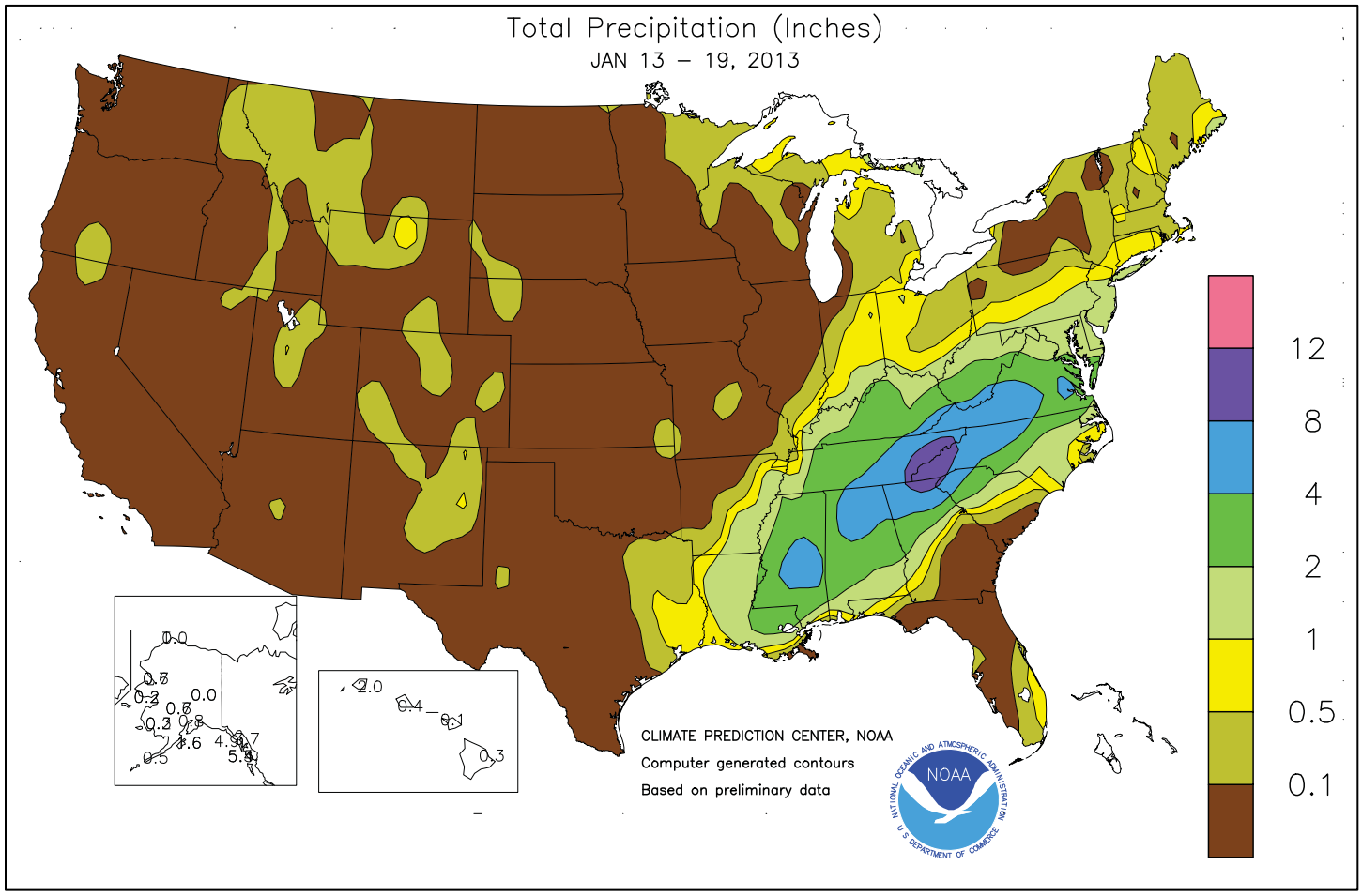
Volume 100, No. 4 http://www.usda.gov/oce/weather January 23, 2013

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 13 – 19, 2013

Highlights provided by USDA/WAOB

Repeated rounds of precipitation fell in the **Southeast**, largely eradicating drought **west of the Appalachians** and easing drought in the **southern Atlantic piedmont region**. Late in the week, enough cold air interacted with lingering moisture to produce accumulating snow from the **lower Mississippi Valley into the southern Mid-Atlantic region**. However, little or no rain fell in **Florida**, maintaining heavy irrigation demands for citrus and winter vegetables. In addition, weekly temperatures averaged 5 to 15°F above normal in the **Atlantic Coast States**.

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Contents

Water Supply Forecast for the Western United States

Highlights

During the early part of the Western wet season, atmospheric patterns somewhat mimicked a typical La Niña, with heavier precipitation falling across the northern tier of the region. Despite the La Niña-like pattern, neutral conditions exist over the equatorial Pacific Ocean.

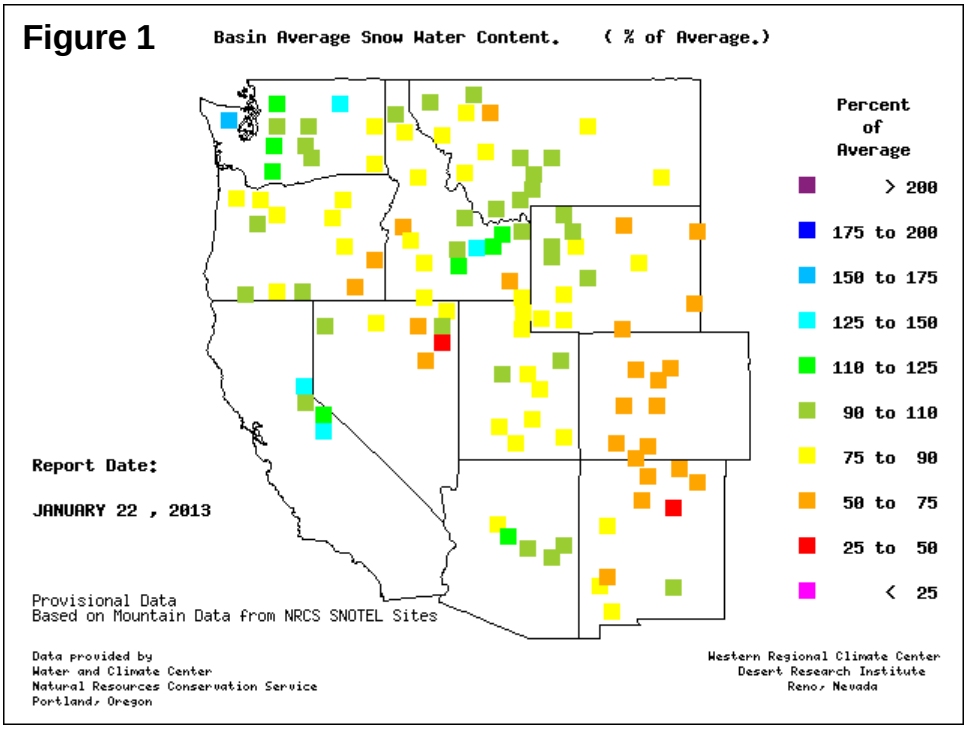
With large uncertainty in the forecast for the remainder of the winter and spring, and a high probability of extremes and variability in weather patterns, there is a lower-than-normal confidence level in the spring and summer streamflow forecasts. In addition, high snow water content values early in the season do not guarantee end-of-season surpluses, nor are low values an assurance of spring deficits.

Snowpack and Precipitation

As 2013 began, the driest regions of the West with respect to snow water content were the eastern slopes of the Continental Divide and parts of the northern Intermountain West. The wettest regions included the Cascades and the Sierra Nevada. By January 22, 2013, snow water content values were less than 75 percent of normal in large sections of the central and southern Rockies (figure 1). Significantly above-normal values were confined to portions of the Sierra Nevada and a few Northwestern river basins.

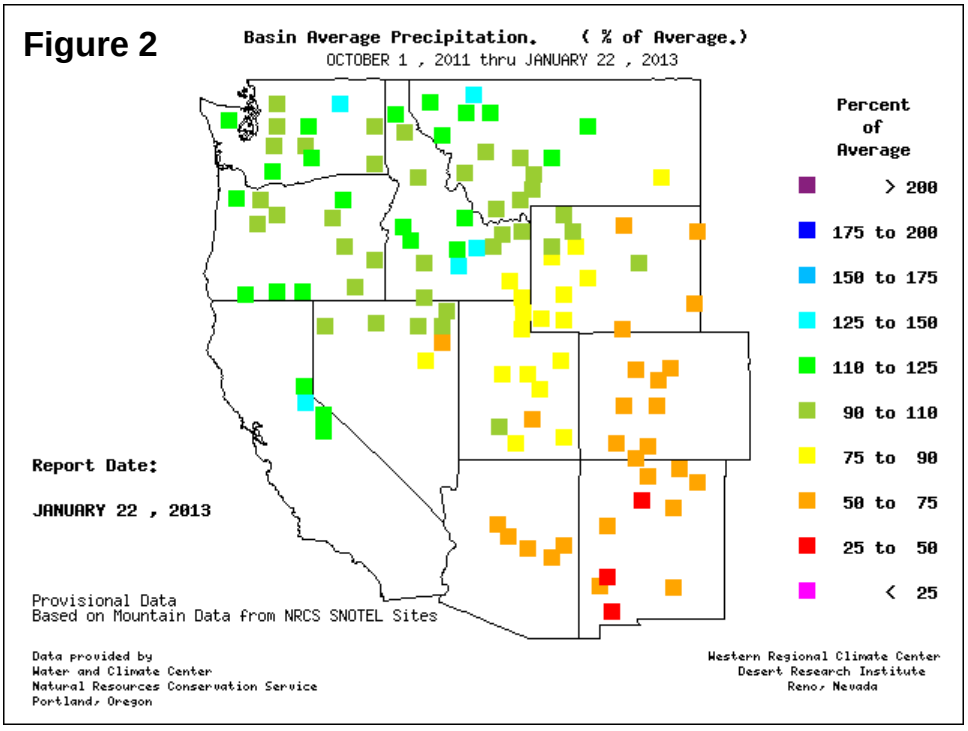
SNOTEL – River Basin Snow Water Content

Figure 1



SNOTEL – River Basin Snow Water Content

Figure 2



Season-to-date precipitation (October 1, 2012 – January 22, 2013) indicated a fairly sharp gradient between drier-than-normal conditions in much of the Southwest and relatively wet weather in northern California and the Northwest (figure 2). Particularly in the Northwest, seasonal precipitation is higher, relative to normal, than snow water content. One of the primary reasons for this discrepancy is that several early-season storms were predominantly warm, rainy events, with snow accumulating only at the highest elevations of northern California and the Northwest.

Spring and Summer Streamflow Forecasts

By January 1, 2013, projections for spring and summer streamflow were indicating the likelihood of below-normal runoff in much of the Southwest, the Platte River drainage area, and the Great Basin (figure 3). Near- to above-average runoff can be expected in the Columbia River Basin and the Missouri River Basin, as well as several smaller basins in the Northwest.

Reservoir Storage

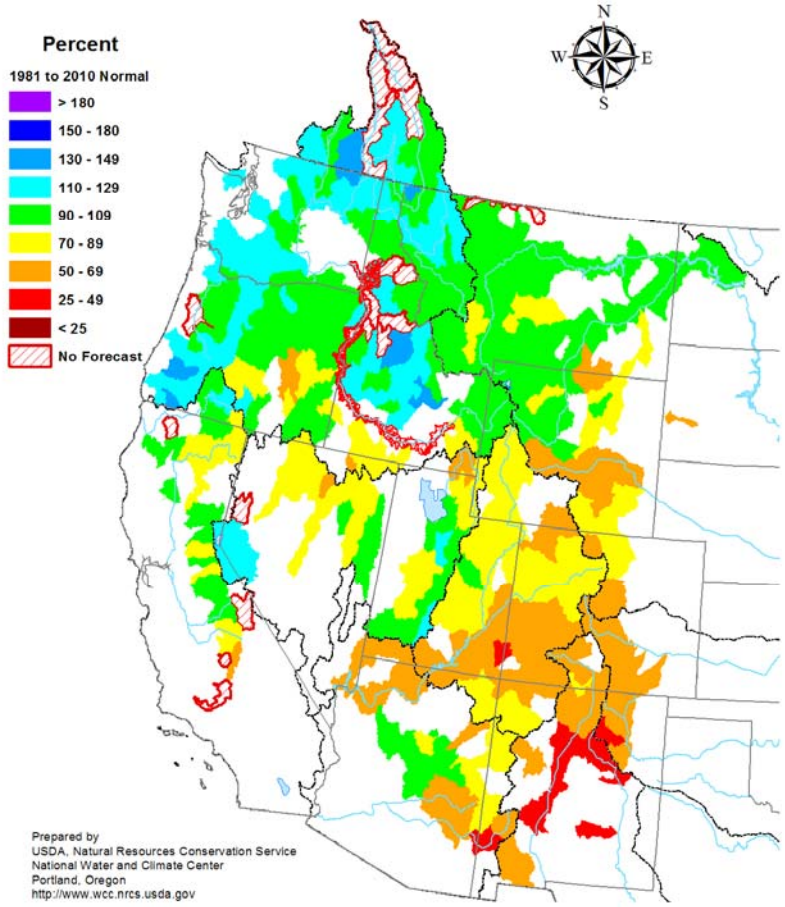
On January 1, 2013, reservoir storage as a percent of average for the date was near to above normal in California, Montana, Utah, Washington, and Wyoming (figure 4). Storage was below average in the other six Western States, but was substantially below average in Arizona, Colorado, Nevada, and New Mexico. This represents a significant change from the previous water supply outlook in May 2012, when below-average storage was confined to Arizona and New Mexico. In other words, reservoir storage—relative to normal—has fallen sharply in the last 7 months in Colorado and Nevada, and to a lesser degree in several other 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

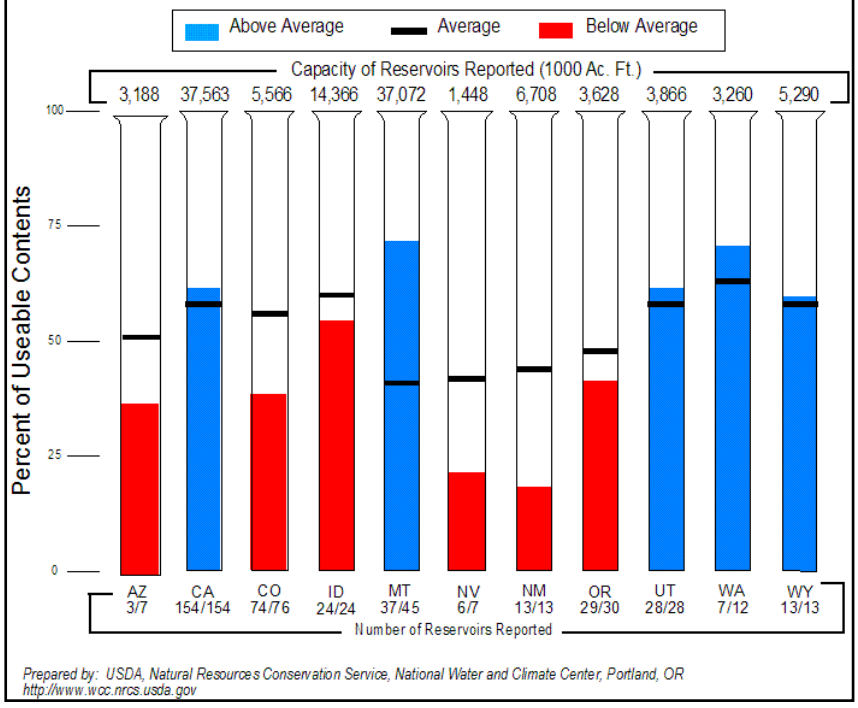
Figure 3

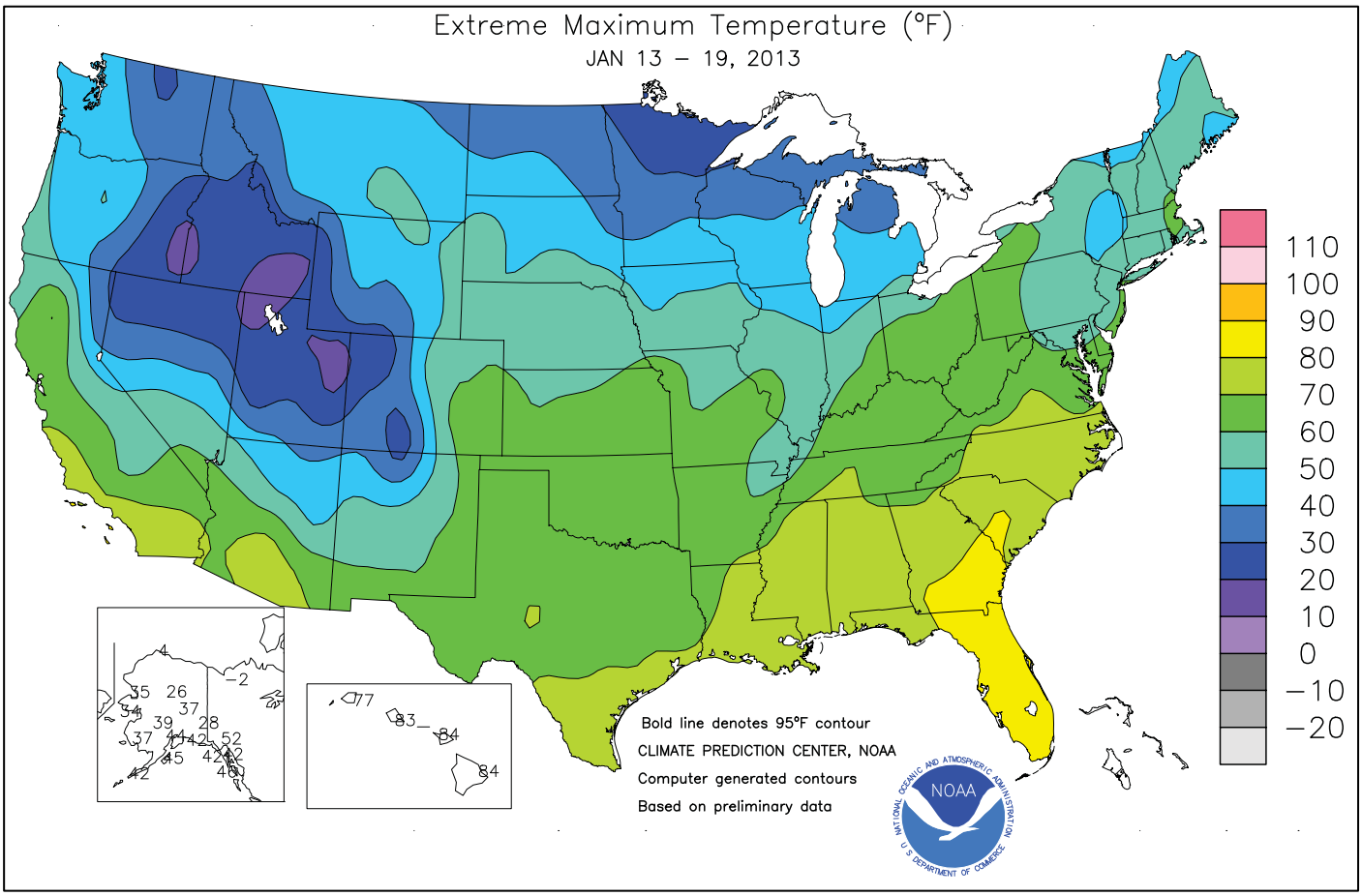
Spring and Summer Streamflow Forecasts as of January 1, 2013

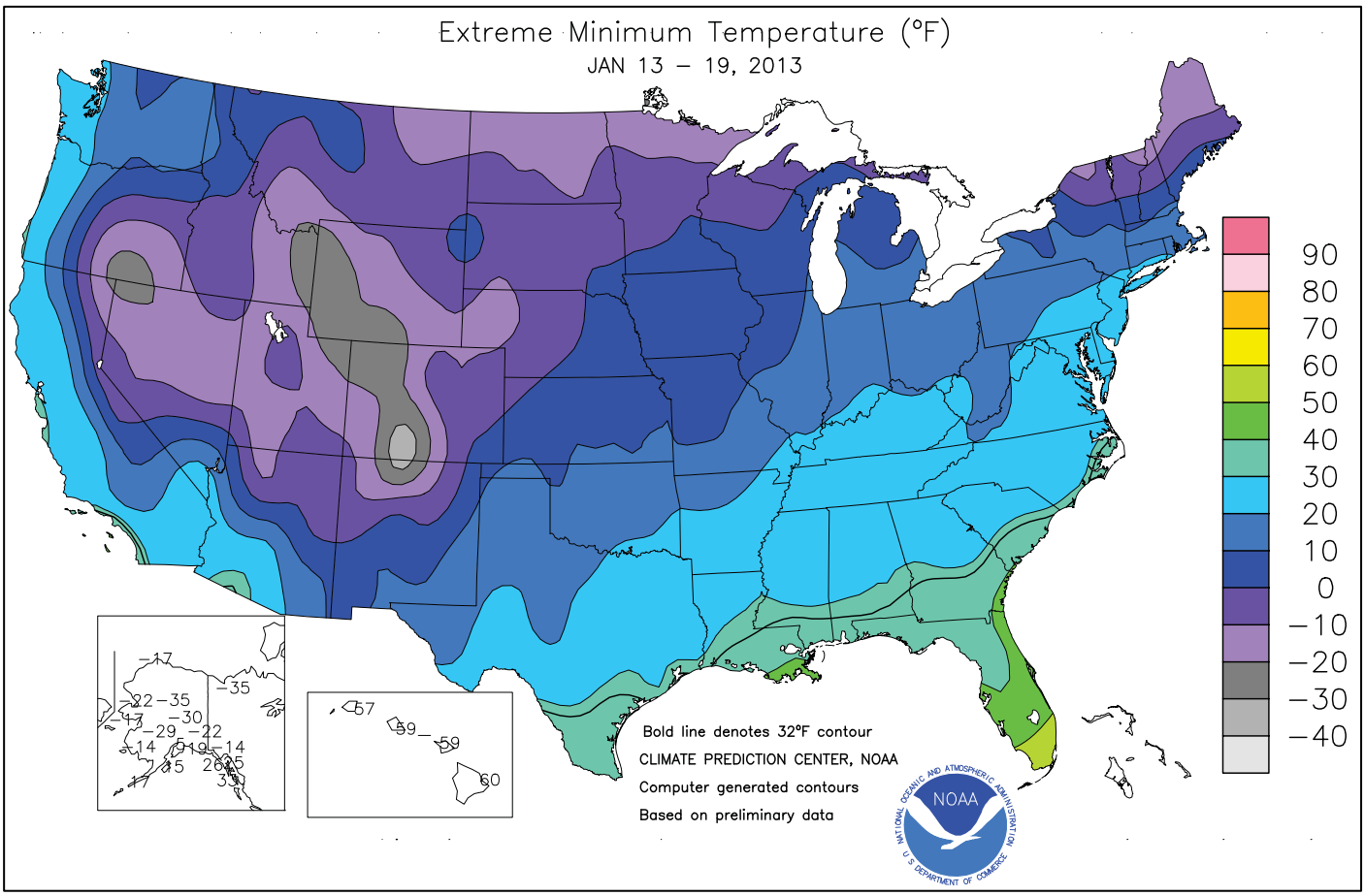


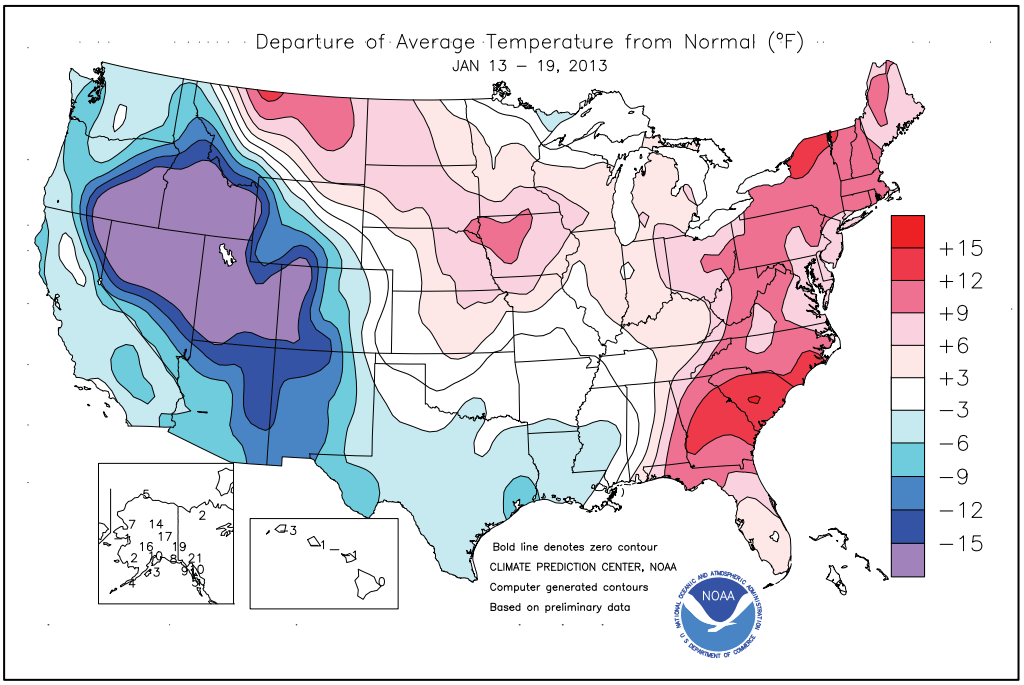
Reservoir Storage as of January 1, 2013

Figure 4




Extreme Maximum Temperature (°F)
JAN 13 – 19, 2013
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
JAN 13 – 19, 2013
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA



(Continued from front cover)

Meanwhile, lowland flooding gradually subsided from the **Mid-South into the lower Midwest**, as runoff from the previous week's downpours moved from tributaries into main-stem rivers. The remainder of the **nation's mid-section**, including the **Plains** and **upper Midwest**, experienced mostly dry weather. Generally cold, dry weather prevailed in the **West**, except for some early-week snow showers in the **Rockies**. Temperatures averaged at least 10 to 20°F below normal across the **Intermountain West**. A series of freezes affected winter agricultural regions of **California** and the **Desert Southwest**, resulting in producers employing protective measures to guard against injury to citrus and vegetables. However, the 2013 cold wave was less severe than a similarly timed event in mid-January 2007. Elsewhere, early-week temperatures plunged to 0°F or below in the **hard red winter wheat belt** as far south as **eastern Colorado** and **northwestern Kansas**. There was little or no snow on the ground across the **central High Plains'** at the height of the cold snap, leaving drought-stressed winter wheat potentially vulnerable to freeze injury. Farther north, freshly fallen snow provided insulation to the **northern High Plains'** wheat.

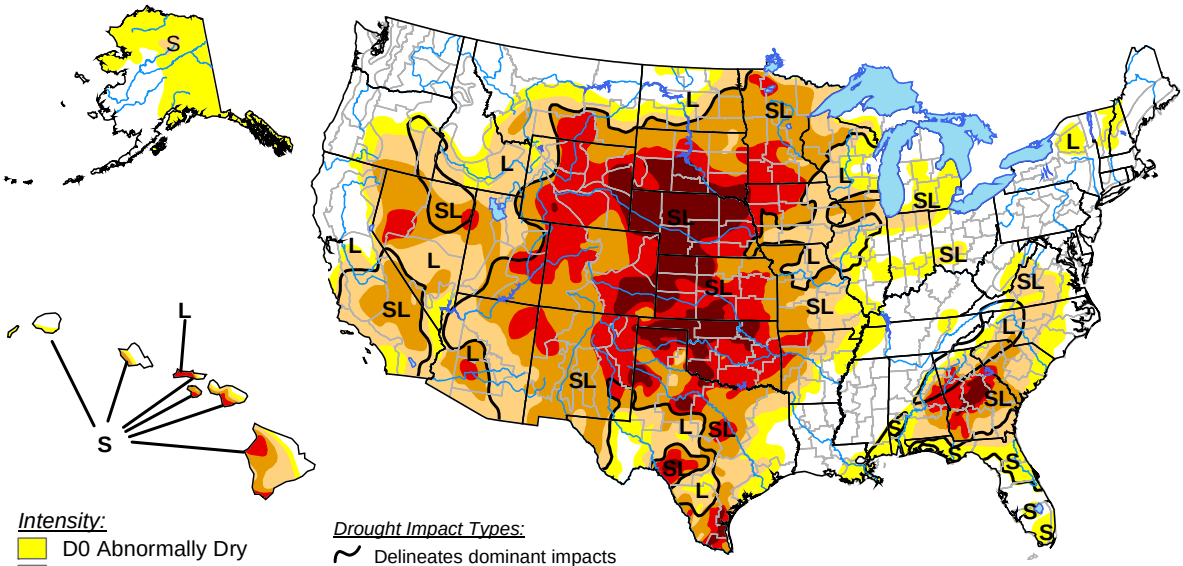
Early in the week, unusually cold conditions dominated the **West**. Daily-record lows for January 13 plunged to -35°F in **Wisdom, MT**; -21°F in **Idaho Falls, ID**; and -14°F in **South Lake Tahoe, CA**. **Ely, NV**, opened the week with consecutive daily-record lows (-22 and -24°F, respectively) on January 13-14. In **Colorado**, daily-record lows included -40°F (on January 14) in **Maybell** and -36°F (on January 15) in **Crested Butte**. On January 20, **Grand Junction** marked its 21st day this winter with a low below 0°F (and 16th such day in January), tying a record most recently achieved in 1990-91. Bitterly cold conditions briefly reached the **High Plains**, where **Alliance, NE** (-17°F on January 14), posted a daily-record low. Farther south, **Phoenix, AZ**, experienced four consecutive freezes (31, 30, 30, and 29°F) from January 12-15 for the first time since December 27-30, 1988. **Las Vegas, NV** (23°F on January 13 and 15), reported its coldest weather since January 14, 2007, when it was also 23°F. Similarly, **Santa Barbara, CA** (27°F on January 14), endured its lowest temperature since January 16, 2007, when the low was 24°F. Elsewhere in **southern California**, downtown **Los Angeles** (34°F on January 14) weathered its lowest reading since December 23, 1990, when it was also 34°F. In stark contrast, **Columbia, SC**, and **Augusta, GA**, reported 9 consecutive days (January 9-17) with high temperatures of 70°F or greater. Previously, **Columbia's** longest January streak of 70-degree warmth had been 8 days in 1928 and 2005, while **Augusta's** longest such January warm spell had been 8 days in 1907, 1928, 1933, and 1974. **Columbia** also notched four consecutive daily-record highs (82, 78, 81, and 78°F) from January 12-15. Farther north, daily-record highs for January 13 included 76°F in **Danville, VA**, and 66°F in **Cincinnati, OH**. The following day, **Caribou, ME** (52°F), posted its highest January temperature since January 27, 1996, when the high also reached 52°F. Toward week's end, warmth returned to the **central U.S.** in advance of a strong cold front. **Rapid City, SD** (59°F), collected a daily-record high for January 18, followed the next day by records in locations such as **Topeka, KS** (66°F), and **St. Joseph, MO** (63°F).

Most of the week's precipitation highlights were confined to the **Southeast**. Record-setting precipitation totals for January 13 included 3.63 inches in **Monticello, AR**; 2.94 inches in **Memphis, TN**; 2.72 inches in **Louisville, KY**; and 2.24 inches in **Greenville, MS**. In **Louisiana**, **New Iberia** received 10.39 inches of rain in a 9-day period from January 8-16. **Bristol, TN**, tallied at least an inch of rain on 4 consecutive days from January 14-17, totaling 6.48 inches. **Bristol's** precipitation ended as 3.5 inches of snow on the 17th. Elsewhere, daily-record snowfall totals for January 17 included 3.0 inches in **Greensboro, NC**; 2.1 inches in **Birmingham, AL**; and 1.7 inches in **Jackson, MS**. **Greensboro** also received a daily-record precipitation amount, 2.45 inches, on January 17. Widespread 6- to 12-inch snowfalls were reported on January 17 in an area of the **Appalachians** centered on **southwestern Virginia**.

Most of **Alaska** remained in a mild pattern, although somewhat colder air overspread the western part of the state. Daily-record highs were established in several locations, including **Big Delta** (47°F on January 14) and **Kotzebue** (35°F on January 13). However, rather stormy conditions accompanied the mild weather. From January 12-16, **Valdez** received precipitation totaling 6.05 inches, including 43.7 inches of snow. Farther inland, **Fairbanks** received less than two-tenths of an inch of rain on January 14. However, it was **Fairbanks'** greatest January rainfall since January 19-20, 1963, when 0.52 inch fell. Later, **Anchorage** netted 8.2 inches of snow on January 16-17, followed by **King Salmon's** easterly wind gust to 68 mph on January 19. Meanwhile in **Hawaii**, early-week showers yielded to tranquil conditions. **Lihue, Kauai**, netted 2.05 inches of rain on January 13-14, but experienced dry weather for the remainder of the week.

U.S. Drought Monitor

January 15, 2013
Valid 7 a.m. EST



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

Drought Impact Types:
~ Delineates dominant impacts
S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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

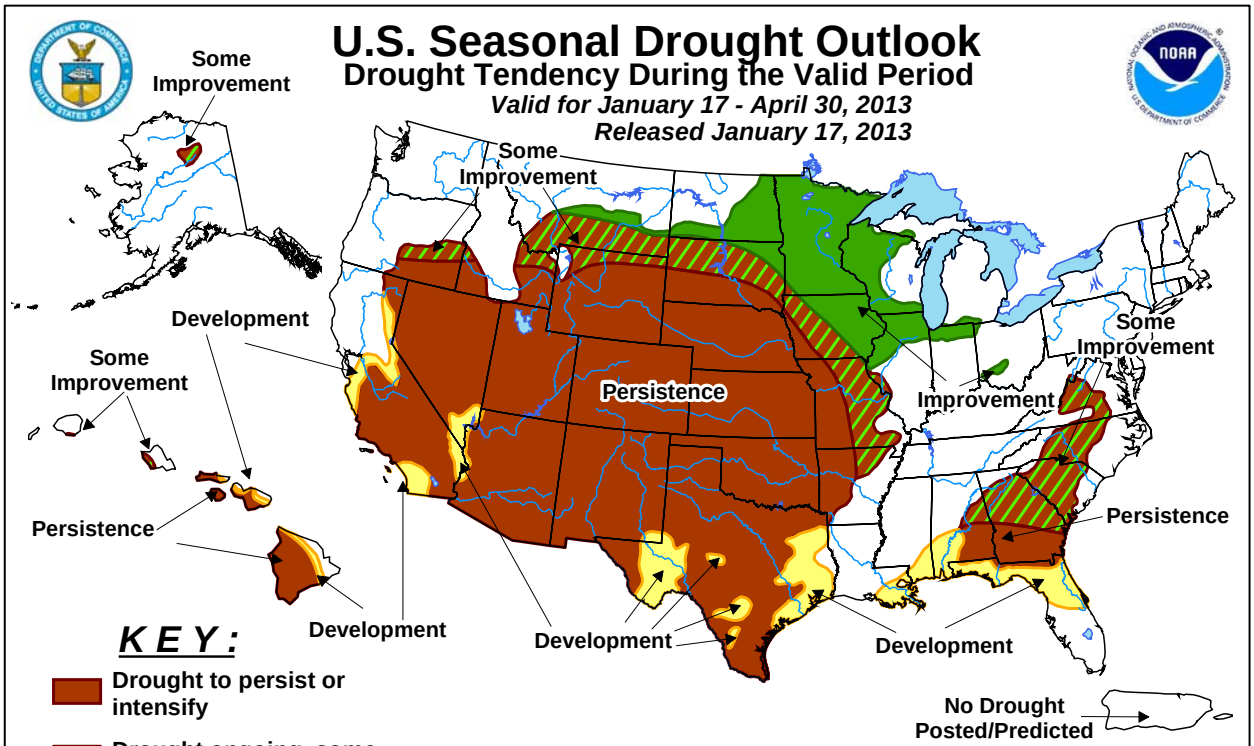
http://droughtmonitor.unl.edu/

Released Thursday, January 17, 2013
Author: David Simeral, Western Regional Climate Center

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for January 17 - April 30, 2013
Released January 17, 2013



K E Y :
- **Drought to persist or intensify**
- **Drought ongoing, some improvement**
- **Drought likely to improve, impacts ease**
- **Drought development likely**

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 green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

National Weather Data for Selected Cities

Weather Data for the Week Ending January 19, 2013

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	53	36	71	28	45	3	4.42	3.15	1.92	12.90	173	6.41	214	99	72	0	2	5	3
	HUNTSVILLE	49	34	70	29	42	3	4.92	3.66	2.02	13.83	160	7.08	230	92	78	0	2	5	3
	MOBILE	63	42	76	34	52	2	0.87	-0.46	0.76	5.44	71	1.96	64	93	77	0	0	5	1
	MONTGOMERY	62	44	77	31	53	7	1.48	0.37	0.55	8.69	114	2.04	78	92	66	0	1	5	2
AK	ANCHORAGE	30	20	44	5	25	9	0.76	0.62	0.38	2.67	187	0.84	221	81	70	0	5	4	0
	BARROW	-4	-13	4	-17	-9	5	0.03	0.03	0.03	0.10	77	0.03	300	85	74	0	7	1	0
	FAIRBANKS	18	-5	37	-30	6	16	0.00	-0.11	0.00	1.19	112	0.00	0	87	79	0	7	0	0
	JUNEAU	38	32	42	25	35	10	3.74	2.67	1.42	10.02	123	5.10	187	95	90	0	2	6	4
	KODIAK	38	28	45	15	33	3	1.65	-0.22	1.59	9.99	82	4.35	95	85	73	0	4	3	1
	NOME	13	-2	34	-17	5	-1	0.23	0.04	0.21	1.30	87	0.68	142	79	71	0	7	2	0
AZ	FLAGSTAFF	32	2	43	-9	17	-13	0.00	-0.47	0.00	2.13	73	0.05	5	78	37	0	7	0	0
	PHOENIX	61	36	75	29	48	-6	0.00	-0.18	0.00	0.88	63	0.01	2	41	21	0	3	0	0
	PRESCOTT	46	13	58	6	30	-7	0.00	-0.33	0.00	1.42	68	0.00	0	70	20	0	7	0	0
	TUCSON	59	29	75	17	44	-7	0.00	-0.22	0.00	1.20	75	0.03	5	42	24	0	4	0	0
AR	FORT SMITH	49	25	67	22	37	0	0.00	-0.52	0.00	3.98	85	1.23	95	80	40	0	7	0	0
	LITTLE ROCK	48	27	62	24	37	-3	0.55	-0.25	0.48	10.02	150	4.42	223	84	46	0	7	2	0
CA	BAKERSFIELD	58	29	68	25	44	-3	0.00	-0.25	0.00	0.89	65	0.24	40	76	56	0	7	0	0
	FRESNO	58	31	66	28	44	-1	0.00	-0.48	0.00	2.53	104	0.50	45	83	69	0	5	0	0
	LOS ANGELES	67	43	79	36	55	-2	0.00	-0.65	0.00	3.07	94	0.25	17	39	22	0	0	0	0
	REDDING	65	29	83	25	47	2	0.00	-1.48	0.00	10.17	125	0.13	4	67	48	0	5	0	0
	SACRAMENTO	55	28	62	24	41	-5	0.00	-0.85	0.00	6.93	158	0.78	40	88	35	0	7	0	0
	SAN DIEGO	65	43	76	39	54	-4	0.00	-0.52	0.00	2.40	96	0.21	18	50	26	0	0	0	0
	SAN FRANCISCO	56	37	62	34	46	-3	0.00	-1.00	0.00	6.36	123	0.12	5	70	55	0	0	0	0
	STOCKTON	55	27	61	24	41	-5	0.01	-0.59	0.01	5.51	173	1.21	88	91	74	0	7	1	0
CO	ALAMOSA	19	-21	29	-34	-1	-15	0.00	-0.06	0.00	0.82	171	0.01	7	79	67	0	7	0	0
	CO SPRINGS	38	12	56	-4	25	-3	0.01	-0.05	0.01	0.27	45	0.01	6	67	30	0	7	1	0
	DENVER INTL	39	10	59	-10	24	-4	0.01	-0.04	0.01	0.36	75	0.09	53	61	35	0	7	1	0
	GRAND JUNCTION	18	-6	29	-12	6	-19	0.04	-0.10	0.04	1.23	141	0.18	51	89	73	0	7	1	0
	PUEBLO	43	8	63	-7	25	-4	0.01	-0.06	0.01	0.32	54	0.02	10	67	43	0	7	1	0
CT	BRIDGEPORT	43	33	57	24	38	8	0.73	-0.12	0.56	5.47	99	1.15	56	82	70	0	4	3	1
	HARTFORD	41	28	56	19	35	9	0.41	-0.47	0.40	5.27	92	0.72	34	82	64	0	5	2	0
DC	WASHINGTON	49	37	63	31	43	8	1.23	0.49	0.87	4.29	88	1.26	70	84	61	0	1	4	1
DE	WILMINGTON	46	35	57	28	40	9	1.49	0.70	0.75	6.14	115	2.22	115	90	61	0	2	4	1
FL	DAYTONA BEACH	77	54	81	42	65	7	0.01	-0.71	0.01	2.39	54	0.40	24	98	56	0	0	1	0
	JACKSONVILLE	74	50	82	41	62	9	0.00	-0.84	0.00	3.13	68	0.82	42	93	54	0	0	0	0
	KEY WEST	78	69	81	60	73	3	0.29	-0.21	0.29	0.96	28	0.29	23	80	63	0	0	1	0
	MIAMI	78	64	81	56	71	3	0.34	-0.05	0.20	1.05	34	0.54	57	86	63	0	0	3	0
	ORLANDO	80	54	84	41	67	6	0.02	-0.53	0.02	1.34	37	0.06	5	96	56	0	0	1	0
	PENSACOLA	67	49	77	37	58	6	1.32	0.09	1.10	4.13	61	2.05	72	88	69	0	0	2	1
	TALLAHASSEE	74	52	81	42	63	11	0.00	-1.24	0.00	3.71	53	0.44	15	87	52	0	0	0	0
	TAMPA	75	58	80	42	67	6	0.03	-0.45	0.03	2.71	78	0.51	44	85	55	0	0	1	0
	WEST PALM BEACH	79	63	82	51	71	5	0.27	-0.60	0.17	1.84	36	0.70	36	83	62	0	0	2	0
GA	ATHENS	64	45	74	26	55	13	2.46	1.40	1.45	9.54	154	3.68	148	96	75	0	2	4	2
	ATLANTA	63	44	72	31	54	12	2.24	1.11	0.67	9.31	145	3.38	130	89	74	0	1	5	3
	AUGUSTA	73	45	80	26	59	15	0.20	-0.82	0.17	4.96	90	0.29	12	95	55	0	2	2	0
	COLUMBUS	69	51	78	35	60	14	1.69	0.62	1.32	7.41	106	2.18	84	91	55	0	0	4	1
	MACON	70	48	77	27	59	14	0.90	-0.23	0.62	6.03	92	1.17	44	96	58	0	2	2	1
	SAVANNAH	75	50	82	37	62	13	0.05	-0.86	0.05	2.25	45	0.34	16	93	52	0	0	1	0
HI	HILO	79	64	84	60	71	0	0.33	-1.89	0.24	19.15	122	7.66	148	82	79	0	0	2	0
	HONOLULU	80	64	83	59	72	-1	0.44	-0.17	0.44	0.66	15	0.65	43	85	69	0	0	1	0
	KAHULUI	80	62	84	59	71	-1	0.11	-0.74	0.05	1.20	23	0.96	46	87	73	0	0	3	0
	LIHUE	76	62	77	57	69	-3	2.05	0.99	1.71	7.10	96	2.85	109	84	74	0	0	2	1
ID	BOISE	19	3	22	-1	11	-19	0.00	-0.30	0.00	1.52	71	0.43	57	85	74	0	7	0	0
	LEWISTON	35	23	41	17	29	-4	0.09	-0.16	0.09	1.05	64	0.19	32	77	63	0	7	1	0
	POCATELLO	14	-7	19	-15	4	-20	0.04	-0.21	0.02	1.68	98	0.27	44	85	77	0	7	3	0
IL	CHICAGO/O'HARE	35	17	47	12	26	4	0.00	-0.37	0.00	3.23	96	1.02	107	79	63	0	7	0	0
	MOLINE	36	13	52	4	24	3	0.00	-0.34	0.00	3.41	110	0.74	83	76	58	0	7	0	0
	PEORIA	36	17	52	11	26	4	0.01	-0.30	0.01	3.54	110	1.56	188	82	57	0	7	1	0
	ROCKFORD	34	13	47	6	23	4	0.07	-0.23	0.07	3.76	133	1.27	167	79	60	0	7	1	0
	SPRINGFIELD	37	19	57	9	28	3	0.01	-0.34	0.01	4.32	124	1.04	112	88	58	0	6	1	0
IN	EVANSVILLE	43	26	58	20	34	3	1.64	1.01	1.64	8.44	166	4.97	321	79	63	0	6	1	1
	FORT WAYNE	38	22	53	16	30	7	0.99	0.55	0.99	4.66	119	2.46	216	87	65	0	6	1	1
	INDIANAPOLIS	39	22	56	16	31	5	1.20	0.65	1.20	6.41	146	3.83	282	86	60	0	6	1	1
	SOUTH BEND	36	20	48	13	28	5	0.17	-0.33	0.17	4.70	108	1.27	100	81	62	0	6	1	0
IA	BURLINGTON	36	15	54	5	26	3	0.04	-0.24	0.04	3.44	122	0.65	89	85	51	0	7	1	0
	CEDAR RAPIDS	36	13	53	5	25	7	0.00	-0.22	0.00	1.51	74	0.11	20	87	49	0	7	0	0
	DES MOINES	40	16	56	8	28	8	0.00	-0.22	0.00	2.05	109	0.12	22	72	49	0	7	0	0
	DUBUQUE	33	12	47	4	23	6	0.00	-0.28	0.00	2.63	111	0.27	40	80	60	0	7	0	0
	SIOUX CITY	39	15	55	2	27	9	0.02	-0.12	0.02	1.73	171	0.06	17	79	61	0	7	1	0
	WATERLOO	35	13	50	4	24	8	0.00	-0.17	0.00	1.93	127	0.19	46	79	55	0	7	0	0
KS	CONCORDIA	45	21	60	8	33	7	0.00	-0.15	0.00	1.30	103	0.37	93	75	52	0	6	0	0
	DODGE CITY	46	19	62	7	32	2	0.00	-0.13	0.00	3.06	268	2.19	592	75	33	0	7	0	0
	GOODLAND	43	15	62	-3	29	2	0.01	-0.08	0.01	0.58	88	0.01	4	74	44	0	7	1	0
	TOPEKA	47	22	66	10	34	7	0.00	-0.19	0.00	1.09	56	0.30	58	73	47	0	5	0	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 19, 2013

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
	WICHITA	47	20	65	12	34	4	0.00	-0.19	0.00	0.84	45	0.50	94	77	45	0	7	0	0
KY	JACKSON	43	30	66	24	37	3	2.53	1.75	0.85	9.67	156	3.28	169	93	68	0	6	4	3
	LEXINGTON	42	28	64	20	35	3	2.12	1.38	1.71	9.48	160	2.93	154	90	77	0	6	3	1
	LOUISVILLE	45	30	69	24	38	5	2.99	2.26	2.72	11.05	201	3.91	216	82	61	0	6	2	1
	PADUCAH	43	25	57	20	34	2	2.33	1.60	2.19	10.36	168	6.44	360	89	62	0	6	2	1
LA	BATON ROUGE	54	37	76	33	46	-4	3.46	2.07	1.42	21.92	257	13.82	423	98	67	0	0	5	3
	LAKE CHARLES	56	36	73	31	46	-5	0.77	-0.53	0.65	16.07	210	11.25	368	91	61	0	1	3	1
	NEW ORLEANS	57	43	77	38	50	-2	1.59	0.30	0.98	10.87	136	5.74	195	92	75	0	0	4	1
	SHREVEPORT	51	32	61	30	41	-5	0.88	-0.14	0.79	10.18	145	4.52	184	86	54	0	5	3	1
ME	CARIBOU	29	5	52	-21	17	8	0.23	-0.45	0.17	4.96	101	1.89	111	87	56	0	6	3	0
	PORTLAND	40	24	59	9	32	10	0.60	-0.33	0.60	8.95	137	0.65	29	83	53	0	5	1	1
MD	BALTIMORE	46	34	58	27	40	8	1.30	0.51	0.74	4.48	85	1.37	71	84	70	0	2	3	1
MA	BOSTON	44	31	61	19	38	9	0.37	-0.51	0.37	6.43	110	0.50	24	80	49	0	4	1	0
	WORCESTER	39	27	53	14	33	10	0.42	-0.52	0.41	5.69	94	0.58	26	84	54	0	5	2	0
MI	ALPENA	32	17	38	6	24	6	0.58	0.18	0.29	3.98	141	1.14	114	86	61	0	7	5	0
	GRAND RAPIDS	37	21	46	16	29	7	0.23	-0.21	0.23	4.16	110	1.31	120	77	57	0	7	1	0
	HOUGHTON LAKE	30	15	38	1	22	4	0.38	0.02	0.22	4.01	152	1.10	125	86	74	0	7	5	0
	LANSING	35	18	45	12	26	4	0.47	0.14	0.47	3.29	110	1.31	158	80	62	0	6	1	0
	MUSKEGON	36	22	44	18	29	5	0.11	-0.39	0.08	4.32	112	1.28	104	71	63	0	7	2	0
	TRAVERSE CITY	32	18	41	10	25	4	0.25	-0.44	0.09	3.52	82	0.53	33	86	60	0	7	5	0
MN	DULUTH	18	1	29	-4	9	1	0.39	0.15	0.32	2.52	170	1.08	200	82	70	0	7	4	0
	INT'L FALLS	12	-11	24	-20	1	-1	0.30	0.12	0.14	2.41	217	1.27	310	86	67	0	7	4	0
	MINNEAPOLIS	27	8	41	2	18	5	0.03	-0.19	0.02	1.99	129	0.35	65	85	62	0	7	2	0
	ROCHESTER	30	9	44	3	20	9	0.05	-0.15	0.03	2.07	138	0.28	58	78	64	0	7	3	0
	ST. CLOUD	24	2	38	-4	13	5	0.04	-0.13	0.04	1.81	168	0.29	74	86	56	0	7	1	0
MS	JACKSON	52	33	75	28	42	-3	4.35	3.05	1.48	16.20	192	7.49	242	93	67	0	3	5	4
	MERIDIAN	51	34	72	28	43	-3	3.89	2.55	2.21	17.25	203	8.17	256	96	86	0	3	5	2
	TUPELO	49	32	73	27	40	0	2.00	0.84	0.89	13.68	151	6.59	223	89	72	0	4	5	2
MO	COLUMBIA	41	20	59	12	31	3	0.01	-0.35	0.01	2.28	68	0.64	72	79	49	0	6	1	0
	KANSAS CITY	43	21	62	10	32	5	0.00	-0.25	0.00	1.59	70	0.25	40	72	38	0	6	0	0
	SAINT LOUIS	42	24	66	17	33	4	0.00	-0.47	0.00	3.27	82	1.27	110	72	51	0	6	0	0
	SPRINGFIELD	42	20	63	13	31	0	0.00	-0.44	0.00	2.48	58	1.38	127	84	62	0	6	0	0
MT	BILLINGS	35	18	56	4	27	3	0.00	-0.19	0.00	0.66	59	0.39	87	69	47	0	6	0	0
	BUTTE	27	-5	48	-22	11	-6	0.01	-0.10	0.01	0.37	46	0.07	25	90	54	0	7	1	0
	CUT BANK	35	21	46	-2	28	9	0.00	-0.08	0.00	0.43	80	0.00	0	75	50	0	6	0	0
	GLASGOW	30	13	42	-15	22	12	0.03	-0.04	0.02	0.79	139	0.30	150	84	73	0	6	2	0
	GREAT FALLS	37	24	47	1	30	9	0.01	-0.14	0.01	1.04	97	0.49	123	68	47	0	5	1	0
	HAVRE	34	16	43	2	25	11	0.01	-0.09	0.01	1.27	163	0.88	326	79	67	0	7	1	0
	MISSOULA	23	6	31	0	14	-9	0.04	-0.19	0.02	2.50	143	0.85	142	94	85	0	7	3	0
NE	GRAND ISLAND	41	18	55	4	30	8	0.00	-0.11	0.00	1.67	178	0.01	4	78	55	0	6	0	0
	LINCOLN	41	15	54	5	28	6	0.00	-0.15	0.00	1.72	137	0.22	55	85	54	0	7	0	0
	NORFOLK	42	16	60	2	29	9	0.00	-0.11	0.00	1.28	138	0.15	54	79	50	0	7	0	0
	NORTH PLATTE	41	6	59	-8	24	1	0.00	-0.08	0.00	0.40	66	0.03	14	88	39	0	7	0	0
	OMAHA	41	17	54	8	29	8	0.00	-0.17	0.00	1.89	142	0.04	10	80	53	0	7	0	0
	SCOTTSBLUFF	39	8	56	-14	23	-1	0.01	-0.10	0.01	0.30	36	0.11	39	74	47	0	7	1	0
	VALENTINE	38	11	52	-6	24	4	0.04	-0.02	0.04	0.40	83	0.11	73	78	54	0	7	1	0
NV	ELY	26	-10	41	-24	8	-17	0.00	-0.17	0.00	1.97	221	0.25	64	83	67	0	7	0	0
	LAS VEGAS	51	29	61	23	40	-6	0.00	-0.11	0.00	0.49	72	0.00	0	38	25	0	4	0	0
	RENO	35	14	42	7	24	-9	0.00	-0.22	0.00	2.15	154	0.05	10	82	68	0	7	0	0
	WINNEMUCCA	21	-14	26	-21	4	-26	0.01	-0.18	0.01	1.90	148	0.21	45	84	74	0	7	1	0
NH	CONCORD	39	21	58	8	30	10	0.39	-0.27	0.39	4.77	104	0.54	34	87	56	0	5	1	0
NJ	NEWARK	46	34	58	27	40	9	0.87	-0.06	0.65	6.49	112	1.43	65	83	62	0	3	3	1
NM	ALBUQUERQUE	39	15	53	8	27	-8	0.00	-0.11	0.00	0.12	16	0.00	0	66	31	0	7	0	0
NY	ALBANY	38	26	47	10	32	10	0.32	-0.23	0.31	4.51	112	0.46	34	82	59	0	5	2	0
	BINGHAMTON	37	23	52	7	30	8	0.37	-0.18	0.28	5.75	131	0.55	41	80	65	0	6	4	0
	BUFFALO	42	27	65	14	34	10	0.45	-0.26	0.38	4.28	77	0.64	36	81	61	0	6	3	0
	ROCHESTER	45	27	69	11	36	12	0.02	-0.50	0.02	3.78	94	0.21	16	74	61	0	6	1	0
	SYRACUSE	44	27	60	14	35	12	0.08	-0.50	0.06	7.94	175	0.37	26	76	52	0	6	2	0
NC	ASHEVILLE	56	39	68	24	48	13	4.87	3.96	2.23	10.09	183	5.71	268	95	74	0	3	5	3
	CHARLOTTE	59	40	75	23	50	9	2.74	1.83	2.32	7.15	134	3.31	153	95	70	0	2	4	1
	GREENSBORO	54	37	73	25	46	9	3.87	3.07	2.42	7.13	144	4.41	232	96	76	0	3	4	3
	HATTERAS	61	48	71	39	55	9	0.70	-0.67	0.67	8.05	103	1.54	47	98	75	0	0	3	1
	RALEIGH	58	40	75	26	49	10	1.66	0.74	1.42	5.31	102	2.37	110	92	73	0	2	3	1
	WILMINGTON	71	47	78	32	59	13	1.28	0.24	1.27	6.49	104	1.89	77	97	51	0	1	2	1
ND	BISMARCK	29	9	42	-7	19	9	0.05	-0.03	0.05	0.83	128	0.20	95	81	74	0	7	1	0
	DICKINSON	29	12	39	-5	21	7	0.00	-0.06	0.00	0.27	55	0.01	7	86	67	0	7	0	0
	FARGO	23	0	37	-4	11	5	0.08	-0.09	0.03	0.57	58	0.20	49	81	62	0	7	3	0
	GRAND FORKS	21	-3	37	-7	9	4	0.13	-0.01	0.08	0.71	79	0.40	114	85	65	0	7	3	0
	JAMESTOWN	26	-1	37	-11	12	4	0.01	-0.13	0.01	0.10	13	0.01	3	87	67	0	7	1	0
	WILLISTON	28	7	37	-12	17	10	0.11	0.00	0.10	0.92	108	0.35	125	90	80	0	7	2	0
OH	AKRON-CANTON	42	27	64	18	35	10	0.21	-0.34	0.21	4.85	111	0.64	47	72	59	0	5	1	0
	CINCINNATI	44	27	66	17	35	6	1.13	0.48	1.11	7.73	158	1.98	122	83	66	0	6	3	1
	CLEVELAND	42	28	64	21	35	9	0.28	-0.27	0.27	4.87	108	0.94	70	79	60	0	5	2	0
	COLUMBUS	43	28	65	19	36	8	0.50	-0.05	0.50	6.72	157	1.02	75	75	62	0	5	1	1
	DAYTON	42	26	65	18	34	8	0.67	0.09	0.67	5.19	115	1.42	99	83	62	0	6	1	1
	MANSFIELD	41	26	63	15	33	9	0.35	-0.23	0.35	4.92	104	1.06	73	86	61	0	5	1	0

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

Weather Data for the Week Ending January 19, 2013

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	39	22	53	14	31	7	1.48	1.07	1.48	4.92	133	2.77	264	83	61	0	6	1	1
	YOUNGSTOWN	42	27	67	16	34	9	0.20	-0.32	0.17	5.88	138	0.69	53	71	59	0	5	3	0
OK	OKLAHOMA CITY	47	24	64	15	36	0	0.00	-0.28	0.00	1.08	41	0.41	53	73	36	0	6	0	0
	TULSA	47	22	65	15	35	-1	0.00	-0.35	0.00	1.47	44	0.62	70	80	50	0	6	0	0
OR	ASTORIA	45	30	53	23	37	-5	0.11	-2.06	0.07	18.92	121	4.29	82	95	82	0	6	2	0
	BURNS	23	-7	28	-15	8	-16	0.00	-0.25	0.00	1.81	93	0.08	12	85	80	0	7	0	0
	EUGENE	35	29	40	25	32	-7	0.00	-1.72	0.00	7.76	62	0.31	7	98	93	0	7	0	0
	MEDFORD	39	22	49	18	30	-9	0.01	-0.54	0.01	6.00	141	0.34	25	92	76	0	7	1	0
	PENDLETON	32	21	43	16	27	-6	0.00	-0.31	0.00	1.69	75	0.50	66	94	86	0	7	0	0
	PORTLAND	38	29	46	25	34	-6	0.04	-1.09	0.03	8.42	99	0.86	31	93	86	0	5	2	0
	SALEM	34	29	39	26	32	-8	0.00	-1.30	0.00	7.93	83	0.53	17	99	94	0	5	0	0
PA	ALLENTOWN	43	32	55	23	37	10	0.84	0.04	0.49	5.57	105	1.26	65	85	70	0	4	4	0
	ERIE	42	28	66	20	35	8	0.23	-0.32	0.18	5.68	110	0.87	60	68	59	0	5	3	0
	MIDDLETOWN	43	32	53	23	37	8	0.87	0.26	0.35	4.98	105	1.19	80	89	59	0	4	4	0
	PHILADELPHIA	47	36	58	29	41	9	1.40	0.60	0.77	6.59	126	2.17	112	82	65	0	2	3	1
	PITTSBURGH	44	31	67	16	37	10	0.27	-0.34	0.14	6.18	143	0.65	45	81	57	0	5	6	0
	WILKES-BARRE	41	27	56	18	34	8	0.46	-0.09	0.31	4.62	120	0.70	54	84	60	0	5	5	0
	WILLIAMSPORT	40	28	50	21	34	9	0.46	-0.17	0.32	6.38	144	0.77	52	86	63	0	5	4	0
RI	PROVIDENCE	46	31	62	18	38	9	0.68	-0.31	0.54	6.51	100	0.96	40	81	61	0	4	3	1
SC	BEAUFORT	71	50	79	38	61	13	0.13	-0.81	0.09	3.19	60	0.45	20	92	53	0	0	5	0
	CHARLESTON	73	50	79	36	61	13	0.06	-0.88	0.06	3.76	69	0.20	9	94	48	0	0	1	0
	COLUMBIA	72	48	81	27	60	16	0.49	-0.58	0.49	4.33	74	0.82	33	90	53	0	2	1	0
	GREENVILLE	60	43	72	27	51	10	3.04	2.05	2.21	9.76	156	3.95	165	94	70	0	2	5	1
SD	ABERDEEN	29	3	42	-13	16	6	0.03	-0.08	0.02	0.83	126	0.08	29	79	68	0	7	2	0
	HURON	32	8	49	-2	20	6	0.01	-0.10	0.01	1.15	180	0.03	12	86	64	0	7	1	0
	RAPID CITY	39	12	59	-5	26	4	0.02	-0.05	0.02	0.41	68	0.16	80	73	48	0	7	1	0
	SIOUX FALLS	33	11	46	3	22	8	0.00	-0.11	0.00	1.42	182	0.11	42	82	63	0	7	0	0
TN	BRISTOL	52	34	73	19	43	9	6.74	5.96	2.48	11.42	217	7.42	395	99	75	0	3	5	4
	CHATTANOOGA	53	38	69	26	45	6	5.78	4.55	2.14	12.94	168	7.37	254	95	78	0	2	5	3
	KNOXVILLE	52	36	71	25	44	7	8.01	6.96	2.87	15.54	221	9.36	369	93	76	0	3	5	4
	MEMPHIS	47	30	71	27	38	-1	3.18	2.26	2.94	9.63	121	5.90	257	86	61	0	7	3	1
	NASHVILLE	47	31	68	26	39	3	2.84	1.95	1.76	10.12	150	5.41	246	87	63	0	4	5	2
TX	ABILENE	52	26	70	19	39	-4	0.00	-0.20	0.00	1.27	70	1.23	224	77	50	0	6	0	0
	AMARILLO	46	21	64	11	34	-1	0.02	-0.12	0.02	1.26	129	0.72	195	71	36	0	7	1	0
	AUSTIN	57	31	69	26	44	-6	0.05	-0.36	0.05	3.53	100	2.70	248	73	48	0	4	1	0
	BEAUMONT	56	36	71	29	46	-6	0.43	-0.90	0.24	14.56	172	8.16	253	96	58	0	1	6	0
	BROWNSVILLE	65	43	76	36	54	-5	0.03	-0.26	0.03	1.80	103	1.48	231	89	63	0	0	1	0
	CORPUS CHRISTI	63	41	74	35	52	-4	0.09	-0.24	0.08	1.28	49	1.25	147	83	54	0	0	2	0
	DEL RIO	60	35	70	27	48	-3	0.00	-0.09	0.00	1.37	138	1.33	554	73	41	0	1	0	0
	EL PASO	50	23	62	18	37	-8	0.00	-0.08	0.00	0.40	39	0.30	115	58	20	0	7	0	0
	FORT WORTH	52	31	67	26	42	-2	0.05	-0.36	0.05	5.62	153	3.67	331	71	39	0	5	1	0
	GALVESTON	58	43	73	36	50	-6	0.24	-0.70	0.14	9.91	172	7.04	317	93	62	0	0	3	0
	HOUSTON	58	36	72	29	47	-4	0.38	-0.45	0.28	5.99	105	3.14	155	89	63	0	2	3	0
	LUBBOCK	48	23	68	18	35	-3	0.00	-0.08	0.00	1.56	173	0.88	383	76	45	0	7	0	0
	MIDLAND	51	26	68	21	38	-5	0.00	-0.11	0.00	1.53	165	1.45	518	76	49	0	6	0	0
	SAN ANGELO	54	27	71	20	41	-4	0.00	-0.15	0.00	1.59	119	1.41	353	77	47	0	6	0	0
	SAN ANTONIO	58	35	69	29	47	-3	0.01	-0.35	0.01	3.22	112	2.85	313	78	36	0	2	1	0
	VICTORIA	60	37	71	31	49	-4	0.19	-0.36	0.14	4.20	110	2.74	203	89	59	0	2	2	0
	WACO	54	29	66	24	42	-4	0.17	-0.22	0.16	5.80	152	4.99	475	83	57	0	6	2	0
	WICHITA FALLS	50	24	66	17	37	-3	0.00	-0.22	0.00	1.07	46	0.47	75	78	43	0	6	0	0
UT	SALT LAKE CITY	20	4	27	-2	12	-17	0.00	-0.30	0.00	1.80	92	0.42	58	85	69	0	7	0	0
VT	BURLINGTON	37	21	49	-1	29	11	0.06	-0.44	0.05	3.52	103	0.22	18	82	53	0	5	2	0
VA	LYNCHBURG	51	35	71	22	43	9	4.57	3.77	1.80	7.58	147	4.93	257	96	75	0	3	4	3
	NORFOLK	54	38	68	26	46	6	1.92	1.02	1.27	6.83	133	2.35	111	94	72	0	2	4	1
	RICHMOND	51	37	64	28	44	8	3.92	3.10	1.55	7.07	138	4.24	213	96	81	0	2	4	3
	ROANOKE	53	38	71	24	45	10	4.28	3.56	1.84	6.93	152	4.35	256	89	68	0	2	4	3
	WASH/DULLES	48	35	59	29	41	9	1.05	0.36	0.62	3.96	83	1.09	65	85	74	0	2	4	1
WA	OLYMPIA	38	24	44	18	31	-7	0.03	-1.66	0.03	12.53	105	2.79	69	98	91	0	7	1	0
	QUILLAYUTE	47	26	56	24	37	-3	0.05	-2.99	0.04	22.40	102	4.87	66	98	92	0	7	2	0
	SEATTLE-TACOMA	39	28	44	24	34	-7	0.00	-1.15	0.00	9.56	114	2.71	97	87	82	0	7	0	0
	SPOKANE	27	12	30	9	19	-8	0.07	-0.33	0.06	3.81	117	1.23	123	92	84	0	7	2	0
	YAKIMA	32	20	40	13	26	-3	0.00	-0.25	0.00	2.22	109	0.09	14	84	76	0	7	0	0
WV	BECKLEY	49	34	70	22	42	12	2.20	1.48	0.94	5.68	118	2.49	143	85	68	0	3	5	2
	CHARLESTON	47	32	66	23	40	7	1.88	1.16	0.82	7.19	143	2.33	135	87	64	0	4	4	2
	ELKINS	49	30	68	19	40	12	1.77	1.00	0.70	6.34	120	2.00	108	90	52	0	3	4	2
	HUNTINGTON	45	31	64	23	38	6	2.05	1.33	0.97	7.52	147	2.62	150	88	65	0	6	4	2
WI	EAU CLAIRE	27	6	42	0	17	6	0.03	-0.19	0.03	2.11	136	0.26	50	85	54	0	7	1	0
	GREEN BAY	30	11	43	6	20	5	0.08	-0.19	0.07	3.09	151	0.55	87	78	58	0	7	2	0
	LA CROSSE	33	11	48	5	22	7	0.01	-0.25	0.01	2.15	118	0.17	29	81	49	0	7	1	0
	MADISON	32	13	45	8	23	6	0.00	-0.26	0.00	2.88	126	0.28	44	76	58	0	7	0	0
	MILWAUKEE	34	16	44	11	25	5	0.13	-0.26	0.13	4.80	151	0.93	97	72	54	0	7	1	0
WY	CASPER	29	11	46	-10	20	-2	0.00	-0.11	0.00	0.50	56	0.11	39	57	48	0	7	0	0
	CHEYENNE	33	8	50	-15	21	-5	0.01	-0.07	0.01	0.71	106	0.14	67	55	41	0	7	1	0
	LANDER	22	-1	45	-15	11	-9	0.01	-0.10	0.01	0.74	83	0.34	121	80	52	0	7	1	0
	SHERIDAN	39	14	56	-2	26	5	0.03	-0.14	0.03	0.55	50	0.05	12	74	44	0	7	1	0

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

2012 U.S. Weather Review

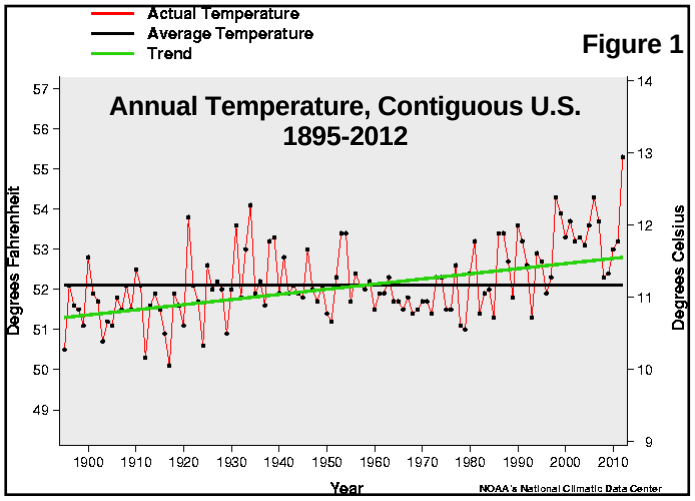
Annual "Weather Review" provided by USDA/WAOB; annual national rankings provided by NCDC

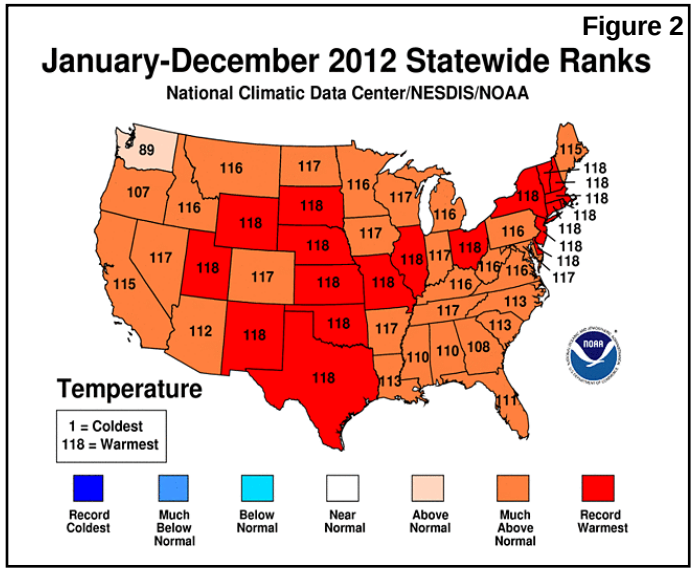
Drought, which began the year mostly confined to the southern United States, charged northward and intensified during the spring and summer, eventually becoming the nation's worst agricultural calamity since 1988. Complicating and exacerbating the drought situation, the nation suffered through its hottest year on record, fueled by a record-warm spring, hottest month (July) on record, and its third-hottest summer. As result, nearly two-thirds (63.86 percent) of the contiguous U.S. was in drought, according to the U.S. Drought Monitor, by late July. Drought coverage eventually peaked on September 25, with 65.45 percent of the country affected. By year's end, drought continued to take a severe toll on the nation's hard red winter wheat, rangeland, and pastures, as well as the livestock sector.

Historically, drought has seldom covered such a large area of the continental U.S. Prior to the development of the U.S. Drought Monitor in 1999, the Palmer Drought Index (PDI) was a widely used drought indicator. However, the PDI is better suited toward depicting long-term, not agricultural, drought. Nevertheless, it is useful to compare the peak PDI drought coverage during the drought of 2012 (61.8%) to historic droughts such as 1988 (52.3%), the 1950s (60.4%), and the 1930's (79.9%). In fact, according to statistics provided by NOAA's National Climatic Data Center, PDI drought coverage in July 2012 was the greatest since the end of the Dust Bowl era—62. 1% in December 1939. The all-time record for PDI drought coverage in the U.S. was 79.9% in July 1934.

According to preliminary data provided by the National Climatic Data Center, the nation's annual average temperature of 55.3°F was 3.3°F above the 1901-2000 mean, demolishing the 1998 standard of 54.3°F. In fact, seven of the nation's ten warmest years on record have occurred in the last 15 years—along with 1998 and 2012, they are 1999, 2001, 2005, 2006, and 2007. The only pre-1998 years still on the record books for top-ten warmth are 1921, 1931, and 1934 (figure 1). During 2012, all but three (Georgia, Oregon, and Washington) of the Lower 48 States reported one of their ten warmest years on record, and 19 states from the Southwest to the Northeast set annual records for warmth (figure 2).

The nation also suffered through its driest year since 1988, and 15th-driest year on record (figure 3). Annual precipitation averaged 26.57 inches (91 percent of normal) across the contiguous U.S. For Nebraska and Wyoming, it was the hottest, driest year on record. Nebraska's record for dryness had stood since 1934. Near-record dryness dominated several other states, including Arkansas, Colorado, Delaware, Georgia, Illinois, Kansas, Missouri, and New Mexico (figure 4). In contrast, relatively wet conditions prevailed during 2012 in the Pacific Northwest, central Gulf Coast region, and parts of the Northeast. Washington ranked highest, reporting its fifth-wettest year.

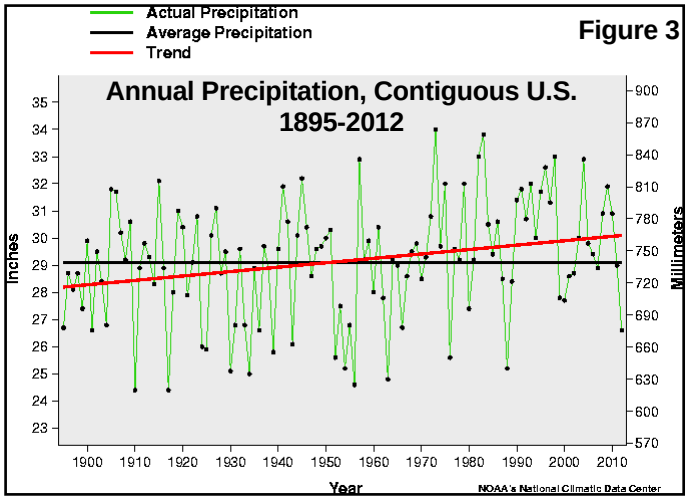


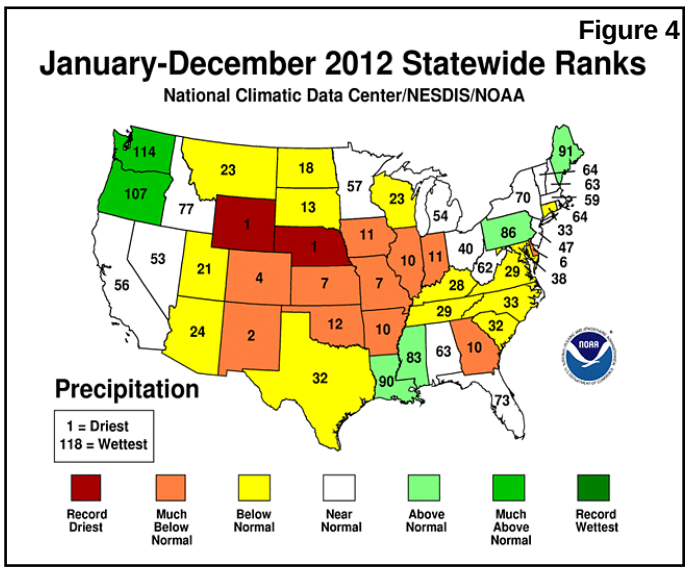


Winter (December 2011 – February 2012)

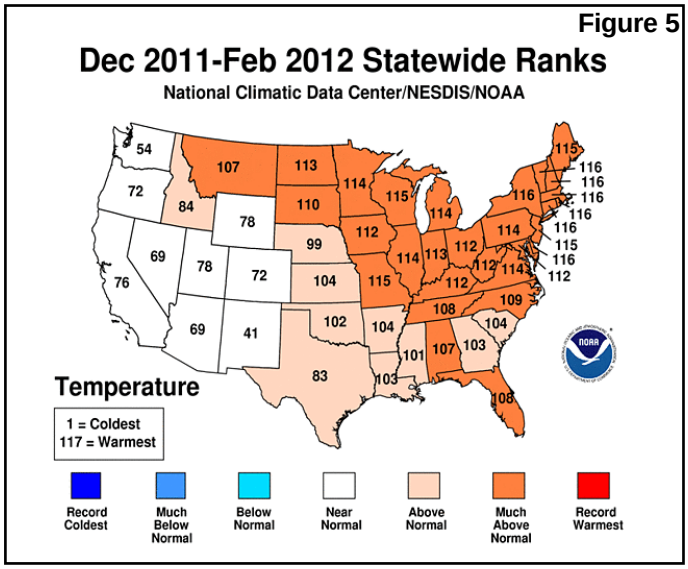
The winter of 2011-12 featured little in the way of sustained cold, especially east of the Rockies. However, even in a winter without much cold weather, Florida's peninsula endured a brief freeze on January 4-5 and several other minor cool snaps. Farther north, winter wheat largely escaped without significant cold-season damage, despite a general lack of snow cover and occasional high winds. Nevertheless, the southern High Plains wheat crop, not to mention rangeland and pastures, continued to suffer from aftereffects of the historic drought of 2011. Meanwhile, precipitation was considerably below normal across much of the western U.S., except for unusually heavy December rain and snow in the Southwest and periods of mid- to late-winter storminess in the Northwest. Drier-than-normal conditions also plagued parts of the Atlantic Coast States, which

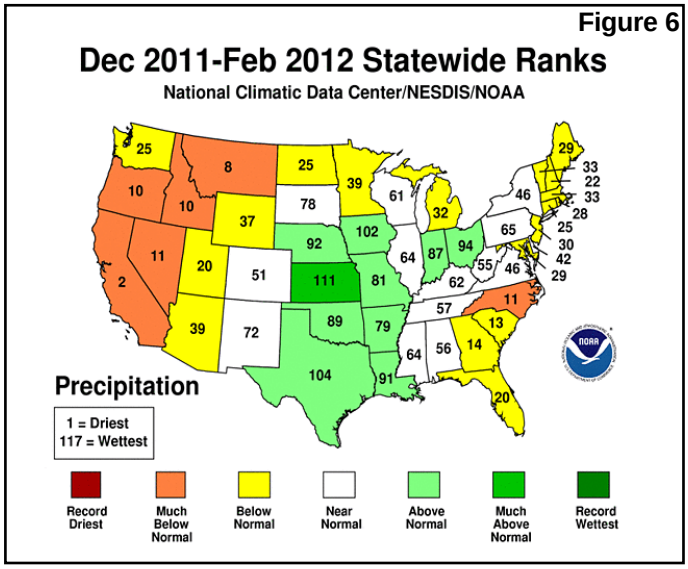
led to worsening drought across the lower Southeast. Notable winter wetness was generally confined to the nation's mid-section, stretching from portions of the central and southern Plains into the Ohio Valley.





According to preliminary information provided by the National Climatic Data Center, the meteorological winter of 2011-12 was overall mild and dry. In fact, it was the fourth-warmest, 20th-driest winter on record. The only warmer December-February periods occurred in 1999-2000, 1998-99, and 1991-92. It was the nation's driest winter since 2001-02. The contiguous states' winter average temperature of 36.8°F was 3.9°F above the long-term mean, while the average precipitation of 5.70 inches was 88 percent of normal. State temperature rankings ranged from the 41st- coolest winter in New Mexico to the second-warmest winter in Delaware, New York, and five of the six New England states (figure 5). Top-ten values for winter warmth were observed in twenty other states from the Dakotas into the Midwest and East. Elsewhere, top-ten winter wetness was confined to Kansas, while top-ten values for dryness were observed in California, Idaho, Montana, and Oregon (figure 6). California experienced its second-driest winter on record, behind 1976-77.





Spring (March-May)

Unprecedented spring warmth covered much of the central and eastern U.S., promoting rapid crop planting and development but reducing soil moisture reserves due to above-normal evaporation rates and crop demands. In much of the West, unusual warmth caused premature melting of high-elevation snow packs. Both March and spring (March-May) U.S. temperatures surpassed records originally set more than a century ago, in 1910. Warmth left fruits vulnerable to spring cold snaps; indeed, a series of freezes (from late March to late April) in the lower Great Lakes region and the Northeast damaged a variety of crops. Meanwhile, consistently cool conditions were confined to the Pacific Northwest. In the Sierra Nevada, significant spring precipitation turned a dismal wet season into merely a poor one. Farther inland, the wet season ended on a dry note, especially in Colorado, Utah, and Wyoming. However, all of those states—as well as California and Nevada—had a buffer against developing drought in the form of abundant reservoir storage. Elsewhere in the West, heavy precipitation from the Pacific Northwest to the northern

Rockies contrasted with drier-than-normal conditions (and below-average reservoir storage) in Arizona and New Mexico. Farther east, late-spring rainfall eased dry conditions across the northern Plains and upper Midwest, but developing drought remained a concern in the central Plains, southern and eastern Corn Belt, and Mid-South. During May, Tropical Storm Beryl contributed to a favorably wetter pattern in the East.

Figure 7

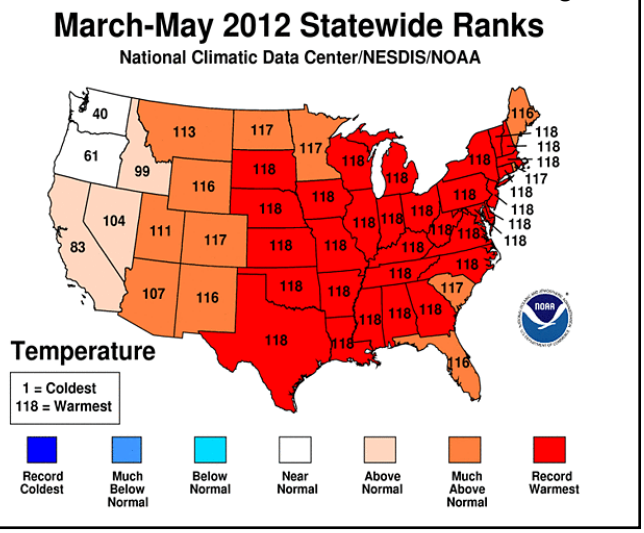
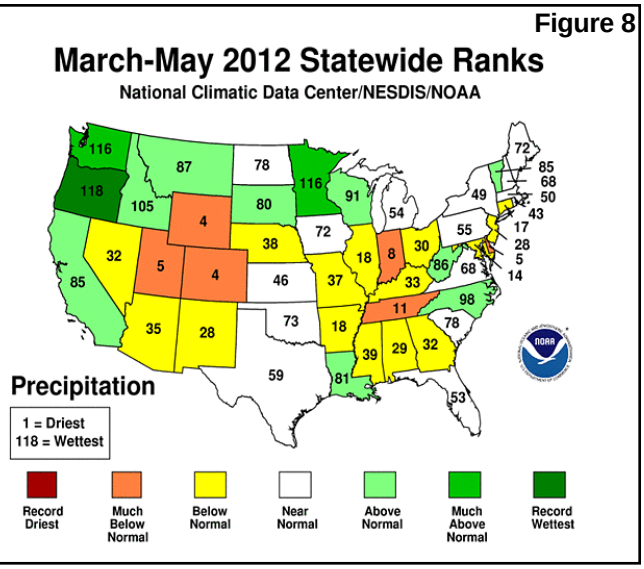


Figure 8



According to the National Climatic Data Center, the meteorological spring of 2012 featured record-setting warmth and slightly drier-than-normal conditions. The nation's average temperature of 57.1°F (5.2°F above the 1901-2000 average) demolished the March-May 1910 standard by 2.0°F. Record-high spring temperatures were noted in 31 of the 48 contiguous states—and all but six states from the Plains to the East Coast (figure 7). Meanwhile, spring precipitation averaged 7.47 inches (97 percent of normal) across the U.S. However, there were large state and regional variations in precipitation. Top-ten values for spring dryness were observed in Colorado, Indiana, Utah, and Wyoming, but near-record to record-setting wetness was noted in Minnesota, Oregon, and Washington (figure 8).

Summer (June-August)

The nation's worst agricultural drought since 1988 harmed corn, soybeans, sorghum, pastures and rangeland, and a variety of other commodities. Corn and soybean conditions, as reported by USDA/NASS, were comparable to those observed during the 1988 drought, while pasture conditions (reported only since 1995) reached a record-high 59 percent very poor to poor during 5 consecutive weeks in August and early September. In contrast, mid- to late-summer rainfall revived pastures and aided immature summer crops across the South, East, and lower Midwest. By summer's end, at least half of the pastures were rated good to excellent in every coastal state from Louisiana to Maryland. Rainfall became excessive, however, in late August, when Hurricane Isaac rolled into Louisiana. Isaac battered the central Gulf Coast with wind, torrential rainfall, and a coastal storm surge, but the storm's remnants eventually provided drought relief to parts of the Mid-South and lower Midwest.

Figure 9

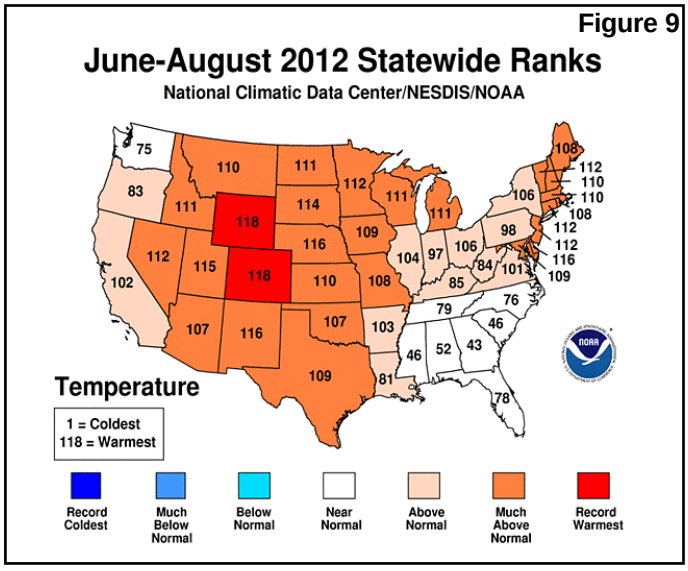
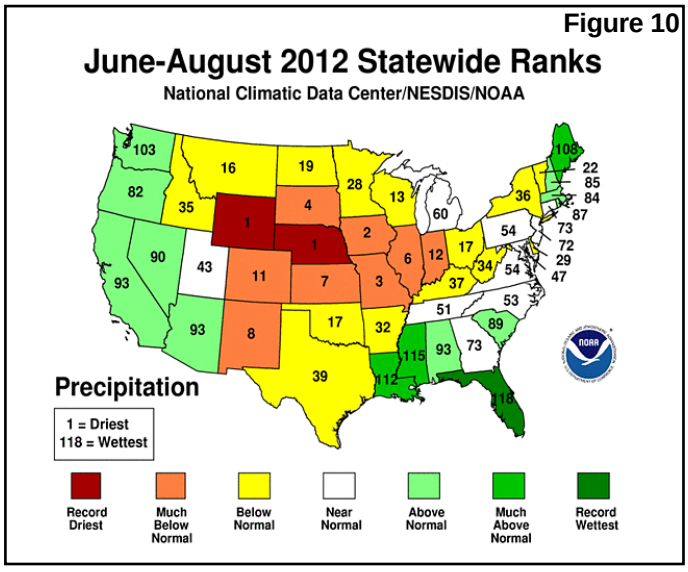


Figure 10



According to preliminary information provided by the National Climatic Data Center, the nation suffered through its third hottest, 18th-driest June August period on record. The nation's average temperature of 74.4°F (2.3°F above the 20th century mean) was behind the June August 1936 value of 74.6°F and the summer 2011 average of 74.5°F. Seven of the ten hottest U.S. summers (2002, 2003, 2006, 2007, 2010, 2011, and 2012) have occurred since the beginning of the 21st century. It was the hottest summer on record in Colorado and Wyoming, and among the ten hottest in 21 other states across the West, Plains, Great Lakes region, and Northeast (figure 9). June-August precipitation averaged 7.39 inches (90 percent of normal) across the Lower 48 states. Except for 2011, when precipitation averaged 7.38 inches, it was the nation's driest summer since 1988. State rankings ranged from the driest summer in Nebraska and Wyoming to the wettest summer in Florida (figure 10). Top-ten values for summer dryness were noted in Illinois, Iowa, Kansas, Missouri, New Mexico, and South Dakota, while top-ten rankings for wetness occurred in Louisiana and Mississippi.

Autumn (September-November)

Dry conditions strengthened their grip on the nation's mid-section, maintaining severe stress on rangeland and pastures and resulting in poor establishment of the Plains' hard red winter wheat crop. On the southern Plains, extremely dry conditions prevailed in October and November, following a promising start to the winter wheat growing season in September. In contrast, relatively wet conditions developed in October and November across northern California, the Northwest, and portions of the northern Plains, helping to offset an exceedingly dry September. However, most of the precipitation failed to reach the Southwest, where drought remained deeply entrenched. Farther east, autumn rainfall largely eradicated drought from the eastern Corn Belt, but soil moisture shortages remained a serious concern across the western Corn Belt. At the end of October, the remnants of Hurricane Sandy contributed to an overall wet pattern across the lower Great Lakes region. However, Sandy's most profound impacts were felt across the northern Mid-Atlantic region, battered by high winds and a record-setting storm surge, and the central and southern Appalachians, blanketed by heavy snow. Elsewhere, an autumn drying trend led to drought expansion and intensification in parts of the Southeast, mainly in Alabama and the southern Atlantic States. Relatively cool autumn weather covered much of the eastern half of the nation, particularly from the middle and lower Mississippi Valley into the middle and southern Atlantic States, while unusual autumn warmth prevailed in most areas from the Pacific Coast to the High Plains.

According to preliminary information provided by the National Climatic Data Center, the nation experienced its 21st-warmest, 22nd-driest September-November period on record. The nation's autumn average temperature of 54.7°F was 1.1°F above the 1901-2000 mean, while the average precipitation of 5.71 inches was 85 percent of normal. State temperature rankings ranged from the sixth-coolest autumn in Kentucky to the warmest autumn on record in Nevada (figure 11). Mississippi also reported a top-ten ranking for cool conditions, while top-ten rankings for autumn warmth were noted in six Western States. Meanwhile, state precipitation rankings ranged from the second-driest autumn in Nebraska to the 18th-wettest autumn in Delaware (figure 12). South Dakota and Minnesota also achieved top-ten rankings for autumn dryness.

Figure 11

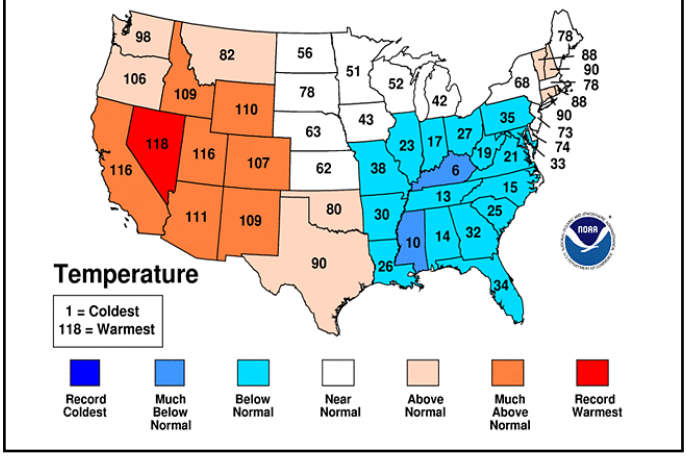
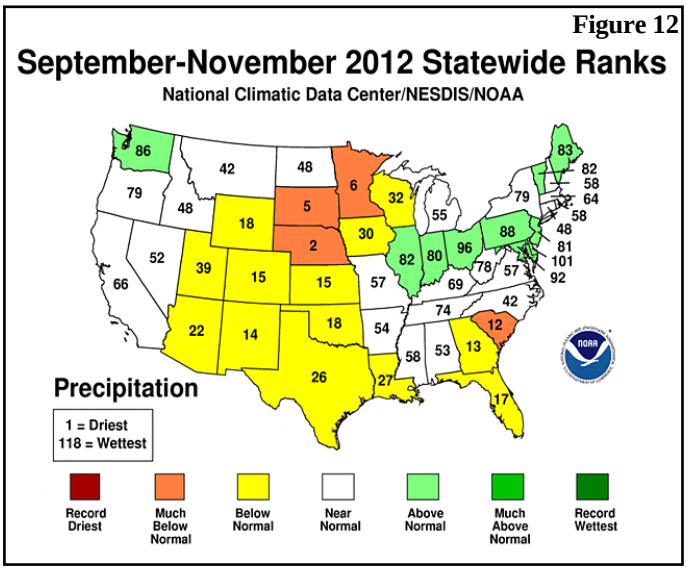


Figure 12



December

Despite occasional December precipitation across the nation's mid-section, hard red winter wheat conditions remained mostly steady or declined due to poor crop establishment and acute soil moisture shortages. However, enough snow fell across the northern and central Plains to provide wheat with some insulation from occasional cold snaps. Meanwhile, significant precipitation fell in much of the soft red winter wheat belt, particularly across the Ohio Valley. Widespread precipitation also fell in much of the East, although rain was spotty across Florida. Elsewhere, the West experienced unsettled weather during December. Precipitation was especially heavy from northern California to the Intermountain West.

National Weather Data for Selected Cities

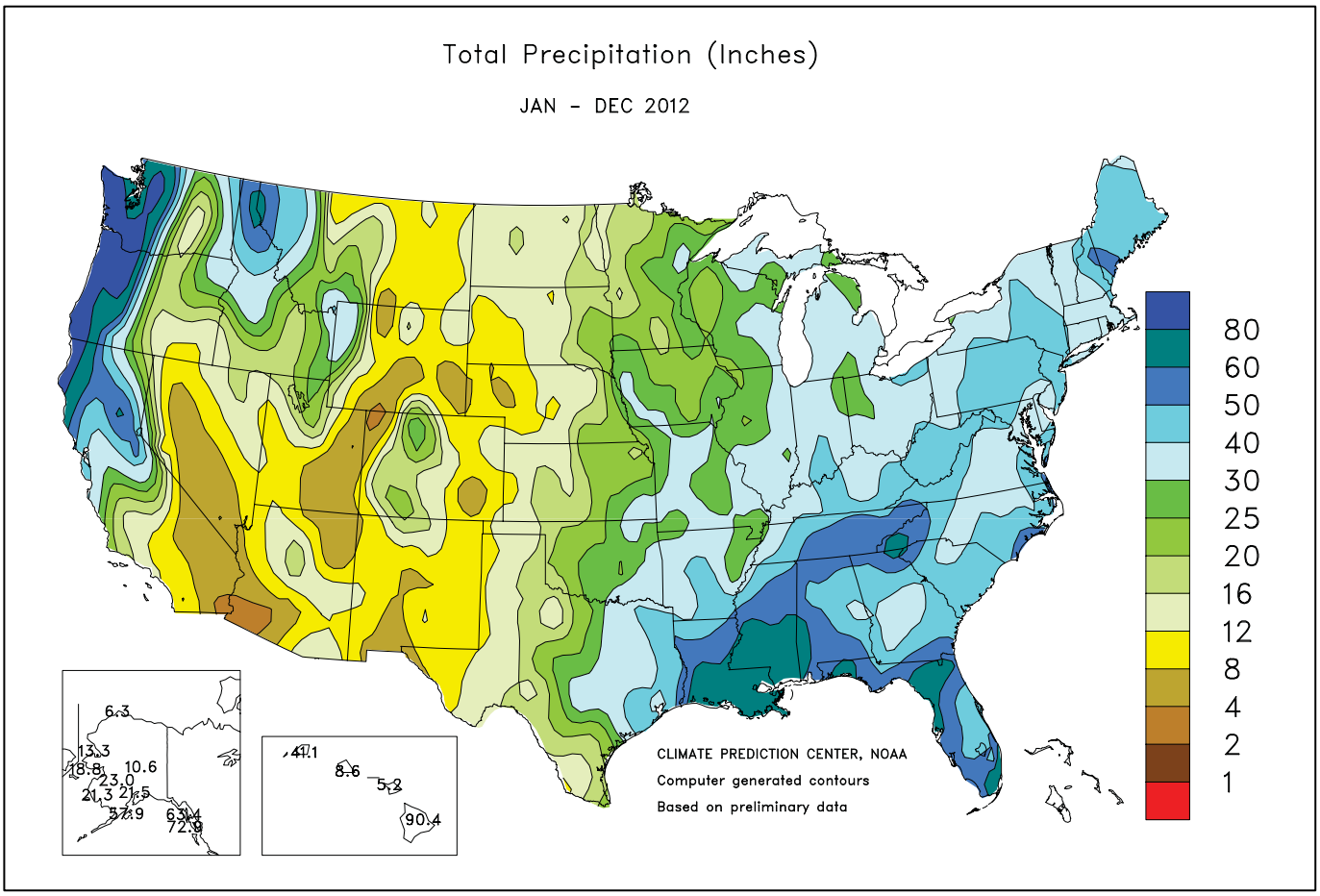
2012

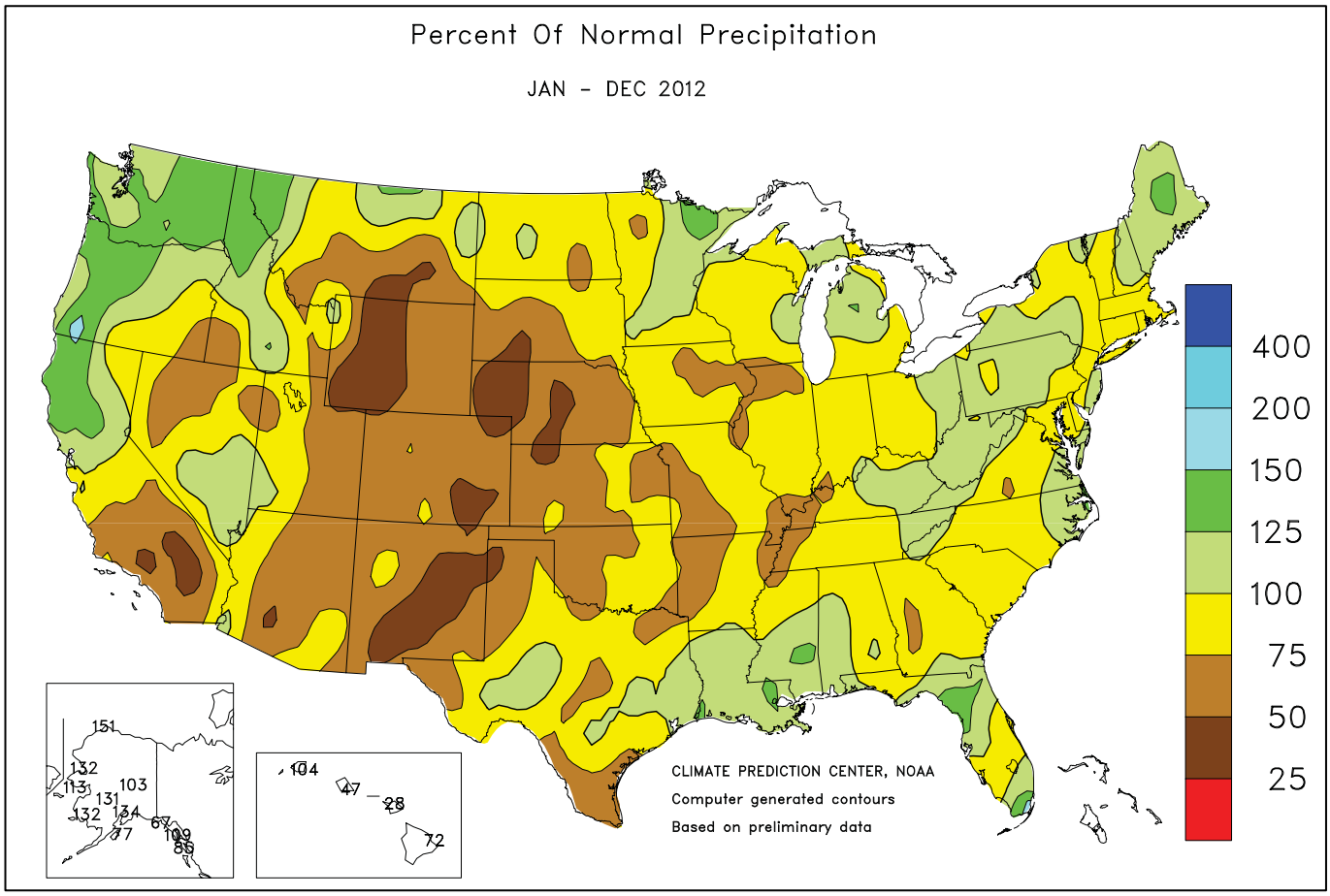
Data Provided by Climate Prediction Center

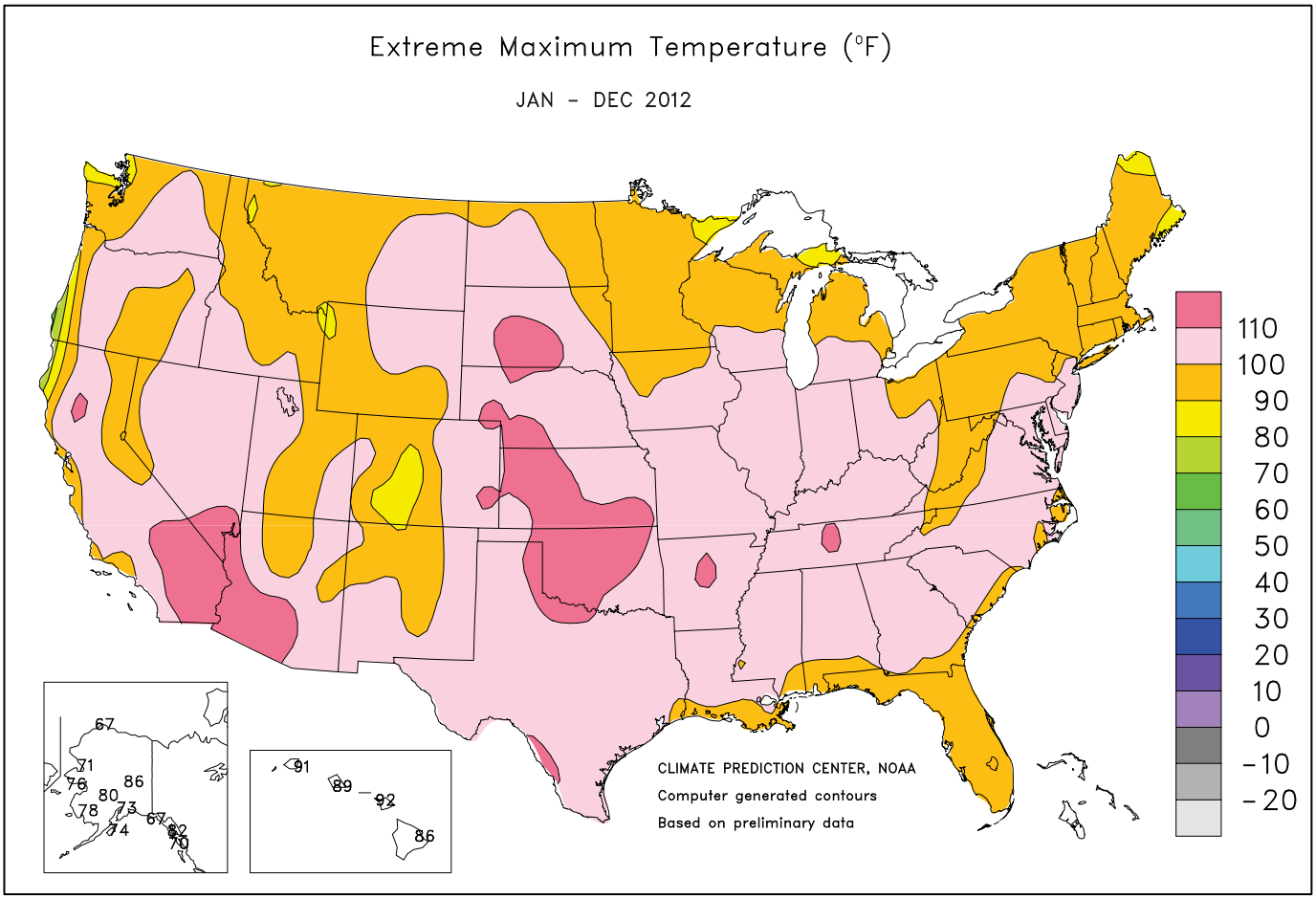
STATES AND STATIONS	TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
AL BIRMINGHAM	65	3	49.34	-4.64
HUNTSVILLE	64	3	52.20	-5.31
MOBILE	69	2	69.10	2.81
MONTGOMERY	68	3	43.06	-11.71
AK ANCHORAGE	35	-1	21.48	5.42
BARROW	13	3	6.27	2.12
COLD BAY	35	-3	43.99	3.71
FAIRBANKS	24	-3	10.64	0.31
JUNEAU	40	-2	63.44	5.11
KING SALMON	31	-4	25.59	6.18
KODIAK	39	-1	57.93	-17.42
NOME	24	-3	18.77	2.21
AZ FLAGSTAFF	48	2	14.89	-8.02
PHOENIX	77	4	4.27	-4.02
TUCSON	71	2	7.89	-4.28
AR FORT SMITH	66	5	33.94	-9.93
LITTLE ROCK	66	4	42.25	-8.68
CA BAKERSFIELD	67	2	4.41	-2.07
EUREKA	50	-3	50.77	12.67
FRESNO	67	4	9.98	-1.25
LOS ANGELES	64	1	8.89	-4.26
REDDING	62	0	36.44	2.92
SACRAMENTO	62	1	21.15	3.22
SAN DIEGO	64	0	6.63	-4.14
SAN FRANCISCO	58	1	21.46	1.36
STOCKTON	62	0	13.59	-0.25
CO ALAMOSA	43	2	5.59	-1.66
CO SPRINGS	53	5	8.10	-9.29
DENVER	54	5	10.12	-3.50
GRAND JUNCTION	55	3	4.53	-4.45
PUEBLO	55	3	5.00	-7.39
CT BRIDGEPORT	56	4	40.99	-3.16
HARTFORD	54	4	38.43	-7.73
DC WASHINGTON	61	3	32.45	-6.90
DE WILMINGTON	57	3	36.31	-6.50
FL DAYTONA BEACH	72	1	42.27	-7.02
FT LAUDERDALE	77	1	60.87	-3.33
FT MYERS	76	1	49.59	-4.60
JACKSONVILLE	69	1	53.42	1.08
KEY WEST	78	0	47.00	8.06
MELBOURNE	73	1	39.72	-8.57
MIAMI	77	0	86.94	28.41
ORLANDO	73	0	41.09	-7.26
PENSACOLA	71	3	66.61	2.33
ST PETERSBURG	74	0	53.05	3.47
TALLAHASSEE	70	2	59.31	-3.89
TAMPA	75	2	55.98	11.22
WEST PALM BEACH	76	1	78.75	17.36
GA ATHENS	64	2	37.35	-10.47
ATLANTA	65	3	37.03	-13.16
AUGUSTA	65	2	36.07	-8.52
COLUMBUS	68	3	35.21	-13.36
MACON	66	2	32.40	-12.59
SAVANNAH	68	2	40.21	-9.37
HI HILO	73	-1	90.41	-35.86
HONOLULU	77	0	8.59	-9.69
KAHULUI	75	-1	5.22	-13.58
LIHUE	76	0	41.08	1.52
ID BOISE	55	3	11.42	-0.78
LEWISTON	55	3	15.43	2.71
POCATELLO	49	2	10.68	-1.91
IL CHICAGO/O'HARE	55	6	26.91	-9.37
MOLINE	54	4	27.25	-10.79
PEORIA	55	4	27.07	-8.95
ROCKFORD	53	5	23.34	-13.27
SPRINGFIELD	57	4	30.06	-5.50
IN EVANSVILLE	60	4	33.12	-11.15
FORT WAYNE	54	4	28.58	-7.97
INDIANAPOLIS	57	4	38.00	-2.94
SOUTH BEND	53	3	34.69	-5.01
IA BURLINGTON	55	3	25.17	-12.77
CEDAR RAPIDS	51	2	24.40	-9.01
DES MOINES	56	6	26.27	-8.45
DUBUQUE	51	4	24.07	-11.44
SIOUX CITY	53	5	24.11	-1.88
WATERLOO	51	4	24.07	-9.07
KS CONCORDIA	57	3	23.99	-4.44
DODGE CITY	58	3	18.08	-4.27
GOODLAND	55	4	9.59	-10.17
HILL CITY	57	4	10.54	-12.35
TOPEKA	60	6	23.06	-12.58
WICHITA	61	5	25.04	-5.34
KY JACKSON	58	2	51.97	2.58
LEXINGTON	57	2	42.62	-3.28
LONDON-CORBIN	58	2	45.95	-1.46
LOUISVILLE	61	4	45.69	1.16
PADUCAH	61	4	30.06	-19.18
LA BATON ROUGE	70	3	69.39	6.32
LAKE CHARLES	71	3	72.01	14.83
NEW ORLEANS	72	3	68.28	4.12
SHREVEPORT	69	3	51.67	0.37
ME BANGOR	46	1	43.25	3.68
CARIBOU	42	3	38.98	1.55
PORTLAND	49	3	54.47	8.64
MD BALTIMORE	58	3	37.42	-4.52
MA BOSTON	54	2	36.72	-5.81
WORCESTER	51	4	43.89	-5.16
MI ALPENA	47	4	27.89	-0.51
DETROIT	54	4	27.11	-5.79
FLINT	51	4	30.85	-0.76
GRAND RAPIDS	53	5	33.85	-3.27
HOUGHTON LAKE	47	4	33.31	4.87
LANSING	51	4	28.42	-3.11
MUSKEGON	52	5	31.59	-1.28
TRAVERSE CITY	50	5	31.85	-1.62
MN DULUTH	44	5	33.20	2.20
INT'L FALLS	40	3	25.16	1.22
MINNEAPOLIS	51	6	29.59	0.18
ROCHESTER	50	7	24.86	-6.55
ST. CLOUD	47	5	25.01	-2.12
MS JACKSON	67	3	69.50	13.56
MERIDIAN	65	0	62.75	4.10
TUPELO	65	4	49.77	-6.09
MO COLUMBIA	59	5	30.65	-9.63
JOPLIN	62	4	38.04	-8.03
KANSAS CITY	59	5	22.28	-15.71
SPRINGFIELD	60	4	30.92	-14.05
ST JOSEPH	57	3	23.27	-11.97
ST LOUIS	61	5	32.30	-6.45
MT BILLINGS	51	4	7.14	-7.62
BUTTE	42	2	9.05	-3.73
GLASGOW	46	3	13.04	1.81
GREAT FALLS	47	3	13.11	-1.78
HELENA	47	3	9.76	-1.56
KALISPELL	45	2	19.94	2.73
MILES CITY	50	4	6.16	-7.33
MISSOULA	47	2	15.34	1.52
NE GRAND ISLAND	55	5	11.54	-14.35
HASTINGS	54	3	20.45	-7.49
LINCOLN	55	4	19.13	-9.24
MCCOOK	55	4	9.47	-12.15
NORFOLK	53	4	14.50	-12.16
NORTH PLATTE	52	3	10.04	-9.62
OMAHA/EPPLEY	56	5	22.61	-7.61
SCOTTSBLUFF	53	5	6.92	-9.41
VALENTINE	52	5	10.68	-8.84
NV ELKO	50	4	7.82	-1.77
ELY	48	3	12.23	2.26
LAS VEGAS	71	3	5.30	0.81
RENO	56	5	5.76	-1.72
WINNEMUCCA	51	2	5.81	-2.52
NH CONCORD	49	3	38.32	0.72
NJ ATLANTIC CITY	57	3	48.57	7.98
NEWARK	58	3	36.33	-9.93
NM ALBUQUERQUE	60	3	5.46	-4.00
NY ALBANY	51	3	36.99	-1.07
BINGHAMTON	49	3	39.34	0.69
BUFFALO	52	4	32.78	-7.76
ROCHESTER	52	4	34.12	0.16
SYRACUSE	53	6	35.11	-4.93
NC ASHEVILLE	58	3	44.68	-2.36
CHARLOTTE	62	1	33.69	-9.83
GREENSBORO	61	3	36.77	-6.36
HATTERAS	65	2	57.77	0.02
RALEIGH	62	2	40.79	-2.26
WILMINGTON	65	1	50.45	-6.62
ND BISMARCK	46	4	14.89	-1.95
DICKINSON	46	3	10.42	-5.93
FARGO	46	4	16.03	-5.16
GRAND FORKS	44	4	17.09	-2.51
JAMESTOWN	45	3	12.90	-5.59
MINOT	45	3	14.74	-3.70
WILLISTON	44	3	13.20	-0.96
OH AKRON-CANTON	54	4	37.93	-0.54
CINCINNATI	57	3	38.78	-3.83
CLEVELAND	54	4	44.62	5.92
COLUMBUS	56	3	37.27	-1.23
DAYTON	55	3	32.59	-6.99
MANSFIELD	53	4	40.16	-3.07
TOLEDO	53	3	30.33	-2.88
YOUNGSTOWN	52	3	45.08	7.06
OK OKLAHOMA CITY	64	4	29.47	-6.38
TULSA	65	4	28.73	-13.69
OR ASTORIA	51	0	91.35	24.22
BURNS	46	2	10.32	-0.25
EUGENE	53	1	50.19	-0.72
MEDFORD	56	2	26.86	8.49
PENDLETON	53	1	14.44	1.68
PORTLAND	55	1	50.43	13.36
SALEM	54	1	54.45	14.45
PA ALLENTOWN	54	3	41.02	-4.15
ERIE	53	3	39.68	-3.09
MIDDLETOWN	56	3	45.19	4.69
PHILADELPHIA	59	4	35.93	-6.11
PITTSBURGH	54	3	41.74	3.89
WILKES-BARRE	53	3	37.94	0.39
WILLIAMSPORT	54	4	36.23	-5.36
PR SAN JUAN	82	2	55.31	4.55
RI PROVIDENCE	54	3	41.18	-5.28
SC CHARLESTON	67	2	43.96	-7.57
COLUMBIA	66	2	42.75	-5.52
FLORENCE	66	2	41.53	-3.23
GREENVILLE	63	3	38.85	-11.37
MYRTLE BEACH	65	1	39.50	-6.21
SD ABERDEEN	47	3	14.64	-5.58
HURON	50	5	19.66	-1.23
RAPID CITY	51	4	11.41	-5.22
SIOUX FALLS	51	6	17.35	-7.34
TN BRISTOL	58	3	46.15	4.83
CHATTANOOGA	64	4	50.79	-3.73
JACKSON	62	2	42.00	-12.78
KNOXVILLE	61	3	53.67	5.45
MEMPHIS	66	4	36.91	-17.74
NASHVILLE	62	3	45.83	-2.28
TX ABILENE	68	4	23.18	-0.59
AMARILLO	61	4	12.33	-7.39
AUSTIN	70	1	35.13	1.48
BEAUMONT	71	2	63.76	3.87
BROWNSVILLE	77	4	21.39	-6.16
COLLEGE STATION	72	3	41.17	1.50
CORPUS CHRISTI	76	4	18.80	-13.45
DALLAS/FT WORTH	69	3	31.25	-3.48
DEL RIO	73	3	13.87	-4.36
EL PASO	67	2	6.04	-3.39
GALVESTON	74	3	47.20	3.36
HOUSTON	72	3	42.31	-5.53
LUBBOCK	64	4	11.43	-7.25
MIDLAND	67	4	12.80	-2.00
SAN ANGELO	69	5	21.95	1.05
SAN ANTONIO	72	3	39.40	6.48
VICTORIA	73	3	28.14	-11.96
WACO	69	2	32.33	-1.01
WICHITA FALLS	66	3	19.80	-9.01
UT SALT LAKE CITY	57	5	12.65	-3.85
VT BURLINGTON	50	5	35.94	-0.11
VA LYNCHBURG	58	3	29.82	-13.49
NORFOLK	63	3	48.34	2.60
RICHMOND	61	3	36.53	-7.37
ROANOKE	59	3	32.91	-9.57
WASH/DULLES	58	4	35.62	-6.19
WA OLYMPIA	50	0	59.59	8.80
QUILLAYUTE	49	0	119.53	17.81
SEATTLE-TACOMA	52	0	48.26	11.20
SPOKANE	49	2	21.31	4.64
YAKIMA	52	3	9.31	1.05
WV BECKLEY	54	2	44.36	2.74
CHARLESTON	58	3	41.49	-2.55
ELKINS	52	2	46.56	0.47
HUNTINGTON	58	3	41.11	-1.20
WI EAU CLAIRE	49	5	24.26	-7.86
GREEN BAY	49	5	31.52	2.33
LA CROSSE	51	4	26.68	-5.68
MADISON	51	5	26.36	-6.59
MILWAUKEE	52	4	29.29	-5.52
WAUSAU	48	4	29.46	-3.90
WY CASPER	49	4	7.89	-5.14
CHEYENNE	49	4	10.31	-5.14
LANDER	49	4	6.60	-6.82
SHERIDAN	48	3	9.53	-5.19

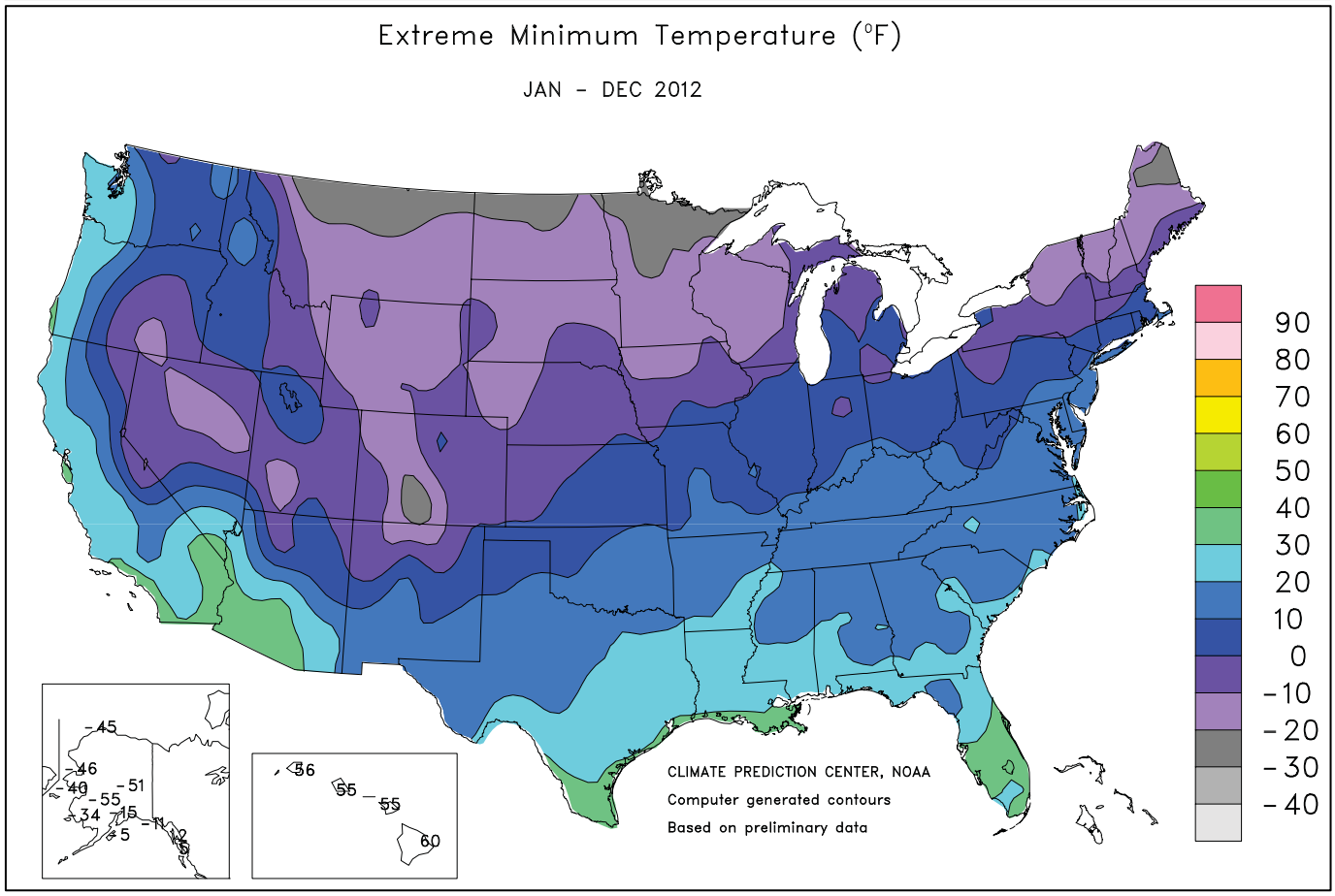
Based on 1971-2000 normals

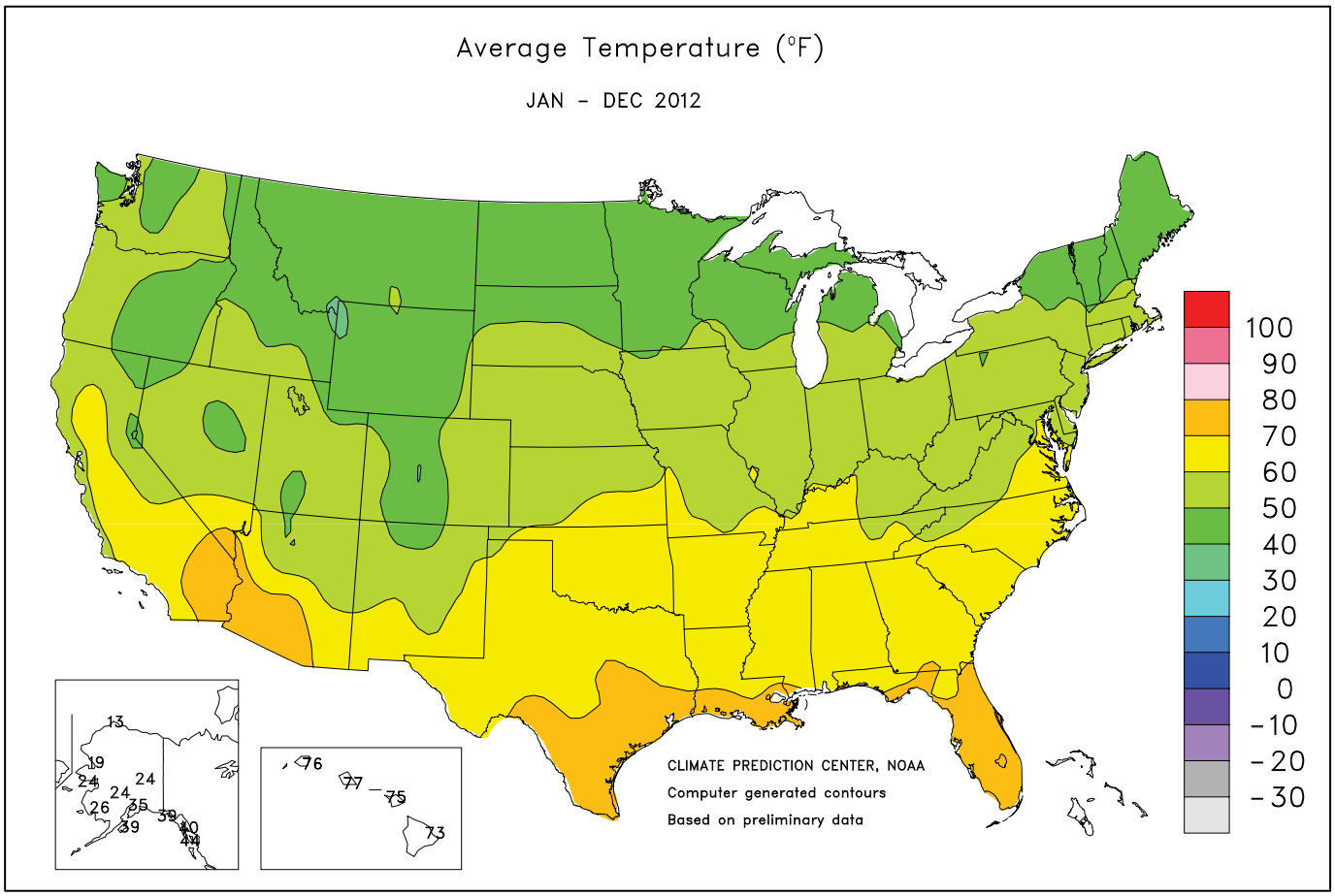
***** Not Available**


Total Precipitation (Inches)
JAN - DEC 2012
80
60
50
40
30
25
20
16
12
8
4
2
1
6.3
13.3
18.8
10.6
23.0
21.3
5.9
72.9
41.1
8.6
5.2
90.4
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Percent Of Normal Precipitation
JAN - DEC 2012
400
200
150
125
100
75
50
25
151
132
113
103
131
134
132
104
47
28
72
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Maximum Temperature (°F)
JAN - DEC 2012
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
67
71
76
86
80
78
73
74
67
82
70
91
89
92
86
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Minimum Temperature (°F)
JAN - DEC 2012
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-45
-46
-40
-51
-55
34
15
-11
-5
56
55
55
60
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Average Temperature (°F)
JAN - DEC 2012
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
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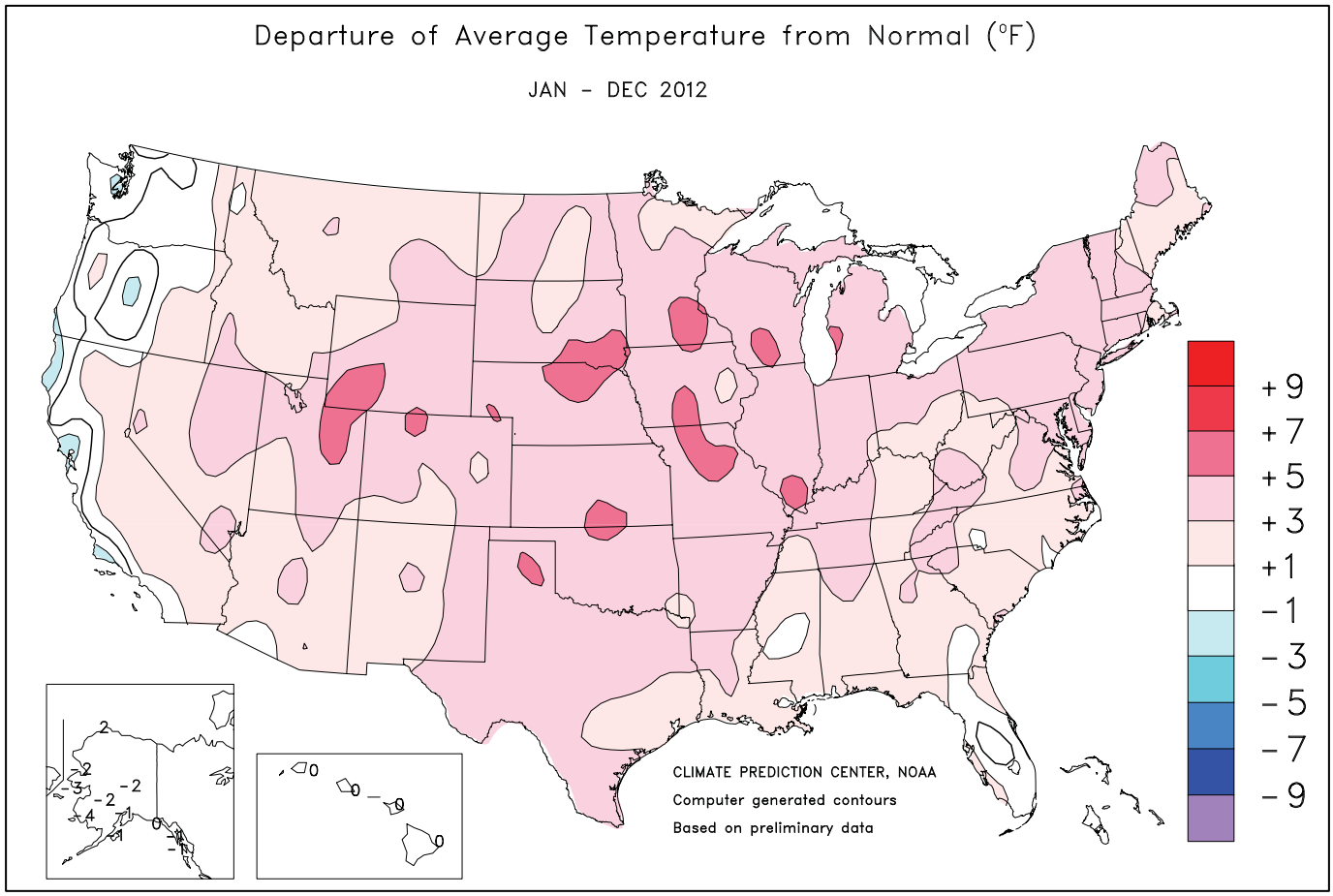
Computer generated contours
Based on preliminary data


Departure of Average Temperature from Normal (°F)
JAN - DEC 2012
+9
+7
+5
+3
+1
-1
-3
-5
-7
-9
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

2012 U.S. Fieldwork Highlights

Highlights, released on January 11, 2013, were provided by USDA/NASS.

April: A mild winter, coupled with warm early-spring conditions throughout much of the country, not only brought overwintered small grains out of dormancy sooner than expected, but also afforded producers a rapid start to spring fieldwork. By April 1, corn planting was active in half of the 18 major estimating states, with 3 percent of the nation's crop in the ground—slightly ahead of both last year and the 5-year average. Cotton producers in southern Texas had been working their fields since mid-March and had 12 percent of the state's crop planted by April 1. Conversely, growers in the Plains and western regions of Texas weighed the cost of seed against mostly dry soil conditions. Warm, mostly dry weather continued throughout the month in most areas, promoting record-setting planting and crop development paces for many crops. Toward month's end, the effects of below-average rainfall became evident in portions of the Southeast as soil moisture levels declined, causing some row crop producers to limit planting activities until some improvement occurred.

May: Warmer-than-normal weather dominated much of the nation during May, maintaining the rapid fieldwork and crop development paces established in April. In Kansas, heading of the winter wheat crop was nearing completion by May 6, approximately 3 weeks ahead of normal. By May 27, harvest was underway in southern portions of Kansas, marking the earliest start since 1952. With rice seeding winding down in the Delta and Texas, overall progress slowed despite improved weather conditions in California that boosted field activity. Favorable weather in the soybean-producing regions promoted a torrid planting pace in May, pushing overall progress 20 percentage points or more ahead of normal in 11 of the 18 major estimating states by June 3. Mostly adequate soil moisture levels existed in portions of the Midwest during the month, although precipitation throughout much of the nation was scarce and soil moisture levels began to decline. This hinted at the start of the hottest, driest summer on record for some regions. Most notably, persistently dry weather coupled with record-breaking temperatures in the central and southern Great Plains negatively impacted winter wheat conditions, evidenced by an 11-point nationwide decline in the good to excellent rating from May 6 to June 3.

June: Above-average temperatures and mostly sunny skies blanketed the heart of the country during June, providing ample time for fieldwork and boosting phenological development of this year's crops. However, the combination of high temperatures and below-average rainfall negatively impacted row crop conditions in many areas. Rootless corn syndrome was reported in portions of Missouri, while the need for additional moisture was evident in many Iowa corn fields with wilted plant leaves. By July 1, corn was reported 48 percent good to excellent, compared with 72 percent on June 3. This represented the lowest good to excellent rating for the week ending July 1 since 1988, when 23 percent of the crop was reported in good to excellent condition. Similarly, high temperatures maintained steady phenological development of the nation's soybean crop, but—when coupled with a severe lack of soil moisture—caused a significant decline in crop condition. In Texas, strong winds, blowing dust, and hail damaged some recently emerged cotton in the Panhandle in early June, while producers on the High Plains irrigated fields and sprayed insecticide to battle aphids and flea hoppers later in the month. Hot, dry conditions in late June dried out soils and stressed this year's barley crop in Idaho, Montana, and North Dakota—where over 60 percent of the crop is produced. Unrelenting high temperatures aided a rapid dry down pace for winter wheat in most of the major producing states, allowing harvest to advance quickly during the month. Nationwide, producers had harvested 69 percent of the winter wheat crop by July 1, one of the fastest paces on record.

July: The month brought little relief from the unusually hot weather and below-average rainfall experienced during June. Crop conditions deteriorated further under record-setting high temperatures and prolonged dryness; however, crop maturity and small grain harvest continued to advance rapidly. By July 8, sorghum producers in south-central Texas were gearing up for an earlier-than-normal harvest, while winter wheat harvest in Colorado, Michigan, Nebraska, and South Dakota was 49 percentage points or more ahead of normal. Peg development was evident in the eight major peanut-producing states as July began, with most of Georgia's crop reported in good to excellent condition despite excessively wet spots in some fields. Warm weather in the Delta promoted rapid boll setting for cotton, while favorable weather in California benefited fruit retention and development. As high temperatures and dry weather lingered, many dryland cotton fields in Texas' Plains regions were plowed under in favor of replanting to sorghum, while some fields in the Coastal Bend were zeroed out by insurance companies. Elsewhere, much-needed precipitation returned to portions of the eastern Corn Belt in late July; however, the moisture did little to benefit drought-affected corn—as 94 percent of the crop was at or beyond the critical pollination stage by July 29. Poor emergence was noted in many double-cropped soybean fields in the Corn Belt, as dry soils limited seed germination. On July 29, twenty-nine percent of the soybeans were reported to be good to excellent, compared with 45 percent on July 1. This represented the lowest good to excellent rating for the week ending July 29 since 1988, when 24 percent of the crop was reported as such.

August: While precipitation totals throughout much of the nation's breadbasket remained well below average, August temperatures returned to near-normal levels following oppressive July heat. Conversely, areas along the central and eastern Gulf Coast accumulated monthly rainfall in excess of 10 inches, with Hurricane Isaac dumping more than 16 inches on portions of southeastern Louisiana. Limited, early-month rainfall in portions of the Corn Belt benefited late-planted corn fields, but did little to help the mature, drought-affected crop. As a result, producers in some states chose to chop corn for silage or bale it for hay, as it would provide better nutrition for livestock given crop conditions this year. Dry, mostly sunny weather in early August provided small grain producers across the nation's northern tier ample time for fieldwork, pushing the barley and spring wheat harvests well ahead of the normal pace. Timely, mid-month rainfall in the eastern Corn Belt helped to slightly improve crop conditions and boost pod fill in late-planted soybeans, while some drought-stricken sorghum fields in Kansas were chopped for silage. Meanwhile, harvest for grain was in full swing throughout Texas. Heavy irrigation continued in many northern Texas cotton fields throughout much of August, but some dryland fields were plowed under. High water and strong winds damaged many cotton fields in Louisiana, as Hurricane Isaac made landfall toward month's end.

September: Near- to above-average temperatures lingered across much of the nation during September, promoting late-season crop development and favoring a rapid fieldwork pace. However, crop conditions and soil moisture levels declined further, as precipitation totaled less than 25 percent of normal in most regions from the Great Lakes westward. Iowa producers focused on combining corn fields with weaker stalks or wind damage early in the month, while mild, mostly dry weather in the Midwest promoted one of the nation's quickest harvests on record. Sunny days, coupled with cool nights, benefited sugarbeet quality in Michigan; however, harvest progress was limited throughout the month because producers anticipated an October 22 start to open piling and long-term storage. By September 9, virtually all of the barley and spring wheat crops were harvested. Seeding of the 2013 winter wheat crop was underway in several states by September 9, while less-than-adequate soil moisture levels delayed the start of fieldwork in portions of the Great Plains and Pacific Northwest. Elsewhere, rice producers were rapidly harvesting the nation's crop despite some mid-month harvest delays in Arkansas, caused by lodging that resulted from early-month thunderstorms. Favorable late-month weather conditions not only maintained rapid soybean maturation, but provided ample time for a torrid fieldwork pace as more Midwestern producers switched their focus from corn to soybeans. By September 30, producers had harvested 41 percent of the nation's soybean crop, 22 percentage points ahead of the 5-year average and one of the quickest harvest paces on record.

October: Near-normal temperatures, coupled with below-average precipitation, provided producers throughout much of the nation ample time to harvest their remaining summer crops and seed overwintered small grains. However, less-than-adequate soil moisture levels hampered seed germination and establishment of winter wheat in portions of the Great Plains. As a result, only 39 percent of the 2013 winter wheat crop was reported in good to excellent condition on November 4, compared with 49 percent at the same time last year. In Kansas, Oklahoma, and Texas, the portion of the crop rated in good to excellent condition was 37, 21, and 34 percent, respectively, compared with 45, 42, and 21 percent at the same time last year. With favorable weather conditions providing for one of the quickest harvest paces on record, corn producers had combined 95 percent of this year's crop by November 4. This was 24 percentage points ahead of the 5-year average. Hampered by persistent rainfall during October, the soybean harvest slowed in portions of the eastern Corn Belt as the month progressed. Meanwhile, producers in many central and western locations in the Midwest were harvesting the last of their fields by month's end. Elsewhere, the first fall frost ended phenological development in many northern Texas cotton and peanut fields, allowing for an earlier-than-normal harvest. Former Hurricane Sandy made landfall toward month's end, pummeling the Mid-Atlantic States with strong wind, excessive rain and snow, as well as severe coastal flooding.

November: Favorable temperatures continued well into November, aiding the maturation of remaining row crops. However, when coupled with below-average moisture, November conditions maintained stress on recently sown small grains. Portions of the central and southern Great Plains received less than 5 percent of their normal November precipitation, limiting seed germination and growth of the 2013 winter wheat crop. By November 25, thirty-three percent of the winter wheat was reported in good to excellent condition, the lowest rating for that week since condition estimates began in 1986. Following an early start to spring planting and rapid crop development throughout the summer, corn producers had harvested 95 percent of the nation's crop by November 4. This was the quickest corn harvest pace since 1987. Peanut harvest in the southern Great Plains and Southeast advanced rapidly in early November under mostly sunny skies. Similarly, mild, dry weather across the Cotton Belt favored a quick fieldwork pace into mid-November. By November 25, eighty-nine percent of this year's cotton crop was harvested, 4 percentage points ahead of the 5-year average. Elsewhere, cooler weather delivered by the remnants of Superstorm Sandy improved conditions for long-term sugarbeet storage in Michigan. As a result, sugarbeet harvest gained speed during the month. By November 25, ninety-nine percent of the nation's sugarbeets had been dug, 2 percentage points ahead of the 5-year average.

2012 U.S. Crop Production Highlights

Highlights, released on January 11, 2013, were provided by USDA/NASS.

Corn: Corn for grain production is estimated at 10.8 billion bushels, up 1 percent from the November 1 forecast but 13 percent below 2011. The average U.S. yield is estimated at 123.4 bushels per acre. This is up 1.1 bushels from the November forecast but 23.8 bushels below the 2011 average yield of 147.2. Estimated yields in 2012 are down sharply across many of the major corn-producing states due to widespread drought and extreme temperatures that occurred in June and July. Yield declines of 30 bushels or more compared with 2011 are estimated in several large corn-producing states. In contrast, yields are up across much of the Southeast and southern Plains, following the adverse weather conditions of 2011. Record yields are estimated in Arkansas, Florida, Georgia, Idaho, Louisiana, Mississippi, South Carolina, and Wyoming.

Corn planted area, at 97.2 million acres, is up 6 percent from 2011. This represents the largest acreage since 1937. Area harvested for grain is estimated at 87.4 million acres, down slightly from the November forecast but up 4 percent from 2011. The 2012 corn objective yield data indicate the lowest number of ears per acre since 2005 for the ten combined objective yield States (Iowa, Illinois, Indiana, Kansas, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin).

Corn silage production is estimated at 113 million tons in 2012, up 4 percent from 2011, and represents the highest U.S. production since 1982. The silage yield is estimated at 15.4 tons per acre, down 3.0 tons from 2011. Area harvested for silage is estimated at 7.38 million acres, up 24 percent from a year ago.

Sorghum: Grain production in 2012 is estimated at 247 million bushels, down 4 percent from the November 1 forecast but up 15 percent from 2011. Planted area is estimated at 6.24 million acres, up 14 percent from last year. Area harvested for grain, at 4.96 million acres, is up 26 percent from 2011. Average grain yield, at 49.8 bushels per acre, is down 1.3 bushels from the previous forecast and down 4.8 bushels from last year. In the South, more favorable growing conditions from a year ago led to improved grain yields. Record-high yields are estimated for Georgia and Louisiana. Meanwhile, yields in the Plains and Midwest were down from last year due to drought conditions. In Colorado, grain production is estimated to be the lowest since 1934. Kansas grain production is estimated to be the lowest since 1956. In New Mexico, grain production is estimated to be the lowest since 1945.

Oats: The 2012 production is estimated at 64.0 million bushels, up 19 percent from last year. Yield is estimated at 61.3 bushels per acre, up 4.2 bushels from the previous year. Area planted to oats is estimated at 2.76 million acres, up 11 percent from 2011. Harvested area is estimated at 1.05 million acres, up 11 percent from last year. Favorable growing conditions in the Dakotas, Minnesota, and Texas promoted significant yield increases compared with 2011. Drought conditions in the Mountain West and Southeast regions led to a large decline in yield from last year.

Barley: Production is estimated at 220 million bushels, up 41 percent from 2011. Average yield per acre, at 67.9 bushels, is down 1.7 bushels from the previous year. Producers seeded 3.64 million acres in 2012, up 42 percent from last year. Harvested area, at 3.24 million acres, is up 45 percent from 2011. These represent the first increases in seeded and harvested area since 2008, and reflect a strong rebound in barley acreage in North Dakota, following problems with seeding during 2011.

All wheat: Production totaled 2.27 billion bushels in 2012, up 13 percent from 2011. Grain area totaled 49.0 million acres, up 7 percent from the previous year. The U.S. yield is 46.3 bushels per acre, up 2.6 bushels from the previous year, matching the record high from 2010. The levels of production and changes from 2011 by type are winter wheat, 1.65 billion bushels, up 10 percent; other spring wheat, 542 million bushels, up 19 percent; and Durum wheat, 80.2 million bushels, up 62 percent.

Winter wheat: The 2012 winter wheat production totaled 1.65 billion bushels, up 10 percent from the previous year. The U.S. yield is 47.2 bushels per acre, up 1.0 bushel from 2011. The yield is the second highest on record, 0.6 bushel below 1999. Area harvested for grain is estimated at 34.8 million acres, up 8 percent from the previous year.

Planted and harvested acres were up from 2011 in most of the major Hard Red Winter (HRW) growing states. Particularly large acreage increases were experienced in Kansas, Oklahoma, and Texas, where dry conditions had limited 2011 planted acres. Record-high planted acres were experienced in North Dakota, while record low acreage was seeded in Nebraska and Ohio. Nationally, HRW production totaled 1.00 billion bushels, up 29 percent from 2011. North Dakota and California producers set record high yields.

In the Soft Red Winter (SRW) growing area, acreage increases from 2011 were experienced in the Southeast, with North Carolina seeding the highest acreage on record for that state. Conversely, acreage decreases were seen in most states in the Corn Belt and Northeast. Yields were down from last year in the Southeast, where many record yields were set in

2011. Record-high yields were realized in Michigan, Pennsylvania, and West Virginia. SRW production totaled 420 million bushels, down 8 percent from 2011.

White winter production totaled 222 million bushels, down 14 percent from the previous year. Planted and harvested acreage in the Pacific Northwest (Idaho, Oregon, and Washington) was below 2011's level. Yields were also down from last year in all Pacific Northwest States.

Other spring wheat: Production for 2012 is estimated at 542 million bushels, up 19 percent from 2011. Harvested area totaled 12.1 million acres, virtually unchanged from last year. The U.S. yield is 45.0 bushels per acre, up 7.3 bushels from last year. Favorable growing conditions in the Dakotas and Minnesota promoted significant yield increases compared to 2011.

Durum wheat: Production for 2012 is estimated at 82.0 million bushels, up 62 percent from 2011. Grain area harvested is 2.10 million acres, up 60 percent from the previous year. The U.S. yield is 39.0 bushels per acre, up 0.5 bushel from 2011 and the fourth-highest yield on record. The crop progressed ahead of normal due to above-normal temperatures in Montana and North Dakota throughout the growing season. Harvest was virtually complete by September 9 in Montana and North Dakota, well ahead of average.

Rice: Production in 2012 is estimated 199 million cwt, up slightly from the previous forecast and 8 percent above 2011. Planted area is estimated at 2.70 million acres, up slightly from 2011. Area harvested, at 2.68 million acres, is up 2 percent from the previous crop year. The average yield for all U.S. rice is estimated at a record-high 7,449 pounds per acre, up 32 pounds from the previous forecast and 382 pounds above the 2011 yield. Good growing conditions, combined with dry weather at harvest, led to record-setting yields in Arkansas, Louisiana, Missouri, and Texas.

All hay: Production of all dry hay for 2012 is estimated at 120 million tons, down 2 percent from the October 1 forecast and down 9 percent from the 2011 total. This is the lowest U.S. production level since 1964. Area harvested is estimated at 56.3 million acres, down 2 percent from the October 1 forecast but up 1 percent from last year. The average yield, at 2.13 tons per acre, is up 0.01 ton from October but down 0.23 ton from the previous year. This is the lowest U.S. yield since 1976.

Alfalfa and alfalfa mixtures: Production in 2012 is estimated at 52.0 million tons, down 6 percent from the October 1 forecast and down 20 percent from 2011. This is the lowest U.S. production level since 1953. Harvested area, at 17.3 million acres, is 8 percent below the October 1 forecast and 10 percent below the previous year. This is the smallest harvested area since 1948. Average yield is estimated at 3.01 tons per acre, 0.06 ton above the October 1 forecast but down 0.39 ton from 2011. Compared with last year, alfalfa hay harvested area decreased throughout much of the nation, as one of the hottest, driest growing seasons on record negatively impacted soil moisture levels and crop growth. Driven by poor yields across much of the central and northern Great Plains, Midwest, and Northern Tier States, production decreased 21 percent or more in 15 of the 42 estimating states. Conversely, yields in the Southwest and southern Great Plains increased or remained unchanged from last year, as precipitation was more widespread when compared with the extreme drought conditions evident in these areas in 2011.

All other hay: Production in 2012 totaled 67.8 million tons, up 2 percent from the October 1 forecast and 3 percent above 2011. This is the second-lowest U.S. production since 1998. Harvested area, at 39.0 million acres, is up less than 1 percent from October and up 7 percent from last year. Average yield is estimated at 1.74 tons per acre, up 0.03 ton from October but down 0.07 ton from last year. Despite unfavorably dry conditions that limited pasture and grass hay growth across much of the nation, harvested acreage increased in the central and southern U.S. due to CRP land being opened for haying. In fact, record highs for harvested acreage were established in Florida and Oklahoma. Elsewhere, declines in acreage throughout much of the West, portions of the Corn Belt, and in many Atlantic Coast States resulted from hot, dry weather, reductions in livestock inventories, and the conversion of hay fields to plowed land for row crop harvest. Record-low harvested acreages were established in Maine, Massachusetts, and North Dakota. With the exception of the South, where moisture was more readily available when compared with last year, yields throughout the country decreased from 2011 under oppressive heat and extremely dry conditions.

Peanuts: Production is estimated at a record high 6.74 billion pounds, up 4 percent from the previous forecast and an 84 percent increase from 2011. Planted area is estimated at 1.64 million acres, up 44 percent from 2011. Area harvested, at 1.61 million acres, is up 49 percent from the previous crop year. Average yield is estimated at 4,192 pounds per acre, up 134 pounds from the previous forecast and up 806 pounds from 2011. This is a record-high yield. Bouncing back from last year's severe drought, yields increased in all states except Texas. Condition of the crop was rated mostly good to excellent during the growing season, with timely rain during nut development boosting yields to record levels. Record-high yields were reported in Alabama, Florida, Georgia, Mississippi, North Carolina, Oklahoma, and Virginia.

Sunflower: The 2012 sunflower production totaled 2.79 billion pounds, up 37 percent from 2011. The U.S. average yield per acre increased 115 pounds from last year to 1,513 pounds. Planted area, at 1.92 million acres, is 24 percent above last year, but is the third lowest since 1990. Area harvested increased 26 percent from last year to 1.84 million acres. Production in North Dakota, the leading sunflower-producing state, is estimated at 1.46 billion pounds, up 91 percent from 2011. The yield in North Dakota, at a record-high 1,732 pounds per acre, is up 366 pounds from 2011. Compared with last year, planted area in North Dakota increased 48 percent and harvested area increased 50 percent. The average yield in Nebraska, at 740 pounds per acre, is down over 660 pounds from last year due to drought conditions in 2012 and is the second lowest on record. Extremely dry weather also hampered yields in Colorado, Kansas, Oklahoma, and South Dakota. Meanwhile, much better growing conditions were prevalent this year in Minnesota, where the average yield of 1,755 pounds per acre is the third highest on record.

Soybeans: Production in 2012 totaled 3.01 billion bushels, up 1 percent from the November 1 forecast but down 3 percent from 2011. U.S. production is the seventh largest on record. The average yield per acre is estimated at 39.6 bushels, 0.3 bushel above the November 1 forecast but 2.3 bushels below last year's yield. Planted area for the nation, at 77.2 million acres, is up 3 percent from last year and is the third largest on record. Soybean growers harvested 76.1 million acres, up 1 percent from the November 1 forecast and up 3 percent from last year. Drought conditions across most of the Corn Belt hampered soybean development in 2012, especially in Nebraska where the average yield declined 12.5 bushels from last year. In contrast, growing conditions were improved from a year ago across the remaining soybean states. Compared with last year, yield increased from the southern Great Plains to the Southeast, and into the Mid-Atlantic States. Record-high yields occurred in Alabama, Arkansas, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina, Virginia, and West Virginia. The 2012 soybean objective yield survey data indicate that final average pod counts were lower than last year in all of the eleven objective yield states. Compared with last year, pod counts were down more than 20 percent in Illinois, Kansas, Missouri, Nebraska, and South Dakota. Hot, dry conditions across most of the Corn Belt during the pod-development stage led to reductions in pod counts per plant compared with last year, and in turn, reduced yields.

Cotton: Upland cotton production is estimated at 16.3 million 480-pound bales, down 2 percent from the December 1 forecast but up 10 percent from last year. The U.S. yield for Upland cotton is estimated at 849 pounds per acre, up 68 pounds from last month and up 77 pounds from 2011. Upland planted area, estimated at 12.1 million acres, is down 16 percent from last year. Harvested area, at 9.19 million acres, is down 10 percent from last month but up fractionally from last year. Record high-Upland yields are forecast in Alabama, California, Georgia, North Carolina, South Carolina, and Virginia. In Georgia, objective yield data forecasted boll weights to be the highest on record. Objective yield data in North Carolina forecasted a record-high number of bolls per acre.

American Pima producers planted 238,400 acres, down 22 percent from last year. Harvested area, at 236,800 acres, is down 22 percent from last year. Production is estimated at 759,900 bales (480-pound), up 16 percent from the September 1 forecast but down 11 percent from last year. The U.S. yield is estimated at 1,540 pounds per acre, up 212 pounds from the September 1 forecast and up 200 pounds from last year.

Sugarbeets: Production for 2012 is estimated at 35.2 million tons, up 1 percent from the November 1 forecast and 22 percent above last year. Growers in the ten major sugarbeet-producing states planted 1.23 million acres, down slightly from last year. Harvested area, at 1.20 million acres, is down 1 percent from the previous year. Estimated yield, at 29.3 tons per acre, is up 0.5 ton from the November forecast and 5.5 tons above last year. Early planting, followed by hot and dry summer growing conditions, helped to maximize the crop's yield potential. Colorado, Michigan, Nebraska, and North Dakota reported record-high yields this year, leading to a record-high U.S. yield. Dry fall weather provided nearly optimal harvest conditions in most of the growing region.

Sugarcane: Production of sugarcane for sugar and seed in 2012 is estimated at 32.6 million tons, of which 30.9 million tons was utilized for sugar and 1.70 million tons for seed. Total production for sugar and seed is up 2 percent from the December 1 forecast and up 12 percent from 2011. Sugarcane producers harvested 899,000 acres for sugar and seed in 2012, up slightly from the December forecast and up 3 percent from last year. Yield for sugar and seed is estimated at 36.3 tons per acre, up 0.5 ton from the December forecast and up 2.8 tons from 2011. In Louisiana, an extended growing season, coupled with timely rains, helped growers realize record-high yields this year. Florida also reported very good growing conditions this season. Although some damage was reported to the crop in Florida and Louisiana during Hurricane Isaac, the damage was early in the growing season—which allowed ample time for the crop to fully recover. Production in Hawaii was up slightly from last year, despite drought conditions on the island of Maui, since the entire crop is irrigated.

National Agricultural Summary

January 14 – 20, 2013

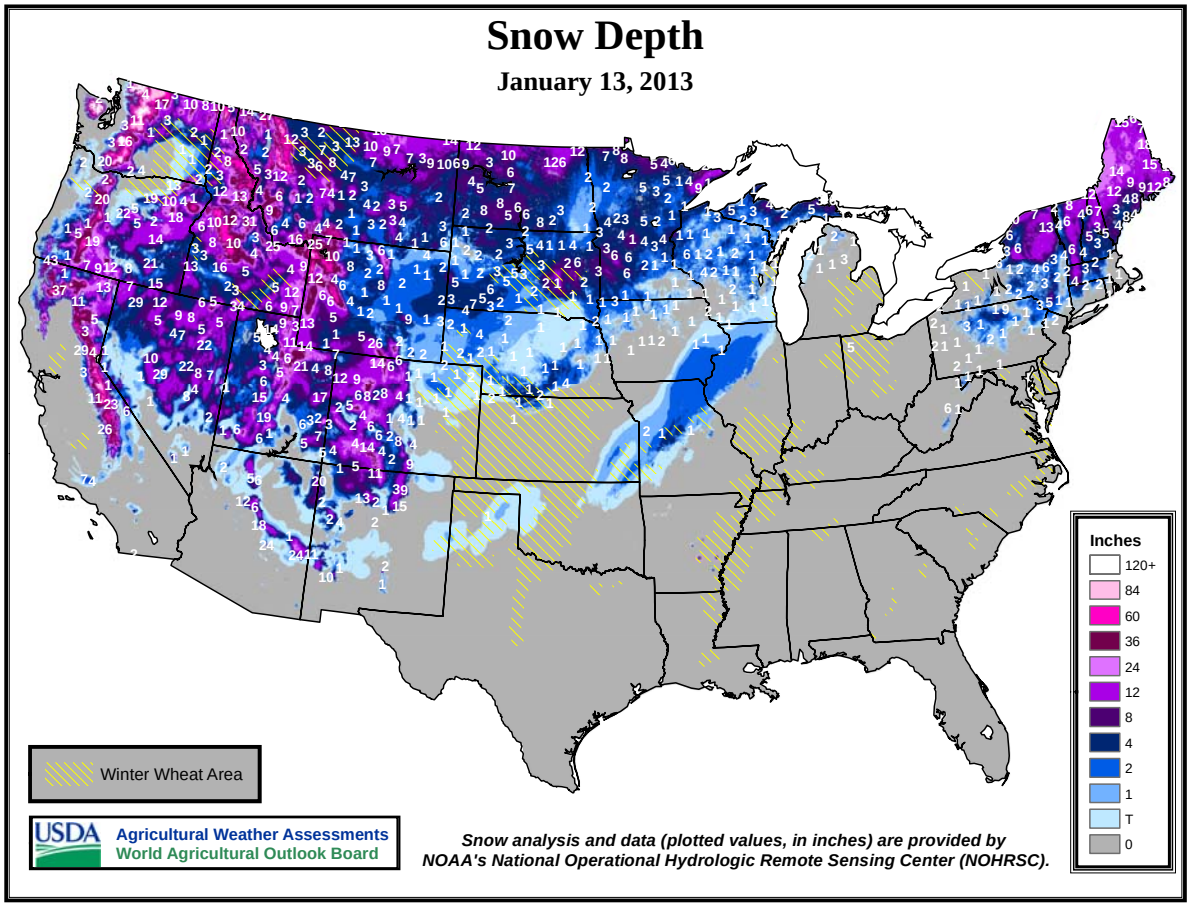
Weekly National Agricultural Summary provided by USDA/NASS

Temperatures in the Atlantic Coast States were above normal, but weekly readings were well below average from the Delta westward along the U.S.-Mexico border, and from the Rocky Mountains to the Pacific Coast. Most notably, weekly temperatures averaged more than 20°F below normal in portions of the Great Basin and Rocky Mountains. A moisture-free week left winter wheat throughout the hard red growing region exposed to potential weather extremes, as snow cover was mostly non-existent from Montana to Texas. Elsewhere, a band of moisture stretched from the Delta into the Mid-Atlantic region, with many areas receiving more than 3 inches of precipitation during the week.

Warm, windy, mostly dry weather blanketed much of Florida, causing further expansion of unfavorably dry conditions during the week. Soil moisture was rated 51 percent very short to short, leaving most small grain crops in need of additional moisture to sustain growth. While a variety of vegetable crops were harvested in southern portions of the state, producers in Gadsden County were busy with land preparations for spring tomatoes. In Bradford County, strawberries were being harvested earlier than normal. Citrus growers conducted general orchard maintenance and applied fertilizer during the week. Harvest of early and mid-season varieties was ongoing, providing packing houses with colored grapefruit, oranges, and tangerines for shipping.

Below-average temperatures and limited precipitation continued in Arizona during the week. As a result, 74 percent of the pastures in the state were rated very poor to poor. Conversely, 75 percent of Arizona's alfalfa crop was reported in good to excellent condition. Producers were harvesting hay from nearly half of the state's total acreage, while sheep continued to graze other fields. Small grain seeding was ongoing. Fruit and vegetable producers shipped a variety of crops.

In California, higher elevations experienced unusually warm, sunny conditions, while sub-freezing morning temperatures were widespread across the Central Valley. Fruit producers utilized wind machines and sprinklers to help protect their crops. Throughout the week, fruit was examined for damage, while a variety of citrus crops continued to be harvested. Dormant sprays were applied to stone fruit orchards and grape vineyards. Winter vegetable growth was slowed due to cool weather. In some locations, fieldwork was completed in preparation for late-winter planting.



International Weather and Crop Summary

January 13-19, 2013

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

HIGHLIGHTS

EUROPE: Occasional rain in southern Europe benefited vegetative winter wheat, while seasonably cold weather maintained favorable overwintering conditions for dormant crops elsewhere.

WESTERN FSU: Seasonably cold, snowy conditions were beneficial for dormant winter crops.

MIDDLE EAST: Locally heavy rain in central and western Turkey contrasted with favorably dry weather across the rest of the region.

NORTHWEST AFRICA: Locally heavy showers ended a month-long dry spell, boosting soil moisture for vegetative winter grains.

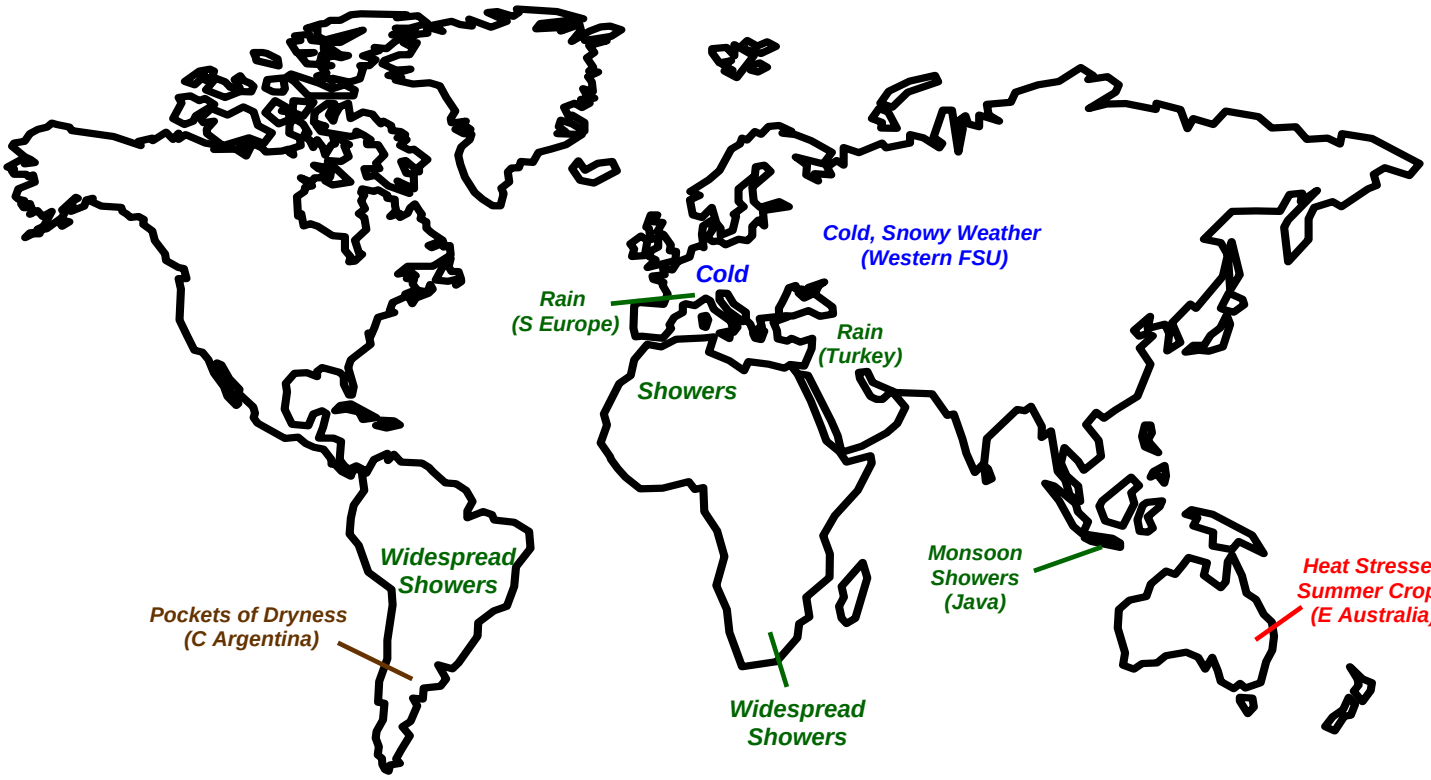
SOUTHEAST ASIA: Heavy rainfall continued in Java, Indonesia, boosting moisture supplies for reproductive rice but causing some minor flooding.

AUSTRALIA: Very hot weather continued to stress summer crops in eastern Australia.

SOUTH AFRICA: Widespread, locally heavy showers increased moisture for corn and other rain-fed summer crops.

ARGENTINA: Light rain returned to southern farming areas, but warmth and dryness continued in other key agricultural districts.

BRAZIL: Rain intensified throughout central Brazil, increasing moisture for soybeans and other summer crops.



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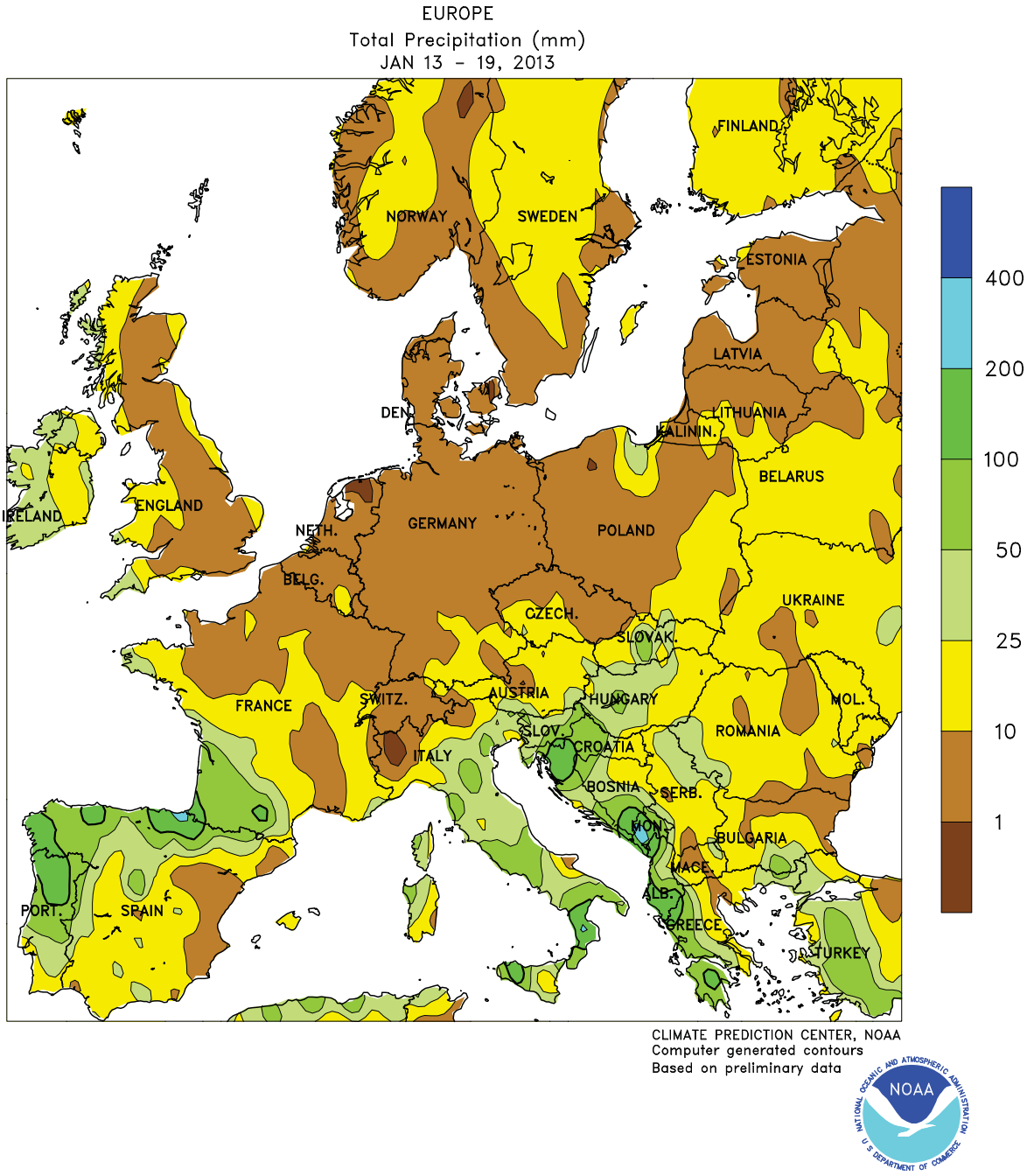
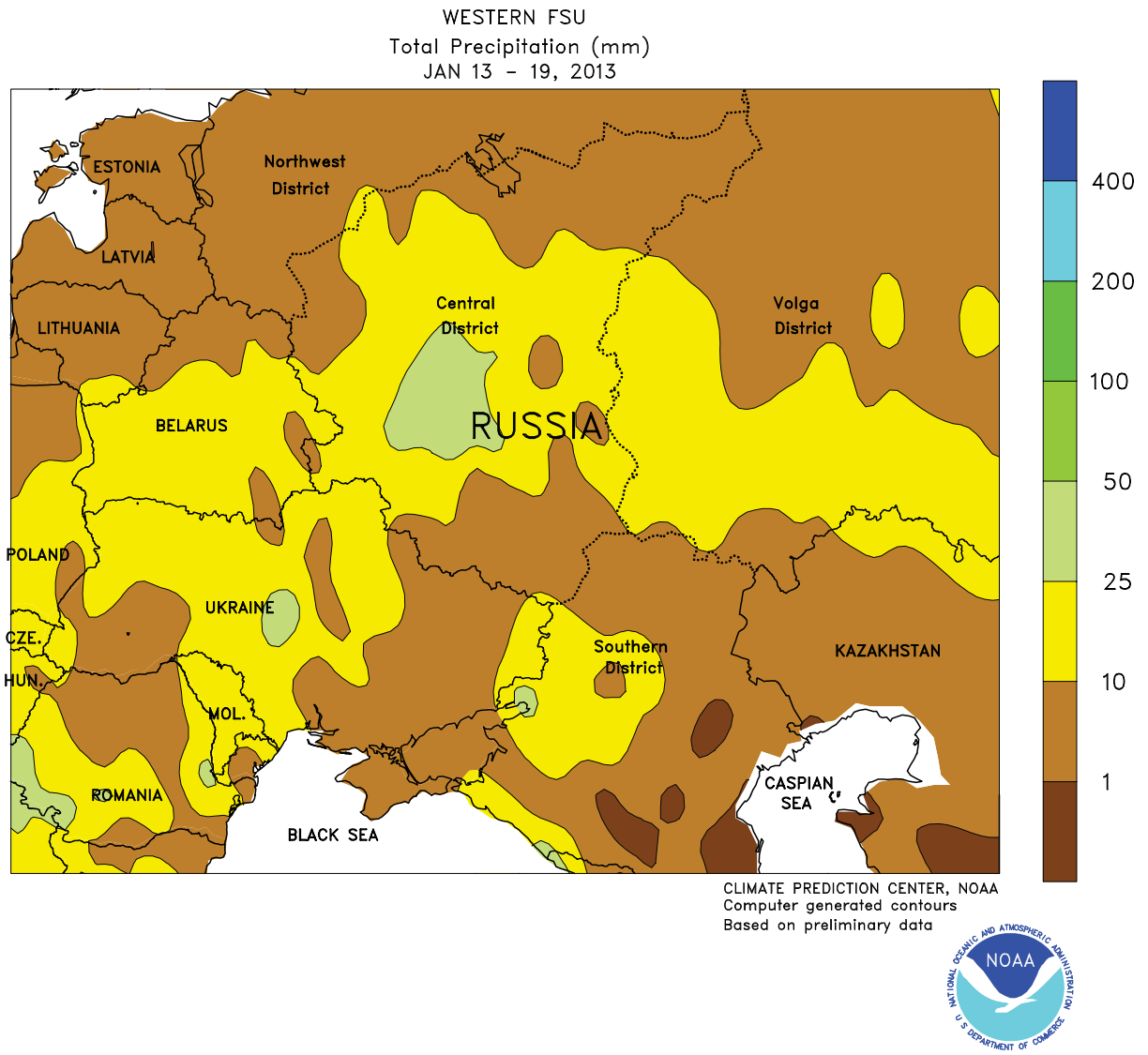


EUROPE

Wet weather across southern growing areas contrasted with mostly dry, seasonably cold conditions over central and northern Europe. A series of slow-moving storms produced moderate to heavy rain and mountain snow (10-100 mm liquid equivalent, locally more) from the Iberian Peninsula into Italy and the western and northern Balkans, boosting soil moisture for winter grains while increasing irrigation reserves for warm-season crops. Meanwhile, seasonably cold weather (2-7°C below normal) prevailed across northern and central Europe, where dormant grains and oilseeds were overwintering favorably. Nighttime temperatures of -15 to -10°C remained above the threshold for potential burnback or winterkill, and most primary growing areas are now insulated by 5 to 15 cm of fresh snow cover.

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



WESTERN FSU

Somewhat milder weather in the south contrasted with seasonably cold, snowy conditions in the north. A slow-moving warm front generated snow and ice (2-35 mm liquid equivalent) from Belarus and northern Ukraine into the Central and Volga Districts in Russia. Snow depths in these locales averaged 10 to 25 cm, affording dormant winter crops adequate protection against potential incursions of bitter cold. Farther south, temperatures up to 4°C above normal caused much of the precipitation (2-20 mm) to fall as rain. Consequently, snow depths at week's end were less than 5 cm from southern Ukraine into central and southern portions of Russia's Southern District, exposing winter grains to the elements.

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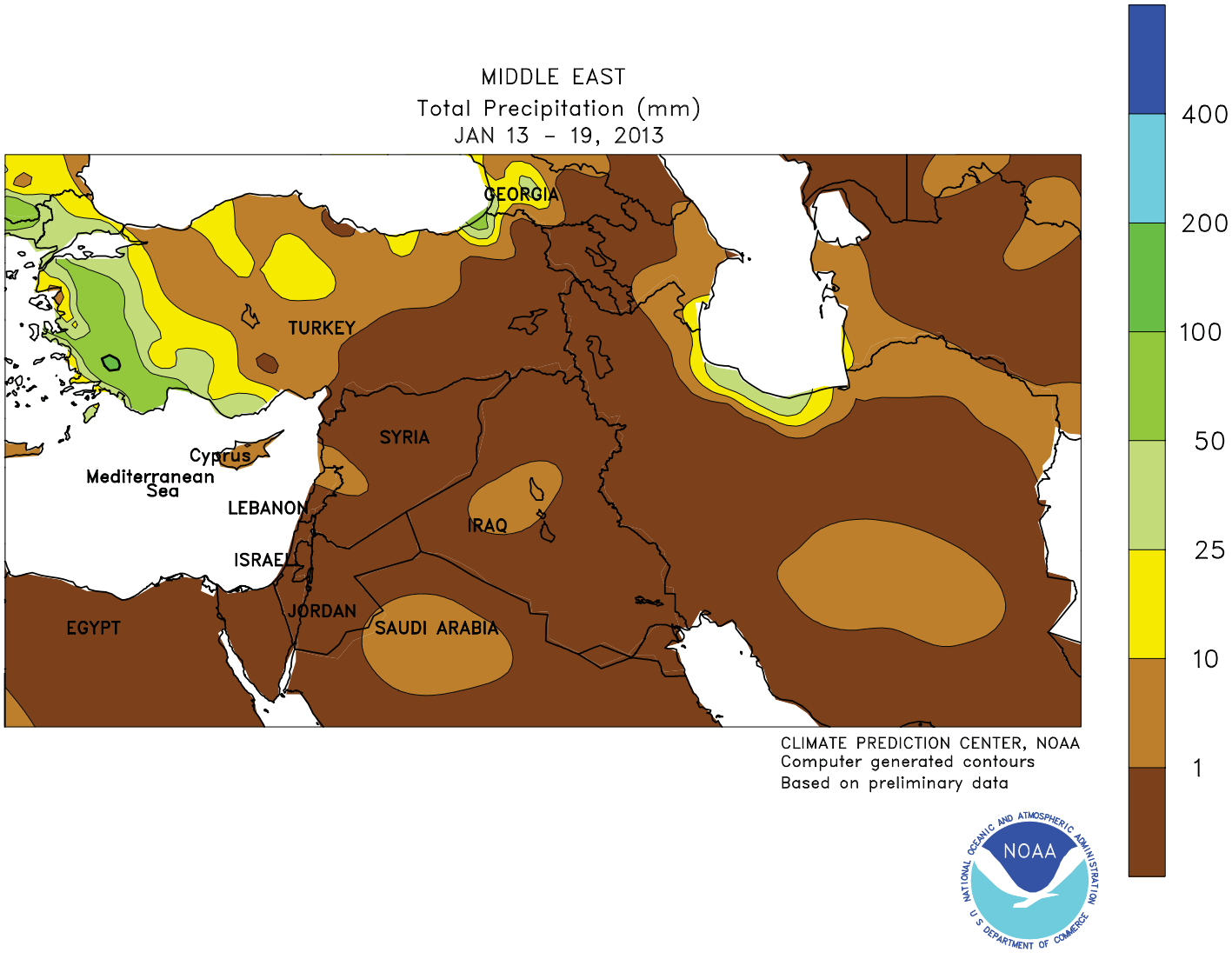

MIDDLE EAST

Unsettled weather prevailed in Turkey, while drier conditions returned to central and eastern growing areas. An area of high pressure provided sunny skies and near-normal temperatures from the eastern Mediterranean Coast into Iran. The dry weather was especially welcomed in portions of Syria, Lebanon, and Israel, where recent heavy rain and historic snow caused lowland flooding, fieldwork delays, and impacted transportation and infrastructure. Meanwhile, a slow-moving area of low pressure generated locally heavy showers (25-70 mm) in southern and western Turkey, maintaining adequate to abundant soil moisture for winter wheat and barley.

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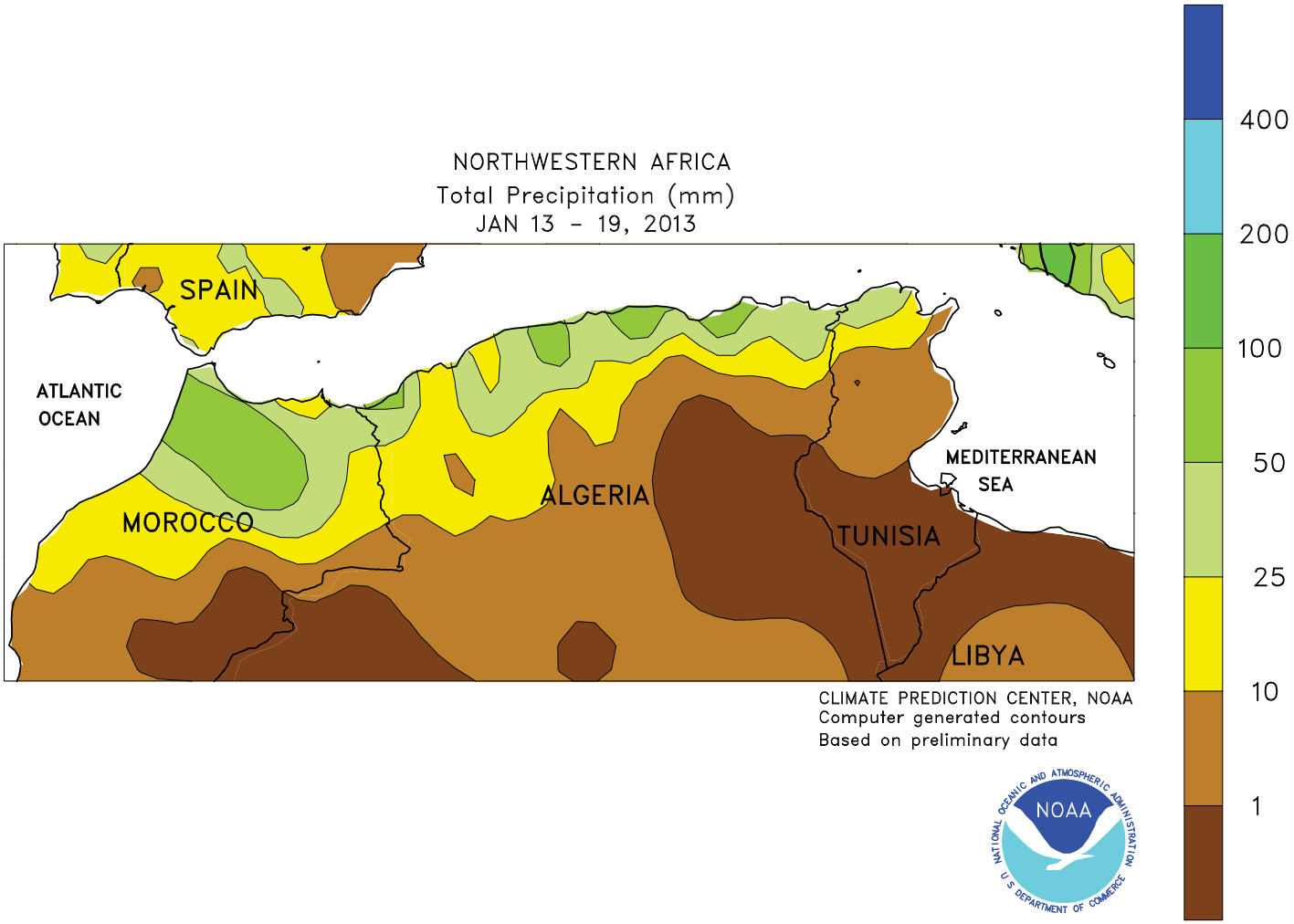

NORTHWEST AFRICA

Wet weather returned, ending a month-long dry spell. A series of Mediterranean storms produced moderate to heavy showers (25-70 mm) from northern Morocco into northern Tunisia, alleviating concerns about short-term dryness and boosting topsoil moisture for vegetative winter grains. Temperatures averaged 1 to 3°C above normal, with nighttime temperatures remaining well above freezing.

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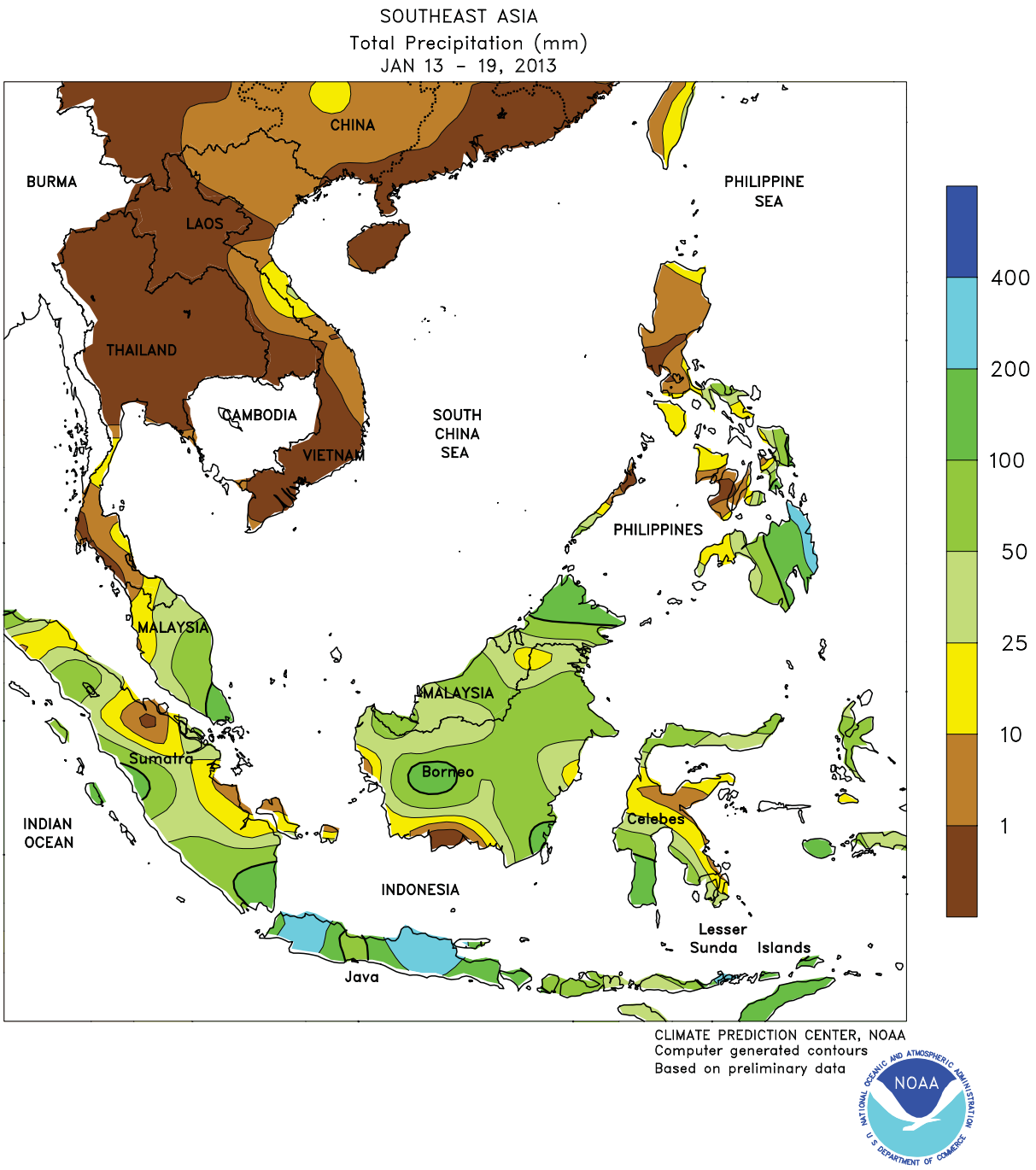

SOUTHEAST ASIA

Heavy rains continued across Java, Indonesia, as 50 to as much as 400 mm added to impressive seasonal totals (since November 1). In eastern Java, after a slow start to the rainy season, seasonal rainfall amounts topped 600 mm (15 percent above the long-term average). In central Java, seasonal rainfall totals of nearly 750 mm were reported (23 percent above average). Meanwhile in western Java, recent heavy showers caused localized flooding while pushing seasonal rainfall totals over 1,000 mm (35 percent above average). Rice was progressing through reproduction in most areas with abundant moisture supplies fostering a favorable outlook on crop prospects. In oil palm areas of Indonesia and Malaysia, showers were somewhat subdued from the heavy downpours of the previous couple of weeks. Rainfall remained seasonable (25-75 mm) maintaining beneficial moisture conditions for oil palm. In the Philippines, seasonably wet weather continued in eastern growing areas, ensuring ample moisture for rice and corn.

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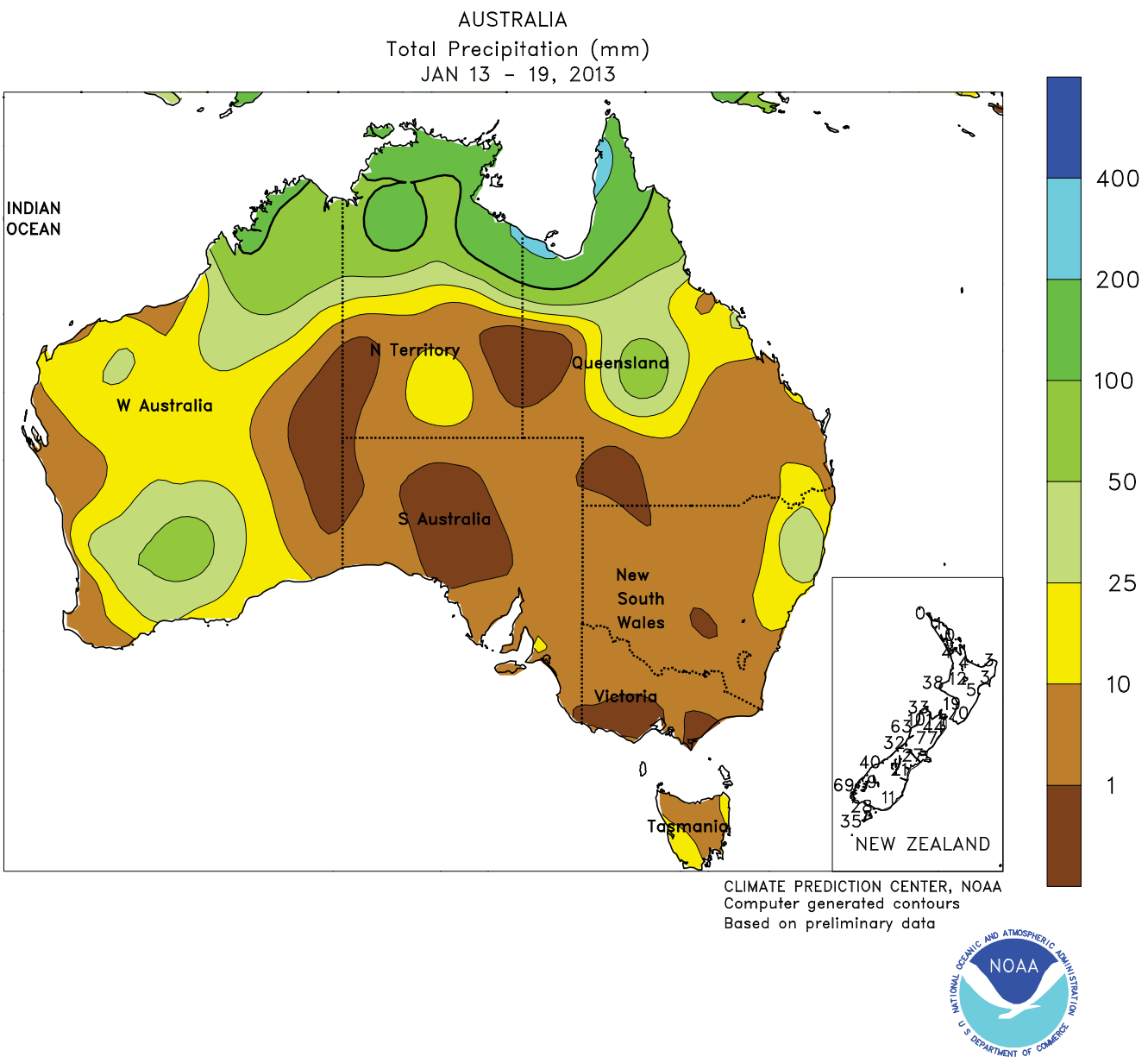

AUSTRALIA

Following a very hot start to the week, somewhat cooler weather overspread eastern Australia, creating slightly more favorable conditions for summer crop development. By the end of the week, however, very hot weather returned to eastern Australia, renewing stress on cotton and sorghum. On the hottest days, maximum temperatures were in the upper 30s to middle 40s degrees C. During mid-week, high temperatures were generally in the upper 20s to middle 30s degrees C. Dry weather accompanied the heat during most of the week, maintaining irrigation requirements. Locally heavy showers (10-50 mm, locally more) at the end of the week provided some relief from the excessive heat, especially in southern Queensland. In northern New South Wales, much of the rain fell east of the major cotton growing areas.

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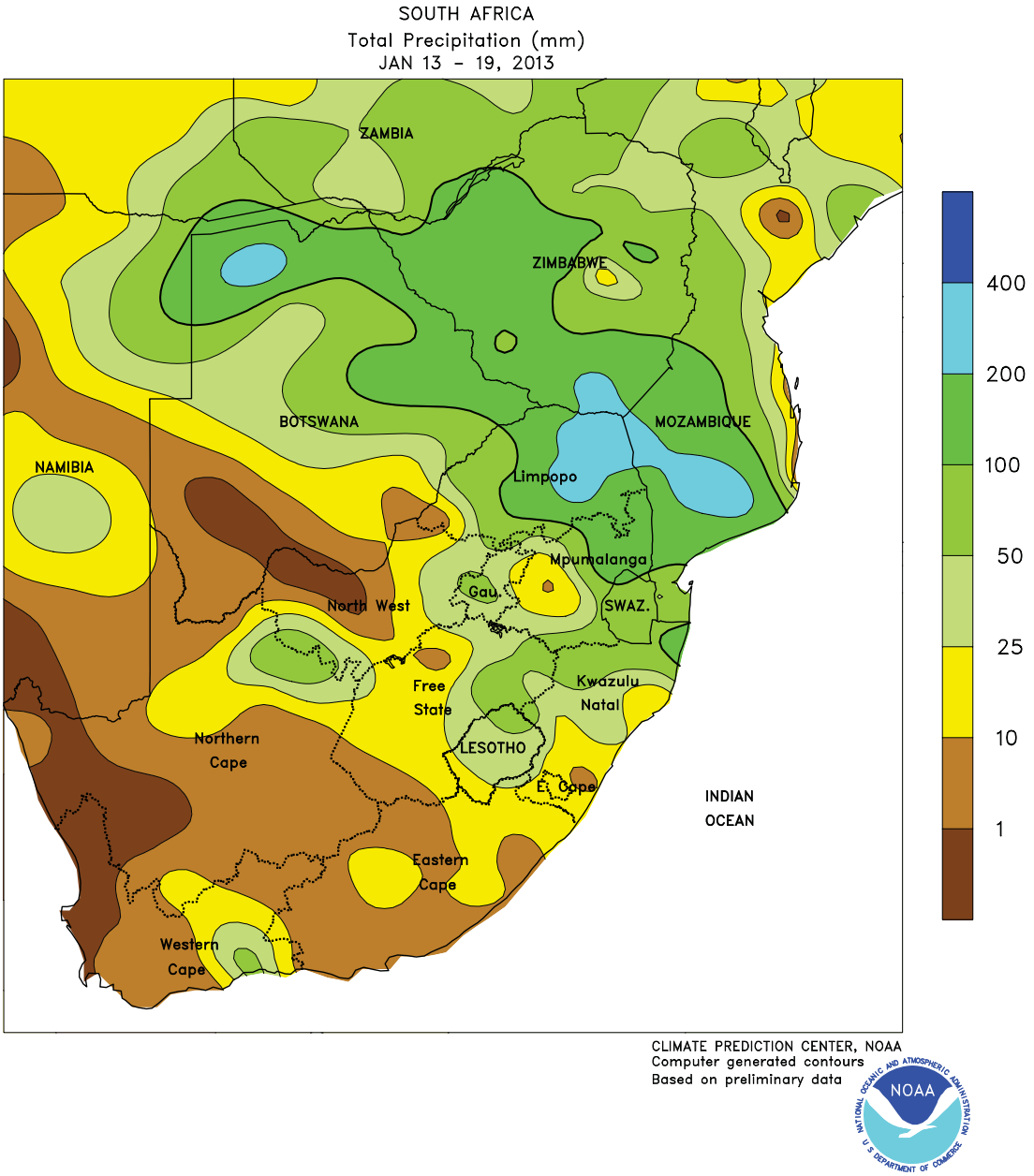

SOUTH AFRICA

Rainfall increased throughout key eastern farming areas, boosting moisture reserves for rain-fed summer crops. Amounts totaled 25 to 100 mm across the corn belt, although higher amounts reportedly caused some flooding in outlying production areas of Limpopo; heavy rain (greater than 50 mm) ended a drying trend in the vicinity of southwestern Mpumalanga as summer crops approached or entered reproductive phases of development. Similar amounts were recorded in irrigated sugarcane areas of eastern Mpumalanga and northern KwaZulu-Natal, but drier weather prevailed in the southern rain-fed districts following several weeks of beneficial rain. Weekly temperatures averaged within 1°C of normal in the aforementioned areas, with daytime highs in the upper 20s (degrees C) in eastern sections of the corn belt and the lower and middle 30s elsewhere. Showers were scattered throughout the Cape Provinces, with most locations recording 5 to 25 mm. Weekly temperatures averaged 1 to 4°C above normal throughout these areas, with daytime highs reaching the upper 30s in major agricultural districts in Northern and Western Cape. The heat and dryness fostered rapid development of irrigated summer crops and supported harvesting of grapes and other early maturing fruit crops.

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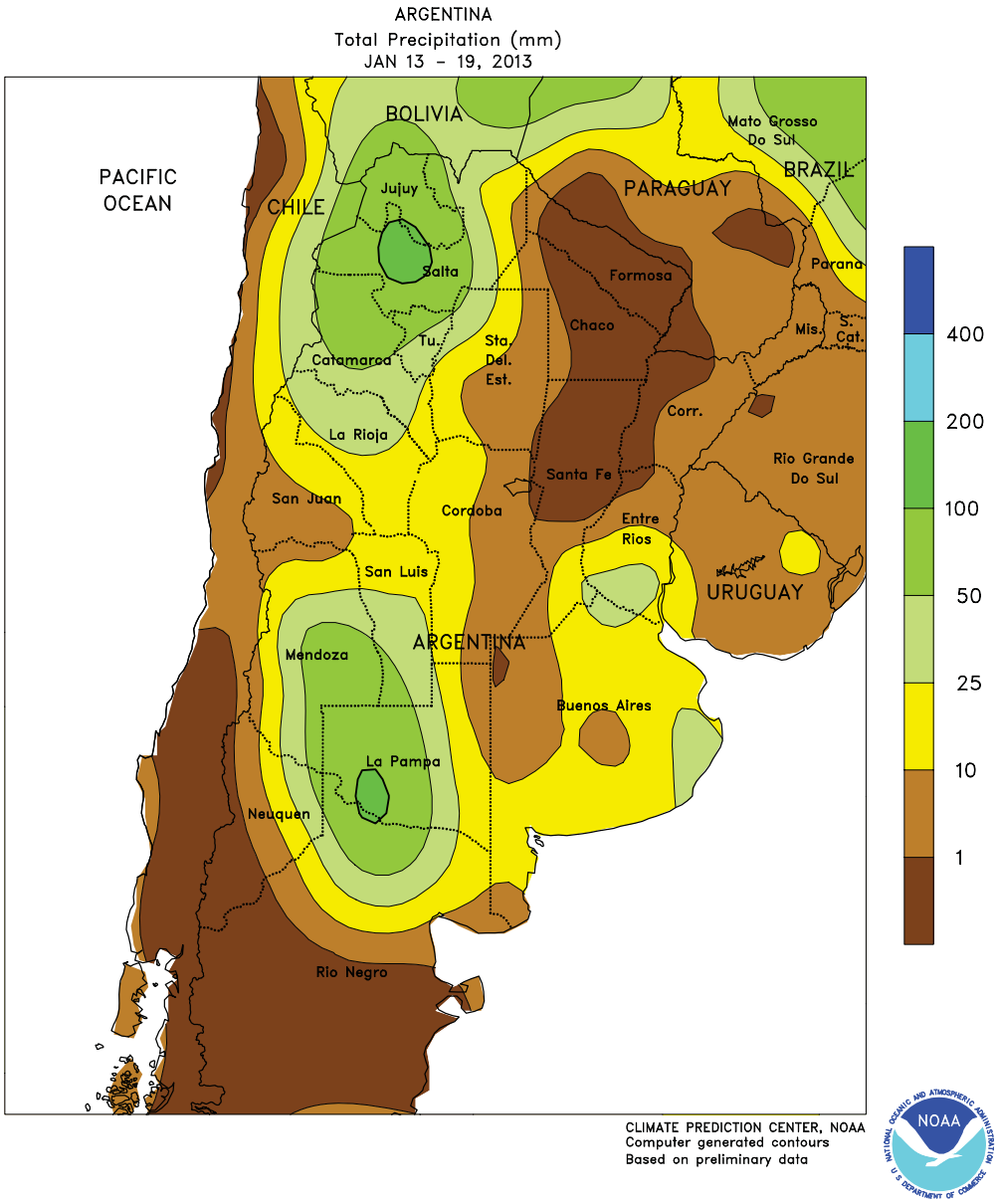

ARGENTINA

Light rain returned to Argentina's southern production areas, boosting topsoil moisture for germination and establishment of recently planted corn and soybeans, although lingering pockets of dryness were causing some concern. Rainfall totaled 10 to 25 mm across much of La Pampa and Buenos Aires, as well as western sections of Cordoba and southern parts of Santa Fe and Entre Rios. In contrast, dry weather lingered over northwestern Buenos Aires and nearby locations in northern La Pampa, southeastern Cordoba, and southwestern Santa Fe. Although initially beneficial, the dryness in these areas has reached excessive levels in some locations, and moisture is needed to ensure proper development of summer grains and oilseeds. Weekly average temperatures were near-normal throughout central Argentina, with daytime highs in the lower and middle 30s (degrees C) fostering growth of summer crops in the absence of stressful heat. Farther north, dry weather returned to the northeastern cotton belt (Santa Fe, Chaco, Formosa, and eastern sections of Santiago del Estero), following last week's beneficial rain. Wet weather continued, however, in the northwest, with amounts in excess of 50 mm again centered over Salta. Weekly temperatures averaged near normal in the northeast and 1 to 2°C above normal toward the west, with daytime highs approaching 40°C in the vicinity of western Chaco.

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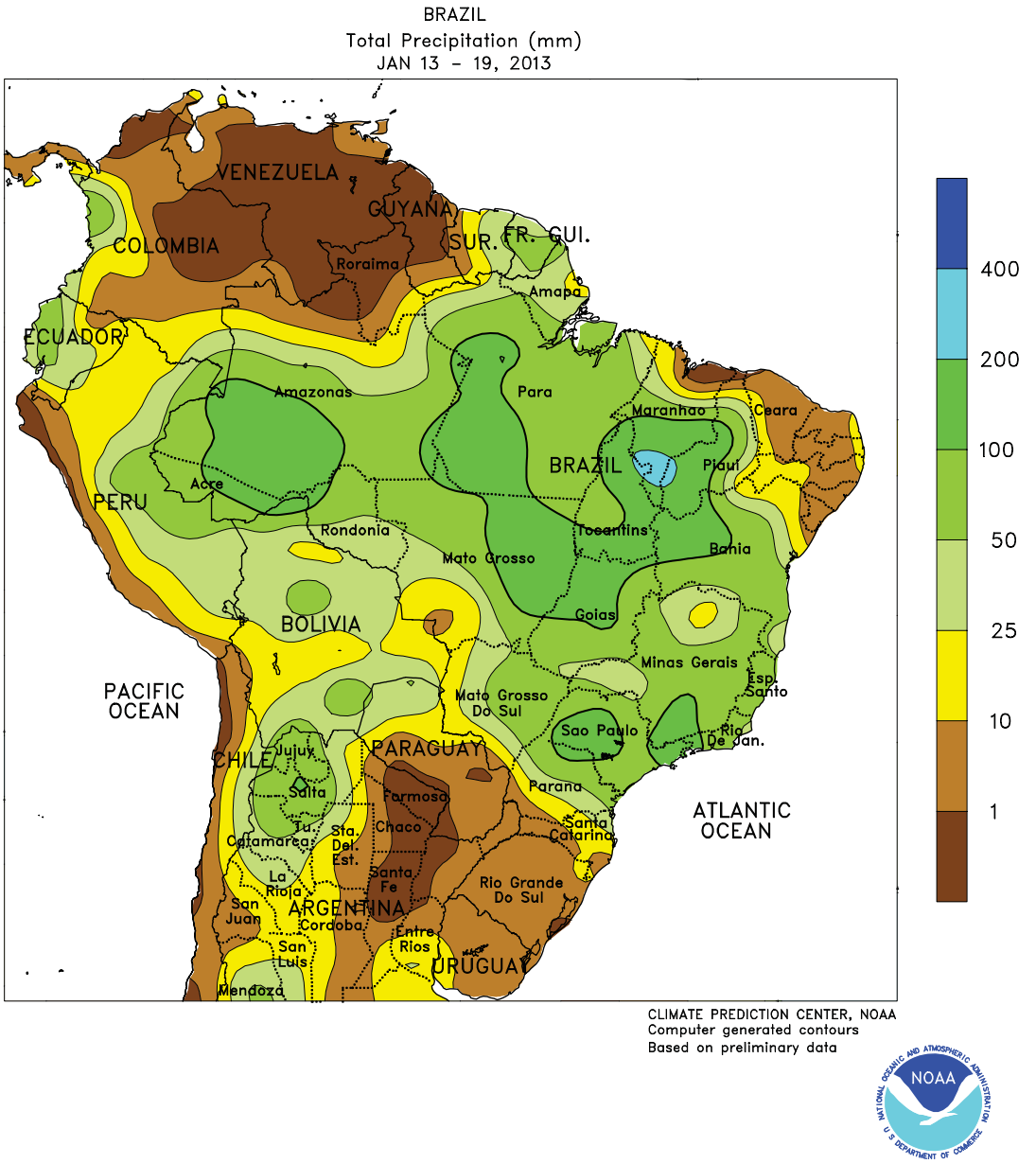

BRAZIL

Widespread, locally heavy rain continued throughout the central interior, increasing moisture for soybeans, cotton, and other summer crops, including sugarcane and coffee. Rainfall totaled 50 to more than 100 mm throughout much of the region stretching from northern Parana to Brazil's northern states. It was the second week of near- to above-normal rainfall in the northeastern interior (western Bahia, Tocantins, and nearby locations in Piaui and Maranhao), improving prospects of soybeans and cotton following an extended period of dryness. In the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), the rain maintained abundant moisture for immature soybeans and safrinha (winter grown) corn, which is currently being planted in some areas. In contrast, dryness in southern Brazil (southern Parana, Santa Catarina, and Rio Grande do Sul) promoted development of generally well-watered corn and soybeans. Weekly average temperatures were mostly within 1°C of normal throughout central and southern Brazil regardless of rainfall, with daytime highs typically in the lower and middle 30s (degrees C). However, dryness in Brazil's northeastern tip was accompanied by above-normal temperatures (daytime highs in the lower and middle 30s), fostering harvesting of sugarcane and other crops but increasing evaporative losses.

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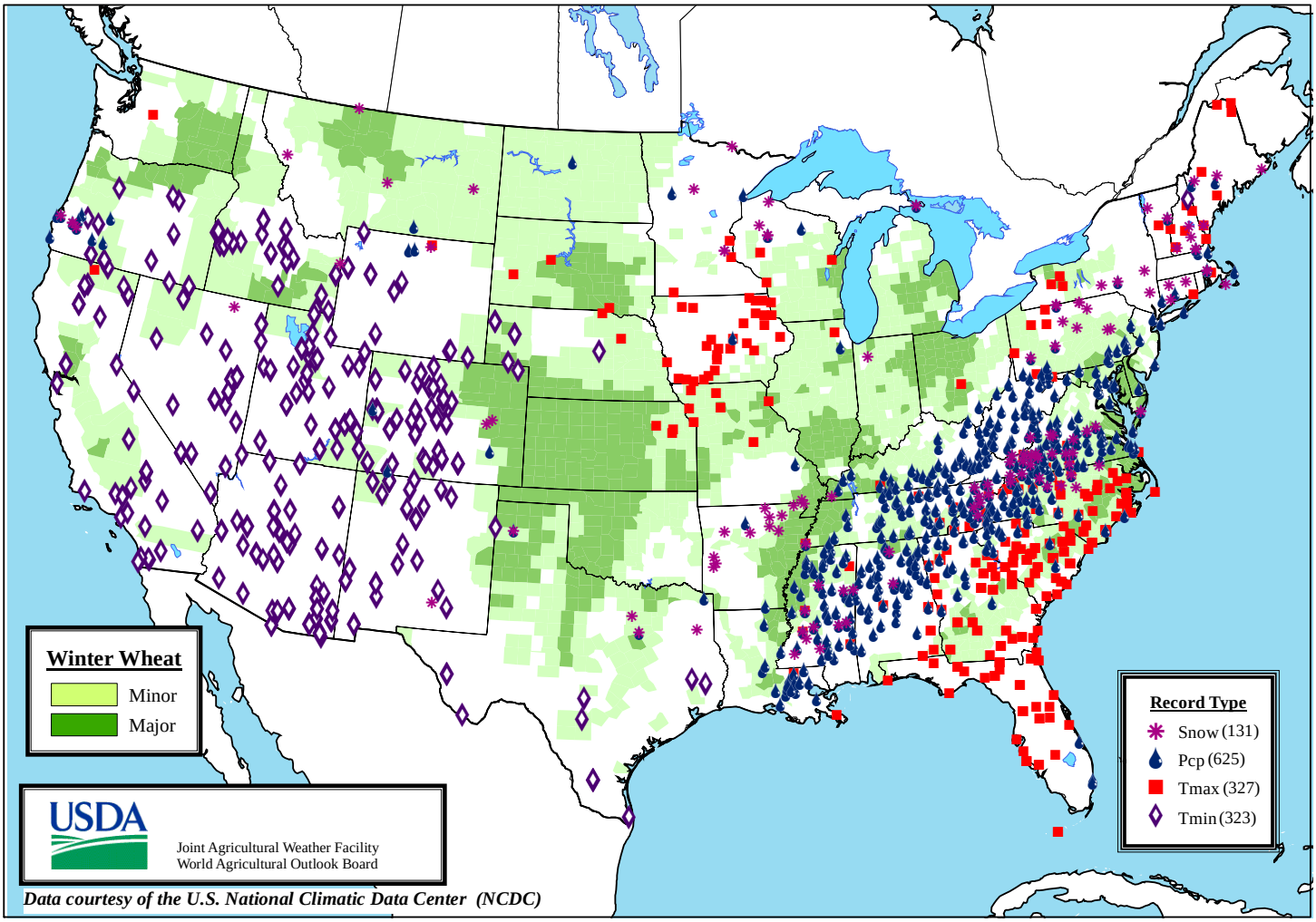
Daily Weather Records (ASOS & COOP)

January 13-19, 2013



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