

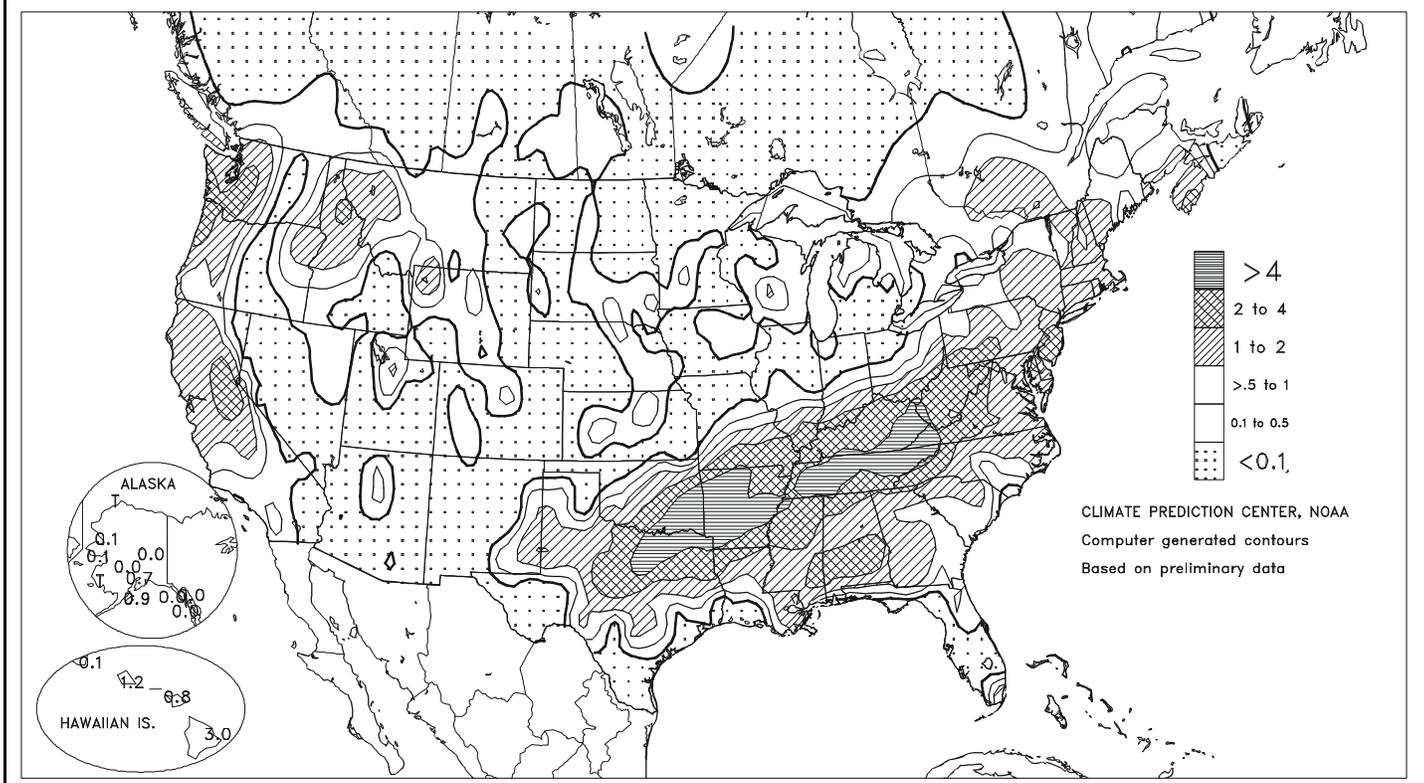
# WEEKLY WEATHER AND CROP BULLETIN

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 17 - 23, 2002



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

## HIGHLIGHTS

March 17 - 23, 2002

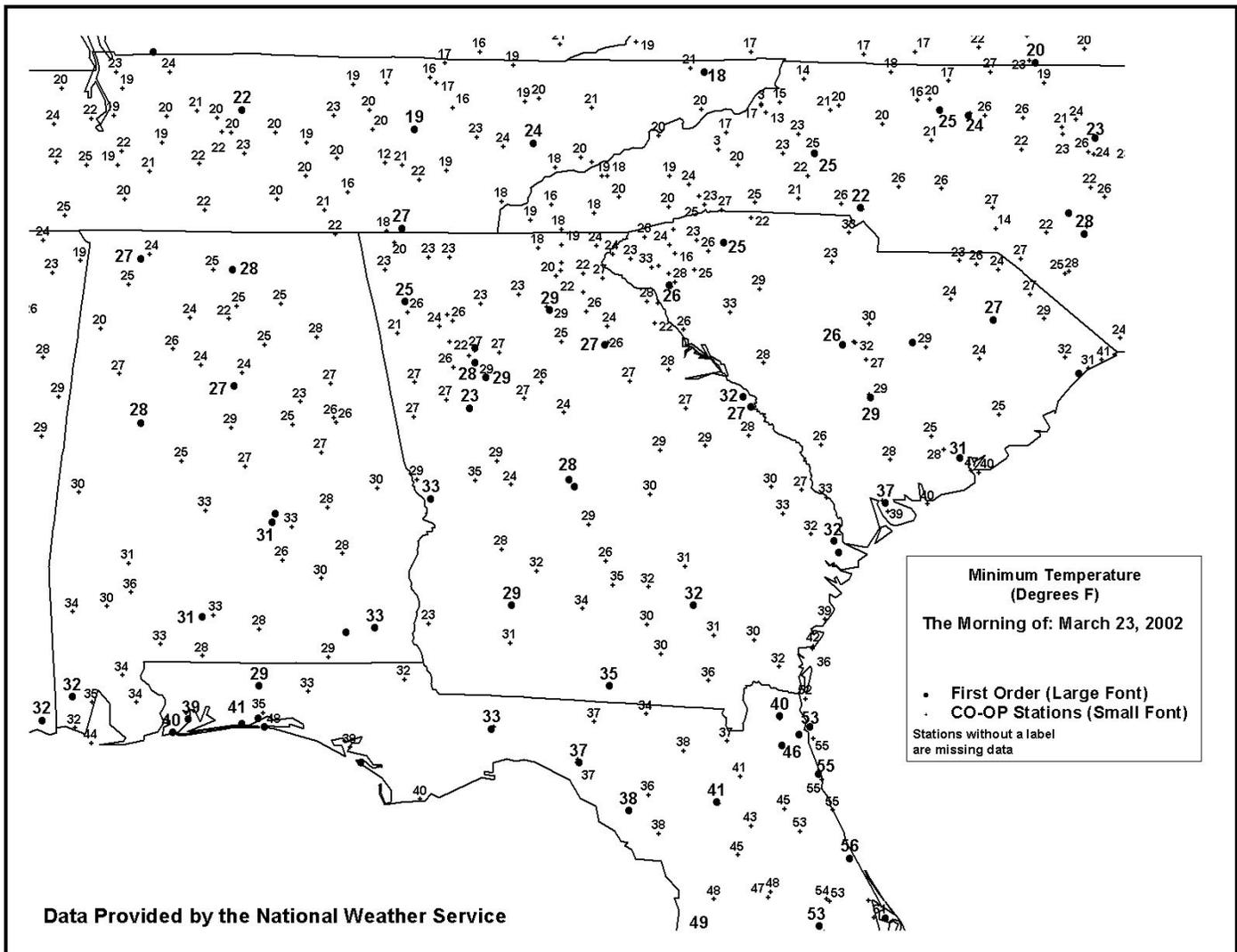
Highlights provided by USDA/WAOB

**A**nother late-season cold outbreak overspread much of the Nation, holding weekly temperatures more than 30°F below normal in **northern Montana** and threatening winter wheat and blooming fruit trees farther south. Heavy rain preceded the arrival of cold air across the **interior South**, causing widespread flooding. Although temperatures fell below -20°F across **northern and eastern Montana**, the **northern High Plains'** drought-stressed winter wheat crop was protected from further adversity by a substantial snow cover. Farther south, wheat fields in northern and central Texas and the **southeastern half of Oklahoma** benefited from topsoil  
*(Continued on page 3)*

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## March 23 Freeze Threatens Southeastern Peaches



Summary provided by USDA/WAOB

Peaches are grown in many locations across the South and East, primarily from central and eastern Texas to the middle and southern Atlantic States. Excluding California, which accounted for 72 percent (1.830 billion pounds) of the U.S. peach production in 2001, there were 707.3 million pounds harvested nationwide last year.

Of the 707.3 million non-California pounds, the ten leading peach production States were: Georgia (19 percent(%)), South Carolina (14%), New Jersey (10%), Pennsylvania (9%), Washington (8%), Michigan (6%), Texas (4%), Alabama (4%), Illinois (3%), and Colorado (3%).

In an ideal year, minor spring freezes in peach-growing areas may provide a natural thinning of the crop. However, severe spring freezes can devastate regional peach production. For example, Georgia peach production totaled just 10.0 million pounds in 1996, due to severe freezes from March 7-10 and 21-23, but rebounded to 160.0 million pounds during the favorable

1997 growing season. Similarly, South Carolina peach production was cut to 8.0 million pounds in 1996, but reached 160.0 million pounds in 1997. Timing of the spring freezes is critical, as the later-developing New Jersey peach crop escaped effects from the 1996 freezes (78.0 million pounds) and had similar production (65.0 million pounds) in 1997.

This year, record-cold weather from March 3-5 caused some damage to early-blooming peaches across the Deep South. According to USDA/NASS, "[Texas] fruit setting moved forward in some southern locations...not damaged by the previous cold weather." More recently, "some [Texas] orchards were damaged by hail" on March 19.

Preliminary reports from the Georgia climatologist indicated that the March 23 freeze caused some thinning of early peach varieties in central Georgia's major producing region, with some minor production losses possible. Most Georgia peach orchards experienced low temperatures only slightly below 30°F, with isolated stations near 24°F. Similar conditions were noted in peach-producing areas of Alabama and South Carolina.

(Continued from front cover)

moisture improvements. However, very dry conditions persisted on the **High Plains** as far south as the **Oklahoma Panhandle**, leaving the drought-affected wheat crop exposed to additional gusty winds and temperature extremes. Late-week temperatures on the **central High Plains** ranged from 5 to 15°F on March 22, when cold weather threatened wheat that had broken dormancy, to as high as 85 °F just 2 days later. Meanwhile across the **South**, torrential rains struck early in the week from **northeastern Texas to southwestern Virginia**, halting fieldwork and submerging lowlands. Flooding affected some winter wheat fields in **southern portions of the Ohio Valley** and in the **northern Delta region**. In contrast, only light showers dampened the **southern Atlantic States**, leaving the region with little soil moisture for pastures and winter grains. Unfavorably dry conditions also persisted across **southern Texas**. On March 22-23, sharply cooler air overspread the **South**, threatening blooming peaches and tender ground vegetation from **central Texas to South Carolina**. On March 23, temperatures generally ranged from 24 to 32°F in major peach-growing areas from **central Georgia into South Carolina**. Cold weather also returned to the **Midwest**, maintaining stressful conditions for livestock in the wake of near-record winter warmth. **Corn Belt** soil moisture ranged from somewhat short across the **upper Midwest** to adequate or excessive in the **Ohio Valley**. In the **West**, beneficial precipitation fell from **northern and central California and the Pacific Northwest to the northern Rockies**, repeating a pattern that has persisted since November. Meanwhile, unfavorably dry weather continued to stress pastures and dryland small grains in **southern California** and the **Southwest**. Meager high-elevation snow packs in the **central and southern Rockies** and the **Southwest** continued to reduce spring runoff potential.

Heavy rain fell across the **interior South** through March 20, boosting 4-day (March 17-20) totals in **western Tennessee** to 6.52 inches in **Jackson** and 5.50 inches in **Memphis**. **Dallas-Ft. Worth, TX**, netted 5.61 inches on March 18-19. Twenty-four hour rainfall totals greater than 6 inches were noted at a few locations, including **Beaver Ridge (Knox County), TN** (6.07 inches on March 17-18); **Appalachia (Wise County), VA** (6.11 inches on March 17-18); and a station near **Ft. Worth, TX** (6.59 inches on March 19-20). **East of the Appalachians**, lighter but much-needed precipitation provided limited relief from long-term drought. **Atlantic City, NJ**, received 1.59 inches of rain on March 20, their highest 1-day total since 2.29 inches fell on August 11, 2001. Farther north, heavy snow fell across **northern New England** on March 20-21, with more than 1 foot observed in parts of **Washington County, ME**. March 18-21 snowfall totals included 9.0 inches in **Concord, NH**, and 9.1 inches in **Portland, ME**.

Early in the week, record warmth prevailed across the **Southeast**, while cool weather lingered in the **West**. On Sunday, daily-record highs included 89°F in **Ft. Myers, FL**, and 88°F in **Columbus, GA**. **Macon, GA**, posted four consecutive high temperatures above 80°F from March 17-20, followed by a freeze (28°F) on March 23. Elsewhere in the **Southeast**, more than a dozen daily-record lows were set or tied on Saturday, including 21 °F in **Richmond, VA**, and 27°F in **Birmingham, AL**. Farther west, more than three dozen daily-record lows were established in the **West Coast States** by midweek. On Sunday, record lows in **southern California** were set in locations such as **Riverside** (32°F) and **Thermal** (33°F). Record lows in **California's Central Valley** included 31°F (on March 18) in **Redding** and 36°F (on March 19) in **Bakersfield**.

After midweek, another strong surge of cold air swept across areas **east of the Rockies**. On March 21, the minimum of -22°F in **Miles City, MT**, represented their latest observance of a low temperature below -20°F (previously -22°F on March 11, 1951). Elsewhere in **Montana**, daily-record lows on March 21 included -27°F in **Cut Bank** and -21°F in **Havre**, helping to hold weekly temperatures slightly below 0°F in both locations. **Great Falls, MT**, registered 12 days

with low temperatures below 0°F during the first 24 days of the month, breaking their March 1912 record of 10 days. Meanwhile, warm weather returned to the **Southwest**, where **Phoenix, AZ**, noted a daily-record high of 93°F on March 21. Farther east, however, cold air continued to spread across the **Plains, Midwest, and East**. Monthly barometric pressure records were set on March 21 in Kansas locations such as **Dodge City** (30.83 inches) and **Wichita** (30.80 inches), edging March standards that had been set in 1980. The following day, daily records in **Kansas** included 5°F in **Hill City**, 9°F in **Ashland**, and 12°F in **Wichita**. Toward week's end, locally heavy lake-effect snow squalls developed downwind of the **Great Lakes**. In **western New York's Lewis County, Highmarket** received 26.5 inches of snow in 24 hours on March 22-23, while **North Osceola** netted 28.1 inches in 28 hours.

Torrential rainfall abated across **Hawaii's eastern islands** early in the week, followed by a period of cool, dry weather. On the **Big Island, Honokaa** netted a 24-hour (March 17-18) rainfall of 10.20 inches and a 48-hour (March 17-19) total of 12.75 inches. **Pukalani, Maui**, received 2.16 inches in 24 hours on March 17-18. **Hilo, on the Big Island**, noted record-low high temperatures for March 18 (71°F) and 19 (70°F), and **Kahului, Maui**, posted a daily-record low of 55°F on March 22. Farther north, mild weather prevailed across **northern and western Alaska** for the fourth consecutive week, while chilly conditions persisted across **southeastern portions of the State**. **Barrow, AK**, notched a daily-record high of 27°F on March 22. Mostly dry weather prevailed across the State, except in **south-central Alaska**, where heavy snow fell early in the week. **Anchorage, AK**, received 28.7 inches of snow on March 16-17, including 21 inches in 17 hours from Saturday evening to Sunday afternoon.

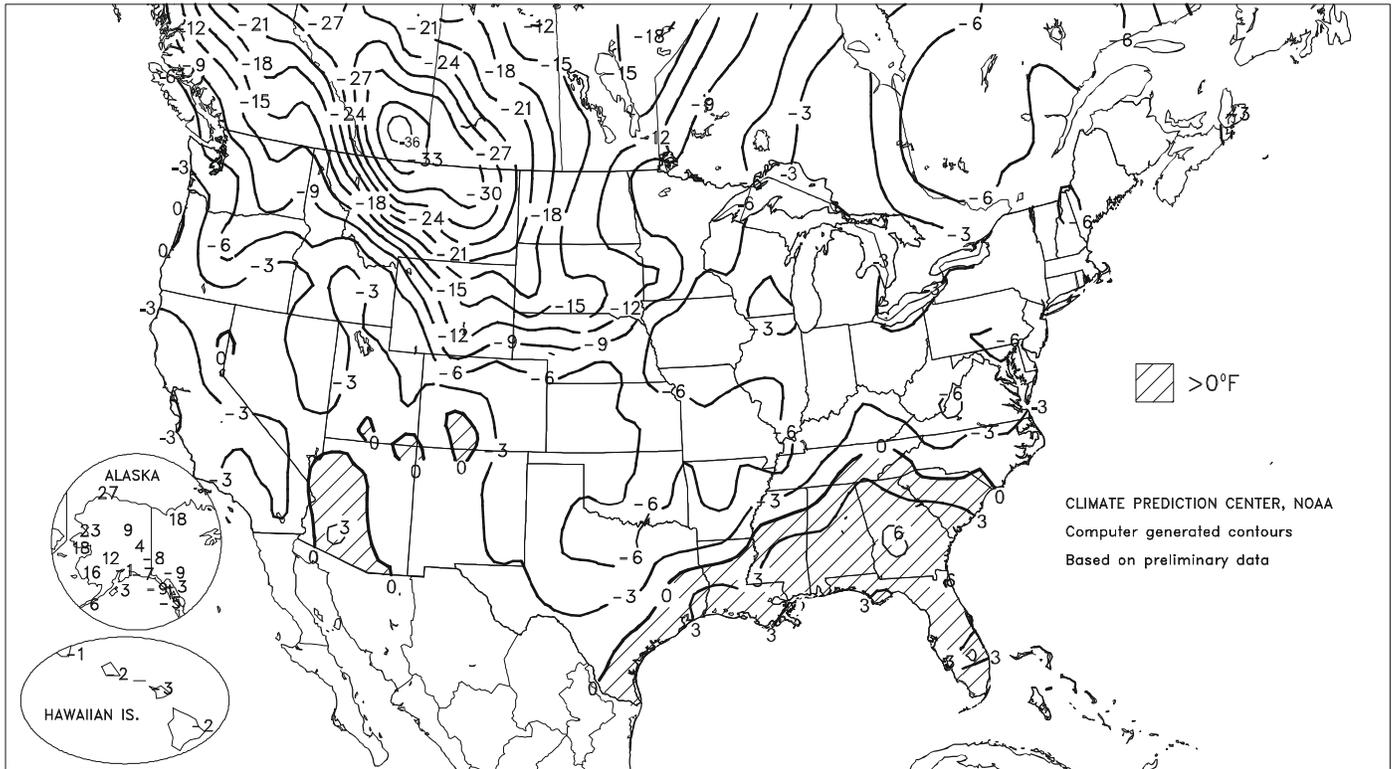
### Flooding Strikes the Interior South

During two rounds of heavy rainfall from March 17-20, several locations from northeastern Texas to southwestern Virginia received more than 6 inches of rain in a 24-hour period. A rapid runoff rate triggered widespread flooding along the axis of torrential rains. For example, the Trinity River at Dallas, TX, crested at 8.73 feet above flood stage on March 20, the highest water level at that gauging station since May 9, 1995 (8.98 feet above flood stage). Meanwhile in east-central Oklahoma, the Poteau River near Panama crested 13.42 feet above flood stage on March 20, but remained more than 7 feet below the high-water mark.

Farther east, major flooding accompanied runoff from the earlier precipitation, which mostly fell on March 17-18. The Cumberland River at Barbourville, KY, rose to 11.70 feet above flood stage on March 19, only 7.21 feet below the record crest set on April 6, 1977. Farther downstream, the Cumberland River at Williamsburg, KY, crested 8.96 feet above flood stage before dawn on March 21. Farther north, Triplett Creek at Morehead, KY, crested on March 20 at 2.02 feet above flood stage, but just 0.88 foot below the record crest, set on July 5, 1939. Elsewhere, the North Fork of the Holston River, near Saltville, VA, in the Tennessee River basin, experienced a discharge rate of 19,000 cubic feet per second on March 18, the highest ever observed during the 82-year period of record.

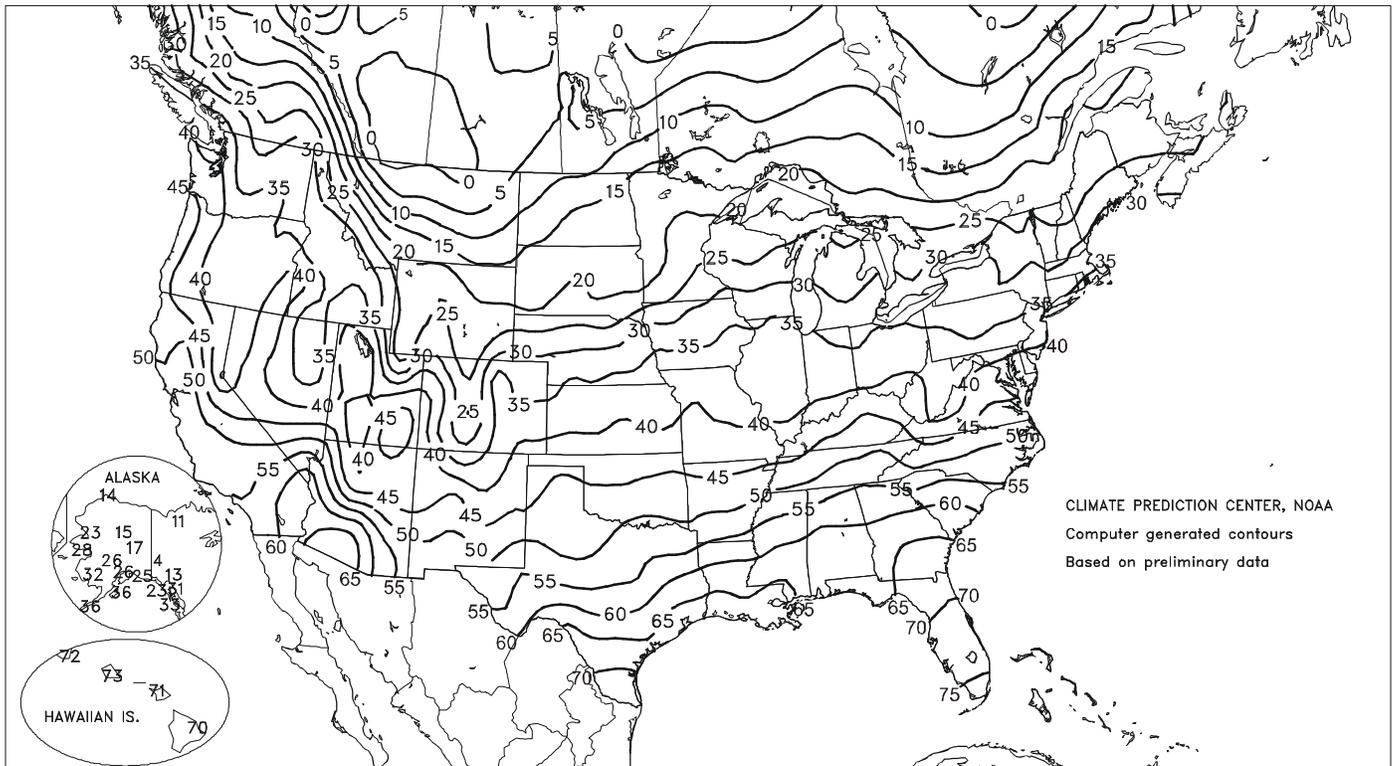
Departure of Average Temperature from Normal (°F)

MAR 17 - 23, 2002



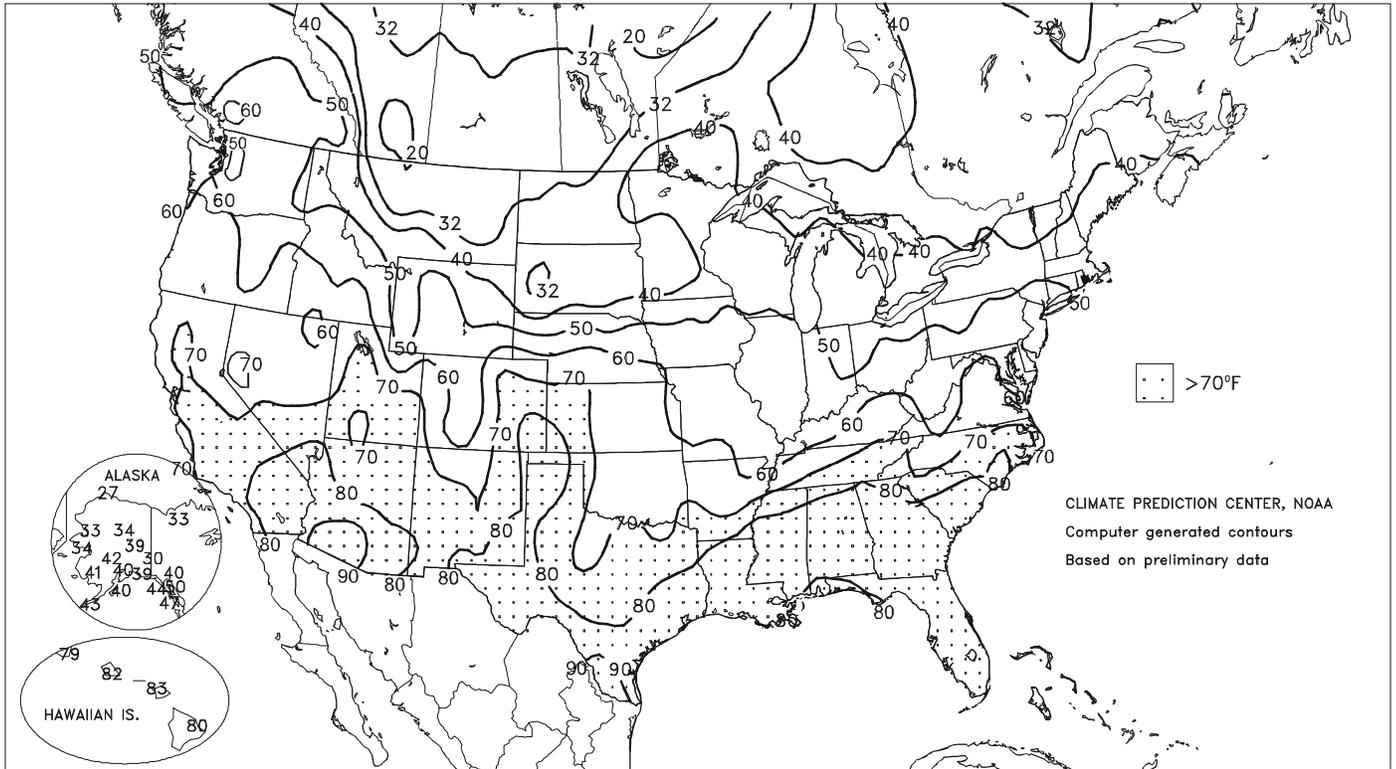
Average Temperature (°F)

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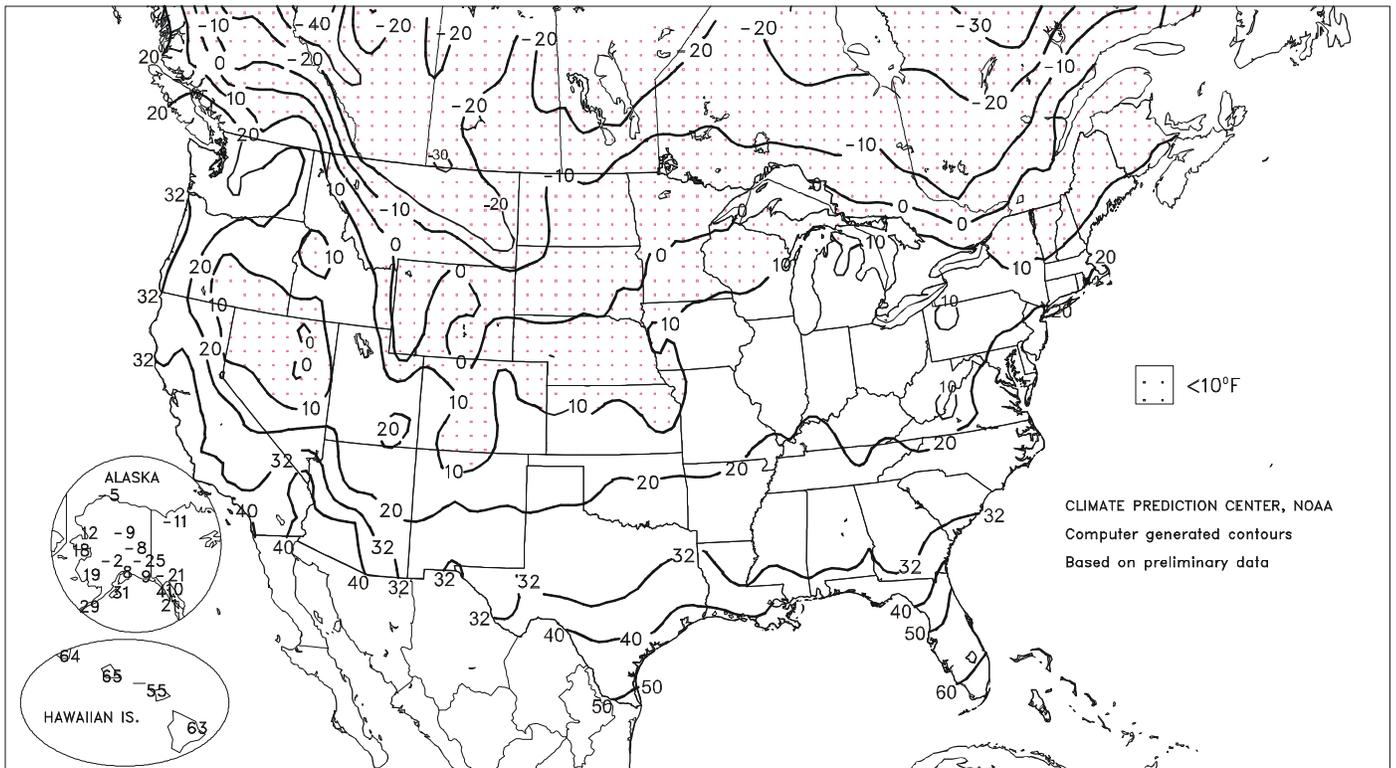
Extreme Maximum Temperature (°F)

MAR 17 - 23, 2002



Extreme Minimum Temperature (°F)

MAR 17 - 23, 2002



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

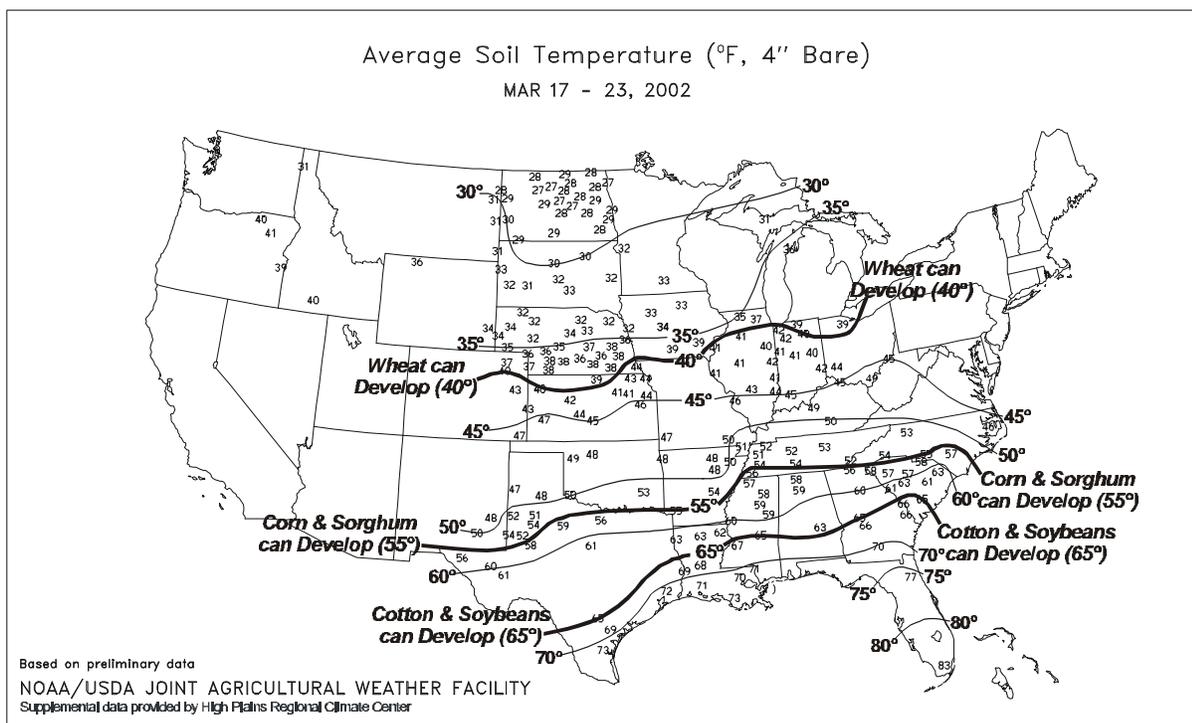
**Weather Data for the Week Ending March 23, 2002**

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			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F				
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
MS BATESVILLE <sup>x</sup>	61	43	81	24	52	-1	2.07	0.69	0.74	6.47	148	19.35	144	--	--	0	2	4	2	
BELZONI <sup>x</sup>	66	48	83	31	57	1	1.80	0.27	1.20	5.05	107	--	--	--	--	0	2	3	2	
CLARKSDALE <sup>x</sup>	58	43	79	27	51	-4	3.13	1.87	1.15	6.91	170	17.79	127	--	--	0	2	3	3	
CLEVELAND <sup>x</sup>	60	45	81	28	53	-4	2.63	1.23	0.82	5.90	131	18.17	132	--	--	0	2	4	2	
GREENVILLE <sup>x</sup>	62	46	83	30	54	-3	2.30	0.97	1.15	4.60	107	18.25	128	--	--	0	2	4	2	
GREENWOOD <sup>x</sup>	68	46	83	28	57	-1	1.52	0.19	1.43	3.71	88	14.57	107	--	--	0	2	3	1	
INDIANOLA 1S	66	46	82	29	56	--	1.58	--	1.29	4.49	--	15.12	--	62	54	0	2	3	1	
INVERNESS 5E	67	47	83	31	57	--	1.58	--	1.43	3.89	--	13.98	--	65	55	0	1	3	1	
LYON	60	43	80	28	52	--	3.02	--	1.60	6.24	--	--	--	58	50	0	2	4	3	
MOORHEAD <sup>x</sup>	67	46	83	30	57	0	1.86	0.46	0.90	3.57	81	14.66	102	--	--	0	2	3	2	
ONWARD	69	48	84	31	59	--	1.22	--	1.22	4.83	--	12.48	--	63	56	0	2	1	1	
ROLLING FORK <sup>x</sup>	69	48	86	29	59	2	0.42	-1.03	0.23	1.92	42	9.81	66	--	--	0	2	3	0	
SIDON	68	47	82	31	58	--	1.28	--	1.20	2.98	--	11.96	--	67	53	0	1	3	1	
TUNICA <sup>x</sup>	59	42	71	27	51	-3	3.03	1.73	1.40	8.13	201	14.50	114	--	--	0	2	4	3	
TUNICA 1W	57	41	70	26	49	--	2.47	--	1.25	7.29	--	12.87	--	56	49	0	3	4	2	
VANCE	62	44	81	29	53	--	3.25	--	1.92	--	--	--	--	60	55	0	1	3	3	
VICKSBURG <sup>x</sup>	72	52	84	31	62	2	1.98	0.51	1.91	4.31	91	12.64	80	--	--	0	1	2	1	
YAZOO CITY <sup>x</sup>	71	49	84	29	60	2	2.16	0.55	1.71	6.69	132	15.42	94	--	--	0	2	3	1	
STONEVILLE <sup>x</sup>	62	46	81	30	54	-2	2.34	1.04	1.15	4.64	113	17.72	127	63	54	0	2	3	2	
MO CARDWELL	53	38	57	24	45	-6	2.46	1.46	1.79	4.30	124	11.18	104	53	48	0	3	4	1	
CHARLESTON	51	36	56	21	44	-4	2.05	1.20	1.33	3.45	116	9.51	97	51	43	0	3	4	2	
CLARKTON	52	36	57	20	44	-6	2.32	1.52	1.62	4.87	175	11.13	124	--	--	0	3	4	2	
DELTA	50	36	54	21	43	-6	2.60	1.54	1.65	5.17	157	11.67	108	49	41	0	3	3	2	
GLENNONVILLE	51	37	57	23	44	-6	2.29	1.49	1.61	4.10	147	10.11	112	53	45	0	3	4	2	
PORTAGEVILLE #1	52	38	57	23	45	-5	2.22	1.33	1.63	3.92	122	10.89	105	53	44	0	3	3	1	
PORTAGEVILLE #2	52	38	58	23	45	-5	2.42	1.53	1.81	3.99	124	10.46	101	54	45	0	3	3	1	
STEELE	53	39	58	24	46	-4	2.40	1.52	1.69	4.17	121	11.65	106	52	46	0	3	4	1	

Compiled by USDA/OCE/WAOB's Stoneville Field Office. <sup>x</sup> Based on 1971-2000 normals.

**Delta and Bootheel Weather and Crop Summary:** A meandering frontal boundary focused precipitation across the Delta and Bootheel for much of the week. The cold air that trailed the front lowered temperatures below the freezing mark. The abundant rainfall and below-normal temperatures disrupted corn planting at many Delta locations. Dry weather toward week's end allowed fieldwork to resume in areas not inundated by the recent rainfall. Winter wheat continued to develop.



National Weather Data for Selected Cities

Weather Data for the Week Ending March 23, 2002

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	70	48	83	26	59	4	1.03	-0.40	1.00	4.58	102	13.51	95	88	41	0	2	2	1
	HUNTSVILLE	65	44	81	25	55	2	1.48	-0.04	0.95	3.13	62	10.37	67	87	63	0	3	3	1
	MOBILE	72	55	81	31	64	3	0.22	-1.45	0.22	4.19	77	10.58	65	93	62	0	1	1	0
	MONTGOMERY	74	52	86	31	63	4	2.68	1.26	2.60	4.78	98	9.84	64	89	41	0	1	2	1
AK	ANCHORAGE	34	17	40	8	26	-1	0.73	0.61	0.73	0.75	163	1.33	71	92	76	0	7	1	1
	BARROW	22	5	27	-5	14	27	0.01	0.01	0.01	0.03	300	0.09	38	93	84	0	7	1	0
	FAIRBANKS	35	-1	39	-8	17	4	0.00	-0.06	0.00	0.01	6	0.63	57	80	55	0	7	0	0
	JUNEAU	42	20	50	10	31	-3	0.00	-0.73	0.00	0.99	37	9.93	86	64	41	0	7	0	0
	KODIAK	38	33	40	31	36	3	0.93	-0.23	0.75	3.52	91	26.50	149	80	68	0	2	2	1
	NOME	31	24	34	18	28	18	0.14	0.03	0.12	0.48	123	3.26	158	89	79	0	7	2	0
AZ	FLAGSTAFF	53	24	68	16	38	1	0.38	-0.17	0.23	0.44	22	0.53	8	70	24	0	6	2	0
	PHOENIX	80	53	93	47	67	4	0.00	-0.22	0.00	0.08	10	0.13	5	34	17	2	0	0	0
	TUCSON	77	44	88	34	60	0	0.01	-0.14	0.01	0.15	24	0.76	30	36	16	0	0	1	0
	YUMA	78	52	89	47	65	-2	0.00	-0.05	0.00	0.00	0	0.00	0	***	***	0	0	0	0
AR	FORT SMITH	58	40	65	26	49	-5	5.32	4.41	3.09	6.61	229	11.62	148	96	60	0	3	3	2
	LITTLE ROCK	56	40	63	26	48	-6	2.63	1.49	1.28	6.87	200	14.02	135	93	65	0	2	4	2
CA	BAKERSFIELD	68	43	84	36	56	-2	0.26	-0.04	0.18	0.38	36	1.16	34	79	49	0	0	2	0
	FRESNO	65	42	80	35	53	-3	0.43	-0.05	0.26	0.90	53	2.05	34	87	60	0	0	2	0
	LOS ANGELES	67	49	74	44	58	0	0.16	-0.32	0.12	0.28	15	1.38	17	91	54	0	0	2	0
	REDDING	62	39	72	32	50	-3	0.93	-0.19	0.81	2.53	63	8.73	55	77	56	0	1	3	1
	SACRAMENTO	61	42	70	35	51	-4	1.13	0.54	0.56	2.85	130	6.26	65	99	54	0	0	3	2
	SAN DIEGO	64	51	68	47	57	-3	0.39	-0.11	0.39	0.47	27	0.95	16	80	56	0	0	1	0
	SAN FRANCISCO	61	46	69	41	54	0	1.03	0.35	0.53	2.13	84	5.13	47	83	71	0	0	3	1
	STOCKTON	63	40	72	34	51	-4	0.84	0.35	0.34	1.79	102	4.12	60	91	70	0	0	3	0
CO	ALAMOSA	54	15	64	8	35	1	0.00	-0.10	0.00	0.04	14	0.77	103	62	21	0	7	0	0
	CO SPRINGS	54	18	70	10	36	-3	0.00	-0.24	0.00	0.24	35	0.60	46	79	18	0	7	0	0
	DENVER INTL	50	19	69	10	35	-4	0.07	-0.12	0.04	0.43	65	0.96	86	85	29	0	7	2	0
	GRAND JUNCTION	58	30	71	21	44	0	0.00	-0.22	0.00	0.64	93	0.97	54	67	35	0	5	0	0
	PUEBLO	59	15	78	9	37	-6	0.00	-0.23	0.00	0.00	0	0.50	41	63	34	0	7	0	0
CT	BRIDGEPORT	41	28	50	20	35	-6	0.88	-0.08	0.81	2.12	71	4.72	49	77	62	0	5	2	1
	HARTFORD	41	25	51	16	33	-6	0.91	0.01	0.74	2.82	101	5.54	58	80	58	0	7	2	1
DC	WASHINGTON	50	35	59	24	43	-5	1.03	0.22	0.48	2.65	98	4.44	52	80	52	0	3	4	0
DE	WILMINGTON	46	33	56	22	39	-5	1.48	0.57	0.93	2.99	102	6.14	67	90	63	0	3	3	1
FL	DAYTONA BEACH	80	60	87	55	70	5	0.12	-0.76	0.12	1.51	54	6.28	72	99	51	0	0	1	0
	JACKSONVILLE	79	56	88	40	67	5	0.61	-0.30	0.61	1.91	67	7.22	74	96	48	0	0	1	1
	KEY WEST	83	73	85	70	78	4	0.26	-0.17	0.26	1.08	84	3.22	64	87	63	0	0	1	0
	MIAMI	83	69	85	67	76	3	0.00	-0.59	0.00	0.86	50	4.66	82	84	56	0	0	0	0
	ORLANDO	84	60	87	51	72	4	0.05	-0.78	0.05	0.50	19	5.06	69	97	54	0	0	1	0
	PENSACOLA	71	57	77	39	64	2	0.03	-1.45	0.03	2.89	60	9.98	67	86	60	0	0	1	0
	TALLAHASSEE	78	52	87	33	65	3	0.78	-0.71	0.78	10.02	204	17.62	118	91	46	0	0	1	1
	TAMPA	82	64	88	52	73	5	0.10	-0.51	0.10	0.64	30	5.96	84	92	52	0	0	1	0
	WEST PALM	82	66	86	61	74	3	0.02	-0.87	0.02	1.63	64	10.20	115	91	58	0	0	1	0
GA	ATHENS	70	46	84	27	58	4	0.52	-0.59	0.32	2.48	66	9.25	72	86	59	0	2	3	0
	ATLANTA	70	48	83	27	59	4	0.61	-0.59	0.44	3.28	80	11.19	81	81	50	0	2	3	0
	AUGUSTA	74	49	88	27	61	4	0.41	-0.63	0.40	2.96	86	7.96	66	90	52	0	2	2	0
	COLUMBUS	76	52	88	33	64	5	1.24	-0.06	0.68	3.63	84	10.13	74	83	32	0	0	2	2
	MACON	76	50	84	28	63	6	0.75	-0.33	0.71	4.01	108	10.16	77	89	40	0	1	2	1
	SAVANNAH	76	54	88	32	65	5	0.60	-0.25	0.60	4.24	165	8.17	87	92	57	0	1	1	1
HI	HILO	75	64	80	63	70	-2	3.01	-0.43	2.22	10.10	98	55.26	191	86	74	0	0	5	2
	HONOLULU	78	67	82	65	73	-1	1.23	0.85	1.23	2.28	156	6.90	106	69	63	0	0	1	1
	KAHULUI	78	63	83	55	70	-3	0.80	0.28	0.67	1.30	77	6.05	78	82	69	0	0	2	1
	LIHUE	76	67	79	64	72	-1	0.13	-0.67	0.13	1.84	70	8.04	77	74	60	0	0	1	0
ID	BOISE	54	32	69	20	43	-2	0.30	0.00	0.13	1.00	101	2.14	61	84	55	0	3	3	0
	LEWISTON	44	32	49	25	38	-8	0.21	-0.04	0.06	0.68	89	2.45	86	92	73	0	3	5	0
	POCATELLO	48	25	65	12	37	-2	0.04	-0.26	0.04	0.77	78	1.69	54	83	52	0	5	1	0
IL	CHICAGO/O'HARE	45	28	51	14	36	-3	0.06	-0.57	0.03	2.05	118	4.79	94	82	59	0	3	3	0
	MOLINE	47	26	54	14	36	-4	0.01	-0.69	0.01	1.41	72	3.44	68	80	49	0	4	1	0
	PEORIA	45	28	53	15	36	-5	0.16	-0.49	0.15	1.44	73	5.35	104	87	54	0	4	2	0
	ROCKFORD	45	26	50	13	35	-3	0.10	-0.47	0.07	1.30	84	3.78	88	80	52	0	5	2	0
	SPRINGFIELD	45	29	52	15	37	-6	0.13	-0.60	0.13	1.57	70	5.44	96	87	65	0	4	1	0
IN	EVANSVILLE	48	34	53	20	41	-6	2.00	1.02	1.37	4.39	142	8.82	97	92	79	0	3	4	1
	FORT WAYNE	44	28	50	16	36	-4	0.07	-0.59	0.06	1.38	70	5.77	97	86	55	0	4	2	0
	INDIANAPOLIS	45	31	53	16	38	-5	0.27	-0.52	0.19	2.11	85	6.24	85	93	61	0	3	2	0
	SOUTH BEND	43	27	50	16	35	-4	0.05	-0.63	0.02	1.80	92	6.37	103	85	66	0	6	4	0
IA	BURLINGTON	45	26	53	14	36	-6	0.07	-0.62	0.07	1.24	60	3.74	76	87	48	0	5	1	0
	CEDAR RAPIDS	44	24	51	11	34	-4	0.21	-0.33	0.21	0.74	51	2.25	62	87	49	0	5	1	0
	DES MOINES	44	24	52	12	34	-6	0.28	-0.25	0.28	0.72	50	1.74	48	79	57	0	6	1	0
	DUBUQUE	42	24	48	13	33	-3	0.24	-0.37	0.23	0.87	50	2.33	53	84	58	0	6	2	0
	SIoux CITY	41	20	51	9	30	-8	0.04	-0.44	0.02	0.20	15	1.11	44	86	64	0	7	2	0
	WATERLOO	41	23	51	12	32	-5	0.21	-0.30	0.21	0.40	29	1.87	57	83	58	0	6	1	0
KS	CONCORDIA	52	24	64	9	38	-6	0.13	-0.42	0.10	0.26	16	1.68	55	80	53	0	7	2	0
	DODGE CITY	57	24	70	12	40	-5	0.26	-0.18	0.23	0.26	21	1.30	52	86	33	0	7	2	0
	GOODLAND	53	16	70	9	35	-6	0.00	-0.28	0.00	0.05	6	0.53	31	76	57	0	7	0	0
	TOPEKA	52	27	60	10	40	-6	0.00	-0.60	0.00	0.53	30	2.79	71	74	52	0	4	0	0

Based on 1971-2000 normals

\*\*\* Not Available

Weather Data for the Week Ending March 23, 2002

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	54	29	64	12	42	-5	0.00	-0.63	0.00	0.42	22	2.36	62	77	56	0	4	0	0
KY JACKSON	54	35	66	18	44	-4	2.92	1.96	1.00	5.08	154	10.41	99	92	61	0	3	5	3
KY LEXINGTON	50	33	55	16	42	-5	3.27	2.28	1.69	4.65	141	8.42	85	92	74	0	3	4	2
KY LOUISVILLE	50	35	53	19	43	-5	2.59	1.60	1.71	4.25	130	9.85	100	87	63	0	3	4	2
LA PADUCAH	51	36	57	20	43	-6	1.81	0.87	1.20	3.74	121	9.78	93	92	61	0	3	5	1
LA BATON ROUGE	75	55	86	33	65	4	0.06	-1.08	0.06	4.27	117	10.00	67	93	43	0	0	1	0
LA LAKE CHARLES	75	57	83	37	66	4	0.00	-0.82	0.00	3.05	119	8.67	76	88	54	0	0	0	0
LA NEW ORLEANS	74	59	84	43	67	4	0.02	-1.15	0.02	2.53	67	8.58	57	86	63	0	0	1	0
ME SHREVEPORT	66	49	80	34	57	-2	2.01	1.10	1.75	3.49	114	8.92	75	93	61	0	0	3	1
ME CARIBOU	32	13	38	6	23	-3	0.19	-0.39	0.10	1.14	62	5.47	80	81	44	0	7	3	0
ME PORTLAND	38	23	44	15	31	-4	0.96	0.00	0.63	1.64	56	7.10	70	84	51	0	7	4	1
MD BALTIMORE	48	33	60	23	40	-5	1.36	0.47	0.80	2.92	99	5.46	58	88	66	0	3	4	1
MA BOSTON	40	29	48	19	34	-6	0.66	-0.22	0.53	2.22	80	7.17	72	78	55	0	4	3	1
MA WORCESTER	35	23	46	12	29	-7	0.83	-0.15	0.53	2.88	94	6.78	66	85	52	0	7	3	1
MI ALPENA	34	15	39	11	25	-5	0.36	-0.14	0.13	2.04	138	4.25	93	92	64	0	7	3	0
MI GRAND RAPIDS	40	23	49	14	31	-5	0.10	-0.53	0.05	1.46	85	4.07	77	90	57	0	7	2	0
MI HOUGHTON LAKE	34	17	43	9	25	-6	0.26	-0.22	0.19	1.93	139	6.03	142	92	68	0	7	4	0
MI LANSING	39	21	48	14	30	-5	0.04	-0.52	0.03	1.24	82	3.59	78	88	61	0	7	2	0
MI MUSKEGON	41	23	51	17	32	-3	0.04	-0.52	0.04	1.44	91	4.03	75	84	60	0	7	1	0
MI TRAVERSE CITY	36	21	48	16	28	-4	0.26	-0.21	0.17	2.16	169	4.98	82	90	52	0	7	3	0
MN DULUTH	29	10	41	-4	19	-8	0.10	-0.31	0.09	0.20	18	1.23	40	85	58	0	7	2	0
MN INTL FALLS	27	9	42	-3	18	-7	0.00	-0.22	0.00	0.15	25	0.26	13	77	49	0	7	0	0
MN MINNEAPOLIS	32	18	40	6	25	-9	0.03	-0.43	0.03	1.36	111	2.21	72	78	62	0	7	1	0
MN ROCHESTER	34	21	41	7	27	-5	0.00	-0.46	0.00	0.00	0	2.34	82	84	66	0	7	0	0
MN ST. CLOUD	28	11	36	0	20	-10	0.36	-0.01	0.18	1.05	114	3.12	137	87	59	0	7	3	0
MS JACKSON	72	52	85	32	62	4	1.85	0.52	1.78	5.64	138	14.31	100	91	47	0	1	2	1
MS MERIDIAN	73	50	86	30	62	4	1.01	-0.58	1.01	3.97	77	12.77	78	97	54	0	2	1	1
MS TUPELO	67	45	83	27	56	2	2.13	0.70	1.16	5.23	111	15.62	107	89	67	0	2	4	2
MO COLUMBIA	48	29	54	13	38	-7	0.21	-0.52	0.21	1.20	53	4.41	71	88	52	0	3	1	0
MO KANSAS CITY	51	27	58	8	39	-6	0.00	-0.55	0.00	0.50	29	2.91	70	79	43	0	4	0	0
MO SAINT LOUIS	48	33	57	19	40	-7	0.46	-0.37	0.36	2.67	104	6.66	95	83	67	0	3	3	0
MO SPRINGFIELD	51	31	61	14	41	-6	1.10	0.19	0.56	2.14	81	6.40	91	87	61	0	4	2	2
MT BILLINGS	23	7	36	-1	15	-23	0.11	-0.15	0.06	0.24	33	0.81	38	88	64	0	7	3	0
MT BUTTE	36	8	52	0	22	-10	0.00	-0.19	0.00	0.35	63	0.79	51	87	47	0	7	0	0
MT GLASGOW	14	-7	27	-19	3	-29	0.07	-0.03	0.04	0.26	90	0.76	84	82	69	0	7	3	0
MT GREAT FALLS	12	-3	19	-16	4	-30	0.25	0.03	0.21	0.58	87	1.15	62	91	67	0	7	3	0
MT HAVRE	10	-10	20	-21	0	-34	0.04	-0.13	0.03	0.11	23	0.56	43	83	72	0	7	2	0
MT KALISPELL	25	10	40	1	17	-19	0.12	-0.10	0.07	0.41	52	1.56	46	84	66	0	7	3	0
MT MISSOULA	35	16	48	8	26	-13	0.37	0.17	0.16	0.81	125	2.07	83	90	68	0	7	3	0
NE GRAND ISLAND	48	21	64	8	34	-6	0.56	0.07	0.56	0.67	48	1.48	57	86	57	0	7	1	1
NE LINCOLN	50	20	61	6	35	-6	0.03	-0.51	0.02	0.58	39	1.58	56	78	52	0	7	2	0
NE NORFOLK	44	18	60	6	31	-7	0.03	-0.44	0.03	0.12	9	0.84	32	86	60	0	7	1	0
NE NORTH PLATTE	48	15	64	7	31	-8	0.00	-0.28	0.00	0.22	27	0.30	17	90	36	0	7	0	0
NE OMAHA	46	22	58	10	34	-7	0.12	-0.39	0.08	0.71	49	1.38	46	78	50	0	7	2	0
NE SCOTTSBLUFF	43	16	58	7	29	-9	0.01	-0.26	0.01	0.21	28	0.26	14	82	57	0	7	1	0
NV VALENTINE	32	13	42	-1	23	-13	0.08	-0.17	0.07	0.33	45	0.59	39	90	73	0	7	2	0
NV ELY	49	18	65	2	33	-4	0.09	-0.13	0.09	0.29	39	1.38	62	74	42	0	7	1	0
NV LAS VEGAS	69	44	83	37	57	-2	0.00	-0.11	0.00	0.09	20	0.09	5	36	21	0	0	0	0
NV RENO	58	30	70	18	44	0	0.00	-0.17	0.00	0.34	52	1.17	42	63	36	0	4	0	0
NV WINNEMUCCA	55	26	68	4	40	-2	0.10	-0.09	0.06	0.62	105	2.36	116	70	44	0	5	2	0
NH CONCORD	37	21	47	12	29	-6	0.87	0.18	0.69	1.89	87	5.87	78	88	49	0	7	3	1
NJ NEWARK	45	30	57	22	37	-6	1.48	0.50	0.99	2.82	92	5.15	52	78	52	0	4	4	1
NM ALBUQUERQUE	65	33	75	25	49	0	0.00	-0.13	0.00	0.00	0	0.42	31	42	14	0	3	0	0
NY ALBANY	38	23	45	12	31	-5	0.91	0.19	0.56	1.56	72	5.67	83	89	55	0	6	3	1
NY BINGHAMTON	35	21	44	10	28	-6	0.76	0.09	0.52	1.68	81	5.78	81	90	64	0	7	6	1
NY BUFFALO	38	25	42	15	32	-4	0.69	0.00	0.34	2.20	104	8.89	115	92	63	0	5	6	0
NY ROCHESTER	39	25	44	13	32	-3	0.54	-0.05	0.30	1.29	72	5.83	94	85	62	0	5	6	0
NY SYRACUSE	40	25	47	14	32	-3	1.01	0.31	0.57	1.74	83	5.33	78	88	55	0	4	5	1
NC ASHEVILLE	59	39	69	22	49	2	1.01	-0.03	0.45	2.97	87	7.91	70	88	67	0	2	4	0
NC CHARLOTTE	62	40	68	22	51	-3	1.04	0.05	0.56	3.42	103	9.64	89	92	58	0	2	3	1
NC GREENSBORO	56	38	64	24	47	-3	0.68	-0.19	0.26	2.03	71	6.39	67	83	59	0	2	4	0
NC HATTERAS	59	48	67	32	53	0	0.49	-0.66	0.28	4.15	113	14.63	109	91	66	0	1	3	0
NC RALEIGH	58	38	72	23	48	-4	0.91	0.01	0.46	2.00	65	9.24	88	91	67	0	2	5	0
NC WILMINGTON	64	45	82	27	54	-2	0.19	-0.75	0.15	3.81	119	7.61	67	99	55	0	2	2	0
ND BISMARCK	27	9	37	-6	18	-13	0.31	0.12	0.24	0.80	151	1.29	87	81	69	0	7	4	0
ND DICKINSON	20	1	31	-13	11	-21	0.02	-0.14	0.01	0.17	50	0.65	57	90	64	0	7	2	0
ND FARGO	28	11	42	0	19	-10	0.03	-0.25	0.03	0.10	13	0.43	20	85	66	0	7	1	0
ND GRAND FORKS	26	5	42	-5	16	-11	0.02	-0.18	0.02	0.05	9	0.14	8	87	62	0	7	1	0
ND JAMESTOWN	26	8	37	-5	17	-13	0.05	-0.15	0.05	0.11	19	0.32	19	88	66	0	7	1	0
ND WILLISTON	18	-2	32	-12	8	-22	0.18	0.01	0.09	0.77	160	1.75	124	85	67	0	7	3	0
OH AKRON-CANTON	43	26	48	11	34	-5	0.70	-0.02	0.44	2.21	98	6.32	90	88	69	0	4	5	0
OH CINCINNATI	47	32	53	17	39	-6	1.14	0.24	0.78	3.53	126	7.67	91	89	72	0	3	3	1
OH CLEVELAND	42	28	47	16	35	-4	0.51	-0.16	0.30	1.71	83	6.35	93	89	63	0	4	4	0
OH COLUMBUS	46	31	54	18	39	-4	0.56	-0.10	0.39	1.95	95	5.60	82	86	68	0	3	4	0
OH DAYTON	44	29	50	16	37	-5	0.35	-0.42	0.25	2.19	96	5.01	70	89	62	0	3	3	0
OH MANSFIELD	41	26	48	13	33	-5	0.26	-0.54	0.21	1.94	84	5.80	82	94	61	0	4	3	0

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Weather Data for the Week Ending March 23, 2002

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	29	50	18	37	-2	0.07	-0.54	0.06	1.03	58	5.35	96	81	60	0	4	2	0
OK YOUNGSTOWN	42	25	47	9	34	-4	0.55	-0.16	0.31	1.54	72	6.19	95	86	68	0	6	5	0
OK OKLAHOMA CITY	55	35	65	22	45	-7	1.24	0.59	0.63	1.58	74	4.67	94	88	56	0	3	3	2
OR TULSA	55	37	65	19	46	-7	1.13	0.30	0.68	1.71	66	5.28	86	84	64	0	3	2	1
OR ASTORIA	53	40	59	31	46	0	1.78	0.16	0.96	6.32	113	25.94	112	85	69	0	2	5	2
OR BURNS	47	26	56	8	36	-2	0.11	-0.15	0.05	0.46	49	1.73	54	90	61	0	5	3	0
OR EUGENE	53	36	60	30	44	-3	0.36	-0.90	0.23	4.30	97	14.56	79	93	75	0	2	5	0
OR MEDFORD	58	35	73	25	47	0	0.65	0.26	0.46	1.35	97	4.59	77	97	53	0	1	3	0
OR PENDLETON	42	29	51	24	36	-10	0.16	-0.12	0.06	0.68	75	2.01	56	85	67	0	6	3	0
OR PORTLAND	52	38	61	31	45	-3	0.36	-0.44	0.18	3.43	122	13.19	109	81	68	0	1	4	0
PA SALEM	52	36	60	29	44	-3	0.66	-0.22	0.38	4.36	136	17.01	120	86	71	0	1	4	0
PA ALLENTOWN	42	28	56	17	35	-5	1.44	0.62	0.87	2.78	107	4.78	54	83	58	0	5	3	1
PA ERIE	43	27	46	18	35	-3	0.56	-0.16	0.46	1.21	56	8.39	120	83	65	0	4	4	0
PA MIDDLETOWN	44	29	58	21	37	-6	1.70	0.98	0.83	3.43	142	6.27	77	88	56	0	4	4	1
PA PHILADELPHIA	46	33	57	23	40	-4	1.75	0.87	0.94	3.06	110	6.04	67	79	56	0	3	3	1
PA PITTSBURGH	45	29	53	14	37	-4	0.97	0.25	0.40	2.01	88	4.95	67	89	57	0	3	4	0
PA WILKES-BARRE	40	26	52	16	33	-6	0.38	-0.24	0.27	1.39	74	4.12	64	80	51	0	5	3	0
PA WILLIAMSPORT	42	27	55	17	35	-4	0.50	-0.23	0.26	2.05	91	4.97	64	88	58	0	4	6	0
RI PROVIDENCE	41	27	50	19	34	-6	1.08	0.05	0.71	3.15	100	7.69	70	75	59	0	7	3	1
SC BEAUFORT	74	55	87	37	64	6	0.54	-0.32	0.54	1.76	67	5.45	56	93	50	0	0	1	1
SC CHARLESTON	74	51	87	31	63	4	0.68	-0.25	0.68	3.20	109	7.83	78	94	55	0	1	1	1
SC COLUMBIA	70	47	83	26	59	3	0.72	-0.32	0.72	2.62	77	7.02	59	92	58	0	2	1	1
SC GREENVILLE	62	42	67	25	52	-1	1.08	-0.11	0.43	3.58	88	9.82	77	91	59	0	2	3	0
SD ABERDEEN	31	14	38	2	23	-9	0.18	-0.14	0.12	0.48	56	0.78	43	83	68	0	7	3	0
SD HURON	28	10	37	0	19	-15	0.31	-0.09	0.30	0.47	43	1.50	70	90	68	0	7	2	0
SD RAPID CITY	24	11	30	-4	18	-18	0.20	-0.04	0.10	0.57	86	0.82	55	83	66	0	7	3	0
SD SIOUX FALLS	30	12	38	3	21	-13	0.67	0.22	0.60	1.36	117	1.80	83	87	76	0	7	3	1
TN BRISTOL	58	37	72	18	47	-1	3.50	2.64	2.19	4.52	154	9.72	99	95	57	0	3	3	2
TN CHATTANOOGA	68	45	84	26	57	4	1.39	-0.02	0.56	3.85	83	11.12	75	86	56	0	2	3	1
TN KNOXVILLE	62	43	74	24	52	1	6.47	5.30	3.83	7.94	204	17.69	142	85	56	0	2	3	2
TN MEMPHIS	58	42	69	26	50	-4	5.51	4.24	4.28	9.57	237	15.27	121	88	65	0	3	4	2
TX NASHVILLE	59	39	68	22	49	-2	4.87	3.77	3.38	6.49	178	13.43	119	92	65	0	3	4	2
TX ABILENE	63	40	72	25	52	-5	2.15	1.85	1.65	2.15	215	3.80	123	84	62	0	1	3	1
TX AMARILLO	61	30	83	17	46	-3	0.43	0.17	0.43	0.43	57	1.80	93	83	40	0	3	1	0
TX AUSTIN	70	49	79	31	59	-4	1.35	0.91	1.27	1.43	88	3.79	69	83	48	0	1	4	1
TX BEAUMONT	75	58	83	41	67	4	0.01	-0.86	0.01	0.43	16	4.79	41	94	57	0	0	1	0
TX BROWNSVILLE	80	62	87	53	71	2	0.04	-0.16	0.02	0.23	42	1.30	42	89	59	0	0	2	0
TX CORPUS CHRISTI	78	60	85	46	69	2	0.04	-0.32	0.04	0.09	7	0.66	14	91	65	0	0	1	0
TX DEL RIO	76	52	85	39	64	-1	0.10	-0.09	0.10	0.10	15	0.14	6	76	55	0	0	1	0
TX EL PASO	71	40	83	35	55	-3	0.00	-0.03	0.00	0.00	0	1.22	121	41	19	0	0	0	0
TX FORT WORTH	63	44	73	30	54	-4	5.62	4.97	4.39	5.74	248	11.59	176	91	63	0	1	3	2
TX GALVESTON	72	60	77	49	66	1	0.00	-0.63	0.00	1.29	65	4.20	48	92	65	0	0	0	0
TX HOUSTON	74	56	82	40	66	3	0.35	-0.41	0.31	1.62	67	3.77	42	91	64	0	0	3	0
TX LUBBOCK	60	36	78	23	48	-4	1.27	1.12	0.78	1.27	265	2.40	142	77	68	0	3	3	1
TX MIDLAND	64	40	75	26	52	-5	0.17	0.11	0.11	0.17	57	1.23	87	82	62	0	2	3	0
TX SAN ANGELO	65	42	71	28	53	-5	0.97	0.78	0.95	0.97	135	2.39	88	80	58	0	1	2	1
TX SAN ANTONIO	73	50	79	36	61	-2	0.86	0.45	0.83	0.99	72	1.79	37	93	58	0	0	3	1
TX VICTORIA	75	54	83	40	65	0	0.12	-0.38	0.07	0.26	16	1.11	18	94	71	0	0	4	0
TX WACO	66	47	75	32	57	-2	1.35	0.84	0.93	1.42	76	4.08	66	91	73	0	1	4	1
TX WICHITA FALLS	58	40	71	25	49	-6	1.57	1.07	1.06	1.59	98	3.81	88	88	67	0	3	3	2
UT SALT LAKE CITY	53	29	72	17	41	-3	0.65	0.21	0.61	2.05	150	3.55	87	79	32	0	3	2	1
VT BURLINGTON	34	20	39	9	27	-5	0.42	-0.12	0.29	1.10	69	4.35	79	85	58	0	7	4	0
VA LYNCHBURG	52	34	65	21	43	-4	1.67	0.81	0.93	3.13	111	6.50	69	81	59	0	2	5	2
VA NORFOLK	55	41	69	25	48	-2	1.75	0.82	1.03	3.27	108	8.87	86	83	62	0	2	4	1
VA RICHMOND	51	36	60	21	43	-6	1.72	0.79	0.88	2.86	94	7.27	76	88	64	0	2	4	1
VA ROANOKE	54	34	64	20	44	-4	1.46	0.59	0.88	3.08	109	5.51	60	81	61	0	3	4	1
VA WASH/DULLES	49	32	61	19	40	-5	1.05	0.25	0.47	2.51	97	4.21	50	88	66	0	3	4	0
WA OLYMPIA	49	31	60	24	40	-4	1.49	0.34	0.65	5.11	128	20.89	118	93	82	0	3	4	2
WA QUILLAYUTE	47	33	59	27	40	-4	1.96	-0.41	1.17	7.87	93	36.32	105	94	78	0	3	6	2
WA SEATTLE-TACOMA	46	34	58	31	40	-7	0.69	-0.12	0.28	2.86	102	13.52	112	89	74	0	2	4	0
WA SPOKANE	39	24	49	16	32	-8	0.48	0.15	0.39	1.01	89	3.18	71	89	64	0	7	4	0
WA YAKIMA	47	25	56	19	36	-7	0.00	-0.14	0.00	0.30	64	1.46	60	89	56	0	7	0	0
WV BECKLEY	47	30	54	12	39	-4	1.77	0.96	0.73	3.32	123	6.27	71	89	76	0	3	5	2
WV CHARLESTON	53	35	59	19	44	-3	1.74	0.87	0.73	3.32	113	7.38	79	89	64	0	3	5	2
WV ELKINS	48	30	56	12	39	-2	2.81	1.94	1.20	3.56	122	8.53	89	93	53	0	3	5	2
WV HUNTINGTON	51	35	59	18	43	-4	5.66	4.81	3.10	6.44	225	10.09	110	89	64	0	3	5	3
WI EAU CLAIRE	33	18	40	5	26	-6	0.22	-0.24	0.13	2.08	178	4.16	138	87	52	0	7	3	0
WI GREEN BAY	36	21	44	11	28	-5	0.38	-0.12	0.23	2.12	156	4.21	118	90	59	0	7	4	0
WI LA CROSSE	38	23	48	10	31	-5	0.30	-0.20	0.14	1.08	88	3.72	109	86	48	0	7	3	0
WI MADISON	41	24	46	12	32	-3	0.29	-0.26	0.16	1.33	91	4.13	104	82	56	0	6	3	0
WI MILWAUKEE	40	26	44	13	33	-3	0.10	-0.52	0.05	0.86	51	3.76	73	85	58	0	6	3	0
WY CASPER	33	9	45	0	21	-15	0.06	-0.13	0.05	0.60	95	0.80	43	81	69	0	7	2	0
WY CHEYENNE	43	14	63	3	29	-6	0.00	-0.24	0.00	0.82	117	1.62	102	79	43	0	7	0	0
WY LANDER	36	13	51	6	25	-12	0.00	-0.29	0.00	0.54	68	1.02	55	77	61	0	7	0	0
WY SHERIDAN	26	7	37	0	17	-19	0.05	-0.15	0.03	0.40	68	0.81	42	83	72	0	6	2	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 were incomplete.

# National Agricultural Summary

March 18 - 24, 2002

Weekly National Agricultural Summary provided by USDA/NASS

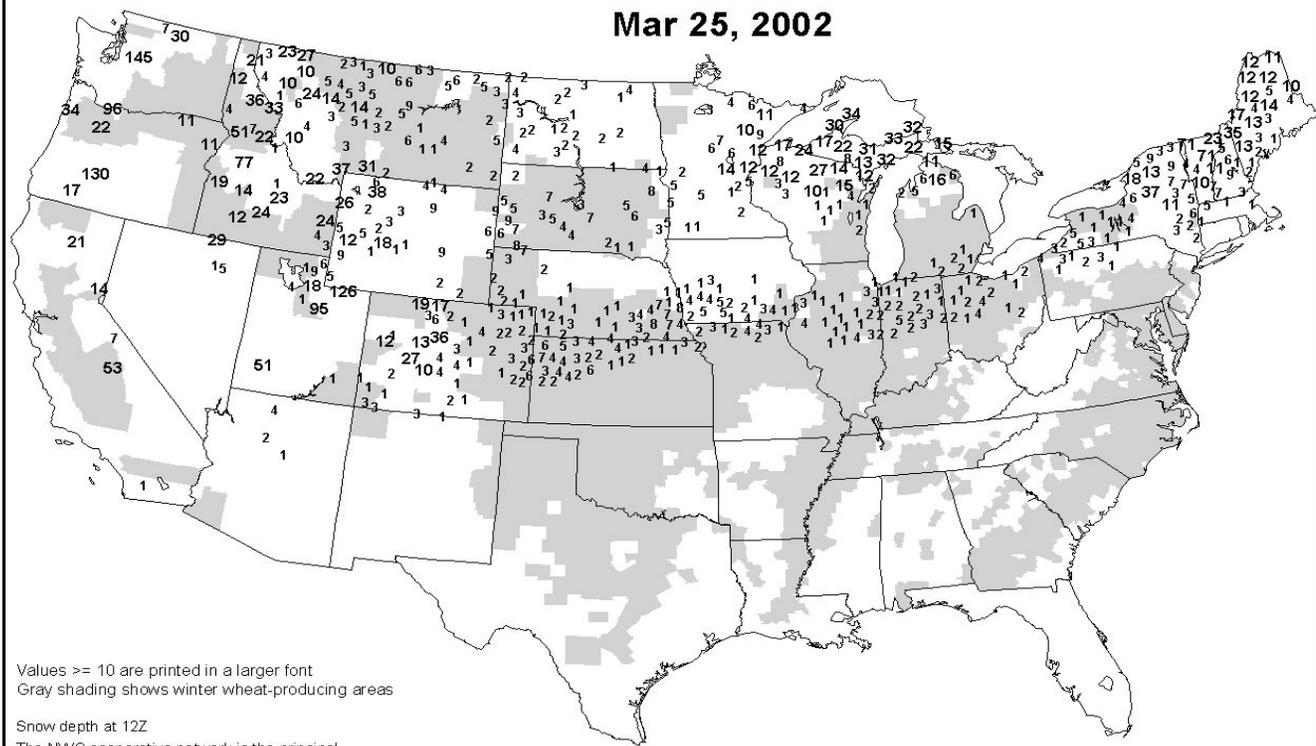
## HIGHLIGHTS

Temperatures averaged below normal across most of the Nation during the week, and far below normal in parts of the northern Great Plains. Freezing temperatures and cold winds stressed winter wheat fields as far south as central Texas. Meanwhile, above-normal temperatures were confined to the Gulf Coast, adjacent areas of the interior Southeast, and the interior Southwest. The warm weather stimulated winter wheat development, but jointing lagged behind normal in the Southeast. In Arizona, 16 percent of durum wheat, 13 percent of winter wheat, and 17 percent of barley were headed. Heavy rain soaked soils and halted fieldwork in parts of the southern

Great Plains and interior Mississippi Delta, as well as the Tennessee and lower Ohio River Valleys. Soil moisture supplies were excessive in most areas receiving the heavy rainfall. Most of the Southeast received light precipitation that provided adequate moisture for short-term winter grain and forage growth. However, long-term moisture reserves remained low on the Atlantic Coastal Plain. The central and northern Great Plains also remained unfavorably dry. Storms continued to deliver precipitation in the Pacific Northwest. The wet weather extended as far south as southern California, temporarily halting field and orchard work but providing beneficial moisture.

## Snow Depth (Inches)

Mar 25, 2002



Values >= 10 are printed in a larger font  
 Gray shading shows winter wheat-producing areas

Snow depth at 12Z  
 The NWS cooperative network is the principal source of the snow depth reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

# International Weather and Crop Summary

March 17 - 23, 2002

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

## HIGHLIGHTS

**EUROPE:** Wet weather kept topsoils moist for winter grains and oilseeds in northern Europe, while pockets of dryness in southern Europe hampered crop development in some areas.

**FSU-WESTERN:** Persistent, unusually mild weather prompted further greening of winter grains in Ukraine and southern Russia, while generally dry weather helped early spring fieldwork.

**MIDDLEEAST:** Widespread, locally heavy rain benefited vegetative to reproductive winter grains.

**NORTHWESTERN AFRICA:** Dry weather returned to the region, reducing moisture supplies for reproductive winter grains.

**SOUTH AFRICA:** Warm, mostly dry weather limited moisture for late-planted corn and other immature summer crops.

**EASTERN ASIA:** Across the North China Plain, mostly warm, dry weather increased the need for supplemental irrigation of vegetative winter wheat.

**SOUTHEAST ASIA:** Showers slowed harvest activities in Java, Indonesia, and the Philippines, but favored crops in peninsular Malaysia and Indochina.

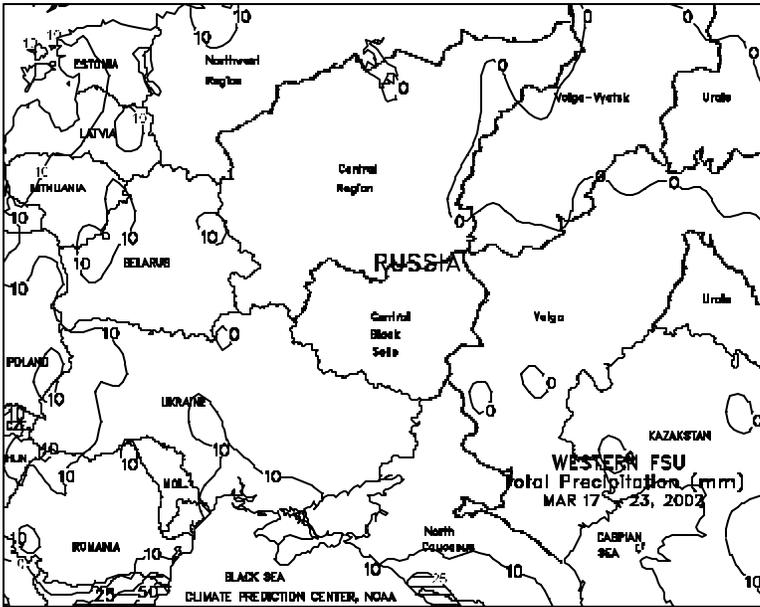
**AUSTRALIA:** Warmth and dryness aided summer crop maturation in the east, while showers in Western Australia boosted moisture reserves for livestock.

**SOUTH AMERICA:** In central Argentina, showers continued to benefit immature second-crop soybeans but slowed summer crop harvesting. In southern Brazil, heavy showers slowed soybean harvesting in Mato Grosso and Goias, while drier weather allowed harvesting to continue elsewhere.



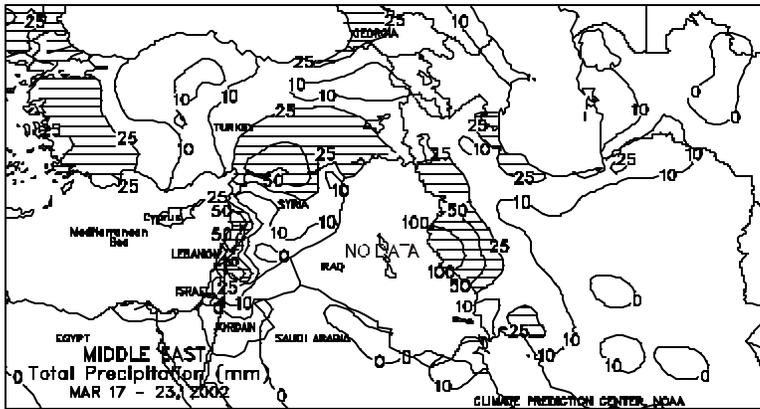
## EUROPE

Widespread precipitation (10-50mm, locally near 80 mm) from England and the northern two-thirds of France eastward through Poland and Slovakia kept topsoils moist for winter grains and oilseeds. Temperatures in northern Europe averaged 2 to 4 degrees C above normal, causing slow crop development in the west and encouraging greening in the east. In contrast, mostly dry weather (less than 10 mm) prevailed in southern France, Italy, and most of the Iberian peninsula. The dry weather this week followed 2 weeks of generous rainfall in Spain, aiding corn and sunflower planting. More rain would be welcome in eastern Spain and southern Italy for cotton and durum wheat development following several weeks of below-normal rainfall. Farther east, rain (10-65 mm) in the western and southern Balkans boosted moisture supplies, but much of the lower Danube River Basin had little rainfall. Widespread, soaking rainfall is still needed along the lower Danube to maintain winter grain yield prospects and to boost moisture supplies for summer crop planting. Similar to northern Europe, unseasonably warm weather (temperatures averaging 2 to 5 degrees C above normal) prevailed in southern Europe, spurring crop development in areas where moisture supplies remained adequate.



**FSU-WESTERN**

The tenth consecutive week of unseasonably mild weather prevailed across the region. Weekly temperatures averaged 4 to 8 degrees C above normal in northern Russia (Central Region, Central Black Soils Region, Volga Vyatsk, and upper Volga Valley) and 1 to 5 degrees C above normal in the remainder of Russia, Ukraine, Belarus, and the Baltics. The mild weather prompted further greening of winter grains in Ukraine and southern Russia, and melted most protective snow cover in northern Russia. By week's end, significant snow cover was confined to the Volga Vyatsk region in Russia. Early spring fieldwork continued in Ukraine and the North Caucasus region in Russia, helped by generally dry weather (precipitation less than 10 mm). At week's end, a cold front ushered in cooler weather and a mixture of rain and snow in the Baltics, Belarus, and western Ukraine, dropping temperatures to more reasonable levels.

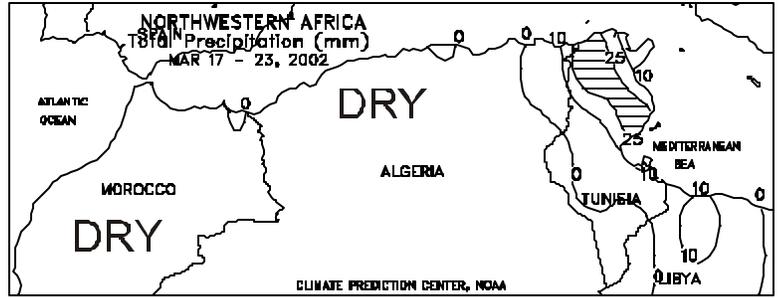


**MIDDLE EAST**

Moderate to heavy rain (25-50 mm or more) overspread the region. The moisture was timely for vegetative to reproductive winter wheat, especially in western Iran, which received some of its heaviest rainfall of the season. Satellite imagery and general weather patterns suggest heavy rain in northern and eastern Iraq. Temperatures averaged 1 to 2 degrees C above normal, increasing crop moisture use, but patchy frost lingered in the higher elevations of central Turkey and northwestern Iran, limiting crop growth.

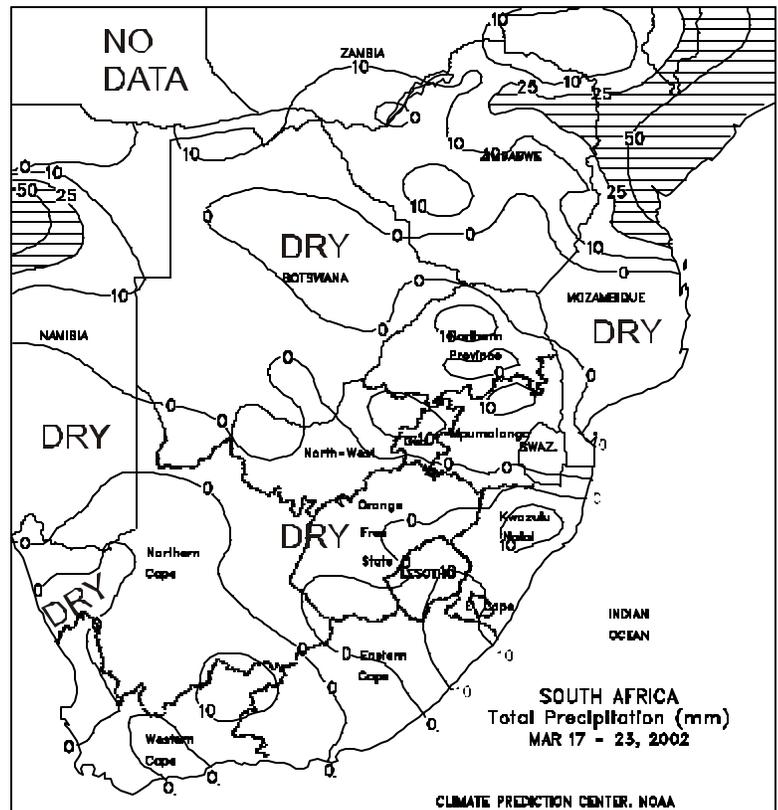
**NORTHWESTERN AFRICA**

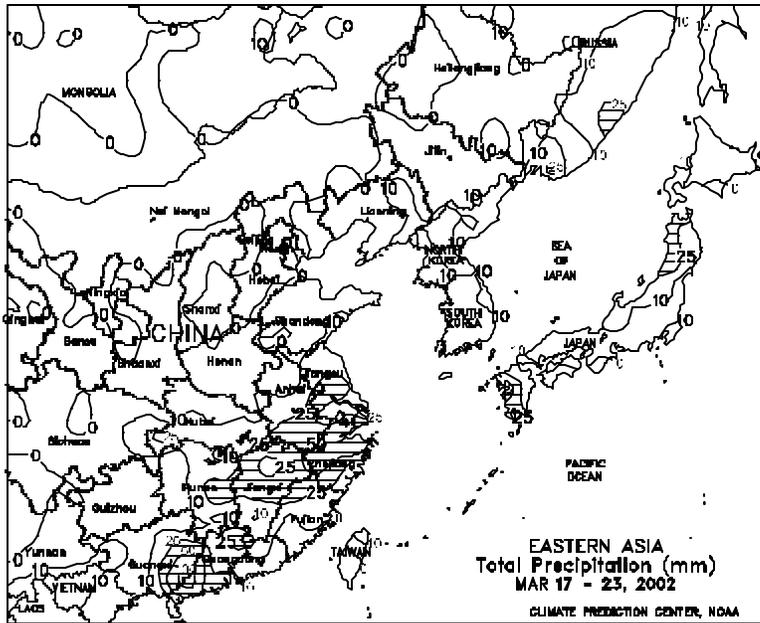
Drier weather returned to Morocco and western Algeria after 2 weeks of stabilizing rains. Showers in Tunisia moistened topsoils. However, moisture reserves continued to be well below normal. Along with the dry weather, temperatures 1 to 5 degrees C above normal increased stress on crops. Winter grains are entering the reproductive phase, resulting in high moisture demands. With moisture reserves limited in all areas, additional rainfall is needed to prevent further declines in crop conditions, especially in eastern growing regions.



**SOUTH AFRICA**

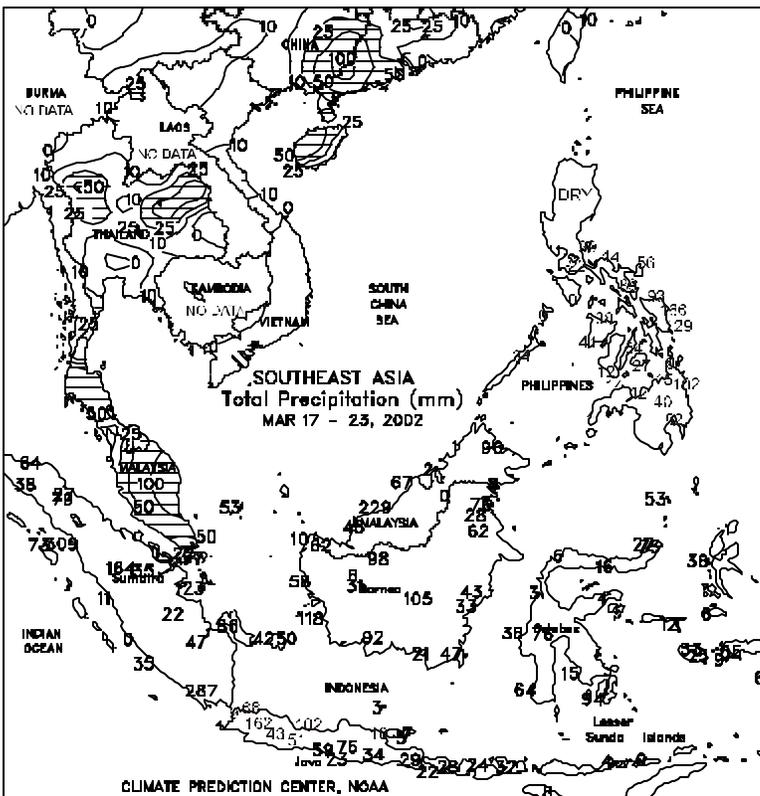
Warm (temperatures averaging 1-2 degrees C above normal, with highs reaching the lower 30s degrees C), mostly dry weather dominated the corn belt, limiting moisture for late-planted corn and other immature summer crops. Significant showers (10 mm or more) were confined to the more northerly growing areas of North West and Mpumalanga, as well as portions of drought-affected Northern Province, bringing only localized relief. Warm, mostly dry weather also covered crop areas of the Cape Provinces and KwaZulu-Natal, raising moisture demands of sugarcane and immature fruits and vegetables.





**EASTERN ASIA**

In the North China Plain, mostly warm, dry weather reduced moisture supplies for vegetative winter wheat and necessitated supplemental irrigation. Across the region, temperatures averaged 2 to 4 degrees C above normal, with highs reaching the lower to middle 20s degrees C. In southern Manchuria (Liaoning), light rain (3-25 mm) provided topsoil moisture for pre-planting activities as warm weather favored fieldwork (temperatures 2-4 degrees C above normal). Across the Yangtze Valley, rain (5-25 mm) maintained adequate moisture supplies for winter crops. Heavier rain (35-60 mm) fell across southern Anhui, northern Jiangxi, and Zhejiang. In southern China, scattered showers (5-25 mm) provided some relief from dryness for sugarcane and early rice planting across Guangdong and Fujian, but more rain is still needed. Temperatures averaged 3 to 5 degrees C above normal across the Yangtze Valley and southern China.

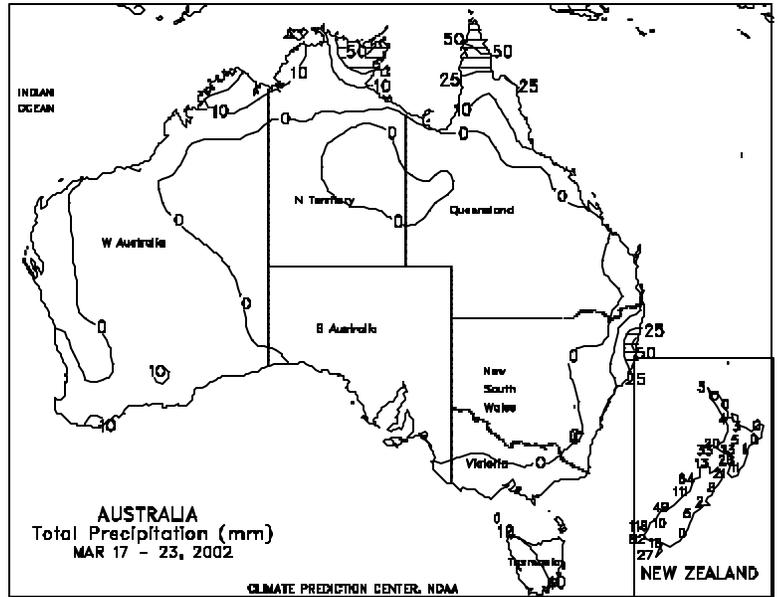


**SOUTHEAST ASIA**

Heavy showers (50-100 mm, locally more) in Java, Indonesia, hampered main-season rice harvesting. In peninsular Malaysia, much-needed showers (25-100 mm) eased dryness and increased moisture supplies for oil palm. A weak tropical system moved across the southern Philippines, generating heavy showers (50-100 mm) from southern Luzon to Mindanao. Unseasonable showers favored second-crop rice in Thailand. Light rains (10-25 mm) aided winter-spring rice transplanting in northern Vietnam.

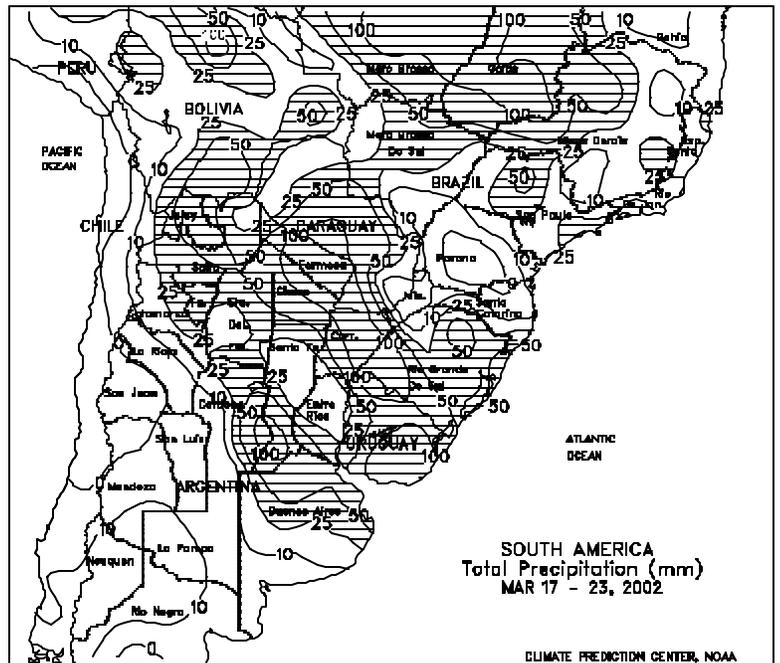
**AUSTRALIA**

Warm, dry weather continued throughout the eastern summer crop belt (southeastern Queensland and northern New South Wales), aiding dry down of sorghum and cotton. Temperatures averaged 2 to 4 degrees C above normal (highs reaching the upper 30s and lower 40s degrees C) throughout the east, enhancing the effect of the dryness. Along the coast, showers (10-25 mm or more) were confined to sugarcane areas of New South Wales, as unseasonable dryness continued along Queensland's coast. Elsewhere, light showers (less than 10 mm) benefited grazing lands and livestock in Western Australia, but unseasonable heat (highs near 40 degrees C) elevated evaporation rates. Warm, dry weather dominated the southeast (South Australia to southern New South Wales), but showers were developing at week's end. In New Zealand, light showers (less than 10 mm) covered most primary small grain and pasture areas, but pockets of heavier rain continued along the west coast.



**SOUTH AMERICA**

In central Argentina, widespread rain (25-80 mm or more) covered the crop areas of northern and central Buenos Aires, southern Santa Fe, and eastern Cordoba, benefiting second-crop soybeans but slowing corn and sunflower harvesting. Drier weather in southern Buenos Aires and La Pampa favored summer crop harvesting, but lingering dryness stressed immature summer crops. In northern Argentina, heavy showers (100-200mm) slowed cotton maturation and increased the risk of disease and harvest losses. According to the Argentine Agricultural Secretariat as of March 15, nationwide corn and sunflowers were 13 and 25 percent harvested, respectively, compared with 12 and 37 percent last year at this time. In southern Brazil, heavy rain (75-150 mm) slowed soybean harvesting in Mato Grosso and Goias, but drier weather elsewhere favored harvesting. Light to moderate showers (10-30 mm) provided late-season moisture for sugarcane, coffee, and citrus in Sao Paulo and southern Minas Gerais. In Parana, dry, warm weather fostered excellent maturation and harvesting conditions. In Rio Grande do Sul, scattered showers (5-50 mm) maintained soil moisture for immature soybeans, but did not impede early harvesting. According to Safras, a Brazilian grain trade analyst firm, as of March 22, nationwide soybeans were 34 percent harvested, compared with the 5-year average of 32 percent. About half of the soybean crop has been harvested in Mato Grosso, Parana, Mato Grosso do Sul, Goias, and Sao Paulo.



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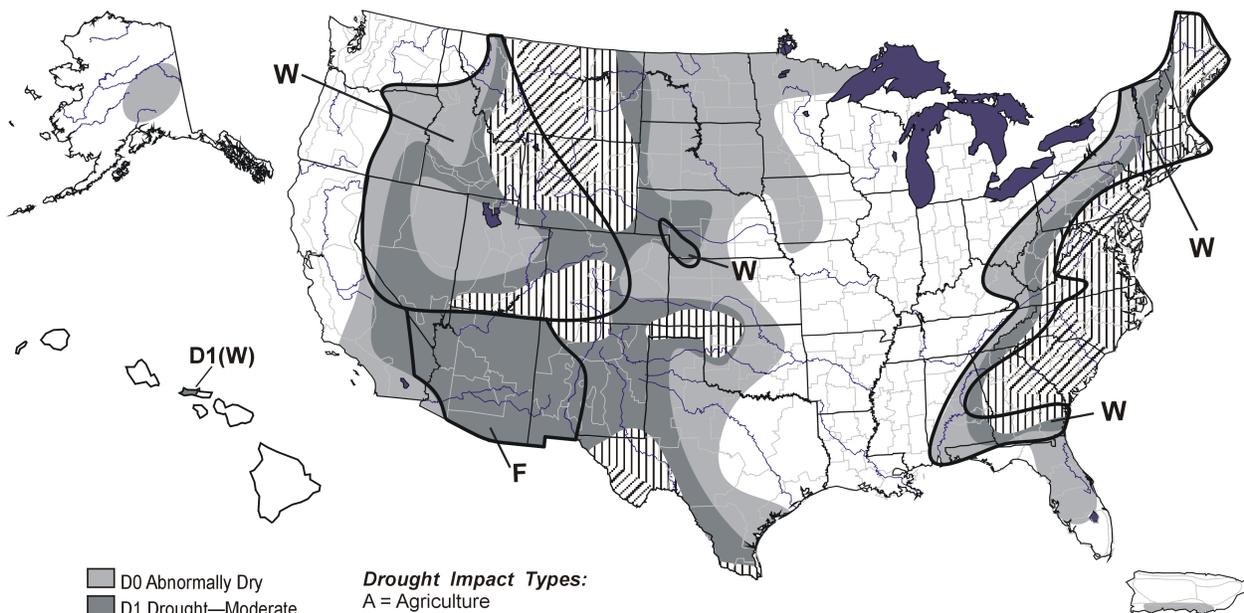
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# U.S. Drought Monitor

March 19, 2002  
Valid 8 a.m. EST



- D0 Abnormally Dry
- D1 Drought—Moderate
- ▨ D2 Drought—Severe
- ▩ D3 Drought—Extreme
- ⊠ D4 Drought—Exceptional

**Drought Impact Types:**  
A = Agriculture  
W = Water (Hydrological)  
F = Fire danger (Wildfires)  
— Delineates dominant impacts  
(No type = All 3 impacts)

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

<http://drought.unl.edu/monitor/monitor.html>



Released Thursday, March 21, 2002

Author: Brad Rippey, USDA

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