

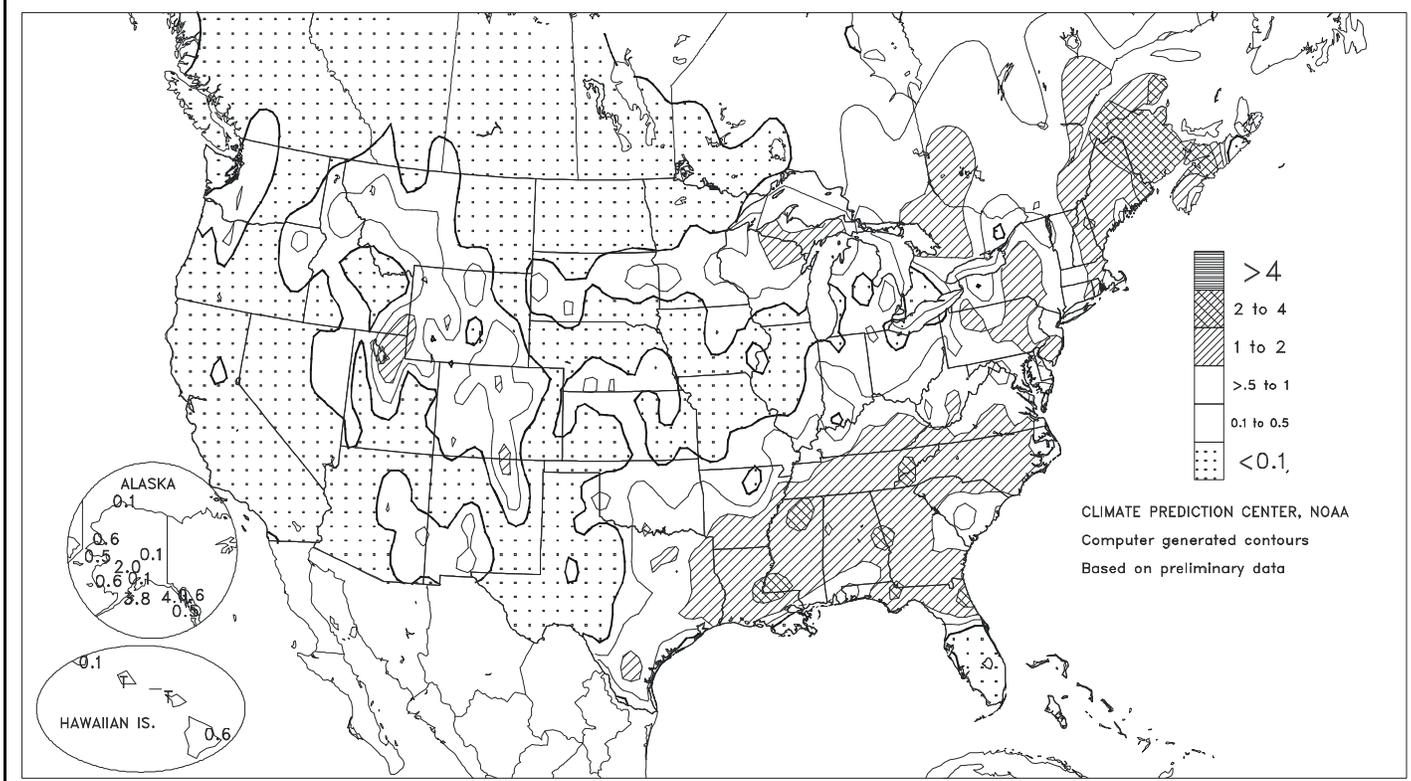
WEEKLY WEATHER AND CROP BULLETIN

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)

FEB 2 - 8, 2003



HIGHLIGHTS

February 2 - 8, 2003

Highlights provided by USDA/WAOB

Mostly dry weather returned to the **Northwest** and persisted in the **Southwest**, accompanied by a sharp decline in temperatures. Following a week that featured readings as much as 20°F above normal and widespread January-record warmth, **Western** temperatures averaged as much as 12°F below normal. Meanwhile, some of the coldest air of the season (temperatures as low as -10°F) overspread the drought-affected **central High Plains**, although a shallow snow cover helped to insulate winter wheat. Light snow also provided wheat with some protection on the **northern High Plains**. Conditions remained mostly favorable for overwintering wheat on the
(Continued on page 5)

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Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending February 8, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE ^x	-	-	-	-	-	-	2.38	1.33	1.33	12.11	146	3.12	129	-	-	-	-	3	2
MS BELZONI ^x	54	29	65	21	42	-0	2.03	0.70	1.08	-	-	-	-	-	-	0	5	3	2
MS CLARKSDALE ^x	-	-	-	-	-	-	1.19	0.00	0.76	10.71	137	2.69	110	-	-	-	-	4	1
MS CLEVELAND ^x	51	32	63	24	42	-0	1.35	0.30	0.62	9.84	134	2.92	127	-	-	0	4	4	1
MS GREENVILLE ^x	52	34	66	25	43	1	1.30	0.04	0.77	-	-	-	-	-	-	0	3	3	1
MS GREENWOOD ^x	49	33	66	21	41	-2	1.43	0.24	0.83	10.32	128	2.77	105	-	-	0	3	3	2
MS INDIANOLA 1S	48	35	64	26	41	-	1.30	-	0.81	8.84	-	2.47	-	47	43	0	3	3	1
MS INVERNESS 5E	48	36	65	26	42	-	1.27	-	0.85	9.81	-	2.55	-	48	44	0	2	3	1
MS LYON	47	31	64	21	39	-	0.85	-	0.77	9.60	-	1.07	-	46	40	0	4	3	1
MS MACON	51	35	72	24	43	-	1.68	-	1.25	9.48	-	3.38	-	50	43	0	3	3	1
MS MOORHEAD ^x	51	35	64	25	43	-0	1.50	0.24	0.78	5.40	63	3.86	143	-	-	0	3	4	1
MS ONWARD	49	36	66	27	43	-	1.20	-	0.98	9.01	-	2.05	-	49	45	0	3	3	1
MS PERTHSHIRE	47	32	64	24	40	-	0.91	-	0.82	12.83	-	-	-	46	40	0	4	3	1
MS ROLLING FORK ^x	53	34	67	25	44	1	1.49	0.16	0.90	6.21	73	2.52	88	-	-	0	3	3	1
MS SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS SIDON	49	36	66	25	42	-	1.36	-	0.78	8.28	-	3.92	-	48	42	0	2	4	1
MS STARKVILLE	50	32	69	22	41	-	1.78	-	1.29	8.75	-	-	-	45	134	0	4	3	1
MS TUNICA ^x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS TUNICA 1W	46	30	63	20	38	-	0.84	-	0.68	8.30	-	1.37	-	43	40	0	4	3	1
MS VANCE	46	31	62	22	38	-	1.15	-	0.81	11.50	-	1.57	-	44	41	0	4	5	1
MS VERONA	48	31	68	19	40	-	1.26	-	0.87	8.90	-	2.52	-	48	40	0	4	3	1
MS VICKSBURG ^x	54	36	69	27	45	-2	1.62	0.15	1.43	9.49	108	3.14	101	-	-	0	3	3	1
MS YAZOO CITY ^x	54	35	68	25	44	-1	1.42	-0.05	1.05	8.36	89	2.71	86	-	-	0	3	3	1
MS STONEVILLE ^x	52	36	65	26	44	3	1.30	0.04	0.79	8.74	107	2.73	101	51	42	0	2	3	1
MO DELTA	42	20	61	-5	32	-3	0.34	-0.35	0.22	6.39	66	0.70	15	39	34	0	5	2	0
MO STEELE	44	28	62	11	37	-1	0.65	-0.38	0.49	9.15	91	1.67	35	42	38	0	5	3	0
MO GLENNONVILLE	43	25	64	6	35	-2	0.35	-0.45	0.21	6.97	83	0.73	18	41	37	0	5	2	0
MO PORTAGEVILLE LF	43	27	62	9	36	-1	0.72	-0.13	0.40	7.10	74	1.44	32	44	37	0	5	3	0
MO CLARKTON	43	24	64	2	34	-3	0.37	-0.43	0.20	6.88	82	0.86	22	41	36	0	5	3	0
MO CARDWELL	44	26	64	7	36	-3	0.44	-0.45	0.33	8.27	87	1.67	36	43	39	0	5	3	0
MO CHARLESTON	42	25	63	3	35	-1	0.35	-0.54	0.29	6.90	80	1.01	26	42	38	0	5	2	0
MO PORTAGEVILLE DC	43	26	62	7	36	-1	0.31	-0.54	0.20	6.85	72	0.95	21	-	-	0	5	3	0

Compiled by USDA/OCE/WAOB's Stoneville Field Office.

^x Based on 1971-2000 normals.

- Sufficient data not available.

Weather and Crop Summary: Rainfall halted Delta fieldwork but boosted soil moisture in preparation for spring planting.

U.S. Crop Production Highlights

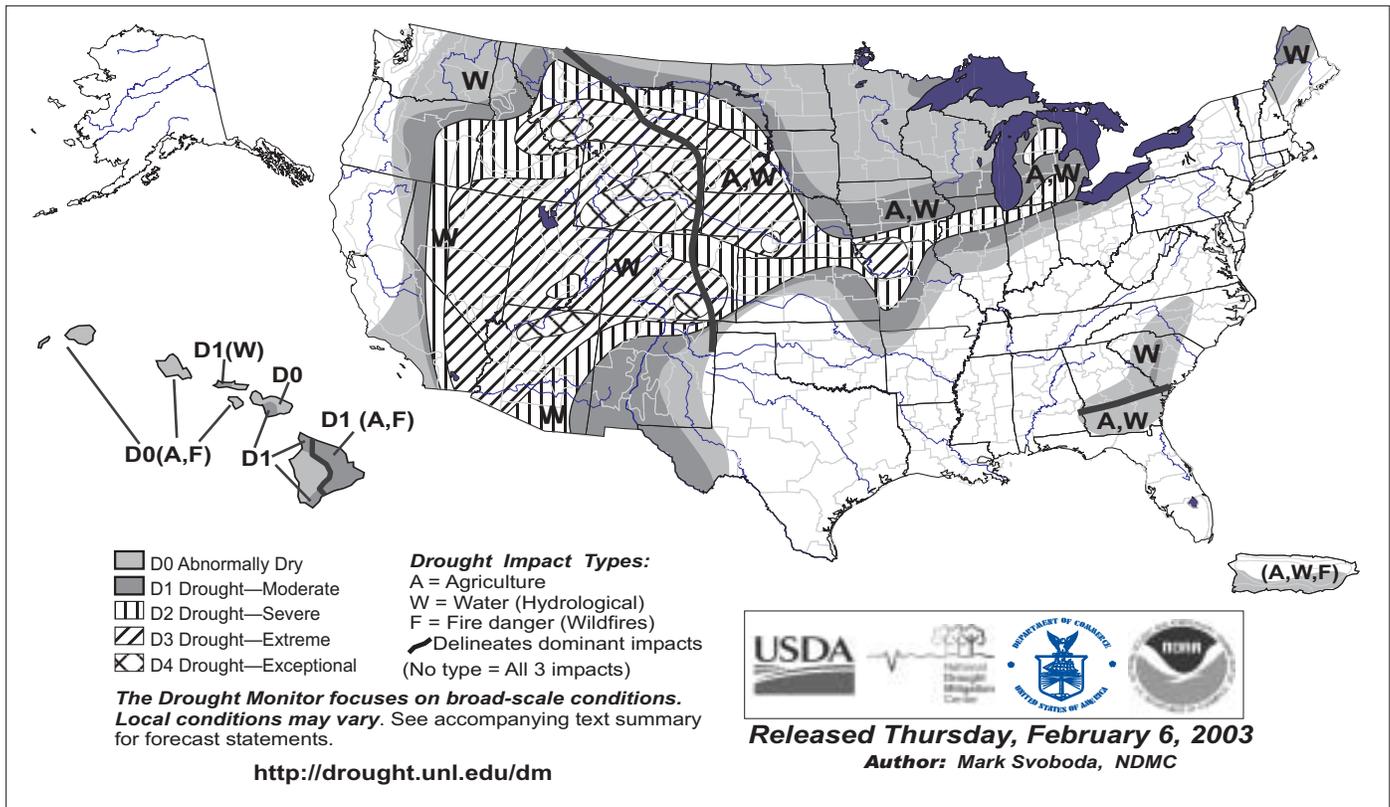
The following information was released by USDA's Agricultural Statistics Board on February 11, 2003. Forecasts refer to February 1.

The **all orange** forecast for the 2002-03 crop is 11.3 million tons, up 1 percent from the January 1 forecast but 10 percent below last season's final utilization. Florida's all orange forecast is increased to 199 million boxes (8.96 million tons), 1 percent above the January 1 forecast but 13 percent below the previous season. Early and midseason varieties in Florida are forecast at 113 million boxes (5.09 million tons), unchanged from last month but 12 percent below last season. Harvest is over 80 percent complete. Florida's Valencia forecast is 86 million boxes (3.87 million tons), up 2 percent from the previous forecast but 16 percent below the previous

season. Despite the cold weather, fruit size measurements indicate that the fruit continues to grow and are the largest in the fruit-measurement series dating back to 1960. The large fruit more than offset above-average droppage, resulting in an increased amount of fruit available for harvest. January temperatures were generally colder than normal in Florida's citrus production areas, but the below-freezing temperatures experienced in late January did not adversely affect the 2002-03 citrus crop. Arizona, California, and Texas orange production forecasts are carried forward from the January forecasts.

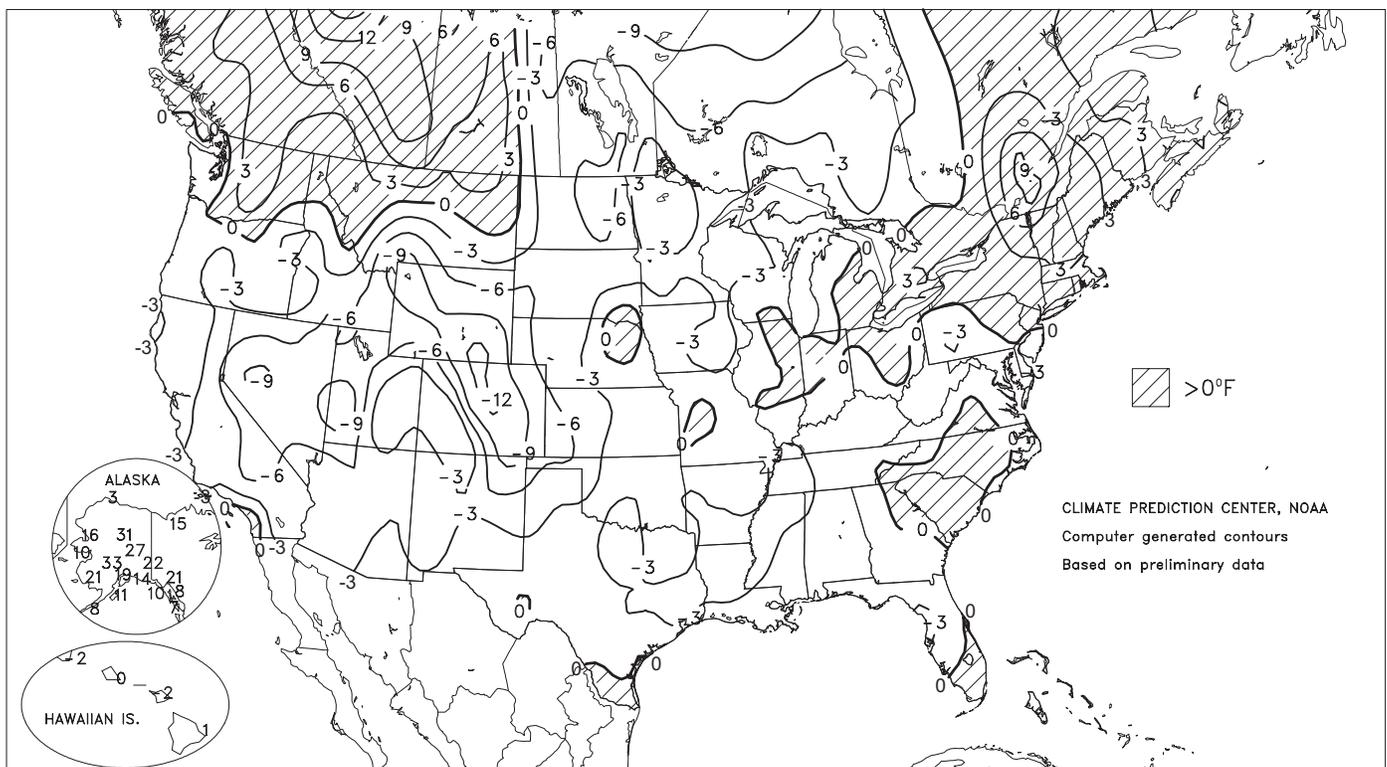
U.S. Drought Monitor

February 4, 2003
Valid 7 a.m. EST



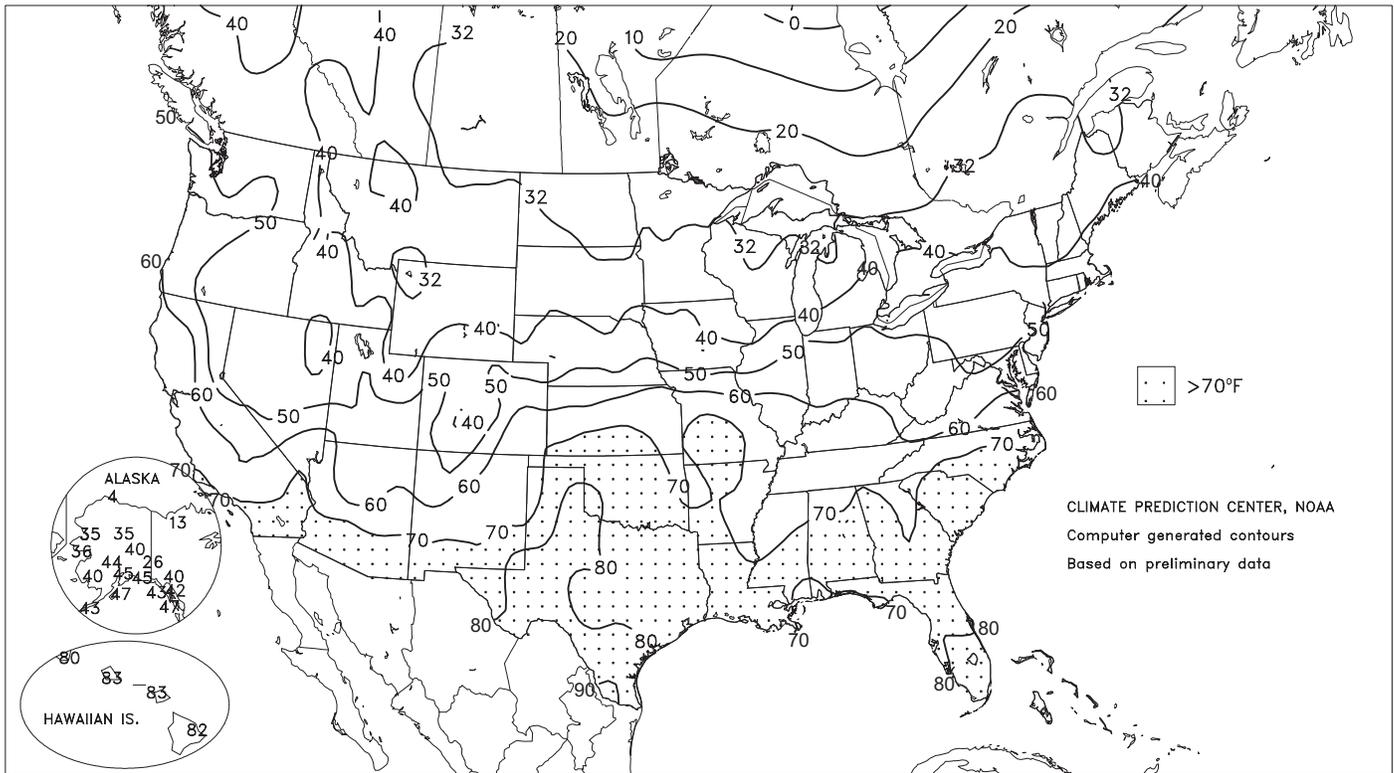
Departure of Average Temperature from Normal (°F)

FEB 2 - 8, 2003



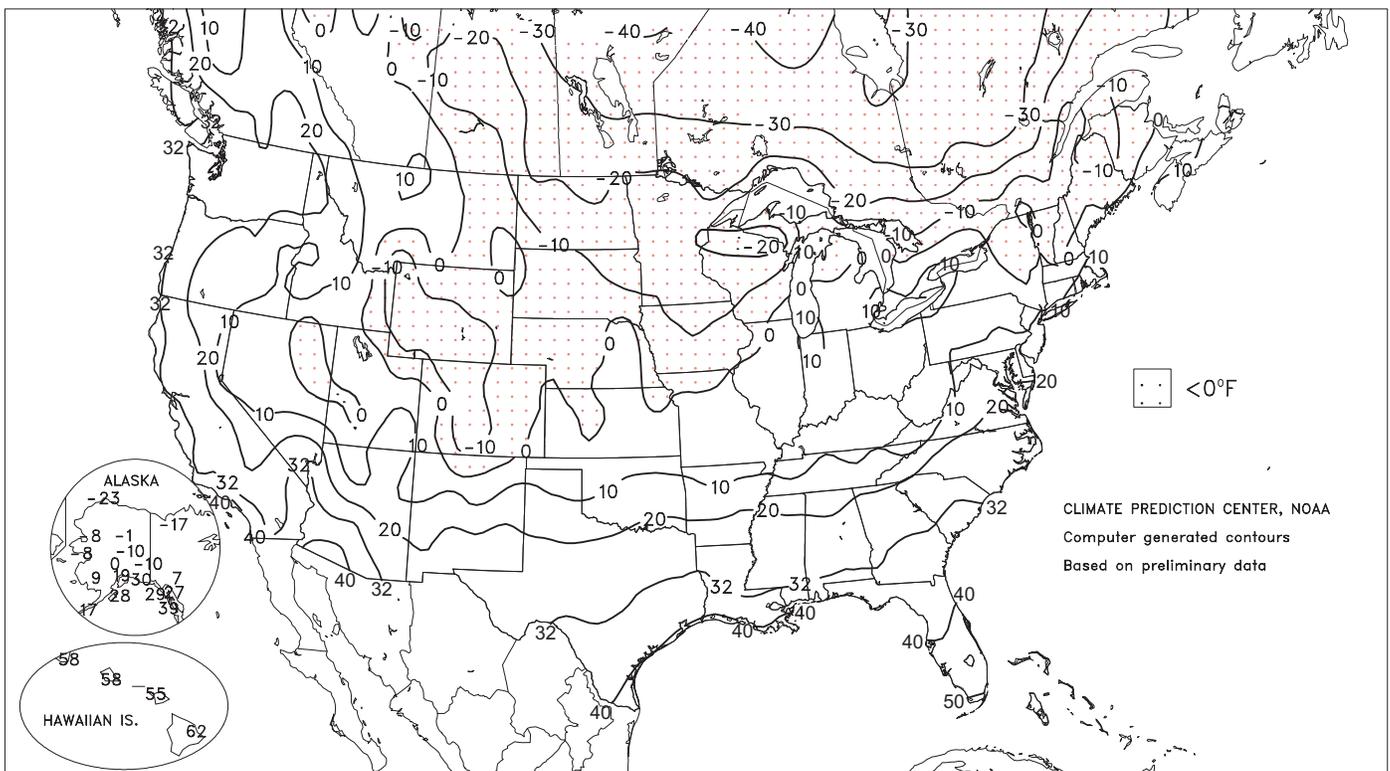
Extreme Maximum Temperature (°F)

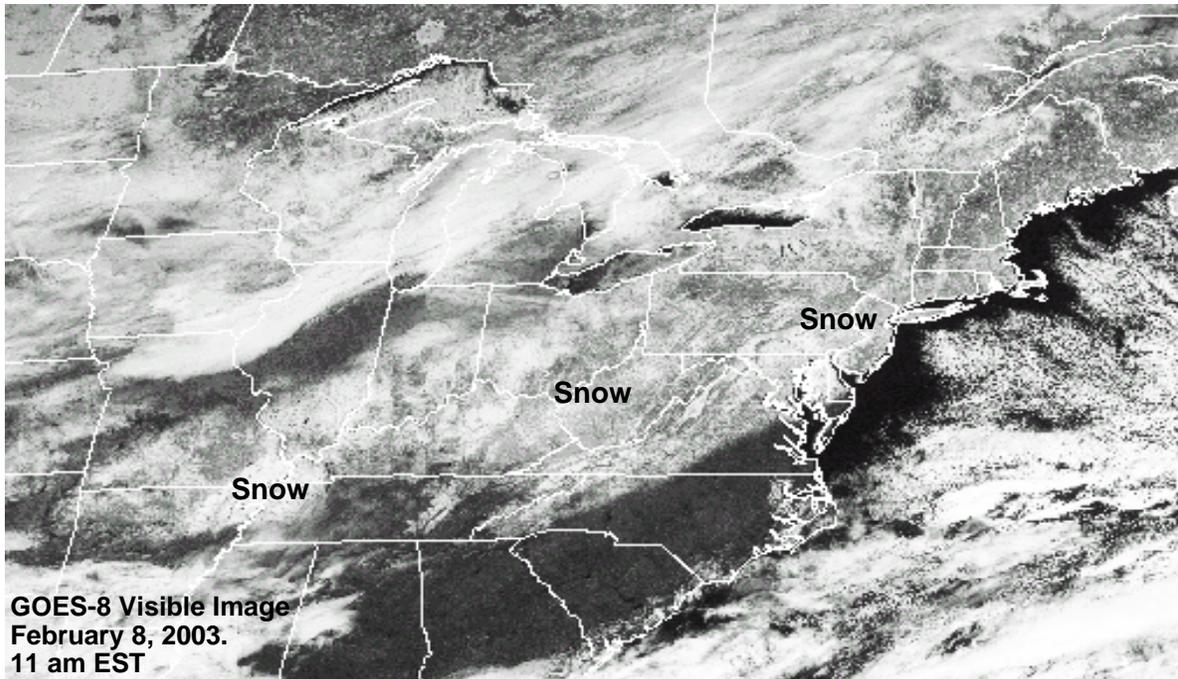
FEB 2 - 8, 2003



Extreme Minimum Temperature (°F)

FEB 2 - 8, 2003





(Continued from front cover)

southern Plains, where rain and snow fell after midweek. Light precipitation also fell in the **Corn Belt**, slightly boosting topsoil moisture but providing little relief from slowly developing **Midwestern** drought. Cold-season dryness has had a negligible effect on **Midwestern** agriculture, but has restricted some river traffic and recreational activities. Across the **South** and **East**, a wetter weather pattern improved topsoil moisture levels, following drier-than-normal conditions during January. The precipitation included some significant snow in the **Northeast**, featuring an early-week blizzard in **northern New England** and widespread accumulations across the **northern Mid-Atlantic region** and **southern New England** on February 7-8.

Early in the week, blizzard conditions struck **northern Maine** and parts of **coastal New England**. **Caribou, ME**, received 23.8 inches of snow on February 2-3, including a daily-record total of 20.8 inches on Sunday. Wind gusts to 47 mph accompanied **Caribou's** snowfall. Meanwhile, record warmth diminished across the **West** but briefly overspread the **southern Plains** and parts of the **interior Southeast**. Daily-record highs on February 2 included 85°F in **Wichita Falls, TX**; 74°F in **Dodge City, KS**, and **Springfield, MO**; and 71°F in **Nashville, TN**. A day later, **Corpus Christi, TX** (87°F), posted a record high for February 3. The warmth was short-lived, however, as cooler weather returned to most of the Nation by week's end. On February 7, **Laramie, WY**, notched a daily-record low of -27°F, while lingering warmth in **southern Florida** resulted in a record high of 87°F in **Miami**.

Las Vegas, NV, tallied a high of 81°F on February 1, their earliest reading at or above 80°F by more than 2 weeks (previously, 81°F on February 17, 1996). But during the week of February 2-8, **Las Vegas'** temperature peaked at 64°F on Sunday and failed to rise above 57°F thereafter. In **California's San Joaquin Valley**, **Bakersfield** posted a minimum of 32°F on February 3 and lows of 33°F on February 5, 6, and 8. **Southern California's** citrus and winter vegetables did not experience temperatures low enough to cause problems, although some vegetable seeding and transplanting operations were delayed. **Lancaster, CA**, closed the week with three consecutive daily-record lows (14, 16, and 21°F). Other **California** daily records for February 8 included 23°F in **Paso Robles** and 25°F in **Redding**.

Although dry weather returned to the **Northwest**, above-normal precipitation in December and January eased drought concerns for winter grains. December-January totals included 6.67 inches (164 percent of normal) in **Spokane, WA**, 5.15 inches (170 percent) in **Pendleton, OR**, and 3.59 inches (130 percent) in **Boise, ID**. Farther east, late-week snow blanketed areas from the **southern Plains to the northern Mid-Atlantic region and southern New England**. On February 6, daily-record snowfall totals included 5.0 inches in Jonesboro, AR, and 4.8 inches in **Jackson, TN**. February 6-7 snowfall totaled 6.6 inches in **Washington, DC**, their greatest February snowfall since 6.8 inches fell on February 16, 1996. The storm came roughly 25 years after the Northeastern Blizzard of February 5-7, 1978, which brought 27.1 inches of snow and 79 mph wind gusts to **Boston, MA**. The 2003 storm produced 11.0 inches in **Boston** and 17.0 inches in nearby **Milton (Blue Hill Observatory), MA**, where it was the largest February storm total since 17.8 inches fell from February 8-10, 1994.

Mostly dry weather prevailed in **Hawaii**, consistent with warm-phase (El Niño) conditions in the **central equatorial Pacific Ocean**, although locally heavy showers overspread western parts of the State at midweek. On February 5-6, 24-hour totals on **Kauai** reached 1.40 inches in **Kokee** and 1.15 inches in **Wainiha**. Meanwhile, unusual warmth dominated most of **Alaska**, boosting weekly temperatures at least 10 to 30°F above normal across the mainland. **McGrath, AK**, notched a high of 44°F on February 5 (not a record, but 39°F above normal), followed by a trio of daily-record highs (42, 36, and 40°F) to end the week. Significant precipitation, including some rare February rainfall, overspread western and southern Alaska. During the first 9 days of the month, **McGrath** received 2.39 inches (more than three times their February normal of 0.74 inch), including a daily-record total of 0.31 inch (all in the form of rain) on February 9. Farther south, **Valdez, AK**, measured daily-record totals (1.60, 2.32, and 2.57 inches) from February 3-5, totaling 6.49 inches (mostly rain, but including about 19 inches of snow).

National Weather Data for Selected Cities

Weather Data for the Week Ending February 8, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE		50 INCH OR MORE	
																		01 INCH OR MORE	50 INCH OR MORE		
AL	BIRMINGHAM	55	33	70	20	44	0	1.40	0.37	1.00	10.85	98	3.62	55	89	42	0	3	3	1	
	HUNTSVILLE	49	30	67	16	40	-2	0.80	-0.33	0.47	8.39	68	2.25	33	82	63	0	5	3	0	
	MOBILE	60	40	70	34	50	-1	0.26	-0.95	0.21	9.78	83	0.81	11	77	48	0	0	3	0	
	MONTGOMERY	58	36	74	29	47	-1	0.91	-0.35	0.83	7.25	63	2.08	32	92	51	0	2	2	1	
AK	ANCHORAGE	42	30	45	19	36	19	0.09	-0.06	0.07	1.20	63	0.35	41	90	78	0	2	3	0	
	BARROW	-7	-18	4	-23	-12	3	0.10	0.07	0.07	0.20	74	0.18	120	83	78	0	7	3	0	
	FAIRBANKS	30	9	40	-10	19	27	0.13	0.05	0.13	0.80	58	0.39	60	89	83	0	7	1	0	
	JUNEAU	39	31	42	27	35	8	0.60	-0.39	0.48	12.15	107	6.29	106	97	94	0	4	4	0	
	KODIAK	44	37	47	28	40	10	3.79	2.21	1.67	26.11	148	20.07	201	92	80	0	1	7	3	
	NOME	23	7	36	-8	15	10	0.50	0.31	0.18	1.82	85	0.85	75	87	78	0	7	6	0	
AZ	FLAGSTAFF	40	15	48	7	28	-3	0.04	-0.53	0.04	0.87	19	0.18	6	72	26	0	7	1	0	
	PHOENIX	67	47	72	40	57	0	0.00	-0.14	0.00	0.73	38	0.57	58	36	24	0	0	0	0	
	TUCSON	64	39	75	32	52	-2	0.00	-0.19	0.00	0.72	32	0.08	7	39	24	0	1	0	0	
	YUMA	67	47	72	39	57	-4	0.00	-0.06	0.00	0.22	26	0.19	43	30	20	0	0	0	0	
AR	FORT SMITH	49	27	69	16	38	-3	0.42	-0.12	0.33	6.01	94	0.79	27	84	47	0	5	2	0	
	LITTLE ROCK	48	32	72	19	40	-2	0.48	-0.30	0.41	8.96	97	0.79	18	86	47	0	4	2	0	
CA	BAKERSFIELD	63	35	68	32	49	-2	0.01	-0.27	0.01	1.57	70	0.17	11	70	49	0	1	1	0	
	FRESNO	60	35	62	33	48	-2	0.00	-0.50	0.00	2.84	70	0.40	15	88	69	0	0	0	0	
	LOS ANGELES	68	49	73	45	59	1	0.00	-0.77	0.00	2.85	50	0.04	1	72	25	0	0	0	0	
	REDDING	61	38	68	25	50	2	0.00	-1.43	0.00	21.53	168	6.78	83	54	36	0	1	0	0	
	SACRAMENTO	60	36	62	30	48	-2	0.00	-0.93	0.00	7.63	104	1.34	27	85	33	0	2	0	0	
	SAN DIEGO	66	50	71	46	58	-1	0.03	-0.47	0.03	2.03	49	0.05	2	72	32	0	0	1	0	
	SAN FRANCISCO	59	43	62	36	51	0	0.00	-1.06	0.00	12.21	143	1.46	26	73	45	0	0	0	0	
	STOCKTON	59	31	61	26	45	-4	0.00	-0.63	0.00	5.70	109	0.67	20	89	61	0	6	0	0	
CO	ALAMOSA	35	2	51	-11	18	-1	0.10	0.07	0.04	0.35	57	0.11	39	78	51	0	7	3	0	
	CO SPRINGS	31	10	59	-6	21	-9	0.10	0.07	0.09	0.18	25	0.10	32	91	45	0	7	2	0	
	DENVER INTL	31	9	54	-7	20	-10	0.26	0.26	0.10	0.34	63	0.29	126	92	52	0	7	5	0	
	GRAND JUNCTION	40	19	59	10	30	-1	0.29	0.21	0.29	0.59	49	0.42	61	69	48	0	7	1	0	
	PUEBLO	40	8	69	-10	24	-8	0.24	0.21	0.19	0.54	72	0.25	69	79	51	0	7	2	0	
CT	BRIDGEPORT	38	24	50	9	31	1	0.59	-0.13	0.34	6.59	82	2.40	53	77	44	0	4	3	0	
	HARTFORD	36	22	45	3	29	2	0.51	-0.24	0.24	6.49	78	2.71	58	78	50	0	5	3	0	
DC	WASHINGTON	43	30	54	22	36	0	0.78	0.17	0.29	7.68	110	3.23	83	76	42	0	5	3	0	
DE	WILMINGTON	44	25	56	13	34	2	0.84	0.19	0.37	7.03	93	2.83	68	84	42	0	5	3	0	
FL	DAYTONA BEACH	68	46	74	40	57	-2	0.09	-0.56	0.06	10.21	155	0.60	16	97	57	0	0	2	0	
	JACKSONVILLE	65	39	73	32	52	-2	1.44	0.64	0.88	6.90	95	1.50	33	93	47	0	1	3	1	
	KEY WEST	76	63	79	52	69	-1	0.44	-0.36	0.01	4.54	94	0.47	18	94	76	0	0	4	0	
	MIAMI	80	62	87	51	71	3	0.09	-0.41	0.09	3.91	84	0.52	21	95	61	0	0	1	0	
	ORLANDO	72	48	79	42	60	-1	0.01	-0.51	0.01	12.20	228	0.81	27	92	55	0	0	1	0	
	PENSACOLA	61	42	71	37	52	-1	0.50	-0.62	0.28	5.61	53	0.71	11	89	51	0	0	5	0	
	TALLAHASSEE	64	40	71	30	52	-1	1.74	0.66	1.46	8.71	81	2.09	32	85	48	0	1	4	1	
	TAMPA	69	51	77	45	60	-2	0.15	-0.45	0.09	14.39	274	0.26	9	92	57	0	0	3	0	
	WEST PALM	77	58	87	46	68	2	0.01	-0.73	0.01	3.91	51	1.32	29	98	71	0	0	1	0	
GA	ATHENS	55	35	68	26	45	1	1.00	-0.06	0.68	8.18	85	2.74	46	82	44	0	2	3	1	
	ATLANTA	53	35	67	25	44	0	1.01	-0.14	0.80	8.26	81	3.03	48	82	56	0	3	2	1	
	AUGUSTA	58	34	72	26	46	0	0.68	-0.34	0.47	6.94	79	2.68	47	90	44	0	2	3	0	
	COLUMBUS	58	38	73	33	48	0	1.65	0.60	1.23	8.29	80	3.77	63	82	36	0	0	3	1	
	MACON	57	36	68	31	47	0	1.11	-0.02	0.92	7.95	78	2.56	41	86	42	0	2	2	1	
	SAVANNAH	62	38	72	33	50	-1	0.60	-0.18	0.37	5.14	67	1.26	26	93	47	0	0	3	0	
HI	HILO	80	64	82	62	72	1	0.60	-1.53	0.46	12.38	55	1.90	16	80	71	0	0	4	0	
	HONOLULU	80	64	83	58	72	-1	0.01	-0.57	0.01	1.26	20	1.22	36	78	64	0	0	1	0	
	KAHULUI	80	60	83	55	70	-2	0.02	-0.65	0.02	2.99	39	2.44	54	85	71	0	0	1	0	
	LIHUE	77	63	80	58	70	-2	0.11	-0.74	0.11	3.35	32	2.27	41	85	72	0	0	1	0	
ID	BOISE	40	26	46	22	33	-1	0.01	-0.27	0.01	3.81	124	1.78	105	86	68	0	7	1	0	
	LEWISTON	43	31	50	26	37	1	0.16	-0.08	0.09	4.01	163	3.33	236	88	77	0	4	2	0	
	POCATELLO	28	9	37	-2	19	-9	0.29	0.07	0.19	1.13	45	0.70	50	83	73	0	7	3	0	
IL	CHICAGO/O'HARE	32	17	45	8	24	0	0.07	-0.32	0.04	2.36	51	0.43	20	81	65	0	6	2	0	
	MOLINE	30	12	41	-1	21	-3	0.04	-0.29	0.04	1.16	28	0.47	24	84	68	0	7	1	0	
	PEORIA	32	14	49	1	23	-2	0.04	-0.30	0.04	3.09	72	0.88	47	85	51	0	7	1	0	
	ROCKFORD	30	13	40	1	21	0	0.02	-0.28	0.02	1.14	30	0.36	20	81	66	0	7	1	0	
	SPRINGFIELD	36	18	56	5	27	0	0.04	-0.30	0.04	2.50	55	0.80	40	82	61	0	6	1	0	
IN	EVANSVILLE	42	22	62	6	32	-1	0.32	-0.38	0.21	7.12	98	1.47	40	79	68	0	5	3	0	
	FORT WAYNE	33	18	49	8	26	1	0.24	-0.20	0.21	3.15	59	1.54	60	90	72	0	7	4	0	
	INDIANAPOLIS	37	18	56	6	28	0	0.35	-0.20	0.29	4.64	76	1.62	52	89	65	0	6	2	0	
	SOUTH BEND	32	18	47	9	25	0	0.28	-0.19	0.27	3.30	56	1.50	53	83	71	0	5	2	0	
IA	BURLINGTON	31	13	44	-2	22	-3	0.03	-0.26	0.03	1.32	35	0.53	32	89	57	0	7	1	0	
	CEDAR RAPIDS	26	7	38	-9	17	-4	0.05	-0.20	0.05	0.75	27	0.48	36	90	67	0	7	1	0	
	DES MOINES	28	9	40	-8	19	-4	0.00	-0.26	0.00	0.49	18	0.49	37	81	69	0	7	0	0	
	DUBUQUE	26	9	38	-7	17	-3	0.03	-0.27	0.03	1.15	35	0.42	26	86	73	0	7	1	0	
	SIOUX CITY	32	12	47	-7	22	0	0.00	-0.08	0.00	0.35	26	0.22	32	77	62	0	7	0	0	
	WATERLOO	27	6	43	-9	17	-2	0.07	-0.15	0.07	0.73	33	0.41	38	82	71	0	7	1	0	
KS	CONCORDIA	38	17	59	4	28	-1	0.05	-0.02	0.05	0.45	28	0.34	46	89	66	0	6	1	0	
	DODGE CITY	42	15	74	2	29	-4	0.05	-0.04	0.03	0.73	49	0.12	17	89	54	0	6	3	0	
	GOODLAND	35	14	58	3	25	-5	0.00	-0.06	0.00	0.18	20	0.18	37	82	56	0	7	0	0	
	TOPEKA	39	18	63	0	29	-1	0.14	-0.06	0.12	0.69	27	0.64	54	80	66	0	6	2	0	

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending February 8, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	43	20	72	6	32	-1	0.05	-0.07	0.05	1.39	60	0.17	17	87	68	0	6	1	0
KY JACKSON	44	24	62	7	34	-1	0.86	0.04	0.29	7.37	84	3.08	68	92	50	0	6	4	0
KY LEXINGTON	42	22	59	2	32	-2	0.62	-0.08	0.49	5.67	69	1.59	38	82	59	0	5	3	0
KY LOUISVILLE	43	23	63	8	33	-2	0.53	-0.19	0.43	8.27	106	1.66	40	85	48	0	6	3	0
KY PADUCAH	42	27	65	4	35	0	0.63	-0.31	0.32	8.85	99	1.78	39	84	53	0	5	3	0
LA BATON ROUGE	59	42	73	34	50	-1	0.81	-0.57	0.63	8.48	65	1.33	17	83	48	0	0	2	1
LA LAKE CHARLES	56	43	71	37	50	-2	1.59	0.63	1.42	12.98	115	3.50	53	92	69	0	0	3	1
LA NEW ORLEANS	62	45	72	37	54	0	0.23	-1.25	0.12	5.24	41	0.42	6	83	65	0	0	3	0
LA SHREVEPORT	53	38	72	31	46	-3	0.83	-0.24	0.69	9.63	93	1.27	22	85	53	0	2	3	1
ME CARIBOU	22	3	30	-14	12	2	7.66	7.13	4.05	10.90	161	7.97	223	90	74	0	7	6	5
ME PORTLAND	34	19	42	-2	27	4	1.08	0.28	0.61	6.85	74	2.34	47	76	47	0	5	4	1
MD BALTIMORE	40	24	50	11	32	-1	0.83	0.14	0.29	8.46	111	3.50	82	88	51	0	6	3	0
MA BOSTON	36	26	46	14	31	1	0.87	0.03	0.45	7.99	93	2.69	55	75	47	0	4	3	0
MA WORCESTER	31	20	40	7	26	2	0.64	-0.13	0.38	7.51	86	3.00	60	84	56	0	7	2	0
MI ALPENA	27	10	45	-3	18	1	0.26	-0.05	0.19	0.98	25	0.46	22	91	73	0	7	3	0
MI GRAND RAPIDS	29	17	39	8	23	0	0.11	-0.28	0.09	2.99	58	1.02	41	92	76	0	7	3	0
MI HOUGHTON LAKE	24	12	31	-1	18	0	0.13	-0.17	0.10	0.75	20	0.34	17	90	76	0	7	3	0
MI LANSING	32	17	46	7	24	2	0.23	-0.13	0.23	1.26	30	0.47	23	87	70	0	7	1	0
MI MUSKEGON	30	20	36	10	25	1	0.14	-0.27	0.08	1.36	26	0.51	19	92	75	0	7	5	0
MI TRAVERSE CITY	24	15	33	-6	20	0	0.15	-0.39	0.07	0.76	12	0.50	14	94	68	0	7	4	0
MN DULUTH	17	-2	30	-14	8	-4	0.00	-0.22	0.00	1.01	44	0.20	15	83	68	0	7	0	0
MN INT'L FALLS	17	-6	30	-18	6	-1	0.01	-0.16	0.01	0.33	19	0.07	7	84	60	0	7	1	0
MN MINNEAPOLIS	22	2	35	-14	12	-5	0.51	0.33	0.33	0.94	42	0.73	58	88	73	0	7	3	0
MN ROCHESTER	23	2	34	-17	12	-3	0.31	0.14	0.25	1.21	56	0.65	57	86	78	0	7	3	0
MS ST. CLOUD	21	-4	33	-22	8	-4	0.27	0.13	0.24	0.66	41	0.44	48	88	66	0	7	2	0
MS JACKSON	53	35	72	25	44	-3	1.51	0.35	1.45	9.07	74	2.77	40	86	51	0	4	3	1
MS MERIDIAN	55	34	72	25	45	-3	0.80	-0.48	0.74	10.31	81	2.39	32	88	54	0	3	3	1
MS TUPELO	48	30	68	19	39	-3	1.56	0.52	0.97	10.26	82	3.14	50	90	63	0	4	3	2
MO COLUMBIA	40	18	65	5	29	-2	0.07	-0.40	0.04	3.04	64	0.95	42	82	45	0	6	2	0
MO KANSAS CITY	40	18	63	1	29	-1	0.12	-0.12	0.06	0.62	20	0.59	-2	85	56	0	6	3	0
MO SAINT LOUIS	42	22	65	9	32	0	0.12	-0.37	0.11	3.10	56	1.08	40	79	65	0	5	2	0
MO SPRINGFIELD	44	20	74	4	32	-2	0.12	-0.40	0.10	3.34	57	0.45	17	76	60	0	6	2	0
MT BILLINGS	27	17	35	7	22	-5	0.20	0.07	0.07	1.24	76	0.99	103	93	71	0	7	5	0
MT BUTTE	25	6	32	-3	16	-4	0.13	0.05	0.08	1.04	90	0.89	144	91	60	0	7	4	0
MT GLASGOW	26	9	33	3	18	3	0.00	-0.06	0.00	0.20	26	0.15	37	88	77	0	7	0	0
MT GREAT FALLS	30	17	36	9	24	0	0.33	0.24	0.12	0.82	56	0.45	57	95	66	0	7	5	0
MT HAVRE	32	20	38	16	26	8	0.02	-0.04	0.01	0.32	31	0.24	45	90	72	0	7	2	0
MT KALISPELL	33	21	41	13	27	3	0.13	-0.17	0.13	2.23	64	0.99	55	94	80	0	7	1	0
MT MISSOULA	35	25	41	18	30	3	0.12	-0.06	0.06	2.53	105	1.90	151	93	76	0	7	4	0
NE GRAND ISLAND	33	16	44	2	24	-1	0.06	-0.03	0.01	0.71	55	0.69	108	88	72	0	7	2	0
NE LINCOLN	34	13	52	-4	23	-2	0.33	0.25	0.33	0.75	46	0.74	97	87	63	0	7	1	0
NE NORFOLK	34	15	47	1	24	1	0.01	-0.11	0.01	0.45	33	0.40	56	82	61	0	6	1	0
NE NORTH PLATTE	35	12	47	-1	24	-3	0.10	0.03	0.07	0.45	52	0.45	96	92	59	0	7	2	0
NE OMAHA	32	14	47	-2	23	-2	0.17	0.03	0.17	0.52	28	0.52	56	81	66	0	7	1	0
NE SCOTTSBLUFF	***	***	***	***	***	***	***	***	***	0.12	10	0.12	19	***	***	***	***	***	***
NV VALENTINE	29	7	40	-12	18	-6	0.07	0.00	0.04	0.42	59	0.38	100	90	77	0	7	3	0
NV ELY	32	6	39	-6	19	-9	0.00	-0.15	0.00	0.40	28	0.26	29	85	61	0	7	0	0
NV LAS VEGAS	56	38	69	30	47	-3	0.00	-0.14	0.00	0.09	8	0.02	3	33	22	0	3	0	0
NV RENO	43	19	52	13	31	-6	0.00	-0.25	0.00	2.42	109	0.22	16	68	47	0	7	0	0
NV WINNEMUCCA	40	15	45	3	28	-6	0.00	-0.14	0.00	1.97	109	1.58	160	81	57	0	7	0	0
NH CONCORD	32	18	38	0	25	4	1.32	0.73	0.67	7.49	113	3.92	107	83	51	0	7	4	1
NJ NEWARK	40	27	50	16	33	1	0.73	-0.01	0.51	7.39	88	3.69	76	71	43	0	4	3	1
NM ALBUQUERQUE	49	27	68	20	38	-1	0.23	0.15	0.23	0.59	55	0.23	40	58	25	0	6	1	0
NY ALBANY	33	18	40	5	26	3	0.29	-0.23	0.17	7.71	134	3.74	121	84	53	0	6	4	0
NY BINGHAMTON	30	15	39	5	22	0	0.95	0.34	0.69	6.06	96	3.32	102	89	67	0	7	4	1
NY BUFFALO	33	21	47	14	27	3	0.51	-0.11	0.31	7.28	95	2.92	75	89	57	0	7	5	0
NY ROCHESTER	32	19	43	8	25	1	0.29	-0.21	0.11	6.31	112	2.54	87	83	60	0	6	5	0
NY SYRACUSE	33	20	45	7	27	4	1.06	0.53	0.74	5.59	88	2.75	86	85	59	0	6	4	1
NC ASHEVILLE	49	25	71	13	37	0	0.47	-0.46	0.23	8.06	95	1.66	32	71	43	0	7	3	0
NC CHARLOTTE	55	33	71	26	44	1	0.79	-0.05	0.47	7.71	95	2.75	55	84	29	0	4	3	0
NC GREENSBORO	52	31	67	24	41	2	0.98	0.23	0.43	7.77	104	3.34	76	84	39	0	5	3	0
NC HATTERAS	52	37	61	31	45	-1	0.92	-0.12	0.37	5.65	49	3.33	47	96	63	0	1	3	0
NC RALEIGH	53	32	70	25	43	2	1.05	0.21	0.60	7.96	99	2.92	59	87	43	0	4	3	1
NC WILMINGTON	57	36	72	30	47	0	0.83	-0.08	0.42	5.05	54	2.52	45	96	46	0	1	3	0
ND BISMARCK	22	-1	32	-10	11	-3	0.00	-0.11	0.00	0.58	57	0.26	45	82	73	0	7	0	0
ND DICKINSON	24	5	34	-10	14	-4	0.01	-0.10	0.01	0.46	55	0.11	22	93	68	0	7	1	0
ND FARGO	16	-2	32	-13	7	-3	0.00	-0.12	0.00	1.09	74	0.26	29	83	71	0	7	0	0
ND GRAND FORKS	14	-6	32	-17	4	-5	0.00	-0.14	0.00	0.53	38	0.21	25	87	64	0	7	0	0
ND JAMESTOWN	16	-4	29	-16	6	-6	0.00	-0.11	0.00	0.37	31	0.13	17	92	74	0	7	0	0
ND WILLISTON	20	-1	31	-21	10	-3	0.06	-0.02	0.03	1.26	105	0.64	102	93	86	0	7	3	0
OH AKRON-CANTON	32	17	49	5	25	-1	0.40	-0.12	0.19	5.18	85	2.27	73	85	71	0	7	5	0
OH CINCINNATI	40	20	57	2	30	-2	0.63	0.00	0.29	7.26	105	2.36	65	87	61	0	6	4	0
OH CLEVELAND	35	20	50	10	28	2	0.42	-0.13	0.17	6.12	98	2.41	77	89	63	0	7	5	0
OH COLUMBUS	39	20	54	6	30	1	0.31	-0.22	0.16	4.75	78	1.98	63	86	67	0	6	4	0
OH DAYTON	36	19	54	5	27	-1	0.26	-0.29	0.15	4.54	72	1.33	41	87	65	0	6	5	0
OH MANSFIELD	33	17	49	5	25	0	0.24	-0.29	0.16	4.31	66	1.57	48	93	68	0	7	3	0

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Weather Data for the Week Ending February 8, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
OK TOLEDO	37	19	52	11	28	3	0.19	-0.25	0.19	4.16	82	1.49	61	82	70	0	5	1	0
OK YOUNGSTOWN	33	15	48	7	24	-2	0.47	0.00	0.19	5.05	86	2.14	74	84	66	0	7	5	0
OK OKLAHOMA CITY	49	24	76	14	37	-2	0.21	-0.03	0.21	2.07	60	0.23	15	86	47	0	6	1	0
OR TULSA	49	26	72	11	37	-2	0.16	-0.19	0.16	3.05	69	0.30	15	84	62	0	6	1	0
OR ASTORIA	52	35	54	30	43	0	0.32	-1.75	0.15	26.19	117	13.42	112	93	80	0	3	5	0
OR BURNS	38	18	43	12	28	0	0.00	-0.25	0.00	3.18	115	1.21	83	87	63	0	7	0	0
OR EUGENE	49	31	53	25	40	-2	0.04	-1.63	0.03	19.09	107	7.04	74	96	87	0	5	2	0
OR MEDFORD	53	28	55	22	41	-1	0.00	-0.53	0.00	10.06	168	2.86	93	86	46	0	5	0	0
OR PENDLETON	44	30	49	25	37	1	0.16	-0.14	0.10	5.44	166	3.21	178	90	75	0	5	2	0
OR PORTLAND	52	34	56	30	43	1	0.09	-1.00	0.05	16.12	134	8.12	128	96	82	0	5	2	0
OR SALEM	52	30	58	26	41	-1	0.02	-1.31	0.01	18.76	136	7.56	103	92	75	0	5	2	0
PA ALLENTOWN	37	21	49	7	29	1	0.70	0.01	0.35	7.05	92	2.10	49	79	55	0	5	3	0
PA ERIE	34	18	50	11	26	-1	0.18	-0.35	0.15	7.15	104	3.17	101	81	64	0	7	2	0
PA MIDDLETOWN	37	21	45	8	29	0	0.78	0.09	0.41	7.79	114	3.19	88	95	57	0	7	3	0
PA PHILADELPHIA	39	26	48	16	33	0	0.90	0.23	0.40	6.96	92	2.91	68	72	51	0	5	3	0
PA PITTSBURGH	35	19	50	9	27	-1	0.47	-0.10	0.23	5.32	86	2.75	82	89	57	0	7	3	0
PA WILKES-BARRE	34	20	45	9	27	0	0.63	0.10	0.43	5.67	101	2.20	72	84	52	0	6	4	0
PA WILLIAMSPORT	35	21	42	9	28	2	0.61	-0.05	0.51	5.93	91	2.57	71	85	57	0	7	3	1
RI PROVIDENCE	38	25	48	11	31	2	0.76	-0.12	0.41	8.15	86	3.00	56	74	50	0	4	3	0
SC BEAUFORT	60	41	71	36	51	2	0.59	-0.24	0.41	4.62	57	0.82	16	93	42	0	0	3	0
SC CHARLESTON	60	40	72	34	50	1	0.44	-0.34	0.34	5.71	69	1.48	30	86	42	0	0	3	0
SC COLUMBIA	58	36	72	30	47	1	0.62	-0.35	0.38	6.21	68	2.05	36	76	37	0	2	3	0
SC GREENVILLE	55	33	70	26	44	2	0.67	-0.29	0.34	9.05	97	2.58	47	85	32	0	3	3	0
SD ABERDEEN	22	-2	32	-17	10	-5	0.06	-0.02	0.06	0.60	63	0.30	53	82	74	0	7	1	0
SD HURON	24	3	35	-9	14	-4	0.28	0.20	0.27	0.90	94	0.52	91	88	71	0	7	2	0
SD RAPID CITY	29	6	41	-9	18	-7	0.16	0.09	0.13	0.53	62	0.49	109	90	73	0	7	2	0
SD SIOUX FALLS	27	7	39	-6	17	0	0.01	-0.07	0.01	0.46	41	0.31	52	84	63	0	7	1	0
TN BRISTOL	44	24	59	9	34	-2	1.01	0.21	0.56	7.95	102	3.57	81	94	48	0	7	3	1
TN CHATTANOOGA	51	30	71	19	40	-1	0.92	-0.25	0.66	9.49	82	2.75	41	78	49	0	5	3	1
TN KNOXVILLE	50	29	64	17	40	1	1.22	0.28	0.50	9.76	96	4.41	78	88	48	0	6	4	2
TN MEMPHIS	48	32	66	18	40	-2	0.83	-0.17	0.69	11.37	103	1.71	32	77	52	0	4	3	1
TN NASHVILLE	46	28	71	11	37	-2	0.91	0.08	0.65	8.31	88	2.50	51	83	43	0	5	2	1
TX ABILENE	54	34	82	23	44	-2	0.06	-0.17	0.03	1.57	63	0.24	20	78	60	0	4	2	0
TX AMARILLO	48	20	73	6	34	-4	0.00	-0.09	0.00	1.10	81	0.00	0	80	45	0	6	0	0
TX AUSTIN	57	38	77	31	47	-5	0.41	-0.01	0.22	6.64	138	2.12	90	86	67	0	2	3	0
TX BEAUMONT	58	46	74	39	52	-2	1.13	0.17	1.09	10.93	91	2.72	40	87	57	0	0	2	1
TX BROWNSVILLE	69	53	83	43	61	0	0.33	-0.02	0.23	2.27	79	1.03	59	97	74	0	0	4	0
TX CORPUS CHRISTI	66	49	87	40	57	-1	0.42	0.00	0.42	4.63	120	1.44	69	94	77	0	0	1	0
TX DEL RIO	61	43	80	32	52	-2	0.28	0.08	0.16	0.92	59	0.61	76	87	70	0	2	4	0
TX EL PASO	58	37	76	29	47	-1	0.20	0.12	0.20	1.85	141	0.20	37	54	32	0	3	1	0
TX FORT WORTH	52	35	77	26	44	-3	0.70	0.26	0.40	5.05	102	0.92	38	91	47	0	3	2	0
TX GALVESTON	60	49	73	41	54	-2	0.09	-0.66	0.09	4.99	59	1.35	27	95	67	0	0	1	0
TX HOUSTON	59	44	77	37	52	-1	0.89	0.13	0.85	8.63	105	2.98	65	85	68	0	0	3	1
TX LUBBOCK	54	25	80	20	39	-2	0.00	-0.15	0.00	1.61	120	0.04	6	69	47	0	6	0	0
TX MIDLAND	55	33	82	25	44	-2	0.00	-0.11	0.00	1.32	101	0.27	41	69	48	0	4	0	0
TX SAN ANGELO	56	35	79	24	46	-1	0.10	-0.15	0.09	1.80	89	0.43	39	77	57	0	3	2	0
TX SAN ANTONIO	61	43	83	34	52	0	0.35	-0.05	0.17	3.88	95	1.35	64	89	54	0	0	4	0
TX VICTORIA	62	45	84	38	54	-1	0.41	-0.09	0.15	5.09	93	2.47	82	96	72	0	0	5	0
TX WACO	53	38	73	32	46	-2	0.23	-0.27	0.16	8.44	161	0.81	33	88	60	0	2	2	0
TX WICHITA FALLS	49	29	64	18	39	-4	0.09	-0.21	0.09	2.05	65	0.17	12	78	59	0	6	1	0
UT SALT LAKE CITY	32	19	46	11	26	-6	0.71	0.41	0.55	1.95	66	1.41	82	90	64	0	7	3	1
VT BURLINGTON	29	14	36	-1	22	4	0.34	-0.10	0.32	2.64	53	1.36	50	86	58	0	7	3	0
VA LYNCHBURG	45	28	56	15	37	1	0.96	0.22	0.42	6.54	86	2.49	57	78	43	0	5	3	0
VA NORFOLK	47	34	65	26	41	1	0.84	0.02	0.57	7.35	93	3.19	66	85	50	0	1	3	1
VA RICHMOND	46	28	60	22	37	-1	0.83	0.14	0.31	6.46	87	3.01	69	84	49	0	7	3	0
VA ROANOKE	44	28	60	18	36	-1	0.67	-0.07	0.33	6.00	86	2.11	52	75	44	0	6	3	0
VA WASH/DULLES	41	24	51	10	33	0	0.68	0.02	0.28	7.08	103	3.47	91	84	45	0	6	3	0
WA OLYMPIA	45	31	50	25	38	-1	0.03	-1.63	0.02	17.06	98	9.67	102	96	90	0	4	2	0
WA QUILLAYUTE	49	31	53	27	40	-2	0.25	-2.91	0.17	28.32	89	13.59	79	98	88	0	5	6	0
WA SEATTLE-TACOMA	45	35	48	29	40	-2	0.08	-1.03	0.07	14.02	117	8.04	126	10	95	0	3	2	0
WA SPOKANE	39	24	42	21	32	2	0.16	-0.21	0.08	6.83	152	3.56	159	93	71	0	7	2	0
WA YAKIMA	52	25	62	20	39	6	0.00	-0.20	0.00	5.70	204	2.21	157	82	62	0	7	0	0
WV BECKLEY	39	22	56	6	30	-2	0.59	-0.10	0.32	5.17	73	2.13	53	82	64	0	6	4	0
WV CHARLESTON	45	24	62	12	35	0	0.58	-0.16	0.21	5.33	72	2.39	58	95	57	0	5	6	0
WV ELKINS	38	18	58	6	28	-2	0.59	-0.15	0.38	5.20	67	2.74	64	95	51	0	7	3	0
WV HUNTINGTON	43	23	61	9	33	-1	0.63	-0.07	0.21	5.14	70	2.04	51	92	54	0	5	5	0
WI EAU CLAIRE	22	2	35	-16	12	-3	0.42	0.22	0.33	1.39	60	0.74	58	90	59	0	7	3	0
WI GREEN BAY	23	6	35	-13	15	-3	0.23	-0.01	0.11	1.54	53	0.81	54	91	68	0	7	3	0
WI LA CROSSE	26	6	36	-12	16	-3	0.35	0.09	0.22	1.24	46	0.88	59	91	65	0	6	2	0
WI MADISON	26	11	36	-1	19	-1	0.09	-0.21	0.06	1.12	34	0.45	28	82	64	0	7	2	0
WI MILWAUKEE	28	15	36	5	21	-2	0.07	-0.34	0.04	1.17	26	0.42	18	81	64	0	7	2	0
WI CASPER	24	8	37	-5	16	-8	0.33	0.20	0.30	0.62	46	0.43	59	87	75	0	7	4	0
WI CHEYENNE	27	9	44	-3	18	-9	0.00	-0.07	0.00	0.13	13	0.02	4	77	58	0	6	0	0
WI LANDER	21	4	38	-11	13	-10	0.93	0.84	0.81	1.43	116	1.25	202	91	84	0	7	4	1
WI SHERIDAN	29	7	35	-8	18	-6	0.13	-0.01	0.08	1.12	70	0.94	101	84	75	0	7	3	0

Based on 1971-2000 normals

*** Not Available

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

January Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

The influence of El Niño on mainland U.S. weather patterns temporarily waned during January, despite the continuation of warm-episode conditions in the central equatorial Pacific Ocean. In fact, the Nation experienced its second-driest January on record, according to preliminary data from the National Climatic Data Center. Unusually wet weather was confined to parts of the Northwest, but drought remained a major concern elsewhere from the Rockies westward. East of the Sierra Nevada and Cascades, dismal runoff prospects for the remainder of 2003, low reservoir levels, and drought-damaged rangelands were among the most serious effects of long-term Western precipitation deficits. Unfavorably dry weather also persisted on the drought-affected northern and central High Plains. Just enough snow fell on the northern Plains in advance of a mid- to late-month cold outbreak to help protect winter wheat from temperatures as low as -30°F. In contrast, mild weather prevailed for the entire month on the central Plains, benefiting overwintering wheat despite dry soils and minimal snow. Dry weather and developing drought in the Corn Belt had little effect on Midwestern agriculture, but hampered upper Mississippi Valley river traffic due to low water levels and curtailed snow-dependent recreational activities. Meanwhile in the South, dry weather permitted an acceleration of fieldwork, following an excessively wet spell in late 2002. By month's end, however, irrigation requirements for winter grains increased in the southern Atlantic region as far north as southern Georgia. Farther north, heavy, early-month precipitation in the Northeast was followed by cold weather and several, mostly light, snowfalls.

January temperatures ranged from 4 to 12°F above normal across most of the West and High Plains, and averaged as much as 4°F above normal in the upper Midwest. In contrast, monthly readings ranged from 4 to 10°F below normal in Florida and were as much as 6°F below normal elsewhere in the South. Cool January weather helped to acclimate Florida's citrus trees in advance of the January 24-25 freezes and added beneficial chill hours for fruit trees elsewhere in the Southeast. Monthly temperatures were mostly 2 to 8°F below normal across the eastern one-third of the Nation, including the eastern Corn Belt and the Northeast.

Cold weather continued to deepen for most of the month from the Midwest into the Northeast. On January 27, the minimum of -9°F in Indianapolis, IN, was their lowest reading since January 17, 1997, while Pittsburgh, PA (-4°F), had their lowest temperature since February 4, 1996. Montpelier, VT, posted a daily-record low of -22°F on January 28, a year after setting a daily-record high (51°F) on the same date. Pittsburgh finally saw temperatures climb above the freezing mark (33°F) on January 30, ending their longest spell of sub-freezing weather (19 days from January 11-29) since December 7-28, 1989. Despite the loss of most of the open water on Lake Erie to ice formation during January, bitterly cold air streaming across unfrozen portions of the remaining Great Lakes contributed to heavy lake-effect snow squalls. Monthly snowfall totals of 30.0 inches in Cleveland, OH (second-snowiest January), and 51.8 inches in Erie, PA (fourth-snowiest January), were well shy of the stations' January 1978 records of 42.8 and 62.4 inches,

respectively. Courtesy of a major early-January storm system, parts of the Northeast also received heavy snow. The January 3-4 system affected many of the same locations hit by heavy snow on December 25-26. Albany, NY, received 20.8 inches on January 3-4, their tenth-greatest storm-total snowfall on record. That followed Albany's ninth-greatest storm total, 21.0 inches on December 25-26. The only other winter that Albany recorded two 20-inch snowfalls was 1887-88. The highest unofficial combined total for the two storms was 77 inches, in Cherry Valley (Otsego County), NY, where 38 inches fell from January 2-4. Elsewhere in New York, Binghamton netted 17.3 inches on January 3, their greatest single-day January snowfall since 18.4 inches fell on January 13, 1964. The following day, 17.4 inches blanketed Burlington, VT, their second-highest single-day total on record during any month behind 23.1 inches on January 14, 1934. Some significant midmonth snow fell across the interior South, where Nashville, TN (7.0 inches on January 16) reported their highest daily total since 8.7 inches fell on March 19, 1996. Another storm system produced as much as 1 foot of snow on North Carolina's Outer Banks on January 23, the region's largest accumulation since 13.3 inches blanketed Cape Hatteras on December 23-24, 1989.

Highest January Snowfall (Inches)

Location	Total	Normal	Previous Record/Year
Newberry, MI	75.8	33.8	65.5 in 1978

Lowest January Snowfall (Inches)

Location	Total	Normal	Previous Record/Year
Winnemucca, NV	0.0	4.7	trace in 1996 and earlier
Denver, CO	trace	7.7	trace in 1934
S.L. City, UT	trace	14.5	0.1 in 1961

Cold air made its strongest push into the Deep South on January 24-25, resulting in freezes as far south as central Florida. However, the freezes were relatively minor compared with the series of major cold outbreaks that affected the State from January 1977 to December 1989, curtailing Florida's citrus production for more than a decade. It was the coldest January since 1981 in Florida locations such as Tampa and Ft. Myers, and the coldest since 1985 or 1994 at many other Eastern observation sites. Detroit, MI, 4.0°F colder than normal in January, experienced a fourth consecutive month of below-normal temperatures for the first time since a 5-month cool spell from June-October 1992.

In contrast, periods of very warm weather prevailed on the Plains, especially prior to midmonth and again toward month's end. On January 8, Topeka, KS (74°F), tied their monthly record established on January 2, 1939. Warmth also briefly overspread the Midwest, where Des Moines, IA (67°F on January 8), eclipsed their former January record of 65°F, set on January 26, 2002, and two earlier dates. International Falls, MN (46°F on January 7), experienced their warmest January day since January 24, 1981. Less than 3 weeks later, rapid warming returned to the High Plains, where Great Falls, MT—with a low of 0°F and a high of 56°F on January 26—had their greatest daily temperature range since December 16, 2000 (low of -21°F and high of 40°F). In Nebraska, North Platte notched a daily-record high of 67°F on January 27, just 4 days after recording their lowest temperature of the month (-3°F on January 23).

At month's end, some of the hottest January weather on record developed across the Southwest. In southern California, Mt. Wilson notched a monthly record high of 75°F on January 30, followed by another record (77°F) on January 31. More than 30 other locations across the West set or tied January record highs on the month's final day. All-time January records included 88°F in Wickenburg, AZ; 71°F in Reno, NV; 63°F in Salt Lake City, UT; and 60°F in Pocatello, ID. Several southern California locations, including Chula Vista (90°F), Los Angeles (LAX) Airport (91°F), Escondido (92°F), Thousand Oaks (94°F), Oxnard (94°F), and the Riverside Citrus Experiment Station (97°F) reached or exceeded 90°F in January for the first time on record. Riverside's high came within 1°F of the Nation's highest-ever January temperature, 98°F in Laredo, TX. The late-month heat capped the warmest January on record in several locations and the warmest since 1953 or 1986 at many more sites.

Highest January Average Temperature (°F)

<u>Location</u>	<u>Avg.</u>	<u>Dep.</u>	<u>Previous Record</u>
Phoenix, AZ	62.0	+ 7.8	61.4 in 1986
San Diego, CA	61.7	+ 3.9	61.3 in 1981
San Jose, CA	55.6	+ 5.1	54.5 in 1986
Las Vegas, NV	54.2	+ 7.2	51.7 in 1986
Albuquerque, NM	43.5	+ 7.8	42.6 in 1909
Reno, NV	43.1	+ 9.5	40.3 in 1986
Winnemucca, NV	40.2	+10.1	39.6 in 1953
Provo, UT	40.1	+ 9.2	38.2 in 1953
Flagstaff, AZ	37.2	+ 7.5	37.0 in 1986
Elko, NV	36.2	+10.6	36.0 in 1953
Rock Springs, WY	30.7	+11.7	30.0 in 1953
Rawlins, WY	30.4	+ 7.4	29.9 in 2000
Laramie, WY	30.1	+ 9.7	29.9 in 1953
Evanston, WY	29.5	+10.0	27.9 in 1981

Dryness was prevalent in January, except in the Northwest. Some of the more impressive Northwestern monthly precipitation totals included 12.77 inches (123 percent of normal) in Astoria, OR; 9.61 inches (127 percent) in Olympia, WA; 3.40 inches (187 percent) in Spokane, WA, and 2.92 inches (201 percent) in Pendleton, OR. Farther south, however, Sierra Nevada snowfall provided only 2 inches of water. According to the California Department of Water Resources, the liquid equivalent of the Sierra Nevada snow pack stood at 18 inches (102 percent of normal) on January 31, up from 16 inches (162 percent) at the end of December. Farther east, light snow on January 16 ended 62-day spells (November 15 - January 15) without measurable precipitation in locations such as St. Joseph, MO, and Olathe, KS. Earlier in the month, a record-setting dry spell had ended at 53 days (November 12 - January 3) in Des Moines, IA. On portions of the central High Plains, the month's only measurable precipitation fell on New Year's Day. January 1 totals included 0.07 inch in Dodge City, KS, and 0.03 inch in Denver, CO. Denver also completed their least snowy January on record (a trace, tying 1934) and 18th consecutive month with below-normal precipitation. In South Dakota, Pierre noted at least a trace of snow on 16 consecutive days from January 14-29, but had more than 0.5 inch only on January 15, when snowfall totaled 10.0 inches. Season-to-date snowfall totaled just 19.9 inches (38 percent of normal) in Duluth, MN, their lowest July-January amount since only 14.7 inches fell in 1980-81. Elsewhere, several locations in the South—from downtown Los Angeles to Pensacola, FL—and scattered locations in the Midwest experienced January-record

dryness. Several other Florida cities had their driest January since 1950 or 1957, while many sites across the Plains and South had their driest January since 1986, 1996, or 1998.

Lowest January Precipitation (Inches)

<u>Location</u>	<u>Total</u>	<u>Normal</u>	<u>Previous Record/Year</u>
Los Angeles, CA	trace	3.33	trace in 1948, 1972, & 1976
New Orleans, LA	0.19	5.87	0.54 in 1968
Pensacola, FL	0.21	5.34	0.60 in 1981
Lansing, MI	0.24	1.61	0.39 in 1981
Little Rock, AR	0.31	3.37	0.55 in 1986
Baton Rouge, LA	0.52	6.19	0.60 in 1928
Troy, AL	0.51	5.11	0.57 in 1954
Fayetteville, NC	0.65	4.16	0.80 in 1981
Florence, SC	0.70	4.09	0.71 in 1981

Unusually dry weather prevailed on Hawaii's Big Island, where Hilo recorded their seventh-lowest January rainfall since 1950. Hilo's monthly total, 1.24 inches (13 percent of normal), was their lowest January sum since a record-low amount of 0.13 inch in 1998. Meanwhile, mid- to late-month cold fronts generated scattered, locally heavy showers from Kauai to Maui. On January 25-26, Kahakuloa, Maui, recorded 4.76 inches of rain in 24 hours. A few days later, 48-hour totals from January 29-31 reached 3.83 inches in Mahinahina, Maui; 3.73 inches in Wainiha, Kauai; and 3.47 inches at Oahu's Wilson Tunnel.

In Alaska, a brief, early-month cold snap yielded to above-normal temperatures. Monthly temperatures averaged up to 8°F above normal across the Alaskan mainland, accompanied by mostly dry weather. In King Salmon, where the normal January maximum temperature is 22.8°F, highs rose above 32°F on every day from January 7-31. Monthly precipitation totaled 0.46 inch (45 percent of normal) in King Salmon and 0.15 inch (14 percent) in McGrath. Season-to-date snowfall in McGrath through January 31 totaled just 39.4 inches (57 percent of normal). Significant Alaskan precipitation was confined to southern parts of the State, where Kodiak completed their wettest January on record, with precipitation totaling 17.18 inches (210 percent of normal). Kodiak's previous record of 15.77 inches was set in 1977.

Fieldwork

Fieldwork summary provided by USDA/NASS

Stormy weather persisted in the Pacific Northwest most of the month, delivering several inches of rain to low-lying coastal areas and significant snowfall to coastal mountain ranges. Significant amounts of precipitation also spilled into inland mountains and valleys, improving topsoil moisture supplies, reducing long-term moisture deficits, and boosting irrigation reserves. The stormy weather ended drought conditions along the coast, but subsoil moisture reserves remained abnormally low across interior areas.

The storms produced little precipitation as they moved into the Great Plains, maintaining abnormally dry subsoils and leaving winter wheat fields on the northern High Plains exposed to potentially damaging winds and extreme temperature fluctuations. However, the threat of heaving and winter kill was minimal, as temperatures averaged well above normal over the Rocky

Mountains and northern High Plains most of the month, including an early-month period of record and near-record daily highs.

The western Corn Belt and adjacent parts of the upper Mississippi Valley and central and northern Great Plains experienced mostly dry weather, with alternating periods of above- and below-normal temperatures. Slightly colder and wetter weather prevailed in the eastern Corn Belt and Northeast, but total precipitation remained below average.

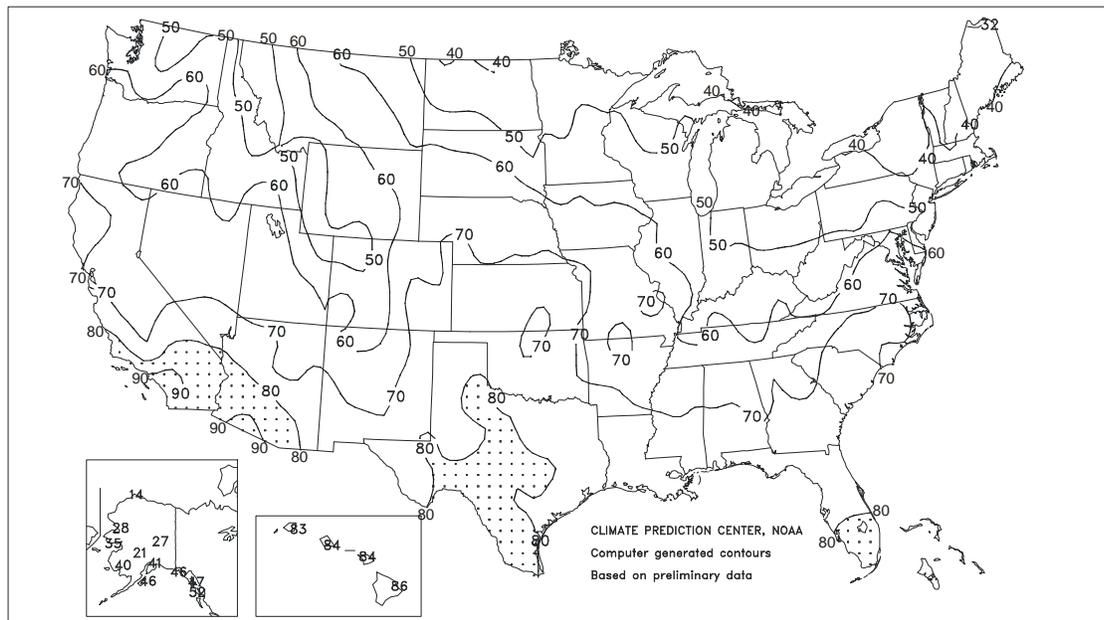
In the southern Great Plains, warm days and cool nights supported growth of winter grains and forages most of the month. Soil moisture supplies were also adequate to support development, although dry, windy weather rapidly depleted moisture reserves on the Texas High Plains, while parts of central and southeast Texas experienced periods of excessively wet weather.

Temperatures remained below normal across the Southeast during most of the month, with below-freezing temperatures recorded as far south as central Florida, along the Gulf Coast, and into the southern Great Plains. Sub-freezing overnight temperatures reached Florida's citrus region, producing some minor bloom injury on young citrus trees. However, there was no significant leaf burn or wood damage, and maturing fruit experienced very little damage.

During the coldest nights, some damage was seen on vegetable crops and new plantings of sugarcane in the Everglades region. Also, strawberry producers ran overhead sprinklers to form protective ice caps on plants and immature fruit. Farther north, the

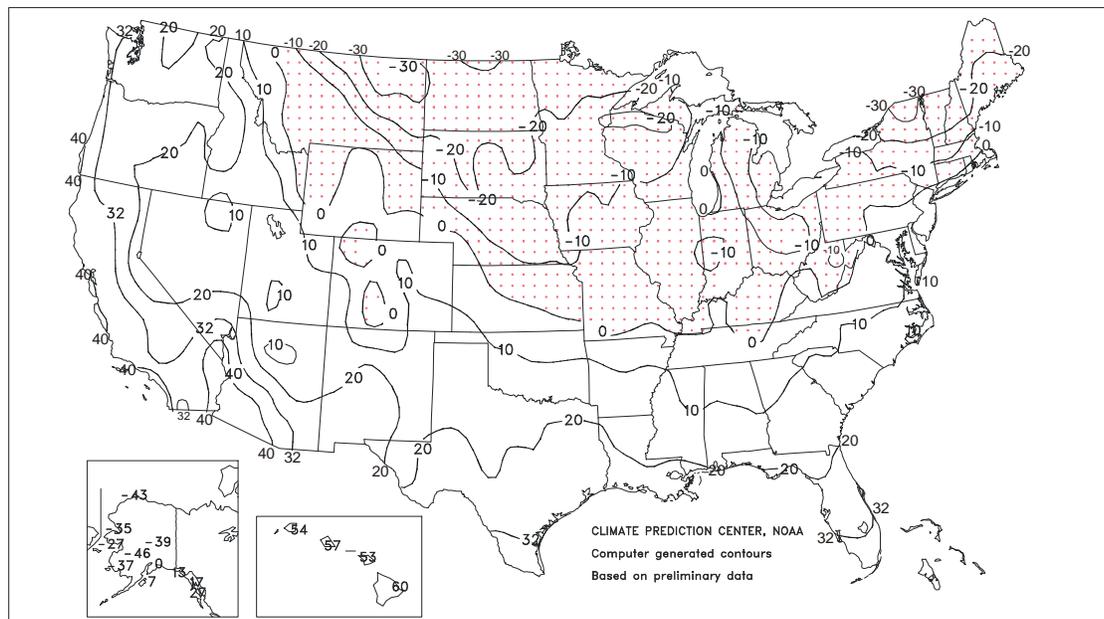
Extreme Maximum Temperature (°F)

January 2003



Extreme Minimum Temperature (°F)

January 2003

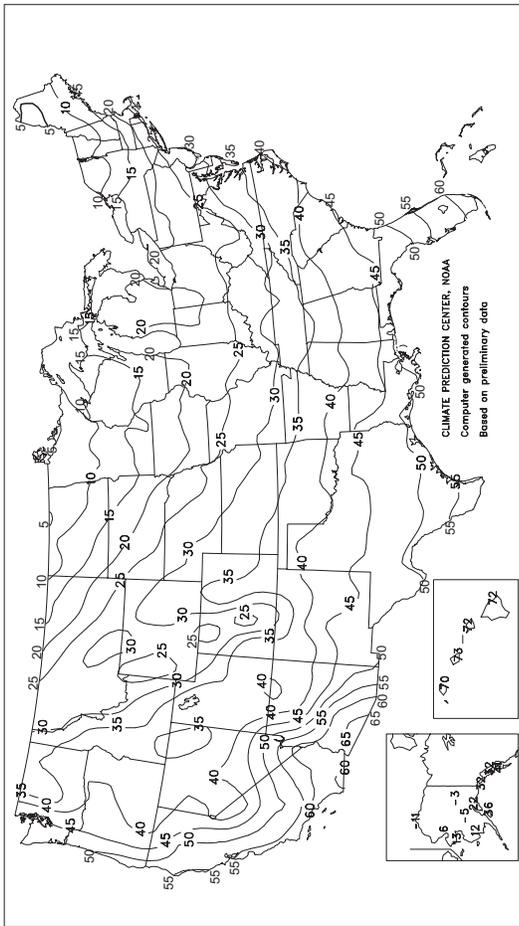


cold weather provided beneficial chill hours for dormant fruit trees across the interior Southeast.

In California, precipitation periodically interrupted field and orchard work in the central and northern valleys, but the delays were mostly brief. The precipitation with above-normal temperatures contributed to vigorous crop growth. Irrigated winter crops also flourished in the abnormally warm weather.

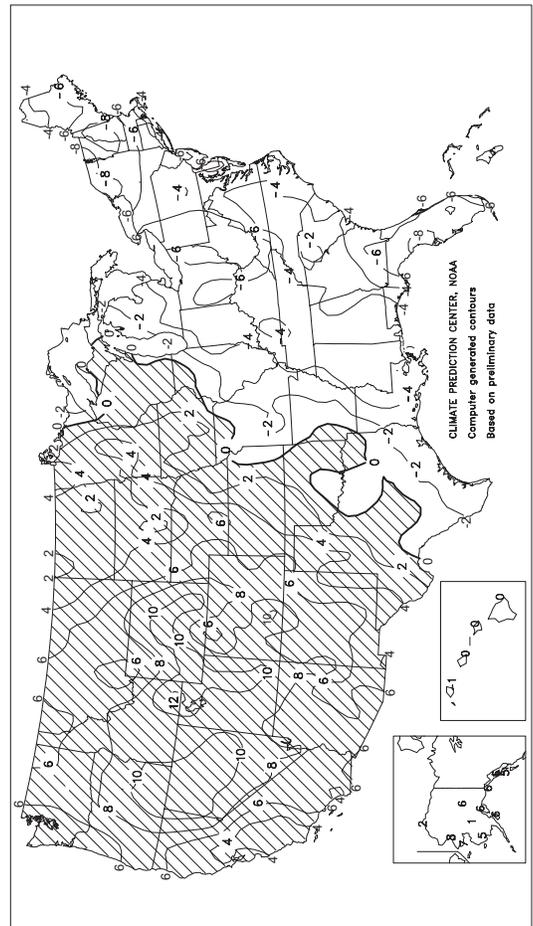
Average Temperature (°F)

January 2003



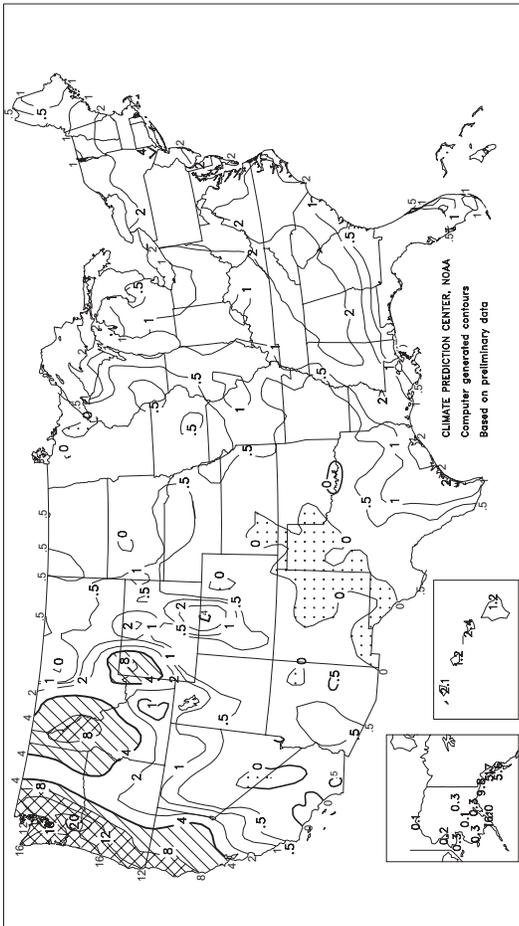
Departure of Average Temperature from Normal (°F)

January 2003



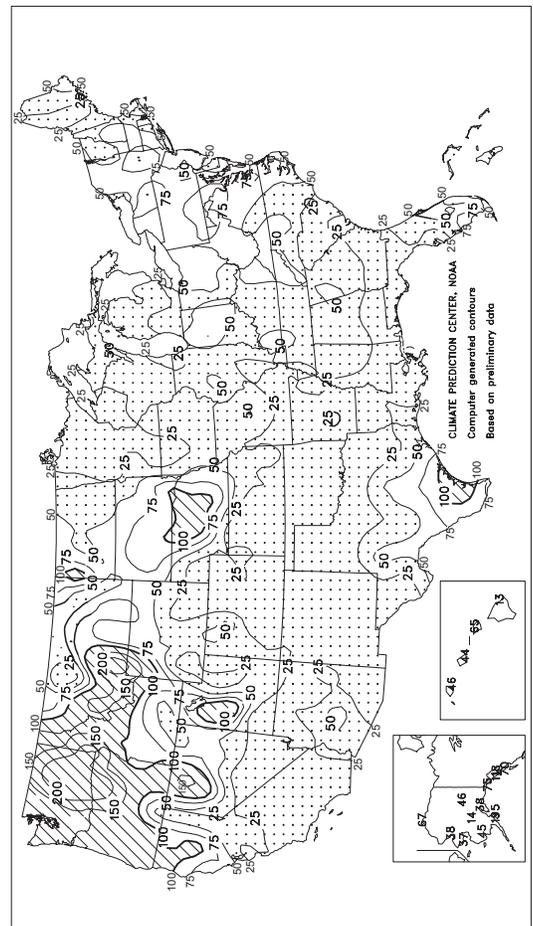
Total Precipitation (inches)

January 2003



Percent Of Normal Precipitation

January 2003



TEMPERATURE AND PRECIPITATION SUMMARY

January 2003

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	38	-5	2.22	-3.23	LEXINGTON	26	-6	0.95	-2.39	COLUMBUS	23	-5	1.65	-0.88
HUNTSVILLE	35	-5	1.45	-4.07	LONDON-CORBIN	29	-5	1.43	-2.58	DAYTON	20	-6	1.07	-1.53
MOBILE	46	-4	0.55	-5.20	LOUISVILLE	29	-4	1.13	-2.15	MANSFIELD	19	-5	1.32	-1.31
MONTGOMERY	42	-5	1.17	-3.87	PADUCAH	29	-4	1.15	-2.32	TOLEDO	21	-3	1.29	-0.64
AK ANCHORAGE	22	6	0.26	-0.42	LA BATON ROUGE	47	-3	0.52	-5.67	YOUNGSTOWN	19	-6	1.63	-0.71
BARROW	-11	3	0.08	-0.04	LAKE CHARLES	48	-3	1.90	-3.62	OK OKLAHOMA CITY	37	0	0.02	-1.26
COLD BAY	33	5	2.47	-0.61	NEW ORLEANS	49	-4	0.19	-5.68	TULSA	37	1	0.14	-1.46
FAIRBANKS	-3	7	0.26	-0.30	SHREVEPORT	46	0	0.44	-4.16	OR ASTORIA	48	6	12.77	3.15
JUNEAU	32	6	5.68	0.87	ME BANGOR	10	-8	0.94	-2.40	BURNS	33	9	1.21	0.03
KING SALMON	29	14	0.46	-0.57	CARIBOU	5	-5	0.30	-2.67	EUGENE	45	5	6.67	-0.98
KODIAK	36	6	15.96	7.79	PORTLAND	16	-6	1.14	-2.95	MEDFORD	44	5	2.48	0.01
NOME	13	7	0.34	-0.58	MD BALTIMORE	28	-4	2.59	-0.88	PENDLETON	41	7	2.92	1.47
AZ FLAGSTAFF	37	7	0.14	-2.04	MA BOSTON	24	-5	1.71	-2.21	PORTLAND	45	5	8.00	2.93
PHOENIX	62	8	0.57	-0.26	WORCESTER	18	-6	2.36	-1.71	SALEM	45	5	7.38	1.54
TUCSON	58	6	0.08	-0.91	MI ALPENA	16	-2	0.19	-1.57	PA ALLENTOWN	24	-3	1.40	-2.10
AR FORT SMITH	37	-1	0.37	-2.00	DETROIT	20	-4	0.42	-1.49	ERIE	21	-6	2.97	0.44
CA BAKERSFIELD	51	3	0.14	-1.04	FLINT	19	-2	0.26	-1.31	MIDDLETOWN	26	-3	2.29	-0.55
EUREKA	52	4	5.51	-0.46	GRAND RAPIDS	19	-3	0.91	-1.12	PHILADELPHIA	28	-4	1.93	-1.59
FRESNO	51	5	0.39	-1.77	HOUGHTON LAKE	15	-3	0.20	-1.41	PITTSBURGH	21	-7	2.18	-0.52
LOS ANGELES	62	5	0.04	-2.94	LANSING	18	-4	0.24	-1.37	WILKES-BARRE	21	-5	1.55	-0.91
REDDING	51	5	6.74	0.24	MUSKEGON	22	-2	0.37	-1.85	WILLIAMSPORT	22	-4	1.91	-0.94
SACRAMENTO	51	5	1.33	-2.51	TRAVERSE CITY	20	-1	0.35	-2.63	PR SAN JUAN	78	1	4.59	1.57
SAN DIEGO	62	4	0.02	-2.26	MN DULUTH	9	1	0.20	-0.92	RI PROVIDENCE	26	-3	2.04	-2.33
SAN FRANCISCO	54	5	1.46	-2.99	INT'L FALLS	5	2	0.00	-0.84	SC CHARLESTON	45	-3	1.04	-3.04
STOCKTON	49	3	0.67	-2.04	MINNEAPOLIS	15	2	0.22	-0.82	COLUMBIA	42	-3	1.43	-3.23
CO ALAMOSA	26	11	0.01	-0.24	ROCHESTER	14	2	0.31	-0.63	FLORENCE	41	-4	0.70	-3.39
CO SPRINGS	36	8	0.00	-0.28	ST. CLOUD	13	4	0.17	-0.59	GREENVILLE	40	-1	1.91	-2.50
DENVER	37	9	0.03	-0.20	MS JACKSON	41	-4	1.26	-4.41	MYRTLE BEACH	42	-4	0.94	-2.72
GRAND JUNCTION	35	9	0.13	-0.47	MERIDIAN	41	-5	1.59	-4.33	SD ABERDEEN	15	4	0.24	-0.24
PUEBLO	37	8	0.01	-0.32	TUPELO	37	-3	1.57	-3.57	HURON	18	4	0.22	-0.26
CT BRIDGEPORT	26	-4	1.80	-1.93	MO COLUMBIA	26	-2	0.88	-0.85	RAPID CITY	26	4	0.33	-0.04
HARTFORD	21	-5	2.16	-1.68	JOPLIN	32	-1	0.30	-1.54	SIoux FALLS	18	4	0.30	-0.21
DC WASHINGTON	31	-4	2.41	-0.80	KANSAS CITY	27	0	0.47	-0.68	TN BRISTOL	30	-4	2.47	-1.05
DE WILMINGTON	29	-2	1.79	-1.64	SPRINGFIELD	29	-3	0.33	-1.78	CHATTANOOGA	36	-3	1.83	-3.57
FL DAYTONA BEACH	52	-6	0.51	-2.62	ST JOSEPH	26	0	0.18	-0.70	JACKSON	33	-5	1.47	-2.86
FT LAUDERDALE	62	-5	0.91	-2.03	ST LOUIS	28	-2	0.96	-1.18	KNOXVILLE	34	-4	3.17	-1.40
FT MYERS	58	-7	1.89	-0.34	MT BILLINGS	31	7	0.40	-0.41	MEMPHIS	38	-2	0.88	-3.36
JACKSONVILLE	47	-6	0.06	-3.63	BUTTE	24	6	0.65	0.12	NASHVILLE	33	-4	1.59	-2.38
KEY WEST	64	-6	0.43	-1.79	GLASGOW	16	5	0.15	-0.20	TX ABILENE	44	0	0.18	-0.79
MELBOURNE	54	-7	0.76	-1.72	GREAT FALLS	30	8	0.12	-0.56	AMARILLO	40	4	0.00	-0.63
MIAMI	63	-5	0.43	-1.45	HELENA	29	9	0.41	-0.11	AUSTIN	47	-3	1.71	-0.18
ORLANDO	54	-7	0.80	-1.63	KALISPELL	28	7	0.86	-0.61	BEAUMONT	50	-2	1.59	-4.10
PENSACOLA	47	-5	0.21	-5.13	MILES CITY	23	6	0.44	-0.06	BROWNSVILLE	59	-1	0.69	-0.67
ST PETERSBURG	55	-7	0.13	-2.63	MISSOULA	29	5	1.50	0.44	COLLEGE STATION	48	-2	1.08	-2.24
TALLAHASSEE	46	-6	0.35	-5.01	NE GRAND ISLAND	26	4	0.63	0.09	CORPUS CHRISTI	54	-2	1.02	-0.60
TAMPA	55	-6	0.11	-2.16	HASTINGS	27	3	0.42	-0.13	DALLAS/FT WORTH	44	0	0.22	-1.68
WEST PALM BEACH	60	-6	1.30	-2.45	LINCOLN	24	2	0.41	-0.26	DEL RIO	51	0	0.33	-0.24
GA ATHENS	41	-1	1.74	-2.95	MCCOOK	31	5	0.04	-0.46	EL PASO	49	4	0.00	-0.45
ATLANTA	40	-3	2.01	-3.01	NORFOLK	23	3	0.39	-0.18	GALVESTON	52	-4	1.26	-2.82
AUGUSTA	42	-3	2.00	-2.50	NORTH PLATTE	28	5	0.35	-0.04	HOUSTON	50	-2	2.09	-1.59
COLUMBUS	43	-4	2.12	-2.66	OMAHA/EPPLEY	23	1	0.35	-0.42	LUBBOCK	42	4	0.04	-0.46
MACON	43	-3	1.45	-3.55	SCOTTSBLUFF	32	8	0.12	-0.42	MIDLAND	44	1	0.27	-0.26
SAVANNAH	45	-4	0.66	-3.29	VALENTINE	24	3	0.31	0.01	SAN ANGELO	46	1	0.33	-0.48
HI HILO	72	1	1.24	-8.50	NV ELKO	36	10	0.95	-0.19	SAN ANTONIO	50	0	1.00	-0.66
HONOLULU	73	0	1.21	-1.52	ELY	36	11	0.22	-0.52	VICTORIA	51	-2	2.05	-0.39
KAHULUI	72	0	2.42	-1.32	LAS VEGAS	54	7	0.02	-0.57	WACO	47	1	0.58	-1.32
LIHUE	70	-2	2.10	-2.49	RENO	43	9	0.17	-0.89	WICHITA FALLS	41	1	0.08	-1.04
ID BOISE	39	9	1.62	0.23	WINNEMUCCA	40	10	1.48	0.65	UT SALT LAKE CITY	38	9	0.64	-0.73
LEWISTON	40	6	3.01	1.87	NH CONCORD	13	7	2.51	-0.46	VT BURLINGTON	12	-6	0.99	-1.23
POCATELLO	34	10	0.40	-0.74	NJ ATLANTIC CITY	28	-4	3.01	-0.59	VA LYNCHBURG	32	-3	1.53	-2.01
IL CHICAGO/O'HARE	21	-1	0.36	-1.39	NEWARK	28	-3	2.96	-1.02	NORFOLK	36	-4	2.34	-1.59
MOLINE	22	1	0.43	-1.15	NM ALBUQUERQUE	44	8	0.00	-0.49	RICHMOND	34	-2	2.18	-1.37
PEORIA	22	0	0.84	-0.66	NY ALBANY	15	-7	3.45	0.97	ROANOKE	33	-3	1.44	-1.79
ROCKFORD	19	0	0.34	-1.07	BINGHAMTON	16	-6	2.30	-0.28	WASH/DULLES	28	-4	2.69	-0.36
SPRINGFIELD	22	-3	0.76	-0.86	BUFFALO	19	-5	2.30	-0.86	WA OLYMPIA	43	5	9.61	2.07
IN EVANSVILLE	27	-4	1.15	-1.76	ROCHESTER	18	-6	2.05	-0.29	QUILLAYUTE	47	6	13.07	-0.58
FORT WAYNE	18	-6	1.30	-0.75	SYRACUSE	19	-4	1.44	-1.16	SEATTLE-TACOMA	46	5	7.95	2.82
INDIANAPOLIS	21	-5	1.27	-1.21	NC ASHEVILLE	33	-3	1.19	-2.87	SPOKANE	34	7	3.40	1.58
SOUTH BEND	20	-3	1.21	-1.06	CHARLOTTE	37	-5	1.96	-2.04	YAKIMA	37	8	2.21	1.04
IA BURLINGTON	21	-2	0.50	-0.81	GREENSBORO	36	-2	2.35	-1.19	WV BECKLEY	25	-5	1.49	-1.74
CEDAR RAPIDS	19	1	0.43	-0.62	HATTERAS	42	-4	2.28	-3.56	CHARLESTON	28	-5	1.79	-1.46
DES MOINES	21	1	0.49	-0.54	RALEIGH	37	-3	1.87	-2.15	ELKINS	22	-7	2.14	-1.29
DUBUQUE	18	1	0.39	-0.89	WILMINGTON	41	-5	1.69	-2.83	HUNTINGTON	28	-5	1.40	-1.81
SIoux CITY	21	2	0.22	-0.37	ND BISMARCK	14	4	0.26	-0.19	WI EAU CLAIRE	14	2	0.32	-0.72
WATERLOO	20	4	0.31	-0.53	DICKINSON	16	2	0.10	-0.27	GREEN BAY	16	0	0.58	-0.63
CONCORDIA	29	2	0.29	-0.37	FARGO	9	2	0.26	-0.50	LA CROSSE	17	1	0.53	-0.66
DODGE CITY	34	4	0.07	-0.55	GRAND FORKS	9	4	0.21	-0.47	MADISON	18	1	0.36	-0.89
GOODLAND	33	5	0.18	-0.25	JAMESTOWN	10	1	0.13	-0.49	MILWAUKEE	20	-1	0.35	-1.50
HILL CITY	32	6	0.01	-0.46	MINOT	13	3	0.24	-0.41	WAUSAU	13	0	0.50	-0.59
TOPEKA	29	2	0.50	-0.45	WILLISTON	10	2	0.58	0.04	WY CASPER	31	9	0.10	-0.48
WICHITA	32	2	0.12	-0.72	OH AKRON-CANTON	19	-6	1.81	-0.68	CHEYENNE	35	9	0.02	-0.43
KY JACKSON	28	-6	2.12	-1.44	CINCINNATI	24	-6	1.66	-1.26	LANDER	28	8	0.32	-0.20
					CLEVELAND	21	-5	1.98	-0.50	SHERIDAN	30	9	0.65	-0.12

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

February 3 - 9, 2003

Weekly National Agricultural Summary provided by USDA/NASS

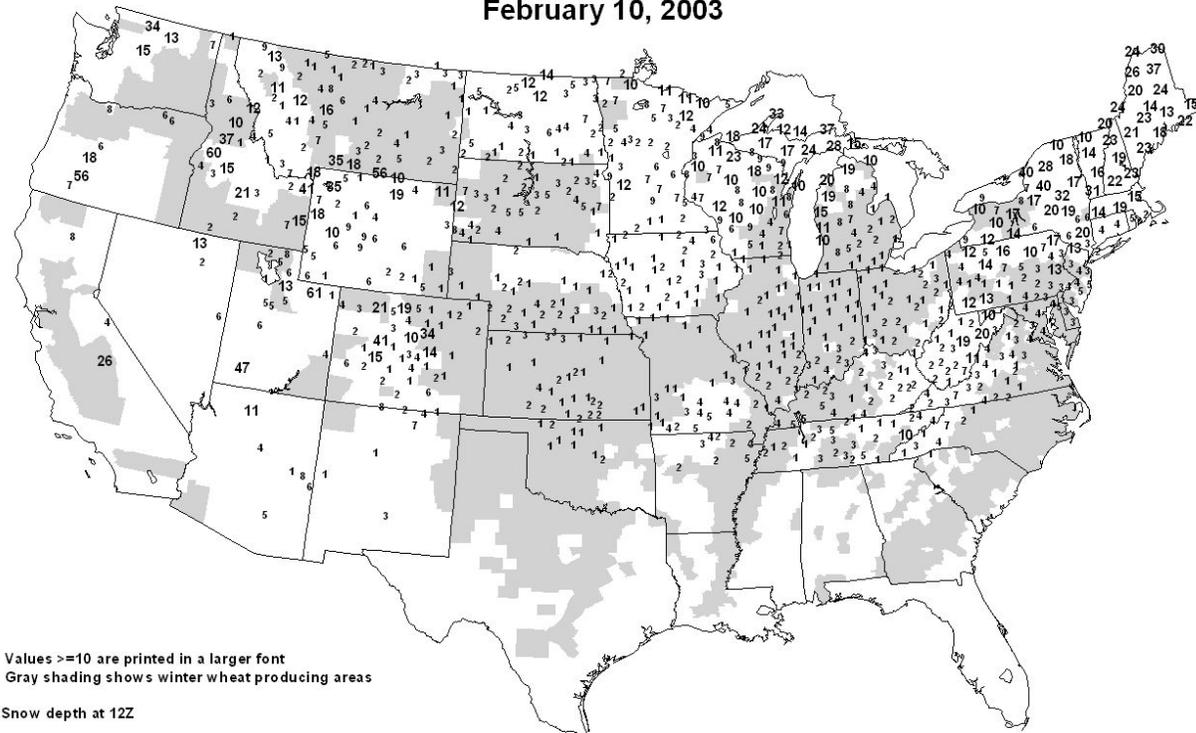
HIGHLIGHTS

Most of the weekly precipitation was confined to the lower Mississippi Valley and Southeast, while the persistent pattern of stormy weather abated in the Pacific Northwest. Long-term soil moisture reserves remained below normal across most of the Great Plains, western Corn Belt, upper Mississippi Valley, and Great Lakes, despite light precipitation in many areas. The heaviest precipitation of the week fell along the Gulf Coast and scattered interior areas of the Mississippi Delta and Southeast. Along the southern Atlantic Coastal Plain, light precipitation slightly eroded remaining long-term soil moisture deficits. Temperatures remained slightly below normal in central and northern Florida, but nighttime temperatures were

not as cold as in recent weeks, and cold damage was nonexistent. In the southern Peninsula, temperatures averaged slightly above normal, boosting vegetable growth. In California, soil moisture supplies were adequate to support short-term crop development in the central and northern valleys. Dryland wheat and forage crops continued to thrive, but soil moisture supplies were rapidly diminishing. Warm daytime temperatures also contributed to healthy crop development. The warm daytime temperatures also accelerated the bloom cycle in early varieties of peaches and nectarines. Dry weather supported field and orchard work throughout the Southwest, southern Florida, and most of the southern Great Plains.

Snow Depth (Inches)

February 10, 2003



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

February 6 ENSO Update

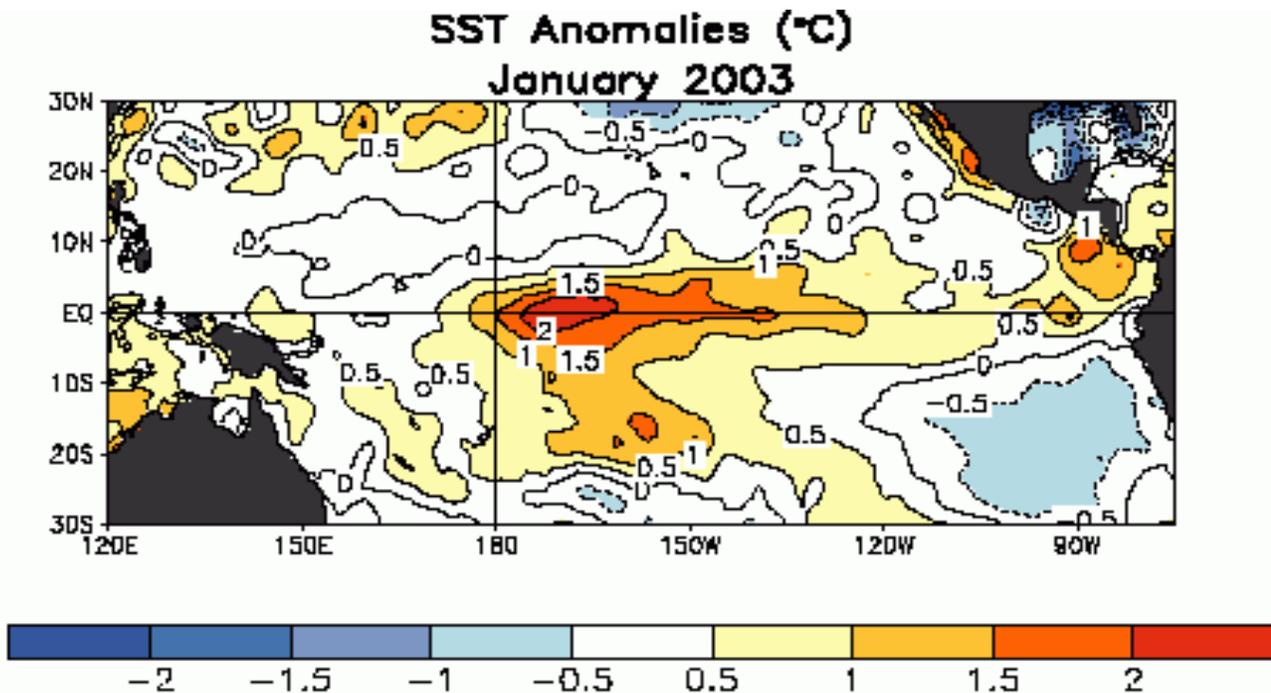


Figure 1. Sea surface temperature (SST) anomalies during January 2003. Departures from average are computed based on the 1971-2000 base period means. Units are °C.

Warm episode (El Niño) conditions continued during January 2003, as equatorial SST anomalies remained greater than +1°C in the central equatorial Pacific (175°E-125°W, Fig. 1). In addition, enhanced precipitation and cloudiness were observed over the central tropical Pacific, and positive subsurface temperature departures and a deeper-than-average oceanic thermocline were observed throughout the equatorial Pacific east of 180°W. These conditions are consistent with mature warm episode conditions.

During January 2003 there were indications that the warm episode is beginning to weaken. Sea-surface temperature anomalies decreased throughout the eastern equatorial Pacific by as much as 1.5°C during the month, while equatorial easterly winds were near normal throughout the central and eastern equatorial Pacific. Over the past several weeks, there has also been a steady eastward progression of negative subsurface temperature anomalies, indicating a gradual depletion of the excess warmth in the upper ocean of the equatorial Pacific. This evolution is typical during the mature phase of warm episodes.

Recent values of atmospheric and oceanic indices, such as the SOI, 850-hPa zonal wind index, Niño 3.4, Niño 3, and Niño 1+2 are considerably smaller in magnitude than those observed during the 1997-98 El Niño. The warming associated with the current event has been greatest in the central equatorial Pacific (Niño 4 and Niño 3.4 regions). Regions farther east (e.g., Niño 3 and especially Niño 1+2) have warmed much less. A comparison with previous warm episodes in the last 50 years indicates that, for the equatorial Pacific as a whole, the current event is moderate in intensity (Fig. 2).

Consistent with current conditions and recently observed trends, most coupled model and statistical model forecasts indicate that El Niño conditions will continue to weaken through April 2003. Thereafter, the consensus forecast is for near-normal conditions during May-October 2003. Those areas of the world usually

affected by El Niño may continue to experience related impacts during the next 2-3 months.

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

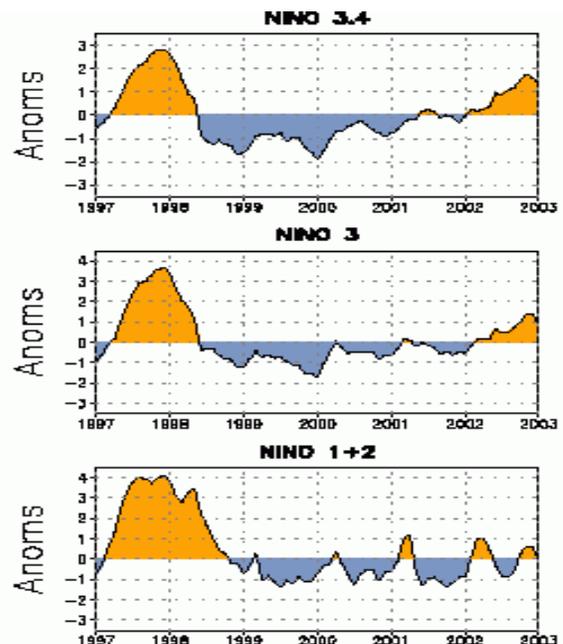


Figure 2. Time series of Niño 3.4, Niño 3, and Niño 1+2 SST anomalies, 1997 - 2003.

International Weather and Crop Summary

February 2 - 8, 2003

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

HIGHLIGHTS

EUROPE: Across eastern Europe, light to moderate snow cover protected winter crops from early-week bitterly cold weather, while widespread precipitation across Europe maintained favorable moisture supplies for dormant winter crops.

FSU-WESTERN: A moderate to deep snow cover protected winter grains from early-week bitterly cold weather.

MIDDLE EAST: In central Turkey, mild weather left winter crops vulnerable to cold outbreaks, while precipitation increased moisture supplies for dormant winter grains in western Iran.

NORTHWESTERN AFRICA: Lighter rain covered the region, and early-week cold weather burned back vegetative growth in the higher elevations.

SOUTH AFRICA: Showers in the corn belt locally maintained moisture supplies for reproductive summer crops.

SOUTHEAST ASIA: Showers continued to favor reproductive rice in Java, Indonesia.

EASTERN ASIA: Unseasonably mild weather favored overwintering wheat.

AUSTRALIA: The remnants of Tropical Cyclone Beni inundated sugarcane areas along the coast of Queensland but brought limited drought relief to summer crop areas farther inland.

SOUTH AMERICA: Showers brought some relief to heat-stressed summer crops in Argentina and southern Brazil.



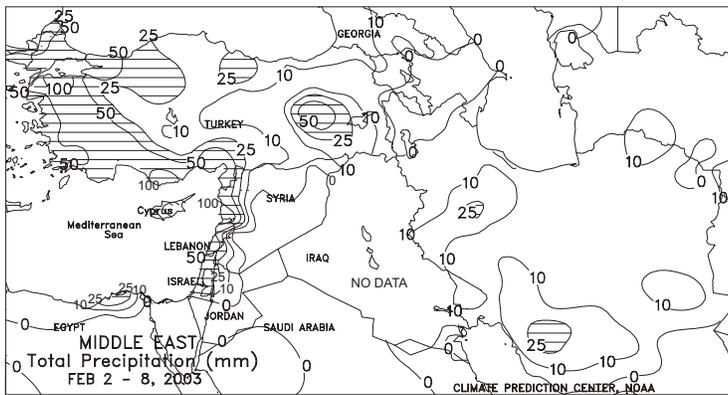
EUROPE

Across northern and central Europe, early-week cold weather moderated by week's end, while moderate to heavy precipitation covered central and southeastern Europe. Widespread precipitation (5-20 mm of water equivalent) continued to cover northern Europe, maintaining favorable moisture supplies for dormant winter crops. The heaviest precipitation (25-60 mm) fell from extreme northern Spain and southwestern France across the Alps into southeastern Europe. The precipitation mainly fell as rain in France and snow elsewhere, greatly boosting mountain snowpacks across the Alps and snow cover in Germany and eastern Europe as far south as Bulgaria. Mostly light rain (less than 10 mm) fell across most of the Iberian Peninsula and northern Italy. These regions have received below-normal rainfall (25-60 percent of normal rainfall) during the past 4 weeks, but moisture supplies remained adequate. Central and southern Italy received moderate rain (15-40 mm) with snow in the higher elevations, maintaining favorable moisture supplies. The coldest weather was confined to eastern Europe, where early-week minimum temperatures ranged from -19 to -15 degrees C, but moderate snow cover protected dormant winter crops. Although temperatures moderated during the week, they remained seasonably cold across the east. Below-freezing temperatures extended into southern Greece and southern Italy. In the west, however, temperatures increased during the week with maximum temperatures by week's end reaching above 10 degrees C across most of England and western France. Winter crops remained dormant across Europe, except across the Mediterranean regions and coastal areas of western France and southern England. Temperatures averaged 1 to 4 degrees C below normal across most of Europe and near normal in the Iberian Peninsula and northwestern Europe.



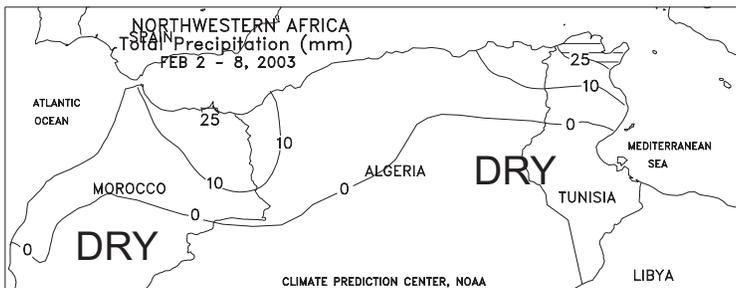
FSU-WESTERN

Early in the week, a departing storm ushered in bitterly cold weather to most of the region. The lowest temperatures were observed from February 2-5, with minimum temperatures ranging from -30 to -20 degrees C as far south as central Ukraine. A moderate to deep snow cover protected winter grains from widespread freeze damage. Although snow cover was less protective in parts of the Southern Region in Russia, minimum temperatures ranged from -10 to 0 degrees C, remaining above the threshold for potential winterkill. Toward week's end, milder weather spread across Ukraine, improving overwintering conditions for winter grains, but melting the protective snow cover in the south. Rain changed to snow in Belarus and western Ukraine, significantly increasing snow depths. Weekly temperatures averaged 1 to 5 degrees C below normal in Ukraine, northern Russia, Belarus, and the Baltics, and 1 to 5 degrees C above normal in the Southern Region in Russia.



MIDDLE EAST

Widespread precipitation (10-60 mm) covered the winter grain areas of Turkey, boosting moisture supplies, especially in the central plateau. Light to moderate precipitation (10-50 mm) continued to increase irrigation supplies across the Tigris and Euphrates watersheds of southeastern Turkey. In western Iran, mostly dry weather prevailed, with only light to moderate precipitation (10-25 mm) reported in west-central and far southern Iran. Across Iran and Turkey, mild weather (temperatures 3-6 degrees C above normal) continued to cause winter grains to lose significant winter hardiness and left winter crops vulnerable to cold outbreaks, especially in the central plateau of Turkey. Late-week colder weather pushed eastward across western Turkey, helping to produce snow. Moderate to heavy showers (25-100 mm) continued along the Mediterranean coast from Syria to northern Israel, boosting irrigation supplies. Temperatures averaged 1 to 2 degrees C above normal in the Middle East, increasing crop irrigation requirements. Based on weather reports from neighboring areas of Turkey and Iran, rainfall was light across northern Iraq.

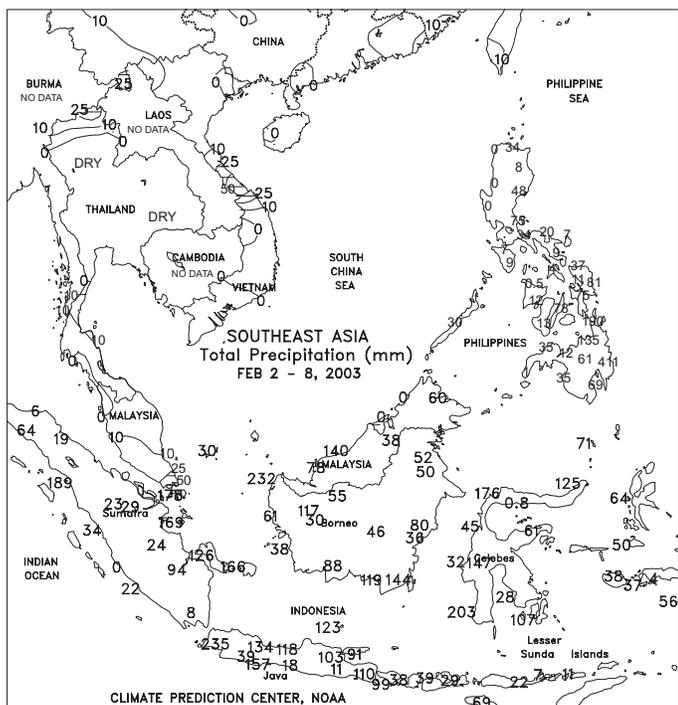
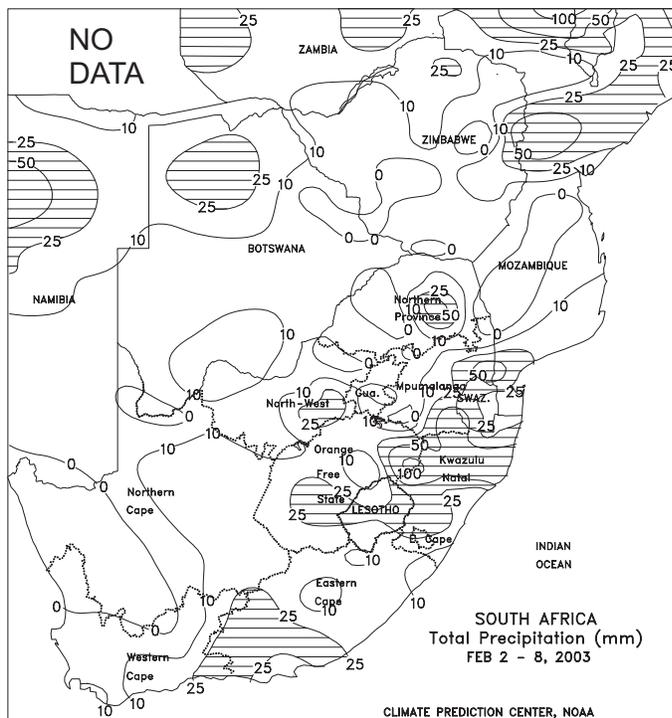


NORTHWESTERN AFRICA

After several weeks of widespread rain, lighter rain (5-25 mm) covered northern Morocco, Algeria, and Tunisia, maintaining abundant soil moisture for vegetative winter grains. Dry weather, however, continued across the southern winter grain areas of Morocco (centered around Marakech), where rain was needed to alleviate the short-term dryness. There is still plenty of time for rain to alleviate the short-term dryness and maintain favorable yield prospects. Early-week cool weather (minimum temperature -6 to 0 degrees C) burned back vegetative winter wheat in the higher elevations of Algeria and Morocco and slowed crop growth. Temperatures averaged near to slightly below normal across the region.

SOUTH AFRICA

Scattered showers (10-45 mm) fell in the western and central corn belt, locally maintaining moisture supplies for mostly reproductive summer crops. Farther east, showers (15-40 mm or more) in extreme eastern Free State and KwaZulu Natal locally improved soil moisture for reproductive corn. Rainfall in the eastern corn belt has been below normal for the season, however, increasing the need for soaking rains during the next couple of weeks to prevent significant declines in yield potential. Temperatures in the corn belt averaged about 2 to 3 degrees C above normal, with maximum temperatures generally in the low 30s degrees C.

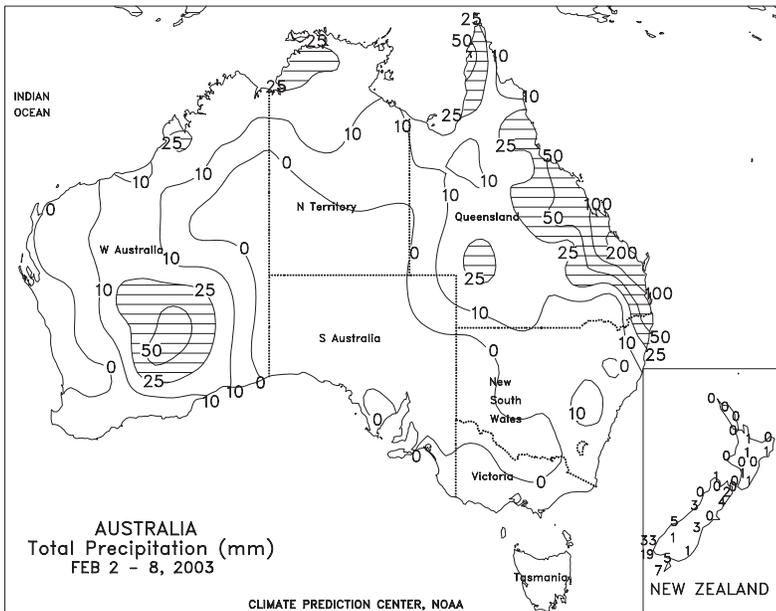


SOUTHEAST ASIA

Heavy showers (25-100 mm or more) continued to increase moisture supplies to reproductive main-season rice in Java, Indonesia. Showers (25-150 mm) were heavy in the southern Philippines (Mindanao) and the east-central islands, slowing maturation of second-season rice. Seasonably dry weather prevailed in Indochina, where rice is vegetative to reproductive. Light to moderate showers (10-50 mm) provided little additional moisture to oil palm in peninsular Malaysia and Sumatra.

EASTERN ASIA

Warmer-than-normal weather returned to northern and central China, as well as the Korean Peninsula, favoring overwintering wheat. On the North China Plain, low temperatures remained above -10 degrees C, reducing the threat of winterkill. The Korean Peninsula recorded lower temperatures (-25 to -15 degrees C in northern North Korea), but patchy snow cover offered some protection to dormant crops. Elsewhere, following recent weeks of unseasonable rainfall, drier weather covered southern China. However, showers (10 mm or more) lingered in sugarcane areas along the southern coast (eastern Guangdong and southern Fujian), hampering fieldwork. Light to moderate precipitation (10-25 mm or more) further increased moisture reserves over much of South Korea and in southern and northwestern Japan.



AUSTRALIA

The remnants of Tropical Cyclone Beni brought excessive rainfall (75-250 mm) to coastal Queensland, boosting moisture supplies for sugarcane, but causing serious flooding in several locations. The rainfall (15-75 mm) extended inland into cotton and sorghum areas in southern Queensland, but remained mostly north of summer crop-producing areas in northern New South Wales. Although the rainfall helped boost topsoil moisture and reservoir levels, the rainfall was too late to significantly improve prospects for drought-stressed summer crops. Elsewhere in Australia, mostly dry weather maintained drought in winter grain-producing areas. The cloud cover in southern Queensland and northern New South Wales kept temperatures below normal (1-2 degrees C below normal), while an abundance of sunshine kept temperatures near to above normal (0-3 degrees above normal) elsewhere.



SOUTH AMERICA

Moderate to heavy rain (25-100 mm or more) overspread most of Argentina, bringing some relief to vegetative to reproductive corn and soybeans stressed by last week's heat and dryness. The rainfall also brought temperatures down to more seasonable levels (highs in the low to middle 30s degrees C), although temperatures continued to average above normal for the week. The beneficial rainfall missed much of La Pampa and southern Buenos Aires, where immature corn and soybeans urgently need moisture to prevent additional stress. In Brazil, rainfall pushing eastward from central Argentina boosted moisture reserves for reproductive to filling soybeans in Rio Grande do Sul, but had not yet reached neighboring locations in Santa Catarina and southern Parana. In fact, showers were generally scattered and light (5-25 mm) from northern Rio Grande do Sul northeastward through Minas Gerais and the northeastern interior, with temperatures averaging 1 to 3 degrees C or more above normal. Locally heavy showers (25-50 mm or more) maintained abundant moisture reserves in Brazil's western crop areas (Mato Grosso, Mato Grosso do Sul, and Goias).

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