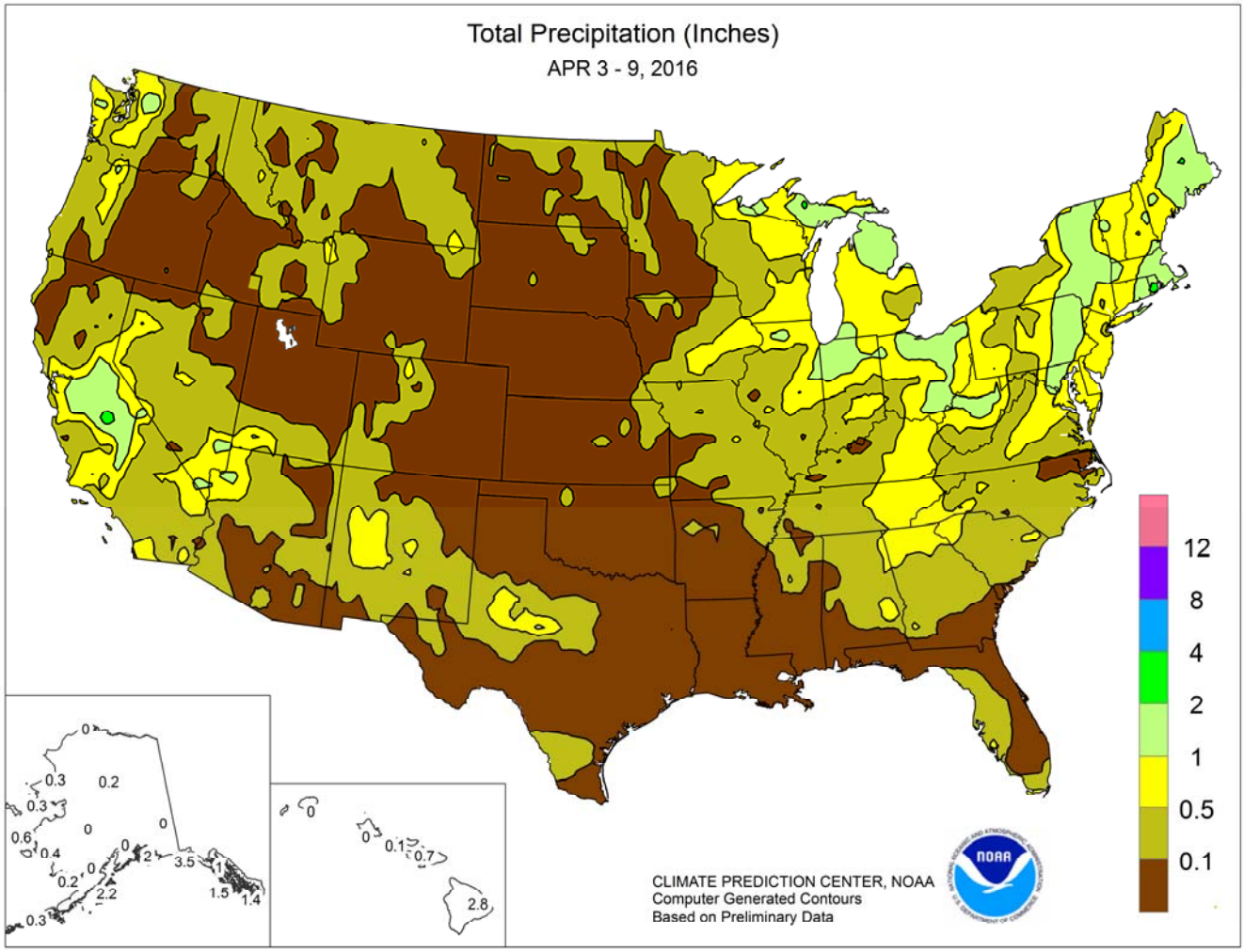
Volume 103, No. 15 http://www.usda.gov/oce/weather April 12, 2016

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

April 3 – 9, 2016

Highlights provided by USDA/WAOB

Beneath a ridge of high pressure, warm, dry weather dominated the **western half of the U.S.**, although scattered, early-week showers dotted the **Northwest**. Late in the week, however, cloudiness and rain showers spread northward across the **West**, with parts of **central California** receiving more than an inch. Similarly, warm, dry weather covered much of the **nation's mid-section**. A few rain and snow showers occurred during the first half of the week across the **northern Plains**, followed by some late-week rainfall in parts of **Texas**. In the driest areas of

(Continued on page 3)

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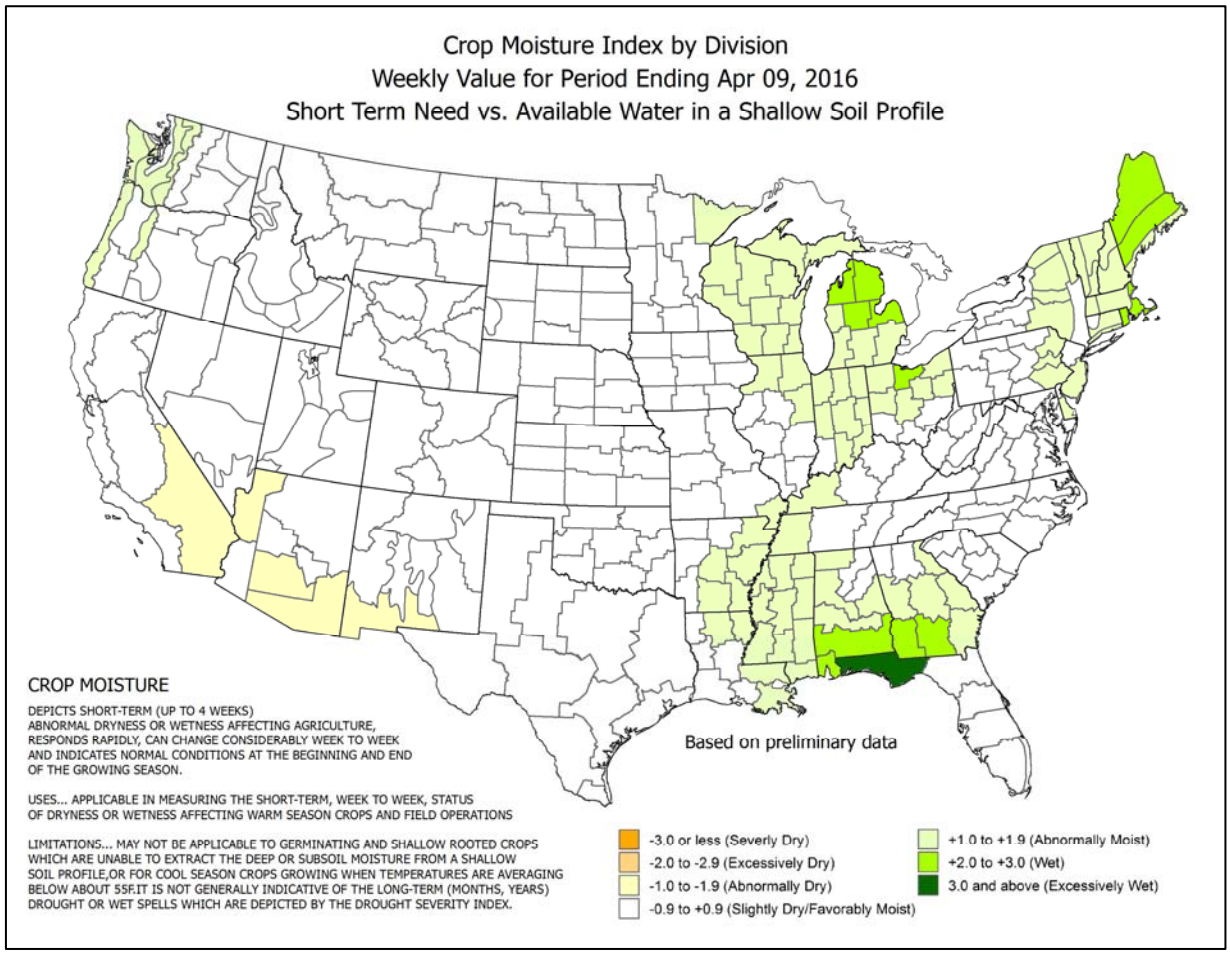
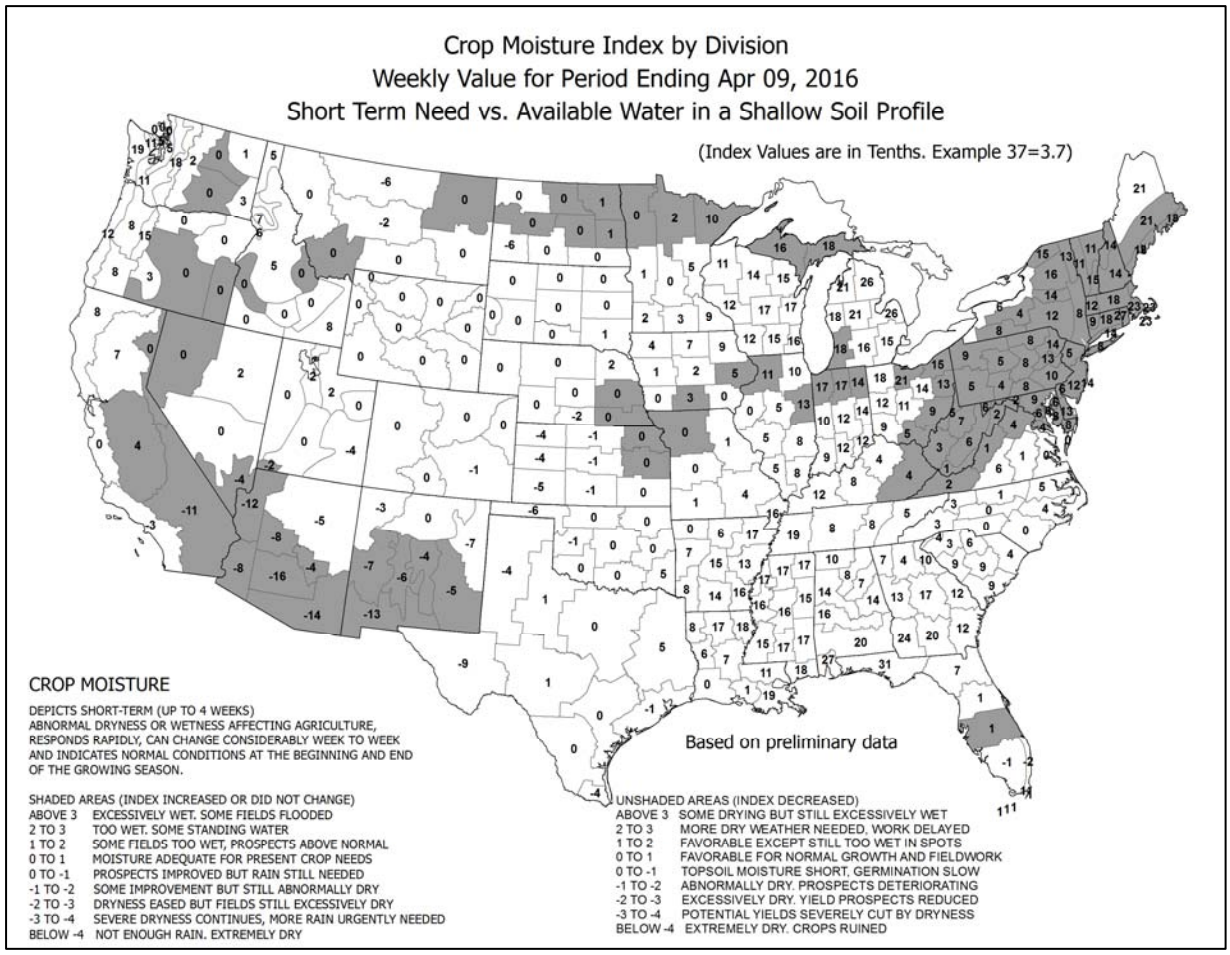
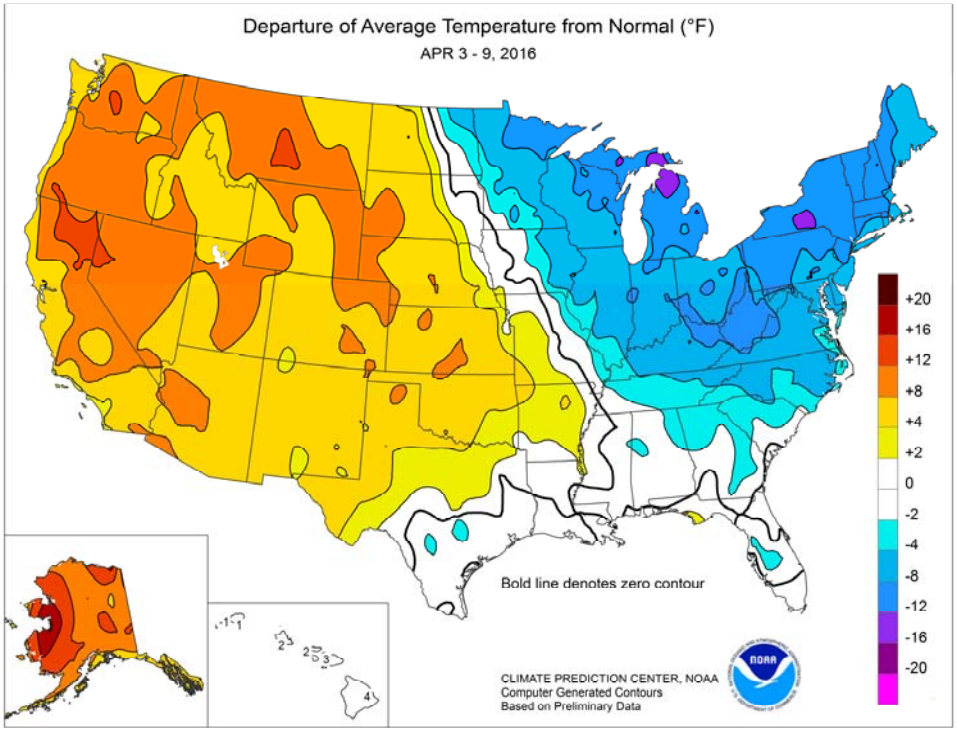

Crop Moisture Index by Division
Weekly Value for Period Ending Apr 09, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)


Crop Moisture Index by Division
Weekly Value for Period Ending Apr 09, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. EXTREMELY DRY
Based on preliminary data
UNSHADED AREAS (INDEX DECREASED)
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. CROPS RUINED

(Continued from front cover)

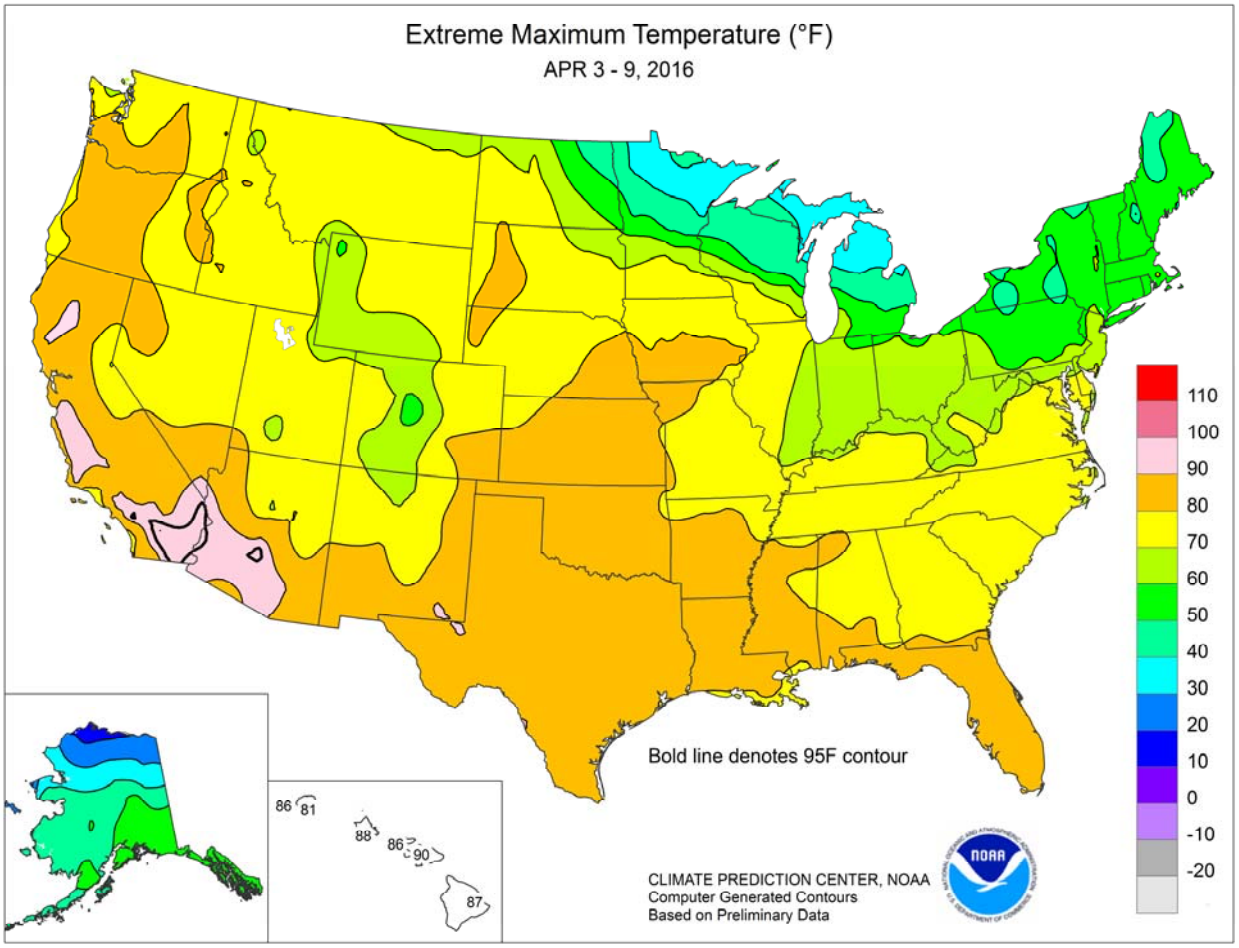
the **Plains**, numerous wildfires flared under warm, dry, windy conditions. In **northern Oklahoma**, the "350 Complex" scorched 57,440 acres of grass, brush, and timber, starting on April 5. Mostly dry weather also prevailed across the **Deep South**, but several rounds of rain and snow showers crossed the **Midwest** and **Northeast**. Rain briefly reached into the **Southeast**, mainly on April 6-7. At times, significant, late-season snow blanketed portions of the **Great Lakes and Northeastern States**. The surges of cold air that dominated the **Midwestern, Northeastern, and Mid-Atlantic States** held weekly temperatures more than 10°F below normal in a few locations. In fact, widespread freezes occurred across the **Midwestern and Mid-Atlantic States**, primarily on April 5-6. Although the freezes were not unusually late, based on climatology, accelerated crop development due to March warmth raised concerns for some fruits and ornamentals. In stark contrast, warmth stretched from the **Pacific Coast to the High Plains**. Weekly readings averaged at least 10°F above normal across parts of **northern California** and the **northern High Plains**.

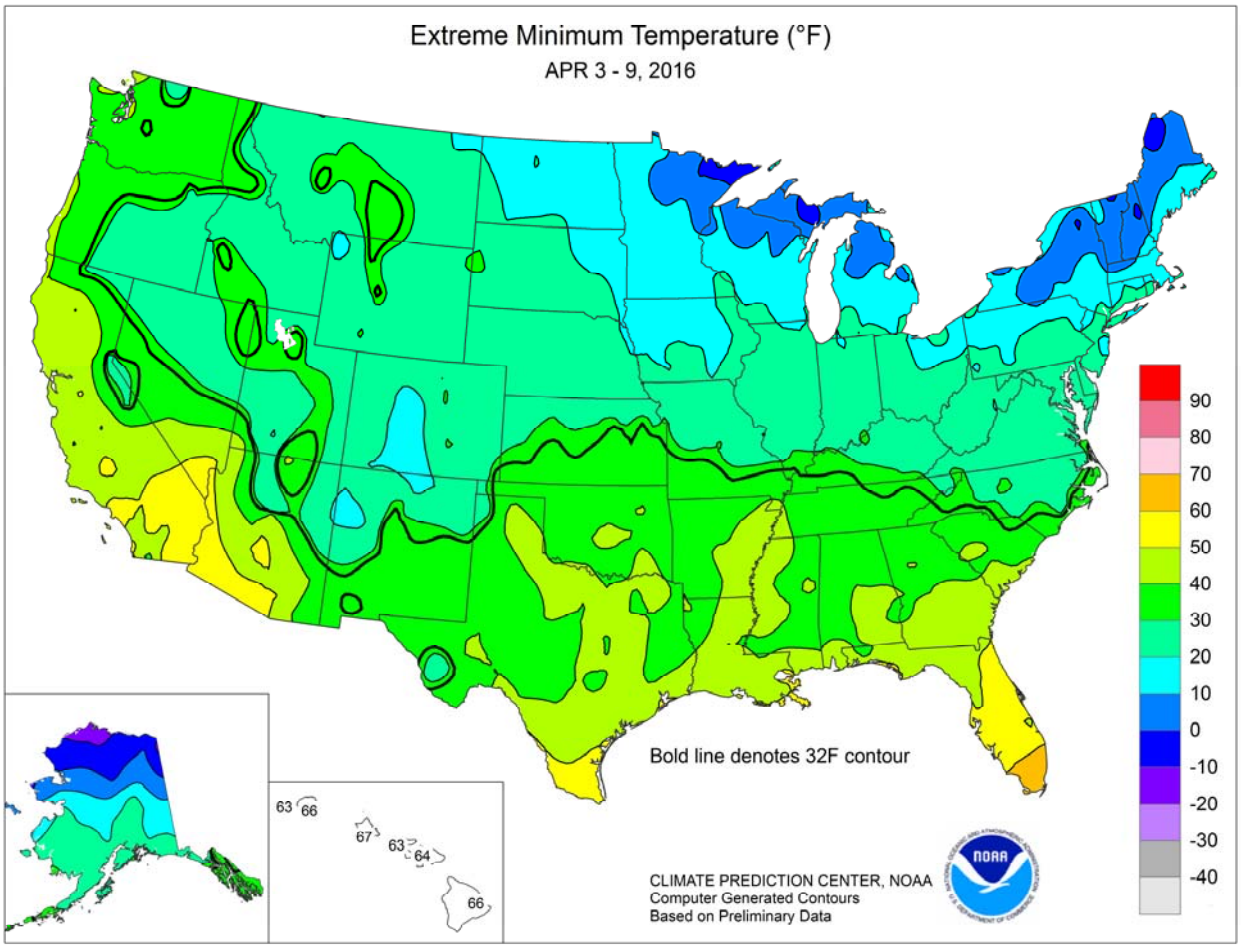


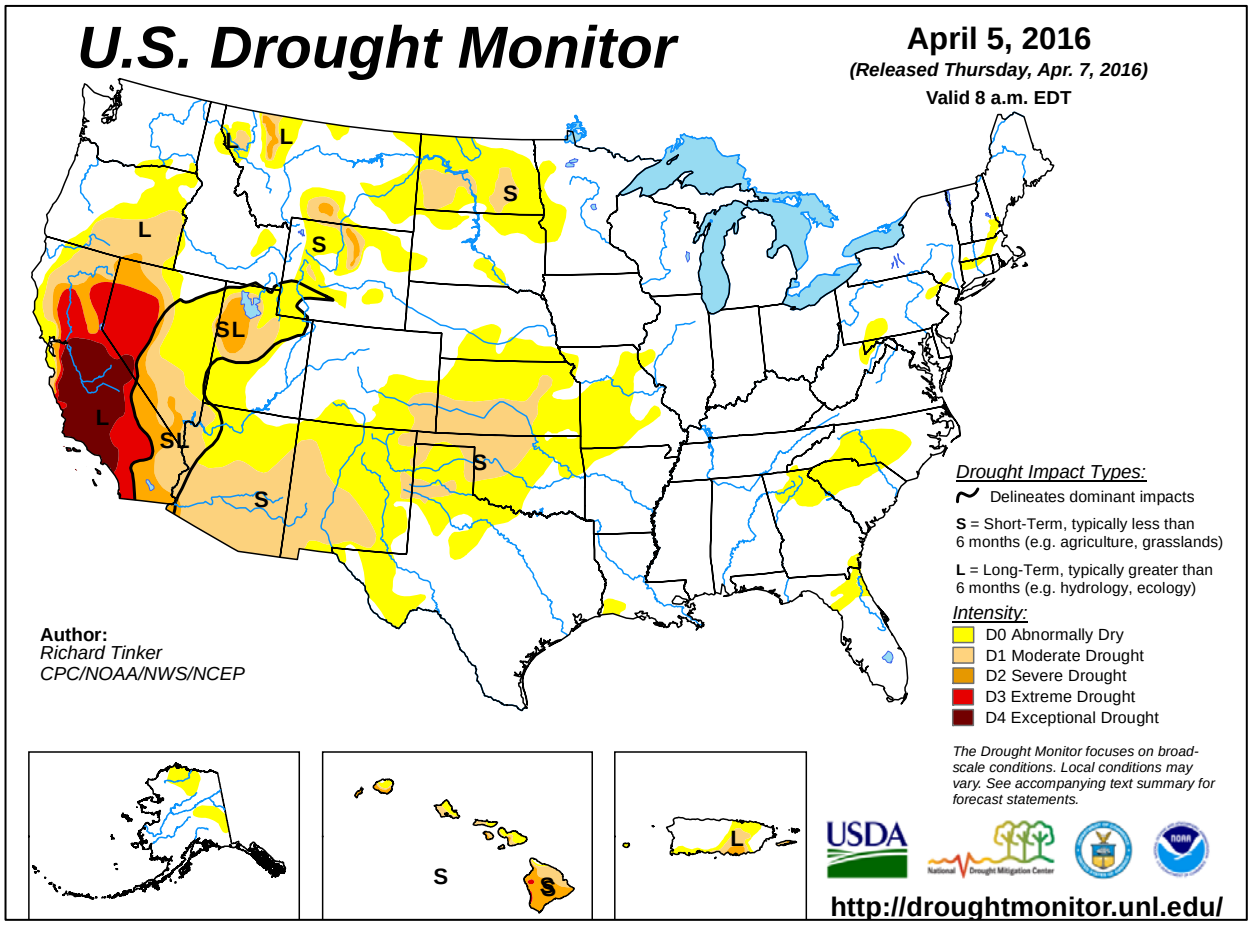
Warmth briefly overspread the **Midwest** in advance of a strong cold front. On April 3, **Cedar Rapids, IA**, notched a daily-record high of 81°F. By April 5, however, **Marquette, MI**, tallied a daily-record low of -7°F. Elsewhere on the 5th, **Northeastern** daily-record lows plunged to 4°F in **Concord, NH**, and 7°F in **Glens Falls, NY**. **Concord** also set a monthly record, previously set with a low of 7°F on April 1, 1874. On April 6, hard freezes were reported deep into the **Mid-Atlantic region**, where daily-record lows dipped to 22°F in **Atlantic City, NJ**; 24°F in **Baltimore, MD**; 25°F in **Danville, VA**; and 28°F in **Elizabeth City, NC**. At week's end, another surge of cold air into the **Midwest** resulted in record-setting lows for April 9 in locations such as **Duluth, MN** (2°F); **St. Cloud, MN** (13°F); and **Ottumwa, IA** (18°F). Farther west, however, warmth dominated areas from the **Pacific Northwest to the northern High Plains**. On April 4, daily-record highs in **Montana** climbed to 74°F in **Havre** and 72°F in **Lewistown**. (**Lewistown** notched another daily-record high, 75°F, on April 8.) Elsewhere in **Montana**, **Bozeman** clocked a wind gust to 65 mph on April 4, tying an April record and marking the highest gust in that location since April 23, 2012. By April 5, the day of the 350 Complex ignition, warmth briefly overspread the **central and southern Plains**. Daily-record highs for April 5 reached 85°F in **Chanute, KS**, and 84°F in **Clayton, NM**. During the mid- to late-week period, warmth dominated **northern California** the **Northwest**. In **California**, daily-record highs for April 6 soared to 93°F in **Redding** and **Gilroy**. The following day in **Oregon**, daily-record highs attained 91°F in **Roseburg** and **Medford**. **Roseburg** just missed its monthly record, most recently achieved with a high of 92°F on April 30, 2014. **Medford**, which noted three consecutive daily-record highs (89, 91, and 83°F) from April 6-8, also reported its earliest occurrence of 90-degree heat (previously, 90°F on April 13, 1947). Several **Northwestern** locations, including **Yakima, WA** (86 and 85°F), and **Choteau, MT** (80 and 78°F), closed the week with consecutive daily-record highs on April 8-9.

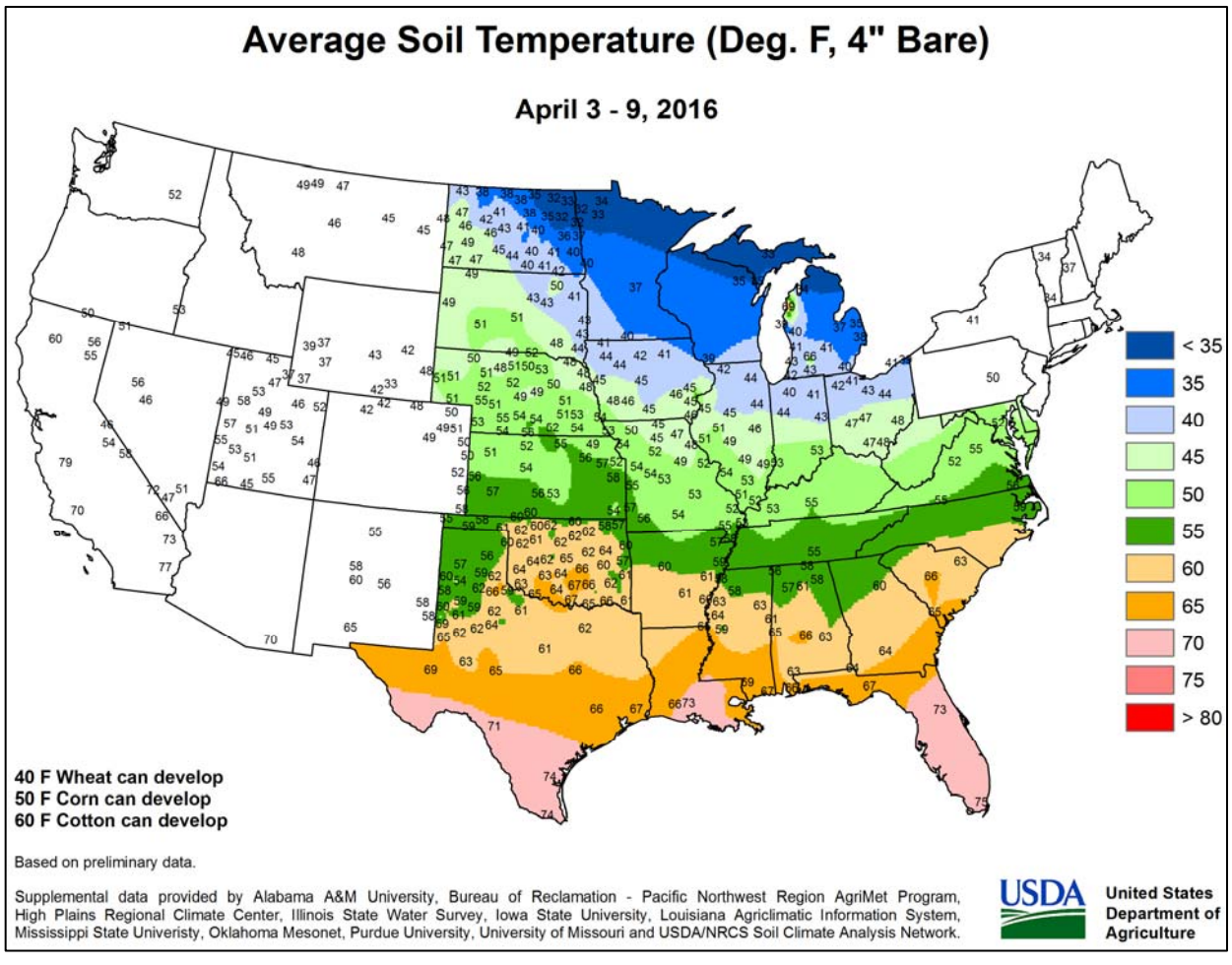
On April 3-4, snow blanketed portions of the **Great Lakes and Northeastern States**. Record-setting snowfall totals for April 3 reached 7.2 inches in **Marquette, MI**; 6.6 inches in **Syracuse, NY**; and 2.2 inches in **Scranton, PA**. During the first 9 days of April, **Marquette's** snowfall totaled 37.9 inches. Daily-record amounts for April 4 totaled 5.9 inches in **Providence, RI**; 4.7 inches in **Boston, MA**; and 4.3 inches in **Albany, NY**. At mid-week, another round of snow fell in **northern Michigan**, while rain spread from the **Midwest into the East**. **Rockford, IL**, netted a daily-record rainfall (1.08 inches on April 6), while daily-record snowfall totals in **Michigan** included 8.9 inches in **Marquette** and 8.1 inches in **Alpena**. In the **Northeast**, precipitation records for April 7 totaled 1.39 inches in **Bangor, ME**, and 1.34 inches in **Scranton, PA**. Snow lingered across the **Great Lakes region**, where daily snowfall records included 5.4 inches (on April 8) in **Grand Rapids, MI**; 2.3 inches (on April 9) in **South Bend, IN**; and 1.8 inches (on April 8) in **Madison, WI**. Meanwhile, locally heavy showers spread northward from **southern California** and the **Desert Southwest**. Record-breaking rainfall totals for April 8 reached 0.48 inch in **Kingman, AZ**, and 0.34 inch in **Thermal, CA**. With a 0.81-inch total on the 9th, **Las Vegas, NV**, experienced its third-wettest April day (behind 0.97 inch on April 12, 1965, and 0.88 inch on April 11, 1941), while nearby **North Las Vegas** received 1.69 inches. Other daily-record amounts for April 9 included 0.71 inch in **Bishop, CA**, and 0.58 inch in **Reno, NV**.

Warmer-than-normal weather continued to dominate **Alaska**, with weekly temperatures averaging 10 to 20°F above normal across the western part of the state. Among the numerous daily-record highs were readings of 59°F (on April 7) on **Annette Island**; 54°F (on April 9) in **King Salmon**; and 51°F (on April 6) in **McGrath**. **Anchorage** posted consecutive daily-record highs (53 and 51°F, respectively) on April 7-8. Meanwhile, precipitation fell in many parts of **Alaska**, although the highest totals were limited to the state's southern tier. Nevertheless, daily-record totals for both precipitation and snowfall were set on April 3 in locations such as **Kotzebue** (0.18 inch, including 4.6 inches of snow) and **Fairbanks** (0.12 inch, including 2.3 inches of snow). Farther south, most of **Hawaii** experienced very warm, dry weather, although some windward locations received locally heavy showers. Daily-record highs included 90°F (on April 4) in **Kahului, Maui**, and 88°F (on April 5) in **Honolulu, Oahu**. On the **Big Island**, **Hilo** netted 2.13 inches of rain on April 6-7, but still had a month-to-date deficit (2.81 inches, or 73 percent of normal). Elsewhere, April 1-9 totals included 0.02 inch (7 percent of normal) in **Honolulu, Oahu**, and 0.04 inch (5 percent) in **Lihue, Kauai**.


Extreme Maximum Temperature (°F)
APR 3 - 9, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
86
81
88
86
90
87
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
APR 3 - 9, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
63
66
67
63
64
66
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


U.S. Drought Monitor
April 5, 2016
(Released Thursday, Apr. 7, 2016)
Valid 8 a.m. EDT
Author:
Richard Tinker
CPC/NOAA/NWS/NCEP
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)
April 3 - 9, 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.
USDA
United States Department of Agriculture

National Weather Data for Selected Cities

Weather Data for the Week Ending April 9, 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	72	46	79	40	59	0	0.37	-0.81	0.37	6.35	83	17.09	99	86	24	0	0	1	0
	HUNTSVILLE	69	43	80	40	56	-2	0.15	-1.01	0.15	4.63	56	14.58	78	74	37	0	0	1	0
	MOBILE	78	49	82	40	63	-1	0.00	-1.28	0.00	12.58	142	22.03	112	93	34	0	0	0	0
	MONTGOMERY	76	48	79	43	62	0	0.46	-0.66	0.44	5.43	69	16.09	88	79	26	0	0	2	0
AK	ANCHORAGE	49	32	53	29	41	9	0.00	-0.11	0.00	1.23	156	1.81	82	81	62	0	4	0	0
	BARROW	7	-2	11	-17	2	9	0.02	0.02	0.02	0.06	67	1.22	370	87	76	0	7	1	0
	FAIRBANKS	49	28	54	24	39	15	0.07	0.04	0.07	0.59	184	0.65	52	80	61	0	7	1	0
	JUNEAU	50	38	54	34	44	6	0.95	0.31	0.40	3.34	77	13.13	100	92	80	0	0	5	0
	KODIAK	46	36	49	29	41	6	2.18	0.99	0.82	9.79	145	33.08	160	94	82	0	1	7	2
	NOME	36	22	43	10	29	15	0.33	0.19	0.26	0.74	95	1.76	72	91	75	0	7	3	0
AZ	FLAGSTAFF	62	31	67	22	47	6	0.48	0.13	0.48	0.85	28	4.63	59	68	21	0	4	1	0
	PHOENIX	89	63	97	59	76	9	0.25	0.16	0.25	0.25	21	1.56	56	38	20	4	0	1	0
	PRESCOTT	73	42	81	37	57	9	0.57	0.37	0.57	0.73	33	2.21	39	57	15	0	0	1	1
	TUCSON	86	56	94	50	71	8	0.26	0.20	0.24	0.37	42	2.08	75	38	19	2	0	2	0
AR	FORT SMITH	78	45	84	39	61	3	0.11	-0.74	0.11	5.42	108	7.57	76	73	20	0	0	1	0
	LITTLE ROCK	75	49	83	44	62	4	0.06	-1.20	0.06	12.39	191	18.08	135	73	27	0	0	1	0
CA	BAKERSFIELD	82	58	91	54	70	10	0.68	0.51	0.36	1.13	69	3.26	81	70	37	1	0	3	0
	FRESNO	79	56	87	52	68	9	0.95	0.67	0.87	3.88	150	8.63	126	82	52	0	0	2	1
	LOS ANGELES	68	57	75	53	62	2	0.31	0.07	0.14	1.77	65	5.44	62	89	69	0	0	3	0
	REDDING	82	56	93	51	69	14	0.20	-0.54	0.20	10.56	172	24.15	133	65	40	2	0	1	0
	SACRAMENTO	76	53	88	49	65	8	0.19	-0.15	0.17	5.26	161	11.52	108	85	43	0	0	2	0
	SAN DIEGO	70	58	76	56	64	2	0.38	0.08	0.31	1.14	43	4.40	63	86	65	0	0	3	0
	SAN FRANCISCO	71	55	86	50	63	8	0.50	0.09	0.26	5.64	148	12.07	98	90	68	0	0	2	0
	STOCKTON	79	52	89	46	65	7	1.34	1.03	1.27	4.89	182	10.28	131	84	56	0	0	2	1
CO	ALAMOSA	65	23	69	14	44	6	0.00	-0.11	0.00	0.52	87	1.50	142	71	23	0	7	0	0
	CO SPRINGS	69	35	73	27	52	10	0.01	-0.30	0.01	1.74	119	3.28	157	55	13	0	2	1	0
	DENVER INTL	69	36	72	30	52	9	0.00	-0.14	0.00	1.90	178	2.88	188	54	20	0	1	0	0
	GRAND JUNCTION	68	37	75	28	53	5	0.27	0.08	0.27	1.34	107	2.71	115	63	30	0	2	1	0
	PUEBLO	77	36	81	31	56	9	0.00	-0.27	0.00	0.58	44	1.45	76	47	17	0	1	0	0
CT	BRIDGEPORT	47	33	57	26	40	-5	1.21	0.26	0.53	3.88	72	11.04	92	69	50	0	4	3	1
	HARTFORD	44	27	58	20	35	-10	1.11	0.22	0.41	3.50	70	10.33	87	71	47	0	6	3	0
DC	WASHINGTON	57	37	74	30	47	-6	0.96	0.32	0.70	2.27	51	8.74	85	70	35	0	2	3	1
DE	WILMINGTON	52	35	67	29	43	-6	0.90	0.12	0.40	3.16	63	9.88	88	77	34	0	3	3	0
FL	DAYTONA BEACH	78	57	87	52	68	1	0.00	-0.73	0.00	1.50	31	12.21	114	88	33	0	0	0	0
	JACKSONVILLE	78	53	83	48	66	1	0.04	-0.78	0.04	3.22	65	10.87	92	88	33	0	0	1	0
	KEY WEST	79	71	81	68	75	-1	0.25	-0.22	0.22	0.55	22	7.63	123	88	63	0	0	2	0
	MIAMI	83	68	85	65	75	0	0.11	-0.65	0.10	0.76	22	11.18	150	83	45	0	0	2	0
	ORLANDO	81	58	86	56	70	0	0.10	-0.58	0.08	5.82	131	13.16	143	82	34	0	0	2	0
	PENSACOLA	76	58	83	50	67	2	0.00	-1.12	0.00	7.65	97	16.30	91	75	34	0	0	0	0
	TALLAHASSEE	80	50	83	43	65	1	0.03	-1.01	0.03	10.39	132	19.08	107	83	27	0	0	1	0
	TAMPA	79	62	83	58	71	1	0.71	0.24	0.71	3.15	91	11.86	141	79	38	0	0	1	1
	WEST PALM BEACH	81	65	87	61	73	1	0.01	-0.87	0.01	2.43	50	14.98	135	81	44	0	0	1	0
GA	ATHENS	70	43	78	37	57	-1	0.39	-0.47	0.25	3.54	58	11.70	77	78	34	0	0	2	0
	ATLANTA	69	47	77	45	58	-1	0.29	-0.62	0.29	3.54	54	16.07	99	61	31	0	0	1	0
	AUGUSTA	72	43	79	36	58	-2	0.18	-0.65	0.18	7.33	129	12.75	89	82	30	0	0	1	0
	COLUMBUS	74	47	78	41	60	-2	0.22	-0.80	0.01	6.36	90	13.79	84	76	23	0	0	2	0
	MACON	73	45	79	38	59	-1	0.35	-0.50	0.31	8.26	138	13.99	90	86	27	0	0	2	0
	SAVANNAH	75	51	79	46	63	0	0.09	-0.77	0.09	6.46	136	12.87	111	78	30	0	0	1	0
HI	HILO	83	69	87	66	76	4	2.80	-0.55	1.06	7.70	41	12.28	33	85	72	0	0	6	3
	HONOLULU	85	70	88	67	77	2	0.02	-0.26	0.02	0.24	11	0.68	9	75	64	0	0	1	0
	KAHULUI	84	68	90	64	76	2	0.69	0.20	0.37	2.64	88	4.19	46	89	79	1	0	3	0
	LIHUE	79	69	81	66	74	0	0.04	-0.67	0.03	2.66	59	3.82	31	80	69	0	0	2	0
ID	BOISE	71	42	78	36	57	9	0.00	-0.29	0.00	1.46	82	2.96	69	59	35	0	0	0	0
	LEWISTON	72	43	81	37	57	8	0.12	-0.16	0.12	2.22	151	3.80	107	74	51	0	0	1	0
	POCATELLO	66	33	77	29	50	7	0.04	-0.22	0.04	3.04	178	4.32	112	73	42	0	3	1	0
IL	CHICAGO/O'HARE	47	29	71	22	38	-6	0.49	-0.34	0.31	3.93	106	6.00	85	74	55	0	5	4	0
	MOLINE	54	31	79	24	42	-5	0.24	-0.62	0.12	3.20	80	4.53	64	71	48	0	5	3	0
	PEORIA	55	32	76	25	43	-4	0.20	-0.54	0.16	2.64	70	4.02	58	78	39	0	5	3	0
	ROCKFORD	48	29	75	21	39	-5	1.48	0.69	1.11	5.51	163	7.04	115	78	55	0	5	3	1
	SPRINGFIELD	56	34	75	27	45	-4	0.56	-0.18	0.56	6.18	150	8.51	113	80	37	0	3	1	1
IN	EVANSVILLE	58	36	68	30	47	-5	0.24	-0.75	0.20	6.11	110	12.45	108	71	46	0	3	2	0
	FORT WAYNE	49	30	62	24	39	-6	1.01	0.22	0.72	5.14	133	8.19	104	89	57	0	5	6	1
	INDIANAPOLIS	52	30	64	26	41	-7	0.31	-0.49	0.16	4.50	101	8.21	88	78	47	0	5	3	0
	SOUTH BEND	45	26	61	18	35	-10	1.62	0.79	1.20	5.98	151	9.76	119	86	69	0	6	5	1
IA	BURLINGTON	56	32	77	24	44	-4	0.45	-0.33	0.44	3.76	95	5.14	76	82	39	0	4	2	0
	CEDAR RAPIDS	53	27	81	18	40	-5	1.12	0.42	0.70	3.98	128	5.51	105	90	44	0	5	4	1
	DES MOINES	58	35	83	25	46	0	0.70	-0.05	0.59	2.70	86	4.47	83	65	44	0	2	3	1
	DUBUQUE	48	27	75	21	37	-6	1.08	0.32	0.62	4.28	121	5.36	86	80	63	0	6	3	1
	SIOUX CITY	59	32	80	19	46	1	0.01	-0.56	0.01	3.09	113	4.93	125	70	44	0	3	1	0
	WATERLOO	51	27	79	16	39	-4	0.23	-0.45	0.12	3.45	115	5.17	106	77	55	0	5	3	0
KS	CONCORDIA	71	41	81	29	56	7	0.03	-0.47	0.03	0.48	16	2.03	46	58	28	0	2	1	0
	DODGE CITY	76	40	89	36	58	8	0.00	-0.49	0.00	0.04	2	0.63	17	60	20	0	0	0	0
	GOODLAND	73	34	77	28	53	8	0.03	-0.22	0.03	0.58	38	1.44	60	68	26	0	1	1	0
	TOPEKA	71	41	83	33	56	5	0.15	-0.50	0.12	2.45	72	3.72	67	58	29	0	0	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending April 9, 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	77	44	87	36	61	9	0.00	-0.57	0.00	1.53	44	2.27	43	50	23	0	0	0	0
KY	JACKSON	57	34	73	30	45	-8	0.58	-0.25	0.42	2.96	54	12.52	99	78	33	0	3	4	0
	LEXINGTON	55	33	71	28	44	-8	0.36	-0.48	0.24	3.15	57	9.49	78	68	47	0	3	2	0
	LOUISVILLE	59	36	74	33	48	-5	0.12	-0.75	0.12	5.62	102	11.44	95	64	35	0	0	1	0
	PADUCAH	64	38	74	32	51	-3	0.17	-0.89	0.13	9.38	167	14.84	114	77	31	0	1	2	0
LA	BATON ROUGE	80	49	85	41	64	0	0.00	-1.26	0.00	10.29	154	19.60	109	90	26	0	0	0	0
	LAKE CHARLES	78	50	80	43	64	-1	0.00	-0.77	0.00	3.62	80	9.79	73	91	34	0	0	0	0
	NEW ORLEANS	78	56	82	51	67	1	0.00	-1.24	0.00	10.36	152	18.49	102	75	35	0	0	0	0
	SHREVEPORT	80	49	85	40	64	1	0.00	-0.95	0.00	12.92	239	17.94	126	79	26	0	0	0	0
ME	CARIBOU	36	15	52	5	26	-7	1.19	0.61	0.78	6.48	196	11.95	143	79	51	0	6	3	1
	PORTLAND	42	25	55	17	33	-7	0.58	-0.44	0.48	5.08	93	12.62	100	82	39	0	5	4	0
MD	BALTIMORE	55	33	71	24	44	-6	0.79	0.08	0.45	3.02	62	12.22	108	75	37	0	4	3	0
MA	BOSTON	44	30	58	22	37	-8	1.77	0.89	1.03	5.30	106	12.74	104	83	43	0	5	3	1
	WORCESTER	39	24	52	17	32	-9	1.60	0.67	0.92	5.38	99	12.76	101	88	44	0	6	3	1
MI	ALPENA	30	19	38	12	24	-12	0.44	-0.08	0.27	6.11	218	10.64	180	76	59	0	7	4	0
	GRAND RAPIDS	41	26	53	20	33	-9	1.02	0.23	0.54	6.34	177	11.27	158	86	53	0	6	5	1
	HOUGHTON LAKE	32	18	38	7	25	-12	1.07	0.52	0.54	5.99	218	9.11	162	83	57	0	7	3	2
	LANSING	41	25	52	19	33	-8	0.52	-0.22	0.25	4.91	150	8.07	127	86	59	0	7	6	0
	MUSKEGON	42	27	55	17	34	-7	0.68	0.02	0.60	5.80	181	10.01	143	75	55	0	6	4	1
	TRAVERSE CITY	34	23	43	14	28	-10	0.53	-0.12	0.27	5.18	185	8.96	118	82	48	0	7	4	0
MN	DULUTH	33	19	39	2	26	-8	0.56	0.09	0.31	4.65	203	6.53	154	81	63	0	7	3	0
	INT'L FALLS	34	16	42	6	25	-9	0.40	0.12	0.26	3.17	240	4.53	162	82	52	0	7	4	0
	MINNEAPOLIS	45	28	68	20	36	-5	0.13	-0.39	0.07	2.41	95	3.81	87	71	56	0	6	3	0
	ROCHESTER	45	25	72	18	35	-5	0.14	-0.49	0.05	4.15	155	5.55	127	82	63	0	6	4	0
	ST. CLOUD	41	23	54	13	32	-6	0.12	-0.38	0.06	1.65	77	2.61	75	86	46	0	7	2	0
MS	JACKSON	77	47	82	41	62	1	0.00	-1.41	0.00	12.32	163	23.91	135	83	27	0	0	0	0
	MERIDIAN	76	44	80	39	60	-1	0.00	-1.40	0.00	12.38	142	19.87	99	93	29	0	0	0	0
	TUPELO	72	44	81	38	58	0	0.27	-0.92	0.27	8.16	104	15.33	87	79	29	0	0	1	0
MO	COLUMBIA	63	38	77	27	50	-1	0.14	-0.71	0.08	2.03	47	3.69	45	72	34	0	1	2	0
	KANSAS CITY	67	40	81	31	54	3	0.31	-0.30	0.22	3.03	94	4.19	74	71	29	0	1	2	0
	SAINT LOUIS	62	39	78	30	51	-2	0.36	-0.47	0.36	2.69	58	4.29	47	63	40	0	1	1	0
	SPRINGFIELD	69	42	75	36	56	4	0.12	-0.88	0.12	3.06	60	4.34	46	59	34	0	0	1	0
MT	BILLINGS	68	42	78	36	55	12	0.00	-0.32	0.00	1.55	101	2.08	71	54	24	0	0	0	0
	BUTTE	62	27	73	24	45	9	0.05	-0.14	0.05	0.50	46	0.97	47	81	22	0	6	1	0
	CUT BANK	63	35	78	27	49	12	0.04	-0.10	0.04	0.21	29	0.69	49	76	26	0	3	1	0
	GLASGOW	62	32	71	27	47	7	0.28	0.17	0.26	0.80	129	1.47	120	78	39	0	5	2	0
	GREAT FALLS	66	35	77	30	50	11	0.11	-0.15	0.09	0.61	46	1.26	50	72	23	0	4	2	0
	HAVRE	65	36	74	28	51	11	0.38	0.24	0.28	0.78	89	1.24	73	72	39	0	2	2	0
	MISSOULA	67	32	77	26	49	6	0.00	-0.19	0.00	0.86	71	1.97	65	73	42	0	4	0	0
NE	GRAND ISLAND	67	36	81	27	51	5	0.00	-0.53	0.00	0.61	22	2.79	71	64	27	0	2	0	0
	LINCOLN	68	35	85	27	52	5	0.01	-0.57	0.01	0.97	33	2.56	60	61	33	0	2	1	0
	NORFOLK	62	33	80	21	48	3	0.00	-0.53	0.00	2.44	92	4.59	115	70	39	0	2	0	0
	NORTH PLATTE	70	31	78	25	51	7	0.00	-0.34	0.00	0.66	39	1.92	74	76	25	0	5	0	0
	OMAHA	64	35	85	24	50	3	0.00	-0.57	0.00	1.06	37	2.78	63	71	38	0	2	0	0
	SCOTTSBLUFF	71	33	82	25	52	9	0.00	-0.34	0.00	2.60	164	3.37	124	70	29	0	2	0	0
	VALENTINE	65	34	74	23	49	7	0.00	-0.33	0.00	1.54	101	2.22	96	66	29	0	4	0	0
NV	ELY	64	32	71	25	48	8	0.05	-0.14	0.05	1.61	124	4.64	166	81	34	0	4	1	0
	LAS VEGAS	83	60	89	56	72	9	0.81	0.78	0.73	0.81	127	1.36	71	36	24	0	0	2	1
	RENO	73	44	78	39	59	13	0.44	0.36	0.44	1.41	145	3.53	114	57	33	0	0	1	0
	WINNEMUCCA	72	34	79	25	53	9	0.30	0.11	0.28	1.04	94	3.15	123	68	29	0	3	2	0
NH	CONCORD	42	21	55	4	31	-10	0.77	0.07	0.51	3.63	92	9.41	101	83	39	0	6	3	1
NJ	NEWARK	48	33	61	26	41	-8	0.62	-0.27	0.44	2.19	41	10.24	83	65	41	0	4	3	0
NM	ALBUQUERQUE	73	42	77	37	57	4	0.35	0.24	0.23	0.35	47	0.77	46	45	16	0	0	2	0
NY	ALBANY	43	24	62	14	33	-9	1.10	0.33	0.45	2.32	57	7.63	87	76	44	0	6	4	0
	BINGHAMTON	34	20	47	12	27	-13	4.34	3.56	3.09	6.16	156	11.87	132	85	59	0	7	5	2
	BUFFALO	38	24	51	17	31	-10	0.51	-0.21	0.29	3.57	91	8.85	93	78	48	0	7	5	0
	ROCHESTER	38	24	52	14	31	-10	0.42	-0.23	0.24	2.44	72	7.74	99	74	51	0	6	4	0
	SYRACUSE	37	21	51	9	29	-12	0.58	-0.19	0.31	3.38	84	10.10	116	86	47	0	6	4	0
NC	ASHEVILLE	60	36	75	31	48	-3	0.41	-0.46	0.39	2.48	43	11.46	84	70	29	0	1	2	0
	CHARLOTTE	65	41	77	34	53	-5	0.34	-0.41	0.33	1.46	27	8.24	64	69	23	0	0	2	0
	GREENSBORO	63	39	76	32	51	-4	0.38	-0.40	0.37	2.41	50	8.55	74	62	24	0	1	2	0
	HATTERAS	65	48	68	40	56	-1	0.45	-0.44	0.43	7.35	120	20.46	129	77	43	0	0	2	0
	RALEIGH	64	41	76	29	52	-4	0.09	-0.58	0.09	4.39	89	10.79	87	63	35	0	1	1	0
	WILMINGTON	69	44	76	35	57	-3	0.49	-0.21	0.49	3.71	72	15.77	118	78	30	0	0	1	0
ND	BISMARCK	59	27	75	17	43	5	0.15	-0.11	0.15	0.60	51	1.24	58	72	48	0	6	1	0
	DICKINSON	60	26	74	20	43	5	0.05	-0.30	0.03	0.30	27	0.72	38	84	26	0	7	2	0
	FARGO	44	25	53	16	35	-3	0.20	-0.08	0.18	1.16	76	2.15	75	78	44	0	7	2	0
	GRAND FORKS	41	23	48	15	32	-4	0.08	-0.16	0.05	1.14	96	1.72	70	82	45	0	6	2	0
	JAMESTOWN	48	26	61	19	37	0	0.10	-0.16	0.09	0.46	38	0.65	28	81	39	0	6	2	0
	WILLISTON	61	29	73	19	45	8	0.21	0.02	0.21	0.39	39	1.52	79	80	41	0	5	1	0
OH	AKRON-CANTON	48	25	64	18	37	-7	0.75	0.02	0.28	5.82	142	10.41	117	73	55	0	7	6	0
	CINCINNATI	52	32	66	26	42	-8	0.30	-0.61	0.14	5.60	110	12.23	114	74	51	0	4	3	0
	CLEVELAND	48	28	62	24	38	-6	1.81	1.05	1.01	6.30	161	10.89	125	82	52	0	7	5	1
	COLUMBUS	49	29	65	23	39	-10	0.63	-0.07	0.19	5.13	135	9.54	112	68	50	0	5	5	0
	DAYTON	49	28	64	23	39	-8	0.34	-0.56	0.16	5.86	132	10.68	114	88	50	0	6	4	0
	MANSFIELD	47	25	61	16	36	-7	1.03	0.09	0.49	5.39	118	10.29	110	93	53	0	7	5	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending April 9, 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	47	26	60	20	36	-8	1.28	0.53	0.64	6.53	182	9.75	132	78	56	0	6	4	1
	YOUNGSTOWN	47	24	63	17	36	-8	1.24	0.47	0.41	5.42	134	10.61	126	77	58	0	7	6	0
OK	OKLAHOMA CITY	78	46	87	41	62	5	0.00	-0.58	0.00	1.02	28	2.48	38	60	21	0	0	0	0
	TULSA	78	48	87	42	63	5	0.00	-0.80	0.00	2.86	62	4.05	50	60	30	0	0	0	0
OR	ASTORIA	63	45	81	38	54	7	0.27	-1.09	0.16	12.37	135	34.65	130	90	69	0	0	2	0
	BURNS	70	31	79	25	50	9	0.00	-0.19	0.00	1.33	89	3.05	80	77	33	0	4	0	0
	EUGENE	70	43	80	38	56	8	0.19	-0.81	0.11	5.95	84	15.79	75	87	67	0	0	2	0
	MEDFORD	79	45	91	38	62	12	0.00	-0.31	0.00	2.45	108	7.69	113	77	32	1	0	0	0
	PENDLETON	71	41	79	37	56	7	0.08	-0.17	0.08	1.70	108	4.07	96	76	45	0	0	1	0
	PORTLAND	72	46	85	39	59	10	0.11	-0.55	0.06	4.84	106	16.17	117	83	58	0	0	2	0
	SALEM	72	44	87	38	58	10	0.01	-0.70	0.01	6.37	125	17.10	107	84	59	0	0	1	0
PA	ALLENTOWN	47	30	58	20	39	-6	0.88	0.11	0.46	2.12	46	11.15	103	68	44	0	6	3	0
	ERIE	43	27	55	24	35	-8	0.47	-0.34	0.22	3.86	93	10.07	112	71	51	0	7	6	0
	MIDDLETOWN	49	31	59	26	40	-8	1.41	0.72	1.06	2.86	69	12.78	129	78	37	0	5	4	1
	PHILADELPHIA	52	36	65	29	44	-5	0.86	0.05	0.39	3.06	63	10.05	90	59	39	0	2	3	0
	PITTSBURGH	50	27	67	23	39	-7	0.40	-0.29	0.16	3.49	86	8.42	92	75	37	0	6	4	0
	WILKES-BARRE	42	27	52	20	35	-10	1.54	0.83	1.34	3.62	101	9.42	116	79	44	0	6	4	1
	WILLIAMSPORT	46	28	58	21	37	-8	0.58	-0.22	0.31	1.89	45	8.31	86	70	46	0	5	3	0
RI	PROVIDENCE	45	28	54	18	37	-8	2.59	1.55	1.44	5.98	104	14.35	106	78	48	0	5	4	2
SC	BEAUFORT	74	51	78	45	63	1	0.11	-0.73	0.11	4.78	100	10.76	90	79	28	0	0	1	0
	CHARLESTON	73	49	78	41	61	-1	0.17	-0.60	0.17	3.91	78	12.20	100	75	26	0	0	1	0
	COLUMBIA	71	46	80	41	59	-1	0.49	-0.36	0.33	3.87	68	10.50	74	66	24	0	0	2	0
	GREENVILLE	66	42	77	35	54	-2	0.43	-0.44	0.40	2.69	42	10.94	72	70	25	0	0	2	0
SD	ABERDEEN	54	25	68	15	39	-1	0.09	-0.30	0.08	0.55	30	1.24	44	80	48	0	6	2	0
	HURON	56	27	75	20	42	1	0.05	-0.44	0.04	1.12	49	1.99	60	83	38	0	5	2	0
	RAPID CITY	66	34	82	27	50	9	0.00	-0.33	0.00	1.09	75	1.95	86	72	25	0	2	0	0
	SIOUX FALLS	55	29	76	19	42	1	0.09	-0.48	0.05	2.17	86	3.85	108	73	51	0	4	2	0
TN	BRISTOL	59	33	73	28	46	-6	0.51	-0.20	0.31	2.83	58	10.23	87	84	27	0	4	3	0
	CHATTANOOGA	67	42	79	38	55	-2	0.65	-0.46	0.64	4.32	57	15.06	84	75	33	0	0	2	1
	KNOXVILLE	62	39	75	34	51	-4	0.71	-0.24	0.68	3.65	57	13.54	90	72	32	0	0	2	1
	MEMPHIS	71	48	80	45	60	1	0.36	-0.97	0.36	16.56	227	24.41	154	69	29	0	0	1	0
	NASHVILLE	65	40	79	37	53	-3	0.23	-0.68	0.19	4.56	75	11.19	82	70	30	0	0	2	0
TX	ABILENE	77	52	85	43	64	2	0.33	0.00	0.33	2.64	143	3.36	85	54	31	0	0	1	0
	AMARILLO	78	42	85	40	60	7	0.00	-0.28	0.00	0.27	18	0.96	36	51	19	0	0	0	0
	AUSTIN	80	45	84	36	63	-3	0.02	-0.40	0.02	4.19	156	6.37	97	72	40	0	0	1	0
	BEAUMONT	81	50	85	45	66	0	0.01	-0.84	0.01	4.99	103	10.95	79	94	32	0	0	1	0
	BROWNSVILLE	81	60	83	50	71	-1	0.00	-0.37	0.00	2.67	192	4.55	116	96	51	0	0	0	0
	CORPUS CHRISTI	83	57	85	50	70	1	0.08	-0.31	0.08	6.63	299	8.92	157	89	45	0	0	1	0
	DEL RIO	83	54	87	42	69	1	0.00	-0.30	0.00	2.20	165	2.95	103	74	41	0	0	0	0
	EL PASO	81	50	89	36	66	4	0.04	0.01	0.04	0.05	17	0.58	51	39	12	0	0	1	0
	FORT WORTH	80	52	86	43	66	4	0.04	-0.55	0.04	2.71	71	5.95	74	64	24	0	0	1	0
	GALVESTON	75	59	78	54	67	-1	0.00	-0.59	0.00	3.17	90	7.13	70	94	48	0	0	0	0
	HOUSTON	80	50	85	42	65	-1	0.00	-0.80	0.00	3.30	75	7.41	67	88	40	0	0	0	0
	LUBBOCK	79	43	87	35	61	4	0.12	-0.11	0.12	0.40	38	0.79	35	60	22	0	0	1	0
	MIDLAND	81	51	88	40	66	5	0.47	0.40	0.47	1.43	286	1.91	119	55	25	0	0	1	0
	SAN ANGELO	81	48	87	34	64	2	0.04	-0.20	0.04	3.37	261	4.17	127	64	24	0	0	1	0
	SAN ANTONIO	80	51	82	44	65	-1	0.00	-0.47	0.00	3.58	144	6.51	111	77	31	0	0	0	0
	VICTORIA	82	50	85	46	66	-2	0.00	-0.56	0.00	4.37	148	9.31	125	94	39	0	0	0	0
	WACO	78	46	85	39	62	-1	0.03	-0.49	0.03	5.63	179	8.08	108	82	38	0	0	1	0
	WICHITA FALLS	79	48	88	44	64	5	0.03	-0.51	0.03	1.38	47	3.08	55	63	29	0	0	1	0
UT	SALT LAKE CITY	68	45	78	38	57	9	0.00	-0.43	0.00	2.22	91	4.68	91	57	27	0	0	0	0
VT	BURLINGTON	39	22	61	14	31	-8	0.67	0.04	0.32	3.11	100	7.44	106	72	39	0	6	4	0
VA	LYNCHBURG	59	33	77	25	46	-6	0.78	0.00	0.78	4.64	96	11.93	104	63	28	0	3	1	1
	NORFOLK	62	43	76	32	52	-2	0.19	-0.62	0.14	4.35	85	15.22	123	72	30	0	1	3	0
	RICHMOND	61	36	77	27	49	-5	0.36	-0.40	0.14	1.80	35	9.45	81	70	33	0	3	4	0
	ROANOKE	59	36	77	29	48	-5	0.09	-0.72	0.07	2.48	51	10.71	96	58	33	0	2	2	0
	WASH/DULLES	55	32	72	24	44	-6	1.05	0.31	0.94	2.61	58	10.86	105	74	39	0	3	3	1
WA	OLYMPIA	68	41	80	36	54	8	0.31	-0.66	0.17	8.82	134	23.96	118	92	70	0	0	3	0
	QUILLAYUTE	61	44	82	40	53	8	0.53	-1.41	0.23	16.37	121	47.84	121	94	75	0	0	3	0
	SEATTLE-TACOMA	67	47	78	44	57	9	0.19	-0.51	0.15	5.71	123	19.13	137	84	66	0	0	2	0
	SPOKANE	66	41	78	33	53	9	0.13	-0.15	0.13	3.43	181	6.89	132	80	36	0	0	1	0
	YAKIMA	75	41	86	33	58	12	0.00	-0.14	0.00	1.82	207	4.54	159	63	34	0	0	0	0
WV	BECKLEY	50	28	70	23	39	-9	0.60	-0.13	0.35	2.96	65	9.25	86	68	46	0	7	4	0
	CHARLESTON	56	31	71	27	43	-8	0.58	-0.15	0.36	3.29	68	10.46	93	75	34	0	4	4	0
	ELKINS	49	26	64	19	37	-9	1.36	0.58	0.82	3.93	80	9.60	83	83	39	0	7	5	1
	HUNTINGTON	55	32	68	27	44	-8	0.74	0.00	0.38	3.42	71	10.88	98	75	36	0	4	5	0
WI	EAU CLAIRE	42	24	58	13	33	-7	0.42	-0.20	0.21	5.20	196	6.58	147	82	43	0	7	4	0
	GREEN BAY	37	24	41	13	31	-9	0.57	-0.03	0.31	4.65	164	7.13	141	90	61	0	6	3	0
	LA CROSSE	48	29	75	20	39	-4	0.14	-0.59	0.09	4.77	163	6.94	136	77	39	0	4	3	0
	MADISON	45	26	73	16	36	-5	0.69	-0.06	0.58	6.76	209	8.99	156	84	55	0	6	3	1
	MILWAUKEE	44	28	70	21	36	-5	0.79	-0.07	0.60	5.28	143	7.59	106	80	59	0	5	4	1
WY	CASPER	64	30	74	24	47	7	0.00	-0.24	0.00	1.38	115	2.83	117	68	35	0	5	0	0
	CHEYENNE	63	34	72	28	49	10	0.00	-0.28	0.00	2.50	179	3.70	162	65	32	0	1	0	0
	LANDER	62	33	73	28	47	6	0.00	-0.39	0.00	4.59	265	5.51	197	62	25	0	3	0	0
	SHERIDAN	67	32	79	28	50	9	0.00	-0.33	0.00	1.59	112	3.04	110	71	30	0	3	0	0

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

March Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Dry conditions intensified during March across the central and southern Plains and the Southwest, contributing to a rash of wildfires and combining with large temperature oscillations to increase stress on winter wheat. Still, the overall U.S. wheat condition improved during the overwintering period for the first time since 2011-12, and for only the seventh time in the last 21 years, mainly on the strength of favorable weather in the Northwest and lower Midwest.

Northwestern wetness not only aided winter wheat, but also led to further reductions in drought coverage and intensity as far south as northern California. However, a sharp southern boundary of recovery was evident, with southern California facing an almost certain fifth year of drought. In northern California, however, much-improved surface water supplies included a near-normal snowpack, abundant streamflow, and substantial reservoir recharge.

Meanwhile, much of the eastern U.S. experienced drier-than-normal March weather, favoring early-season fieldwork but reducing topsoil moisture. Elsewhere, generally wet weather affected several other areas, including the eastern Corn Belt, the upper Great Lakes region, and a broad section of the South stretching from southern and eastern Texas to the Mississippi Delta. Heavy Southern rain, much of which fell from March 8-13, resulted in severe flooding and spring fieldwork delays from easternmost Texas into the lower Mississippi Valley.

Historical Perspective: According to preliminary information provided by the National Centers for Environmental Information, the contiguous U.S. experienced its fourth-warmest, 26th-wettest March during the 122-year period of record. The nation's average temperature of 47.5°F was 6.0°F above the 1901-2000 mean—ranking behind only 2012 (50.4°F), 1910 (49.4°F), and 2007 (47.7°F). Meanwhile, U.S. precipitation averaged 2.89 inches, 115 percent of normal.

Coast-to-coast warmth pushed 29 states—mainly across the North, East, and Southwest—into top-ten territory in terms of March temperature rankings (figure 1). In fact, only three states—Maine (26th warmest), Oregon (24th warmest), and Arkansas (21st warmest)—failed to achieve a top-twenty ranking for March warmth.

State precipitation rankings ranged from the driest March on record in New Mexico to the second-wettest March in Louisiana and Wisconsin (figure 2). New Mexico's monthly precipitation averaged 0.06 inch (8 percent of normal), tying a March 1956 standard. Five other states (AZ, MD, NJ, NC, and PA) experienced a top-ten ranking for March dryness. In contrast, Louisiana's monthly precipitation averaged 10.40 inches, second only to 10.79 inches in March 1926. Wisconsin's total of 3.83 inches trailed only 4.02 inches in March 1977. March totals were among the ten highest values on record in Arkansas, Mississippi, Washington, and Michigan.

Figure 1 Statewide Average Temperature Ranks
March 2016
Period: 1895–2016

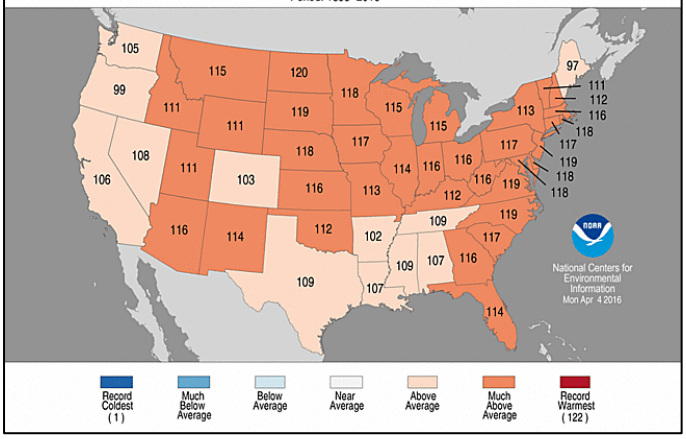
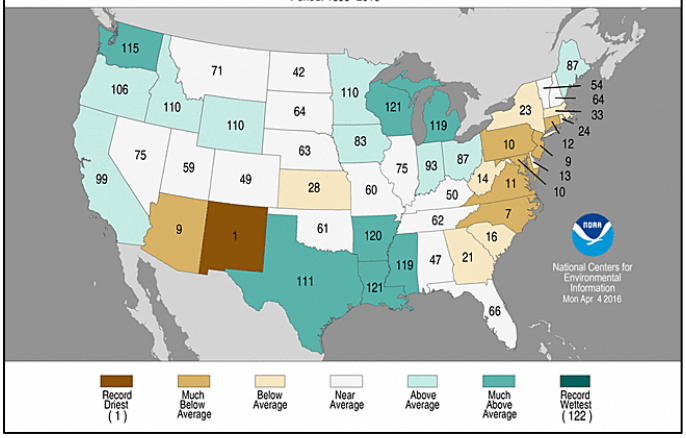


Figure 2 Statewide Precipitation Ranks
March 2016
Period: 1895–2016



Summary: Early-month warmth resulted in numerous daily-record highs across the West. In Arizona, Phoenix posted five consecutive daily-record highs (88, 89, 90, 91, and 88°F) from February 29 – March 4. Similarly, Thermal, CA, noted a trio of daily-record highs (90, 91, and 93°F) from February 29 – March 2. Later, record-setting warmth arrived across the nation's mid-section. On March 3, daily-record highs climbed to 98°F in McAllen, TX, and 68°F in Dunkirk, MT. Warm conditions also dominated the Intermountain region, where Salt Lake City, UT, collected consecutive daily-record highs (69 and 68°F, respectively) on March 4-5. In Montana, record-setting highs for March 5 soared to 74°F in Miles City and 71°F in Billings. Farther east, however, Houghton Lake, MI, registered a daily-record low (-7°F) on March 4.

In the Midwest and Northeast, late-February warmth yielded to colder weather and, in some cases, snow. In Michigan, daily-record snowfall totals for March 1 reached 7.4 inches in Grand Rapids and 7.2 inches in Lansing and Alpena. On March 2, Caribou, ME, reported a daily-record snowfall of 7.5 inches. Snow fell in the Mid-Atlantic States on March 4, when daily-record amounts included 4.3 inches in Atlantic City, NJ, and 2.7 inches in Wilmington, DE. Farther west, high winds developed on March 2 across the southern High Plains, raising dust. A gust to 67 mph was recorded on March 2 in Springfield, CO. On the same date, Guymon, OK, clocked a gust to 52 mph and reported a minimum visibility of 2.5 miles in blowing dust. Similarly, Borger, TX, had a minimum visibility of 4 miles and a peak gust to 50 mph. Farther west, an initial surge of Pacific moisture reached western Washington on March 1, when record-setting rainfall totals included 2.17 inches in Hoquiam and 1.68 inches in Olympia. Significant precipitation finally returned to California on March 4-5. On the latter date, daily-record California rainfall totals reached 2.63 inches in Ukiah and 1.53 inches in Sacramento.

Starting on March 8, torrential rainfall struck an area from easternmost Texas to the Mississippi Delta. In northern Louisiana and environs, historic rainfall totals of 12 to 20 inches or more triggered widespread flooding that persisted for days, as water slowly drained from creeks and bayous to larger rivers. However, heavy precipitation first fell in the West before reaching the South. During a 72-hour period ending on the morning of March 7, California rainfall totals reached 11.60 inches at Bucks Lake (Plumas County); 11.04 inches at Strawberry Valley (Yuba County); and 10.66 inches on Mount Umunhum (Santa Clara County). Meanwhile, locally heavy showers across the Intermountain West and the High Plains led to daily-record totals on March 7 in Scottsbluff, NE (1.49 inches), and Lander, WY (0.50 inch, including 2.2 inches of snow).

Downpours erupted on March 8 in the western and central Gulf Coast States. In Louisiana, record-setting totals for the 8th reached 5.62 inches in Monroe and 5.12 inches in Shreveport. Monroe was inundated with 10.86 inches of rain the following day, March 9, breaking an all-time daily rainfall record (previously, 7.40 inches on September 2, 2008). Monroe's wettest March day had been March 21, 1955, when 5.48 inches fell. Selected daily-record totals for March 9 included 5.68 inches in Longview, TX; 5.64 inches in Greenville, MS; 5.30 inches in Monticello, AR; and 5.15 inches in Corpus Christi, TX. Corpus Christi's wettest March day had been March 11, 1903, when 4.66 inches fell. During the 6-day period from March 8-13, Louisiana rainfall totals burgeoned to 21.29 inches in Monroe and 12.02 inches in Shreveport. Elsewhere, the March 8-13 deluge resulted in 13.35 inches in Greenville, MS; 11.68 inches in Monticello, AR; 10.58 inches in Memphis, TN; and 10.08 inches in Longview, TX. Along the Texas-Louisiana border, the Sabine River surged to record-high levels in Texas locations such as Bon Wier (14.21 feet above flood stage on March 13, topping a high-water mark set in April 1913) and Deweyville (9.24 feet above flood stage on March 15, eclipsing a May 1884 record). In Louisiana, crest records from April or May 1991 were topped in locations such as Bayou Dorcheat at Lake Bistineau (on March 13) and Bayou Bartholomew at Beekman (on March 12). A crest record from 1991 was also broken (on March 16) along the Coldwater River near Marks, MS. And, high-water marks from April 1983 were surpassed in Louisiana communities such as Bush (along the Bogue Chitto River on March 12) and Folsom (along the Tchefuncte River on March 11). Later, heavy precipitation returned to California, where 72-hour rainfall totals ending the morning of March 14 included 10.44 inches at Strawberry Valley (Yuba County) and 9.76 inches at Bucks Lake (Plumas County).

Significant wind accompanied the storminess, especially in the Northwest. On March 9-10, wind gusts topped 100 mph at several locations in the Cascades of Washington and northern Oregon. Gusts were clocked to 74 mph (on March 9) in Astoria, OR, and 67 mph (on March 10) in Bellingham, WA. During the second wave of storminess, Bellingham reported a gust to 64 mph on March 13. Elsewhere, the primary, early-month headline was rampant warmth. On March 6, daily-record highs surged to 76°F in Mobridge, SD; 75°F in Bismarck, ND; and 74°F in Miles City, MT. On March 7 in Nebraska, highs of 81°F in Hastings and Grand Island represented the second-earliest readings of 80°F or higher (previously, March 6, 1972, in both locations). Elsewhere on March 7, daily-record highs included 82°F in Hill City, KS, and 80°F in Sioux City, IA. In the Northeast, the earliest 80-degree readings on record occurred on March 9 in locations such as Poughkeepsie, NY (82°F); Philadelphia, PA (82°F); Allentown, PA (80°F); and Trenton, NJ (80°F). In all cases, previous records had been set on March 12 or 13, 1990. The parade of Eastern records continued on March 10, when Atlantic City, NJ (81°F), reported its earliest 80-degree reading (previously, 85°F on March 12, 1990). On March 9-10, consecutive daily-record highs were broken at numerous sites, including Baltimore, MD (82 and 80°F); Philadelphia (82°F both days); and New York's Central Park (77 and 79°F). Similarly, Elizabeth City, NC, collected daily-record highs (82 and 81°F, respectively) on March 10-11. Later, warmth re-intensified across the nation's mid-section. On March 11-12, daily-record highs attained the 70-degree mark on consecutive days in South Dakota locations such as Sisseton (70 and 71°F) and Aberdeen (71 and 72°F). With a high of 81°F on March 11, Valentine, NE, tied a record for its second-earliest reading of 80°F or higher, behind only March 10, 1972 and 1995.

Elsewhere, record-setting warmth lingered across the Deep South. For example, March 14-15 featured consecutive daily-record highs of 87°F in Shreveport, LA. Other daily-record highs for March 15 included 92°F in Austin, TX, and 89°F in Montgomery, AL; Tupelo, MS; and Daytona Beach, FL. The parade of Southeastern records continued on March 16 with highs of 90°F in New Bern, NC, and 88°F in Danville, VA, and Charleston, SC. New Bern also tied a monthly record, previously attained on March 8, 1974, and March 30, 1985. In Georgia, Savannah posted consecutive daily-record highs of 87°F on March 15-16.

At mid-month, an unusually heavy March precipitation event unfolded across the Great Lakes region. In Wisconsin, March 15-16 precipitation totals climbed to 3.35

inches in Wisconsin Rapids and 2.67 inches in Wausau. Daily-record snowfall totals included 6.8 inches (on March 16) in International Falls, MN, and 8.2 inches (on March 17) in Marquette, MI. Elsewhere, a few showers and thunderstorms dotted the Gulf Coast region, where New Orleans, LA, netted a daily-record sum (1.98 inches) for March 18. A few days later, on March 21, 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 major 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).

Periods of sharply colder weather arrived across the Plains after mid-month, following early-season warmth. The cold snaps raised concerns about possible freeze injury to jointing winter wheat in southwestern Kansas, southeastern Colorado, western Oklahoma, and northernmost Texas. On March 20, low temperatures ranged from 5 to 20°F in western Oklahoma and parts of neighboring states. (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. Freeze-injury symptoms can include death of the growing point; splitting or bending of the lower stem; and leaf yellowing or burning. Depending on severity, wheat injured at this stage of development can sometimes recover if future weather conditions are not unfavorably hot or dry.) Shortly after the initial 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 within days. Elsewhere on March 21-22, widespread Southeastern frost and scattered freezes briefly threatened crops such as winter wheat and blooming fruits.

On March 20 in Kansas, Garden City's daily-record low of 10°F marked a steep decline from a high of 79°F on the 14th. 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. Those winds contributed to the rapid spreading of the Anderson Creek fire, which burned more than 367,000 acres in three counties near the Oklahoma-Kansas line, eventually becoming the largest wildfire in Kansas history. 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. Within a few days, however, 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).

Toward month'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. Despite the snow, large sections of the central and southern Plains remained unfavorably dry through month's end. During the first 3 months of the year, precipitation in Garden City, KS, totaled 0.22 inch (9 percent of normal). Similarly, January-March totals included 0.69 inch (30 percent of normal) in Guymon, OK; 0.42 inch (28 percent) in Albuquerque, NM; and 0.41 inch (20 percent) in Dalhart, TX. Farther east, however, heavy showers dotted the southern Atlantic region. With a 3.98-inch total on the 27th, Savannah, GA, noted its wettest March day on record (previously, 3.57 inches on March 5, 1959).

Meanwhile, late-March snow blanketed the northern Great Basin and northern Intermountain West. Daily-record snowfall totals in Nevada for March 28 reached 13.0 inches in Ely and 6.8 inches in Reno. In Wyoming, March 28-31 snowfall totaled 23.2 inches in Lander and 16.6 inches in Riverton. Lander received 2.97 inches of precipitation during the 4-day event. Farther east, heavy rain and locally severe thunderstorms erupted across the South. In Arkansas, daily-record rainfall totals for March 30 included 4.94 inches in North Little Rock, 4.63 inches in Pine Bluff, and 4.45 inches in Batesville. Rain extended into parts of the Midwest, where daily-record totals reached 2.16 inches (on March 30) in Springfield, IL, and 1.38 inches (on March 31) in Dayton, OH. The last day of March featured a daily-record rainfall of 5.01 inches in Greenwood, MS. The late-month rainfall, in combination with the March 8-13 deluge, contributed to monthly precipitation records in locations such as Monroe, LA (24.38 inches; previously, 12.50 inches in 1980); Greenville, MS (17.32 inches; previously, 15.83 inches in 1973); and North Little Rock, AR (12.23 inches; previously, 10.09 inches in 1990).

At month's end, intervals of warm and cool weather persisted in many parts of the U.S. Another freeze struck portions of the southern High Plains on March 27, followed by a daily-record low (24°F) in Fayetteville, AR, on March 28. Garden City, KS, warmed from a low of 15°F on March 27 to a high of 75°F the next day. Later, warmth returned to the Northwest. On March 31, daily-record highs climbed to 78°F in The Dalles, OR, and Yakima, WA. Heat briefly affected southern Texas, where McAllen logged a daily-record high of 100°F on March 31.

Alaska's amazing warm spell continued, with monthly temperatures averaging 10 to 20°F above normal at most mainland locations. In southeastern Alaska, Yakutat posted consecutive daily-record highs (50 and 51°F, respectively) on March 6-7. Later, Juneau logged a pair of daily-record highs (50 and 49°F, respectively) on March 12-13. Around mid-month, parts of west-central and southwestern Alaska finally experienced cold weather, but mild conditions continued farther east. Later, significant snow developed in parts of southern Alaska, where Anchorage received 6.4 inches on March 19. Late in the month, record-setting warmth returned. 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. The snow in Anchorage was immediately 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. Southern Alaska's warmth persisted through month's end. From March 30 – April 1, locations such as Delta Junction (60, 56, and 52°F) and Anchorage (50, 53, and 51°F) noted three consecutive daily-record highs. Anchorage also set a monthly record (53°F on March 31), eclipsing its standard of 51°F set on March 11, 1984, and March 24, 2016. In southeastern Alaska, daily-record highs for March 31 soared to 71°F in Klawock and 65°F in Ketchikan. Juneau posted consecutive daily-record highs of 58°F on March 31 – April 1. In fact, it was the warmest March on record at a number of locations in southeastern Alaska, including Ketchikan (43.8°F; previously, 43.5°F in 1915) and Juneau (39.9°F; previously, 39.6°F in 1984). Meanwhile, pockets of above-normal March precipitation were mostly confined to the southern tier of Alaska. Many mainland locations were drier than normal. Precipitation increased, however, late in the month, when daily-record precipitation totals included 0.33 inch (on March 31) in Bethel and 0.30 inch (on March 29) in Fairbanks. Yakutat's monthly precipitation totaled 9.63 inches (87 percent of normal), with 6.80 inches falling from March 25-30.

Most of Hawaii remained locked into a warmer- and drier-than-normal weather pattern, courtesy of El Niño. A few heavy showers were noted at times, although drought generally continued to expand and intensify. On Kauai, Kokee netted 4.08 inches of rain in a 24-hour period on March 8-9. Meanwhile on the Big Island, Hilo posted three consecutive daily-record highs (88, 87, and 90°F) from March 6-8. Later, Kauai's famously wet Mt. Waialeale received 5.68 inches of rain fell in a 24-hour period on March 13-14. Late-month showers helped to stabilize Hawaii's drought situation in a few spots. For example, March 25 rainfall totals reached 2.59 inches in Lihue, Kauai, and 1.37 inches in Kahului, Maui. Despite the rain, Hilo ended the month with 4.89 inches of rain, just 36 percent of the normal March precipitation. Honolulu, Oahu, received a monthly total of 0.22 inch (11 percent of normal), leaving its January-March rainfall at 0.65 inch (10 percent).

Fieldwork

Fieldwork summary provided by USDA/NASS

Above-average temperatures stretched across the U.S. during March. Most notably, temperatures in the majority of the Ohio Valley and upper Midwest averaged more than 6°F above normal. March precipitation was near normal throughout much of the nation. The major exception to this trend occurred in the Mississippi Delta and Pacific Northwest. More than 20 inches of rain fell during March near the Arkansas-Louisiana border. On March 20, 2016, the U.S. Drought Monitor reported that areas in exceptional drought (D4) were limited to parts of California and southeastern Nevada.

Winter wheat conditions improved in most locations during March. Condition ratings in California, Indiana, Michigan, Missouri, North Carolina, and Ohio experienced double-digit gains in the good to excellent categories. Conversely, the lower half of the Great Plains experienced declines in condition. Fifty-six percent of the winter wheat in Kansas was rated in good to excellent condition on March 27, down 3 percentage points from February 28. In Kansas, winter wheat was 30 percent jointing or beyond on March 27, eighteen percentage points ahead of last year and 14 points ahead of the 5-year average. Colorado's winter wheat was 2 percent jointing at the end of the month, slightly ahead of last year but equal to the 5-year average.

In March, warm weather led to favorable pasture ratings throughout most of the southern U.S. Pasture and rangeland conditions were above the 5-year average across parts of the southern half of the nation, with Arizona at 41 percent good to excellent, Oklahoma at 39 percent, Louisiana at 69 percent, and Florida at 43 percent. By the end of the month, Texas pasture and rangeland condition was reported at 46 percent good to excellent, 22 percentage points above the 5-year average.

By the end of the month, some California winter forage crops were starting to be harvested, while groundwork continued for spring plantings. Alfalfa growth was good and some fields were cut and baled. Navel and Valencia oranges and tangerines continued to be harvested throughout the month. 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. 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 benefit rangeland forage growth, thus reducing the need for supplemental feed. Some beehives remained in prune orchards at the end of the month.

In Florida, processing plants finished with early and midseason oranges, began running grapefruit, or had transitioned to late orange harvesting. The Valencia harvest was lagging last season due to low maturity levels. Honey tangerines, colored grapefruit, white grapefruit, midseason oranges, Temples, and Valencias were going to fresh market. Early and mid-season orange harvest was complete. Grove activities included fertilizing, irrigating, some hedging and topping of trees after harvest, applying herbicide, and removing brush. Citrus trees were in full bloom, petal drop began, and small, pea-size fruit was apparent on early varieties.

U.S. Crop Production Highlights

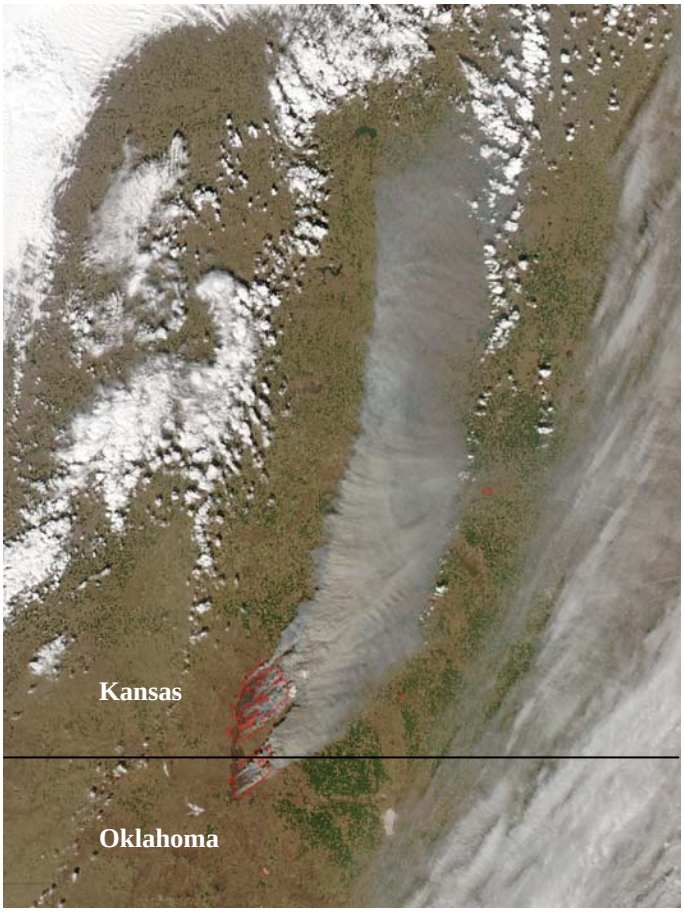
The following information was released by USDA's Agricultural Statistics Board on April 12, 2016. Forecasts refer to April 1.

The U.S. **all orange** forecast for the 2015-2016 season is 5.59 million tons, up 4 percent from the previous forecast but down 12 percent from the 2014-2015 revised final utilization.

The Florida all orange forecast, at 76.0 million boxes (3.42 million tons), is up 7 percent from last month's forecast but down 22 percent from last season's revised final utilization. Early, midseason, and Navel varieties in Florida are forecast at 36.0 million boxes (1.62 million tons), unchanged from last month but down 24 percent from last season. The Florida Valencia orange forecast, at 40.0 million boxes (1.80 million tons), is up 14 percent from last month but down 19 percent from last season's revised final utilization.

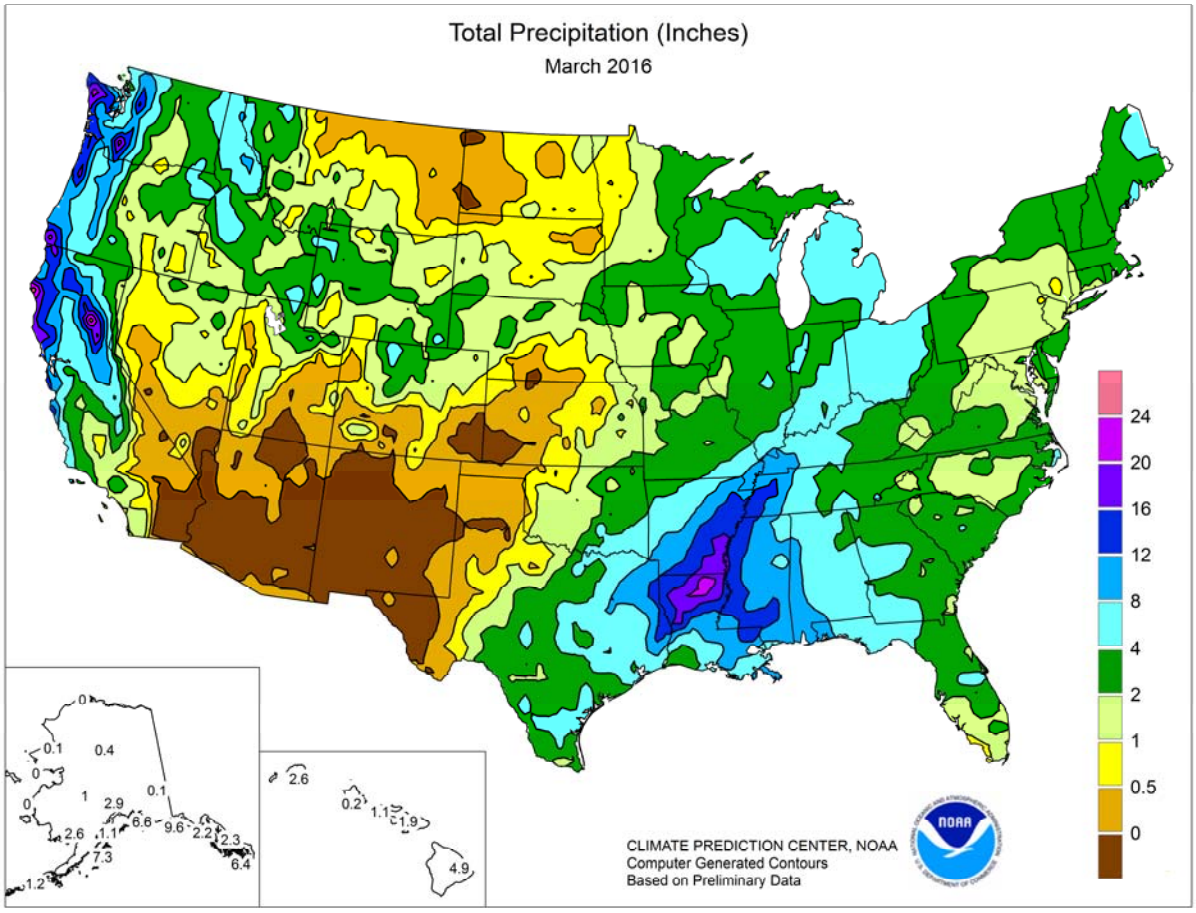
The California Valencia orange forecast is 10.5 million boxes (420,000 tons), unchanged from the previous forecast but up 11 percent from last season. The California Navel orange forecast is 42.0 million boxes (1.68 million tons), unchanged from the previous forecast but up 7 percent from last season's revised final utilization.

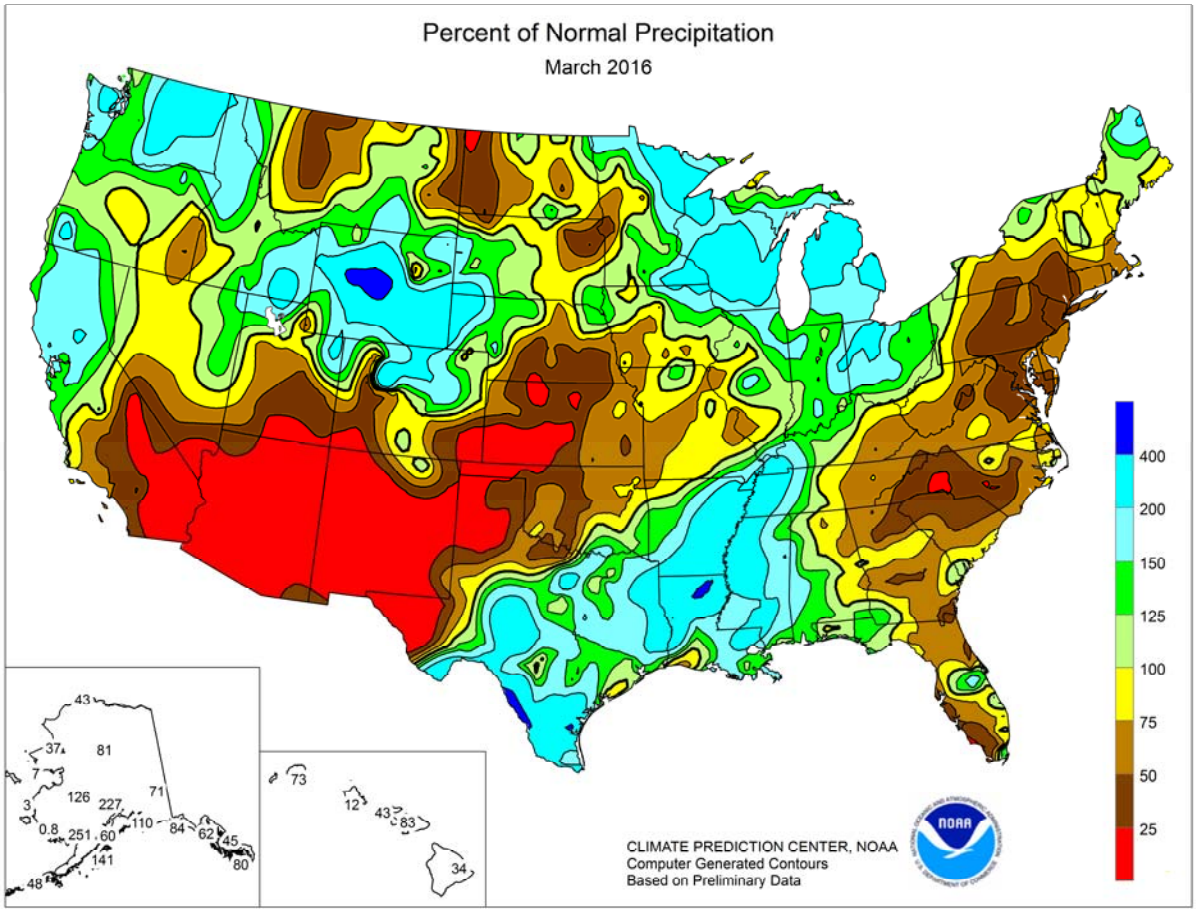
The Texas all orange forecast, at 1.57 million boxes (66,000 tons), is up 11 percent from the previous forecast and up 8 percent from last season's final utilization.

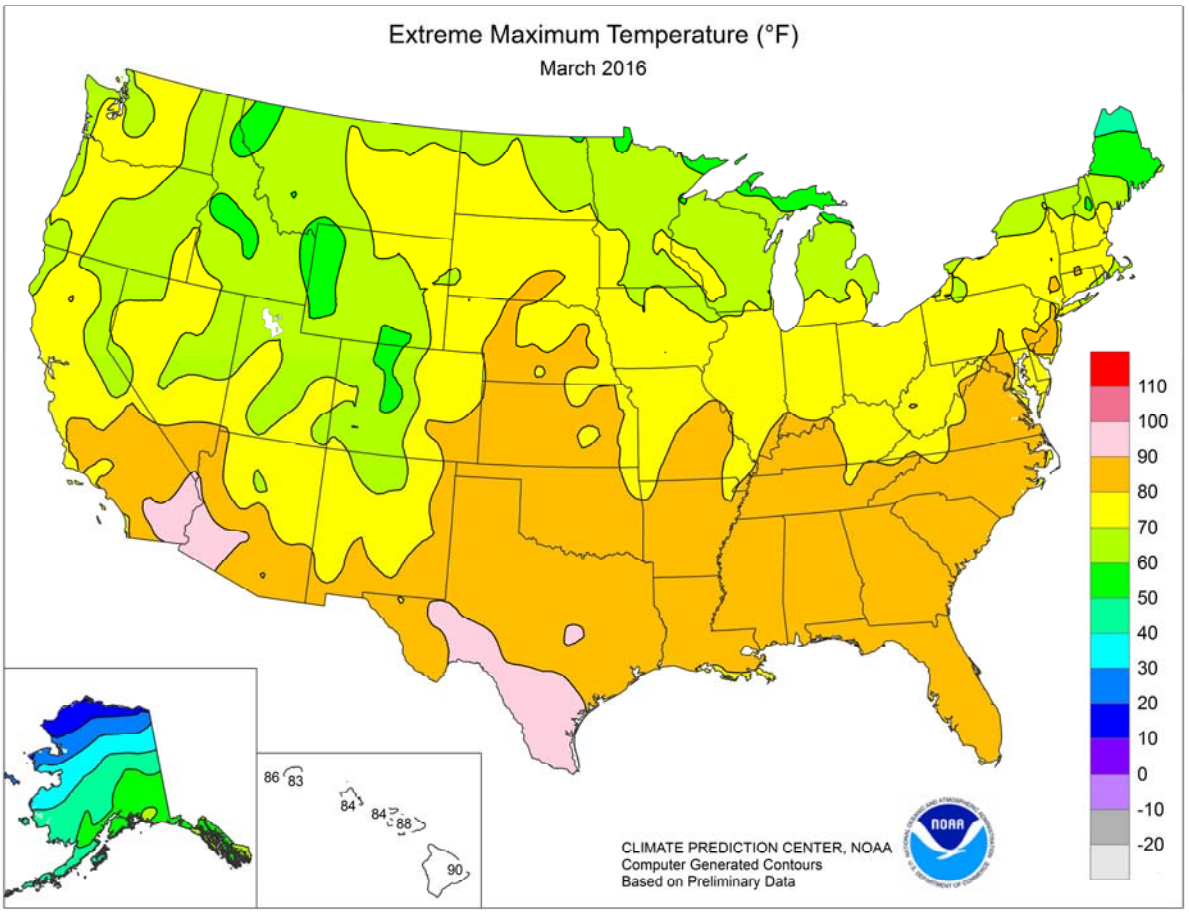


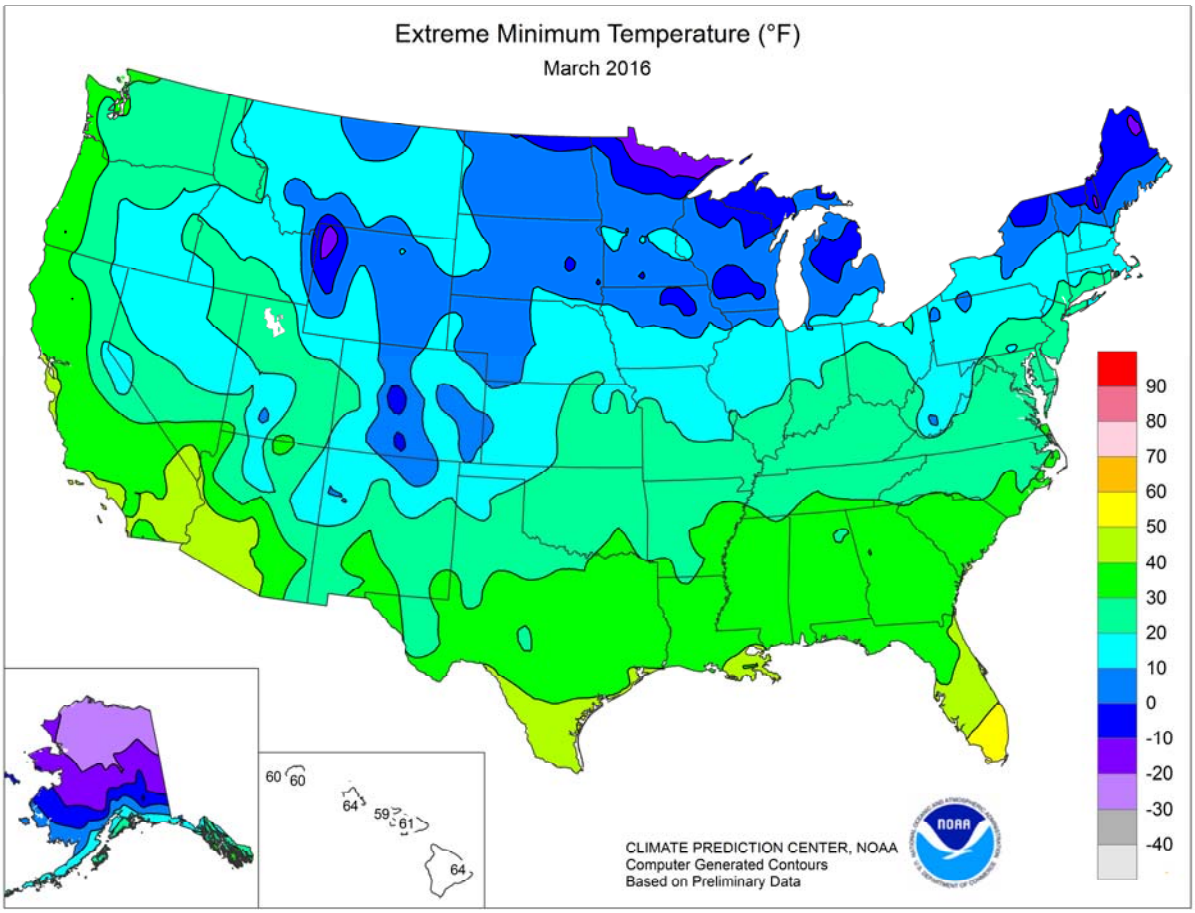
The Moderate Resolution Imaging Spectroradiometer (MODIS) aboard NASA's Aqua satellite captured this true-color image of the Anderson Creek fire on March 23, 2016 – less than 24 hours after ignition. Actively burning areas (hot spots) are highlighted in red. A dense blanket of smoke extended north-northeastward from the fire, shrouding much of south-central and central Kansas.

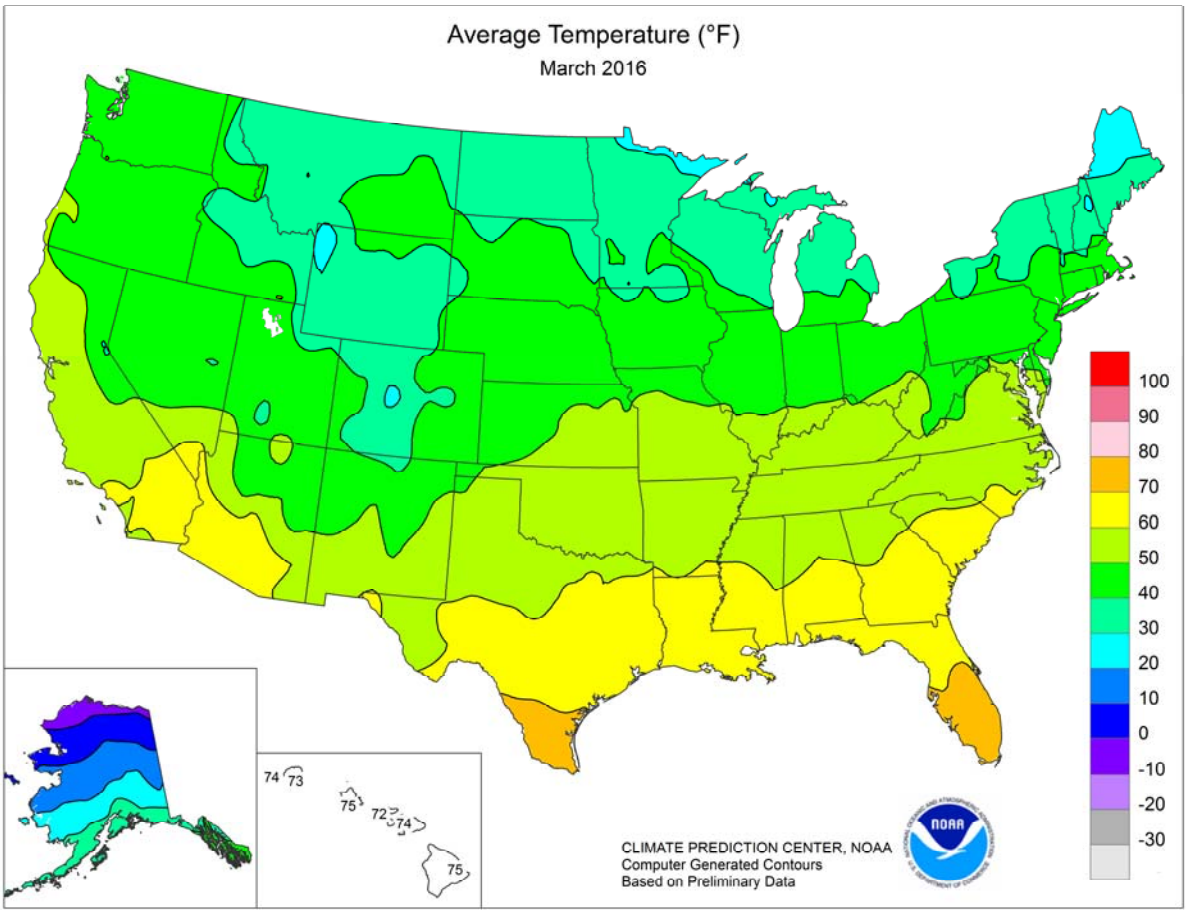
The Anderson Creek fire grew to 367,740 acres, according to preliminary reports, and became the largest wildfire in modern Kansas history.

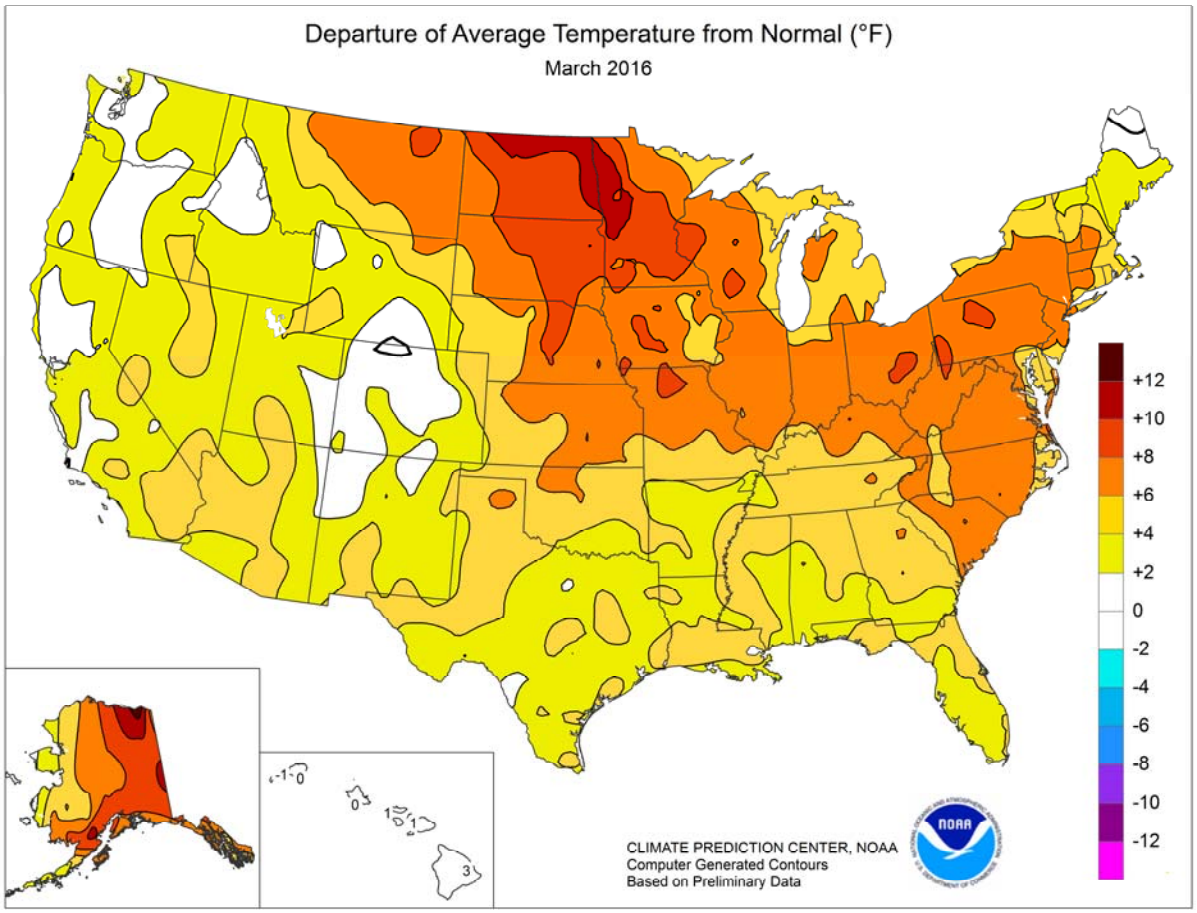

Total Precipitation (Inches)
March 2016
24
20
16
12
8
4
2
1
0.5
0
0
0.1
0.4
0
1
2.9
0.1
0
2.6
1.1
6.6
9.6
2.2
2.3
7.3
6.4
1.2
2.6
0.2
1.1
1.9
4.9
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Percent of Normal Precipitation
March 2016
400
200
150
125
100
75
50
25
43
37
81
7
3
126
227
71
0.8
251
60
110
84
62
45
141
80
48
73
12
43
83
34
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Maximum Temperature (°F)
March 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
86
83
84
84
88
90
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
March 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
60
60
64
59
61
64
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
March 2016
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
74
73
75
72
74
75
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
March 2016
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-1
0
0
1
1
3
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

March 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	60	5	5.70	-0.40	LEXINGTON	52	6	2.79	-1.62	COLUMBUS	48	6	4.27	1.38
HUNTSVILLE	58	6	4.48	-2.20	LONDON-CORBIN	52	5	2.13	-2.48	DAYTON	47	7	5.50	2.21
MOBILE	64	4	10.16	2.96	LOUISVILLE	54	7	5.50	1.09	MANSFIELD	45	8	4.15	0.79
MONTGOMERY	63	5	4.21	-2.18	PADUCAH	53	5	9.21	4.94	TOLEDO	43	6	5.10	2.48
AK ANCHORAGE	34	8	1.23	0.58	LA BATON ROUGE	66	6	10.00	4.93	YOUNGSTOWN	45	8	3.81	0.76
BARROW	-7	7	0.04	-0.05	LAKE CHARLES	66	5	3.45	-0.09	OK OKLAHOMA CITY	56	5	1.02	-1.88
COLD BAY	33	3	1.19	-1.29	NEW ORLEANS	68	6	6.36	1.12	TULSA	56	5	2.86	-0.71
FAIRBANKS	20	9	0.52	0.24	SHREVEPORT	63	5	12.83	8.65	OR ASTORIA	49	3	12.10	4.73
JUNEAU	40	6	2.17	-1.34	ME BANGOR	33	2	3.27	-0.17	BURNS	41	4	1.33	0.09
KING SALMON	33	9	1.95	1.16	CARIBOU	24	-1	4.69	2.12	EUGENE	49	3	5.76	-0.04
KODIAK	40	7	7.34	2.12	PORTLAND	38	4	4.37	0.23	MEDFORD	51	4	2.45	0.60
NOME	12	3	0.04	-0.56	MD BALTIMORE	50	6	2.09	-1.84	PENDLETON	47	2	1.62	0.36
AZ FLAGSTAFF	40	3	0.37	-2.25	MA BOSTON	42	3	3.16	-0.69	PORTLAND	51	4	4.73	1.02
PHOENIX	69	6	0.00	-1.07	WORCESTER	40	6	3.49	-0.74	SALEM	50	3	6.36	2.19
TUCSON	65	6	0.11	-0.70	MI ALPENA	33	5	5.52	3.39	PA ALLENTOWN	46	7	1.06	-2.50
AR FORT SMITH	56	3	5.31	1.37	DETROIT	43	6	4.86	2.34	ERIE	43	6	3.16	0.03
LITTLE ROCK	58	5	12.33	7.45	FLINT	41	7	4.33	2.11	MIDDLETOWN	48	7	1.30	-1.98
CA BAKERSFIELD	61	4	0.45	-0.96	GRAND RAPIDS	40	5	4.94	2.35	PHILADELPHIA	51	8	2.01	-1.80
EUREKA	51	2	8.10	2.55	HOUGHTON LAKE	35	6	4.73	2.68	PITTSBURGH	48	8	2.83	-0.34
FRESNO	59	3	2.93	0.73	LANSING	40	6	4.25	1.92	WILKES-BARRE	44	6	1.78	-0.91
LOS ANGELES	60	2	1.46	-0.94	MUSKEGON	40	6	4.94	2.58	WILLIAMSPORT	46	8	1.11	-2.10
REDDING	57	4	10.36	5.21	TRAVERSE CITY	37	6	4.56	2.58	PR SAN JUAN	79	1	2.22	0.08
SACRAMENTO	57	2	5.07	2.27	MN DULUTH	32	7	3.96	2.27	RI PROVIDENCE	44	5	2.68	-1.75
SAN DIEGO	63	3	0.76	-1.50	INT'L FALLS	29	5	2.71	1.75	SC CHARLESTON	64	6	3.19	-0.81
SAN FRANCISCO	58	4	5.14	1.88	MINNEAPOLIS	41	9	2.26	0.40	COLUMBIA	62	7	1.88	-2.71
STOCKTON	58	3	3.55	1.27	ROCHESTER	38	7	3.98	2.10	FLORENCE	59	3	1.63	-2.37
CO ALAMOSA	35	2	0.52	0.06	ST. CLOUD	38	10	1.50	0.00	GREENVILLE	58	6	1.69	-3.62
CO SPRINGS	42	4	1.73	0.67	MS JACKSON	62	5	12.24	6.50	MYRTLE BEACH	62	7	2.55	-1.24
DENVER	42	4	1.90	1.01	MERIDIAN	60	3	12.38	5.45	SD ABERDEEN	40	9	0.46	-0.88
GRAND JUNCTION	45	2	1.07	0.07	TUPELO	58	5	7.89	1.59	HURON	41	8	1.07	-0.60
PUEBLO	46	4	0.58	-0.39	MO COLUMBIA	51	7	1.88	-1.33	RAPID CITY	41	6	1.09	0.06
CT BRIDGEPORT	45	5	2.17	-1.98	JOPLIN	53	5	2.57	-1.05	SIOUX FALLS	40	7	2.08	0.27
HARTFORD	44	6	2.20	-1.68	KANSAS CITY	51	7	2.72	0.28	TN BRISTOL	52	5	1.94	-1.97
DC WASHINGTON	53	6	1.16	-2.44	SPRINGFIELD	52	6	2.94	-0.88	CHATTANOOGA	57	6	3.64	-2.55
DE WILMINGTON	49	6	2.00	-1.97	ST JOSEPH	49	5	1.37	-0.99	JACKSON	55	4	12.65	7.52
FL DAYTONA BEACH	69	4	1.43	-2.41	ST LOUIS	53	7	2.29	-1.31	KNOXVILLE	55	5	2.94	-2.23
FT LAUDERDALE	75	4	2.84	0.04	MT BILLINGS	43	6	1.55	0.43	MEMPHIS	58	5	16.20	10.62
FT MYERS	72	2	1.05	-1.69	BUTTE	34	4	0.45	-0.38	NASHVILLE	56	6	4.33	-0.54
JACKSONVILLE	66	4	1.83	-2.10	GLASGOW	40	9	0.52	0.05	TX ABILENE	59	3	2.31	0.90
KEY WEST	75	1	0.30	-1.56	GREAT FALLS	40	7	0.50	-0.51	AMARILLO	53	5	0.27	-0.86
MELBOURNE	72	6	3.08	0.16	HELENA	40	5	0.19	-0.44	AUSTIN	64	2	3.81	1.67
MIAMI	76	4	0.61	-1.95	KALISPELL	38	3	1.29	0.18	BEAUMONT	67	5	4.85	1.10
ORLANDO	71	4	5.31	1.77	MILES CITY	43	8	0.26	-0.32	BROWNSVILLE	72	3	2.67	1.74
PENSACOLA	65	4	7.65	1.25	MISSOULA	40	2	0.86	-0.10	COLLEGE STATION	65	3	4.42	1.58
ST PETERSBURG	71	4	1.31	-1.98	NE GRAND ISLAND	46	8	0.61	-1.43	CORPUS CHRISTI	71	5	6.54	4.81
TALLAHASSEE	65	4	6.50	0.03	HASTINGS	46	7	0.61	-1.47	DALLAS/FT WORTH	61	4	2.67	-0.39
TAMPA	71	4	1.76	-1.08	LINCOLN	47	8	0.93	-1.28	DEL RIO	66	2	2.08	1.12
WEST PALM BEACH	75	4	2.42	-1.26	MCCOOK	46	6	0.48	-0.93	EL PASO	62	5	0.01	-0.25
GA ATHENS	60	7	1.95	-3.04	NORFOLK	43	6	2.41	0.44	GALVESTON	67	3	3.16	0.40
ATLANTA	60	6	2.21	-3.17	NORTH PLATTE	43	5	0.66	-0.58	HOUSTON	65	3	3.25	-0.11
AUGUSTA	61	5	3.18	-1.43	OMAHA/EPPLEY	47	8	1.03	-1.10	LUBBOCK	57	6	0.20	-0.56
COLUMBUS	62	4	2.56	-3.19	SCOTTSBLUFF	43	6	2.60	1.44	MIDLAND	61	5	0.34	-0.08
MACON	61	5	2.64	-2.25	VALENTINE	42	7	1.53	0.42	SAN ANGELO	61	4	3.33	2.34
SAVANNAH	65	6	5.01	1.37	NV ELKO	43	4	1.01	0.03	SAN ANTONIO	66	4	3.56	1.67
HI HILO	75	3	4.89	-9.46	ELY	39	3	1.56	0.51	VICTORIA	67	3	4.32	2.07
HONOLULU	75	1	0.22	-1.67	LAS VEGAS	64	6	0.00	-0.59	WACO	61	3	5.33	2.85
KAHULUI	74	1	1.95	-0.40	RENO	49	6	0.97	0.11	WICHITA FALLS	58	4	1.35	-0.92
LIHUE	73	0	2.62	-0.96	WINNEMUCCA	44	3	0.74	-0.12	UT SALT LAKE CITY	47	4	2.22	0.31
ID BOISE	48	4	1.46	0.05	NH CONCORD	40	7	2.67	-0.37	VT BURLINGTON	37	6	2.26	-0.06
LEWISTON	47	2	2.10	0.98	NJ ATLANTIC CITY	48	6	3.12	-0.94	VA LYNCHBURG	52	6	3.36	-0.47
POCATELLO	42	4	3.00	1.62	NEWARK	49	7	1.38	-2.83	NORFOLK	56	7	3.46	-0.62
IL CHICAGO/O'HARE	43	6	3.34	0.69	NM ALBUQUERQUE	52	4	0.00	-0.61	RICHMOND	53	5	1.02	-3.07
MOLINE	46	7	2.91	-0.01	NY ALBANY	43	8	1.17	-1.93	ROANOKE	54	7	2.25	-1.59
PEORIA	47	7	2.32	-0.51	BINGHAMTON	40	7	1.40	-1.57	WASH/DULLES	50	7	1.45	-2.10
ROCKFORD	43	7	4.01	1.62	BUFFALO	40	6	2.85	-0.14	WA OLYMPIA	46	2	8.51	3.22
SPRINGFIELD	50	8	5.59	2.44	ROCHESTER	40	6	1.82	-0.76	QUILLAYUTE	48	4	15.84	4.86
IN EVANSVILLE	52	6	5.87	1.58	SYRACUSE	40	6	2.45	-0.57	SEATTLE-TACOMA	49	3	5.52	1.77
FORT WAYNE	44	6	3.96	1.10	NC ASHEVILLE	53	7	1.56	-3.03	SPOKANE	43	3	3.30	1.77
INDIANAPOLIS	49	7	4.19	0.75	CHARLOTTE	58	5	0.85	-3.54	YAKIMA	47	5	1.82	1.12
SOUTH BEND	42	4	4.17	1.28	GREENSBORO	57	8	1.96	-1.89	WV BECKLEY	48	6	2.30	-1.33
IA BURLINGTON	46	6	3.21	0.25	HATTERAS	59	7	5.97	1.02	CHARLESTON	52	7	2.65	-1.25
CEDAR RAPIDS	42	5	2.73	0.50	RALEIGH	58	7	4.04	0.01	ELKINS	47	7	2.36	-1.56
DES MOINES	47	9	1.98	-0.23	WILMINGTON	61	6	2.83	-1.39	HUNTINGTON	53	7	2.67	-1.16
DUBUQUE	41	6	3.02	0.45	ND BISMARCK	39	9	0.43	-0.42	WI EAU CLAIRE	39	8	4.66	2.80
SIOUX CITY	44	7	3.06	1.06	DICKINSON	37	7	0.25	-0.44	GREEN BAY	37	6	4.05	1.99
WATERLOO	41	6	2.87	0.74	FARGO	38	11	0.96	-0.21	LA CROSSE	41	6	4.61	2.61
KS CONCORDIA	49	7	0.45	-1.90	GRAND FORKS	36	10	1.05	0.16	MADISON	40	6	5.96	3.68
DODGE CITY	49	5	0.04	-1.80	JAMESTOWN	37	9	0.36	-0.53	MILWAUKEE	40	5	4.34	1.75
GOODLAND	46	6	0.55	-0.65	MINOT	39	11	1.04	-0.01	WAUSAU	39	9	4.94	3.02
HILL CITY	48	9	0.20	-1.34	WILLISTON	37	8	0.18	-0.56	WY CASPER	37	2	1.36	0.46
TOPEKA	51	7	2.30	-0.26	OH AKRON-CANTON	45	7	4.58	1.43	CHEYENNE	38	4	2.49	1.44
WICHITA	53	7	1.53	-1.18	CINCINNATI	50	6	5.30	1.40	LANDER	38	3	4.59	3.35
KY JACKSON	54	7	2.38	-2.00	CLEVELAND	45	7	4.17	1.23	SHERIDAN	40	5	1.59	0.59

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

April 4 – 10, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Warmer than normal weather promoted fieldwork across much of the West, while weekly temperatures in the Great Lakes region and Northeast averaged more than 9°F below normal in some locations, further delaying spring planting. Dry weather in the Northwest and Southeast favored fieldwork. Elsewhere, beneficial precipitation fell in the Southwest, including the exceptional drought areas of California and Nevada.

Corn: By April 10, producers had planted 4 percent of this year's corn crop, 3 percentage points ahead of last year but equal to the 5-year average. Planting progress was at or behind normal in all states except Kansas, Missouri, North Carolina, Pennsylvania, and Tennessee.

Winter Wheat: Nationally, 56 percent of the winter wheat crop was reported in good to excellent condition, down 3 percentage points from last week but 14 points above this time last year. Four percent of the 2016 winter wheat crop was heading, slightly behind last year and 3 percentage points behind the 5-year average. Winter wheat heading progress was at or behind the 5-year average in all estimating states.

Cotton: Planting inched forward during the week, as cotton producers in California and Mississippi began seeding their crop. By April 10, five percent of the nation's crop was planted, slightly ahead of last year but 2 percentage points behind the 5-year average.

Sorghum: Fifteen percent of the sorghum was planted by April 10, slightly ahead of last year but 2 percentage points behind the 5-year average. Planting has been largely limited to the Delta and the southern Great Plains.

Rice: Producers had seeded 32 percent of the 2016 rice crop by week's end, 9 percentage points ahead of last year and 6 points ahead of the 5-year average. Planting was most active in Arkansas and Mississippi, where planting progress advanced 22 and 20 percentage points, respectively, during the week. Twelve percent of the nation's crop had emerged by April 10, five percentage points ahead of last year and 3 points ahead of the 5-year average.

Small Grains: Thirty-eight percent of the oat crop was seeded by April 10, two percentage points behind last year and 4 points behind the 5-year average. Good planting conditions promoted fieldwork in the Missouri River Valley, with planting progress advancing 17 percentage points or more in Iowa, Nebraska, and South Dakota. By week's end, 26 percent of the nation's oat crop had emerged, slightly behind last year and 6 percentage points behind the 5-year average.

By April 10, thirteen percent of the spring wheat crop was seeded, slightly behind last year but 3 percentage points ahead of the 5-year average. During the week, spring wheat planting progressed at least 21 percentage points in Idaho, South Dakota, and Washington.

Nineteen percent of the nation's barley was planted by week's end, 3 percentage points behind last year but 4 points ahead of the 5-year average. Planting progress was well behind last year's pace in the Northwest, with 35 percent planted in Idaho and 30 percent planted in Washington. This is 28 and 17 percentage points, respectively, behind last year in these states.

Other Crops: By week's end, 4 percent of the sugarbeet crop was planted, 8 percentage points behind last year and 6 points behind the 5-year average. Cold, wet conditions have delayed seeding in Michigan.

Crop Progress and Condition

Week Ending April 10, 2016

Weekly U.S. Progress and Condition Data provided by USDA/NASS

Winter Wheat Percent Headed

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
AR	6	NA	5	22
CA	62	NA	10	42
CO	0	NA	0	0
ID	0	NA	0	0
IL	0	NA	1	3
IN	0	NA	0	1
KS	1	NA	0	2
MI	0	NA	0	0
MO	0	NA	0	7
MT	0	NA	0	0
NE	0	NA	0	0
NC	1	NA	4	10
OH	0	NA	0	0
OK	4	NA	0	13
OR	0	NA	0	0
SD	0	NA	0	0
TX	18	12	20	22
WA	0	NA	0	0
18 Sts	5	NA	4	7

These 18 States planted 90% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	3	4	35	48	10
CA	0	0	15	35	50
CO	3	13	31	47	6
ID	0	1	7	79	13
IL	1	5	28	50	16
IN	1	2	19	60	18
KS	2	9	39	44	6
MI	1	6	21	54	18
MO	1	4	30	53	12
MT	1	5	39	51	4
NE	0	3	40	50	7
NC	4	13	31	44	8
OH	0	1	19	52	28
OK	2	7	37	46	8
OR	0	1	33	59	7
SD	0	1	35	59	5
TX	2	9	44	38	7
WA	1	3	16	70	10
18 Sts	2	7	35	48	8
Prev Wk	1	6	34	49	10
Prev Yr	5	14	39	35	7

Corn Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
CO	0	NA	0	1
IL	0	NA	2	6
IN	0	NA	0	2
IA	0	NA	0	0
KS	12	6	17	7
KY	1	NA	6	10
MI	0	NA	0	1
MN	0	NA	0	1
MO	3	3	24	10
NE	0	NA	0	1
NC	18	5	21	19
ND	0	NA	0	0
OH	1	NA	0	1
PA	0	1	2	1
SD	0	NA	0	1
TN	4	6	17	16
TX	43	42	46	52
WI	0	NA	0	0
18 Sts	1	NA	4	4

These 18 States planted 93% of last year's corn acreage.

Oats Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
IA	35	13	30	37
MN	14	1	8	14
NE	63	20	50	44
ND	5	0	4	4
OH	5	6	8	15
PA	1	14	27	18
SD	34	6	31	24
TX	100	100	100	100
WI	4	1	3	8
9 Sts	40	29	38	42

These 9 States planted 68% of last year's oat acreage.

Oats Percent Emerged

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
IA	3	0	3	7
MN	0	0	0	2
NE	9	0	2	8
ND	0	0	0	0
OH	1	0	3	3
PA	0	1	10	6
SD	4	0	3	5
TX	100	100	100	100
WI	0	0	0	1
9 Sts	27	24	26	32

These 9 States planted 68% of last year's oat acreage.

Sorghum Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
AR	12	1	8	24
CO	0	0	0	0
IL	0	0	0	0
KS	0	0	0	0
LA	37	14	29	50
MO	0	0	0	0
NE	0	0	0	0
NM	0	0	1	0
OK	7	0	4	2
SD	0	0	0	0
TX	34	36	40	46
11 Sts	14	13	15	17

These 11 States planted 98% of last year's sorghum acreage.

Crop Progress and Condition

Week Ending April 10, 2016

Weekly U.S. Progress and Condition Data provided by USDA/NASS

Cotton Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
AL	1	0	0	1
AZ	34	25	35	30
AR	1	0	0	1
CA	14	0	10	24
GA	0	0	0	2
KS	0	0	0	0
LA	0	0	0	3
MS	1	0	1	1
MO	0	0	0	0
NC	0	0	0	1
OK	1	0	0	0
SC	0	0	0	1
TN	0	0	0	0
TX	4	5	8	10
VA	0	0	0	0
15 Sts	4	3	5	7

These 15 States planted 99% of last year's cotton acreage.

Sugarbeets Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
ID	36	5	23	31
MI	0	0	0	18
MN	8	0	0	3
ND	9	0	0	2
4 Sts	12	1	4	10

These 4 States planted 84% of last year's sugarbeet acreage.

Rice Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
AR	17	11	33	23
CA	1	0	0	1
LA	71	48	67	67
MS	23	6	26	17
MO	0	0	11	14
TX	45	47	65	60
6 Sts	23	16	32	26

These 6 States planted 100% of last year's rice acreage.

Spring Wheat Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
ID	57	2	30	36
MN	15	1	5	10
MT	7	3	17	6
ND	4	1	5	5
SD	36	8	29	22
WA	62	17	42	39
6 Sts	14	NA	13	10

These 6 States planted 99% of last year's spring wheat acreage.

Rice Percent Emerged

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
AR	2	1	3	4
CA	0	0	0	0
LA	30	32	47	32
MS	3	0	3	5
MO	0	0	0	2
TX	11	20	44	32
6 Sts	7	7	12	9

These 6 States planted 100% of last year's rice acreage.

Barley Percent Planted

	Prev Year	Prev Week	Apr 10 2016	5-Yr Avg
ID	63	6	35	37
MN	7	0	2	6
MT	15	11	25	12
ND	1	0	2	2
WA	47	18	30	22
5 Sts	22	6	19	15

These 5 States planted 82% of last year's barley acreage.

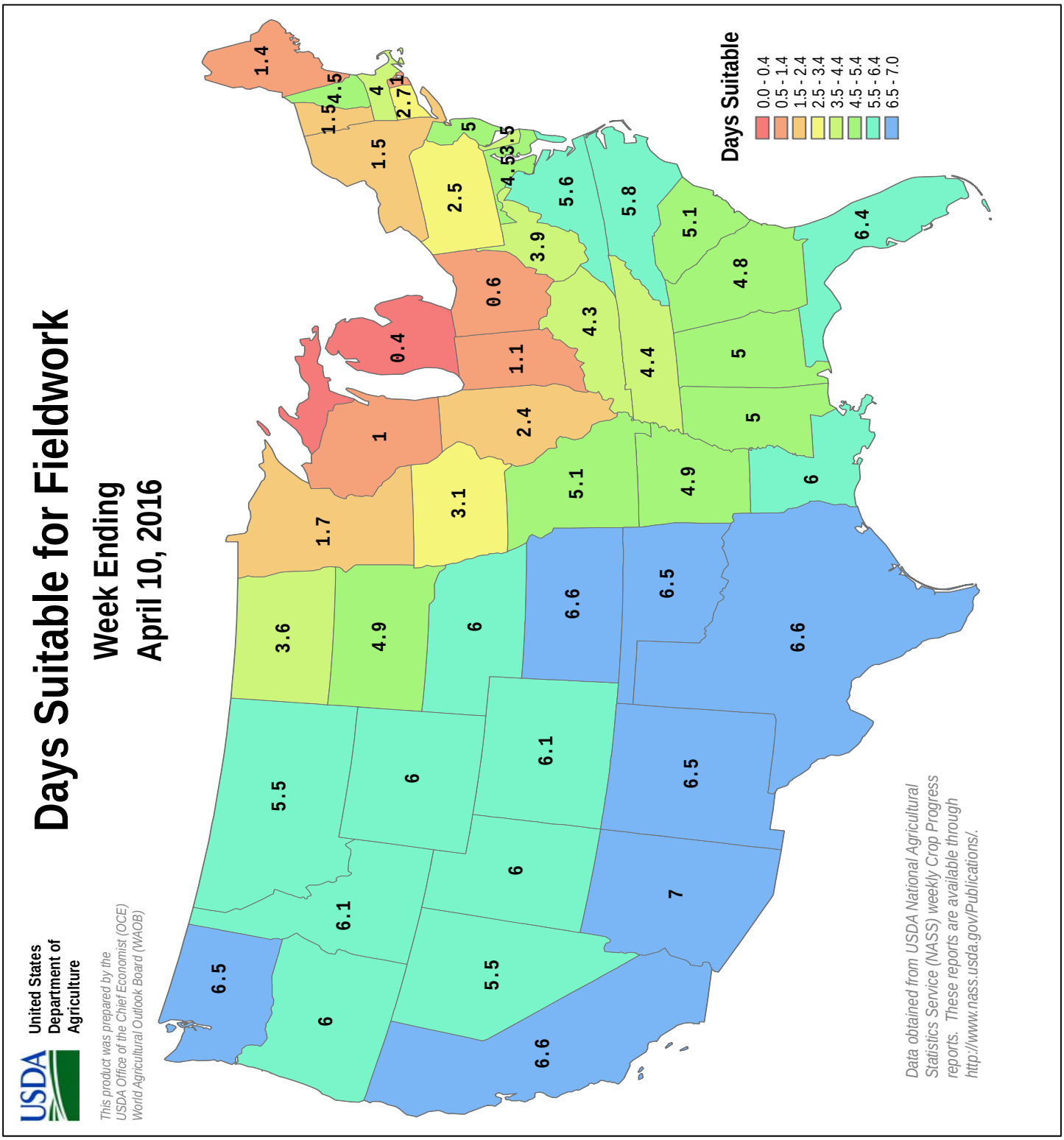
VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent

NA - Not Available; *Revised

Crop Progress and Condition

Week Ending April 10, 2016

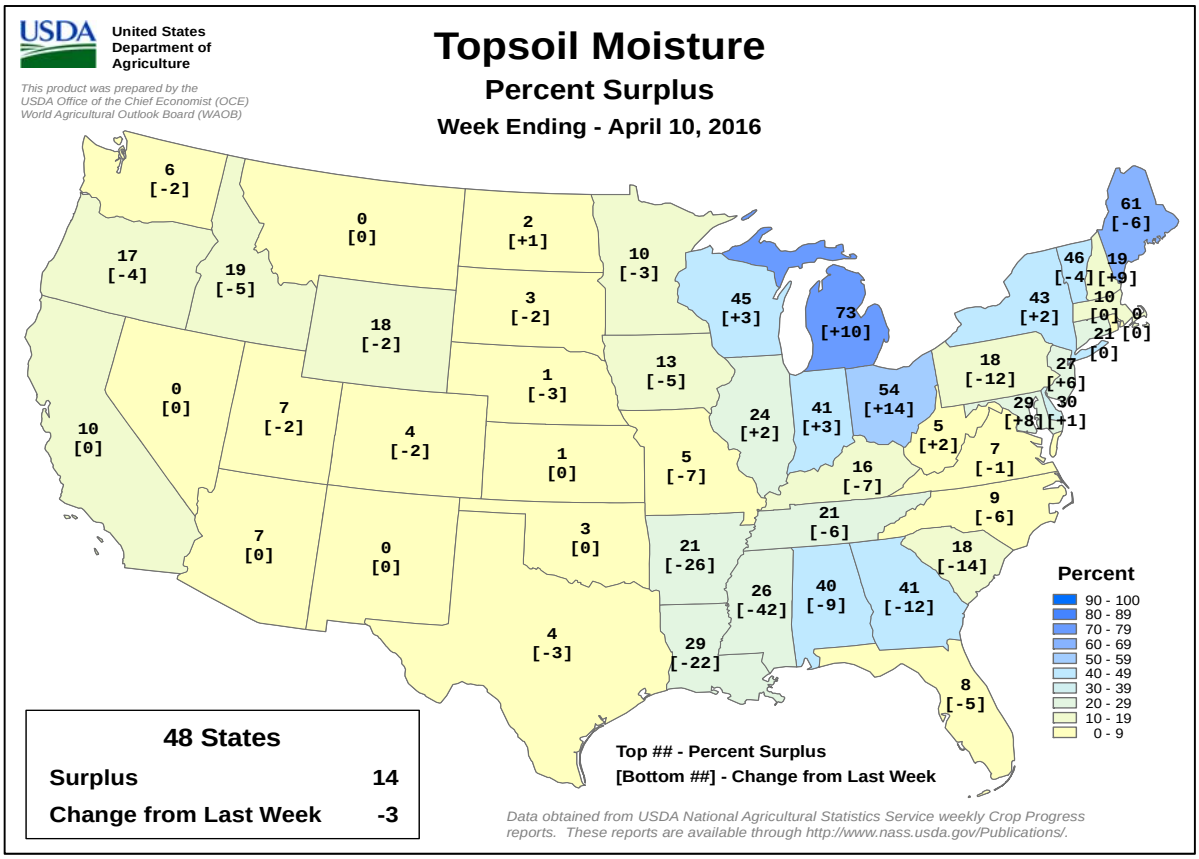
Weekly U.S. Progress and Condition Data provided by USDA/NASS

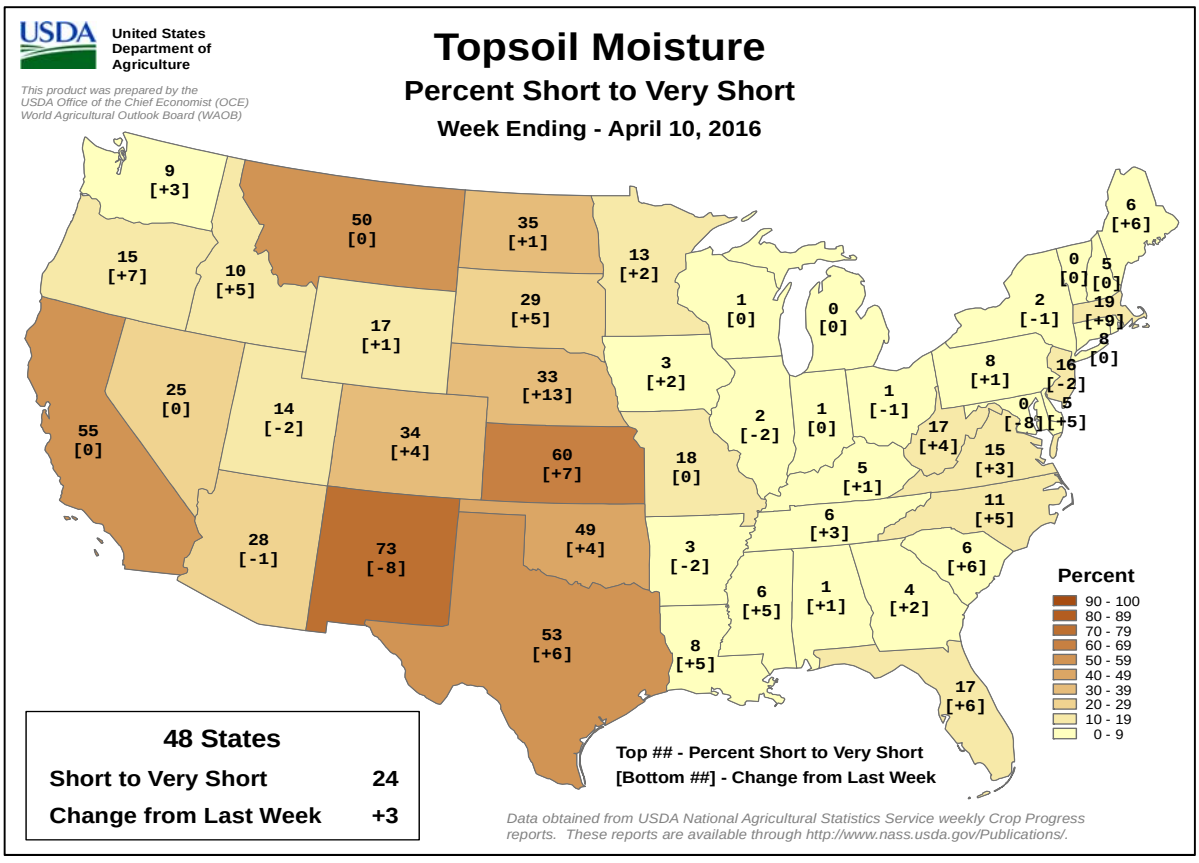


Crop Progress and Condition

Week Ending April 10, 2016

Weekly U.S. Progress and Condition Data provided by USDA/NASS

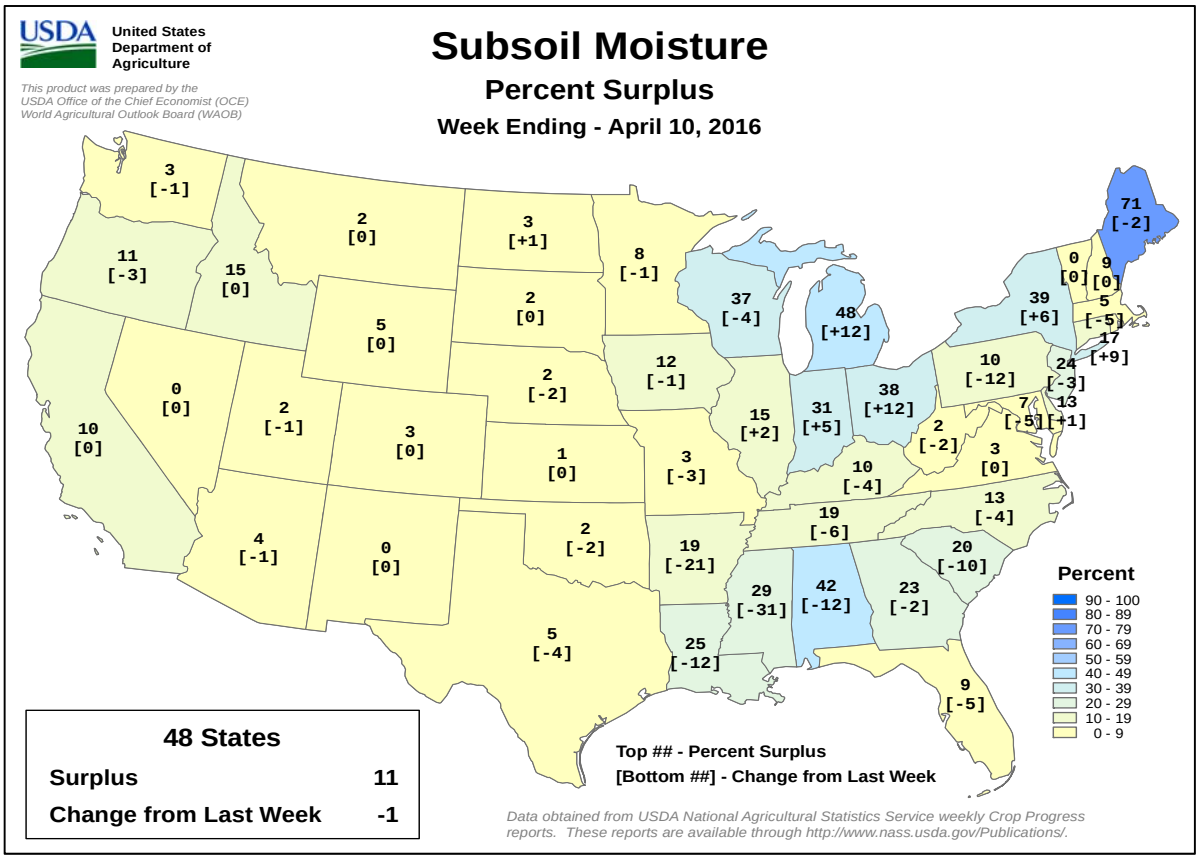


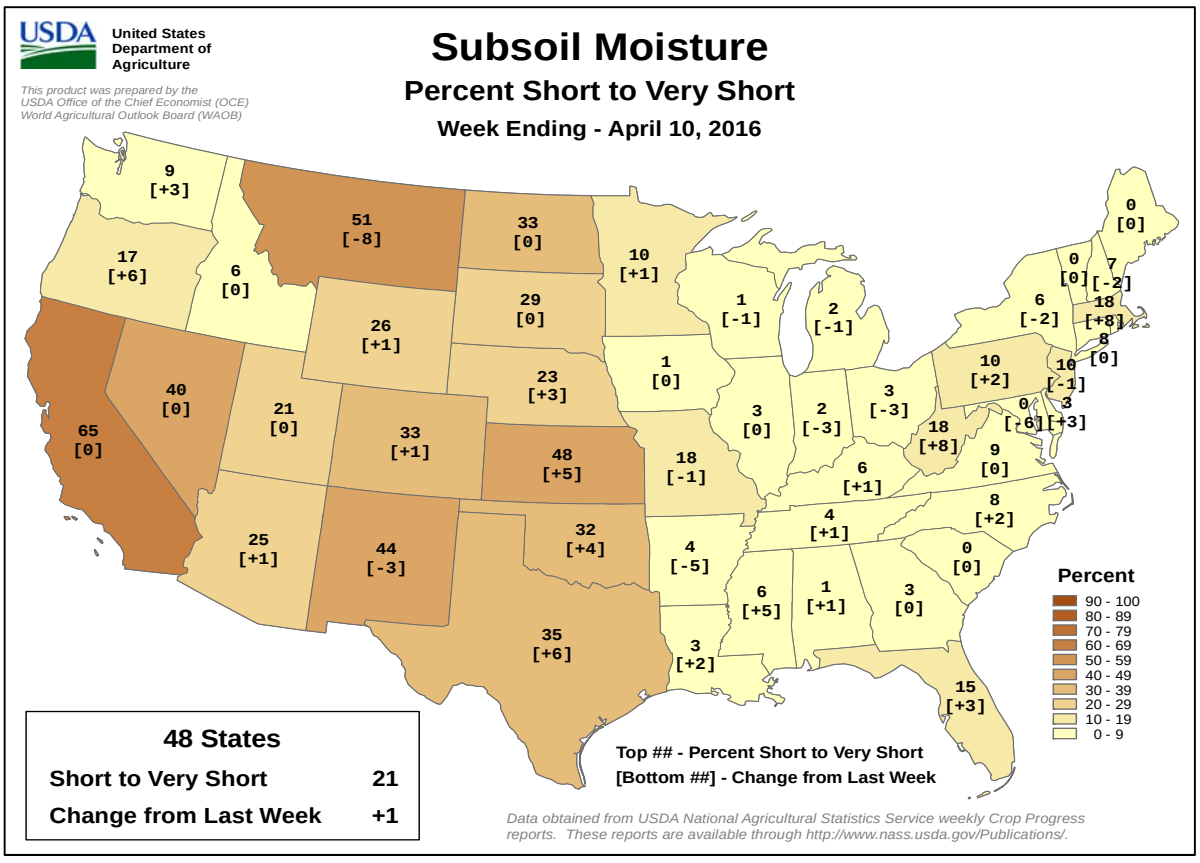


Crop Progress and Condition

Week Ending April 10, 2016

Weekly U.S. Progress and Condition Data provided by USDA/NASS





International Weather and Crop Summary

April 3-9, 2016

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

HIGHLIGHTS

EUROPE: Additional showers and above-normal temperatures maintained excellent winter crop prospects over most of the continent.

WESTERN FSU: Warm, dry weather accelerated winter wheat development and encouraged summer crop sowing.

MIDDLE EAST: Sunny, locally hot conditions promoted seasonal fieldwork but may have caused some crop stress in central portions of the region.

NORTHWESTERN AFRICA: Widespread showers sustained favorable winter grain prospects over Algeria and Tunisia but slowed winter grain maturation in Morocco.

EASTERN ASIA: Moderate to heavy rainfall maintained ample soil moisture for reproductive rapeseed and vegetative spring-sown crops in eastern China.

SOUTHEAST ASIA: Showers continued throughout Indonesia, benefiting oil palm but slowing rice harvesting.

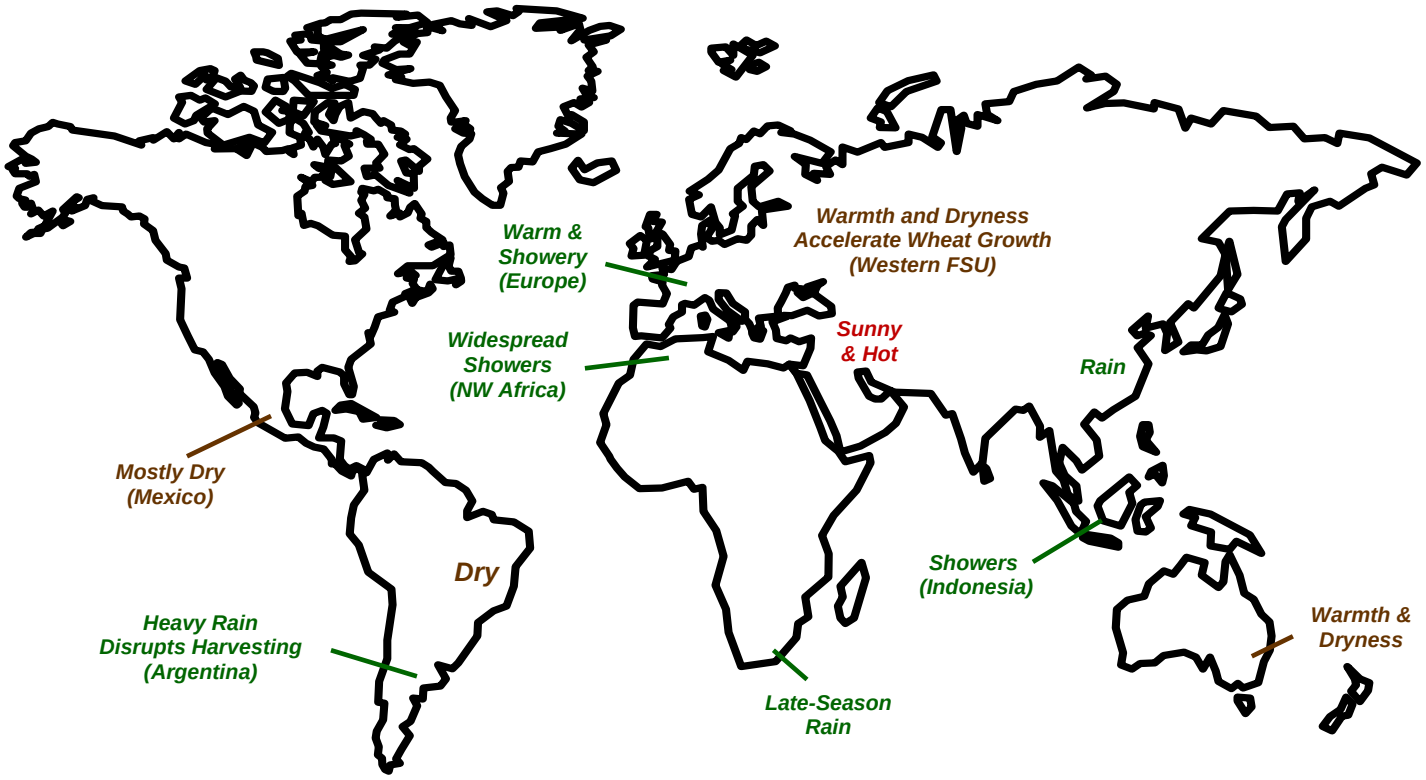
AUSTRALIA: Mostly dry, very warm weather favored summer crop drydown and harvesting.

SOUTH AFRICA: Rain fell in western corn areas, although the moisture came too late to significantly improve crop prospects.

ARGENTINA: Rain disrupted summer crop harvesting but moisture reserves were mostly favorable for late-planted crops.

BRAZIL: Dry weather dominated large sections of central Brazil, reducing moisture for second-crop corn.

MEXICO: The summer rainy season has yet to develop on the southern plateau corn belt.



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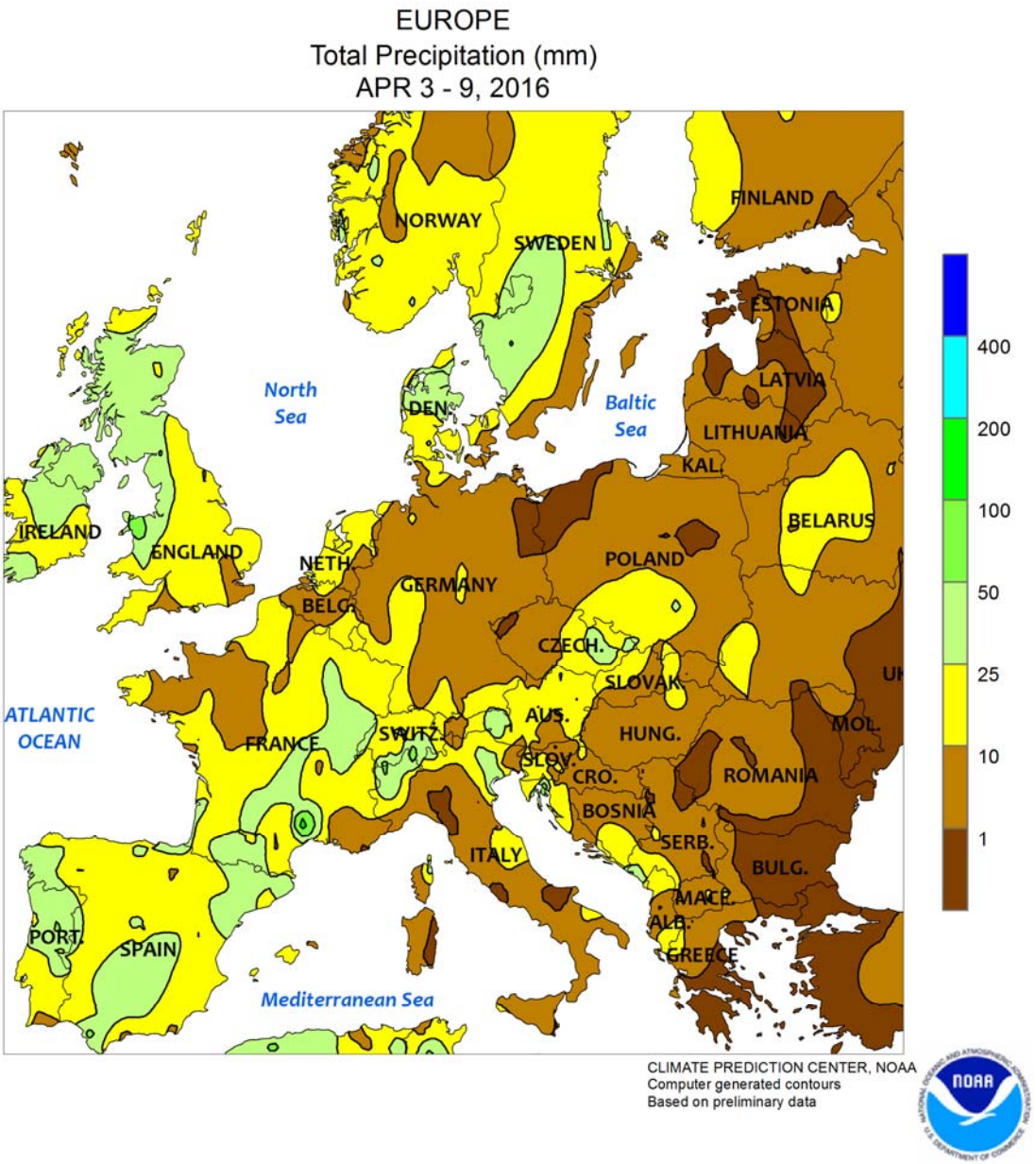

EUROPE

Warm, showery weather maintained good to excellent prospects for winter crops over much of the continent. Across France and the United Kingdom, above-normal temperatures (1-3°C above normal) and widespread showers (5-30 mm) maintained good conditions for vegetative winter wheat and rapeseed. Light to moderate showers (1-20 mm, locally more) in Germany, Poland, and the Baltic States sustained favorable prospects for vegetative winter grains and oilseeds. Unusually warm weather (up to 9°C above normal, with highs reaching 30°C) in the Balkans accelerated winter wheat development, though soil moisture remained adequate to abundant for spring growth. In Spain, soaking rainfall (10-45 mm) boosted already-excellent winter grain prospects as wheat and barley advanced toward the reproductive (north) and filling stages (south) of development. Farther east, corn planting in northern Italy proceeded with minimal delay, as rain generally bypassed the Po River Valley.

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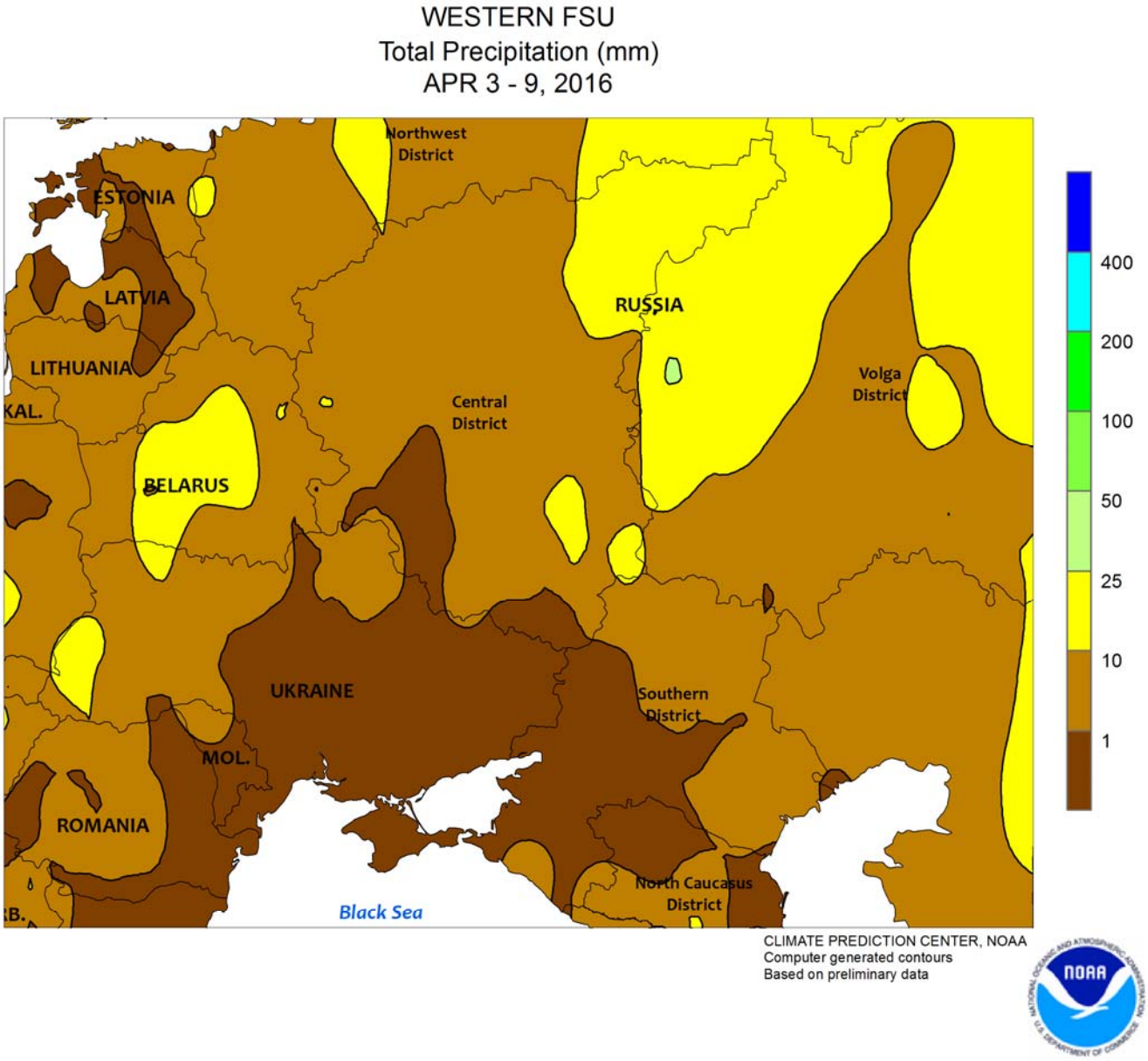

WESTERN FSU

Warm, dry weather promoted a rapid pace of fieldwork and crop development over most of the region. A broad area of high pressure centered over the Caspian Sea maintained sunny skies and a warm southerly flow for much of the week. Temperatures averaged 5 to 10°C above normal in Belarus, Ukraine, and western Russia, facilitating rapid winter crop development. Warmer-than-normal conditions (1-4°C above normal) also prevailed across the remainder of central and southern Russia, melting the remnants of this season's snow cover in all but eastern-most portions of the Volga District while encouraging a faster-than-normal pace of winter wheat development in the Southern District. The sunny, warm conditions (22-26°C) in Ukraine and neighboring portions of Russia also engendered early corn, sunflower, and sugarbeet planting.

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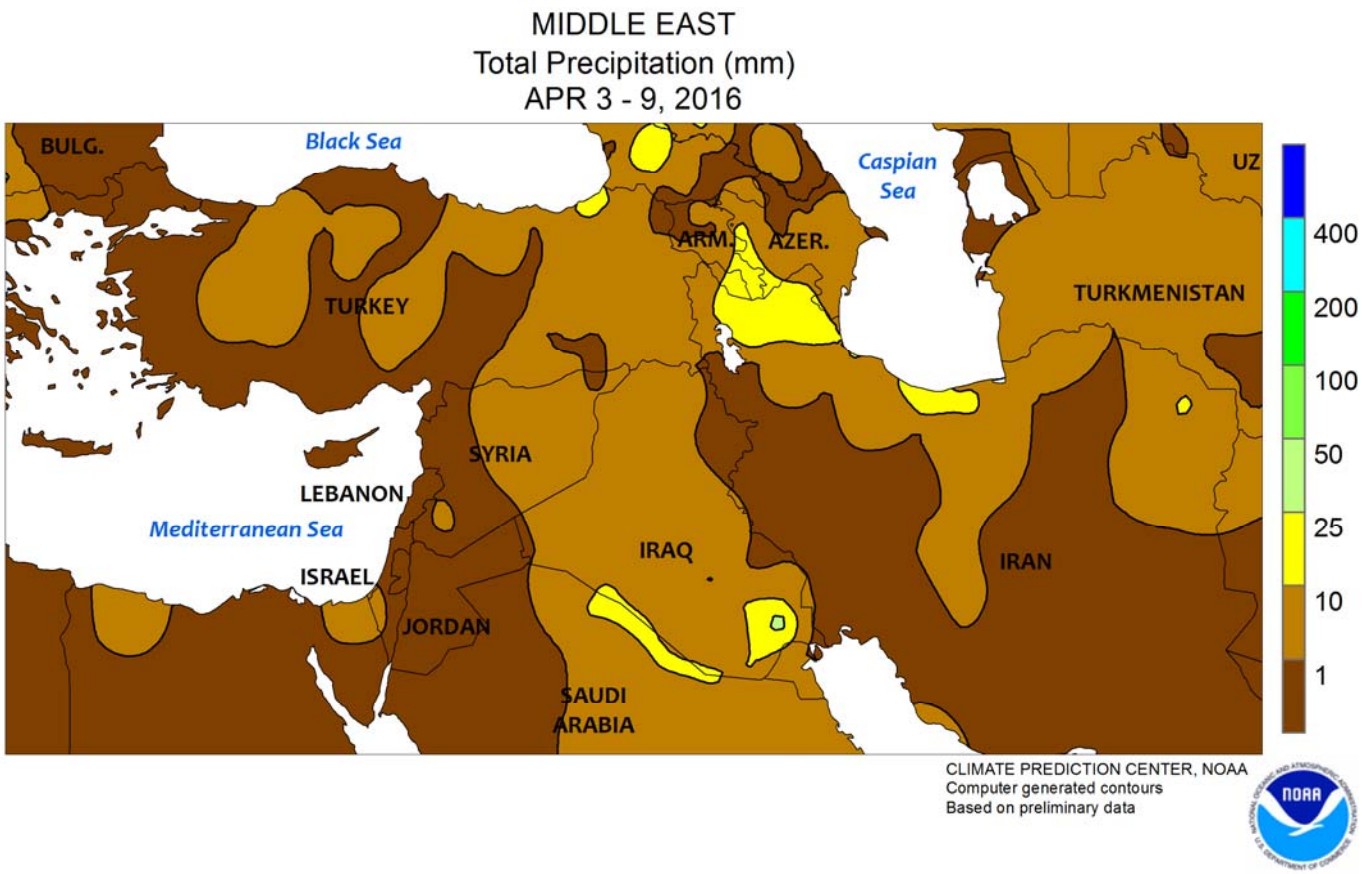

MIDDLE EAST

Sunny, warmer-than-normal weather over much of the region accelerated seasonal fieldwork and winter grain development. A large area of high pressure centered over the Caspian Sea maintained sunny skies and warm, locally hot conditions over much of the region. Readings topped 30°C in western Turkey, while daytime highs on the Anatolian Plateau peaked into the middle and upper 20s. The heat accelerated wheat toward the heading stage of development up to a month ahead of normal, though sharply cooler conditions arrived in Turkey by week's end. Likewise, a hot southerly flow caused temperatures to spike into the middle 30s (as high as 35°C) over Iraq and the southwestern corner of Iran, stressing winter grains that have likely reached the flowering stage of development two to four weeks faster than normal. However, crops in these areas have received abundant rainfall during the season and are consequently more able to withstand the increased water demands caused by the heat. Furthermore, locally heavy showers and thunderstorms were sweeping across Syria, Iraq, and western Iran as of April 11, signaling the end of the recent hot spell; more information on this rainfall will be provided in next week's *Bulletin*. The remainder of Iran experienced near- to below-normal temperatures, maintaining good to excellent prospects for winter grains.

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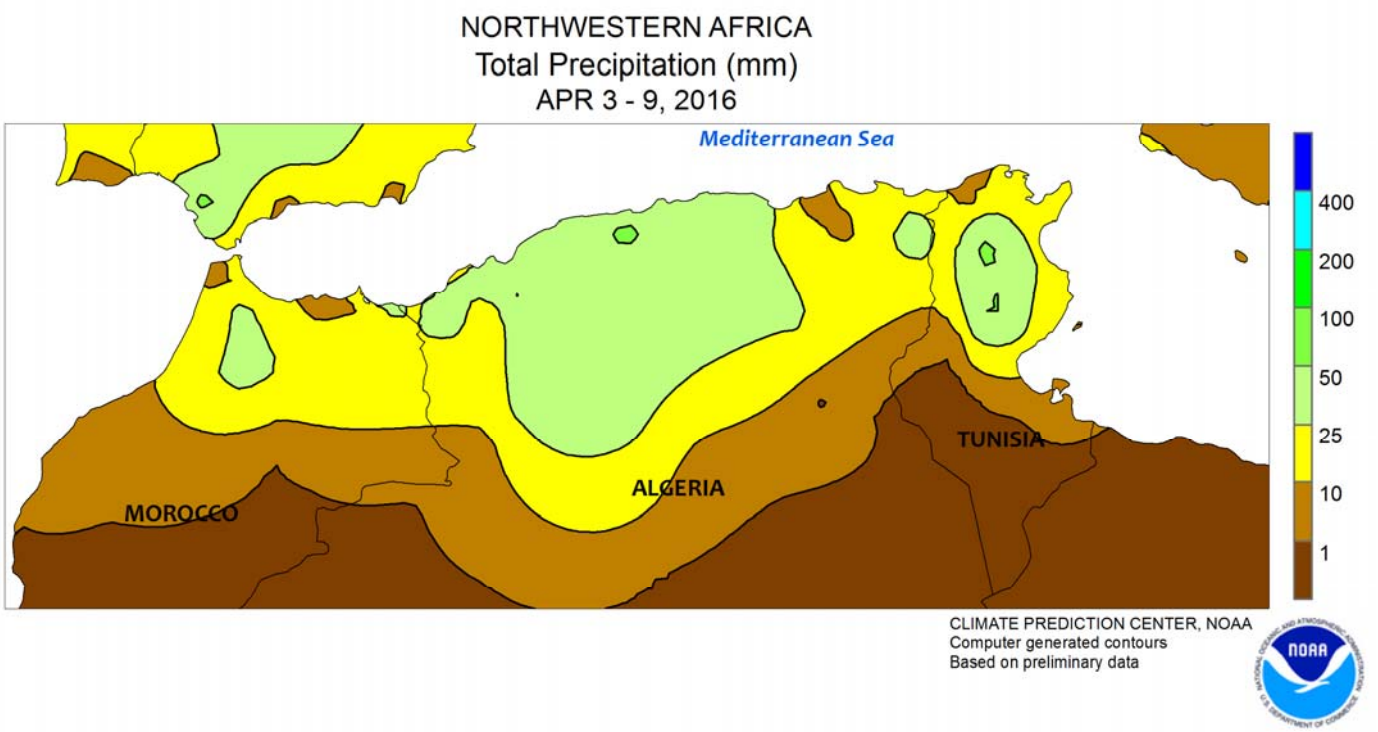

NORTHWESTERN AFRICA

Widespread rain returned to the region, easing concerns brought on by last week's hot, dry weather in eastern growing areas. In Morocco, showers (3-30 mm) slowed winter wheat maturation, though crops have suffered irreversible yield losses from this season's severe drought. Farther east, moderate to heavy rain (10-50 mm, locally more) in Algeria and Tunisia brought last week's spell of hot weather to a close and boosted soil moisture supplies for heading to flowering winter grains. Consequently, winter crop prospects remained good to excellent in central and eastern portions of northern Africa's wheat belt.

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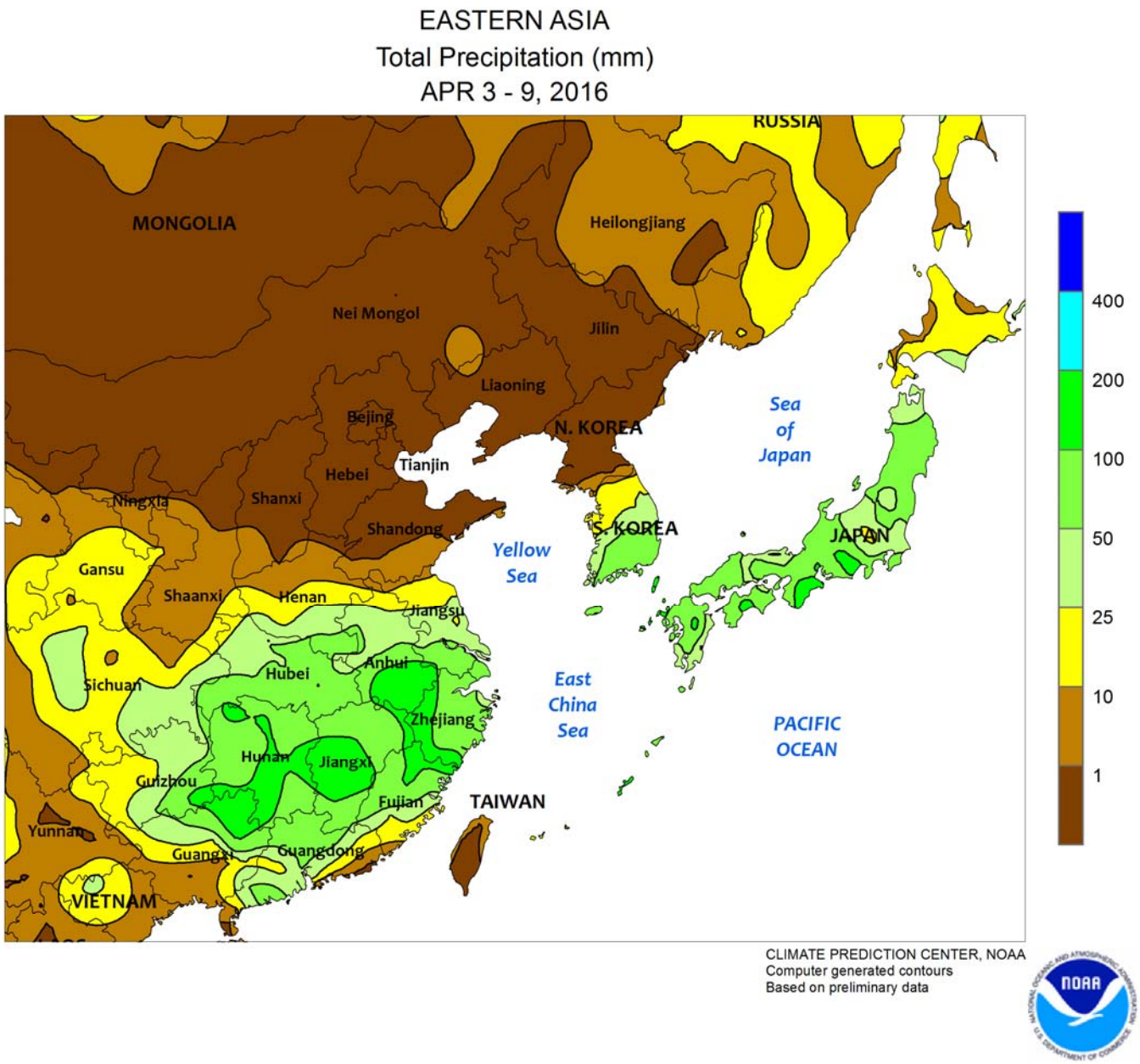

EASTERN ASIA

Showers overspread a large portion of the winter and spring crop areas in eastern China. Moderate to heavy rainfall during the early half of the week brought nearly 50 mm to reproductive wheat in southern sections of the North China Plain and upwards of 100 mm to reproductive rapeseed in the Yangtze Valley. Farther south, showers persisted throughout the week, with over 100 mm of rain keeping early-crop rice and other spring-sown crops well watered. In contrast, wheat in central and northern portions of the North China Plain continued to experience unfavorable spring dryness and temperatures approaching 5°C above normal, necessitating further supplemental irrigation to stave off yield reductions. The last appreciable rainfall in these areas occurred in mid-February when the crop was still dormant.

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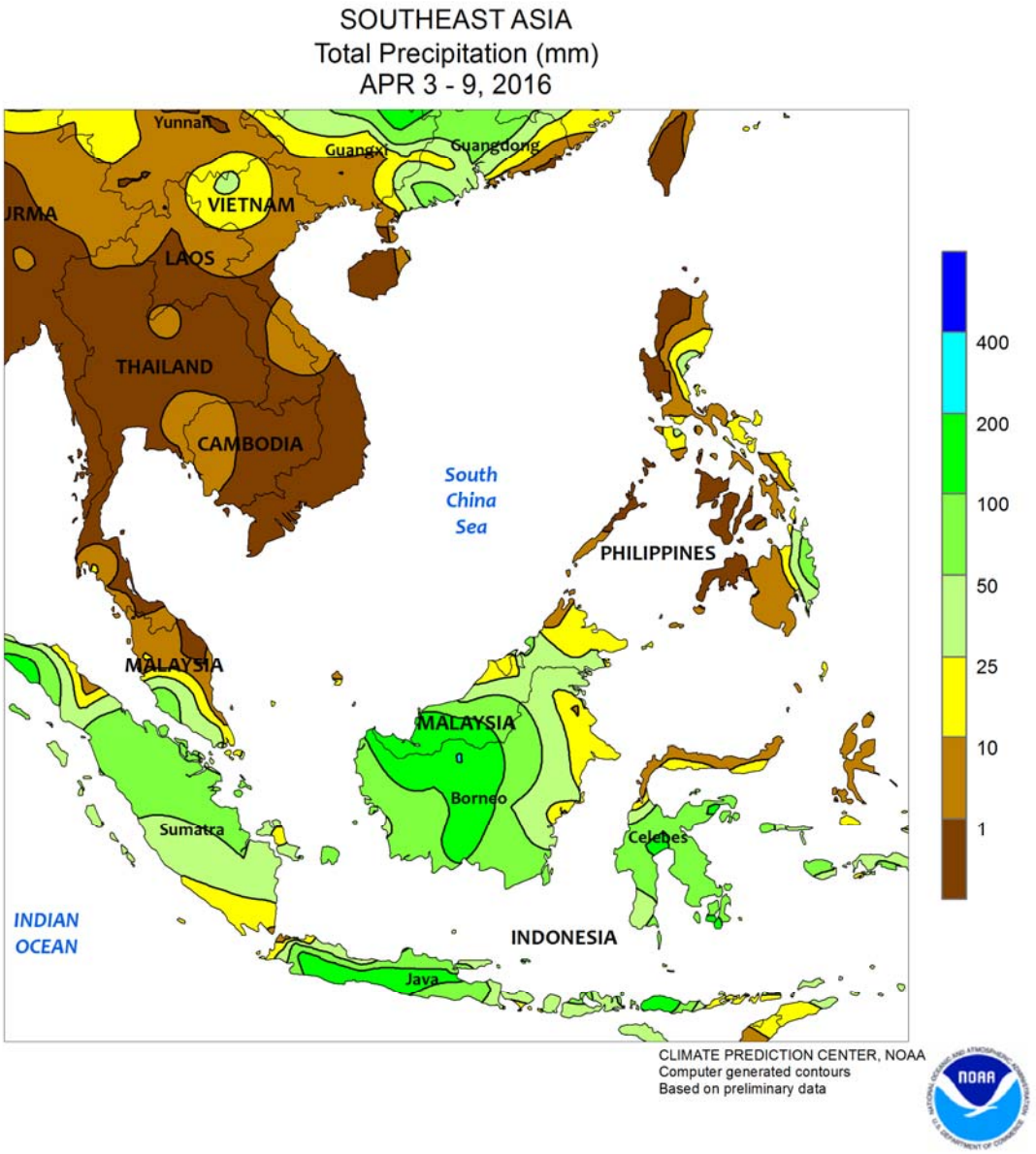

SOUTHEAST ASIA

Unseasonably heavy showers prevailed across much of Indonesia, with amounts surpassing 50 mm in many areas. The rainfall maintained beneficial soil moisture for oil palm in Sumatra and Kalimantan but slowed main-season rice harvesting in Java. Typically, seasonal rain begins to slowly ease across Indonesia at this time of year as tropical showers migrate northward. More rain was reported in southwestern sections of the Malay Peninsula, benefiting oil palm that has experienced consistently below-normal rainfall during the main wet season. In the Philippines, a return to drier weather exacerbated limited soil moisture for spring-sown rice and corn. Meanwhile, seasonal heat was building across Indochina (temperatures in excess of 40°C), a precursor to the monsoon that begins in early May. Dry-season rice harvesting was nearing completion in Thailand, while summer rice cultivation was about half complete in southern Vietnam and spring rice cultivation was about half complete in northern Vietnam. Low water supplies in both countries have likely lowered rice prospects and a timely onset of seasonal rainfall in May is needed.

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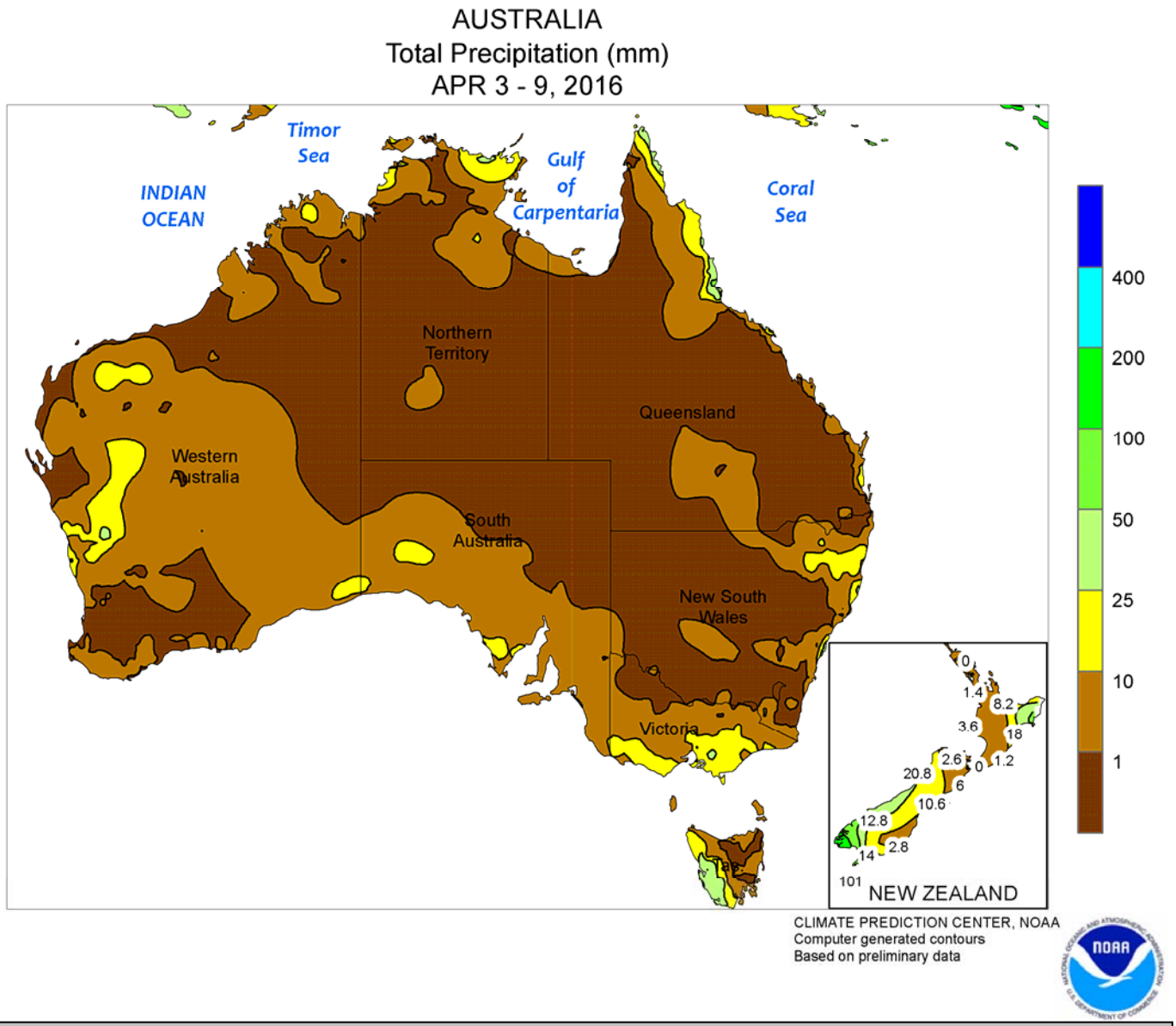

AUSTRALIA

Similar to last week, mostly dry, very warm weather during most of the week favored summer crop drydown and harvesting in southern Queensland and northern New South Wales. Scattered showers (2-10 mm, locally more) at week's end may have caused some delays in cotton and sorghum harvesting, but any delays were likely localized and brief. Temperatures in eastern Australia averaged about 2 to 3°C above normal, with maximum temperatures generally in the middle 20s to lower 30s degrees C.

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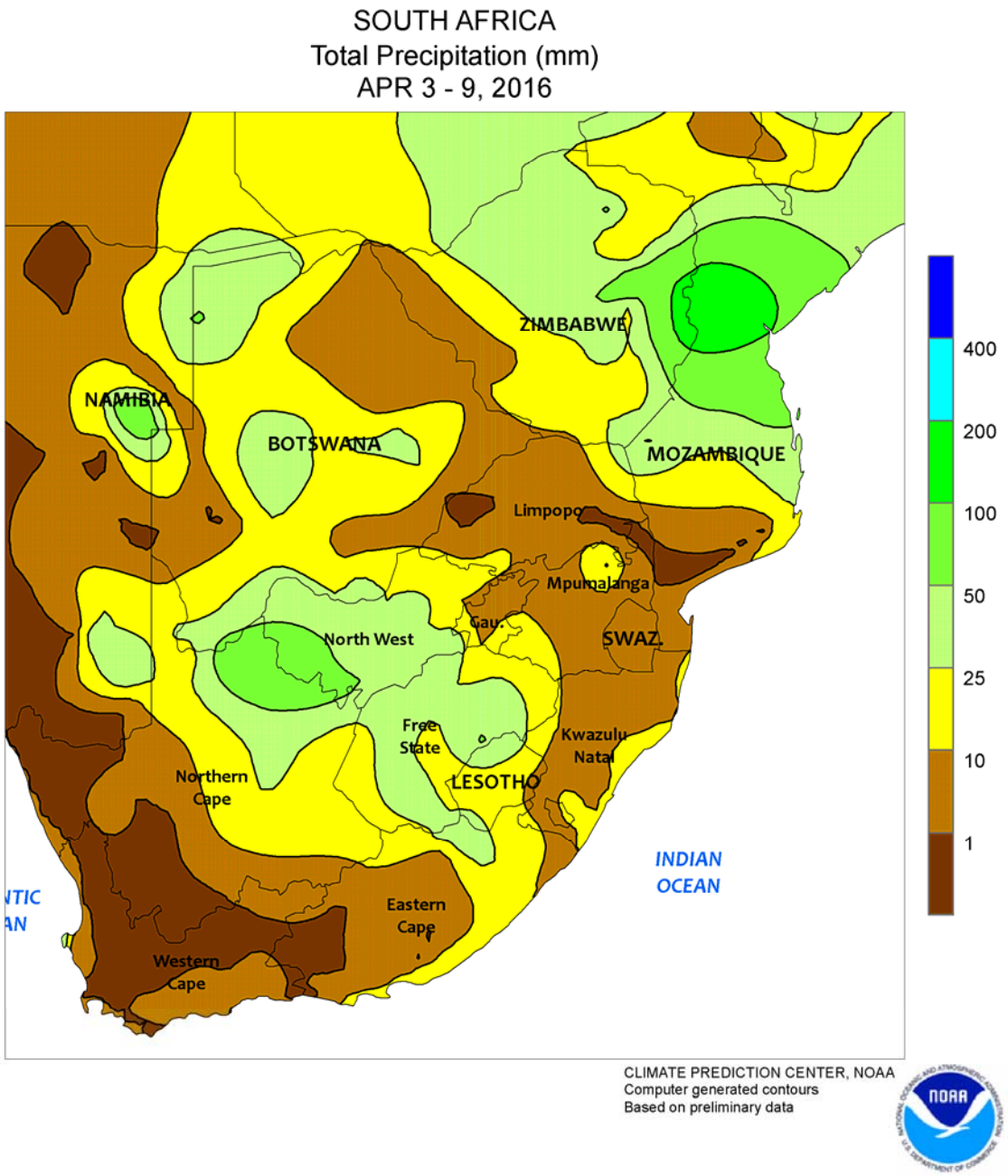

SOUTH AFRICA

Late-season rain fell in western and southern sections of the corn belt, as drier weather prevailed in other key eastern commercial farming areas. Rainfall totaled 10 to 25 mm — locally higher — over much of North West and Free State, as well as neighboring locations in Gauteng and Mpumalanga. While overall favorable, the moisture came too late in the season to significantly improve prospects of corn and other summer crops planted late due to spring and early summer drought. Little to no rain fell from Limpopo southward through KwaZulu-Natal, including most of Mpumalanga. An exception was along the Indian Coast, where moderate rain (locally greater than 10 mm) gave a late-season boost to rain-fed sugarcane. The general pattern of dryness benefited maturing corn and supported early harvesting of sugarcane in irrigated production areas of northern KwaZulu-Natal and eastern Mpumalanga. Weekly temperatures averaged near to slightly below normal in the aforementioned areas, although temperatures reached the upper 20s and lower 30s (degrees C) on several days. No freezes were recorded in the main summer crop areas. Elsewhere, unseasonably heavy showers (locally greater than 50 mm) increased long-term moisture reserves in sections of Northern and Eastern Cape Provinces, but dry weather continued in Western Cape, where moisture would be welcome in advance of winter wheat planting.

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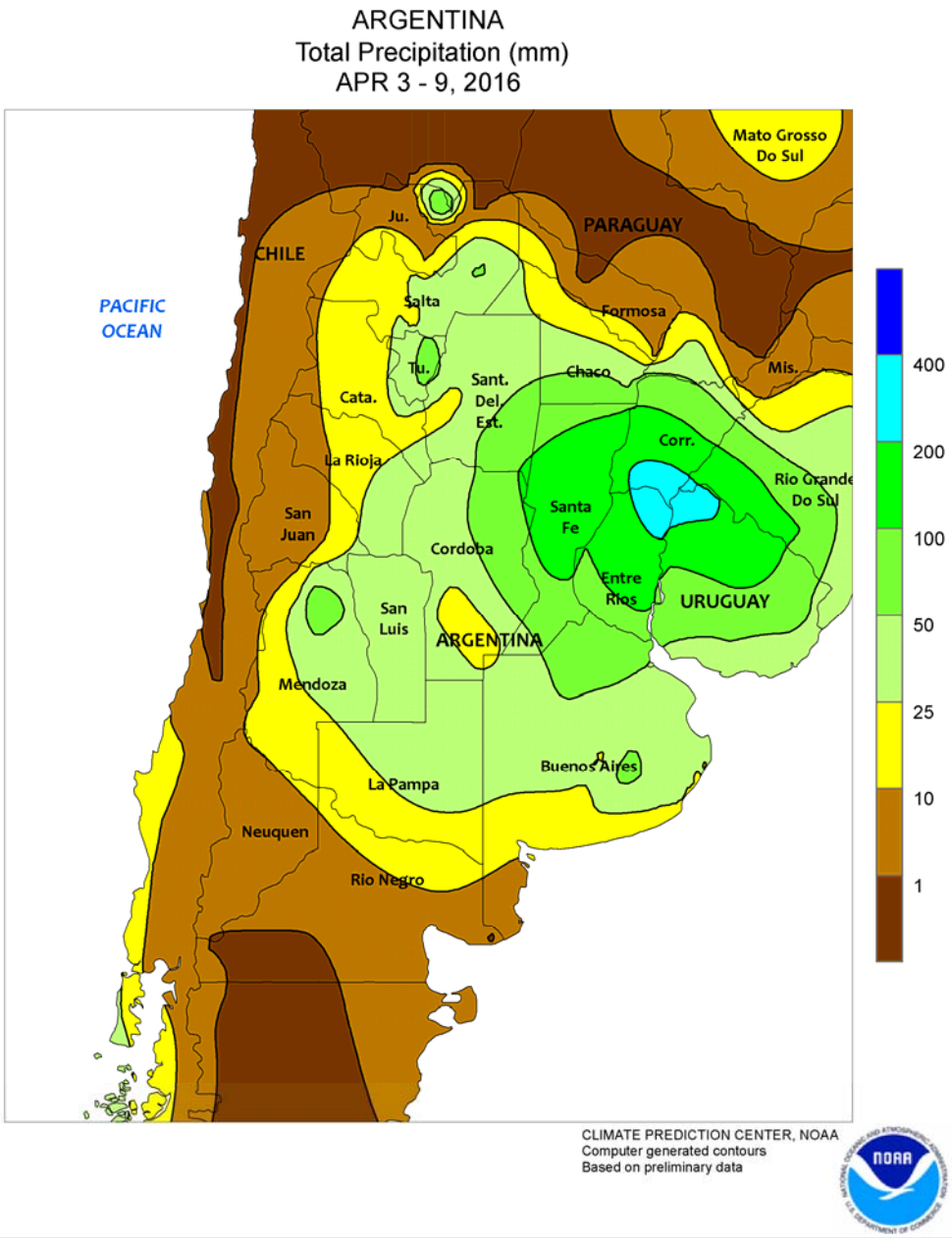

ARGENTINA

Wet weather continued in northeastern farming areas, while rainfall elsewhere maintained overall favorable levels of moisture for immature, late-planted corn and soybeans. The heaviest rain (greater than 100 mm, with local accumulations higher than 200) was concentrated over northern Entre Rios and southern Corrientes, expanding westward and southward into Santa Fe and Entre Rios, respectively. Although untimely for fieldwork and opening cotton bolls, and possibly causing some localized flooding, the rain provided abundant moisture for late-planted corn and soybeans. Elsewhere, more moderate amounts of rainfall (10-50 mm) benefited immature corn and soybeans without concerns for damage. The rain in southern farming areas of La Pampa and Buenos Aires helped to further improve long-term moisture reserves after earlier periods of dryness. Weekly temperatures averaged near to slightly above normal in central Argentina (La Pampa, Buenos Aires, and southern sections of Cordoba, Santa Fe, and Entre Rios), with daytime highs reaching the lower and middle 20s (degrees C) and no overnight freezes. Higher temperatures (averaging 1-5°C above normal, with daytime highs approaching the middle 30s) were recorded across northern Argentina, fostering rapid development of summer grains, oilseeds, and cotton. According to Argentina's Ministry of Agriculture, sunflowers were 94 percent harvested as of April 7, equal to last year's pace.

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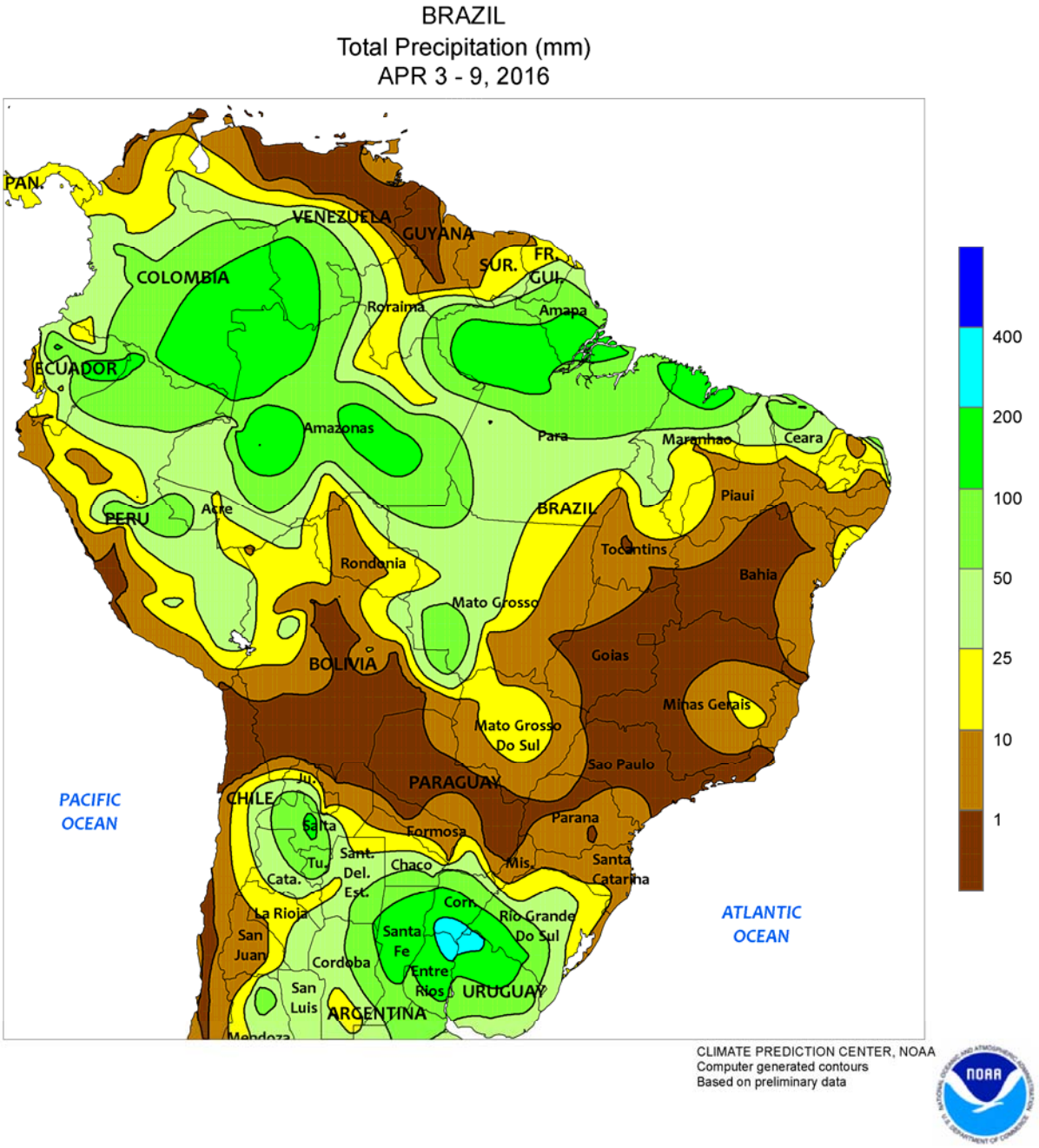

BRAZIL

Mostly dry, warmer-than-normal weather dominated a large section of central Brazil, reducing moisture for second-crop corn in major production areas. Little to no rain fell from southern and eastern Mato Grosso and Goias to Parana, with the highest amounts (greater than 10 mm) concentrated over Mato Grosso do Sul. Above-normal temperatures (high temperatures reaching the middle 30s degrees C on several days) maintained high moisture demands of vegetative corn in the aforementioned areas. While long-term moisture reserves are generally more favorable in southern farming area, a drying trend has gripped the region for several weeks and additional rain would be welcomed. More importantly, the dryness in the Center-West Region (in particular Mato Grosso and Goias) was disconcerting given the approaching end of the rainy season and the potential for a premature start to the dry season. Warmth and dryness also dominated much of the northeastern interior — including western Bahia and southern Tocantins — speeding development of immature cotton and hastening the final stages of the soybean harvesting. In contrast to the dryness over the aforementioned agricultural areas, moderate to heavy rain (10-50 mm) fell in Rio Grande do Sul, as well as northern sections of Mato Grosso; the northern rain sustained mostly favorable conditions for second-crop corn. Rio Grande do Sul is a minor producer of second-crop corn.

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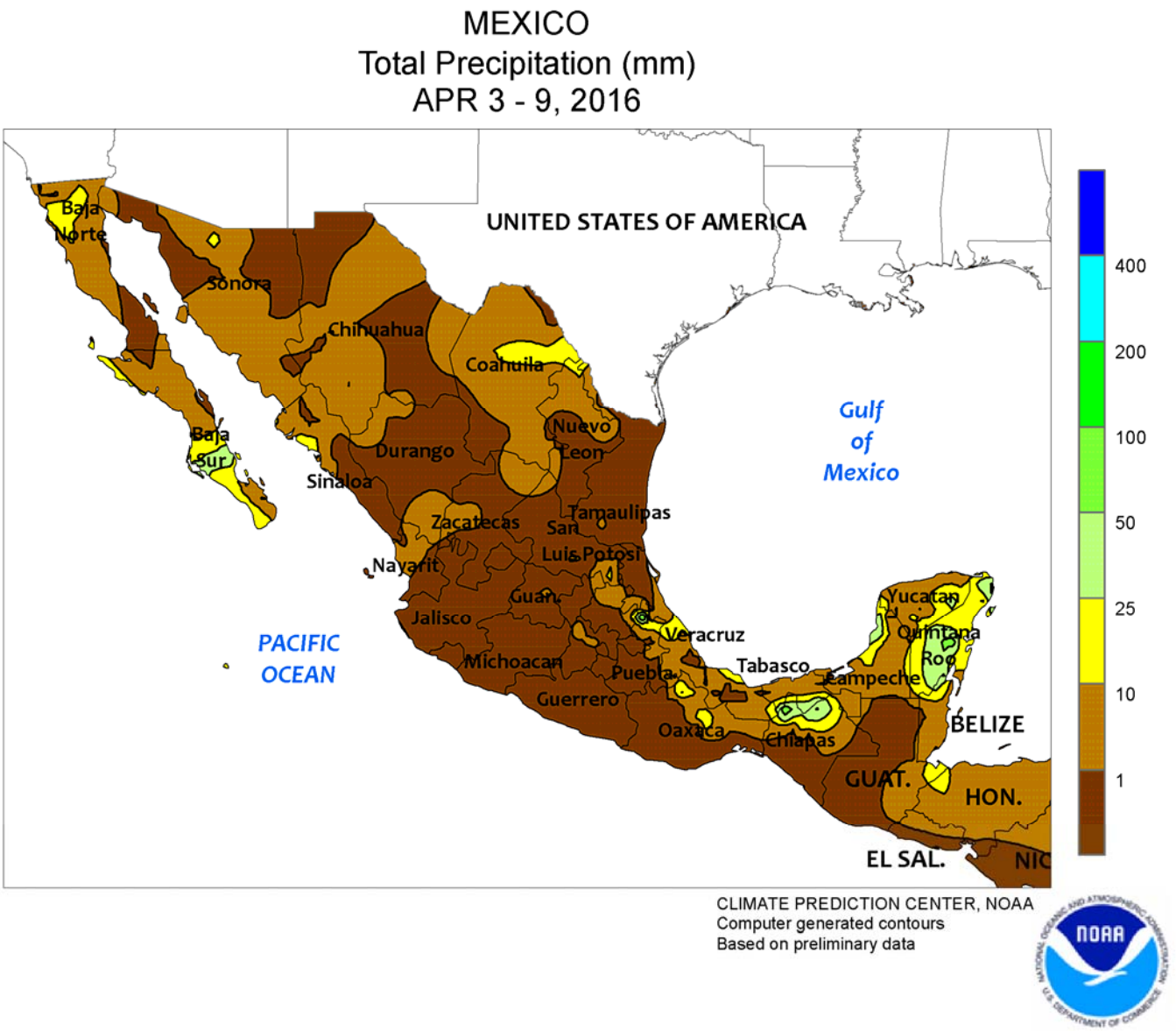


MEXICO

Mostly dry weather dominated major farming areas of northern, central, and southern Mexico. Rain was generally confined to the southeast (Veracruz to the Yucatan Peninsula), although amounts were well below normal. Little to no rain fell on the southern plateau, where farmers awaited the start of the rainy season to begin planting corn. Seasonal rainfall typically arrives in eastern sections of the corn belt (in and around Puebla) in April and in western areas (Jalisco and Michoacan) in May. Dry weather also dominated corn areas along the southern Pacific Coast (Michoacan to Oaxaca). In the northwest, the dryness and accompanying above-normal temperatures (daytime highs reaching the middle 30s degrees C) benefited maturing wheat and corn. In contrast, moisture was needed in the northeast (Tamaulipas and environs) for development of winter sorghum, which is almost entirely rainfed.

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

U.S. Crop Production Highlights

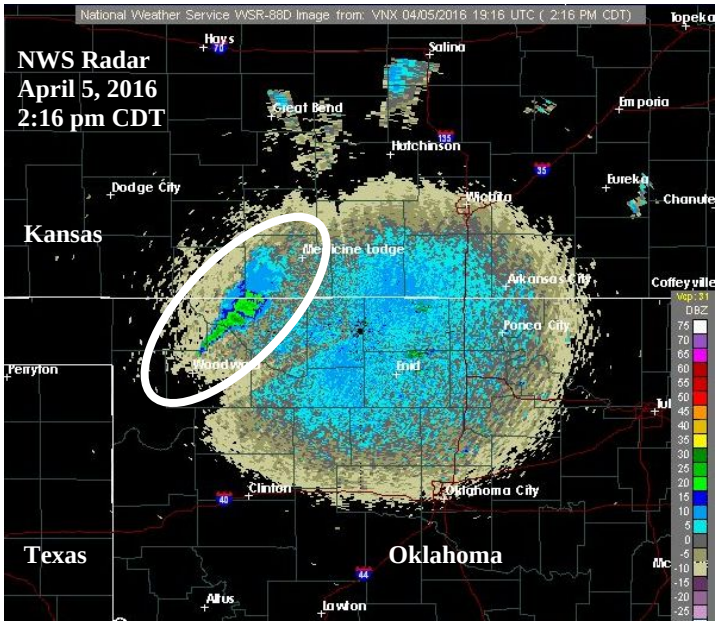
The following information was released by USDA's Agricultural Statistics Board on April 12, 2016. Forecasts refer to April 1.

The U.S. **all orange** forecast for the 2015-2016 season is 5.59 million tons, up 4 percent from the previous forecast but down 12 percent from the 2014-2015 revised final utilization.

The Florida all orange forecast, at 76.0 million boxes (3.42 million tons), is up 7 percent from last month's forecast but down 22 percent from last season's revised final utilization. Early, midseason, and Navel varieties in Florida are forecast at 36.0 million boxes (1.62 million tons), unchanged from last month but down 24 percent from last season. The Florida Valencia orange forecast, at 40.0 million boxes (1.80 million tons), is up 14 percent from last month but down 19 percent from last season's revised final utilization.

The California Valencia orange forecast is 10.5 million boxes (420,000 tons), unchanged from the previous forecast but up 11 percent from last season. The California Navel orange forecast is 42.0 million boxes (1.68 million tons), unchanged from the previous forecast but up 7 percent from last season's revised final utilization.

The Texas all orange forecast, at 1.57 million boxes (66,000 tons), is up 11 percent from the previous forecast and up 8 percent from last season's final utilization.



Although high-level cloudiness (cirrus) partially obscured satellite views of the smoke from a fast-spreading wildfire that eventually became known as the "350 Complex," particulate matter was readily apparent on National Weather Service radar imagery (circled, at left) from Vance Air Force Base near Enid, OK. The fire, which started on April 5 near Woodward, OK, due to arcing power lines, was driven by wind gusts that locally topped 50 mph. Eventually, the 350 Complex scorched 57,440 acres of grass, brush, and timber in Woodward County, OK, based on preliminary estimates. Just 2 weeks earlier, a fire that had started in neighboring Woods County, OK, became the largest wildfire in Kansas history, burning a total of more than 367,740 acres on both sides of the Kansas-Oklahoma line. Through April 8, U.S. wildfires had charred 817,480 acres of vegetation, 147 percent of the 10-year average for the date.

On the same day that the 350 Complex was ignited, a cold front's passage resulted in a significant dust storm spreading southeastward from southeastern Colorado and southwestern Kansas across western Oklahoma and northern Texas. At the height of the event, during the evening of April 5, wind gusts of 60 to 70 mph or higher were clocked across the Oklahoma panhandle and portions of neighboring states.

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