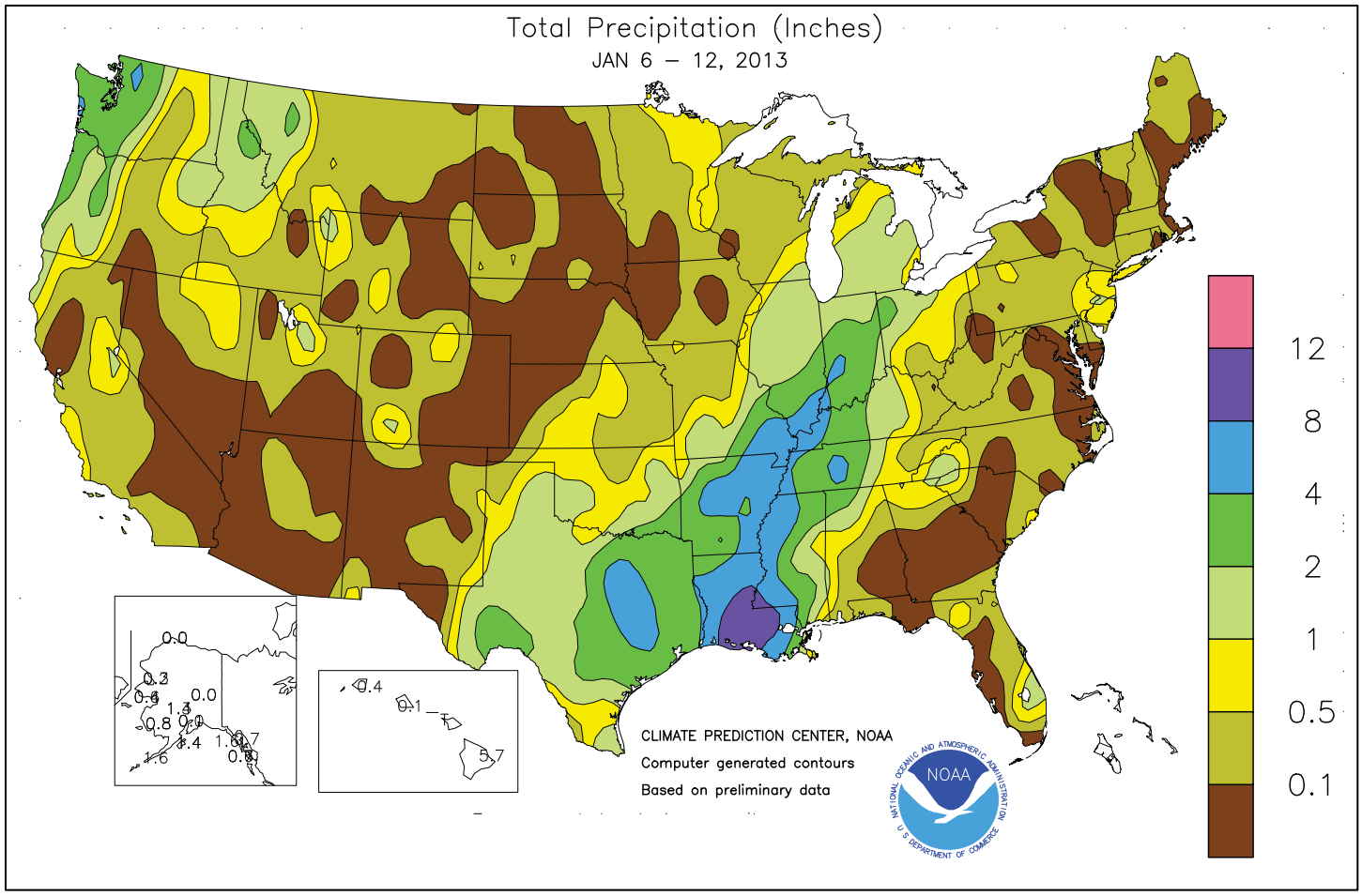
Volume 100, No. 3 http://www.usda.gov/oce/weather January 15, 2013

WEEKLY WEATHER AND CROP BULLETIN

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

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



HIGHLIGHTS

January 6 – 12, 2013

Highlights provided by USDA/WAOB

Flooding rains developed across lower portions of the **Mississippi and Ohio Valleys**, as back-to-back storms dropped 4 to 8 inches of rain—with locally higher amounts in **southern Louisiana**. The storms largely eradicated any remaining drought in the **eastern Corn Belt** and the **Mid-South**, and brought significant improvement in the drought situation to **eastern Texas**. In contrast, mostly dry weather prevailed through week's end in the **East**, leaving long-term precipitation deficits intact across much of the **southern Atlantic region**. In **Florida**, very warm,

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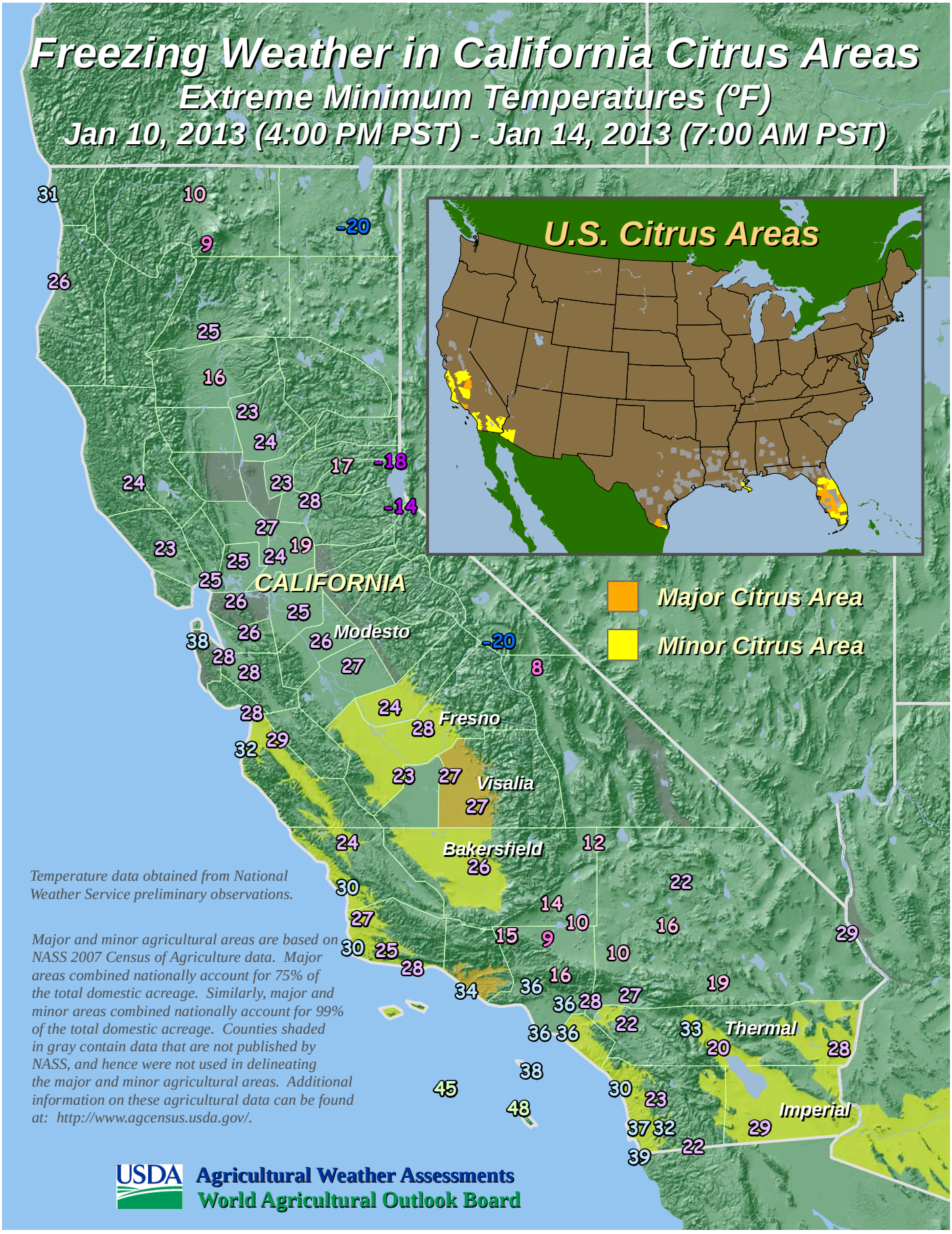
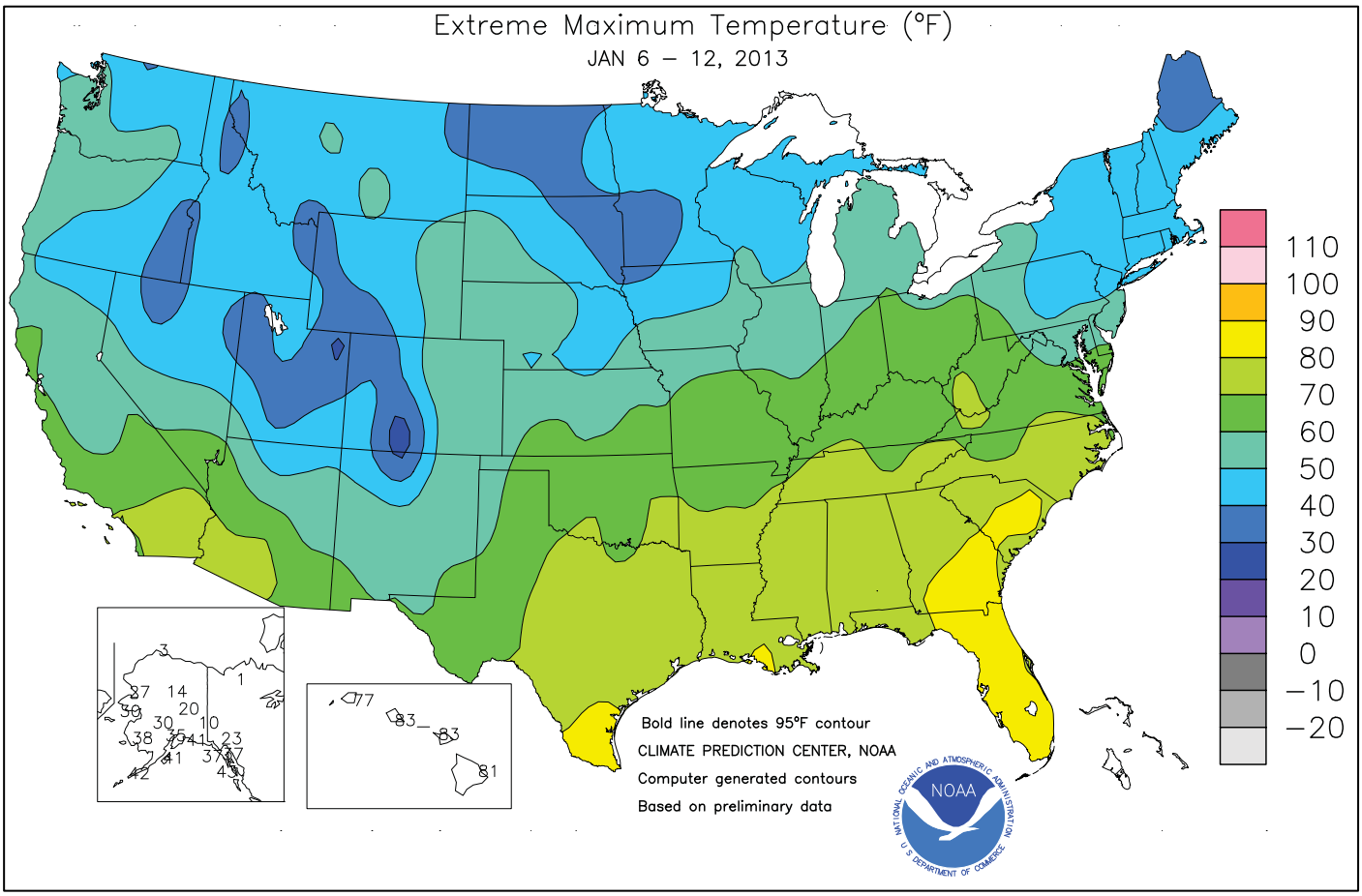
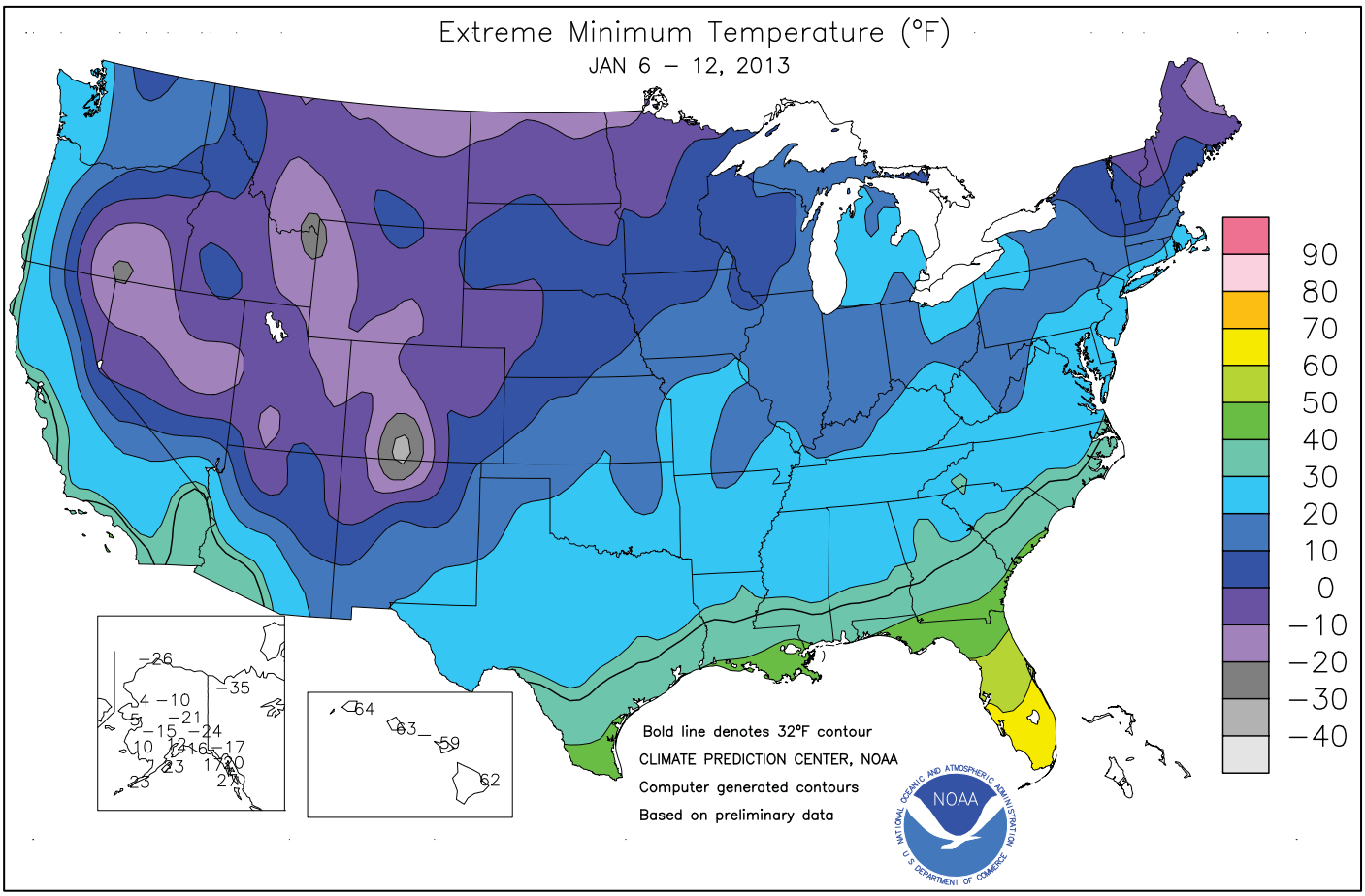
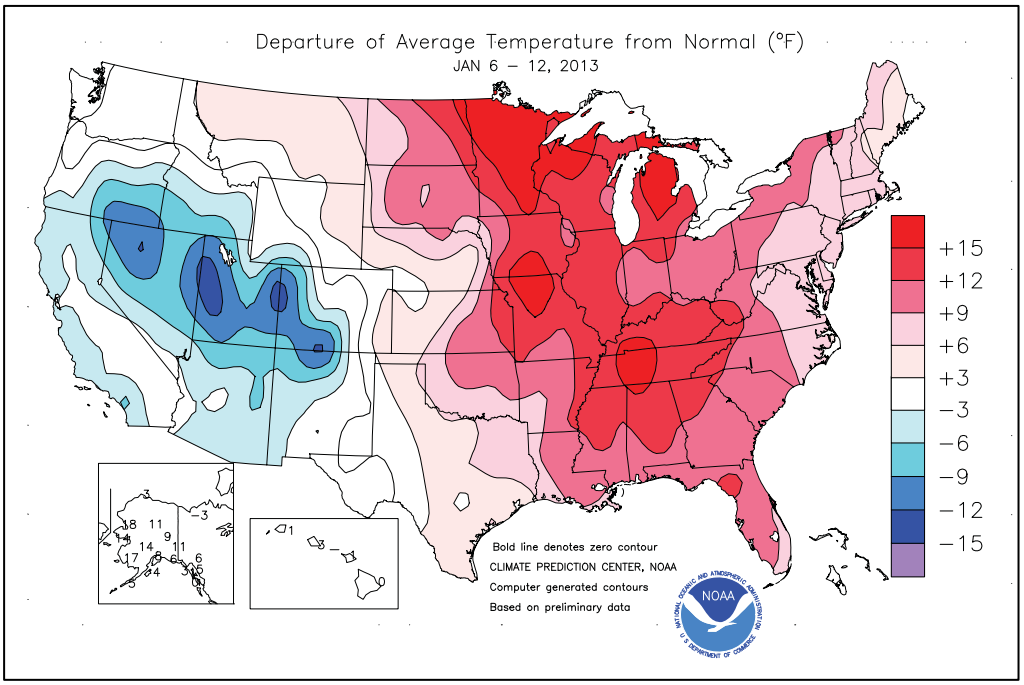
Contents


Freezing Weather in California Citrus Areas
Extreme Minimum Temperatures (ºF)
Jan 10, 2013 (4:00 PM PST) - Jan 14, 2013 (7:00 AM PST)
U.S. Citrus Areas
Major Citrus Area
Minor Citrus Area
CALIFORNIA
Modesto
Fresno
Visalia
Bakersfield
Thermal
Imperial
Temperature data obtained from National Weather Service preliminary observations.
Major and minor agricultural areas are based on NASS 2007 Census of Agriculture data. Major areas combined nationally account for 75% of the total domestic acreage. Similarly, major and minor areas combined nationally account for 99% of the total domestic acreage. Counties shaded in gray contain data that are not published by NASS, and hence were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/.
USDA Agricultural Weather Assessments
World Agricultural Outlook Board


Freezing Weather in California Citrus Areas
Total Number of Hours Temperatures ≤ 28 ºF
Jan 10, 2013 (4:00 PM PST) - Jan 14, 2013 (7:00 AM PST)
U.S. Citrus Areas
Major Citrus Area
Minor Citrus Area
CALIFORNIA
Modesto
Fresno
Visalia
Bakersfield
Thermal
Imperial
62
86
61
6
6
43
16
6
76
76
15
7 16
85
2
6
8 12
6
6
4
5
2
2
4
85
59
15
9
6
2
11
30
5
10
23
1
35
16
44
29
4
34
15
15
1
3
19
4
19
16
Temperature data obtained from National Weather Service preliminary observations.
Major and minor agricultural areas are based on NASS 2007 Census of Agriculture data. Major areas combined nationally account for 75% of the total domestic acreage. Similarly, major and minor areas combined nationally account for 99% of the total domestic acreage. Counties shaded in gray contain data that are not published by NASS, and hence were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/.
USDA
Agricultural Weather Assessments
World Agricultural Outlook Board


Extreme Maximum Temperature (°F)
JAN 6 – 12, 2013
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
JAN 6 – 12, 2013
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA



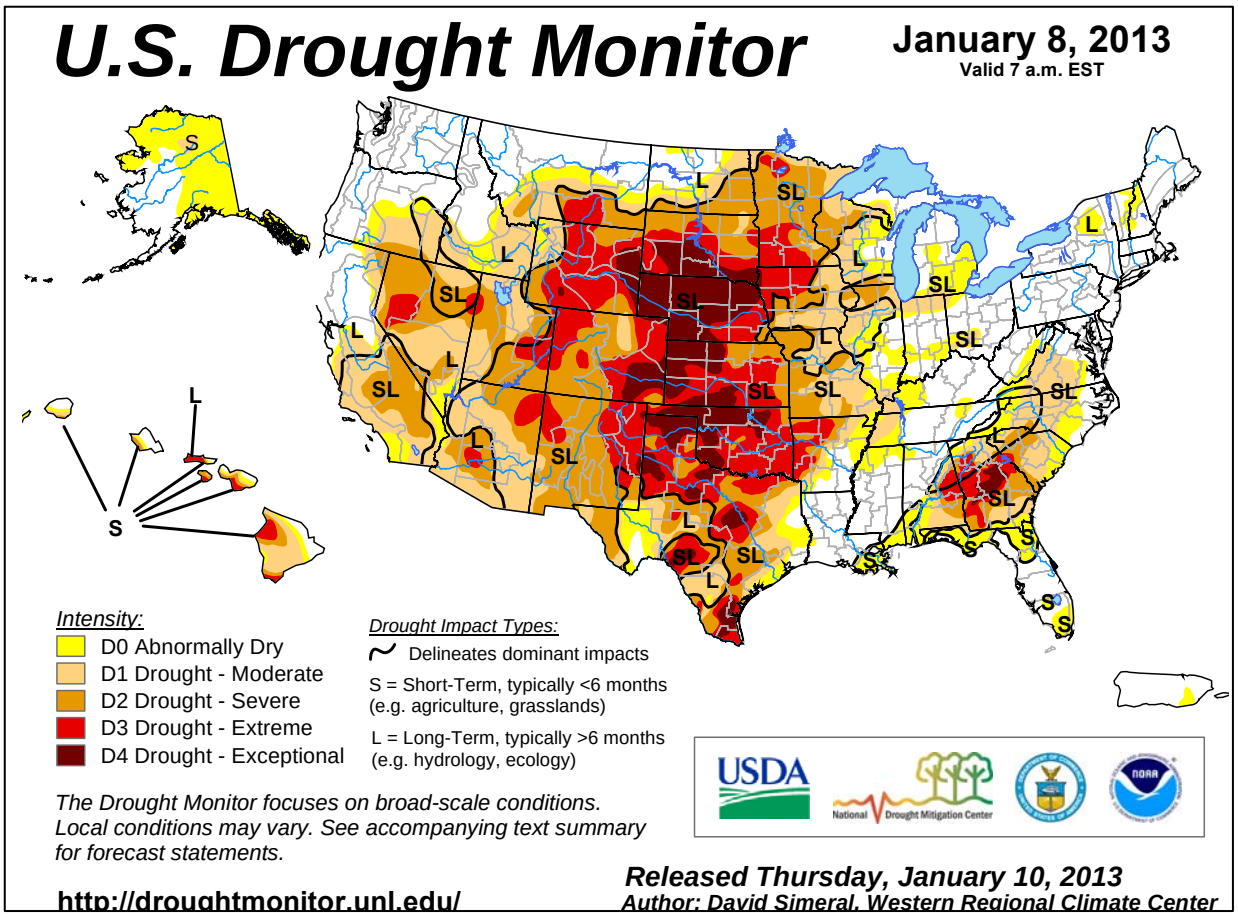
(Continued from front cover)

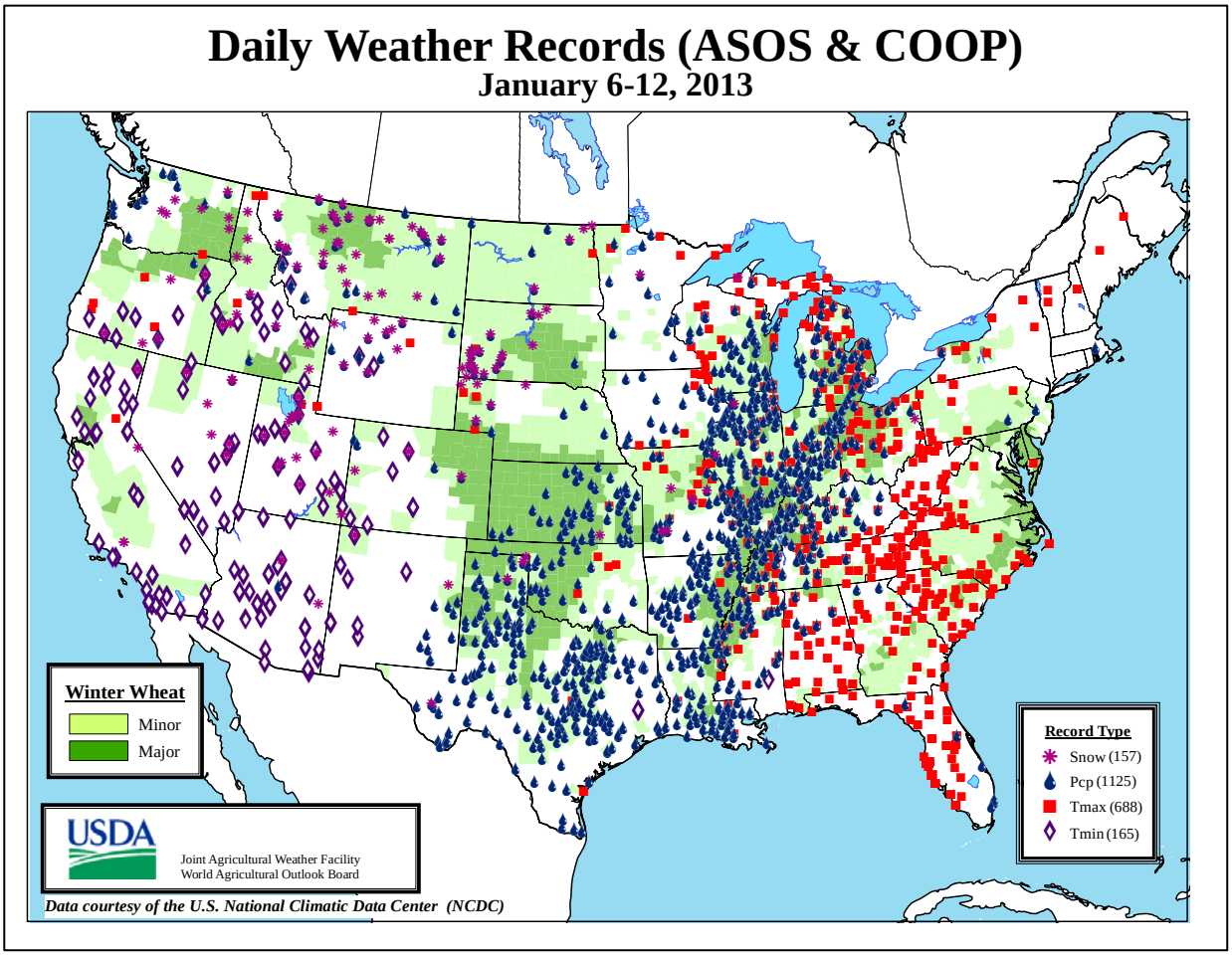
generally dry conditions favored citrus harvesting and other mid-winter fieldwork, but maintained heavy irrigation demands. In fact, weekly temperatures averaged at least 10°F above normal across the **eastern half of the nation**, except for slightly cooler conditions in the **western Gulf Coast region** and the **Northeast**. Farther west, however, cold conditions persisted in the **West**—and intensified at week's end in the wake of a departing storm. Weekly temperatures averaged more than 10°F below normal across parts of the **Intermountain West**. In addition, late-week freezes reached into winter agricultural regions of **California** and the **Desert Southwest**, resulting in producers employing protective measures to guard against injury to citrus and vegetables. Cold air also invaded the **nation's mid-section** late in the week, preceded by snow on the **northern Plains**. While the new snow helped to insulate the **northern Plains'** winter wheat, a portion of the **central High Plains'** crop was exposed to sub-zero temperatures by week's end. Meanwhile, beneficial rain provided some drought relief from **Texas to southern and eastern Kansas**, although the most substantial precipitation fell southeast of the primary hard red winter wheat belt.

Early in the week, chilly conditions persisted across the **Intermountain West**. **Roosevelt, UT**, opened the week with consecutive daily-record lows (-24 and 21°F, respectively) on January 6 and 7. However, the **Western** cold spell broke long enough to end the fourth-longest spell of sub-freezing weather on record in **Grand Junction, CO**. The temperature in **Grand Junction** remained below 32°F on 22 consecutive days from December 19 – January 9, before climbing to 42°F on January 10; **Grand Junction's** longest sub-freezing spell remains 28 days from December 18, 1924 – January 14, 1925. Meanwhile, warmth across the **South** eventually expanded to encompass the **central and eastern U.S.** In **Florida**, warm conditions peaked on January 9, when monthly record highs were tied in locations such as **Ft. Myers** (88°F), **Lakeland** (87°F), and **Sarasota-Bradenton** (87°F). **Lakeland's** record had been originally set on January 31, 1982, while monthly standards in **Ft. Myers** and **Sarasota-Bradenton** had not been achieved since January 1990. Later, expanding warmth pushed temperatures above 80°F as far north as **South Carolina**, where **Columbia** (82°F), **Florence** (81°F), and **Charleston** (81°F) notched daily-record highs for January 12. On the same date, **Bluefield, WV** (72°F), tied a monthly record high originally set on January 1, 1985. Farther west, however, the return of extremely cold weather led to daily-record lows for January 12 in locations such as **Redding, CA** (25°F); **Burns, OR** (-14°F); and **Eureka, NV** (-20°F). In **Oregon**, **Klamath Falls** tallied a trio of daily-record lows (1, -5, and -4°F, respectively) from January 11-13. More information on the **Western** cold snap will appear next week.

Tranquil weather as the week began yielded to stormier conditions. Early-week (January 6-8) snowfall totaled 9.0 inches **Spokane, WA**, including a daily-record amount (6.9 inches) on the 7th. The following day, heavy rain erupted across the **south-central U.S.** Some of the heaviest rain drenched **Louisiana**, where January 8-10 totals climbed to 7.96 inches in **Baton Rouge**, 7.57 inches in **New Iberia**, and 6.38 inches in **Lafayette**. **Dallas-Ft. Worth, TX**, noted consecutive daily-record rainfall amounts on January 8-9, totaling 3.47 inches. Elsewhere in **Texas**, record-setting totals for January 9 included 3.79 inches in **Waco** and 0.84 inch in **Lubbock**. Farther east, **Vicksburg, MS**, received a daily-record total of 5.37 inches on January 10 en route to a 5-day (January 8-12) sum of 7.20 inches. Late in the week, a new storm emerged from the **Rockies**, sparking high winds in the **Southwest**, snow across the **northern Plains** and **Intermountain West**, and more heavy rain across the **South**. In **New Mexico**, peak wind gusts on January 11 were clocked to 67 mph at **Las Vegas** and 66 mph at **Ft. Stanton**. In **Montana**, daily-record snowfall totals for January 10 included 7.1 inches in **Billings**, 7.0 inches in **Havre**, and 5.9 inches in **Great Falls**. The 2-day (January 10-11) total in **Havre** reached 13.0 inches. In **Utah**, **Salt Lake City** received 10.2 inches of snow from January 10-12, while as much as 2 to 3 feet fell in the **northern Wasatch Range**. By week's end, torrential rain developed in the **Mid-South** and **lower Ohio Valley**. With 5.20 inches on January 12, **Russellville, AR**, experienced its wettest January day on record—surpassing 4.73 inches on January 5, 1998. Daily-record totals for January 12 included 3.16 inches in **Paducah, KY**, and 2.63 inches in **Greenwood, MS**. In **Marion, IN**, the **Mississinewa River** crested 2.74 feet above flood stage on January 14—the highest level in that location since January 2005. Similarly, the **Mermentau River** at **Mermentau, LA**, crested 6.56 feet above flood stage on January 15—that town's highest water level since November 1985.

Mild weather prevailed across much of **Alaska** for a second consecutive week, with weekly temperatures averaging more than 10°F above normal at most interior and western locations. Warmth was especially dramatic late in the week, when **King Salmon** (49°F) posted a daily-record high for January 12. Widespread precipitation accompanied the mild weather. For example, **King Salmon** received 0.80 inch from January 10-13, starting with 4.3 inches of snow on the 10th and 11th. Similarly, **McGrath** netted 1.65 inches from January 10-13, including 12.6 inches of snow. On January 12, **McGrath** noted daily-record totals for both precipitation (0.86 inch) and snowfall (5.7 inches). Farther south, wet weather continued in windward sections of **Hawaii**. On the **Big Island**, **Hilo's** month-to-date rainfall through January 12 climbed to 7.33 inches (221 percent of normal). **Hilo** received at least an inch of rain on January 5, 6, and 9. On **Kauai**, famously wet **Mt. Waialeale** recorded a weekly rainfall total of 18.79 inches, including 11.46 inches in a 48-hour period from January 8-10.


U.S. Drought Monitor
January 8, 2013
Valid 7 a.m. EST
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
L = Long-Term, typically >6 months (e.g. hydrology, ecology)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/
Released Thursday, January 10, 2013
Author: David Simeral, Western Regional Climate Center


Daily Weather Records (ASOS & COOP)
January 6-12, 2013
Winter Wheat
Minor
Major
Record Type
Snow (157)
Pcp (1125)
Tmax (688)
Tmin (165)
Joint Agricultural Weather Facility
World Agricultural Outlook Board
Data courtesy of the U.S. National Climatic Data Center (NCDC)

National Weather Data for Selected Cities

Weather Data for the Week Ending January 12, 2013

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	63	49	73	26	56	14	0.51	-0.71	0.32	8.48	137	1.99	116	94	64	0	1	5	0
	HUNTSVILLE	61	47	72	26	54	14	0.58	-0.69	0.46	8.91	120	2.16	119	90	74	0	1	4	0
	MOBILE	68	53	80	36	61	11	0.59	-0.64	0.47	4.57	72	1.09	63	90	73	0	0	3	0
	MONTGOMERY	69	50	80	31	59	13	0.09	-0.97	0.04	7.21	111	0.56	37	88	57	0	1	3	0
AK	ANCHORAGE	28	20	35	12	24	8	0.08	-0.07	0.05	1.91	148	0.08	33	86	78	0	7	2	0
	BARROW	-5	-15	3	-26	-10	3	0.00	0.00	0.00	0.07	54	0.00	0	83	74	0	7	0	0
	FAIRBANKS	9	-11	20	-21	-1	9	0.00	-0.14	0.00	1.19	125	0.00	0	85	80	0	7	0	0
	JUNEAU	34	28	37	20	31	5	0.72	-0.42	0.21	6.28	89	1.36	82	98	93	0	7	5	0
	KODIAK	38	30	41	23	34	4	1.38	-0.52	0.49	8.34	81	2.70	100	89	78	0	4	4	0
	NOME	25	15	30	5	20	14	0.41	0.22	0.15	1.07	82	0.45	155	97	90	0	7	5	0
AZ	FLAGSTAFF	36	9	47	-9	22	-7	0.05	-0.39	0.04	2.13	87	0.05	8	82	31	0	7	2	0
	PHOENIX	62	40	72	31	51	-2	0.01	-0.18	0.01	0.88	72	0.01	3	48	28	0	1	1	0
	PRESCOTT	49	21	62	12	35	-1	0.00	-0.32	0.00	1.42	82	0.00	0	69	20	0	7	0	0
	TUCSON	61	33	70	25	47	-4	0.03	-0.21	0.03	1.20	87	0.03	9	63	34	0	4	1	0
AR	FORT SMITH	59	36	73	26	48	11	1.23	0.71	0.61	3.98	96	1.23	160	90	53	0	3	4	1
	LITTLE ROCK	59	39	74	25	49	9	3.87	3.06	2.21	9.47	161	3.87	328	94	61	0	3	4	2
CA	BAKERSFIELD	54	36	62	28	45	-2	0.24	0.00	0.15	0.89	80	0.24	69	86	72	0	1	2	0
	FRESNO	53	37	59	30	45	0	0.50	0.06	0.47	2.53	129	0.50	81	86	75	0	2	2	0
	LOS ANGELES	60	46	67	43	53	-4	0.25	-0.33	0.13	3.07	118	0.25	30	68	47	0	0	2	0
	REDDING	52	33	61	25	42	-3	0.13	-1.26	0.07	10.17	153	0.13	7	86	61	0	3	2	0
	SACRAMENTO	51	32	56	26	42	-3	0.48	-0.28	0.48	6.93	197	0.78	73	92	53	0	3	1	0
	SAN DIEGO	59	47	67	42	53	-4	0.21	-0.26	0.12	2.40	122	0.21	32	74	53	0	0	3	0
	SAN FRANCISCO	53	43	57	38	48	-1	0.04	-0.86	0.04	6.36	153	0.12	10	79	69	0	0	1	0
	STOCKTON	51	33	56	27	42	-3	0.86	0.31	0.85	5.50	212	1.20	156	94	81	0	3	2	1
CO	ALAMOSA	21	-21	30	-32	0	-14	0.00	-0.06	0.00	0.82	195	0.01	11	81	68	0	7	0	0
	CO SPRINGS	43	14	54	6	29	1	0.00	-0.07	0.00	0.26	48	0.00	0	64	20	0	7	0	0
	DENVER INTL	45	14	60	-12	30	2	0.08	0.01	0.08	0.35	83	0.08	73	64	29	0	7	1	0
	GRAND JUNCTION	26	-1	42	-8	13	-12	0.13	-0.01	0.13	1.19	163	0.14	67	93	78	0	7	1	0
	PUEBLO	46	10	56	0	28	-1	0.00	-0.08	0.00	0.31	60	0.01	8	57	34	0	7	0	0
CT	BRIDGEPORT	45	29	49	24	37	7	0.42	-0.43	0.33	4.74	101	0.42	34	84	65	0	6	2	0
	HARTFORD	42	23	46	18	32	6	0.31	-0.55	0.27	4.86	101	0.31	25	85	57	0	6	3	0
DC	WASHINGTON	52	36	57	30	44	9	0.02	-0.72	0.01	3.06	74	0.03	3	82	48	0	2	2	0
DE	WILMINGTON	50	31	55	23	41	9	0.73	-0.07	0.69	4.65	102	0.73	63	89	54	0	4	2	1
FL	DAYTONA BEACH	77	60	82	56	69	10	0.23	-0.46	0.17	2.38	64	0.39	40	100	64	0	0	2	0
	JACKSONVILLE	73	54	82	44	63	10	0.54	-0.23	0.54	3.13	84	0.82	75	97	66	0	0	1	1
	KEY WEST	81	74	82	72	78	8	0.00	-0.52	0.00	0.67	23	0.00	0	87	70	0	0	0	0
	MIAMI	82	72	83	68	77	9	0.19	-0.20	0.14	0.71	26	0.20	35	84	65	0	0	2	0
	ORLANDO	81	61	84	57	71	10	0.00	-0.52	0.00	1.32	43	0.04	5	98	70	0	0	0	0
	PENSACOLA	68	55	76	40	62	10	0.38	-0.77	0.35	2.81	50	0.73	45	87	71	0	0	3	0
	TALLAHASSEE	72	54	80	47	63	11	0.11	-1.09	0.06	3.71	64	0.44	26	84	67	0	0	2	0
	TAMPA	80	65	85	59	73	12	0.11	-0.36	0.06	2.68	90	0.48	71	91	55	0	0	2	0
	WEST PALM BEACH	81	71	83	63	76	10	0.43	-0.34	0.37	1.57	37	0.43	40	84	65	0	0	4	0
GA	ATHENS	64	45	75	29	54	12	0.15	-0.85	0.13	7.08	138	1.22	86	89	62	0	2	2	0
	ATLANTA	63	49	76	35	56	14	0.08	-0.96	0.06	7.07	134	1.14	78	83	67	0	0	2	0
	AUGUSTA	68	43	81	29	55	11	0.00	-0.96	0.00	4.76	106	0.09	7	92	65	0	2	0	0
	COLUMBUS	66	51	77	32	58	12	0.06	-1.00	0.05	5.72	97	0.49	32	89	58	0	1	2	0
	MACON	66	46	78	30	56	11	0.07	-1.00	0.07	5.13	94	0.27	18	93	59	0	1	1	0
	SAVANNAH	70	50	81	37	60	11	0.09	-0.78	0.02	2.20	54	0.29	24	90	63	0	0	1	0
HI	HILO	78	64	81	62	71	0	5.73	3.65	2.28	18.82	140	7.33	248	***	***	0	0	7	4
	HONOLULU	82	70	83	63	76	3	0.07	-0.56	0.06	0.22	6	0.21	23	77	72	0	0	2	0
	KAHULUI	81	64	83	59	73	1	0.04	-0.81	0.04	1.09	25	0.85	70	83	72	0	0	1	0
	LIHUE	77	69	77	64	73	1	0.43	-0.65	0.19	5.05	80	0.80	51	83	75	0	0	5	0
ID	BOISE	32	15	46	5	24	-5	0.43	0.13	0.23	1.52	84	0.43	98	87	74	0	7	3	0
	LEWISTON	41	30	51	16	36	3	0.10	-0.14	0.05	0.96	69	0.10	29	84	64	0	4	5	0
	POCATELLO	31	8	48	-13	19	-5	0.23	-0.02	0.10	1.64	112	0.23	62	84	74	0	7	5	0
IL	CHICAGO/O'HARE	46	24	53	14	35	13	0.99	0.60	0.59	3.23	107	1.02	176	88	61	0	6	3	1
	MOLINE	45	22	55	13	33	12	0.70	0.33	0.58	3.41	124	0.74	135	87	67	0	6	3	1
	PEORIA	47	27	57	17	37	14	1.52	1.18	0.84	3.53	121	1.55	304	89	60	0	6	3	2
	ROCKFORD	45	23	52	14	34	15	1.17	0.86	0.74	3.69	146	1.20	261	88	66	0	6	3	1
	SPRINGFIELD	49	29	59	19	39	14	1.01	0.62	0.46	4.31	138	1.03	175	96	62	0	6	3	0
IN	EVANSVILLE	54	35	68	17	45	14	3.32	2.69	1.91	6.80	152	3.33	362	87	69	0	3	4	3
	FORT WAYNE	43	28	59	14	36	12	1.46	0.99	0.70	3.67	106	1.47	210	94	75	0	5	3	2
	INDIANAPOLIS	47	30	64	16	39	12	2.61	2.06	1.35	5.21	136	2.63	325	94	68	0	5	4	2
	SOUTH BEND	44	28	58	18	36	12	1.09	0.57	0.48	4.53	117	1.10	143	84	70	0	5	3	0
IA	BURLINGTON	45	27	55	18	36	13	0.58	0.28	0.57	3.40	133	0.61	133	90	55	0	6	2	1
	CEDAR RAPIDS	40	22	51	10	31	13	0.11	-0.11	0.06	1.51	83	0.11	33	95	71	0	6	2	0
	DES MOINES	45	25	54	15	35	15	0.12	-0.10	0.10	2.05	123	0.12	36	80	64	0	6	2	0
	DUBUQUE	38	18	47	8	28	11	0.26	-0.02	0.24	2.63	125	0.27	66	89	75	0	6	2	0
	SIOUX CITY	34	13	40	3	24	6	0.03	-0.11	0.02	1.71	197	0.04	19	91	73	0	7	2	0
	WATERLOO	39	19	48	11	29	13	0.19	0.02	0.15	1.93	142	0.19	76	87	72	0	6	2	0
KS	CONCORDIA	41	24	54	13	33	7	0.37	0.20	0.37	1.30	117	0.37	148	83	66	0	7	1	0
	DODGE CITY	46	25	61	13	35	5	0.30	0.15	0.30	3.06	303	2.19	913	82	55	0	6	1	0
	GOODLAND	46	17	56	5	32	5	0.00	-0.11	0.00	0.57	100	0.00	0	78	57	0	7	0	0
	TOPEKA	52	30	60	20	41	14	0.29	0.07	0.28	1.09	62	0.30	91	77	56	0	4	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 12, 2013

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	52	30	60	22	41	11	0.47	0.25	0.47	0.84	50	0.50	147	83	58	0	5	1	0
KY	JACKSON	55	41	67	27	48	14	0.51	-0.29	0.24	7.14	131	0.75	64	88	60	0	3	3	0
	LEXINGTON	53	37	66	22	45	13	0.67	-0.12	0.39	7.36	142	0.81	70	89	69	0	3	3	0
	LOUISVILLE	56	38	69	22	47	14	0.89	0.15	0.69	8.06	169	0.92	86	87	55	0	3	3	1
	PADUCAH	57	37	69	18	47	14	4.11	3.39	2.94	8.03	148	4.11	388	94	59	0	3	3	2
LA	BATON ROUGE	66	54	78	37	60	10	8.82	7.50	3.16	18.46	259	10.36	551	100	72	0	0	5	4
	LAKE CHARLES	66	52	77	38	59	8	5.18	3.94	3.67	15.30	241	10.48	595	92	71	0	0	4	2
	NEW ORLEANS	66	57	78	45	61	9	3.62	2.45	1.70	9.28	138	4.15	250	92	81	0	0	5	4
	SHREVEPORT	63	43	76	28	53	7	3.42	2.42	1.70	9.30	156	3.64	255	97	60	0	2	3	3
ME	CARIBOU	26	8	36	-11	17	7	0.92	0.22	0.46	4.73	112	1.66	163	87	63	0	7	4	0
	PORTLAND	39	19	44	13	29	7	0.05	-0.89	0.03	8.35	149	0.05	4	88	59	0	6	2	0
MD	BALTIMORE	51	30	57	23	41	9	0.07	-0.73	0.07	3.18	71	0.07	6	87	52	0	5	1	0
MA	BOSTON	44	31	47	28	37	7	0.13	-0.73	0.13	6.06	122	0.13	10	82	54	0	5	1	0
	WORCESTER	39	26	42	21	33	9	0.16	-0.77	0.15	5.27	103	0.16	12	83	55	0	6	2	0
MI	ALPENA	43	28	57	21	35	16	0.55	0.14	0.54	3.40	140	0.56	93	88	63	0	5	2	1
	GRAND RAPIDS	45	30	57	23	37	14	1.02	0.58	0.52	3.93	117	1.08	166	85	58	0	5	4	1
	HOUGHTON LAKE	40	26	52	16	33	14	0.70	0.34	0.52	3.63	160	0.72	138	92	71	0	6	5	1
	LANSING	44	29	58	22	37	15	0.82	0.49	0.41	2.82	106	0.84	168	83	66	0	5	4	0
	MUSKEGON	45	32	53	25	39	15	1.05	0.55	0.63	4.21	125	1.17	158	81	64	0	4	4	1
	TRAVERSE CITY	44	29	55	24	37	15	0.28	-0.38	0.16	3.27	91	0.28	30	85	57	0	5	3	0
MN	DULUTH	35	18	42	6	26	18	0.65	0.44	0.35	2.13	172	0.69	230	81	68	0	6	3	0
	INT'L FALLS	31	11	48	-9	21	19	0.91	0.75	0.60	2.11	227	0.97	422	86	69	0	7	5	1
	MINNEAPOLIS	36	18	41	5	27	14	0.31	0.09	0.27	1.96	148	0.32	100	85	69	0	6	2	0
	ROCHESTER	34	18	42	7	26	14	0.21	0.02	0.17	2.02	155	0.23	82	82	69	0	6	4	0
	ST. CLOUD	34	13	40	1	24	15	0.20	0.05	0.14	1.77	195	0.25	114	92	65	0	6	2	0
MS	JACKSON	65	49	78	30	57	12	1.12	-0.14	0.61	11.85	166	3.14	173	94	72	0	2	6	1
	MERIDIAN	65	49	77	28	57	11	2.43	1.13	1.29	13.36	187	4.28	233	97	79	0	1	4	2
	TUPELO	63	45	76	24	54	14	3.42	2.19	2.36	11.68	148	4.59	256	94	73	0	2	4	2
MO	COLUMBIA	52	31	63	20	42	14	0.61	0.25	0.36	2.27	76	0.63	119	87	45	0	4	2	0
	KANSAS CITY	51	30	59	20	41	14	0.25	-0.01	0.24	1.59	78	0.25	64	81	46	0	4	2	0
	SAINT LOUIS	55	34	64	23	44	14	1.27	0.80	0.65	3.27	92	1.27	184	78	52	0	4	2	2
	SPRINGFIELD	54	33	66	20	44	12	1.38	0.94	0.57	2.48	65	1.38	212	83	56	0	4	4	2
MT	BILLINGS	37	21	54	4	29	5	0.38	0.20	0.35	0.66	71	0.39	150	67	44	0	7	2	0
	BUTTE	29	7	40	-21	18	1	0.06	-0.05	0.06	0.36	51	0.06	35	83	54	0	7	1	0
	CUT BANK	32	12	46	-14	22	3	0.00	-0.08	0.00	0.43	93	0.00	0	85	56	0	7	0	0
	GLASGOW	29	7	45	-12	18	8	0.20	0.12	0.15	0.76	152	0.27	208	85	73	0	7	2	0
	GREAT FALLS	36	21	53	-3	29	7	0.48	0.31	0.38	1.03	112	0.48	192	71	46	0	4	3	0
	HAVRE	33	6	51	-18	20	6	0.69	0.58	0.50	1.26	185	0.87	512	83	70	0	7	4	1
	MISSOULA	34	20	48	2	27	4	0.81	0.56	0.45	2.46	162	0.81	219	86	71	0	5	4	0
NE	GRAND ISLAND	37	17	43	8	27	5	0.01	-0.10	0.01	1.67	201	0.01	6	89	73	0	7	1	0
	LINCOLN	39	16	50	9	28	6	0.22	0.05	0.22	1.72	155	0.22	88	89	71	0	7	1	0
	NORFOLK	38	16	45	7	27	7	0.15	0.04	0.12	1.28	156	0.15	88	87	68	0	6	2	0
	NORTH PLATTE	40	11	52	-3	26	3	0.03	-0.05	0.03	0.40	75	0.03	23	89	53	0	7	1	0
	OMAHA	41	21	53	12	31	10	0.04	-0.13	0.04	1.89	163	0.04	17	82	63	0	7	1	0
	SCOTTSBLUFF	45	14	61	-3	30	6	0.08	-0.03	0.08	0.29	40	0.10	59	79	51	0	7	1	0
	VALENTINE	43	15	56	-4	29	8	0.07	0.01	0.07	0.36	86	0.07	78	86	57	0	6	1	0
NV	ELY	32	-1	45	-16	16	-9	0.25	0.10	0.24	1.97	274	0.25	114	87	63	0	7	2	0
	LAS VEGAS	54	36	65	28	45	-1	0.00	-0.11	0.00	0.49	86	0.00	0	41	29	0	2	0	0
	RENO	41	20	60	6	30	-3	0.05	-0.16	0.04	2.15	182	0.05	17	82	65	0	7	2	0
	WINNEMUCCA	30	1	37	-15	15	-14	0.19	0.00	0.16	1.89	172	0.20	69	87	75	0	7	3	0
NH	CONCORD	39	14	43	1	27	6	0.15	-0.51	0.11	4.38	112	0.15	16	93	57	0	7	3	0
NJ	NEWARK	49	34	50	27	41	9	0.56	-0.34	0.54	5.62	116	0.56	44	78	55	0	3	2	1
NM	ALBUQUERQUE	44	21	53	13	33	-2	0.00	-0.11	0.00	0.12	18	0.00	0	54	22	0	7	0	0
NY	ALBANY	40	20	44	9	30	7	0.14	-0.41	0.14	4.19	121	0.14	18	89	61	0	6	1	0
	BINGHAMTON	38	28	46	24	33	11	0.15	-0.40	0.14	5.38	140	0.18	23	79	67	0	6	2	0
	BUFFALO	43	32	59	25	37	12	0.15	-0.58	0.09	3.83	79	0.19	18	82	64	0	5	2	0
	ROCHESTER	44	30	58	22	37	12	0.13	-0.39	0.12	3.76	108	0.19	25	80	64	0	4	2	0
	SYRACUSE	42	23	50	12	33	10	0.23	-0.35	0.19	7.86	198	0.29	35	84	60	0	6	2	0
NC	ASHEVILLE	58	42	70	34	50	14	0.52	-0.34	0.51	5.22	113	0.84	69	87	75	0	0	2	1
	CHARLOTTE	60	37	73	25	49	8	0.08	-0.80	0.04	4.41	100	0.57	46	91	60	0	2	3	0
	GREENSBORO	56	38	64	28	47	9	0.12	-0.65	0.11	3.26	78	0.54	49	88	55	0	2	2	0
	HATTERAS	59	46	69	43	53	7	0.40	-0.94	0.23	7.35	114	0.84	44	98	68	0	0	2	0
	RALEIGH	59	38	71	28	48	8	0.24	-0.63	0.24	3.65	85	0.71	58	88	67	0	2	1	0
	WILMINGTON	66	43	78	35	54	8	0.38	-0.62	0.37	5.21	100	0.61	43	94	56	0	0	2	0
ND	BISMARCK	31	7	40	0	19	9	0.11	0.03	0.08	0.78	137	0.15	115	87	70	0	7	3	0
	DICKINSON	29	12	38	-4	21	7	0.00	-0.06	0.00	0.27	63	0.01	11	88	67	0	7	0	0
	FARGO	30	12	43	0	21	14	0.12	-0.05	0.07	0.49	60	0.12	50	84	67	0	7	4	0
	GRAND FORKS	31	10	52	-5	20	15	0.26	0.12	0.19	0.58	76	0.27	129	91	65	0	7	3	0
	JAMESTOWN	29	8	40	-4	18	9	0.00	-0.12	0.00	0.09	15	0.00	0	91	67	0	7	0	0
	WILLISTON	26	6	37	-9	16	8	0.17	0.06	0.09	0.81	109	0.24	141	90	75	0	7	3	0
OH	AKRON-CANTON	45	31	61	19	38	12	0.40	-0.16	0.35	4.64	122	0.43	52	88	69	0	5	3	0
	CINCINNATI	51	33	65	19	42	12	0.85	0.19	0.61	6.60	155	0.85	88	87	71	0	5	4	1
	CLEVELAND	46	34	61	26	40	14	0.66	0.11	0.56	4.59	116	0.66	83	88	60	0	5	3	1
	COLUMBUS	48	32	66	22	40	11	0.48	-0.07	0.39	6.22	166	0.52	64	90	73	0	5	3	0
	DAYTON	47	32	64	21	39	12	0.74	0.15	0.54	4.52	115	0.75	87	91	69	0	5	5	1
	MANSFIELD	45	32	62	23	38	13	0.71	0.11	0.55	4.57	111	0.71	82	94	63	0	4	4	1

Based on 1971-2000 normals *** Not Available

Weather Data for the Week Ending January 12, 2013

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC 1	PCT. NORMAL SINCE DEC 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	44	29	58	22	37	13	1.29	0.86	0.76	3.44	105	1.29	202	87	69	0	5	2	2
	YOUNGSTOWN	44	31	60	22	37	12	0.47	-0.05	0.39	5.68	152	0.49	64	86	61	0	5	4	0
OK	OKLAHOMA CITY	56	34	70	21	45	9	0.41	0.08	0.24	1.08	45	0.41	84	84	51	0	4	3	0
	TULSA	57	35	70	20	46	10	0.62	0.25	0.32	1.47	49	0.62	115	83	60	0	3	4	0
OR	ASTORIA	47	36	52	28	41	-1	3.74	1.59	1.49	18.81	140	4.18	136	95	89	0	3	5	3
	BURNS	30	6	44	-13	18	-6	0.08	-0.19	0.08	1.81	106	0.08	20	89	76	0	7	1	0
	EUGENE	48	33	56	20	41	2	0.31	-1.38	0.18	7.76	72	0.31	13	96	87	0	4	4	0
	MEDFORD	42	33	47	23	38	0	0.27	-0.28	0.14	5.99	162	0.33	41	94	76	0	3	5	0
	PENDLETON	43	29	57	19	36	3	0.50	0.20	0.46	1.69	88	0.50	114	86	70	0	5	2	0
	PORTLAND	45	35	55	26	40	1	0.80	-0.33	0.21	8.38	114	0.82	50	93	86	0	2	6	0
	SALEM	45	34	54	20	40	0	0.52	-0.76	0.23	7.93	96	0.53	29	97	89	0	3	4	0
PA	ALLENTOWN	46	28	48	19	37	9	0.42	-0.36	0.42	4.73	105	0.42	37	87	59	0	6	1	0
	ERIE	45	35	61	27	40	12	0.31	-0.29	0.20	5.45	118	0.64	72	79	60	0	3	3	0
	MIDDLETOWN	44	27	48	20	35	6	0.32	-0.29	0.32	4.11	100	0.32	36	94	58	0	6	1	0
	PHILADELPHIA	50	33	53	27	42	9	0.77	-0.03	0.68	5.19	117	0.77	68	80	57	0	4	2	1
	PITTSBURGH	45	29	61	15	37	9	0.32	-0.28	0.25	5.91	159	0.38	44	89	62	0	5	2	0
	WILKES-BARRE	41	28	44	22	34	7	0.21	-0.31	0.19	4.16	126	0.24	32	86	60	0	6	3	0
	WILLIAMSPORT	40	24	45	16	32	6	0.31	-0.28	0.31	5.92	156	0.31	36	85	69	0	6	1	0
RI	PROVIDENCE	44	27	48	20	35	6	0.28	-0.70	0.20	5.83	105	0.28	20	85	60	0	6	3	0
SC	BEAUFORT	68	49	77	40	59	10	0.07	-0.83	0.03	3.06	70	0.32	25	93	58	0	0	4	0
	CHARLESTON	69	49	81	41	59	11	0.01	-0.91	0.01	3.70	81	0.14	11	93	54	0	0	1	0
	COLUMBIA	67	43	82	31	55	11	0.04	-0.98	0.04	3.84	80	0.33	23	91	66	0	2	1	0
	GREENVILLE	61	42	73	29	52	11	0.32	-0.66	0.31	6.72	128	0.91	65	91	60	0	2	2	0
SD	ABERDEEN	30	10	38	-7	20	9	0.05	-0.06	0.03	0.80	145	0.05	29	86	76	0	7	2	0
	HURON	32	15	39	1	24	10	0.02	-0.07	0.01	1.14	215	0.02	14	90	71	0	6	2	0
	RAPID CITY	44	16	59	6	30	8	0.14	0.06	0.12	0.39	74	0.14	108	82	42	0	7	2	0
	SIOUX FALLS	33	13	39	2	23	9	0.11	0.00	0.09	1.42	212	0.11	73	91	72	0	7	2	0
TN	BRISTOL	56	35	71	20	46	12	0.13	-0.64	0.12	4.68	104	0.68	62	96	56	0	3	2	0
	CHATTANOOGA	60	45	72	27	52	13	0.67	-0.51	0.38	7.16	110	1.59	95	98	75	0	2	5	0
	KNOXVILLE	59	41	75	26	50	13	0.04	-1.00	0.02	7.53	126	1.35	91	90	58	0	2	2	0
	MEMPHIS	61	46	73	28	54	14	2.42	1.47	1.11	6.45	91	2.72	196	89	60	0	1	3	2
	NASHVILLE	60	44	71	23	52	15	2.22	1.31	0.93	7.28	124	2.57	196	89	59	0	3	4	3
TX	ABILENE	57	36	72	22	47	4	1.17	0.94	0.85	1.27	78	1.23	351	77	57	0	3	3	1
	AMARILLO	51	28	61	17	39	4	0.69	0.54	0.60	1.24	146	0.70	292	78	42	0	5	3	1
	AUSTIN	63	38	75	25	51	1	2.27	1.81	1.86	3.48	112	2.65	390	92	72	0	2	3	1
	BEAUMONT	65	50	75	37	57	5	4.65	3.32	3.84	14.13	198	7.73	407	99	70	0	0	6	1
	BROWNSVILLE	73	56	82	48	65	6	0.78	0.54	0.45	1.77	121	1.45	414	93	69	0	0	3	0
	CORPUS CHRISTI	72	52	81	40	62	6	0.89	0.54	0.72	1.19	52	1.16	223	89	70	0	0	3	1
	DEL RIO	62	42	69	33	52	1	1.26	1.17	0.89	1.37	152	1.33	887	89	72	0	0	2	1
	EL PASO	56	32	61	21	44	0	0.00	-0.11	0.00	0.40	43	0.30	176	68	31	0	3	0	0
	FORT WORTH	59	40	71	28	50	6	3.61	3.14	1.93	5.57	170	3.62	510	91	56	0	1	4	2
	GALVESTON	63	54	71	43	59	3	2.00	1.10	1.58	9.67	201	6.80	531	100	81	0	0	3	1
	HOUSTON	66	49	75	36	58	6	1.79	0.96	1.30	5.61	115	2.76	232	96	72	0	0	5	1
	LUBBOCK	51	30	63	22	40	3	0.88	0.79	0.84	1.56	190	0.88	587	87	56	0	4	2	1
	MIDLAND	53	36	64	27	44	1	1.40	1.29	1.35	1.53	187	1.45	853	81	63	0	3	3	1
	SAN ANGELO	58	37	72	26	47	3	1.02	0.85	0.93	1.59	134	1.41	564	85	68	0	2	2	1
	SAN ANTONIO	64	43	74	31	54	4	2.53	2.16	1.70	3.21	128	2.84	516	97	61	0	2	2	2
	VICTORIA	68	48	75	34	58	5	2.09	1.54	1.85	4.01	123	2.55	319	97	75	0	0	4	1
	WACO	63	39	77	22	51	5	4.72	4.28	3.80	5.63	165	4.82	730	93	74	0	2	3	2
	WICHITA FALLS	58	36	76	25	47	7	0.47	0.21	0.24	1.07	51	0.47	115	86	69	0	3	3	0
UT	SALT LAKE CITY	30	14	49	2	22	-7	0.42	0.12	0.22	1.80	108	0.42	98	90	63	0	7	3	0
VT	BURLINGTON	38	19	45	10	28	9	0.09	-0.39	0.05	3.46	119	0.16	23	87	62	0	6	4	0
VA	LYNCHBURG	56	31	70	22	43	9	0.03	-0.75	0.02	3.01	69	0.36	32	94	52	0	4	2	0
	NORFOLK	57	36	69	29	47	7	0.05	-0.81	0.03	4.91	116	0.43	35	93	61	0	2	2	0
	RICHMOND	55	36	67	27	45	9	0.06	-0.76	0.03	3.15	73	0.32	27	91	56	0	2	2	0
	ROANOKE	56	34	73	23	45	9	0.05	-0.63	0.05	2.65	69	0.07	7	80	47	0	3	1	0
	WASH/DULLES	50	30	55	23	40	8	0.04	-0.65	0.02	2.91	72	0.04	4	78	53	0	5	2	0
WA	OLYMPIA	44	33	51	19	39	1	2.59	0.93	1.31	12.50	122	2.76	116	96	91	0	2	5	3
	QUILLAYUTE	46	32	50	25	39	-1	3.85	0.82	1.47	22.35	119	4.82	111	98	91	0	3	5	3
	SEATTLE-TACOMA	44	34	53	25	39	-1	2.39	1.26	1.66	9.56	132	2.71	166	88	80	0	2	5	1
	SPOKANE	34	23	43	5	28	2	1.15	0.74	0.69	3.74	131	1.16	193	96	79	0	6	5	1
	YAKIMA	45	25	55	17	35	7	0.00	-0.28	0.00	2.22	124	0.09	22	77	68	0	7	0	0
WV	BECKLEY	51	36	70	25	44	13	0.14	-0.58	0.11	3.48	84	0.29	28	85	61	0	3	2	0
	CHARLESTON	55	34	72	22	45	12	0.29	-0.41	0.22	5.31	123	0.45	45	90	52	0	4	2	0
	ELKINS	50	26	68	12	38	9	0.13	-0.63	0.07	4.57	101	0.23	21	94	56	0	5	3	0
	HUNTINGTON	52	33	67	21	42	9	0.45	-0.27	0.34	5.47	124	0.57	55	90	62	0	5	3	0
WI	EAU CLAIRE	36	15	44	7	26	14	0.23	0.02	0.23	2.08	156	0.23	77	92	63	0	6	1	0
	GREEN BAY	38	18	45	11	28	12	0.47	0.22	0.24	3.01	169	0.47	127	90	66	0	6	2	0
	LA CROSSE	39	19	48	14	29	13	0.16	-0.07	0.14	2.14	137	0.16	48	91	60	0	6	2	0
	MADISON	41	20	48	14	30	13	0.28	0.03	0.24	2.88	142	0.28	76	85	68	0	6	2	0
	MILWAUKEE	43	26	52	18	35	14	0.75	0.36	0.41	4.67	168	0.80	143	85	65	0	6	3	0
WY	CASPER	37	16	50	-12	26	4	0.11	0.00	0.09	0.50	63	0.11	65	60	43	0	7	2	0
	CHEYENNE	40	15	51	-2	28	2	0.13	0.05	0.12	0.70	119	0.13	100	59	35	0	7	2	0
	LANDER	30	5	45	-9	17	-3	0.33	0.22	0.32	0.73	94	0.33	194	83	55	0	7	2	0
	SHERIDAN	34	12	48	4	23	2	0.02	-0.15	0.01	0.52	56	0.02	8	80	63	0	7	2	0

Based on 1971-2000 normals

***** Not Available**

December Fieldwork Summary

Fieldwork summary provided by USDA/NASS

Temperatures from the Great Plains eastward were well above normal during December, allowing producers with unharvested crops additional time to complete fieldwork, while aiding the establishment of winter wheat. Most notably, temperatures for an area centered over the eastern Corn Belt and Ohio Valley averaged more than 6°F above normal. In the West, monthly temperatures were near normal. Precipitation totals for the nation varied drastically during December. Much of the southern Great Plains received precipitation totaling less than 25 percent of normal, while parts of Great Basin and Northeast noted more than 200 percent of their normal precipitation.

In the South, a variety of producer activities were ongoing throughout the month. Barley and Durum wheat were sown in Arizona, while cotton producers finished harvesting their crop. Growers in Texas readied fields for spring planting, following the completion of cotton harvesting and small grain seeding. Elsewhere, general equipment and field maintenance was completed as conditions allowed. Fruit and vegetable producers in the major producing states harvested and shipped a variety of crops throughout the month, with replanting ongoing as conditions allowed.

Unfavorably dry conditions led to further deterioration of winter wheat in some areas. By December 30, the portion of the Plains' wheat rated in very poor to poor condition included 61 percent in Oklahoma, 49 percent in Nebraska, and 31 percent in Kansas. Conversely, increased moisture in some areas of the Corn Belt benefited not only winter wheat, but helped to somewhat replenish soil moisture as producers began to plan for the 2013 crop season.

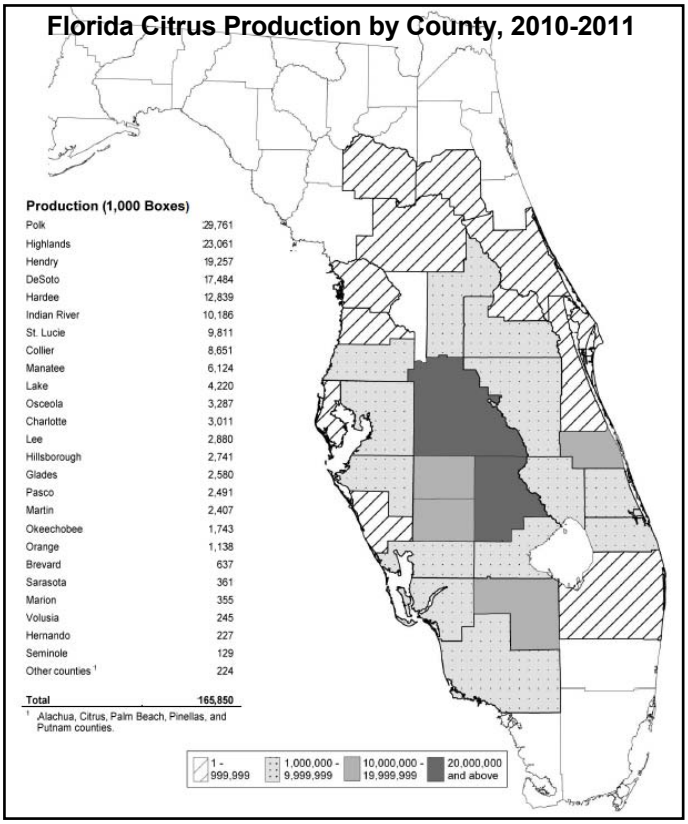
U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 11, 2013. Forecasts refer to January 1.

The U.S. **all orange** forecast for the 2012-2013 season is 8.83 million tons, down 2 percent from both the previous forecast and the 2011-2012 final utilization.

The Florida all orange forecast, at 142 million boxes (6.39 million tons), is down 3 percent from both the December forecast and last season's final utilization.

Early, midseason, and Navel varieties in Florida are forecast at 66.0 million boxes (2.97 million tons), down 1 percent from the December forecast and down 11 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 76.0 million boxes (3.42 million tons), is down 4 percent from the December forecast but up 5 percent from the 2011-2012 crop.



National Agricultural Summary

January 7 – 13, 2013

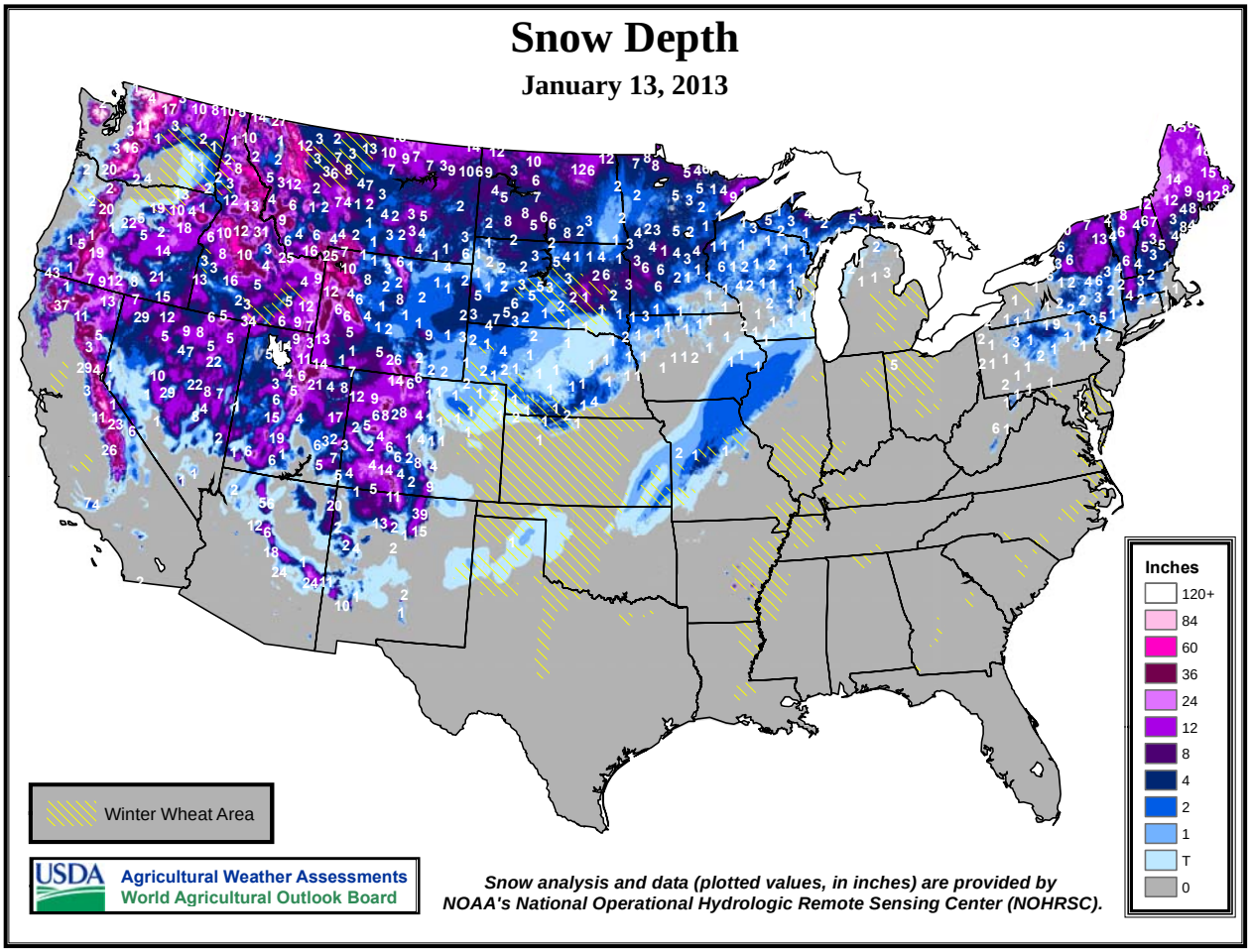
Weekly National Agricultural Summary provided by USDA/NASS

Temperatures east of the Great Plains averaged more than 10°F above normal, while weekly readings were below normal in the West. Late-week temperatures prompted fruit and vegetable growers from central California into the Southwest to implement freeze countermeasures to help protect crops. Similarly, frigid weather posed a threat to exposed winter wheat as far south as northwestern Kansas, where this year's snow cover is patchy or non-existent. Meanwhile, beneficial rainfall stretched from Texas northeastward into the eastern Corn Belt, with weekly totals exceeding 400 percent of normal in many locations.

In Florida, warmer-than-normal weather, coupled with scarce rainfall, allowed row crop and vegetable producers ample time for field preparations and planting during the week. Early budding was evident in many strawberry fields exposing the crop to potential damage should cold temperature return to the state. Watermelon and corn were planted, while the harvest of cucumbers, eggplant, peppers, squash, and tomatoes continued. Drought conditions intensified across the citrus-producing region during the week, prompting further irrigation to keep moisture in the ground and on the trees. General orchard maintenance continued, while producers applied fertilizer.

Arizona was blanketed with cold air during the week, with temperatures averaging up to 10°F below normal. Precipitation was widespread but total accumulations were limited to less than 50 percent of normal across most areas. Rangeland and pastures were rated 62 percent very poor to poor. Sheep continued to graze many alfalfa fields, with producers harvesting hay from approximately one-third of the state's total acreage. Barley and Durum wheat seeding were nearly three-quarters complete by week's end. Vegetable growers continued to harvest and ship a variety of crops.

Below-average temperatures as well as limited precipitation prevailed in California during the week; however, soil moisture levels remained mostly adequate statewide. Small grain crops continued to be reported in good to excellent condition, despite cooler weather that limited growth. Orchard producers used wind machines and irrigation to help protect their crops from low overnight temperatures. A variety of citrus and other fruit crops were harvested. Grape vines were being pruned, as pre-emergent sprays, planting, and pruning were ongoing in nut orchards. Vegetable growth was slowed by cooler weather in Tulare County, although rainfall in previous weeks was beneficial.



January 10 ENSO Update

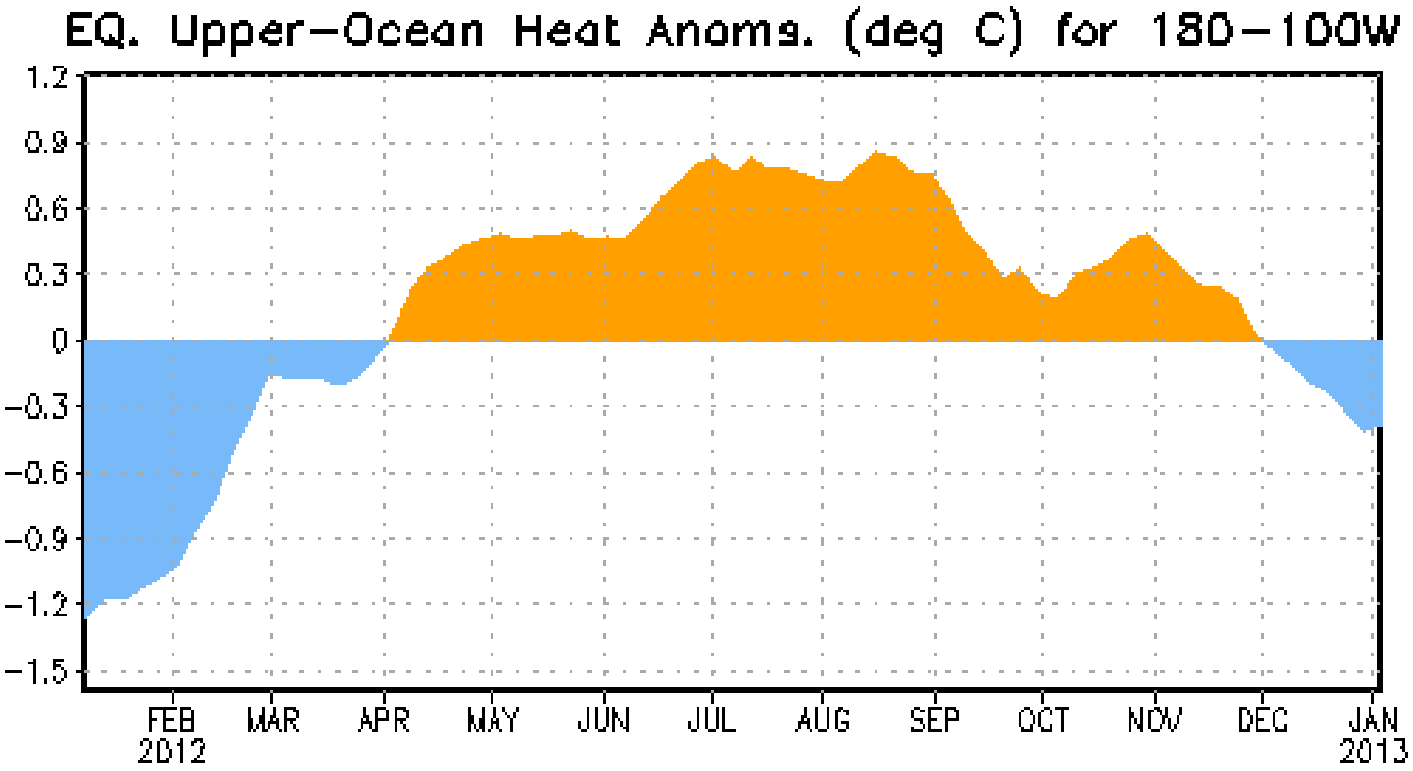


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: Not Active

Synopsis: ENSO-neutral is favored through Northern Hemisphere spring 2013.

ENSO-neutral conditions continued during December 2012. Equatorial sea surface temperature (SST) anomalies were positive in the western Pacific, near zero in the central Pacific, and slightly negative in much of the eastern Pacific. This SST anomaly pattern is also reflected in the Niño indices. The oceanic heat content (average temperature in the upper 300m of the ocean) in the equatorial Pacific became slightly below average (Fig. 1), with positive sub-surface temperature anomalies west of 165°W and stronger negative anomalies in the east-central and eastern Pacific. Upper- and lower-level zonal winds were near average across the tropical Pacific, and the Southern Oscillation Index was slightly negative. Also, convection was suppressed over the central tropical Pacific and enhanced over western Indonesia. Collectively, these oceanic and atmospheric features indicate ENSO-neutral conditions.

Model predictions favor near-average SST in the Niño-3.4 region from the Northern Hemisphere winter 2012-13 into summer 2013. Because predictions through the April-June season are known to be less skillful, the forecasts for the summer carry limited confidence at this time. Thus, it is considered unlikely that an El Niño or La Niña will develop during the next several months, and ENSO-neutral is favored through Northern Hemisphere 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 7 February 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

January 6-12, 2013

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

HIGHLIGHTS

EUROPE: Wet weather continued, with above-normal temperatures in central and western Europe contrasting with colder-than-normal conditions in eastern growing areas.

WESTERN FSU: Additional snowfall maintained sufficient protection against potential incursions of bitter cold.

MIDDLE EAST: A slow-moving storm produced heavy rain and historic snowfall across central and western portions of the region.

NORTHWEST AFRICA: Sunny skies promoted winter grain growth, although soil moisture has become limited in western-most crop districts.

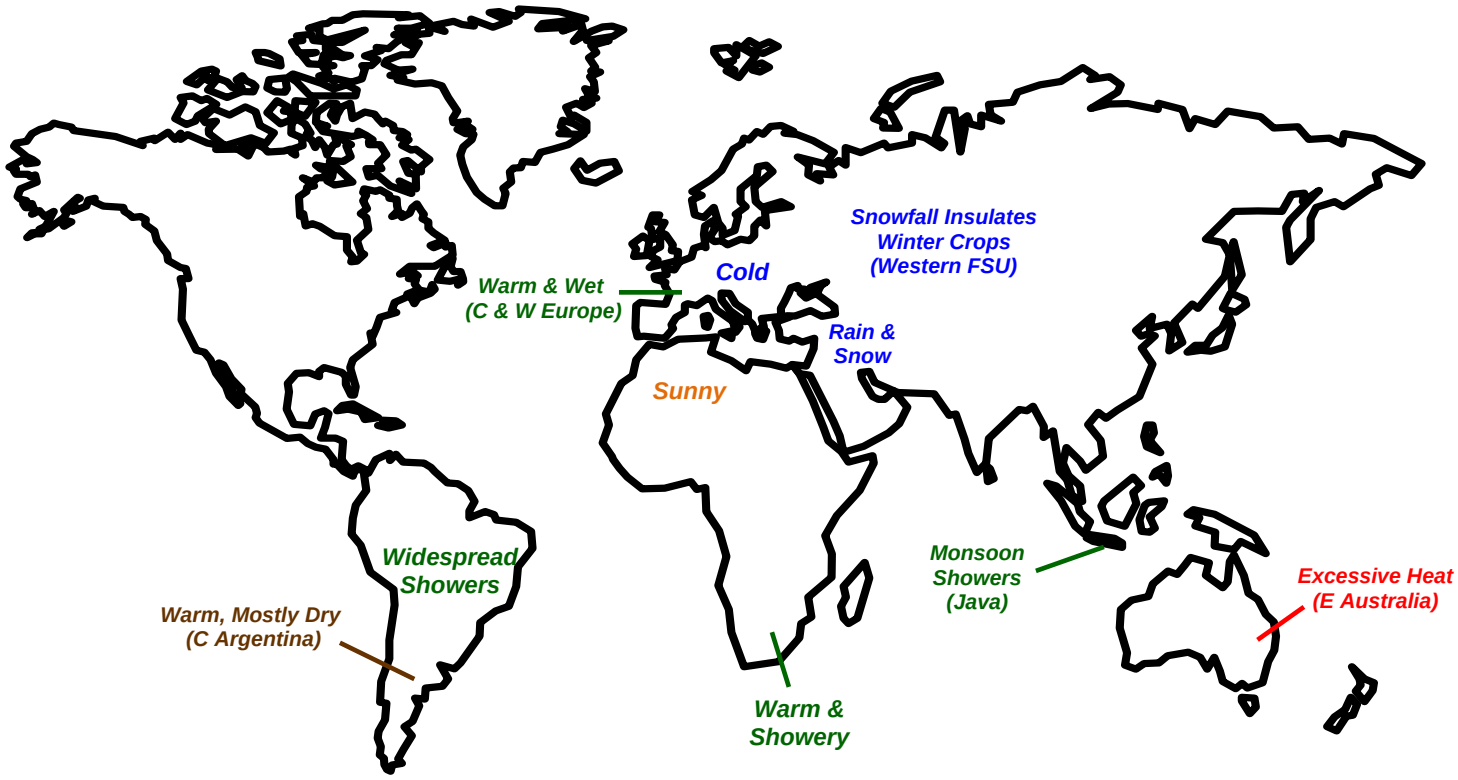
SOUTHEAST ASIA: Monsoon showers continued to benefit rice in Java, Indonesia.

AUSTRALIA: Excessive heat stressed summer crops in eastern Australia.

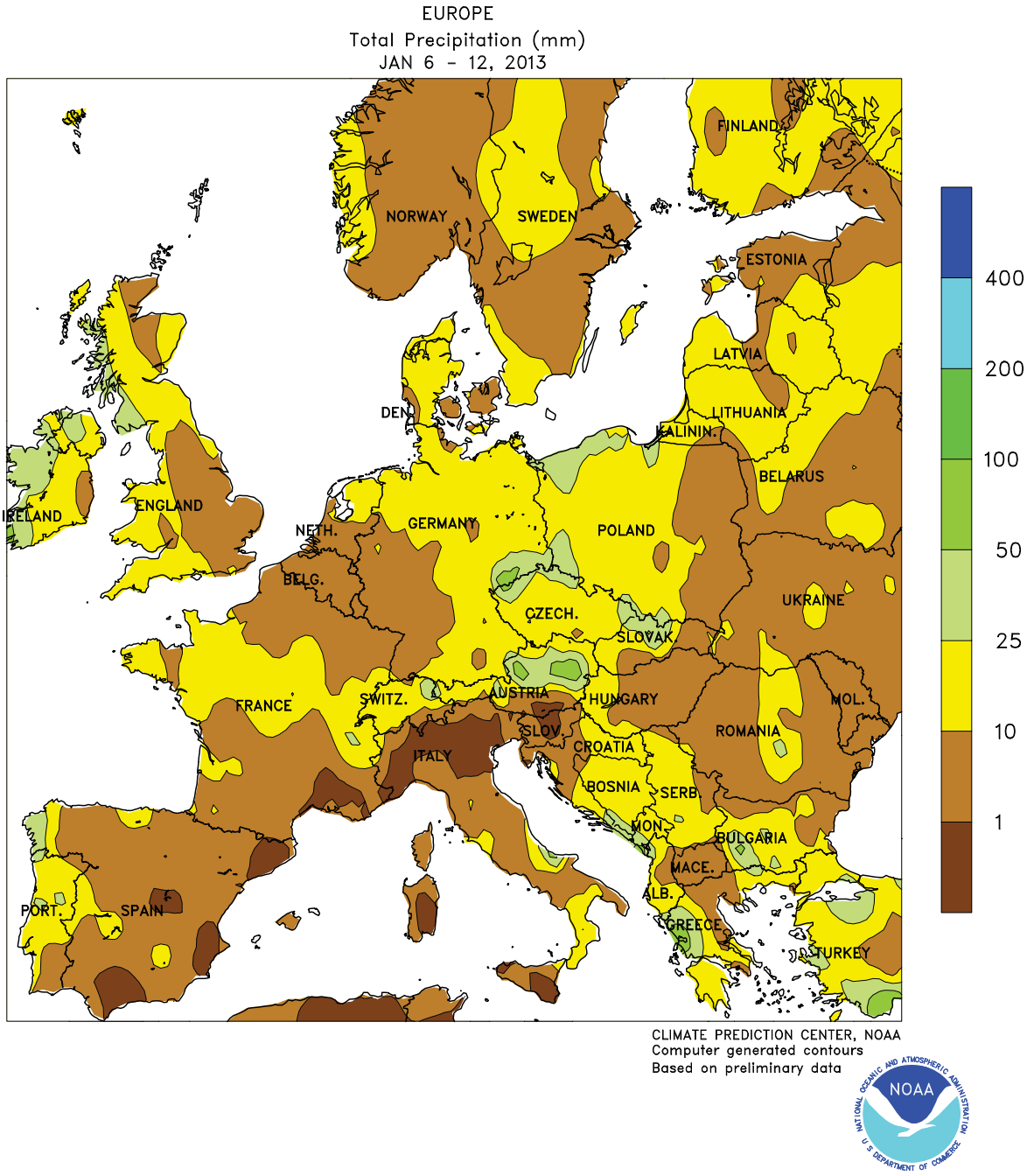
SOUTH AFRICA: Warm, showery weather continued, although pockets of dryness lingered in eastern sections of the corn belt.

ARGENTINA: Warmth and dryness aided late corn and soybean planting in central Argentina.

BRAZIL: Widespread, locally heavy rain increased moisture for soybeans and other summer crops.



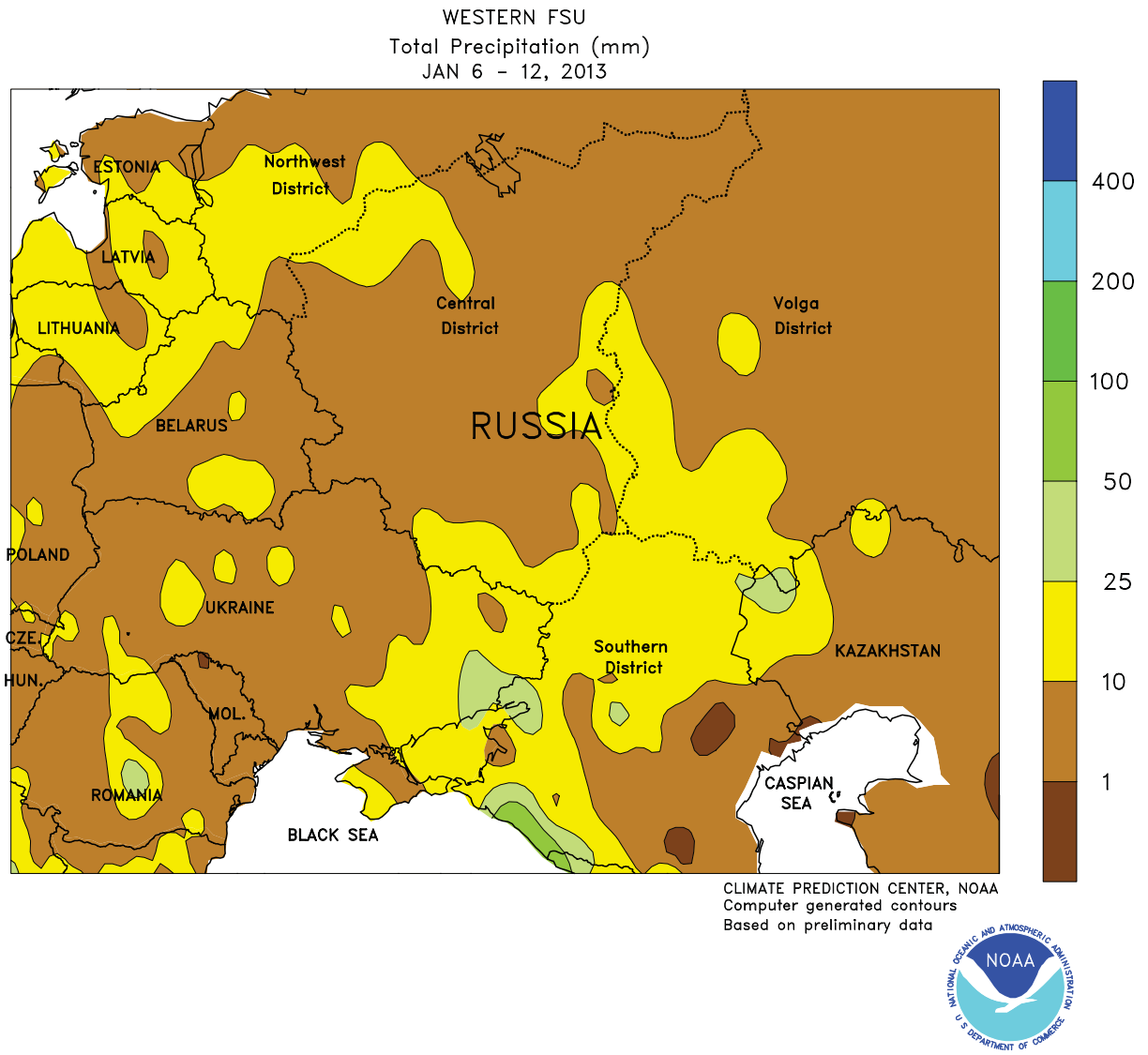
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Unsettled weather persisted, with above-normal temperatures across central and western Europe contrasting with colder-than-normal conditions in the east. A pair of slow-moving storms triggered periodic showers (4-30 mm) from England and northern France into Germany, maintaining favorable soil moisture for dormant winter crops. Farther east, precipitation fell mostly as snow (5-10 cm) in Poland and the northern Balkans, insulating dormant winter grains and oilseeds from potential incursions of bitter cold. Rain and snow (2-20 mm liquid equivalent) also fell in the Danube River Valley, although snow cover at week's end remained shallow and patchy (less than 5 cm). Farther south, light showers (10 mm or less) spread into Spain, providing some topsoil moisture for winter grains. Dry weather prevailed in Italy, although soil moisture and irrigation reserves remained favorable due to a wetter-than-normal autumn. Temperatures averaged 1 to 4°C above normal across central and western portions of the continent, while colder-than-normal weather (1-4°C below normal) prevailed in eastern-most growing areas.

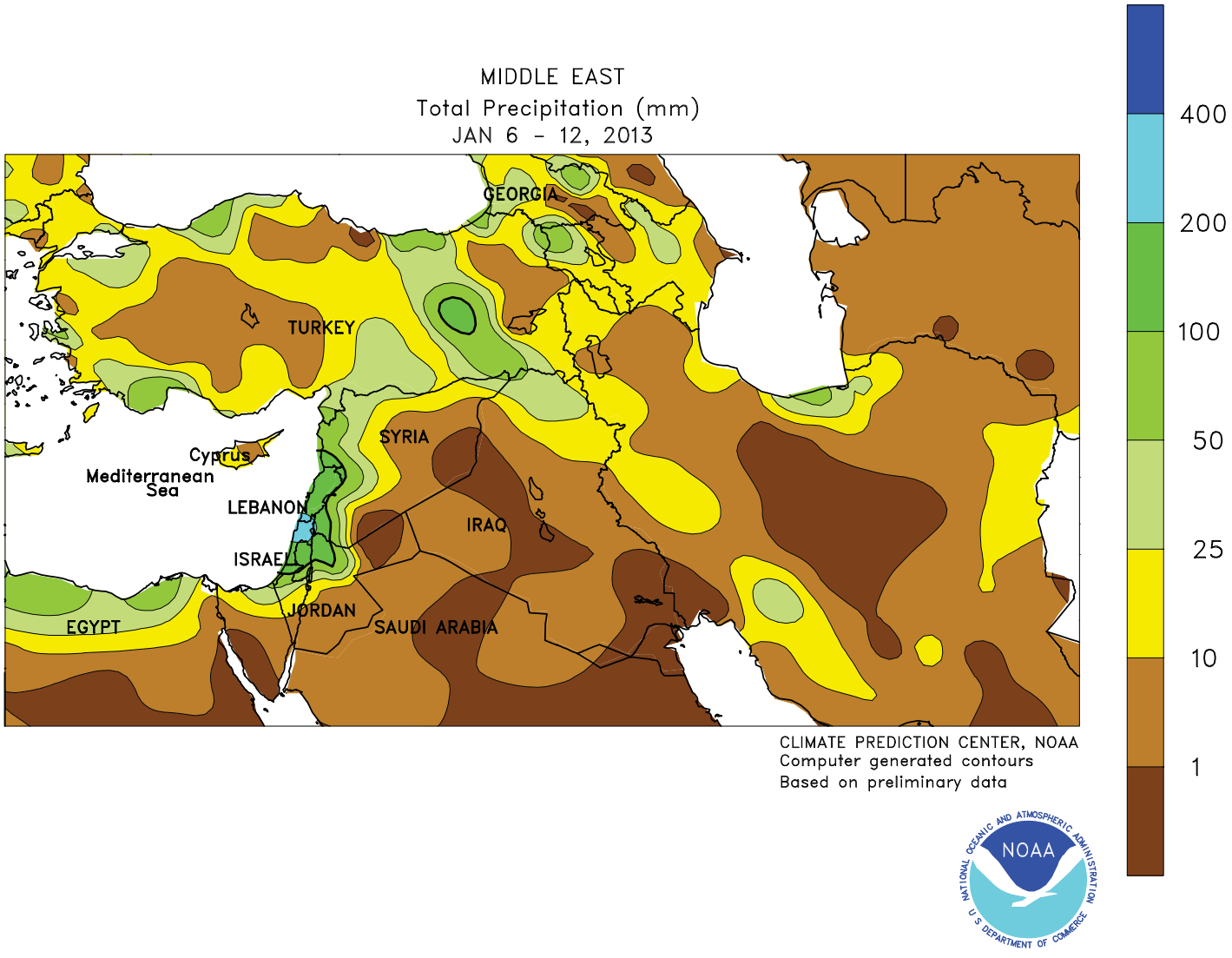
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Additional snowfall along with seasonable temperatures benefited winter grains. Light to moderate snow (2-20 mm liquid equivalent) provided dormant winter crops additional insulation from potential incursions of bitter cold. By week's end, most primary winter wheat areas were under 5 to 30 cm of snow, with few if any bare areas. Nighttime lows were mostly above the threshold for potential freeze damage, with the coldest conditions (-20 to -18°C) confined to areas with a deep snowpack.

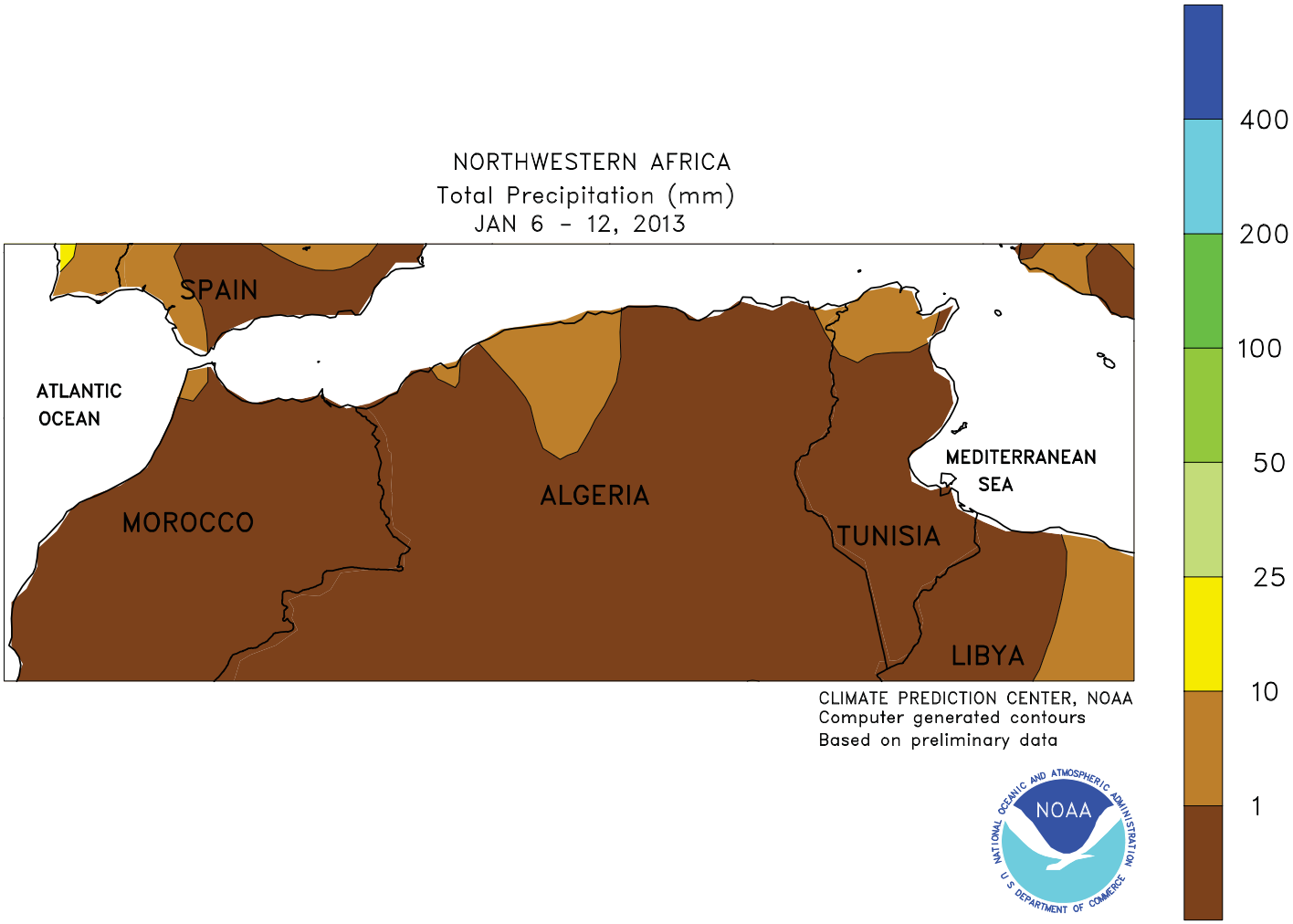
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

A slow-moving storm brought heavy rain and historic snowfall to the region. Precipitation totaled 10 to more than 100 mm (liquid equivalent) from the Mediterranean Coast into northern Iraq and western Iran. Snow depths in central and eastern Turkey were locally more than 100 cm by week's end, while higher elevations from Syria into Israel also recorded some of the heaviest snow in 20 years. The moisture boosted mountain snowpacks and lake levels, which in turn improved irrigation reserves for warm-season crops. Soil moisture also remained adequate to abundant for winter grains, although some lowland flooding was reported. However, the uncharacteristically heavy snow halted fieldwork, stressed livestock, and impacted travel. Temperatures up to 4°C below normal across central and western portions of the region contrasted with readings up to 5°C above normal in Iran.

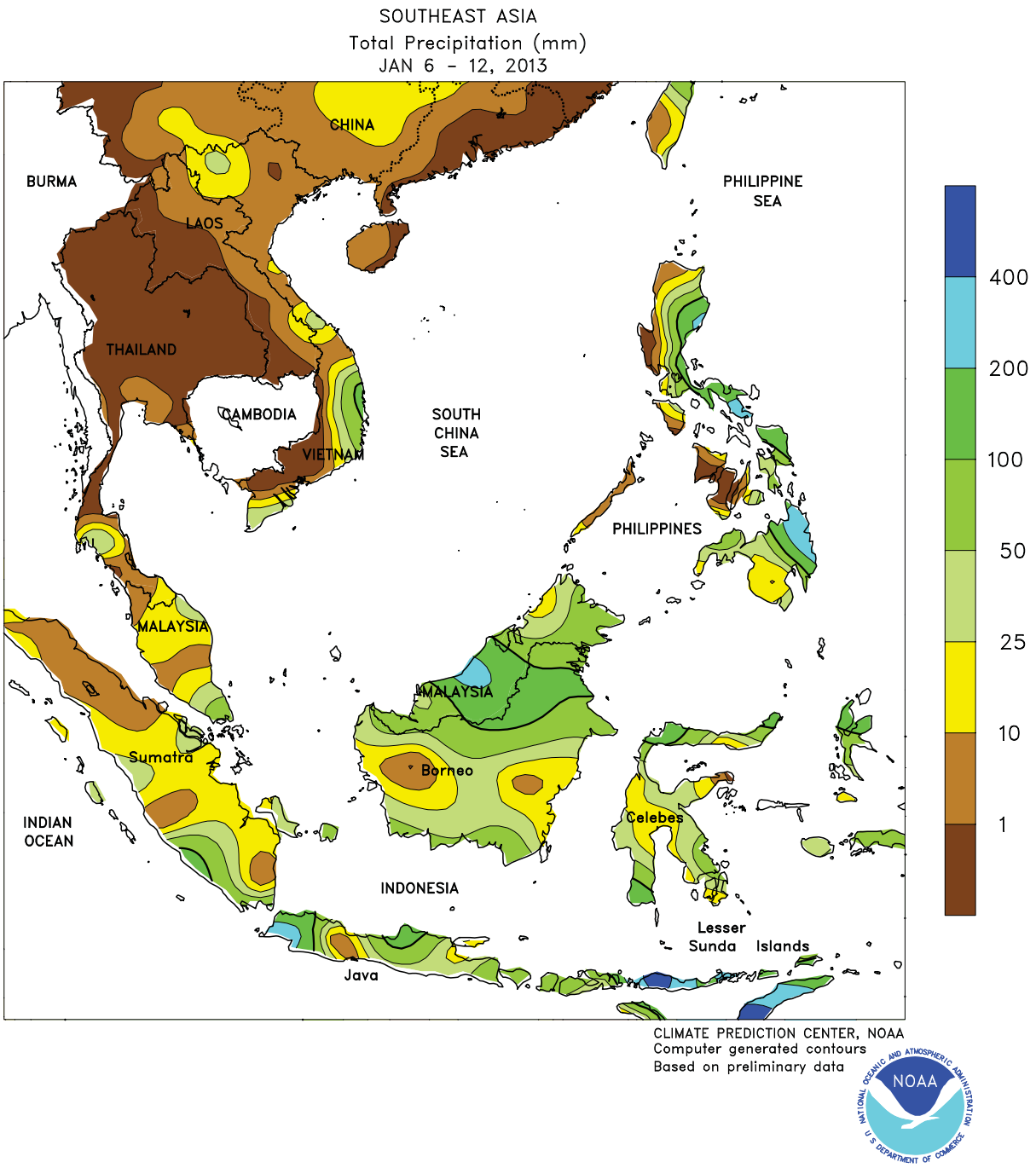
For additional information contact: mbrusberg@oce.usda.gov



NORTHWEST AFRICA

Sunny skies promoted winter grain growth across the region. After a favorably wet autumn, the recent month-long dry trend spurred fieldwork and crop development, although short-term dryness has reduced soil moisture in western and southern Morocco. Overall, winter grain prospects remained favorable, but rain will be needed soon to maintain current yield expectations. Temperatures averaged 1 to 3°C above normal, with nighttime temperatures well above freezing.

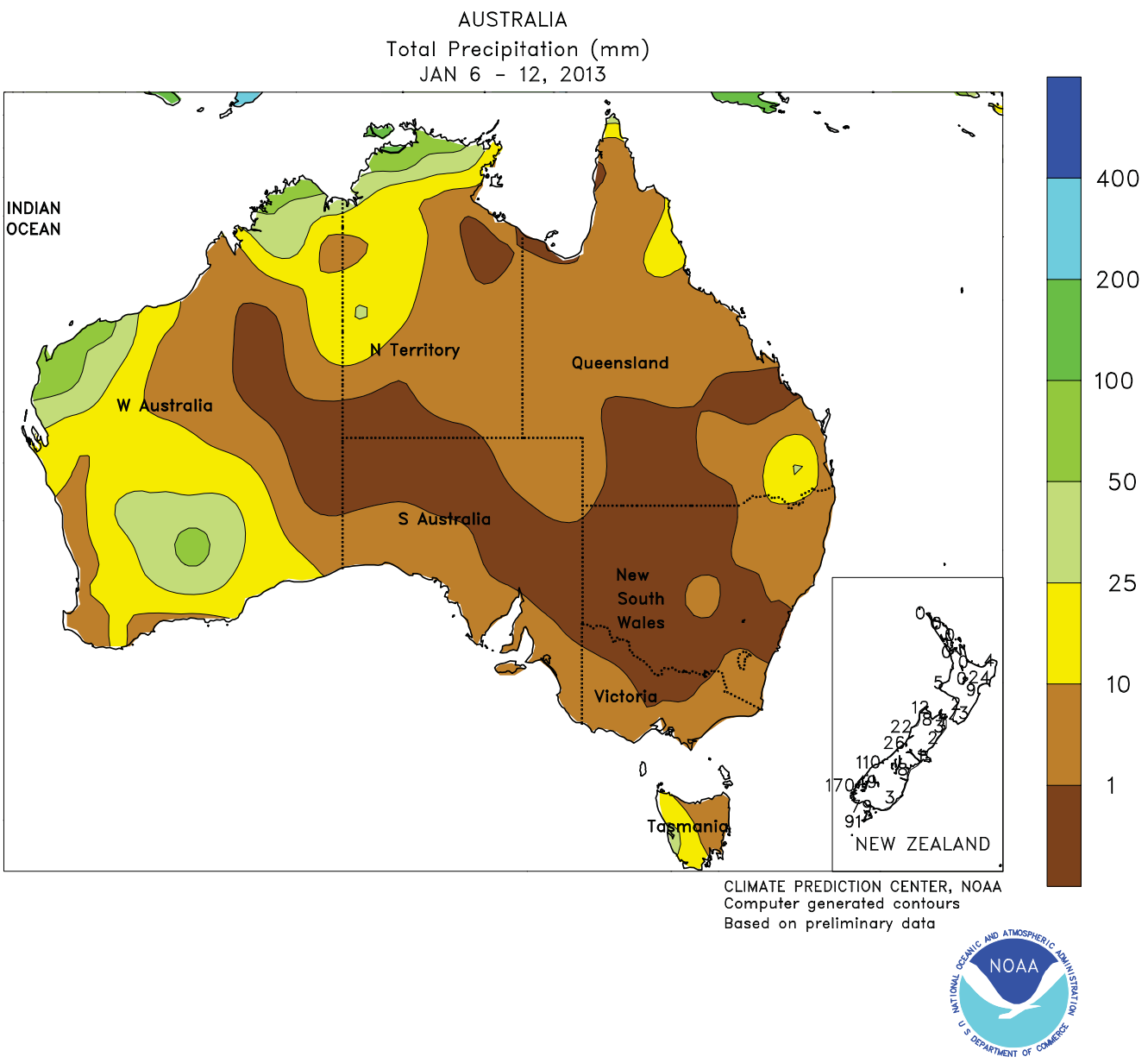
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

Monsoon showers (25-150 mm) across western and central Java, Indonesia, maintained favorable moisture supplies for reproductive rice. Eastern growing areas of Java, however, experienced drier-than-usual weather for the week which resulted in somewhat lower moisture supplies. Moisture conditions were favorable for oil palm in the remainder of Indonesia and into Malaysia, although dry weather in production areas of western Malaysia reduced moisture supplies. Meanwhile, rice and corn in the Philippines benefited from ample moisture as 25 to 150 mm of rain fell during the week; some flooding occurred in eastern Mindanao, where over 300 mm of rain was reported.

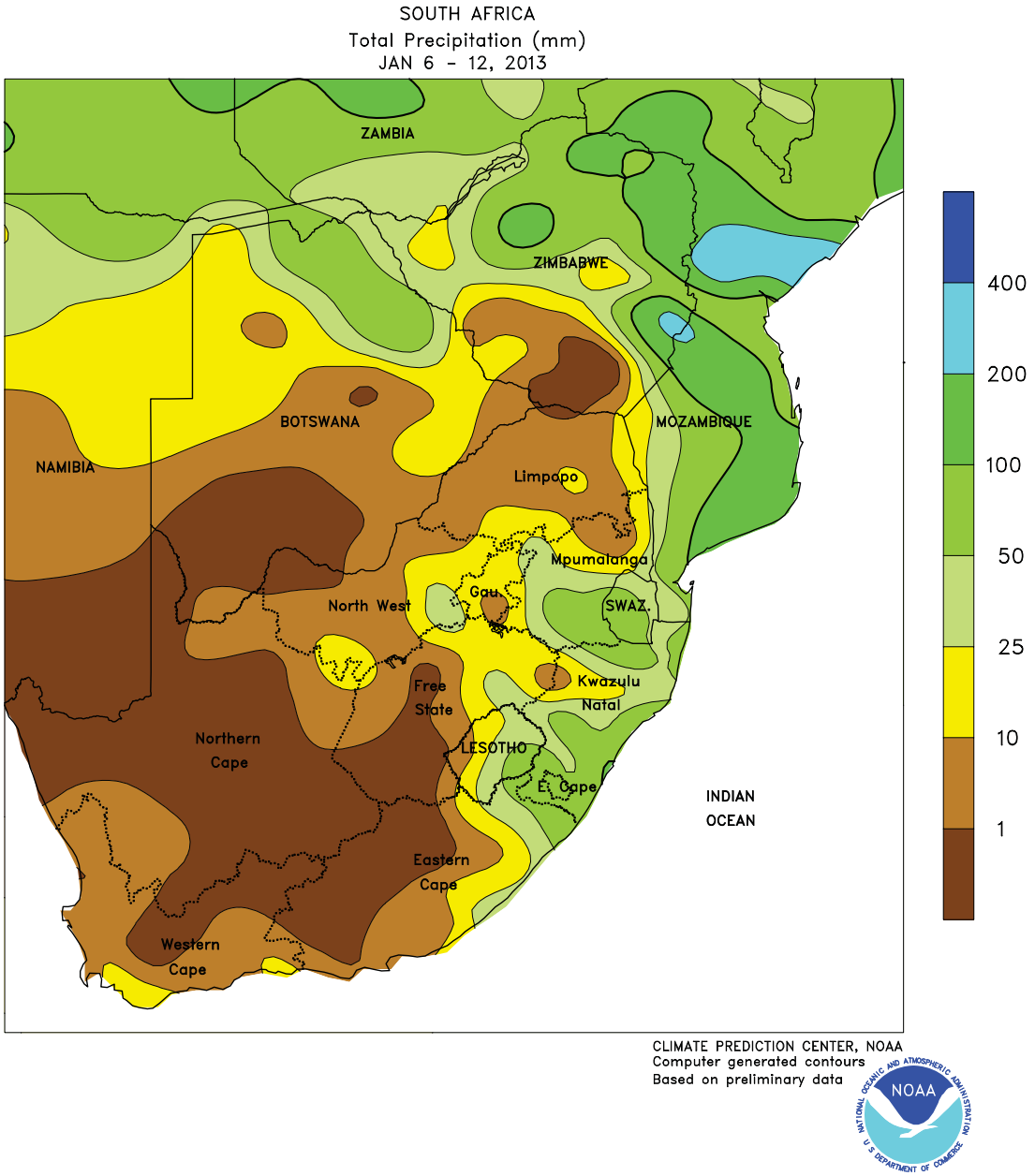
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

As the week progressed, very hot weather overspread southern Queensland and northern New South Wales, stressing dryland summer crops while hampering development of irrigated crops. Maximum temperatures were generally in the upper 30s to middle 40s degrees C during the latter half of the week. Isolated showers and thundershowers (5-25 mm or more) did occur, but the rainfall provided little relief from the excessive heat. Very hot, dry weather stressed summer crops in southeastern Australia as well, but these growing areas are typically less productive than summer crop growing areas farther to the north, minimizing impacts on national production. The dryness allowed late winter grain harvesting to progress without delay in southeastern Australia. In Western Australia, scattered showers (2-15 mm) may have caused temporary delays in winter grain harvesting, which is nearly complete.

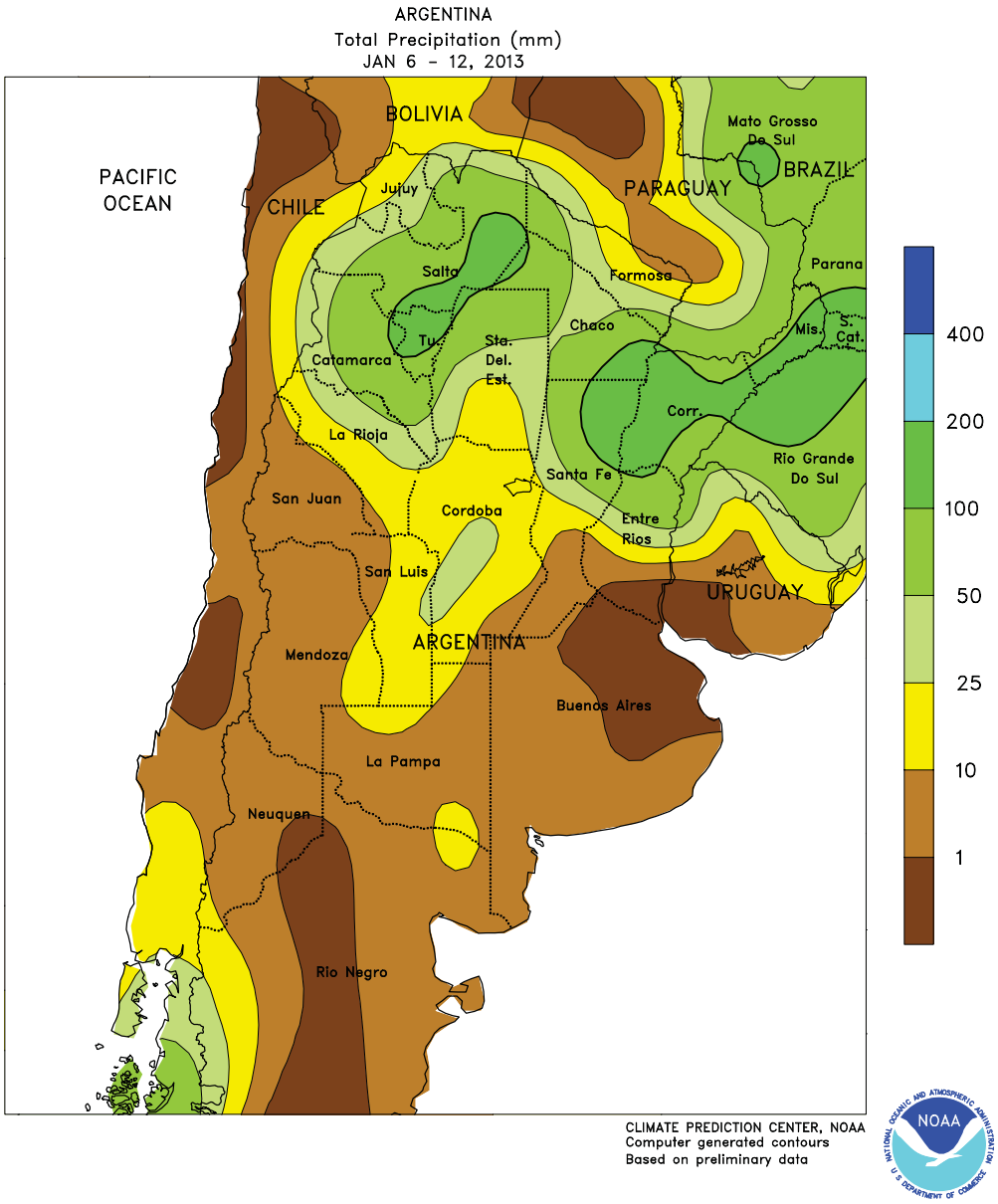
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Warm, showery weather continued throughout the region. Rainfall totaled 10 to 50 mm across the corn belt, although pockets of dryness lingered over parts of the east, notably southern Mpumalanga. Weekly temperatures averaged 1 to 4°C above normal, with daytime highs ranging from the lower 30s (degrees C) in the east to the middle and upper 30s farther north and west; the highest temperatures (36-38°C) were recorded in outlying production areas of North West, Gauteng, and Limpopo. Although conditions are currently overall favorable for corn and other summer crops in these areas, additional rain will be needed as crops advance through moisture- and temperature-sensitive stages of development, which usually occurs from mid-January to mid-February. Elsewhere, heavier rain (25-75 mm) fell in eastern Mpumalanga, eastern KwaZulu-Natal, and nearby locations in Eastern Cape, maintaining mostly favorable conditions for sugarcane. Dry weather dominated the remainder of the Cape Provinces, with daytime highs in the middle and upper 30s, promoting growth of irrigated summer row crops, vineyards, and orchards.

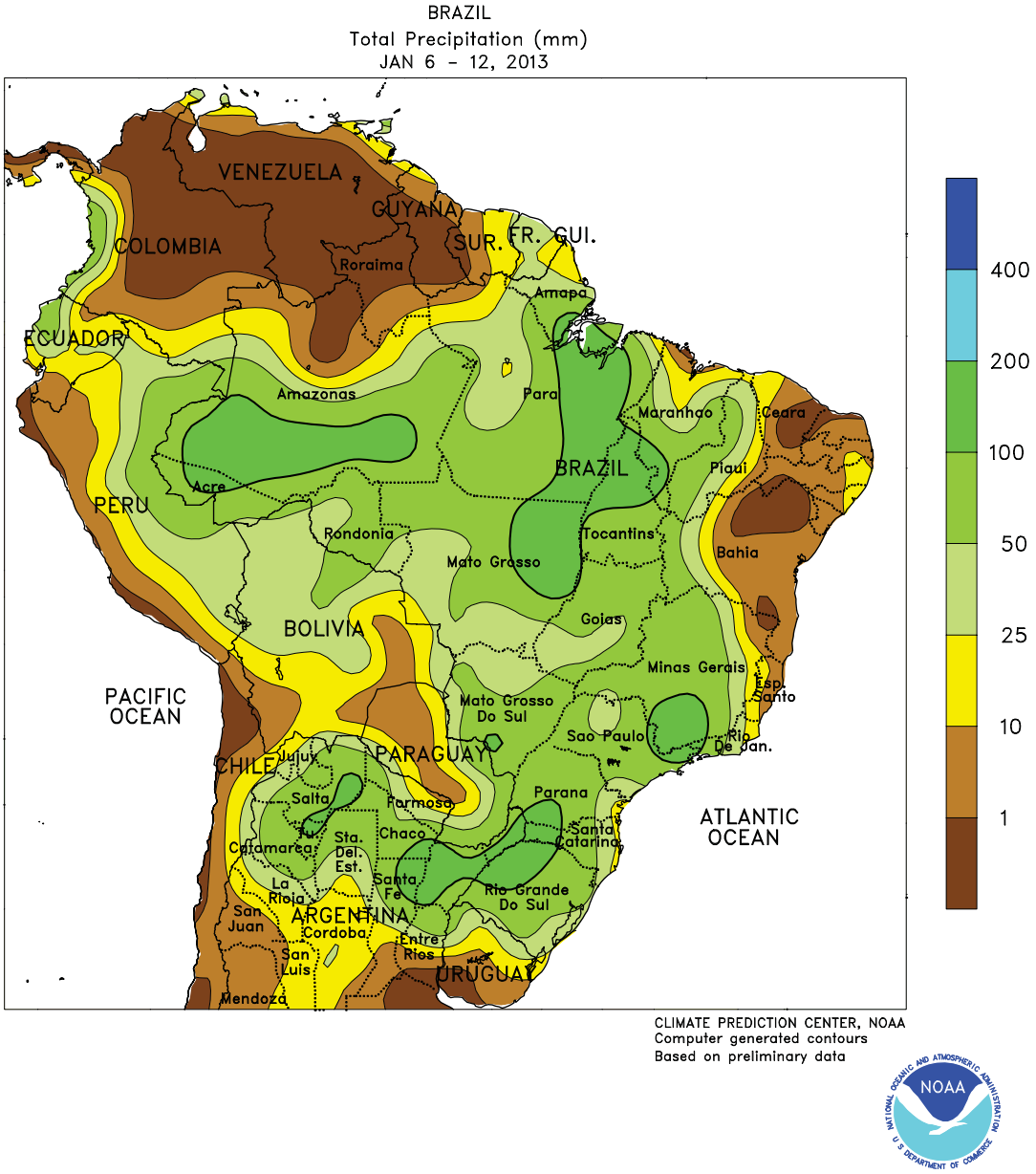
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Mostly dry, warmer-than-normal weather continued across central Argentina, further improving conditions for fieldwork delayed by earlier periods of wetness. Little to no rain fell in La Pampa, Buenos Aires, and southern sections of Santa Fe and Entre Rios, while moderate rain (10-30 mm) fell in Cordoba. Weekly temperatures averaged 1 to 3°C above normal, with daytime highs in the lower and middle 30s (degrees C); somewhat warmer conditions prevailed in northern La Pampa, with highs briefly reaching 38°C toward the end of the week. Moderate to heavy rain (25-100 mm, locally more) overspread the north, boosting moisture for germination and establishment of summer grains, oilseeds, and cotton. While hindering fieldwork in eastern production areas, the rain was welcome in the west, including Santiago del Estero, Salta, and western sections of Chaco and Formosa, following weeks of mostly dry conditions. Weekly temperatures averaged 1 to 2°C above normal, with highs approaching 40°C in traditionally warmer western locations. According to Argentina's Ministry of Agriculture, corn and soybeans were 90 and 92 percent planted, respectively, as of January 10. For both crops, most of the acreage remaining to be planted is in the northern part of the country. In addition, winter wheat harvesting was approaching completion at 97 percent, an increase of 15 points from last week.

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

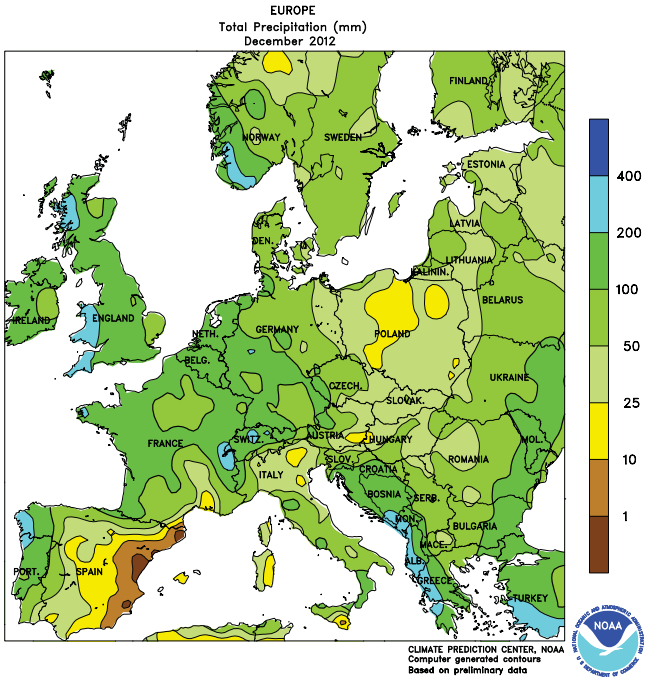


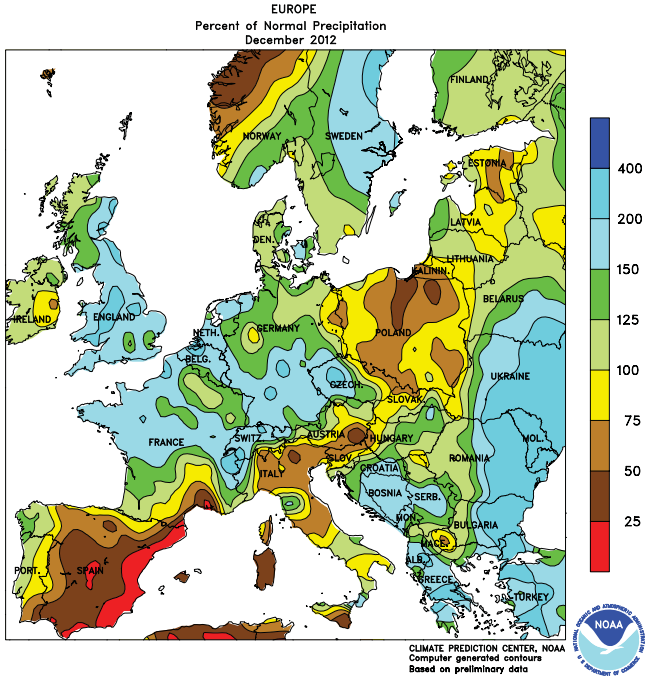
BRAZIL

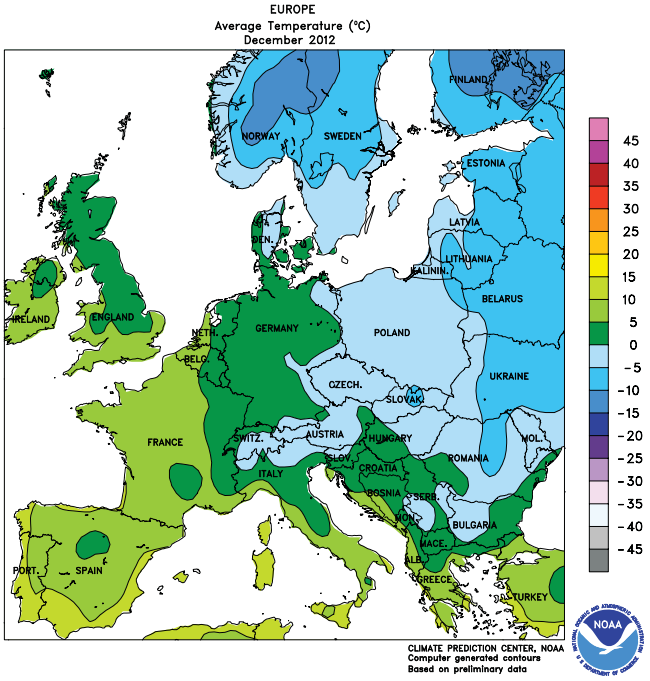
Widespread, locally heavy rain increased moisture for soybeans and other summer crops in most major production areas. Rainfall totaled 50 to more than 100 mm throughout large portions of southern and central Brazil, including previously dry farming areas of the northeastern interior (western Bahia, Tocantins, Piaui, and Maranhao). Dry weather was confined to the northeastern coast; although harvesting of cocoa and sugarcane were underway, rain would be welcome to boost moisture reserves after months of drought. Weekly average temperatures were below normal in Brazil's southern production areas (Rio Grande do Sul, Santa Catarina, and southern Parana), with daytime highs in the upper 20s and lower 30s (degrees C). Warmer conditions relative to normal prevailed elsewhere, with daytime highs in the middle 30s in most areas recording rainfall; somewhat higher temperatures (35-38°C) were recorded in drier locations of the northeastern interior.

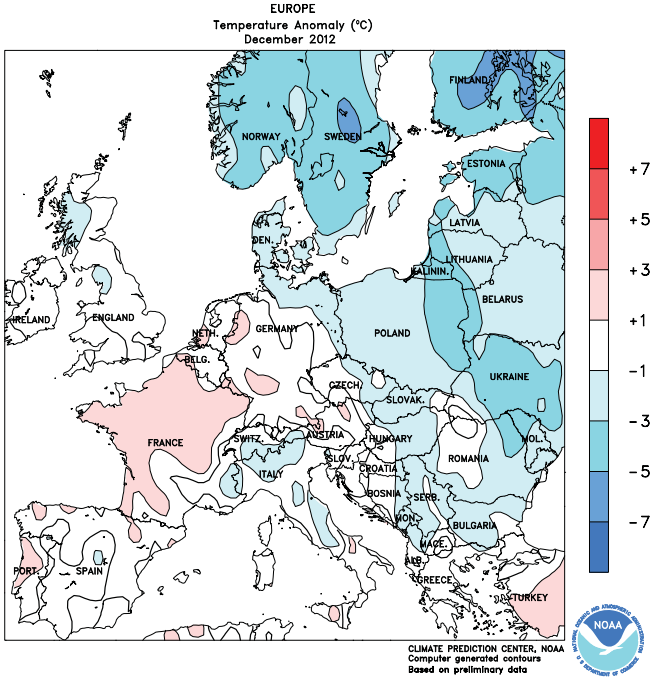
For additional information contact: mbrusberg@oce.usda.gov

December International Temperature and Precipitation Maps



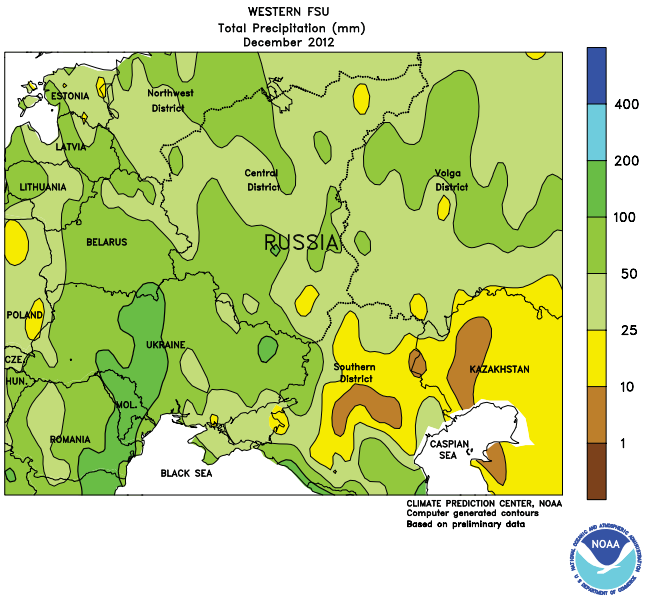


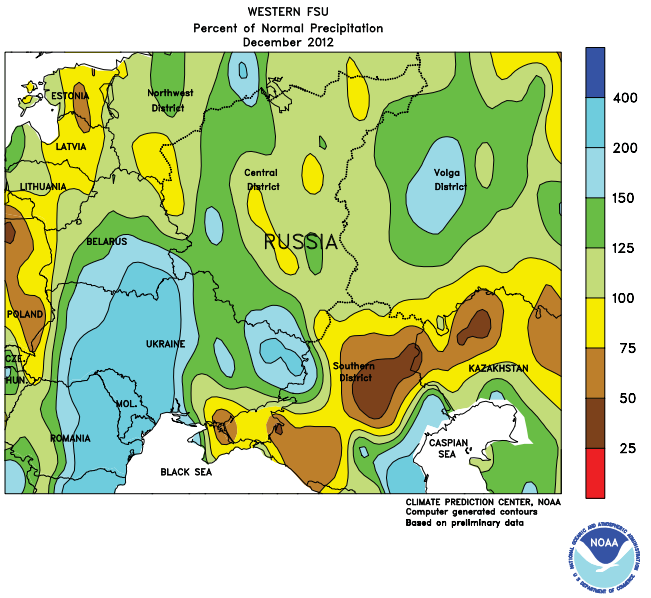


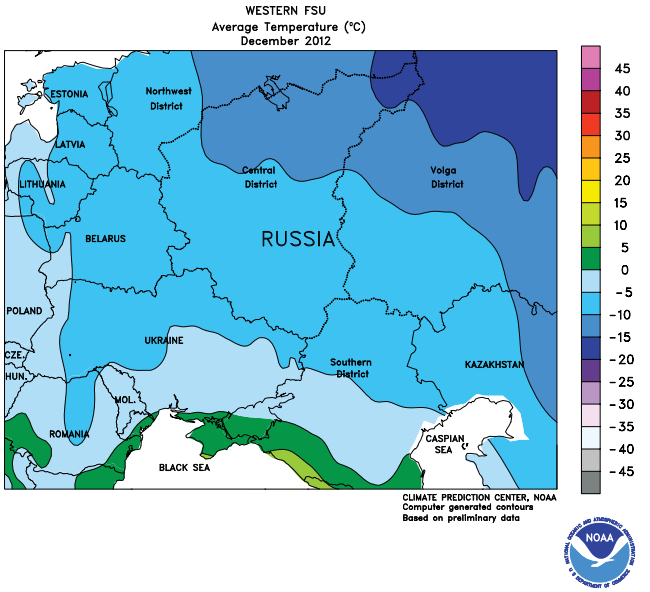


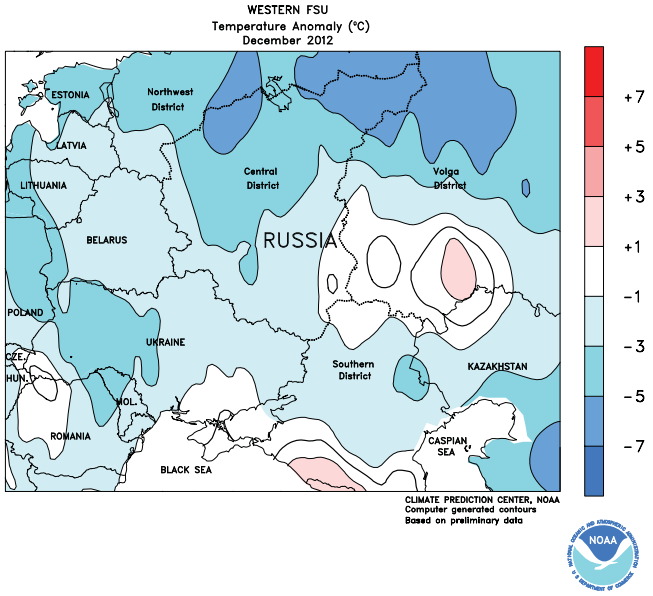
EUROPE

In December, wet conditions prevailed across much of Europe, slowing late winter crop planting in France and England but maintaining adequate to abundant soil moisture for winter grains and oilseeds. Below-normal precipitation was reported in Poland, although subsoil moisture remained favorable following a mostly wetter-than-normal autumn. Farther south, locally heavy rain and snow (100-200 percent of normal, locally more) eased long-term drought in the Balkans and improved soil moisture for winter wheat. In Spain and Italy, generally sunny skies promoted winter wheat establishment following a wet autumn. At month's end, winter crops were dormant in northern and central Europe but still adding vegetative growth in southern growing areas.





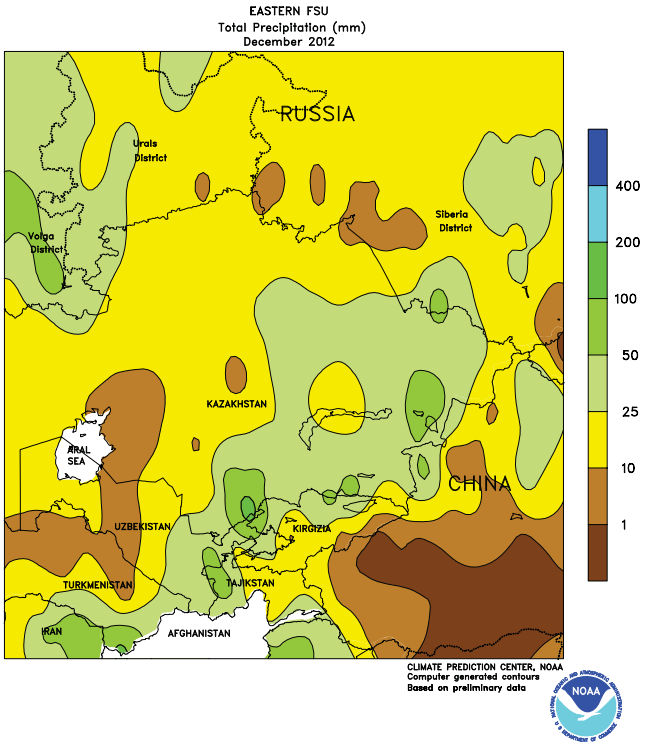


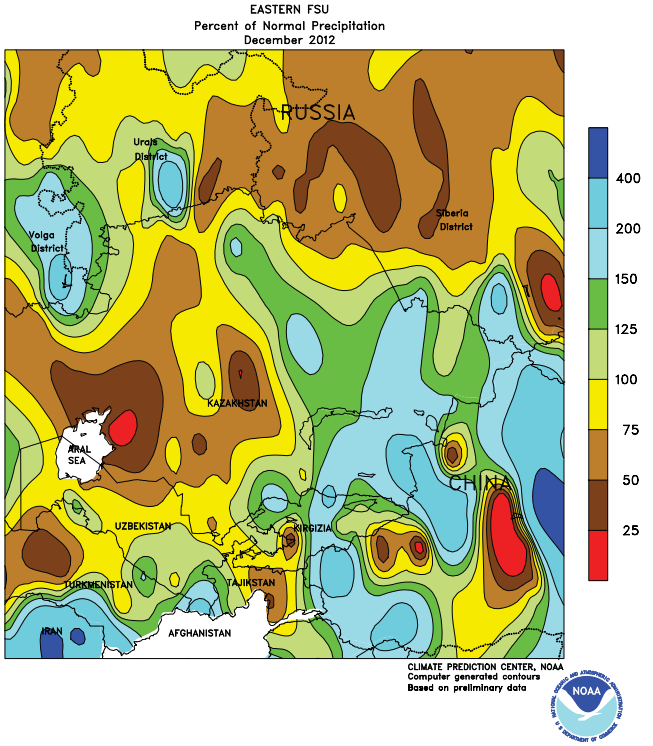


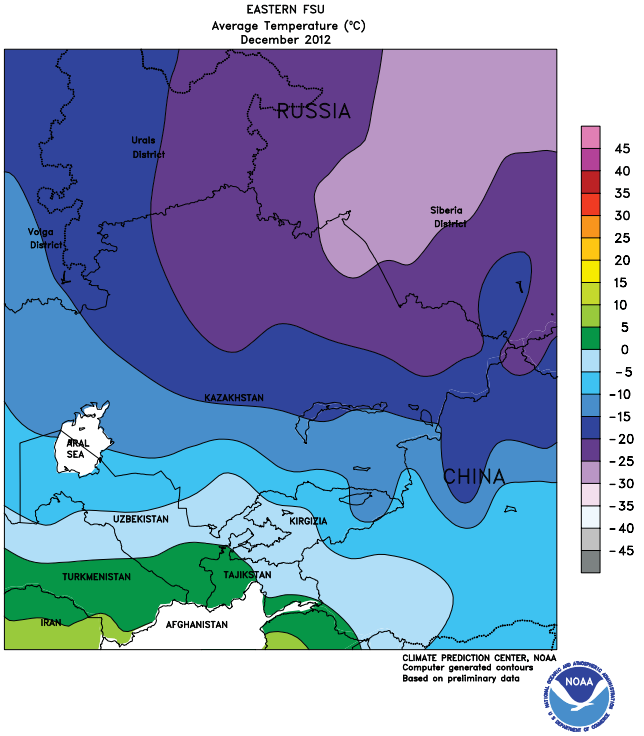
WESTERN FSU

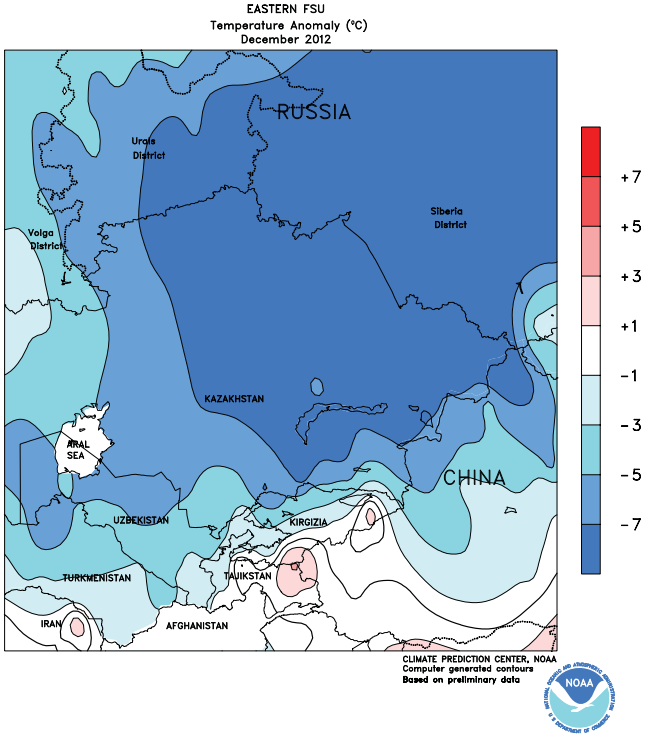
In December, persistent drought in the south contrasted with favorable rain and snow in the north and west. Soil moisture remained limited for winter wheat in southern-most portions of Russia's Southern District, where an unfavorably dry autumn (30-70 percent of normal) persisted into December. Meanwhile, rain and snow totaled 40 to 140 mm (liquid equivalent) across western and northern portions of the region, maintaining adequate to abundant soil moisture reserves for spring growth. Colder-than-normal weather ushered crops into dormancy across southern portions of the region by mid-month. More notably, a late-month arctic blast (-22 to -19°C) caused burnback and winterkill to exposed winter grains in central and northern portions of the Southern District and southern-most portions of the Volga and Central Districts. The bitter cold arrived mid-month and lasted until December 27, with much-needed snow finally arriving in the northern Southern District on December 23; consequently, this was a multi-day winterkill event. Key southern-most winter wheat areas were spared due to adequate snow cover.

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



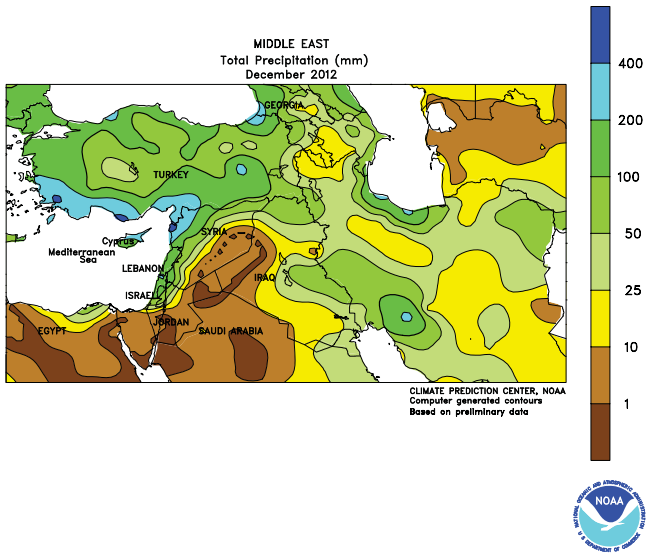


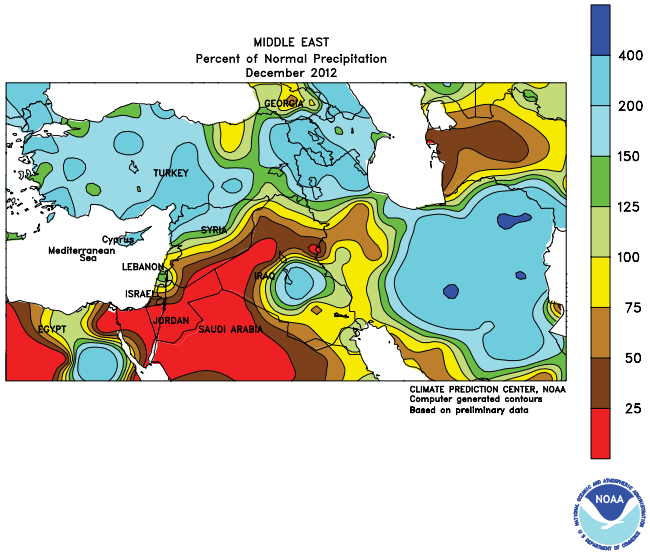


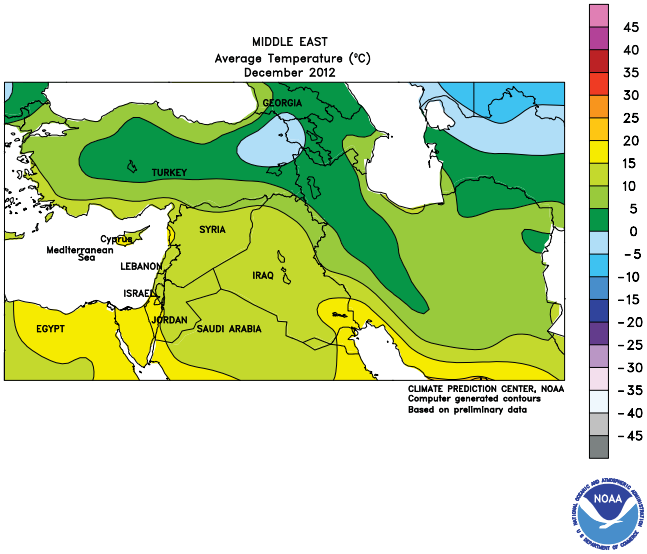


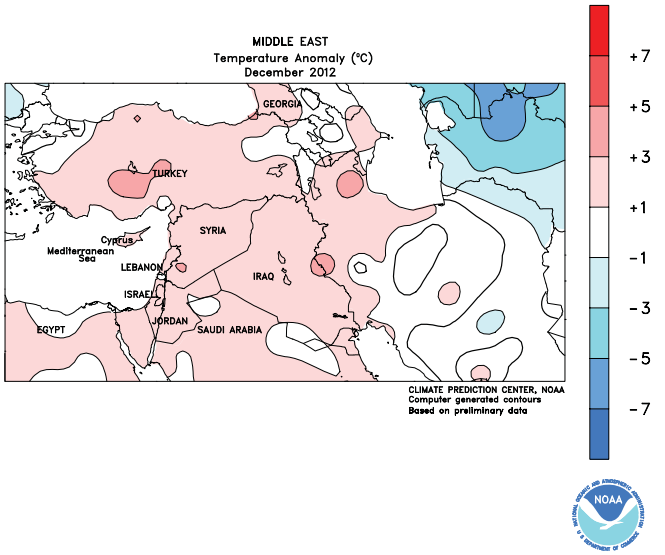
EASTERN FSU

In December, bitterly cold weather settled over the region. Temperatures for the month averaged an astounding 8 to 13°C below normal, with nighttime lows plunging below -40°C (locally as low as -48°C) across northern Kazakhstan and Russia's Siberia District. Conditions like these highlight the reason winter wheat is generally not grown in this region.









MIDDLE EAST

During December, moderate to heavy rain boosted soil moisture for winter crop establishment from Turkey into Iran. Rainfall totaled 200 to 500 mm (locally more) across southern Turkey and the eastern Mediterranean Coast, while amounts of 50 mm or more (liquid equivalent) encompassed primary winter grain areas of northern Iraq and western Iran. Warmer-than-normal weather (up to 3°C above normal) kept crops devoid of snow cover, although notably colder, snowy conditions arrived at month's end.

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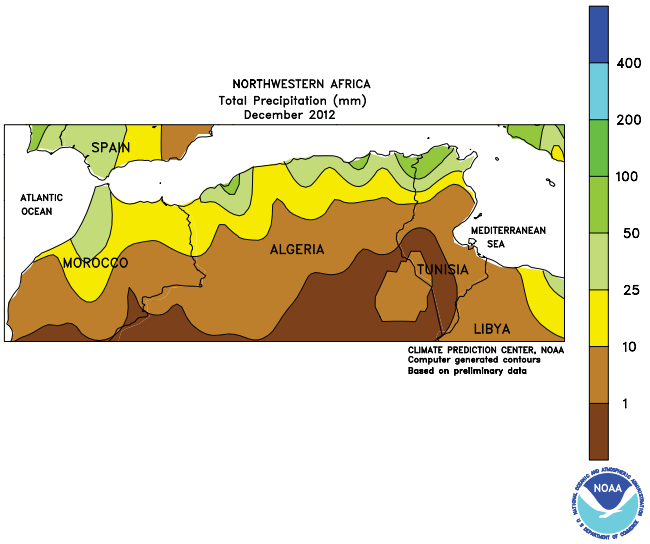
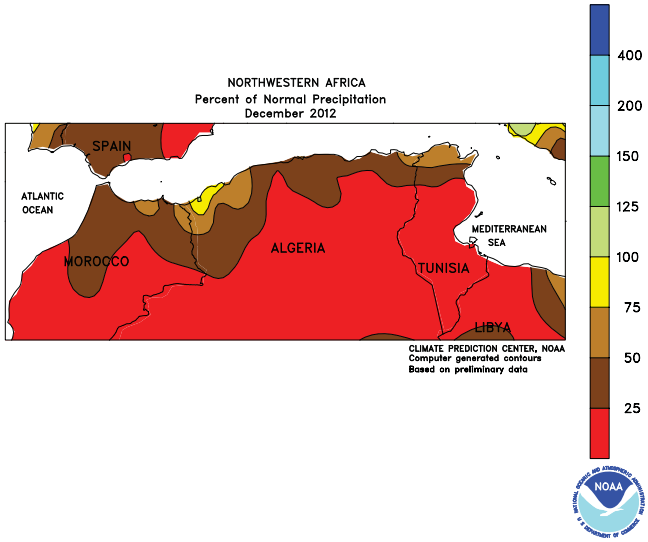
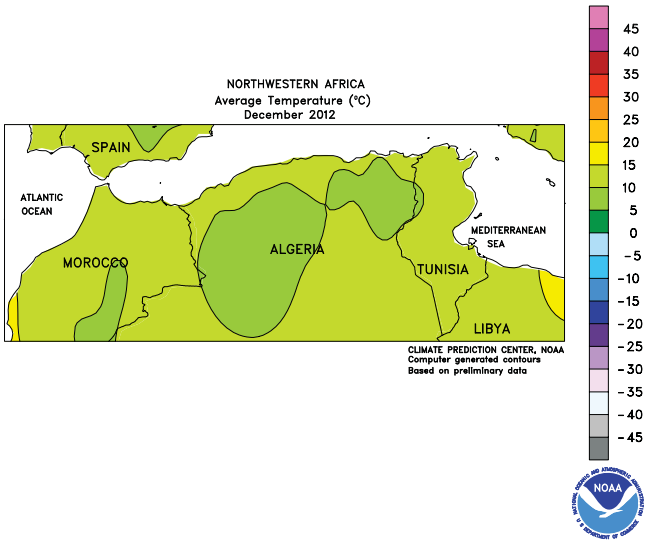
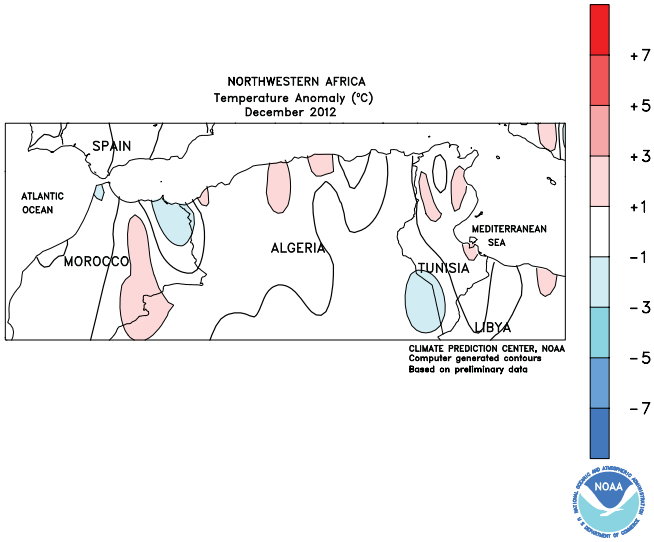


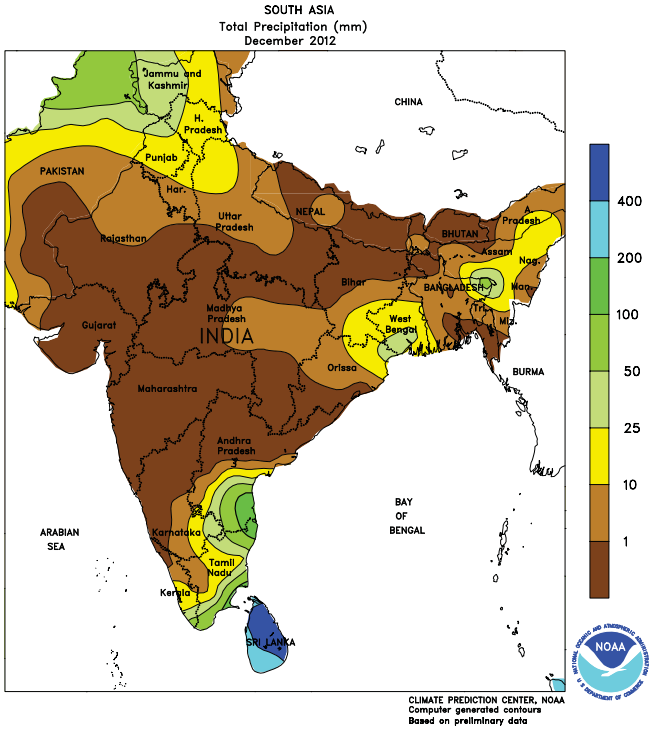


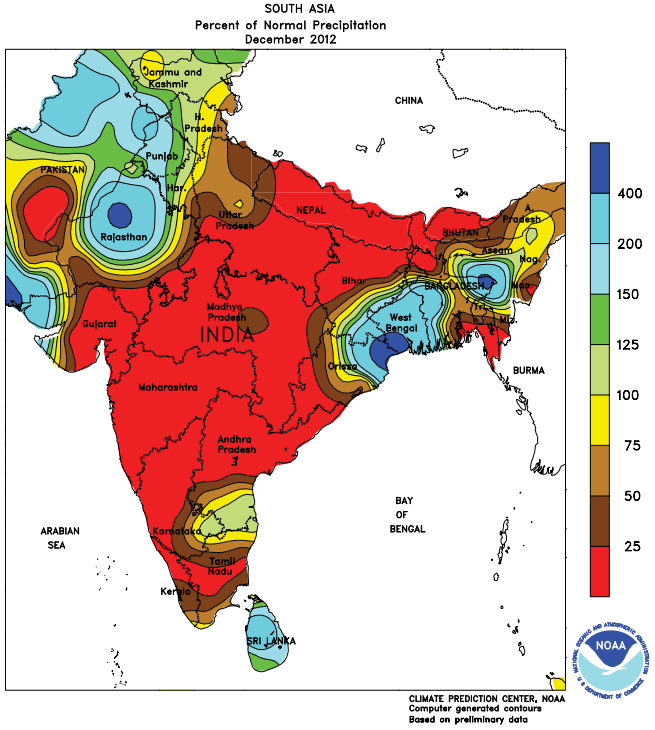


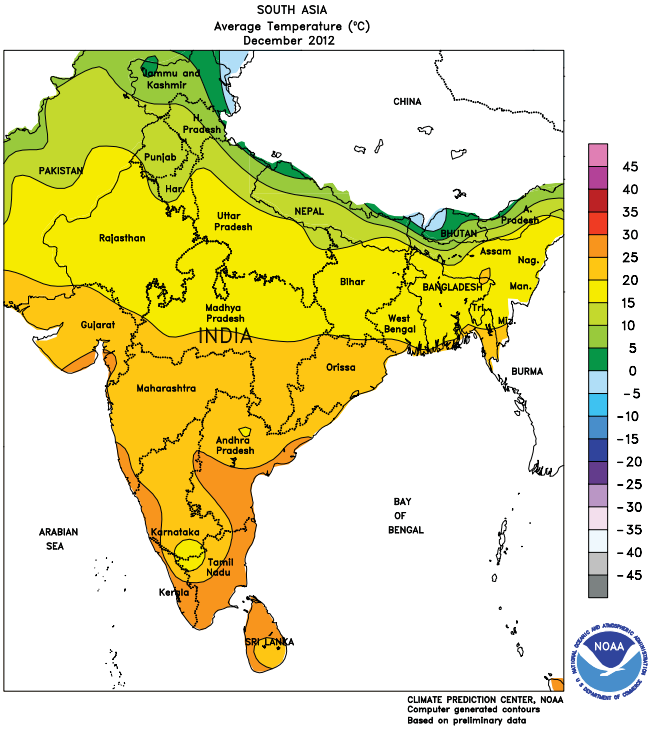


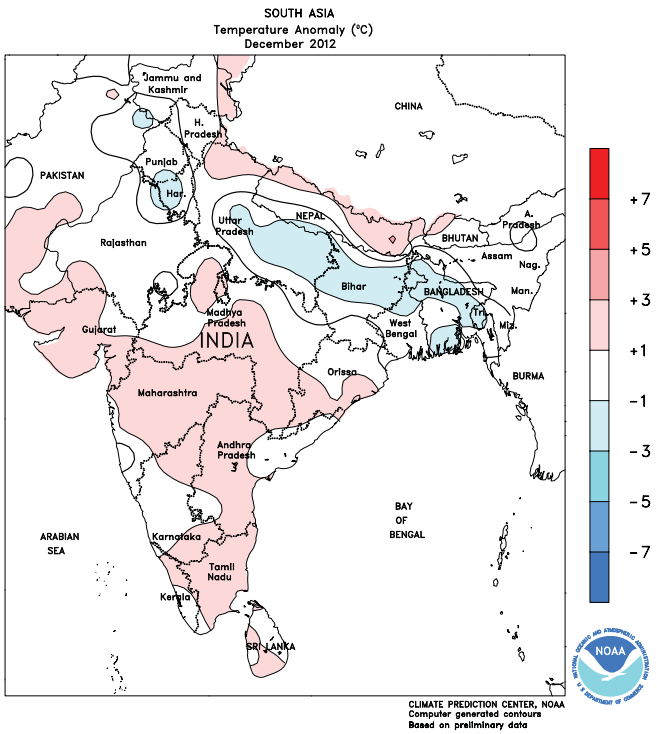
NORTHWESTERN AFRICA

Mostly sunny weather during December promoted winter grain growth. Monthly rainfall totaled 50 percent of normal or less across most primary winter crop areas, although soil moisture remained in good supply following an unusually wet autumn (200-300 percent of normal), especially across the western half of the region. Only southwestern Morocco, a relatively small winter grain area, received little — if any — measureable precipitation during the month.









SOUTH ASIA

Seasonably dry weather prevailed during December, promoting cotton harvesting in western and central India. Below-normal rainfall, however, in southern India reduced moisture supplies for rabi groundnuts and cotton. In northern India, cool weather in the beginning of the month aided rapeseed and wheat development, but by month's end, the onset of colder weather limited further growth.

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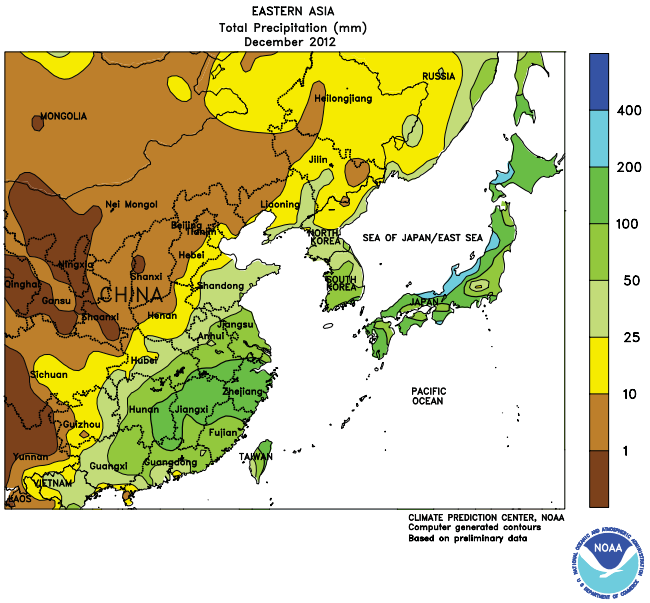
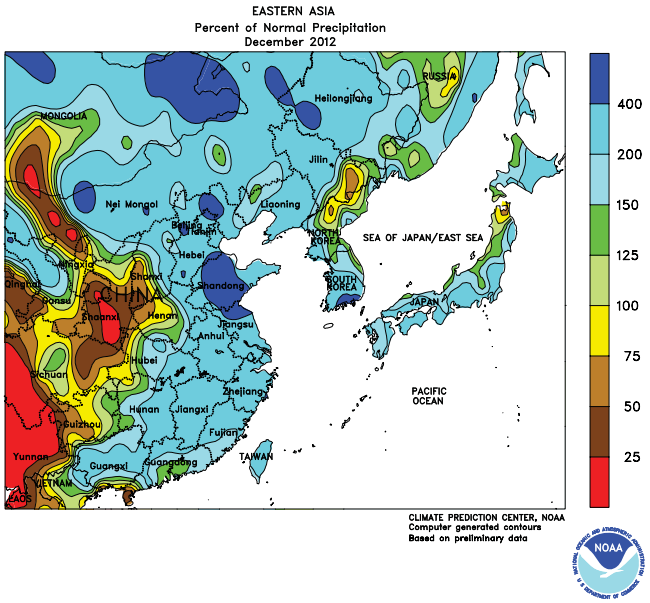
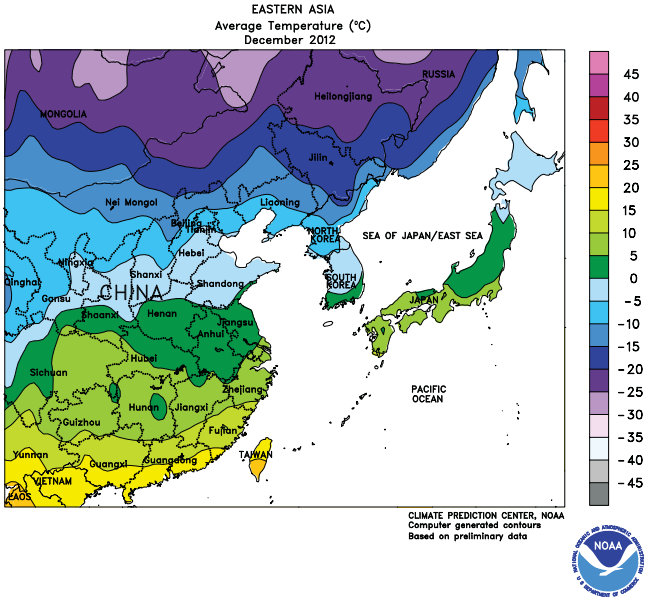
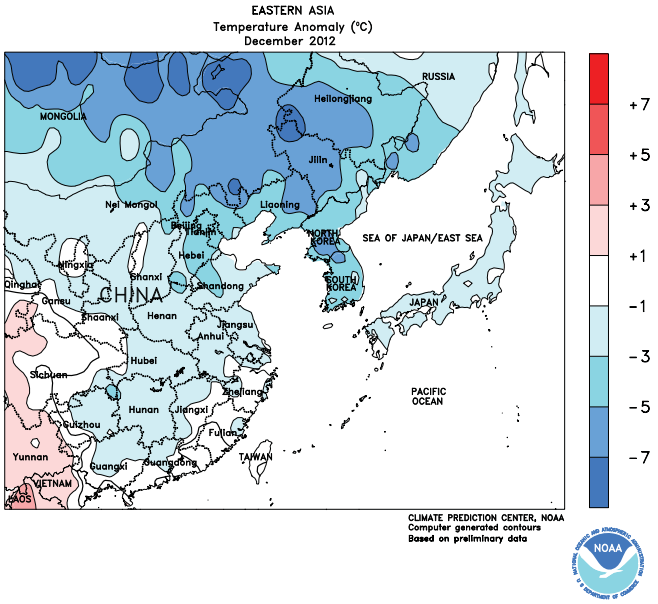


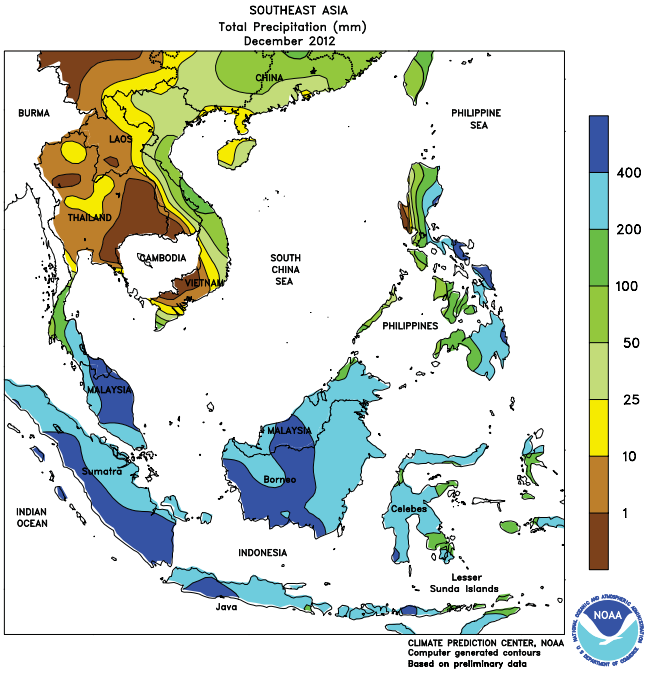


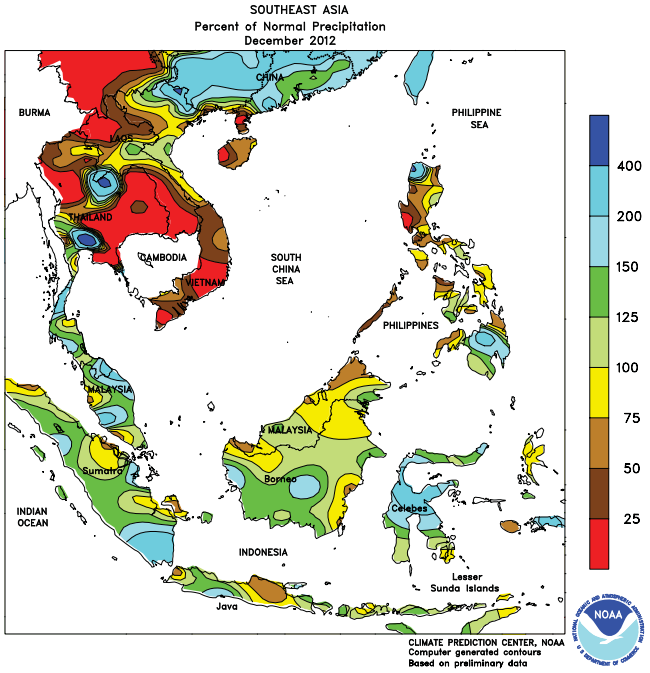


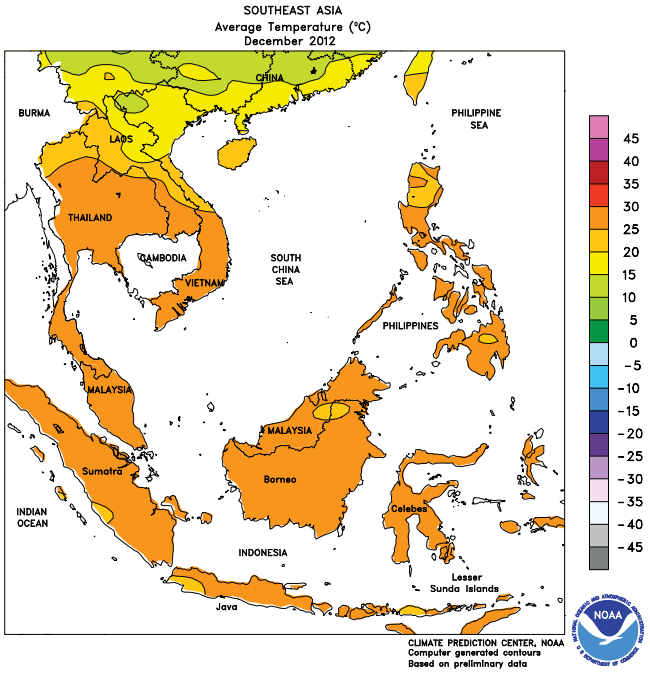


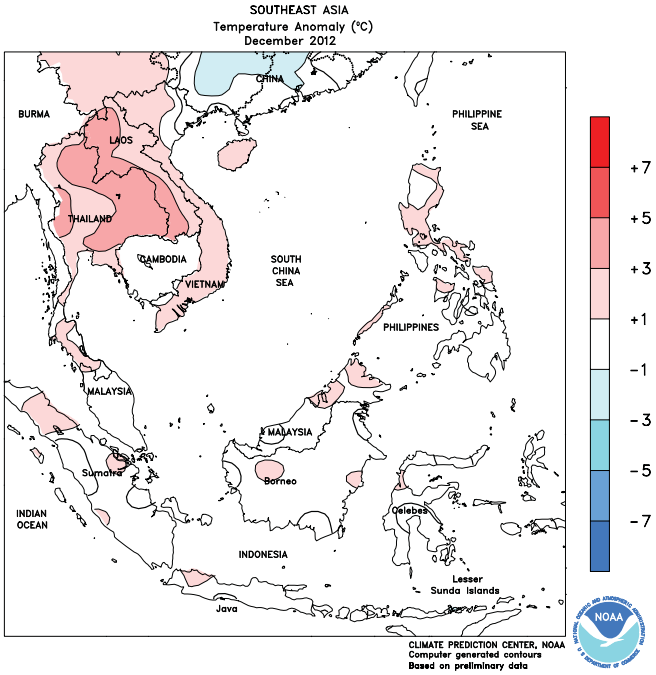
EASTERN ASIA

December rainfall (including some snow) was near to above normal across wheat and rapeseed areas, maintaining or boosting moisture reserves. Both crops were dormant by the end of the month, as below-normal temperatures settled into portions of the Yangtze Valley and across the North China Plain. In addition, a shallow snow cover — atypical for the area — provided some protection to wheat from bitter cold in northern and eastern parts of the North China Plain.



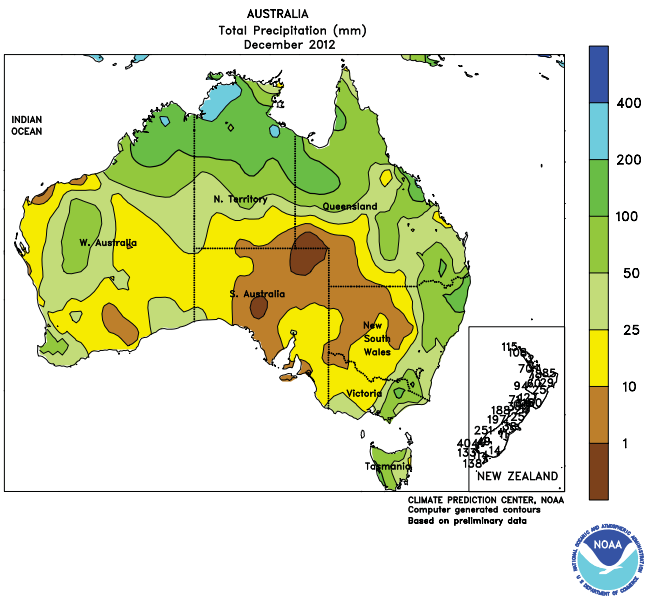


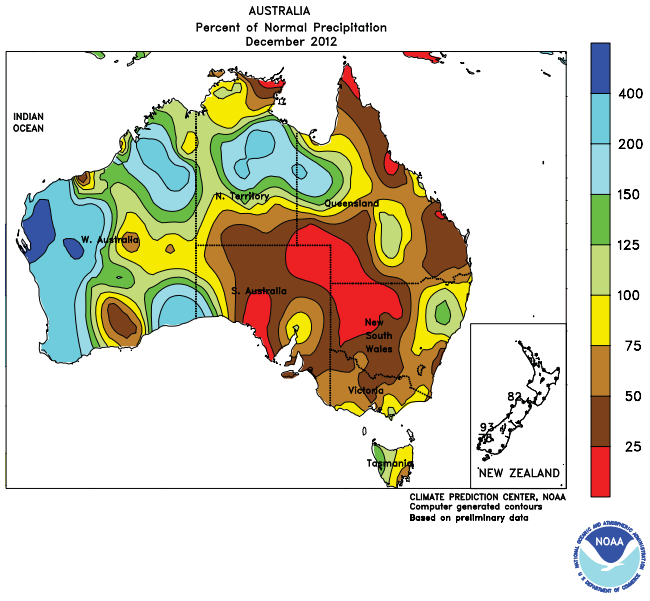


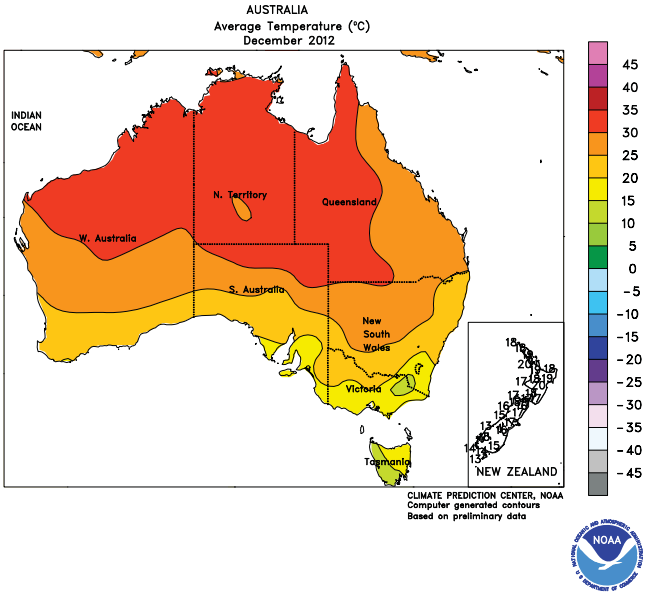


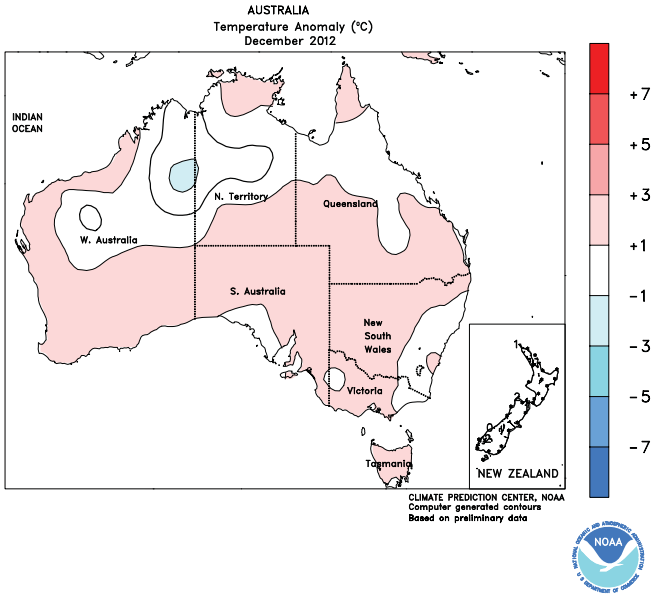
SOUTHEAST ASIA

Rainfall increased across Java, Indonesia, during the month of December. After a slow start to the rainy season, rainfall amounts were near normal by month's end, benefiting vegetative rice. Meanwhile, powerful Typhoon Bopha moved rapidly across the southern Philippines early in the month, reportedly causing damage to some corn and rice.





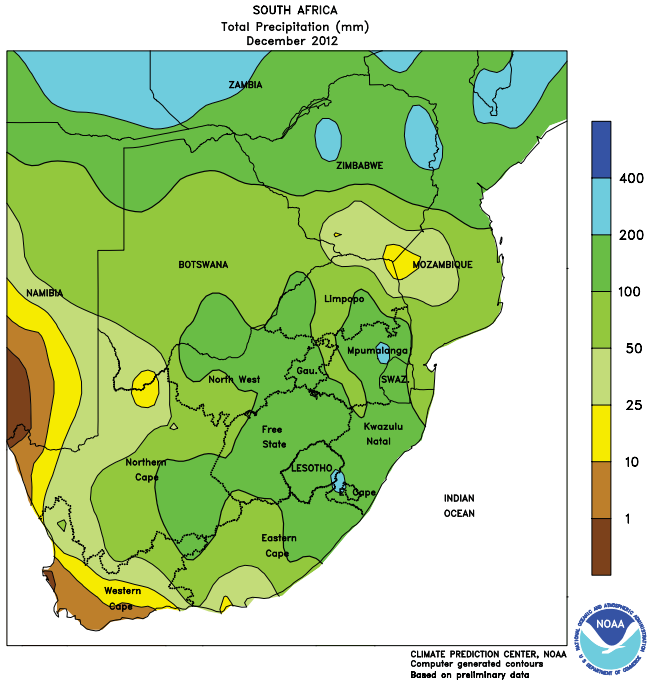


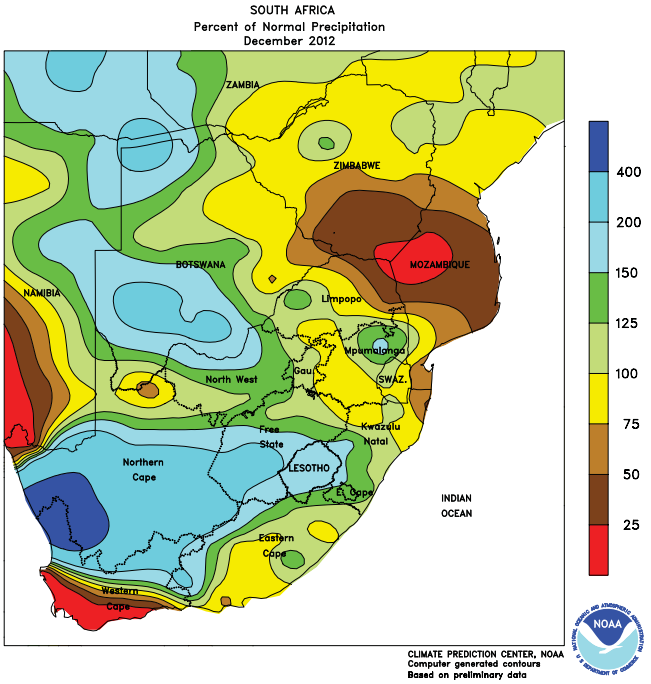


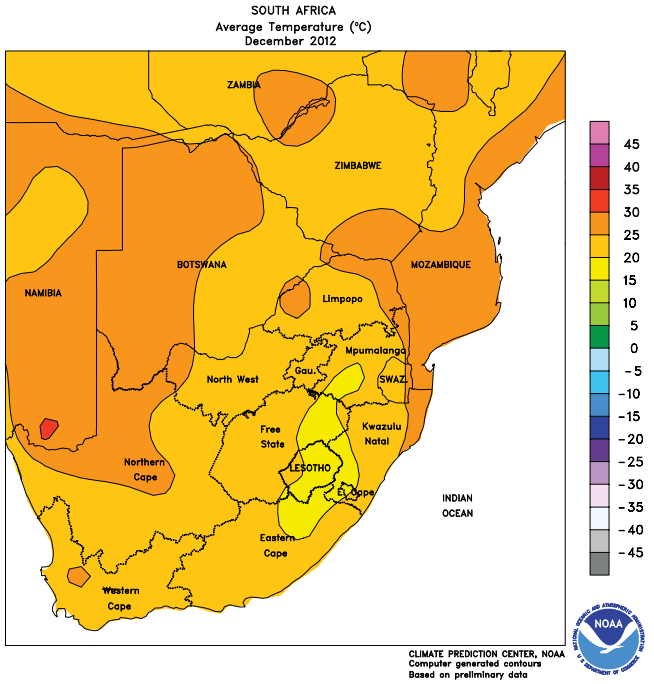
AUSTRALIA

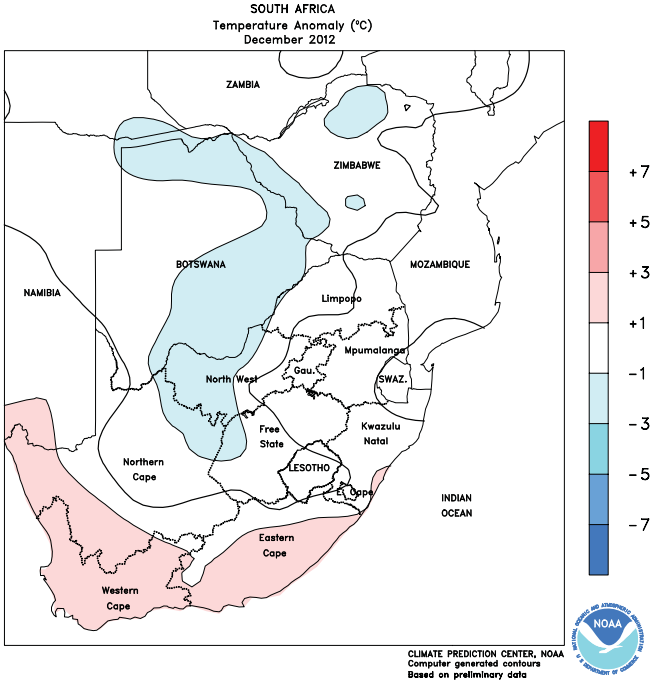
In December, above-normal rainfall in Western Australia hampered winter wheat harvesting. In contrast, very warm, mostly dry weather in southeastern Australia favored harvest activities. In southern Queensland and northern New South Wales, scattered showers maintained local moisture supplies for cotton and sorghum, while pockets of dryness increased irrigation requirements elsewhere.

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









SOUTH AFRICA

In December, warm, showery weather benefited rain-fed summer crops throughout most major production areas. Much of the corn belt recorded monthly rainfall in excess of 100 mm, with lingering pockets of drier conditions generally confined to southern sections of Mpumalanga and a few outlying northern production areas. Temperatures averaged slightly above normal across the corn belt, with daytime highs commonly ranging from the upper 20s (degrees C) in the east to the lower and middle 30s farther west, promoting development of emerging to vegetative summer crops in the absence of stressful heat. Elsewhere, December rainfall was near to above normal in KwaZulu-Natal, maintaining favorable levels of moisture for sugarcane despite a brief spell of mid-month dryness. Unseasonable wetness boosted irrigation reserves in northern and eastern sections of the Cape Provinces, but seasonably drier, warmer-than-normal conditions (monthly temperatures averaging 2°C above normal with daytime highs frequently reaching the middle and upper 30s) dominated western growing areas, including irrigated orchards and vineyards of Western Cape.

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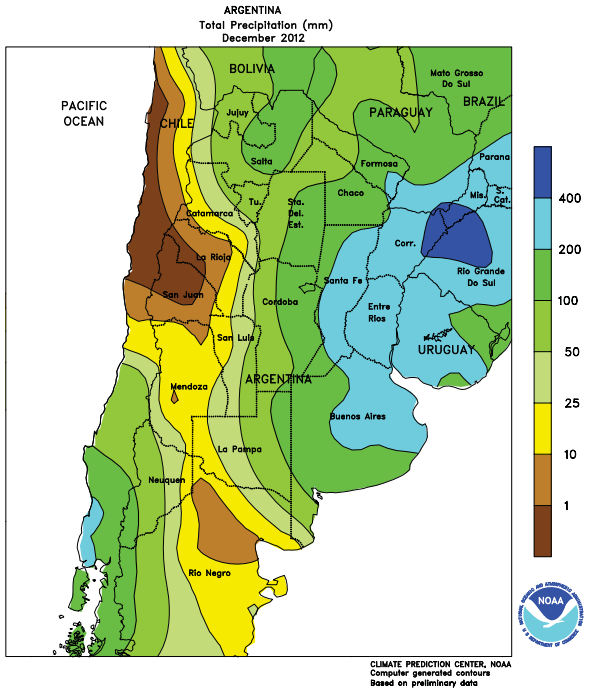

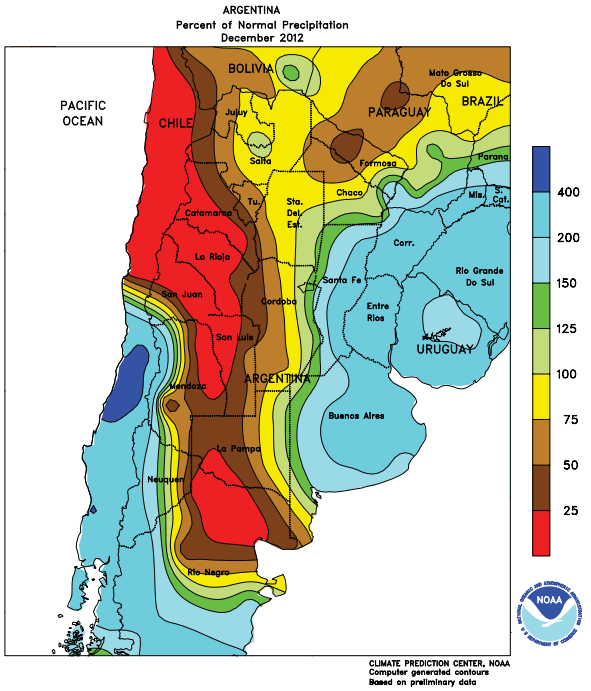

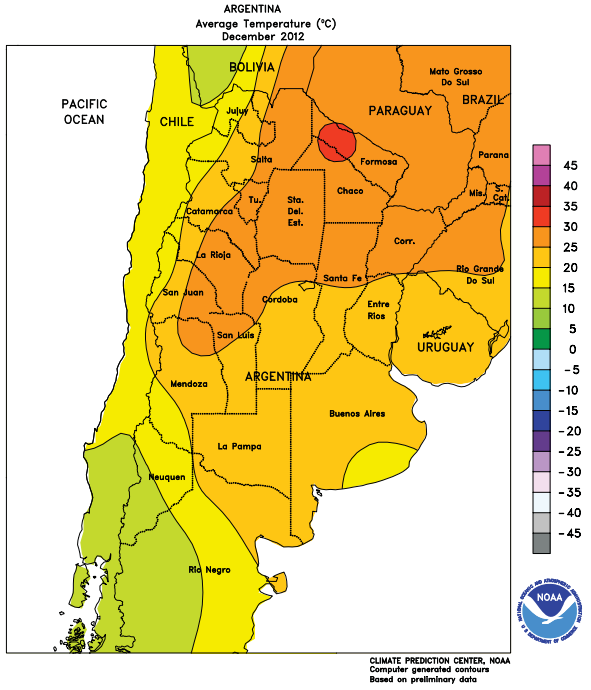

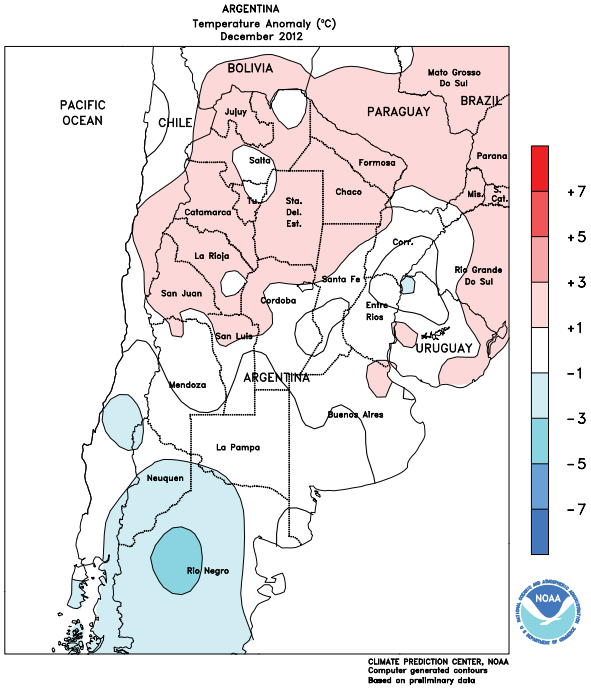

ARGENTINA

During December, lingering wetness sustained difficulties with fieldwork throughout key production areas of central Argentina. Monthly rainfall ranged from 100 to more than 200 mm from Buenos Aires northward through eastern sections of Chaco and Formosa; most western farming recorded 50 to 100 mm. Though below normal, the rain in the northwest was welcome due to this season's trend of drier-than-normal conditions. In most other areas, the wetness exacerbated delays in fieldwork, including winter grain harvesting and planting of corn and soybeans. In fact, substantial local delays were reported due to standing water in some fields. Monthly temperatures were near to above normal throughout the region. In central Argentina, daytime highs peaked in the lower and middle 30s (degrees C) on the sunny days, fostering summer crop development in the absence of stressful heat. In drier parts of the northwest, daytime highs occasionally topped 40°C.

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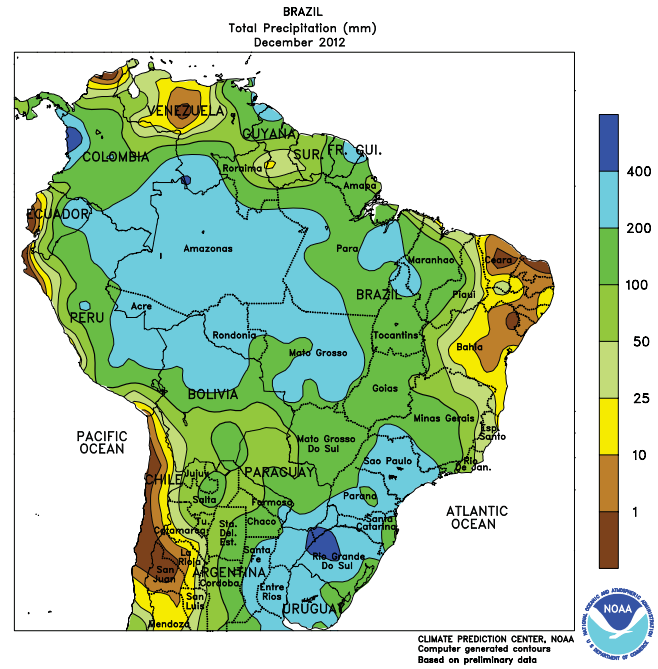

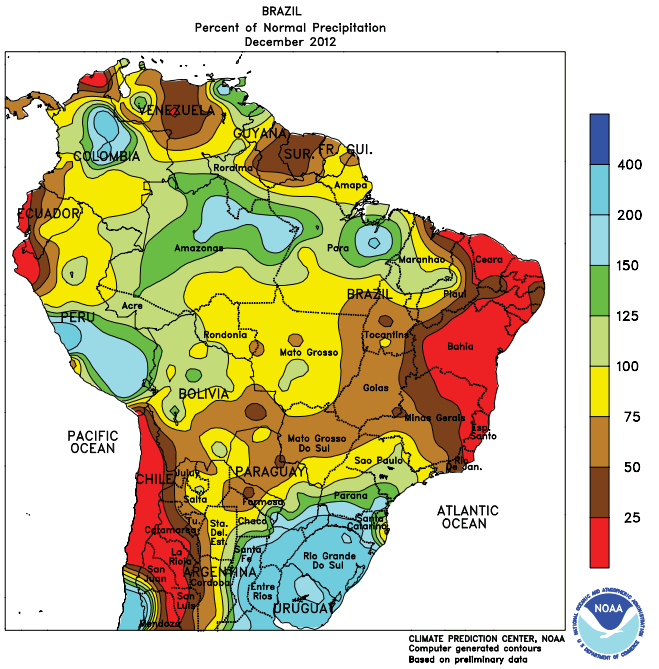

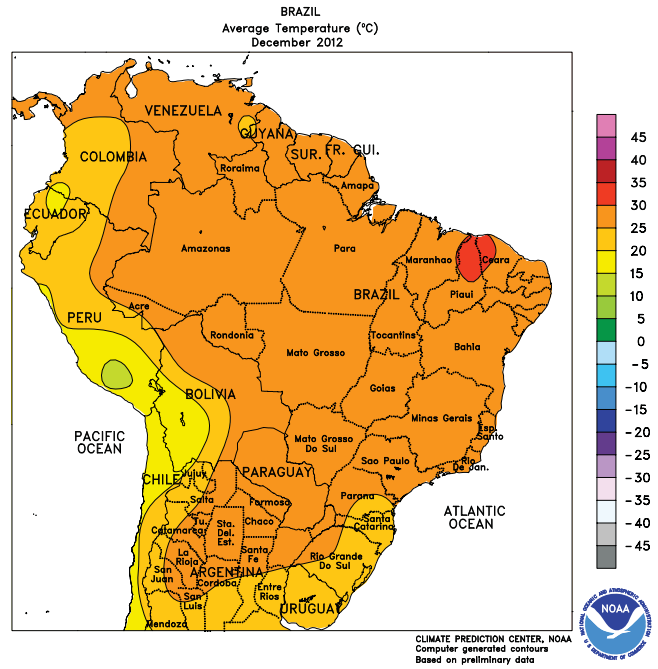

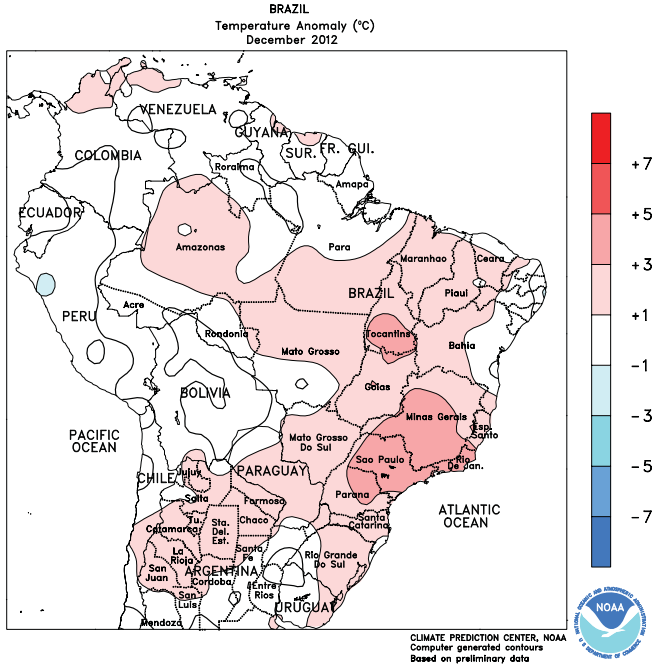

BRAZIL

In December, near- to above-normal rainfall benefited soybeans, corn, and other summer crops in the major production areas of southern and central Brazil. Rainfall totaled more than 200 mm over a large section of the south (Sao Paulo to Rio Grande do Sul), providing a timely boost in moisture for corn and soybeans following a dry November. Rainfall was generally lighter in the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), mainly from a mid-month drying trend that lowered monthly totals to below-normal levels. Periodic dryness also reduced moisture for crops, including summer row crops and coffee, in Minas Gerais. A more significant drying trend developed over the northeast during the latter half of December, with the main soybean and cotton areas of western Bahia recording less than 50 percent-of-normal rainfall. The dryness was an extension of the drying trend that has affected the northeast coast for much of the year. Monthly temperatures averaged 2 to 3°C above normal throughout the main production areas of southern and central Brazil, with daytime highs occasionally reaching 40°C in the traditionally warmer locations of Mato Grosso and the northeastern interior.

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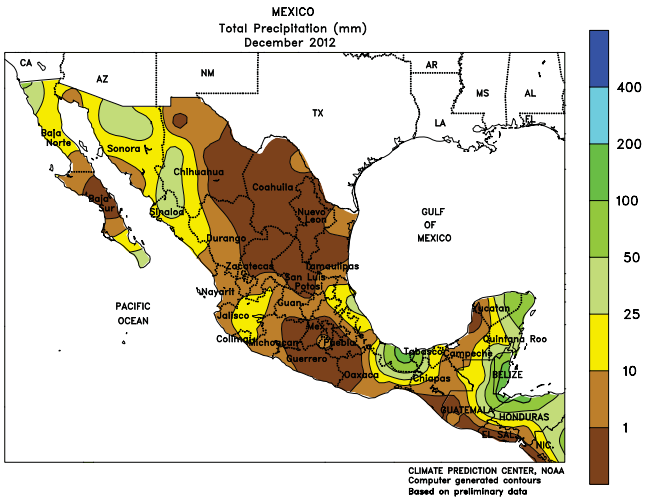

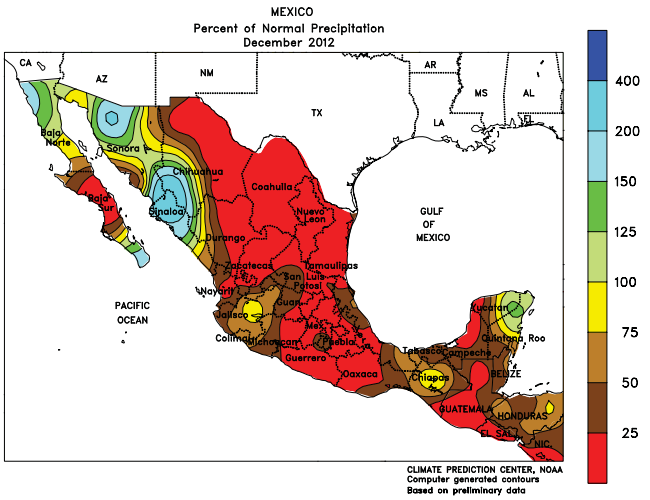

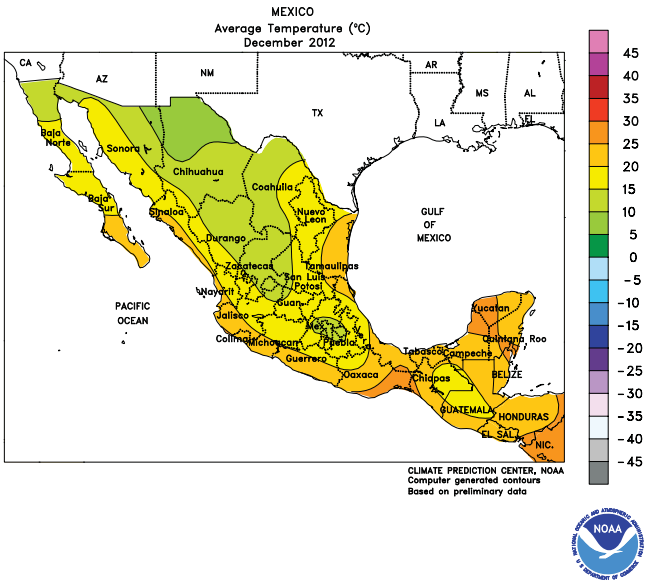

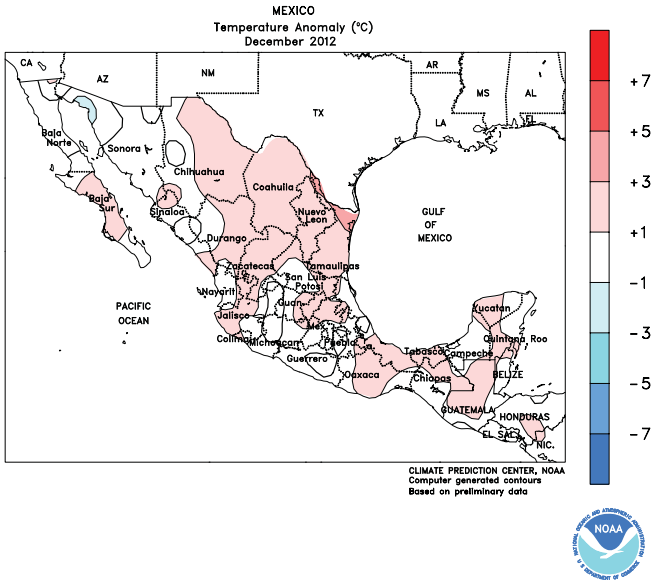

MEXICO

Mostly dry, warmer-than-normal weather continued to dominate northern Mexico during the month of December. The warmth promoted growth of winter-grown crops in the northwest, including wheat, and aided planting and early development of corn and vegetables in Sinaloa. Monthly temperatures averaged 2 to 3°C above normal in the northeast, reducing moisture for early planting of winter sorghum. Warmth and dryness also promoted drydown and harvesting of corn and other summer crops across the southern plateau and along the southern Pacific Coast. Meanwhile, scattered showers continued in the southeast (Oaxaca and Veracruz eastward through the Yucatan Peninsula), although amounts were generally below normal; the periodic dryness aided sugarcane harvesting and other seasonal fieldwork but increased irrigation requirements of fruits and other crops. According to the government of Mexico, total national reservoir capacity was at 47.5 percent as of December 30, compared with 53.9 percent last year and 82.7 percent in 2010. In the northwest (Sinaloa and Sonora), total reservoir capacity was at 39.8, ahead of last year (37.2 percent) but still well behind 2010 (73.9 percent).

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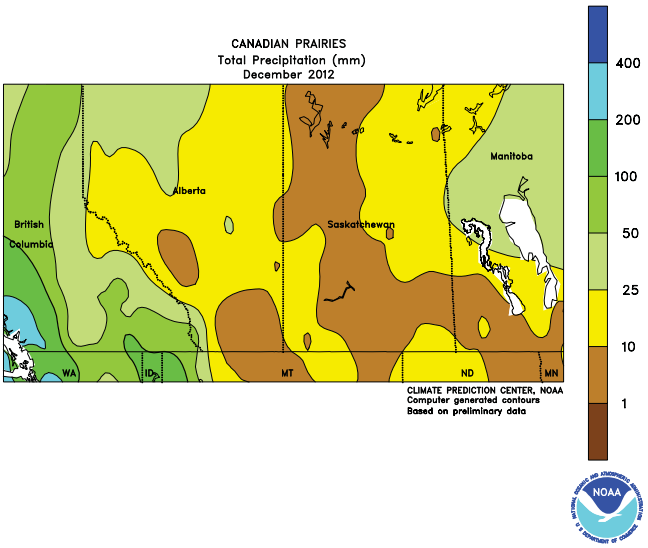
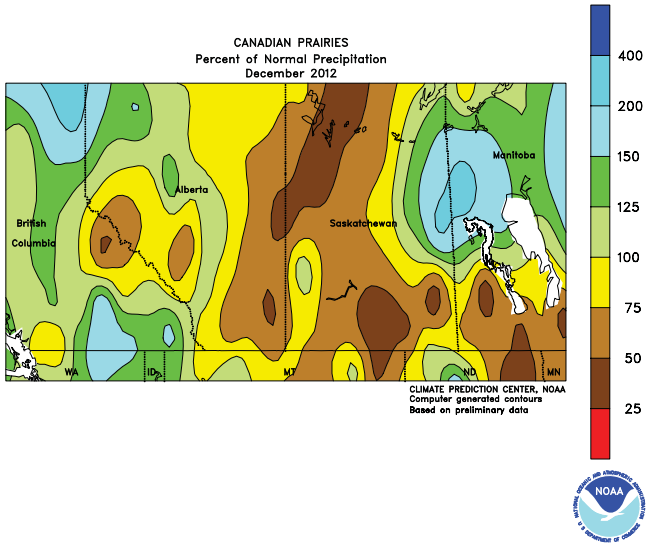
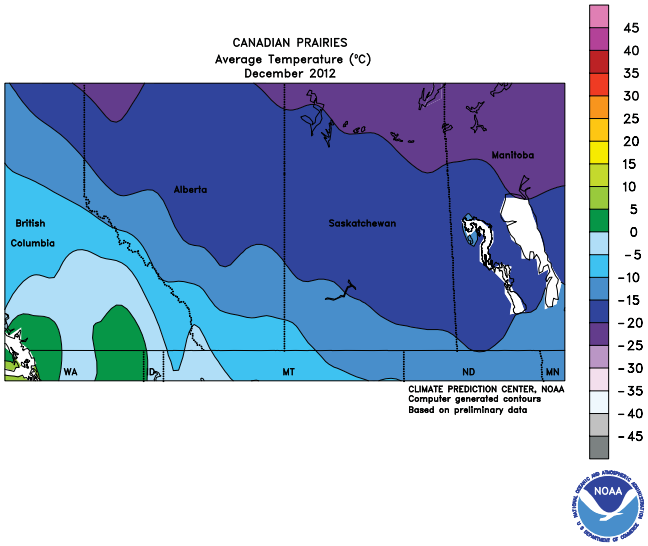
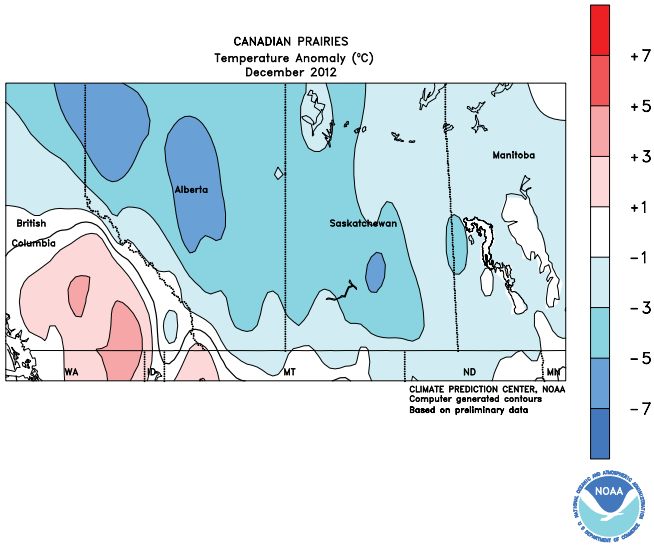


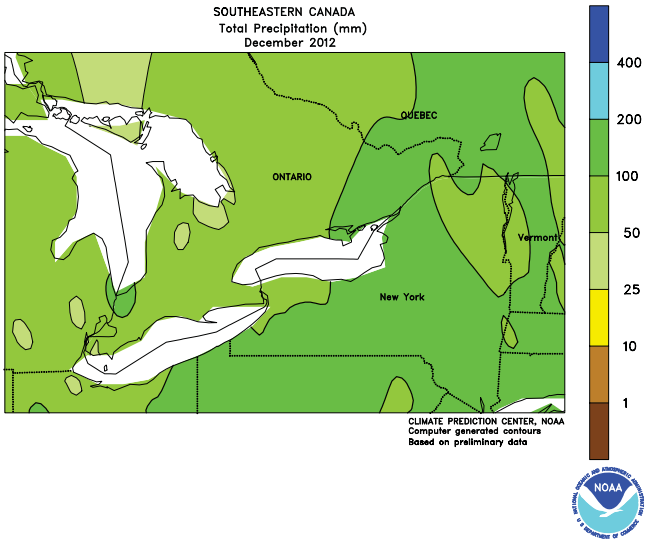


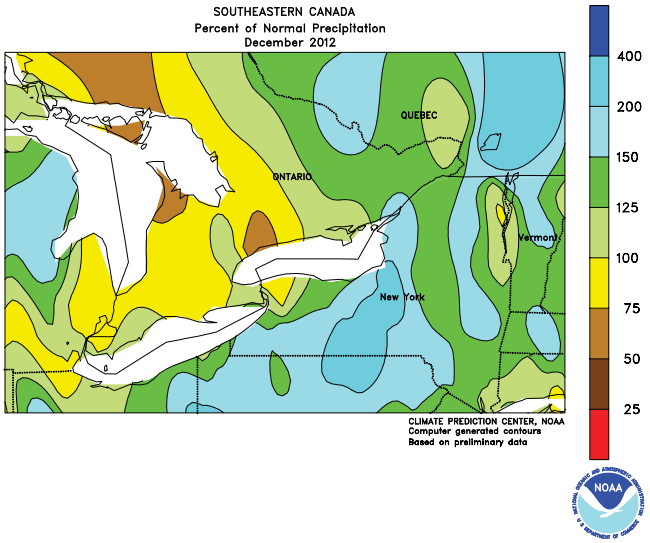


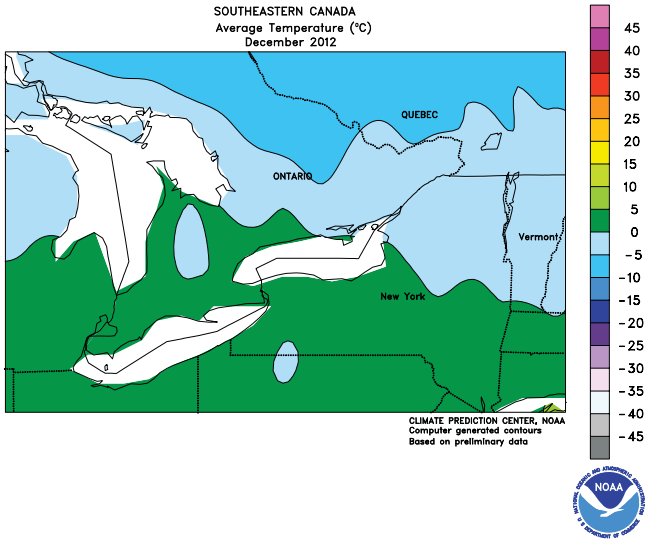


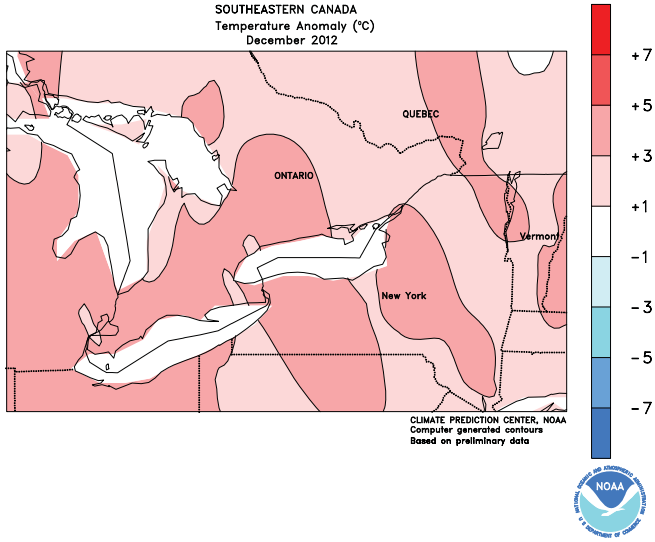
CANADIAN PRAIRIES

Cold, occasionally snowy weather dominated the Prairies for most of December. Monthly temperatures averaged 1 to 3°C below normal in Manitoba and eastern Saskatchewan and 3 to 7°C below normal in central and western agricultural districts, with nighttime lows frequently falling below -20°C. Existing snow cover offered some protection to overwintering grains and pastures, especially in Manitoba and the more northerly production areas of Alberta and Saskatchewan. Monthly precipitation was below normal (less than 10 mm, liquid equivalent) across much of the south and, consequently, snow cover was patchy and light at times in some southern production areas of Alberta and Saskatchewan. Meanwhile, heavier precipitation (10-50 mm liquid equivalent) fell elsewhere, adding to an already deep snowpack protecting overwintering wheat and pastures in most northern districts, as well as parts of the southwest.



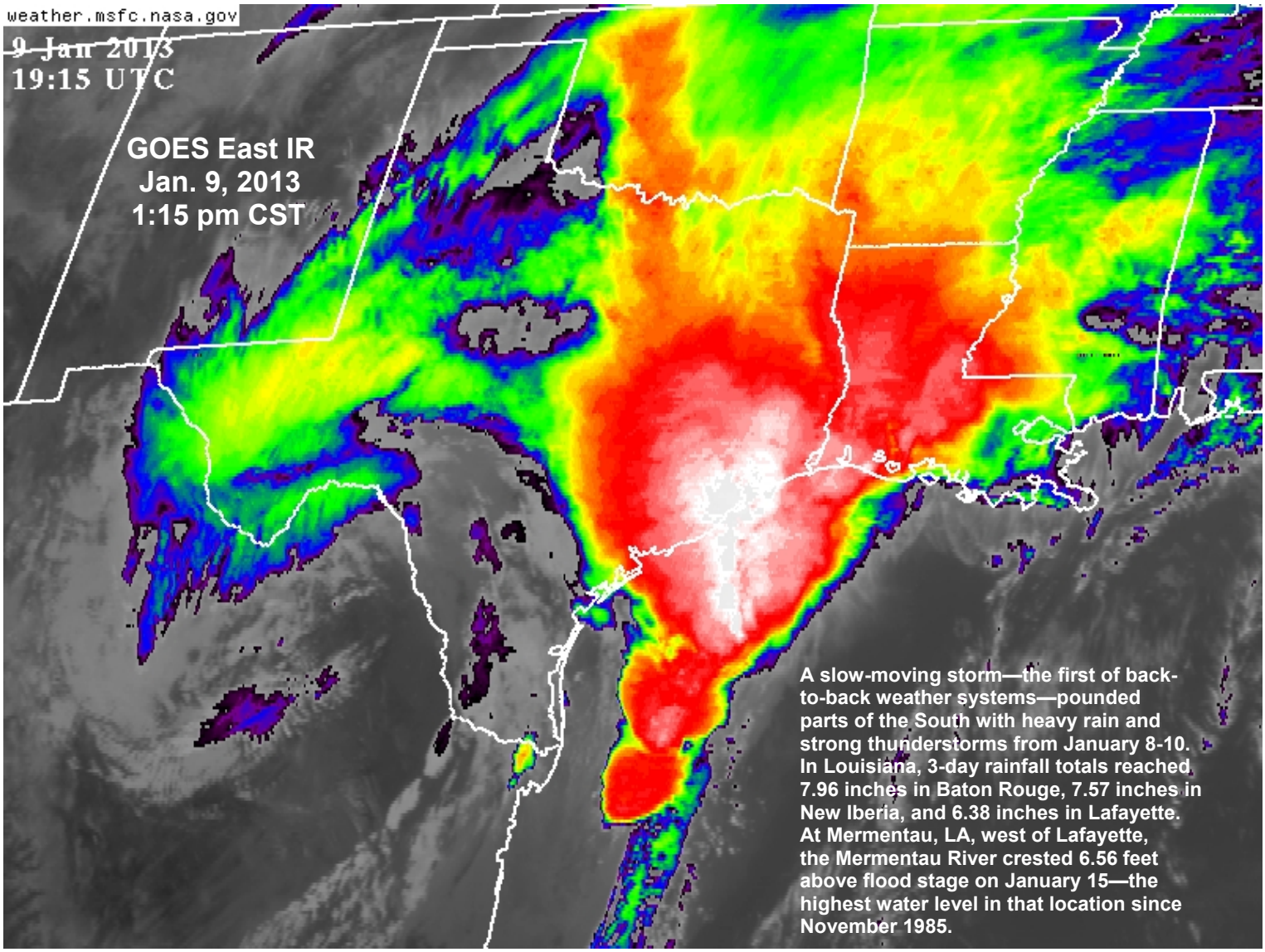






SOUTHEASTERN CANADA

In December, wet, unseasonably mild weather dominated the region. Near- to above-normal precipitation (50 to more than 100 mm, liquid equivalent) provided beneficial moisture for overwintering grains and wheat in the main production areas. Monthly average temperatures were several degrees C above normal, though nighttime lows occasionally fell below -20°C in Quebec several times during the month; temperatures were generally higher in Ontario, with lows falling to near -20°C at month's end. In Quebec, the coldest weather was preceded by light snowfall, which offered some protection from the bitter cold. By month's end, nearly all locations enjoyed a moderate to deep snow cover (at least 10 cm at most locations).



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

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