

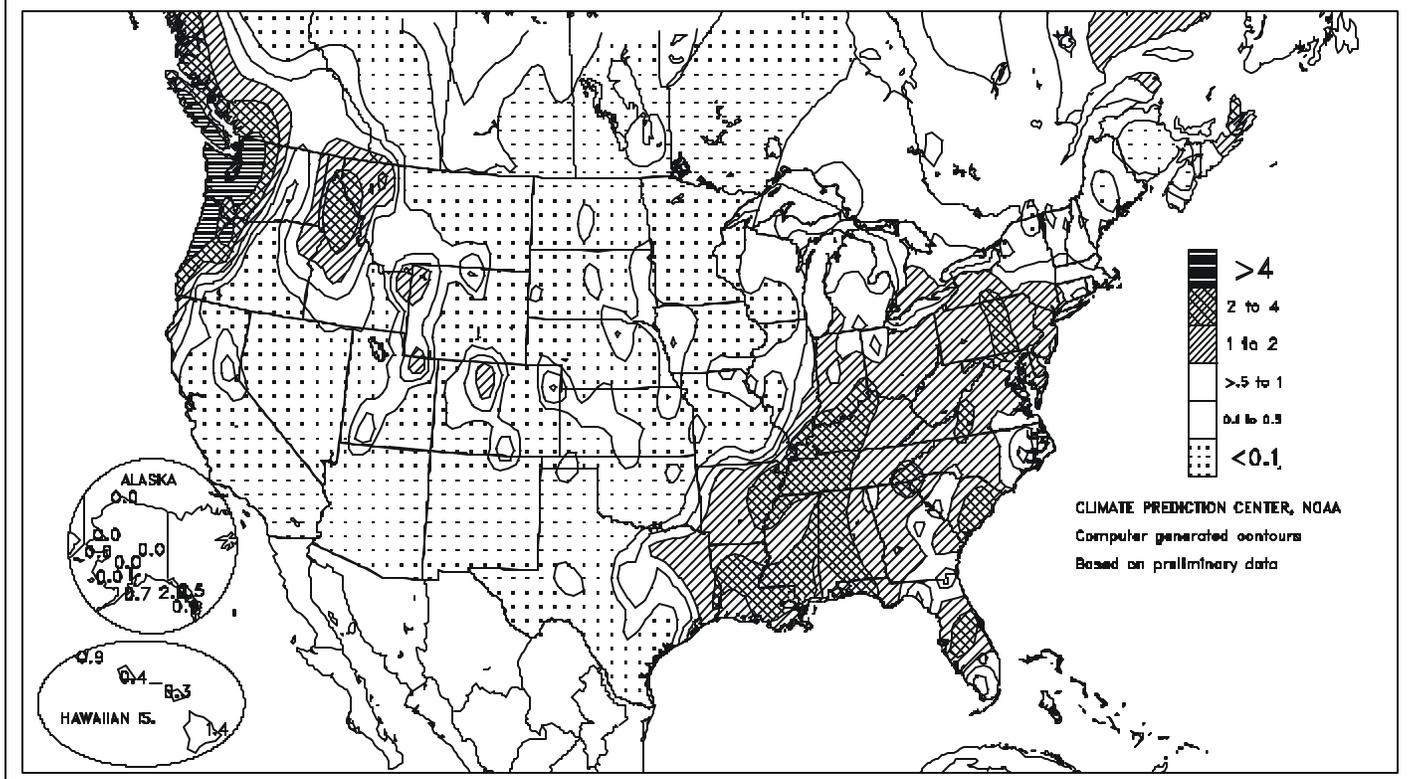
WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board

Total Precipitation (Inches)

DEC 12 - 18, 1999



HIGHLIGHTS

December 12 - 18, 1999

Widespread rainfall further eased long-term drought from the **Gulf Coast region** northeastward to the **Ohio Valley**, continuing a trend that developed in late November. Unfavorable dryness persisted in **central and western Texas**, on the **Plains** from **western Kansas northward**, in the **western Corn Belt**, and across the **Southwest**. Dryness also lingered in the **southern Atlantic States**, although beneficial, locally heavy showers eased irrigation requirements in citrus and vegetable areas of **central Florida**. A weather pattern change after midweek brought a respite from an 8-week wet spell in the **Northwest**, allowing wintry conditions (sub-zero

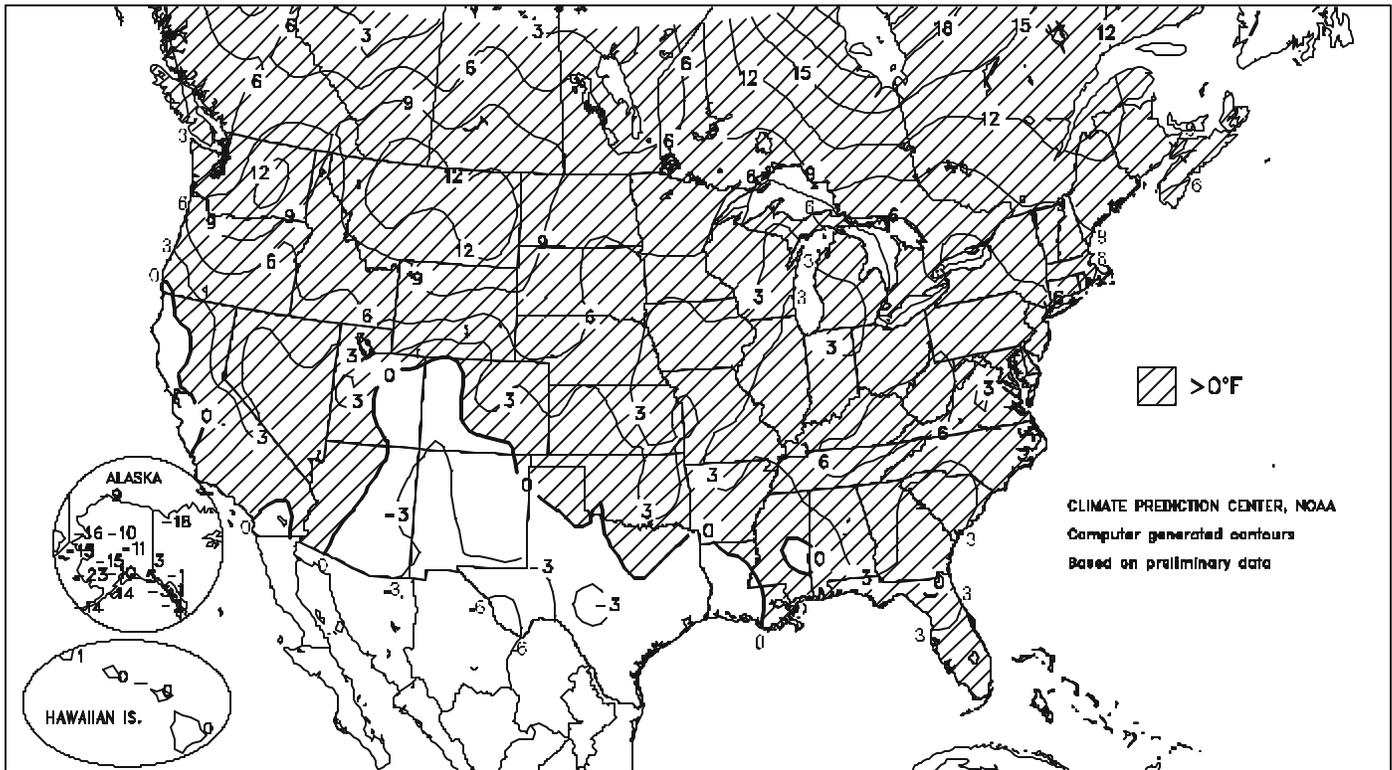
(Continued on page 3)

Contents

Temperature Departure & Extreme Minimum Temperature Maps	2
Weather Data for the Delta	3
National Weather Data for Selected Cities	4
National Agricultural Summary & Snow Cover Map	7
International Weather and Crop Summary	8
La Niña Advisory	11
Subscription Information & January 2000 and January-March 2000 Outlooks	12

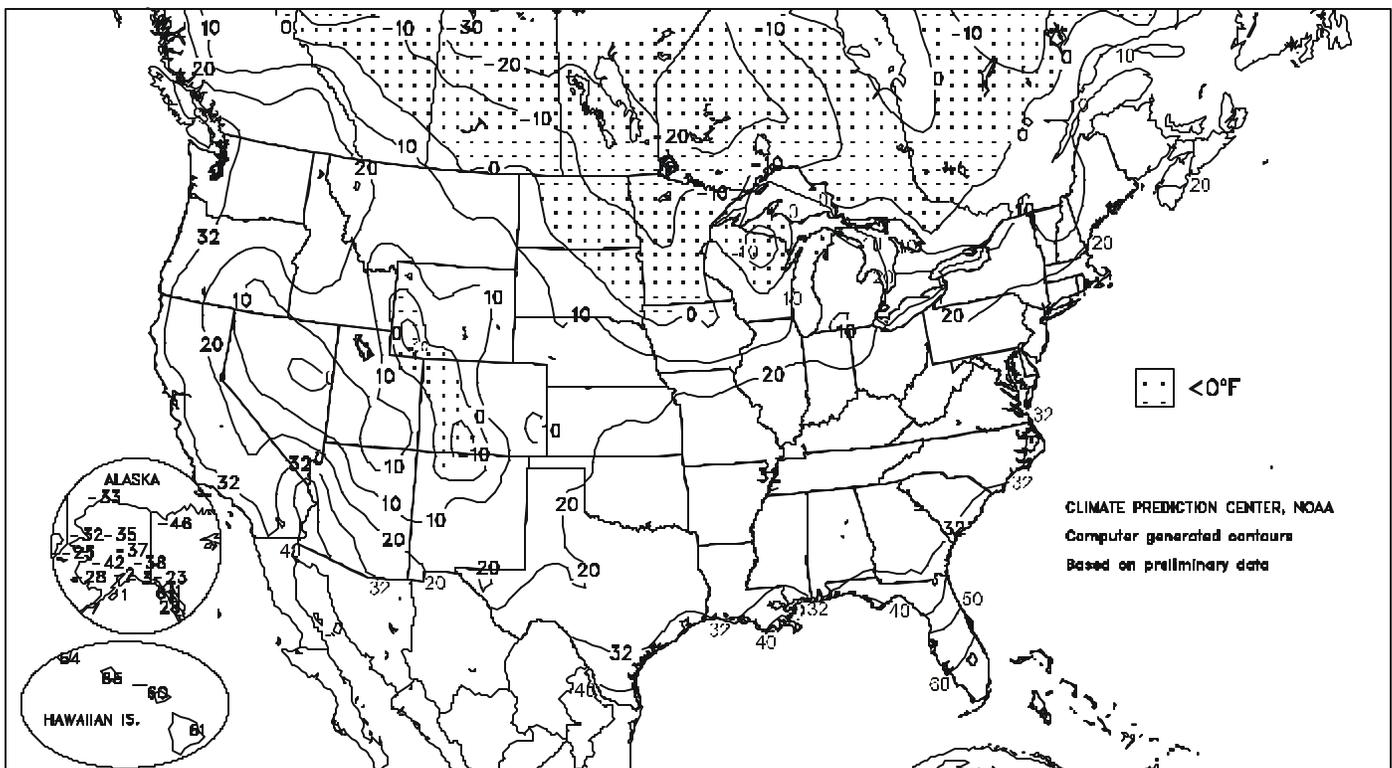
Departure of Average Temperature from Normal (°F)

DEC 12 - 18, 1999



Extreme Minimum Temperature (°F)

DEC 12 - 18, 1999



Weather Data for Selected Locations in the Delta

Weather Data for the Week Ending December 18, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP. °F		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		1/2 INCH OR MORE	5/8 INCH OR MORE
																		OF 90 AND ABOVE	OF 32 AND BELOW		
MS BATESVILLE ^x	53	38	58	30	46	3	1.89	0.56	1.67	--	--	--	--	--	--	0	2	2	1		
BELZONI ^x	57	40	67	26	49	2	1.35	0.03	1.25	--	--	--	--	--	--	0	2	2	1		
CLARKSDALE ^x	54	40	58	33	47	3	0.50	-0.69	0.50	2.14	70	--	--	--	--	0	0	1	1		
CLEVELAND ^x	54	36	60	28	45	0	1.32	0.20	0.85	2.92	104	--	--	--	--	0	3	2	1		
GREENVILLE ^x	56	38	63	31	47	0	1.17	0.07	1.17	3.02	100	--	--	--	--	0	2	1	1		
GREENWOOD ^x	57	37	66	25	48	1	0.12	-1.05	0.11	0.61	20	--	--	--	--	0	3	2	0		
INDIANOLA 1S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
INVERNESS 5E	57	39	66	33	48	--	1.07	--	0.97	2.30	--	44.19	--	53	50	0	0	2	1		
LYON	53	38	58	31	46	--	1.43	--	1.01	3.27	--	--	--	--	--	0	1	2	1		
MOORHEAD ^x	57	40	65	33	49	2	0.85	-0.48	0.85	--	--	--	--	--	--	0	0	1	1		
ONWARD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
ROLLING FORK ^x	59	38	69	29	49	3	1.37	0.18	1.25	2.80	88	--	--	--	--	0	2	4	1		
SIDON	59	41	67	30	50	--	1.11	--	1.04	1.98	--	--	--	56	52	0	1	2	1		
TUNICA ^x	51	37	56	30	44	1	2.08	0.75	1.45	2.87	86	--	--	--	--	0	2	2	2		
VICKSBURG ^x	58	40	66	32	49	1	--	--	--	--	--	--	--	--	--	0	1	--	--		
YAZOO CITY ^x	59	38	66	27	49	1	1.61	0.21	1.50	--	--	--	--	--	--	0	3	3	1		
STONEVILLE [*]	57	38	60	31	48	2	1.44	0.19	1.12	3.06	90	50.30	100	55	46	0	3	2	1		

Compiled by USDA/OCE/WAOB's Stoneville Field Office. * Based on 1964-93 normals. ^x Based on 1961-90 normals.

Delta Weather and Crop Summary: Soil moisture for pastures and winter wheat continued to improve as a fast-moving cold front brought moderate rainfall to the Delta. The continuation of near- to slightly above-normal temperatures also aided winter wheat.

(Continued from front cover)

temperatures and light snow) to overspread the **upper Midwest**. Winter wheat entered dormancy as far south as the **southern Plains** and the **Ohio Valley**, despite a continuation of above-normal temperatures nearly nationwide. Winter grains remained vegetative only in **California** and the **South**. Weekly temperatures averaged 6 to 16°F above normal in the **northern Plains** and the **Northwest**, and as much as 12°F above normal in **northern New England**. Despite a mid- to late-week cool snap, most of the **Plains** experienced an eighth consecutive week of above-normal temperatures. In contrast, cool conditions (generally 1 to 5°F below normal) prevailed in the **Southwest**. The cool weather, which resulted in near- to slightly below-freezing temperatures as far south as **California's San Joaquin Valley** and **southeastern Arizona**, did not threaten citrus but may have adversely affected some cool-season vegetables.

Weekly rainfall generally topped 2 inches from the **central Gulf Coast region** northward to the **lower Ohio Valley**, as the primary storm track edged eastward compared to past weeks. As a result, December 1-18 totals climbed to 5.24 inches in **Little Rock, AR** and 5.18 inches in **Louisville, KY**. In **Louisiana**, month-to-date rainfall rose to 2.86 inches in **Lake Charles** and 1.98 inches in **New Orleans**, leaving their respective year-to-date totals at 68 and 75 percent of normal. On Tuesday, heavy precipitation spread as far north and east as **Pennsylvania**, where **Harrisburg** (1.50 inches) and **Williamsport** (1.37 inches) collected daily-record amounts.

In the **Southwest**, however, dry stretches approached record proportions. In **Arizona**, December 18 represented the 85th consecutive day with no measurable precipitation in **Flagstaff** and 87th consecutive day with no rain in **Phoenix**. **Flagstaff's** all-time record of 93 days was set in April-July 1974, but their former autumn record of 77 days had been noted in October-December 1903 and September-November 1898. **Phoenix's** longest spell without a drop of rain, 91 days, occurred in January-April 1984, although the city once observed 160 consecutive days without measurable rain, from December 1971 - June 1972. Mean-while, **San Diego, CA** remained on a pace to record their driest second half of a year. **San Diego's** July 1 - December 18 rainfall was 0.09 inch, well below their July-December record of 0.24 inch, set in 1962.

Enough cold air filtered into the **upper Midwest** to end several long-running streaks. In **Wisconsin**, **Madison's** streak of consecutive days

with highs above 32°F ended at 280 days (March 11 - December 15), tying their record set in 1981. Elsewhere in **Wisconsin**, **Milwaukee's** above-freezing streak ended a day later at 281 days, just 2 days shy of their 1994 record. Farther west, **Minneapolis, MN** saw their 281-day (March 10 - December 15) streak with above-freezing maximum temperatures end with a high of 17°F on Thursday. Their previous record, 263 days, was set in 1994. In **South Dakota**, cold weather on December 15 ended streaks of above-normal temperatures at 47 days (October 29 - December 14) in **Huron** and 41 days (November 4 - December 14) in **Sioux Falls**. In addition, Thursday's lows of -3°F in both **Huron** and **Sioux Falls** were the locations' first sub-zero readings since January 25. Meanwhile in **Iowa**, **Des Moines'** spell of above-normal temperatures ended at 42 days (November 4 - December 15), 11 days shy of their all-time record set in June-August 1935.

In **Grand Forks, ND**, a 56-day streak (October 19 - December 13) without measurable precipitation ended with a light snowfall on Tuesday. **Grand Forks'** temperature averaged 8.9°F above normal during the 8-week dry spell. Elsewhere in **North Dakota**, **Bismarck** noted their latest first measurable snow when 0.9 inch fell on December 13. Their former record was established on December 8, 1920. **Madison, WI** also registered their latest first snowfall (0.9 inch on December 15), bettering their former mark set on November 28, 1994.

A handful of daily-record high were reported during the week, primarily across the **North**. On Sunday in **North Dakota**, **Grand Forks** (43°F) and **Williston** (48°F) collected record highs. **Wenatchee, WA** notched consecutive daily records (48 and 56°F) on December 15-16. Warm weather overspread **California** toward week's end, resulting in an additional half-dozen daily-record highs. On Friday, **Riverside, CA** noted a high of 88°F. Meanwhile, much-needed rain developed across **Peninsular Florida**, where daily-record totals were tallied on Saturday in **Melbourne** (1.68 inches) and **Orlando** (1.26 inches).

Bitterly cold weather (weekly temperatures 9 to 23°F below normal) prevailed across **Alaska**, except southeastern areas, continuing an 8-week trend. On Monday, **King Salmon** posted a daily-record low of -36°F. Meanwhile in **Hawaii**, beneficial showers continued to provide some relief from long-term drought, which has persisted from **Oahu** to leeward portions of the **Big Island** since late 1997.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 18, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	50 INCH OR MORE
AL BIRMINGHAM	59	39	69	27	49	4	1.80	0.64	1.02	2.61	89	48.09	92	91	45	0	2	3	1
AL HUNTSVILLE	58	36	67	26	47	4	2.09	0.74	1.15	3.10	91	45.29	83	92	50	0	2	3	2
AL MOBILE	64	42	75	29	53	0	1.97	0.76	1.02	2.85	93	50.15	81	97	49	0	1	4	1
AL MONTGOMERY	64	39	76	25	52	2	1.77	0.58	0.94	2.53	84	41.11	80	95	45	0	2	3	2
AK ANCHORAGE	11	1	14	-2	6	-10	0.01	-0.24	0.01	0.02	3	16.87	109	86	62	0	7	1	0
AK BARROW	-14	-27	-10	-33	-20	-9	0.00	-0.03	0.00	0.03	43	3.73	85	81	67	0	7	0	0
AK FAIRBANKS	-10	-24	-4	-37	-17	-10	0.00	-0.19	0.00	0.00	0	9.80	93	77	64	0	7	0	0
AK JUNEAU	32	23	37	11	28	1	0.48	-0.51	0.21	2.44	96	70.66	135	97	74	0	7	6	0
AK KODIAK	23	9	35	1	16	-15	0.87	-0.67	0.87	2.07	54	71.08	110	78	53	0	7	1	1
AK NOME	-1	-16	6	-25	-8	-15	0.00	-0.19	0.00	0.01	2	15.20	105	78	46	0	7	0	0
AZ FLAGSTAFF	45	13	53	9	29	-1	0.00	-0.55	0.00	0.00	0	16.04	74	61	20	0	7	0	0
AZ PHOENIX	66	39	72	35	53	-1	0.00	-0.22	0.00	0.00	0	6.63	92	43	13	0	0	0	0
AZ TUCSON	66	33	75	28	50	-2	0.00	-0.25	0.00	0.00	0	9.67	84	35	11	0	3	0	0
AZ YUMA	69	46	76	43	58	2	0.00	-0.11	0.00	0.00	0	4.35	146	36	16	0	0	0	0
AR FORT SMITH	54	32	61	24	43	3	1.33	0.63	1.33	5.06	262	40.69	102	87	42	0	4	1	1
AR LITTLE ROCK	54	35	62	26	45	2	2.18	1.07	1.83	5.25	178	37.44	76	91	56	0	3	2	1
CA BAKERSFIELD	57	34	64	31	46	-1	0.00	-0.14	0.00	0.16	46	6.02	111	81	39	0	2	0	0
CA EUREKA	55	42	59	37	48	0	0.86	-0.50	0.69	2.81	79	39.33	112	93	84	0	1	4	1
CA FRESNO	57	33	59	30	45	0	0.00	-0.31	0.00	0.03	4	6.45	65	97	50	0	4	0	0
CA LOS ANGELES	70	47	76	44	59	2	0.00	-0.36	0.00	0.00	0	7.13	63	71	28	0	0	0	0
CA REDDING	56	33	62	28	44	-1	0.13	-1.11	0.08	0.64	20	24.35	79	94	46	0	3	2	0
CA SACRAMENTO	57	34	60	29	46	1	0.00	-0.55	0.00	0.06	4	11.88	72	95	45	0	2	0	0
CA SAN DIEGO	67	46	73	44	57	0	0.00	-0.36	0.00	0.03	3	5.20	56	67	27	0	0	0	0
CA SAN FRANCISCO	57	42	61	39	50	1	0.02	-0.66	0.01	0.47	28	15.69	86	95	63	0	0	2	0
CO ALAMOSA	35	-3	44	-10	17	-1	0.00	-0.11	0.00	0.01	4	7.55	102	82	27	0	7	0	0
CO CO SPRINGS	47	20	55	15	34	4	0.00	-0.11	0.00	0.12	43	25.14	157	72	20	0	7	0	0
CO DENVER	46	24	54	20	35	4	0.00	-0.14	0.00	0.23	58	20.93	138	73	25	0	7	0	0
CO GRAND JUNCTION	37	15	45	6	26	-3	0.03	-0.11	0.03	0.27	77	8.07	96	83	42	0	7	1	0
CO PUEBLO	54	15	65	7	34	3	0.00	-0.10	0.00	0.05	19	13.85	125	65	17	0	7	0	0
CT BRIDGEPORT	45	35	51	30	40	6	1.03	0.23	0.71	2.16	104	40.71	101	85	54	0	3	4	1
CT HARTFORD	43	30	50	23	36	6	0.88	-0.01	0.60	1.61	70	43.29	102	88	58	0	5	3	1
DC WASHINGTON	50	36	53	32	43	4	1.30	0.58	0.89	2.34	127	40.08	107	84	51	0	1	2	1
DE WILMINGTON	47	33	50	28	40	4	1.37	0.57	0.75	2.04	99	46.89	119	89	56	0	4	3	2
FL DAYTONA BEACH	72	55	79	47	63	3	1.43	0.85	1.08	1.47	99	46.24	99	95	59	0	0	3	1
FL JACKSONVILLE	65	46	74	35	56	1	0.67	0.06	0.37	0.85	57	41.57	83	98	58	0	0	4	0
FL KEY WEST	80	71	82	68	75	4	0.34	-0.11	0.31	0.45	38	46.85	121	92	71	0	0	3	0
FL MIAMI	80	68	82	67	74	5	0.50	0.09	0.24	2.44	226	64.32	117	92	62	0	0	5	0
FL ORLANDO	72	58	81	52	65	3	2.63	2.14	1.23	2.64	208	54.74	116	97	60	0	0	5	2
FL PENSACOLA	65	45	71	36	55	1	2.27	1.30	1.73	2.52	105	45.66	76	92	47	0	0	4	2
FL TALLAHASSEE	66	43	75	33	55	2	1.24	0.09	0.93	1.40	48	48.93	77	96	51	0	0	2	1
FL TAMPA	73	60	80	54	67	5	0.82	0.32	0.43	0.91	73	34.21	80	94	63	0	0	6	0
FL WEST PALM	79	66	81	64	72	5	0.58	0.04	0.49	0.77	50	61.78	103	96	67	0	0	3	0
GA ATHENS	60	36	65	27	48	3	1.18	0.26	1.04	1.97	85	40.83	85	91	44	0	2	3	0
GA ATLANTA	58	40	65	30	49	5	0.75	-0.22	0.70	1.48	60	38.29	78	86	44	0	2	3	1
GA AUGUSTA	63	35	67	23	49	2	0.14	-0.63	0.12	0.57	31	36.29	84	93	46	0	3	3	0
GA COLUMBUS	63	41	71	29	52	3	0.93	-0.21	0.71	1.05	37	27.12	56	85	39	0	1	3	0
GA MACON	63	38	69	24	51	2	0.60	-0.38	0.43	0.82	34	35.39	83	92	49	0	3	2	0
GA SAVANNAH	66	42	75	32	54	2	0.54	-0.13	0.41	0.69	43	48.87	102	93	46	0	1	3	0
HI HILO	79	65	80	61	72	0	1.44	-1.29	0.39	14.43	196	117.1	94	96	73	0	0	5	0
HI HONOLULU	80	68	82	65	74	0	0.44	-0.43	0.43	1.66	76	11.22	55	94	68	0	0	2	0
HI KAHULUI	83	64	84	60	73	0	0.31	-0.42	0.31	1.26	70	8.69	45	94	59	0	0	1	0
HI LIHUE	78	69	79	64	74	1	0.87	-0.27	0.47	2.18	74	31.48	77	93	73	0	0	4	0
ID BOISE	44	31	49	25	38	8	0.42	0.12	0.17	0.91	115	8.60	75	94	61	0	2	6	0
ID LEWISTON	48	39	52	33	44	10	0.83	0.55	0.28	1.18	166	11.72	98	84	59	0	0	6	0
IL POCATELLO	39	28	45	21	33	8	0.07	-0.18	0.05	0.26	41	10.25	88	87	53	0	5	2	0
IL CHICAGO/O'HARE	37	24	46	11	31	4	0.24	-0.33	0.10	2.52	164	38.12	109	93	69	0	5	4	0
IL MOLINE	34	21	43	10	27	2	0.12	-0.39	0.08	1.93	142	33.36	87	95	72	0	7	4	0
IL PEORIA	37	26	44	19	31	4	0.29	-0.27	0.23	2.44	163	30.13	85	94	71	0	7	4	0
IL ROCKFORD	33	19	41	0	26	2	0.07	-0.40	0.06	1.43	112	37.27	105	97	75	0	7	2	0
IL SPRINGFIELD	39	28	45	23	34	4	0.17	-0.47	0.12	2.13	127	28.85	84	94	70	0	5	4	0
IN EVANSVILLE	45	34	56	27	39	4	2.64	1.80	1.20	4.80	216	38.99	94	86	59	0	3	4	2
IN FORT WAYNE	36	27	44	17	32	3	0.92	0.25	0.81	1.74	99	28.12	84	94	78	0	5	3	1
IN INDIANAPOLIS	42	32	50	25	37	6	0.59	-0.18	0.21	2.35	116	32.18	83	95	66	0	3	5	0
IN SOUTH BEND	36	25	43	9	30	1	1.05	0.29	0.70	2.56	128	30.43	80	95	74	0	4	5	1
IA BURLINGTON	34	24	43	15	29	2	0.20	-0.26	0.14	2.39	196	36.61	104	95	72	0	7	2	0
IA CEDAR RAPIDS	34	15	46	1	24	1	0.05	-0.32	0.03	0.34	34	32.03	97	97	65	0	7	3	0
IA DES MOINES	35	19	50	8	27	3	0.01	-0.29	0.01	0.11	13	31.24	96	94	58	0	7	1	0
IA DUBUQUE	32	16	42	1	24	2	0.01	-0.44	0.01	0.44	35	34.64	92	95	71	0	7	1	0
IA SIOUX CITY	34	15	49	3	25	3	0.00	-0.18	0.00	0.10	21	30.41	119	96	63	0	7	0	0
IA WATERLOO	34	12	48	0	23	3	0.01	-0.29	0.01	0.14	17	43.54	131	93	59	0	7	1	0
KS CONCORDIA	42	22	50	19	32	2	0.00	-0.19	0.00	0.44	85	25.51	90	91	48	0	7	0	0
KS DODGE CITY	48	23	61	17	36	3	0.11	-0.03	0.11	0.26	65	21.32	100	80	35	0	7	1	0
KS GOODLAND	48	19	59	14	33	4	0.18	0.10	0.18	0.25	100	20.27	112	78	31	0	7	1	0
KS TOPEKA	42	26	51	19	34	3	0.05	-0.28	0.04	1.69	190	34.95	101	93	56	0	7	2	0

Based on 1961-90 normals

*** Not Available

Weather Data for the Week Ending December 18, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
KY	WICHITA	45	28	50	22	36	3	0.08	-0.20	0.07	4.07	543	45.51	158	90	48	0	6	2	0
	JACKSON	55	37	64	31	46	8	1.39	0.39	0.94	2.42	93	39.97	83	78	47	0	2	3	1
	LEXINGTON	49	35	54	30	42	6	1.54	0.62	0.78	2.46	104	32.05	75	90	58	0	3	3	2
	LOUISVILLE	47	35	57	31	41	4	2.79	1.96	1.39	4.29	195	39.73	93	93	67	0	1	4	2
	PADUCAH	48	37	57	28	42	5	2.69	1.60	1.72	4.00	142	41.05	87	88	55	0	1	3	2
LA	BATON ROUGE	63	41	76	29	52	-1	2.65	1.38	2.05	3.31	104	45.58	78	95	52	0	1	3	2
	LAKE CHARLES	64	39	77	28	51	-2	1.68	0.52	1.21	2.90	100	35.74	68	99	54	0	1	4	1
	NEW ORLEANS	66	48	79	39	57	2	1.85	0.53	1.19	1.97	59	44.50	75	89	52	0	0	2	2
	SHREVEPORT	59	36	65	28	48	0	1.70	0.77	1.29	3.82	157	54.54	123	89	45	0	2	3	1
ME	CARIBOU	33	22	39	8	28	13	0.13	-0.61	0.08	2.03	104	37.77	107	95	69	0	5	2	0
	PORTLAND	41	31	47	19	36	10	0.23	-0.81	0.21	1.28	46	39.78	93	82	55	0	3	2	0
MD	BALTIMORE	49	32	55	27	40	3	1.67	0.90	1.15	2.65	134	43.76	111	93	54	0	4	2	2
MA	BOSTON	45	35	50	29	40	6	0.31	-0.60	0.23	1.36	57	37.73	95	81	50	0	2	4	0
	WORCESTER	40	29	45	23	35	8	0.57	-0.35	0.26	1.84	76	40.65	88	91	62	0	6	4	0
MI	ALPENA	35	21	43	9	28	4	0.28	-0.19	0.24	1.64	134	20.59	73	96	65	0	5	3	0
	GRAND RAPIDS	34	25	40	15	30	3	0.47	-0.18	0.26	2.18	124	32.46	93	95	73	0	6	3	0
	HOUGHTON LAKE	33	21	41	11	27	4	0.25	-0.19	0.22	1.56	131	27.60	100	96	69	0	7	2	0
	LANSING	34	23	41	11	29	2	0.60	0.06	0.36	1.79	124	28.36	95	98	78	0	6	4	0
	MUSKOGON	36	25	42	14	30	1	0.73	0.04	0.42	2.25	124	29.86	95	95	72	0	6	3	0
	TRAVERSE CITY	36	23	44	14	29	4	0.30	-0.18	0.25	1.41	112	30.21	105	94	66	0	7	2	0
MN	DULUTH	26	10	37	-4	18	5	0.00	-0.28	0.00	0.00	0	38.67	131	92	61	0	7	0	0
	INT'L FALLS	27	8	37	-10	18	11	0.01	-0.18	0.01	0.09	18	28.86	120	90	60	0	7	1	0
	MINNEAPOLIS	32	15	45	0	24	6	0.00	-0.25	0.00	0.00	0	30.17	108	85	51	0	7	0	0
	ROCHESTER	31	12	45	1	22	5	0.00	-0.23	0.00	0.00	0	37.06	127	89	56	0	7	0	0
	ST. CLOUD	30	10	43	-7	20	6	0.00	-0.19	0.00	0.00	0	25.86	95	89	55	0	7	0	0
MS	JACKSON	59	37	68	26	48	0	1.63	0.28	1.35	2.10	61	42.56	80	96	52	0	3	3	1
	MERIDIAN	60	34	72	23	47	-1	2.51	1.11	1.96	2.72	77	36.68	68	98	50	0	3	3	1
	TUPELO	57	37	64	28	47	3	2.06	0.63	2.02	3.25	90	49.56	93	90	50	0	2	3	1
MO	COLUMBIA	40	28	45	25	34	2	0.03	-0.54	0.03	3.39	219	28.16	74	93	68	0	6	1	0
	KANSAS CITY	39	28	50	22	34	4	0.05	-0.31	0.03	2.07	216	40.12	108	93	62	0	6	2	0
	SAINT LOUIS	43	32	50	27	37	3	0.08	-0.62	0.06	1.88	99	34.08	94	94	67	0	5	2	0
	SPRINGFIELD	47	28	53	21	37	2	0.07	-0.66	0.06	6.96	350	41.76	100	90	47	0	5	2	0
MT	BILLINGS	45	28	55	18	36	11	0.10	-0.07	0.08	0.10	23	12.84	87	76	37	0	5	2	0
	BUTTE	38	20	46	7	29	12	0.33	0.23	0.11	0.34	131	11.48	96	87	50	0	7	5	0
	GLASGOW	40	17	47	7	28	13	0.10	0.02	0.07	0.11	52	14.48	134	89	50	0	7	2	0
	GREAT FALLS	46	25	51	17	35	11	0.05	-0.14	0.02	0.05	11	12.46	84	78	38	0	7	3	0
	KALISPELL	41	28	48	22	34	11	0.84	0.45	0.53	1.10	112	14.16	90	95	67	0	6	6	1
	MILES CITY	44	25	53	17	35	16	0.08	-0.06	0.03	0.08	23	11.13	81	90	46	0	7	3	0
	MISSOULA	42	29	47	24	36	13	0.23	-0.03	0.10	0.42	66	12.09	93	94	60	0	5	5	0
NE	GRAND ISLAND	39	20	50	15	30	5	0.01	-0.16	0.01	0.04	9	26.10	106	90	54	0	7	1	0
	LINCOLN	38	18	52	12	28	3	0.19	-0.01	0.17	0.42	75	27.11	97	93	56	0	7	2	0
	NORFOLK	36	17	50	8	26	3	0.00	-0.17	0.00	0.06	13	24.98	100	93	58	0	7	0	0
	NORTH PLATTE	46	12	56	8	29	5	0.00	-0.11	0.00	0.00	0	19.30	101	88	38	0	7	0	0
	OMAHA	36	17	52	9	27	2	0.15	-0.08	0.10	0.43	68	38.58	131	96	62	0	7	2	0
	SCOTTSBLUFF	47	18	56	15	33	7	0.11	-0.03	0.10	0.11	31	16.85	112	73	29	0	7	2	0
	VALENTINE	44	15	55	8	29	7	0.09	0.01	0.06	0.09	39	19.37	107	90	43	0	7	2	0
NV	ELY	45	11	54	-2	28	3	0.01	-0.16	0.01	0.05	12	6.48	66	84	32	0	7	1	0
	LAS VEGAS	59	36	66	30	47	1	0.00	-0.08	0.00	0.00	0	3.73	94	40	19	0	1	0	0
	RENO	51	23	56	20	37	4	0.01	-0.21	0.01	0.13	23	4.46	63	79	27	0	7	1	0
	WINNEMUCCA	49	15	56	0	32	2	0.08	-0.11	0.08	0.08	15	5.45	69	86	36	0	7	1	0
NH	CONCORD	39	25	44	17	32	8	0.15	-0.57	0.11	0.81	42	39.53	112	89	58	0	6	2	0
NJ	NEWARK	46	35	51	31	41	5	0.95	0.18	0.59	1.98	97	43.81	103	81	52	0	2	3	1
NM	ALBUQUERQUE	47	22	53	15	35	0	0.00	-0.11	0.00	0.01	4	8.27	95	52	21	0	7	0	0
NY	ALBANY	39	28	48	20	33	7	0.39	-0.28	0.28	1.17	66	38.37	110	92	59	0	5	3	0
	BINGHAMTON	36	27	42	18	31	5	0.61	-0.08	0.55	1.00	55	32.03	89	93	67	0	7	3	1
	BUFFALO	38	28	50	18	33	4	1.01	0.17	0.60	1.67	75	33.58	90	91	59	0	4	5	1
	ROCHESTER	38	29	46	19	33	4	1.00	0.37	0.82	1.45	88	32.55	105	97	64	0	4	5	1
	SYRACUSE	39	27	47	17	33	5	0.62	-0.11	0.51	1.03	53	30.75	82	96	62	0	5	5	1
NC	ASHEVILLE	56	30	59	21	43	3	1.12	0.32	1.09	1.75	84	39.63	86	94	35	0	6	3	1
	CHARLOTTE	58	33	62	24	46	3	0.65	-0.13	0.41	1.17	59	34.32	83	94	43	0	5	4	0
	GREENSBORO	56	35	61	27	46	5	0.95	0.18	0.87	1.44	74	42.09	102	92	36	0	3	2	1
	HATTERAS	60	49	69	42	55	6	2.87	1.86	2.13	3.47	134	52.66	97	88	62	0	0	2	2
	RALEIGH	59	34	68	26	47	4	1.56	0.83	1.48	1.95	105	50.31	126	97	40	0	4	2	1
	WILMINGTON	64	44	72	33	54	5	0.62	-0.20	0.28	0.91	44	70.89	135	89	47	0	0	4	0
ND	BISMARCK	30	10	43	-3	20	6	0.20	0.09	0.10	0.20	71	26.48	174	90	65	0	7	3	0
	DICKINSON	38	16	51	2	27	10	0.04	-0.04	0.04	0.04	19	17.93	113	89	55	0	7	1	0
	FARGO	30	9	46	-10	20	8	0.09	-0.05	0.09	0.09	26	25.04	131	89	60	0	7	1	0
	GRAND FORKS	28	6	43	-11	17	7	0.03	-0.11	0.03	0.03	9	21.42	119	90	61	0	7	1	0
	JAMESTOWN	29	8	45	-5	19	6	0.03	-0.08	0.03	0.03	11	22.28	133	92	65	0	7	1	0
	WILLISTON	34	15	48	3	24	11	0.06	-0.08	0.06	0.21	64	14.86	111	90	57	0	7	1	0
OH	AKRON-CANTON	39	28	48	19	34	3	0.76	0.08	0.53	1.76	98	35.75	100	95	76	0	4	5	1
	CINCINNATI	44	33	53	27	39	5	2.15	1.43	0.90	3.24	170	32.17	80	97	65	0	3	4	2
	CLEVELAND	40	30	49	23	35	4	0.83	0.12	0.44	2.06	110	31.04	88	94	69	0	4	6	0
	COLUMBUS	42	31	49	23	37	5	1.36	0.71	0.86	2.31	132	27.20	74	94	68	0	4	5	1
	DAYTON	41	30	46	22	35	3	1.15	0.48	0.44	2.33	131	29.72	84	91	70	0	3	4	0

Weather Data for the Week Ending December 18, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
OK	37	28	44	17	33	5	0.91	0.23	0.70	1.47	82	28.73	90	94	69	0	4	4	1
OK	39	29	49	21	34	4	1.14	0.47	0.92	2.05	115	41.65	115	95	64	0	4	6	1
OK	52	32	57	27	42	3	0.00	-0.32	0.00	3.71	426	39.38	120	81	37	0	3	0	0
OR	52	32	57	27	42	3	0.00	-0.49	0.00	5.09	372	48.16	121	82	39	0	4	0	0
OR	53	45	56	39	49	7	7.05	4.65	2.34	12.51	203	87.90	142	98	80	0	0	7	5
OR	39	22	44	9	31	6	0.28	0.02	0.16	0.70	101	7.43	78	95	70	0	7	5	0
OR	50	42	56	35	46	5	1.48	-0.47	0.38	3.68	73	42.53	93	94	79	0	0	7	0
OR	48	37	54	28	42	4	0.25	-0.51	0.21	0.91	46	16.59	95	96	67	0	2	4	0
OR	52	40	58	32	46	12	0.51	0.15	0.21	1.02	106	9.43	83	83	51	0	1	5	0
OR	52	45	58	38	48	8	1.49	0.08	0.45	3.53	98	39.11	116	93	77	0	0	6	0
PA	51	44	56	36	47	7	2.52	0.97	0.56	5.35	133	46.75	129	98	80	0	0	7	3
PA	43	29	46	24	36	4	0.96	0.17	0.90	1.75	84	39.34	93	88	60	0	5	3	1
PA	41	31	52	21	36	4	1.12	0.29	0.94	2.05	92	38.77	97	94	57	0	4	6	1
PA	45	32	50	28	39	5	1.73	0.99	1.54	2.38	123	38.25	98	85	54	0	4	2	1
PA	47	36	50	31	41	5	1.74	0.97	1.07	2.62	132	48.09	120	86	53	0	2	3	2
PA	43	32	54	22	37	5	1.38	0.72	1.25	2.07	122	36.00	101	91	55	0	4	4	1
PA	39	30	46	25	35	5	0.83	0.26	0.72	1.22	79	35.38	100	88	58	0	4	4	1
RI	42	31	44	25	37	6	1.53	0.94	1.37	1.83	104	44.72	113	91	68	0	4	4	1
RI	45	33	50	26	39	6	0.60	-0.39	0.28	2.13	82	42.02	96	84	49	0	4	3	0
SC	64	45	72	32	54	2	0.73	0.01	0.52	1.05	60	48.58	97	94	62	0	1	3	1
SC	65	44	74	34	55	4	0.78	0.07	0.39	1.12	64	42.08	84	96	50	0	0	3	0
SC	61	36	66	27	49	2	0.49	-0.31	0.23	0.79	40	29.36	61	96	44	0	2	3	0
SD	58	36	63	29	47	4	0.97	0.03	0.83	1.96	83	35.25	71	87	44	0	3	3	1
SD	32	9	47	-5	21	6	0.14	0.06	0.07	0.14	56	22.25	121	90	58	0	7	2	0
SD	35	12	53	-3	23	5	0.02	-0.09	0.02	0.02	7	16.71	84	91	59	0	7	1	0
SD	44	22	54	15	33	9	0.04	-0.07	0.02	0.04	14	18.79	114	87	37	0	7	2	0
TN	32	11	50	-3	21	3	0.05	-0.12	0.03	0.05	11	21.22	90	95	55	0	7	2	0
TN	55	31	63	23	43	5	0.51	-0.26	0.45	1.05	54	34.86	89	88	42	0	5	2	0
TN	59	36	64	27	47	6	0.70	-0.49	0.44	1.63	54	47.27	92	92	43	0	2	3	0
TN	57	35	63	29	46	6	0.81	-0.23	0.80	1.62	62	49.44	109	91	47	0	4	2	1
TX	53	38	59	30	46	2	2.98	1.65	2.55	4.76	137	45.56	91	84	52	0	1	2	1
TX	55	39	60	29	47	6	1.74	0.68	1.32	2.47	90	40.78	90	88	57	0	1	2	1
TX	58	30	67	18	44	-1	0.01	-0.21	0.01	0.36	59	16.78	70	65	18	0	4	1	0
TX	50	23	57	16	37	0	0.05	-0.03	0.05	0.44	169	26.50	137	79	28	0	6	1	0
TX	65	30	74	21	48	-4	0.76	0.33	0.76	1.05	93	25.68	82	86	31	0	6	1	1
TX	64	39	74	32	51	-3	1.60	0.53	1.06	2.89	105	35.49	64	97	51	0	1	3	1
TX	73	48	80	43	61	-1	0.01	-0.27	0.01	0.04	6	22.75	87	90	32	0	0	1	0
TX	71	41	79	35	56	-2	0.01	-0.27	0.01	0.01	1	29.04	98	77	31	0	0	1	0
TX	67	35	78	31	51	-1	0.00	-0.14	0.00	0.00	0	15.31	85	62	16	0	3	0	0
TX	55	28	62	18	41	-3	0.00	-0.14	0.00	0.00	0	7.50	87	54	20	0	5	0	0
TX	60	38	70	30	49	2	1.12	0.71	0.90	2.58	237	23.74	72	77	36	0	1	3	1
TX	64	49	71	45	57	1	1.89	1.09	0.87	3.85	187	31.57	77	92	55	0	0	3	2
TX	64	36	73	28	50	-3	0.26	-0.51	0.14	2.09	103	28.17	63	94	44	0	2	2	0
TX	53	24	63	16	39	-2	0.00	-0.11	0.00	0.41	124	19.54	106	77	27	0	7	0	0
TX	57	27	67	21	42	-3	0.00	-0.14	0.00	0.00	0	6.69	45	54	14	0	7	0	0
TX	60	31	70	20	46	0	0.09	-0.08	0.09	0.09	19	13.48	67	68	22	0	3	1	0
TX	66	35	72	29	50	-2	0.20	-0.13	0.20	0.33	35	16.53	54	82	26	0	3	1	0
TX	68	38	75	29	53	-3	0.09	-0.37	0.08	0.44	37	25.21	69	90	36	0	1	2	0
TX	60	37	69	27	49	1	1.23	0.81	1.20	2.58	228	20.30	65	86	42	0	2	2	1
TX	55	33	61	28	44	1	0.00	-0.30	0.00	0.76	97	29.55	104	73	30	0	4	0	0
UT	40	28	46	21	34	4	0.21	-0.12	0.21	1.48	174	13.30	85	83	52	0	5	1	0
VT	36	27	43	13	32	9	0.25	-0.30	0.16	0.53	35	31.96	95	91	59	0	6	2	0
VA	53	31	57	26	42	3	1.20	0.46	0.93	1.86	97	39.24	99	94	47	0	5	2	1
VA	58	39	72	30	49	5	0.47	-0.25	0.45	1.44	80	55.17	128	90	47	0	2	2	0
VA	55	35	60	26	45	5	1.64	0.90	1.57	1.96	104	48.46	116	88	49	0	3	2	1
VA	53	35	58	29	44	6	1.39	0.71	1.11	1.99	113	35.71	89	86	45	0	2	2	1
WA	49	30	53	24	39	3	1.39	0.65	0.95	2.47	129	43.38	111	93	54	0	5	2	1
WA	49	38	54	33	43	5	6.62	4.79	2.60	9.87	209	65.54	139	97	80	0	0	7	5
WA	49	40	52	33	45	5	10.09	6.58	4.74	21.00	232	132.6	134	10	82	0	0	7	5
WA	49	41	53	36	45	5	3.00	1.66	1.40	5.04	145	41.99	121	96	75	0	0	6	2
WA	44	32	50	26	38	10	0.70	0.15	0.30	2.10	148	14.69	95	94	71	0	4	3	0
WA	53	31	62	24	43	13	0.18	-0.15	0.18	0.29	36	6.07	82	92	45	0	3	1	0
WV	50	32	55	24	41	7	0.61	-0.13	0.39	1.71	90	35.49	89	80	41	0	4	2	0
WV	54	33	60	26	43	6	1.45	0.68	0.74	2.37	117	36.98	90	91	48	0	4	2	2
WV	50	28	57	18	39	7	1.40	0.60	0.86	2.97	144	37.34	86	91	49	0	6	2	2
WI	52	34	61	27	43	6	1.70	0.93	0.93	2.35	126	33.37	83	86	45	0	4	3	2
WI	29	13	38	1	21	4	0.01	-0.24	0.01	0.01	2	29.15	94	93	69	0	7	1	0
WI	30	14	39	-3	22	2	0.29	-0.06	0.19	0.66	69	23.66	84	95	76	0	7	2	0
WI	33	18	44	6	25	5	0.05	-0.24	0.04	0.34	43	33.47	111	92	61	0	7	2	0
WI	31	17	41	3	24	2	0.10	-0.33	0.10	0.76	67	31.76	105	96	72	0	7	1	0
WI	36	22	43	13	29	5	0.34	-0.20	0.20	1.22	86	37.86	118	92	65	0	7	2	0
WY	38	21	47	7	30	6	0.03	-0.12	0.03	0.08	20	8.93	73	73	43	0	7	1	0
WY	39	22	47	14	31	3	0.00	-0.08	0.00	0.22	85	16.15	113	76	42	0	7	0	0
WY	40	18	48	3	29	8	0.12	-0.02	0.12	0.15	43	13.75	108	80	36	0	7	1	0
WY	43	21	51	10	32	9	0.56	0.39	0.24	0.56	130	13.30	94	88	40	0	7	4	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 have been incomplete.

National Agricultural Summary

December 13 - 19, 1999

HIGHLIGHTS

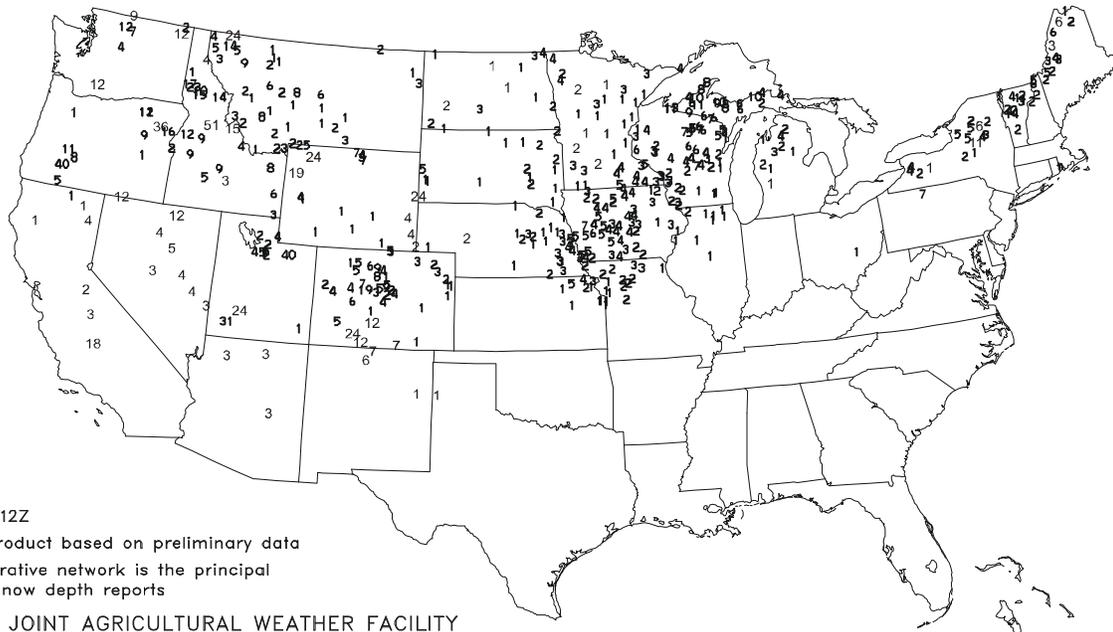
Significant precipitation fell from eastern Texas northeastward into southern Indiana. Portions of the Pacific Northwest continued to receive heavy precipitation for the eighth consecutive week. Temperatures across the U.S. were above normal, except in southern Texas, New Mexico, and parts of Arizona and Louisiana. Summer crop harvesting in Texas continued, with only minor delays due to blowing snow in the Panhandle and light rains in the east. The

Florida citrus belt received much-needed rain, allowing caretakers to currently discontinue their irrigation. Vegetable harvest in Florida was active for the holiday market; however, rain delayed some activity at the end of the week. Field activities in California progressed normally under favorable conditions. In Hawaii, most crops made fair progress, even with cloudy skies, low temperatures, and shorter daylight hours.

(Commodity-specific information will resume during the first week of April 2000.)

Snow Depth (Inches)

Dec 20, 1999



Snow Depth at 12Z

Experimental product based on preliminary data

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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Supplemental values from the U.S. Air Force Snow Depth Analysis, 00Z Dec, 20

International Weather and Crop Summary

December 12 - 18, 1999

HIGHLIGHTS

FSU-WESTERN: Unseasonably mild weather continued to favor dormant winter grains but kept most crop areas in Ukraine and southern Russia snow free.

EUROPE: Dry weather continued over the southern Iberian peninsula.

EASTERN ASIA: Dormant winter wheat withstood the coldest weather of the season in the North China Plain.

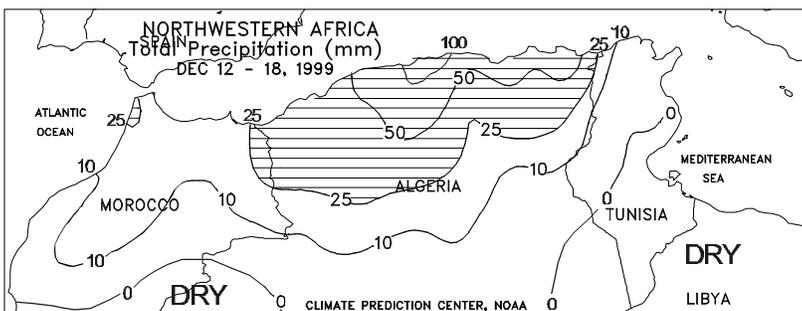
SOUTHEAST ASIA: A tropical depression brought additional flooding to central Vietnam. Showers maintained moisture supplies for main-season rice in Java, Indonesia.

SOUTH AMERICA: In southern Brazil, southern Paraguay, and northern Argentina, early-week rainfall provided critical moisture for crop development, but hot, dry weather returned later in the week.

NORTHWESTERN AFRICA: Light to locally heavy showers fell throughout the region, providing beneficial moisture for developing winter grains.

SOUTH AFRICA: More rain is needed in western sections of the corn belt to ensure normal crop development.

AUSTRALIA: Widespread rain slowed winter grain harvesting.

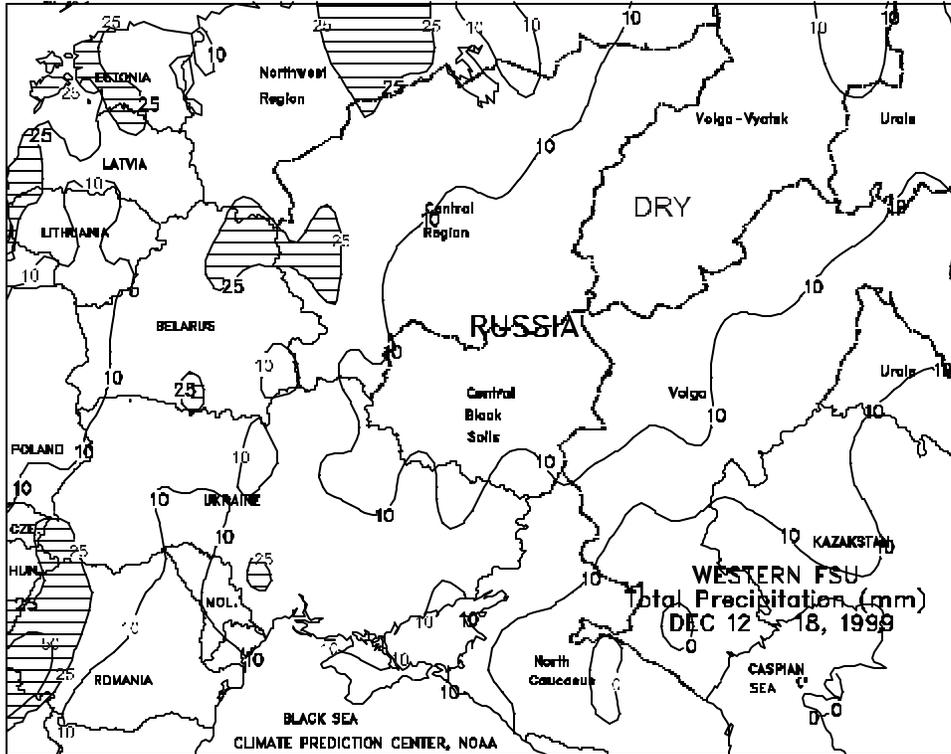


EUROPE

In England, light showers (8-30 mm) in major winter wheat- and barley-producing areas maintained adequate soil moisture for developing crops. Similarly, moderate to locally heavy showers (15-75 mm, with a few higher amounts) from northern Portugal and extreme northern Spain northeastward into western Germany aided winter grain establishment. Farther south, scattered light showers (3-15) fell across southeastern France and the remainder of the Iberian peninsula, bringing little drought relief to Spain and southern Portugal. In contrast, moderate to locally excessive rainfall (40-80 mm, with isolated amounts greater than 135 mm) fell across central Italy and parts of the Balkans, causing localized flooding. Reports indicated, however, that winter grains were not significantly affected by the flooding. Unseasonably mild weather (temperatures 2-5 degrees C above normal) prevailed across central and eastern Europe, favoring dormant winter grains in these areas. In western Europe, winter grains eased into dormancy across parts of eastern France and northern Spain where average temperatures have remained below 5 degrees C the past two weeks.

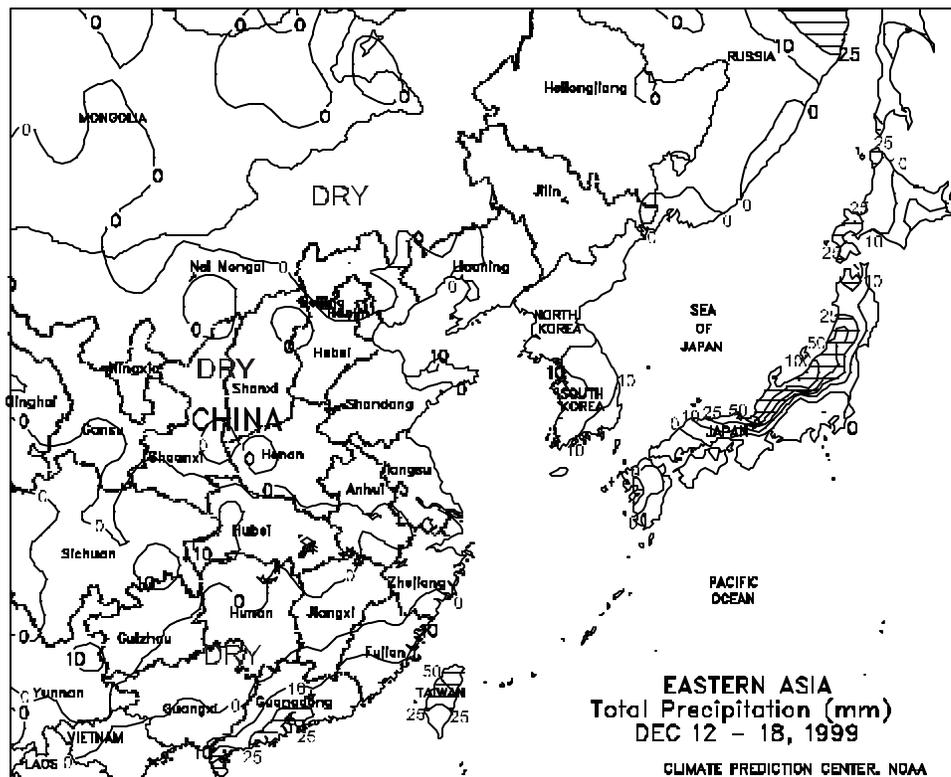
NORTHWESTERN AFRICA

Winter grains benefitted from light to moderate showers in Tunisia and Morocco, and heavier amounts in Algeria. Rainfall (9-37 mm) continued to ease moisture deficits in Morocco while lighter amounts (2-5 mm) fell on Tunisia. Heavy showers (22-106 mm) added to already adequate moisture in Algeria. Unseasonably cold weather overspread the region at week's end, slowing crop development. Minimum temperatures fell below freezing (-1 to -5 degrees C) in winter grain areas of northern Morocco and Algeria, possibly causing some burn back of tender vegetation.



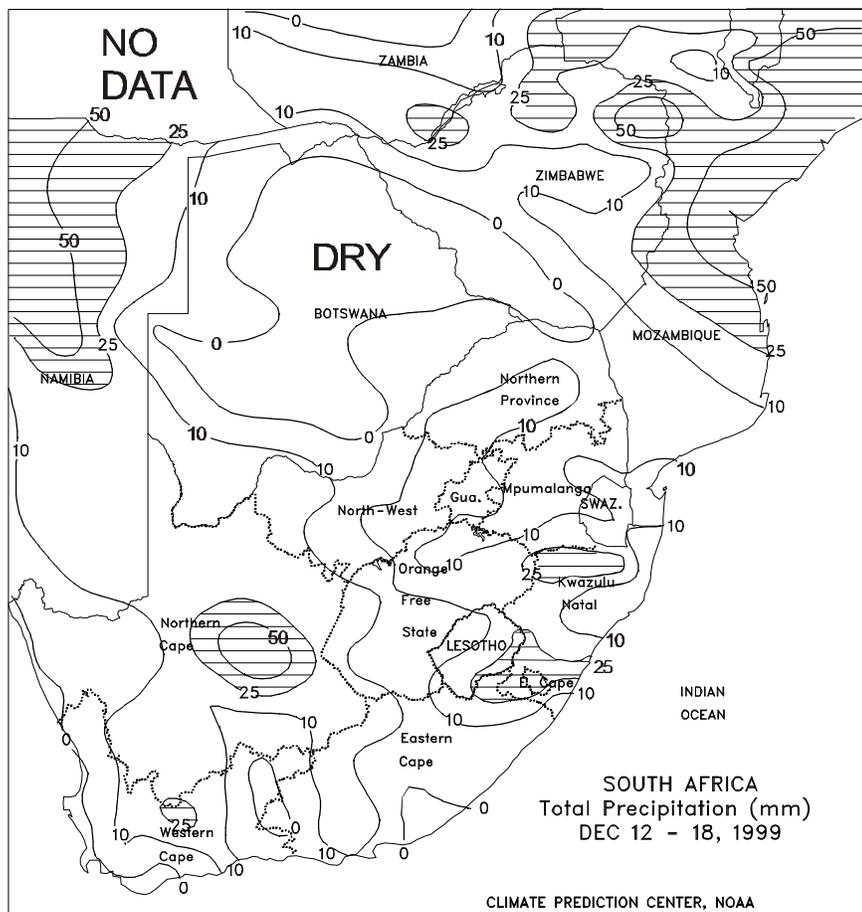
FSU-WESTERN

A persistent southerly flow of air kept unseasonably mild weather entrenched across most winter grain areas. Weekly temperatures averaged 3 to 8 degrees C above normal over most of this region. Temperatures rose above freezing in most areas, with the warmest weather (extreme maximum temperatures between 7-15 degrees C) observed in the Ukraine, the Russian North Caucasus region, Belarus, and the Baltics. As a result, winter wheat in these areas remained mostly snow-free. Elsewhere in Russia, extreme maximum temperatures ranged from 1 to 4 degrees C, causing some melting of protective snow cover. Widespread precipitation (10-34 mm) fell over Ukraine, Belarus, the Baltics, and parts of Russia (Northwestern Region, western portion of the Central Region, the northern tip of the North Caucasus, and the eastern Volga Valley). The precipitation fell as a mixture of rain and snow in the west and south, and snow in the north. At week's end, scattered snow showers accompanied a cooling trend in Ukraine and southern Russia.



EASTERN ASIA

Across the North China Plain, dormant winter wheat withstood the coldest weather of the season. Minimum temperatures plunged from -6 to -11 degrees C during the weekend (including December 19). While there was no snow cover across this region, these readings were well above the critical threshold for winterkill, causing no damage to winter wheat.



SOUTH AFRICA

Rainfall was unfavorably light (less than 25 mm in most areas) across the corn belt, raising concern for emerging summer crops. It was the second week of below-normal rainfall in important corn areas of North West and Free State, although temperatures remained seasonable with highs ranging from 28 to 31 degrees C. More rain is needed throughout this portion of the corn belt to ensure normal development of emerging to vegetative crops. In eastern sections of the corn belt (eastern Free State and Mpumalanga), the moisture situation was not as critical following last week's locally heavy rainfall. The majority of the corn crop normally advances through reproduction from mid-January to mid-February, and can be subject to outbreaks of summer heat and dryness. With this season's early dryness, a return to a more normal weather pattern is vital for sustaining current yield expectations. Elsewhere, rainfall was mostly light and scattered over coastal crop areas of KwaZulu-Natal and Eastern Cape. Hot weather encompassed the Western Cape, with highs near 40 degrees C.

La Niña Update: December 10, 1999

The following is derived from the ENSO Advisory 99/12 issued by the Climate Prediction Center/National Centers for Environmental Prediction (NCEP) on December 10, 1999.

Cold episode conditions (La Niña) strengthened in the tropical Pacific during November, as equatorial sea surface temperatures (SSTs) dropped to more than 1°C below normal everywhere between 165°W and the South American coast. This cooling was reflected by increasing negative values for all four Niño region indices compared to those observed just a few months ago. A comparison to the values observed at the same time in 1998 reveals that the Niño3 and Niño1+2 values are substantially lower, while the Niño3.4 and Niño4 values are nearly the same.

Cold episode conditions have persisted since June 1998, with below-normal SSTs, stronger-than-normal low-level easterlies, and reduced rainfall throughout the central equatorial Pacific. Accompanying these conditions, tropical rainfall has been above normal over a large portion of Indonesia, Malaysia, and the western Pacific.

The pattern of subsurface oceanic temperature anomalies during November remained similar to that observed in October, and shows no sign of evolving toward a pre-warm episode state. Thus, it is likely that cold episode conditions will continue for the next several months. This assessment is supported by the most recent NCEP coupled model forecasts and other available coupled model and statistical predictions indicating cold episode conditions persisting during the first half of 2000.

Weekly updates for SST, 850-hPa wind, and OLR (Outgoing Longwave Radiation) are available on the Climate Prediction Center homepage at:

<http://www.cpc.ncep.noaa.gov> (Weekly Update)

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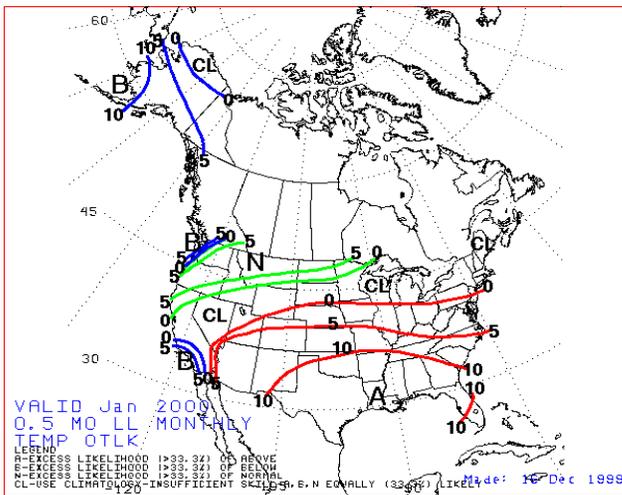
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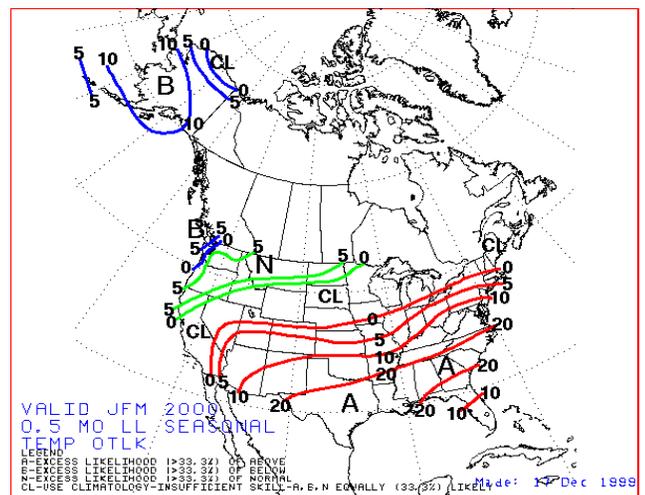
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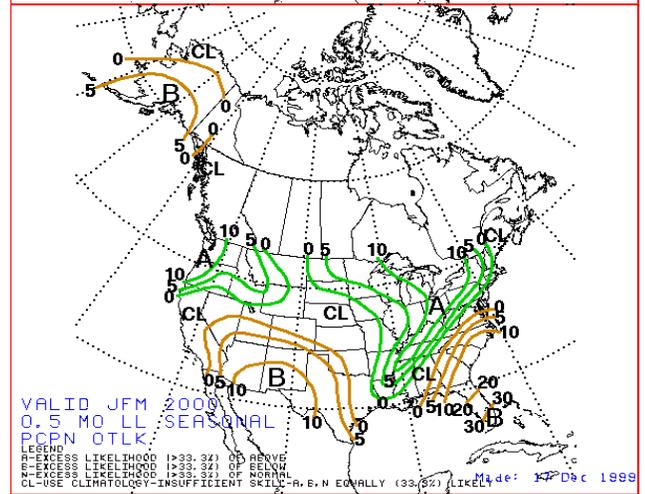
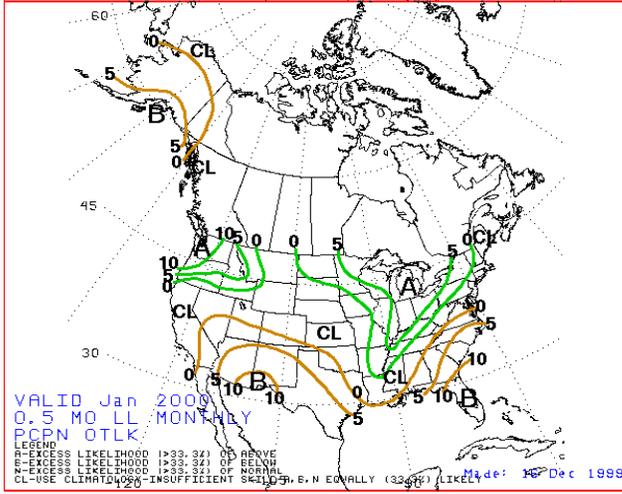


**January 2000
 Temperature
 (top) and
 Precipitation
 (bottom)
 Outlook**



**3 - Month
 (January-March
 2000)
 Temperature
 (top) and
 Precipitation
 (bottom)
 Outlook**

(from Climate Prediction
 Center, NCEP, NWS,
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