

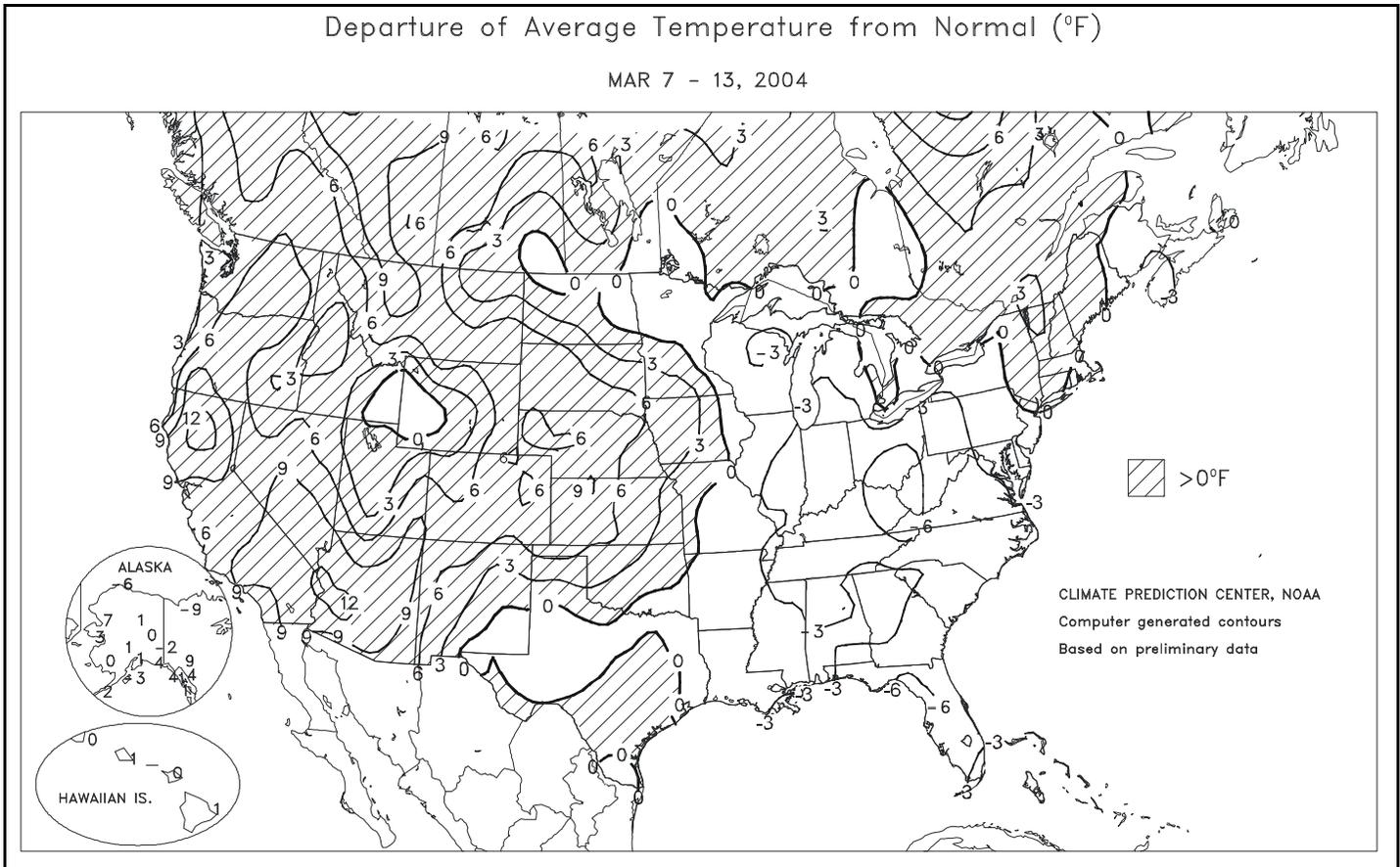
WEEKLY WEATHER AND CROP BULLETIN

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

Departure of Average Temperature from Normal (°F)

MAR 7 - 13, 2004



HIGHLIGHTS

March 7 - 13, 2004

Highlights provided by USDA/WAOB

Across the **Intermountain West**, **central and southern Rockies**, and **Southwest**, the return of warm, dry weather left many drought-affected river basins facing near- to below-normal spring and summer runoff. Weekly temperatures averaged more than 10°F above normal in parts of **California** and **Arizona**. Meanwhile, mild weather also prevailed on the **Plains**, lifting temperatures as much as 10°F above normal. On the **southern Plains**, winter wheat benefited from recent topsoil moisture improvements and additional rainfall. Farther north, however,

(Continued on page 7)

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Water Supply Forecast for the Western United States

Highlights

As of March 1, 2004, a majority of basins in the Pacific Northwest, northern Nevada, central California, portions of Utah, and the northern Rockies of Montana and Idaho were forecast to receive average to slightly above-average spring and summer streamflows (90 to 130 percent of normal). In contrast, many basins in Arizona and western New Mexico, along with the South Platte River basin in Colorado and the Bear River basin in southeastern Idaho, were forecast to receive well-below-average streamflows (less than 50 percent of normal). Reservoir storage remains below average for this time of year in all Western States except California.

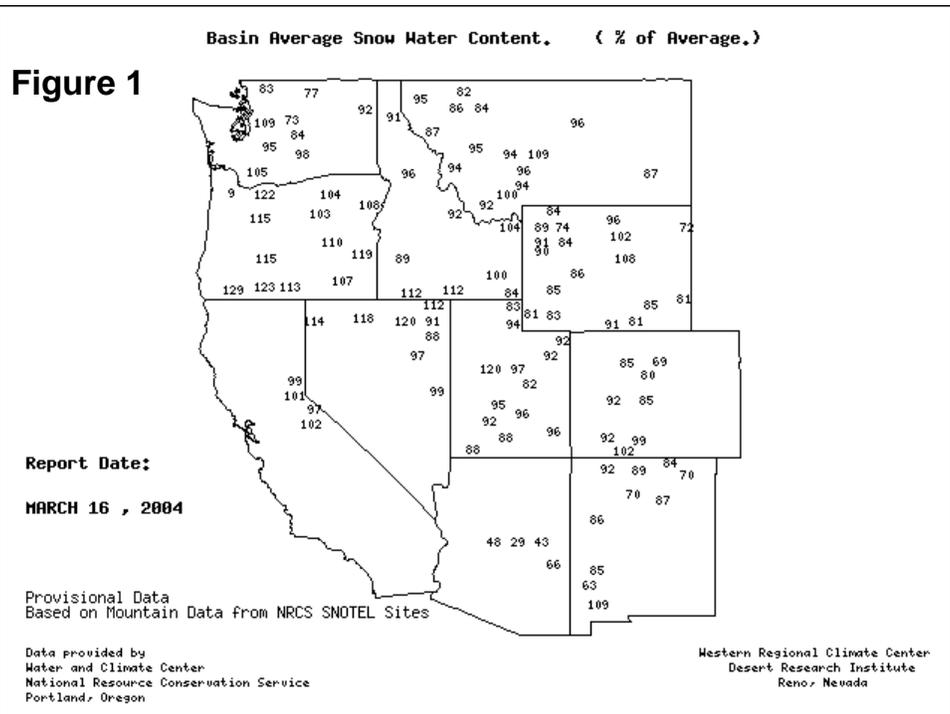
Snowpack and Precipitation

On March 16, 2004, the snowpack map clearly reflected below-average snowpacks in the Southwest (figure 1). Snowpacks in many Southwestern basins were less than 70 percent of average. In contrast, snow packs were at least 110 percent of average in much of Oregon, northern Nevada, and southwestern Idaho. Rocky Mountain snow packs generally ranged from 70 to 110 percent of average along the front range of Colorado, Wyoming, and Montana.

Season-to-date precipitation (October 1, 2003, to March 16, 2004) was well below normal in eastern Colorado and parts of the Southwest. Meanwhile, basin-average precipitation was above normal in parts of the interior

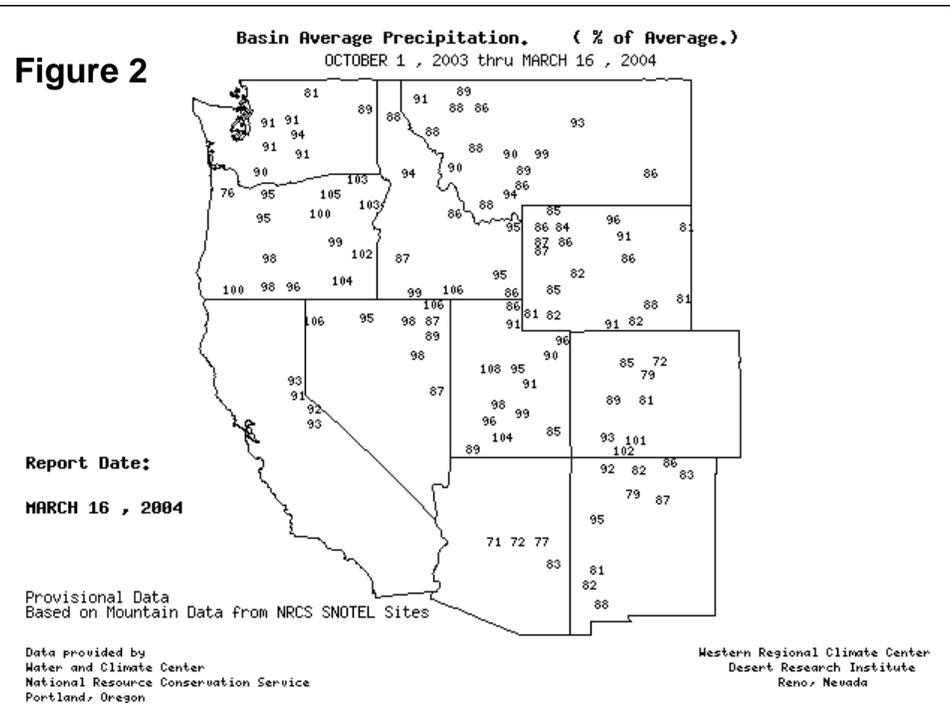
SNOTEL – River Basin Snow Water Content

Figure 1



SNOTEL – River Basin Precipitation

Figure 2



Northwest. The remainder of the West reported near- to slightly below-normal totals (figure 2).

Spring and Summer Streamflow Forecasts

As of March 1, 2004, a majority of basins in the Pacific Northwest, northern Nevada, central California, portions of Utah, and the northern Rockies of Montana and Idaho were forecast to receive average to slightly above-average spring and summer streamflows (90 to 130 percent of normal). Conversely, many basins in Arizona and western New Mexico, along with the South Platte River basin in Colorado and the Bear River basin in southeastern Idaho, were forecast to receive well-below-average streamflows (less than 50 percent of normal). Spring and summer streamflows were forecast to range from 50 to 90 percent of average in most basins across the Intermountain region of Utah and along the eastern slopes of the Rockies in Wyoming, Colorado, and northern New Mexico (figure 3).

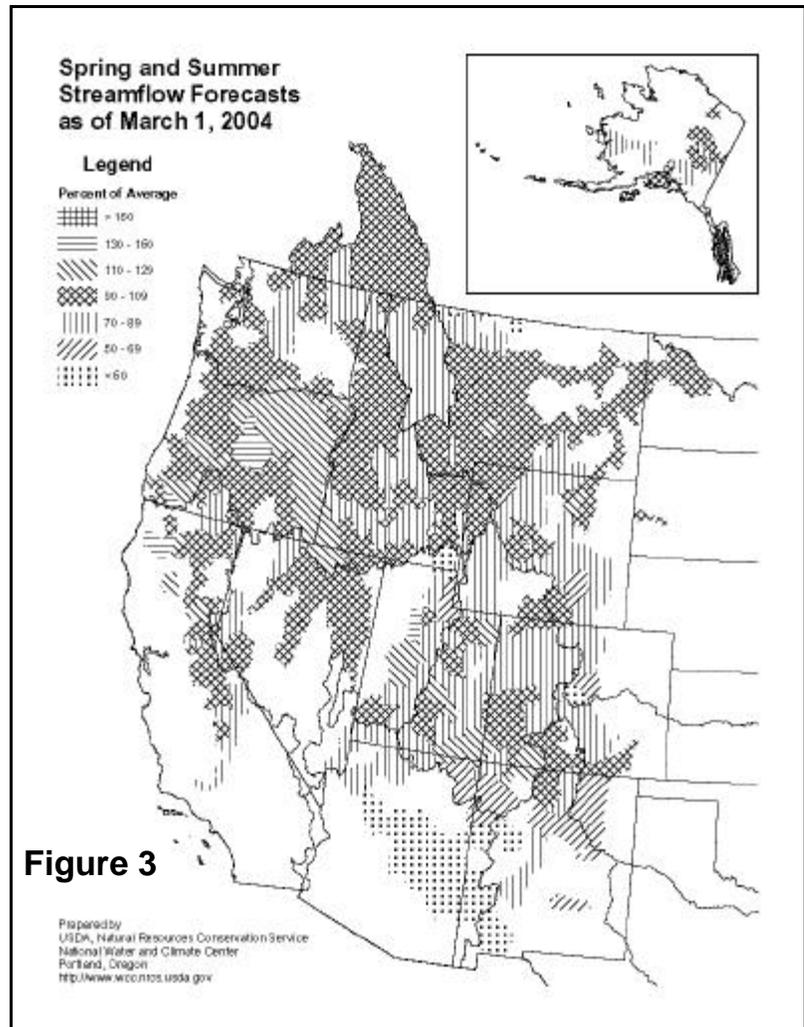


Figure 3

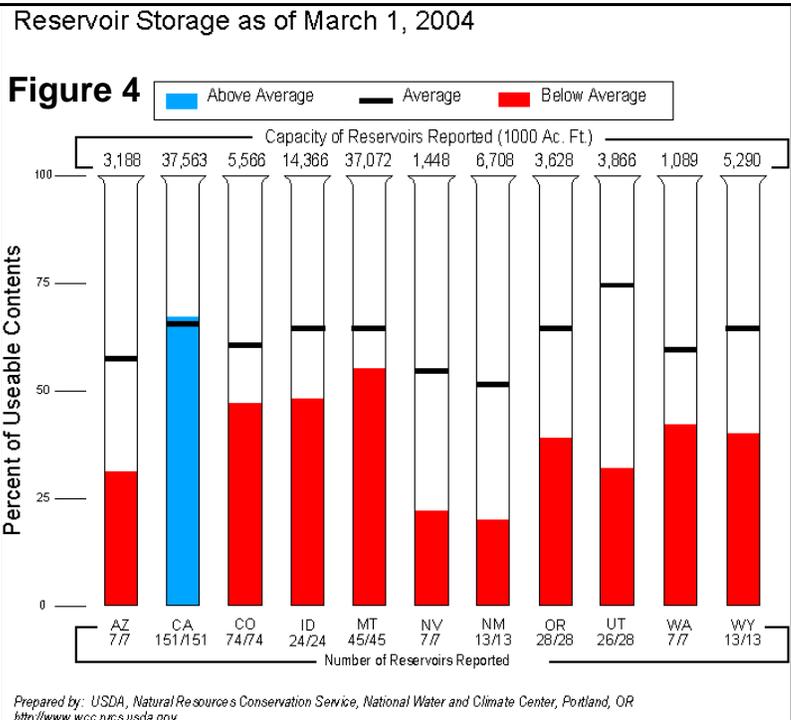
Reservoir Storage

As of March 1, 2004, reservoir storage for all Western States, except California, was below average for this time of year (figure 4). Arizona, Nevada, New Mexico, Oregon, Utah, and Wyoming reported the largest percent of average storage deficits, compared with normal. Low reservoir levels were reflecting last year's below-average runoff and carryover drought from previous years.

For More Information

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

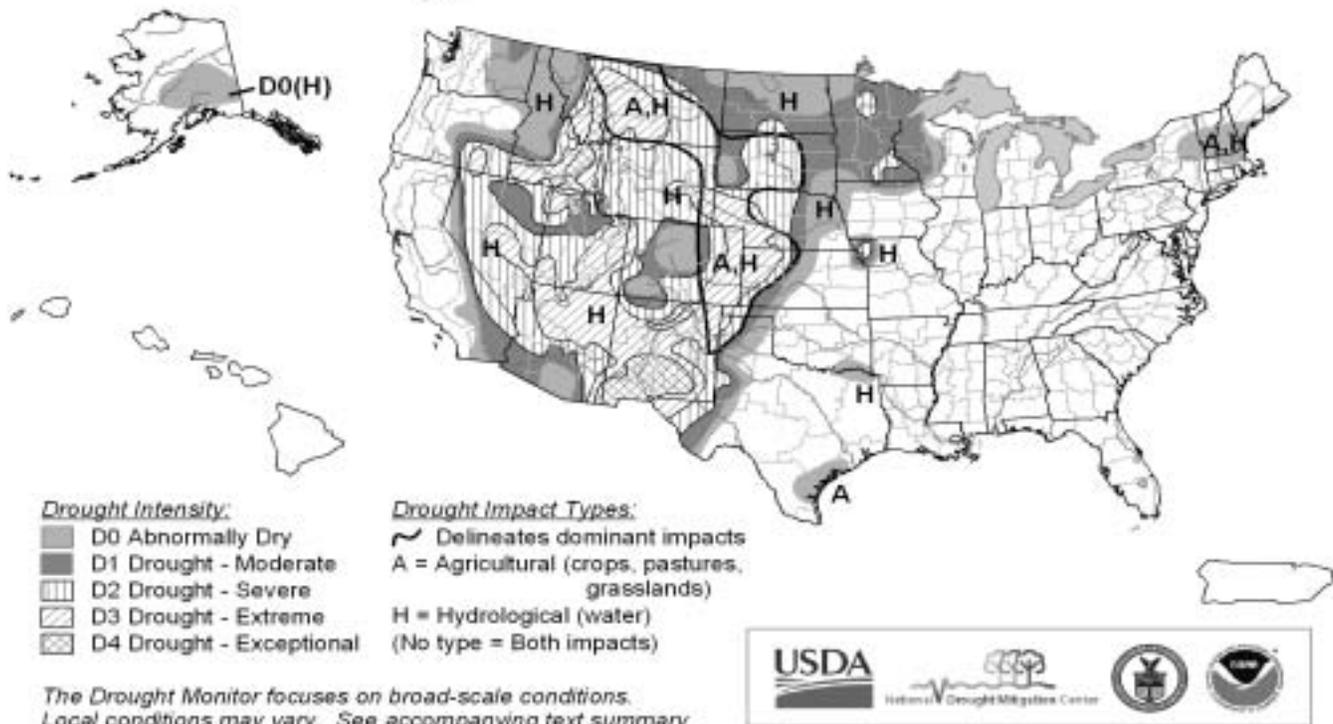
<http://www.wcc.nrcs.usda.gov>



Prepared by: USDA, Natural Resources Conservation Service, National Water and Climate Center, Portland, OR <http://www.wcc.nrcs.usda.gov>

U.S. Drought Monitor

March 9, 2004
Valid 7 a.m. EST



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

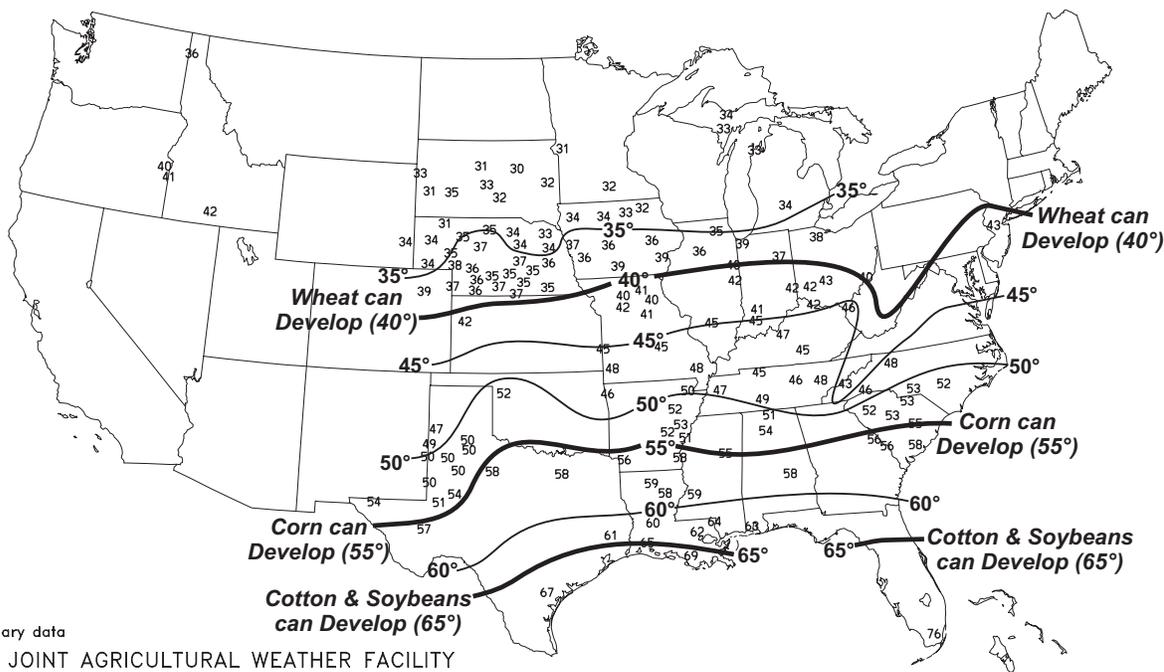
<http://drought.unl.edu/dm>



Released Thursday, March 11, 2004
Author: Richard Tinker, NOAA/NWS/NCEP/CPC

Average Soil Temperature (°F, 4" Bare)

MAR 7 - 13, 2004



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

Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending March 13, 2004

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

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MS INDIANOLA 1S	64	42	70	34	53	-	0.00	-	0.00	0.79	-	11.58	-	-	-	0	0	0	0	
MS INVERNESS 5E	63	44	69	38	54	-	0.00	-	0.00	2.16	-	12.55	-	66	51	0	0	0	0	
MS LYON	61	38	66	33	50	-	0.00	-	0.00	2.73	-	12.61	-	57	48	0	0	0	0	
MS MACON	66	41	72	32	53	-	0.00	-	0.00	2.20	-	14.23	-	61	51	0	1	0	0	
MS ONWARD	66	43	71	37	54	-	0.00	-	0.00	3.17	-	13.41	-	-	-	0	0	0	0	
MS PERTHSHIRE	62	38	67	33	50	-	0.00	-	0.00	2.63	-	14.29	-	-	-	0	0	0	0	
MS SCOTT	63	43	69	37	53	-	0.00	-	0.00	1.43	-	12.83	-	-	-	0	0	0	0	
MS SIDON	64	43	70	36	54	-	0.00	-	0.00	2.85	-	14.75	-	67	50	0	0	0	0	
MS STARKVILLE	64	39	71	32	52	-1	0.00	-1.36	0.00	3.69	138	12.83	97	-	-	0	2	0	0	
MS TUNICA 1W	59	37	64	29	48	-	0.00	-	0.00	1.79	-	12.82	-	-	-	0	1	0	0	
MS VANCE	60	39	66	34	50	-	0.00	-	0.00	1.91	-	13.29	-	-	-	0	0	0	0	
MS VERONA	63	38	70	31	50	-	0.00	-	0.00	3.60	-	12.25	-	63	46	0	2	0	0	
MS STONEVILLE X	66	41	71	34	53	0	0.00	-1.26	0.00	0.56	23	12.39	100	65	51	0	0	0	0	
MO DELTA	55	32	61	26	44	-1	0.02	-0.87	0.01	2.74	167	6.48	79	52	39	0	4	2	0	
MO STEELE	57	36	62	29	46	-1	0.00	-1.12	0.00	2.18	95	7.88	81	54	45	0	1	0	0	
MO GLENNONVILLE	56	35	62	27	46	-1	0.04	-0.73	0.04	1.51	90	5.18	67	54	43	0	3	1	0	
MO PORTAGEVILLE LF	56	35	61	29	46	0	0.00	-0.87	0.00	2.55	131	7.76	88	58	42	0	2	0	0	
MO CLARKTON	57	34	63	28	45	-2	0.04	-0.73	0.04	2.22	133	6.25	80	52	44	0	3	1	0	
MO CARDWELL	57	35	62	27	47	0	0.01	-1.08	0.01	1.80	77	7.23	75	55	45	0	2	1	0	
MO CHARLESTON	55	32	61	27	44	-1	0.00	-0.73	0.00	1.72	100	6.14	71	53	41	0	4	0	0	
MO PORTAGEVILLE DC	56	36	61	30	46	-1	0.00	-0.87	0.00	2.43	125	8.15	93	58	42	0	1	0	0	

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

X Based on 1971-2000 normals.

- Sufficient data not available.

Weather and Crop Summary: An exceptional week of steady sunshine, low humidity, and pleasant temperatures promoted fieldwork and spraying activities. Extensive tilling and bedding preparations were done and final applications of burndown were applied. Some producers completed corn seeding, and a few soybean acres were planted. Although the majority of the winter wheat crop was growing well, some patches of water stress from previous weeks' heavy rains were evident. Meanwhile, the Missouri Bootheel received very light rainfall and remained slightly cooler than the Mississippi Delta.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on March 10, 2004. Forecasts refer to March 1.

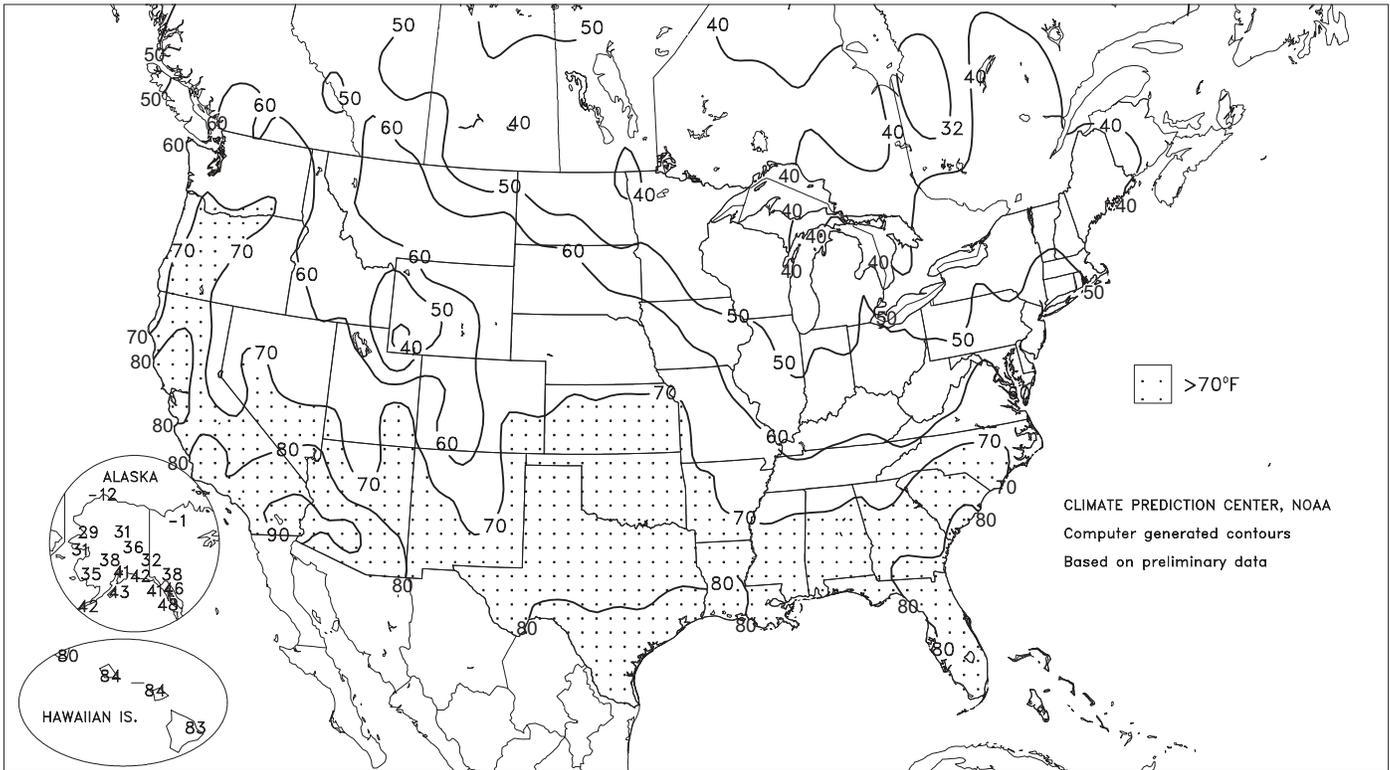
The **all orange** March forecast for the 2003-04 crop is 13.2 million tons, down 1 percent from the February 1 forecast but 14 percent above last season's final utilization. Florida's all orange forecast is unchanged at 246 million boxes (11.1 million tons) but 21 percent above the previous season. Early and midseason varieties in Florida are forecast at 127 million boxes (5.72 million tons), down 1 percent from last month but 13 percent above the previous season. The harvest of the early and midseason varieties is nearly complete. Florida's Valencia forecast is 119 million boxes (5.36 million tons), up 1 percent from the February forecast and 31 percent above last season's final utilization. Fruit size continues to be above average but not as large as last season. Loss from droppage is at a record low.

California's all orange forecast is 54.0 million boxes (2.03 million tons), down 7 percent from the January forecast and

13 percent below last season. The Navel orange forecast is unchanged from January at 39.0 million boxes (1.46 million tons), but 5 percent below last season. Valencia oranges are forecast at 15.0 million boxes (563,000 tons) down 21 percent from the January forecast and 29 percent below last season's final utilization. Picking of Valencia oranges is underway in some of the southern growing regions. Overall, sizes appear to be up from the previous year but fruits are not as abundant on the trees. Rapid decreases in Valencia acreage continue in most parts of California, as growers abandon their orchards or replace their Valencias with more profitable fruit or vegetable crops. California conducted an objective measurement survey and a grower survey for the March 1 forecast. Arizona and Texas orange production forecasts are carried forward from the previous forecasts.

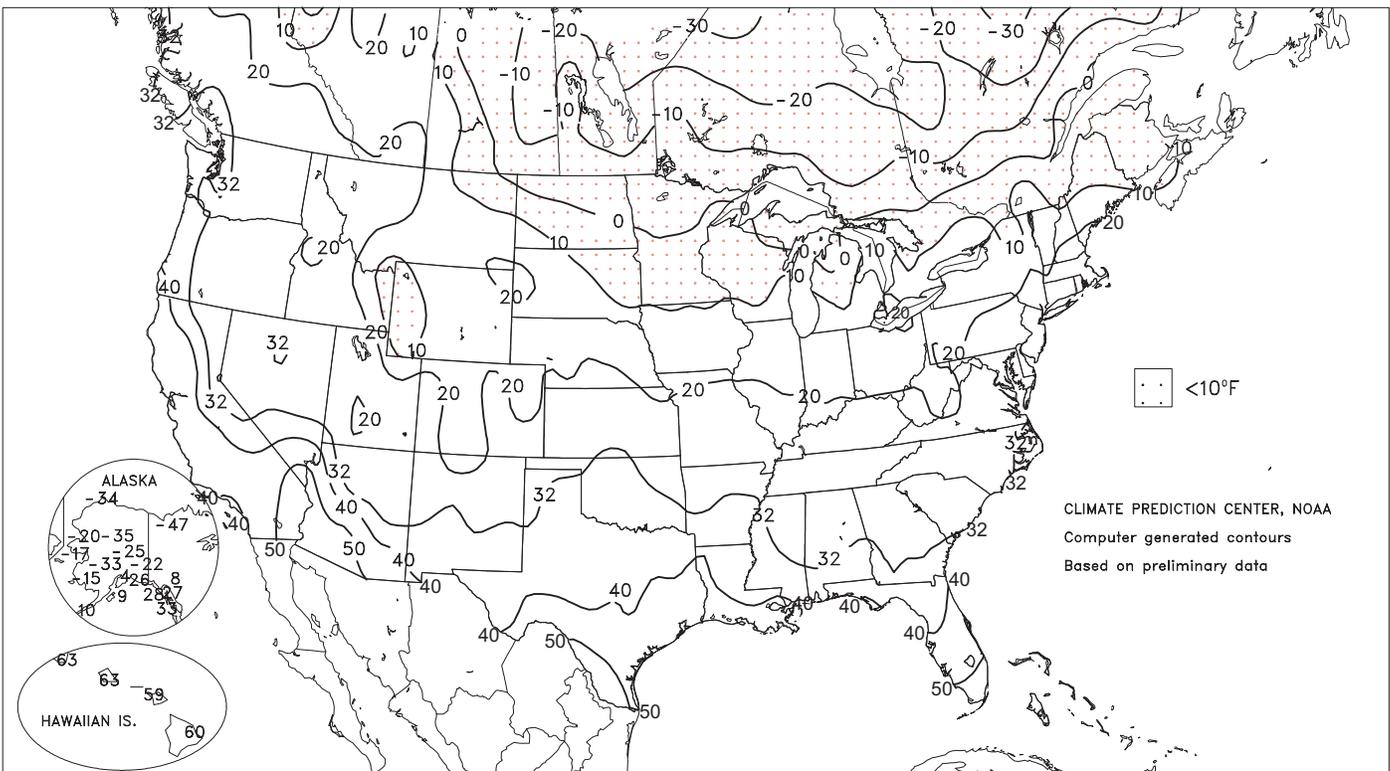
Extreme Maximum Temperature (°F)

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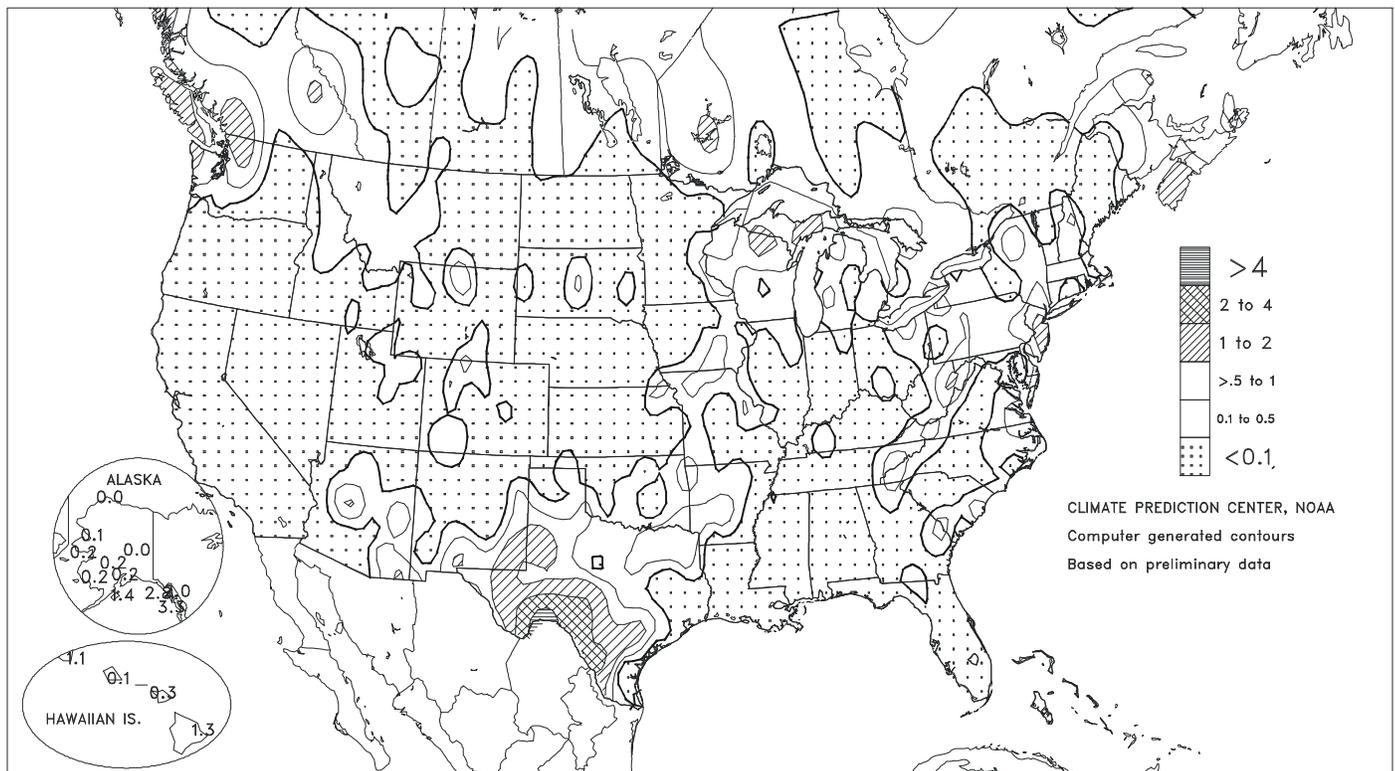
Extreme Minimum Temperature (°F)

MAR 7 - 13, 2004



Total Precipitation (Inches)

MAR 7 - 13, 2004



(Continued from front cover)

drought-stressed wheat began to break dormancy on the **central High Plains**, where significant subsoil moisture shortages persisted. Farther east, mild weather also overspread the **western Corn Belt**, but chilly, unsettled conditions lingered elsewhere in the **Midwest**. Weekly temperatures averaged as much as 6°F below normal in the **eastern Corn Belt**, keeping winter wheat grains dormant in the **lower Great Lakes region** and slowing wheat development in the **Ohio Valley**. Generally cool weather also affected the **South** and **East**. Despite the **Southern** cool spell, dry weather permitted a gradual return to spring fieldwork in previously soaked areas across the **western and central Gulf Coast States**. The late-week arrival of rain in **southern Texas** slowed spring planting operations but boosted soil moisture reserves.

Warmth from the **West Coast to the northern High Plains** resulted in well over 200 daily-record highs. More than half of the record highs were established on March 8-9. In **California**, **Sacramento (city)** set or tied five record highs in 6 days from March 8-13, including a maximum temperature of 82°F on March 13. **Covelo, CA**, notched four consecutive daily-record highs from March 9-12, including its earliest reading of 85°F or higher (85°F on March 10; previously, 85°F on March 18, 1960). Elsewhere in **California**, **Santa Ana** opened the week with a trio of daily-record highs (93, 97, and 88°F) from March 7-9, while **Indio** posted consecutive records (96°F both days) on March 9-10.

Record warmth reached **Montana's High Plains** on March 8, when daily records included 66°F in **Great Falls** and 63°F in **Cut Bank**. Elsewhere in **Montana**, **Billings** logged

consecutive record highs (66 and 70°F) on March 8-9. **Helena, MT**, collected a daily-record high (63°F) on March 8 and again toward week's end (65°F on March 12). Similarly, **Whitman Mission, WA**, tallied record highs on March 8 (74°F) and 13 (68°F). In contrast, daily-record lows in **Michigan** on March 13 included -12°F in **Marquette** and -5°F in **Gaylord**.

An early-week storm clipped the **Pacific Northwest**, producing a daily-record total (2.03 inches on March 7) in **Quillayute, WA**. Farther east, a coastal storm brushed the **Atlantic Seaboard** at midweek, resulting in a daily-record rainfall (0.90 inch on March 10) on **Cape Hatteras, NC**. Two days later, locally heavy showers in **southern and western Texas** brought daily-record amounts to locations such as **Lubbock** (0.75 inch), **Midland** (0.71 inch), and **El Paso** (0.62 inch). For **El Paso**, it was the highest 1-day total since 0.99 inch fell on February 20, 2003.

Locally heavy showers dotted **Hawaii's** windward locations early in the week and again toward week's end. On March 7-8, **Kokee, Kauai**, netted 4.67 inches of rain in 24 hours. Heavy showers returned to **Kokee** from March 12-14, when its 48-hour total reached 4.54 inches. Farther east, the **Big Island** location of **Kamuela** received 4.97 inches in 24 hours on March 13-14. Meanwhile, mild weather in **southeastern and western Alaska** contrasted with bitterly cold conditions across the **State's northern tier**. On March 8, **Juneau** (46°F) posted a daily-record high. In addition, **Juneau** received precipitation totaling 2.92 inches (171 percent of normal) during the first 14 days of March, including 9.6 inches of snow.

National Weather Data for Selected Cities

Weather Data for the Week Ending March 13, 2004

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
																TEMP. °F	PRECIP			
AL BIRMINGHAM	65	38	71	32	51	-2	0.02	-1.37	0.02	1.91	76	10.61	87	82	29	0	1	1	0	
AL HUNTSVILLE	62	36	67	29	49	-2	0.00	-1.57	0.00	4.00	139	14.18	106	79	37	0	2	0	0	
AL MOBILE	73	43	77	36	58	-1	0.00	-1.68	0.00	0.16	5	14.44	104	80	27	0	0	0	0	
AL MONTGOMERY	70	40	75	31	55	-2	0.00	-1.51	0.00	0.32	11	10.69	80	72	21	0	1	0	0	
AK ANCHORAGE	33	17	41	4	25	1	0.15	0.01	0.07	0.51	182	1.73	102	87	73	0	7	5	0	
AK BARROW	-15	-28	-12	-34	-21	-6	0.00	0.00	0.00	0.00	0	0.15	63	79	75	0	7	0	0	
AK FAIRBANKS	23	-7	36	-25	8	0	0.00	-0.06	0.00	0.00	0	0.66	65	83	72	0	7	0	0	
AK JUNEAU	41	32	46	27	37	4	2.01	1.18	0.78	2.59	163	14.14	136	95	86	0	4	6	2	
AK KODIAK	37	22	43	9	30	-2	1.34	0.18	0.88	2.64	121	19.96	124	76	62	0	6	5	1	
AK NOME	19	4	31	-17	12	4	0.23	0.12	0.08	0.48	218	1.11	59	78	71	0	7	4	0	
AZ FLAGSTAFF	61	29	65	24	45	9	0.11	-0.53	0.11	0.76	63	2.58	43	88	25	0	6	1	0	
AZ PHOENIX	87	60	92	53	73	11	0.11	-0.15	0.09	1.30	265	3.14	150	64	33	3	0	2	0	
AZ TUCSON	81	56	88	44	68	10	0.17	-0.03	0.17	0.68	174	1.93	85	65	36	0	0	1	0	
AZ YUMA	90	61	94	54	76	10	0.00	-0.06	0.00	0.41	410	1.41	186	54	25	4	0	0	0	
AR FORT SMITH	64	38	74	32	51	0	0.29	-0.60	0.25	1.64	102	6.23	95	85	27	0	1	2	0	
AR LITTLE ROCK	63	39	71	34	51	-1	0.04	-1.00	0.04	1.78	96	9.70	110	78	27	0	0	1	0	
CA BAKERSFIELD	81	52	84	48	66	9	0.00	-0.33	0.00	0.08	13	2.30	77	75	54	0	0	0	0	
CA FRESNO	78	50	80	46	64	9	0.02	-0.51	0.01	1.18	118	3.74	71	91	69	0	0	2	0	
CA LOS ANGELES	74	55	89	53	65	7	0.00	-0.61	0.00	0.78	66	5.88	81	89	59	0	0	0	0	
CA REDDING	83	51	85	44	67	15	0.00	-1.24	0.00	0.95	41	14.05	98	58	29	0	0	0	0	
CA SACRAMENTO	77	48	79	43	62	8	0.00	-0.69	0.00	0.29	22	7.46	86	92	41	0	0	0	0	
CA SAN DIEGO	72	58	84	54	65	5	0.00	-0.54	0.00	0.21	21	3.36	63	87	68	0	0	0	0	
CA SAN FRANCISCO	75	51	79	47	63	9	0.00	-0.80	0.00	0.07	5	7.68	77	89	72	0	0	0	0	
CA STOCKTON	76	45	78	41	61	7	0.01	-0.53	0.01	0.56	54	6.01	97	91	65	0	0	1	0	
CO ALAMOSA	56	22	59	19	39	7	0.00	-0.08	0.00	0.07	47	1.23	202	91	53	0	7	0	0	
CO CO SPRINGS	58	30	64	24	44	7	0.04	-0.16	0.04	0.34	97	1.33	136	86	28	0	5	1	0	
CO DENVER INTL	63	30	70	25	47	10	0.00	-0.22	0.00	0.08	21	0.52	62	70	23	0	5	0	0	
CO GRAND JUNCTION	65	33	66	28	49	7	0.00	-0.22	0.00	0.00	0	1.48	99	63	32	0	3	0	0	
CO PUEBLO	66	28	73	22	47	7	0.02	-0.17	0.02	0.37	119	1.53	170	82	44	0	5	1	0	
CT BRIDGEPORT	44	32	54	28	38	0	0.39	-0.52	0.25	1.24	77	5.26	64	80	57	0	5	2	0	
CT HARTFORD	43	29	53	23	36	0	0.13	-0.72	0.09	0.48	31	3.71	45	78	57	0	6	3	0	
DC WASHINGTON	51	34	60	31	43	-2	0.17	-0.67	0.16	1.27	83	4.91	67	70	39	0	3	2	0	
DE WILMINGTON	48	33	55	30	41	0	0.17	-0.74	0.10	1.22	74	5.21	66	84	39	0	5	3	0	
FL DAYTONA BEACH	71	48	82	43	60	-4	0.04	-0.82	0.04	0.04	3	5.80	78	90	36	0	0	1	0	
FL JACKSONVILLE	71	42	84	32	56	-5	0.11	-0.76	0.10	0.11	7	6.24	74	92	31	0	1	2	0	
FL KEY WEST	76	65	81	62	70	-3	0.00	-0.38	0.00	0.00	0	5.23	118	78	52	0	0	0	0	
FL MIAMI	78	61	85	56	69	-3	0.00	-0.50	0.00	0.00	0	5.61	115	85	51	0	0	0	0	
FL ORLANDO	74	51	83	45	62	-5	0.00	-0.80	0.00	0.00	0	7.80	126	88	43	0	0	0	0	
FL PENSACOLA	70	46	77	37	58	-2	0.00	-1.49	0.00	0.23	9	11.03	87	71	30	0	0	0	0	
FL TALLAHASSEE	73	38	82	30	55	-5	0.02	-1.51	0.02	0.06	2	10.72	84	84	28	0	1	1	0	
FL TAMPA	73	52	80	45	62	-5	0.00	-0.67	0.00	0.00	0	7.75	125	86	42	0	0	0	0	
FL WEST PALM	77	56	87	51	67	-3	0.00	-0.77	0.00	0.03	2	4.77	62	86	49	0	0	0	0	
GA ATHENS	64	37	71	30	51	-1	0.00	-1.18	0.00	0.15	7	6.96	62	76	28	0	2	0	0	
GA ATLANTA	63	40	70	33	51	-2	0.03	-1.24	0.03	0.34	14	7.79	65	65	31	0	0	1	0	
GA AUGUSTA	66	35	78	27	51	-4	0.23	-0.84	0.23	0.24	12	7.77	73	89	34	0	4	1	0	
GA COLUMBUS	69	41	75	34	55	-1	0.00	-1.35	0.00	0.07	3	7.99	68	69	17	0	0	0	0	
GA MACON	69	39	79	30	54	-1	0.00	-1.15	0.00	0.04	2	10.28	88	76	22	0	1	0	0	
GA SAVANNAH	67	39	82	32	53	-5	0.07	-0.70	0.07	0.07	5	4.87	59	88	29	0	1	1	0	
HI HILO	81	64	83	60	73	1	1.29	-1.83	1.16	2.98	54	23.47	97	80	67	0	0	3	1	
HI HONOLULU	81	68	84	63	75	1	0.11	-0.34	0.05	0.53	60	16.88	283	78	68	0	0	3	0	
HI KAHULUI	80	65	84	59	72	-1	0.32	-0.19	0.16	0.82	87	11.80	168	89	71	0	0	4	0	
HI LIHUE	77	67	80	63	72	0	1.06	0.25	0.40	1.31	87	13.40	143	84	71	0	0	5	0	
ID BOISE	60	33	61	28	47	4	0.00	-0.30	0.00	0.31	55	3.62	117	78	54	0	1	0	0	
ID LEWISTON	61	37	69	32	49	5	0.00	-0.22	0.00	0.17	41	3.21	128	73	56	0	1	0	0	
ID POCATELLO	49	26	53	20	37	0	0.00	-0.30	0.00	0.13	23	3.50	129	90	71	0	7	0	0	
IL CHICAGO/O'HARE	42	24	49	16	33	-2	0.03	-0.48	0.02	1.22	137	3.33	78	78	51	0	6	2	0	
IL MOLINE	45	25	54	15	35	-2	0.15	-0.44	0.13	1.51	148	3.53	86	74	44	0	6	2	0	
IL PEORIA	46	26	52	17	36	-2	0.06	-0.53	0.06	1.41	132	2.68	63	84	39	0	6	1	0	
IL ROCKFORD	42	23	50	12	33	-1	0.14	-0.31	0.11	1.37	176	2.59	73	80	53	0	6	2	0	
IL SPRINGFIELD	49	27	52	20	38	-2	0.10	-0.59	0.10	1.45	119	3.31	71	77	47	0	6	1	0	
IN EVANSVILLE	52	29	58	23	41	-3	0.00	-0.95	0.00	1.14	66	4.68	61	81	41	0	5	0	0	
IN FORT WAYNE	41	23	48	15	32	-4	0.04	-0.55	0.04	1.23	117	4.20	83	84	51	0	7	1	0	
IN INDIANAPOLIS	46	25	53	19	36	-4	0.00	-0.76	0.00	1.25	91	6.67	107	79	38	0	6	0	0	
IN SOUTH BEND	40	23	48	16	32	-4	0.05	-0.53	0.04	1.88	181	4.20	79	83	57	0	6	2	0	
IA BURLINGTON	47	26	54	17	36	-2	0.16	-0.47	0.16	1.37	123	3.08	78	85	37	0	7	1	0	
IA CEDAR RAPIDS	44	22	53	12	33	-1	0.20	-0.23	0.17	2.02	273	3.90	135	93	43	0	7	3	0	
IA DES MOINES	50	27	60	17	39	3	0.22	-0.19	0.20	1.39	193	4.36	148	76	52	0	5	2	0	
IA DUBUQUE	40	23	49	11	31	-2	0.39	-0.13	0.30	2.06	226	3.74	104	78	57	0	7	4	0	
IA SIOUX CITY	53	27	64	14	40	6	0.02	-0.38	0.02	1.29	193	3.21	171	78	49	0	5	1	0	
IA WATERLOO	44	23	54	10	34	1	0.17	-0.24	0.11	1.55	221	3.25	125	76	51	0	7	2	0	
KS CONCORDIA	59	33	70	22	46	5	0.00	-0.52	0.00	1.57	174	4.74	207	71	41	0	3	0	0	
KS DODGE CITY	62	34	73	28	48	5	0.00	-0.38	0.00	1.93	297	3.01	156	76	34	0	2	0	0	
KS GOODLAND	62	28	69	23	45	7	0.00	-0.27	0.00	0.23	49	1.31	98	78	39	0	6	0	0	
KS TOPEKA	59	33	72	24	46	4	0.12	-0.42	0.11	2.54	267	5.08	165	76	35	0	3	2	0	

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending March 13, 2004

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 Mar 1	PCT. NORMAL SINCE Mar 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	61	36	74	30	48	4	0.05	-0.55	0.05	2.66	253	5.29	182	78	39	0	3	1	0
KY JACKSON	48	30	57	26	39	-6	0.02	-1.00	0.02	1.60	85	9.60	105	75	37	0	5	1	0
KY LEXINGTON	48	29	54	22	38	-6	0.00	-1.02	0.00	2.89	154	7.70	91	76	46	0	5	0	0
KY LOUISVILLE	52	32	58	25	42	-3	0.00	-1.02	0.00	2.38	128	8.81	105	73	31	0	3	0	0
KY PADUCAH	55	32	60	23	44	-2	0.00	-0.94	0.00	2.02	115	6.71	73	82	29	0	4	0	0
LA BATON ROUGE	73	45	80	38	59	0	0.00	-1.10	0.00	0.43	21	15.71	118	91	31	0	0	0	0
LA LAKE CHARLES	73	48	84	41	60	0	0.01	-0.77	0.01	0.13	9	17.03	167	86	37	0	0	1	0
LA NEW ORLEANS	70	49	77	42	60	-1	0.00	-1.13	0.00	0.18	9	11.61	86	79	43	0	0	0	0
LA SHREVEPORT	69	46	75	40	58	1	0.00	-0.93	0.00	2.97	170	15.27	145	72	29	0	0	0	0
ME CARIBOU	32	13	44	2	22	-1	0.05	-0.51	0.04	0.68	67	2.78	46	88	52	0	7	2	0
ME PORTLAND	41	27	51	22	34	2	0.02	-0.87	0.02	0.22	14	2.24	25	76	44	0	7	1	0
MD BALTIMORE	49	31	59	27	40	-2	0.14	-0.77	0.10	1.68	101	5.50	67	86	49	0	4	3	0
MA BOSTON	43	31	51	29	37	0	0.13	-0.71	0.06	0.41	27	2.88	33	78	48	0	6	3	0
MA WORCESTER	39	26	46	22	32	-1	0.25	-0.68	0.19	0.61	36	3.50	40	90	53	0	7	3	0
MI ALPENA	35	17	43	6	26	0	0.10	-0.35	0.06	1.11	139	2.34	60	88	54	0	7	2	0
MI GRAND RAPIDS	38	22	45	12	30	-3	0.32	-0.18	0.24	2.53	291	5.57	126	87	60	0	7	2	0
MI HOUGHTON LAKE	34	15	40	-3	25	-3	0.21	-0.21	0.17	1.72	236	3.61	101	90	63	0	7	3	0
MI LANSING	40	20	47	9	30	-2	0.19	-0.25	0.16	1.88	247	3.34	87	89	60	0	7	2	0
MI MUSKOGON	37	21	43	12	29	-3	0.35	-0.12	0.21	3.03	365	4.97	107	90	67	0	7	4	0
MI TRAVERSE CITY	36	17	44	2	26	-3	0.34	-0.03	0.24	1.60	246	4.21	78	92	58	0	7	2	0
MN DULUTH	33	16	42	1	24	1	0.12	-0.21	0.07	0.40	71	3.77	150	87	59	0	7	4	0
MN INT'L FALLS	31	6	45	-7	19	-2	0.25	0.07	0.13	0.37	123	1.16	65	91	51	0	7	3	0
MN MINNEAPOLIS	38	19	46	5	29	-1	0.31	-0.05	0.15	1.02	167	2.34	96	76	63	0	7	3	0
MN ROCHESTER	37	21	45	7	29	1	0.23	-0.12	0.10	1.17	205	3.21	142	81	71	0	7	4	0
MS ST. CLOUD	36	16	44	3	26	0	0.11	-0.15	0.06	0.39	91	1.59	89	84	64	0	7	2	0
MS JACKSON	68	40	74	33	54	-2	0.00	-1.24	0.00	1.06	48	11.79	95	79	26	0	0	0	0
MS MERIDIAN	69	38	76	31	54	-2	0.00	-1.58	0.00	1.75	61	12.82	91	89	28	0	1	0	0
MS TUPELO	63	36	71	29	50	-2	0.01	-1.45	0.01	3.85	144	13.39	107	77	41	0	2	1	0
MO COLUMBIA	53	29	63	22	41	-1	0.17	-0.51	0.17	2.00	163	5.07	98	79	34	0	6	1	0
MO KANSAS CITY	56	33	70	22	45	3	0.13	-0.40	0.13	1.33	140	3.23	95	78	36	0	3	1	0
MO SAINT LOUIS	54	33	59	27	43	-1	0.06	-0.73	0.05	1.66	118	6.48	111	73	50	0	3	2	0
MO SPRINGFIELD	56	32	68	24	44	-1	0.14	-0.65	0.14	3.91	277	8.35	144	71	35	0	4	1	0
MT BILLINGS	60	31	70	23	46	10	0.02	-0.20	0.01	0.09	24	0.93	53	67	28	0	4	2	0
MT BUTTE	51	24	56	17	37	8	0.00	-0.17	0.00	0.09	30	0.61	47	82	35	0	7	0	0
MT GLASGOW	40	19	50	9	30	1	0.00	-0.08	0.00	0.01	7	1.40	184	86	77	0	7	0	0
MT GREAT FALLS	55	29	67	22	42	10	0.15	-0.05	0.12	0.19	53	0.49	32	79	29	0	5	3	0
MT HAVRE	52	27	63	21	39	8	0.00	-0.14	0.00	0.01	4	0.26	24	85	56	0	7	0	0
MT KALISPELL	49	25	56	20	37	3	0.02	-0.23	0.02	0.45	98	2.88	94	89	58	0	7	1	0
MT MISSOULA	54	30	63	26	42	6	0.03	-0.17	0.01	0.27	75	1.76	80	80	57	0	5	3	0
NE GRAND ISLAND	57	29	67	20	43	7	0.01	-0.41	0.01	0.29	40	2.61	135	72	41	0	6	1	0
NE LINCOLN	57	29	68	15	43	6	0.01	-0.45	0.01	1.14	146	3.12	148	66	35	0	4	1	0
NE NORFOLK	55	28	67	15	42	7	0.02	-0.39	0.02	1.14	165	3.23	160	72	46	0	5	1	0
NE NORTH PLATTE	59	23	64	15	41	5	0.00	-0.25	0.00	0.04	9	0.90	67	87	28	0	6	0	0
NE OMAHA	55	28	66	18	42	5	0.00	-0.44	0.00	1.32	174	3.88	167	71	41	0	6	0	0
NE SCOTTSBLUFF	59	24	69	18	42	6	0.00	-0.23	0.00	0.09	23	0.81	53	84	57	0	7	0	0
NE VALENTINE	56	25	66	17	40	6	0.00	-0.22	0.00	0.01	3	1.00	85	77	44	0	7	0	0
NV ELY	59	24	63	21	41	6	0.00	-0.24	0.00	0.03	7	0.87	45	85	46	0	7	0	0
NV LAS VEGAS	79	54	81	49	66	9	0.00	-0.15	0.00	0.23	79	1.70	108	48	26	0	0	0	0
NV RENO	68	34	74	32	51	8	0.00	-0.21	0.00	1.25	305	3.77	149	72	45	0	1	0	0
NV WINNEMUCCA	64	28	68	24	46	6	0.00	-0.18	0.00	0.03	9	1.60	90	84	45	0	7	0	0
NH CONCORD	41	27	50	24	34	3	0.10	-0.56	0.09	0.26	22	2.03	31	80	49	0	7	2	0
NJ NEWARK	48	34	58	30	41	0	0.97	0.03	0.91	1.55	92	5.82	67	73	48	0	2	2	1
NM ALBUQUERQUE	63	42	70	35	52	5	0.00	-0.14	0.00	0.63	263	1.90	162	63	34	0	0	0	0
NY ALBANY	42	29	51	21	35	2	0.25	-0.41	0.17	0.56	47	3.05	52	90	52	0	6	3	0
NY BINGHAMTON	38	24	46	17	31	0	0.09	-0.53	0.04	0.60	53	3.57	58	88	64	0	7	4	0
NY BUFFALO	38	24	48	21	31	-2	0.48	-0.16	0.23	1.01	87	5.11	76	91	64	0	7	5	0
NY ROCHESTER	39	25	49	21	32	0	0.24	-0.30	0.10	0.34	35	3.87	72	90	65	0	7	5	0
NY SYRACUSE	39	25	49	17	32	0	0.15	-0.48	0.08	0.34	30	3.32	57	90	61	0	7	4	0
NC ASHEVILLE	55	31	64	21	43	-2	0.10	-0.95	0.09	0.42	22	5.48	56	83	41	0	5	2	0
NC CHARLOTTE	60	35	73	24	47	-4	0.05	-0.97	0.05	0.06	3	4.53	48	71	26	0	3	1	0
NC GREENSBORO	56	34	69	26	45	-3	0.07	-0.81	0.06	0.50	31	3.80	46	70	28	0	3	2	0
NC HATTERAS	53	42	60	38	47	-4	0.53	-0.61	0.28	0.56	27	5.93	50	86	49	0	0	3	0
NC RALEIGH	59	34	70	27	47	-2	0.07	-0.89	0.07	0.34	19	4.89	53	85	36	0	3	1	0
NC WILMINGTON	62	38	70	32	50	-4	0.25	-0.74	0.25	0.25	14	7.72	77	91	32	0	1	1	0
ND BISMARCK	44	20	57	5	32	4	0.16	0.00	0.16	0.23	82	1.13	91	78	58	0	6	1	0
ND DICKINSON	45	21	56	9	33	4	0.01	-0.08	0.01	0.05	36	0.61	65	88	53	0	7	1	0
ND FARGO	35	14	46	0	25	0	0.06	-0.18	0.06	0.49	120	1.89	107	87	67	0	7	1	0
ND GRAND FORKS	31	9	38	-5	20	-3	0.11	-0.06	0.11	0.30	97	1.30	83	91	74	0	7	1	0
ND JAMESTOWN	36	14	45	2	25	-1	0.03	-0.14	0.03	0.11	38	0.44	31	93	64	0	7	1	0
ND WILLISTON	39	16	47	1	27	0	0.02	-0.12	0.02	0.17	68	1.66	141	86	71	0	7	1	0
OH AKRON-CANTON	38	23	49	15	30	-6	0.50	-0.19	0.15	0.95	76	5.52	92	93	71	0	7	6	0
OH CINCINNATI	46	26	53	19	36	-6	0.05	-0.80	0.05	1.30	84	7.10	98	81	46	0	6	1	0
OH CLEVELAND	39	25	51	20	32	-4	0.63	0.01	0.21	1.19	106	4.64	79	88	55	0	7	5	0
OH COLUMBUS	42	25	53	16	34	-6	0.06	-0.56	0.06	0.53	47	7.64	130	75	49	0	7	1	0
OH DAYTON	43	23	52	16	33	-6	0.02	-0.66	0.02	0.60	49	6.53							

Weather Data for the Week Ending March 13, 2004

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 Mar 1	PCT. NORMAL SINCE Mar 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	42	23	51	13	32	-3	0.10	-0.43	0.08	1.04	111	2.83	60	85	49	0	7	2	0
OK YOUNGSTOWN	38	23	47	17	31	-4	0.46	-0.19	0.12	0.90	78	5.51	100	91	64	0	7	6	0
OK OKLAHOMA CITY	63	39	73	33	51	1	0.18	-0.48	0.16	2.81	234	5.72	142	76	29	0	0	2	0
OR TULSA	64	39	77	31	51	1	0.11	-0.69	0.11	2.96	207	6.52	131	73	33	0	1	1	0
OR ASTORIA	58	42	64	36	50	4	0.09	-1.62	0.04	1.51	47	21.38	103	99	85	0	0	3	0
OR BURNS	51	23	57	20	37	1	0.00	-0.28	0.00	0.18	33	2.90	102	85	65	0	7	0	0
OR EUGENE	63	40	70	34	52	6	0.03	-1.33	0.01	0.57	22	11.75	71	95	82	0	0	3	0
OR MEDFORD	73	39	78	36	56	9	0.00	-0.43	0.00	0.60	73	6.94	129	94	45	0	0	0	0
OR PENDLETON	63	36	73	31	49	5	0.00	-0.28	0.00	0.47	92	4.55	143	80	50	0	2	0	0
OR PORTLAND	64	41	71	36	52	5	0.03	-0.84	0.02	0.54	33	9.35	86	93	77	0	0	2	0
OR SALEM	63	39	69	33	51	5	0.00	-0.98	0.00	0.40	21	12.20	95	95	72	0	0	0	0
PA ALLENTOWN	46	30	54	23	38	1	0.20	-0.59	0.10	0.66	46	5.44	71	77	52	0	5	4	0
PA ERIE	37	24	48	18	30	-5	0.28	-0.37	0.11	0.63	53	5.45	91	83	68	0	6	3	0
PA MIDDLETOWN	48	31	55	28	40	1	0.26	-0.48	0.24	0.91	66	4.79	67	84	38	0	6	2	0
PA PHILADELPHIA	48	35	55	31	41	-1	0.43	-0.42	0.29	1.69	110	5.89	76	74	45	0	1	4	0
PA PITTSBURGH	42	26	51	22	34	-4	0.18	-0.52	0.08	0.80	63	8.02	126	85	54	0	6	4	0
PA WILKES-BARRE	42	27	50	21	35	-1	0.30	-0.26	0.13	0.63	62	4.63	83	88	47	0	6	4	0
PA WILLIAMSPORT	45	28	53	23	37	1	0.11	-0.57	0.06	0.58	47	4.88	73	89	52	0	6	3	0
RI PROVIDENCE	44	29	50	25	37	0	0.07	-0.89	0.07	0.67	39	4.29	45	80	47	0	6	1	0
SC BEAUFORT	65	43	81	31	54	-2	0.11	-0.68	0.11	0.11	8	5.61	65	80	28	0	1	1	0
SC CHARLESTON	66	40	81	30	53	-4	0.16	-0.74	0.16	0.16	10	6.13	70	82	30	0	1	1	0
SC COLUMBIA	64	37	76	28	51	-3	0.00	-1.04	0.00	0.04	2	5.89	57	75	30	0	3	0	0
SC GREENVILLE	61	36	72	31	49	-1	0.04	-1.23	0.04	0.14	6	5.20	47	73	23	0	2	1	0
SD ABERDEEN	45	20	53	6	32	3	0.03	-0.23	0.02	0.45	105	2.18	157	83	66	0	7	2	0
SD HURON	50	21	59	8	36	5	0.03	-0.30	0.03	0.09	16	1.65	102	81	35	0	6	1	0
SD RAPID CITY	55	27	67	20	41	8	0.00	-0.19	0.00	0.65	197	1.81	156	77	35	0	6	0	0
SD SIOUX FALLS	49	23	61	8	36	5	0.04	-0.30	0.04	0.44	77	2.07	130	83	56	0	6	1	0
TN BRISTOL	52	30	62	24	41	-4	0.31	-0.60	0.23	2.36	140	8.67	101	82	36	0	5	2	0
TN CHATTANOOGA	62	35	69	29	48	-2	0.00	-1.44	0.00	2.48	94	10.96	85	76	33	0	2	0	0
TN KNOXVILLE	56	34	64	27	45	-3	0.14	-1.07	0.10	2.56	116	8.94	83	73	31	0	1	2	0
TN MEMPHIS	59	38	64	32	49	-3	0.00	-1.22	0.00	1.45	65	9.10	84	64	29	0	1	0	0
TN NASHVILLE	56	34	65	28	45	-4	0.00	-1.13	0.00	2.55	123	11.92	123	69	29	0	2	0	0
TX ABILENE	65	42	75	34	53	-2	0.37	0.07	0.37	1.10	196	5.65	212	81	46	0	0	1	0
TX AMARILLO	60	37	73	32	49	2	0.08	-0.15	0.06	1.49	373	3.61	228	78	44	0	1	2	0
TX AUSTIN	72	46	81	34	59	-2	0.51	0.01	0.39	1.06	110	8.94	185	69	44	0	0	2	0
TX BEAUMONT	73	48	84	44	61	0	0.00	-0.81	0.00	0.15	10	13.12	125	96	40	0	0	0	0
TX BROWNSVILLE	77	59	79	49	68	0	0.02	-0.13	0.01	0.03	11	2.73	97	93	59	0	0	2	0
TX CORPUS CHRISTI	76	56	83	50	66	1	0.00	-0.38	0.00	0.03	4	4.17	99	88	54	0	0	0	0
TX DEL RIO	74	53	84	46	63	0	2.15	1.96	1.31	2.52	681	4.10	216	78	54	0	0	3	2
TX EL PASO	68	41	79	38	55	-1	0.76	0.70	0.62	0.80	727	1.22	128	69	36	0	0	2	1
TX FORT WORTH	66	46	72	41	56	0	0.33	-0.39	0.33	1.37	101	8.26	147	73	30	0	0	1	0
TX GALVESTON	70	56	80	54	63	0	0.03	-0.58	0.03	0.15	14	9.11	117	87	51	0	0	1	0
TX HOUSTON	74	50	85	47	62	1	0.03	-0.70	0.03	0.35	26	11.89	149	79	43	0	0	1	0
TX LUBBOCK	61	40	74	35	50	0	0.82	0.68	0.76	1.86	689	5.64	381	77	50	0	0	2	1
TX MIDLAND	63	43	73	36	53	-2	0.73	0.64	0.71	1.28	640	2.75	210	80	50	0	0	2	1
TX SAN ANGELO	67	44	75	37	55	-1	1.08	0.87	0.84	1.67	388	4.76	197	85	56	0	0	3	1
TX SAN ANTONIO	74	52	87	47	63	2	0.91	0.50	0.46	1.55	199	5.60	134	83	44	0	0	2	0
TX VICTORIA	75	50	84	43	63	0	0.50	0.00	0.50	0.79	86	7.03	130	94	53	0	0	1	1
TX WACO	69	45	73	37	57	0	0.24	-0.34	0.14	1.51	136	10.78	198	89	51	0	0	2	0
UT WICHITA FALLS	65	43	75	36	54	1	0.20	-0.30	0.20	1.97	214	6.46	179	76	38	0	0	1	0
UT SALT LAKE CITY	54	33	58	30	43	1	0.00	-0.41	0.00	0.29	39	2.92	85	86	49	0	4	0	0
VT BURLINGTON	39	25	45	16	32	3	0.04	-0.44	0.03	0.29	35	1.61	34	84	50	0	7	2	0
VA LYNCHBURG	54	30	65	21	42	-2	0.00	-0.87	0.00	0.53	33	4.31	52	62	29	0	4	0	0
VA NORFOLK	55	40	63	33	47	-1	0.83	-0.10	0.49	1.03	61	4.44	49	80	42	0	0	3	0
VA RICHMOND	55	31	65	27	43	-3	0.46	-0.49	0.42	0.54	31	3.96	48	88	50	0	4	2	0
VA ROANOKE	54	33	65	25	43	-2	0.13	-0.73	0.13	0.46	29	5.12	65	66	33	0	4	1	0
WA WASH/DULLES	49	29	60	24	39	-3	0.13	-0.67	0.13	1.37	94	4.71	65	76	44	0	5	1	0
WA OLYMPIA	59	37	70	30	48	5	0.15	-1.07	0.14	0.92	39	13.00	81	97	79	0	3	2	0
WA QUILLAYUTE	55	38	64	31	47	3	2.53	-0.07	2.20	4.86	98	24.06	78	99	87	0	1	5	1
WA SEATTLE-TACOMA	56	41	65	37	48	2	0.35	-0.51	0.25	0.75	46	9.55	87	93	78	0	0	2	0
WA SPOKANE	56	33	63	29	45	7	0.00	-0.35	0.00	0.16	24	3.04	76	80	44	0	3	0	0
WA YAKIMA	63	31	70	28	47	6	0.00	-0.14	0.00	0.08	30	3.05	136	90	59	0	5	0	0
WV BECKLEY	44	25	55	20	35	-6	0.22	-0.61	0.19	1.50	98	6.40	83	81	48	0	7	3	0
WV CHARLESTON	49	29	58	23	39	-5	0.10	-0.81	0.09	2.06	123	8.18	101	90	41	0	5	2	0
WV ELKINS	45	24	56	18	34	-4	0.54	-0.37	0.35	2.44	147	7.99	96	97	51	0	7	3	0
WV HUNTINGTON	48	28	57	24	38	-6	0.01	-0.87	0.01	2.13	130	8.16	103	78	40	0	5	1	0
WI EAU CLAIRE	35	17	45	5	26	-3	0.50	0.16	0.23	1.18	211	4.12	172	92	56	0	7	4	0
WI GREEN BAY	36	22	46	12	29	0	0.40	0.00	0.14	2.11	306	4.97	171	87	59	0	7	4	0
WI LA CROSSE	40	22	51	10	31	-1	0.38	0.03	0.20	2.41	416	4.66	169	85	46	0	7	4	0
WI MADISON	41	22	52	10	31	-1	0.11	-0.32	0.05	1.59	218	3.65	112	76	50	0	7	3	0
WI MILWAUKEE	40	23	49	12	31	-2	0.07	-0.41	0.03	1.75	208	4.28	99	79	57	0	6	3	0
WY CASPER	48	25	56	11	36	2	0.02	-0.17	0.02	0.10	28	0.77	49	82	58	0	6	1	0
WY CHEYENNE	55	25	63	19	40	7	0.00	-0.21	0.00	0.08	22	0.60	48	72	31	0	6	0	0
WY LANDER	43	23	51	13	33	-1	0.00	-0.24	0.00	0.00	0	1.64	112	81	61	0	7	0	0
WY SHERIDAN	55	24	65	15	40	6	0.11	-0.07	0.08	0.26	84	1.30	79	80	47	0	7	2	0

Based on 1971-2000 normals

*** Not Available

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

Winter Weather Review

Review provided by USDA/WAOB

Highlights: February precipitation fell in drought areas of the Plains, West, and upper Midwest, reversing a prevailing pattern. Significant February precipitation also soaked the South, helping to dent or erase a 2-month dry spell. Winter wheat on the southern Plains was among the greatest beneficiaries of the late-winter soil moisture improvements, although major dust storms on December 15 and February 19 exhibited the seriousness of the region's long-term drought. Farther west, a late-season boost in high-elevation snow packs across the Great Basin, Intermountain West, and Southwest improved spring and summer runoff prospects but provided only limited relief from long-term drought and correspondingly low reservoir levels.

The only region cold throughout the winter months was the Southeast, where temperatures generally ranged from 2 to 4°F below normal. Meanwhile in the Northeast, near-normal temperatures in December and February partially offset bitterly cold January weather. Farther west, winter opened on a mild note across the Plains and Midwest, followed by intermittent cold blasts in January and February. Nevertheless, winter temperatures averaged up to 4°F above normal on the High Plains and as much as 6°F above normal at a few locations in the upper Midwest. The West also experienced mild weather for most of December, followed by persistently colder-than-normal conditions for the remainder of the winter. Winter temperatures averaged as much as 6°F below normal in portions of the Intermountain West.

December: Storms repeatedly battered the Northeast during the first 3 weeks of December, resulting in frequent bouts of heavy rain, snow, and high winds. Precipitation highlights were scarce, however, elsewhere east of the Rockies. Winter wheat areas in the lower Midwest retained plenty of moisture from previously heavy rainfall, while Southern winter grains and cool-season pastures received enough rain to promote generally normal development. Farther west, the Plains' winter wheat situation remained far from ideal. Although the Plains escaped December with relatively minor temperature fluctuations, subsoil moisture was limited. Occasional snowfall provided a boost in topsoil moisture on the northern and central Plains, but exceptional dryness persisted on the southern High Plains, where high winds on December 15 triggered a major dust storm. Farther west, wet weather along the Pacific Coast gradually pushed inland, especially toward month's end. Wetness in the West Coast States, initially confined to northern and central California and the Pacific Northwest, reached southern California's burned areas (from the October wildfires) by December 25, triggering several major mudslides. Farther inland, late-month storminess was more welcomed across the Intermountain West, where reservoir storage remained significantly below normal due to a multi-year drought.

Below-normal monthly temperatures were confined to the East, where an early- to mid-December cold snap helped to condition Florida's citrus trees. The cold spell culminated on December 21, featuring scattered temperatures near the freezing mark as far south as the northern Everglades. However, winter agricultural interests in central and southern Florida incurred minimal damage. Mild weather overspread the East toward the end of December, while most of the remainder of the Nation experienced a continuation of above-normal temperatures. An exception was the Southwest, where colder air at month's end brought the lowest temperatures in several years. On December 28 and 29, some winter crop producers in southern California and the Southwest had to take protective measures.

January: The coldest weather in many years gripped the Northeast, accompanied by occasional snowfall in the northern Mid-Atlantic States and relentless snow squalls downwind of the Great Lakes. While bitterly cold conditions were persistent in the Northeast, cold air made only two significant surges across the remainder of the United States. Across most of the Plains, the most impressive cold outbreak struck from January 4-6, followed by the Midwest's coldest

spell toward month's end. On the Plains, significant precipitation was confined to a few relatively small geographic areas. Much-needed precipitation, mostly rain, spread onto the southern Plains from January 15-17, followed by a major snowstorm across the east-central Plains on January 25-26. Farther north, the last week of January featured heavy snow in northeastern Montana and parts of North Dakota. However, mostly dry conditions persisted on the High Plains from eastern Colorado and western Kansas northward into southern Montana, leaving a portion of the wheat crop regularly exposed to gusty winds and temperature fluctuations. In contrast, heavy rain soaked the Ohio Valley early in the month, causing some flooding in lowlands planted to winter wheat. Elsewhere in the eastern Corn Belt, soil moisture remained adequate to locally excessive. Farther west, however, unfavorably dry conditions persisted across the northwestern Corn Belt, although late-month snowfall provided beneficial moisture. Meanwhile, January precipitation was well below normal from the Delta to the southern Atlantic region, although the combination of cool weather and sporadic showers limited stress on pastures and winter grains. January rainfall was heavier in the western Gulf Coast region, while late-month downpours reduced irrigation demands in Florida's winter agricultural areas. In the West, mild, tranquil weather prevailed for most of the month, following some early-January storminess. However, cold air remained trapped in many snow-covered valleys across the Intermountain West, resulting in persistently cold, foggy weather and air-stagnation problems. Prospects for winter grains continued to improve in the Northwest, where widespread precipitation and a late-month warming trend melted snow and boosted soil moisture reserves.

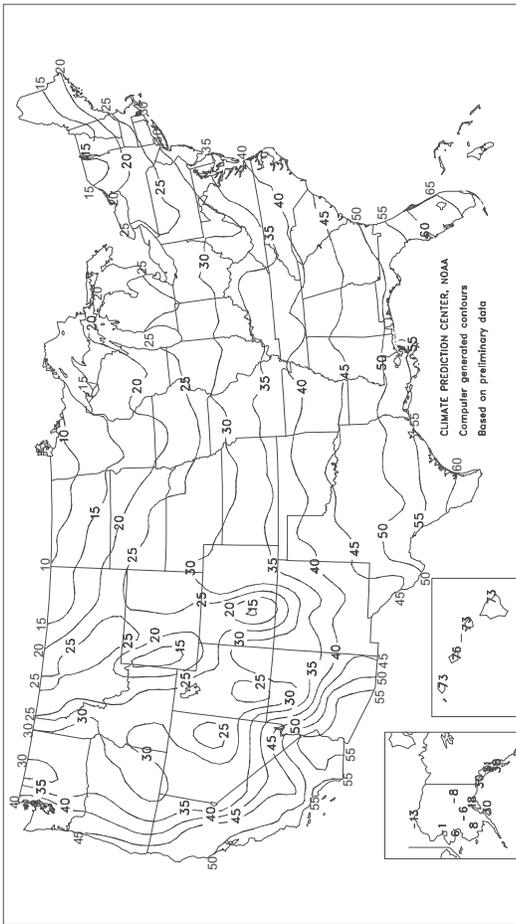
January temperatures averaged as much as 5°F above normal on the central and southern High Plains and across the South-Central United States. In contrast, readings ranged from 3 to 7°F below normal in eastern Montana and North Dakota and were slightly below normal across the remainder of the northern Plains, northern Corn Belt, and southern Atlantic States. Even colder weather was noted in parts of the Intermountain West, where temperatures averaged at least 5°F below normal in some valley locations, and the Northeast, where readings ranging from 5 to 10°F below normal were widespread.

February: Important changes in the Nation's weather provided drought relief across the West, central and southern Plains, and upper Midwest. In addition, heavy precipitation across the South ended a 2-month dry spell. Western storminess boosted high-elevation snow packs and improved spring and summer runoff prospects in the Great Basin, Intermountain West, central and southern Rockies, and Southwest. Meanwhile, water-supply prospects remained favorable in California and the Northwest. Farther east, most winter wheat areas on the Plains benefited from increasingly wet weather, despite underlying subsoil moisture shortages. Some of the heaviest precipitation fell on the southern Plains, where a late-month warming trend promoted some wheat and pasture development. However, pockets of dryness persisted farther north, most notably across parts of Montana and the central High Plains. Elsewhere, the northern and western Corn Belt received substantial rain and snow, reducing long-term precipitation deficits. In contrast, mostly dry weather across the southern and eastern Corn Belt helped to eliminate pockets of excessive wetness. Across the South, a steady procession of storms aided pastures and winter grains but slowed pre-planting activities. Fieldwork delays were most pronounced west of the Delta, where monthly precipitation totaled more than 200 percent of normal.

Below-normal temperatures prevailed across the southern two-thirds of the Nation, excluding southern Florida, where near-normal readings prevailed. Chilly conditions were most pronounced from the Great Basin to the southern Rockies, where temperatures averaged as much as 8°F below normal. In contrast, near- to slightly above-normal temperatures were observed across the Nation's northern tier. An exception was eastern Montana, where record-high snow depths helped to hold readings as much as 6°F below normal.

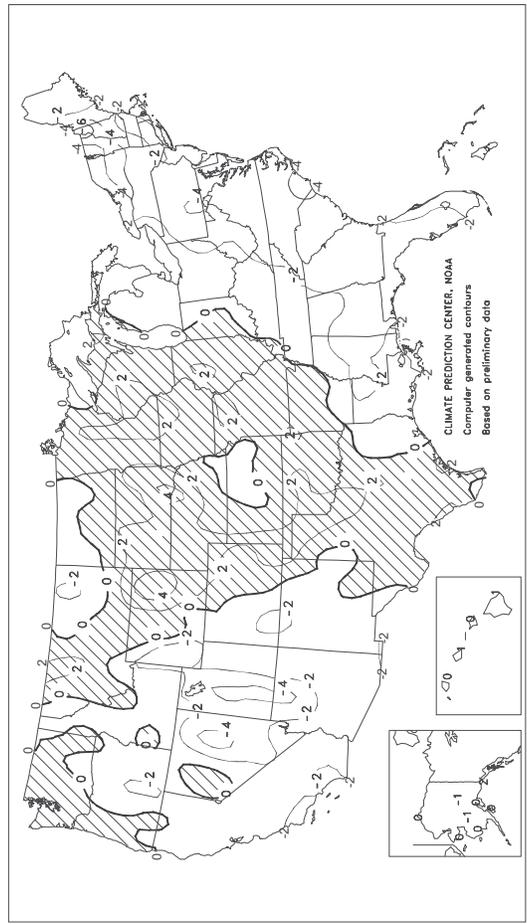
Average Temperature (°F)

DEC 2003 - FEB 2004



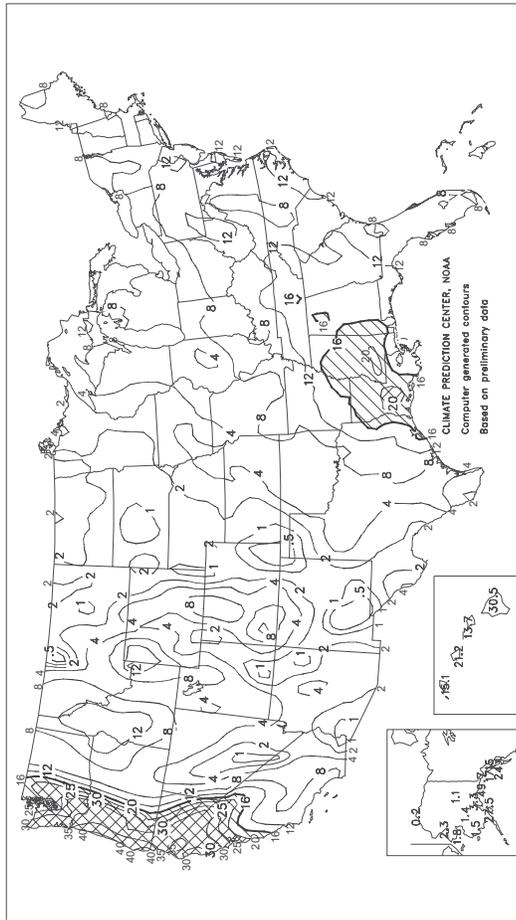
Departure of Average Temperature from Normal (°F)

DEC 2003 - FEB 2004



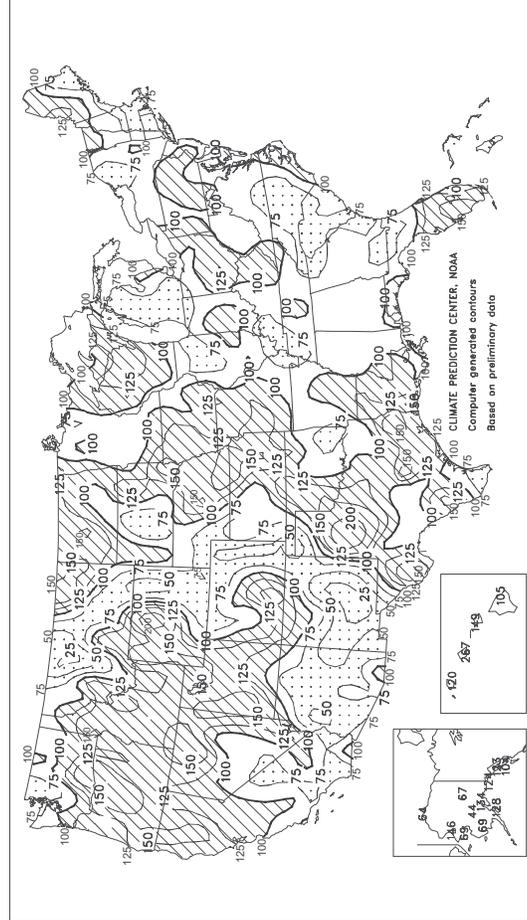
Total Precipitation (inches)

DEC 2003 - FEB 2004



Percent of Normal Precipitation

DEC 2003 - FEB 2004



TEMPERATURE AND PRECIPITATION SUMMARY

Winter 2003-04

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	44	-1	12.00	-2.13	LEXINGTON	34	-1	8.70	-1.94	COLUMBUS	30	-1	9.89	2.23
HUNTSVILLE	41	-1	13.34	-2.72	LONDON-CORBIN	36	-1	13.02	0.98	DAYTON	29	0	8.37	0.40
MOBILE	51	-1	18.07	2.56	LOUISVILLE	37	1	9.56	-0.66	MANSFIELD	26	-1	7.88	-0.18
MONTGOMERY	46	-3	14.31	-1.15	PADUCAH	37	1	6.89	-4.89	TOLEDO	27	0	5.04	-1.41
AK ANCHORAGE	18	1	3.31	0.84	LA BATON ROUGE	51	-1	17.94	1.39	YOUNGSTOWN	26	-2	7.29	-0.04
BARROW	-13	0	0.23	-0.12	LAKE CHARLES	53	0	20.38	6.98	OK OKLAHOMA CITY	41	2	4.02	-0.71
COLD BAY	29	0	12.09	2.09	NEW ORLEANS	53	-1	13.39	-3.02	TULSA	41	2	6.02	0.04
FAIRBANKS	-8	-1	1.10	-0.56	SHREVEPORT	48	-1	15.91	2.55	OR ASTORIA	44	1	29.74	1.85
JUNEAU	31	3	17.47	3.23	ME BANGOR	19	-2	6.37	-2.84	BURNS	26	0	4.28	0.69
KING SALMON	17	1	1.59	-1.55	CARIBOU	13	0	7.17	-1.05	EUGENE	42	1	21.81	-0.48
KODIAK	30	0	27.55	6.02	PORTLAND	23	-2	5.74	-5.73	MEDFORD	43	3	11.01	3.54
NOME	6	-1	1.84	-0.84	MD BALTIMORE	33	-2	8.54	-1.30	PENDLETON	34	-1	6.80	2.65
AZ FLAGSTAFF	29	-2	2.74	-3.83	MA BOSTON	30	-2	7.53	-3.42	PORTLAND	42	1	16.27	1.31
PHOENIX	57	1	2.03	-0.49	WORCESTER	24	-2	7.45	-3.52	SALEM	42	1	22.24	4.85
TUCSON	52	-1	1.41	-1.49	MI ALPENA	20	0	2.62	-2.32	PA ALLENTOWN	28	-2	9.75	0.11
AR FORT SMITH	42	1	6.43	-1.92	DETROIT	27	0	4.75	-1.55	ERIE	28	-1	7.79	-0.75
LITTLE ROCK	43	0	11.90	0.25	FLINT	25	1	4.39	-0.71	MIDDLETOWN	30	-1	7.28	-1.73
CA BAKERSFIELD	51	2	3.52	0.37	GRAND RAPIDS	26	1	4.27	-1.99	PHILADELPHIA	33	-2	9.66	0.09
EUREKA	48	0	26.37	8.54	HOUGHTON LAKE	20	0	3.09	-1.52	PITTSBURGH	29	-1	10.56	2.63
FRESNO	49	2	5.51	-0.11	LANSING	24	0	2.89	-2.34	WILKES-BARRE	26	-3	7.97	0.88
LOS ANGELES	56	-1	6.26	-1.62	MUSKEGON	27	1	3.50	-2.94	WILLIAMSPORT	27	-1	8.72	0.32
REDDING	46	-1	24.92	8.26	TRAVERSE CITY	23	0	4.20	-3.23	PR SAN JUAN	77	0	9.36	-0.53
SACRAMENTO	49	1	11.43	1.60	MN DULUTH	15	3	3.91	1.02	RI PROVIDENCE	30	-1	10.05	-1.91
SAN DIEGO	57	-1	3.76	-1.87	INT'L FALLS	9	2	1.17	-1.01	SC CHARLESTON	47	-3	7.83	-2.57
SAN FRANCISCO	51	1	14.04	2.69	MINNEAPOLIS	19	2	2.11	-0.72	COLUMBIA	43	-3	7.98	-3.90
STOCKTON	48	1	8.57	1.58	ROCHESTER	19	3	2.47	-0.24	FLORENCE	43	-4	5.50	-5.08
ALAMOSA	18	0	1.21	0.42	ST. CLOUD	16	3	1.48	-0.56	GREENVILLE	41	-2	7.73	-4.78
CO SPRINGS	32	3	1.05	0.00	MS JACKSON	46	-1	14.07	-1.44	MYRTLE BEACH	45	-3	10.29	-0.32
DENVER	32	2	0.56	-0.21	MERIDIAN	45	-3	13.70	-2.88	SD ABERDEEN	17	2	2.06	0.72
GRAND JUNCTION	28	-1	2.03	0.41	TUPELO	42	-1	12.74	-3.20	HURON	21	3	1.75	0.31
PUEBLO	33	2	1.21	0.23	MO COLUMBIA	32	1	6.54	0.14	RAPID CITY	28	3	1.41	0.18
CT BRIDGEPORT	30	-2	7.30	-2.82	JOPLIN	38	2	8.08	1.03	SIoux FALLS	20	2	2.70	1.16
HARTFORD	27	-1	7.14	-3.26	KANSAS CITY	31	1	3.86	-0.24	TN BRISTOL	36	0	10.69	0.38
DC WASHINGTON	36	-2	7.96	-0.93	SPRINGFIELD	36	1	8.37	0.81	CHATTANOOGA	41	-1	12.86	-2.20
DE WILMINGTON	32	-2	8.80	-0.84	ST JOSEPH	30	0	4.39	0.94	JACKSON	40	-1	10.53	-3.41
FL DAYTONA BEACH	58	-2	7.31	-1.27	ST LOUIS	35	2	7.17	-0.11	KNOXVILLE	38	-2	9.79	-3.28
FT LAUDERDALE	68	0	8.32	0.03	MT BILLINGS	29	2	1.60	-0.45	MEMPHIS	43	0	10.73	-3.50
FT MYERS	63	-3	11.56	5.65	BUTTE	20	1	0.89	-0.64	NASHVILLE	40	0	12.56	0.36
JACKSONVILLE	52	-3	7.33	-2.15	GLASGOW	13	-2	1.92	0.94	TX ABILENE	47	1	4.56	1.19
KEY WEST	69	-2	6.26	0.39	GREAT FALLS	27	3	0.41	-1.45	AMARILLO	39	1	2.21	0.42
MELBOURNE	62	0	7.43	0.15	HELENA	24	1	0.78	-0.58	AUSTIN	51	-1	8.39	2.07
MIAMI	68	-1	6.86	0.73	KALISPELL	23	-1	3.78	-0.49	BEAUMONT	53	-1	16.16	1.87
ORLANDO	60	-2	9.36	2.27	MILES CITY	21	0	0.73	-0.56	BROWNSVILLE	62	1	3.05	-0.60
PENSACOLA	51	-3	14.43	0.44	MISSOULA	26	1	2.35	-0.63	COLLEGE STATION	52	0	11.68	2.75
ST PETERSBURG	61	-2	10.91	2.68	NE GRAND ISLAND	26	1	2.49	0.61	CORPUS CHRISTI	59	1	4.71	-0.50
TALLAHASSEE	50	-3	12.67	-1.42	HASTINGS	27	0	2.98	1.03	DALLAS/F WORTH	48	1	7.85	1.01
TAMPA	61	-1	9.05	1.81	LINCOLN	26	0	2.50	0.31	DEL RIO	54	1	1.62	-0.66
WEST PALM BEACH	66	-1	9.00	-0.44	MCCOOK	30	1	1.09	-0.58	EL PASO	46	-1	0.43	-1.18
GA ATHENS	42	-2	9.11	-3.68	NORFOLK	25	2	2.30	0.32	GALVESTON	56	-1	14.67	4.45
ATLANTA	43	-2	10.14	-3.38	NORTH PLATTE	27	1	0.96	-0.34	HOUSTON	54	0	14.53	4.18
AUGUSTA	44	-3	9.55	-2.20	OMAHA/EPPLEY	26	1	3.40	0.91	LUBBOCK	43	3	3.78	1.90
COLUMBUS	46	-3	10.85	-2.81	SCOTTSBLUFF	29	2	1.22	-0.46	MIDLAND	46	1	1.47	-0.29
MACON	46	-1	15.10	1.62	VALENTINE	26	2	1.22	0.11	SAN ANGELO	48	1	3.09	0.16
SAVANNAH	48	-3	6.28	-3.40	NV ELKO	25	-3	3.58	0.63	SAN ANTONIO	54	2	4.16	-1.21
HI HILO	73	1	30.54	1.44	ELY	25	-2	2.03	0.04	VICTORIA	55	0	8.34	1.39
HONOLULU	75	1	21.16	13.23	LAS VEGAS	48	-1	2.43	0.75	WACO	49	1	9.76	2.67
KAHULUI	73	1	13.70	4.52	RENO	38	3	3.74	0.74	WICHITA FALLS	45	2	4.60	0.23
LIHUE	73	1	15.11	2.48	WINNEMUCCA	32	0	3.36	1.10	UT SALT LAKE CITY	28	-3	6.60	2.67
ID BOISE	33	1	4.93	1.02	NH CONCORD	22	-1	7.08	-1.21	VT BURLINGTON	18	-3	6.21	0.10
LEWISTON	37	2	4.83	1.69	NJ ATLANTIC CITY	33	-1	9.27	-0.33	VA LYNCHBURG	35	-2	7.13	-2.74
POCATELLO	26	-1	4.34	1.09	NEWARK	32	-2	9.40	-1.11	NORFOLK	42	0	9.65	-0.65
IL CHICAGO/O'HARE	27	2	3.77	-2.04	NM ALBUQUERQUE	38	0	1.38	-0.04	RICHMOND	37	-2	7.70	-1.95
MOLINE	27	2	4.80	-0.49	NY ALBANY	23	-2	7.97	0.64	ROANOKE	37	-1	7.61	-1.56
PEORIA	29	3	2.91	-2.66	BINGHAMTON	22	-2	6.10	-1.97	WASH/DULLES	33	-1	7.91	-0.98
ROCKFORD	25	2	4.44	-0.37	BUFFALO	26	-1	7.74	-1.64	WA OLYMPIA	40	1	18.10	-3.50
SPRINGFIELD	30	1	3.34	-2.62	ROCHESTER	25	-1	5.95	-1.16	QUILLAYUTE	42	1	32.85	-7.65
IN EVANSVILLE	35	1	4.74	-4.81	SYRACUSE	23	-2	6.07	-1.76	SEATTLE-TACOMA	42	0	12.68	-2.25
FORT WAYNE	26	-1	5.59	-1.17	NC ASHEVILLE	37	-1	7.71	-3.57	SPOKANE	29	0	5.02	-0.56
INDIANAPOLIS	31	1	8.85	0.93	CHARLOTTE	40	-4	6.87	-3.86	YAKIMA	32	1	5.04	1.69
SOUTH BEND	27	1	4.02	-3.32	GREENSBORO	38	-2	5.95	-3.75	WV BECKLEY	31	-2	7.23	-2.05
IA BURLINGTON	28	2	6.03	1.08	HATTERAS	45	-3	11.08	-3.26	CHARLESTON	34	-2	9.01	-0.75
CEDAR RAPIDS	24	2	3.68	0.05	RALEIGH	40	-2	8.07	-2.46	ELKINS	29	-2	8.30	-1.77
DES MOINES	26	2	3.86	0.31	WILMINGTON	44	-4	12.42	0.46	HUNTINGTON	35	-1	8.69	-0.98
DUBUQUE	23	2	3.35	-1.04	ND BISMARCK	16	2	1.38	-0.02	WI EAU CLAIRE	19	3	4.07	1.20
SIoux CITY	23	1	2.15	0.28	DICKINSON	18	0	0.77	-0.37	GREEN BAY	21	2	4.54	0.91
WATERLOO	22	2	2.24	-0.76	FARGO	13	2	2.58	0.66	LA CROSSE	22	2	2.97	-0.44
KS CONCORDIA	29	-1	3.95	1.70	GRAND FORKS	10	0	1.67	-0.14	MADISON	22	1	4.06	-0.13
DODGE CITY	33	0	1.58	-0.47	JAMESTOWN	13	0	0.80	-0.78	MILWAUKEE	26	2	4.56	-1.16
GOODLAND	32	2	1.64	0.37	MINOT	13	-1	2.11	0.30	WAUSAU	18	1	4.08	0.76
HILL CITY	31	1	1.00	-0.54	WILLISTON	12	-1	1.71	0.21	CASPER	28	4	1.06	-0.78
TOPEKA	31	0	4.90	1.35	OH AKRON-CANTON	27	-1	7.48	-0.27	CHEYENNE	30	3	1.28	-0.07
WICHITA	34	1	3.52	0.31	CINCINNATI	32	-1	8.06	-0.89	LANDER	23	1	2.46	0.79
KY JACKSON	36	-1	11.79	0.28	CLEVELAND	28	0	7.48	-0.43	SHERIDAN	26	2	1.91	-0.11

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

March 8 -14, 2004

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

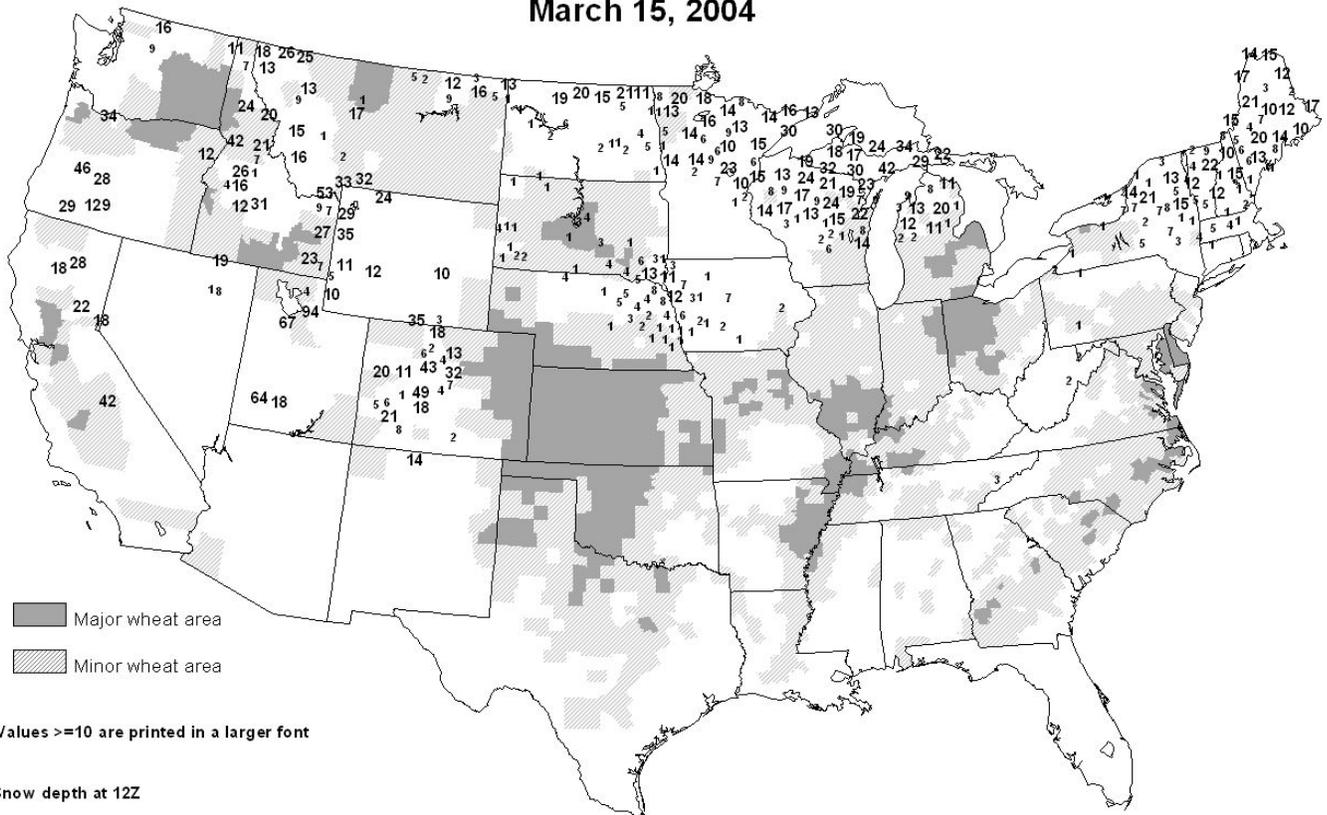
Above-normal temperatures melted most of the northern Great Plains' snow cover, while warmer temperatures early in the week raised optimism for planting in the southern Great Plains. Weekend rainfall, in the southern Great Plains, enhanced small grain and pasture conditions. Seasonal rainfall continued in western Washington, while areas east of the Cascade Mountains experienced dry conditions. Cooler-than-normal temperatures were recorded in most areas east of the Great Plains, with the reading as much as 6 degrees F below average along the East Coast. Light, widespread showers maintained moisture levels in the Ohio Valley. Most areas along the Atlantic Coast received rain, but amounts were too light to break the recent dry weather pattern in the southern region. Daytime warmth provided some support for crop development in the Southeast and Delta Regions.

In Texas, wheat and oat fields benefited from warmer, moist weather. Corn and sorghum planting began in north-central Texas, while planting continued in southern areas. Late-week rain and cool weather limited fieldwork activities in the cotton fields. Corn and vegetable planting was active in Florida. Growth of winter forages and grains remained very slow due to moisture shortages and cool weather that included near-freezing temperatures in the northern half of the State. In Georgia, producers burned fields and fertilized pastures and hay. California's warm weather and adequate soil moisture promoted growth of small grains. Alfalfa fields and winter forage grew rapidly in the warmer weather. Some fields were cut for hay and greenchop. Others were treated with herbicide applications to control weeds.

Snow Depth

(Inches)

March 15, 2004



Values ≥ 10 are printed in a larger font

Snow depth at 12Z

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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

International Weather and Crop Summary

March 7 - 13, 2004

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

HIGHLIGHTS

EUROPE: Cool, wet weather kept winter grains dormant across northern and eastern Europe, while widespread rain boosted soil moisture supplies for vegetative winter grains in southern and western Europe.

FSU-WESTERN: Near- to slightly above-normal temperatures gradually melted snow cover across the region.

MIDDLE EAST: Rain benefited greening winter grains in western Iran, although unseasonably warm weather continued to increase crop water use.

NORTHWESTERN AFRICA: Widespread rain continued to favor vegetative to reproductive winter grains in Morocco, while dryness persisted in eastern Algeria and Tunisia.

SOUTHAFRICA: Continuing showers benefited immature corn and other summer crops.

AUSTRALIA: Hot, dry weather early in the week helped summer crop maturation, while somewhat cooler, showery weather later in the week slowed fieldwork and maturation of summer crops.

EASTERN ASIA: Warm weather dominated the region, favoring winter wheat and rapeseed.

SOUTHEAST ASIA: Showers continued in Indonesia and increased in the Philippines.

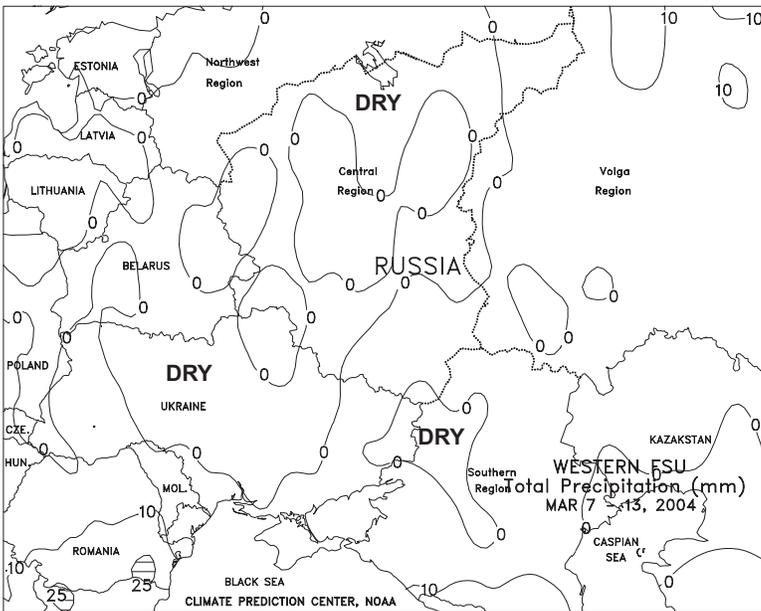
BRAZIL: In the south, scattered showers boosted moisture for immature corn and soybeans, while farther north, a drying trend brought some relief from excessive wetness.

ARGENTINA: Mild, showery weather benefited immature summer grains and oilseeds, but locally heavy rain was untimely for maturing cotton in major northern growing areas.



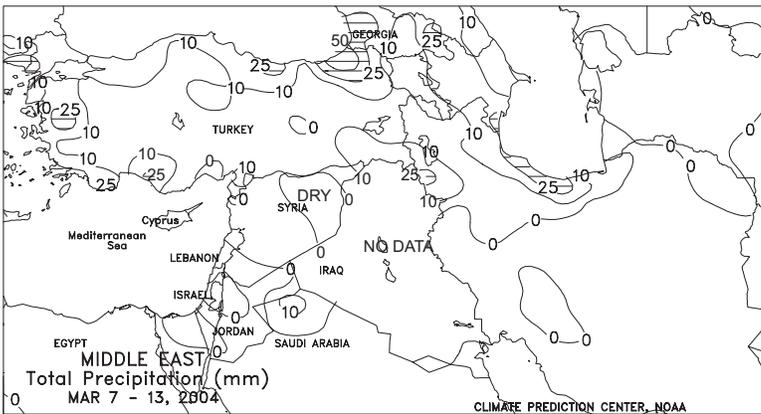
EUROPE

Active weather prevailed across southern Europe, bringing rain (20-50 mm or more) to most of Italy and the coastal and southern Balkans. The precipitation in these areas boosted soil moisture for vegetative winter crops and newly planted spring grains. Farther north, from the Alps and the Czech Republic to Romania, light precipitation (5-25 mm) maintained favorable moisture supplies for upcoming spring growth of dormant winter crops. Early-week light snow and rain prevailed across Poland, Germany, and eastern France. Late in the week, a frontal system brought widespread rain (5-25 mm) to England and France, boosting soil moisture supplies. This system produced heavier rain (10-50 mm) in Spain and Portugal, favoring vegetative winter grains. Winter grains were nearing reproduction in southern Spain. Temperatures averaged 1 to 4 degrees C below normal across most of Europe, except for near-normal temperatures in southern Spain. Winter grains remained dormant from eastern France to Poland and southward to Bulgaria. In portions of western and southern France and England, winter grains were semidormant.



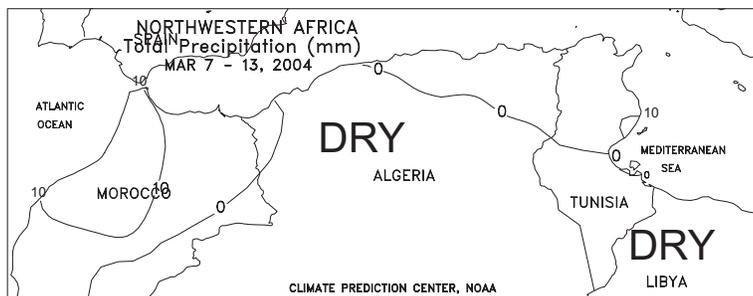
FSU-WESTERN

Dry weather prevailed across most of the region. Light precipitation (2-10 mm) was confined to Estonia and the extreme southern portion of the Southern Region in Russia. The drier weather was accompanied by near- to slightly above-normal temperatures, gradually melting snow cover. Most locations reported maximum temperatures above freezing on several days. Extreme maximum temperatures ranged from 5 to 10 degrees C in the Baltics, Belarus, Ukraine, and the Central and Southern Regions in Russia and from 1 to 5 degrees C in the Volga Region in Russia. By week's end, most winter grain areas in Ukraine and the Southern Region in Russia were snow-free. A moderate to deep snow cover continued to extend from northern Belarus eastward across the Central and Volga Regions in Russia. Temperatures were low enough to keep winter grains dormant in most areas, except for crop areas along the Black Sea Coast, where winter grains were likely breaking dormancy and resuming spring growth. Typically, winter grains break dormancy in Ukraine and the North Caucasus region in Russia in early April.



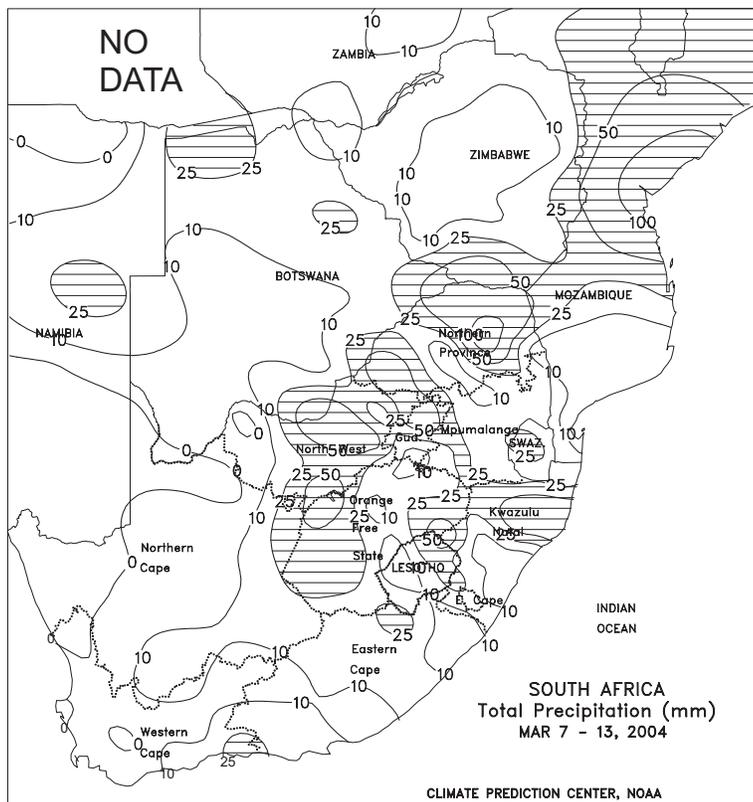
MIDDLE EAST

Across Turkey, light to moderate rain (5-25 mm) maintained adequate moisture supplies for the upcoming spring growth of winter grains. The heaviest amounts were confined to northern and western Turkey. In central Turkey, patchy to light snow cover provided protection for dormant to semidormant winter grains from early-week cold weather (minimum temperatures of -11 to -7 degrees C). The highly variable temperatures of the past 2 weeks stressed winter grains and caused them to lose some winter hardiness. However, the minimum temperatures were above the threshold of potential winterkill. Mostly dry weather continued in the eastern Mediterranean, but favorable moisture supplies existed for winter grain development. Based on reports from surrounding countries, light rain possibly fell in northern Iraq. In northwestern Iran, light to moderate rain (5-25 mm) benefited greening winter grains. Farther south in west-central Iran, however, dry, unseasonably warm weather increased evaporation rates and reduced available moisture supplies for greening winter grains. Maximum temperatures ranged from 17 to 23 degrees C in northwestern Iran. Temperatures averaged 1 to 3 degrees C below normal across Turkey, near normal in the eastern Mediterranean, and 7 to 10 degrees C above normal in western Iran.



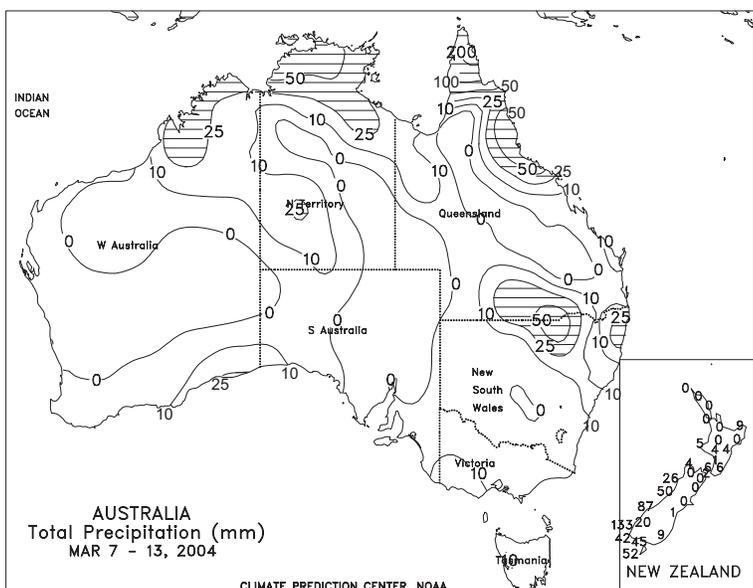
NORTHWESTERN AFRICA

Across Morocco, light to moderate rain (7-27 mm) favored vegetative to reproductive winter grains. Although mostly dry weather prevailed across the winter grain areas of western and central Algeria, adequate soil moisture existed for vegetative to reproductive winter grains. In eastern Algeria and Tunisia, rainfall has trended below normal for the past 4 weeks (about 50 percent of normal rainfall), and rain is needed soon for winter grains nearing the heading stage of development. Temperatures averaged 1 to 3 degrees C above normal, increasing crop water use, especially in eastern Algeria and Tunisia.



SOUTH AFRICA

Scattered showers benefited immature summer crops throughout the corn belt, further improving crop prospects following an unfavorably dry spring. The heaviest rain (25-50 mm or more) fell in northern growing areas from North West to Limpopo (Northern Province) and locally from eastern Free State to northern KwaZulu-Natal. Lighter rain (5-25 mm) covered much of the central and eastern corn belt (central Free State and Mpumalanga). Scattered, mostly light showers also fell in the southern growing areas from southern KwaZulu-Natal to Western Cape. Temperatures averaged near to below normal throughout the region, with highs ranging from the upper 20s to lower 30s degrees C. Summer crops, including corn and sunflowers, should mostly range from filling to mature, although late-planted crops may still be in reproductive stages of development.



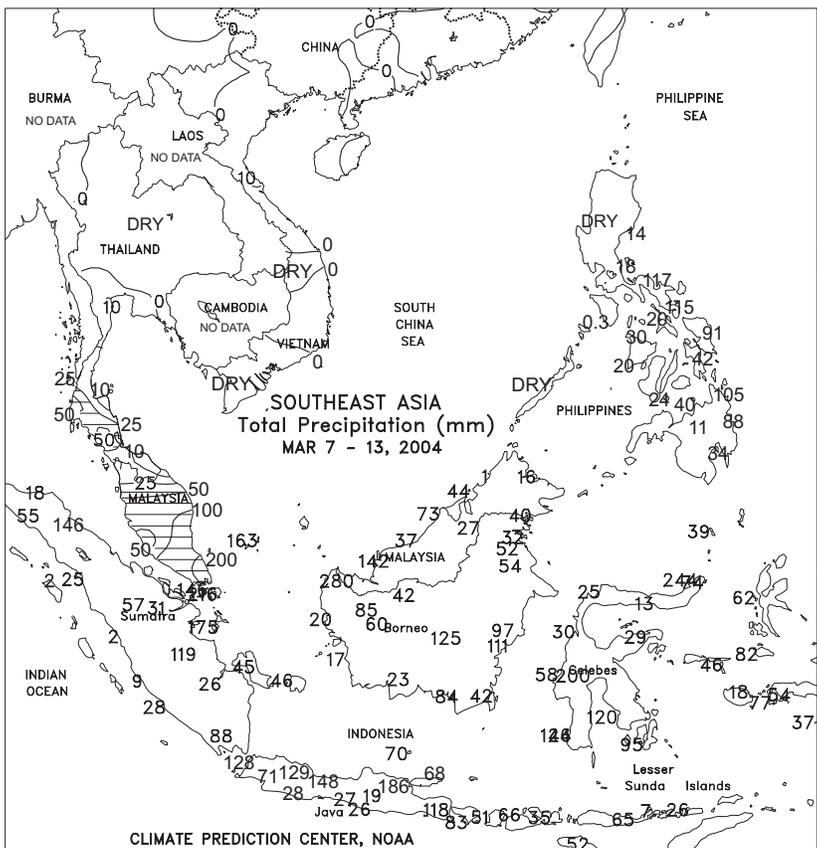
AUSTRALIA

In eastern Australia, hot, dry weather early in the week yielded to somewhat cooler, showery weather during the latter half of the week. The heat and dryness accelerated maturation of cotton and sorghum and spurred early summer crop harvesting in Queensland. Showers (10-50 mm, locally more) overspread eastern Australia during midweek and persisted through the weekend. The heaviest rain (25-50 mm, locally more than 75 mm) was confined to major cotton- and sorghum-producing areas in extreme southern Queensland and northern New South Wales. The rain slowed fieldwork and may have raised some concerns about the quality of maturing crops, but less advanced crops likely benefited from the additional water. Temperatures averaged about 2 degrees C above normal for the week, with maximum temperatures in the middle to upper 30s degrees C during the first half of the week and in the upper 20s to lower 30s degrees C during the second half of the week.



EASTERN ASIA

Generally dry weather prevailed in China. Light showers (less than 10 mm) fell along the Yangtze Valley, where rapeseed ranged from filling to mature. The dry weather favored paddy preparation and early transplanting of rice. Cold weather early in the week gave way to above-normal temperatures (1-5 degrees C above normal) that favored greening wheat throughout the North China Plain. In Manchuria, temperatures warmed by midweek, favoring pre-planting activities. The warm, dry weather extended into the Korea and Japan, reducing spring moisture supplies.



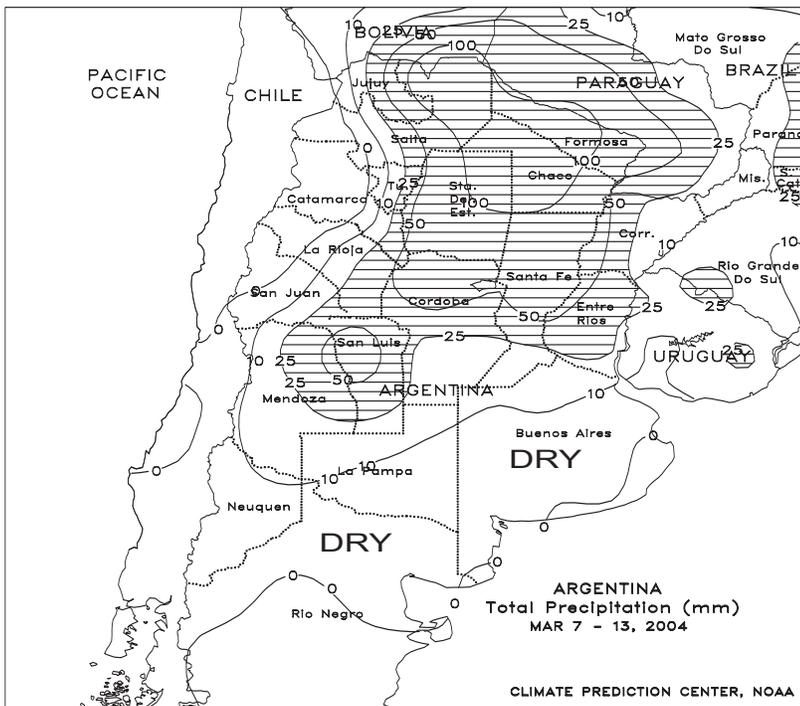
SOUTHEAST ASIA

Showers (25-100 mm) continued in Java, Indonesia, as rice progressed through maturation. Showers also remained heavy in oil palm areas of Malaysia and Indonesia. Tropical showers continued their seasonal migration northward, causing increased rainfall throughout the southern and eastern Philippines. Indochina remained seasonably dry as winter-grown rice matured.



BRAZIL

In the south (southern Mato Grosso do Sul and Sao Paulo to Rio Grande do Sul), light to moderate showers (10-25 mm or more) brought some relief to immature corn and soybeans stressed by the current drying trend. However, near- to above-normal temperatures (highs in the lower and middle 30s degrees C) maintained high crop moisture demands. In addition, due to the accumulated moisture deficits of the past several months, additional rain will be needed throughout the southern growing areas for the remainder of the growing season to support current yield potential. Farther north, rainfall generally ranged from 5 to 25 mm or more from Mato Gross to Minas Gerais, providing a much-needed break in the recent excessively wet weather that has hampered soybean harvesting. According to independent analyst Safras e Mercado, soybeans were 22 percent harvested as of March 12, comparable to last season's pace. In the top producing states of Mato Grosso and Parana, soybeans were 37 and 30 percent harvested, respectively, also similar to last year.



ARGENTINA

Beneficial rain (10-25 mm, locally exceeding 50 mm) continued from San Luis and Cordoba eastward through Entre Rios, further increasing moisture levels for immature summer crops, especially soybeans and late-planted corn and sunflowers. In contrast, mostly dry (rainfall of 10 mm or less), sunny weather returned to La Pampa and Buenos Aires, spurring crop development following last week's beneficial rainfall. Seasonable temperatures (highs from 28-32 degrees C) helped advance crops toward maturation in the absence of stressful heat. Farther north, untimely, locally heavy showers (50-100 mm or more) covered most northern growing areas (including Santiago del Estero, Chaco, and Formosa), hampering fieldwork and possibly damaging maturing cotton. According to the Buenos Aires Cereals Exchange, corn and sunflowers were 18 and 33 percent harvested, respectively, as of March 13, with soybeans creeping up to about 2 percent harvested.

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Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250**. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: jawfweb@oce.usda.gov

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor **David Miskus** (202) 720-7919
Meteorologists **Eric Luebehusen,**
..... **Brad Pugh, and Chester Schmitt**

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