

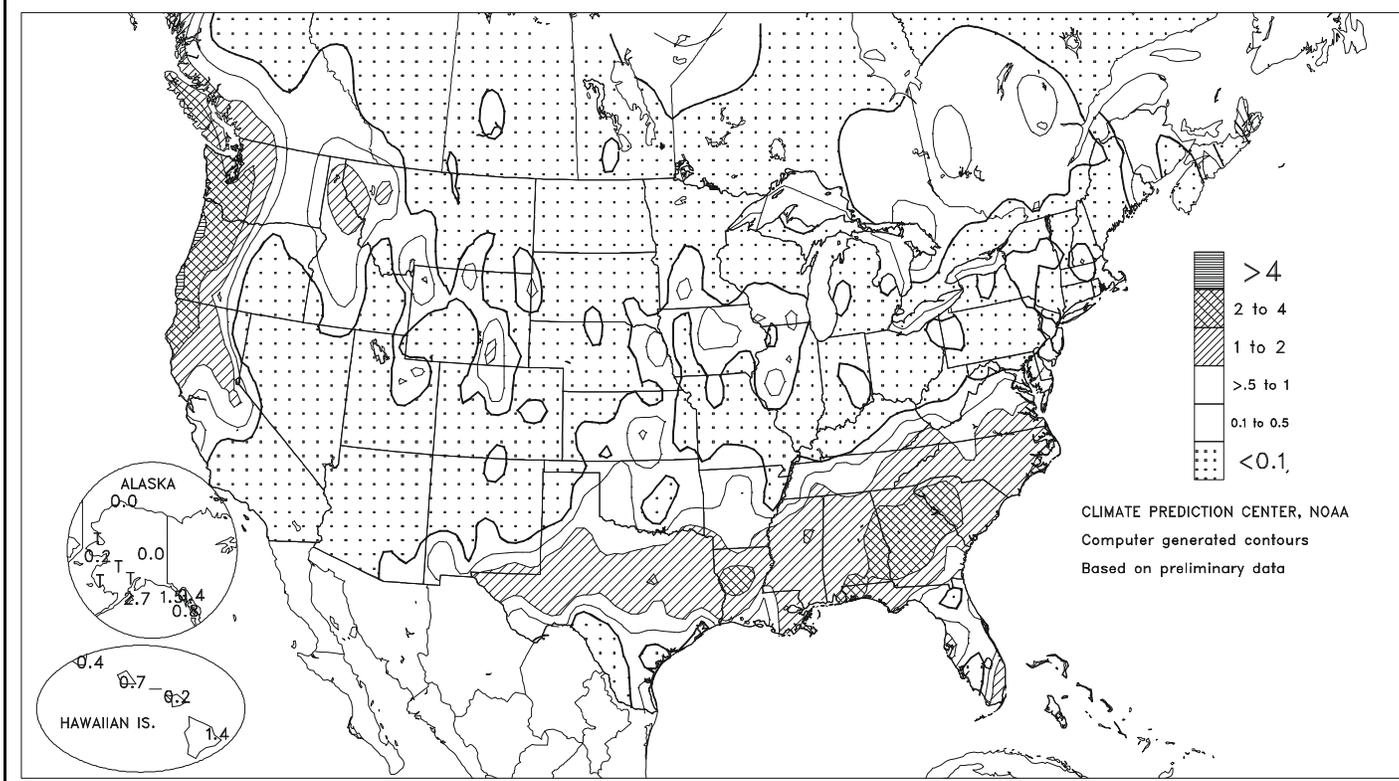
WEEKLY WEATHER AND CROP BULLETIN

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 3 - 9, 2002



HIGHLIGHTS

February 3 - 9, 2002

Highlights provided by USDA/WAOB

Widespread precipitation returned to the **South**, maintaining adequate to locally excessive soil moisture for pastures and winter grains **west of the Appalachians**. On the northern fringe of the precipitation shield, snow blanketed areas from **Oklahoma and northern Texas to the southern Appalachians**. In the **East**, however, long-term drought persisted, despite recent rain and snow. Winter wheat benefited from recent soil moisture improvements from **southern Nebraska southward into Texas**, but continued to suffer from windy, unfavorably dry conditions and a minimal snow cover from **western Nebraska northward through** (Continued on page 5)

Contents

Long-Term Drought Affects Storage on the Rio Grande	2
Weather Data for the Delta and Bootheel & U.S. Crop Production Highlights	3
Extreme Maximum & Minimum Temperature Maps	4
Temperature Departure Map	5
National Weather Data for Selected Cities	6
January Weather and Crop Summary	9
January Maximum & Minimum Temperature Maps	11
January Precipitation & Temperature Maps	12
January Weather Data for Selected Cities	13
National Agricultural Summary & Snow Cover Map ...	14
February 5 ENSO Update	15
International Weather and Crop Summary	16
Subscription Information & February 5 Drought Monitor	20

Long-Term Drought Affects Storage on the Rio Grande

Summary provided by USDA/WAOB

The Rio Grande basin (fig. 1), which straddles northern Mexico and the southern United States, continues to suffer from the effects of long-term drought. Looking at the United States' portion of the Rio Grande basin, which comprises approximately 57 percent of the entire basin and stretches from south-central Colorado to southern Texas, near- to below-normal precipitation was observed in 8 of 9 years from 1993 to 2001 (fig. 2). The drought is the basin's most serious since both international reservoirs on the Rio Grande were completed. The International Falcon Reservoir, south of Laredo, TX, began storing water in 1953. Although Falcon was completed during the region's historic 1950-56 drought, storage was temporarily boosted in late-June 1954 by the local inundation due to Hurricane Alice's remnants. During the present drought, storage was similarly (though not as significantly)

improved in late-August 1998 due to the remnants of Tropical Storm Charley. The International Amistad Reservoir, farther upstream near Del Rio, TX, began to store water in 1968.

The United States' portion of the combined reservoir storage fell to a record low of 19.06 percent of conservation capacity in August 1998, and has remained at very low levels since, according to the International Boundary and Water Commission (fig. 3). On February 2, 2002, the IBWC reported that the United States' combined ownership for the two reservoirs stood at 1.06 million acre feet (31.88 percent of conservation capacity), down from 1.43 million acre feet (43.02 percent) at this time last year. While water storage in the Rio Grande Valley is strongly affected by precipitation patterns, other factors—including agricultural and municipal usage, population increases, and international water issues—are playing a role in the region's ongoing water crisis.

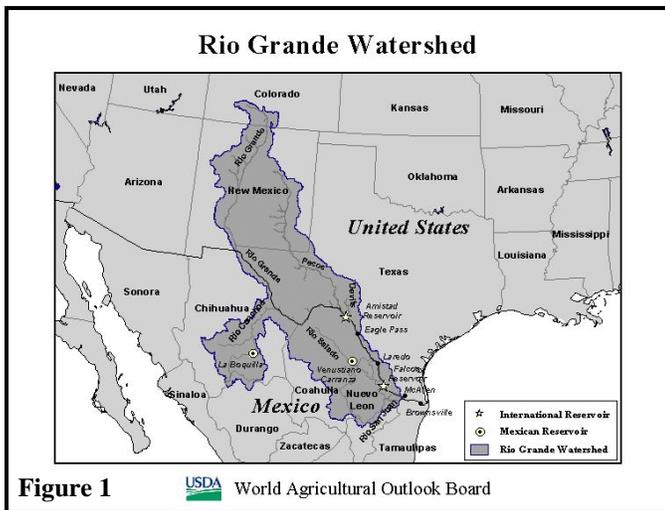


Figure 1

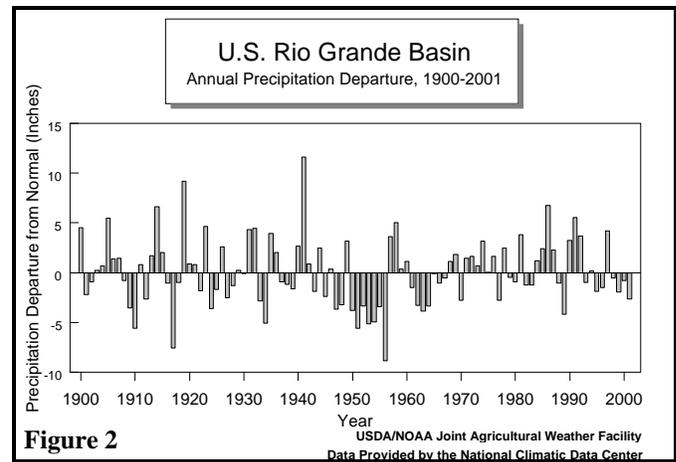


Figure 2

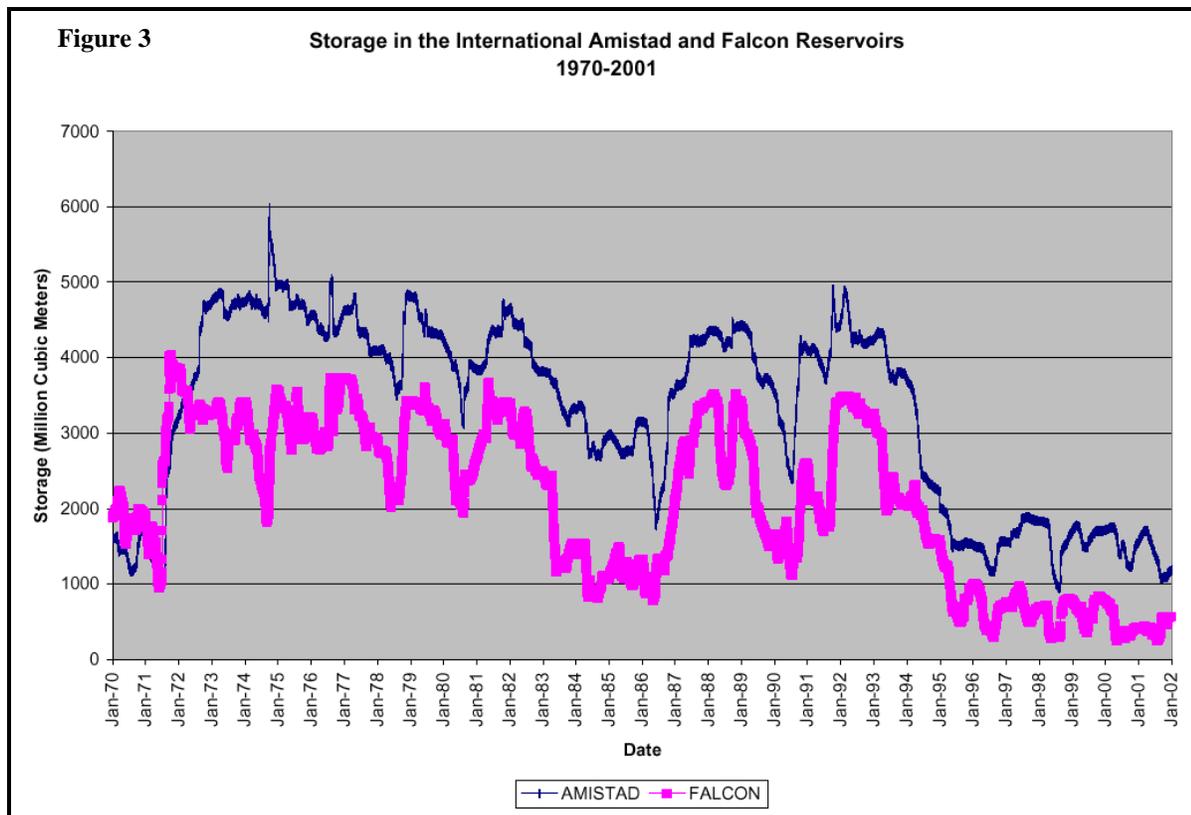


Figure 3

Weather Data for Selected Locations in the Delta and the Bootheel

Weather Data for the Week Ending February 9, 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 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	PRECIP		
																		0.1 INCH OR MORE	5.0 INCH OR MORE	
MS BATESVILLE ^x	46	32	56	27	39	-3	0.61	-0.40	0.59	19.06	160	10.53	174	--	--	0	4	2	1	
CLARKSDALE ^x	45	32	53	28	39	-5	0.92	-0.27	0.90	20.52	170	9.29	139	--	--	0	4	2	1	
CLEVELAND ^x	46	33	54	29	40	-5	1.03	-0.06	0.91	16.65	149	10.09	165	--	--	0	3	3	1	
GREENVILLE ^x	46	33	55	28	40	-5	1.11	-0.05	1.05	20.58	171	11.32	167	--	--	0	3	2	1	
GREENWOOD ^x	49	32	64	25	41	-6	1.09	0.04	0.68	17.05	142	9.15	139	--	--	0	3	3	1	
INDIANOLA 1S	47	35	61	30	41	--	1.13	--	0.66	15.50	--	8.66	--	48	43	0	1	3	1	
INVERNESS 5E	48	35	63	31	42	--	1.09	--	0.69	16.20	--	8.22	--	49	43	0	1	3	1	
LYON	47	33	60	29	40	--	0.82	--	0.58	--	--	--	--	49	41	0	3	4	1	
MOORHEAD ^x	48	35	62	30	42	-5	0.98	-0.14	0.84	16.49	129	8.91	130	--	--	0	1	3	1	
ONWARD	49	36	63	30	43	--	1.52	--	1.24	13.55	--	6.58	--	49	45	0	1	3	1	
ROLLING FORK ^x	48	34	58	28	41	-5	2.02	0.88	1.40	11.32	88	6.08	84	--	--	0	2	3	2	
SIDON	48	36	64	30	42	--	1.06	--	0.53	14.94	--	7.26	--	52	41	0	1	4	1	
TUNICA ^x	44	32	56	30	38	-4	0.76	-0.22	0.62	15.16	133	4.89	83	--	--	0	4	3	1	
TUNICA 1W	46	33	58	30	40	--	0.64	--	0.46	14.83	--	4.50	--	46	40	0	5	4	0	
VANCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
VICKSBURG ^x	48	34	57	28	41	-9	1.79	0.59	1.60	13.61	101	6.86	88	--	--	0	3	3	1	
YAZOO CITY ^x	47	34	59	29	41	-7	1.77	0.51	1.56	14.82	105	7.33	93	--	--	0	2	3	1	
STONEVILLE*	47	34	55	30	42	-2	1.11	-0.01	1.03	19.93	162	10.84	158	50	42	0	2	3	1	
MO CARDWELL	46	31	58	28	38	-1	0.44	-0.24	0.18	14.04	146	5.13	110	44	42	0	5	3	0	
CHARLESTON	47	30	60	26	38	2	0.07	-0.67	0.03	12.68	145	4.69	115	44	37	0	5	3	0	
CLARKTON	47	31	60	28	38	1	0.13	-0.45	0.07	14.70	172	4.86	119	--	--	0	5	3	0	
DELTA	47	30	57	25	37	2	0.11	-0.38	0.11	11.62	119	4.96	105	42	36	0	5	1	0	
GLENNONVILLE	46	32	59	28	38	1	0.13	-0.45	0.08	13.39	157	4.82	118	45	38	0	5	2	0	
PORTAGEVILLE #1	46	32	60	27	39	2	0.23	-0.36	0.10	14.13	147	5.34	116	47	38	0	5	3	0	
PORTAGEVILLE #2	46	32	61	28	38	1	0.18	-0.41	0.06	13.45	140	5.05	110	47	38	0	3	3	0	
STEELE	46	32	60	29	39	1	0.34	-0.50	0.17	14.06	138	5.93	122	44	38	0	4	4	0	

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

* Based on 1964-93 normals.

^x Based on 1961-90 normals.

Delta and Bootheel Weather and Crop Summary: A low-pressure system that traversed the Gulf of Mexico brought light rain, freezing rain, and snow to much of the northern Delta and Bootheel. The cool, damp conditions slowed winter wheat development. The majority of winter wheat remains at the seedling stage, with some beginning to tiller.

U.S. Crop Production Highlights

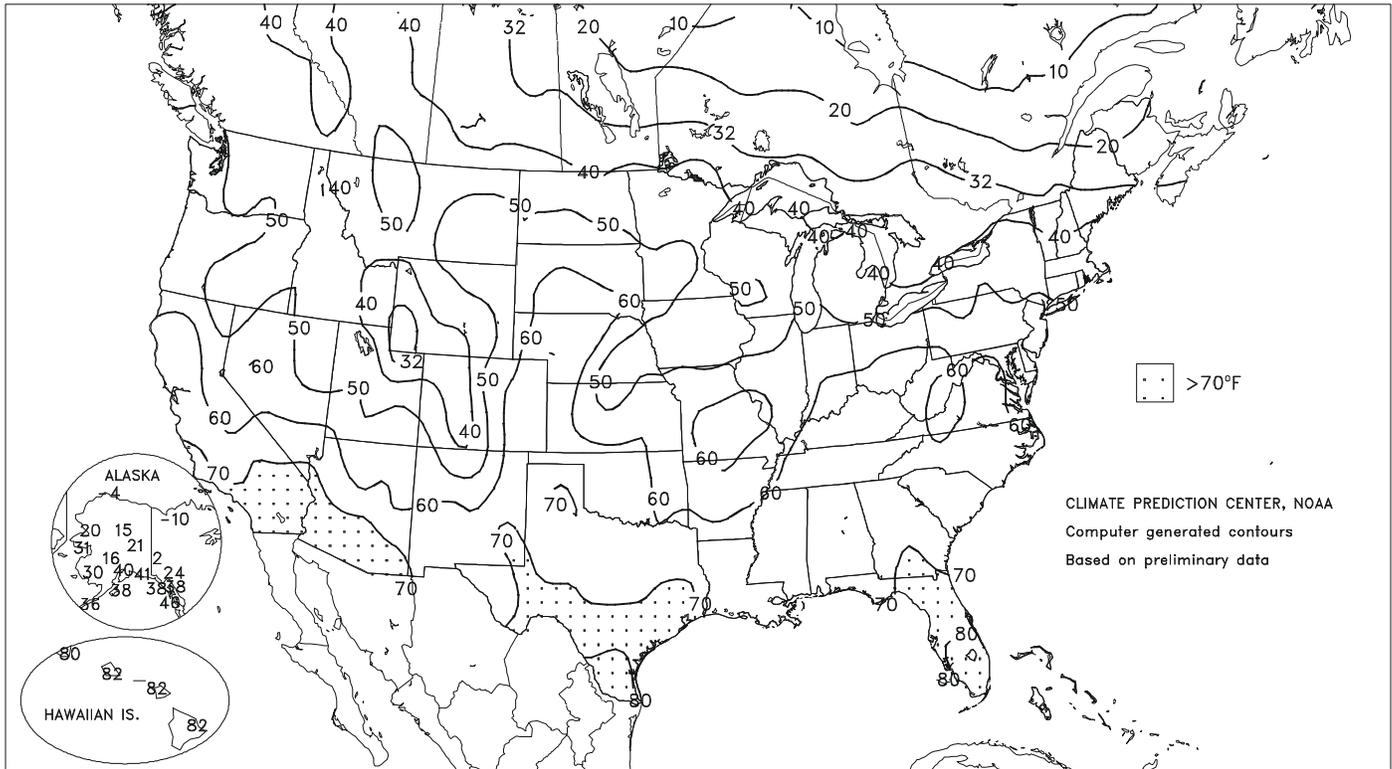
The following information was released by USDA's Agricultural Statistics Board on February 8, 2002. Forecasts refer to February 1.

The **all orange** forecast for the 2001-02 crop is 12.4 million tons, down 1 percent from the January 1 forecast, but virtually unchanged from last season's final utilization. Florida's all orange forecast is lowered to 228 million boxes (10.3 million tons), 1 percent below the January 1 forecast, but 2 percent above the previous season. Early and midseason varieties in Florida are forecast at 128 million boxes (5.76 million tons), down 2 percent from the previous forecast, but identical to last season's utilization. The harvest of early and midseason oranges is nearly three-fourths complete. Dry, warm

weather has increased droppage of the unharvested fruit, especially in western areas, where most of the unharvested fruit remains. Total droppage in the western areas has been above Florida's average all season and is higher than in the other four areas of the citrus belt. Florida's Valencia forecast is 100 million boxes (4.50 million tons), unchanged from the previous forecast, but 5 percent higher than last season's final utilization. Fruit sizes and losses from droppage are below average. Arizona, California, and Texas orange production forecasts are carried forward from the January forecasts.

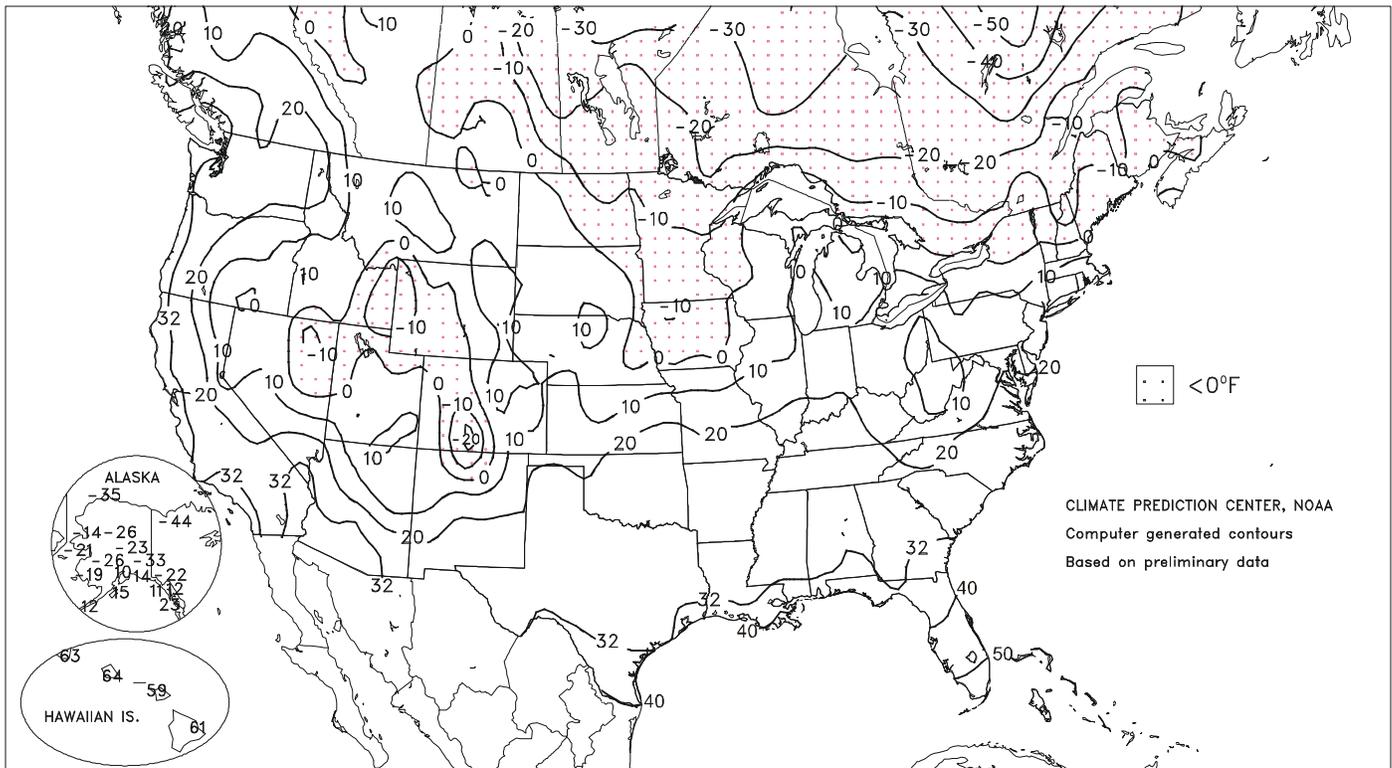
Extreme Maximum Temperature (°F)

FEB 3 - 9, 2002



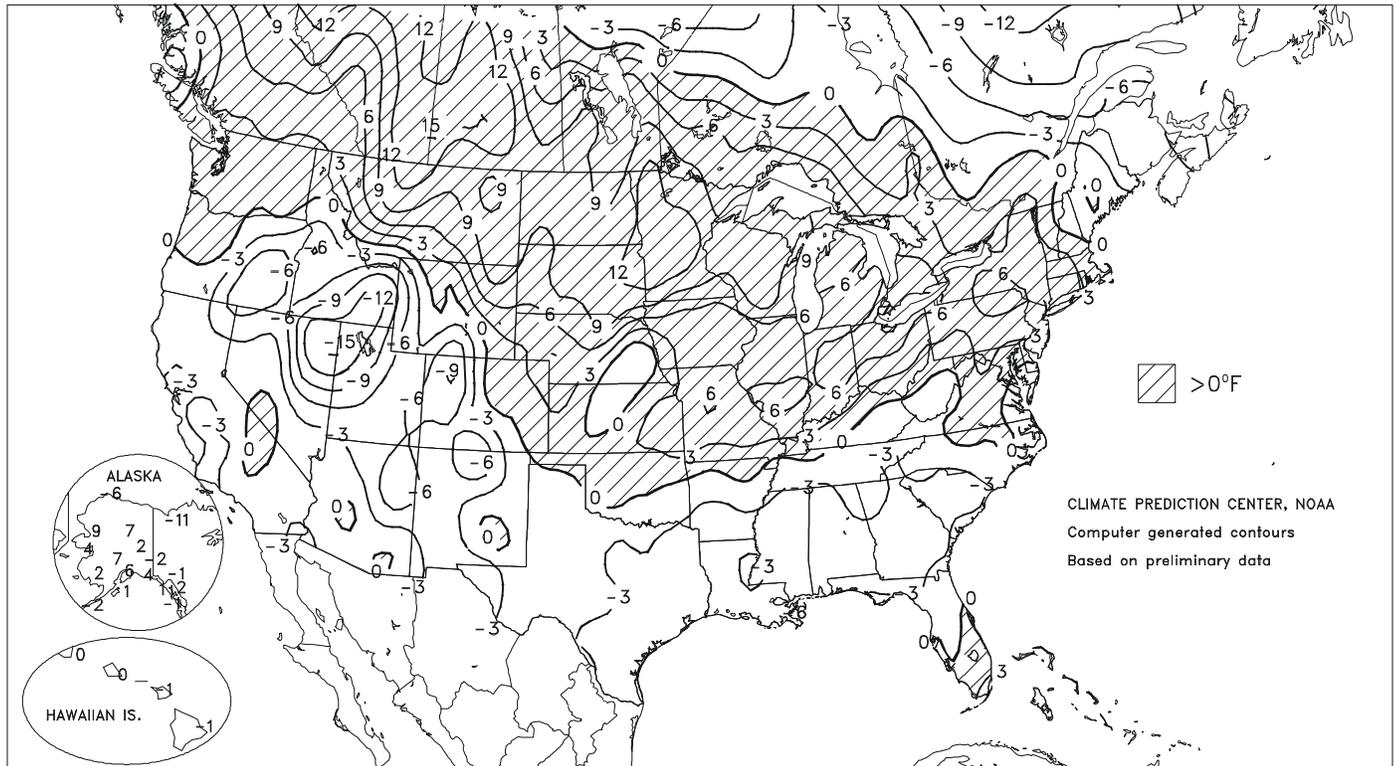
Extreme Minimum Temperature (°F)

FEB 3 - 9, 2002



Departure of Average Temperature from Normal (°F)

FEB 3 - 9, 2002



(Continued from front cover)

Montana. In addition, a late-week storm system raked the **northern half of the Plains** with high winds and light snow, briefly producing blizzard conditions. Weekly temperatures averaged well above normal from the **northern High Plains eastward into the Great Lakes region**, with departures ranging from +5 to +15°F. The mild weather melted much of the previous week's snowfall across the **Midwest**, recharging soil moisture but leaving muddy conditions in some fields and feedlots. Farther west, a 3-week cool snap eased across winter agricultural areas of **California** and the **Southwest**, aiding vegetable and winter grain growth. However, chilly conditions persisted across the **interior West** (more than 15°F below normal in a few areas), where a stagnant weather pattern left cold air trapped in valley locations. In contrast, gusty "Santa Ana" winds swept across **southern California** at week's end, fanning localized brush fires.

Early in the week, a storm system quickly swept across the **Northeast**, bringing gusty winds and snow. **Rochester, NY**, received 9.7 inches of snow from February 3-5, accounting for more than one-third of their season-to-date total of 28.8 inches. Storm-total snowfall locally reached 1 foot in **Maine's Washington County**. Farther south, a wind gust to 61 mph was noted on Monday night on **North Carolina's Ocracoke Island**. Meanwhile, significant precipitation developed on Monday in a band across **Texas**, reaching the remainder of the South on February 6 and 7. Weekly precipitation totaled at least 1 inch from **western Texas to the Carolinas**, surpassing 2 inches in many locations from **northern Louisiana to South Carolina**. Storm-total (February 5-6) snowfall included 3.4 inches in **Lubbock, TX**, 3.5 inches in **Dallas-Ft. Worth, TX**, and 5.4 inches in **Little Rock, AR**, and **Nashville, TN**.

Farther west, cool weather lingered through midweek in **southern California**, where **Ramona** notched a seventh consecutive daily-

record low (27°F) on February 5. By week's end, however, a change in wind direction brought warm weather to the **California coast**. In **Oceanside, CA**, a daily-record high of 80°F on February 9 followed a daily-record low of 36°F on February 7. Farther inland, however, weekly temperatures averaged nearly 14°F below normal in **Elko, NV**, although a streak of 10 consecutive days (January 28 - February 6) with low temperatures below 0°F ended on Thursday. In contrast, daily-record warmth returned to the **upper Midwest** during the mid- to late-week period. In **Wisconsin, Wausau** noted record highs on February 6 (43°F) and 8 (50°F).

At week's end, however, a dynamic storm system swept across the **Plains** with gusty winds but little snow. **East of the Rockies**, heavy snowfall was confined to the **northern Black Hills**, where February 9 totals in **Lawrence County, SD**, included 18.5 inches at **Deadwood** and 18.0 inches at **Lead**. Meanwhile, February 8-9 snowfall totaled 3 to 4 inches (0.19 inch liquid) in the **Miles City, MT**, area, and 2.6 inches (0.13 inch liquid) in **Cheyenne, WY**. Peak wind gusts included 63 mph (on February 8) in **Cheyenne** and 61 mph (on February 9) in **Grand Island, NE**.

Mild weather (up to 9°F above normal) prevailed across most of **Alaska**, including the **west-central portion of the State**, where bitterly cold weather had dominated the preceding 2 weeks. Significant precipitation was confined to **southern Alaska**, where **Kodiak** received 4.30 inches (including 18.5 inches of snow) during the first 9 days of February. Meanwhile in **Hawaii**, heavy showers swept into **Kauai** on the morning of February 8 and across the remainder of the State during the ensuing 24-hour period, interrupting an otherwise quiet weather pattern. **Wainiha, Kauai**, netted 2.90 inches on Friday, and February 8-9 (24-hour) totals elsewhere included 2.41 inches at the **Wilson Tunnel** on **Oahu**, and 3.17 inches at **Laupahoehoe**, on the **Big Island**.

National Weather Data for Selected Cities

Weather Data for the Week Ending February 9, 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 Dec 1	PCT. NORMAL SINCE Dec 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	48	33	65	30	41	-4	1.18	0.16	0.92	12.71	113	7.95	117	96	54	0	3	4	1
	HUNTSVILLE	46	31	65	27	39	-3	0.97	-0.16	0.81	12.96	103	6.65	95	94	69	0	6	4	1
	MOBILE	55	38	65	32	46	-6	1.19	-0.01	0.69	7.94	66	5.11	70	84	56	0	1	3	1
	MONTGOMERY	52	35	66	31	43	-5	1.34	0.08	1.25	7.64	66	4.55	68	97	56	0	2	3	1
AK	ANCHORAGE	29	18	40	10	23	6	0.04	-0.12	0.02	0.70	36	0.50	57	88	75	0	7	2	0
	BARROW	-16	-26	-4	-35	-21	-6	0.00	-0.03	0.00	0.12	43	0.06	38	78	75	0	7	0	0
	FAIRBANKS	5	-16	21	-23	-6	1	0.00	-0.08	0.00	0.63	45	0.54	81	84	78	0	7	0	0
	JUNEAU	35	24	38	12	29	1	0.36	-0.63	0.16	8.69	76	4.20	69	95	86	0	6	4	0
	KODIAK	35	25	38	15	30	0	2.73	1.17	1.13	24.57	138	16.76	164	94	84	0	6	6	2
	NOME	17	2	31	-21	10	5	0.21	0.02	0.15	2.14	98	1.61	138	85	76	0	7	4	0
AZ	FLAGSTAFF	47	12	55	4	29	-2	0.00	-0.58	0.00	1.18	25	0.02	1	58	14	0	7	0	0
	PHOENIX	72	43	74	39	57	0	0.00	-0.14	0.00	0.93	48	0.05	5	45	27	0	0	0	0
	TUCSON	67	40	74	33	53	-1	0.30	0.11	0.29	1.24	55	0.64	52	70	40	0	0	2	0
	YUMA	72	43	77	36	58	-3	0.00	-0.06	0.00	0.01	1	0.00	0	34	28	0	0	0	0
AR	FORT SMITH	47	32	59	27	39	-2	0.27	-0.28	0.15	9.76	151	4.06	132	91	59	0	5	2	0
	LITTLE ROCK	46	33	59	30	40	-3	0.33	-0.45	0.21	12.76	137	4.88	106	94	58	0	4	2	0
CA	BAKERSFIELD	61	36	67	30	49	-3	0.00	-0.28	0.00	1.18	52	0.52	34	86	65	0	2	0	0
	FRESNO	61	36	63	31	49	-1	0.06	-0.44	0.03	2.75	66	0.82	29	92	77	0	1	2	0
	LOS ANGELES	67	45	77	42	56	-2	0.00	-0.77	0.00	2.05	36	0.75	19	92	47	0	0	0	0
	REDDING	61	34	70	28	47	-1	0.68	-0.74	0.68	13.34	103	4.05	49	79	64	0	4	1	1
	SACRAMENTO	59	35	63	30	47	-3	0.37	-0.56	0.37	8.88	119	2.60	52	99	52	0	3	1	0
	SAN DIEGO	66	45	76	43	55	-4	0.00	-0.50	0.00	0.77	18	0.32	11	81	48	0	0	0	0
	SAN FRANCISCO	58	42	60	40	50	-2	0.36	-0.69	0.36	10.36	119	1.82	31	93	79	0	0	1	0
	STOCKTON	60	33	64	28	46	-4	0.29	-0.34	0.20	6.95	130	1.92	55	98	81	0	4	2	0
CO	ALAMOSA	31	-11	43	-20	10	-9	0.03	0.00	0.03	0.66	106	0.53	183	80	52	0	7	1	0
	CO SPRINGS	46	16	57	11	31	1	0.00	-0.03	0.00	0.34	46	0.25	78	64	17	0	7	0	0
	DENVER INTL	46	20	57	15	33	3	0.00	0.00	0.00	0.35	65	0.21	91	53	20	0	7	0	0
	GRAND JUNCTION	41	13	43	11	27	-4	0.00	-0.08	0.00	0.56	46	0.25	35	65	41	0	7	0	0
	PUEBLO	50	12	63	3	31	-1	0.00	-0.03	0.00	0.65	86	0.43	116	66	31	0	7	0	0
CT	BRIDGEPORT	41	26	47	17	33	3	0.02	-0.69	0.02	3.96	49	1.93	41	83	48	0	6	1	0
	HARTFORD	41	20	49	13	31	4	0.00	-0.74	0.00	3.64	43	1.43	30	75	40	0	7	0	0
DC	WASHINGTON	47	28	61	21	38	2	0.27	-0.34	0.19	3.17	45	1.64	41	75	42	0	5	2	0
DE	WILMINGTON	44	26	53	19	35	3	0.03	-0.62	0.03	4.81	63	2.84	67	88	47	0	7	1	0
FL	DAYTONA BEACH	69	48	75	42	58	-1	0.20	-0.45	0.20	2.56	38	2.21	56	94	54	0	0	1	0
	JACKSONVILLE	63	41	71	36	52	-2	0.19	-0.61	0.19	7.80	106	4.67	99	91	58	0	0	1	0
	KEY WEST	77	68	81	61	72	2	0.00	-0.40	0.00	3.65	75	0.09	3	83	68	0	0	0	0
	MIAMI	79	64	84	55	71	3	0.74	0.23	0.74	4.29	91	1.25	49	87	61	0	0	1	1
	ORLANDO	71	49	77	42	60	-1	0.48	-0.04	0.48	2.06	38	1.58	51	87	56	0	0	1	0
	PENSACOLA	57	39	63	35	48	-5	1.80	0.69	1.59	8.28	77	5.91	87	83	57	0	0	3	1
	TALLAHASSEE	63	37	69	32	50	-3	0.84	-0.23	0.48	7.85	72	7.07	105	82	52	0	1	2	0
	TAMPA	72	52	79	42	62	0	0.77	0.16	0.77	4.15	78	3.26	107	84	53	0	0	1	1
	WEST PALM	76	60	85	50	68	2	0.66	-0.06	0.66	5.24	67	1.84	39	86	59	0	0	1	1
GA	ATHENS	51	32	66	26	41	-3	2.03	0.98	1.91	8.02	82	6.54	108	85	55	0	3	3	1
	ATLANTA	49	33	63	29	41	-4	2.12	0.98	1.98	9.81	95	7.59	117	90	61	0	4	4	1
	AUGUSTA	53	31	69	23	42	-4	2.14	1.13	1.91	5.79	65	4.79	83	91	52	0	4	4	1
	COLUMBUS	53	36	67	34	45	-3	3.07	2.02	2.71	8.06	77	6.25	102	89	44	0	0	3	1
	MACON	52	32	67	28	42	-5	2.86	1.73	2.54	7.41	71	5.83	90	91	52	0	3	4	1
	SAVANNAH	61	38	67	33	49	-2	1.68	0.91	1.43	4.59	59	4.08	82	83	49	0	0	2	1
HI	HILO	79	62	82	61	71	0	1.36	-0.76	1.06	41.76	182	27.99	224	82	70	0	0	4	1
	HONOLULU	79	66	82	64	72	-1	0.69	0.11	0.55	5.36	85	4.60	133	84	69	0	0	3	1
	KAHULUI	79	63	82	59	71	-1	0.43	-0.44	0.20	7.08	92	3.97	86	87	73	0	0	2	0
	LIHUE	77	66	80	63	72	0	0.21	-0.40	0.29	7.28	70	5.78	102	84	73	0	0	4	0
ID	BOISE	43	22	50	16	32	-2	0.15	-0.13	0.08	2.24	72	1.09	63	83	61	0	7	2	0
	LEWISTON	47	32	50	29	40	4	0.41	0.18	0.41	1.86	75	1.22	85	72	57	0	4	1	0
	POCATELLO	26	1	43	-8	13	-15	0.05	-0.17	0.03	1.85	73	0.77	54	87	74	0	7	2	0
IL	CHICAGO/O'HARE	37	21	50	10	29	5	0.00	-0.39	0.00	2.80	60	1.81	80	83	64	0	7	0	0
	MOLINE	37	16	49	2	26	2	0.24	-0.09	0.13	2.41	57	1.42	71	88	67	0	7	2	0
	PEORIA	42	22	56	13	32	7	0.17	-0.17	0.17	4.34	100	2.99	154	91	57	0	6	1	0
	ROCKFORD	36	18	47	6	27	5	0.13	-0.17	0.13	1.72	45	0.79	44	83	62	0	6	1	0
	SPRINGFIELD	43	24	57	16	34	6	0.09	-0.26	0.09	4.63	101	2.54	123	86	63	0	6	1	0
IN	EVANSVILLE	46	28	60	24	37	4	0.02	-0.68	0.02	10.86	148	3.70	97	87	58	0	7	1	0
	FORT WAYNE	43	23	57	15	33	8	0.00	-0.44	0.00	5.03	93	2.63	100	86	49	0	7	0	0
	INDIANAPOLIS	45	24	60	15	35	6	0.00	-0.55	0.00	5.51	89	2.50	79	91	46	0	7	0	0
	SOUTH BEND	39	23	55	12	31	6	0.00	-0.47	0.00	4.74	80	2.49	87	87	68	0	6	0	0
IA	BURLINGTON	38	19	49	6	28	2	0.25	-0.05	0.25	2.70	71	1.71	102	93	59	0	6	1	0
	CEDAR RAPIDS	35	14	45	-1	24	2	0.32	0.07	0.32	1.93	68	0.89	65	96	65	0	6	1	0
	DES MOINES	35	18	43	-2	26	2	0.16	-0.10	0.16	1.17	43	0.51	38	87	72	0	6	1	0
	DUBUQUE	34	15	44	4	25	5	0.21	-0.09	0.21	1.89	56	0.58	35	91	71	0	6	1	0
	SIoux CITY	36	10	47	-8	23	1	0.27	0.19	0.27	1.32	97	0.87	124	90	78	0	7	1	0
	WATERLOO	33	10	43	-5	22	3	0.35	0.13	0.35	1.73	78	0.85	76	89	74	0	6	1	0
KS	CONCORDIA	38	20	49	7	29	-1	0.18	0.11	0.18	0.88	55	0.81	108	90	74	0	6	1	0
	DODGE CITY	43	23	59	16	33	0	0.24	0.15	0.12	0.92	61	0.89	122	90	59	0	7	2	0
	GOODLAND	49	20	63	15	34	4	0.08	0.02	0.08	0.95	106	0.32	64	81	50	0	7	1	0
	TOPEKA	44	27	58	17	35	5	0.01	-0.19	0.01	1.65	63	1.52	126	90	67	0	6	1	0

Weather Data for the Week Ending February 9, 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 Dec 1	PCT. NORMAL SINCE Dec 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	43	28	60	21	36	3	0.29	0.16	0.19	1.49	63	1.41	141	91	71	0	7	2	0
	JACKSON	42	26	69	17	34	-2	0.35	-0.48	0.31	7.28	82	4.73	102	90	45	0	6	4	0
	LEXINGTON	44	25	64	18	35	1	0.02	-0.68	0.02	5.77	70	2.88	68	82	55	0	7	1	0
	LOUISVILLE	47	30	65	25	39	4	0.03	-0.69	0.03	8.97	114	4.50	107	87	44	0	5	1	0
LA	PADUCAH	47	29	60	24	38	2	0.09	-0.85	0.07	13.18	146	4.51	97	91	46	0	5	3	0
	BATON ROUGE	54	39	69	31	47	-5	0.53	-0.84	0.27	9.42	71	5.17	65	87	54	0	2	2	0
	LAKE CHARLES	55	40	68	31	48	-4	0.94	0.00	0.54	9.43	83	4.24	63	88	54	0	1	2	1
	NEW ORLEANS	55	42	67	36	49	-5	1.06	-0.41	0.54	7.75	60	4.85	63	83	62	0	0	2	2
	SHREVEPORT	53	36	67	27	44	-5	1.27	0.20	1.17	9.77	93	3.67	61	95	59	0	1	4	1
ME	CARIBOU	13	-5	19	-15	4	-6	0.12	-0.40	0.08	3.20	47	2.21	61	85	60	0	7	3	0
	PORTLAND	34	12	42	-3	23	0	0.00	-0.79	0.00	5.01	54	2.98	58	76	44	0	7	0	0
MD	BALTIMORE	46	24	58	19	35	2	0.13	-0.56	0.13	4.07	53	2.34	54	74	47	0	7	1	0
MA	BOSTON	39	25	47	19	32	2	0.00	-0.83	0.00	6.29	72	3.47	69	72	40	0	6	0	0
	WORCESTER	35	20	42	13	27	3	0.00	-0.76	0.00	5.52	62	2.75	54	86	47	0	7	0	0
MI	ALPENA	34	16	44	1	25	8	0.03	-0.28	0.03	2.18	55	0.72	33	85	62	0	7	1	0
	GRAND RAPIDS	35	21	44	10	28	5	0.02	-0.37	0.02	3.55	68	1.18	47	87	68	0	7	1	0
	HOUGHTON LAKE	34	17	43	3	26	8	0.01	-0.29	0.01	2.99	80	2.40	120	87	61	0	7	1	0
	LANSING	36	18	44	0	27	5	0.02	-0.34	0.02	2.19	52	1.06	51	84	64	0	7	1	0
	MUSKEGON	37	25	50	16	31	7	0.00	-0.40	0.00	2.12	39	0.70	26	86	72	0	7	0	0
	TRAVERSE CITY	35	21	44	11	28	7	0.01	-0.52	0.01	3.04	48	0.86	23	95	62	0	7	1	0
MN	DULUTH	30	13	43	-11	22	10	0.00	-0.21	0.00	0.95	41	0.40	29	88	67	0	7	0	0
	INTL FALLS	32	5	44	-19	19	12	0.01	-0.16	0.01	0.35	20	0.08	8	86	49	0	7	1	0
	MINNEAPOLIS	35	19	50	1	27	10	0.02	-0.16	0.02	1.22	54	0.48	38	83	66	0	6	1	0
	ROCHESTER	33	15	49	-3	24	9	0.05	-0.12	0.05	2.09	96	0.70	60	90	76	0	7	1	0
	ST. CLOUD	36	13	50	-5	25	12	0.14	0.00	0.14	0.59	36	0.43	46	93	52	0	7	1	0
MS	JACKSON	51	35	66	29	43	-4	1.16	0.01	0.62	10.84	87	6.77	95	94	54	0	2	2	2
	MERIDIAN	51	34	65	28	43	-5	1.07	-0.21	0.65	12.80	99	7.51	99	97	62	0	2	2	1
	TUPELO	48	32	63	28	40	-3	1.19	0.15	0.92	15.57	124	9.02	139	96	65	0	3	4	1
MO	COLUMBIA	44	26	61	15	35	4	0.09	-0.39	0.09	4.12	86	2.67	114	89	52	0	6	1	0
	KANSAS CITY	44	25	60	13	35	5	0.01	-0.23	0.01	2.42	78	1.67	114	89	55	0	6	1	0
	SAINT LOUIS	47	29	63	19	38	5	0.01	-0.48	0.01	6.64	118	3.18	115	75	51	0	6	1	0
	SPRINGFIELD	45	28	61	20	37	3	0.20	-0.32	0.15	7.19	121	3.67	132	90	61	0	6	2	0
MT	BILLINGS	44	26	55	17	35	7	0.00	-0.12	0.00	0.54	33	0.37	38	69	36	0	6	0	0
	BUTTE	36	10	43	-3	23	3	0.01	-0.07	0.01	0.36	31	0.28	44	83	40	0	7	1	0
	GLASGOW	35	13	48	-1	24	9	0.04	-0.02	0.04	0.43	54	0.42	100	88	68	0	7	1	0
	GREAT FALLS	45	27	51	15	36	12	0.04	-0.05	0.03	0.73	50	0.34	43	68	34	0	5	2	0
	HAVRE	45	20	53	4	33	14	0.11	0.05	0.09	0.38	36	0.37	69	75	58	0	7	3	0
	KALISPELL	37	21	41	5	29	4	0.27	-0.02	0.20	1.42	41	0.92	50	91	77	0	7	3	0
	MISSOULA	41	23	50	9	32	5	0.32	0.15	0.23	2.07	85	0.95	74	87	68	0	6	2	0
NE	GRAND ISLAND	36	14	43	3	25	-1	0.05	-0.04	0.05	0.88	67	0.74	114	91	74	0	7	1	0
	LINCOLN	37	14	48	-1	26	1	0.36	0.28	0.36	1.34	82	1.00	128	90	69	0	7	1	0
	NORFOLK	37	13	48	-1	25	1	0.09	-0.04	0.09	0.52	38	0.46	63	87	71	0	7	1	0
	NORTH PLATTE	51	10	67	6	31	4	0.00	-0.08	0.00	0.15	17	0.08	17	92	37	0	7	0	0
	OMAHA	37	17	46	-2	27	2	0.25	0.11	0.25	1.29	69	0.62	65	90	69	0	6	1	0
	SCOTTSBLUFF	48	13	59	6	31	3	0.00	-0.11	0.00	0.05	4	0.05	7	64	33	0	7	0	0
	VALENTINE	51	14	64	9	33	9	0.02	-0.05	0.02	0.03	4	0.03	8	83	46	0	7	1	0
NV	ELY	37	3	48	-5	20	-8	0.00	-0.15	0.00	0.56	39	0.46	49	78	57	0	7	0	0
	LAS VEGAS	61	35	68	30	48	-2	0.00	-0.14	0.00	0.11	9	0.00	0	32	23	0	2	0	0
	RENO	52	22	60	19	37	0	0.10	-0.15	0.08	2.49	110	0.69	50	73	47	0	7	2	0
	WINNEMUCCA	51	16	58	7	34	0	0.02	-0.12	0.02	1.17	64	0.86	85	75	48	0	6	1	0
NH	CONCORD	34	10	41	-2	22	1	0.00	-0.59	0.00	4.71	70	2.47	66	86	42	0	7	0	0
NJ	NEWARK	44	28	54	19	36	4	0.00	-0.73	0.00	3.95	46	1.94	39	73	44	0	4	0	0
NM	ALBUQUERQUE	48	25	62	20	36	-3	0.00	-0.08	0.00	0.58	53	0.34	57	69	28	0	7	0	0
NY	ALBANY	37	18	42	10	28	5	0.01	-0.51	0.01	4.92	85	2.97	94	83	47	0	7	1	0
	BINGHAMTON	37	19	45	7	28	6	0.02	-0.59	0.02	4.64	73	2.35	70	81	58	0	7	1	0
	BUFFALO	35	22	42	6	29	5	0.29	-0.32	0.25	11.15	144	4.67	118	94	62	0	7	2	0
	ROCHESTER	37	19	45	5	28	4	0.56	0.06	0.38	5.58	98	3.86	130	87	60	0	7	3	0
	SYRACUSE	38	18	47	5	28	5	0.07	-0.46	0.03	4.85	76	2.66	81	87	53	0	7	3	0
NC	ASHEVILLE	46	27	60	21	37	0	1.01	0.08	0.73	7.01	81	4.67	89	80	40	0	6	2	1
	CHARLOTTE	50	29	64	21	40	-3	1.25	0.41	0.67	7.90	96	5.94	117	92	46	0	5	2	2
	GREENSBORO	49	28	62	18	39	0	0.89	0.15	0.58	6.41	85	4.19	93	84	38	0	6	2	1
	HATTERAS	51	38	62	30	45	-1	2.21	1.19	1.85	11.72	100	9.32	130	83	44	0	1	3	1
	RALEIGH	51	30	63	23	40	-1	1.25	0.41	0.69	9.26	114	7.23	141	82	41	0	5	2	2
	WILMINGTON	57	34	64	25	45	-2	1.51	0.60	1.35	4.65	49	3.34	59	92	44	0	3	2	1
ND	BISMARCK	39	10	56	1	25	10	0.03	-0.08	0.03	0.49	48	0.36	61	89	71	0	7	1	0
	DICKINSON	39	15	55	6	27	9	0.04	-0.07	0.04	0.46	54	0.34	67	93	51	0	7	1	0
	FARGO	34	8	47	-10	21	10	0.00	-0.12	0.00	0.43	29	0.21	23	89	68	0	7	0	0
	GRAND FORKS	32	8	47	-8	20	10	0.00	-0.14	0.00	0.34	24	0.06	7	92	62	0	7	0	0
	JAMESTOWN	34	8	51	-10	21	8	0.00	-0.11	0.00	0.27	23	0.20	26	93	64	0	7	0	0
	WILLISTON	36	14	49	5	25	12	0.12	0.04	0.12	1.38	113	0.82	126	90	70	0	7	1	0
OH	AKRON-CANTON	42	19	57	6	31	5	0.06	-0.46	0.06	3.74	61	2.67	84	81	55	0	7	1	0
	CINCINNATI	46	24	62	15	35	3	0.00	-0.63	0.00	6.93	99	2.85	76	83	53	0	7	0	0
	CLEVELAND	43	23	58	10	33	7	0.15	-0.40	0.13	5.37	85	2.84	89	84	48	0	7	2	0
	COLUMBUS	45	24	61	14	35	5	0.02	-0.50	0.02	5.40	88	2.39	74	83	54	0	7	1	0
	DAYTON	44	24	59	14	34	6	0.00	-0.55	0.00	5.48	86	1.82	55	84	43	0	7	0	0
	MANSFIELD	42	21	56	10	32	7	0.00	-0.52	0.00	4.90	75	2.38	72						

Weather Data for the Week Ending February 9, 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 Dec 1	PCT. NORMAL SINCE Dec 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	24	57	13	34	9	0.00	-0.44	0.00	4.89	95	2.88	115	84	49	0	7	0	0
OK YOUNGSTOWN	40	21	54	5	31	5	0.30	-0.17	0.30	4.85	82	2.82	96	80	52	0	7	1	0
OK OKLAHOMA CITY	49	31	62	29	40	0	0.35	0.10	0.29	3.88	111	2.97	187	90	64	0	6	2	0
OR TULSA	47	33	58	26	40	1	0.28	-0.08	0.24	5.20	116	2.95	143	90	68	0	4	2	0
OR ASTORIA	50	38	55	33	44	0	2.01	-0.05	0.73	28.80	127	16.97	138	92	79	0	0	5	2
OR BURNS	31	5	41	-4	18	-10	0.08	-0.17	0.08	2.24	80	1.19	79	82	77	0	7	1	0
OR EUGENE	50	35	55	31	43	1	1.51	-0.15	0.91	16.38	91	9.67	99	96	88	0	2	5	1
OR MEDFORD	53	29	60	25	41	-1	0.65	0.12	0.47	6.61	109	2.27	72	97	61	0	5	4	0
OR PENDLETON	48	29	52	21	39	2	0.21	-0.09	0.16	1.56	47	0.86	47	86	65	0	5	3	0
OR PORTLAND	50	37	52	30	43	1	1.72	0.63	0.87	14.65	120	8.03	124	97	79	0	1	5	1
PA SALEM	49	34	51	30	42	0	2.15	0.82	1.22	19.24	137	11.21	148	96	89	0	2	5	1
PA ALLENTOWN	44	22	52	15	33	5	0.07	-0.61	0.07	3.69	47	1.77	40	79	49	0	7	1	0
PA ERIE	40	25	53	16	32	5	0.04	-0.50	0.03	9.17	132	4.72	147	83	51	0	7	2	0
PA MIDDLETOWN	44	24	55	17	34	5	0.02	-0.67	0.02	4.44	64	2.57	69	85	48	0	7	1	0
PA PHILADELPHIA	45	28	53	20	36	3	0.03	-0.63	0.03	4.65	61	2.54	58	73	51	0	6	1	0
PA PITTSBURGH	43	22	58	11	33	4	0.00	-0.56	0.00	4.25	68	1.82	53	79	39	0	7	0	0
PA WILKES-BARRE	41	24	50	12	32	5	0.04	-0.49	0.04	3.10	54	1.99	63	75	46	0	5	1	0
PA WILLIAMSPORT	43	23	52	14	33	6	0.00	-0.66	0.00	3.39	51	1.81	49	81	49	0	7	0	0
RI PROVIDENCE	41	22	49	16	31	2	0.02	-0.85	0.02	5.46	57	3.00	55	80	54	0	7	1	0
SC BEAUFORT	59	38	67	30	49	0	1.28	0.47	0.74	4.39	53	3.09	60	89	45	0	1	3	2
SC CHARLESTON	59	36	68	27	48	-1	1.54	0.77	0.89	5.70	68	3.97	78	89	46	0	1	2	2
SC COLUMBIA	53	33	67	28	43	-3	1.68	0.72	1.46	5.35	58	4.15	70	86	50	0	3	3	1
SD GREENVILLE	50	31	64	22	40	-2	1.21	0.25	0.85	8.30	87	6.07	107	89	39	0	4	2	1
SD ABERDEEN	40	13	53	0	27	12	0.02	-0.06	0.02	0.35	36	0.29	49	88	71	0	7	1	0
SD HURON	43	16	57	4	30	12	0.02	-0.06	0.02	0.91	93	0.85	144	87	50	0	7	1	0
SD RAPID CITY	50	16	61	9	33	8	0.00	-0.07	0.00	0.05	6	0.05	11	68	27	0	7	0	0
SD SIOUX FALLS	44	12	59	-2	28	10	0.17	0.09	0.17	0.45	39	0.34	55	86	51	0	7	1	0
TN BRISTOL	44	25	66	14	35	-1	0.67	-0.13	0.48	8.47	107	5.05	111	96	46	0	6	3	0
TN CHATTANOOGA	48	32	65	29	40	-1	0.90	-0.26	0.69	11.67	100	6.59	96	79	54	0	5	3	1
TN KNOXVILLE	44	29	59	24	36	-4	0.89	-0.05	0.48	13.89	135	9.23	160	89	49	0	6	3	0
TN MEMPHIS	47	34	62	31	40	-3	0.49	-0.51	0.37	14.70	131	4.52	82	91	53	0	3	5	0
TX NASHVILLE	44	28	63	24	36	-3	0.66	-0.17	0.25	9.29	97	5.97	118	93	55	0	6	3	0
TX ABILENE	53	36	68	29	44	-2	0.92	0.69	0.67	2.38	94	1.40	111	83	60	0	3	2	1
TX AMARILLO	48	27	69	24	38	-1	0.31	0.21	0.16	1.71	126	1.48	197	82	46	0	7	3	0
TX AUSTIN	58	35	73	25	47	-6	0.79	0.36	0.79	7.11	146	2.48	102	84	58	0	3	1	1
TX BEAUMONT	56	41	69	34	49	-5	0.48	-0.46	0.37	6.20	51	3.90	56	90	55	0	0	3	0
TX BROWNSVILLE	66	49	78	41	57	-4	0.32	-0.03	0.17	1.43	49	0.41	23	95	75	0	0	4	0
TX CORPUS CHRISTI	64	42	81	32	53	-5	0.08	-0.35	0.05	2.04	52	0.38	18	96	69	0	1	2	0
TX DEL RIO	64	42	74	32	53	-1	0.02	-0.19	0.01	0.39	25	0.04	5	72	42	0	1	2	0
TX EL PASO	53	35	64	27	44	-5	1.09	1.01	0.45	1.36	102	1.22	218	81	44	0	3	3	0
TX FORT WORTH	53	36	64	30	45	-2	0.88	0.42	0.85	9.02	179	5.78	234	97	59	0	4	2	1
TX GALVESTON	57	46	68	38	51	-6	0.13	-0.60	0.07	4.83	56	2.33	46	89	60	0	0	3	0
TX HOUSTON	57	38	75	31	48	-5	0.58	-0.18	0.48	7.99	96	1.82	39	96	66	0	2	3	0
TX LUBBOCK	51	30	68	24	41	0	0.50	0.35	0.47	1.25	92	1.12	162	80	62	0	6	2	0
TX MIDLAND	54	34	67	29	44	-2	1.00	0.89	0.57	1.18	89	1.08	159	80	58	0	3	2	1
TX SAN ANGELO	56	37	69	28	47	0	1.05	0.79	0.73	1.51	73	1.37	121	83	52	0	2	2	1
TX SAN ANTONIO	61	38	76	31	50	-2	0.36	-0.04	0.36	4.17	101	0.74	34	90	46	0	1	1	0
TX VICTORIA	61	40	75	31	51	-4	0.23	-0.27	0.17	4.28	77	0.76	25	93	65	0	1	2	0
TX WACO	54	37	65	30	45	-3	1.67	1.15	1.48	6.67	126	2.64	104	94	74	0	2	2	1
TX WICHITA FALLS	52	34	69	27	43	0	0.36	0.06	0.32	2.62	82	1.52	101	89	64	0	4	3	0
UT SALT LAKE CITY	30	12	45	5	21	-11	0.07	-0.23	0.07	2.70	90	1.26	72	93	65	0	7	1	0
VT BURLINGTON	31	10	38	3	20	2	0.02	-0.41	0.02	3.83	77	2.34	84	81	55	0	7	1	0
VA LYNCHBURG	48	25	61	18	37	1	0.81	0.07	0.43	6.33	82	3.15	70	82	39	0	7	2	0
VA NORFOLK	47	32	55	25	39	-2	1.10	0.29	1.05	7.15	89	5.32	107	80	46	0	3	2	1
VA RICHMOND	49	26	60	19	38	0	0.79	0.10	0.68	6.04	80	4.37	98	78	50	0	7	2	1
VA ROANOKE	48	28	60	16	38	1	0.59	-0.15	0.42	4.79	68	2.31	55	64	42	0	6	2	0
VA WASH/DULLES	47	24	62	19	35	2	0.20	-0.46	0.18	3.02	43	1.43	37	73	41	0	7	2	0
WA OLYMPIA	47	33	50	27	40	0	1.26	-0.39	0.48	24.71	141	12.76	132	98	90	0	4	7	0
WA QUILLAYUTE	48	37	51	33	42	0	4.38	1.22	2.03	35.83	111	19.97	113	98	83	0	0	6	4
WA SEATTLE-TACOMA	48	37	53	33	42	0	1.38	0.28	0.51	13.79	113	7.90	120	95	80	0	0	5	1
WA SPOKANE	38	25	40	22	31	0	0.61	0.25	0.24	3.79	83	1.76	77	97	72	0	7	4	0
WA YAKIMA	44	23	49	18	34	1	0.79	0.59	0.78	2.24	80	1.12	78	91	83	0	7	2	1
WV BECKLEY	39	21	56	9	30	-2	0.28	-0.41	0.25	4.96	69	2.55	62	72	48	0	7	3	0
WV CHARLESTON	45	23	68	13	34	-1	0.06	-0.68	0.06	5.89	78	3.42	81	92	44	0	7	1	0
WV ELKINS	41	15	62	-2	28	-2	0.22	-0.52	0.08	6.12	78	3.83	87	95	39	0	7	3	0
WV HUNTINGTON	46	24	67	15	35	0	0.05	-0.65	0.05	5.14	69	2.89	70	89	42	0	7	1	0
WI EAU CLAIRE	35	14	46	-5	24	9	0.00	-0.19	0.00	1.55	67	0.60	46	94	56	0	6	0	0
WI GREEN BAY	34	17	42	5	25	7	0.00	-0.24	0.00	1.86	63	0.63	41	88	63	0	7	0	0
WI LA CROSSE	37	17	51	0	27	7	0.13	-0.13	0.13	1.40	51	0.57	38	89	52	0	6	1	0
WI MADISON	40	20	51	8	30	10	0.08	-0.22	0.08	1.92	58	0.79	48	86	59	0	7	1	0
WI MILWAUKEE	39	21	50	12	30	7	0.00	-0.41	0.00	2.34	51	1.48	62	81	58	0	7	0	0
WI CASPER	39	17	45	9	28	3	0.11	-0.02	0.07	0.28	20	0.15	20	66	41	0	7	2	0
WI CHEYENNE	41	18	50	12	29	2	0.13	0.05	0.12	0.43	42	0.30	54	60	25	0	7	2	0
WI LANDER	35	10	44	1	22	-1	0.00	-0.09	0.00	0.45	36	0.28	44	76	56	0	7	0	0
WI SHERIDAN	42	19	58	9	31	6	0.08	-0.06	0.08	0.29	18	0.25	26	72	48	0	7	1	0

Based on 1971-2000 normals

*** Not Available

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

January Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Precipitation slackened across the Northwest during January, leaving in doubt the region's recovery from the drought of 2001-01, despite a 6-week parade of major storm systems in November and December. Farther south, a late-January storm system delivered the month's only significant precipitation in the southern Rockies. The same storm crossed the central and southern Plains and parts of the Corn Belt on January 30-31, providing much-needed moisture for the Plains' winter wheat crop and recharging soil moisture in parts of the Midwest, but causing serious travel and electrical disruptions due to heavy ice accumulations. The cold air that helped to fuel the late-month storm also left the northern High Plains' drought-stressed, wind-battered winter wheat crop exposed to temperatures as low as -20 degrees F. A patchy snow cover, with depths generally 2 inches or less, provided little insulation for the northern Plains' wheat. Ironically, the late-month cold outbreak quieted winds across the northern High Plains, where chinook (downslope) winds frequently gusted higher than 40 mph—and occasionally higher than 70 mph—during the first 25 days of January.

Cool air also spilled into California, bringing several minor to moderate freezes in mid to late January and holding monthly temperatures as much as 4°F below normal. On the coldest mornings—January 23 and 24—low temperatures generally ranged from 24 to 30 degrees F in the San Joaquin Valley's citrus areas, accelerating orange harvesting in local cold spots, necessitating freeze-protections measures in some groves, and slowing winter grain development, but providing beneficial "chill hours" for fruit and nut trees. Cold air also briefly spread into winter agricultural areas of the Southwest. Farther east, heavy precipitation was confined to inland portions of the South, including areas from the Delta to the southern Appalachians. While the rain and snow aided previously drought-stressed pastures and winter grains in the southern Atlantic region, lowland flooding returned to the lower Mississippi Valley and adjacent areas. Following some early-month snowfall (mostly January 2-3), nearly all of the South's heavy rain fell from January 18-25. Farther north, record-setting warmth returned to areas from the Midwest into the Northeast, following briefly colder weather in late December and early January. Corn Belt monthly temperatures ranged from 8 to 16 degrees F above normal, capping the warmest November-January period on record in several locations.

During the first few days of the new year, cold air remained in place across the South and East. Minor freezes reached areas as far south as Deep South Texas on January 3 and central Florida on several occasions during the first 10 days of the month. On January 3, lows of 9°F in Oklahoma City, OK, and 30°F in Brownsville, TX, were the stations' lowest readings since January 1997. A day later, Baton Rouge, LA, registered 18°F, their lowest temperature since the mercury dipped to 15°F on February 5, 1996. Although southern Florida escaped the freezes, central Florida noted its coldest morning on January 9, when temperatures generally ranged from 24 to 34°F. Although Florida's northern citrus areas escaped freeze damage (temperatures below 28°F for 4 or more hours were confined to isolated locations), some winter ground crops required freeze protection. Farther west, the harvest of southern Louisiana's sugarcane crop was virtually complete, making the primary agricultural concern the possible effect of cold weather on young sugarcane stands (mostly under 3 feet tall).

On New Year's Day, snow developed across portions of Louisiana and southern Mississippi, accumulating as much as 4 inches between Columbia and Hattiesburg, MS. Snow continued into January 3 across the Southeast, totaling 4.6 inches in Atlanta, GA

(their highest 24-hour snowfall since 5.0 inches fell on January 18, 1992), 5.0 inches in Columbia, SC, 7.7 inches in Richmond, VA, and 10.8 inches in Raleigh-Durham, NC. Storm-total snowfall reached 14 inches at a few locations in the North Carolina piedmont.

Although the month began on a chilly note across the Plains and Midwest, mild, breezy weather quickly returned. On January 8, the high of 61°F in Miami, FL, was lower than monthly record-setting highs in locations such as McCook, NE (75°F), and Bismarck, ND (63°F). Monthly record warmth returned to the Plains and Midwest on January 25-26, expanding into the East from January 29-31. On the 26th, McCook (77°F) again established a January-record high, while Waterloo, IA (65°F), surpassed a monthly record that had remained on the books since a high of 61°F on January 1, 1897. Sioux Falls, SD (63°F on the 26th), posted a January high temperature of 60°F or higher for the first time since January 24, 1981. Eventually, temperatures also rebounded in Miami and elsewhere across the South. In fact, Miami closed the month with high temperatures at or above 80°F on 15 days in a row, eclipsing their January 1989 record of 12 consecutive days. With a maximum temperature of 81°F on the 30th, Little Rock, AR, achieved a January high of at least 80°F for the first time since January 27, 1975. Elsewhere in the East, more than a dozen locations logged January-record highs during the last 3 days of the month, including Richmond, VA (81°F on the 30th), and Tampa, FL (86°F on the 31st).

For the first time on record, LaCrosse, WI, did not experience a cold-season temperature below 0°F through January. The previous latest date of their first sub-zero temperature was January 29, established during the winter of 1931-32. In addition, LaCrosse noted 5 days with high temperatures at or above 50°F (January 9, 22, and 25-27), breaking their January 1880 record of 3 days. Not surprisingly, LaCrosse was one of several locations reporting November-January record warmth, with a 3-month average temperature of 35.1°F (10.7°F above normal). LaCrosse's previous November-January record was 33.7°F, set in 1877-78. Farther east, Portland, ME, registered a record-high January average temperature of 30.4°F (8.7°F above normal), completing their warmest December-January period on record (32.6°F, or 9.0°F above normal). Portland's December-January average demolished their 1957-58 record of 29.6°F. A casualty of the warmth was the late-December snowfall across the Great Lakes region. In New York, for example, Buffalo's record-setting 44-inch snow depth on December 28 quickly melted to a trace by January 27.

With the exception of the early-January Southern storm, snow was also light and infrequent farther south and west until month's end. With a 1.4-inch snowfall on January 16, Moline, IL, had their latest first 1-inch snowfall since the winter of 1943-44, when 5.5 inches fell on February 11. In Kansas, Wichita's first snow flakes of the season were observed on January 2, just shy of the city's record set on January 4, 1904. Farther east, locations such as Philadelphia, PA, and Washington, DC, received a trace of snow on January 6, the stations' latest first snow flakes on record. Previous records had been set in Philadelphia on December 27, 1990, and in Washington on December 25, 1894. Farther north, snowfall was infrequent but occasionally heavy. One of northern New England's most significant storm systems struck on January 13-14, depositing 7.3 inches in Caribou, ME, and as much as 20 inches in Maine's Aroostook and Penobscot Counties. Farther south, most of the interior South's rain, including more than 95 percent of the 8.06-inch monthly total in Knoxville, TN, fell in little more than a week from January 18-25. On January 19 in Georgia, Atlanta's 1.87-inch rainfall represented their highest 1-day total since 2.86 inches fell on June 1, 2001.

In contrast to wet weather across the interior South, dry weather prevailed across the Deep South. For example, rainfall in Key West, FL, totaled only 0.09 inch (4 percent of normal), their driest January since only a trace fell in 1990. Similarly, 0.01 inch (2 percent of normal) dampened Del Rio, TX, their lowest January total since a trace in 1996. Meanwhile, drought remained a serious concern in most areas from the Appalachians eastward. The Delaware River Basin storage area, which provides approximately half of New York City's water supply, gained 6.7 billion gallons of water during January. However, the gain failed to achieve the rate of the normal recharge that typically takes place between December and April, causing the basin's water supply to fall from 37 to 36 percent of normal during the month, despite a January increase from 26 to 28 percent of capacity.

On January 30-31, storm-total snowfall topped 10 inches in a band from southeastern Nebraska to northern Illinois, including 13.5 inches in Grand Island, NE, 12.7 inches in Burlington, IA, and 12.0 inches in Chicago, IL. Grand Island's 10.6-inch total on the 31st represented their greatest calendar-day total in January in 90 years. Just south of the heavy snow, freezing rain glazed trees and power lines from northern Texas and Oklahoma into the Northeast. Locations that received mostly freezing rain during the prolonged (January 29-31) icing event included Oklahoma City, OK (2.23 inches), and Pleasant Hill, MO (2.32 inches).

Until 0.65 inch of precipitation (6.2 inches of snow) fell in Dodge City, KS, on January 30-31, a long-running dry spell featured just 0.25 inch (6 percent of normal) in 132 days from September 20, 2001 - January 29, 2002. Meanwhile on the northern High Plains, winter wheat remained severely stressed by dry soils, high winds, a lack of snow cover, and a late-month cold outbreak. In the northwestern portion of Montana's winter wheat belt, Cut Bank reported peak gusts of 70 mph on the 7th, 72 mph on the 8th, and 71 mph on the 24th, and endured gusts above 40 mph on 13 of the first 24 days of January. Although winds briefly subsided during the last week of January, Cut Bank posted low temperatures of -21°F on the 27th and 28th.

Bakersfield, CA, noted 10 days during January with low temperatures at or below 32°F, all of them after January 15. Bakersfield's lowest reading was 26°F on January 24. Farther inland, daily-record lows on January 30 included -37°F in Randolph, UT, and -27°F in Wells, NV. Some low-elevation snowfall accompanied the West's chill, resulting in the first snowfall (a trace on January 28) in Sacramento, CA, since February 27, 1996. Farther south, Tucson, AZ, received 0.6 inch on January 30, their first measurable snowfall since 0.3 inch fell on March 16, 1991. Prior to the snow's arrival, Tucson registered a minimum of 25°F on January 24, their lowest reading since December 4, 1999 (also 25°F). Only light precipitation accompanied the cool weather in California and adjacent areas. As a result, the water equivalent of the Sierra Nevada snow pack increased only 2 inches during January, reaching 19 inches (107 percent of normal) by month's end, according to California's Department of Water Resources.

In Hawaii, a late-month "kona" storm produced soaking rainfall, causing localized flash flooding but capping an otherwise favorably wet month. On Kauai, nearly half (2.50 inches) of Lihue's monthly rainfall (5.26 inches, or 115 percent of normal), fell on January 29. Hilo, on the Big Island, netted 12.20 inches on the 29th, surpassing their calendar-day record for January (previously 9.51 inches on January 19, 1990). The highest January 29 total on the Big Island was 17.46 inches at Pahala. For the month, Hilo received 26.95 inches (277 percent of normal), while elsewhere on the Big Island, Glenwood recorded 32.56 inches (176 percent). Meanwhile in Alaska, monthly temperatures ranged from as much as 4°F below normal in the northern and western fringes of the State to more than

10°F above normal across much of the interior. The mildest Alaskan weather appeared at midmonth, followed by a return to more typical mid-winter conditions. For example, temperatures in McGrath, AK, fell from a high of 38°F on January 17 to a low of -43°F on January 25. Precipitation was widespread and occasionally heavy across southern and western Alaska, including 12.43 inches (152 percent of normal) in Kodiak and 2.16 inches (296 percent)—melted down from 37.0 inches of snow—in McGrath. Kodiak netted at least 1 inch of rain on 4 days (January 4, 5, 8, and 17), with a maximum daily total of 1.80 inches on the 5th. All of McGrath's snow fell during two periods: generally light accumulations (measurable snow fell on 18 of 20 days) from January 2-21 totaling 22.6 inches, and heavier snow (14.4 inches) from January 26-29.

Fieldwork

Weather summary provided by USDA/NASS

The year began with a winter storm that brought well-below-normal temperatures and a mixture of wintry precipitation to the southern Great Plains, lower Mississippi Valley, and Southeast. However, temperatures quickly rebounded and abnormally warm weather prevailed from the Rocky Mountains to the Atlantic Coast during the remainder of the month. Many areas recorded new record daytime highs, and parts of the Corn Belt and Great Lakes region experienced their warmest January ever. In the Southwest and Pacific Northwest, abnormally warm weather prevailed early in the month, but temperatures averaged well below normal after midmonth. Below-normal precipitation extended drought conditions along parts of the Atlantic Coastal Plain and large portions of the Great Plains. In the Pacific Northwest, storms frequently produced heavy rain along the coast and large snow accumulations in the Cascade and Sierra mountains.

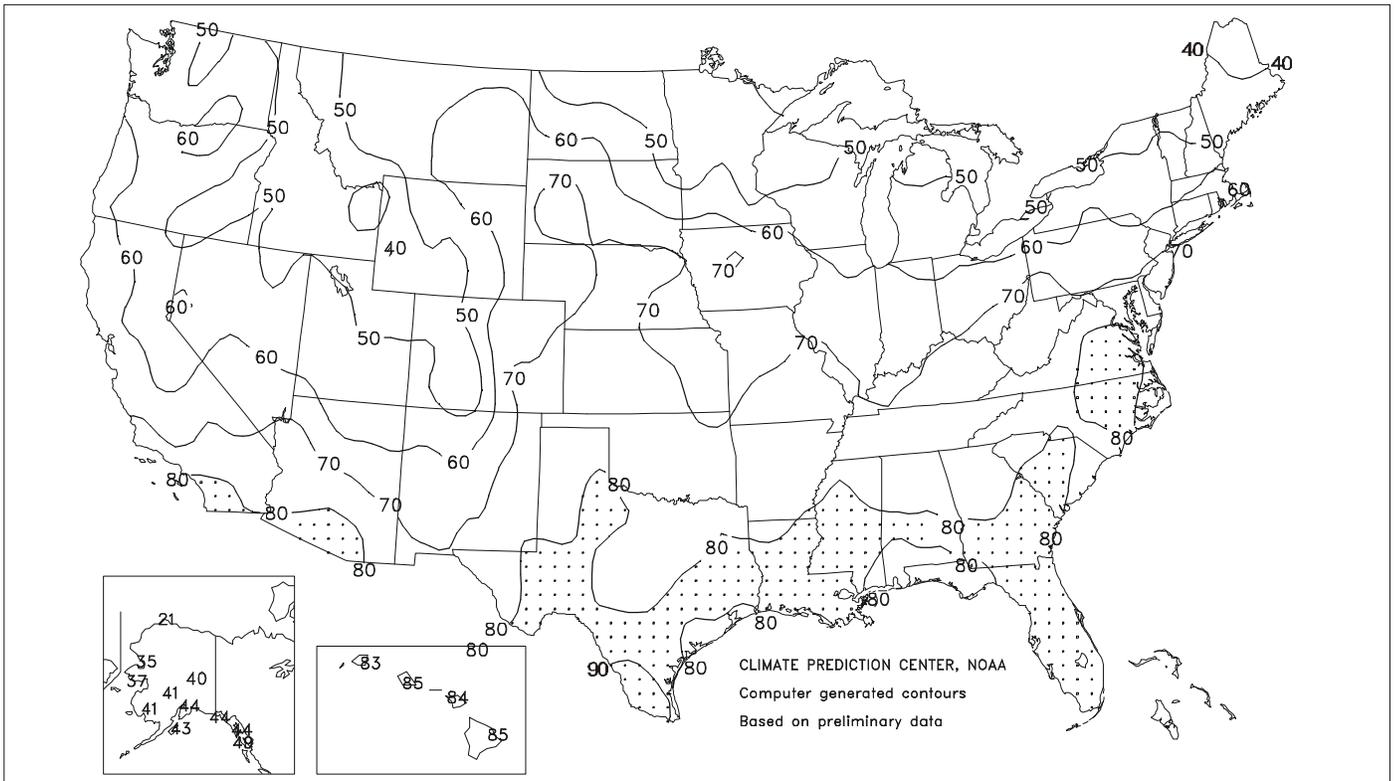
Temperatures averaged above normal in the northern Great Plains, but winter wheat remained dormant, despite periods of record warmth across the region. Heaving and winter kill were virtually non-existent most of the month, although fields were exposed and vulnerable to wind-blown soil and a late-month period of bitterly cold weather. In parts of the southern Great Plains, lower Mississippi Valley, and Southeast, abnormally warm weather stimulated growth of winter grains and forages most of the month. In Texas, dry weather supported fieldwork but limited the response of winter grains and forage crops to favorable temperatures.

Sub-freezing temperatures penetrated into the Southeast early in the month, providing beneficial chill hours for fruit trees approaching the upcoming bloom period. The cold weather briefly halted growth of winter grains and forages, but sub-freezing temperatures were not sustained long enough to damage the citrus crop. However, citrus trees experienced minor foliage burn, and in the coldest areas, some new leafy growth was lost. In southern areas of the Florida peninsula, the sugarcane harvest and work in vegetable fields continued with little delay.

In California, above-normal temperatures, supported by ample moisture supplies, stimulated development of winter crops during the first half of the month. However, temperatures averaged well below normal throughout the Southwest after midmonth. The cold weather slowed growth of winter crops, but nighttime temperatures did not remain below freezing long enough to seriously damage citrus trees and unharvested fruit. Vegetable growers ran irrigation systems to protect delicate leafy crops from sub-freezing overnight lows, and citrus growers ran irrigation systems and wind machines to protect fruit from frost damage. Nevertheless, ice marks and slight freeze damage showed in some citrus varieties.

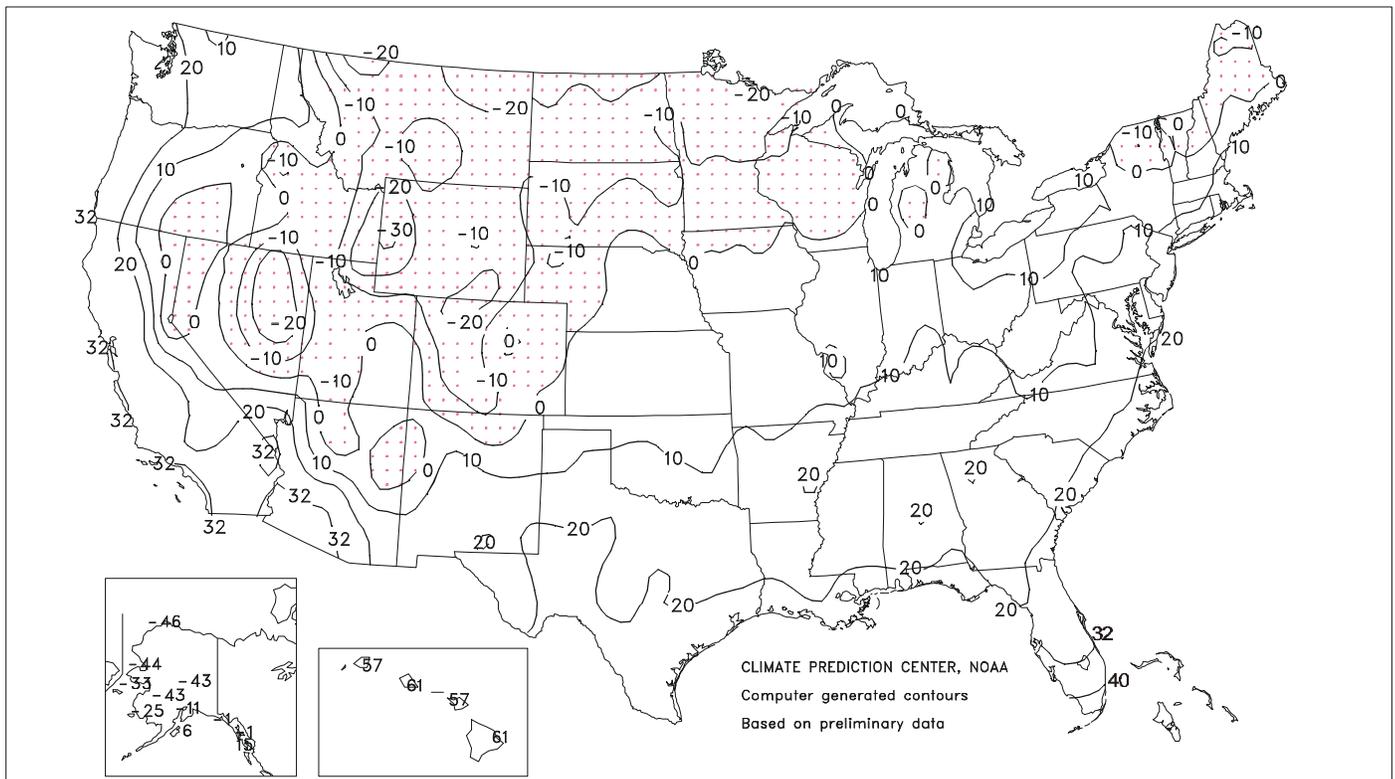
Extreme Maximum Temperature (°F)

January 2002



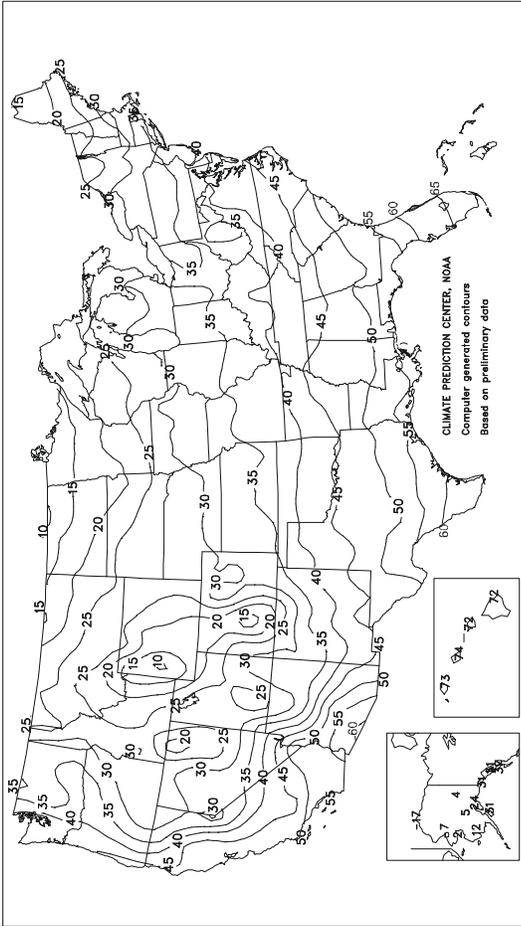
Extreme Minimum Temperature (°F)

January 2002



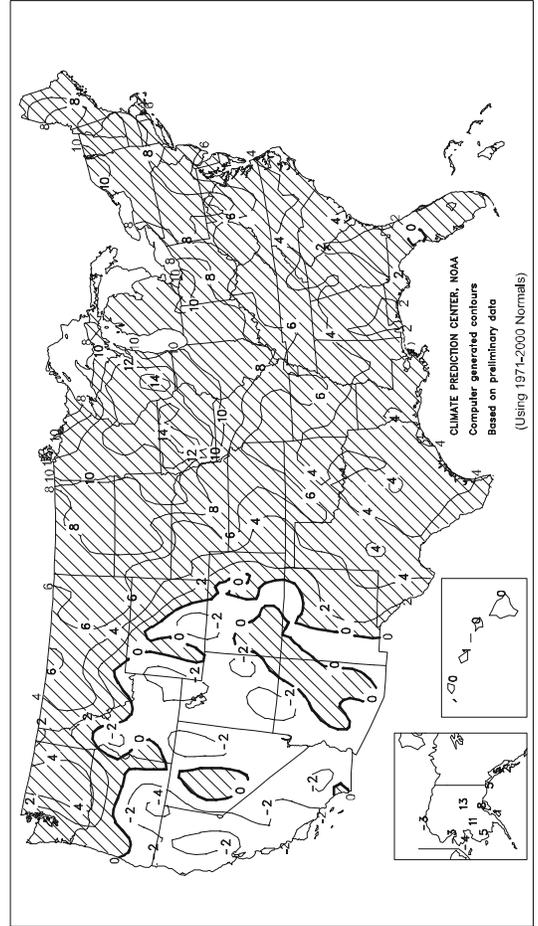
Average Temperature (°F)

January 2002



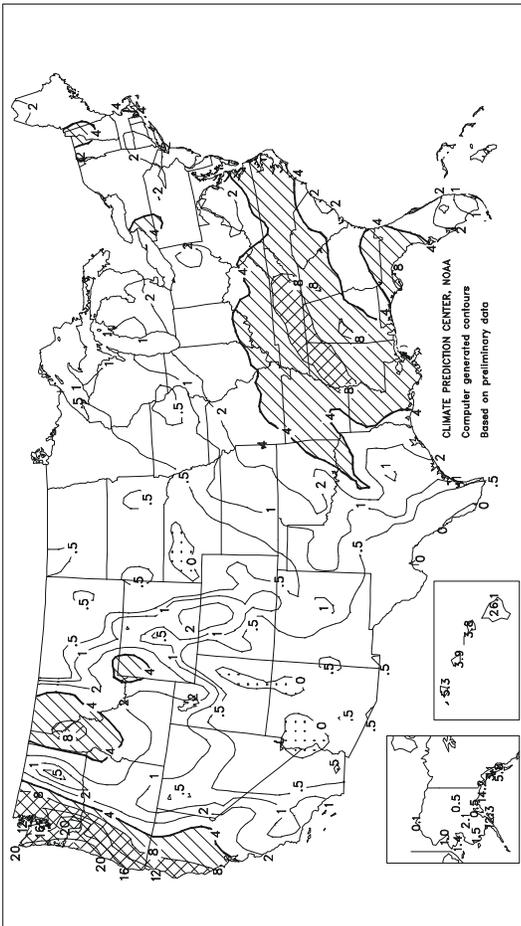
Departure of Average Temperature from Normal (°F)

January 2002



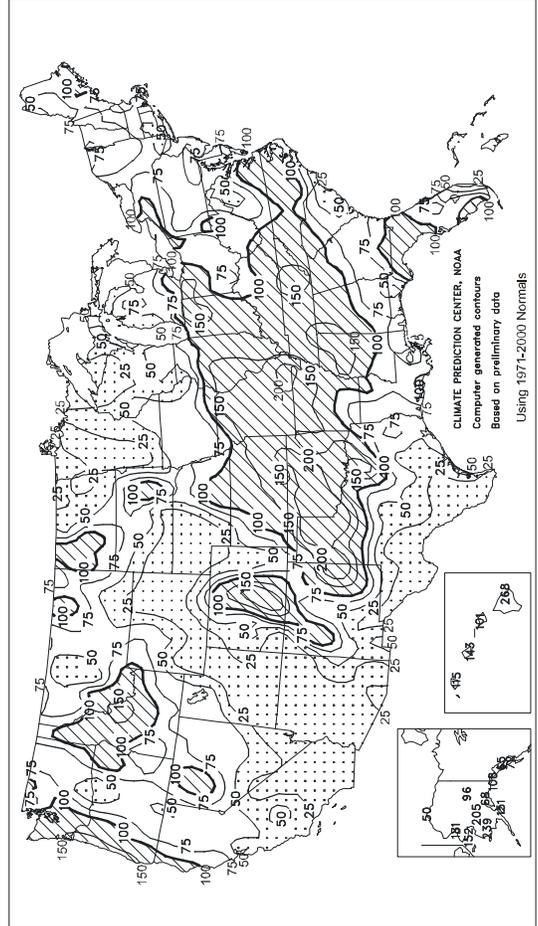
Total Precipitation (inches)

January 2002



Percent Of Normal Precipitation

January 2002



TEMPERATURE AND PRECIPITATION SUMMARY

January 2002

STATES AND STATIONS	TEMP, EF		PRECIP.		STATES AND STATIONS	TEMP, EF		PRECIP.		STATES AND STATIONS	TEMP, EF		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	47	4	6.02	0.57	LEXINGTON	38	6	2.40	-0.94	COLUMBUS	36	8	1.93	-0.60
HUNTSVILLE	44	4	4.98	-0.54	LONDON-CORBIN	38	4	5.18	1.17	DAYTON	35	9	1.54	-1.06
MOBILE	53	3	3.50	-2.25	LOUISVILLE	41	8	4.13	0.85	MANSFIELD	33	9	2.15	-0.48
MONTGOMERY	49	2	2.83	-2.21	PADUCAH	40	7	4.42	0.95	TOLEDO	35	11	2.68	0.75
AK ANCHORAGE	24	8	0.47	-0.21	LA BATON ROUGE	53	3	4.29	-1.90	YOUNGSTOWN	33	8	2.44	0.10
BARROW	-17	-3	0.08	-0.04	LAKE CHARLES	54	3	3.31	-2.21	OK OKLAHOMA CITY	40	3	2.64	1.36
COLD BAY	31	3	6.26	3.18	NEW ORLEANS	55	2	3.31	-2.56	TULSA	40	4	2.68	1.08
FAIRBANKS	4	14	0.55	-0.01	SHREVEPORT	49	3	2.40	-2.20	OR ASTORIA	43	1	14.65	5.03
JUNEAU	31	5	3.13	-1.68	ME BANGOR	22	4	3.35	0.01	BURNS	23	-1	0.88	-0.30
KING SALMON	24	9	2.40	1.37	CARIBOU	15	5	1.73	-1.24	EUGENE	42	2	7.84	0.19
KODIAK	31	1	12.34	4.17	PORTLAND	30	8	2.99	-1.10	MEDFORD	40	1	1.57	-0.90
NOME	2	-4	1.42	0.50	MD BALTIMORE	39	7	2.20	-1.27	PENDELTON	37	3	0.59	-0.86
AZ FLAGSTAFF	31	1	0.02	-2.16	MA BOSTON	37	8	3.15	-0.77	PORTLAND	41	1	6.22	1.15
PHOENIX	56	2	0.04	-0.79	WORCESTER	32	8	2.47	-1.60	SALEM	41	1	8.95	3.11
TUCSON	52	0	0.35	-0.64	MI ALPENA	26	8	0.39	-1.37	PA ALLENTOWN	34	7	1.46	-2.04
AR FORT SMITH	41	3	3.78	1.41	DETROIT	33	9	3.35	1.44	ERIE	34	7	3.54	1.01
CA BAKERSFIELD	45	-3	0.52	-0.66	FLINT	31	10	1.38	-0.19	MIDDLETOWN	36	7	2.45	-0.39
EUREKA	45	-3	6.81	0.84	GRAND RAPIDS	30	8	1.10	-0.93	PHILADELPHIA	39	7	2.44	-1.08
FRESNO	45	-1	0.75	-1.41	HOUGHTON LAKE	26	8	2.20	0.59	PITTSBURGH	35	7	1.77	-0.93
LOS ANGELES	56	-1	0.75	-2.23	LANSING	31	9	0.98	-0.63	WILKES-BARRE	33	7	1.69	-0.77
REDDING	45	-1	3.37	-3.13	MUSKEGON	33	9	0.63	-1.59	WILLIAMSPORT	33	7	1.66	-1.19
SACRAMENTO	45	-1	2.24	-1.60	TRAVERSE CITY	28	7	0.68	-2.30	PR SAN JUAN	78	1	3.35	0.33
SAN DIEGO	56	-2	0.31	-1.97	MN DULUTH	18	10	0.39	-0.73	RI PROVIDENCE	35	6	2.80	-1.57
SAN FRANCISCO	49	0	1.46	-2.99	INT'L FALLS	12	9	0.08	-0.76	SC CHARLESTON	51	3	2.44	-1.64
STOCKTON	44	-2	1.63	-1.08	MINNEAPOLIS	25	12	0.47	-0.57	COLUMBIA	48	3	2.48	-2.18
CO ALAMOSA	17	2	0.50	0.25	ROCHESTER	24	12	0.67	-0.27	FLORENCE	48	3	1.65	-2.44
CO SPRINGS	30	2	0.25	-0.03	ST. CLOUD	21	12	0.28	-0.48	GREENVILLE	44	3	4.84	0.43
DENVER	30	2	0.21	-0.02	MS JACKSON	49	4	5.59	-0.08	MYRTLE BEACH	49	3	0.81	-2.85
GRAND JUNCTION	28	2	0.24	-0.36	MERIDIAN	49	3	5.94	0.02	SD ABERDEEN	20	9	0.27	-0.21
PUEBLO	30	1	0.43	0.10	TUPELO	46	6	7.83	2.69	HURON	24	10	0.83	0.35
CT BRIDGEPORT	36	6	1.82	-1.91	MO COLUMBIA	35	7	2.60	0.87	RAPID CITY	28	6	0.04	-0.33
HARTFORD	34	8	1.26	-2.58	JOPLIN	38	5	3.09	1.25	SIoux FALLS	25	11	0.16	-0.35
DC WASHINGTON	42	7	1.34	-1.87	KANSAS CITY	34	7	1.65	0.50	TN BRISTOL	38	4	4.31	0.79
DE WILMINGTON	38	7	2.72	-0.71	SPRINGFIELD	35	3	3.46	1.35	CHATTANOOGA	44	5	5.43	0.03
FL DAYTONA BEACH	60	2	2.01	-1.12	ST JOSEPH	32	6	0.78	-0.10	JACKSON	42	4	6.20	1.87
FT LAUDERDALE	69	2	0.46	-2.48	ST LOUIS	38	8	3.15	1.01	KNOXVILLE	41	3	8.07	3.50
FT MYERS	65	0	2.04	-0.19	MT BILLINGS	28	4	0.35	-0.46	MEMPHIS	46	6	4.03	-0.21
JACKSONVILLE	55	2	4.49	0.80	BUTTE	20	2	0.27	-0.26	NASHVILLE	42	5	4.92	0.95
KEY WEST	71	1	0.08	-2.14	GLASGOW	18	7	0.39	0.04	TX ABILENE	48	4	0.47	-0.50
MELBOURNE	63	2	2.05	-0.43	GREAT FALLS	27	5	0.31	-0.37	AMARILLO	40	4	1.18	0.55
MIAMI	70	2	0.24	-1.64	HELENA	30	10	0.04	-0.48	AUSTIN	51	1	1.69	-0.20
ORLANDO	61	0	1.10	-1.33	KALISPELL	26	5	0.65	-0.82	BEAUMONT	55	3	3.42	-2.27
PENSACOLA	53	1	4.06	-1.28	MILES CITY	26	9	0.17	-0.33	BROWNSVILLE	64	4	0.08	-1.28
ST PETERSBURG	62	0	2.36	-0.40	MISSOULA	28	4	0.63	-0.43	COLLEGE STATION	52	2	1.60	-1.72
TALLAHASSEE	53	1	6.22	0.86	NE GRAND ISLAND	30	8	0.71	0.17	CORPUS CHRISTI	60	4	0.31	-1.31
TAMPA	63	2	2.48	0.21	HASTINGS	31	7	0.74	0.19	DALLAS/FT WORTH	48	4	4.92	3.02
WEST PALM BEACH	67	1	0.47	-3.28	LINCOLN	30	8	0.64	-0.03	DEL RIO	55	4	0.02	-0.55
GA ATHENS	46	4	4.51	-0.18	MCCOOK	34	8	0.18	-0.32	EL PASO	46	1	0.00	-0.45
ATLANTA	47	4	5.35	0.33	NORFOLK	29	9	0.35	-0.22	GALVESTON	56	0	2.20	-1.88
AUGUSTA	47	2	2.64	-1.86	NORTH PLATTE	27	4	0.08	-0.31	HOUSTON	55	3	1.26	-2.42
COLUMBUS	50	3	3.16	-1.62	OMAHA/EPPLEY	30	8	0.37	-0.40	LUBBOCK	42	4	0.63	0.13
MACON	49	3	2.95	-2.05	SCOTTSBLUFF	29	5	0.05	-0.49	MIDLAND	46	3	0.08	-0.45
SAVANNAH	52	3	2.40	-1.55	VALENTINE	27	6	0.01	-0.29	SAN ANGELO	49	4	0.31	-0.50
HI HILO	72	1	26.14	16.40	NV ELKO	24	-2	0.54	-0.60	SAN ANTONIO	54	4	0.35	-1.31
HONOLULU	74	1	3.90	1.17	ELY	24	-1	0.47	-0.27	VICTORIA	57	4	0.55	-1.89
KAHULUI	72	0	3.76	0.02	LAS VEGAS	46	-1	0.00	-0.59	WACO	49	3	0.98	-0.92
LIHUE	73	1	5.28	0.69	RENO	35	1	0.59	-0.47	WICHITA FALLS	46	6	1.18	0.06
ID BOISE	32	2	0.94	-0.45	WINNEMUCCA	31	1	0.83	0.00	UT SALT LAKE CITY	26	-3	1.18	-0.19
LEWISTON	37	3	0.81	-0.33	NH CONCORD	29	9	2.01	-0.96	VT BURLINGTON	27	9	1.34	-0.88
POCATELLO	23	-1	0.71	-0.43	NJ ATLANTIC CITY	38	6	2.09	-1.51	VA LYNCHBURG	39	4	2.33	-1.21
IL CHICAGO/O'HARE	32	10	1.22	-0.53	NY ALBANY	39	8	1.81	-2.17	NORFOLK	44	4	4.21	0.28
MOLINE	32	11	0.91	-0.67	NM ALBUQUERQUE	37	1	0.35	-0.14	RICHMOND	42	6	3.58	0.03
PEORIA	33	11	2.80	1.30	NY BINGHAMTON	30	8	2.17	-0.41	ROANOKE	42	6	1.73	-1.50
ROCKFORD	30	11	0.61	-0.80	BUFFALO	31	7	3.54	0.38	WASH/DULLES	39	7	1.23	-1.82
SPRINGFIELD	34	9	2.44	0.82	ROCHESTER	33	9	2.91	0.57	WA OLYMPIA	39	1	11.46	3.92
IN EVANSVILLE	38	7	3.70	0.79	SYRACUSE	33	10	2.13	-0.47	QUILLAYUTE	41	0	15.35	1.70
FORT WAYNE	34	10	2.60	0.55	NC ASHEVILLE	42	6	3.66	-0.40	SEATTLE-TACOMA	41	0	6.50	1.37
INDIANAPOLIS	35	9	2.48	0.00	CHARLOTTE	43	1	4.69	0.69	SPOKANE	31	4	1.14	-0.68
SOUTH BEND	33	10	2.48	0.21	GREENSBORO	41	3	3.31	-0.23	YAKIMA	35	6	0.31	-0.86
IA BURLINGTON	33	10	1.46	0.15	HATTERAS	49	3	7.10	1.26	WV BECKLEY	36	6	2.24	-0.99
CEDAR RAPIDS	30	12	0.56	-0.49	RALEIGH	43	3	5.98	1.96	CHARLESTON	38	5	3.15	-0.10
DES MOINES	31	11	0.35	-0.68	WILMINGTON	49	3	1.82	-2.70	ELKINS	34	5	3.42	-0.01
DUBUQUE	29	12	0.37	-0.91	ND BISMARCK	19	9	0.31	-0.14	HUNTINGTON	38	5	2.68	-0.53
SIoux CITY	28	9	0.43	-0.16	DICKINSON	22	8	0.30	-0.07	WI EAU CLAIRE	24	12	0.59	-0.45
WATERLOO	30	14	0.50	-0.34	FARGO	17	10	0.20	-0.56	GREEN BAY	26	10	0.59	-0.62
KS CONCORDIA	34	7	0.63	-0.03	GRAND FORKS	14	9	0.06	-0.62	LA CROSSE	28	12	0.44	-0.75
DODGE CITY	34	4	0.67	0.05	JAMESTOWN	18	9	0.20	-0.42	MADISON	28	11	0.63	-0.62
GOODLAND	32	4	0.24	-0.19	MINOT	17	7	0.24	-0.41	MILWAUKEE	31	10	1.46	-0.39
HILL CITY	32	6	0.40	-0.07	WILLISTON	17	9	0.71	0.17	WAUSAU	25	12	0.48	-0.61
TOPEKA	35	8	1.50	0.55	OH AKRON-CANTON	33	8	1.97	-0.52	CASPER	24	2	0.04	-0.54
WICHITA	36	6	1.10	0.26	CINCINNATI	37	7	2.32	-0.60	CHEYENNE	28	2	0.16	-0.29
KY JACKSON	40	6	4.09	0.53	CLEVELAND	35	9	2.21	-0.27	LANDER	22	2	0.28	-0.24
									SHERIDAN	26	5	0.16	-0.61	

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

February 4 - 10, 2002

Weekly National Agricultural Summary provided by USDA/NASS

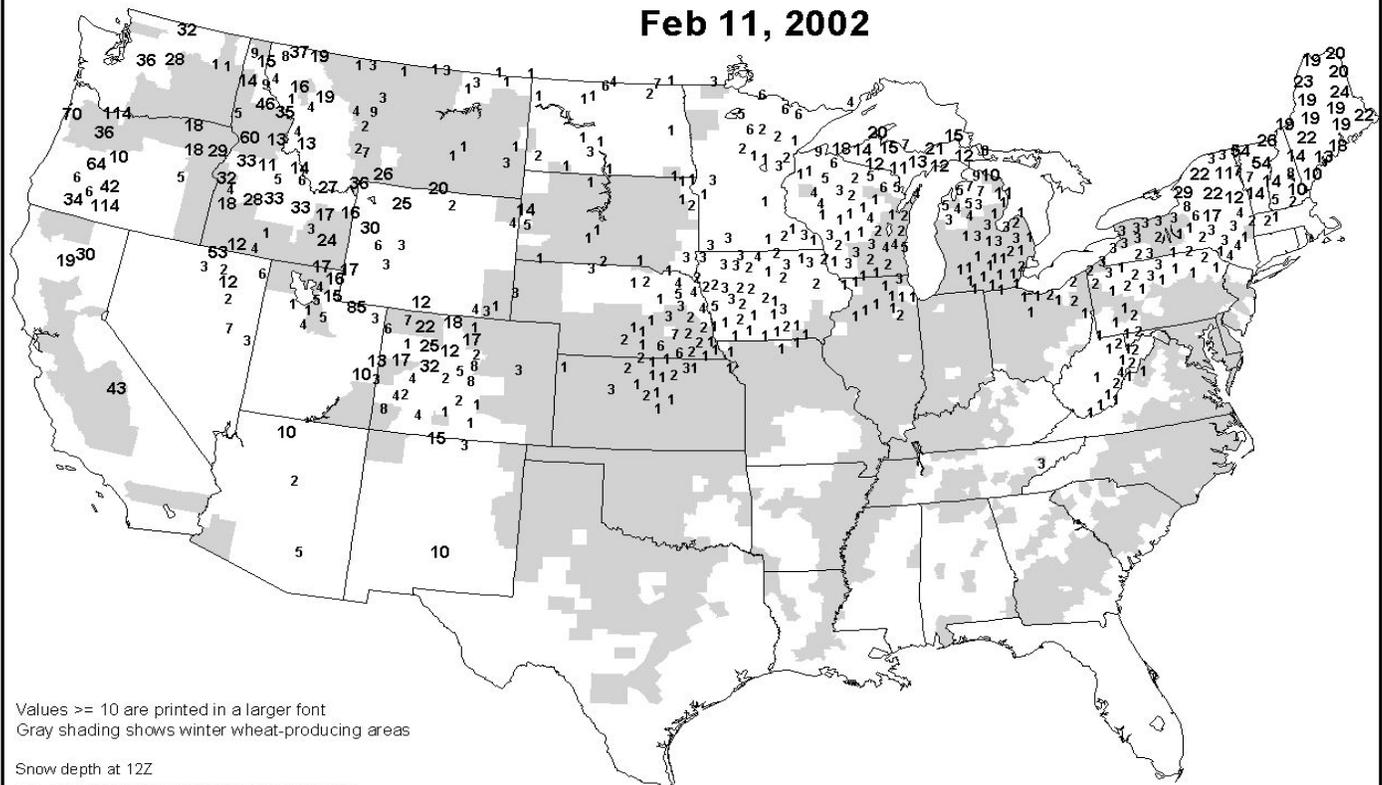
HIGHLIGHTS

Soil moisture shortages in the southern Great Plains and Southeast were reduced by a storm system that tracked eastward across Texas, through the lower Mississippi Valley, and into the Atlantic Coastal Plain. The heaviest precipitation was centered over Georgia and provided a much-needed boost to moisture reserves. Other parts of the Southeast and Atlantic Coastal Plain received substantial precipitation, but long-term soil moisture supplies remained low. Winter grains and forages throughout the South benefited from the widespread precipitation, but cooler-than-normal weather limited growth. Field and orchard work continued with few delays in Florida, and the cold nighttime

temperatures provided beneficial chill hours for dormant fruit trees throughout the Southeast. Elsewhere, unseasonably warm weather continued across most of the Corn Belt and central and northern Great Plains. Light precipitation, mostly in the form of snow, added to the already adequate soil moisture supplies across the Corn Belt, but dry weather contributed to increasing moisture shortages in the central and northern Great Plains. The seasonal storm track resumed after a brief lull in the Pacific Northwest, raising coastal reservoir levels and adding to the mountain snowpack accumulations. In California, dry weather supported field and orchard work, but cold nighttime temperatures slowed growth of winter

Snow Depth (Inches)

Feb 11, 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

February 5 ENSO Update

Outlook

Based on the observed oceanic and atmospheric circulation patterns and their recent evolution, and the time of year, it seems most likely that warm episode (El Niño) conditions will develop in the tropical Pacific during the next 3 months.

Discussion

The evolution towards a warm episode in the tropical Pacific continued during January 2002. By late January equatorial SST anomalies exceeding +1°C were observed in the vicinity of the date line from 170° E to 160° W (Fig. 1). Warmer-than-normal subsurface waters continued to expand eastward beyond the date line during the month (Fig. 2).

In recent months many tropical Pacific atmospheric and oceanic variables have been influenced by intraseasonal (30-60 day) fluctuations associated with the Madden-Julian Oscillation (MJO). Alternating periods of low-level easterly and westerly wind anomalies over the western and central Pacific have been consistent with this activity. December 2001 featured significant low-level westerly anomalies over the western and central equatorial Pacific. This activity generated a strong eastward propagating oceanic Kelvin wave that contributed to a deepening of the oceanic thermocline and warming of the sea-surface temperatures in the vicinity of the date line during January. Due to the ongoing Kelvin wave, an increase in subsurface temperature anomalies and SST anomalies is occurring in the eastern tropical Pacific. Localized warming of SSTs is expected along the coasts of Ecuador and Peru with the arrival of the ongoing Kelvin wave. It is important to note that this warming represents the early stages of El Niño development and that mature El Niño conditions will take several months to develop.

Strong MJO activity observed over the Indian Ocean and west Pacific during late January may contribute to another period of westerly low-level wind anomalies over the central and western equatorial Pacific during February. This may be the impetus for additional Kelvin wave activity that could arrive in the eastern equatorial Pacific by late March.

The latest statistical and coupled model predictions show a spread from near-normal to moderate warm-episode conditions during the next 3-6 months. All such models have relatively low skill during the transition phases of ENSO. While the majority of the prediction techniques do indicate that a warm episode will develop, there is considerable uncertainty as to its strength.

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

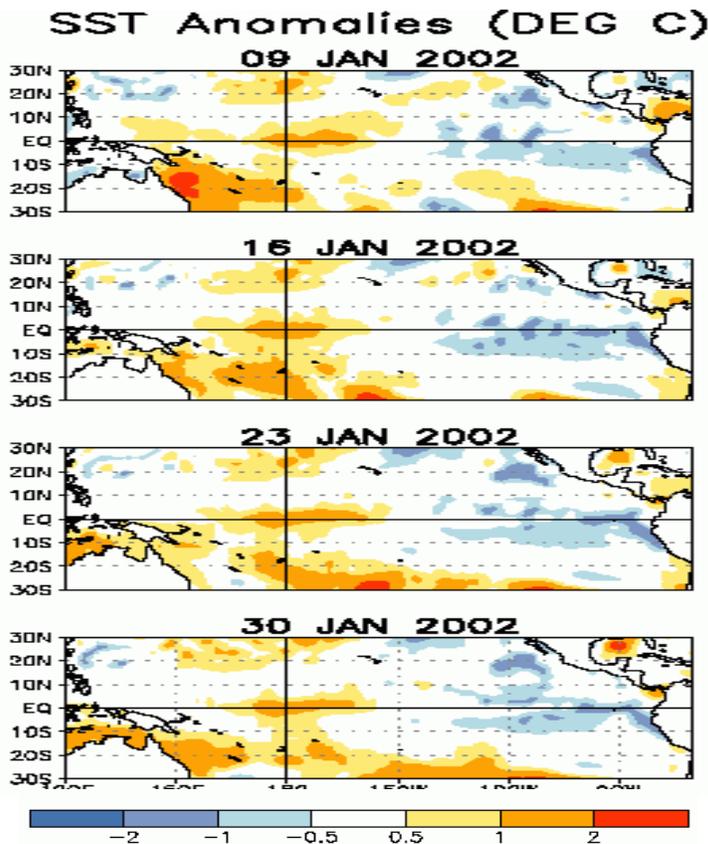


Figure 1. Recent weekly sea surface temperature (SST) anomaly patterns. Departures from average (anomalies) are computed based on the 1971-2000 period means. Units are °C.

Subsurface Temperature Anomalies (°C)

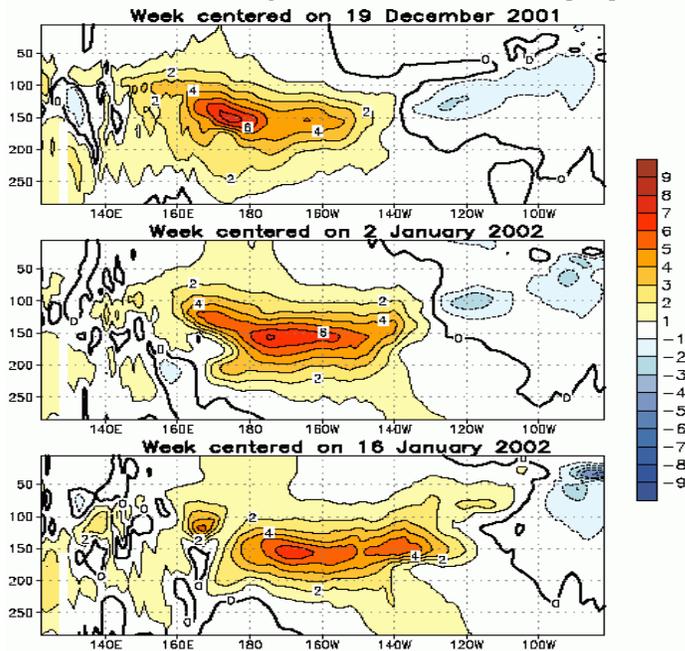


Figure 2. Depth-longitude cross section of anomalous equatorial ocean temperatures (°C) for recent weeks. Contour interval is 1°C. Anomalies are computed based on the 1981-2000 period means.

International Weather and Crop Summary

February 3 - 9, 2002

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

HIGHLIGHTS

EUROPE: Unusually mild weather persisted across the continent, causing winter crops to continue to lose winter hardiness.

FSU-WESTERN: Unseasonably mild weather continued to provide favorable overwintering conditions for winter grains, but caused further melting of protective snow cover.

MIDDLE EAST: Unseasonably warm, dry weather dominated the region, eroding protective snow cover in Turkey and western Iran.

AUSTRALIA: Coastal showers boosted irrigation reserves for sugarcane and cotton, but missed crop areas farthest inland.

NORTHWESTERN AFRICA: Winter grains remained under a high degree of stress due to drought throughout the region.

SOUTH AFRICA: Drier, somewhat warmer weather spurred development of reproductive to filling summer crops.

SOUTHEAST ASIA: Flooding in Java, Indonesia, damaged main-season rice.

EASTERN ASIA: Across the North China Plain, unseasonably warm weather caused wheat to lose winter hardiness, while dryness developed across portions of the Yangtze Valley.

SOUTH AMERICA: Drier weather returned to Rio Grande do Sul, Brazil, but soil moisture remained adequate after previous beneficial rainfall. In central Argentina, soil moisture was overall adequate for summer crop development, but in some areas moisture remained limited.



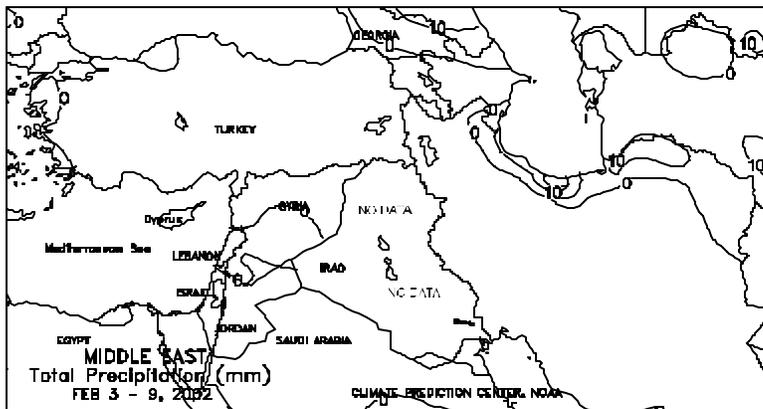
EUROPE

For the third consecutive week, unseasonably mild weather caused dormant winter crops to lose winter hardiness throughout northern and eastern Europe, and encouraged some slow crop development in southwestern Europe. Temperatures averaged 6 to 9 degrees C above normal in north-central and eastern Europe, and 3 to 6 degrees C above normal elsewhere. Widespread precipitation (10-35 mm) fell across England, France, the Benelux countries, Portugal, and northern Spain, maintaining adequate to abundant moisture supplies in northwestern Europe, and boosting reservoir levels in the Iberian peninsula. Similarly, widespread rainfall (10-45 mm) fell across northern Italy for the second time in 3 weeks, further improving moisture supplies after an extended period of dry weather. Farther north, mostly light precipitation (less than 10 mm) fell across northeastern Europe. In contrast, dry weather covered southeastern Europe and southern and eastern Spain, further reducing soil moisture.



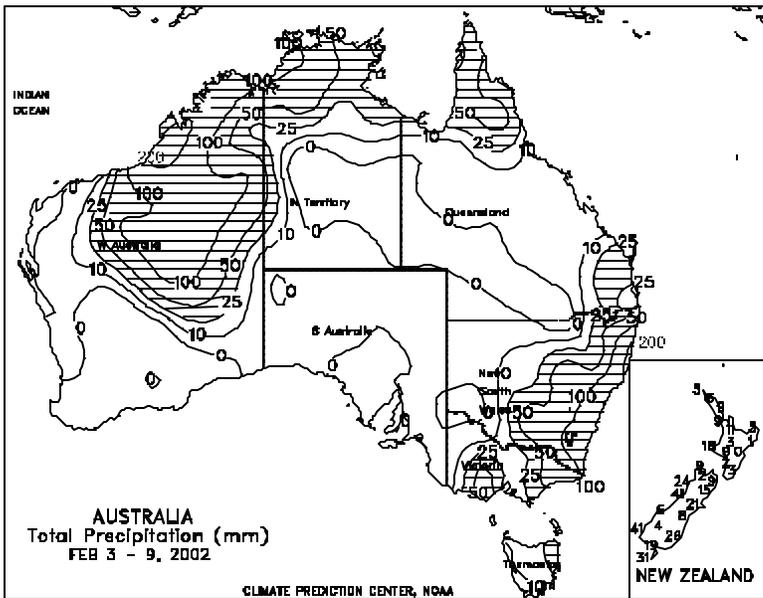
FSU-WESTERN

The fourth consecutive week of unusually mild weather maintained favorable overwintering conditions for winter grains in Russia, Ukraine, Belarus, and the Baltics. Weekly temperatures averaged 4 to 10 degrees C above normal in these areas. Winter grain areas in Ukraine, southern Russia, Belarus, and the Baltics remained snow-free, leaving crops vulnerable to potential extreme cold. Furthermore, although temperatures remained low enough to keep winter grains dormant in these areas, the continued unusually mild weather pattern has likely caused crops to lose some winter hardiness. Elsewhere, a moderate to deep snow cover persisted across winter grain areas of northern Russia. Widespread light precipitation (3-25 mm) fell in most areas during the week. The greatest amounts of precipitation (10-25 mm of liquid equivalent) fell as a mixture of rain and snow from the Baltics eastward across extreme northern Russia.



MIDDLE EAST

Unseasonable warmth and dryness dominated the region. Temperatures averaged 2 to 5 degrees C above normal, favoring overwintering wheat. Although the warm weather eroded protective snow cover, low temperatures stayed well above the threshold for potential winterkill in the traditionally cooler winter wheat areas of central Turkey and western Iran. Crops usually advance through reproduction during March in the region's warmest growing areas, including Syria. In cooler locations, including Turkey's Anatolian Plateau and western Iran, crops usually break dormancy in March and April.

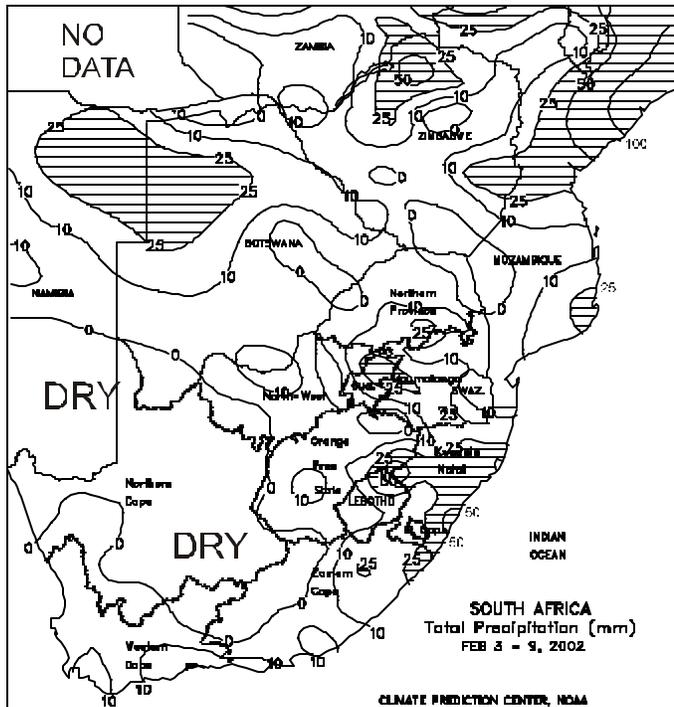
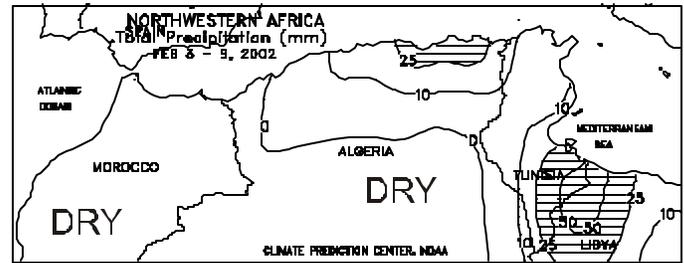


AUSTRALIA

Heavy rain (100 mm or more) fell along the New South Wales coast, increasing irrigation levels for sugarcane but likely causing some flooding. More moderate showers (25-50 mm or more) stretched from southern Victoria to southeastern Queensland, improving grazing conditions and boosting irrigation reserves for cotton in New South Wales. However, dry weather persisted in New South Wales' western growing areas as well as in most interior summer crop areas of Queensland, stressing rainfed sorghum and other summer crops. Highs in the middle to upper 30s degrees C exacerbated the effects of dryness on immature summer crops, which are usually harvested from March through June. Elsewhere in the east, dry, cooler-than-normal weather covered pasture and grazing lands from South Australia and western Victoria northward. Tropical Cyclone Chris made landfall on the northern coast of Western Australia, but showers from the storm did not reach the main agricultural districts of the southwest. Light showers (5-25 mm) returned to New Zealand, boosting moisture levels for summer crops and pastures.

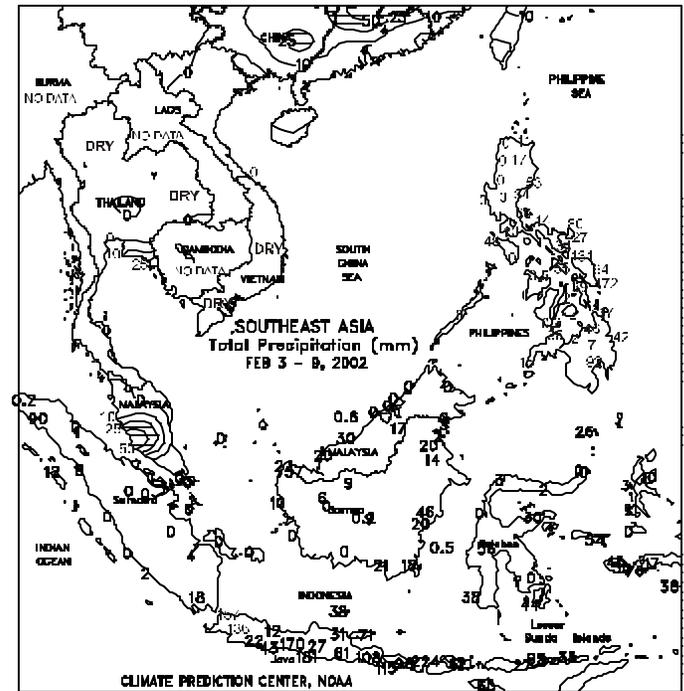
NORTHWESTERN AFRICA

Drought existed throughout winter grain areas of Morocco, western Algeria, and Tunisia as warm, dry weather continued into its seventh week. Central and eastern Algeria received much-needed rains (10-30 mm), easing long-term dryness. However, rainfall still remains well below normal in these areas. Winter grains were in the vegetative stage over most of the region. Temperatures continued to be above normal (1-3 degrees C), increasing crop-water requirements. Timely rains will be needed throughout the region in upcoming weeks, as winter grains advance through the reproductive phase of development.



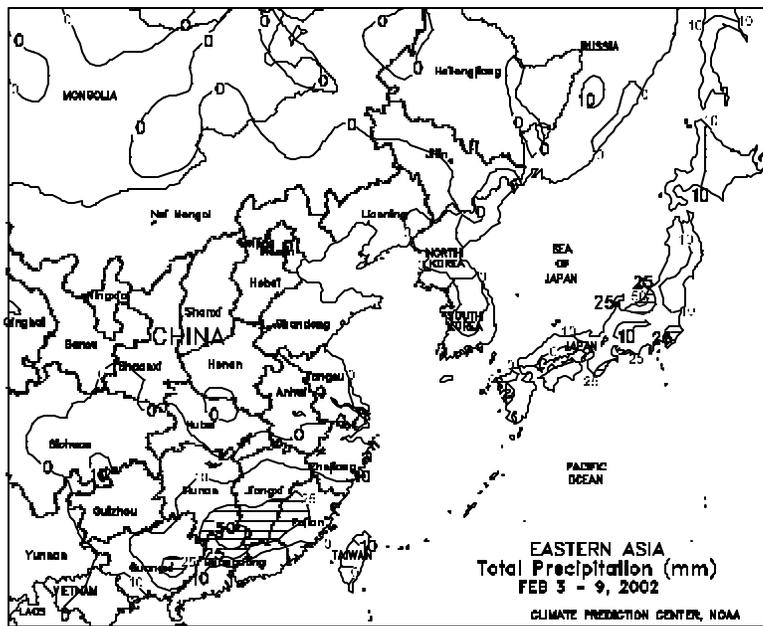
SOUTH AFRICA

Drier, warmer weather dominated the corn belt, spurring development of reproductive to filling summer crops. Temperatures were generally near normal, with highs approaching the middle 30s degrees C in westernmost growing areas (North West and Free State). Corn and other summer crops are nearing the traditional end of their reproductive phases of development, with harvesting usually taking place from April through June. Elsewhere, locally heavy showers (25 mm or more) increased irrigation reserves in sugarcane areas of KwaZulu-Natal, but scattered, mostly light showers (25 mm or less) covered crops in Western and Eastern Cape. Near- to below-normal temperatures in the Cape Provinces kept irrigation requirements at seasonable levels.



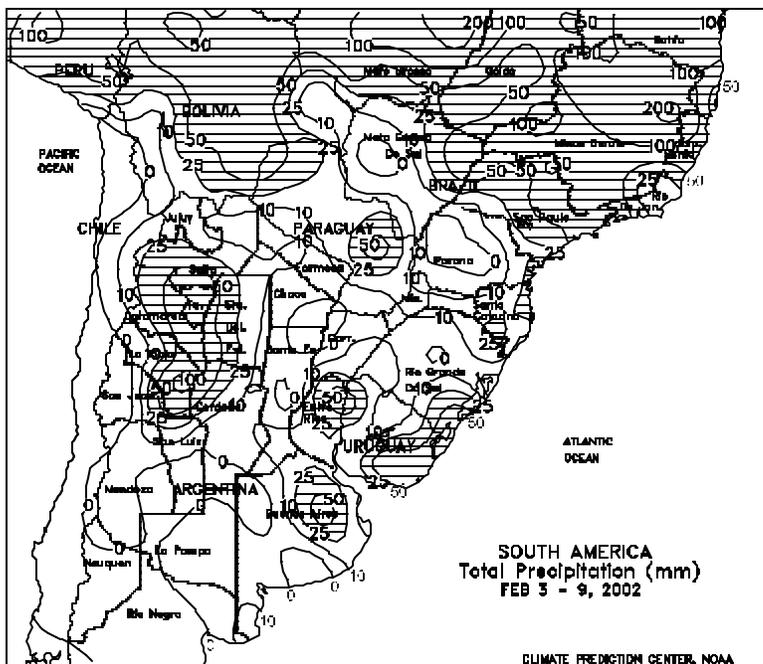
SOUTHEAST ASIA

Flooding from heavy showers over the past few weeks in western Java, Indonesia, has damaged some main-season rice. Heavy showers (25-150 mm) continued throughout Java, causing more concern over crop loss. Showers (50-150 mm) increased in southern Luzon and the eastern Philippines, boosting moisture supplies in grain and plantation crop areas. Cool, wet weather continued to hamper winter-spring rice development in northern Vietnam. Unseasonably dry weather continued to reduce moisture supplies for oil palm in peninsular Malaysia.



EASTERN ASIA

Unseasonably warmer weather prevailed across the North China Plain, causing wheat to lose winter hardiness. Another week of warm weather will likely cause winter wheat to break dormancy and start to green across the southern North China Plain (southern Henan and northern Anhui and Jiangsu). Seasonably dry weather prevailed across the North China Plain, where mid-February rainfall typically averages less than 5 mm a week. Temperatures averaged 4 to 6 degrees C above normal across the region, with highs reaching the upper teens degrees C. In portions of the Yangtze Valley (Hubei and southern Anhui and Jiangsu), dry weather during the past 2 to 3 weeks has reduced moisture supplies for winter crops. Light to moderate rain (5-35 mm or more) fell across southern China, maintaining adequate moisture supplies for winter crops and sugarcane. Temperatures averaged 2 to 5 degrees C above normal across the Yangtze Valley and 1 to 2 degrees C above normal across southern China.



SOUTH AMERICA

Drier weather (less than 10 mm) prevailed across Rio Grande do Sul, Brazil, and southern Paraguay, after 2 weeks of much-needed rain eased short-term drought and crop stress. The previous rain boosted soil moisture to adequate levels, but continued rain is needed for the rest of the season to prevent crop stress from returning. Mostly dry weather also prevailed over Parana and Mato Grosso do Sul, where soil moisture remained adequate. Elsewhere across southern Brazil, widespread showers (30-100 mm or more) continued to provide adequate to abundant soil moisture for soybeans, corn, cotton, coffee, sugarcane, and citrus. In western Bahia, unseasonably heavy rain (100-130 mm) possibly caused flooding and slowed early harvesting. Across central Argentina, light rain (5-20 mm) continued to provide overall adequate soil moisture for reproductive soybeans and filling corn. However, soil moisture was still limited in some areas, especially central Santa Fe. In northern Argentina, dry, sunny weather favored cotton development but reduced moisture supplies. Across Argentina and southern Brazil, temperatures averaged 1 to 3 degrees C below normal, reducing crop water use.

