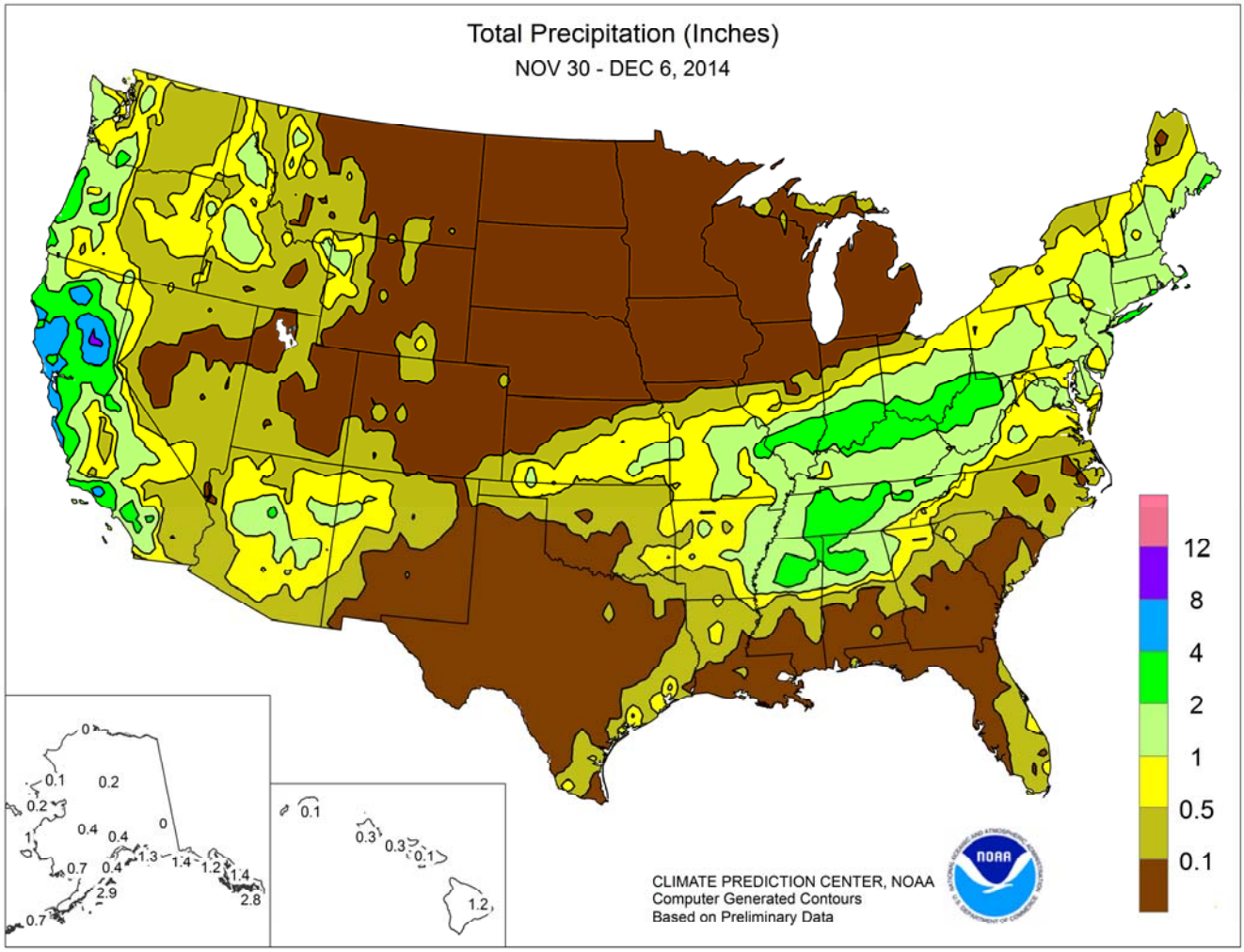
Volume 101, No. 49 http://www.usda.gov/oce/weather December 9, 2014

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

November 30 – December 6, 2014

Highlights provided by USDA/WAOB

In **California**, widespread precipitation boosted topsoil moisture and revived pastures. Weekly totals of 2 to 4 inches were common in **northern California**, but the **Sierra Nevada** snowpack received only a slight boost due to warm conditions resulting in much of the precipitation falling as rain. Precipitation also fell in other parts of the **West**, benefiting rangeland, pastures, and winter grains in **Arizona** and the **Northwest**. Farther east, dry weather prevailed from the **northern Plains into the northern Corn Belt**. Producers were able to harvest a limited

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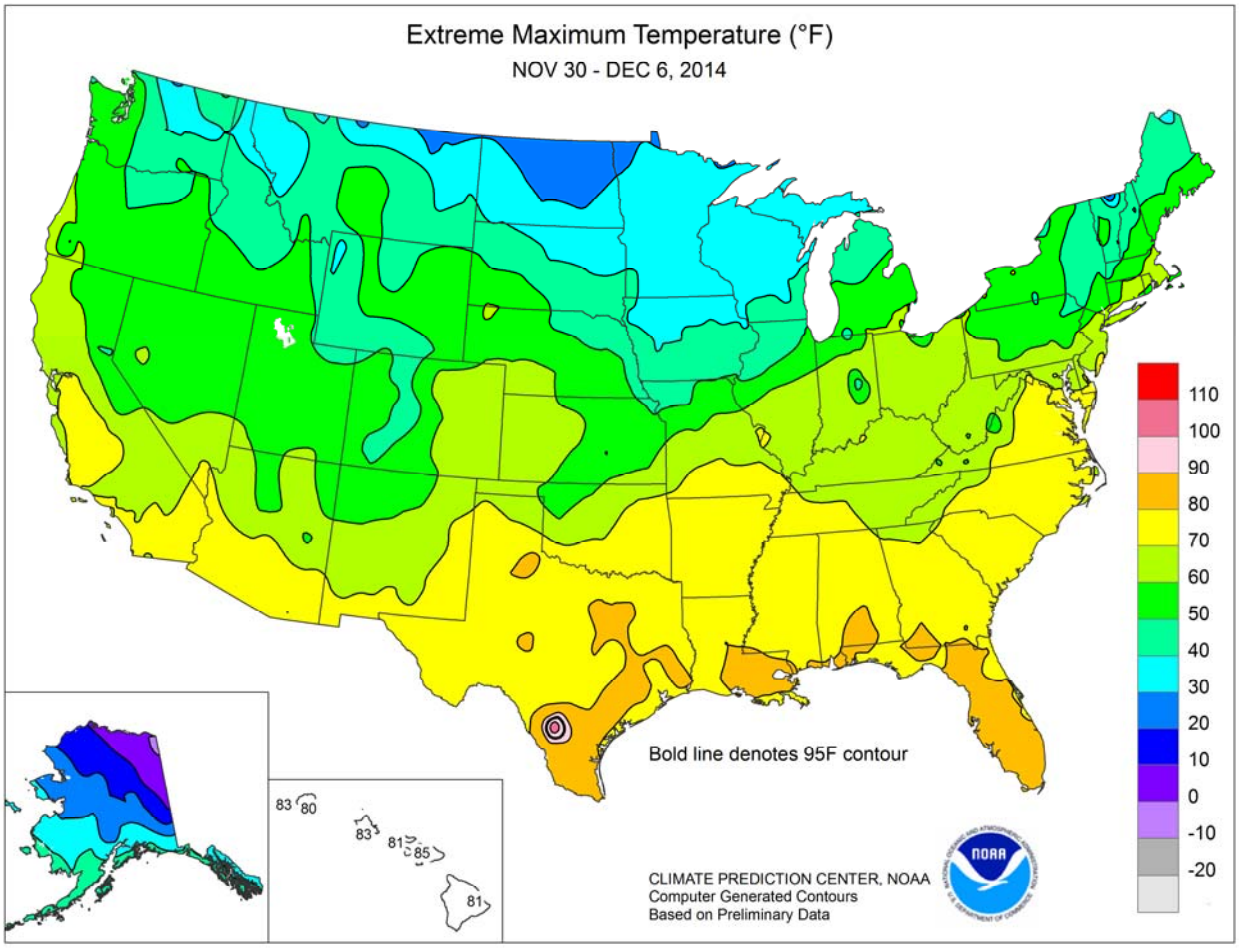
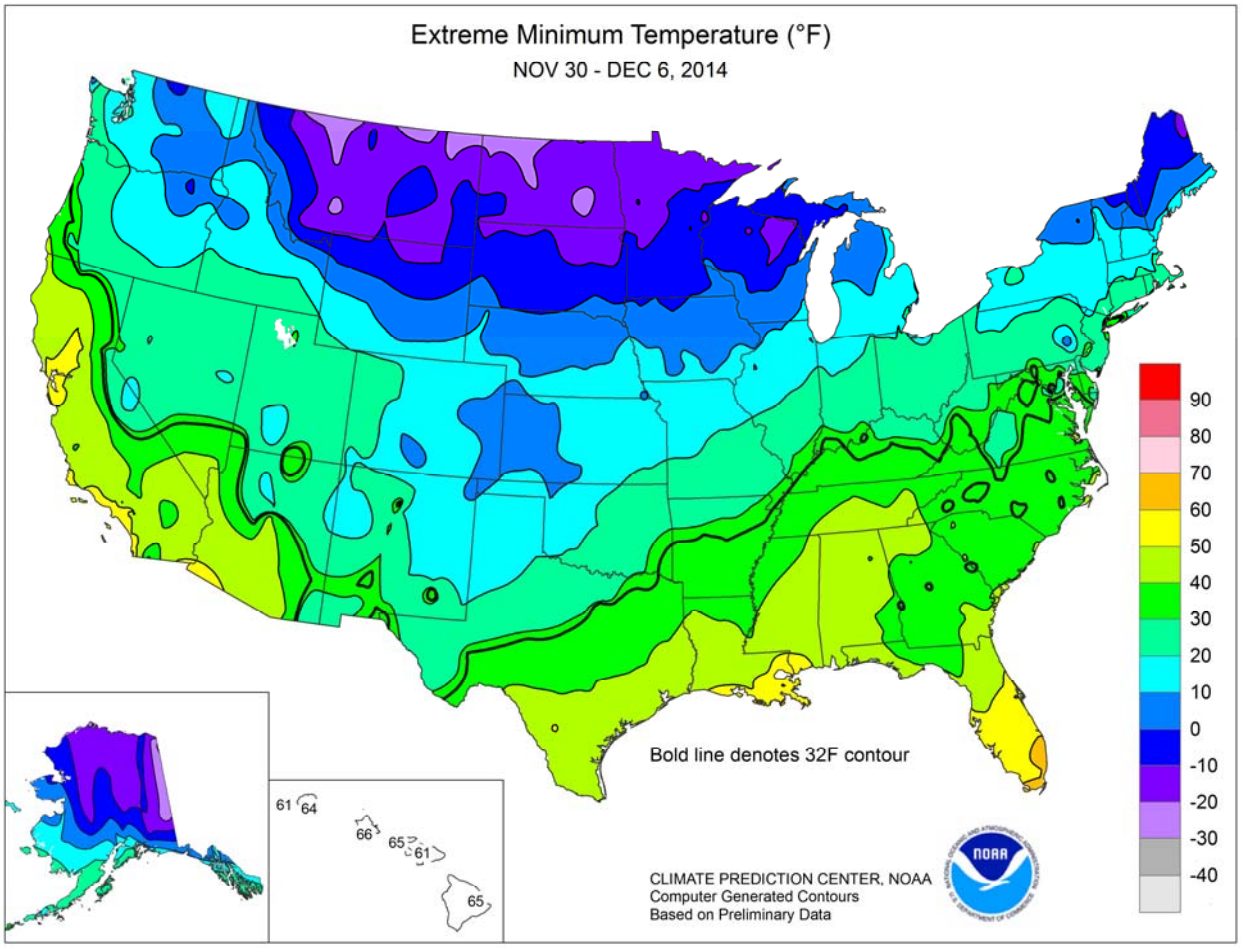
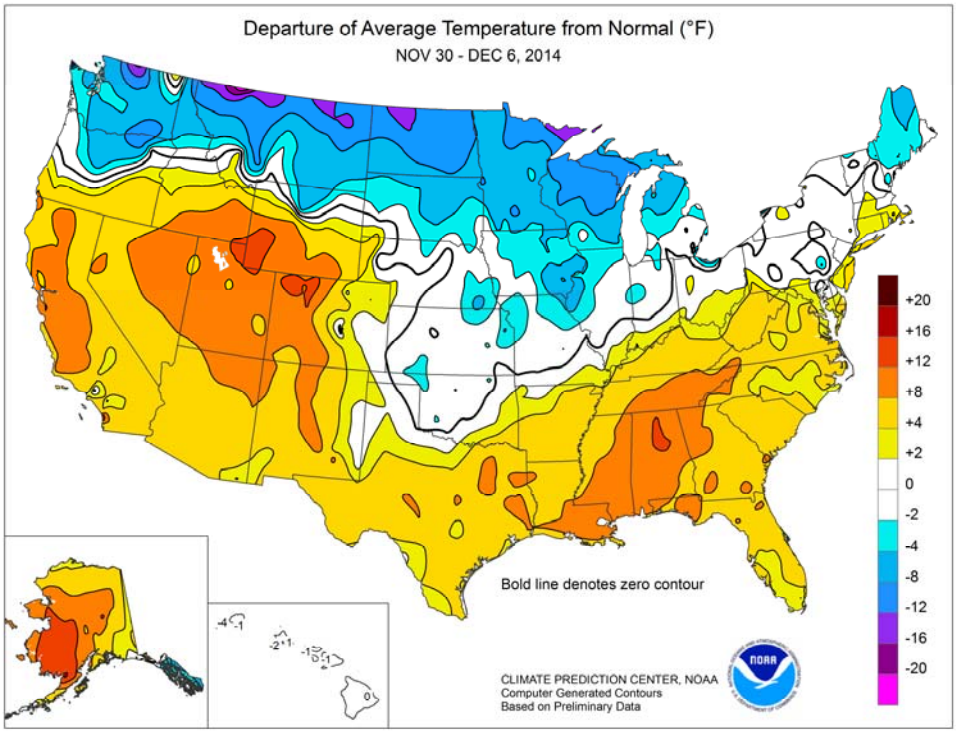

Extreme Maximum Temperature (°F)
NOV 30 - DEC 6, 2014
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
83
80
83
81
85
81
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
NOV 30 - DEC 6, 2014
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
61
64
66
65
61
65
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

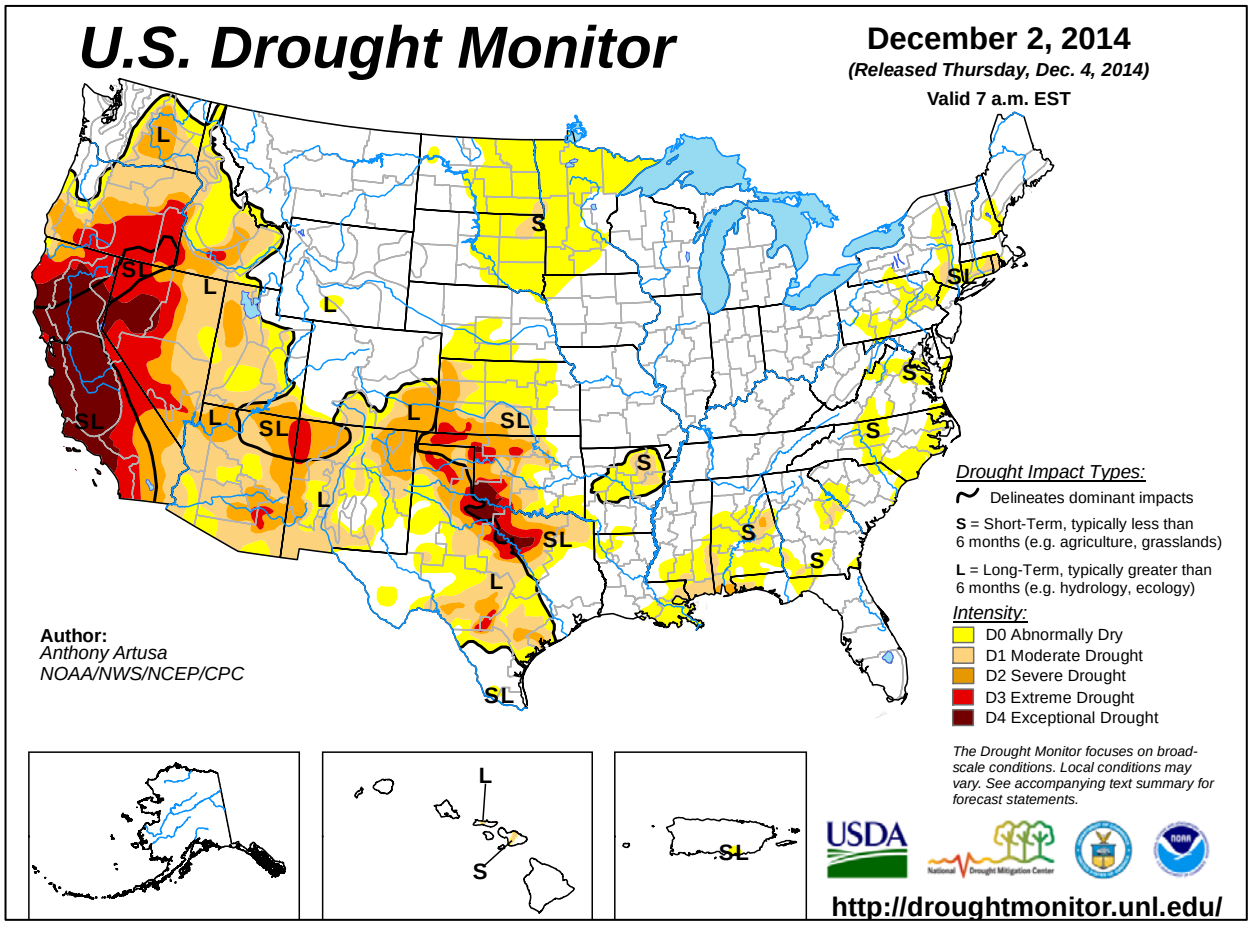
amount of corn in **Michigan** and **Wisconsin**, both of which began the month with more than one-fifth of the crop (77 and 78% harvested, respectively, on November 30) still in the field. Meanwhile, weekly precipitation—mostly rain—totaled 1 to 2 inches or more from the **middle Mississippi, Ohio, and Tennessee Valleys into the Northeast**. Rain also extended westward across portions of the **central Plains**. In the **southern Corn Belt**, cool, soggy soils continued to hamper the emergence and establishment of late-planted winter wheat. In contrast, warm, mostly dry weather in the **southern Atlantic States** and the **Deep South** favored late-season fieldwork, including winter wheat planting and soybean harvesting. Cold conditions lingered across the **nation's northern tier**, especially from **Washington to Wisconsin**. Weekly temperatures averaged at least 10°F below normal at several locations along the **Canadian border**. A variable snow cover helped to insulate a portion of the **northern Plains'** winter wheat from the extremely cold weather, although fields were mostly bare in some parts of **Montana** and **South Dakota**. Farther south, however, near- to above-normal temperatures dominated the **southern two-thirds of the U.S.** In particular, weekly temperatures locally averaged at least 10°F above normal from **California to the Intermountain West** and in parts of the **Southeast**.

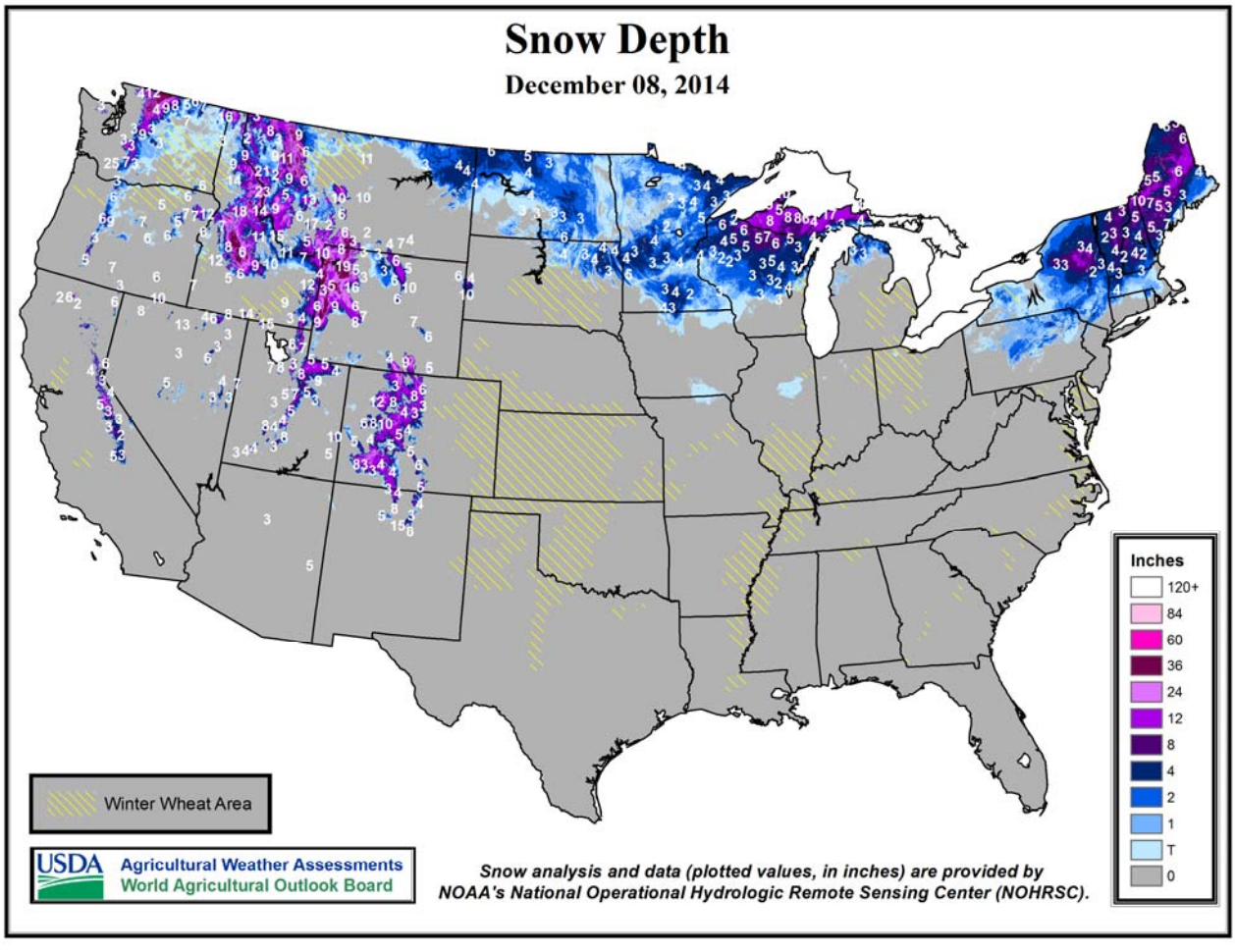


Early in the week, warmth prevailed across the **South**, while frigid conditions lingered across the **North**. On the last day of November, daily-record highs soared to 81°F in **San Angelo, TX**; 79°F in **Ft. Smith, AR**; and 73°F in **West Plains, MO**. In contrast, **Great Falls, MT**, posted a daily-record low on November 30. The following day, December opened with daily-record lows in locations such as **Jamestown, ND** (-24°F); **Bozeman, MT** (-23°F); and **Marquette, MI** (-11°F). Cold conditions also returned to the **Northwest**, where record-setting lows for December 2 dipped to 19°F in **Olympia, WA**, and 23°F in **Portland, OR**. Farther south, however, numerous daily-record highs accompanied and trailed a warm Pacific storm. By December 4, daily-record highs included 69°F in **Sacramento, CA**, and 59°F in **Salt Lake City, UT**. Both locations also posted daily records (68 and 58°F, respectively) on December 6. Other record-setting highs in **California** for December 6 included 70°F in **Fresno** and 67°F in **San Francisco (SFO Airport)**. Farther north, **Quillayute, WA**, collected a daily-record high (57°F) on December 5, shortly after notching consecutive daily-record lows (19 and 25°F, respectively) on December 1-2. Elsewhere, warmth in the **Southeast** led to a handful of daily-record highs, including readings of 75°F (on December 1) in **Danville, VA**, and 81°F (on December 3) in **Tallahassee, FL**.

In early December, heavy rain spread ashore along the **Pacific Coast**. In **southern Oregon**, **North Bend** netted a daily-record rainfall of 2.83 inches on December 1. The following day, record-setting amounts in **southern California** climbed to 2.14 inches in **Santa Barbara**, 1.49 inches in **Sandberg**, and 1.12 inches in **Los Angeles (LAX Airport)**. By December 3, daily-record totals in **California's Central Valley** included 2.20 inches in **Sacramento** and 1.39 inches in **Redding**. **San Francisco (SFO Airport)** collected 3.48 inches on December 2-3. Later, significant, late-week precipitation developed across the **mid-South** and environs. On December 5, daily-record amounts totaled 1.35 inches in **St. Louis, MO**, and 1.27 inches in **Chanute, KS**. The week ended on a wet note in parts of the **East**, with record-setting totals for December 6 in location such as **New York's LaGuardia Airport** (1.29 inches) and **Dayton, OH** (0.71 inch).

Mild weather returned to **Alaska**, accompanied by widespread precipitation. Weekly temperatures averaged at least 10°F above normal across much of the state. Among a handful of daily-record highs were readings—both on December 1—of 45°F in **Cold Bay** and 42°F on **St. Paul Island**. Elsewhere, **Juneau** received a daily-record snowfall (8.5 inches) on November 30, while **Fairbanks** netted a daily-record precipitation total of 0.39 inch—including 4.7 inches of snow—on December 2. In **Kodiak**, weekly rainfall totaled exactly 3 inches. Farther south, **Hawaii** experienced another week without widespread showers, except in windward areas. Conditions were especially quiet during the second half of the week, even in favored locations. During the first 6 days of December, rainfall totaled just 0.04 inch (4 to 7 percent of normal) in **Lihue, Kauai**, and **Kahului, Maui**.


U.S. Drought Monitor
December 2, 2014
(Released Thursday, Dec. 4, 2014)
Valid 7 a.m. EST
Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
http://droughtmonitor.unl.edu/


Snow Depth
December 08, 2014
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by
NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending December 6, 2014

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	72	52	76	48	62	13	1.79	0.74	1.61	1.79	199	44.40	88	93	56	0	0	2	1
	HUNTSVILLE	68	50	74	46	59	12	1.56	0.25	0.91	1.56	138	49.28	93	90	72	0	0	2	2
	MOBILE	76	51	77	47	63	8	0.19	-1.03	0.19	0.19	18	67.63	108	100	69	0	0	1	0
	MONTGOMERY	77	49	81	42	63	11	0.03	-1.20	0.03	0.03	3	43.73	86	92	48	0	0	1	0
AK	ANCHORAGE	30	22	39	18	26	7	0.31	0.09	0.18	0.31	163	18.22	120	86	79	0	7	3	0
	BARROW	3	-12	9	-21	-5	2	0.03	0.02	0.03	0.03	300	7.93	197	89	78	0	7	1	0
	FAIRBANKS	19	1	25	-13	10	13	0.00	-0.14	0.00	0.00	0	16.23	167	82	75	0	7	0	0
	JUNEAU	32	21	39	9	27	-4	1.22	0.06	0.65	0.57	57	65.95	122	97	92	0	7	4	1
	KODIAK	43	35	45	28	39	7	2.94	1.39	1.12	2.94	221	78.59	114	94	83	0	3	6	2
	NOME	29	14	32	2	21	9	0.24	-0.01	0.10	0.14	67	13.79	88	84	71	0	7	3	0
AZ	FLAGSTAFF	50	30	55	20	40	8	1.79	1.38	0.89	1.79	511	19.01	89	88	53	0	5	3	2
	PHOENIX	73	56	80	51	65	8	0.65	0.48	0.61	0.65	464	8.10	108	65	51	0	0	3	1
	PRESCOTT	57	37	61	29	47	7	1.57	1.29	0.82	1.57	654	11.88	65	83	45	0	1	3	2
	TUCSON	72	48	79	43	60	6	0.69	0.53	0.69	0.69	493	8.71	77	64	45	0	0	1	1
AR	FORT SMITH	54	41	79	31	48	3	0.19	-0.82	0.15	0.19	22	40.02	97	88	71	0	1	3	0
	LITTLE ROCK	58	44	75	34	51	4	1.48	0.19	1.39	1.48	135	46.43	98	90	72	0	0	2	1
CA	BAKERSFIELD	71	52	75	48	61	11	0.44	0.30	0.44	0.44	367	2.44	42	73	55	0	0	1	0
	FRESNO	67	51	73	46	59	11	0.43	0.18	0.42	0.42	200	5.58	55	83	62	0	0	2	0
	LOS ANGELES	66	58	68	56	62	3	1.45	1.14	1.00	1.23	456	5.49	47	93	78	0	0	4	1
	REDDING	58	51	62	49	55	8	3.09	2.15	1.36	2.69	336	26.25	89	97	93	0	0	7	1
	SACRAMENTO	64	54	69	51	59	11	3.29	2.78	2.20	3.12	709	13.26	83	96	72	0	0	6	2
	SAN DIEGO	69	60	70	57	64	5	2.53	2.31	1.85	2.53	1332	5.79	60	84	70	0	0	3	1
	SAN FRANCISCO	65	57	67	53	61	10	4.92	4.34	1.84	3.81	762	13.85	78	99	91	0	0	6	3
	STOCKTON	65	51	71	44	58	10	1.81	1.42	1.10	1.38	418	9.52	77	95	87	0	0	5	1
CO	ALAMOSA	49	16	57	7	33	11	0.01	-0.07	0.01	0.01	14	5.32	76	76	49	0	7	1	0
	CO SPRINGS	50	22	61	15	36	5	0.02	-0.04	0.02	0.02	40	16.89	99	74	28	0	7	1	0
	DENVER INTL	52	23	64	16	38	6	0.00	-0.07	0.00	0.00	0	18.18	136	81	35	0	7	0	0
	GRAND JUNCTION	51	31	57	24	41	9	0.05	-0.06	0.03	0.05	56	10.94	128	77	58	0	3	2	0
	PUEBLO	50	21	65	14	36	3	0.00	-0.08	0.00	0.00	0	11.58	96	71	48	0	7	0	0
CT	BRIDGEPORT	49	37	62	30	43	3	2.02	1.24	1.14	2.02	301	42.54	103	82	60	0	1	5	2
	HARTFORD	46	31	62	23	39	3	1.33	0.48	0.75	1.33	185	42.59	98	79	55	0	3	4	1
DC	WASHINGTON	54	41	70	37	48	4	1.35	0.68	0.57	1.35	237	42.25	115	78	54	0	0	5	1
DE	WILMINGTON	50	37	65	29	44	3	1.36	0.59	0.74	1.36	206	49.25	123	89	58	0	1	5	1
FL	DAYTONA BEACH	78	61	80	52	69	6	0.00	-0.60	0.00	0.00	0	60.98	129	97	60	0	0	0	0
	JACKSONVILLE	75	53	79	41	64	6	0.00	-0.55	0.00	0.00	0	51.72	103	100	69	0	0	0	0
	KEY WEST	80	70	82	67	75	1	0.01	-0.45	0.01	0.01	3	34.38	92	91	66	0	0	1	0
	MIAMI	81	70	82	68	76	4	0.88	0.32	0.37	0.88	183	63.16	111	82	58	0	0	4	0
	ORLANDO	80	61	83	53	70	5	0.54	-0.01	0.39	0.54	115	54.28	117	96	64	0	0	2	0
	PENSACOLA	75	55	81	51	65	8	0.21	-0.71	0.21	0.21	27	79.88	131	99	73	0	0	1	0
	TALLAHASSEE	78	50	81	35	64	7	0.00	-0.85	0.00	0.00	0	59.69	100	86	65	0	0	0	0
	TAMPA	80	62	82	56	71	5	0.00	-0.50	0.00	0.00	0	56.30	131	90	56	0	0	0	0
	WEST PALM BEACH	81	72	82	67	76	6	0.41	-0.59	0.40	0.41	49	59.93	101	75	62	0	0	2	0
GA	ATHENS	66	44	74	36	55	7	0.18	-0.63	0.15	0.18	26	40.92	91	94	79	0	0	2	0
	ATLANTA	69	49	74	41	59	10	0.35	-0.58	0.34	0.35	44	42.46	90	87	67	0	0	2	0
	AUGUSTA	70	41	76	29	56	6	0.04	-0.52	0.04	0.04	8	34.53	82	95	67	0	2	1	0
	COLUMBUS	72	48	76	36	60	8	0.35	-0.66	0.35	0.35	40	47.85	106	95	53	0	0	1	0
	MACON	72	44	76	31	58	7	0.02	-0.80	0.02	0.02	3	42.61	102	100	57	0	1	1	0
	SAVANNAH	75	52	78	41	64	9	0.02	-0.48	0.02	0.02	5	46.55	99	89	66	0	0	1	0
HI	HILO	79	67	81	65	73	0	1.21	-2.00	0.27	1.11	41	110.23	93	88	78	0	0	6	0
	HONOLULU	80	69	83	66	75	-1	0.31	-0.25	0.31	0.31	65	20.08	126	79	67	0	0	1	0
	KAHULUI	81	66	85	61	74	-1	0.05	-0.52	0.03	0.05	10	18.31	113	79	70	0	0	3	0
	LIHUE	79	68	80	64	74	0	0.14	-0.92	0.08	0.06	7	30.75	86	78	64	0	0	4	0
ID	BOISE	44	31	57	19	37	3	0.76	0.43	0.25	0.76	271	12.87	116	94	82	0	3	5	0
	LEWISTON	35	26	47	14	30	-6	0.48	0.23	0.35	0.48	229	10.73	90	92	84	0	5	4	0
	POCATELLO	49	29	56	22	39	10	0.04	-0.21	0.02	0.04	19	11.92	102	95	76	0	6	3	0
IL	CHICAGO/O'HARE	37	24	50	18	30	-3	0.00	-0.65	0.00	0.00	0	38.68	112	80	61	0	7	0	0
	MOLINE	36	20	47	11	28	-4	0.01	-0.55	0.01	0.01	2	38.58	106	81	65	0	7	1	0
	PEORIA	39	25	53	16	32	-1	0.02	-0.65	0.02	0.02	4	38.55	113	82	57	0	6	1	0
	ROCKFORD	35	20	40	10	27	-3	0.00	-0.57	0.00	0.00	0	32.57	93	79	61	0	7	0	0
	SPRINGFIELD	41	26	64	17	34	-2	0.65	0.00	0.62	0.65	116	44.14	131	89	66	0	6	3	1
IN	EVANSVILLE	51	38	70	33	44	4	2.01	1.04	1.28	1.96	236	45.73	110	86	75	0	0	5	1
	FORT WAYNE	41	27	61	21	34	0	0.38	-0.31	0.33	0.38	64	41.50	121	88	67	0	6	3	0
	INDIANAPOLIS	42	30	64	26	36	-1	0.99	0.19	0.67	0.97	143	39.98	104	92	67	0	5	7	1
	SOUTH BEND	40	25	58	18	33	-1	0.00	-0.78	0.00	0.00	0	39.96	107	85	67	0	5	0	0
IA	BURLINGTON	35	22	47	13	28	-5	0.00	-0.58	0.00	0.00	0	39.81	110	93	65	0	7	0	0
	CEDAR RAPIDS	33	17	42	7	25	-4	0.00	-0.44	0.00	0.00	0	37.90	117	93	57	0	7	0	0
	DES MOINES	37	21	45	11	29	-1	0.00	-0.37	0.00	0.00	0	40.94	121	74	56	0	6	0	0
	DUBUQUE	32	17	39	7	24	-4	0.00	-0.49	0.00	0.00	0	36.56	107	84	65	0	7	0	0
	SIOUX CITY	35	17	43	9	26	-1	0.00	-0.20	0.00	0.00	0	39.96	157	71	59	0	7	0	0
	WATERLOO	31	15	41	3	23	-4	0.00	-0.35	0.00	0.00	0	33.26	103	84	58	0	7	0	0
KS	CONCORDIA	43	22	57	14	32	-2	0.01	-0.23	0.01	0.01	5	26.47	95	70	55	0	6	1	0
	DODGE CITY	46	22	63	9	34	-3	0.47	0.30	0.26	0.47	336	22.66	104	74	37	0	6	2	0
	GOODLAND	49	17	69	5	33	1	0.00	-0.09	0.00	0.00	0	16.41	84	74	45	0	7	0	0
	TOPEKA	44	27	56	16	36	0	1.04	0.63	1.04	1.04	297	29.92	87	79	59	0	4	1	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending December 6, 2014

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	46	29	54	18	37	-1	0.57	0.23	0.46	0.57	197	24.87	85	71	53	0	4	2	0
KY	JACKSON	56	38	64	32	47	4	1.54	0.49	0.37	1.54	171	52.91	115	91	76	0	2	5	0
	LEXINGTON	53	37	66	30	45	4	2.59	1.68	0.95	2.59	332	53.48	125	93	87	0	2	5	3
	LOUISVILLE	55	40	72	34	48	6	2.58	1.67	1.01	2.57	329	42.27	102	92	74	0	0	5	3
	PADUCAH	52	39	69	32	45	4	1.02	-0.13	0.73	1.00	101	44.94	98	94	77	0	1	5	1
LA	BATON ROUGE	77	54	82	47	66	11	0.00	-1.16	0.00	0.00	0	56.01	95	96	57	0	0	0	0
	LAKE CHARLES	73	55	79	49	64	8	0.01	-1.05	0.01	0.01	1	66.60	125	98	68	0	0	1	0
	NEW ORLEANS	78	58	81	52	68	10	0.00	-1.28	0.00	0.00	0	50.78	84	93	59	0	0	0	0
	SHREVEPORT	68	51	79	40	60	9	0.21	-0.85	0.21	0.21	23	37.66	79	96	70	0	0	1	0
ME	CARIBOU	29	5	42	-13	17	-6	0.69	-0.03	0.45	0.62	102	41.03	118	86	68	0	7	5	0
	PORTLAND	41	25	59	16	33	0	1.12	0.11	0.72	1.12	130	50.72	119	86	58	0	6	4	1
MD	BALTIMORE	51	37	69	28	44	3	1.18	0.44	0.55	1.18	184	50.18	128	83	62	0	1	5	2
MA	BOSTON	49	33	64	26	41	1	1.71	0.85	1.06	1.71	231	40.40	102	85	57	0	3	5	1
	WORCESTER	42	30	55	21	36	2	1.74	0.87	0.89	1.74	235	50.43	110	92	61	0	6	4	1
MI	ALPENA	33	17	47	11	25	-4	0.01	-0.41	0.01	0.01	3	33.10	123	85	58	0	7	1	0
	GRAND RAPIDS	38	22	53	13	30	-2	0.01	-0.75	0.01	0.01	2	38.67	110	83	57	0	7	1	0
	HOUGHTON LAKE	33	15	46	4	24	-5	0.03	-0.40	0.03	0.03	8	29.58	109	80	61	0	7	1	0
	LANSING	39	22	57	12	31	-1	0.00	-0.60	0.00	0.00	0	35.91	120	77	58	0	6	0	0
	MUSKEGON	39	23	54	13	31	-2	0.03	-0.66	0.03	0.03	5	36.91	120	75	57	0	7	1	0
	TRAVERSE CITY	35	20	48	9	28	-3	0.00	-0.58	0.00	0.00	0	37.44	120	77	52	0	7	0	0
MN	DULUTH	22	4	35	-9	13	-7	0.00	-0.34	0.00	0.00	0	29.35	97	73	54	0	7	0	0
	INT'L FALLS	20	-7	33	-16	6	-9	0.00	-0.21	0.00	0.00	0	29.39	125	80	46	0	7	0	0
	MINNEAPOLIS	25	10	32	-3	17	-8	0.00	-0.30	0.00	0.00	0	34.56	121	74	57	0	7	0	0
	ROCHESTER	26	12	33	-1	19	-4	0.00	-0.33	0.00	0.00	0	32.22	105	79	63	0	7	0	0
	ST. CLOUD	23	6	36	-8	15	-6	0.00	-0.20	0.00	0.00	0	35.96	135	78	53	0	7	0	0
MS	JACKSON	72	49	78	44	61	10	0.05	-1.17	0.04	0.05	5	52.32	101	96	59	0	0	2	0
	MERIDIAN	73	49	77	46	61	9	0.20	-1.03	0.20	0.20	19	45.81	84	98	78	0	0	1	0
	TUPELO	65	46	75	41	56	9	1.81	0.44	1.10	1.81	153	53.81	106	91	76	0	0	4	1
MO	COLUMBIA	43	28	64	20	35	-2	1.23	0.50	1.22	1.23	198	43.17	112	90	63	0	5	2	1
	KANSAS CITY	41	25	56	15	33	-3	0.64	0.17	0.64	0.64	160	38.80	106	84	59	0	5	1	1
	SAINT LOUIS	46	32	72	25	39	0	1.47	0.65	1.35	1.46	209	42.16	115	81	66	0	4	4	1
	SPRINGFIELD	47	32	72	22	40	0	0.48	-0.52	0.42	0.48	56	37.30	87	89	73	0	4	3	0
MT	BILLINGS	35	12	49	-10	24	-5	0.03	-0.10	0.03	0.00	0	13.35	94	82	55	0	7	1	0
	BUTTE	36	12	46	-5	24	3	0.00	-0.11	0.00	0.00	0	14.27	116	89	49	0	7	0	0
	CUT BANK	29	1	41	-20	15	-9	0.00	-0.06	0.00	0.00	0	14.93	122	82	56	0	7	0	0
	GLASGOW	19	-3	29	-18	8	-13	0.00	-0.06	0.00	0.00	0	14.90	137	83	73	0	7	0	0
	GREAT FALLS	31	4	50	-22	17	-10	0.05	-0.06	0.04	0.05	56	19.06	133	88	58	0	7	2	0
	HAVRE	24	2	35	-7	13	-10	0.00	-0.08	0.00	0.00	0	11.37	103	82	70	0	7	0	0
	MISSOULA	28	13	35	1	21	-5	0.31	0.08	0.17	0.30	150	14.68	114	94	84	0	7	5	0
NE	GRAND ISLAND	40	18	52	10	29	-1	0.00	-0.22	0.00	0.00	0	26.79	105	69	48	0	7	0	0
	LINCOLN	39	18	53	13	29	-2	0.00	-0.26	0.00	0.00	0	33.52	121	72	55	0	7	0	0
	NORFOLK	35	18	48	8	27	-1	0.00	-0.22	0.00	0.00	0	28.51	109	68	51	0	7	0	0
	NORTH PLATTE	44	14	60	8	29	0	0.00	-0.09	0.00	0.00	0	20.48	106	77	34	0	7	0	0
	OMAHA	37	20	43	13	28	-3	0.00	-0.31	0.00	0.00	0	37.46	127	73	60	0	7	0	0
	SCOTTSBLUFF	45	20	55	11	33	4	0.01	-0.13	0.01	0.00	0	17.79	112	83	54	0	7	1	0
	VALENTINE	40	11	56	0	26	-1	0.00	-0.10	0.00	0.00	0	20.89	108	80	39	0	7	0	0
NV	ELY	50	26	54	19	38	9	0.12	0.04	0.12	0.12	171	8.65	91	83	64	0	6	1	0
	LAS VEGAS	62	52	70	49	57	7	0.24	0.18	0.15	0.24	480	1.75	42	69	59	0	0	3	0
	RENO	53	37	58	32	45	9	0.72	0.53	0.53	0.69	406	4.75	70	88	75	0	2	3	1
	WINNEMUCCA	50	31	56	27	41	9	0.40	0.23	0.33	0.07	50	7.46	97	93	81	0	6	5	0
NH	CONCORD	39	23	53	12	31	-1	1.41	0.69	0.78	1.41	227	42.37	120	94	64	0	7	4	1
NJ	NEWARK	49	36	66	30	43	2	1.77	0.91	1.11	1.77	242	46.19	106	83	60	0	2	5	1
NM	ALBUQUERQUE	57	37	63	31	47	8	0.42	0.34	0.38	0.42	600	8.09	89	69	42	0	1	3	0
NY	ALBANY	40	28	50	19	34	1	1.11	0.44	0.71	1.11	195	35.43	99	81	58	0	6	5	1
	BINGHAMTON	40	24	55	18	32	0	1.17	0.39	0.62	1.17	177	37.48	103	89	68	0	7	4	1
	BUFFALO	43	28	60	19	35	0	0.42	-0.51	0.16	0.34	43	40.60	108	88	57	0	6	4	0
	ROCHESTER	45	29	61	23	37	3	0.63	-0.03	0.36	0.51	89	31.16	98	86	57	0	4	4	0
	SYRACUSE	44	27	58	19	35	1	0.75	-0.10	0.46	0.74	101	38.22	101	93	66	0	5	5	0
NC	ASHEVILLE	61	40	70	30	51	9	0.05	-0.76	0.04	0.05	7	44.55	100	93	71	0	1	2	0
	CHARLOTTE	61	42	73	39	52	4	0.16	-0.52	0.12	0.16	28	43.05	105	88	58	0	0	2	0
	GREENSBORO	57	39	73	32	48	3	0.16	-0.52	0.15	0.16	28	34.31	84	92	63	0	1	2	0
	HATTERAS	62	52	68	48	57	3	0.60	-0.35	0.60	0.60	74	59.99	111	98	72	0	0	1	1
	RALEIGH	59	42	74	36	51	4	0.16	-0.49	0.16	0.16	29	50.44	124	85	64	0	0	1	0
	WILMINGTON	67	45	74	37	56	4	0.22	-0.61	0.22	0.22	31	55.00	102	98	59	0	0	1	0
ND	BISMARCK	23	0	30	-18	11	-9	0.00	-0.10	0.00	0.00	0	13.81	84	83	64	0	7	0	0
	DICKINSON	28	7	36	-8	18	-4	0.00	-0.08	0.00	0.00	0	21.79	136	83	48	0	7	0	0
	FARGO	21	3	34	-13	12	-6	0.00	-0.12	0.00	0.00	0	19.94	96	75	58	0	7	0	0
	GRAND FORKS	19	-2	29	-17	8	-9	0.02	-0.10	0.02	0.02	20	22.86	119	84	58	0	7	1	0
	JAMESTOWN	19	-3	28	-24	8	-11	0.00	-0.08	0.00	0.00	0	21.00	116	84	62	0	7	0	0
	WILLISTON	21	-6	34	-20	7	-11	0.00	-0.14	0.00	0.00	0	10.66	78	84	67	0	7	0	0
OH	AKRON-CANTON	44	30	62	23	37	1	1.17	0.43	0.61	1.05	167	44.43	123	87	69	0	5	5	1
	CINCINNATI	51	35	67	27	43	4	2.36	1.59	0.92	2.05	311	40.74	102	89	75	0	4	5	2
	CLEVELAND	43	31	62	25	37	1	1.18	0.36	0.58	0.87	124	43.09	119	89	63	0	5	5	1
	COLUMBUS	46	33	63	24	39	1	1.66	0.90	0.71	1.57	242	36.96	102	91	70	0	4	4	2
	DAYTON	46	31	65	25	38	2	1.74	0.99	0.96	1.64	256	34.81	94	93	68	0	5	5	2
	MANSFIELD	43	29	61	22	36	1	1.17	0.32	0.59	0.98	134	35.64	88	98	67	0	6	4	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending December 6, 2014

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	41	27	62	19	34	0	0.06	-0.60	0.05	0.05	9	30.66	98	83	64	0	6	2	0
	YOUNGSTOWN	44	30	61	22	37	2	1.19	0.42	0.57	1.06	161	38.01	106	90	70	0	5	5	1
OK	OKLAHOMA CITY	51	35	68	21	43	0	0.14	-0.28	0.10	0.14	39	27.81	81	78	63	0	3	3	0
	TULSA	51	37	73	28	44	0	0.27	-0.43	0.15	0.27	45	27.88	69	82	68	0	3	3	0
OR	ASTORIA	49	38	58	28	43	-1	0.64	-1.93	0.23	0.64	29	62.93	107	85	73	0	3	3	0
	BURNS	42	26	53	14	34	6	0.60	0.32	0.28	0.60	250	9.05	95	90	78	0	7	4	0
	EUGENE	45	36	58	29	41	0	1.61	-0.49	0.71	1.61	89	35.39	80	92	78	0	2	5	1
	MEDFORD	55	38	63	30	46	6	0.11	-0.62	0.04	0.11	17	18.07	112	97	74	0	1	5	0
	PENDLETON	29	20	48	6	25	-11	0.55	0.19	0.25	0.55	177	10.99	95	91	81	0	7	5	0
	PORTLAND	44	33	56	23	39	-3	1.73	0.33	1.18	1.73	144	35.78	110	86	66	0	3	3	1
	SALEM	46	36	57	28	41	-1	1.42	-0.19	0.80	1.42	103	35.73	102	88	72	0	3	5	1
PA	ALLENTOWN	43	30	59	25	37	0	0.86	0.04	0.44	0.86	123	41.92	99	83	60	0	4	5	0
	ERIE	43	31	61	22	37	0	0.76	-0.18	0.54	0.68	85	38.99	98	80	61	0	4	5	1
	MIDDLETOWN	44	31	61	28	38	-1	1.36	0.53	0.45	1.36	192	41.75	110	93	58	0	4	4	0
	PHILADELPHIA	51	38	65	32	45	3	1.45	0.69	0.95	1.45	223	45.55	116	79	58	0	1	5	1
	PITTSBURGH	47	32	62	26	40	3	1.84	1.12	0.94	1.84	302	36.04	101	94	67	0	5	4	2
	WILKES-BARRE	42	30	49	26	36	0	1.21	0.53	0.76	1.21	209	29.28	82	84	60	0	4	4	1
	WILLIAMSPORT	41	29	51	23	35	0	1.63	0.83	0.78	1.63	240	36.20	92	87	65	0	4	4	1
RI	PROVIDENCE	51	34	67	26	42	3	1.38	0.41	1.08	1.38	166	42.06	97	82	54	0	3	4	1
SC	BEAUFORT	72	51	76	40	61	7	0.09	-0.48	0.08	0.09	18	48.31	102	98	65	0	0	2	0
	CHARLESTON	71	48	76	37	60	6	0.15	-0.48	0.12	0.15	28	49.74	102	98	62	0	0	2	0
	COLUMBIA	68	45	74	37	56	6	0.03	-0.60	0.03	0.03	6	38.34	84	88	66	0	0	1	0
	GREENVILLE	61	45	72	38	53	6	0.46	-0.37	0.24	0.46	65	46.72	99	94	67	0	0	2	0
SD	ABERDEEN	26	4	36	-16	15	-6	0.00	-0.06	0.00	0.00	0	17.54	88	78	62	0	7	0	0
	HURON	30	9	40	-7	20	-4	0.00	-0.10	0.00	0.00	0	15.68	76	82	47	0	7	0	0
	RAPID CITY	39	13	52	-3	26	-2	0.03	-0.03	0.03	0.00	0	21.11	130	84	52	0	7	1	0
	SIOUX FALLS	32	12	45	-3	22	-2	0.00	-0.17	0.00	0.00	0	27.93	115	74	54	0	7	0	0
TN	BRISTOL	58	42	65	39	50	9	1.28	0.49	0.67	1.28	188	36.38	94	98	77	0	0	6	1
	CHATTANOOGA	65	48	68	45	57	11	0.74	-0.43	0.38	0.74	74	41.61	82	93	77	0	0	4	0
	KNOXVILLE	60	45	64	41	53	8	1.44	0.42	0.74	1.44	166	38.85	87	96	74	0	0	5	1
	MEMPHIS	60	45	73	34	53	6	1.56	0.07	1.10	1.56	122	56.60	113	91	76	0	0	4	1
	NASHVILLE	59	45	70	40	52	8	1.44	0.32	0.79	1.44	150	48.81	110	92	77	0	0	5	1
TX	ABILENE	65	42	78	26	53	5	0.00	-0.23	0.00	0.00	0	14.49	64	74	54	0	2	0	0
	AMARILLO	56	27	76	13	42	2	0.02	-0.06	0.02	0.02	29	19.29	101	80	39	0	5	1	0
	AUSTIN	67	50	79	40	58	3	0.06	-0.46	0.04	0.06	13	27.41	87	91	71	0	0	2	0
	BEAUMONT	73	56	81	46	65	8	0.02	-1.11	0.02	0.02	2	48.73	88	98	68	0	0	1	0
	BROWNSVILLE	77	61	82	50	69	5	0.03	-0.26	0.02	0.01	4	27.17	102	96	77	0	0	2	0
	CORPUS CHRISTI	74	58	80	47	66	5	0.11	-0.24	0.11	0.11	37	28.43	92	95	75	0	0	1	0
	DEL RIO	66	51	75	43	59	4	0.00	-0.17	0.00	0.00	0	15.44	88	90	69	0	0	0	0
	EL PASO	66	43	71	33	55	7	0.00	-0.14	0.00	0.00	0	8.45	96	54	27	0	0	0	0
	FORT WORTH	65	47	79	31	56	6	0.03	-0.49	0.02	0.03	7	20.21	62	87	58	0	2	2	0
	GALVESTON	69	58	76	48	63	2	0.34	-0.49	0.34	0.34	48	28.35	69	100	84	0	0	1	0
	HOUSTON	70	54	80	44	62	5	0.11	-0.76	0.08	0.11	15	38.23	85	98	77	0	0	2	0
	LUBBOCK	62	31	80	18	46	3	0.00	-0.14	0.00	0.00	0	22.17	122	74	39	0	2	0	0
	MIDLAND	66	40	77	26	53	6	0.00	-0.12	0.00	0.00	0	7.45	52	80	45	0	1	0	0
	SAN ANGELO	68	46	81	33	57	8	0.00	-0.19	0.00	0.00	0	16.35	81	74	53	0	0	0	0
	SAN ANTONIO	68	54	78	42	61	6	0.12	-0.33	0.12	0.12	32	27.06	86	90	65	0	0	1	0
	VICTORIA	73	55	82	46	64	6	0.14	-0.41	0.12	0.14	30	28.11	74	94	71	0	0	2	0
	WACO	66	50	80	36	58	6	0.02	-0.60	0.01	0.02	4	29.58	95	85	63	0	0	2	0
	WICHITA FALLS	57	36	78	22	47	1	0.00	-0.35	0.00	0.00	0	22.81	83	86	63	0	3	0	0
UT	SALT LAKE CITY	55	36	59	30	45	12	0.05	-0.23	0.05	0.05	21	13.12	85	88	53	0	1	1	0
VT	BURLINGTON	39	23	50	13	31	0	0.43	-0.17	0.26	0.42	82	33.90	99	81	54	0	7	5	0
VA	LYNCHBURG	53	36	70	28	44	2	1.01	0.29	0.45	1.01	166	42.62	105	96	69	0	1	5	0
	NORFOLK	60	43	74	35	52	4	0.33	-0.29	0.33	0.33	62	46.93	109	86	61	0	0	1	0
	RICHMOND	58	41	76	36	50	6	0.46	-0.19	0.37	0.46	82	33.06	80	85	67	0	0	5	0
	ROANOKE	56	39	69	29	47	4	1.02	0.33	0.64	1.02	173	37.89	94	91	69	0	1	6	1
	WASH/DULLES	51	35	70	28	43	3	1.14	0.42	0.54	1.14	187	43.94	112	87	73	0	1	5	2
WA	OLYMPIA	44	28	53	16	36	-3	0.32	-1.65	0.24	0.32	19	48.83	110	93	88	0	4	3	0
	QUILLAYUTE	47	32	57	19	40	-2	1.09	-2.43	0.71	1.09	36	92.02	102	92	82	0	4	3	1
	SEATTLE-TACOMA	46	34	55	23	40	-2	0.44	-0.97	0.30	0.44	36	44.13	135	83	68	0	4	3	0
	SPOKANE	30	21	39	10	26	-4	0.34	-0.22	0.22	0.34	71	13.36	90	90	74	0	7	3	0
	YAKIMA	35	20	46	7	27	-5	0.24	-0.05	0.13	0.24	96	5.83	82	82	69	0	6	2	0
WV	BECKLEY	53	37	59	32	45	6	1.46	0.77	0.49	1.46	247	38.57	99	87	78	0	2	6	0
	CHARLESTON	54	39	66	34	47	6	2.12	1.27	1.09	2.12	294	45.46	110	91	72	0	0	6	2
	ELKINS	53	35	63	31	44	7	2.74	1.92	1.31	2.74	391	41.12	95	96	73	0	2	6	2
	HUNTINGTON	53	35	66	26	44	3	2.51	1.74	1.02	2.51	380	47.79	121	94	81	0	2	5	3
WI	EAU CLAIRE	25	5	33	-7	15	-9	0.00	-0.32	0.00	0.00	0	42.30	135	88	50	0	7	0	0
	GREEN BAY	28	8	36	0	18	-9	0.02	-0.40	0.02	0.02	6	30.46	108	86	61	0	7	1	0
	LA CROSSE	30	15	38	6	23	-5	0.00	-0.39	0.00	0.00	0	36.59	116	78	47	0	7	0	0
	MADISON	32	16	43	5	24	-5	0.00	-0.47	0.00	0.00	0	34.28	108	79	62	0	7	0	0
	MILWAUKEE	36	22	47	12	29	-3	0.03	-0.56	0.03	0.03	6	31.11	94	77	60	0	7	1	0
WY	CASPER	45	18	55	1	32	6	0.04	-0.10	0.04	0.00	0	10.86	87	77	52	0	7	1	0
	CHEYENNE	49	23	54	13	36	7	0.02	-0.10	0.02	0.02	20	17.12	113	61	44	0	7	1	0
	LANDER	48	21	54	9	35	11	0.01	-0.15	0.01	0.00	0	9.88	76	78	37	0	7	1	0
	SHERIDAN	32	6	48	-14	19	-6	0.12	-0.02	0.12	0.00	0	14.34	101	80	66	0	7	1	0

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

December 1 – 7, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Temperatures were above normal for most of the nation, especially in the Southeast and the central Rocky Mountains, where readings averaged as much as 9°F above normal. An exception to the mild pattern occurred in northern sections of the Corn Belt and the Great Plains, where temperatures were below normal. Most locations received near-normal amounts of precipitation, with the exception of northern California, where there were reports of some locations receiving rainfall nearly every day and more than 5 inches for the week.

In Arizona, cotton harvesting was 80 percent complete, equal to last year but 3 percentage points ahead of the 5-year average. Alfalfa conditions were mostly fair to excellent, depending on location. Harvesting occurred on three-fourths of the alfalfa acreage across the state. Significant amounts of rain were received throughout the state, enough to maintain soil moisture ratings. Rangeland conditions varied widely, ranging from very poor to good, depending on location. Central Arizona growers shipped broccoli, Bok Choy, Chinese cabbage, red and green cabbage, cantaloupes, cilantro, collard greens, kale, lemons, mustard, parsley, turnips, and spinach. Western Arizona growers shipped anise, arugula, broccoli, Bok Choy, cauliflower, celery, Chinese cabbage, red and green cabbage, cilantro, endive, escarole, kale, lettuce, parsley, and spinach.

Rain-soaked fields reduced access, although most fields were empty and bare in California. Emergence of the wheat crop is considered excellent due to recent rainfall. Eighty-seven percent of the wheat was emerged and condition was rated as 80 percent good to excellent. Pasture and rangeland condition was 70 percent poor to fair. The Cotton Plowdown Regulations compliance deadline rapidly approached. All fields must be shredded and disked by December 20, 2014. The last cutting of alfalfa for silage was ongoing. Growers pruned, sprayed for weeds, irrigated, and fertilized in preparation for the dormant season. The last of the olives for olive oil and late-variety table grapes were harvested. Growers were pushing out Thompson Seedless grapes vineyards in Sutter County. Kiwifruit and Persimmons harvest continued. Color in navel oranges was improving and exports were on the rise. Growers were treating groves for fungal diseases and Fuller Rose Beetle. Mandarin oranges, grapefruit, limes, and lemons were packed and shipped to foreign markets. Pruning of almond and walnut orchards continued. Shelling and processing of stored almonds was ongoing. Pistachio harvest continued. In Monterey County, lettuce production ended, as the area enters host-free period to control Lettuce Mosaic Virus. The no-plant period runs from December 7-21. In Sutter County, winter vegetable field preparation and planting was completed. In Tulare County, spinach and broccoli harvest ended and fields were prepared for winter and spring planting. Cauliflower fields continued to mature. In Fresno County, early carrots and broccoli were near harvest and early onions looked good. Local bee hives received supplemental feeding to sustain the hives until spring bloom; out-of-state beehives were conveyed and placed in local bee yards preparing for almond bloom season. The eastern slope of Coast Range Mountains was still very dry and range conditions were poor. Recent precipitation gave grasses a chance to grow; however, overall conditions were still dry. Sheep continued to graze on small grains fields, alfalfa fields, or on retired farmlands, and ranchers were supplementing feed with baled hay.

In Florida, cotton and soybean harvest was wrapping up in the Panhandle and north Florida. Farmers were planting winter forage and oats and wheat for grain. In Glades and Hendry Counties, sugarcane harvest continued. Flagler and Putnam county farmers began harvesting cabbage. Vegetable harvesting continued in southwest Florida, where farmers harvested green beans, beets, cucumbers, eggplant, herbs, kale, peppers, squash, tomatoes, and watermelon. Small amounts of rain and warmer weather improved pasture and reduced livestock stress in the Panhandle and north Florida. Hardee County reported standing water in low-lying areas but flooding was not an issue. Statewide, the cattle condition was mostly good while pasture condition was fair to good. All counties within the Indian River District received significant rainfall this past week. Temperatures were normal for this time of the year, with daytime highs reaching the lower 80s and morning lows in the middle to upper 50s. Early orange harvest picked up significantly this week and should continue to increase the next couple weeks as ratios rise to acceptable levels. White and colored grapefruit harvest should pick up significantly this month, with a good portion of white grapefruit going straight to the plants for processing. Meanwhile, colored grapefruit will be harvested primarily for the fresh market. Sunburst tangerines were at full maturity and should be harvested at maximum amounts from now until the end of the season. Fruit quality remained good this season, even though much of it has been on the small side. Grove activity included irrigation, mowing, spraying, and fertilizing. Fieldworkers across the citrus growing region reported new groves and resets being planted, and old non-productive groves being pushed.

In Wisconsin, temperatures were well below average at the beginning of the week, with overnight lows in the single digits or lower. Temperatures gradually rose to more seasonable levels by the weekend, with above-freezing days softening the ground in some areas. Northern portions of the state received a light dusting of snow on Tuesday, but it was a dry week farther south and west. Clear skies and well-frozen fields helped farmers harvest corn, though lingering snow cover kept progress slow for many. Long lines at grain driers and elevators reportedly slowed progress further. Corn grain moisture content has not dropped appreciably in the past 2 weeks. Farmers raced to empty manure pits wherever conditions allowed, but deep frost and snow continued to prevent fall tillage in many areas. In portions of the state hardest hit by November blizzards, field operations were hampered or prevented by muddy soils beneath deep, insulating snow. With winter weather here to stay, corn and soybeans still standing in these areas will likely remain in fields until spring. As of December 7, corn for grain was 86 percent harvested. This makes 2014 the fourth-latest corn harvest in the past 30 years, ahead of 1985, 1992, and 2009.

November Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: In a replay from the winter of 2013-14, cold weather dominated the central and eastern U.S. In fact, monthly temperatures averaged 5 to 10°F below normal from the northern Plains and upper Midwest into the Southeast. Cold air also spilled across the northern Rockies into the Northwest, but did not reach California or the Desert Southwest. Monthly readings averaged at least 5°F above normal in parts of California.

Periodic showers in northern California were insufficient to dent the 3-year drought. Meanwhile, little, if any, precipitation reached southern California and the Desert Southwest. In contrast, significant precipitation fell across northern portions of the Rockies and High Plains. In the latter region, snow helped to insulate winter wheat from the harsh, early-season cold outbreak. Farther south, however, some wheat on the central High Plains was exposed to temperatures ranging from 0 to -20°F at the height of the cold wave. In the southern and eastern Corn Belt, the sudden cold hampered the emergence and establishment of late-planted winter wheat. By month's end, wheat germination was incomplete in several Midwestern States, including Indiana (93% emerged) and Michigan (89%).

Elsewhere, significant precipitation was confined to the south-central U.S. (associated with remnant moisture from former eastern Pacific Hurricane Vance), the Atlantic Seaboard (in part due to a pre-Thanksgiving coastal storm), and the Great Lakes region—where cold, snowy weather impeded late-season corn harvest efforts. By November 30, more than one-fifth of the corn remained in the field in Wisconsin (78% harvested) and Michigan (77%).

Historical Perspective: According to preliminary information provided by the National Climatic Data Center, the contiguous U.S. experienced its 16th-coldest, 46th-driest November during the 120-year period of record. The nation's monthly average temperature of 39.3°F was 2.4°F below the 20th century mean, while precipitation averaged 2.07 inches (93% of normal). It was the nation's coldest November since 2000.

State temperature rankings ranged from the second-coldest November in Alabama and Mississippi to the ninth-warmest November in California (figure 1). Monthly temperatures were among the ten lowest values on record in sixteen other states across the central and eastern U.S. Meanwhile, state precipitation rankings ranged from the 19th-driest November in Arizona to the 11th-wettest November in Florida (figure 2).

Summary: In early November—and for the fourth time this autumn—remnant moisture from a former eastern Pacific hurricane contributed to heavy showers in the southwestern or south-central U.S. This time, Hurricane Vance largely dissipated before reaching the Pacific Coast of Mexico. However, the interaction between Pacific tropical moisture and a North American cold front led to rainfall totals in excess of 2 inches across parts of Texas, and produced at least an inch of rain as far east as the Tennessee Valley. On November 4, heavy rain arrived in parts of Texas, where record-setting daily amounts reached 2.01 inches in Lubbock and 2.48 inches in San Angelo. Lubbock's November 3-4 rainfall climbed to 2.89 inches. Rain lingered for several days in parts of southern and eastern Texas, resulting in additional daily-record totals in locations such as San Antonio (2.30 inches on November 5) and Victoria (1.39 inches on November 6). Prior to the arrival of Vance's moisture, the month opened with significant storms near both the Atlantic and Pacific Coasts. For example, snow blanketed the southern Appalachians, with November 1-2 snowfall reaching 18 inches atop Mt. Mitchell, NC, the highest peak east of the Mississippi River, and 12 inches at Newfound Gap on the NC/TN border in the Great Smoky Mountains. Farther north, daily-record snowfall totals for November 2 in Maine included 12.0 inches in Bangor and 10.1 inches in Caribou. Elsewhere in New England, a trace of snow fell on November 2 in Boston, MA, and Providence, RI. High winds accompanied the Northeastern storm, with a gust to 63 mph clocked on November 2 in Nantucket, MA. Meanwhile, Quillayute, WA, collected a daily-record rainfall (4.20 inches) for November 3. Precipitation also reached portions of the High Plains, where record-setting totals for November 3 included 0.74 inch (including 3.1 inches of snow) in Cheyenne, WY, and 0.59 inch (1.1 inches of snow) in Scottsbluff, NE.

Figure 1 Statewide Average Temperature Ranks
November 2014
Period: 1895–2014

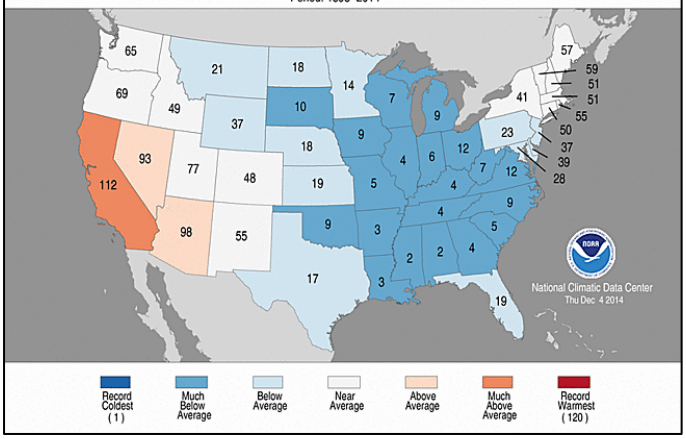
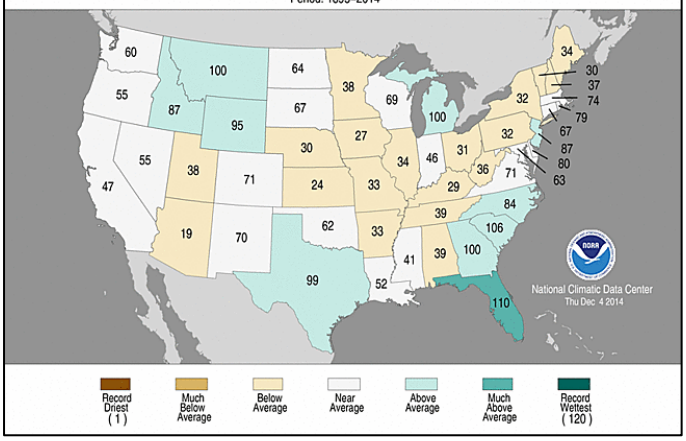


Figure 2 Statewide Precipitation Ranks
November 2014
Period: 1895–2014



Early in the month, cold weather prevailed across the Midwest and settled into the South and East. Daily-record lows for November 2 dipped to 19°F in Flint, MI; 22°F in Toledo, OH; 23°F in Frankfort, KY; 24°F in Cape Girardeau, MO; 29°F in Macon, GA; and 30°F in Hattiesburg, MS. The following morning, Charlotte, NC, posted a daily-record low (24°F) for November 3. Farther north, Portland, ME, noted the end its longest growing season on record: 196 days from April 21 – November 2. Previously, Portland's longest growing season had been 185 days in 1990, and its latest first freeze had been October 25, 1949 and 2013. Meanwhile, record-setting warmth developed in the Northwest, where daily-record highs in Washington included 71°F (on November 4) in Yakima and 72°F (on November 5) in Walla Walla. Later, warmth expanded broadly across the West, resulting in daily-record highs for November 6 in locations such as Santa Ana, CA (92°F); Lewiston, ID (73°F); and Missoula, MT (63°F). A day later, Clayton, NM, logged a daily-record high (81°F) for November 7. Highs on November 8 soared to daily-record levels in California locations such as Elsinore (95°F) and Woodland Hills (94°F).

The warmth quickly, but briefly, expanded eastward in advance of a potent cold front. Snow accompanied the surge of cold air across the northern Plains, helping to insulate winter wheat, but wheat on the central High Plains was exposed to sub-zero temperatures and may have sustained injury. Meanwhile, warmth continued in much of the West. Daily-record highs for November 9 included 84°F in Palmdale, CA, and 76°F in Reno, NV. The following day, record-setting highs for November 10 climbed to 84°F in Las Vegas, NV, and 77°F in Bullfrog, UT. Across the southern half of the Plains, a final day of warmth in advance of the cold front led to daily-record highs for November 10 in Childress, TX (87°F), and Wichita, KS (77°F). Similarly, brief warmth in the East led to a daily-record highs in Elkins, WV (76°F on November 11), and Wallops Island, VA (71°F on November 12). In stark contrast, frigid weather overspread most of the remainder of the country. In Wyoming, Casper, posted three consecutive daily-record lows (-19, -27, and -26°F) from November 11-13. Casper also set a monthly record low, previously achieved with a reading of -21°F on November 23, 1985. Meanwhile in Montana, Livingston (-21°F on November 12) reported its earliest reading below -20°F (previously, November 13, 1959). On November 13, monthly record lows included -28°F in Worland, WY (previously, -26°F on November 23, 1985), and -10°F in Burlington, CO (previously, -8°F on November 14, 1916). With a low of -6°F on November 13, Goodland, KS, experienced its earliest reading below -5°F (previously, November 26, 1952). Very cold conditions persisted and expanded as time progressed, eventually reaching the South and Northwest. By November 14, record-setting lows included -19°F in Havre, MT; -17°F in Aberdeen, SD; 14°F in Fayetteville, AR; and 21°F in Greenwood, MS. Daily-record lows for November 15 were set in locations such as Redmond, OR (-17°F); St. Cloud, MN (-6°F); and Parkersburg, WV (15°F). With an average temperature of 17.8°F (more than 20°F below normal) from November 11-15, Grand Island, NE, reported its coldest 5-day period during the first half of November since November 2-6, 1991.

Snow developed across the northern Plains on November 9, when Glasgow, MT, netted a daily-record total of 6.0 inches. The following day, November 10, became the snowiest November day on record in St. Cloud, MN, where 13.2 inches fell (previously, 12.0 inches on November 21, 1898). Elsewhere on the 10th, Rapid City, SD, received 5.0 inches, a record for the date. Record-setting snowfall totals for November 11 included 4.5 inches in Wausau, WI, and 2.5 inches in Colorado Springs, CO. In Michigan, nearly half (16.0 inches) of Marquette's 33.8-inch weekly (November 9-15) snowfall occurred on November 11. Farther south, Harlingen, TX, collected a daily-record rainfall (2.24 inches) for November 11. Two days later, on November 13, daily-record snowfall totals in excess of a foot blanketed Sault Sainte Marie, MI (18.2 inches), and South Bend, IN (12.3 inches). South Bend's total marked its fourth-highest daily amount during November, well behind the all-time record of 18.0 inches set on November 2, 1911. Other daily-record snowfall totals for November 13 included 6.3 inches in Muskegon, MI; 3.7 inches in Pendleton, OR; 3.3 inches in Boise, ID; 2.3 inches in Pueblo, CO; and 0.4 inch in North Little Rock, AR. For North Little Rock, it represented the earliest measurable snowfall since October 29, 1993. Elsewhere on November 13, an ice storm in western Oregon led to accumulations of one-tenth to one-quarter of an inch. Farther inland, mid-November snowfall totals of 1 to 2 feet or more were common across the northern Intermountain West and the Rockies. Eventually, snowfall returned to the nation's mid-section, resulting in daily-record totals in locations such as Sioux Falls, SD (6.5 inches), and Sioux City, IA (4.0 inches). In Wisconsin, Rhinelander received 21.7 inches of snow during the first half of the month, eclipsing its November 1957 standard of 21.5 inches.

As the month progressed, frigid conditions continued to dominate the Northwest and many areas east of the Rockies. On November 16, temperatures plunged to daily-record levels in locations such as Laramie, WY (-20°F); Redmond, OR (-19°F); and Stanley, ID (-18°F). In Nebraska, record-setting lows for November 16 included -5°F in Norfolk and -3°F in Grand Island. The following day, record lows for November 17 plunged to 3°F in Garden City, KS; 5°F in Dalhart, TX; and 8°F in Roswell, NM. In the Northwest, Pendleton, OR (2, 4, and 4°F), and Olympia, WA (16, 18, and 19°F), posted three consecutive daily-record lows from November 16-18. Monthly record lows were attained on November 18 in Missouri locations such as Joplin (6°F; previously, 7°F on November 29, 1976) and Cape Girardeau (8°F; tied 8°F on November 29, 1976). With a low of 9°F on November 18, Evansville, IN, reported its earliest reading below the 10-degree mark (previously, -1°F on November 24, 1950). Farther west, daily-record lows for November 18 dipped to -14°F in Valentine, NE, and -1°F in Pocatello, ID. Later, cold air surged into the East, where record-setting lows for November 19 plummeted to 11°F in Frankfort, KY; 12°F in Charleston, WV; and 15°F in Augusta, GA. The low in Augusta marked its earliest sub-20°F reading (previously, 19°F on November 21, 1951). In Florida, daily-record lows for November 20 fell to 24°F in Gainesville and Jacksonville. On the same date, record-breaking lows in Iowa included -2°F in Mason City and 0°F in Waterloo. Mason City set another record with a low of -3°F on November 21, while other sub-zero, daily-record lows bottomed out at -8°F in Rhinelander, WI, and -7°F in St. Cloud, MN. In Chicago, IL, the temperature remained below 32°F on 7 consecutive days from November 12-18, tying a November record set from November 24-30, 1903. Similarly, South Bend, IN, spent 9 days (November 13-21) at or below 32°F, easily besting its November record of 5 such days set in 1898 and 1996.

Mid-month rain soaked the Southeast, while snow fell from the southern Plains into the lower Midwest. Record-setting rainfall

totals for November 16 climbed to 3.45 inches in Anniston, AL, and 3.20 inches in Jackson, MS. Meanwhile, daily-record snowfall totals for November 16 included 3.4 inches in Ft. Wayne, IN; 2.5 inches in Oklahoma City, OK; and 1.8 inches in Wichita, KS. Somewhat heavier snow blanketed the Ohio Valley on November 17, when daily-record amounts reached 4.9 inches in Cincinnati, OH, and 3.3 inches in Louisville, KY. According to the National Weather Service, snow covered just over 50 percent of the contiguous U.S. on November 17-18—a record in the satellite era for so early in the season. Meanwhile, heavy rain fell along the northern Atlantic Coast, resulting in daily-record totals at New York's Central Park (1.54 inches) and Providence, RI (1.50 inches). By November 18, heavy snow downwind of the Great Lakes led to a daily-record total of 9.6 inches in Grand Rapids, MI. Buffalo, NY, received a weekly (November 16-22) snowfall of 16.9 inches, aided by a daily-record sum of 7.6 inches on November 19. Much heavier snow fell downwind of Lake Erie just south of Buffalo, where weekly totals of at least 5 to 6 feet were common. Later, rain and snow arrived in the Northwest, accompanied by high winds. A wind gust to 82 mph was clocked on November 21 at Sea Lion Caves near Florence, OR. Daily-record precipitation totals included 0.70 inch (on November 21) in Omak, WA, and 0.57 inch (on November 22) in Stanley, ID. Meanwhile, mountain snowfall totals of 1 to 2 feet or more were common from the Pacific Northwest to the northern and central Rockies.

Prior to Thanksgiving, heavy rain developed across the South, resulting in record-setting amounts for November 22 in Wichita Falls, TX (2.80 inches), and Tallahassee, FL (1.79 inches). On November 23, daily-record precipitation amounts reached 3.37 inches in Lake Charles, LA; 2.49 inches in Macon, GA; and 2.43 inches in Greenville-Spartanburg, SC. Heavy rain also extended into the Midwest, where record-setting totals for November 23 included 1.91 inches in Indianapolis, IN, and 1.16 inches in Grand Rapids, MI. Precipitation lingered across Michigan into November 24, when record-setting totals reached 1.04 inches in Muskegon and 1.01 inches in Lansing. Meanwhile, Midwestern precipitation changed to snow, leading to record-setting amounts for November 24 in Wisconsin locations such as Madison (5.3 inches) and La Crosse (2.2 inches). Farther south, heavy rain developed across parts of Florida, resulting in daily-record totals for November 25 in Daytona Beach (6.22 inches) and Tampa (3.63 inches). By November 26, an East Coast storm produced additional heavy rain, along with locally more than a foot of snow from the eastern slopes of the central Appalachians northeastward into Maine. Daily-record rainfall totals for the 26th reached 2.85 inches in Ft. Myers, FL, and 1.79 inches in Norfolk, VA. Meanwhile, record-setting snowfall amounts for November 26 reached 10.3 inches in Concord, NH; 9.6 inches in Albany, NY; 5.3 inches in Worcester, MA; and 4.9 inches in Allentown, PA. Snow squalls returned to the Great Lakes region, resulting in a daily-record total of 11.0 inches (on November 27) in Alpena, MI. Not surprisingly, November snowfall records were broken in locations such as Marquette, MI (53.0 inches), and Rhinelander, WI (32.4 inches). Meanwhile, several rounds of precipitation pushed inland across the Northwest, accompanied by locally high winds. Billings, MT, measured daily-record snowfall totals (6.2 and 4.4 inches, respectively) on November 26 and 29. Elsewhere in Montana, record-setting snowfall totals for November 29 included 6.1 inches in both Helena and Great Falls. Meanwhile in Wyoming, peak wind gusts on November 29 were clocked to 64 mph in Buffalo and 63 mph in Lander.

Late in the month, warmth briefly overspread the East in advance of a strong cold front. On November 23-24, Melbourne, FL, collected consecutive daily-record highs (86 and 88°F, respectively). Other record-setting highs for November 24 included 88°F in Miami, FL; 83°F in Savannah, GA; 74°F in Washington, DC; and 72°F in Syracuse, NY. Just 2 days later, Jamestown, ND, posted a daily-record low (-25°F) for November 26. Thanksgiving Day, November 27, featured another daily-record low (-28°F) in Jamestown, as well as with Sisseton, SD (-15°F), and Antigo, WI (-13°F). With a low of -8°F on November 27, Rochester, MN, experienced its second-lowest Thanksgiving temperature on record, behind -18°F on November 30, 1893. By month's end, cold air settled into the East, where Montpelier, VT (4°F), collected a daily-record low for November 29. At the same time, another surge of bitterly cold air reached Montana, where Ennis logged a daily-record low (-18°F on the 29th). In stark contrast, late-month warmth expanded across the western and central U.S. In Portland, OR, consecutive daily record highs (63 and 62°F, respectively) were noted on November 25-26. Similarly, November 26-27 featured consecutive daily-record highs in southern California locations such as Long Beach (87 and 90°F) and El Cajon (89 and 91°F). In fact, Long Beach experienced its second-warmest Thanksgiving behind 91°F on November 24, 1977. Elsewhere in southern California, November 27 was the warmest Thanksgiving Day on record in Woodland Hills (93°F) and San Luis Obispo (82°F). At month's end, warmth rapidly spread across the Great Plains. In Nebraska, consecutive daily-record highs occurred on November 28-29 in Hastings (74 and 80°F) and Grand Island (70 and 78°F). For Hastings, it was the first-ever observance of an 80-degree reading during the second half of November. Elsewhere, daily-record highs included 87°F (on November 27) in Phoenix, AZ; 84°F (on November 29) in Childress, TX; and 80°F (on November 28) in Goodland, KS. In northern Texas, November 28-29 featured consecutive daily-record highs in locations such as Amarillo (83°F both days) and Borger (83 and 81°F). On the last day of November, daily-record highs soared to 81°F in San Angelo, TX; 79°F in Ft. Smith, AR; and 73°F in West Plains, MO. However, November ended with another strong push of cold air across the northern Plains and northern Rockies. Bozeman, MT, set a 24-hour temperature change record, falling from 49 to -22°F—a 71-degree change—on November 29-30. Elsewhere in Montana, Great Falls reported a 33-degree drop in 32 minutes on November 28, eventually witnessing a 78-degree plunge (from 56 to -22°F) in less than 48 hours from November 28-30. Great Falls' low of -22°F was a record for November 30.

Following a cold start to the month, mild weather dominated Alaska, in part due to warmth and moisture associated with the remnants of Typhoon Nuri. From November 11-18, King Salmon logged eight consecutive daily-record highs—including a reading of 51°F on November 13. During the 8-day warm spell, King Salmon's rainfall totaled 1.60 inches. Meanwhile, McGrath posted three daily-record highs in a row, highlighted by a monthly record maximum of 50°F on November 12. Prior to this year, McGrath had never experienced a high of 50°F or greater after October 22. Other daily-record highs included 44°F (on November 18) in Nome and 36°F (on November 19) in Bettles. Colder weather arrived late in the month across much of Alaska, accompanied by some snow. In Juneau, where no measurable snow had fallen during the first 28 days of the month, 9.8 inches fell on November 29-30. Meanwhile, Kodiak received rainfall totaling only 0.33 inch during the last 10 days of November, but still reached 13.00 inches for the month—less than 3 inches shy of its November 2002 precipitation record of 15.92 inches.

Shower activity in Hawaii was mostly light, with a few exceptions. Early in the month, Lihue, Kauai, netted a daily-record total of 1.20 inches on November 7. On Oahu, Honolulu received some heavy showers, totaling 1.08 inches, on November 14-15. Also at mid-month, daily-record highs for November 15 included 84°F in Lihue, Kauai, and 85°F in Hilo, on the Big Island. Lihue posted another daily record (84°F) on November 21. Shower activity increased, especially at windward sites on the Big Island, where Honokaa received more than a foot of rain during the last full week of November. At the state's major airport observation sites, November rainfall ranged from 1.00 inch (45 percent of normal) in Kahului, Maui, to 9.03 inches (58 percent) in Hilo, on the Big Island.

Fieldwork

Fieldwork summary provided by USDA/NASS

November temperatures were below normal in areas east of the Rocky Mountains, with a large swath from Dakotas to Alabama recording temperatures more than 6°F below normal. Conversely, some locations in California recorded temperatures more than 3°F above normal. Monthly precipitation totals were below average in most locations across the country, with exceptions in the Rocky Mountains, the Southeast, and Texas. A winter storm in the middle of the month led to snow cover in the northern Plains and the upper Midwest, but major winter wheat-producing regions continued to lack protective snow cover for emerging wheat.

With corn development behind normal for most of the 2014 growing season, harvest progress accelerated in November. Nationally, 65 percent of the corn was harvested by November 2, six percentage points behind last year and 8 points behind the 5-year average. However, by November 9, eighty percent of the corn was harvested, 2 percentage points behind last year but equal to the 5-year average. This was the first time that the corn harvest pace was not behind the 5-year average during the 2014 growing season, catching up from a 22-point deficit on October 19. Ninety-our percent of the corn crop was harvested by November 23, equal to last year but 2 percentage points ahead of the 5-year average.

Eighty-three percent of the soybean crop was harvested by November 2, two percentage points behind last year but equal to the 5-year average. Ninety-four percent of the soybean crop was harvested by November 16, equal to last year but 2 percentage points behind the 5-year average. Producers had harvested 97 percent of the nation's soybean crop by November 23, two percentage points ahead of last year but slightly behind the 5-year average. The soybean crop was at or above 95 percent harvested by November 23 in all estimating states except Kentucky, North Carolina, and Tennessee.

Ninety-four percent of the sorghum crop was mature by November 2, five percentage points behind last year and slightly behind the 5-year average. By November 2, sixty-five percent of the sorghum crop had been harvested, 9 percentage points behind last year and 5 points behind the 5-year average. By November 16, eighty-three percent of the sorghum had been harvested, 7 percentage points behind last year and 4 points behind the 5-year average. Producers had harvested 88 percent of the nation's sorghum crop by November 23, eight percentage points behind last year and 3 points behind the 5-year average. Harvest progress in Kansas, the nation's largest sorghum-producing state, was 10 percentage points behind the 5-year average on November 2 but had nearly caught up to normal levels, and was 95 percent complete, by November 30.

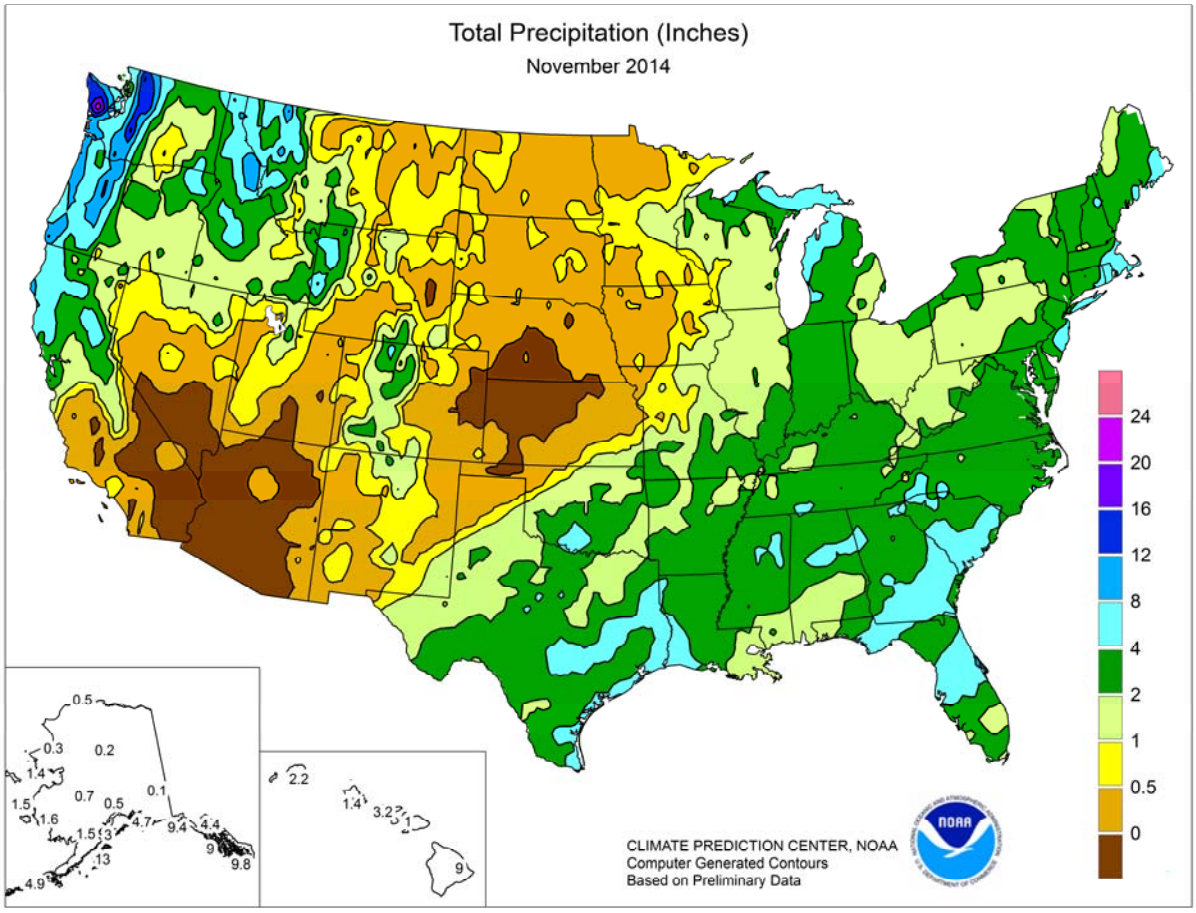
By November 2, producers had sown 90 percent of the nation's intended 2015 winter wheat acreage, equal to last year but slightly ahead of the 5-year average. Nationally, 77 percent of the winter wheat had emerged by November 2, slightly ahead of last year and 5 percentage points ahead of the 5-year average. Nationally, 83 percent of the winter wheat was emerged by November 9, equal to last year's pace but 4 percentage points ahead of the 5-year average. By November 16, ninety-five percent of the 2015 winter wheat was seeded, 4 percentage points behind last year and 2 points behind the 5-year average. By November 23, ninety-two percent of the nation's winter wheat was emerged, equal to last year but 3 percentage points ahead of the 5-year average. Overall, 58 percent of the winter wheat crop was reported in good to excellent condition, slightly below the beginning of the month and 4 percentage points below than the same time last year. Generally, the northern Plains had better condition ratings on November 23—like Montana at 70 percent good to excellent—than the southern Plains—like Texas at 49 percent.

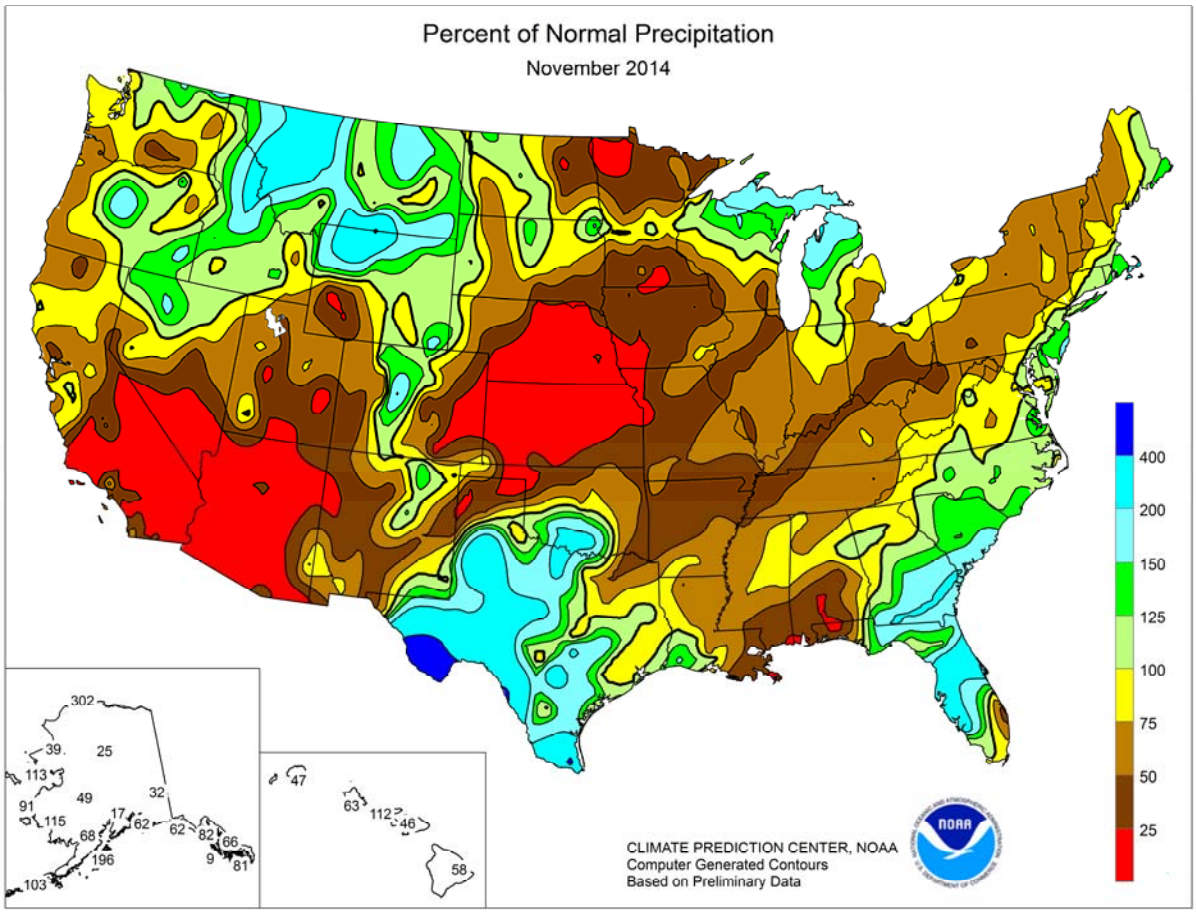
By November 2, fifty percent of the nation's sunflower crop was harvested, 20 percentage points ahead of last year but 4 points behind the 5-year average. North Dakota producers surpassed the halfway point for harvest progress at the beginning of the month (54 percent complete), 3 percentage points ahead of the 5-year average. By November 9, seventy percent of the sunflower crop was harvested, 22 percentage points ahead of last year and slightly ahead of the 5-year average. Producers had harvested 86 percent of the nation's sunflower crop by November 23, eight percentage points ahead of last year but 4 points behind of the 5-year average.

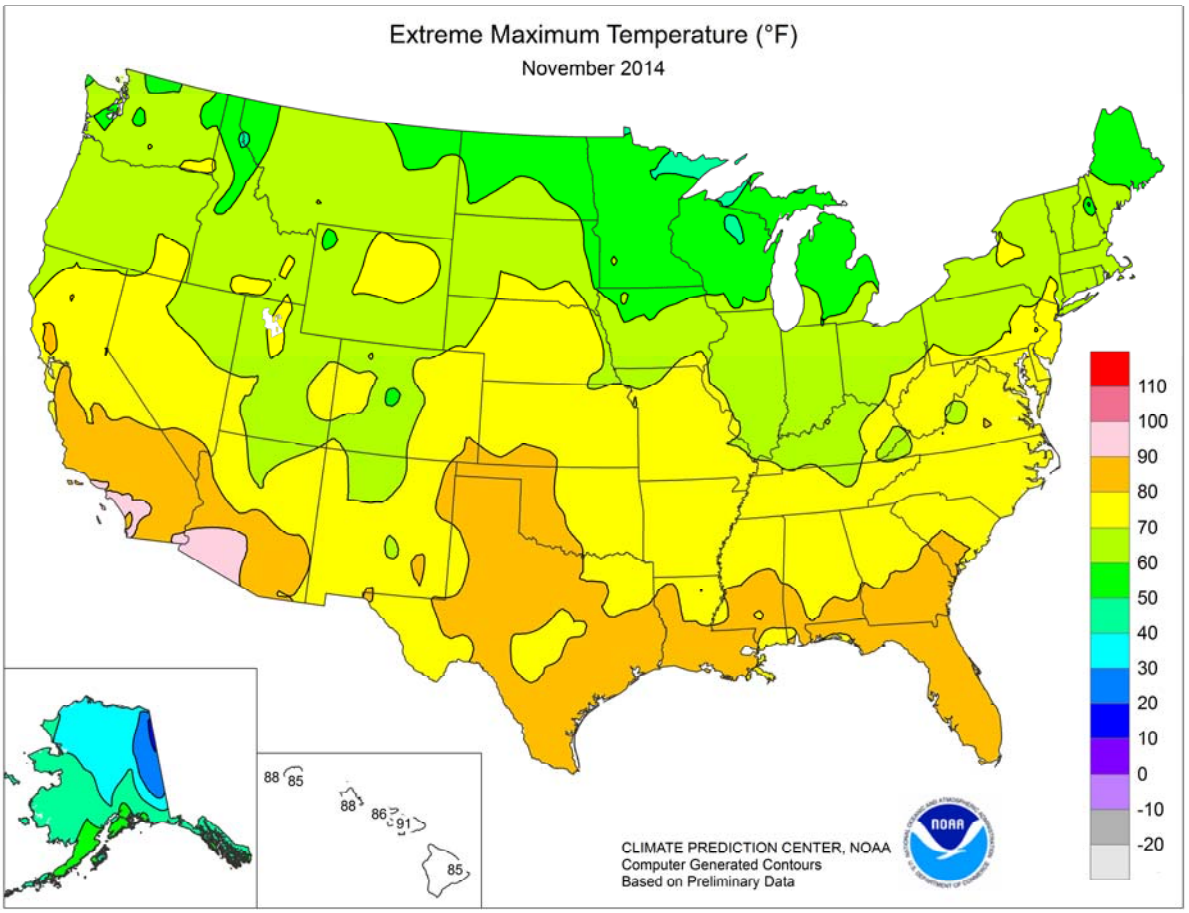
Producers had harvested 79 percent of the nation's peanut crop by November 2, three percentage points behind last year but 3 points ahead of the 5-year average. Producers had harvested 94 percent of the nation's peanut crop by November 16, two percentage points behind last year but 2 points ahead of the 5-year average. Peanut producers had harvested 97 percent of the nation's crop by November 23, equal to last year but 2 percentage points ahead of the 5-year average. Georgia saw freezing temperatures throughout the month, stopping the development and accelerating the peanut harvest.

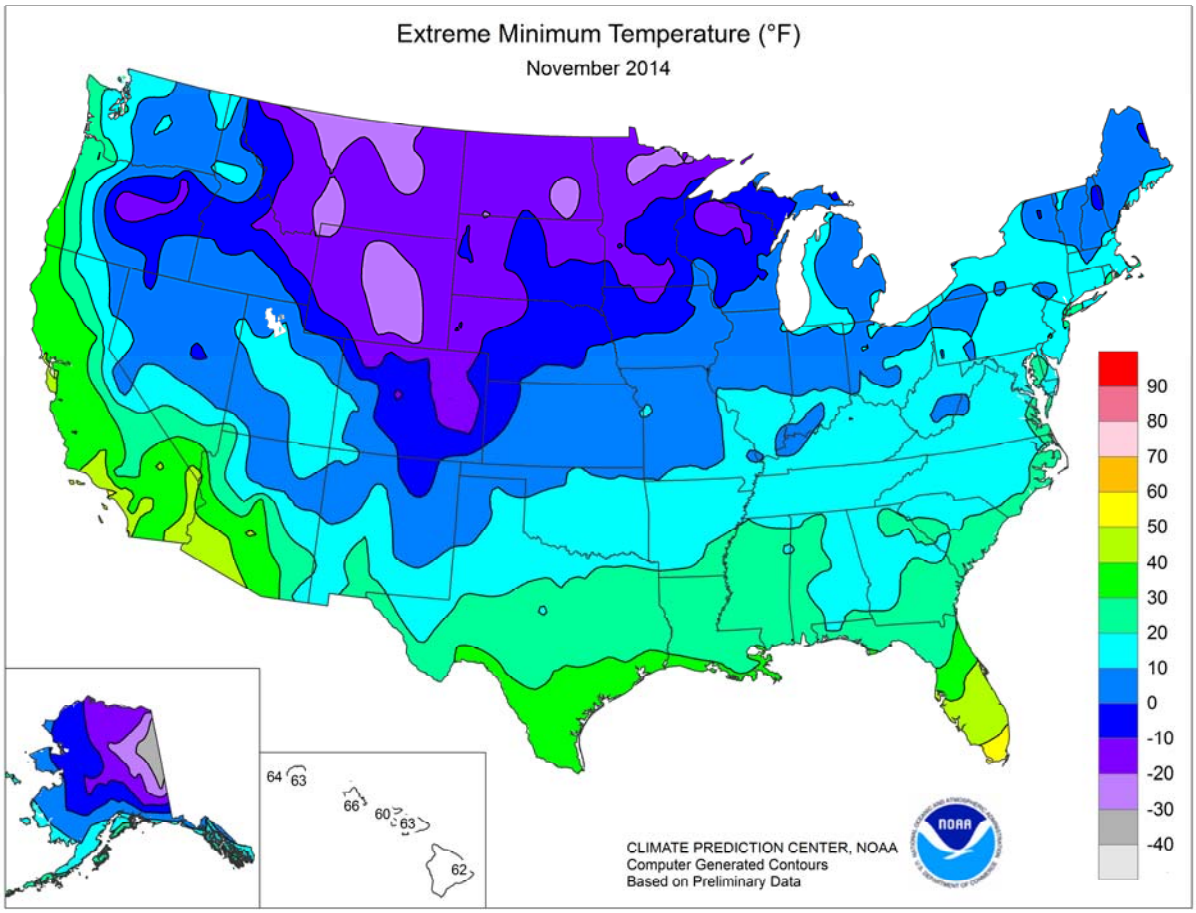
Nationwide, 95 percent of the cotton crop had open bolls by November 2, identical to last year's pace but 2 percentage points behind the 5-year average. By November 2, fifty percent of the cotton crop was harvested, 8 percentage points ahead of last year but slightly behind the 5-year average. By November 9, sixty-two percent of the cotton crop was harvested, 8 percentage points ahead of last year but 2 percentage points behind the 5-year average. By November 23, seventy-seven percent of the cotton was harvested, equal to last year but 6 percentage points behind the 5-year average.

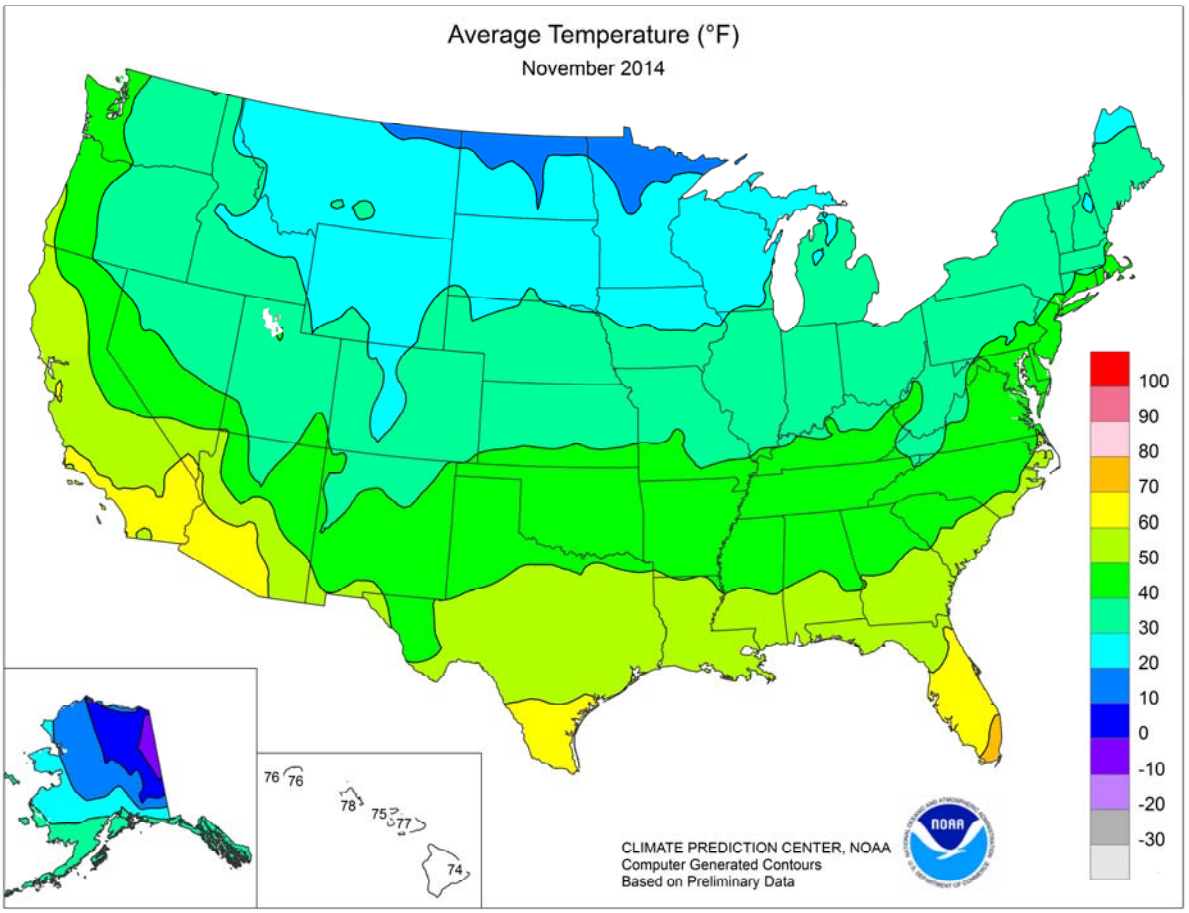
By November 2, ninety-four percent of the nation's sugarbeet acreage had been harvested, 3 percentage points ahead of last year and 5 points ahead of the 5-year average. Producers harvested 22 percent of the sugarbeet crop in both Idaho and Michigan during the first week of the month. By November 9, ninety-eight percent of the nation's sugarbeet acreage had been harvested, 2 percentage points ahead of both last year and the 5-year average.

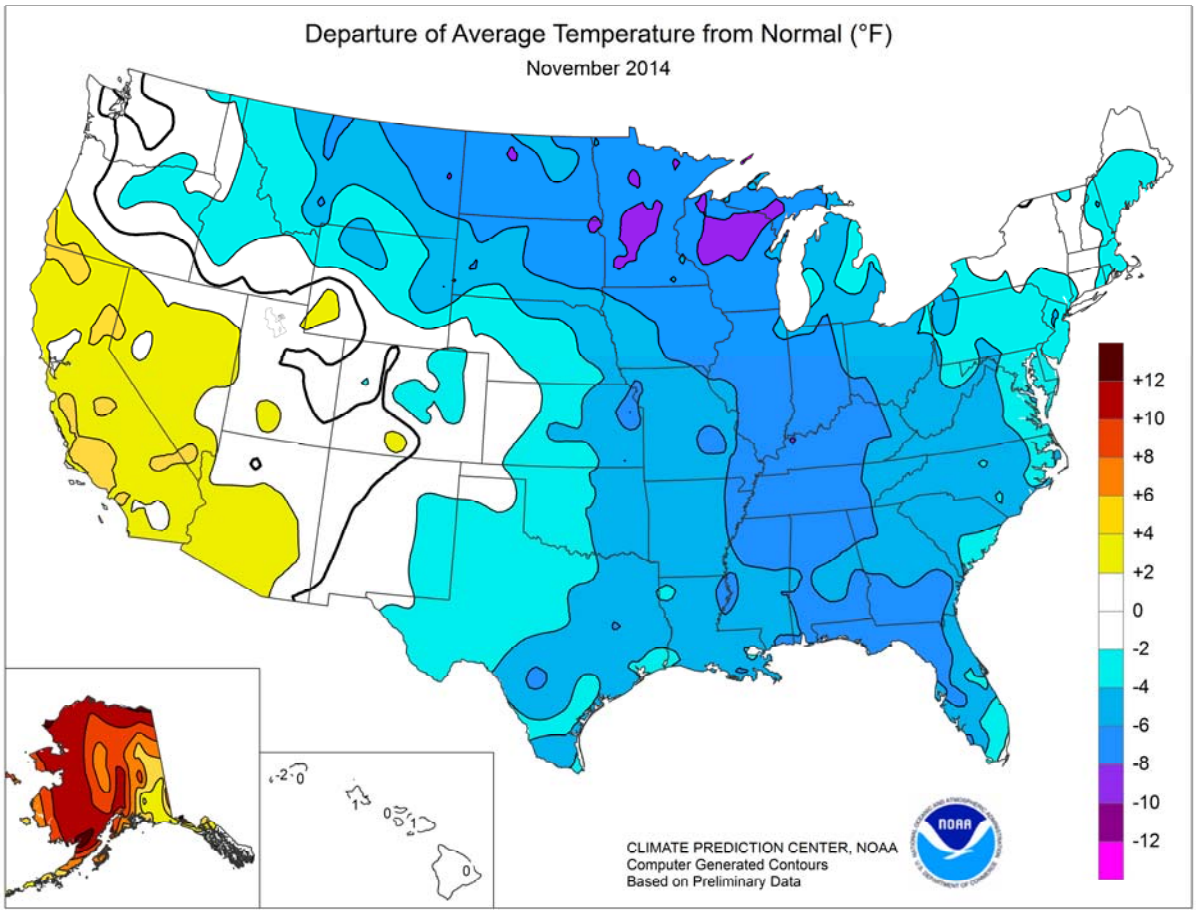

Total Precipitation (Inches)
November 2014
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Percent of Normal Precipitation
November 2014
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Maximum Temperature (°F)
November 2014
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
88
85
88
86
91
85
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
November 2014
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
64
63
66
60
63
62
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
November 2014
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
76
76
78
75
77
74
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
November 2014
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-2
0
1
0
1
0
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

November 2014

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
AL BIRMINGHAM	49	-4	4.46	-0.17
HUNTSVILLE	47	-4	2.67	-2.55
MOBILE	53	-6	1.48	-3.93
MONTGOMERY	51	-5	1.21	-3.32
AK ANCHORAGE	31	9	0.39	-0.70
BARROW	10	11	0.49	0.33
COLD BAY	38	3	4.92	0.13
FAIRBANKS	11	9	0.18	-0.50
JUNEAU	35	2	4.44	-0.99
KING SALMON	37	14	2.43	0.89
KODIAK	40	6	13.00	6.37
NOME	26	9	1.44	0.16
AZ FLAGSTAFF	40	3	0.60	-1.26
PHOENIX	66	4	0.00	-0.73
TUCSON	62	3	0.00	-0.67
AR FORT SMITH	47	-4	1.58	-3.22
LITTLE ROCK	48	-4	2.19	-3.54
CA BAKERSFIELD	60	5	0.01	-0.58
EUREKA	53	2	3.89	-1.89
FRESNO	58	5	0.40	-0.70
LOS ANGELES	65	3	0.42	-0.71
REDDING	54	3	3.71	-0.32
SACRAMENTO	56	3	1.25	-0.94
SAN DIEGO	66	4	0.37	-0.70
SAN FRANCISCO	60	5	1.99	-0.50
STOCKTON	56	3	1.30	-0.47
CO ALAMOSA	32	4	0.34	-0.14
CO SPRINGS	36	0	0.26	-0.26
DENVER	37	0	0.76	0.16
GRAND JUNCTION	36	-2	0.39	-0.32
PUEBLO	37	-1	0.46	-0.12
CT BRIDGEPORT	43	-2	4.23	0.58
HARTFORD	41	-1	3.77	-0.29
DC WASHINGTON	48	-1	2.64	-0.39
DE WILMINGTON	44	-2	4.19	1.00
FL DAYTONA BEACH	63	-4	9.09	6.06
FT LAUDERDALE	73	-1	2.92	-1.65
FT MYERS	68	-4	4.46	2.75
JACKSONVILLE	57	-5	3.96	1.62
KEY WEST	73	-3	0.84	-1.80
MELBOURNE	67	-2	3.08	-0.04
MIAMI	73	-1	2.66	-0.77
ORLANDO	65	-4	4.83	2.51
PENSACOLA	55	-6	1.20	-3.26
ST PETERSBURG	65	-5	3.82	1.78
TALLAHASSEE	54	-6	6.92	3.06
TAMPA	64	-5	5.26	3.64
WEST PALM BEACH	71	-2	1.94	-3.61
GA ATHENS	48	-5	3.04	-0.67
ATLANTA	49	-4	3.85	-0.25
AUGUSTA	49	-5	3.19	0.51
COLUMBUS	51	-6	2.96	-1.01
MACON	49	-6	4.31	1.09
SAVANNAH	56	-3	4.64	2.24
HI HILO	74	0	9.03	-6.55
HONOLULU	78	0	1.43	-0.83
KAHULUI	77	1	1.00	-1.17
LIHUE	76	0	2.20	-2.50
ID BOISE	36	-4	2.17	0.79
LEWISTON	40	0	1.36	0.15
POCATELLO	34	-1	1.58	0.45
IL CHICAGO/O'HARE	34	-5	1.41	-1.60
MOLINE	32	-7	1.57	-1.16
PEORIA	36	-4	1.07	-1.92
ROCKFORD	32	-5	1.63	-1.00
SPRINGFIELD	36	-6	1.86	-1.01
IN EVANSVILLE	40	-6	2.85	-1.33
FORT WAYNE	35	-6	3.05	0.07
INDIANAPOLIS	36	-7	2.80	-0.81
SOUTH BEND	35	-5	3.37	-0.02
IA BURLINGTON	34	-7	1.39	-1.33
CEDAR RAPIDS	30	-7	1.29	-0.95
DES MOINES	34	-4	0.58	-1.52
DUBUQUE	29	-7	1.17	-1.32
SIOUX CITY	31	-4	0.41	-0.99
WATERLOO	29	-6	0.65	-1.45
KS CONCORDIA	37	-4	0.11	-1.34
DODGE CITY	40	-2	0.15	-0.86
GOODLAND	37	0	0.02	-0.80
HILL CITY	39	-1	0.02	-0.72
TOPEKA	39	-4	0.44	-1.87
WICHITA	41	-3	0.45	-1.37
KY JACKSON	42	-6	2.97	-1.23
LEXINGTON	39	-7	2.35	-1.09
LONDON-CORBIN	41	-6	2.91	-0.99
LOUISVILLE	42	-6	1.71	-2.09
PADUCAH	41	-6	2.59	-1.94
LA BATON ROUGE	55	-4	3.50	-1.26
LAKE CHARLES	56	-4	7.05	2.44
NEW ORLEANS	58	-3	2.14	-2.95
SHREVEPORT	53	-3	4.42	-0.26
ME BANGOR	33	-4	3.21	-0.48
CARIBOU	30	-1	3.37	0.25
PORTLAND	39	1	3.96	-0.76
MD BALTIMORE	43	-3	3.36	0.24
MA BOSTON	42	-3	5.27	1.29
WORCESTER	38	-2	4.56	0.22
MI ALPENA	31	-4	3.49	1.41
DETROIT	36	-5	1.67	-0.99
FLINT	35	-3	1.69	-0.96
GRAND RAPIDS	34	-4	4.11	0.76
HOUGHTON LAKE	30	-5	3.05	0.91
LANSING	34	-4	2.61	-0.05
MUSKEGON	36	-3	4.17	0.94
TRAVERSE CITY	33	-4	5.51	2.84
MN DULUTH	22	-6	0.98	-1.14
INT'L FALLS	19	-5	0.57	-0.79
MINNEAPOLIS	26	-7	0.88	-1.06
ROCHESTER	25	-6	0.91	-1.10
ST. CLOUD	23	-6	1.89	0.35
MS JACKSON	50	-5	3.88	-1.16
MERIDIAN	50	-6	3.18	-1.77
TUPELO	47	-4	4.50	-0.51
MO COLUMBIA	38	-5	1.32	-2.15
JOPLIN	42	-5	1.95	-2.11
KANSAS CITY	38	-5	0.68	-1.62
SPRINGFIELD	41	-5	2.30	-2.16
ST JOSEPH	35	-7	0.24	-1.92
ST LOUIS	41	-4	2.46	-1.25
MT BILLINGS	31	-3	0.74	-0.01
BUTTE	25	-2	1.00	0.40
GLASGOW	21	-7	0.74	0.35
GREAT FALLS	26	-6	1.38	0.79
HELENA	29	-2	1.07	0.59
KALISPELL	28	-3	2.54	1.09
MILES CITY	25	-7	0.40	-0.12
MISSOULA	29	-3	2.89	1.93
NE GRAND ISLAND	34	-2	0.29	-1.12
HASTINGS	34	-3	0.23	-1.23
LINCOLN	35	-3	0.47	-1.11
MCCOOK	36	-2	0.01	-1.08
NORFOLK	32	-3	0.32	-1.12
NORTH PLATTE	32	-3	0.08	-0.68
OMAHA/EPPLEY	34	-4	0.22	-1.60
SCOTTSBLUFF	33	-1	0.91	0.11
VALENTINE	30	-3	0.55	-0.17
NV ELKO	37	2	1.15	0.10
ELY	37	4	0.44	-0.19
LAS VEGAS	60	5	0.00	-0.31
RENO	46	5	0.31	-0.49
WINNEMUCCA	39	2	1.32	0.52
NH CONCORD	36	-2	3.13	-0.44
NJ ATLANTIC CITY	44	-2	5.37	2.11
NEWARK	44	-2	4.13	0.25
NM ALBUQUERQUE	46	2	0.25	-0.37
NY ALBANY	38	-1	2.44	-0.84
BINGHAMTON	36	-2	2.09	-1.23
BUFFALO	38	-2	2.58	-1.34
ROCHESTER	39	-1	2.41	-0.43
SYRACUSE	40	0	2.30	-1.47
NC ASHEVILLE	42	-4	3.83	0.01
CHARLOTTE	47	-5	3.79	0.43
GREENSBORO	45	-4	3.33	0.37
HATTERAS	53	-5	4.27	-0.66
RALEIGH	47	-4	3.78	0.81
WILMINGTON	52	-4	4.67	1.41
ND BISMARCK	22	-6	0.60	-0.10
DICKINSON	22	-7	0.29	-0.30
FARGO	23	-4	0.71	-0.35
GRAND FORKS	21	-5	0.31	-0.68
JAMESTOWN	21	-6	0.30	-0.41
MINOT	20	-7	0.48	-0.38
WILLISTON	21	-5	0.63	-0.02
OH AKRON-CANTON	37	-4	2.57	-0.47
CINCINNATI	38	-7	1.77	-1.69
CLEVELAND	37	-5	3.68	0.30
COLUMBUS	38	-6	1.46	-1.73
DAYTON	37	-5	2.04	-1.26
MANSFIELD	36	-4	2.14	-1.62
TOLEDO	35	-5	1.83	-0.95
YOUNGSTOWN	37	-4	2.40	-0.67
OK OKLAHOMA CITY	47	-2	2.38	0.27
TULSA	45	-5	2.09	-1.38
OR ASTORIA	47	0	6.44	-4.06
BURNS	33	0	1.05	-0.06
EUGENE	45	0	5.28	-3.16
MEDFORD	48	4	1.95	-0.98
PENDLETON	37	-4	1.30	-0.33
PORTLAND	46	0	2.99	-2.62
SALEM	46	1	4.87	-1.52
PA ALLENTOWN	39	-3	3.12	-0.58
ERIE	39	-4	3.45	-0.51
MIDDLETOWN	40	-4	2.75	-0.77
PHILADELPHIA	45	-2	4.07	0.91
PITTSBURGH	39	-3	1.97	-1.05
WILKES-BARRE	39	-3	1.80	-1.32
WILLIAMSPORT	38	-3	2.16	-1.46
PR SAN JUAN	81	1	10.98	4.81
RI PROVIDENCE	42	-2	5.45	1.05
SC CHARLESTON	55	-3	4.66	2.00
COLUMBIA	50	-5	4.37	1.49
FLORENCE	51	-4	3.56	0.97
GREENVILLE	48	-3	4.36	0.57
MYRTLE BEACH	53	-4	4.30	1.33
SD ABERDEEN	22	-7	0.64	-0.11
HURON	24	-7	0.74	-0.15
RAPID CITY	27	-6	0.81	0.20
SIOUX FALLS	26	-5	0.58	-0.78
TN BRISTOL	41	-5	2.44	-0.64
CHATTANOOGA	46	-4	3.45	-1.43
JACKSON	44	-6	2.18	-2.89
KNOXVILLE	43	-6	2.09	-1.89
MEMPHIS	47	-5	2.56	-3.20
NASHVILLE	44	-5	3.34	-1.11
TX ABILENE	52	-2	2.44	1.14
AMARILLO	44	-1	0.34	-0.34
AUSTIN	54	-6	6.64	3.96
BEAUMONT	58	-3	4.37	-0.38
BROWNSVILLE	65	-3	3.46	1.71
COLLEGE STATION	56	-4	5.89	2.71
CORPUS CHRISTI	61	-4	2.84	1.10
DALLAS/FT WORTH	51	-4	2.13	-0.44
DEL RIO	56	-4	3.26	2.30
EL PASO	53	0	0.11	-0.31
GALVESTON	62	-3	3.91	0.27
HOUSTON	57	-4	3.40	-0.79
LUBBOCK	47	-1	2.95	2.24
MIDLAND	51	-1	1.02	0.37
SAN ANGELO	54	0	3.04	1.94
SAN ANTONIO	57	-3	7.21	4.63
VICTORIA	60	-3	4.53	1.89
WACO	53	-4	2.68	0.07
WICHITA FALLS	49	-3	4.23	2.55
UT SALT LAKE CITY	41	1	0.60	-0.80
VT BURLINGTON	38	1	1.98	-1.08
VA LYNCHBURG	42	-5	2.43	-0.75
NORFOLK	49	-3	3.44	0.46
RICHMOND	47	-2	2.95	-0.11
ROANOKE	43	-4	3.52	0.31
WASH/DULLES	42	-3	2.66	-0.65
WA OLYMPIA	43	1	6.12	-2.01
QUILLAYUTE	46	2	13.18	-1.64
SEATTLE-TACOMA	46	1	4.84	-1.06
SPOKANE	35	0	1.34	-0.90
YAKIMA	38	1	0.32	-0.73
WV BECKLEY	38	-5	2.20	-0.68
CHARLESTON	41	-5	2.24	-1.42
ELKINS	37	-4	2.38	-1.04
HUNTINGTON	41	-5	2.31	-1.01
WI EAU CLAIRE	25	-7	1.74	-0.18
GREEN BAY	28	-6	2.52	0.25
LA CROSSE	30	-5	0.96	-1.14
MADISON	30	-5	1.54	-0.77
MILWAUKEE	33	-5	1.84	-0.86
WAUSAU	24	-8	2.30	0.10
WY CASPER	28	-4	0.81	-0.01
CHEYENNE	33	0	1.19	0.55
LANDER	30	0	0.58	-0.41
SHERIDAN	29	-2	1.49	0.69

Based on 1971-2000 normals

***** Not Available**

Autumn Weather Review

Weather summary provided by USDA/WAOB

Highlights: Western warmth contrasted with chilly autumn conditions in much of the central and eastern U.S. Although overall temperatures were slightly above the long-term mean on the strength of Western and Northeastern warmth, it was among the ten coolest autumns in Illinois and Indiana. Meanwhile, California experienced it warmest September-November period during the 120-year period of record.

Most of the nation experienced near- to above-average autumn precipitation, although somewhat dry conditions existed across the interior Northeast and upper Midwest. In the latter region, dry fall weather aided in the maturation and harvesting of late-developing corn and soybeans. Other precipitation highlights included the contribution of four former eastern Pacific hurricanes—Norbert, Odile, Simon, and Vance—to autumn rainfall in parts of the southern U.S., as well as the onset of seasonal storminess in the West. In general, precipitation was heavier across the Rockies and the Northwest than in California and the Great Basin, resulting in very little relief in the West's core drought areas.

September: In the Corn Belt, a cold snap led to widespread frost across the upper Midwest from September 11-13, but largely spared late-developing corn and soybeans. Following the cool spell, an extended period of late-season Midwestern warmth promoted summer crop maturation. Most of the upper Midwest experienced beneficial dryness, but heavy rain in the southern Corn Belt slowed early-season harvest efforts. Regardless of the weather extremes, Midwestern crop conditions remained near historic highs, with nearly three-quarters of the corn (74%) and soybeans (73%) rated in good to excellent condition by October 5. Those numbers represented the highest U.S. corn and soybean ratings in October since 2004 and 1994, respectively.

Meanwhile, a band of September dryness stretched from the southeastern Plains and Mid-South into the Northeast. The mostly dry weather favored summer crop maturation and harvesting, but increased stress on pastures and reduced topsoil moisture for the establishment of newly planted winter grains. Across the Deep South, however, heavy rain hampered fieldwork in several areas, including southern Texas and the southern Atlantic coastal plain.

Heavy September rain also soaked portions of the southern High Plains and the Southwest, in part due to moisture associated with the remnants of eastern Pacific Hurricanes Norbert and Odile. Substantial precipitation fell in other parts of the West, including the Great Basin and Intermountain region, providing some drought relief. However, warm, mostly dry weather persisted in central and southern California and portions of the interior Northwest. By October 5, at least one-third of the rangeland and pastures were rated in very poor to poor condition in California (70%), Oregon (48%), Nevada (40%), and Washington (34%).

October: Warmer-than-normal October weather domin-ated areas from the Pacific Coast to the Plains, while near- to below-normal temperatures covered much of the Corn Belt. Warmth across the Plains and Northwest was beneficial for winter wheat establishment, although dryness on the southern Plains led to an increase in stress on the emerging crop.

In general, drier-than-normal weather stretched from central and southern California into the upper Midwest, and also covered portions of the south-central U.S. and the southern Atlantic coastal plain. In contrast, wetter-than-normal weather prevailed in the Pacific Northwest, as well as the Ohio Valley, interior Southeast, and Corn Belt—excluding the upper Midwest. The remnants of Vance became the season's third eastern Pacific Hurricane to contribute to heavy rain in the U.S., as early-month downpours soaked portions of the Southern States.

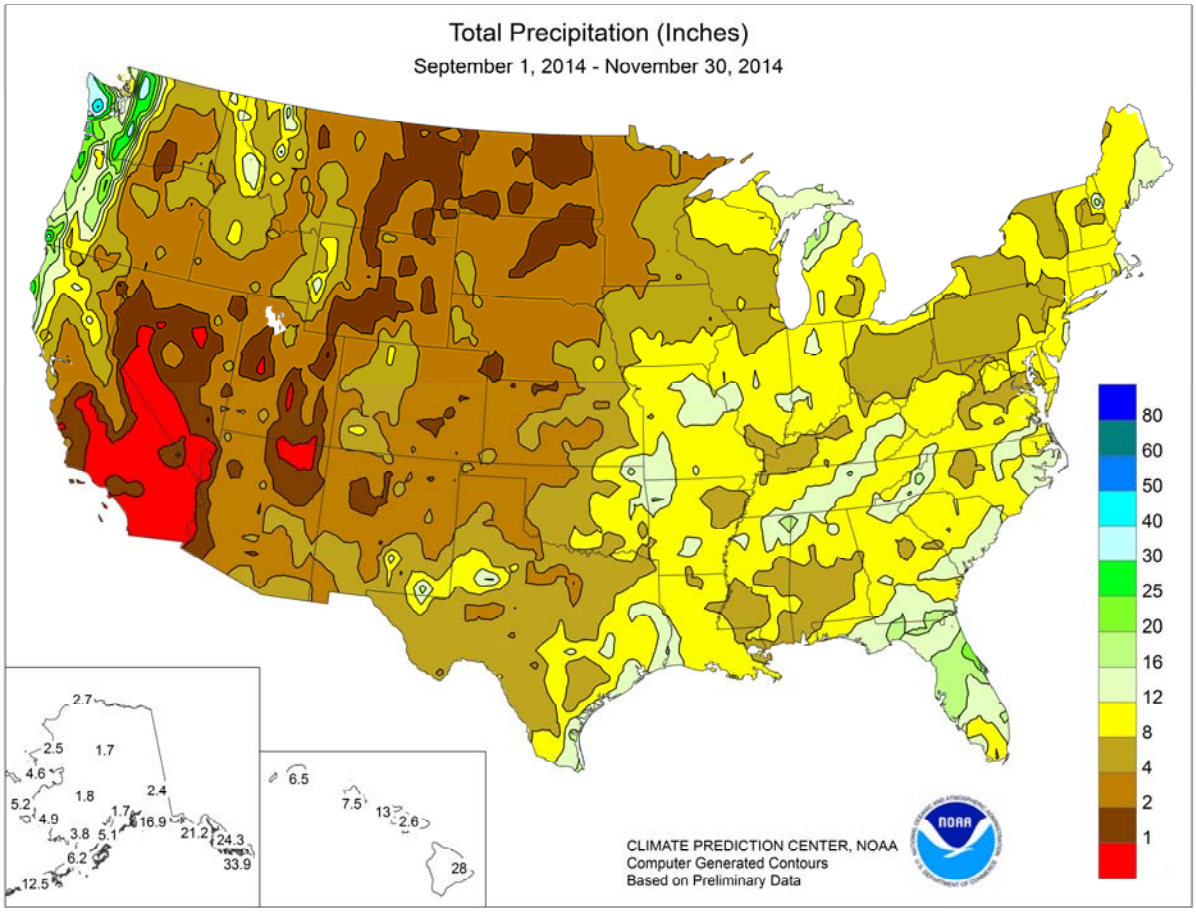
Dry weather in the upper Midwest allowed the soybean harvest to near completion. However, significant delays in soybean harvesting and winter wheat planting were noted across much of the southern and eastern Corn Belt. In addition, the Midwestern corn harvest was hampered by a variety of factors, depending on location, including heavy rain and crop developmental delays.

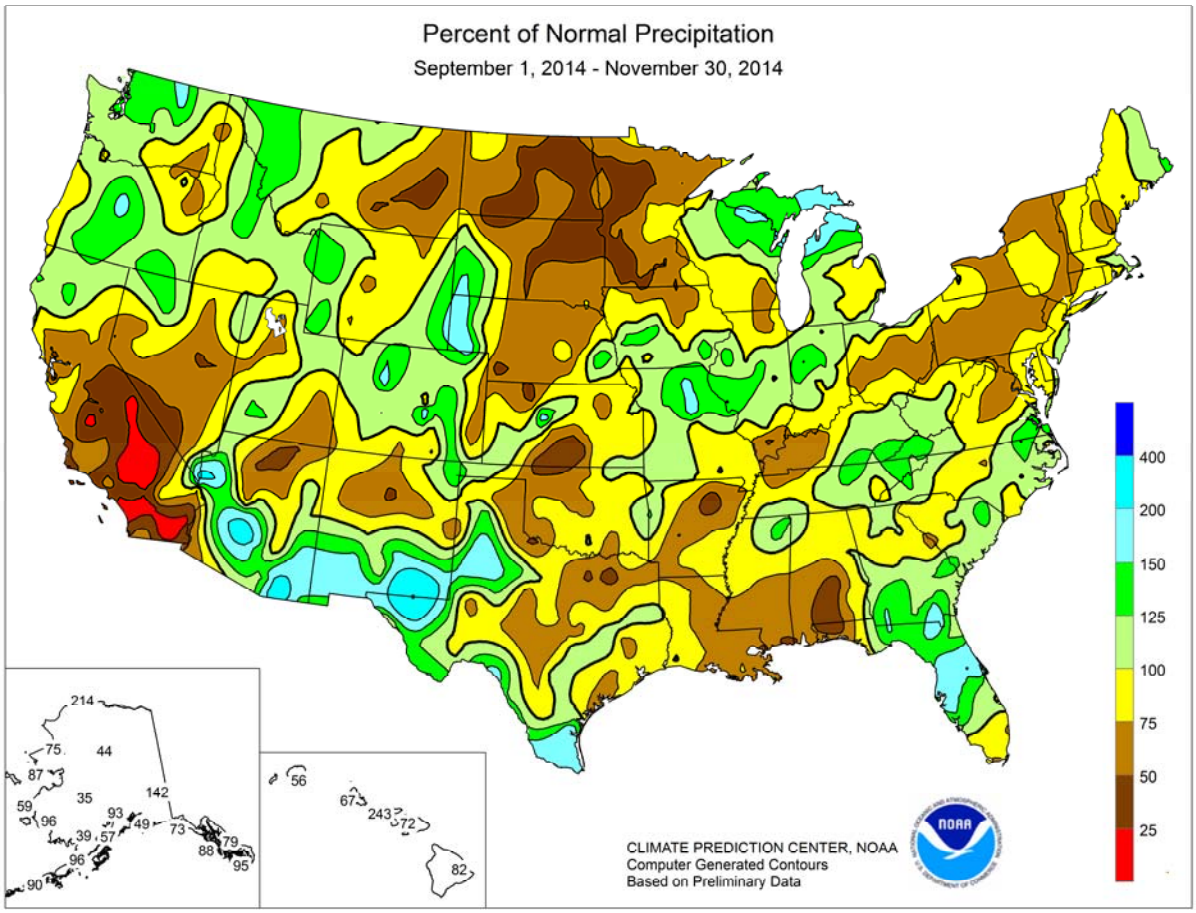
Farther south, fieldwork was also limited by wet soils across the interior Southeast, with October-record rainfall totals reported in some locations. Closer to the Gulf and Atlantic Coasts, somewhat drier conditions allowed winter wheat planting and summer crop harvesting to proceed with only periodic disruptions.

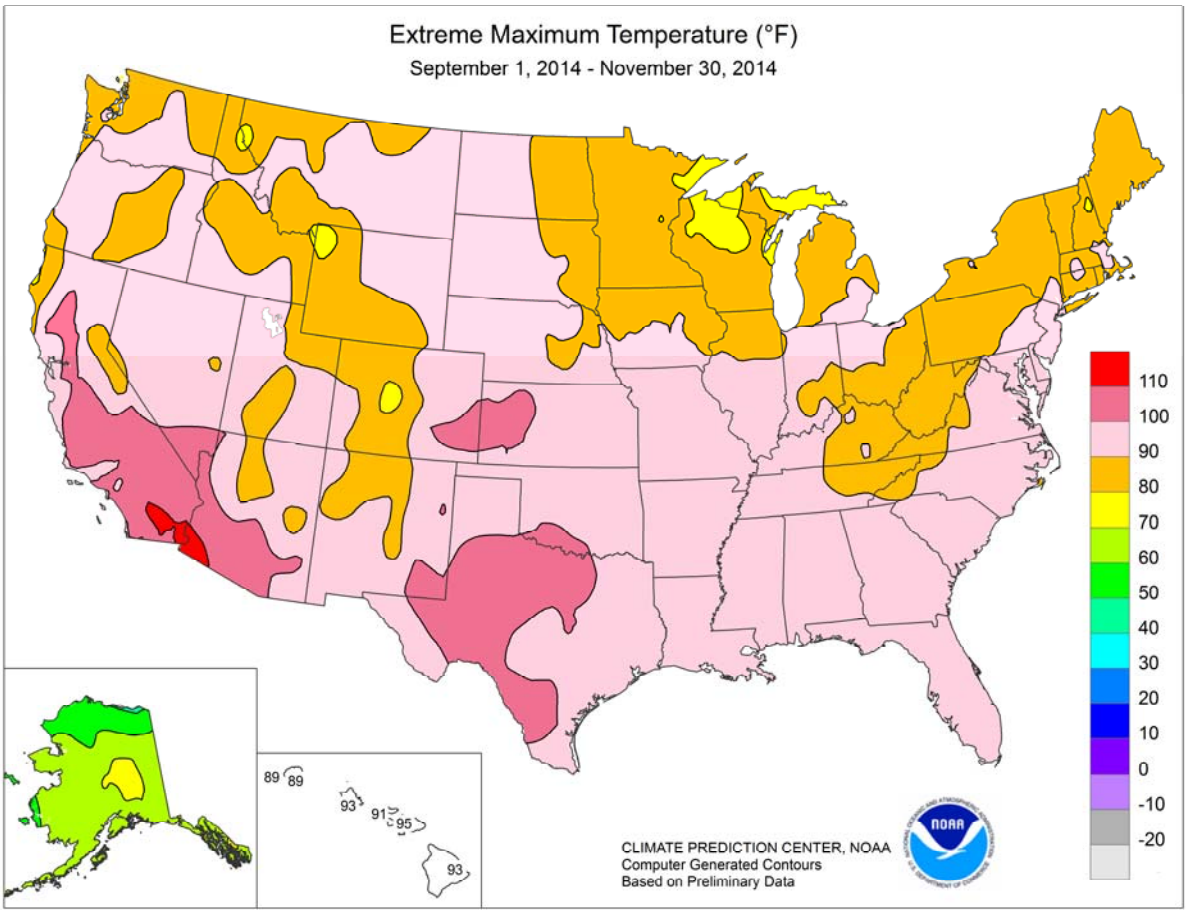
Meanwhile, winter wheat planting and emergence advanced, roughly on schedule, across the Plains. However, developing dryness on the southern Plains, superimposed on long-term precipitation deficits, led to an increase in stress on rangeland, pastures, and emerging winter grains. On October 26, more than one-tenth of the winter wheat was rated in very poor to poor condition in Texas (17% very poor to poor) and Oklahoma (13%).

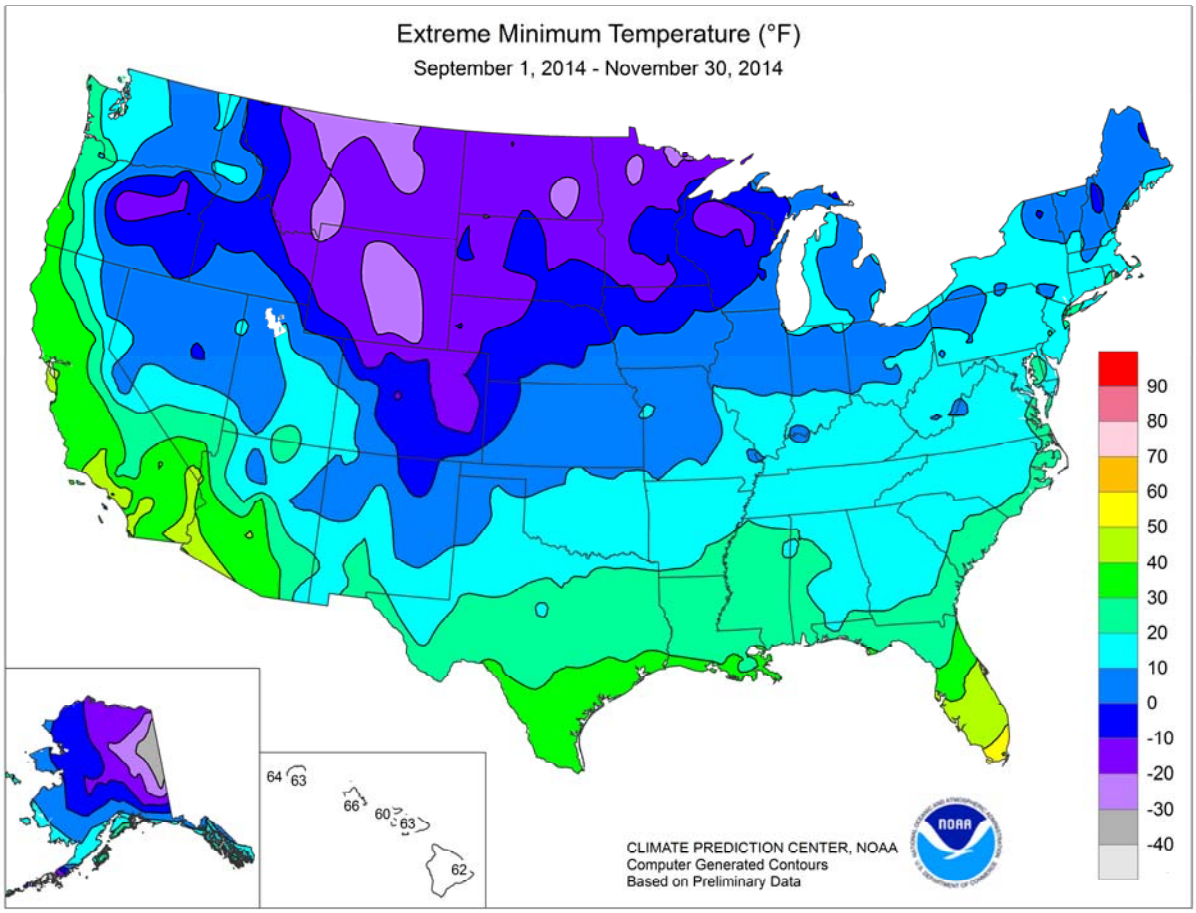
Elsewhere, beneficial showers in the Northwest contrasted with ongoing drought in California and the Great Basin. A few October showers grazed northern California but provided little overall relief from the historic, 3-year drought. By October 26, California led the nation with 75% of its rangeland and pastures rated in very poor to poor condition.

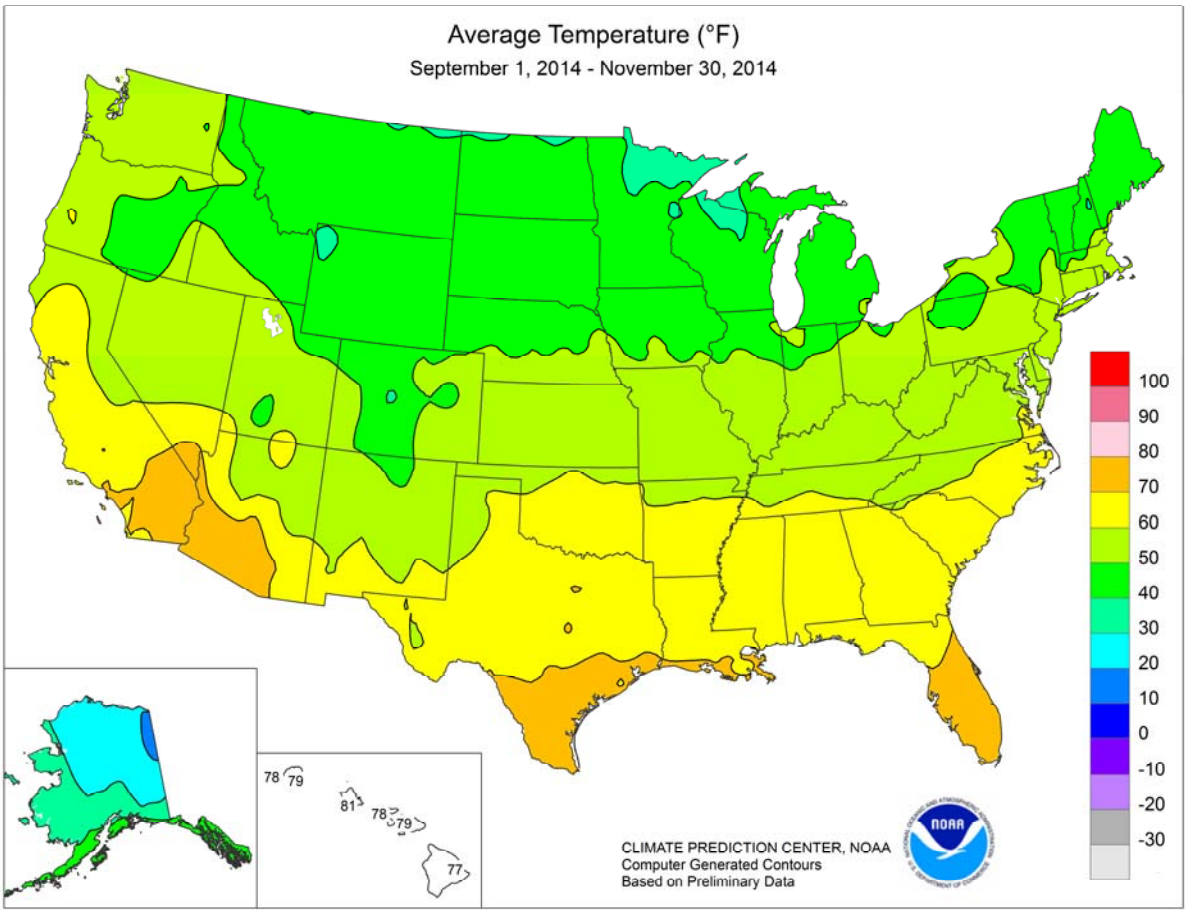
November: *A complete summary begins on page 9.*

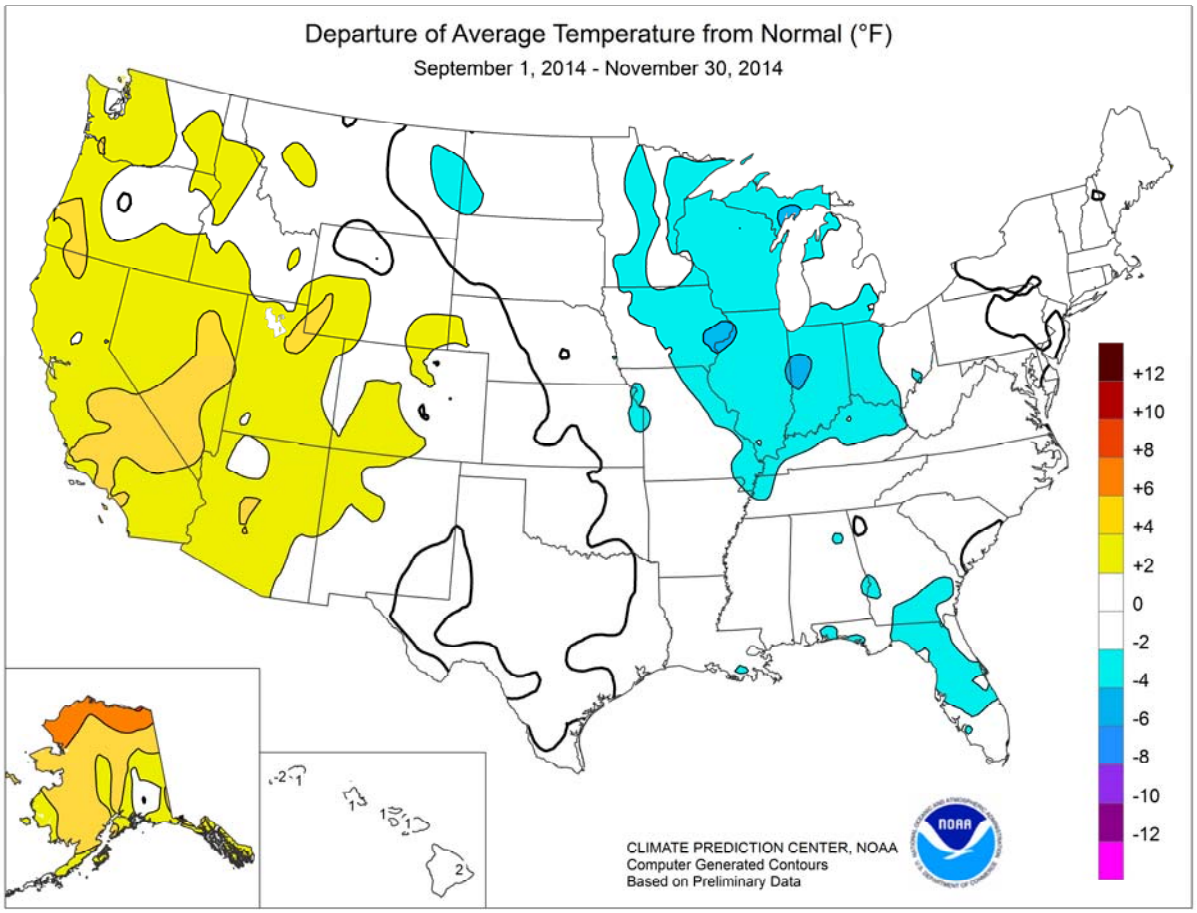

Total Precipitation (Inches)
September 1, 2014 - November 30, 2014
80
60
50
40
30
25
20
16
12
8
4
2
1
2.7
2.5
1.7
4.6
1.8
2.4
5.2
4.9
1.7
16.9
3.8
5.1
21.2
24.3
6.2
33.9
12.5
6.5
7.5
13
2.6
28
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
September 1, 2014 - November 30, 2014
400
200
150
125
100
75
50
25
214
75
44
87
35
142
59
96
93
49
73
39
57
88
79
96
95
90
56
67
243
72
82
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
September 1, 2014 - November 30, 2014
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
89
89
93
91
95
93
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
September 1, 2014 - November 30, 2014
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
64
63
66
60
63
62
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
September 1, 2014 - November 30, 2014
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
78
79
81
78
79
77
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
September 1, 2014 - November 30, 2014
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-2
-1
1
1
0
1
2
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

Autumn 2014

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	64	1	9.76	-2.15
HUNTSVILLE	63	1	9.59	-3.46
MOBILE	66	-2	10.04	-4.63
MONTGOMERY	66	0	3.96	-7.37
AK ANCHORAGE	39	4	5.60	-0.44
BARROW	22	7	2.66	1.42
COLD BAY	42	1	12.47	-1.37
FAIRBANKS	28	5	3.51	0.79
JUNEAU	44	2	21.21	-0.06
KING SALMON	40	5	6.18	-0.26
KODIAK	44	3	26.42	3.59
NOME	34	5	4.65	-0.72
AZ FLAGSTAFF	50	3	4.39	-1.52
PHOENIX	78	4	5.24	2.97
TUCSON	73	3	4.09	0.76
AR FORT SMITH	62	0	16.38	4.03
LITTLE ROCK	63	0	7.84	-5.85
CA BAKERSFIELD	71	5	0.67	-0.37
EUREKA	56	2	11.71	2.71
FRESNO	70	6	1.08	-0.93
LOS ANGELES	69	3	0.68	-1.07
REDDING	66	3	9.09	2.40
SACRAMENTO	66	3	2.23	-1.21
SAN DIEGO	71	4	0.37	-1.35
SAN FRANCISCO	65	5	2.72	-1.01
STOCKTON	66	2	2.33	-0.59
CO ALAMOSA	46	4	1.45	-0.59
CO SPRINGS	51	3	3.83	1.22
DENVER	52	3	3.07	0.56
GRAND JUNCTION	53	1	2.81	0.19
PUEBLO	53	1	1.99	-0.07
CT BRIDGEPORT	56	1	9.30	-1.47
HARTFORD	54	2	9.31	-2.82
DC WASHINGTON	61	2	7.24	-2.80
DE WILMINGTON	57	1	9.82	-0.46
FL DAYTONA BEACH	72	-2	27.82	13.70
FT LAUDERDALE	79	1	15.23	-4.04
FT MYERS	75	-2	13.02	0.86
JACKSONVILLE	68	-2	15.63	1.53
KEY WEST	79	-1	12.23	-0.20
MELBOURNE	74	-1	17.43	2.35
MIAMI	78	-1	13.15	-4.85
ORLANDO	73	-2	15.97	5.16
PENSACOLA	67	-3	10.92	-3.42
ST PETERSBURG	74	-2	19.28	7.01
TALLAHASSEE	68	-1	18.61	6.49
TAMPA	74	-2	16.35	5.90
WEST PALM BEACH	77	-1	16.39	-2.72
GA ATHENS	62	0	11.27	0.56
ATLANTA	64	1	8.14	-3.16
AUGUSTA	63	-1	6.07	-3.40
COLUMBUS	65	-1	11.33	1.96
MACON	63	-1	8.67	-0.18
SAVANNAH	68	1	11.48	0.88
HI HILO	77	2	28.03	-6.33
HONOLULU	81	1	7.52	2.34
KAHULUI	79	1	2.61	-1.00
LIHUE	79	1	6.52	-5.12
ID BOISE	54	2	3.49	0.59
LEWISTON	55	3	2.60	-0.37
POCATELLO	49	2	3.10	0.11
IL CHICAGO/O'HARE	50	-2	6.60	-2.39
MOLINE	49	-3	10.00	1.31
PEORIA	53	0	8.46	-0.41
ROCKFORD	49	-1	6.32	-2.35
SPRINGFIELD	53	-2	11.16	2.84
IN EVANSVILLE	56	-1	9.59	-0.36
FORT WAYNE	49	-3	10.73	2.31
INDIANAPOLIS	52	-3	8.50	-0.75
SOUTH BEND	50	-2	11.76	1.31
IA BURLINGTON	51	-3	10.66	1.43
CEDAR RAPIDS	47	-4	7.41	-0.31
DES MOINES	51	-1	8.59	0.72
DUBUQUE	46	-3	6.36	-2.19
SIOUX CITY	49	-1	4.33	-1.48
WATERLOO	46	-3	5.96	-1.58
KS CONCORDIA	54	-1	5.80	0.01
DODGE CITY	56	0	3.95	-0.21
GOODLAND	53	2	2.50	-0.49
HILL CITY	55	1	1.63	-2.62
TOPEKA	56	0	9.04	0.03
WICHITA	59	1	2.33	-4.90
KY JACKSON	55	-3	13.08	1.93
LEXINGTON	56	-1	11.16	1.91
LONDON-CORBIN	56	-1	12.65	2.58
LOUISVILLE	57	-2	8.53	-1.11
PADUCAH	57	-1	7.18	-4.36
LA BATON ROUGE	68	0	8.90	-4.51
LAKE CHARLES	69	0	14.52	0.02
NEW ORLEANS	71	1	7.82	-5.87
SHREVEPORT	67	0	11.47	-0.87
ME BANGOR	48	0	10.95	0.39
CARIBOU	44	2	11.75	2.37
PORTLAND	51	3	11.40	-1.09
MD BALTIMORE	56	0	10.73	0.47
MA BOSTON	55	0	11.80	0.56
WORCESTER	50	0	13.65	0.37
MI ALPENA	45	-1	11.21	4.00
DETROIT	50	-2	8.73	0.57
FLINT	49	0	6.79	-1.96
GRAND RAPIDS	49	-1	12.19	1.76
HOUGHTON LAKE	45	-1	9.48	1.97
LANSING	48	-1	8.70	0.27
MUSKEGON	49	-1	10.27	0.72
TRAVERSE CITY	47	-2	17.14	7.95
MN DULUTH	41	-1	4.42	-4.29
INT'L FALLS	38	-2	4.83	-1.54
MINNEAPOLIS	46	-1	3.56	-3.18
ROCHESTER	44	-2	6.81	-0.52
ST. CLOUD	44	0	6.60	-0.11
MS JACKSON	65	0	8.58	-3.11
MERIDIAN	64	-2	7.16	-4.71
TUPELO	62	0	16.07	4.33
MO COLUMBIA	55	0	17.65	7.58
JOPLIN	57	-2	14.43	1.21
KANSAS CITY	54	-2	12.17	1.90
SPRINGFIELD	57	-1	14.85	2.09
ST JOSEPH	53	-3	8.40	-0.95
ST LOUIS	57	-1	11.73	2.30
MT BILLINGS	49	2	1.47	-1.88
BUTTE	41	1	2.80	0.32
GLASGOW	43	0	1.95	-0.13
GREAT FALLS	45	1	2.57	-0.18
HELENA	47	3	2.57	0.38
KALISPELL	44	2	4.87	1.26
MILES CITY	46	-1	1.12	-1.72
MISSOULA	46	2	4.33	1.46
NE GRAND ISLAND	51	0	4.60	-0.75
HASTINGS	51	-1	3.77	-2.10
LINCOLN	52	-1	9.82	3.38
MCCOOK	52	0	1.96	-1.78
NORFOLK	49	-1	3.29	-2.12
NORTH PLATTE	49	0	2.20	-1.12
OMAHA/EPPLEY	52	0	8.81	1.61
SCOTTSBLUFF	50	3	5.75	2.72
VALENTINE	48	0	1.85	-1.70
NV ELKO	51	4	1.53	-0.91
ELY	50	5	1.27	-1.30
LAS VEGAS	73	5	0.64	-0.22
RENO	58	6	0.78	-0.89
WINNEMUCCA	51	2	2.81	0.82
NH CONCORD	49	1	8.01	-2.18
NJ ATLANTIC CITY	56	0	12.11	2.85
NEWARK	58	1	9.80	-1.26
NM ALBUQUERQUE	60	3	1.61	-1.08
NY ALBANY	52	2	7.54	-2.26
BINGHAMTON	49	1	7.29	-2.64
BUFFALO	51	0	10.32	-0.63
ROCHESTER	52	2	5.63	-3.26
SYRACUSE	53	3	8.44	-2.68
NC ASHEVILLE	56	0	13.73	3.02
CHARLOTTE	61	-1	9.13	-1.72
GREENSBORO	59	0	8.27	-2.25
HATTERAS	64	-2	18.34	2.42
RALEIGH	60	-1	11.87	1.46
WILMINGTON	64	-1	12.26	-1.00
ND BISMARCK	43	-1	1.12	-2.47
DICKINSON	42	-2	2.02	-1.53
FARGO	44	1	3.49	-1.72
GRAND FORKS	42	0	1.97	-2.68
JAMESTOWN	42	-1	2.32	-1.53
MINOT	42	-1	1.61	-2.31
WILLISTON	42	0	2.23	-0.64
OH AKRON-CANTON	52	0	7.59	-1.41
CINCINNATI	54	-2	8.23	-1.01
CLEVELAND	51	-1	10.98	1.10
COLUMBUS	53	-2	4.88	-3.54
DAYTON	52	-2	5.28	-3.39
MANSFIELD	50	-1	5.44	-4.44
TOLEDO	49	-3	9.42	1.45
YOUNGSTOWN	50	-1	7.39	-2.03
OK OKLAHOMA CITY	63	2	6.95	-2.78
TULSA	61	-1	9.10	-3.18
OR ASTORIA	56	3	19.98	1.26
BURNS	46	2	2.46	0.13
EUGENE	57	4	11.22	-2.11
MEDFORD	60	5	6.58	1.56
PENDLETON	53	1	2.12	-1.13
PORTLAND	58	3	9.91	-0.23
SALEM	57	4	11.87	1.02
PA ALLENTOWN	54	2	7.08	-4.32
ERIE	52	-1	10.53	-2.08
MIDDLETOWN	55	0	6.72	-3.24
PHILADELPHIA	58	0	8.29	-1.50
PITTSBURGH	52	-1	4.83	-3.65
WILKES-BARRE	53	1	6.70	-3.30
WILLIAMSPORT	53	1	5.76	-5.03
PR SAN JUAN	83	2	20.55	3.72
RI PROVIDENCE	55	1	9.49	-2.30
SC CHARLESTON	67	0	14.27	2.54
COLUMBIA	64	0	10.23	0.52
FLORENCE	64	-1	13.30	4.10
GREENVILLE	61	0	11.61	-0.02
MYRTLE BEACH	65	0	12.12	0.34
SD ABERDEEN	43	-2	1.90	-2.29
HURON	46	-1	2.12	-2.16
RAPID CITY	46	-1	4.52	1.44
SIOUX FALLS	46	-1	3.53	-2.34
TN BRISTOL	56	0	10.06	1.60
CHATTANOOGA	62	1	12.23	-0.22
JACKSON	59	-2	11.52	-0.63
KNOXVILLE	59	-1	8.16	-1.51
MEMPHIS	63	-1	11.31	-1.07
NASHVILLE	60	0	11.98	1.07
TX ABILENE	67	2	3.99	-3.12
AMARILLO	58	0	5.58	1.52
AUSTIN	68	-2	11.80	2.24
BEAUMONT	71	1	13.31	-2.21
BROWNSVILLE	75	0	17.64	6.80
COLLEGE STATION	69	-1	14.27	2.96
CORPUS CHRISTI	73	0	14.48	3.77
DALLAS/FT WORTH	68	1	4.27	-4.83
DEL RIO	71	1	8.73	3.71
EL PASO	66	2	5.32	2.48
GALVESTON	73	-1	11.77	-1.12
HOUSTON	70	0	10.23	-2.79
LUBBOCK	60	0	10.27	5.29
MIDLAND	65	1	2.71	-2.02
SAN ANGELO	67	2	4.37	-2.25
SAN ANTONIO	72	2	10.89	1.45
VICTORIA	73	1	9.09	-2.81
WACO	68	0	8.97	-0.19
WICHITA FALLS	65	1	7.00	-0.98
UT SALT LAKE CITY	56	4	3.12	-1.18
VT BURLINGTON	51	3	7.78	-2.23
VA LYNCHBURG	55	-2	7.62	-2.83
NORFOLK	62	0	14.18	3.67
RICHMOND	60	1	6.93	-3.71
ROANOKE	57	0	8.31	-1.90
WASH/DULLES	55	-1	6.60	-3.90
WA OLYMPIA	53	3	16.10	1.75
QUILLAYUTE	54	4	35.09	6.31
SEATTLE-TACOMA	56	3	13.82	3.10
SPOKANE	50	3	3.02	-1.04
YAKIMA	52	3	1.64	-0.33
WV BECKLEY	52	-1	9.72	0.97
CHARLESTON	55	-1	11.20	1.42
ELKINS	51	0	10.15	0.05
HUNTINGTON	54	-2	10.86	2.01
WI EAU CLAIRE	44	-2	9.63	1.73
GREEN BAY	45	-2	9.72	2.17
LA CROSSE	48	-2	7.11	-0.55
MADISON	47	-1	6.47	-1.10
MILWAUKEE	48	-3	5.79	-2.70
WAUSAU	43	-3	12.84	3.93
WY CASPER	46	1	2.49	-0.45
CHEYENNE	48	3	3.44	0.62
LANDER	48	3	2.87	-0.63
SHERIDAN	46	2	3.28	-0.31

Based on 1971-2000 normals

***** Not Available**

December 4 ENSO Update

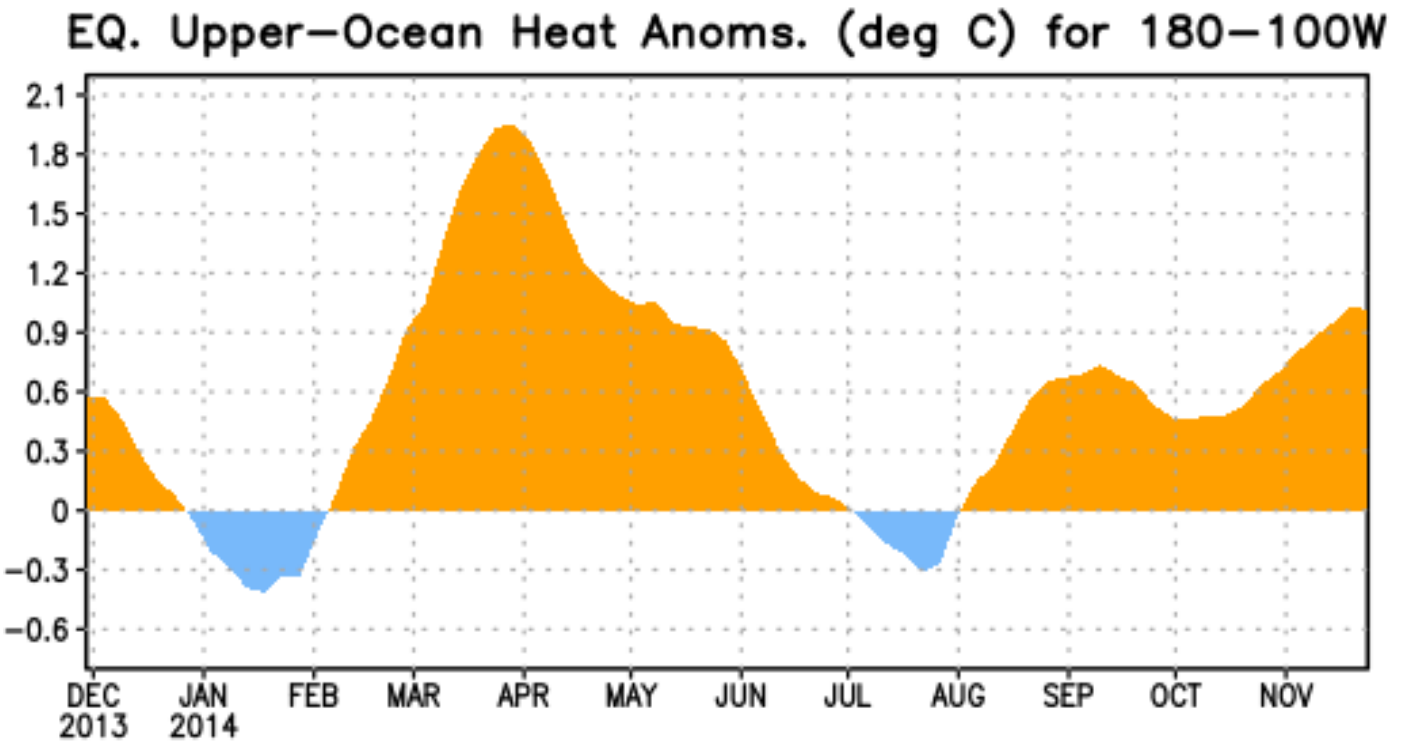


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

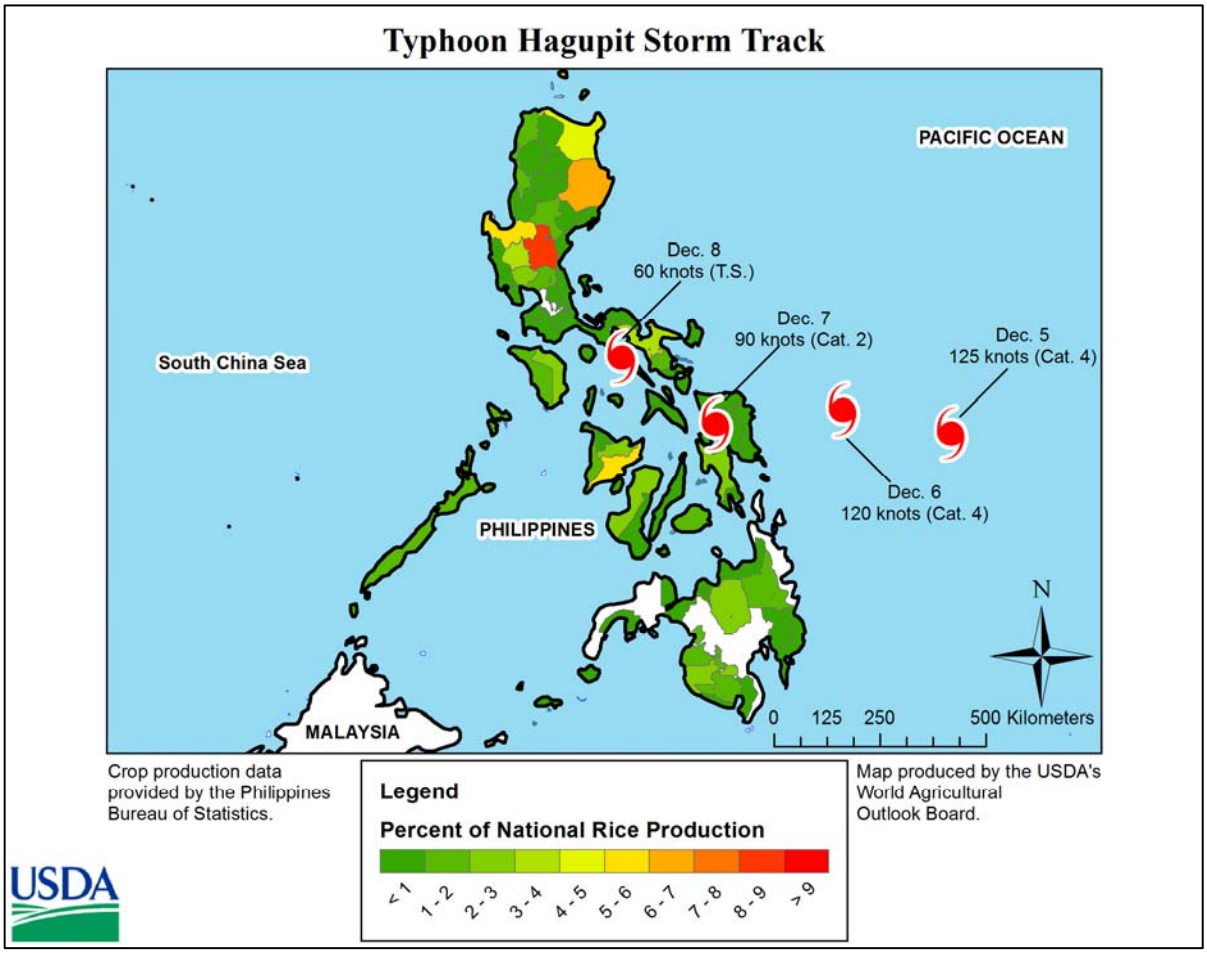
ENSO Alert System Status: El Niño Watch

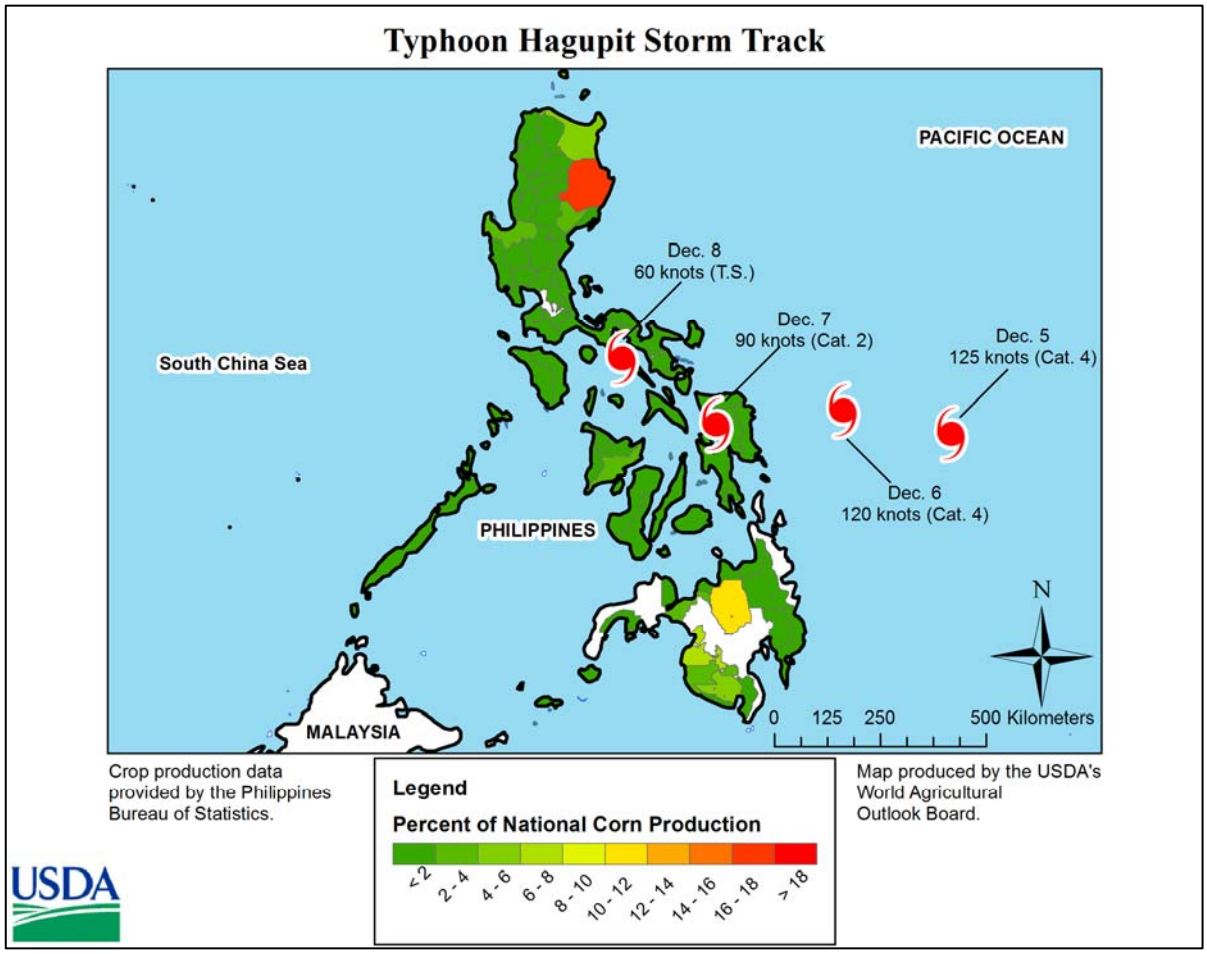
Synopsis: There is an approximately 65% chance that El Niño conditions will be present during the Northern Hemisphere winter and last into the Northern Hemisphere spring 2015.

During November 2014, sea surface temperature (SST) anomalies increased across the central and eastern equatorial Pacific. At the end of the month, the weekly Niño indices ranged from +0.4°C in the Niño-1+2 region to +1.0°C in the Niño-3.4 region. The subsurface heat content anomalies (averaged between 180º-100ºW) also increased during November (Fig. 1) as a downwelling oceanic Kelvin wave increased subsurface temperatures in the central and eastern Pacific. However, the overall atmospheric circulation has yet to show a clear coupling to the anomalously warm waters. The monthly equatorial low-level winds were largely near average, although weak anomalous westerlies appeared in a portion of the eastern tropical Pacific. Upper level easterly anomalies emerged in the central and eastern tropical Pacific during the month. The Southern Oscillation Index has been somewhat negative, but the equatorial Southern Oscillation Index has been near zero. Also, rainfall continued to be below average near the Date Line and over Indonesia, and near average east of the Date Line. Although the SST anomalies alone might imply weak El Niño conditions, the patterns of wind and rainfall anomalies generally do not clearly indicate a coupling of the atmosphere to the ocean. Therefore, despite movement toward El Niño from one month ago, the combined atmospheric and oceanic state remains ENSO-neutral.

Similar to last month, most models predict SST anomalies to be at weak El Niño levels during November-January 2014-15 and to continue above the El Niño threshold into early 2015. Assuming that El Niño fully emerges, the forecaster consensus favors a weak event. In summary, there is an approximately 65% chance of El Niño conditions during the Northern Hemisphere winter, which are expected to last into the Northern Hemisphere spring 2015 (click CPC/IRI consensus forecast for the chance of each outcome).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts are also updated monthly in the Forecast Forum of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an ENSO blog. The next ENSO Diagnostics Discussion is scheduled for 8 January 2015. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.


Typhoon Hagupit Storm Track
PACIFIC OCEAN
South China Sea
PHILIPPINES
MALAYSIA
Dec. 8
60 knots (T.S.)
Dec. 7
90 knots (Cat. 2)
Dec. 5
125 knots (Cat. 4)
Dec. 6
120 knots (Cat. 4)
N
0 125 250 500 Kilometers
Crop production data provided by the Philippines Bureau of Statistics.
Legend
Percent of National Rice Production
<1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 >9
Map produced by the USDA's World Agricultural Outlook Board.
USDA


Typhoon Hagupit Storm Track
PACIFIC OCEAN
South China Sea
PHILIPPINES
MALAYSIA
Dec. 8
60 knots (T.S.)
Dec. 7
90 knots (Cat. 2)
Dec. 5
125 knots (Cat. 4)
Dec. 6
120 knots (Cat. 4)
N
0 125 250 500 Kilometers
Crop production data provided by the Philippines Bureau of Statistics.
Legend
Percent of National Corn Production
<2 2-4 4-6 6-8 8-10 10-12 12-14 14-16 16-18 >18
Map produced by the USDA's World Agricultural Outlook Board.
USDA

International Weather and Crop Summary

November 30 - December 6, 2014

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

HIGHLIGHTS

EUROPE: Wet weather in the south contrasted with dry but cold conditions in northern Europe.

WESTERN FSU: Snow provided dormant winter grains adequate protection from early-season cold.

MIDDLE EAST: Northern rain and mountain snow boosted moisture supplies for winter grains, while drier weather in the south allowed fieldwork to resume.

NORTHWESTERN AFRICA: Locally heavy rain expanded from Morocco into Algeria, while sunny, warm conditions accelerated fieldwork in Tunisia but reduced soil moisture.

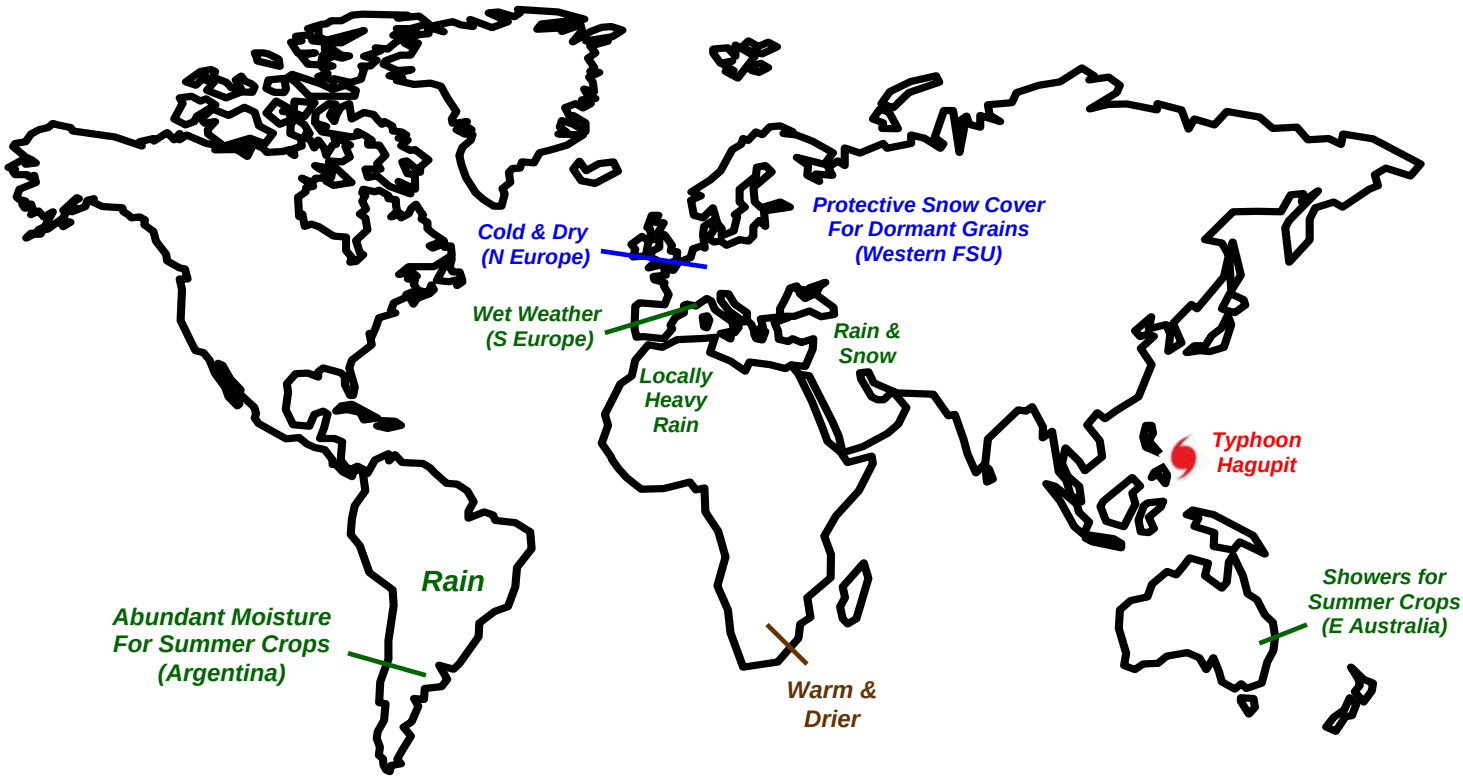
SOUTHEAST ASIA: Super Typhoon Hagupit weakened rapidly as it made landfall in the eastern Philippines, sparing rice and corn significant damage.

AUSTRALIA: Much-needed showers continued to benefit vegetative summer crops but slowed winter crop harvesting.

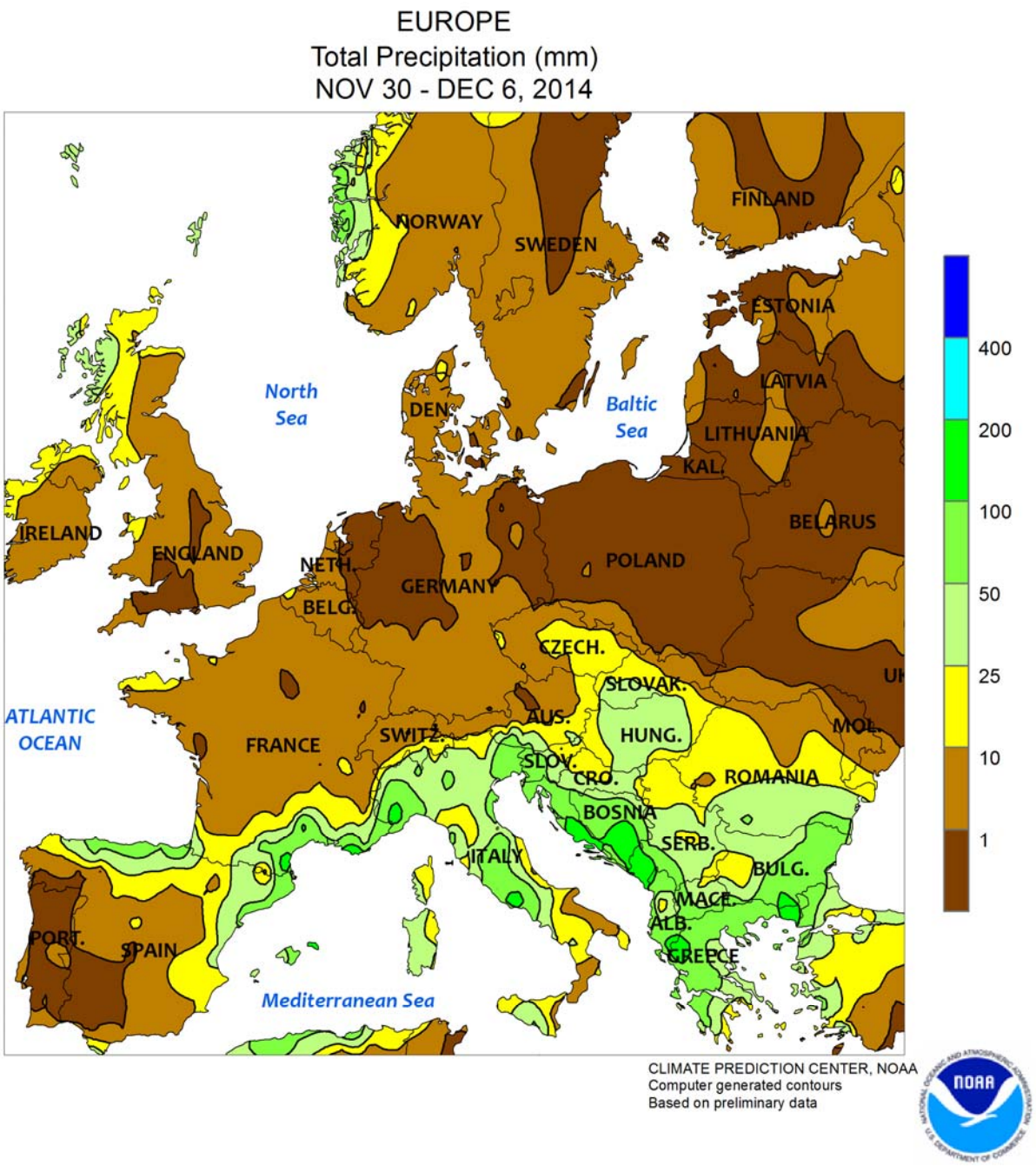
SOUTH AFRICA: Warmth and dryness promoted corn planting after last week's beneficial rain.

ARGENTINA: Heavy rain maintained abundant moisture for summer crops in eastern farming areas, but the wetness slowed corn and soybean planting.

BRAZIL: Conditions remained overall favorable for soybeans in key central and southern production areas.



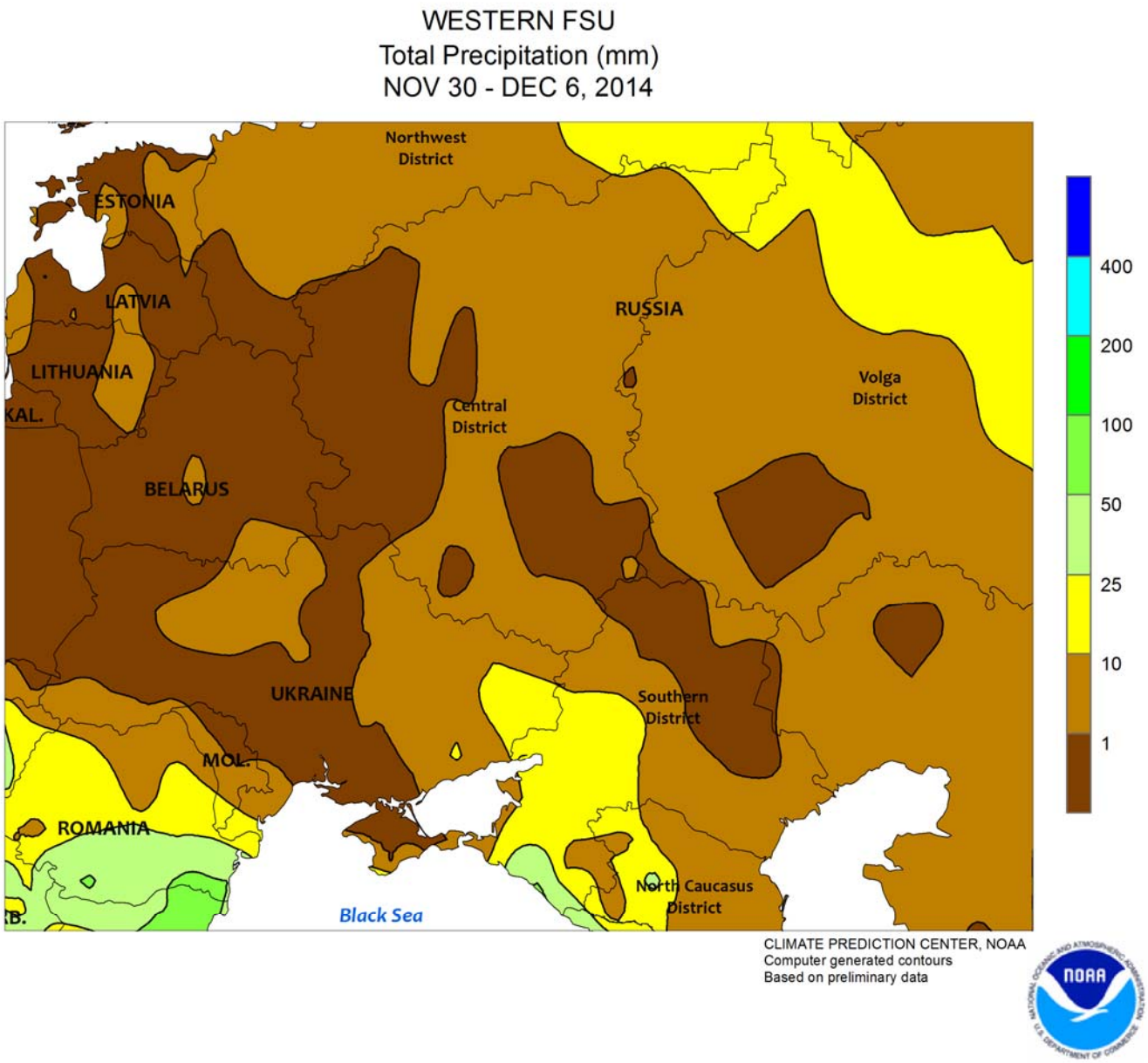
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Wet weather in southern Europe contrasted with dry, cold conditions over northern growing areas. An area of high pressure persisted across northern Eurasia, maintaining a dry, cold weather pattern over central and northern portions of the continent. Temperatures averaged 1 to 2°C below normal in northern France and up to 5°C below normal in Poland, ushering winter grains and oilseeds further into dormancy over most of northern Europe. However, major winter crop areas remained devoid of a protective snowpack, and are subsequently exposed to potential incursions of bitter cold. Despite the damage risk, temperatures remained above the threshold for winterkill, with nighttime lows at or above -10°C. The stationary area of high pressure over the north also caused Atlantic storms to take a more southerly route. Consequently, moderate to heavy rainfall (10-80 mm, locally more) maintained adequate to abundant moisture reserves for winter crops from Spain and Italy into Greece and the Balkans. In addition, heavy high-elevation snow (25 mm or more liquid equivalent) boosted irrigation reserves and spring runoff prospects in northern Italy.

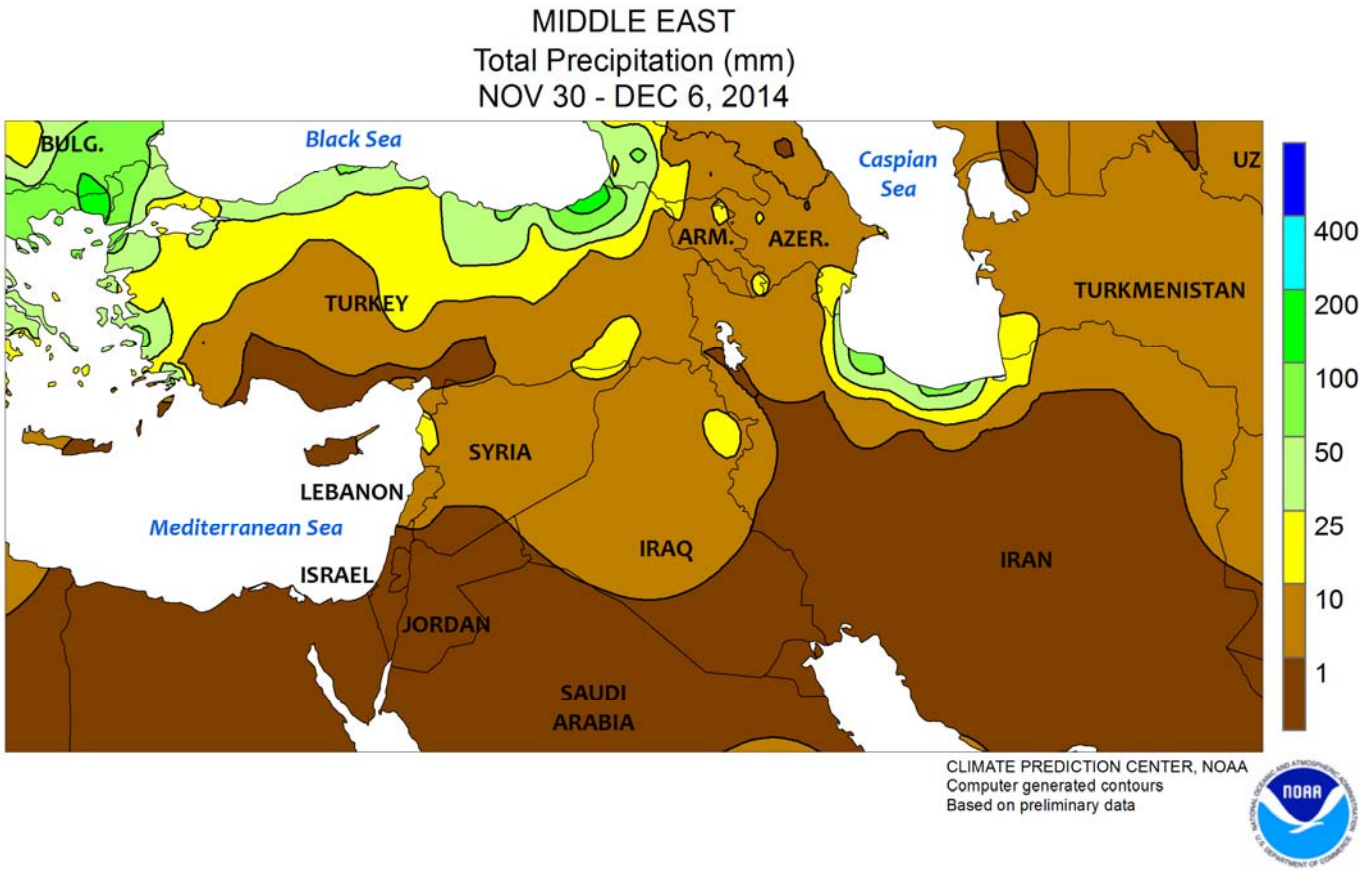
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Cold, snowy weather maintained favorable conditions for dormant winter grains and oilseeds. Across primary southern winter wheat areas of Russia and Ukraine, temperatures averaged 5 to 9°C below normal, with nighttime lows dropping below -20°C in the coldest locales. However, a moderate snowpack (5-15 cm) insulated dormant winter wheat from freeze damage, and a fresh snowfall (2-20 mm liquid equivalent) boosted moisture reserves and insulation from eastern Ukraine into southwestern Russia during the period. Farther north, areas along the border between Russia's Volga, Southern, and Central Districts may have experienced some burnback or freeze damage, as a shallow snow cover (2-5 cm) likely left some winter crops exposed to temperatures as low as -23°C.

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



MIDDLE EAST

Early-week storminess maintained abundant moisture reserves for winter crops in the north, while drier weather in the south facilitated fieldwork and winter grain development. Rain and mountain snow totaled 2 to 25 mm (liquid equivalent) from central and western Turkey into northern Iran, sustaining the favorable start to the 2014-15 wet season and further boosting moisture reserves for winter wheat and barley. Drier weather was observed from the eastern Mediterranean Coast into central and southern portions of Iraq and Iran, promoting fieldwork and winter crop development following recent, locally heavy rainfall. Temperatures remained generally mild, and winter crops continued to add vegetative growth in all but the coldest locales of central Turkey and northwestern Iran.

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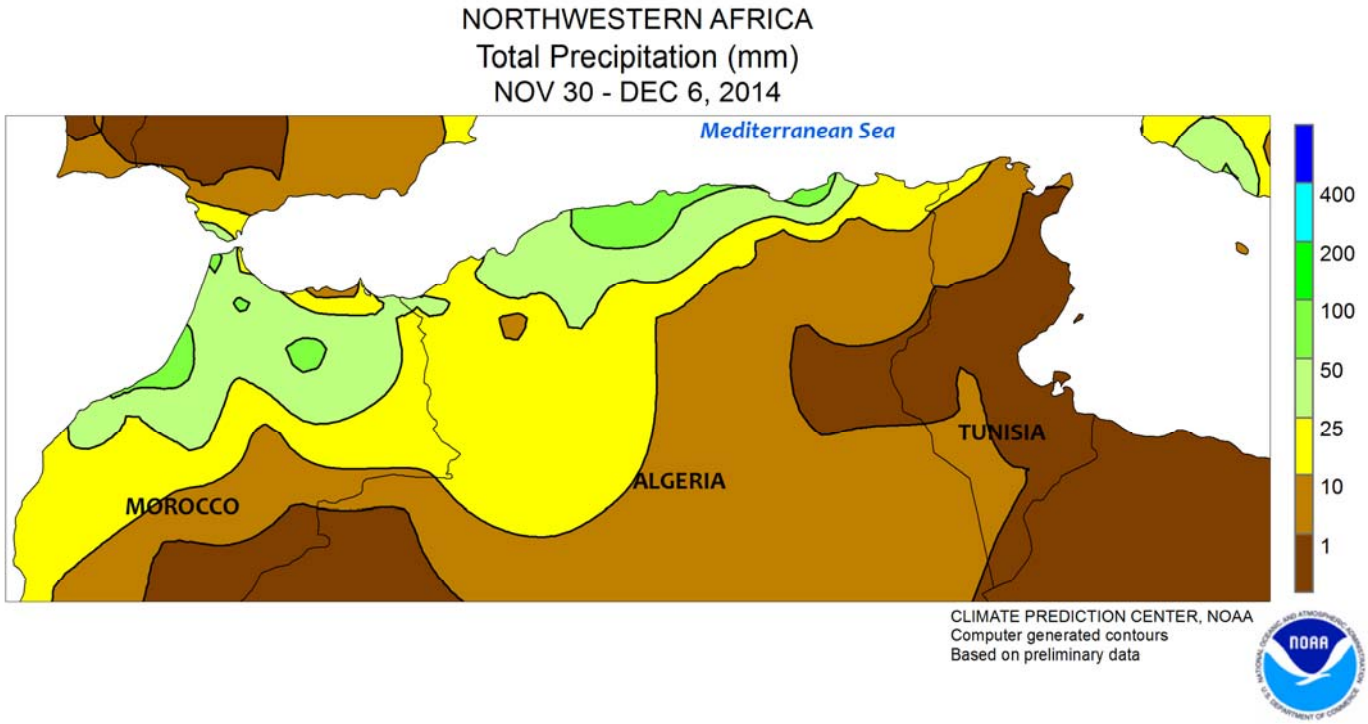

NORTHWESTERN AFRICA

A slow-moving Mediterranean storm generated additional moderate to heavy rainfall over the western half of the region, while sunny, warm weather prevailed across eastern-most growing areas. For the second consecutive week, moderate to heavy rain fell in Morocco (10-50 mm, locally more), maintaining abundant soil moisture for winter grain establishment but hampering late winter crop planting efforts. Rainfall (10-75 mm) spread into Algeria, and was especially welcomed in the previously-dry northeastern corner of the country. Meanwhile in Tunisia, sunny skies and above-normal temperatures (2-5°C above normal) promoted a rapid winter crop sowing pace but reduced soil moisture for wheat and barley establishment.

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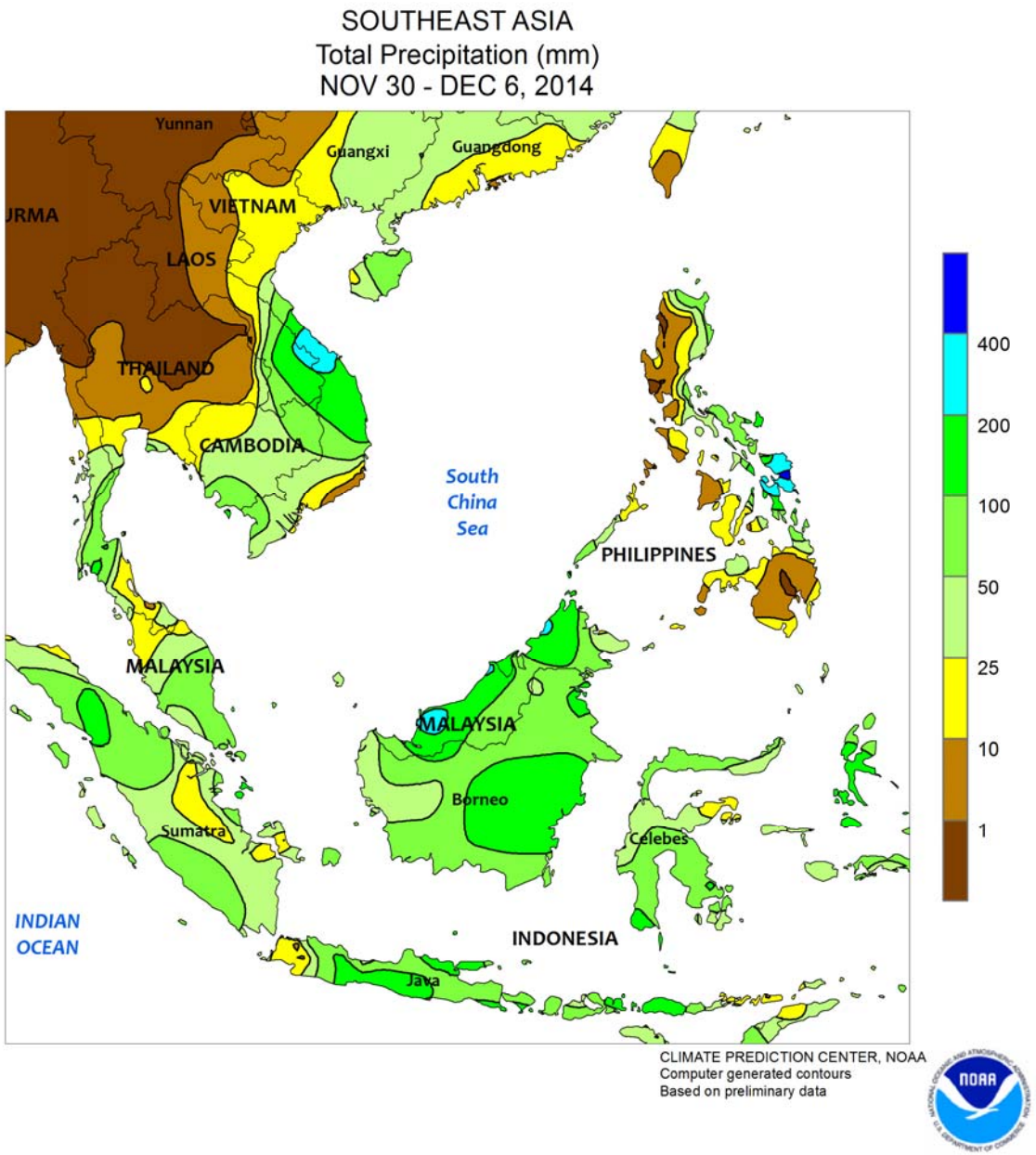

SOUTHEAST ASIA

A rare December typhoon (Hagupit) made landfall in the eastern Visayan Islands of the Philippines late in the week and was tracking through southern Luzon (see page 23 for a detailed map). Hagupit was labelled a super typhoon with winds in excess of 155 knots on December 4th but began to weaken rapidly under the influence of a descending area of high pressure from the north. By the time of landfall in the Philippines on December 6th, maximum sustained wind speeds for Hagupit were estimated at 100 knots, with continued weakening as the storm moved through the rugged terrain of Luzon early on December 8th. Initially, Hagupit's track and intensity were similar to that of Super Typhoon Haiyan which cut a path through the Visayan Islands last year in early November. Haiyan (reportedly the most powerful tropical cyclone in recorded history) did little damage as a result of its path through an area where most rice and corn harvesting was complete and with little winter crop production. Hagupit was much weaker than Haiyan at the time of landfall but took a more northerly path toward key winter corn and rice areas. However, despite Hagupit's path, little damage was expected due to the storm's rapid weakening. Initial rainfall totals of 200 mm or more were reported across the eastern Visayan Islands and southern Luzon. More information on rainfall associated with Hagupit will appear in next week's Bulletin. In other parts of the region, rainfall continued to increase across central and eastern Java, Indonesia, boosting moisture supplies for rice. With the recent rainfall in Java, totals for the season (beginning November 1) were near the long-term average and similar to last year's for the same period. In Vietnam, flooding rainfall (over 100 mm and locally nearly 400 mm) resumed in central portions of the country but occurred in minor crop producing areas. In far northern and southern Vietnam, showers (15-35 mm) maintained beneficial moisture supplies for winter-spring rice.

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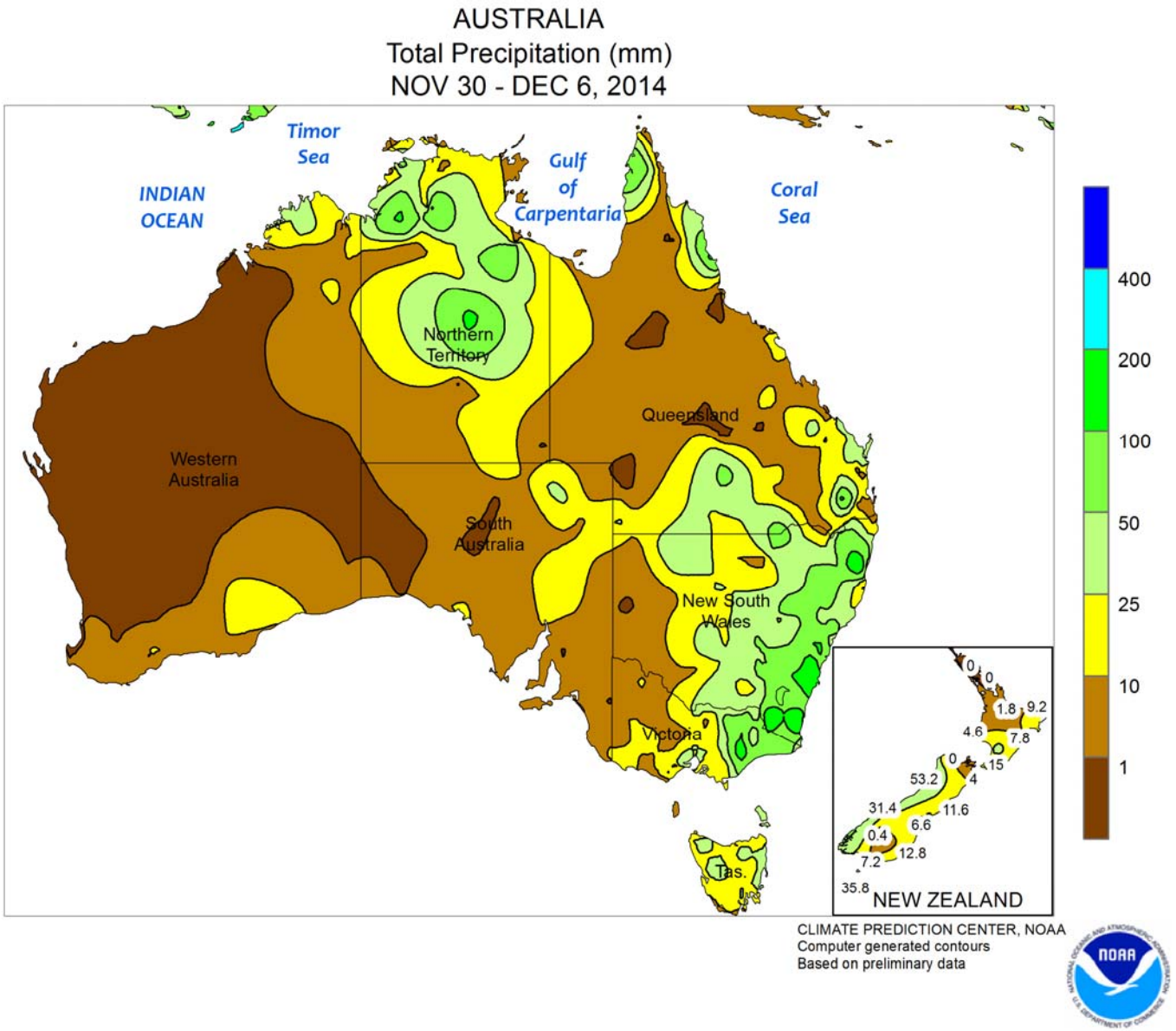

AUSTRALIA

In the wake of last week's showers, seasonably warm, mostly dry weather overspread Western Australia, helping winter crop harvesting regain momentum. Mostly dry weather persisted in South Australia and extreme northern Victoria, allowing wheat, barley, and canola harvesting to maintain pace. Elsewhere in the wheat belt, widespread showers (10-50 mm, locally more) fell across southern and eastern Victoria, New South Wales, and southern Queensland. The rain slowed or halted fieldwork in many areas but was overall beneficial, providing a welcome boost in topsoil moisture for vegetative summer crops. Winter crop harvesting is reportedly nearing completion in northern New South Wales and Queensland, but harvesting continues in southeastern Australia, where the rain likely raised some concerns about crop quality. Mid-week heat caused weekly temperatures to average about 1 to 4°C above normal in southern and eastern Australia. On most days, however, maximum temperatures were in the upper 20s to middle 30s degrees C.

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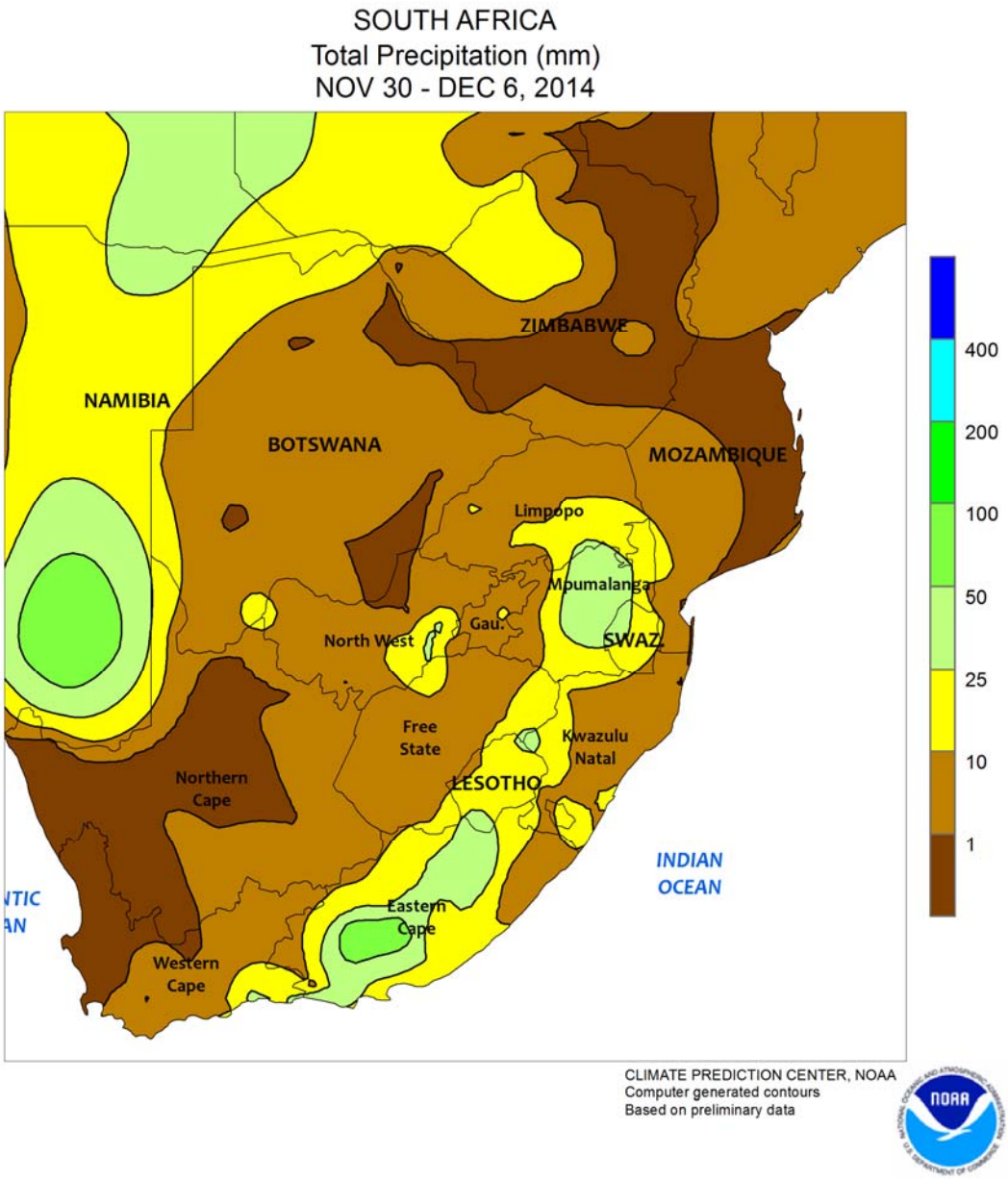

SOUTH AFRICA

Following last week's beneficial showers, warmer, drier conditions supported summer crop planting and vegetative development of early planted corn. Rainfall totaled 5 to 25 mm across most of the corn belt, though higher amounts were recorded in far eastern production areas (central Mpumalanga). Weekly temperatures averaged near normal in the wetter sections of the east and 2°C or more above normal in western agricultural areas; daytime highs ranged from the upper 20s (degrees C) in Mpumalanga to the lower and middle 30s in western production areas in North West and Free State. Mostly dry, seasonably warm weather also prevailed in Limpopo, with daytime highs reaching the upper 30s maintaining high evaporative losses. Elsewhere, drier-than-normal weather (rainfall generally totaling below 10 mm) returned to rain-fed sugarcane areas of southern KwaZulu-Natal, further limiting soil moisture for normal crop development after last week's brief period of beneficial rain. Rainfall also tapered off from the previous week in the Cape Provinces. Near- to above-normal temperatures in the country's western agricultural areas fostered rapid development of mostly irrigated crops, including tree and vine crops in key production areas of Western Cape.

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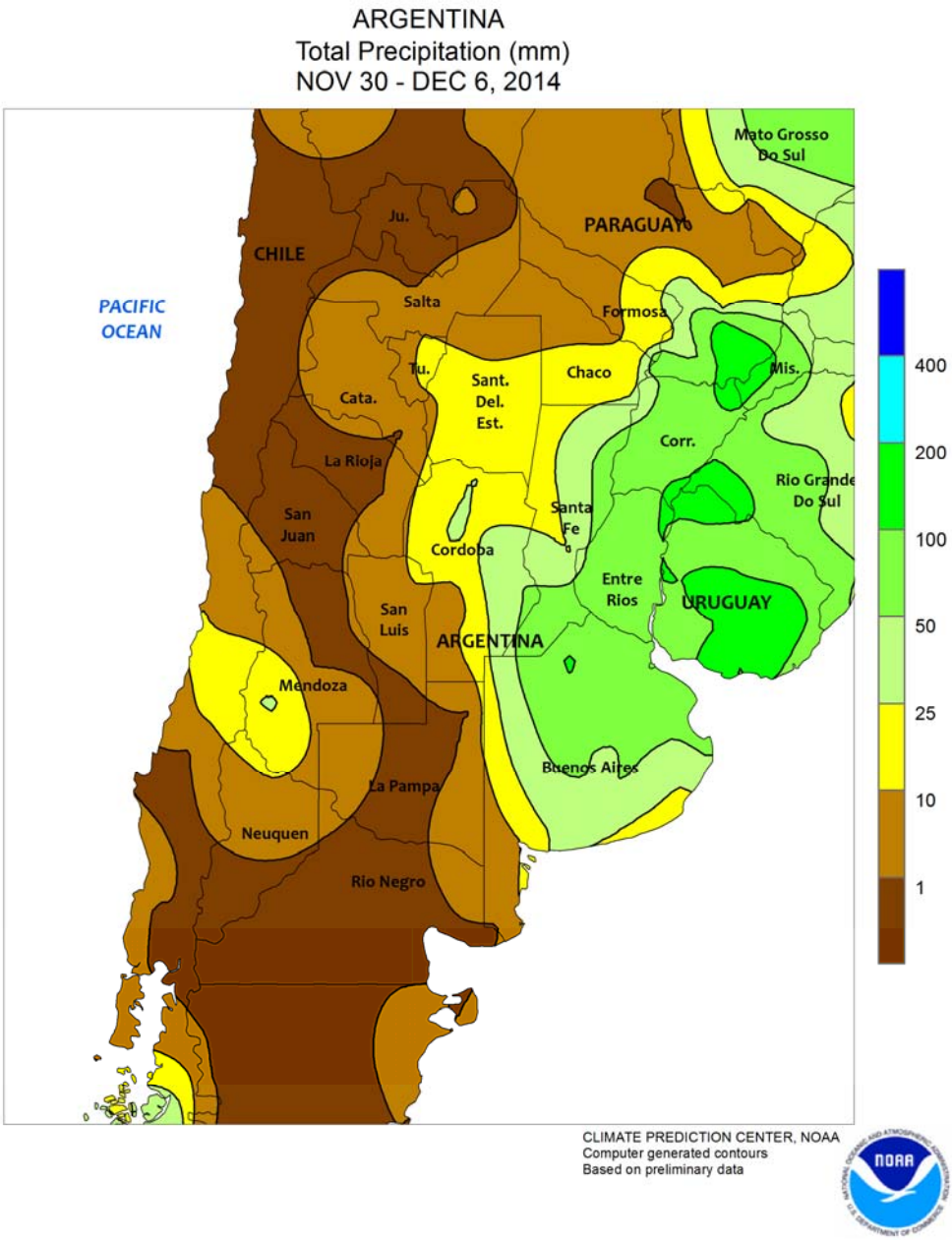

ARGENTINA

Rain intensified in eastern farming areas, maintaining abundant levels of moisture for summer crop development but slowing the rate of fieldwork for later plantings. Rainfall exceeded 50 mm over a broad area stretching from central Buenos Aires to the northeast, extending eastward into Uruguay; amounts in excess of 100 mm were concentrated over northern Buenos Aires and sections of the northeast (eastern Entre Rios to Misiones). In contrast, drier conditions returned to La Pampa, spurring corn and soybean planting following last week's rain. Farther north, light to moderate showers (10-25 mm, locally higher) lingered over Cordoba and Santa Fe early in the week; otherwise dry weather dominated much of the northwest. Weekly temperatures averaged near to slightly above normal in central and northwestern Argentina and slightly cooler than normal in the northeast. However, mild, showery weather at the start of the week gave way to dry, much warmer weather at week's end; daytime highs rose into the upper 30s (degrees C) as far south as La Pampa, with highs briefly reaching the lower 40s in the northwest. While fostering high evaporative losses in western and northwestern agricultural areas, the drying in eastern production areas helped to dry fields for future fieldwork. According to Argentina's Ministry of Agriculture, corn was 48 percent planted as of December 4, on par with last year's pace; soybeans were 60 percent planted, lagging last year's pace by 5 percentage points. In addition, winter wheat was 51 percent harvested versus 47 percent last year.

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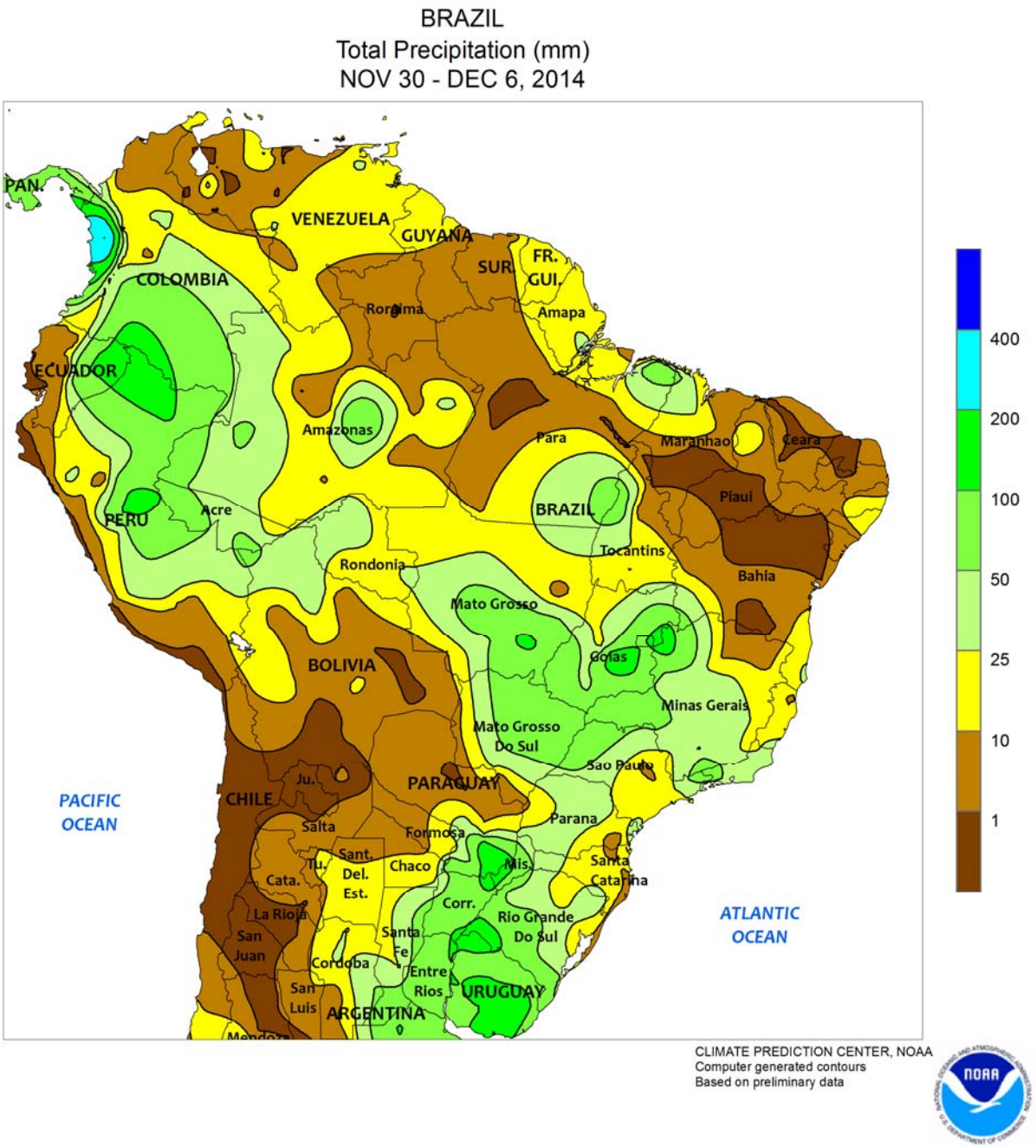

BRAZIL

Widespread, locally heavy rain maintained overall favorable conditions for soybeans and other main-season row crops. Rainfall totaled 25 to 100 mm in major production areas of the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), although in many locations amounts were lower than in recent weeks. Similarly, drier weather dominated the northeastern interior (notably Tocantins and western Bahia) after several weeks of improved rainfall. In addition to the dryness, above-normal temperatures (daytime highs reaching the middle 30s on several days) maintained high evaporative losses, while spurring rapid emergence of soybeans and cotton. Showers also tapered off across the southeast; rainfall totaled 10 to 75 mm in Sao Paulo and Minas Gerais, where sporadic rainfall has limited moisture for normal development of sugarcane and coffee for most of the season. Meanwhile, rainfall was variable in Brazil's southern agricultural areas, ranging from more than 50 mm in southern Rio Grande do Sul to more moderate amounts (10-25 mm) in southern Parana and Santa Catarina. The rain in Rio Grande do Sul was favorable for soybean establishment after a recent period of dryness, but more rain will be needed in Parana. As in the northeastern interior, weekly temperatures averaged 1 to 2°C above normal throughout the south, though highs only briefly reached the lower and middle 30s.

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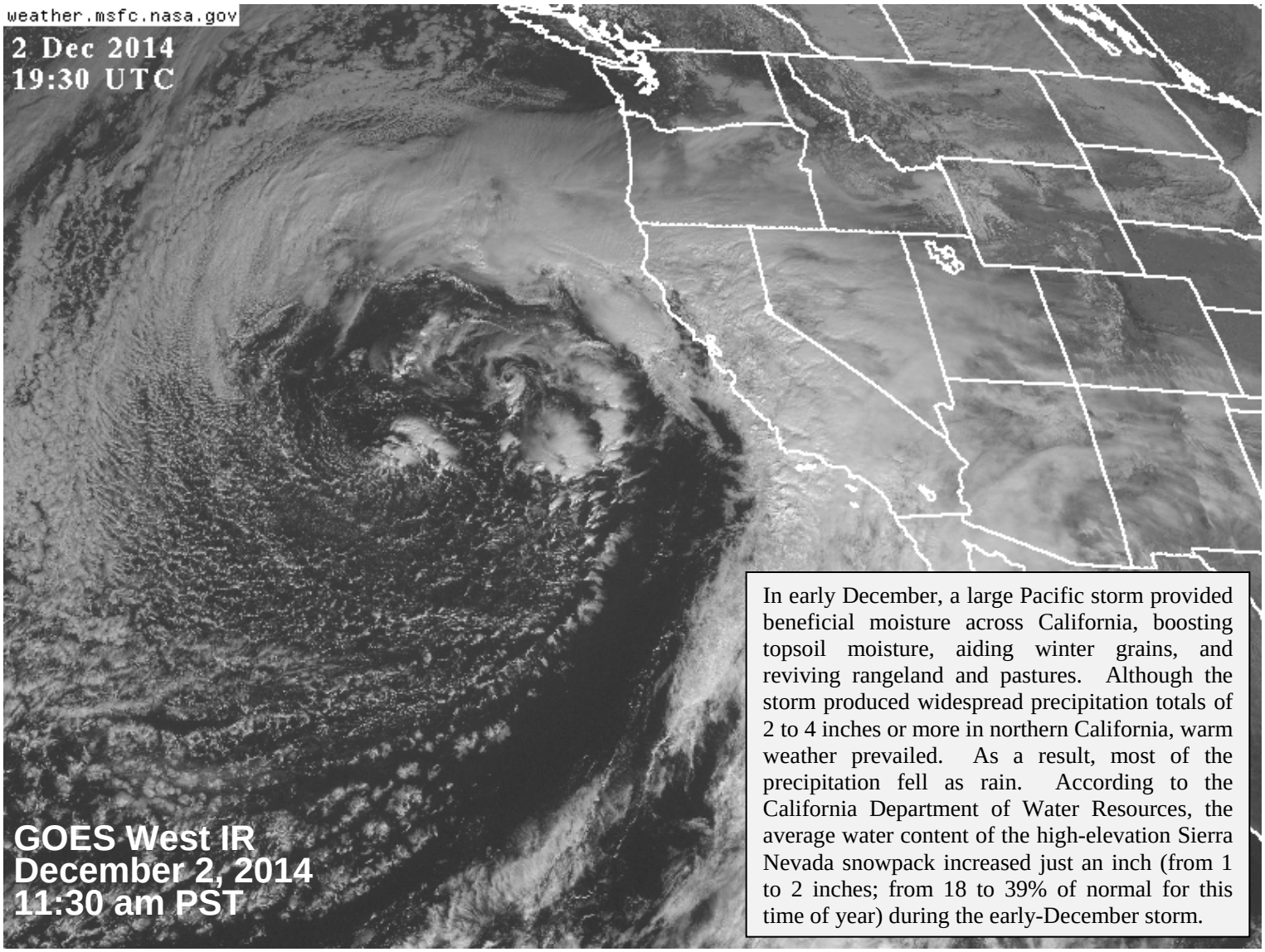

In early December, a large Pacific storm provided beneficial moisture across California, boosting topsoil moisture, aiding winter grains, and reviving rangeland and pastures. Although the storm produced widespread precipitation totals of 2 to 4 inches or more in northern California, warm weather prevailed. As a result, most of the precipitation fell as rain. According to the California Department of Water Resources, the average water content of the high-elevation Sierra Nevada snowpack increased just an inch (from 1 to 2 inches; from 18 to 39% of normal for this time of year) during the early-December storm.

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