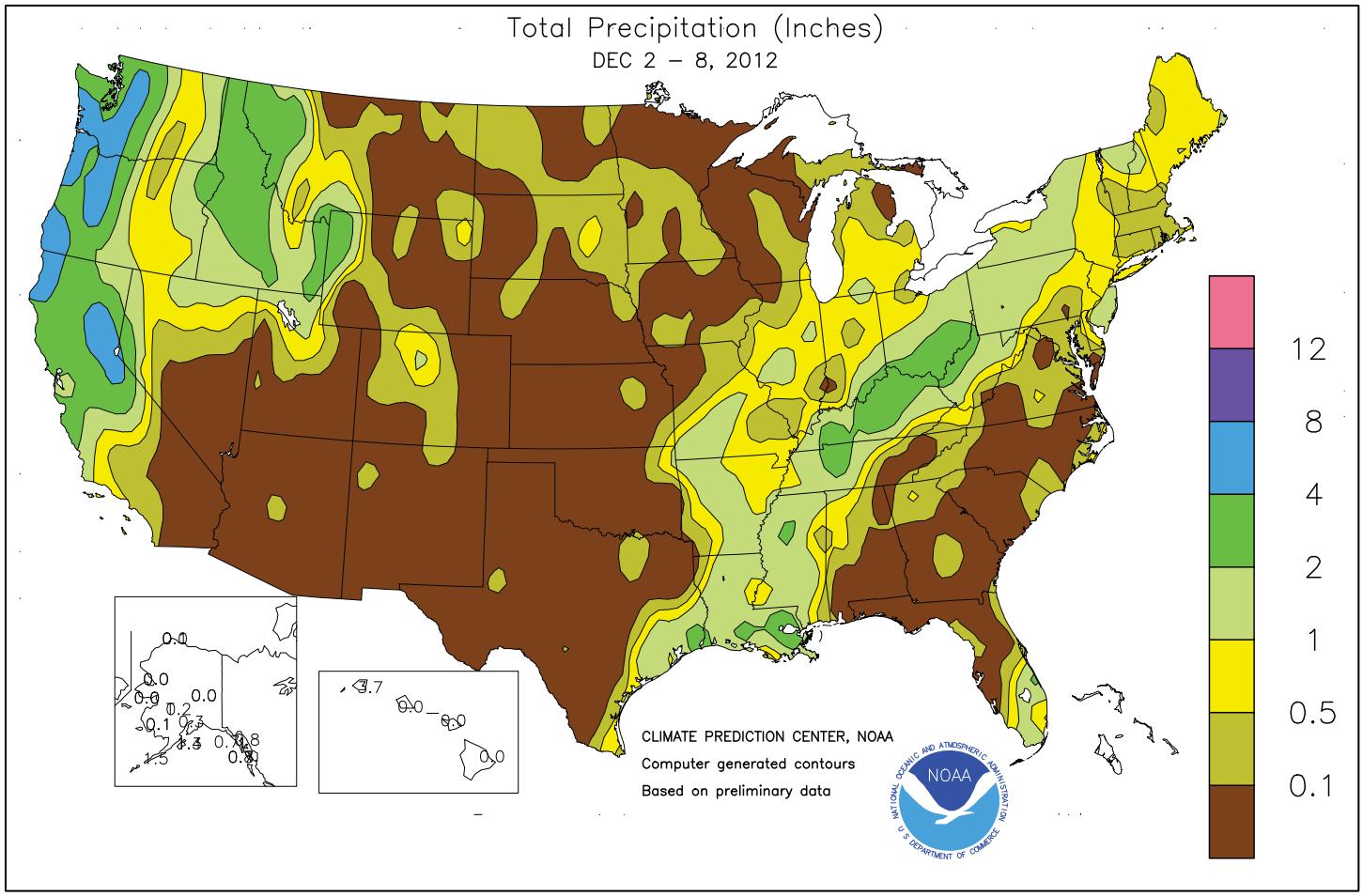
Volume 99 No. 50 http://www.usda.gov/oce/weather December 11, 2012

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

December 2-8, 2012

Highlights provided by USDA/WAOB

Pacific storms brought some additional rain and snow to **California** and the **Northwest**, culminating a period of unsettled weather that began in late November. As the week progressed, dry weather returned to **California**, while a few showers lingered across the **Northwest**. Farther east, mild, dry weather prevailed for much of the week on the **Plains**, maintaining severe stress on pastures, rangeland, and winter wheat. Toward week's end, however, snow began to overspread the **northern Plains**. In **Montana** and the **Dakotas**, the late-week snow

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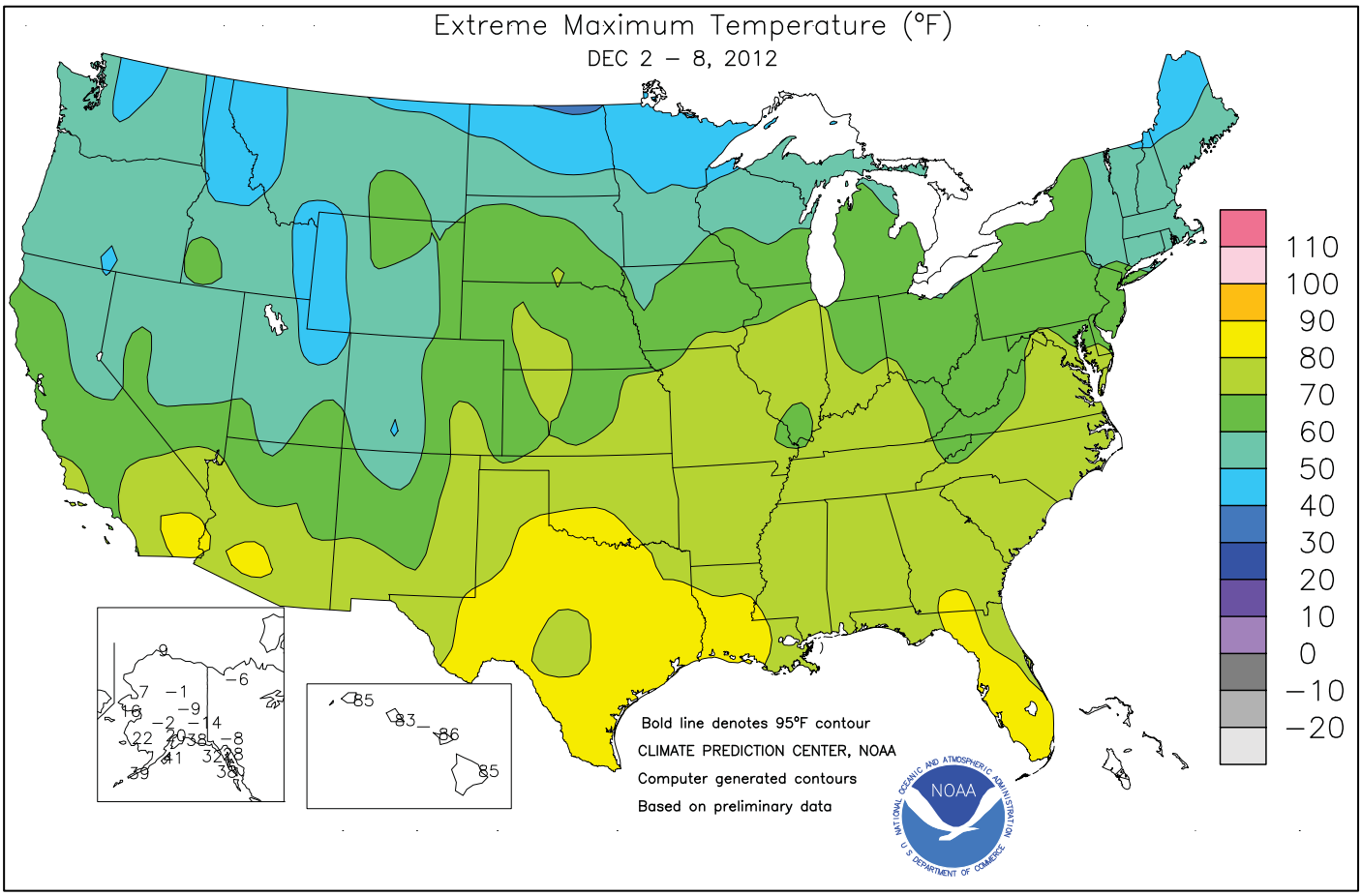
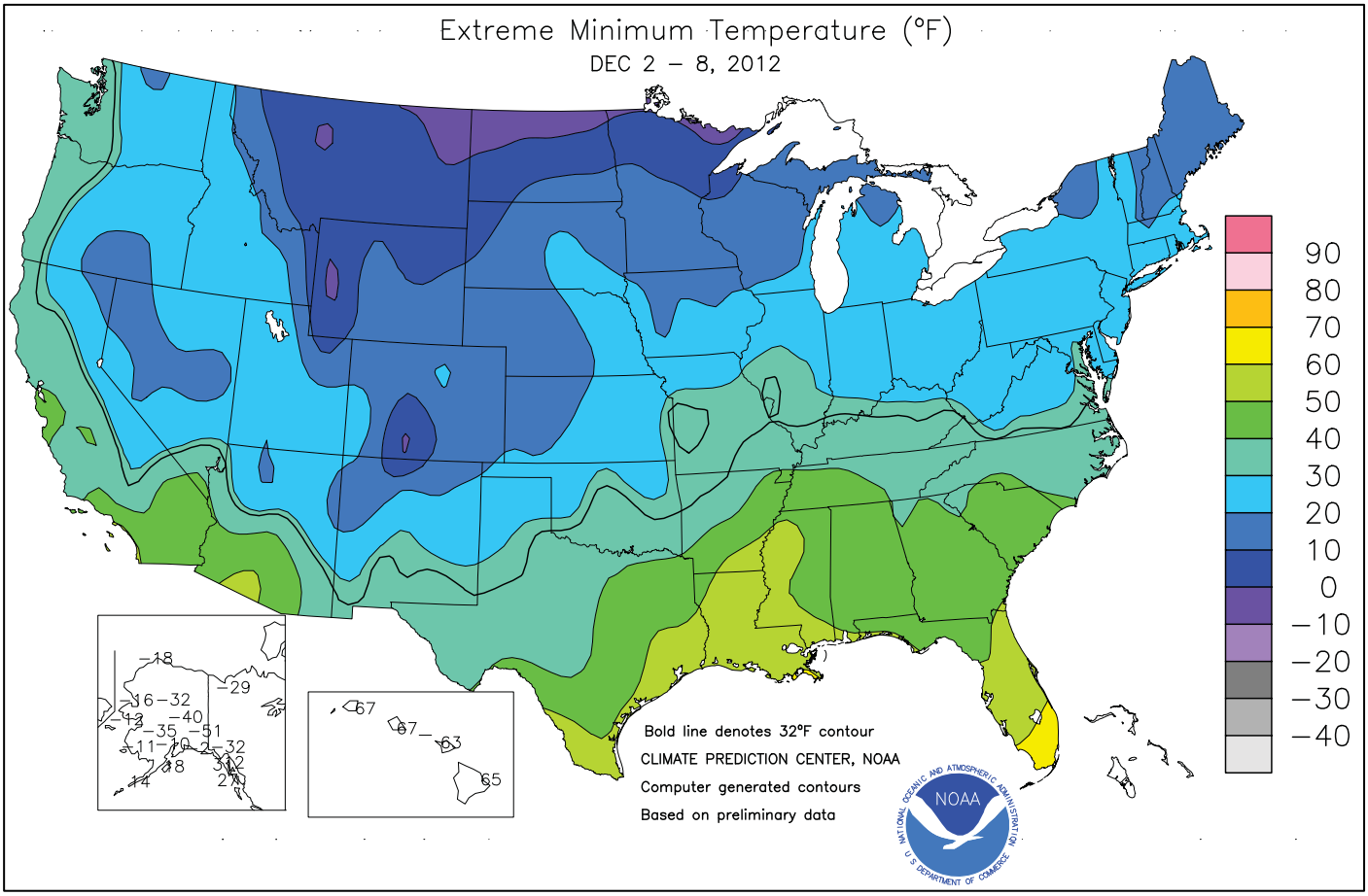
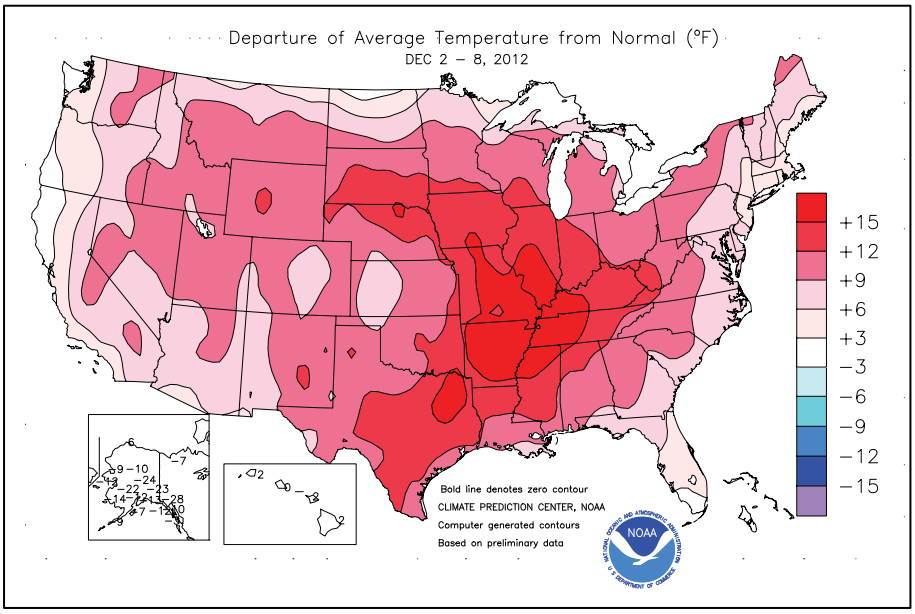

Extreme Maximum Temperature (°F)
DEC 2 – 8, 2012
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
DEC 2 – 8, 2012
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA

(Continued from front cover)

provided winter grains with highly beneficial moisture and insulation. Meanwhile, frequent showers occurred from the **western half of the Gulf Coast northeastward into the lower Great Lakes region**. Some of the heaviest rain, locally 2 to 4 inches, fell along the **central Gulf Coast** and in the **middle Ohio Valley**. In contrast, mostly dry weather persisted through week's end in the **Southeast**, except for a few showers in **southern and eastern Florida**. Although the **Southeastern** dryness favored late-season fieldwork, drought continued to gradually expand and intensify. During the first full week of December, late-season warmth prevailed nearly from coast to coast. Warm conditions were especially prevalent between the **Rockies and Appalachians**. In fact, weekly temperatures averaged more than 15°F above normal in a broad area centered on the **Mid-South**.

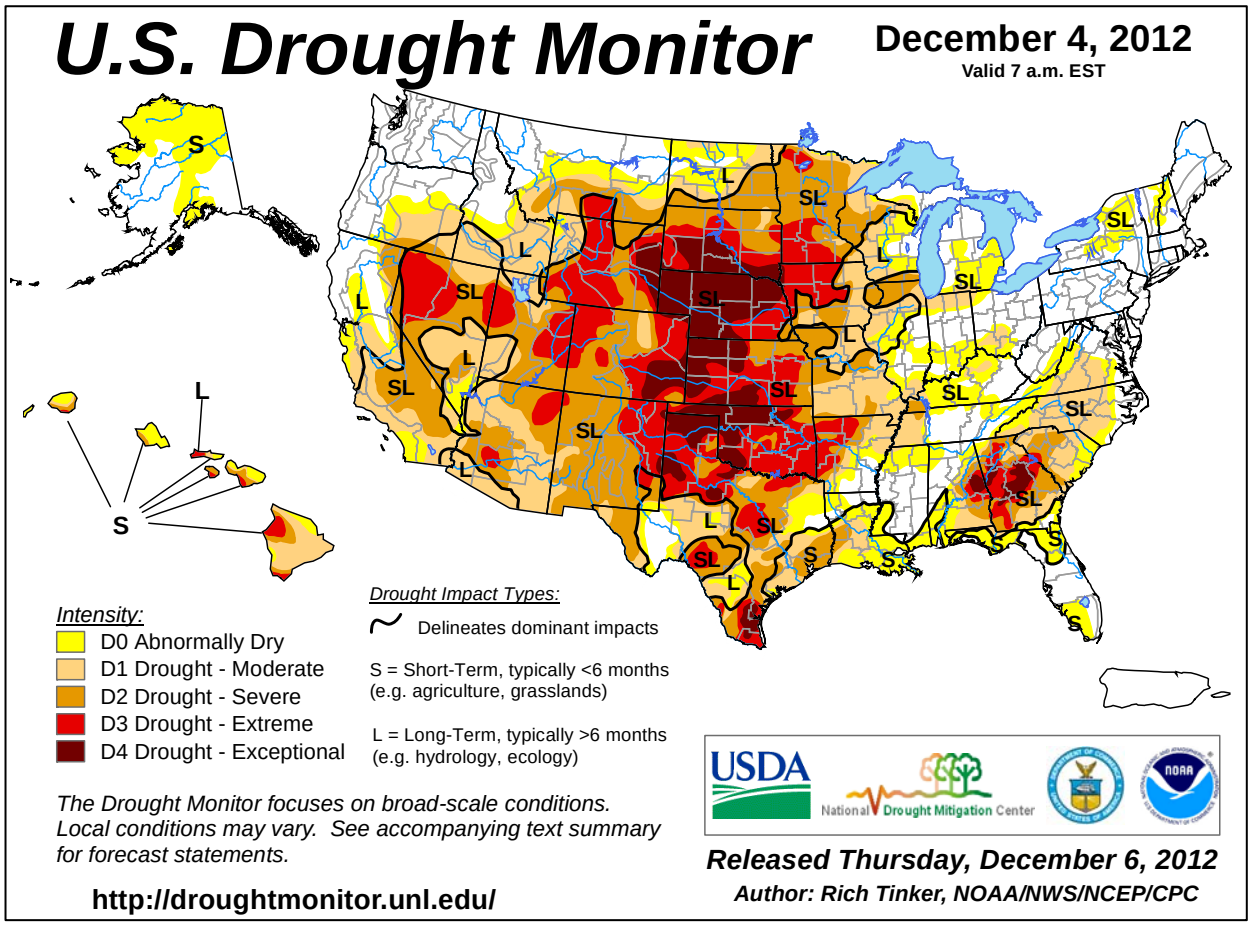


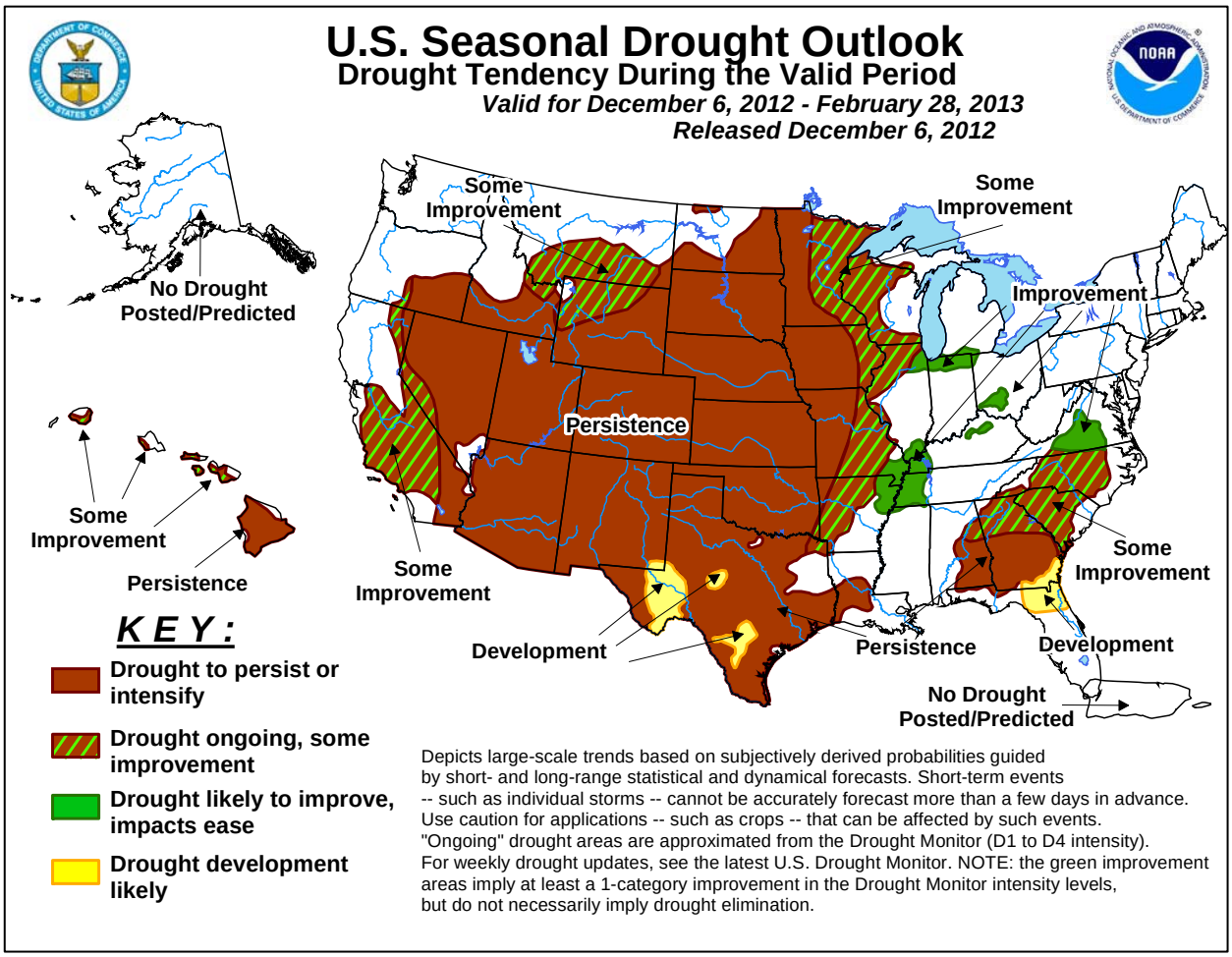
During the first half of the week, record-setting warmth blanketed much of the **South**, **East**, and **Midwest**. On December 3, monthly record highs were established in locations such as **Quincy, IL** (74°F; previously, 71°F on December 9, 1940, and December 3, 1970); **Rockford, IL** (69°F; previously, 67°F on December 5, 2001); **Muskegon, MI** (66°F; previously, 64°F on December 2, 1982); and **Madison, WI** (65°F; previously, 64°F on December 5, 2001). In addition, monthly record highs were tied on December 3 in **Kansas City, MO** (74°F); **Springfield, IL** (74°F); **Ottumwa, IA** (71°F); and **Traverse City, MI** (64°F). **Peoria, IL** (70°F on December 3), reached the 70-degree mark in December for the first time since December 28, 1984. Farther south, highs soared to daily-record levels on December 2 in **Texas** locations such as **Corpus Christi** (87°F), **Victoria** (85°F), **Houston** (84°F), and **Dallas-Ft. Worth** (83°F). Highs reached 70°F on December 2 as far north as **Kennebec, SD**, where a daily-record high was tied. In **Texas**, warmth continued through December 4, when **Brownsville** (87°F) and **Houston** (83°F) posted daily-record highs. Meanwhile in the **East**, selected daily-record highs for December 4 included 74°F in **Danville, VA**, and 70°F in **Syracuse, NY.** By mid-week, warmth briefly shifted into the **West**, where **Phoenix, AZ** (82°F), collected a daily-record high. However, warmth quickly returned to the **south-central U.S.**, where both **Midland and San Angelo, TX**, posted daily-record highs of 81°F on December 6. Two days later, on December 8, additional daily-record highs in **Texas** included 83°F in **Houston** and 85°F in both **Corpus Christi** and **Victoria**.

By the time precipitation finally ended in **northern California** around mid-week, late-November and early-December rainfall totals topped 20 inches in locations such as **Honeydew (Humboldt County)** and **Brandy Creek (Shasta County)**. On December 2, daily-record rainfall totals in **California** included 1.23 inches in **Stockton** and 1.18 inches in **Alturas**. November 28 - December 5 multi-storm totals in those two locations reached 3.58 inches in **Stockton** and 1.89 inches in **Alturas**.

During the same 8-day period, totals in **northwestern California** reached 9.80 inches in **Crescent City** and 9.27 inches in **Ukiah**. Farther inland, 1.82 inches of precipitation fell in **Stanley, ID**, during the first 5 days of the month, aided by daily-record totals on December 2 and 5 (0.89 and 0.47 inch, respectively). Toward week's end, heavy rain erupted in the **Ohio Valley**, while snow overspread **northern portions of the Rockies and Plains**. On December 7, **Louisville, KY**, netted a daily-record precipitation total of 1.80 inches. Farther west, **Missoula, MT** (7.7 inches on December 7), experienced its earliest 7-inch, calendar-day snowfall on record, previously set with a 9.5-inch total on December 16, 1955. Elsewhere in **Montana**, **Great Falls** (5.7 inches on December 8) received a daily-record snowfall. In **South Dakota**, **Huron** received a daily-record snowfall (6.5 inches) on December 8 en route to a 3-day (December 7-9) storm total of 9.9 inches. With most of the **upper Midwestern** snow falling on December 9, the remainder of this event will be covered in next week's summary. For **Midwestern** areas not affected by the snow storm, near-record to record-setting streaks without measurable snow continued. For example, **Chicago, IL**, reported its 280th consecutive day (March 5 - December 9) without measurable snow, tying a record originally set from March 1 - December 5, 1994.

A cold, mostly dry weather pattern remained locked in across the **Alaskan mainland**, where temperatures averaged more than 20°F below normal in some locations. However, the cold air began to erode at week's end, when the temperature in **Fairbanks** climbed to -2°F on December 8—up from -40°F on December 3. Meanwhile, widespread precipitation fell across **southern Alaska**. During the first 8 days of December, precipitation in **Juneau** totaled 0.95 inch—in the form of 18.1 inches of snow. Farther south, dry weather covered **Hawaii**, except for some brief downpours on the western islands. Some of the heaviest rain fell across **Kauai** on December 4, when **Lihue** netted 2.85 inches. **Lihue's** weekly rainfall reached 3.62 inches. In contrast, no measurable rain fell during the first 8 days of December in **Kahului, Maui**.


U.S. Drought Monitor
December 4, 2012
Valid 7 a.m. EST
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
L = Long-Term, typically >6 months (e.g. hydrology, ecology)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/
USDA
National Drought Mitigation Center
Released Thursday, December 6, 2012
Author: Rich Tinker, NOAA/NWS/NCEP/CPC


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for December 6, 2012 - February 28, 2013
Released December 6, 2012
No Drought Posted/Predicted
Some Improvement
Persistence
Some Improvement
Some Improvement
Improvement
Persistence
Some Improvement
Development
Persistence
Some Improvement
Development
No Drought Posted/Predicted
KEY:
Drought to persist or intensify
Drought ongoing, some improvement
Drought likely to improve, impacts ease
Drought development likely
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 8, 2012

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	69	53	73	46	61	13	0.10	-0.92	0.10	0.10	9	42.95	85	92	60	0	0	1	0
	HUNTSVILLE	69	52	74	49	61	15	0.03	-1.27	0.03	0.03	2	45.48	85	84	63	0	0	1	0
	MOBILE	76	56	78	52	66	12	0.14	-1.01	0.07	0.14	11	65.76	104	96	64	0	0	4	0
	MONTGOMERY	77	50	80	43	63	12	0.01	-1.20	0.01	0.01	1	36.42	71	92	49	0	0	1	0
AK	ANCHORAGE	13	0	20	-10	6	-12	0.29	0.07	0.29	0.29	116	19.94	131	68	53	0	7	1	0
	BARROW	3	-7	9	-18	-2	6	0.04	0.04	0.01	0.08	800	6.28	156	85	76	0	7	4	0
	FAIRBANKS	-22	-34	-9	-40	-28	-24	0.00	-0.14	0.00	0.00	0	9.45	97	***	***	0	7	0	0
	JUNEAU	23	17	28	12	20	-10	0.81	-0.36	0.29	0.87	65	59.39	109	90	82	0	7	5	0
	KODIAK	28	21	41	18	25	-7	1.31	-0.27	1.24	1.31	73	53.60	77	78	64	0	7	3	1
	NOME	6	-8	16	-12	-1	-12	0.00	-0.25	0.00	0.01	4	18.16	115	76	63	0	7	0	0
AZ	FLAGSTAFF	55	25	62	23	40	8	0.00	-0.40	0.00	0.00	0	12.81	59	88	31	0	7	0	0
	PHOENIX	77	53	82	51	65	9	0.00	-0.17	0.00	0.00	0	3.40	45	55	34	0	0	0	0
	PRESCOTT	64	34	70	29	49	10	0.00	-0.28	0.00	0.00	0	9.64	53	78	25	0	2	0	0
	TUCSON	77	47	81	46	62	9	0.00	-0.18	0.00	0.00	0	6.72	59	50	30	0	0	0	0
AR	FORT SMITH	70	46	80	32	58	14	0.10	-0.86	0.10	0.10	9	31.29	75	90	50	0	1	1	0
	LITTLE ROCK	69	55	77	45	62	16	0.72	-0.52	0.72	0.72	50	37.37	78	91	60	0	0	1	1
CA	BAKERSFIELD	65	50	72	44	57	8	0.11	-0.03	0.09	0.14	88	3.90	66	90	75	0	0	2	0
	FRESNO	62	53	65	46	58	11	0.42	0.17	0.39	0.51	182	8.45	83	91	82	0	0	2	0
	LOS ANGELES	65	56	68	53	61	2	0.24	-0.09	0.20	0.27	73	6.34	54	96	83	0	0	2	0
	REDDING	59	43	61	35	51	5	2.94	2.00	1.40	3.02	282	29.42	98	90	68	0	0	3	3
	SACRAMENTO	59	46	62	38	53	5	1.71	1.21	1.32	2.41	423	17.41	108	96	64	0	0	2	1
	SAN DIEGO	66	59	68	57	62	4	0.00	-0.22	0.00	0.00	0	4.44	46	88	77	0	0	0	0
	SAN FRANCISCO	61	50	64	46	56	5	1.45	0.87	0.95	2.24	339	17.46	98	85	75	0	0	2	2
	STOCKTON	59	46	63	39	53	6	1.85	1.46	1.25	2.04	464	11.33	91	98	88	0	0	3	2
CO	ALAMOSA	52	9	57	2	31	10	0.00	-0.07	0.00	0.00	0	4.78	68	81	46	0	7	0	0
	CO SPRINGS	58	26	67	18	42	11	0.00	-0.06	0.00	0.00	0	7.84	46	60	20	0	6	0	0
	DENVER INTL	59	28	69	22	43	12	0.00	-0.06	0.00	0.00	0	9.85	74	57	20	0	5	0	0
	GRAND JUNCTION	52	27	56	22	40	9	0.03	-0.07	0.03	0.03	27	3.51	41	75	52	0	6	1	0
	PUEBLO	61	23	71	13	42	10	0.00	-0.08	0.00	0.00	0	4.70	39	56	34	0	6	0	0
CT	BRIDGEPORT	52	35	60	27	44	5	0.48	-0.29	0.23	0.48	55	37.15	89	92	72	0	2	5	0
	HARTFORD	49	29	57	20	39	4	0.14	-0.68	0.07	0.15	16	34.03	78	88	70	0	6	4	0
DC	WASHINGTON	59	41	72	35	50	7	0.07	-0.59	0.05	0.07	9	29.49	80	87	56	0	0	2	0
DE	WILMINGTON	55	39	68	27	47	7	0.34	-0.42	0.29	0.34	39	32.73	81	91	66	0	2	3	0
FL	DAYTONA BEACH	75	59	78	55	67	4	0.04	-0.55	0.04	0.04	6	40.32	85	99	65	0	0	1	0
	JACKSONVILLE	72	53	77	47	63	6	0.22	-0.33	0.14	0.23	37	51.34	102	98	70	0	0	3	0
	KEY WEST	79	69	82	67	74	1	0.66	0.22	0.49	0.66	129	46.99	126	91	69	0	0	5	0
	MIAMI	80	68	82	64	75	4	0.20	-0.34	0.09	0.24	39	86.67	152	83	59	0	0	4	0
	ORLANDO	80	60	82	56	70	5	0.06	-0.48	0.06	0.06	10	39.87	85	95	63	0	0	1	0
	PENSACOLA	75	58	77	54	66	10	0.14	-0.74	0.14	0.14	14	64.67	105	94	74	0	0	1	0
	TALLAHASSEE	78	50	80	46	64	8	0.00	-0.84	0.00	0.00	0	56.04	93	90	63	0	0	0	0
	TAMPA	80	62	82	59	71	6	0.03	-0.49	0.03	0.03	5	53.81	125	88	48	0	0	1	0
	WEST PALM BEACH	80	69	83	65	75	5	0.08	-0.83	0.05	0.09	9	77.70	131	76	56	0	0	2	0
GA	ATHENS	69	48	76	43	59	12	0.01	-0.79	0.01	0.01	1	31.51	70	90	58	0	0	1	0
	ATLANTA	70	51	74	47	60	12	0.06	-0.83	0.06	0.06	6	31.16	66	84	56	0	0	1	0
	AUGUSTA	71	45	77	42	58	9	0.02	-0.55	0.02	0.02	3	31.42	75	96	72	0	0	1	0
	COLUMBUS	74	52	78	49	63	12	0.00	-1.00	0.00	0.00	0	29.98	66	88	48	0	0	0	0
	MACON	73	47	76	45	60	10	0.05	-0.78	0.05	0.05	5	27.59	66	97	51	0	0	1	0
	SAVANNAH	73	50	78	46	62	8	0.00	-0.51	0.00	0.00	0	38.30	81	94	70	0	0	0	0
HI	HILO	83	67	85	65	75	2	0.00	-3.00	0.00	0.00	0	78.92	66	86	73	0	0	0	0
	HONOLULU	82	71	83	67	76	0	0.00	-0.58	0.00	0.00	0	8.57	53	88	81	0	0	0	0
	KAHULUI	84	67	86	63	76	2	0.00	-0.59	0.00	0.00	0	4.98	30	88	74	0	0	0	0
	LIHUE	81	70	85	67	76	2	3.64	2.59	3.30	3.64	303	40.47	112	88	74	0	0	5	1
ID	BOISE	51	35	62	28	43	10	0.59	0.26	0.26	0.61	165	10.94	98	81	62	0	2	4	0
	LEWISTON	49	37	57	28	43	8	0.51	0.27	0.38	0.83	296	15.40	129	78	64	0	2	4	0
	POCATELLO	45	33	52	23	39	11	0.56	0.32	0.30	0.64	229	9.91	84	76	65	0	3	4	0
IL	CHICAGO/O'HARE	53	38	70	27	45	13	0.85	0.23	0.64	0.85	118	25.55	74	85	68	0	2	3	1
	MOLINE	52	37	69	27	45	14	0.26	-0.28	0.13	0.29	47	24.87	68	89	64	0	1	4	0
	PEORIA	53	40	70	30	47	15	0.24	-0.41	0.09	0.24	32	25.33	74	90	65	0	1	6	0
	ROCKFORD	51	36	69	24	43	14	0.53	-0.02	0.47	0.54	86	21.39	61	90	66	0	2	4	0
	SPRINGFIELD	59	44	74	32	51	17	1.16	0.52	0.87	1.16	157	27.94	83	90	62	0	1	4	1
IN	EVANSVILLE	62	46	73	32	54	15	0.58	-0.36	0.31	0.58	54	30.23	72	87	73	0	1	4	0
	FORT WAYNE	51	38	64	23	45	12	0.38	-0.30	0.18	0.38	49	26.76	77	96	77	0	2	4	0
	INDIANAPOLIS	55	42	69	29	49	13	0.71	-0.06	0.26	0.71	80	36.14	93	96	72	0	2	5	0
	SOUTH BEND	52	38	65	29	45	12	0.96	0.19	0.75	0.97	110	32.23	86	89	69	0	2	5	1
IA	BURLINGTON	53	40	72	30	46	14	0.25	-0.31	0.18	0.25	38	22.63	62	92	62	0	1	3	0
	CEDAR RAPIDS	51	32	68	22	42	14	0.01	-0.40	0.01	0.03	6	23.03	71	91	58	0	3	1	0
	DES MOINES	52	37	69	27	44	15	0.00	-0.35	0.00	0.00	0	24.34	72	77	63	0	2	0	0
	DUBUQUE	48	33	64	22	40	13	0.06	-0.40	0.05	0.19	36	21.90	64	88	64	0	4	2	0
	SIOUX CITY	50	27	60	20	39	13	0.10	-0.08	0.09	0.11	55	22.55	88	84	61	0	6	2	0
	WATERLOO	49	28	67	16	38	12	0.04	-0.28	0.02	0.04	11	22.37	69	89	65	0	4	3	0
KS	CONCORDIA	56	31	68	22	43	10	0.01	-0.21	0.01	0.02	8	23.08	83	75	52	0	4	1	0
	DODGE CITY	59	29	71	19	44	8	0.00	-0.17	0.00	0.00	0	17.21	79	70	29	0	4	0	0
	GOODLAND	57	24	67	18	41	9	0.00	-0.08	0.00	0.00	0	9.02	46	54	37	0	7	0	0
	TOPEKA	60	36	74	27	48	13	0.00	-0.39	0.00	0.00	0	22.27	64	82	58	0	4	0	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending December 8, 2012

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	60	36	72	25	48	11	0.00	-0.33	0.00	0.00	0	24.70	84	82	56	0	2	0	0
KY	JACKSON	63	46	72	31	55	13	1.62	0.58	1.18	1.62	136	47.20	102	90	54	0	1	5	1
	LEXINGTON	61	45	70	29	53	13	2.05	1.14	1.01	2.05	197	38.12	89	91	74	0	1	5	2
	LOUISVILLE	62	49	75	33	56	15	3.14	2.25	1.87	3.14	308	41.69	100	89	64	0	0	5	2
	PADUCAH	63	49	71	34	56	16	0.58	-0.56	0.50	0.58	45	26.72	58	95	64	0	0	2	1
LA	BATON ROUGE	73	57	80	54	65	11	1.49	0.33	1.05	1.49	113	62.79	106	100	64	0	0	2	1
	LAKE CHARLES	77	58	81	53	68	13	0.94	-0.09	0.64	0.94	80	68.13	127	96	64	0	0	2	1
	NEW ORLEANS	75	59	79	55	67	10	2.82	1.58	2.26	2.86	200	66.01	109	95	69	0	0	2	2
	SHREVEPORT	71	59	80	50	65	14	0.01	-1.04	0.01	0.01	1	46.02	96	97	70	0	0	1	0
ME	CARIBOU	40	21	50	13	30	9	0.72	0.02	0.37	0.72	89	36.63	105	93	70	0	7	4	0
	PORTLAND	48	26	55	21	37	5	0.54	-0.45	0.21	0.55	49	46.72	109	93	67	0	6	5	0
MD	BALTIMORE	58	37	70	27	48	8	0.05	-0.68	0.03	0.05	6	34.36	87	86	70	0	2	2	0
MA	BOSTON	51	35	59	30	43	4	0.38	-0.47	0.34	0.41	42	31.21	78	87	64	0	3	3	0
	WORCESTER	48	32	55	24	40	7	0.49	-0.36	0.31	0.58	59	39.36	85	93	66	0	4	5	0
MI	ALPENA	44	28	60	16	36	8	0.25	-0.16	0.14	0.58	123	25.64	95	89	68	0	5	5	0
	GRAND RAPIDS	51	32	65	27	42	11	0.74	0.01	0.33	0.76	90	31.76	90	88	64	0	3	5	0
	HOUGHTON LAKE	44	28	60	18	36	8	0.62	0.20	0.34	1.14	238	31.55	116	90	78	0	5	5	0
	LANSING	49	31	63	22	40	9	0.51	-0.07	0.19	0.52	78	26.96	90	87	72	0	3	4	0
	MUSKEGON	51	32	66	26	42	10	0.19	-0.47	0.12	0.29	38	28.84	93	80	67	0	3	3	0
	TRAVERSE CITY	47	33	64	25	40	10	0.53	-0.05	0.47	0.69	105	29.56	94	85	61	0	4	3	0
MN	DULUTH	35	21	48	8	28	9	0.07	-0.23	0.07	0.11	31	31.87	105	84	66	0	5	1	0
	INT'L FALLS	30	13	46	-1	22	8	0.12	-0.07	0.08	0.12	55	24.14	103	88	68	0	6	3	0
	MINNEAPOLIS	42	26	55	19	34	11	0.07	-0.20	0.05	0.07	23	28.02	98	86	64	0	6	2	0
	ROCHESTER	43	27	62	17	35	13	0.30	0.00	0.22	0.31	89	23.38	76	81	61	0	5	2	0
	ST. CLOUD	40	21	53	13	30	11	0.09	-0.09	0.04	0.09	45	23.58	89	88	62	0	6	4	0
MS	JACKSON	72	56	77	50	64	14	1.42	0.21	1.41	1.42	102	62.21	120	96	65	0	0	2	1
	MERIDIAN	71	52	75	45	61	10	1.11	-0.11	0.57	1.11	80	54.78	100	100	76	0	0	5	1
	TUPELO	69	54	74	50	61	15	1.53	0.15	1.43	1.53	97	44.21	86	94	74	0	0	2	1
MO	COLUMBIA	59	44	75	36	52	16	0.61	-0.08	0.46	0.61	76	29.62	77	87	58	0	0	3	0
	KANSAS CITY	58	38	74	32	48	13	0.00	-0.44	0.00	0.00	0	20.94	57	82	49	0	1	0	0
	SAINT LOUIS	61	47	75	37	54	16	0.62	-0.16	0.30	0.62	69	30.92	84	87	64	0	0	4	0
	SPRINGFIELD	62	45	74	31	54	15	0.80	-0.14	0.51	0.81	74	30.63	71	92	67	0	1	3	1
MT	BILLINGS	48	30	63	11	39	11	0.07	-0.05	0.05	0.07	50	6.94	49	72	41	0	4	2	0
	BUTTE	37	21	48	2	29	9	0.11	0.00	0.09	0.16	123	8.91	72	87	53	0	7	3	0
	CUT BANK	41	22	50	-1	32	8	0.05	-0.01	0.05	0.05	83	9.05	74	80	50	0	7	1	0
	GLASGOW	***	***	***	***	***	***	***	***	***	***	***	12.74	117	***	***	***	***	***	***
	GREAT FALLS	46	27	58	-2	37	11	0.22	0.11	0.21	0.22	169	12.78	89	67	40	0	4	2	0
	HAVRE	43	23	56	1	33	11	0.17	0.09	0.14	0.17	189	12.59	114	77	63	0	7	2	0
	MISSOULA	41	30	47	15	35	10	0.74	0.50	0.36	0.99	354	14.68	113	87	69	0	3	5	0
NE	GRAND ISLAND	55	28	70	19	42	13	0.00	-0.20	0.00	0.00	0	9.87	39	80	53	0	5	0	0
	LINCOLN	56	25	68	20	40	10	0.00	-0.24	0.00	0.00	0	17.63	63	83	55	0	6	0	0
	NORFOLK	52	28	64	22	40	13	0.04	-0.16	0.04	0.04	17	13.41	51	79	51	0	6	1	0
	NORTH PLATTE	55	19	69	12	37	9	0.00	-0.08	0.00	0.00	0	9.67	50	78	27	0	7	0	0
	OMAHA	54	32	62	28	43	14	0.01	-0.27	0.01	0.02	6	20.78	70	81	61	0	4	1	0
	SCOTTSBLUFF	56	25	68	18	40	12	0.00	-0.14	0.00	0.01	6	6.74	42	67	43	0	7	0	0
	VALENTINE	55	25	68	16	40	14	0.03	-0.06	0.03	0.03	27	10.42	54	71	42	0	6	1	0
NV	ELY	49	26	52	13	37	9	0.16	0.08	0.16	0.16	178	10.67	112	87	59	0	5	1	0
	LAS VEGAS	68	49	72	44	58	9	0.00	-0.06	0.00	0.00	0	4.81	116	63	43	0	0	0	0
	RENO	55	35	59	27	45	10	0.97	0.78	0.72	0.97	441	4.63	68	86	62	0	3	3	1
	WINNEMUCCA	51	28	59	20	40	8	0.73	0.56	0.35	0.73	384	4.86	63	87	71	0	5	3	0
NH	CONCORD	45	25	53	18	35	5	0.51	-0.19	0.24	0.59	73	34.68	98	99	72	0	7	4	0
NJ	NEWARK	53	38	64	30	46	6	0.54	-0.29	0.22	0.54	57	31.82	73	90	71	0	2	5	0
NM	ALBUQUERQUE	61	34	65	30	48	10	0.00	-0.08	0.00	0.00	0	5.34	59	55	24	0	1	0	0
NY	ALBANY	47	28	56	21	37	5	0.59	-0.06	0.21	0.64	86	33.58	93	92	67	0	5	5	0
	BINGHAMTON	46	33	64	22	40	9	0.93	0.17	0.34	0.93	107	35.07	96	87	69	0	3	5	0
	BUFFALO	51	36	65	22	44	11	0.80	-0.12	0.35	0.80	76	29.94	79	90	62	0	2	4	0
	ROCHESTER	51	37	70	24	44	11	0.58	-0.08	0.32	0.58	77	31.13	97	84	62	0	2	3	0
	SYRACUSE	51	35	70	26	43	10	0.98	0.16	0.52	0.98	104	28.52	75	90	59	0	2	5	1
NC	ASHEVILLE	64	40	70	36	52	10	0.03	-0.75	0.02	0.03	3	40.33	91	90	57	0	0	2	0
	CHARLOTTE	66	46	74	42	56	9	0.03	-0.64	0.03	0.03	4	29.88	73	91	49	0	0	1	0
	GREENSBORO	62	44	73	38	53	9	0.17	-0.50	0.16	0.17	22	34.22	84	90	51	0	0	2	0
	HATTERAS	64	51	68	38	58	5	0.61	-0.32	0.54	0.61	58	51.87	96	97	68	0	0	2	1
	RALEIGH	65	45	76	37	55	9	0.06	-0.58	0.05	0.06	8	37.91	93	87	60	0	0	2	0
	WILMINGTON	69	47	76	40	58	6	0.08	-0.75	0.06	0.08	9	45.93	85	98	58	0	0	3	0
ND	BISMARCK	38	19	51	9	29	10	0.12	0.03	0.09	0.12	109	14.38	87	83	70	0	7	2	0
	DICKINSON	42	19	61	5	30	9	0.04	-0.04	0.04	0.04	44	10.20	63	86	50	0	7	1	0
	FARGO	37	19	50	12	28	11	0.10	-0.01	0.06	0.10	77	15.76	76	82	59	0	7	2	0
	GRAND FORKS	31	14	44	6	23	7	0.19	0.08	0.10	0.19	146	16.97	88	88	66	0	7	2	0
	JAMESTOWN	36	17	49	11	26	8	0.03	-0.05	0.02	0.03	33	12.84	71	89	60	0	7	2	0
	WILLISTON	33	14	46	-1	24	7	0.20	0.07	0.15	0.20	133	12.83	93	87	79	0	7	3	0
OH	AKRON-CANTON	51	39	61	26	45	10	1.35	0.62	0.57	1.35	163	35.07	97	90	77	0	2	4	1
	CINCINNATI	58	44	71	29	51	13	2.17	1.41	0.92	2.17	249	35.20	88	91	73	0	2	6	2
	CLEVELAND	51	40	62	27	46	11	1.25	0.45	0.51	1.25	136	41.94	115	92	70	0	1	4	1
	COLUMBUS	54	41	63	27	48	11	1.97	1.24	0.70	1.97	235	33.54	92	96	75	0	2	6	3
	DAYTON	55	41	67	26	48	13	1.35	0.61	0.52	1.35	159	30.17	81	98	74	0	2	5	1
	MANSFIELD	52	38	62	23	45	12	0.96	0.13	0.39	0.96	101	37.26	91	97	72	0	2	4	0

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

Weather Data for the Week Ending December 8, 2012

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	50	36	63	21	43	10	0.33	-0.33	0.12	0.34	45	28.53	91	90	73	0	2	4	0
	YOUNGSTOWN	51	38	61	22	44	10	1.39	0.63	0.48	1.39	160	41.28	115	90	75	0	2	4	0
OK	OKLAHOMA CITY	65	44	79	37	54	12	0.00	-0.41	0.00	0.00	0	28.80	84	85	46	0	0	0	0
	TULSA	65	45	76	31	55	12	0.05	-0.62	0.05	0.05	6	27.93	69	84	59	0	1	1	0
OR	ASTORIA	51	44	55	39	47	3	3.16	0.64	0.94	4.04	140	80.76	135	92	77	0	0	7	3
	BURNS	44	28	51	20	36	9	0.61	0.33	0.35	0.65	210	9.24	96	87	73	0	6	3	0
	EUGENE	52	41	58	34	46	5	1.87	-0.19	0.99	2.62	111	45.36	101	95	87	0	0	6	2
	MEDFORD	49	39	56	30	44	5	2.38	1.66	1.08	3.19	389	24.39	150	93	74	0	1	3	2
	PENDLETON	51	39	60	33	45	9	0.44	0.09	0.32	0.65	163	13.90	119	73	63	0	0	2	0
	PORTLAND	51	43	57	36	47	5	1.89	0.50	1.16	2.61	164	45.48	138	93	82	0	0	6	1
	SALEM	51	42	58	36	47	6	2.16	0.57	1.20	2.94	162	49.99	141	94	83	0	0	6	2
PA	ALLENTOWN	51	34	63	24	43	7	0.47	-0.33	0.25	0.47	51	37.17	87	91	75	0	3	4	0
	ERIE	53	39	64	26	46	10	1.39	0.46	0.71	1.39	131	36.26	90	86	73	0	2	5	1
	MIDDLETOWN	54	36	67	26	45	8	0.37	-0.44	0.33	0.37	40	41.77	109	94	64	0	3	4	0
	PHILADELPHIA	55	39	67	30	47	6	0.40	-0.34	0.32	0.40	47	31.91	81	89	68	0	2	4	0
	PITTSBURGH	54	39	65	24	46	10	1.56	0.86	0.97	1.56	195	37.77	106	93	67	0	2	4	1
	WILKES-BARRE	51	36	63	25	43	8	0.64	-0.01	0.25	0.64	85	34.66	97	90	67	0	3	5	0
	WILLIAMSPORT	49	36	66	24	43	9	0.84	0.19	0.50	0.84	111	31.46	80	86	71	0	3	5	1
RI	PROVIDENCE	53	33	60	24	43	6	0.47	-0.48	0.37	0.49	45	36.12	83	89	66	0	3	4	0
SC	BEAUFORT	71	49	76	46	60	7	0.04	-0.54	0.01	0.04	6	33.15	70	98	60	0	0	4	0
	CHARLESTON	72	50	78	48	61	8	0.00	-0.63	0.00	0.00	0	40.41	82	99	57	0	0	0	0
	COLUMBIA	70	48	76	44	59	10	0.00	-0.64	0.00	0.00	0	39.24	86	90	62	0	0	0	0
	GREENVILLE	67	48	73	43	57	11	0.05	-0.78	0.03	0.05	5	33.09	70	88	52	0	0	2	0
SD	ABERDEEN	42	19	56	16	31	11	0.57	0.51	0.33	0.57	950	14.46	73	83	59	0	7	2	0
	HURON	45	23	60	17	34	11	0.72	0.63	0.52	0.72	720	19.26	93	86	51	0	6	2	1
	RAPID CITY	52	26	65	12	39	12	0.08	0.02	0.08	0.08	133	11.23	69	75	40	0	6	1	0
	SIOUX FALLS	48	26	61	22	37	15	0.12	-0.03	0.07	0.12	67	16.16	66	83	58	0	6	2	0
TN	BRISTOL	64	36	69	29	50	10	0.23	-0.55	0.21	0.23	26	42.38	109	97	48	0	2	2	0
	CHATTANOOGA	68	47	72	41	57	12	0.26	-0.87	0.23	0.26	20	45.48	89	92	58	0	0	2	0
	KNOXVILLE	66	44	73	39	55	11	0.04	-0.98	0.02	0.04	3	47.53	106	91	53	0	0	3	0
	MEMPHIS	68	56	75	49	62	16	0.44	-1.02	0.33	0.44	26	33.62	66	89	62	0	0	4	0
	NASHVILLE	66	52	75	41	59	16	0.74	-0.36	0.49	0.74	59	41.86	93	84	58	0	0	4	0
TX	ABILENE	73	46	80	33	60	13	0.00	-0.24	0.00	0.00	0	23.14	102	72	46	0	0	0	0
	AMARILLO	67	35	78	29	51	12	0.00	-0.08	0.00	0.00	0	11.79	61	66	22	0	2	0	0
	AUSTIN	78	53	83	40	66	12	0.01	-0.51	0.01	0.01	2	34.31	108	89	63	0	0	1	0
	BEAUMONT	77	60	82	54	69	13	3.42	2.29	2.58	3.42	265	60.78	109	99	64	0	0	6	2
	BROWNSVILLE	84	62	87	54	73	10	0.31	0.03	0.30	0.31	97	21.38	80	99	58	0	0	2	0
	CORPUS CHRISTI	85	61	89	48	73	13	0.02	-0.34	0.01	0.02	5	18.79	61	91	57	0	0	2	0
	DEL RIO	76	54	79	45	65	11	0.00	-0.17	0.00	0.00	0	13.83	78	83	66	0	0	0	0
	EL PASO	71	43	74	37	57	10	0.00	-0.15	0.00	0.00	0	5.94	67	42	20	0	0	0	0
	FORT WORTH	73	53	83	42	63	14	0.00	-0.53	0.00	0.00	0	29.30	89	86	42	0	0	0	0
	GALVESTON	75	64	79	61	70	10	0.63	-0.18	0.34	0.63	68	44.96	109	100	78	0	0	5	0
	HOUSTON	78	59	84	54	68	12	0.17	-0.68	0.10	0.17	18	39.63	88	100	72	0	0	2	0
	LUBBOCK	70	37	79	31	53	11	0.00	-0.14	0.00	0.00	0	10.75	59	64	25	0	1	0	0
	MIDLAND	74	41	81	34	57	10	0.00	-0.13	0.00	0.00	0	12.72	89	72	34	0	0	0	0
	SAN ANGELO	78	46	81	34	62	14	0.00	-0.19	0.00	0.00	0	21.77	108	77	52	0	0	0	0
	SAN ANTONIO	77	57	79	46	67	13	0.04	-0.40	0.03	0.04	8	39.07	124	96	55	0	0	2	0
	VICTORIA	82	56	85	48	69	12	0.01	-0.54	0.01	0.01	2	26.69	70	98	61	0	0	1	0
	WACO	75	53	82	41	64	13	0.00	-0.63	0.00	0.00	0	31.52	101	89	58	0	0	0	0
	WICHITA FALLS	70	43	84	36	56	11	0.00	-0.36	0.00	0.00	0	19.20	70	86	51	0	0	0	0
UT	SALT LAKE CITY	49	35	58	26	42	9	0.46	0.18	0.21	0.47	152	11.74	75	84	57	0	1	3	0
VT	BURLINGTON	46	33	56	26	40	11	0.59	0.02	0.29	0.61	94	33.25	96	84	62	0	3	5	0
VA	LYNCHBURG	61	38	71	28	49	8	0.02	-0.70	0.01	0.02	2	27.19	66	88	50	0	1	2	0
	NORFOLK	64	44	75	37	54	7	0.04	-0.57	0.03	0.04	6	43.90	101	92	60	0	0	2	0
	RICHMOND	63	41	75	31	52	8	0.15	-0.49	0.13	0.15	20	33.85	82	91	64	0	1	2	0
	ROANOKE	63	39	73	31	51	9	0.00	-0.67	0.00	0.00	0	30.33	75	85	53	0	1	0	0
	WASH/DULLES	59	37	71	26	48	9	0.03	-0.67	0.02	0.03	4	32.78	83	86	63	0	2	2	0
WA	OLYMPIA	48	40	51	34	44	5	3.10	1.17	0.97	3.77	171	53.62	119	94	85	0	0	6	3
	QUILLAYUTE	48	39	52	35	43	2	4.14	0.67	1.18	5.43	136	107.43	118	96	84	0	0	7	4
	SEATTLE-TACOMA	48	42	53	38	45	3	2.00	0.62	0.77	2.39	150	43.80	133	84	76	0	0	6	3
	SPOKANE	43	33	49	21	38	9	0.86	0.31	0.39	1.05	167	19.79	131	92	65	0	3	5	0
	YAKIMA	51	34	56	27	42	11	0.75	0.45	0.46	0.76	224	7.95	110	83	65	0	3	2	0
WV	BECKLEY	61	42	66	27	52	14	0.19	-0.50	0.09	0.19	24	41.36	105	85	58	0	2	3	0
	CHARLESTON	62	43	70	27	53	12	1.07	0.25	0.52	1.07	114	37.70	90	92	59	0	1	6	1
	ELKINS	59	34	69	22	46	10	0.95	0.14	0.37	0.95	102	43.17	99	98	59	0	3	6	0
	HUNTINGTON	61	45	70	29	53	13	1.33	0.56	0.60	1.33	151	37.54	94	95	64	0	1	4	1
WI	EAU CLAIRE	42	25	60	11	33	11	0.21	-0.08	0.19	0.21	64	22.62	72	91	59	0	5	3	0
	GREEN BAY	44	31	62	21	38	12	0.17	-0.22	0.15	0.18	39	29.16	103	84	66	0	5	2	0
	LA CROSSE	45	28	64	18	37	10	0.14	-0.21	0.11	0.15	37	24.85	79	84	56	0	4	2	0
	MADISON	48	32	65	19	40	13	0.02	-0.43	0.02	0.16	31	23.92	75	83	63	0	3	1	0
	MILWAUKEE	49	34	65	24	41	10	0.43	-0.14	0.29	0.44	68	25.86	78	86	66	0	2	2	0
WY	CASPER	48	26	57	11	37	11	0.07	-0.07	0.05	0.07	44	7.57	60	66	39	0	5	2	0
	CHEYENNE	51	27	61	17	39	10	0.01	-0.10	0.01	0.01	8	9.75	64	55	39	0	6	1	0
	LANDER	47	24	62	16	36	13	0.02	-0.13	0.01	0.02	12	6.22	48	72	26	0	7	2	0
	SHERIDAN	46	19	63	1	32	8	0.29	0.15	0.16	0.29	181	9.32	66	76	52	0	7	2	0

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

November Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Dry weather from South Dakota to Texas left U.S. winter wheat conditions at their lowest levels for late November since records of that type were initiated by USDA/NASS in 1986. By November 25, more than one-quarter (26 percent) of the wheat was rated very poor to poor, fueled by abysmal crop ratings in South Dakota (64 percent very poor to poor), Nebraska (46 percent), Oklahoma (44 percent), Texas (40 percent), Colorado (34 percent), and Kansas (25 percent).

In contrast, beneficial precipitation fell across northern California and from the Pacific Northwest to Montana and North Dakota. Still, winter wheat struggled to emerge on the northern Plains due to the seasonal decline in temperatures. By November 25, a significant portion of the wheat had not yet emerged in South Dakota (60 percent emerged) and Montana (68 percent).

Toward month's end, precipitation intensity increased across northern California and the Northwest. However, mild weather accompanied the storminess, limiting high-elevation snowfall. As a result, the end-of-month water content of the Sierra Nevada snow pack stood at just 4 inches, about 85 percent of normal for November 30.

Most areas from the Mississippi Valley to the East Coast experienced a cool, dry November. In the northern Mid-Atlantic region, dry weather aided recovery efforts from Superstorm Sandy. Farther south, mostly dry conditions promoted Southeastern fieldwork—including winter wheat planting and cotton and soybean harvesting—but caused renewed drought intensification in Alabama and the southern Atlantic States.

Monthly temperatures averaged more than 5°F below normal in portions of the southern Atlantic region, but generally ranged from 5 to 10°F above normal across the central and southern High Plains and adjacent areas of the Intermountain West.

Historical Perspective: According to preliminary information provided by the National Climatic Data Center, the contiguous U.S. experienced its 20th-warmest, 8th-driest November on record. The nation's average temperature of 44.0°F was 2.1°F above the 1901-2000 mean, while the average precipitation of 1.19 inches was just 56 percent of normal. It was the nation's driest November since 1976, when an average of 1.08 inches fell.

State temperature rankings ranged from the tenth-coldest November in North Carolina to the third-warmest November in Colorado (figure 1). In addition to Colorado, top-ten rankings for November warmth were noted in Arizona, New Mexico, Utah, and Wyoming. Meanwhile, near-record November dryness across parts of the South and East contrasted with relatively wet conditions in the Northwest. Precipitation rankings ranged from the second-driest November in Florida, New Hampshire, New Jersey, Vermont, and West Virginia to the 29th-wettest November in Montana (figure 2). Overall, top-ten rankings for November dryness were recorded in Colorado, Texas, and 20 of the 26 states east of the Mississippi River.

Figure 1

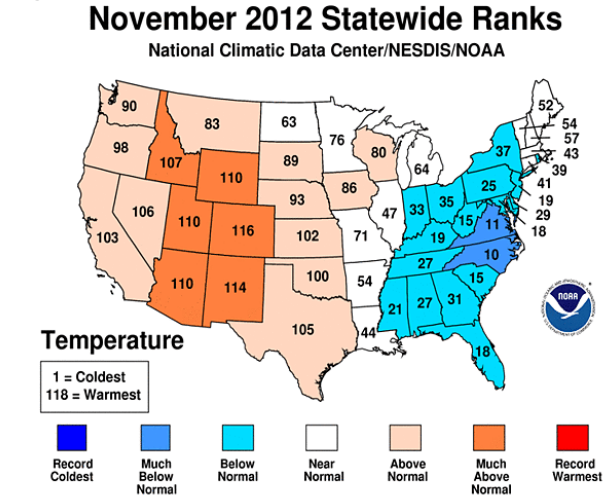
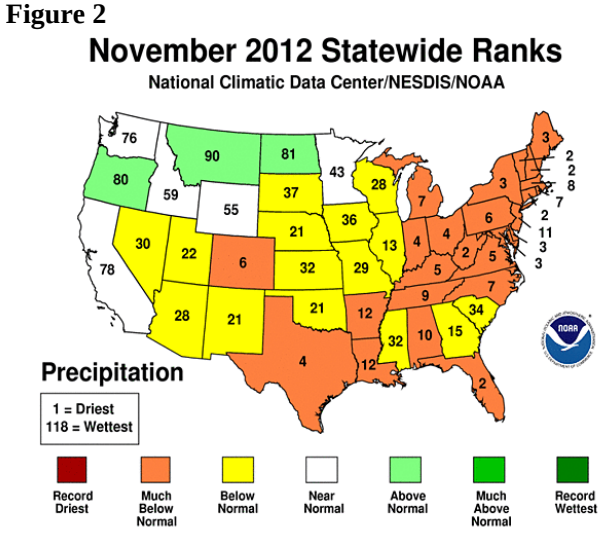


Figure 2



Summary: In Texas, November opened with consecutive daily-record highs in Dallas-Ft. Worth (88 and 87°F) and Wichita Falls (87°F both days). On November 2, highs

soared to 90°F in Ponca City, OK, and Childress, TX, setting daily records in both locations. Corpus Christi, TX (90 and 91°F), posted consecutive daily-record highs on November 2-3. Meanwhile, Wichita, KS (86°F on November 2), tied a monthly record originally set on November 8, 2006. Warmth also reached the Southeast, where Tallahassee, FL, and Columbus, GA (both 86°F), tallied daily-record highs for November 3. In contrast, chilly conditions prevailed in the East in early November. On November 6, Northeastern daily-record lows dipped to 20°F in Hartford, CT; 24°F in Providence, RI; and 27°F in Newark, NJ. Farther south and west, daily-record highs for November 4 included 95°F in Thermal, CA, and 85°F in Savannah, GA. By November 5, daily-record highs in California soared to 98°F in Camarillo and 96°F in Death Valley, Salinas, Palm Springs, and Thermal. For Death Valley, it was the warmest November day since November 1, 1997, when it was also 96°F. Warmth spread farther inland by November 6, when highs climbed to daily-record levels in Mexican Hat, UT (76°F), and Reno, NV (75°F). In southern Arizona, record-setting highs for November 7 reached 96°F in Ajo and 90°F in Tucson. In advance of a developing storm, warmth also returned to the Plains, where daily-record highs surged to 87°F (on November 8) in Childress, TX, and 84°F (on November 9) in Medicine Lodge, KS. During a final day of Plains and Midwestern warmth on November 10, highs rose to daily-record levels in St. Louis, MO (81°F); Grand Island, NE (79°F); Des Moines, IA (78°F); and Rochester, MN (75°F). Farther west, suddenly colder weather resulted in daily-record lows for November 10 in several locations, including Olympia, WA (20°F); Paso Robles, CA (27°F); and Red Bluff, CA (32°F). Paso Robles had posted consecutive daily-record highs (90 and 91°F, respectively) on November 5 and 6.

Little more than a week after Superstorm Sandy hit, another storm formed east of the Mid-Atlantic coast on November 7-8. Storm-total snowfall reached a foot at isolated locations in coastal counties from Ocean County, NJ, to New Haven County, CT. On Long Island, Islip, NY, received 4.2 inches of snow and reported a northerly wind gust to 48 mph. Similarly, November 7-8 snowfall totaled 8.3 inches (with a wind gust to 36 mph) in Bridgeport, CT; 6.4 inches (with a wind gust to 44 mph) in Worcester, MA; and 6.2 inches (with a wind gust to 38 mph) in Newark, NJ. Both Bridgeport and Newark set single-storm snowfall records for November (previously, 6.6 and 5.7 inches, respectively, on November 22-23, 1989). New York's Central Park (4.3 inches on November 7 and a 2-day storm total of 4.7 inches) experienced its earliest 4-inch snowfall, breaking the record set with a 4.4-inch accumulation on November 23, 1938. In coastal Massachusetts, peak wind gusts on November 7 were clocked to 64 mph on Nantucket Island and 62 mph on Martha's Vineyard. Just offshore, a gust to 76 mph was recorded at the Buzzards Bay buoy, west of Martha's Vineyard.

Farther west, snow arrived in Montana on November 8. Great Falls, MT, received 15.8 inches of snow (1.22 inches of liquid) from November 8-10. Similarly, November 8-10 snowfall totaled 17.0 inches (1.43 inches of liquid) in Helena, MT. Salt Lake City, UT, also received heavy snow, with 15.2 inches (1.53 inches of liquid) falling from November 9-11. Elsewhere in northern Utah, isolated November 9-11 snowfall totals in excess of 4 feet were reported in locations such as Alta (54 inches) and Snowbird (51 inches). By November 10, heavy snow spread across North Dakota, where daily-record totals included 9.1 inches in Bismarck and 8.0 inches in Williston. Some North Dakota totals exceeded a foot, with an unofficial amount of 18 inches reported in Crosby. Meanwhile, there were some unusual November tornadoes. In Tulare County, CA, a weak tornado on November 9 was the county's first since January 27, 2008. The following day near Minneapolis-St. Paul, MN, an outbreak of four weak tornadoes represented the state's second tornado outbreak since 1950—a single tornado occurred on November 1, 2000. Farther south, high winds raked portions of the southern Plains, where a November 10 gust to 63 mph was reported in Dalhart, TX.

As mid-month approached, fleeting warmth in the East contrasted with sharply colder conditions in the West. In western New York, Buffalo collected consecutive daily-record highs (70°F both days) on November 11 and 12. Highs also reached record-setting levels for November 11 in locations such as Morgantown, WV (75°F), and Flint, MI (70°F). Warmth also persisted in coastal Texas, where Corpus Christi (89°F on November 11) tied a daily-record high. In Vermont, Burlington's warmth also led to consecutive daily-record highs (70 and 65°F, respectively) on November 12 and 13. Meanwhile, cold air swept into the West. Readings plunged to sub-zero, daily-record lows in several locations, including Shelby, MT (-15°F on November 11); Stanley, ID (-6°F on November 11); and Alamosa, CO (-1 and -5°F, respectively, on November 11 and 12). In California, daily-record lows for November 11 dipped to 26°F in Paso Robles and 31°F in Stockton. A day later, cold conditions reached the Plains, where Dalhart, TX (16°F on November 12), collected a daily-record low. Eventually, cold air settled into the Southeast, where Greenwood, MS (27°F on November 13), posted a daily-record low. Little Rock, AR, recorded its first freeze of the autumn on November 13, a day after Rochester, MN, experienced its first sub-freezing maximum temperature (27°F on November 12) since March 4.

As colder air arrived, rainfall reached daily-record levels for November 11 in locations such as Little Rock, AR (1.30 inches); Memphis, TN (1.23 inches); and Kansas City, MO (1.16 inches). Two days later, Virginia's Dulles Airport received a daily-record amount (0.87 inch) for November 13, along with a trace of snow. Earlier, on November 11, Rochester, MN, had also received its first trace of snow of the season, followed by its first measurable snowfall (0.1 inch) on November 12. Rochester's latest first trace of snow remains November 20, 1953. Showers lingered for several days near the southern Atlantic Coast, where Charleston, SC (0.95 inch), registered a daily-record amount for November 15. Heavy rain fell along the coast as late as November 18, when Wilmington, NC (2.33 inches), netted a daily-record total. Meanwhile, the focus for heavy precipitation began to shift into the West. November 17 featured daily-record totals in several locations, including Redding, CA (2.40 inches), and Burns, OR (0.54 inch). By November 19, Seattle, WA (2.13 inches), collected a record-setting total. High winds accompanied the Northwestern storminess, with a gust to 114 mph clocked during the morning of November 19 on Naselle Ridge in southwestern Washington's Willapa Hills. Widespread gusts of 70 to 100 mph were reported along the Oregon coast on the 19th, with Yaquina Head reporting a gust to 98 mph. Northwestern precipitation was persistent, resulting in daily-record totals in locations such as Roseburg, OR (2.19 inches on November 20), and McCall, ID (1.29 inches on November 21). Outside the Northwest, most areas of the nation experienced favorable weather during the busy Thanksgiving travel season. Across the nation's mid-section, however, fog created some travel problems. On Thanksgiving morning (November 22), for example, fog contributed to a chain-reaction accident on I-10 near Beaumont, TX. Farther north, the period before Thanksgiving featured a prolonged period of dense fog in parts of the Midwest. In Rockford, IL, the visibility was one-quarter mile or less for 13 consecutive hours on November 20-21. Meanwhile, snowy, breezy conditions grazed the nation's northern tier. In northern Minnesota, November 22-24 snowfall included 7.0 inches in Duluth and 4.9 inches in International Falls.

As the month progressed, record-setting warmth briefly exploded across the nation's mid-section in advance of an onslaught of Pacific storms. Chadron, NE, posted consecutive daily-record highs (70 and 73°F, respectively) on November 20 and 21. Rochester, MN (70°F on November 21), reached the 70-degree mark later than ever before (previously, 71°F on November 16, 1953). Other record-setting highs for November 21 included 78°F in both Kennebec, SD, and McAlester, OK. On November 22, enough warmth lingered on the Plains to result in the warmest Thanksgiving Day on record in Wichita, KS (75°F; previously, 71°F on November 25, 1965). On Thanksgiving Day, however, most of the record warmth shifted into the Great Lakes region, where daily-record highs for November 22 reached 68°F in Pellston, MI, and 64°F in La Crosse, WI. For La Crosse, it was the warmest Thanksgiving Day since November 26, 1914, when the high reached 65°F. Two days later, record-setting highs for November 24 soared to 77°F in Colby, KS, and 73°F in Yuma, CO.

Late in the month, snow squalls affected the Great Lakes region. Sault Ste. Marie, MI, received 16.4 inches of snow from November 25-29, including a daily-record total of 8.0 inches on the 26th. Despite the late-month snow, the Lake Michigan-Huron system fell to a November-record surface elevation of 576.21 feet above mean sea level by month's end—nearly 30 inches below the long-term average of 578.70 feet. The previous November record low of 576.30 feet had been set in 1964. Indeed, many parts of the nation concluded a very dry November. Records for November dryness were set in locations such as Sanford, FL (0.02 inch; previously, 0.05 inch in 1960); South Bend, IN (0.26 inch; previously, 0.37 inch in 1904 and 1917); Hartford, CT (0.40 inch; previously, 0.51 inch in 1976); and Elkins, WV (0.48 inch; previously, 0.73 inch in 1914). In Texas, Austin (Camp Mabry) received no November precipitation, not even a trace, for only the fourth time on record; the other occurrences were 1861, 1894, and 1897. Elsewhere in Texas, Waco (0.06 inches in October and November) completed its driest 2-month period since July-August 1924, when a only trace of rain fell. With a trace of rain, Waco also reported its driest November since 1903, when no precipitation occurred. Farther north, Pittsburgh, PA (0.28 inch), registered its driest November since 1917 and driest month since September 1985. In stark contrast, heavy precipitation struck parts of northern California and the Northwest. On November 29, daily-record totals included 4.14 inches in Crescent City, CA; 3.89 inches in Mt. Shasta City, CA; and 2.22 inches in Medford, OR. Five-day (November 28 - December 2) rainfall totals in those locations reached 7.97 inches in Crescent City, 9.36 inches in Mt. Shasta City, and 4.39 inches in Medford. A few 15- to 20-inch totals were noted during the 5-day period in the Sierra Nevada, southern Cascades, and coastal ranges of northern California, with additional precipitation falling from December 3-5.

Although cold weather covered the South and East in late November, few records were set. In northern Florida, however, Jacksonville (30°F) recorded its first freeze of the autumn on November 25—eleven days earlier than the average date of December 6. Later, enough cold air settled

across the nation's mid-section to produce a daily-record low (10°F on November 27) in St. Joseph, MO. Meanwhile, warmth expanded across the western half of the nation. In western Texas, Lubbock registered three consecutive daily-record highs (78, 81, and 79°F) from November 29 - December 1. Elsewhere in Texas, Corpus Christi tallied consecutive daily-record highs (85 and 87°F, respectively) on November 30 - December 1.

Cold weather covered much of the Alaskan mainland during November, holding temperatures as much as 10°F below normal. Drier-than-normal conditions accompanied the cold weather in most locations. In fact, Nome (0.02 inch, or 1 percent of normal) completed its driest November on record, previously set with a 0.03-inch total in 1939, 1962, and 2001. Precipitation was heavier and more frequent in southeastern Alaska, where Annette Island received a monthly total of 12.40 inches (101 percent of normal). Although no temperature records were set early in the month, readings on November 7 plunged to -35°F in Chicken; -34°F in Tok; and -30°F in Northway. During a brief period of milder weather, King Salmon warmed from -3°F on November 7 to a daily-record high of 50°F on November 9. Later, cold conditions intensified. Temperatures dipped below -50°F on 3 consecutive days (November 29 - December 1) in Chicken, where the lowest reading was -56°F on December 1.

Due to dry conditions in Hawaii, unusually low overnight temperatures were noted from time to time. For example, Kahului, Maui (62°F on November 1), noted a daily-record low on November 1. The following day, Kahului registered 61°F—not a record for November 2. Later, Kahului ended the month as it began—with a daily-record low (59°F on November 30). Conditions were especially dry across the western Hawaiian islands, where Lihue, Kauai, tied a November record for dryness. Lihue's record, 0.58 inch (13 percent of normal), had been originally set in 1963. The dry November capped an autumn with sub-par rainfall. At the state's major airport stations, September-November rainfall ranged from 0.61 inch (16 percent of normal) at Kahului to 13.31 inches (38 percent) at Hilo, on the Big Island.

Fieldwork

Fieldwork summary provided by USDA/NASS

November temperatures were near to above average in much of the country, promoting crop maturity in remaining row crops, but—when coupled with below-average moisture—maintaining stress on recently sown winter wheat. Conversely, monthly averages in the Atlantic Coast States were at least 6°F below normal. Monthly moisture totals were well below average across much of the nation. Most notably, portions of the central and southern Great Plains received less than 5 percent of their normal November precipitation, limiting seed germination and growth of the 2013 winter wheat crop.

Following an early start to spring planting and rapid crop development throughout the summer, corn producers had harvested 95 percent of this year's crop by November 4. This was 10 percentage points ahead of last year, 24 points ahead of the 5-year average, and the quickest harvest pace since 1987. As the month began, saturated fields resulting from Hurricane Sandy limited fieldwork in portions of Ohio and Pennsylvania; however, overall progress remained ahead of normal.

Sorghum was 97 percent mature by November 4, two percentage points ahead of both last year and the 5-year average. Above-average early-month temperatures, coupled with below-average rainfall, promoted a rapid harvest pace in portions of the Great Plains and Four Corners regions. By November 18, producers had harvested 95 percent of the nation's crop, 4 percentage points ahead of last year and 8 points ahead of the 5-year average.

Producers had sown 92 percent of the 2013 winter wheat crop by November 4, two percentage points ahead of the 5-year average. Unfavorably dry conditions persisted in Kansas, leaving many recently sown fields in need of increased moisture for proper seed germination and crop establishment. In Texas, irrigation was active in some areas, while dryland acreage was beginning to show signs of drought stress. By November 11, nationwide emergence had advanced to 79 percent complete, 2 percentage points behind both last year and the 5-year average. Despite increased moisture across the nation's northern tier at mid-month, doggedly dry weather throughout much of the Great Plains maintained drought stress on the developing crop. By November 18, the most significant emergence delays were evident in Montana and South Dakota, where overall progress was 28 and 46 percentage points behind normal, respectively. Adverse weather continued to blanket the nation's heartland throughout the month, causing crop conditions to further deteriorate. Most notably, good to excellent condition ratings in seven of the top ten winter wheat-producing states totaled 29 percentage points or less by November 25. Overall, 33 percent of the crop was reported in good to excellent condition, compared with 39 percent on November 4 and 52 percent at the same time last year. This represented the lowest good to excellent rating for this week since condition ratings began in 1986.

By November 4, rice producers had harvested 95 percent of the nation's crop, on par with both last year and the 5-year average. Producers in California remained busy harvesting their remaining crop, while activities in the Delta and Texas centered around preparing fields for next season.

Despite late-October rainfall that saturated soils and limited fieldwork in portions of the eastern Corn Belt, soybean producers nationwide had harvested 93 percent of this year's crop by November 4. This was 7 percentage points ahead of the 5-year average. With the exception of North Carolina, where a large portion of the crop is grown following winter wheat, harvest was complete or nearing completion in the 18 major estimating states by November 11.

Sunflower producers had harvested 88 percent of this year's crop by November 4, twenty eight percentage points ahead of the 5-year average. Early month rain and snow limited fieldwork in North Dakota, the largest sunflower-producing state, allowing producers to harvest just 2 percent of their remaining crop during the week ending November 11. Nationally, 97 percent of the crop was harvested by November 18, slightly ahead of last year and 11 percentage points ahead of the 5-year average.

Peanut harvest was advancing quickly in portions of the southern Great Plains and Southeast under sunny skies and dry weather in early November. By November 4, producers had dug and combined 87 percent of the nation's crop, 8 percentage points ahead of last year and 10 points ahead of the 5-year average. The first fall frost hit areas of the Southeast as far south as northern Florida during the week ending November 11; however, harvest remained steady. Nationwide, 95 percent of this year's crop was harvested by November 11, nine percentage points ahead of both last year and the 5-year average.

With mild, dry weather across much of the Southeast providing ample time for fieldwork, cotton producers nationwide had harvested 64 percent of this year's crop by November 4. This was 6 percentage points ahead of the 5-year average. With harvest ongoing, defoliation was active in many late-planted cotton fields in northern and western Texas early in the month. Mostly dry weather throughout the Cotton Belt favored rapid fieldwork into mid-November. Where harvest was complete, producers readied fields for spring planting. By November 25, eighty-nine percent of the nation's cotton crop was harvested, 4 percentage points ahead of the 5-year average. In Texas, harvest continued in the Plains and Trans Pecos regions.

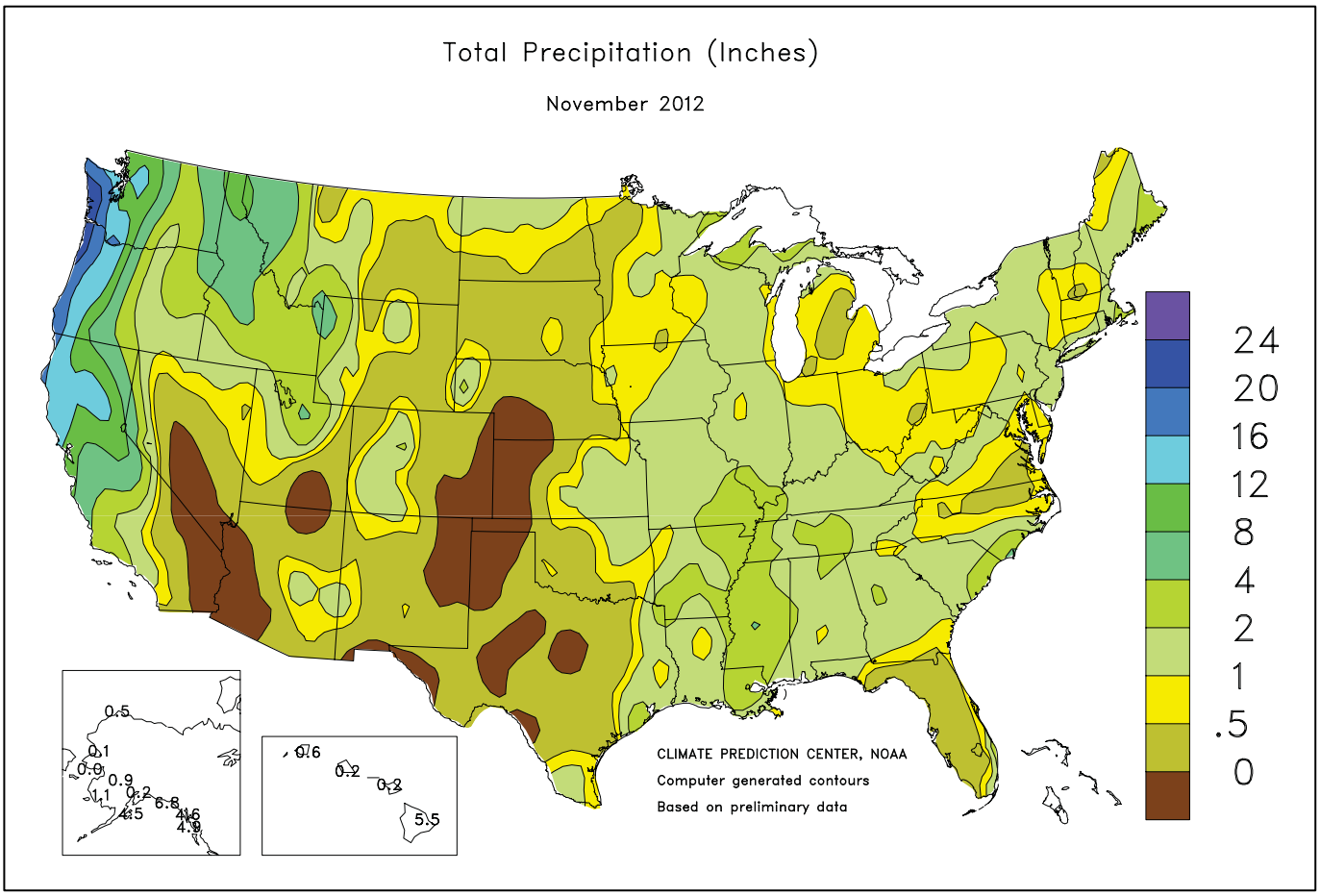
Ninety-one percent of this year's sugarbeet crop had been dug by November 4, two percentage points behind last year and slightly behind the 5-year average. Harvest in Minnesota and North Dakota neared completion, while rapid progress was evident in Idaho and Michigan. In Michigan, harvest gained speed as cooler weather delivered by the remnants of Hurricane Sandy improved conditions for long-term piling. During the week ending November 11, producers in Michigan harvested 33 percent of the state's crop. Nationally, 99 percent of the sugarbeet crop was harvested by November 11, slightly ahead of last year and 2 percentage points ahead of the 5-year average.

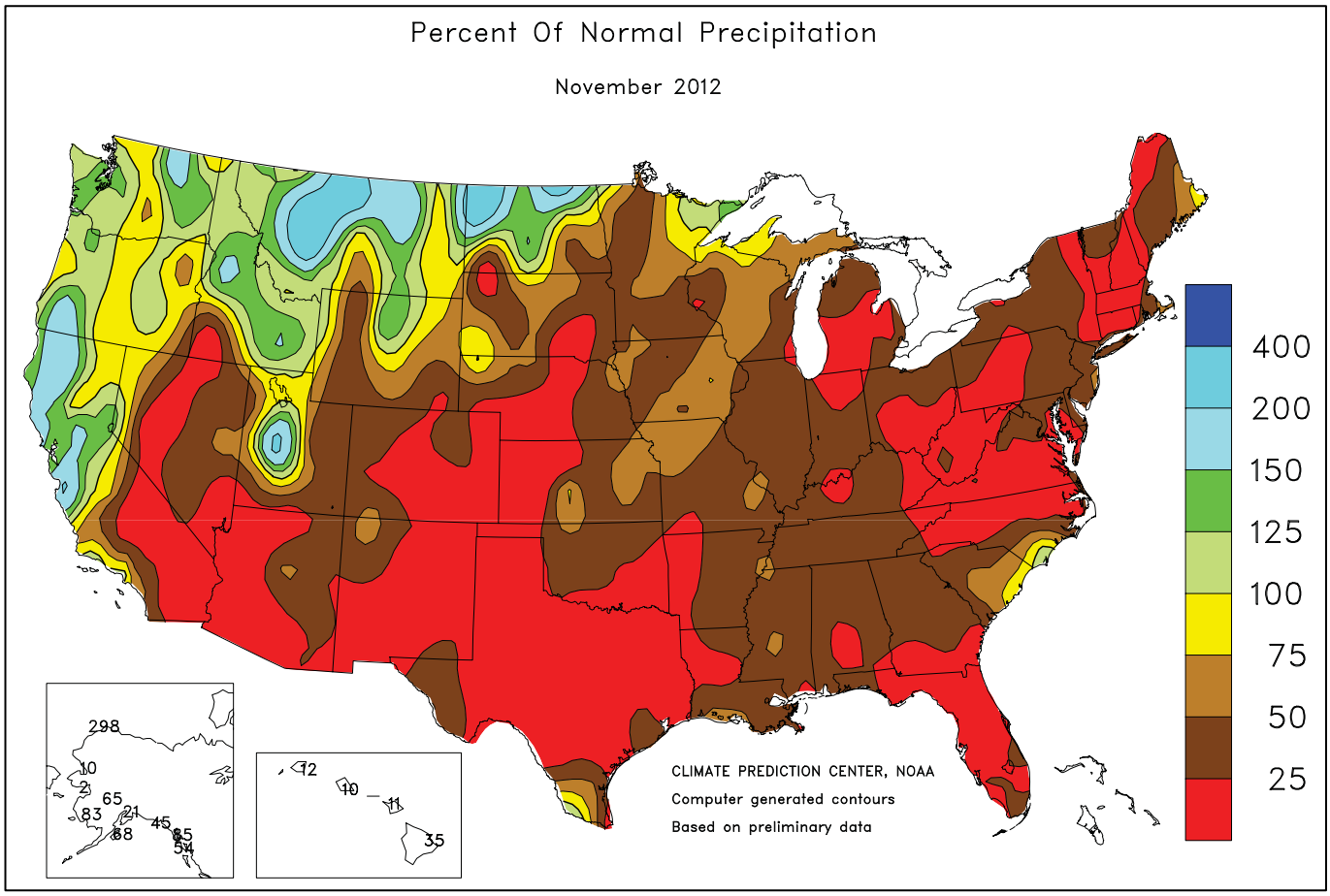
U.S. Crop Production Highlights

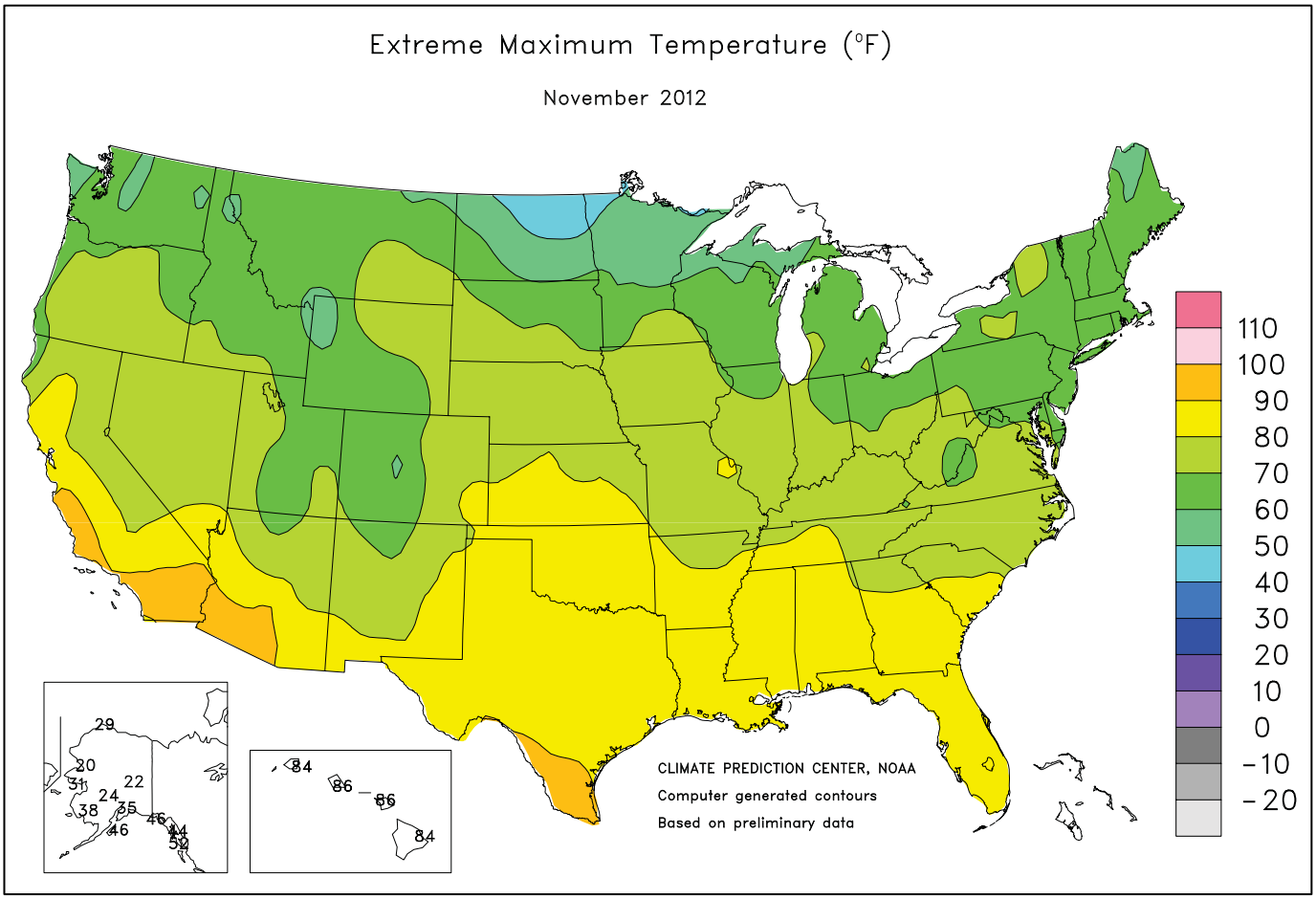
The following information was released by USDA's Agricultural Statistics Board on December 11, 2012. Forecasts refer to December 1.

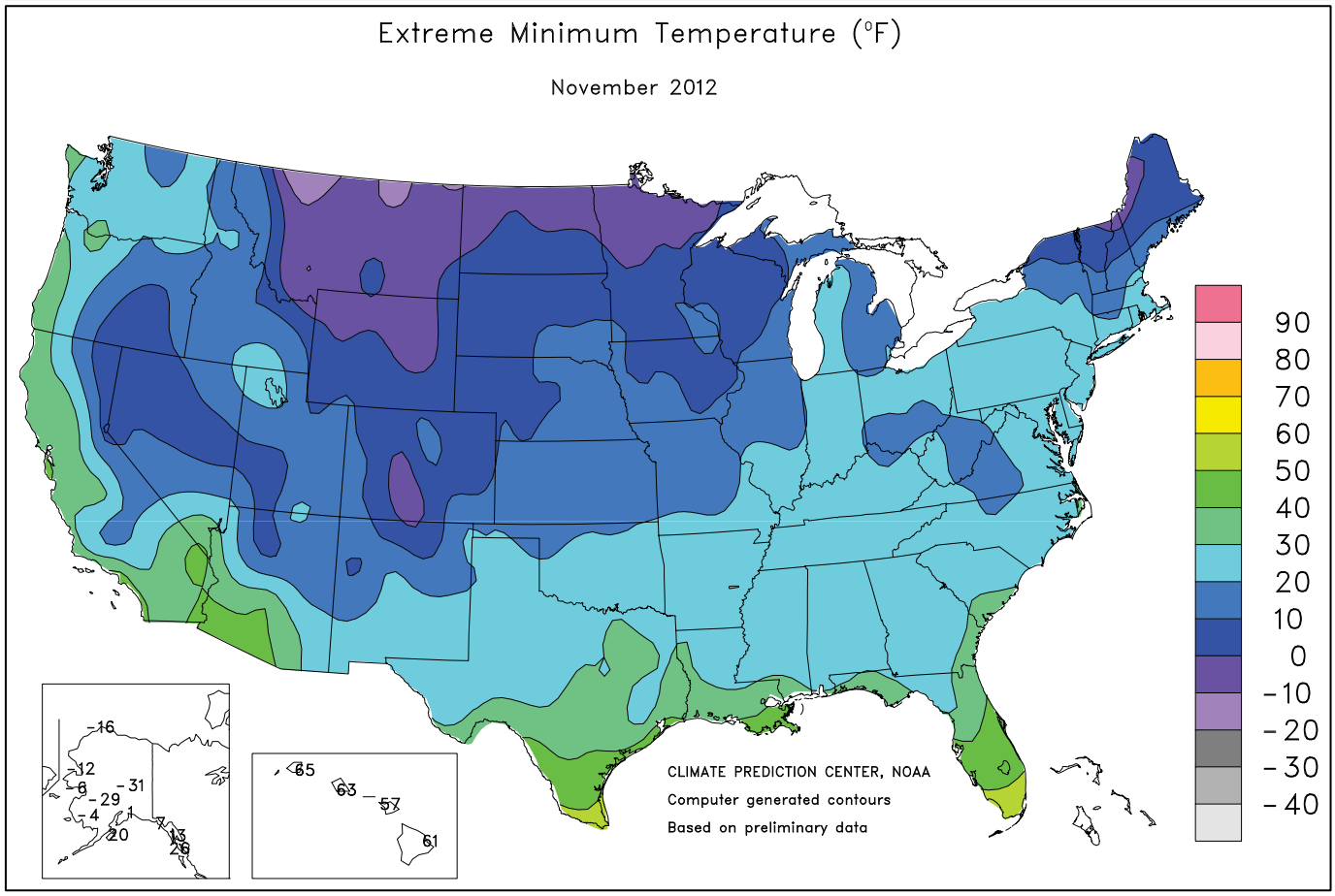
All cotton production is forecast at 17.3 million 480-pound bales, down 1 percent from last month but up 11 percent from last year. Yield is expected to average 793 pounds per acre, up 3 pounds from last year. Upland cotton production is forecast at 16.6 million 480-pound bales, up 13 percent from 2011. Pima cotton production, forecast at 657,000 bales, was carried forward from last month.

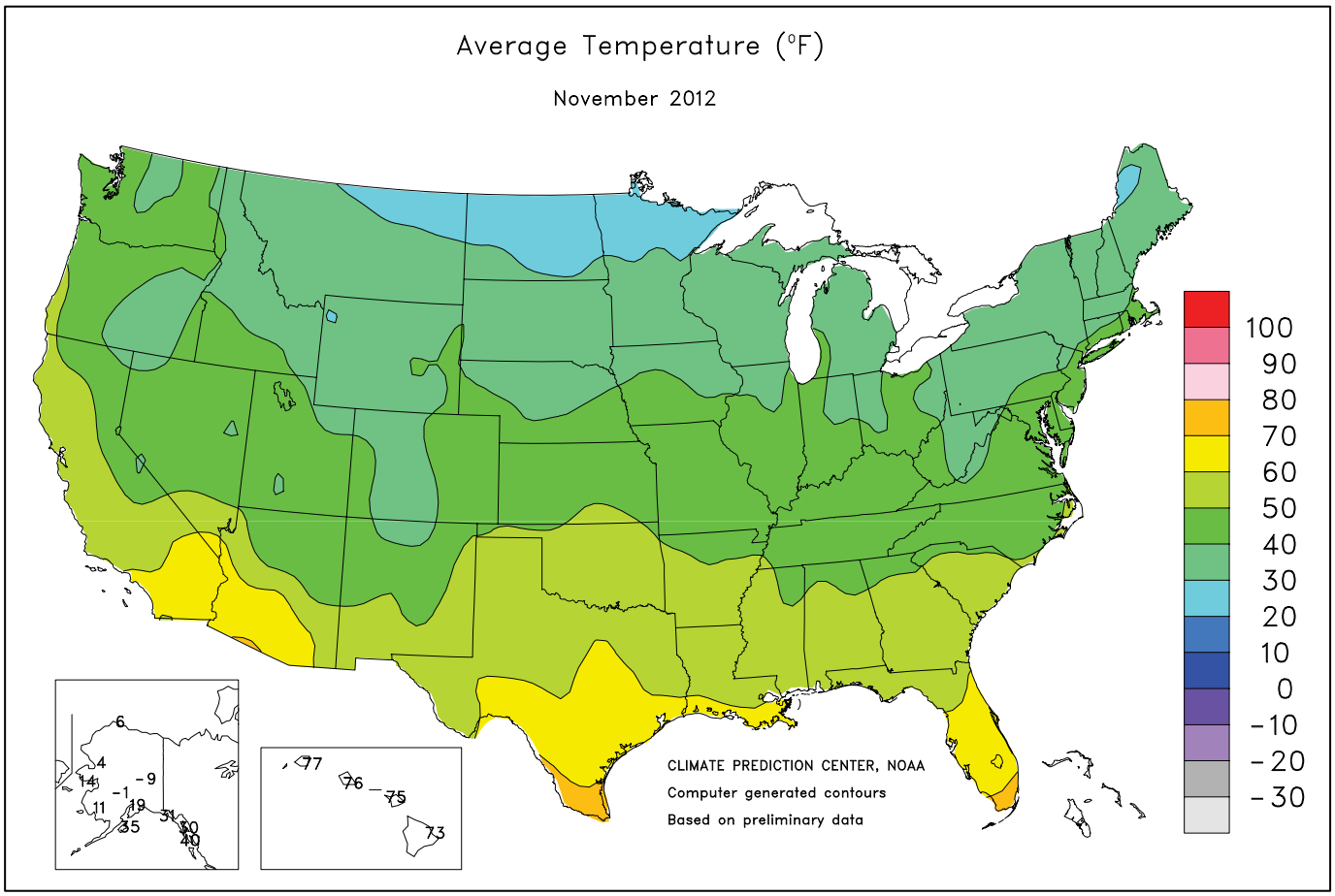
The **all orange** forecast for the 2012-2013 season is 9.01 million tons, down 4 percent from the previous forecast and down fractionally from the 2011-2012 final utilization. The Florida all orange forecast, at 146 million boxes (6.57 million tons), is down 5 percent from the October forecast and down slightly from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 67.0 million boxes (3.02 million tons), down 9 percent from the October forecast and down 10 percent from last season. Projected droppage is the highest since the 1969-1970 season, while size is projected to be below average. The Florida Valencia orange forecast, at 79.0 million boxes (3.56 million tons), is down 1 percent from the October forecast but up 9 percent from the 2011-2012 crop. California and Texas orange production forecasts are carried forward from October.

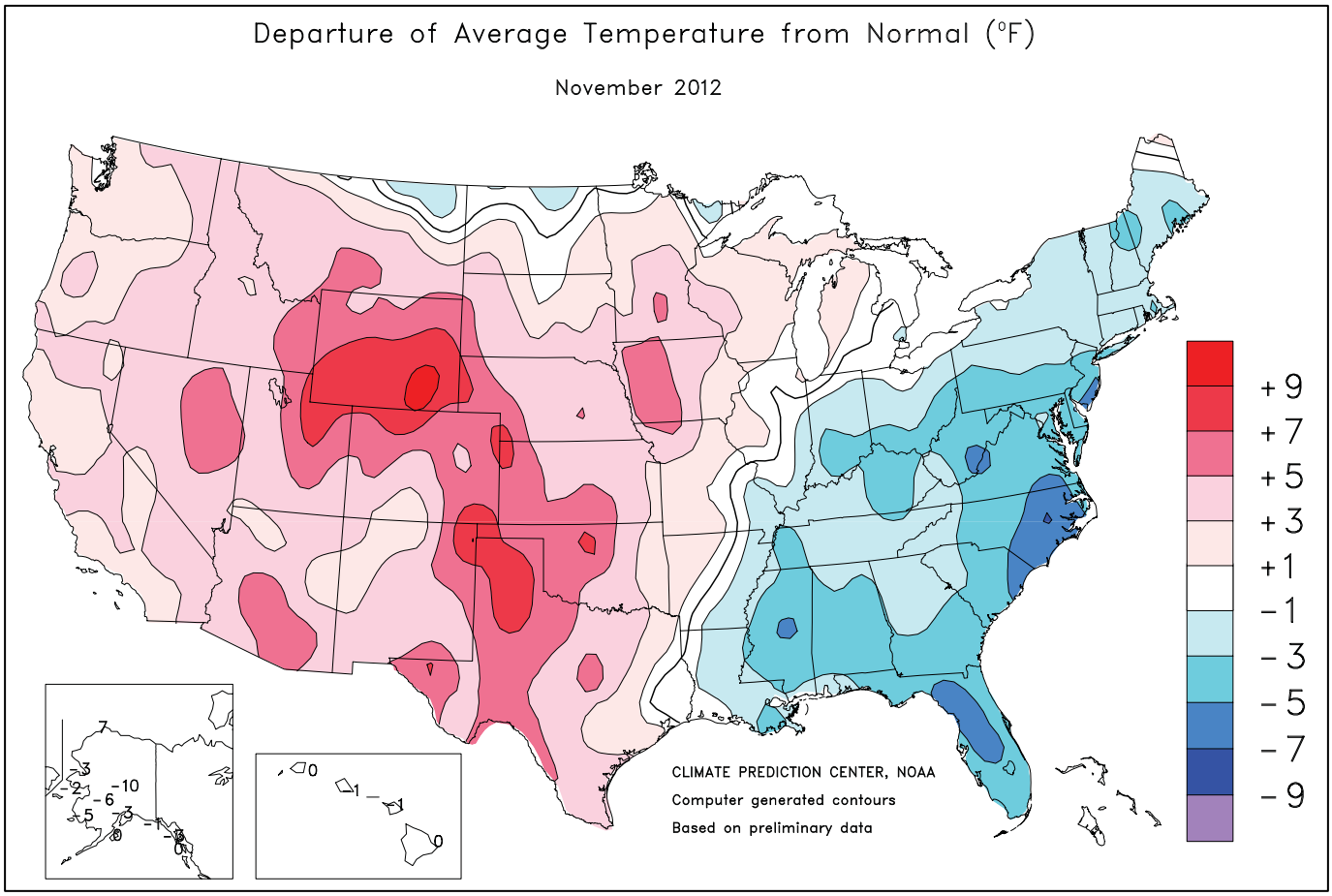

Total Precipitation (Inches)
November 2012
24
20
16
12
8
4
2
1
.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Percent Of Normal Precipitation
November 2012
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Maximum Temperature (°F)
November 2012
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
29
20
31
22
24
38
35
46
46
44
52
84
86
86
84
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Minimum Temperature (°F)
November 2012
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-16
12
6
-31
-29
-4
1
20
13
26
65
63
57
61
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Average Temperature (°F)
November 2012
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


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

National Weather Data for Selected Cities

November 2012

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	51	-2	1.46	-3.17	LEXINGTON	43	-3	1.76	-1.68	COLUMBUS	42	-2	0.66	-2.53
HUNTSVILLE	49	-2	2.00	-3.22	LONDON-CORBIN	43	-4	0.91	-2.99	DAYTON	41	-1	0.79	-2.51
MOBILE	57	-2	1.43	-3.98	LOUISVILLE	46	-2	0.75	-3.05	MANSFIELD	40	0	0.82	-2.94
MONTGOMERY	54	-2	0.96	-3.57	PADUCAH	46	-1	2.04	-2.49	TOLEDO	39	-1	0.99	-1.79
AK ANCHORAGE	19	-3	0.23	-0.86	LA BATON ROUGE	58	-1	1.21	-3.55	YOUNGSTOWN	38	-3	0.82	-2.25
BARROW	6	7	0.48	0.32	LAKE CHARLES	61	1	2.61	-2.00	OK OKLAHOMA CITY	54	5	0.81	-1.30
COLD BAY	31	-4	4.51	-0.28	NEW ORLEANS	60	-1	2.48	-2.61	TULSA	53	3	1.11	-2.36
FAIRBANKS	-9	-11	0.29	-0.39	SHREVEPORT	57	1	0.85	-3.83	OR ASTORIA	48	1	13.84	3.34
JUNEAU	30	-3	4.59	-0.84	ME BANGOR	33	-4	1.13	-2.56	BURNS	37	4	1.40	0.29
KING SALMON	15	-8	1.60	0.06	CARIBOU	31	0	0.67	-2.45	EUGENE	48	3	7.62	-0.82
KODIAK	35	1	4.54	-2.09	PORTLAND	38	0	1.02	-3.70	MEDFORD	48	4	5.13	2.20
NOME	14	-3	0.02	-1.26	MD BALTIMORE	43	-3	0.71	-2.41	PENDLETON	43	2	1.67	0.04
AZ FLAGSTAFF	40	3	1.02	-0.84	MA BOSTON	42	-3	1.01	-2.97	PORTLAND	49	3	8.22	2.61
PHOENIX	69	7	0.05	-0.68	WORCESTER	39	-1	1.19	-3.15	SALEM	48	3	8.92	2.53
TUCSON	65	6	0.03	-0.64	MI ALPENA	36	1	0.85	-1.23	PA ALLENTOWN	39	-3	1.00	-2.70
AR FORT SMITH	53	2	0.29	-4.51	DETROIT	40	-1	0.72	-1.94	ERIE	40	-3	1.50	-2.46
LITTLE ROCK	52	0	1.86	-3.87	FLINT	38	0	0.65	-2.00	MIDDLETOWN	41	-3	1.04	-2.48
CA BAKERSFIELD	58	3	0.10	-0.49	GRAND RAPIDS	40	2	0.49	-2.86	PHILADELPHIA	44	-3	1.04	-2.12
EUREKA	52	1	6.36	0.58	HOUGHTON LAKE	36	1	0.68	-1.46	PITTSBURGH	40	-2	0.38	-2.64
FRESNO	58	5	1.11	0.01	LANSING	38	0	0.38	-2.28	WILKES-BARRE	39	-3	1.09	-2.03
LOS ANGELES	63	1	1.31	0.18	MUSKEGON	41	2	0.57	-2.66	WILLIAMSPORT	40	-1	0.65	-2.97
REDDING	54	3	6.77	2.74	TRAVERSE CITY	39	2	0.75	-1.92	PR SAN JUAN	82	2	3.09	-3.08
SACRAMENTO	55	2	3.97	1.78	MN DULUTH	31	3	1.33	-0.79	RI PROVIDENCE	42	-2	0.91	-3.49
SAN DIEGO	62	0	0.28	-0.79	INT'L FALLS	26	2	1.07	-0.29	SC CHARLESTON	53	-5	2.20	-0.46
SAN FRANCISCO	58	3	4.06	1.57	MINNEAPOLIS	37	4	0.63	-1.31	COLUMBIA	52	-3	1.62	-1.26
STOCKTON	55	2	2.54	0.77	ROCHESTER	38	7	0.51	-1.50	FLORENCE	52	-3	1.66	-0.93
CO ALAMOSA	30	2	0.08	-0.40	ST. CLOUD	33	4	1.04	-0.50	GREENVILLE	51	0	0.90	-2.89
CO SPRINGS	44	8	0.02	-0.50	MS JACKSON	53	-2	2.93	-2.11	MYRTLE BEACH	51	-6	2.23	-0.74
DENVER	44	7	0.27	-0.33	MERIDIAN	51	-5	1.72	-3.23	SD ABERDEEN	31	2	0.38	-0.37
GRAND JUNCTION	43	5	0.16	-0.55	TUPELO	50	-1	1.16	-3.85	HURON	34	3	0.18	-0.71
PUEBLO	43	5	0.00	-0.58	MO COLUMBIA	46	3	0.99	-2.48	RAPID CITY	37	4	0.45	-0.16
CT BRIDGEPORT	43	-2	1.22	-2.43	JOPLIN	50	3	1.31	-2.75	SIOUX FALLS	36	5	0.35	-1.01
HARTFORD	40	-2	0.40	-3.66	KANSAS CITY	47	4	1.36	-0.94	TN BRISTOL	43	-3	0.54	-2.54
DC WASHINGTON	46	-3	0.60	-2.43	SPRINGFIELD	47	1	1.03	-3.43	CHATTANOOGA	49	-1	1.55	-3.33
DE WILMINGTON	42	-4	0.98	-2.21	ST JOSEPH	45	3	1.79	-0.37	JACKSON	47	-3	2.16	-2.91
FL DAYTONA BEACH	62	-5	0.77	-2.26	ST LOUIS	46	1	1.40	-2.31	KNOXVILLE	47	-2	1.05	-2.93
FT LAUDERDALE	71	-3	0.83	-3.74	MT BILLINGS	40	6	0.64	-0.11	MEMPHIS	52	0	2.90	-2.86
FT MYERS	69	-3	0.66	-1.05	BUTTE	29	2	0.97	0.37	NASHVILLE	48	-1	1.38	-3.07
JACKSONVILLE	58	-4	0.27	-2.07	GLASGOW	27	-1	0.73	0.34	TX ABILENE	59	5	0.29	-1.01
KEY WEST	72	-4	0.13	-2.51	GREAT FALLS	38	6	1.42	0.83	AMARILLO	53	8	0.01	-0.67
MELBOURNE	65	-4	0.66	-2.46	HELENA	35	4	1.78	1.30	AUSTIN	61	1	0.00	-2.68
MIAMI	71	-3	0.50	-2.93	KALISPELL	35	4	1.53	0.08	BEAUMONT	62	1	0.26	-4.49
ORLANDO	65	-4	0.23	-2.09	MILES CITY	35	3	0.27	-0.25	BROWNSVILLE	72	4	0.16	-1.59
PENSACOLA	60	-1	1.23	-3.23	MISSOULA	36	4	1.32	0.36	COLLEGE STATION	63	3	0.52	-2.66
ST PETERSBURG	66	-4	0.15	-1.89	NE GRAND ISLAND	42	6	0.52	-0.89	CORPUS CHRISTI	69	4	0.58	-1.16
TALLAHASSEE	58	-2	0.34	-3.52	HASTINGS	42	5	0.66	-0.80	DALLAS/FT WORTH	60	5	0.05	-2.52
TAMPA	66	-3	0.16	-1.46	LINCOLN	41	3	0.15	-1.43	DEL RIO	65	5	0.05	-0.91
WEST PALM BEACH	70	-3	0.75	-4.80	MCCOOK	42	4	0.04	-1.05	EL PASO	58	5	0.02	-0.40
GA ATHENS	51	-2	0.96	-2.75	NORFOLK	39	4	0.43	-1.01	GALVESTON	66	1	0.86	-2.78
ATLANTA	53	0	1.67	-2.43	NORTH PLATTE	39	4	0.05	-0.71	HOUSTON	63	2	0.65	-3.54
AUGUSTA	51	-3	1.10	-1.58	OMAHA/EPPLEY	43	5	0.38	-1.44	LUBBOCK	55	7	0.01	-0.70
COLUMBUS	56	-1	1.13	-2.84	SCOTTSBLUFF	41	7	0.29	-0.51	MIDLAND	58	6	0.00	-0.65
MACON	52	-3	1.38	-1.84	VALENTINE	37	4	0.47	-0.25	SAN ANGELO	60	6	0.00	-1.10
SAVANNAH	55	-4	0.48	-1.92	NV ELKO	40	5	0.40	-0.65	SAN ANTONIO	63	3	0.27	-2.31
HI HILO	73	-1	5.52	-10.06	ELY	40	7	0.47	-0.16	VICTORIA	65	2	0.12	-2.52
HONOLULU	76	-2	0.22	-2.04	LAS VEGAS	60	5	0.00	-0.31	WACO	59	2	0.00	-2.61
KAHULUI	75	-1	0.23	-1.94	RENO	46	5	0.85	0.05	WICHITA FALLS	57	5	0.20	-1.48
LIHUE	77	1	0.58	-4.12	WINNEMUCCA	41	4	0.19	-0.61	UT SALT LAKE CITY	46	6	1.66	0.26
ID BOISE	45	5	0.58	-0.80	NH CONCORD	36	-2	0.50	-3.07	VT BURLINGTON	37	0	1.24	-1.82
LEWISTON	46	6	1.15	-0.06	NJ ATLANTIC CITY	42	-4	1.34	-1.92	VA LYNCHBURG	43	-4	0.61	-2.57
POCATELLO	40	5	1.70	0.57	NEWARK	43	-3	1.62	-2.26	NORFOLK	49	-3	0.94	-2.04
IL CHICAGO/O'HARE	41	2	0.95	-2.06	NM ALBUQUERQUE	48	4	0.11	-0.51	RICHMOND	46	-3	0.27	-2.79
MOLINE	40	1	0.91	-1.82	NY ALBANY	38	-1	0.87	-2.41	ROANOKE	45	-2	0.61	-2.60
PEORIA	41	1	0.82	-2.17	BINGHAMTON	36	-2	1.34	-1.98	WASH/DULLES	42	-3	1.12	-2.19
ROCKFORD	39	2	0.60	-2.03	BUFFALO	39	-1	1.04	-2.88	WA OLYMPIA	44	2	9.14	1.01
SPRINGFIELD	44	2	1.13	-1.74	ROCHESTER	39	-1	0.71	-2.13	QUILLAYUTE	46	2	13.84	-0.98
IN EVANSVILLE	44	-2	1.19	-2.99	SYRACUSE	39	-1	1.41	-2.36	SEATTLE-TACOMA	47	2	8.28	2.38
FORT WAYNE	40	-1	0.60	-2.38	NC ASHEVILLE	45	-1	0.85	-2.97	SPOKANE	39	4	3.24	1.00
INDIANAPOLIS	41	-2	1.33	-2.28	CHARLOTTE	48	-4	0.65	-2.71	YAKIMA	42	5	0.66	-0.39
SOUTH BEND	40	0	0.26	-3.13	GREENSBORO	46	-3	0.24	-2.72	WV BECKLEY	40	-3	0.68	-2.20
IA BURLINGTON	42	1	1.37	-1.35	HATTERAS	52	-6	1.14	-3.79	CHARLESTON	43	-3	1.04	-2.62
CEDAR RAPIDS	37	0	1.92	-0.32	RALEIGH	47	-4	0.56	-2.41	ELKINS	37	-4	0.48	-2.94
DES MOINES	44	6	1.33	-0.77	WILMINGTON	51	-5	4.42	1.16	HUNTINGTON	43	-3	0.62	-2.70
DUBUQUE	38	2	1.16	-1.33	ND BISMARCK	29	1	1.07	0.37	WI EAU CLAIRE	36	4	0.70	-1.22
SIOUX CITY	38	3	1.07	-0.33	DICKINSON	32	3	0.22	-0.37	GREEN BAY	37	3	1.04	-1.23
WATERLOO	38	3	1.14	-0.96	FARGO	30	3	0.58	-0.48	LA CROSSE	38	3	1.24	-0.86
KS CONCORDIA	45	4	0.45	-1.00	GRAND FORKS	27	1	0.85	-0.14	MADISON	38	3	0.90	-1.41
DODGE CITY	47	5	0.09	-0.92	JAMESTOWN	28	1	0.26	-0.45	MILWAUKEE	39	1	0.35	-2.35
GOODLAND	44	7	0.00	-0.82	MINOT	27	0	1.18	0.32	WAUSAU	35	3	1.27	-0.93
HILL CITY	44	4	0.00	-0.74	WILLISTON	25	-1	1.49	0.84	WY CASPER	39	7	0.49	-0.33
TOPEKA	48	5	1.27	-1.04	OH AKRON-CANTON	39	-2	0.75	-2.29	CHEYENNE	40	7	0.02	-0.62
WICHITA	50	6	0.55	-1.27	CINCINNATI	42	-3	1.08	-2.38	LANDER	38	8	0.49	-0.50
KY JACKSON	45	-3	0.84	-3.36	CLEVELAND	40	-2	0.76	-2.62	SHERIDAN	35	4	1.09	0.29

Based on 1971-2000 normals

***** Not Available**

Autumn Weather Review

Review provided by USDA/WAOB

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

Relatively cool autumn weather covered much of the eastern half of the nation, particularly from the middle and lower Mississippi Valley into the middle and southern Atlantic States. In contrast, unusual autumn warmth prevailed in most areas from the Pacific Coast to the High Plains.

According to preliminary information provided by the National Climatic Data Center, the nation experienced its 21st-warmest, 22nd-driest September-November period on record. The nation's autumn average temperature of 54.7°F was 1.1°F above the 1901-2000 mean, while the average precipitation of 5.71 inches was 85 percent of normal.

State temperature rankings ranged from the sixth-coolest autumn in Kentucky to the warmest autumn on record in Nevada (figure 1). Mississippi also reported a top-ten ranking for cool conditions, while top-ten rankings for autumn warmth were noted in six Western States (AZ, CA, ID, NM, UT, and WY). Meanwhile, state precipitation rankings ranged from the second-driest autumn in Nebraska to the 18th-wettest autumn in Delaware (figure 2). South Dakota and Minnesota also achieved top-ten rankings for autumn dryness.

September: The nation's historic drought of 2012 continued its shift toward the northwest during September. Extremely dry conditions fostered a record-setting pace of corn and soybean harvesting in the upper Midwest, but delayed winter wheat planting and emergence across the northwestern half of the Plains and parts of the Northwest. According to the U.S. Drought Monitor, late-September drought coverage in the contiguous U.S. reached 65.45 percent, surpassing by 1.59 percent the previous high established on July 24, 2012.

In contrast, September rainfall continued to benefit some late-developing soybeans in the Mid-South and lower Midwest. In those regions, early-September rainfall was associated with the remnants of Hurricane Isaac. As the month progressed, additional rainfall in both the Mid-South and lower Midwest aided pastures and boosted soil moisture in preparation for soft red winter wheat planting. Occasional rainfall also maintained generally favorable conditions for pastures and maturing summer crops in the Gulf and Atlantic Coast States.

Figure 1

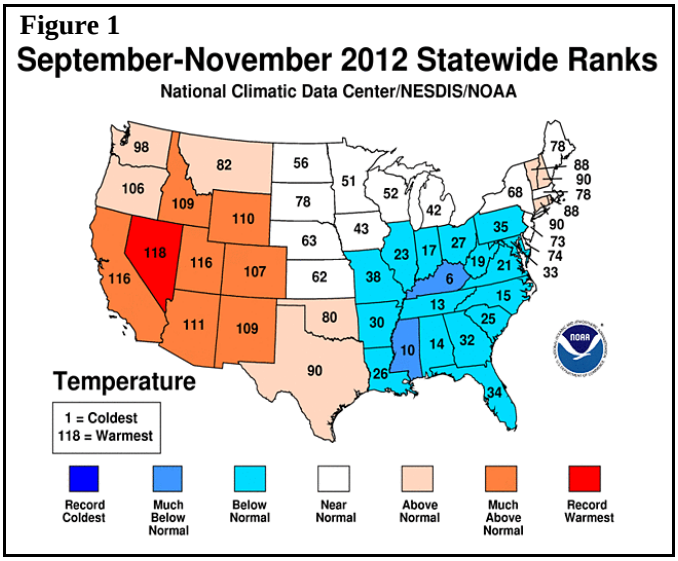
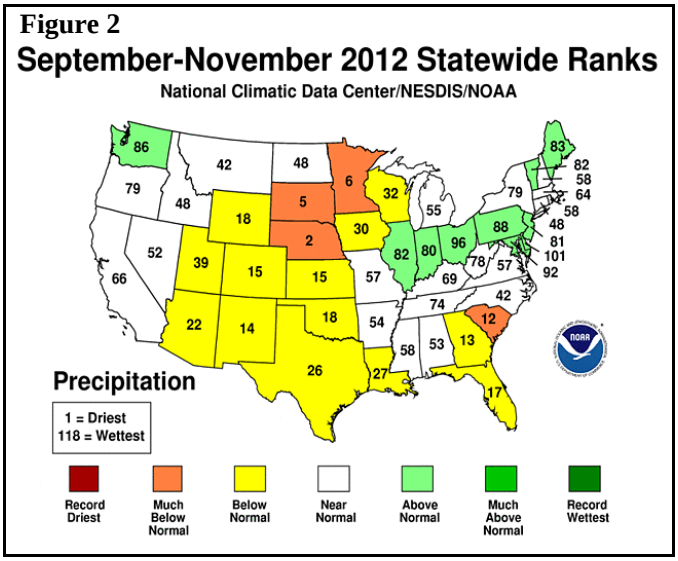


Figure 2



The eastern half of the U.S. also got a reprieve from the high temperatures that plagued most areas during the 2012 growing season. The coolest weather, relative to normal, covered the Midwest, while most other areas from the eastern Plains to the East Coast noted near-normal temperatures. In Illinois, Chicago reported its first cooler-than-normal month since September 2011.

Farther south, wetter conditions developed across the southern half of the Plains. Some of the most impressive rain fell late in the month, when the interaction between a cold front and remnant moisture associated with former eastern Pacific Hurricane Miriam and Tropical Storm Norman contributed to heavy rain in the south-central U.S. The rain helped to revive rangeland and pastures, and promoted the emergence of newly planted hard red winter wheat.

Elsewhere, much of the West experienced a warm, dry month. In fact, record-setting September warmth covered parts of the Far West, while portions of the Northwest received no measurable rainfall. As a result, wildfires remained a periodic problem in the Northwest. Meanwhile, lingering monsoon showers in the Southwest withdrew by mid-September, roughly on schedule, following a fairly robust summer wet season.

October: Unfavorably dry weather returned to the southern half of the Plains' winter wheat belt during October, while exceptionally dry conditions persisted in much of South Dakota and Nebraska. As a result, nearly one-fifth (19 percent) of the U.S. winter wheat was rated in very poor to poor condition by November 4—a list topped by South Dakota (52 percent), Nebraska (49 percent), Oklahoma (30 percent), Colorado (28 percent), and Texas (24 percent). In addition, much of South Dakota's wheat failed to germinate by early November—33 percent had emerged by November 4, compared to the 5-year average of 93 percent. Finally, October ended with at least 40 percent of the rangeland and pastures rated very poor to poor in 20 states across the western and central U.S., led by Nebraska (97 percent).

In contrast, beneficial rain and snow fell across the nation's northern tier from the Pacific Northwest to the Red River Valley of the North. In particular, the precipitation aided winter grains, which previously had struggled to emerge. Farther south, warm, mostly dry weather covered California and the Southwest, promoting autumn fieldwork.

Meanwhile, corn and soybean harvest activities were complete by early November in parts of the upper Midwest, including Minnesota and South Dakota. In the eastern Corn Belt, however, frequent rainfall eased or eradicated any remaining drought but slowed summer crop harvesting and winter wheat planting.

Elsewhere, drier-than-normal weather in much of the Southeast—excluding Florida's peninsula—allowed harvesting to proceed, while Hurricane Sandy made headlines toward month's end in the Mid-Atlantic States. Sandy merged with a non-tropical storm and was forced inland on October 29 by a blocking high-pressure system over the northern Atlantic Ocean. Sandy officially made landfall as a post-tropical cyclone near Atlantic City, New Jersey, with sustained winds near 80 mph. Sandy's greatest impacts occurred in coastal and tidal areas of the northern Mid-Atlantic States, where a record-setting storm surge inundated beachfront and low-lying communities. In addition, wind gusts of 60 to 90 mph in the Mid-Atlantic coastal plain downed trees and power lines. Farther inland, across the central and southern Appalachians, Sandy dumped as much as 1 to 3 feet of snow.

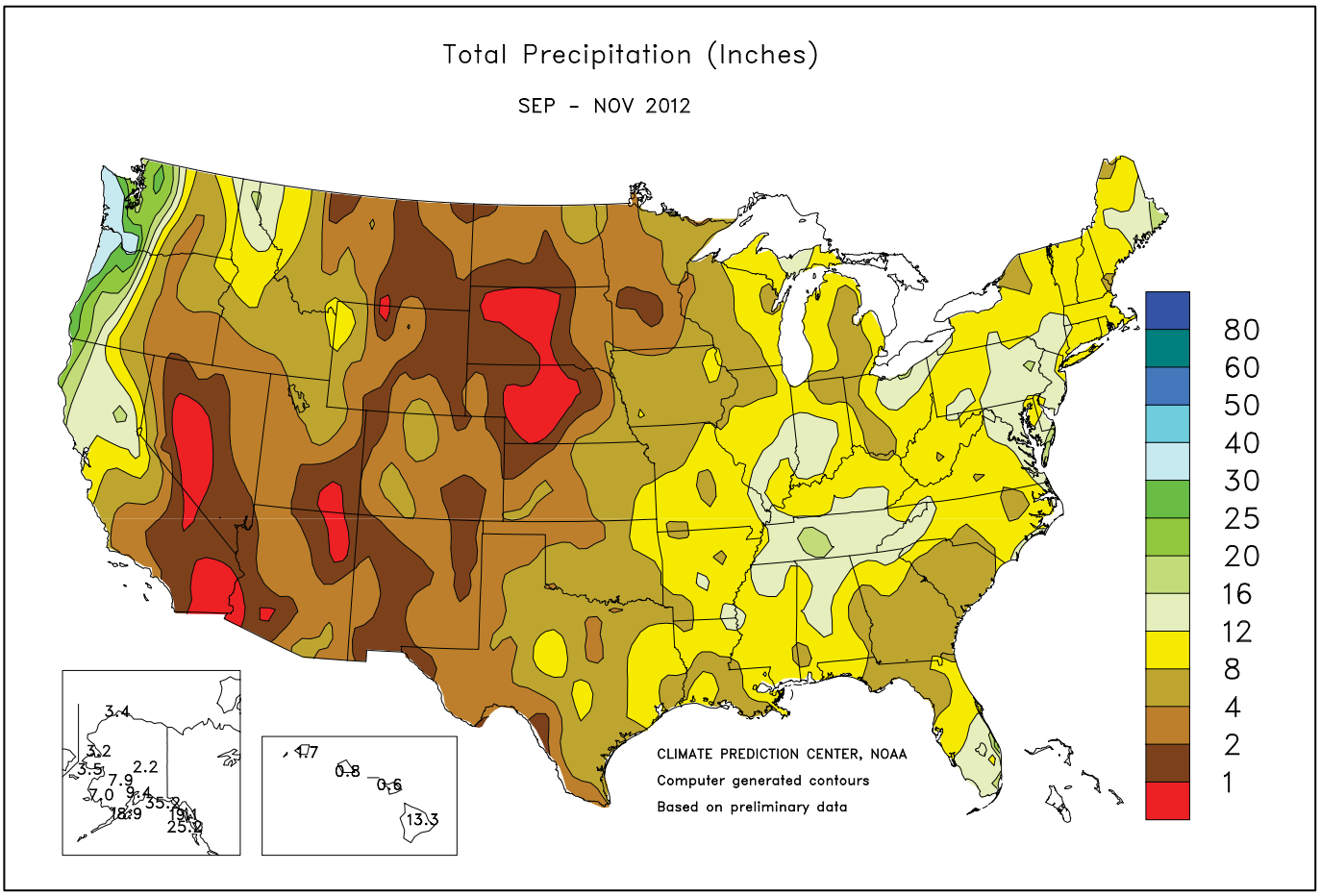
November: Dry weather from South Dakota to Texas left U.S. winter wheat conditions at their lowest levels for late November since records of that type were initiated by USDA/NASS in 1986. By November 25, more than one-quarter (26 percent) of the wheat was rated very poor to poor, fueled by abysmal crop ratings in South Dakota (64 percent very poor to poor), Nebraska (46 percent), Oklahoma (44 percent), Texas (40 percent), Colorado (34 percent), and Kansas (25 percent).

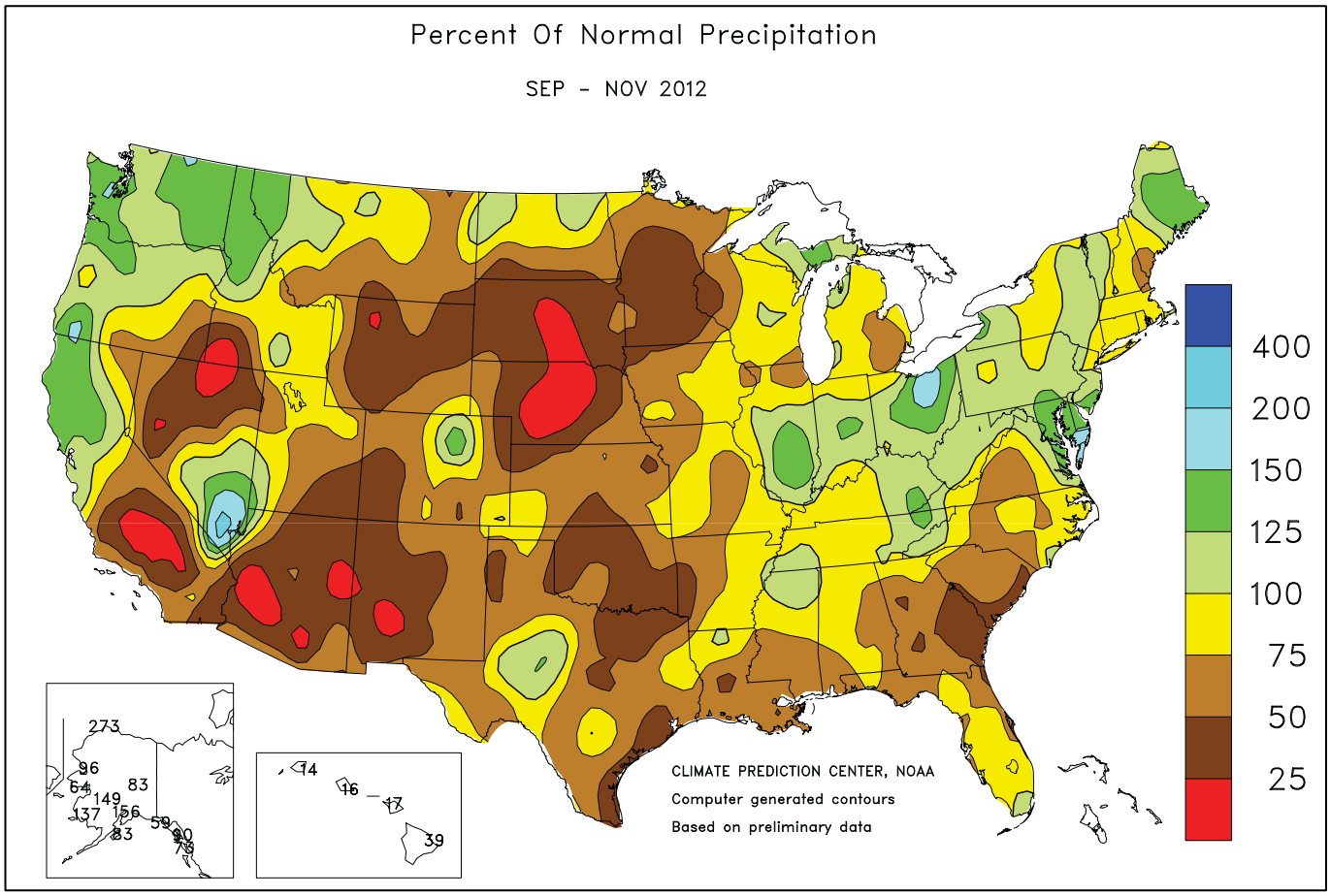
In contrast, beneficial precipitation fell across northern California and from the Pacific Northwest to Montana and North Dakota. Still, winter wheat struggled to emerge on the northern Plains due to the seasonal decline in temperatures. By November 25, a significant portion of the wheat had not yet emerged in South Dakota (60 percent emerged) and Montana (68 percent).

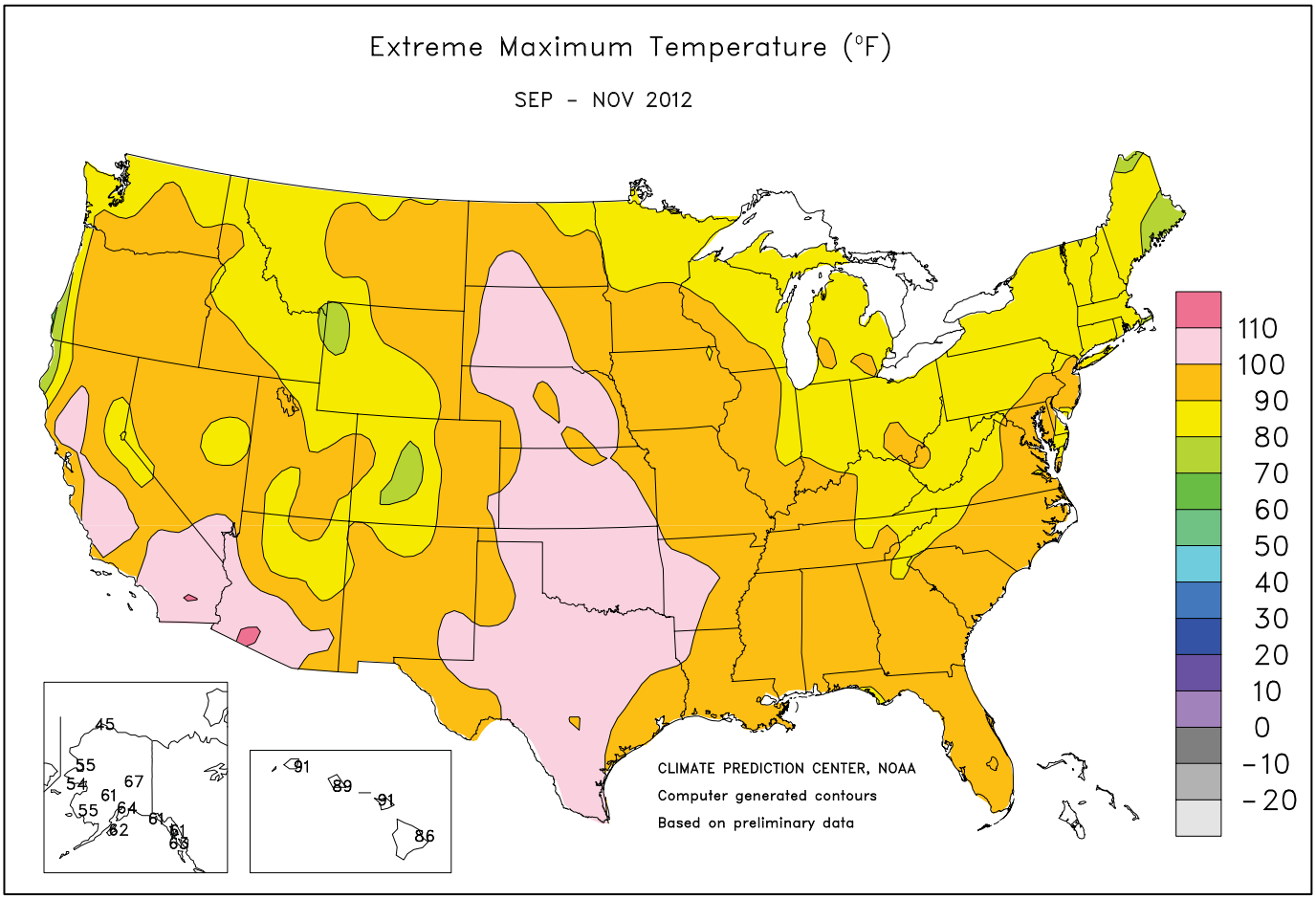
Toward month's end, precipitation intensity increased across northern California and the Northwest. However, mild weather accompanied the storminess, limiting high-elevation snowfall. As a result, the end-of-month water content of the Sierra Nevada snow pack stood at just 4 inches, about 85 percent of normal for November 30.

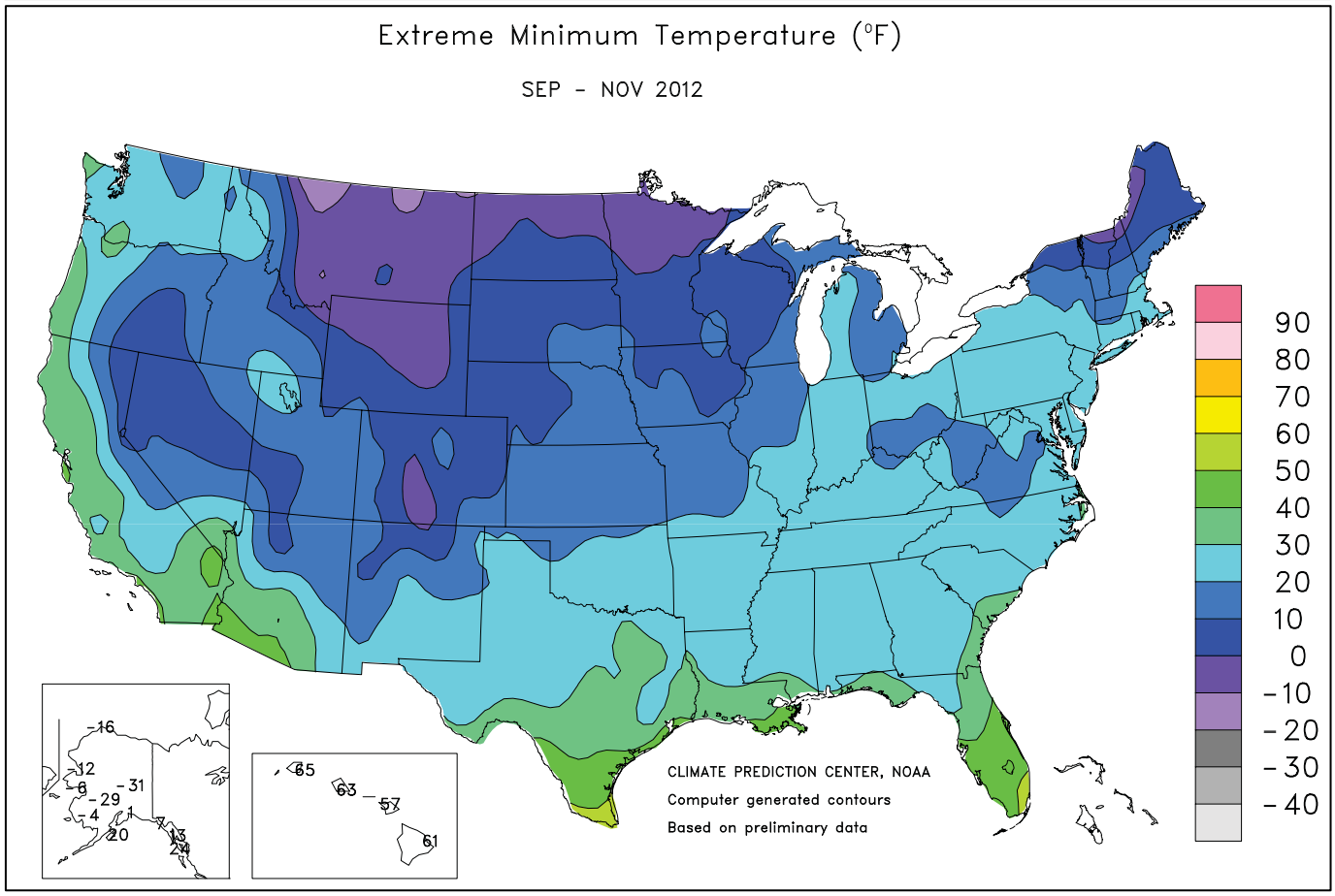
Most areas from the Mississippi Valley to the East Coast experienced a cool, dry November. In the northern Mid-Atlantic region, dry weather aided recovery efforts from Superstorm Sandy. Farther south, mostly dry conditions promoted Southeastern fieldwork—including winter wheat planting and cotton and soybean harvesting—but caused renewed drought intensification in Alabama and the southern Atlantic States.

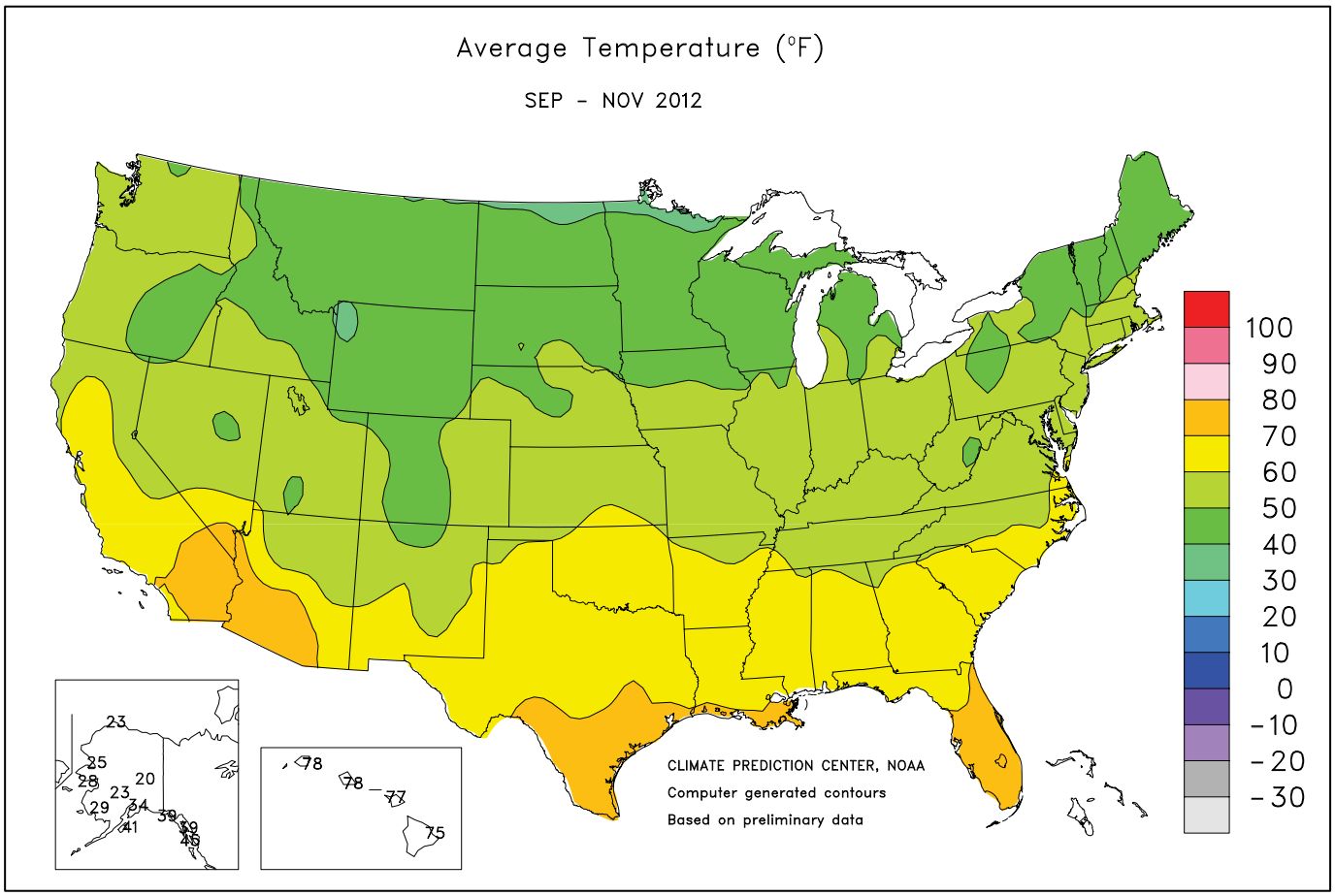
Monthly temperatures averaged more than 5°F below normal in portions of the southern Atlantic region, but generally ranged from 5 to 10°F above normal across the central and southern High Plains and adjacent areas of the Intermountain West.

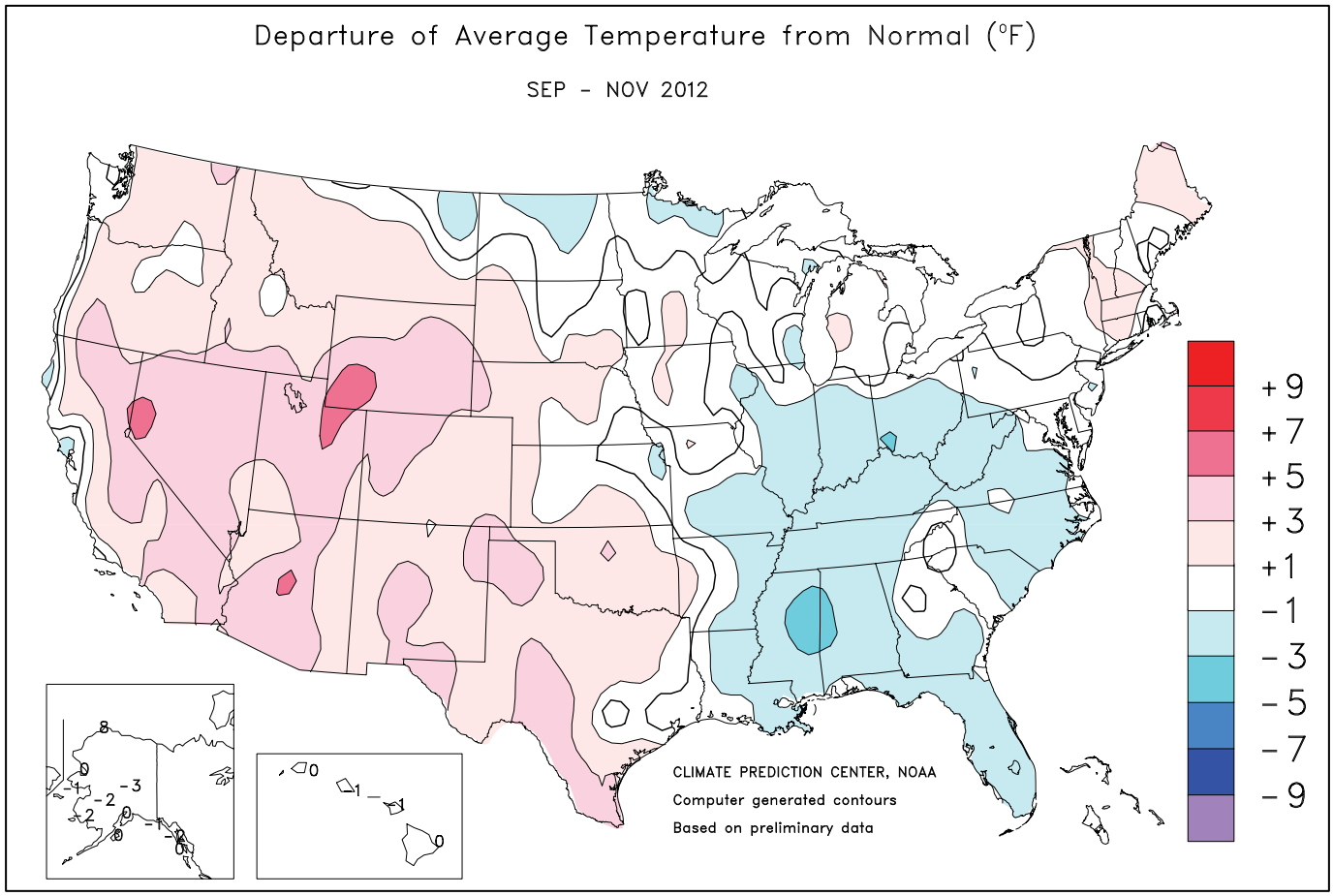

Total Precipitation (Inches)
SEP - NOV 2012
80
60
50
40
30
25
20
16
12
8
4
2
1
3.4
3.2
3.5
2.2
7.9
7.0
9.4
35.2
18.9
19.1
25.9
1.7
0.8
0.6
13.3
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Percent Of Normal Precipitation
SEP - NOV 2012
400
200
150
125
100
75
50
25
273
96
64
83
149
137
156
59
83
74
76
39
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Maximum Temperature (°F)
SEP - NOV 2012
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
45
55
54
67
61
55
64
62
61
61
91
89
91
86
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Minimum Temperature (°F)
SEP - NOV 2012
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-16
12
6
-31
-29
-4
1
20
13
65
63
57
61
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Average Temperature (°F)
SEP - NOV 2012
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


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

National Weather Data for Selected Cities

Autumn 2012

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	62	-1	10.31	-1.60	LEXINGTON	54	-3	8.46	-0.79	COLUMBUS	54	-1	8.69	0.27
HUNTSVILLE	60	-2	11.34	-1.71	LONDON-CORBIN	54	-3	12.12	2.05	DAYTON	52	-2	9.87	1.20
MOBILE	67	-1	5.75	-8.92	LOUISVILLE	57	-2	8.97	-0.67	MANSFIELD	51	0	14.83	4.95
MONTGOMERY	65	-1	7.40	-3.93	PADUCAH	57	-1	10.02	-1.52	TOLEDO	51	-1	5.63	-2.34
AK ANCHORAGE	34	-1	9.42	3.38	LA BATON ROUGE	67	-1	7.02	-6.39	YOUNGSTOWN	50	-1	11.46	2.04
BARROW	23	8	3.39	2.15	LAKE CHARLES	70	1	10.14	-4.36	OK OKLAHOMA CITY	63	2	7.05	-2.68
COLD BAY	39	-2	12.89	-0.95	NEW ORLEANS	70	0	5.91	-7.78	TULSA	63	1	5.64	-6.64
FAIRBANKS	20	-3	2.24	-0.48	SHREVEPORT	66	-1	12.33	-0.01	OR ASTORIA	53	0	27.27	8.55
JUNEAU	39	-3	19.11	-2.16	ME BANGOR	47	-1	14.42	3.86	BURNS	47	3	2.17	-0.16
KING SALMON	31	-4	7.84	1.40	CARIBOU	45	3	8.68	-0.70	EUGENE	55	2	11.91	-1.42
KODIAK	41	0	18.89	-3.94	PORTLAND	50	2	8.46	-4.03	MEDFORD	58	3	7.09	2.07
NOME	28	-1	3.45	-1.92	MD BALTIMORE	57	1	11.84	1.58	PENDLETON	53	1	3.25	0.00
AZ FLAGSTAFF	49	2	2.31	-3.60	MA BOSTON	54	-1	7.73	-3.51	PORTLAND	57	2	14.40	4.26
PHOENIX	79	5	0.63	-1.64	WORCESTER	51	1	10.15	-3.13	SALEM	56	3	14.90	4.05
TUCSON	73	3	0.41	-2.92	MI ALPENA	46	0	7.05	-0.16	PA ALLENTOWN	53	1	10.89	-0.51
AR FORT SMITH	64	2	4.73	-7.62	DETROIT	52	0	5.51	-2.65	ERIE	53	0	14.16	1.55
LITTLE ROCK	63	0	9.86	-3.83	FLINT	50	1	6.55	-2.20	MIDDLETOWN	54	-1	12.08	2.12
CA BAKERSFIELD	69	3	0.12	-0.92	GRAND RAPIDS	51	1	8.78	-1.65	PHILADELPHIA	58	0	10.60	0.81
EUREKA	52	-2	9.12	0.12	HOUGHTON LAKE	47	1	5.70	-1.81	PITTSBURGH	52	-1	9.62	1.14
FRESNO	69	5	1.36	-0.65	LANSING	50	1	7.72	-0.71	WILKES-BARRE	52	0	11.85	1.85
LOS ANGELES	68	2	1.46	-0.29	MUSKEGON	51	1	8.31	-1.24	WILLIAMSPORT	53	1	7.97	-2.82
REDDING	65	2	9.11	2.42	TRAVERSE CITY	49	0	9.63	0.44	PR SAN JUAN	84	3	9.90	-6.93
SACRAMENTO	64	1	5.11	1.67	MN DULUTH	43	1	3.51	-5.20	RI PROVIDENCE	54	0	9.97	-1.82
SAN DIEGO	69	2	0.98	-0.74	INT'L FALLS	39	-1	4.79	-1.58	SC CHARLESTON	65	-2	5.27	-6.46
SAN FRANCISCO	61	1	4.76	1.03	MINNEAPOLIS	49	2	2.23	-4.51	COLUMBIA	64	0	4.88	-4.83
STOCKTON	64	0	2.81	-0.11	ROCHESTER	50	4	3.65	-3.68	FLORENCE	64	-1	6.59	-2.61
CO ALAMOSA	43	1	1.55	-0.49	ST. CLOUD	46	2	2.01	-4.70	GREENVILLE	61	0	5.99	-5.64
CO SPRINGS	52	4	1.58	-1.03	MS JACKSON	64	-1	8.09	-3.60	MYRTLE BEACH	63	-2	5.08	-6.70
DENVER	53	4	4.44	1.93	MERIDIAN	62	-4	7.96	-3.91	SD ABERDEEN	45	0	1.44	-2.75
GRAND JUNCTION	54	2	0.91	-1.71	TUPELO	61	-1	11.93	0.19	HURON	47	0	1.87	-2.41
PUEBLO	53	1	1.02	-1.04	MO COLUMBIA	56	1	6.31	-3.76	RAPID CITY	49	2	1.03	-2.05
CT BRIDGEPORT	56	1	11.46	0.69	JOPLIN	59	0	13.14	-0.08	SIOUX FALLS	48	1	2.35	-3.52
HARTFORD	53	1	8.97	-3.16	KANSAS CITY	56	0	5.28	-4.99	TN BRISTOL	55	-1	9.50	1.04
DC WASHINGTON	60	1	10.71	0.67	SPRINGFIELD	56	-2	10.43	-2.33	CHATTANOOGA	60	-1	14.19	1.74
DE WILMINGTON	56	0	12.52	2.24	ST JOSEPH	54	-2	5.12	-4.23	JACKSON	59	-2	12.48	0.33
FL DAYTONA BEACH	72	-2	11.07	-3.05	ST LOUIS	57	-1	6.93	-2.50	KNOXVILLE	58	-2	11.47	1.80
FT LAUDERDALE	77	-1	16.79	-2.48	MT BILLINGS	50	3	1.78	-1.57	MEMPHIS	63	-1	13.57	1.19
FT MYERS	76	-1	11.62	-0.54	BUTTE	41	1	1.36	-1.12	NASHVILLE	59	-1	10.85	-0.06
JACKSONVILLE	69	-1	9.87	-4.23	GLASGOW	43	0	1.73	-0.35	TX ABILENE	67	2	9.49	2.38
KEY WEST	78	-2	8.98	-3.45	GREAT FALLS	48	4	2.79	0.04	AMARILLO	60	2	3.28	-0.78
MELBOURNE	74	-1	7.75	-7.33	HELENA	46	2	2.43	0.24	AUSTIN	69	-1	5.59	-3.97
MIAMI	78	-1	17.95	-0.05	KALISPELL	44	2	4.63	1.02	BEAUMONT	70	0	8.34	-7.18
ORLANDO	74	-1	11.20	0.39	MILES CITY	48	1	1.34	-1.50	BROWNSVILLE	78	3	4.72	-6.12
PENSACOLA	69	-1	7.15	-7.19	MISSOULA	47	3	3.14	0.27	COLLEGE STATION	71	1	5.91	-5.40
ST PETERSBURG	75	-1	6.35	-5.92	NE GRAND ISLAND	53	2	1.77	-3.58	CORPUS CHRISTI	77	4	4.36	-6.35
TALLAHASSEE	69	0	8.86	-3.26	HASTINGS	52	0	2.70	-3.17	DALLAS/FT WORTH	69	2	2.82	-6.28
TAMPA	75	-1	8.83	-1.62	LINCOLN	52	-1	3.80	-2.64	DEL RIO	74	4	4.01	-1.01
WEST PALM BEACH	77	-1	16.13	-2.98	MCCOOK	52	0	0.80	-2.94	EL PASO	67	3	1.53	-1.31
GA ATHENS	62	0	7.77	-2.94	NORFOLK	50	0	1.53	-3.88	GALVESTON	74	0	7.00	-5.89
ATLANTA	63	0	4.87	-6.43	NORTH PLATTE	49	0	0.43	-2.89	HOUSTON	71	1	3.67	-9.35
AUGUSTA	63	-1	4.30	-5.17	OMAHA/EPPLEY	53	1	4.04	-3.16	LUBBOCK	63	3	2.33	-2.65
COLUMBUS	66	0	5.77	-3.60	SCOTTSBLUFF	51	4	2.06	-0.97	MIDLAND	66	2	6.01	1.28
MACON	64	0	4.34	-4.51	VALENTINE	49	1	1.15	-2.40	SAN ANGELO	68	3	7.40	0.78
SAVANNAH	67	0	4.49	-6.11	NV ELKO	51	4	0.74	-1.70	SAN ANTONIO	71	1	9.98	0.54
HI HILO	74	-1	13.31	-21.05	ELY	49	4	2.59	0.02	VICTORIA	73	1	5.99	-5.91
HONOLULU	78	-2	0.81	-4.37	LAS VEGAS	72	4	2.11	1.25	WACO	68	0	4.69	-4.47
KAHULUI	77	-1	0.62	-2.99	RENO	58	6	1.01	-0.66	WICHITA FALLS	65	1	3.93	-4.05
LIHUE	78	0	1.68	-9.96	WINNEMUCCA	51	2	0.74	-1.25	UT SALT LAKE CITY	57	5	3.74	-0.56
ID BOISE	55	3	1.61	-1.29	NH CONCORD	49	1	7.12	-3.07	VT BURLINGTON	50	2	11.64	1.63
LEWISTON	55	3	3.30	0.33	NJ ATLANTIC CITY	56	0	12.94	3.68	VA LYNCHBURG	55	-2	4.63	-5.82
POCATELLO	49	2	2.84	-0.15	NEWARK	57	0	8.40	-2.66	NORFOLK	61	-1	11.18	0.67
IL CHICAGO/O'HARE	52	0	5.86	-3.13	NM ALBUQUERQUE	60	3	0.55	-2.14	RICHMOND	59	0	8.32	-2.32
MOLINE	51	-1	6.54	-2.15	NY ALBANY	51	1	9.98	0.18	ROANOKE	57	0	5.51	-4.70
PEORIA	52	-1	8.22	-0.65	BINGHAMTON	48	0	8.02	-1.91	WASH/DULLES	56	0	12.70	2.20
ROCKFORD	51	1	4.76	-3.91	BUFFALO	51	0	12.41	1.46	WA OLYMPIA	51	1	17.21	2.86
SPRINGFIELD	55	0	9.05	0.73	ROCHESTER	51	1	10.07	1.18	QUILLAYUTE	51	1	30.01	1.23
IN EVANSVILLE	56	-1	11.69	1.74	SYRACUSE	52	2	8.51	-2.61	SEATTLE-TACOMA	55	2	15.02	4.30
FORT WAYNE	51	-1	7.52	-0.90	NC ASHEVILLE	56	0	10.79	0.08	SPOKANE	50	3	4.78	0.72
INDIANAPOLIS	53	-2	12.93	3.68	CHARLOTTE	60	-2	6.68	-4.17	YAKIMA	52	3	1.71	-0.26
SOUTH BEND	51	-1	6.68	-3.77	GREENSBORO	58	-1	7.32	-3.20	WV BECKLEY	52	-1	10.46	1.71
IA BURLINGTON	52	-2	6.72	-2.51	HATTERAS	65	-1	15.00	-0.92	CHARLESTON	55	-1	10.28	0.50
CEDAR RAPIDS	48	-3	6.98	-0.74	RALEIGH	60	-1	10.22	-0.19	ELKINS	50	-1	10.33	0.23
DES MOINES	54	2	5.65	-2.22	WILMINGTON	63	-2	13.81	0.55	HUNTINGTON	55	-1	10.92	2.07
DUBUQUE	48	-1	4.94	-3.61	ND BISMARCK	43	-1	2.14	-1.45	WI EAU CLAIRE	47	1	3.25	-4.65
SIOUX CITY	50	0	3.31	-2.50	DICKINSON	45	1	1.73	-1.82	GREEN BAY	47	0	7.05	-0.50
WATERLOO	49	0	6.88	-0.66	FARGO	44	1	2.92	-2.29	LA CROSSE	49	-1	5.71	-1.95
KS CONCORDIA	55	0	4.83	-0.96	GRAND FORKS	42	0	3.19	-1.46	MADISON	49	1	6.79	-0.78
DODGE CITY	56	0	2.52	-1.64	JAMESTOWN	43	0	2.11	-1.74	MILWAUKEE	50	-1	5.57	-2.92
GOODLAND	53	2	0.86	-2.13	MINOT	42	-1	3.38	-0.54	WAUSAU	46	0	8.37	-0.54
HILL CITY	54	0	2.91	-1.34	WILLISTON	41	-1	3.12	0.25	WY CASPER	48	3	1.36	-1.58
TOPEKA	57	1	3.27	-5.74	OH AKRON-CANTON	51	-1	10.31	1.31	CHEYENNE	49	4	2.45	-0.37
WICHITA	60	2	3.51	-3.72	CINCINNATI	54	-2	11.25	2.01	LANDER	49	4	1.52	-1.98
KY JACKSON	56	-2	11.84	0.69	CLEVELAND	52	0	18.72	8.84	SHERIDAN	47	3	2.04	-1.55

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

December 3-9, 2012

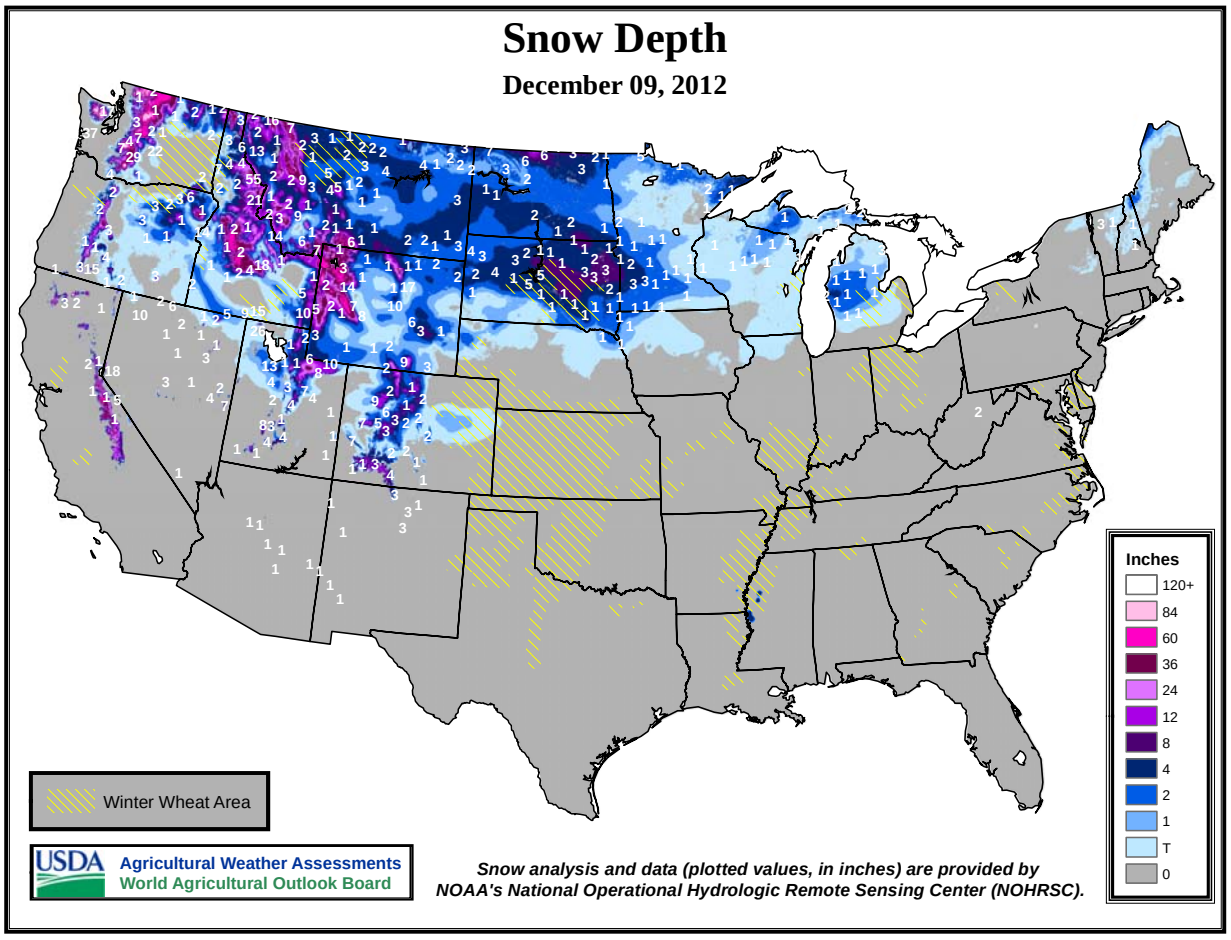
Weekly National Agricultural Summary provided by USDA/NASS

With few exceptions, temperatures across the country were well above normal during the week. Much of Arkansas and Missouri recorded temperatures 15°F or more above average. The Pacific Coast and portions of the Ohio Valley received more than 2 inches of rain during the week, while little to no rain on the Great Plains further stressed small grain crops.

With warm, dry weather, Arizona producers were busy harvesting alfalfa hay and cotton, as well as planting Durum wheat and barley. However, the continual dry weather has dried out pastures and stock tanks. Central and western vegetable producers shipped a variety of crops, including broccoli, cabbage, cantaloupes, kale, and lettuce. Lemons were also shipped during the week.

Early-week storms delivered rain to the northern and central portions of California, while gusty winds later in the week helped dry fields in some portions of the state. Cotton producers continued to plow down fields to control pink bollworm. Small grains benefited from this week's rainfall. However, saturated fields interrupted pruning and weed control activities in the Sacramento Valley. A variety of fruits (apples, table grapes, lemons, oranges, etc.) continued to be harvested. Vegetables were planted in Sutter and Tulare Counties, while carrots were harvested in Fresno County. Bees were being staged in preparation for the almond bloom.

Another week of only a few scattered showers across Florida further depleted topsoil moisture levels, which by week's end were rated 61 percent short to very short. Florida's winter field crops have struggled due to a lack of moisture, but recent above-normal temperatures have resulted in good growing conditions for vegetables. Vegetables marketed included corn, cucumbers, peppers, and tomatoes. Early marketing of strawberries has been reported. With the persistent lack of rainfall in Florida, some citrus trees were straining to keep the fruit set healthy and growing, while some growers were irrigating groves several times a week. Harvest of early and midseason oranges continued at a heavy pace.



December 6 ENSO Update

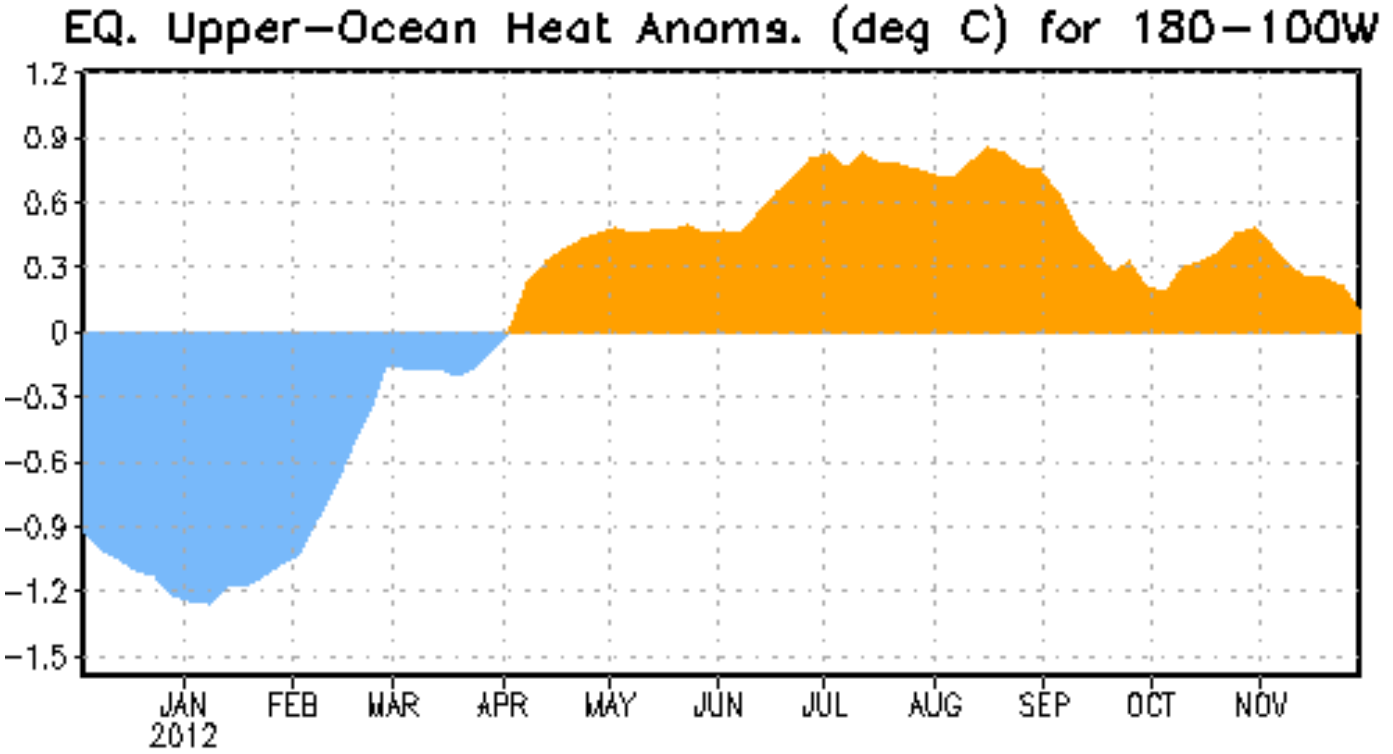


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1982-2010 base period pentad means.

ENSO Alert System Status: Not Active

Synopsis: ENSO-neutral is favored for Northern Hemisphere winter 2012-13 and into spring 2013.

During November 2012, the Pacific Ocean reflected ENSO-neutral conditions. Equatorial sea surface temperatures (SST) anomalies were slightly positive across all of the tropical Pacific Ocean except for the far eastern portion, as also indicated in the Niño indices. The oceanic heat content (average temperature in the upper 300m of the ocean) was also slightly above average (Fig. 1), with largest amplitude in the east-central part of the basin. Despite the subsurface and surface Pacific Ocean being slightly warmer than average, the tropical atmosphere remained in an ENSO-neutral state. Upper-level and lower-level zonal winds were near average, and convection was slightly suppressed over the eastern and central tropical Pacific. Thus, both the atmosphere and ocean indicated ENSO-neutral conditions.

Relative to last month, the SST model predictions increasingly favor ENSO-neutral, with many remaining just slightly above average in the Niño-3.4 region through the Northern Hemisphere winter 2012-13 and into spring 2013. While the tropical atmosphere and especially the ocean suggested borderline ENSO-neutral/ weak El Niño conditions at times from July to September, these signs have now largely dissipated. Therefore, it is considered unlikely that a fully coupled El Niño will develop during the next several months. ENSO-neutral is now favored through the Northern Hemisphere winter 2012-13 and into spring 2013 (see CPC/IRI consensus forecast).

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 for the evolution of El Niño/La Niña are updated monthly in the Forecast Forum section of CPC's Climate Diagnostics Bulletin. The next ENSO Diagnostics Discussion is scheduled for 10 January 2013. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

December 2-8, 2012

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

HIGHLIGHTS

EUROPE: Cold, snowy weather eased winter crops into dormancy across much of the continent.

WESTERN FSU: Wet weather returned to key winter wheat areas in southern Russia, although eastern portions of the Southern District remained unfavorably dry.

MIDDLE EAST: Locally heavy rain and high-elevation snow returned to Turkey, ending a month-long dry spell and improving soil moisture for winter grains.

NORTHWEST AFRICA: Showers continued, maintaining a favorable start to the winter crop growing season.

EAST ASIA: Seasonably cold, dry weather prevailed as winter wheat eased into dormancy across the North China Plain.

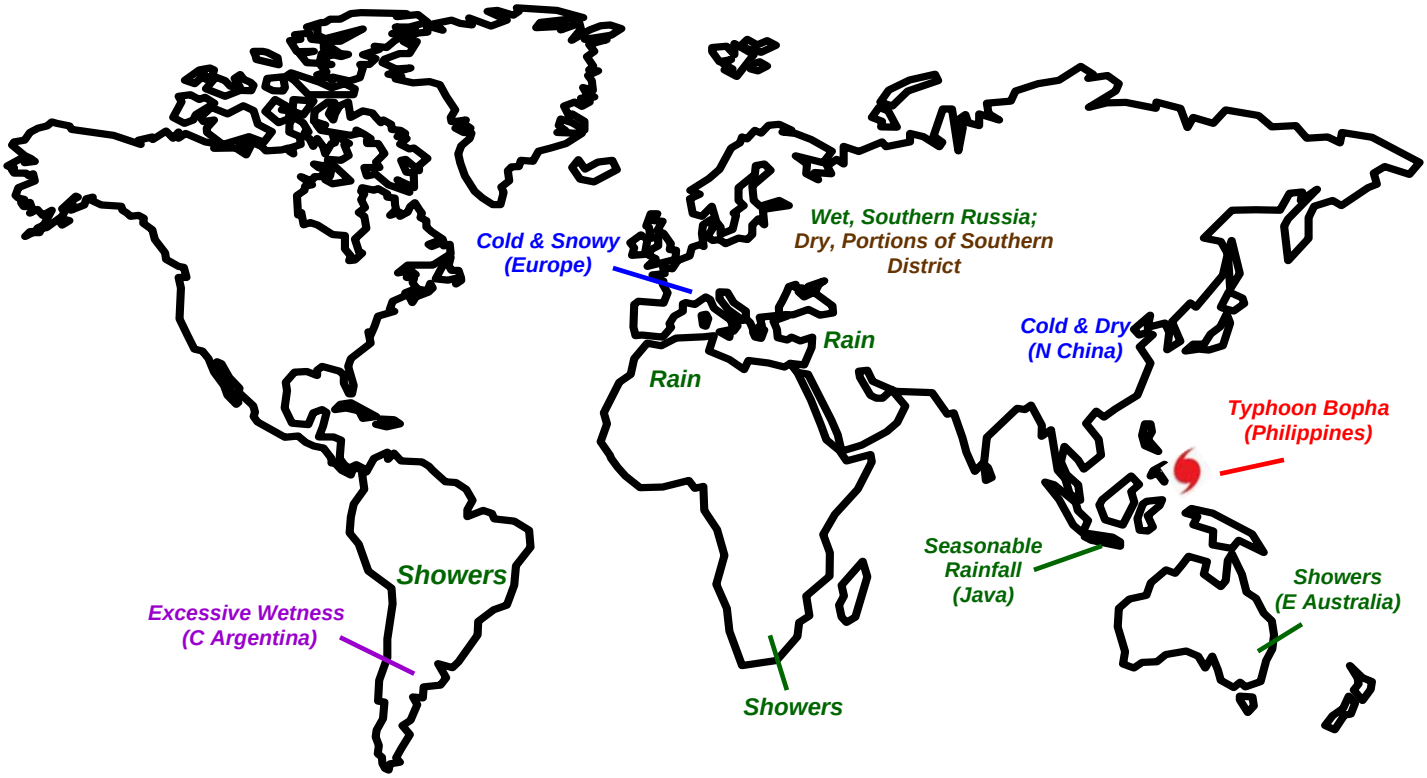
SOUTHEAST ASIA: Seasonable rainfall in Java, Indonesia, improved moisture conditions for vegetative rice, while Typhoon Cyclone Bopha made landfall in the southern Philippines.

AUSTRALIA: Showers benefited summer crops across portions of eastern Australia, but more rain would be welcome for dryland crops.

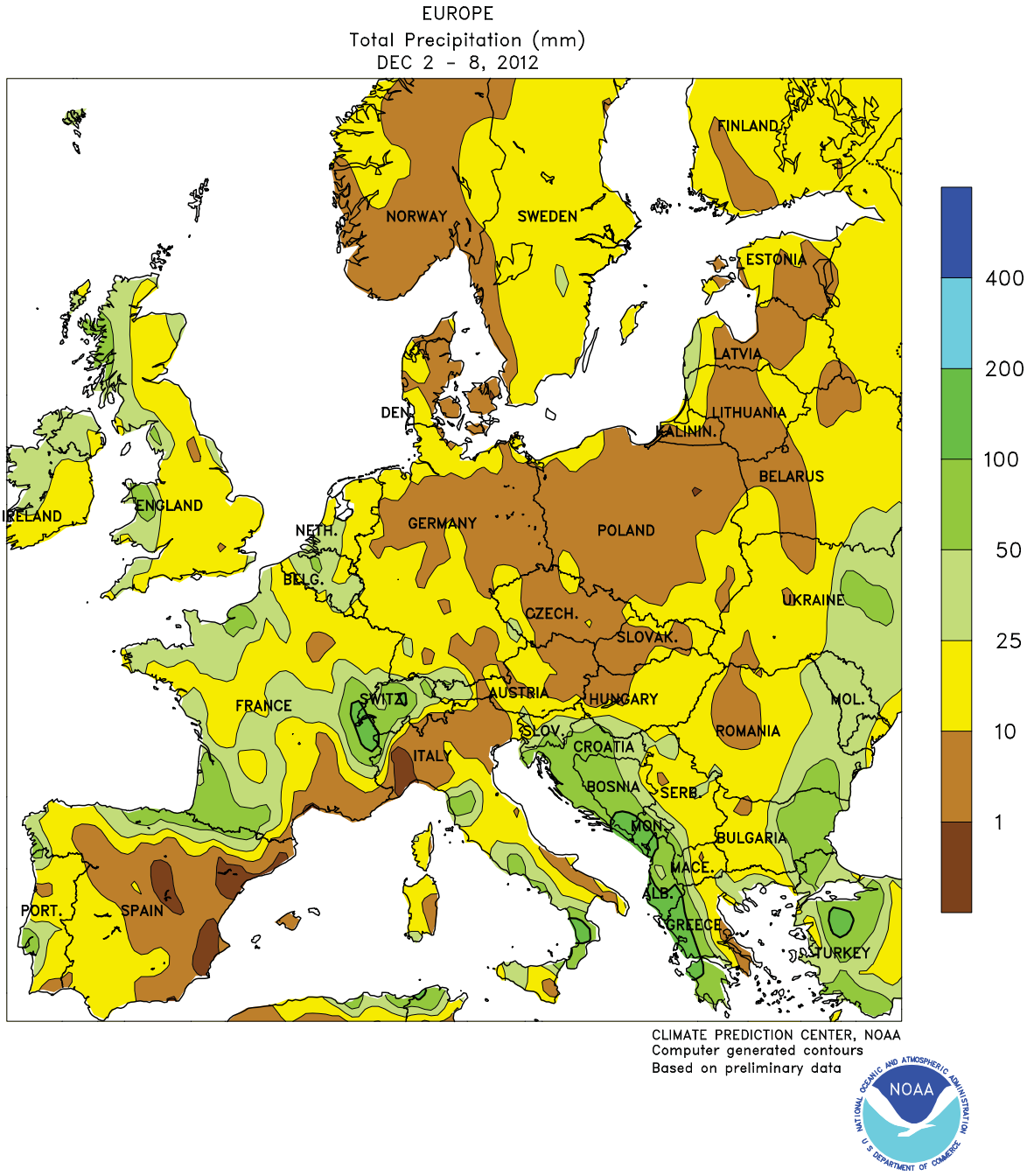
SOUTH AFRICA: Showers benefited corn, sugarcane, and other rain-fed summer crops.

ARGENTINA: Widespread, locally heavy rain maintained problems with excessive wetness.

BRAZIL: Rain inundated parts of the south, keeping summer crops well watered but hampering fieldwork.



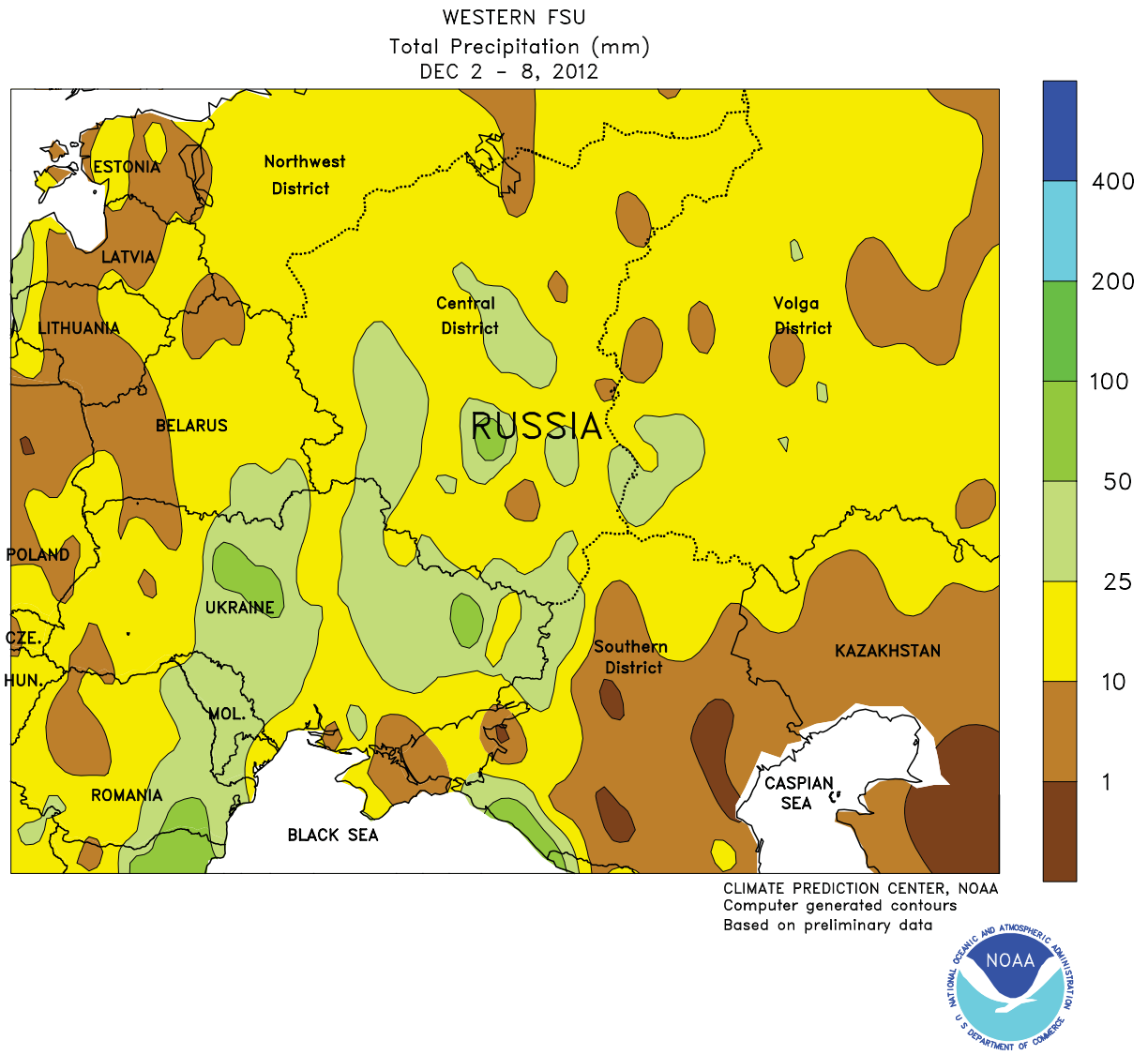
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Cold, snowy weather settled over much of the continent, with rain falling in warmer southern and western locales. Snow was observed across Germany, Poland, and the Baltic States, with depths of 2 to 20 cm at week's end affording dormant winter crops protection from increasingly cold weather (up to 5°C below normal). Farther south, an area of moderate to heavy snow (5-30 cm) covered winter crops from Serbia and southern Hungary into central and northern Romania, boosting soil moisture reserves for winter wheat but bringing an abrupt end to the growing season. Locally heavy rain (10-60 mm) in eastern portions of the Balkans provided much-needed soil moisture for winter wheat, although the arrival of sharply colder weather likely limited any potential benefit for late-season growth. Meanwhile, moderate to heavy rain (10-85 mm) from western and northern portions of the Iberian Peninsula into France and the United Kingdom boosted moisture reserves for emerging (south) to dormant (north) winter grains and oilseeds. Rain (10-75 mm) also continued in central and southern Italy, further increasing moisture supplies and irrigation reserves.

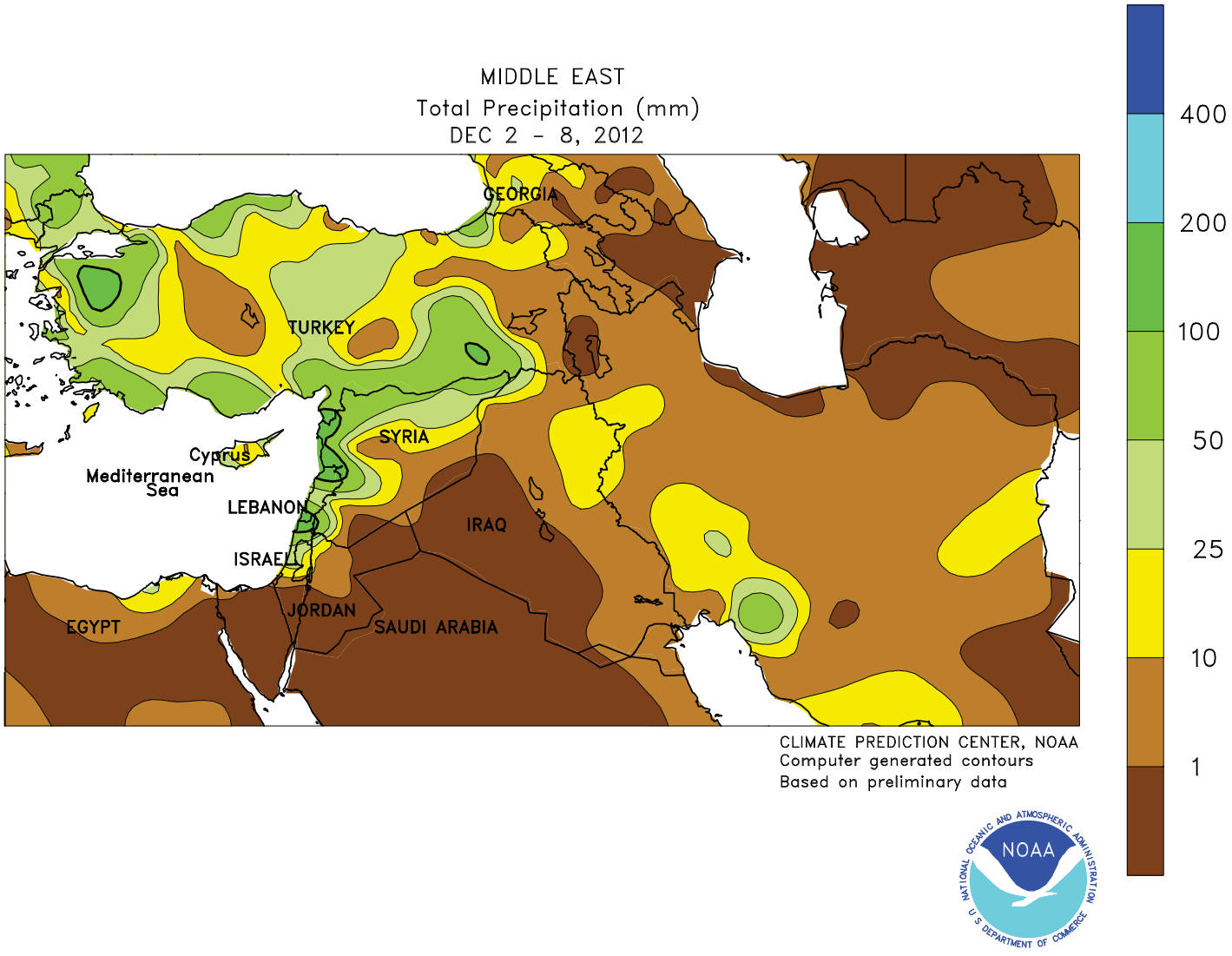
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Rain and snow expanded across the region, with abnormally warm weather in southern and eastern crop districts contrasting with colder-than-normal weather in western-most growing areas. A slow-moving cold front generated moderate to heavy rain (10-55 mm) in northeastern Ukraine as well as southern portions of Russia's Central and Volga Districts, boosting moisture reserves for dormant winter crops. However, abnormal warmth (locally more than 10°C above normal) kept these locales devoid of snow cover. Showers (10-35 mm) also spread into western sections of Russia's Southern District, providing much-needed soil moisture for winter wheat establishment. Rain bypassed the remainder of the Southern District's winter wheat areas, where crops remained poorly established due to an abnormally dry autumn. Meanwhile, rain changed to snow in western Ukraine and southeastern Belarus, with snow depths of 5 to 30 cm at week's end affording dormant winter grains and oilseeds adequate insulation from potential incursions of bitter cold.

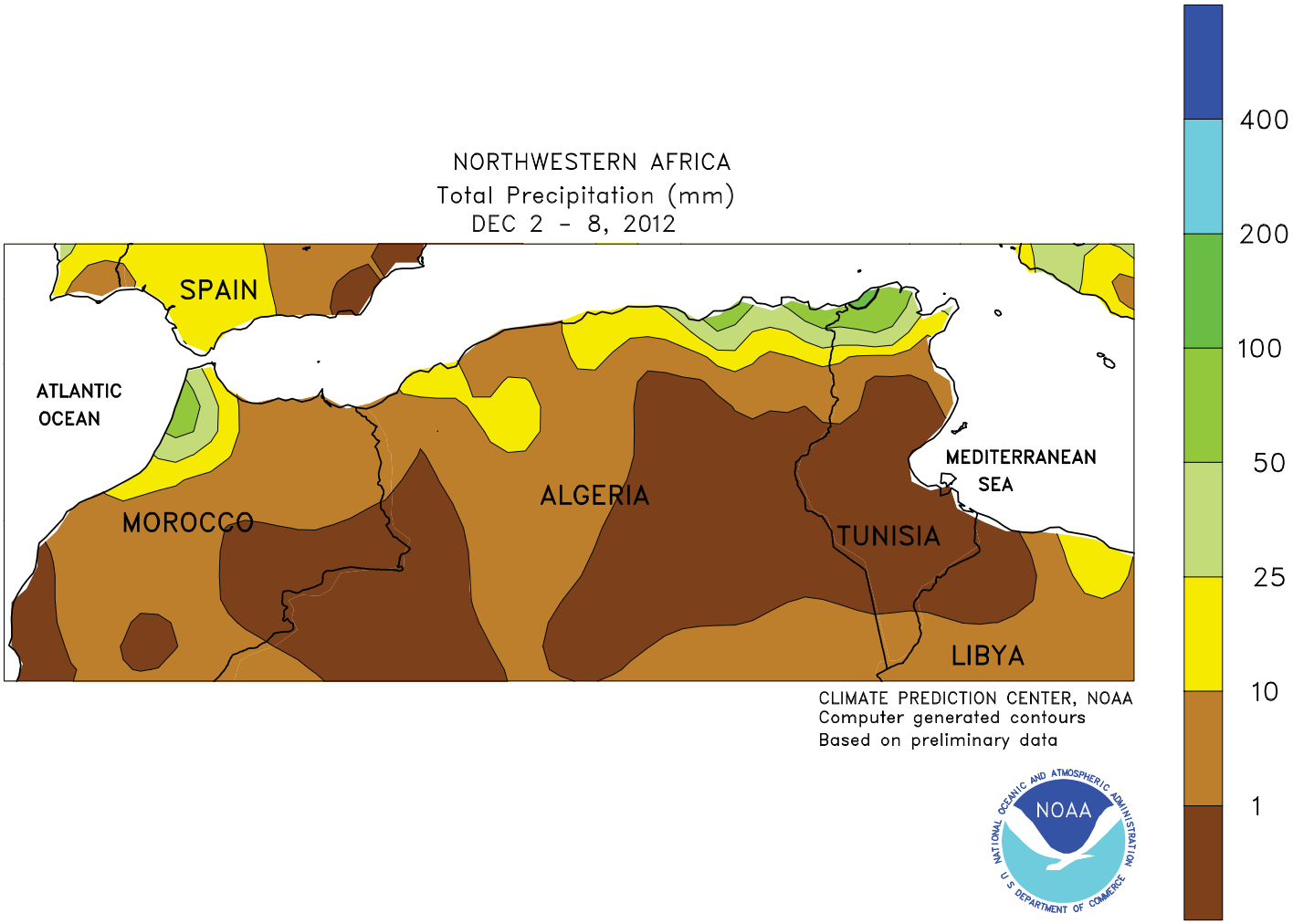
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

Wet weather returned to western and central portions of the region, while warmer-than-normal conditions extended the growing season. A slow-moving Mediterranean storm and its attendant cold front generated moderate to heavy rain (10-110 mm) in Turkey, ending a month-long dry spell and boosting moisture supplies for winter wheat and barley. Rain also reached Syria, Lebanon, and Israel, favoring vegetative winter crops. Lingering rain and high elevation snow (2-10 mm) in western Iran and northern Iraq were beneficial for winter crops, while lingering heavy showers (25-60 mm) in southern Iran further increased irrigation reserves for wheat and barley. Temperatures across the Middle East averaged 2 to 5°C above normal, extending the growing season in the north and accelerating crop growth in the south.

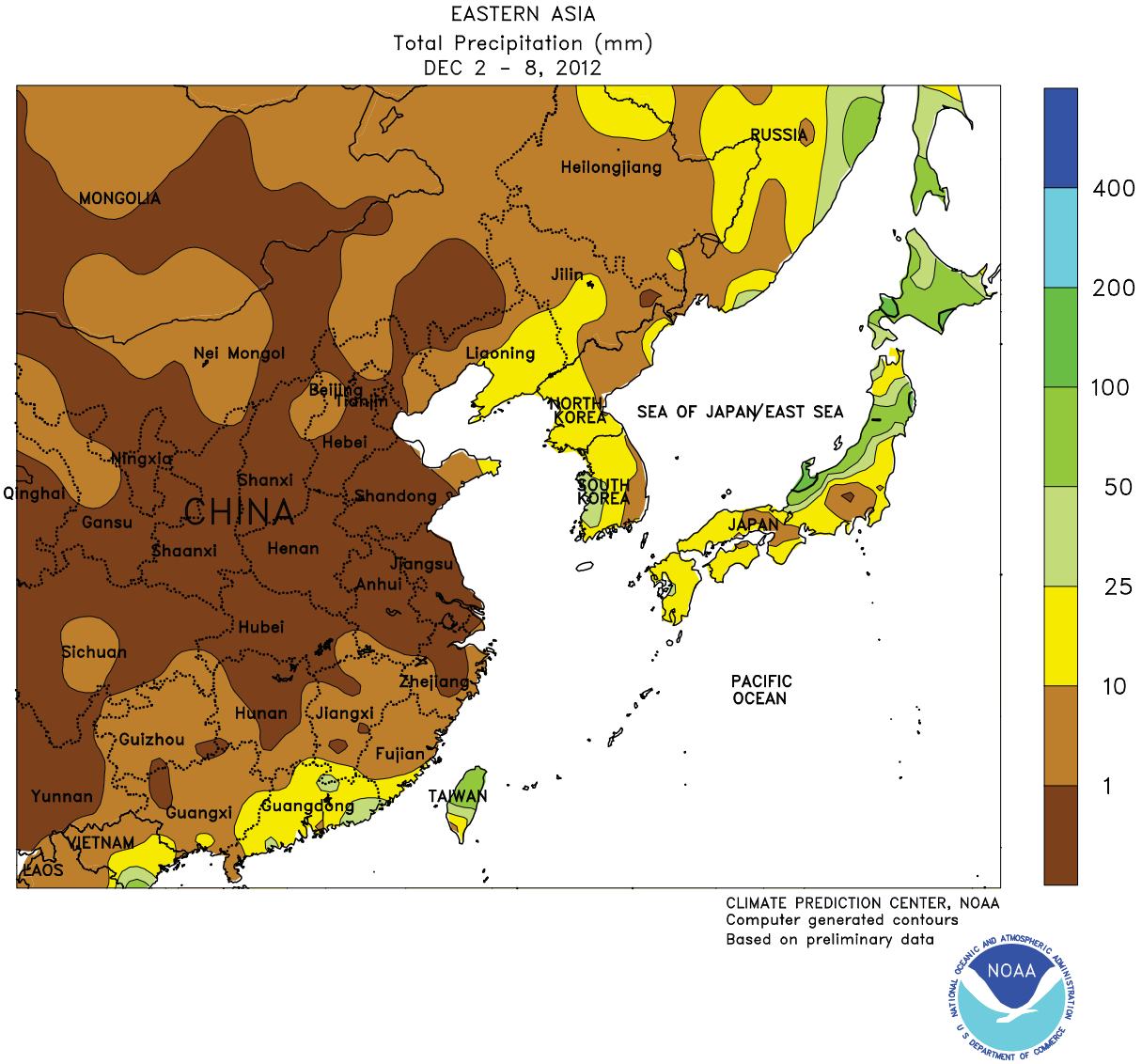
For additional information contact: mbrusberg@oce.usda.gov



NORTHWEST AFRICA

Showers continued across the west and returned to eastern crop districts, increasing moisture reserves for winter grains. A pair of cold fronts triggered additional moderate to heavy showers (5-80 mm) from northern Morocco into Tunisia. The rainfall maintained adequate to locally excessive soil moisture for winter wheat and barley in the west and improved conditions for winter grains farther east. Temperatures averaged 1 to 4°C below normal, although nighttime freezes were confined to the typically colder higher elevations south of the growing areas.

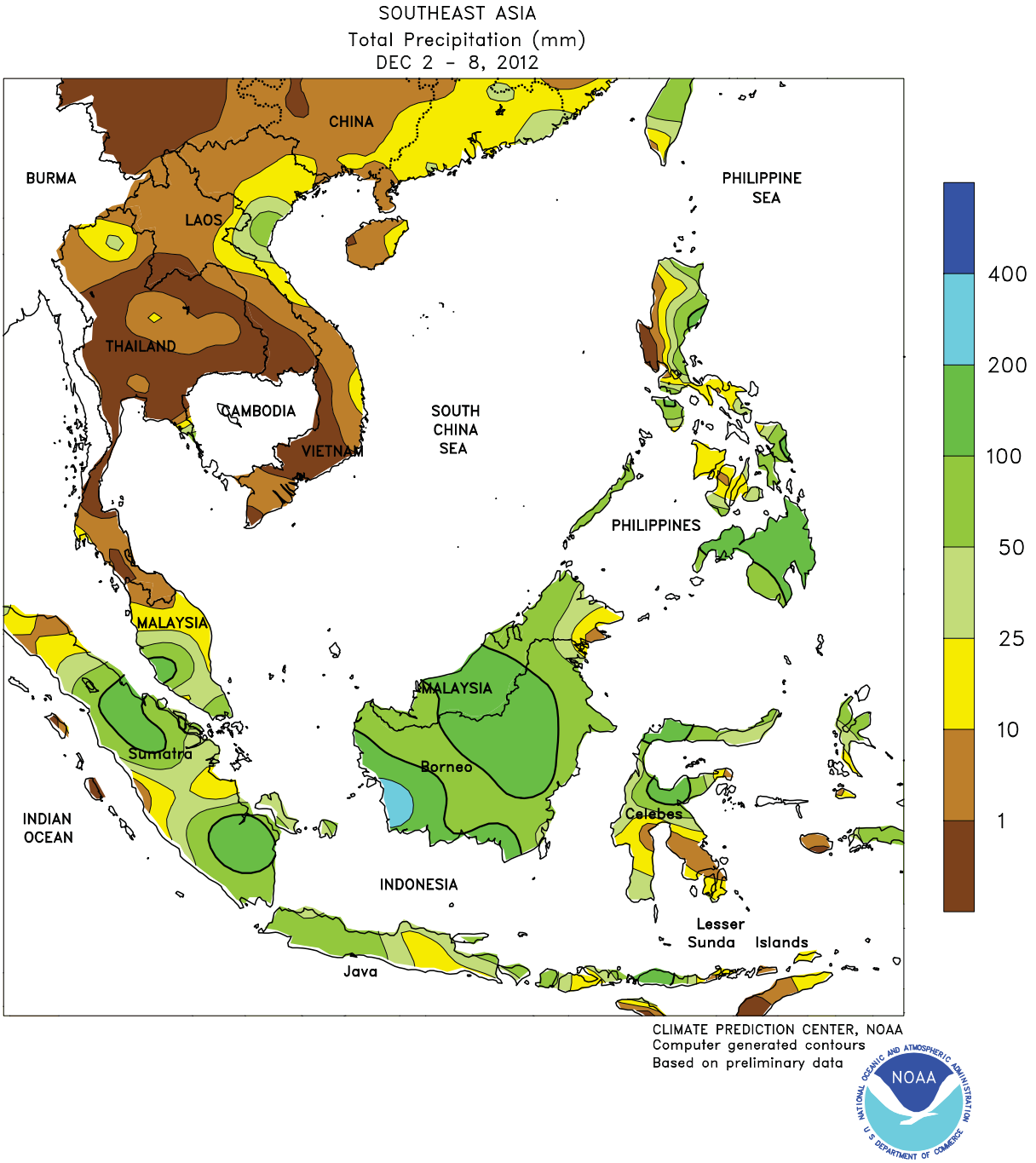
For additional information contact: mbrusberg@oce.usda.gov



EASTERN ASIA

Seasonably dry weather prevailed across winter crop areas of China. Moisture reserves remained favorable for the majority of winter wheat and rapeseed, although portions of the North China Plain and the Sichuan Basin were entering the winter with minor rainfall deficits (since October 1). Most of the wheat on the North China Plain was easing into dormancy, with temperatures consistently averaging below 5°C over the last 2 weeks. Rapeseed, however, remained vegetative in the Yangtze Valley, where dormancy typically occurs late in December.

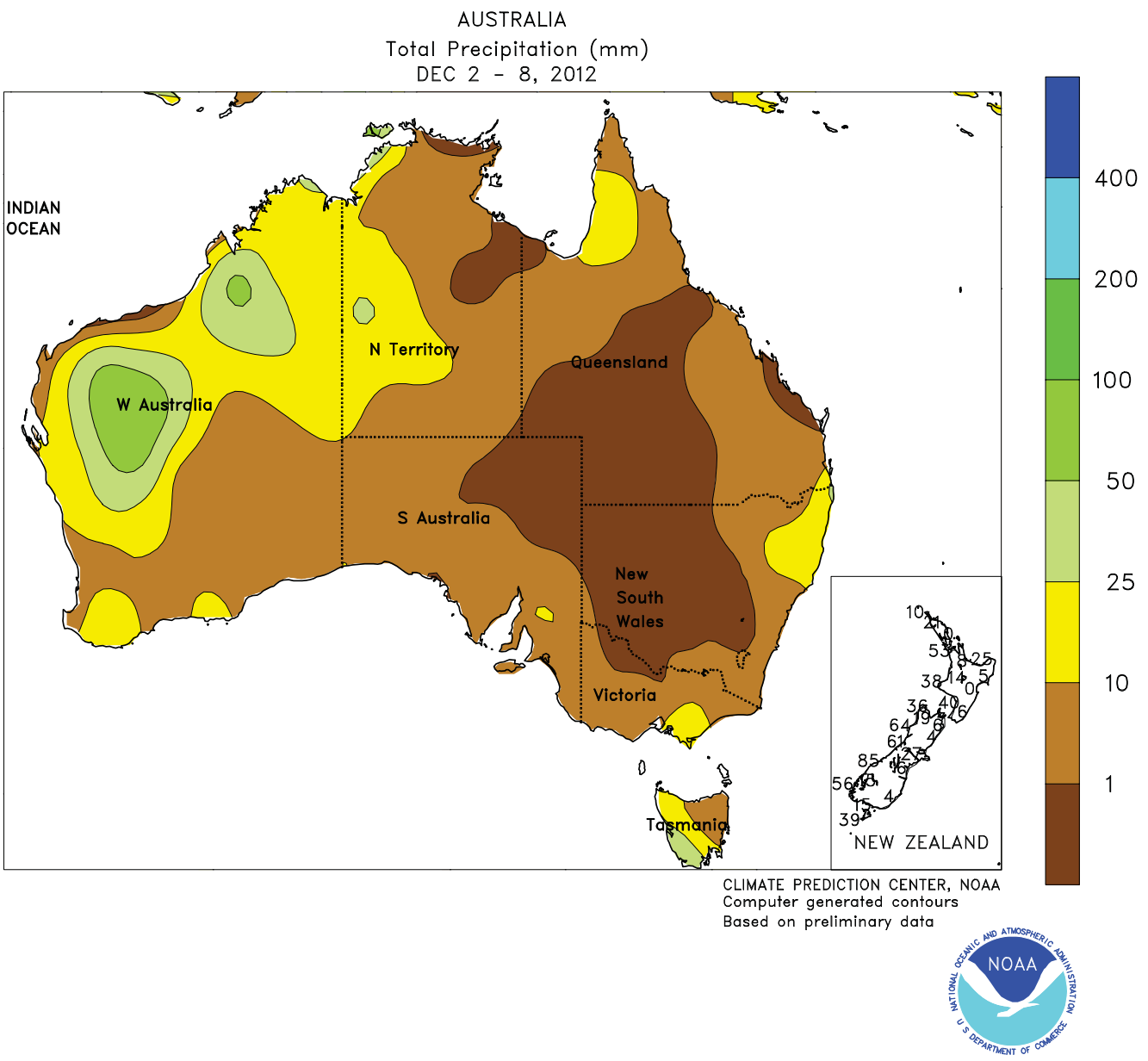
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

Additional rainfall (50-100 mm) across Java, Indonesia, improved moisture conditions for vegetative rice and eased recent seasonal deficits (since November 1). Oil palm in the remainder of Indonesia as well as Malaysia also benefited from seasonable rainfall (50-150 mm). Meanwhile, Typhoon Bopha cut a path across the southern Philippines with winds in excess of 140 knots and rainfall of nearly 200 mm. Most damage to corn and rice was likely the result of the immense storm surge associated with this powerful storm, although lodging may have also resulted due to high winds and rain. By the end of the reporting period, Bopha had recurved and was positioned off the western coast of Luzon in the north but had weakened substantially (winds of 45 knots).

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



AUSTRALIA

In Western Australia, occasional showers (5-35 mm) slowed winter grain drydown and harvesting. In contrast, warm, mostly dry weather in southeastern Australia favored winter grain maturation and harvesting. In northern New South Wales and southern Queensland, scattered showers (5-20 mm, locally more) reduced local irrigation requirements and benefited some dryland summer crops, but more rain would be welcome to ease longer term moisture deficits. Temperatures in southeastern Australia averaged near to below normal (up to 2°C below normal), while elsewhere in the wheat belt temperatures were generally seasonable.

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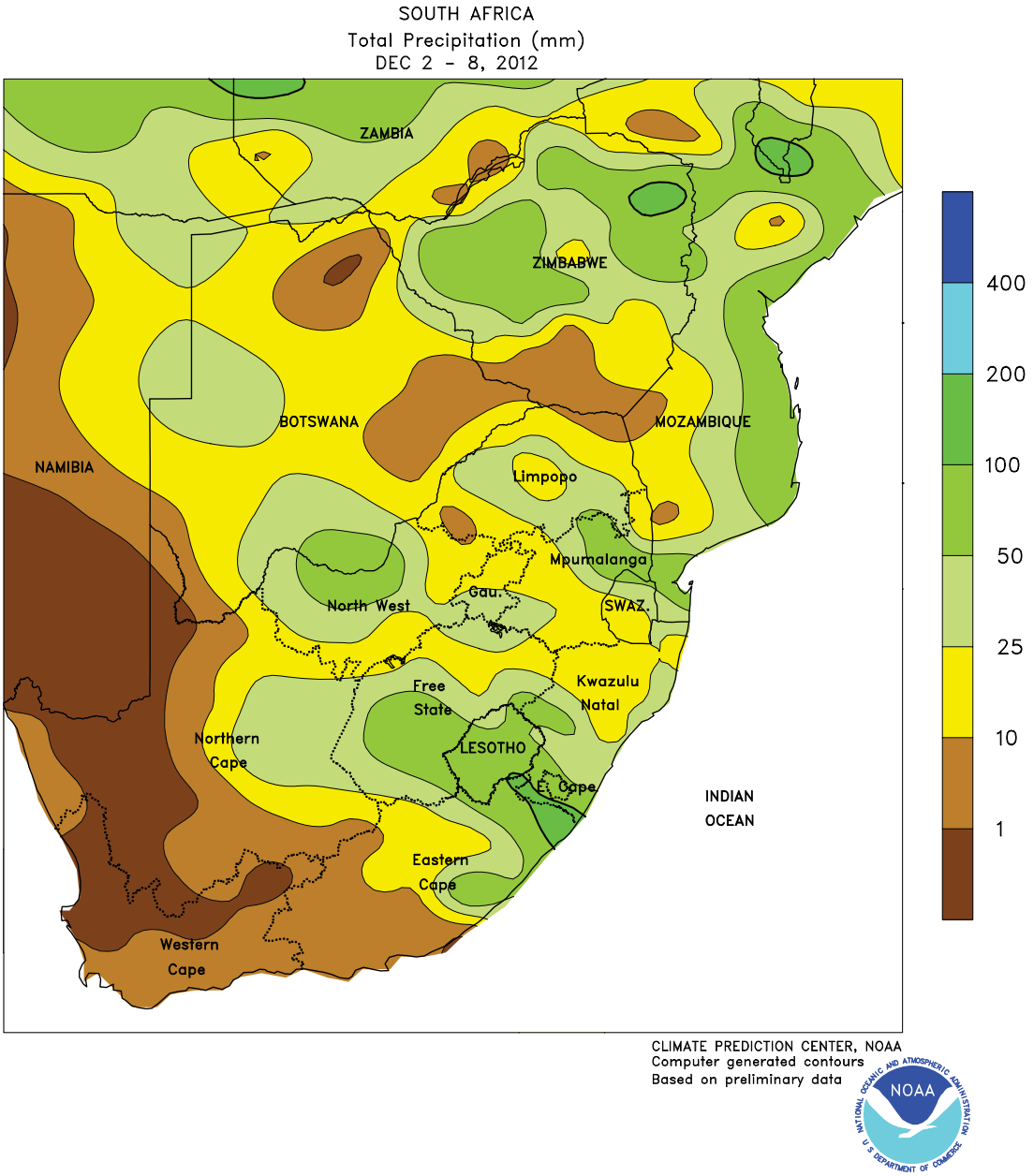

SOUTH AFRICA

Showers maintained generally favorable summer crop prospects. Rainfall totaled 10 to 25 mm in eastern sections of the corn belt (in and around southwestern Mpumalanga), with locally heavier amounts in outlying production areas. Rainfall intensified throughout the western corn belt (North West and central Free State), totaling 15 to 45 mm. The moisture in western production areas was timely for planting, while in the east, conditions were mostly favorable for vegetative crops. Weekly temperatures averaged near to slightly below normal throughout the corn belt; daytime highs were mostly in the lower and middle 20s (degrees C), approaching the lower 30s in western production areas at week's end. Elsewhere, moderate to heavy rain (10-50 mm) maintained favorable moisture levels for sugarcane in rain-fed production areas of southern KwaZulu-Natal. Unseasonably heavy rain (greater than 25 mm) increased irrigation reserves in eastern sections of both Northern and Eastern Cape Provinces. In contrast, dry, seasonably mild weather (daytime highs reaching the lower 30s) promoted growth of tree and vine crops in Western Cape.

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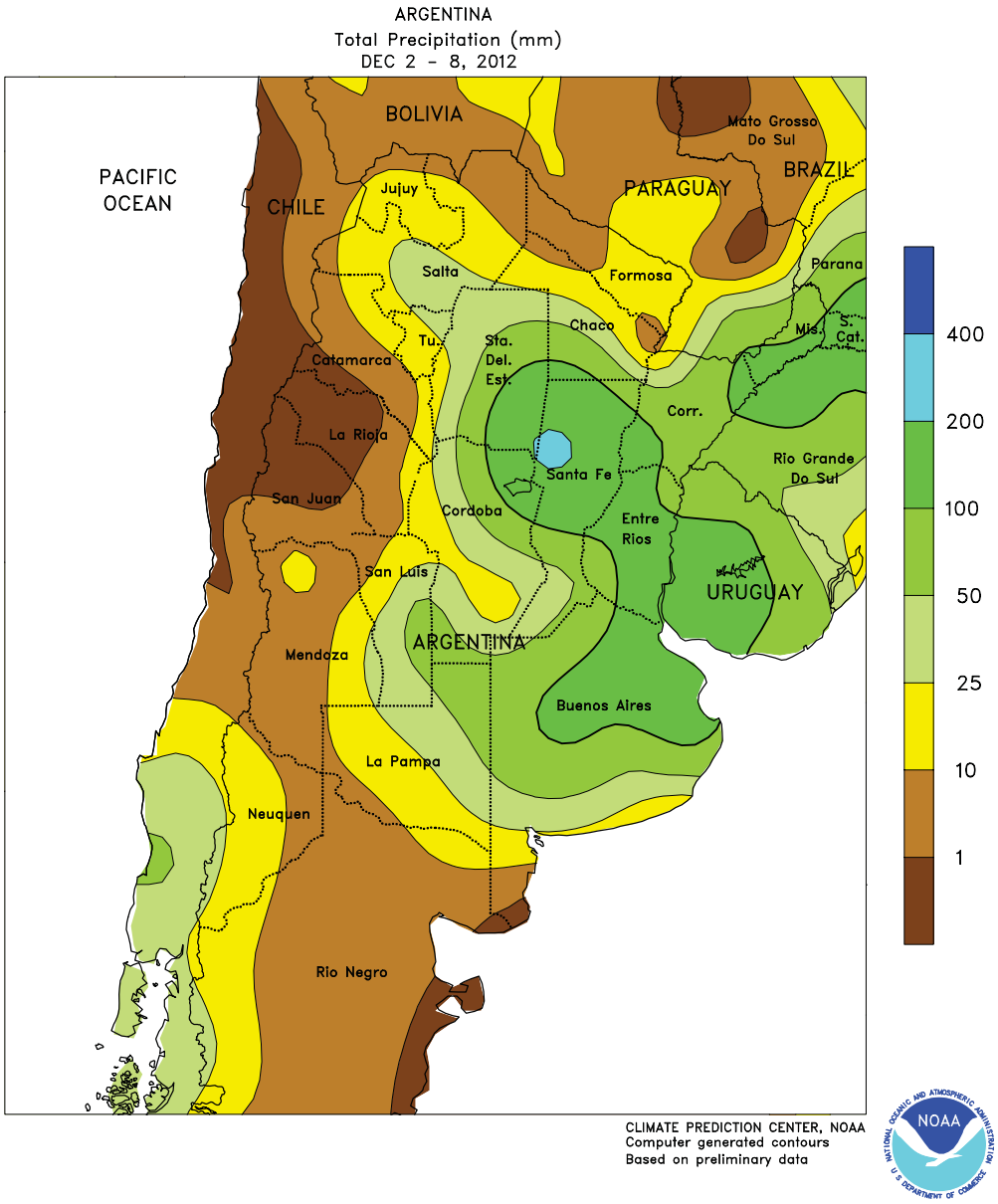

ARGENTINA

Chronic wetness maintained unfavorable prospects for summer crop planting and normal development of winter grains. Unlike recent weeks, the heaviest rainfall (greater than 100 mm) was concentrated in eastern production areas (Santa Fe to northeastern Buenos Aires), ending a brief period of favorable dryness. Meanwhile, moderate to heavy rain (25-100 mm) continued in many other agricultural areas, including western production areas of central Argentina (in the vicinity of northern La Pampa) that have reported some of the worst problems with planting delays. An extended period of drier weather is needed soon for the normal resumption of fieldwork, including the latter stages of summer crop planting and treatments for pests and diseases in winter grains. Weekly average temperatures were 2 to 4°C above normal, with daytime highs ranging from the lower 30s (degrees C) in southern Buenos Aires to the lower 40s farther north. The warm weather promoted crop development in the absence of stressful heat and helped to evaporate excessive moisture. According to Argentina's Ministry of Agriculture, sunflower planting was nearing completion (96 percent complete) as of December 6. Corn and soybeans were 66 and 65 percent planted, respectively, each lagging last year about 10 percentage points. In addition, winter wheat was 37 percent harvested, down 8 points from last year.

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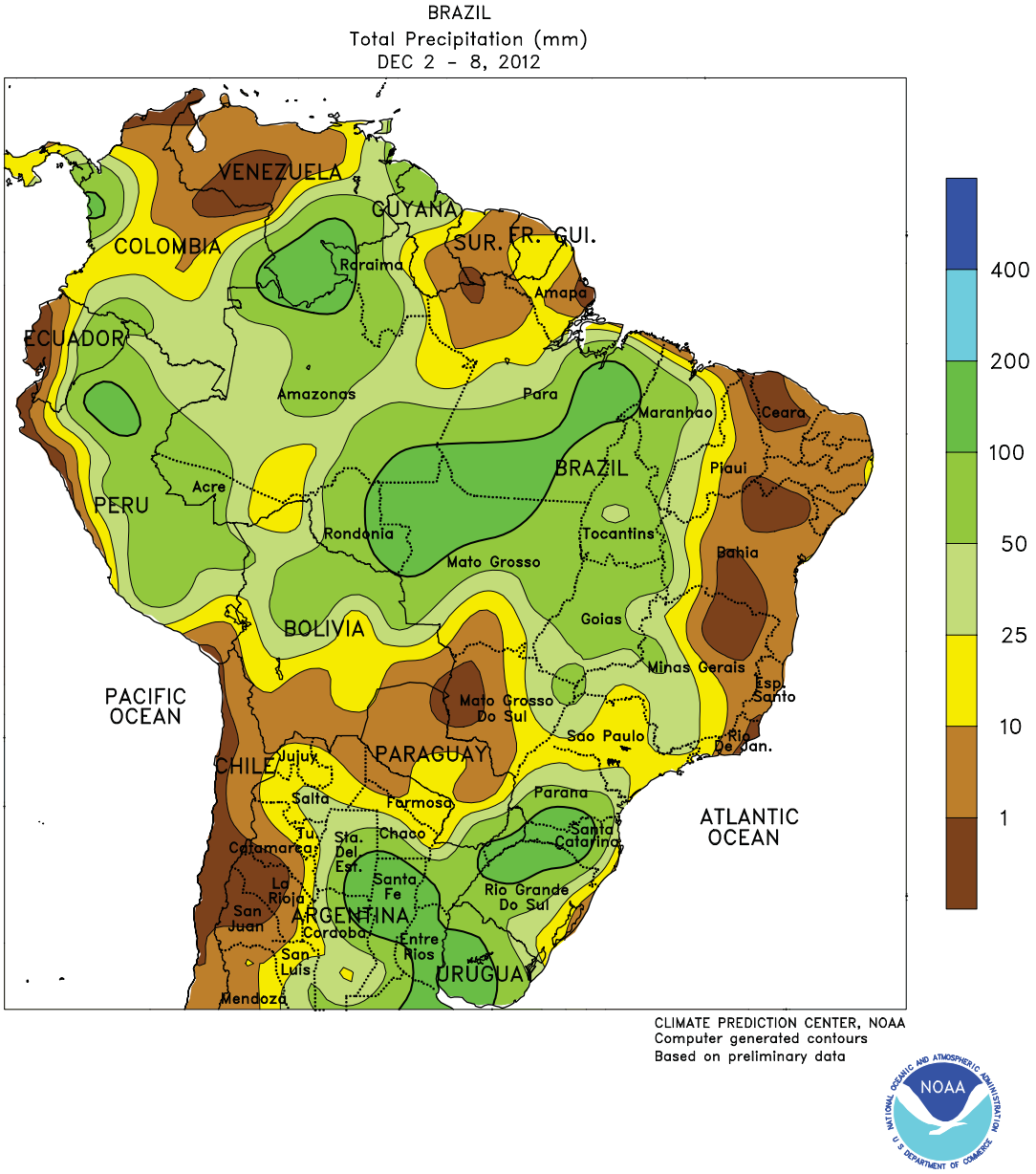

BRAZIL

Widespread, locally heavy rain overspread the region, maintaining adequate to locally excessive levels of moisture for agriculture. In the south, rainfall in excess of 100 mm was recorded over northern Rio Grande do Sul, western Santa Catarina, and southern Parana; the rainfall increased moisture for corn and soybeans but was untimely for the final stages of the winter wheat harvest. Elsewhere in southern Brazil, lighter rain (10-50 mm) fell from northern Parana to southern sections of Mato Grosso and Minas Gerais, boosting moisture for summer row crops, sugarcane, and coffee. Weekly temperatures averaged 2 to 5°C above normal in the aforementioned areas, with daytime highs reaching the middle 30s (degrees C) in some of the warmer locations. Locally heavy rain (25-100 mm) covered much of the central interior, extending from northern Mato Grosso eastward through western Bahia, including northeastern production areas of Tocantins, Piaui, and Maranhao. Weekly temperatures averaged up to 2°C above normal in central Brazil, with daytime highs in the lower and middle 30s. Meanwhile, seasonable warmth and dryness aided harvesting of cocoa and sugarcane along the northeastern coast.

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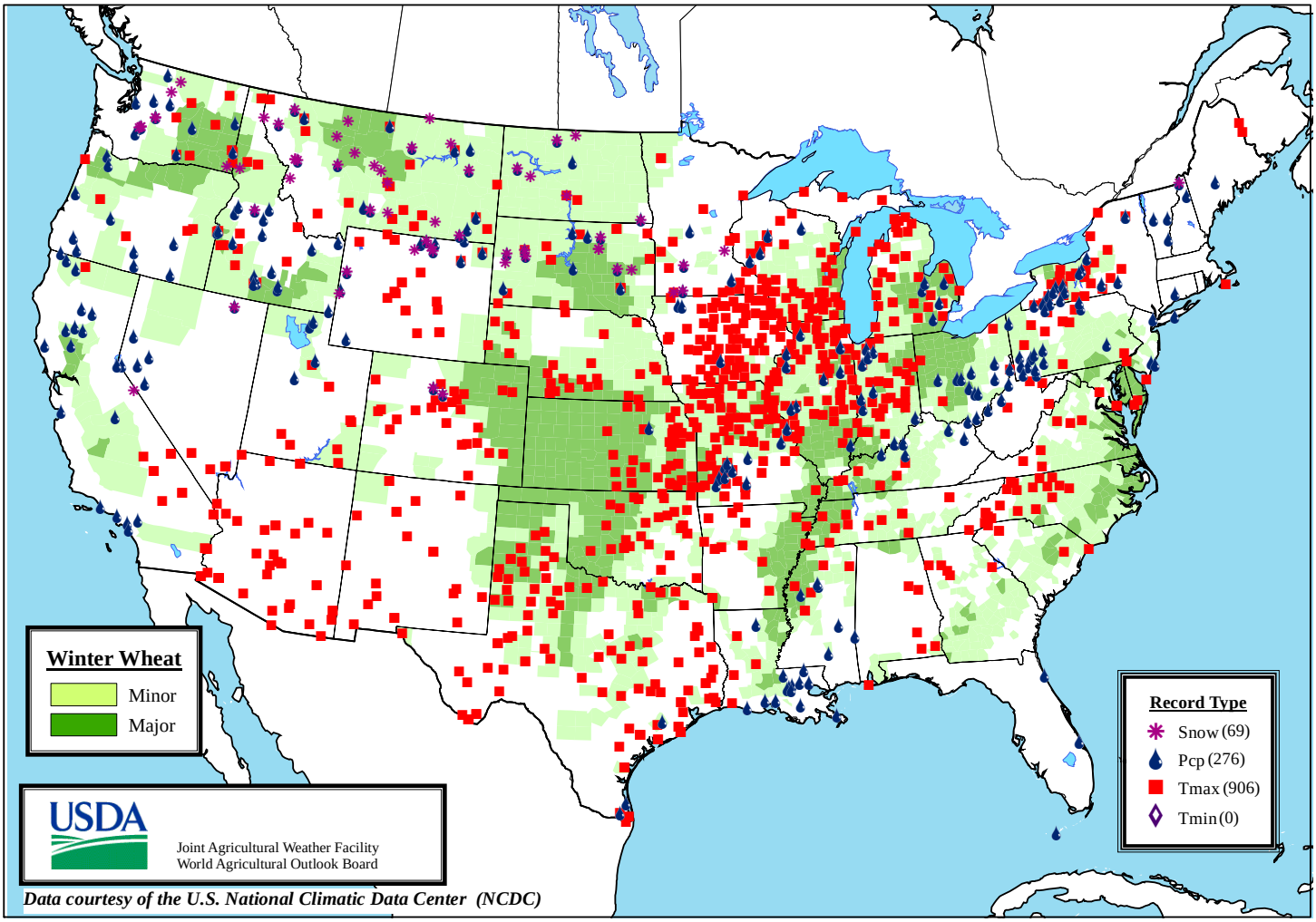
Daily Weather Records (ASOS & COOP)

December 2-8, 2012



Data courtesy of the U.S. National Climatic Data Center (NCDC)

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