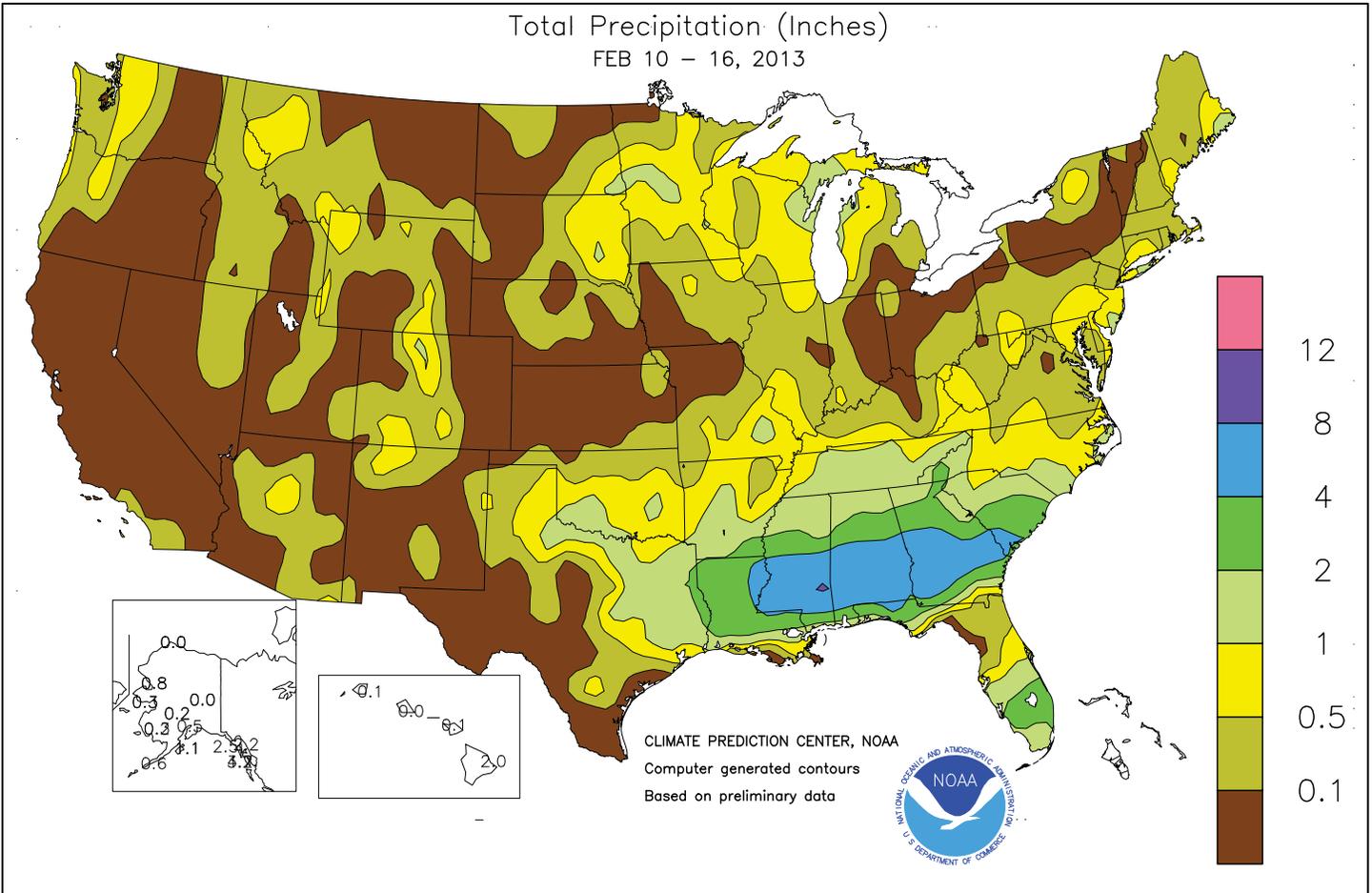


WEEKLY WEATHER AND CROP BULLETIN



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 February 10 – 16, 2013

Highlights provided by USDA/WAOB

During the first half of the week, additional heavy rain fell across the **South**. Weekly rainfall totaled 4 inches or more from **eastern Louisiana to southern South Carolina**. The rain perpetuated lowland flooding in a few areas, especially in the already saturated **central Gulf Coast region**. Rainfall was less widespread across **Florida's peninsula**, although local totals in excess of 2 inches eased irrigation demands. Farther north, a significant winter storm struck the **upper Midwest** early in the week, providing beneficial moisture but causing travel

(Continued on page 5)

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Water Supply Forecast for the Western United States

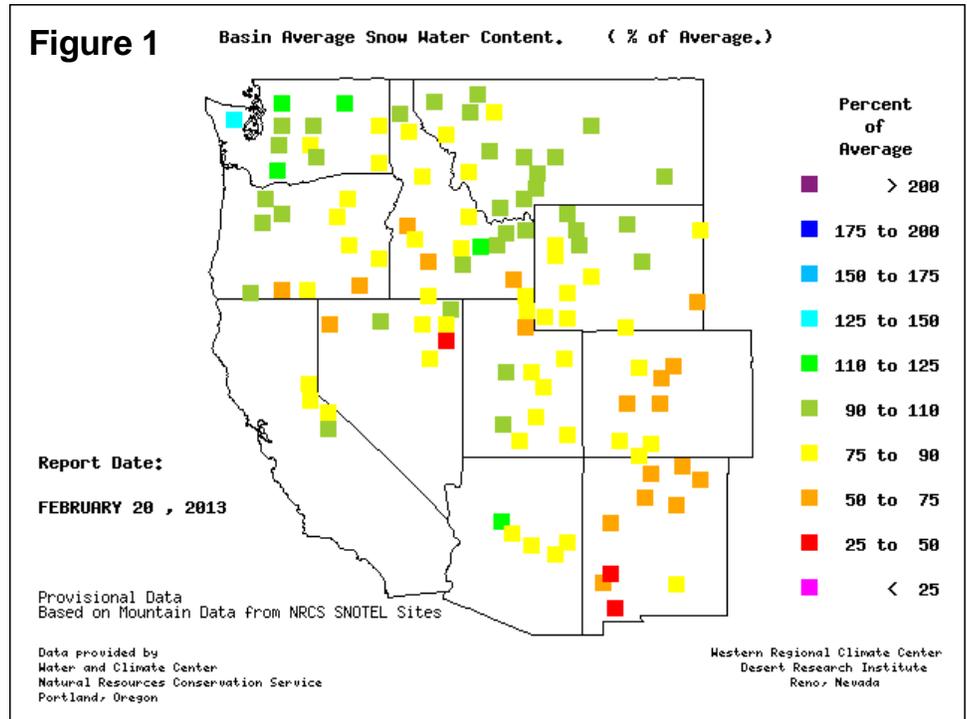
Highlights

January temperatures were very low west of the Rocky Mountain Divide, averaging 5 to 15°F below normal in many locations. However, monthly precipitation was also below normal across a large portion of the West. Specifically, the area of below-normal January precipitation included all of Washington, western Oregon, nearly all of Idaho, and most of Wyoming, Utah, Nevada, and Colorado. Near-normal precipitation was recorded in eastern Oregon, southwestern Idaho, northeastern Nevada, several basins in Montana, northeastern Wyoming, and southwestern Colorado. Much-above-normal precipitation was confined to the Mogollon Rim in central Arizona, the Cheyenne Basin in eastern Wyoming, and portions of Alaska. Due to the unusually dry January in many areas, projected seasonal water supplies in the West declined in nearly every state and basin, compared to the January 1 forecasts.

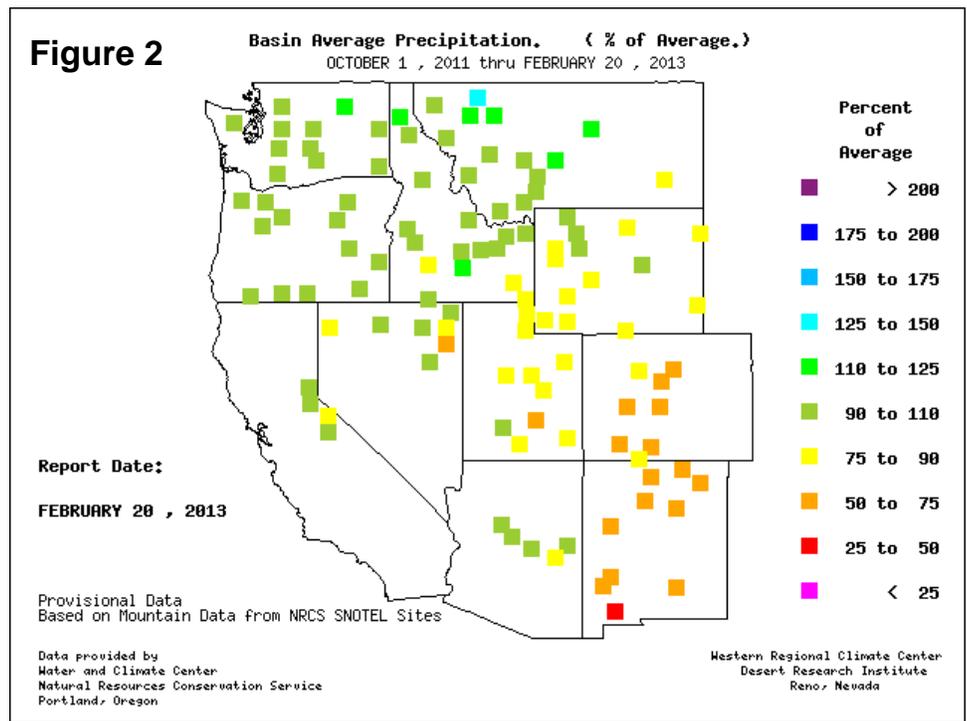
Snowpack and Precipitation

February opened with the driest conditions located along the eastern slope of the Continental Divide from Wyoming to New Mexico. By February 20, 2013, the lowest snow water content values, relative to normal, were located in basins across Colorado and New Mexico (figure 1). Slightly below-average values (75 to 90 percent of average) were common elsewhere in the

SNOTEL – River Basin Snow Water Content



SNOTEL – River Basin Snow Water Content



West. Widespread near- to above-average snow water content values were mostly confined to the Cascades and the eastern slopes of the northern Rockies.

Season-to-date precipitation (October 1, 2012 – February 20, 2013) indicated a fairly sharp gradient between near- to above-normal totals in the Northwest and drier-than-normal conditions from much of Wyoming southward into the Four Corners States (figure 2). Despite the absence of La Niña, or any strong signal from the equatorial Pacific Ocean, atmospheric and precipitation patterns across the western U.S. have skewed in the direction of what normally what would be expected during La Niña.

Spring and Summer Streamflow Forecasts

By February 1, 2013, projections for spring and summer streamflow were indicating the likelihood of below-normal runoff in much of the Southwest, as well as much of the Great Basin (figure 3). Near- to above-average runoff can be expected across the northern tier of the West, including the Columbia River Basin and the Missouri River Basin. From an overall perspective, preliminary February 1 runoff forecasts indicated worsening conditions, compared to January 1.

Reservoir Storage

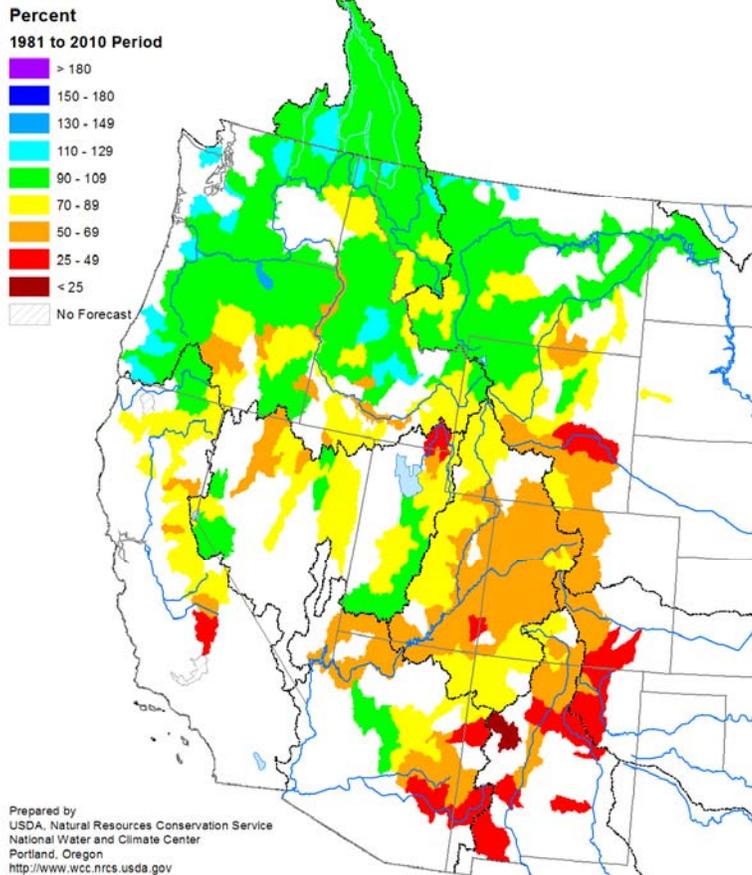
On February 1, 2013, reservoir storage as a percent of average for the date was near to above normal in California, Idaho, Montana, Utah, Washington, and Wyoming (figure 4). Storage was below average in the other five Western States, but was substantially below average in Arizona, Colorado, Nevada, and New Mexico.

For More Information

The National Water and Climate Center homepage provides the latest available snowpack and water supply information. Please visit:

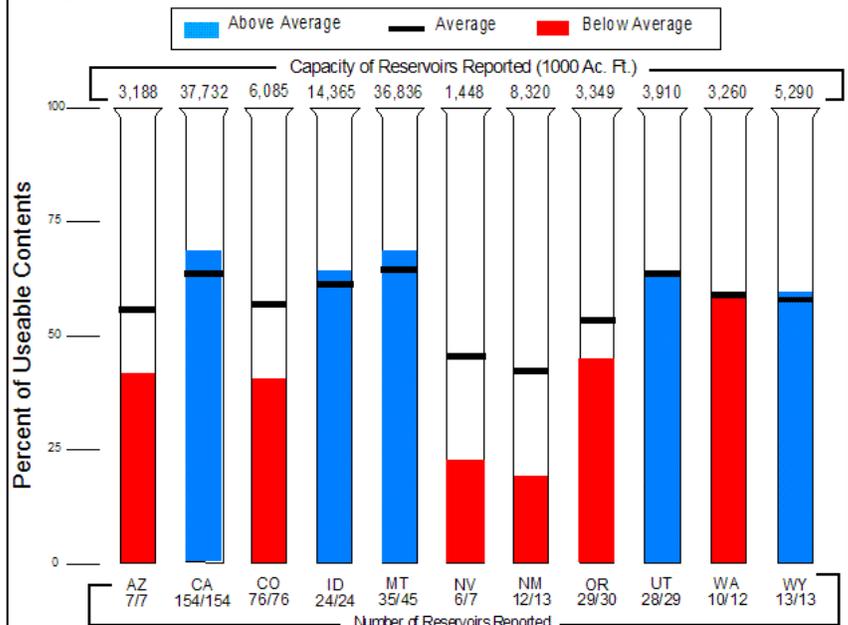
<http://www.wcc.nrcs.usda.gov>

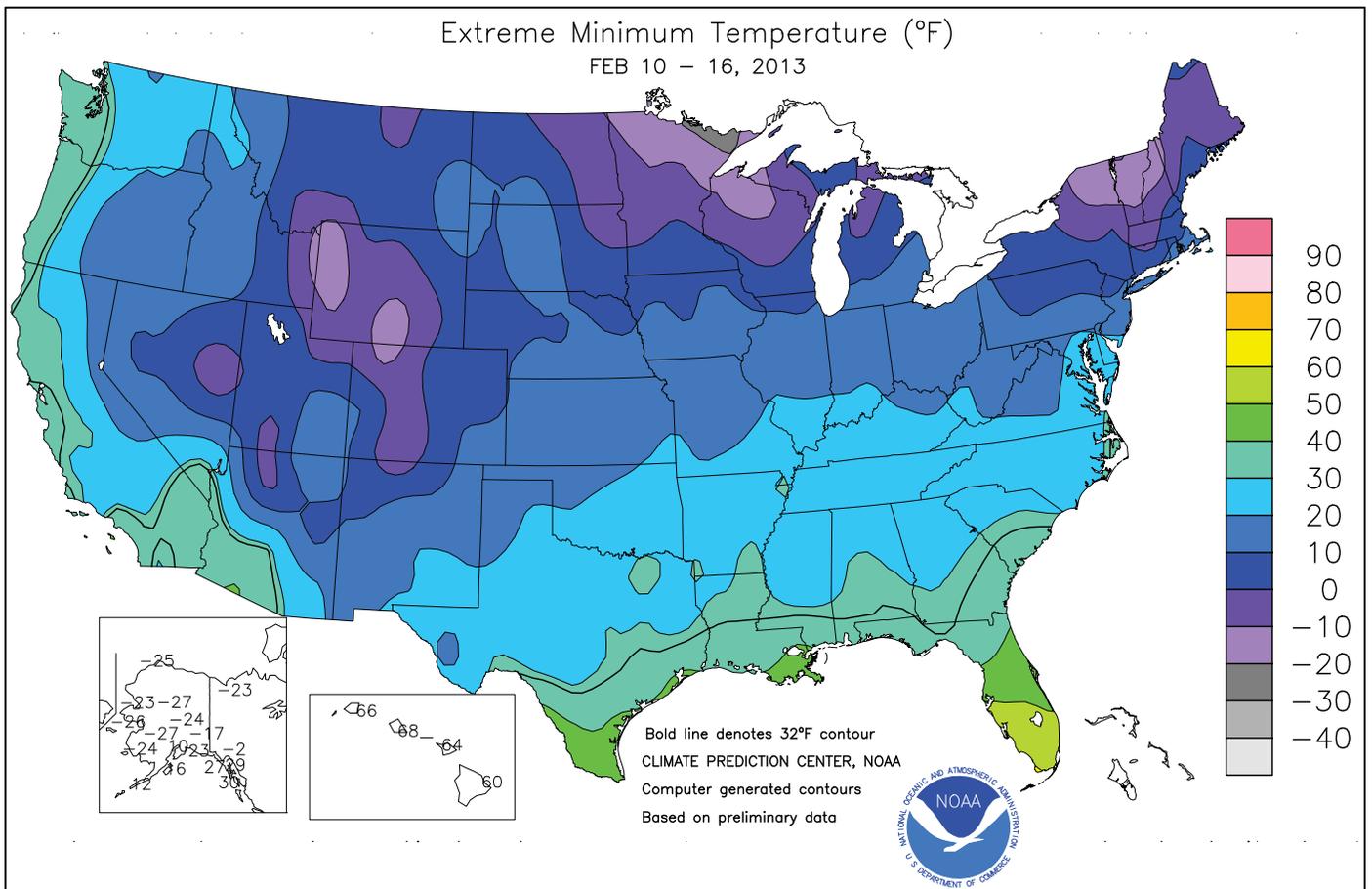
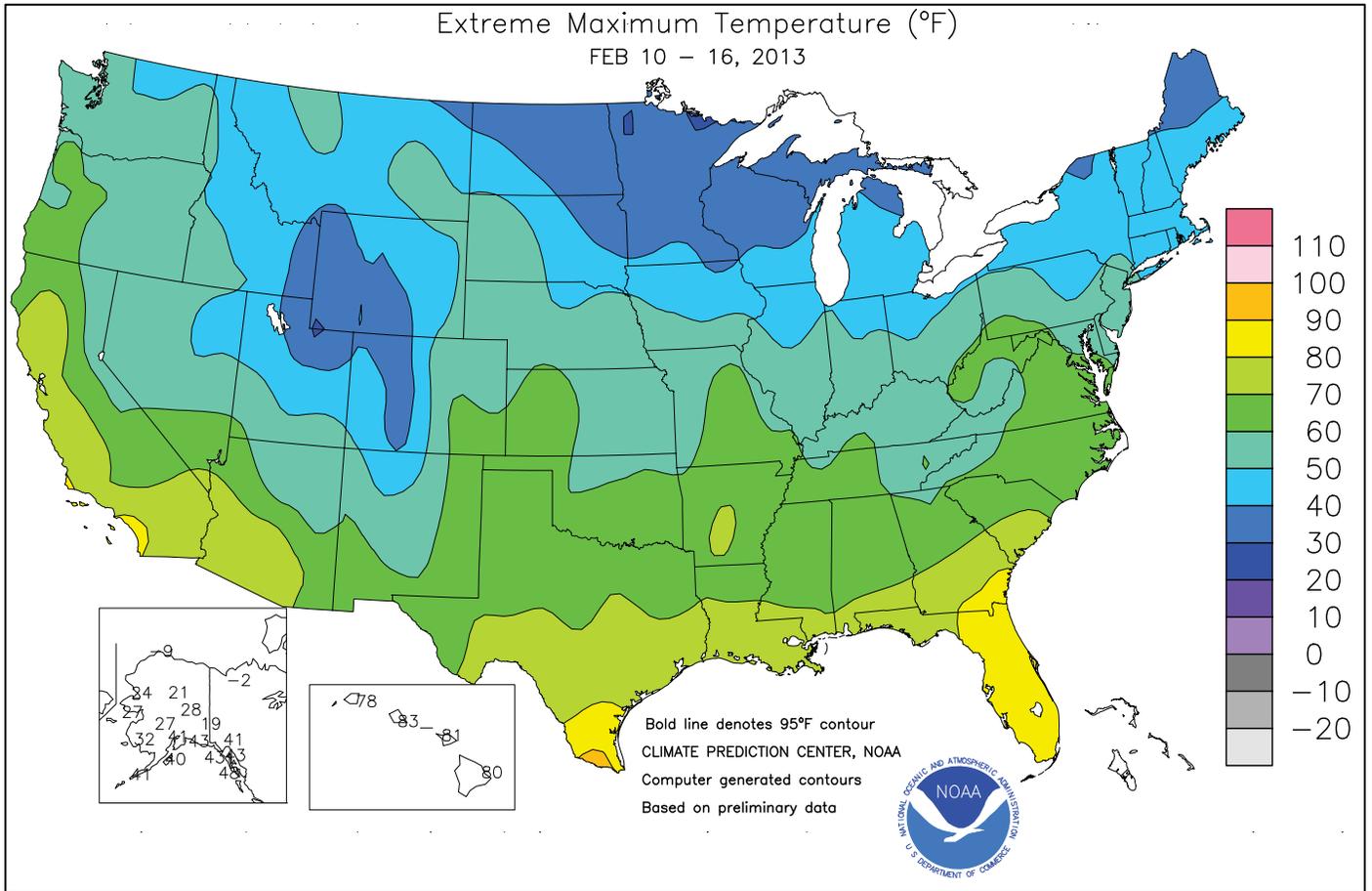
Figure 3
Spring and Summer Streamflow Forecasts as of February 1, 2013



Reservoir Storage as of February 1, 2013

Figure 4



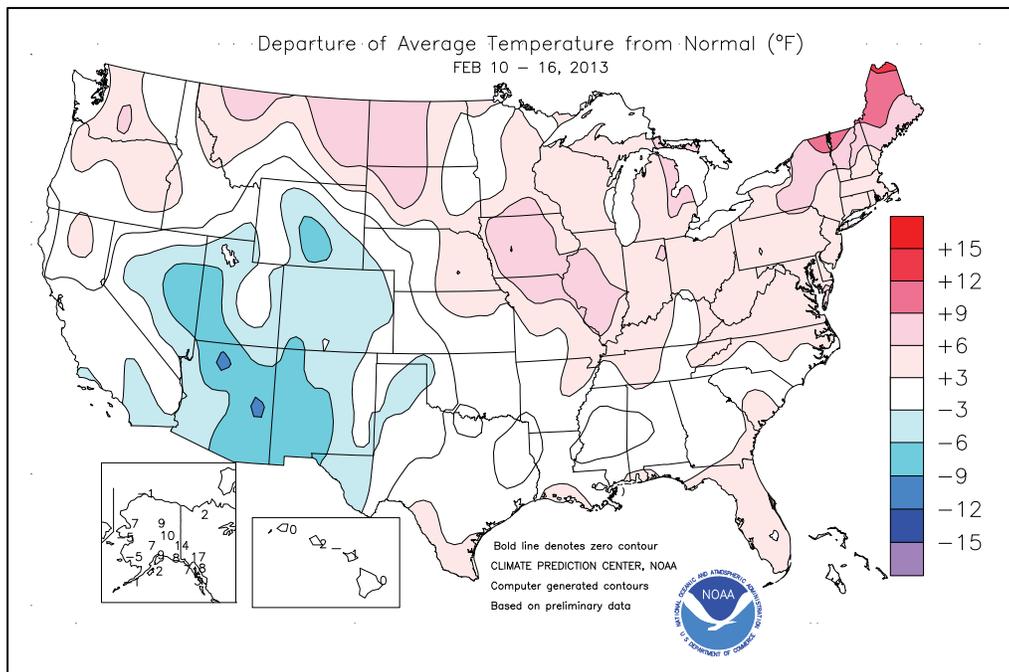


(Continued from front cover)

disruptions and increasing livestock stress. Although several days of relatively mild weather trailed the storm, bitterly cold conditions returned to the **upper Midwest** at week's end. Meanwhile, variable conditions prevailed on the **Plains**. Eastern portions of the **northern Plains** also experienced the early-week storm, while much-needed precipitation—both rain and snow—fell across the **southern Plains**, mainly on February 12. However, little or no precipitation fell during the week across the **central Plains** and the **northern High Plains**. Elsewhere, most of the **West** continued to receive below-normal precipitation, despite fairly widespread rain and snow showers. Nearly all of **California** was dry, however, and has not received appreciable moisture since late 2012.

Persistently chilly conditions were confined to the **Southwest**. Across the remainder of the U.S., near- to above-normal temperatures prevailed. Weekly readings averaged more than 10°F above normal in **northern New England**.

Early in the week, snow blanketed the **upper Midwest**, while heavy rain soaked the **Deep South**. Record-setting snowfall totals for February 10 included 12.0 inches in **Sisseton, SD**; 9.3 inches in **Fargo, ND**; 6.7 inches in **St. Cloud, MN**; and 4.4 inches in **North Platte, NE**. From February 9-11, snowfall in **South Dakota** reached 17.3 inches in **Sisseton**, 13.2 inches in **Aberdeen**, and 9.9 inches in **Mitchell**, with the bulk of the accumulation occurring on the 10th. Farther south, daily-record rainfall totals for February 10 reached 3.90 inches in **Hattiesburg, MS**, and 2.49 inches in **Longview, TX**. **Hattiesburg's** 4-day total, from February 10-13, climbed to 6.31 inches. Elsewhere in **Mississippi**, February 10-12 totals included 6.38 inches in **Meridian** and 5.77 inches in **Vicksburg**. Meanwhile, high winds raked the **Southwest**, including **New Mexico**, where gusts on February 10 were clocked to 68 mph in **Las Vegas** and **Tucumcari**. By February 12, however, parts of the **southern High Plains** received much-needed moisture in the form of wet snow. In **northern Texas**, daily-record snowfall totals for the 12th reached 8.0 inches in **Dalhart** and 4.7 inches in **Borger** and **Amarillo**. With a 4.0-inch snowfall total, **Guymon, OK**, also received a daily-record amount on February 12. As the week progressed, additional rounds of heavy rain affected parts of the **Deep South**. Daily-record totals topped 2 inches in several locations, including **Columbus, GA** (3.13 inches on February 12); **Montgomery, AL** (2.82 inches on February 12); and **Macon, GA** (2.21 inches on February 11). **Montgomery** received more than 2 inches of rain on 3 consecutive days from February 10-12, totaling 7.50 inches. Similarly, **Columbus** netted 6.02 inches of rain from February 10-13. Later, daily-record totals in **Florida** for February 14 reached 1.56 inches in **Naples**, 0.87 inch in **Fort Lauderdale**, and 0.85 inch in **Melbourne**. Impacts from the **Southern** storminess included flooding and localized wind damage. The **Leaf River near McLain, MS**, climbed 9.14 feet above flood stage on February 14, the highest water level in that location since April 1980. The **Chickasawhay River at Leaksville, MS**, rose 9.18 feet above flood stage on February 14, marking the highest



level in that location since February 1990. **Southern Mississippi** and neighboring areas also endured a tornado outbreak on February 10. One tornado, an EF-4 with winds estimated near 170 mph, cut a 21-mile swath—up to three-quarters of a mile wide—through **Hattiesburg** and neighboring communities.

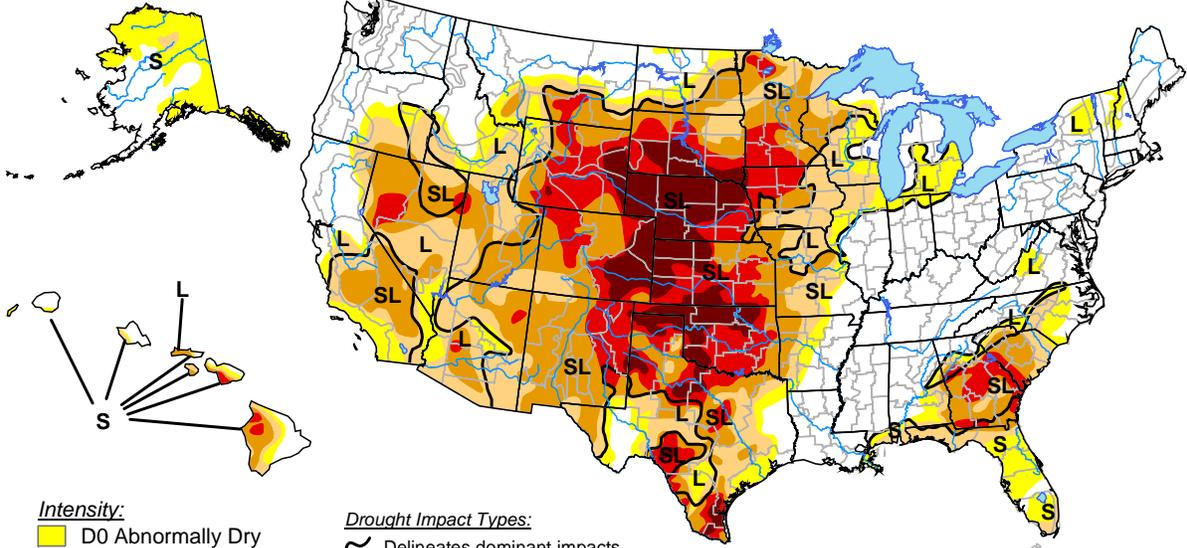
Hot weather lingered on February 10 across **Deep South Texas**, where **McAllen** posted a daily-record high of 96°F. Two days later, **Melbourne, FL**, tied a daily-record high for February 12 with a high of 85°F. Additional daily-record highs across the **lower Southeast** occurred on February 13 in locations such as **Orlando, FL** (89°F); **Melbourne** (88°F); and **Savannah, GA** (80°F). Meanwhile, markedly colder air overspread the **Southwest**, resulting in consecutive daily-record lows of 17°F (on February 10-11) in **Douglas, AZ**. Another daily-record low (18°F) occurred in **Douglas** on February 13. During the second half of the week, warmth developed across the **Pacific Coast States**. By February 15, highs climbed to daily-record levels in **Camarillo, CA** (85°F), and **Medford, OR** (69°F). The following day, additional record-setting highs in **California** (for February 16) included 86°F in **El Cajon** and 79°F in **Santa Barbara**.

Cold weather in **western Alaska** contrasted with mild conditions across the remainder of the state. Weekly temperatures averaged at least 10°F above normal in parts of **eastern Alaska**. Widespread storminess accompanied **western Alaska's** cold conditions. Weekly snowfall totaled 9.9 inches in **King Salmon**, aided by a daily-record amount (3.5 inches) on February 12. **Kotzebue's** weekly precipitation of 0.83 inch included a daily-record total of 0.40 inch on February 14. Farther south, widespread showers dampened **Hawaii's** windward locations, especially toward week's end. On February 15-16, 24-hour **Big Island** totals reached 2.72 inches in **Glenwood** and 2.25 inches in **Mountain View**. Elsewhere on the **Big Island**, **Hilo's** February 1-16 rainfall climbed to 7.28 inches (135 percent of normal). Somewhat drier conditions prevailed across the **western Hawaiian Islands**, where month-to-date rainfall included 0.27 inch (15 percent of normal) in **Lihue, Kauai**, and a trace (1.07 inches below normal) in **Honolulu, Oahu**.

U.S. Drought Monitor

February 12, 2013

Valid 7 a.m. EDT



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.



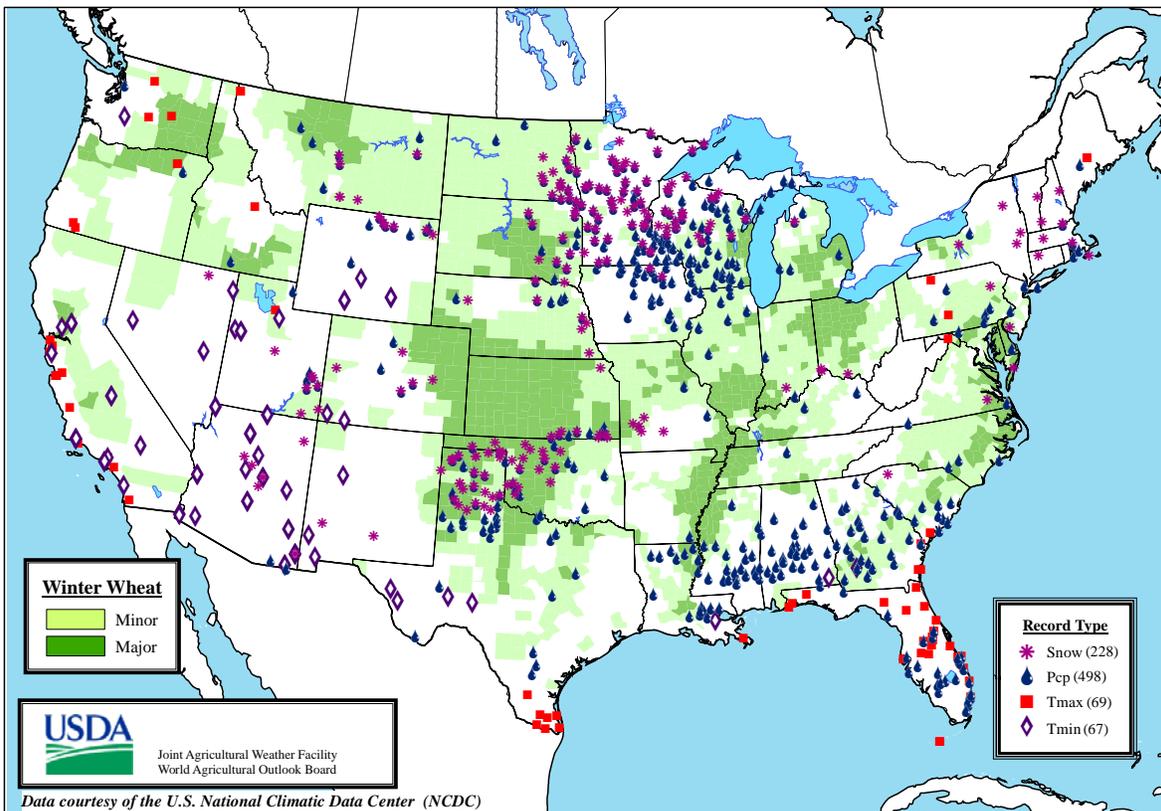
Released Thursday, February 14, 2013

Author: Michael Brewer/Liz Love-Brotak NOAA/NESDIS/NCDC

<http://droughtmonitor.unl.edu/>

Daily Weather Records (ASOS & COOP)

February 10-16, 2013

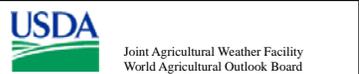


Winter Wheat

- Minor
- Major

Record Type

- Snow (228)
- Pcp (498)
- Tmax (69)
- Tmin (67)



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

National Weather Data for Selected Cities

Weather Data for the Week Ending February 16, 2013

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	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	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OF MORE	.50 INCH OF MORE	
AL BIRMINGHAM	55	39	63	30	47	1	2.18	1.21	1.32	17.40	142	10.91	140	94	53	0	2	4	2	
HUNTSVILLE	54	38	61	27	46	3	1.01	-0.14	0.55	16.87	123	10.12	124	86	55	0	2	4	1	
MOBILE	66	45	71	33	55	3	1.18	-0.01	0.53	10.30	78	6.82	80	87	65	0	0	4	1	
AK MONTGOMERY	60	41	70	31	50	1	7.51	6.21	2.82	18.28	142	11.63	146	90	55	0	1	4	3	
ANCHORAGE	33	21	41	10	27	9	0.48	0.31	0.16	3.91	188	2.08	202	86	75	0	7	6	0	
BARROW	-13	-21	-9	-25	-17	-1	0.00	-0.03	0.00	0.13	43	0.06	33	80	71	0	7	0	0	
FAIRBANKS	15	-7	28	-24	4	9	0.00	-0.08	0.00	1.98	133	0.79	105	85	79	0	7	0	0	
JUNEAU	40	32	43	29	36	8	2.20	1.21	1.06	17.57	141	12.65	179	96	90	0	3	6	2	
KODIAK	37	25	40	16	31	1	1.13	-0.33	0.50	19.68	102	14.04	120	86	71	0	6	5	1	
NOME	9	-9	27	-26	0	-5	0.27	0.08	0.13	2.15	91	1.53	113	85	80	0	7	5	0	
AZ FLAGSTAFF	38	6	52	-8	22	-10	0.21	-0.40	0.19	5.22	98	3.14	89	84	41	0	7	2	0	
PHOENIX	66	44	80	38	55	-3	0.08	-0.07	0.08	2.34	113	1.47	127	58	33	0	0	1	0	
PRESCOTT	51	22	65	17	36	-3	0.01	-0.42	0.01	3.51	92	2.09	83	79	26	0	7	1	0	
TUCSON	62	35	75	29	48	-7	0.26	0.07	0.26	2.28	93	1.11	78	74	36	0	4	1	0	
AR FORT SMITH	55	35	65	29	45	3	1.51	0.93	1.00	8.92	127	6.17	170	83	40	0	3	3	2	
LITTLE ROCK	56	37	71	29	47	3	0.55	-0.25	0.30	11.30	112	5.70	105	85	40	0	1	4	0	
CA BAKERSFIELD	67	36	76	32	52	-1	0.00	-0.28	0.00	1.56	61	0.91	50	67	42	0	1	0	0	
FRESNO	66	38	73	36	52	1	0.00	-0.50	0.00	3.03	65	1.00	30	80	58	0	0	0	0	
LOS ANGELES	68	46	80	43	57	-1	0.73	-0.04	0.73	4.93	75	2.11	45	73	44	0	0	1	1	
REDDING	69	37	73	31	53	4	0.00	-1.37	0.00	11.50	80	1.46	15	66	40	0	2	0	0	
SACRAMENTO	65	34	71	30	50	-1	0.00	-0.90	0.00	7.13	85	0.98	16	89	35	0	2	0	0	
SAN DIEGO	66	47	78	44	57	-2	0.00	-0.50	0.00	3.69	78	1.50	44	68	43	0	0	0	0	
SAN FRANCISCO	63	42	68	38	53	1	0.00	-1.02	0.00	6.71	69	0.47	7	79	67	0	0	0	0	
STOCKTON	64	33	70	28	49	-2	0.00	-0.61	0.00	5.60	94	1.30	31	89	70	0	2	0	0	
CO ALAMOSA	36	4	44	-1	20	-1	0.00	-0.03	0.00	0.88	138	0.07	23	78	52	0	7	0	0	
CO SPRINGS	40	16	58	11	28	-3	0.06	0.01	0.06	0.64	81	0.38	103	74	33	0	7	1	0	
DENVER INTL	42	15	58	8	28	-2	0.01	0.00	0.01	0.60	109	0.33	138	67	30	0	7	1	0	
GRAND JUNCTION	39	20	46	13	30	-3	0.21	0.12	0.13	1.87	143	0.82	104	90	63	0	7	2	0	
PUEBLO	47	14	65	8	31	-3	0.01	-0.02	0.01	0.66	85	0.36	92	74	44	0	7	1	0	
CT BRIDGEPORT	41	24	45	7	33	2	0.97	0.28	0.49	13.87	157	9.55	178	88	62	0	6	3	1	
HARTFORD	41	22	47	-4	31	3	0.32	-0.39	0.23	8.23	90	3.68	66	86	49	0	6	3	0	
DC WASHINGTON	51	34	60	26	43	6	0.60	-0.01	0.28	6.39	83	3.36	73	81	38	0	2	4	0	
DE WILMINGTON	47	28	55	18	38	5	0.83	0.19	0.53	8.90	107	4.98	101	91	48	0	6	4	1	
FL DAYTONA BEACH	74	55	84	43	65	6	0.55	-0.08	0.34	3.05	42	1.06	23	94	52	0	0	2	0	
JACKSONVILLE	72	48	83	36	60	5	0.24	-0.52	0.17	3.59	44	1.28	23	94	53	0	0	3	0	
KEY WEST	79	69	82	65	74	3	0.81	0.44	0.60	1.77	34	1.10	35	90	69	0	0	3	1	
MIAMI	80	66	87	55	73	4	1.74	1.22	1.29	2.79	53	2.28	75	89	59	0	0	3	1	
ORLANDO	78	56	89	47	67	5	0.50	-0.04	0.28	2.02	34	0.74	20	96	56	0	0	2	0	
PENSACOLA	68	49	79	38	58	4	1.06	-0.04	0.63	9.04	76	6.96	88	87	60	0	0	4	1	
TALLAHASSEE	68	45	77	30	57	3	0.23	-0.83	0.13	4.74	40	1.47	19	85	64	0	2	4	0	
TAMPA	74	59	80	49	66	4	0.73	0.08	0.40	3.61	60	1.41	38	90	60	0	0	3	0	
WEST PALM BEACH	78	63	88	52	71	4	1.83	1.20	1.59	3.76	44	2.62	49	87	66	0	0	3	1	
GA ATHENS	58	37	65	30	48	3	1.50	0.44	0.87	13.21	122	7.35	103	87	55	0	2	4	1	
ATLANTA	56	40	63	29	48	2	2.34	1.21	1.10	13.78	120	7.85	103	81	56	0	1	4	2	
AUGUSTA	62	40	70	30	51	4	2.96	1.97	1.34	11.33	114	6.66	98	94	59	0	3	5	2	
COLUMBUS	60	43	68	34	52	3	6.02	4.96	3.08	15.97	138	10.74	150	91	49	0	0	4	3	
MACON	60	39	67	28	49	1	5.22	4.11	2.21	14.38	125	9.52	126	99	55	0	2	4	3	
SAVANNAH	65	45	80	36	55	3	4.74	4.02	2.60	8.26	97	6.35	111	92	70	0	0	4	3	
HI HILO	78	64	80	60	71	0	1.96	-0.13	0.90	26.87	107	15.38	105	83	70	0	0	6	2	
HONOLULU	80	69	83	68	75	2	0.00	-0.58	0.00	2.43	35	2.42	60	68	61	0	0	0	0	
KAHULUI	79	66	81	64	73	1	0.12	-0.47	0.08	3.19	38	2.95	56	80	67	0	0	4	0	
LIHUE	76	68	78	66	72	0	0.12	-0.68	0.05	10.37	92	6.12	94	75	54	0	0	4	0	
ID BOISE	49	27	57	22	38	2	0.00	-0.28	0.00	2.36	69	1.27	63	78	56	0	7	0	0	
LEWISTON	51	32	61	27	42	4	0.00	-0.22	0.00	2.22	82	1.36	81	82	70	0	4	0	0	
POCATELLO	38	21	48	4	30	1	0.01	-0.21	0.01	2.07	76	0.66	40	78	59	0	7	1	0	
IL CHICAGO/O'HARE	37	24	49	13	30	4	0.30	-0.09	0.30	7.71	152	5.50	209	81	63	0	6	1	0	
MOLINE	39	25	50	12	32	6	0.30	-0.04	0.30	6.68	147	4.01	172	80	61	0	6	1	0	
PEORIA	40	25	49	13	33	6	0.72	0.35	0.72	7.16	152	5.18	225	83	53	0	5	1	1	
ROCKFORD	36	20	45	9	28	5	0.57	0.27	0.57	7.28	175	4.79	228	80	67	0	7	1	1	
SPRINGFIELD	43	27	51	15	35	6	0.41	0.02	0.41	6.78	136	3.50	144	89	49	0	6	1	0	
IN EVANSVILLE	49	31	58	22	40	6	0.51	-0.22	0.38	11.07	137	7.60	168	78	58	0	4	2	0	
FORT WAYNE	40	26	49	14	33	7	0.07	-0.39	0.07	6.01	103	3.81	124	88	68	0	7	1	0	
INDIANAPOLIS	44	26	51	19	35	5	0.10	-0.46	0.10	8.42	125	5.84	157	88	56	0	7	1	0	
SOUTH BEND	39	23	50	10	31	5	0.22	-0.25	0.14	9.44	147	6.01	180	80	62	0	7	3	0	
IA BURLINGTON	41	26	55	13	34	7	0.45	0.12	0.45	5.98	145	3.19	159	85	52	0	6	1	0	
CEDAR RAPIDS	37	22	49	10	29	6	0.39	0.14	0.39	3.20	104	1.80	112	89	63	0	7	1	0	
DES MOINES	42	24	52	12	33	8	0.06	-0.22	0.06	3.61	122	1.68	103	78	55	0	6	1	0	
D																				

Weather Data for the Week Ending February 16, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	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	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
WICHITA	49	25	59	13	37	2	0.04	-0.13	0.04	1.18	47	0.84	72	79	47	0	6	1	0	
KY JACKSON	49	30	59	19	40	3	0.39	-0.48	0.20	12.89	132	6.50	119	89	40	0	5	5	0	
LEXINGTON	47	29	58	19	38	3	0.19	-0.56	0.14	11.56	128	5.01	101	85	57	0	5	3	0	
LOUISVILLE	50	33	59	23	41	5	0.27	-0.48	0.19	12.81	148	5.67	115	81	42	0	3	3	0	
PADUCAH	50	32	57	22	41	4	0.67	-0.31	0.44	13.11	131	9.19	163	87	47	0	3	2	0	
LA BATON ROUGE	65	45	77	34	55	3	2.58	1.28	1.51	26.19	180	18.09	195	96	56	0	0	4	2	
LAKE CHARLES	67	47	77	38	57	4	1.14	0.32	0.98	20.04	164	15.22	199	90	54	0	0	4	1	
NEW ORLEANS	66	50	76	39	58	3	0.46	-0.95	0.33	14.94	105	9.81	107	88	70	0	0	4	0	
SHREVEPORT	58	41	70	31	50	0	2.10	1.04	1.65	12.70	110	7.04	100	90	47	0	2	4	1	
ME CARIBOU	31	14	36	-5	23	11	0.59	0.09	0.18	6.26	85	3.19	77	90	62	0	7	4	0	
PORTLAND	41	21	45	9	31	7	0.51	-0.25	0.50	11.05	109	2.75	47	83	48	0	7	2	1	
MD BALTIMORE	49	30	59	18	39	5	0.85	0.15	0.41	7.87	93	4.76	94	90	50	0	5	4	0	
MA BOSTON	42	28	47	15	35	4	0.21	-0.60	0.20	7.77	81	1.84	32	78	48	0	6	2	0	
WORCESTER	40	24	48	11	32	7	0.28	-0.45	0.24	8.03	83	2.92	50	81	42	0	7	2	0	
MI ALPENA	32	17	40	3	25	7	0.40	0.10	0.22	6.51	151	3.67	148	86	66	0	7	3	0	
GRAND RAPIDS	36	22	45	13	29	5	0.36	0.00	0.17	8.16	145	5.31	182	86	65	0	7	4	0	
HOUGHTON LAKE	31	17	40	4	24	5	0.40	0.12	0.14	7.72	191	4.81	210	85	72	0	7	4	0	
LANSING	36	23	45	14	30	7	0.08	-0.28	0.07	6.06	132	4.08	168	76	63	0	7	2	0	
MUSKEGON	36	21	48	2	29	5	0.60	0.22	0.30	10.51	182	7.47	238	77	68	0	7	4	0	
TRAVERSE CITY	33	20	44	9	27	6	0.76	0.30	0.37	8.00	117	5.01	120	88	62	0	7	5	0	
MN DULUTH	27	10	38	-6	18	4	0.41	0.22	0.40	3.61	142	2.17	136	84	66	0	7	2	0	
INT'L FALLS	23	3	31	-28	13	3	1.22	1.07	0.68	4.59	239	3.45	283	89	65	0	7	2	2	
MINNEAPOLIS	31	15	39	2	23	4	0.80	0.63	0.62	3.58	146	1.94	134	88	73	0	7	3	1	
ROCHESTER	31	16	37	4	23	6	0.36	0.19	0.31	3.35	142	1.56	116	83	75	0	7	3	0	
ST. CLOUD	27	9	35	-2	18	3	0.99	0.86	0.70	3.16	180	1.64	153	91	63	0	7	2	1	
MS JACKSON	57	39	64	28	48	0	4.81	3.70	2.43	22.28	163	13.57	164	92	61	0	2	3	3	
MERIDIAN	57	38	64	28	48	-1	6.38	5.11	3.48	25.59	181	16.51	186	97	73	0	3	3	3	
TUPELO	54	37	61	25	46	2	1.49	0.40	1.29	17.66	129	10.57	140	88	55	0	2	3	1	
MO COLUMBIA	48	28	62	18	38	6	0.37	-0.14	0.37	4.76	90	3.12	110	79	40	0	5	1	0	
KANSAS CITY	45	26	55	17	36	4	0.07	-0.20	0.07	2.78	83	1.44	84	79	40	0	5	1	0	
SAINT LOUIS	49	32	57	21	41	7	0.46	-0.05	0.46	6.16	100	4.16	127	72	43	0	3	1	0	
SPRINGFIELD	48	28	60	17	38	2	0.33	-0.20	0.16	4.91	76	3.81	116	85	51	0	5	4	0	
MT BILLINGS	39	22	51	13	31	2	0.20	0.09	0.09	1.05	60	0.78	72	81	49	0	7	4	0	
BUTTE	35	11	46	-6	23	2	0.08	0.00	0.08	0.66	53	0.36	50	87	49	0	7	1	0	
CUT BANK	43	17	50	3	30	7	0.00	-0.06	0.00	0.85	100	0.42	81	84	45	0	7	0	0	
GLASGOW	35	16	46	3	25	7	0.02	-0.04	0.02	1.12	132	0.63	131	84	73	0	7	1	0	
GREAT FALLS	43	22	53	12	33	7	0.11	0.01	0.08	1.36	87	0.81	90	76	45	0	6	2	0	
HAVRE	37	17	47	0	27	6	0.00	-0.06	0.00	1.85	167	1.46	243	78	67	0	7	0	0	
MISSOULA	40	27	46	21	34	6	0.07	-0.10	0.03	2.95	113	1.30	89	84	71	0	6	4	0	
NE GRAND ISLAND	44	21	55	12	33	6	0.04	-0.07	0.02	1.91	135	0.25	33	82	60	0	7	2	0	
LINCOLN	44	20	55	11	32	5	0.07	-0.03	0.05	2.30	133	0.80	92	85	49	0	7	2	0	
NORFOLK	41	17	56	7	29	4	0.08	-0.06	0.04	1.46	97	0.33	38	84	65	0	7	3	0	
NORTH PLATTE	41	15	56	9	28	-1	0.29	0.20	0.29	0.96	99	0.59	104	88	48	0	7	1	0	
OMAHA	43	21	55	13	32	5	0.11	-0.04	0.05	2.46	122	0.61	56	81	56	0	7	3	0	
SCOTTSBLUFF	42	13	56	6	27	-2	0.02	-0.09	0.01	0.50	37	0.31	39	78	50	0	7	2	0	
VALENTINE	38	15	51	10	26	0	0.25	0.16	0.25	0.84	105	0.55	117	79	66	0	7	1	0	
NV ELY	36	4	54	-9	20	-9	0.07	-0.10	0.07	3.00	189	1.28	117	87	71	0	7	1	0	
LAS VEGAS	61	40	67	35	50	-1	0.00	-0.16	0.00	0.92	69	0.43	46	40	26	0	0	0	0	
RENO	53	23	60	19	38	0	0.00	-0.25	0.00	2.22	88	0.12	7	73	50	0	7	0	0	
WINNEMUCCA	49	18	59	13	34	-1	0.00	-0.14	0.00	2.10	107	0.41	36	87	55	0	7	0	0	
NH CONCORD	39	15	48	-2	27	5	0.28	-0.29	0.25	7.54	104	3.31	77	92	45	0	7	2	0	
NJ NEWARK	45	29	57	15	37	4	0.48	-0.21	0.42	9.34	101	4.28	76	84	54	0	7	3	0	
NM ALBUQUERQUE	49	23	58	19	36	-5	0.00	-0.08	0.00	0.23	20	0.11	16	60	20	0	7	0	0	
NY ALBANY	38	21	48	-5	29	5	0.06	-0.46	0.04	6.17	97	2.12	58	79	49	0	7	2	0	
BINGHAMTON	35	23	39	12	29	6	0.09	-0.52	0.07	8.26	118	3.06	77	78	57	0	7	2	0	
BUFFALO	38	23	49	7	30	5	0.31	-0.28	0.19	7.30	87	3.66	80	84	58	0	7	2	0	
ROCHESTER	40	23	51	3	31	6	0.16	-0.34	0.08	7.51	121	3.94	114	80	60	0	6	4	0	
SYRACUSE	38	22	47	5	30	6	0.15	-0.35	0.10	10.54	152	2.97	78	78	48	0	7	3	0	
NC ASHEVILLE	52	33	59	23	42	4	0.77	-0.15	0.43	14.15	148	9.77	158	86	49	0	4	4	0	
CHARLOTTE	55	34	62	25	44	0	0.61	-0.22	0.22	9.48	104	5.64	95	94	51	0	4	5	0	
GREENSBORO	53	33	60	26	43	3	0.57	-0.17	0.25	9.84	118	7.12	135	88	47	0	4	5	0	
HATTERAS	58	43	64	37	50	4	1.24	0.30	0.80	12.95	102	6.44	79	94	62	0	0	4	1	
RALEIGH	55	36	63	25	45	3	0.70	-0.13	0.39	7.76	86	4.82	81	83	52	0	4	4	0	
WILMINGTON	60	41	67	29	50	2	1.22	0.34	0.60	9.57	92	4.97	75	93	57	0	1	4	1	
ND BISMARCK	32	19	39	13	26	9	0.07	-0.04	0.03	1.07	94	0.44	63	86	75	0	7	3	0	
DICKINSON	35	20	47	13	28	8	0.00	-0.11	0.00	0.34	35	0.08	13	87	62	0	7	0	0	
FARGO	24	8	32	-8	16	3	0.71	0.60	0.55	2.17	135	1.80	173	85	74	0	7	3	1	
GRAND FORKS	24	7	33	-6	16	4	0.04	-0.10	0.04	0.99	64	0.68	69	92	71	0	7	1	0	
JAMESTOWN	25	12	34	-2	19	4	0.17	-0.06	0.11	0.54	41	0.45	52	93	75	0	7	3	0	
WILLISTON	32	17	39	3	25	10	0.03	-0.05	0.01	1.11	85	0.54	74	90	79	0	7	3	0	
OH AKRON-CANTON	40	23	53	16	32	5	0.16	-0.37	0.15	6.96	104	2.75	75	83	58	0	6	2	0	
CINCINNATI	46	28	56	16	37	4	0.09	-0.56	0.07	9.54	125	3.79	87	83	62	0	6	2	0	
CLEVELAND	39	26	50	19	32	5	0.21	-0.34	0.19	7.04	102	3.11	83	82	59	0	6	3	0	
COLUMBUS	42	27	53	17	35	4	0.13	-0.39	0.04	8.53	128	2.83	76	84	61	0	6	4	0	
DAYTON	42	26	51	15	34	5	0.02	-0.53	0.02	7.09	102	3.32	86	91	58	0	6	1	0	
MANSFIELD	38	25	49	14	32	6	0.05	-0.47	0.03	7.00	99	3.14	82	94	60	0	6	2	0	

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending February 16, 2013

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	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 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	38	24	47	15	31	5	0.01	-0.45	0.01	6.27	112	4.12	139	79	60	0	7	1	0
OK YOUNGSTOWN	39	21	52	15	30	3	0.15	-0.32	0.12	7.83	123	2.64	77	83	62	0	6	4	0
OK OKLAHOMA CITY	53	32	62	26	42	1	0.67	0.36	0.62	2.51	66	1.84	97	85	36	0	4	4	1
OR TULSA	52	31	62	22	42	1	0.35	-0.06	0.25	2.80	57	1.95	80	80	42	0	4	3	0
OR ASTORIA	50	42	59	40	46	2	0.76	-1.24	0.21	25.47	103	10.84	76	96	87	0	0	5	0
OR BURNS	45	23	52	14	34	5	0.00	-0.25	0.00	2.21	72	0.48	27	87	70	0	7	0	0
OR EUGENE	52	40	57	34	46	4	0.02	-1.59	0.01	9.38	48	1.93	17	94	85	0	0	2	0
OR MEDFORD	58	31	69	27	44	1	0.01	-0.51	0.01	6.79	103	1.13	31	90	57	0	4	1	0
OR PENDLETON	52	31	57	24	41	3	0.00	-0.30	0.00	2.17	60	0.98	46	87	68	0	5	0	0
OR PORTLAND	52	40	61	37	46	3	0.07	-0.99	0.05	11.32	85	3.76	50	91	77	0	0	3	0
OR SALEM	53	41	59	36	47	5	0.01	-1.29	0.01	9.46	62	2.06	23	94	82	0	0	1	0
PA ALLENTOWN	42	24	52	6	33	4	0.59	-0.07	0.32	9.41	111	5.10	101	87	52	0	7	4	0
PA ERIE	39	25	53	16	32	5	0.04	-0.51	0.02	9.00	120	4.19	111	78	67	0	6	2	0
PA MIDDLETOWN	44	26	51	17	35	5	0.69	-0.02	0.26	7.85	102	4.06	92	95	48	0	7	3	0
PA PHILADELPHIA	47	30	57	21	39	5	0.76	0.13	0.48	8.98	108	4.56	91	84	47	0	5	4	0
PA PITTSBURGH	42	25	60	18	34	4	0.25	-0.30	0.16	8.52	124	2.99	75	87	51	0	6	5	0
PA WILKES-BARRE	40	24	46	9	32	4	0.26	-0.25	0.12	6.61	106	2.69	73	88	50	0	7	4	0
PA WILLIAMSPORT	40	24	47	7	32	4	0.10	-0.54	0.05	8.66	119	3.05	70	79	49	0	7	2	0
RI PROVIDENCE	42	24	48	13	33	3	0.51	-0.33	0.37	9.14	87	3.59	56	81	57	0	7	3	0
SC BEAUFORT	63	45	76	36	54	4	3.96	3.20	1.85	8.45	93	5.71	96	95	53	0	0	4	3
SC CHARLESTON	63	43	75	33	53	3	3.46	2.73	1.86	9.15	101	5.59	96	95	56	0	0	4	2
SC COLUMBIA	61	40	71	31	51	4	1.48	0.55	0.48	7.76	76	4.25	62	85	55	0	1	5	0
SC GREENVILLE	55	36	62	25	46	3	0.89	-0.10	0.38	12.59	120	6.78	102	95	48	0	3	5	0
SD ABERDEEN	29	5	38	-6	17	0	0.57	0.49	0.48	2.41	230	1.66	248	84	76	0	7	5	0
SD HURON	30	12	41	4	21	1	0.91	0.81	0.55	2.59	240	1.47	213	94	76	0	7	4	1
SD RAPID CITY	41	15	57	3	28	1	0.06	-0.03	0.06	0.74	79	0.49	91	75	43	0	7	1	0
SD SIOUX FALLS	32	15	39	5	23	3	0.44	0.36	0.41	2.26	185	0.95	136	89	74	0	7	2	0
TN BRISTOL	51	30	60	24	41	4	0.61	-0.20	0.31	14.98	171	10.98	205	92	42	0	5	5	0
TN CHATTANOOGA	54	37	60	26	45	3	1.11	-0.05	0.85	16.56	129	10.99	136	85	48	0	2	4	1
TN KNOXVILLE	52	35	61	24	44	3	0.63	-0.31	0.27	19.73	176	13.55	201	86	46	0	1	5	0
TN MEMPHIS	53	40	61	28	47	3	0.98	-0.06	0.93	14.73	121	11.00	168	79	45	0	1	2	1
TN NASHVILLE	53	34	62	24	44	4	1.04	0.18	0.71	13.07	125	8.36	142	83	40	0	3	3	1
TX ABILENE	60	33	68	25	46	-1	0.02	-0.24	0.02	1.58	57	1.54	102	75	41	0	3	1	0
TX AMARILLO	48	24	61	15	36	-4	0.62	0.51	0.62	1.92	131	1.38	160	75	38	0	7	1	1
TX AUSTIN	66	40	72	28	53	-1	0.51	0.05	0.35	4.16	78	3.33	116	81	44	0	3	3	0
TX BEAUMONT	66	47	76	37	57	2	0.65	-0.18	0.34	16.17	124	9.77	125	92	54	0	0	4	0
TX BROWNSVILLE	77	57	87	46	67	5	0.01	-0.31	0.01	1.80	55	1.48	69	88	59	0	0	1	0
TX CORPUS CHRISTI	73	52	86	43	63	4	0.01	-0.44	0.01	1.71	39	1.68	65	81	55	0	0	1	0
TX DEL RIO	71	46	76	34	58	3	0.00	-0.23	0.00	1.37	76	1.33	127	62	29	0	0	0	0
TX EL PASO	57	30	61	24	44	-6	0.01	-0.07	0.01	0.41	29	0.31	48	48	19	0	4	1	0
TX FORT WORTH	59	39	69	30	49	1	1.36	0.83	0.98	7.40	134	5.45	184	77	36	0	1	2	1
TX GALVESTON	66	54	75	48	60	3	0.86	0.21	0.69	12.01	130	9.14	159	87	60	0	0	4	1
TX HOUSTON	66	46	74	34	56	2	0.26	-0.48	0.13	6.72	74	3.87	72	87	60	0	0	3	0
TX LUBBOCK	54	29	64	23	41	-1	0.48	0.31	0.48	2.08	137	1.40	165	78	45	0	6	1	0
TX MIDLAND	60	29	66	24	45	-3	0.03	-0.10	0.03	1.56	107	1.48	183	65	31	0	5	1	0
TX SAN ANGELO	65	33	71	23	49	0	0.23	-0.06	0.20	1.87	80	1.69	121	76	39	0	4	3	0
TX SAN ANTONIO	69	44	76	31	56	2	0.03	-0.39	0.03	3.29	72	2.92	113	85	30	0	1	1	0
TX VICTORIA	67	46	73	33	56	0	0.07	-0.43	0.03	5.34	88	3.88	108	92	61	0	0	3	0
TX WACO	61	40	69	26	51	1	1.67	1.09	0.70	7.54	129	6.73	218	82	62	0	1	3	2
TX WICHITA FALLS	56	32	65	27	44	-1	0.94	0.59	0.92	2.25	64	1.65	90	79	48	0	5	2	1
UT SALT LAKE CITY	35	21	40	9	28	-5	0.11	-0.19	0.11	3.19	97	1.81	88	88	66	0	7	1	0
VT BURLINGTON	36	22	44	-7	29	10	0.09	-0.31	0.09	5.07	94	1.77	55	79	44	0	6	1	0
VA LYNCHBURG	52	31	63	20	42	5	0.23	-0.51	0.07	9.43	111	6.78	129	77	40	0	4	4	0
VA NORFOLK	54	39	63	32	46	5	0.58	-0.22	0.40	10.03	114	5.55	96	85	55	0	1	3	0
VA RICHMOND	54	33	63	24	44	5	0.35	-0.34	0.18	9.67	117	6.84	133	83	48	0	4	4	0
VA ROANOKE	53	33	63	23	43	5	0.22	-0.52	0.15	10.51	135	7.93	161	71	37	0	4	4	0
VA WASH/DULLES	50	30	58	17	40	6	0.50	-0.16	0.26	7.28	95	4.41	97	84	46	0	5	4	0
WA OLYMPIA	49	36	56	31	43	3	0.06	-1.53	0.04	14.26	74	4.52	40	96	86	0	2	3	0
WA QUILLAYUTE	51	41	57	32	46	4	1.04	-2.09	0.54	30.96	88	13.43	64	88	82	0	1	5	1
WA SEATTLE-TACOMA	50	41	56	35	46	3	0.18	-0.88	0.09	11.53	87	4.68	61	90	81	0	0	3	0
WA SPOKANE	42	27	50	21	34	2	0.00	-0.36	0.00	4.25	87	1.67	63	91	70	0	7	0	0
WA YAKIMA	57	28	59	22	42	8	0.00	-0.19	0.00	2.23	74	0.10	6	83	65	0	7	0	0
WV BECKLEY	46	29	58	17	38	5	0.46	-0.24	0.31	8.73	110	5.54	115	76	49	0	6	5	0
WV CHARLESTON	49	31	63	21	40	4	0.48	-0.27	0.25	10.18	123	5.32	107	80	43	0	5	4	0
WV ELKINS	44	24	60	12	34	3	0.55	-0.21	0.28	10.22	119	5.88	114	87	45	0	6	5	0
WV HUNTINGTON	50	31	61	22	40	4	0.35	-0.38	0.16	9.51	116	4.61	95	84	43	0	5	3	0
WI EAU CLAIRE	30	13	36	-6	22	5	0.78	0.61	0.40	3.80	151	1.95	132	91	60	0	7	4	0
WI GREEN BAY	31	16	40	-2	24	5	0.66	0.44	0.45	5.88	186	3.34	191	87	64	0	7	3	0
WI LA CROSSE	31	17	40	4	24	3	0.43	0.19	0.37	3.90	130	1.92	108	88	63	0	7	4	0
WI MADISON	33	17	44	2	25	4	0.66	0.36	0.65	7.06	196	4.46	230	82	66	0	7	2	1
WI MILWAUKEE	35	22	43	9	28	4	0.38	-0.03	0.34	8.37	167	4.50	161	81	64	0	7	3	0
WY CASPER	30	12	42	-5	21	-5	0.03	-0.11	0.02	0.90	60	0.51	58	78	61	0	7	2	0
WY CHEYENNE	32	14	49	-1	23	-5	0.06	-0.02	0.06	0.94	85	0.37	58	68	48	0	7	1	0
WY LANDER	30	6	43	-4	18	-6	0.07	-0.04	0.07	1.90	141	1.50	203	85	53	0	7	1	0
WY SHERIDAN	35	14	46	-1	25	-1	0.27	0.14	0.13	1.81	103	1.31	122	83	65	0	7	4	0

Based on 1971-2000 normals

*** Not Available

National Agricultural Summary

February 11 – 17, 2013

Weekly National Agricultural Summary provided by USDA/NASS

With the exception of the Pacific Northwest and the nation's northern tier, temperatures throughout the West were below normal during the week. Temperatures averaged more than 9°F below normal in portions of the Great Basin, Rocky Mountains, and Southwest. In the Southeast, heavy rainfall in Alabama, Georgia, Louisiana, Mississippi, and South Carolina improved soil moisture.

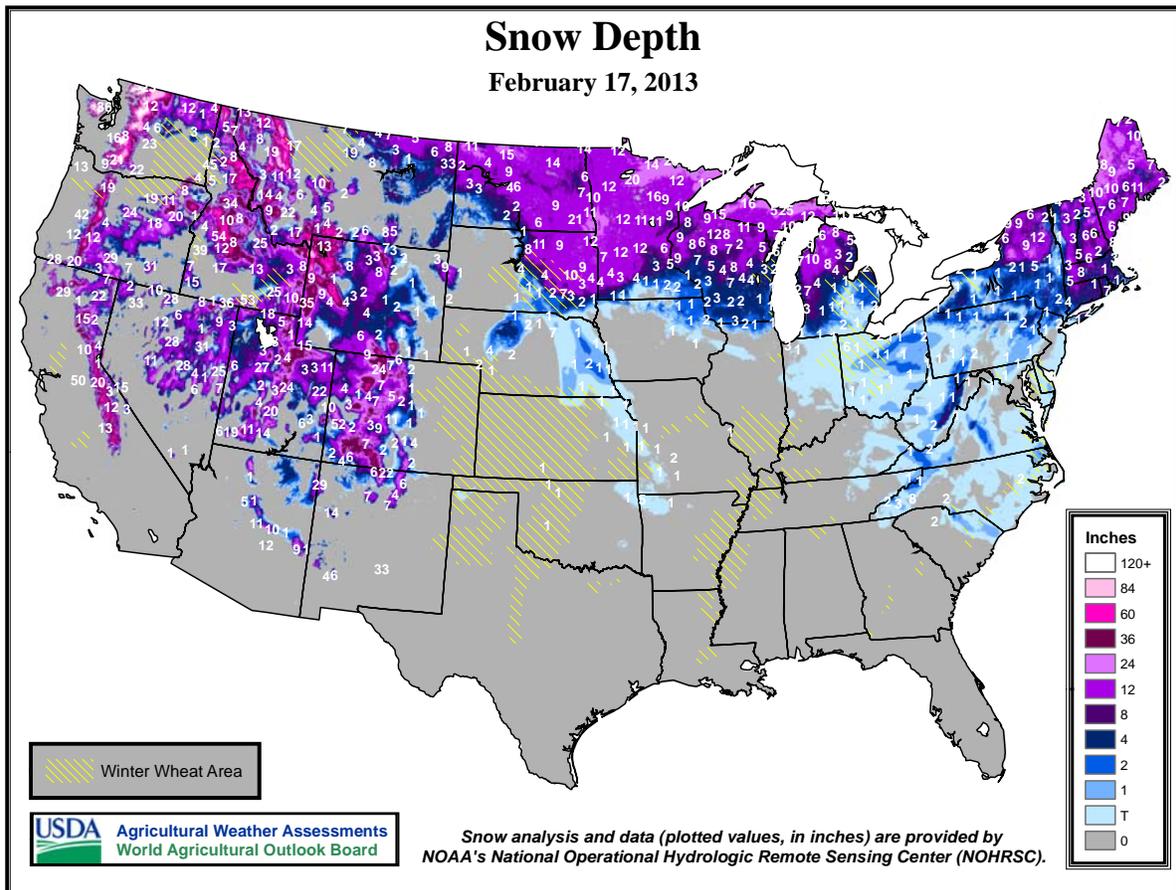
Producers in Florida took freeze-protection measures as a precaution against a late-week dip in temperatures. Most fruit and vegetable crops appeared to weather the cold snap with minimal damage, but assessments were ongoing in many counties. Strong winds blew through Charlotte, Collier, Glades, Hendry, and Lee Counties, which could result in scarring and culling of some produce. Harvesting of vegetables was slowed in southern Florida, where much-needed rainfall left fields too wet for fieldwork. General maintenance and fertilization continued in most citrus groves, while harvest of early and midseason varieties was drawing to a close.

In Texas, rainfall was scattered during the week, with portions of the state receiving more than 2 inches, while others reported less than 0.10 inch. With most regions in need of moisture, 49 percent of the state's winter wheat crop was reported in very poor or poor condition on February 17. Row crop

producers in most areas were preparing fields and equipment for spring-planted crops. In the Upper Coast and southern regions, corn and sorghum were already being planted. Fruit orchards were being pruned. In East Texas, warm weather has caused early bud and bloom. Citrus, sugarcane, and a variety of vegetables were harvested in the Lower Valley.

Cool weather and scattered precipitation dominated Arizona, where producers harvested hay from over two-thirds of the state's alfalfa fields. Durum wheat was reported in mostly good to excellent condition, while barley was mostly fair to good. Over half of the pastures were reported in fair or better condition; however, additional moisture was needed to prevent drying out. Fruit and vegetable producers continued to harvest and ship a wide variety of crops.

Warm, dry weather benefited irrigated small grain fields in California, while emerged crops in dryland fields were in need of additional moisture to maintain growth. Stone fruit bloom increased under warm conditions and sunny skies. General orchard and vineyard maintenance continued for grapes, kiwi, and olives. Freeze-protection measures were ongoing in avocado and citrus orchards. Despite continued bud swell on almond trees, bloom was reported as being delayed as compared to normal. A variety of vegetables were being harvested in Fresno and Tulare Counties.



International Weather and Crop Summary

February 10-16, 2013

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

HIGHLIGHTS

EUROPE: Colder, snowier weather across northern and central Europe was favorable for dormant winter crops, while showers continued in the south and west.

WESTERN FSU: Unseasonably warm, dry weather kept most of the region devoid of a protective snowpack and reduced crop cold hardiness, while rain and snow overspread western growing areas.

MIDDLE EAST: Warmer-than-normal conditions continued, benefiting winter grains but keeping the region devoid of a protective snow cover.

NORTHWEST AFRICA: Rain expanded across the region, maintaining favorable prospects for vegetative winter grains.

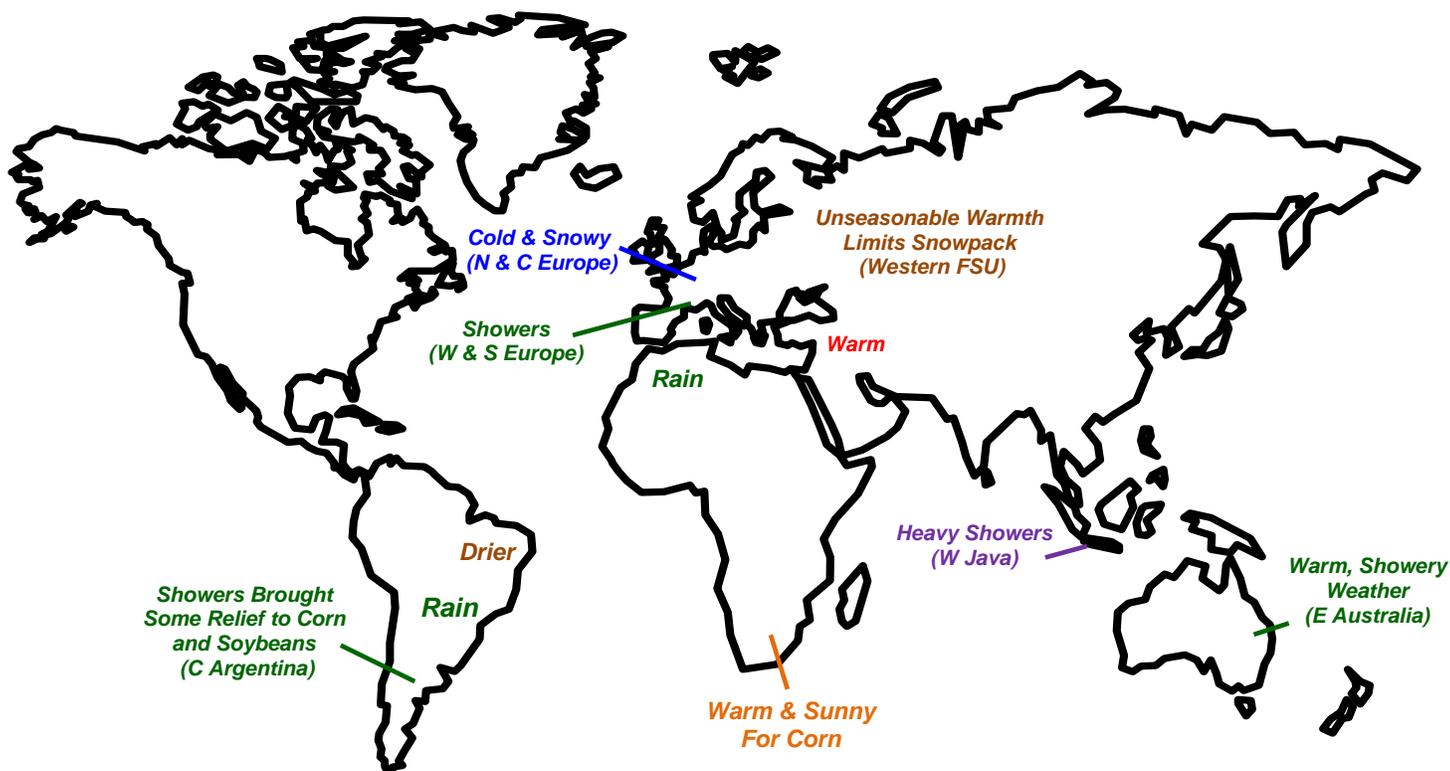
SOUTHEAST ASIA: Heavy showers slowed rice maturation in western Java, Indonesia, but were still favorable for filling rice in the east.

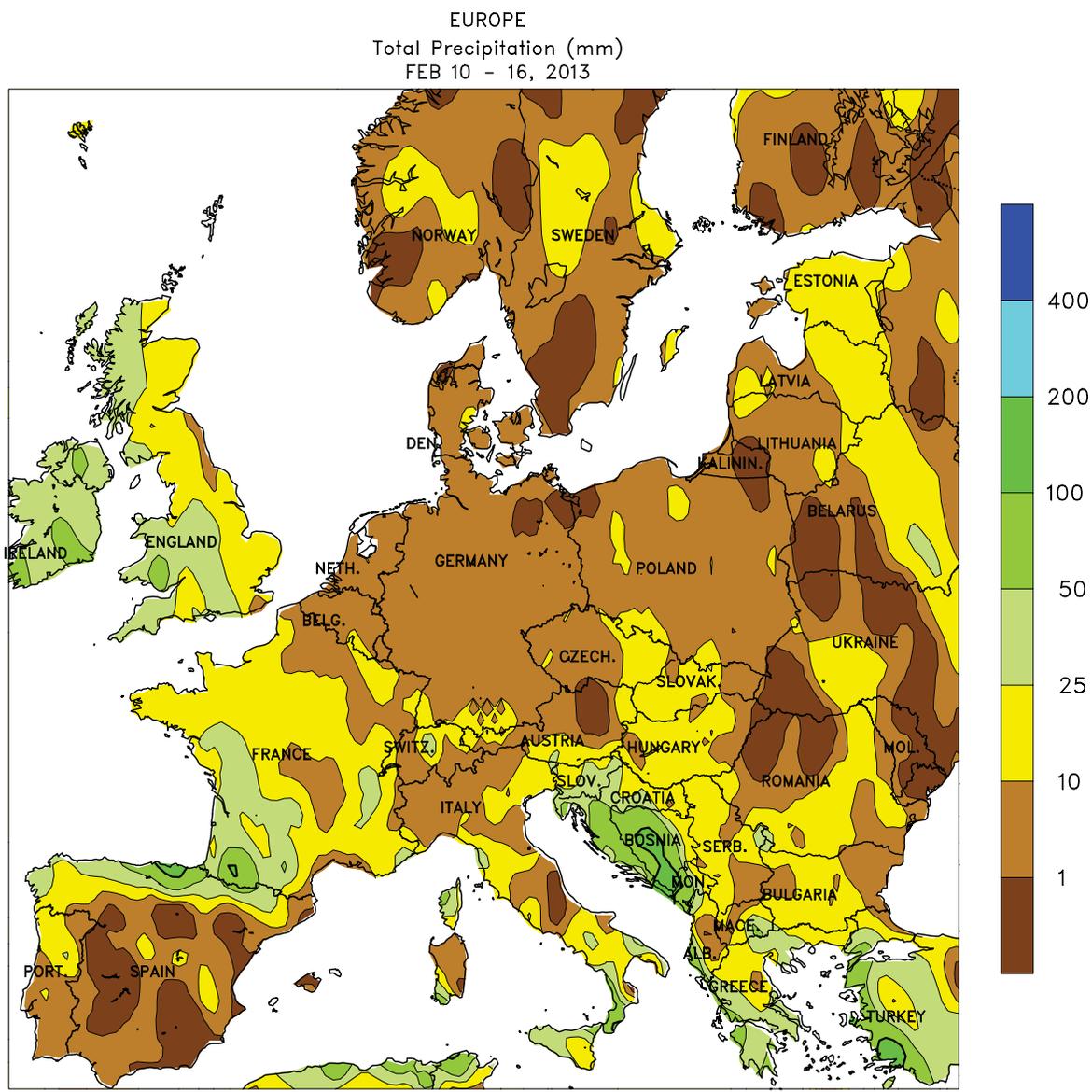
AUSTRALIA: Scattered showers and seasonably warm weather favored summer crop development.

SOUTH AFRICA: Warmth and sunshine promoted development of reproductive to filling corn.

ARGENTINA: Showers brought some relief from dryness to late-planted corn and soybeans.

BRAZIL: Beneficial rain continued throughout southern and central Brazil but dryness expanded across soybean and cotton areas of the northeastern interior.





CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

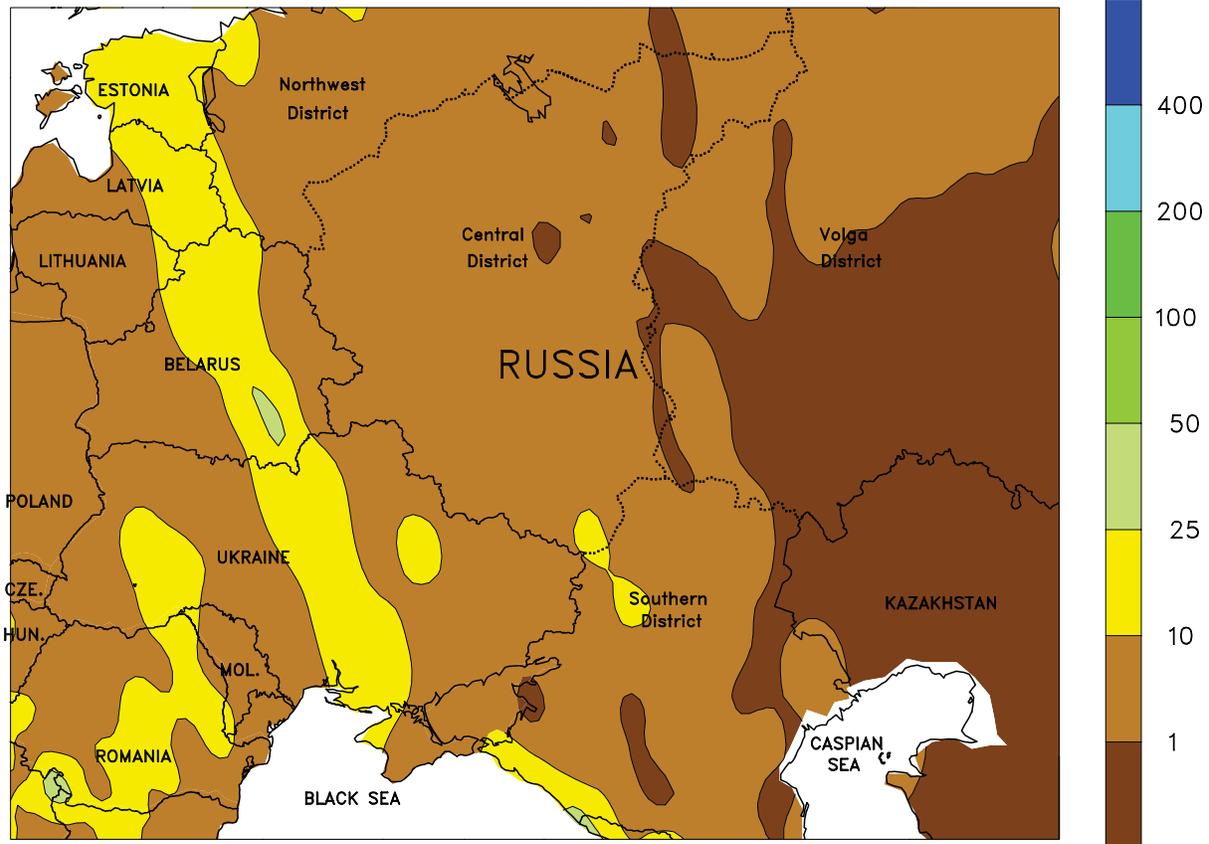


EUROPE

Colder, unsettled weather prevailed across most of the continent, favoring dormant (north) to vegetative (south) winter crops. A slow-moving cold front brought an end to the recent spell of warmer-than-normal weather, with temperatures during the past week averaging up to 3°C below normal from England into central Europe. The colder conditions were accompanied by a fresh snowfall (2-10 cm) from Germany and Poland southward into the Alps

and northern Italy, providing dormant winter crops some insulation from potential late-season bitter cold. As the front pushed southward, an area of low pressure generated moderate to heavy rain (10-50 mm) and high-elevation snow from the United Kingdom and France into the central and eastern Mediterranean region, boosting moisture reserves for spring growth but hampering citrus harvesting and other seasonal fieldwork.

WESTERN FSU
 Total Precipitation (mm)
 FEB 10 - 16, 2013



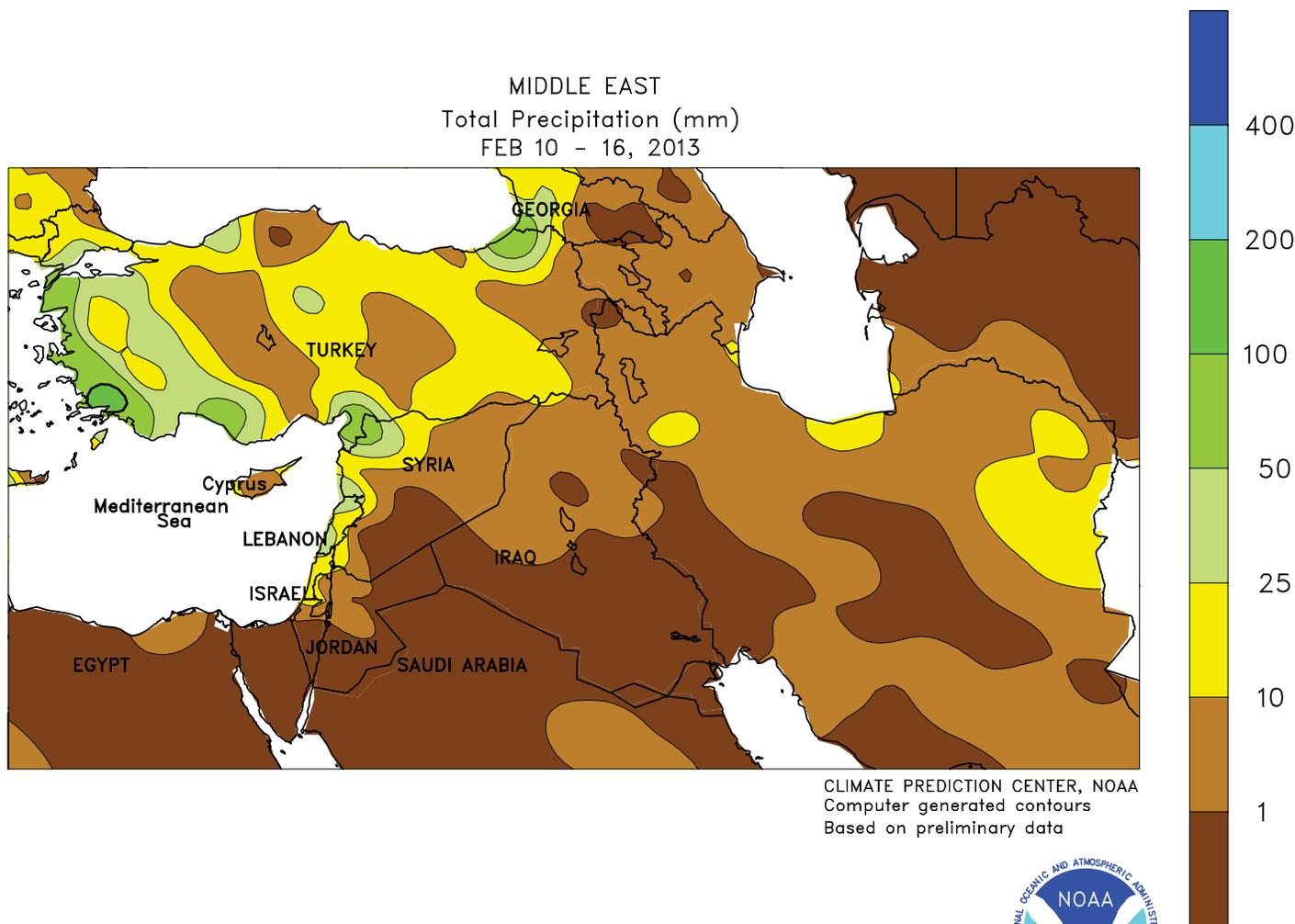
CLIMATE PREDICTION CENTER, NOAA
 Computer generated contours
 Based on preliminary data



WESTERN FSU

Unseasonably warm weather prevailed, with western wetness contrasting with dry conditions in central and eastern portions of the region. A broad area of high pressure centered over western Kazakhstan and central Russia maintained a warm southerly wind in key winter wheat areas of Russia and eastern Ukraine. Consequently, temperatures averaged 6 to 9°C above normal, with daytime highs eclipsing 10°C from Crimea, Ukraine, into the southern third of Russia’s Southern District. With weekly

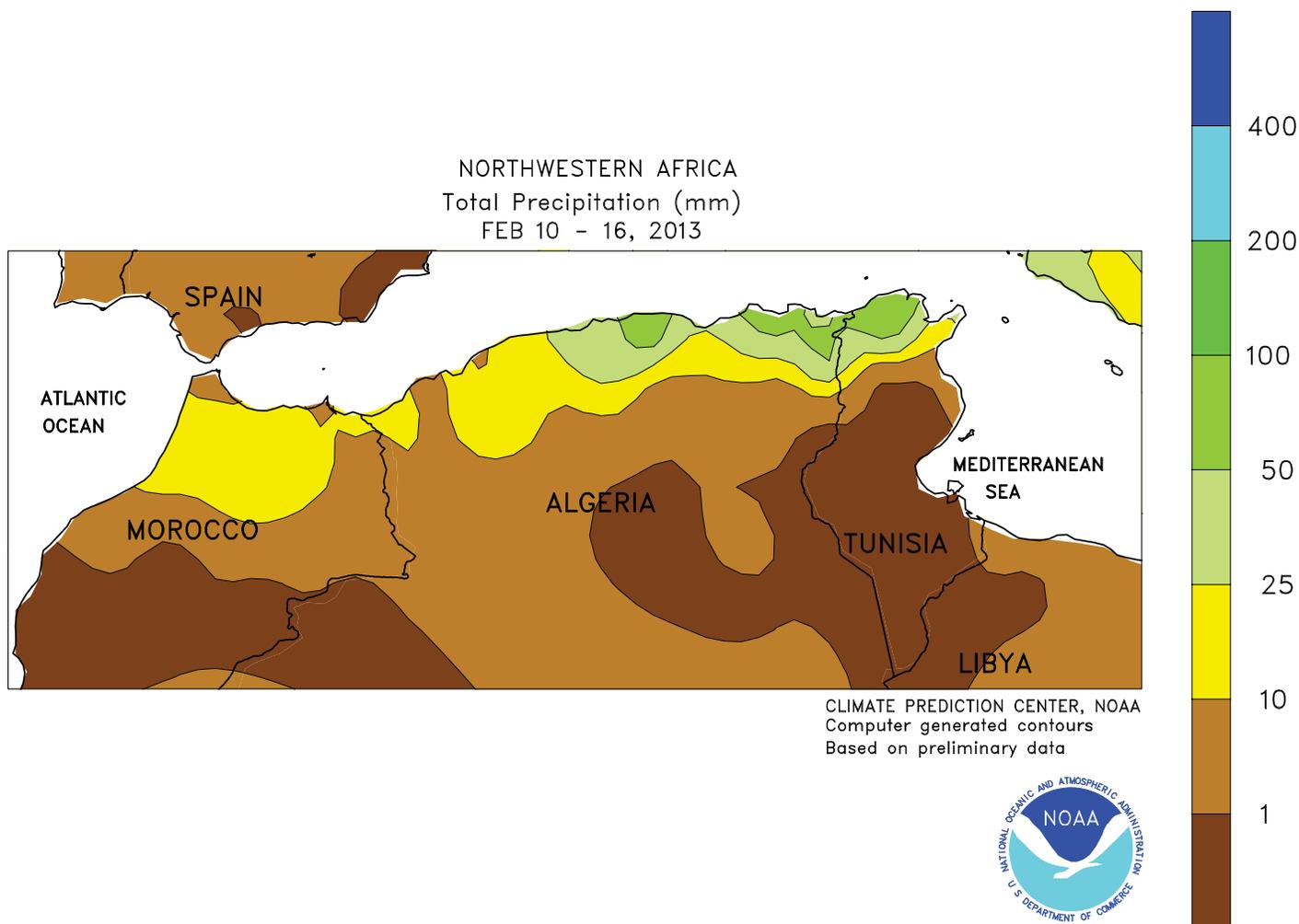
average temperatures at or above 5°C in these southern crop regions for a second consecutive week, some greening of winter wheat was likely; this early emergence from dormancy has put the crop at risk of potential freeze damage should any late incursions of bitter cold occur. In western portions of the region, a slow-moving cold front generated southern rain and northern snow in Ukraine and Belarus, maintaining adequate to abundant moisture reserves for spring growth.



MIDDLE EAST

Warm weather prevailed across the region, with additional rain in the west contrasting with drier conditions in central and eastern crop areas. A warm, southerly flow maintained unseasonable warmth (3-9°C above normal) across the region, keeping major winter grain areas devoid of a protective snow cover. In addition, daytime highs of 12 to 22°C further reduced crop cold hardiness and likely caused some early greening. Meanwhile, a Mediterranean storm approached from

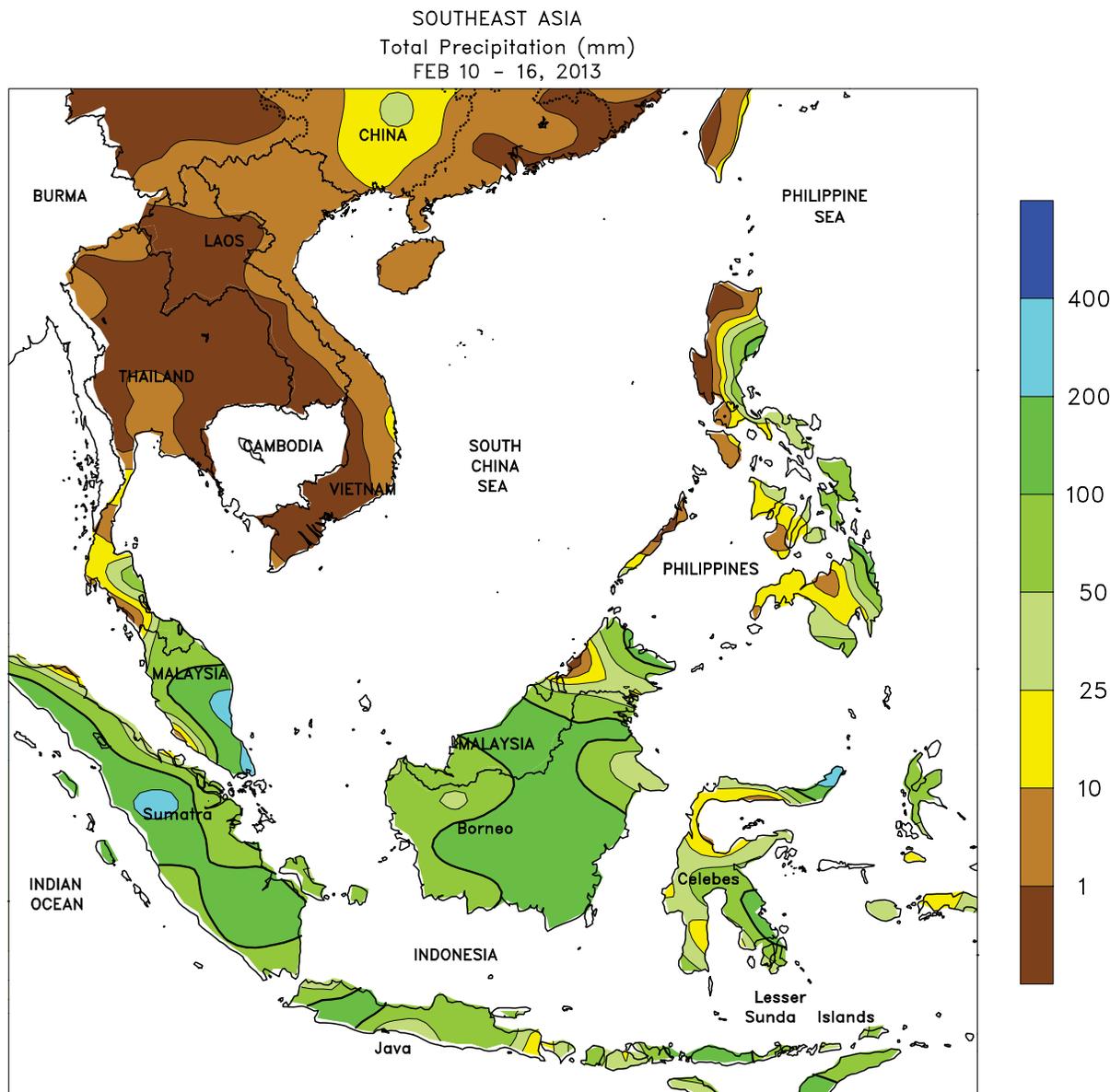
the west, generating moderate to heavy rain (10-100 mm) from western Turkey into Syria, Lebanon, and Israel. The rain boosted soil moisture for winter wheat and barley and improved irrigation reserves for warm-season crops. Across eastern Syria, Iraq, and Iran, precipitation was generally light (less than 10 mm) and spotty. While conditions remained overall favorable for winter wheat and barley, crops remained exposed to any sudden temperature extremes.



NORTHWEST AFRICA

Showers continued in the east and returned to western crop districts. An early week cold front generated widespread rain (10-65 mm) across the region's primary winter grain areas, boosting soil moisture for vegetative

winter wheat and barley. In the front's wake, cold weather led to some light snow away from the coast, while most winter crop districts remained safely above freezing.



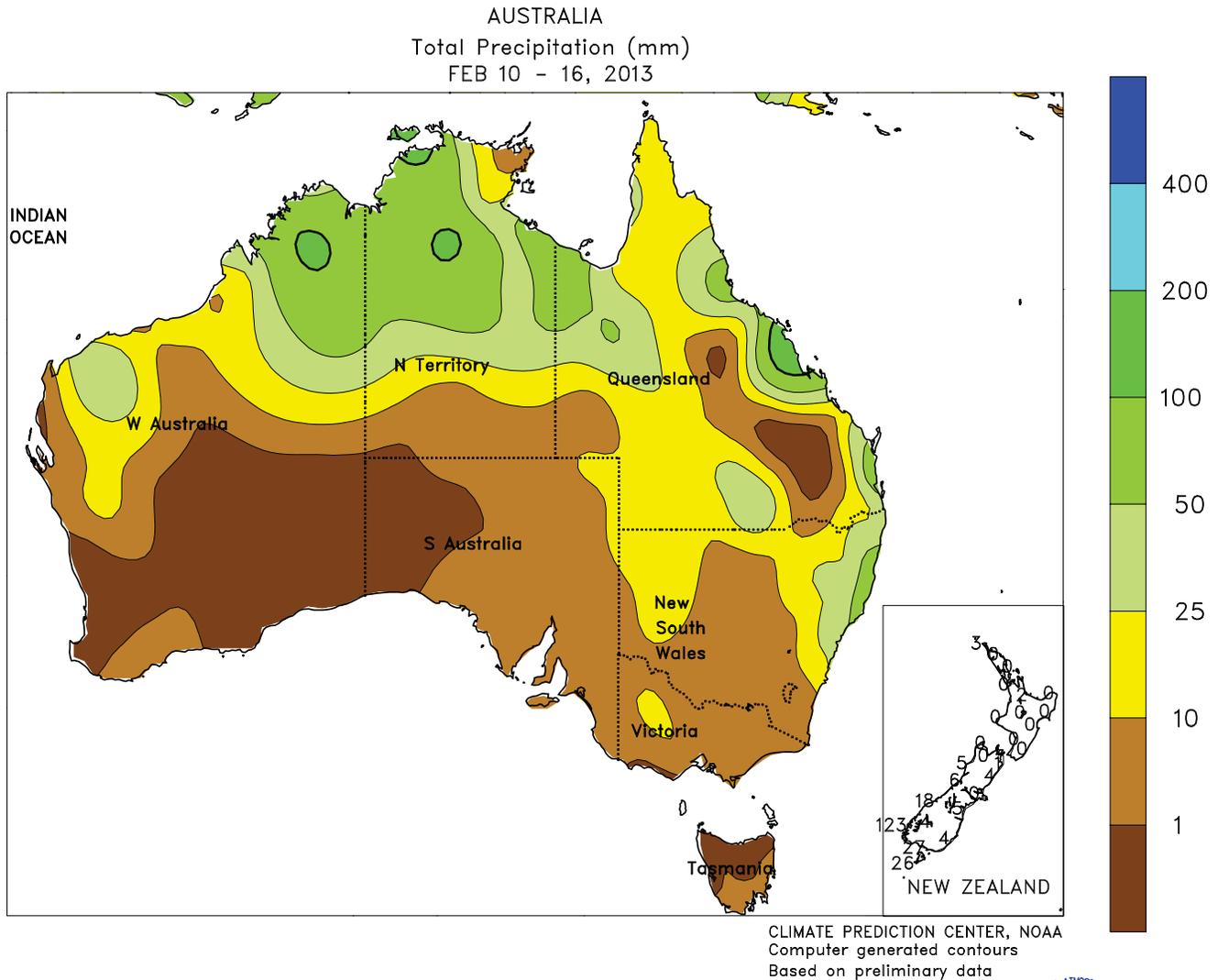
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTHEAST ASIA

Heavy monsoon showers overspread the traditionally wet southern half of the region. In Java, Indonesia, 50 to 150 mm of rain maintained saturated conditions in the west, where the earliest planted rice was likely maturing. Growers would welcome drier conditions, as weekly rainfall totals typically average less than 50 mm at this time of year; further heavy rain could cause quality issues such as cracked grains. In central and eastern portions of Java, where rice is planted

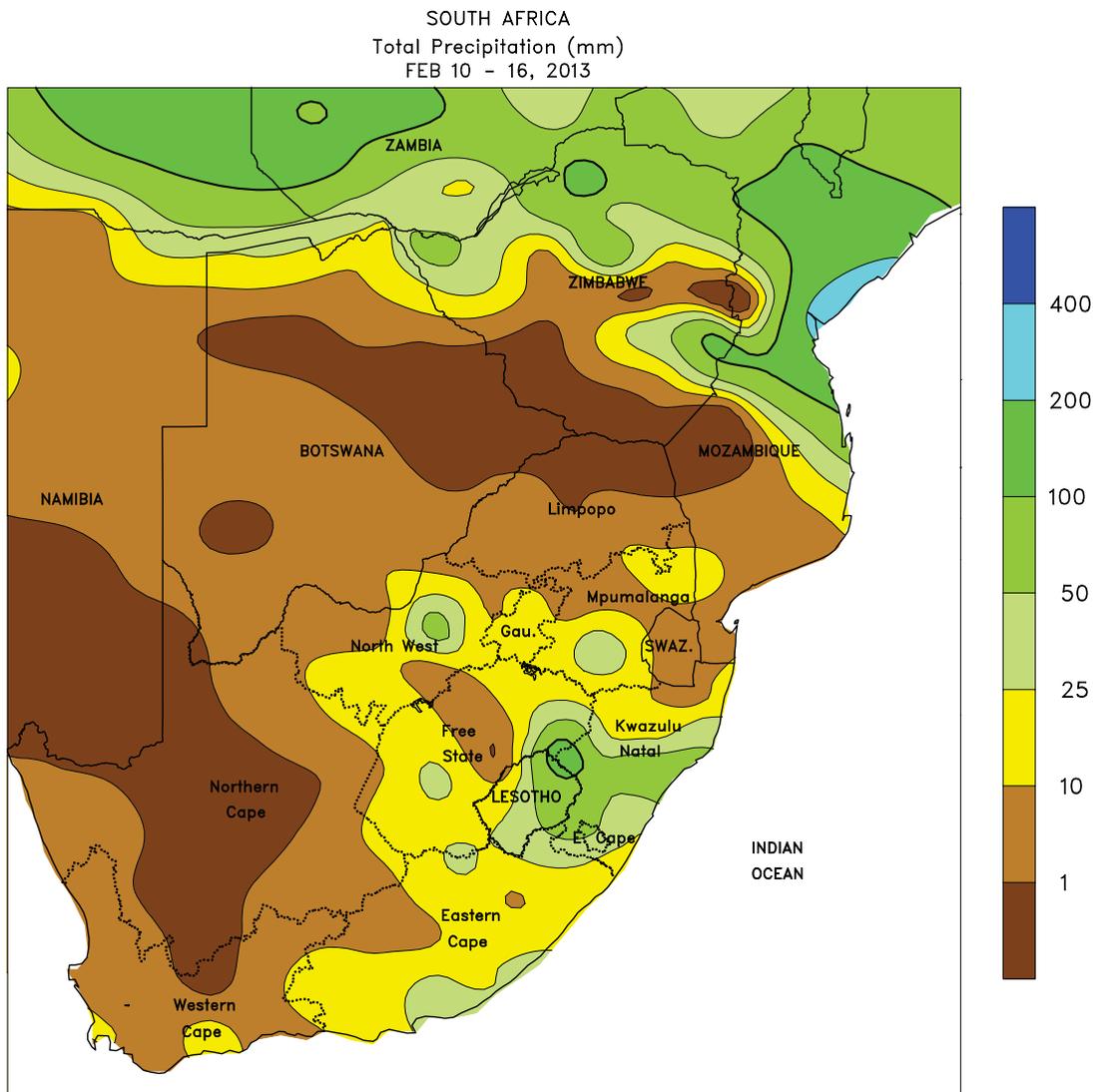
later, the rainfall (50-150 mm) was still beneficial to the filling crop. Showers were also unseasonably heavy elsewhere in Indonesia and Malaysia, where 75 to 225 mm slowed oil palm harvesting and could lower yield potential. In contrast, showers were more seasonable in the Philippines as rainfall amounts varied between 10 and 110 mm, maintaining favorable soil moisture for winter rice and corn while causing few harvest delays.



AUSTRALIA

In northern New South Wales, scattered showers (5-25 mm or more) maintained local moisture supplies for immature cotton and sorghum. Showers (5-35 mm) were more isolated in major summer crop areas of southern Queensland. The mostly dry weather aided drydown of early maturing summer

crops but may have increased irrigation requirements for crops planted later in the growing season. Temperatures were generally seasonable in eastern Australia, with maximum temperatures in the upper 20s to middle 30s degrees C in most areas.



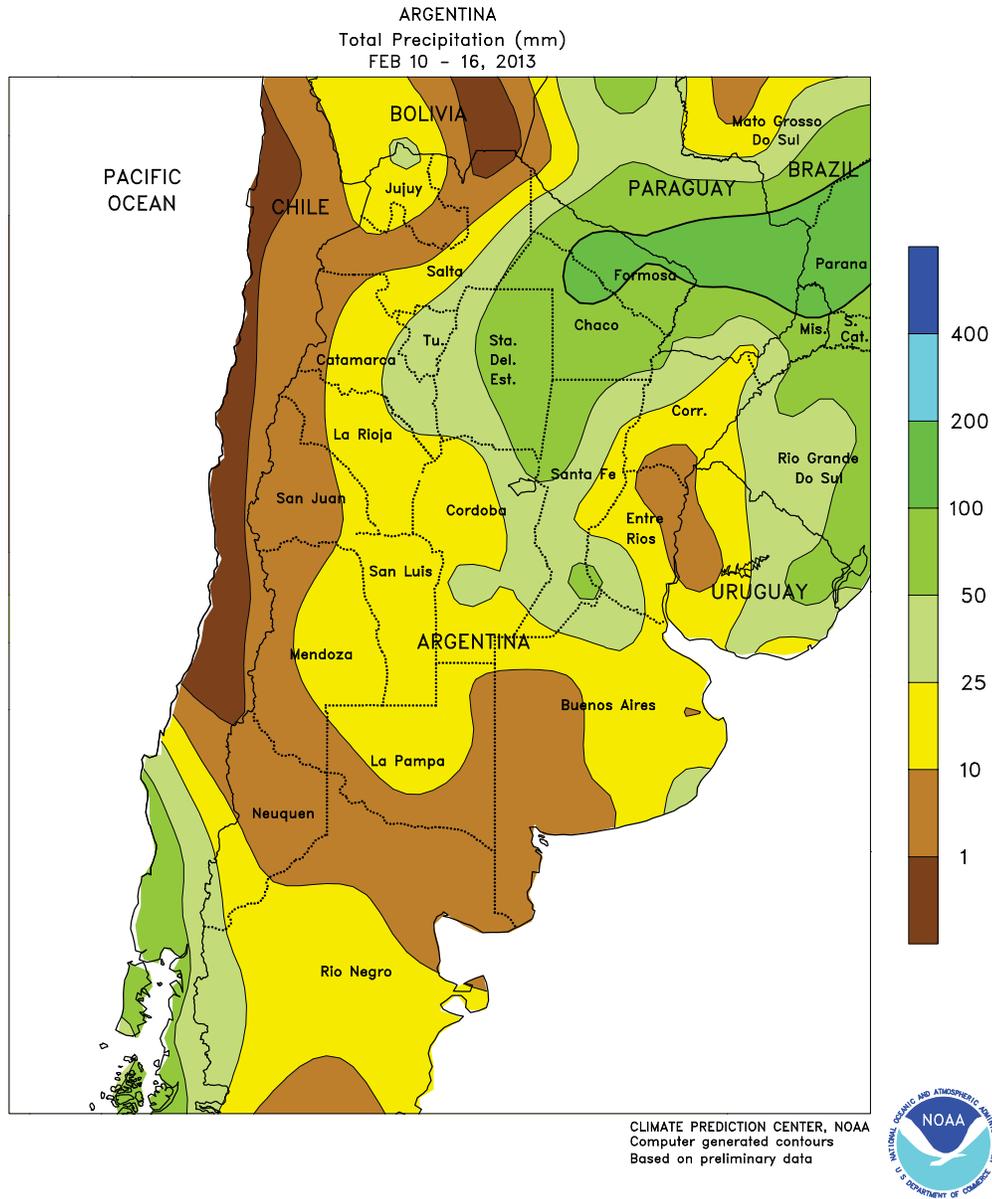
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTH AFRICA

Summer warmth promoted growth of rain-fed summer crops. Eastern sections of the corn belt registered light rain (less than 25 mm) and sunny days, aiding development of early planted crops in the filling stages. Meanwhile, timely, locally heavy showers (10-25 mm) boosted moisture for reproductive crops in western sections of the corn belt. Weekly temperatures averaged 1 to 2°C above normal, with daytime highs briefly reaching the lower 30s (degrees C) in

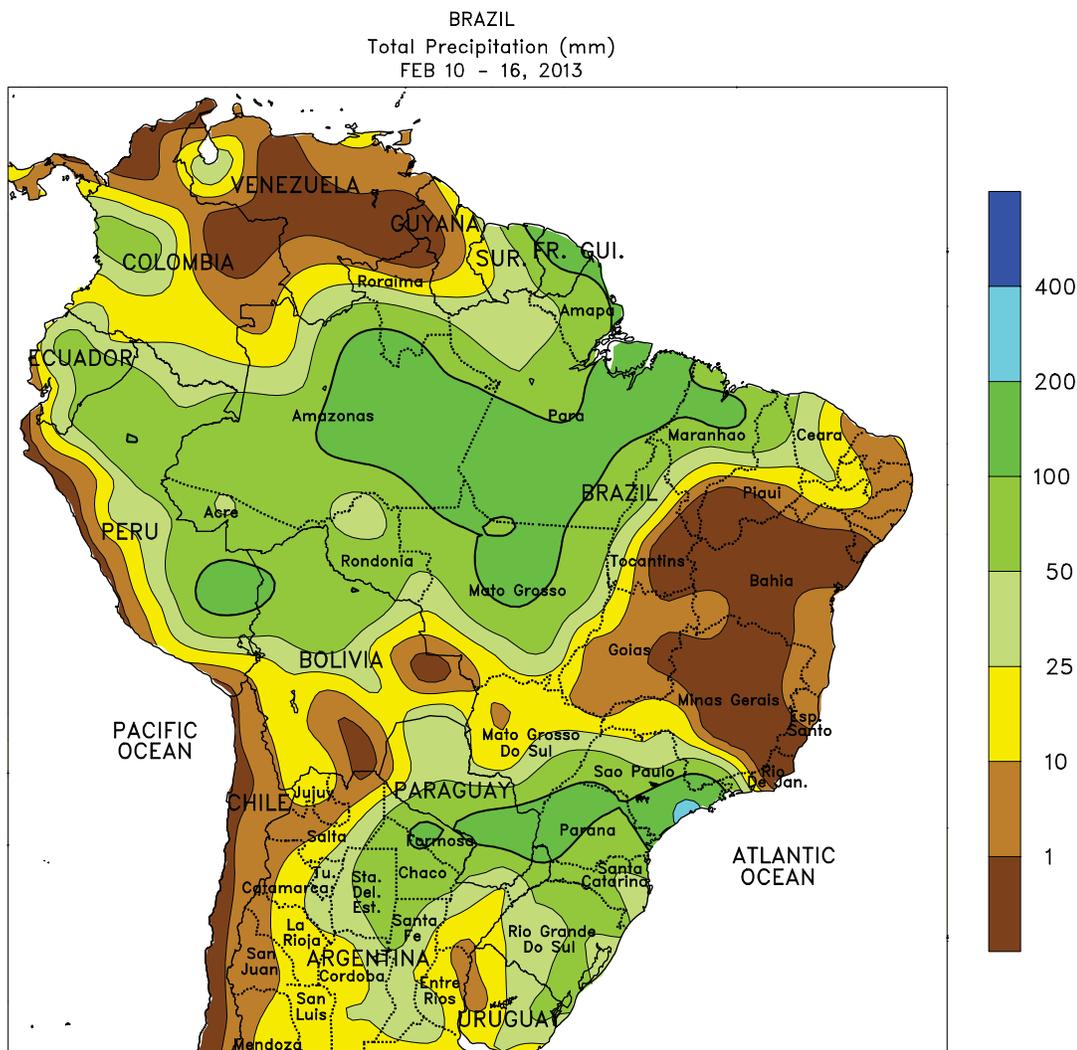
the east and the middle 30s in the west. Elsewhere, locally heavy rain (25-50 mm) maintained generally favorable levels of moisture for rain-fed sugarcane in southern sections of KwaZulu-Natal. Unseasonably heavy rain (5-25 mm) lingered over agricultural districts of Western and Eastern Cape, boosting moisture reserves for livestock and immature summer crops but causing minor disruptions in fieldwork.



ARGENTINA

Showers brought some relief from long-term dryness to key farming areas of central Argentina. Rainfall totaled 10 to 25 mm across Cordoba, Santa Fe, and Entre Rios, and in northern production areas of La Pampa and Buenos Aires; little to no rain fell in southwestern Buenos Aires. While providing beneficial moisture for grains and oilseeds in varying stages of development, the rain was not of sufficient intensity or coverage to fully alleviate drought impacts. Additionally,

weekly temperatures averaging 2 to 5°C above normal (daytime highs reaching the middle 30s degrees C) maintained high evaporative losses. Heavy rain (25-100 mm) overspread the north, boosting moisture for immature, late-planted summer grains, oilseeds, and cotton. As in central Argentina, weekly temperatures averaged 2 to 5°C above normal, though daytime highs reached 40°C in traditionally warmer western locations (Santiago del Estero to Formosa).



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

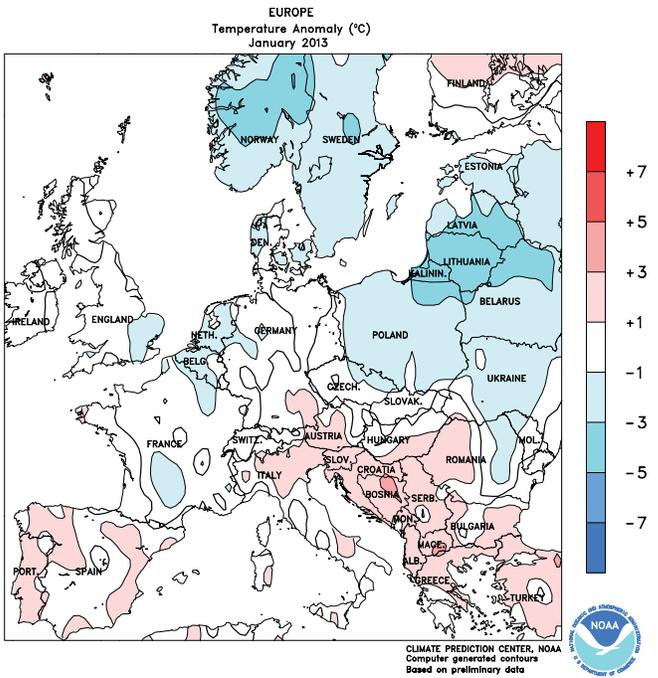
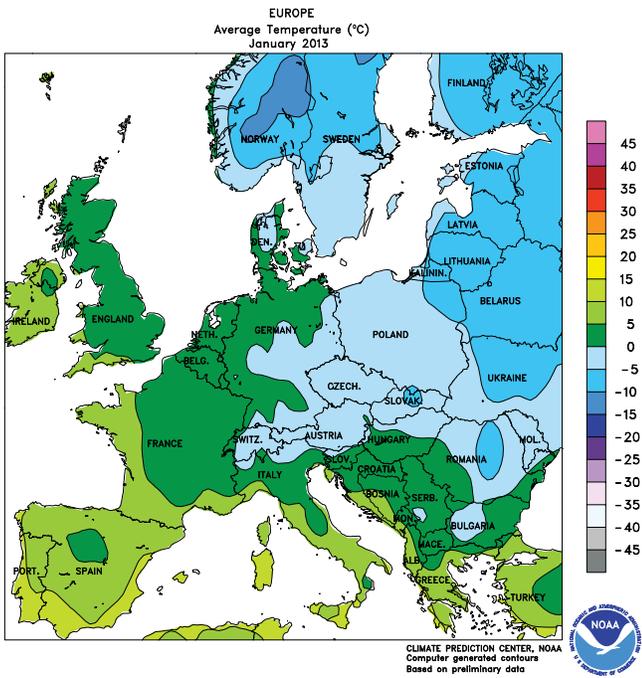
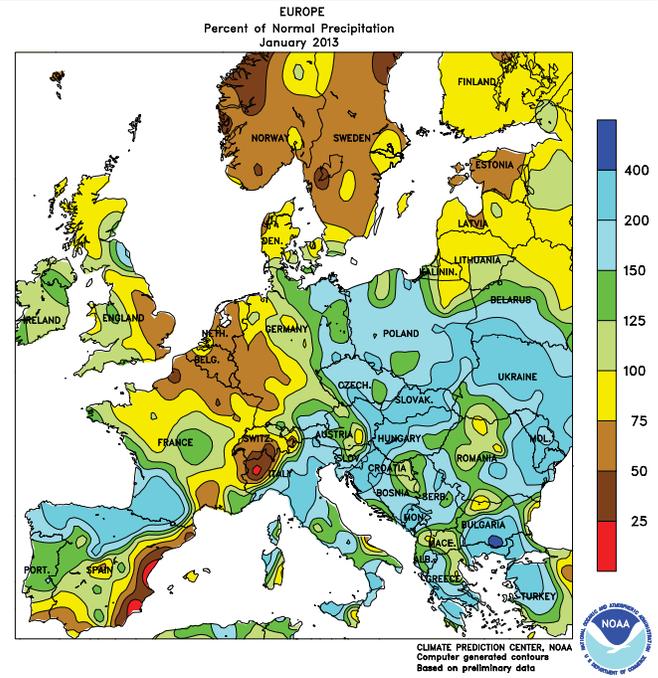
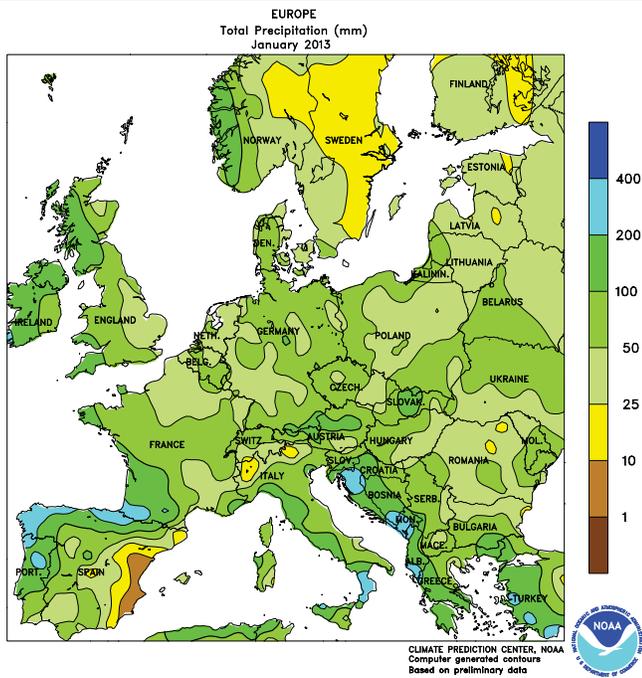


BRAZIL

Beneficial rain continued throughout major soybean areas of southern and central Brazil, but unseasonable dryness increased in outlying production areas of the northeastern interior. Rainfall totaled 25 to 100 mm from Rio Grande do Sul to Sao Paulo, and in most farming areas of Mato Grosso. In the south, the rain was overall beneficial for summer crops, including soybeans, corn, and sugarcane, as well as emerging second-crop (safrinha) corn, but the intensity of the rain may have slowed harvesting of early maturing soybeans. In contrast, dry weather dominated much of east-central Brazil, including Bahia, most of Minas Gerais, and nearby locations in

the Center-West Region and the northeastern interior. The dryness in the Center-West (Goias and northern Mato Grosso do Sul) aided soybean harvesting and subsequent planting of safrinha corn. Farther east (western Bahia and nearby locations in Tocantins, Piaui, and Maranhao), however, the dryness reduced moisture for soybeans and cotton. Weekly temperatures averaged several degrees C above normal throughout Brazil's agricultural areas, with the highest anomalies (3-4°C above normal, with daytime highs in the middle and upper 30s) recorded in some of the driest locations, exacerbating moisture losses through evapotranspiration.

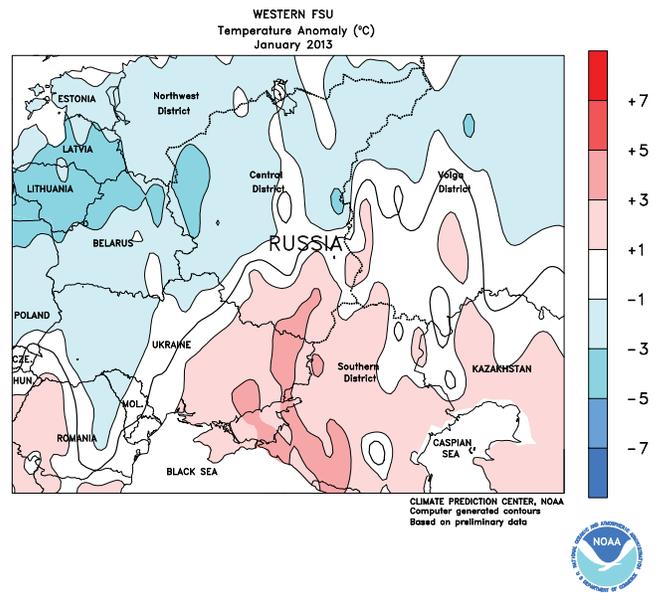
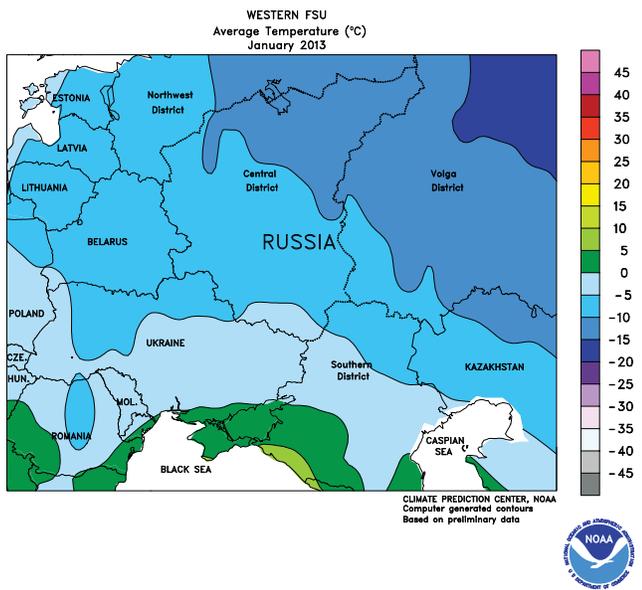
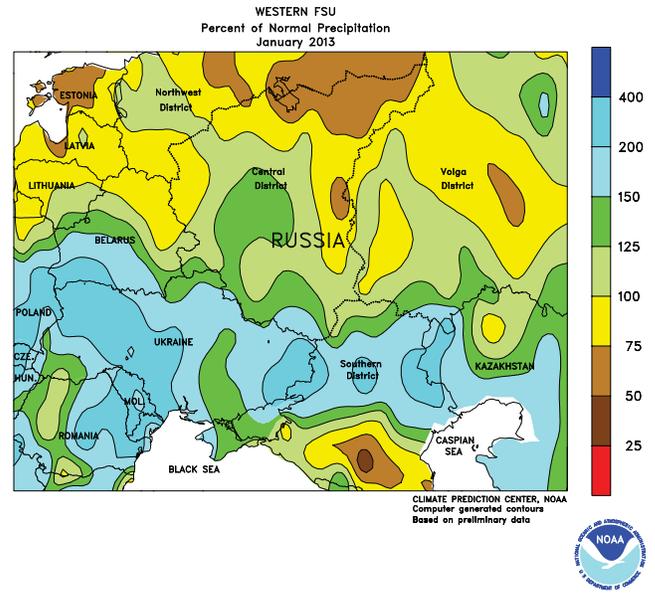
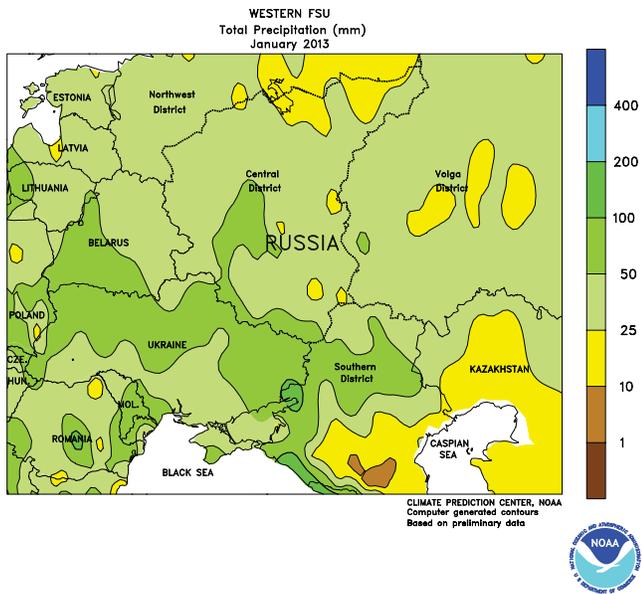
January International Temperature and Precipitation Maps



EUROPE

During January, above-normal precipitation and near- to below-normal temperatures across Europe maintained favorable overwintering conditions for winter grains and oilseeds. In northern Europe's winter crop areas, precipitation averaged 80 to 150 percent of normal, although areas of dryness (locally less than 50 percent of

normal) were noted in northern France and western Germany. Farther south, rainfall totaled 40 to locally more than 100 mm in Spain and Italy, favoring vegetative winter wheat and barley. In the Balkans, rainy, mild weather favored dormant winter crops but kept the region devoid of a protective snow cover.

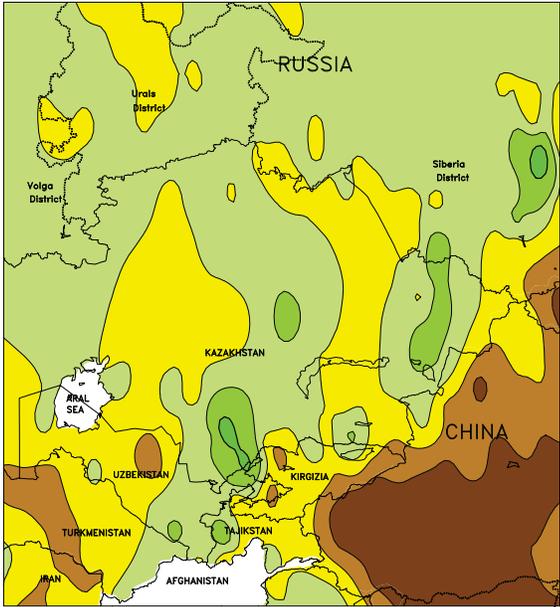


WESTERN FSU

In January, near- to above-normal precipitation maintained abundant soil moisture reserves for dormant winter grains and oilseeds. However, warmer-than-normal weather (2-4°C above normal, with highs topping 15°C by month's end)

melted much of the protective snow cover over key southern winter wheat areas. In contrast, snow cover remained adequate for crop insulation in northern crop areas, where temperatures averaged near to below normal.

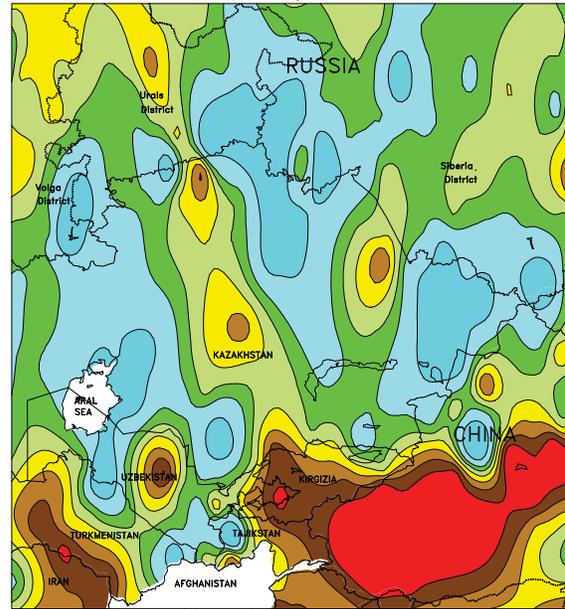
EASTERN FSU
Total Precipitation (mm)
January 2013



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



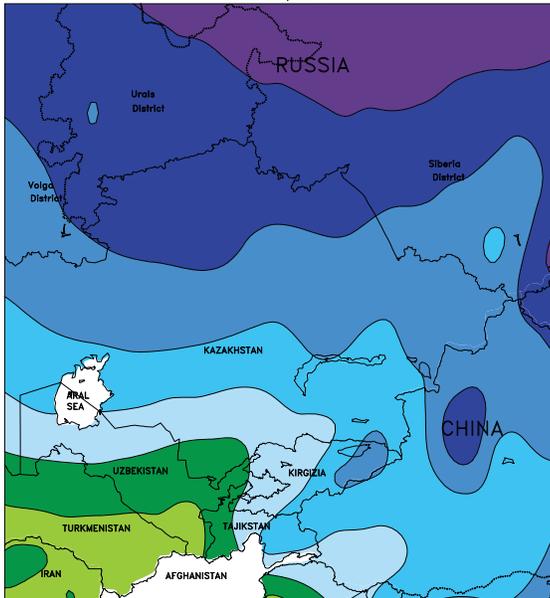
EASTERN FSU
Percent of Normal Precipitation
January 2013



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



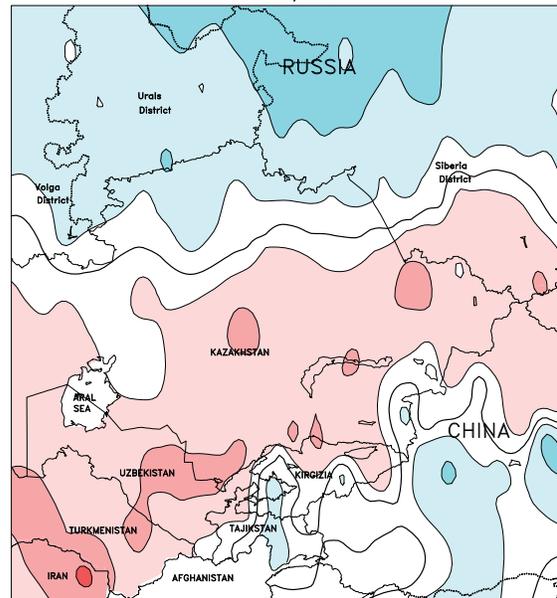
EASTERN FSU
Average Temperature (°C)
January 2013



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EASTERN FSU
Temperature Anomaly (°C)
January 2013



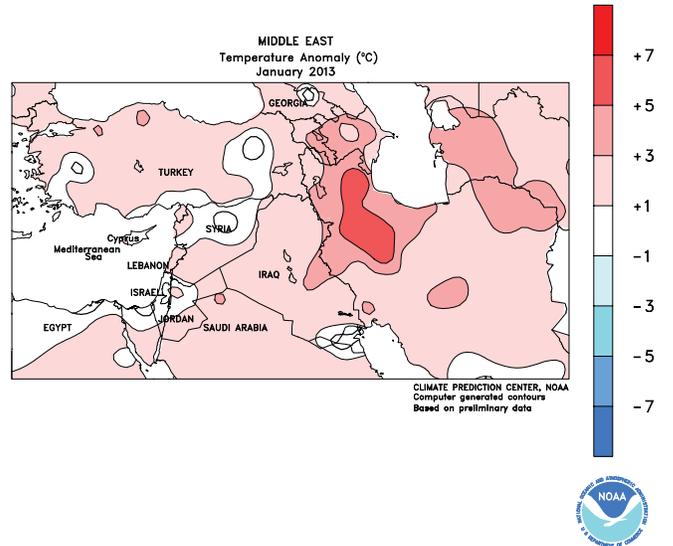
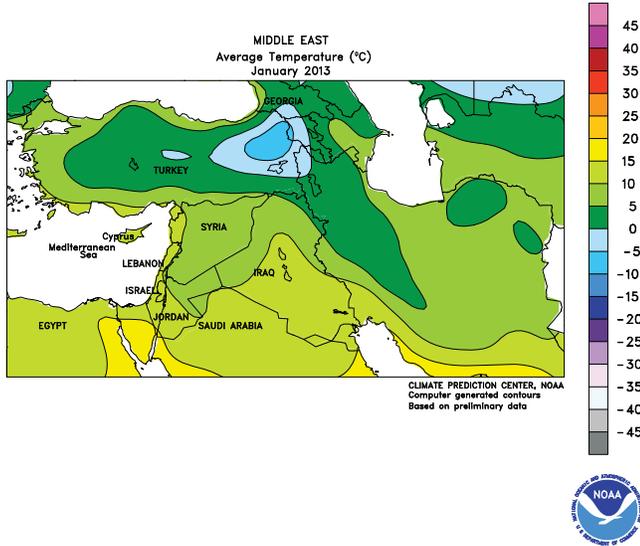
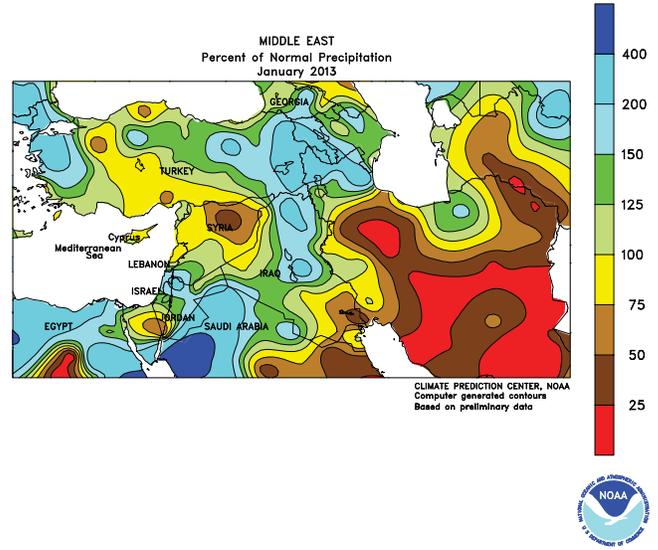
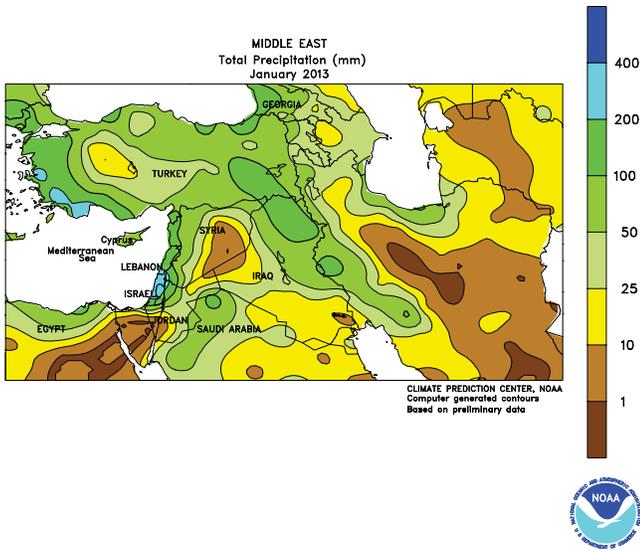
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EASTERN FSU

In January, colder-than-normal weather in northern portions of the region contrasted with above-normal temperatures in the south. Temperatures for the month averaged up to 3°C below normal in southern Russia and northern Kazakhstan, although

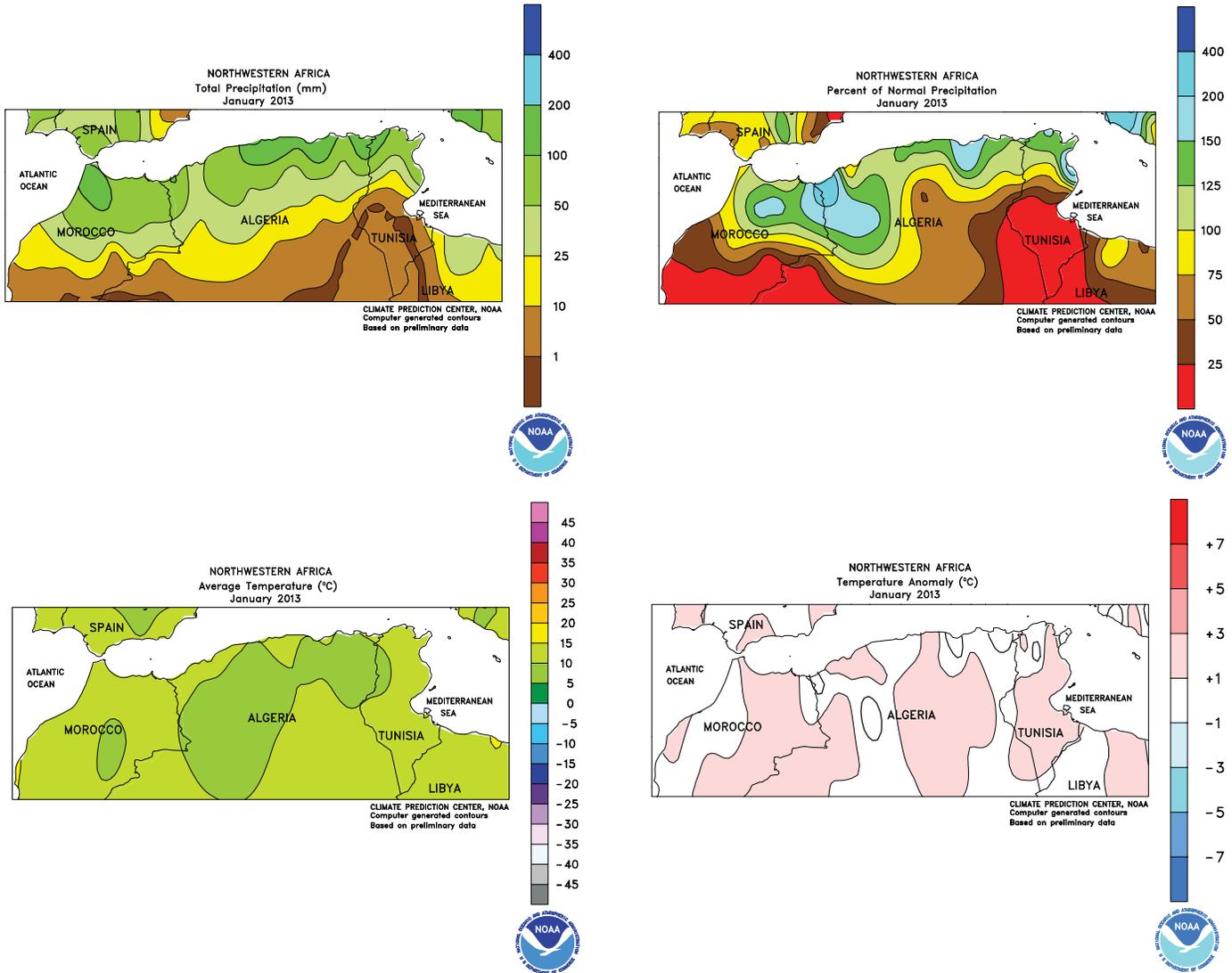
the region remained encased in a deep snowpack and agricultural activity was minimal (if any). In the southern cotton areas, rain and mountain snow provided a welcome boost to irrigation reserves for cotton, which is planted in April and May.



MIDDLE EAST

Heavy rain and mountain snow during January insulated dormant winter crops in the north and boosted soil moisture for vegetative winter grains in southern growing areas. Precipitation totaled 50 to 140 mm in key winter grain areas from southeastern Turkey into

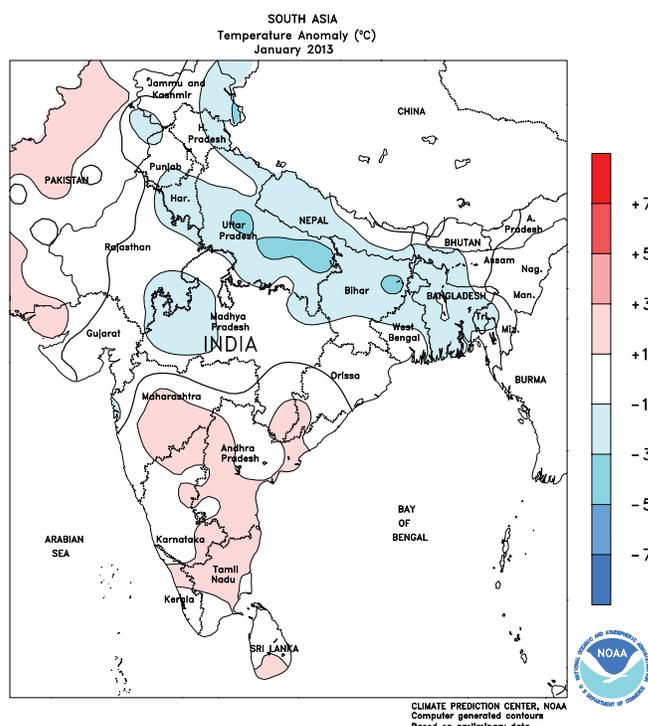
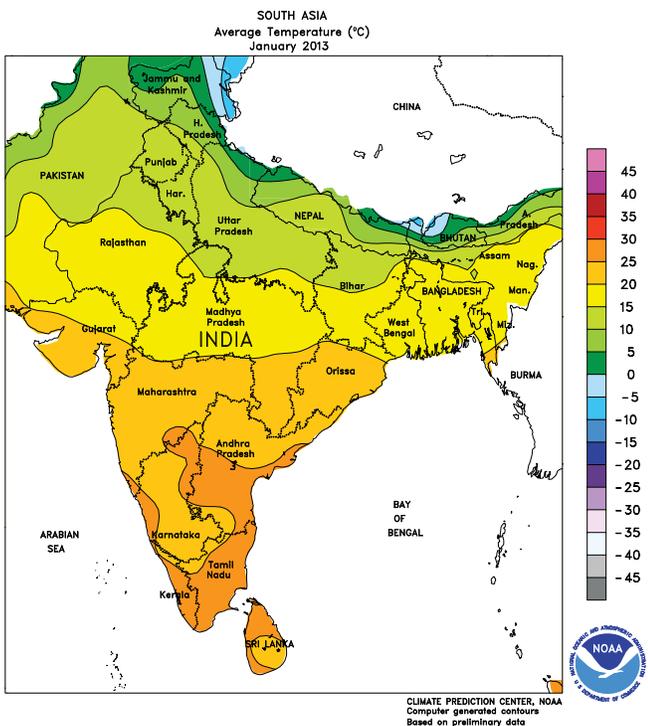
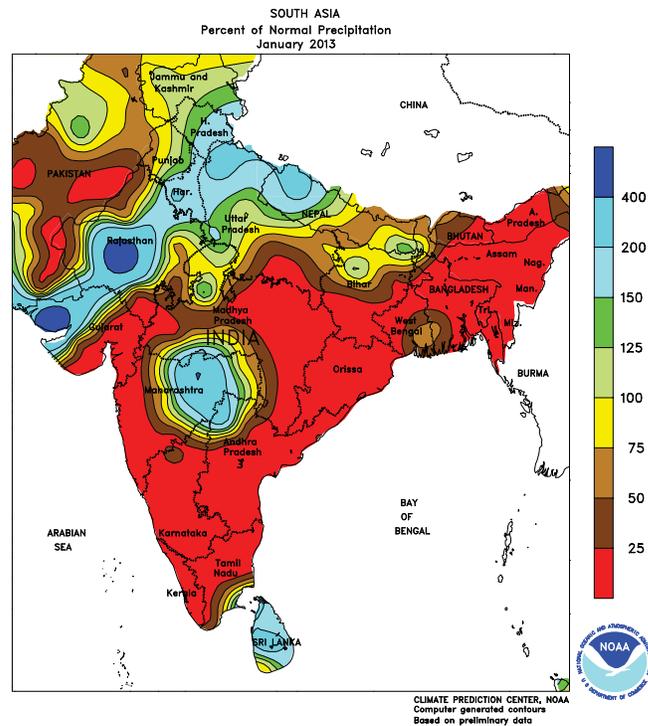
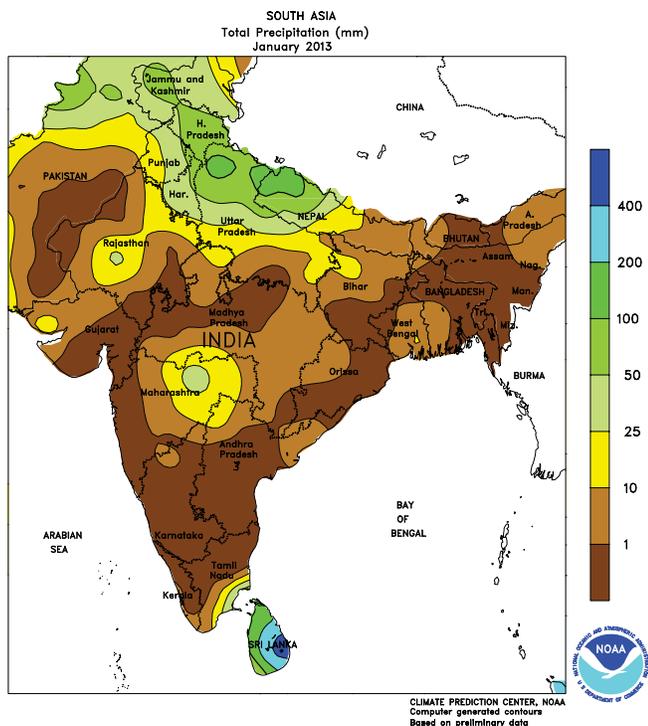
northern Iraq and western Iran, with drier-than-normal conditions generally confined to Turkey's Anatolia Plateau. By month's end, however, sharply warmer weather (15°C or greater) melted most of the region's snowpack.



NORTHWESTERN AFRICA

After a dry start, beneficial rain returned to the region during the latter half of January, maintaining favorable prospects for vegetative winter wheat and barley. Rain was heaviest (greater 100 mm) in northern Morocco

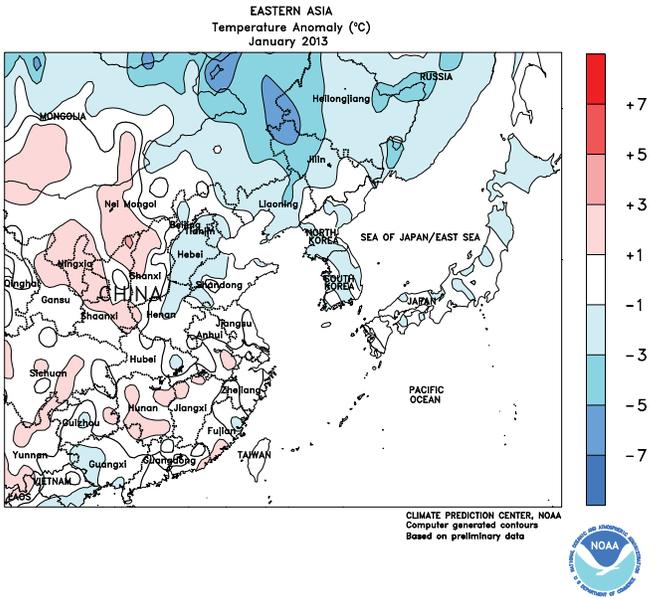
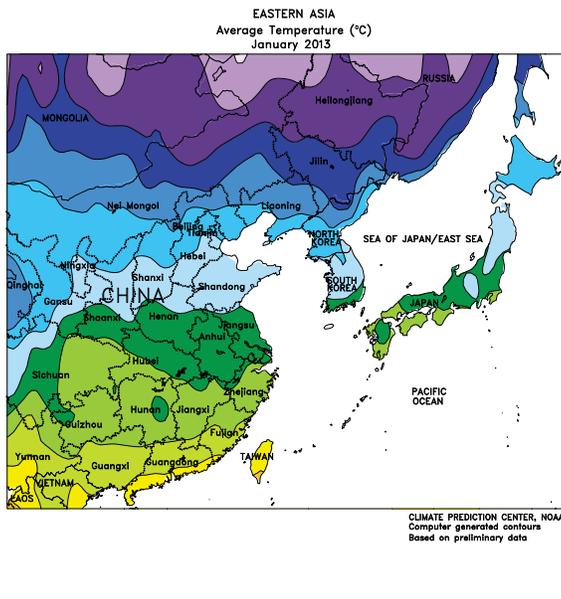
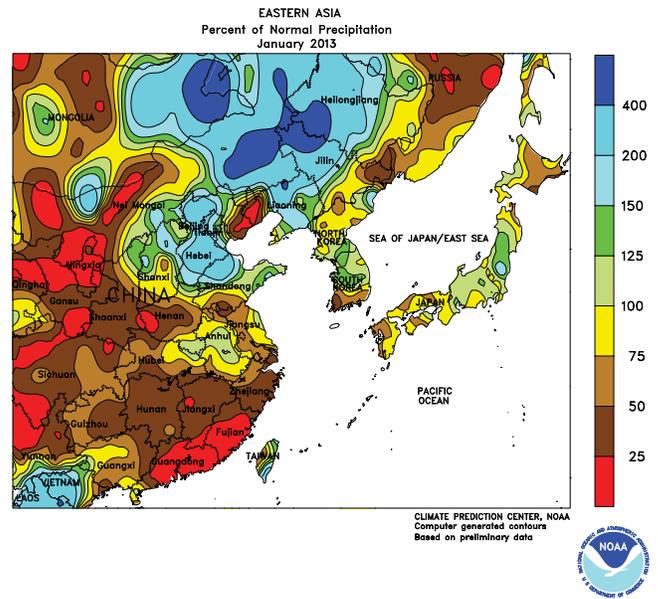
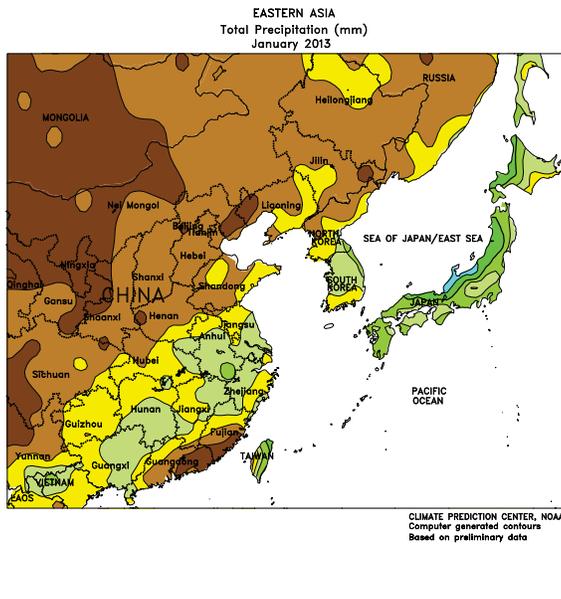
and from north-central Algeria into northwestern Tunisia. Only southern-most portions of western Morocco were dry, a relatively small winter grain production area.



SOUTH ASIA

Above-normal rainfall in January (predominantly in the form of mid-month showers) across northern India provided a favorable boost to moisture supplies for vegetative wheat as well as reproductive rapeseed in portions of western India. Rainfall was below normal, however, in southern and southeastern India, raising concerns about sufficient moisture

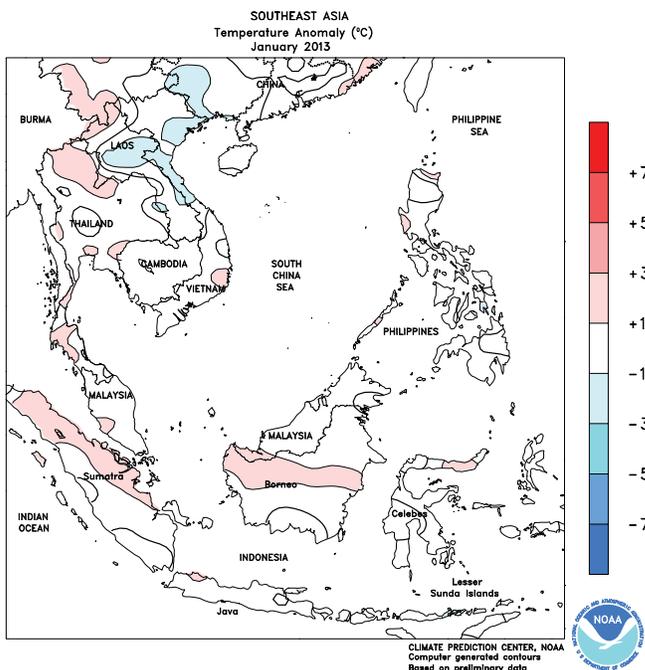
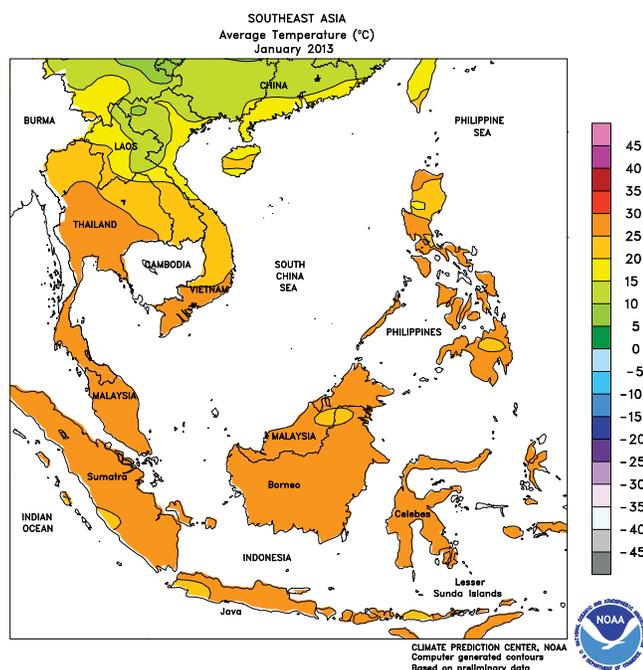
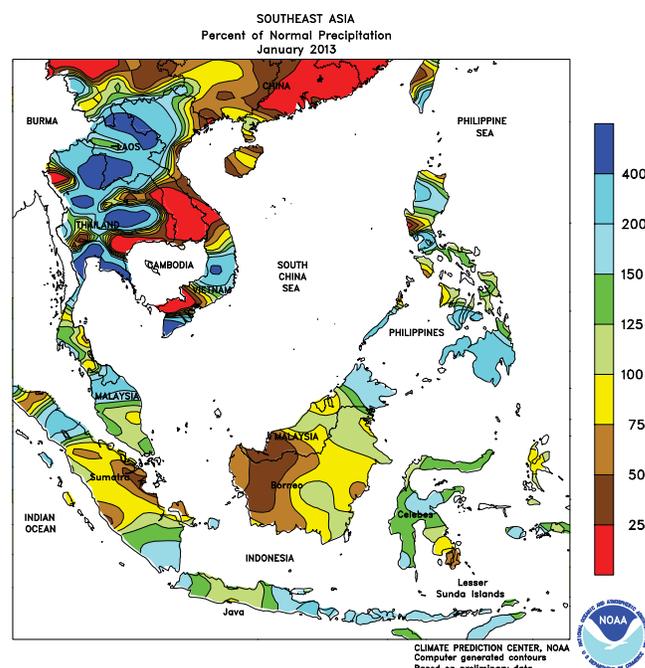
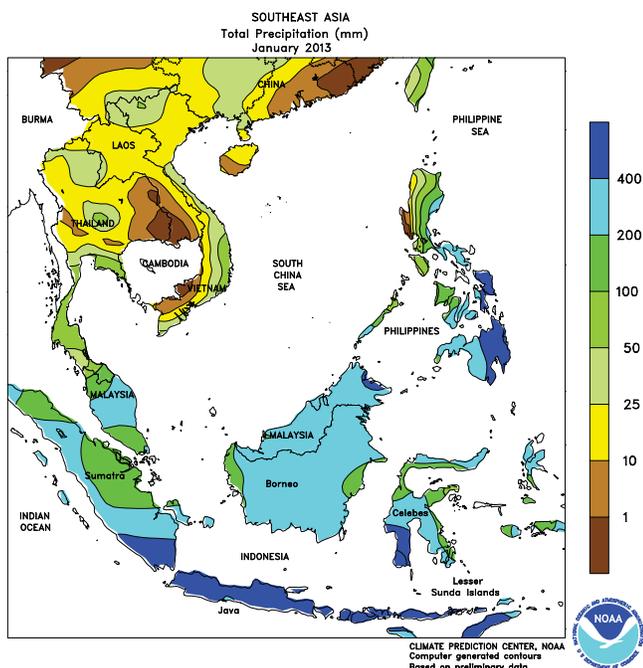
for rabi rice and groundnuts. In contrast, above-normal monthly rainfall maintained near record wetness in Sri Lanka as wet-season rice was beginning to mature. Meanwhile, temperatures were below normal in northern India, aiding wheat development, while near-normal temperatures prevailed throughout the rest of the region.



EASTERN ASIA

In China, rainfall was generally near normal in January across wheat and rapeseed areas. Moisture conditions remained favorable for overwintering crops, with periodic light rain and snow maintaining adequate moisture reserves. In contrast, below-normal rainfall in southern

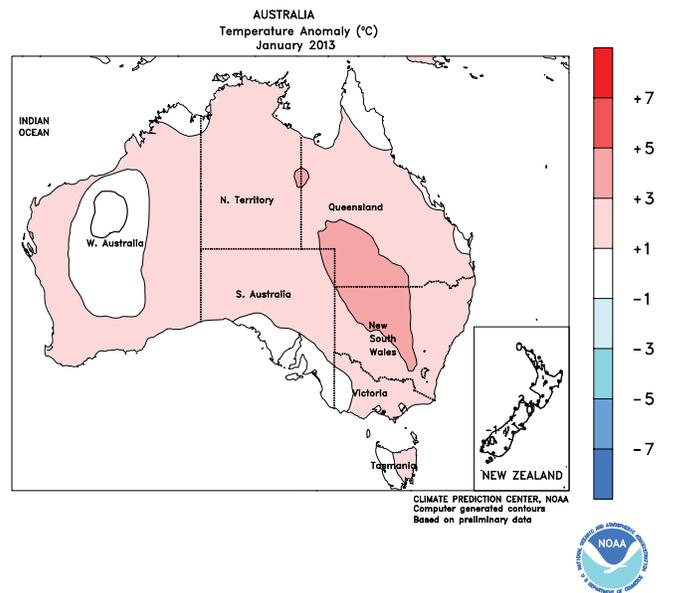
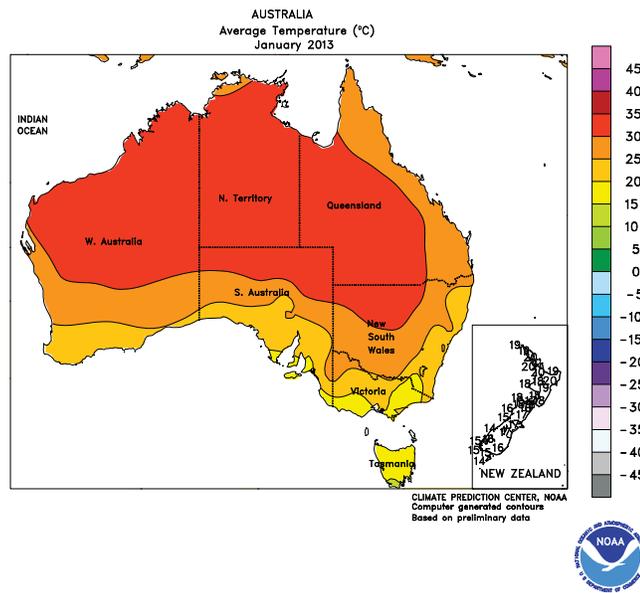
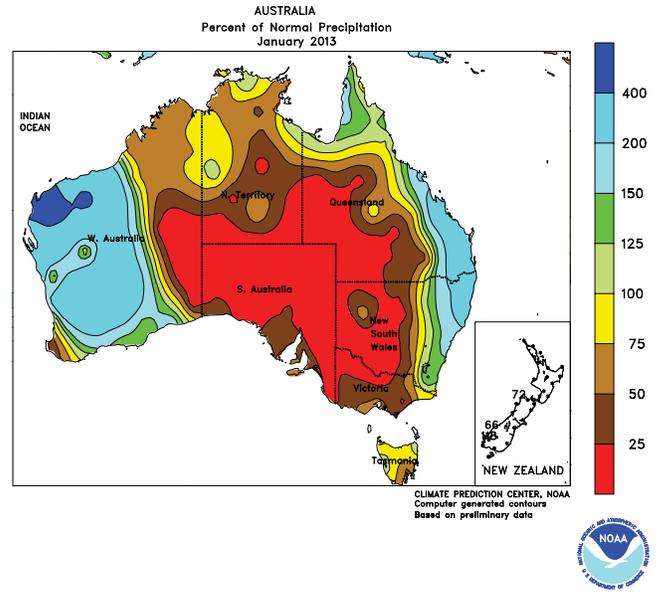
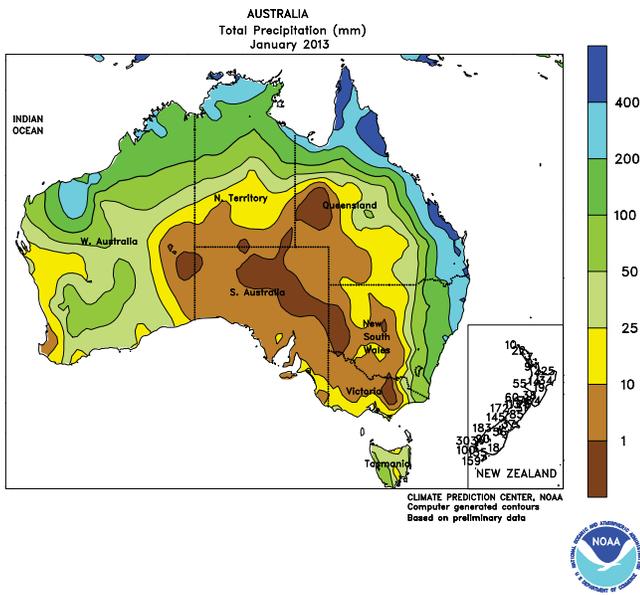
China reduced moisture supplies for sugarcane and winter vegetables. Meanwhile, temperatures were near normal across much of China, with occasional cold outbreaks raising concerns about crop damage, mainly in far southern areas.



SOUTHEAST ASIA

In January, monsoon rains across Java, Indonesia, maintained abundant to excessive moisture supplies for reproductive rice. Some flooding occurred, however, in western portions of Java. Seasonal rainfall (since November 1) has been well above

normal in Java, making the period the second wettest in the last 30 years. In the Philippines, seasonal rainfall continued to keep winter rice and corn well watered, with localized flooding occurring in eastern parts of Mindanao and the Visayan Islands.

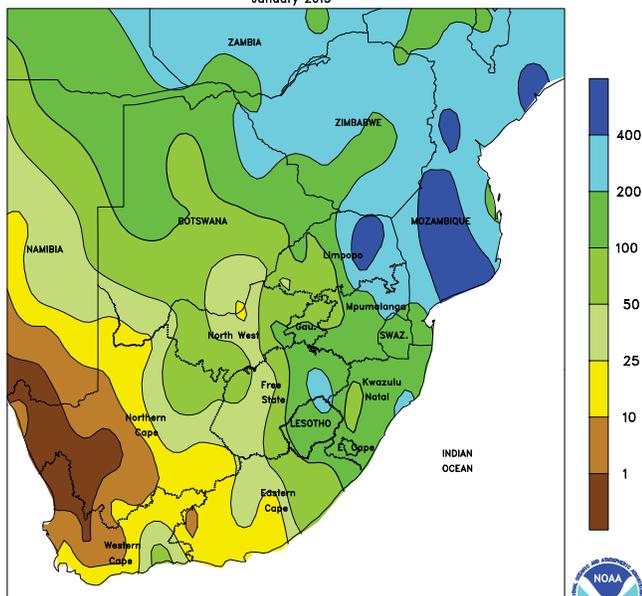


AUSTRALIA

In early to mid-January, periods of excessive heat stressed summer crops in eastern Australia. Later in the month, seasonal warmth and adequate moisture supplies favored summer crop development in Queensland, but drier-than-normal weather lingered in northern New South Wales, further

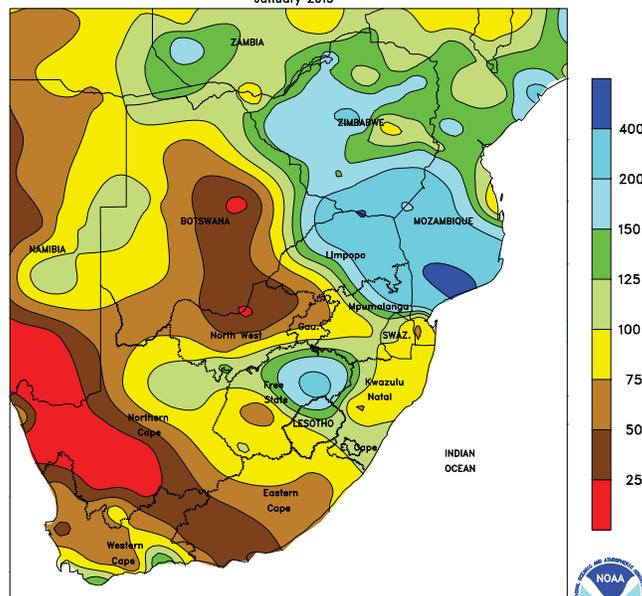
disrupting crop development. At the end of January, the remnants of Tropical Cyclone Oswald soaked the east coast, causing local freshwater flooding and some damage to sugarcane. Farther inland, Oswald provided a welcome boost in topsoil moisture for cotton and sorghum.

SOUTH AFRICA
Total Precipitation (mm)
January 2013



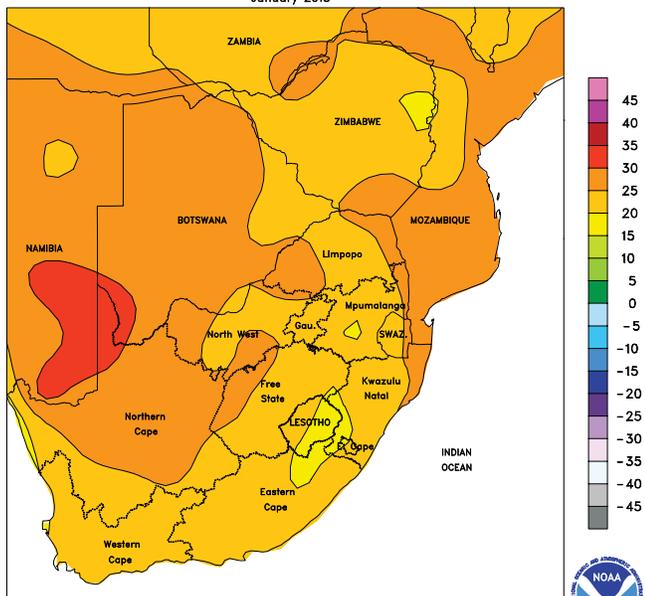
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTH AFRICA
Percent of Normal Precipitation
January 2013



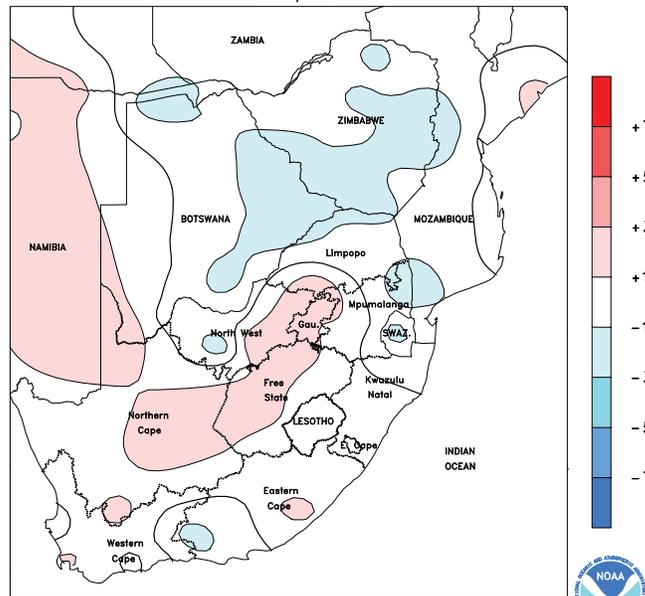
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTH AFRICA
Average Temperature (°C)
January 2013



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTH AFRICA
Temperature Anomaly (°C)
January 2013

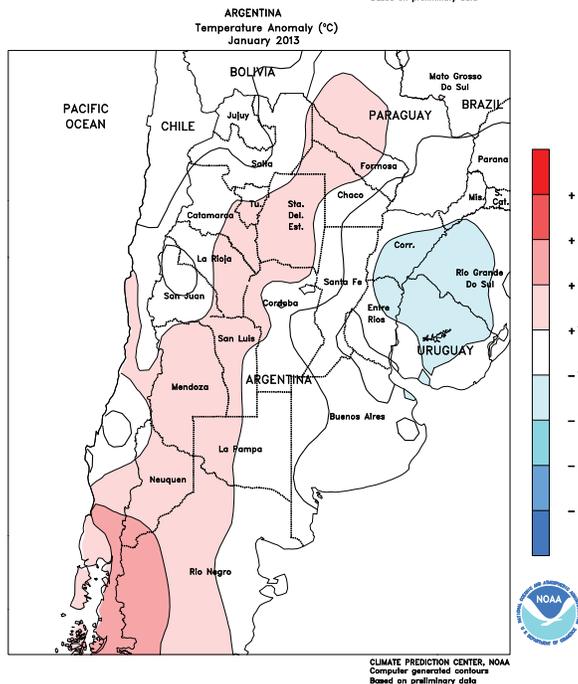
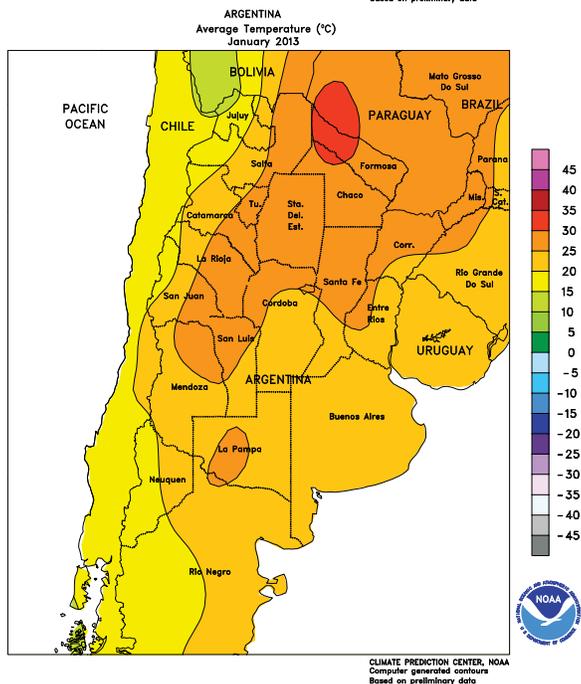
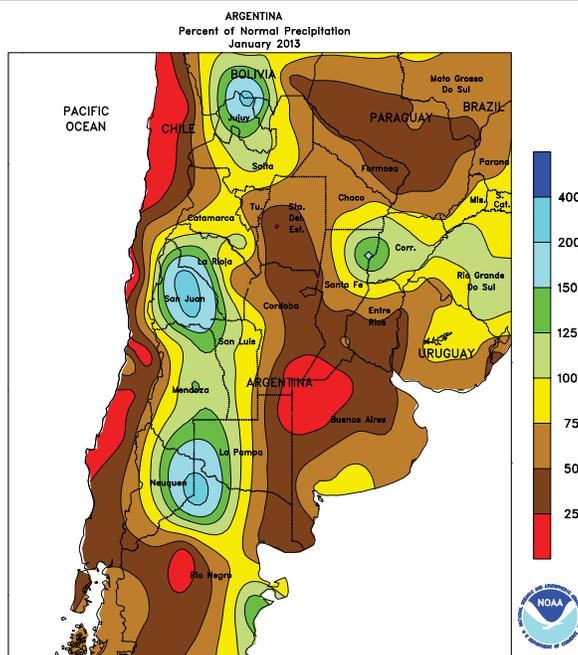
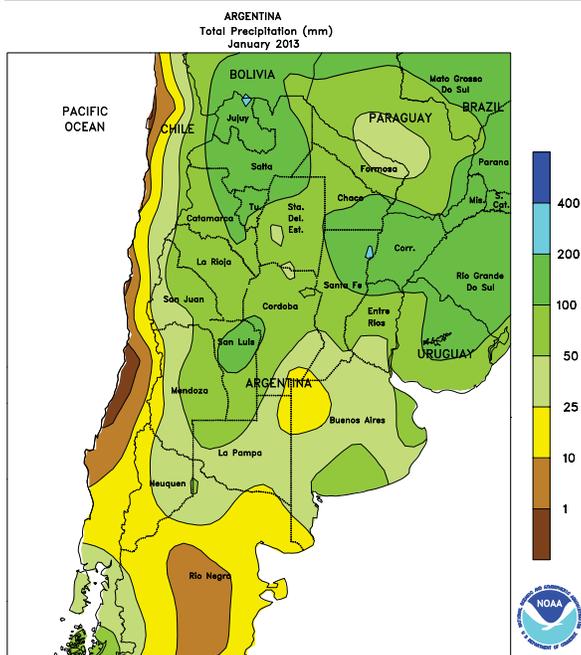


CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTH AFRICA

During January, warm, showery weather prevailed throughout the main eastern production areas. However, rainfall was below normal across northern and western sections of the corn belt (North West to west-central Mpumalanga), reducing moisture for vegetative rain-fed summer crops. In addition, weekly temperatures averaged up to 2°C above normal – with daytime highs occasionally reaching the upper 30s degrees C – exacerbating the effects of the dryness on soil moisture reserves and developing

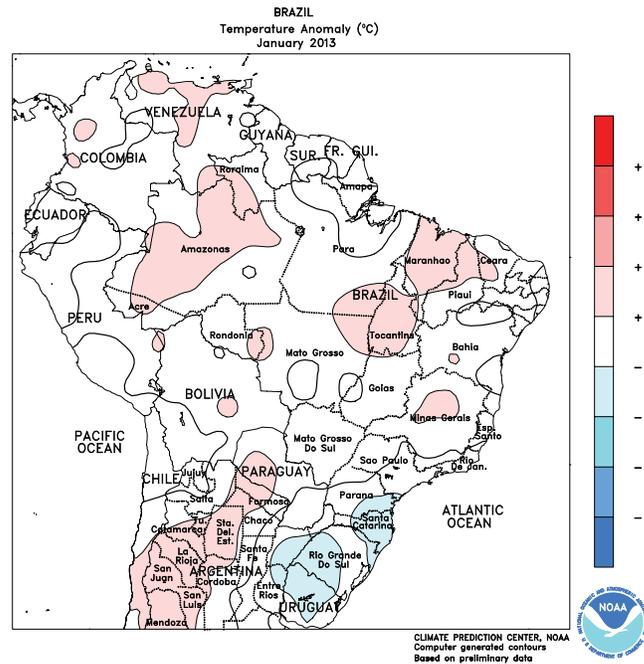
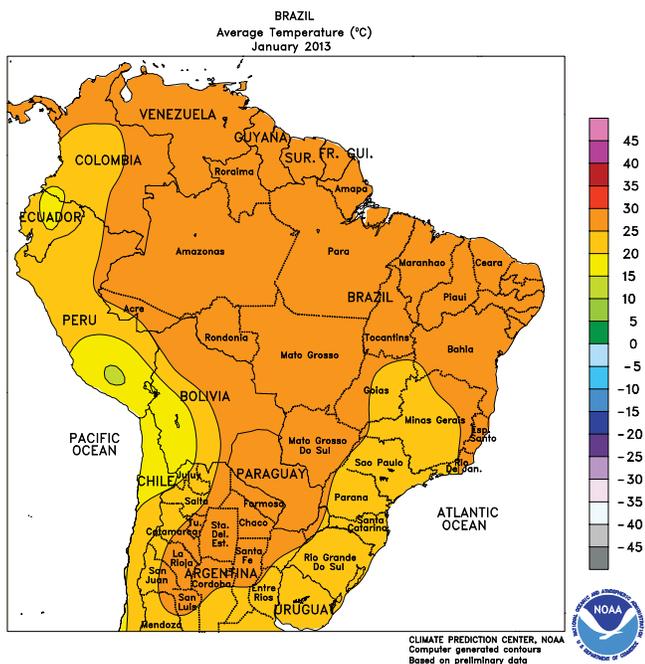
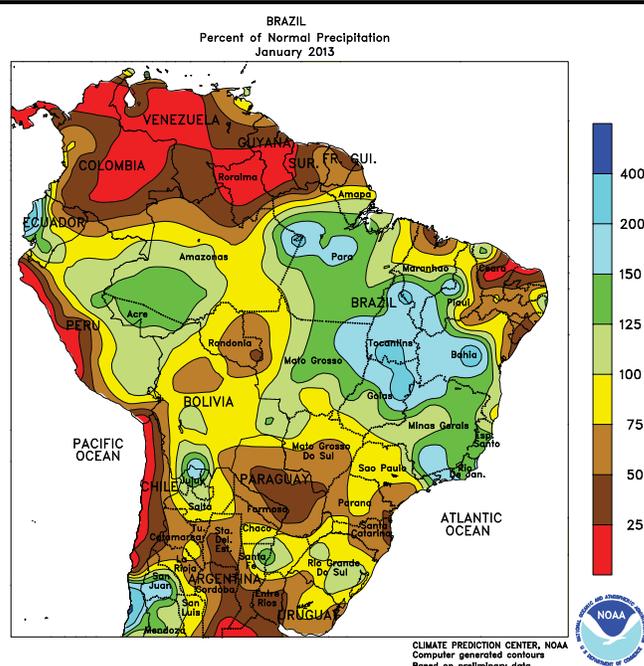
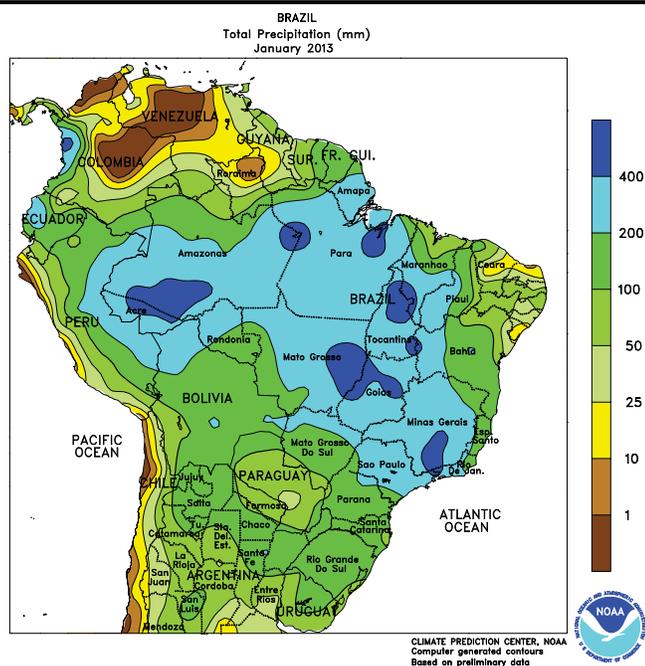
crops. Temperatures were more seasonable in eastern sections of the corn belt, where rainfall was closer to normal; consequently, conditions in the east were generally favorable for crops advancing through reproduction. Near-normal rainfall and seasonable warmth also benefited sugarcane in the main production areas of Mpumalanga and KwaZulu-Natal. Showers were less frequent in the Cape Provinces, where summer warmth fostered rapid development of irrigated crops.



ARGENTINA

During January, dry, occasionally warm weather reduced moisture for summer grains and oilseeds following months of excessively wet conditions. Rainfall totaled less than 50 mm (below 50 percent of normal) in high-yield farming areas from southern Cordoba and northern La Pampa eastward through the lower Parana River Valley (southern Santa Fe, Entre Rios, and northern Buenos Aires). While initially beneficial, the dryness eventually depleted moisture reserves for corn and soybeans, particularly later-planted crops that did not have well-established rooting systems. Monthly

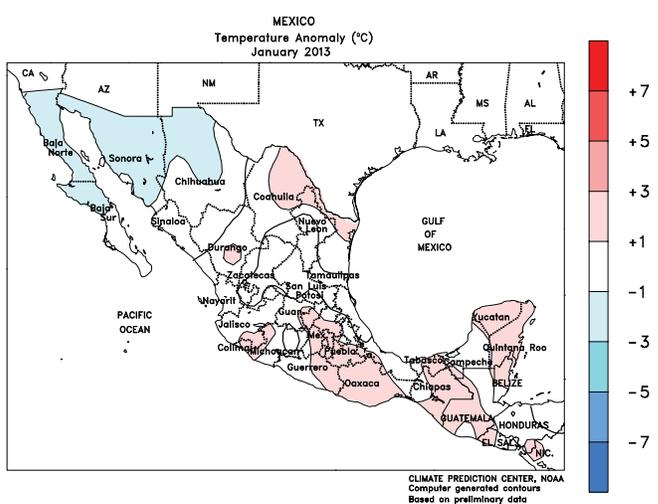
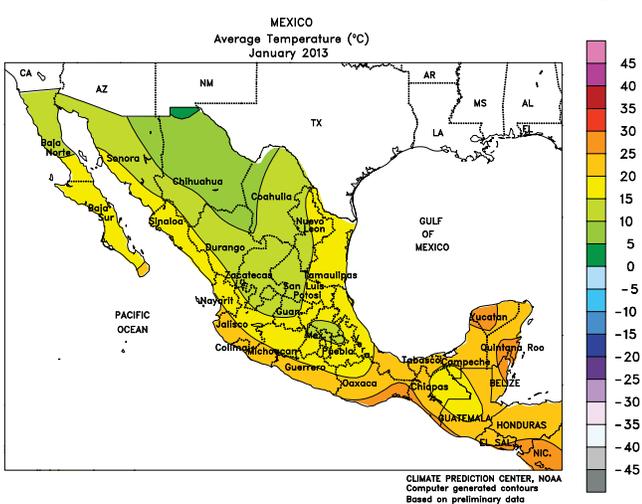
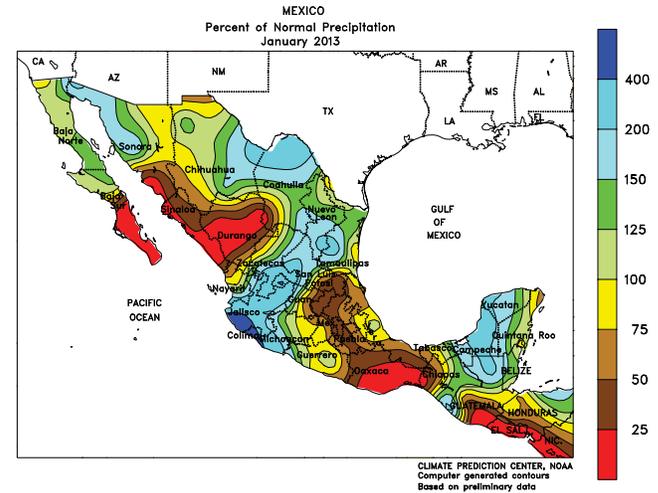
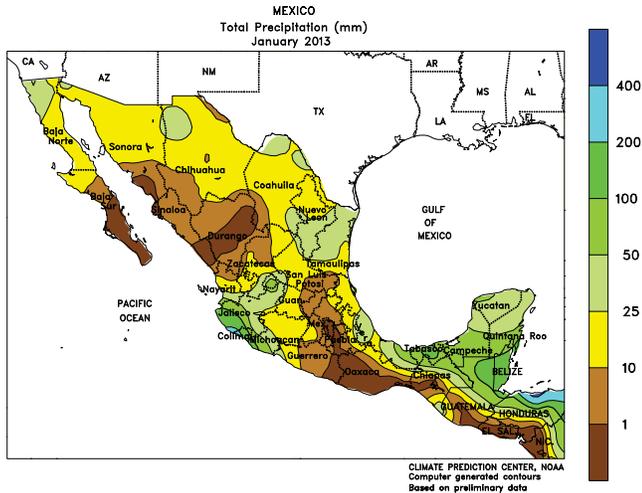
average temperature were generally within 1°C of normal, although daytime highs occasionally reached the middle 30s (degrees C), maintaining high evapotranspiration rates. Farther north, near- to above-normal rainfall provided timely moisture for summer grains, oilseeds, and cotton, though high temperatures (monthly temperatures 1-2°C above normal, with daytime highs often reaching 40°C) sustained high moisture demands of crops and livestock in western production areas (notably Santiago del Estero, Chaco, and Formosa).



BRAZIL

In January, near- to above-normal rainfall covered nearly all major agricultural areas. In the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), the rain maintained mostly favorable conditions for immature soybeans and newly planted second-crop (safrinha) corn but reportedly slowed fieldwork. Meanwhile, the rain in the northeast marked an improvement of conditions following a December dry spell, though unseasonably drier conditions continued near the northeastern coast. In southern Brazil, most of the rain came

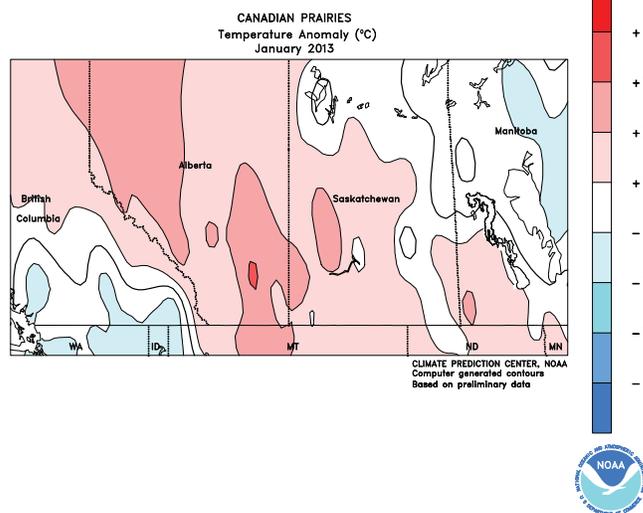
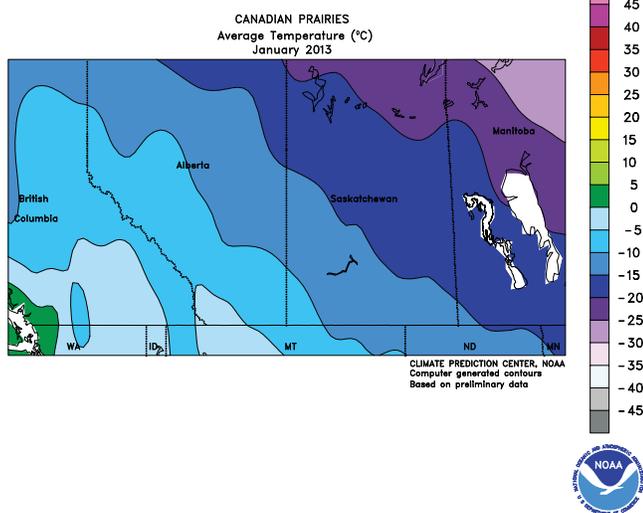
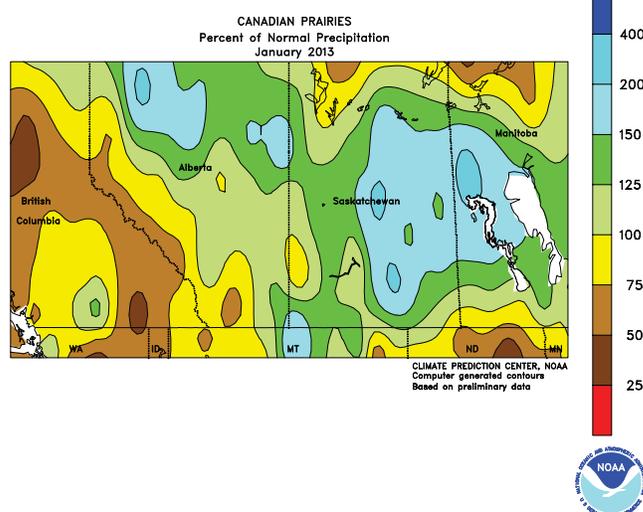
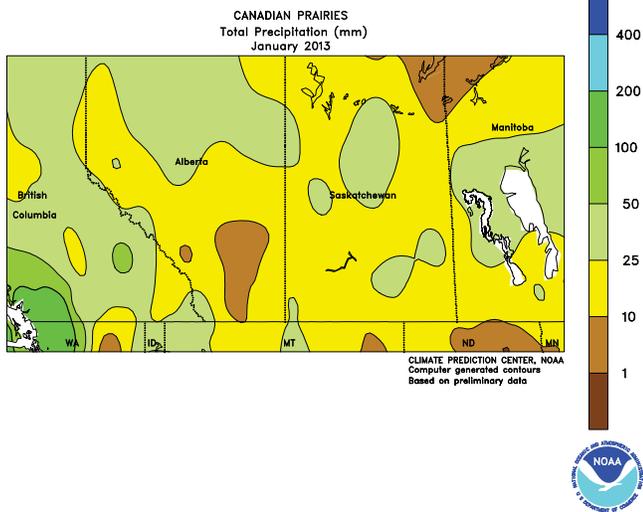
in early January, with a developing drying trend gradually reducing moisture for immature corn and soybeans. Monthly average temperatures were near to slightly above normal in central and northeastern Brazil (daytime highs often reaching the middle 30s degrees C), fostering rapid growth of soybeans, corn, cotton, and other crops. Cooler conditions relative to normal were noted in the south, although daytime highs reached the middle 30s toward month's end at the height of the drying trend.



MEXICO

In January, seasonably drier conditions prevailed across much of region, although many locations recorded rainfall in excess of the normal monthly accumulations. Across the north, scattered showers boosted moisture for winter grains, including rain-fed winter sorghum in the main production areas of Tamaulipas. Temperatures averaged near to above normal in northeastern Mexico and slightly below in the northwest, owing to an unusual outbreak of cold weather that reportedly brought frost to Sinaloa. However, freezing temperatures were not widespread, or of a sufficient level to cause significant damage to corn or other winter crops.

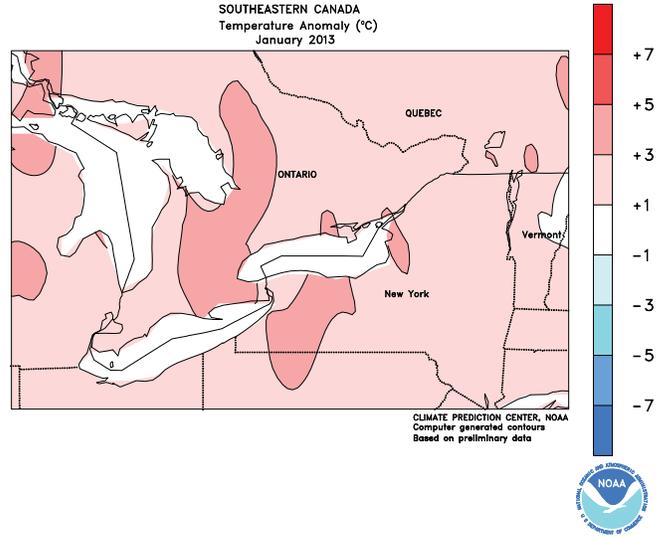
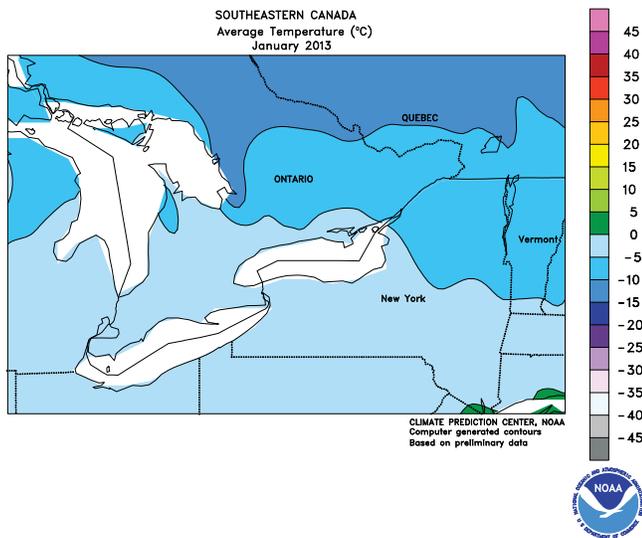
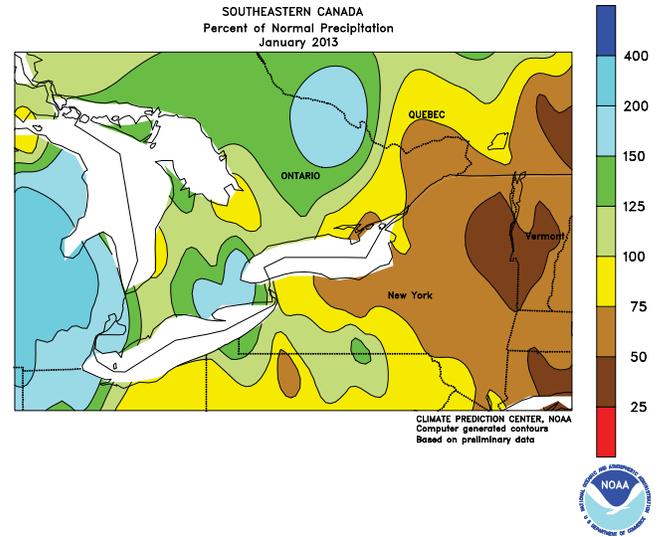
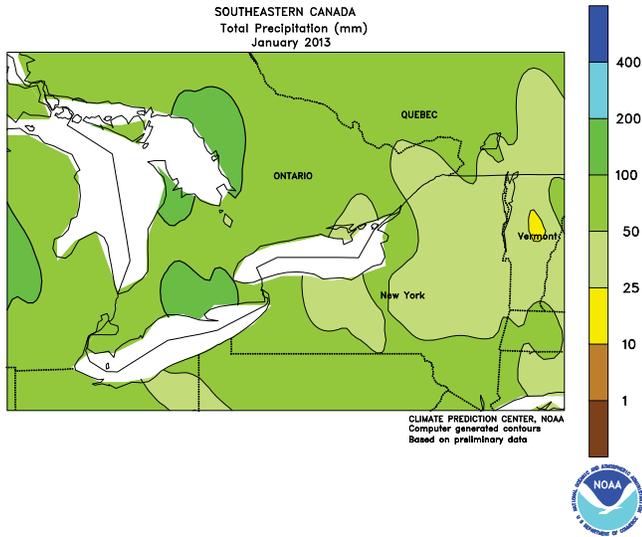
Elsewhere, scattered light showers boosted moisture for winter wheat on the southern plateau, although amounts were unseasonably light (2-25 mm). Seasonably heavier amounts were recorded in the southeast, including the main coffee growing areas of Chiapas. According to the government of Mexico, total national reservoir capacity was at 44.4 percent as of January 30, compared with 51.0 percent last year and 78.3 percent in 2011. In the northwest (Sinaloa and Sonora), total reservoir capacity was at 36.0, ahead of last year (34.3 percent) but still well behind 2010 (67.1 percent).



CANADIAN PRAIRIES

January temperatures averaged 2 to 3°C above normal across most of the Prairies, reversing a 3-month trend of cooler-than-normal weather. However, temperatures were sufficiently low enough to keep winter grains and pastures dormant, and most agricultural districts recorded several instances of nighttime temperatures below -25°C. In most areas, however, snow

cover was adequate to protect overwintering crops. Monthly precipitation totaled more than 10 mm in Manitoba, northern Saskatchewan, and much of Alberta. Moderate to deep snow cover (greater than 20 cm) existed for most of January over much of Manitoba, northeastern Saskatchewan, parts of southern Alberta, and Alberta's Peace River Valley.

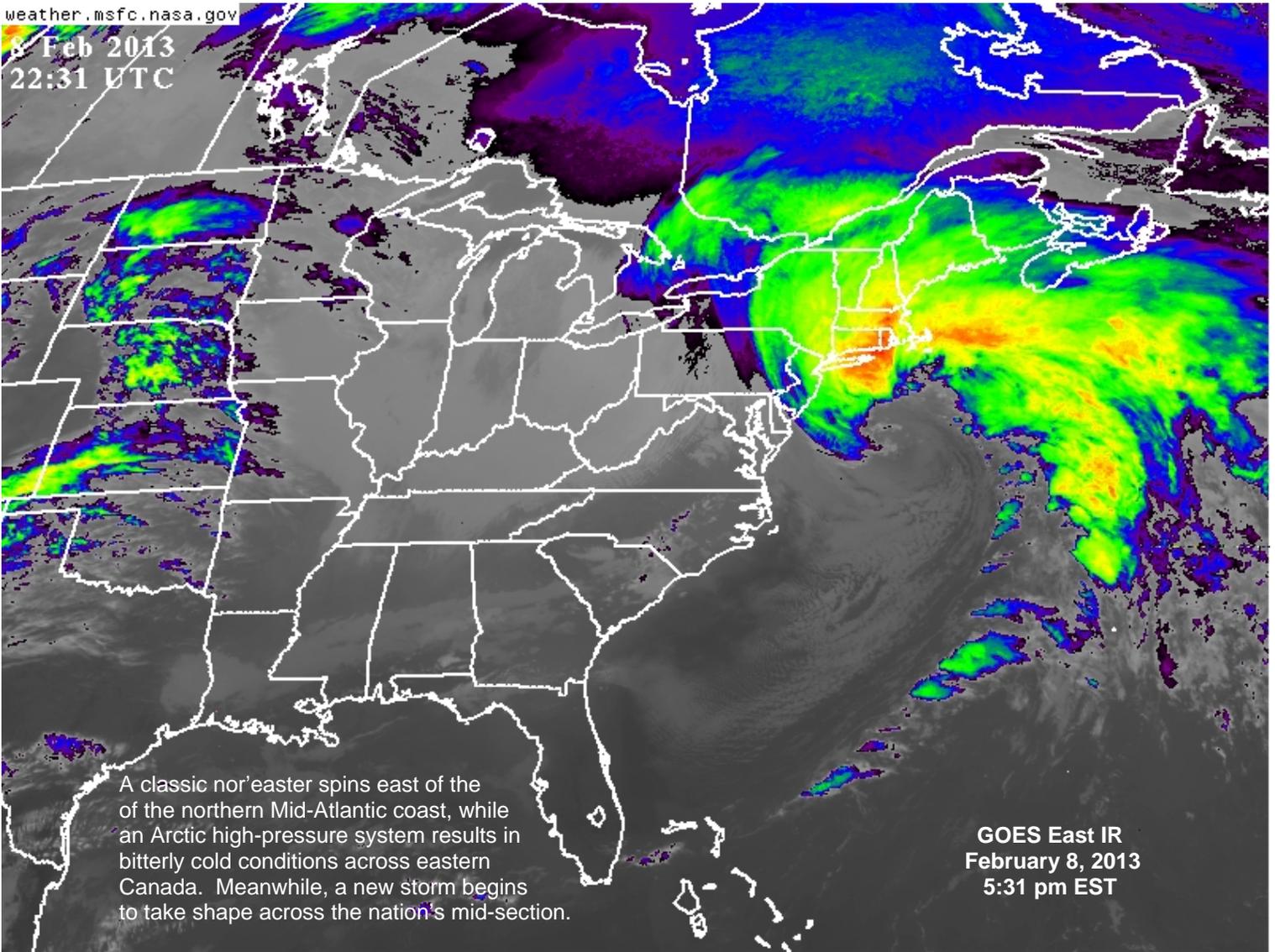


SOUTHEASTERN CANADA

A warm, wet weather pattern prevailed for much of January. The month began with a moderate to deep snow cover across the region, but a warming trend accompanied by locally heavy rain melted most snow by mid-month, leaving overwintering wheat and pastures vulnerable to damage from bitter cold. Nighttime

lows fell well below -20°C several times during the latter half of January, although light snow (below 10 cm) fell in advance of the cold, offering some protection. At month's end, however, unseasonable warmth and showers returned, further increasing moisture reserves but leaving crops unprotected again.

8 Feb 2013
22:31 UTC



A classic nor'easter spins east of the northern Mid-Atlantic coast, while an Arctic high-pressure system results in bitterly cold conditions across eastern Canada. Meanwhile, a new storm begins to take shape across the nation's mid-section.

GOES East IR
February 8, 2013
5:31 pm EST

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