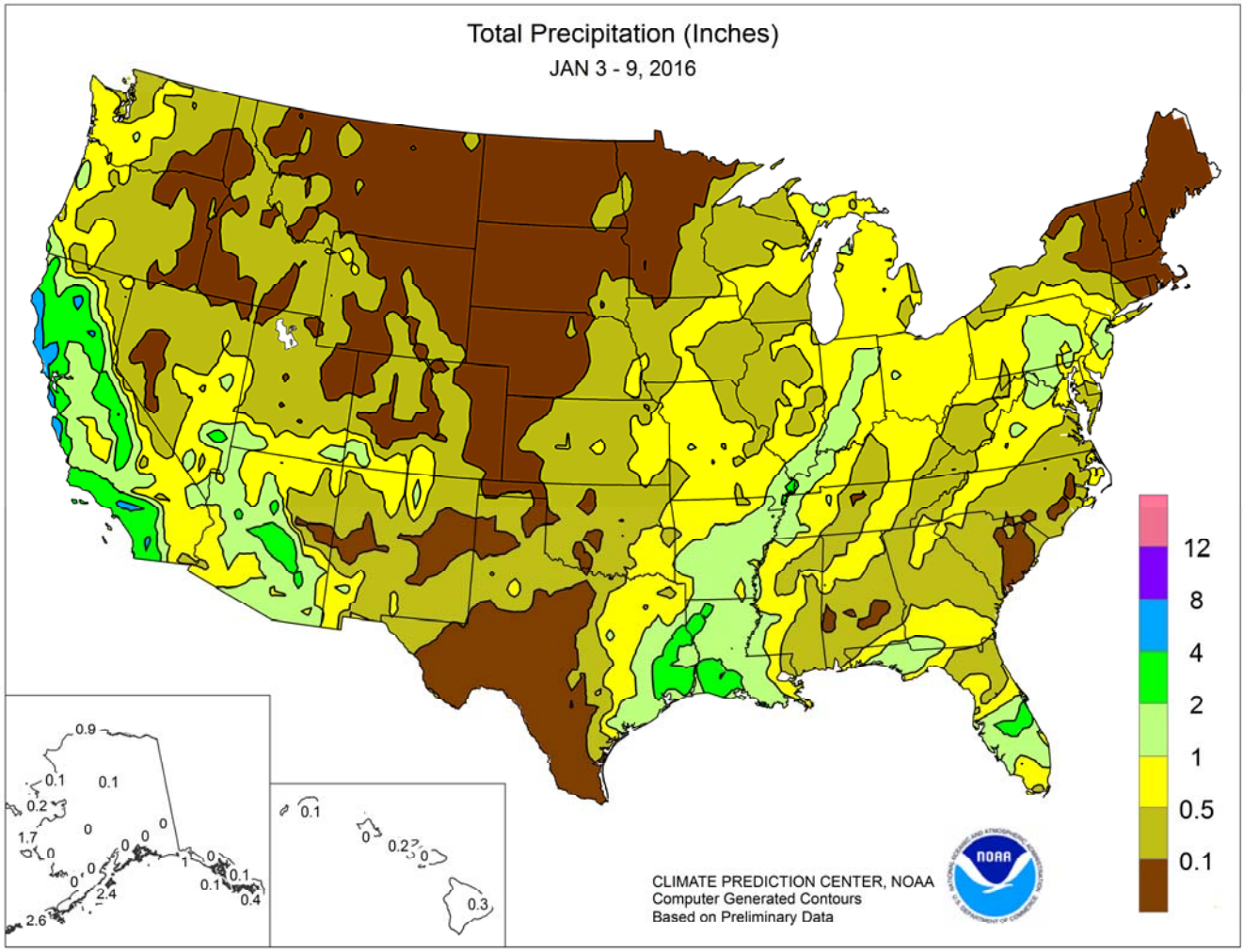
Volume 103, No. 2 http://www.usda.gov/oce/weather January 12, 2016

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

January 3 – 9, 2016

Highlights provided by USDA/WAOB

Colder, more tranquil weather temporarily overspread the **central and eastern U.S.**, while a southward shift in the primary storm track brought the heaviest precipitation of the season to **southern California**. In the **middle Mississippi Valley**, several days of dry weather allowed the rare winter flood to run its course and favored recovery operations. As the **Mississippi River** crest moved through the **mid-South**, impacts gradually diminished due to a wider, deeper channel. However, high water levels continued to disrupt transportation and maintained

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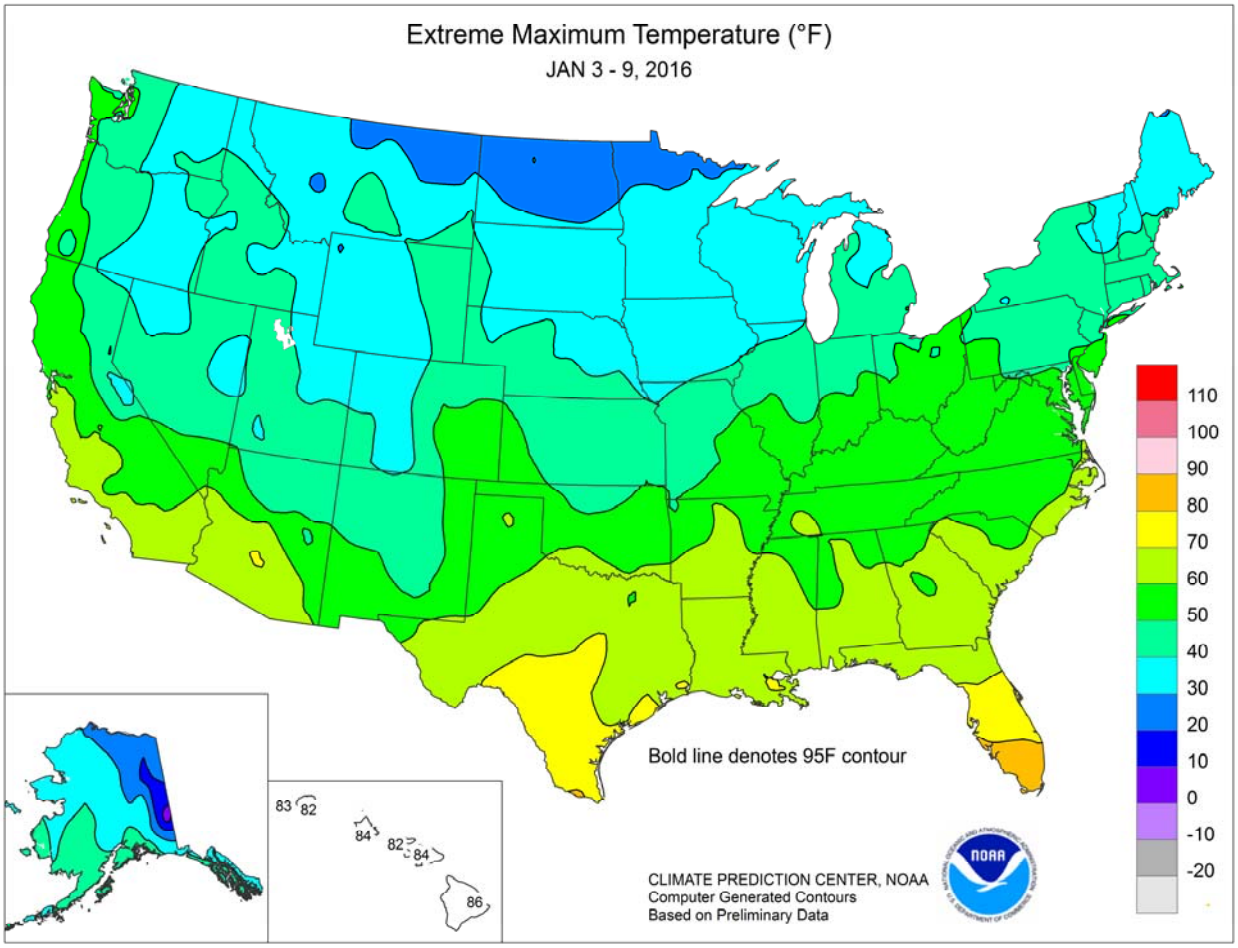
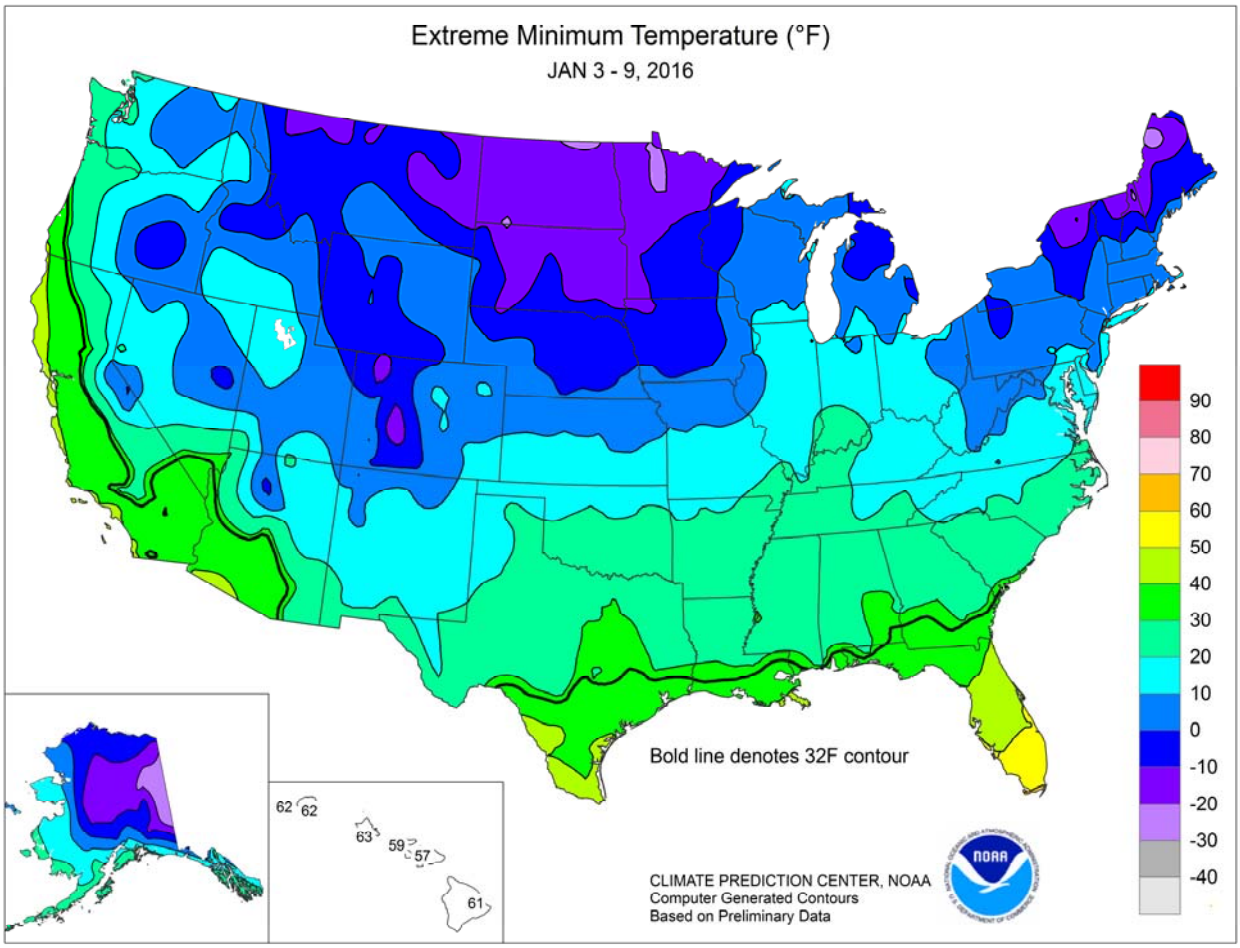
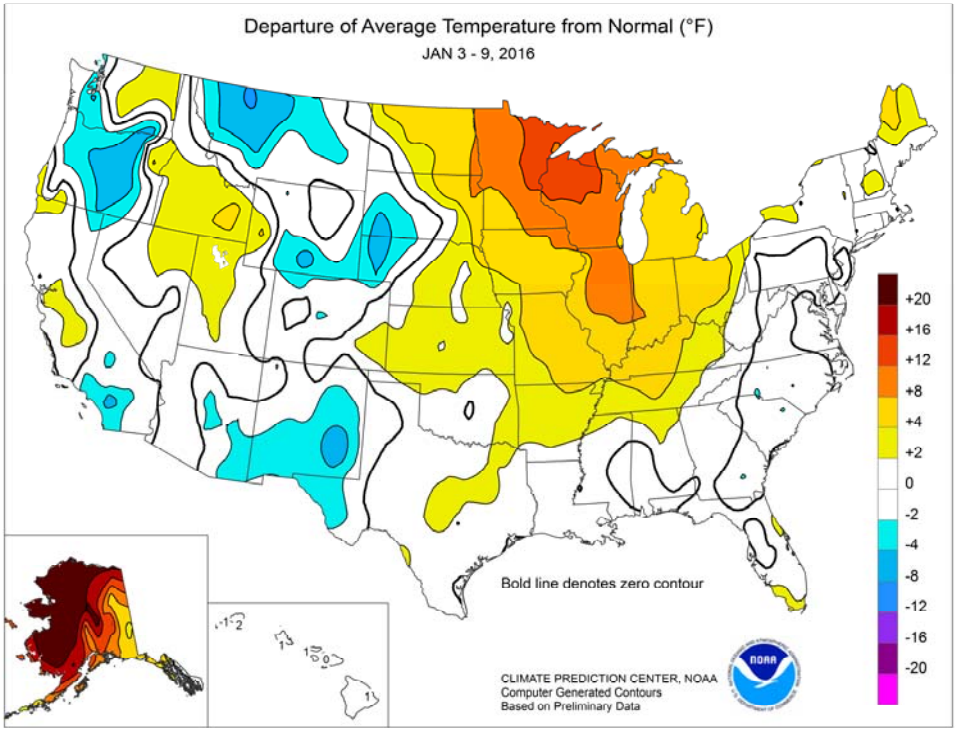

Extreme Maximum Temperature (°F)
JAN 3 - 9, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
83
82
84
82
84
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
JAN 3 - 9, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
62
62
63
59
57
61
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

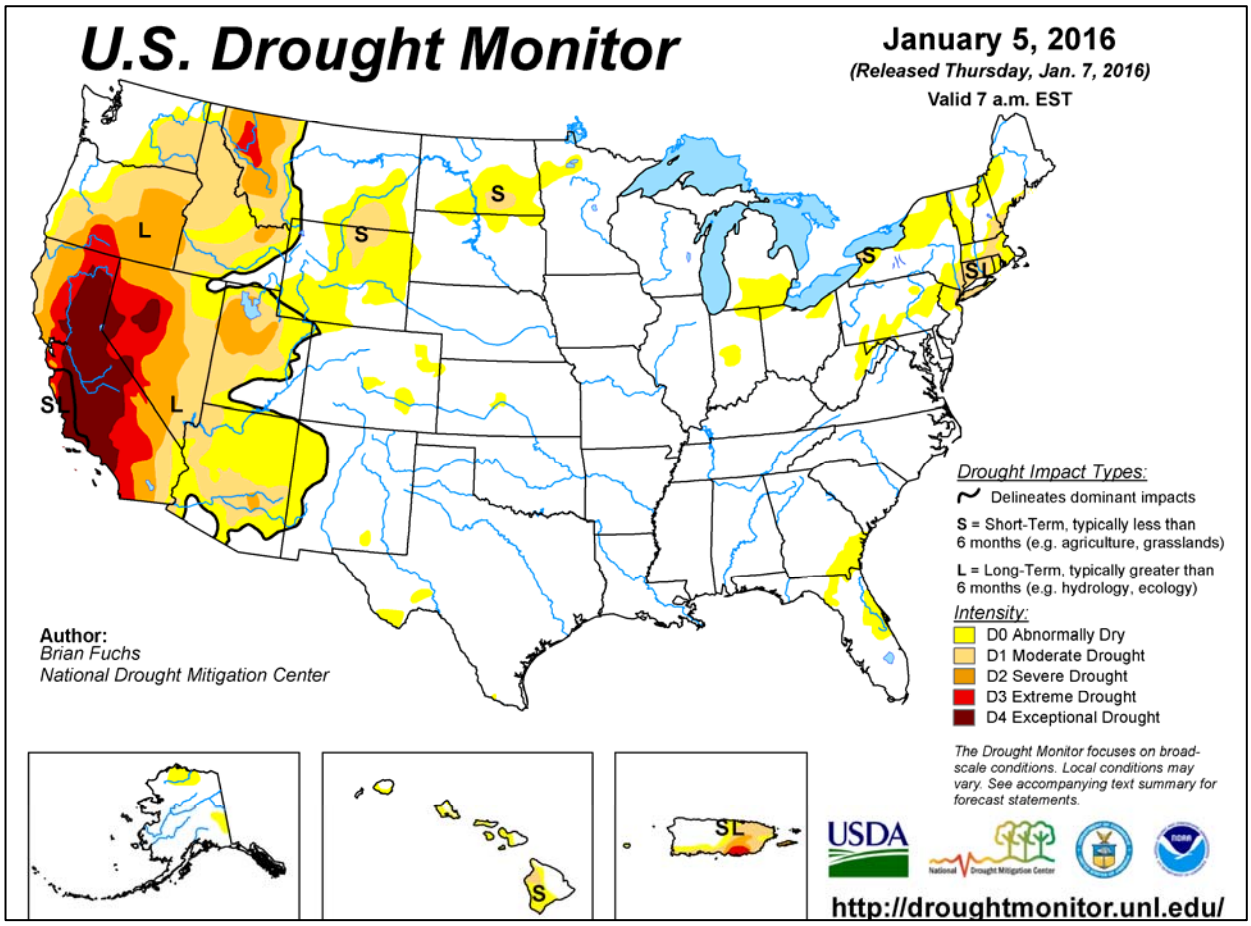


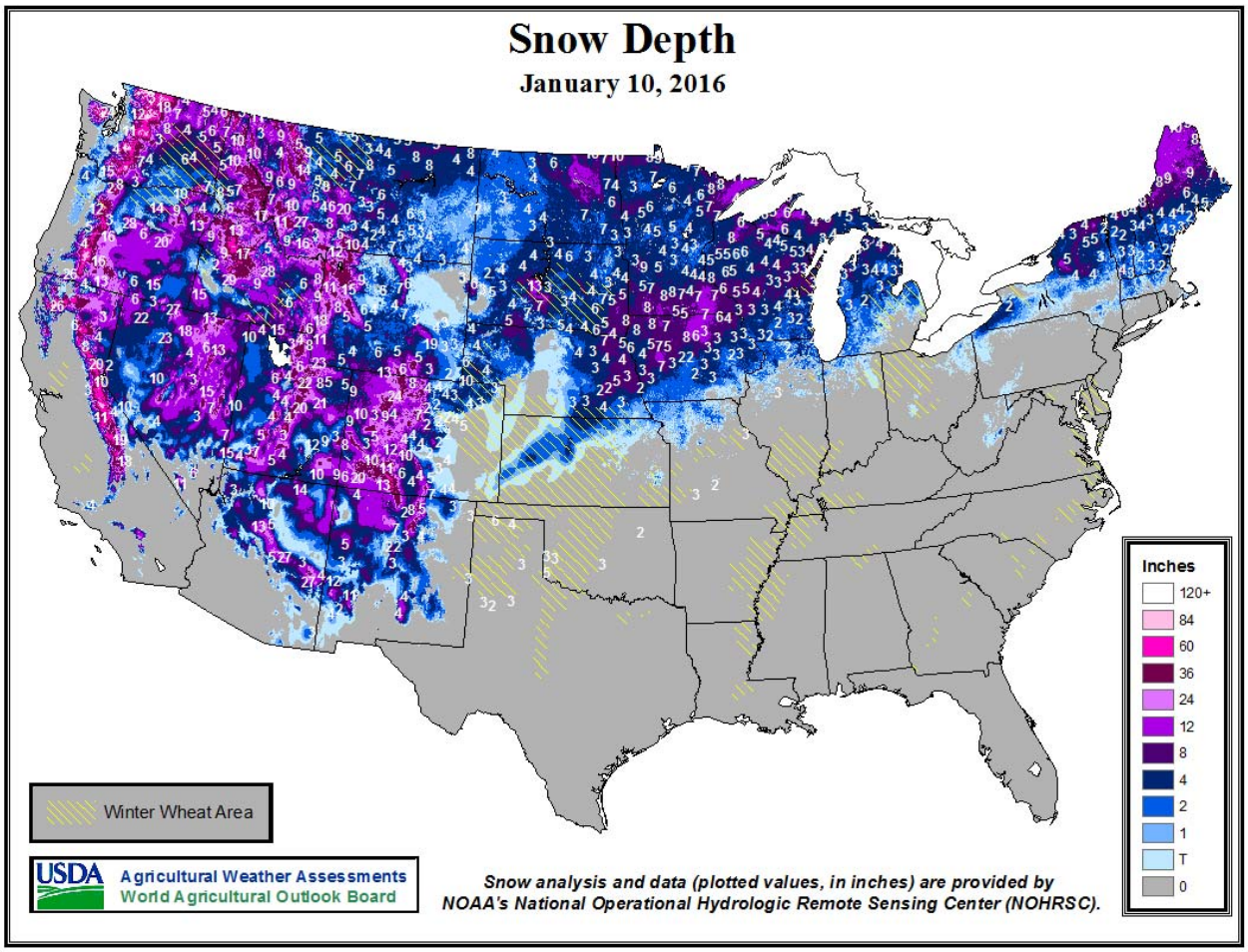
pressure on levees. During the second half of the week, precipitation returned across much of the **South**, **East**, and **Midwest**. Some of the heaviest rain, 1 to 2 inches or more in many locations, fell from **Louisiana and eastern Texas into the lower Ohio Valley**. Parts of **southern Florida** and the **northern Mid-Atlantic region** also received at least an inch of rain. Meanwhile, late-week snow blanketed portions of the **Plains**, **Midwest**, and **mid-South**, although amounts were mostly light. On the **northern Plains**, a variable snow cover helped to protect winter wheat from sub-zero temperatures during the weekend of January 9-10. Farther west, heavy rain and mountain snow spread across **California** and the **Southwest**. By January 10, the average water content of the high-elevation **Sierra Nevada** snowpack climbed to 13 inches—just slightly above normal for this time of year but higher than at any point during 2013-14 or 2014-15. Despite a turn toward cooler weather, near- to above-normal temperatures dominated the **eastern half of the U.S.** In fact, weekly temperatures averaged at least 10°F above normal in parts of the **upper Midwest**. Temperatures across the **western U.S.** were a mix of above- and below-normal values.

The week began with cold air in place across parts of the **interior West** and a few snow squalls downwind of the **Great Lakes**. With a low of 8°F, **Pasco, WA**, tied a daily record for January 3. The next day, **South Bend, IN**, netted a daily-record snowfall (4.6 inches) for January 4. Although no records were set, temperatures in parts of **northern New England** briefly dipped below -20°F on January 5. Then, following several days with mostly uneventful temperatures, the strongest cold surge of the season arrived across the **northern Plains** and **upper Midwest**. **La Crosse, WI**, reported a low of 6°F on January 9, the second-latest observance of the season's first single-digit reading in that location behind January 11, 1914. The average date of the season's first sub-10°F reading in **La Crosse** is November 30. In contrast, **Miami, FL**, notched a daily record-tying high of 84°F on January 9.

A major, multi-storm precipitation event occurred across **California** and the **Southwest** from January 4-8. During that 5-day period, precipitation in **Flagstaff, AZ**, totaled 2.69 inches, including 30.9 inches of snow. Snowfall totals of 2 to 3 feet were reported in the mountains northwest of **Las Vegas, NV**, with 34 inches noted at the **Lee Canyon Ski Area**. Meanwhile in **southern California**, January 4-8 rainfall totals included 5.51 inches in **Ramona**, 3.01 inches in **Burbank**, 2.98 inches in **San Diego**, 2.72 inches in **Los Angeles (LAX and downtown)**, 2.45 inches in **Riverside**, and 2.12 inches in **Palm Springs**. Some of the heaviest rain fell on January 5, when daily-record totals included 2.33 inches in **Ramona** and 1.42 inches in **Los Angeles (LAX)**. Windy weather accompanied **California's** precipitation, with gusts clocked to 67 mph (on January 5) on **Mt. Palomar** and 61 mph (on January 6) in **Beverly Hills**. Farther inland, record-setting snowfall totals for January 7 included 10.4 inches in **Ely, NV**, and 4.5 inches in **Boulder, MT**. Late in the week, snow spread **east of the Rockies**, stretching into the **upper Midwest**. Daily-record snowfall amounts for January 8 reached 5.3 inches in **Alamosa, CO**, and 4.3 inches in **Sioux Falls, SD**. Elsewhere, mid-week showers across the **South** led to daily-record rainfall totals for January 6 in locations such as **Melbourne, FL** (1.59 inches), and **Victoria, TX** (1.49 inches).

Unusually mild weather pushed weekly temperatures at least 20 to 25°F above normal across much of **northern, central, and western Alaska**. **Bettles** posted consecutive daily-record highs of 32°F on January 3-4. Elsewhere on January 4, **King Salmon** (45°F) also notched a daily-record high. **McGrath** achieved multiple daily-record highs, including a maximum of 42°F on January 5. Significant precipitation accompanied the mild conditions in portions of **western Alaska**, but a broad section of the mainland experienced dry weather. In the **Aleutians**, **Cold Bay** received precipitation totaling 2.95 inches, including 6.9 inches of snow, from January 1-9. Farther south, mostly dry weather covered **Hawaii**. During the first 9 days of 2016, rainfall at the state's major airport observation sites ranged from a trace at **Honolulu, Oahu**, to 0.44 inch (17 percent of normal) at **Hilo**, on the **Big Island**.


U.S. Drought Monitor
January 5, 2016
(Released Thursday, Jan. 7, 2016)
Valid 7 a.m. EST
Author:
Brian Fuchs
National Drought Mitigation Center
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
http://droughtmonitor.unl.edu/


Snow Depth
January 10, 2016
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by
NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending January 9, 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	52	37	62	30	45	2	0.52	-0.66	0.51	11.05	195	0.52	44	81	52	0	4	2	1
	HUNTSVILLE	51	35	60	23	43	3	0.43	-0.83	0.43	11.11	162	0.43	34	72	53	0	4	1	0
	MOBILE	58	41	68	29	49	-1	0.13	-1.04	0.11	12.67	217	0.29	24	89	66	0	1	2	0
	MONTGOMERY	56	39	62	31	48	2	0.11	-0.93	0.11	14.24	236	0.11	10	81	50	0	2	1	0
AK	ANCHORAGE	33	22	41	16	28	12	0.00	-0.17	0.00	0.24	20	0.01	6	78	69	0	7	0	0
	BARROW	15	3	28	-7	9	22	0.91	0.91	0.56	0.95	731	0.91	9100	95	76	0	7	4	1
	FAIRBANKS	13	-7	26	-15	3	12	0.00	-0.14	0.00	0.07	8	0.00	0	85	78	0	7	0	0
	JUNEAU	32	22	38	16	27	1	0.26	-0.90	0.25	3.37	51	0.95	81	94	91	0	7	2	0
	KODIAK	41	33	43	25	37	7	2.39	0.50	0.71	15.44	162	3.16	166	98	87	0	3	6	3
	NOME	33	25	38	20	29	23	0.16	-0.03	0.06	0.95	79	0.17	85	82	68	0	7	4	0
AZ	FLAGSTAFF	34	21	45	2	27	-2	2.69	2.26	1.11	3.72	164	2.69	611	99	75	0	7	4	2
	PHOENIX	60	49	72	41	54	1	1.13	0.93	0.61	1.34	119	1.13	538	76	63	0	0	4	1
	PRESCOTT	46	30	59	21	38	2	1.08	0.77	0.53	1.38	86	1.08	338	96	57	0	5	5	1
	TUCSON	58	43	70	34	51	0	1.53	1.28	0.82	2.00	155	1.53	588	76	55	0	0	2	2
AR	FORT SMITH	48	32	55	25	40	2	0.37	-0.17	0.35	11.18	284	0.37	67	84	58	0	5	2	0
	LITTLE ROCK	51	34	66	25	43	3	1.52	0.69	0.95	9.90	178	1.52	181	90	54	0	3	3	1
CA	BAKERSFIELD	60	43	68	39	51	5	0.69	0.46	0.48	1.27	127	0.69	288	78	65	0	0	3	0
	FRESNO	54	42	60	38	48	4	1.27	0.85	0.64	4.24	240	1.27	295	90	79	0	0	5	1
	LOS ANGELES	61	49	67	45	55	-2	2.73	2.18	1.42	3.81	162	2.73	488	79	62	0	0	3	2
	REDDING	50	40	54	33	45	0	4.71	3.37	2.15	12.92	215	4.71	349	87	77	0	0	5	4
	SACRAMENTO	54	41	57	34	47	2	2.06	1.34	1.31	3.81	119	2.06	278	93	67	0	0	5	1
	SAN DIEGO	62	52	64	48	57	0	2.98	2.54	1.67	3.86	219	2.98	662	79	65	0	0	5	3
	SAN FRANCISCO	54	46	58	42	50	1	2.24	1.39	1.01	5.61	149	2.24	257	87	81	0	0	6	2
	STOCKTON	54	40	56	34	47	3	1.43	0.91	0.94	3.90	166	1.44	272	93	86	0	0	4	1
CO	ALAMOSA	31	5	39	-3	18	4	0.55	0.49	0.46	0.80	200	0.55	786	87	73	0	7	5	0
	CO SPRINGS	41	21	55	14	31	3	0.18	0.10	0.13	0.43	84	0.18	200	73	40	0	7	2	0
	DENVER INTL	39	19	46	10	29	1	0.38	0.30	0.25	1.09	273	0.38	422	77	52	0	7	2	0
	GRAND JUNCTION	33	17	39	5	25	0	0.31	0.17	0.23	1.00	149	0.31	207	94	78	0	7	3	0
	PUEBLO	45	16	54	7	30	1	0.41	0.33	0.31	0.81	169	0.41	456	76	49	0	7	2	0
CT	BRIDGEPORT	41	22	47	10	32	1	0.00	-0.84	0.00	4.94	114	0.00	0	68	43	0	5	0	0
	HARTFORD	39	16	46	5	28	2	0.00	-0.85	0.00	4.25	95	0.00	0	74	49	0	6	0	0
DC	WASHINGTON	44	29	54	16	36	1	0.42	-0.32	0.42	5.26	138	0.42	56	82	52	0	4	1	0
DE	WILMINGTON	43	24	54	12	33	1	0.00	-0.79	0.00	5.21	124	0.00	0	83	42	0	5	0	0
FL	DAYTONA BEACH	68	56	73	48	62	3	0.74	0.06	0.69	1.37	40	0.80	116	96	64	0	0	4	1
	JACKSONVILLE	58	47	68	37	53	0	0.41	-0.33	0.20	1.26	37	0.70	93	90	71	0	0	3	0
	KEY WEST	76	68	81	65	72	2	0.81	0.29	0.49	5.40	201	0.82	152	94	71	0	0	3	0
	MIAMI	77	63	84	60	70	2	1.52	1.13	1.05	11.42	443	1.60	400	95	61	0	0	4	1
	ORLANDO	69	54	75	48	62	1	0.69	0.17	0.31	1.41	50	0.69	130	92	70	0	0	4	0
	PENSACOLA	57	46	64	36	52	0	0.00	-1.10	0.00	8.33	164	0.00	0	77	59	0	0	0	0
	TALLAHASSEE	61	47	67	39	54	2	0.98	-0.18	0.67	6.20	118	1.43	122	79	56	0	0	4	1
	TAMPA	70	55	78	49	62	1	1.38	0.91	0.65	1.87	67	1.38	288	89	61	0	0	3	2
	WEST PALM BEACH	75	60	80	55	68	1	1.10	0.38	0.44	8.44	218	1.10	151	90	68	0	0	4	0
GA	ATHENS	51	33	62	22	42	0	0.44	-0.53	0.24	12.81	273	0.44	45	80	54	0	4	2	0
	ATLANTA	51	36	60	26	43	1	0.58	-0.42	0.37	13.09	271	0.58	57	75	53	0	3	2	0
	AUGUSTA	53	36	65	25	45	0	0.14	-0.79	0.14	7.06	173	0.14	15	85	59	0	3	1	0
	COLUMBUS	54	39	62	30	47	0	0.34	-0.70	0.21	17.71	325	0.34	32	76	48	0	2	3	0
	MACON	53	38	59	25	46	1	0.26	-0.78	0.25	12.89	259	0.27	26	79	53	0	2	2	0
	SAVANNAH	57	41	67	31	49	0	0.14	-0.70	0.14	3.90	107	0.55	65	78	56	0	2	1	0
HI	HILO	82	63	86	61	73	2	0.33	-1.70	0.32	14.54	116	0.44	22	84	70	0	0	2	0
	HONOLULU	82	67	84	63	75	2	0.00	-0.63	0.00	0.27	8	0.00	0	81	67	0	0	0	0
	KAHULUI	82	62	84	57	72	0	0.01	-0.83	0.01	0.78	20	0.05	6	84	73	0	0	1	0
	LIHUE	80	67	82	62	74	2	0.09	-1.00	0.08	1.51	26	0.09	8	82	72	0	0	2	0
ID	BOISE	39	26	43	13	33	4	0.04	-0.26	0.04	1.75	104	0.04	13	92	84	0	6	1	0
	LEWISTON	40	29	49	14	35	2	0.01	-0.22	0.01	1.60	124	0.01	4	90	81	0	6	1	0
	POCATELLO	36	24	43	10	30	6	0.09	-0.16	0.09	1.33	98	0.09	35	88	79	0	7	1	0
IL	CHICAGO/O'HARE	36	25	42	17	31	9	0.47	0.07	0.27	5.40	190	0.53	129	85	74	0	5	3	0
	MOLINE	36	22	42	10	29	8	0.22	-0.16	0.12	4.41	170	0.22	56	83	74	0	5	3	0
	PEORIA	40	26	47	12	33	10	0.49	0.13	0.25	6.80	245	0.49	132	84	63	0	5	3	0
	ROCKFORD	34	23	38	15	29	9	0.65	0.33	0.46	5.30	222	0.65	197	86	76	0	5	3	0
	SPRINGFIELD	42	27	51	13	35	9	0.59	0.18	0.29	7.15	241	0.59	137	88	60	0	5	3	0
IN	EVANSVILLE	47	29	56	22	38	7	1.37	0.74	1.34	6.57	157	1.37	211	77	57	0	6	2	1
	FORT WAYNE	39	24	47	12	31	7	0.86	0.38	0.47	5.01	153	0.86	172	88	63	0	6	3	0
	INDIANAPOLIS	42	28	50	18	35	8	0.83	0.27	0.53	6.42	178	0.83	146	81	60	0	5	2	1
	SOUTH BEND	36	22	45	9	29	5	0.79	0.25	0.47	4.91	135	0.79	144	87	69	0	5	4	0
IA	BURLINGTON	36	24	44	3	30	7	0.33	0.02	0.19	4.84	199	0.33	100	91	71	0	5	3	0
	CEDAR RAPIDS	32	18	37	0	25	6	0.17	-0.05	0.10	4.24	248	0.17	74	97	82	0	5	2	0
	DES MOINES	32	20	37	-2	26	5	0.44	0.22	0.33	5.88	377	0.44	191	82	76	0	6	3	0
	DUBUQUE	32	19	37	8	25	8	0.23	-0.05	0.14	4.42	223	0.23	79	90	81	0	6	3	0
	SIOUX CITY	31	19	36	-3	25	7	0.47	0.33	0.22	3.33	411	0.47	313	83	77	0	6	4	0
	WATERLOO	30	18	36	-4	24	8	0.52	0.35	0.37	6.44	499	0.52	289	89	81	0	7	3	0
KS	CONCORDIA	36	21	45	4	28	1	0.42	0.25	0.27	3.06	294	0.42	233	91	76	0	6	3	0
	DODGE CITY	41	24	48	14	32	2	0.25	0.08	0.25	2.68	282	0.25	139	88	57	0	5	1	0
	GOODLAND	41	17	50	6	29	1	0.02	-0.09	0.02	0.18	35	0.02	17	86	61	0	7	1	0
	TOPEKA	38	24	43	7	31	4	0.72	0.50	0.53	3.43	208	0.72	313	88	73	0	4	3	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 9, 2016

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	40	27	45	14	33	3	0.18	-0.06	0.16	2.40	150	0.18	72	88	72	0	4	3	0
KY	JACKSON	48	30	57	17	39	5	0.68	-0.13	0.41	5.32	104	0.68	82	75	41	0	5	2	0
	LEXINGTON	46	29	54	16	37	5	0.47	-0.34	0.25	7.68	158	0.47	57	78	57	0	5	2	0
	LOUISVILLE	48	32	55	23	40	7	0.33	-0.41	0.16	6.91	155	0.33	43	78	50	0	5	3	0
	PADUCAH	48	29	55	19	38	5	2.13	1.39	1.99	9.55	186	2.13	284	86	53	0	6	2	1
LA	BATON ROUGE	62	42	70	30	52	2	1.84	0.55	1.02	8.26	126	1.93	148	90	54	0	1	2	2
	LAKE CHARLES	62	42	68	31	52	1	2.11	0.91	1.19	5.42	93	2.18	179	93	56	0	1	4	2
	NEW ORLEANS	62	48	71	39	55	2	0.75	-0.38	0.51	7.80	126	1.34	118	79	64	0	0	2	1
	SHREVEPORT	57	39	66	27	48	2	1.51	0.52	0.91	4.40	79	1.51	151	87	57	0	3	3	2
ME	CARIBOU	25	7	33	-9	16	5	0.11	-0.61	0.10	4.99	127	0.11	15	82	64	0	7	2	0
	PORTLAND	36	15	41	4	26	3	0.07	-0.87	0.07	5.42	104	0.08	8	70	49	0	7	1	0
MD	BALTIMORE	43	25	52	12	34	1	0.31	-0.49	0.30	6.16	148	0.31	38	82	51	0	5	2	0
MA	BOSTON	40	24	45	8	32	2	0.01	-0.84	0.01	4.29	93	0.01	1	71	45	0	6	1	0
	WORCESTER	34	18	39	3	26	2	0.05	-0.87	0.05	4.70	99	0.05	5	75	45	0	7	1	0
MI	ALPENA	34	15	40	-10	24	5	0.42	0.01	0.30	4.21	186	0.42	98	85	67	0	6	3	0
	GRAND RAPIDS	36	24	43	10	30	7	0.70	0.25	0.46	4.03	128	0.70	152	84	60	0	5	3	0
	HOUGHTON LAKE	32	17	38	-7	25	6	0.52	0.16	0.32	4.09	193	0.52	141	79	66	0	7	4	0
	LANSING	35	22	42	7	29	6	0.74	0.39	0.56	3.48	138	0.76	211	78	66	0	6	3	1
	MUSKEGON	37	24	42	10	31	6	0.66	0.15	0.37	5.57	176	0.67	129	74	63	0	5	5	0
	TRAVERSE CITY	35	21	43	0	28	6	0.56	-0.09	0.24	5.65	170	0.56	85	85	61	0	6	3	0
MN	DULUTH	27	14	32	-11	21	12	0.21	0.02	0.08	3.91	343	0.21	105	87	78	0	7	3	0
	INT'L FALLS	25	14	29	-18	19	16	0.10	-0.05	0.09	1.17	136	0.10	63	87	74	0	7	2	0
	MINNEAPOLIS	30	17	34	-6	24	11	0.17	-0.04	0.08	2.49	204	0.17	77	84	74	0	7	3	0
	ROCHESTER	28	16	33	-9	22	10	0.44	0.26	0.20	3.65	302	0.44	232	91	83	0	7	3	0
	ST. CLOUD	27	12	32	-9	20	11	0.13	-0.01	0.06	1.15	137	0.13	87	91	75	0	7	3	0
MS	JACKSON	57	38	68	28	47	2	1.14	-0.11	0.98	7.01	106	1.14	90	85	56	0	1	2	1
	MERIDIAN	55	35	62	26	45	-1	0.10	-1.17	0.10	6.19	94	0.11	9	87	57	0	2	1	0
	TUPELO	52	31	57	21	42	2	0.40	-0.86	0.28	7.76	105	0.40	31	85	63	0	5	2	0
MO	COLUMBIA	41	26	49	11	34	6	0.69	0.32	0.37	7.73	271	0.69	182	86	63	0	5	3	0
	KANSAS CITY	37	23	45	7	30	3	0.60	0.33	0.36	3.84	200	0.60	214	93	72	0	6	3	0
	SAINT LOUIS	45	30	55	19	38	8	0.52	0.05	0.45	12.26	367	0.52	108	74	60	0	5	3	0
	SPRINGFIELD	43	28	47	18	35	3	0.69	0.25	0.42	12.12	334	0.69	150	83	68	0	5	2	0
MT	BILLINGS	29	16	42	8	23	-1	0.09	-0.08	0.05	0.66	78	0.09	50	80	65	0	7	3	0
	BUTTE	27	9	32	-7	18	1	0.13	0.02	0.13	0.80	123	0.13	108	90	73	0	7	1	0
	CUT BANK	20	0	33	-10	10	-9	0.00	-0.08	0.00	0.22	52	0.00	0	94	73	0	7	0	0
	GLASGOW	16	4	24	-6	10	-1	0.09	0.01	0.09	0.80	174	0.09	100	81	74	0	7	1	0
	GREAT FALLS	24	7	39	-7	15	-7	0.14	-0.03	0.14	1.21	142	0.14	78	90	70	0	7	1	0
	HAVRE	17	0	24	-12	9	-6	0.12	0.01	0.09	0.54	86	0.12	100	92	81	0	7	2	0
	MISSOULA	24	13	31	-6	18	-5	0.00	-0.25	0.00	1.38	98	0.00	0	93	80	0	7	0	0
NE	GRAND ISLAND	31	18	39	-3	25	3	0.09	-0.02	0.04	1.97	253	0.09	75	89	79	0	7	4	0
	LINCOLN	33	20	41	0	27	4	0.51	0.34	0.44	4.93	474	0.51	283	90	79	0	6	2	0
	NORFOLK	30	15	36	-6	22	2	0.26	0.15	0.18	2.53	329	0.26	217	90	81	0	6	3	0
	NORTH PLATTE	36	17	47	-1	27	4	0.04	-0.04	0.04	0.32	65	0.04	44	89	59	0	7	1	0
	OMAHA	30	19	36	0	25	3	0.74	0.58	0.43	6.00	550	0.74	435	92	82	0	6	3	0
	SCOTTSBLUFF	31	9	43	4	20	-4	0.04	-0.07	0.04	0.75	110	0.04	33	86	74	0	7	1	0
	VALENTINE	28	9	39	-2	19	-2	0.01	-0.05	0.01	1.05	263	0.01	14	88	73	0	7	1	0
NV	ELY	32	15	37	-5	24	0	0.97	0.83	0.83	2.35	362	0.97	647	91	82	0	7	4	1
	LAS VEGAS	54	43	56	37	49	3	0.26	0.15	0.23	0.27	52	0.26	217	67	52	0	0	3	0
	RENO	39	26	42	23	33	1	0.24	0.04	0.15	0.99	91	0.24	114	83	70	0	7	4	0
	WINNEMUCCA	36	23	39	14	30	1	0.15	-0.04	0.06	1.98	196	0.15	75	92	80	0	7	4	0
NH	CONCORD	36	12	44	0	24	3	0.04	-0.62	0.03	4.82	133	0.04	6	84	45	0	7	2	0
NJ	NEWARK	42	23	48	10	32	0	0.01	-0.86	0.01	4.41	99	0.01	1	64	38	0	6	1	0
NM	ALBUQUERQUE	41	28	43	20	34	-1	0.33	0.22	0.23	1.31	215	0.33	275	90	55	0	6	3	0
NY	ALBANY	36	15	45	2	25	2	0.03	-0.52	0.03	3.71	115	0.04	7	75	47	0	6	1	0
	BINGHAMTON	32	15	40	0	24	1	0.00	-0.56	0.00	3.62	101	0.01	2	74	57	0	6	0	0
	BUFFALO	36	20	49	6	28	2	0.22	-0.52	0.17	3.25	71	0.35	46	79	52	0	6	3	0
	ROCHESTER	36	20	49	10	28	3	0.13	-0.39	0.12	2.90	89	0.17	31	73	52	0	6	2	0
	SYRACUSE	35	15	47	5	25	1	0.19	-0.39	0.11	5.10	137	0.27	46	88	56	0	6	3	0
NC	ASHEVILLE	47	28	59	16	37	1	0.42	-0.41	0.33	9.18	217	0.42	49	75	50	0	5	2	0
	CHARLOTTE	48	29	58	19	39	-3	0.31	-0.54	0.28	9.01	222	0.31	36	79	48	0	5	2	0
	GREENSBORO	45	29	54	19	37	-1	0.35	-0.41	0.32	7.00	183	0.35	45	83	55	0	4	2	0
	HATTERAS	54	44	65	32	49	2	0.57	-0.73	0.49	5.69	97	0.73	56	90	63	0	1	2	0
	RALEIGH	46	32	54	21	39	-1	0.23	-0.61	0.17	6.30	162	0.23	27	83	63	0	4	2	0
	WILMINGTON	52	38	68	27	45	-1	0.34	-0.63	0.34	6.15	129	0.65	66	88	58	0	3	1	0
ND	BISMARCK	22	4	28	-17	13	3	0.00	-0.08	0.00	0.91	172	0.00	0	89	81	0	7	0	0
	DICKINSON	21	5	30	-15	13	-1	0.00	-0.06	0.00	0.28	68	0.00	0	91	70	0	7	0	0
	FARGO	23	10	30	-16	17	10	0.40	0.24	0.29	1.05	142	0.40	235	84	73	0	7	2	0
	GRAND FORKS	20	5	28	-19	13	7	0.00	-0.14	0.00	1.05	150	0.00	0	87	69	0	7	0	0
	JAMESTOWN	21	6	26	-15	14	5	0.00	-0.11	0.00	0.44	79	0.00	0	89	73	0	7	0	0
	WILLISTON	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
OH	AKRON-CANTON	39	22	50	8	30	4	0.33	-0.24	0.23	4.03	113	0.33	56	71	55	0	6	4	0
	CINCINNATI	43	28	54	17	36	6	0.65	-0.02	0.37	6.74	170	0.65	94	80	63	0	5	2	0
	CLEVELAND	39	24	52	11	32	5	0.33	-0.23	0.24	3.29	89	0.33	58	78	49	0	6	3	0
	COLUMBUS	40	23	50	12	32	3	0.35	-0.21	0.24	5.23	149	0.35	61	80	61	0	6	2	0
	DAYTON	41	25	50	13	33	6	0.46	-0.14	0.31	4.85	131	0.46	75	87	60	0	5	2	0
	MANSFIELD	39	22	50	10	30	5	0.25	-0.36	0.17	4.41	114	0.25	40	87	53	0	6	3	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 9, 2016

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	38	21	49	9	30	5	0.29	-0.16	0.29	3.27	105	0.29	63	85	58	0	6	1	0
	YOUNGSTOWN	38	19	50	5	28	2	0.39	-0.14	0.27	4.58	131	0.39	72	75	54	0	6	4	0
OK	OKLAHOMA CITY	45	29	53	23	37	1	0.05	-0.30	0.04	3.12	139	0.05	14	94	65	0	4	2	0
	TULSA	44	29	51	20	36	0	0.62	0.24	0.29	9.22	327	0.62	159	86	75	0	4	3	0
OR	ASTORIA	47	37	52	29	42	0	0.66	-1.49	0.28	21.19	169	0.66	31	86	78	0	1	5	0
	BURNS	30	8	34	-9	19	-5	0.26	-0.02	0.15	3.64	229	0.26	90	89	79	0	7	4	0
	EUGENE	40	33	48	24	36	-3	0.40	-1.28	0.14	14.01	140	0.40	24	93	89	0	2	6	0
	MEDFORD	50	32	54	27	41	3	0.16	-0.39	0.15	7.89	228	0.16	29	93	64	0	4	2	0
	PENDLETON	29	23	37	15	26	-7	0.06	-0.24	0.05	2.34	131	0.06	19	95	90	0	7	2	0
	PORTLAND	42	31	47	28	36	-3	0.52	-0.62	0.26	15.76	230	0.52	45	88	73	0	5	4	0
	SALEM	40	33	46	24	36	-4	0.56	-0.72	0.29	15.80	204	0.56	43	92	87	0	3	5	0
PA	ALLENTOWN	40	19	46	8	30	2	0.01	-0.76	0.01	4.20	101	0.01	1	73	41	0	6	1	0
	ERIE	38	22	53	8	30	2	0.21	-0.42	0.13	4.54	104	0.65	102	64	51	0	6	3	0
	MIDDLETOWN	40	21	47	12	31	2	0.37	-0.24	0.37	4.66	121	0.37	60	84	49	0	5	1	0
	PHILADELPHIA	43	26	54	12	35	2	0.00	-0.79	0.00	5.14	125	0.00	0	66	40	0	5	0	0
	PITTSBURGH	39	19	54	7	29	1	0.40	-0.19	0.32	3.44	99	0.40	67	83	44	0	6	4	0
	WILKES-BARRE	37	16	45	5	27	0	0.01	-0.50	0.01	2.56	83	0.01	2	74	46	0	6	1	0
	WILLIAMSPORT	36	16	45	8	26	0	0.04	-0.54	0.02	3.40	96	0.04	7	80	60	0	6	3	0
RI	PROVIDENCE	40	20	47	8	30	0	0.00	-0.96	0.00	4.80	94	0.00	0	72	48	0	6	0	0
SC	BEAUFORT	56	41	67	31	49	0	0.01	-0.87	0.01	2.94	74	0.05	6	85	56	0	2	1	0
	CHARLESTON	56	39	65	29	48	0	0.00	-0.89	0.00	3.70	89	0.56	62	85	53	0	2	0	0
	COLUMBIA	52	36	62	26	44	0	0.27	-0.71	0.19	6.72	153	0.27	27	76	57	0	3	2	0
	GREENVILLE	49	32	60	22	41	0	0.39	-0.58	0.21	10.47	216	0.39	40	78	47	0	4	2	0
SD	ABERDEEN	26	10	33	-14	18	7	0.04	-0.07	0.04	0.68	136	0.04	33	86	79	0	7	1	0
	HURON	23	8	33	-14	16	2	0.02	-0.06	0.02	1.30	271	0.02	22	92	80	0	7	1	0
	RAPID CITY	27	9	39	-4	18	-4	0.00	-0.08	0.00	0.63	129	0.00	0	86	67	0	7	0	0
	SIOUX FALLS	26	12	34	-14	19	5	0.31	0.22	0.31	1.62	257	0.31	282	89	83	0	7	1	0
TN	BRISTOL	49	25	60	17	37	3	0.39	-0.37	0.32	5.66	136	0.39	51	89	41	0	5	2	0
	CHATTANOOGA	50	33	55	22	41	2	0.61	-0.54	0.53	11.02	185	0.61	53	83	51	0	5	2	1
	KNOXVILLE	48	28	58	20	38	0	0.28	-0.75	0.21	8.12	147	0.28	27	84	47	0	5	2	0
	MEMPHIS	52	34	58	26	43	3	1.42	0.45	1.31	6.19	93	1.42	145	81	53	0	4	2	1
	NASHVILLE	51	32	59	24	42	5	0.22	-0.69	0.20	5.14	94	0.22	24	78	45	0	5	2	0
TX	ABILENE	53	35	66	26	44	1	0.04	-0.21	0.04	2.24	146	0.04	15	92	70	0	3	1	0
	AMARILLO	44	24	59	16	34	-1	0.10	-0.07	0.08	1.38	175	0.10	56	90	59	0	6	3	0
	AUSTIN	61	38	72	29	49	-1	0.65	0.17	0.64	3.17	108	0.88	180	86	64	0	2	2	1
	BEAUMONT	63	44	71	34	54	2	2.20	0.89	1.04	6.35	97	2.21	167	95	57	0	0	5	2
	BROWNSVILLE	68	50	78	42	59	0	0.16	-0.07	0.10	1.80	133	1.64	683	93	71	0	0	2	0
	CORPUS CHRISTI	64	47	70	42	56	0	0.30	-0.06	0.25	2.95	139	2.06	557	90	76	0	0	2	0
	DEL RIO	62	43	76	37	52	1	0.00	-0.10	0.00	0.91	106	0.57	518	86	61	0	0	0	0
	EL PASO	51	35	57	27	43	-1	0.46	0.34	0.27	1.54	171	0.46	354	87	53	0	2	3	0
	FORT WORTH	54	39	64	32	46	2	0.87	0.37	0.79	4.70	152	0.87	167	83	54	0	2	2	1
	GALVESTON	62	47	68	40	55	-1	0.64	-0.23	0.41	4.27	97	0.78	88	96	66	0	0	4	0
	HOUSTON	62	43	69	34	52	0	1.77	0.94	1.40	6.98	154	1.77	211	90	68	0	0	4	1
	LUBBOCK	47	28	59	20	37	-1	0.29	0.19	0.26	1.86	238	0.29	264	91	72	0	5	3	0
	MIDLAND	54	33	63	26	44	1	0.05	-0.06	0.05	1.33	173	0.09	75	87	64	0	3	1	0
	SAN ANGELO	57	33	69	25	45	0	0.00	-0.17	0.00	2.26	202	0.00	0	87	60	0	3	0	0
	SAN ANTONIO	62	41	72	36	52	2	0.14	-0.24	0.08	2.60	111	1.12	287	88	53	0	0	2	0
	VICTORIA	65	43	69	34	54	1	1.62	1.07	1.49	4.39	145	2.79	498	95	71	0	0	3	1
	WACO	57	37	71	30	47	1	0.22	-0.25	0.22	3.84	119	0.22	46	86	67	0	2	1	0
	WICHITA FALLS	51	32	66	25	41	1	0.11	-0.18	0.11	2.73	138	0.11	37	88	64	0	4	1	0
UT	SALT LAKE CITY	35	26	41	17	30	1	0.28	0.00	0.14	2.51	164	0.28	93	91	77	0	7	4	0
VT	BURLINGTON	31	13	43	2	22	3	0.04	-0.43	0.02	4.49	166	0.05	10	76	50	0	6	2	0
VA	LYNCHBURG	43	27	52	12	35	0	0.56	-0.21	0.47	5.52	138	0.56	72	77	54	0	5	2	0
	NORFOLK	48	37	58	23	42	1	0.06	-0.77	0.05	3.43	88	0.06	7	79	61	0	2	2	0
	RICHMOND	46	28	54	16	37	0	0.54	-0.27	0.50	6.48	164	0.54	66	85	56	0	4	2	1
	ROANOKE	43	25	54	14	34	-2	0.79	0.12	0.66	5.34	151	0.79	116	74	47	0	5	2	1
	WASH/DULLES	42	23	54	9	33	1	0.43	-0.26	0.39	4.19	111	0.43	61	86	53	0	5	2	0
WA	OLYMPIA	39	29	46	13	34	-3	0.36	-1.29	0.23	14.86	156	0.36	22	97	94	0	5	4	0
	QUILLAYUTE	49	31	53	20	40	0	0.38	-2.65	0.26	19.62	112	0.38	13	90	84	0	3	2	0
	SEATTLE-TACOMA	45	34	53	30	40	0	0.28	-0.85	0.15	11.49	170	0.28	25	92	73	0	2	3	0
	SPOKANE	33	25	38	7	29	3	0.11	-0.30	0.08	4.55	170	0.11	26	95	86	0	7	3	0
	YAKIMA	35	27	39	13	31	3	0.45	0.17	0.24	3.92	235	0.45	155	85	80	0	4	4	0
WV	BECKLEY	42	25	53	8	33	2	0.38	-0.33	0.18	3.93	103	0.38	53	71	45	0	5	3	0
	CHARLESTON	47	24	58	15	35	1	0.21	-0.48	0.15	5.80	144	0.21	30	84	42	0	5	2	0
	ELKINS	43	15	56	2	29	0	0.32	-0.42	0.19	5.01	119	0.32	42	84	41	0	7	3	0
	HUNTINGTON	45	25	55	15	35	2	0.36	-0.36	0.28	6.77	165	0.36	49	85	49	0	6	3	0
WI	EAU CLAIRE	31	17	35	-1	24	12	0.30	0.10	0.19	4.14	334	0.30	143	88	68	0	7	3	0
	GREEN BAY	32	19	38	3	26	10	0.64	0.39	0.43	6.35	380	0.64	246	89	74	0	6	3	0
	LA CROSSE	33	21	35	6	27	11	0.53	0.31	0.30	5.45	373	0.53	230	90	70	0	6	4	0
	MADISON	32	20	38	9	26	8	0.52	0.26	0.37	3.85	199	0.52	193	85	76	0	6	3	0
	MILWAUKEE	34	24	39	13	29	8	0.27	-0.12	0.18	4.09	156	0.27	68	81	70	0	6	3	0
WY	CASPER	33	16	39	6	25	3	0.30	0.19	0.17	1.35	182	0.30	250	73	61	0	7	2	0
	CHEYENNE	39	16	49	1	27	1	0.28	0.20	0.20	1.13	205	0.28	311	76	57	0	7	2	0
	LANDER	26	9	32	1	18	-2	0.36	0.25	0.18	0.84	115	0.36	300	86	62	0	7	2	0
	SHERIDAN	32	12	41	6	22	1	0.01	-0.16	0.01	0.35	41	0.01	6	80	71	0	7	1	0

Based on 1971-2000 normals

***** Not Available**

December Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Record-setting December warmth covered much of the Midwest and East, while heavy to record-setting precipitation fell across the Northwest, mid-South, and upper Midwest. Relentless precipitation further eased or eradicated Northwestern drought, but southern California and the Desert Southwest received little December moisture.

Farther east, an already wet pattern in the nation's mid-section culminated in a late-month deluge that drove the Mississippi River to record-high levels from Cape Girardeau, MO, to Thebes, IL. Record-breaking crests were also noted along several Mississippi River tributaries, especially in Missouri.

The wetness across the mid-South and lower Midwest increased concerns about soft red winter wheat due to standing water and lowland flooding. During December, the portion of Illinois' winter wheat rated in good to excellent condition fell from 67 to 58%. Excessively wet conditions also continued to plague parts of the Southeast, hampering final harvest and winter wheat planting efforts. In North Carolina, only 42% of the winter wheat was rated in good to excellent condition at the end of December, down from 69% on November 29.

Unusual warmth accompanied the general wetness across the eastern half of the country. In the Southeast, warm conditions allowed winter grains and cool-season pastures to continue to develop. Farther north, periods of snow blanketed the upper Midwest, despite above-normal temperatures. Occasional snow also fell across the Plains, providing winter wheat with some moisture and insulation. On the southern High Plains, however, a late-month blizzard caused significant livestock losses due to bitter cold and wind-driven snow.

Historical Perspective: According to preliminary information provided by the National Centers for Environmental Information, the contiguous U.S. experienced unprecedented December warmth and wetness. The nation's monthly average temperature of 38.6°F was 6.0°F above the 1901-2000 mean and easily topped the December 1939 standard of 37.7°F. It was the warmest December on record in Iowa, Minnesota, and Missouri, along with every state east of the Mississippi River (figure 1). Arizona, with its 44th-warmest December, had the "coolest" month of any state.

December precipitation averaged 3.93 inches, 167 percent of normal. Another El Niño-influenced December, 1982, slipped to second place on the all-time list with 3.76 inches. Two states, Iowa and Wisconsin, weathered their wettest December, and it was among the ten wettest in eighteen other states stretching from Washington and Oregon to the Carolinas and Georgia (figure 2). Arizona, with its 43rd-driest December, was the "driest" of the Lower 48 states.

Figure 1 Statewide Average Temperature Ranks
December 2015
Period: 1895–2015

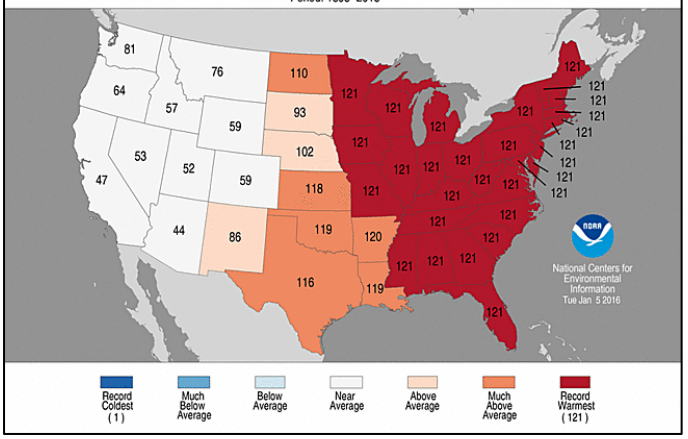
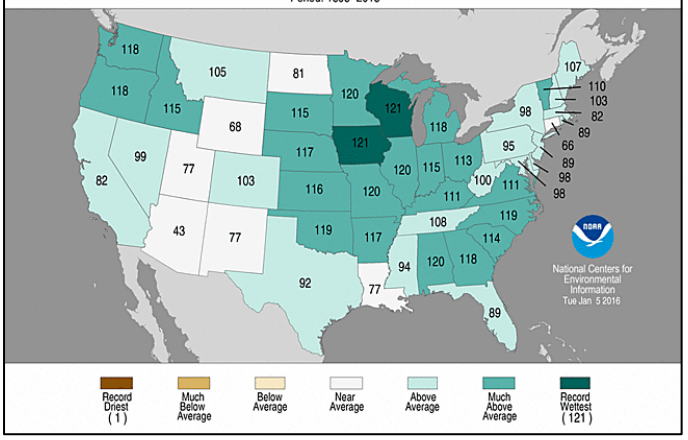


Figure 2 Statewide Precipitation Ranks
December 2015
Period: 1895–2015



Summary: As the calendar turned to December, a significant snow storm was in progress across the upper Midwest. November 30 – December 1 snowfall reached 10.4 inches in Huron, SD; 9.8 inches in Sioux City, IA; 6.3 inches in St. Cloud, MN; 5.1 inches in Grand Forks, ND; and 5.0 inches in Norfolk, NE. Meanwhile, heavy rain fell farther south. Chattanooga, TN, received 5.13 inches of rain from November 29 – December 2, including a daily-record total (2.32 inches) on the 1st. Localized but torrential rain lingered for several days in southern Florida, where Miami Executive Airport logged 13.27 inches of rain during the first 5 days of December. The airport's accumulation was bolstered by totals of 3.33 inches on the 4th and 8.82 inches on the 5th. Significant, early-month precipitation also fell in the Northwest. Omak, WA, received precipitation totaling 1.76 inches during the first 5 days of the month, aided by daily-record amounts (0.98 and 0.65 inch, respectively) on December 3 and 5. (Omak's normal December precipitation is 2.54 inches.) Windy weather accompanied the Northwestern storminess, with Oregon gusts on December 3 clocked to 73 mph on Cape Blanco and 58 mph in Klamath Falls.

Very cold conditions lingered across the interior Northwest into early December. In Redmond, OR, there were five daily-record lows in a row (-4, -4, -5, -7, and 0°F, respectively) from November 27 – December 1. In contrast, warmth prevailed across the Deep South. In Florida, record-setting highs for December 2 reached 86°F in Melbourne and 84°F in Daytona Beach. Mild air also arrived along the northern Pacific Coast, where Bellingham, WA, notched consecutive daily-record highs (60 and 62°F, respectively) on December 2-3. The Pacific Northwestern warmth was a sign of approaching storminess, which led to not only drought eradication but also some flooding. December 7 was the second-wettest calendar day on record in Portland, OR, where 2.67 inches fell. Portland's wettest day remains November 19, 1996, when 2.69 inches fell, but the December daily record (2.17 inches on December 27, 1942) was broken. With a 3.22-inch total on December 6-7, Portland experienced its third-wettest 24-hour period behind 4.44 inches on October 26-27, 1994, and 4.10 inches on November 18-19, 1996. Elsewhere in the Northwest, daily-record totals for December 7 included 2.41 inches in Troutdale, OR; 2.39 inches in Vancouver, WA; 1.08 inches in Spokane, WA; and 0.91 inch in Pendleton, OR. In western Washington locations such as Quillayute, Hoquiam, and Olympia, measurable rain fell on each of the first 12 days of December, totaling 11.38, 9.95, and 8.09 inches, respectively. During the same 12-day period, totals in western Oregon reached 11.29 inches in Astoria and 9.57 inches in Portland. In western Washington, the Cowlitz River at Randle rose to its highest level (6.11 feet above flood stage on December 9) since November 7, 2006. Also on the 9th, the Snohomish River climbed more than 5 feet above flood stage at Snohomish and Carnation, WA, marking the highest levels in those locations since January 8-9, 2009.

Eventually, precipitation spread to other parts of the country—but also persisted in the Northwest. Duluth, MN, reported a daily-record total (1.14 inches) on December 10, including 2.9 inches of snow. Daily-record amounts for December 12 included 2.51 inches in Crescent City, CA; 1.49 inches in Roseburg, OR; and 0.32 inch in Winslow, AZ. Farther east, record-setting totals for the 12th reached 3.43 inches in College Station, TX; 1.29 inches in Salina, KS; and 1.15 inches in Des Moines, IA. On December 12-13, snow blanketed portions of the central and southern Plains, with totals reaching 8.5 inches in Clayton, NM; 8.0 inches in Dodge City, KS; and 2.3 inches in Amarillo, TX.

Though warmth had not yet become fully established, signs of a central and eastern U.S. "heat wave" started to appear. On the Plains, daily-record highs for December 9 surged to 74°F in Oklahoma City, OK, and 70°F in Casper, WY, and Topeka, KS. A few days later, warmth cloaked many areas east of the Rockies. Daily-record highs for December 10 rose to 89°F in McAllen, TX, and 60°F in Traverse City, MI. By December 11, record-setting highs surged to 87°F in San Angelo, TX; 84°F in Greenwood, MS; and 82°F in Monroe, LA. December 12 featured daily-record highs in dozens of locations, including Tampa, FL (85°F); New Iberia, LA (83°F); Norfolk, VA (77°F); Memphis, TN (76°F); Charleston, WV (74°F); Atlantic City, NJ (71°F); and Cincinnati, OH (70°F).

Mid-December warmth set many more records across the Midwest and East. For example, Rockford, IL, reported highs of 50°F or greater on 6 consecutive days from December 9-14, the longest such December streak in that location since December 1-7, 1916. On December 13, daily-record highs soared to 85°F in Tampa, FL; 81°F in Hattiesburg, MS; 76°F in Nashville, TN; and 71°F in Evansville, IN, and Washington, DC. In Illinois, *minimum* temperatures on December 13 dipped only to 61°F in Springfield and Peoria. Springfield tied a monthly record originally set on December 2, 1982. Peoria's previous record-high minimum temperature for December had been 59°F—also on December 2, 1982. Farther east, daily-record highs were set or tied on 4 consecutive days, from December 12-15, in locations such as Philadelphia, PA (69, 71, 70, and 69°F), and Georgetown, DE (74, 71, 75, and 70°F). For Georgetown, it marked the first time that daily-record highs were established on four days in a row since December 4-7, 1998. Buffalo, NY, posted a daily-record high of 71°F on December 14, followed by its first measurable snowfall (0.1 inch) on December 18. A few favored locations downwind of the lower Great Lakes received 1 to 3 feet of snow, but Buffalo was located on the northern fringe of a snow band. Still, it was Buffalo's latest first accumulation, previously set with a 0.2-inch snowfall on December 3, 1899. While Eastern warmth prevailed, cold air overspread the West. Camarillo, CA, reported a daily-record low (33°F) for December 15. On December 16-17, Douglas, AZ, notched consecutive daily-record lows of 15°F.

A mid-month deluge across the upper Midwest set many rainfall records. The extremely heavy rainfall event unfolded on December 13, when Waterloo, IA, experienced its wettest day (3.32 inches) during any month from October to April (previously, 3.05 inches on April 25, 2008). Waterloo's previous wettest December day had been December 5, 1982, when 1.68 inches fell. December 13 was also the wettest December day on record in locations such as Des Moines, IA (1.79 inches), and La Crosse, WI (1.71 inches). It was also Des Moines' second-wettest winter day, behind only 2.13 inches on January 12, 1960. Meanwhile, daily-record amounts for December 13 in Kansas included 2.30 inches in Salina and 2.07 inches in Dodge City. The precipitation in Dodge City included 7.9 inches of snow. By December 14, a round of snow arrived across the northern Plains, where Great Falls, MT, reported daily records for precipitation (0.77 inch) and snowfall (8.2 inches). It was Great Falls' wettest December day on record (previously, 0.74 inch on December 29, 2010), and snowiest day since November 8, 2012, when 9.9 inches fell. In Wyoming, December 14-15 snowfall included 10.4 inches in Casper and 7.3 inches in Cheyenne. In Nebraska, record-setting snowfall totals for December 15 reached 8.0 inches in Scottsbluff and 4.8 inches in Valentine. In South Dakota, daily-record snowfall amounts for the 15th totaled 4.3 inches in Rapid City and 4.2 inches in Pierre. From December 13-16, snowfall included 10.4 inches in Salt Lake City, UT, and 9.2 inches in Duluth, MN. By December 17, heavy showers overspread the East, where locations such as Athens, GA (2.01 inches), and Trenton, NJ (1.05 inches), reported daily-record amounts. Farther west, a new Pacific storm led to flooding in western Oregon. Record-setting totals in Oregon

for December 17 climbed to 3.16 inches in North Bend; 3.08 inches in Newport; and 1.87 inches in Portland. By the 21st, Portland set a December precipitation record—a total that would eventually climb to 15.24 inches, or 278 percent of normal—surpassing its 1996 standard of 13.35 inches.

Through the first two-thirds of the month, the U.S. remained on track to set an annual record for its lowest number of tornado-related fatalities, with records back to 1875. In fact, there were only 10 tornado deaths through December 22, 2015, compared to 1910 annual record low of 12 and the modern-day, 1986 low of 15. However, U.S. tornadoes were reported each day from December 21-28, breaking the December 1982 record of 6 consecutive days. Amid the late-year rampage were deadly tornado outbreaks on December 23 and 26 that tragically increased the 2015 tornado fatality count from 10 to 34. The December 23 outbreak featured about three dozen tornadoes across the mid-South and lower Midwest. There were three deadly tornadoes resulting in 13 total fatalities (11 in Mississippi and two in Tennessee)—the nation's deadliest outbreak since late-April 2014. The longest-lasting tornado, an EF-4 with maximum winds estimated at 170 mph, cut a 75-mile swath in a 75-minute period across northern Mississippi (nine deaths in three counties) and southwestern Tennessee. Deadly storms erupted again on December 26, when 11 fatalities in northeastern Texas were blamed on tornadoes. There were also three fatal tornadoes in the latter outbreak, including an EF-4 (winds up to 180 mph) in Garland, TX, that resulted in eight deaths.

Adverse weather extended far beyond the tornado-affected areas. Precipitation first arrived in the Far West, where Redding, CA, netted 2.97 inches of rain from December 20-22. High winds accompanied the Northwestern storminess, with peak gusts on December 21 in Oregon clocked to 69 mph in Pendleton and 64 mph in Redmond. Snow lingered for several days in the West, where Elko, NV, received 14.9 inches from December 20-25—including a 6.9-inch total on the 22nd. From December 21-23, snowfall totals of 1 to 3 feet were common across the Intermountain West, with 42 inches reported in Alta, UT. Meanwhile, the first of several rounds of precipitation developed across the eastern half of the U.S. On December 21, daily-record totals included 2.37 inches in Jackson, TN, and 1.02 inches in Muskegon, MI. The following day, record-setting rainfall totals for December 22 reached 2.74 inches in Columbia, SC, and 2.25 inches in Apalachicola, FL. December 23 featured daily-record amounts in dozens of Midwestern and Eastern locations, including Mobile, AL (4.03 inches); Fayetteville, NC (2.10 inches); Baltimore, MD (2.01 inches); and Rhinelander, WI (1.01 inches). Elsewhere on the 23rd, Green Bay, WI, reported its lowest December barometric pressure (28.91 inches) since December 14, 1920.

Elsewhere, heavy rain struck the Southeast on Christmas Eve. Record-setting rainfall totals for December 24 reached 4.46 inches in Montgomery, AL, and 3.31 inches in Columbus, GA. The Southeastern downpours persisted through December 25, resulting in the wettest Christmas Day on record in locations such as Huntsville, AL (5.34 inches), and Chattanooga, TN (4.14 inches). Perhaps the greatest benefit of the rampant storminess was to further boost Western snowpack. By year's end, the water content of the high-elevation Sierra Nevada snowpack stood at 10 inches, slightly above the late-December average. However, the 10-inch measurement was higher than at any point during the drought-riddled winters of 2013-14 and 2014-15. In Ventura County, CA, however, a 1,300-acre, late-month fire helped to push the nation's preliminary annual wildfire total to 10.13 million acres, surpassing the 2006 standard of 9.87 million acres.

On the southern High Plains, a late-month blizzard resulted in the exposure, suffocation, and starvation deaths of thousands of head of livestock in western Texas and eastern New Mexico. Lubbock, Texas, received 11.2 inches of snow on December 26-27, all but 0.2 inch of which fell on the latter date. On the 27th, a northerly wind gust to 61 mph accompanied Lubbock's snow. It was Lubbock's greatest storm-total snowfall since January 20-21, 1983, when 16.9 inches fell. Elsewhere in Texas, December 27 snowfall (and peak wind gusts) reached 7.6 inches (and 44 mph) in Midland; 4.8 inches (55 mph) in Childress; 3.8 inches (58 mph) in Amarillo; and 3.1 inches (43 mph) in San Angelo. December 26-27 snowfall reached 15.6 inches in Roswell, NM, and 8.1 inches in El Paso, TX. Roswell also endured its snowiest calendar day on record, with 12.4 inches on December 27 (previously, 11.5 inches on February 5, 1988).

Meanwhile, inundating rains developed across the mid-South and lower Midwest on December 26. In Missouri, Springfield (6.03 inches on the 26th) experienced its second-wettest day behind 6.27 inches on November 24, 1987, while St. Louis (4.87 inches) noted its third-wettest day behind 6.85 inches on August 20, 1915, and 5.59 inches on May 16, 1995. From December 26-28, rainfall in St. Louis totaled 9.18 inches. December precipitation records were broken in Missouri locations such as Springfield (11.43 inches), St. Louis (11.74 inches), Vichy-Rolla (10.32 inches), and Joplin (9.77 inches). Several Midwestern communities, including Waterloo, IA (5.92 inches); Omaha, NE (5.26 inches); and La Crosse, WI (4.93 inches), also set December precipitation records. December 27 featured impressive daily-record rainfall amounts in Fayetteville, AR (6.49 inches); Ft. Smith, AR (5.63 inches); Tyler, TX (5.09 inches); and McAlester, OK (4.68 inches). Daily-record totals for December 28 included 1.96 inches in Lincoln, IL; 1.53 inches in Paducah, KY; 1.45 inches in South Bend, IN; and 1.25 inches in Muskegon, MI. Farther northwest, record-setting snowfall amounts for December 28 reached 10.1 inches in Waterloo, IA, and 9.0 inches in Milwaukee, WI. Along the Meramec River, all-time crest records from December 1982 were broken on December 30 or 31 by at least 2 to 4 feet in Missouri locations such as Eureka, Valley Park, and Arnold. In St. Louis, the Mississippi River crested 12.58 feet above flood stage on December 31—the third-highest level in that location behind the high-water marks of August 1993 and April 1973. All-time Mississippi River crest records were set on January 1 in Cape Girardeau, MO (16.86 feet above flood

stage, surpassing August 1993 by 0.37 foot), and on January 2 in Thebes, IL (14.74 feet above flood stage, surpassing May 1995 by 1.83 feet). Meanwhile in Texas, the Trinity River near Oakwood experienced its third top-fifteen flood of the year on December 31, cresting 12.08 feet above flood stage; higher crests had occurred on May 30 and October 27. And, the Flint River in Newton, GA, achieved its highest crest (8.35 feet above flood stage) since March 1998.

The month's most impressive warm spell commenced on December 21, when daily-record highs rose to 87°F in Naples, FL, and 67°F in St. Louis, MO. The following day, Nashville, TN, posted a daily-record high (70°F) for December 22. By December 24, all-time monthly records were broken in locations such as Norfolk, VA (82°F); Albany, NY (72°F); and Burlington, VT (68°F). Farther south, Alma, GA, tied a monthly record with a Christmas Eve high of 83°F. The parade of records continued on Christmas Day, with Naples (89°F), tying a December record most recently achieved on December 1, 1995. It was the warmest Christmas on record in dozens of communities, including Houston, TX (83°F); New Orleans, LA (82°F); Augusta, GA (81°F); Tuscaloosa, AL (80°F); New York City (66°F); and Portland, ME (62°F). Additional monthly records were established on December 26, with Little Rock, AR (81°F), breaking by 1°F a record that had last been achieved on December 3, 2005. In Florida, Tampa tied its monthly record high of 86°F on December 25 and 26. Across the Southeast, stunning winter warmth continued through year's end. In Georgia, Alma tied a monthly record high with readings of 83°F on December 24, 27, 28, and 30. Muscle Shoals, AL, also tied a monthly record high on December 27 with a reading of 78°F. On December 28, Jacksonville, FL, set a monthly record with a high of 85°F. With highs ranging from 83 to 86°F, Tampa set or tied daily-record highs on 8 consecutive days from December 24-31. Elsewhere in Florida, Key West's temperature stayed above 75°F on 11 days in a row from December 22 – January 1, including monthly record-high minima of 79°F on December 25 and 27-31. In stark contrast, frigid conditions engulfed snow-covered sections of the Intermountain West. Randolph, UT, notched a daily-record low of -26°F on December 27. Consecutive daily-record lows were reported on December 27-28 in Wyoming locations such as Laramie (-24 and -23°F) and Rawlins (-21°F on both days). In California, daily-record lows for December 27 included 30°F in Oakland and 36°F in downtown Los Angeles. The following day in southern California, record-setting lows for December 28 dipped to 19°F in Barstow-Daggett and 21°F in Thermal.

For some communities with long-term weather observations, such as Baltimore, MD; Richmond, VA; Lansing, MI; Columbia, SC; and Augusta, GA, records for December warmth originally set in 1889 were shattered by 1 to 3°F. And, previous December average temperature records were crushed by more than 5°F in several locations, including Washington, DC (51.2°F; previously, 45.6°F in 1889 and 1984), and New York City (50.8°F; previously, 44.1°F in 2001). In Norfolk, VA, 12 days of 70-degree warmth toppled the December record of 10 days previously set in 1931, 1971, 1982, 1998, and 1999. A sample of other similar December records included 13 days of 60-degree warmth in Philadelphia, PA (previously, 8 days in 1951 and 1998), and 26 days of 50-degree warmth in Washington, DC (previously, 24 days in 1889). In Michigan, December came and went for the first time without a temperature below 20°F in Lansing and Grand Rapids. Given the warmth, it was not surprisingly the least-snowy December in New York snow-belt locations such as Buffalo (1.0 inch) and Rochester (2.3 inches). In contrast, East Rapid City, SD, experienced its snowiest December, with a monthly sum of 15.5 inches.

In parts of the country, particularly the Southeast, the December warmth capped the warmest year on record. With an annual average temperature of 71.8°F, Tallahassee, FL, toppled its 1933 mark of 71.1°F. And, annual temperature records from 1990 were tied or broken in Orlando, FL, and Columbia, SC. Finally, the wettest year on record drew to a close across parts of the South. Annual rainfall records included 74.89 inches in Charleston, SC, and 62.61 inches in Dallas-Ft. Worth, TX. Record-setting wetness extended as far north as the middle Mississippi Valley, where St. Louis, MO, netted 61.24 inches. In Arkansas, the 101.05-inch annual total near Big Fork, Polk County, toppled the 2009 state record of 100.05 inches set in Leola, Grant County. Baytown, TX, measured 101.33 inches, ending up just shy of the 1979 state record of 106.44 inches set near Freeport.

Like the central and eastern U.S., Alaska experienced mild December weather. Monthly temperatures averaged at least 5 to 10°F above normal across much of mainland Alaska. Significant precipitation accompanied the mild weather, with monthly precipitation ranging from 100 to 300 percent of normal at most Alaskan observation sites. In southeastern Alaska, Annette Island posted consecutive daily-record highs (50°F both days) on December 5-6. Shortly afterward, cold air briefly engulfed much of the state, followed by widespread snow. McGrath reported four consecutive readings below -20°F from December 7-10. Later, King Salmon received 7.2 inches of snow on December 10-11. On December 12-13, a powerful storm crossed the western Aleutians. On December 13, the storm's estimated minimum central pressure of 924 millibars (27.29 inches) tied a satellite-era Alaskan record set in November 2014, when the extratropical remnants of Typhoon Nuri reached the Aleutian Islands. Early on the 13th, Adak reported a peak wind gust to 123 mph. Mild weather returned to Alaska by mid-month, accompanied by additional precipitation. Daily-record snowfall totals included 2.3 (on December 16) in Cold Bay and 4.6 inches (on December 18) in Bethel. In southern Alaska, Kodiak received precipitation totaling 4.09 inches from December 13-19, including 11.3 inches of snow. By December 25, King Salmon reported a Christmas Day high of 41°F, along with a peak wind gust to 62 mph. Snow spread into southeastern Alaska on December 26, when Juneau reported a daily-record sum of 6.6 inches. Late-month warmth peaked in Anchorage with consecutive daily-record highs (46 and 45°F, respectively) on December 29-30. Other record-setting highs for December 30 included 47°F in McGrath; 45°F in Fairbanks; and 38°F in Nome. Meanwhile,

occasional precipitation accompanied the mild weather. In the Aleutians, Cold Bay received 7.1 inches of snow on December 29-30.

Many of Hawaii's leeward locations experienced mostly dry December weather, typical of an El Niño regime. However, favored windward sites received occasional showers. Early in the month, for example, Kauai's famously wet Mt. Waialeale received 3.94 inches in a 72-hour period from November 30 – December 3. Later, the Big Island location of Hilo received 5.12 inches of rain from December 20-22. In fact, most (12.41 of 14.10 inches) of Hilo's monthly rain fell in a 15-day period from December 14-28. At the state's other major airport observation sites, December rainfall ranged from 0.27 inch (8 percent of normal) in Honolulu, Oahu, to 1.42 inches (27 percent) in Lihue, Kauai.

Fieldwork

Fieldwork summary provided by USDA/NASS

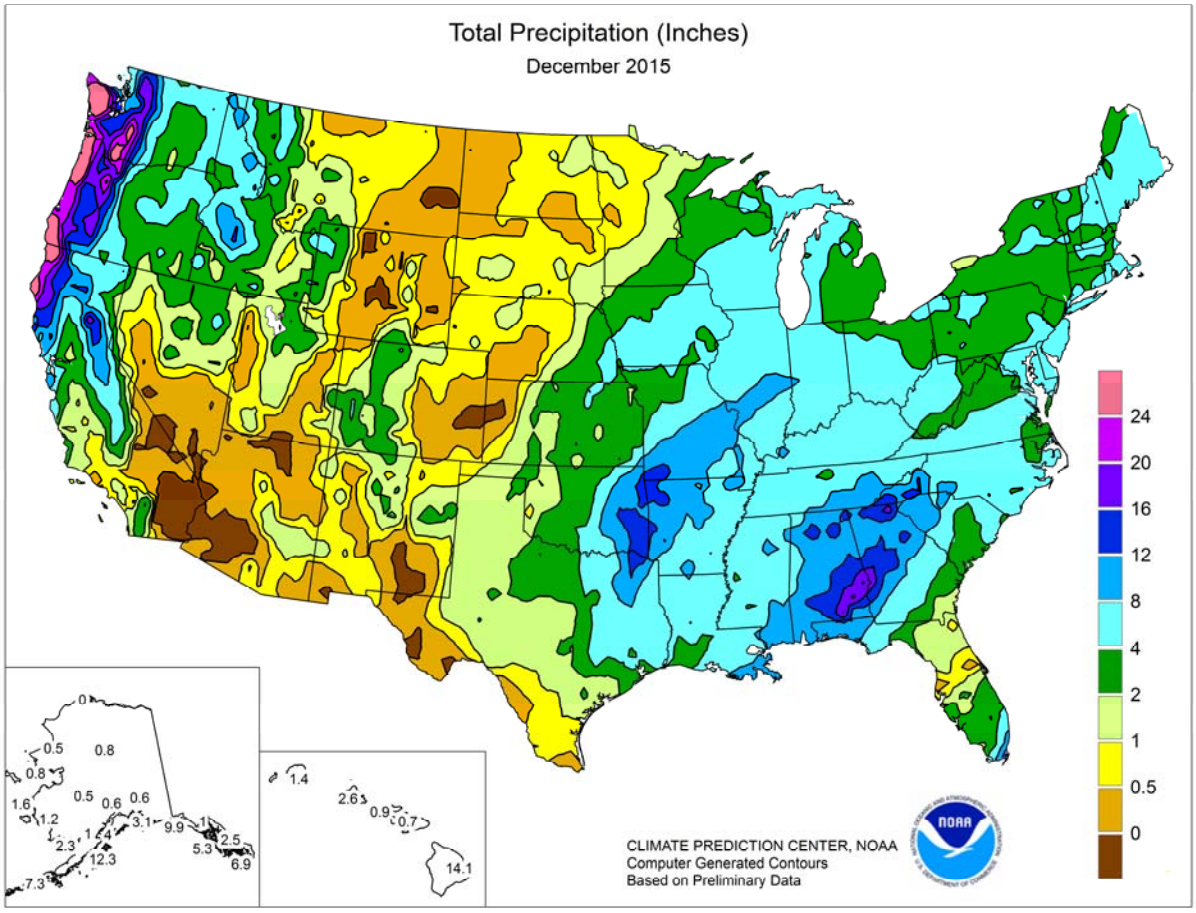
Temperatures from the Mississippi Valley eastward were well above normal during December, allowing producers additional time for completing fieldwork and aiding the establishment of winter wheat. Most notably, temperatures in the Great Lakes region, Ohio Valley, and Mid-Atlantic States averaged more than 9°F above normal. In the West, monthly temperatures were slightly below normal. Precipitation was generally within 3 inches of normal across most of the nation. In early December, however, rain events along the northern Pacific Coast resulted in at least 8 inches of precipitation. Another exception included significant, late-month rainfall from the southern Plains into the middle Mississippi Valley and parts of the Southeast.

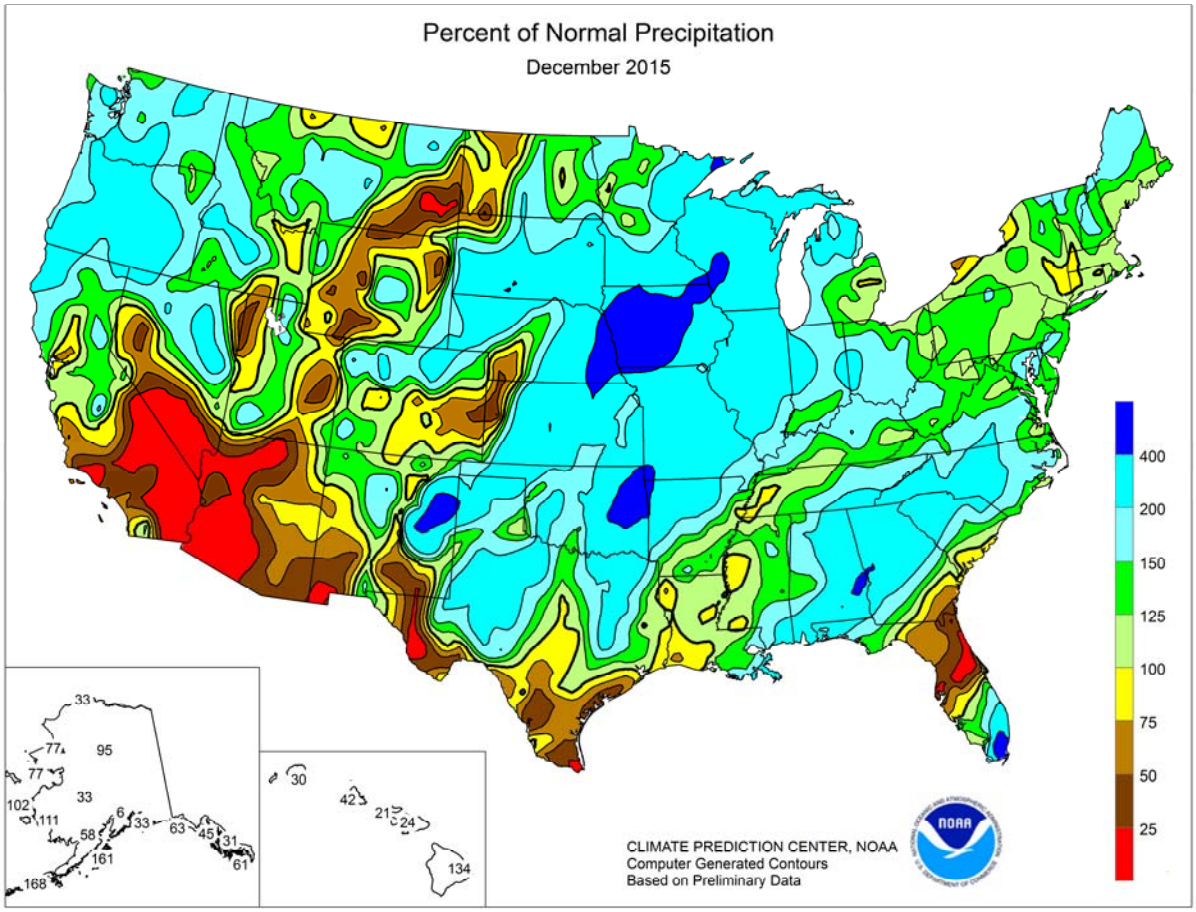
Most of the winter wheat crop was being reported in good or excellent condition by the end of December. In Kansas, winter wheat conditions were rated at 54 percent in the good to excellent categories at the end of month, up from 48 percent on November 29. Areas with some snow cover generally reported higher winter wheat ratings. Examples included Montana at 74 percent good to excellent; South Dakota at 71 percent; and Nebraska at 59 percent.

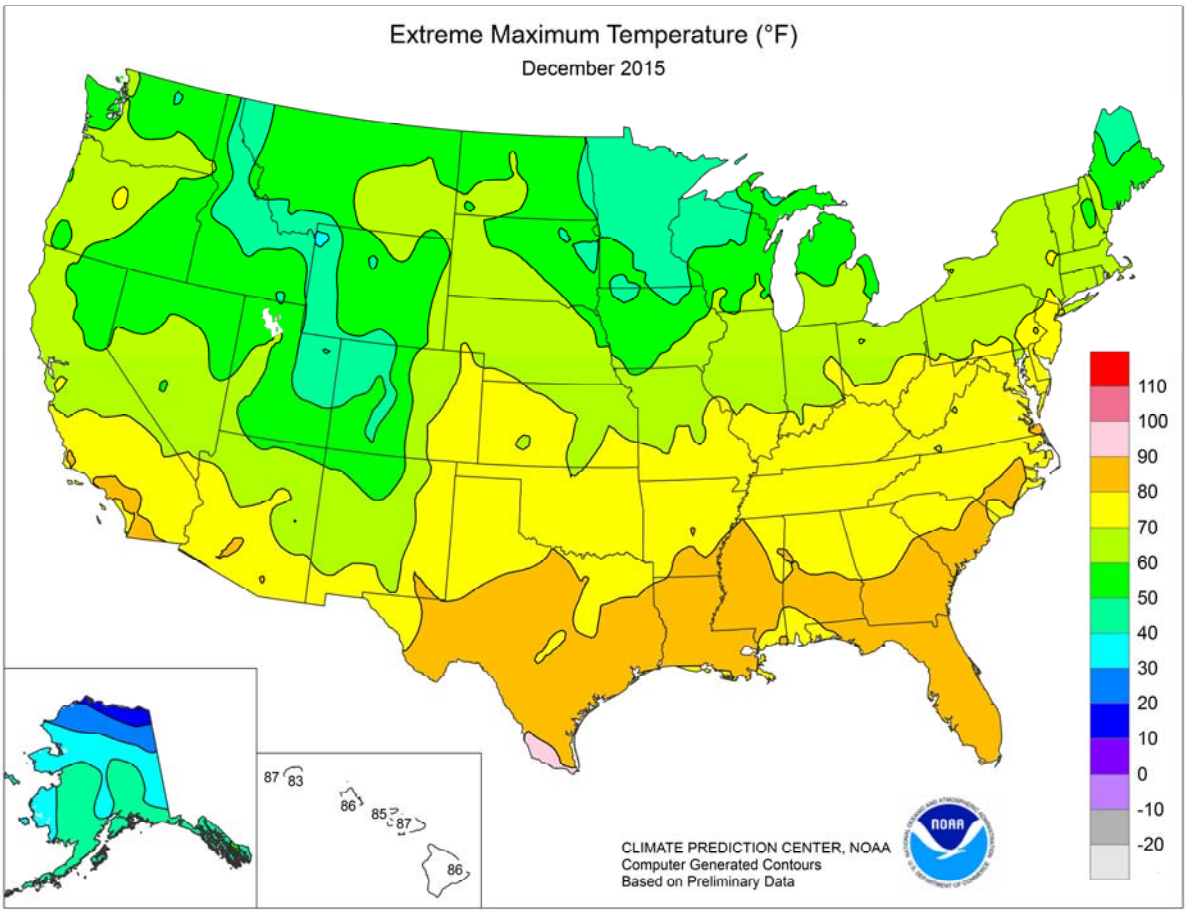
Pasture and range conditions varied throughout the nation. In Colorado, pasture conditions at the end of the month were rated 62 percent in the good to excellent categories, up 12 percentage points from November 29. Oklahoma producers reported 36 percent of its pasture in the good to excellent categories, down 8 percentage points from November 29. In North Carolina, pasture conditions were rated 28 percent in the good to excellent categories, down 9 percentage points from November 29.

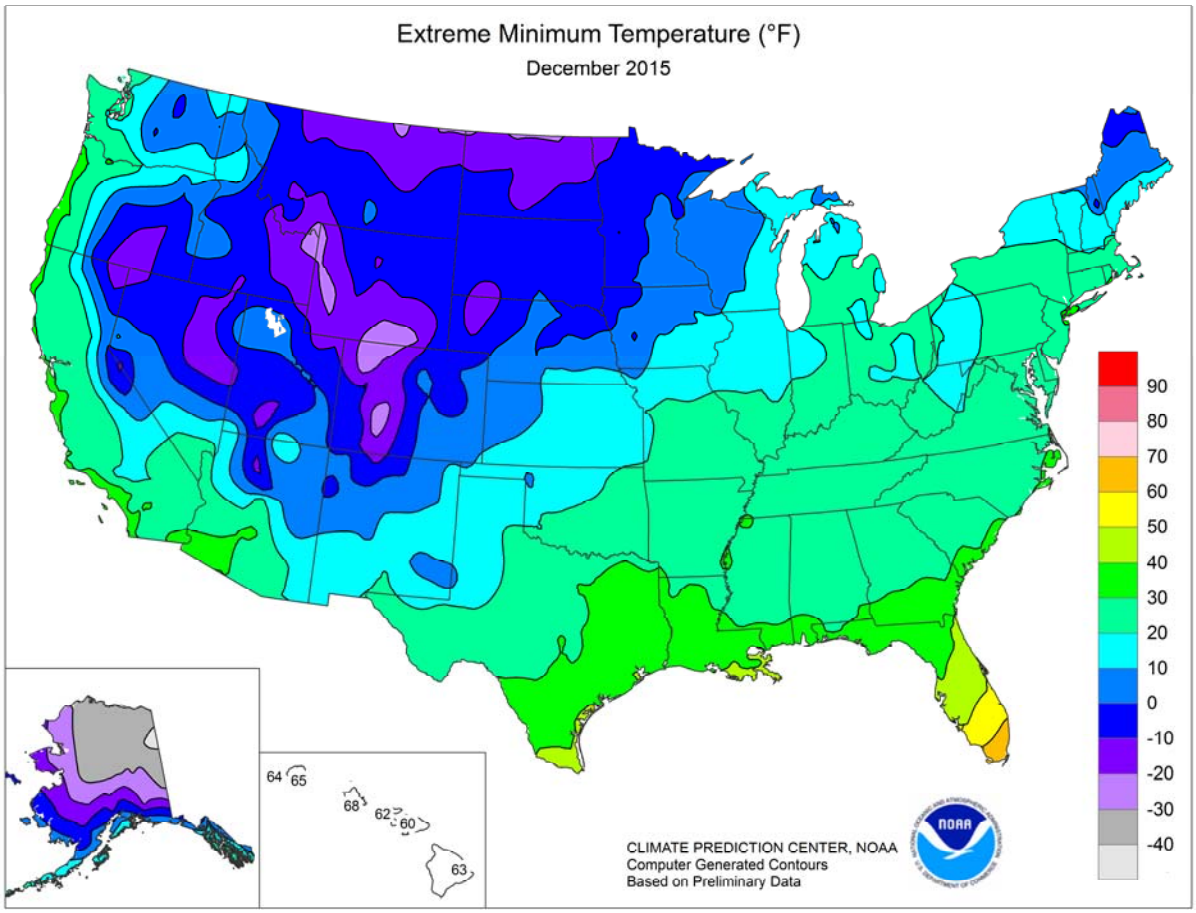
During December, producers experienced above-average temperatures and above-average precipitation in the Florida panhandle and southern Florida. There was an increase in early orange harvest activities at the beginning of the month. Producers reported overall good quality in fresh fruit; however, fruit size was small compared to a normal year. By the end of December, most processing plants were open for the season. Navel orange and grapefruit harvest schedule was slightly lagging behind last season.

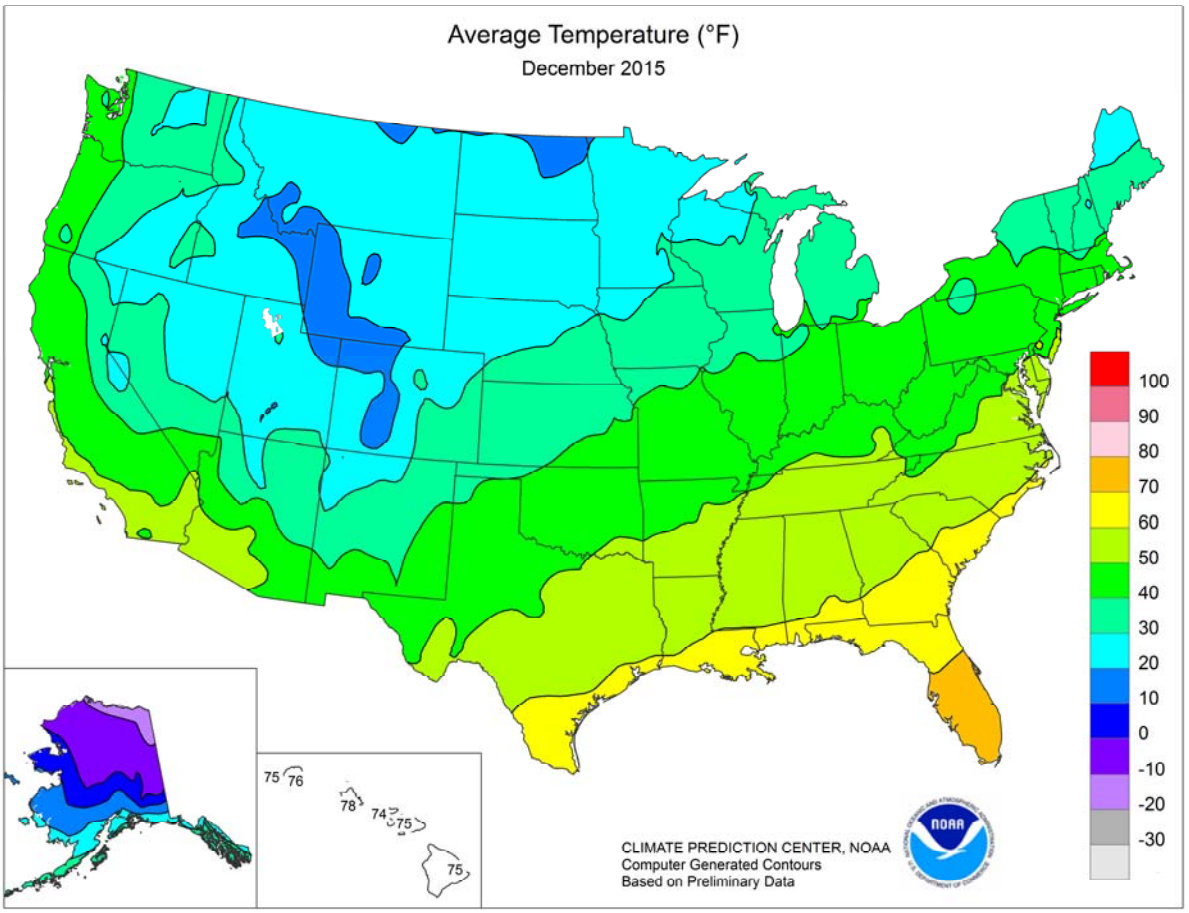
Late-season row crop harvesting continued in some Southern States in December but was mostly complete by month's end. In Texas and Arizona, cotton harvest was virtually complete. Rain events in Georgia delayed harvest and decreased quality of soybeans, cotton, and peanuts in many areas. Most of the cotton and peanut crops not harvested prior to December in South Carolina were likely to be left in the fields and destroyed as a result of October's historic flood and still-soggy field conditions.

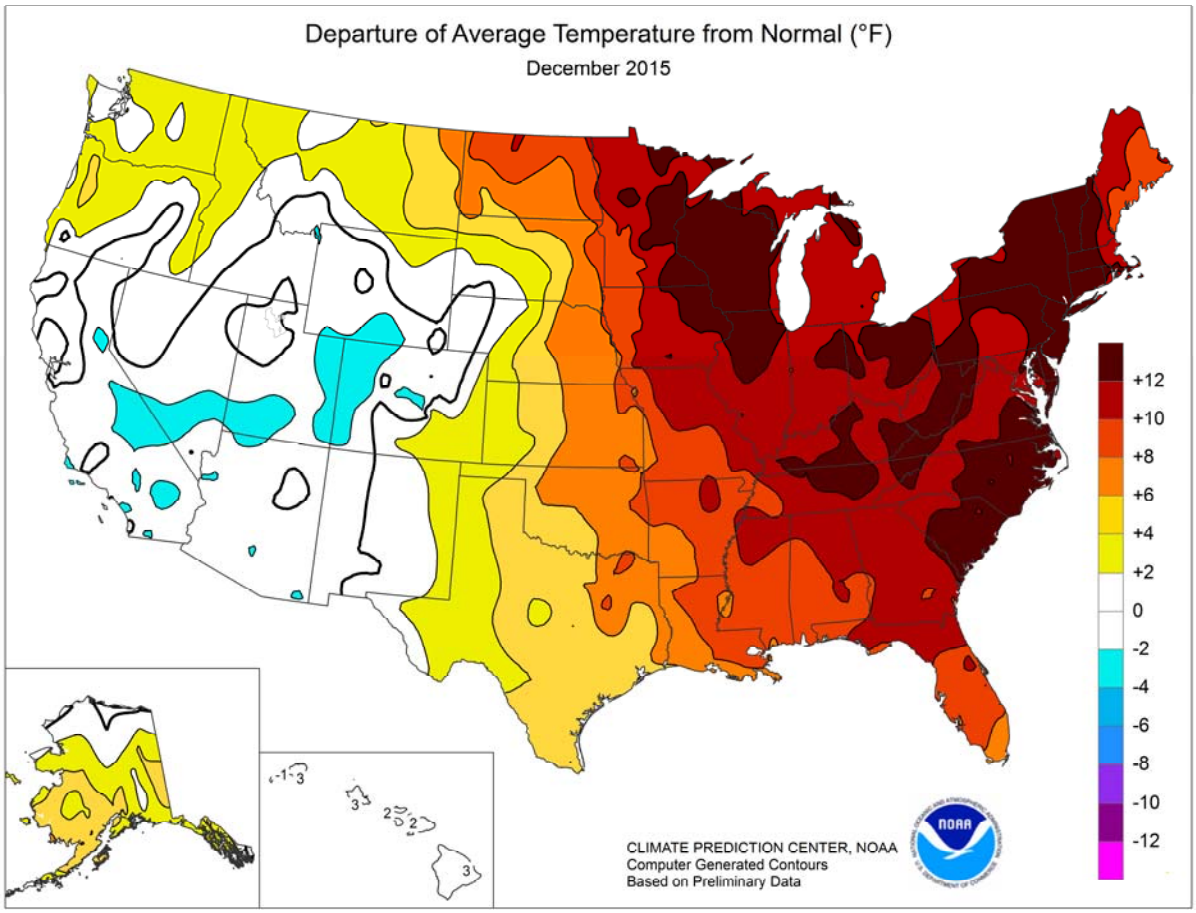

Total Precipitation (Inches)
December 2015
24
20
16
12
8
4
2
1
0.5
0
0
0.5
0.8
0.8
1.6
0.5
0.6
0.6
1.2
3.1
9.9
1
2.5
2.3
1.4
5.3
12.3
6.9
7.3
1.4
2.6
0.9
0.7
14.1
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
December 2015
400
200
150
125
100
75
50
25
33
77
95
77
33
102
111
6
33
63
45
31
58
161
61
168
30
42
21
24
134
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
December 2015
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
87
83
86
85
87
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
December 2015
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
64
65
68
62
60
63
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Average Temperature (°F)
December 2015
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
75 76
78
74 75
75
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
December 2015
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-1 3
3
2 2
3
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

December 2015

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	57	11	10.53	6.06	LEXINGTON	49	13	7.21	3.18	COLUMBUS	45	12	4.88	1.95
HUNTSVILLE	55	12	10.68	5.09	LONDON-CORBIN	49	11	5.45	1.14	DAYTON	44	13	4.39	1.31
MOBILE	61	9	12.38	7.72	LOUISVILLE	50	12	6.58	2.89	MANSFIELD	43	13	4.16	0.90
MONTGOMERY	59	10	14.13	9.16	PADUCAH	49	12	7.42	3.04	TOLEDO	41	12	2.98	0.34
AK ANCHORAGE	22	5	0.23	-0.82	LA BATON ROUGE	62	10	6.33	1.07	YOUNGSTOWN	42	12	4.19	1.23
BARROW	-11	0	0.04	-0.08	LAKE CHARLES	60	7	3.24	-1.36	OK OKLAHOMA CITY	45	5	3.07	1.18
COLD BAY	33	2	7.27	2.94	NEW ORLEANS	65	10	6.46	1.39	TULSA	47	7	8.60	6.17
FAIRBANKS	-2	4	0.07	-0.67	SHREVEPORT	56	8	2.89	-1.66	OR ASTORIA	46	3	20.53	10.13
JUNEAU	32	3	2.42	-2.99	ME BANGOR	34	10	4.06	0.73	BURNS	24	-1	3.38	2.08
KING SALMON	23	6	2.34	0.95	CARIBOU	28	12	4.88	1.69	EUGENE	44	4	13.61	5.32
KODIAK	35	4	12.28	4.64	PORTLAND	38	10	5.34	1.10	MEDFORD	42	4	7.73	4.83
NOME	11	3	0.78	-0.23	MD BALTIMORE	49	12	5.85	2.50	PENDLETON	37	3	2.28	0.80
AZ FLAGSTAFF	28	-2	1.03	-0.80	MA BOSTON	45	10	4.28	0.55	PORTLAND	44	4	15.24	9.53
PHOENIX	54	0	0.21	-0.71	WORCESTER	41	12	4.65	0.85	SALEM	44	4	15.24	8.78
TUCSON	52	0	0.47	-0.56	MI ALPENA	37	13	3.79	1.96	PA ALLENTOWN	46	14	4.19	0.80
AR FORT SMITH	49	8	10.81	7.42	DETROIT	41	11	3.01	0.50	ERIE	44	11	3.89	0.16
LITTLE ROCK	52	9	8.38	3.67	FLINT	41	14	1.90	-0.28	MIDDLETOWN	45	11	4.29	1.05
CA BAKERSFIELD	48	1	0.58	-0.18	GRAND RAPIDS	39	11	3.33	0.63	PHILADELPHIA	51	14	5.14	1.83
EUREKA	48	0	14.66	8.31	HOUGHTON LAKE	35	11	3.57	1.82	PITTSBURGH	44	11	3.04	0.18
FRESNO	46	1	2.97	1.63	LANSING	39	12	2.72	0.55	WILKES-BARRE	44	13	2.55	0.00
LOS ANGELES	58	0	1.08	-0.71	MUSKEGON	40	11	4.90	2.26	WILLIAMSPORT	43	12	3.36	0.42
REDDING	46	1	8.21	3.54	TRAVERSE CITY	38	12	5.09	2.43	PR SAN JUAN	80	2	3.47	-1.10
SACRAMENTO	47	1	1.75	-0.70	MN DULUTH	26	12	3.70	2.76	RI PROVIDENCE	46	12	4.80	0.66
SAN DIEGO	58	0	0.88	-0.43	INT'L FALLS	22	14	1.07	0.37	SC CHARLESTON	64	13	3.14	-0.10
SAN FRANCISCO	50	1	3.37	0.48	MINNEAPOLIS	30	11	2.32	1.32	COLUMBIA	60	13	6.45	3.07
STOCKTON	47	2	2.46	0.64	ROCHESTER	30	13	3.21	2.19	FLORENCE	59	12	7.09	3.62
CO ALAMOSA	22	5	0.25	-0.08	ST. CLOUD	26	12	1.02	0.33	GREENVILLE	55	11	10.08	6.22
CO SPRINGS	33	4	0.25	-0.17	MS JACKSON	58	10	5.87	0.53	MYRTLE BEACH	62	13	3.85	0.40
DENVER	30	1	0.71	0.40	MERIDIAN	57	8	6.08	0.77	SD ABERDEEN	22	6	0.64	0.26
GRAND JUNCTION	25	-3	0.69	0.17	TUPELO	54	11	7.36	1.24	HURON	24	5	1.28	0.89
PUEBLO	34	4	0.40	0.01	MO COLUMBIA	43	11	7.04	4.57	RAPID CITY	27	2	0.63	0.23
CT BRIDGEPORT	47	12	4.94	1.47	JOPLIN	44	7	9.77	6.81	SIOUX FALLS	26	8	1.31	0.79
HARTFORD	43	12	4.25	0.65	KANSAS CITY	40	9	3.24	1.60	TN BRISTOL	50	13	5.27	1.88
DC WASHINGTON	51	11	4.84	1.79	SPRINGFIELD	44	8	11.43	8.26	CHATTANOOGA	54	12	10.41	5.60
DE WILMINGTON	49	13	5.21	1.81	ST JOSEPH	38	7	3.25	1.81	JACKSON	51	9	5.15	-0.21
FL DAYTONA BEACH	71	10	0.57	-2.14	ST LOUIS	46	12	11.74	8.88	KNOXVILLE	52	11	7.84	3.35
FT LAUDERDALE	78	9	6.34	3.69	MT BILLINGS	29	3	0.57	-0.10	MEMPHIS	54	11	4.77	-0.91
FT MYERS	74	8	3.60	2.02	BUTTE	18	0	0.67	0.14	NASHVILLE	53	13	4.92	0.38
JACKSONVILLE	66	11	0.56	-2.08	GLASGOW	21	5	0.71	0.34	TX ABILENE	50	5	2.20	0.93
KEY WEST	77	5	4.58	2.44	GREAT FALLS	27	3	1.07	0.40	AMARILLO	41	4	1.28	0.67
MELBOURNE	74	11	3.69	1.38	HELENA	24	3	0.74	0.28	AUSTIN	55	3	2.29	-0.15
MIAMI	77	7	9.82	7.64	KALISPELL	26	3	2.43	0.78	BEAUMONT	61	7	4.14	-1.11
ORLANDO	71	8	0.72	-1.59	MILES CITY	27	6	0.02	-0.43	BROWNSVILLE	67	6	0.16	-0.95
PENSACOLA	64	10	8.33	4.36	MISSOULA	25	2	1.38	0.23	COLLEGE STATION	58	6	8.08	4.85
ST PETERSBURG	73	9	0.37	-2.23	NE GRAND ISLAND	32	6	1.88	1.22	CORPUS CHRISTI	62	4	0.89	-0.86
TALLAHASSEE	65	11	4.77	0.67	HASTINGS	33	6	2.18	1.45	DALLAS/FT WORTH	54	7	3.83	1.26
TAMPA	73	10	0.49	-1.81	LINCOLN	34	8	4.42	3.56	DEL RIO	56	4	0.34	-0.41
WEST PALM BEACH	76	8	7.34	4.20	MCCOOK	33	4	0.16	-0.37	EL PASO	47	2	1.08	0.31
GA ATHENS	56	11	12.37	8.66	NORFOLK	30	6	2.27	1.62	GALVESTON	61	3	3.49	-0.04
ATLANTA	58	13	12.51	8.69	NORTH PLATTE	30	4	0.28	-0.12	HOUSTON	59	5	5.21	1.52
AUGUSTA	59	12	6.92	3.78	OMAHA/EPPLEY	34	8	5.26	4.34	LUBBOCK	43	3	1.57	0.90
COLUMBUS	59	10	17.37	12.97	SCOTTSBLUFF	26	0	0.71	0.15	MIDLAND	48	3	1.24	0.59
MACON	59	11	12.62	8.69	VALENTINE	25	1	1.04	0.71	SAN ANGELO	51	5	2.26	1.32
SAVANNAH	64	13	3.35	0.54	NV ELKO	25	-1	2.27	1.34	SAN ANTONIO	58	6	1.48	-0.48
HI HILO	75	3	14.10	3.60	ELY	24	-2	1.38	0.88	VICTORIA	60	5	1.60	-0.87
HONOLULU	78	3	0.27	-2.58	LAS VEGAS	47	0	0.01	-0.39	WACO	53	5	3.62	0.86
KAHULUI	75	2	0.73	-2.35	RENO	36	2	0.75	-0.13	WICHITA FALLS	49	6	2.62	0.94
LIHUE	76	3	1.42	-3.36	WINNEMUCCA	31	1	1.83	1.02	UT SALT LAKE CITY	31	1	2.23	1.00
ID BOISE	32	1	1.71	0.33	NH CONCORD	38	12	4.78	1.82	VT BURLINGTON	39	14	4.44	2.22
LEWISTON	37	3	1.59	0.54	NJ ATLANTIC CITY	51	14	5.44	2.29	VA LYNCHBURG	49	11	4.96	1.73
POCATELLO	25	0	1.24	0.14	NEWARK	50	14	4.40	0.83	NORFOLK	57	13	3.37	0.34
IL CHICAGO/O'HARE	39	12	4.87	2.44	NM ALBUQUERQUE	37	1	0.98	0.49	RICHMOND	52	12	5.94	2.82
MOLINE	39	13	4.19	1.99	NY ALBANY	42	14	3.67	1.00	ROANOKE	50	11	4.55	1.69
PEORIA	41	13	6.31	3.91	BINGHAMTON	40	13	3.61	0.58	WASH/DULLES	49	13	3.76	0.69
ROCKFORD	38	14	4.65	2.59	BUFFALO	42	12	2.90	-0.90	WA OLYMPIA	40	2	14.50	6.61
SPRINGFIELD	42	12	6.56	4.02	ROCHESTER	42	13	2.73	0.00	QUILLAYUTE	43	2	19.24	4.74
IN EVANSVILLE	48	12	5.20	1.66	SYRACUSE	41	12	4.83	1.71	SEATTLE-TACOMA	43	2	11.21	5.59
FORT WAYNE	42	13	4.15	1.38	NC ASHEVILLE	51	12	8.76	5.37	SPOKANE	31	4	4.44	2.19
INDIANAPOLIS	43	11	5.59	2.56	CHARLOTTE	55	11	8.70	5.52	YAKIMA	32	3	3.47	2.09
SOUTH BEND	39	10	4.12	1.03	GREENSBORO	53	12	6.65	3.59	WV BECKLEY	48	13	3.55	0.46
IA BURLINGTON	39	11	4.51	2.41	HATTERAS	63	13	4.96	0.40	CHARLESTON	49	11	5.59	2.27
CEDAR RAPIDS	36	12	4.07	2.59	RALEIGH	56	13	6.07	3.03	ELKINS	46	13	4.69	1.25
DES MOINES	36	11	5.44	4.11	WILMINGTON	61	12	5.50	1.72	HUNTINGTON	48	11	6.41	3.04
DUBUQUE	34	12	4.19	2.50	ND BISMARCK	22	7	0.91	0.47	WI EAU CLAIRE	31	13	3.84	2.81
SIOUX CITY	31	9	2.86	2.20	DICKINSON	24	6	0.28	-0.06	GREEN BAY	35	14	5.71	4.30
WATERLOO	34	12	5.92	4.81	FARGO	23	10	0.65	0.08	LA CROSSE	34	12	4.92	3.69
KS CONCORDIA	37	7	2.64	1.78	GRAND FORKS	20	9	1.05	0.50	MADISON	35	12	3.33	1.67
DODGE CITY	37	4	2.43	1.66	JAMESTOWN	21	7	0.44	0.00	MILWAUKEE	38	12	3.82	1.60
GOODLAND	33	3	0.16	-0.24	MINOT	25	10	0.41	-0.22	WAUSAU	31	12	4.94	3.61
HILL CITY	35	4	1.86	1.39	WILLISTON	22	9	0.55	-0.02	WY CASPER	25	1	1.05	0.43
TOPEKA	40	9	2.71	1.29	OH AKRON-CANTON	44	13	3.70	0.72	CHEYENNE	28	1	0.85	0.39
WICHITA	41	7	2.22	0.87	CINCINNATI	46	11	6.09	2.81	LANDER	21	0	0.48	-0.13
KY JACKSON	51	13	4.64	0.37	CLEVELAND	44	13	2.96	-0.18	SHERIDAN	26	4	0.34	-0.34

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

January 4 – 10, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Near normal temperatures prevailed across much of the nation, week with exceptions in the upper Great Lakes region and northern Plains. Northern sections of Minnesota, Wisconsin, and Upper Michigan experienced temperatures more than 9°F above normal. Conversely, readings averaged more than 6°F below normal in portions of Montana, South Dakota, and Nebraska. Precipitation was near normal across most of the county. Above average precipitation was mostly limited to the Southwest, where a majority of the area received at least 400 percent of the weekly normal.

Arizona: Alfalfa conditions continued to be rated mostly good to excellent, depending on location. Harvesting occurred on 70 percent of the state's alfalfa acreage. Rangeland conditions varied widely, depending on location, but were mostly good to fair. Central Arizona shipped broccoli, cabbage (green and red), cilantro, kale greens, lemons and parsley. Western Arizona growers shipped anise, arugula, Bok Choy, broccoli, cabbage (green and red), cauliflower, celery, Chinese cabbage, cilantro, endive, escarole, kale greens, varieties of lettuce (Boston, Iceberg, green leaf, red leaf, and romaine), oranges, parsley, radicchio, and spinach. The northern part of the state had significant rainfall below 5,000 feet and snow above. The southern part of the state experienced heavy rain.

California: Winter grains and field crops benefited from the ongoing precipitation. Growers were shaping soil beds and preparing ground for next year's crop. In Kern County, potatoes were harvested and new fields were planted. In Fresno County, recent rains led to favorable growth of fall and winter plantings of barley, oats, and wheat. Some grain fields were treated with herbicides. Straw was harvested and shipped. The last cuts were made to alfalfa. Alfalfa seed was planted and growing nicely. The sorghum harvest was completed. Cotton fields were bedded up, shredded, and disked. Post-harvest pruning and orchard replanting continued in deciduous tree fruit orchards. Pomegranates and kiwifruit were picked and shipped. Harvest was ongoing for citrus, including Navel, Cara Cara, mandarin, and blood oranges. The grapefruit, pumelo, lemon and tangelo harvest continued. In Tulare County, exports of citrus fruit have started to pick up. Frost protection measures were underway when the cold weather dictated. Some immature orange trees remained covered to protect them from sub-freezing temperatures. Growers were running wind machines during cold events to prevent freeze damage. Muddy groves were impeding the applications of needed fungicidal treatments. For nut crops, post-harvest cultural maintenance was impeded due to rain. Almond, walnut, and pistachio orchards were pruned, shredded, and cleaned. Growers applied herbicides and dormant sprays. Almond shelling was ongoing. Almonds and shelled and in-shell walnuts were exported. The rainy weather made harvest difficult and interfered with preparations for the spring vegetable plantings. In Colusa and San Joaquin Counties, fieldwork was halted due to wet conditions. In Sutter County, the cultivation and preparation of tomato and other spring crop fields continued. Onions for seed were planted. In Madera County, processing tomato beds were prepared. In Fresno County, the asparagus fields were topped and shredded to prepare for the spring harvest. Bok choy, broccoli, napa cabbage, and daikon were harvested. Carrots were harvested and new carrot fields were growing nicely. Field preparation, including weeding, discing, and repair of irrigation lines, continued. Dehydrator onions were up to stand and fresh onions were planted. Fungicide was applied to seed onions and seed kale. In Tulare County, winter vegetables were well established. In Fresno County, beehives from out of state were brought in to prepare for almond pollination. In Tulare County, recent rains continued to benefit lower-elevation pasture growth, reducing the need for supplemental feed. Sheep continued to graze in alfalfa fields.

Florida: There was an average of 5.3 days suitable for fieldwork, down slightly from the previous week due to wet fields. Sugarcane harvest activities continued. Cotton was 90 percent picked in Walton County and 99 percent harvested in Jackson County. Bradford County onions, leafy greens, broccoli, and strawberries were being harvested. Potato and cabbage were being planted in Flagler and Putnam Counties, and cabbage and leafy greens were being harvested. Watermelons and spring crops were being planted in Charlotte, Collier, Glades, Hendry, and Lee Counties. Vegetable growers in South Florida planted green beans, pole beans, yellow squash, zucchini, tomato, pepper, eggplant, herbs, sweet corn, boniato, malanga, strawberry, avocados, and other tropical fruits. Vegetables being harvested were: cabbage, collards, cucumbers, green beans, herbs, kale, peppers, squash, Swiss chard, tomatoes, watermelons, and a variety of specialty items. Cabbage fields in Okeechobee County were covered with water. Saturday's weather scarred fruit in Palm Beach County. Temperatures were closer to normal in the citrus region. Highs were mostly in the 70s, with a couple days reaching the lower 80s. Lows were mostly in the upper 40s to lower 50s. Rainfall was the heaviest in the Western Area and Indian River District. In those areas, five of seven monitored counties had at least 1.5 inches of rain. The remainder of the citrus-growing region averaged just over one-half inch of rain. The January 5 U.S. Drought Monitor showed the eastern edge of Lake County and most of Brevard, Volusia, Seminole, Orange, and Osceola Counties as abnormally dry. With the holiday season behind, all open processing plants were running at full capacity. Packing houses accepted mostly grapefruit, later variety tangelos, and a few early oranges. The honey tangerine harvest just started. Other grove activity was relatively slow this time of the year. Growers have done some hedging and topping after harvest. Irrigating was taking place where conditions have been dry. Mowing was being reduced to an as-needed basis, mostly before harvest. The earlier warmth hurt cool-season pasture condition in the panhandle and central areas. Some pasture in Washington County and several southeastern counties had standing water. Cool-season forage (clover and ryegrass) was a failure in Flagler and Dixie Counties.

International Weather and Crop Summary

January 3-9, 2016

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

HIGHLIGHTS

EUROPE: Rain alleviated drought on the Iberian Peninsula, while the season's first snowfall was reported from Germany into the Balkans.

WESTERN FSU: Fresh snowfall protected dormant winter grains from lingering bitter cold.

MIDDLE EAST: Rain and snow alleviated short-term dryness in Turkey and sustained adequate to abundant moisture supplies for winter grains in Syria, Iraq, and portions of Iran.

NORTHWESTERN AFRICA: Despite some showers, drought continued to impede winter wheat and barley establishment from Morocco into central Algeria.

SOUTHEAST ASIA: Lighter-than-usual showers increased rainfall deficits for rice in parts of Java, Indonesia.

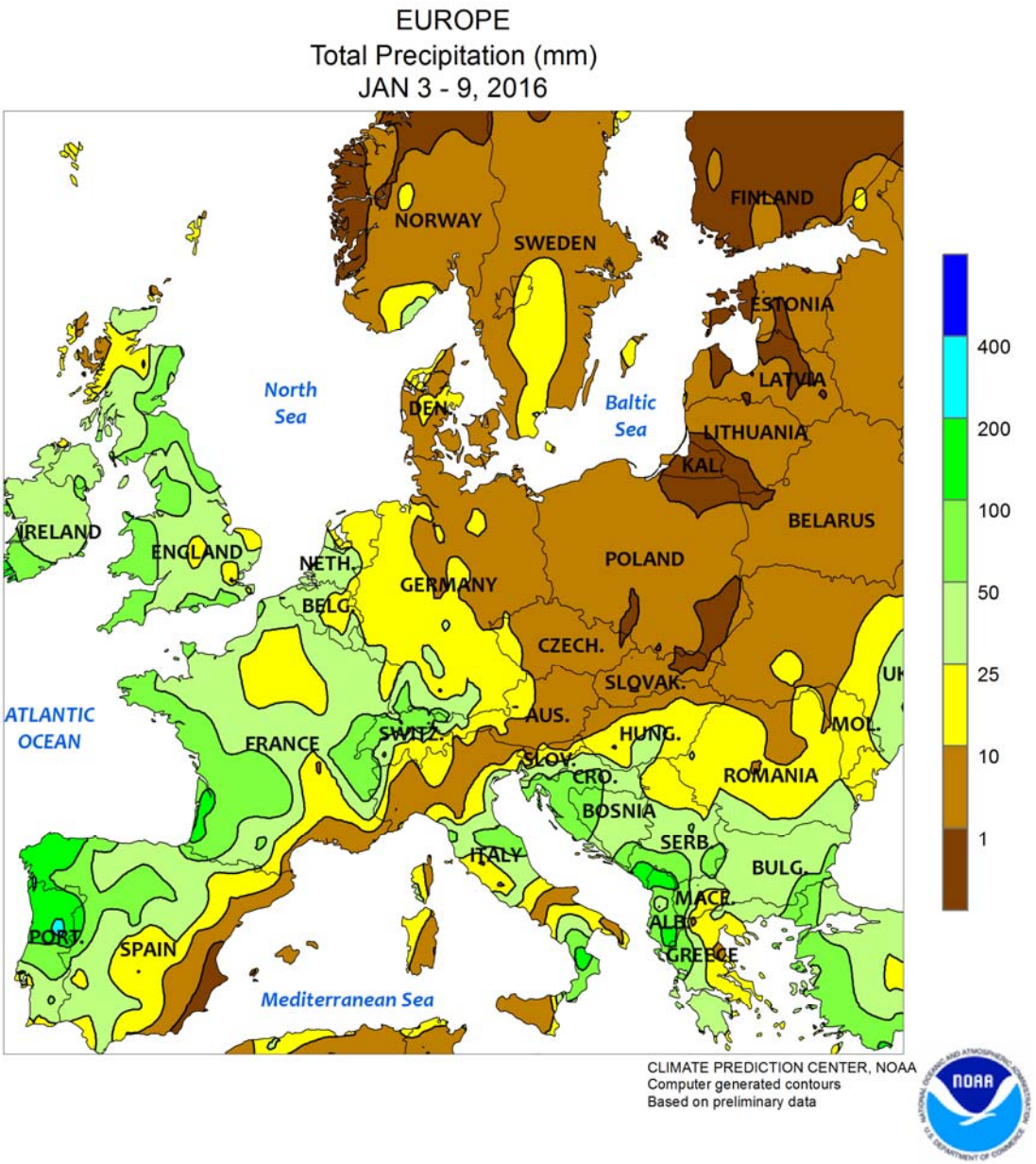
AUSTRALIA: Widespread, soaking rains maintained adequate to abundant moisture supplies for summer crops.

SOUTH AFRICA: Intensifying drought worsened prospects of corn and other summer crops.

ARGENTINA: Showers and summer warmth benefited summer grains, oilseeds, and cotton.

BRAZIL: Locally heavy rain brought much-needed relief to soybeans and cotton in central and northeastern Brazil.

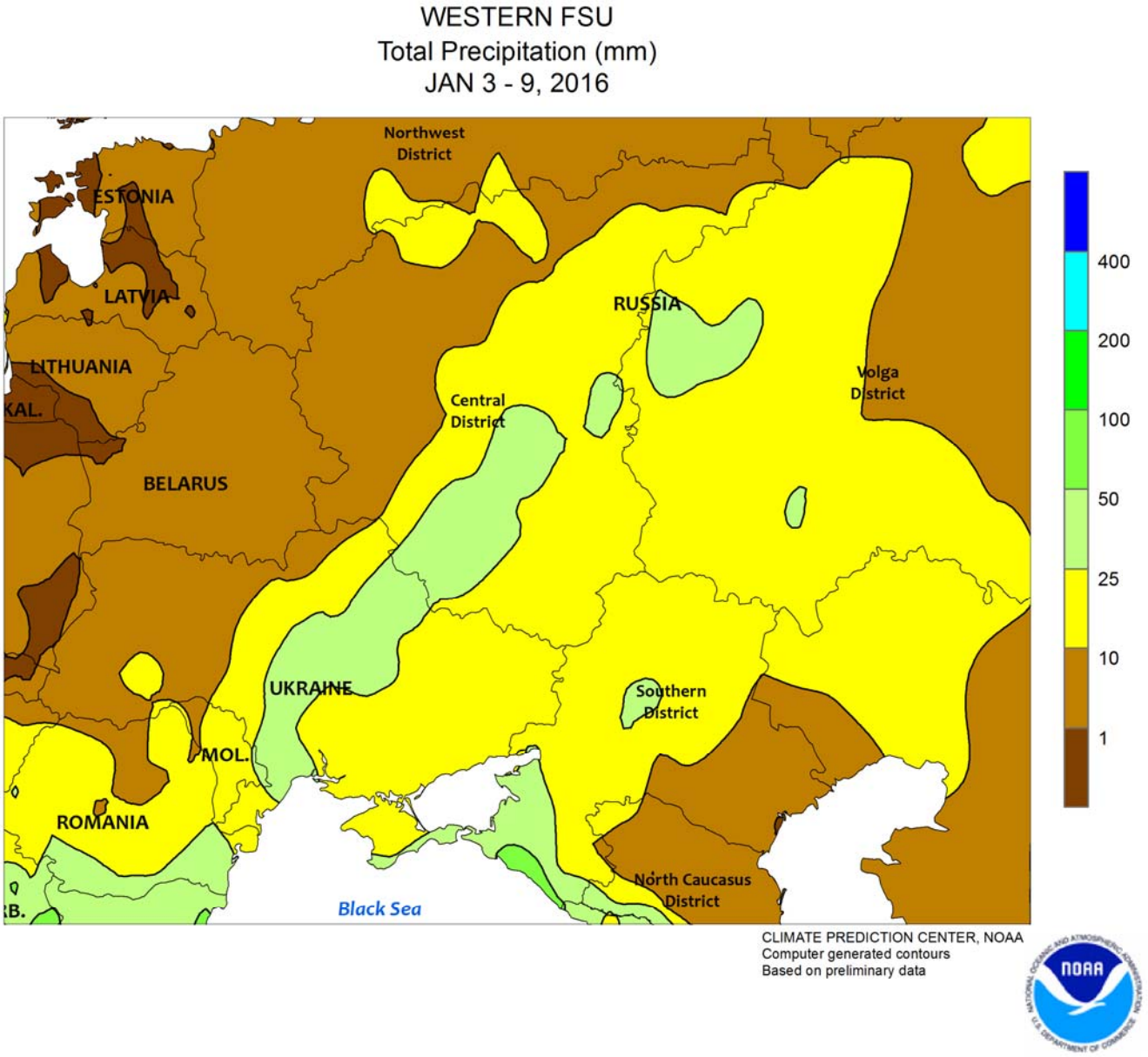
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Widespread rain and snow over much of the continent contrasted with dry, cold conditions in northeastern growing areas. For the second consecutive week, moderate to heavy rain (10-100 mm, locally more) alleviated drought on the Iberian Peninsula; short-term precipitation (since November 1) improved from 52 to 62 percent of normal in central Spain over the course of the past week. While lingering deficits persist, prospects for winter grain establishment and development have improved considerably. Farther east, pronounced short-term dryness persisted in northern Italy, as this week's rain (1-10 mm) was insufficient to ease the 120 mm deficits that have accumulated since November 1. In contrast, rain and snow (10-120 mm liquid equivalent) developed from central and southern Italy into the Balkans, easing short-term dryness. Moderate to heavy rain (25-70 mm) caused additional lowland flooding and localized damage to infrastructure over Ireland and the western United Kingdom, but major winter crop areas in southeastern England reported favorable rainfall (15-50 mm). Rain (10-45 mm) also maintained adequate to abundant moisture reserves for winter grains and oilseeds from France into western and southern Germany. The season's first accumulating snow (2-20 cm by week's end) covered now-dormant winter crops from northeastern Germany and western Poland into the Balkans. However, crops in northeastern Poland remained devoid of snow, with some localized burnback possible due to minimum temperatures between -21 and -17°C.

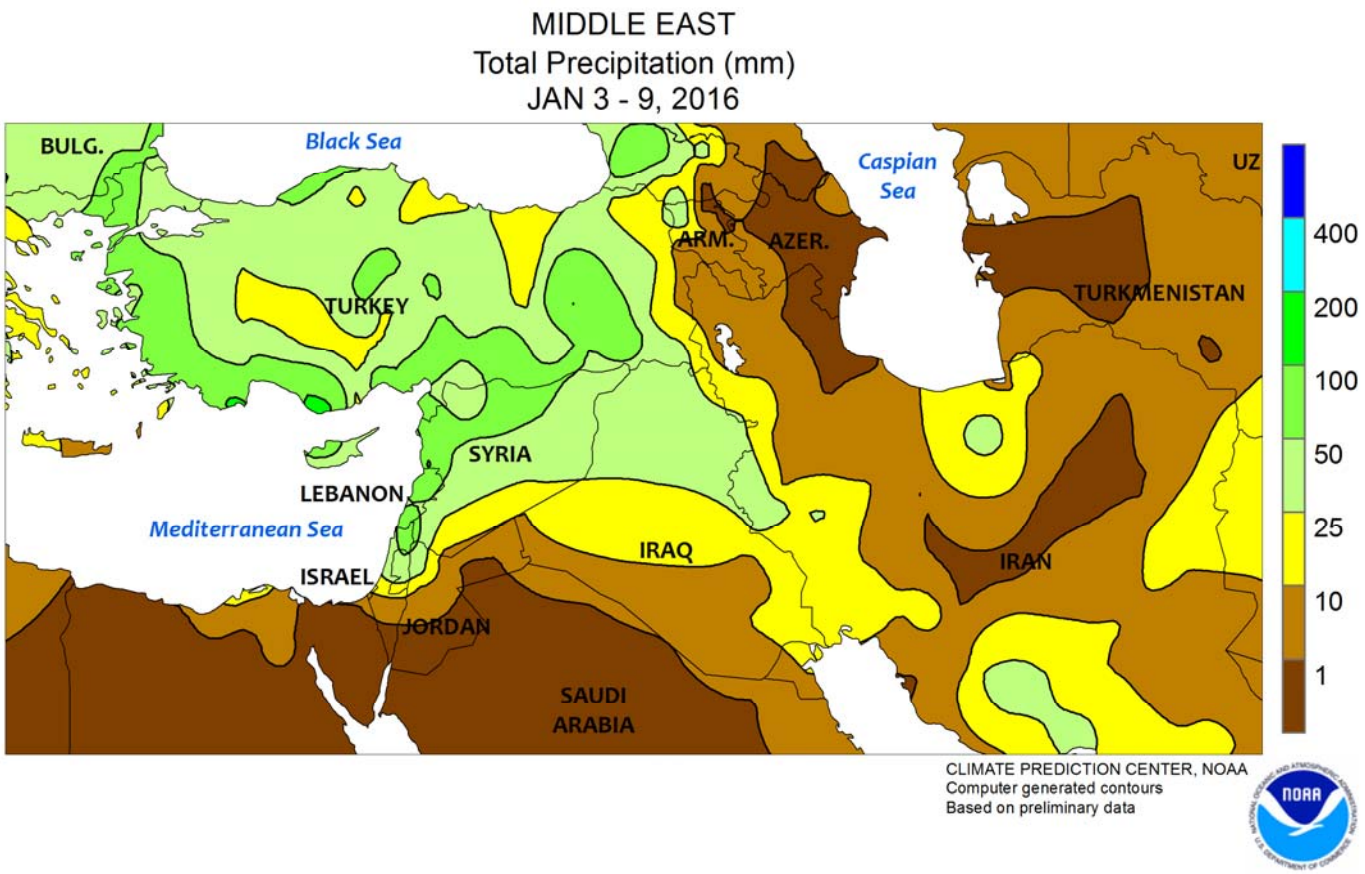
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Snow continued, though some rain in southern crop areas eroded the snowpack somewhat. Widespread precipitation (snow and some late-week rain) sustained favorable soil moisture reserves for dormant winter grains and oilseeds. By week's end, the entire region was covered by 5 to 25 cm of snow, except for southern-most portions of Ukraine and Russia's Southern District. Despite minimum temperatures below -20°C early in the period (locally as low as -27°C), there were no concerns for winterkill due to the widespread snowpack. In the southern-most areas which lost snow cover during the week due to rain, minimum temperatures (-17 to -10°C) remained above the threshold for winterkill.

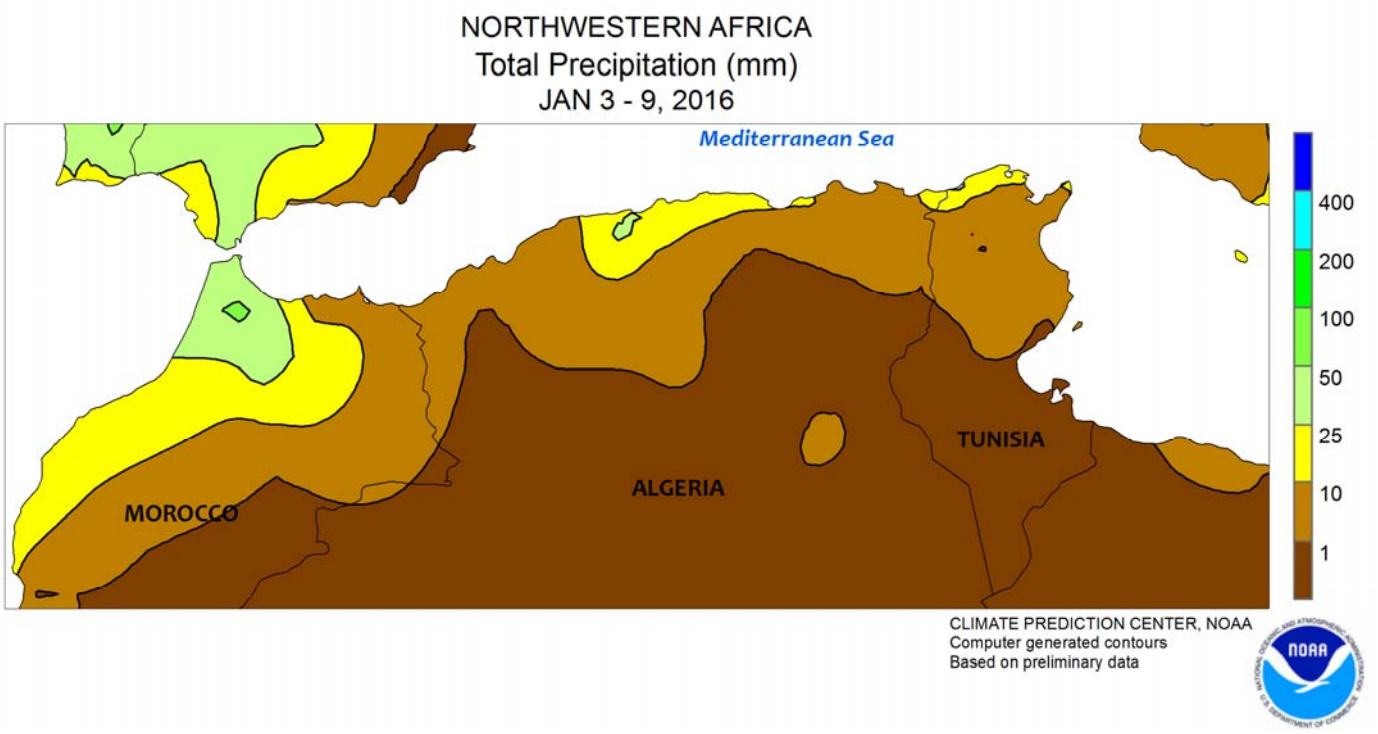
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

Rain and snow along with somewhat milder temperatures expanded across the region. In Turkey, rain and high-elevation snow (25-100 mm liquid equivalent, locally more) eased short-term dryness but arrived too late to benefit dormant winter crops. Up to 75 mm of rainfall along the eastern Mediterranean Coast boosted soil moisture for vegetative winter grains. Moderate to heavy rain and mountain snow (10-40 mm liquid equivalent) was also reported over Iraq and much of Iran, sustaining abundant soil moisture and irrigation reserves for winter grains. In particular, season-to-date (since October 1) regional average precipitation in central Iraq has already exceeded 300 mm, easily surpassing last year's total-season (October-May) precipitation (200 mm) as well as all season totals going back to 2009-10. Temperatures for the week averaged 2 to 7°C above normal across the entire region, though a pocket of colder-than-normal conditions (up to 2°C below normal) was noted from southeastern Turkey into northern Iraq.

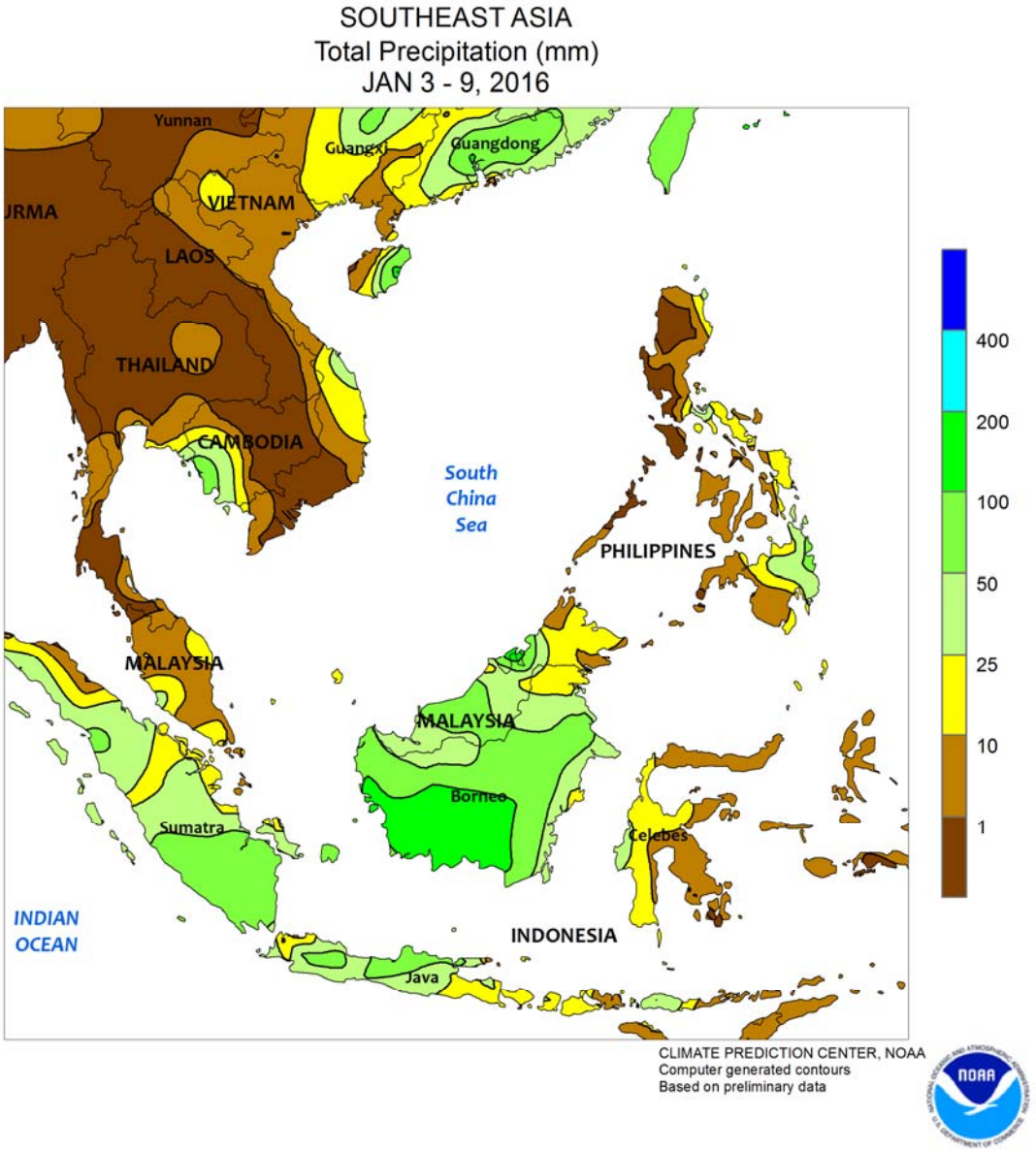
For additional information contact: mbrusberg@oce.usda.gov



NORTHWESTERN AFRICA

Despite some showers, drought continued to adversely impact winter grains across the west. A passing cold front triggered 2 to 30 mm of rainfall over winter grain areas of Morocco and Algeria, though the heaviest rain (25-60 mm) generally fell outside of the major crop areas. The moisture was welcomed for drought-afflicted winter wheat and barley in these locales, but more rain will be needed to stabilize rapidly-declining crop prospects. Even with this past week's rain, regional average precipitation since November 1 stood at a meager 23 percent of average in northern Morocco and 34 percent in central Algeria. In contrast, light to moderate showers (4-30 mm) sustained good crop prospects across northeastern Algeria and northern Tunisia; these eastern locales benefited from locally heavy late-November rainfall. Temperatures for the week averaged up to 6°C above normal, maintaining higher-than-normal evapotranspiration rates in areas already devoid of soil moisture.

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



SOUTHEAST ASIA

Rainfall was unseasonably light across Java, Indonesia, averaging less than 50 mm for the week. The below-normal rainfall further exacerbated short-term moisture deficits for rice in central and eastern Java, while soil moisture in the west remained adequate for rice development. In oil palm areas of Indonesia and Malaysia, widespread showers (50-100 mm or more) kept trees well watered, although pockets of dryness persisted in Sabah (Malaysia) and Peninsular Malaysia, where moisture deficits since the start of the new crop cycle (beginning November 1) continued. Meanwhile in the Philippines, mostly dry weather eased lingering excessive wetness for rice and corn in the northeast. Rainfall during the winter cropping season has been inconsistent across the Philippines, cycling between bouts of short-term dryness to deluges of rainfall. To the west in Thailand and Vietnam, temperatures remained above normal, further necessitating increased irrigation to the dry-season rice crop. Temperatures have been above normal in rice areas of Thailand and southern Vietnam 67 of the last 70 days.

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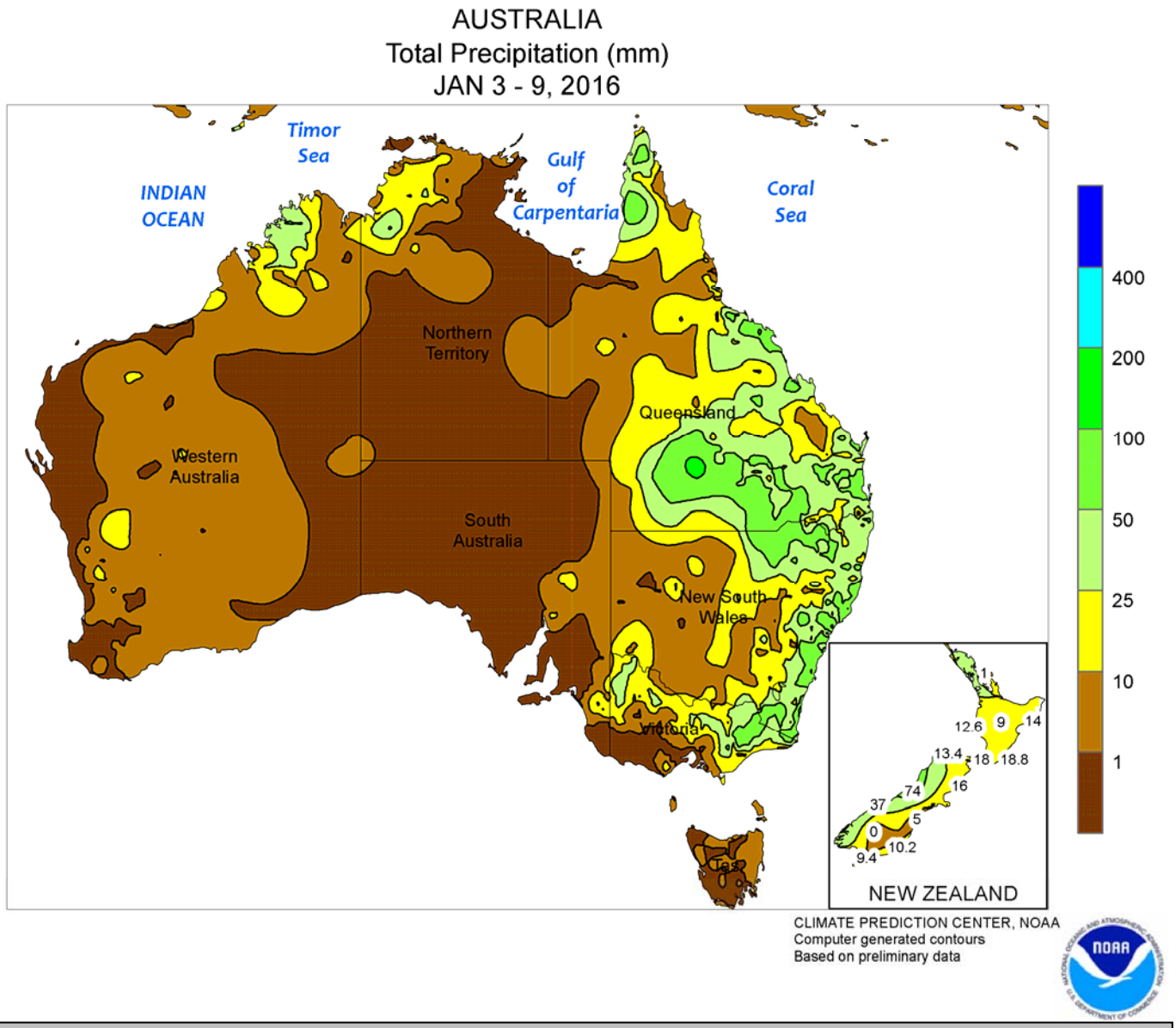

AUSTRALIA

Widespread, soaking rains (20-50 mm, locally near 75 mm) in southern Queensland and northern New South Wales maintained adequate to abundant moisture supplies for summer crops. The rain further increased topsoil moisture for dryland crops while reducing the supplemental water demands of irrigated crops. Relatively cool weather favored cotton and sorghum development as well, with temperatures averaging 2 to 3°C below normal in major summer crop producing areas. Elsewhere in the wheat belt, scattered showers (5-25 mm) in western and southeastern Australia had no significant impact on winter grain harvesting, which has reportedly concluded in most areas.

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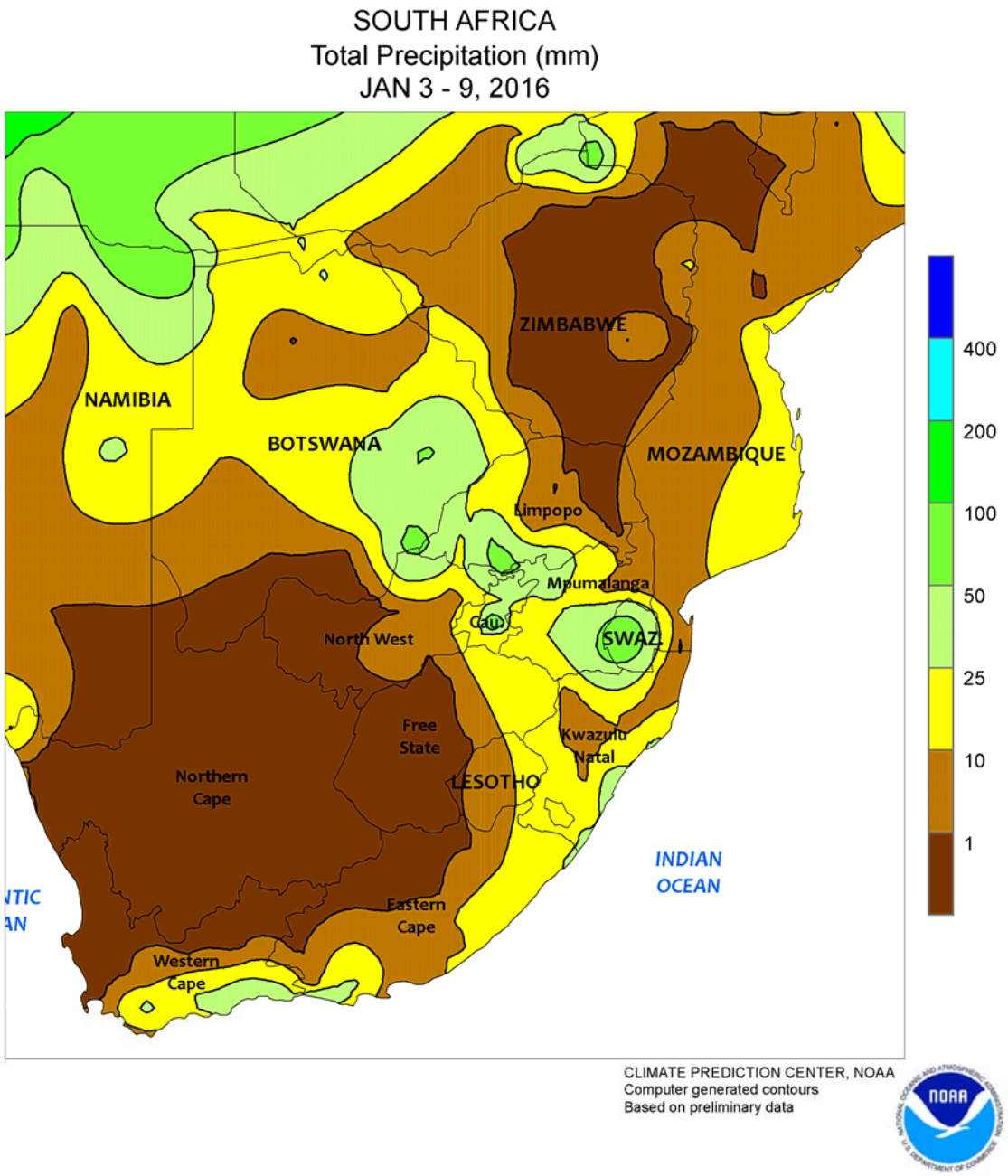

SOUTH AFRICA

Mostly dry, unseasonably hot weather persisted over western sections of the corn belt, maintaining unfavorable prospects for rain-fed summer crops. Virtually no rain fell in commercial white corn areas of Free State and North West, where daytime highs reached 40°C on several days. Weekly temperatures averaged as much as 6°C above normal in western areas, marking one of the warmest weeks for this time of year on record. Rain (10-25 mm, locally higher) helped to stabilize crop conditions farther east (notably Mpumalanga, Gauteng, and eastern sections of Free State) but similar to western areas, above-normal temperatures (weekly temperatures averaging 3-4°C above normal with daytime highs reaching the middle and upper 30s) maintained high evaporative losses and accelerated crops toward reproduction. In most areas, corn typically advances through reproduction during January and February, and rain is needed to prevent further significant declines in yield potential. The window for planting corn in western production areas is rapidly closing, making rain in western areas crucial for germination of any crops that might be planted over the next few weeks. Elsewhere, warm, showery weather (rainfall totaling 10-25 mm, with temperatures averaging 2°C above normal) favored rain-fed sugarcane in southern KwaZulu-Natal as mostly dry, hotter conditions (highs reaching 40°C) spurred rapid development of irrigated sugarcane farther north. Heat and dryness also dominated the Cape Provinces, spurring rapid development of summer row crops and — in Western Cape — tree and vine crops.

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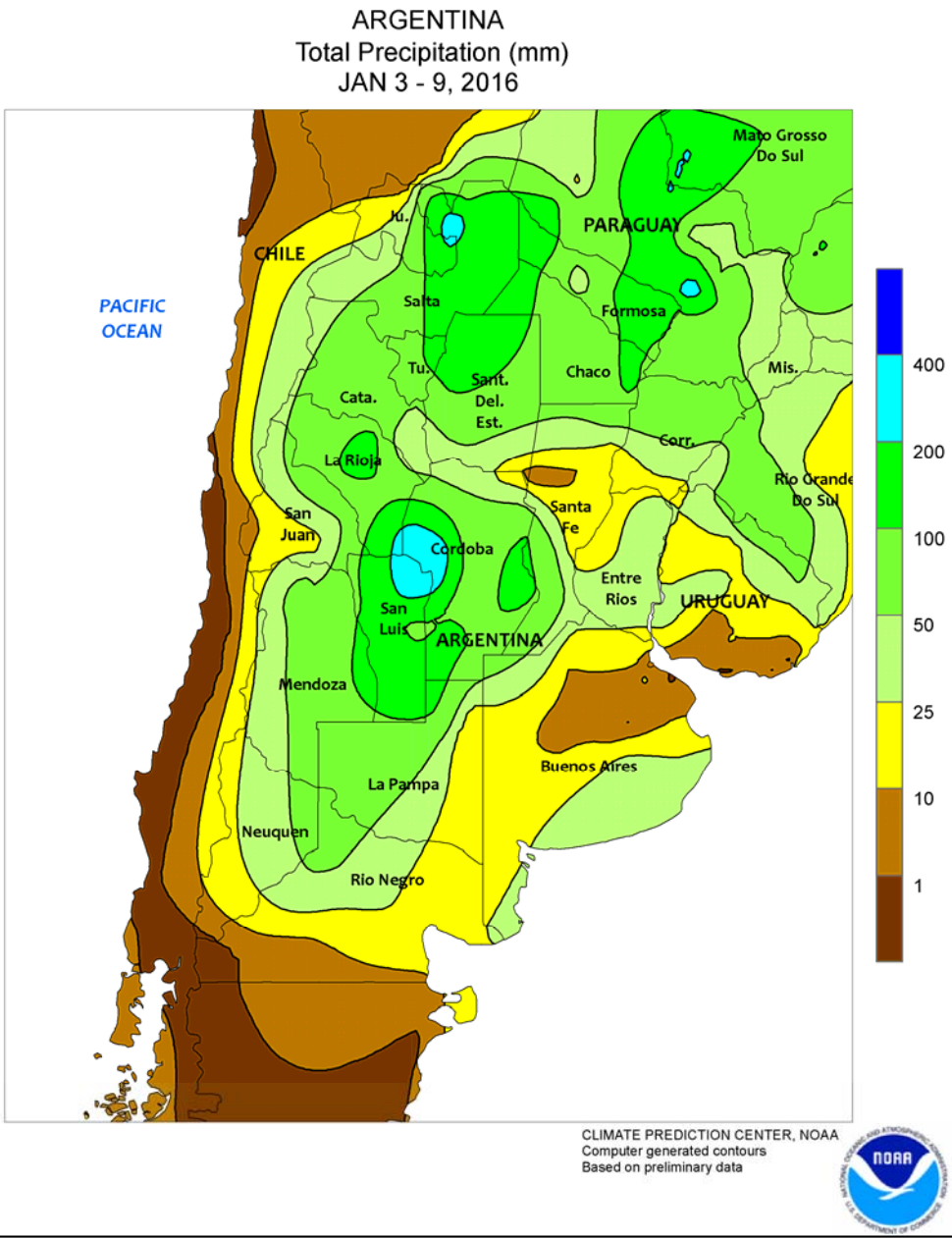

ARGENTINA

Warm, showery weather maintained overall favorable conditions for summer grains, oilseeds, and cotton. In central Argentina, moderate to heavy rain (25-100 mm) fell in previously dry portions of Cordoba and southern Santa Fe. Similar amounts were recorded in southeastern Buenos Aires, slowing winter grain harvesting but providing timely moisture for planting soybeans and corn. Lighter amounts (less than 25 mm) were recorded elsewhere in central Argentina (notably central Buenos Aires). Weekly temperatures averaged up to 2°C below normal in the aforementioned areas (daytime highs reaching the lower 30s degrees C), fostering summer grain and oilseed development in the absence of stressful heat. Somewhat warmer conditions prevailed farther north, with daytime highs reaching the middle 30s in traditionally warmer locations from Santiago del Estero northward. Most northern areas recorded at least 50 mm of rainfall, maintaining adequate moisture for most summer crops. An exception was in the vicinity of northern Santa Fe, which experienced a second week of mostly dry conditions. According to the government of Argentina, soybeans and corn were 91 and 82 percent planted, respectively, as of December 30. In addition, wheat was 87 percent harvested (versus 98 percent last year), with about 25 percent of the acreage remaining in Buenos Aires and La Pampa.

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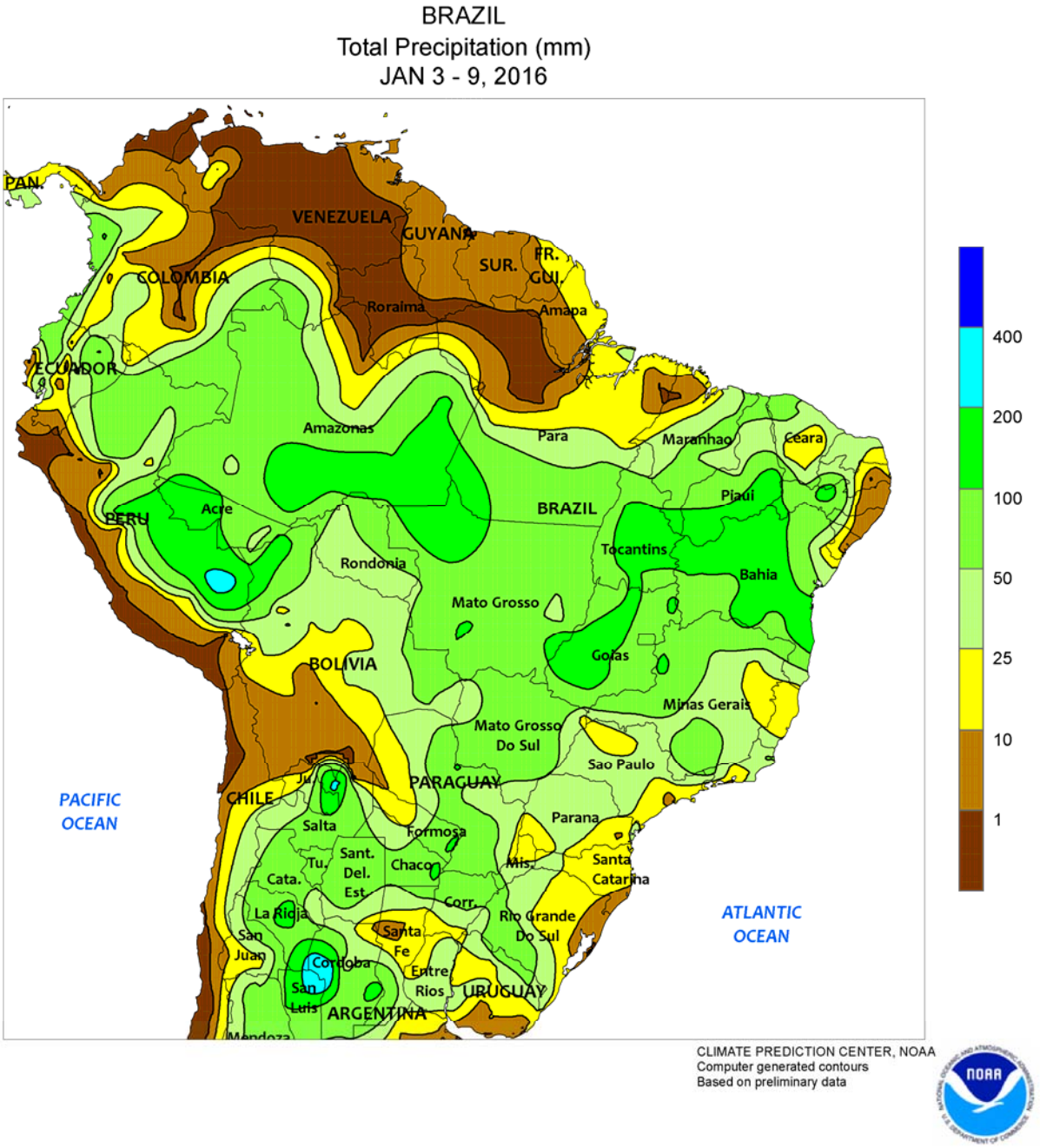

BRAZIL

Rain intensified throughout key agricultural areas of central and northeastern Brazil, providing much-needed moisture for soybeans and corn. Rainfall totaled more than 50 mm from Mato Grosso eastward through Bahia, with more than 100 mm concentrated over previously dry locations in the vicinity of Tocantins and Goias. The rainier weather also brought some relief from excessive heat, although weekly average temperatures still averaged up to 2°C above normal in spots due to lingering warmth (daytime highs reaching the middle 30s degrees C) at the beginning of the week. Meanwhile, rainfall declined from the previous week's excessive totals in southern Brazil, which has enjoyed abundant levels of moisture for soybeans, corn, and other summer crops for much of the season. Amounts totaled 15 to 50 mm from Sao Paulo to Rio Grande do Sul, with somewhat higher totals in southern Minas Gerais and Mato Grosso do Sul. As in central Brazil, temperatures averaged up to 2°C above normal in the south, with highs reaching the lower and middle 30s.

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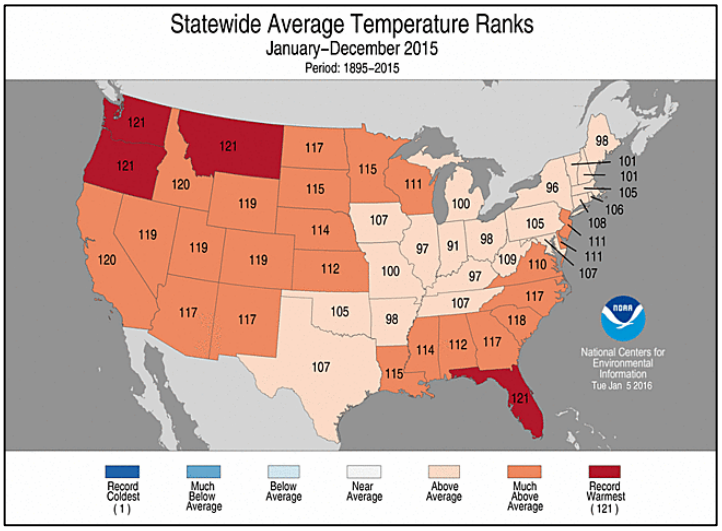
U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 12, 2016. Forecasts refer to January 1.

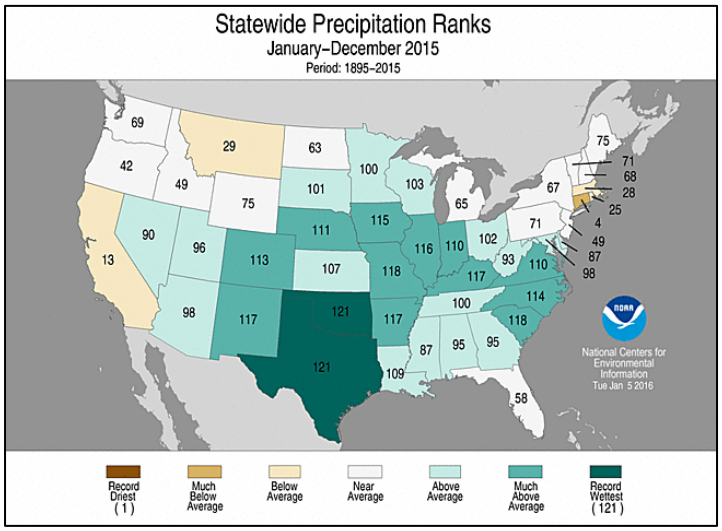
The U.S. **all orange** forecast for the 2015-2016 season is 5.25 million tons, down 1% from the previous forecast and down 18% from the 2014-2015 final utilization.

The Florida all orange forecast, at 69.0 million boxes (3.11 million tons), is unchanged from last month's forecast but down 29% from last season. Early, midseason, and Navel varieties in Florida are forecast at 36.0 million boxes (1.62 million tons), unchanged from last month but down 24% from last season. The Florida Valencia orange forecast, at 33.0 million boxes (1.49 million tons), is unchanged from last month but down 33% from last season.

The California Valencia forecast is 10.0 million boxes (400,000 tons), up 5% from both the previous forecast and last season. The California Navel forecast is 42.0 million boxes (1.68 million tons), down 2% from the previous forecast but up 6% from last season. The Texas all orange forecast, at 1.41 million boxes (60,000 tons), is down 16% from the previous forecast and down 3% from last season.



The National Centers for Environmental Information indicated that the contiguous U.S. experienced its second-warmest year during the 1895-2015 period of record. The nation's annual average temperature was 54.4°F, 2.4°F above the 20th century mean. All four of the nation's warmest years have occurred in the last two decades, with 2015 ranked behind 2012 (55.3°F), but just ahead of 2006 (54.3°F) and 1998 (54.2°F).



Despite ongoing drought in California, the U.S. experienced its third-wettest year, with precipitation averaging 34.47 inches (115% of normal). All of the years on the nation's top-five list for annual wetness (1973, 1983, 2015, 1998, and 1957) occurred during moderate to strong El Niño events—either during the year of onset or the following year. Oklahoma and Texas noted record-setting wetness in 2015.

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