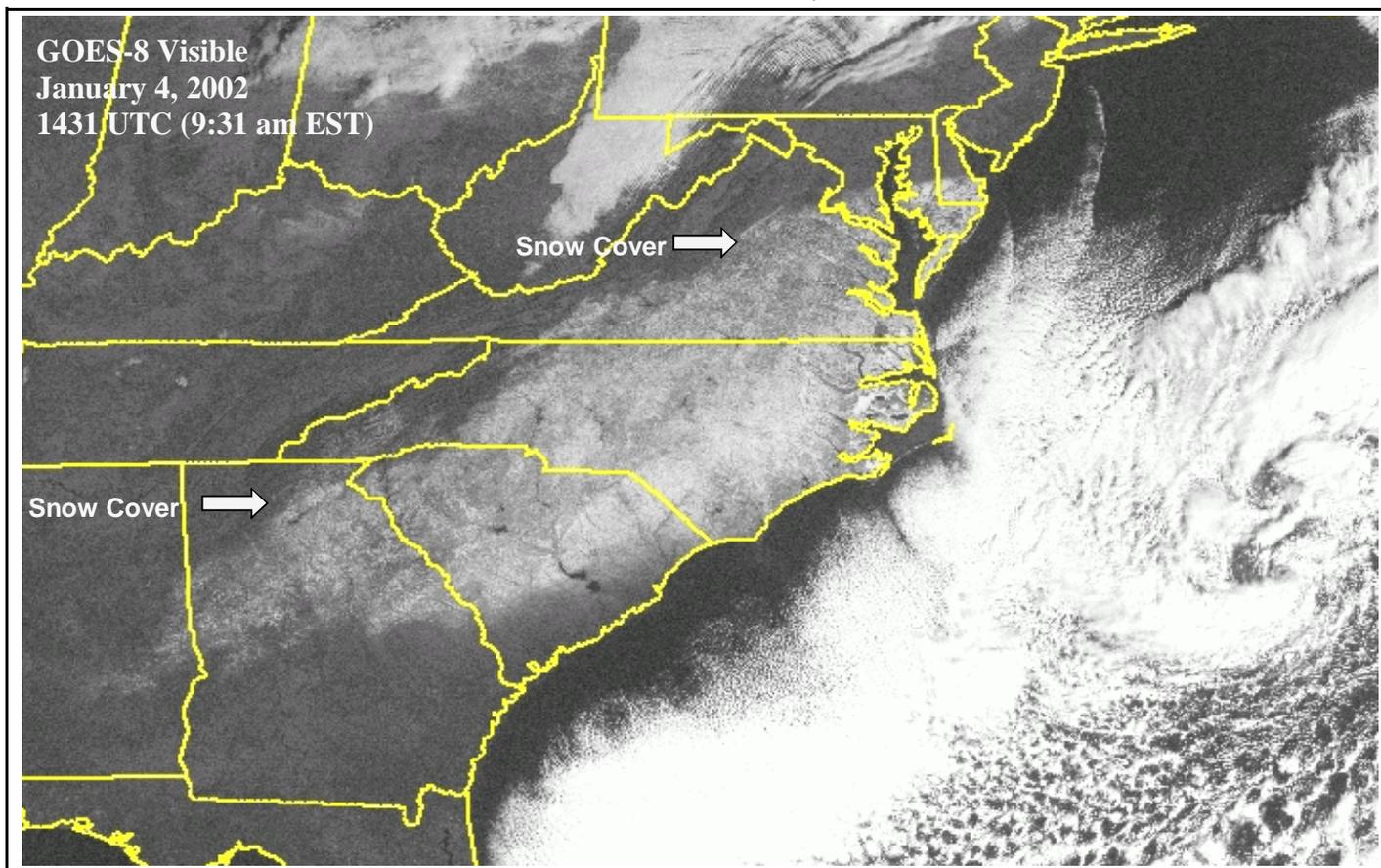


WEEKLY WEATHER AND CROP BULLETIN



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



HIGHLIGHTS

December 30 - January 5, 2001

Highlights provided by USDA/WAOB

A cold weather pattern deepened across areas from the **Plains eastward**, resulting in near- to below-freezing conditions as far south as **southern Texas** on January 3 and **central Florida** on January 4 and 5. Weekly temperatures ranged from 5 to 13°F below normal from the **southern Plains to the southern Atlantic States**. Although some **Deep South** winter ground crops required protective measures against the cold, citrus escaped with minimal damage. One of the major cold-weather concerns involved emerging sugarcane in **southern Louisiana**,
(Continued on page 3)

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Weather Data for Selected Locations in the Delta and the Bootheel

Weather Data for the Week Ending January 5, 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	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MS BATESVILLE ^x	36	23	43	13	30	-8	0.00	-1.15	0.00	8.53	129	0.00	0	--	--	0	7	0	0	
CLARKSDALE ^x	37	24	42	17	31	-8	0.00	-1.05	0.00	11.23	192	0.00	0	--	--	0	7	0	0	
CLEVELAND ^x	38	24	42	18	31	-11	0.00	-0.90	0.00	6.56	121	0.00	0	--	--	0	7	0	0	
GREENVILLE ^x	39	25	45	17	32	-10	0.00	-1.14	0.00	9.26	154	0.00	0	--	--	0	7	0	0	
GREENWOOD ^x	40	23	48	15	32	-10	0.54	-0.62	0.54	8.44	138	0.54	66	--	--	0	7	1	1	
INDIANOLA 1S	38	25	44	18	32	--	1.12	--	1.12	7.96	--	1.12	--	41	37	0	7	1	1	
INVERNESS 5E	38	27	44	19	33	--	0.95	--	0.95	8.93	--	0.95	--	43	38	0	7	1	1	
LYON	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MOORHEAD ^x	39	27	44	20	33	-9	0.00	-1.18	0.00	7.58	114	0.00	0	--	--	0	7	0	0	
ONWARD	40	26	46	19	33	--	1.39	--	1.39	8.36	--	1.39	--	44	40	0	7	1	1	
ROLLING FORK ^x	41	26	47	18	34	-8	0.00	-1.20	0.00	5.24	84	0.00	0	--	--	0	7	0	0	
SCOTT	39	26	42	20	33	--	1.31	--	1.31	9.04	--	1.31	--	41	36	0	7	1	1	
SIDON	39	28	48	21	34	--	0.28	--	0.28	7.96	--	0.28	--	46	36	0	7	1	0	
TUNICA ^x	36	23	40	18	30	-8	0.00	-1.15	0.00	10.27	160	0.00	0	--	--	0	7	0	0	
TUNICA 1W	36	22	43	16	29	--	0.55	--	0.55	10.88	--	0.55	--	38	36	0	7	1	1	
VANCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
VICKSBURG ^x	42	27	51	19	35	-10	0.00	-1.33	0.00	6.75	103	0.00	0	--	--	0	6	0	0	
YAZOO CITY ^x	41	26	51	16	34	-10	0.00	-1.33	0.00	7.49	105	0.00	0	--	--	0	6	0	0	
STONEVILLE [*]	40	24	45	18	32	-8	0.00	-1.31	0.00	9.09	136	0.00	0	44	37	0	7	0	0	
MO CARDWELL	35	20	41	17	27	-7	0.18	-0.63	0.18	9.09	168	0.18	40	40	38	0	7	1	0	
CHARLESTON	34	18	44	15	26	-7	0.13	-0.60	0.13	8.12	161	0.13	36	33	33	0	7	1	0	
CLARKTON	34	16	41	13	25	-9	0.12	-0.82	0.12	9.96	200	0.12	23	--	--	0	7	1	0	
DELTA	33	16	40	11	24	-8	0.21	-0.70	0.21	6.87	124	0.21	40	32	30	0	7	1	0	
GLENNONVILLE	34	20	40	17	26	-8	0.19	-0.75	0.19	8.76	176	0.19	37	34	33	0	7	1	0	
PORTAGEVILLE #1	35	20	46	17	27	-7	0.06	-0.66	0.06	8.85	162	0.06	15	34	32	0	7	1	0	
PORTAGEVILLE #2	36	20	46	16	27	-7	0.06	-0.66	0.06	8.46	155	0.06	15	33	32	0	7	1	0	
STEELE	35	21	43	18	28	-6	0.09	-0.69	0.09	8.22	143	0.09	20	35	33	0	7	1	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: An area of low pressure in the Southeast late in the week dropped scattered amounts of precipitation across the region. An atmospheric flow favorable to frigid conditions continued across much of the Eastern United States, allowing temperatures to remain well below normal. Winter wheat that was not dramatically affected by the recent flooding is awaiting abundant sunshine and warmer weather to promote development.

Selected 2001 Precipitation Highlights

Lowest Annual Precipitation (Inches)

Location	Total	Normal*	Previous Record/Year
Riverton, WY	3.68	8.02	3.75 in 1988
Charlotte, NC	26.23	43.09	26.91 in 1986

Wettest Year (Inches) in Selected Locations Since...

Location	Total	Normal*	Wettest Year Since...
Houston, TX	71.18	46.07	72.38 in 1919
Kansas City, MO	53.51	37.62	55.26 in 1973

Driest Year (Inches) in Selected Locations Since...

Location	Total	Normal*	Driest Year Since...
El Paso, TX	4.30	8.81	2.73 in 1934
Harrisburg, PA	25.76	40.50	25.52 in 1941
Pocatello, ID	7.10	12.46	5.34 in 1966
Del Rio, TX	9.69	18.24	9.24 in 1989
Wichita, KS	24.49	29.33	19.71 in 1990

Lowest Calendar-Year Snowfall (Inches)

Location	Total	Normal*	Previous Record/Year
Columbia, MO	2.9	24.8	4.9 in 1923
Indianapolis, IN	3.8	27.5	5.4 in 1998
Milwaukee, WI	9.4	49.9	14.5 in 1922

* Normal values are based on 1961-90 data. Beginning on January 1, the period for computing temperature and precipitation normals changed to 1971-2000.

Lowest Temperature (°F) in Selected Locations Since...		
Location	Low/Date	Lowest Temperature Since...
Baton Rouge, LA	18 on January 4	15 on February 5, 1996
Brownsville, TX	30 on January 3	30 on January 13, 1997
Oklahoma City, OK	9 on January 3	6 on January 28, 1997
San Antonio, TX	22 on January 3	22 on December 13, 1997
Corpus Christi, TX	27 on January 3	27 on December 28, 1997
Del Rio, TX	22 on January 3	20 on January 4, 1999
Austin (Bergstrom), TX	17 on January 3	14 on January 5, 2000

(Continued from front cover)

where temperatures at or below 20°F left new growth vulnerable to damage, especially if very warm weather were to follow the chill. Elsewhere in the **South**, snow blanketed areas from **central Louisiana to the southern Mid-Atlantic region** from January 1-3. Although the snow impeded transportation, drought-stressed pastures and winter grains in the **southern Atlantic Coastal Plain** benefited from soil moisture improvements. Toward week's end, locally heavy showers maintained unfavorably wet conditions in the **lower Mississippi Valley**, while additional rain and snow overspread the **East**. Meanwhile, cold, mostly dry weather prevailed across the **Plains and Midwest**, favoring winter fieldwork activities. In winter wheat areas on the **northern High Plains**, the week's lowest temperatures ranged from -20 to 0°F, increasing the risk of winterkill. Poorly established winter wheat in **Montana** remained especially vulnerable due to a patchy protective snow cover and long-term drought, although varying degrees of dryness also persisted across the **southern half of the Plains**. In the **West**, heavy precipitation fell in areas from the **Cascades and Sierra Nevada westward**, while showers provided additional drought relief across the **Great Basin and interior Northwest**. Despite nearly 2 months of significant precipitation in the **Northwest**, water-supply concerns persist. Meanwhile, in the **Four Corners region**, concerns about next summer's water supplies began to mount because of precipitation deficits since the summer of 2001.

Early in the week, a record-setting **Great Lakes** snow squall event tapered to flurries. Downwind of **Lake Erie, Buffalo, NY**, received only 0.1 inch of snow during the week after receiving an 81.5-inch blanket from December 24-28. Meanwhile downwind of **Lake Ontario in Lewis County, NY**, December 24 - January 1 snowfall totaled 127 inches in **Montague** and 104 inches in **Highmarket**. Just east of **Lake Michigan, Grand Rapids, MI**, weathered at least 1 inch of snow on each of the last 9 days in December, totaling 51.6 inches, breaking their record of 7 consecutive days set from December 5-11, 1958.

Farther south, the coldest air in several years spread into portions of the **southern Plains** and the **Southeast**. **Oklahoma City, OK**, noted 9°F on January 3, their lowest reading since January 28, 1997, when the minimum temperature was 6°F. Meanwhile in **Brownsville, TX**, the low of 30°F was their lowest since an identical reading on January 13, 1997. Elsewhere in **Texas**, January 3 lows of 22°F in **San Antonio** and 27°F in **Corpus Christi** were the stations' lowest readings since December 1997. Even more impressively cold weather settled in across portions of the **Southeast**, where **Baton Rouge, LA** (18°F on January 4), experienced their lowest reading since February 5, 1996 (15°F). In **Florida**, record lows on Friday included 31°F in **Orlando** and 36°F in **West Palm Beach**, followed by a record of 32°F in **Sarasota-Bradenton** on Saturday. **Miami Beach** (40 and 40°F) and **Hollywood** (35 and 40°F) set daily-record lows on both January 4 and 5.

Farther north, several **upper Midwestern** and **northern Plains** locations registered their first sub-zero readings of the winter on December 31, including **Sioux Falls, SD** (-2°F), and **Aberdeen, SD** (-8°F). Elsewhere on the final day of 2001, the low dipped to -23°F in **Williston, ND**. The following day, **Havre, MT**, noted -14°F.

During the final days of 2001, some periodic light snow fell on the **southern Plains** as a winter storm began to evolve. On New Year's Day, snow developed across portions of **Louisiana** and **southern Mississippi**, accumulating as much as 2 inches in **Tangipahoa and Livingston Parishes** and locally more than 4 inches between **Columbia and Hattiesburg, MS**. Snow continued into January 3 across the **Southeast**, ending early on January 4 on **North Carolina's Outer Banks**. January 2-3 snowfall reached 4.6 inches in **Atlanta, GA**, their highest 24-hour total since 5.0 inches fell on January 18, 1992. Elsewhere in the **Southeast**, storm-total snowfall included 10.8 inches in **Raleigh-Durham, NC**, 8.2 inches in **Greensboro, NC**, 7.7 inches in **Richmond, VA**, and 5.0 inches in **Columbia, SC**. Storm totals reached 14 inches at several locations in the **North Carolina piedmont**.

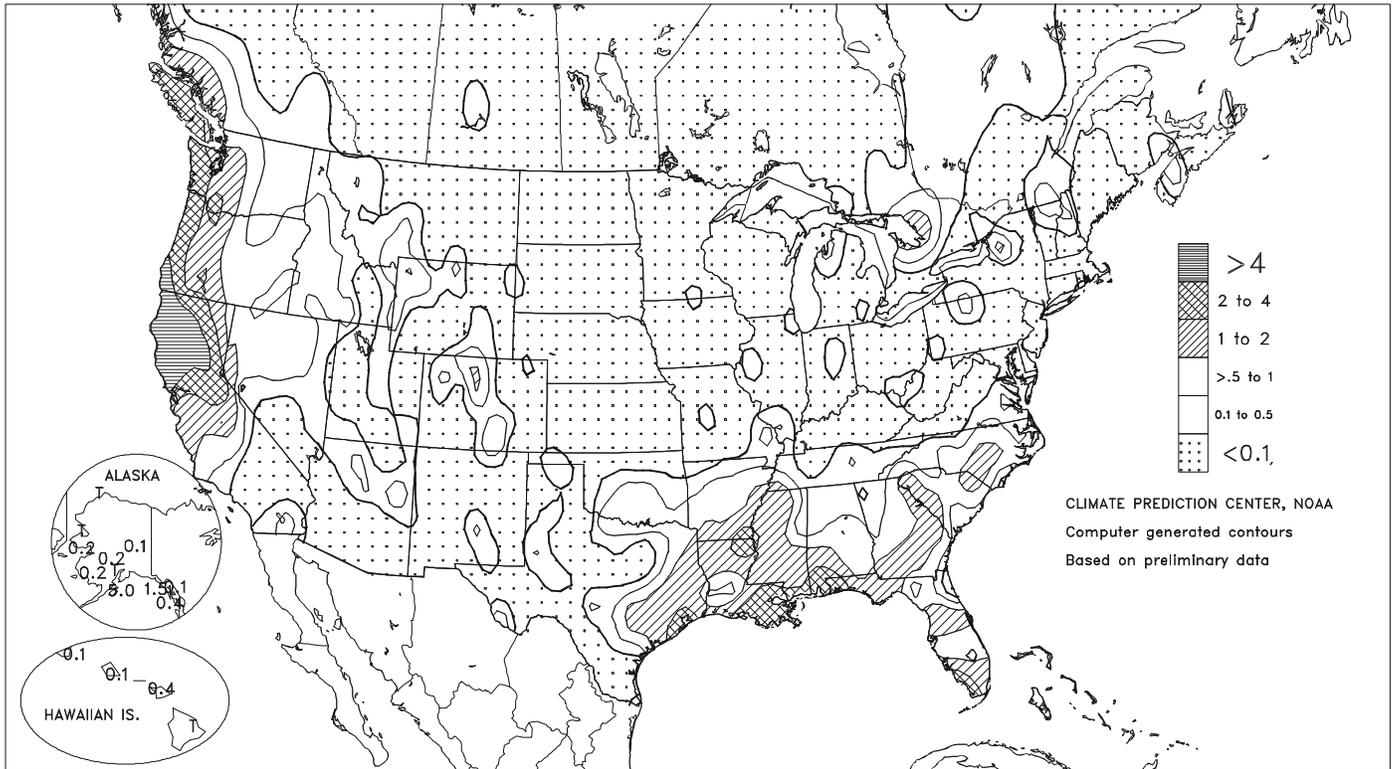
Heavy precipitation returned to **northern California** and the **Northwest** in the early days of the new year. On January 2, **Stockton, CA**, netted a daily-record total of 1.29 inches. In the drainage area behind **Whiskeytown Dam, near Redding, CA, Clear Creek** noted a 24-hour precipitation total of 5.64 inches on January 1-2. Nearby **Brandy Creek, CA**, reported 5.88 inches during the same period. Farther south, however, **Tucson, AZ**, closed the year with a sixth consecutive month with below-normal precipitation. During the second half of 2001, rainfall totaled only 3.61 inches (40 percent of normal) in **Tucson**, their third-lowest July-December total behind 2.73 inches in 1973 and 2.84 inches in 1924.

Following a frigid regime for most of December, warmer-than-normal weather returned to much of **Alaska** at year's end and in early January. Weekly temperatures averaged nearly 20°F above normal across **interior Alaska**, accompanied by light snow. In **Anchorage, AK**, high temperatures reached or exceeded 32°F on 10 of 12 days from December 25 - January 5, following 15 days with low temperatures below 0°F from December 1-24. Farther into the **Alaskan interior, McGrath** received 4.7 inches of snow from January 2-5. Meanwhile, heavy precipitation soaked portions of **southern Alaska**, including a 7.18-inch weekly rainfall total in **Kodiak**. Farther south, only scattered, generally light showers fell across **Hawaii**, as the typical trade-wind pattern remained disrupted for a third consecutive week.

Selected 2001 Temperature Highlights			
Warmest Year (°F) in Selected Locations Since...			
Location	Avg	Departure	Warmest Year Since...
Milwaukee, WI	49.2	+1.7	50.9 in 1998
Del Rio, TX	71.5	+2.1	72.2 in 2000
Longest Growing Season (Days Between Freezes)			
Location	Number of Days	Previous Record/Year	
Little Rock, AR	307 (Feb 20 - Dec 23)	283 days in 1998	
Albuquerque, NM	249 (Mar 16 - Nov 19)	226 days in 1992	

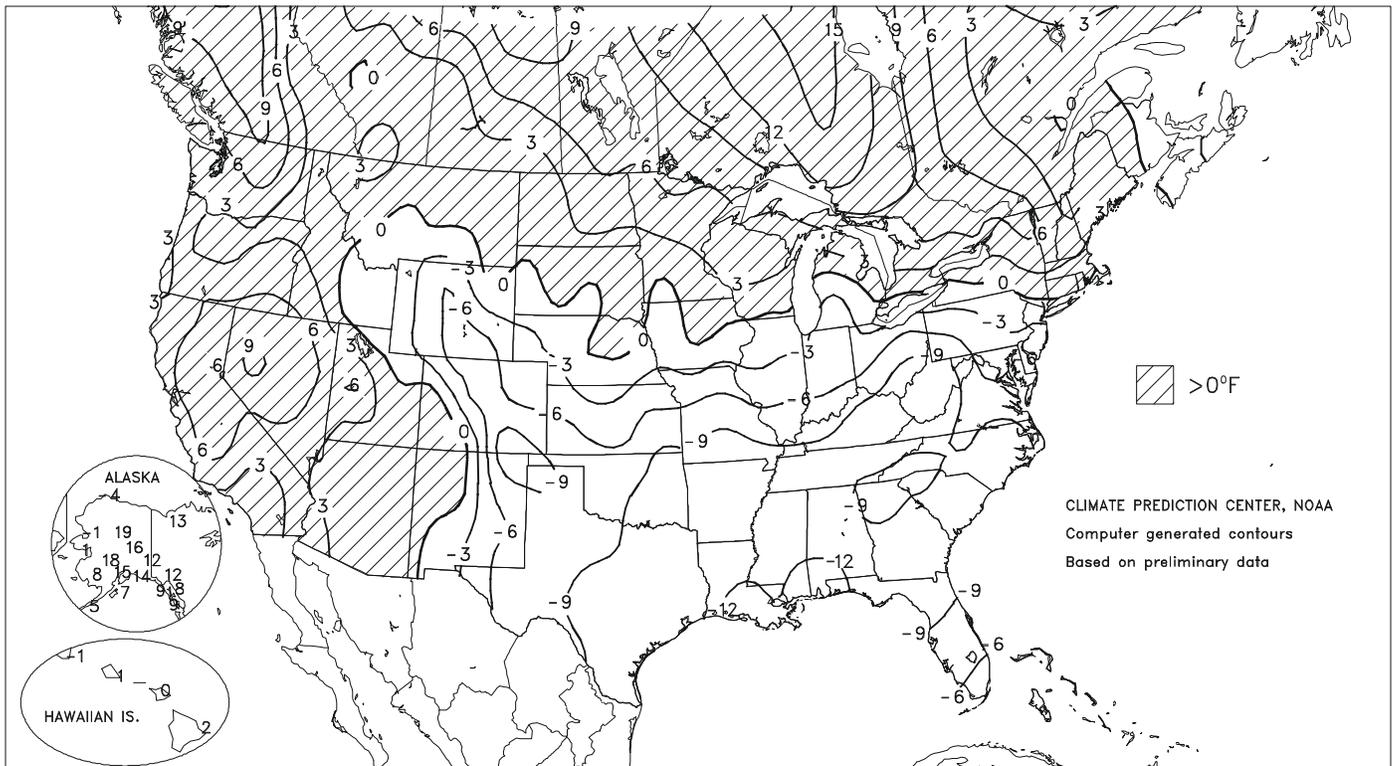
Total Precipitation (Inches)

DEC 30, 2001 - JAN 5, 2002



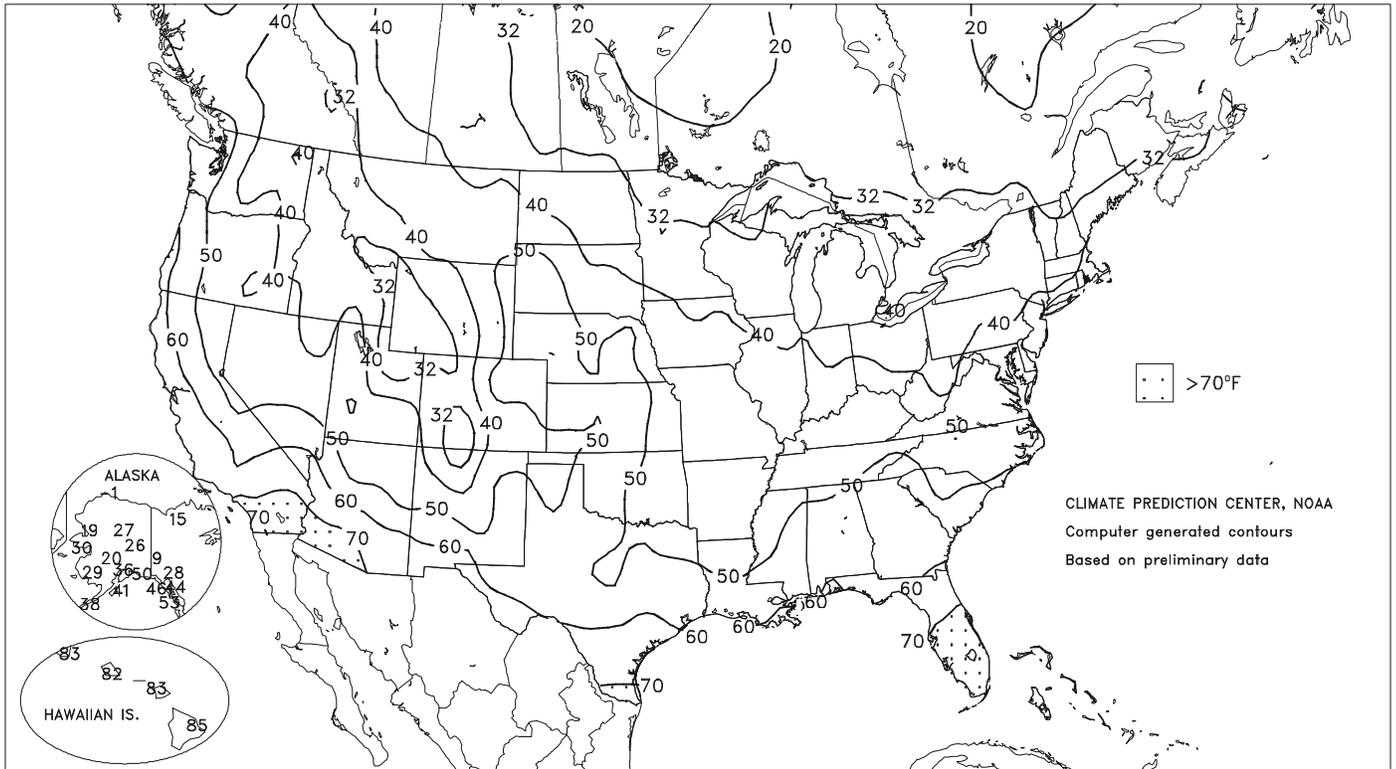
Departure of Average Temperature from Normal (°F)

DEC 30, 2001 - JAN 5, 2002



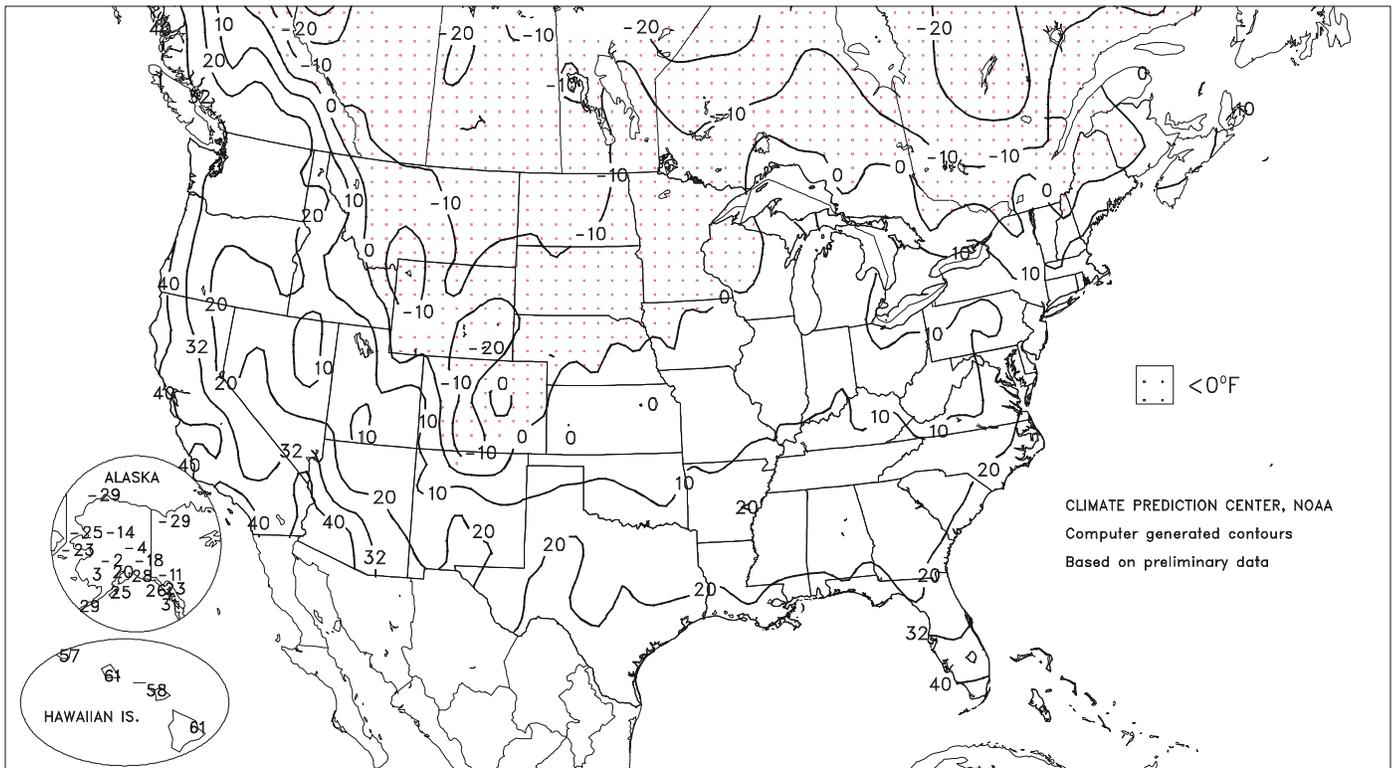
Extreme Maximum Temperature (°F)

DEC 30, 2001 - JAN 5, 2002



Extreme Minimum Temperature (°F)

DEC 30, 2001 - JAN 5, 2002



National Weather Data for Selected Cities

Weather Data for the Week Ending January 5, 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	50 INCH OR MORE	
AL	BIRMINGHAM	41	23	52	15	32	-10	0.24	-0.95	0.21	5.00	84	0.24	28	79	40	0	7	2	0
	HUNTSVILLE	39	19	50	14	29	-10	0.05	-1.21	0.05	6.36	94	0.05	6	75	47	0	7	1	0
	MOBILE	46	29	58	19	37	-13	2.06	0.93	1.50	4.89	80	2.06	261	81	54	0	5	3	1
	MONTGOMERY	45	25	58	18	35	-12	0.36	-0.74	0.18	3.45	58	0.36	47	90	54	0	7	3	0
AK	ANCHORAGE	33	26	36	20	30	15	0.03	-0.18	0.03	0.23	18	0.03	21	89	76	0	7	1	0
	BARROW	-11	-21	-1	-29	-16	-4	0.01	-0.02	0.00	0.07	39	0.01	50	81	74	0	7	1	0
	FAIRBANKS	13	0	26	-4	7	17	0.08	-0.07	0.04	0.17	18	0.08	80	87	80	0	7	2	0
	JUNEAU	37	28	44	23	32	7	0.05	-0.99	0.02	4.54	87	0.05	7	98	92	0	6	3	0
	KODIAK	39	35	41	25	37	7	5.04	3.34	1.39	10.22	127	2.41	198	96	92	0	2	7	4
	NOME	18	-1	30	-23	9	2	0.20	0.01	0.20	0.73	75	0.20	143	64	51	0	7	1	0
AZ	FLAGSTAFF	41	21	50	14	31	3	0.18	-0.32	0.17	1.16	42	0.00	0	95	58	0	7	2	0
	PHOENIX	66	47	69	41	57	4	0.00	-0.19	0.00	0.88	78	0.00	0	56	37	0	0	0	0
	TUCSON	65	39	68	30	52	1	0.00	-0.23	0.00	0.60	49	0.00	0	71	39	0	1	0	0
	YUMA	71	49	73	45	60	5	0.00	-0.09	0.00	0.01	2	0.00	0	68	65	0	0	0	0
AR	FORT SMITH	36	20	44	13	28	-9	0.26	-0.24	0.26	5.96	177	0.26	76	79	39	0	7	1	0
	LITTLE ROCK	37	23	45	16	30	-9	0.54	-0.35	0.54	8.42	154	0.54	87	76	35	0	6	1	1
CA	BAKERSFIELD	59	46	65	40	52	6	0.10	-0.07	0.05	0.76	101	0.10	83	95	86	0	0	3	0
	FRESNO	59	48	63	46	54	10	0.87	0.47	0.57	2.50	145	0.57	190	97	86	0	0	3	1
	LOS ANGELES	62	53	70	48	58	2	0.26	-0.20	0.13	1.46	73	0.16	47	94	84	0	0	4	0
	REDDING	54	46	58	35	50	6	3.48	2.11	1.13	11.71	180	2.42	242	97	88	0	0	5	4
	SACRAMENTO	56	47	58	37	51	7	2.15	1.40	1.05	7.93	258	1.65	295	10	89	0	0	6	2
	SAN DIEGO	64	54	69	49	59	2	0.16	-0.25	0.16	0.61	33	0.16	53	91	75	0	0	1	0
	SAN FRANCISCO	58	50	61	43	54	6	1.57	0.66	0.76	9.41	250	0.87	128	97	85	0	0	6	2
	STOCKTON	57	47	62	36	52	8	1.79	1.19	1.29	6.36	248	1.33	296	99	93	0	0	6	1
CO	ALAMOSA	28	0	32	-14	14	0	0.15	0.07	0.11	0.17	34	0.04	67	85	68	0	7	2	0
	CO SPRINGS	33	14	49	9	24	-4	0.06	-0.02	0.05	0.14	27	0.05	83	86	46	0	7	2	0
	DENVER INTL	35	15	52	0	25	***	0.00	***	0.00	0.14	***	0.00	***	85	46	0	7	0	0
	GRAND JUNCTION	35	22	40	16	29	4	0.14	0.00	0.07	0.38	54	0.07	70	92	77	0	7	3	0
	PUEBLO	32	8	47	-8	20	-9	0.23	0.15	0.13	0.35	73	0.13	217	89	72	0	7	2	0
CT	BRIDGEPORT	37	23	41	18	30	0	0.00	-0.76	0.00	2.03	50	0.00	0	66	40	0	7	0	0
	HARTFORD	36	19	40	11	27	1	0.00	-0.82	0.00	2.21	49	0.00	0	71	41	0	7	0	0
DC	WASHINGTON	38	24	51	20	31	-5	0.00	-0.65	0.00	1.53	43	0.00	0	57	32	0	7	0	0
DE	WILMINGTON	37	21	45	19	29	-3	0.00	-0.74	0.00	1.97	49	0.00	0	73	41	0	7	0	0
FL	DAYTONA BEACH	60	41	68	30	51	-7	0.63	0.04	0.63	0.98	33	0.63	150	94	60	0	1	1	1
	JACKSONVILLE	53	31	59	25	42	-11	0.48	-0.21	0.44	3.61	112	0.48	98	96	52	0	4	2	0
	KEY WEST	72	60	79	46	66	-4	2.05	1.60	1.99	3.62	154	0.06	18	88	73	0	0	3	1
	MIAMI	70	55	76	42	63	-4	0.76	0.33	0.57	3.23	151	0.19	61	91	60	0	0	2	1
	ORLANDO	62	43	71	31	52	-8	0.65	0.17	0.64	1.13	46	0.65	197	89	61	0	1	2	1
	PENSACOLA	47	30	60	23	39	-12	2.57	1.55	1.89	4.94	99	2.57	357	77	50	0	3	3	1
	TALLAHASSEE	50	28	58	19	39	-12	1.15	0.05	0.86	1.93	33	1.15	149	83	48	0	6	3	1
	TAMPA	63	44	71	34	53	-7	0.76	0.33	0.68	1.65	67	0.76	253	88	55	0	0	2	1
	WEST PALM	69	52	78	36	61	-5	1.00	0.42	0.94	3.45	118	0.05	12	91	64	0	0	3	1
GA	ATHENS	43	25	51	16	34	-8	0.15	-0.86	0.12	1.63	34	0.15	21	74	44	0	7	2	0
	ATLANTA	41	25	50	21	33	-8	0.30	-0.74	0.25	2.52	50	0.30	40	69	40	0	7	2	0
	AUGUSTA	44	24	52	16	34	-10	0.60	-0.27	0.50	1.60	40	0.60	97	86	46	0	7	2	1
	COLUMBUS	45	27	53	21	36	-10	0.41	-0.68	0.24	2.22	39	0.41	53	80	32	0	7	3	0
	MACON	46	25	53	20	36	-10	0.39	-0.64	0.23	1.97	39	0.39	53	77	39	0	7	2	0
	SAVANNAH	49	28	56	19	38	-11	0.59	-0.19	0.58	1.10	31	0.59	104	93	48	0	7	2	1
HI	HILO	82	65	85	61	74	2	0.03	-2.34	0.03	13.80	101	0.03	2	84	74	0	0	1	0
	HONOLULU	81	67	82	61	74	1	0.06	-0.82	0.06	0.76	17	0.00	0	84	71	0	0	1	0
	KAHULUI	80	65	83	58	72	0	0.42	-0.49	0.25	3.37	86	0.26	39	85	55	0	0	3	0
	LIHUE	79	63	83	57	71	-1	0.05	-1.30	0.05	1.50	24	0.00	0	82	71	0	0	1	0
ID	BOISE	35	26	41	22	31	3	0.42	0.10	0.20	1.42	89	0.27	113	96	84	0	7	4	0
	LEWISTON	39	31	44	25	35	2	0.47	0.17	0.31	1.11	78	0.47	214	94	82	0	4	2	0
	POCATELLO	28	17	36	10	22	-1	0.07	-0.18	0.04	1.15	89	0.07	39	91	83	0	7	2	0
IL	CHICAGO/O'HARE	28	13	38	5	21	-1	0.02	-0.42	0.02	1.01	36	0.02	7	81	56	0	7	1	0
	MOLINE	29	10	41	3	19	-2	0.00	-0.43	0.00	0.99	39	0.00	0	83	57	0	7	0	0
	PEORIA	30	11	43	6	21	-1	0.07	-0.36	0.07	1.42	52	0.07	23	86	48	0	7	1	0
	ROCKFORD	28	9	38	3	19	0	0.00	-0.36	0.00	0.93	40	0.00	0	82	61	0	7	0	0
	SPRINGFIELD	32	11	43	3	21	-4	0.03	-0.43	0.03	2.12	70	0.03	10	76	52	0	7	1	0
IN	EVANSVILLE	33	16	43	10	24	-7	0.00	-0.68	0.00	7.16	173	0.00	0	81	50	0	7	0	0
	FORT WAYNE	31	13	38	8	22	-2	0.00	-0.52	0.00	2.40	74	0.00	0	79	51	0	7	0	0
	INDIANAPOLIS	31	14	41	7	23	-3	0.00	-0.61	0.00	3.01	80	0.00	0	81	48	0	7	0	0
	SOUTH BEND	27	12	36	5	20	-5	0.06	-0.55	0.05	2.31	62	0.06	14	83	70	0	7	2	0
IA	BURLINGTON	32	11	43	4	22	0	0.12	-0.23	0.12	1.11	50	0.12	50	86	46	0	7	1	0
	CEDAR RAPIDS	28	7	41	2	17	-1	0.00	-0.28	0.00	1.04	58	0.00	0	85	57	0	7	0	0
	DES MOINES	29	11	44	4	20	0	0.00	-0.25	0.00	0.66	44	0.00	0	83	63	0	7	0	0
	DUBUQUE	25	7	37	2	16	-1	0.00	-0.34	0.00	1.31	60	0.00	0	85	67	0	7	0	0
	SIoux CITY	27	7	49	-3	17	-1	0.00	-0.14	0.00	0.45	51	0.00	0	86	67	0	7	0	0
	WATERLOO	28	9	42	0	18	3	0.00	-0.22	0.00	0.88	61	0.00	0	84	66	0	7	0	0
KS	CONCORDIA	34	13	52	4	24	-2	0.00	-0.15	0.00	0.07	7	0.00	0	82	60	0	6	0	0
	DODGE CITY	37	12	49	1	25	-5	0.00	-0.12	0.00	0.03	4	0.00	0	88	47	0	7	0	0
	GOODLAND	38	11	52	0	24	-4	0.01	-0.08	0.01	0.64	133	0.01	14	80	53	0	7	1	0
	TOPEKA	34	11	48	4	23	-4	0.00	-0.26	0.00	0.13	8	0.00	0	82	57	0	7	0	0

Based on 1961-90 normals

*** Not Available

Weather Data for the Week Ending January 5, 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	36	14	52	4	25	-5	0.00	-0.21	0.00	0.08	6	0.00	0	76	52	0	7	0	0
	JACKSON	32	17	45	12	24	-10	0.00	-0.91	0.00	2.55	51	0.00	0	78	43	0	7	0	0
	LEXINGTON	30	12	42	8	21	-11	0.00	-0.76	0.00	2.89	64	0.00	0	80	56	0	7	0	0
	LOUISVILLE	34	18	44	13	26	-7	0.00	-0.71	0.00	4.47	108	0.00	0	79	48	0	7	0	0
LA	PADUCAH	34	16	45	11	25	-8	0.06	-0.79	0.06	8.73	166	0.06	10	92	41	0	7	1	0
	BATON ROUGE	47	28	54	18	38	-12	1.43	0.26	1.21	5.66	89	1.41	174	88	37	0	5	3	1
	LAKE CHARLES	47	32	53	21	39	-12	0.89	-0.22	0.83	6.04	103	0.85	108	78	42	0	2	3	1
	NEW ORLEANS	47	35	60	26	41	-11	2.19	1.00	1.24	4.99	76	2.09	255	75	56	0	2	4	2
	SHREVEPORT	42	28	49	16	35	-10	1.05	0.17	1.05	7.15	151	1.05	167	76	40	0	5	1	1
ME	CARIBOU	20	6	26	-5	13	3	0.00	-0.63	0.00	0.99	27	0.00	0	81	53	0	7	0	0
	PORTLAND	35	18	40	14	27	5	0.00	-0.88	0.00	2.03	39	0.00	0	70	42	0	7	0	0
MD	BALTIMORE	37	20	47	15	29	-4	0.00	-0.72	0.00	1.73	44	0.00	0	70	41	0	7	0	0
MA	BOSTON	36	26	40	23	31	1	0.00	-0.84	0.00	2.82	61	0.00	0	58	35	0	7	0	0
	WORCESTER	31	19	34	14	25	1	0.00	-0.87	0.00	2.77	59	0.00	0	73	41	0	7	0	0
MI	ALPENA	29	19	36	14	24	5	0.01	-0.40	0.01	1.47	63	0.01	3	86	62	0	7	1	0
	GRAND RAPIDS	28	10	35	1	19	-4	0.00	-0.52	0.00	2.37	74	0.00	0	94	75	0	7	0	0
	HOUGHTON LAKE	27	14	34	4	20	2	0.00	-0.39	0.00	0.59	26	0.00	0	88	72	0	7	0	0
	LANSING	28	12	34	0	20	-2	0.03	-0.38	0.03	1.16	44	0.03	10	88	67	0	7	1	0
	MUSKEGON	30	17	38	1	24	-1	0.00	-0.62	0.00	1.42	41	0.00	0	84	70	0	6	0	0
	TRAVERSE CITY	27	17	36	5	22	1	0.18	-0.31	0.18	2.36	94	0.18	51	93	70	0	7	1	0
MN	DULUTH	20	4	31	-1	12	4	0.00	-0.30	0.00	0.55	38	0.00	0	87	70	0	7	0	0
	INTL FALLS	18	1	29	-7	10	8	0.00	-0.20	0.00	0.27	27	0.00	0	86	67	0	7	0	0
	MINNEAPOLIS	21	9	35	1	15	2	0.00	-0.22	0.00	0.74	60	0.00	0	82	67	0	7	0	0
	ROCHESTER	20	6	34	-4	13	1	0.00	-0.19	0.00	1.39	119	0.00	0	86	74	0	7	0	0
	ST. CLOUD	21	2	33	-7	12	3	0.02	-0.16	0.02	0.18	19	0.02	15	87	64	0	7	1	0
MS	JACKSON	44	25	51	16	34	-11	1.03	-0.26	1.03	5.10	75	1.03	113	76	38	0	7	1	1
	MERIDIAN	45	25	56	17	35	-10	0.53	-0.74	0.53	5.82	84	0.53	60	80	45	0	7	1	1
	TUPELO	41	23	49	17	32	-8	0.20	-1.06	0.20	6.75	96	0.20	23	72	46	0	7	1	0
MO	COLUMBIA	30	12	45	6	21	-7	0.02	-0.39	0.02	1.47	53	0.02	7	87	49	0	7	1	0
	KANSAS CITY	31	13	43	5	22	-4	0.01	-0.28	0.01	0.76	43	0.01	5	83	50	0	7	1	0
	SAINT LOUIS	33	17	46	12	25	-5	0.09	-0.42	0.09	3.55	105	0.09	26	68	48	0	6	1	0
	SPRINGFIELD	31	13	44	5	22	-10	0.07	-0.45	0.07	3.59	102	0.07	20	78	51	0	7	1	0
MT	BILLINGS	30	13	41	-4	22	-1	0.11	-0.10	0.08	0.26	27	0.09	56	86	55	0	7	3	0
	BUTTE	26	5	33	-10	16	0	0.00	-0.13	0.00	0.08	15	0.00	0	94	71	0	7	0	0
	GLASGOW	22	3	37	-16	12	1	0.00	-0.08	0.00	0.01	2	0.00	0	85	77	0	7	0	0
	GREAT FALLS	30	14	42	-9	22	1	0.00	-0.22	0.00	0.39	39	0.00	0	82	60	0	6	0	0
	HAVRE	25	1	44	-14	13	-1	0.00	-0.12	0.00	0.01	2	0.00	0	82	74	0	5	0	0
	KALISPELL	28	17	36	3	22	2	0.07	-0.32	0.04	0.57	28	0.07	25	88	82	0	7	2	0
	MISSOULA	29	19	34	11	24	2	0.07	-0.23	0.06	1.19	86	0.07	32	92	83	0	7	2	0
NE	GRAND ISLAND	33	10	51	0	22	0	0.00	-0.12	0.00	0.14	18	0.00	0	84	60	0	7	0	0
	LINCOLN	31	9	49	0	20	-2	0.00	-0.15	0.00	0.34	35	0.00	0	84	56	0	7	0	0
	NORFOLK	30	10	51	-1	20	1	0.00	-0.14	0.00	0.06	7	0.00	0	81	62	0	7	0	0
	NORTH PLATTE	35	4	50	-3	19	-2	0.00	-0.08	0.00	0.07	13	0.00	0	92	43	0	7	0	0
	OMAHA	28	9	47	1	19	-2	0.00	-0.19	0.00	0.67	58	0.00	0	88	73	0	7	0	0
	SCOTTSBLUFF	37	5	55	-8	21	-3	0.05	-0.06	0.05	0.05	8	0.05	63	80	58	0	7	1	0
	VALENTINE	32	6	50	-6	19	0	0.00	-0.06	0.00	0.00	0	0.00	0	84	61	0	7	0	0
NV	ELY	39	19	43	8	29	5	0.07	-0.10	0.07	0.10	12	0.00	0	89	75	0	7	1	0
	LAS VEGAS	57	40	59	35	49	5	0.00	-0.10	0.00	0.11	24	0.00	0	85	64	0	0	0	0
	RENO	47	33	52	26	40	8	0.31	0.07	0.20	2.00	171	0.20	111	90	77	0	3	3	0
	WINNEMUCCA	44	30	47	20	37	9	0.87	0.68	0.26	0.91	89	0.60	429	94	82	0	5	6	0
NH	CONCORD	34	16	38	11	25	5	0.00	-0.61	0.00	2.24	62	0.00	0	74	40	0	7	0	0
NJ	NEWARK	38	24	44	19	31	-1	0.00	-0.78	0.00	2.01	50	0.00	0	57	38	0	7	0	0
NM	ALBUQUERQUE	42	28	45	22	35	2	0.09	-0.02	0.08	0.25	43	0.01	13	83	52	0	6	2	0
NY	ALBANY	34	19	38	13	26	4	0.00	-0.59	0.00	1.95	58	0.00	0	68	46	0	7	0	0
	BINGHAMTON	27	15	34	11	21	-1	0.00	-0.59	0.00	2.29	67	0.00	0	84	67	0	7	0	0
	BUFFALO	29	20	37	15	25	0	0.01	-0.70	0.01	6.48	155	0.00	0	84	63	0	7	1	0
	ROCHESTER	31	21	38	13	26	1	0.02	-0.50	0.02	1.74	56	0.02	5	75	55	0	6	1	0
	SYRACUSE	33	23	41	19	28	4	0.11	-0.50	0.04	2.30	63	0.11	26	79	55	0	6	5	0
NC	ASHEVILLE	***	***	***	***	***	***	0.00	-0.74	0.00	2.34	58	0.00	0	59	37	***	***	0	0
	CHARLOTTE	41	22	47	11	31	-9	0.12	-0.71	0.08	2.08	51	0.12	20	79	39	0	7	2	0
	GREENSBORO	37	21	47	13	29	-8	0.18	-0.56	0.10	2.40	62	0.18	35	79	42	0	7	2	0
	HATTERAS	43	35	47	33	39	-7	1.33	0.17	1.02	3.73	69	1.33	156	79	57	0	0	2	1
	RALEIGH	38	21	44	13	30	-10	0.67	-0.10	0.39	2.70	71	0.67	122	76	44	0	7	2	0
	WILMINGTON	44	27	52	25	35	-11	0.16	-0.71	0.11	1.47	35	0.16	25	94	47	0	7	2	0
ND	BISMARCK	23	3	40	-12	13	4	0.04	-0.07	0.04	0.17	29	0.04	50	88	76	0	7	1	0
	DICKINSON	25	6	44	-6	16	3	0.00	-0.08	0.00	0.12	27	0.00	0	91	65	0	7	0	0
	FARGO	19	1	33	-8	10	3	0.00	-0.17	0.00	0.22	29	0.00	0	87	76	0	7	0	0
	GRAND FORKS	18	1	32	-8	9	4	0.00	-0.17	0.00	0.28	37	0.00	0	88	71	0	7	0	0
	JAMESTOWN	20	2	37	-9	11	3	0.00	-0.13	0.00	0.07	12	0.00	0	89	73	0	7	0	0
	WILLISTON	17	-2	35	-23	8	-1	0.08	-0.06	0.08	0.64	94	0.08	80	87	78	0	7	1	0
OH	AKRON-CANTON	26	13	36	8	20	-6	0.01	-0.55	0.01	1.08	32	0.01	3	84	63	0	7	1	0
	CINCINNATI	32	15	40	9	23	-6	0.00	-0.63	0.00	4.08	113	0.00	0	77	52	0	7	0	0
	CLEVELAND	27	16	38	11	22	-4	0.05	-0.51	0.03	2.58	74	0.05	13	79	59	0	7	2	0
	COLUMBUS	30	14	38	9	22	-6	0.01	-0.54	0.01	3.01	93	0.00	0	82	57	0	7	1	0
	DAYTON	30	13	38	8	22	-5	0.00	-0.55	0.00	3.66	110	0.00	0	81	46	0	7	0	0
	MANSFIELD	25	12	34	6	19	-7	0.00	-0.54	0.00	2.52	73	0.00	0	83	60	0	7	0	0

Based on

Weather Data for the Week Ending January 5, 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	32	17	39	12	25	1	0.00	-0.51	0.00	2.01	61	0.00	0	79	56	0	7	0	0
OK YOUNGSTOWN	27	15	37	11	21	-4	0.02	-0.54	0.02	2.05	62	0.02	5	79	61	0	7	1	0
OK OKLAHOMA CITY	37	19	49	9	28	-8	0.23	-0.03	0.16	1.07	68	0.16	89	91	56	0	6	2	0
OR TULSA	37	17	51	9	27	-8	0.10	-0.28	0.10	2.35	97	0.10	37	85	61	0	7	1	0
OR ASTORIA	52	43	56	39	48	6	2.15	-0.23	0.67	13.70	112	1.87	109	91	80	0	1	7	2
OR BURNS	33	21	37	11	27	4	0.64	0.39	0.24	1.48	111	0.43	239	96	90	0	7	6	0
OR EUGENE	48	37	56	34	43	3	1.62	-0.30	0.48	7.70	77	0.99	72	98	93	0	0	7	0
OR MEDFORD	51	39	59	34	45	8	0.64	-0.05	0.26	4.68	123	0.34	69	97	75	0	0	6	0
OR PENDLETON	35	29	40	25	32	-1	0.12	-0.24	0.07	0.80	42	0.10	38	99	95	0	6	3	0
OR PORTLAND	47	37	49	32	42	3	1.33	-0.01	0.51	7.72	109	1.10	116	92	77	0	1	7	1
OR SALEM	48	36	56	30	42	3	1.40	-0.06	0.53	9.19	117	1.16	112	99	94	0	1	7	1
PA ALLENTOWN	35	17	40	11	26	-2	0.00	-0.74	0.00	1.92	48	0.00	0	72	44	0	7	0	0
PA ERIE	***	22	***	18	***	***	0.01	-0.61	0.01	4.46	111	0.01	2	77	65	***	6	1	0
PA MIDDLETOWN	34	19	38	12	27	-3	0.00	-0.67	0.00	1.87	50	0.00	0	79	48	0	7	0	0
PA PHILADELPHIA	36	23	44	20	30	-2	0.00	-0.76	0.00	2.11	54	0.00	0	65	44	0	7	0	0
PA PITTSBURGH	27	14	38	9	21	-6	0.00	-0.62	0.00	2.43	72	0.00	0	78	54	0	7	0	0
PA WILKES-BARRE	31	17	39	12	24	-2	0.00	-0.50	0.00	1.11	39	0.00	0	73	47	0	7	0	0
PA WILLIAMSPORT	32	17	42	11	24	-3	0.00	-0.60	0.00	1.58	46	0.00	0	71	49	0	7	0	0
RI PROVIDENCE	37	21	43	18	29	0	0.00	-0.93	0.00	2.46	49	0.00	0	77	44	0	7	0	0
SC BEAUFORT	48	30	54	22	39	-10	0.35	-0.47	0.28	1.65	44	0.35	59	95	45	0	4	2	0
SC CHARLESTON	49	28	55	23	38	-11	0.57	-0.20	0.37	2.30	62	0.57	104	94	52	0	7	2	0
SC COLUMBIA	44	25	49	17	34	-10	0.51	-0.44	0.42	1.71	40	0.51	74	84	41	0	7	2	0
SC GREENVILLE	42	25	51	21	34	-7	0.14	-0.80	0.09	2.37	49	0.14	21	74	36	0	7	2	0
SD ABERDEEN	20	7	37	-8	13	3	0.01	-0.07	0.01	0.07	15	0.01	17	81	76	0	7	1	0
SD HURON	23	7	48	-6	15	1	0.00	-0.08	0.00	0.06	11	0.00	0	87	70	0	7	0	0
SD RAPID CITY	35	7	56	-4	21	-1	0.00	-0.09	0.00	0.00	0	0.00	0	80	46	0	6	0	0
SD SIOUX FALLS	25	7	48	-5	16	2	0.00	-0.14	0.00	0.11	14	0.00	0	85	71	0	7	0	0
TN BRISTOL	35	16	45	12	25	-10	0.00	-0.75	0.00	3.42	87	0.00	0	93	47	0	7	0	0
TN CHATTANOOGA	41	22	51	19	32	-6	0.01	-1.14	0.01	5.09	85	0.01	1	59	39	0	7	1	0
TN KNOXVILLE	37	20	49	14	29	-8	0.00	-1.00	0.00	4.66	89	0.00	0	72	38	0	7	0	0
TN MEMPHIS	38	23	47	18	31	-9	0.43	-0.59	0.43	10.61	165	0.43	62	72	41	0	7	1	0
TX NASHVILLE	36	17	49	11	27	-10	0.01	-0.90	0.01	3.33	64	0.01	2	77	42	0	7	1	0
TX ABILENE	42	27	51	19	34	-9	0.14	-0.08	0.11	1.12	94	0.14	88	82	62	0	5	2	0
TX AMARILLO	34	18	46	7	26	-9	0.21	0.11	0.14	0.30	59	0.07	88	94	68	0	7	3	0
TX AUSTIN	48	29	54	17	39	-10	1.46	1.09	1.43	6.09	285	1.46	562	80	52	0	5	2	1
TX BEAUMONT	48	34	55	24	41	-10	1.62	0.50	1.61	3.91	70	1.61	199	79	46	0	3	2	1
TX BROWNSVILLE	60	42	74	30	51	-9	0.09	-0.24	0.09	1.11	74	0.09	36	82	56	0	1	1	0
TX CORPUS CHRISTI	55	37	67	27	46	-10	0.30	-0.03	0.29	1.96	131	0.30	125	84	64	0	1	2	0
TX DEL RIO	51	32	61	22	41	-9	0.00	-0.12	0.00	0.35	51	0.00	0	74	48	0	4	0	0
TX EL PASO	51	30	65	23	41	-1	0.08	-0.03	0.08	0.14	22	0.00	0	67	41	0	5	1	0
TX FORT WORTH	42	27	51	14	34	-10	0.14	-0.26	0.12	3.38	159	0.14	50	79	45	0	6	2	0
TX GALVESTON	50	39	59	31	45	-8	1.43	0.64	1.39	3.89	96	1.39	244	83	56	0	1	2	1
TX HOUSTON	49	33	56	23	41	-10	0.84	0.07	0.83	7.00	175	0.83	151	82	51	0	3	2	1
TX LUBBOCK	38	23	52	20	31	-8	0.13	0.04	0.11	0.15	25	0.02	33	90	75	0	7	2	0
TX MIDLAND	41	27	53	20	34	-8	0.04	-0.05	0.04	0.14	23	0.04	67	78	67	0	6	1	0
TX SAN ANGELO	43	28	51	21	36	-8	0.18	0.01	0.15	0.32	35	0.18	150	79	62	0	5	2	0
TX SAN ANTONIO	49	30	60	22	40	-9	0.28	-0.06	0.16	3.71	210	0.28	108	83	49	0	4	2	0
TX VICTORIA	45	33	76	25	44	-9	0.47	0.00	0.43	3.97	168	0.45	136	81	53	0	3	4	0
TX WACO	55	27	53	17	36	-9	0.13	-0.24	0.13	4.16	196	0.13	50	82	54	0	6	1	0
TX WICHITA FALLS	42	24	54	16	33	-7	0.66	0.41	0.58	1.76	121	0.66	388	85	56	0	6	2	1
UT SALT LAKE CITY	34	21	36	15	28	1	0.55	0.27	0.13	1.80	113	0.36	180	95	77	0	7	5	0
VT BURLINGTON	30	20	34	13	25	7	0.00	-0.46	0.00	1.49	54	0.00	0	75	56	0	7	0	0
VA LYNCHBURG	36	18	48	12	27	-8	0.07	-0.61	0.07	3.25	88	0.07	15	62	36	0	7	1	0
VA NORFOLK	38	27	44	23	33	-7	0.53	-0.29	0.45	2.36	62	0.53	90	72	41	0	7	2	0
VA RICHMOND	37	20	47	17	29	-8	0.29	-0.45	0.21	1.96	52	0.29	55	74	45	0	7	2	0
VA ROANOKE	37	21	50	14	29	-6	0.00	-0.61	0.00	2.48	73	0.00	0	66	38	0	7	0	0
VA WASH/DULLES	37	17	45	12	27	-5	0.00	-0.65	0.00	1.59	43	0.00	0	64	38	0	7	0	0
WA OLYMPIA	47	35	53	29	41	4	1.49	-0.39	0.50	13.04	138	1.09	80	10	95	0	1	7	1
WA QUILLAYUTE	52	42	58	37	47	7	3.26	-0.14	1.13	18.32	102	2.46	102	98	87	0	0	7	3
WA SEATTLE-TACOMA	50	40	51	31	45	6	1.08	-0.22	0.52	6.72	98	0.83	89	93	69	0	1	6	1
WA SPOKANE	32	27	34	17	30	4	0.18	-0.32	0.18	2.21	80	0.18	51	93	82	0	7	1	0
WA YAKIMA	37	32	40	28	34	6	0.30	-0.01	0.13	1.32	81	0.20	91	98	90	0	4	5	0
WV BECKLEY	26	12	39	6	19	-11	0.00	-0.70	0.00	2.41	65	0.00	0	78	56	0	7	0	0
WV CHARLESTON	31	13	46	7	22	-11	0.00	-0.70	0.00	2.47	64	0.00	0	86	48	0	7	0	0
WV ELKINS	27	7	43	-2	17	-11	0.00	-0.74	0.00	2.29	57	0.00	0	87	45	0	7	0	0
WV HUNTINGTON	32	14	46	8	23	-10	0.00	-0.69	0.00	2.25	59	0.00	0	80	47	0	7	0	0
WI EAU CLAIRE	25	7	38	-3	16	4	0.00	-0.24	0.00	0.95	74	0.00	0	87	56	0	7	0	0
WI GREEN BAY	27	11	38	5	19	4	0.00	-0.30	0.00	1.23	71	0.00	0	82	57	0	7	0	0
WI LA CROSSE	25	9	39	0	17	2	0.00	-0.24	0.00	0.83	58	0.00	0	84	56	0	7	0	0
WI MADISON	25	10	36	4	18	1	0.00	-0.31	0.00	1.13	55	0.00	0	81	63	0	7	0	0
WI MILWAUKEE	27	14	36	7	21	1	0.00	-0.44	0.00	0.86	33	0.00	0	76	58	0	7	0	0
WY CASPER	29	8	39	-5	19	-3	0.06	-0.08	0.05	0.14	18	0.01	10	76	64	0	7	2	0
WY CHEYENNE	32	10	48	-11	21	-5	0.11	0.02	0.08	0.15	31	0.02	33	75	54	0	7	3	0
WY LANDER	23	8	36	1	16	-3	0.01	-0.10	0.01	0.17	26	0.00	0	88	81	0	7	1	0
WY SHERIDAN	30	6	46	-10	18	-2	0.00	-0.17	0.00	0.04	5	0.00	0	84	73	0	7	0	0

Based on 1961-90 normals

*** Not Available

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

December Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Near-record to record warmth carried over from November into the first 3 weeks of December, followed by the first large-scale cold outbreak of the season. Meanwhile, several precipitation anomalies from late November were repeated in early- to mid-December. These included unfavorably dry weather in the East, torrential rainfall from the western Gulf Coast region to the lower Ohio Valley, and drought-easing precipitation in northern California and the Northwest.

Dry weather in the East, which was particularly severe in the southern Atlantic Coast Plain, further stressed pastures and winter grains. In sharp contrast, lowland flooding, standing water, and submerged winter wheat fields were concerns from eastern Texas to the lower Ohio Valley. Portions of the Delta netted more than 20 inches of rain in less than 4 weeks. However, little precipitation was observed on the Plains, keeping winter wheat's protective snow cover at a minimum and leaving the northern High Plains and much of the southern half of the region in need of moisture. In the Southwest, a drying trend during the second half of the year began to raise concerns about water supplies in 2002, but additional improvement was noted in much of California and the Northwest, where drought developed during the spring of 2000.

Despite colder weather during the last week of December, monthly temperatures were above normal at nearly all locations east of the Rockies and averaged at least 10°F above normal in portions of Minnesota and Wisconsin. Temperatures were within a few degrees of normal across most of the West, although some readings in some interior valley locations averaged as much as 6°F below normal, in part due to a substantial snow cover.

Early-December warmth culminated in more than a dozen monthly record highs from the upper Midwest into the Northeast on December 5-6. Several of the new records—including 68°F on December 5 in Milwaukee, WI, and 72°F on December 6 in Syracuse, NY—broke standards that had been established during the first week of December 1998. The remainder of the former December records had stood since either 1982 or 1962. Although partly symptomatic of the urban heat-island effect but also a function of the lack of autumn cold outbreaks, a few locations set records for their latest first freeze:

Latest First Freeze (32°F or Below)

Location	Low (°F)/Date	Previous Record/Year
Little Rock, AR	30 on Dec. 24	December 21, 1998
Washington, DC	29 on Dec. 22	December 14, 1980
Albuquerque, NM	31 on Nov. 20	November 17, 1963

Meanwhile in western Washington, December rainfall totaled 11.95 inches (147 percent of normal) in Olympia. Combined with a 13.30-inch total the previous month, Olympia's November-December total of 25.25 inches (156 percent) represented their wettest 2-month period since January-February 1999, when 27.75 inches fell. Olympia's water year-to-date (October 1 - December 31) climbed to 29.59 inches (144 percent of normal) by year's end. During the 2000-01 water year, Olympia did not reach the 30-inch mark until August 22, 2001, and netted only 31.28 inches (62 percent of normal) during the entire 12-month period. Meanwhile, Portland, OR, noted measurable rainfall on 23 consecutive days (November 28 - December 20) and at least a trace of rain on 34 days in a row (November 19 - December 22). The latter streak tied the Portland International Airport record, previously set from November

12 - December 15, 1948; December 29, 1949 - January 31, 1950; and November 10 - December 13, 1953. Although Portland's 23-day streak fell short of their record (29 consecutive days with measurable rainfall from January 1-29, 1950), the 20 consecutive days from December 1-20 eclipsed their December record of 16 days, set in 1957. Farther south, the high-elevation Sierra Nevada snow pack gained 12 inches of water equivalent during December, according to the California Department of Water Resources, boosting the year-end average to 17 inches (138 percent of normal for December 31). Across the interior West, monthly snowfall totals included 21.9 inches (145 percent of normal) in Spokane, WA, 20.9 inches (235 percent) in Elko, NV, and 19.9 inches (145 percent) in Salt Lake City, UT. Just 2 months and 2 days into the new water year (October 1 - December 2), Reno's precipitation total of 2.16 inches exceeded their total for the entire 2000-01 water year (2.13 inches, or 28 percent of normal, from October 2000 - September 2001).

In the Southwest, however, concerns about dryness gradually increased. Tucson, AZ, received only 3.61 inches of rain (40 percent of normal) during the second half of 2001, their third-lowest July-December total behind 2.73 inches in 1973 and 2.84 inches in 1924. Meanwhile, intensifying drought was a major concern on the northern High Plains, where Havre, MT (0.01 inch), tied their 1986 record for December dryness. Frequently windy conditions compounded the effects of dryness on the High Plains, as Casper, WY, reported daily peak wind gusts of 40 mph or higher on 10 of the first 17 days in December.

Lowest December Precipitation (Inches)

Location	Total	Normal	Previous Record/Year
Havre, MT	0.01	0.53	0.01 in 1986

Lowest August-December Precipitation (Inches)

Location	Total	Normal	Previous Record/Year
Glasgow, MT	0.80	3.62	1.45 in 1934

Outside of the West and away from the Great Lakes, snow was fairly scarce in December. The most widespread snow storm in the Northeast struck on December 8-9, depositing 9.0 inches on Worcester, MA, and 7.4 inches on Albany, NY. Many Midwestern locations received their latest first measurable snowfall, which was in most cases not very impressive when it finally arrived:

Latest First Measurable Snowfall

Location	Total (Inches)/Date	Previous Record/Year
LaCrosse, WI	0.6 on Dec. 23	December 7, 1969
Norfolk, NE	0.5 on Dec. 22	December 8, 1949
Madison, WI	1.1 on Dec. 23	December 15, 1999
Ft. Wayne, IN	0.3 on Dec. 23	December 17, 1998
Jackson, KY	1.2 on Dec. 29	December 24, 1990

Lowest July-December Snowfall (Inches)

Location	Total	Normal	Previous Record/Year
LaCrosse, WI	1.0	13.1	1.5 in 1965

Nearly all of the snow downwind of the Great Lakes fell during the last 10 days of the month. Monthly totals reached 82.7 inches (a record for any month) in Buffalo, NY, 53.9 inches (their third-snowiest December) in Grand Rapids, MI, and 37.1 inches in Erie, PA. Nearly all (81.5 inches) of Buffalo's snow fell in just 5 days from December 24-28, including at least 20 inches on December 24, 27, and 28. Buffalo also endured 35.4 inches on December 27-28, their second-highest 24-hour total on record behind 37.9 inches on December 9-10, 1985. Finally, Buffalo's snow depth climbed to 44 inches on December 28, edging their record of 42 inches, set on February 5 and 6, 1977. Prior to the onset of Buffalo's snow squalls, Lake Erie's temperature near the surface stood at 45°F (6°F

above normal) on December 17, tying the record for the date set in 1991 and 1998. Farther west, Grand Rapids received 51.6 inches of snow during the last 9 days of the month, including a 3-day record total of 28.2 inches from December 25-27. Nearly half (16.0 inches) of Erie's snow fell on the 29th.

Greatest Snowfall (Inches) for Any Month

Location	Total	Normal	Previous Record/Year
Buffalo, NY	82.7	24.3	68.4 in December 1985

Despite the sudden late-month chill in the East, several cities—including Portland, ME, and New York City—set December average temperature records. In addition, highs topped the freezing mark (32°F) in Portland on all 31 days in December for the first time on record. Meanwhile in the upper Midwest, several long-running streaks of above-normal daily temperatures came to an end, including 57-day stretches (October 28 - December 23) in LaCrosse, WI, Rochester, MN, and Minneapolis, MN.

Highest December Average Temperatures (°F)

Location	Avg.	Dep.	Previous Record/Year
Central Park, NY	44.1	+ 7.5	43.8 in 1984
Wilmington, DE	42.5	+ 6.7	42.2 in 1931
Syracuse, NY	36.8	+ 8.5	36.4 in 1923
Portland, ME	34.8	+ 8.3	34.5 in 1996
Caribou, ME	26.5	+11.7	26.2 in 1996

Meanwhile across the Deep South, the coldest air waited until after the arrival of the new year (January 3-5), although several daily-record lows were established toward month's end. On December 27, daily-record lows included 24°F in Austin (Bergstrom), TX, and 25°F in New Iberia, LA. In addition, a trace of snow was observed on December 25 in Shreveport, LA, their first Christmas Day snowfall since records began in 1871. Prior to the chill, persistent warmth resulted in several records, including the greatest number of consecutive December days with highs at or above 80°F in Tampa, FL (the first 17 days of the month).

Drier-than-normal weather was prevalent in the East and especially persistent in the southern Atlantic States, where Charlotte, NC, completed their driest year on record. Only 26.23 inches (61 percent of normal) dampened Charlotte in 2001, breaking their 1986 record of 26.91 inches. December rainfall totaled less than 0.50 inch in locations such as Daytona Beach, FL (0.35 inch, or 14 percent of normal), Florence, SC (0.42 inch, or 13 percent), and Savannah, GA (0.49 inch, or 17 percent). Just to the west, however, flooding rains persisted through mid-December.

For the 24-day period ending December 17, rainfall reached 20.03 inches in Memphis, TN, and totaled greater than 20 inches in parts of the Mississippi Delta, including the towns of Batesville (24.32 inches) and Stoneville (20.15 inches). Although heavy rainfall in the Delta was a nuisance, areas just to the West were able to wash away vestiges of drought. Little Rock, AR, received 7.88 inches (168 percent of normal) during December, capping their first year with above-normal precipitation since 1997 and their first observance of 3 consecutive months with more than 5 inches of rain since September-November 1996. Meanwhile in eastern Texas, Houston recorded 6.17 inches (179 percent of normal), capping their wettest year since 72.38 inches fell in 1919. Houston ended the year with 71.18 inches (155 percent of normal).

A cold, mostly dry weather pattern gripped Alaska through midmonth, followed by markedly milder weather thereafter. Monthly temperatures averaged as much as 13°F below normal across southwestern Alaska. On December 19, the temperature in King Salmon climbed 67°F from a daily-record low of -38°F to a high of 29°F. In Anchorage, temperatures reached or exceeded 32°F on 8 of the last 11 days of December, following the city's first sub-

zero cold in nearly 2 years. Anchorage went 682 days (January 18, 2000 - November 30, 2001) with low temperatures at or above 0°F, but experienced lows below 0°F on 14 of the first 19 days in December. Precipitation was well below normal across most of mainland Alaska, totaling just 0.21 inch (17 percent of normal) in McGrath and 0.20 inch (18 percent) in Anchorage.

Meanwhile, the year ended on a dry note in Hawaii, following locally heavy showers in early December. Monthly totals at the major airport sites ranged from 0.76 inch (20 percent of normal) at Honolulu, Oahu, to 13.77 inches (114 percent) in Hilo, on the Big Island. Annual rainfall was below normal nearly statewide, with airport locations reporting totals ranging from 9.16 inches (42 percent of normal) in Honolulu to 97.10 inches (75 percent) in Hilo.

Fieldwork

Fieldwork summary provided by USDA/NASS

Above-normal temperatures prevailed across most of the Nation during December, stimulating vegetative growth of winter crops and forages in the southern Great Plains, lower Mississippi Valley, and Southeast. Many winter wheat fields in the Corn Belt and central Great Plains remained green until after midmonth, although vegetative growth was slow due to sub-freezing nighttime temperatures.

The abnormally warm weather also delayed the onset of freezing soil temperatures and extended the period for winter wheat root development. Parts of the central and northern Great Plains received light snowfall, but the warm weather pattern prevented accumulation of an adequate protective cover. As a result, most winter wheat fields were exposed to wind-blown soil and remained vulnerable to an outbreak of bitterly cold temperatures.

Several storms struck the Pacific Northwest during December, producing heavy rainfall that boosted reservoirs and benefited development of winter crops in low-lying coastal areas as far south as central California. The wet weather also hampered field and orchard activities in California's central and northern valleys.

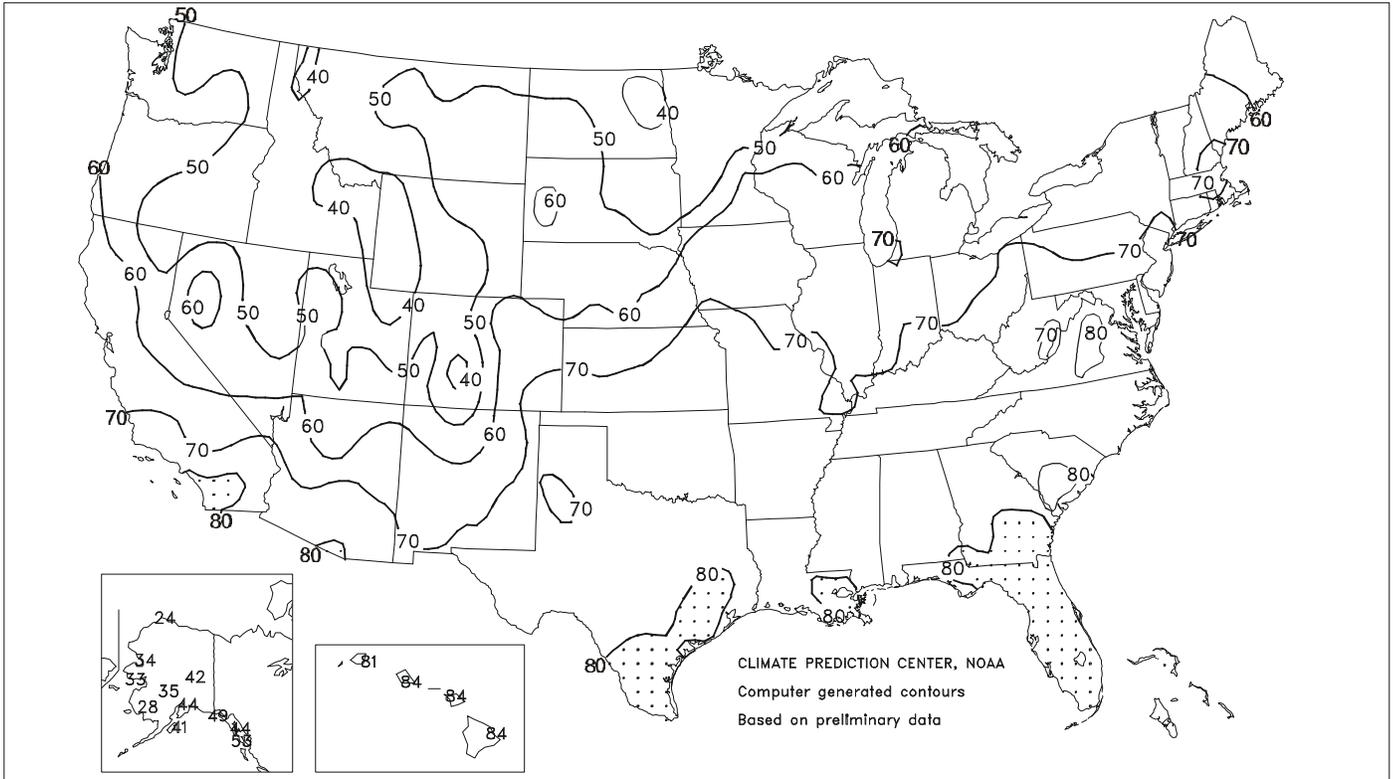
As the storms tracked inland, they produced abundant snow accumulations in the coastal and interior mountain ranges, increasing irrigation water reserves for the 2002 summer crops. However, the systems produced very little precipitation as they crossed the Great Plains. Consequently, moisture shortages increased in most areas of the Great Plains and limited the winter wheat crop's response to the favorable temperatures.

The storm systems reorganized over the western Gulf Coast, accessed moisture from the Gulf of Mexico, and moved across the interior Mississippi Delta and into the Ohio Valley. Many winter wheat fields in the lower Mississippi Valley and adjacent areas of the southern Great Plains, Southeast, and southern Corn Belt were stressed by the unfavorably wet weather that saturated soils and flooded low-lying areas along rivers and streams. Farther to the north and east, widespread precipitation near midmonth maintained soil moisture supplies in the central and eastern Corn Belt, and supported development of the soft red winter wheat crop.

A few light showers provided much-needed moisture for winter grains and forages along the eastern Gulf Coast and Atlantic Coastal Plain, but soils remained unfavorably dry. In Florida, warm, dry weather hastened ripening of fruits and vegetables, aided the sugarcane harvest, and supported other field and orchard activities.

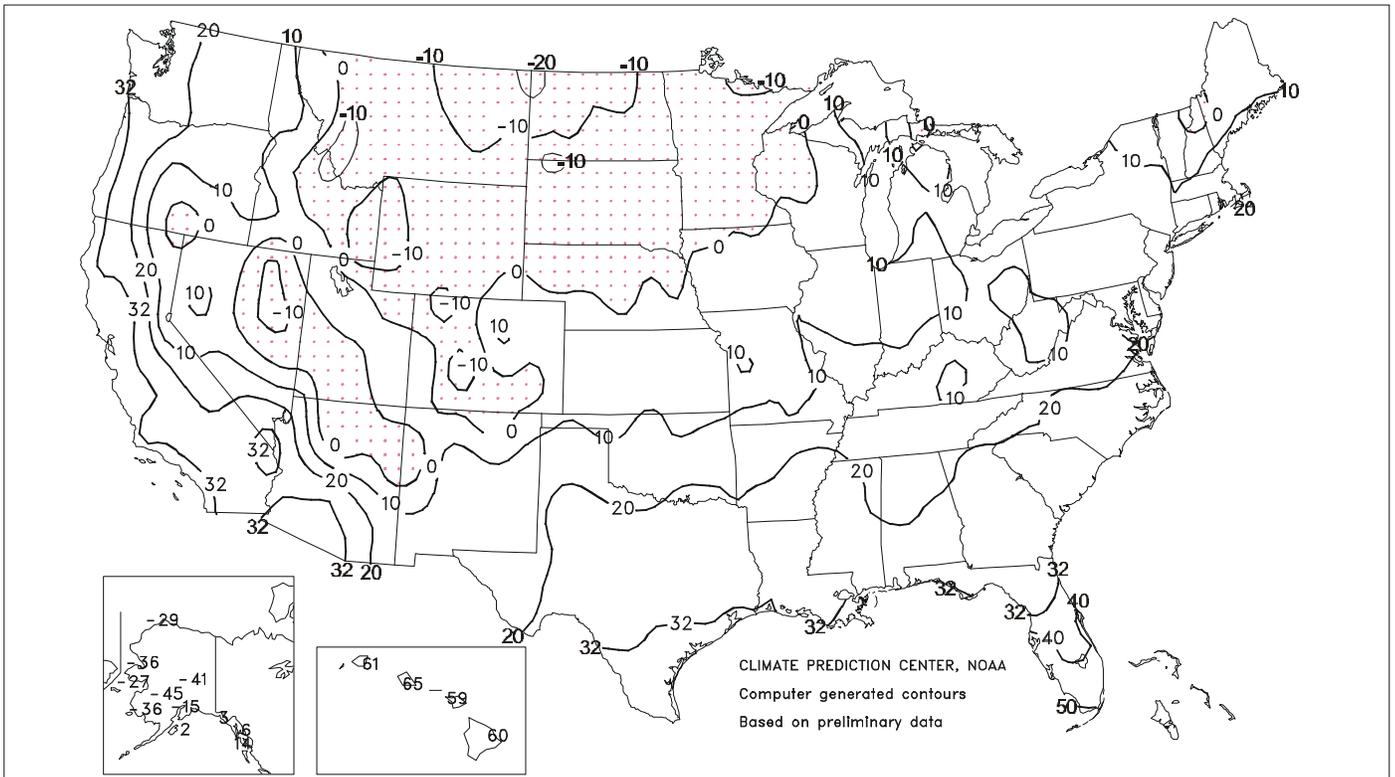
Extreme Maximum Temperature (°F)

December 2001



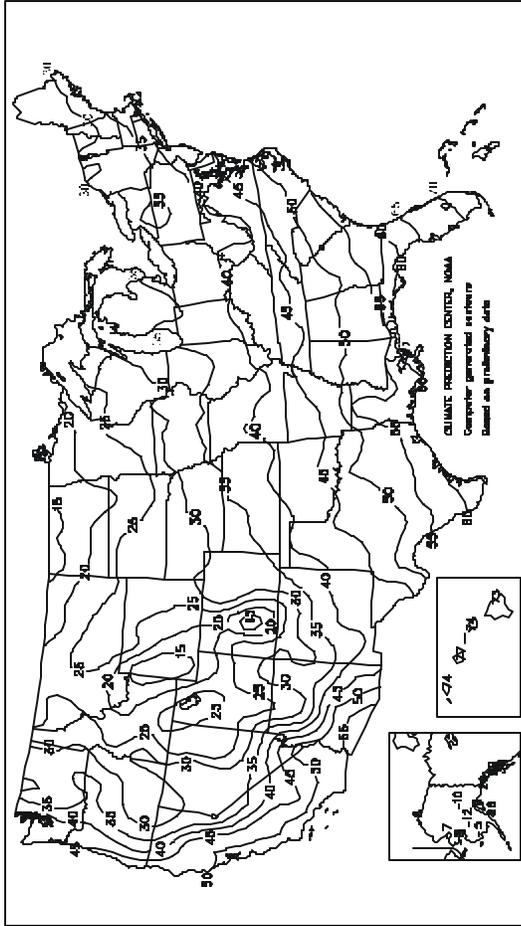
Extreme Minimum Temperature (°F)

December 2001



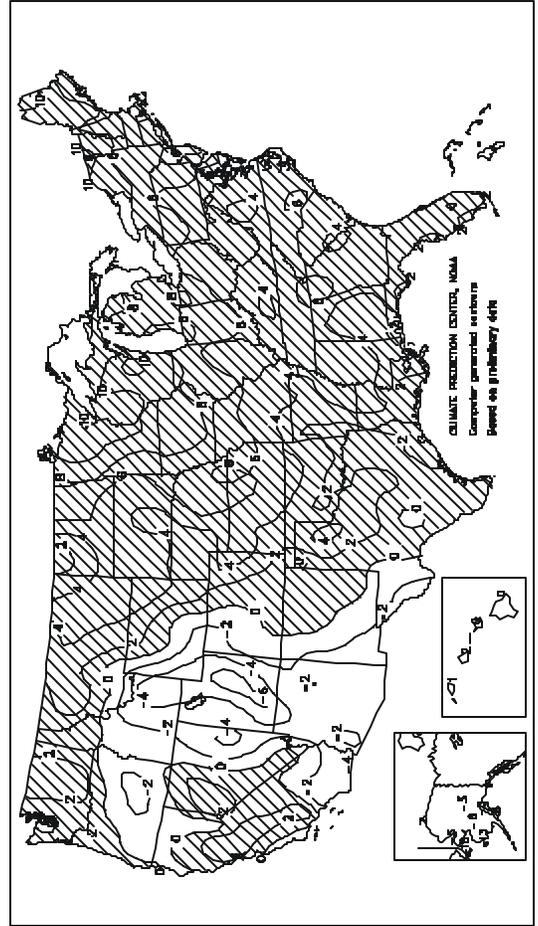
Average Temperature (°F)

December 2001



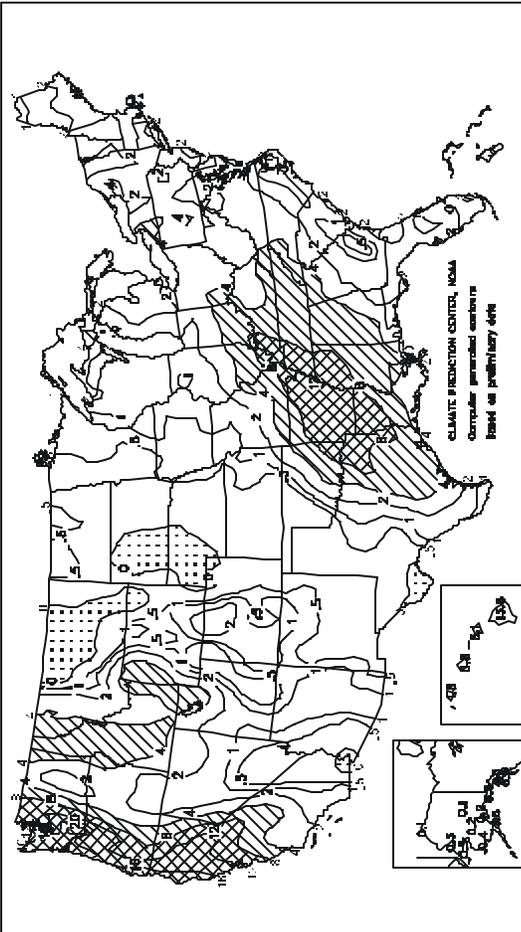
Departure of Average Temperature from Normal (°F)

December 2001



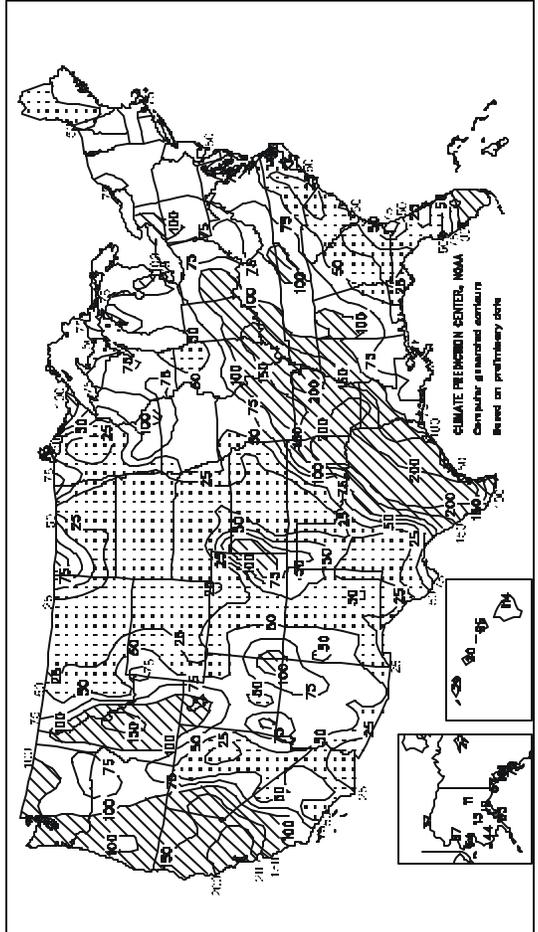
Total Precipitation (inches)

December 2001



Percent Of Normal Precipitation

December 2001



TEMPERATURE AND PRECIPITATION SUMMARY

December 2001

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	49	4	4.76	-0.36	LEXINGTON	41	5	2.89	-1.09	COLUMBUS	38	6	3.01	0.15
HUNTSVILLE	47	4	6.31	0.44	LONDON-CORBIN	42	4	3.95	-0.22	DAYTON	37	5	3.66	0.73
MOBILE	55	2	2.83	-2.48	LOUISVILLE	42	5	4.47	0.83	MANSFIELD	35	5	2.52	-0.55
MONTGOMERY	51	2	3.09	-2.11	PADUCAH	42	5	8.67	3.99	TOLEDO	37	9	2.01	-0.92
AK ANCHORAGE	11	-5	0.20	-0.92	LA BATON ROUGE	55	2	4.25	-1.28	YOUNGSTOWN	36	7	2.03	-0.90
BARROW	-8	3	0.06	-0.10	LAKE CHARLES	56	3	5.19	0.14	OK OKLAHOMA CITY	42	3	0.91	-0.49
COLD BAY	27	-4	2.95	-0.72	NEW ORLEANS	58	3	2.90	-2.85	TULSA	44	5	2.25	0.09
FAIRBANKS	-10	-3	0.09	-0.76	SHREVEPORT	51	3	6.10	2.00	OR ASTORIA	45	3	11.83	1.28
JUNEAU	29	2	4.49	0.05	ME BANGOR	29	6	2.70	-1.25	BURNS	23	-2	1.05	-0.10
KING SALMON	8	-8	0.80	-0.57	CARIBOU	26	11	0.99	-2.23	EUGENE	42	1	6.71	-1.90
KODIAK	26	-5	7.81	1.00	PORTLAND	35	9	2.03	-2.52	MEDFORD	41	3	4.34	1.02
NOME	-3	-10	0.53	-0.30	MD BALTIMORE	42	5	1.73	-1.68	PENDELTON	37	3	0.70	-0.93
AZ FLAGSTAFF	27	-3	1.16	-1.24	MA BOSTON	40	6	2.82	-1.19	PORTLAND	42	2	6.62	0.49
PHOENIX	54	0	0.88	-0.12	WORCESTER	35	8	2.77	-1.28	SALEM	42	2	8.03	1.23
TUCSON	49	-3	0.60	-0.47	MI ALPENA	32	8	1.46	-0.57	PA ALLENTOWN	38	6	1.92	-1.57
AR FORT SMITH	44	4	5.70	2.67	DETROIT	36	8	2.23	-0.59	ERIE	38	7	4.45	0.86
CA BAKERSFIELD	49	2	0.66	0.03	FLINT	34	7	1.77	-0.34	MIDDLETOWN	40	6	1.87	-1.37
EUREKA	47	-1	11.56	5.52	GRAND RAPIDS	34	7	2.37	-0.48	PHILADELPHIA	44	8	2.11	-1.27
FRESNO	48	3	1.93	0.51	HOUGHTON LAKE	31	8	0.59	-1.36	PITTSBURGH	37	6	2.43	-0.49
LOS ANGELES	56	-1	1.30	-0.36	LANSING	34	8	1.13	-1.20	WILKES-BARRE	37	7	1.11	-1.40
REDDING	46	1	9.29	3.78	MUSKEGON	35	6	1.42	-1.61	WILLIAMSPORT	36	5	1.58	-1.45
SACRAMENTO	49	4	6.28	3.77	TRAVERSE CITY	32	7	2.18	0.03	PR SAN JUAN	78	0	10.74	6.20
SAN DIEGO	55	-2	0.45	-1.12	MN DULUTH	22	9	0.55	-0.69	RI PROVIDENCE	39	6	2.46	-1.92
SAN FRANCISCO	52	3	8.54	5.45	INT'L FALLS	19	12	0.27	-0.57	SC CHARLESTON	56	5	1.73	-1.42
STOCKTON	48	3	5.03	2.92	MINNEAPOLIS	28	10	0.74	-0.34	COLUMBIA	52	5	1.20	-2.39
CO ALAMOSA	19	1	0.13	-0.31	ROCHESTER	26	9	1.39	0.36	FLORENCE	52	5	0.42	-2.72
CO SPRINGS	32	2	0.09	-0.37	ST. CLOUD	24	10	0.16	-0.67	GREENVILLE	48	5	2.23	-1.91
DENVER	32	2	0.14	-0.46	MS JACKSON	52	4	4.07	-1.84	MYRTLE BEACH	54	7	2.30	-1.00
GRAND JUNCTION	28	-1	0.31	-0.30	MERIDIAN	51	3	5.29	-0.78	SD ABERDEEN	19	4	0.06	-0.35
PUEBLO	31	0	0.22	-0.20	TUPELO	48	4	6.55	0.39	HURON	22	4	0.06	-0.41
CT BRIDGEPORT	41	7	-2.03	-1.47	MO COLUMBIA	37	5	1.45	-1.02	RAPID CITY	29	5	0.00	-0.47
HARTFORD	37	8	2.21	-1.70	JOPLIN	42	6	2.40	-0.10	SIoux FALLS	25	7	0.11	-0.59
DC WASHINGTON	45	6	1.53	-1.59	KANSAS CITY	37	7	0.75	-0.83	TN BRISTOL	43	5	3.42	0.03
DE WILMINGTON	42	6	1.97	-1.51	SPRINGFIELD	39	4	3.52	0.36	CHATTANOOGA	48	7	5.08	-0.09
FL DAYTONA BEACH	65	5	0.35	-2.24	ST JOSEPH	36	7	0.44	-0.94	JACKSON	45	4	7.17	1.79
FT LAUDERDALE	73	4	1.78	-0.33	ST LOUIS	40	6	3.46	0.43	KNOXVILLE	46	6	4.66	0.12
FT MYERS	69	4	1.84	0.31	MT BILLINGS	28	2	0.17	-0.62	MEMPHIS	48	4	10.18	4.44
JACKSONVILLE	60	5	3.13	0.41	BUTTE	19	1	0.08	-0.36	NASHVILLE	45	5	3.32	-1.29
KEY WEST	74	3	3.56	1.54	GLASGOW	20	5	0.01	-0.37	TX ABILENE	48	2	0.98	-0.05
MELBOURNE	68	5	0.66	-1.42	GREAT FALLS	26	2	0.39	-0.46	AMARILLO	40	3	0.23	-0.20
MIAMI	73	4	3.04	1.21	HELENA	25	4	0.28	-0.31	AUSTIN	52	0	4.63	2.75
ORLANDO	66	4	0.48	-1.67	KALISPELL	25	2	0.50	-1.23	BEAUMONT	57	3	2.30	-2.51
PENSACOLA	57	3	2.37	-1.92	MILES CITY	24	5	0.02	-0.62	BROWNSVILLE	64	2	1.02	-0.23
ST PETERSBURG	68	5	1.03	-1.38	MISSOULA	26	3	1.12	-0.04	COLLEGE STATION	54	3	3.55	0.72
TALLAHASSEE	57	4	0.78	-4.25	NE GRAND ISLAND	32	7	0.14	-0.57	CORPUS CHRISTI	60	2	1.66	0.40
TAMPA	69	7	0.89	-1.26	HASTINGS	33	8	0.11	-0.72	DALLAS/FT WORTH	49	2	3.24	1.40
WEST PALM BEACH	71	4	3.40	0.91	LINCOLN	36	6	0.34	-0.54	DEL RIO	54	2	0.35	-0.26
GA ATHENS	50	5	1.48	-2.61	MCCOOK	35	7	0.14	-0.38	EL PASO	43	-1	0.14	-0.43
ATLANTA	50	6	2.22	-2.11	NORFOLK	30	7	0.06	-0.68	GALVESTON	60	4	2.50	-1.00
AUGUSTA	51	4	1.00	-2.40	NORTH PLATTE	27	3	0.07	-0.40	HOUSTON	56	3	6.17	2.72
COLUMBUS	53	4	1.81	-3.16	OMAHA/EPPLEY	32	7	0.67	-0.35	LUBBOCK	43	2	0.13	-0.40
MACON	52	3	1.58	-2.73	SCOTTSBLUFF	30	4	0.00	-0.56	MIDLAND	45	0	0.10	-0.46
SAVANNAH	56	4	0.51	-2.45	VALENTINE	26	4	0.00	-0.37	SAN ANGELO	47	1	0.14	-0.65
HI HILO	73	1	13.77	1.73	NV ELKO	24	-2	0.33	-0.77	SAN ANTONIO	54	2	3.43	1.92
HONOLULU	77	3	0.76	-3.04	ELY	21	-5	0.10	-0.60	VICTORIA	58	2	3.52	1.48
KAHULUI	74	1	3.11	-0.16	LAS VEGAS	46	0	0.11	-0.27	WACO	51	3	4.03	2.17
LIHUE	74	1	1.50	-3.65	RENO	37	4	1.80	0.81	WICHITA FALLS	46	3	1.10	-0.19
ID BOISE	31	1	1.15	-0.21	WINNEMUCCA	32	2	0.31	-0.57	UT SALT LAKE CITY	27	-3	1.44	0.04
LEWISTON	35	0	0.64	-0.56	NH CONCORD	32	8	2.24	-0.92	VT BURLINGTON	33	10	1.49	-0.93
POCATELLO	21	-4	1.08	-0.03	NJ ATLANTIC CITY	42	6	1.84	-1.48	VA LYNCHBURG	42	4	3.18	-0.05
IL CHICAGO/O'HARE	33	6	0.99	-1.48	NEWARK	44	8	2.01	-1.44	NORFOLK	50	6	1.83	-1.40
MOLINE	33	8	0.99	-1.24	NM ALBUQUERQUE	36	1	0.24	-0.26	RICHMOND	46	6	1.67	-1.59
PEORIA	35	8	1.35	-1.09	NY ALBANY	34	8	1.95	-0.98	ROANOKE	44	6	2.48	-0.49
ROCKFORD	32	8	0.93	-1.12	BINGHAMTON	33	7	2.29	-0.71	WASH/DULLES	41	6	1.59	-1.63
SPRINGFIELD	35	5	2.09	-0.64	BUFFALO	36	7	6.48	2.81	WA OLYMPIA	39	1	11.95	3.83
EVANSVILLE	41	6	7.16	3.49	ROCHESTER	36	7	1.72	-1.01	QUILLAYUTE	41	1	15.86	0.40
FORT WAYNE	36	7	2.40	-0.49	SYRACUSE	37	9	2.19	-1.01	SEATTLE-TACOMA	42	2	5.89	-0.02
INDIANAPOLIS	38	7	3.01	-0.33	NC ASHEVILLE	44	4	2.34	-1.18	SPOKANE	28	0	2.03	-0.39
SOUTH BEND	35	6	2.25	-1.05	CHARLOTTE	48	5	1.96	-1.52	YAKIMA	33	3	1.12	-0.29
IA BURLINGTON	34	7	0.99	-0.99	GREENSBORO	46	6	2.22	-1.14	WV BECKLEY	39	5	2.41	-0.82
CEDAR RAPIDS	31	8	1.04	-0.55	HATTERAS	56	7	2.40	-2.14	CHARLESTON	42	5	2.47	-0.92
DES MOINES	32	8	0.66	-0.66	RALEIGH	47	4	2.03	-1.21	ELKINS	37	5	2.29	-1.19
DUBUQUE	30	8	1.31	-0.65	WILMINGTON	54	5	1.31	-2.32	HUNTINGTON	42	5	2.25	-1.11
SIoux CITY	29	7	0.45	-0.33	ND BISMARCK	21	7	0.13	-0.38	WI EAU CLAIRE	27	10	0.95	-0.15
WATERLOO	30	10	0.88	-0.42	DICKINSON	22	5	0.12	-0.27	GREEN BAY	30	10	1.23	-0.30
CONCORDIA	36	6	0.07	-0.77	FARGO	20	8	0.22	-0.43	LA CROSSE	30	10	0.83	-0.44
DODGE CITY	37	4	0.03	-0.62	GRAND FORKS	17	7	0.28	-0.36	MADISON	30	8	1.13	-0.71
GOODLAND	34	5	0.63	0.22	JAMESTOWN	19	6	0.07	-0.41	MILWAUKEE	33	9	0.86	-1.47
HILL CITY	34	3	0.17	-0.30	MINOT	16	2	0.29	-0.43	WAUSAU	27	9	0.84	-0.59
TOPEKA	38	7	0.13	-1.30	WILLISTON	14	1	0.56	-0.02	WY CASPER	25	1	0.13	-0.53
WICHITA	39	6	0.08	-1.12	OH AKRON-CANTON	36	5	1.07	-1.88	CHEYENNE	29	1	0.13	-0.29
JACKSON	43	5	2.55	-1.83	CINCINNATI	39	6	4.08	0.93	LANDER	22	1	0.17	-0.41
					CLEVELAND	37	6	2.53	-0.56	SHERIDAN	26	3	0.04	-0.66

Based on 1961-90 normals.

*** Not Available.

National Agricultural Summary

December 31 - January 6, 2001

Weekly National Agricultural Summary provided by USDA/NASS

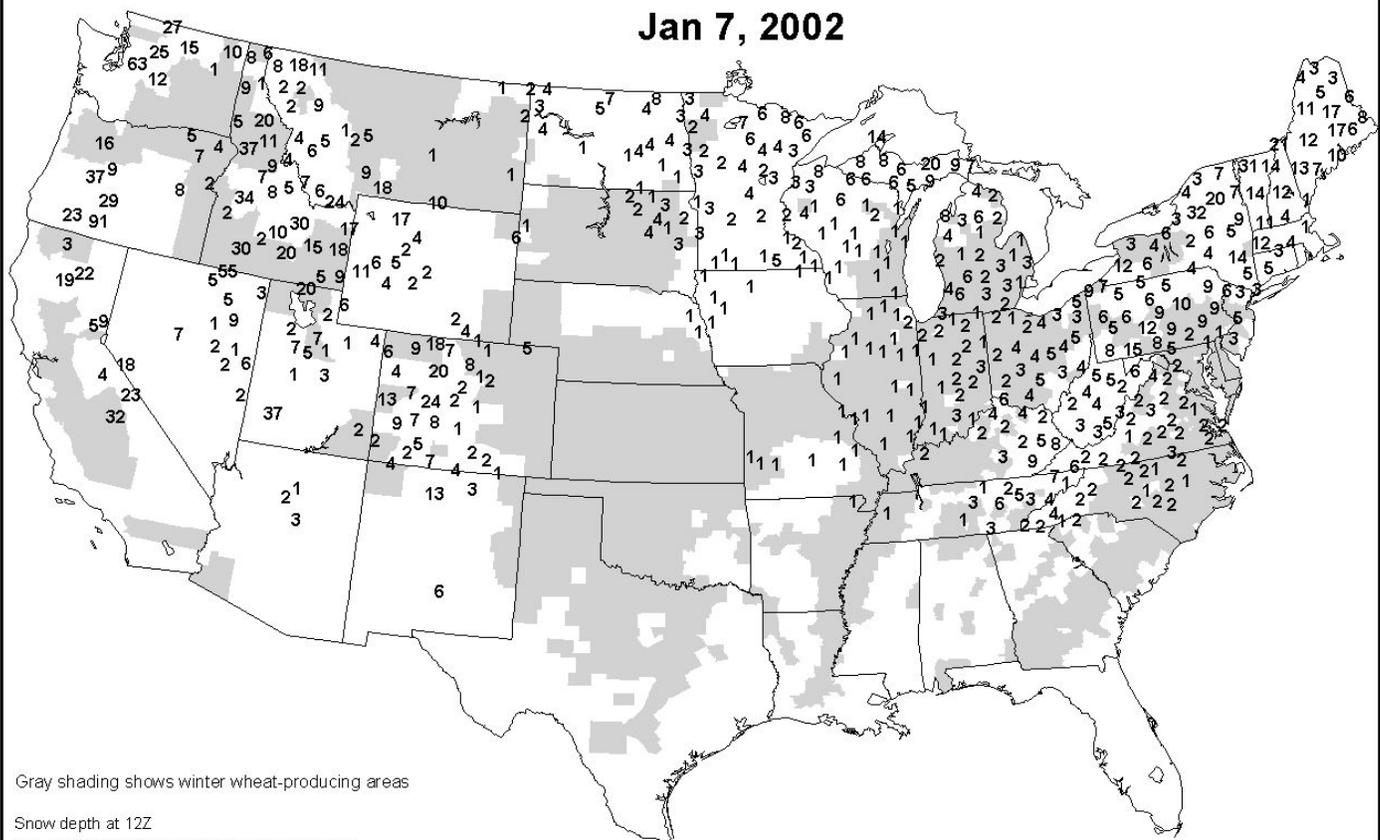
HIGHLIGHTS

A winter storm brought below-normal temperatures and a mixture of wintry precipitation to the southern Great Plains, lower Mississippi Valley, and Southeast. The cold weather halted growth of winter grains and forages but provided much-needed soil moisture reserves, especially along the Atlantic Coastal Plain. In Florida, overnight low temperatures fell below freezing, but were not sustained long enough to damage the citrus crop. Also, citrus trees experienced virtually no foliage burn, since temperatures quickly rebounded from early-morning lows. The cold weather provided beneficial chill hours for trees

approaching the upcoming bloom period. A stormy pattern continued in the Pacific Northwest, producing persistent rain in the low-lying coastal areas and heavy snowfall accumulations in the higher elevations of the Cascade and Sierra ranges. In California, above-normal temperatures, supported by ample moisture supplies, stimulated development of winter crops. Temperatures averaged above normal in the northern Great Plains, but winter wheat fields were exposed to periods of sub-zero temperatures and gusty winds.

Snow Depth (Inches)

Jan 7, 2002

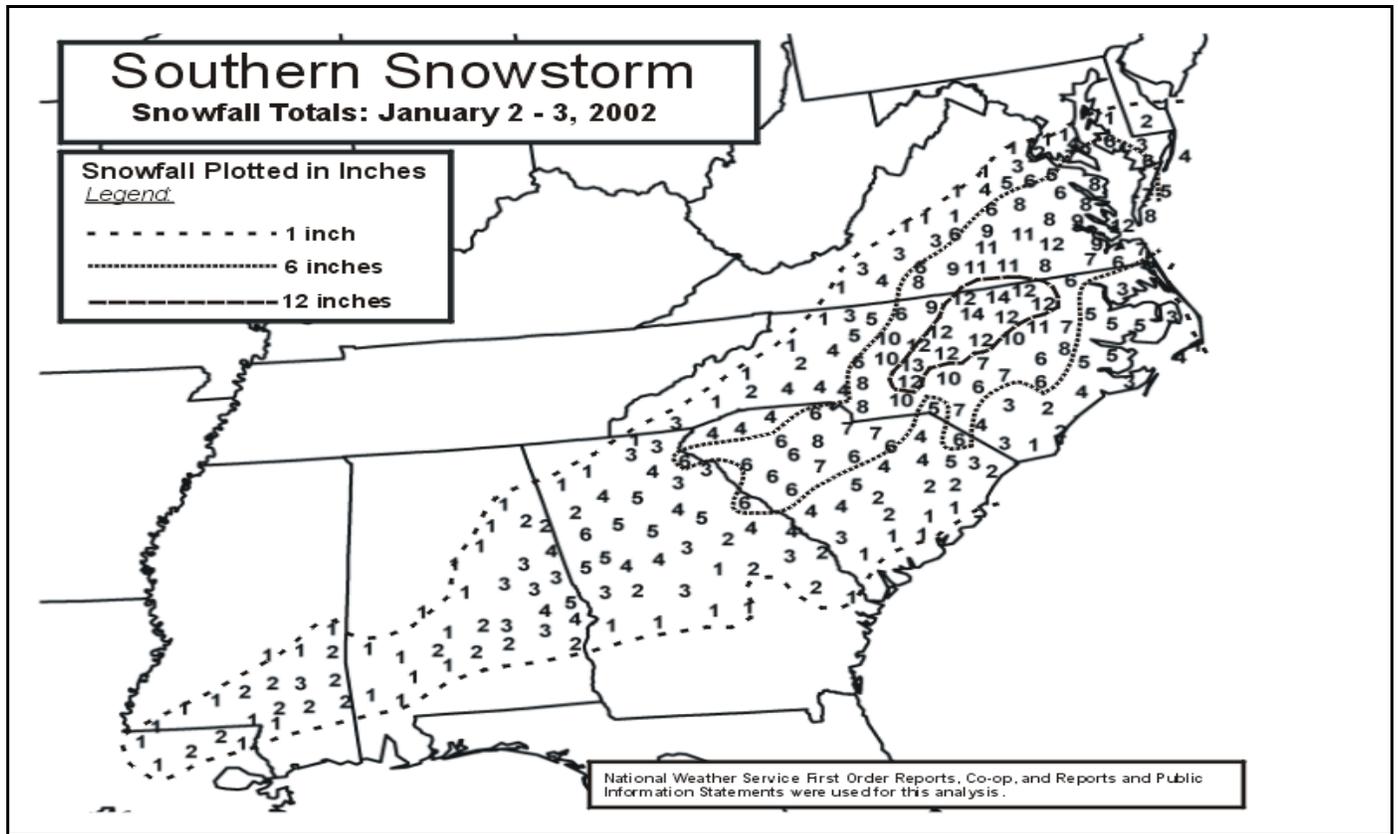


Gray shading shows winter wheat-producing areas

Snow depth at 12Z

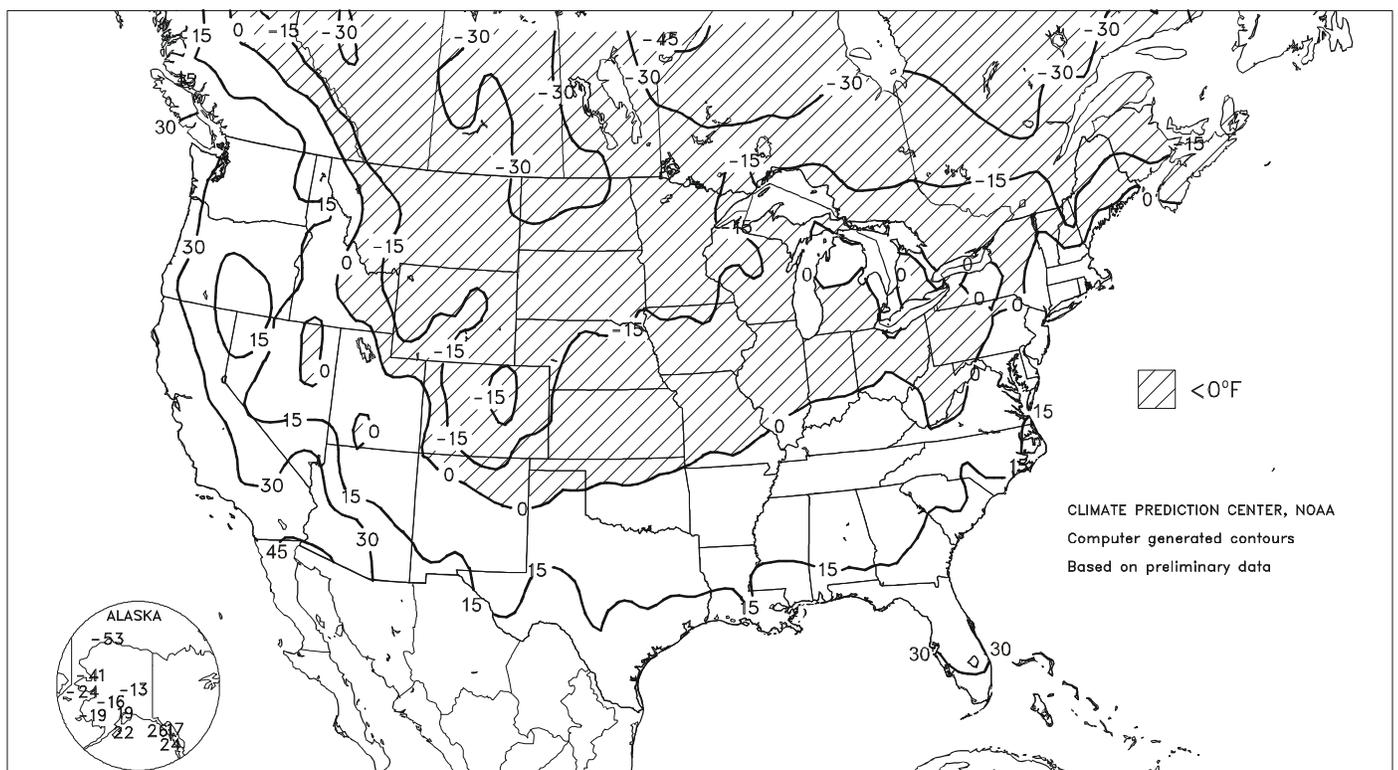
The NWS cooperative network is the principal source of the snow depth reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY



Extreme Wind Chill Temperature (°F)

DEC 30, 2001 - JAN 5, 2002



International Weather and Crop Summary

December 30, 2001 - January 5, 2002

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

HIGHLIGHTS

EUROPE: Cold weather continued to prevail in eastern Europe, but moderate to deep snow cover protected winter grains from potential winterkill.

FSU-WESTERN: Bitterly cold weather returned to winter grain areas across the region.

MIDDLE EAST: Somewhat drier weather brought relief to western Turkey, although pockets of heavy rain and flooding continued.

NORTHWESTERN AFRICA: Mostly dry weather prevailed over winter grain areas further reducing moisture supplies in Algeria and Tunisia.

SOUTH AFRICA: Scattered showers and seasonably warmer weather aided summer crop development.

SOUTHEAST ASIA: Heavy showers in Mindinao, Philippines, increased moisture supplies for crops, but caused some flooding.

EASTERN ASIA: Much warmer weather prevailed across the North China Plain, but winter wheat remained dormant. Overall moisture supplies remained adequate for winter crops across southern and central China, despite dry weather.

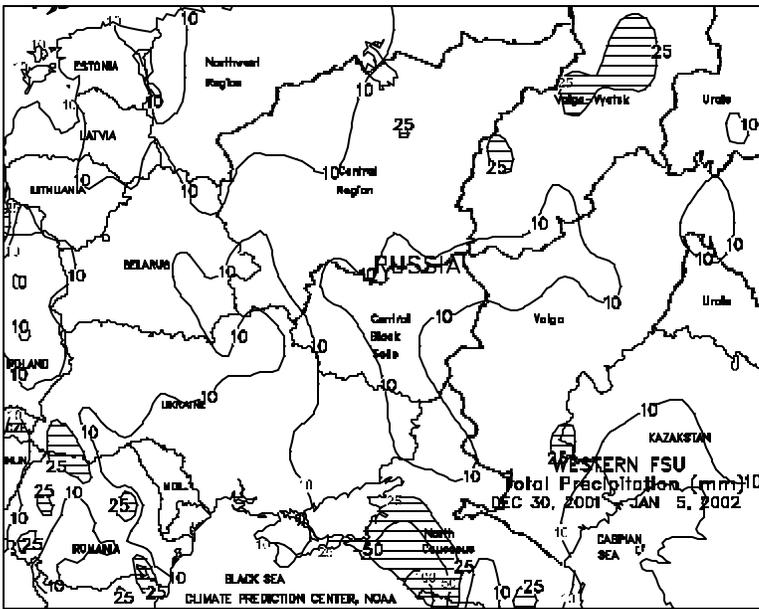
SOUTH AMERICA: Across portions of extreme southern Brazil, soil moisture was becoming limited for soybean development, while beneficial rain continued across central Argentina, aiding vegetative to early reproductive summer crops.

AUSTRALIA: Showers slowed late winter crop harvesting along the southeastern coast.



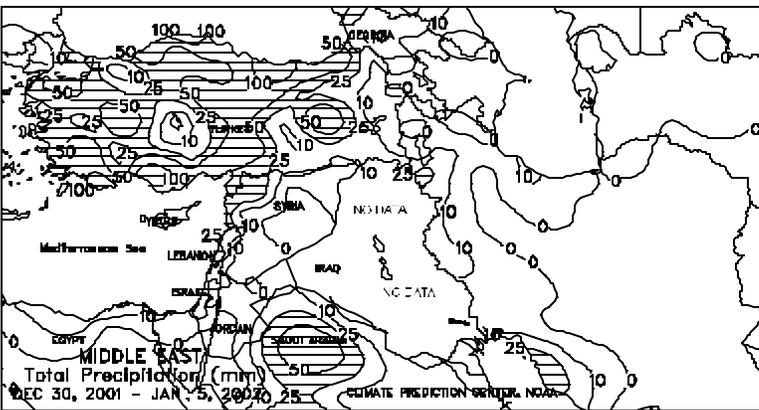
EUROPE

Cold weather continued to prevail in northern and eastern Europe, with temperatures averaging between -10 and 0 degrees C. Minimum temperatures in north-central and eastern Europe generally ranged from -24 to -12 degrees C. However, widespread snow (5-40 mm of liquid equivalent) increased an already moderate to deep snow pack, protecting winter grains from potential winterkill. Mostly dry weather (generally less than 10 mm) dominated south-central and northwestern Europe. Snow cover remained isolated in these areas, but despite unseasonably cold weather, minimum temperatures ranged only from about -10 to -5 degrees C, eliminating the potential winterkill. In southwestern France, Spain, and Portugal, temperatures averaged about 2 to 4 degrees C above normal. Moderate to locally heavy rain (10-60 mm) fell across much of the Iberian peninsula, boosting topsoil moisture and reservoir levels.



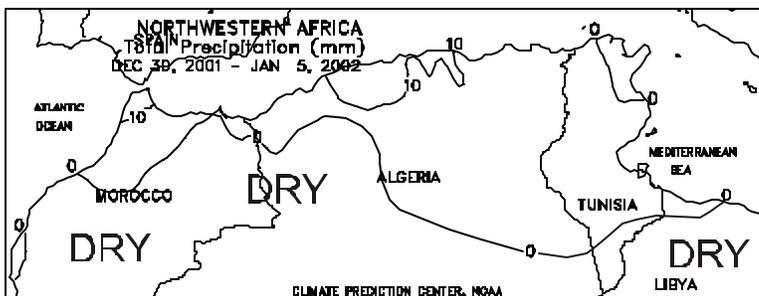
FSU-WESTERN

After a brief period of milder weather, bitterly cold air returned to most areas. The coldest weather began in the north on January 3, with minimum temperatures ranging from -35 to -25 degrees C from the Baltics eastward across northern Russia. The frigid air then pushed southward on January 4-5, with the lowest temperatures ranging from -21 to -15 degrees C as far south as southern Ukraine and the northern half of the North Caucasus region in Russia. Light to moderate snow (4-25 mm of liquid equivalent) maintained a deep snow cover in most areas, protecting winter grains from potential widespread winterkill. However, some local damage to winter grains was possible, especially in southeastern Ukraine, where snow cover was thin or patchy. Furthermore, crops in southeastern Ukraine entered dormancy poorly established, making them more susceptible to extremely cold weather. Weekly temperatures averaged 3 to 6 degrees C below normal from the Baltics and Belarus eastward across northern Russia, and 1 to 3 degrees C below normal in Ukraine and southern Russia.



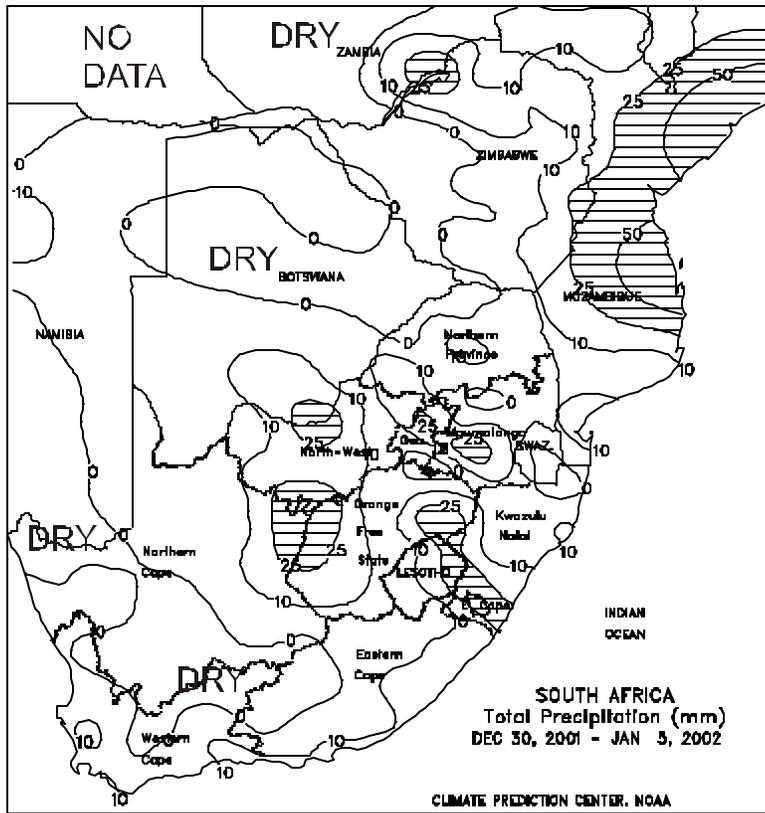
MIDDLE EAST

Heavy rain ended across much of western Turkey, bringing some relief from the recent spell of inundating rainfall. Precipitation amounts (liquid equivalent) totaled less than 25 mm over much of the southwest and Anatolia, with heavy showers (50 mm or more) lingering over a relatively small portion of the southern coast south of the Taurus Mountain range. Temperatures averaged near to slightly above normal across the Anatolian Plateau, but were low enough to keep winter wheat dormant. Light to moderate showers (10-25 mm or more) continued over much of eastern Turkey and western Syria, increasing irrigation reserves. Light showers (10 mm or less) fell from eastern Syria through northwestern Iran, but winter wheat areas of west-central and eastern Iran stayed dry. Temperatures averaged from 2 to 4 degrees C or more above normal from eastern Turkey and Syria eastward through Iran, favoring overwintering winter wheat. However, the much-above-normal temperatures in Iran left winter wheat vulnerable to potential winter kill and without sufficient winter hardiness.



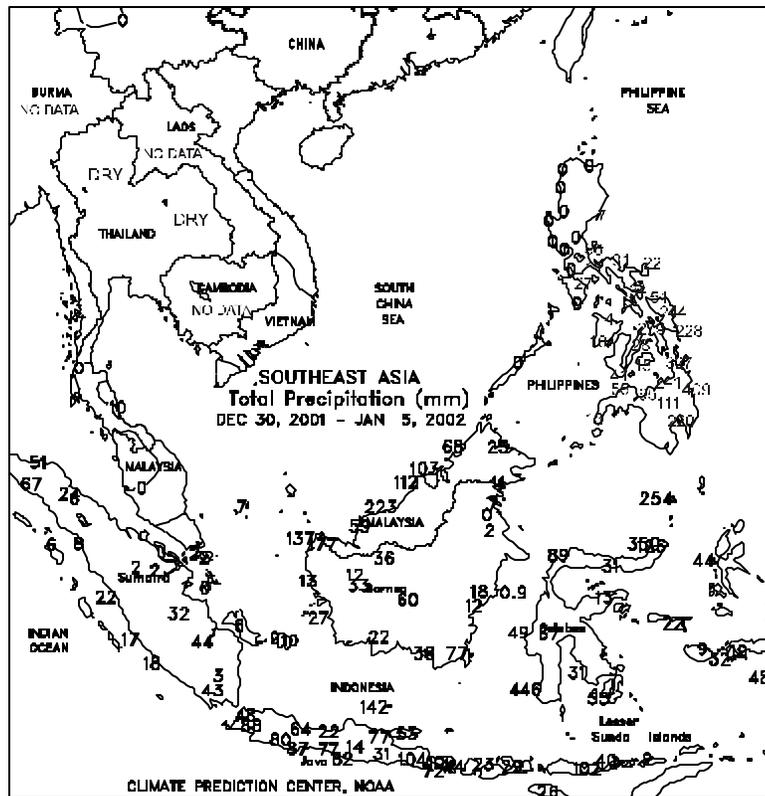
NORTHWESTERN AFRICA

Unseasonably warm, dry weather prevailed over winter grain areas in Morocco, Algeria, and Tunisia. Winter grains were mostly in the vegetative stage over the region. Rainfall in Morocco over the previous 3 weeks has improved moisture reserves. Farther east, the return of dry weather continued to reduce moisture for winter grains in Algeria and Tunisia. Weekly temperatures averaged 3 to 5 degrees C above normal in Morocco and 1 to 4 degrees C above normal in Algeria and Tunisia.



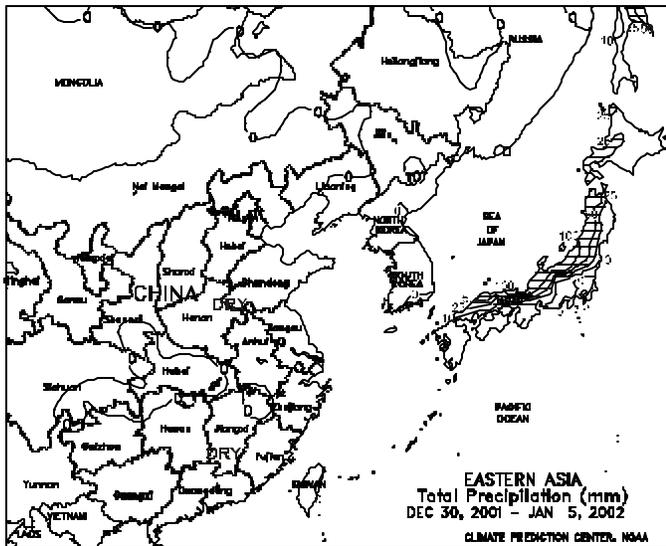
SOUTH AFRICA

Scattered showers (5-25 mm or more) were accompanied by seasonably warm weather conditions (highs reaching 30-35 degrees C) across the corn belt, benefiting vegetative summer crops. Corn typically advances through reproduction in late January and early February, and conditions are favorable for crops nearing these moisture- and temperature-sensitive stages of development. Elsewhere, mostly light showers (less than 25 mm) and seasonable temperatures aided development of sugarcane and other summer crops in KwaZulu-Natal and Eastern Cape. Dry, slightly warmer-than-normal weather maintained seasonably high irrigation demands in primary agricultural districts of Western Cape.



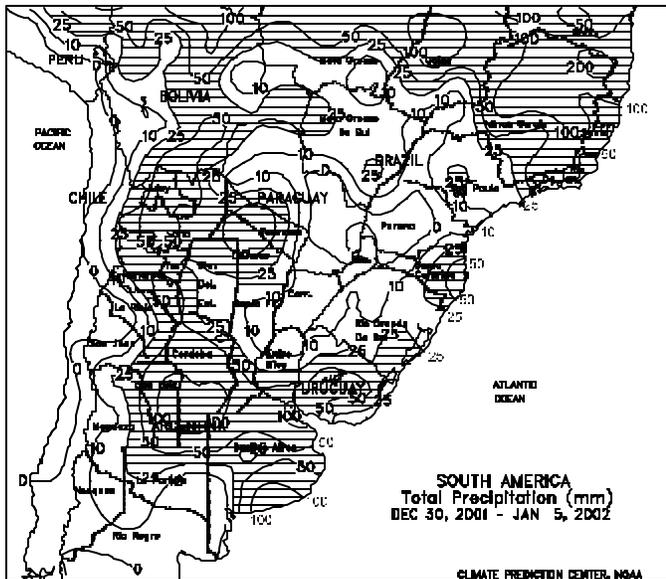
SOUTHEAST ASIA

Across Mindanao, Philippines, and the east-central islands, heavy showers (50-400 mm) increased moisture supplies for second-season crops, but caused some flooding. Seasonably dry weather prevailed across Thailand and southern Vietnam, favoring rice fieldwork. Rainfall (25-100 mm) in Java, Indonesia, continued to ease unseasonable dryness. Drier weather in Sumatra and peninsular Malaysia eased wetness for oil palm.



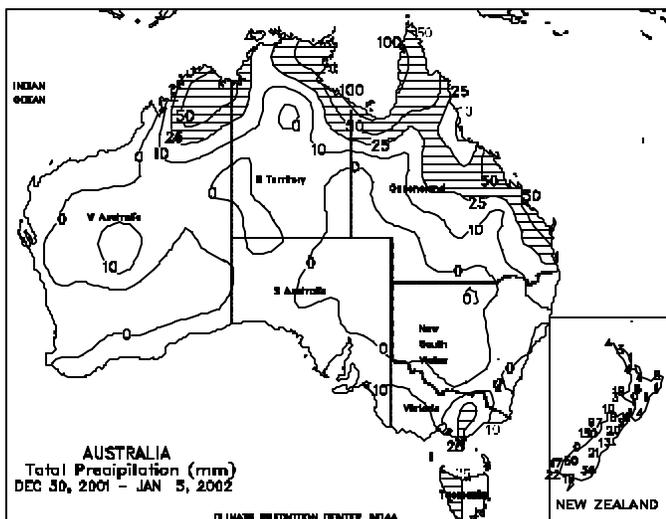
EASTERN ASIA

Across the North China Plain, much warmer weather prevailed by week's end, but temperatures remained cold enough for winter wheat to remain dormant. Seasonably dry weather continued across the region, with temperatures averaging 3 to 6 degrees C above normal and highs reaching 10 to 15 degrees C by Saturday. Dry weather continued to prevail across the Yangtze Valley and southern China, but overall moisture supplies remained adequate for winter crops. Temperatures averaged 2 to 6 degrees C above normal across central and southern China.



SOUTH AMERICA

Across northwestern Rio Grande do Sul, western Santa Catarina, and southeastern Parana, rainfall has averaged about 30 percent of normal for the past 2 weeks. Soil moisture was becoming limited for soybean development and rain was needed to ease the dryness. Elsewhere across southern Brazil, light showers (5-25 mm) fell across Mato Grosso do Sul and Sao Paulo, maintaining adequate soil moisture for summer crops. In Mato Grosso, Goias, and western Bahia, widespread showers (25-100 mm or more) maintained abundant soil moisture for soybeans and cotton. However, heavy showers (100-150 mm) slowed main-season cocoa harvesting across coastal Bahia. In central Argentina, widespread showers (50-150 mm) boosted soil moisture for vegetative to early reproductive corn and vegetative soybeans, especially in southern Cordoba and La Pampa. In southern Buenos Aires, most of the rain fell early in the week, allowing drier weather to favor winter wheat maturation. Temperatures averaged slightly below normal across Argentina and 1 to 3 degrees C above normal in southern Brazil. According to the Argentine Agricultural Secretariat as of December 28, nationwide corn, sorghum, sunflowers, and soybeans were 90, 89, 96, and 89 percent planted, respectively, compared with 90, 89, 99, and 91 percent last year. Cotton was 98 percent planted. Winter wheat was 64 percent harvested, compared with 62 percent on this date last year.



AUSTRALIA

Showers (5-20 mm) swept across the southeastern coast, slowing harvesting in the more southerly winter crop areas of South Australia and Victoria. Mostly dry, unseasonably cool weather continued elsewhere in the southeast, including southern New South Wales, as well as in Western Australia, favoring late winter grain and oilseed harvesting. In southern Queensland and northern New South Wales, above-normal temperatures (with highs ranging from 35-40 degrees C) spurred cotton and sorghum growth. Summer crop areas of New South Wales were mostly dry, but scattered showers (5-25 mm or more) boosted moisture reserves for sorghum and sugarcane in southeastern Queensland. In New Zealand, light to moderate showers (5-30 mm) continued to provide adequate moisture for small grains and pastures.

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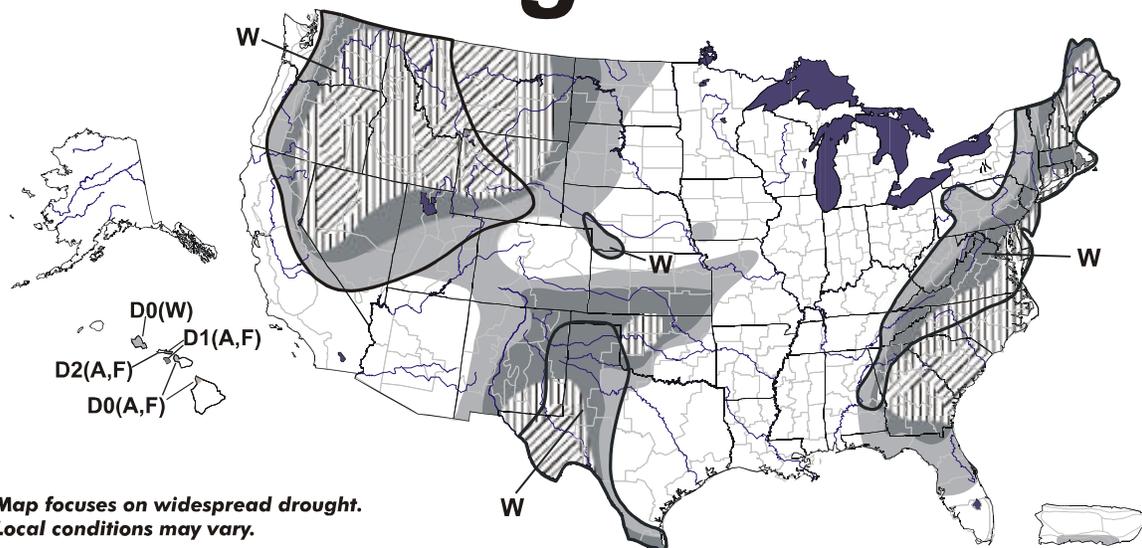
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January 1, 2002 Valid 8 a.m. EST

U.S. Drought Monitor



Map focuses on widespread drought. Local conditions may vary.

- D0 Abnormally Dry
- D1 Drought-First Stage
- ▨ D2 Drought-Severe
- ▨ D3 Drought-Extreme
- ▨ D4 Drought-Exceptional
- Delineates Overlapping Areas

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



See accompanying text summary for forecast statements
<http://enso.unl.edu/monitor/monitor.html>

● **Released Thursday, January 3, 2002** ●
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