

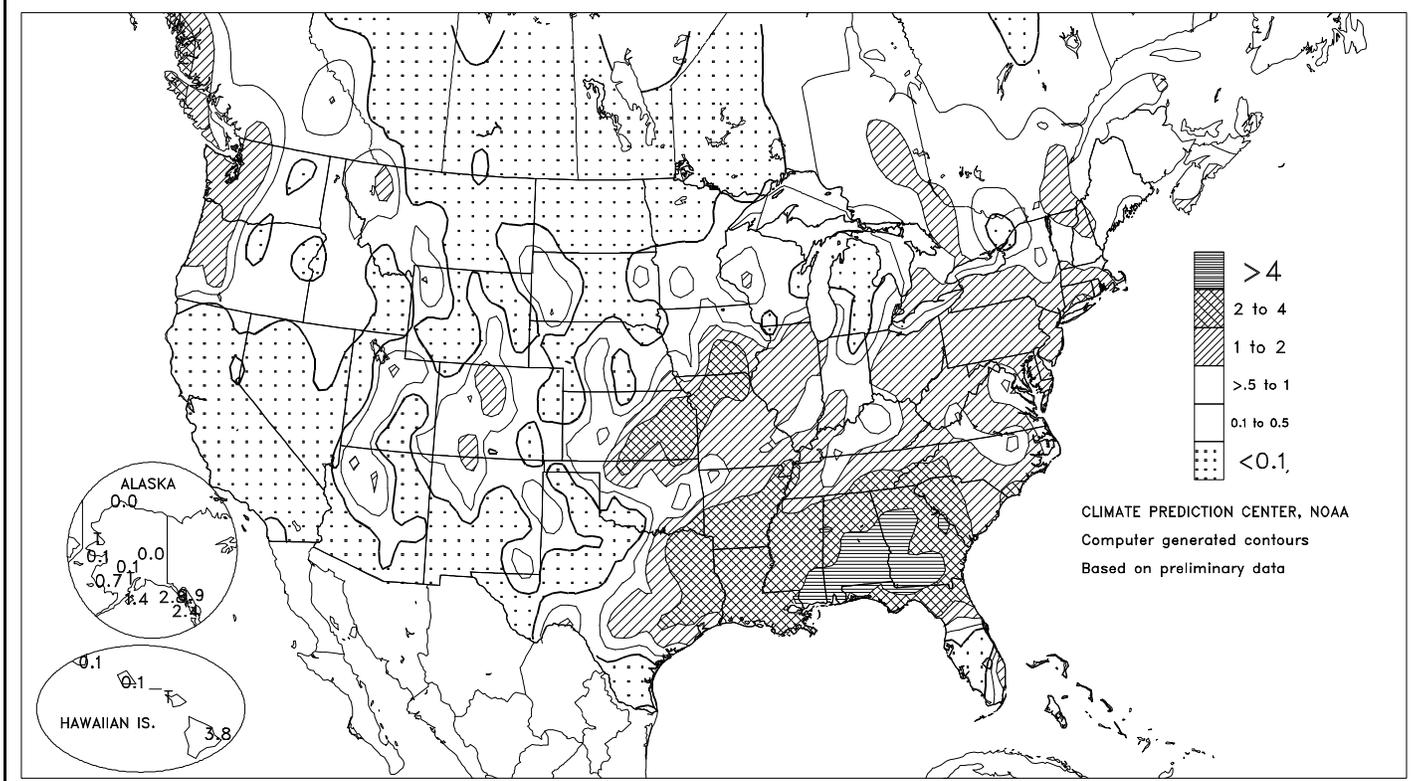
# WEEKLY WEATHER AND CROP BULLETIN

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 11 - 17, 2001



## HIGHLIGHTS

March 11 - 17, 2001

Highlights provided by USDA/WAOB

**D**ry weather overspread **California** and the **Southwest**, favoring fieldwork and crop development. The **Sierra Nevada** also experienced dry weather, following a 2-month wet spell that added approximately 17 inches of liquid equivalent to the high-elevation snowpack, according to the California Department of Water Resources. However, the snowpack's water content, 22 inches, stood at only about 83 percent of the mid-March normal. Meanwhile, beneficial showers provided limited drought relief in the **Northwest**. Nevertheless, snowpack water equivalents in key watershed areas from the **Cascades** to the **northern Rockies**

(Continued on page 5)

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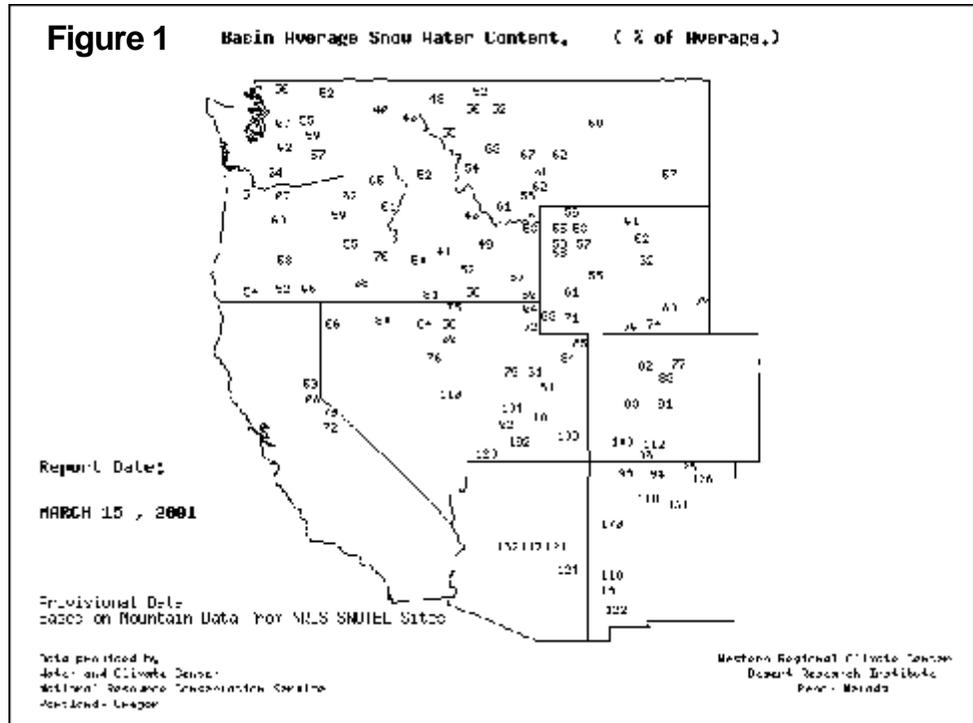
# Water Supply Forecast for the Western United States

## Snowpack and Precipitation

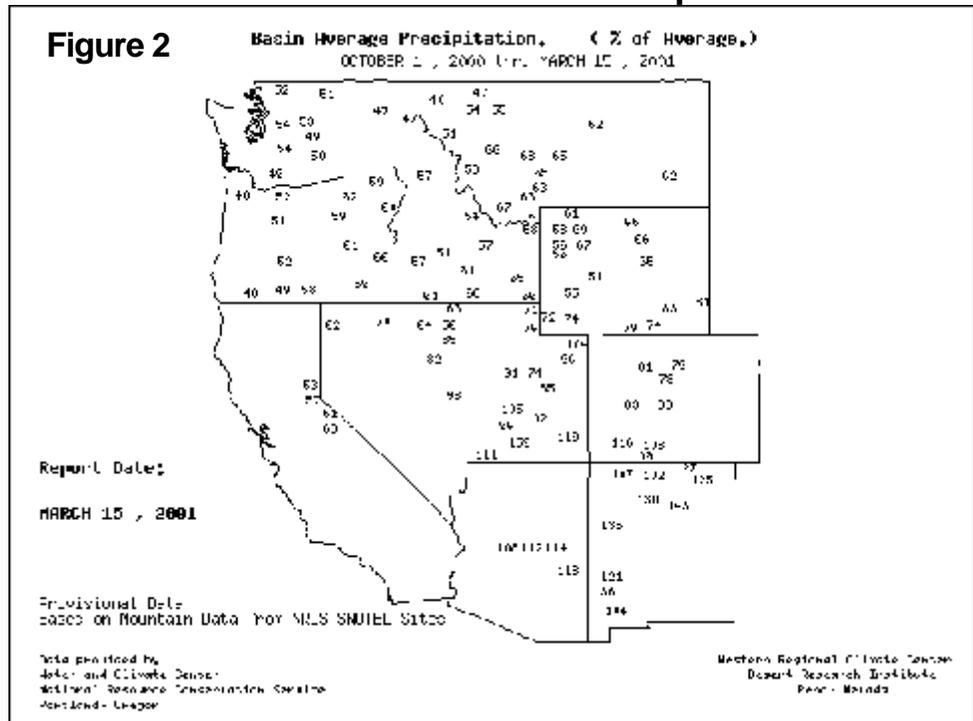
As of March 15, 2001, much of the West continued to struggle with a very dry weather pattern, resulting in well-below-average seasonal snowpacks (fig. 1). Snowpacks are less than 50 percent (%) of average in northern and central Idaho and northwestern Montana. Snowpacks are less than 70% of average in the Tahoe area of California, southwestern Oregon, Washington, Idaho, central Utah, Montana, and northwestern Wyoming. Basins reporting slightly below- to slightly above-average snowpacks (70 to 110%) include scattered areas in Oregon, Washington, Idaho, western Montana, southern Wyoming, central Utah, Colorado, central Arizona, and central New Mexico. Basins reporting above- to much-above-average snowpacks (110 to greater than 130%) include portions of eastern Nevada, southern Utah, central Arizona, eastern New Mexico, southern Colorado, and an isolated area in northeastern Wyoming. The composite snow index for the Columbia River above Castlegar is 51% of average, below 1977's previous March 1 record of 54%. The snowpack index above Grand Coulee Reservoir is 52% of average, identical to the 1977 value. The snowpack index above The Dalles, Oregon, is 52.6% of average, little changed from February 1, 2001, but higher than the March 1 record minimum of 43.3% set in 1977.

February 2001 was an extremely wet month in southern California, southern Nevada, and portions of western Arizona and south-central Utah, where monthly totals were in excess of 130% of average. The copious amounts stood in stark contrast to the Pacific Northwest's light February precipitation (less than 70% of average), which increased concerns about drought and low spring runoff. Season-to-date (October 1 to March 15) precipitation in central California, western Oregon, Washington, northern and central Idaho, northwestern Montana, and western Wyoming was less than 70% of average (fig. 2). In contrast, well-above-normal seasonal precipitation (greater than 130%) was reported in nearly all of New Mexico, southern Arizona, southern Utah, and southern Nevada.

## SNOTEL – River Basin Snow Water Content



## SNOTEL – River Basin Precipitation



### Spring and Summer Streamflow Forecasts

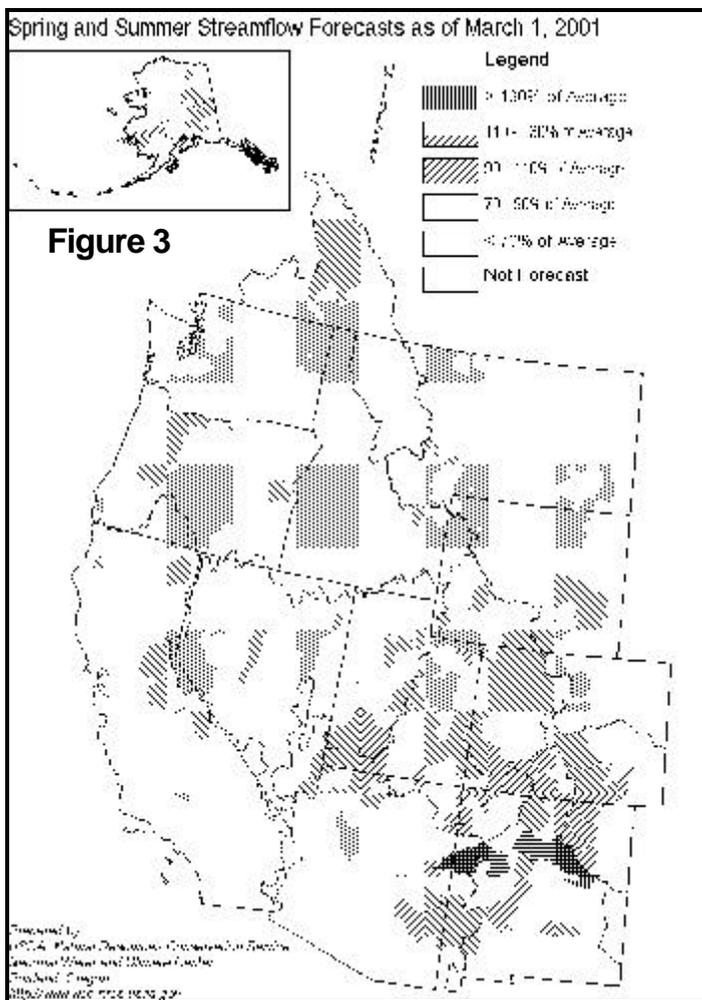
The scarcity of snowpack is reflected in the forecasted streamflow forecast volumes for much of the West (fig. 3). As of March 1, well-below-average (less than 70% of normal) spring and summer streamflows are forecast for portions of central California; northern Nevada; southwestern, central, and southeastern Oregon; Washington; Idaho; western and central Montana; western and central Wyoming; central Utah; and small portions of central Colorado and central Arizona. Slightly below-average (70 to 90%) spring and summer streamflows are forecast for parts of northern California, western and north-central Oregon, a small portion of eastern Idaho, southeastern Wyoming, eastern and southern Utah, northern Colorado, and portions of central Arizona. Average (90 to 110%) spring and summer streamflows are forecast for portions of southeastern Utah, south-central Colorado, central New Mexico, and southeastern Arizona. Above- to much- above-normal (110 to 130% or higher) spring and summer streamflows are forecast for a few areas in southeastern Utah, southern Colorado, and central and northern New Mexico.

### Reservoir Storage

As of March 1, 2001, major western storage reservoirs in Montana, Nevada, Oregon, and Washington report below-average storage levels for this time of year (fig. 4). Arizona, California, Colorado, Idaho, Utah, and Wyoming report near- average storage. Above-average storage levels are reported in New Mexico.

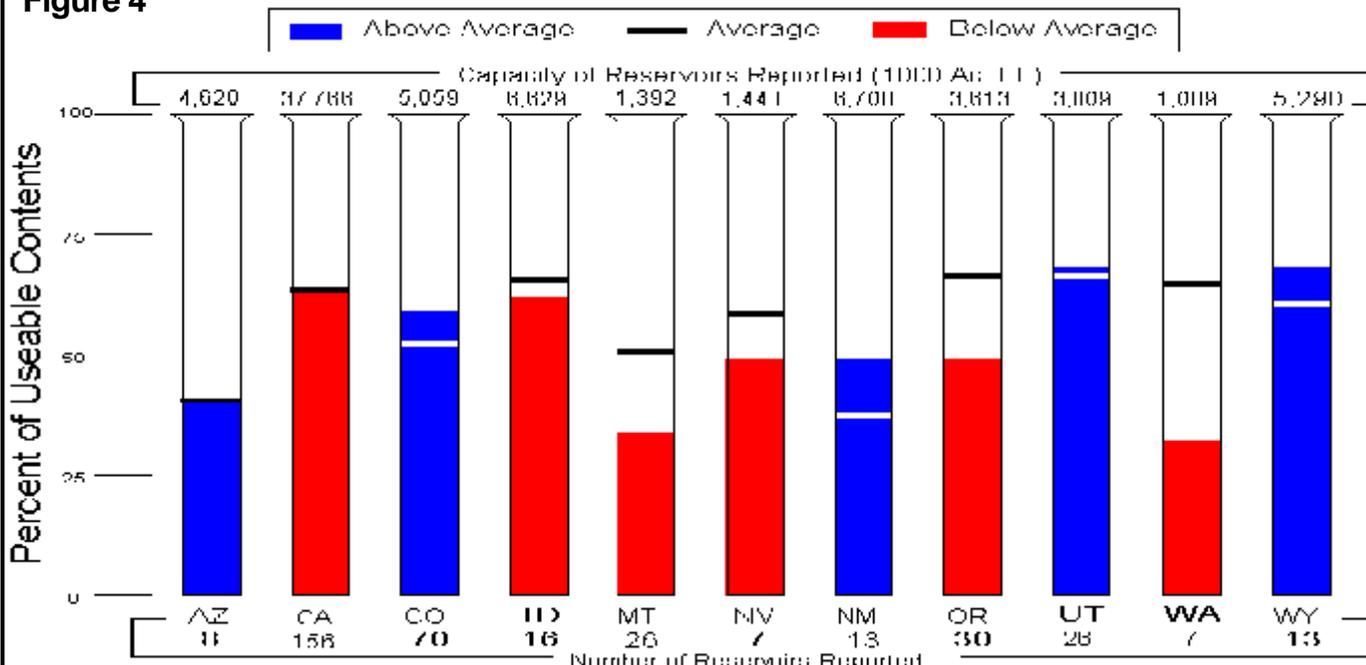
### For More Information

The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit: <http://www.wcc.nrcs.usda.gov>



### Reservoir Storage as of March 1, 2001

Figure 4



**Weather Data for Selected Locations in the Delta and the Bootheel**

**Weather Data for the Week Ending March 17, 2001**

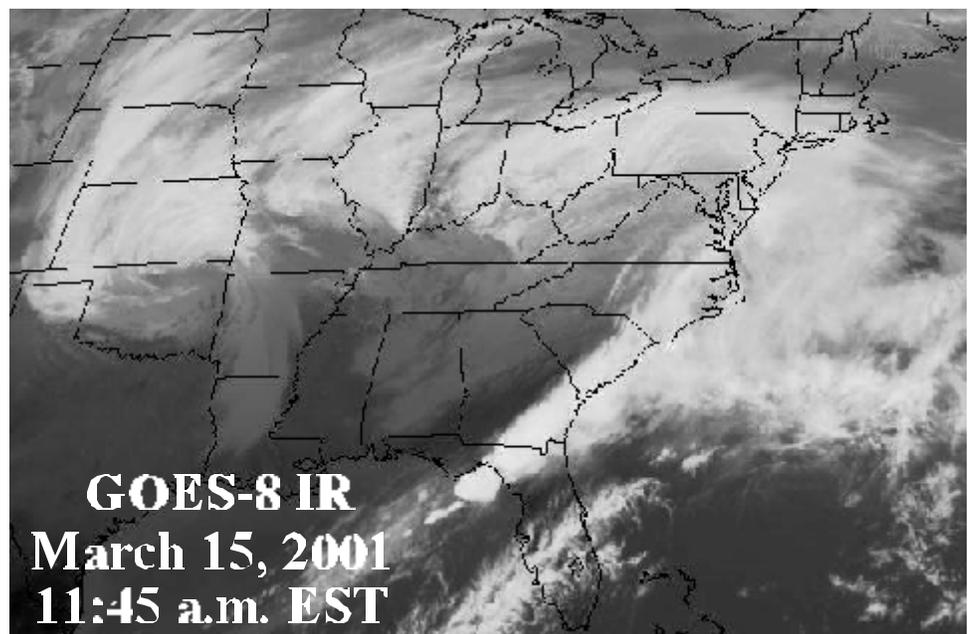
Data provided by the Mississippi State Delta Research and Extension Center (DREC), the Southern Regional Climate Center (SRCC), and the University of Missouri.

STATES AND STATIONS	TEMPERATURE EF						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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE *	65	40	70	28	53	2	1.95	0.69	1.00	2.90	90	17.73	147	-	-	0	1	3	2
MS BELZONI *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS CLARKSDALE *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS CLEVELAND *	65	40	72	32	53	0	2.43	1.38	1.24	3.40	105	17.70	136	-	-	0	2	3	2
MS GREENVILLE *	65	41	73	32	53	-2	2.89	1.67	1.95	4.51	141	19.44	157	-	-	0	1	2	2
MS GREENWOOD *	64	44	70	35	54	-1	2.64	1.42	1.69	4.45	145	19.59	169	-	-	0	0	3	2
MS INDIANOLA 1S	61	43	71	36	52	-	2.83	-	1.90	4.30	-	17.35	-	58	51	0	0	3	2
MS INVERNESS 5E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS LYON	63	44	70	37	54	-	1.61	-	1.05	2.38	-	15.83	-	-	-	0	0	3	1
MS MOORHEAD *	64	46	72	37	55	-1	1.67	0.45	1.02	3.37	109	16.02	132	-	-	0	0	2	2
MS ONWARD	61	48	71	39	55	-	2.39	-	1.34	5.21	-	18.63	-	57	52	0	0	3	2
MS ROLLING FORK *	66	43	73	33	55	0	2.86	1.66	1.70	6.65	217	20.94	166	-	-	0	0	3	2
MS SIDON	64	46	70	38	55	-	2.23	-	1.02	4.00	-	16.75	-	-	-	0	0	4	2
MS TUNICA *	64	45	71	39	54	2	1.75	0.67	1.00	3.08	115	16.32	149	-	-	0	0	3	2
MS TUNICA 1W	61	43	69	36	52	-	1.85	-	1.29	2.83	-	16.19	-	56	50	0	0	3	1
MS VANCE	63	44	70	36	54	-	1.76	-	1.06	2.44	-	17.16	-	53	50	0	0	3	2
MS VICKSBURG *	65	45	71	36	55	-3	3.58	2.19	1.95	8.91	264	19.77	145	-	-	0	0	3	2
MS YAZOO CITY *	65	42	71	35	54	-3	2.64	1.22	1.33	6.37	181	22.08	160	-	-	0	0	3	2
MS STONEVILLE *	64	42	73	34	53	0	2.54	1.35	1.07	4.31	150	19.38	159	62	47	0	0	3	2
MO CARDWELL	61	41	68	33	50	1	1.56	0.70	0.82	2.65	100	11.39	115	-	-	0	0	3	2
MO CHARLESTON	58	38	67	30	48	1	1.23	0.25	0.71	1.96	86	7.93	87	-	-	0	2	3	1
MO CLARKTON	60	40	70	33	50	2	1.10	0.28	0.63	1.99	98	9.93	120	-	-	0	0	2	1
MO DELTA	57	37	67	30	48	1	1.19	0.22	0.59	1.95	81	6.26	63	-	-	0	2	4	2
MO GLENNONVILLE	59	40	69	34	50	2	0.91	0.09	0.56	1.87	92	9.36	113	-	-	0	0	2	1
MO PORTAGEVILLE #1	60	41	69	34	50	2	1.63	0.72	0.81	2.75	111	10.34	107	-	-	0	0	4	2
MO PORTAGEVILLE #2	60	40	67	32	50	2	2.00	1.09	0.99	3.07	124	10.10	105	-	-	0	2	3	2
MO STEELE	61	42	67	35	51	3	1.86	0.86	0.99	3.19	118	12.87	125	-	-	0	0	3	2

Compiled by USDA/OCE/WAOB's Stoneville Field Office. \* Based on 1964-93 normals. x Based on 1961-90 normals.

**Delta and Bootheel Weather and Crop Summary:** Temperatures were slightly above normal in the Bootheel and northern areas of the Delta, but were slightly below normal in other Delta locations. Precipitation was above normal throughout the entire region, with localized flooding in the southern Delta. The mild, wet conditions promoted the growth of pastures and fall-sown grains but hindered planting preparations. There was limited fieldwork reported by week's end. Note: Data from Belzoni and Clarksdale, MS will be unavailable for several weeks.

**Sprawling Storm System:** A late-week storm affected areas from the Plains to the East Coast with a variety of weather conditions. While gusty winds and snow showers swept across the central Plains and western Corn Belt, widespread rain fell in the Atlantic Coast States. Isolated severe thunderstorms were reported on March 15 in northern Florida and southern Georgia, according to the Storm Prediction Center. A day earlier, however, the storm system spawned at least 10 tornadoes from eastern Texas to northern Florida, and was responsible for numerous reports of large hail and damaging winds from Kansas southward into the Texas panhandle.



(continued from front cover)

remained well below normal (generally 45 to 75 percent of normal). Farther east, back-to-back storm systems produced more heavy rain across the **South**, halting fieldwork and causing additional lowland flooding. More than 4 inches soaked areas from **southern Mississippi** into **Georgia**. Although significant rain fell as far south as **northern Florida**, very warm, mostly dry weather maintained heavy citrus irrigation requirements and further depleted freshwater reserves across **southern Florida**. Weekly temperatures averaged up to 9°F above normal in **southern Florida**, peaking above 90°F in some areas on March 13. Widespread precipitation also fell in the **central Plains**, **Corn Belt**, and **Northeast**, exceeding 2 inches from **eastern Kansas** to **southeastern Iowa**. Some additional wet snow fell in the deeply snow-covered **northwestern Corn Belt**, where weekly temperatures averaged as much as 5°F below normal. According to National Weather Service outlooks, parts of the **upper Midwest**—including **eastern South Dakota's James River basin** and several Mississippi River tributaries in **southern Minnesota** and **eastern Iowa**—face major flooding during the upcoming snow-melt season. Winter wheat continued to break dormancy as far north as the **central Plains** and **Ohio Valley** and lose winter hardiness across the **North**. Warm weather and recent soil moisture improvements spurred rapid wheat development in the **southern Atlantic States**.

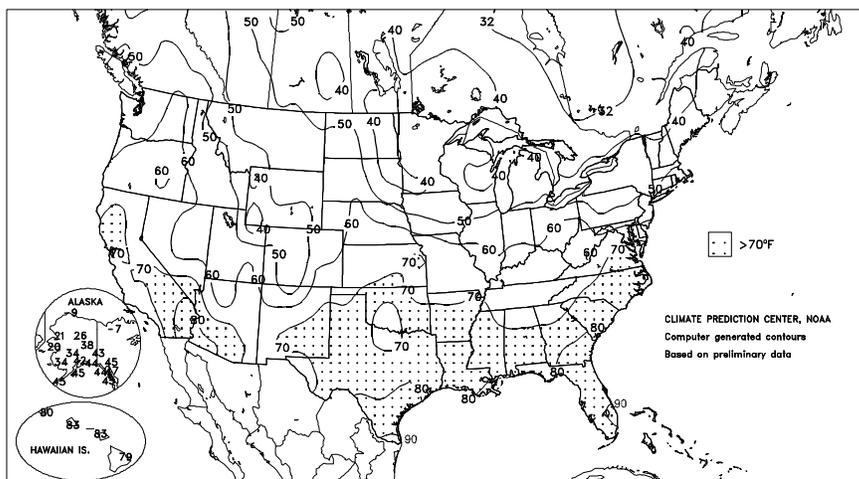
Record warmth continued across **Florida's peninsula** for most of the week. On Tuesday, highs soared to 93°F in **West Palm Beach** and 91°F in **Miami**. **West Palm Beach's** previous earliest high at or above 93°F was observed on March 22, 1977, when the high reached 94°F. Similarly, **Miami's** high represented their earliest reading above 90°F (previously 92°F on March 22, 1977). Elsewhere in **southern Florida**, the average surface elevation of **Lake Okeechobee** fell to 10.14 feet on March 18, a record low for the date. **Okeechobee's** lowest level on record, 9.75 feet, was observed on July 29, 1981. Widespread showers and thunderstorms reached **northern and western Florida** on March 12-13 and 15-16, but bypassed most southern portions of the State. **Daytona Beach** netted 2.00 inches on March 13, a record rainfall for the date.

Farther north, copious rains soaked the remainder of the **South**, boosting March 1-18 precipitation totals to 8.10 inches (242 percent of normal) in **Jackson, MS**, 8.85 inches (259 percent) in **Columbus, GA**, and 9.95 inches (254 percent) in **Mobile, AL**. Lowland flooding, locally severe, continued across much of the **South**. In **northwestern Louisiana**, the **Bayou Bodcau Reservoir** crested near 197.39 feet on the morning of March 18, the highest level since its completion in 1949. The previous record of 196.67 feet was set on May 11, 1958. Major flooding also persisted along the **Red River** at **Grand Ecure, LA**, near **Natchitoches**, where the river crested at week's end more than 6 feet above flood stage.

Heavy snow fell in the **western Corn Belt** on March 12, producing daily-record totals in locations such as **Rochester, MN** (8.6 inches) and **LaCrosse, WI** (7.5 inches). Later in the week, 5.1 inches blanketed **Des Moines, IA** on March 15-16, prolonging the city's record-setting duration with at least 1 inch of snow cover. **Des Moines's** streak reached 97 days (December 11 - March 17) by week's end, well above their previous record of 90 days, set in 1977-78. Additional snow also fell from the **Great Lakes region** into the **Northeast**, boosting near-record seasonal snowfall totals to 260.0

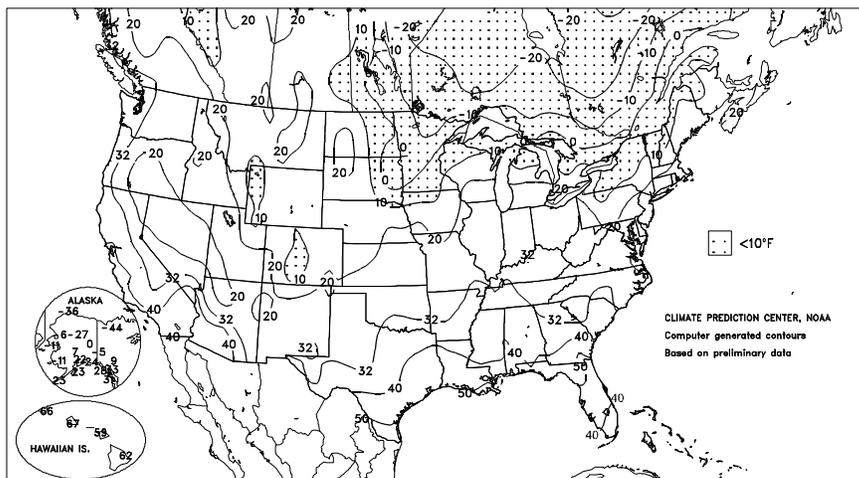
Extreme Maximum Temperature (°F)

MAR 11 - 17, 2001



Extreme Minimum Temperature (°F)

MAR 11 - 17, 2001



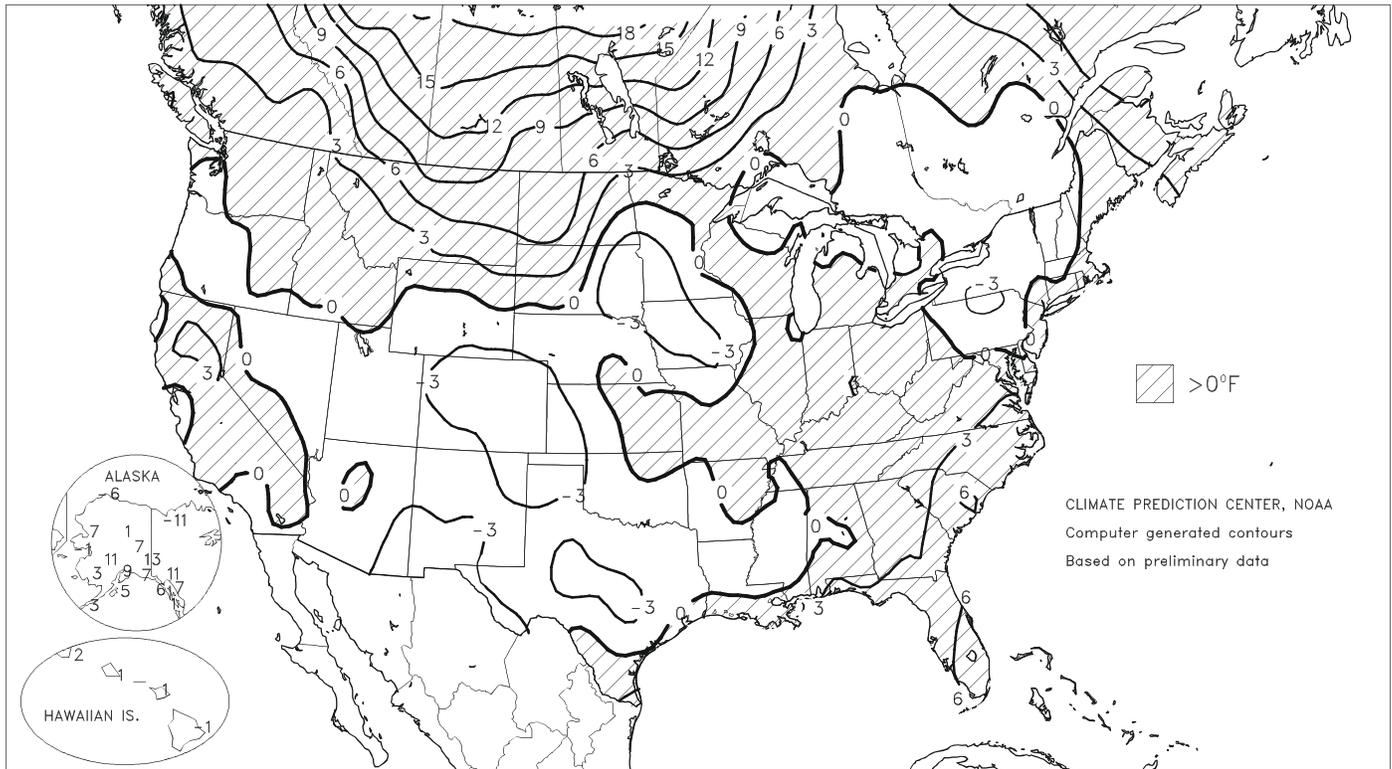
inches in **Marquette, MI** and 186.4 inches in **Syracuse, NY**. Elsewhere in **New York**, **Binghamton's** month-to-date snowfall reached 39.2 inches, breaking their March record of 37.9 inches, set in 1993.

High winds swept across parts of the **Plains** and **Intermountain West**, especially during the mid- to late-week period. On Wednesday in **Colorado**, **Grand Junction's** peak wind gust to 60 mph set a March record (previously 53 mph in 1994). A day later in **Kansas**, winds gusted to 49 mph in **Wichita** and 47 mph in **Goodland**. Meanwhile, cool air briefly spread into the **Northwest**, resulting in daily-record lows on Friday in **Yakima, WA** (22°F) and **Redmond, OR** (13°F). Water-year precipitation (since October 1, 2000) remained well below normal in the **Northwest**, including **Oregon**, where **Eugene's** October 1 - March 18 rainfall totaled 12.89 inches (35 percent of normal).

Cooler air overspread **northern and western Alaska**, following the State's warmest winter (December-February) on record. (**Alaska's** winter temperature averaged more than 12°F above the 1917-18 to 2000-01 normal, according to the National Climatic Data Center, breaking the 1976-77 record by more than 1°F.) In **Barrow**, where weekly readings averaged 7°F below normal, the temperature fell to -36°F on March 13. Meanwhile, generally quiet weather prevailed in **Hawaii**, where significant showers were confined to typically wetter windward locations.

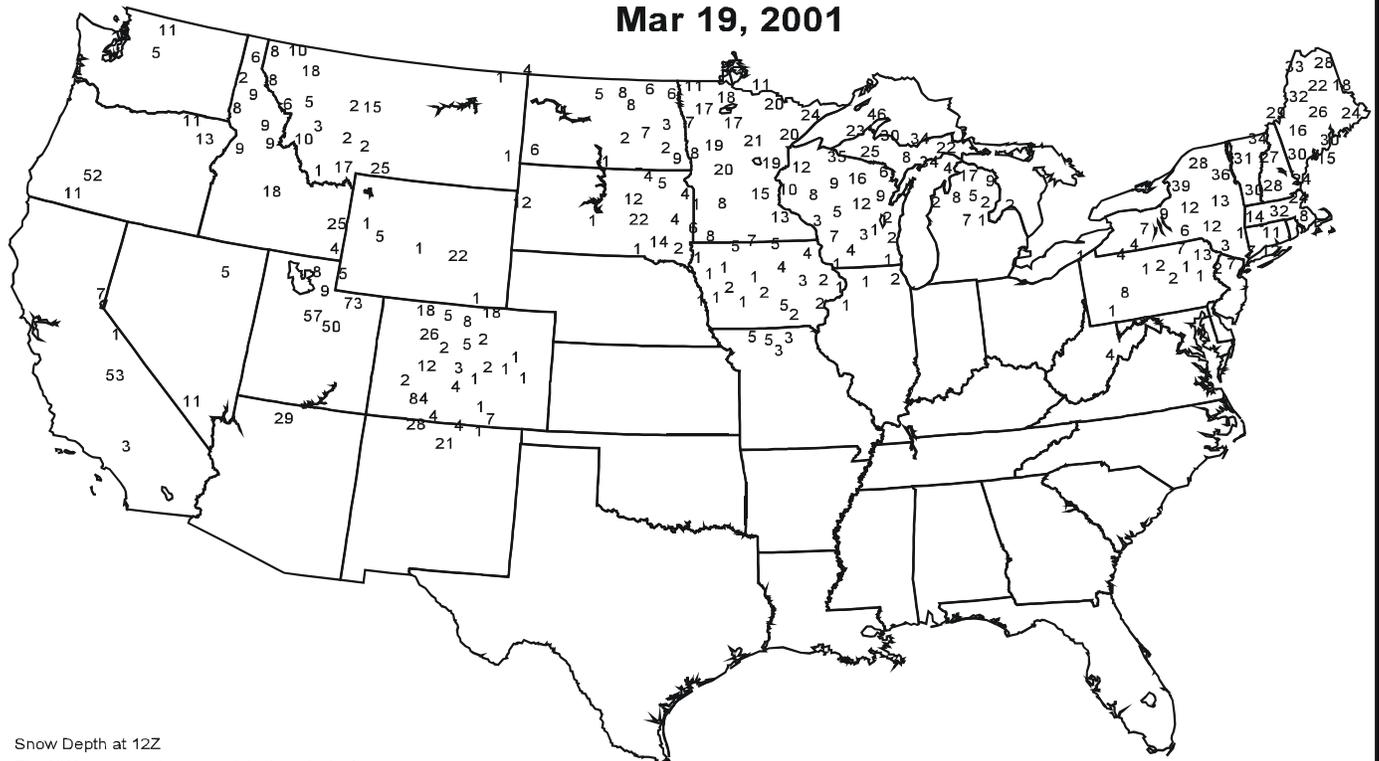
Departure of Average Temperature from Normal (°F)

MAR 11 - 17, 2001



Snow Depth (Inches)

Mar 19, 2001



Snow Depth at 12Z

The NWS cooperative network is the principal source of the snow depth reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

National Weather Data for Selected Cities

Weather Data for the Week Ending March 17, 2001

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

STATES AND STATIONS	TEMPERATURE EF						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. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
AL	BIRMINGHAM	64	45	70	36	54	0	3.22	1.79	1.67	4.58	136	14.10	107	94	48	0	0	3	3
	HUNTSVILLE	61	44	67	34	52	1	2.62	1.08	1.34	3.08	85	13.25	97	85	56	0	0	4	2
	MOBILE	70	51	76	39	61	1	4.75	3.26	2.85	9.93	275	16.71	121	90	64	0	0	6	2
	MONTGOMERY	65	46	72	37	56	-1	3.62	2.17	1.91	7.77	221	15.63	114	90	46	0	0	4	3
AK	ANCHORAGE	39	29	42	22	34	9	0.02	-0.15	0.02	0.68	170	3.25	165	82	71	0	6	1	0
	BARROW	-16	-28	-9	-36	-22	-6	0.00	-0.03	0.00	0.00	0	0.72	185	74	70	0	7	0	0
	FAIRBANKS	27	7	38	0	17	7	0.00	-0.08	0.00	0.00	0	1.06	99	78	69	0	7	0	0
	JUNEAU	43	35	47	33	39	7	0.89	0.14	0.37	2.75	147	14.38	142	93	86	0	0	6	0
	KODIAK	42	33	45	23	37	4	1.39	0.33	0.63	3.62	139	21.41	140	91	82	0	2	5	2
	NOME	15	-1	20	-11	7	-1	0.13	0.02	0.06	0.16	59	2.85	172	80	77	0	7	3	0
AZ	FLAGSTAFF	47	23	55	17	35	0	0.10	-0.50	0.09	1.38	95	5.66	101	85	34	0	7	2	0
	PHOENIX	73	50	78	46	61	-1	0.00	-0.22	0.00	1.03	191	3.66	194	73	45	0	0	0	0
	TUCSON	69	42	74	38	56	-2	0.16	-0.01	0.13	0.88	220	2.58	131	79	38	0	0	2	0
	YUMA	77	51	81	44	64	-1	0.00	-0.06	0.00	1.82	140	2.72	389	56	35	0	0	0	0
AR	FORT SMITH	60	39	72	29	49	-2	0.77	-0.13	0.41	0.80	38	10.30	156	90	47	0	2	3	0
	LITTLE ROCK	64	42	73	34	53	1	2.47	1.37	1.39	3.76	147	14.95	156	88	43	0	0	4	1
CA	BAKERSFIELD	67	43	70	39	55	-2	0.00	-0.25	0.00	0.24	40	4.04	160	81	56	0	0	0	0
	FRESNO	67	44	71	39	56	1	0.00	-0.44	0.00	0.97	91	5.85	121	87	63	0	0	0	0
	LOS ANGELES	62	52	65	49	57	-1	0.00	-0.47	0.00	1.44	118	15.90	259	84	66	0	0	0	0
	REDDING	71	42	77	38	56	4	0.00	-1.04	0.00	3.02	118	16.82	129	66	33	0	0	0	0
	SACRAMENTO	68	41	73	38	54	1	0.01	-0.60	0.01	1.68	111	10.00	123	96	36	0	0	1	0
	SAN DIEGO	62	53	65	49	57	-2	0.00	-0.41	0.00	0.65	65	6.33	146	91	73	0	0	0	0
	SAN FRANCISCO	61	46	65	43	54	1	0.01	-0.71	0.01	0.90	50	10.87	117	92	80	0	0	1	0
	STOCKTON	68	38	74	34	53	-1	0.00	-0.51	0.00	1.39	112	6.56	108	90	63	0	0	0	0
CO	ALAMOSA	44	19	48	15	31	-1	0.00	-0.11	0.00	0.44	183	1.36	172	82	43	0	7	0	0
	CO SPRINGS	40	21	53	13	31	-6	0.41	0.20	0.27	0.73	155	1.82	157	91	41	0	7	2	0
	DENVER	44	23	53	18	34	-4	0.14	-0.14	0.10	0.53	84	1.99	117	87	41	0	7	2	0
	GRAND JUNCTION	48	31	55	22	40	-3	0.66	0.45	0.44	0.80	167	1.90	125	82	55	0	4	4	0
	PUEBLO	48	23	64	17	36	-5	0.10	-0.07	0.09	0.14	36	1.11	109	85	48	0	7	2	0
CT	BRIDGEPORT	47	32	50	28	39	1	1.44	0.59	1.12	2.46	123	6.69	81	80	55	0	3	3	1
	HARTFORD	45	28	49	22	37	0	0.86	0.04	0.78	1.96	101	6.21	72	77	47	0	6	2	1
DC	WASHINGTON	58	39	66	32	48	1	0.76	0.04	0.31	1.11	64	5.16	72	81	45	0	1	4	0
DE	WILMINGTON	51	33	56	26	42	0	1.10	0.33	0.45	2.01	109	7.90	101	93	50	0	3	5	0
FL	DAYTONA BEACH	80	59	88	50	69	5	2.50	1.84	2.00	3.19	190	4.45	59	96	54	0	0	3	2
	JACKSONVILLE	77	54	83	46	66	5	1.54	0.69	0.80	3.36	158	4.95	53	95	47	0	0	6	1
	KEY WEST	83	72	85	64	78	4	0.01	-0.38	0.01	0.68	72	1.10	23	97	76	0	0	1	0
	MIAMI	86	72	91	64	79	8	0.00	-0.55	0.00	0.68	52	1.33	25	94	61	1	0	0	0
	ORLANDO	84	61	89	53	72	5	0.10	-0.66	0.06	0.66	35	1.54	21	93	54	0	0	2	0
	PENSACOLA	68	58	73	44	63	3	0.00	-1.31	0.00	3.39	105	8.95	67	***	***	0	0	0	0
	TALLAHASSEE	75	52	82	44	63	3	3.27	1.81	2.03	5.24	147	8.28	60	93	52	0	0	5	2
	TAMPA	77	63	81	54	70	4	0.06	-0.66	0.06	1.74	95	3.95	57	94	67	0	0	1	0
	WEST PALM	88	70	93	67	79	9	2.21	1.36	2.21	2.24	110	3.80	50	94	61	2	0	1	1
GA	ATHENS	66	44	71	32	55	2	3.81	2.54	2.07	5.57	183	11.33	94	88	51	0	1	3	2
	ATLANTA	65	46	70	37	55	2	3.85	2.51	1.98	5.64	176	12.02	94	88	57	0	0	3	2
	AUGUSTA	73	43	78	28	58	3	5.27	4.20	2.53	7.60	289	12.22	112	90	44	0	1	4	3
	COLUMBUS	67	48	75	38	58	1	3.59	2.26	1.79	8.85	276	12.29	97	94	41	0	0	3	3
	MACON	69	46	75	31	57	1	2.91	1.80	1.67	6.62	243	10.36	86	93	43	0	1	3	3
	SAVANNAH	75	51	82	35	63	4	2.15	1.27	1.04	3.29	156	5.60	63	90	54	0	0	4	2
HI	HILO	78	64	79	62	71	-1	3.76	0.65	1.67	5.12	71	19.87	73	91	82	0	0	7	3
	HONOLULU	82	69	83	67	75	1	0.05	-0.46	0.05	0.07	6	0.82	12	78	71	0	0	1	0
	KAHULUI	82	66	83	59	74	1	0.04	-0.59	0.04	0.18	12	1.22	14	83	71	0	0	1	0
	LIHUE	79	70	80	66	75	2	0.09	-0.87	0.08	0.50	22	5.30	46	85	77	0	0	2	0
ID	BOISE	53	32	60	29	42	0	0.14	-0.16	0.09	0.58	84	2.07	64	77	50	0	4	2	0
	LEWISTON	54	35	66	30	45	1	0.29	0.04	0.13	0.46	79	1.88	68	82	63	0	2	5	0
	POCATELLO	46	30	53	23	38	2	0.15	-0.13	0.13	0.51	76	2.31	88	82	55	0	6	3	0
IL	CHICAGO/O'HARE	42	29	50	25	36	-1	1.30	0.71	0.46	1.35	104	5.04	120	92	73	0	6	5	0
	MOLINE	43	30	52	23	36	-1	1.28	0.62	0.92	1.50	103	6.93	164	92	74	0	6	6	1
	PEORIA	47	31	56	25	39	1	1.10	0.45	0.59	1.10	77	7.21	165	92	58	0	5	5	1
	ROCKFORD	42	28	47	24	35	1	1.26	0.72	0.50	2.71	232	8.04	224	95	79	0	7	5	1
	SPRINGFIELD	50	33	59	24	42	2	1.18	0.46	0.56	1.18	72	6.25	127	91	65	0	4	4	1
IN	EVANSVILLE	56	37	64	29	47	2	1.06	-0.03	0.56	1.77	70	6.32	76	83	57	0	2	3	1
	FORT WAYNE	46	31	54	28	39	2	0.44	-0.21	0.14	0.45	30	3.92	74	90	62	0	5	4	0
	INDIANAPOLIS	50	35	58	27	43	2	0.55	-0.32	0.33	0.55	28	3.25	48	83	53	0	1	4	0
	SOUTH BEND	43	29	51	22	36	-1	0.38	-0.31	0.09	0.44	28	4.71	83	87	69	0	5	7	0
IA	BURLINGTON	46	30	54	25	38	0	1.25	0.62	0.89	1.33	95	6.88	181	94	59	0	5	5	1
	CEDAR RAPIDS	38	27	45	18	33	-2	0.88	0.37	0.49	1.04	93	5.69	181	97	74	0	7	5	0
	DES MOINES	40	27	56	19	34	-2	1.42	0.91	0.78	1.44	129	5.16	162	93	74	0	7	5	1
	DUBUQUE	38	27	43	22	33	0	0.58	-0.06	0.25	0.62	44	5.10	128	91	77	0	7	5	0
	SIoux CITY	39	25	47	12	32	-3	0.19	-0.25	0.19	0.20	20	2.53	113	89	70	0	7	1	0
	WATERLOO	36	26	44	15	31	-2	0.70	0.20	0.56	0.77	69	2.59	87	89	78	0	7	6	1
KS	CONCORDIA	50	32	61	24	41	0	0.36	-0.15	0.33	0.42	37	3.07	125	88	63	0	5	3	0
	DODGE CITY	52	29	67	22	40	-3	0.28	-0.07	0.25	0.28	37	3.40	182	88	50	0	5	2	0
	GOODLAND	47	24	65	18	35	-3	0.11	-0.17	0.08	0.15	25	1.60	113	89	62	0	6	2	0
	TOPEKA	55	34	72	26	45	2	3.23	2.68	1.36	3.24	266	7.36	229	89	58	0	2	4	3

Weather Data for the Week Ending March 17, 2001

STATES AND STATIONS	TEMPERATURE EF						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. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
KY WICHITA	57	34	71	28	46	1	2.17	1.61	1.75	2.29	183	7.63	254	83	57	0	3	4	1	
KY JACKSON	58	40	70	33	49	2	0.83	-0.27	0.28	1.44	55	7.66	75	85	36	0	0	5	0	
KY LEXINGTON	55	38	63	33	46	1	0.71	-0.30	0.30	1.81	76	8.07	96	76	49	0	0	4	0	
KY LOUISVILLE	57	39	66	35	48	2	0.47	-0.60	0.17	1.69	68	6.87	79	86	51	0	0	3	0	
LA PADUCAH	58	38	66	32	48	1	1.57	0.46	0.88	2.20	84	8.68	89	94	47	0	2	3	2	
LA BATON ROUGE	70	50	78	42	60	-1	2.21	1.14	1.16	5.41	204	11.24	86	91	47	0	0	3	2	
LA LAKE CHARLES	71	50	78	46	61	1	1.60	0.86	1.17	5.41	294	11.93	120	89	50	0	0	4	1	
LA NEW ORLEANS	71	54	78	48	62	1	1.95	0.84	0.91	5.71	203	10.35	75	84	65	0	0	4	2	
ME SHREVEPORT	66	48	77	43	57	0	1.70	0.89	0.95	5.53	277	17.81	182	89	44	0	0	3	2	
ME CARIBOU	32	19	38	10	25	1	0.62	0.07	0.51	0.64	49	4.11	73	89	57	0	7	4	1	
MD PORTLAND	42	25	48	22	34	2	0.44	-0.38	0.44	1.12	57	5.03	57	77	42	0	7	1	0	
MD BALTIMORE	55	34	63	25	45	2	0.81	0.04	0.36	1.23	66	6.05	75	83	55	0	3	5	0	
MA BOSTON	44	32	51	28	38	0	0.40	-0.43	0.39	0.91	45	3.97	43	76	43	0	3	2	0	
MA WORCESTER	41	28	46	20	34	1	0.77	-0.12	0.70	2.31	108	7.02	76	80	37	0	7	2	1	
MI ALPENA	34	17	42	-2	26	-1	0.12	-0.36	0.08	0.37	34	2.52	63	87	58	0	7	3	0	
MI GRAND RAPIDS	40	29	45	25	35	2	0.44	-0.14	0.25	0.59	46	4.00	88	91	68	0	7	4	0	
MI HOUGHTON LAKE	36	22	42	12	29	2	0.31	-0.15	0.28	0.41	39	2.60	70	83	57	0	7	3	0	
MI LANSING	41	27	50	19	34	1	0.31	-0.20	0.25	0.33	29	3.77	94	89	67	0	7	4	0	
MI MUSKEGON	41	29	47	23	35	3	0.15	-0.41	0.12	0.24	19	4.22	83	83	67	0	5	3	0	
MI TRAVERSE CITY	36	20	42	5	28	-1	0.10	-0.28	0.08	0.42	48	3.09	72	88	57	0	7	3	0	
MN DULUTH	33	15	44	1	24	0	0.16	-0.27	0.16	0.16	17	3.17	107	92	67	0	7	1	0	
MN INT'L FALLS	36	10	43	-17	23	2	0.05	-0.18	0.04	0.06	12	0.49	24	92	47	0	7	2	0	
MN MINNEAPOLIS	37	23	48	11	30	0	0.54	0.11	0.54	0.54	56	3.07	110	83	63	0	7	1	1	
MN ROCHESTER	35	21	40	10	28	-1	0.25	-0.14	0.12	0.26	31	2.23	94	86	74	0	7	4	0	
MS ST. CLOUD	35	15	44	-1	25	-2	0.38	0.08	0.38	0.38	58	2.62	129	89	59	0	7	1	0	
MS JACKSON	65	44	73	34	55	-1	2.75	1.43	1.75	8.10	260	17.35	133	90	55	0	0	3	2	
MS MERIDIAN	66	44	73	31	55	-1	1.72	0.18	1.52	6.22	169	16.43	115	94	59	0	1	4	1	
MS TUPELO	61	42	70	32	51	-2	2.00	0.61	1.07	2.86	87	16.63	129	85	53	0	1	4	2	
MO COLUMBIA	55	34	66	27	44	2	0.93	0.22	0.69	0.94	58	8.04	164	91	52	0	3	5	1	
MO KANSAS CITY	52	34	70	26	43	1	0.85	0.29	0.80	0.89	71	6.22	180	88	61	0	2	3	1	
MO SAINT LOUIS	56	37	66	30	47	3	1.36	0.55	1.11	1.37	73	4.97	86	88	60	0	2	4	1	
MO SPRINGFIELD	55	34	65	22	44	-1	0.79	-0.09	0.69	0.80	40	8.02	135	84	58	0	2	4	1	
MT BILLINGS	49	29	56	22	39	4	0.00	-0.26	0.00	0.25	45	1.15	55	70	31	0	5	0	0	
MT BUTTE	39	21	45	8	30	2	0.03	-0.14	0.03	0.10	26	0.75	58	82	40	0	7	1	0	
MT GLASGOW	48	27	53	23	37	8	0.04	-0.04	0.04	0.06	30	0.38	45	86	60	0	7	1	0	
MT GREAT FALLS	47	27	54	12	37	4	0.15	-0.10	0.15	0.25	45	1.29	64	77	35	0	5	1	0	
MT KALISPELL	41	27	47	17	34	1	0.36	0.14	0.20	0.36	67	1.80	57	86	72	0	5	2	0	
MT MILES CITY	48	28	56	21	38	6	0.54	0.41	0.54	0.56	200	0.97	76	88	39	0	6	1	1	
MT MISSOULA	43	30	50	25	37	2	0.13	-0.09	0.12	0.27	51	1.63	64	87	69	0	5	2	0	
NE GRAND ISLAND	47	26	63	19	37	0	0.23	-0.19	0.19	0.23	25	2.47	117	88	59	0	5	2	0	
NE LINCOLN	48	27	64	17	38	0	0.47	0.01	0.46	0.51	50	3.22	141	85	59	0	5	2	0	
NE NORFOLK	44	25	58	17	35	0	0.14	-0.28	0.13	0.14	15	1.64	74	87	61	0	6	2	0	
NE NORTH PLATTE	47	20	64	10	34	-2	0.25	-0.01	0.12	0.30	54	1.18	87	93	50	0	7	3	0	
NE OMAHA	45	27	59	19	36	-2	0.91	0.45	0.86	0.91	91	4.05	161	87	70	0	7	3	1	
NE SCOTTSBLUFF	45	25	57	19	35	0	0.23	-0.01	0.16	0.33	62	1.01	67	86	58	0	7	4	0	
NV VALENTINE	50	26	65	18	38	5	0.13	-0.10	0.11	0.13	26	0.84	69	80	47	0	5	2	0	
NV ELY	46	19	53	14	33	-1	0.02	-0.20	0.02	0.41	82	0.99	54	88	44	0	7	1	0	
NV LAS VEGAS	68	46	77	42	57	1	0.00	-0.11	0.00	0.17	65	3.25	266	56	28	0	0	0	0	
NV RENO	60	29	68	24	45	3	0.00	-0.17	0.00	0.42	95	0.91	36	61	32	0	6	0	0	
NV WINNEMUCCA	54	23	64	15	39	-1	0.00	-0.17	0.00	0.19	48	1.46	83	75	42	0	6	0	0	
NH CONCORD	42	20	47	12	31	-1	0.43	-0.18	0.43	1.41	96	5.43	83	83	40	0	7	1	0	
NJ NEWARK	51	35	57	29	43	2	1.58	0.70	1.10	2.62	127	6.98	82	79	49	0	2	4	1	
NM ALBUQUERQUE	56	33	66	31	44	-2	0.03	-0.08	0.03	0.26	96	0.81	69	56	19	0	3	1	0	
NY ALBANY	39	25	47	16	32	-2	0.59	-0.07	0.54	1.81	116	4.66	75	82	46	0	7	3	1	
NY BINGHAMTON	38	25	43	13	31	-1	1.08	0.45	0.43	2.41	162	4.92	79	86	69	0	7	6	0	
NY BUFFALO	39	26	46	13	32	-1	1.43	0.82	0.35	2.48	173	6.96	108	88	62	0	5	6	0	
NY ROCHESTER	38	26	45	15	32	-2	1.01	0.50	0.36	2.22	182	6.43	119	83	67	0	7	6	0	
NY SYRACUSE	38	25	45	8	32	-1	1.10	0.48	0.65	2.85	199	6.14	104	85	55	0	6	4	1	
NC ASHEVILLE	59	40	65	27	50	3	1.01	-0.06	0.94	1.52	58	6.88	70	87	56	0	1	3	1	
NC CHARLOTTE	65	42	74	29	53	3	1.07	0.03	0.75	2.10	83	6.16	61	89	45	0	1	2	1	
NC GREENSBORO	61	40	72	27	51	3	0.91	0.06	0.66	1.74	84	6.78	79	88	42	0	1	4	1	
NC HATTERAS	64	48	70	28	56	5	0.41	-0.58	0.23	0.77	32	4.64	39	99	66	0	1	3	0	
NC RALEIGH	66	45	77	33	55	5	0.68	-0.20	0.58	1.81	83	5.45	58	87	46	0	0	4	1	
NC WILMINGTON	69	48	78	30	59	5	2.33	1.43	1.03	3.58	163	6.54	67	93	53	0	1	4	3	
ND BISMARCK	43	25	53	18	34	7	0.01	-0.15	0.01	0.13	39	1.03	85	89	70	0	7	1	0	
ND DICKINSON	45	27	54	22	36	7	0.16	0.02	0.16	0.16	57	0.67	66	94	53	0	7	1	0	
ND FARGO	31	12	37	-6	22	-3	0.01	-0.22	0.01	0.01	2	0.95	59	92	70	0	7	1	0	
ND GRAND FORKS	33	19	38	2	26	3	0.23	0.02	0.23	0.23	50	0.77	46	95	72	0	7	1	0	
ND JAMESTOWN	34	19	39	2	27	1	0.00	-0.19	0.00	0.00	0	0.09	6	96	75	0	7	0	0	
ND WILLISTON	44	26	52	20	35	8	0.01	-0.14	0.01	0.01	3	0.41	32	87	73	0	7	1	0	
OH AKRON-CANTON	46	31	56	26	38	1	1.10	0.34	0.54	1.54	87	4.57	74	88	64	0	4	5	1	
OH CINCINNATI	53	37	60	31	45	3	0.50	-0.48	0.25	0.91	40	4.05	54	74	53	0	1	3	0	
OH CLEVELAND	45	30	54	25	37	0	1.03	0.38	0.26	1.95	127	5.17	90	92	67	0	4	5	0	
OH COLUMBUS	51	35	64	30	43	3	0.71	-0.03	0.27	1.01	58	3.69	60	83	59	0	2	3	0	
OH DAYTON	49	34	56	30	42	2	1.07	0.29	0.55	1.07	60	3.60	59	87	58	0	1	4	1	
OH MANSFIELD	45	30	56	26	38	1	0.96	0.22	0.48	1.01	59	3.85	68	98	67	0	5	5	0	

Based on 1961-90 normals

\*\*\* Not Available

Weather Data for the Week Ending March 17, 2001

STATES AND STATIONS	TEMPERATURE EF						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. EF		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	44	30	51	24	37	2	0.69	0.10	0.19	0.69	50	3.77	78	85	60	0	4	5	0
OK YOUNGSTOWN	44	28	51	20	36	0	0.93	0.23	0.25	1.35	82	4.07	70	88	63	0	6	6	0
OK OKLAHOMA CITY	58	38	69	31	48	-2	0.60	-0.02	0.52	0.76	53	5.24	127	90	53	0	1	2	1
OK TULSA	61	41	73	31	51	1	0.76	-0.03	0.54	0.76	42	5.47	103	85	59	0	1	3	1
OR ASTORIA	51	41	53	34	46	0	1.12	-0.52	0.41	2.65	65	10.93	50	99	89	0	0	6	0
OR BURNS	48	25	58	22	37	1	0.13	-0.12	0.11	0.42	74	1.14	49	85	63	0	7	2	0
OR EUGENE	54	37	61	33	46	-1	0.72	-0.57	0.33	1.28	40	4.43	26	96	81	0	0	5	0
OR MEDFORD	57	33	68	30	45	-2	0.46	0.04	0.31	0.90	86	2.72	48	91	50	0	5	2	0
OR PENDLETON	54	34	64	30	44	0	0.22	-0.06	0.19	0.58	88	2.15	65	87	68	0	2	3	0
OR PORTLAND	53	41	57	36	47	0	0.64	-0.18	0.32	1.23	60	3.99	35	90	77	0	0	5	0
PA SALEM	53	38	61	35	46	1	0.53	-0.45	0.19	1.40	58	4.43	34	97	83	0	0	5	0
PA ALLENTOWN	48	28	55	21	38	-1	1.30	0.56	0.45	1.83	103	6.85	87	83	48	0	5	5	0
PA ERIE	42	28	50	18	35	0	0.95	0.27	0.29	1.14	72	5.25	86	88	71	0	4	6	0
PA MIDDLETOWN	49	31	52	23	40	-1	1.10	0.36	0.57	1.93	108	5.85	77	92	57	0	3	6	1
PA PHILADELPHIA	54	36	57	29	45	3	1.30	0.52	0.39	2.27	124	8.08	103	80	55	0	2	5	0
PA PITTSBURGH	49	31	59	26	40	1	0.76	-0.02	0.31	1.53	84	3.97	59	91	55	0	5	6	0
PA WILKES-BARRE	44	27	47	20	36	0	0.73	0.16	0.27	2.02	150	4.29	77	85	49	0	7	5	0
PA WILLIAMSPORT	45	26	48	20	36	-1	0.85	0.13	0.45	1.77	103	4.14	59	89	66	0	6	5	0
RI PROVIDENCE	47	31	54	26	39	2	1.06	0.15	1.01	2.89	133	7.30	75	75	49	0	5	2	1
SC BEAUFORT	74	52	80	36	63	5	1.46	0.50	0.89	1.83	79	4.85	52	93	46	0	0	4	1
SC CHARLESTON	74	50	80	33	62	4	2.57	1.55	1.42	3.25	133	6.63	72	87	40	0	0	4	2
SC COLUMBIA	71	46	76	29	59	4	2.43	1.30	1.24	3.86	142	7.63	68	91	57	0	1	3	2
SD GREENVILLE	64	44	71	32	54	3	1.93	0.68	1.15	2.84	94	8.16	71	88	40	0	1	3	2
SD ABERDEEN	33	17	38	-2	25	-4	0.15	-0.14	0.15	0.26	41	1.55	105	93	81	0	7	1	0
SD HURON	34	18	39	-3	26	-5	0.28	-0.09	0.26	0.28	34	3.96	207	92	72	0	7	2	0
SD RAPID CITY	46	22	58	15	34	1	0.23	0.01	0.20	0.23	48	0.92	66	88	48	0	7	3	0
SD SIOUX FALLS	34	18	40	1	26	-6	0.25	-0.11	0.16	0.25	32	2.40	125	91	74	0	7	2	0
TN BRISTOL	59	37	68	24	48	1	0.76	-0.09	0.29	1.35	66	8.49	97	88	41	0	2	4	0
TN CHATTANOOGA	61	43	68	31	52	2	2.27	0.86	1.20	2.80	83	12.92	99	90	56	0	1	5	2
TN KNOXVILLE	59	41	64	29	50	2	1.22	0.03	0.55	1.79	63	12.99	117	91	46	0	1	4	1
TN MEMPHIS	64	44	71	37	54	2	1.50	0.28	0.79	2.55	88	12.76	116	80	41	0	0	3	2
TX NASHVILLE	59	41	67	32	50	0	0.91	-0.20	0.69	1.51	57	13.25	132	87	46	0	1	3	1
TX ABILENE	64	43	71	31	54	-2	0.03	-0.27	0.03	0.85	121	4.62	160	79	49	0	1	1	0
TX AMARILLO	56	31	70	25	44	-3	0.32	0.10	0.22	1.68	323	4.28	263	87	39	0	4	2	0
TX AUSTIN	66	47	78	37	56	-5	1.50	1.09	0.88	2.85	279	6.60	135	88	53	0	0	4	2
TX BEAUMONT	71	51	80	43	61	0	1.46	0.73	0.97	3.26	181	10.75	108	91	49	0	0	3	1
TX BROWNSVILLE	82	61	92	55	72	4	2.00	0.09	0.19	3.00	111	2.21	76	93	55	2	0	2	0
TX CORPUS CHRISTI	77	56	87	50	67	2	0.25	0.05	0.23	1.25	227	3.71	88	85	56	0	0	2	0
TX DEL RIO	73	49	80	41	61	-2	0.31	0.18	0.20	0.65	217	2.28	126	86	44	0	0	2	0
TX EL PASO	65	42	71	35	53	-2	0.00	-0.06	0.00	0.41	228	0.71	72	42	18	0	0	0	0
TX FORT WORTH	63	47	70	38	55	-1	0.86	0.24	0.55	1.77	123	10.38	190	90	50	0	0	3	1
TX GALVESTON	69	56	73	49	62	1	1.48	0.98	1.08	2.51	209	9.18	137	89	58	0	0	3	1
TX HOUSTON	71	49	82	43	60	0	2.14	1.48	1.82	5.26	327	10.33	131	91	58	0	0	4	1
TX LUBBOCK	62	36	72	26	49	-2	0.28	0.09	0.28	1.68	357	3.65	237	77	46	0	2	1	0
TX MIDLAND	67	40	74	30	53	-2	0.03	-0.11	0.03	0.12	36	2.24	166	68	32	0	1	1	0
TX SAN ANGELO	66	42	73	30	54	-4	0.07	-0.12	0.05	0.49	104	3.95	169	72	47	0	1	2	0
TX SAN ANTONIO	69	50	79	41	60	-1	0.85	0.52	0.55	1.98	247	5.53	128	89	43	0	0	6	1
TX VICTORIA	72	51	83	43	62	-1	1.38	1.05	1.21	2.92	352	5.97	120	94	60	0	0	4	1
TX WACO	65	48	74	39	56	-2	0.83	0.31	0.35	3.58	293	9.01	182	90	55	0	0	4	0
TX WICHITA FALLS	62	43	70	32	52	-1	0.03	-0.45	0.01	0.70	63	5.57	154	88	56	0	1	3	0
UT SALT LAKE CITY	48	32	54	28	40	-1	0.66	0.23	0.40	0.97	99	3.25	98	78	43	0	5	2	0
VT BURLINGTON	35	22	44	9	29	-1	0.52	0.03	0.52	2.22	195	4.74	103	81	49	0	6	1	1
VA LYNCHBURG	58	36	68	27	47	1	1.64	0.84	1.15	1.90	99	6.02	77	79	43	0	2	4	1
VA NORFOLK	62	44	75	31	53	5	1.09	0.24	0.56	1.50	72	5.12	55	92	57	0	1	3	2
VA RICHMOND	62	39	73	29	50	3	0.85	0.02	0.68	1.33	67	5.94	71	87	53	0	1	3	1
VA ROANOKE	57	38	67	27	47	1	0.77	-0.03	0.45	1.16	61	3.85	51	86	49	0	1	3	0
VA WASH/DULLES	57	32	64	21	45	2	0.66	-0.06	0.32	1.21	70	5.42	75	84	57	0	3	4	0
WA OLYMPIA	50	35	53	27	43	-1	0.43	-0.72	0.15	1.06	37	7.15	43	99	86	0	3	7	0
WA QUILLAYUTE	48	38	51	34	43	0	1.84	-0.82	0.62	3.36	51	18.17	54	98	90	0	0	7	1
WA SEATTLE-TACOMA	49	40	51	36	44	-1	0.46	-0.36	0.32	1.02	50	5.79	51	94	80	0	0	3	0
WA SPOKANE	47	30	54	27	39	1	0.20	-0.13	0.12	0.72	85	2.01	47	88	58	0	6	3	0
WA YAKIMA	57	29	65	22	43	0	0.00	-0.17	0.00	0.10	25	0.98	42	74	47	0	6	0	0
WV BECKLEY	52	36	63	30	44	3	0.91	0.14	0.47	1.32	72	5.52	72	82	61	0	2	5	0
WV CHARLESTON	58	35	71	26	47	2	1.31	0.48	0.52	2.10	106	6.43	81	88	44	0	2	4	1
WV ELKINS	52	27	63	17	39	0	0.95	0.08	0.36	1.49	73	6.75	83	92	46	0	6	6	0
WV HUNTINGTON	57	37	68	30	47	1	0.94	0.10	0.57	2.12	106	5.84	76	89	40	0	2	5	1
WI EAU CLAIRE	36	21	44	14	29	0	0.85	0.48	0.85	0.85	109	2.46	99	92	51	0	7	1	1
WI GREEN BAY	34	24	38	15	29	0	0.17	-0.29	0.14	0.31	30	2.76	86	88	61	0	7	3	0
WI LA CROSSE	38	24	44	18	31	-1	0.74	0.31	0.70	0.74	79	2.92	105	89	52	0	7	2	1
WI MADISON	38	27	42	22	32	0	0.25	-0.23	0.16	0.33	31	3.96	123	83	71	0	7	5	0
WI MILWAUKEE	38	29	43	25	33	0	0.45	-0.14	0.17	0.57	44	5.16	118	86	73	0	7	3	0
WY CASPER	43	20	53	11	32	-1	0.08	-0.12	0.03	0.10	22	0.80	50	86	61	0	7	4	0
WY CHEYENNE	37	22	49	15	30	-3	0.33	0.10	0.13	0.64	128	1.38	107	82	61	0	7	4	0
WY LANDER	43	22	53	14	32	-1	0.11	-0.13	0.06	0.17	33	0.85	54	79	53	0	7	2	0
WY SHERIDAN	47	22	54	11	35	2	0.00	-0.20	0.00	0.11	24	1.35	74	81	51	0	6	0	0

Based on 1961-90 normals

\*\*\* Not Available

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

# National Agricultural Summary

March 12 - 18, 2001

Weekly National Agricultural Summary provided by USDA/NASS

## HIGHLIGHTS

A wide band of heavy precipitation boosted moisture reserves in the lower Mississippi Valley and Southeast. The moisture was beneficial along the Gulf Coast, but interior areas experienced flash floods. In Florida's Peninsula and along the mid-Atlantic Coastal Plain, rainfall was lighter and moisture

shortages remained. Another line of precipitation provided additional moisture for parts of the central Great Plains and Corn Belt. California experienced favorably warm, dry weather, while the Pacific Northwest received much-needed rain and snow.

Snow, ice, rain, and high winds slowed field preparation across most of Texas. High winds eroded soils across the Plains and produced sand storms in some locations. Small grains slightly improved, despite below-normal temperatures. However, some fields were damaged by standing water. Corn, cotton, and sorghum planting continued in southern and coastal areas, but the pace was slowed by muddy fields. Fruit and nut trees were blooming, and some peach trees were setting fruit in southern Texas.

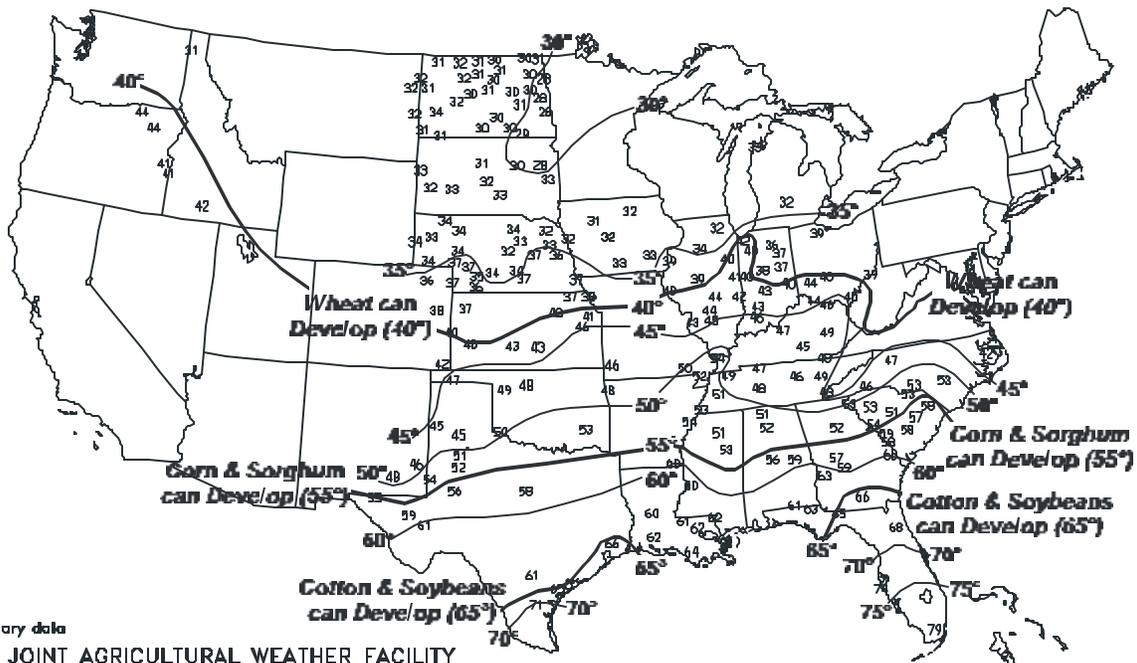
Producers prepared fields for spring crops and a few began planting corn. The sugarcane harvest neared completion and mills were closing for the season.

Much-needed rain arrived in Florida's citrus region near the end of the week, but most of the week was hot, dry, and windy. Moisture shortages remained in the peninsula, and irrigation continued most of the week. The citrus bloom was in all stages. Some trees lost leaves and a portion of their recent bloom due to moisture shortages. The early- and mid-season orange harvests

In California, producers cultivated and applied herbicides to cotton fields, but planting was limited by cool soil temperatures. Sugar beets responded to above-normal temperatures with vigorous growth. Irrigated wheat, oat, and barley fields also benefited from the warm weather, with some wheat fields beginning to develop heads. Dryland grain crops progressed well but need more moisture to continue progress. Warm, sunny weather accelerated growth and pollination in orchards and vineyards. Most fruit and nut trees were in full bloom, and early varieties were setting fruit. Bud swell began in vineyards. Petals were falling from almond trees. Grapefruit and orange harvests continued.

### Average Soil Temperature (°F, 4" Bare)

MAR 11 - 17, 2001



Based on preliminary data  
 NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
 Supplemental data provided by High Plains Regional Climate Center

# International Weather and Crop Summary

March 11 - 17, 2001

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

## HIGHLIGHTS

**EUROPE:** Mild weather caused crops to break dormancy in southeastern Europe, but dryness lingered, hampering growth.

**FSU-WESTERN:** Continued unusually mild weather prompted winter grains to break dormancy in southern areas and raised soil temperatures to favorable levels for early spring grain planting.

**MIDDLE EAST:** Unseasonable warmth increased moisture demands of developing winter wheat.

**AUSTRALIA:** Showers in New South Wales raised concern for maturing cotton, but boosted long-term moisture reserves for winter agriculture.

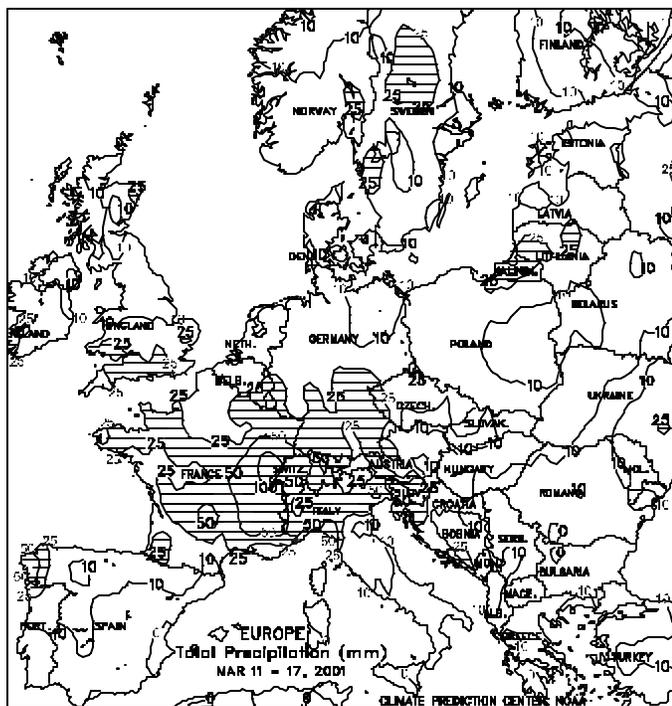
**SOUTH AFRICA:** Mostly dry, seasonably warm weather spurred filling summer crops toward maturity.

**EASTERN ASIA:** Warmer weather favored winter crop development across eastern China, while showers increased moisture supplies across the Yangtze Valley.

**SOUTHEAST ASIA:** Heavy showers continued in Thailand, causing localized flooding.

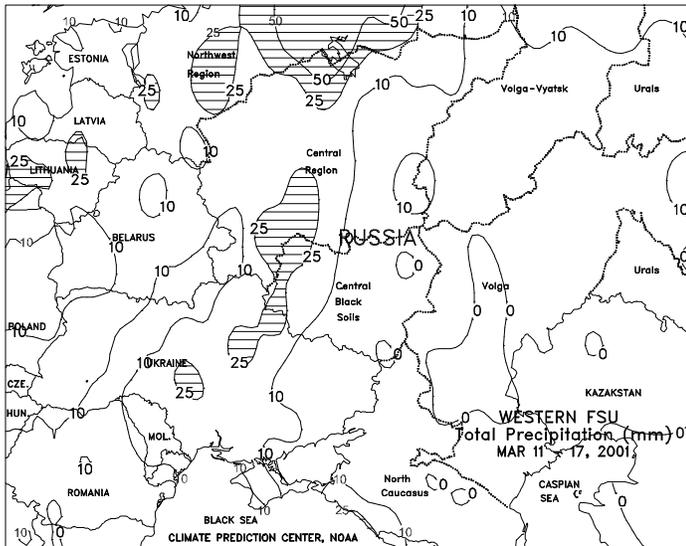
**SOUTH AMERICA:** Showers slowed summer crop harvesting across the northern Brazilian growing areas and portions of central Argentina.

**NORTHWESTERN AFRICA:** A developing drought worsened conditions for winter grains in southern Morocco, while the third consecutive week of dryness increased stress on crops in Algeria and Tunisia.

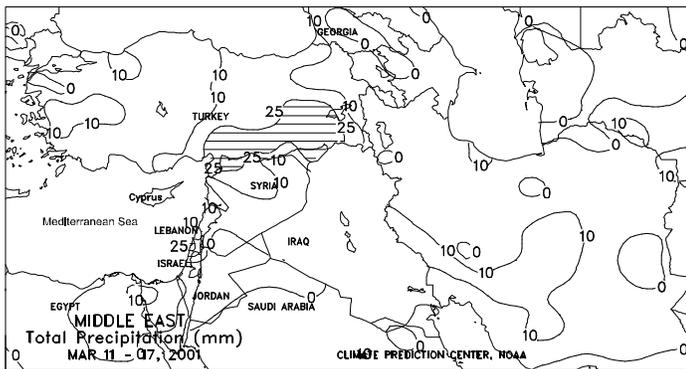


## EUROPE

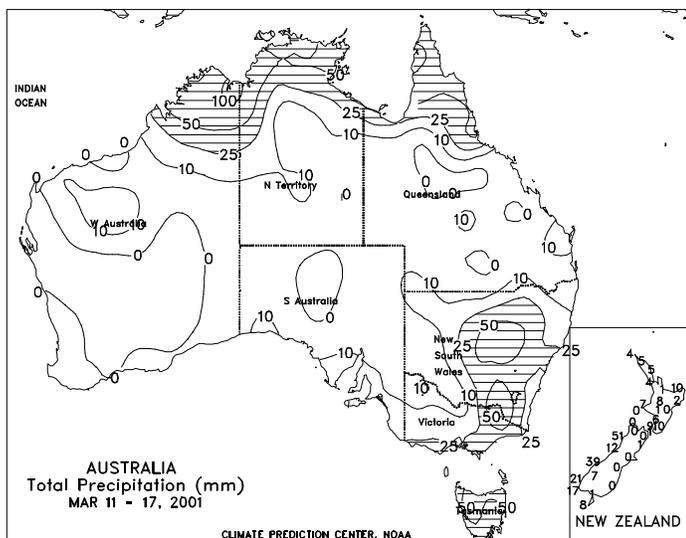
Unseasonably mild weather continued across the continent, spurring winter grain development in the west and causing crops to break dormancy in the southeast. Temperatures averaged about 1 to 4 degrees C above normal in western Europe, and about 3 to 7 degrees C above normal in eastern Europe. Dry weather lingered in southeastern Europe, however, increasing evaporative losses and hampering winter grain development. Elsewhere in southern Europe, mainly light showers (5-25 mm) fell across central and southern Italy and the northern Iberian Peninsula. In contrast, mostly dry weather in southern Spain and Portugal likely spurred some corn and sunflower planting. In northern Europe, light to moderate precipitation (10-40 mm) delayed most fieldwork, but maintained adequate moisture supplies for winter grains and oilseeds. Crops are in the vegetative stage in much of northwestern Europe and continue to lose winter hardiness in northeastern Europe.



Unseasonably warm weather continued to prevail across the region, with weekly temperatures averaging 5 to 10 degrees C above normal in Ukraine, Russia, Belarus, the Baltics, and Moldova. The unusually mild weather pattern caused snow cover to rapidly diminish. By week's end, winter grain areas in Ukraine, Belarus, the Baltics, and southern Russia (North Caucasus, lower Volga Valley, and the southern half of the Central Black Soils Region) lacked snow cover. The mild weather in northern Russia (Central Region and Volga Vyatsk) decreased the depth of snow cover. In southern Ukraine and the North Caucasus region in Russia, winter wheat began breaking dormancy about 2 to 3 weeks earlier than usual. Furthermore, extreme maximum temperatures in these areas ranged from 17 to 22 degrees C, warming topsoils to favorable levels for early spring grain planting. During the latter half of the week, a cold front brought cooler weather and light to moderate rainfall (10-30 mm) to the western two-thirds of Ukraine, Belarus, the Baltics, and westernmost areas in Russia (Central Region and the western Black Soils Region). Mostly dry weather prevailed over eastern Ukraine and the remainder of Russia.



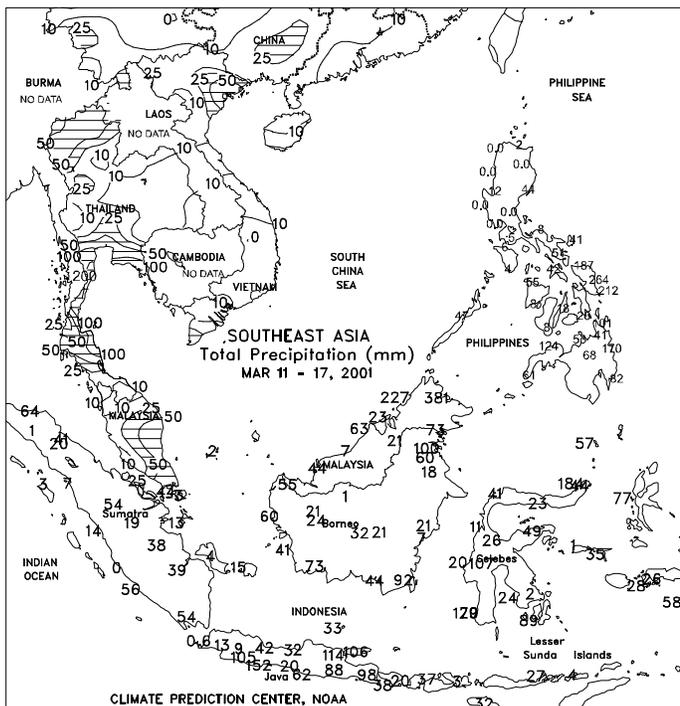
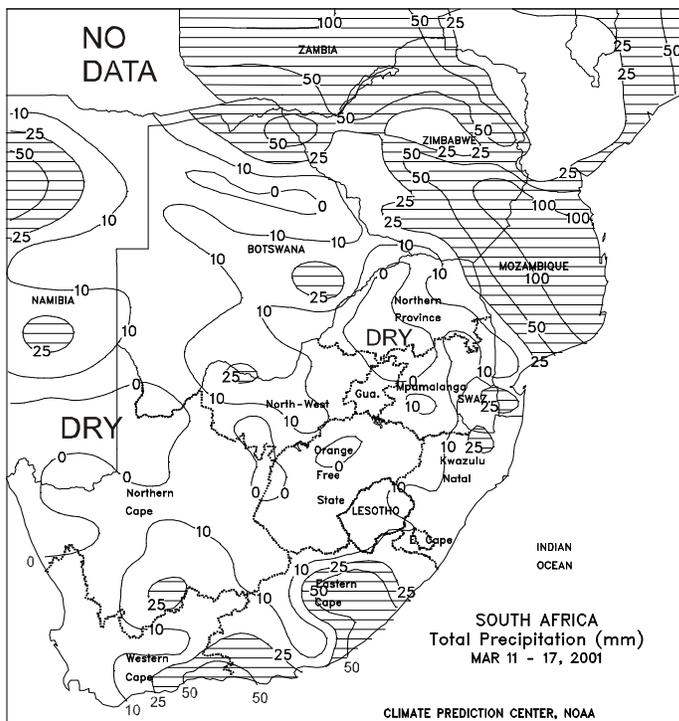
Temperatures remained above normal throughout the region, increasing moisture demands of vegetative to heading winter wheat. In Turkey, light showers (15 mm or less) moistened topsoils for vegetative development. Although temperatures averaged 4 to 6 degrees C above normal, patchy frost may have burned back tender vegetation. Moderate rain (25 mm or greater) covered a broad section of eastern Turkey and neighboring sections of Syria, increasing reservoir levels and potential spring river flow along the Tigris and Euphrates River Systems. Scattered, light showers fell from central Syria southward. Wheat in these traditionally warm areas typically ranges from reproductive in the north to filling farther south. Farther east, satellite imagery depicted beneficial rain across northern Iraq, but rainfall was generally light (10 mm or less) and scattered in the main winter wheat areas of western and northeastern Iran. Temperatures averaged near to above normal throughout Iran, but frost limited crop development.



Showery weather covered the east, hampering summer crop harvests, but aiding pastures and grazing land. Moderate to heavy rain (25-50 mm or more) covered the central and southern interior agricultural districts in New South Wales. The rainfall was unfavorable for maturing cotton, but helped to improve long-term moisture reserves. Drier weather along the New South Wales coast helped flood waters to recede, following last week's inundating rains. Rainfall was light (10 mm or less) in most of Queensland's coastal sugarcane areas, with heavy rain (50-100 mm) confined to northernmost growing areas. Dry, cooler-than-normal weather aided seasonal fieldwork in Western Australia. In New Zealand, mostly dry, mild weather covered the main growing areas.

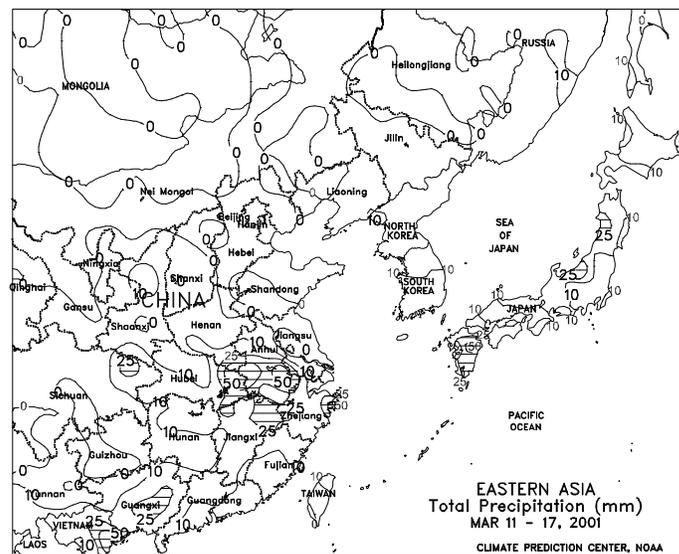
**SOUTH AFRICA**

Mostly dry, seasonably warm weather continued to dominate the corn belt, helping filling summer crops advance toward maturity. Summer grain and oilseed harvesting typically runs from April through June, although harvesting of irrigated crops was reportedly underway. Rainfall was light (25 mm or less) over coastal sugarcane areas of KwaZulu-Natal. Harvesting of sugarcane, which is partially to fully irrigated, occurs from April to September. Elsewhere, widespread showers (10-50 mm or more) benefited summer crops and increased irrigation supplies across Eastern Cape and eastern sections of Western Cape. Near- to above-normal temperatures in the Cape Provinces sustained irrigation demands in orchards and pastures. Rain is needed in western sections of Western Cape before wheat planting can begin.



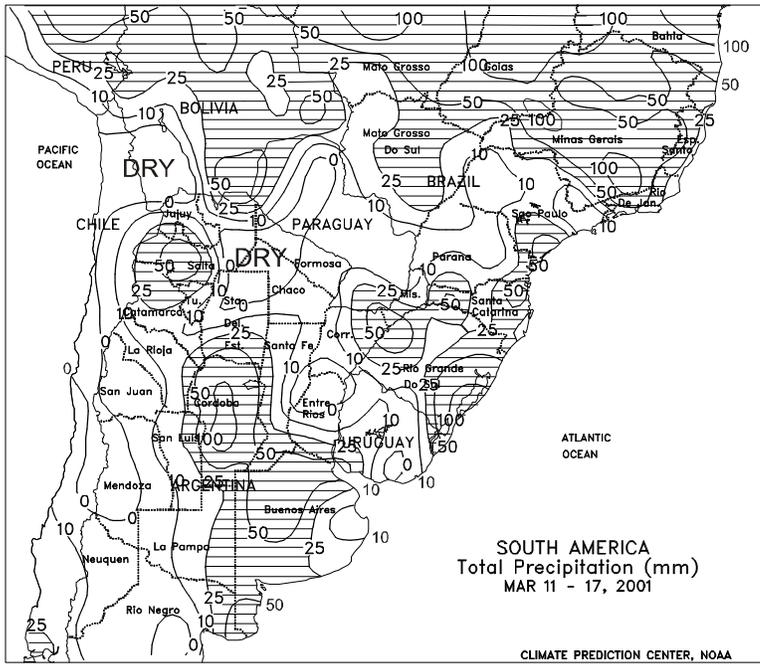
**SOUTHEAST ASIA**

Heavy showers (50-200 mm) continued in southern and northwestern Thailand, slowing fieldwork. In Java, Indonesia, showers (50-200 mm) further increased moisture supplies for main-season rice, but caused localized flooding. Heavy showers (50-200 mm) fell in the east-central and southern Philippines, continuing to disrupt fieldwork.



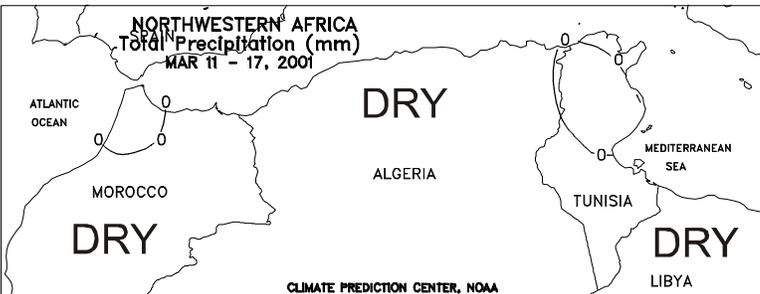
**EASTERN ASIA**

Across eastern China, warmer weather favored winter crop development, especially winter wheat in the North China Plain. Temperatures averaged 2 to 4 degrees C above normal across eastern China. Dry weather prevailed from the North China Plain northward into Manchuria. Showers (10-40 mm) increased moisture supplies for winter crops across the Yangtze Valley. The largest amounts (50-60 mm) fell in eastern Hubei and southern Anhui. Seasonably light rain (10-25 mm) fell across southern China. Despite rain during the past few weeks in this region, rainfall has averaged below normal.



**SOUTH AMERICA**

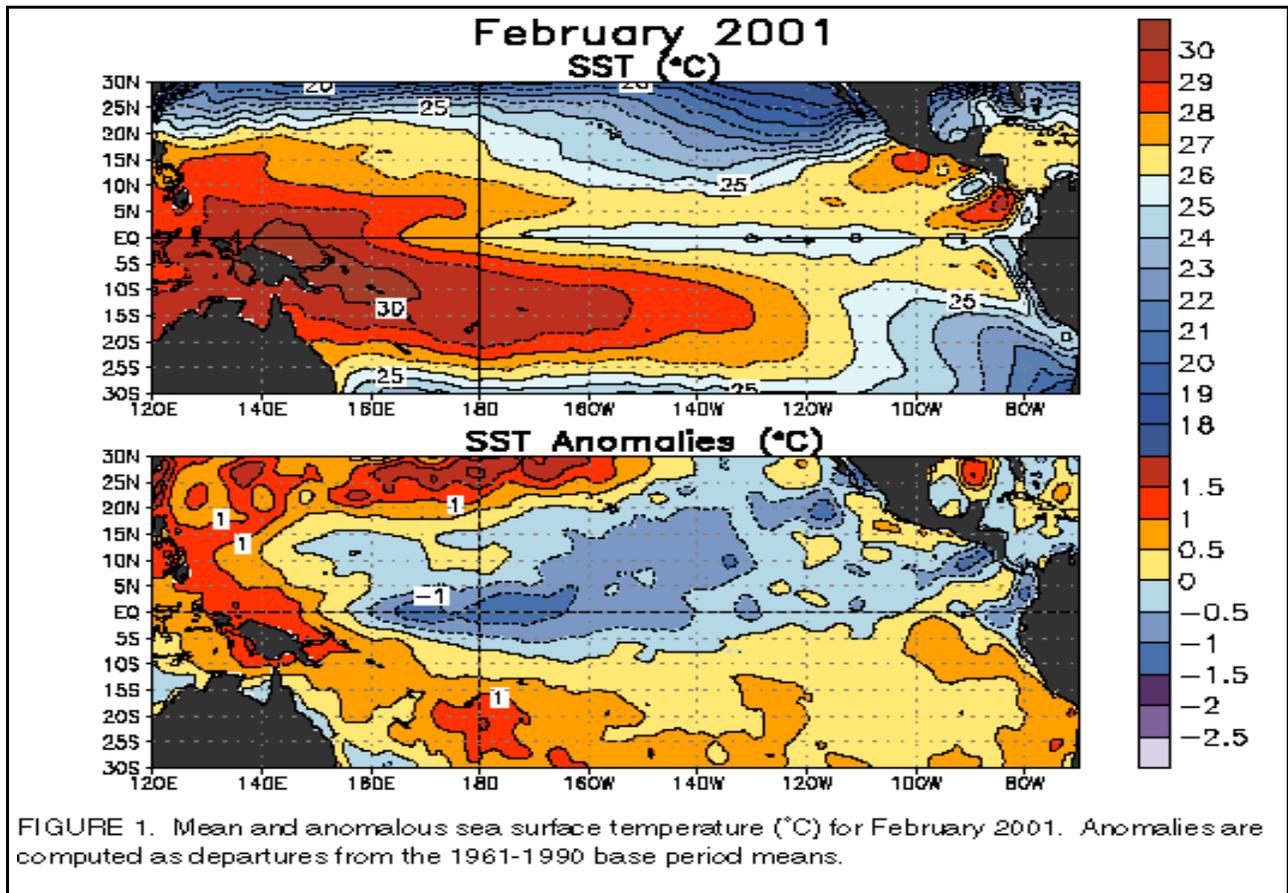
Moderate showers (25-50 mm, with isolated amounts greater than 70 mm) covered most of central Argentina, maintaining adequate to abundant soil moisture for second-crop soybeans. However, the showers slowed sunflower and early corn harvesting. Across northern Argentina, dry weather continued to stress late-planted cotton, but benefited early-maturing cotton. Temperatures averaged 2 to 4 degrees C above normal across Argentina. According to Argentine Agricultural Secretariat as of March 9, corn was 6 percent harvested nationwide, compared with 10 percent last year. In Entre Rios, corn was 46 percent harvested and was 10 percent harvested in Santa Fe. Sunflower was 25 percent harvested nationwide, compared with 44 percent last year. In Brazil, heavy showers (25-150 mm) fell across Mato Grosso, Goias, most of Minas Gerais, and coastal Bahia, slowing soybean and corn harvesting. This moisture, however, continued to benefit coffee and sugarcane in Minas Gerais and Sao Paulo and cocoa in coastal Bahia. Farther south in Parana and Rio Grande do Sul, the soybean harvest continued in spite of scattered showers (10-60 mm). According to Safras, an independent weekly Brazilian analyst, as of March 16, soybeans were 20 percent harvested, the same as the 5-year average. In the states of Mato Grosso, Mato Grosso do Sul, Goias, and Sao Paulo, harvesting was between 30 and 40 percent complete.



**NORTHWESTERN AFRICA**

In Morocco, dryness continued to impact winter grains. In southern Morocco, a developing drought worsened conditions for winter grains in or nearing the heading stage, while farther north, the dryness continued for the second consecutive week. Rain is needed soon in southern Morocco to prevent further deterioration in crop conditions and to avert serious declines in yield prospects. Farther east, the third consecutive week of mostly dry weather prevailed over winter grains in Algeria and Tunisia, increasing stress on winter grains approaching the highly weather-sensitive reproductive phase of development. Weekly temperatures averaged 3 to 5 degrees C above normal across the region, further reducing available soil moisture for winter grains.

La Niña Update: March 12, 2001



Mature cold episode (La Niña) conditions continued during February, as sea surface temperatures (SSTs) remained more than 1.0°C below average across portions of the central equatorial Pacific between 160°E and 160°W (Fig. 1). Since early February, SSTs have become anomalously warm in many sections of the eastern tropical Pacific. Similar features were observed at about the same time of the year in 1999 and 2000. In both years, the anomalous warming of the eastern equatorial Pacific SSTs lasted until May and then rapidly disappeared as cross-equatorial flow from the Southern Hemisphere into the Northern Hemisphere became established and seasonal rainfall began to increase over Central America, southern Mexico, and the southeastern tropical North Pacific.

Since the demise of the 1997-98 El Niño, many ENSO indices have shown distinct annual cycles, with the northern winter seasons featuring: (1) minima in the SST, (2) maxima in the OLR anomalies, and (3) maxima in the low-level easterly winds over the central equatorial Pacific. The slope of the oceanic thermocline has been greater than normal throughout this period, with positive (negative) subsurface temperature anomalies in the west-central (eastern) equatorial Pacific. The strength of this anomalous subsurface pattern has also displayed an annual cycle since mid-1998. The evolution of the atmospheric and oceanic anomaly patterns since mid-1998 is similar to, but stronger than, that observed during 1984-86, which followed the strong 1982-83 El Niño. During both of these post-strong El

Niño periods, the anomalous annual cycles were accompanied by an enhanced Australasian monsoon system.

Over the past 2 years, there has been a gradual expansion of the area of positive equatorial subsurface temperature anomalies into the central Pacific. This evolution is consistent with a slow decay of the subsurface thermal structure that characterizes the mature phase of cold episodes. Thus, it is likely that cold episode conditions will gradually weaken over the next several months, with near-normal conditions likely during the summer of 2001. This assessment is generally supported by the most recent NCEP statistical and coupled model forecasts, as well as by other available coupled model and statistical model predictions, which indicate a gradual weakening of cold episode conditions during the next few months. Thereafter, the models indicate near-normal or slightly warmer-than-normal conditions during the second half of 2001.

Weekly updates for SST, 850-hPa wind, OLR, and the equatorial subsurface temperature structure are available on the CPC homepage 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. This ENSO Diagnostic Discussion, which replaces the ENSO Advisories, will appear regularly around the 10th of each month on the CPC web site.

