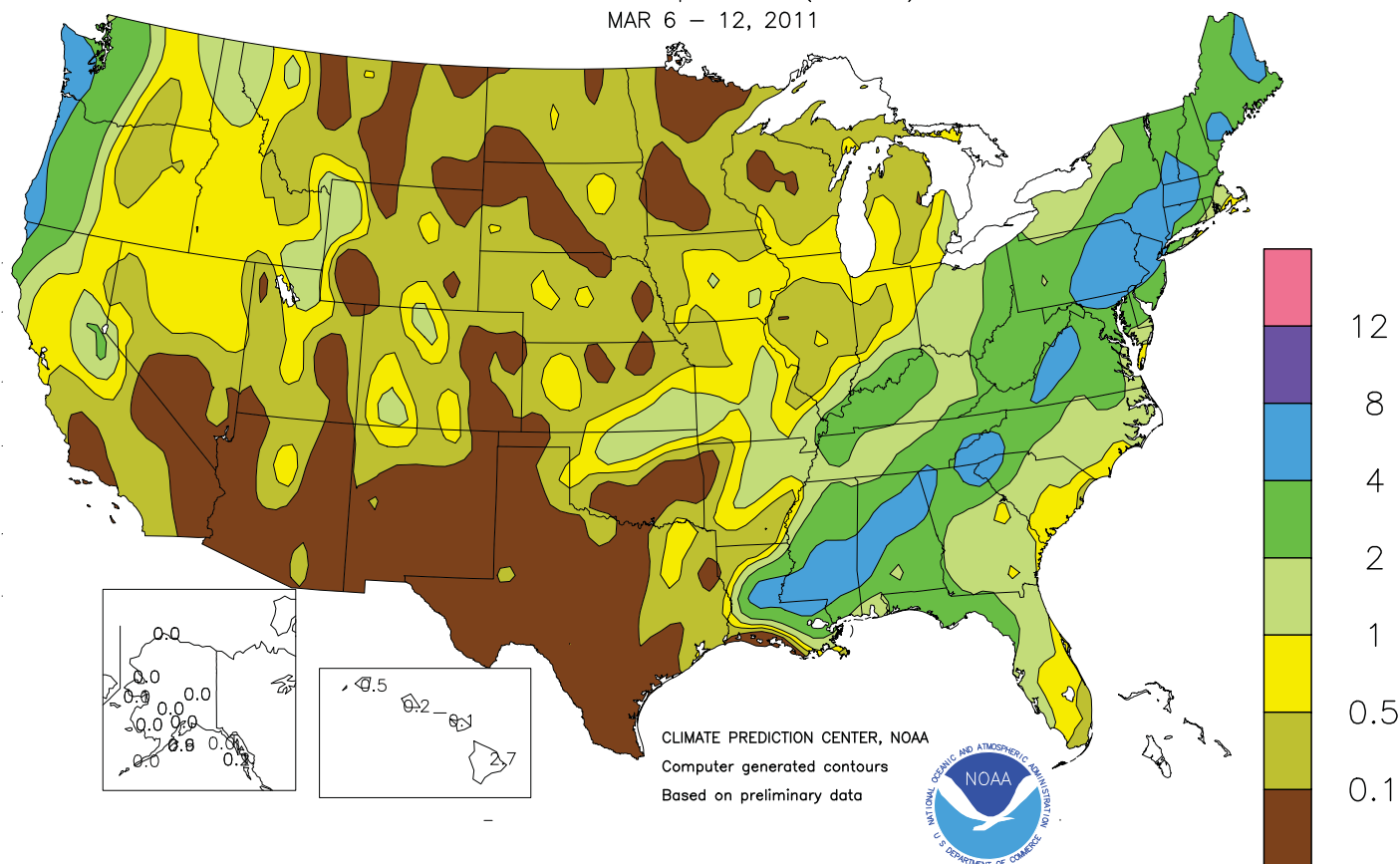


WEEKLY WEATHER AND CROP BULLETIN

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

Total Precipitation (Inches)
MAR 6 - 12, 2011



HIGHLIGHTS

March 6 - 12, 2011

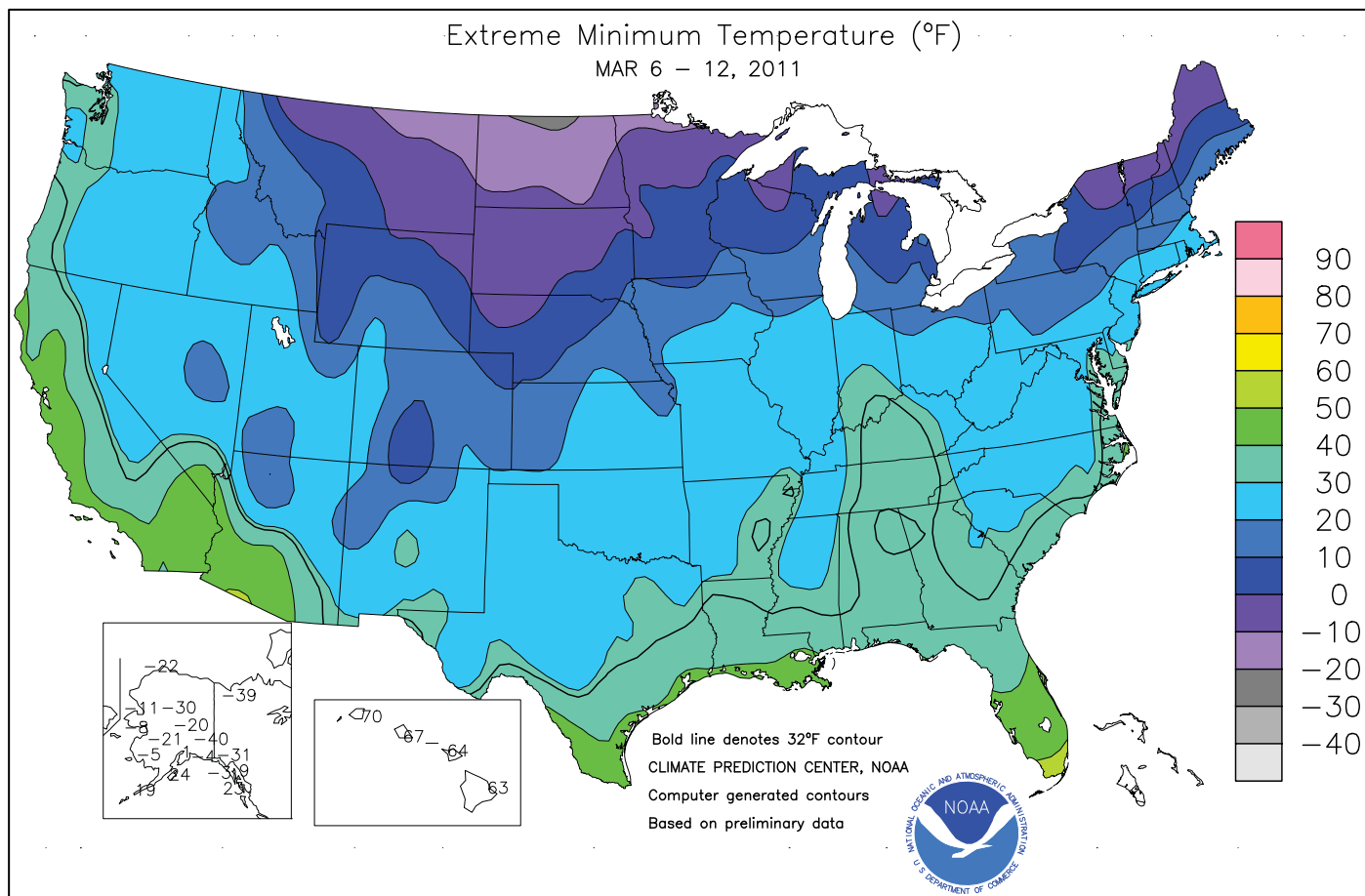
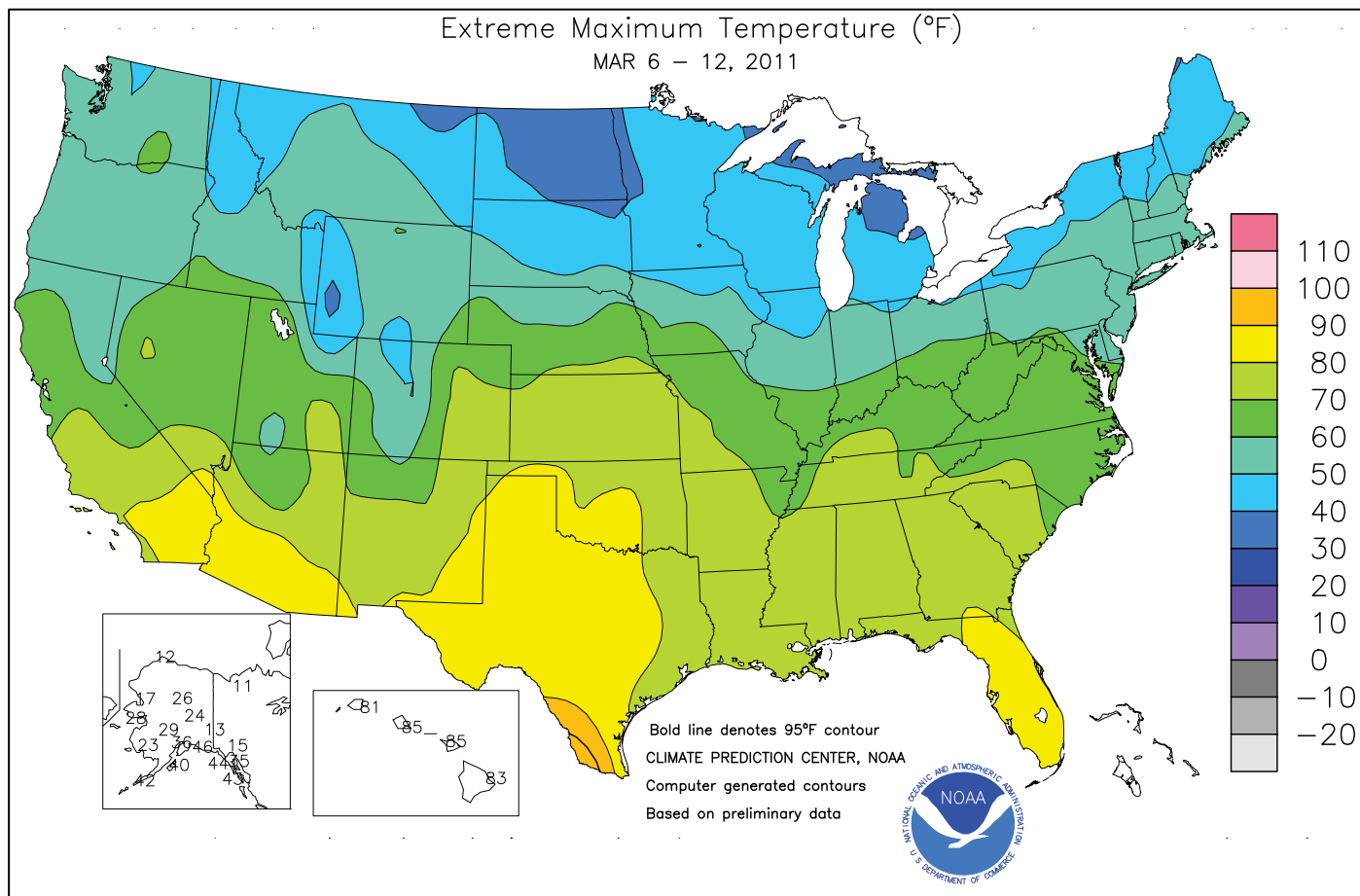
Highlights provided by USDA/WAOB

Hheavy rain associated with two storm systems fell from the **central Gulf Coast region into the Northeast**, with many locations receiving at least 4 inches. In the **Southeast**, the storms slowed fieldwork but provided significant drought relief. Farther north, however, flooding developed in parts of the **Northeast**. Flooding also returned to or continued in parts of the **Ohio Valley** and the **lower Great Lakes region**. Weekly precipitation totaled 2 inches or more—in the form of rain and snow—in parts of the **Ohio Valley**. Much of the remainder of the

(Continued on page 3)

Contents

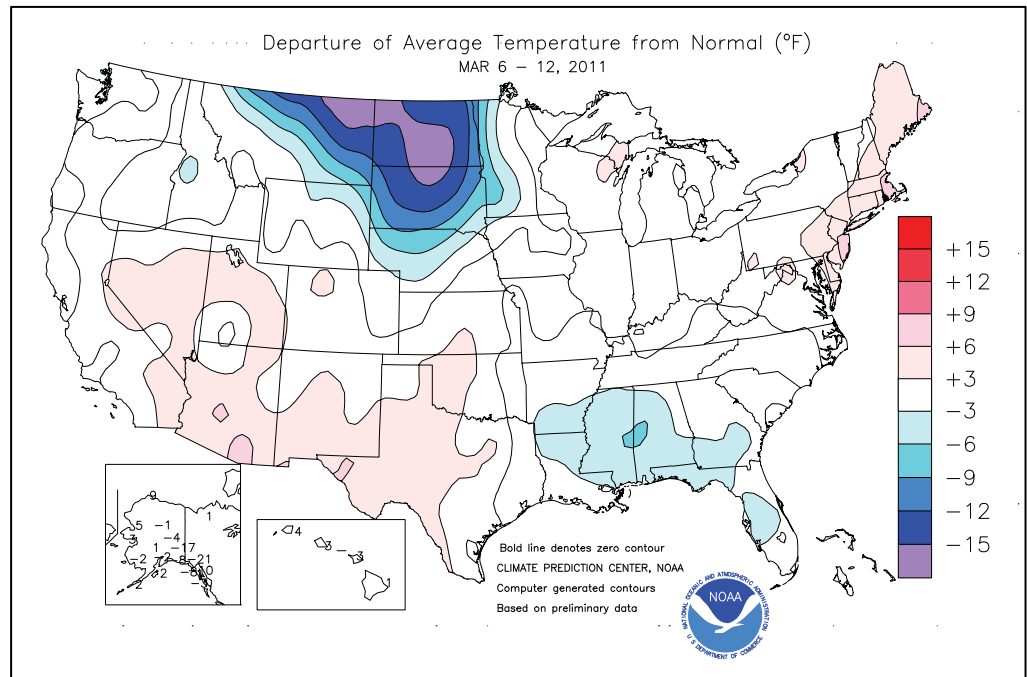
Extreme Maximum & Minimum Temperature Maps.....	2
Temperature Departure Map.....	3
March 9 Drought Monitor & Soil Temperature Map	4
Agricultural Weather Data Compiled by	
USDA's Stoneville Field Office	5
National Weather Data for Selected Cities.....	6
February Crop Summary & U.S. Crop Production Highlights ..	9
Winter Weather Review	10
Winter Precipitation & Temperature Maps.....	11
Winter Weather Data for Selected Cities.....	14
National Agricultural Summary & Snow Cover Map.....	15
March 10 ENSO Update	16
International Weather and Crop Summary.....	17
February International Temperature/Precipitation Maps	29
Bulletin Information & Record Reports.....	44



(Continued from front cover)

Midwest received wet snow. Substantial liquid remained locked into the dense snow cover across the **upper Midwest**, where spring flooding can be expected. In contrast, only light precipitation dampened the drought-stricken **central and southern High Plains**, although some locations in **southern Kansas** and **northern Oklahoma** received more than an inch. Pastures and winter grains on the **central and southern High Plains** will need additional spring moisture to prevent further declines in crop condition. Elsewhere, very cold weather persisted across the **northern Plains**, while unsettled conditions covered the **northern two-thirds of the West**. Precipitation totaled 4 inches or more in parts of the **Pacific Northwest**, but drought continued to expand and intensify in **Arizona** and **New Mexico**.

On March 6-7, snowfall locally topped 2 feet from **central New York into northern Maine**. Unofficial amounts in excess of 30 inches were noted in parts of **northeastern New York** and **northern Vermont**. Official 2-day totals reached 19.0 inches in **Caribou, ME**, and 15.9 inches in **Binghamton, NY**. Heavy rain preceded the arrival of snow in the **Northeast**, while torrential rain fell farther south. March 6-7 precipitation reached 3.25 inches in **Montpelier, VT**, and 2.71 inches in **Mt. Pocono, PA**. Farther south, **Meridian, MS**, experienced consecutive daily-record rainfall totals on March 8-9 (2.02 and 2.30 inches, respectively). During the same period, rainfall totals in excess of 6 inches occurred in parts of **southern Mississippi**. Daily-record amounts for March 9 reached 3.83 inches in **New Orleans, LA**, and 3.68 inches in **Anniston, AL**. By March 10, very heavy precipitation returned to the **Northeast**, triggering widespread flooding. **Mt. Pocono** netted 5.08 inches on March 10-11, boosting its 6-day precipitation total to 7.79 inches. The **Saddle River at Lodi, NJ** (3.49 feet above flood stage on March 11), achieved its highest level since September 16, 1999, when the remnants of Hurricane Floyd produced a record-setting crest of 7.49 feet above flood stage. Meanwhile in **Mississippi**, **Tallahala Creek at Laurel** crested 7.73 feet above flood stage on March 11, representing the highest level in that locations since February 17, 1990 (8.34 feet above flood stage). In contrast, beneficial showers overspread drought-affected areas in **Florida**, where daily-record amounts for March 10 reached 1.45 inches in **Sarasota-Bradenton** and 1.31 inches in **Lakeland**.



Cooler, drier weather arrived in **Florida** at week's end, when **Jacksonville** (32°F) and **Orlando** (40°F) posted daily-record lows for March 12.

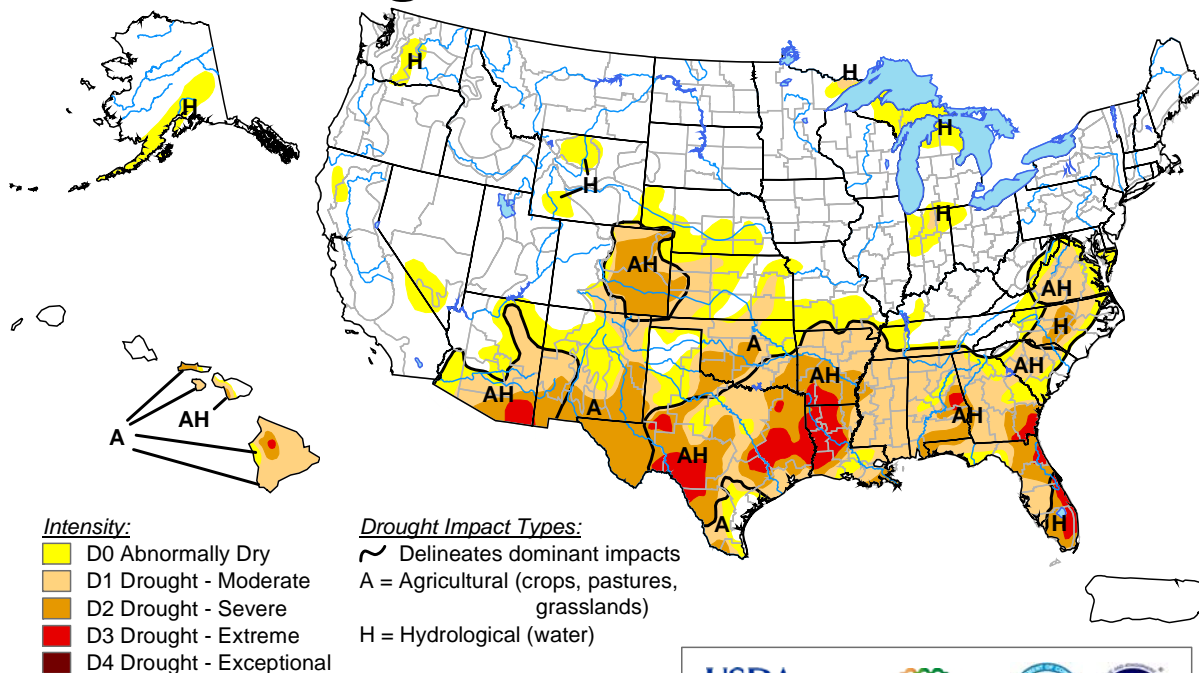
Farther north and west, snow blanketed the **upper Midwest**, while frequent storms lashed the **Northwest**. In **South Dakota**, daily-record snowfall totals for March 8 included 5.1 inches in **Mobridge** and 4.6 inches in **Aberdeen**. In the **West**, daily precipitation records were noted in locations such as **Winnemucca, NV** (0.77 inch on March 6); **Salt Lake City, UT** (0.90 inch on March 7, including 3.6 inches of snow); and **Olympia, WA** (1.82 inches on March 9). By March 11, a late-season blizzard unfolded across parts of the **north-central U.S.** In **North Dakota**, up to 5 inches of snow accompanied winds that were clocked to 67 mph in **Mandan** and 61 mph in **Hettinger**. Meanwhile, warm, dry, breezy weather allowed several wildfires to flourish in the **south-central U.S.** In **Texas**, daily-record highs reached 91°F in **Harlingen** (on March 8) and **McAllen** (on March 9). Across the **South**, year-to-date wildfires have charred more than 350,000 acres of vegetation in a 15-state area stretching from **Arizona to the southern Atlantic States**.

Most of **Alaska** experienced dry weather and near- to below-normal temperatures. Weekly readings averaged more than 10°F below normal in **Juneau**, highlighted by a low of 9°F on March 11. In contrast, weekly temperatures averaged more than 5°F above normal in parts of **northern Alaska**. Farther south, unusually warm weather accompanied scattered showers in **Hawaii**. Heavier showers were mostly confined to windward locations. The **Oahu Forest National Wildlife Refuge** received 3.21 inches of rain in a 24-hour period on March 9-10.

U.S. Drought Monitor

March 8, 2011

Valid 8 a.m. EDT



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>

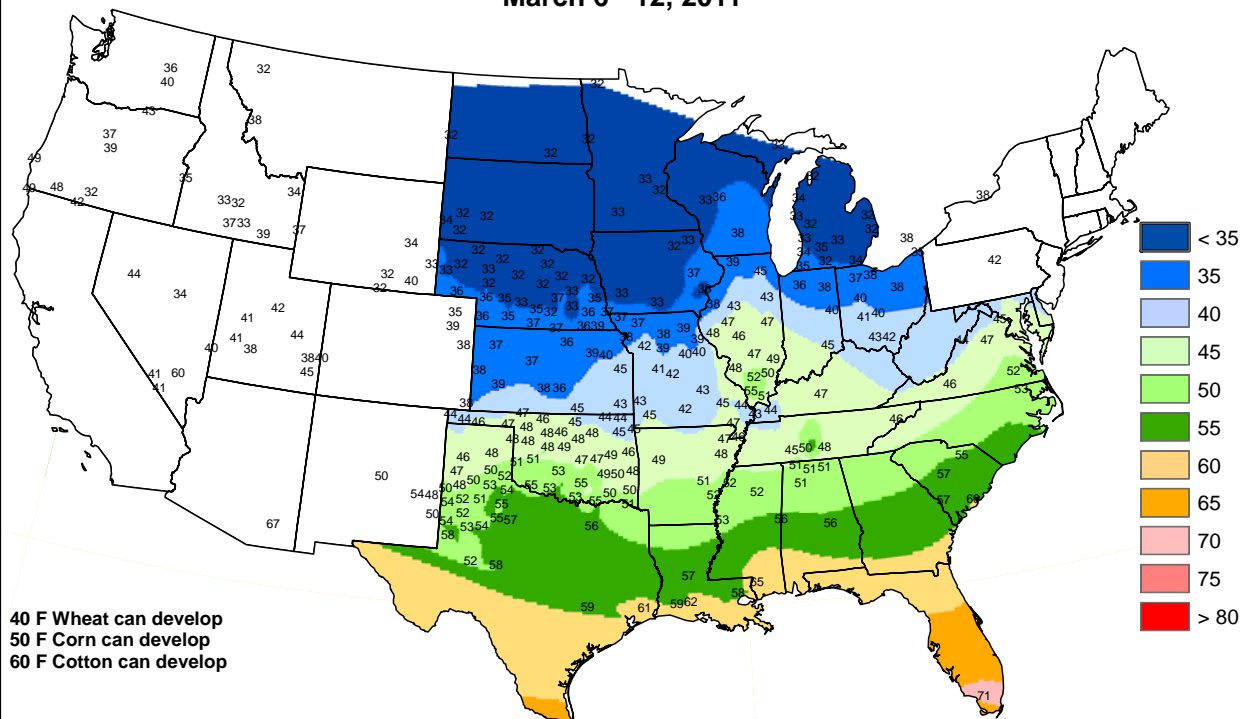


Released Thursday, March 10, 2011

Author: Laura Edwards, Western Regional Climate Center

Average Soil Temperature (° F, 4" Bare)

March 6 - 12, 2011



Based on preliminary data

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Supplemental data provided by Alabama A&M University, Bureau of Reclamation - Pacific Northwest Region AgriMet Program, High Plains Regional Climate Center, Illinois State Water Survey, Iowa State University, Louisiana Agricultural Information System, Mississippi State University, Oklahoma Mesonet, Purdue University, University of Missouri and USDA/NRCS Soil Climate Analysis Network.

Agricultural Weather Data Compiled by USDA's Stoneville Field Office

Weather Data for the Week Ending March 12, 2011

Data Provided by the Mississippi State Delta Research and Extension Center (DREC)
and the University of Missouri Commercial Agriculture Program.

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP. °F	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 MAR01	PCT. NORMAL SINCE MAR01	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
MISSISSIPPI																			
ND TUNICA 1W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LYON	57	39	72	32	48	-	0.52	-	0.35	1.13	-	4.82	-	53	48	0	1	2	0
VANCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PERTHSHIRE	57	38	71	32	48	-	0.23	-	0.20	1.36	-	7.07	-	55	43	0	1	2	0
SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANDY RIDGE	58	39	71	34	49	-	1.44	-	1.37	1.79	-	6.71	-	59	-	0	0	2	1
NE VERONA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SD STONEVILLE x	58	38	66	33	48	-5	1.98	0.73	1.66	2.19	104	7.16	60	60	47	0	0	3	1
INDIANOLA 1S*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INVERNESS 5E	59	39	73	33	49	-	1.29	-	0.81	1.86	-	6.35	-	57	48	0	0	2	1
SIDON	60	41	74	35	51	-	1.30	-	0.80	1.72	-	5.77	-	-	-	0	0	2	2
NORTH ISSAQUENA	60	40	72	35	50	-	0.86	-	0.80	1.13	-	7.27	-	58	-	0	0	2	1
SILVER CITY	60	40	72	34	50	-	2.89	-	1.54	3.33	-	9.15	-	57	-	0	0	2	2
ONWARD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAYDAY	62	40	76	35	51	-	2.76	-	1.76	3.38	-	9.97	-	56	-	0	0	2	2
MISSOURI																			
NW CORNING	49	29	72	20	38	1	0.27	-0.15	0.22	0.27	35	0.79	32	-	-	0	4	2	0
ALBANY	47	28	68	17	37	-1	0.49	0.14	0.44	0.50	67	1.07	38	40	36	0	5	2	0
ST. JOSEPH	47	29	69	19	37	-2	0.54	0.12	0.47	0.62	79	1.51	58	-	-	0	5	2	0
NC LINNEUS	47	31	66	26	38	0	0.42	-0.07	0.36	0.99	112	2.35	74	42	35	0	3	3	0
BRUNSWICK	48	32	68	27	39	-1	0.70	0.28	0.65	1.15	134	3.58	95	42	37	0	3	2	1
NE NOVELTY	47	30	62	25	38	-1	0.39	-0.13	0.35	0.94	98	2.43	63	44	35	0	4	2	0
MONROE CITY	47	32	60	26	39	-2	0.36	-0.05	0.31	0.80	90	2.86	68	43	37	0	4	2	0
WC GREEN RIDGE	50	32	70	25	41	0	0.62	0.10	0.61	0.91	96	3.42	78	46	37	0	3	2	1
C AUXVASSE	50	33	66	28	40	0	0.68	0.20	0.64	1.50	169	3.93	83	44	38	0	3	2	1
COL-SANBORN FLD	50	33	69	27	41	-1	0.70	0.19	0.64	1.57	165	4.42	86	47	39	0	3	2	1
WILLIAMSBURG	50	32	67	26	40	0	0.97	0.44	0.95	1.40	146	3.78	70	47	39	0	4	2	1
COL-JEFFERS F&G	50	32	68	26	41	-1	0.57	0.05	0.49	1.40	149	3.27	64	45	39	0	4	2	0
COL SOUTH FARMS	50	32	68	28	40	-2	0.78	0.25	0.68	1.72	181	4.23	83	-	-	0	4	2	1
COL-BF	50	32	67	26	40	-2	0.71	0.18	0.62	1.55	163	4.04	79	46	37	0	4	2	1
VERSAILLES	52	34	70	28	42	-1	0.71	0.14	0.71	1.00	102	4.33	88	47	38	0	3	1	1
EC VANDALIA	48	33	61	27	40	1	0.50	-0.05	0.46	1.90	188	4.03	81	44	36	0	4	2	0
SW LAMAR	53	33	69	24	43	-2	0.99	0.37	0.98	1.00	83	4.25	79	48	39	0	2	2	1
SC COOK STATION	53	31	69	21	42	-2	0.64	-0.07	0.62	1.83	156	6.79	114	47	40	0	4	2	1
MOUNTAIN GROVE	52	32	70	27	41	-1	0.56	-0.23	0.56	1.83	137	4.42	67	49	36	0	4	1	1
SE DELTA	52	35	66	28	43	-2	1.11	0.38	1.10	2.42	181	7.45	96	49	40	0	2	2	1
CHARLESTON	52	36	66	28	44	-2	1.61	0.82	1.53	2.66	187	8.90	108	48	39	0	3	2	1
GLENNONVILLE	52	37	67	30	45	-2	1.53	0.88	1.51	2.27	161	7.87	104	51	44	0	1	3	1
CLARKTON	52	36	68	29	44	-3	1.38	0.70	1.36	2.30	156	7.60	98	50	41	0	2	2	1
PORTAGEVILLE DC	53	38	67	31	45	-2	1.41	0.69	1.33	2.57	165	8.94	102	52	41	0	1	2	1
PORTAGEVILLE LF	53	38	68	31	45	-1	1.49	0.78	1.38	2.59	169	8.67	102	50	41	0	1	2	1
STEELE	53	38	68	32	46	-1	1.33	0.48	1.29	2.62	151	9.16	102	50	42	0	1	2	1
CARDWELL	53	37	68	30	45	-2	1.33	0.52	1.32	3.34	201	9.40	109	52	42	0	1	2	1

Compiled by USDA/OCE/WAOB's Stoneville Field Office. * Beasley Lake. X Based on 1971-2000 normals. - Sufficient data not available.

Data are preliminary and subject to revision.

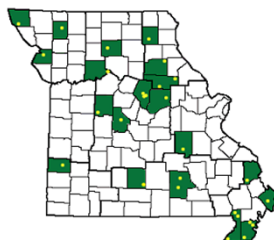
Mississippi: ND = Northern Delta; NE = Northeastern Mississippi; EC = East Central Mississippi; SD = Southern Delta.

Missouri: NW = Northwest; NC = North Central; NE = Northeast; WC = West Central; C = Central; EC = East Central; SW = Southwest; SE = Southeast;

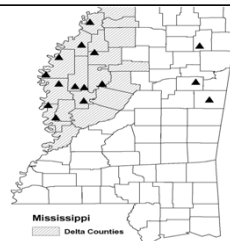
SC = South Central. (Col=Columbia, Col-Jeffers F&G=Columbia Jefferson Farm and Gardens, Col-BF=Bradford Farm)

Weather and Crop Summary for the Mississippi Delta: Beneficial rainfall occurred, although amounts were highly variable and ranged from less than one-quarter inch to nearly 3 inches. Heavier rain in southern and eastern areas resulted in some flash flooding and river flooding. Meanwhile, water levels continued to climb within the Mississippi River levee zones. By March 14, the Mississippi River at Greenville rose to within less than 3.5 feet of the 48-foot flood stage.

Missouri Weather Stations



Mississippi Weather Stations



Note: For information on the weather stations in Missouri, please visit:
<http://agebb.missouri.edu/weather/stations/index.htm>

Note: For information on the weather stations in Mississippi, please visit:
http://www.deltaweather.msstate.edu/maps/weather_station_map.htm

National Weather Data for Selected Cities

Weather Data for the Week Ending March 12, 2011

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

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 MAR 1	PCT. NORMAL SINCE MAR 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 OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	59	40	72	34	49	-3	3.66	2.33	2.95	5.94	270	12.90	109	91	55	0	0	3	2
	HUNTSVILLE	55	39	72	32	47	-3	2.95	1.40	1.99	5.34	206	13.30	102	83	66	0	1	3	2
	MOBILE	66	42	72	32	54	-4	1.78	0.15	1.74	4.11	152	10.43	77	89	51	0	1	2	1
AK	MONTGOMERY	65	42	76	35	54	-2	2.35	0.83	2.03	3.99	155	10.81	83	88	49	0	0	3	1
	ANCHORAGE	32	11	36	1	21	-2	0.00	-0.16	0.00	0.00	0	1.32	78	71	49	0	7	0	0
	BARROW	2	-15	12	-22	-7	9	0.00	0.00	0.00	0.10	1000	0.92	383	91	76	0	7	0	0
	FAIRBANKS	22	-17	24	-20	2	-4	0.00	-0.06	0.00	0.00	0	1.83	181	79	62	0	7	0	0
	JUNEAU	29	14	35	9	22	-10	0.01	-0.86	0.01	0.01	1	10.92	105	78	55	0	7	1	0
	KODIAK	38	30	40	24	34	2	0.91	-0.27	0.62	1.52	74	12.45	78	76	67	0	5	4	1
AZ	NOME	21	1	28	-8	11	3	0.05	-0.07	0.04	0.08	36	2.55	135	69	57	0	7	2	0
	FLAGSTAFF	53	24	61	17	39	4	0.13	-0.53	0.13	0.13	11	3.44	58	79	23	0	7	1	0
	PHOENIX	81	55	88	50	68	7	0.00	-0.27	0.00	0.00	0	0.70	34	37	17	0	0	0	0
	PRESCOTT	65	33	72	26	49	7	0.01	-0.49	0.01	0.01	1	2.22	51	61	14	0	4	1	0
	TUCSON	80	48	87	40	64	6	0.00	-0.22	0.00	0.00	0	0.25	11	29	14	0	0	0	0
	FORT SMITH	62	37	80	28	49	-1	0.01	-0.85	0.01	0.06	4	3.75	59	80	44	0	1	1	0
CA	LITTLE ROCK	59	39	74	32	49	-2	0.68	-0.31	0.68	2.57	156	7.55	88	87	50	0	1	1	1
	BAKERSFIELD	68	44	79	37	56	0	0.04	-0.29	0.02	0.07	12	0.96	32	82	61	0	0	2	0
	FRESNO	67	47	74	40	57	3	0.06	-0.48	0.05	0.11	12	3.43	66	84	62	0	0	2	0
	LOS ANGELES	68	52	81	50	60	2	0.00	-0.65	0.00	0.21	18	2.49	34	75	60	0	0	0	0
	REDDING	60	45	64	41	53	1	0.48	-0.79	0.44	1.22	56	7.02	50	82	70	0	0	2	0
	SACRAMENTO	63	47	67	40	55	1	0.82	0.10	0.80	0.95	74	6.02	70	95	54	0	0	2	1
	SAN DIEGO	68	55	77	52	61	2	0.24	-0.30	0.16	0.24	26	2.63	50	80	58	0	0	2	0
	SAN FRANCISCO	59	48	61	45	54	1	0.51	-0.32	0.50	0.66	45	6.39	64	89	72	0	0	2	1
	STOCKTON	64	46	66	41	55	1	0.26	-0.30	0.23	0.36	37	3.51	57	94	71	0	0	2	0
CO	ALAMOSA	54	12	67	5	33	3	0.02	-0.06	0.02	0.02	15	0.47	80	71	35	0	7	1	0
	CO SPRINGS	52	27	69	20	39	3	0.06	-0.12	0.06	0.29	100	0.54	59	72	30	0	6	1	0
	DENVER INTL	53	24	71	18	39	3	0.05	-0.15	0.04	0.07	22	1.10	141	71	31	0	6	2	0
	GRAND JUNCTION	56	32	66	26	44	3	0.11	-0.09	0.07	0.14	42	0.58	41	73	44	0	3	2	0
	PUEBLO	56	23	78	21	40	0	0.31	0.15	0.19	0.62	248	1.49	177	79	52	0	7	2	0
	BRIDGEPORT	48	35	53	26	42	5	2.28	1.42	1.28	2.28	159	11.39	141	88	64	0	3	4	1
DC	HARTFORD	46	30	55	22	38	3	4.69	3.87	2.40	4.74	349	13.95	171	84	59	0	3	4	3
	WASHINGTON	53	36	58	32	44	0	2.90	2.08	1.41	2.90	212	7.26	101	88	58	0	1	4	2
	WILMINGTON	52	36	56	27	44	4	1.20	0.32	0.79	1.20	82	7.32	95	95	56	0	2	3	1
DE	DAYTONA BEACH	71	49	81	38	60	-3	0.58	-0.25	0.30	0.99	72	6.56	90	92	44	0	0	2	0
	JACKSONVILLE	70	44	78	32	57	-3	0.53	-0.31	0.39	0.59	42	10.40	126	93	43	0	1	2	0
	KEY WEST	76	66	81	60	71	-2	0.27	-0.10	0.27	0.27	44	2.91	67	83	66	0	0	1	0
	MIAMI	79	62	83	53	71	0	0.78	0.30	0.78	0.89	109	3.67	77	80	52	0	0	1	1
	ORLANDO	76	52	84	40	64	-2	1.03	0.27	0.79	1.24	98	7.41	123	90	55	0	0	2	1
	PENSACOLA	64	44	69	36	54	-5	2.34	0.90	2.25	3.30	138	10.41	84	88	59	0	0	2	1
	TALLAHASSEE	69	42	77	31	56	-4	1.74	0.25	1.56	1.76	71	8.79	71	86	51	0	1	3	1
	TAMPA	73	54	83	47	64	-2	1.69	1.01	1.06	2.23	191	9.15	150	84	45	0	0	2	2
	WEST PALM BEACH	78	59	83	50	69	-1	0.11	-0.59	0.09	0.47	41	3.12	42	79	55	0	0	2	0
GA	ATHENS	60	38	74	31	49	-2	1.81	0.63	1.09	2.46	122	10.49	95	82	53	0	1	3	2
	ATLANTA	60	40	73	35	50	-2	1.83	0.56	1.30	2.93	136	9.81	83	79	60	0	0	4	1
	AUGUSTA	68	36	76	28	52	-2	1.02	-0.04	0.74	1.07	59	7.48	72	87	41	0	2	2	1
	COLUMBUS	64	43	74	36	53	-2	1.91	0.58	1.56	3.08	138	10.89	95	87	44	0	0	3	1
	MACON	64	39	74	30	51	-3	1.33	0.17	0.99	1.69	86	9.17	80	93	47	0	2	2	1
	SAVANNAH	68	43	76	34	56	-1	0.75	0.01	0.68	1.49	121	7.23	89	86	50	0	0	3	1
HI	HILO	81	66	83	63	73	1	2.66	-0.26	1.55	3.64	76	11.47	49	88	78	0	0	4	2
	HONOLULU	83	70	85	67	77	3	0.17	-0.31	0.09	1.02	119	5.74	97	83	74	0	0	3	0
	KAHULUI	83	68	85	64	76	3	0.13	-0.37	0.13	0.65	76	7.82	113	79	71	0	0	1	0
	LIHUE	80	71	81	70	76	4	0.47	-0.33	0.21	6.29	459	16.96	184	83	77	0	0	5	0
	BOISE	51	32	59	26	41	-1	0.47	0.17	0.36	0.65	130	2.50	83	89	57	0	4	4	0
	LEWISTON	51	34	54	30	43	0	0.08	-0.14	0.05	0.44	116	3.50	142	76	62	0	3	3	0
ID	POCATELLO	44	29	56	23	37	1	0.67	0.37	0.29	1.08	212	3.03	114	91	70	0	7	4	0
	CHICAGO/O'HARE	41	29	47	24	35	1	0.40	-0.07	0.39	1.67	217	6.11	147	84	69	0	6	2	0
	MOLINE	43	29	51	23	36	1	0.63	0.10	0.36	1.17	134	4.37	110	89	72	0	6	2	0
	PEORIA	45	30	51	23	37	1	0.37	-0.20	0.19	1.02	109	5.21	127	88	61	0	5	2	0
	ROCKFORD	42	28	49	21	35	2	0.38	-0.03	0.37	1.21	181	3.99	117	76	61	0	5	2	0
	SPRINGFIELD	46	33	53	27	39	1	0.28	-0.37	0.23	1.40	130	5.16	115	87	64	0	3	3	0
IN	EVANSVILLE	51	35	68	27	43	0	2.06	1.14	1.45	3.60	232	9.77	129	78	59	0	3	3	2
	FORT WAYNE	44	30	51	22	37	2	0.87	0.31	0.53	1.96	211	6.97	142	88	69	0	5	2	1
	INDIANAPOLIS	47	34	59	30	41	2	0.36	-0.37	0.28	2.86	234	10.31	169	86	62	0	4	2	0
	SOUTH BEND	42	28	50	18	35	1	0.62	0.07	0.44	1.56	171	7.23	140	86	71	0	6	3	0
	BURLINGTON	44	29	54	23	37	1	0.56	-0.03	0.55	1.12	117	2.85	75	92	66	0	5	2	1
	CEDAR RAPIDS	39	26	51	19	32	-1	0.6												

Weather Data for the Week Ending March 12, 2011

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 MAR 1	PCT. NORMAL SINCE MAR 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	
KY	WICHITA	57	34	73	24	45	2	0.65	0.09	0.65	0.65	72	2.38	86	73	49	0	3	1	1	
	JACKSON	53	33	69	30	43	-1	2.40	1.38	0.94	3.78	216	10.47	116	85	56	0	5	5	2	
	LEXINGTON	51	34	66	30	43	0	1.97	0.95	1.48	3.39	198	11.65	140	76	65	0	4	4	1	
	LOUISVILLE	53	38	70	34	46	2	3.06	2.06	1.79	3.87	229	11.04	134	80	53	0	0	3	2	
LA	PADUCAH	52	36	68	28	44	-1	2.59	1.65	2.15	5.24	321	12.17	135	87	53	0	2	2	1	
	BATON ROUGE	68	45	75	38	56	-2	3.75	2.66	2.88	5.18	274	12.36	94	96	51	0	0	2	2	
	LAKE CHARLES	70	48	76	38	59	0	0.10	-0.66	0.09	3.91	310	10.57	105	91	48	0	0	2	0	
	NEW ORLEANS	69	51	78	45	60	-1	3.88	2.75	3.83	6.68	339	12.42	93	79	58	0	0	2	1	
ME	SHREVEPORT	66	42	76	33	54	-2	0.32	-0.62	0.27	0.85	52	8.04	77	85	45	0	0	2	0	
	CARIBOU	34	16	46	-6	25	4	5.29	4.75	1.75	5.75	632	9.99	168	94	72	0	6	6	3	
MD	PORTLAND	41	29	47	17	35	4	3.54	2.69	1.94	3.58	250	10.09	117	93	66	0	3	4	3	
	BALTIMORE	53	36	58	27	44	3	3.69	2.79	2.54	3.69	243	9.04	113	80	57	0	1	4	2	
MA	BOSTON	48	34	61	25	41	5	1.02	0.20	0.51	1.02	73	10.16	118	87	61	0	3	4	1	
	WORCESTER	44	30	53	20	37	5	3.91	3.01	1.80	3.95	265	13.35	154	94	65	0	5	4	3	
MI	ALPENA	30	16	37	-7	23	-2	0.60	0.17	0.23	1.25	179	3.44	90	92	70	0	7	5	0	
	GRAND RAPIDS	39	26	43	14	33	2	0.65	0.19	0.55	1.98	268	6.25	145	83	57	0	6	3	1	
	HOUGHTON LAKE	34	17	40	-1	26	0	0.39	0.00	0.20	0.97	154	4.01	115	88	65	0	7	5	0	
	LANSING	39	23	42	7	31	0	0.22	-0.18	0.16	1.21	183	4.44	119	85	65	0	6	2	0	
MN	MUSKEGON	38	27	43	17	33	2	0.64	0.20	0.54	1.43	199	7.36	163	80	64	0	6	2	1	
	TRAVERSE CITY	36	25	44	11	30	2	0.38	0.04	0.25	0.75	134	4.05	76	86	54	0	7	3	0	
	DULUTH	31	16	38	5	23	1	0.30	0.01	0.16	0.33	73	1.75	73	85	66	0	7	3	0	
	INT'L FALLS	32	9	41	-11	21	1	0.09	-0.07	0.07	0.12	46	1.70	98	81	54	0	7	2	0	
MS	MINNEAPOLIS	35	21	43	11	28	-1	0.30	-0.01	0.12	0.31	62	2.43	104	84	71	0	7	4	0	
	ROCHESTER	35	22	41	11	29	2	0.29	-0.01	0.16	0.29	63	1.90	88	88	77	0	7	3	0	
	ST. CLOUD	32	11	42	2	22	-3	0.28	0.06	0.22	0.28	82	2.13	126	94	65	0	7	4	0	
	JACKSON	64	39	76	33	51	-4	2.75	1.56	1.96	4.74	237	11.12	91	92	51	0	0	2	2	
MO	MERIDIAN	63	35	74	30	49	-6	4.34	2.79	2.32	6.78	262	13.52	98	94	59	0	3	2	2	
	TUPELO	58	38	74	29	48	-3	2.08	0.64	1.06	4.13	170	9.27	76	85	60	0	1	2	2	
	COLUMBIA	50	33	67	28	41	0	0.89	0.24	0.84	1.84	167	5.80	115	90	58	0	4	2	1	
	KANSAS CITY	49	30	69	18	39	-2	0.63	0.12	0.63	0.94	113	4.45	135	84	55	0	4	1	1	
MT	SAINT LOUIS	50	35	65	26	43	0	0.47	-0.28	0.47	2.20	176	6.90	122	80	60	0	3	1	0	
	SPRINGFIELD	53	32	70	24	43	0	0.63	-0.11	0.61	1.27	104	4.96	88	86	64	0	3	2	1	
	BILLINGS	43	22	64	4	33	-2	0.10	-0.10	0.06	0.12	38	1.08	64	79	46	0	5	2	0	
	BUTTE	39	19	47	10	29	1	0.06	-0.11	0.04	0.06	23	0.76	60	79	37	0	7	2	0	
NE	CUT BANK	31	12	48	-9	22	-7	0.00	-0.09	0.00	0.00	0	0.10	12	86	57	0	6	0	0	
	GLASGOW	21	1	38	-9	11	-16	0.54	0.46	0.45	0.63	485	3.07	415	86	80	0	7	2	0	
	GREAT FALLS	37	17	54	2	27	-4	0.01	-0.18	0.01	0.03	10	2.26	151	83	47	0	6	1	0	
	HAVRE	26	4	47	-11	15	-15	1.01	0.87	0.97	1.20	545	2.66	253	84	76	0	6	2	1	
NV	MISSOULA	43	25	50	19	34	-1	0.05	-0.14	0.02	0.35	106	4.01	186	89	70	0	7	3	0	
	GRAND ISLAND	45	24	67	17	34	-1	0.22	-0.16	0.19	0.22	37	1.99	109	87	61	0	7	3	0	
	LINCOLN	47	27	70	19	38	2	0.33	-0.08	0.22	0.33	52	2.19	111	86	66	0	5	2	0	
	NORFOLK	41	22	62	12	32	-1	0.38	0.02	0.31	0.38	67	2.52	133	86	65	0	6	3	0	
NH	NORTH PLATTE	45	17	63	3	31	-4	0.34	0.11	0.23	0.34	92	2.06	162	88	49	0	7	3	0	
	OMAHA	46	26	67	17	36	0	0.15	-0.25	0.12	0.15	24	1.87	85	85	68	0	6	2	0	
	SCOTTSBLUFF	44	16	64	2	30	-5	0.58	0.37	0.32	0.64	188	1.44	99	84	66	0	7	3	0	
	VALENTINE	37	14	54	-1	25	-8	0.45	0.25	0.22	0.47	142	2.08	187	83	67	0	6	4	0	
NJ	ELY	49	25	58	16	37	3	0.50	0.27	0.44	0.52	133	1.92	102	85	57	0	6	2	0	
	LAS VEGAS	73	51	80	45	62	6	0.00	-0.16	0.00	0.00	0	0.08	5	38	24	0	0	0	0	
	RENO	58	36	64	31	47	5	0.22	0.00	0.21	0.27	68	1.72	68	67	47	0	2	2	0	
	WINNEMUCCA	53	31	65	27	42	2	0.92	0.75	0.77	0.97	346	2.60	150	88	67	0	4	3	1	
NM	CONCORD	41	27	51	16	34	4	3.11	2.47	1.36	3.11	291	10.20	159	94	69	0	5	4	2	
	NEWARK	53	38	58	29	45	6	3.80	2.90	1.89	3.80	255	11.69	139	79	54	0	2	5	3	
NY	ALBUQUERQUE	64	37	75	33	51	5	0.00	-0.13	0.00	0.00	0	0.11	10	41	14	0	0	0	0	
	ALBANY	42	25	53	11	33	1	3.66	3.03	1.45	3.68	350	9.91	174	92	68	0	4	4	4	
NC	BINGHAMTON	40	23	48	13	32	2	2.51	1.90	1.27	2.51	241	9.14	150	88	66	0	7	6	2	
	BUFFALO	39	26	52	17	32	1	1.93	1.31	0.88	3.37	324	8.39	127	90	66	0	6	5	2	
	ROCHESTER	43	27	50	17	35	4	1.13	0.61	0.44	1.50	170	5.90	112	79	59	0	5	4	0	
	SYRACUSE	42	24	53	11	33	3	1.73	1.13	0.94	1.85	187	5.93	104	90	61	0	4	6	1	
ND	ASHEVILLE	53	32	70	27	42	-2	4.05	3.01	2.08	4.62	261	9.70	100	91	63	0	4	4	2	
	CHARLOTTE	60	35	72	28	47	-3	1.83	0.81	0.93	1.99	116	6.80	73	84	42	0	3	3	2	
	GREENSBORO	57	34	68	28	45	-2	2.03	1.17	1.13	2.03	139	5.50	68	80	46	0	2	3	2	
	HATTERAS	61	49	68	45	55	5	2.04	0.94	1.44	2.26	123	11.38	98	82	54	0	0	2	2	
OH	RALEIGH	61	35	69	28	48	0	1.37	0.41	0.67	1.37	85	5.01	55	83	55	0	2	3	1	
	WILMINGTON	63	39	69	32	51	-2	1.03	0.04	0.68	1.13	67	8.28	84	94	52	0	1	3	1	
	BISMARCK	21	0	40	-9	11	-15	0.50	0.36	0.26	0.55	229	2.25	188	86	76	0	7	3	0	
	DICKINSON	24	3	39	-8	14	-14	0.03	-0.04	0.03	0.03	27	1.83	201	92	73	0	7	1	0	
OH	FARGO	24	9	39	-3	16	-7	0.56	0.35	0.21	0.58	171	1.56	92	86	72	0	7	4	0	
	GRAND FORKS	19	-3	37	-13	8	-14	0.53	0.36	0.16	0.53	204	1.42</								

Weather Data for the Week Ending March 12, 2011

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 MAR 1	PCT. NORMAL SINCE MAR 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	
OK	TOLEDO	48	28	50	19	38	4	1.16	0.66	0.93	2.52	300	8.77	189	83	71	0	6	3	1	
	YOUNGSTOWN	42	26	51	14	34	0	2.61	2.00	0.90	4.21	413	11.41	212	92	75	0	6	4	3	
	OKLAHOMA CITY	63	38	79	25	51	2	0.03	-0.62	0.02	0.03	3	2.21	57	72	37	0	2	2	0	
	TULSA	60	36	76	24	48	-1	0.11	-0.66	0.11	0.11	9	3.25	68	72	51	0	2	1	0	
OR	ASTORIA	51	38	53	29	45	-1	2.66	0.92	1.45	4.09	135	23.71	116	93	81	0	2	6	2	
	BURNS	42	25	50	19	34	-1	0.20	-0.10	0.12	0.67	129	2.13	76	92	71	0	7	3	0	
	EUGENE	54	38	61	33	46	1	1.53	0.13	0.76	2.52	104	9.48	58	93	79	0	0	5	2	
	MEDFORD	54	39	62	34	47	1	0.78	0.34	0.32	1.60	205	4.56	85	91	63	0	0	5	0	
PA	PENDLETON	54	33	63	30	44	1	0.22	-0.06	0.08	0.47	100	3.20	102	80	57	0	4	3	0	
	PORTLAND	54	40	58	31	47	1	1.62	0.73	0.82	3.12	200	12.14	112	92	77	0	1	6	1	
	SALEM	55	40	60	32	48	2	1.57	0.53	0.95	2.85	156	10.41	82	89	75	0	1	5	1	
	ALLENTOWN	52	31	57	21	41	5	4.60	3.83	2.26	4.70	364	10.90	145	81	58	0	3	5	2	
RI	ERIE	39	26	50	13	33	-1	2.49	1.86	1.15	3.49	332	11.24	192	88	69	0	6	4	2	
	MIDDLETOWN	49	33	57	25	41	3	5.49	4.75	2.51	5.68	444	10.68	151	91	54	0	4	5	3	
	PHILADELPHIA	54	37	60	31	46	6	2.95	2.12	1.42	2.95	215	8.99	118	78	52	0	2	5	2	
	PITTSBURGH	47	29	59	20	38	1	2.56	1.88	1.25	3.32	294	10.69	172	86	57	0	6	5	2	
SC	WILKES-BARRE	46	28	54	16	37	2	4.14	3.60	1.82	4.17	469	9.48	175	90	59	0	6	5	2	
	WILLIAMSPORT	48	29	57	20	38	3	4.83	4.17	2.63	5.11	460	10.55	161	77	58	0	4	4	2	
	PROVIDENCE	51	33	63	25	42	6	1.08	0.16	0.53	1.10	71	9.65	103	88	60	0	3	4	1	
	BEAUFORT	67	44	76	34	56	1	0.59	-0.16	0.43	0.81	64	6.00	71	86	41	0	0	3	0	
SD	CHARLESTON	67	44	75	38	56	0	0.78	-0.08	0.53	1.03	72	6.14	71	90	44	0	0	3	1	
	COLUMBIA	66	39	75	30	52	-1	1.02	-0.01	0.75	1.03	60	6.94	68	86	50	0	2	3	1	
	GREENVILLE	60	35	74	30	47	-2	2.92	1.66	1.81	3.26	152	9.66	90	87	37	0	3	3	2	
	ABERDEEN	23	2	41	-12	13	-14	0.47	0.25	0.34	0.49	140	2.69	205	87	80	0	7	5	0	
TN	HURON	27	9	45	-2	18	-11	0.23	-0.06	0.14	0.23	51	3.27	218	87	76	0	7	5	0	
	RAPID CITY	33	11	53	-2	22	-10	0.25	0.07	0.20	0.35	121	2.05	183	90	68	0	7	3	0	
	SIOUX FALLS	34	17	48	12	26	-3	0.15	-0.15	0.06	0.15	33	2.26	154	86	71	0	7	4	0	
	BRISTOL	55	33	67	26	44	0	3.22	2.31	1.52	3.55	228	9.96	117	86	46	0	4	3	3	
TX	CHATTANOOGA	57	39	72	34	48	-1	4.46	3.05	2.61	6.89	291	13.40	106	85	59	0	0	4	3	
	KNOXVILLE	57	37	70	33	47	0	3.47	2.28	1.20	4.19	210	11.70	111	85	51	0	0	5	3	
	MEMPHIS	56	40	71	31	48	-3	0.72	-0.48	0.42	2.60	128	7.45	70	81	55	0	1	2	0	
	NASHVILLE	55	39	74	34	47	-1	0.94	-0.18	0.71	2.31	123	10.16	106	79	50	0	0	3	1	
UT	ABILENE	75	42	86	28	58	4	0.00	-0.30	0.00	0.05	10	1.65	63	57	27	0	2	0	0	
	AMARILLO	63	33	83	26	48	2	0.05	-0.16	0.03	0.05	15	0.54	36	75	27	0	4	2	0	
	AUSTIN	77	40	84	28	59	-1	0.02	-0.50	0.02	0.08	9	4.39	91	70	35	0	3	1	0	
	BEAUMONT	70	48	74	39	59	-1	0.06	-0.73	0.06	1.92	145	5.32	51	94	45	0	0	1	0	
VA	BROWNSVILLE	79	57	86	47	68	1	0.00	-0.15	0.00	0.00	0	2.49	89	84	57	0	0	0	0	
	CORPUS CHRISTI	76	51	82	39	64	0	0.00	-0.40	0.00	0.03	4	4.17	100	90	47	0	0	0	0	
	DEL RIO	80	49	89	36	64	2	0.00	-0.20	0.00	0.02	6	0.25	13	56	29	0	0	0	0	
	EL PASO	75	45	82	34	60	5	0.00	-0.06	0.00	0.00	0	0.11	11	24	10	0	0	0	0	
WV	FORT WORTH	71	45	82	30	58	3	0.02	-0.72	0.01	0.02	2	2.54	46	74	32	0	1	2	0	
	GALVESTON	67	55	73	47	61	-1	0.05	-0.54	0.04	3.23	326	7.76	101	87	58	0	0	2	0	
	HOUSTON	73	48	78	37	60	0	0.09	-0.63	0.06	0.15	12	5.89	75	83	47	0	0	2	0	
	LUBBOCK	71	35	85	27	53	4	0.00	-0.14	0.00	0.28	108	0.77	52	58	22	0	2	0	0	
WA	MIDLAND	77	39	88	27	58	4	0.00	-0.11	0.00	0.08	38	0.15	11	45	17	0	1	0	0	
	SAN ANGELO	80	42	89	23	61	6	0.00	-0.24	0.00	0.18	42	1.17	48	59	21	0	2	0	0	
	SAN ANTONIO	77	47	84	33	62	2	0.00	-0.41	0.00	0.01	1	3.16	76	82	30	0	0	0	0	
	VICTORIA	77	47	81	36	62	0	0.03	-0.47	0.03	0.21	25	3.77	71	90	49	0	0	1	0	
WI	WACO	74	43	84	27	58	2	0.04	-0.57	0.02	0.12	11	5.64	104	78	41	0	1	2	0	
	WICHITA FALLS	71	40	82	29	56	4	0.97	0.47	0.97	0.97	117	1.61	46	65	30	0	2	1	1	
	SALT LAKE CITY	51	36	64	27	43	2	1.43	1.02	0.85	1.53	225	3.24	96	86	51	0	2	4	1	
	BURLINGTON	38	19	48	3	28	1	2.85	2.41	1.21	2.85	385	7.39	160	94	70	0	6	5	2	
WY	LYNCHBURG	55	34	67	28	45	2	1.82	0.96	1.15	1.84	127	5.25	65	78	49	0	3	3	2	
	NORFOLK	57	42	66	33	49	2	1.52	0.61	0.83	1.52	99	7.40	84	86	56	0	0	2	2	
	RICHMOND	58	37	66	29	47	2	2.34	1.41	1.63	2.34	151	6.90	85	82	54	0	2	2	2	
	ROANOKE	53	35	68	29	44	0	3.32	2.47	1.82	3.40	236	6.42	83	75	60	0	1	3	3	
WY	WASH/DULLES	54	34	61	25	44	4	3.88	3.09	2.33	3.88	292	7.96	111	85	60	0	3	4	2	
	OLYMPIA	51	35	53	30	43	0	3.19	1.93	1.58	4.41	200	16.14	101	95	82	0	3	6	2	
	QUILLAYUTE	48	35	50	25	42	-1	3.99	1.29	1.18	5.81	123	33.86	110	96	90	0	2	6	4	
	SEATTLE-TACOMA	51	39	53	34	45	0	2.60	1.72	1.17	3.30	214	11.33	104	89	69	0	0	6	2	
WY	SPOKANE	43	30	49	28	37	-1	0.88	0.52	0.50	1.41	231	4.98	126	93	68	0	6	4	1	
	YAKIMA	55	32	60	25	43	2	0.26	0.11	0.24	0.42	162	1.32	59	77	57	0	5	3	0	
	BECKLEY	48	30	62	25	39	0	2.12	1.29	1.13	2.60	186	7.14	94	80	65	0	5	5	2	
	CHARLESTON	54	34	67	30	44	1	2.11	1.20	0.83	2.38	156	8.98	113	83	54	0	3	5	2	
WI	ELKINS	50	29	61	21	39	2	2.37	1.48	0.91	2.71	179	7.50	92	91	51	0	6	5	2	
	HUNTINGTON	52	33	66	30	43	0	2.28	1.40	0.95	3.00	200	9.42	121	87	58	0	5	5	2	
	EAU CLAIRE	36	21	42	6	29	2	0.01	-0.28	0.01	0.01	2	1.86	81	92	61	0	7	1	0	
	GREEN BAY	36	23	41	12	30	2	0.44	0.08	0.39	0.61	107	3.18	114							

February Crop Summary

Fieldwork summary provided by USDA/NASS

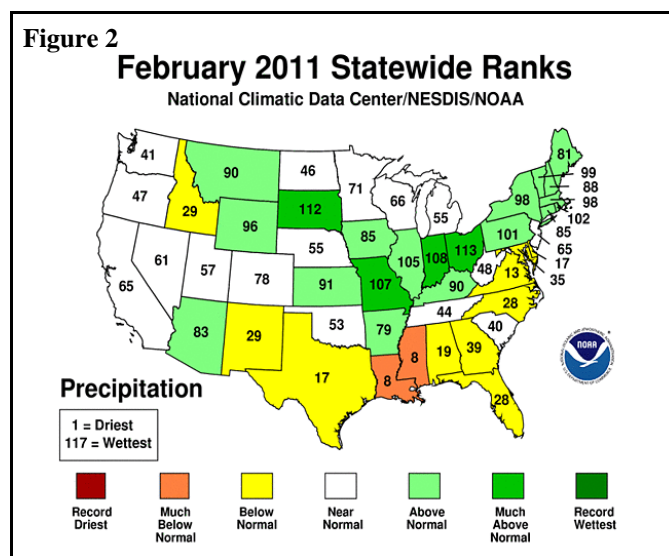
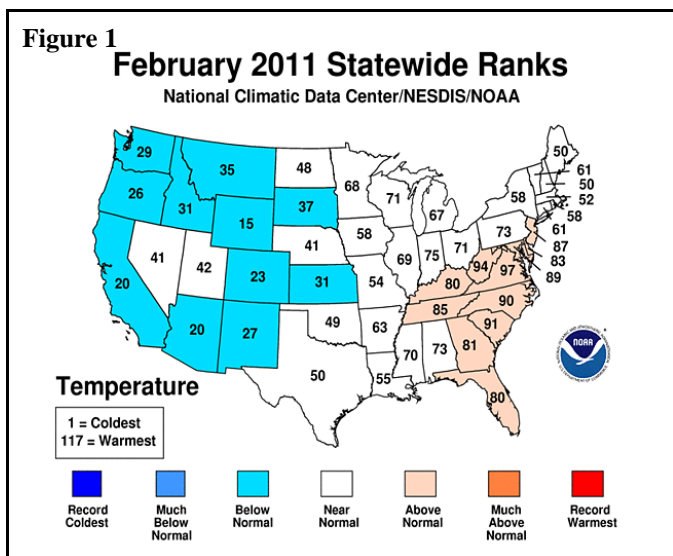
Despite an early-month storm system that delivered sub-freezing temperatures, snow, and ice to the Deep South, above-average temperatures returned to the Southeastern and Mid-Atlantic States later in the month. Elsewhere, below-average temperatures prevailed throughout much of the country from the Great Plains westward (figure 1). Specifically, monthly temperatures average at least 10°F below normal in the northern Rocky Mountains. While much of the South was relatively dry during the month (figure 2), parts of the Rocky Mountains, Great Plains, Corn Belt, and Ohio Valley received precipitation totaling at least 200 percent of normal.

Row crop producers in many areas of the country were afforded ample time to ready farm equipment and fields for spring planting. In California, garbanzo beans and safflower were being planted as the month began, while corn and sorghum fields in several regions of Texas were planted toward month's end. Sugarcane producers in Florida and Texas spent much of the month wrapping up the harvest of their 2010 crop.

A lack of available soil moisture left producers in parts of Kansas and Texas—the two largest winter wheat-producing

states—concerned about crop condition and development as spring approached. Similarly, a strong winter storm delivered sub-freezing temperatures and ice to portions of the Blacklands, Cross Timbers, Plains, and Trans Pecos regions of Texas, negatively impacting many oat and wheat fields. Elsewhere, many winter wheat fields in Washington were reported in good condition, despite concerns of potential mold and stripe rust outbreaks.

As sub-freezing temperatures plunged southward in early February, vegetable producers in southern Texas ran irrigation systems to help prevent crop damage while continuing to harvest their cabbage and citrus crops. In Florida, citrus producers harvested grapefruit and early and midseason oranges throughout the month. Orchard maintenance activities were ongoing and included irrigation, hedging and topping of trees, and lime applications. Bee colonies were moved into almond orchards in California, while seedbed preparations were made for spring vegetable crops. As the month ended, producers in California made bloom sprays to almond orchards, while budding and early bloom was evident on many peach and plum trees.



U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on March 10, 2011. Forecasts refer to March 1.

The U.S. **all orange** forecast for the 2010-2011 season is 8.84 million tons, up 2 percent from the February 1 forecast and 8 percent above the 2009-2010 final utilization. The Florida all orange forecast, at 142 million boxes (6.39 million tons), is up 3 percent from the February 1 forecast and 6 percent above last season's final utilization. Early, midseason, and navel varieties in Florida are forecast at 70.0 million boxes (3.15 million tons), up 6 percent from February and 2 percent higher than last season. The Florida Valencia orange forecast, at 72.0 million boxes (3.24 million tons), is unchanged from the previous forecast but up 11 percent from the 2009-2010 crop. In Florida,

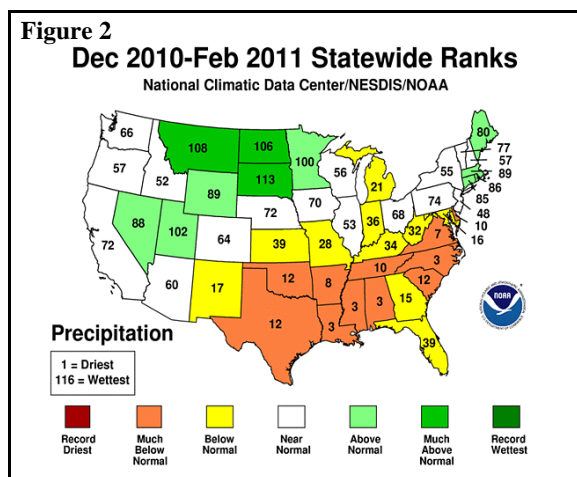
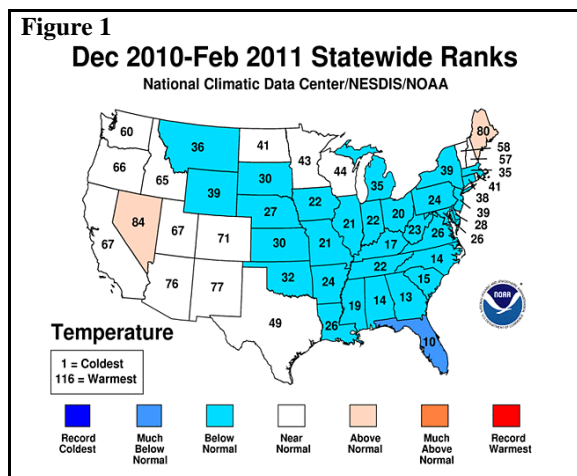
fruit size is projected to be below average, while droppage is projected to be above average. The forecast for Texas is carried forward from February. Meanwhile, the California Valencia orange forecast is 13.0 million boxes (520,000 tons), down 7 percent from the previous forecast. This brings California's all orange forecast to 59.5 million boxes (2.38 million tons), down 2 percent from the February 1 forecast. Objective survey measurements taken during January and February indicated that fruit set per tree was down compared with last year, while measured average fruit size was smaller than the previous year.

Winter Weather Review

Review provided by USDA/WAOB

Highlights: December freezes in Florida, expanding drought across the South, and an erratic Western winter wet season highlighted an unusual winter. December was not only cold in the Southeast, but exceptionally stormy in the West. But precipitation virtually ceased across much of the West for a 6-week period from early January to mid-February, only to return for the second half of February. The primary impact of Southern drought was deteriorating conditions of pastures and winter wheat. February featured numerous weather extremes. For example, bitter cold was replaced by mild weather across the central and southern Plains and the Mid-South.

Overall, the winter of 2010-11 was cool and dry. The nation's winter average temperature of 32.3°F was 0.7°F below the 20th-century mean, and represented the 39th-lowest value on record. State rankings ranged from the 10th-coldest winter in Florida to the 33rd-warmest December-February period in Nevada (figure 1). Meanwhile, winter precipitation averaged 5.51 inches (85 percent of the long-term mean). It was the third-driest December-February period on record in Louisiana, Mississippi, Alabama, and North Carolina, but the fourth-wettest winter in South Dakota and the ninth-wettest winter in Montana (figure 2). Other states reporting a top-ten winter ranking for dryness included Arkansas, Delaware, Tennessee, and Virginia. In South Dakota, it was the wettest winter since 1996-97, when massive spring flooding ensued.



December: Two large-scale atmospheric phenomena strongly influenced weather patterns across the United States: La Niña and a blocking high-pressure system over the northern Atlantic Ocean. The result was stormy weather in the western and north-central U.S., along with drier-than-normal conditions from the central and southern Plains into the Southeast. In addition, the North Atlantic block displaced cold air southward, locking frigid air into place across the Southeast. In contrast, mild weather accompanied the Western storminess.

Western storms were most intense from central and southern California to the western slopes of the central Rockies. In those areas, heavy precipitation bolstered high-elevation snow packs and improved water-supply prospects, but also caused flash flooding and mudslides.

Meanwhile, little precipitation fell from southern sections of Arizona and New Mexico to the central and southern Plains. Between November 28 and January 2, the portion of the winter wheat crop rated in very poor to poor condition climbed from 25 to 33% in Kansas and 8 to 19% in Oklahoma. On the northern Plains, however, a well-established snow cover helped to protect winter wheat from periodic weather extremes.

Farther east, record-setting snowfall accumulated in the upper Midwest, while cold but relatively benign weather covered the central and eastern Corn Belt. The upper Midwestern snow and cold maintained stress on livestock and hampered rural travel. The Northeast also experienced several episodes of bad weather, with a post-holiday storm causing major travel disruptions.

Elsewhere, multiple freezes struck Florida's winter agricultural region, causing extensive damage to vegetables and requiring growers to employ a variety of measures in an effort to protect citrus, sugarcane, strawberries, ornamentals, and nursery crops. December temperatures were the lowest on record in dozens of communities in Florida and elsewhere in the Southeast, eclipsing standards that had been mostly set in 1935, 1963, or 1989.

January: In a dramatic change from December, little or no precipitation fell in California during January. The water content of the Sierra Nevada snow pack, which rose about 16 inches in December, increased only an inch during January. The dry regime also stretched eastward into the Four Corners States. Farther north, warmth and melting snow accompanied a period of heavy precipitation from the Pacific Northwest to the northern Rockies, leading to some flooding.

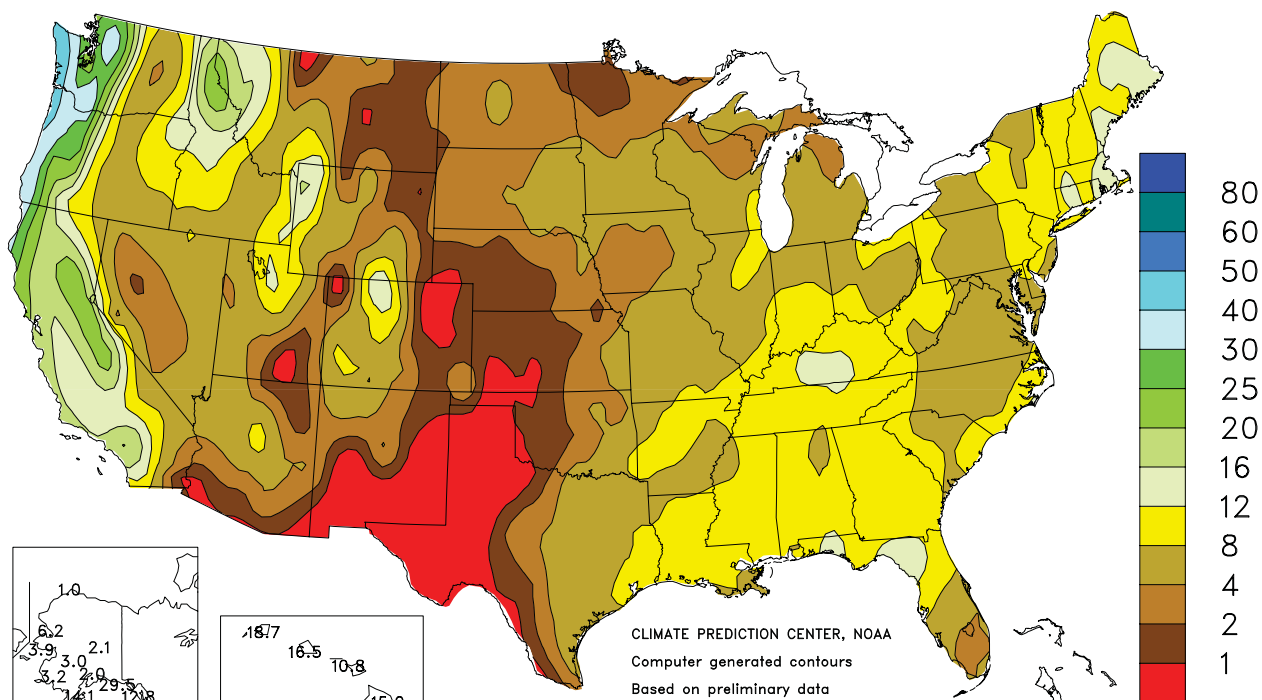
Farther east, frequent snowfall blanketed the northern Plains and the upper Midwest, insulating winter grains but hampering rural travel and stressing livestock. In contrast, drought continued to expand and intensify across the southern half of the Plains. From November 28 to January 30, the portion of the winter wheat crop rated in very poor to poor condition increased from 26 to 52% in Texas, 8 to 40% in Oklahoma, and 25 to 37% in Kansas.

Elsewhere, January precipitation was generally below average across the South and East. Exceptions included Florida's peninsula and southern and eastern Texas, which received drought-easing rainfall, and the northern Atlantic region, which experienced record-setting snowfall. Despite frequent January showers across the South, long-term drought remained a concern in many areas.

February: A complete summary appeared last week.

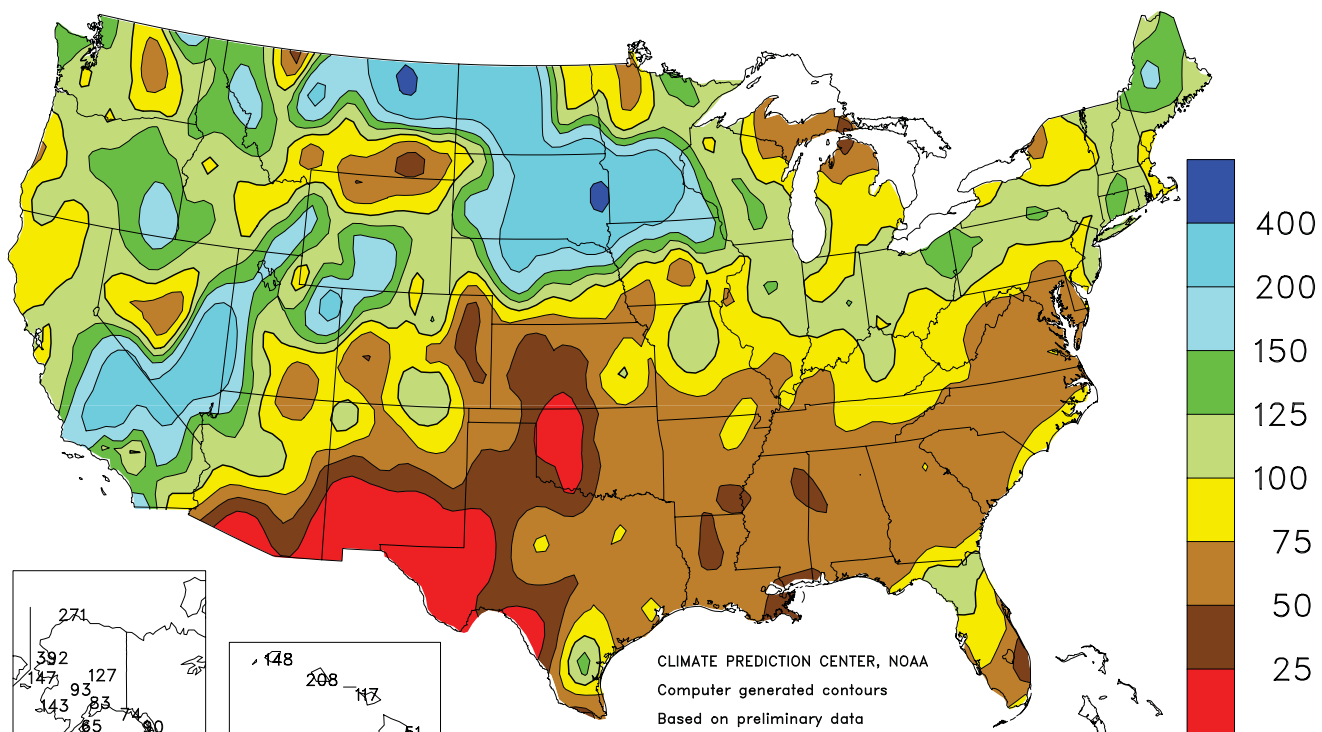
Total Precipitation (Inches)

DEC 2010 - FEB 2011



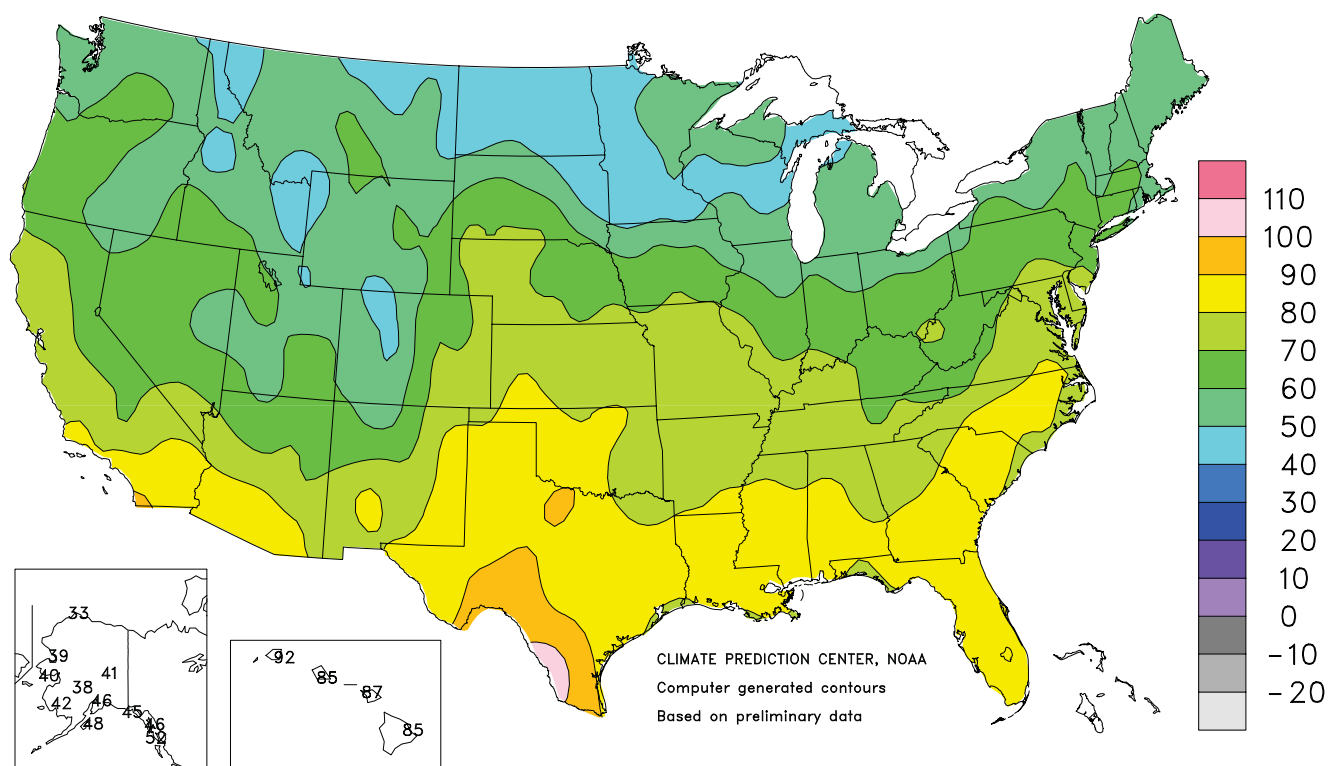
Percent Of Normal Precipitation

DEC 2010 - FEB 2011



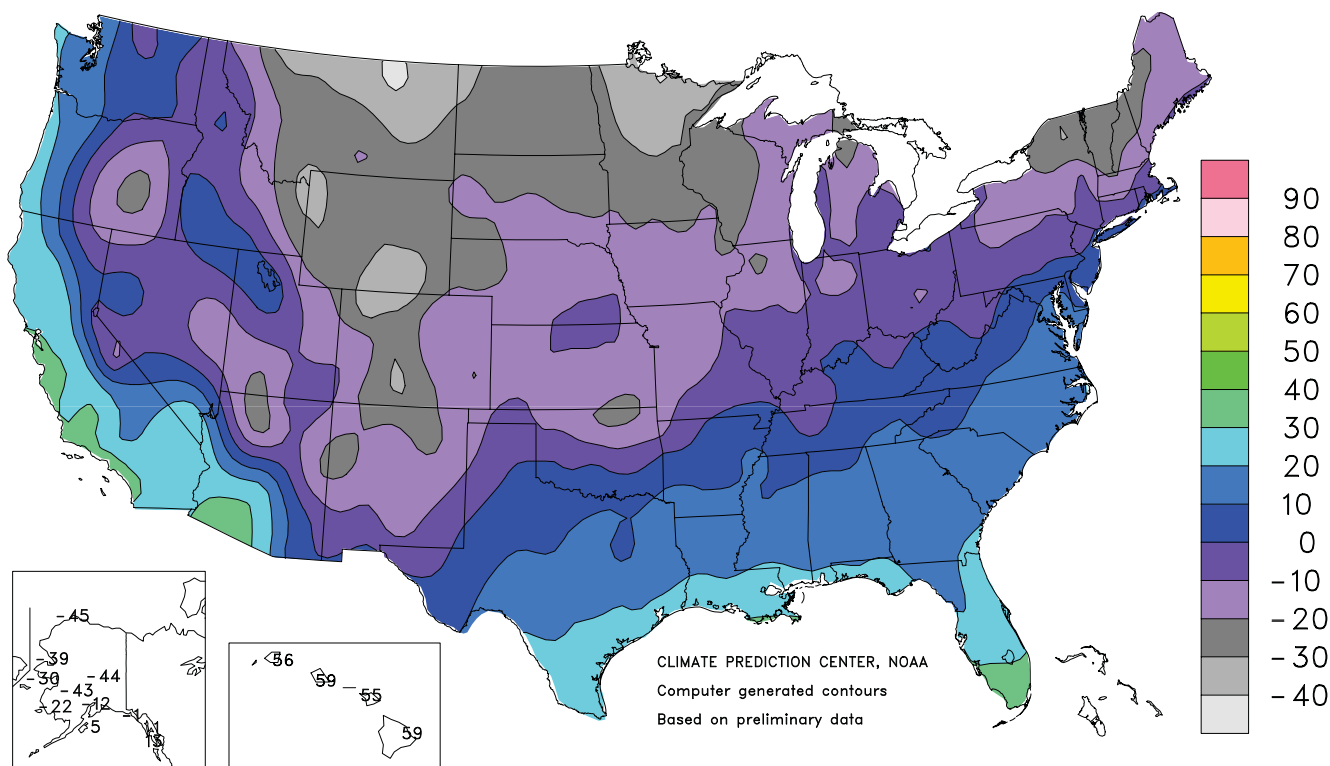
Extreme Maximum Temperature (°F)

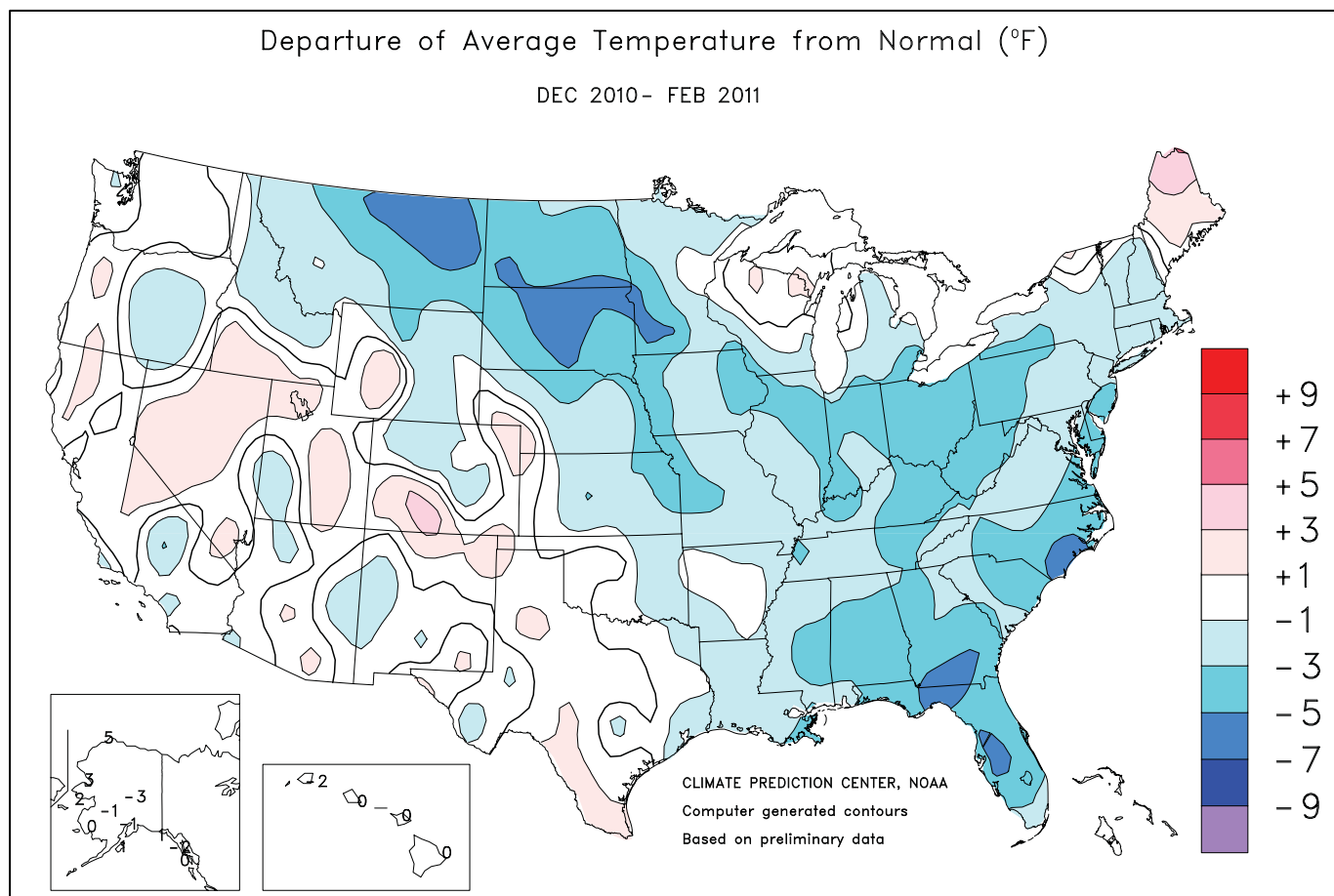
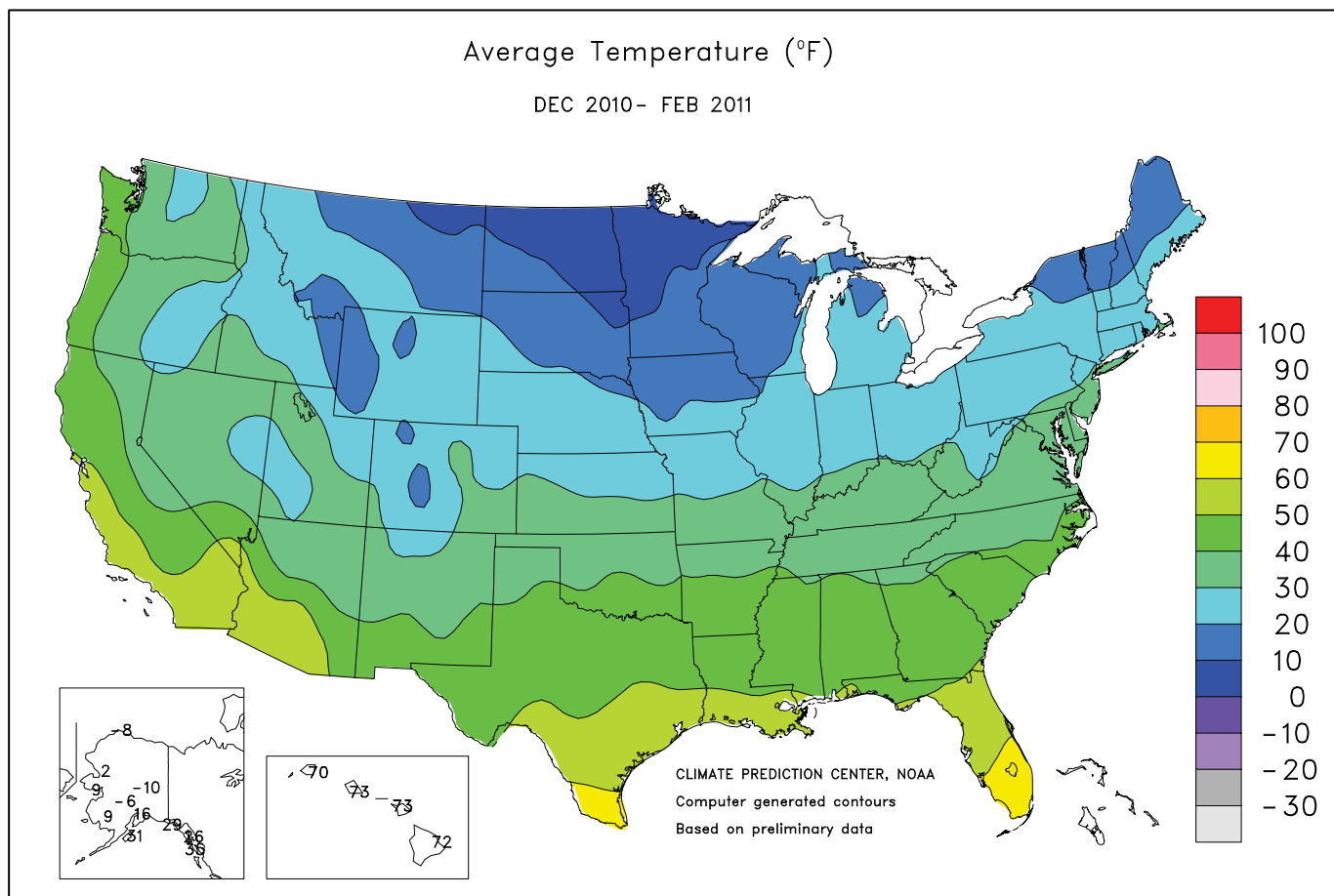
DEC 2010 - FEB 2011



Extreme Minimum Temperature (°F)

DEC 2010 - FEB 2011





National Weather Data for Selected Cities

Winter 2010-11

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	43	-2	8.33	-5.80	LEXINGTON	31	-4	10.75	0.11	COLUMBUS	28	-3	6.98	-0.68
HUNTSVILLE	41	-1	10.19	-5.87	LONDON-CORBIN	33	-4	9.54	-2.50	DAYTON	26	-3	7.43	-0.54
MOBILE	50	-2	7.71	-7.80	LOUISVILLE	34	-2	8.83	-1.39	MANSFIELD	24	-3	8.25	0.19
MONTGOMERY	46	-3	7.85	-7.61	PADUCAH	34	-2	9.15	-2.63	TOLEDO	24	-3	7.69	1.24
AK ANCHORAGE	16	-1	2.05	-0.42	LA BATON ROUGE	51	-1	11.77	-4.78	YOUNGSTOWN	24	-4	11.01	3.68
BARROW	-8	5	0.96	0.61	LAKE CHARLES	52	-1	9.94	-3.46	OK OKLAHOMA CITY	39	0	2.31	-2.42
COLD BAY	30	1	8.49	-1.51	NEW ORLEANS	53	-1	7.91	-8.50	TULSA	37	-2	3.69	-2.29
FAIRBANKS	-10	-3	2.10	0.44	SHREVEPORT	47	-2	7.60	-5.76	OR ASTORIA	42	-1	30.99	3.10
JUNEAU	26	-2	12.76	-1.48	ME BANGOR	21	0	9.32	0.11	BURNS	23	-3	5.10	1.51
KING SALMON	15	-1	3.06	-0.08	CARIBOU	18	5	9.44	1.22	EUGENE	42	1	13.74	-8.55
KODIAK	31	1	14.06	-7.47	PORTLAND	25	0	10.54	-0.93	MEDFORD	41	1	7.27	-0.20
NOME	9	2	3.93	1.25	MD BALTIMORE	33	-2	7.31	-2.53	PENDLETON	35	0	5.86	1.71
AZ FLAGSTAFF	31	0	6.71	0.14	MA BOSTON	30	-2	12.75	1.80	PORTLAND	42	1	17.37	2.41
PHOENIX	57	2	1.77	-0.75	WORCESTER	24	-2	14.48	3.51	SALEM	42	1	17.51	0.12
TUCSON	53	0	0.71	-2.19	MI ALPENA	20	0	3.52	-1.42	PA ALLENTOWN	28	-2	9.12	-0.52
AR FORT SMITH	40	-1	5.83	-2.52	DETROIT	24	-3	6.41	0.11	ERIE	26	-3	9.99	1.45
LITTLE ROCK	42	-1	7.06	-4.59	FLINT	22	-2	5.07	-0.03	MIDDLETOWN	30	-1	6.97	-2.04
CA BAKERSFIELD	50	1	6.71	3.56	GRAND RAPIDS	25	0	6.05	-0.21	PHILADELPHIA	33	-2	9.28	-0.29
EUREKA	46	-2	15.93	-1.90	HOUGHTON LAKE	19	-2	4.16	-0.45	PITTSBURGH	27	-3	8.93	1.00
FRESNO	49	2	9.24	3.62	LANSING	23	-1	4.88	-0.35	WILKES-BARRE	26	-3	7.76	0.67
LOS ANGELES	58	1	11.11	3.23	MUSKEGON	26	0	7.80	1.36	WILLIAMSPORT	27	-1	9.47	1.07
REDDING	47	0	14.48	-2.18	TRAVERSE CITY	23	0	5.52	-1.91	PR SAN JUAN	77	0	12.39	2.50
SACRAMENTO	48	0	10.62	0.79	MN DULUTH	11	-1	3.50	0.61	RI PROVIDENCE	29	-2	12.59	0.63
SAN DIEGO	59	1	7.39	1.76	INT'L FALLS	5	-2	3.15	0.97	SC CHARLESTON	47	-3	7.59	-2.81
SAN FRANCISCO	51	1	11.73	0.38	MINNEAPOLIS	16	-1	4.91	2.08	COLUMBIA	44	-2	7.31	-4.57
STOCKTON	48	1	7.38	0.39	ROCHESTER	15	-1	5.29	2.58	FLORENCE	43	-4	6.43	-4.15
CO ALAMOSA	23	5	0.83	0.04	ST. CLOUD	12	-1	4.30	2.26	GREENVILLE	41	-2	7.56	-4.95
CO SPRINGS	31	2	0.32	-0.73	MS JACKSON	46	-1	10.26	-5.25	MYRTLE BEACH	44	-4	8.25	-2.36
DENVER	31	1	1.25	0.48	MERIDIAN	44	-4	7.85	-8.73	SD ABERDEEN	10	-5	3.97	2.63
GRAND JUNCTION	30	1	1.08	-0.54	TUPELO	42	-1	7.37	-8.57	HURON	13	-5	4.42	2.98
PUEBLO	30	-1	1.31	0.33	MO COLUMBIA	28	-3	6.24	-0.16	RAPID CITY	22	-3	2.31	1.08
CT BRIDGEPORT	29	-3	13.20	3.08	JOPLIN	34	-2	4.14	-2.91	SIOUX FALLS	14	-4	3.65	2.11
HARTFORD	26	-2	15.36	4.96	KANSAS CITY	27	-3	4.03	-0.07	TN BRISTOL	35	-1	8.97	-1.34
DC WASHINGTON	36	-2	6.14	-2.75	SPRINGFIELD	32	-3	4.43	-3.13	CHATTANOOGA	40	-2	7.94	-7.12
DE WILMINGTON	32	-2	8.53	-1.11	ST JOSEPH	25	-5	1.54	-1.91	JACKSON	39	-2	7.93	-6.01
FL DAYTONA BEACH	55	-5	5.95	-2.63	ST LOUIS	31	-2	6.00	-1.28	KNOXVILLE	38	-2	9.71	-3.36
FT LAUDERDALE	66	-2	2.25	-6.04	MT BILLINGS	24	-3	1.91	-0.14	MEMPHIS	42	-1	7.37	-6.86
FT MYERS	62	-4	4.75	-1.16	BUTTE	19	0	1.34	-0.19	NASHVILLE	37	-3	9.72	-2.48
JACKSONVILLE	51	-4	10.15	0.67	GLASGOW	10	-5	3.90	2.92	TX ABILENE	47	1	2.80	-0.57
KEY WEST	67	-4	3.22	-2.65	GREAT FALLS	22	-2	3.79	1.93	AMARILLO	38	0	0.71	-1.08
MELBOURNE	60	-2	6.25	-1.03	HELENA	22	-1	1.90	0.54	AUSTIN	50	-2	5.11	-1.21
MIAMI	67	-2	3.99	-2.14	KALISPELL	23	-1	5.77	1.50	BEAUMONT	53	-1	8.41	-5.88
ORLANDO	59	-3	6.95	-0.14	MILES CITY	16	-5	0.65	-0.64	BROWNSVILLE	63	2	2.50	-1.15
PENSACOLA	50	-4	8.59	-5.40	MISSOULA	24	-1	4.94	1.96	COLLEGE STATION	53	1	4.41	-4.52
ST PETERSBURG	58	-5	4.05	-4.18	NE GRAND ISLAND	24	-1	2.01	0.13	CORPUS CHRISTI	58	0	4.76	-0.45
TALLAHASSEE	49	-4	8.51	-5.58	HASTINGS	24	-3	1.58	-0.37	DALLAS/FT WORTH	47	0	4.57	-2.27
TAMPA	59	-3	7.47	0.23	LINCOLN	24	-2	2.10	-0.09	DEL RIO	54	1	0.25	-2.03
WEST PALM BEACH	65	-2	3.95	-5.49	MCCOOK	28	-1	0.91	-0.76	EL PASO	47	0	0.27	-1.34
GA ATHENS	41	-3	9.95	-2.84	NORFOLK	21	-2	2.56	0.58	GALVESTON	54	-3	6.66	-3.56
ATLANTA	42	-3	8.50	-5.02	NORTH PLATTE	24	-2	2.16	0.86	HOUSTON	54	0	8.78	-1.57
AUGUSTA	44	-3	7.57	-4.18	OMAHA/EPPEL	23	-2	2.26	-0.23	LUBBOCK	42	2	0.49	-1.39
COLUMBUS	46	-3	9.37	-4.29	SCOTTSBLUFF	28	1	1.73	0.05	MIDLAND	45	0	0.09	-1.67
MACON	44	-3	8.56	-4.92	VALENTINE	21	-3	2.47	1.36	SAN ANGELO	49	2	1.98	-0.95
SAVANNAH	48	-3	7.37	-2.31	NV ELKO	30	2	2.64	-0.31	SAN ANTONIO	53	1	3.78	-1.59
HI HILO	71	-1	14.97	-14.13	ELY	26	-1	4.74	2.75	VICTORIA	55	0	4.75	-2.20
HONOLULU	73	-1	16.46	8.53	LAS VEGAS	50	1	1.85	0.17	WACO	49	1	6.29	-0.80
KAHULUI	73	1	10.76	1.58	RENO	37	2	2.84	-0.16	WICHITA FALLS	43	0	0.77	-3.60
LIHUE	70	-2	18.74	6.11	WINNEMUCCA	33	1	3.22	0.96	UT SALT LAKE CITY	32	1	4.75	0.82
ID BOISE	34	2	5.10	1.19	NH CONCORD	22	-1	10.67	2.38	VT BURLINGTON	21	0	8.14	2.03
LEWISTON	36	1	4.76	1.62	NJ ATLANTIC CITY	33	-1	9.81	0.21	VA LYNCHBURG	34	-3	5.57	-4.30
POCATELLO	26	0	3.92	0.67	NEWARK	33	-1	11.77	1.26	NORFOLK	38	-4	8.76	-1.54
IL CHICAGO/O'HARE	23	-2	6.78	0.97	NM ALBUQUERQUE	38	0	1.18	-0.24	RICHMOND	37	-2	7.82	-1.83
MOLINE	22	-3	4.88	-0.41	NY ALBANY	23	-2	9.18	1.85	ROANOKE	36	-2	5.01	-4.16
PEORIA	24	-2	7.96	2.39	BINGHAMTON	22	-2	8.67	0.60	WASH/DULLES	33	-1	5.55	-3.34
ROCKFORD	22	-1	4.51	-0.30	BUFFALO	24	-3	7.74	-1.64	WA OLYMPIA	39	0	21.08	-0.52
SPRINGFIELD	27	-2	5.43	-0.53	ROCHESTER	24	-2	7.04	-0.07	QUILLAYUTE	41	0	47.07	6.57
EVANSVILLE	32	-2	7.97	-1.58	SYRACUSE	23	-2	6.50	-1.33	SEATTLE-TACOMA	42	0	16.71	1.78
FORT WAYNE	23	-4	6.09	-0.67	NC ASHEVILLE	35	-3	6.34	-4.94	SPOKANE	29	0	6.76	1.18
INDIANAPOLIS	27	-3	9.31	1.39	CHARLOTTE	40	-4	6.55	-4.18	YAKIMA	33	2	3.28	-0.07
SOUTH BEND	24	-2	7.30	-0.04	GREENSBORO	37	-3	5.67	-4.03	WV BECKLEY	30	-3	6.82	-2.46
IA BURLINGTON	24	-2	2.55	-2.40	HATTERAS	44	-4	12.59	-1.75	CHARLESTON	33	-3	9.03	-0.73
CEDAR RAPIDS	19	-3	2.89	-0.74	RALEIGH	40	-2	6.03	-4.50	ELKINS	27	-4	6.64	-3.43
DES MOINES	23	-1	2.64	-0.91	WILMINGTON	42	-6	10.78	-1.18	HUNTINGTON	32	-4	7.95	-1.72
DUBUQUE	18	-3	6.36	1.97	ND BISMARCK	11	-3	3.10	1.70	WI EAU CLAIRE	14	-2	3.68	0.81
SIOUX CITY	18	-4	3.51	1.64	DICKINSON	12	-6	2.02	0.88	GREEN BAY	18	-1	4.48	0.85
WATERLOO	17	-3	4.89	1.89	FARGO	8	-3	2.73	0.81	LA CROSSE	17	-3	4.31	0.90
KS CONCORDIA	28	-2	1.54	-0.71	GRAND FORKS	6	-4	1.61	-0.20	MADISON	20	-1	4.36	0.17
DODGE CITY	32	-1	1.01	-1.04	JAMESTOWN	8	-5	1.46	-0.12	MILWAUKEE	24	0	5.03	-0.69
GOODLAND	30	0	0.96	-0.31	MINOT	11	-3	1.71	-0.10	WAUSAU	16	-1	4.20	0.88
HILL CITY	29	-1	0.48	-1.06	WILLISTON	9	-3	3.80	2.30	CASPER	24	0	2.66	0.82
TOPEKA	29	-2	3.30	-0.25	OH AKRON-CANTON	25	-3	8.02	0.27	CHEYENNE	28	1	1.41	0.06
WICHITA	32	-1	1.85	-1.36	CINCINNATI	29	-4	9.14	0.19	LANDER	23	1	2.75	1.08
KY JACKSON	33	-4	9.66	-1.85	CLEVELAND	26	-2	8.48	0.57	SHERIDAN	22	-1	1.22	-0.80

National Agricultural Summary

March 7 – 13, 2011

Weekly National Agricultural Summary provided by USDA/NASS

With the exception of the northern Great Plains, where weekly temperatures averaged more than 10°F below normal, and the Southwest, where readings locally averaged more than 5°F above average, near-normal temperatures were experienced across the United States. A mid-week storm system delivered above-average precipitation to much of the country east of the Mississippi River. Most notably, 3 inches or more fell in a band stretching northeastward from Louisiana to New England. Elsewhere, the Southwest was unusually dry, receiving precipitation totaling less than 2 percent of normal.

Rainfall was widespread in Florida, while temperatures ranged from normal to as much as 5°F below normal. There were several nights of sub-freezing temperatures and hard frosts reported in areas of the Panhandle and northern Peninsula. Field preparation for row crops was on schedule across much of the state. Producers in Hamilton County planted field corn during the week, while potato planting was active in the Tri-County area. Rainfall halted some vegetable harvesting as producers prepared to meet St. Patrick's Day demands. Cooler weather in Hillsborough County slowed tomato growth. Increased market movement included broccoli, cabbage, radishes, snap beans, and strawberries, while supplies of sweet corn, eggplant, and tomatoes remained light.

In Louisiana, spring tillage gained speed toward week's end, as fields dried out following early-week rainfall. Corn and rice producers continued to plant at a steady pace, with progress expected to increase as field conditions improved. While citrus producers fertilized their orchards, vegetable producers prepared for spring crop planting.

Despite welcomed, widespread precipitation during the week, concerns of dry soil conditions lingered for many producers in Kansas. The winter wheat crop

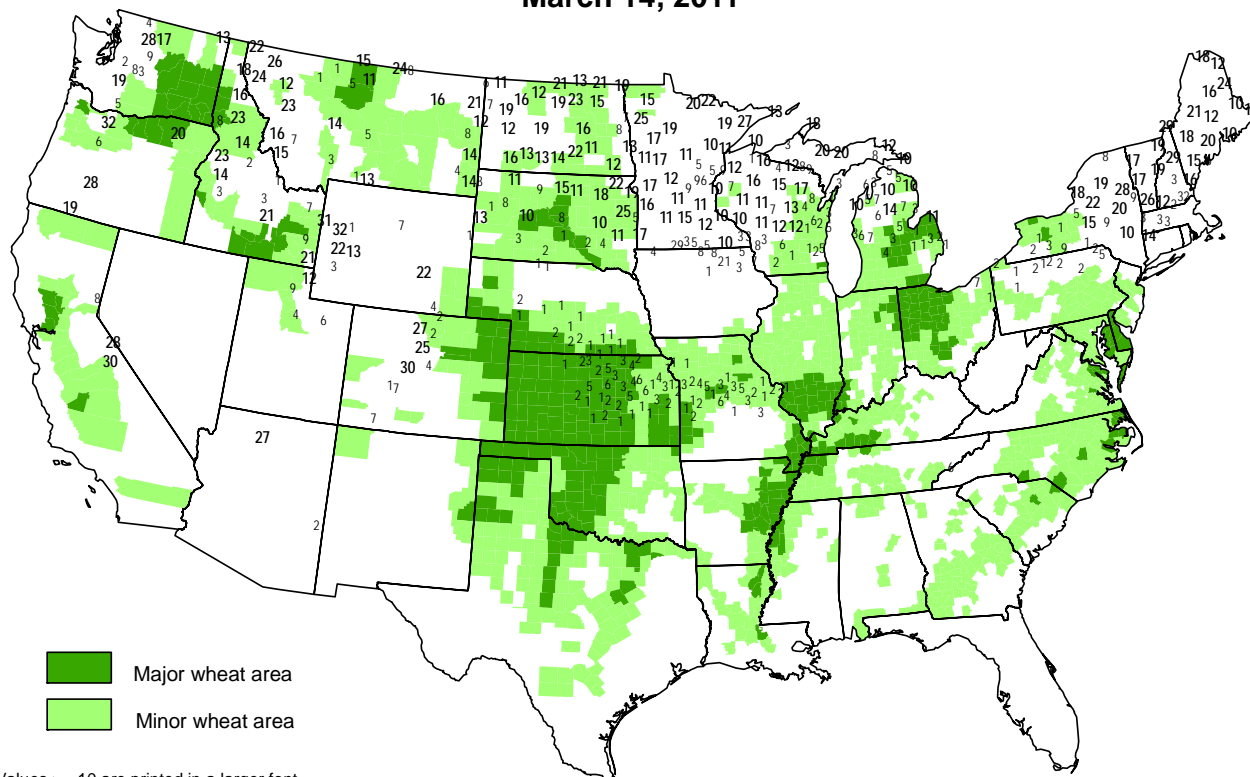
was reported as greening up following warmer weather, but increased moisture will be needed to provide decent growing conditions. Jointing was evident in a small portion of the crop.

Rainfall in Texas was scattered and scarce during the week. On the Southern High Plains, winter wheat stands were negatively impacted by an outbreak of Russian wheat aphids and winter grain mites, while portions of the crop in the Low Plains were damaged by soil erosion and high winds. Irrigated fields in the Northern High Plains and Blacklands progressed well under warmer weather. In some areas of the Plains, cotton producers were tilling fields and setting pivots in preparation for planting. A lack of available moisture delayed corn and cotton planting in many southern portions of the state. Early-planted corn in the Coastal Bend was reported as needing additional rainfall. In East Texas and the Trans-Pecos, warm-season vegetable planting continued, while many fruit trees reached the bloom stage.

A series of wet Pacific storm systems delivered some precipitation to much of California during the week, with parts of the Northern Coast receiving over an inch of rain. Limited irrigation has occurred on small grain crops due to adequate levels of soil moisture so far this year. Rice producers were busy working on drainage ditches to help drain excess water following recent rainfall. Spring row crop field preparation continued as field conditions allowed. A variety of citrus crops were harvested in the San Joaquin Valley, as well as the coastal and desert regions. Citrus trees were shipped statewide from Tulare County nurseries. Full bloom continued in stone fruit trees, while cherry bloom was just beginning. Orchard producers spent the week making fertilizer and herbicide applications. Good growing conditions were reported for most vegetable crops, with producers continuing to irrigate and fertilize fields.

Snow Depth (inches)

March 14, 2011



March 10 ENSO Update

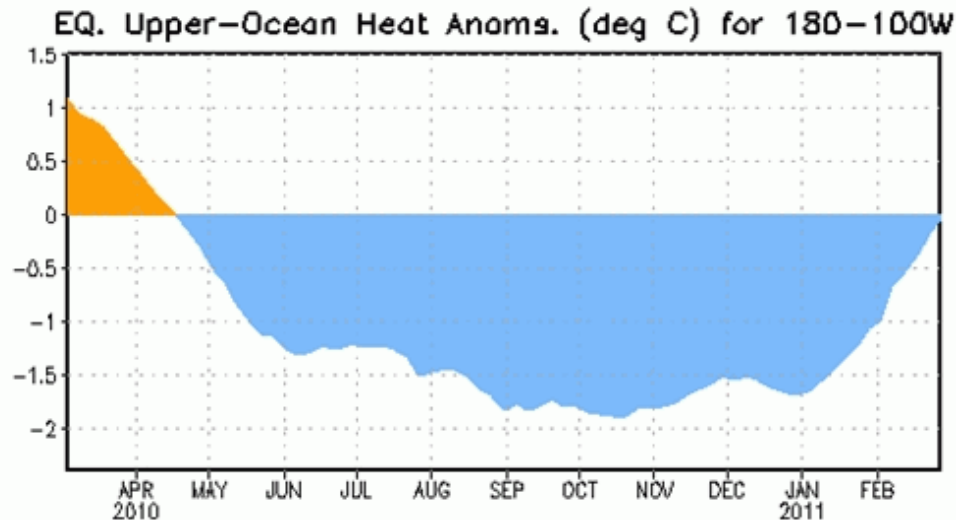


Figure 1: Area-averaged upper-ocean heat content anomalies (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). Heat content anomalies are computed as departures from the 1982-2004 base period weekly means.

ENSO Alert System Status: [La Niña Advisory](#)

Synopsis: ENSO-neutral conditions are expected by June 2011.

La Niña continued to weaken during February 2011 as reflected by the reduced strength of the negative surface and near-surface temperature anomalies across much of the equatorial Pacific Ocean. The Niño indices were between -0.5°C and -1.3°C at the end of February. Subsurface oceanic heat content anomalies (average temperatures in the upper 300m of the ocean, Fig. 1) returned to near zero in response to the eastward progression of a strong oceanic Kelvin wave, which has weakened the negative temperature anomalies at depth in the central and eastern equatorial Pacific. La Niña continued to be most evident in the atmospheric circulation over the equatorial Pacific, although at lesser intensity. Convection remained enhanced over much of Indonesia and suppressed over the western and central equatorial Pacific. Also, anomalous low-level easterly and upper-level westerly winds have persisted in this region. However, a reduction in the strength of the anomalous low-level cross-equatorial flow, and associated oceanic upwelling, over the eastern Pacific contributed to anomalous SST warming in that region. Collectively, these oceanic and atmospheric anomalies reflect a weakening La Niña.

In concurrence with the observed evolution, nearly all of the ENSO models predict La Niña to weaken further in the coming months. While the majority of models predict a return to ENSO-neutral by May-June-July 2011 (three month average in the Niño-3.4 index between -0.5°C and $+0.5^{\circ}\text{C}$), there continues to be large uncertainty in the status of ENSO through the Northern Hemisphere summer and fall. Due to both model and observed trends, there is increasing confidence in ENSO-neutral conditions by June 2011. However, model forecasts issued in the spring typically have

minimum skill (the “spring barrier”), which results in low confidence forecasts for summer and beyond.

La Niña will continue to have global impacts even as the episode weakens through the Northern Hemisphere Spring. Expected La Niña impacts during March-May 2011 include suppressed convection over the west-central tropical Pacific Ocean, and enhanced convection over Indonesia. Potential impacts in the United States include an enhanced chance of below-average precipitation across much of the southern states and the Central Rockies and Central Plains. An increased chance of below-average temperatures is predicted for much of the West Coast and across the northern tier of states (excluding New England). A higher possibility of above-average temperatures is favored for much of the southern half of the contiguous U.S. (see [3-month seasonal outlook](#) released on February 17, 2011).

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 April 2011. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ens0-update@noaa.gov.

International Weather and Crop Summary

March 6-12, 2011

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

HIGHLIGHTS

EUROPE: Dry, increasingly mild weather across much of the continent promoted fieldwork and early crop development.

WESTERN FSU: A deep snowpack protected dormant grains and oilseeds from bitter cold, although milder weather melted snow cover in western and southern crop districts.

MIDDLE EAST: Rain and snow further improved prospects for greening to jointing winter grains.

NORTHWEST AFRICA: Widespread showers maintained abundant soil moisture for jointing to heading winter grains.

SOUTH ASIA: Warm, dry weather prevailed for filling winter crops.

EAST ASIA: Showers and warm weather aided development of winter crops, while extensive tsunami-induced flooding caused damage to fields and infrastructure in northern Japan.

SOUTHEAST ASIA: Persistent showers favored rice in Vietnam but renewed fieldwork delays in the Philippines and eastern Malaysia.

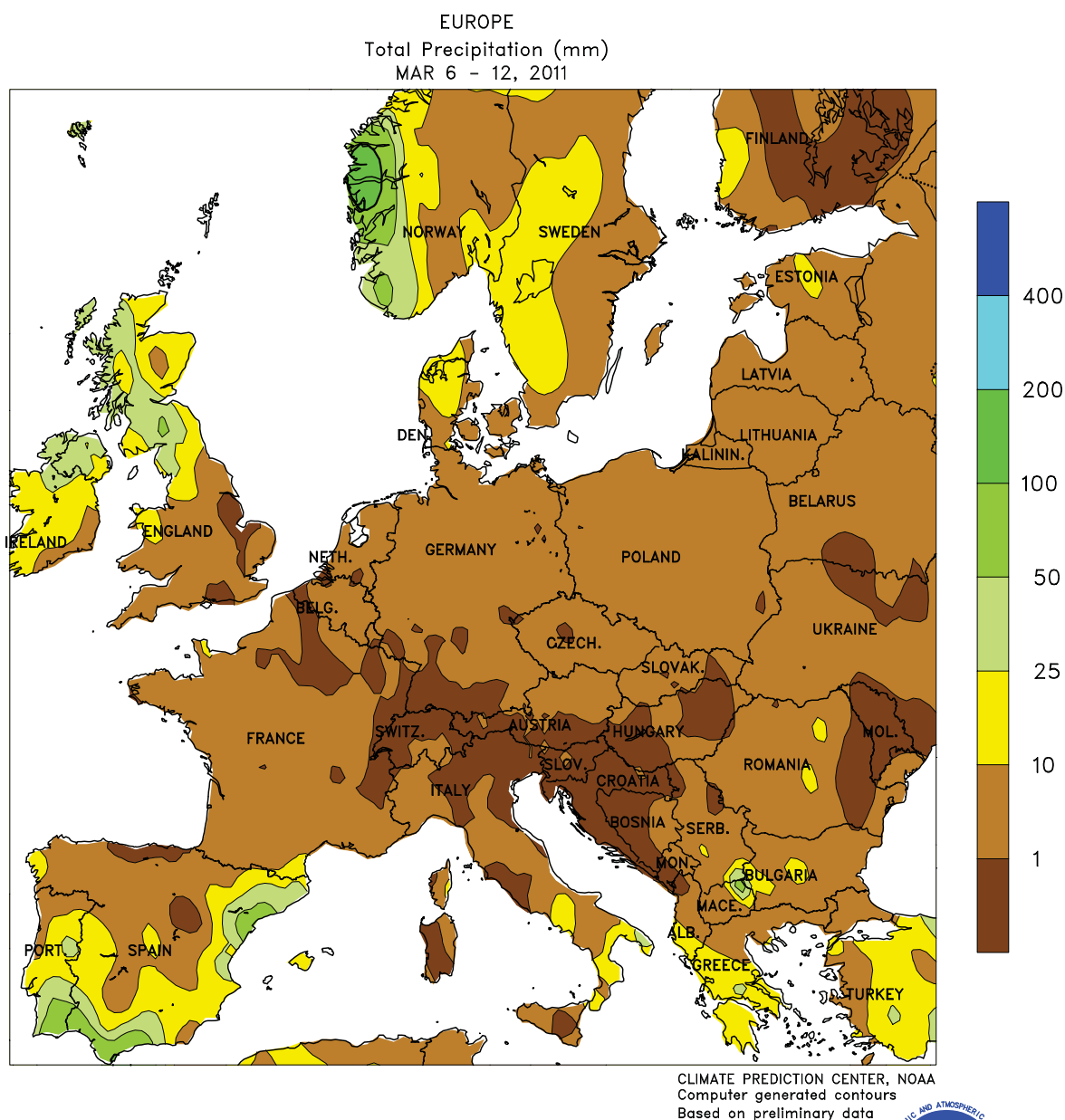
AUSTRALIA: Warm, sunny weather and abundant moistures supplies aided summer crop development in east-central Australia.

SOUTH AFRICA: Unseasonable warmth and dryness hastened maturation of corn and other summer crops.

ARGENTINA: Beneficial rain returned to central Argentina.

BRAZIL: Scattered showers ended a brief drying trend in the south as heavier rain continued in Brazil's central and northeastern farming areas.

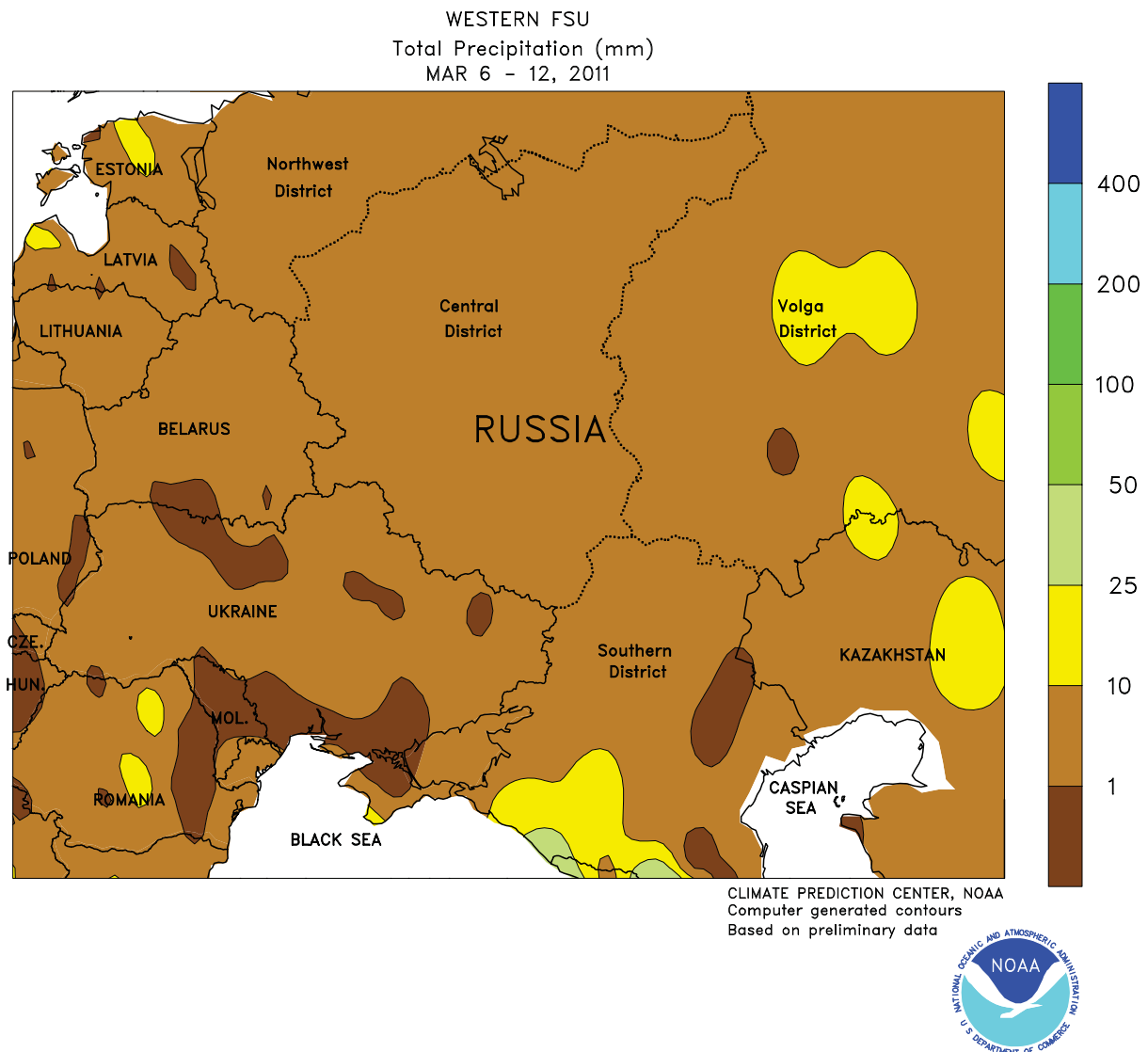




EUROPE

Dry, increasingly warm weather encompassed much of the continent, promoting fieldwork and early crop development. Temperatures averaged 1 to 2°C above normal across northern Europe's wheat belt, although highs by week's end were approaching or exceeding 15°C from France eastward into southern Poland and the Balkans. Winter crops were still dormant across the eastern half of the region, but the milder conditions reduced crop cold hardiness and encouraged some greening. In France and southern

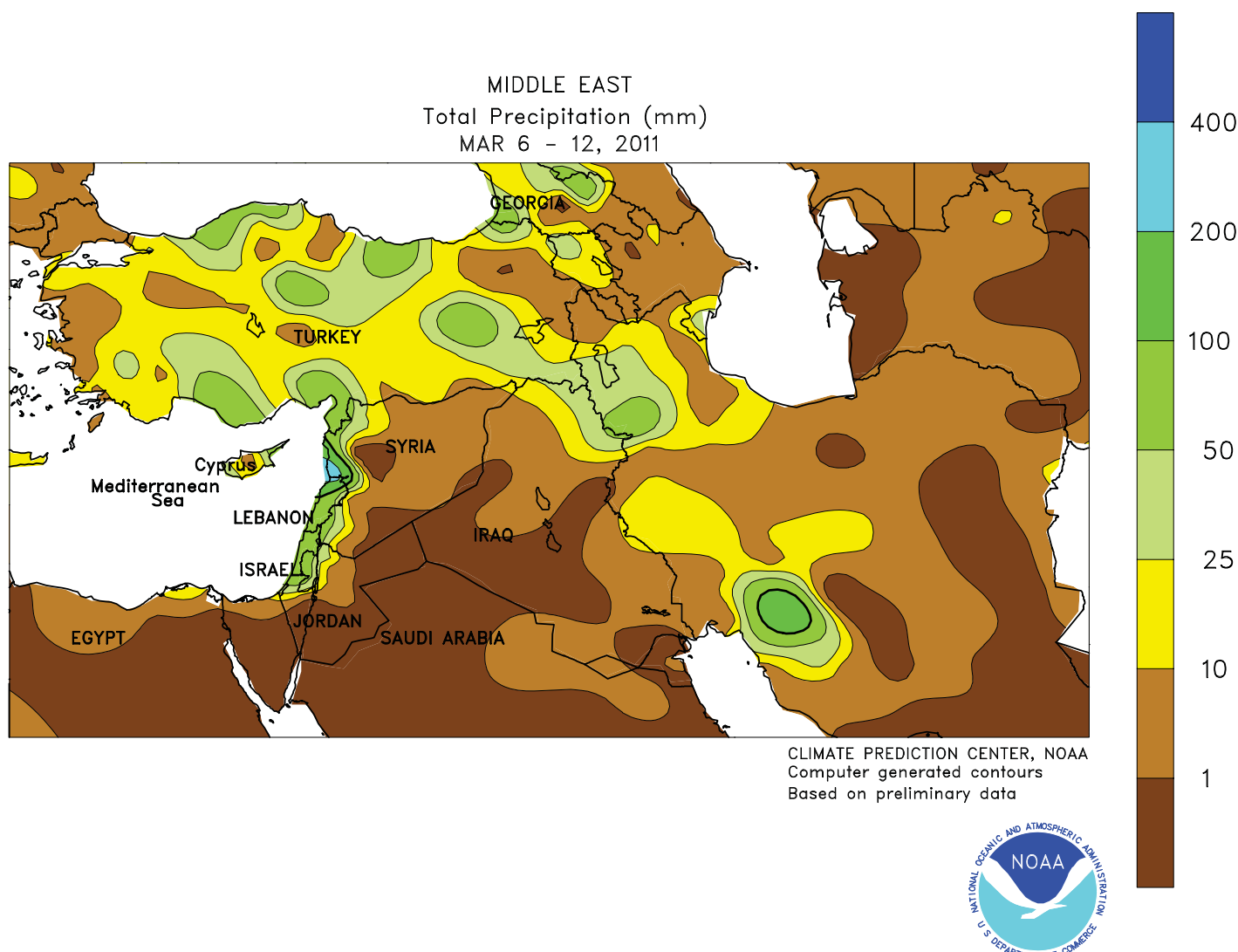
England, sunny skies allowed winter wheat and rapeseed to progress steadily through vegetative stages of development. Meanwhile, drier weather returned to Italy on the heels of last week's heavy rain, allowing fields to dry and corn and small grain planting to resume. In Spain, locally heavy showers (25-70 mm) in southern portions of the country boosted soil moisture for jointing winter wheat, although primary wheat districts in central and northern Spain were mostly dry.



WESTERN FSU

Dry, cold weather persisted over much of the region, although milder conditions arrived from the west by week's end. Precipitation was generally light (less than 5 mm), but eastern portions of the Volga District reported locally more than 10 mm (liquid equivalent). In addition, light to moderate snow (2-25 mm liquid equivalent) in southern portions of the Southern District boosted moisture reserves for spring growth but kept winter crops dormant. Minimum temperatures during the past week

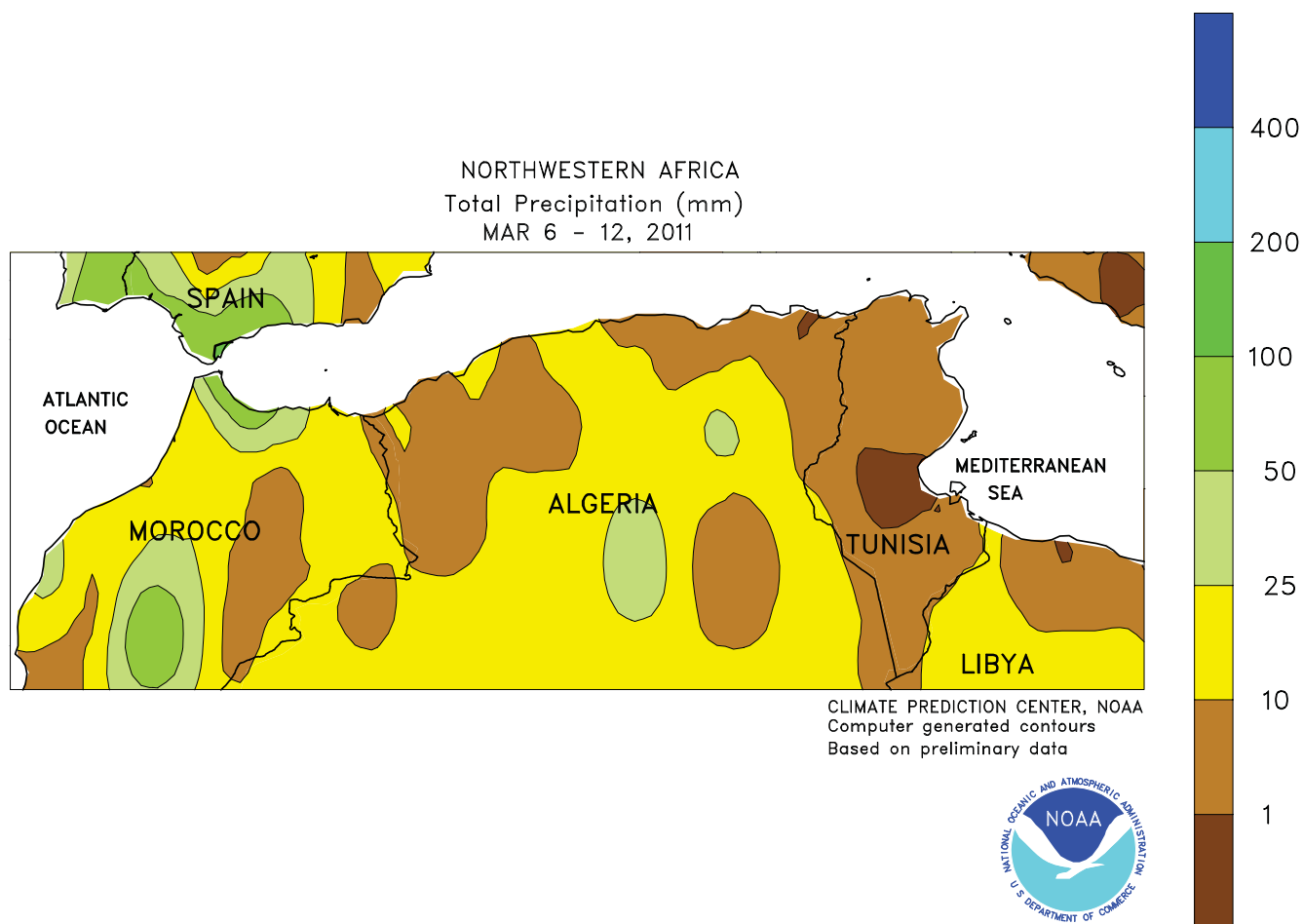
(-20 to -10°C) did not threaten dormant winter crops due to a deep snow cover and readings well above the extremes observed in mid-February. By week's end, high temperatures approached 10°C from western Belarus into Ukraine and the southern half of the Southern District, melting some of the existing snowpack and reducing crop cold hardiness. In contrast, most of central and northern Russia's winter crop districts remained under a moderate to deep snowpack (10-40 cm).



MIDDLE EAST

Wet weather prevailed over most winter crop areas, improving soil moisture and crop prospects heading into the spring growing season. A strong storm moved slowly across the region, generating 25 to more than 50 mm of rain along the Mediterranean coast. Snow was reported across Turkey, which slowed or halted crop development but maintained adequate to abundant soil moisture. Rain and mountain snow tallied 5 to 60 mm from southeastern Turkey into northern portions of Syria, Iraq, and Iran; the precipitation was beneficial for jointing winter

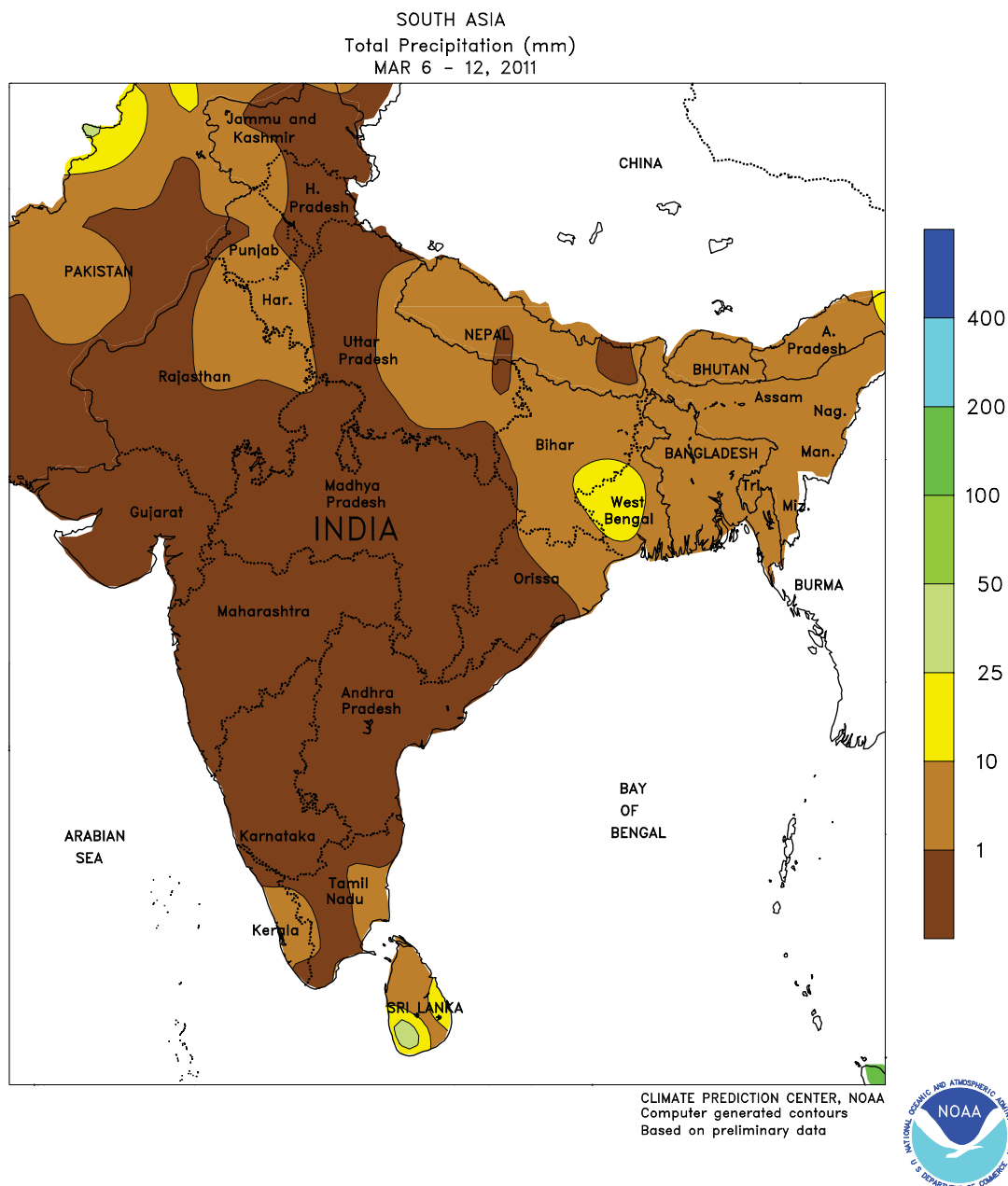
grains, but the extent of crop recovery from an unusually dry autumn remains uncertain. In southwestern Iran, moderate to heavy rain (10-100 mm, locally more) boosted irrigation reserves and provided supplemental soil moisture for wheat and barley. Precipitation was approaching northeastern Iran by week's end, with 5 to 10 mm representing the early stages of the rainfall. Temperatures averaged up to 7°C below normal in Turkey, while readings averaged 2 to 4°C above normal from eastern portions of Turkey and Syria into Iran.



NORTHWESTERN AFRICA

Unsettled weather maintained favorable soil moisture for winter grains across most of the region. A nearly stationary storm system generated periods of rain from Morocco into central Algeria, with weekly totals averaging 10 mm or more across most primary growing areas. Consequently, soil moisture remained adequate for heading (north) to flowering (south)

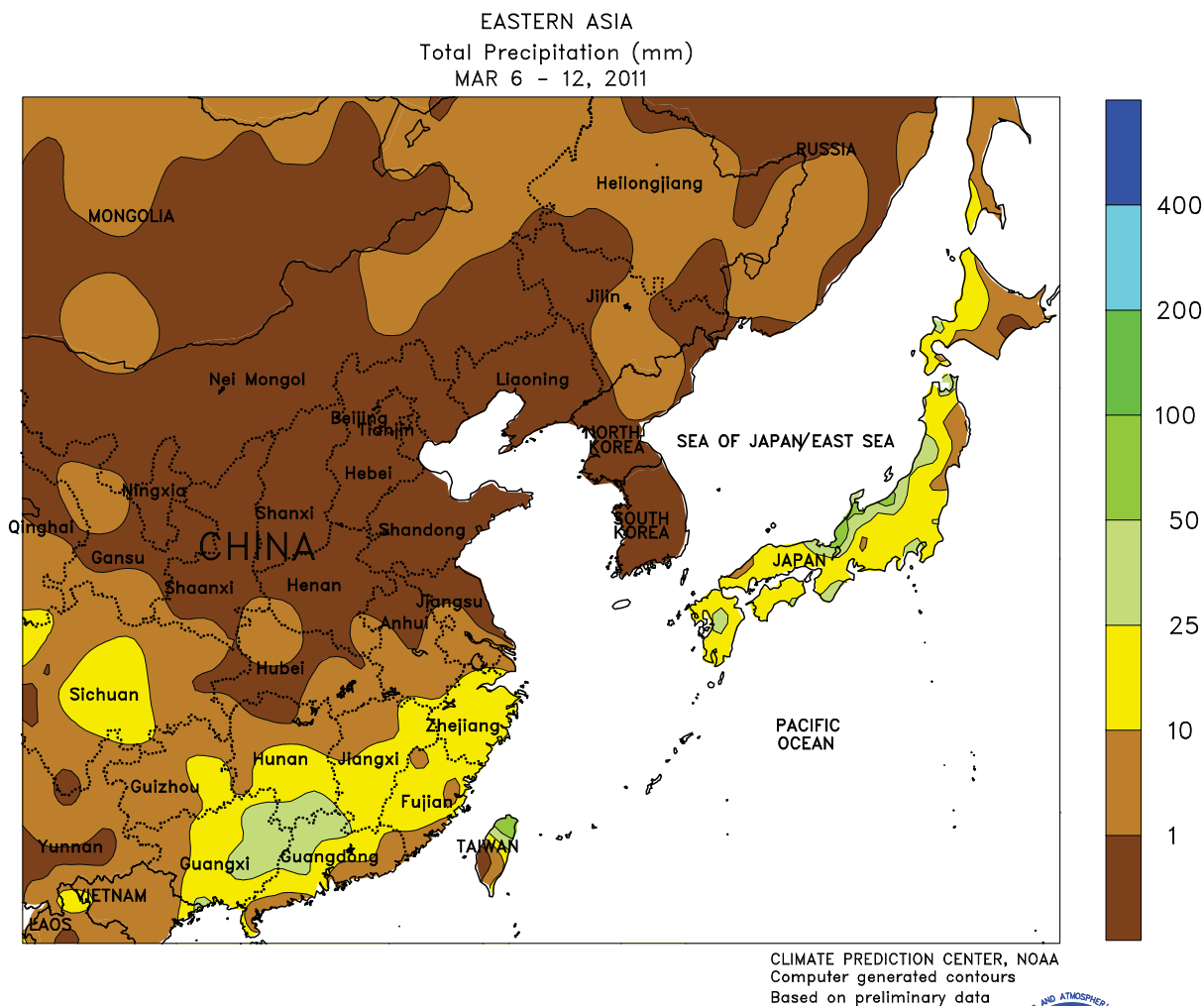
winter grains in western portions of the region. Farther east, light showers (3-10 mm) maintained favorable soil moisture for jointing to heading winter crops in Tunisia and eastern Algeria. Warmer-than-normal weather (2-5°C above normal) in Algeria contrasted with near- to below-normal temperatures (up to 2°C below normal) in Tunisia and Morocco.



SOUTH ASIA

Seasonably dry weather returned to the region as winter wheat and rapeseed neared maturation. In addition to the dryness, daily maximum temperatures reached 30°C periodically

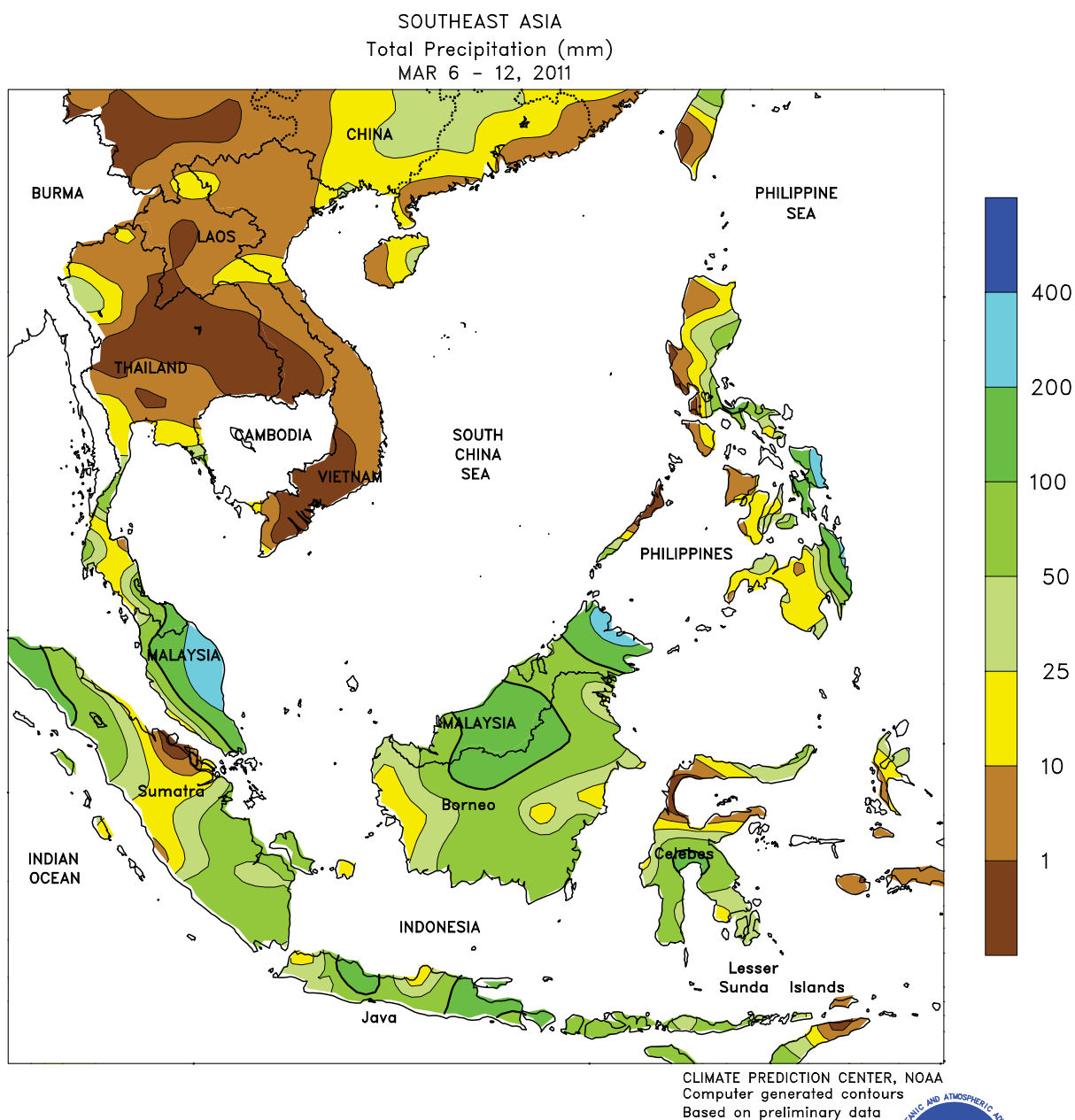
through the period. The combination of heat and dryness increased irrigation demands and caused some stress to filling crops in northern India and the Punjab region of Pakistan.



EASTERN ASIA

Passing showers in southeastern China brought upwards of 30 mm, increasing moisture to greening winter rapeseed and newly transplanted early rice. Meanwhile, dry weather returned to major winter wheat areas on the North China Plain. However, recent rainfall and adequate irrigation kept moisture conditions

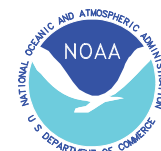
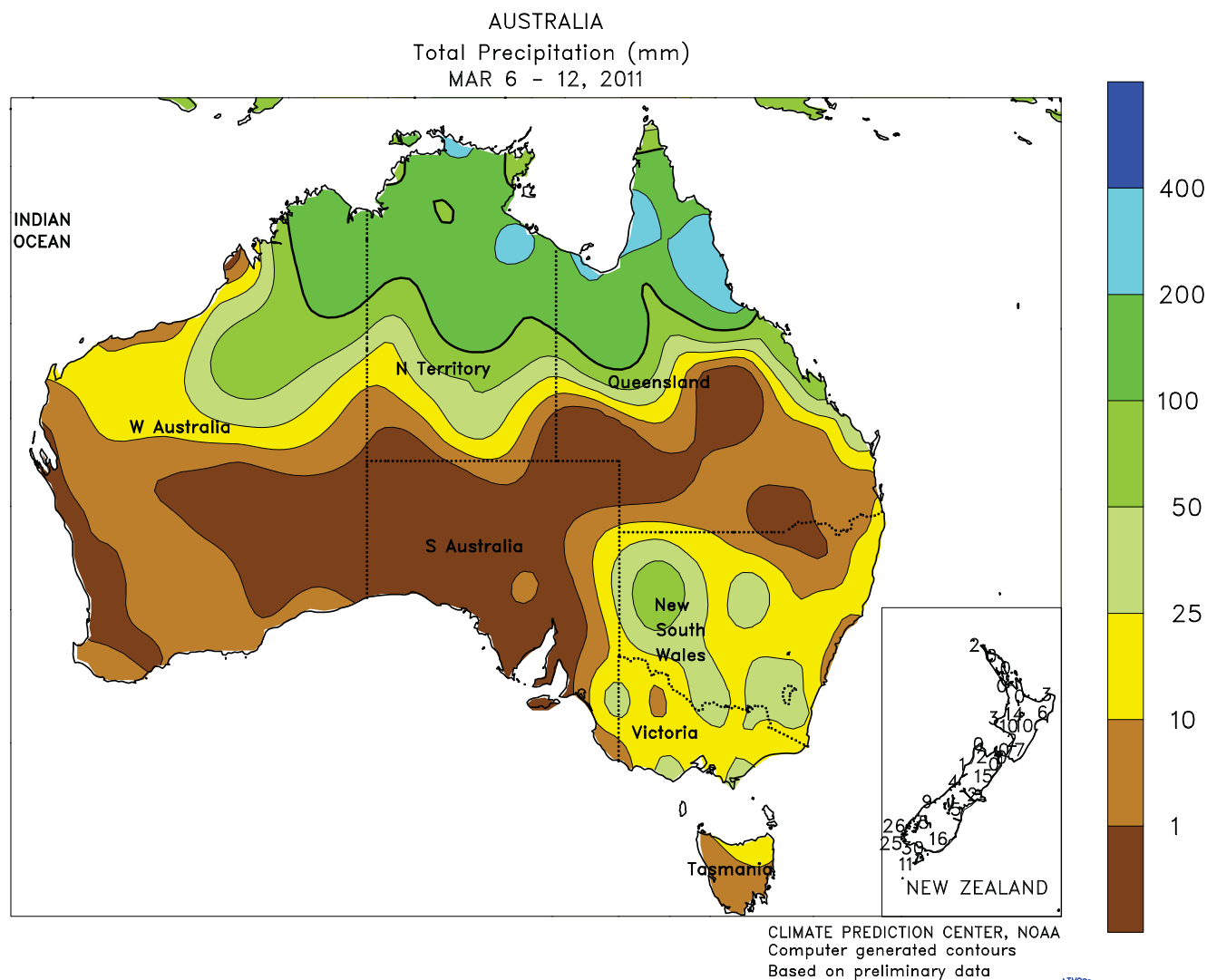
favorable for greening wheat. Temperatures averaged nearly 5°C above normal across eastern China, accelerating early spring development of crops. In Japan, a tsunami produced widespread flooding and caused extensive damage to vegetable fields and rice paddies in minor producing areas.



SOUTHEAST ASIA

Continued rainfall maintained adequate to excessive soil moisture throughout the region. In Vietnam, periodic showers (less than 10 mm) favored vegetative spring rice in the north, while dry conditions aided spring rice harvesting in the south. In addition, despite temperatures averaging 3°C below normal in the north, rice continued to develop at a normal pace. In the Philippines, above-normal rainfall persisted, with localized amounts of over 200 mm in the southeast. The excessive

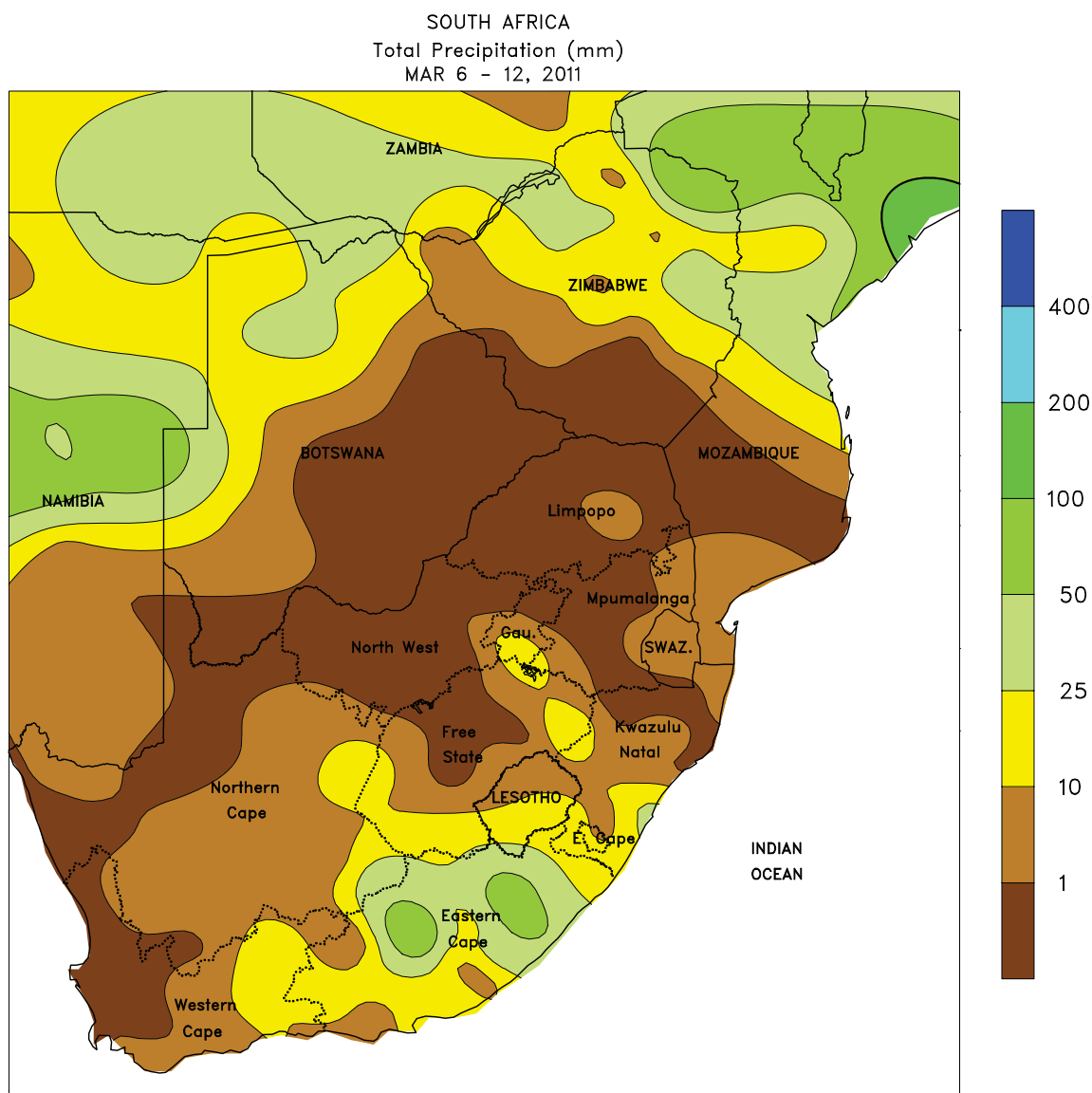
moisture delayed spring fieldwork in many eastern parts of the country. Farther south in the region, torrential rainfall (over 300 mm) in Peninsular Malaysia caused flooding and slowed oil palm harvesting. In contrast, seasonable showers (25-100 mm) maintained favorable moisture conditions for oil palm elsewhere in Malaysia as well as Indonesia, with few harvest delays. Wet weather continued for rice in Indonesia, slowing maturation and preparations for harvest.



AUSTRALIA

In southern Queensland and extreme northern New South Wales, a combination of warm, sunny weather and abundant moisture supplies aided cotton and sorghum development, following last week's soaking rains. Elsewhere in New South Wales, widespread showers (10-

50 mm) boosted soil moisture and reservoir levels for dryland and irrigated cotton. Temperatures in major summer crop areas averaged near normal, with maximum temperatures generally in the lower to middle 30s (degrees C).



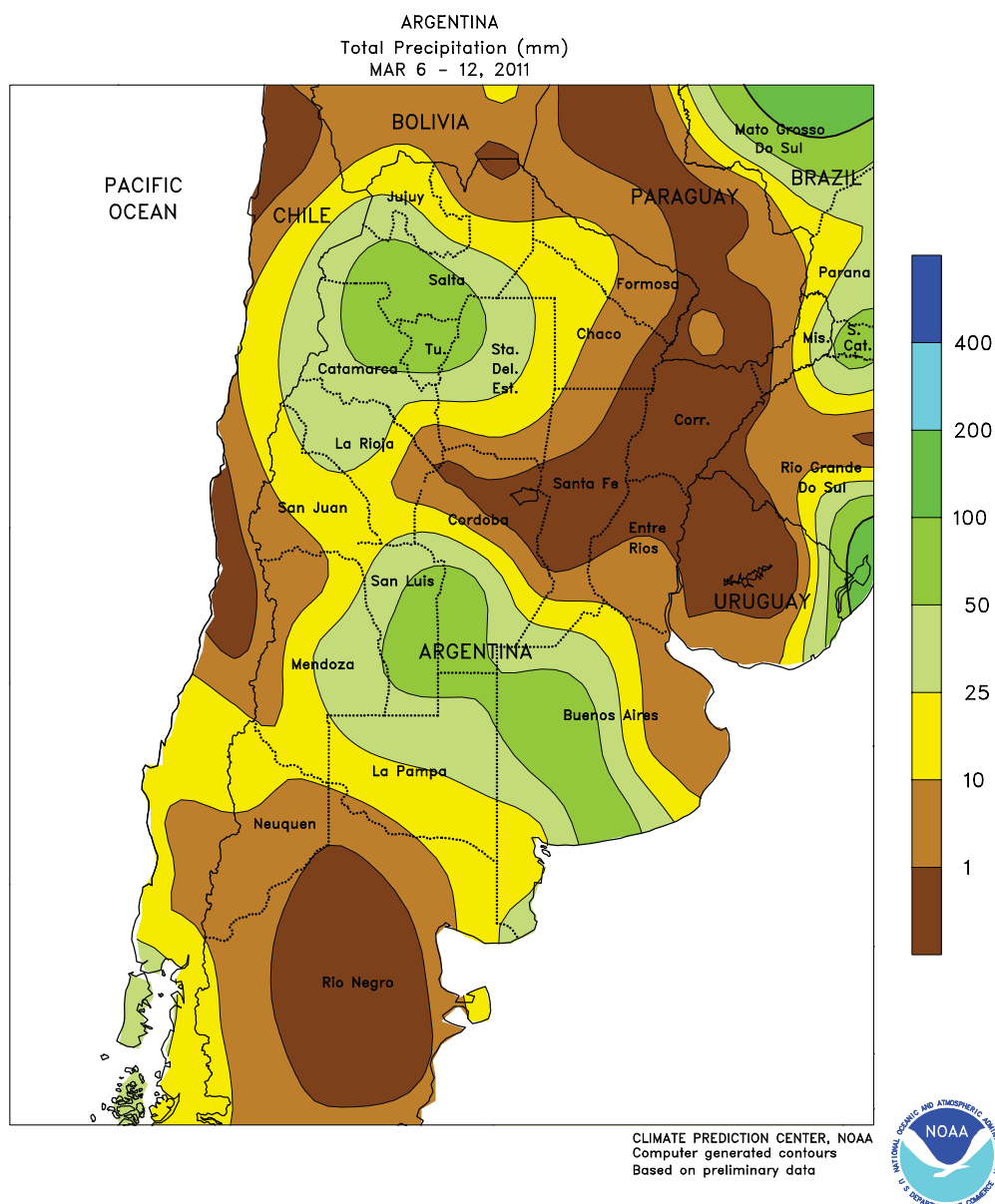
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTH AFRICA

Mostly dry, unseasonably warm weather hastened maturity of summer crops in most major farming areas. Temperatures averaged 1 to 2°C above normal across the corn belt, with highs reaching the lower 30s (degrees) during the latter half of the week. In KwaZulu-Natal, temperatures were slightly higher, averaging about 3°C above normal with highs ranging from 35 to 40°C, although scattered showers (10-25 mm) brought some

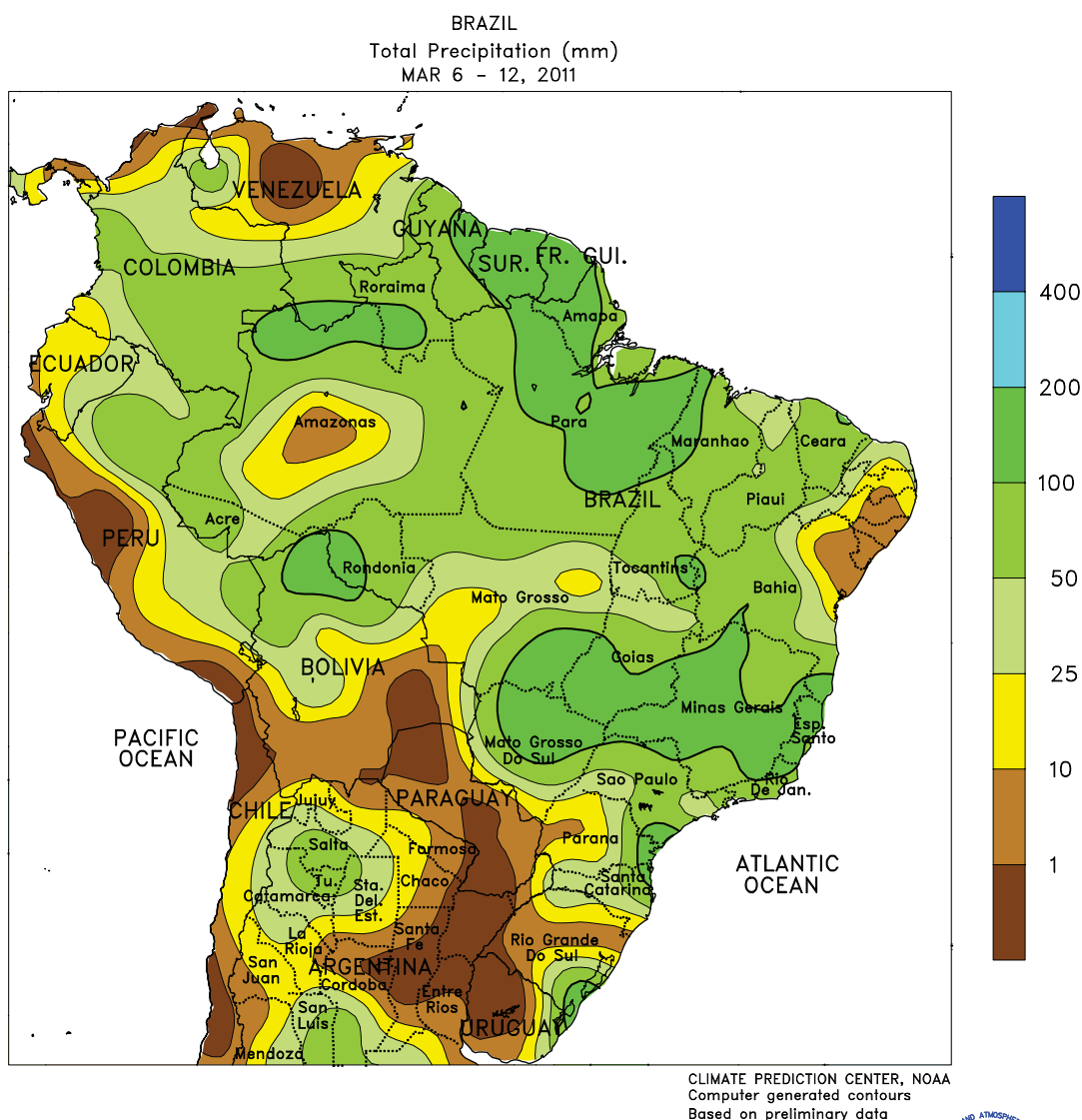
relief from the heat at week's end. Farther west, widespread, heavier rain (10-50 mm or more) increased moisture reserves for agriculture in Eastern Cape as drier conditions prevailed in previously wet locations of Northern Cape and southern Free State. Meanwhile, dry, seasonably warm weather (highs mostly in the middle 30s) favored maturation and harvesting of tree and vine crops in Western Cape.



ARGENTINA

Showers returned to central Argentina, boosting moisture for soybeans, corn, and other immature summer crops. Rainfall totaled 25 to 50 mm or more in southern Cordoba and most agricultural areas of La Pampa and western Buenos Aires, with much of the rain coming at week's end ahead of an approaching cold front. On March 13, the rain was pushing through the remainder of the region, bringing relief to crops in northern Buenos Aires, Santa Fe, and Entre Rios (additional information will appear in next week's *Weekly Weather and Crop Bulletin*). Throughout central Argentina, weekly temperatures averaging 3 to 4°C above normal promoted rapid development of filling to maturing summer grains and

oilseeds, with highs reaching the middle 30s (degrees C) ahead of the late-week cold front. Warmer-than-normal weather also dominated northern Argentina for much of the week, though lingering showers 10-50 mm or more) in western areas kept high temperatures to more seasonable levels (upper 20s) early in the week. As in central Argentina, cooler, showery weather was expanding into the region ahead of a cold front outside of the reporting period, boosting moisture in eastern cotton areas (Chaco, Formosa, and northern Santa Fe) after a second week of dryness. According to Argentina's ministry of Agriculture, sunflowers were 50 percent harvested as of March 10, 3 percentage points ahead of last year's pace.

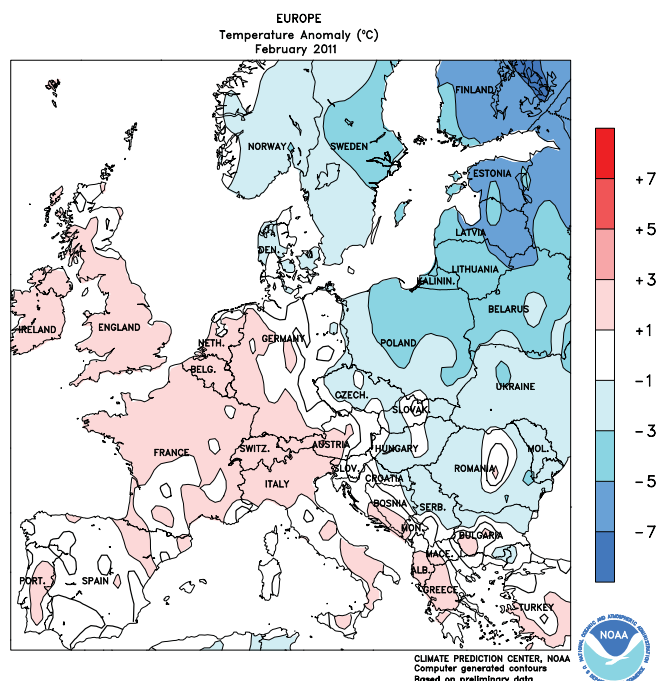
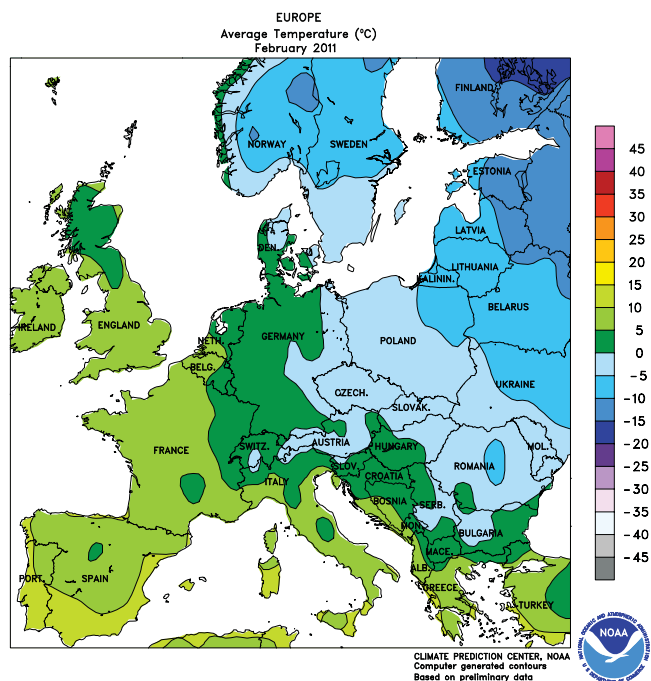
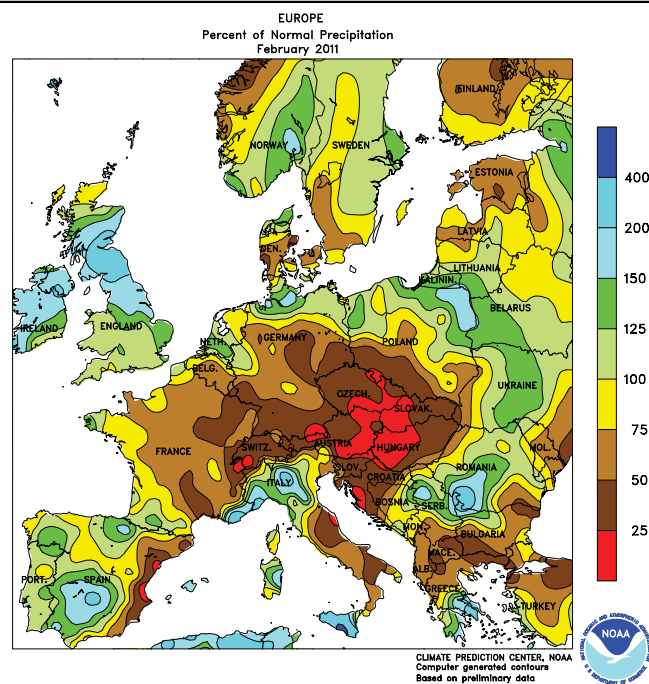
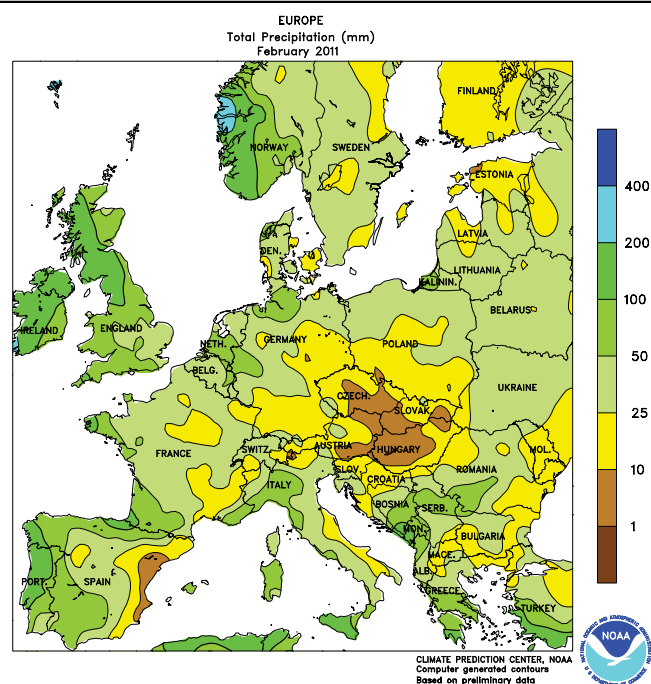


BRAZIL

Scattered showers returned to southern Brazil, boosting moisture for immature soybeans after a brief dry spell. Rainfall totaled 10 to 25 mm in most areas, with somewhat heavier rain (locally exceeding 50 mm) concentrated over Santa Catarina. The rain came sporadically, however, and an increase in sunshine led to weekly temperatures averaging up to 3°C above normal (highs reaching 35°C locally) in Rio Grande do Sul, fostering rapid development of flowering to pod filling soybeans. Farther north, heavy showers (weekly rainfall accumulations above 100 mm) lingered from northern Mato Grosso do Sul eastward, keeping maturing soybeans unfavorably wet and sustaining local flood conditions. Drier

weather is needed throughout this region for resumption of soybean harvesting and to promote normal development of sugarcane, coffee, and citrus. Temperatures continued to average up to 2°C below normal in these wet areas, with highs in the upper 20s and lower 30s (degrees C). Elsewhere, seasonably warm, showery weather (rainfall totaling 25-100 in most areas) maintained mostly favorable moisture levels for immature soybeans and cotton in the northeastern interior, although breaks in the rainfall allowed some harvesting of early maturing crops to take place. In contrast, seasonably dry weather along the northeastern coast promoted harvesting of sugarcane and cocoa.

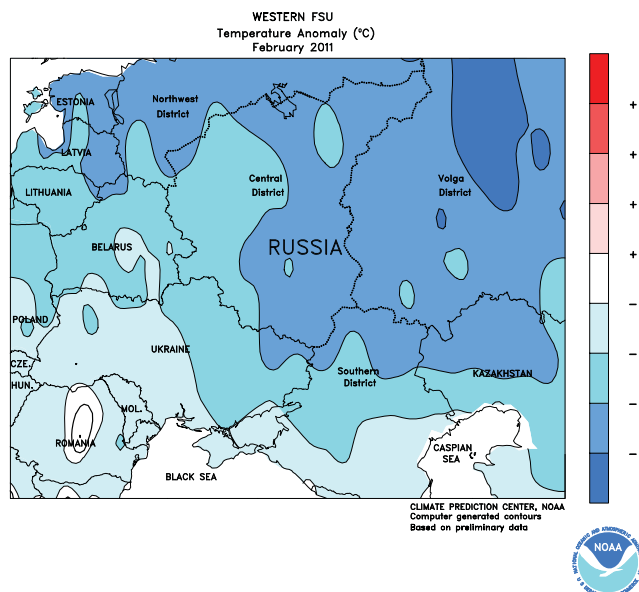
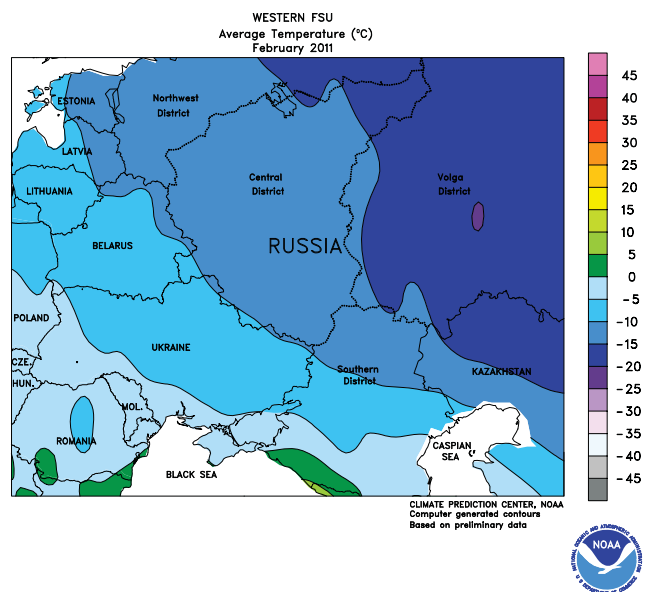
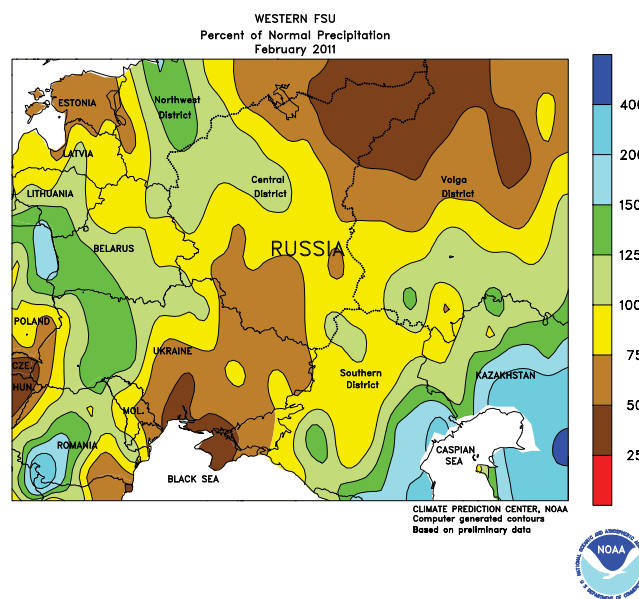
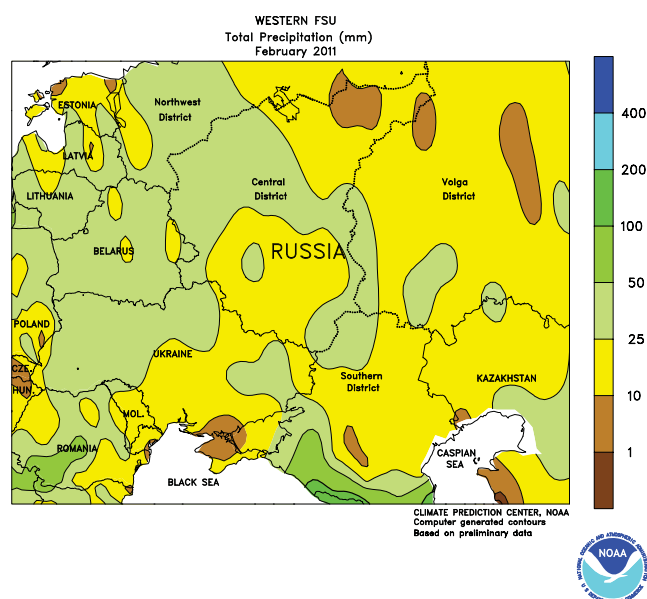
February International Temperature and Precipitation Maps



EUROPE

Abnormally dry February weather (less than 75 percent of normal) across most of Europe reduced soil moisture reserves for dormant to greening winter grains. However, near- to above-normal precipitation was reported in the United Kingdom, boosting moisture for dormant winter crops. Winter crops in France and England broke dormancy by month's end, while wheat, barley, and rapeseed remained

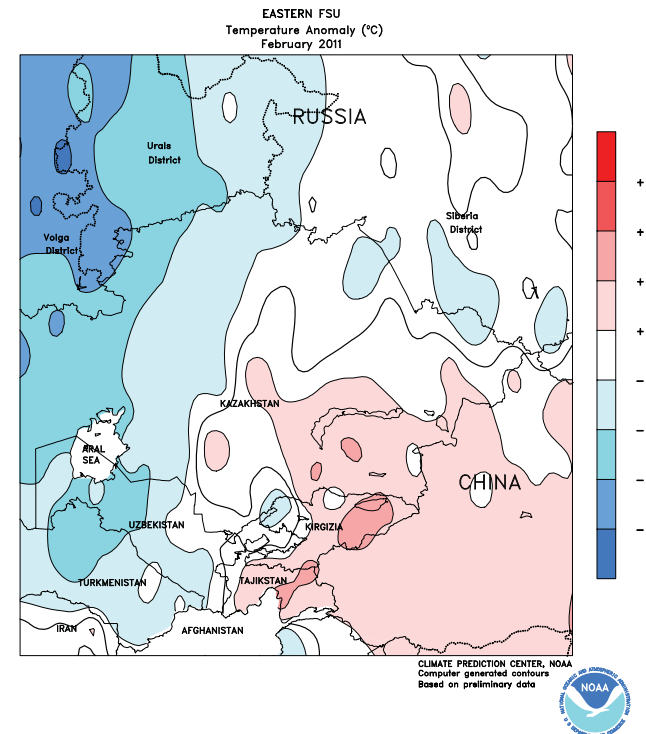
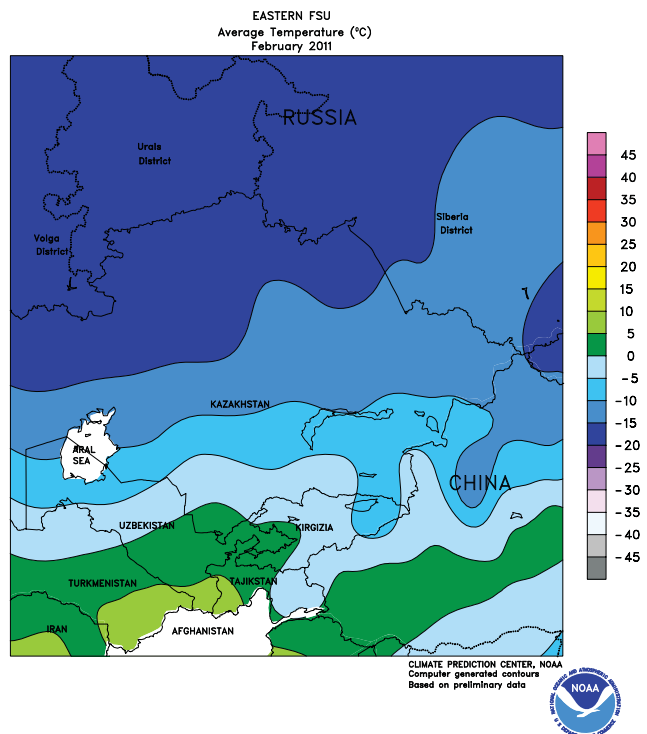
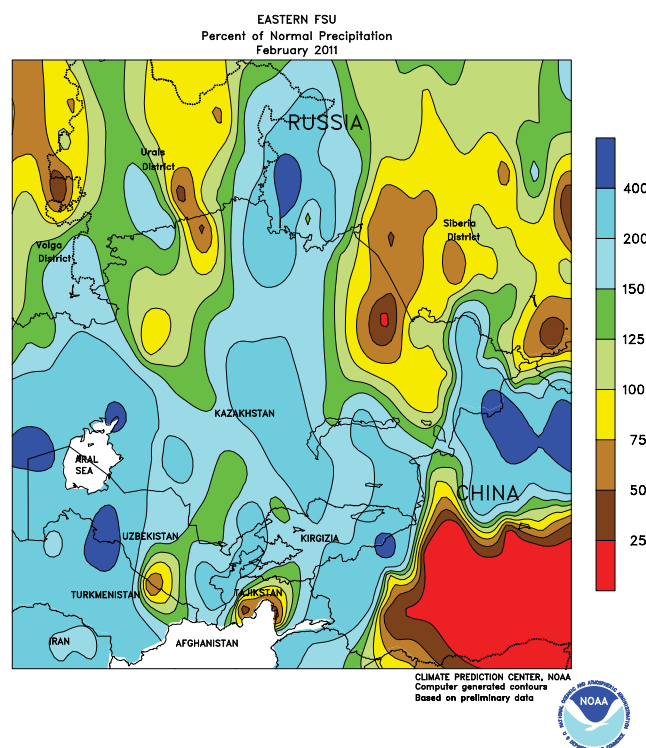
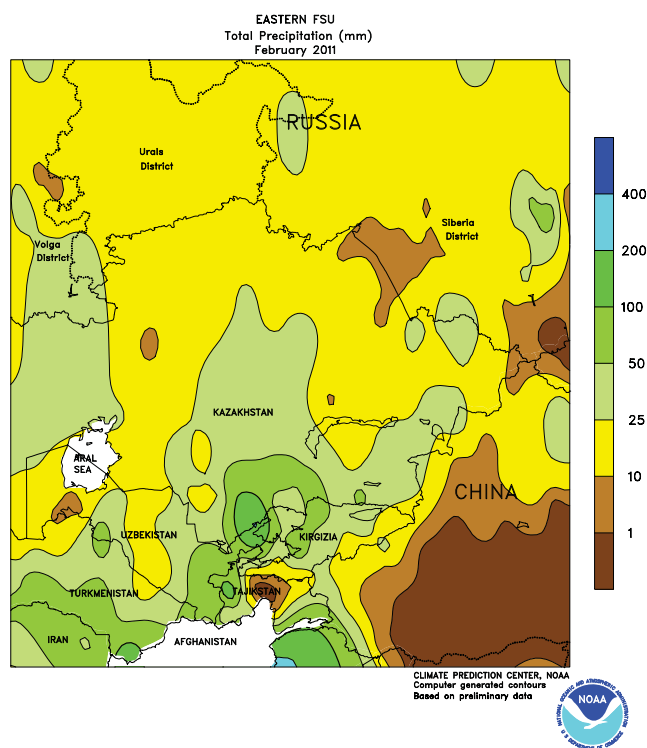
dormant from Germany into the Baltics. Locally heavy rain (locally more than 200 percent of normal) in Italy and on the Iberian Peninsula boosted irrigation reserves and reservoir levels, providing favorable prospects for vegetative winter wheat. A cold snap at the end of February threatened exposed winter crops in Poland, while above-normal temperatures elsewhere in northern Europe minimized the risk of winterkill.



WESTERN FSU

Bitterly cold weather persisted over Russia's winter grain areas during February, although crops were protected by a deep snow pack. Farther south, cold, snowy weather inhibited early spring fieldwork in Ukraine and southern Russia and kept

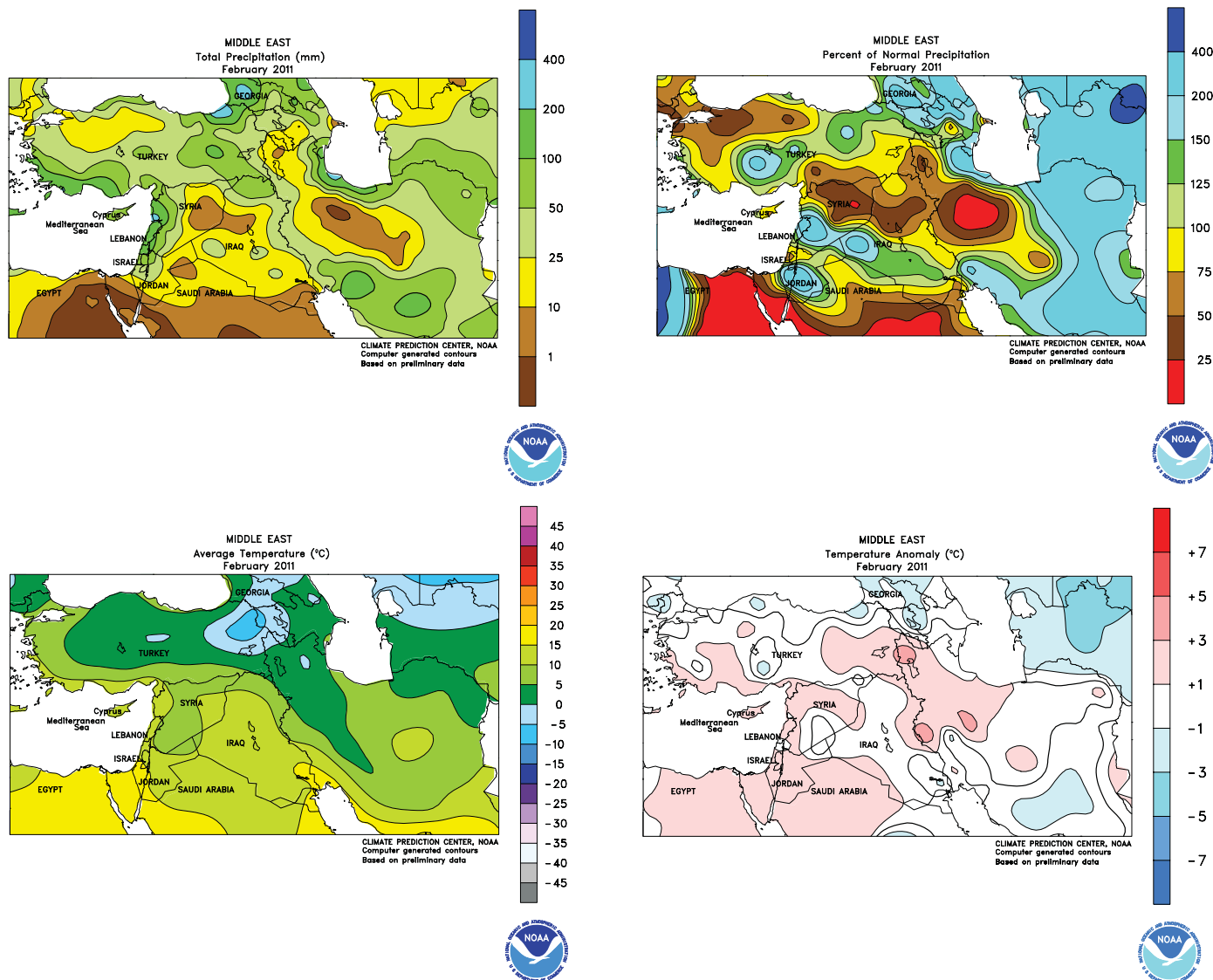
winter crops dormant. Near- to below-normal precipitation was observed in most primary winter crop areas, although wetter-than-normal weather (mostly snow) prevailed in western portions of Ukraine and Belarus.



EASTERN FSU

Unsettled, cold weather prevailed across much of the region during February. In spring grain districts of southern Russia and northern Kazakhstan, frequent snowfall accompanied bitter cold, with monthly precipitation averaging more than 125 percent of normal

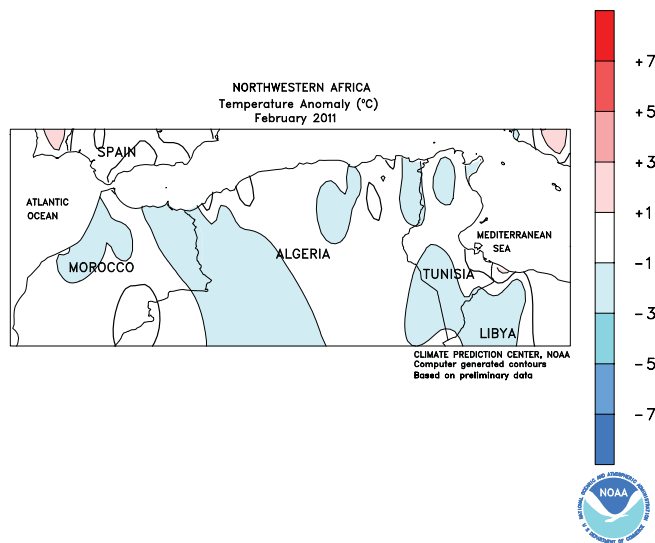
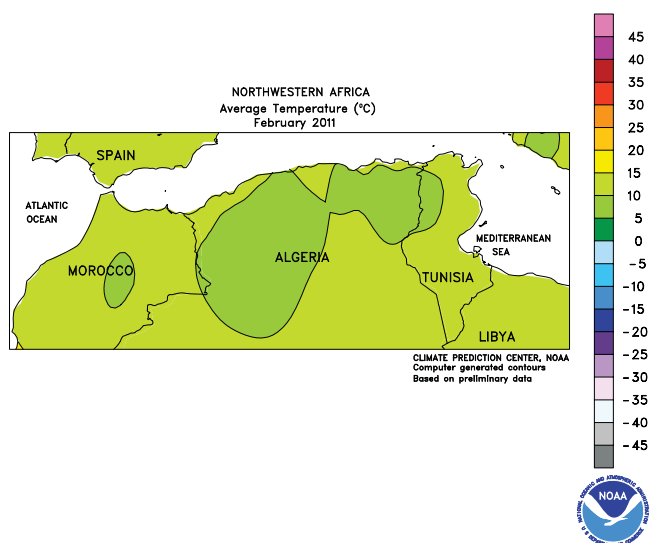
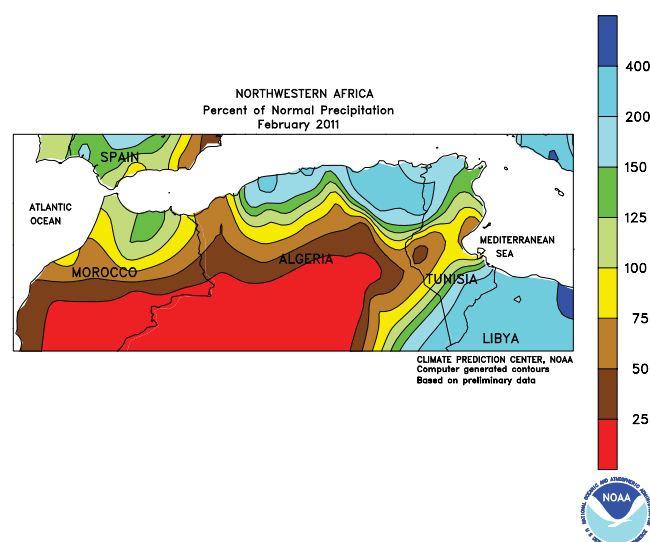
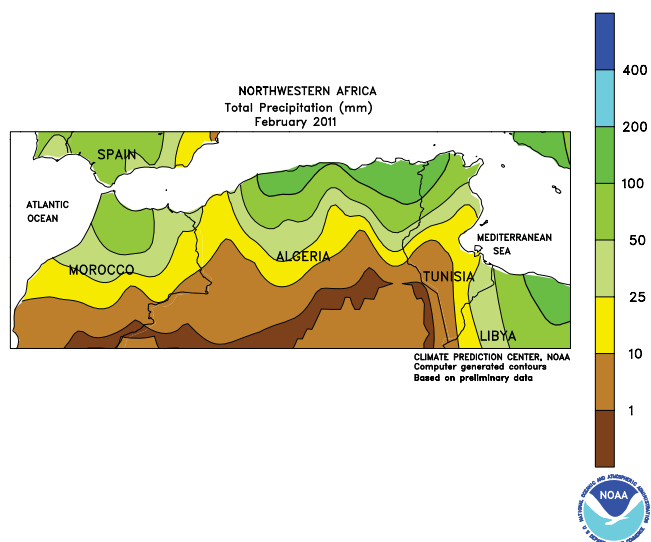
over most crop districts. Farther south, rain and mountain snow (25-100 mm, locally more) boosted irrigation reserves for summer-grown cotton; precipitation averaged 200 percent or more of the normal from Turkmenistan into Kirgizia.



MIDDLE EAST

Much-needed rain and snow developed across the region during the second half of February, improving soil moisture for greening winter crops. In particular, a swath of rain (25-60 mm, locally more) from southeastern Turkey into northern Iraq and western Iran provided timely soil moisture for spring growth. However, concerns still exist for vegetative winter

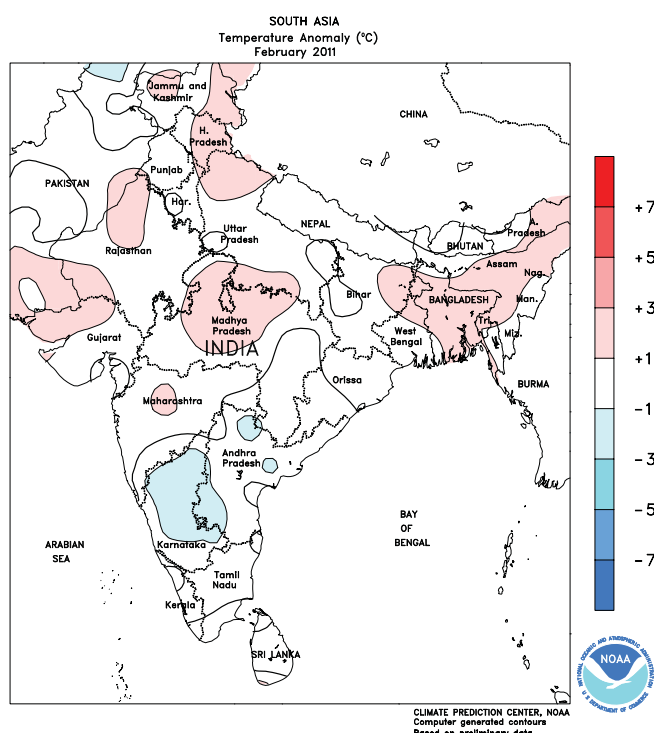
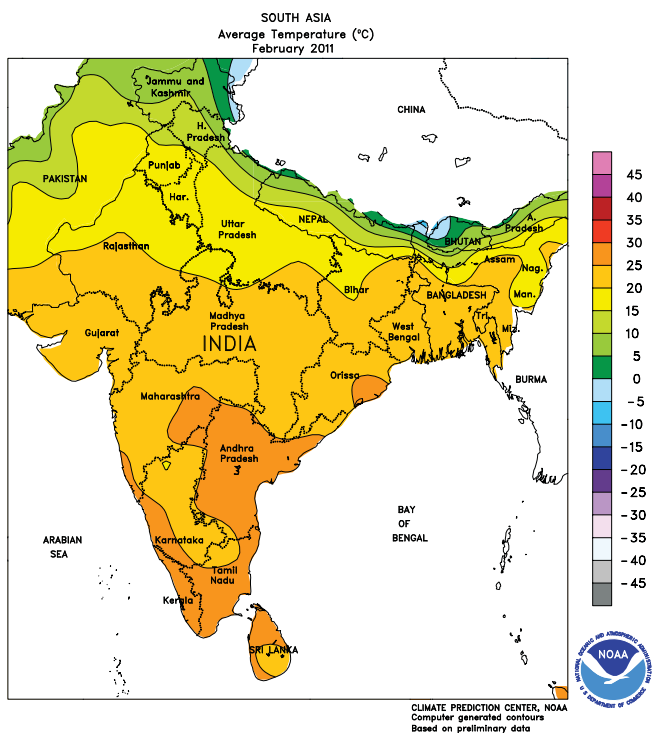
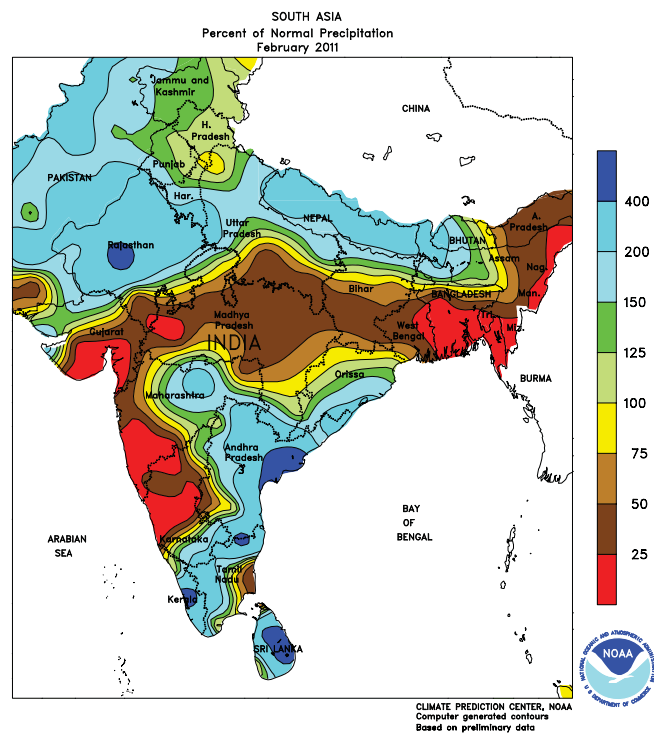
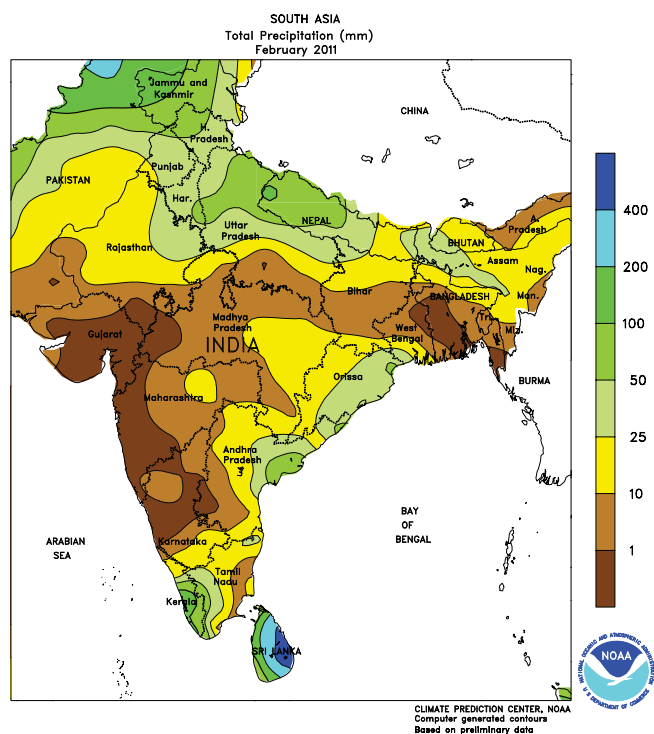
grains in northern portions of Syria, Iraq, and Iran due to an unusually dry autumn and subsequent poor crop establishment. Temperatures averaged 1 to 4°C above normal over much of the Middle East, with little if any risk of winterkill or freeze damage despite the lack of a persistent snow cover.



NORTHWESTERN AFRICA

In February, above-normal rainfall maintained adequate to abundant soil moisture for vegetative to reproductive winter grains over much of the region. Rain was locally heavy (150 mm or more) from north-central Algeria into northwestern

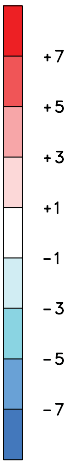
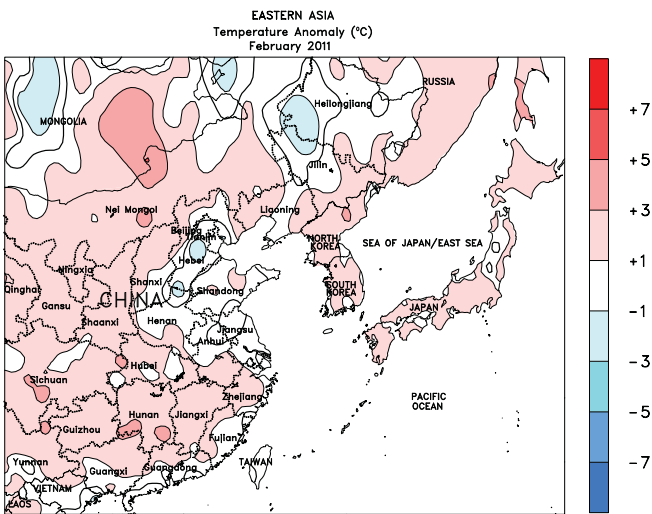
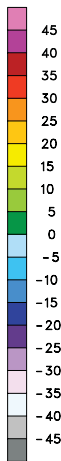
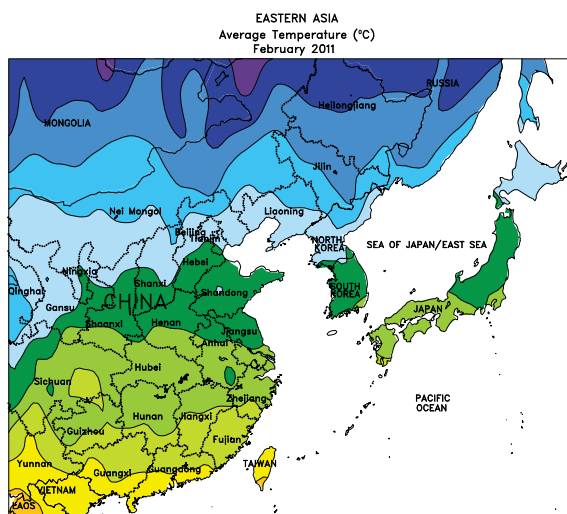
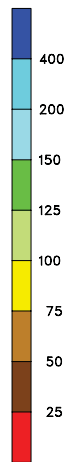
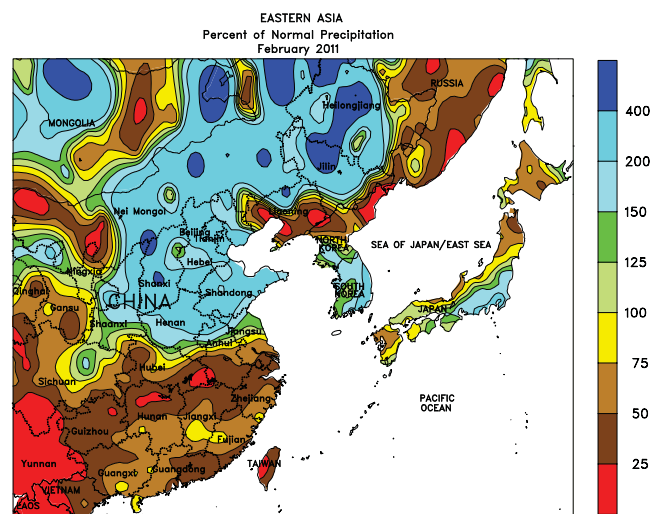
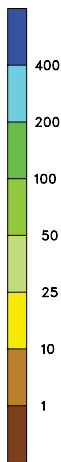
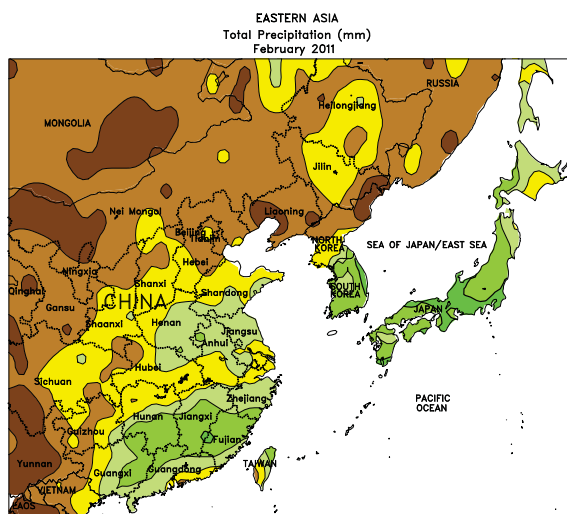
Tunisia, further improving water reserves and winter crop prospects. Drier-than-normal weather was confined to western Algeria and southern Morocco, although early-March rainfall eased concerns of potential crop stress.



SOUTH ASIA

February warmth in India aided the development of wheat and rapeseed, previously slowed by cold conditions. Late-month showers provided favorable moisture for winter crops entering reproduction. Prospects are currently favorable for the Indian

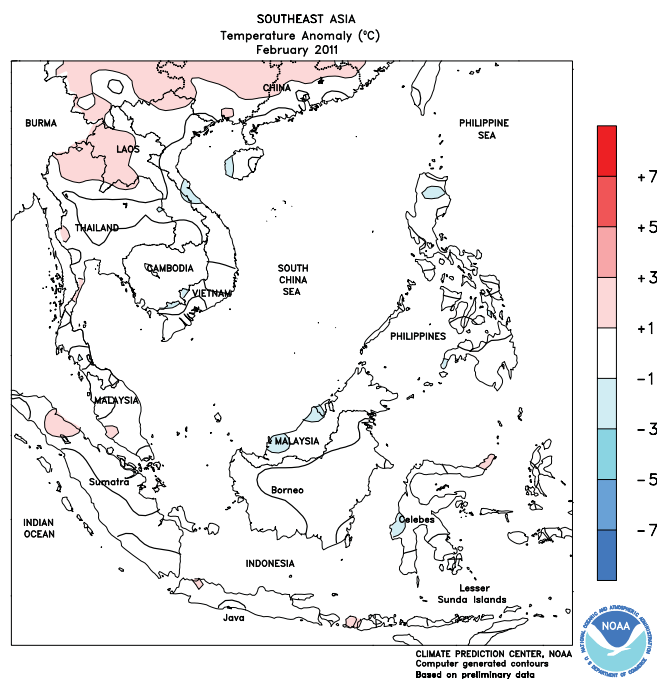
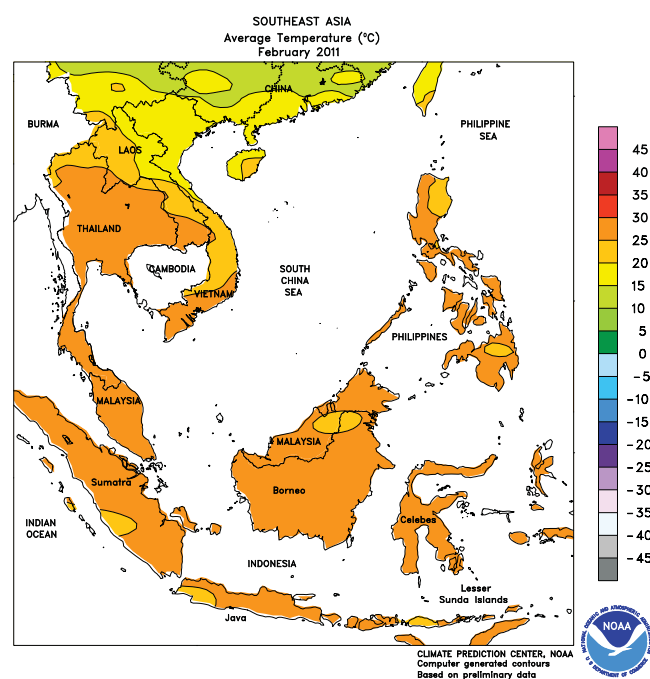
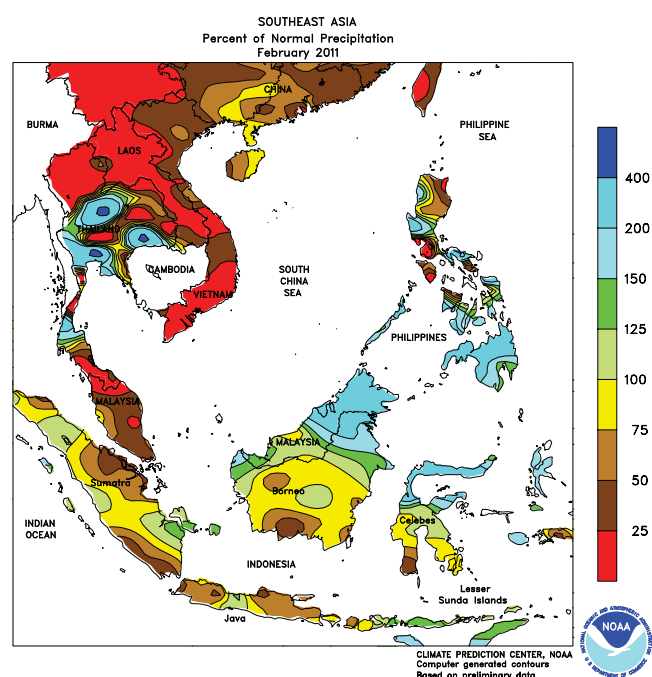
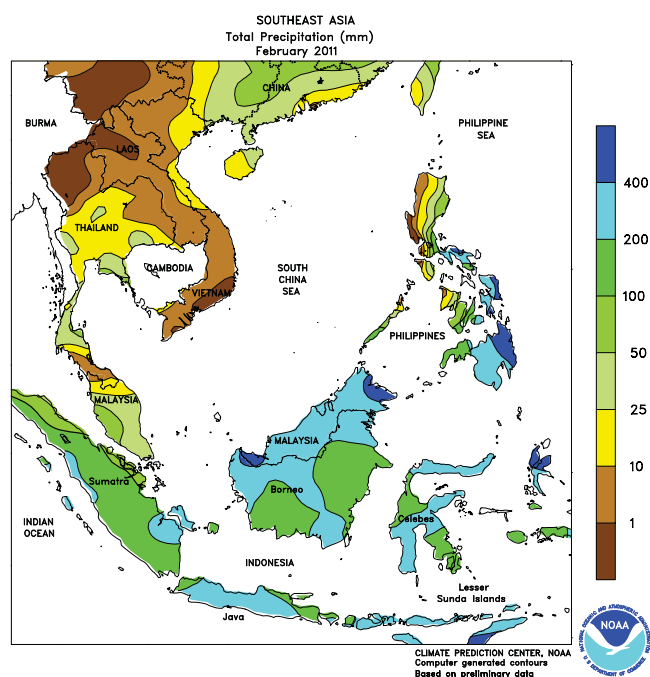
wheat crop. However, the crop was planted later than usual in the autumn due to persistent wetness, placing it at greater risk of heat stress later in the growing season when pre-monsoon heat normally begins to build across the region.



EASTERN ASIA

Mild weather in February eased winter crops out of dormancy by month's end, slightly ahead of usual. Light rainfall late in February eased short-term dryness

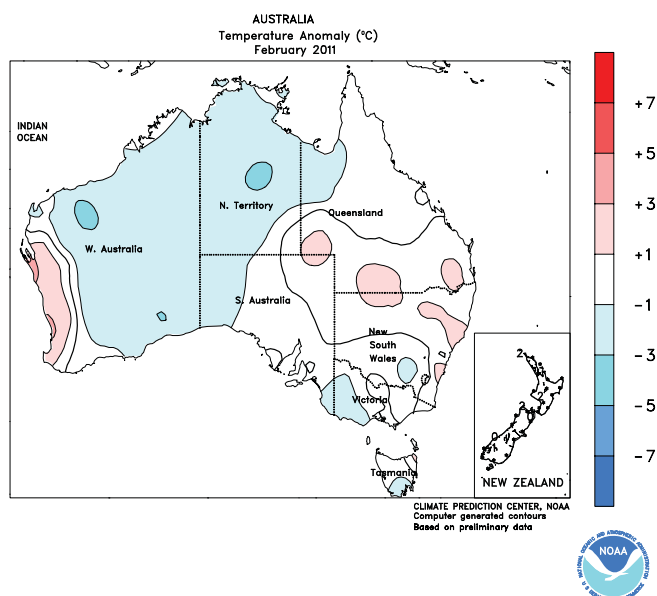
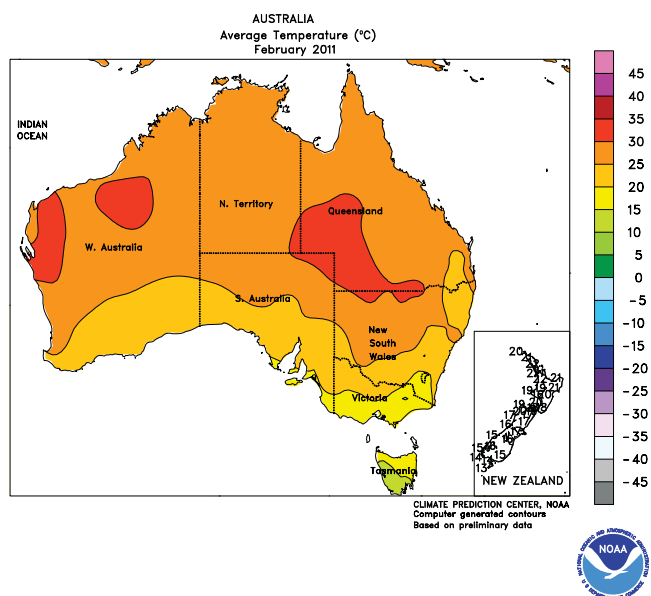
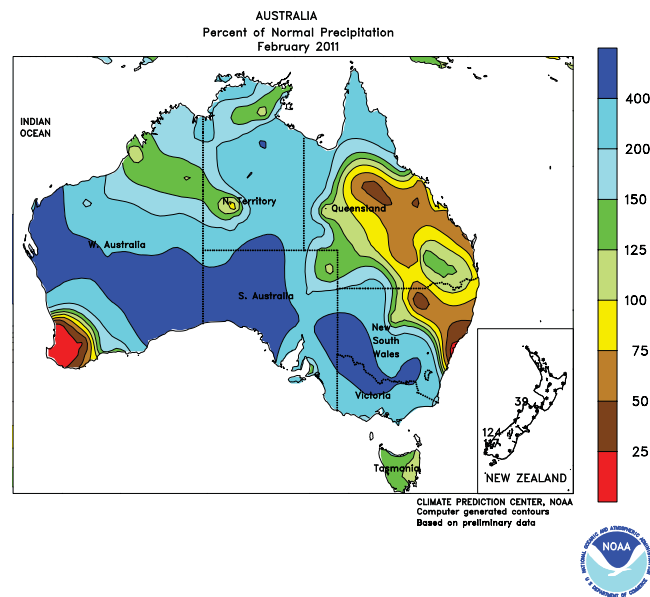
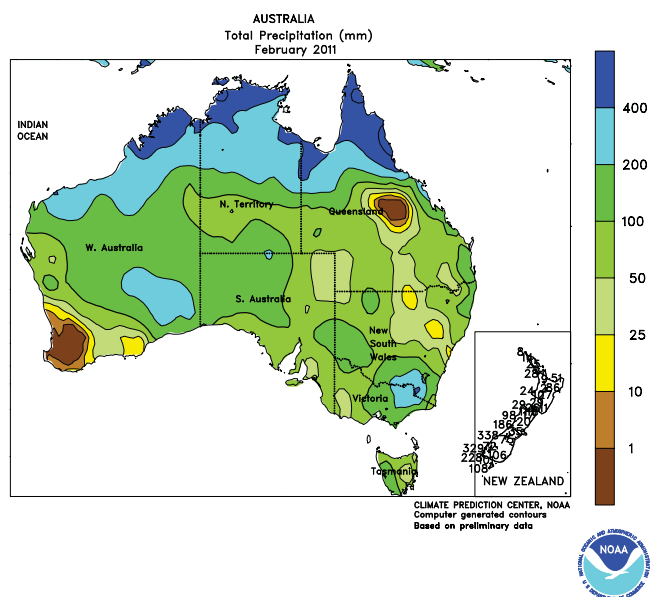
across winter crop areas of China and provided beneficial moisture for wheat and rapeseed breaking dormancy.



SOUTHEAST ASIA

Persistent heavy rainfall throughout February slowed winter harvest activities as well as spring planting in the eastern and southern Philippines. Warmer weather favored development of spring rice in northern Vietnam, following

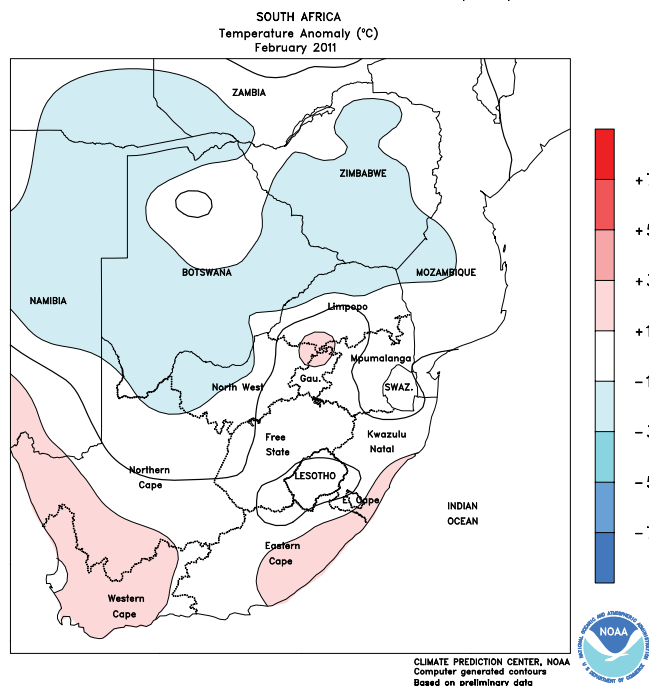
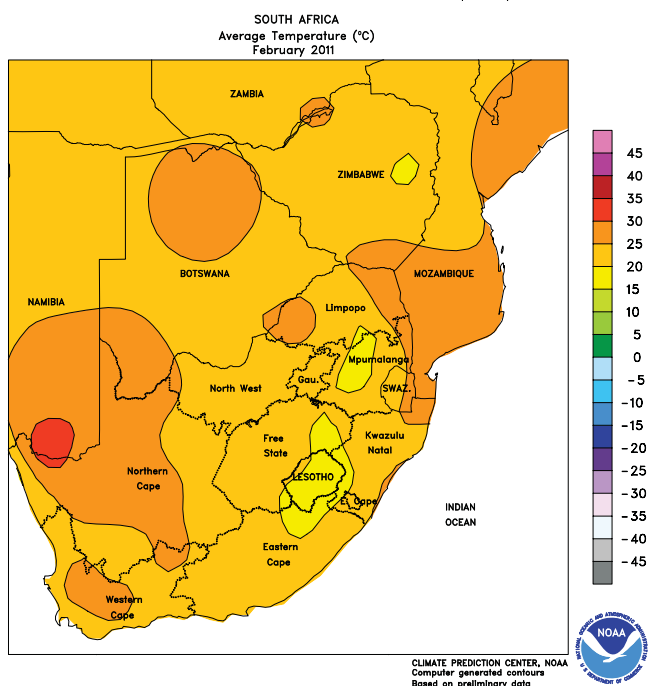
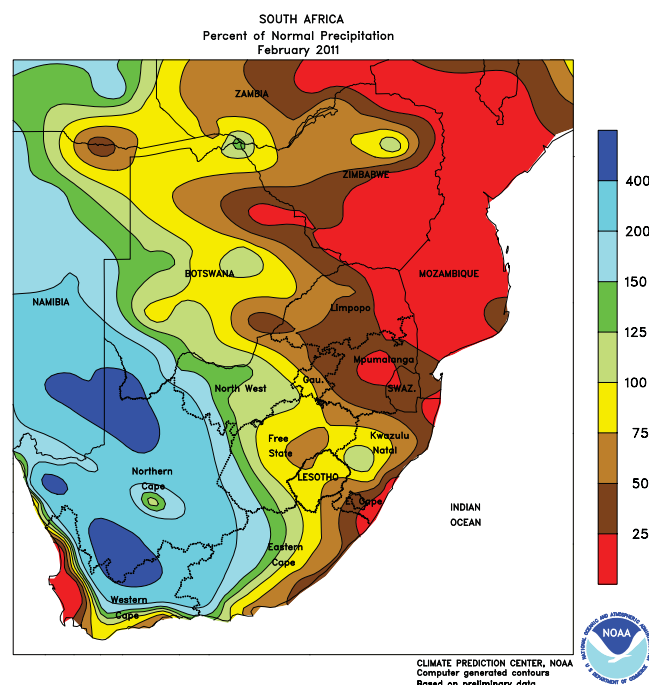
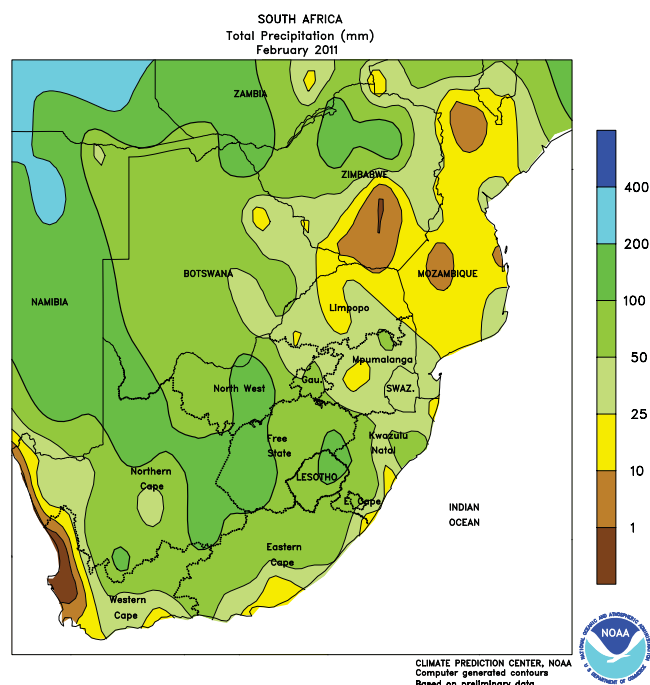
colder-than-usual conditions in January. Rice progressed through reproduction, with ample moisture across Java, Indonesia, but drier weather would be welcome as the crop matures in March.



AUSTRALIA

In February, occasional showers throughout most of southern Queensland and northern New South Wales maintained abundant moisture supplies for

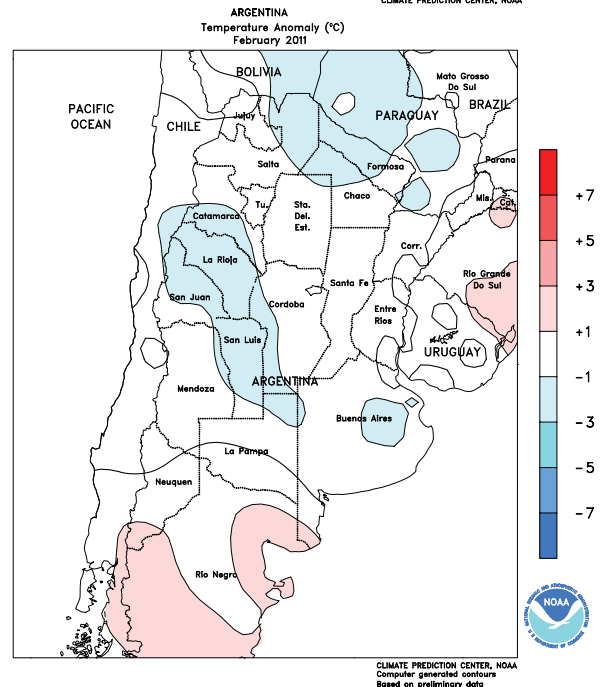
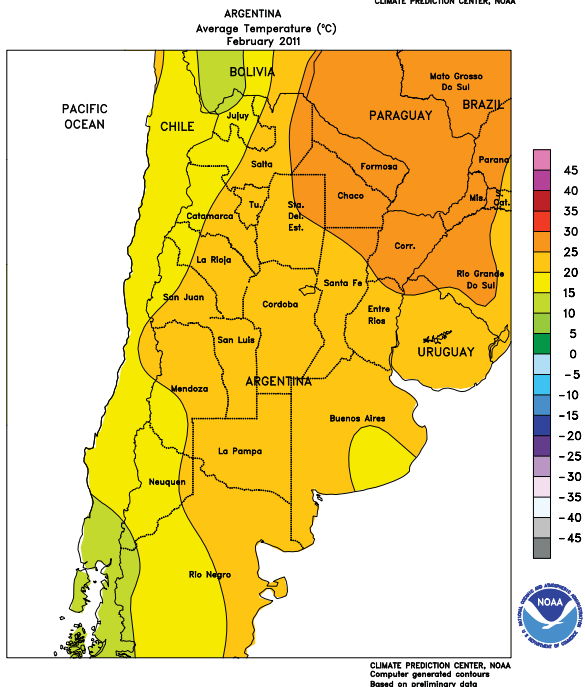
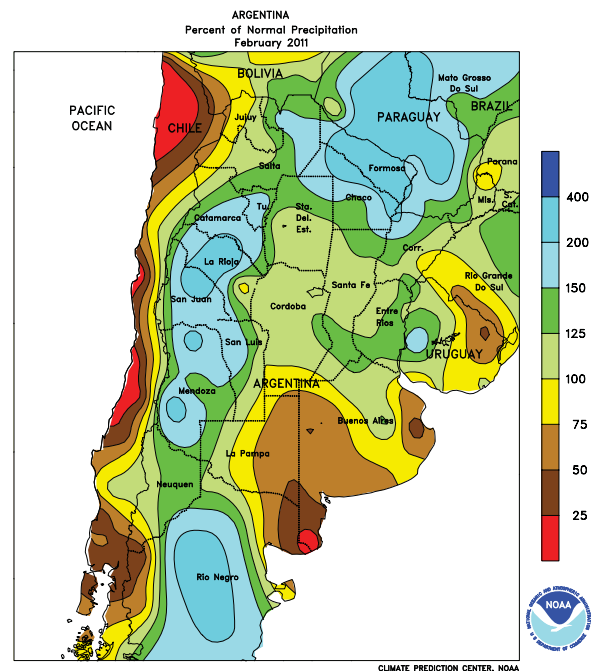
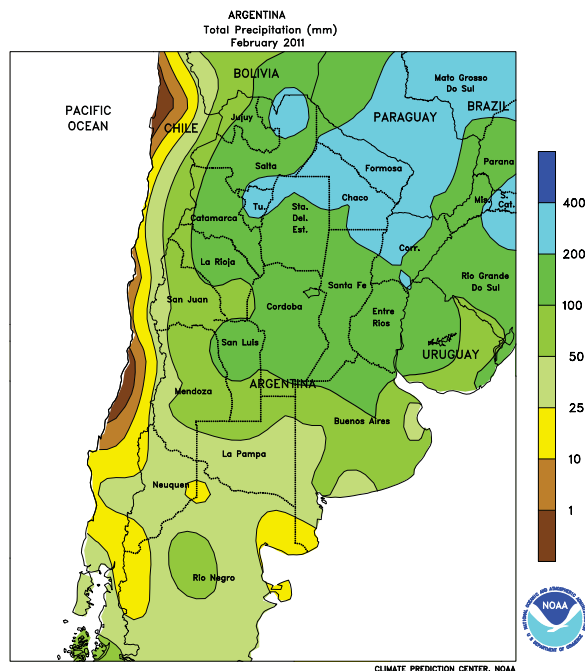
reproductive summer crops. Pockets of below-normal rainfall, however, increased local irrigation requirements.



SOUTH AFRICA

In February, drier-than-normal weather reduced moisture levels for filling corn in eastern sections of the corn belt. Monthly rainfall totaled below 25 mm (well below half the monthly average) over a large portion of Mpumalanga. Drier conditions also prevailed in Limpopo and in sugarcane areas of KwaZulu-Natal, necessitating increased irrigation where available. However, monthly average temperatures were near normal throughout the driest eastern farming areas, helping to mitigate the impact of the short-

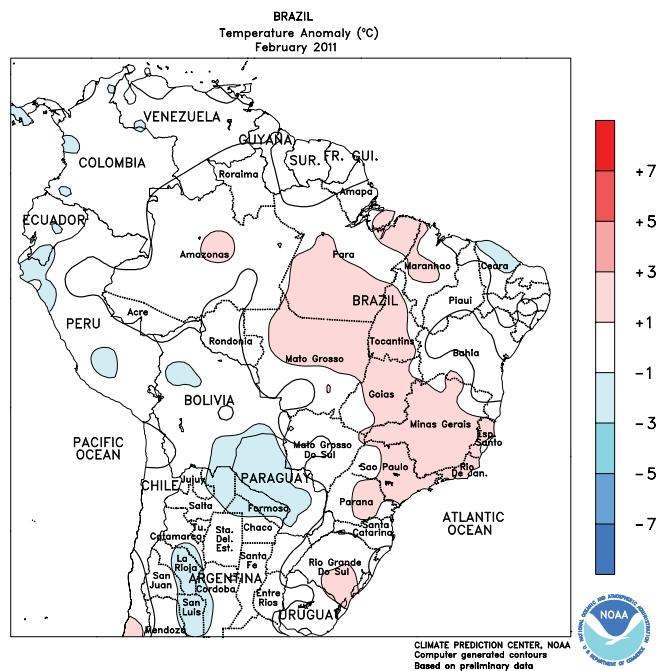
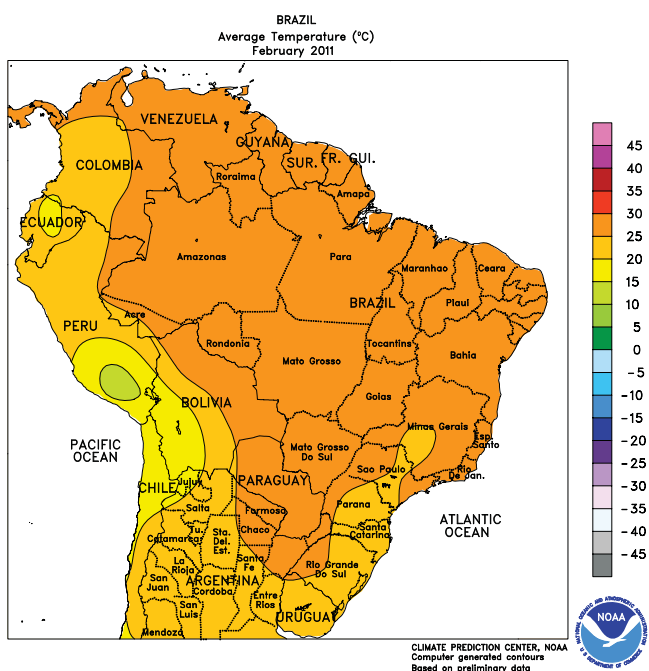
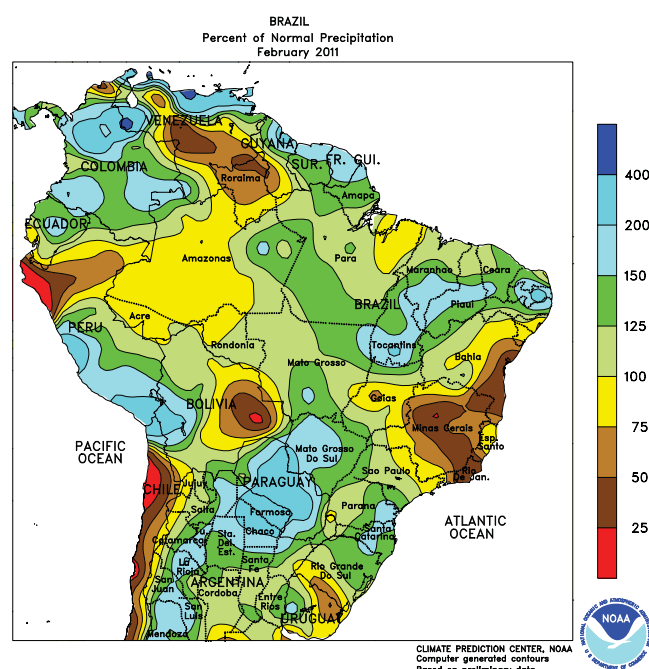
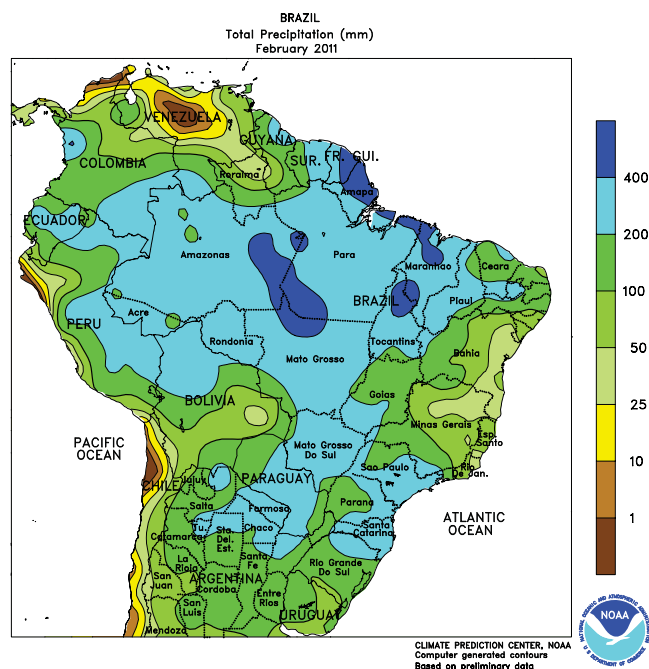
term dryness in areas that entered the month with generally favorable levels of moisture. Elsewhere, scattered showers were overall beneficial for summer crops in western sections of the corn belt. Wetter conditions prevailed west of the corn belt (monthly totals of 50-100 mm or more), sustaining localized flooding along the Orange and lower Vaal River systems. In contrast, seasonable warmth and dryness favored maturation and harvesting of tree and vine crops in Western Cape.



ARGENTINA

During February, seasonable warmth and frequent, near- to above-normal rainfall further improved crop prospects in most major summer grain, oilseed, and cotton areas of central and northern Argentina. The exception was in outlying, southern production areas of La Pampa and Buenos Aires, where drier, occasionally warm weather prevailed. Monthly rainfall totaled more than 100 mm in the high-yielding farming areas of northern Buenos Aires, Cordoba, Santa Fe, and Entre Rios, and 100 to 200 mm or more across much of

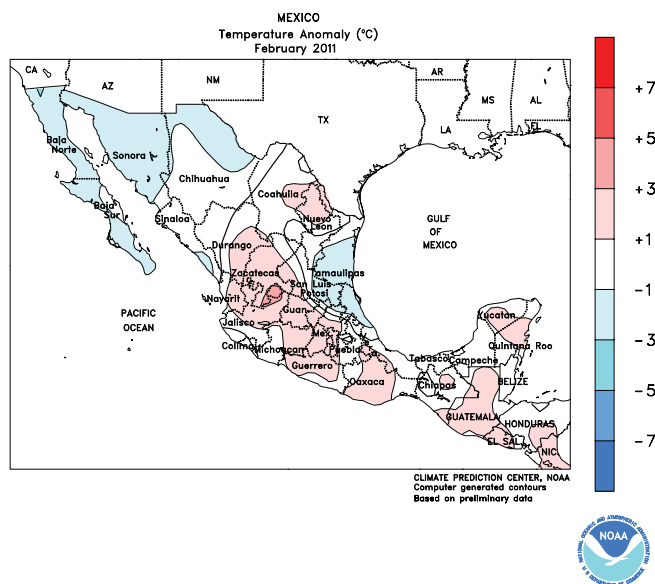
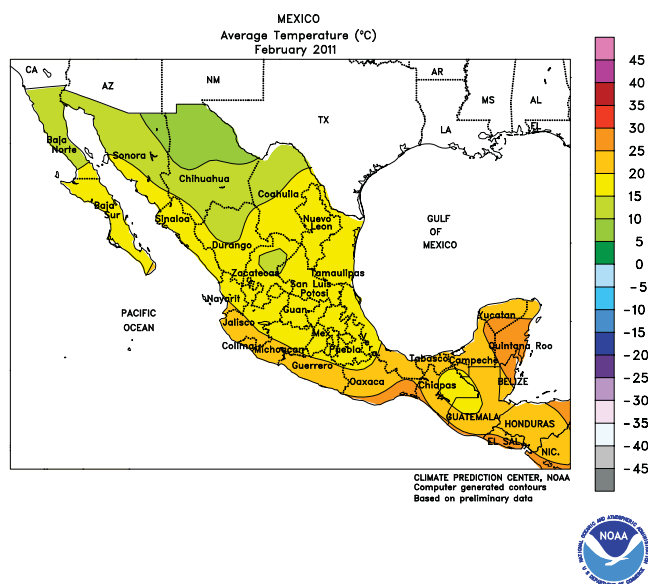
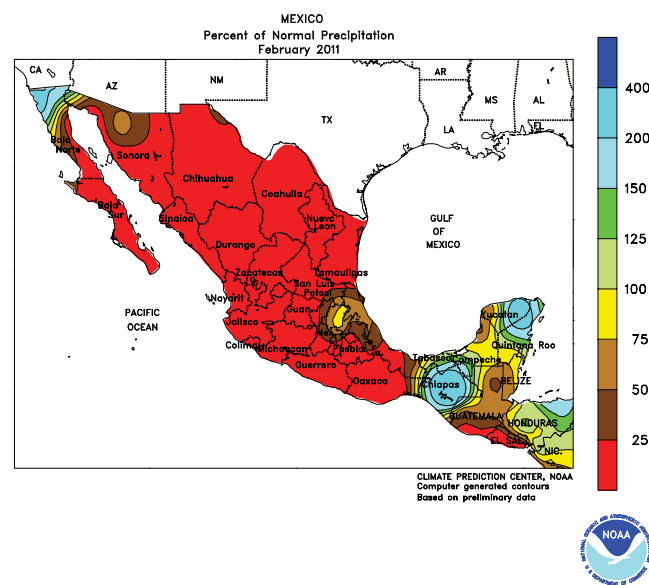
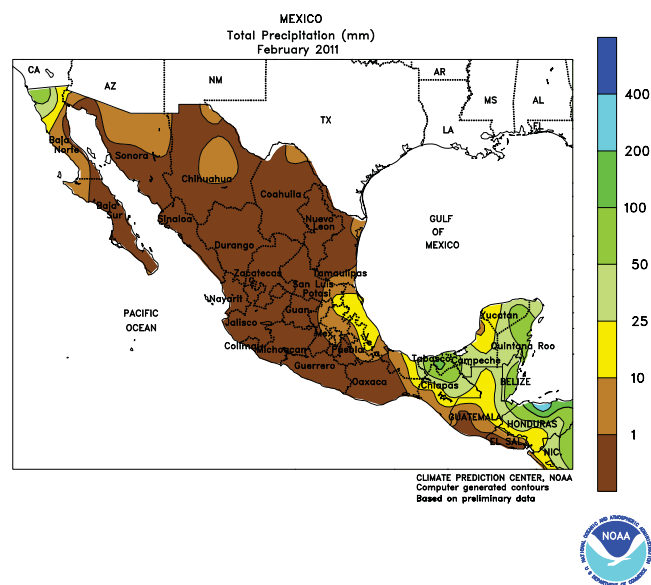
the north. The moisture was particularly beneficial for soybeans and cotton; immature corn also benefited, but stress due to heat and dryness had already been experienced by crops that advanced through reproduction prior to mid-January. Temperatures averaged within 1°C of normal throughout the region, and weekly temperatures were characterized by highs in the upper 20s and lower 30s degrees C in most areas, promoting summer crop growth in the absence of stressful heat.



BRAZIL

In February, weather conditions remained generally favorable for soybeans and other summer row crops, as well as coffee, sugarcane, and citrus. Rainfall was near to above normal in nearly all major agricultural areas, the exception being a portion of the east-central part of the country centered on Minas Gerais and Bahia's southern coast, where some locations recorded monthly accumulations below 25 mm. Breaks in the rainfall early in the month reportedly allowed soybean harvesting to progress in the Center-West

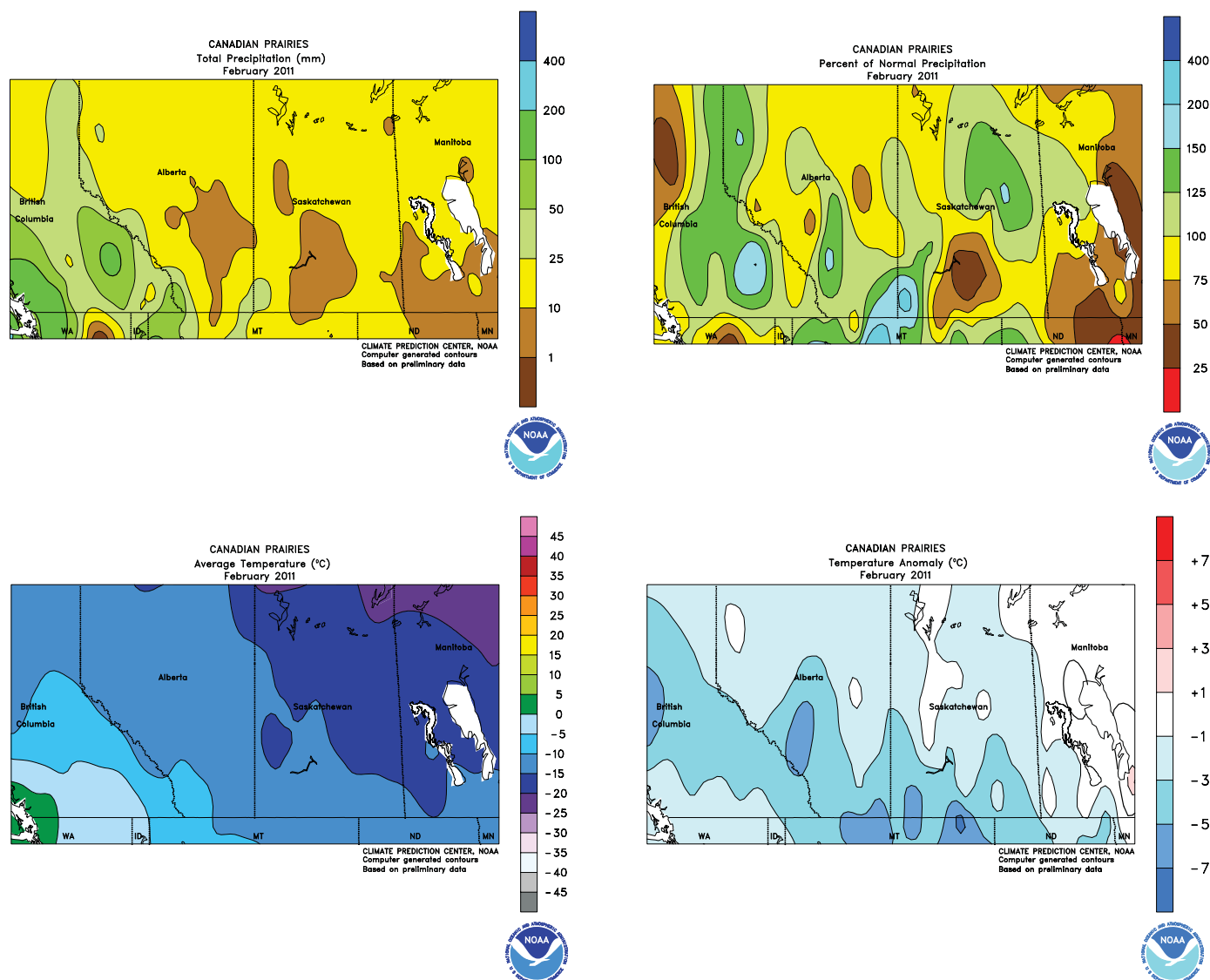
Region (Mato Grosso, Goias, and northern Mato Grosso do Sul), but the frequency of the rain increased during the latter part of February. In general, moisture was favorable for safrinha corn and other secondary crops throughout the main production areas of central and southern Brazil. February temperatures averaged 1 to 2°C above normal throughout the region but by month's end, milder weather (highs in the upper 20s and lower 30s degrees C) was observed.



MEXICO

An unusual outbreak of cold air overspread the north early in the month, resulting in a rare freeze in Sinaloa, an important producer of winter vegetables. During the period February 3 to 5, subfreezing temperatures were recorded in nearly all of Sinaloa's farming districts, damaging corn, tomatoes, and other temperature-sensitive crops (additional information can be obtained on page 23 of *Weekly Weather and Crop Bulletin* Volume 98, Number 8). Warmer conditions prevailed elsewhere, with monthly temperatures averaging more than 2°C above normal in central and western sections of the

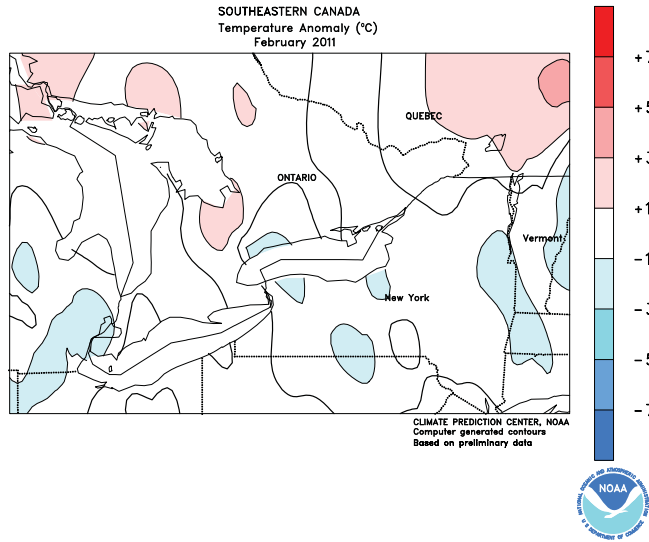
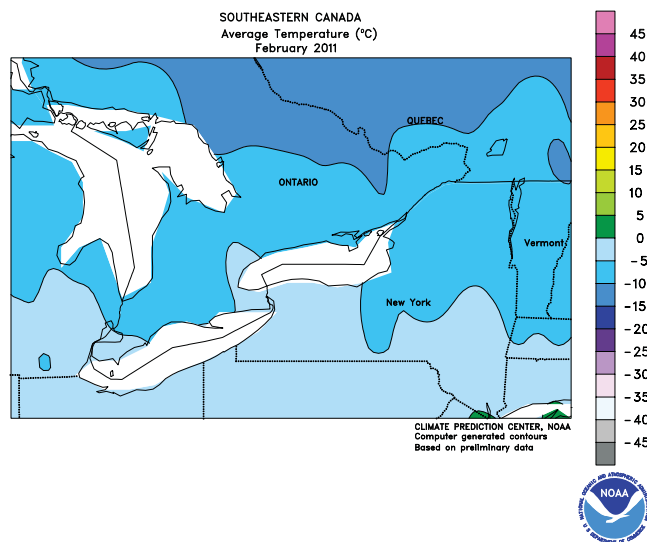
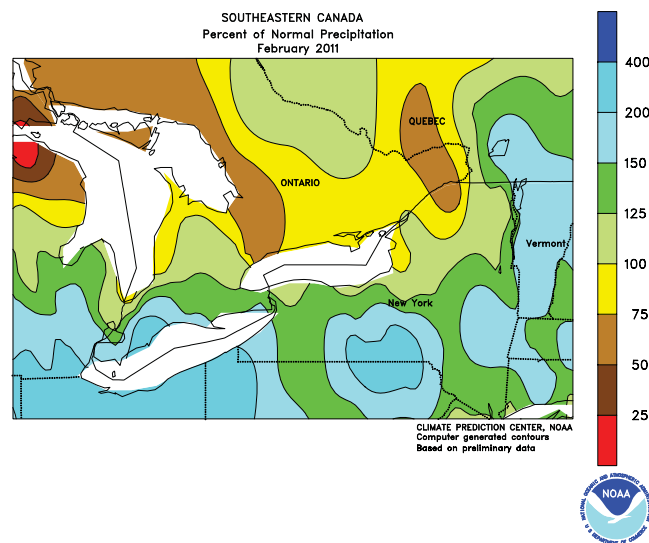
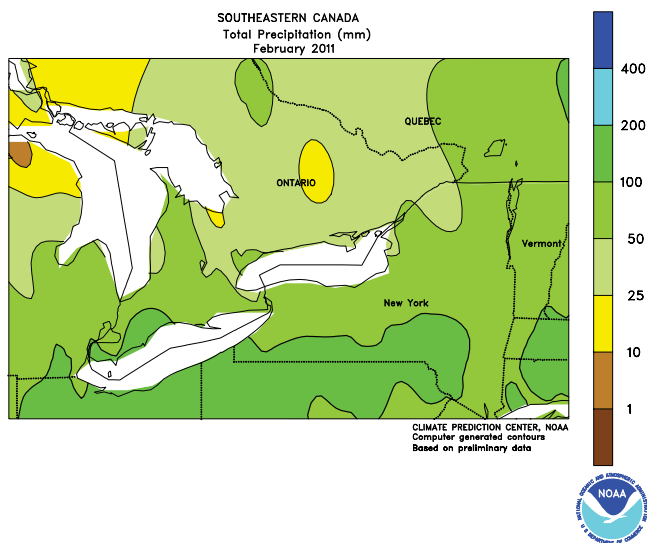
southern plateau. Rainfall was generally confined to Veracruz and the Yucatan Peninsula; however, the rain came early in the month and accumulations were below normal in most areas due to the drier conditions during the latter half of February. Virtually no rain fell in and around Tamaulipas, where moisture was needed for germination of the predominantly rain-fed winter sorghum crop. According to the Government of Mexico, total national reservoir capacity was at 73.8 percent as of February 28, compared with 74.4 percent last year, and 77.6 percent in 2009.



CANADIAN PRAIRIES

Several periods of unseasonably mild weather in early February were followed by much colder weather for the remainder of the month. As a result, monthly average temperatures were 2 to 4°C or more below normal over much of Alberta and Saskatchewan; temperatures were mostly within 1°C of normal in Manitoba. The large temperature swings early in the period led to an erosion of the region's snow cover, particularly in Alberta and western Saskatchewan, where large areas were void of snow

during the middle part of the month. Later, as colder weather developed across the region, some southwestern Prairie farming areas were subjected to temperatures low enough to harm dormant wheat (lows at or below -20°C) before the return of protective snow cover. Many areas received near to above normal precipitation for the month (2-25 mm liquid equivalent), much of it coming in the form of snow at month's end, increasing concerns for potential spring flooding.



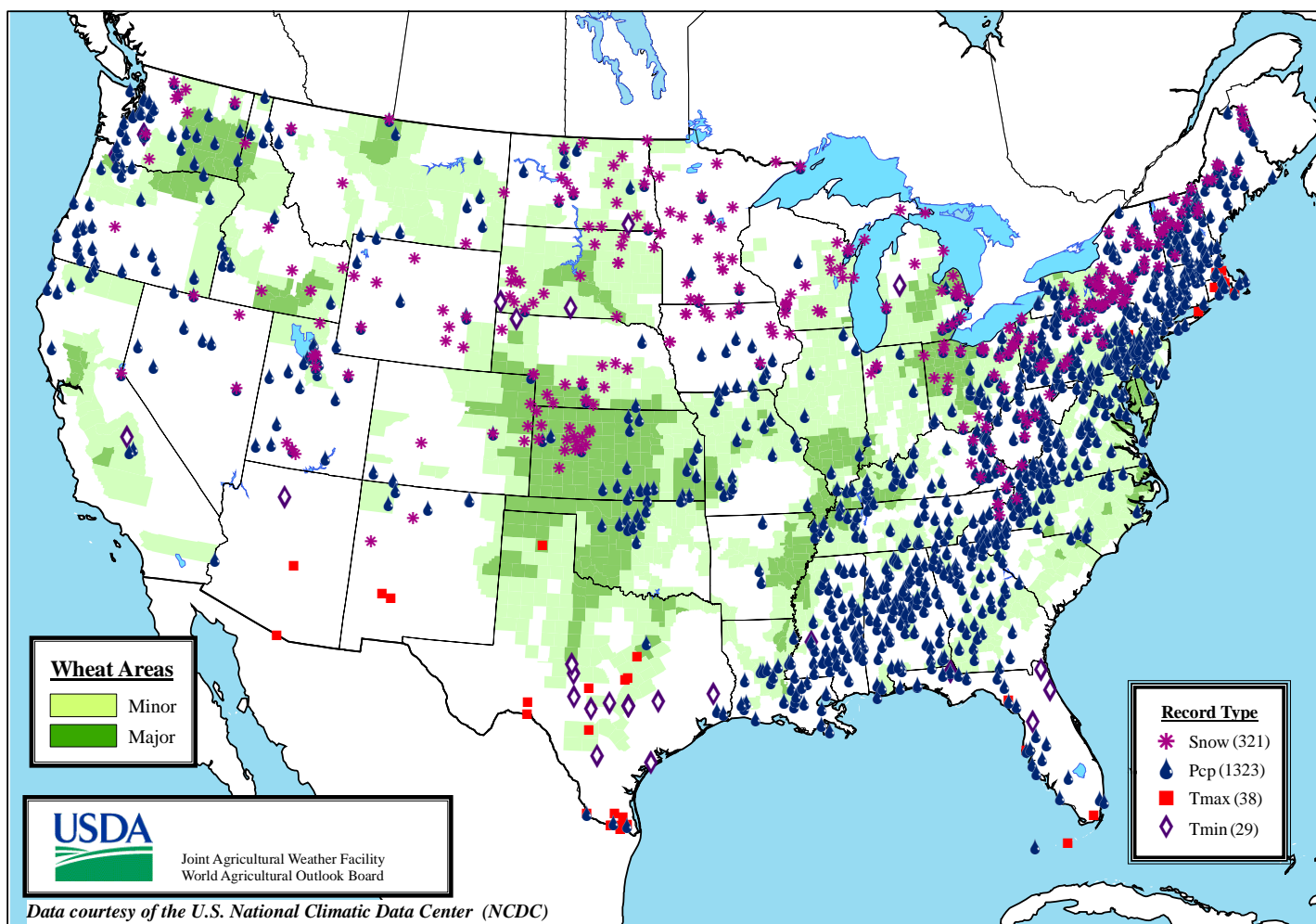
SOUTHEASTERN CANADA

February precipitation was near to above normal, with most of the region's winter wheat areas enjoying a protective layer of snow cover for virtually the entire month. In southwestern Ontario, most of the precipitation fell on the first and last few days of the month; much of the snow cover was lost during a mid-month warming trend, but additional snow fell ahead of the

next outbreak of bitter cold (temperatures falling near -20°C). Precipitation was more evenly distributed in Quebec, though drier conditions prevailed for the latter part of the month. Monthly average temperatures were near normal across the region as mild weather during the middle part of February offset colder-than-normal weather during the remainder of the month.

Daily Weather Records (ASOS & COOP)

March 6-12, 2011



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