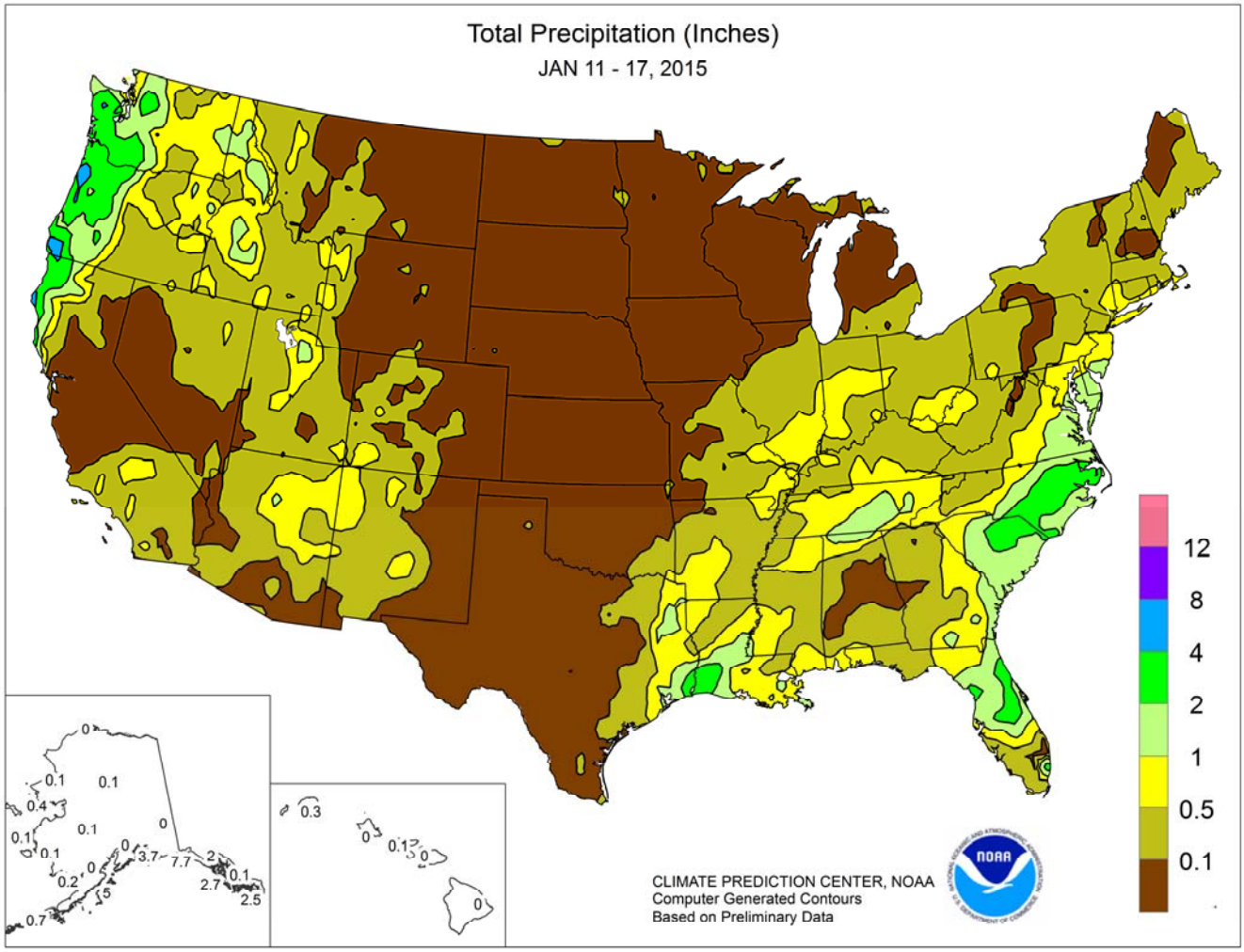
Volume 102, No. 3 http://www.usda.gov/oce/weather January 21, 2015

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

January 11 – 17, 2015

Highlights provided by USDA/WAOB

Precipitation mostly bypassed **California**, extending a stretch of unfavorably dry weather to 4 weeks. The average water content of the high-elevation **Sierra Nevada** snowpack remained stuck at 5 inches, just over one-third of the mid-January normal. However, other parts of the **West**, including the **Four Corners States** and areas from the **Pacific Northwest to the northern Rockies**, received widespread rain and snow. The **Southwest's** precipitation fell early in the week, followed by a late-week shift of storminess into the **Northwest**. Despite the

(Continued on page 5)

Contents

Water Supply Forecast for the Western United States

Highlights

The phase of the El Niño-Southern Oscillation (ENSO) was officially neutral during the early portion of the 2014-15 Western winter wet season, but teetering on the brink of El Niño due to warm water in the central and eastern equatorial Pacific Ocean. However, without coupling between the warm water and the surrounding atmosphere, winter weather patterns across the western U.S. have been inconsistent and routinely influenced by factors other than ENSO. In California, inconsistencies included a 3-week period of wet weather in late 2014, followed by a fleeting cold snap (in an otherwise warm winter) and the return of dry conditions from late-December 2014 to present.

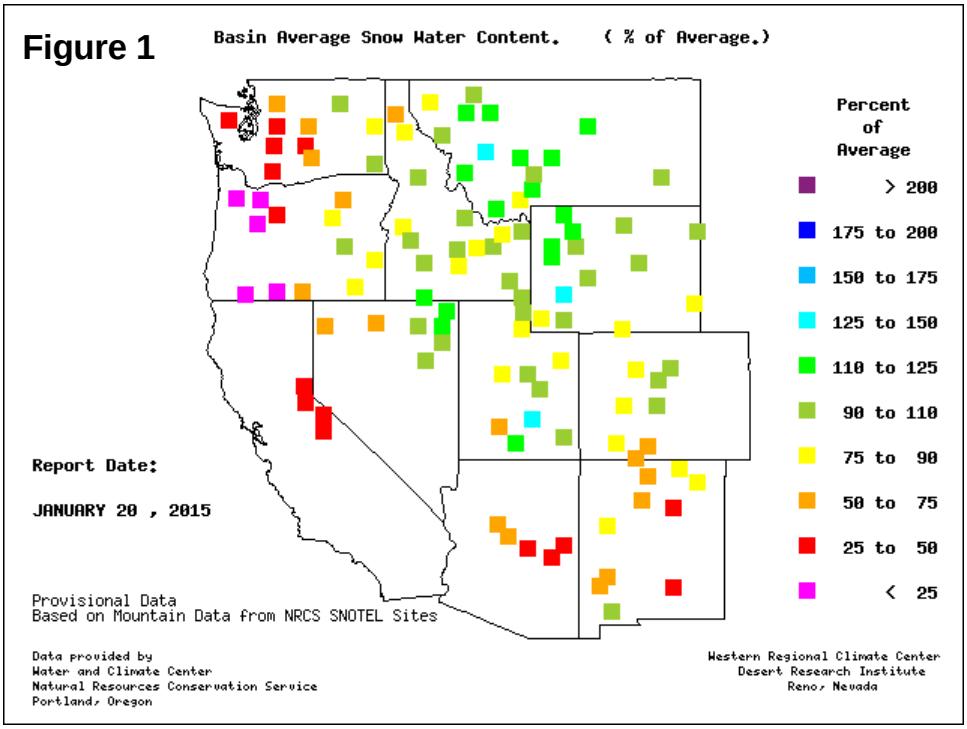
Snowpack and Precipitation

By January 20, 2015, deficient snowpack was a concern in California, Arizona, New Mexico, the western Great Basin, and western and central sections of Washington and Oregon (figure 1). In the Pacific Northwest, ample precipitation has fallen in recent months, but warm conditions and anomalously high snow levels have not allowed snowpack to build to typical levels. Farther inland, snow water content values were nearly ideal in the northern Rockies, as well as adjacent basins in the northern Intermountain West.

Season-to-date precipitation (October 1, 2014 – January 20, 2015) was normal to above

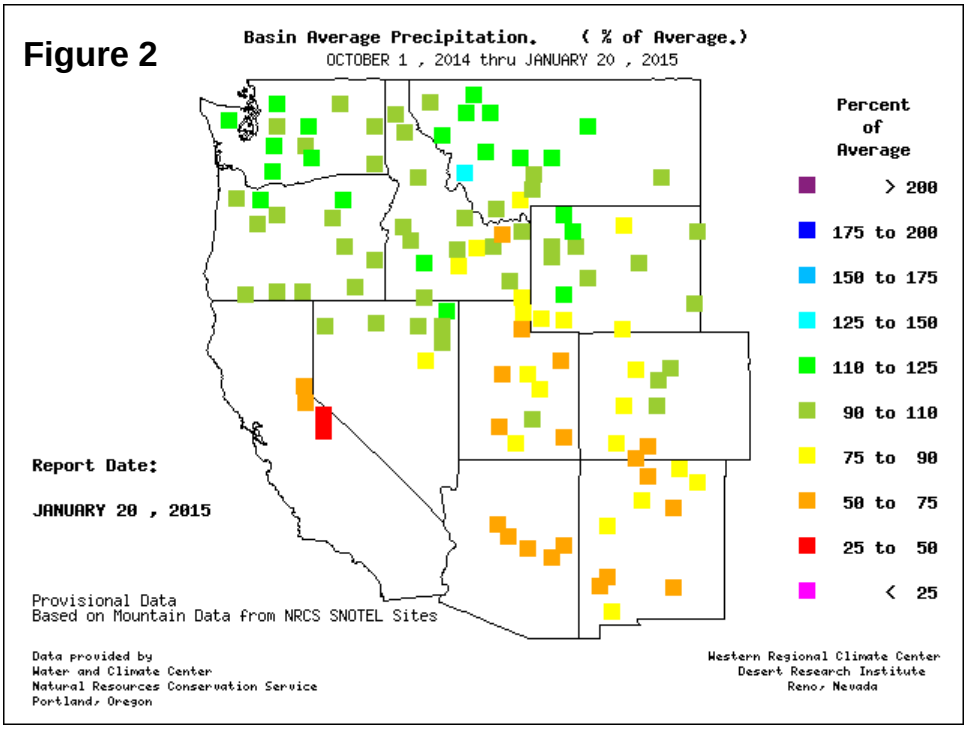
SNOTEL – River Basin Snow Water Content

Figure 1



SNOTEL – River Basin Precipitation

Figure 2



normal in most river basins from the Pacific Northwest to the northern Rockies (figure 2). Percent of normal precipitation values, which ranged from 90 to 125 percent in the Cascades, stood in stark contrast to the aforementioned snowpack deficits. Farther south, from the Sierra Nevada to the southern Rockies, sub-par precipitation was reported during the first half of the 2014-15 wet season.

Spring and Summer Streamflow Forecasts

By January 1, 2015, projections for spring and summer streamflow were indicating the likelihood of below-normal runoff from California to the southern Rockies (figure 3). In particular, less than 70 percent of the normal runoff can be expected in most basins stretching from the Sierra Nevada into the Great Basin, as well as the southern half of the Four Corners States. In contrast, near- to above-normal runoff should occur in the northern and central Rockies and the northern Intermountain West. Snowpack is lacking in the Cascades, leading to expectations of near- to below-normal warm-season runoff despite ample precipitation.

Reservoir Storage

On January 1, 2015, reservoir storage as a percent of average for the date was below average in Arizona, California, Nevada, New Mexico, and Oregon (figure 4). However, statewide storage was higher than a year ago in all Western States except Arizona, California, and Nevada. December storms added 3.1 million acre-feet of water to California's 154 reservoirs, while overall storage climbed from 11.6 to 14.7 million acre-feet (55 to 67 percent of average). A year ago, on January 1, 2014, California's storage stood at 15.5 million acre-feet, or 70 percent of average.

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

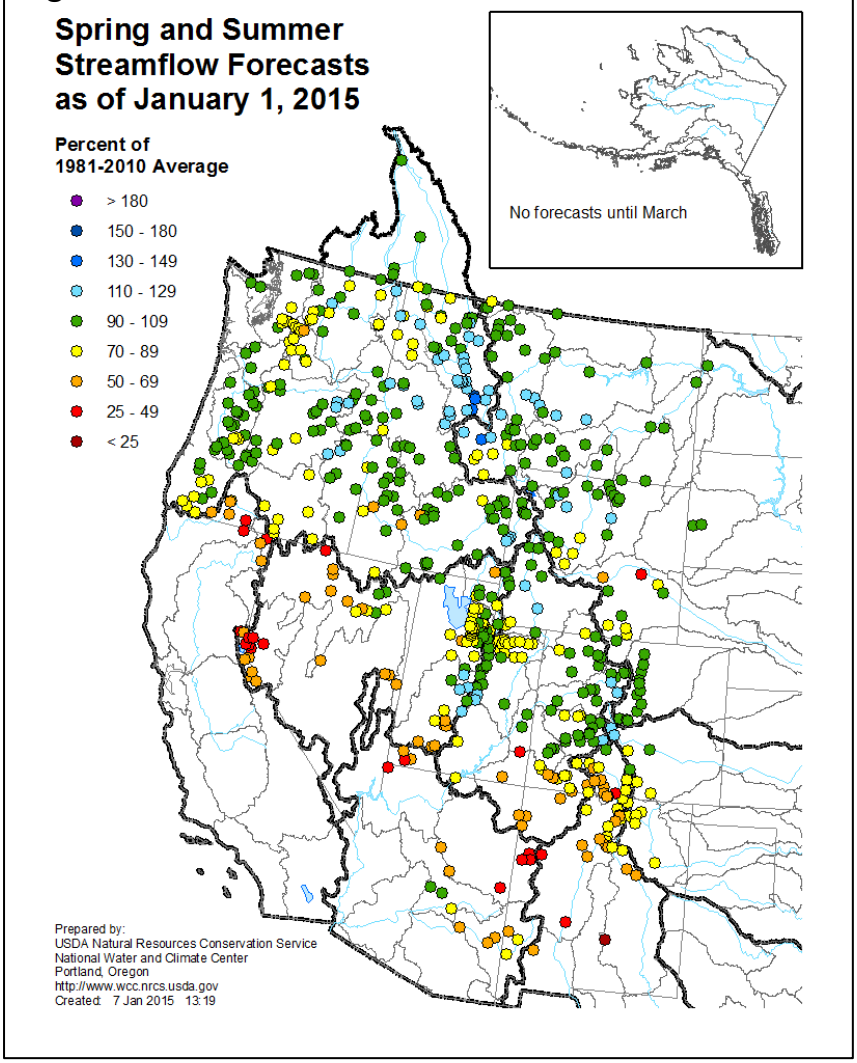
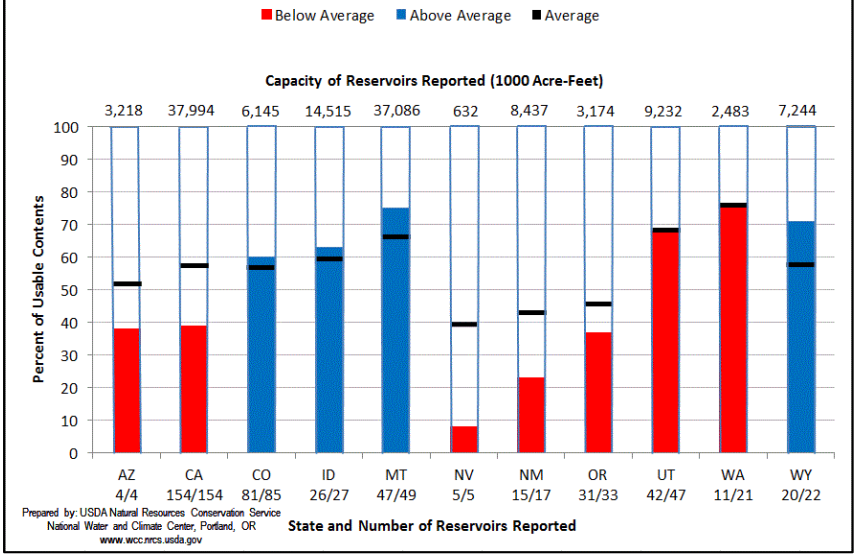
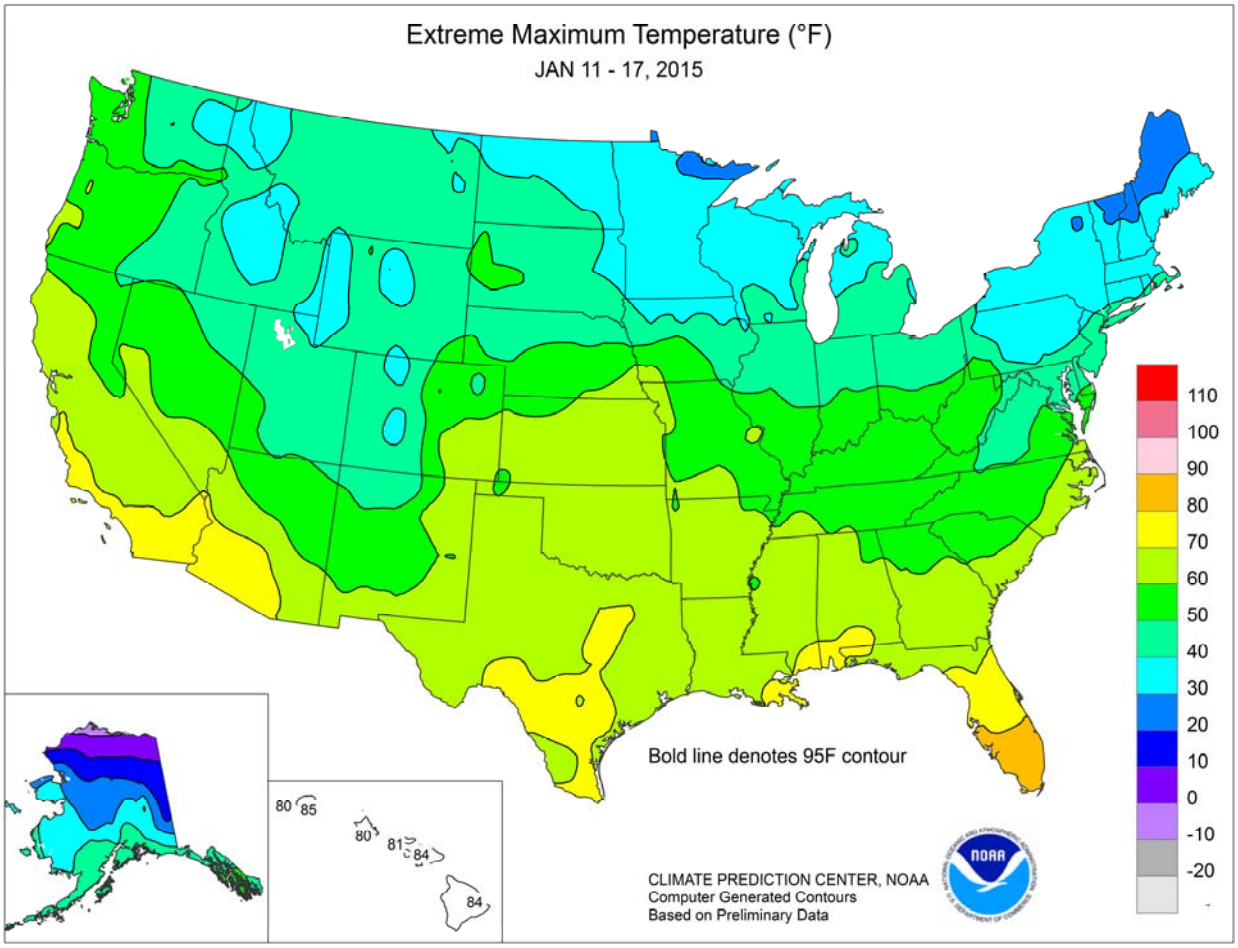
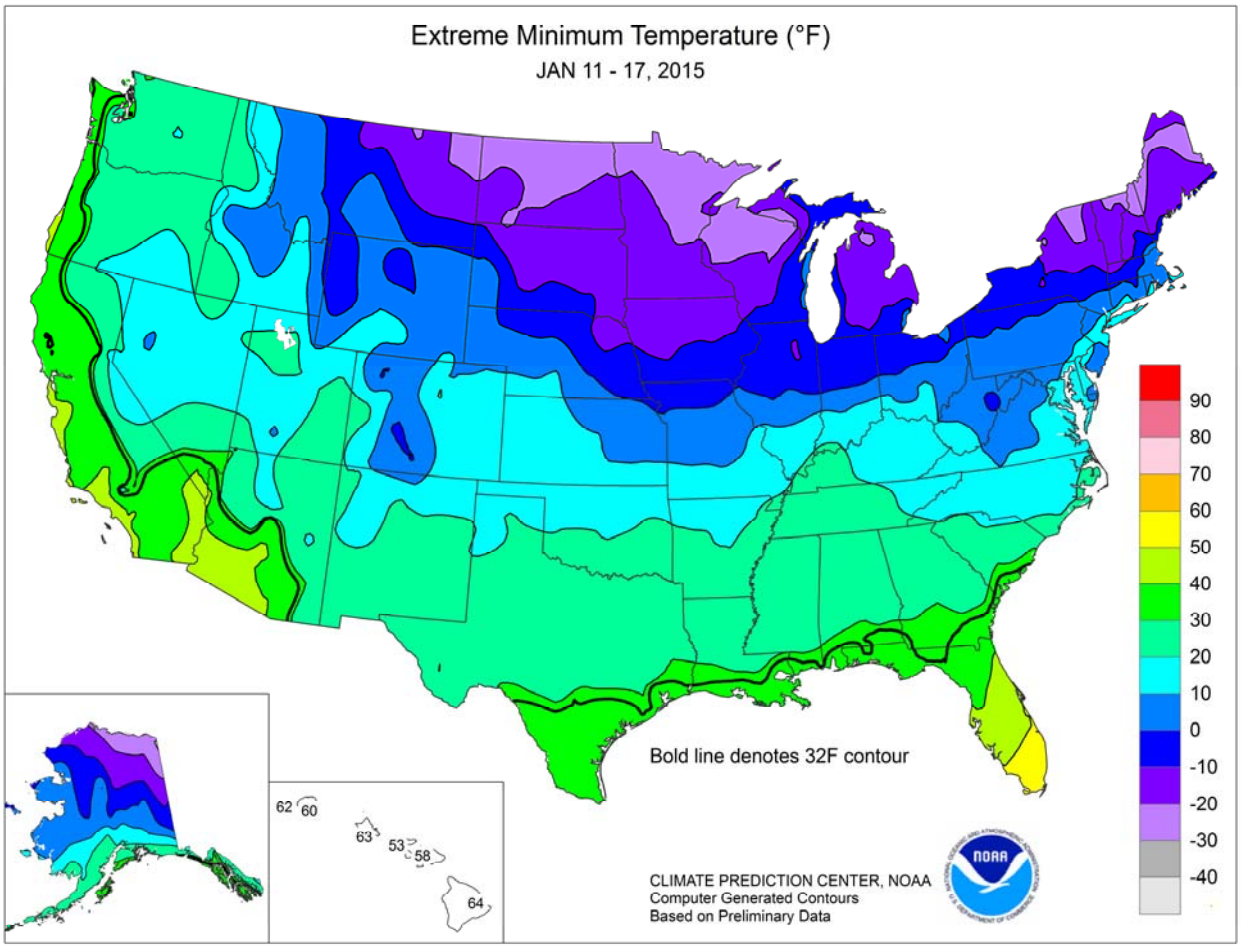


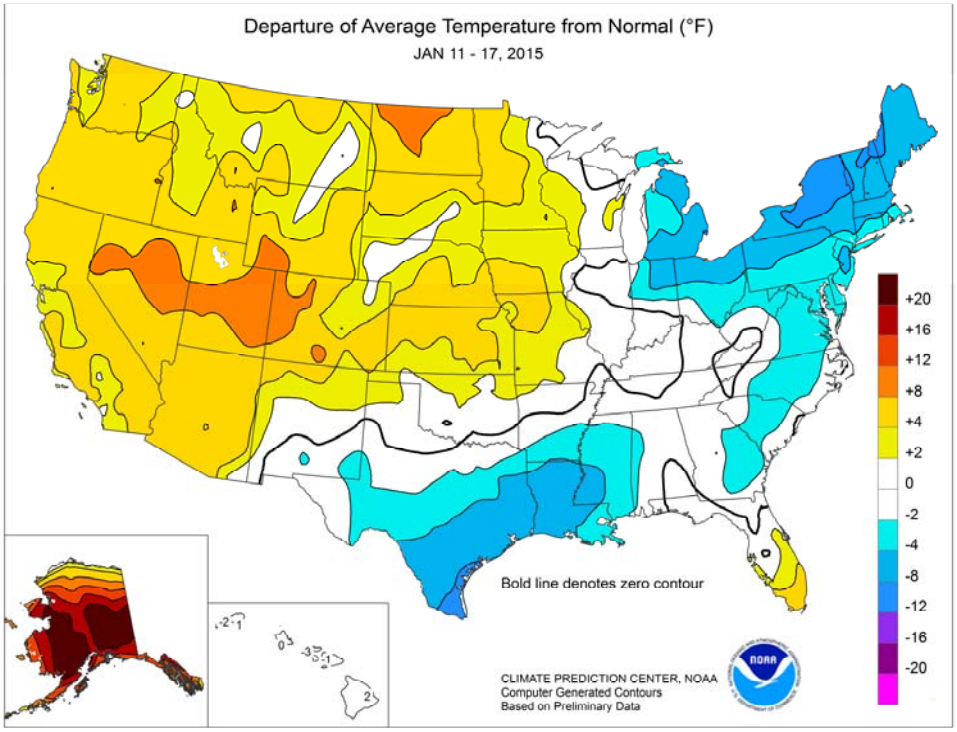
Figure 4 Reservoir Storage as of January 1, 2015




Extreme Maximum Temperature (°F)
JAN 11 - 17, 2015
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
80
85
80
81
84
84
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
JAN 11 - 17, 2015
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
62
60
63
53
58
64
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

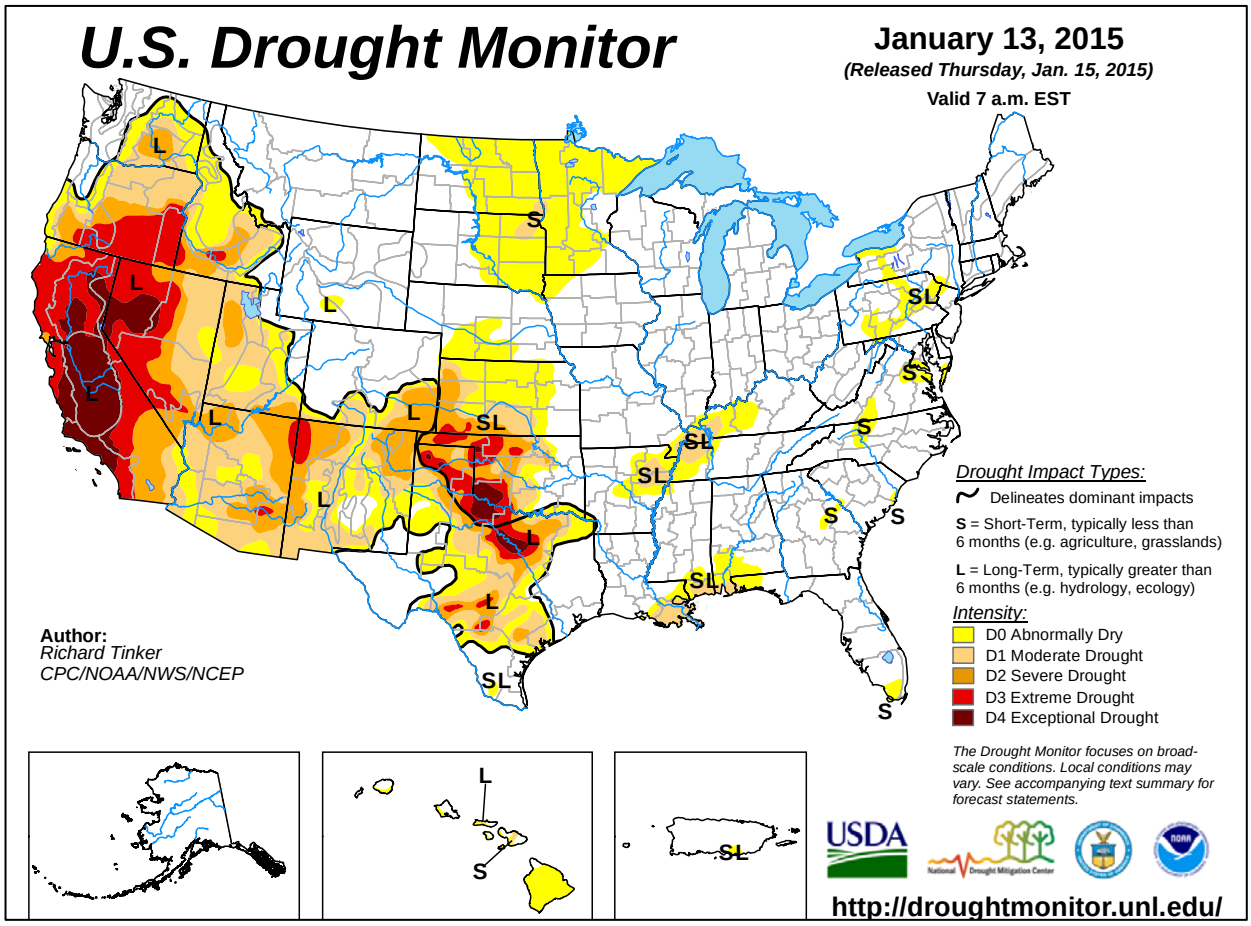


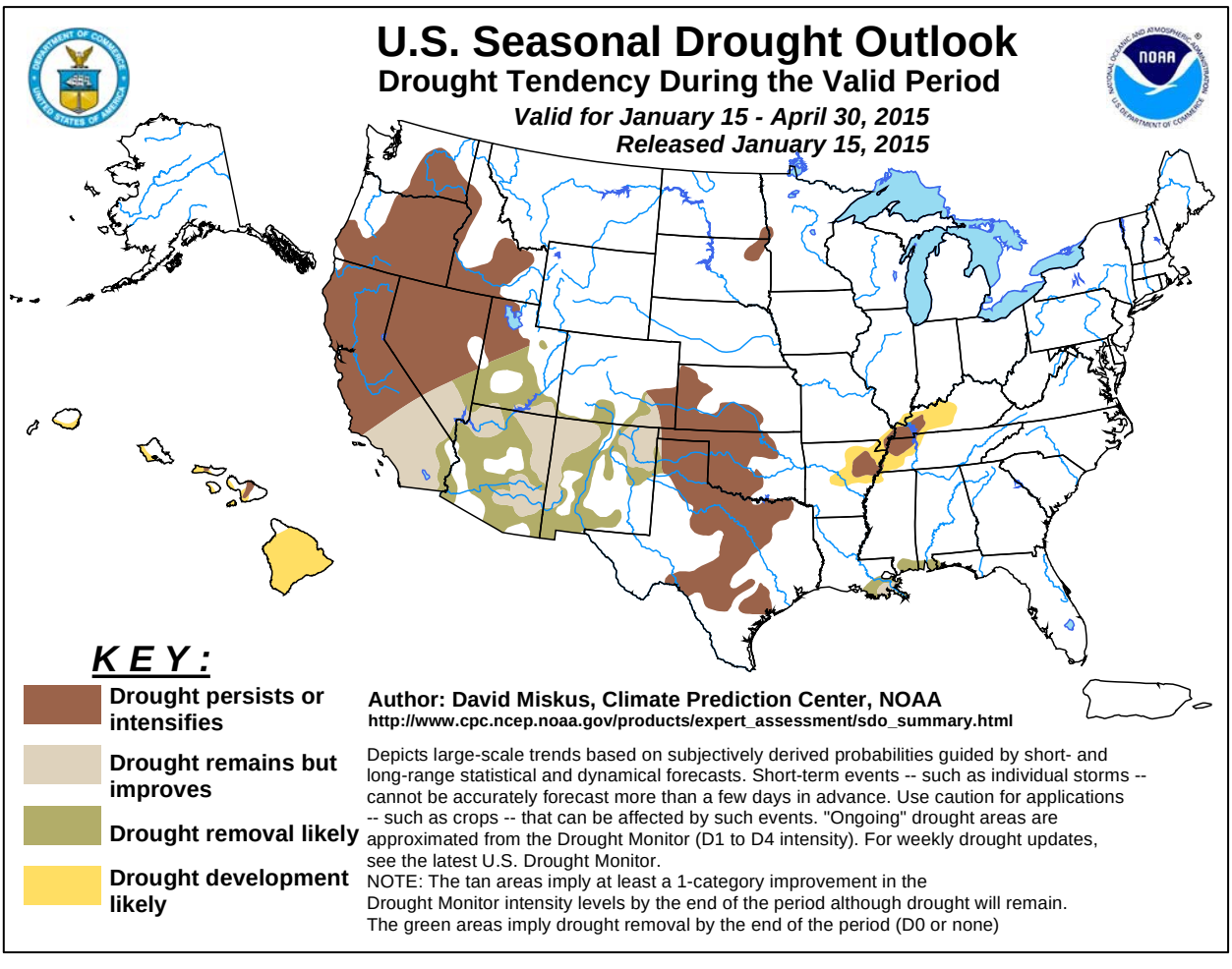
light rain and snow, weekly temperatures averaged as much as 10°F above normal in several locations across the **Great Basin** and the **Intermountain West**. Meanwhile, mostly dry weather accompanied a warming trend across the **Plains** and **upper Midwest**. The sudden warmth eroded or eliminated winter wheat's protective snow cover across the **northern half of the Plains**, and increased wheat stress on the **southern Plains**. Farther east, generally light precipitation fell along and east of a line from **eastern Texas to the lower Great Lakes States**. The bulk of the precipitation fell early in the week, and included heavy rain (2 inches or more) in the **southern Mid-Atlantic coastal plain** and wintry weather (snow, sleet, and freezing rain) from the **Ohio Valley to the interior Northeast**. In fact, weekly temperatures in parts of the **Northeast** averaged at least 10°F below normal. Before being replaced by mild weather, bitterly cold conditions lingered from the **northern Plains into the Northeast**. On January 13-14, temperatures fell below 0°F as far south as **northern Missouri** and **central sections of Illinois and Indiana**. However, temperatures were generally not as low as those observed across the **Midwest** the previous week. In addition, snow provided insulation for winter wheat in most **Midwestern** areas subjected to sub-zero temperatures on January 13-14.

Following mild December weather, unusually cold conditions gripped the **central and eastern U.S.** during the first half of January. In fact, during the 19-day period from December 27, 2014 – January 14, 2015, the temperature in **Grand Island, NE**, averaged 13.2°F—more than 11°F below normal. This marked the coldest such period in **Grand Island** since 1987-88, when the temperature averaged 11.6°F. Similarly in **Texas**, the 18-day period from December 28 – January 14 was the coldest such period since 1978-79 in **College Station** and the coldest since 2009-10 in **Houston**. During that 18-day span, temperatures averaged 10.6°F below normal in **College Station** and 8.6°F below normal in **Houston**. During a final wave of frigid conditions, consecutive daily-record lows were established on January 13-14 in **Michigan** locations such as **Flint** (-9 and -19°F) and **Grand Rapids** (-5 and -13°F). The January 14 minimum in **Grand Rapids** marked the lowest temperature in that location since February 4, 1996, when it was -17°F. Elsewhere in **Michigan**, record-setting lows for January 13 included -21°F in **Gaylord** and -14°F in **Traverse City**. Later, mild conditions spread from the **Pacific Coast to the Plains**. By January 16, **Russell, KS**, posted a daily-record high of 63°F. A day later, record-setting highs for January 17, climbed to 59°F in **Portland, OR**, and 39°F in **Grand Forks, ND**.

Heavy precipitation accompanied the late-week warmth in the **Northwest**. For example, record-setting rainfall totals for January 17 in **Oregon** included 2.86 inches in **Astoria** and 1.80 inches in **Portland**. Similarly, precipitation records for January 17 were broken in **Washington** locations such as **Vancouver** (1.73 inches), **Spokane** (0.63 inch), and **Yakima** (0.52 inch). Earlier, significant precipitation had been confined to the **southern tier of the U.S.** The week opened with **Southwestern** showers, including daily-record amounts for January 11 in **Bakersfield, CA** (0.63 inch); **Las Vegas, NV** (0.46 inch); and **Colorado Springs, CO** (0.43 inch). **Colorado Springs** also received 6.5 inches of snow on January 11-12. In the **Wasatch Range**, January 12-13 snowfall totaled 2 feet in **Alta, UT**. During the same 2-day period, 6.4 inches of snow blanketed **Flagstaff, AZ**. Farther east, heavy rain on January 11 in **southern and eastern Texas** led to daily-record totals in **Beaumont-Port Arthur** (2.11 inches) and **Victoria** (1.51 inches). A day later, **Southeastern** rainfall records for January 12 reached 2.40 inches in **Fayetteville, NC**, and 1.89 inches in **Savannah, GA**. Heavy rain lasted into January 13 across **Florida**, where **Fort Lauderdale** collected a daily-record total of 1.97 inches. Farther north and inland, patches of wintry precipitation resulted in sporadic travel difficulties and daily records, including snowfall totaling 0.5 inch in **Paducah, KY**, on January 15.

Uncommonly mild weather prevailed in **Alaska**, boosting weekly temperatures 10 to 30°F above normal in many locations. Consecutive daily-record highs were set in several locations, including **Craig** (50 and 51°F, respectively, on January 13-14) and **Yakutat** (45 and 47°F, respectively, on January 12-13). Mostly dry weather accompanied the "warmth" across the **Alaskan mainland**, but heavy precipitation fell in some southern locations. **Haines** netted a daily-record total (1.26 inches) on January 15, while **Yakutat** reported a weekly rainfall of 7.70 inches. In **western Alaska**, late-week snow in **Nome** resulted in a daily-record total (4.0 inches) for January 16. Farther south, most of **Hawaii** remained locked in a dry weather pattern. Through January 17, month-to-date rainfall in **Hilo**, on the **Big Island**, totaled just 0.02 inch—less than one-half of one percent of normal. In **Lihue, Kauai**, where the January 1-17 rainfall totaled 1.16 inches, or 54 percent of normal, consecutive daily-record highs (85 and 84°F, respectively) were attained on January 15-16.


U.S. Drought Monitor
January 13, 2015
(Released Thursday, Jan. 15, 2015)
Valid 7 a.m. EST
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.
USDA
http://droughtmonitor.unl.edu/


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for January 15 - April 30, 2015
Released January 15, 2015
KEY:
Drought persists or intensifies
Drought remains but improves
Drought removal likely
Drought development likely
Author: David Miskus, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The green areas imply drought removal by the end of the period (D0 or none)

National Weather Data for Selected Cities

Weather Data for the Week Ending January 17, 2015

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	50	34	62	25	42	0	0.07	-1.19	0.06	10.27	145	3.12	119	92	58	0	3	2	0
	HUNTSVILLE	47	32	61	27	39	0	0.96	-0.31	0.90	9.20	111	3.47	128	80	70	0	5	2	1
	MOBILE	57	39	78	32	48	-2	0.72	-0.58	0.72	6.98	95	1.71	64	92	71	0	1	1	1
	MONTGOMERY	56	38	65	29	47	1	0.15	-0.94	0.15	6.24	86	1.35	59	88	57	0	3	1	0
AK	ANCHORAGE	39	28	46	23	33	17	0.00	-0.14	0.00	0.70	50	0.02	6	84	73	0	7	0	0
	BARROW	-10	-16	-6	-21	-13	0	0.00	0.00	0.00	0.20	154	0.00	0	83	76	0	7	0	0
	FAIRBANKS	26	9	31	0	17	27	0.00	-0.12	0.00	0.93	90	0.00	0	83	79	0	7	0	0
	JUNEAU	44	37	46	31	40	14	3.36	2.27	0.96	9.08	116	5.79	238	96	87	0	1	7	3
	KODIAK	44	39	45	32	41	11	5.01	3.12	1.43	22.14	189	8.35	206	96	90	0	1	7	4
	NOME	33	17	40	9	25	19	0.37	0.18	0.22	1.25	87	0.71	165	84	72	0	7	3	0
AZ	FLAGSTAFF	44	24	56	15	34	4	0.71	0.25	0.53	4.45	159	1.01	104	91	55	0	7	3	1
	PHOENIX	70	50	74	46	60	6	0.14	-0.05	0.11	1.05	78	0.14	33	75	52	0	0	3	0
	PRESCOTT	55	30	64	24	43	6	0.46	0.13	0.28	2.59	131	0.66	94	86	40	0	5	3	0
	TUCSON	68	45	73	40	57	6	0.06	-0.16	0.06	2.49	162	0.32	63	74	55	0	0	1	0
AR	FORT SMITH	48	27	64	21	38	1	0.17	-0.35	0.17	4.06	89	1.75	152	86	44	0	7	1	0
	LITTLE ROCK	48	29	66	21	39	-1	0.53	-0.27	0.51	5.98	93	2.82	161	85	41	0	5	2	1
CA	BAKERSFIELD	60	45	66	41	52	5	0.64	0.39	0.64	2.66	208	0.64	123	90	82	0	0	1	1
	FRESNO	57	43	64	39	50	5	0.00	-0.47	0.00	2.29	100	0.00	0	98	92	0	0	0	0
	LOS ANGELES	68	51	74	47	60	3	0.49	-0.14	0.49	5.12	167	1.08	84	80	57	0	0	1	0
	REDDING	60	41	67	32	51	6	0.15	-1.31	0.15	10.54	137	0.15	5	90	76	0	1	1	0
	SACRAMENTO	58	42	63	37	50	5	0.00	-0.83	0.00	8.60	208	0.00	0	99	69	0	0	0	0
	SAN DIEGO	69	53	73	50	61	4	0.37	-0.14	0.20	4.87	208	0.37	36	71	51	0	0	2	0
	SAN FRANCISCO	59	47	64	43	53	4	0.00	-0.97	0.00	10.66	219	0.00	0	97	84	0	0	0	0
	STOCKTON	56	42	63	39	49	4	0.01	-0.58	0.01	6.11	202	0.02	2	98	93	0	0	1	0
CO	ALAMOSA	37	11	46	-1	24	10	0.03	-0.03	0.02	0.29	63	0.08	62	88	74	0	7	2	0
	CO SPRINGS	42	20	54	18	31	3	0.46	0.40	0.37	0.73	126	0.57	356	85	46	0	7	2	0
	DENVER INTL	44	26	60	19	35	7	0.00	-0.06	0.00	0.74	161	0.16	107	76	45	0	6	0	0
	GRAND JUNCTION	42	27	47	23	35	10	0.44	0.30	0.26	1.49	180	0.44	142	94	76	0	7	3	0
	PUEBLO	49	18	66	13	33	4	0.01	-0.07	0.01	0.26	45	0.02	11	83	58	0	7	1	0
CT	BRIDGEPORT	39	19	47	12	29	-1	0.34	-0.51	0.28	7.03	133	1.38	75	67	48	0	6	1	0
	HARTFORD	31	11	39	3	21	-5	0.28	-0.60	0.28	5.64	103	1.09	59	71	51	0	7	1	0
DC	WASHINGTON	42	28	48	21	35	0	0.75	0.01	0.75	5.16	111	1.66	104	76	47	0	6	1	1
DE	WILMINGTON	38	22	45	11	30	-1	0.71	-0.09	0.71	4.78	94	1.77	104	81	42	0	6	1	1
FL	DAYTONA BEACH	68	53	79	46	61	3	1.85	1.14	1.57	4.74	113	1.91	127	97	71	0	0	4	1
	JACKSONVILLE	60	45	66	35	53	0	1.33	0.51	1.07	5.34	123	1.60	95	100	79	0	0	3	1
	KEY WEST	77	69	81	65	73	3	0.04	-0.46	0.04	2.50	77	0.25	23	91	75	0	0	1	0
	MIAMI	78	66	80	56	72	4	0.88	0.49	0.45	2.24	74	0.92	110	90	65	0	0	3	0
	ORLANDO	72	54	79	48	63	2	3.09	2.55	2.98	4.68	136	3.09	271	97	75	0	0	3	1
	PENSACOLA	58	43	67	36	50	-2	0.72	-0.49	0.70	6.98	108	3.48	140	92	67	0	0	2	1
	TALLAHASSEE	62	46	70	31	54	3	0.32	-0.91	0.32	10.77	161	1.99	77	86	63	0	1	1	0
	TAMPA	72	55	80	46	64	3	0.29	-0.18	0.25	1.86	56	0.29	28	91	64	0	0	3	0
	WEST PALM BEACH	78	64	82	53	71	5	0.44	-0.41	0.26	2.74	57	0.98	58	90	68	0	0	5	0
GA	ATHENS	48	31	59	26	40	-2	0.29	-0.75	0.15	6.82	116	2.13	98	89	76	0	5	4	0
	ATLANTA	48	34	60	29	41	-1	0.40	-0.71	0.23	8.73	143	3.22	142	83	73	0	3	4	0
	AUGUSTA	50	34	61	24	42	-2	0.56	-0.45	0.20	5.16	99	0.95	45	88	73	0	3	5	0
	COLUMBUS	54	38	63	31	46	0	0.11	-0.96	0.10	6.12	92	1.50	66	96	56	0	2	2	0
	MACON	51	35	61	27	43	-2	0.18	-0.93	0.08	6.75	108	0.86	37	98	75	0	3	4	0
	SAVANNAH	55	41	62	33	48	-1	1.98	1.08	1.85	6.52	139	2.50	133	89	75	0	0	4	1
HI	HILO	82	65	84	64	74	3	0.02	-2.17	0.02	6.12	41	0.02	0	80	64	0	0	1	0
	HONOLULU	80	67	80	63	73	0	0.03	-0.58	0.03	1.82	43	0.75	56	87	74	0	0	1	0
	KAHULUI	82	59	84	58	71	-1	0.00	-0.85	0.00	4.91	100	0.68	37	87	77	0	0	0	0
	LIHUE	81	64	85	60	73	1	0.32	-0.74	0.32	2.59	36	1.19	51	81	72	0	0	1	0
ID	BOISE	37	29	43	25	33	3	0.54	0.24	0.36	4.05	199	0.71	108	93	84	0	7	4	0
	LEWISTON	44	33	54	26	38	5	0.56	0.31	0.50	2.62	167	0.78	150	91	77	0	3	3	1
	POCATELLO	35	27	41	25	31	7	0.34	0.09	0.15	1.12	68	0.35	65	97	88	0	7	3	0
IL	CHICAGO/O'HARE	30	15	42	1	22	0	0.19	-0.19	0.19	1.90	58	1.11	131	85	66	0	7	1	0
	MOLINE	32	9	44	-10	20	-1	0.08	-0.27	0.08	1.63	54	0.91	114	77	61	0	6	1	0
	PEORIA	33	14	49	-3	24	2	0.28	-0.04	0.15	2.53	81	1.30	176	84	59	0	6	2	0
	ROCKFORD	29	11	42	-6	20	1	0.00	-0.30	0.00	1.73	63	0.80	118	80	63	0	7	0	0
	SPRINGFIELD	36	16	52	-1	26	1	0.22	-0.14	0.16	2.82	83	0.87	104	88	60	0	6	2	0
IN	EVANSVILLE	40	25	55	21	33	2	0.41	-0.22	0.21	5.99	122	2.56	187	77	60	0	7	3	0
	FORT WAYNE	27	8	42	-3	18	-6	0.43	-0.02	0.25	3.57	94	1.85	183	92	69	0	7	3	0
	INDIANAPOLIS	34	16	51	5	25	-1	0.64	0.09	0.49	4.20	99	1.65	138	91	56	0	7	3	0
	SOUTH BEND	29	10	46	-6	20	-3	0.14	-0.36	0.10	2.92	69	1.45	128	85	64	0	7	2	0
IA	BURLINGTON	34	12	47	-2	23	0	0.12	-0.16	0.12	1.38	50	0.72	111	92	62	0	6	1	0
	CEDAR RAPIDS	30	10	42	-7	20	2	0.00	-0.22	0.00	0.68	35	0.03	6	90	66	0	6	0	0
	DES MOINES	36	16	57	-6	26	6	0.01	-0.21	0.01	1.48	82	0.44	92	76	54	0	6	1	0
	DUBUQUE	29	9	39	-4	19	2	0.00	-0.28	0.00	1.30	57	0.37	62	81	67	0	7	0	0
	SIOUX CITY	33	10	47	-13	22	4	0.00	-0.14	0.00	1.64	169	0.24	77	80	63	0	6	0	0
	WATERLOO	29	7	42	-17	18	2	0.00	-0.17	0.00	2.16	146	0.52	141	89	69	0	6	0	0
KS	CONCORDIA	44	20	64	4	32	6	0.00	-0.16	0.00	0.85	70	0.11	31	74	50	0	6	0	0
	DODGE CITY	44	22	65	14	33	3	0.00	-0.14	0.00	1.23	112	0.23	70	72	36	0	7	0	0
	GOODLAND	42	20	60	13	31	4	0.04	-0.06	0.02	1.53	239	0.07	29	80	60	0	7	2	0
	TOPEKA	45	17	65	4	31	4	0.03	-0.17	0.02	2.35	125	0.08	17	75	55	0	6	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 17, 2015

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	46	21	65	13	34	4	0.01	-0.19	0.01	1.61	88	0.32	67	79	45	0	7	1	0
KY	JACKSON	40	25	59	20	33	-1	0.43	-0.35	0.37	3.79	63	1.30	76	87	57	0	7	3	0
	LEXINGTON	39	24	54	18	32	0	0.22	-0.54	0.21	4.27	75	0.97	57	84	66	0	7	2	0
	LOUISVILLE	42	26	57	19	34	1	0.18	-0.56	0.10	4.13	78	0.56	35	83	48	0	7	2	0
	PADUCAH	41	27	57	22	34	2	0.37	-0.35	0.28	4.35	73	1.46	93	86	55	0	6	3	0
LA	BATON ROUGE	54	37	63	29	45	-5	0.56	-0.82	0.42	9.81	121	4.14	144	94	59	0	2	3	0
	LAKE CHARLES	53	37	63	31	45	-6	2.22	0.93	2.03	7.26	100	5.23	194	95	71	0	1	4	1
	NEW ORLEANS	57	43	72	35	50	-2	1.22	-0.04	0.71	6.47	85	2.51	98	85	71	0	0	3	1
	SHREVEPORT	51	32	66	28	42	-4	1.12	0.10	1.11	9.25	138	5.50	255	90	55	0	5	2	1
ME	CARIBOU	15	-8	26	-18	4	-6	0.27	-0.42	0.20	7.15	152	1.27	84	81	54	0	7	2	0
	PORTLAND	29	6	38	-6	18	-4	0.25	-0.69	0.21	7.46	119	1.19	59	77	45	0	7	2	0
MD	BALTIMORE	38	23	44	9	31	-1	0.70	-0.10	0.70	5.30	105	1.72	100	78	57	0	7	1	1
MA	BOSTON	32	18	38	9	25	-4	0.32	-0.56	0.20	8.10	145	1.54	82	76	41	0	6	2	0
	WORCESTER	28	11	34	2	20	-4	0.26	-0.68	0.26	6.28	108	1.38	69	80	41	0	7	1	0
MI	ALPENA	26	0	38	-14	13	-5	0.05	-0.36	0.02	2.20	81	0.51	57	85	64	0	7	3	0
	GRAND RAPIDS	29	7	43	-13	18	-5	0.05	-0.39	0.03	2.71	74	1.14	118	85	64	0	7	2	0
	HOUGHTON LAKE	27	2	39	-18	14	-4	0.01	-0.35	0.01	2.26	89	0.83	106	82	68	0	7	1	0
	LANSING	29	7	45	-12	18	-4	0.13	-0.20	0.11	2.46	85	0.90	122	79	62	0	7	2	0
	MUSKEGON	32	13	40	-5	22	-2	0.03	-0.47	0.03	2.76	74	1.04	95	74	64	0	7	1	0
	TRAVERSE CITY	28	7	42	-14	18	-3	0.00	-0.68	0.00	2.16	53	0.34	24	83	63	0	7	0	0
MN	DULUTH	19	2	34	-16	11	3	0.11	-0.13	0.09	1.56	111	0.30	64	75	63	0	7	3	0
	INT'L FALLS	17	-9	30	-25	4	2	0.16	-0.01	0.09	1.87	178	1.02	291	83	58	0	7	2	0
	MINNEAPOLIS	23	11	38	-10	17	4	0.03	-0.19	0.02	1.12	76	0.26	54	82	66	0	7	2	0
	ROCHESTER	24	7	37	-17	15	4	0.02	-0.18	0.01	1.39	97	0.37	88	86	74	0	7	2	0
	ST. CLOUD	21	3	36	-22	12	4	0.09	-0.08	0.04	0.96	93	0.21	62	90	66	0	7	3	0
MS	JACKSON	52	32	62	24	42	-3	0.71	-0.58	0.46	6.99	87	3.06	112	94	61	0	3	3	0
	MERIDIAN	52	33	63	24	42	-4	0.23	-1.10	0.12	13.79	170	5.11	183	90	75	0	4	2	0
	TUPELO	48	30	60	23	39	-1	0.75	-0.44	0.63	8.55	98	3.47	132	83	64	0	6	3	1
MO	COLUMBIA	41	20	57	6	31	3	0.07	-0.29	0.04	2.72	83	0.54	68	84	45	0	6	2	0
	KANSAS CITY	44	19	61	1	31	4	0.02	-0.23	0.02	1.95	89	0.12	21	83	40	0	6	1	0
	SAINT LOUIS	42	21	63	13	32	3	0.32	-0.15	0.28	3.74	96	1.02	100	73	53	0	7	2	0
	SPRINGFIELD	44	23	60	12	33	2	0.10	-0.34	0.09	2.49	60	0.72	75	79	51	0	6	2	0
MT	BILLINGS	33	20	44	4	27	3	0.19	0.00	0.19	1.69	158	1.02	255	75	60	0	7	1	0
	BUTTE	32	10	40	0	21	4	0.06	-0.05	0.06	0.67	86	0.11	44	90	63	0	7	1	0
	CUT BANK	32	18	43	1	25	6	0.00	-0.08	0.00	0.36	69	0.04	21	79	63	0	7	0	0
	GLASGOW	26	4	42	-14	15	5	0.00	-0.08	0.00	0.56	100	0.45	237	82	74	0	7	0	0
	GREAT FALLS	32	16	43	-3	24	3	0.08	-0.08	0.04	2.05	199	0.95	264	83	62	0	7	4	0
	HAVRE	26	8	40	-16	17	3	0.00	-0.11	0.00	1.41	186	1.07	428	82	72	0	7	0	0
	MISSOULA	33	19	42	7	26	3	0.13	-0.11	0.07	2.28	135	1.02	189	92	85	0	7	2	0
NE	GRAND ISLAND	37	14	53	-1	26	4	0.00	-0.11	0.00	0.79	87	0.03	12	78	57	0	7	0	0
	LINCOLN	40	13	59	-4	27	5	0.00	-0.16	0.00	1.26	103	0.04	11	80	54	0	6	0	0
	NORFOLK	33	11	50	-14	22	2	0.00	-0.11	0.00	1.28	142	0.08	32	78	63	0	6	0	0
	NORTH PLATTE	39	14	55	6	27	4	0.00	-0.08	0.00	1.09	185	0.05	26	86	45	0	7	0	0
	OMAHA	39	15	59	-4	27	6	0.00	-0.17	0.00	1.72	134	0.04	11	82	60	0	6	0	0
	SCOTTSBLUFF	36	14	51	1	25	1	0.11	0.00	0.09	1.68	207	0.21	84	83	76	0	7	2	0
	VALENTINE	32	10	43	-6	21	1	0.00	-0.06	0.00	0.96	209	0.06	46	80	63	0	7	0	0
NV	ELY	46	22	53	13	34	9	0.20	0.03	0.17	0.93	111	0.20	59	87	70	0	7	2	0
	LAS VEGAS	61	44	65	40	53	7	0.46	0.35	0.46	0.76	117	0.46	184	67	46	0	0	1	0
	RENO	53	31	61	22	42	9	0.00	-0.22	0.00	0.93	69	0.00	0	80	58	0	3	0	0
	WINNEMUCCA	48	25	55	17	37	8	0.16	-0.03	0.16	1.32	106	0.16	37	90	69	0	6	1	0
NH	CONCORD	27	3	34	-10	15	-5	0.03	-0.63	0.03	6.55	149	1.39	97	78	48	0	7	1	0
NJ	NEWARK	37	19	44	14	28	-3	0.33	-0.59	0.33	6.39	116	1.48	76	69	45	0	6	1	0
NM	ALBUQUERQUE	47	29	56	23	38	3	0.17	0.06	0.13	1.35	182	0.21	84	85	55	0	7	2	0
NY	ALBANY	29	4	35	-10	16	-6	0.20	-0.35	0.20	6.46	167	1.09	92	71	48	0	7	1	0
	BINGHAMTON	25	4	32	-5	15	-7	0.47	-0.08	0.46	4.81	114	1.51	126	81	63	0	7	2	0
	BUFFALO	29	6	44	-4	18	-7	0.37	-0.35	0.30	3.92	73	1.77	113	84	53	0	7	2	0
	ROCHESTER	29	3	34	-9	16	-8	0.22	-0.30	0.17	3.32	86	1.01	89	78	56	0	7	4	0
	SYRACUSE	26	-1	34	-11	13	-10	0.22	-0.36	0.20	4.33	99	1.31	105	84	55	0	7	2	0
NC	ASHEVILLE	47	27	53	17	37	2	0.32	-0.58	0.20	4.63	88	2.23	119	89	61	0	5	3	0
	CHARLOTTE	48	28	57	15	38	-3	1.10	0.19	0.74	4.30	85	1.73	91	91	57	0	5	3	1
	GREENSBORO	46	27	53	15	36	-1	0.58	-0.22	0.41	3.33	70	1.12	67	91	60	0	6	2	0
	HATTERAS	54	41	64	36	47	1	1.18	-0.19	1.09	4.47	60	2.02	70	96	79	0	0	3	1
	RALEIGH	46	28	53	17	37	-2	1.33	0.42	1.29	6.74	137	1.78	94	84	67	0	6	3	1
	WILMINGTON	54	34	66	23	44	-2	1.11	0.08	0.97	6.52	110	1.54	72	95	66	0	2	4	1
ND	BISMARCK	29	6	43	-21	18	8	0.00	-0.08	0.00	0.30	48	0.19	100	83	68	0	6	0	0
	DICKINSON	29	9	42	-17	19	5	0.02	-0.04	0.02	0.12	26	0.05	38	77	57	0	7	1	0
	FARGO	22	5	39	-17	13	7	0.21	0.04	0.11	0.54	58	0.29	81	83	68	0	7	3	0
	GRAND FORKS	22	1	39	-21	12	7	0.16	0.02	0.13	0.61	71	0.39	126	88	65	0	7	2	0
	JAMESTOWN	24	6	39	-19	15	7	0.00	-0.14	0.00	0.11	15	0.08	29	86	66	0	7	0	0
	WILLISTON	27	3	39	-21	15	8	0.00	-0.11	0.00	0.23	28	0.20	80	80	69	0	7	0	0
OH	AKRON-CANTON	31	13	45	3	22	-3	0.54	-0.01	0.42	4.59	109	2.28	187	75	61	0	7	2	0
	CINCINNATI	38	22	53	18	30	1	0.44	-0.22	0.23	5.22	111	1.62	113	72	57	0	7	2	0
	CLEVELAND	30	11	45	-5	21	-5	0.40	-0.15	0.24	4.28	99	2.33	194	83	61	0	7	2	0
	COLUMBUS	33	18	49	9	26	-2	0.34	-0.21	0.18	4.87	118	2.17	181	77	61	0	7	2	0
	DAYTON	34	16	50	5	25	-1	0.32	-0.26	0.18	5.16	119	2.37	187	90	58	0	7	2	0
	MANSFIELD	29	11	44	-3	20	-4	0.46	-0.12	0.35	4.09	90	2.23	174	93	60	0	7	2	0

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

Weather Data for the Week Ending January 17, 2015

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	26	8	43	-6	17	-7	0.36	-0.05	0.19	2.76	77	1.67	180	90	69	0	7	2	0
	YOUNGSTOWN	30	8	45	-3	19	-6	0.51	-0.01	0.39	4.36	106	2.04	179	79	61	0	7	2	0
OK	OKLAHOMA CITY	49	28	67	21	39	3	0.02	-0.27	0.01	1.13	44	0.43	61	71	37	0	7	2	0
	TULSA	48	27	67	16	38	2	0.03	-0.32	0.02	2.38	74	0.41	51	79	47	0	6	2	0
OR	ASTORIA	53	40	59	34	47	5	3.46	1.29	2.85	18.70	124	8.13	176	88	78	0	0	5	1
	BURNS	39	24	48	18	32	8	0.39	0.14	0.17	2.68	143	0.39	68	90	86	0	7	5	0
	EUGENE	52	38	59	29	45	6	2.04	0.33	1.18	9.15	77	2.08	57	95	91	0	2	5	1
	MEDFORD	50	39	56	29	44	6	1.03	0.48	0.57	3.34	82	1.03	87	97	81	0	1	5	1
	PENDLETON	41	32	51	28	37	4	0.49	0.19	0.35	3.47	162	0.67	102	94	85	0	4	5	0
	PORTLAND	50	37	59	30	44	5	2.39	1.26	1.61	8.83	108	2.78	114	89	77	0	2	4	1
	SALEM	52	36	60	28	44	4	2.50	1.21	1.54	9.51	103	2.64	95	94	87	0	3	5	1
PA	ALLENTOWN	35	16	40	9	26	-1	0.44	-0.36	0.43	5.00	98	1.35	79	69	46	0	7	2	0
	ERIE	32	7	47	-1	19	-8	0.48	-0.08	0.42	4.74	95	2.29	179	73	53	0	7	3	0
	MIDDLETOWN	34	18	39	10	26	-3	0.15	-0.46	0.13	4.32	95	1.06	81	81	48	0	7	3	0
	PHILADELPHIA	37	23	43	15	30	-2	0.59	-0.21	0.59	5.08	101	1.81	106	73	56	0	6	1	1
	PITTSBURGH	34	16	50	9	25	-3	0.17	-0.44	0.15	3.60	87	0.97	75	76	51	0	7	2	0
	WILKES-BARRE	32	13	35	6	23	-3	0.22	-0.32	0.22	3.69	100	0.91	80	75	49	0	7	1	0
	WILLIAMSPORT	32	12	39	3	22	-4	0.02	-0.60	0.02	3.44	81	0.84	65	73	50	0	7	1	0
RI	PROVIDENCE	33	18	40	10	26	-3	0.37	-0.62	0.36	7.67	123	1.42	67	72	46	0	6	2	0
SC	BEAUFORT	55	41	63	34	48	0	0.28	-0.65	0.12	4.60	91	0.93	48	97	67	0	0	4	0
	CHARLESTON	55	39	63	32	47	-1	1.21	0.27	1.06	5.01	96	1.61	82	94	71	0	1	4	1
	COLUMBIA	50	33	59	21	41	-3	1.24	0.18	0.92	5.80	104	1.90	86	87	66	0	2	4	1
	GREENVILLE	48	32	57	22	40	-1	0.85	-0.14	0.74	6.39	107	2.76	131	94	62	0	3	3	1
SD	ABERDEEN	26	3	43	-19	15	5	0.03	-0.08	0.03	0.30	48	0.05	20	80	70	0	7	1	0
	HURON	24	4	40	-14	14	0	0.02	-0.09	0.02	0.96	157	0.26	118	87	67	0	7	1	0
	RAPID CITY	36	16	53	5	26	4	0.00	-0.08	0.00	0.55	93	0.13	68	74	55	0	7	0	0
	SIOUX FALLS	28	4	41	-16	16	2	0.00	-0.11	0.00	1.75	233	0.42	183	86	69	0	7	0	0
TN	BRISTOL	46	27	60	14	36	2	0.58	-0.20	0.57	4.14	82	1.11	67	95	57	0	5	2	1
	CHATTANOOGA	46	30	58	23	38	-1	0.53	-0.69	0.44	7.00	95	2.60	102	91	69	0	5	3	0
	KNOXVILLE	44	27	59	17	36	-1	1.14	0.09	1.13	6.36	95	2.13	95	93	61	0	5	2	1
	MEMPHIS	47	30	60	27	39	0	0.23	-0.70	0.19	3.62	47	1.02	50	80	48	0	4	2	0
	NASHVILLE	45	28	59	23	37	1	0.96	0.06	0.95	4.87	75	1.66	85	90	54	0	6	2	1
TX	ABILENE	52	32	69	29	42	-1	0.01	-0.19	0.01	1.00	56	0.48	96	80	59	0	5	1	0
	AMARILLO	50	23	66	19	36	1	0.02	-0.12	0.01	0.51	54	0.38	115	83	42	0	7	2	0
	AUSTIN	53	35	71	27	44	-6	0.21	-0.21	0.21	3.90	114	1.79	183	92	75	0	1	1	0
	BEAUMONT	54	39	69	32	46	-6	2.17	0.83	2.11	6.85	85	3.71	130	95	65	0	1	3	1
	BROWNSVILLE	59	42	72	39	51	-8	0.21	-0.06	0.14	4.83	291	3.40	618	94	80	0	0	3	0
	CORPUS CHRISTI	54	41	69	37	48	-8	0.05	-0.28	0.03	1.94	78	0.90	120	93	79	0	0	3	0
	DEL RIO	56	37	75	34	47	-4	0.00	-0.09	0.00	0.49	51	0.24	114	84	66	0	0	0	0
	EL PASO	55	31	64	26	43	-1	0.00	-0.09	0.00	0.13	13	0.01	4	85	45	0	5	0	0
	FORT WORTH	50	34	68	31	42	-2	0.37	-0.05	0.37	2.84	80	1.71	171	84	52	0	2	1	0
	GALVESTON	52	43	61	40	47	-9	1.63	0.70	1.36	6.19	113	2.32	119	96	75	0	0	3	1
	HOUSTON	53	39	69	33	46	-5	0.71	-0.12	0.66	7.87	144	2.27	128	94	67	0	0	2	1
	LUBBOCK	52	26	66	22	39	1	0.01	-0.07	0.01	0.88	101	0.49	245	83	60	0	7	1	0
	MIDLAND	51	30	67	27	41	-2	0.00	-0.11	0.00	1.19	132	0.97	388	89	64	0	5	0	0
	SAN ANGELO	54	33	69	27	43	-1	0.00	-0.15	0.00	0.84	65	0.48	137	88	59	0	4	0	0
	SAN ANTONIO	56	37	71	34	47	-3	0.02	-0.34	0.02	2.46	89	1.22	153	89	58	0	0	1	0
	VICTORIA	56	40	72	36	48	-5	1.54	0.99	1.51	4.13	113	1.92	161	88	72	0	0	3	1
	WACO	52	34	73	27	43	-3	0.37	-0.03	0.37	2.04	55	1.50	160	92	68	0	2	1	0
	WICHITA FALLS	50	31	69	26	41	1	0.00	-0.23	0.00	1.70	76	0.75	132	75	56	0	5	0	0
UT	SALT LAKE CITY	40	28	48	24	34	5	0.74	0.44	0.66	2.21	118	0.81	127	95	78	0	6	3	1
VT	BURLINGTON	24	0	31	-8	12	-6	0.10	-0.40	0.08	4.29	131	0.44	42	70	43	0	7	2	0
VA	LYNCHBURG	42	23	48	9	33	-1	0.80	0.00	0.77	4.21	86	1.09	64	89	57	0	7	2	1
	NORFOLK	46	31	60	17	38	-2	1.54	0.65	1.08	5.37	110	1.67	90	86	63	0	5	3	1
	RICHMOND	42	27	53	17	35	-1	0.93	0.10	0.71	4.21	86	1.07	61	89	65	0	6	3	1
	ROANOKE	43	26	48	11	35	0	0.43	-0.28	0.37	3.27	75	0.73	49	80	58	0	6	4	0
	WASH/DULLES	37	20	42	7	29	-3	0.62	-0.07	0.62	5.00	110	1.74	118	83	55	0	7	1	1
WA	OLYMPIA	49	34	55	27	42	4	1.79	0.11	1.35	11.56	101	5.56	156	95	89	0	4	4	1
	QUILLAYUTE	53	38	57	31	46	6	0.85	-2.19	0.43	22.13	105	7.92	122	98	85	0	1	3	0
	SEATTLE-TACOMA	49	39	53	33	44	4	1.28	0.14	0.82	7.07	88	2.28	93	90	74	0	0	4	1
	SPOKANE	33	26	37	24	29	2	0.76	0.35	0.46	3.21	102	1.24	139	97	87	0	7	3	0
	YAKIMA	38	31	43	21	34	5	0.44	0.18	0.30	1.36	69	0.44	76	90	82	0	3	4	0
WV	BECKLEY	40	23	50	14	31	1	0.37	-0.35	0.36	3.92	85	0.93	60	84	74	0	7	2	0
	CHARLESTON	40	24	59	10	32	-1	0.43	-0.29	0.38	4.18	86	1.33	88	91	61	0	7	3	0
	ELKINS	37	19	51	-5	28	-1	0.33	-0.44	0.25	5.16	102	1.55	95	95	57	0	7	3	0
	HUNTINGTON	38	22	57	10	30	-2	0.56	-0.16	0.52	4.68	95	1.37	88	89	61	0	7	3	1
WI	EAU CLAIRE	23	5	38	-22	14	3	0.00	-0.22	0.00	0.69	46	0.01	2	87	61	0	7	0	0
	GREEN BAY	26	11	40	-5	18	3	0.01	-0.25	0.01	2.03	103	0.35	63	82	64	0	7	1	0
	LA CROSSE	28	9	42	-13	19	3	0.00	-0.25	0.00	1.44	83	0.34	67	85	59	0	7	0	0
	MADISON	28	8	41	-6	18	1	0.00	-0.25	0.00	1.43	65	0.40	73	78	63	0	7	0	0
	MILWAUKEE	29	17	42	4	23	3	0.00	-0.39	0.00	1.71	56	0.68	81	76	60	0	7	0	0
WY	CASPER	33	19	41	0	26	4	0.08	-0.03	0.05	1.60	184	0.35	140	78	64	0	7	2	0
	CHEYENNE	41	24	53	13	33	7	0.02	-0.06	0.02	0.69	106	0.02	11	70	49	0	6	1	0
	LANDER	30	14	48	4	22	2	0.00	-0.11	0.00	1.82	212	0.00	0	93	65	0	7	0	0
	SHERIDAN	34	10	44	1	22	1	0.13	-0.04	0.13	1.16	110	0.42	114	72	61	0	7	1	0

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

National Agricultural Summary

January 12 - 18, 2015

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

The Corn Belt and Great Plains recorded below-average precipitation for the week. In contrast, the coastal Carolinas and parts of Florida, Louisiana, Oregon, and Washington received more than 2.5 inches of precipitation. Most of the western U.S. recorded above-average weekly temperatures. Temperatures were generally below average in the eastern half of the nation, with parts of New York and the Gulf Coast of Texas recording temperatures more than 6°F below average.

In **Arizona**, alfalfa conditions were mostly fair to excellent, depending on location. Harvesting occurred on two-thirds of the alfalfa acreage across the state. Sheep continued to graze on various alfalfa fields in many areas. Range and pastures were in relatively good condition for this time of year. Soil moisture levels were good and have been maintained by recent storms. Rangeland conditions varied widely from very poor to good, depending on location. Central Arizona growers shipped broccoli, Bok Choy, Chinese cabbage, red and green cabbage, cilantro, collard greens, kale greens, mustard, parsley, turnip top greens, and spinach. Western Arizona growers shipped anise, arugula, broccoli, Bok Choy, cauliflower, cilantro, celery, Chinese cabbage, red and green cabbage, curry, endive, escarole, kale greens, various lettuce including Boston, iceberg, romaine, green and red leaf lettuce, parsley, and spinach.

Field preparation and planting of winter wheat for grain and silage continued as weather conditions permitted in **California**. Winter grain conditions declined in dryland fields due to the resumption of drought stress. The wheat crop was rated as 80 percent good to excellent. Wheat, oats, and other winter forage crops germinated and grew well. Alfalfa fields remained dormant. Field cultivation for spring planting continued throughout the state. Pruning and shredding in tree fruit and grape vineyards continued. Dormant sprays and herbicides were applied. Harvest and packing continued for Navel oranges, Mandarins, lemons, grapefruit, and limes. The recent cold weather caused very minimal damage in a few isolated cold spots. Avocados were harvested. Pruning and shredding of walnut and pistachio orchards continued. Pre-emergence herbicide was applied on nut trees and the ground was prepared for tree planting. Leafy vegetables were harvested in San Joaquin County. In San Mateo, some fields were plowed and vegetable transplants were planted. In Fresno County, there was harvesting of organic broccoli. Seed crops such as cilantro and kale progressed on schedule. Tomato beds were prepared, while onions and garlic were irrigated and fertilized. In Tulare County, the planting of spring spinach and broccoli continued, and fields were prepared for spring plantings of other vegetables. Range and non-irrigated pastures were primarily in fair condition. Recent rain promoted germination of grasses and some forbs, which ultimately improved range conditions. Cattle continued relocation to foothill and valley pastures to take advantage of the available forage. Supplemental feeding of livestock continued but at a diminishing rate, as range and pasture recovered from the extended drought conditions. Bees were staged in preparation for the pending almond pollination.

Fields in the panhandle of **Florida** were very wet. Some cotton was being harvested in Gadsden County. Potato planting continued in Flagler and Putnam Counties. Farmers in northern Florida were harvesting onions, strawberries, greens, cabbage, and broccoli. Vegetables coming to market in southwestern Florida were green beans, beets, cabbage, collards, cucumbers, eggplant, kale, peppers, potatoes, squash, Swiss chard, tomatoes, and a variety of specialty items. Warmer weather has increased yields on vegetable crops. Crops harvested in Miami-Dade County were green beans, pole beans, yellow squash, zucchini, tomatoes, peppers, eggplant, sweet corn, boniato, and malanga. In Charlotte, Collier, Glades, Hendry, and Lee Counties, pasture quality has improved with warm weather and rain. Statewide, the cattle condition was mostly good while the winter forage and pasture condition was fair to good. Citrus processing plants were up and running at full capacity. Harvesting for early and midseason oranges included both Hamlin and Pineapple oranges. Weekly totals continued to be slightly below last season, due to the small size fruit and lesser crop. Navel orange harvest was slowing as the season came closer to an end. Colored and white grapefruit harvest was very similar to last season's weekly harvest. Honey tangerine harvest was picking up, but was still being harvested in small amounts. Grove activity included spraying, irrigation, and mowing in preparation for harvest. Combating greening is a constant struggle for citrus growers. Re-entry times after spraying was between 2 and 10 days, slowing down survey progress at times.

Many areas across eastern **Texas** received at least an inch of precipitation, with the Upper Coast receiving the highest amounts. The Northern High Plains received some precipitation, although totals were mostly 0.01 inch or less. Below-normal temperatures created adverse conditions for harvesting of crops. Recent weather conditions have contributed to the development of the winter wheat crop on the Northern Plains. Oats continued to progress in the Blacklands and South Texas. Statewide cotton harvest was 96 percent complete, up 2 percentage points from the previous year but 3 percentage points behind the 5-year average. Harvest on the Northern Plains was near completion. Field preparations for corn were underway in parts of the Blacklands. In South Texas, cold, damp conditions have temporarily delayed fresh and processed spinach harvest. The cabbage and onion crops were rated in mostly fair condition. Livestock were generally in fair to good condition across the state, as supplemental feeding continued.

International Weather and Crop Summary

January 11-17, 2015

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

HIGHLIGHTS

EUROPE: Warm, wet weather prevailed across central and northern growing areas, while dry conditions gave way to welcomed showers in the south by week's end.

WESTERN FSU: Warmer conditions melted the protective snow cover in western and southern portions of the region but reduced the risk for freeze damage to dormant winter wheat.

MIDDLE EAST: Rain and snow further boosted moisture supplies for winter wheat and barley over northern and central growing areas.

NORTHWESTERN AFRICA: Dry, warm weather was replaced by welcomed showers by the end of the period.

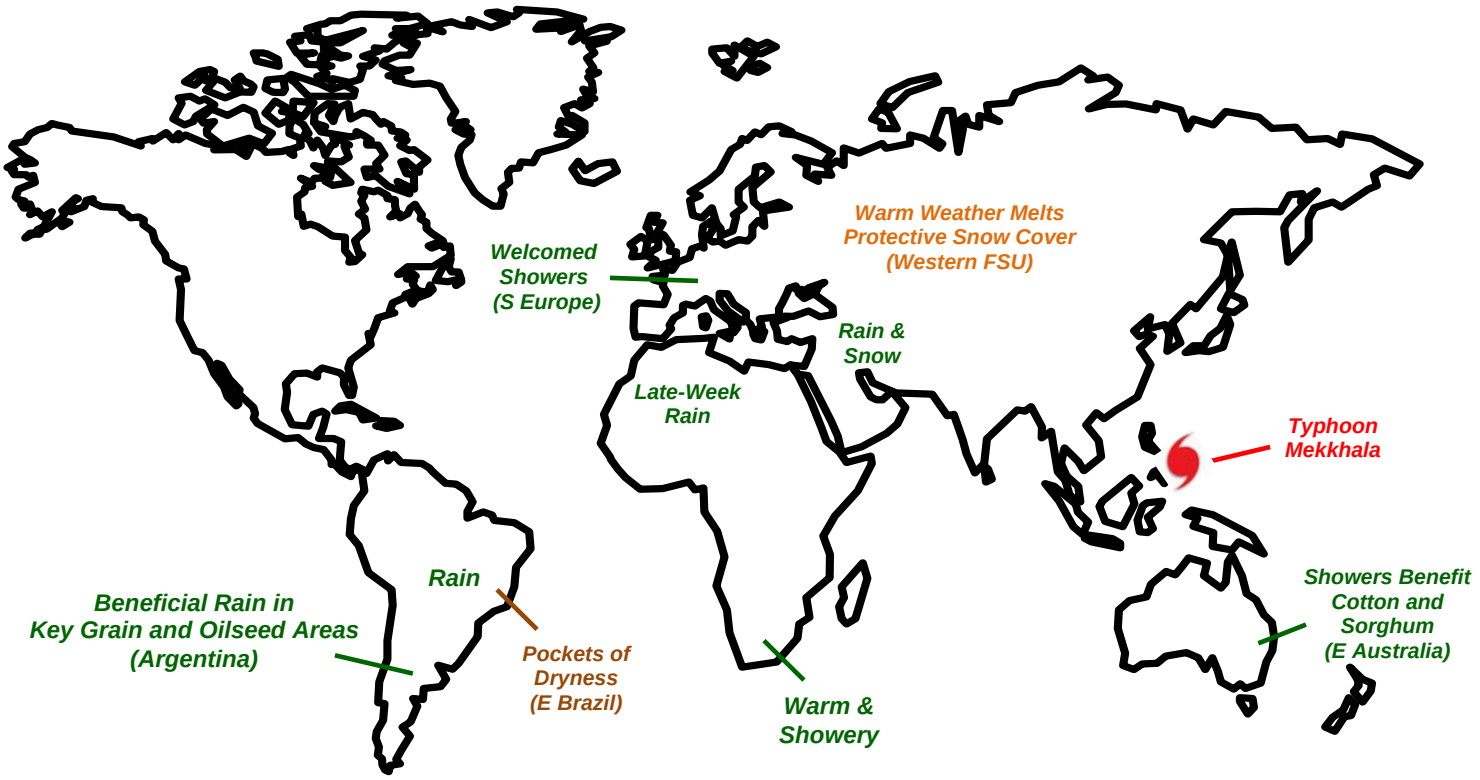
SOUTHEAST ASIA: Typhoon Mekkhala made landfall in the eastern Philippines, but damage to crops was likely limited.

AUSTRALIA: Widespread showers were followed by sunny skies, benefiting vegetative to reproductive cotton and sorghum.

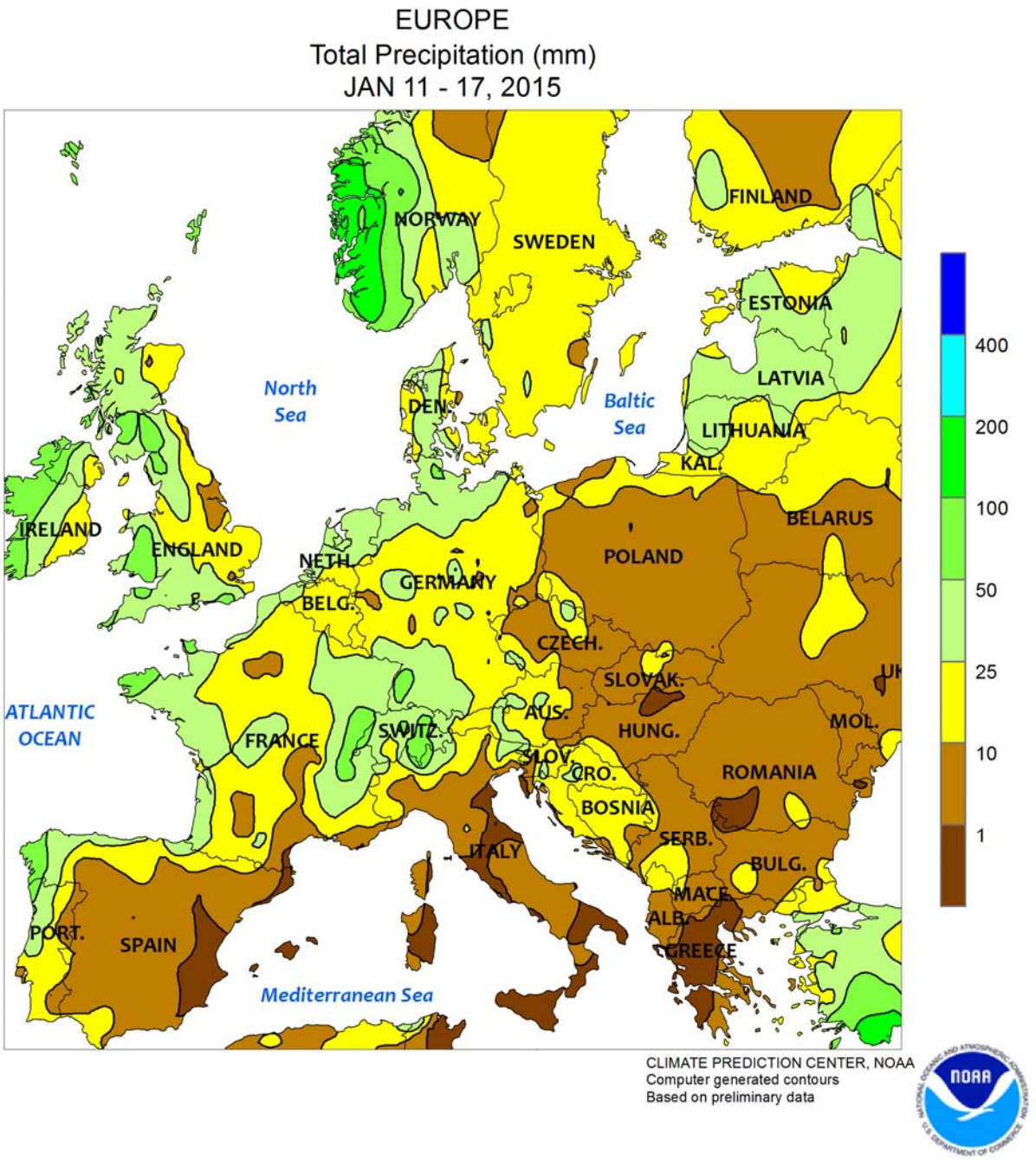
SOUTH AFRICA: Warm, showery weather continued across the corn belt, but more rain is needed as summer crops advance through reproduction.

ARGENTINA: Beneficial rain improved prospects of summer grains and oilseeds in Cordoba.

BRAZIL: Beneficial rain continued in key western and southern soybean areas, but unseasonable warmth and dryness persisted in eastern production areas.



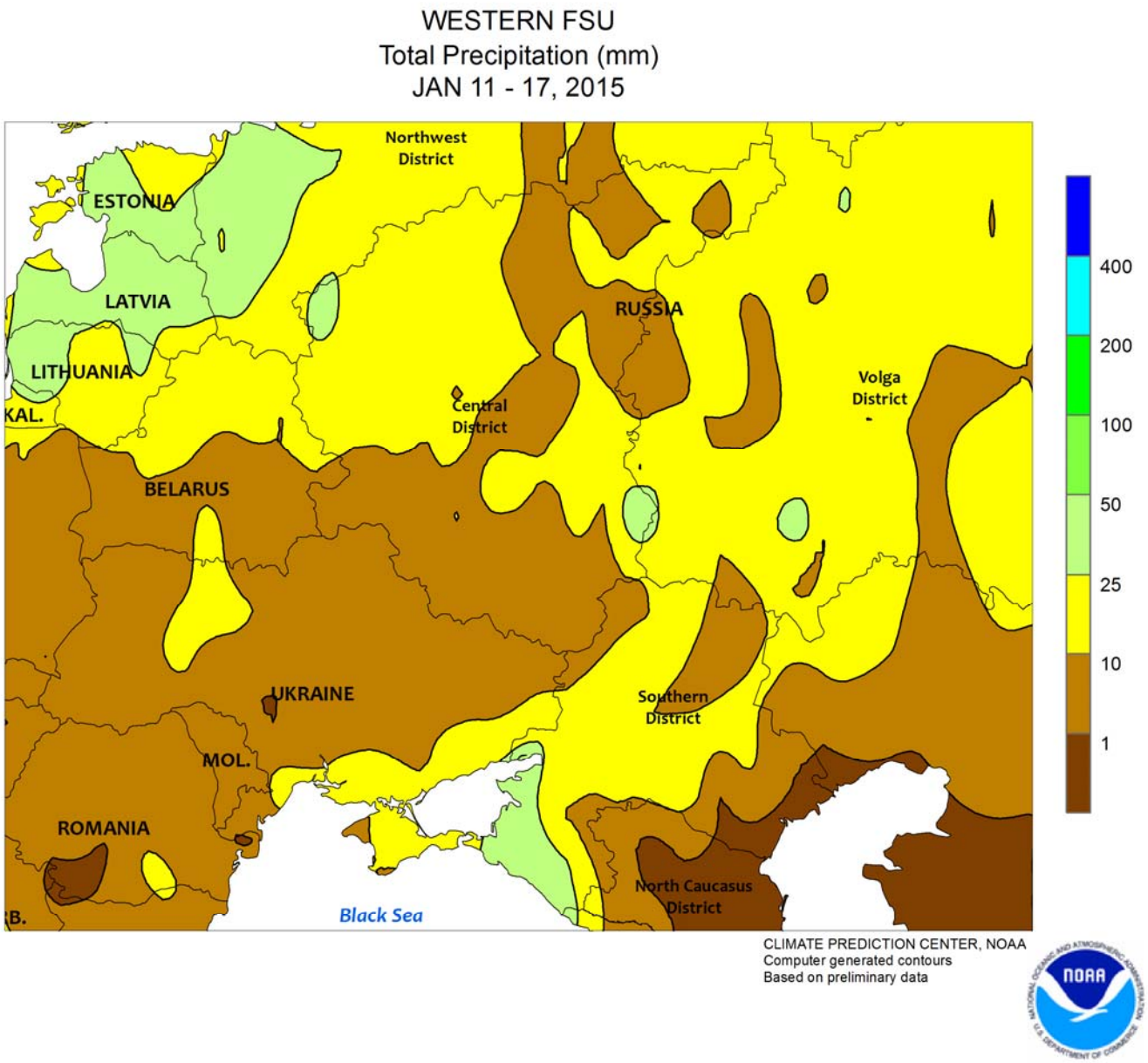
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Warm, wet weather persisted over central and northern Europe, while dry, warm conditions across the south were replaced by beneficial late-week showers. A potent storm swept across northern Europe, producing strong winds and moderate to heavy rainfall (10-50 mm, locally more) from the United Kingdom into central and northern portions of France and Germany. However, temperatures up to 6°C above normal reduced winter crop cold hardiness and likely encouraged some wheat growth in the warmer locales of France and Germany. In addition, the warm, wet weather kept key northern wheat and rapeseed areas devoid of a protective snow cover, though there was no risk of freeze damage or burnback during the period. Meanwhile, dry, warm conditions for much of the week across Spain and Italy facilitated fieldwork and winter grain development, though light showers (1-15 mm) at week's end provided some topsoil moisture on the Iberian Peninsula. Likewise, unseasonable warmth (15-22°C) melted the remaining snow cover in the Balkans and reduced winter crop cold hardiness.

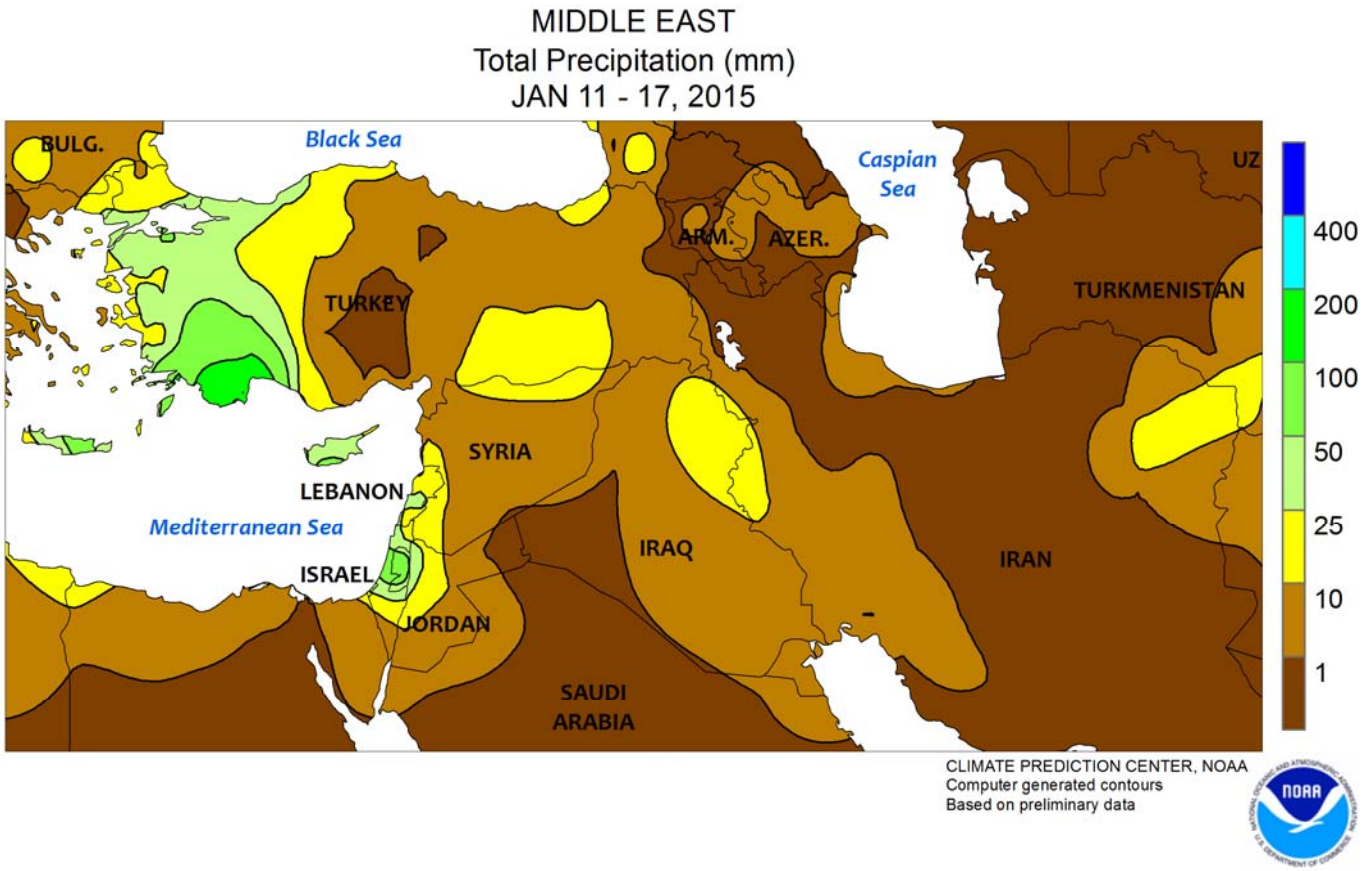
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Warmer weather coupled with rain melted the protective snowpack in western and southern portions of the region, while a fresh snowfall blanketed dormant winter wheat in central Russia. Across central Ukraine and southern Russia, above-normal temperatures (4-10°C above normal) as well as early-week rain melted much of the protective snow cover, though nighttime temperatures did not drop low enough to pose a risk to exposed winter wheat. Meanwhile, early-week snow increased the insulation for dormant winter crops from eastern Ukraine into the northern Southern District as well as southern portions of the Central and Volga Districts (snow depths averaging 15-30 cm). Here, too, temperatures moderated as the week progressed, with no risk for winterkill. The precipitation (10-35 mm liquid equivalent) also increased moisture reserves following a dry autumn.

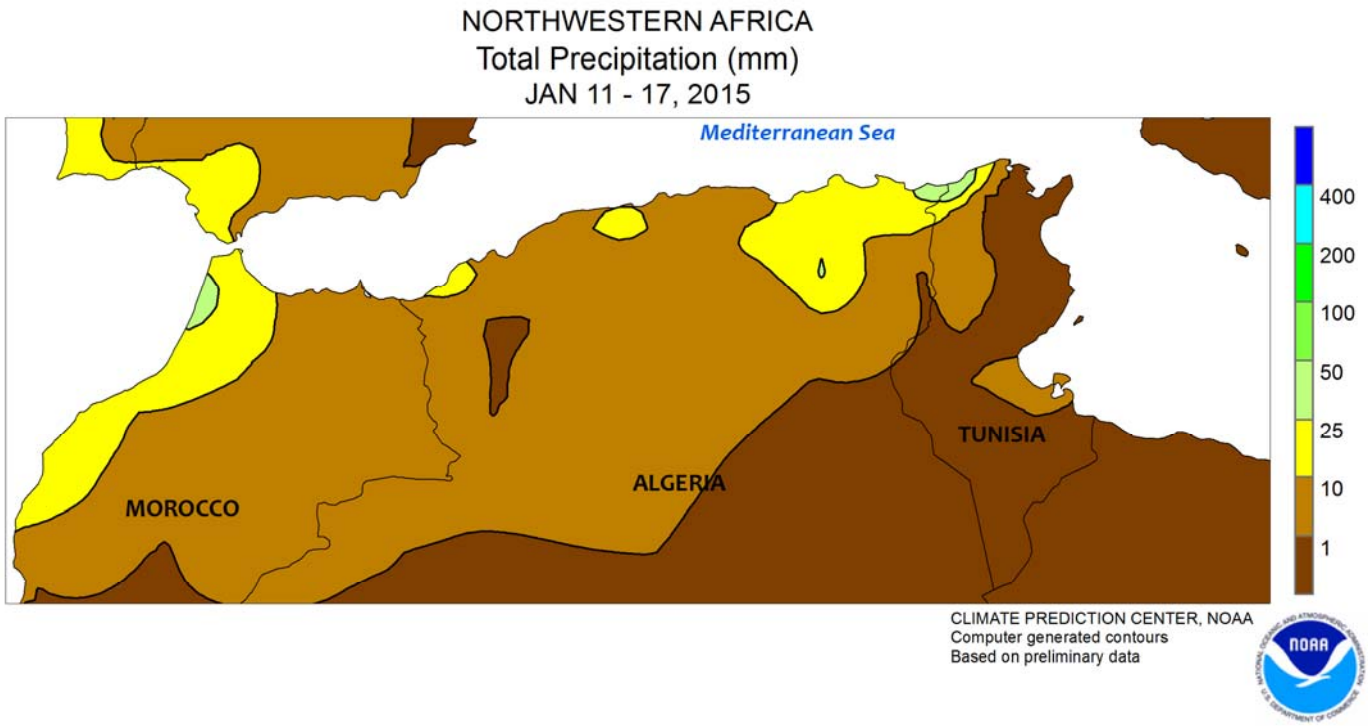
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

A slow-moving storm system generated additional rain and snow over northern and central growing areas, while drier weather returned to eastern portions of the region. Precipitation totaled 10 to locally more than 100 mm (liquid equivalent) over much of Turkey and the eastern Mediterranean Coast, boosting moisture reserves for dormant (north) to vegetative (south) winter grains. In Turkey, a moderate to deep snowpack (5-30 cm) persisted on the typically colder Anatolian Plateau, providing adequate insulation against any potential incursions of bitter cold. Farther east, variable amounts of rain and mountain snow (1-20 mm liquid equivalent) across northern Iraq and neighboring portions of western Iran maintained good to excellent prospects for winter wheat and barley. The remainder of Iran was dry and warm, with temperatures up to 7°C above normal reducing winter crop cold hardiness in the north and encouraging additional wheat and barley development in the south.

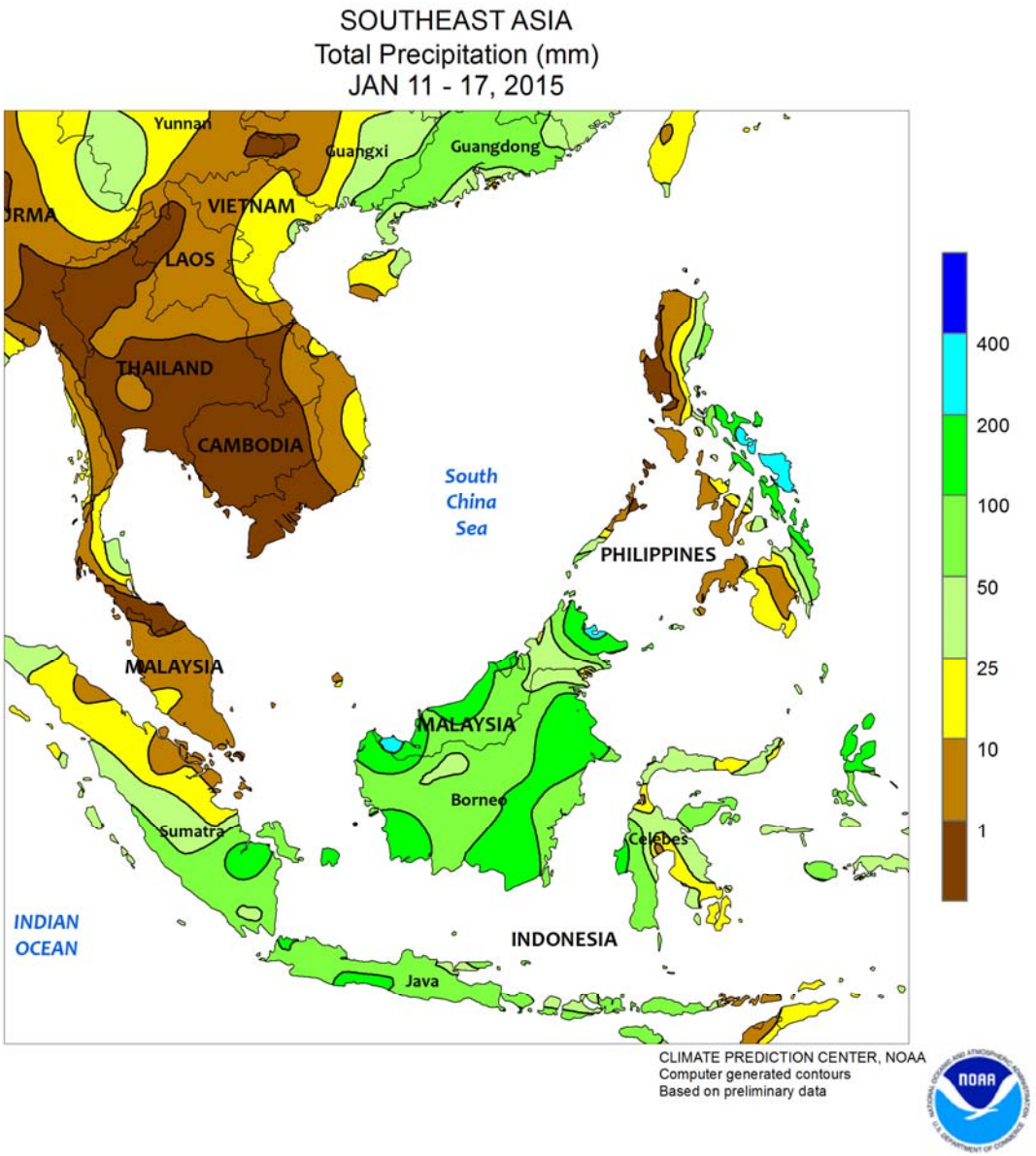
For additional information contact: mbrusberg@oce.usda.gov



NORTHWESTERN AFRICA

Sunny skies and near- to above-normal temperatures promoted winter grain growth before clouds and showers returned at week's end. For most of the period, dry, warm weather (20°C or greater) promoted fieldwork and accelerated crop development. However, a late-week cold front signaled a change in the weather pattern, with 5 to 25 mm of rain (locally more) falling from northern Morocco into Algeria and Tunisia. As the period ended, rain was expanding eastward across northern Africa, ending a month-long stretch of dry weather. Overall, conditions in the west remained excellent, while satellite-derived vegetation health imagery showed lingering crop stress in the east where autumn dryness was most pronounced.

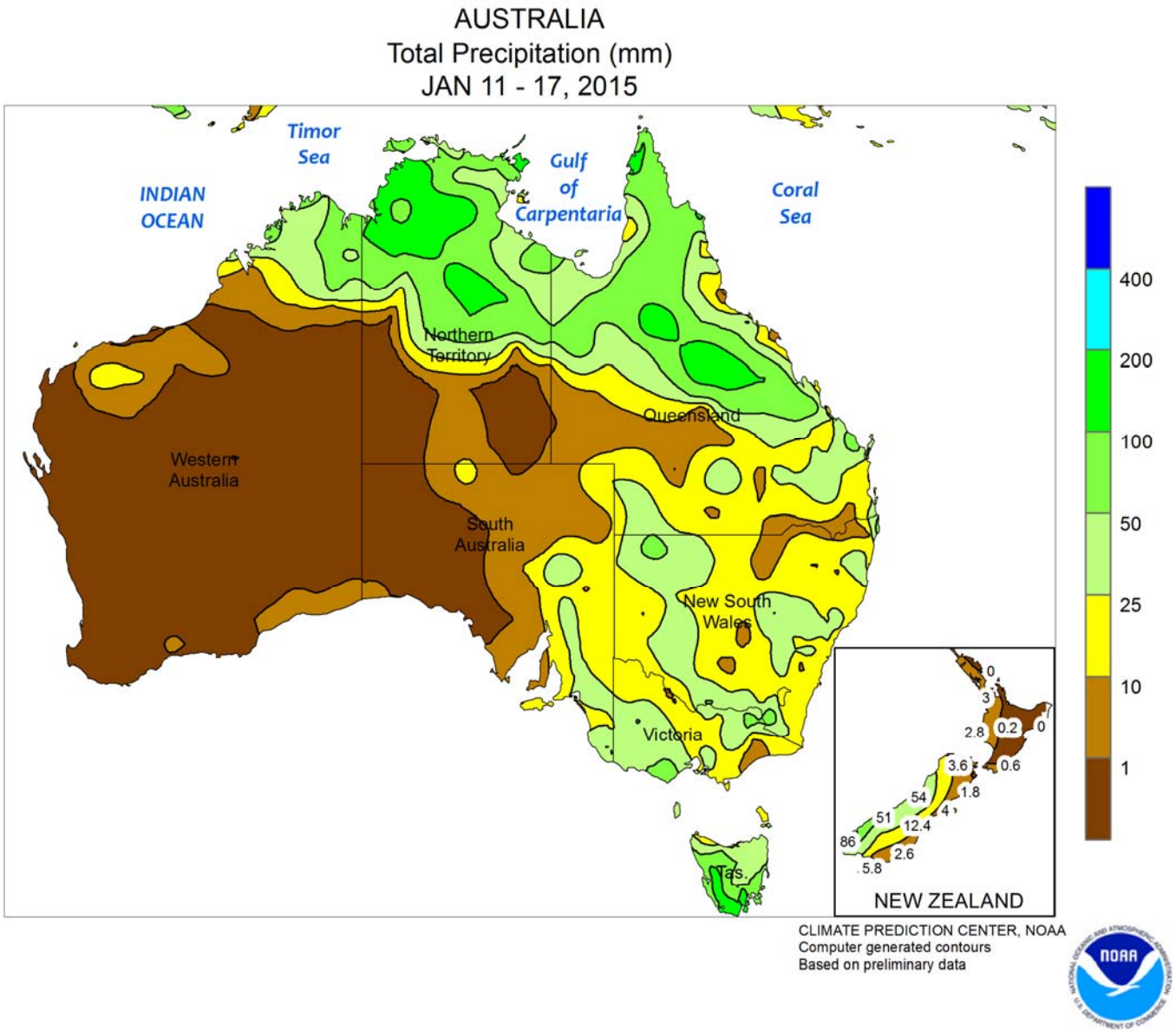
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

A rare January typhoon made landfall in the eastern Philippines late in the period. Typhoon Mekkhala made landfall in the Eastern Visayas of the Philippines with winds in excess of 70 knots (category 1 typhoon), near where Super Typhoon Hagupit came ashore in early December 2014. Mekkhala weakened rapidly as it tracked northward into Luzon and dissipated. Weekly rainfall totals as a result of the storm exceeded 300 mm from the Eastern Visayas to the Bicol Region of southern Luzon. Storm related damage to rice and corn was likely minor, as was the case with Hagupit. The remainder of the Philippines experienced more seasonable rainfall (25-100 mm) for the week. Meanwhile, heavier showers (25-100 mm) returned to Java, Indonesia, after a brief lull in the rainy season, boosting moisture supplies for rice. Rainfall eased in oil palm areas of Peninsular Malaysia, following over 2,000 mm of rain in a 4-week period. And while the drier conditions allowed harvesting to resume across western portions of Malaysia, locally heavy rainfall (100-200 mm) in eastern Malaysia and key areas of Indonesia slowed harvesting.

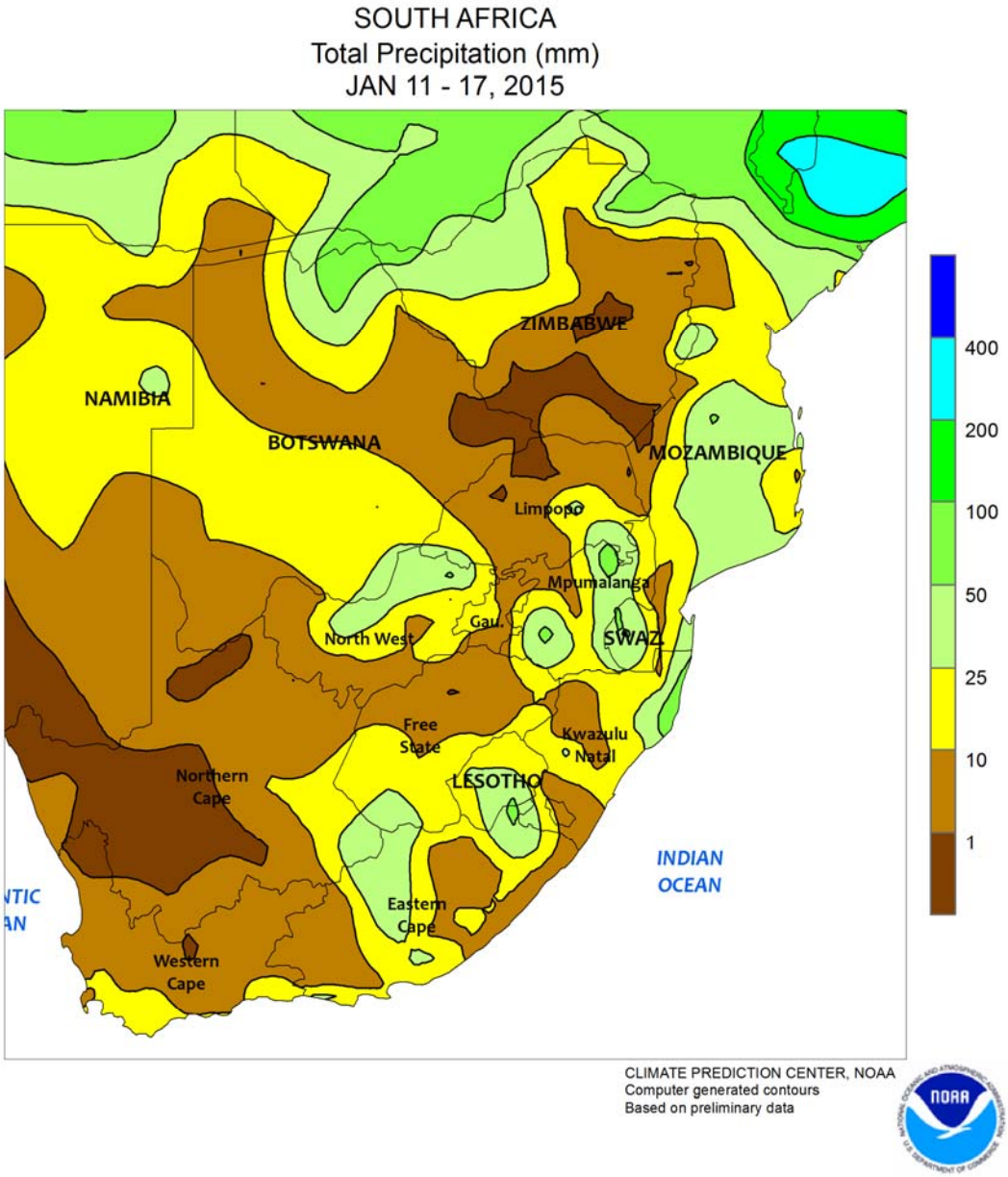
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

Following last week's lull, showers (5-25 mm, locally more) returned to major summer crop producing areas in northern New South Wales and southern Queensland. The rain maintained adequate moisture supplies for cotton, sorghum, and other summer crops. Sunny, very warm weather during the latter half of the week spurred growth, further benefiting vegetative to reproductive summer crops. Temperatures averaged near normal for the week, with maximum temperatures in the 30s degrees C.

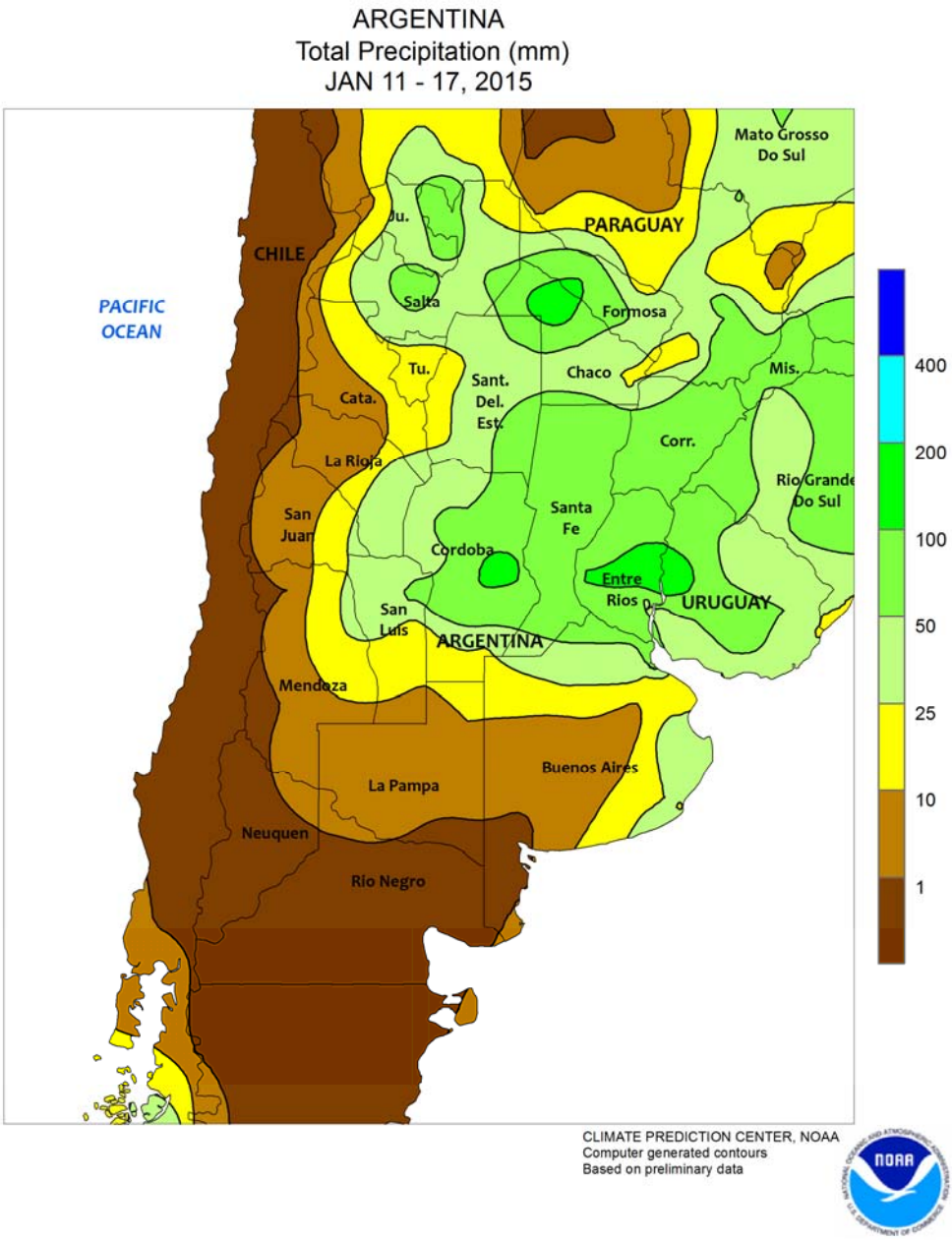
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Warm, showery weather continued across most of the corn belt. Rainfall totaling 10 to 25 mm provided timely moisture for reproductive corn in the east (notably Mpumalanga), although several days of unseasonable warmth (daytime highs reaching 30°C) sustained high crop moisture demands. Similar conditions prevailed in central and western farming areas, as well as Limpopo, with daytime highs reaching the middle 30s in some locations. Although the rainfall was timely, additional rain was needed throughout the region for later-planted crops approaching reproduction. Elsewhere, locally heavy rain (greater than 25 mm) increased irrigation reserves for sugarcane in northern KwaZulu-Natal and eastern Mpumalanga; lighter amounts (3-25 mm) were recorded in rain-fed sugarcane areas of southern KwaZulu-Natal. Meanwhile, light to moderate showers (5-45 mm) swept across the Cape Provinces, increasing irrigation reserves for summer row crops in the Orange Valley, and tree and vine crops in Western Cape.

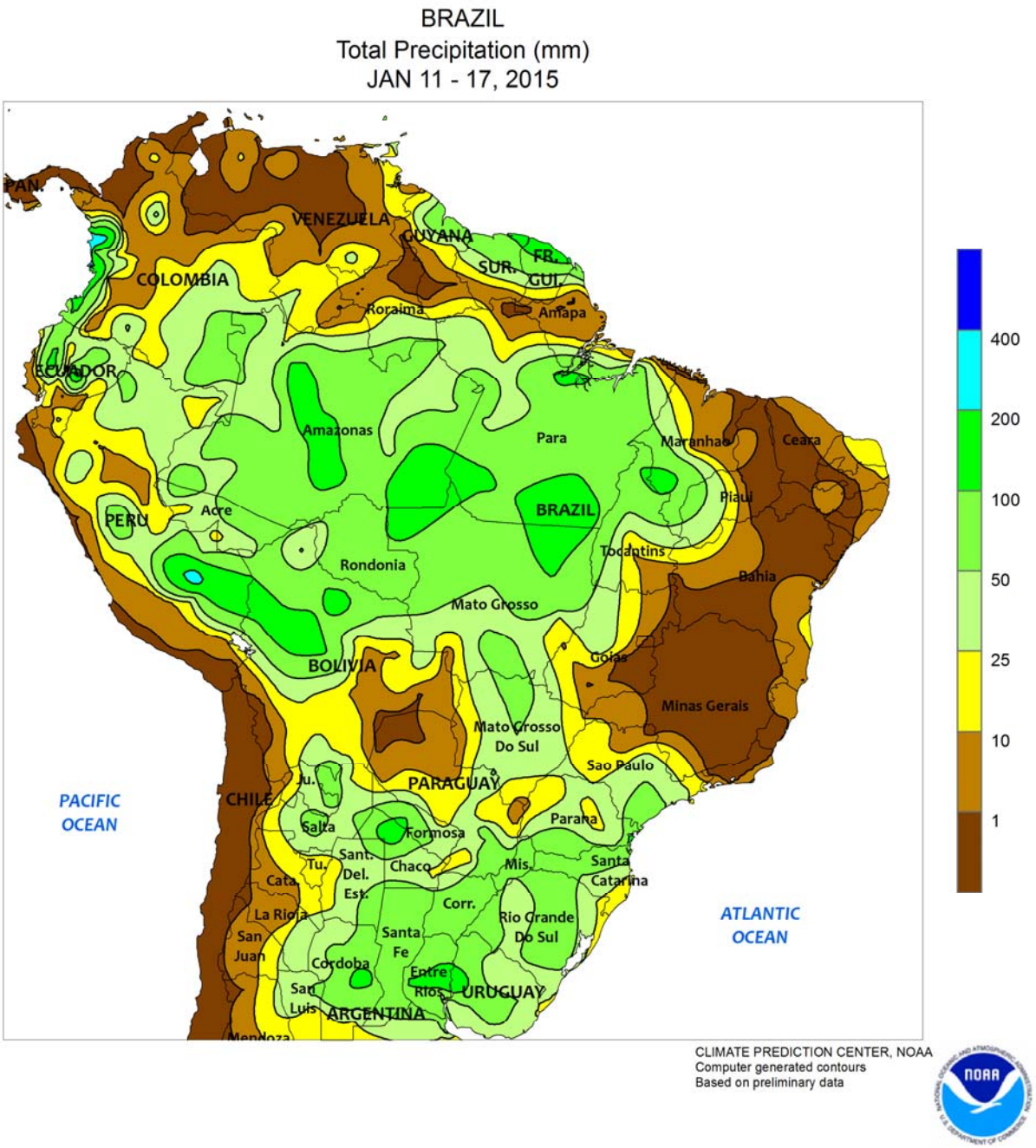
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Rain intensified in recently dry western production areas, improving conditions for corn and soybeans at various stages of development. Rainfall totaled more than 50 mm over much of Cordoba, one of Argentina's largest producers of corn and soybeans, and in northwestern production areas in and around Salta; both of these areas experienced periods of sporadic rainfall until recently, making the moisture particularly timely. Farther east, rainfall totaling 50 to 100 mm maintained abundant to locally excessive levels of moisture for summer grains, oilseeds, and cotton from northern Buenos Aires northward to Formosa and Misiones. Meanwhile, drier conditions continued in La Pampa and southern Buenos Aires, continuing the recent drying trend that reduced moisture for corn and soybeans while aiding the final stages of winter grain harvesting. Weekly temperatures averaged near to above normal throughout the region. Daytime highs reached the lower and middle 30s (degrees C) in most of central Argentina on several days, with temperatures briefly reaching 40°C in sections of La Pampa. Hot weather also affected the north (notably Santiago del Estero, Chaco, and Formosa). According to Argentina's Ministry of Agriculture, corn was 88 percent planted as of January 15, on par with last year's pace. Soybeans were 95 percent planted, 3 points ahead of last year. Wheat was 100 percent harvested.

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

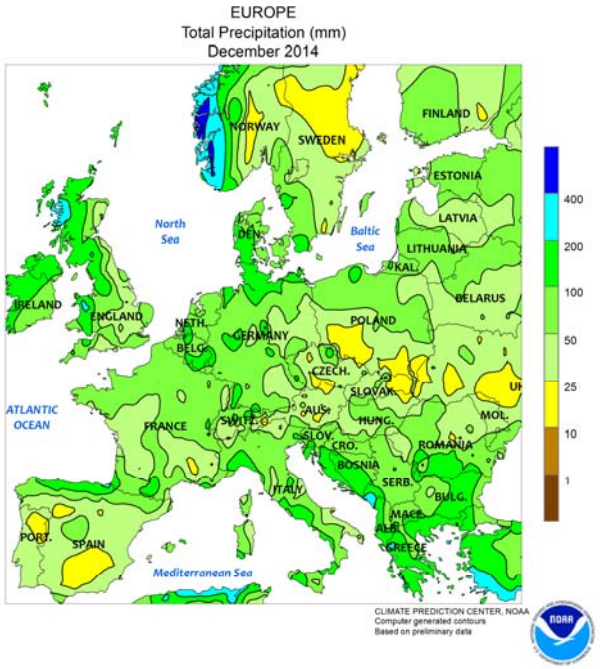


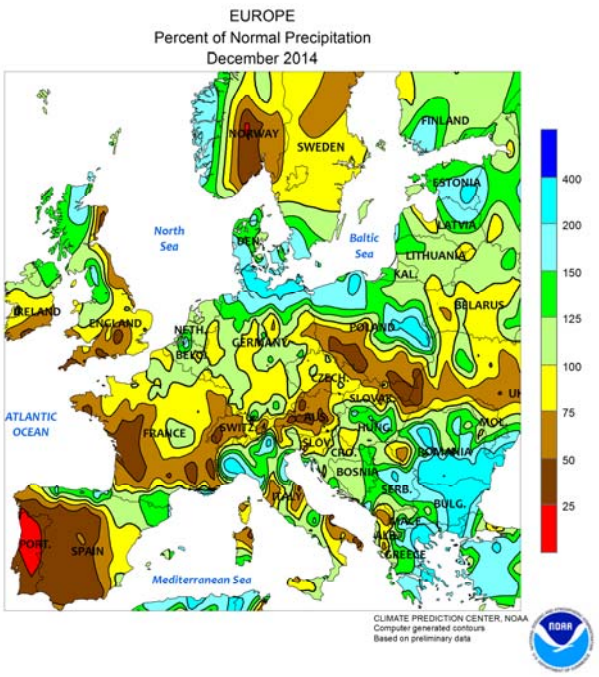
BRAZIL

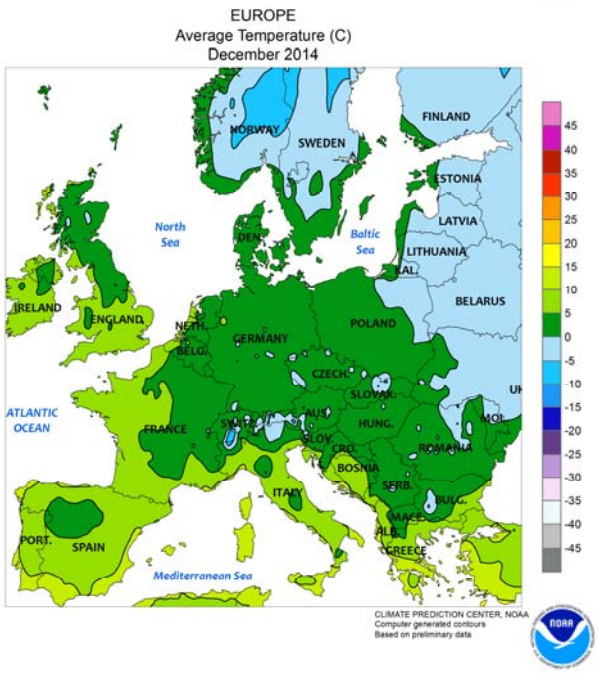
Dry weather dominated a large section of northeastern Brazil, extending westward toward the soybean belt. Little to no rain fell from the eastern coast — including coffee areas of Espirito Santo — to Goias, which lies at the eastern edge of the main soybean areas of the Center-West agricultural region. The dryness also extended into Sao Paulo's northern sugarcane areas, which have experienced sporadic rainfall for much of the current growing season. Similarly, drier-than-normal weather (rainfall totaling less than 10 mm) continued for a third week in western Bahia and nearby sections of Tocantins and Piaui. Weekly temperatures averaged 2 to 5°C above normal in the aforementioned areas, with daytime highs reaching into the middle 30s (degrees C) on multiple days, compounding the impacts of the dryness on soybeans, coffee, and other regionally important summer crops. Meanwhile, seasonal rain (25-75 mm) continued in Brazil's main soybean areas (Mato Grosso southward through Rio Grande do Sul), which historically account for about 80 percent of the total national production. Weekly temperatures averaged several degrees C above normal, with daytime highs reaching the middle 30s in Mato Grosso and the lower 30s farther south. Conditions are overall favorable for crops in Brazil's more westerly and southerly farming areas.

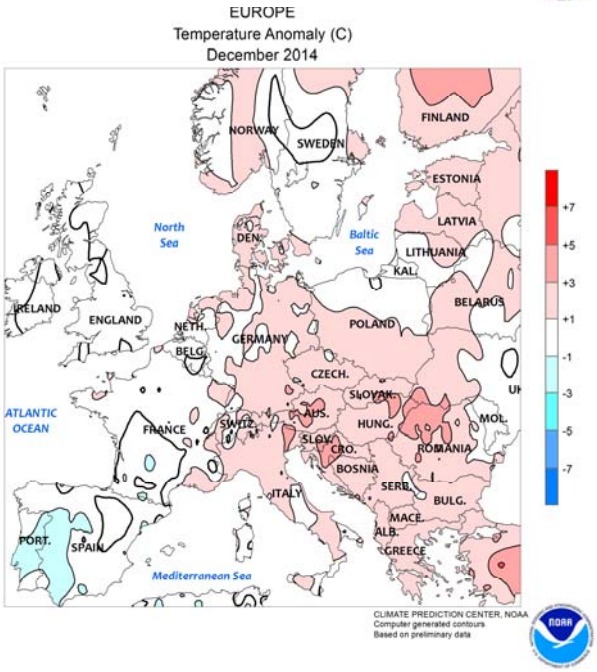
For additional information contact: mbrusberg@oce.usda.gov

December International Temperature and Precipitation Maps



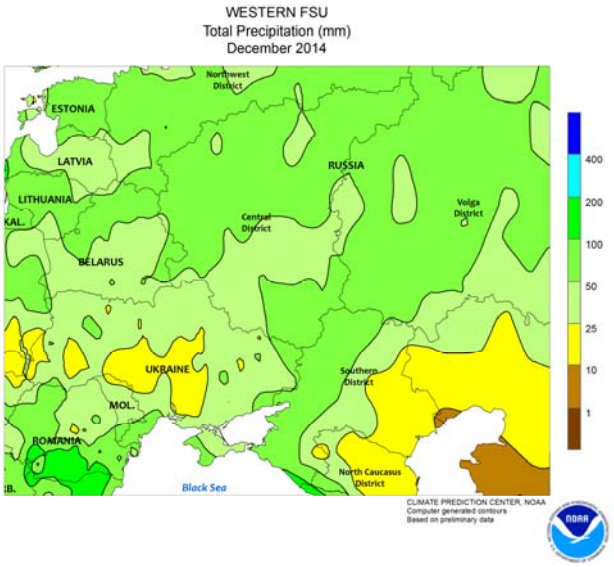


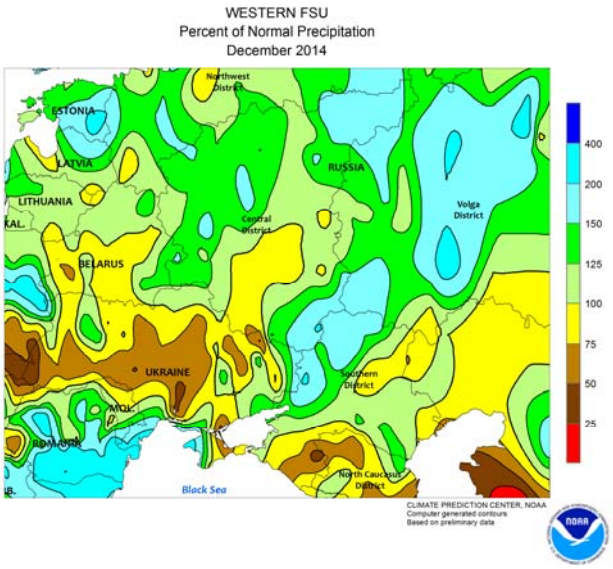


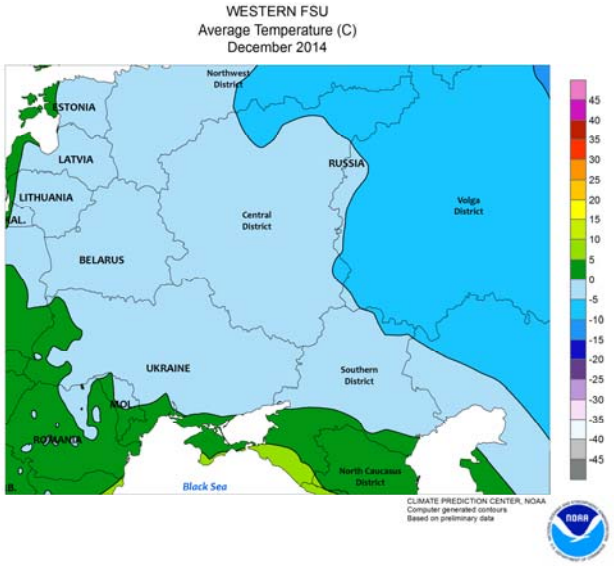


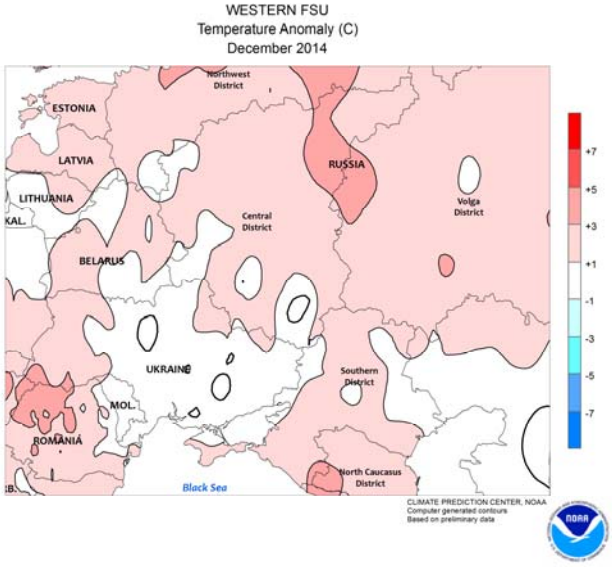
EUROPE

Above-normal temperatures and precipitation maintained favorable conditions for winter crops over much of Europe. Periods of moderate to heavy rain boosted moisture reserves for dormant winter wheat and rapeseed from northern France into Poland and the Balkans. Precipitation was heaviest in the lower Danube River Valley, with totals locally in excess of 150 mm (more than 300 percent of normal). In addition, persistent warmth (1-4°C above normal) minimized the risk for freeze damage from Germany into eastern Europe. Meanwhile, rain and mountain snow further increased soil moisture and irrigation reserves in Italy. Despite the overall wet weather pattern, dry albeit cool conditions in Spain reduced soil moisture for winter wheat and barley, though crop prospects remained promising after a good start to the 2014-15 winter wet season.



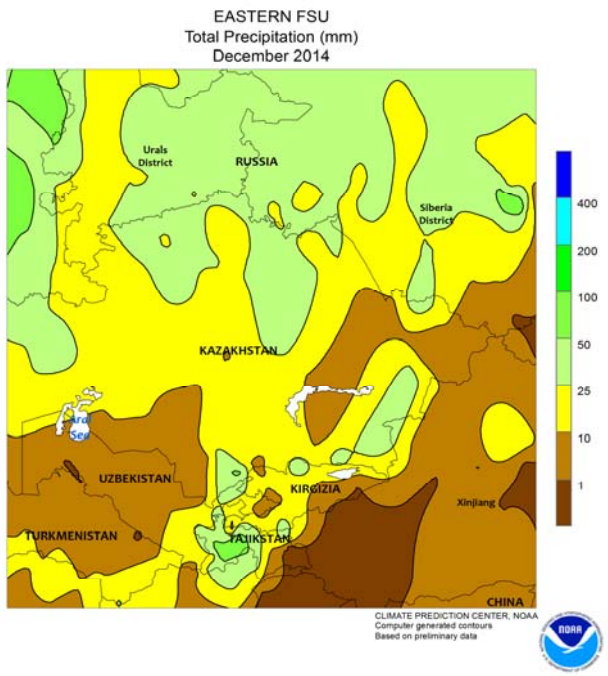


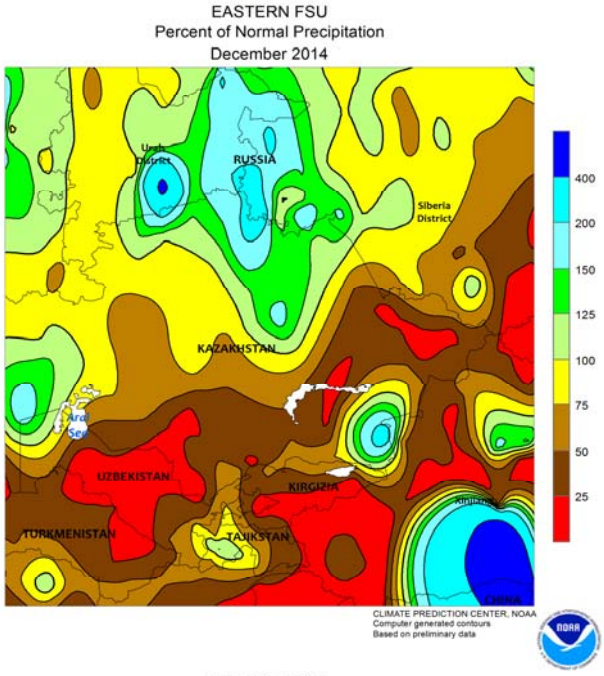


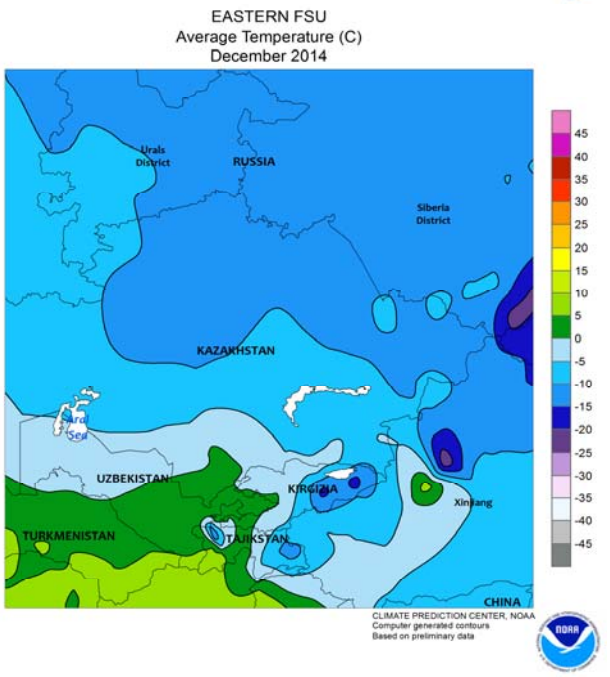


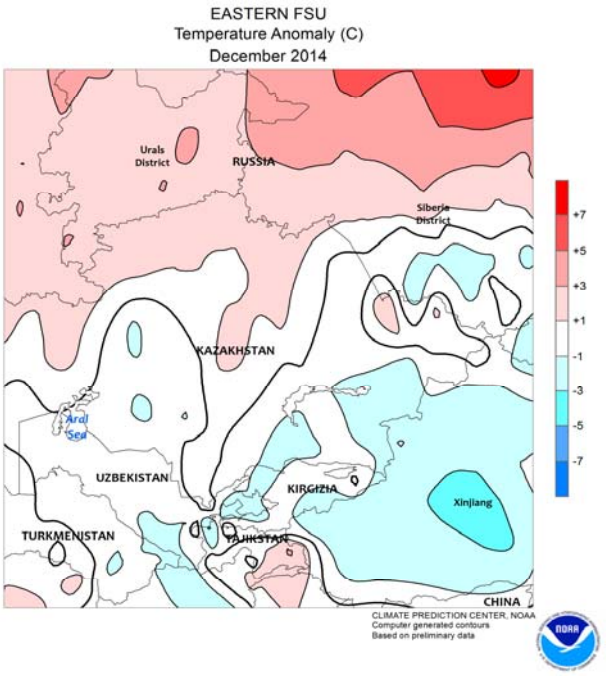
WESTERN FSU

Near- to above-normal temperatures and precipitation maintained good conditions for dormant winter grains over much of the region. From eastern Ukraine into central Russia, 50 to 70 mm of precipitation (much of which fell as snow) improved soil moisture reserves in areas impacted by autumn drought. In addition, crops were protected from bitter cold (-20°C or lower) at the end of December by a moderate to deep snowpack, reducing the risk for winterkill. However, snow cover was shallow and patchy in north-central Ukraine, leaving crops exposed to the elements. In addition, many of the wheat areas of central and northern Ukraine remained unfavorably dry, exacerbating soil moisture losses brought on by a drier-than-normal fall.



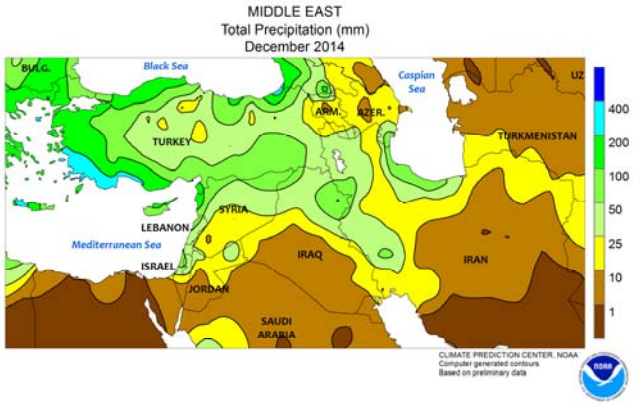


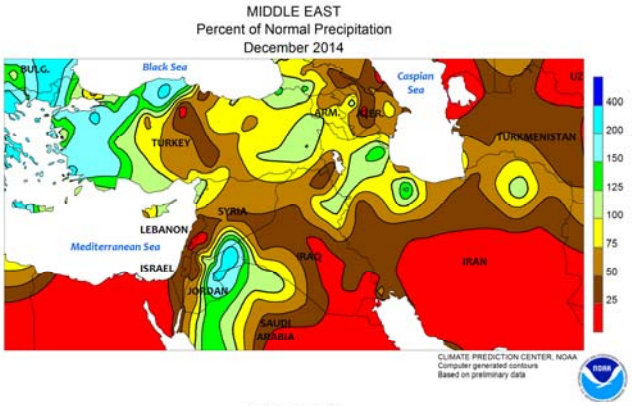


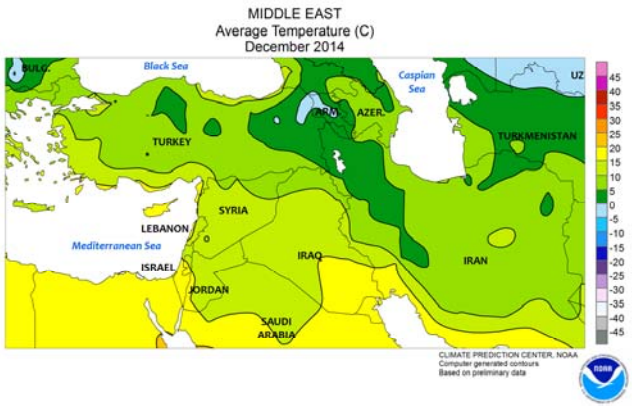


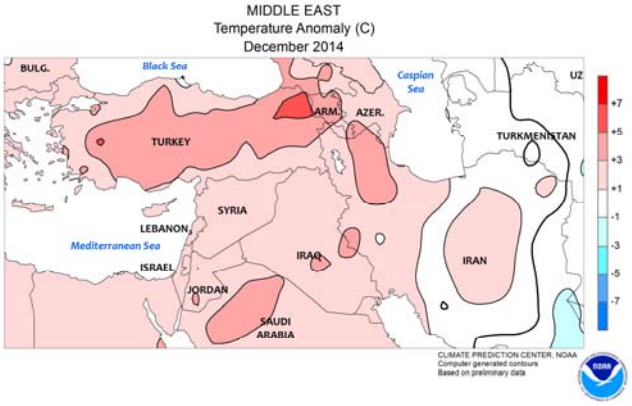
EASTERN FSU

During December, near- to above-normal temperatures and precipitation prevailed across much of the region. Despite the somewhat warmer-than-normal conditions, Kazakhstan and Russia remained encased in a moderate to deep snowpack; agricultural activity in the spring wheat belt is minimal during the winter due to the extreme cold and deep snow cover. In the south, where the harvest of cotton and other summer crops was completed during the autumn, agricultural activity was likewise relatively minor. However, winter wheat in eastern Uzbekistan benefited from light to moderate rain and snow (10-30 mm liquid equivalent).



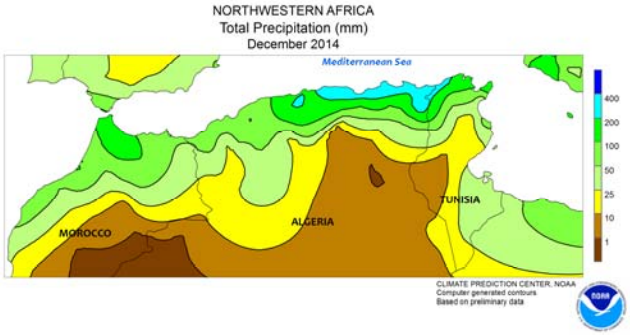


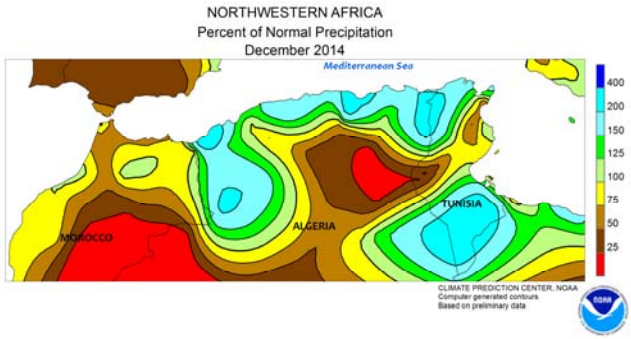


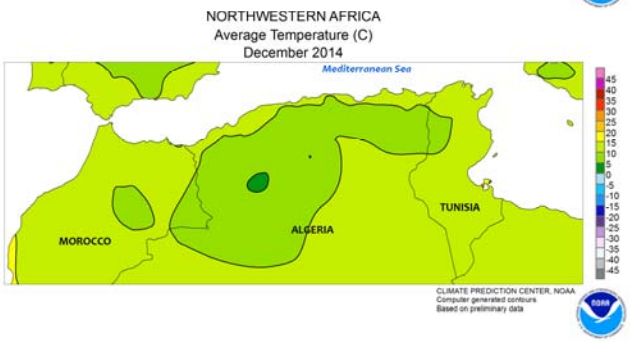


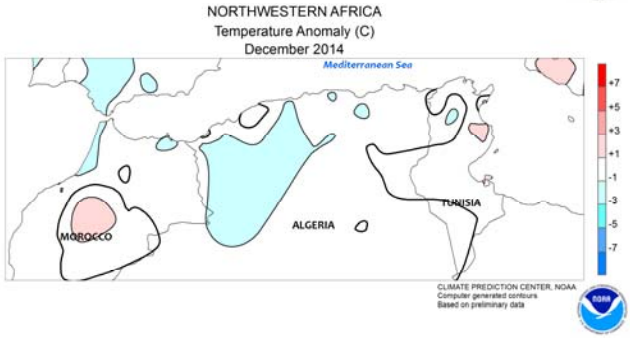
MIDDLE EAST

During December, above-normal temperatures and precipitation maintained the favorable start to the 2014-15 growing campaign for winter wheat and barley over much of the region. Precipitation was heaviest (100 mm or more liquid equivalent) over western and southern Turkey, the eastern Mediterranean Coast, and in northeastern Iraq. Pockets of drier weather were noted in central Turkey and southwestern Iran, though season-to-date precipitation in these locales remained adequate for crop development. Temperatures averaged up to 5°C above normal, and winter crops in only the coldest northern locales were likely dormant.



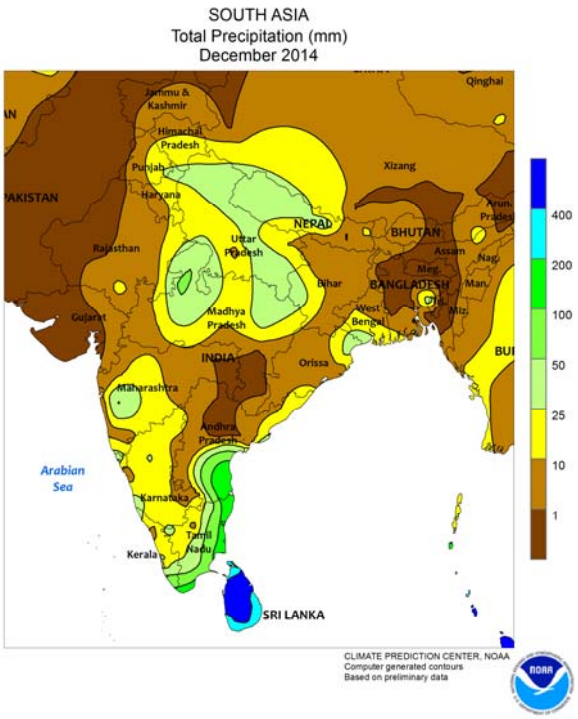


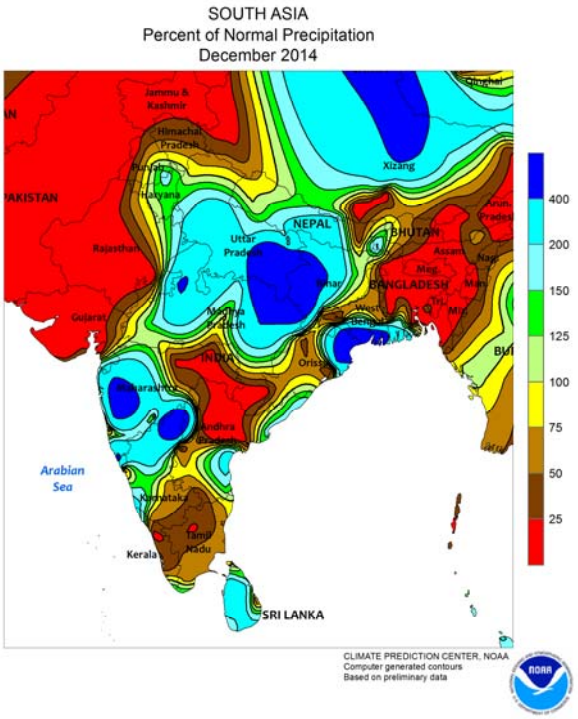


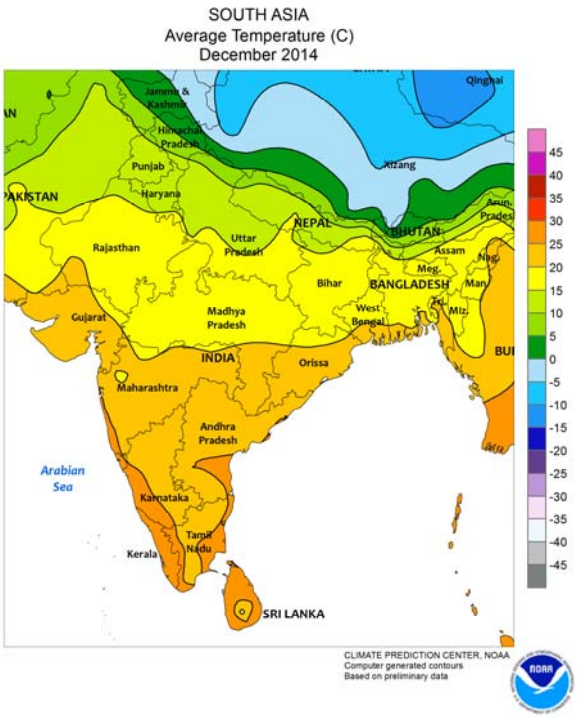


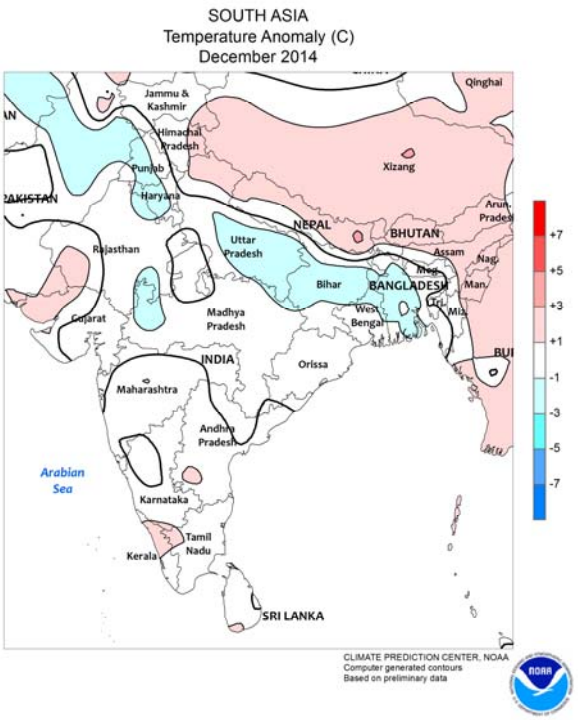
NORTHWESTERN AFRICA

Widespread rain during December boosted soil moisture for winter grain growth and eased concerns over short-term dryness in Algeria and Tunisia. Rainfall was heavy (100-300 mm, locally more) in eastern growing areas, where autumn dryness resulted in poor conditions for crop establishment. In contrast, favorable rainfall (50-150 mm) continued in the west for winter wheat. However, favorably drier weather returned to southern Morocco, following excessive November rainfall.





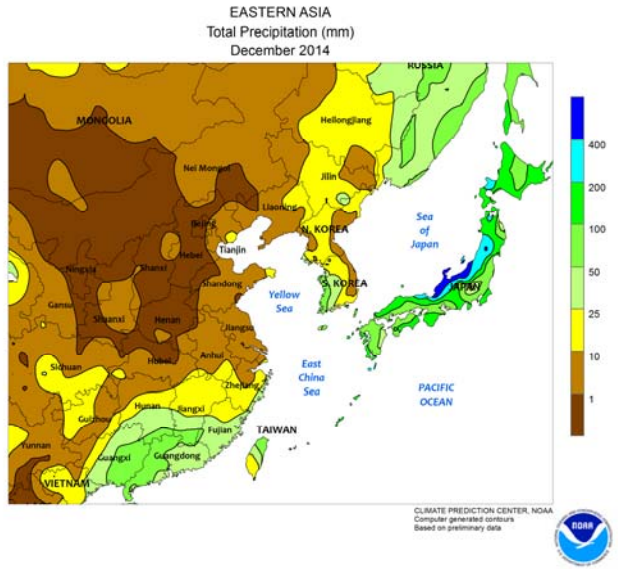


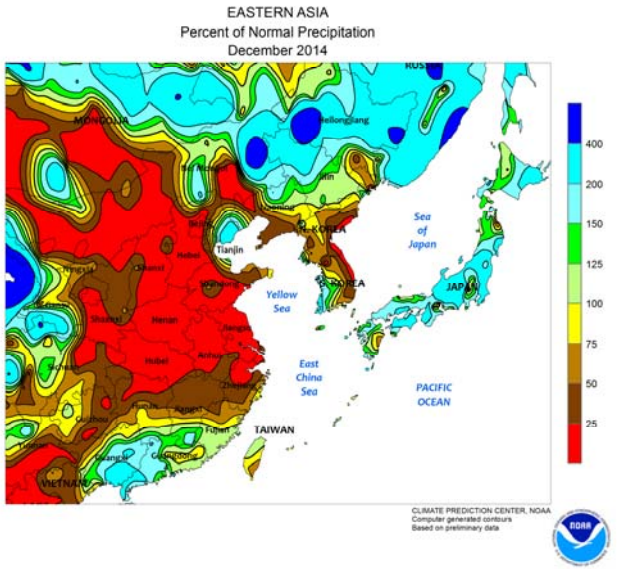


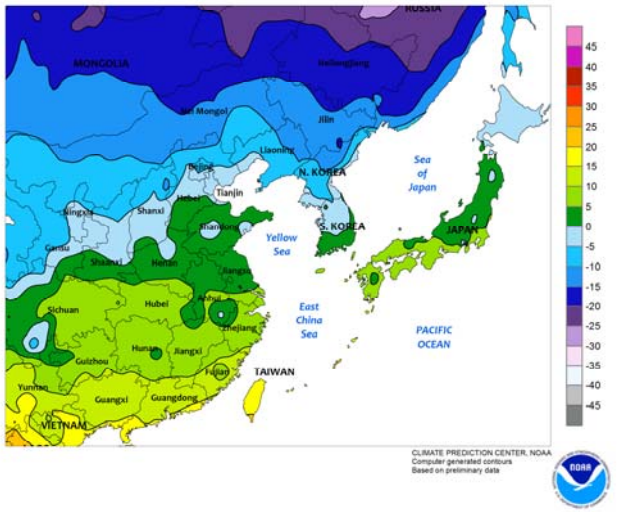
SOUTH ASIA

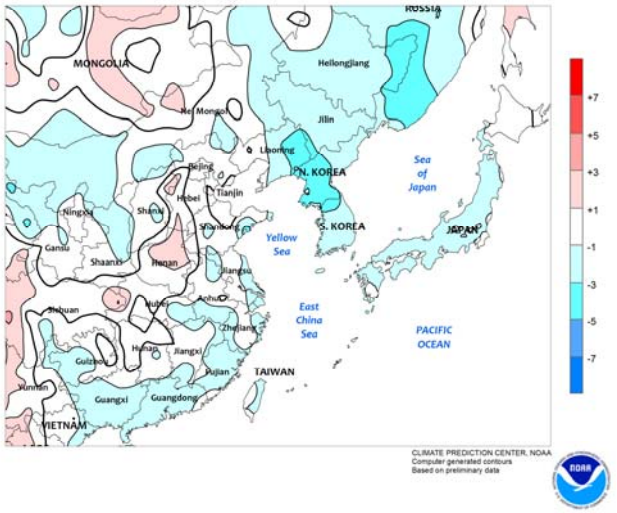
Seasonably dry weather prevailed across much of India during December. However, passing showers around mid-month bolstered favorable moisture conditions for irrigated wheat and rapeseed in the north, while also benefiting other rabi crops in western India. More consistent rainfall was confined to seasonally wetter locations in southern India, where 50 to over 100 mm occurred. Despite the consistency of rainfall in the south, monthly totals (as well as seasonal totals) where below normal, but overall moisture conditions were likely sufficient to meet water requirements for most rabi crops. Meanwhile, near- to slightly below-normal temperatures in the north improved yield prospects for wheat. Elsewhere in the region, well above-normal December rainfall boosted seasonal moisture supplies for rice (maha) in Sri Lanka, which was notably improved over last year at the same time.

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



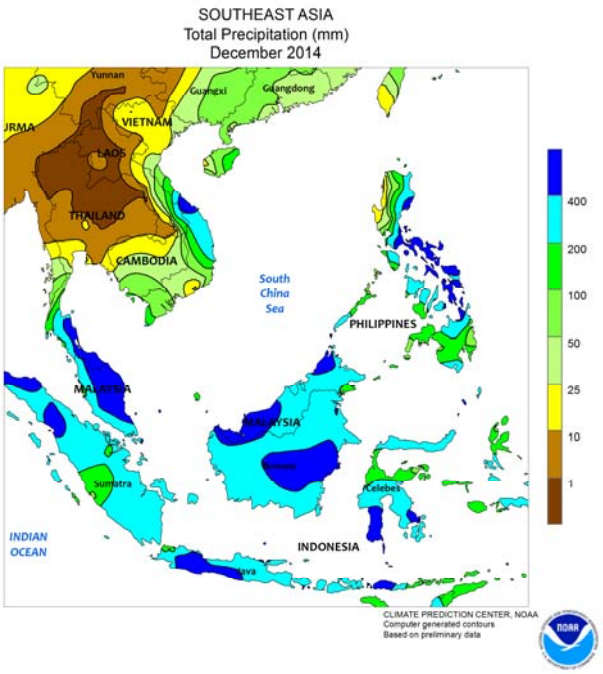


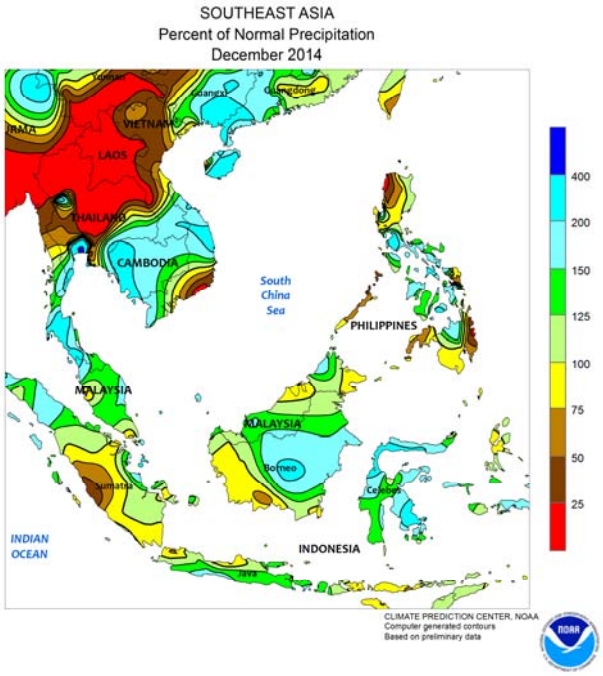


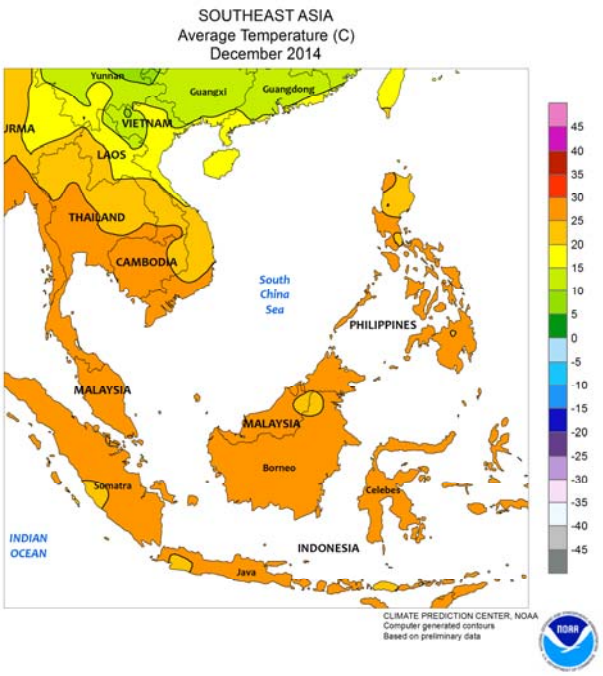


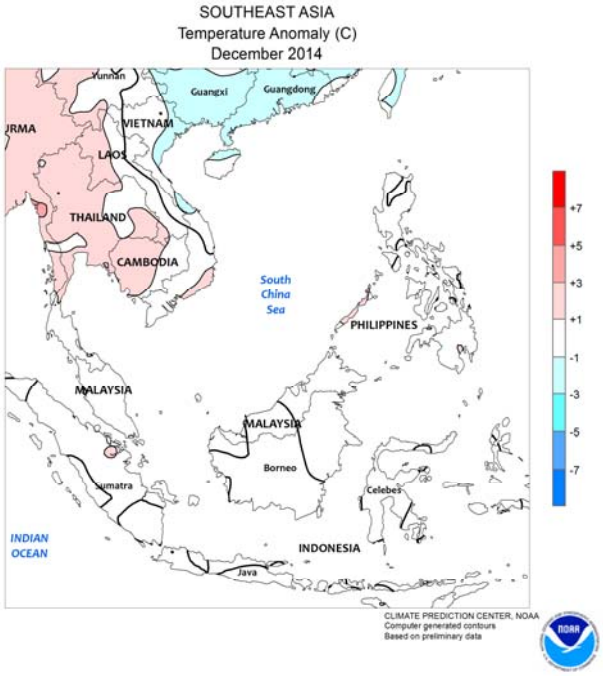
EASTERN ASIA

Seasonably dry weather prevailed across most winter crop areas of China during December, with rainfall generally confined to the typically wetter southern provinces. However, despite the dry weather in key winter crop areas, most crops benefited from good overall seasonal moisture conditions, and with most crops now dormant, water requirements are minimal. The notable exceptions were in northern winter wheat areas (Hebei and Shandong), where seasonal (since October 1) moisture conditions were below normal, necessitating supplemental irrigation to ensure proper crop establishment prior to the crop going dormant; northern wheat entered dormancy in early December. The remainder of the wheat and all of the winter rapeseed benefited from above-normal seasonal rainfall. Meanwhile, after a cold start to the month, temperatures averaged nearly 6°C above normal during the latter half.





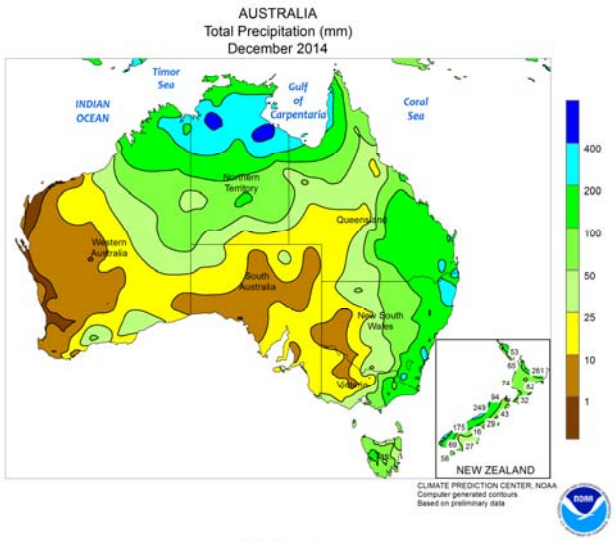


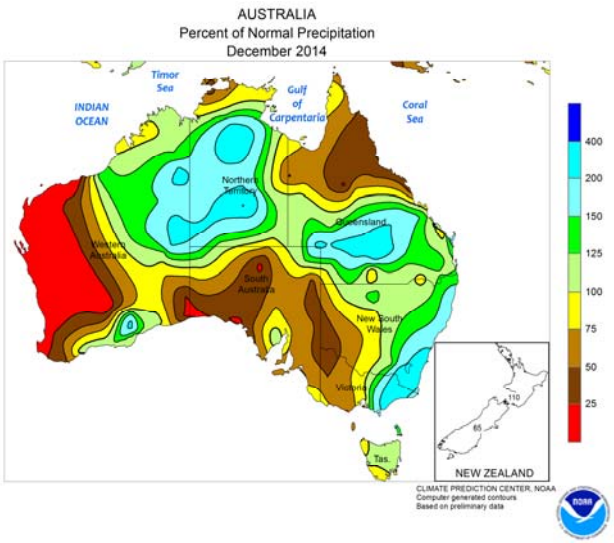


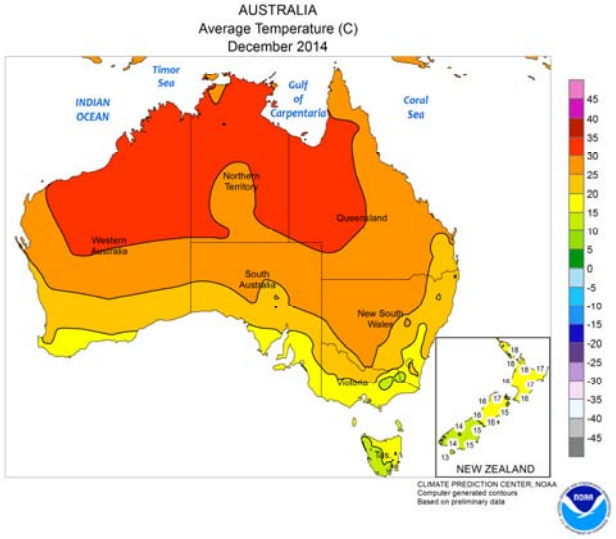
SOUTHEAST ASIA

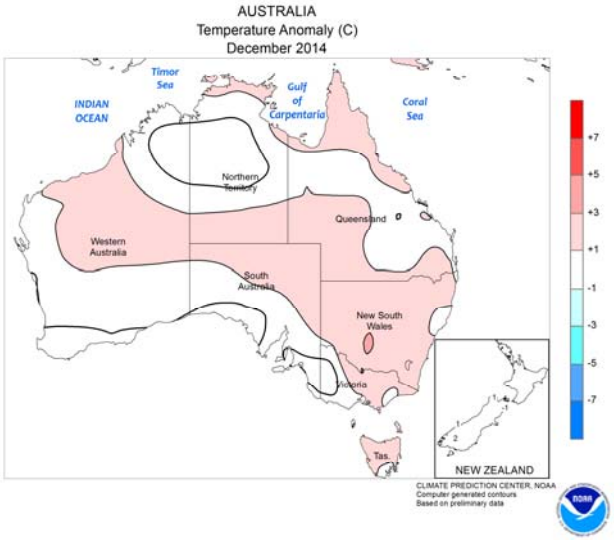
A late-season category 5 tropical cyclone (Hagupit) approached the eastern Philippines early in December. However, Hagupit weakened rapidly prior to making landfall in the Eastern Visayas and most winter-grown rice and corn avoided significant damage; summer rice and corn had been harvested, avoiding damage as well. The storm, along with a strong northeastern monsoon, ensured above-normal rainfall for most of the Philippines, favoring winter rice and corn, with similar conditions occurring in minor agricultural areas of central Vietnam (where Hagupit dissipated). Meanwhile in Java, Indonesia, consistent showers through December resulted in all major rice producing areas receiving normal- to above-normal rainfall, improving rice prospects. In Malaysia, oil palm harvesting was slowed by flooding rainfall, particularly on the eastern peninsula, where nearly 2,000 mm of rain was reported for the month.

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



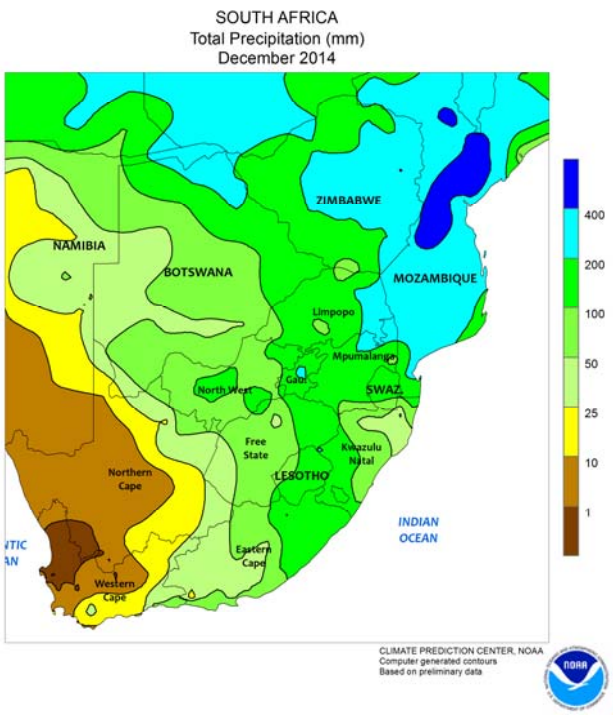


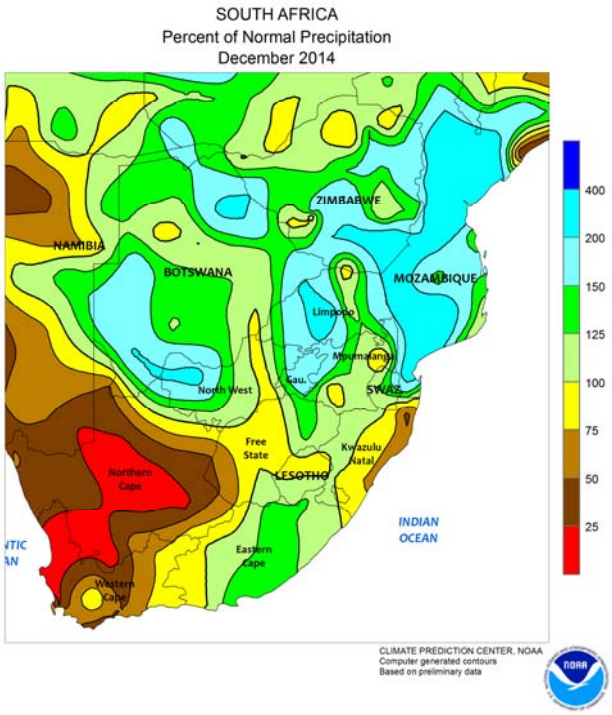


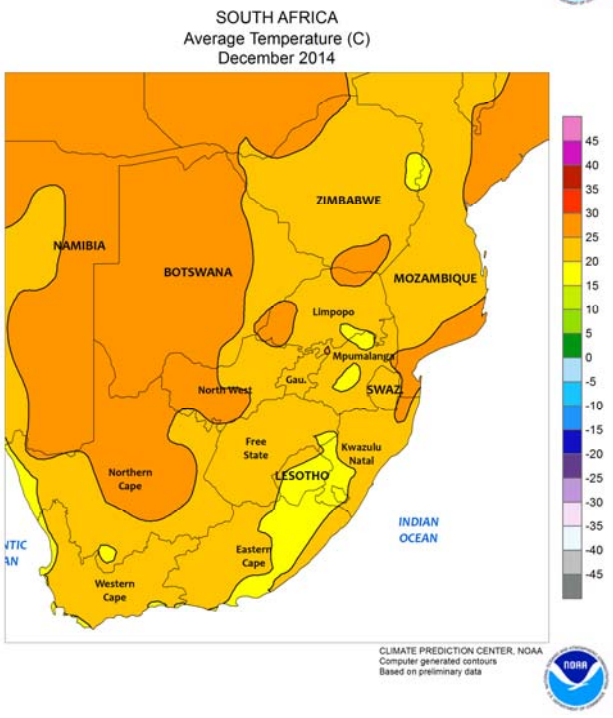


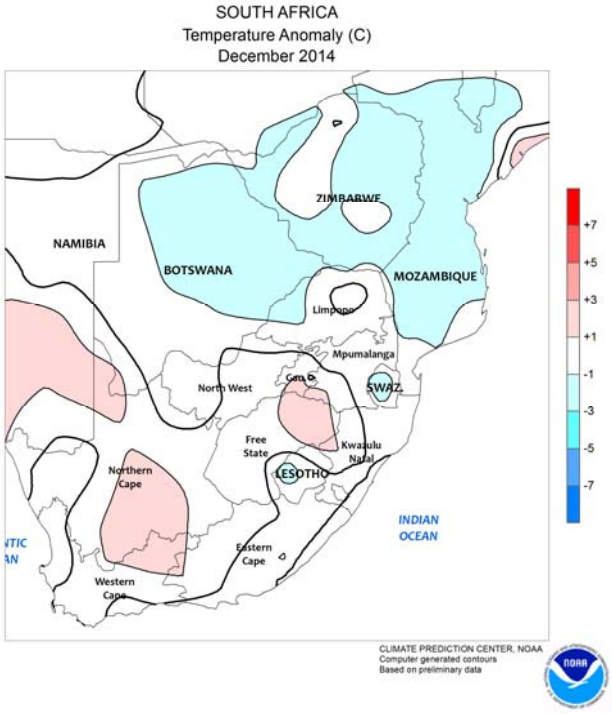
AUSTRALIA

Following an unseasonably hot and dry spring, soaking rains overspread southern Queensland and northern New South Wales during December, improving conditions for cotton and sorghum and increasing yield prospects. In southeastern and western Australia, very warm, mostly dry weather favored final wheat, barley, and canola harvesting.



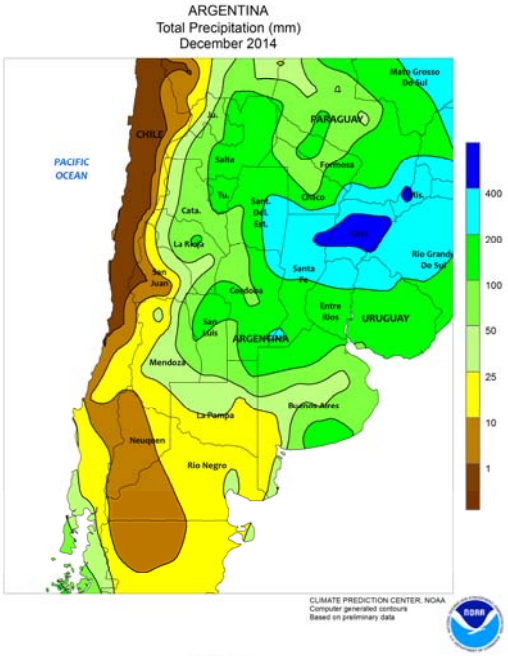


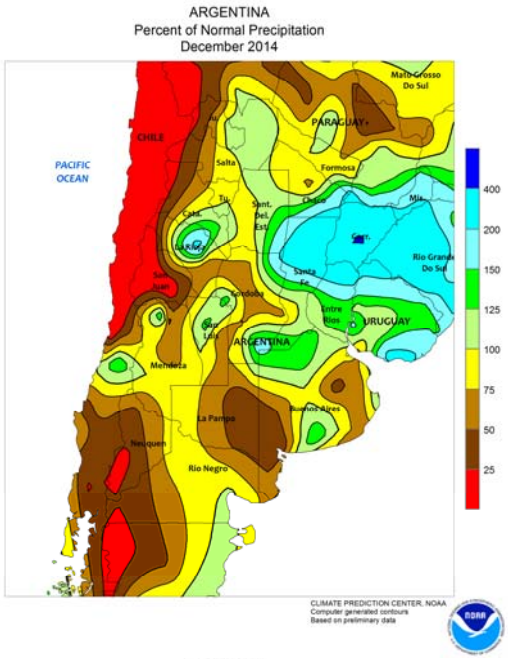


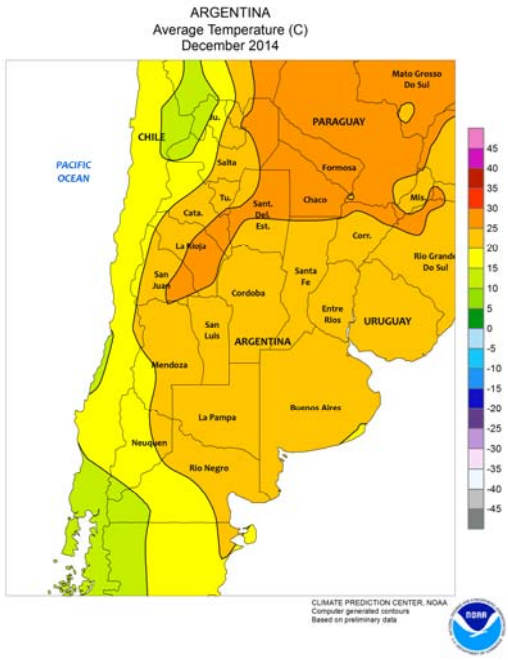


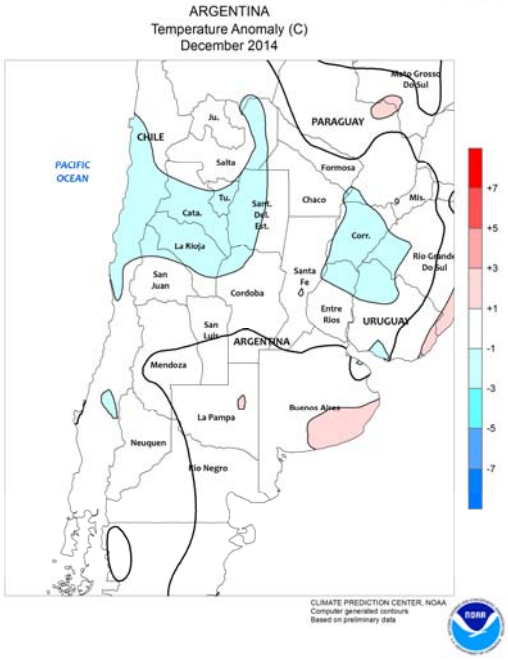
SOUTH AFRICA

During December, frequent, occasionally heavy rain improved prospects of rain-fed summer crops across the corn belt. Most of the area recorded rainfall in excess of 100 mm, with somewhat lower amounts in traditionally drier western production areas of North West and Free State. Some of the heaviest rain (greater than 200 mm) was concentrated along the Limpopo River, likely causing some flooding. Monthly average temperatures were near to slightly below normal in northern and eastern sections of the corn belt and up to 3°C above normal in the west, where daytime highs occasionally reached the upper 30s (degrees C). Elsewhere, unseasonable dryness prevailed for much of the month in southern KwaZulu-Natal, further reducing moisture for rain-fed sugarcane; rainfall was also spotty and light in irrigated sugarcane areas of northern KwaZulu-Natal but heavier showers (monthly rainfall totaling more than 100 mm) occurred in eastern Mpumalanga. Locally heavy rain also fell in sections of the Orange River Valley, increasing irrigation reserves for summer row crops, including cotton and corn. Meanwhile, warm, mostly dry weather spurred growth of tree and vine crops in Western Cape.



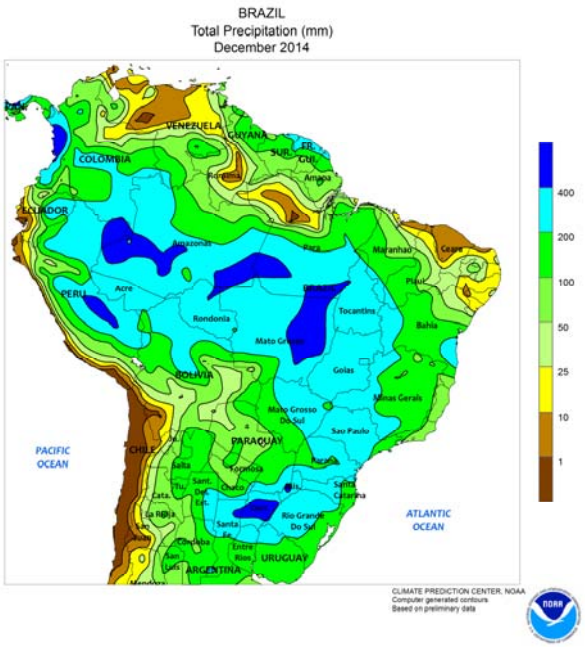


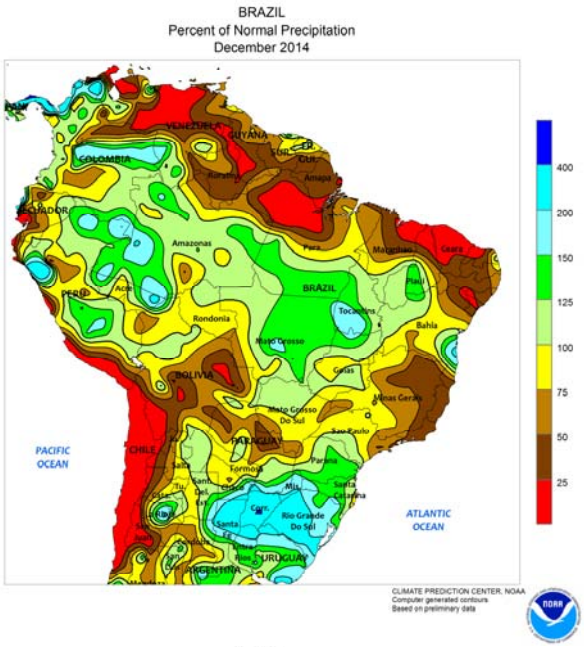


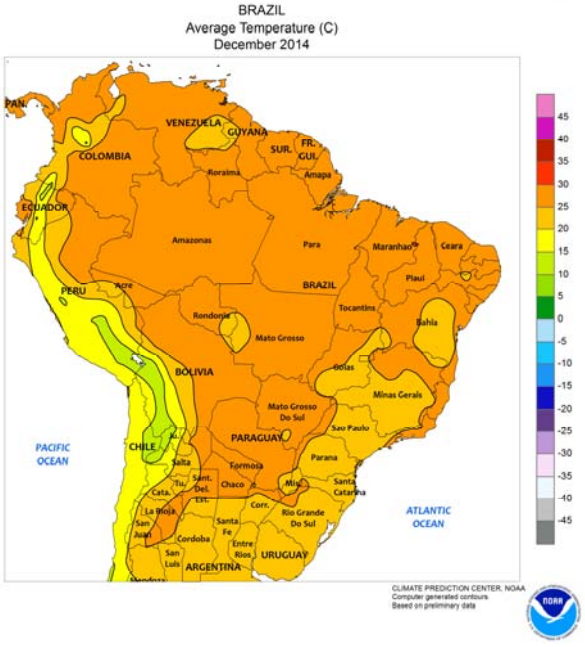


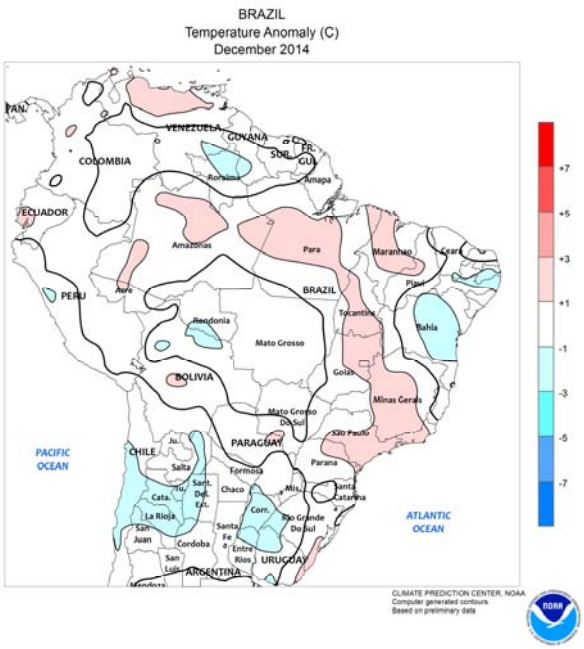
ARGENTINA

In December, frequent, above-normal rainfall renewed fieldwork delays in various northern and eastern farming areas. The heaviest rain (totaling more than 200 mm for the month) was concentrated over the northeast; amounts exceeding 400 mm over northeastern Santa Fe and Corrientes resulted in flooding of low-lying cropland and disrupted the final stages of cotton planting. Heavy rain also fell in key soybean and corn areas of the lower Parana River Valley, with amounts in excess of 200 mm throughout Entre Rios. Otherwise, rainfall was variable throughout central Argentina, with pockets of warmth and dryness in southern sections of La Pampa and Buenos Aires. In Cordoba, an increase in showers at month's end was timely for vegetative to reproductive summer crops after weeks of dryness. Scattered showers also brought some relief to previously-dry northwestern farming areas, spurring late planting of corn and soybeans. December average temperatures were within 1°C of normal, maintaining seasonable levels of crop-water usage. Temperatures reached the middle and upper 30s (degrees C) at times in the southwest (notably La Pampa, western Buenos Aires, and Cordoba) but stressful heat (highs approaching 40°C) was confined to traditionally warmer parts of the northwest.





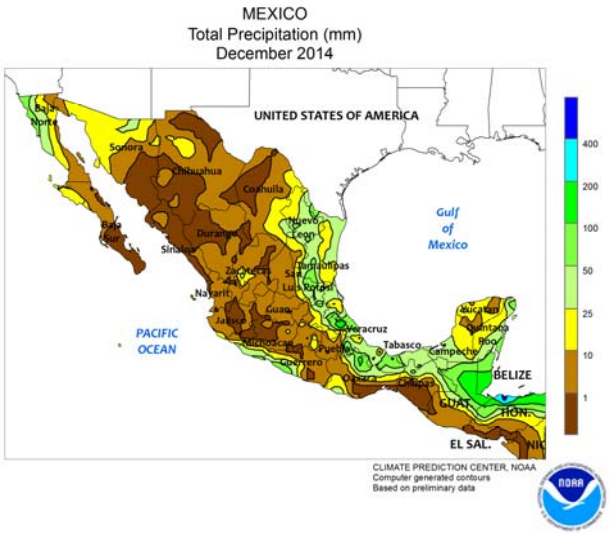


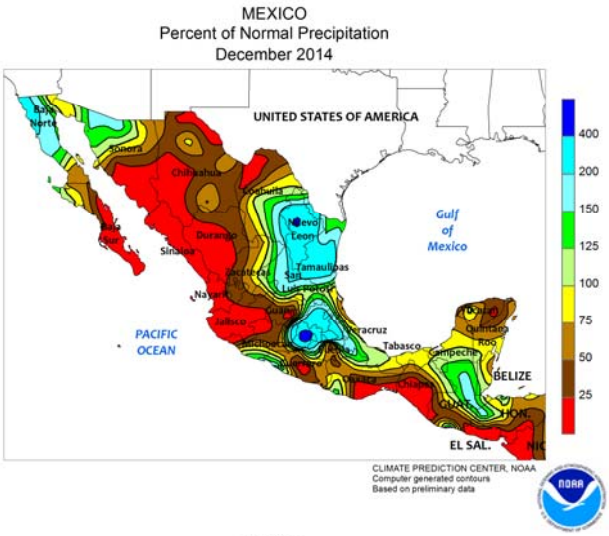


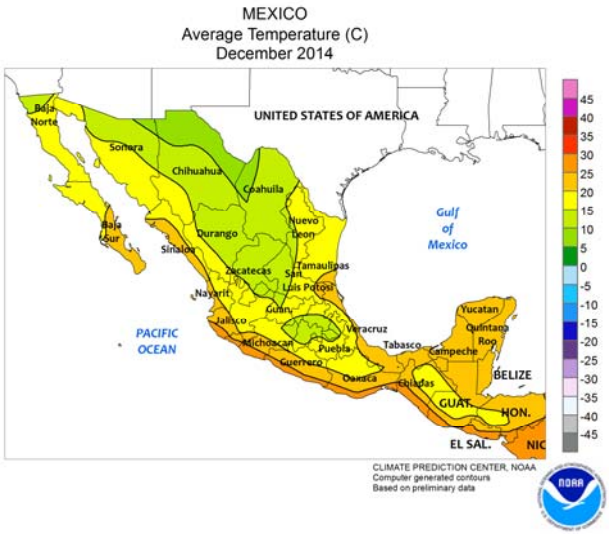
BRAZIL

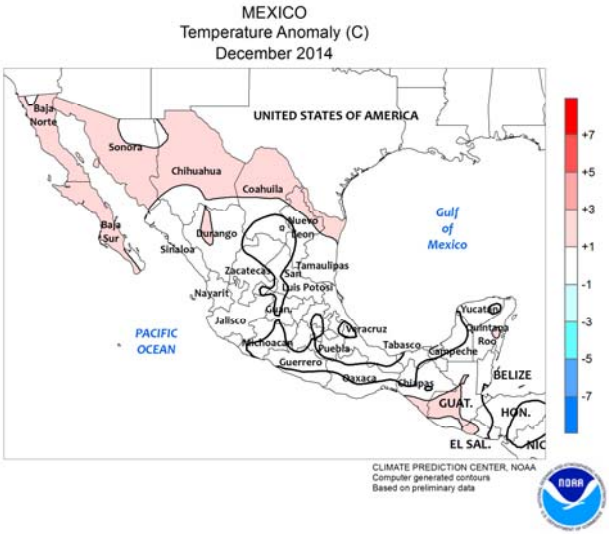
For much of December, seasonal rains provided adequate to locally excessive levels of moisture for summer crop development. Most major crop areas recorded more than 200 mm, with the highest monthly rainfall (greater than 400 mm) recorded in sections of Mato Grosso and Rio Grande do Sul. Much of the excess rain in the south came at the end of the month, likely flooding low-lying farmlands along the Parana River system and raising concern for potential impacts on vegetative soybeans. In contrast, a drying trend developed in eastern farming areas (western Minas Gerais northward to Piaui), reducing moisture for vegetative to reproductive soybeans and first-crop corn. Beneficial rain prior to the late-month dryness was timely for summer crops in the aforementioned areas, including sugarcane and coffee in major production areas of Sao Paulo and Minas Gerais. December temperatures averaged up to 2°C above normal in central and southern farming, with daytime highs occasionally reaching the upper 30s (degrees C) in the traditionally warmer sections of Mato Grosso and Tocantins.

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



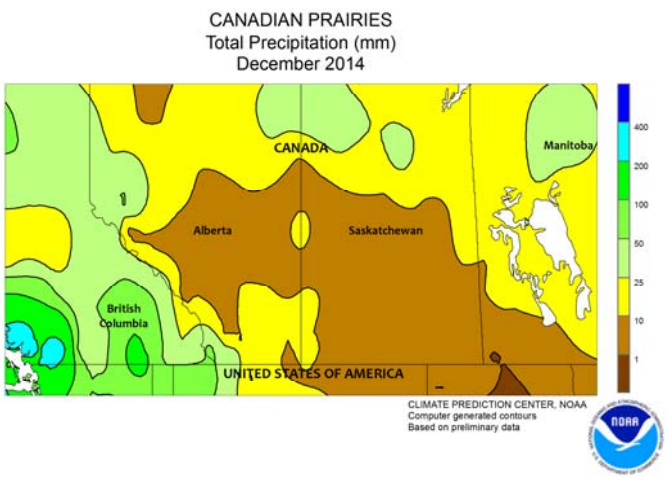


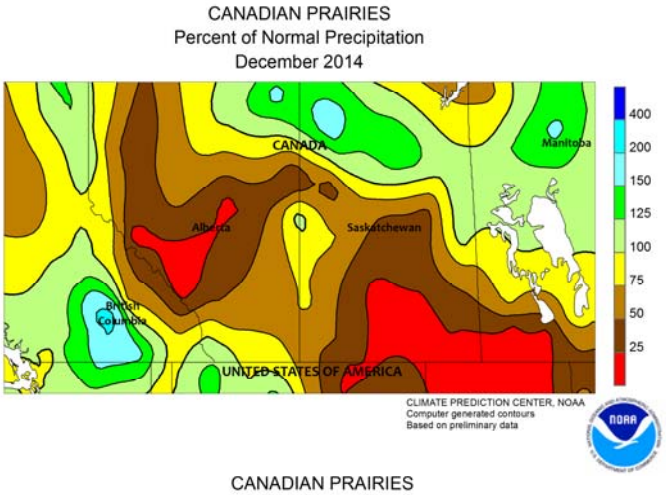


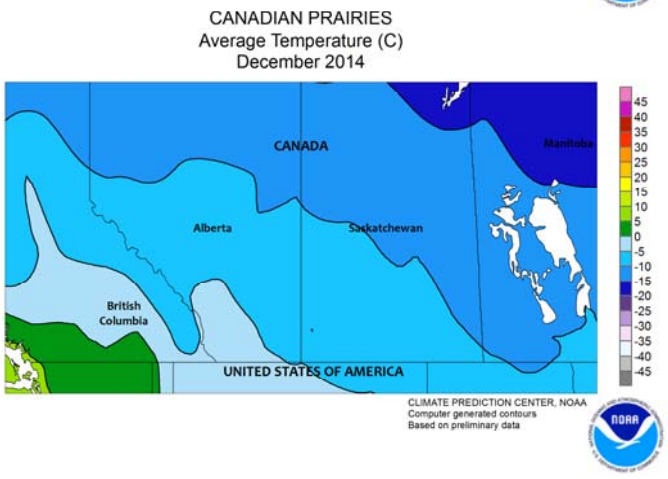


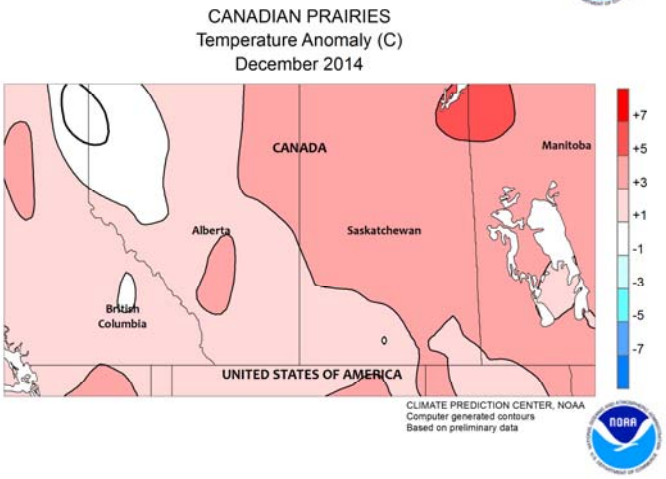
MEXICO

Seasonable dryness dominated much of the northwest during December, aiding fieldwork that included wheat planting and cotton harvesting. Farther south, dry, generally warm weather promoted drydown and harvesting of corn and other rain-fed summer crops along the southern Pacific Coast and in western sections of the southern plateau. Periodic rain increased moisture reserves farther east, most notably along the Gulf coast, but the moisture resulted in temporary delays in the harvesting of summer crops. Heavy rain slowed sugarcane harvesting in northern Veracruz in early December, followed by overall drier conditions the remainder of the month. According to the government of Mexico, total national reservoir levels were at 53.5 percent capacity as of December 30, compared with 64.6 last year, and 45.4 in 2012.



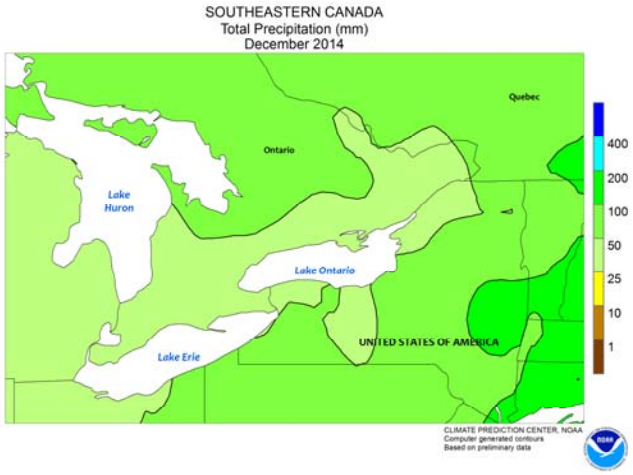


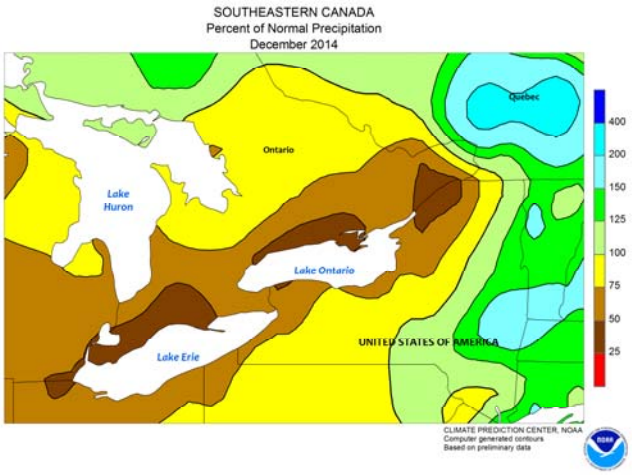


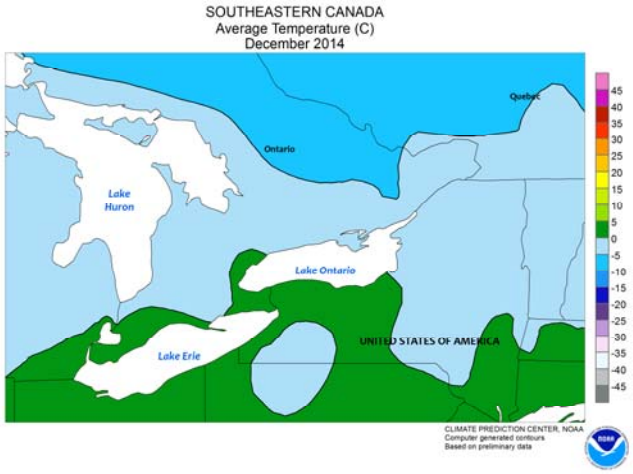


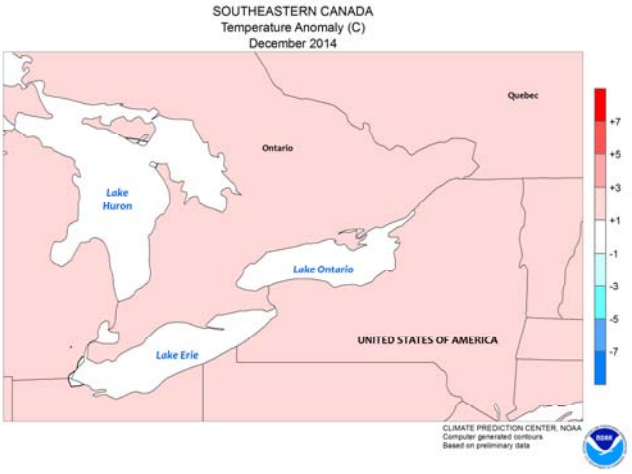
CANADIAN PRAIRIES

Warmer- and drier-than-normal weather dominated the Prairies during much of the month of December, but many locations enjoyed a protective layer of snowfall during the coldest periods. Monthly temperatures averaged near normal in Alberta's Peace River Valley and 2 to 4°C above normal elsewhere. Despite the generally warmer pattern relative to normal, most areas experienced extended periods with temperatures failing to rise above 0°C. A brief warm-up melted some of the protective snow cover during the early half of the month but earlier periods of heavy snow had provided a locally deep protective layer of snow in the weeks prior. Monthly precipitation was lighter than normal (3-25 mm liquid equivalent) but most of it came in the form of snow. At month's end, temperatures fell below the threshold for damage to winter grains (-20°C or lower), and some southern locations likely had only sparse snow cover.





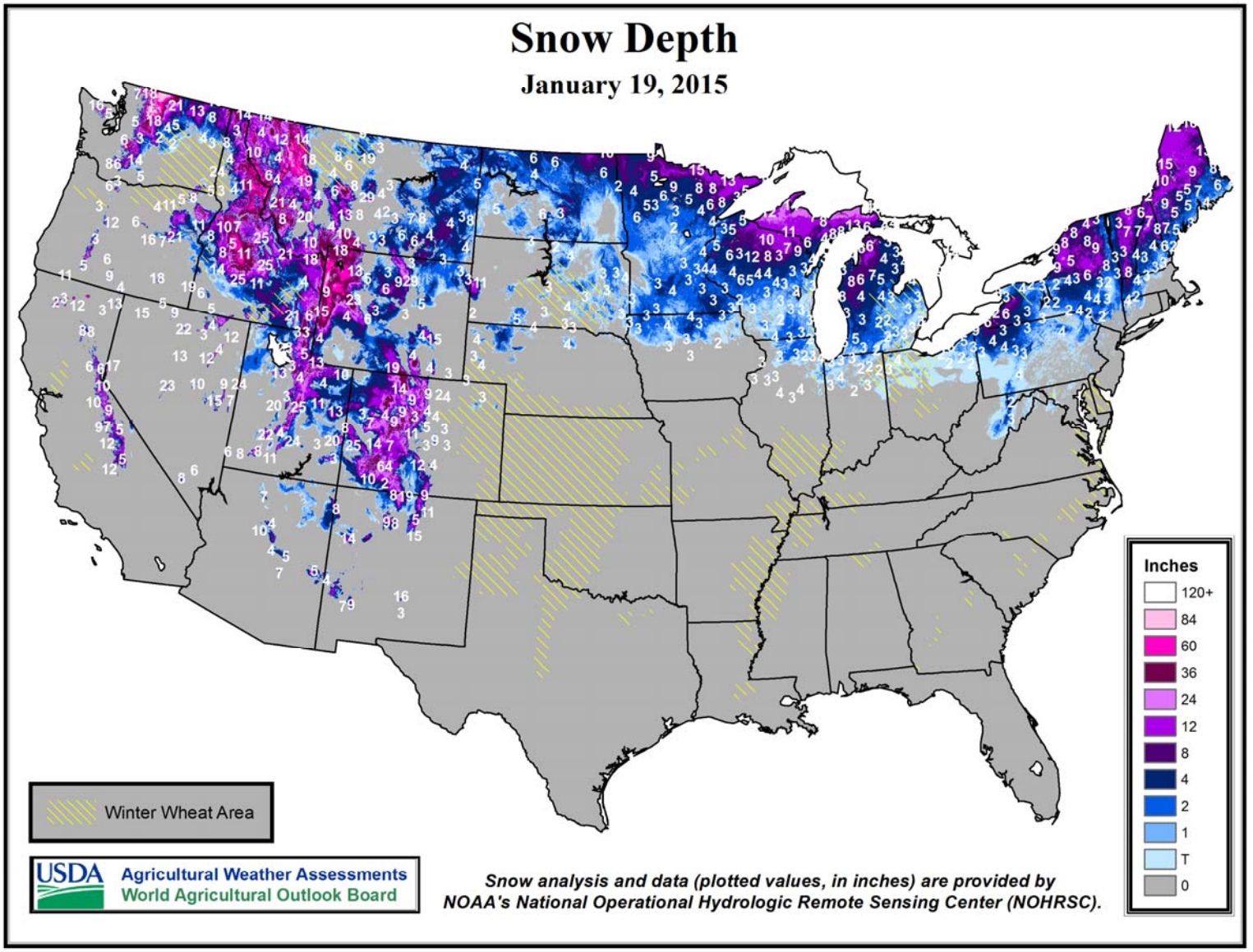




SOUTHEASTERN CANADA

During December, unseasonable warmth eroded the protective layer of snow cover throughout the region, leaving overwintering wheat vulnerable to winterkill at different times of the month. Monthly average temperatures were 2 to 3°C above normal throughout Ontario and Quebec, owing to outbreaks of unseasonable warmth during the middle and latter parts of December. Both warm events were followed by brief periods of colder weather, but conditions were not conducive to winterkill. In Ontario, where snow cover was sparse, nighttime lows fell below -10°C but were generally not cold enough to stress overwintering grains. Somewhat colder weather occurred in Quebec, which was mostly protected with snow. Monthly precipitation varied across the region, averaging above normal in parts of Quebec and near to below normal throughout Ontario.

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



The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. The contents may be redistributed freely with proper credit.

Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**
Internet URL: **http://www.usda.gov/oce/weather**
E-mail address: ***brippey@oce.usda.gov***

The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:
http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm