage supplies 7% very short, 25% short, 64% adequate, 4% surplus.

NORTH DAKOTA: Topsoil moisture 8% very short, 26% short, 64% adequate, 2% surplus. Subsoil moisture 3% very short, 26% short, 68% adequate, 3% surplus. Winter wheat condition, 2% very poor, 3% poor, 30% fair, 63% good, 2% excellent. Cattle and calves condition, 0% very poor, 0% poor, 9% fair, 77% good, 14% excellent. Calving, 11% complete. Cattle and calves death loss, 0% heavy, 55% average, 45%

light. Sheep and lambs condition, 0% very poor, 0% poor, 9% fair, 82% good, 9% excellent. Ewes lambed, 17% complete. Sheep and lambs death loss, 0% heavy, 50% average, 50% light. Hay and roughage supplies, 1% very short, 4% short, 87% adequate, 8% surplus. Stock water supplies, 4% very short, 9% short, 83% adequate, 4% surplus. Temperatures averaged six or more degrees above normal. Precipitation up to an inch covered most of the State with two inches or more in the east. The warm conditions limited livestock losses and hay usage. Producers were preparing for spring fieldwork.

OHIO: Topsoil moisture 2% short, 63% adequate, and 35% surplus. Subsoil moisture 5% short, 71% adequate, 24% surplus. Winter wheat condition rated 15% fair, 56% good, and 29% excellent. The March 2016 statewide average temperature was 46.0°F, 7.4°F above normal. Precipitation averaged 3.23 inches statewide, which was 0.68 inches above normal for the month of March. Unusually warm weather this month led to early green up in wheat, hay, and pastures. The State saw precipitation slightly above normal, causing some sporadic instances of standing water. Wheat is in great condition at the moment, though there were some worries that the advanced maturity seen in wheat fields makes them more vulnerable to any prolonged temperature drops. Growers were beginning to top-dress wheat and haul manure. Spring calving and lambing is also underway.

OKLAHOMA: Oklahoma experienced warm and dry weather, with occasional rainy, cold fronts, for the month of March. The heaviest rains were received in the South Central, Southwest, and Southeast districts. According to the Oklahoma Mesonet, the weather was the driest on the northwest of the State and the wettest in the southeast. Precipitation across the State averaged 2.28 inches, ranging from 0.39 of an inch in the Panhandle district to 5.61 inches in the Southeast district. Statewide temperatures averaged in the low 50's, with the lowest recording of 8°F at Kenton on Sunday, March 20th and the highest recording of 89°F at Beaver on Tuesday, March 22nd. Topsoil and subsoil moisture conditions were rated mostly adequate to short.

OREGON: There were 4.1 days suitable for fieldwork for the last week of March. Pasture and range conditions were reported to be 0% very poor, 6% poor, 31% fair, 43% good and 20% excellent. The northwestern region experienced temperatures ranging between 50 and 60°F. Field work included fertilizing, and spraying grass seed, fallow ground and perennial specialty crops. Orchards were pruned and specialty seed row crops planted. Some areas experienced springtime freezing and record setting rainfall which delayed planting. Subsoil moisture was recovering from past years' drought. Pastures were impacted by compaction and hoof damage was reported due to high moisture levels. Pasture grass was growing well. Peaches and sweet cherries were in bloom in the north central region. Growth of winter wheat, forage crops, rangeland and tree fruit crops were slow but steady. The northeastern region experienced wetter weather than in February. Fieldwork was limited due to subsoil moisture conditions. The southeastern region reported lots of moisture in the form of snow and rain. Some fieldwork was completed between storms. Good snowpack was reported. Reservoirs were above 2015 levels and irrigators were informed they should receive full irrigation for 2016. Range and pasture conditions were significantly better than last year. In the southwestern region, rains made fieldwork difficult to impossible. Tree fruit crops were blooming and blueberries were about a week out from bloom. All fields needed weed control due to wet conditions. Some vineyards were pumping standing water out of fields. Grain producers reported fields were too wet to plant. Livestock producers reported pastures were too wet to work cattle.

PENNSYLVANIA: March weather in Pennsylvania could be described as indecisive this year. Unseasonably warm temperatures (high of 79°F) gave way to a few days of wintery cold (low of 15°F) resulting in a State average temperature of 44°F. Despite the odd extremes, overall conditions were clear, dry and ideal for early season field activities such as seeding for hay, alfalfa and oats. Additional activities included manure hauling, fertilizer spraying, and spring tillage.

SOUTH CAROLINA: March was a dryer month with windy and warmer temperatures across the State. The average high temperatures ranged from low to high 70s and the average low temperatures ranged between low 40s to low 50s. Precipitation estimates for the State ranged from 0.85 to 3.17 inches. In the western counties the weather conditions have been favorable to date. Small grains were progressing well and pastures were excellent at this time. Livestock is generally in good condition and grazing has started. In the northern counties the wheat that has been planted looks good and seems to be on pace for the season. Livestock were doing well with grasses coming back. In the eastern counties farmers were getting prepared for setting tobacco. In the midlands the weather conditions were getting drier but recent rains helped to improve it. Crop production activities have been proceeding ahead of schedule due to dry conditions. Planting conditions improved late in the month and large acreages of corn has been planted. The small amount of wheat that was planted looks fair. Corn is starting to emerge. Winter wheat, rye, and oats were looking pretty good for now. Some winter vegetable crops have been irrigated. In the southern counties, the State growers were able to get into fields for land preparation for planting. Corn that is emerging seems to be in good shape. Watermelon transplanting began in mid-March. Small grains were faring well and the March weather allowed growers to get fertilizer and weed control treatments applied. No crop insect or disease problems reported so far.

SOUTH DAKOTA: Topsoil moisture 6% very short, 24% short, 65% adequate, 5% surplus. Subsoil moisture 7% very short, 26% short, 64% adequate, 3% surplus. Winter wheat condition 0% very poor, 1% poor, 37% fair, 55% good, and 7% excellent. Stock water supplies 3% very short, 21% short, 73% adequate, 3% surplus. Hay and forage supplies 0% very poor, 3% poor, 88% adequate, and 9% excellent. Cattle and calf conditions 0% very poor, 0% poor, 19% fair, 73% good, 8% excellent. Cattle and calf death loss 0% heavy, 59% average, 41% light. Calving progress 15%. Sheep and lamb condition 0% very poor, 0% poor, 27% fair, 65% good, 8% excellent. Sheep and lamb death loss 0% heavy, 69% average, 31% light. Lambing progress 21%. For the month of March 2016, temperatures were above average Statewide, according to the USDA's National Agricultural Statistics Service. The mild temperatures were beneficial for calving and early fieldwork. Late season winter storms brought rain and snow to parts of the State. However, most locations reported below average precipitation for the month.

TENNESSEE: Days suitable 4.6. Topsoil moisture 2% short, 80% adequate, 18% surplus. Subsoil moisture 3% short, 77% adequate, 20% surplus. Winter wheat condition 2% poor, 19% fair, 55% good, 24% excellent. Pasture and Range condition 1% very poor, 10% poor, 40% fair, 43% good, 6% excellent. Cattle condition 3% poor, 24% fair, 60% good, 13% excellent. Hay supplies 3% very short, 14% short, 74% adequate, 9% surplus. Tennessee experienced mild weather in March which has kept pastures and cattle in good condition. Producers have been applying fertilizer to wheat and pastures, applying burndown applications in preparation for corn/soybean planting, and a few have begun planting corn.

TEXAS: Warmer weather began make its way across the State. Precipitation ranged from trace amounts to upwards of

10 inches of rainfall, with isolated areas in South East Texas reaching of 15 inches. The majority of the precipitation was concentrated to the eastern part of the State. Winter wheat and oats continued to develop, aided by precipitation and warmer weather in many parts of the State. Producers continued field preparations for cotton, corn and sorghum. Pecans continued to develop, with some orchards reporting trees beginning the bud break stage. Vegetable planting continued throughout many areas of the State. Livestock were in fair to good condition with producers beginning to reduce supplemental feeding in many parts of the State.

UTAH: Topsoil moisture 0% very short, 10% last year; 24% short, 52% last year; 68% adequate, 38% last year; 8% surplus, 0% last year. Subsoil moisture 6% very short, 11% last year; 23% short, 51% last year; 67% adequate, 38% last year; 4% surplus, 0% last year. Pasture and range condition 0% very poor, 1% last year; 4% poor, 16% last year; 41% fair, 49% last year; 48% good, 32% last year; 7% excellent, 2% last year. Winter wheat condition 0% very poor, 0% last year; 0% poor, 2% last year; 38% fair, 25% last year; 51% good, 62% last year; 11% excellent, 11% last year. Barley planted 5%, 44% last year. Oats planted 6%, 25% last year. Spring wheat 10%, 49% last year. Hay and roughage supplies 0% very short, 0% last year; 1% short, 2% last year; 80% adequate, 93% last year; 19% surplus year, 5% last year. Stock water supplies 0% very short, 3% last year; 8% short, 25% last year; 90% adequate, 72% last year; 2% surplus, 0% last year. Cattle and calves condition 0% very poor, 0% last year; 1% poor, 0% last year; 14% fair, 15% last year; 67% good, 72% last year; 18% excellent, 13% last year. Sheep and lambs condition 0% very poor, 0% last year; 0% poor, 0% last year; 39% fair, 22% last year; 45% good, 72% last year; 16% excellent, 6% last year. Livestock receiving supplemental feed for cattle 68%, 55% last year. Livestock receiving supplemental feed for sheep 58%, 38% last year. Cows calved 25%, 36% last year. Farm Flock Ewes Lambed 20%, 18% last year, and Range Flock Ewes Lambed 5%, 5% last year. During March, Utah received less precipitation than the historical average, with the only above average precipitation being in the Northeast. Abnormally dry conditions persist in two-thirds of the State with the Southeast primarily being the only region not affected. Overall drought conditions have worsened slightly over the last month. This is indicated by topsoil moisture content which has seen a significant reduction in both surplus and adequate for topsoil moisture and an increase in the short category since the February release. Snowpack conditions were slightly below their historical averages in the central and southwestern part of the State. Barley, oats and spring wheat have made their first appearance on crop progress and condition. Planting is considerably behind for each compared to March 2015.

VIRGINIA: Barley conditions were 1% poor, 19% fair, 73% good, and 7% excellent. Oats conditions were 36% fair, 56% good, and 8% excellent. Winter wheat conditions were 1% poor, 23% fair, 66% good, and 10% excellent. Livestock conditions were 2% very poor, 10% poor, 22% fair, 55% good, and 11% excellent. Pasture and range conditions were 4% very poor, 18% poor, 33% fair, 37% good, and 8% excellent. Percent of feed obtained from pastures 31%. Abnormally warm temperatures have helped fields dry up after the rains of the previous month. This has allowed for more available days for fieldwork as well as help pastures green up. Pastures should see significant grow in the coming weeks. Farm activities this month included scouting small grains, preparing equipment, gathering inputs, and soil sampling.

WASHINGTON: This winter was warmer and wetter compared to the previous couple of years. Flooding was a problem throughout the State. Low lying fields were having the largest problem from the excess rains. Windy days were reported with winds in excess of 30 mph throughout the State, although no severe damage was reported. Some farmers were delaying their tilling, spraying, and fertilizer applications due to the soil being overly saturated. Few fields were dry enough to start field work at the end of March. Cows continued their calving season and ewes continued lambing. Cattleman began to put their cattle out to pasture. Winter wheat was in good to excellent condition this year. However, some fields had not recovered from the dry conditions of last fall. Klickitat County reported that the fruit trees were in bloom around Maryhill and that alfalfa crowned. Whatcom County reported that blueberries and raspberries budded and were showing good growth. Overall, the State was in the process of gearing up for this year's crop season.

WEST VIRGINIA: Topsoil moisture was 2% very short, 11% short, 83% adequate and 4% surplus, compared to 6% short, 92% adequate, and 2% surplus last year. Subsoil moisture was 2% very short, 8% short, 85% adequate, and 5% surplus, compared to 5% short, 85% adequate, and 10% surplus last year. Hay and roughage supplies were 1% very short, 7% short, 83% adequate, and 9% surplus compared to 1% very short, 19% short, 78% adequate, and 2% surplus last year. Feed grain supplies were 1% very short, 3% short, 92% adequate, and 4% surplus compared to 5% short, 92% adequate, and 3% surplus last year. Winter wheat conditions were 7% very poor, 15% poor, 37% fair, 38% good, and 3% excellent. Calving was 65% complete, 66% in 2015, and 69% 5-year avg. Cattle and calves were 2% poor, 16% fair, 77% good, and 5% excellent. Lambing was 74% complete, 74% in 2015, and 74% 5-year avg. Sheep and lambs were 1% poor, 17% fair, 77% good, and 5% excellent. This month has been a mix of warmer and cooler periods as weather patterns changed. Farming activities included calving, lambing, and watching weather for frost to protect fruit blossoms.

WISCONSIN: March temperatures at the five major weather stations ranged from 4.9 to 7.7°F above normal. Average highs ranged from 43.8 in Green Bay to 49.2 in La Crosse, while average lows ranged from 28.2 to 32.2 in those same cities. Precipitation was above average at all stations and ranged from 2.68 inches in La Crosse to 3.30 inches in Eau Claire. La Crosse received the most snowfall out of the major cities with 12.3 inches. Madison received the least, with 4.0 inches of snow for the month. Above normal temperatures and frequent rains thawed the ground and kept snow cover minimal during March. A large winter storm dropped heavy snow and ice over much of the State during the third week of the month, but reporters noted that snow cover was quick to melt. Some reporters saw manure spreading and early tillage activities, but soils in many areas were too muddy to support machinery. Winter wheat and alfalfa were reportedly greening up statewide. Reporters commented that maple sap collection was stop and go, with an unusually early start to the season and several interruptions due to above-freezing nights.

WYOMING: Topsoil moisture 3% very short, 13% short, 71% adequate, 13% surplus. Subsoil moisture 7% very short, 21% short, 72% adequate. Barley planted 34%, 18% 2015. Winter wheat condition 34% fair, 59% good, 7% excellent. Hay and roughage supplies 6% short, 55% adequate, 39% surplus. Livestock condition 1% poor, 11% fair, 84% good, 4% excellent. Stock water supplies 8% short, 91% adequate, 1% surplus. Pasture and range condition 8% poor, 32% fair, 58% good, 2% excellent. Cows calved 21%, 20% 2015. Cattle and calf death loss 40% average, 60% light. Ewes lambed 19%, 27% 2015. Sheep shorn 15%, 28% 2015. Sheep and lamb death loss 48% average, 52% light.

International Weather and Crop Summary

March 20-26, 2016

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

HIGHLIGHTS

EUROPE: Widespread showers and near-normal temperatures sustained favorable winter crop prospects over most of the continent.

WESTERN FSU: Lingering cold slowed the recent trend of early winter wheat growth over Ukraine and Russia, though warmer, wetter weather returned late in the period.

MIDDLE EAST: Early-week cold was followed by warmer, wetter weather by the end of the period.

NORTHWESTERN AFRICA: Rain returned to Morocco's drought-afflicted crop areas, albeit too late to offer much improvement for wheat and barley prospects.

EASTERN ASIA: Rainfall in southern China and into the western Yangtze Valley benefited spring rice and other crops, but dryness persisted for wheat and rapeseed elsewhere.

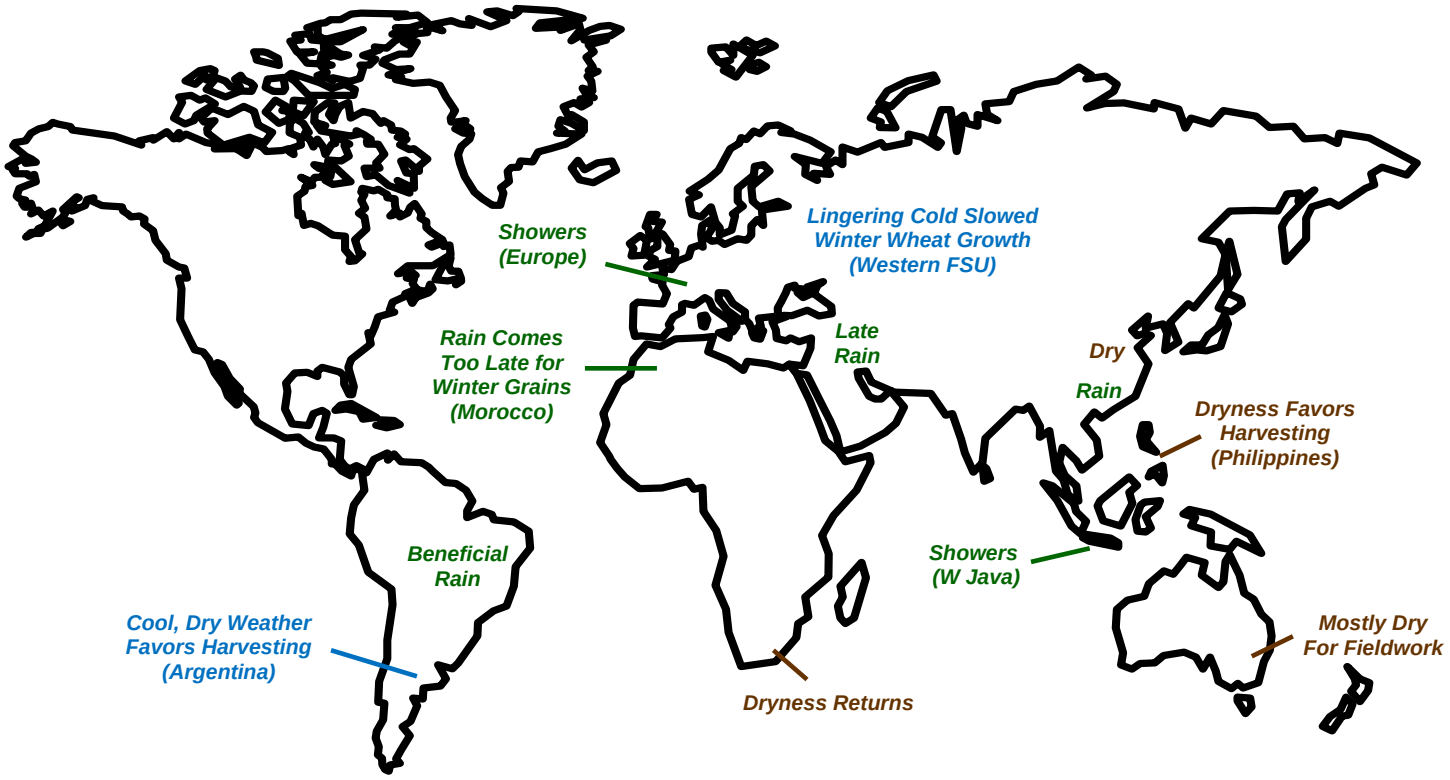
SOUTHEAST ASIA: Showers continued to benefit rice in western Java, Indonesia, while seasonably drier weather aided rice and corn harvesting in the Philippines.

AUSTRALIA: Late-week showers overspread southern Queensland, but dry weather during most of the week favored summer crop maturation and harvesting.

SOUTH AFRICA: Dry weather returned to the corn belt, following several weeks of beneficial rainfall.

ARGENTINA: Cool, mostly dry weather aided corn and sunflower harvesting in central Argentina.

BRAZIL: Beneficial rain maintained overall favorable conditions for second-crop corn.



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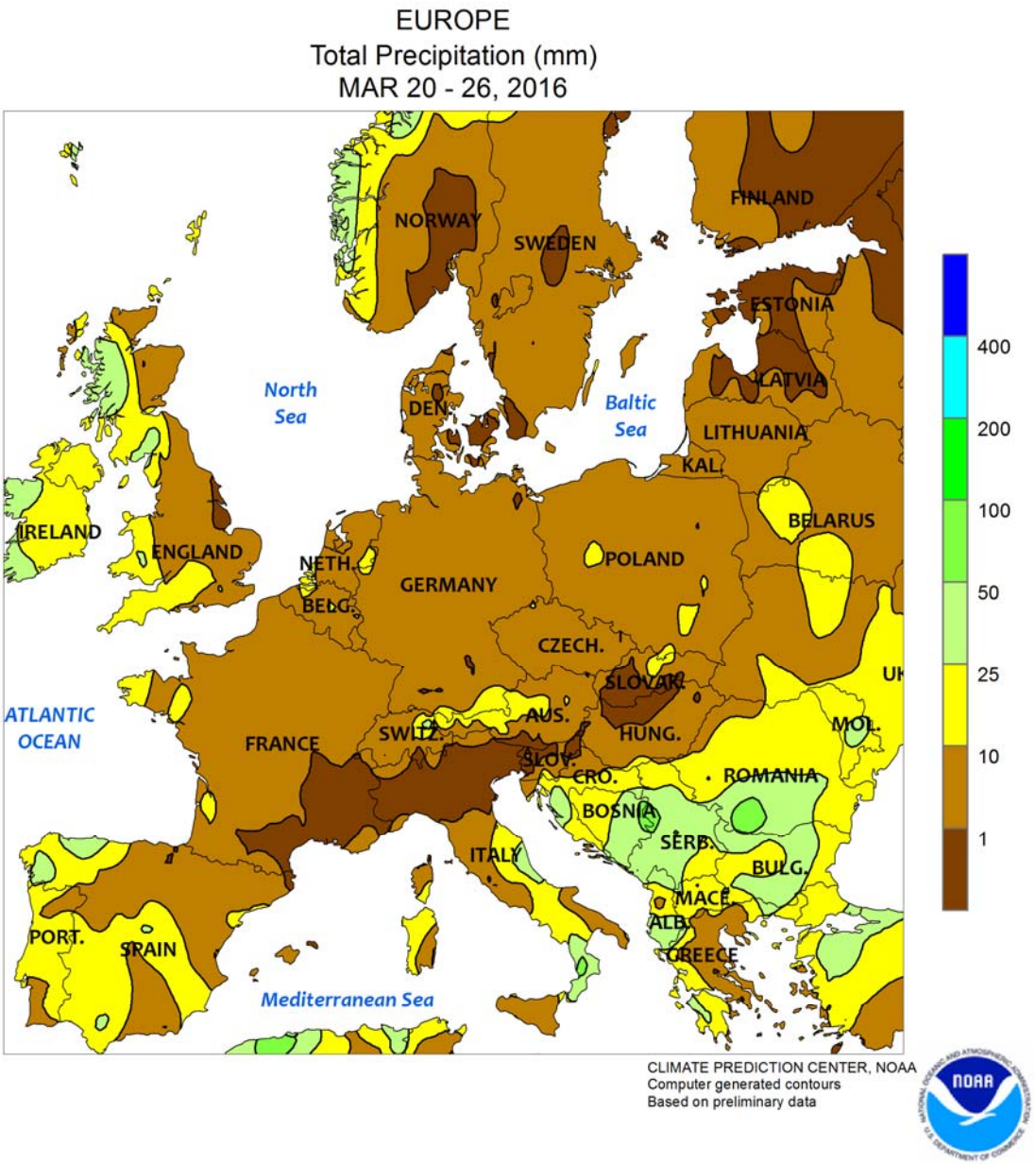
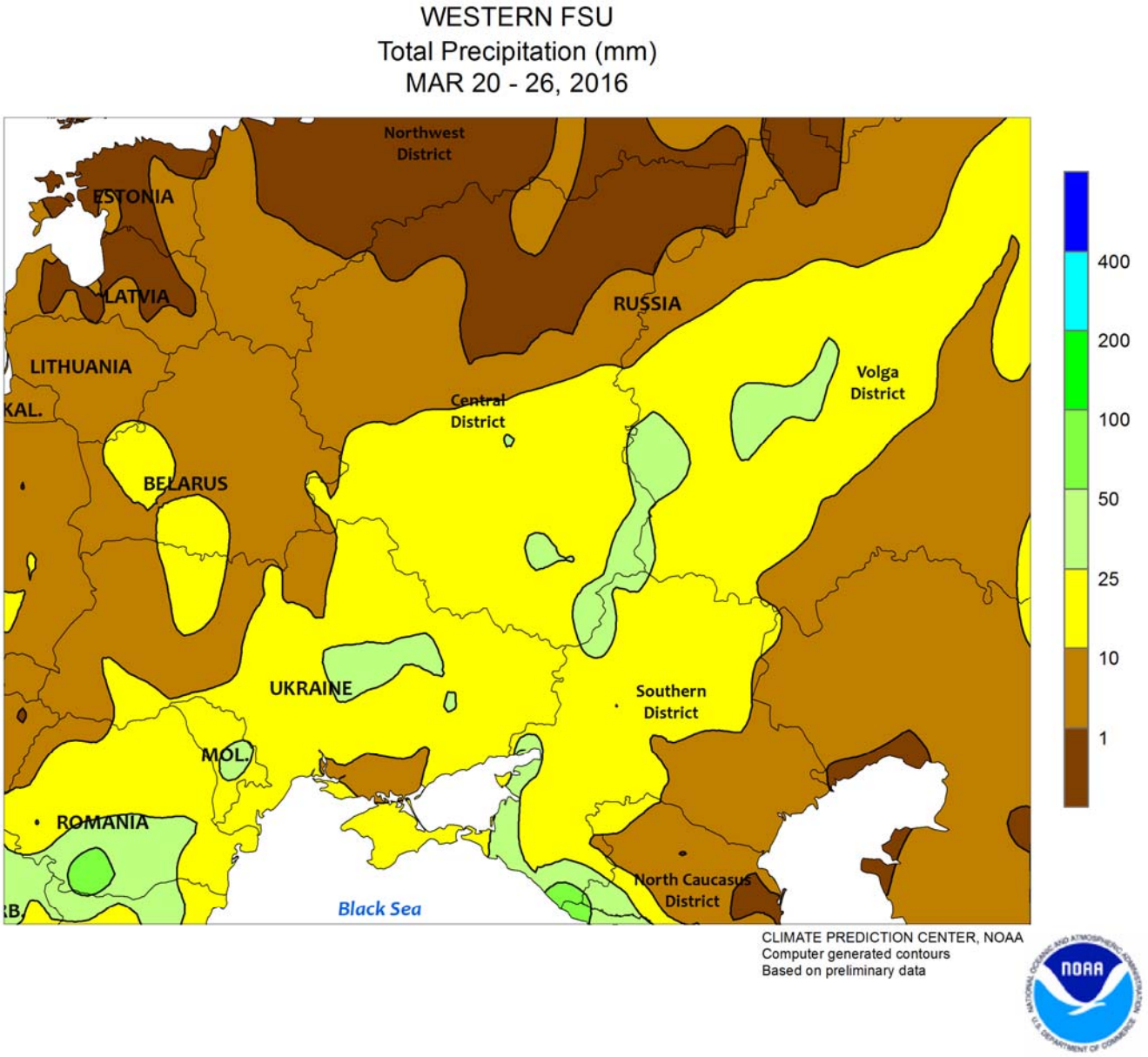


EUROPE

Conditions remained overall favorable for dormant to vegetative winter crops. Sunny skies promoted fieldwork in central and northern Europe for much of the period, though late-week showers (5-25 mm) slowed fieldwork but sustained good moisture reserves for winter grain and oilseed development. Winter crops remained dormant in northeastern Europe, while wheat and rapeseed in northern France and the United Kingdom began to add vegetative growth in response to weekly temperatures averaging between 6 and 8°C. Across Spain and southern Italy, widespread showers (10-25 mm) provided a timely boost to soil moisture for heading winter grains. Moderate to heavy rain (10-50 mm, locally more) in southeastern Europe hampered citrus harvesting along the Mediterranean Coast but maintained abundant moisture supplies for vegetative winter crops across the Danube River Valley. In addition, cooler conditions slowed the recent spell of unseasonably early winter crop development in the Balkans, allowing wheat to retain cold hardiness and avoid detrimental impacts from this week's freeze (-4 to 0°C).

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



WESTERN FSU

Lingering cold was followed by warmer, wetter weather by the end of the period. During the first half of the week, a cold snap (nighttime readings between -10 and -5°C) slowed or halted winter wheat growth from central and southern Ukraine into southwestern Russia. However, even with the early crop development, wheat was not yet far enough advanced to be damaged by the hard freeze. The return of cold weather also sustained a moderate to deep snowpack (10-30 cm) from northern Belarus into Russia's Volga District. Toward week's end, warmer, unsettled conditions (10-30 mm, locally more) returned over primary winter crop areas of Ukraine and southwestern Russia, boosting moisture reserves and allowing wheat in southern-most portions of the region to resume adding vegetative growth.

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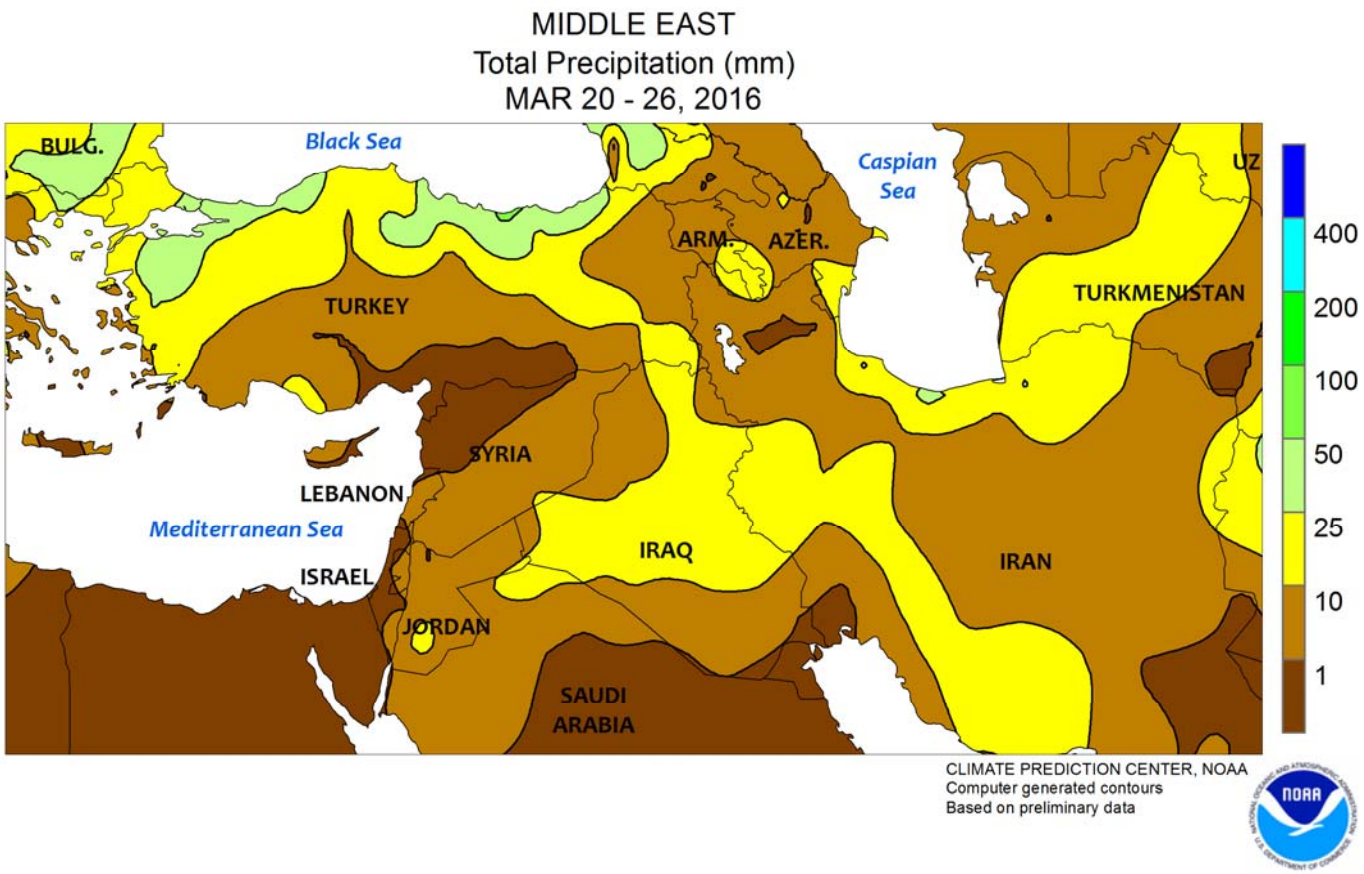
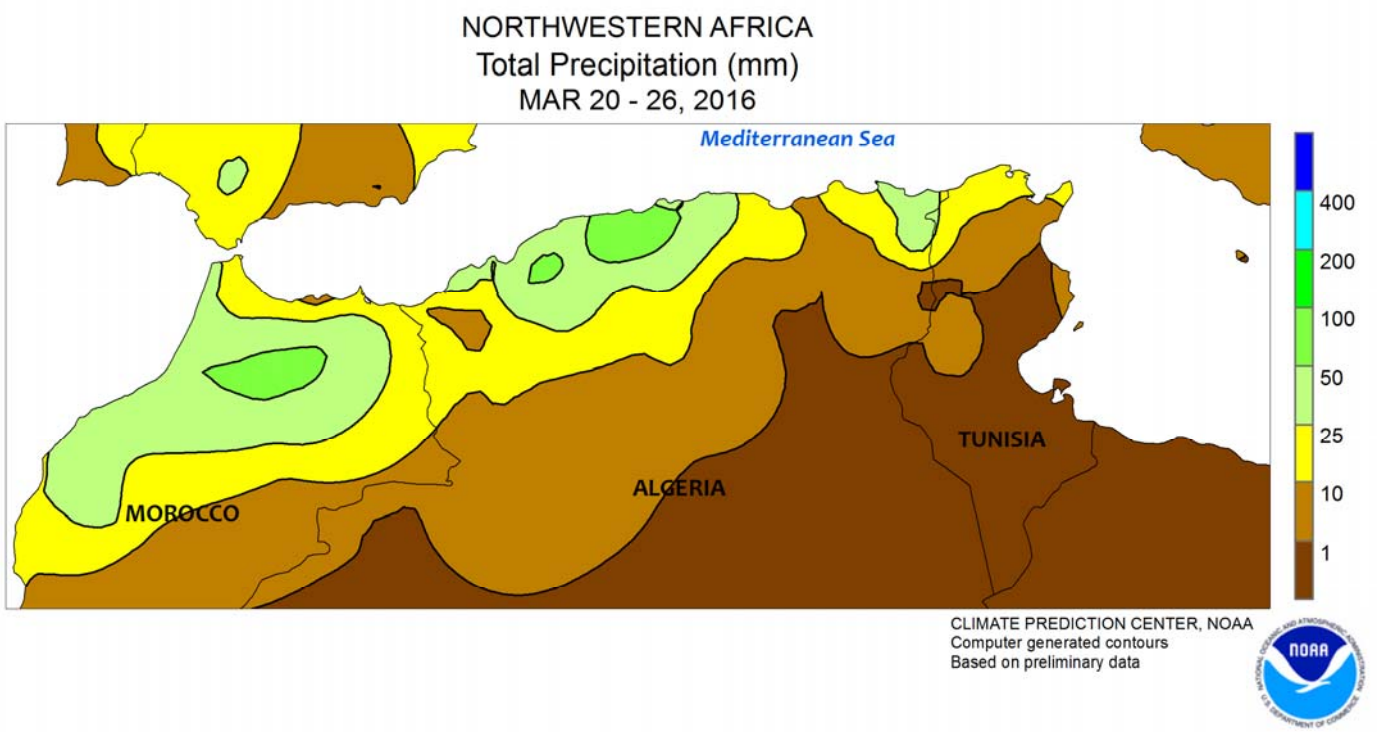


MIDDLE EAST

Following an early-week cold spell, rainy, warmer weather returned. Temperatures during the first half of the week reached as low as -7°C on Turkey's Anatolian Plateau, not cold enough to damage winter wheat that was likely in the latter stages of tillering. Likewise, hard freezes in western Iran did not pose a threat to vegetative winter grains, which were in the early stages of tillering and consequently able to withstand this week's cold snap without any detrimental impacts. Temperatures briefly moderated, with mid-week readings in the upper 10s and lower 20s (degrees C) promoting a return to faster-than-normal crop development in the typically-colder northern growing areas. Meanwhile, increasingly stormy weather resulted in widespread rainfall totals of 10 to 50 mm in Turkey's northern farming areas, sustaining good to excellent moisture supplies. Heavy rain was moving through eastern Turkey and approaching northern Iraq and neighboring portions of Iran at week's end, promising to bring timely moisture for vegetative to heading winter grains (additional information will appear in next week's *Weekly Weather and Crop Bulletin*).

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



NORTHWESTERN AFRICA

Rain was generally too late to benefit drought-afflicted winter grains in Morocco, while conditions in eastern growing areas remained good to excellent. In Morocco, the heaviest rain of the season (20-65 mm) came too late to reverse the impacts of this season's severe drought, with winter wheat already approaching maturity due to the abnormally dry, warm fall and winter. In contrast, another round of timely showers (10-80 mm) sustained good to excellent prospects for heading to flowering winter crops in Algeria and Tunisia.

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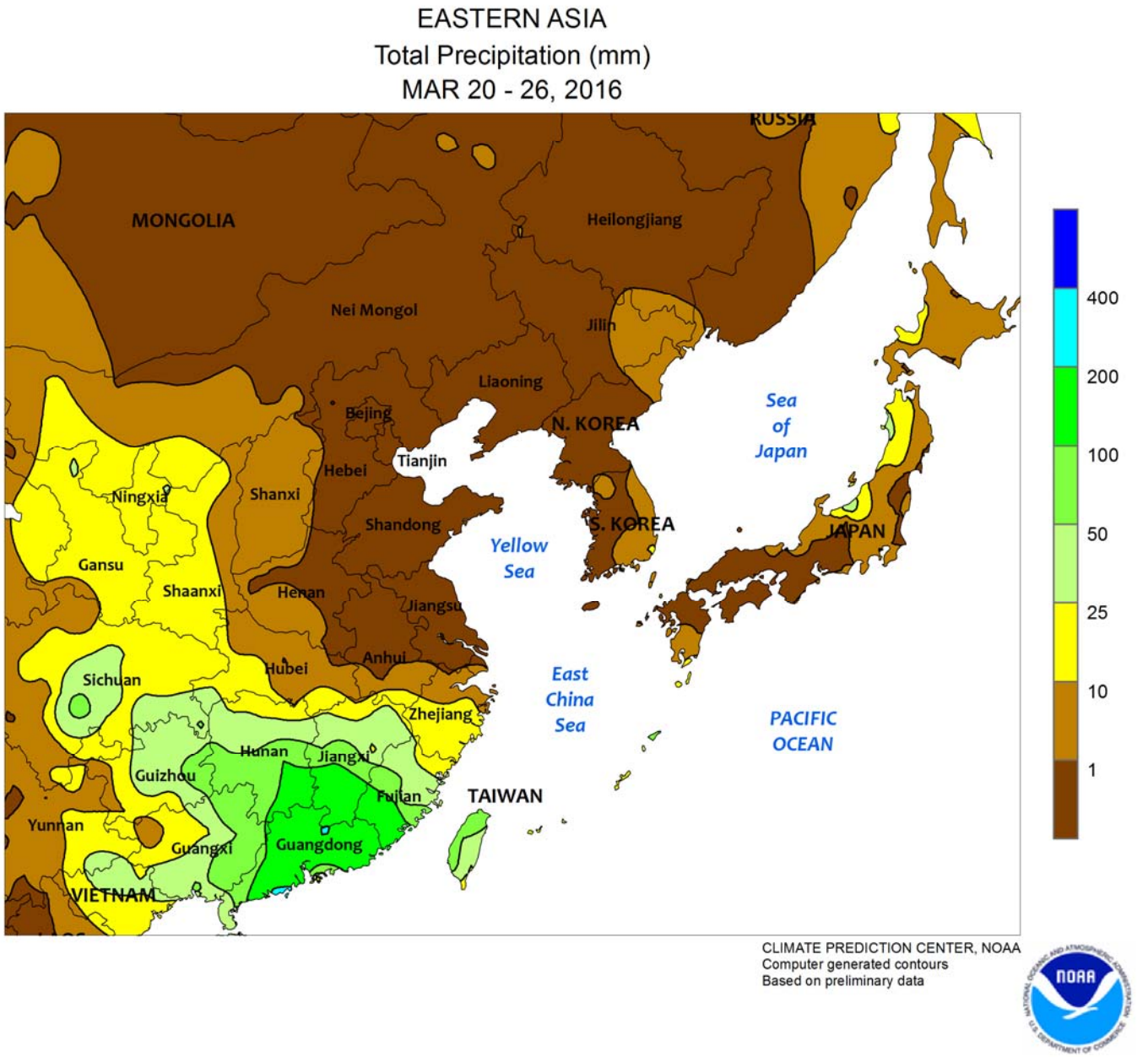

EASTERN ASIA

Showers (25-150 mm or more) in the first half of the week brought more beneficial moisture to early-crop rice in southern China, while also boosting longer-term water supplies for the upcoming summer rice crop. Early-week rainfall also occurred in western sections of the Yangtze Valley, and while amounts were less than those recorded farther south (25-50 mm or more), the moisture was beneficial for winter rapeseed and spring-sown crops as well. Showers were more intermittent and light (less than 10 mm) in the eastern Yangtze Valley, with little if any rain on the North China Plain. Spring moisture has been limited in these areas, and with weekly temperatures consistently averaging 1 to 3°C above normal, supplemental irrigation has been required to ensure good development of wheat and rapeseed.

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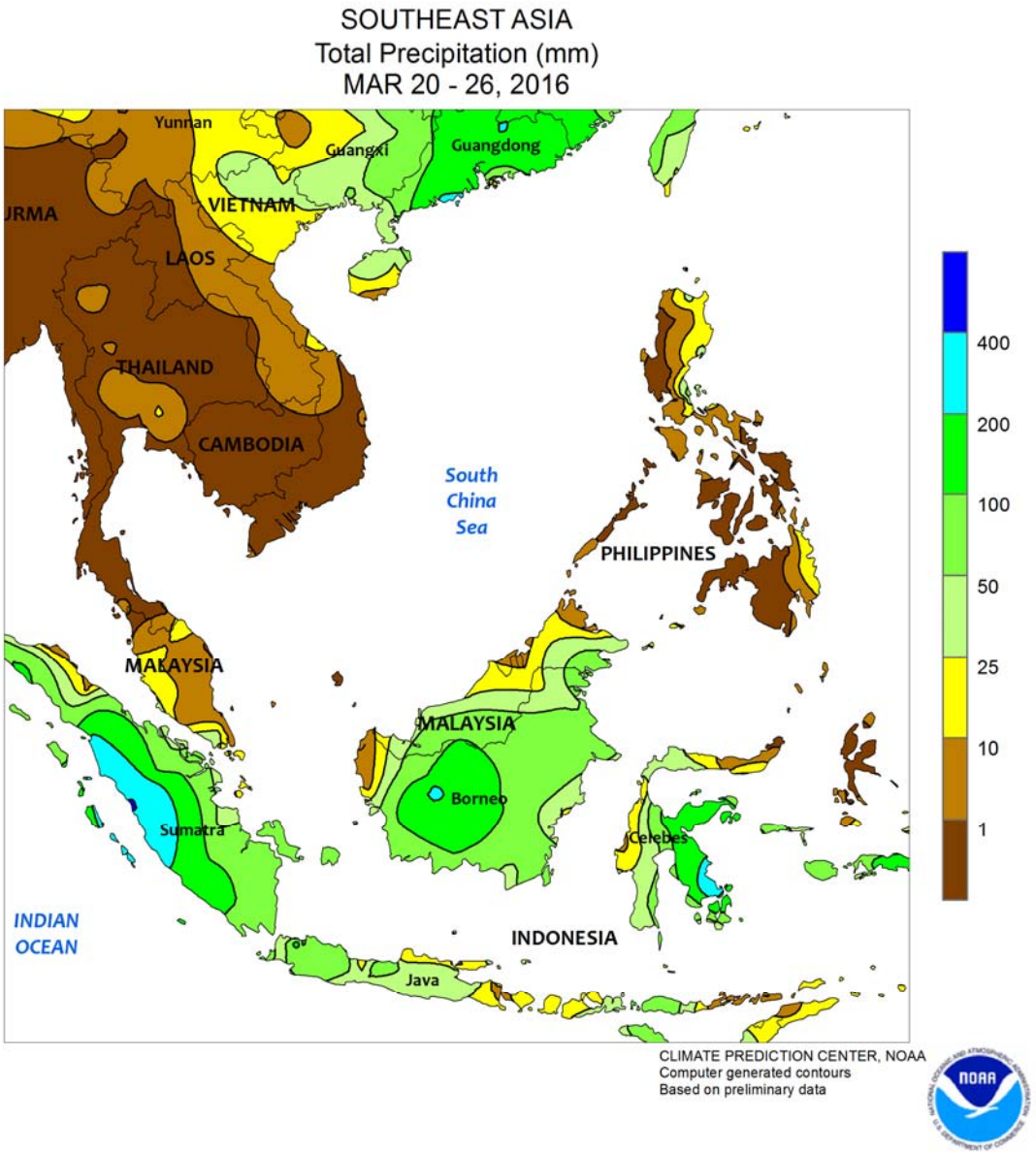

SOUTHEAST ASIA

Monsoon showers continued across much of Indonesia, with over 400 mm reported in western Sumatra. Late-planted rice in western Java continued to benefit from nearly 100 mm of rain, while rainfall was more limited in central Java and almost non-existent in the east. Rice prospects in central and eastern Java continued to be below last year from poor seasonal rain. Oil palm in Indonesia has fared better, with more consistent rainfall over the last few months. In contrast, Malaysia oil palm yields have suffered from below-normal rainfall over the last several months. Meanwhile in the Philippines, mostly dry weather prevailed, with a few localized showers in eastern Luzon and eastern Mindanao. The dry weather aided rice and corn harvesting, but poor winter rainfall has reduced crop prospects as the country enters a seasonally drier time of the year. To the west, spring rice harvesting was nearly half complete in southern Vietnam under warm, dry conditions, while brief periods of rain (nearly 25 mm) in northern Vietnam benefited spring rice planted in January and broke an extended period (since February 1) with little rainfall.

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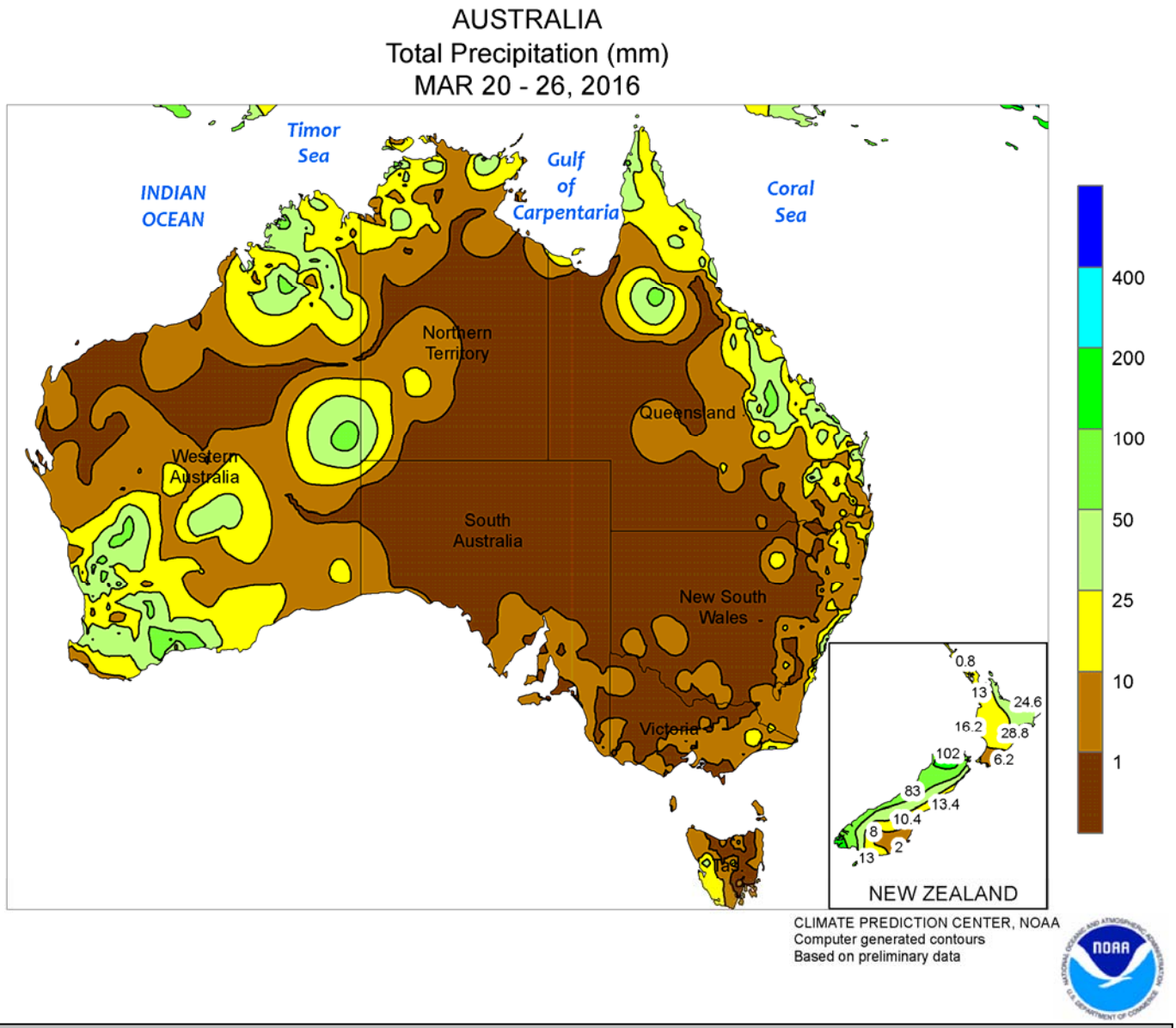
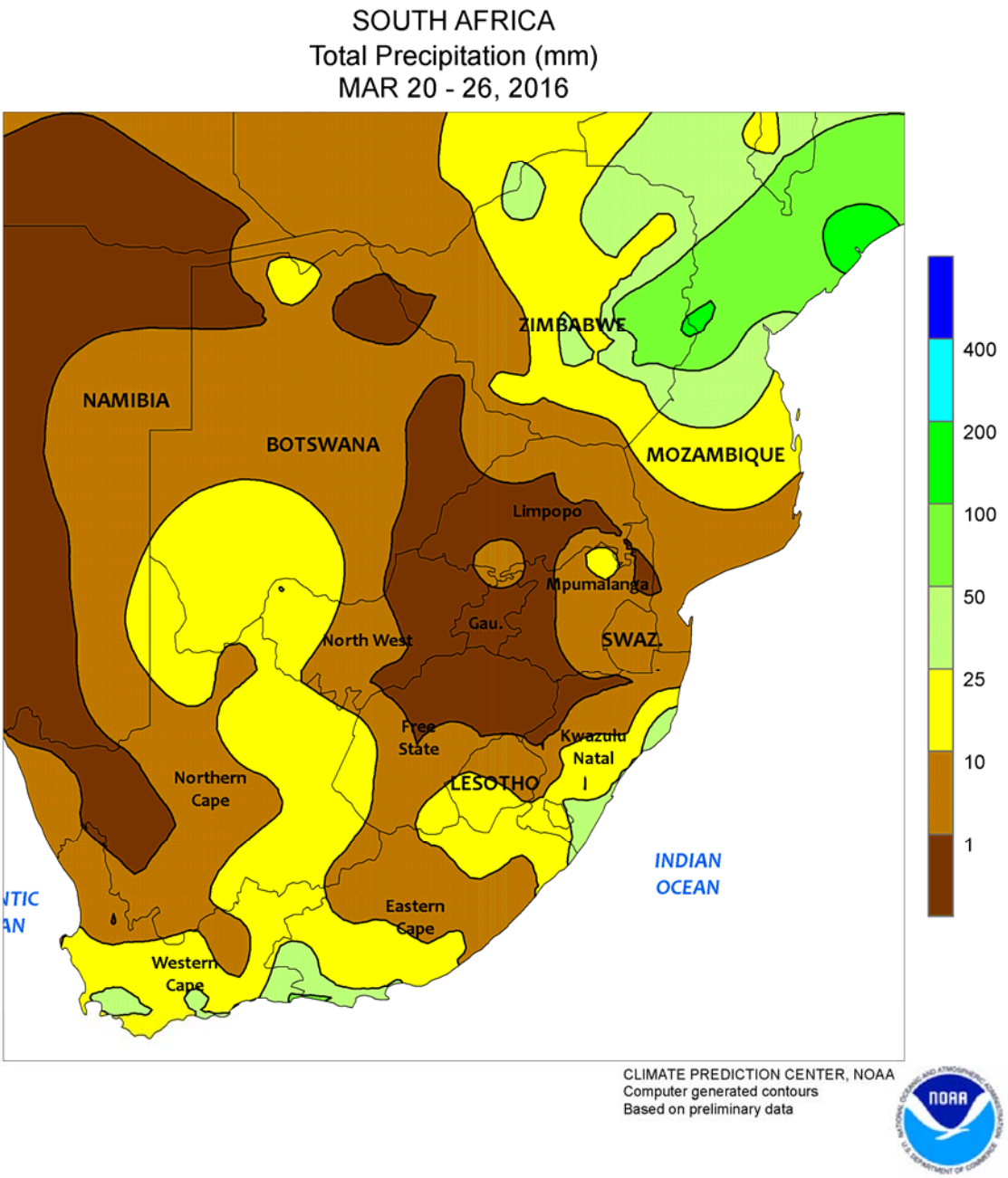


AUSTRALIA

In eastern Australia, dry weather throughout most of the week favored cotton and sorghum maturation and harvesting. Widespread showers (5-25 mm, locally more) overspread southern Queensland at the end of the week, aiding immature summer crops. Many crops have reached maturation, however, constraining the overall boost in yield potential. The rain was relatively short-lived, too, likely causing only brief delays in summer crop harvesting. In northern New South Wales, widely scattered, generally light showers late in the week had little impact on summer crop maturation and harvesting. Following several weeks of warmer-than-normal weather, temperatures were generally seasonable in eastern Australia, with maximum temperatures mostly in the upper 20s and lower 30s degrees C.

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



SOUTH AFRICA

Following last week's beneficial rain, dry weather dominated the corn belt. Virtually no rain fell over a broad region extending from Free State and North West to Limpopo. While the sunny weather would typically be welcomed for maturation of summer crops, additional rain was needed in western production areas for exceptionally late-planted corn. Cooler weather accompanied the dryness; although daytime highs continued to reach the 30s (degrees C) in western and northern production areas, nighttime lows occasionally fell below 10°C with the continuation of seasonal cooling. Elsewhere, lingering showers (rainfall totaling 10 to 50 mm) provided additional moisture for rain-fed sugarcane in southern KwaZulu-Natal. Drier conditions prevailed in irrigated production areas of northern KwaZulu-Natal and eastern Mpumalanga, where daytime highs reached the middle 30s. Sugarcane harvesting typically begins in April, making the warmth and dryness timely. In contrast, unseasonable rain (10-50 mm) swept across the Cape Provinces, slowing autumn fieldwork.

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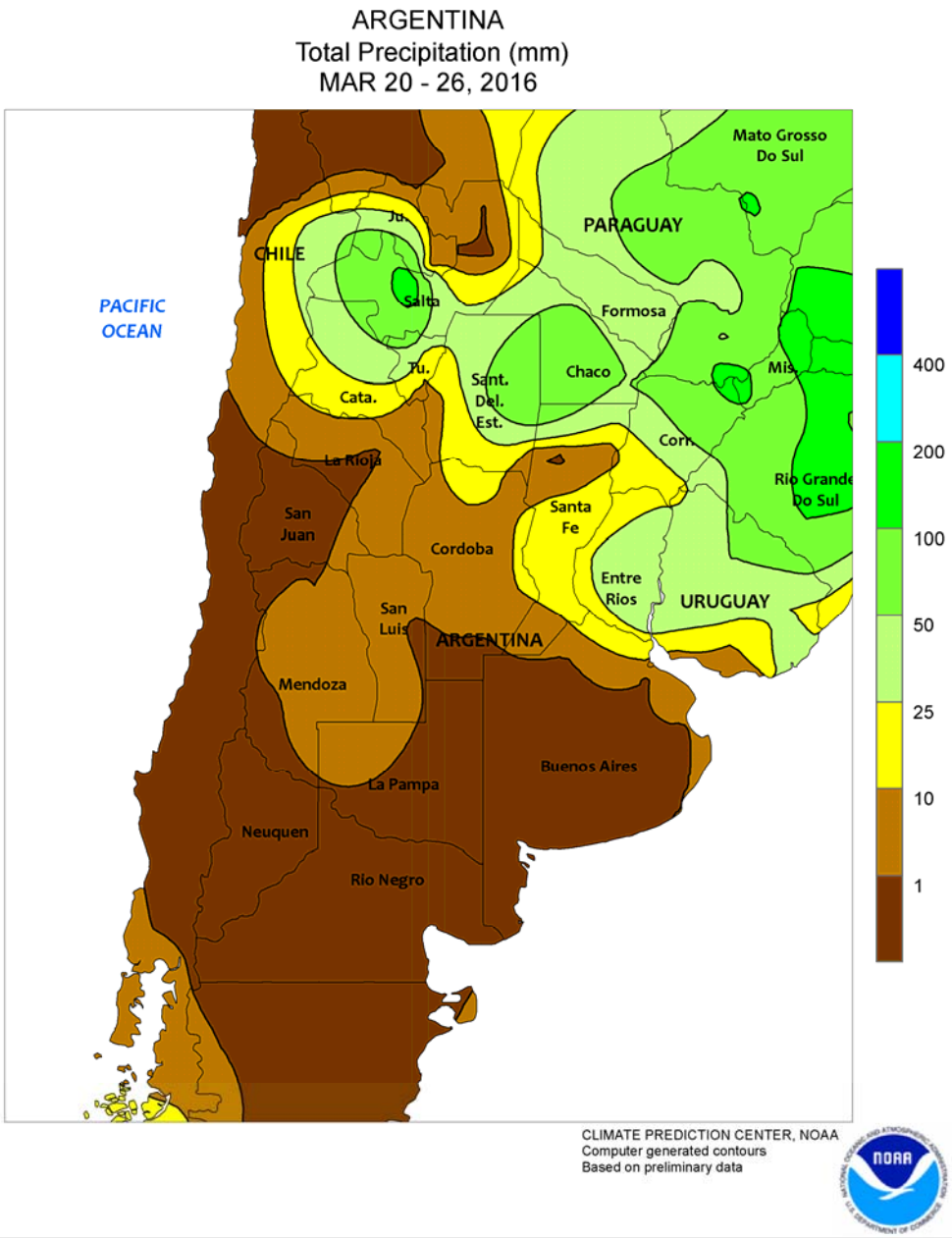

ARGENTINA

Cool, mostly dry weather promoted summer grain and oilseed harvesting in central Argentina. Showers (10-50 mm) lingered early in the week over Entre Rios, Santa Fe, and neighboring locations in eastern Cordoba and northern Buenos Aires as rain from an earlier storm exited the region; otherwise, little to no rain over the remainder of the region. Weekly average temperatures were 1 to 2°C below normal following the front's passage, with nighttime lows dipping below 5°C in traditionally cooler locations of southeastern Buenos Aires. Unseasonably mild weather also prevailed across Argentina's northern agricultural areas, with weekly temperatures averaging 2 to 3°C below normal as daytime highs generally failed to reach 30°C. Rainfall was variable, totaling 5 to 50 mm across the region both from the early-week storm affecting the south and a new storm system later in the week. According to Argentina's Ministry of Agriculture, sunflowers were 79 percent harvested as of March 23, slightly behind last year's pace. Harvesting was 65 percent complete in Buenos Aires — the country's largest producer — versus 72 percent last year. In addition, harvesting of early-planted corn and soybeans was reportedly underway.

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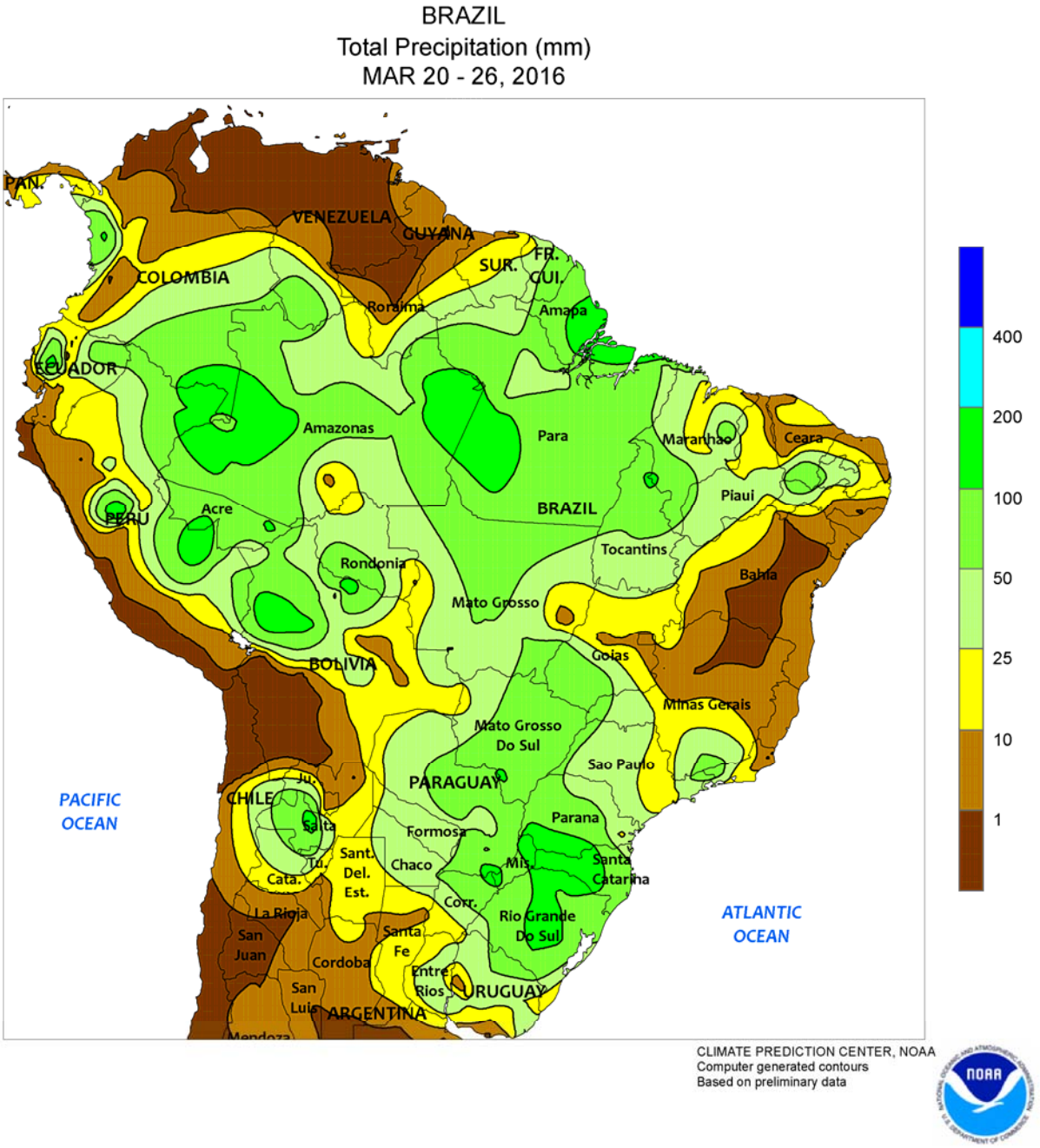

BRAZIL

Beneficial rain maintained overall favorable conditions for second-crop corn in key production areas of central and southern Brazil. Rainfall totaled more than 25 mm over a large area extending from Mato Grosso to Rio Grande do Sul, with the heaviest rainfall (more than 100 mm) concentrated over southern Parana, Santa Catarina, and northern Rio Grande do Sul. The moisture extended into the northeastern interior (Tocantins, Maranhao, Piaui, and northern sections of western Bahia) but drier weather (rainfall totaling less than 25 mm) extended westward across southern Bahia and northern Minas Gerais into Goias. Showers were more patchy in nature in the southeast (Sao Paulo and southern Minas Gerais), with amounts totaling 10 to 50 mm giving a late-season boost to sugarcane and coffee. Warmer-than-normal weather (weekly temperatures averaging 2-4°C above normal with daytime highs reaching the middle and upper 30s degrees C) dominated the aforementioned areas, aiding drydown and harvesting of soybeans and other main-season summer crops while spurring development of secondary crops. Weekly temperatures generally averaged within 2°C of normal in the south (daytime highs reaching 35°C in northern parts of the region), fostering growth of second-crop corn in the absence of stressful temperatures.

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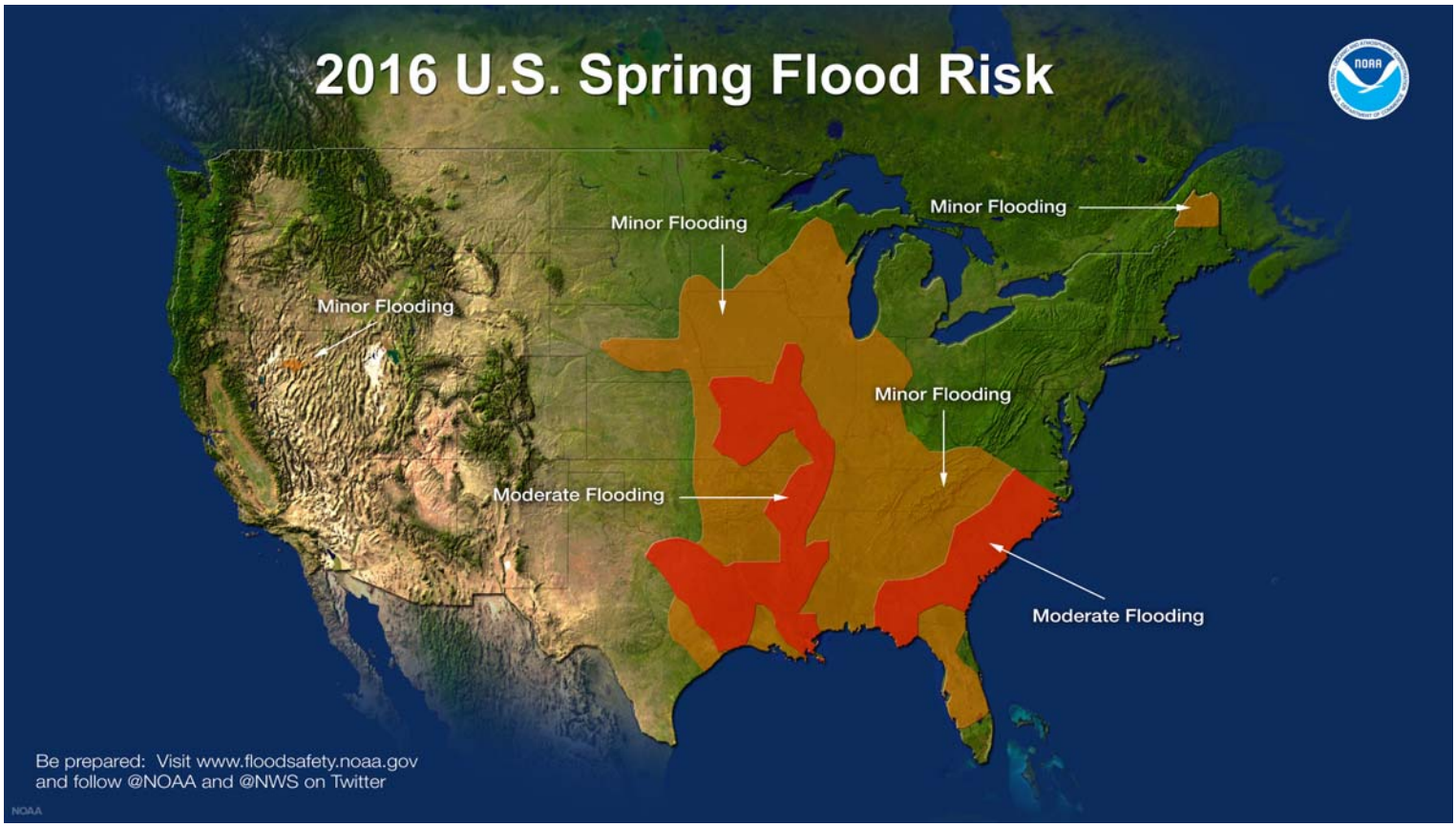

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