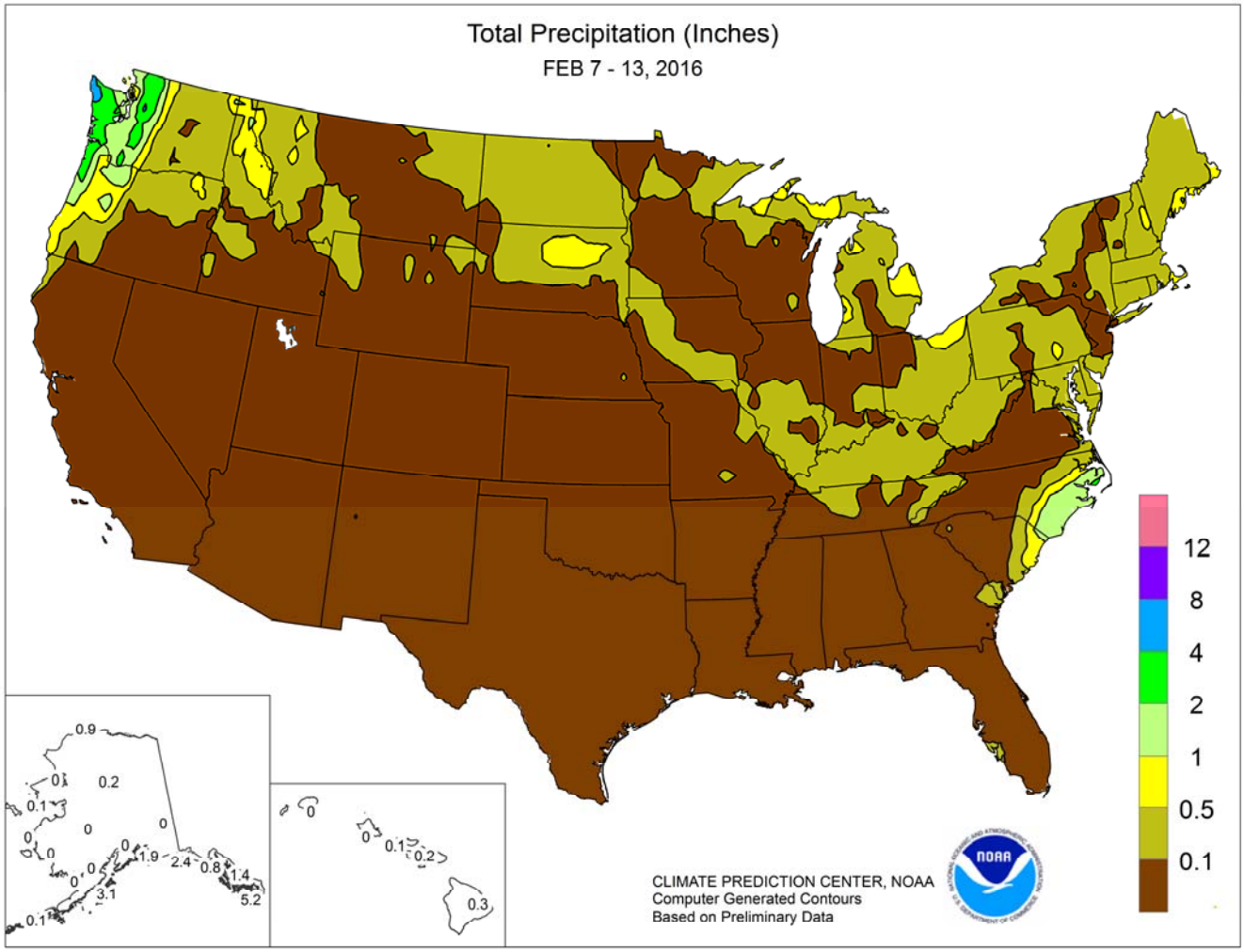
Volume 103, No. 7 http://www.usda.gov/oce/weather February 17, 2016

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

February 7 – 13, 2016

Highlights provided by USDA/WAOB

Remarkably quiet weather prevailed, as a ridge of high pressure deflected **Pacific** storminess away from the **western U.S.** At the same time, several disturbances traversed a trough of low pressure covering the **eastern U.S.**, but little moisture was available to those continental storm systems. Weekly precipitation totals in excess of an inch were limited to the **Pacific Northwest** and the **coastal Carolinas**. Generally light precipitation was noted across the remainder of the **nation's northern tier**, although high winds caused some blowing and drifting of snow—as well

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Contents

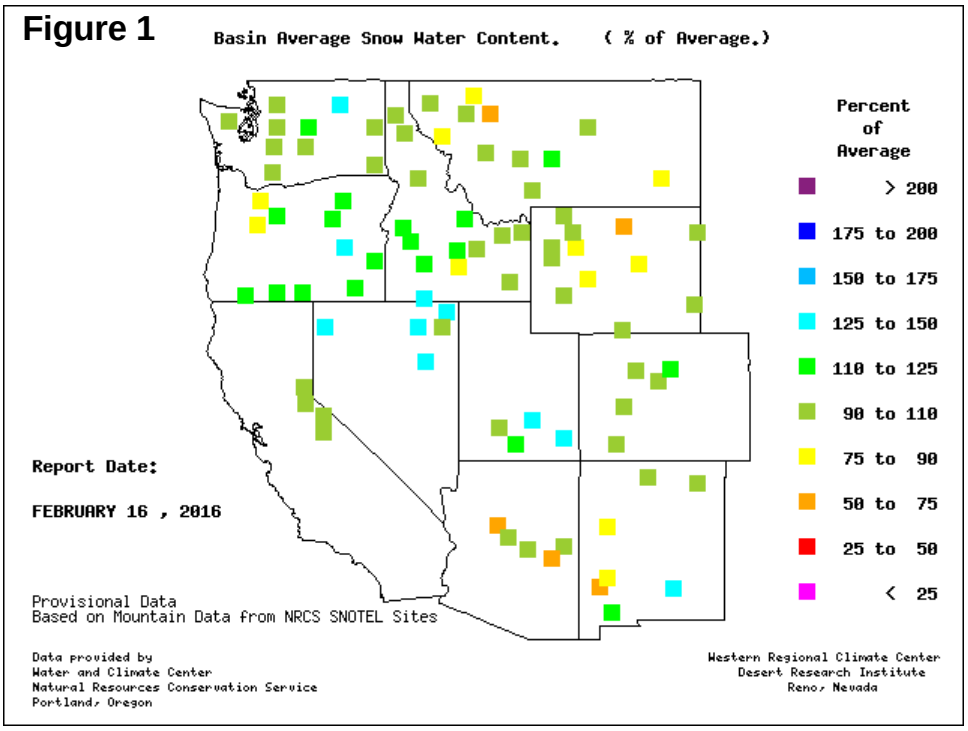
Water Supply Forecast for the Western United States

Highlights

Frequent January storms, in part fueled by a strong El Niño, further dented Western drought. Periodic southward shifts in the primary storm track brought occasionally heavy precipitation to southern California and the Southwest. But, for much of the remainder of January, storms primarily crossed the Northwest, with meaningful precipitation often falling as far south as northern California. In early February, a building ridge of high pressure brought an extended stretch of Western warmth and dryness, raising concerns about California's drought recovery. Elsewhere, unexpectedly heavy precipitation continued in the Pacific Northwest, but rather dry weather prevailed on eastern slopes of the northern Rockies.

SNOTEL – River Basin Snow Water Content

Figure 1



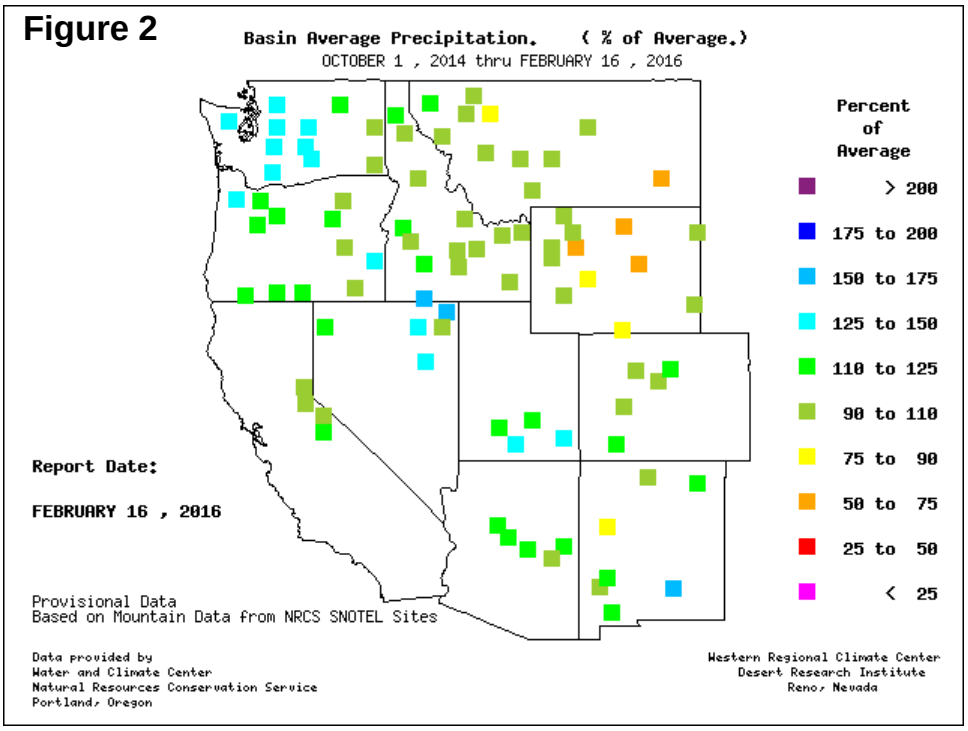
Snowpack and Precipitation

By February 16, 2016, deficient snowpack was a concern in a few river basins in Montana and Wyoming (figure 1). In addition, recent warmth has caused premature melting of snow in some Southwestern basins. For the most part, however, Western snowpack is widespread and abundant, with water-equivalency values greater than 125 percent of average reported in several river basins stretching southward from eastern Washington into the Great Basin and southeastward into Utah and New Mexico.

Season-to-date precipitation (October 1, 2015 – February 16,

SNOTEL – River Basin Precipitation

Figure 2



2016) was above normal nearly region-wide. The greatest concentration of above-average basin precipitation totals covered the Pacific Northwest (figure 2). Season-to-date precipitation was close to average in California, while a pocket of dryness was noted across Wyoming and south-eastern Montana.

Spring and Summer Streamflow Forecasts

By February 1, 2016, projections for spring and summer streamflow were indicating the likelihood of above-normal runoff in much of the Northwest, Great Basin, and Southwest (figure 3). Mostly near-normal runoff can be expected in other areas, including many Sierra Nevada river basins and the central Rockies. However, below-normal runoff is a growing concern across the eastern slopes of the northern Rockies, including numerous basins in Montana and Wyoming, and to a lesser degree in north-eastern Utah.

Reservoir Storage

On February 1, 2016, reservoir storage as a percent of average for the date was significantly below average in several Western States. Specifically, statewide storage was barely one-quarter of the historical average for this time of year in Nevada and ranged from 50 to 80 percent of average in Arizona, California, New Mexico, and Oregon (figure 4). During the upcoming spring and summer runoff season, melting of abundant snowpack should aid in boosting reservoir storage in many of the aforementioned states.

For More Information

The National Water and Climate Center homepage provides the latest available snowpack and water supply information. Please visit: http://www.wcc.nrcs.usda.gov

Figure 3

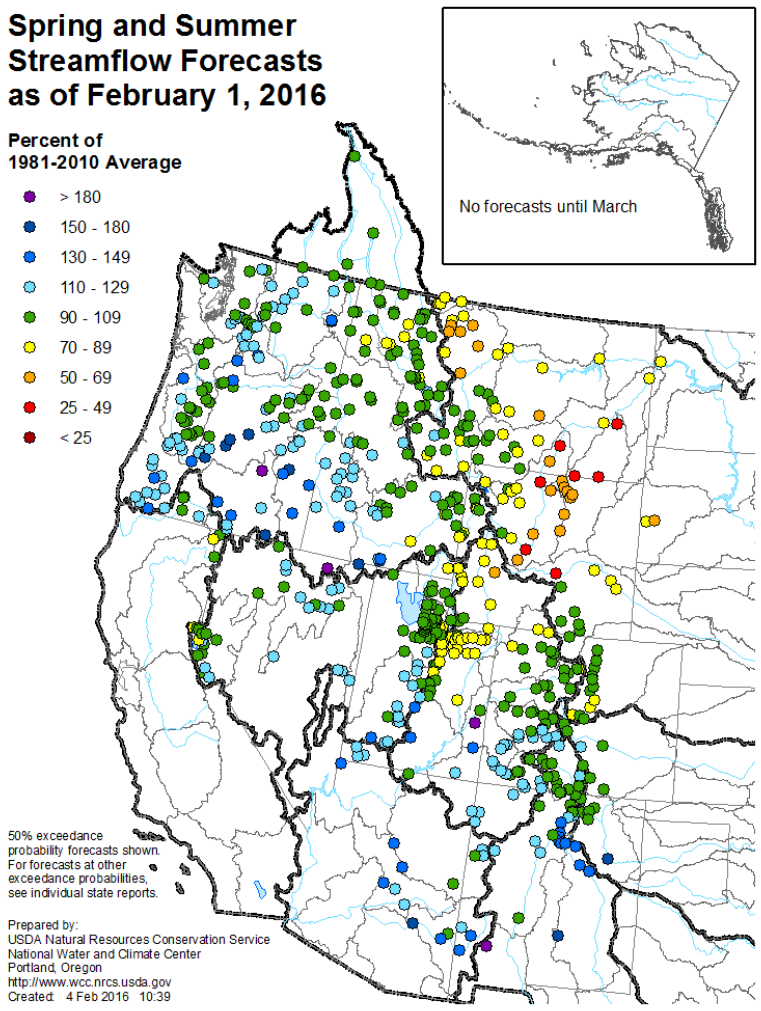
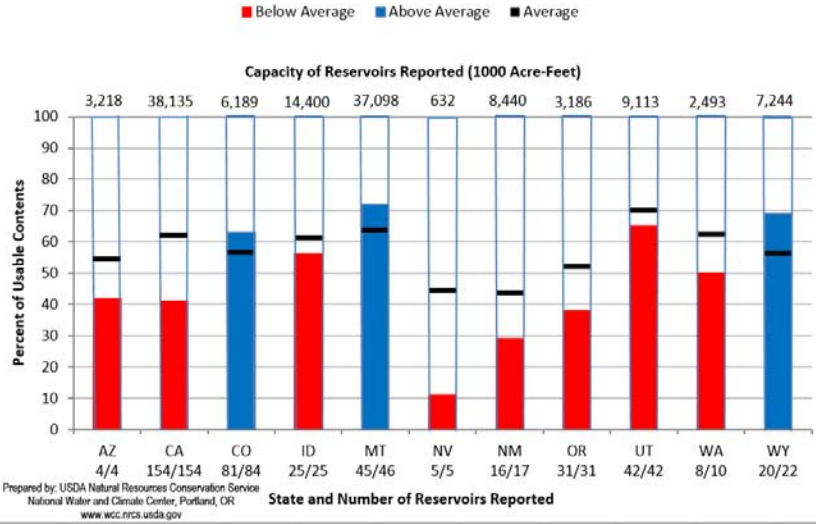
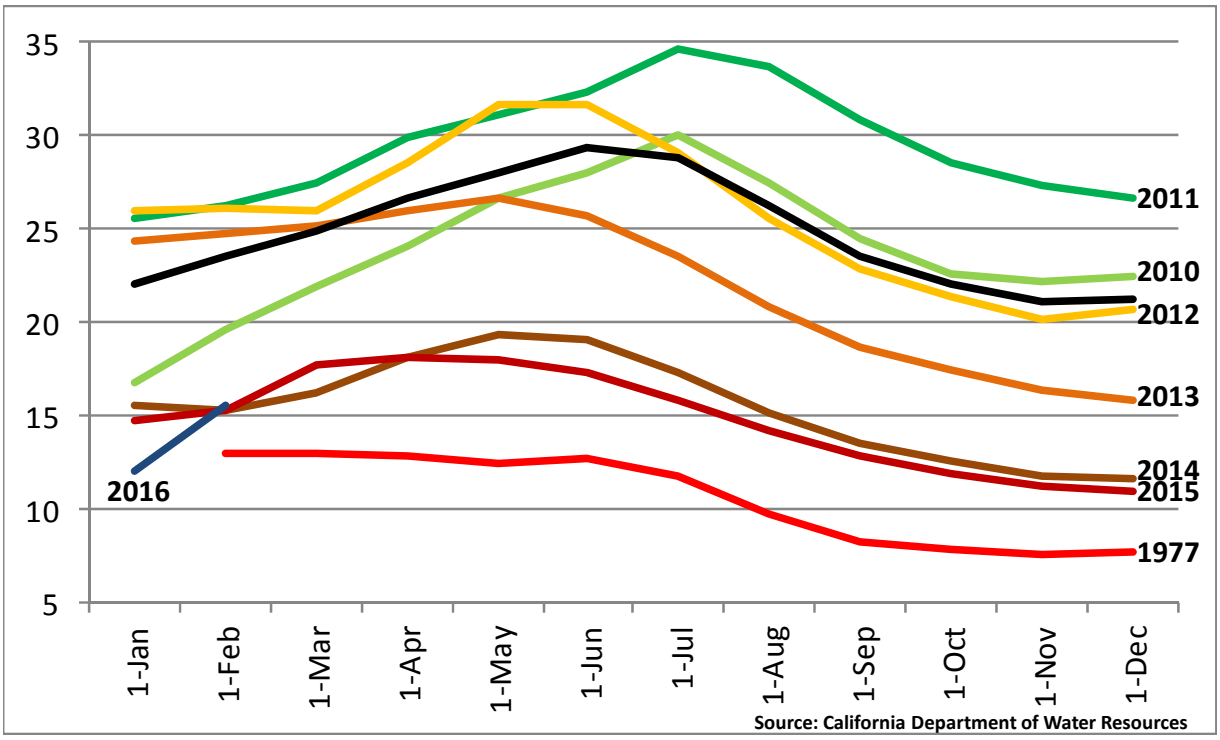


Figure 4 Reservoir Storage as of February 1, 2016



California Reservoir Storage, Million Acre-Feet, 1977 and 2010-16



Note: One acre-foot is equal to 325,851 gallons, or the amount of water it takes to cover one acre to a depth of one foot.

Storage in California's 154 reservoirs increased 4.56 million acre-feet (maf) in December and January to reach 15.51 maf. Most of that improvement (3.54 maf) came during January. The 2015-16 season-to-date gain in storage has already exceeded the full-season gain of just 4.17 maf in 2013-14.

California Reservoirs, Recharge and Withdrawal

Million Acre-Feet and Percent of Average

	Recharge		Withdrawal
2010-11	12.47 (151%)	**2011**	8.78 (107%)
2011-12	5.79 (70%)	**2012**	11.54 (140%)
2012-13	6.52 (79%)	**2013**	11.49 (139%)
2013-14	4.17 (51%)	**2014**	7.75 (94%)
2014-15	6.46 (78%)	**2015**	7.13 (87%)
2015-16	4.56		
Avg.	**8.24**	**Avg.**	**8.24**

Notes: Recharge and withdrawal values are based on end-of-month statistics, not daily readings. The recharge value for 2015-16 is updated through Jan. 31.

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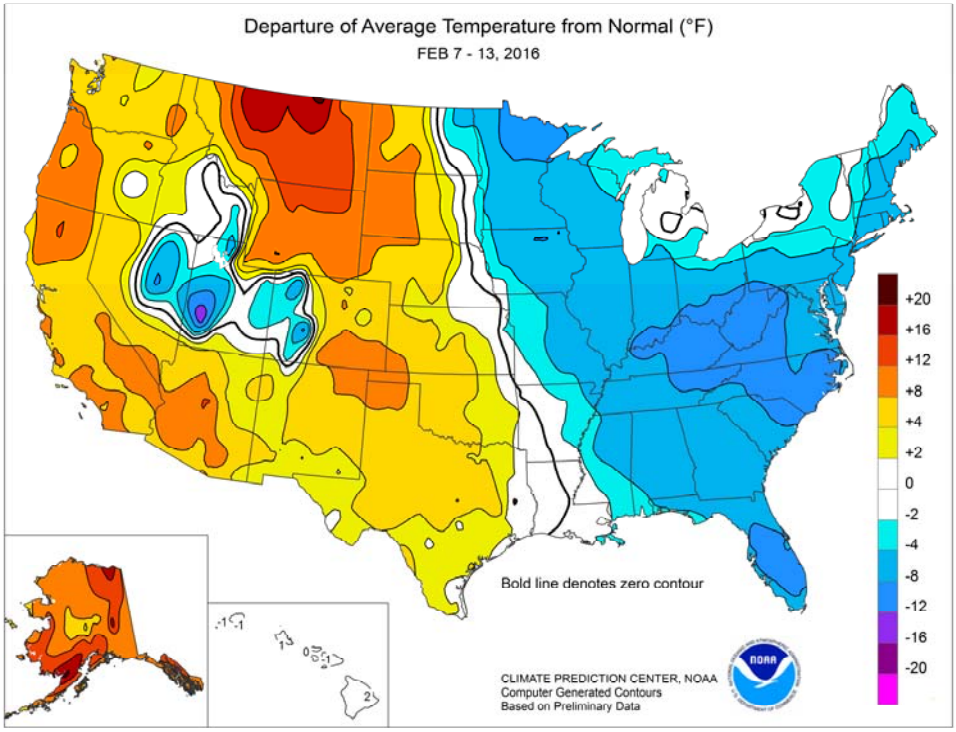
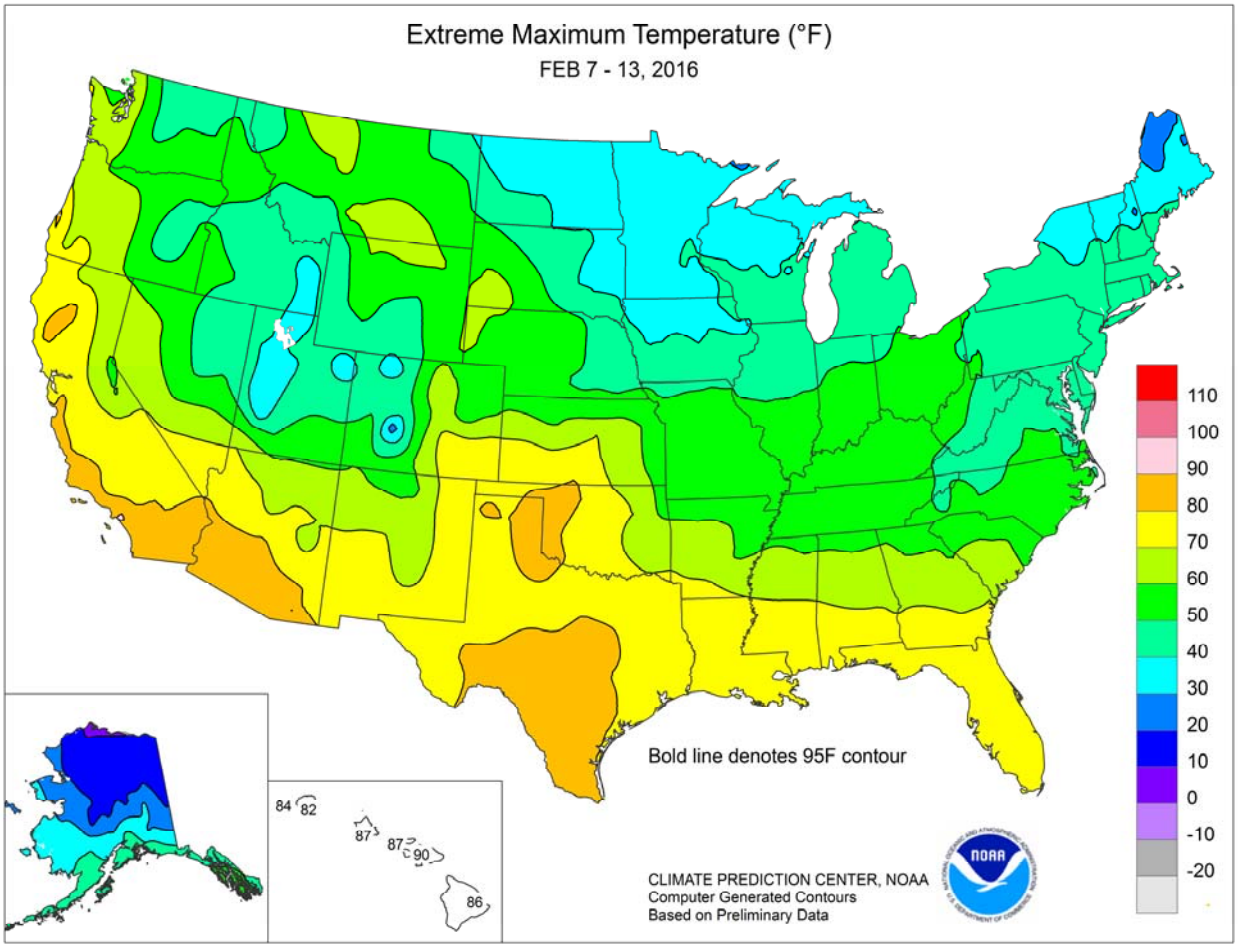


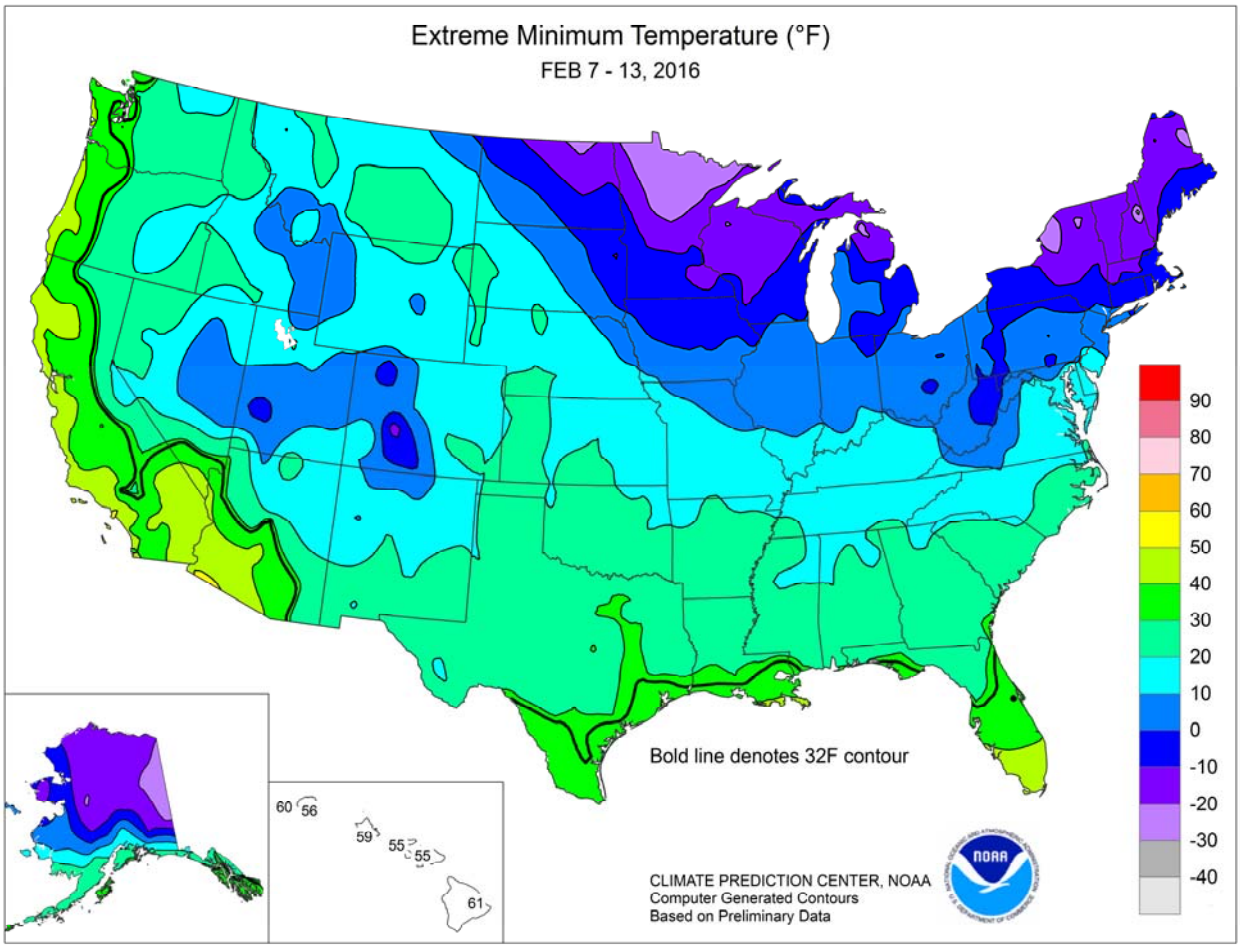
as travel disruptions—in some areas. Snow briefly fell as far south as the **interior Southeast**, including parts of **Kentucky** and **Tennessee**. However, dry weather covered the remainder of the country, stretching from **California to the central and southern Plains, the lower Mississippi Valley, and the lower Southeast**. Unusually warm weather accompanied the dry conditions from **California to the central and southern High Plains**, but cool, dry weather prevailed in the **lower Southeast**. For the nation as a whole, weekly temperatures ranged from at least 10°F below normal in parts of the **Ohio Valley**, **central Appalachians**, and **southern Mid-Atlantic States** to more than 15°F above normal on the **northern High Plains**. Late in the week, some of the coldest air of the season overspread the **Midwest** and **Northeast**. Sub-freezing temperatures did not reach major winter agricultural regions of **Florida** or **Deep South Texas**, although most other parts of the **southeastern U.S.** experienced at least one freeze during the week.

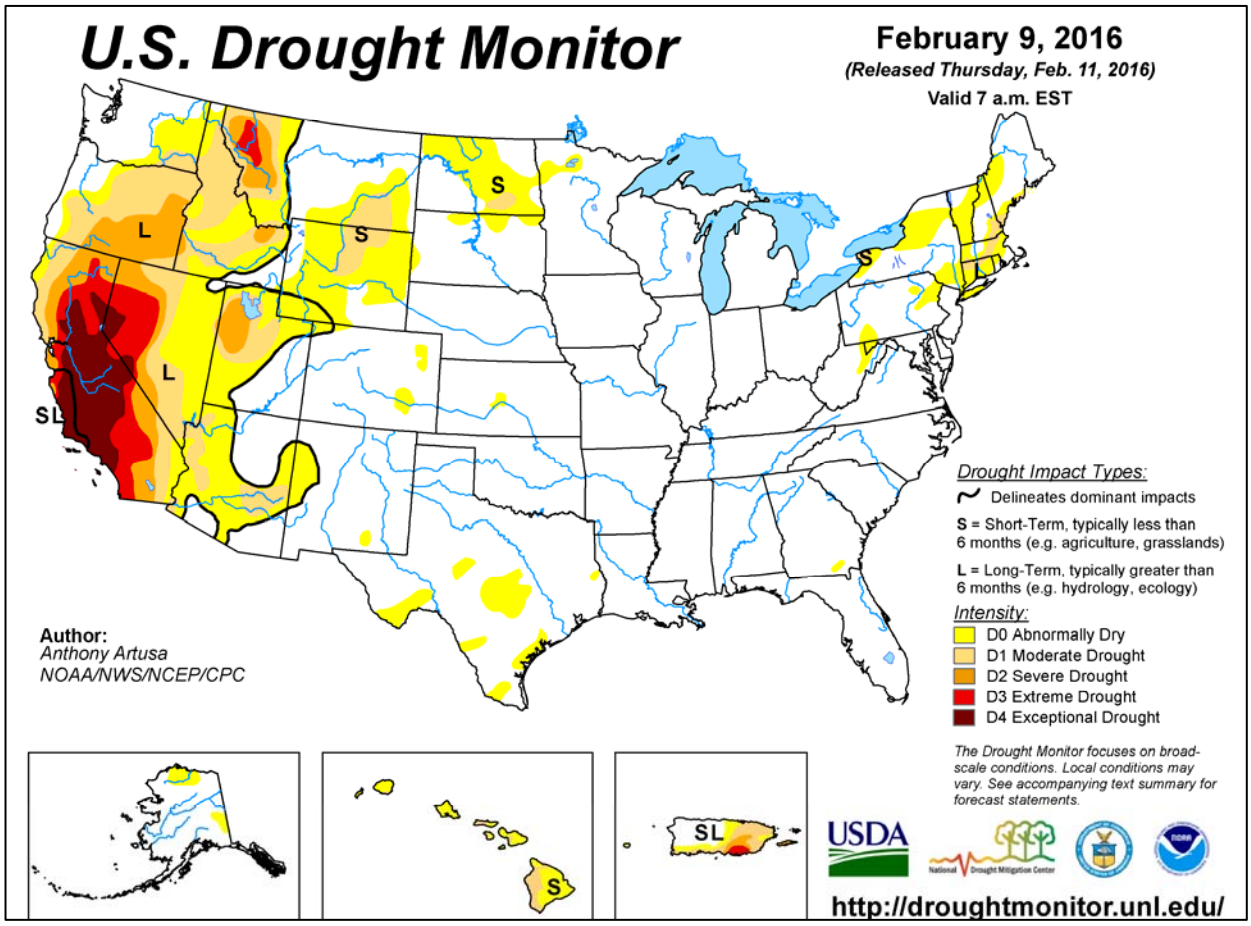
Early in the week, high winds accompanied light snow across the **north-central U.S.** On February 7, gusts were clocked to 62 mph in **Bismarck, ND**; 61 mph in **Broken Bow, NE**; and 60 mph in **Huron, SD**. Meanwhile, a storm grazed the **coastal Carolinas** with rain and high winds. On February 7 in **North Carolina**, a wind gust to 72 mph was reported on **Cedar Island**, while a daily-record rainfall total of 1.83 inches occurred in **Wilmington**. The same storm grazed **New England** on February 8, resulting in several hours of blizzard conditions on **Cape Cod** and environs. On February 8, **Boston, MA**, received 6.4 inches of snow and reported a peak wind gust to 46 mph. Similarly, **Providence, RI**, noted 5.6 inches of snow and clocked a gust to 47 mph. Farther west, snow squalls downwind of the **Great Lakes** led to daily-record totals in locations such as **Flint, MI** (7.1 inches on February 9), and **South Bend, IN** (6.6 inches on February 10). Toward week's end, additional snow spread across the **nation's norther tier**, where record-setting precipitation totals for February 13 reached 0.36 inch in **Williston, ND**, and 0.11 inch in **Miles City, MT**.

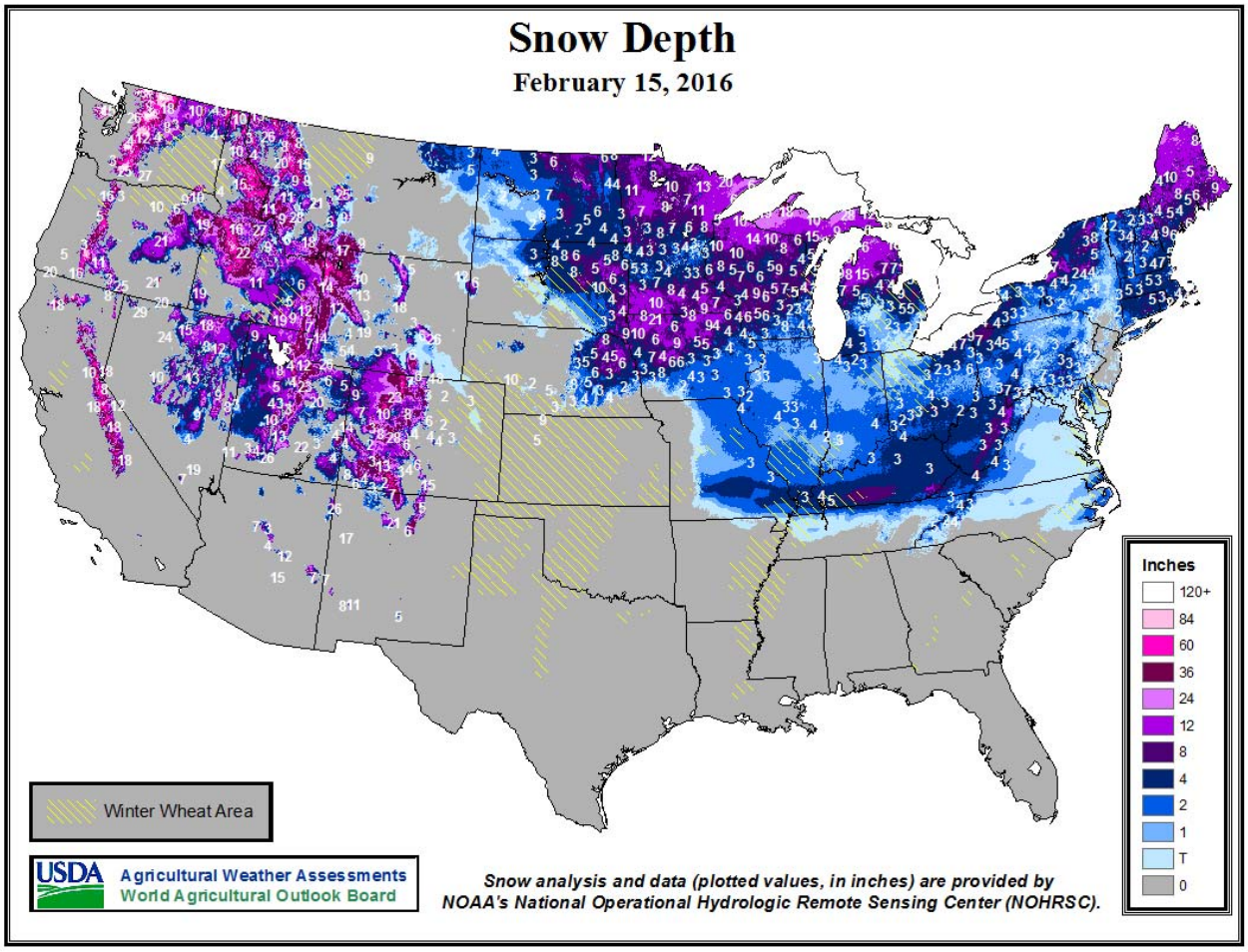
Warmth dominated the **western U.S.**, resulting in dozens of daily-record highs. On February 7 in **northern California**, highs of 80°F set daily records in **Redding** and **Red Bluff**. **Redding** and **Red Bluff** also posted daily-record highs on February 8, with respective highs of 82 and 81°F. In **Oregon**, monthly record highs were tied on February 8 in **North Bend** (82°F) and **Medford** (79°F). **North Bend** had previously achieved 82°F on February 25, 1992. Similarly, **Medford's** previous monthly record had been attained on February 25 and 26, 1992. With a high of 73°F on the 9th, **Quillayute, WA**, tied a monthly record originally set on February 26, 1992. Farther south, a monthly record was also tied on February 9 in **Santa Ana, CA**—previously reached on February 20, 1995. **San Diego, CA**, reached or exceeded the 80-degree mark on 6 consecutive days from February 7-12, including a daily-record high of 86°F on February 10. By mid-week, warmth expanded to the **High Plains**, where daily-record highs for February 10 soared to 76°F in **Pueblo, CO**, and 62°F in **Livingston, MT**. Meanwhile in **Arizona**, **Yuma** posted consecutive daily-record highs of 87°F on February 11-12. At week's end, another wave of warmth reached the **High Plains**, where **Pueblo** (76°F on February 13), notched its second daily-record high in 4 days. In stark contrast, frigid air engulfed the **Northeast**. **Boston, MA**, registered consecutive daily-record lows (-4 and -9°F, respectively) on February 13-14. By the morning of February 14, monthly record lows were established in **New York** locations such as **Watertown** (-37°F; previously, -36°F on February 16, 2015) and **Binghamton** (-18°F; previously, -15°F on February 2, 1961, and February 17 and 18, 1979).

Mild weather continued across **Alaska**, with weekly temperatures averaging at least 10 to 20°F above normal in many mainland locations. Daily-record highs were set in several **Alaskan** communities, including **Sitka** (55°F on February 9) and **Klawock** (55°F on February 11). **Ketchikan** posted consecutive daily-record highs (51 and 53°F, respectively) on February 10-11. Meanwhile, precipitation remained sparse across **interior and southwestern Alaska**, while higher totals were noted across the **state's southern tier**. **Annette Island's** weekly rainfall totaled 5.20 inches, aided by a daily-record total of 2.09 inches on February 8. No measurable snow has fallen on **Annette Island** since December 26. Heavy precipitation also affected parts of **northernmost Alaska**, where **Barrow** reported a daily-record snowfall total (5.7 inches) for February 12. Farther south, **Hawaii's** extended run of dry weather persisted. During the 75-day period from December 1 – February 13, rainfall totaled just 0.38 inch (6 percent of normal) in **Honolulu, Oahu**, and 1.75 inches (17 percent) in **Lihue, Kauai**. Meanwhile, a cool spell briefly lowered **Hawaiian** temperatures, followed by a return to daily-record warmth. On February 8, **Lihue** posted a daily record-tying low of 56°F. Later, daily-record highs for February 13 included 90°F in **Kahului, Maui**, and 87°F in **Honolulu**.


Extreme Maximum Temperature (°F)
FEB 7 - 13, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
84
82
87
87
90
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
FEB 7 - 13, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
60
56
59
55
55
61
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


U.S. Drought Monitor
February 9, 2016
(Released Thursday, Feb. 11, 2016)
Valid 7 a.m. EST
Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC
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.
USDA
http://droughtmonitor.unl.edu/


Snow Depth
February 15, 2016
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by
NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending February 13, 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 DEC 1	PCT. NORMAL SINCE DEC 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	52	30	64	23	41	-4	0.00	-0.99	0.00	16.86	142	6.33	86	70	27	0	5	0	0
	HUNTSVILLE	47	27	58	20	37	-5	0.00	-1.13	0.00	16.52	125	5.84	77	67	41	0	5	0	0
	MOBILE	62	37	75	26	49	-3	0.00	-1.19	0.00	19.85	157	7.47	93	77	40	0	3	0	0
	MONTGOMERY	58	32	70	24	45	-4	0.00	-1.28	0.00	20.85	169	6.72	91	67	26	0	4	0	0
AK	ANCHORAGE	36	25	42	18	30	13	0.01	-0.16	0.01	0.60	30	0.37	39	78	67	0	7	1	0
	BARROW	-3	-11	7	-18	-7	8	0.89	0.86	0.48	2.16	745	2.12	1247	88	79	0	7	5	0
	FAIRBANKS	14	-9	21	-17	2	9	0.00	-0.08	0.00	0.08	6	0.01	1	85	78	0	7	0	0
	JUNEAU	45	35	48	32	40	12	0.75	-0.24	0.27	10.31	85	7.89	119	94	85	0	1	7	0
	KODIAK	39	34	40	32	36	6	3.10	1.58	0.88	27.69	148	15.41	139	100	92	0	2	7	4
	NOME	22	5	32	-15	13	8	0.10	-0.09	0.10	1.58	69	0.80	63	84	64	0	7	1	0
AZ	FLAGSTAFF	57	21	64	10	39	7	0.00	-0.59	0.00	4.87	96	3.84	118	75	17	0	6	0	0
	PHOENIX	85	53	87	47	69	12	0.00	-0.14	0.00	1.59	79	1.38	127	39	17	0	0	0	0
	PRESCOTT	71	29	75	24	50	11	0.00	-0.42	0.00	1.78	49	1.48	63	66	9	0	7	0	0
	TUCSON	83	43	87	37	63	9	0.00	-0.19	0.00	2.20	92	1.73	128	35	16	0	0	0	0
AR	FORT SMITH	57	30	65	22	44	2	0.00	-0.56	0.00	11.20	165	0.39	12	63	23	0	6	0	0
	LITTLE ROCK	55	32	64	27	43	0	0.00	-0.79	0.00	11.93	122	3.55	70	63	26	0	5	0	0
CA	BAKERSFIELD	74	44	79	40	59	7	0.00	-0.28	0.00	2.53	103	1.95	115	82	60	0	0	0	0
	FRESNO	72	44	78	41	58	8	0.00	-0.50	0.00	7.39	167	4.42	144	88	74	0	0	0	0
	LOS ANGELES	81	55	89	50	68	10	0.00	-0.77	0.00	4.02	65	2.94	67	47	29	0	0	0	0
	REDDING	76	46	82	41	61	13	0.00	-1.40	0.00	20.98	152	12.77	140	72	48	0	0	0	0
	SACRAMENTO	72	42	75	38	57	7	0.00	-0.92	0.00	7.23	90	5.48	99	95	41	0	0	0	0
	SAN DIEGO	81	54	86	50	68	9	0.00	-0.50	0.00	4.09	90	3.21	100	44	26	0	0	0	0
	SAN FRANCISCO	68	50	73	47	59	7	0.00	-1.04	0.00	9.15	98	5.78	90	85	74	0	0	0	0
	STOCKTON	71	42	74	38	57	7	0.00	-0.62	0.00	7.37	130	4.91	127	95	80	0	0	0	0
CO	ALAMOSA	50	10	60	-3	30	10	0.00	-0.03	0.00	0.98	156	0.73	243	86	46	0	7	0	0
	CO SPRINGS	53	24	67	19	39	9	0.00	-0.04	0.00	1.79	236	1.54	453	76	25	0	7	0	0
	DENVER INTL	55	25	66	14	40	10	0.00	0.00	0.00	1.69	313	0.98	426	74	33	0	6	0	0
	GRAND JUNCTION	41	16	47	8	29	-3	0.00	-0.08	0.00	2.04	161	1.35	180	93	66	0	7	0	0
	PUEBLO	64	25	76	22	45	12	0.00	-0.03	0.00	1.25	162	0.85	224	73	50	0	7	0	0
CT	BRIDGEPORT	34	17	44	1	26	-5	0.41	-0.29	0.37	9.67	113	4.73	93	74	52	0	7	3	0
	HARTFORD	31	11	46	-7	21	-6	0.32	-0.41	0.16	7.76	88	3.51	67	79	54	0	7	3	0
DC	WASHINGTON	37	25	46	14	31	-5	0.25	-0.36	0.24	8.45	114	3.61	83	71	41	0	6	2	0
DE	WILMINGTON	33	21	45	9	27	-6	0.49	-0.15	0.34	9.24	115	4.03	87	85	52	0	7	3	0
FL	DAYTONA BEACH	63	42	76	35	53	-6	0.01	-0.63	0.01	10.47	149	9.90	229	85	36	0	0	1	0
	JACKSONVILLE	62	35	76	28	48	-6	0.21	-0.57	0.21	7.01	90	6.45	125	85	29	0	2	1	0
	KEY WEST	69	59	73	56	64	-6	0.03	-0.36	0.03	10.78	211	6.20	209	86	62	0	0	1	0
	MIAMI	69	53	76	50	61	-7	0.03	-0.49	0.03	18.83	377	9.01	321	79	44	0	0	1	0
	ORLANDO	66	42	76	35	54	-8	0.00	-0.52	0.00	7.05	123	6.33	186	81	39	0	0	0	0
	PENSACOLA	62	45	73	37	53	0	0.00	-1.11	0.00	12.27	108	3.94	53	66	31	0	0	0	0
	TALLAHASSEE	64	33	78	27	49	-4	0.00	-1.06	0.00	11.78	103	7.01	95	76	34	0	3	0	0
	TAMPA	65	47	72	42	56	-6	0.01	-0.61	0.01	7.98	140	7.49	221	84	45	0	0	1	0
	WEST PALM BEACH	68	48	75	42	58	-9	0.05	-0.63	0.05	18.11	220	10.77	211	79	44	0	0	1	0
GA	ATHENS	50	28	61	22	39	-5	0.04	-1.01	0.04	17.92	173	5.55	83	65	44	0	6	1	0
	ATLANTA	50	30	64	22	40	-5	0.00	-1.13	0.00	19.78	180	7.27	102	58	39	0	5	0	0
	AUGUSTA	53	30	62	23	42	-5	0.00	-1.00	0.00	10.72	113	3.80	60	65	41	0	5	0	0
	COLUMBUS	56	32	69	25	44	-5	0.00	-1.05	0.00	22.95	206	5.58	83	67	27	0	4	0	0
	MACON	55	29	68	24	42	-5	0.00	-1.13	0.00	17.35	157	4.73	67	78	33	0	6	0	0
	SAVANNAH	57	33	70	28	45	-6	0.58	-0.17	0.50	9.55	116	6.20	115	75	47	0	2	2	1
HI	HILO	82	64	86	61	73	2	0.26	-1.84	0.15	16.64	69	2.55	19	74	61	0	0	2	0
	HONOLULU	82	65	87	59	74	1	0.00	-0.58	0.00	0.39	6	0.12	3	78	61	0	0	0	0
	KAHULUI	82	59	90	55	71	-1	0.23	-0.40	0.23	1.56	19	0.81	16	83	71	1	0	1	0
	LIHUE	78	63	82	56	71	-1	0.01	-0.81	0.01	1.74	16	0.32	5	82	66	0	0	1	0
ID	BOISE	47	28	51	26	38	3	0.00	-0.28	0.00	2.63	80	0.92	48	91	75	0	7	0	0
	LEWISTON	54	37	59	27	46	9	0.27	0.05	0.16	2.81	107	1.22	77	78	62	0	1	3	0
	POCATELLO	37	19	44	12	28	0	0.00	-0.22	0.00	2.36	89	1.12	72	91	78	0	7	0	0
IL	CHICAGO/O'HARE	25	13	43	2	19	-6	0.04	-0.35	0.02	6.56	134	1.69	68	70	58	0	7	2	0
	MOLINE	27	13	47	4	20	-5	0.05	-0.28	0.04	5.28	121	1.09	50	72	52	0	6	2	0
	PEORIA	29	13	49	4	21	-5	0.02	-0.33	0.01	7.47	165	1.16	54	74	45	0	7	2	0
	ROCKFORD	25	12	45	2	19	-3	0.01	-0.29	0.01	5.94	147	1.29	65	70	57	0	7	1	0
	SPRINGFIELD	29	15	50	7	22	-6	0.08	-0.28	0.04	8.15	170	1.59	70	81	51	0	6	2	0
IN	EVANSVILLE	35	22	58	15	29	-5	0.21	-0.50	0.15	9.16	118	3.96	94	70	51	0	6	4	0
	FORT WAYNE	32	16	49	0	24	-1	0.03	-0.42	0.02	6.04	107	1.89	66	82	54	0	7	2	0
	INDIANAPOLIS	30	16	55	7	23	-6	0.06	-0.49	0.04	7.41	114	1.82	52	77	51	0	7	2	0
	SOUTH BEND	26	13	46	1	19	-6	0.44	-0.03	0.21	6.61	106	2.49	79	87	74	0	7	6	0
IA	BURLINGTON	27	13	48	4	20	-6	0.05	-0.26	0.03	5.79	146	1.28	69	88	51	0	6	2	0
	CEDAR RAPIDS	23	10	43	1	17	-5	0.00	-0.25	0.00	4.69	157	0.62	41	88	58	0	7	0	0
	DES MOINES	25	12	45	2	18	-6	0.25	-0.02	0.09	6.77	238	1.33	88	74	56	0	7	3	0
	DUBUQUE	21	9	38	-2	15	-6	0.00	-0.31	0.00	4.92	139	0.73	39	74	61	0	7	0	0
	SIOUX CITY	27	15	43	5	21	-2	0.08	-0.01	0.08	4.22	299	1.36	181	75	62	0	7	1	0
	WATERLOO	21	5	40	-6	13	-7	0.00	-0.22	0.00	7.37	314	1.45	117	79	62	0	7	0	0
KS	CONCORDIA	39	24	56	19	31	1	0.00	-0.08	0.00	4.17	251	1.53	191	75	57	0	6	0	0
	DODGE CITY	51	25	74	19	38	4	0.00	-0.10	0.00	3.02	194	0.59	75	80	34	0	7	0	0
	GOODLAND	46	25	61	20	35	4	0.00	-0.06	0.00	0.80	86	0.64	121	82	55	0	6	0	0
	TOPEKA	42	25	60	20	34	3	0.00	-0.22	0.00	3.98	145	1.27	95	64	43	0	6	0	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending February 13, 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 DEC 1	PCT. NORMAL SINCE DEC 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	51	27	71	23	39	5	0.00	-0.14	0.00	2.96	122	0.74	69	66	37	0	7	0	0
KY	JACKSON	33	19	54	13	26	-10	0.23	-0.62	0.20	10.02	107	5.38	105	79	45	0	7	3	0
	LEXINGTON	32	19	53	13	25	-9	0.27	-0.45	0.26	10.70	123	3.49	75	75	58	0	7	2	0
	LOUISVILLE	36	21	56	15	28	-8	0.28	-0.45	0.24	9.45	114	2.87	62	72	44	0	7	3	0
	PADUCAH	38	21	57	15	30	-6	0.09	-0.87	0.05	10.42	109	3.00	58	77	45	0	7	2	0
LA	BATON ROUGE	65	41	77	31	53	1	0.00	-1.34	0.00	13.91	99	7.58	87	78	28	0	1	0	0
	LAKE CHARLES	66	41	78	30	54	1	0.00	-0.89	0.00	7.41	62	4.17	57	90	34	0	1	0	0
	NEW ORLEANS	65	44	77	37	55	1	0.00	-1.45	0.00	11.92	87	5.46	64	71	38	0	0	0	0
	SHREVEPORT	65	39	79	29	52	2	0.00	-1.07	0.00	5.76	52	2.87	44	62	24	0	2	0	0
ME	CARIBOU	19	-2	30	-14	9	-2	0.26	-0.25	0.23	7.17	100	2.29	58	83	57	0	7	4	0
	PORTLAND	29	8	44	-9	19	-4	0.43	-0.35	0.25	10.46	107	5.12	92	86	49	0	7	4	0
MD	BALTIMORE	35	21	46	12	28	-6	0.30	-0.39	0.26	10.53	130	4.68	98	68	44	0	7	2	0
MA	BOSTON	32	14	44	-6	23	-7	0.14	-0.68	0.14	8.99	98	4.71	86	75	49	0	7	1	0
	WORCESTER	27	8	42	-12	18	-7	0.39	-0.36	0.30	8.63	93	3.98	72	82	49	0	7	3	0
MI	ALPENA	26	10	42	-13	18	0	0.32	0.02	0.14	7.16	171	3.37	143	83	62	0	7	6	0
	GRAND RAPIDS	29	16	45	3	23	0	0.01	-0.36	0.01	7.10	130	3.77	137	82	58	0	7	1	0
	HOUGHTON LAKE	25	9	41	-12	17	-1	0.06	-0.24	0.03	6.13	156	2.56	118	83	64	0	7	3	0
	LANSING	29	16	47	2	22	-1	0.08	-0.28	0.05	4.83	109	2.11	93	80	62	0	7	3	0
	MUSKEGON	29	18	43	8	24	0	0.16	-0.23	0.11	8.81	157	3.91	131	72	60	0	6	4	0
	TRAVERSE CITY	26	16	45	0	21	0	0.07	-0.43	0.06	7.66	115	2.57	64	82	60	0	7	2	0
MN	DULUTH	15	-5	35	-17	5	-8	0.13	-0.07	0.11	5.03	204	1.33	87	77	58	0	7	2	0
	INT'L FALLS	10	-13	34	-29	-1	-9	0.09	-0.07	0.05	1.84	99	0.77	66	81	55	0	7	2	0
	MINNEAPOLIS	18	4	40	-6	11	-7	0.03	-0.14	0.02	3.48	147	1.16	85	70	53	0	7	2	0
	ROCHESTER	15	2	37	-11	9	-7	0.01	-0.16	0.01	4.40	192	1.19	94	78	65	0	7	1	0
	ST. CLOUD	17	0	38	-14	9	-5	0.05	-0.09	0.03	1.55	91	0.53	52	81	52	0	7	2	0
MS	JACKSON	61	34	74	23	48	1	0.00	-1.13	0.00	14.39	109	8.52	109	73	28	0	2	0	0
	MERIDIAN	59	29	75	23	44	-4	0.00	-1.27	0.00	10.04	74	3.96	48	83	38	0	6	0	0
	TUPELO	51	27	60	20	39	-4	0.00	-1.06	0.00	12.46	94	5.10	72	64	31	0	6	0	0
MO	COLUMBIA	34	20	53	12	27	-4	0.11	-0.38	0.06	8.07	159	1.03	39	78	50	0	6	3	0
	KANSAS CITY	37	21	52	15	29	-2	0.00	-0.26	0.00	4.40	136	1.16	73	73	44	0	6	0	0
	SAINT LOUIS	34	21	55	11	27	-6	0.10	-0.40	0.06	12.79	216	1.05	34	68	46	0	6	3	0
	SPRINGFIELD	44	24	51	17	34	-1	0.00	-0.52	0.00	12.40	199	0.97	32	62	39	0	7	0	0
MT	BILLINGS	55	33	65	25	44	16	0.00	-0.11	0.00	1.01	59	0.44	42	64	33	0	5	0	0
	BUTTE	43	17	48	2	30	9	0.03	-0.05	0.02	1.07	88	0.40	59	90	53	0	7	2	0
	CUT BANK	54	31	65	21	42	20	0.00	-0.06	0.00	0.67	82	0.45	92	76	31	0	4	0	0
	GLASGOW	38	22	49	15	30	14	0.16	0.10	0.07	1.23	150	0.52	116	82	72	0	7	3	0
	GREAT FALLS	56	31	63	19	44	19	0.00	-0.09	0.00	1.72	112	0.65	76	74	28	0	4	0	0
	HAVRE	47	24	58	18	36	17	0.00	-0.06	0.00	0.78	72	0.36	63	90	61	0	7	0	0
	MISSOULA	43	25	52	17	34	7	0.10	-0.07	0.07	2.26	89	0.88	63	92	80	0	6	2	0
NE	GRAND ISLAND	34	20	49	14	27	1	0.00	-0.10	0.00	6.43	469	4.55	641	76	68	0	7	0	0
	LINCOLN	33	20	44	14	27	1	0.00	-0.09	0.00	5.88	348	1.46	176	72	61	0	7	0	0
	NORFOLK	31	20	42	11	25	1	0.01	-0.12	0.01	3.28	226	1.01	126	72	65	0	7	1	0
	NORTH PLATTE	40	21	53	20	31	3	0.00	-0.08	0.00	1.39	151	1.11	213	85	56	0	7	0	0
	OMAHA	30	17	45	9	24	-2	0.01	-0.13	0.01	6.86	352	1.60	155	77	57	0	7	1	0
	SCOTTSBLUFF	50	27	62	21	38	10	0.01	-0.10	0.01	1.27	98	0.56	76	80	53	0	7	1	0
	VALENTINE	42	25	56	22	33	8	0.01	-0.07	0.01	1.60	211	0.56	130	78	67	0	7	1	0
NV	ELY	42	9	51	4	25	-4	0.00	-0.16	0.00	3.91	261	2.53	253	78	66	0	7	0	0
	LAS VEGAS	73	45	75	40	59	8	0.00	-0.15	0.00	0.56	44	0.55	64	39	25	0	0	0	0
	RENO	61	29	66	26	45	8	0.00	-0.25	0.00	2.45	102	1.70	112	79	59	0	6	0	0
	WINNEMUCCA	54	27	59	24	40	5	0.00	-0.14	0.00	3.82	201	1.99	183	86	62	0	7	0	0
NH	CONCORD	30	7	45	-13	19	-3	0.21	-0.37	0.18	7.76	110	2.98	73	84	43	0	7	3	0
NJ	NEWARK	35	22	47	6	28	-4	0.06	-0.65	0.02	9.59	107	5.19	97	71	43	0	7	3	0
NM	ALBUQUERQUE	63	31	69	29	47	7	0.00	-0.08	0.00	1.38	122	0.40	63	59	19	0	7	0	0
NY	ALBANY	32	14	46	-9	23	0	0.16	-0.36	0.10	5.42	89	1.75	51	76	41	0	7	2	0
	BINGHAMTON	27	12	43	-9	20	-2	0.22	-0.39	0.12	6.32	94	2.71	73	81	60	0	7	6	0
	BUFFALO	31	17	49	-5	24	-1	0.43	-0.17	0.19	5.89	73	2.99	69	82	56	0	6	5	0
	ROCHESTER	32	17	47	-4	25	1	0.11	-0.39	0.06	5.13	86	2.40	74	82	60	0	6	3	0
	SYRACUSE	29	13	45	-14	21	-2	0.51	-0.01	0.19	7.83	117	3.00	84	92	62	0	7	6	0
NC	ASHEVILLE	38	22	48	16	30	-8	0.00	-0.92	0.00	14.47	158	5.71	99	72	42	0	7	0	0
	CHARLOTTE	44	25	51	17	35	-9	0.01	-0.82	0.01	11.73	134	3.03	54	67	30	0	7	1	0
	GREENSBORO	41	23	50	15	32	-8	0.00	-0.74	0.00	9.56	120	2.91	59	64	32	0	7	0	0
	HATTERAS	43	35	50	28	39	-7	2.78	1.79	2.29	14.00	113	9.04	116	81	45	0	2	4	1
	RALEIGH	42	26	56	19	34	-7	0.09	-0.74	0.09	9.43	109	3.36	60	64	44	0	6	1	0
	WILMINGTON	46	30	56	25	38	-9	1.85	0.96	1.78	16.15	162	10.65	171	85	39	0	5	3	1
ND	BISMARCK	31	17	41	1	24	9	0.22	0.11	0.13	1.36	125	0.45	69	71	57	0	7	2	0
	DICKINSON	33	17	41	6	25	6	0.15	0.04	0.11	0.59	65	0.31	54	88	57	0	7	2	0
	FARGO	18	2	39	-8	10	-2	0.09	-0.02	0.03	1.46	94	0.81	82	77	60	0	7	3	0
	GRAND FORKS	17	1	39	-9	9	-1	0.15	0.01	0.12	1.67	112	0.62	66	79	63	0	7	3	0
	JAMESTOWN	20	4	38	-9	12	-1	0.04	-0.07	0.03	0.57	45	0.13	16	85	62	0	7	2	0
	WILLISTON	32	18	39	-1	25	11	0.54	0.46	0.36	1.51	120	0.96	139	80	67	0	7	3	0
OH	AKRON-CANTON	29	15	51	0	22	-5	0.45	-0.07	0.13	6.05	94	2.35	68	82	63	0	7	6	0
	CINCINNATI	30	17	53	10	24	-8	0.32	-0.31	0.27	9.53	129	3.44	84	79	58	0	7	4	0
	CLEVELAND	30	17	52	7	24	-3	1.02	0.47	0.62	5.94	89	2.98	85	80	58	0	7	5	1
	COLUMBUS	29	15	51	5	22	-8	0.60	0.08	0.45	7.29	113	2.41	68	80	61	0	7	4	0
	DAYTON	29	14	52	3	22	-7	0.12	-0.43	0.06	7.24	108	2.85	79	84	57	0	7	3	0
	MANSFIELD	28	15	50	1	22	-4	0.53	0.01	0.33	6.92	101	2.76	76	90	60	0	7	5	0

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

Weather Data for the Week Ending February 13, 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 DEC 1	PCT. NORMAL SINCE DEC 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	30	16	50	1	23	-2	0.12	-0.33	0.09	4.89	91	1.91	69	77	60	0	7	4	0
	YOUNGSTOWN	29	15	51	3	22	-4	0.47	0.00	0.20	7.10	115	2.91	90	82	63	0	7	6	0
OK	OKLAHOMA CITY	60	30	74	21	45	5	0.00	-0.27	0.00	3.44	95	0.37	21	72	27	0	6	0	0
	TULSA	55	30	68	24	43	3	0.00	-0.38	0.00	9.33	199	0.73	32	65	39	0	4	0	0
OR	ASTORIA	60	45	67	39	53	9	2.15	0.12	0.94	37.96	159	17.43	129	92	78	0	0	4	2
	BURNS	39	18	43	12	28	0	0.00	-0.25	0.00	4.98	171	1.60	99	88	81	0	7	0	0
	EUGENE	56	41	61	35	49	7	0.61	-1.03	0.45	22.00	116	8.39	78	95	88	0	0	3	0
	MEDFORD	66	39	79	36	52	10	0.02	-0.50	0.01	12.21	192	4.48	129	89	50	0	0	2	0
	PENDLETON	52	32	54	27	42	5	0.41	0.11	0.22	4.42	127	2.14	106	94	74	0	4	3	0
	PORTLAND	59	43	62	37	51	9	0.66	-0.41	0.27	23.96	187	8.72	123	83	68	0	0	3	0
	SALEM	59	41	65	34	50	8	0.43	-0.89	0.17	24.00	162	8.76	105	91	78	0	0	3	0
PA	ALLENTOWN	33	19	48	6	26	-2	0.20	-0.47	0.17	8.47	104	4.28	90	76	48	0	7	2	0
	ERIE	32	20	52	5	26	-1	0.82	0.28	0.52	7.76	107	3.87	110	75	59	0	6	6	1
	MIDDLETOWN	32	19	45	6	26	-4	0.58	-0.12	0.49	10.66	145	6.37	155	82	49	0	7	3	0
	PHILADELPHIA	34	24	46	13	29	-4	0.08	-0.57	0.05	8.41	104	3.27	69	68	44	0	7	4	0
	PITTSBURGH	29	14	51	2	22	-7	0.25	-0.31	0.17	5.60	85	2.56	68	83	55	0	7	4	0
	WILKES-BARRE	30	17	47	1	24	-3	0.32	-0.20	0.19	5.15	86	2.60	75	79	50	0	7	3	0
	WILLIAMSPORT	32	17	48	6	25	-2	0.22	-0.43	0.13	6.60	94	3.24	80	69	51	0	7	3	0
RI	PROVIDENCE	32	13	44	-3	23	-7	0.22	-0.64	0.20	10.22	101	5.42	90	75	52	0	7	2	0
SC	BEAUFORT	54	34	63	28	44	-5	0.36	-0.44	0.31	8.36	96	5.47	97	86	37	0	2	2	0
	CHARLESTON	52	33	62	26	42	-7	0.54	-0.22	0.42	9.92	113	6.78	122	81	38	0	4	2	0
	COLUMBIA	51	29	62	26	40	-6	0.05	-0.90	0.05	10.13	103	3.68	57	65	38	0	7	1	0
	GREENVILLE	46	26	56	20	36	-7	0.04	-0.93	0.04	15.28	152	5.20	84	72	36	0	7	1	0
SD	ABERDEEN	26	11	41	-1	19	3	0.20	0.12	0.10	1.02	101	0.38	60	76	61	0	7	3	0
	HURON	27	13	38	1	20	1	0.06	-0.03	0.05	1.68	163	0.40	63	83	62	0	7	2	0
	RAPID CITY	49	25	63	20	37	11	0.22	0.14	0.22	1.28	142	0.65	130	80	42	0	7	1	0
	SIOUX FALLS	23	8	40	-5	15	-3	0.15	0.07	0.08	2.09	177	0.78	118	78	64	0	7	3	0
TN	BRISTOL	35	20	50	12	28	-8	0.29	-0.51	0.13	10.06	120	4.79	96	86	48	0	7	4	0
	CHATTANOOGA	45	28	57	22	36	-6	0.02	-1.14	0.02	16.85	136	6.44	85	66	38	0	5	1	0
	KNOXVILLE	39	24	52	19	32	-8	0.14	-0.80	0.14	12.82	119	4.98	79	75	43	0	7	1	0
	MEMPHIS	48	30	59	24	39	-4	0.00	-1.02	0.00	8.78	75	4.01	66	58	31	0	5	0	0
	NASHVILLE	41	24	58	19	32	-7	0.18	-0.66	0.09	8.51	85	3.59	65	73	41	0	7	3	0
TX	ABILENE	70	34	77	28	52	5	0.00	-0.24	0.00	2.24	84	0.04	3	62	28	0	2	0	0
	AMARILLO	66	27	79	23	47	8	0.00	-0.11	0.00	1.58	111	0.30	37	68	21	0	7	0	0
	AUSTIN	73	34	80	26	54	1	0.00	-0.44	0.00	3.33	65	1.04	39	66	32	0	2	0	0
	BEAUMONT	69	42	81	31	56	2	0.00	-0.89	0.00	8.25	65	4.11	55	93	33	0	1	0	0
	BROWNSVILLE	76	47	80	38	62	1	0.00	-0.34	0.00	2.04	65	1.88	94	94	39	0	0	0	0
	CORPUS CHRISTI	77	42	84	35	60	2	0.00	-0.43	0.00	2.97	72	2.08	87	81	31	0	0	0	0
	DEL RIO	77	39	85	34	58	4	0.00	-0.22	0.00	1.02	60	0.68	72	59	26	0	0	0	0
	EL PASO	70	33	78	26	51	2	0.00	-0.08	0.00	1.61	118	0.53	88	44	13	0	3	0	0
	FORT WORTH	67	38	75	32	53	6	0.00	-0.48	0.00	4.87	92	1.04	38	60	25	0	1	0	0
	GALVESTON	65	49	73	43	57	0	0.00	-0.70	0.00	6.59	73	3.10	57	93	50	0	0	0	0
	HOUSTON	70	45	80	34	58	4	0.00	-0.75	0.00	7.53	86	2.32	45	81	43	0	0	0	0
	LUBBOCK	68	26	77	20	47	5	0.00	-0.16	0.00	1.87	129	0.30	38	66	25	0	7	0	0
	MIDLAND	70	33	76	28	52	5	0.00	-0.12	0.00	1.42	101	0.18	24	59	24	0	4	0	0
	SAN ANGELO	75	32	83	27	53	5	0.00	-0.27	0.00	2.29	104	0.03	2	57	22	0	6	0	0
	SAN ANTONIO	74	40	82	30	57	4	0.00	-0.41	0.00	2.86	66	1.38	58	69	26	0	1	0	0
	VICTORIA	75	41	82	30	58	3	0.00	-0.50	0.00	4.75	81	3.15	93	92	42	0	2	0	0
	WACO	72	33	83	27	52	3	0.00	-0.54	0.00	3.94	70	0.32	11	73	31	0	3	0	0
	WICHITA FALLS	66	32	78	24	49	5	0.00	-0.32	0.00	3.06	91	0.44	26	72	34	0	5	0	0
UT	SALT LAKE CITY	37	26	41	22	31	-2	0.00	-0.30	0.00	4.27	135	2.04	106	92	75	0	7	0	0
VT	BURLINGTON	28	10	37	-12	19	1	0.14	-0.28	0.04	6.03	115	1.59	52	78	54	0	7	5	0
VA	LYNCHBURG	37	18	47	9	28	-8	0.07	-0.67	0.07	8.96	110	4.00	81	70	40	0	7	1	0
	NORFOLK	40	29	50	20	35	-6	0.05	-0.76	0.03	12.20	144	8.83	162	71	40	0	4	3	0
	RICHMOND	39	23	48	14	31	-7	0.09	-0.60	0.04	10.64	134	4.70	97	70	40	0	7	3	0
	ROANOKE	36	20	47	12	28	-9	0.02	-0.72	0.02	8.79	118	4.24	92	64	42	0	7	1	0
	WASH/DULLES	36	20	47	12	28	-5	0.33	-0.33	0.31	9.52	130	5.76	135	69	43	0	7	2	0
WA	OLYMPIA	56	36	66	30	46	6	1.84	0.21	0.81	26.08	141	11.58	109	95	90	0	2	4	2
	QUILLAYUTE	58	42	73	40	50	8	4.41	1.26	2.04	42.44	125	23.20	119	91	81	0	0	4	3
	SEATTLE-TACOMA	56	42	63	34	49	6	1.89	0.80	1.07	21.57	168	10.36	144	92	79	0	0	4	1
	SPOKANE	45	32	51	26	38	7	0.28	-0.08	0.15	7.60	160	3.16	126	94	73	0	5	3	0
	YAKIMA	51	32	55	26	42	9	0.18	-0.01	0.17	5.99	204	2.52	163	83	72	0	4	2	0
WV	BECKLEY	29	14	47	2	22	-10	0.12	-0.57	0.05	6.80	89	3.25	72	77	58	0	7	5	0
	CHARLESTON	33	18	54	7	26	-9	0.24	-0.50	0.13	9.10	114	3.51	76	79	46	0	7	2	0
	ELKINS	29	9	47	-3	19	-11	0.30	-0.45	0.11	7.77	94	3.08	64	82	49	0	7	5	0
	HUNTINGTON	34	20	54	10	27	-8	0.04	-0.67	0.01	10.03	127	3.62	80	74	44	0	7	4	0
WI	EAU CLAIRE	18	1	40	-13	9	-7	0.00	-0.19	0.00	4.53	186	0.69	49	77	48	0	7	0	0
	GREEN BAY	22	6	40	-7	14	-4	0.10	-0.13	0.09	7.82	256	2.11	128	76	55	0	7	2	0
	LA CROSSE	21	4	41	-8	12	-8	0.04	-0.21	0.04	6.41	221	1.49	89	74	48	0	7	1	0
	MADISON	22	8	41	-3	15	-5	0.02	-0.28	0.01	5.11	147	1.78	98	74	58	0	7	2	0
	MILWAUKEE	24	11	45	0	18	-5	0.21	-0.20	0.17	5.62	116	1.80	69	68	55	0	7	2	0
WY	CASPER	42	25	48	7	33	8	0.00	-0.14	0.00	2.38	165	1.33	162	63	52	0	6	0	0
	CHEYENNE	50	28	59	17	39	11	0.00	-0.08	0.00	1.94	183	1.09	182	62	38	0	5	0	0
	LANDER	45	21	54	14	33	10	0.00	-0.10	0.00	1.33	102	0.85	123	75	41	0	7	0	0
	SHERIDAN	54	28	65	25	41	16	0.04	-0.10	0.04	1.23	72	0.89	86	65	46	0	7	1	0

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

National Agricultural Summary

February 8 – 14, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

From the Mississippi Valley to the Atlantic Coast, temperatures were below normal. Readings averaged more than 15°F below normal in parts of West Virginia. The western U.S. experienced mostly above-normal temperatures, with the majority of Montana and Wyoming averaging at least 10°F above normal. Weekly precipitation was below average for most of the nation.

Arizona: Alfalfa conditions were rated 78 percent good to excellent. Harvesting continued on almost two-thirds of the state's alfalfa acreage. Rangeland conditions varied widely, depending on location, but were mostly good to fair. Central Arizona growers shipped broccoli, cabbage (green and red), cilantro, kale greens, and parsley. Western Arizona growers shipped anise, arugula, Bok Choy, broccoli, cabbage (green and red), cauliflower, celery, Chinese cabbage, cilantro, endive, escarole, frisee, kale greens, varieties of lettuce (Boston, Iceberg, green leaf, red leaf, romaine and other), parsley, radicchio, and spinach. Unexpectedly high temperatures and low humidity caused a loss of soil moisture throughout the state. All fifty weather stations reported no precipitation and above-average temperatures during the week. The highest temperature was 89°F at several locations. The lowest temperature was 12°F at Springerville.

California: Warm, dry weather prevailed. For the week, temperatures averaged 5 to 14°F higher than normal. In Tulare County, dryland grain fields continued to benefit from the recent rains. Herbicidal sprays were applied to winter grain and alfalfa crops. Corn seed was received in advance of spring planting. Black-eyed beans were exported to foreign markets. In Colusa County, wheat fields were growing at a very vigorous rate. Due to drying conditions, row crop fields were sprayed for weeds to clean them up. Growers began to "scratch" the row crop beds to enhance drying and prepare soil for planting. In Fresno County, warm weather was ideal for grain development. In Tulare County, a few early varieties of stone fruit were starting to bloom. Grape vines were being pruned and tied. Weed control was being performed on berms. Kiwis were being trellised and new plants planted. Kiwifruit continued to be packed for shipment. Navel oranges, Minneola tangelos, and lemons continued to be picked and packed for both domestic and foreign markets. Citrus groves continued to be pruned and skirted, with pruned brush being shredded. In Sutter County, pruning, re-planting, and weed spraying in fruit, vineyards, and nut orchards continued. In Ventura County, high winds and low humidity caused Valencia orange trees to lose excessive amounts of oranges. In Sutter County, almonds were beginning to bloom. Walnuts continued to be packed for domestic and foreign markets. In Tulare County, shelled pecans, shelled and in-shell walnuts, pistachios, and almonds continued to be packed for export to foreign and domestic markets. In Fresno County, the harvest of lettuce and broccoli were ongoing. In Monterey County, farmers were actively planting lettuce, brassicas, spinach, and other row crops. The artichoke harvest has started off well. In Tulare County, strawberry fields continued to show ideal growth. Blueberries were still being planted as weather permitted. Certified producers continued to grow winter vegetables, and to sell produce such as cabbage, cauliflower, broccoli, carrots, and Brussels sprouts at the local farmer's markets. Summer vegetables continued to be planted under hot-caps. Recent rains have continued to benefit the lower elevation pasture growth, reducing the need for supplemental feed. Vegetation in the foothills continued to thrive with the warm, sunny weather. In Tulare and San Joaquin Counties, bee keepers continued moving hives into the orchards to facilitate pollination. In Fresno County, warmer, drier weather has improved conditions for dairies.

Florida: There was an average of 6.2 days suitable for fieldwork, compared with 5.5 days the previous week. Winter wheat and other grains suffered some damage due to wet conditions. Fields in the northern counties were too wet for soil preparation. Field preparation continued for watermelons in Dixie County, with some producers planting windbreaks. Produce coming to market included boniato, cabbage, collards, eggplant, green beans, herbs, kale, lettuce and leafy greens, peppers, squash, strawberries, sweet corn, tomatoes, zucchini, and specialty items. Vegetable quality and quantity was significantly reduced by the adverse weather of the past few weeks. Temperatures were slightly cooler than average. All citrus growing counties had at least one nighttime low in the middle to upper 30s. The lowest temperature was in Kenansville (Osceola County) at 33.4°F. Rainfall was very light in the citrus belt. Several citrus-producing counties did not record any rainfall. Harvesting continued at a steady pace. Most processing plants remained opened to take early and mid-season oranges still hanging on the trees. A few plants began taking Valencia oranges, while other plants temporarily shut down waiting for ratios to improve. Most packinghouses have finished with early and midseason oranges and were taking Valencia oranges acceptable for the fresh market. Harvest of honey tangerines started, but the supply had not caught up with demand. Temples were being harvested, as were Royal tangerines, which are sought for the fresh market. There were plenty of red and white grapefruit groves that were spot picked and were being cleaned for both fresh and processed fruit. Caretakers were hedging and topping trees after harvest. Limited mowing and brush removal were being conducted, mostly before harvest. Winter forage in Escambia, Holmes, and Taylor Counties was in poor condition due to frost damage and flooding. Orange and Seminole County pastures were damaged due to past flooding and disease that resulted from standing water. In the southwest and southeast, cool weather and saturated soils negatively affected pasture quality. Livestock producer were feeding supplements to make up for reduced forage. The cattle condition remained steady.

Texas: Little or no measurable precipitation occurred. Producers in parts of the Northern High Plains continued to top dress winter wheat. In portions of the Blacklands, some producers began fertilizer applications. Cotton producers in the Lower Valley began planting. In other areas of the state, the 2015 cotton harvest reached 100 percent complete. In parts of the Coastal Bend, corn planting was active. Some producers in the Lower Valley began corn and sorghum planting. Vegetable, sugarcane, and citrus harvest continued in the Lower Valley, while in onion planting was underway in portions of North Texas. South Texas growers continued irrigation operations. In parts of the Cross Timbers, pecan harvest neared completion. Supplemental feeding remained active across much of the state. On the Southern Low Plains, small wildfires were contained.

February 11 ENSO Update

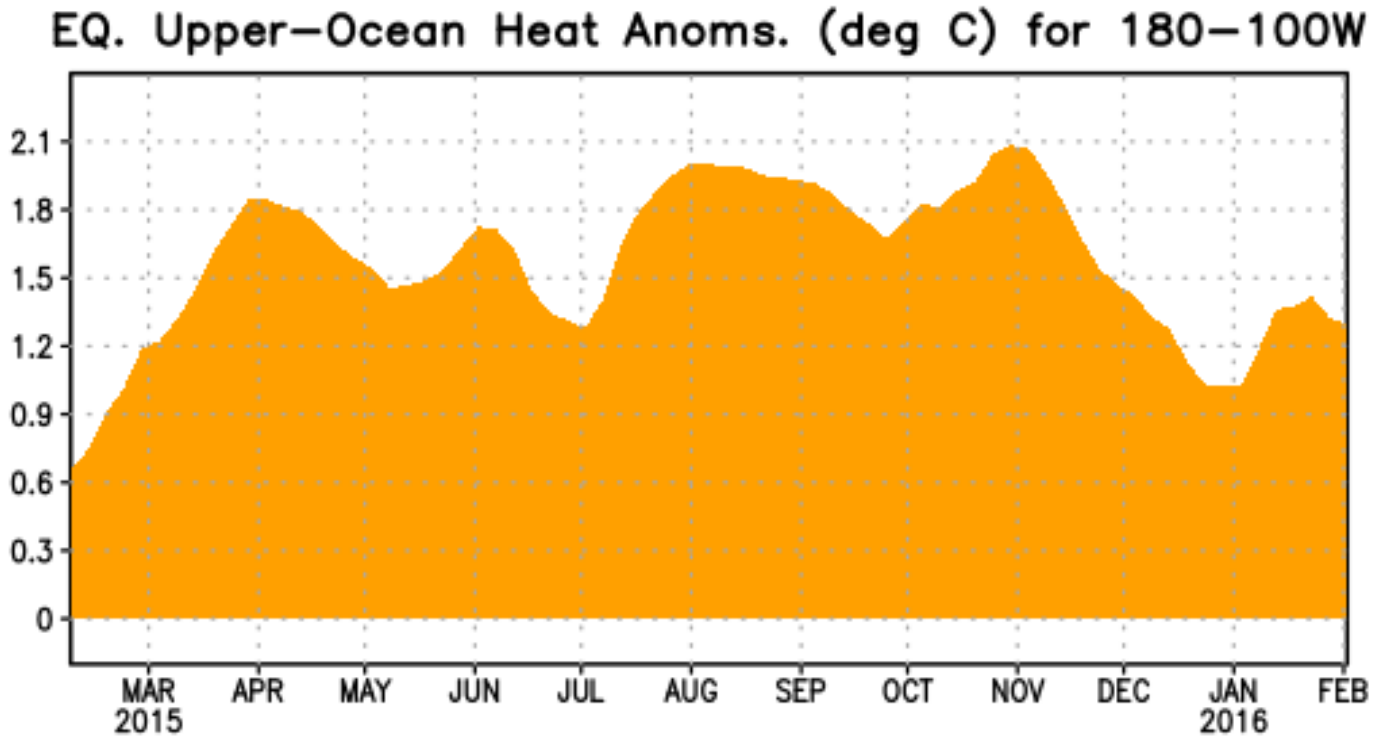


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: El Niño Advisory

Synopsis: A transition to ENSO-neutral is likely during late Northern Hemisphere spring or early summer 2016, with a possible transition to La Niña conditions during the fall.

Indicative of a strong El Niño, sea surface temperature (SSTs) anomalies were in excess of 2°C across the east-central equatorial Pacific Ocean during January. The Niño indices in the eastern Pacific declined, while Niño-3.4 and Niño-4 were nearly unchanged. The subsurface temperatures in the central and eastern Pacific increased due to a downwelling Kelvin wave (Fig. 1), but toward the end of the month weakened again in association with the eastward shift of below-average temperatures at depth in the central Pacific. Also, low-level westerly wind anomalies and upper-level easterly wind anomalies continued over much of the tropical Pacific. The traditional and equatorial Southern Oscillation Index (SOI) values remained negative but weakened relative to last month. Convection remained much enhanced over the central and east-central tropical Pacific and suppressed over Indonesia. Collectively, these anomalies reflect the continuation of a strong El Niño.

Most models indicate that El Niño will weaken, with a transition to ENSO-neutral during the late spring or early summer 2016. Thereafter, the chance of La Niña conditions increases into the fall. While there is both model and physical support for La Niña following strong El Niño, considerable uncertainty remains. A transition to ENSO-neutral is likely during late Northern Hemisphere spring or early summer 2016, with a possible transition to La Niña conditions during the fall (click CPC/IRI consensus forecast for the chance of each outcome for each 3-month period).

El Niño has already produced significant global impacts and is expected to affect temperature and precipitation patterns across the United States during the upcoming months (the 3-month seasonal outlook will be updated on Thursday February 18th). The seasonal outlooks for February – April indicate an increased likelihood of above-median precipitation across the southern tier of the United States, and below-median precipitation over the northern tier. Above-average temperatures are favored in the North and West, and below-average temperatures are favored in the southern Plains and along the Gulf Coast.

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts are also updated monthly in the Forecast Forum of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an ENSO blog. The next ENSO Diagnostics Discussion is scheduled for **10 March 2016**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

February 7-13, 2016

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

HIGHLIGHTS

EUROPE: Mild, wet weather prevailed over central and northern portions of the continent, while rain returned to southern winter grain areas.

WESTERN FSU: Abnormally warm conditions prevailed, keeping key southern wheat areas devoid of snow cover.

MIDDLE EAST: Early-week rain and mountain snow fell over northern portions of Iraq and Iran, while sunny skies briefly returned to Turkey.

NORTHWESTERN AFRICA: Severe drought further cut winter grain yield prospects in Morocco and western Algeria, though the first significant rain since November approached at week's end.

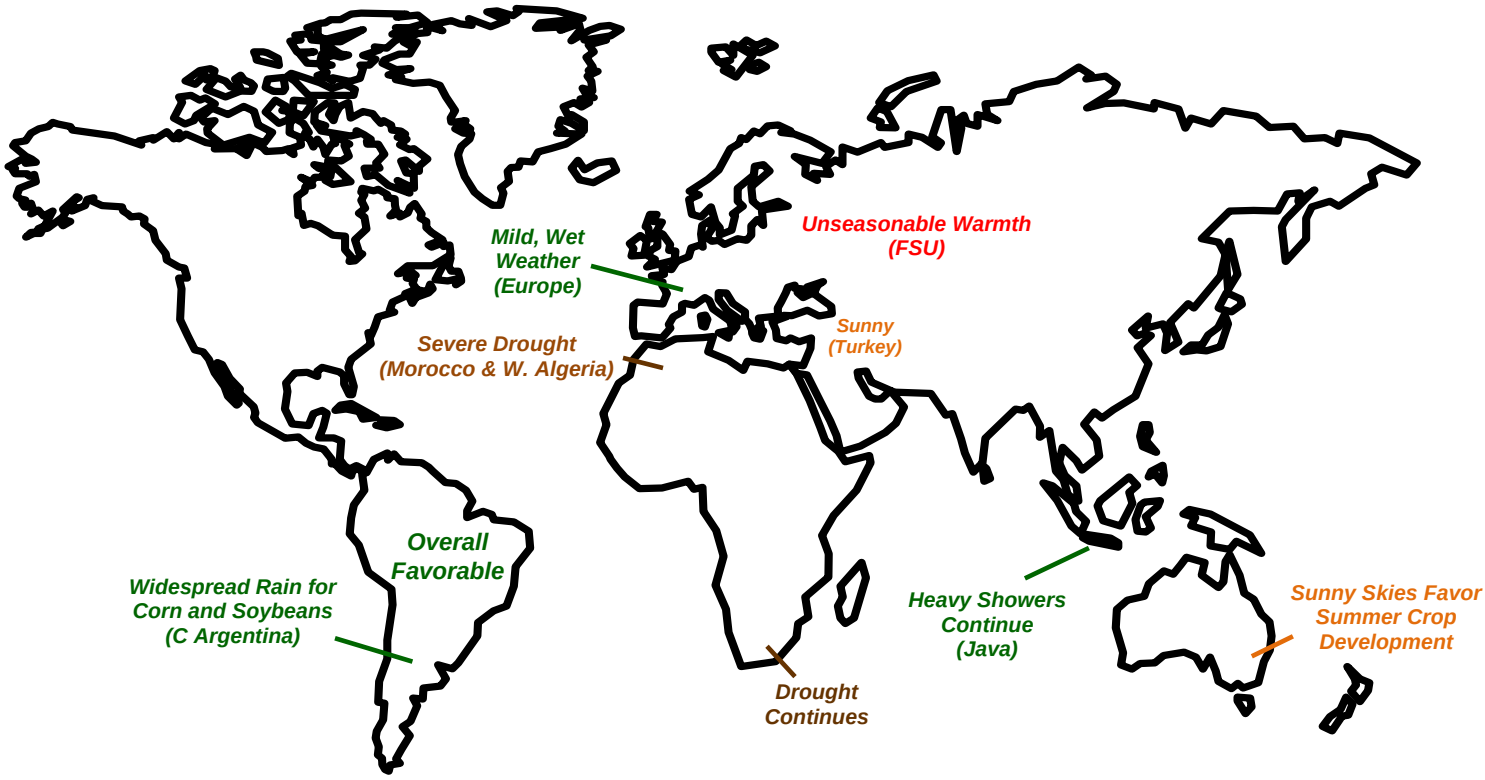
SOUTHEAST ASIA: Seasonably heavy showers continued in Java, Indonesia, boosting water supplies for rice.

AUSTRALIA: Mostly sunny skies and adequate to locally abundant soil moisture favored summer crop development.

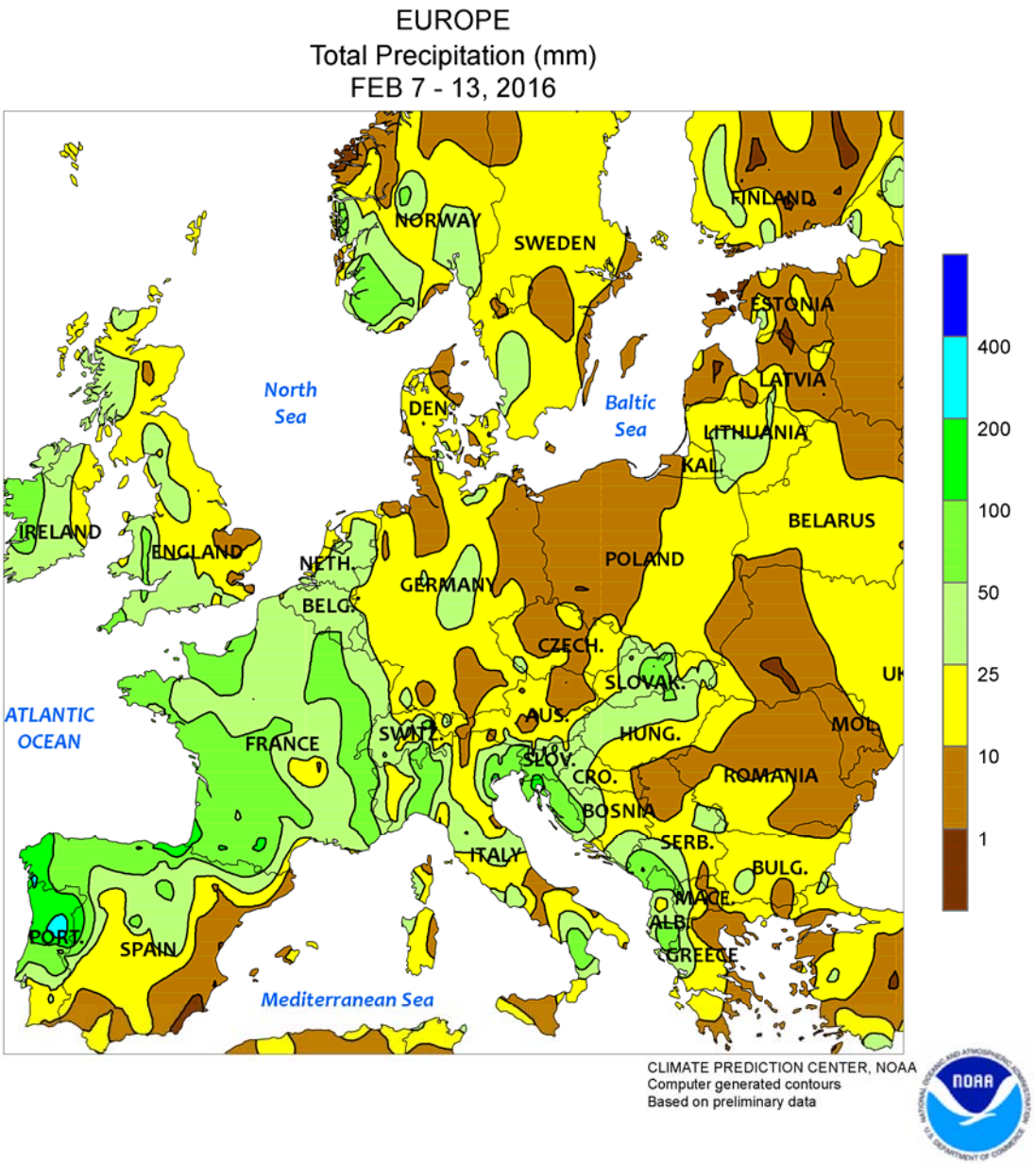
SOUTH AFRICA: Light showers provided little relief from the effects of long-term drought.

ARGENTINA: Widespread, locally heavy rain improved corn and soybean prospects in previously dry sections of central Argentina.

BRAZIL: Warmer, drier conditions prevailed in the northeast, otherwise conditions remained overall favorable for corn, soybeans, and other summer crops.



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

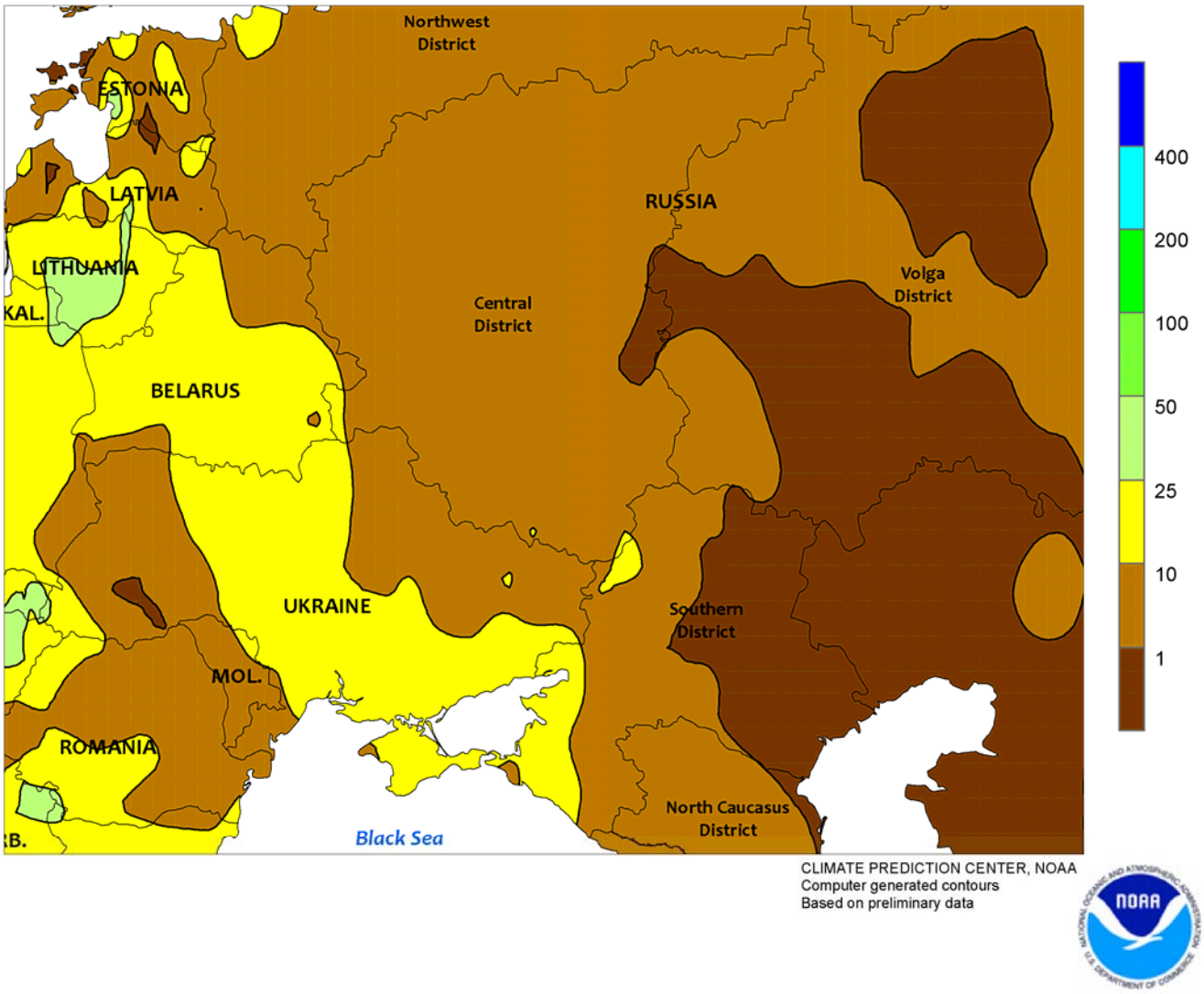


EUROPE

Mild, unsettled weather prevailed over central and northern portions of the continent, while rain returned to southern winter grain areas. The multi-week spell of abnormal warmth continued, with temperatures averaging 3 to 5°C above normal in Spain and France and up to 9°C above normal across most of eastern Europe. Precipitation (mostly in the form of rain) totaled 25 to 70 mm over major growing areas of central and northern Europe, maintaining abundant moisture reserves for dormant winter wheat and rapeseed. While a brief mid-week incursion of colder weather facilitated some snowfall from southern Germany into Poland, the shallow snow cover disappeared by week's end. Farther south, rain (10-100 mm, locally more) returned to Spain as well as Italy, improving soil moisture for vegetative wheat and barley. In northern Italy, up to 90 mm of rainfall eased the Po River Valley's localized pronounced drought and improved water supplies for summer irrigation.

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

WESTERN FSU
Total Precipitation (mm)
FEB 7 - 13, 2016



WESTERN FSU

Unseasonable warmth left southern wheat areas devoid of snow cover and further reduced winter crop cold hardiness. Temperatures for the week averaged 3 to 6°C above normal from central Ukraine into southern Russia, keeping key southern winter wheat areas snow free. Though winter wheat remained exposed to potential incursions of bitter cold, nighttime low temperatures (-10 to -5°C) were above the threshold for freeze damage. Despite the warmth, wheat remained dormant with weekly average temperatures remaining below 5°C. Farther north, winter grains were still covered by a moderate to deep snowpack (10-25 cm) from central Ukraine into Russia's Volga District. Moisture reserves for spring growth remained favorable due to near- to above-normal precipitation for much of the winter, though mostly dry conditions in Russia contrasted with additional rain and snow (10-25 mm liquid equivalent) in Ukraine and Belarus.

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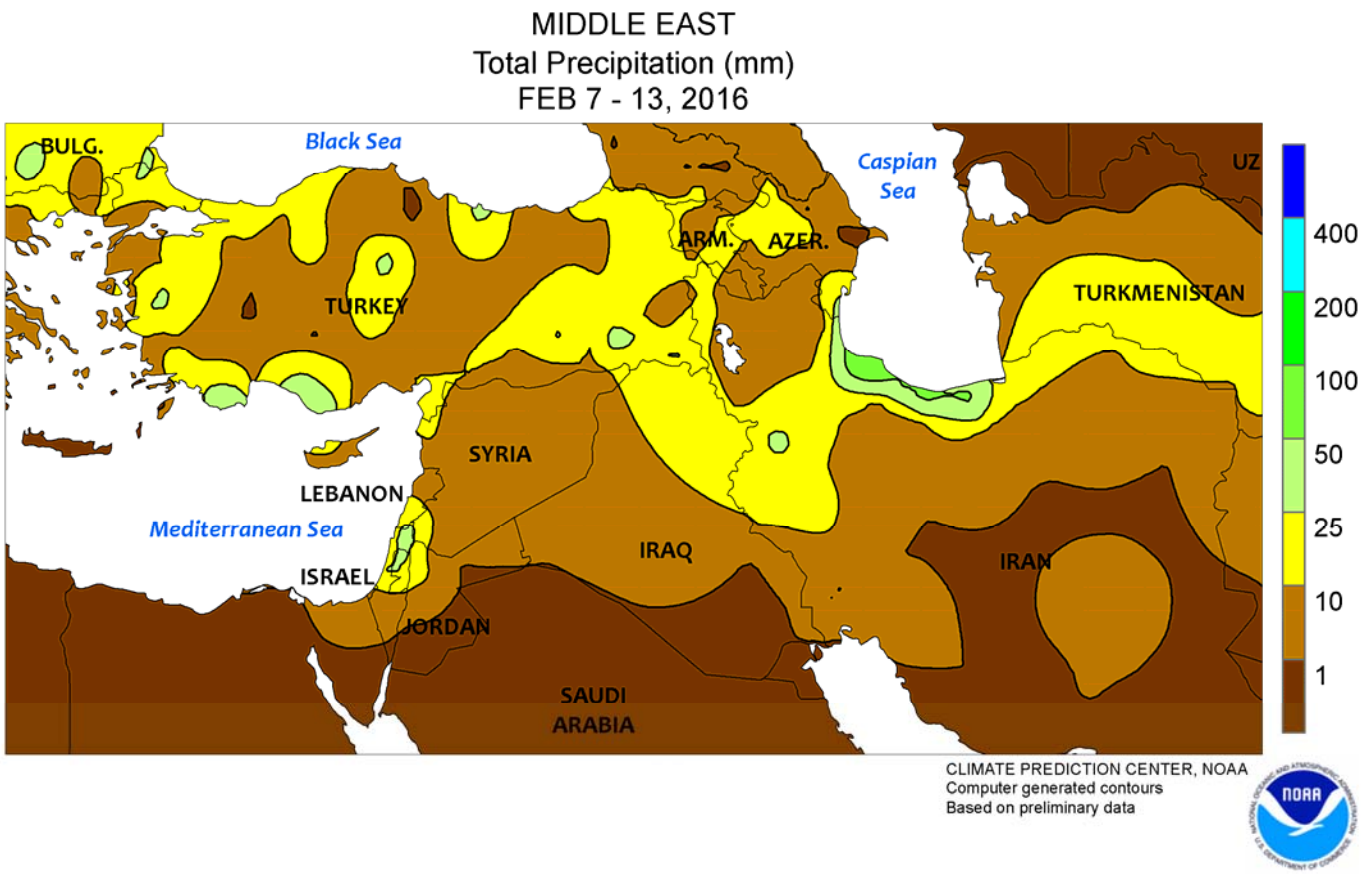

MIDDLE EAST

Rain and high-elevation snow moved across central and eastern crop areas, while sunny weather briefly returned to western portions of the region. A slow-moving Mediterranean storm system produced 10 to 35 mm (liquid equivalent) of rain and high-elevation snow over eastern Turkey as well as northern portions of Iraq and Iran, maintaining good moisture supplies for dormant winter wheat and barley. Meanwhile, sunny skies during the first half of the period allowed for several days of seasonal fieldwork over Turkey and along the Mediterranean Coast. However, a rapidly-moving disturbance brought clouds and precipitation (locally more than 20 mm) back to northern and western crop areas by week's end.

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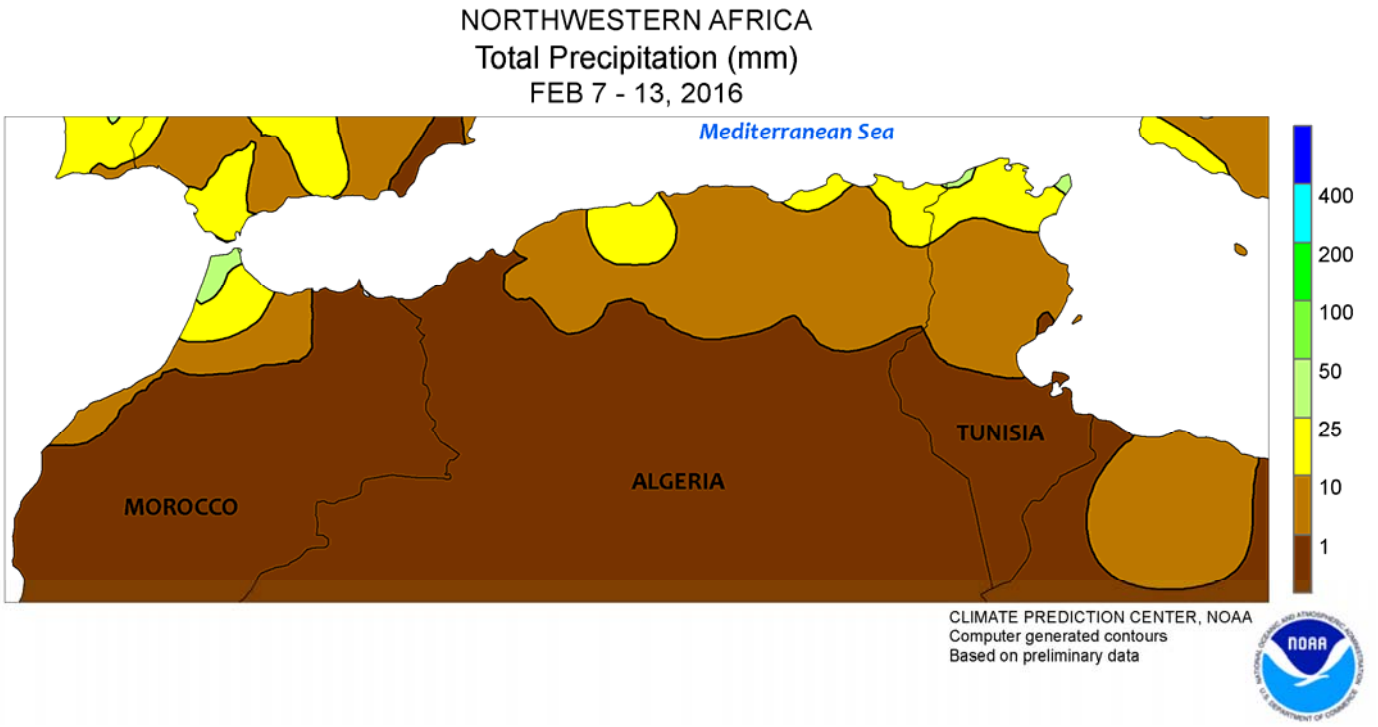
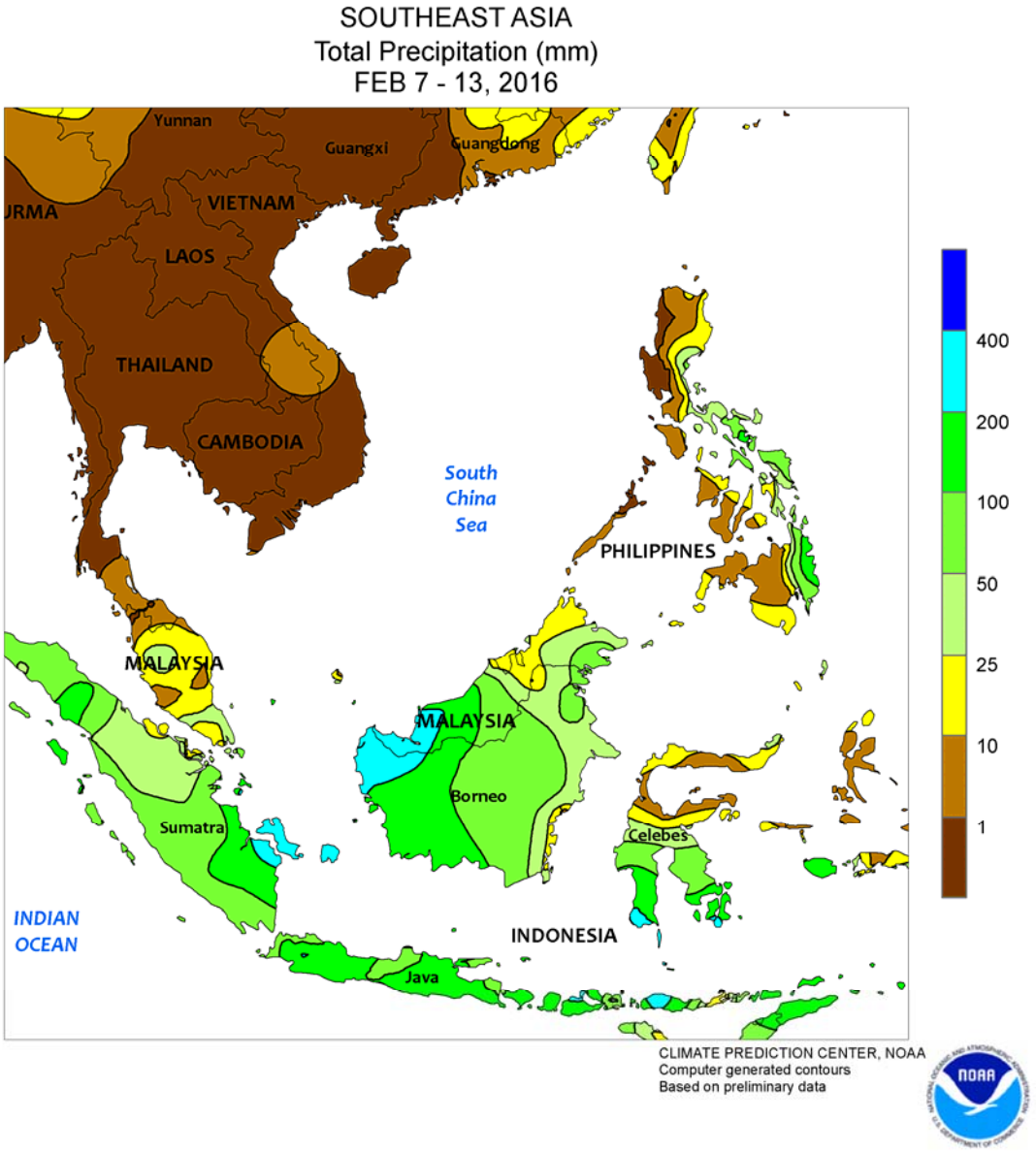


NORTHWESTERN AFRICA

Severe drought further impacted western growing areas, while showers improved moisture for wheat and barley from central Algeria into Tunisia. In Morocco, winter grain yield prospects continued to decline under sunny skies, above-normal temperatures (up to 5°C above normal), and unrelenting drought. Since November 1, northern portions of the country have received less than 20 percent of average rainfall, while southern crop areas have averaged less than 15 percent. Furthermore, persistent western warmth is pushing moisture-deprived crops toward reproduction a week or more ahead of schedule; wheat and barley in Morocco typically enter the reproductive stages of development during March, but will likely begin heading by month's end. Similar dryness has also impacted winter grains in western Algeria, though this country's primary crop areas are located farther east. While the first rain in several months was approaching these drought-afflicted crop areas at week's end, significant, persistent rainfall will be needed to reverse the drought's agricultural impacts and alleviate deficits which locally exceed 150 mm. Meanwhile, crops from central Algeria into Tunisia benefited from widespread showers (2-20 mm). Furthermore, these more easterly areas have been mostly spared northern Africa's locally extreme drought, and current winter grain yield prospects are favorable.

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



SOUTHEAST ASIA

Widespread showers continued throughout Indonesia, with over 100 mm reported across rice areas of Java and over 200 mm in oil palm areas of southern Sumatra and western Kalimantan. Moisture conditions in central and eastern Java have significantly improved for rice as compared to the first half of the season when rainfall was running well below normal. While the rainfall may have come too late to vastly improve wet-season rice prospects, the increase in water supplies will aid rice grown during the dry season. In Malaysia, rainfall remained lighter than normal (less than 25 mm) in key oil palm areas on the peninsula and in Sabah, offering little improvement to crop prospects already down year to year due to the late onset of seasonal rain in the autumn. Meanwhile in the Philippines, showers (50-100 mm) from southern Luzon to eastern Mindanao maintained soil moisture for rice and corn. In addition, the rainfall prevented further declines in long-term water supplies brought on by poor seasonal rainfall in much of the central and southern portions of the country.

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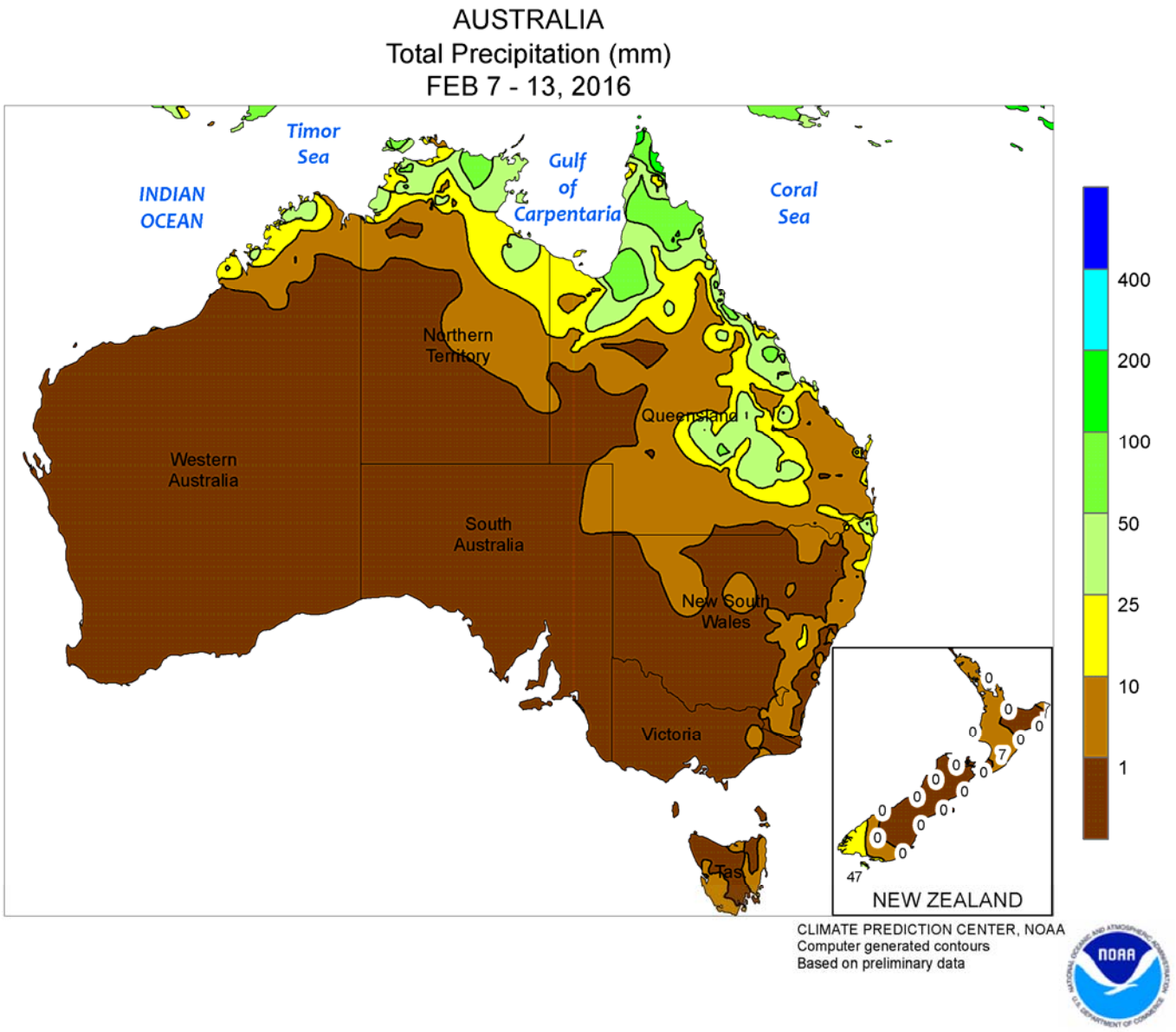

AUSTRALIA

Scattered showers (5-25 mm) fell across central Queensland, while more isolated showers (2-10 mm) occurred in central and southern New South Wales. Sandwiched in between these two regions, predominately dry weather prevailed in major cotton and sorghum producing areas of southern Queensland and northern New South Wales. In the wake of recent widespread rains, the combination of sunny skies and adequate to locally abundant soil moisture favored summer crop development in these latter areas. Temperatures in eastern Australia were generally seasonable, averaging within about 1°C of normal.

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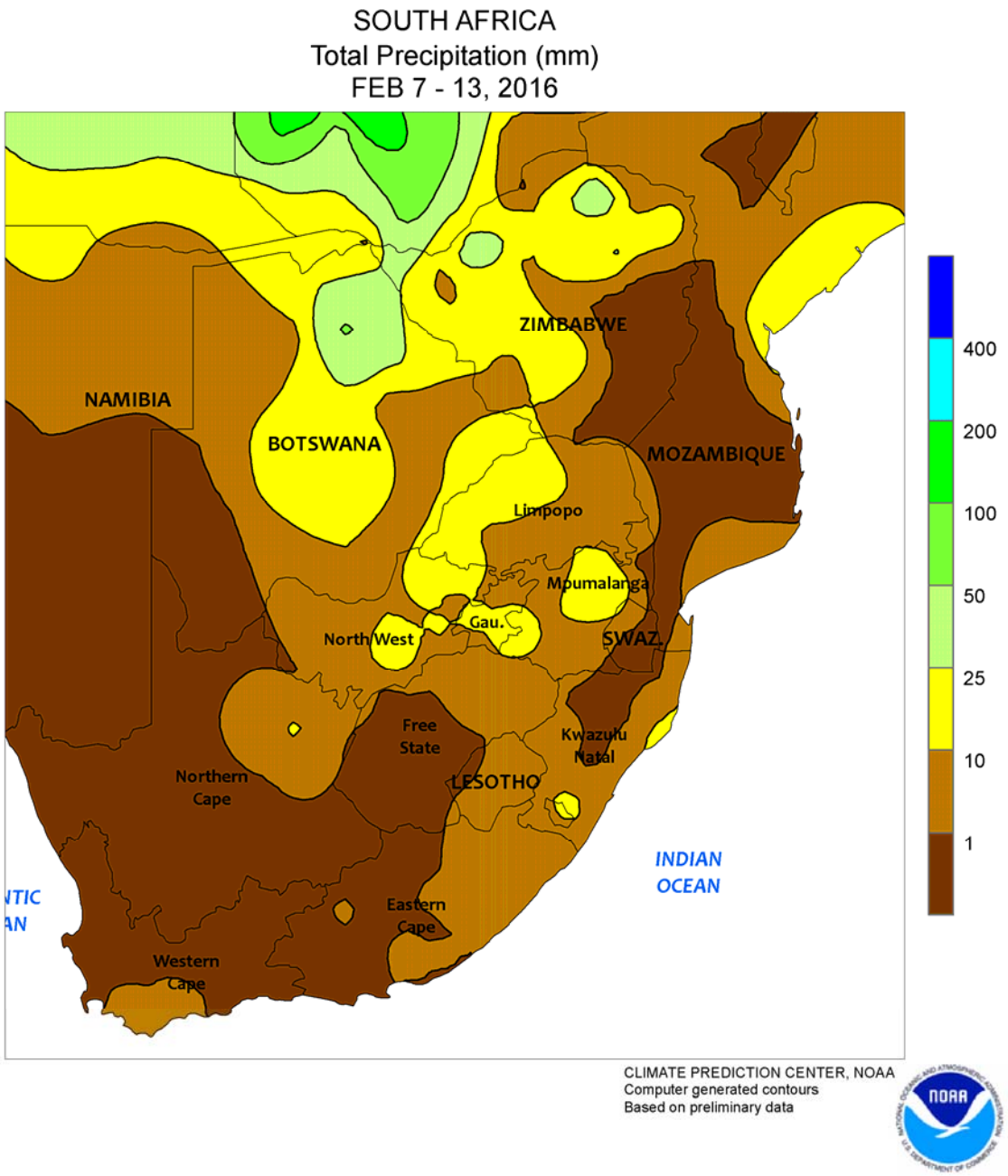

SOUTH AFRICA

Periodic showers brought limited drought relief to corn and other rain-fed summer crops. Pockets of moderate rainfall (greater than 10 mm) were scattered across the corn belt, with the highest concentration of rain in North West and western sections of Limpopo. The showers developed over a period of several days and helped to lower temperatures to more seasonable levels (daytime highs in the middle and upper 20s degrees C). On the drier days, however, temperatures rose well into the 30s, with daytime highs approaching 40°C in spots. Summer crops typically advance through reproductive stages of development at this time of year, particularly in western sections of the corn belt, but the lateness in planting has left crops well behind in development. Unseasonable warmth and dryness also dominated sugarcane areas of KwaZulu-Natal and eastern Mpumalanga, with only a few isolated reports of more than 10 mm in the more southerly rain-fed production areas. Meanwhile, warm, sunny weather fostered rapid development of irrigated summer row crops in Northern Cape, while aiding harvesting of tree and vine crops in Western Cape.

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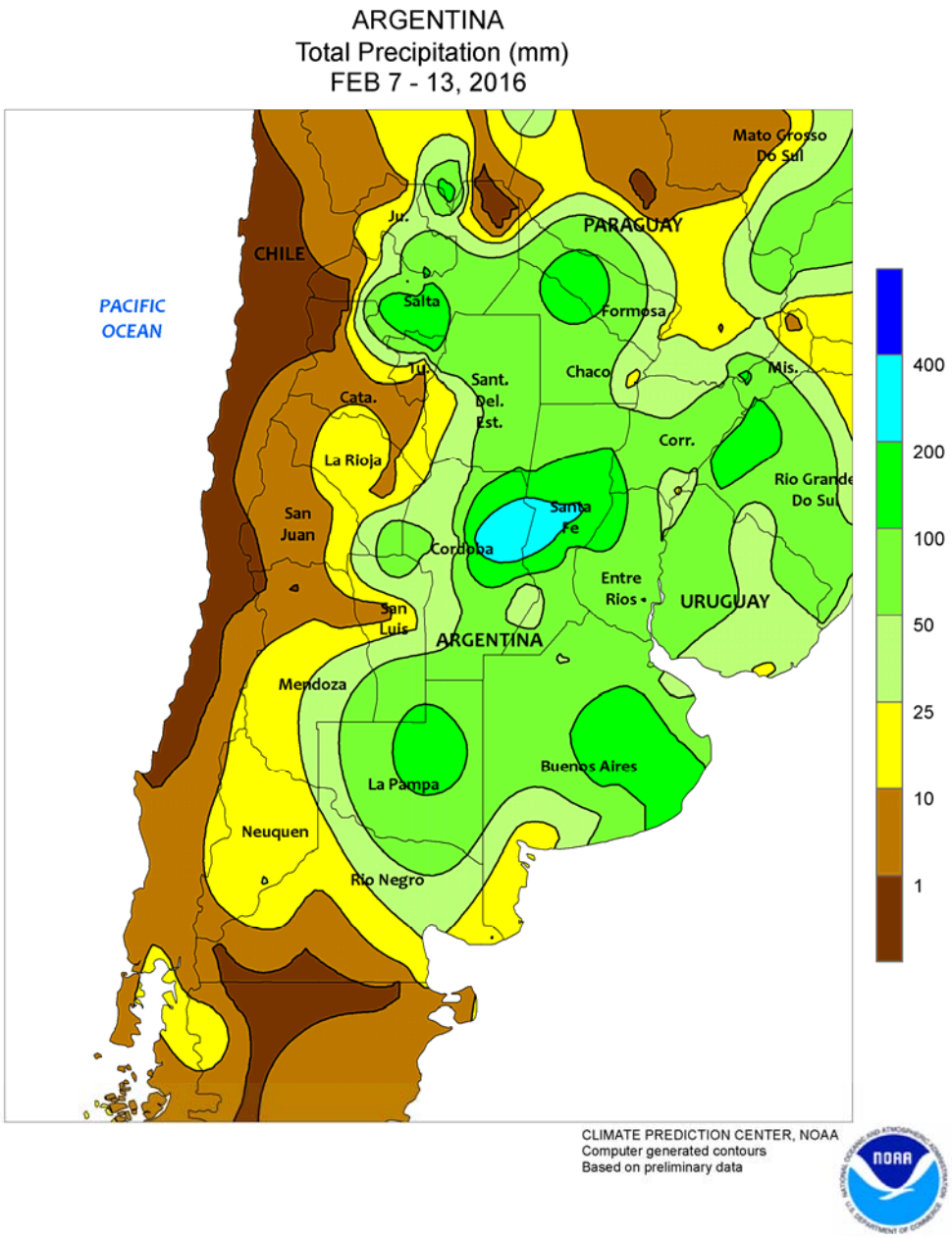
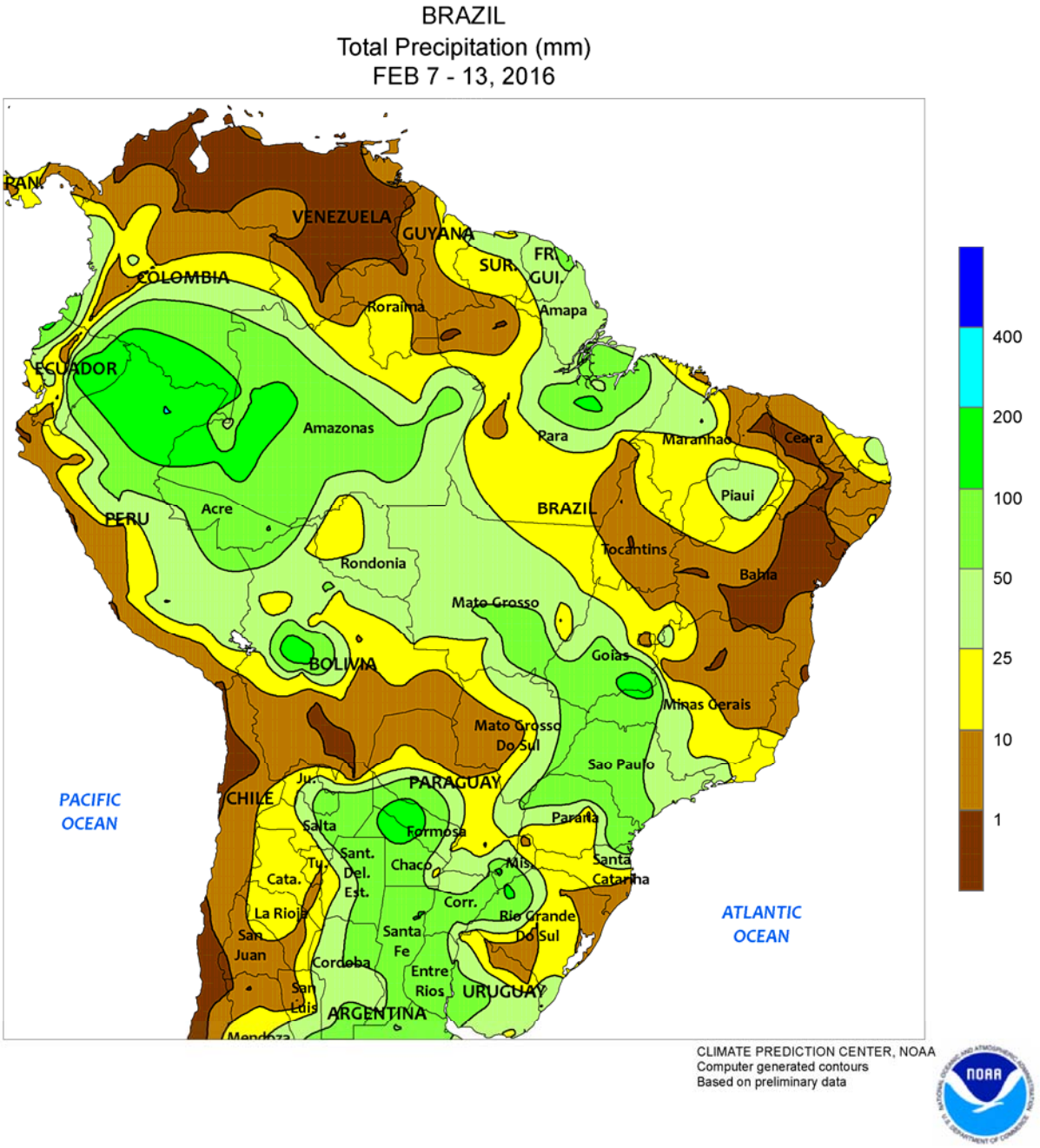


ARGENTINA

Widespread, locally heavy rain improved summer grain and oilseed prospects in previously dry parts of central Argentina. Rainfall totaled more than 50 mm in most major farming areas, with the heaviest amounts (greater than 100 mm) concentrated over southeastern Buenos Aires. The rain — which fell both at the beginning and end of the week — was particularly welcomed in high-yielding corn and soybean areas of the lower Parana River Valley (in and around northern Buenos Aires), which had experienced a general trend of below-normal rainfall and above-normal temperatures since December. In spite of the rain, weekly temperatures averaged 2 to 5°C as daytime highs continued to reach the lower and middle 30s (degrees C) on the days in between the rain events. Rainfall also intensified in northern Argentina, with amounts totaling 25 to 100 mm from Salta and Santiago del Estero eastward through Corrientes though as in central Argentina, several hot days (daytime highs approaching 40°C in the traditionally warmer locations from northern Cordoba to western Formosa) caused weekly temperatures to average 3 to 5°C above normal across the region.

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

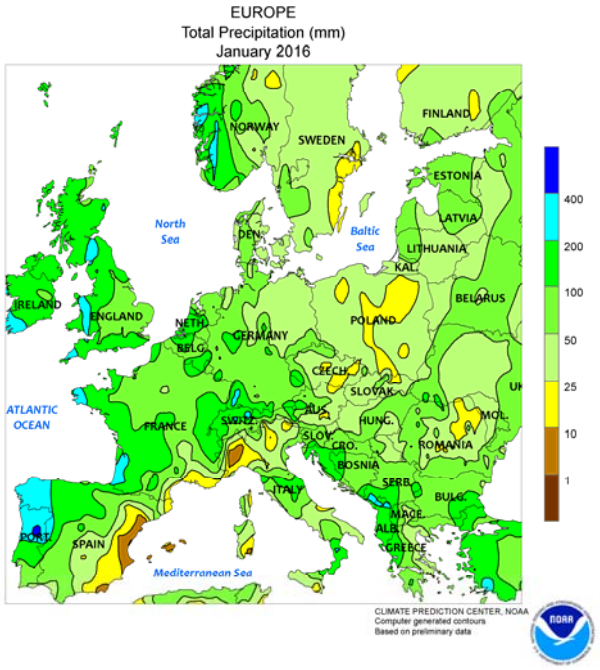


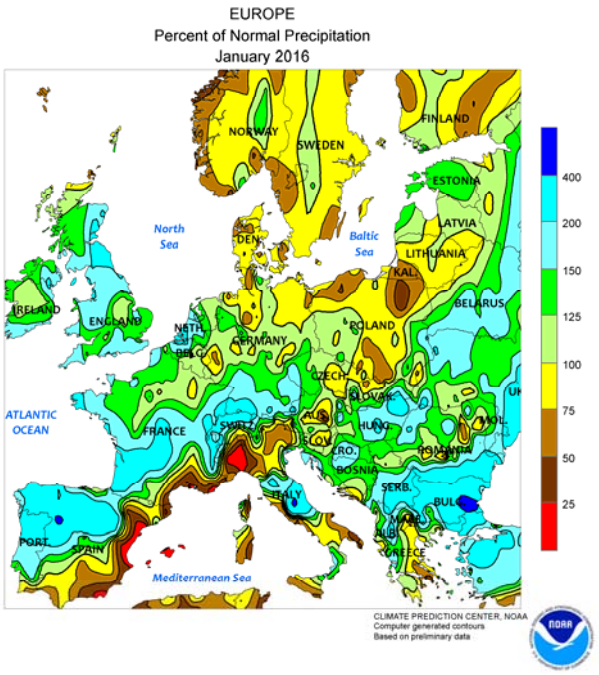
BRAZIL

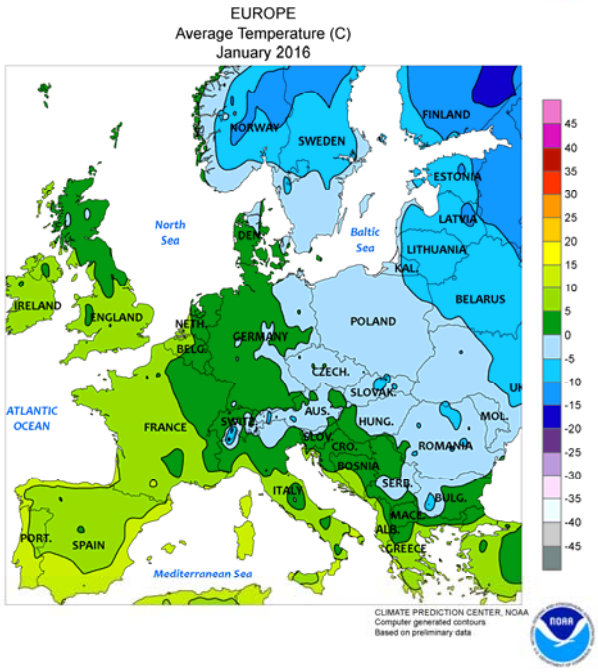
Beneficial rain continued throughout key soybean and corn production areas of central and southern Brazil, as drier weather developed over the northeastern interior. Rainfall totaled less than 10 mm over much of Tocantins and western Bahia, with somewhat higher amounts (10-25 mm) in neighboring locations in Piaui, Mananhao, and northern Goias. Weekly temperatures averaged up to 4°C above normal in the aforementioned region as daytime highs reached into the upper 30s (degrees C), maintaining high evaporative losses and raising crop moisture requirements. Rainfall had trended above normal prior to the recent spell of warmth and dryness, however, helping to mitigate the impact of the warmth and dryness on soybeans, cotton, and newly-sown corn. Warm, showery weather maintained overall favorable conditions for summer crops elsewhere, with rainfall amounts totaling more than 50 mm from southern Mato Grosso to northern Parana, including sugarcane and citrus areas of Sao Paulo. Lighter amounts (less than 25 mm) were recorded from southern Parana to central Rio Grande do Sul, where crops have experienced abundant levels of moisture for virtually the entire season. Similar amounts were recorded in coffee areas of southeastern Minas Gerais but totals increased toward the southwest, with rainfall increasing toward the southwest. Weekly temperatures averaged 2 to 4°C above normal in southern and southeastern farming areas, with daytime highs reaching as high as 37°C above normal in southern Mato Grosso.

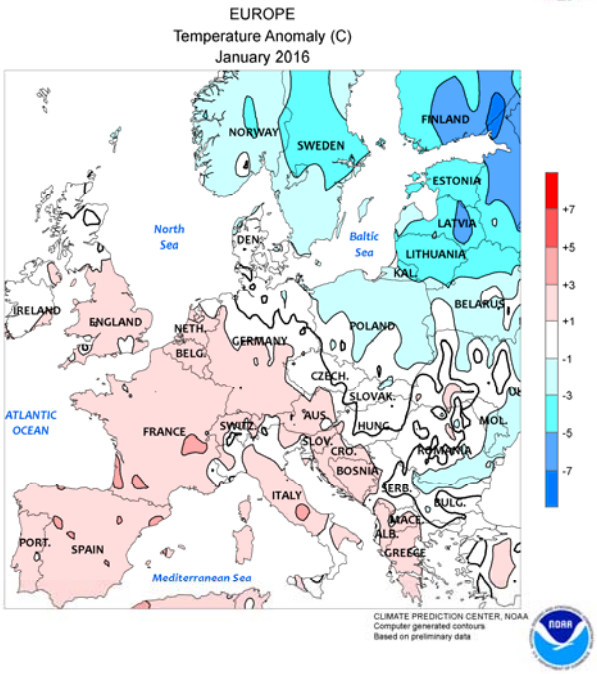
For additional information contact: mbrusberg@oce.usda.gov

January International Temperature and Precipitation Maps







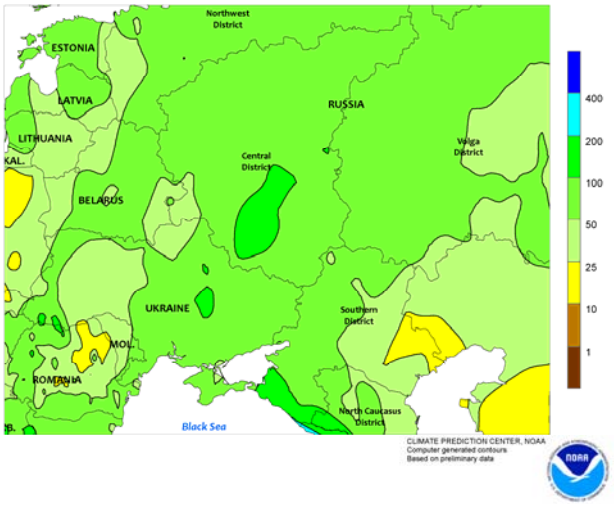


EUROPE

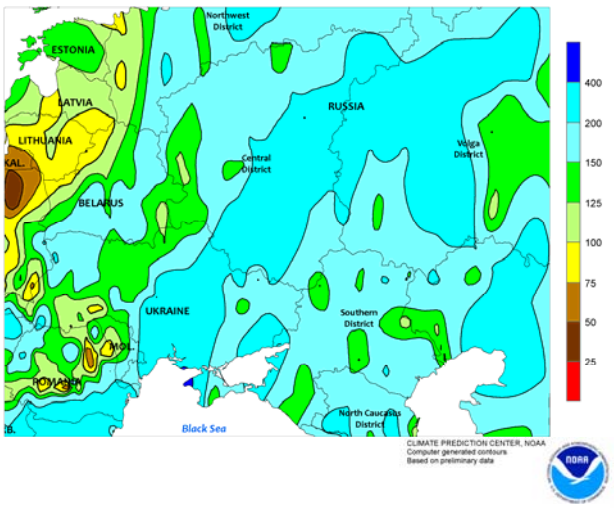
During January, mild, wet weather across much of the continent maintained favorable prospects for dormant winter grains and oilseeds. Temperatures averaged up to 4°C above normal from England, France, and Spain southeastward into Greece, with cooler-than-normal conditions confined to Poland, the Baltic States, and the lower Danube River Valley. Monthly precipitation averaged near to above normal over most of the continent. While localized dryness was reported over southern Spain and northern Italy, moisture remained overall favorable for vegetative wheat and barley in the primary southern winter grain areas. By month's end, colder, snowier weather arrived over northern and central Europe, though the risk for winterkill remained minimal.

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

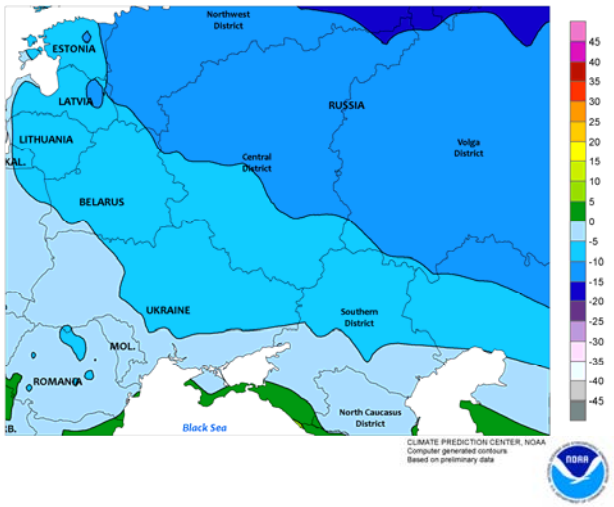
WESTERN FSU
Total Precipitation (mm)
January 2016



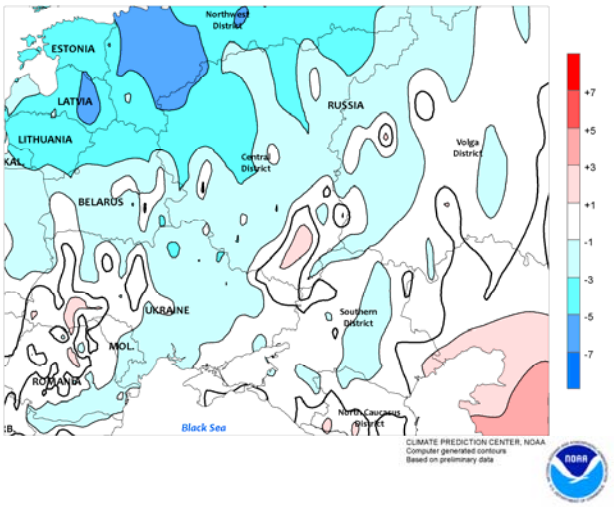
WESTERN FSU
Percent of Normal Precipitation
January 2016



WESTERN FSU
Average Temperature (C)
January 2016

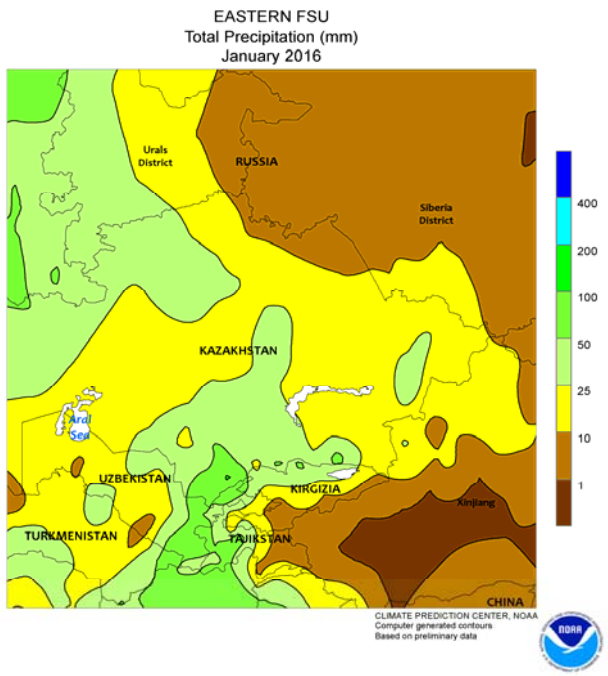


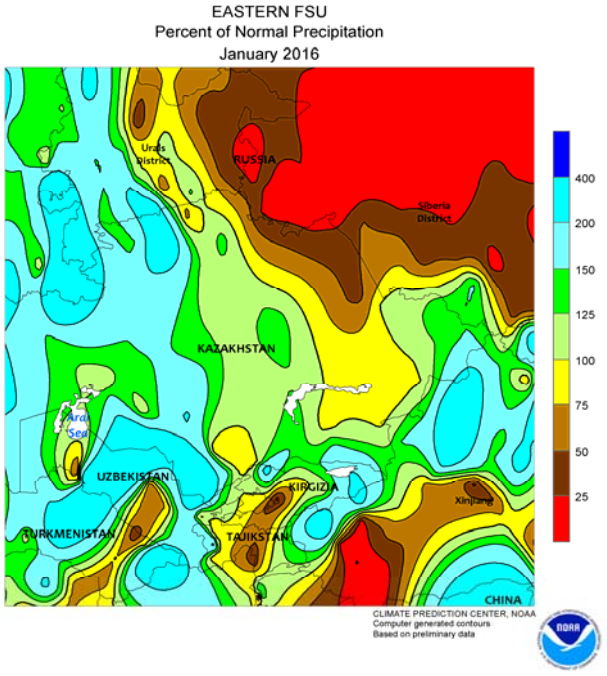
WESTERN FSU
Temperature Anomaly (C)
January 2016

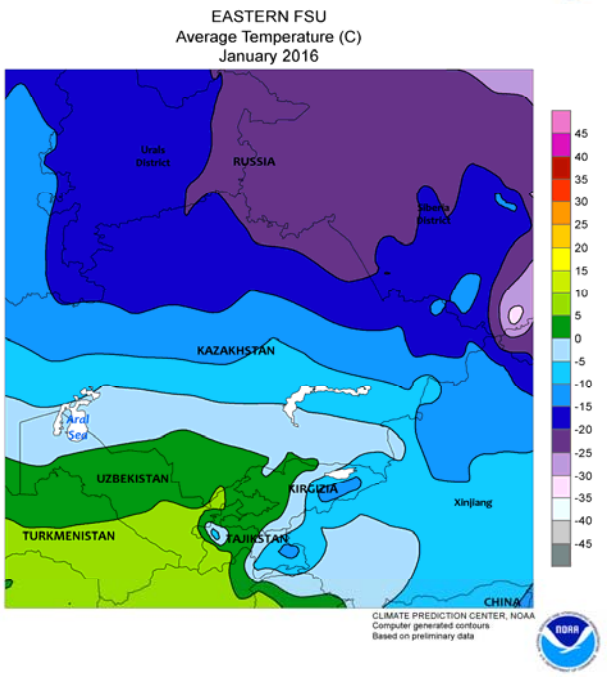


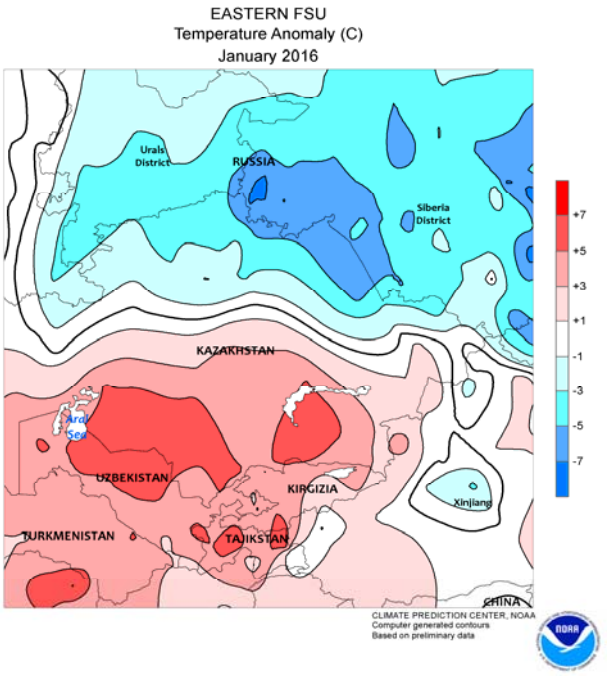
WESTERN FSU

In January, seasonably cold, snowy weather overspread much of the region. Temperatures averaged 1 to 3°C below normal in most major wheat areas of Russia and Ukraine, though the cold was often preceded or accompanied by fresh snowfall. As a result, dormant winter wheat was adequately insulated from potential freeze damage. By month's end, sharply warmer conditions arrived from the west, causing snow to rapidly melt in southern and western wheat areas.









EASTERN FSU

During January, seasonably cold, snowy weather in the north contrasted with warmer conditions in southern crop areas. Agricultural activity during the winter in the northern spring wheat belt is minimal (if any). Farther south, moderate to heavy rain and mountain snow (25-80 mm liquid equivalent) in eastern Uzbekistan provided additional supplemental moisture for vegetative winter wheat, which is heavily irrigated.

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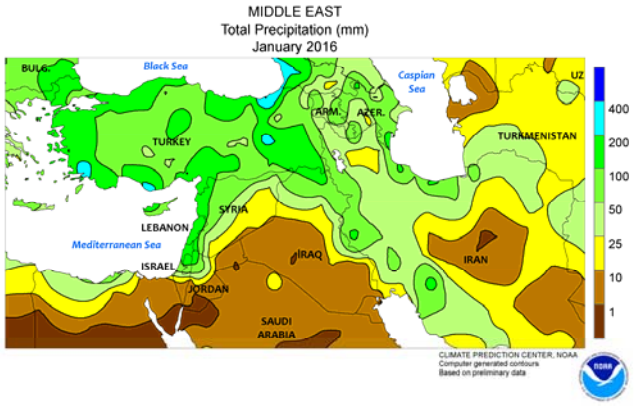
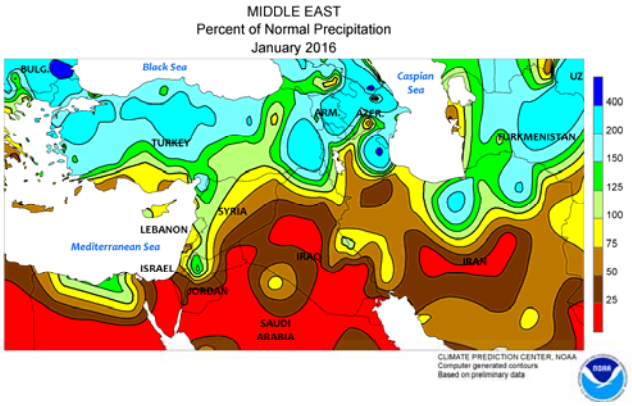
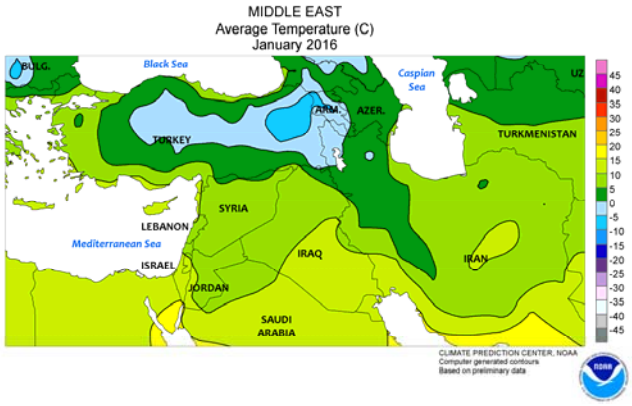
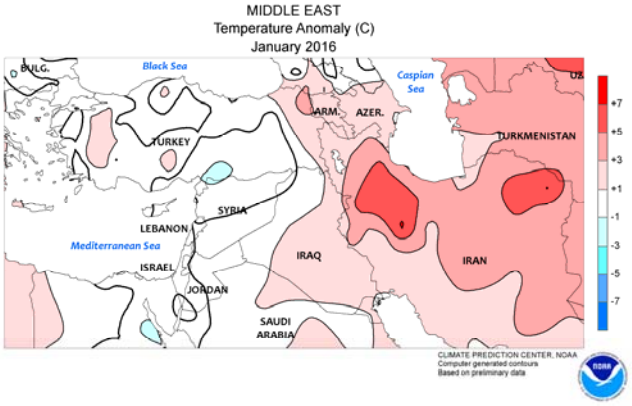


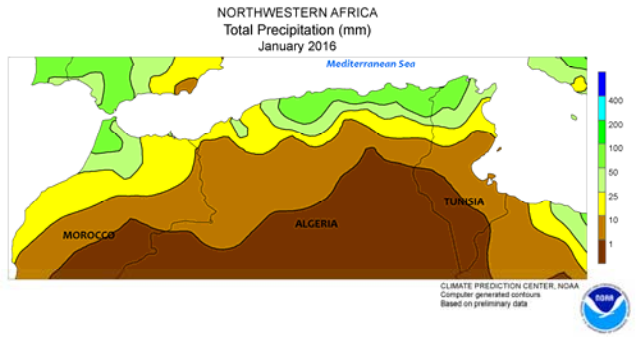


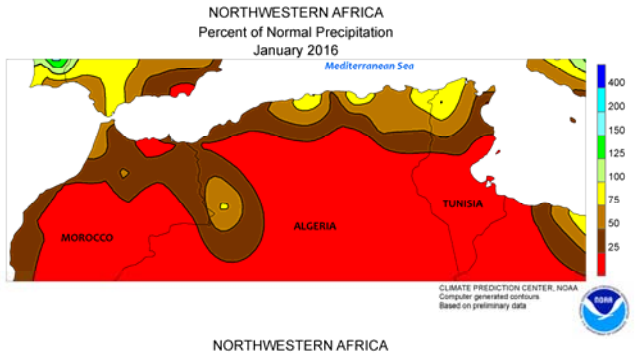


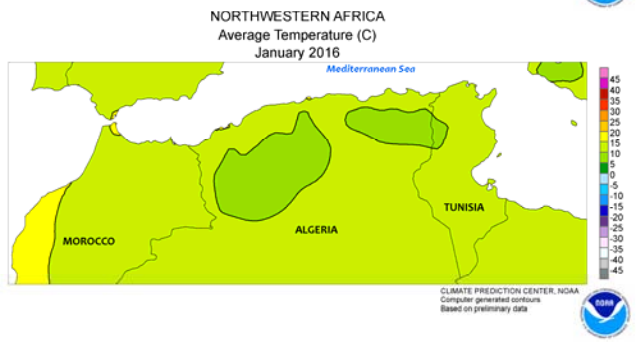


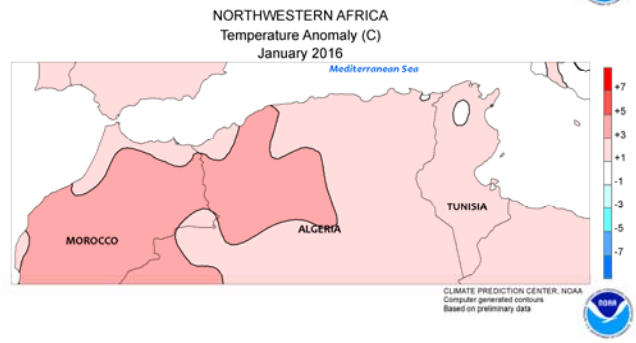
MIDDLE EAST

Heavy rain and mountain snow persisted across the region during January, sustaining abundant moisture supplies for wheat and barley. In Turkey, where winter wheat remained dormant on the typically colder Anatolian Plateau, rain and snow (45-140 mm liquid equivalent) boosted moisture reserves for spring growth. Farther east, precipitation totaled 25 to locally more than 100 mm in Iraq and Iran, boosting moisture supplies for dormant winter grains in the north as well as vegetative wheat and barley in southern and eastern growing areas. Temperatures averaged near to above normal, with no widespread winterkill concerns.



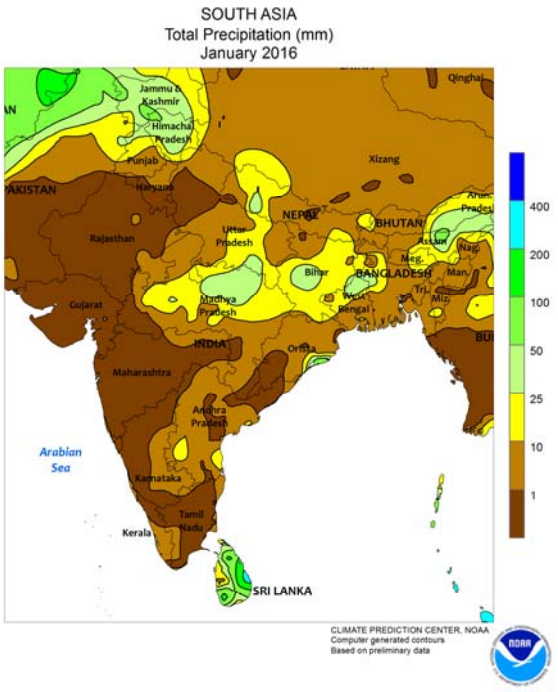


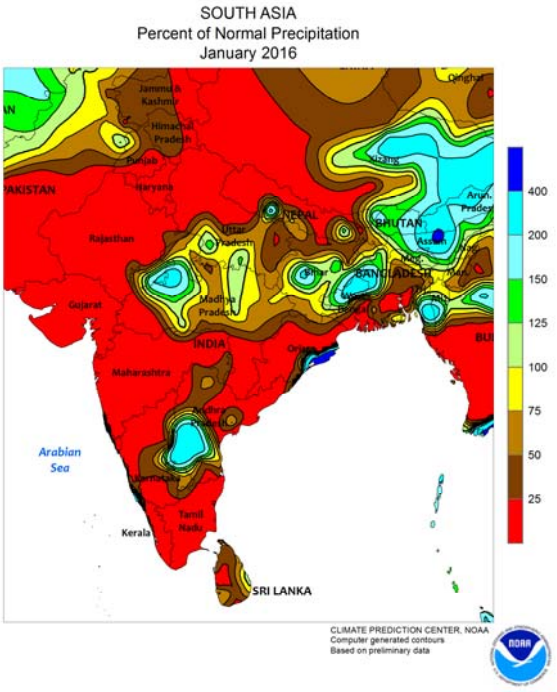


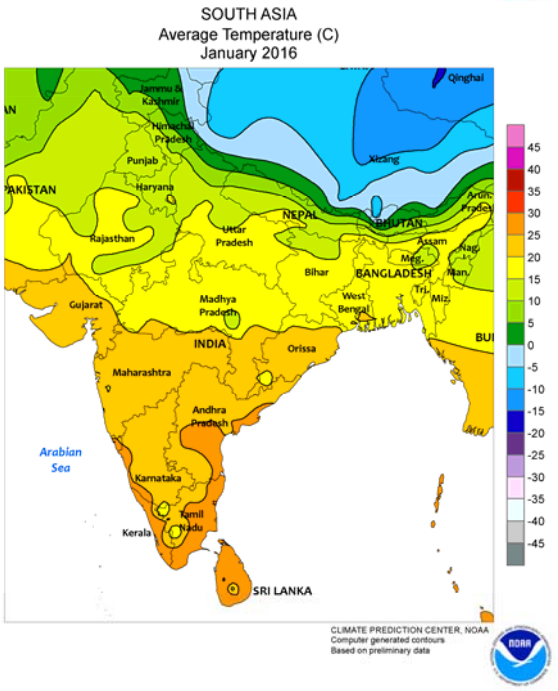


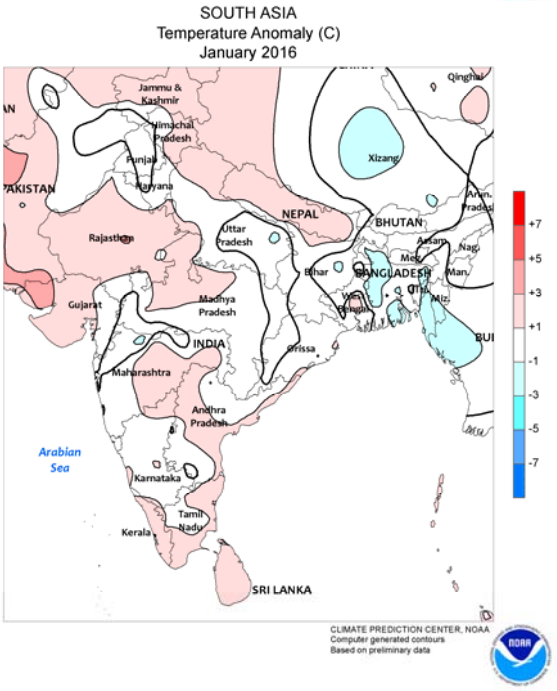
NORTHWESTERN AFRICA

During January, severe drought intensified over Morocco and western Algeria, causing yield prospects for wheat and barley to decline further. Morocco and western Algeria reported much-below-normal rainfall, continuing a dry trend which began in early November. In contrast, timely rain (50-100 mm) stabilized winter grain prospects over the rest of Algeria and maintained favorable crop conditions in Tunisia.



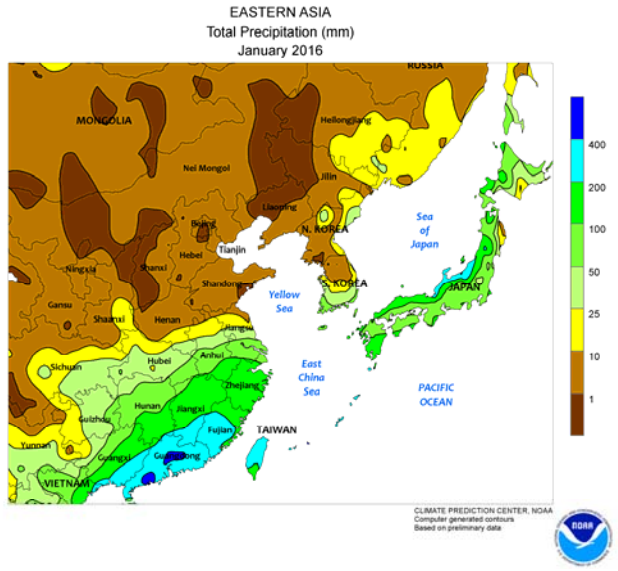


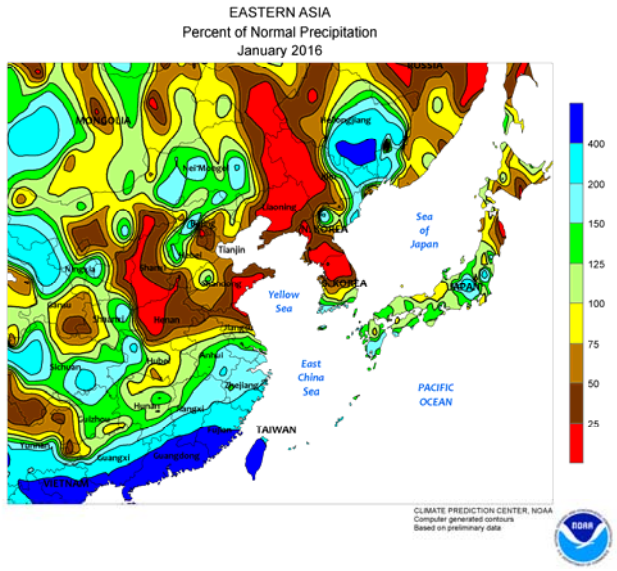


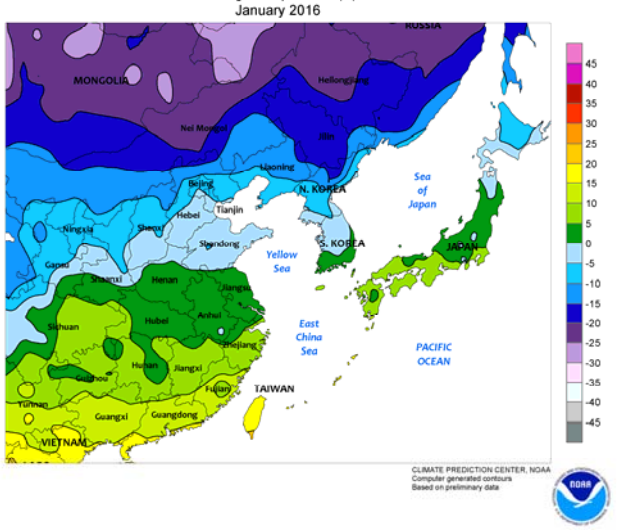


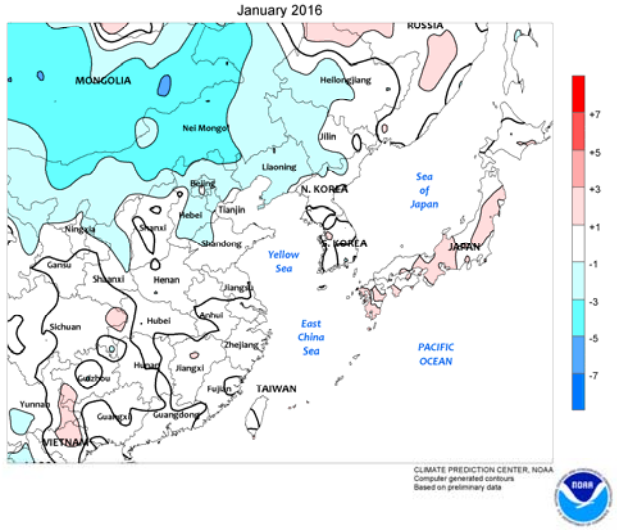
SOUTH ASIA

Seasonably dry weather occurred throughout most of India in January. Although, a brief period of showers brought over 25 mm to parts of Madhya Pradesh and Bihar in the latter half of the month. The rainfall provided beneficial moisture to winter-grown (rabi) crops in the latter stages of development. Meanwhile temperatures were more seasonable in wheat and rapeseed areas of northern India following above-normal temperatures for much of the season.



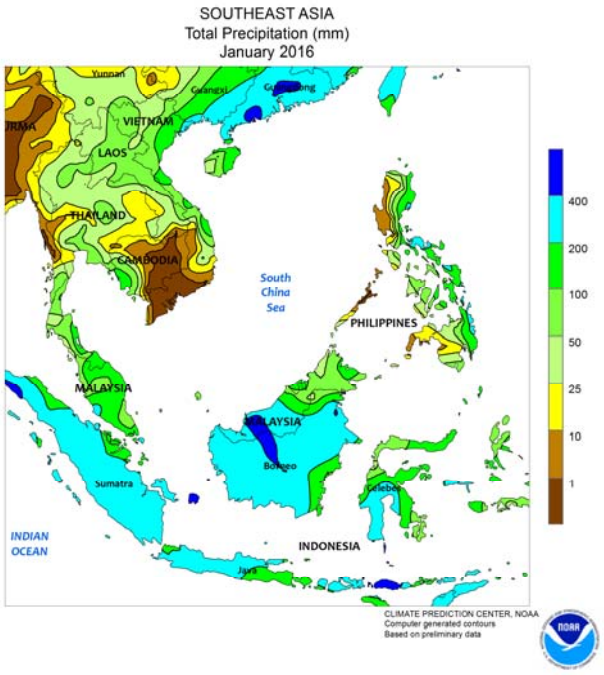


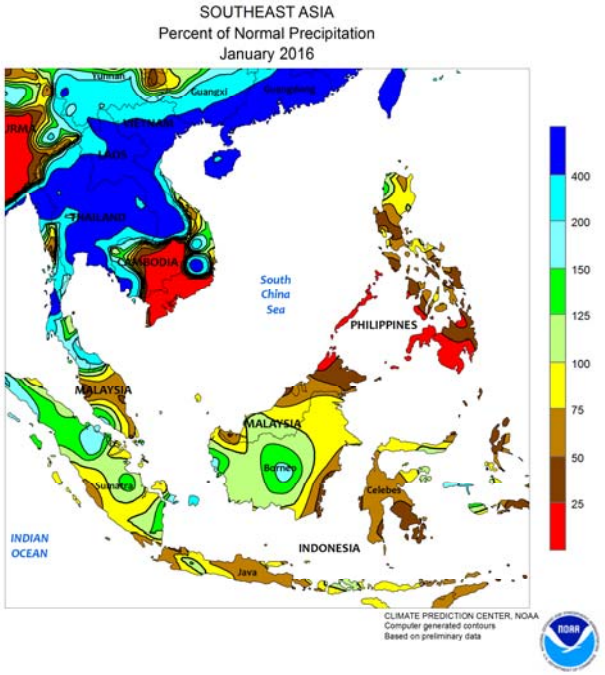


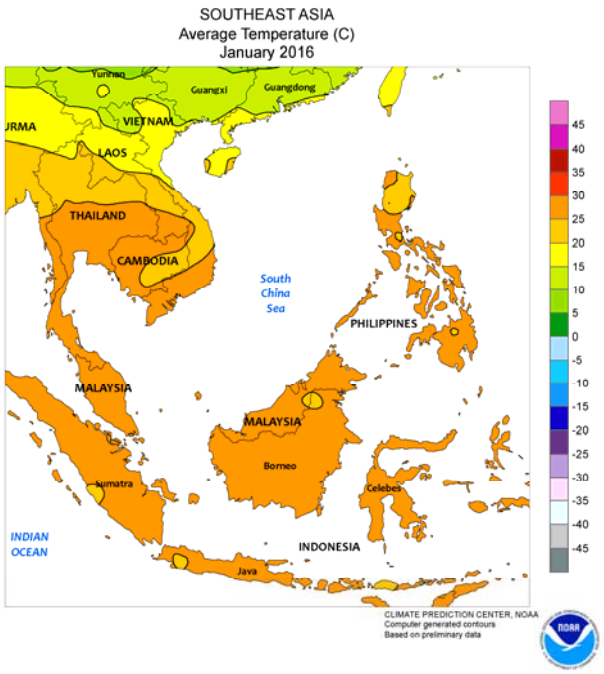


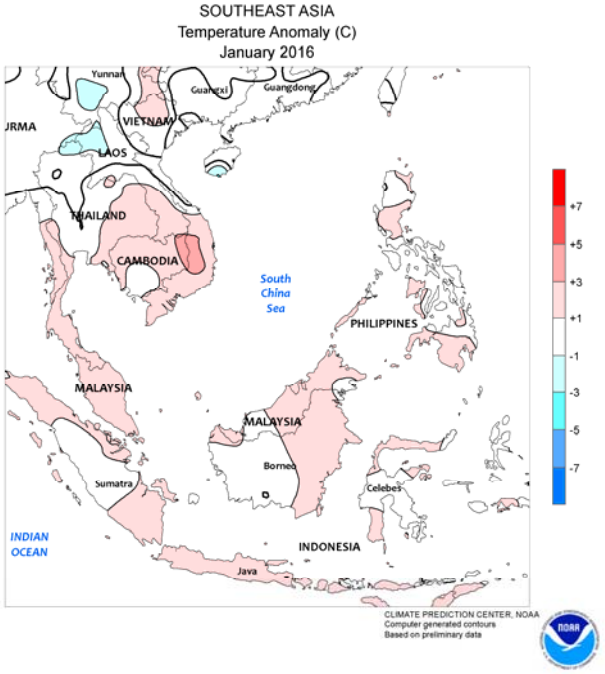
EASTERN ASIA

Heavier-than-usual rainfall prevailed in southeastern China during January, with totals surpassing 300 mm in some parts (over 4 times the typical amount). The wetness caused some isolated flooding but was over all beneficial, increasing water reserves for crops grown in the spring and summer as well as sugarcane grown throughout the year. Much of the Yangtze Valley also received above-normal rainfall for the month (upwards of 100 mm or more), increasing soil moisture reserves for overwintering rapeseed. Meanwhile, seasonably dry weather occurred on the North China Plain, with brief periods of rain and snow producing less than 25 mm of total liquid equivalent for dormant wheat.





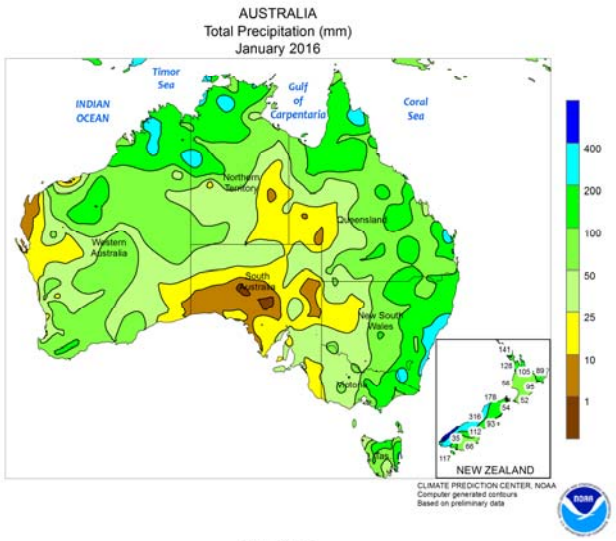


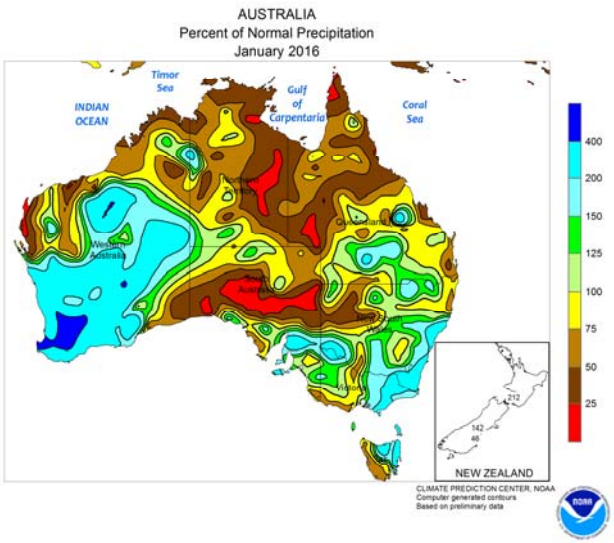


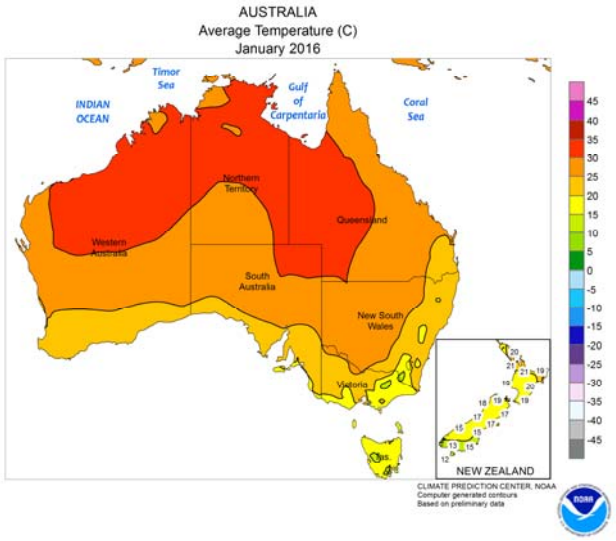
SOUTHEAST ASIA

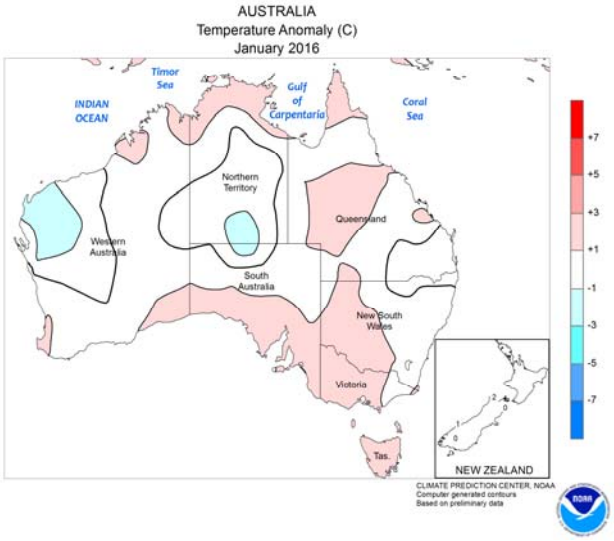
Rainfall improved across Java, Indonesia during January, specifically during the latter half of the month. However, despite the increased rainfall, rainfall totals for the month ended below normal in central and eastern rice areas. For the season (beginning November 1), soil moisture and water supplies have been generally favorable in western Java but deficient in the remainder of Java. Oil palm areas of Indonesia received near-normal rainfall for the month, while rainfall was below normal for oil palm in Malaysia. Farther north, below-normal rainfall prevailed across much of the Philippines, with only portions of Luzon receiving near-normal rainfall. The lack of consistent moisture in the Philippines during the last 12 months has reduced rice and corn prospects into the 2016 calendar year. Meanwhile, unseasonable showers (25-50 mm) in Thailand and surrounding environs provided a much-welcomed boost to irrigation supplies for dry-season rice, although prospects continued to be lower than last year.

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









AUSTRALIA

In January, near- to above-normal rainfall in southern Queensland and northern New South Wales maintained good to excellent yield prospects for summer crops. The rain maintained adequate to abundant soil moisture for dryland sorghum while reducing irrigation requirements for cotton. Generally seasonable temperatures occurred throughout the month, benefiting summer crops which were in or approaching the reproductive stages of development.

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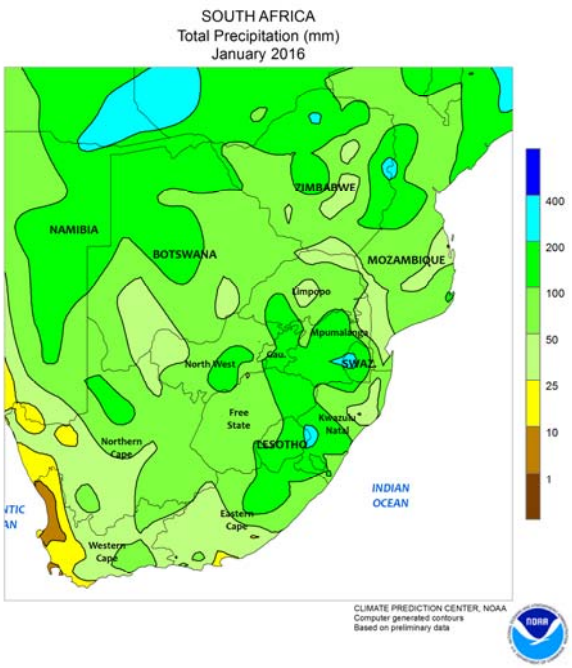

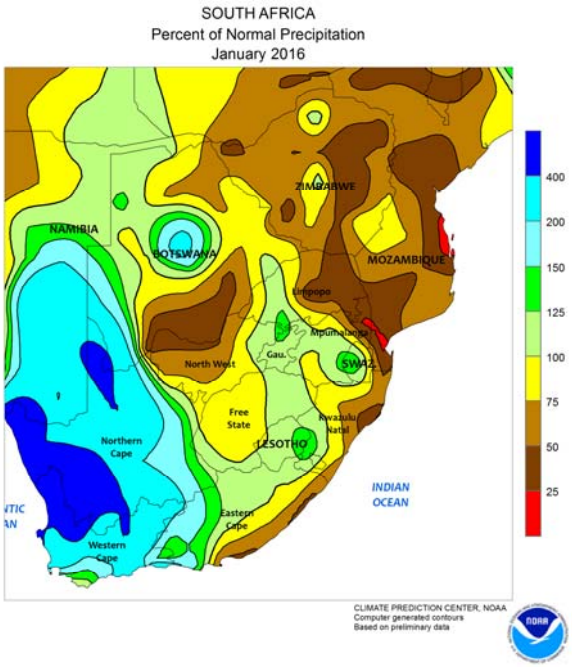

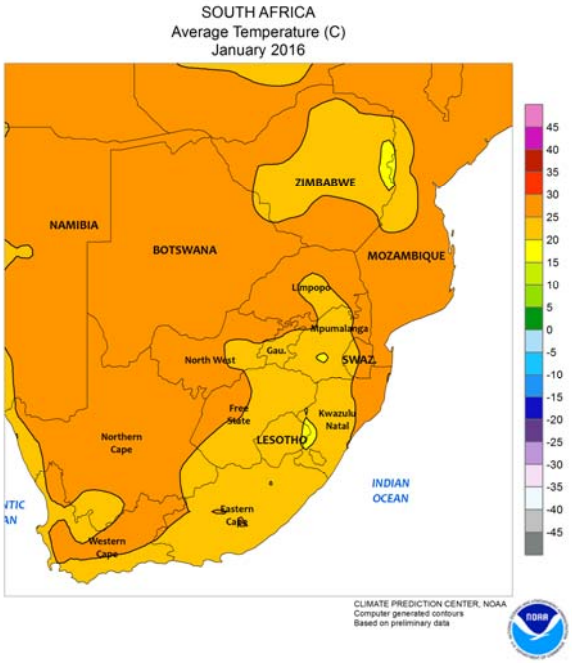

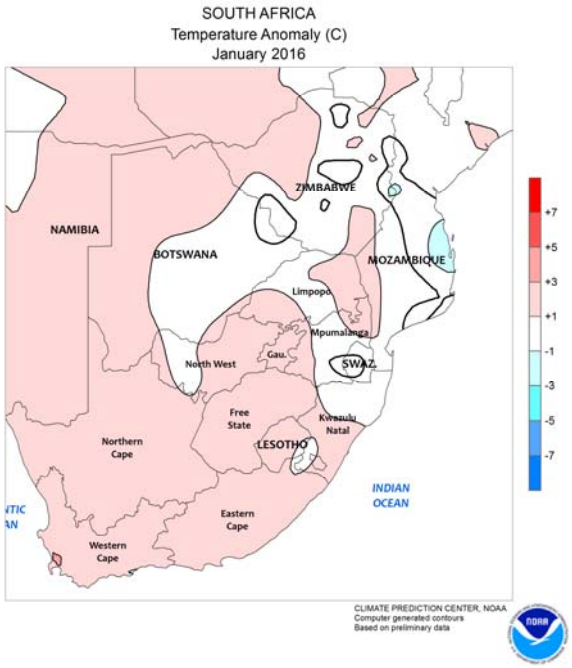

SOUTH AFRICA

In January, rainfall intensified throughout the corn belt, helping to stabilize the condition of vegetative to reproductive summer crops and spurring some late planting in areas previously too dry for fieldwork. Showers generally occurred more frequently in eastern sections of the corn belt (in and around Mpumalanga) than in the west (including commercial white corn areas of North West and Free State), though all regions experienced a return to unseasonable warmth and dryness at month's end. In mid-January, western production areas recorded their first significant rain of the growing season, reportedly encouraging farmers to plant a portion of their intended corn crop. However, the moisture arrived well after the optimal planting period, and crops planted that late in the growing season will require exceptional growing conditions to reach maturity, including unseasonable rainfall and the late arrival of cooler autumn weather. The rain helped to bring temperatures down to more seasonable levels, though stressful heat (daytime highs approaching 40°C) was again recorded in western production areas before the onset of the rain. As a result, monthly temperatures averaged 1 to 3°C above normal across the corn belt, continuing the trend of unfavorable warmth that has plagued the region for most of the season. Elsewhere, near-normal rainfall benefited rain-fed sugarcane in southern KwaZulu-Natal. Unseasonably heavy rain also fell throughout the Cape Provinces, reducing irrigation requirements for corn, cotton, and other summer row crops. Warm, mostly dry weather favored development of tree and vine crops in key production areas of Western Cape.

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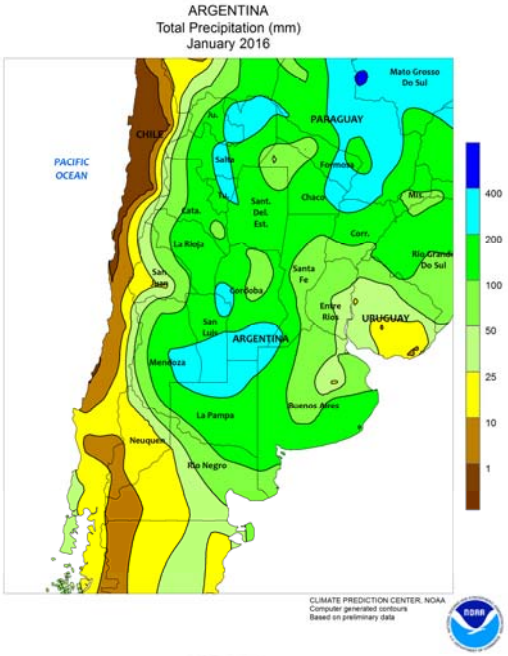

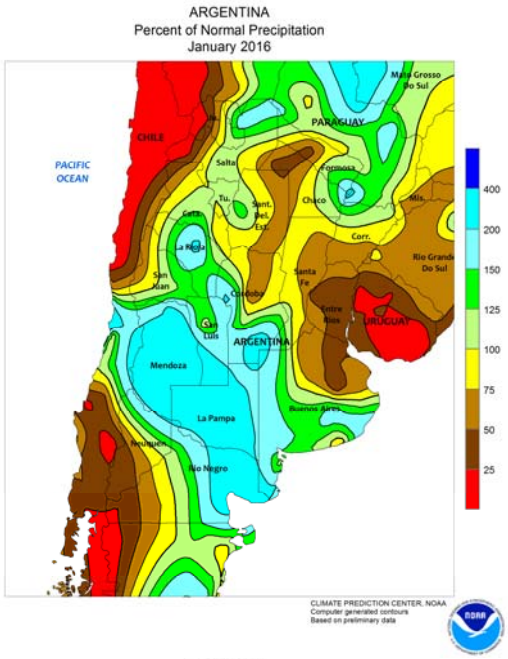

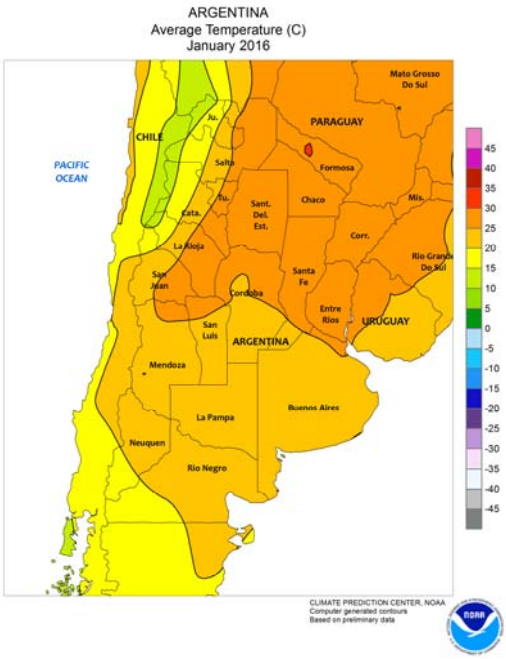

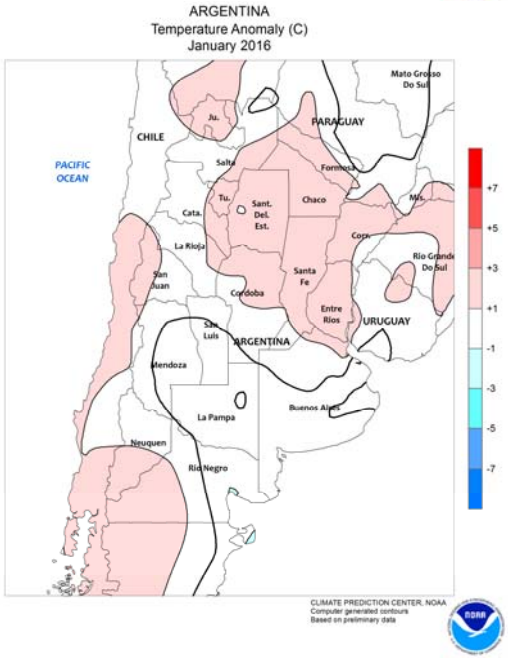

ARGENTINA

In January, a general pattern of warm, showery weather maintained mostly favorable conditions for summer grains, oilseeds, and cotton, despite brief periods of stressful heat. An exception was in the vicinity of northern Buenos Aires, where a drying trend prevailed for much of the month. Above-normal rainfall (100 mm, locally in excess of 200 mm) in southwestern farming areas (La Pampa and neighboring locations in Cordoba and Buenos Aires) helped to reverse the effects of earlier periods of dryness on corn and soybeans in varying stages of development. Similar amounts also improved moisture conditions for later-planted crops in previously dry northwestern farming areas (northern Cordoba to Salta and western Formosa). In contrast, periods of dryness in the northeast (notably eastern Chaco and environs) aided development of cotton after a protracted period of wetness that began in November. Monthly temperatures averaged near normal in central Argentina and several degrees C above across the north, partly due to several spikes in temperatures during the latter half of the month. Daytime highs reached the upper 30s as far south as northern Buenos Aires for several days; however, most areas had sufficient moisture reserves to compensate for the heat wave, and the variability in crop stage of development ensured that only a portion of the crops were in temperatures sensitive reproductive phases of development.

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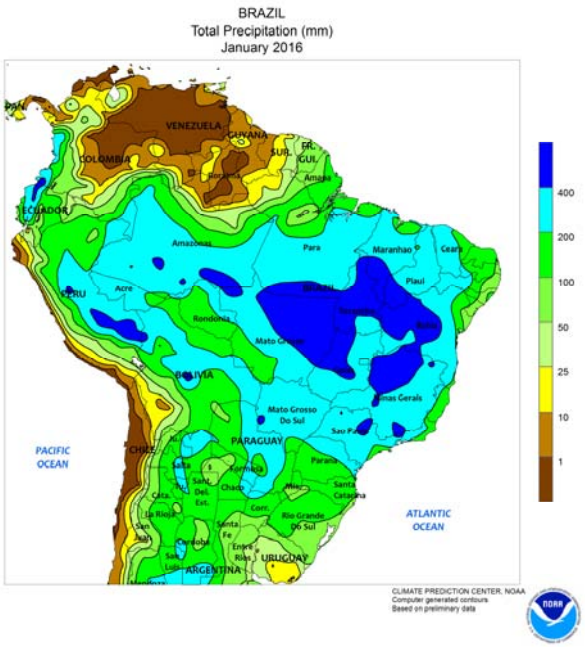
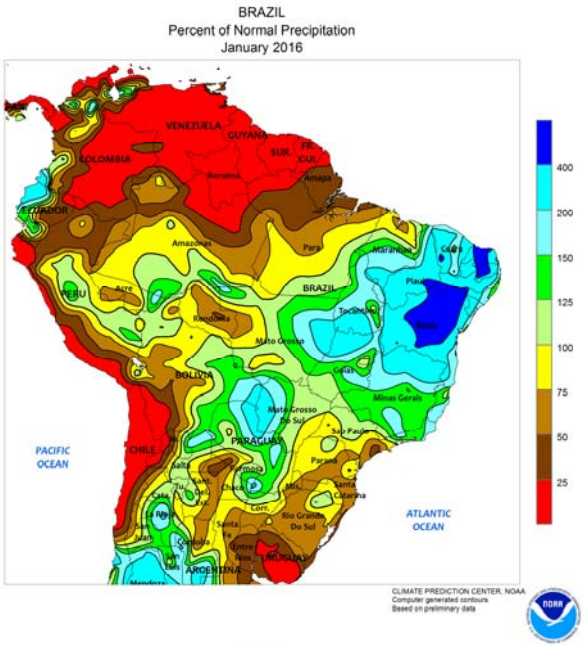
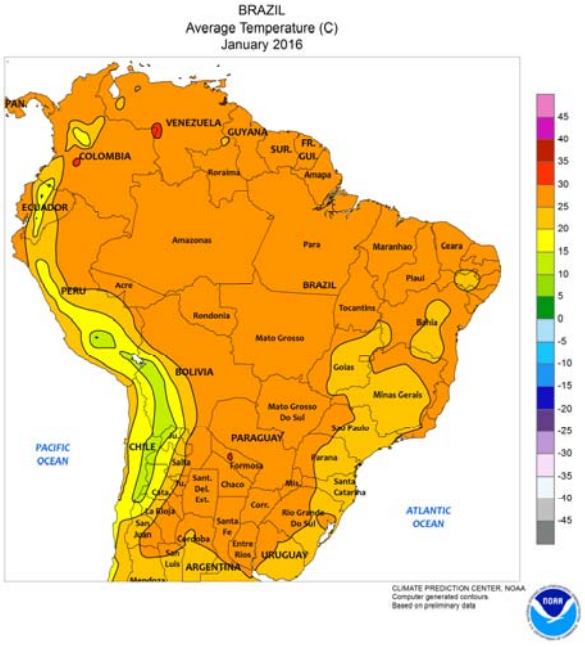
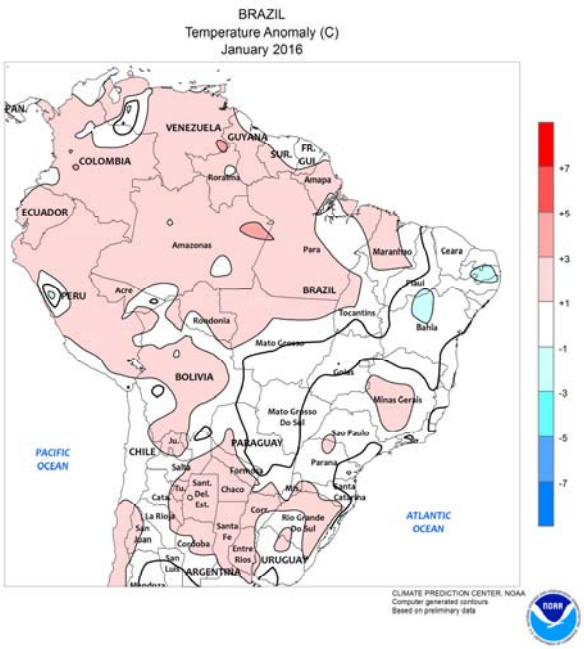




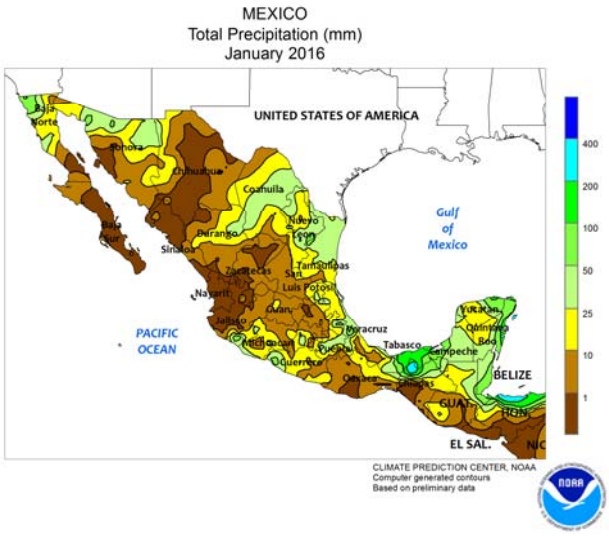


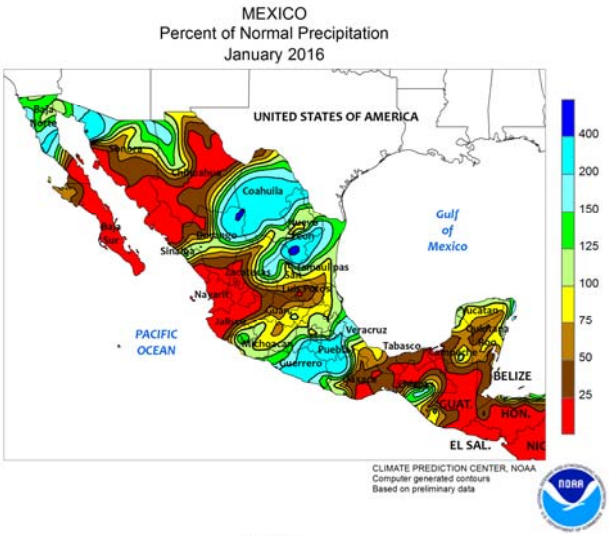


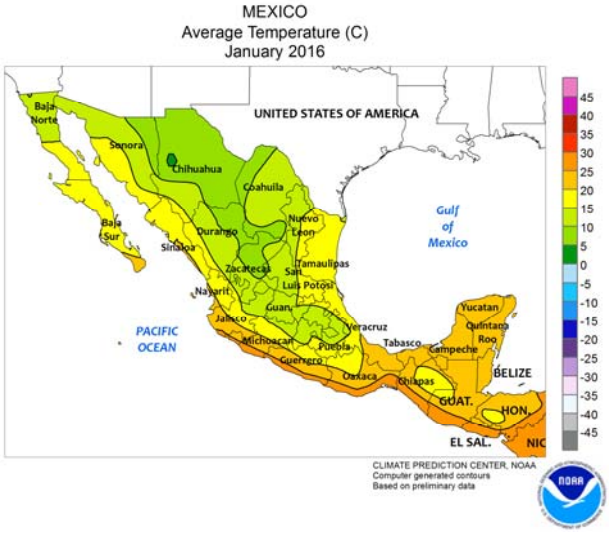
BRAZIL

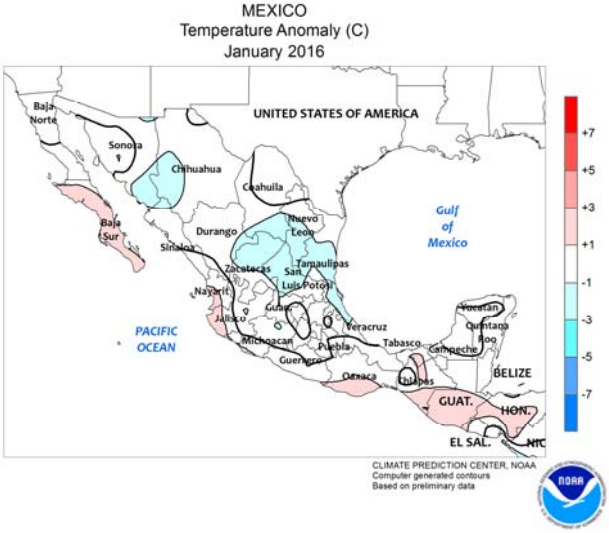
Following several months of erratic rainfall, seasonal rainfall intensified in central Brazil's tropical rain belt during the month of January, improving moisture for soybeans, cotton, and other summer crops. Total monthly accumulations in excess of 200 mm were reported from Mato Grosso to sections of the northeastern coast, with some of the highest amounts (totaling more than 400 mm) concentrated over previously dry sections of the northeastern interior (notably Tocantins and western Bahia). A beneficial increase in rainfall also occurred in the southeast (Sao Paulo, Minas Gerais, and Espirito Santo), boosting moisture reserves for sugarcane and coffee, as well as other crops, including citrus. Somewhat drier conditions prevailed farther south, although given the wet weather that had prevailed for most of the summer growing season, an extended period of dryness in mid-January and the accompanying warmth aided growth of corn and soybeans growing with abundant moisture. Monthly temperatures averaged near to slightly above normal throughout Brazil's main summer growing areas, with daytime highs occasionally reaching the upper 30s (degrees C) in traditionally warmer growing areas of Mato Grosso and western Rio Grande do Sul.

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



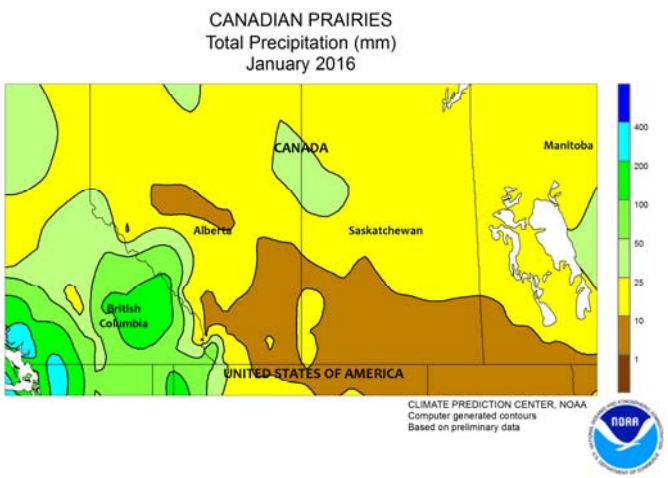


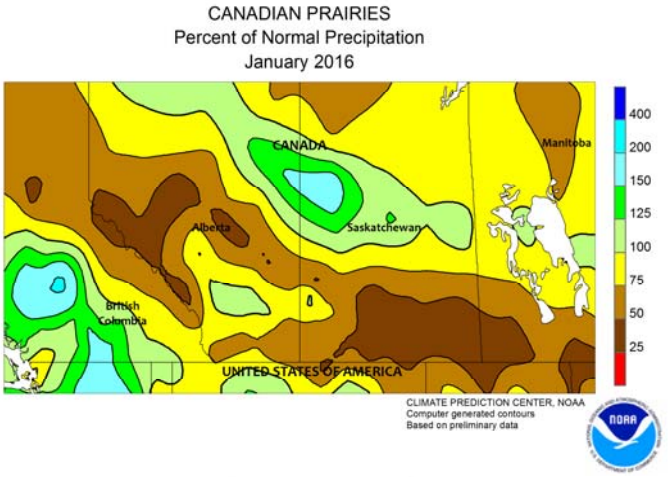


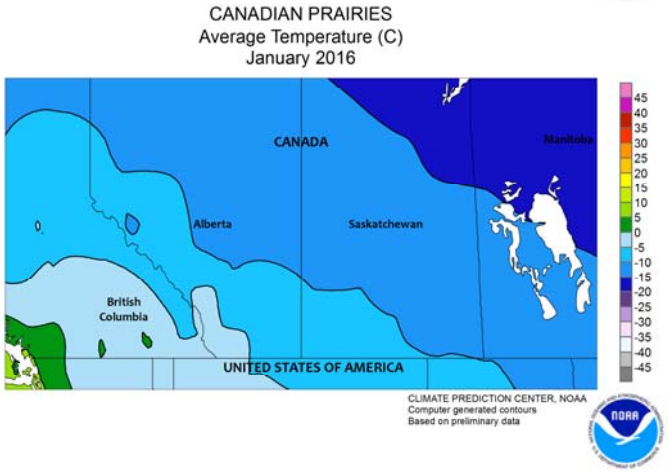


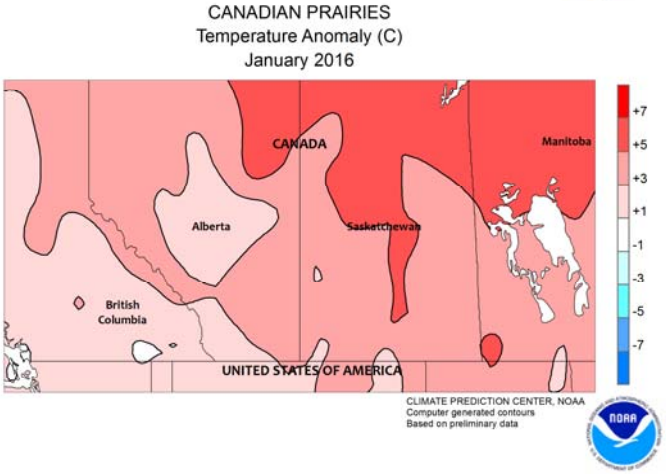
MEXICO

January rainfall provided timely moisture for germination of rain-fed winter sorghum in the northeast. Farming areas in Tamaulipas — the largest producer of winter sorghum — recorded monthly rainfall totaling 10 to 50 mm. Elsewhere, unseasonable wetness lingered over the southeast, most notably northern Chiapas and Tabasco, which recorded more than 100 mm in a period of several weeks. Meanwhile, scattered, generally light showers slowed late summer crop harvesting across sections of the southern plateau corn belt (Michoacan to Puebla). Aside from some unseasonable early-January rain concentrated over northern Sonora, most northwestern and west-coastal winter crop areas remained sunny and dry. Unseasonably cool weather slowed crop growth in the northwestern interior at various times during the month, but freezes were reportedly confined to high elevation areas outside of the main production areas. According to the government of Mexico, national reservoir levels reached 77.5 percent capacity on December 30, with all regions reporting levels higher than last year.









CANADIAN PRAIRIES

Warmer-than-normal conditions prevailed for much of January in most agricultural districts, with sections of the northern and eastern Prairies recording monthly average temperatures of more than 5°C above normal. By month's end, temperatures reached sufficiently high levels to erode the protective snow cover across southern farming areas of Alberta and Saskatchewan. However, nighttime lows remained above the threshold for potential winter kill, and some areas experienced more than a week of above-freezing temperatures in late January, eliminating the risk of damage from cold weather. January precipitation was below normal across the southern Prairies, with most locations recording less than 10 mm (liquid equivalent) for the month. Higher amounts were recorded elsewhere, adding to the snow pack across the north and in eastern Manitoba.

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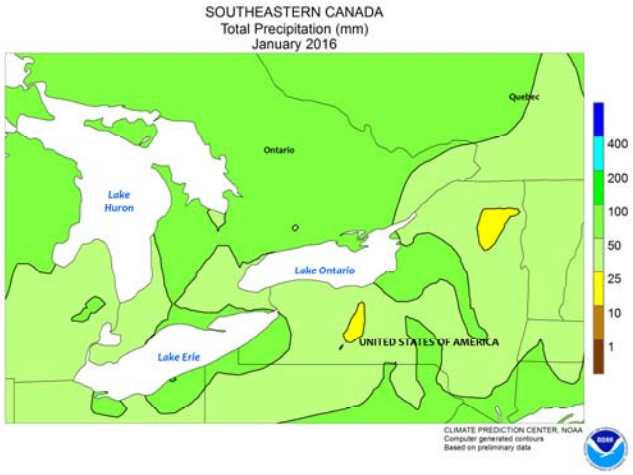

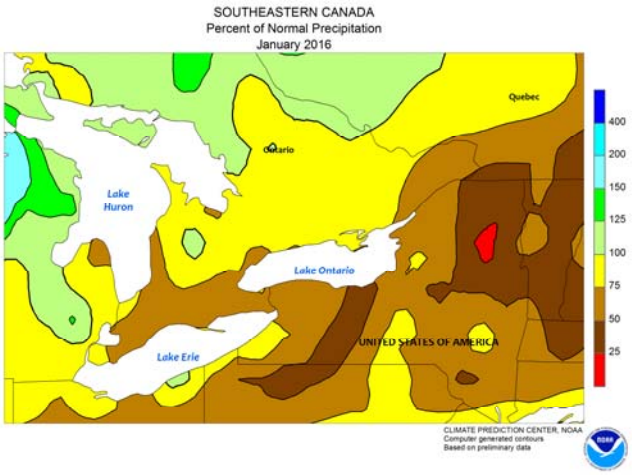

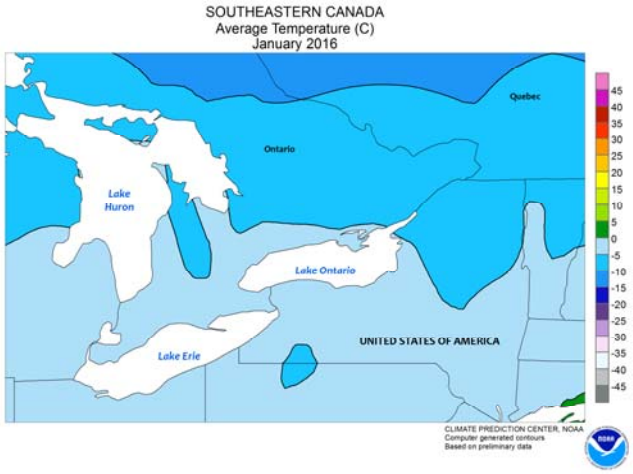

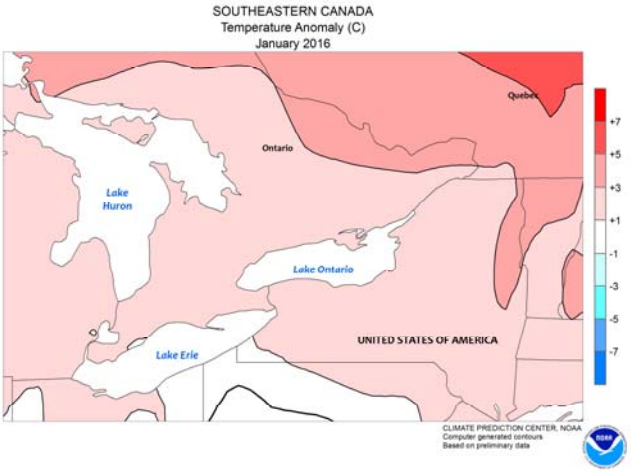

SOUTHEASTERN CANADA

January temperatures were highly variable, with several outbreaks of arctic air interspersed with periods of unseasonably mild weather. In southwestern Ontario, temperatures fell below -17°C on several nights during the first week of the month; snow cover was patchy and light at the southern edge of the region's snowpack, possibly impacting overwintering wheat and pastures. A second event later in the month was preceded by snow, providing additional protection. Elsewhere in Ontario and in Quebec, snow cover provided adequate protection from potentially damaging cold. Monthly precipitation was near to below normal, coming in the form of rain in some of the warmest periods. At month's end, however, large sections of southwestern Ontario were void of snow, while locations in eastern Ontario and Quebec were adequately protected from potential damage from cold.

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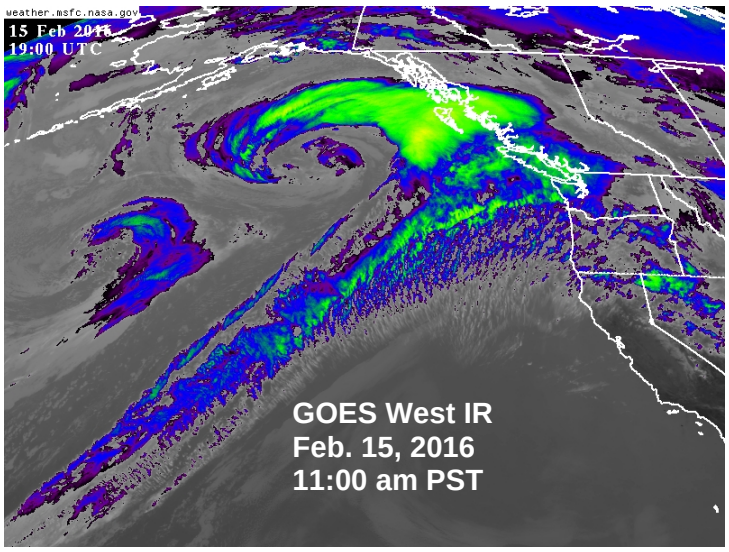

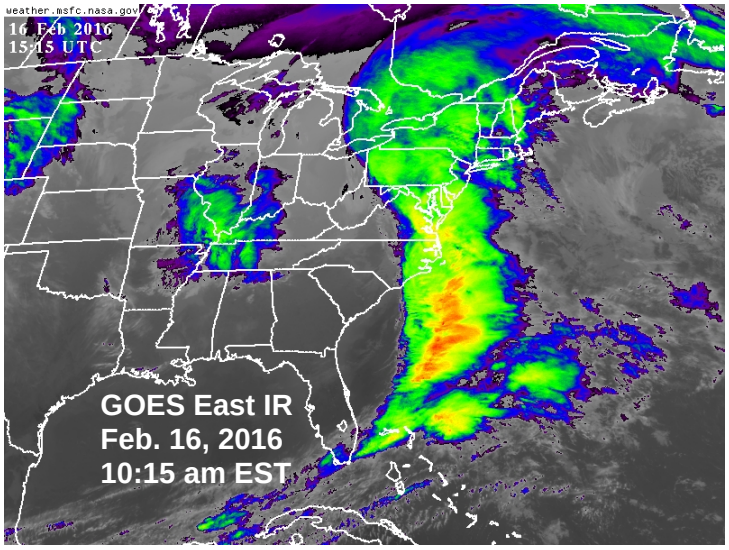

During the first 2½ weeks of February, a highly amplified upper-atmospheric pattern steered storms well north of the western U.S. and—following a warm start to the month—delivered cold air to the East. In the infrared satellite images (left), taken less than a day apart, some of the tangible weather results of the amplified pattern are apparent. For example, warm, dry weather has halted the accumulation of snow in the Sierra Nevada. The average water content of the Sierra Nevada snowpack remained nearly steady at 20 to 21 inches during the first half of February. Meanwhile in southern California, Santa Ana posted monthly record-tying highs of 95°F on February 9 and 16—a mark previously achieved only on February 20, 1995.

Farther east, a Valentine's Day cold wave led to the lowest February temperatures on record in New York locations such as Watertown (-37°F; previously, -36°F on February 16, 2015) and Binghamton (-18°F; previously, -15°F on February 2, 1961, and February 17 and 18, 1979). The following day, February 15, severe thunderstorms sweeping across the Southeast spawned more than two dozen tornadoes, according to preliminary reports. Where the moisture interacted with the lingering Arctic air, widespread snow, sleet, and freezing rain caused travel disruptions. Salisbury, MD, noted 4.0 inches of snow on February 15, while Youngstown, OH, netted 7.5 inches on February 15-16. Snow squalls lingered through February 16 downwind of the mostly unfrozen Great Lakes, leading to daily-record totals in New York locations such as Rochester (18.3 inches) and Buffalo (8.9 inches).

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