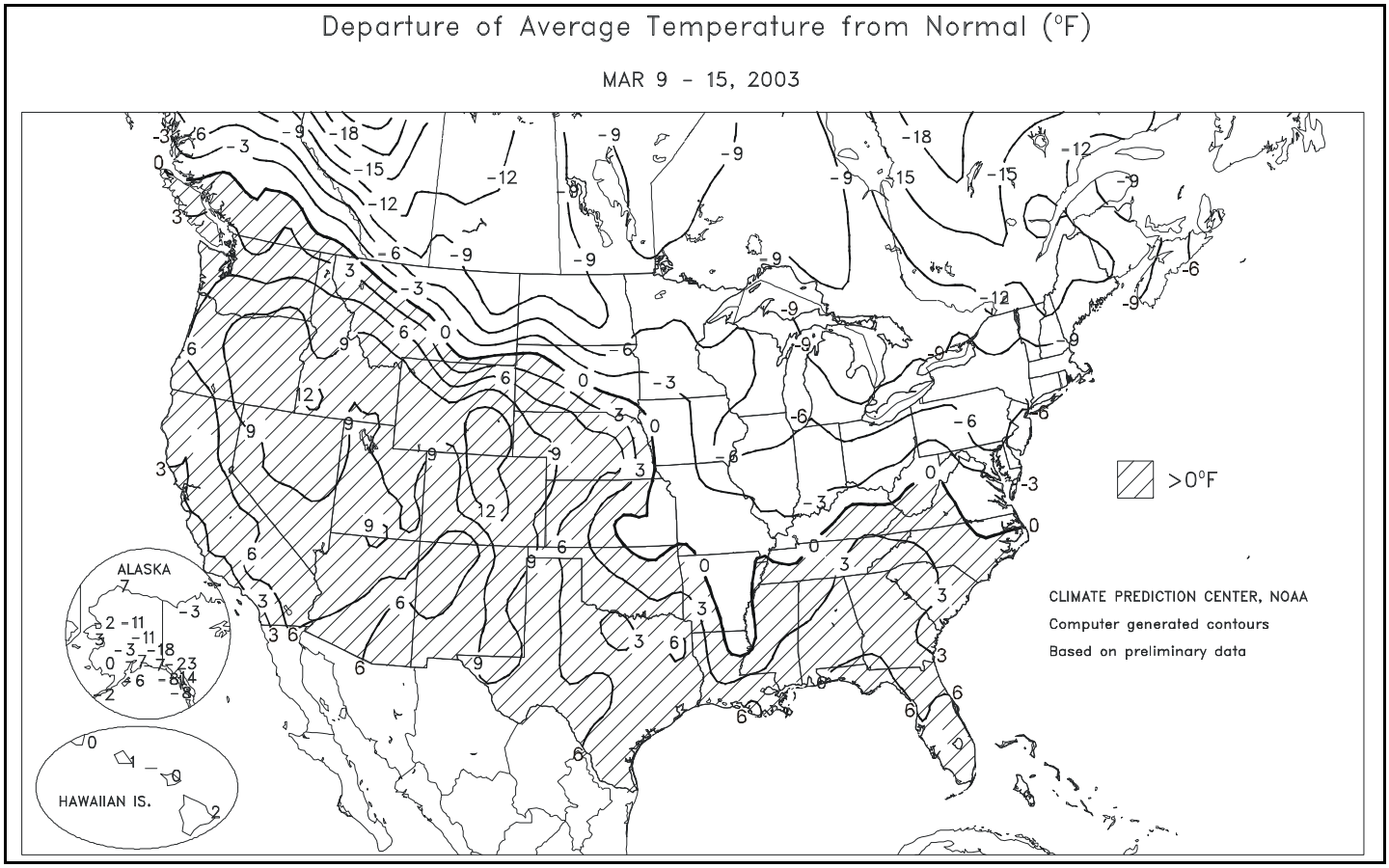
Volume 90, No. 11 http://www.usda.gov/oce/waob/jawf/wwcb.html March 18, 2003

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

March 9 - 15, 2003

Highlights provided by USDA/WAOB

Spring-like weather suddenly replaced a wintry pattern from the **Plains into the Midwest**, as very warm conditions in the **West** expanded to encompass much of the Nation by week's end. In the **West**, weekly temperatures generally ranged from 4 to 12°F above normal. Despite the warming trend, beneficially wet weather continued across the **Pacific Northwest** and **northern Rockies**. Toward week's end, heavy precipitation spread southward through the **Pacific Coast States**, reaching **southern California**. Meanwhile, cold weather lingered for much of the week across the **northern Plains** and **Midwest**, where readings averaged as much as

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Water Supply Forecast for the Western United States

Highlights

As of March 1, 2003, no western river basin was forecast to receive above-average spring or summer streamflow. Western water supply volume forecasts showed a slight improvement in the Southwest and the Rockies of Colorado, Wyoming, and Montana, but forecasts decreased in much of the Columbia Basin, eastern Oregon, and the Sierra Nevada. Spring and summer streamflows for the Intermountain West were forecast to be less than 50 percent of average.

Below-average water supply forecasts follow last year's record-low or near-record-low runoff in the Southwest, Intermountain West, and southern Rockies. In many of these areas, this year's low snowpacks are resting on very dry soils, which generally translates into reduced snowmelt runoff. In addition, all Western States reported below-average reservoir storage for March.

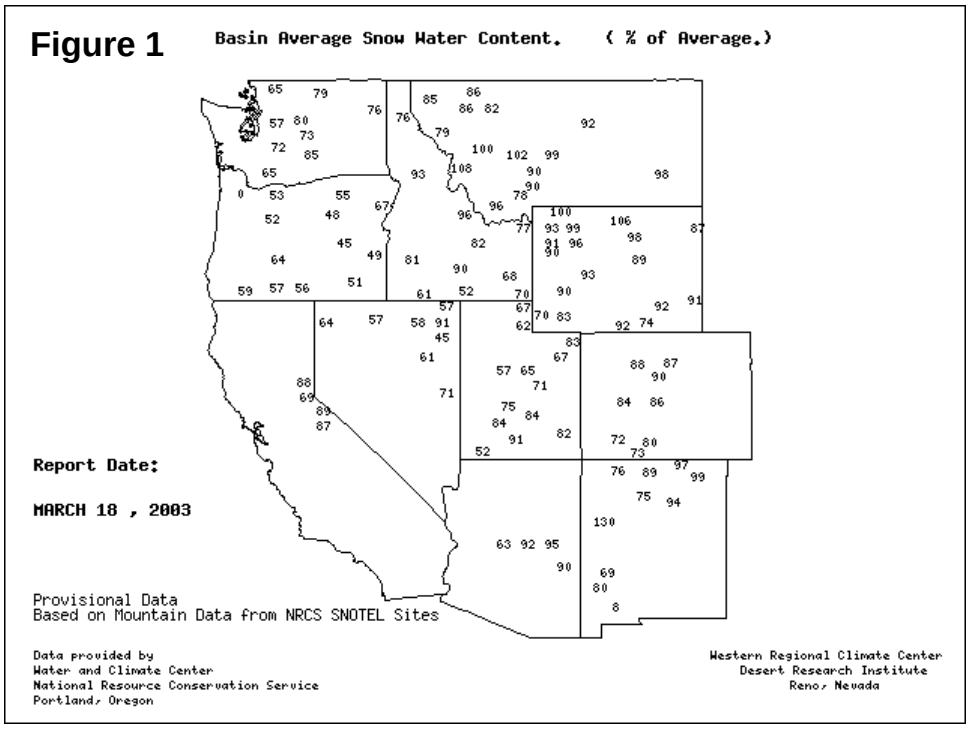
Snowpack and Precipitation

On March 18, 2003, the snow water content map (fig. 1) reflected the below-average snowpacks that remain a concern in the West. Significantly below-average snowpacks (less than 50 percent of average) were reported in much of eastern Oregon. The entire Pacific Northwest reported below-average snowpacks generally ranging from 50 to 90 percent of average. Below-average snowpacks were also prevalent throughout the Intermountain West. Only a few basins reported near-average snowpacks.

Seasonal precipitation (October 1, 2002, to March 18, 2003) generally improved from last month in the Southwest and southern Rockies. However, above-average seasonal

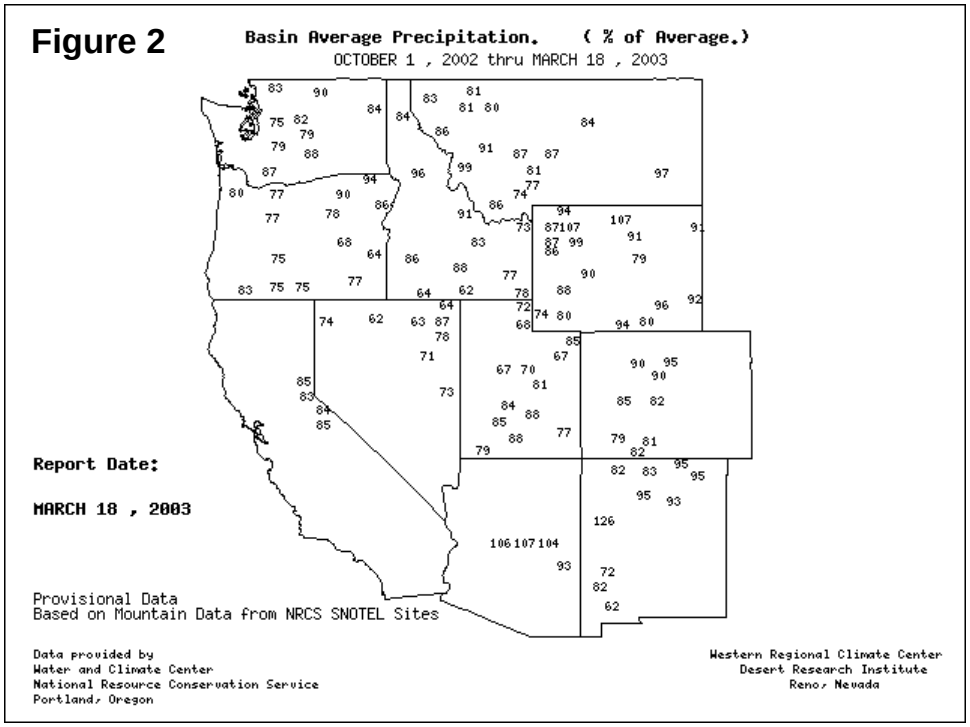
SNOTEL – River Basin Snow Water Content

Figure 1



SNOTEL – River Basin Precipitation

Figure 2



totals were reported in only scattered river basins (fig. 2). Many seasonal amounts across the Intermountain West were significantly below average.

Spring and Summer Streamflow Forecasts

As of March 1, 2003, no western river basin was forecast to receive above-average spring or summer streamflow (fig. 3). The Intermountain West, including much of central Utah, Nevada, southeastern Idaho, and eastern Oregon, continued to show less than 50 percent of average spring and summer volume forecasts. The area expanded significantly in Nevada and eastern Oregon during the past month. Central Wyoming and parts of central Montana are also forecast to receive less than 50 percent of average spring and summer streamflow.

Volume forecasts improved in the Southwest and Rockies but were still a patchwork of below-average values (generally 50 to 90 percent of average). On the Colorado River, the April-July volume forecast for Lake Powell was 61 percent of average, higher than the observed volume of 14 percent measured in 2002. In the Columbia Basin, the April-September volume forecast for The Dalles dropped 2 percent during the past month to 68 percent of average, compared with the 53 percent measured during the 2001 drought.

Low Western water supply forecasts follow last year's extremely low runoff for many Southwestern and Rocky Mountain basins.

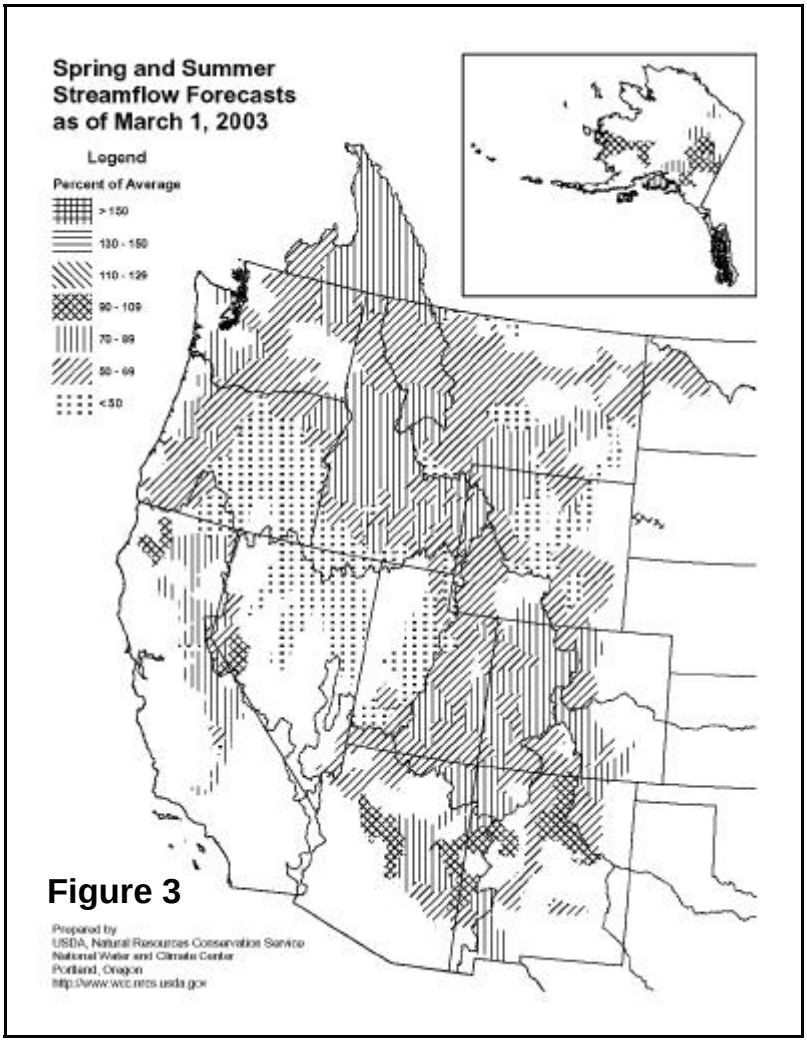


Figure 3

Reservoir Storage

As of March 1, 2003, reservoir storage was below normal in every Western State (fig. 4). This reflected the combined effects of last year's drought and recent precipitation deficits in much of the West.

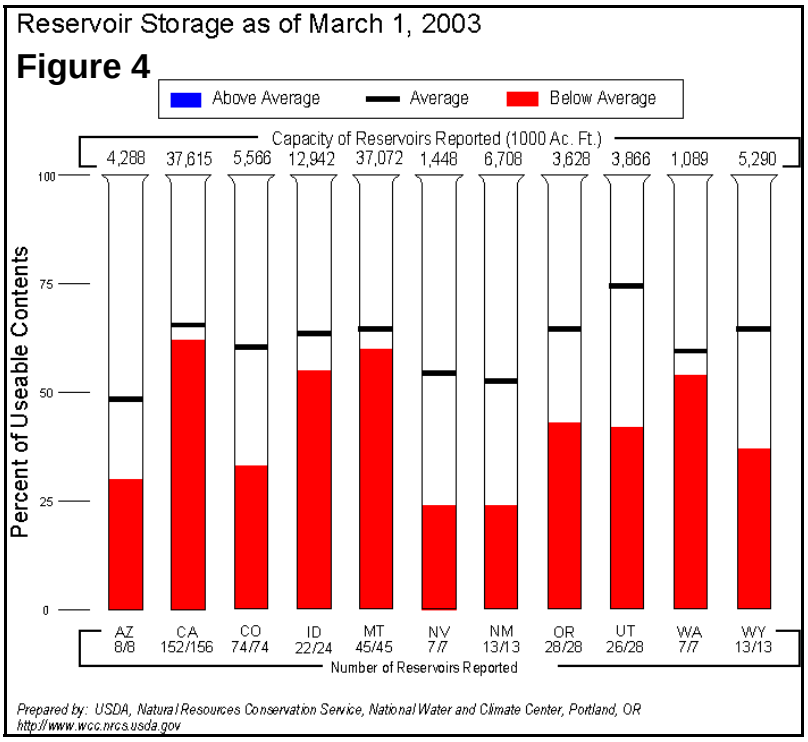


Figure 4

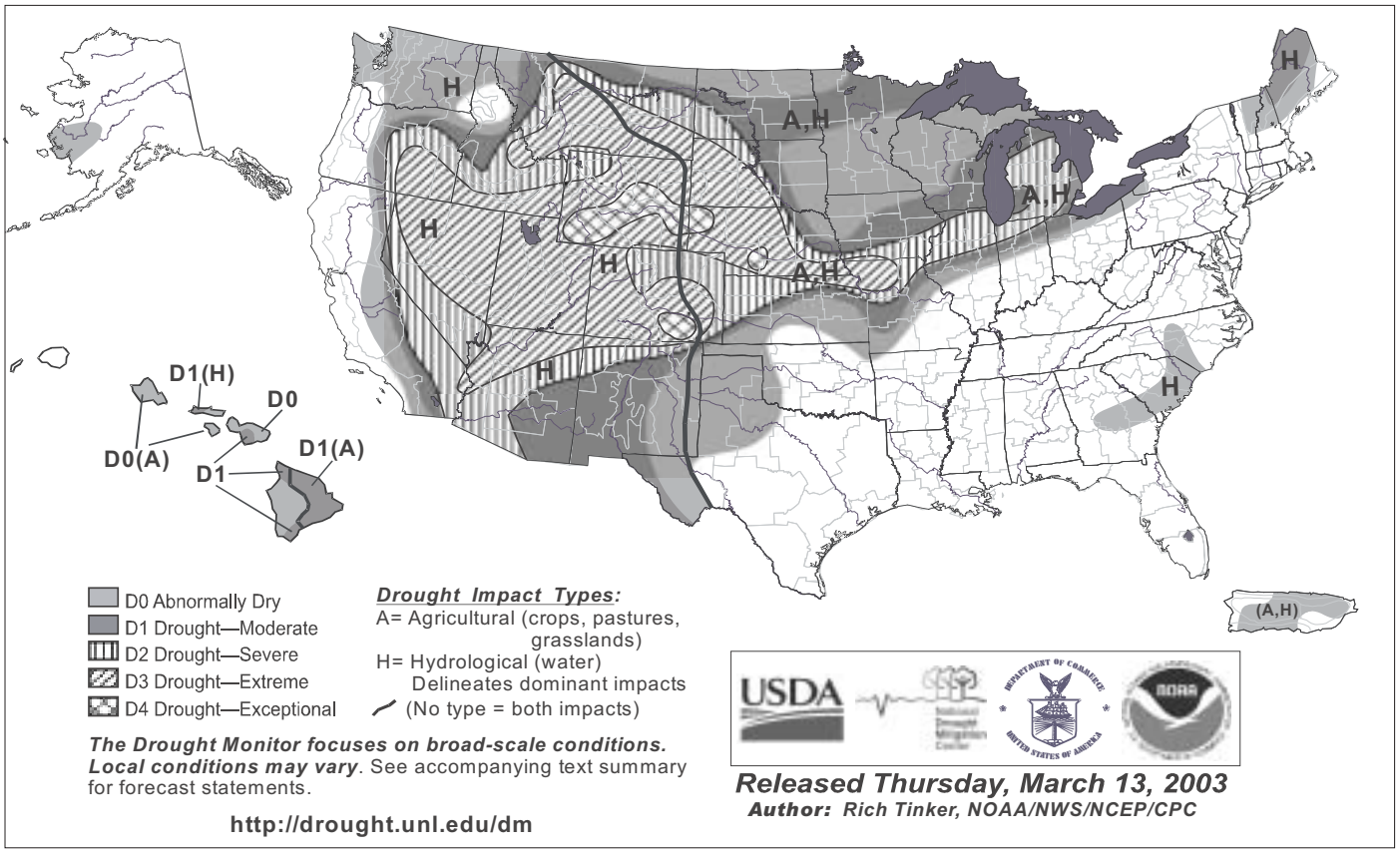
For More Information

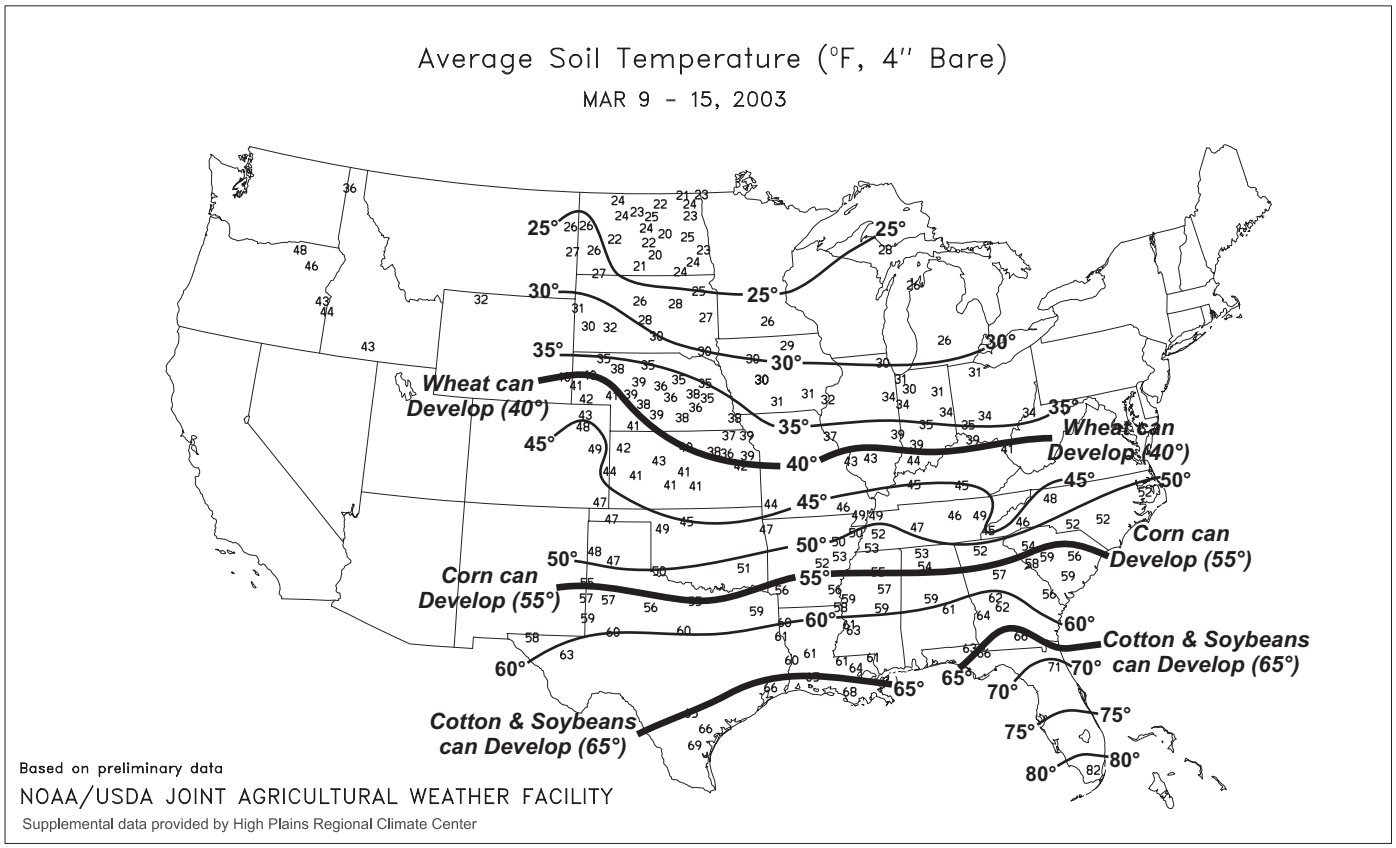
The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit:

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

U.S. Drought Monitor

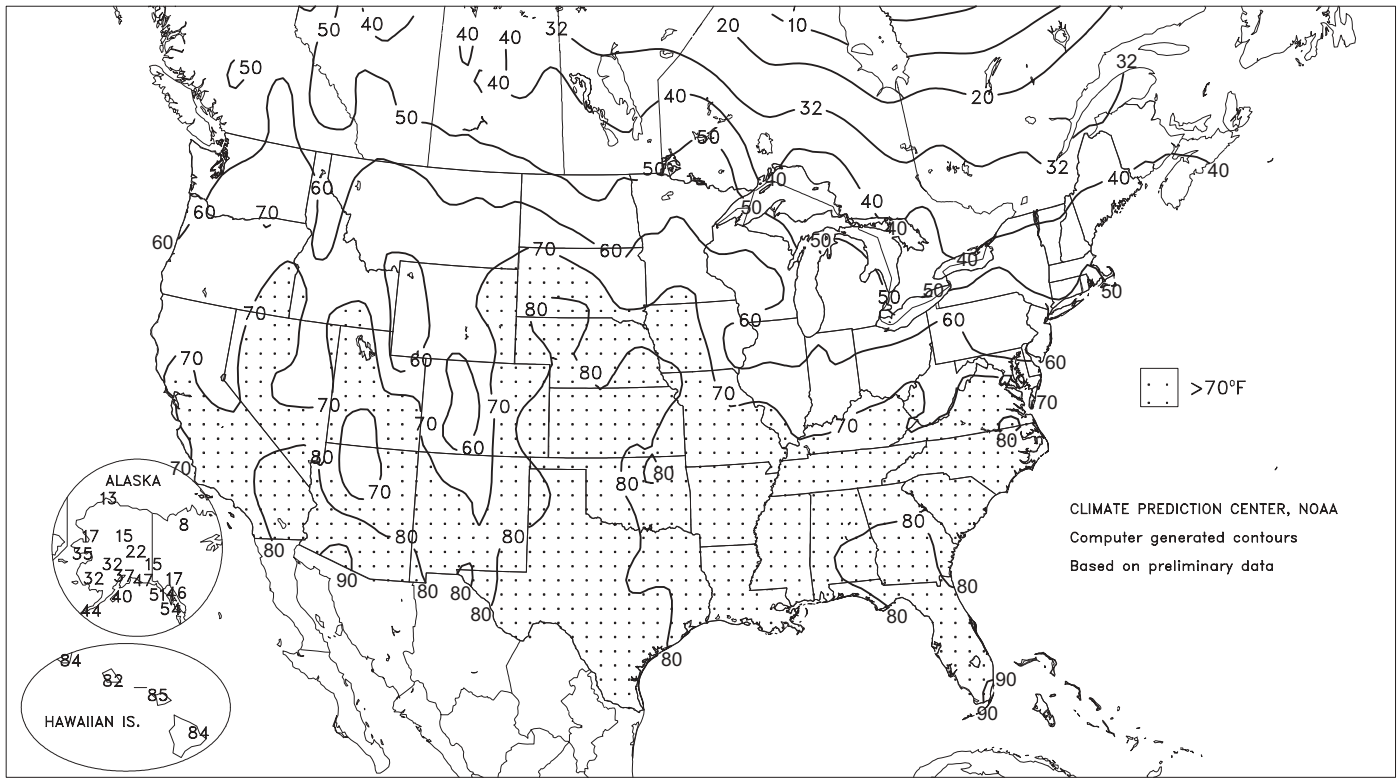
March 11, 2003
Valid 7 a.m. EST





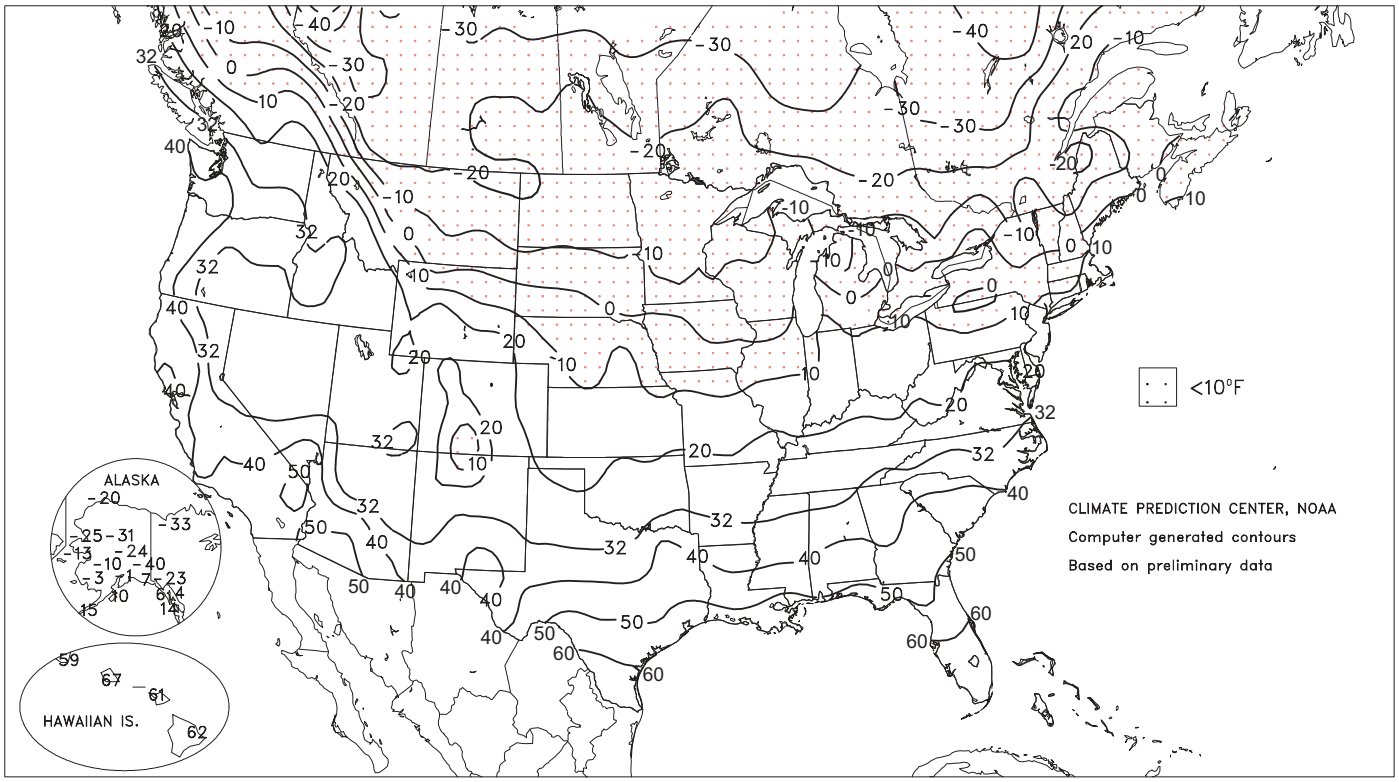
Extreme Maximum Temperature (°F)

MAR 9 - 15, 2003



Extreme Minimum Temperature (°F)

MAR 9 - 15, 2003



Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending March 15, 2003

Data provided by the Mississippi State Delta Research and Extension Center (DREC), the Southern Regional Climate Center (SRCC), and the University of Missouri.

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP, °F		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS	BATESVILLE [x]	64	44	77	30	54	2	1.63	0.30	1.63	1.73	62	11.56	98	-	-	0	1	1	1
	BELZONI [x]	67	38	70	34	53	-2	0.48	-0.98	0.48	1.50	50	13.04	99	-	-	0	0	1	0
	CLARKSDALE [x]	63	40	76	31	51	-1	0.70	-0.56	0.70	1.10	42	9.85	78	-	-	0	1	1	1
	CLEVELAND [x]	65	40	74	32	52	-2	0.24	-1.15	0.24	0.57	20	9.82	80	-	-	0	1	1	0
	GREENVILLE [x]	65	43	76	33	54	-0	0.35	-0.93	0.30	1.53	55	-	-	-	-	0	0	3	0
	GREENWOOD [x]	68	44	78	32	56	1	0.33	-0.97	0.31	0.64	24	9.46	78	-	-	0	1	2	0
	INDIANOLA 1S	64	44	75	34	54	-	0.57	-	0.55	0.88	-	8.32	-	58	51	0	0	2	1
	INVERNESS 5E	64	47	76	36	56	-	0.66	-	0.66	1.06	-	9.71	-	57	53	0	0	1	1
	LYON	64	41	78	31	53	-	0.73	-	0.73	0.90	-	6.99	-	61	47	0	1	1	1
	MACON	68	48	80	37	58	-	0.24	-	0.23	1.52	-	11.87	-	63	55	0	0	2	0
	MOORHEAD [x]	65	46	75	35	55	0	0.49	-0.84	0.48	0.88	31	11.73	92	-	-	0	0	2	0
	ONWARD	66	45	76	36	56	-	0.14	-	0.14	0.80	-	9.61	-	59	53	0	0	1	0
	PERTHSHIRE	63	41	76	32	52	-	0.23	-	0.23	0.32	-	6.98	-	61	48	0	1	1	0
	ROLLING FORK [x]	66	44	79	35	55	0	0.00	-1.40	0.00	0.90	31	10.92	82	-	-	0	0	0	0
	SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SIDON	67	47	80	36	57	-	0.27	-	0.25	0.58	-	8.35	-	65	52	0	0	2	0
	STARKVILLE	67	46	78	35	56	3	0.75	-0.62	0.75	1.59	55	12.98	97	63	53	0	0	1	1
	TUNICA [x]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	TUNICA 1W	63	39	75	30	51	-	1.50	-	1.50	1.52	-	3.87	-	54	47	0	1	1	1
	VANCE	64	42	74	31	53	-	1.05	-	0.99	1.16	-	7.16	-	52	48	0	1	2	1
	VERONA	65	45	77	32	55	-	0.33	-	0.33	0.84	-	9.16	-	63	51	0	1	1	0
	VICKSBURG [x]	67	47	78	39	57	-0	0.34	-1.13	0.34	0.81	27	11.99	85	-	-	0	0	1	0
	YAZOO CITY [x]	67	46	79	37	56	0	0.03	-1.51	0.03	0.47	15	9.47	65	-	-	0	0	1	0
	STONEVILLE [x]	63	42	71	33	52	-1	0.64	-0.73	0.58	0.87	30	9.92	74	62	49	0	0	2	1
MO	DELTA	54	33	73	22	43	-3	0.22	-0.74	0.22	0.23	11	3.86	40	51	39	0	3	1	0
	STEELE	58	37	75	26	47	0	0.15	-0.85	0.15	0.19	8	7.55	75	53	44	0	2	1	0
	GLENNONVILLE	56	35	75	24	45	-2	0.36	-0.52	0.35	0.38	20	5.59	69	52	41	0	2	2	0
	PORTAGEVILLE LF	57	36	75	25	47	0	0.16	-0.77	0.16	0.19	8	6.94	74	55	41	0	2	1	0
	CLARKTON	57	34	75	24	45	-2	0.23	-0.65	0.22	0.25	13	6.19	77	51	41	0	2	2	0
	CARDWELL	58	36	75	25	47	-1	0.38	-0.64	0.38	0.38	16	7.07	73	53	43	0	2	1	0
	CHARLESTON	55	34	73	22	45	-2	0.27	-0.52	0.27	0.28	15	6.11	70	52	41	0	3	1	0
	PORTAGEVILLE DC	57	36	75	24	47	0	0.42	-0.51	0.42	0.44	20	6.78	72	54	43	0	2	1	0

Compiled by USDA/OCE/WAOB's Stoneville Field Office.
[x] Based on 1971-2000 normals.
- Sufficient data not available.

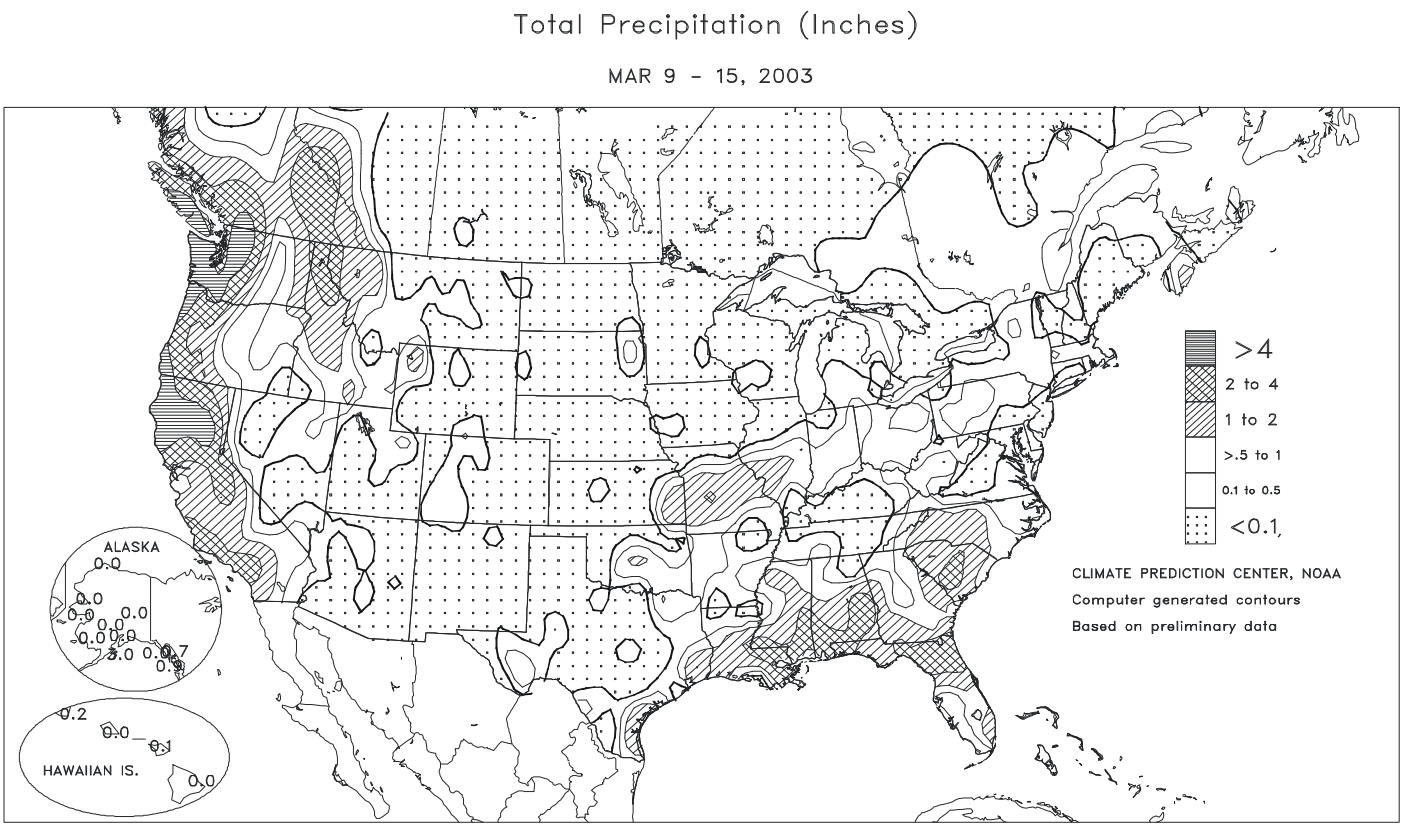
Weather and Crop Summary: Early-week drying conditions allowed spring tillage to begin throughout the Delta on lighter soils. Warmer weather after midweek included a heavy rain event on Thursday that was a concern to areas that had started planting corn. The majority of spring burndown operations were completed.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on March 11, 2003. Forecasts refer to March 1.

The **all orange** forecast for the 2002-03 crop is 11.4 million tons, virtually unchanged from the February 1 forecast but 9 percent below last season's final utilization. Florida's all orange forecast is unchanged at 199 million boxes (8.96 million tons) but 13 percent below the previous season. Early and midseason varieties in Florida are forecast at 113 million boxes (5.09 million tons), unchanged from last month but 12 percent below the previous season. The harvest of the early and midseason varieties is nearly complete. Florida's Valencia forecast is unchanged at 86.0 million boxes (3.87 million tons) but 16 percent below last season's final utilization. Average fruit size is the largest on record since 1960. Loss from droppage remains above the 10-season average.

California's all orange forecast is 62.0 million boxes (2.33 million tons), up 2 percent from the January forecast and 11 percent above last season. Valencia oranges are forecast at 22.0 million boxes (825,000 tons), up 5 percent from the January forecast but unchanged from last season's final utilization. California conducted an objective measurement survey and a grower survey for the March 1 forecast. The Arizona and Texas all orange and California's navel orange production forecasts are carried forward from the January forecasts.



(Continued from front cover)

12°F below normal. Warm, dry weather arrived, however, by week's end, boosting temperatures to 80°F as far north as **South Dakota** and further reducing soil moisture reserves across the **Plains** (excluding southern portions of the region) and the **Midwest** (excluding areas along and south of the **Ohio River**). During the week, light to moderate precipitation (0.5 to 1.5 inches) was confined to a narrow band from **eastern Kansas to Ohio**. Farther south, record warmth (up to 9°F above normal) continued across **Florida's peninsula**, promoting growth of next year's citrus crop but increasing irrigation requirements. Elsewhere in the **South**, occasional showers from the **western Gulf Coast region to the southern Atlantic States** slowed spring fieldwork and maintained adequate to excessive soil moisture levels.

On Sunday, daily-record lows in the upper Midwest included -10°F in **Wausau, WI**, and **Minneapolis, MN.** High temperatures for March 9 were the lowest on record in locations such as **Glasgow, MT** (-1°F), and **Marquette, MI** (4°F). **Marquette's** high was also their lowest on record for the month, breaking the record of 5°F set on March 6 and 11, 1984. Very cold weather continued across the **Midwest** through March 10, when lows of -5°F in **Dubuque, IA**, and **Madison, WI**, set records for the date.

During the mid- to late-week period, however, warm weather resulted in more than 100 daily-record highs across the **Plains**, **Midwest**, and **West**. From March 12-14, **Whitman Mission, WA**, posted a trio of daily records (68, 74, and 67°F). Farther east, consecutive daily-record highs were noted in locations such as **Valentine, NE** (74 and 82°F on March 13 and 14), and **Salina, KS** (81°F on both March 14 and 15). On March 15, highs soared to 85°F in **Concordia, KS**, and **Lincoln, NE.** Very warm weather also continued across **southern Florida**, where **Miami** noted daily-record highs on March 9, 12, and 15 (88, 87, and 89°F). In contrast, wintry conditions lingered in the **Northeast**, where daily-record lows on March 14 included -2°F in **Montpelier, VT**, and -15°F in **Massena, NY**, their tenth daily-record low of the year. A day later in **Maine**, daily-record lows were observed in **Caribou** (-11°F) and **Houlton** (-19°F).

Stormy weather prevailed for much of the week in the **Pacific Northwest**, where **Seattle, WA**, tallied daily-record precipitation totals on March 9 and 12 (0.83 and 0.99 inch). Elsewhere in **Washington**, rainfall records on March 15 included 0.54 inch in **Spokane** and 0.55 inch in **Walla Walla**. Farther south, torrential rains swept across **southern California** on March 15. Downtown **Los Angeles'** 4.10-inch rainfall was their second-highest daily total on record in March behind 5.88 inches on March 2, 1938. The daily rainfall also exceeded **Los Angeles'** normal March rainfall of 3.14 inches and nearly equaled the city's record-low total of 4.42 inches set during the July 2001 - June 2002 water year. Meanwhile in the **southern Atlantic region**, March 1-17 rainfall totaled 7.21 inches in **Alma, GA**, and 10.19 inches (472 percent of normal) in **Jacksonville, FL.**

Mostly dry, cold weather prevailed in **Alaska**, where temperatures across the **eastern half of the State** generally averaged 6 to 18°F below normal. **Valdez, AK**, noted four consecutive daily-record lows (11, 4, 2, and 5°F) from March 11-14. By week's end, however, daily-record warmth returned to **southeastern Alaska**, where **Petersburg's** high (54°F on March 15) came just 4 days after a daily-record low of 9°F. Meanwhile, only isolated showers dampened **Hawaii**, although rainfall became a little heavier and more widespread toward week's end. On March 15-16, 24-hour totals included 1.23 inches in **Hana, Maui**, and **Wainiha, Kauai**.

National Weather Data for Selected Cities

Weather Data for the Week Ending March 15, 2003

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

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	67	48	78	35	58	4	0.64	-0.77	0.43	3.40	110	11.42	90	91	53	0	0	3	0
	HUNTSVILLE	64	43	78	30	54	2	0.16	-1.41	0.15	0.67	19	9.97	71	81	63	0	1	2	0
	MOBILE	74	55	78	50	65	5	1.32	-0.38	0.87	2.27	61	8.41	58	89	58	0	0	3	1
	MONTGOMERY	72	51	82	42	61	4	1.18	-0.32	0.84	2.94	85	7.74	56	96	59	0	0	4	1
AK	ANCHORAGE	27	11	44	-1	19	-6	0.00	-0.14	0.00	0.11	31	1.25	71	49	38	0	7	0	0
	BARROW	-6	-17	13	-28	-12	3	0.00	0.00	0.00	0.01	100	0.21	88	82	76	0	7	0	0
	FAIRBANKS	9	-14	17	-24	-2	-11	0.00	-0.06	0.00	0.01	8	1.07	102	62	50	0	7	0	0
	JUNEAU	28	13	46	4	21	-12	0.72	-0.08	0.51	2.20	113	9.35	87	75	61	0	7	3	1
	KODIAK	33	22	41	10	27	-5	3.84	2.68	1.36	4.07	151	27.40	165	79	62	0	7	5	4
	NOME	16	-3	32	-13	7	-2	0.00	-0.11	0.00	0.30	107	1.60	82	65	49	0	7	0	0
AZ	FLAGSTAFF	56	28	61	21	42	6	0.82	0.20	0.70	1.02	69	3.98	64	85	30	0	6	2	1
	PHOENIX	81	57	87	55	69	7	0.31	0.05	0.31	0.31	53	4.05	185	55	32	0	0	1	0
	TUCSON	80	52	86	48	66	7	0.01	-0.18	0.01	0.24	50	1.34	57	54	29	0	0	1	0
	YUMA	82	59	87	52	70	4	0.22	0.16	0.21	0.22	169	1.34	170	49	38	0	0	2	0
AR	FORT SMITH	67	43	76	31	55	3	0.66	-0.24	0.66	0.67	34	4.37	63	90	53	0	1	1	1
	LITTLE ROCK	64	41	80	30	52	-1	0.41	-0.65	0.41	0.42	18	6.98	76	95	60	0	2	1	0
CA	BAKERSFIELD	73	49	82	44	61	4	0.31	-0.02	0.27	0.31	41	1.99	63	89	66	0	0	3	0
	FRESNO	71	49	78	43	60	5	0.56	0.04	0.41	0.64	52	2.29	42	91	69	0	0	4	0
	LOS ANGELES	64	54	67	49	59	1	0.59	0.01	0.59	0.76	53	5.56	74	95	76	0	0	1	1
	REDDING	63	48	70	43	56	4	2.17	0.95	1.12	2.22	77	11.25	76	94	74	0	0	5	2
	SACRAMENTO	67	50	71	44	58	4	1.44	0.77	0.86	1.44	89	4.12	46	96	57	0	0	4	1
	SAN DIEGO	65	56	67	51	61	1	1.17	0.63	0.78	1.33	109	6.22	112	88	75	0	0	2	1
	SAN FRANCISCO	63	52	66	48	57	3	0.87	0.09	0.48	0.87	47	4.77	46	92	79	0	0	3	0
	STOCKTON	68	47	74	41	58	4	0.98	0.44	0.69	0.98	78	2.67	42	96	73	0	0	4	1
CO	ALAMOSA	61	16	65	5	39	7	0.00	-0.08	0.00	0.00	0	0.25	38	67	25	0	6	0	0
	CO SPRINGS	67	36	73	31	51	14	0.00	-0.21	0.00	0.11	26	0.70	66	53	14	0	1	0	0
	DENVER INTL	68	37	75	31	53	15	0.00	-0.22	0.00	0.06	13	0.59	63	41	13	0	2	0	0
	GRAND JUNCTION	64	38	71	32	51	8	0.08	-0.14	0.08	0.29	62	1.43	91	62	35	0	1	1	0
	PUEBLO	76	32	83	20	54	13	0.00	-0.20	0.00	0.09	23	0.81	83	54	18	0	4	0	0
CT	BRIDGEPORT	41	24	60	16	33	-6	0.07	-0.85	0.07	1.70	85	7.27	84	76	53	0	7	1	0
	HARTFORD	43	20	63	9	31	-6	0.27	-0.60	0.27	1.01	53	6.56	75	77	52	0	7	1	0
DC	WASHINGTON	55	33	69	26	44	-2	0.18	-0.67	0.16	0.95	51	8.78	114	81	40	0	5	2	0
DE	WILMINGTON	48	26	67	17	37	-5	0.14	-0.77	0.12	1.73	86	8.13	98	85	44	0	6	2	0
FL	DAYTONA BEACH	77	61	88	58	69	5	0.04	-0.83	0.04	6.15	322	11.84	152	99	60	0	0	1	0
	JACKSONVILLE	75	57	80	53	66	5	1.29	0.41	1.27	8.59	441	13.35	152	98	61	0	0	3	1
	KEY WEST	84	72	86	69	78	5	0.56	0.17	0.52	0.57	67	2.38	52	93	69	0	0	2	1
	MIAMI	87	72	89	70	80	8	0.55	0.03	0.27	0.55	49	1.81	36	90	56	0	0	4	0
	ORLANDO	82	63	87	58	73	6	0.38	-0.43	0.26	2.34	133	4.70	72	97	59	0	0	2	0
	PENSACOLA	74	57	78	53	66	6	1.76	0.26	0.72	4.45	134	10.41	78	93	62	0	0	4	2
	TALLAHASSEE	80	55	86	44	68	7	0.52	-1.02	0.43	6.52	191	13.72	102	92	52	0	0	3	0
	TAMPA	83	64	85	61	74	7	0.81	0.16	0.81	1.21	79	4.24	65	90	51	0	0	1	1
	WEST PALM	85	70	88	67	78	8	1.52	0.72	1.04	1.68	101	3.61	45	99	69	0	0	5	1
GA	ATHENS	68	45	79	39	57	4	0.44	-0.73	0.40	2.44	91	8.72	74	86	56	0	0	2	0
	ATLANTA	66	47	78	39	57	3	0.58	-0.68	0.58	2.80	97	8.35	66	79	59	0	0	1	1
	AUGUSTA	69	45	79	39	57	2	1.30	0.23	1.07	3.46	142	9.21	83	95	57	0	0	3	1
	COLUMBUS	72	51	82	42	62	5	1.03	-0.32	0.36	4.02	132	11.84	96	91	49	0	0	3	0
	MACON	71	48	82	39	60	4	0.50	-0.64	0.39	2.34	89	8.95	74	94	48	0	0	4	0
	SAVANNAH	71	51	80	48	61	2	0.35	-0.44	0.32	4.75	276	8.81	103	99	79	0	0	3	0
HI	HILO	84	63	86	62	74	2	0.00	-3.21	0.00	0.19	3	6.88	27	79	54	0	0	0	0
	HONOLULU	81	69	82	67	75	1	0.13	-0.31	0.13	1.08	100	3.40	55	87	72	0	0	1	0
	KAHULUI	83	64	85	61	74	1	0.00	-0.52	0.00	0.66	57	4.31	59	88	75	0	0	0	0
	LIHUE	80	65	84	59	73	1	0.85	0.04	0.63	3.57	194	10.07	104	87	80	0	0	3	1
ID	BOISE	63	45	71	37	54	11	0.24	-0.06	0.22	0.46	67	2.94	91	64	44	0	0	3	0
	LEWISTON	60	44	72	38	52	8	0.34	0.11	0.22	1.93	371	5.90	226	85	71	0	0	5	0
	POCATELLO	59	36	70	31	48	11	0.41	0.11	0.16	0.42	61	1.84	65	74	44	0	3	3	0
IL	CHICAGO/O'HARE	47	25	67	2	36	0	0.00	-0.53	0.00	0.68	61	1.23	27	78	64	0	6	0	0
	MOLINE	48	25	71	5	37	0	0.00	-0.61	0.00	0.29	23	1.20	28	82	64	0	5	0	0
	PEORIA	51	27	70	8	39	0	0.00	-0.61	0.00	0.13	10	1.74	39	94	62	0	4	0	0
	ROCKFORD	45	20	68	-2	32	-3	0.00	-0.48	0.00	0.69	70	1.14	31	86	71	0	7	0	0
	SPRINGFIELD	56	30	71	11	43	2	0.44	-0.26	0.23	0.47	31	2.36	48	90	71	0	4	2	0
IN	EVANSVILLE	58	33	72	18	45	0	0.55	-0.41	0.36	0.55	26	6.61	81	87	61	0	2	2	0
	FORT WAYNE	45	24	67	9	35	-2	0.24	-0.36	0.24	0.49	38	3.17	60	94	64	0	6	1	0
	INDIANAPOLIS	54	29	74	11	42	1	0.56	-0.20	0.56	0.90	53	5.62	85	89	49	0	4	1	1
	SOUTH BEND	47	25	69	11	36	-1	0.16	-0.44	0.15	0.54	42	2.67	48	87	60	0	6	2	0
IA	BURLINGTON	50	27	70	8	38	-1	0.00	-0.64	0.00	0.17	12	1.39	33	90	59	0	5	0	0
	CEDAR RAPIDS	45	24	71	2	35	0	0.00	-0.45	0.00	0.11	12	0.77	25	90	62	0	5	0	0
	DES MOINES	53	29	77	9	41	4	0.11	-0.33	0.11	0.22	24	2.39	77	83	67	0	5	1	0
	DUBUQUE	44	23	67	-5	33	-1	0.00	-0.54	0.00	0.07	6	0.58	15	86	70	0	5	0	0
	SIOUX CITY	55	28	76	10	41	6	0.00	-0.42	0.00	0.03	4	1.21	59	87	72	0	4	0	0
	WATERLOO	50	25	72	-1	38	4	0.00	-0.43	0.00	0.08	9	0.62	22	84	57	0	5	0	0
KS	CONCORDIA	66	35	85	15	51	10	0.00	-0.54	0.00	0.00	0	1.22	49	85	55	0	4	0	0
	DODGE CITY	68	35	84	18	52	9	0.00	-0.39	0.00	0.02	2	1.40	67	90	43	0	3	0	0
	GOODLAND	73	31	84	16	52	13	0.00	-0.28	0.00	0.01	2	0.88	61	63	33	0	4	0	0
	TOPEKA	62	34	80	15	48	5	0.16	-0.40	0.16	0.21	18	2.10	63	85	61	0	3	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 15, 2003

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	64	36	79	20	50	5	0.01	-0.61	0.01	0.01	1	2.06	65	93	71	0	2	1	0
KY	JACKSON	61	38	75	20	50	4	0.18	-0.83	0.17	0.34	15	10.34	108	78	41	0	2	2	0
	LEXINGTON	57	34	73	18	45	0	0.39	-0.63	0.21	0.43	19	6.22	70	85	54	0	3	2	0
	LOUISVILLE	59	35	75	19	47	1	0.24	-0.78	0.16	0.42	18	5.70	65	83	47	0	2	2	0
	PADUCAH	60	36	73	21	48	1	0.14	-0.80	0.14	0.24	11	7.28	76	88	52	0	2	1	0
LA	BATON ROUGE	74	53	81	48	64	4	0.50	-0.60	0.50	1.57	63	9.36	68	95	60	0	0	1	1
	LAKE CHARLES	73	55	78	49	64	4	2.99	2.20	2.24	3.31	190	9.88	94	99	68	0	0	2	2
	NEW ORLEANS	73	57	79	53	65	3	1.44	0.30	1.04	2.19	84	6.95	50	97	79	0	0	4	1
	SHREVEPORT	74	50	79	40	62	4	0.16	-0.77	0.16	0.55	26	8.66	79	92	50	0	0	1	0
ME	CARIBOU	22	-1	32	-11	11	-12	0.07	-0.50	0.05	0.99	79	5.08	81	73	42	0	7	2	0
	PORTLAND	32	15	46	8	24	-9	0.04	-0.87	0.03	1.28	65	5.77	63	70	45	0	7	2	0
MD	BALTIMORE	53	26	67	19	40	-3	0.15	-0.76	0.09	1.11	54	10.40	122	85	64	0	6	2	0
MA	BOSTON	39	23	53	16	31	-7	0.17	-0.68	0.17	1.30	69	7.21	79	83	54	0	7	1	0
	WORCESTER	37	17	61	7	27	-6	0.27	-0.68	0.25	1.67	81	6.45	70	83	42	0	7	2	0
MI	ALPENA	39	12	69	-3	25	-2	0.00	-0.46	0.00	0.01	1	0.52	13	80	43	0	7	0	0
	GRAND RAPIDS	42	20	62	7	31	-2	0.17	-0.36	0.12	0.51	47	2.05	44	90	56	0	6	3	0
	HOUGHTON LAKE	38	14	60	-8	26	-2	0.00	-0.43	0.00	0.15	16	0.51	14	79	51	0	6	0	0
	LANSING	42	16	66	2	29	-4	0.21	-0.25	0.12	0.57	59	1.13	28	86	56	0	6	2	0
	MUSKEGON	41	23	59	11	32	-1	0.13	-0.36	0.08	0.34	33	0.85	18	86	70	0	6	2	0
	TRAVERSE CITY	40	15	63	-12	27	-3	0.01	-0.38	0.01	0.23	28	0.94	17	82	41	0	6	1	0
MN	DULUTH	36	12	60	-10	24	0	0.00	-0.35	0.00	0.00	0	0.43	16	86	66	0	7	0	0
	INT'L FALLS	35	6	57	-14	21	-1	0.02	-0.17	0.02	0.09	24	0.29	16	87	50	0	7	1	0
	MINNEAPOLIS	44	22	68	-8	33	2	0.15	-0.24	0.11	0.49	64	1.28	49	93	68	0	5	2	0
	ROCHESTER	46	22	68	-9	34	5	0.03	-0.34	0.02	0.04	6	1.02	42	93	73	0	5	2	0
	ST. CLOUD	38	17	61	-16	27	0	0.07	-0.22	0.07	0.14	25	0.61	32	94	67	0	4	1	0
MS	JACKSON	70	48	78	39	59	3	1.12	-0.14	1.08	2.96	107	13.39	104	96	56	0	0	2	1
	MERIDIAN	72	48	77	38	60	3	1.62	0.03	1.53	2.58	73	10.97	74	97	62	0	0	3	1
	TUPELO	65	45	77	31	55	3	0.34	-1.12	0.33	0.61	19	9.92	76	87	63	0	1	2	0
MO	COLUMBIA	59	32	73	13	46	3	0.99	0.30	0.57	1.07	70	3.35	61	92	52	0	2	3	1
	KANSAS CITY	61	34	79	15	48	5	0.29	-0.25	0.29	0.42	36	1.64	45	91	48	0	2	1	0
	SAINT LOUIS	59	34	73	17	46	1	1.17	0.37	0.69	1.23	70	4.18	68	86	71	0	2	3	1
	SPRINGFIELD	61	37	75	20	49	4	0.57	-0.25	0.31	0.57	33	4.63	76	86	69	0	2	2	0
MT	BILLINGS	57	28	67	2	43	7	0.00	-0.23	0.00	0.28	60	1.50	81	71	40	0	3	0	0
	BUTTE	49	30	56	24	39	9	0.08	-0.09	0.08	0.28	76	1.87	136	82	38	0	5	1	0
	GLASGOW	38	18	61	-1	28	-2	0.01	-0.07	0.01	0.08	42	0.47	59	89	72	0	5	1	0
	GREAT FALLS	56	23	69	-1	40	8	0.00	-0.21	0.00	0.15	34	0.90	55	79	38	0	4	0	0
	HAVRE	42	17	61	-4	30	-1	0.01	-0.13	0.01	0.18	58	0.55	48	86	70	0	7	1	0
	KALISPELL	50	31	66	21	40	6	0.54	0.29	0.48	0.87	153	1.94	61	89	78	0	3	4	0
	MISSOULA	57	33	69	29	45	8	0.26	0.06	0.21	0.96	213	3.60	158	94	67	0	2	4	0
NE	GRAND ISLAND	63	32	79	14	48	11	0.00	-0.44	0.00	0.00	0	1.65	78	87	71	0	4	0	0
	LINCOLN	62	31	85	15	46	8	0.00	-0.48	0.00	0.06	6	2.09	91	87	61	0	3	0	0
	NORFOLK	59	31	80	11	45	9	0.05	-0.37	0.05	0.06	7	1.16	53	87	63	0	4	1	0
	NORTH PLATTE	70	25	78	16	48	11	0.00	-0.26	0.00	0.00	0	0.83	58	92	27	0	7	0	0
	OMAHA	58	33	79	12	46	8	0.02	-0.44	0.01	0.13	14	1.78	71	85	72	0	3	2	0
	SCOTTSBLUFF	70	30	80	17	50	14	0.00	-0.24	0.00	0.07	14	0.45	28	75	31	0	5	0	0
	VALENTINE	66	27	82	12	46	12	0.00	-0.23	0.00	0.13	27	0.65	52	91	60	0	5	0	0
NV	ELY	58	29	65	24	44	9	0.25	0.01	0.24	0.33	62	1.04	51	76	38	0	4	2	0
	LAS VEGAS	75	54	83	49	65	7	0.23	0.09	0.20	0.31	89	2.44	150	50	29	0	0	2	0
	RENO	61	37	71	28	49	6	0.20	0.00	0.20	0.21	42	0.60	23	63	42	0	2	1	0
	WINNEMUCCA	63	32	76	19	48	7	0.09	-0.10	0.09	0.10	25	1.99	108	65	42	0	3	1	0
NH	CONCORD	35	10	50	0	23	-9	0.09	-0.58	0.08	0.96	65	6.87	101	87	42	0	7	2	0
NJ	NEWARK	48	27	71	19	38	-3	0.24	-0.72	0.24	1.69	81	8.56	95	70	43	0	6	1	0
NM	ALBUQUERQUE	69	40	73	35	54	7	0.06	-0.08	0.06	0.06	20	1.08	88	50	18	0	0	1	0
NY	ALBANY	39	17	59	6	28	-6	0.09	-0.58	0.09	0.36	25	5.99	98	79	44	0	7	1	0
	BINGHAMTON	37	18	59	5	28	-4	0.19	-0.44	0.19	0.58	41	5.30	82	71	52	0	6	1	0
	BUFFALO	38	19	58	9	29	-4	0.30	-0.35	0.22	1.13	79	6.09	87	84	53	0	6	2	0
	ROCHESTER	39	19	65	8	29	-4	0.17	-0.38	0.15	0.58	48	4.60	82	80	52	0	7	3	0
	SYRACUSE	39	18	65	7	29	-3	0.19	-0.46	0.09	0.71	51	4.77	78	83	43	0	7	3	0
NC	ASHEVILLE	62	38	77	28	50	5	0.68	-0.37	0.37	1.81	76	7.48	73	87	48	0	2	3	0
	CHARLOTTE	63	44	75	34	53	1	0.95	-0.07	0.68	2.99	129	8.58	87	89	51	0	0	2	1
	GREENSBORO	59	40	74	32	50	2	1.34	0.46	0.54	2.51	127	9.79	114	88	54	0	1	3	2
	HATTERAS	62	45	73	39	54	2	2.34	1.19	2.32	3.51	138	9.06	74	95	71	0	0	3	1
	RALEIGH	61	39	76	31	50	0	1.09	0.14	0.64	2.43	112	8.97	93	86	61	0	2	3	1
	WILMINGTON	68	44	75	38	56	2	0.77	-0.22	0.51	1.98	88	7.18	69	99	62	0	0	2	1
ND	BISMARCK	39	14	61	-8	26	-2	0.06	-0.11	0.03	0.11	32	0.62	48	88	68	0	7	2	0
	DICKINSON	45	19	66	0	32	3	0.05	-0.05	0.03	0.09	50	0.24	24	93	55	0	6	2	0
	FARGO	37	12	58	-12	25	-1	0.09	-0.15	0.09	0.12	24	0.59	32	93	69	0	7	1	0
	GRAND FORKS	32	8	52	-17	20	-4	0.00	-0.18	0.00	0.04	11	0.32	20	95	68	0	7	0	0
	JAMESTOWN	34	9	53	-10	22	-5	0.12	-0.06	0.11	0.13	35	0.28	19	96	72	0	7	2	0
	WILLISTON	35	11	57	-9	23	-5	0.21	0.06	0.12	0.32	103	1.26	102	91	72	0	7	3	0
OH	AKRON-CANTON	47	24	68	10	35	-2	0.76	0.06	0.76	1.57	101	5.27	83	86	56	0	5	1	1
	CINCINNATI	54	29	73	14	42	-1	0.39	-0.48	0.36	0.74	39	5.98	79	88	67	0	4	2	0
	CLEVELAND	46	24	69	13	35	-2	0.48	-0.15	0.46	1.04	75	5.79	94	87	55	0	6	2	0
	COLUMBUS	52	26	73	13	39	-2	0.24	-0.39	0.24	0.79	57	5.40	88	84	58	0	5	1	0
	DAYTON	51	27	70	11	39	0	0.46	-0.24	0.46	0.89	59	4.20	66	86	51	0	4	1	0
	MANSFIELD	48	23	69	9	36	0	0.78	0.07	0.78	1.38	98	4.16	67	95	53	0	4	1	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending March 15, 2003

	STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN.; SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN.; SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	45	23	68	13	34	-2	0.20	-0.34	0.20	0.56	48	3.75	75	87	69	0	7	1	0
	YOUNGSTOWN	46	23	70	10	35	-1	0.33	-0.33	0.33	0.96	67	4.90	84	81	58	0	5	1	0
OK	OKLAHOMA CITY	70	42	79	25	56	6	0.00	-0.66	0.00	0.00	0	0.87	20	89	47	0	1	0	0
	TULSA	69	39	80	26	54	4	0.00	-0.81	0.00	0.00	0	1.93	36	90	67	0	2	0	0
OR	ASTORIA	55	47	60	41	51	5	3.76	2.07	1.18	7.02	178	24.54	114	90	82	0	0	7	3
	BURNS	58	34	68	26	46	9	0.58	0.30	0.51	0.62	93	1.96	66	80	57	0	3	4	1
	EUGENE	61	47	66	42	54	8	0.56	-0.79	0.23	3.04	96	12.67	74	94	75	0	0	6	0
	MEDFORD	62	42	71	39	52	5	0.97	0.55	0.35	1.11	111	5.32	96	97	55	0	0	5	0
	PENDLETON	63	45	71	35	54	9	0.57	0.29	0.50	1.00	159	4.98	151	79	55	0	0	4	1
	PORTLAND	59	48	62	42	53	6	1.13	0.28	0.45	3.54	175	13.89	123	90	73	0	0	6	0
	SALEM	59	47	61	41	53	7	0.72	-0.24	0.19	2.82	122	13.05	98	91	72	0	0	7	0
PA	ALLENTOWN	44	22	66	14	33	-5	0.30	-0.50	0.30	1.23	69	5.76	72	80	64	0	7	1	0
	ERIE	42	22	65	11	32	-3	0.08	-0.59	0.08	0.40	27	4.56	73	84	59	0	5	1	0
	MIDDLETOWN	44	24	63	15	34	-6	0.20	-0.54	0.20	1.20	71	7.65	102	93	60	0	7	1	0
	PHILADELPHIA	50	29	69	22	40	-2	0.06	-0.81	0.04	1.91	101	8.88	109	78	57	0	5	2	0
	PITTSBURGH	51	24	72	12	37	-2	0.26	-0.45	0.26	0.85	54	5.89	89	89	46	0	5	1	0
	WILKES-BARRE	43	20	64	10	31	-6	0.23	-0.34	0.23	0.52	42	3.55	61	81	45	0	7	1	0
	WILLIAMSPORT	43	20	62	10	31	-6	0.37	-0.33	0.37	0.68	44	4.97	71	93	70	0	7	1	0
RI	PROVIDENCE	42	22	64	15	32	-6	0.16	-0.81	0.16	1.98	93	7.77	78	75	53	0	7	1	0
SC	BEAUFORT	67	52	77	48	59	2	0.77	-0.04	0.50	2.84	161	6.23	70	10	65	0	0	3	1
	CHARLESTON	69	49	79	45	59	2	1.24	0.33	0.56	3.64	182	7.14	78	98	63	0	0	4	1
	COLUMBIA	68	47	79	39	57	2	1.95	0.90	1.53	4.64	197	9.60	88	93	63	0	0	4	1
	GREENVILLE	65	45	77	37	55	4	0.73	-0.53	0.63	2.06	72	8.00	69	91	53	0	0	4	1
SD	ABERDEEN	42	17	63	-8	30	1	0.02	-0.25	0.02	0.02	4	0.32	21	91	73	0	7	1	0
	HURON	47	24	66	2	36	5	0.00	-0.35	0.00	0.00	0	1.26	72	92	63	0	4	0	0
	RAPID CITY	65	27	80	8	46	12	0.03	-0.17	0.03	0.03	7	0.58	46	83	33	0	5	1	0
	SIOUX FALLS	49	26	69	5	38	7	0.00	-0.37	0.00	0.27	38	1.21	70	86	65	0	4	0	0
TN	BRISTOL	63	37	74	29	50	4	0.90	-0.01	0.48	1.58	76	10.38	115	91	42	0	3	3	0
	CHATTANOOGA	66	44	77	35	55	4	0.01	-1.44	0.01	1.14	35	11.53	85	82	51	0	0	1	0
	KNOXVILLE	65	43	74	32	54	5	0.28	-0.93	0.19	0.93	34	12.82	113	84	49	0	1	2	0
	MEMPHIS	67	45	77	30	56	3	0.22	-1.01	0.22	0.39	14	9.52	84	80	47	0	1	1	0
	NASHVILLE	63	41	76	25	52	3	0.03	-1.10	0.03	0.19	7	10.23	100	89	50	0	1	1	0
TX	ABILENE	77	49	84	35	63	7	0.01	-0.29	0.01	0.03	4	1.17	42	88	64	0	0	1	0
	AMARILLO	75	37	80	22	56	9	0.00	-0.24	0.00	0.00	0	0.24	14	83	20	0	2	0	0
	AUSTIN	76	53	84	44	64	3	0.04	-0.45	0.02	0.45	38	6.00	119	90	68	0	0	2	0
	BEAUMONT	74	58	79	54	66	4	1.19	0.36	0.68	1.49	82	8.92	82	10	64	0	0	2	2
	BROWNSVILLE	79	65	85	58	72	4	0.29	0.13	0.28	0.30	86	1.56	54	98	77	0	0	2	0
	CORPUS CHRISTI	76	63	83	61	70	4	0.56	0.19	0.56	0.65	71	3.01	69	10	80	0	0	1	1
	DEL RIO	79	63	89	60	71	8	0.04	-0.15	0.03	0.19	41	0.97	49	92	71	0	0	2	0
	EL PASO	78	49	80	41	63	7	0.00	-0.05	0.00	0.04	29	1.42	145	45	18	0	0	0	0
	FORT WORTH	73	49	80	35	61	4	0.00	-0.70	0.00	0.00	0	3.31	56	89	54	0	0	0	0
	GALVESTON	71	60	77	58	66	3	0.00	-0.61	0.00	0.11	8	2.98	37	99	71	0	0	0	0
	HOUSTON	76	59	80	53	68	6	0.05	-0.69	0.05	0.99	60	7.17	86	98	77	0	0	1	0
	LUBBOCK	79	43	84	31	61	11	0.00	-0.14	0.00	0.00	0	0.12	8	77	41	0	1	0	0
	MIDLAND	80	48	83	38	64	9	0.01	-0.08	0.01	0.01	4	0.99	73	89	58	0	0	1	0
	SAN ANGELO	78	48	83	40	63	7	0.01	-0.19	0.01	0.27	52	2.16	86	89	62	0	0	1	0
	SAN ANTONIO	76	59	87	55	68	7	0.05	-0.36	0.02	0.45	47	3.60	82	98	66	0	0	4	0
	VICTORIA	77	62	83	54	70	7	0.24	-0.26	0.20	0.62	55	4.32	77	99	73	0	0	3	0
	WACO	75	51	78	41	63	5	0.02	-0.54	0.01	0.78	57	3.93	69	93	69	0	0	2	0
	WICHITA FALLS	76	43	85	25	60	7	0.00	-0.50	0.00	0.00	0	0.91	24	89	57	0	1	0	0
UT	SALT LAKE CITY	62	41	73	37	51	8	0.53	0.12	0.26	1.03	111	2.72	75	76	35	0	0	3	0
VT	BURLINGTON	32	11	55	2	22	-8	0.03	-0.46	0.03	0.11	10	2.08	42	88	58	0	7	1	0
VA	LYNCHBURG	58	33	77	26	46	1	0.04	-0.84	0.03	0.73	37	8.02	93	83	44	0	3	2	0
	NORFOLK	56	38	79	33	47	-1	0.45	-0.49	0.35	2.00	96	9.56	102	92	61	0	0	2	0
	RICHMOND	58	31	79	27	44	-3	0.20	-0.75	0.12	1.46	69	7.84	91	94	60	0	5	2	0
	ROANOKE	60	36	78	29	48	2	0.18	-0.69	0.13	0.52	27	7.76	94	78	48	0	3	3	0
	WASH/DULLES	55	27	69	19	41	-1	0.24	-0.56	0.22	0.63	35	8.30	109	82	52	0	5	2	0
WA	OLYMPIA	56	45	59	36	51	8	2.39	1.19	0.74	4.23	148	16.00	97	97	83	0	0	7	1
	QUILLAYUTE	51	45	53	39	48	4	4.29	1.74	1.22	6.84	112	24.04	75	96	92	0	0	7	4
	SEATTLE-TACOMA	55	46	59	42	51	5	2.44	1.59	0.91	4.18	209	13.94	123	96	75	0	0	7	2
	SPOKANE	54	39	64	30	46	7	0.81	0.47	0.52	1.07	134	4.97	120	91	60	0	1	5	1
	YAKIMA	62	38	64	28	50	8	0.25	0.11	0.13	0.40	121	2.88	125	82	61	0	1	2	0
WV	BECKLEY	56	34	70	19	45	4	0.28	-0.55	0.26	0.43	23	7.28	90	80	52	0	3	2	0
	CHARLESTON	59	34	71	22	47	3	0.54	-0.37	0.33	0.82	40	10.11	119	89	50	0	3	3	0
	ELKINS	57	25	70	16	41	2	0.49	-0.41	0.42	0.89	44	7.48	86	96	37	0	6	3	0
	HUNTINGTON	59	33	74	21	46	1	0.51	-0.37	0.41	0.68	34	7.88	95	93	50	0	3	2	0
WI	EAU CLAIRE	44	20	69	-10	32	2	0.09	-0.28	0.08	0.25	35	1.03	40	91	50	0	6	2	0
	GREEN BAY	42	19	65	-7	30	0	0.00	-0.43	0.00	0.06	7	1.20	39	86	59	0	6	0	0
	LA CROSSE	47	24	70	-5	36	3	0.52	0.14	0.44	0.65	88	1.58	54	86	45	0	5	3	0
	MADISON	43	20	66	-5	31	-1	0.03	-0.42	0.03	0.20	22	1.07	31	86	63	0	6	1	0
	MILWAUKEE	43	21	66	0	32	-2	0.04	-0.47	0.04	0.30	29	1.09	24	85	62	0	6	1	0
WY	CASPER	62	36	71	30	49	15	0.00	-0.19	0.00	0.02	5	0.65	39	67	32	0	2	0	0
	CHEYENNE	62	37	70	33	50	17	0.00	-0.22	0.00	0.02	4	0.30	22	45	22	0	0	0	0
	LANDER	59	34	65	30	47	12	0.00	-0.25	0.00	0.04	8	1.46	93	72	48	0	4	0	0
	SHERIDAN	56	27	65	2	42	8	0.16	-0.03	0.16	0.33	85	1.51	87	81	55	0	6	1	0

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

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

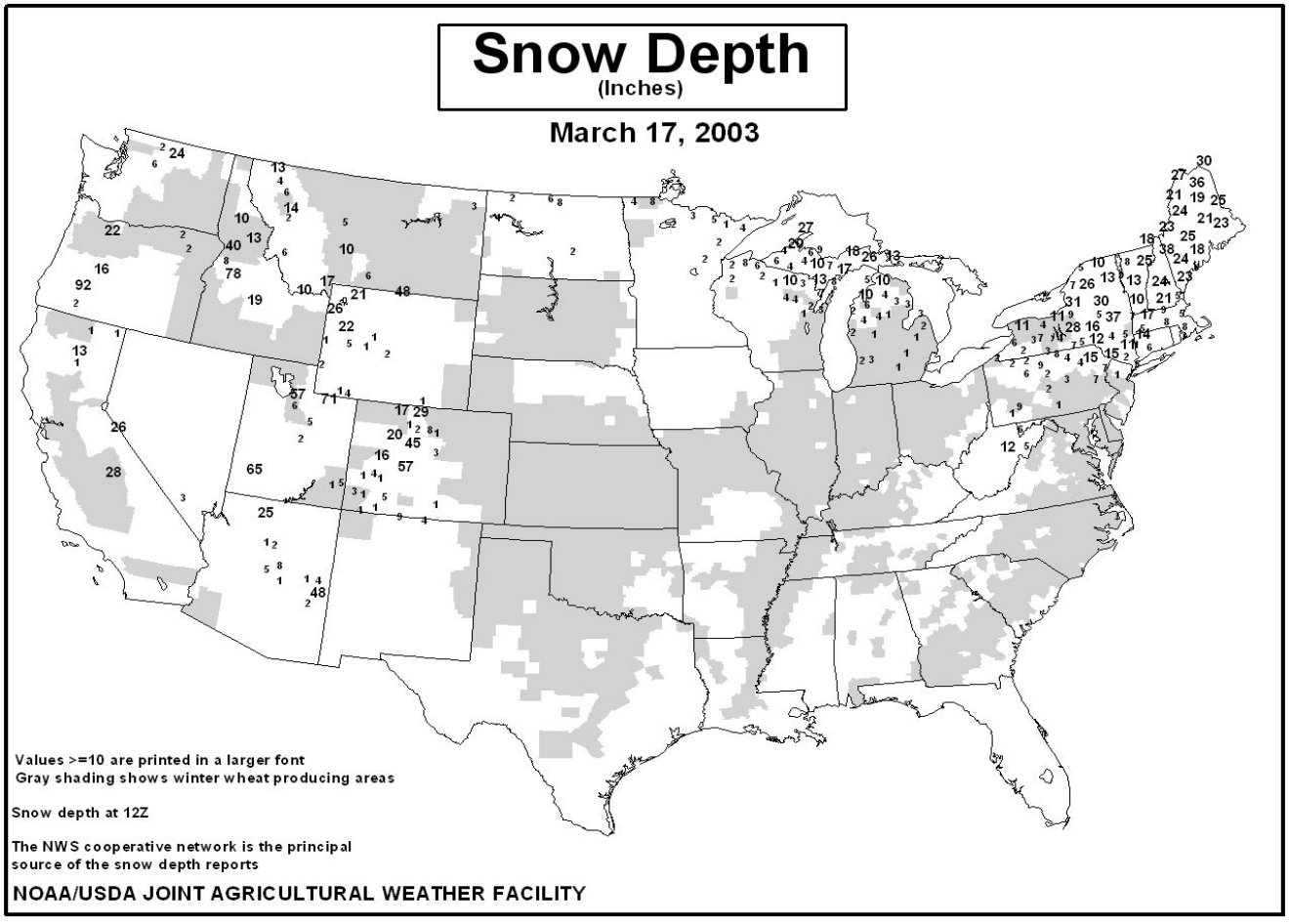
National Agricultural Summary

March 10 - 16, 2003

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Seasonal rainfall continued along the Pacific coast, while dry conditions prevailed in eastern Washington and Oregon. Across the Rocky Mountain region, pasture condition ratings were much poorer than this time last year, further emphasizing dry conditions. Warmer-than-normal weather across the central Great Plains contributed to advanced growth in wheat and pasture land. Precipitation continued across the Delta and Southeast. Mild, sunny California weather promoted vigorous growth in wheat, barley, oat, and winter forage fields. Pre-plant irrigation and herbicide treatment of corn and cotton fields continued. Fields of alfalfa for hay and seed showed strong development. Fruit and almond trees continued to bloom across the State, and trees displayed new leaves. Swelling buds and newly opened green shoots appeared in many vineyards. Navel orange and lemon harvests continued. Wet conditions slowed vegetable fieldwork in the Central Coast region. Additional rainfall late in the week proved beneficial to foothill pastures. Pasture conditions were good to excellent. Livestock were in good condition, with only minimal supplemental feeding reported. Mild weather descended on most of Texas. The State experienced highs in the 70s and 80s degrees Fahrenheit at the end of the week. The High Plains and western Texas had little or no precipitation. Mild weather allowed some producers to plant corn and sorghum. In the Rio Grande Valley, producers harvested sugarcane, citrus, greens, carrots, and cabbage. Cattle were moved from wheat pastures where wheat will be harvested for grain. Some producers irrigated wheat but sparingly due to high fuel costs. Range and pasture conditions on the plains and Trans Pecos declined quickly due to a lack of moisture. Pasture conditions in other areas of Texas improved as the sun made a welcomed appearance. Hay supplies were beginning to run short in eastern Texas due to consistent rain during the winter. Rain in Florida added moisture to soils in the northern and central peninsula and panhandle counties. Soil moisture supplies were rated short to mostly adequate. Drier conditions allowed some field preparations for corn, soybean, peanut, and cotton plantings. Sugarcane harvest in the Everglades was active. Dry conditions allowed vegetable planting and picking to proceed. Strawberry picking was slowing seasonally. In the panhandle and northern areas, pastures improved following rainfall and warmer weather. Early-season pastures grew at a rapid pace. In central and southwestern areas, range conditions declined due to drought. Statewide, cattle were in fair to good condition. Many citrus growers irrigated on a rotating basis to ensure good tree condition during the bloom cycle.



March 6 ENSO Update

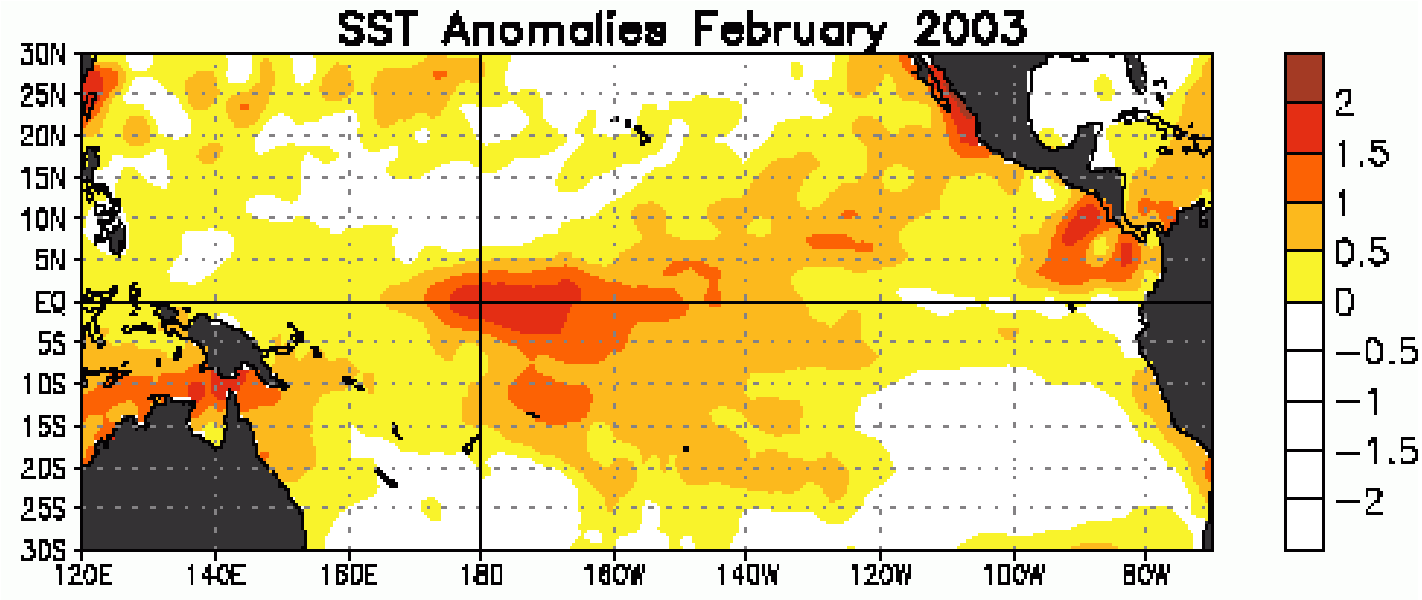


Figure 1. Sea surface temperature (SST) anomalies during February 2003. Departures from average are computed based on the 1971-2000 base period means. Image has been altered to only show positive anomalies for easier viewing. Units are ˚C.

Warm episode (El Niño) conditions continued to weaken during February 2003, as SST anomalies decreased throughout the eastern and central equatorial Pacific (Fig. 1). Since December, SST anomalies have decreased by more than 2˚C in the eastern equatorial Pacific between 130˚W and the South American coast. This decrease has resulted in near normal or slightly below normal SSTs in the region east of 120˚W during February. Since December, there has also been a steady decrease in the magnitude and extent of the positive subsurface temperature anomalies, indicating a depletion of the excess warmth in the upper ocean of the equatorial Pacific (Fig. 2). This evolution is typical during the decay phases of warm episodes.

In spite of these trends, significant positive SST anomalies in the central equatorial Pacific continued during February 2003, with anomalies greater than +1˚C extending from 170˚E to 150˚W. In addition, enhanced precipitation and cloudiness were found over this region and some atmospheric circulation indices, such as the SOI, continued to reflect warm (El Niño) episode conditions.

Consistent with current conditions and recent observed trends, most coupled model and statistical model forecasts indicate that El Niño conditions will continue to weaken through March 2003. Thereafter, the consensus forecast is for near-normal conditions during April-October 2003. However, there is a wide spread amongst the individual forecasts, with some indicating the possibility of continued weak El Niño conditions and others indicating the development of La Niña conditions during the last half of 2003. The recent cooling of the upper ocean (surface and subsurface) in the eastern equatorial Pacific supports the possibility of the development of La Niña later this year.

This discussion is a team effort of NOAA and its funded institutions. Updates of SST, 850-hPa wind, OLR, and the equatorial subsurface temperature structure are available on the Climate Prediction Center (CPC) web page at http://www.cpc.ncep.noaa.gov (Weekly Update). Forecasts for the evolution of El Niño/La Niña are updated monthly in CPC's Climate Diagnostics Bulletin Forecast Forum.

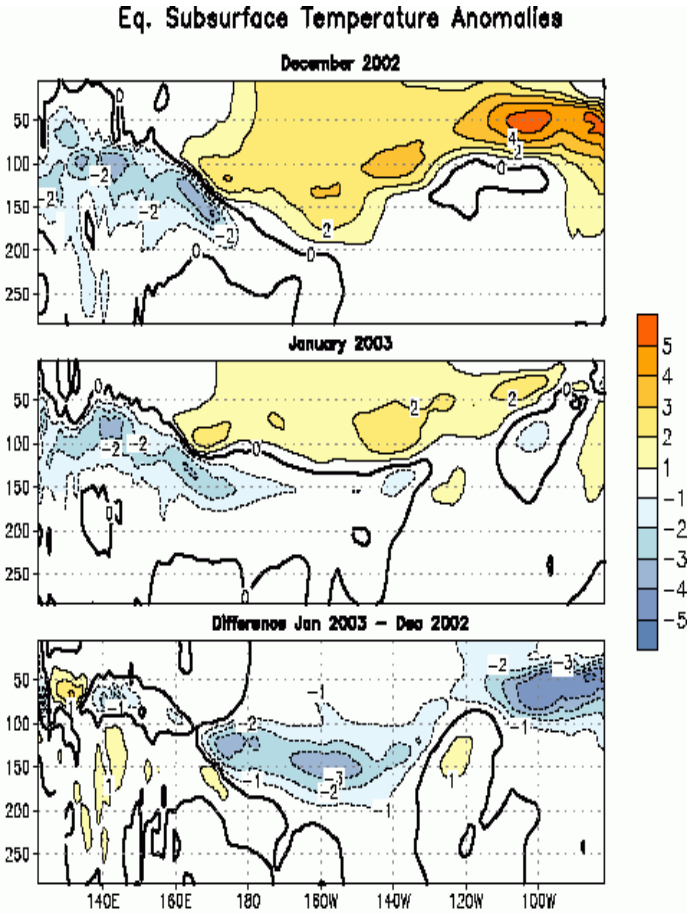


Figure 2. Equatorial depth-longitude cross section of ocean temperature anomalies for December 2002 (top panel), January 2003 (middle panel), and the difference between the 2 months (bottom panel). Dashed contours indicate negative anomalies.

International Weather and Crop Summary

March 9 - 15, 2003

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

HIGHLIGHTS

FSU-WESTERN: Unseasonably cold weather continued in Ukraine, maintaining a later-than-usual snow cover and preventing early spring fieldwork.

EUROPE: Across western Europe, unseasonably warm, dry weather caused winter crops to continue breaking dormancy, but topsoil moisture was becoming limited for rainfed, greening winter crops.

EASTERN ASIA: Precipitation benefited greening winter wheat on the North China Plain.

SOUTHEAST ASIA: Showers slowed rice maturation in Java, Indonesia, but favored reproductive rice in Indochina.

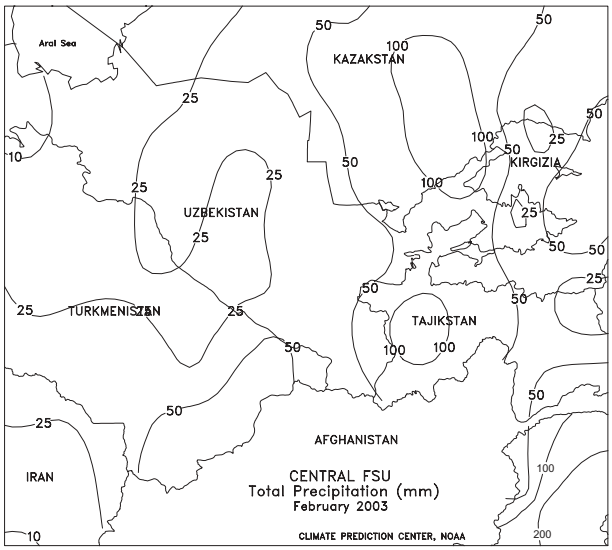
AUSTRALIA: Showers came too late to improve prospects for drought-stressed summer crops in Queensland and northern New South Wales.

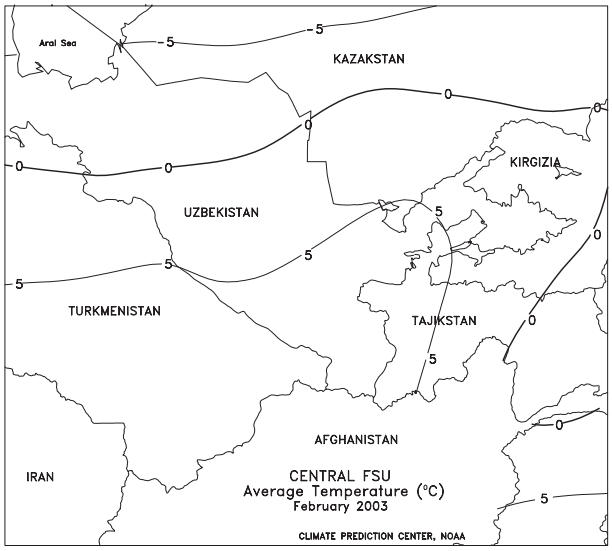
NORTHWESTERN AFRICA: Across Morocco and most of Algeria, continued warm, dry weather started to reduce soil moisture for early reproductive winter grains and stressed winter crops with limited soil moisture in southern Morocco.

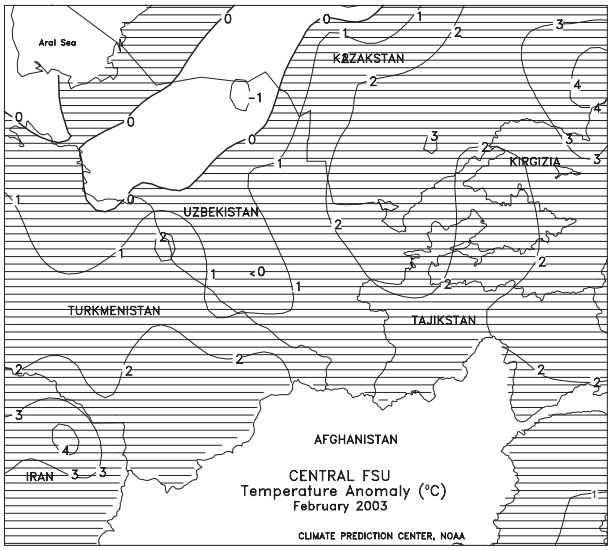
SOUTH AFRICA: Hot, mostly dry weather in the corn belt further reduced moisture supplies for filling summer crops.

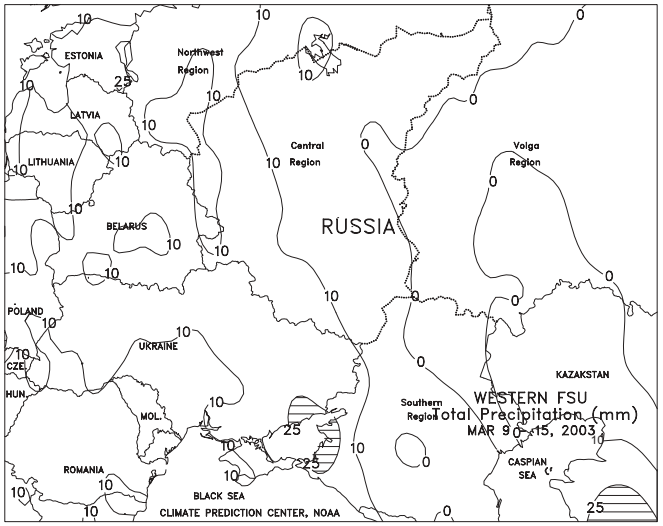
MIDDLE EAST: Across central Turkey and western Iran, seasonably warmer weather caused winter grains to start breaking dormancy.

SOUTH AMERICA: Widespread, locally heavy showers maintained generally favorable conditions for summer crop development.



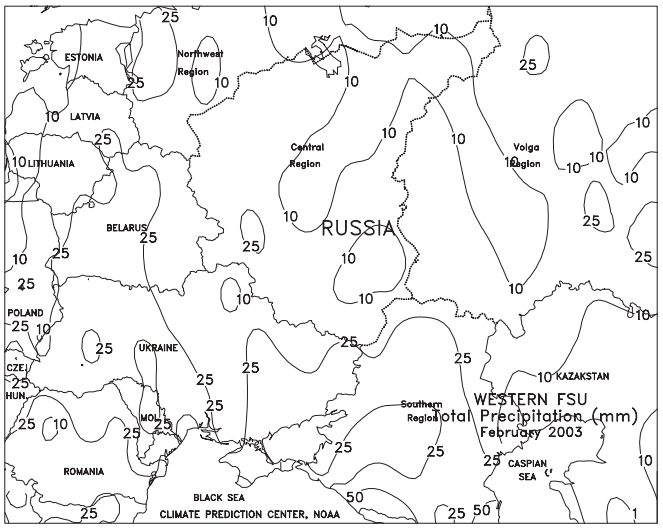


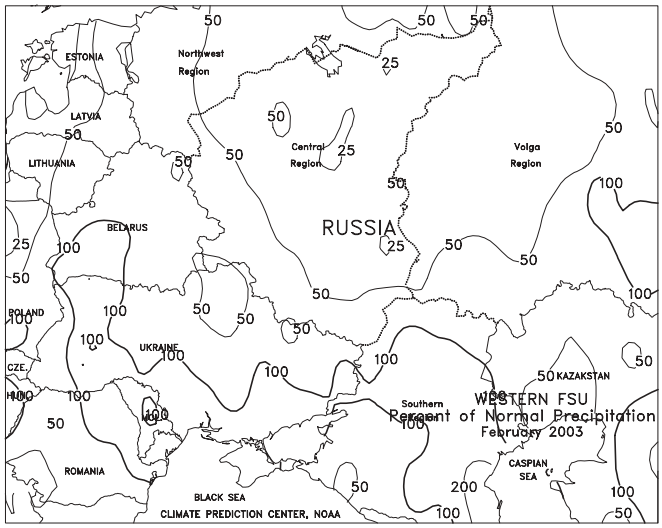


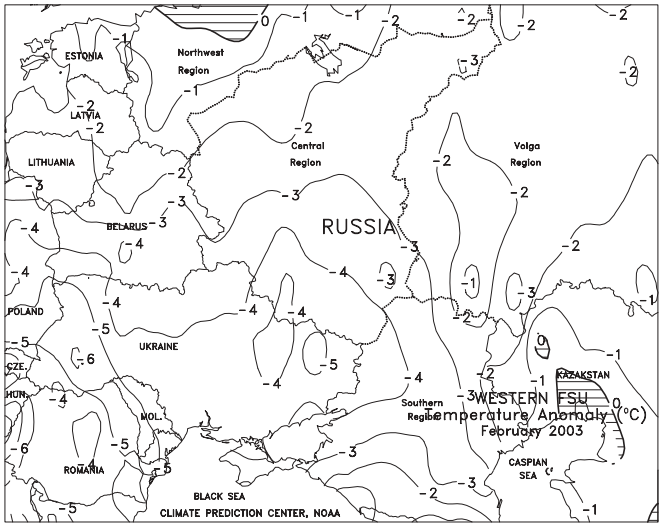


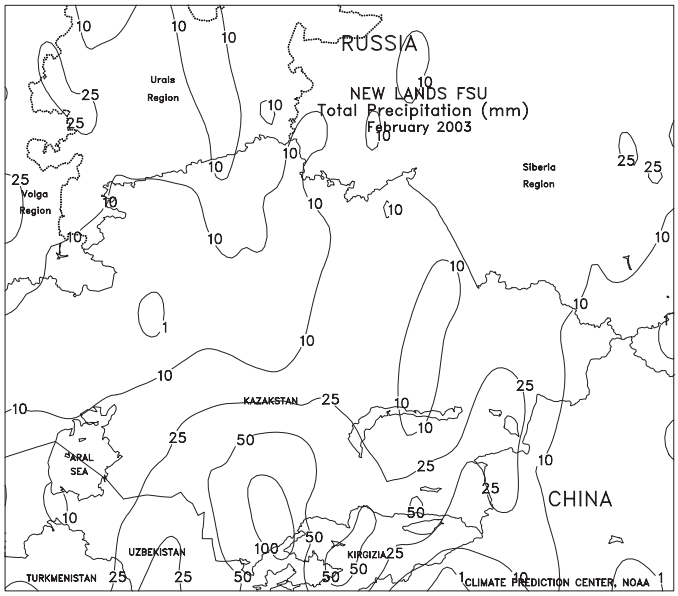
FSU-WESTERN

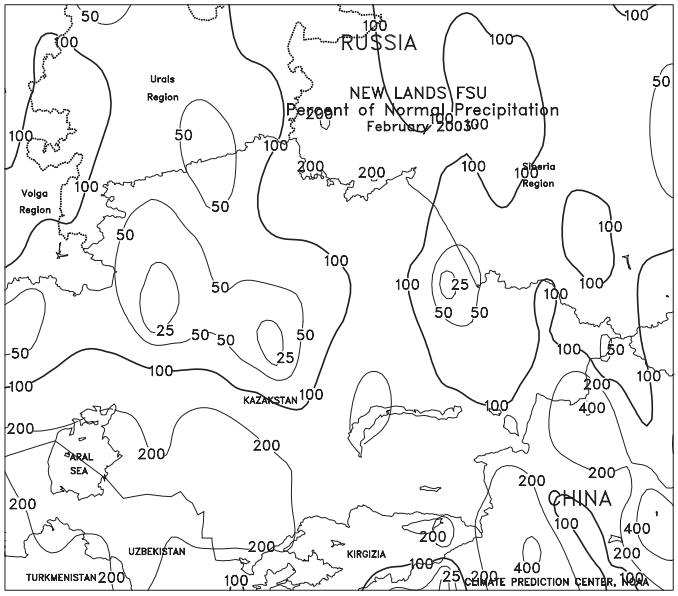
The persistent ridge of high pressure that had kept most of the region unseasonably cold for nearly a month weakened, allowing a moderation in temperatures across the Baltics, northern Belarus, and northern Russia. Weekly temperatures averaged 1 to 5 degrees C above normal in these areas, causing some melting of snow cover. Farther south, unseasonably cold weather continued to prevail across Ukraine, while temperatures averaged near to slightly below normal in the Southern and lower Volga Regions in Russia. The cold weather in Ukraine maintained an unusually late snow cover, preventing early spring fieldwork. A lack of snow cover along with mostly dry weather in the Southern Region in Russia allowed some early season fieldwork. A deep snowpack (greater than 10 cm) remained in the Central Region, Volga Region, northern portions of the Southern Region, and eastern Ukraine. In February, unseasonably cold weather persisted over winter grain areas in Ukraine, Russia, Belarus, and the Baltics, maintaining a moderate to deep snow cover. The snow cover protected winter grains from the coldest February weather since at least 1996. In major winter wheat-producing areas of Ukraine and the Southern Region in Russia, the lowest temperatures (-28 to -17 degrees C) were observed during February 16-22. Monthly temperatures averaged 3 to 6 degrees C below normal in Ukraine and the Southern Region in Russia, and 2 to 4 degrees C below normal in northern Russia, Belarus, and the Baltics. Although below-normal precipitation was observed at most locations in February, periods of light snow boosted snow cover.

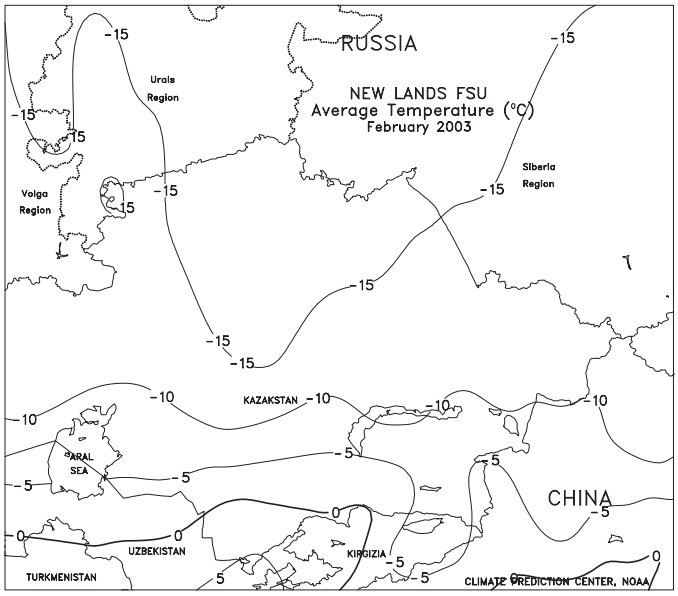


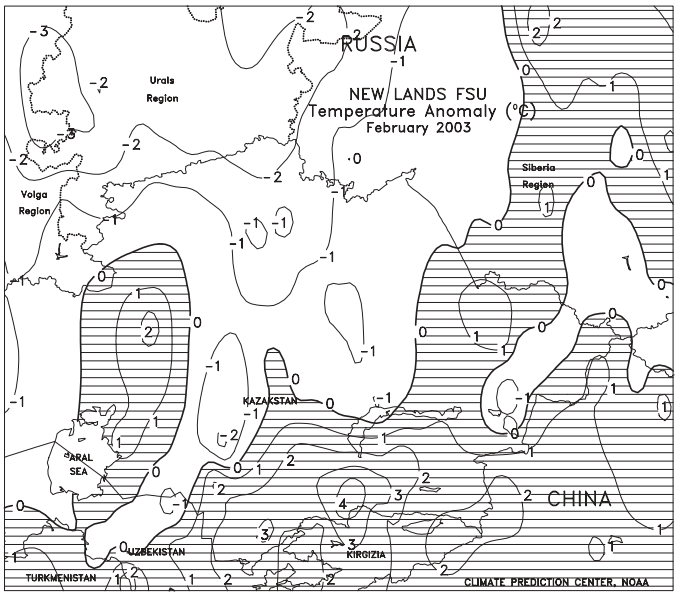


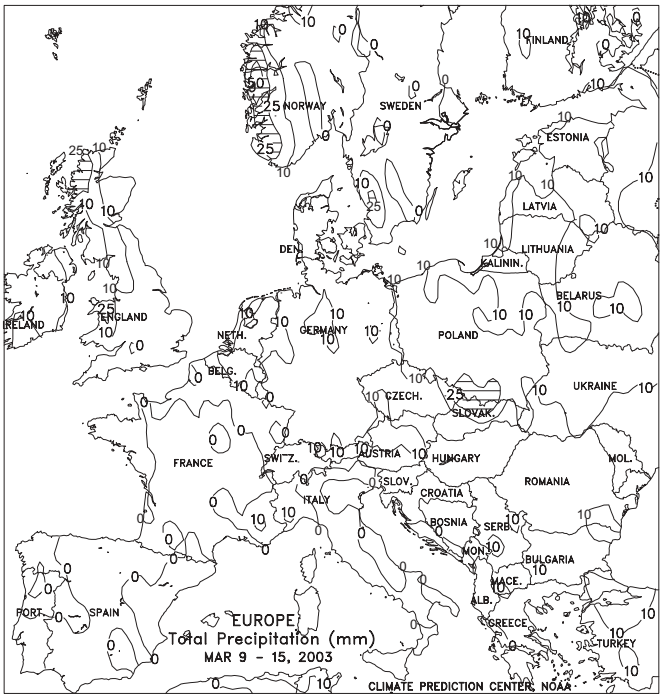



RUSSIA
NEW LANDS FSU
Total Precipitation (mm)
February 2003
Urals Region
Volga Region
Siberia Region
KAZAKSTAN
ARAL SEA
UZBEKISTAN
KIRGIZIA
TURKMENISTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA


RUSSIA
NEW LANDS FSU
Percent of Normal Precipitation
February 2003
Urals Region
Volga Region
Siberia Region
KAZAKSTAN
ARAL SEA
UZBEKISTAN
KIRGIZIA
TURKMENISTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA

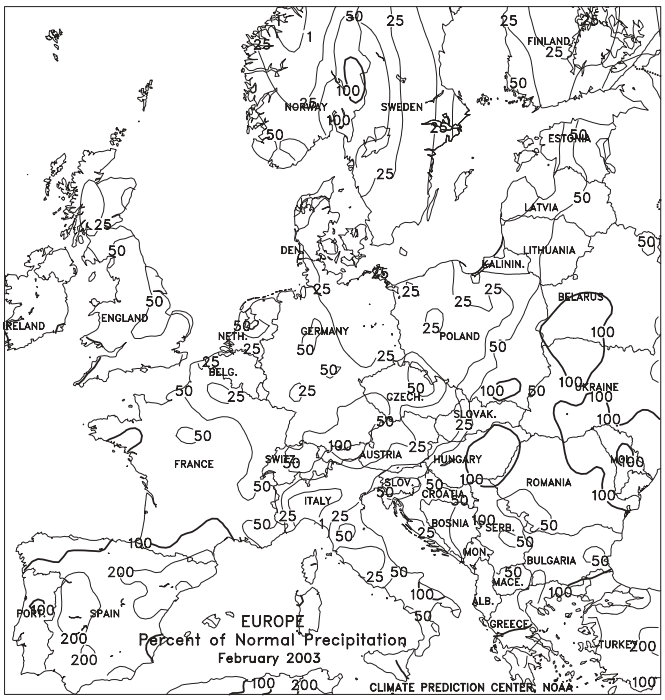

RUSSIA
NEW LANDS FSU
Average Temperature (°C)
February 2003
Urals Region
Volga Region
Siberia Region
KAZAKSTAN
ARAL SEA
UZBEKISTAN
KIRGIZIA
TURKMENISTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA

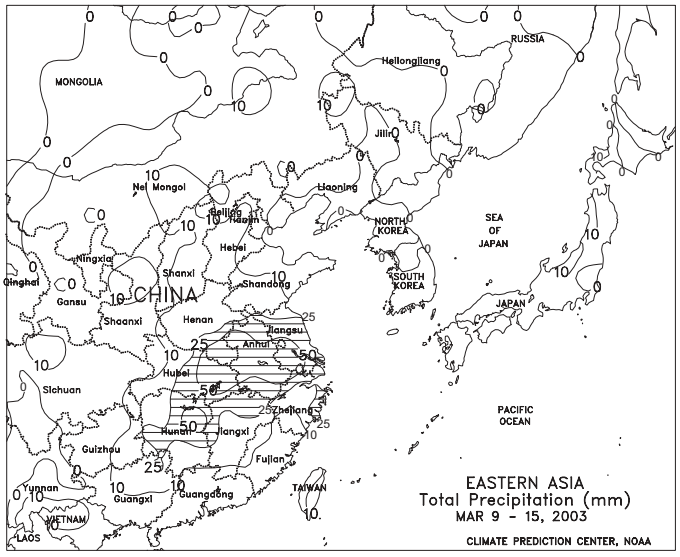

RUSSIA
NEW LANDS FSU
Temperature Anomaly (°C)
February 2003
Urals Region
Volga Region
Siberia Region
KAZAKSTAN
ARAL SEA
UZBEKISTAN
KIRGIZIA
TURKMENISTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA



EUROPE

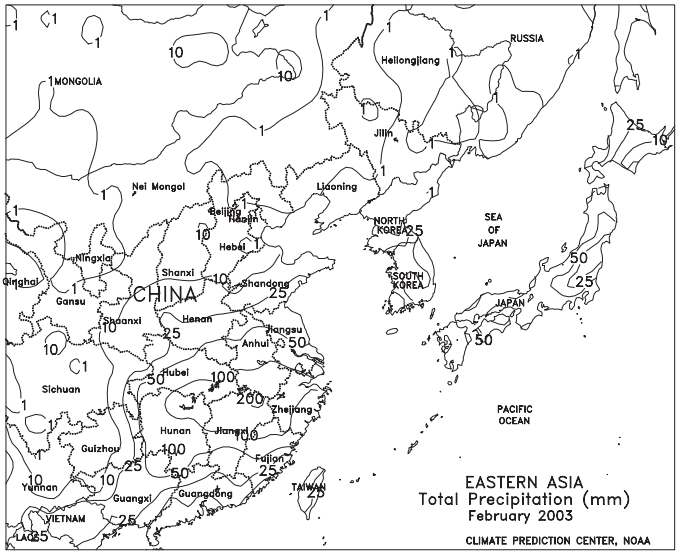
A high-pressure area centered over southern England and northern France kept most of western Europe dry and unseasonably warm (temperatures 2-4 degrees C above normal). The warmer weather caused winter grains and oilseeds to continue breaking dormancy across most of the region, including most of Germany. Maximum temperatures reached 12 to 18 degrees C from England and northern France eastward into western Poland and 18 to 23 degrees C across the most of Spain, northern Italy, and the rest of France. The only significant rain fell in the Low Countries and extreme northwest Germany (5-15 mm) and across Poland (10-25 mm), increasing topsoil moisture for winter crops. In England, France, and northern Italy, topsoil moisture was becoming limited for rainfed greening winter crops, but adequate subsoil moisture existed. In eastern Europe, seasonably warmer weather prompted winter crops to lose winter hardiness and continued to melt snow cover. Temperatures averaged slightly above normal in Poland and slightly below normal in the southeast. Dry weather prevailed across the Iberian Peninsula and Italy, favoring fieldwork. However, unseasonably warm weather (temperatures averaging 2-4 degrees C above normal, with highs exceeding 27 degrees C) in southern Spain increased irrigation demands. During February, northern and central Europe received below-normal precipitation, but soil moisture and irrigation supplies remained adequate for dormant winter grains and oilseeds. However, short-term moisture deficits developed in northern Italy. Near- to above-normal precipitation maintained favorable moisture supplies across the Iberian Peninsula, southern Italy, and southeastern Europe. Moderate to heavy snow cover protected winter crops from unseasonably cold weather in eastern Europe.





EASTERN ASIA

On the North China Plain, mild, showery weather (temperatures averaging near to slightly below normal, with precipitation of 2-10 mm or more) benefited winter wheat that was greening or beginning to break dormancy. The lowest minimum temperatures stayed above -5 degrees C in all but the coldest, more northerly growing areas. Moderate to heavy rain (25-50 mm or more) continued in the middle and lower Yangtze Valley, increasing irrigation reserves for newly planted rice and other summer crops, although cool weather (lows below 5 degrees C) slowed emergence. Elsewhere, precipitation (5-10 mm or more) lingered over Japan, accompanied by colder-than-normal weather. Warmer- and drier-than-normal weather prevailed on the Korean Peninsula. During February, above-normal temperatures favored overwintering wheat on the North China Plain, limiting the potential for winterkill. Early in the month, snow cover offered some protection from outbreaks of bitter cold. During that same period, however, freezing temperatures raised some concern for sugarcane and winter rapeseed in the Yangtze Valley. Above-normal February rainfall increased irrigation reserves in the middle and lower Yangtze Valley but may have caused some delays in spring fieldwork, including preparations for planting early double-crop rice. Elsewhere, near- to above-normal precipitation improved long-term moisture reserves in South Korea and southern Japan, with overall lighter precipitation elsewhere in the region.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Heilongjiang
Jilin
Liaoning
Nei Mongol
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Tianjin
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Ningxia
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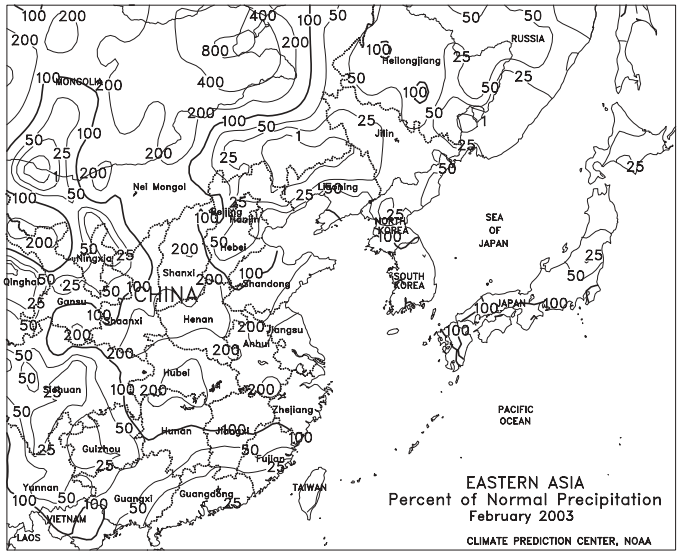
Qinghai
Gansu
CHINA
Shaanxi
Henan
Jiangsu
Anhui
Hubei
Sichuan
Zhejiang
Hunan
Jiangxi
Guizhou
Fujian
Yunnan
Guangxi
Guangdong
TAIWAN
VIETNAM
LAOS
NORTH KOREA
SOUTH KOREA
SEA OF JAPAN
JAPAN
PACIFIC OCEAN
EASTERN ASIA
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA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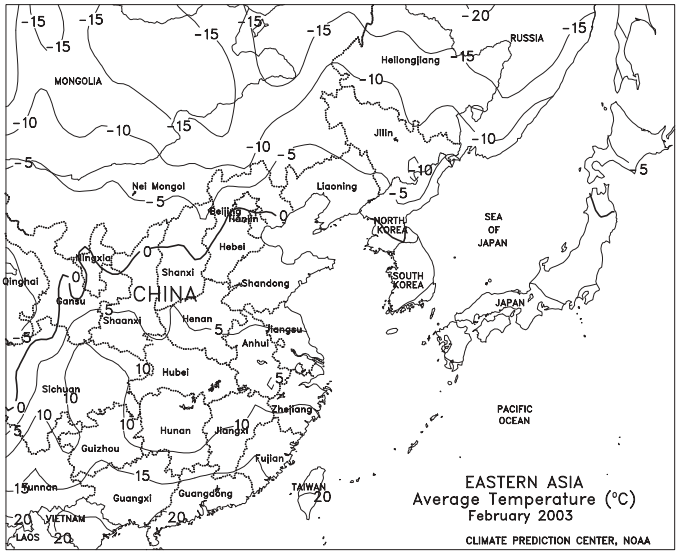
Qinghai
Gansu
CHINA
Shaanxi
Henan
Jiangsu
Anhui
Hubei
Sichuan
Zhejiang
Hunan
Jiangxi
Guizhou
Fujian
Yunnan
Guangxi
Guangdong
TAIWAN
VIETNAM
LAOS
NORTH KOREA
SOUTH KOREA
SEA OF JAPAN
JAPAN
PACIFIC OCEAN
EASTERN ASIA
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA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Gansu
CHINA
Shaanxi
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Jiangsu
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Zhejiang
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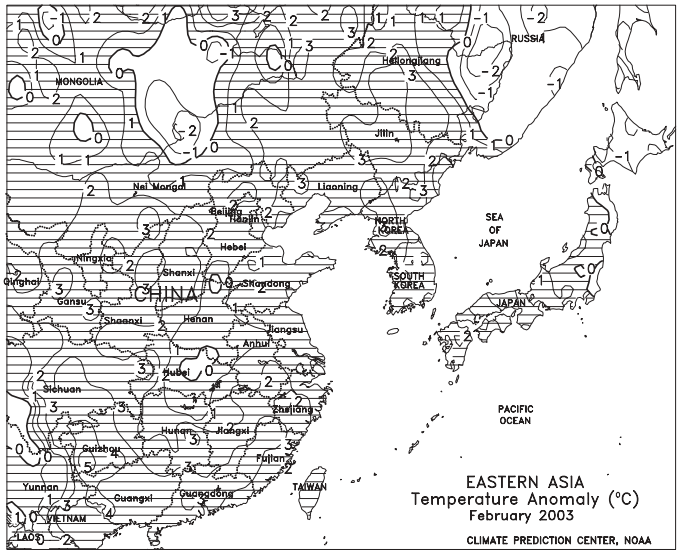
Guizhou
Fujian
Yunnan
Guangxi
Guangdong
TAIWAN
VIETNAM
LAOS
NORTH KOREA
SOUTH KOREA
SEA OF JAPAN
JAPAN
PACIFIC OCEAN
EASTERN ASIA
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA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CHINA
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Jiangsu
Anhui
Hubei
Sichuan
Zhejiang
Hunan
Jiangxi
Guizhou
Fujian
Yunnan
Guangxi
Guangdong
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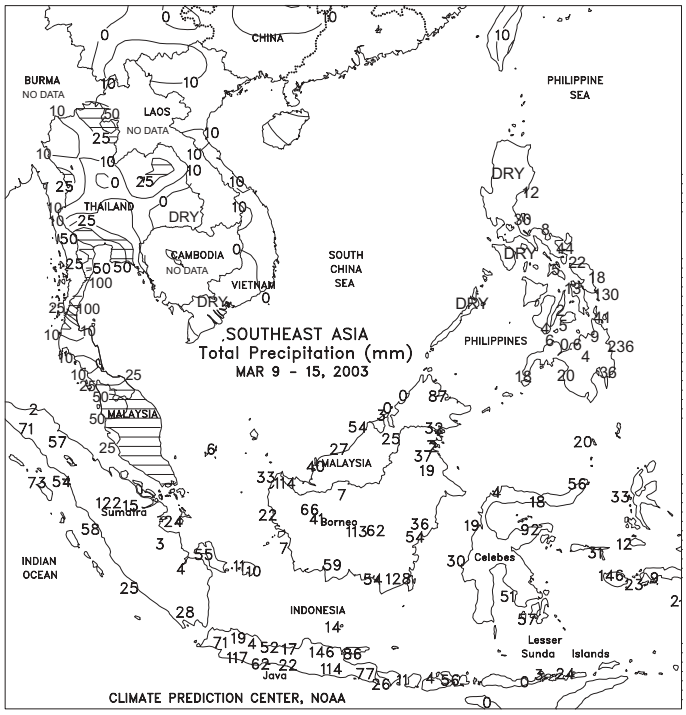
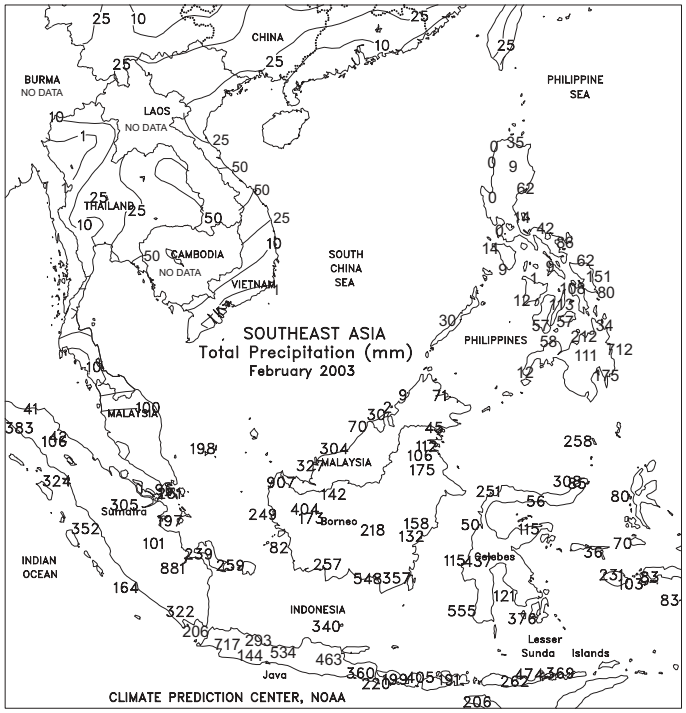
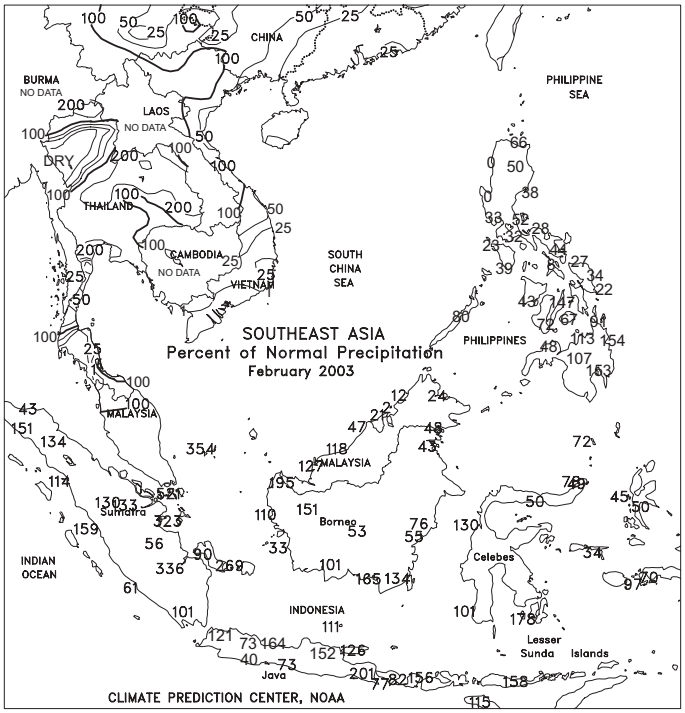
VIETNAM
LAOS
NORTH KOREA
SOUTH KOREA
SEA OF JAPAN
JAPAN
PACIFIC OCEAN
EASTERN ASIA
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

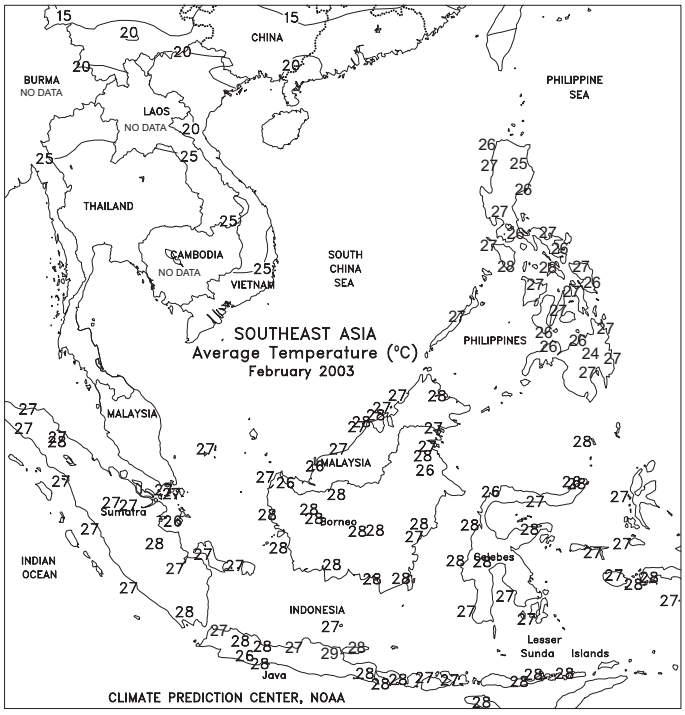


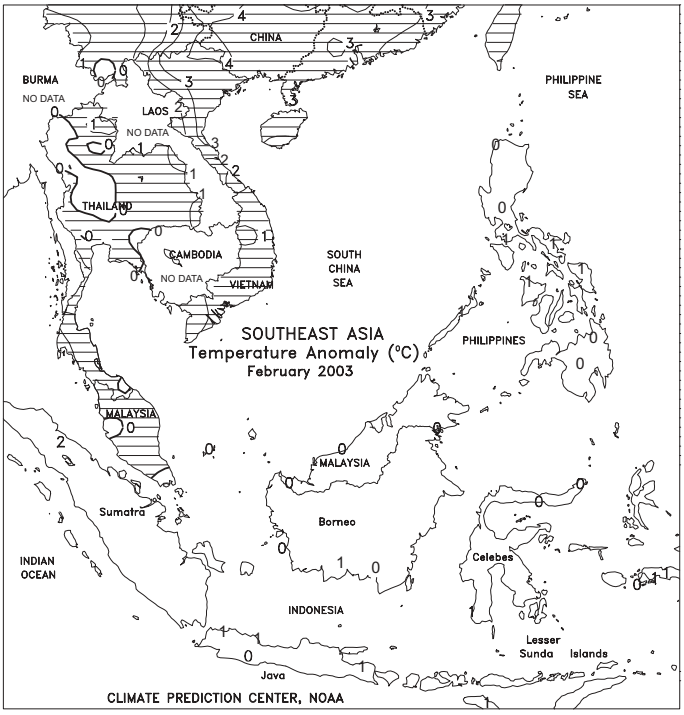
SOUTHEAST ASIA

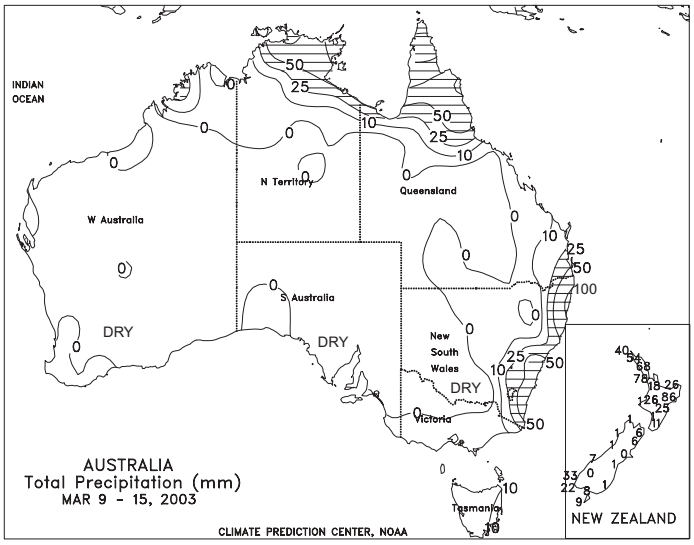
Heavy showers (25-150 mm) slowed maturation of main-season rice in Java, Indonesia. Dry weather in the western Philippines favored second-season rice harvesting, while heavy showers (25-200 mm) in the east caused local flooding. Light showers (1-10 mm) supplemented irrigation supplies for reproductive winter-spring rice in northern Vietnam. Scattered showers boosted irrigation supplies for reproductive second-season rice in Thailand. An increase in showers boosted moisture supplies for oil palm in peninsular Malaysia and Sumatra. In February, above-normal rainfall eased long-term dryness in Java, Indonesia, favoring reproductive rice. Generally dry weather in the Philippines was beneficial for maturing rice. Well above-normal temperatures in northern Vietnam reduced irrigation supplies for reproductive rice. In Thailand, above-normal rainfall supplemented irrigation supplies for vegetative rice. Above-normal showers in peninsular Malaysia and Sumatra boosted moisture supplies for oil palm.





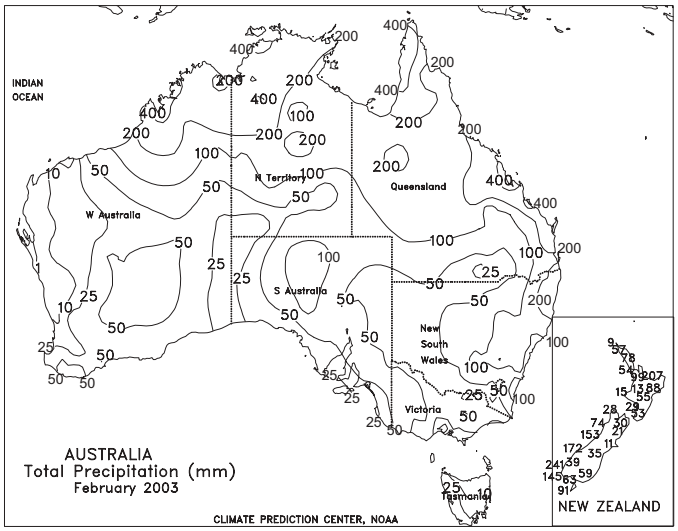


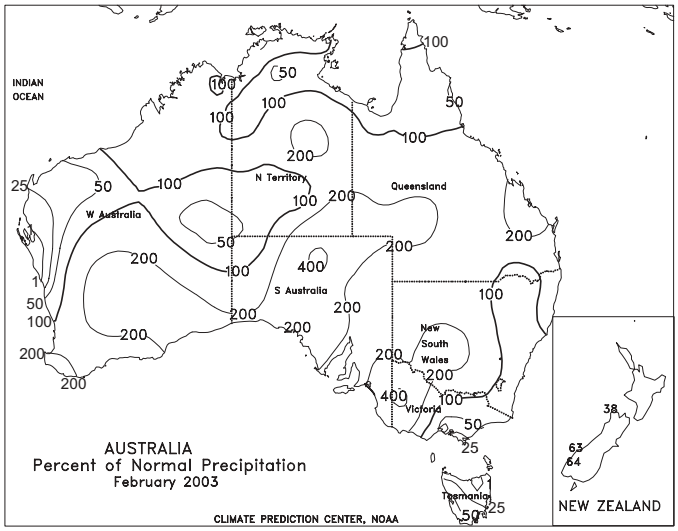


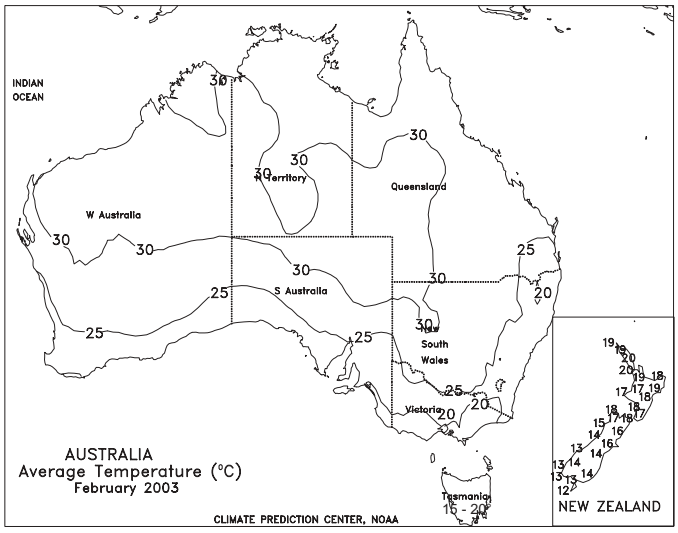


AUSTRALIA

Light showers (3-19 mm) moistened topsoils in southern Queensland and northern New South Wales. Nevertheless, the rain was much too late to improve prospects for drought-stressed summer crops, approaching or advancing through maturation in many areas. Elsewhere in Australia, hot, dry weather prevailed. In southern New South Wales, northern Victoria, South Australia, and Western Australia, major winter grain areas continued to need soaking rains to end the severe drought stretching across this region. Hot weather (temperatures averaging 5 degrees C above normal, with maximum temperatures near 40 degrees C) in Western Australia offered no drought relief. Elsewhere, seasonably hot weather prevailed (maximum temperatures in the upper 20s to lower 30s degrees C). In February, heavy rain along the coast of Queensland boosted moisture supplies for sugarcane. Farther inland, near-normal rainfall was welcomed but did not improve yield prospects for drought-damaged summer crops in southern Queensland and northern New South Wales.


INDIAN OCEAN
W Australia
N Territory
Queensland
S Australia
New South Wales
Victoria
Tasmania
NEW ZEALAND
AUSTRALIA
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA


INDIAN OCEAN
W Australia
N Territory
Queensland
S Australia
New South Wales
Victoria
Tasmania
NEW ZEALAND
AUSTRALIA
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA


INDIAN OCEAN
W Australia
N Territory
Queensland
S Australia
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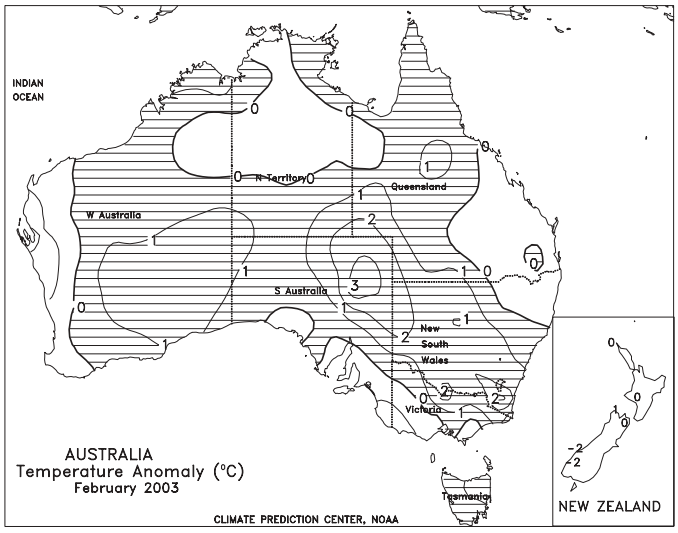
Victoria
Tasmania
NEW ZEALAND
AUSTRALIA
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA


INDIAN OCEAN
W Australia
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Queensland
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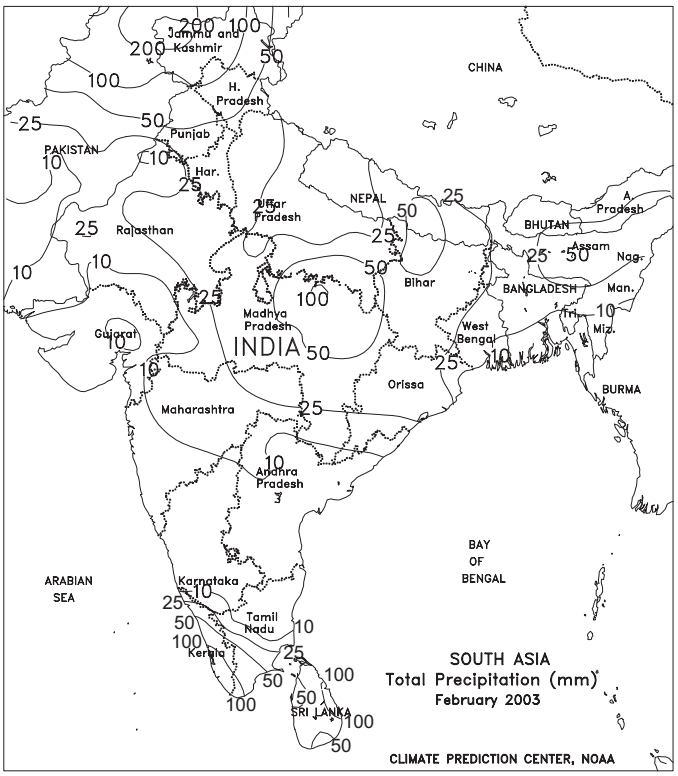
Tasmania
NEW ZEALAND
AUSTRALIA
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA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Punjab
Har.
Uttar Pradesh
Rajasthan
Bihar
Madhya Pradesh
Gujarat
Maharashtra
Orissa
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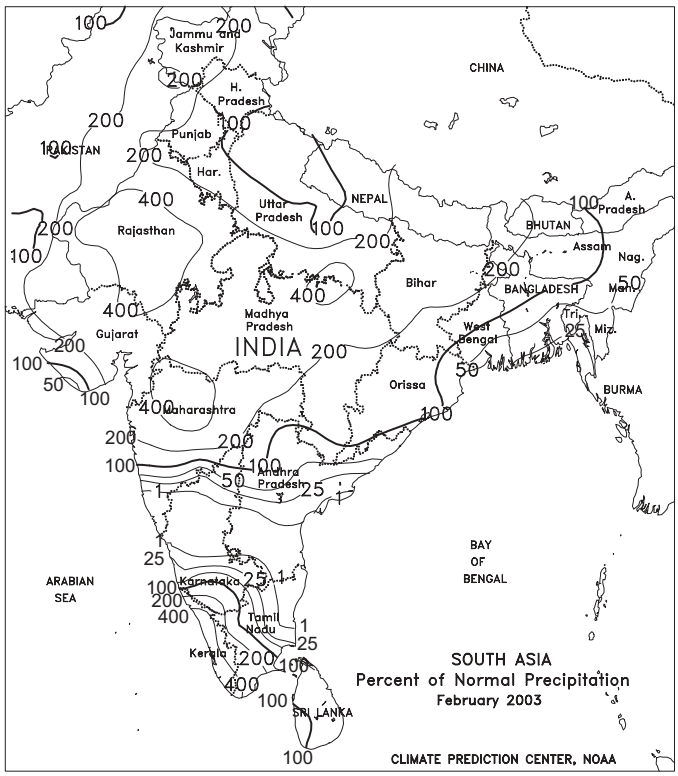
Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
A. Pradesh
Assam
Nag.
Man.
Tri.
Miz.
PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
INDIA
BURMA
SRI LANKA
ARABIAN SEA
BAY OF BENGAL
SOUTH ASIA
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA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Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
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Assam
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Tri.
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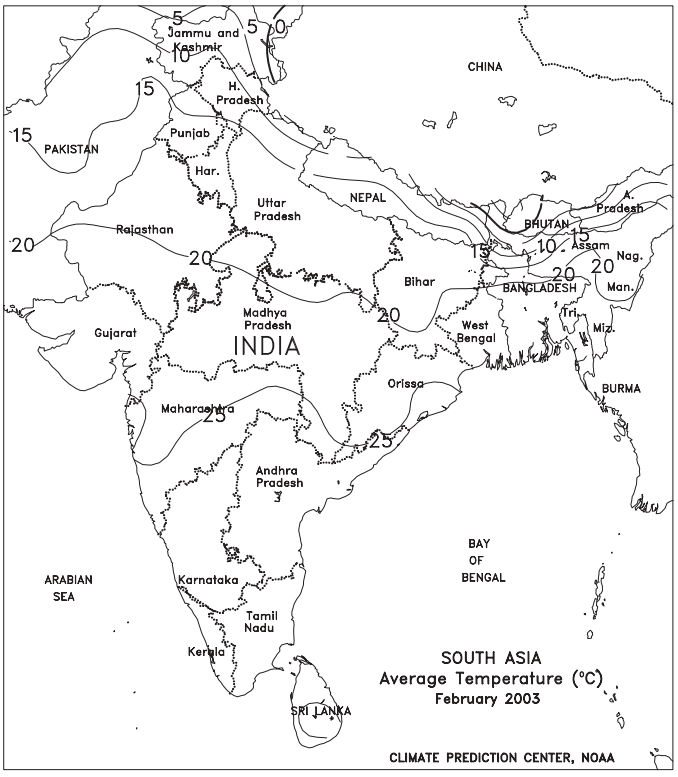
PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
INDIA
BURMA
SRI LANKA
ARABIAN SEA
BAY OF BENGAL
SOUTH ASIA
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA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Bihar
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Gujarat
Maharashtra
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Karnataka
Tamil Nadu
Kerala
A. Pradesh
Assam
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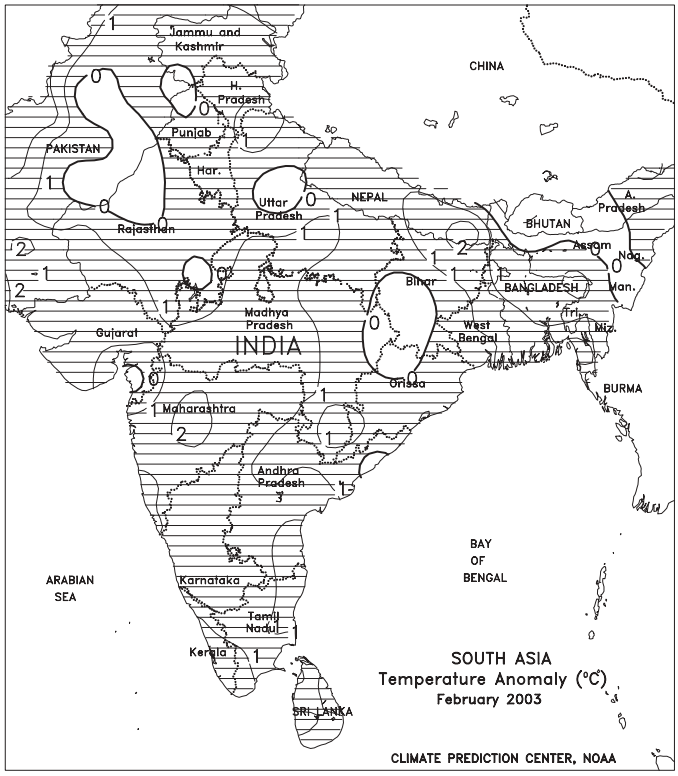
Miz.
PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
INDIA
BURMA
SRI LANKA
ARABIAN SEA
BAY OF BENGAL
SOUTH ASIA
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA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Orissa
West Bengal
Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
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PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
INDIA
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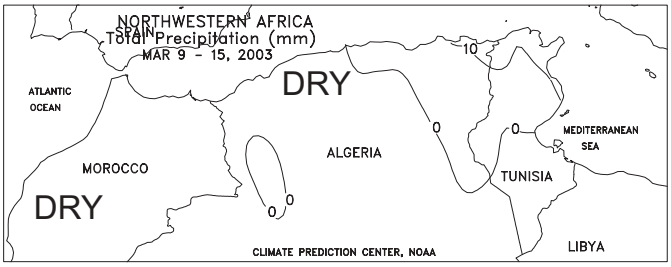
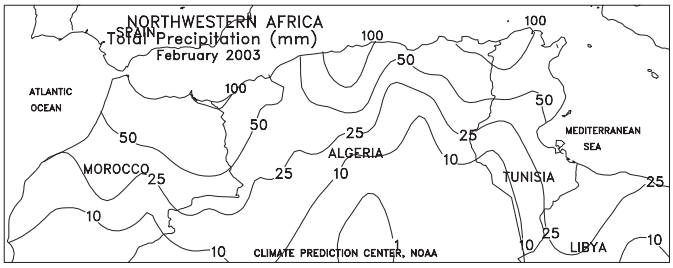
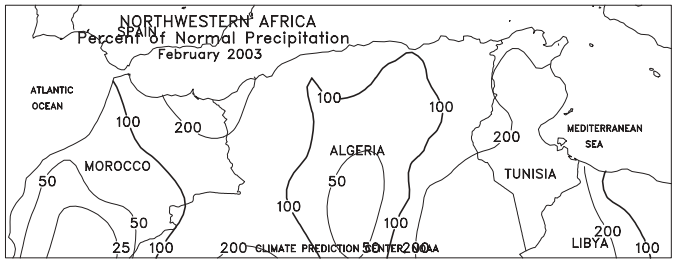
BAY OF BENGAL
SOUTH ASIA
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

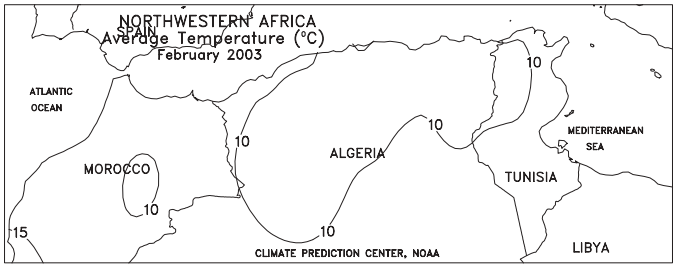


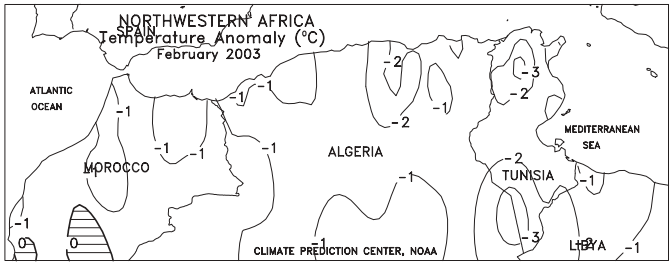
NORTHWESTERN AFRICA

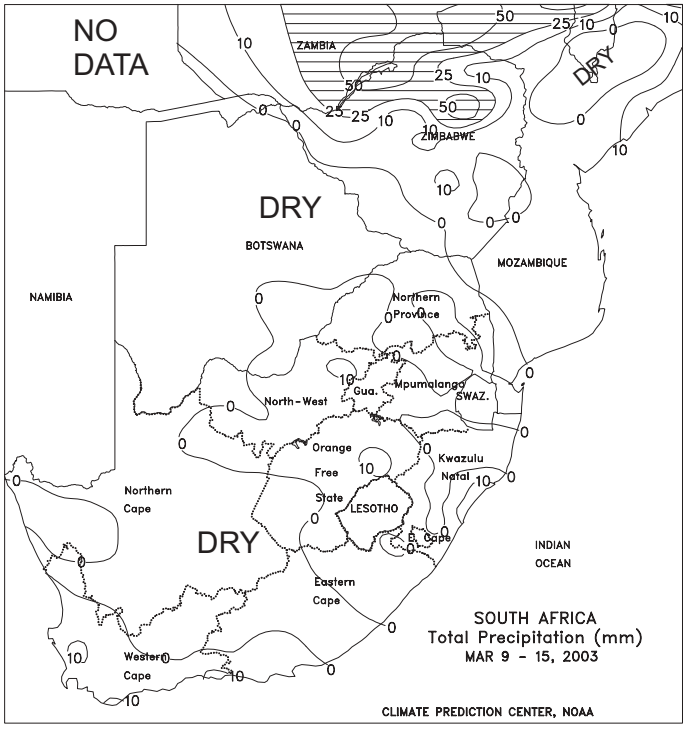
Across Morocco and western and central Algeria, 2 consecutive weeks of warm, dry weather started to reduce soil moisture for vegetative to reproductive winter grains. While soil moisture levels were adequate, rain was needed to maintain these favorable levels. In the southern wheat areas of Morocco, however, hot, dry weather stressed reproductive winter grains. Significant rain (5-20 mm) fell across the wheat areas of Tunisia and extreme eastern Algeria, maintaining favorable soil moisture supplies. Temperatures averaged 1 to 4 degrees C above normal, with maximum temperatures reaching 22 to 27 degrees C across most areas and 27 to 32 degrees C across the southern wheat areas of Morocco. During February, near- to above-normal rainfall maintained adequate to abundant soil moisture supplies for vegetative winter grains in Algeria, Tunisia, and northern Morocco. In southern Morocco, however, below-normal February rainfall continued to reduce soil moisture, but rain during late February provided some relief. Cool weather slowed crop growth across higher elevations.





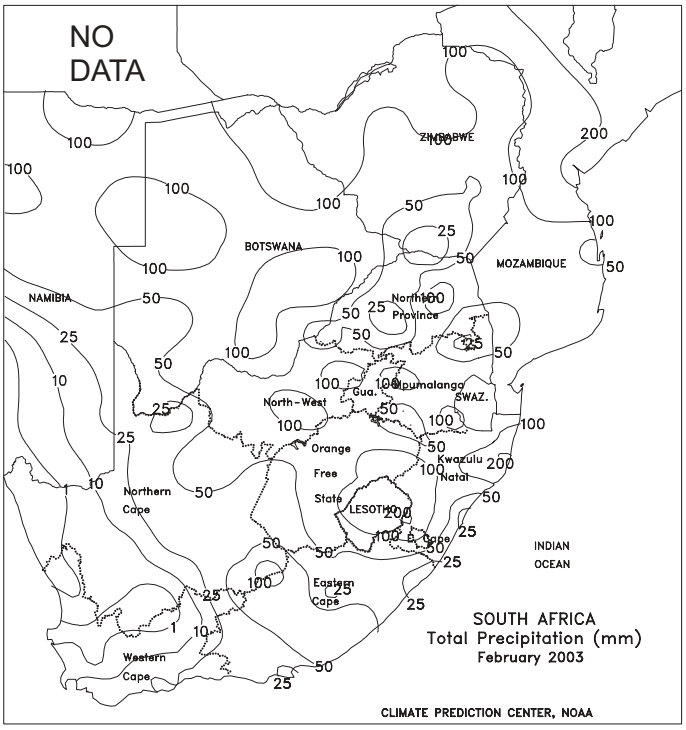






SOUTH AFRICA

For the 2nd consecutive week, light showers (generally less than 5 mm) dampened topsoils in the corn belt, but the rainfall was not sufficient to avoid net evaporative losses. As a result, moisture supplies continued to decline in most areas. In the western corn belt, more rain will be needed soon to maintain current yield prospects. Farther east, where dryness has been more of a problem this growing season, the recent dryness has likely caused additional reductions in yield potential. Temperatures averaged about 2 degrees C above normal in the corn belt, with maximum temperatures in the middle 30s degrees C. In mid-February, soaking rains benefited reproductive corn, but mostly dry, very warm weather during the remainder of the month limited surface and subsoil moisture supplies for summer crops.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NAMIBIA
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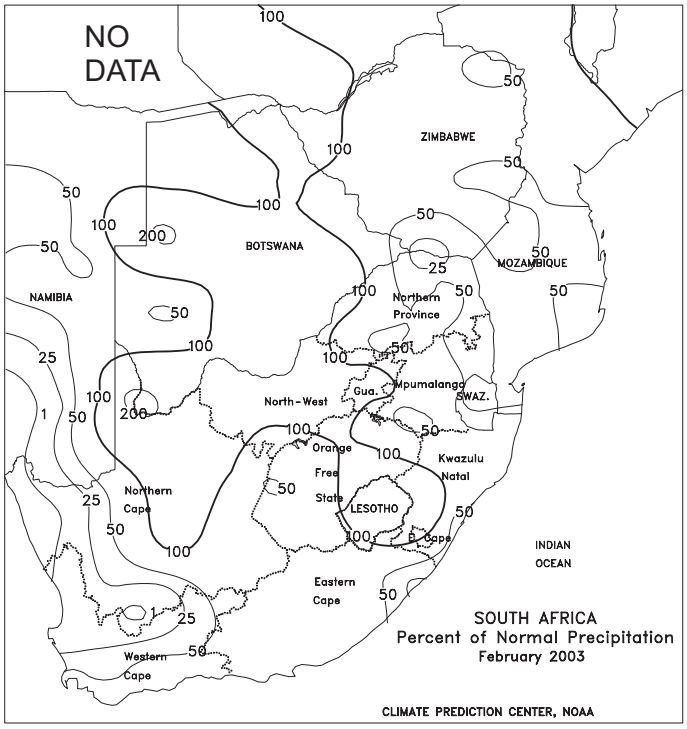
Gua.
Mpumalanga
SWAZ.
Orange Free State
Kwazulu Natal
LESOTHO
Northern Cape
W. Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA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NAMIBIA
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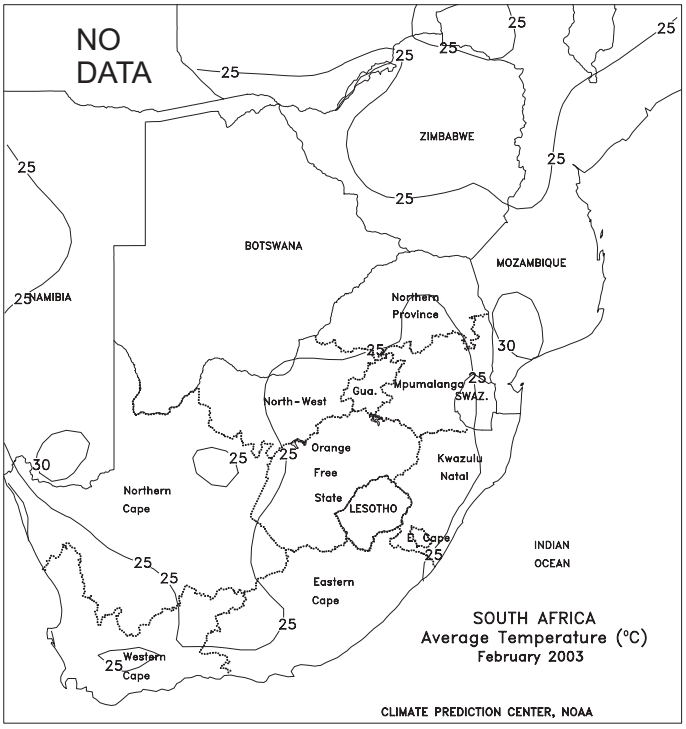
Gua.
Mpumalanga
SWAZ.
Orange Free State
Kwazulu Natal
LESOTHO
Northern Cape
W. Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA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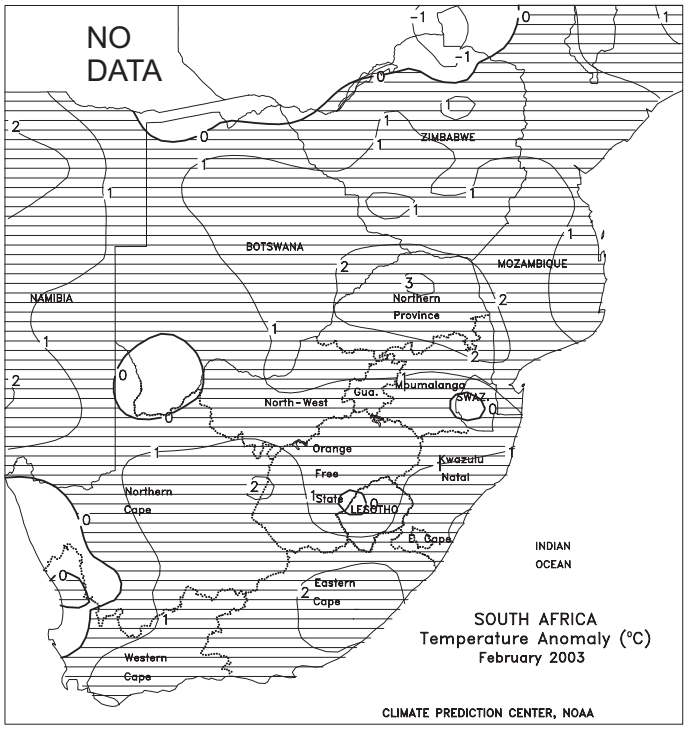
Orange Free State
Kwazulu Natal
LESOTHO
Northern Cape
W. Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA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NAMIBIA
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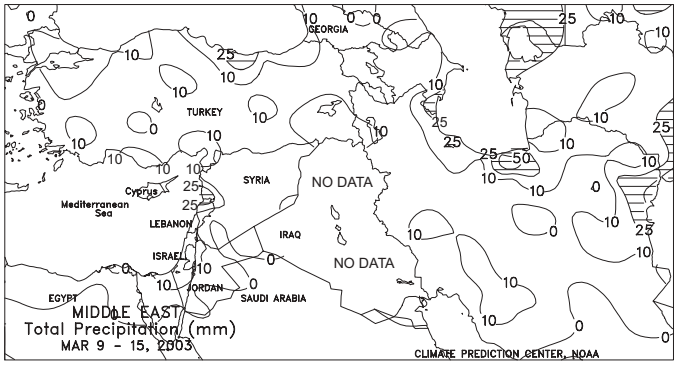
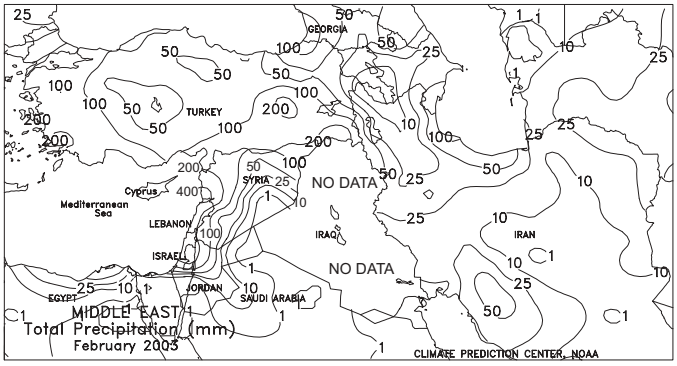
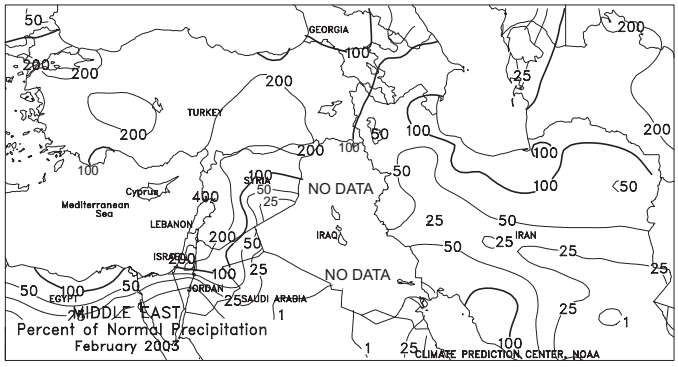
Mpumalanga
SWAZ.
Orange Free State
Kwazulu Natal
LESOTHO
Northern Cape
W. Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

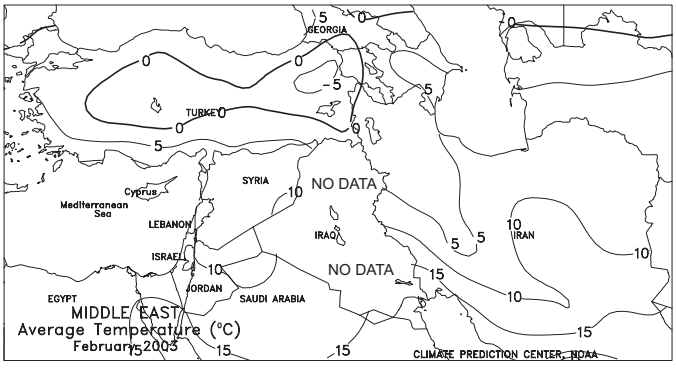


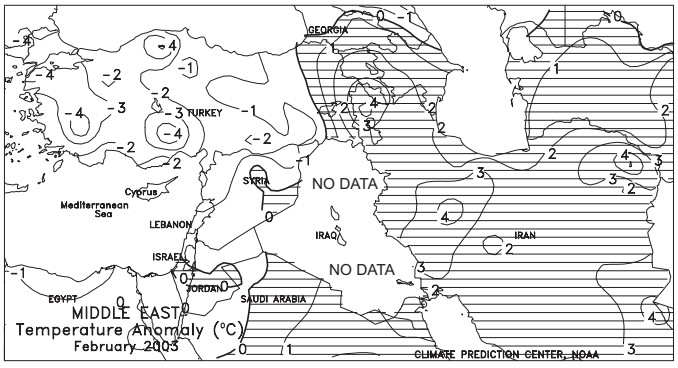
MIDDLE EAST

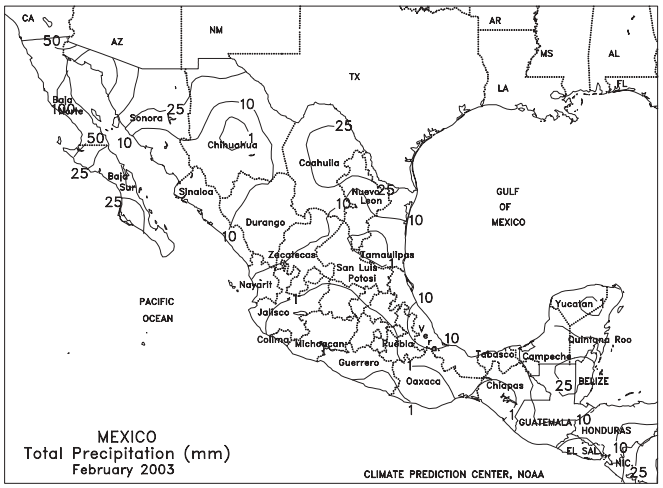
Scattered rain (3-15 mm) fell across the main wheat areas of Turkey, maintaining adequate moisture supplies for winter crops. The heaviest rain (10-30 mm or more) fell across the northern Black Sea coast. Rain (8-20 mm) continued to increase irrigation supplies in the Tigris and Euphrates watersheds of southeastern Turkey. Across central Turkey and western Iran, seasonably warmer weather caused winter crops to start breaking dormancy. In western Iran, scattered rain (5-15 mm) increased moisture supplies for rainfed winter crops. Light to moderate rain (10-25 mm) fell across the eastern Mediterranean from Syria to northern Israel and Jordan, maintaining adequate moisture supplies for vegetative to reproductive winter grains. Based on weather reports from neighboring countries, mostly dry weather prevailed across northern Iraq. Temperatures averaged near to slightly above normal across Turkey and 1 to 3 degrees C above normal across the eastern Mediterranean and western Iran. In February, above-normal precipitation boosted moisture supplies for winter crops across Turkey and the Middle East. Below-normal rainfall in northwestern Iran reduced moisture supplies for dormant rainfed winter crops, while near-normal rainfall increased moisture supplies along the Caspian Sea Coast. In central Turkey, colder weather stressed winter grains after previous mild weather, but snow cover protected winter crops from bitterly cold weather in late February.

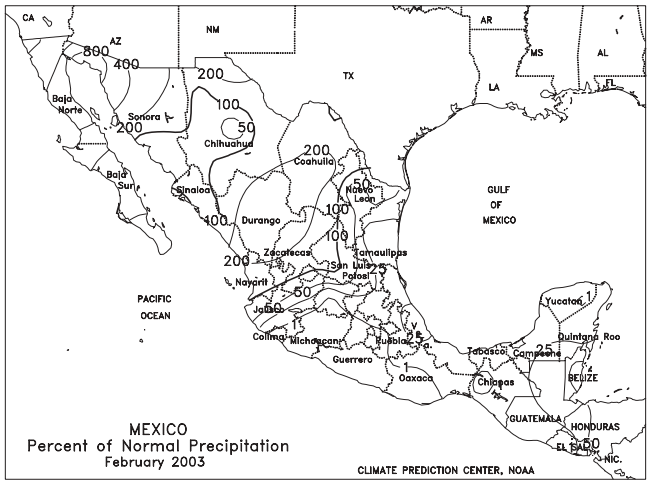


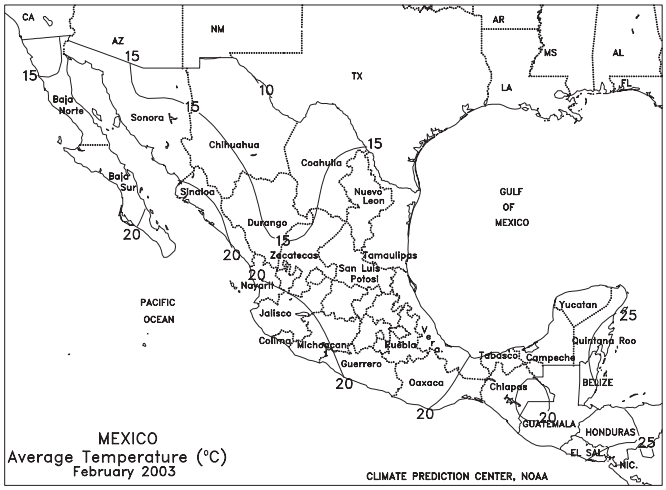


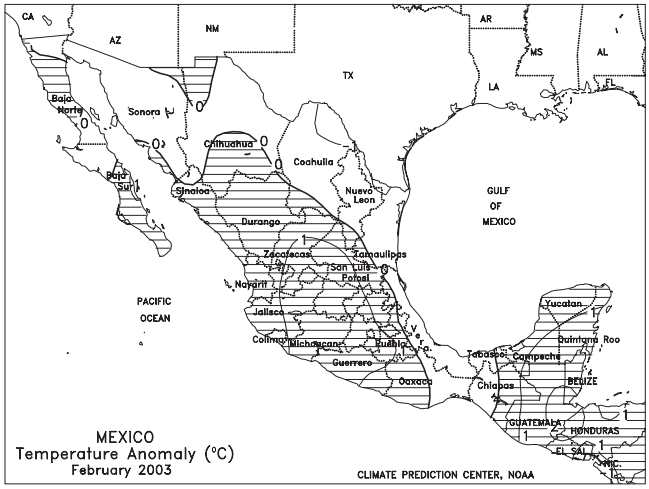


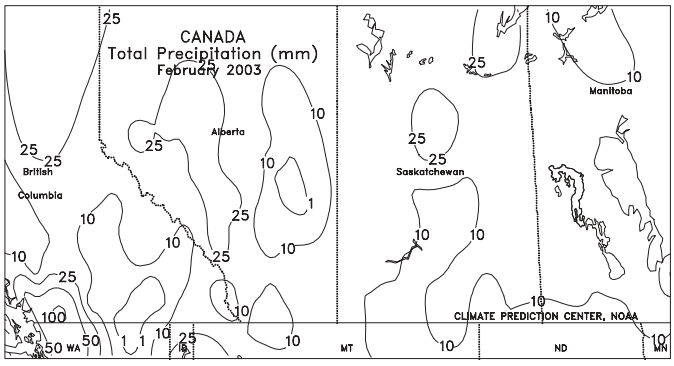


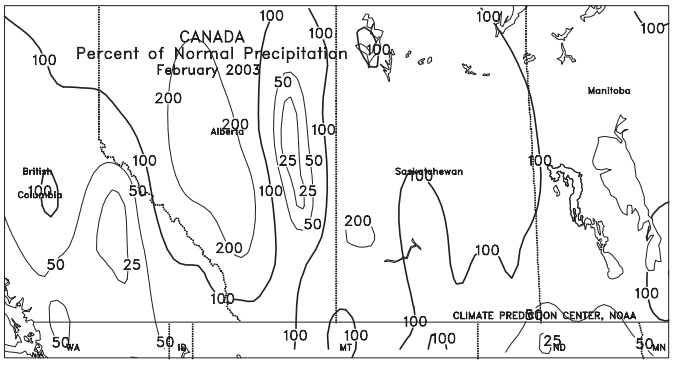

MEXICO
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA

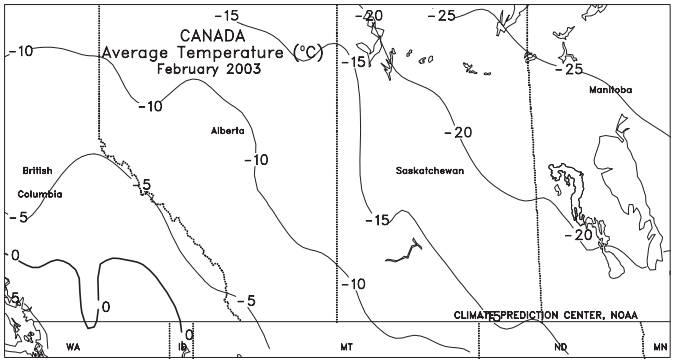

MEXICO
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA

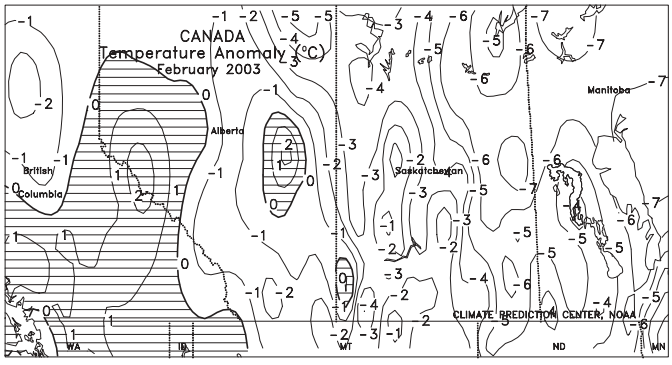

MEXICO
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

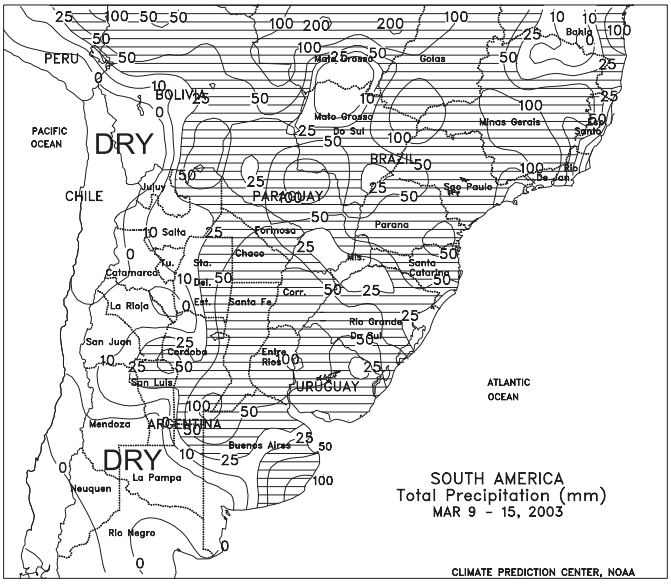

MEXICO
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA


CANADA
Total Precipitation (mm)
February 2003
CLIMATE PREDICTION CENTER, NOAA


CANADA
Percent of Normal Precipitation
February 2003
CLIMATE PREDICTION CENTER, NOAA

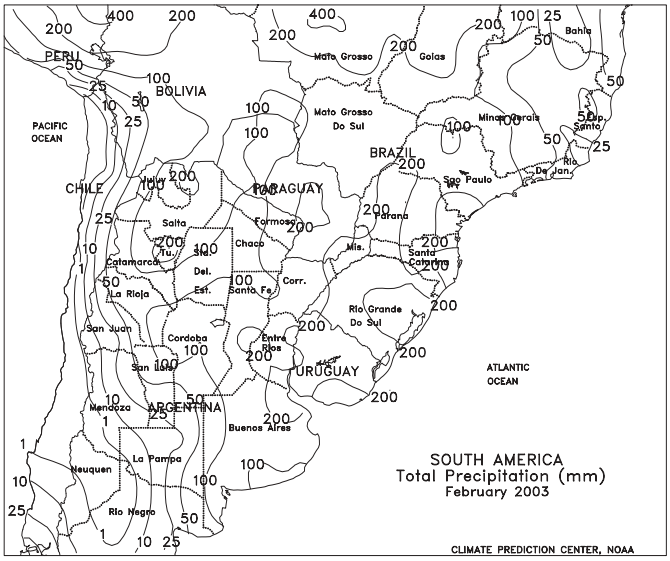

CANADA
Average Temperature (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

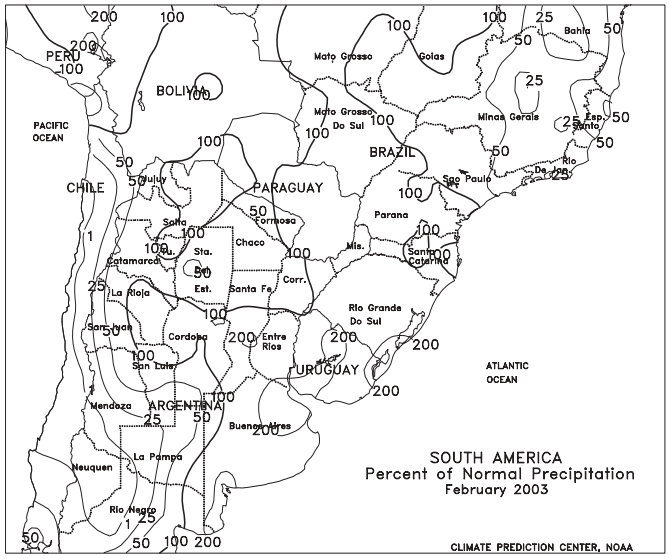

CANADA
Temperature Anomaly (°C)
February 2003
CLIMATE PREDICTION CENTER, NOAA

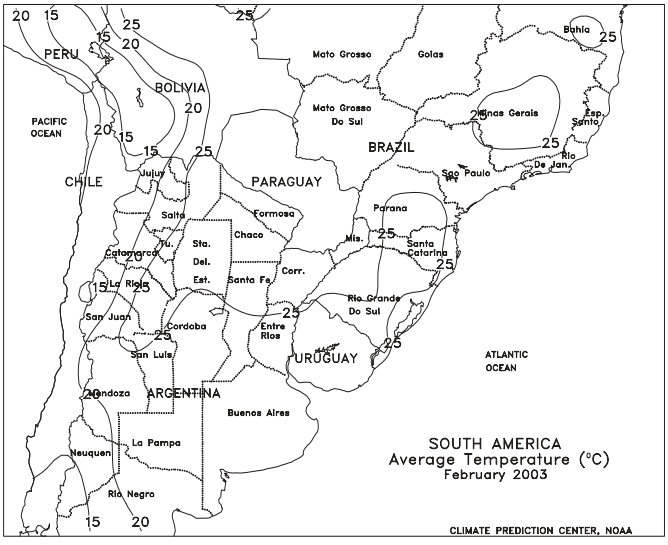


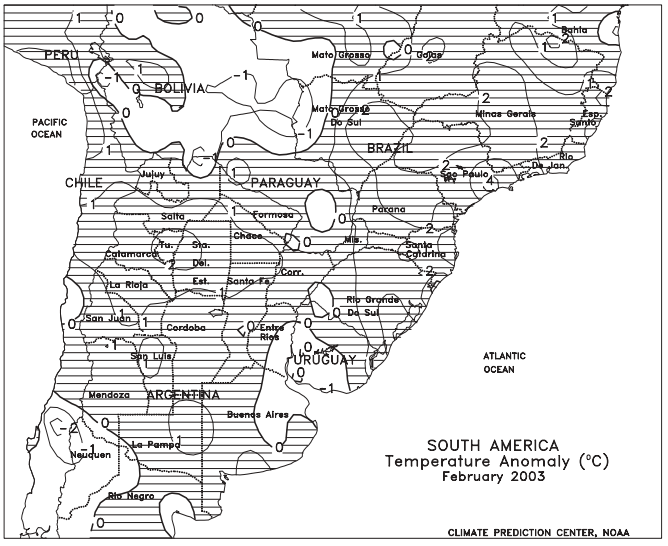
SOUTH AMERICA

Widespread, locally heavy showers (25-100 mm or more) overspread the region's main growing areas, maintaining overall favorable conditions for summer crops. In Argentina, moderate to heavy rain (25-50 mm, locally exceeding 100 mm) returned to important soybean areas from Cordoba and Santa Fe southeastward through Buenos Aires, benefiting reproductive to filling crops. In the south (La Pampa and southern Buenos Aires), the rain was also helping to build long-term moisture reserves for winter wheat, typically planted beginning in April. Beneficial rain continued in Argentina's northern growing areas, sustaining moisture levels for immature summer crops but likely hampering cotton harvesting. Temperatures remained at mostly favorable levels (highs from the upper 20s to lower 30s degrees C) in the main crop areas for normal summer crop development. In Brazil, widespread, moderate to heavy showers (25-100 mm or more) returned to most northern and eastern crop areas (from Sao Paulo and Mato Grosso do Sul northward). The showers continued in the south, benefiting immature summer crops but slowing harvesting. Temperatures continued to average near to slightly above normal, with highs in the lower and middle 30s degrees C. During February, warm, showery weather benefited reproductive to filling soybeans in Argentina's main growing areas (Cordoba, Santa Fe, and northern Buenos Aires). However, hot, dry weather in southern growing areas (in and around La Pampa) hastened corn maturity and stressed immature summer crops. Dry pockets reduced moisture for summer crops, including cotton, in northern growing areas (Chaco and Formosa). In Brazil, warmer- and wetter-than-normal weather continued in most southern and western growing areas, maintaining ample moisture reserves for reproductive to filling summer crops and newly planted winter corn. A drying trend developed in northeastern crop areas (Sao Paulo to Bahia), but moisture reserves remained overall favorable for developing summer crops.









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