

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

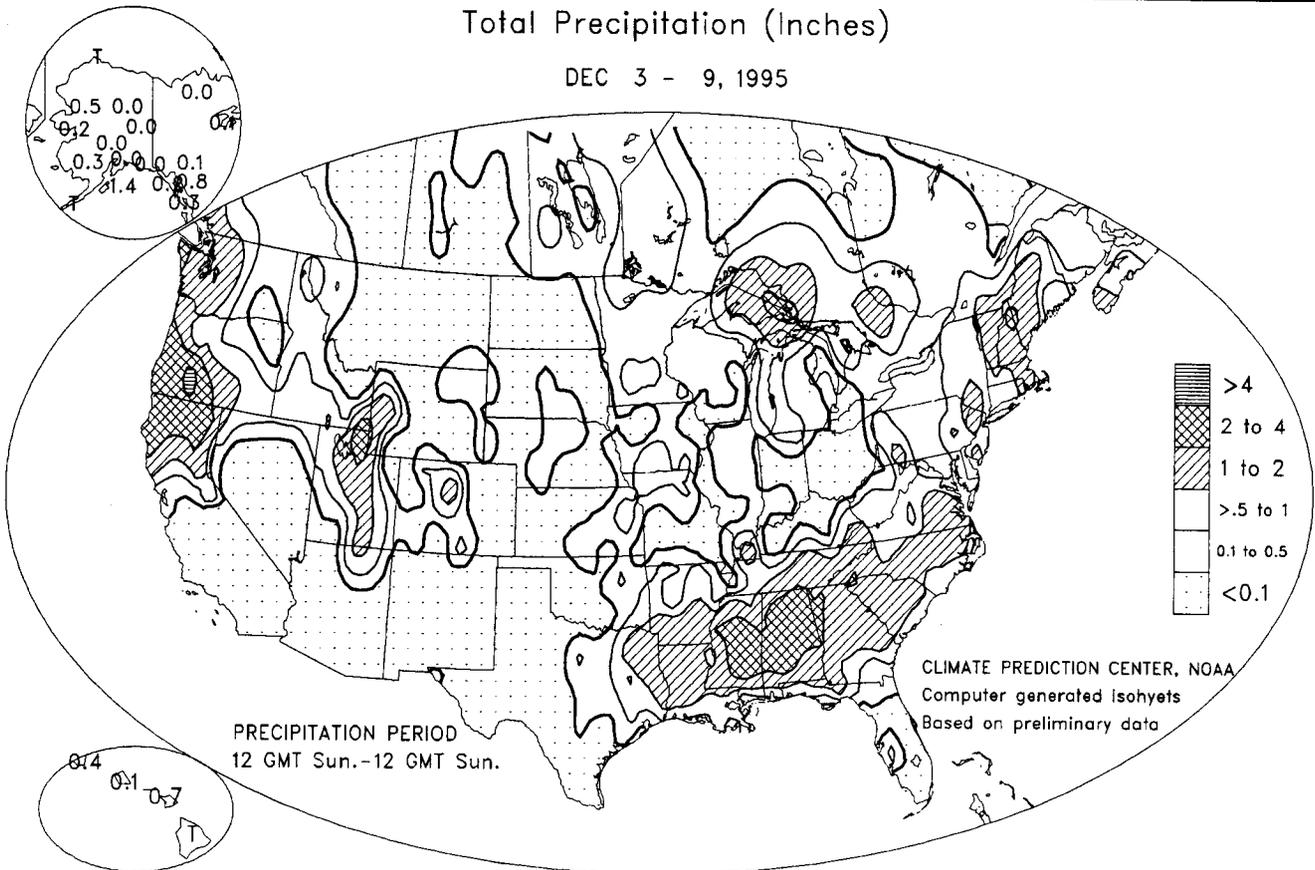
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Washington, D.C.

December 12, 1995

Total Precipitation (Inches)

DEC 3 - 9, 1995



HIGHLIGHTS

December 3 - 9, 1995

Arctic air poured southeastward from Alaska and western Canada, reaching the northern Plains on Thursday and overspreading the rest of the Nation--except the Southwest--by week's end. Most winter wheat in the Pacific Northwest and Plains had no snow-cover insulation. In addition, wheat in the central and southern Plains was subjected to a ninth or tenth consecutive week of dry weather. Elsewhere, seasonal precipitation continued to wax in northern California, while rain twice overspread the Southeast. Farther north, a midweek snowfall from the lower Missouri Valley to the Middle Atlantic region was followed by light snow in the Nation's northeastern quadrant at week's end. On Saturday, intense snow squalls developed downwind of the Great Lakes.

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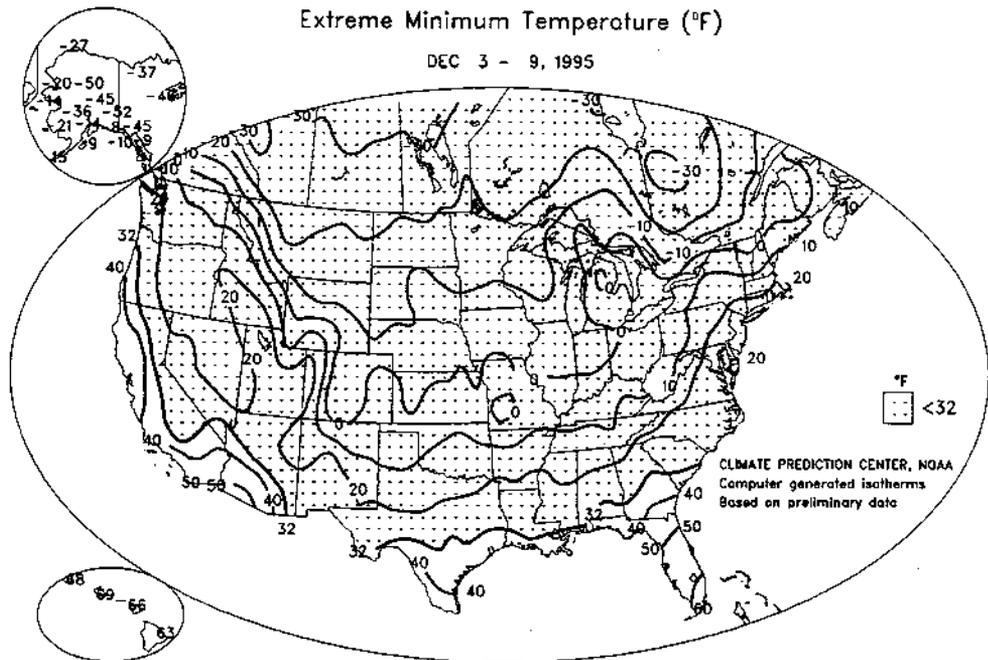
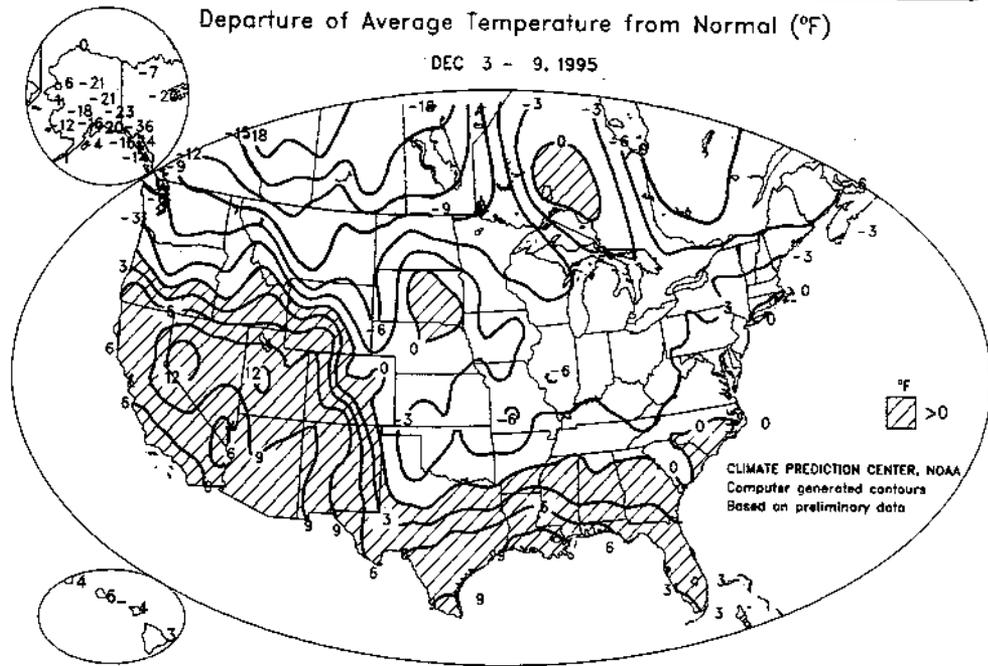
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During the first half of the week, warmth covered the South and West, setting more than 30 daily records. On Sunday, highs topped 80°F as far north as El Dorado, AR (81°F). A day later, New Orleans, LA notched its first of three consecutive daily records, including a December record-tying high of 84°F on December 5. Farther west, highs on Tuesday reached 88°F in Del Rio, TX and 68°F in Green River, UT. Meanwhile, a fast-moving weather system raced from coast-to-coast across southern Canada in 2 days, delivering high winds to the Northwest on Monday, and cooling much of the Nation by midweek. In Montana, Missoula clocked an all-time record gust to 76 mph, while an observer in nearby Plains reported a gust to 110 mph. Farther west, gusts in Washington reached 48 mph in Spokane and 51 mph in Hanford. A narrow band of snow developed in the system's wake, leaving depths on Thursday morning of 4 inches in Omaha, NE and 10 inches in Roanoke, VA. Farther south, rainfall topped an inch in locations such as Montgomery, AL and Augusta, GA. A handful of daily records were set in snow-covered areas on Friday morning, including lows of 12°F in Bristol, TN and 1°F in Blacksburg, VA.

In Alaska, early-week lows plunged to -50°F in Bettles and -58°F in Fort Yukon. As frigid air accelerated south-eastward, midweek lows near the Yukon border plummeted to -60°F in Tok and -52°F in Northway. Weekly temperatures averaged more than 20°F below normal in much of eastern Alaska, and 36°F below normal at Whitehorse, in Canada's Yukon Territory. By Friday morning, lows in Montana fell to -26°F in Great Falls and -18°F in Miles City. A day later, the cold front surged southward through Texas and eastward across the western Atlantic.



On Saturday, lows dipped to 0°F as far south as a northern Kansas-to-central Indiana line. In Rochester, MN, a maximum of -2°F was accompanied by northwesterly wind gusts as high as 47 mph. A general 1- to 4-inch snowfall preceded the blast from the Midwest to the Northeast, covering areas as far west as eastern Kansas and as far south as the Ohio River. Much heavier snow fell in Great Lakes squalls, including an all-time 24-hour total of 23.9 inches in Sault Sainte Marie, MI on December 8-9. By Sunday morning, their snow depth reached a December-record 42 inches, with snow continuing to fall. Record snowfall also developed in Buffalo, NY, culminating in an all-time record total of 37.9 inches during the 24 hours ending at 7 p.m. on December 10. Farther south and east, rainfall ended in the Gulf Coast States and eastern New England after totals topped an inch in locations such as Shreveport, LA, Birmingham, AL, and Providence, RI.

Meanwhile, warm, moist air began to overspread the Northwest, including a daily-record high of 59°F on Saturday in Klamath Falls, OR. But cold air remained entrenched at ground level in the interior Northwest, resulting in freezing rain. Farther south, where California's Sierra Nevada snowpack stood at only 5 percent of normal on December 4, conditions improved slightly. Blue Canyon, in the foothills, recorded nearly 2 inches of rain during the week.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 9, 1995

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE	MAXIMUM	MINIMUM	EXTREME HIGH	EXTREME LOW	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	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	58	38	71	20	48	0	1.27	-0.14	0.82	1.27	88	50.01	98	92	64	0	1	4	1	0	
MOBILE	72	50	79	30	61	7	0.20	-0.97	0.13	0.20	13	71.65	119	97	59	0	1	2	0	0	
MONTGOMERY	61	44	75	28	53	3	2.24	1.12	1.70	2.24	157	40.92	80	95	58	0	1	3	1	0	
AK ANCHORAGE	7	-5	16	-14	1	-17	0.00	-0.25	0.00	0.00	0	13.68	91	71	49	0	7	0	0	0	
BARROW	-2	-17	11	-27	-10	0	0.02	-0.01	0.01	0.02	50	3.17	75	81	74	0	7	2	0	0	
FAIRBANKS	-19	-33	1	-45	-26	-21	0.00	-0.19	0.00	0.05	20	8.86	86	79	74	0	7	0	0	0	
JUNEAU	12	-3	19	-9	4	-24	0.84	-0.15	0.84	0.87	68	...	...	87	57	0	7	1	1	1
KODIAK	33	22	40	9	27	-4	1.39	-0.06	1.23	1.39	75	84.80	135	75	54	0	5	4	4	1	
WHEE	17	3	21	-14	10	1	0.17	-0.02	0.10	0.17	68	14.98	105	87	73	0	7	4	0	0	
AZ PHOENIX	74	50	76	46	62	7	0.00	-0.22	0.00	0.00	0	9.40	134	55	22	0	0	0	0	0	
PRESCOTT	63	32	68	29	48	10	0.00	-0.36	0.00	0.00	0	11.33	61	75	28	0	3	0	0	0	
TUCSON	75	46	78	42	61	7	0.00	-0.22	0.00	0.00	0	10.97	98	56	22	0	0	0	0	0	
YUMA	78	54	80	52	66	9	0.00	-0.09	0.00	0.00	0	3.24	115	59	23	0	0	0	0	0	
AR FORT SMITH	51	32	69	13	41	-1	0.54	-0.24	0.54	0.54	53	35.86	92	76	37	0	3	1	1	1	
LITTLE ROCK	...	...	...	...	...	...	0.66	-0.49	...	0.66	39	33.70	73	...	...	...	...	...	...	...
CA BAKERSFIELD	65	46	70	37	55	6	0.00	-0.14	0.00	0.00	0	7.85	149	90	59	0	0	0	0	0	
SUREA	60	50	64	42	55	6	1.14	-0.27	0.41	2.40	133	42.12	126	94	69	0	0	5	0	0	
FRESNO	65	46	70	39	55	8	0.00	-0.30	0.00	0.00	0	15.17	160	91	36	0	0	0	0	0	
LOS ANGELES	70	54	74	52	62	4	0.00	-0.36	0.00	0.00	0	21.14	196	98	35	0	0	0	0	0	
REDDING	57	48	66	42	53	7	1.78	0.57	0.65	2.31	148	49.21	168	99	77	0	0	4	1	0	
SACRAMENTO	61	49	69	42	55	8	0.11	-0.42	0.08	0.15	22	23.98	153	97	72	0	0	2	0	0	
SAN DIEGO	68	55	72	52	62	4	0.00	-0.36	0.00	0.00	0	16.15	184	92	39	0	0	0	0	0	
SAN FRANCISCO	62	51	65	44	57	6	0.13	-0.51	0.10	0.14	17	21.17	123	93	66	0	4	0	0	0	
CO DENVER	46	18	63	1	32	0	0.00	-0.17	0.00	0.00	0	15.98	107	82	37	0	6	0	0	0	
GRAND JUNCTION	54	32	63	26	43	9	0.17	0.00	0.15	0.17	81	9.81	99	75	31	0	5	2	0	0	
FORCO	48	13	72	-1	31	-2	0.00	-0.11	0.00	0.00	0	15.40	141	76	24	0	7	0	0	0	
CT BRIDGEPORT	43	30	51	24	37	-1	0.50	-0.32	0.19	0.57	94	31.67	81	75	47	0	5	4	0	0	
HARTFORD	40	25	48	19	33	0	0.76	-0.15	0.56	0.76	65	39.38	95	79	45	0	5	3	1	0	
DC WASHINGTON	48	32	62	26	40	-2	0.30	-0.42	0.28	0.30	33	37.89	104	86	36	0	3	2	0	0	
FL PALM BEACH	69	51	75	38	60	3	0.68	-0.33	0.46	0.68	53	47.75	77	99	74	0	3	2	0	0	
DAYTONA BEACH	77	57	80	52	67	0	0.06	-0.32	0.06	0.06	8	50.42	109	100	59	0	0	0	0	0	
JACKSONVILLE	72	49	77	45	61	1	0.63	-0.01	0.40	0.63	80	48.61	102	96	65	0	0	3	0	0	
KEY WEST	79	66	83	59	72	0	0.00	-0.48	0.00	0.00	0	35.74	94	95	66	0	0	0	0	0	
MIAMI	82	66	84	63	74	4	0.23	-0.20	0.20	0.23	42	78.85	144	92	56	0	0	2	0	0	
ORLANDO	80	58	81	55	69	6	0.00	-0.50	0.00	0.00	0	42.68	92	99	63	0	0	0	0	0	
TALLAHASSEE	68	50	75	40	59	4	2.08	0.97	2.08	2.08	148	50.72	82	96	70	0	0	4	2	0	
TAMPA	77	58	79	55	68	4	0.00	-0.48	0.00	0.00	0	53.07	125	95	55	0	0	0	0	0	
WEST PALM BEACH	81	63	82	60	72	3	0.08	-0.46	0.08	0.08	11	62.44	108	94	58	0	0	1	0	0	
GA ATLANTA	56	40	68	21	48	1	1.15	0.21	0.83	1.15	95	50.34	106	94	55	0	1	3	1	0	
ADONSTA	62	37	74	28	49	0	1.84	1.14	0.86	1.84	207	45.65	108	95	54	0	3	4	2	0	
MACON	63	40	71	31	52	1	0.28	-0.61	0.28	0.28	25	38.07	92	98	63	0	2	1	0	0	
SAVANNAH	65	45	75	38	55	2	0.46	-0.14	0.45	0.46	60	50.69	108	95	67	0	0	2	0	0	
HI HILO	84	66	87	63	75	3	0.04	-2.92	0.04	0.77	20	81.52	67	92	66	0	0	1	0	0	
HONOLULU	88	74	89	69	81	6	0.14	-0.69	0.08	0.14	13	12.01	62	88	63	0	0	2	0	0	
KAHULUI	86	70	89	66	78	4	0.72	0.05	0.72	0.72	84	11.65	63	89	59	0	0	1	1	0	
LIHUE	84	72	86	68	78	4	0.38	-0.75	0.38	0.88	60	38.59	98	89	64	0	0	1	0	0	
ID BOISE	36	26	50	20	31	-1	0.57	0.27	0.38	0.61	153	12.48	112	94	71	0	6	3	0	0	
LEWISTON	36	25	52	17	31	-5	0.12	-0.16	0.12	0.21	60	15.89	137	91	66	0	7	1	0	0	
POCATELLO	37	25	49	20	31	4	0.74	0.48	0.49	1.15	359	15.26	135	91	66	0	6	3	0	0	
IL CHICAGO	35	19	57	-4	27	-3	0.23	-0.39	0.15	0.23	29	32.51	95	76	39	0	7	3	0	0	
MOLINE	34	17	55	-2	26	-3	0.25	-0.29	0.20	0.25	36	34.07	91	83	45	0	6	2	0	0	
PEORIA	36	18	59	-2	27	-4	0.13	-0.47	0.13	0.13	17	33.49	97	88	42	0	6	1	0	0	
QUINCY	36	17	56	-2	27	-6	0.16	-0.43	0.09	0.16	21	32.26	85	80	37	0	7	2	0	0	
ROCKFORD	32	15	52	-5	24	-4	0.17	-0.35	0.12	0.17	25	32.81	94	85	48	0	7	2	0	0	
SPRINGFIELD	37	15	59	-2	26	-7	0.16	-0.50	0.09	0.16	19	30.31	91	88	45	0	7	2	0	0	
IN EVANSVILLE	48	26	65	3	37	-3	0.34	-0.57	0.34	0.34	29	43.53	101	83	37	0	5	1	0	0	
FORT WAYNE	39	17	56	-4	28	-4	0.20	-0.49	0.17	0.20	22	30.67	94	85	45	0	7	3	0	0	
INDIANAPOLIS	42	21	59	-1	32	-3	0.16	-0.64	0.16	0.16	16	32.89	87	79	39	0	6	1	0	0	
SOUTH BEND	37	20	56	-4	28	-4	0.45	-0.34	0.36	0.45	44	40.37	109	80	43	0	7	4	0	0	
IA DES MOINES	35	15	53	-3	25	-3	0.00	-0.34	0.00	0.00	0	30.85	93	91	49	0	7	0	0	0	
SIOUX CITY	36	12	51	-4	24	-1	0.12	-0.07	0.12	0.12	48	24.12	95	86	42	0	7	1	0	0	
WATERLOO	33	12	50	-5	23	-2	0.14	-0.19	0.14	0.14	32	29.47	90	83	44	0	7	1	0	0	
KS CONCORDIA	42	18	58	-2	30	-3	0.00	-0.21	0.00	0.00	0	25.43	90	76	30	0	7	0	0	0	
DODGE CITY	45	18	62	0	32	-3	0.00	-0.17	0.00	0.00	0	18.81	89	59	25	0	6	0	0	0	
GOODLAND	44	16	66	0	30	-1	0.00	-0.11	0.00	0.00	0	19.77	112	63	24	0	6	0	0	0	
TOPEKA	42	17	59	-1	29	-4	0.23	-0.13	0.23	0.23	50	36.06	105	78	34	0	6	1	0	0	
WICHITA	45	21	61	4	33	-4	0.00	-0.36	0.00	0.00	0	33.81	100	78	27	0	6	0	0	0	
KY BOWLING GREEN	49	28	61	8	38	-2	0.34	-0.83	0.30	0.34	23	38.46	81	90	41	0	5	3	0	0	
LEKINGTON	43	25	56	4	34	-4	0.07	-0.86	0.03	0.07	6	47.44	114	83	47	0	4	3	0	0	
LOUISVILLE	46	27	60	5	37	-3	0.13	-0.74	0.11	0.13	12	37.64	90	89	37	0	4	2	0	0	
LA BATON ROUGE	73	55	82	30	64	9	0.57	-0.66	0.29	0.57	36	68.53	120	94	57	0	1	3	0	0	
LAKE CHARLES	72	57	81	34	65	10	0.26	-0.86	0.15	0.26	18	59.19	116	97	72	0	0	3	0	0	
NEW ORLEANS	76	57	84	34	67	10	0.57	-0.71	0.25	0.57	35	61.10	106	97	58	0	0	3	0	0	
SHREVEPORT	62	46	82	28	54	4	1.12	0.05	1.12	1.12	82	39.93	87	90	50	0	1	1	1	1	

Weather Data for the Week Ending December 9, 1995

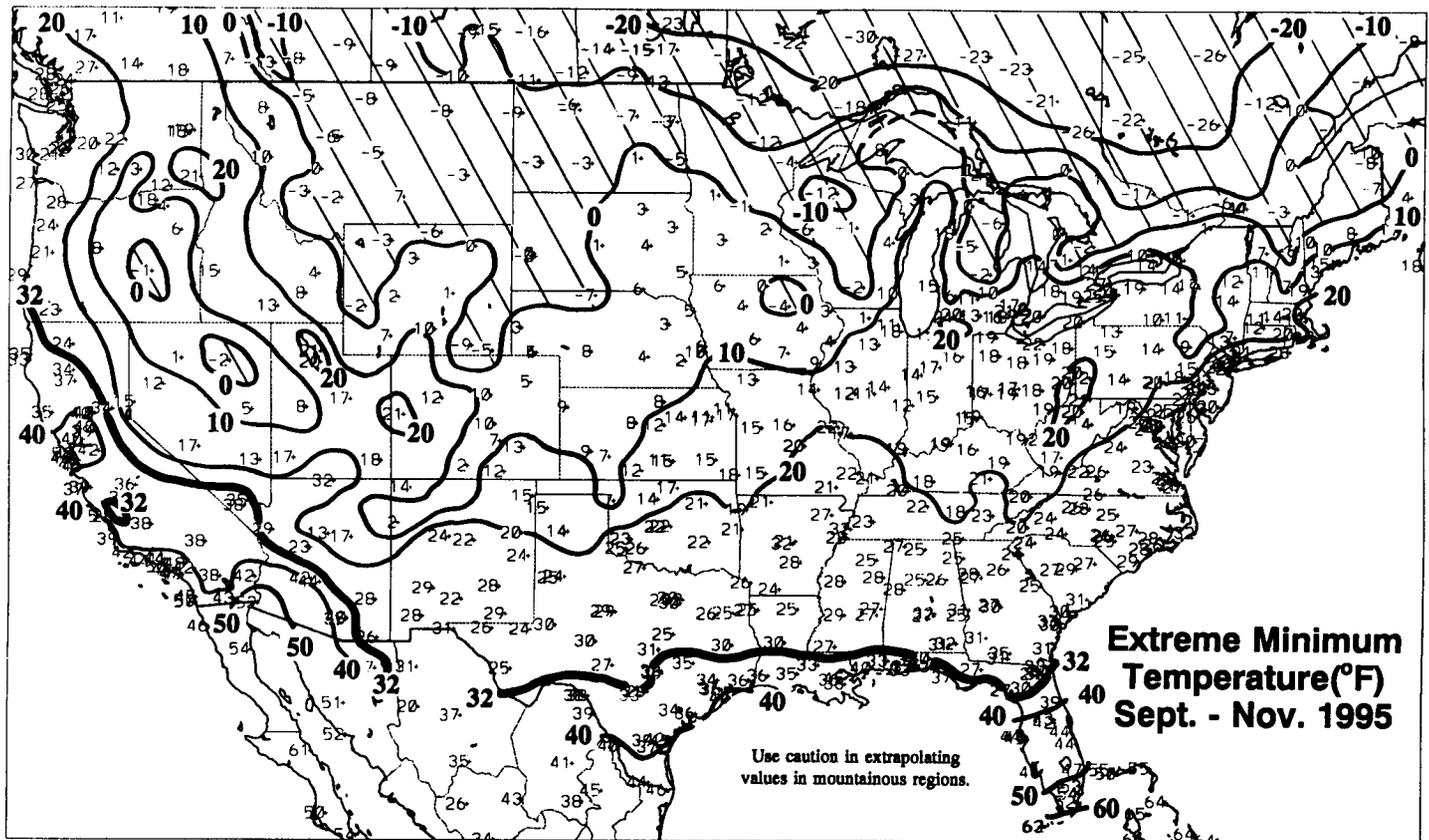
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	20	3	28	-8	11	-7	0.38	-0.39	0.14	0.60	60	33.31	97	86	56	0	7	4	0
PORTLAND	38	19	46	13	28	-1	1.49	-0.38	1.29	1.75	122	37.69	91	87	48	0	7	2	1
MD BALTIMORE	47	31	63	35	39	0	0.27	-0.50	0.26	0.27	27	34.08	89	84	36	0	4	2	0
SALISBURY	50	25	65	11	38	-4	0.94	0.18	0.50	0.94	91	29.82	70	96	43	0	7	3	0
MA BOSTON	45	28	50	21	36	-1	1.74	0.80	0.98	1.84	152	33.67	87	75	36	0	5	3	2
CHATHAM	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
MI ALPENA	30	16	38	0	23	-4	0.39	-0.09	0.17	0.44	71	23.59	86	88	57	0	6	3	0
DETROIT	37	20	53	3	29	-3	0.28	-0.40	0.26	0.28	32	26.91	88	79	46	0	7	2	0
FLINT	34	17	49	1	26	-5	0.01	-0.52	0.01	0.01	1	33.29	81	83	53	0	7	1	0
GRAND RAPIDS	33	18	51	4	25	-5	0.21	-0.49	0.12	0.22	24	33.95	89	84	55	0	7	3	0
HOUGHTON LAKE	26	14	37	-6	20	-6	0.35	-0.12	0.17	0.47	77	29.98	111	86	55	0	7	4	0
LANSING	34	17	50	3	26	-3	0.33	-0.18	0.18	0.33	50	24.38	81	84	48	0	7	4	0
MARQUETTE	24	5	35	-12	15	-6	0.68	0.07	0.32	0.92	118	37.39	113	87	53	0	7	3	0
MUSKOGON	33	19	47	1	26	-6	0.85	0.13	0.40	0.85	92	28.51	94	82	53	0	7	4	0
SAULT ST. MARIE	26	12	34	-3	19	-4	2.81	2.12	1.42	3.29	366	42.93	133	90	65	0	7	7	2
MN ALEXANDRIA	25	3	38	-14	14	-4	0.21	0.04	0.21	0.21	100	26.73	107	85	48	0	7	1	0
DULUTH	18	-3	34	-15	8	-9	0.48	0.18	0.30	0.52	133	33.30	114	79	52	0	7	3	0
INT'L FALLS	14	-7	29	-20	4	-8	0.54	0.35	0.33	0.58	232	23.71	100	85	63	0	7	5	0
MINNEAPOLIS	27	8	43	-9	18	-4	0.46	0.19	0.44	0.46	131	25.03	91	74	43	0	7	2	0
ROCHESTER	28	7	43	-9	17	-4	0.19	-0.07	0.19	0.19	56	26.00	90	84	53	0	7	1	0
ME GREENWOOD	59	44	75	20	52	3	0.39	-0.94	0.39	0.39	23	35.30	70	90	44	0	1	1	0
JACKSON	62	46	76	22	54	5	1.05	-0.33	0.62	1.05	60	54.60	108	95	65	0	1	3	1
MERIDIAN	62	44	77	23	53	3	1.43	0.09	1.06	1.43	84	48.74	93	99	65	0	1	4	1
MO CAPE GIRARDEAU	47	29	64	4	38	-1	0.43	-0.62	0.43	0.43	32	36.20	84	83	32	0	4	1	0
COLUMBIA	41	20	58	0	31	-4	0.26	-0.41	0.22	0.26	30	46.76	127	84	37	0	6	2	0
KANSAS CITY	40	20	57	-2	30	-4	0.14	-0.25	0.14	0.14	28	34.28	94	80	39	0	6	1	0
SAINT LOUIS	42	25	62	4	33	-4	0.17	-0.58	0.13	0.17	18	39.04	110	83	32	0	5	2	0
SPRINGFIELD	44	19	63	-4	32	-6	0.34	-0.37	0.34	0.34	37	39.60	95	78	34	0	7	1	0
MT BILLINGS	30	8	53	-14	19	-9	0.07	-0.10	0.07	0.07	33	15.54	107	71	38	0	7	1	0
GLASGOW	24	-1	52	-19	12	-7	0.00	-0.08	0.00	0.03	33	12.79	120	80	47	0	7	0	0
GREAT FALLS	30	0	45	-26	15	-11	0.00	-0.18	0.00	0.00	0	14.13	97	81	38	0	7	0	0
HAVRE	24	-2	47	-22	11	-9	0.00	-0.11	0.00	0.00	0	15.82	147	78	48	0	7	0	0
HELENA	26	2	48	-21	14	-10	0.05	-0.08	0.04	0.17	106	11.40	102	83	49	0	7	3	0
KALISPELL	27	9	42	-6	18	-7	0.09	-0.29	0.06	0.19	40	19.39	127	90	49	0	7	2	0
MILES CITY	28	3	58	-18	16	-7	0.00	-0.14	0.00	0.00	0	12.15	89	79	43	0	7	0	0
MISSOULA	32	15	45	2	23	-2	0.28	0.04	0.18	0.47	152	15.08	119	80	52	0	7	2	0
NE GRAND ISLAND	40	14	55	-1	27	-1	0.08	-0.11	0.08	0.08	33	23.74	97	89	32	0	7	1	0
LINCOLN	42	15	57	0	29	0	0.12	-0.10	0.12	0.12	41	23.52	85	85	34	0	7	1	0
NORFOLK	36	13	53	-4	25	-1	0.22	0.03	0.17	0.22	88	33.12	134	91	36	0	7	3	0
NORTH PLATTE	41	13	59	-6	27	0	0.00	-0.11	0.00	0.00	0	17.31	91	77	30	0	7	0	0
OMAHA	35	16	56	-2	26	-3	...	...	...	...	...	...	...	90	50	0	7	-	-
SCOTT'S BLUFF	35	7	61	-13	21	-7	0.42	0.28	0.35	0.42	233	17.04	115	85	46	0	7	2	0
VALENTINE	41	11	68	-12	26	-2	0.01	-0.13	0.01	0.01	6	21.94	99	71	32	0	6	1	0
NV RLY	51	25	59	14	38	11	0.01	-0.16	0.01	0.01	5	10.75	111	81	25	0	6	1	0
LAS VEGAS	65	41	68	39	53	6	0.00	-0.08	0.00	0.00	0	3.65	95	49	23	0	0	0	0
RENO	59	34	63	25	47	12	0.00	-0.22	0.00	0.00	0	10.20	150	84	28	0	3	0	0
WINNEVOCCA	54	32	60	20	43	11	0.38	0.16	0.17	0.40	143	8.62	113	93	48	0	2	3	0
NH CONCORD	33	16	46	9	25	-3	0.75	-0.01	0.45	0.91	92	37.46	109	90	41	0	7	4	0
NJ ATLANTIC CITY	49	27	57	21	38	-1	0.64	-0.12	0.44	0.64	65	34.80	92	85	43	0	5	3	0
NM ALBUQUERQUE	59	35	67	25	47	10	0.04	-0.07	0.04	0.04	29	5.52	65	53	24	0	1	1	0
CLOVIS	57	27	70	11	42	2	0.00	-0.14	0.00	0.00	0	9.91	58	62	24	0	5	0	0
ROSWELL	62	35	74	19	49	6	...	...	...	...	...	...	...	58	23	0	2	-	-
NY ALBANY	35	20	43	15	28	-2	0.33	-0.37	0.20	0.34	37	31.78	93	91	47	0	7	3	0
BINGHAMTON	32	18	38	10	25	-5	0.22	-0.50	0.16	0.29	32	31.69	91	91	53	0	7	3	0
BUFFALO	35	21	47	6	28	-4	0.35	-0.53	0.22	0.39	35	31.54	87	77	48	0	7	4	0
NEW YORK	46	33	56	28	39	0	0.55	-0.26	0.34	0.55	53	33.40	84	70	37	0	3	3	0
ROCHESTER	36	21	45	6	28	-4	0.36	-0.30	0.14	0.40	47	28.95	96	85	47	0	7	5	0
SYRACUSE	37	21	45	13	29	-3	0.34	-0.44	0.15	0.54	53	30.19	82	85	52	0	7	4	0
NC ASHEVILLE	51	32	66	19	41	-1	0.88	-0.14	0.64	0.88	67	54.83	103	96	39	0	4	4	1
CHARLOTTE	55	37	66	29	46	1	0.76	-0.01	0.38	0.76	78	47.74	118	82	39	0	3	5	0
GREENSBORO	51	31	65	22	41	-2	0.85	0.11	0.31	0.85	89	40.87	102	88	35	0	3	4	0
HATTERAS	...	...	...	...	...	...	0.35	-0.66	...	0.35	...	...	...	...	...	...	...	...	...
NEW BERN	59	39	74	28	49	0	0.56	-0.22	0.44	0.56	56	30.14	59	93	55	0	1	2	0
RALPHIGH	54	34	69	22	44	-1	1.26	0.54	0.77	1.26	137	48.03	123	88	35	0	2	4	1
WILMINGTON	63	39	74	27	51	1	0.88	0.03	0.72	0.88	81	63.90	118	97	58	0	2	2	1
ND BISMARCK	27	4	51	-12	16	-2	0.06	-0.05	0.06	0.06	43	18.37	121	75	47	0	7	1	0
FARGO	21	2	35	-13	11	-5	0.00	-0.14	0.00	0.00	0	20.83	110	80	55	0	7	0	0
GRAND FORKS	15	-3	35	-16	6	-8	0.11	-0.03	0.11	0.11	61	25.46	142	81	58	0	7	1	0
WILLISTON	24	-3	52	-20	10	-6	0.05	-0.07	0.03	0.10	67	14.39	108	77	52	0	7	2	0
OK ALBON-CAMPON	38	22	52	4	30	-4	0.05	-0.66	0.05	0.05	5	33.71	97	81	42	0	6	1	0
CINCINNATI	42	19	58	5	31	-6	0.03	-0.72	0.02	0.03	3	40.22	103	84	50	0	6	2	0
CLEVELAND	38	22	53	4	30	-4	0.08	-0.66	0.08	0.16	17	38.10	111	86	53	0	7	1	0
COLUMBUS	42	22	58	7	32	-1	0.05	-0.69	0.03	0.05	5	43.41	122	79	38	0	6	2	0
DAYTON	40	20	56	1	30	-4	0.05	-0.65	0.05	0.05	5	48.78	141	85	50	0	6	1	0

Based on 1961-90 normals.

Weather Data for the Week Ending December 9, 1995

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	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	38	20	54	0	29	-2	0.13	-0.59	0.13	0.13	14	30.98	100	80	44	0	6	1	0
YOUNGSTOWN	37	21	50	4	29	-4	0.07	-0.63	0.05	0.07	8	28.43	80	83	45	0	6	2	0
OK OKLAHOMA CITY	52	30	66	13	41	-1	0.10	-0.25	0.09	0.10	22	30.91	95	72	29	0	6	2	0
TULSA	50	26	65	10	38	-4	0.18	-0.38	0.18	0.18	25	40.99	105	74	28	0	5	2	0
OR ASTORIA	48	34	58	28	41	-3	1.54	-0.86	0.96	2.50	81	67.34	114	93	69	0	3	3	2
BURNS	37	20	43	12	29	2	0.81	0.53	0.50	0.89	247	11.67	127	99	70	0	7	5	2
MEDFORD	51	42	56	33	47	8	1.73	0.96	0.60	2.22	224	18.09	110	97	72	0	6	5	1
FENDLETON	38	24	56	16	31	-4	0.18	-0.21	0.16	0.30	60	15.69	143	89	42	0	7	2	0
PORTLAND	45	34	53	29	39	-2	0.73	-0.66	0.43	1.14	64	38.63	121	92	40	0	3	4	0
SALEM	45	34	53	29	40	-1	0.57	-1.00	0.22	1.12	56	42.31	123	97	73	0	3	4	0
PA ALLENTOWN	41	25	49	21	33	-2	0.48	-0.34	0.30	0.48	45	36.33	88	82	43	0	7	3	0
ERIE	39	25	50	6	32	3	0.15	-0.74	0.10	0.15	13	32.31	83	79	48	0	6	3	0
HARRISBURG	42	30	51	26	36	0	0.34	-0.43	0.17	0.35	35	33.01	86	81	44	0	6	3	0
PHILADELPHIA	44	31	56	26	38	1	0.57	-0.28	0.43	0.57	52	29.96	69	80	41	0	5	2	0
PITTSBURGH	41	23	54	8	32	-3	0.11	-0.55	0.10	0.11	13	27.45	79	78	40	0	6	2	0
SCRANTON	38	24	46	18	31	-2	0.19	-0.42	0.12	0.19	24	28.42	82	87	44	0	7	2	0
RI PROVIDENCE	45	27	51	22	36	0	1.54	0.52	1.02	1.67	127	37.72	89	80	41	0	5	3	1
NC CHARLESTON	64	43	71	33	54	0	0.35	-0.32	0.28	0.35	41	48.96	100	95	63	0	0	3	0
COLOMBIA	59	37	71	26	48	-1	0.91	0.17	0.39	0.91	97	53.74	114	91	51	0	2	3	0
FLORENCE	61	39	74	28	50	1	0.89	0.23	0.53	0.89	106	45.82	110	94	48	0	2	3	1
GREENVILLE	56	35	69	27	46	0	1.07	0.16	0.46	1.07	91	59.07	122	88	45	0	3	5	0
SD ABERDEEN	31	4	48	-12	17	-1	0.01	-0.11	0.01	0.01	6	23.36	113	79	42	0	7	1	0
BURON	34	10	53	-7	22	1	0.14	0.03	0.11	0.14	100	29.77	151	79	45	0	7	2	0
RAPID CITY	35	7	63	-15	21	-5	0.02	-0.09	0.01	0.02	14	19.43	119	76	33	0	7	2	0
SIoux FALLS	34	11	49	-7	23	1	0.05	-0.13	0.03	0.05	21	30.37	130	85	46	0	7	3	0
TX CHATTANOOGA	53	32	69	16	43	-1	1.16	-0.00	0.75	1.16	78	53.57	108	94	38	0	3	5	1
KNOXVILLE	50	29	67	16	40	-3	0.84	-0.17	0.27	0.84	65	41.32	94	97	47	0	4	6	0
MEMPHIS	54	38	72	18	46	0	0.93	-0.44	0.80	0.93	53	51.56	107	92	38	0	1	2	1
NASHVILLE	51	32	66	13	42	-1	0.90	-0.57	0.30	0.50	36	47.14	107	91	43	0	3	3	0
TX ARLING	60	33	71	17	46	-1	0.00	-0.25	0.00	0.00	0	22.91	97	75	33	0	2	0	0
AMARILLO	52	23	70	6	38	-1	0.00	-0.11	0.00	0.00	0	17.59	91	55	25	0	5	0	0
AUSTIN	69	49	86	28	59	5	0.05	-0.40	0.05	0.05	9	33.27	109	89	44	0	1	1	0
BEAUMONT	81	65	95	45	73	9	0.00	-1.07	0.00	0.00	0	50.62	94	98	63	0	0	0	0
BROWNSVILLE	76	61	93	37	68	8	0.05	-0.27	0.01	0.01	3	28.03	109	95	64	0	0	1	0
CORPUS CHRISTI	76	61	93	37	68	8	0.05	-0.23	0.05	0.05	14	36.42	125	96	65	0	0	1	0
DEL RIO	75	47	88	37	61	6	0.03	-0.22	0.01	0.03	9	14.78	62	76	38	0	0	3	0
EL PASO	69	42	74	31	55	10	0.08	-0.05	0.08	0.08	47	7.93	93	50	23	0	1	1	0
FORT WORTH	58	40	70	19	49	1	0.26	-0.24	0.25	0.26	41	33.63	94	81	49	0	2	2	0
GALVESTON	71	62	78	45	66	8	0.04	-0.76	0.04	0.04	4	33.52	84	93	69	0	0	1	0
HOUSTON	73	55	85	35	64	9	0.29	-0.86	0.29	0.29	19	39.91	79	92	56	0	0	1	0
LUBBOCK	57	28	73	12	43	0	0.00	-0.14	0.00	0.00	0	18.46	101	72	23	0	5	0	0
MIDLAND	65	35	76	20	50	3	0.00	-0.11	0.00	0.00	0	10.68	72	72	23	0	3	0	0
SAN ANGELO	67	37	79	22	52	4	0.00	-0.19	0.00	0.00	0	20.97	105	81	32	0	1	0	0
SAN ANTONIO	72	49	84	31	61	6	0.19	-0.19	0.19	0.19	38	21.81	73	84	40	0	1	1	0
VICTORIA	73	56	84	31	65	8	0.06	-0.62	0.06	0.06	7	30.57	71	97	49	0	1	1	0
WACO	65	44	80	23	55	4	0.28	-0.17	0.28	0.28	48	35.61	116	82	44	0	1	1	0
WICHITA FALLS	56	31	68	15	44	-2	0.08	-0.28	0.08	0.08	17	25.73	84	73	31	0	3	1	0
UT CEDAR CITY	57	28	64	20	42	10	0.21	0.04	0.21	0.21	95	11.77	107	81	33	0	5	1	0
SALT LAKE CITY	51	33	54	26	42	10	0.45	0.12	0.23	0.45	105	16.22	106	92	36	0	4	4	0
VT BURLINGTON	32	17	41	5	24	-2	0.50	-0.10	0.28	0.68	87	30.30	92	82	53	0	7	6	0
VA NORFOLK	50	29	67	19	40	-3	1.00	0.31	0.59	1.00	115	34.95	83	89	50	0	2	4	1
RICHMOND	49	27	66	14	38	-3	0.68	-0.05	0.51	0.68	73	33.39	82	86	38	0	5	2	1
ROANOKE	42	30	53	24	36	-5	3.41	-0.12	2.49	3.78	83	94.34	100	96	73	0	6	4	2
WA QUILLAYUTE	29	15	41	3	22	-7	1.48	0.12	0.78	2.13	122	38.35	116	92	54	0	5	3	2
SEATTLE-TACOMA	40	32	46	25	36	-5	0.26	-0.29	0.12	0.51	72	19.89	134	90	56	0	7	3	0
YAKIMA	33	19	44	13	26	-5	0.09	-0.21	0.09	0.09	23	7.49	107	88	50	0	7	1	0
WV BECKLEY	43	25	59	8	34	-3	0.49	-0.24	0.16	0.49	52	39.05	101	81	34	0	5	5	0
CHARLESTON	44	22	57	10	33	-6	0.60	-0.20	0.20	0.60	58	43.37	108	95	53	0	7	5	0
HUNTINGTON	44	26	57	9	35	-2	0.20	-0.63	0.08	0.20	19	39.52	97	81	36	0	4	6	0
PARKERSBURG	44	25	58	10	34	-3	0.00	-0.63	0.00	0.00	0	...	...	81	36	0	4	6	0
WI GREEN BAY	25	10	38	-9	17	-7	0.33	-0.06	0.19	0.33	65	29.54	106	76	53	0	7	2	0
LACROSSE	29	13	46	-7	21	-3	0.18	-0.14	...	0.18	42	29.61	100	74	40	0	7	2	0
MADISON	30	13	48	-7	22	-4	0.19	-0.22	0.13	0.19	36	33.03	107	77	47	0	7	3	0
MILWAUKEE	32	18	47	-5	25	-3	0.14	-0.42	0.09	0.14	19	30.22	96	76	46	0	6	2	0
WAUSAU	21	6	36	-13	13	-8	0.23	-0.14	0.09	0.23	48	33.12	104	81	46	0	7	4	0
WY CASPER	39	6	53	-9	23	-2	0.05	-0.12	0.04	0.05	24	18.66	155	75	31	0	7	2	0
CHEYENNE	41	15	54	-3	28	-1	0.00	-0.11	0.00	0.00	0	19.81	141	81	32	0	7	0	0
LANDER	40	16	53	0	28	5	0.00	-0.14	0.00	0.00	0	19.30	153	60	30	0	6	0	0
SHERIDAN	33	6	59	-13	19	-5	0.04	-0.13	0.04	0.04	19	17.06	122	76	35	0	7	1	0
PR SAN JUAN	87	74	88	72	80	2	0.63	-0.57	0.22	0.88	57	52.68	107	90	60	0	0	6	0

Based on 1961-90 normals.



In parts of the Plains, the highest and lowest temperatures of November occurred within a few days of each other. For instance, Dodge City, KS recorded 82°F on the 25th and 7°F on the 28th. Farther north, portions of the Northwest, Great Basin, and northern Plains experienced their coldest autumn weather during the Halloween outbreak, when lows dipped to 15°F in Spokane, WA, -2°F in Elko, NV, and -3°F in Miles City, MT. Areas east of the Dakotas were spared sub-zero readings until late November, with temperatures bottoming out on the 29th at -4°F in Waterloo, IA and -5°F in Houghton Lake, MI. By autumn's end, sub-freezing temperatures reached locations as far south as San Antonio, TX (31°F on November 29) and Gainesville, FL (30°F on November 23), a typical penetration of cold into the Gulf Coast States by late November.

Autumn Weather Review

HIGHLIGHTS: In the upper Midwest, an early freeze ended the growing season on September 22-23, only 3 weeks after a hot, dry summer relinquished its grip. Rain and snow preceding the cold wave provided some of the last significant moisture of autumn to parts of the central Plains, where winter wheat was increasingly stressed by dry, windy weather. In contrast, heavy precipitation in October and early November erased long-term drought in the Northeast. But in the Pacific Northwest, rainfall became excessive in late November, causing near-record to record flooding. Farther south, nearly dry weather encompassed California, where autumn precipitation typically accounts for about 20 percent of their annual total.

SEPTEMBER: A freeze ended the growing season 1 to 3 weeks early in the central Plains and western Corn Belt, damaging immature sorghum and soybeans. In the broader picture, lingering summer heat persisted only a few days into September across the East, replaced by a cooler pattern that dropped monthly temperatures as much as 2 to 4°F below normal. Warmth shifted into the West, where temperatures averaged 2 to 4°F above normal.

Despite the cooler weather, moisture deficits persisted from the Midwest into the Northeast. The month's heaviest precipitation fell in the northwestern Corn Belt, and from the southern Plains into the Southeast. Some of the latter rains were fueled by the remnants of the eastern Pacific Hurricane Ismael. Some of the central Plains'

precipitation fell as wet snow on September 20-21. In the Northwest, seasonal precipitation began to fall late in the month.

OCTOBER: Hurricane Opal slammed into western Florida on October 4 and proceeded to soak the East with wind-driven rain. Frequent heavy rain returned to the East after mid-month, eradicating long-term drought. Storms passed north of the Nation's southwestern quadrant, however, resulting in a late start to California's wet season and stress on the Plains' newly planted wheat. Under dry conditions in the Southwest, temperatures reached 100°F as late as October 12.

Elsewhere, warmth accompanied the wetness in the East, where temperatures averaged up to 4°F above normal. Farther west, a cold outbreak at month's end reinforced monthly readings that averaged 2 to 4°F below normal from the interior Northwest to the central Plains. Preceding the arrival of frigid air, heavy snow overspread the North-Central States on October 22-23.

NOVEMBER: Dryness intensified from California to the central Plains, as storms bypassed the region, instead striking the Pacific Northwest. Western Washington witnessed two floods, including the worst event since the November 1990 record flooding. In the East, conditions remained stormy and turned colder through mid-month, but drier, cold weather prevailed thereafter. Monthly temperatures averaged 4 to 10°F below normal from the Great Lakes States into the Southeast, but soared to 4 to 8°F above normal in the West.

Autumn Weather in Historical Perspective

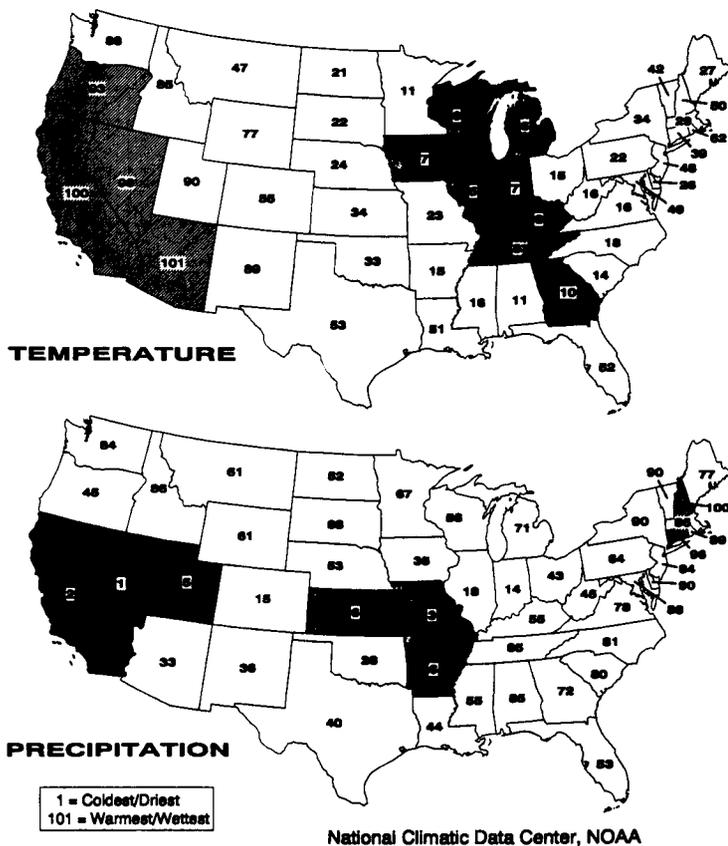
Autumn showcased drought-ending rainfall in the East, but also featured very dry weather from California to the middle Mississippi Valley. A half-dozen States from California to Missouri marked one of their six driest autumns (fig. 1). Nationally, the average precipitation of 6.17 inches was 87 percent of the 30-year normal (fig. 2), making autumn 1995 the 32nd driest such period since 1895 (table 1). Continued stabilization of the Nation's long-term moisture balance after the spring 1995 wet spell

left just one-eighth of the country severely to extremely wet by autumn's end (fig. 3).

Record warmth in the West was offset by very cold conditions in the East-Central States, resulting in the 47th coldest autumn in the past 101 years. The Nation's average temperature of 54.0°F matched the 30-year normal (fig. 4).

Figure 1

AUTUMN (SON) 1995 STATEWIDE RANKS



Region	Precipitation	Temperature
Northeast	89	30
East North Central	57	9
Central	26	9
Southeast	80	14
West North Central	64	38
South	24	38
Southwest	19	95
Northwest	65	90
West	2	101
National	32	47

Figure 2

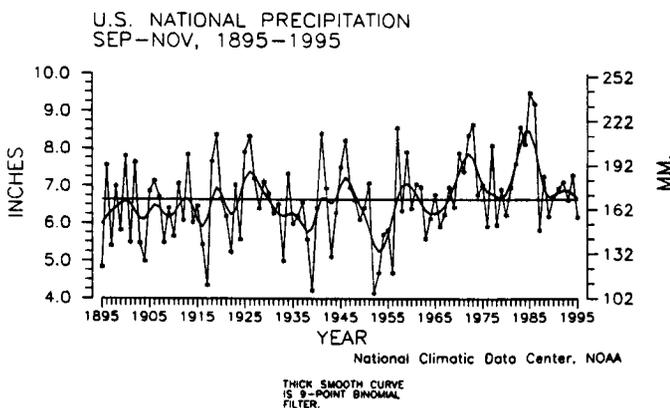


Figure 3 U.S. PERCENT AREA DRY AND WET

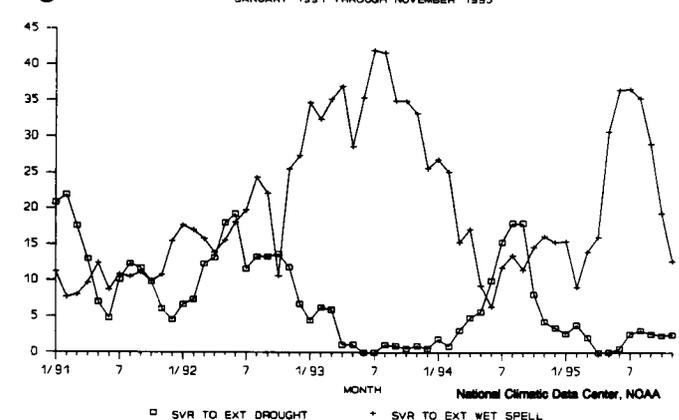
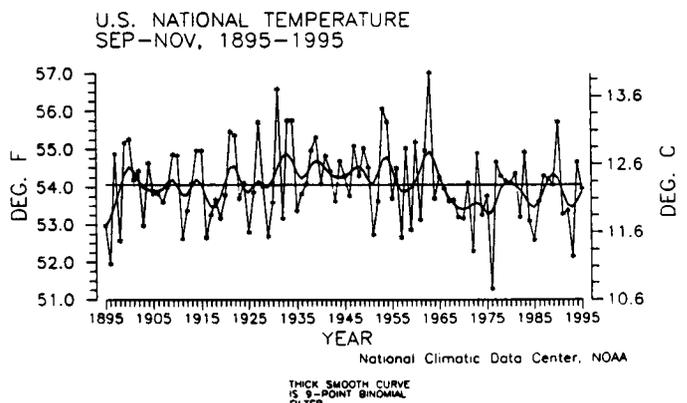


Figure 4



November Weather and Crop Summary

Weather

Jet-stream winds arced north of the Nation's southwestern quadrant, leaving the region dry and breezy. Farther north, a potent flow of Pacific moisture pummeled the northern Rockies and Cascades, resulting in two flood episodes and monthly rainfall of up to 3 feet in the latter mountains. Meanwhile, the East faced two rain- and severe-weather-laced fronts and a coastal storm prior to mid-month, completing their recovery from long-term drought.

A few days of early-month warmth in the East soon yielded to a series of strong cold fronts, borne on northwesterly flow aloft. The nearly month-long cold spell dropped monthly temperatures 4 to 10°F below normal from the Great Lakes States into the Southeast. In contrast, ridging aloft helped to produce temperature departures of +4 to +8°F in many areas west of the Continental Divide. In the transition zone, gusty, direction-changing winds and oscillating temperatures further dried topsoils and hampered establishment of the 1996 winter wheat crop in the central and southern Plains.

After promising early-month showers in eastern Kansas, southeastern Oklahoma, and central Texas, minimal precipitation fell on the central and southern Plains. In southern Texas, a mid-month disturbance delivered heavy rain as far north as San Angelo. No measurable rain fell during November in Colorado Springs, CO, or in Texas at Lubbock and Midland. Less than a tenth of an inch dampened North Platte, NE (0.08 inches), Wichita, KS (0.08 inches), and Amarillo, TX (0.06 inches). In Cheyenne, WY, wind gusts reached or exceeded 40 mph on 16 days, peaking at 61 mph on November 11, and the monthly average wind speed of 15.3 mph was 3.0 mph above normal.

Farther west, Las Vegas, NV notched November records for lack of rain (none; tied seven other years) and warmth (59.8°F, topped the 1949 record by 0.9°F). Similarly, no measurable rain fell in Sacramento, CA, signaling a record-late wet-season onset, while the temperature averaged 61.6°F, smashing the 1976 record by 2.4°F. Although neighboring Oregon shared in the record warmth, including an average of 51.1°F (6.1°F above normal) in Salem, conditions became increasingly wet farther north. Astoria's monthly total of 17.47 inches was a November record at the airport observing site. Totals were less than one-third of an inch below November records in Portland, OR (11.25 inches) and Seattle, WA (10.40 inches). Heavy rain and localized flooding in western Washington before November 10 served as a precursor to major river flooding on November 29-30. During the more severe event, flooding extended southward into western Oregon and eastward into the northern Rockies, but spared most agricultural land east of the Cascades.

Snow was scarce across much of the West, lower Midwest, and Plains, but plentiful in the Great Lakes and Northeast. The month's most widespread snowfall accompanied a storm across the Northern States on November 26-28, followed immediately by a central Appalachians-to-southern New England snowmaker. Earlier in the month, a cold front (November 11-12) and a coastal storm (November 14-15) dumped locally impressive amounts in the interior Northeast, including respective totals of 9.9 and 14.8 inches in Binghamton, NY. The November 11-12 cold front also sparked a rash of severe weather in the East, including damaging straight-line and tornadic winds. In combination with another vigorous cold front on November 7 that primarily affected the Southeast, the month's preliminary tornado count reached 80, well above the average of 32, and the highest November total since 1992.

During the month, less than an inch of snow blanketed Salt Lake City, UT (0.1 inches), Peoria, IL (0.3 inches), and Topeka, KS (0.7 inches). In contrast, Great Lake-effect snows enhanced record totals in locations such as Muskegon, MI (25.7 inches) and Syracuse, NY

(34.2 inches). In addition to November-record snowfall in Williamsport, PA (13.8 inches), the temperature averaged 35.7°F (6.1°F below normal), their second-lowest value on record. Temperatures in Washington, DC averaged below normal on 23 consecutive days before warmth briefly returned on November 27. Farther south, dryness quietly developed over Peninsular Florida, where monthly totals included a trace in Key West and 0.65 inches in Melbourne. Elsewhere in the east, heavy early- to mid-month precipitation vanquished vestiges of drought, and pushed November totals to 7.28 inches in Portland, ME, 7.40 inches in Atlanta, GA, and 13.27 inches in Pensacola, FL. By November 14, New York City's composite reservoir holdings increased to 96 percent of normal, up from about 70 percent on October 12.

More than 10 inches of rain fell on parts of western Hawaii early in the month, causing flooding and boosting the November total to 16.14 inches in Lihue. In contrast, much of Alaska experienced dry November weather, including a record-tying least snowfall (0.9 inches) in Anchorage.

Fieldwork

The month began with the first sub-zero temperatures of the 1995 crop year. Harvest progress for row crops started the month ahead of normal, but wheat emergence was slightly behind the 5-year average. Cold weather in the Midwest was preceded by heavy rains that delayed harvest activity. The central and southern Great Plains remained dry. Snow across the northern Great Plains provided some protection from the early-November low temperatures for the winter wheat crop.

Favorable weather in early November dried fields and allowed the row crop harvest to approach completion ahead of normal. In the Eastern States, rain and snow delayed fieldwork. Dry conditions over the southern Great Plains slowed winter wheat growth and hindered crop emergence in the middle Mississippi Valley. Wheat condition declined due to continued dry weather.

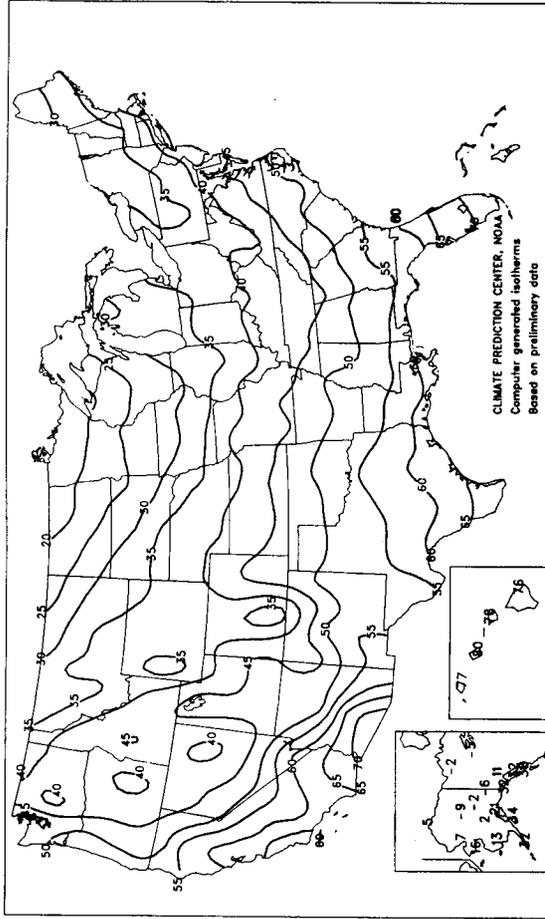
By mid-month, cold, rainy weather in the Eastern States saturated fields, curtailed harvest activity, and delayed small grain seeding. Continued dry conditions in the Central and Western States slowed wheat seeding. The persistent dry weather in the central and southern Great Plains lowered wheat condition. Cotton harvesting was active in the lower Great Plains where a hard freeze reduced the need for chemical defoliation.

Later in the month, dry, windy weather hampered small grain emergence in the Central and Western States. Dry soil conditions and cool weather over most of the eastern winter wheat region limited wheat development. Toward the end of November, clear weather in the Great Lakes region allowed farmers to finish the row crop harvest. Persistent dry conditions caused wheat condition to decline in the central Great Plains.

By the end of November, persistent dry weather and record-high temperatures in the Western States left small grain fields in critical need of moisture. Small grain emergence and growth were delayed in the central Great Plains by the continued dry conditions. Heavy rains flooded fields in the Pacific Northwest. Mild weather aided the vegetable harvest in Florida and left citrus groves in need of moisture. Wheat emergence finished November slightly behind the average. Wheat condition ended the month mostly good to fair, except in the southern Great Plains, where the continued dry spell left many fields in serious need of moisture. Cotton harvesting started November equal to the average and finished the month 1 percentage point ahead of normal. Wet weather in early November slowed cotton harvest activity in the Southeastern States, but dry weather by month's end allowed harvest activity to near completion.

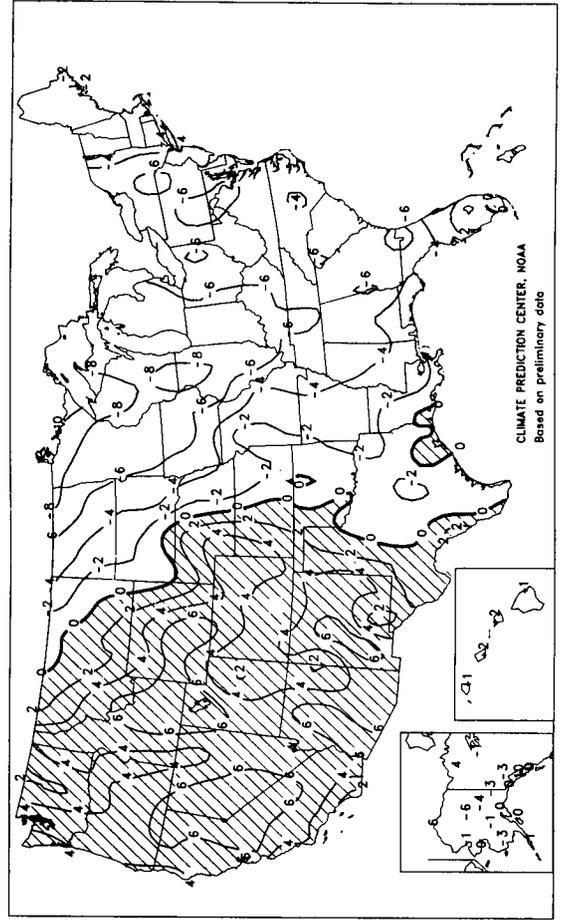
Average Temperature (°F)

NOV 1995



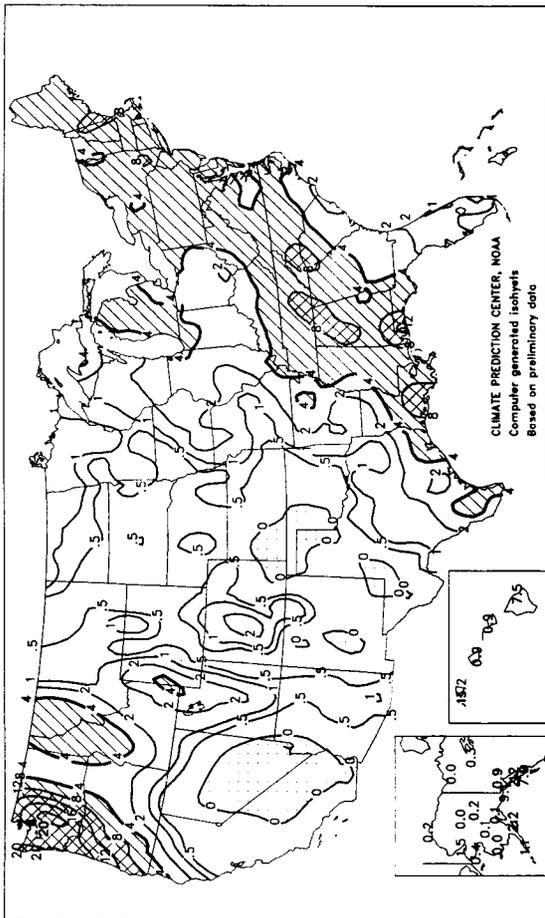
Departure of Average Temperature from Normal (°F)

NOV 1995



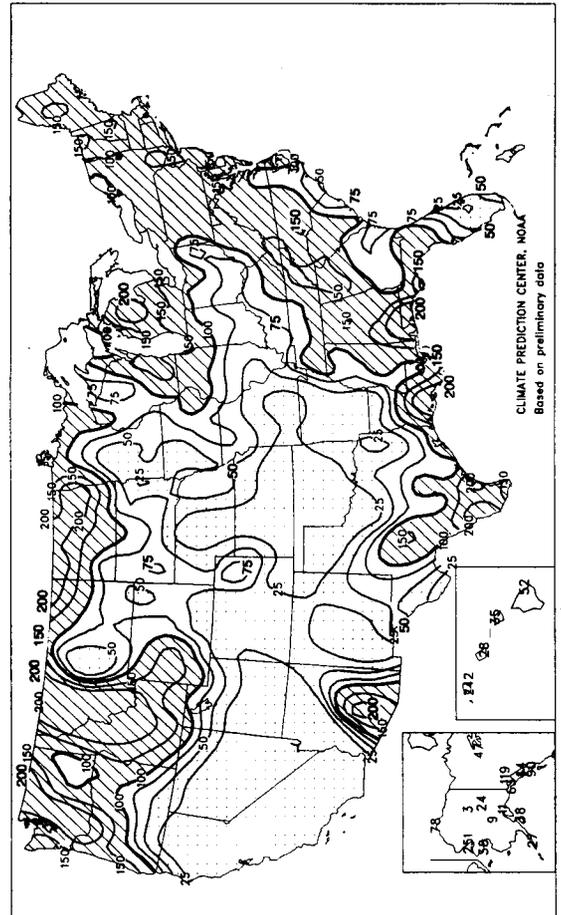
Total Precipitation (Inches)

NOV 1995



Percent Of Normal Precipitation

NOV 1995



November Weather in Historical Perspective

Near-record warmth in the three westernmost regions balanced a near-record chill in four eastern regions, resulting in the 50th coldest November during the 101-year period of record (table 1). Twenty States from the Mississippi Valley eastward posted one of their ten coldest Novembers, while nine States from the Rockies westward registered one of their ten warmest (fig. 1). The nationally averaged temperature of 42.3°F was 0.4°F below the 30-year normal (fig. 2).

Dry weather in the West and Southwest regions propelled the Nation to its 30th driest November on record. The Nation's average precipitation of 1.86 inches was 80 percent of normal (fig. 3), but the monthly total in the West region (California and Nevada) was just 11 percent of normal. Minimal precipitation fell across wheat areas of the Plains for a second consecutive month, resulting in the driest October-November period for the region since 1921 (fig. 4).

Region	Precipitation	Temperature
Northeast	73	9
East North Central	54	5
Central	38	7
Southeast	67	3
West North Central	44	56
South	32	52
Southwest	12	100
Northwest	80	96
West	6	100
National	30	50

Figure 2

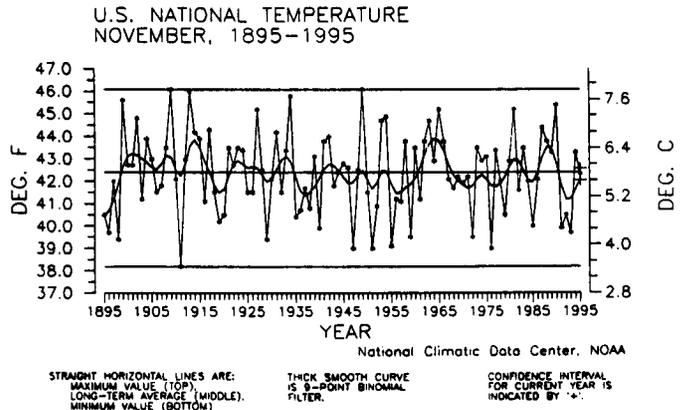


Figure 1

NOVEMBER 1995 STATEWIDE RANKS

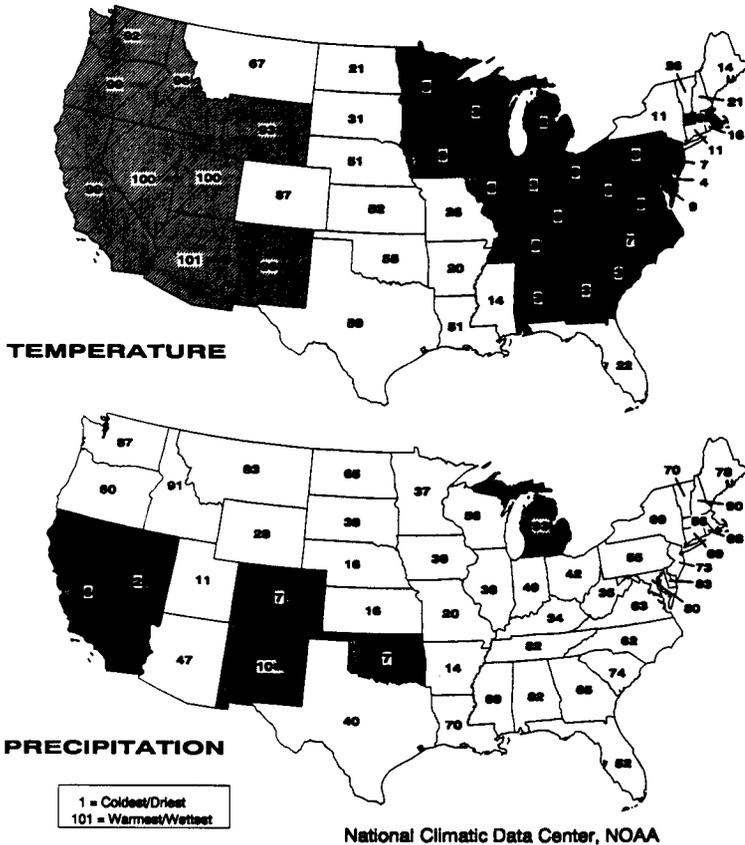


Figure 3

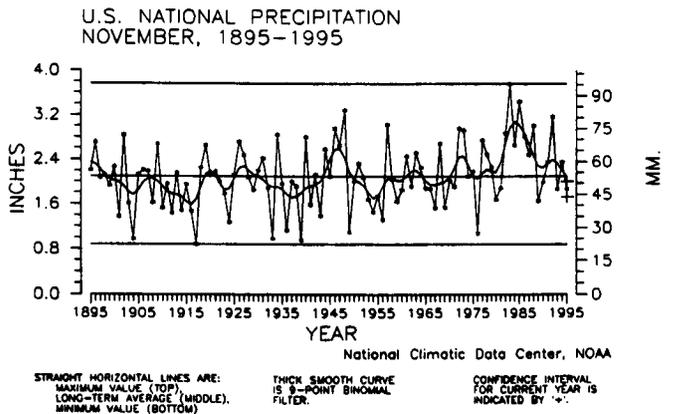
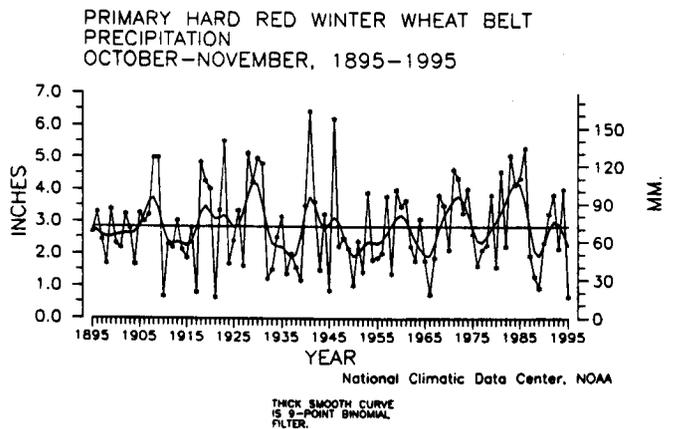


Figure 4

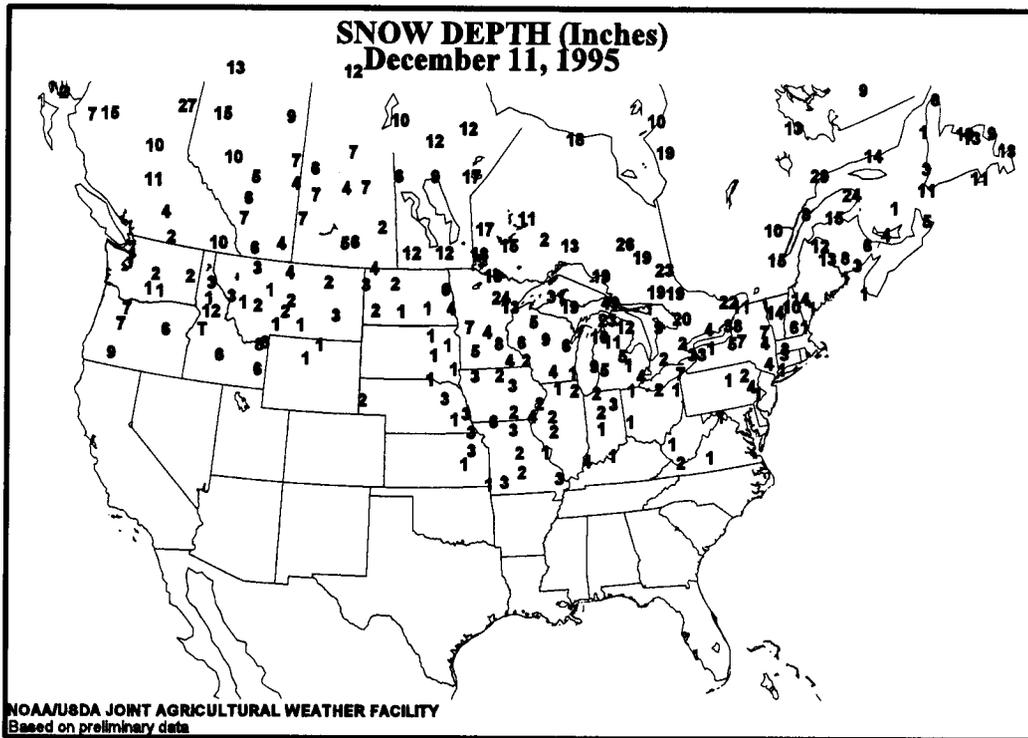


National Agricultural Summary

HIGHLIGHTS for December 4 - 10, 1995

A winter storm hit the Northern States late in the week, bringing fieldwork to a halt. The storm system deposited snow over the Midwest and Northeast and was followed by sub-zero temperatures. Adequate snow cover protected most of the winter wheat from the low temperatures, but the snow cover was patchy across the Northern Plains. Last week's flood waters subsided in the Pacific Northwest, but rain added to standing water in low-lying fields. Later in Oregon's Willamette Valley, an ice storm threatened Nursery

stock. Northern California received much-needed rain, but some growers in the Sacramento and San Joaquin Valleys continued to wait for moisture before planting. Ten successive weeks of dry weather in the southern Great Plains left small grain fields in critical need of moisture. Small grain emergence of some late-planted fields was poor due to the continued dry conditions. In Texas, greenbug populations were up, requiring increased spraying activities.



CORRECTION: Lander, WY did not receive a November-total snowfall of 30.8 inches, as erroneously reported on page 2 of last week's *WWCB*. The correct November total was 16.9 inches, bringing their October 1 - November 30 cumulative total to 30.8 inches.

NOTE TO READERS: Beginning with this issue, weekly "State Summaries of Weather and Agriculture" are suspended for the winter. Regular weekly "State Summaries" coverage will resume on April 9, 1996. In the interim, monthly "State Summaries" will be published in the *WWCB* on January 9, February 6, March 5, and April 2, 1996. Selected weekly reports will continue to be available on the Internet through the NASS Home Page (<http://www.usda.gov/nass/>). Please direct comments or questions to Greg Preston, at (202) 720-7621.

CORRECTION: In last week's crop progress tables, which were the last of the season, the week-ending date should have been December 3, not November 26.

International Weather and Crop Summary

December 3 - 9, 1995

HIGHLIGHTS

FSU-WESTERN: Bitter cold covered winter grain areas, accompanied by patches of light snow or flurries.

NORTHWESTERN AFRICA: Beneficial rain continued over winter grain areas in Morocco, Algeria, and Tunisia.

EUROPE: Unusually cold weather continued to prompt dormancy in winter grains across the north, while farther south, rain continued to ease long-term drought in Spain.

SOUTH ASIA: Seasonable dryness favored maturing summer crops, with winter grain and oilseed planting progressing across the north.

SOUTH AFRICA: Showers maintained favorable early corn prospects.

AUSTRALIA: Scattered showers, heaviest along the coast, continued in eastern Australia.

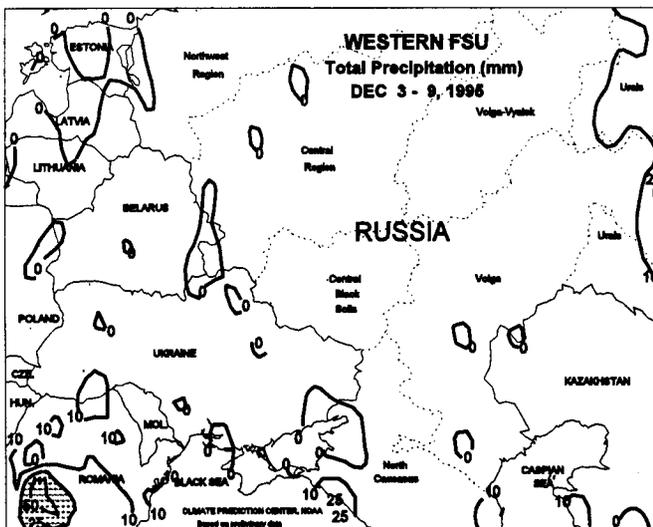
SOUTHEAST ASIA: Torrential showers caused flooding and possible damage to copra in southern Luzon, Philippines.

EASTERN ASIA: Cooler weather hardened winter wheat across the North China Plain.

SOUTH AMERICA: Across southern Brazil, early-week showers brought some relief for germinating soybeans, but additional rain is still needed. In Argentina, hot weather eased by week's end across the western grain areas as scattered showers favored summer crops.

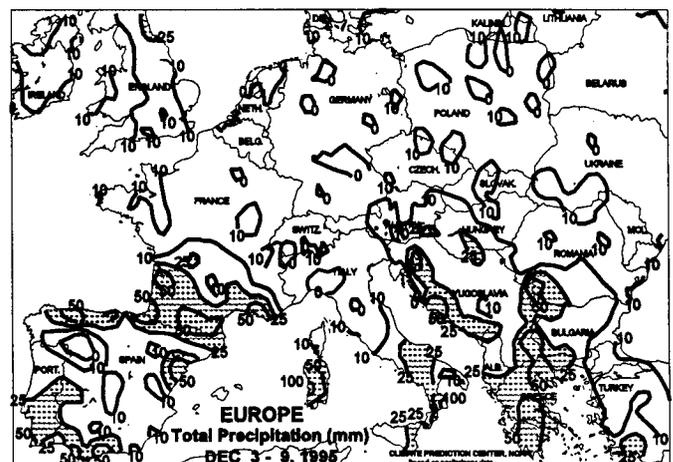
FSU-WESTERN

Bitter cold spread south and west over the region accompanied by patches of light snow or flurries. As a result, precipitation amounts were generally light (1-5 mm) over Ukraine, southern Russia (central Black Soils Region, lower Volga Valley, and North Caucasus Region), Belarus, and the Baltics. Greatest amounts of snow (4-17 mm liquid equivalent) fell over northern Russia, protecting winter grains from minimum temperatures that ranged from -17 to -23 degrees Celsius (C). Farther south, lowest temperatures ranged from -10 to -15 degrees C over traditional winter wheat producing areas of Ukraine and southern Russia, and did not fall low enough to threaten the crop.



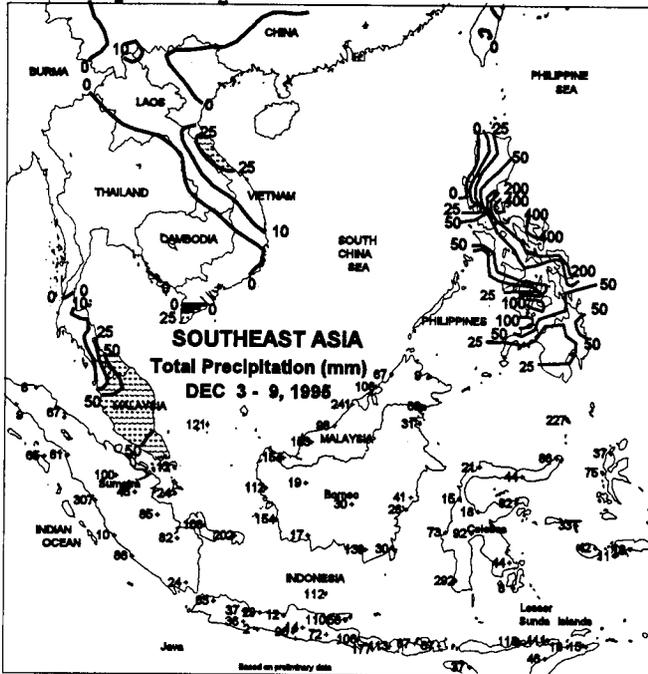
EUROPE

Unusually cold weather spread westward across the continent during the week, accompanied by some snow. Greatest amounts of snow fell from Hungary, southward into Romania and former Yugoslavia, where precipitation amounts ranged from 5 to 26 mm. Farther north, light snow (1-7 mm liquid equivalent) dusted northern Europe. Lowest temperatures ranged from -9 to -12 degrees C over eastern Romania, Poland, and adjacent areas in eastern Germany and the Czech Republic. Temperatures across northern Europe and Italy's Po Valley ranged from -3 to -9 degrees C. Although temperatures did not fall low enough to threaten winter grains in eastern Europe, the cold weather continued to prompt dormancy of crops across northern Europe. Temperatures remained above freezing over Mediterranean citrus areas. Light to moderate rain (5-40 mm, with locally heavier amounts in excess of 50 mm) fell over the Iberian Peninsula, southern Italy, Greece, and southern Yugoslavia. The precipitation over Spain continued to ease long-term drought, benefiting winter grain emergence and early growth.



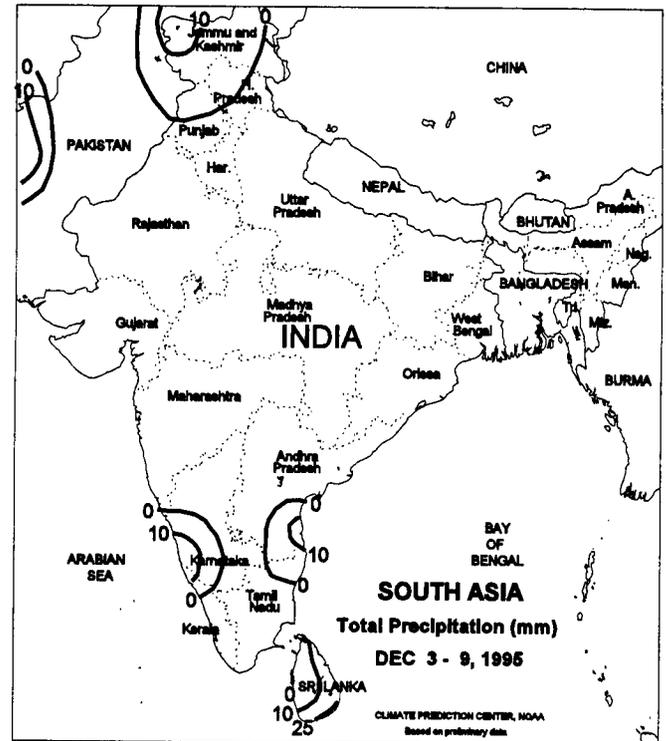
SOUTHEAST ASIA

Heavy showers (200-300 mm), with isolated torrential showers (500-750 mm), were reported in southern Luzon, Philippines, causing flooding and possible damage to copra. A weak tropical depression contributed to the excessive rainfall. Elsewhere in the Philippines, showers (20-100 mm) benefited second-season corn and rice across the central islands. Seasonably dry weather aided rice harvesting across most of Indochina, with only light to moderate rain (10-40 mm) reported in central Vietnam. Drier weather (15-80 mm) eased flooding in the eastern oil palm and rubber areas of the Malay Peninsula (peninsular Thailand and Malaysia). Widespread showers (20-100 mm, with isolated amounts greater than 150 mm) prevailed across Java, maintaining irrigation supplies for main-season rice.



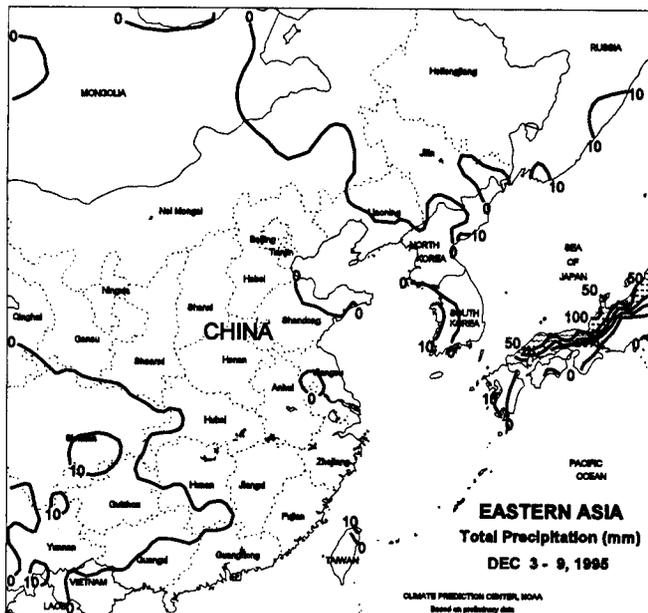
SOUTH ASIA

Seasonably dry weather maintained favorable conditions for summer grain, oilseed, and cotton maturation. Across the north, winter grain and oilseed planting progressed. The bulk of the region's winter crops is irrigated. Temperatures throughout the region were seasonably warm, except for Pakistan, where lingering unseasonable coolness (temperatures 1-2 degrees C below normal, lows dipping below 5 C) slowed winter crop emergence.



EASTERN ASIA

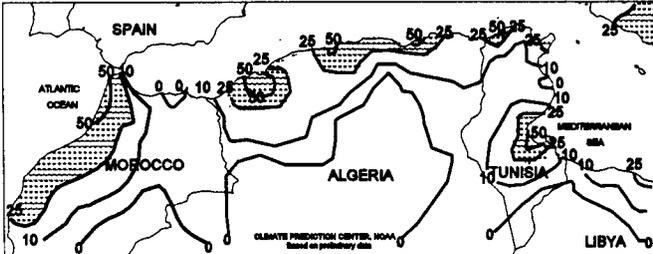
Cooler weather (1-2 degrees C below normal) prompted winter grain hardening across the North China Plain. Seasonably dry weather prevailed across most of China, with light rain (2-15 mm) aiding winter grain and oilseeds across the southwest (Sichuan and Guizhou).



NORTHWESTERN AFRICA

Shower activity increased and became more widespread over winter grain areas in Morocco, Algeria, and Tunisia. Rainfall in these areas ranged from 10 to 40 mm, with locally heavier amounts in excess of 50 mm. The precipitation benefited winter grain emergence and early establishment.

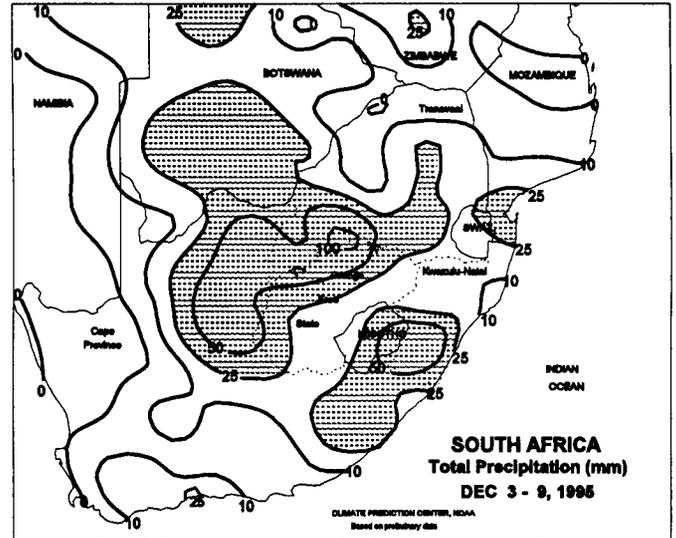
**NORTHWEST AFRICA Total Precipitation (mm)
DEC 3 - 9, 1995**



SOUTH AFRICA

Widespread rain continued throughout the region. In western corn areas that had been trending dry, rainfall ranged from 19 to 53 mm, providing timely moisture for crop germination and establishment. Moderate rain (10-47 mm) continued in the eastern corn belt. Although corn planting is not yet completed, this season's crop is off to a much better start than last year's drought-reduced crop. Elsewhere in South Africa, moderate showers (20-63 mm) benefited sugarcane and other crops in Eastern Cape and southern Kwazulu Natal.

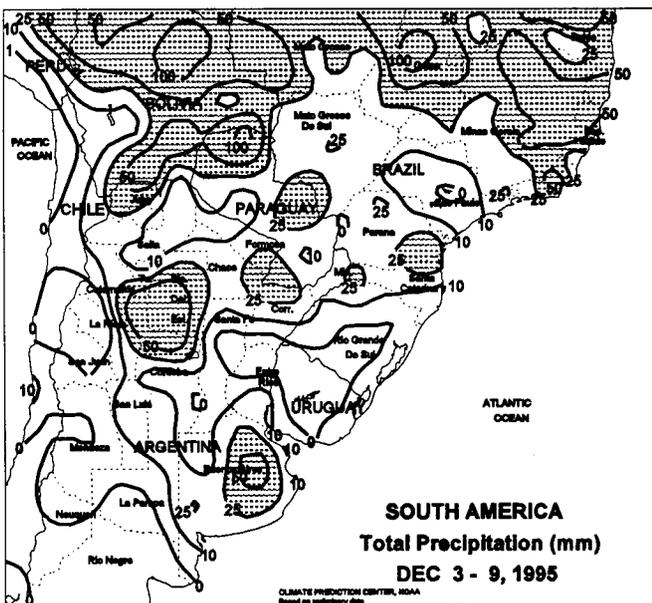
**SOUTH AFRICA Total Precipitation (mm)
DEC 3 - 9, 1995**



SOUTH AMERICA

In southern Brazil, early-week showers (10-35 mm) brought some relief to germinating summer crops in extreme northern Rio Grande do Sul, western Santa Catarina, and Parana. However, rain was light (less than 5 mm) across the rest of northwestern Rio Grande do Sul, the main soybean producing area of the state. Maximum temperatures reached into the mid-30's C, further reducing soil moisture. The northern soybean areas (Mato Grosso, Goias, and Mato Grosso do Sul) received moderate showers (20-75 mm), aiding soybeans. In Argentina, light to moderate rain (10-50 mm) fell across Buenos Aires province, aiding germinating summer crops in the north and filling wheat in the south. Lighter rain (less than 10 mm) was reported across most of southern Santa Fe and Cordoba, with only areas of western Cordoba receiving moderate rain (15-25 mm). Hot weather (maximum temperatures ranging from 36 to 40 degrees C) across the western grain areas (Cordoba and La Pampa) eased by week's end but not before reducing soil moisture. Moderate rain (10-35 mm) favored cotton in northern Argentina and soybeans and cotton in southern Paraguay. Temperatures averaged 1 to 4 degrees C above normal across central Argentina and southern Brazil.

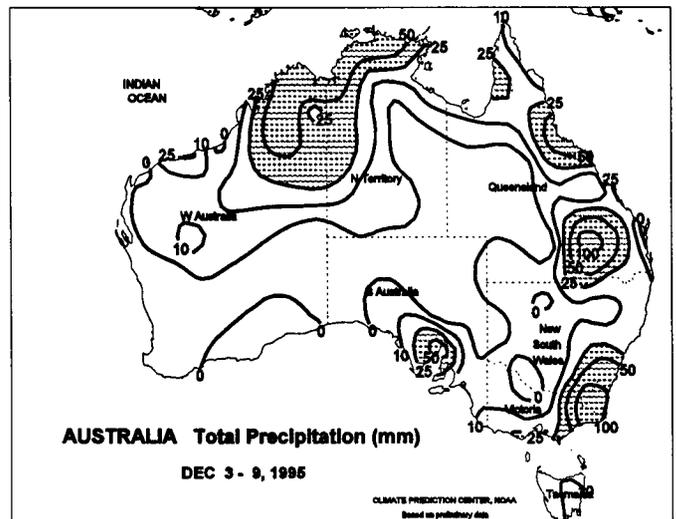
**SOUTH AMERICA Total Precipitation (mm)
DEC 3 - 9, 1995**



AUSTRALIA

Scattered showers continued throughout eastern Australia, but the heaviest rain (25-50 mm or more) fell east of the Dividing Range from northern Queensland to eastern Victoria. While benefiting Queensland's sugarcane, the rain likely caused some coastal flooding in the southeast. Farther inland, rainfall was generally less than 25 mm in the main crop areas of Queensland and New South Wales, although a few scattered heavier showers (25-50 mm or more) occurred. The generally drier conditions were welcome for summer crop development and winter grain harvests. Temperatures in the east averaged 1 to 3 degrees C below normal, ending a brief heat wave in the western pasture lands. Favorably warmer, drier weather prevailed again in western and southern winter grain areas, aiding dry down and harvesting. In New Zealand, mild, dry weather dominated main pasture areas.

**AUSTRALIA Total Precipitation (mm)
DEC 3 - 9, 1995**



Spring Rains Help Australia's Summer Crops

Since early September, copious rains have fallen throughout major summer crop regions of Queensland and New South Wales (see figures 1 and 2). Unlike last year, when Australia was in the midst of a severe drought, newly planted cotton and sorghum (figure 3) are enjoying adequate to abundant moisture for early development. However, a few locations along the states' border experienced local flooding and need a few weeks of drier weather for proper crop establishment.

The Climate Prediction Center of the National Weather Service recently issued an ENSO (El Niño/Southern Oscillation) advisory stating that a cold episode is developing in the tropical Pacific. If a cold episode (commonly known as "La Niña") were to continue developing, eastern Australia would have a higher likelihood of a warmer- and wetter-than-normal growing season.

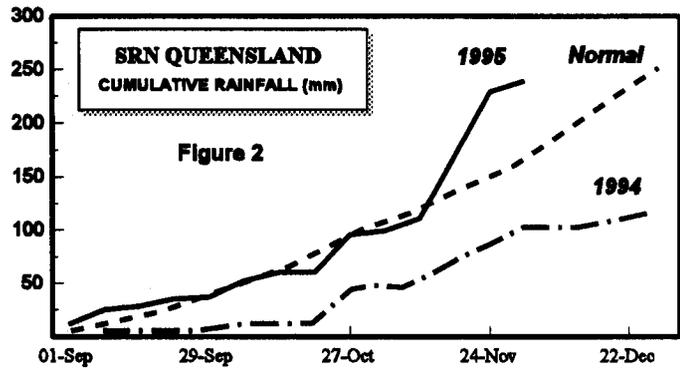
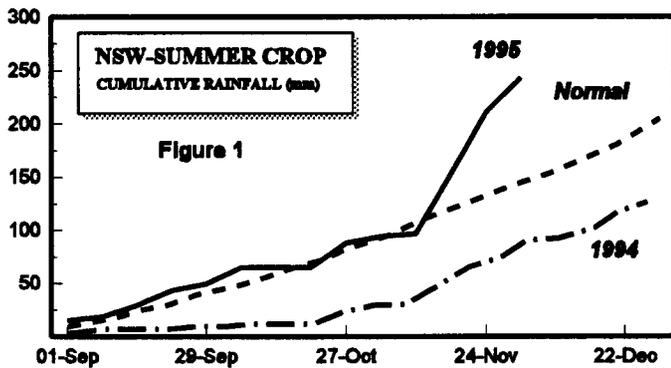
The ENSO advisories are available on the World Wide Web at <http://nic.fb4.noaa.gov>.

-- Mark Brusberg
Brian Morris

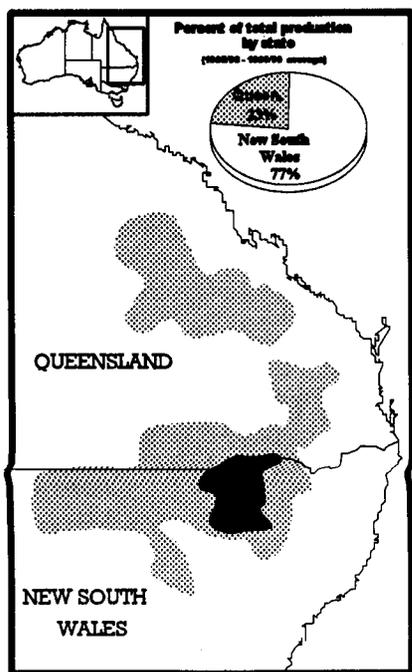
SOURCES:

Major World Crop Areas and Climatic Profiles (Agricultural Handbook No. 664, 1994).

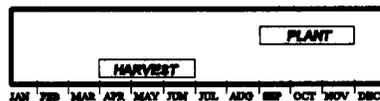
Ropelewski, C. F. and M. S. Halpert, "Global and Regional Scale Precipitation Associated with El Niño/Southern Oscillation." Monthly Weather Review. 115, 1987, pp. 1606-1626.



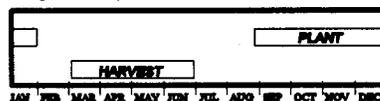
Cotton



Cotton crop calendar for eastern Australia



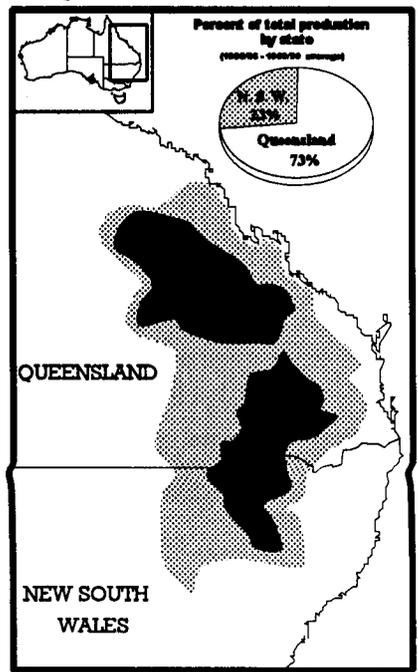
Sorghum crop calendar for eastern Australia



■ Major growing areas
 ■ Minor growing areas

Figure 3

Sorghum



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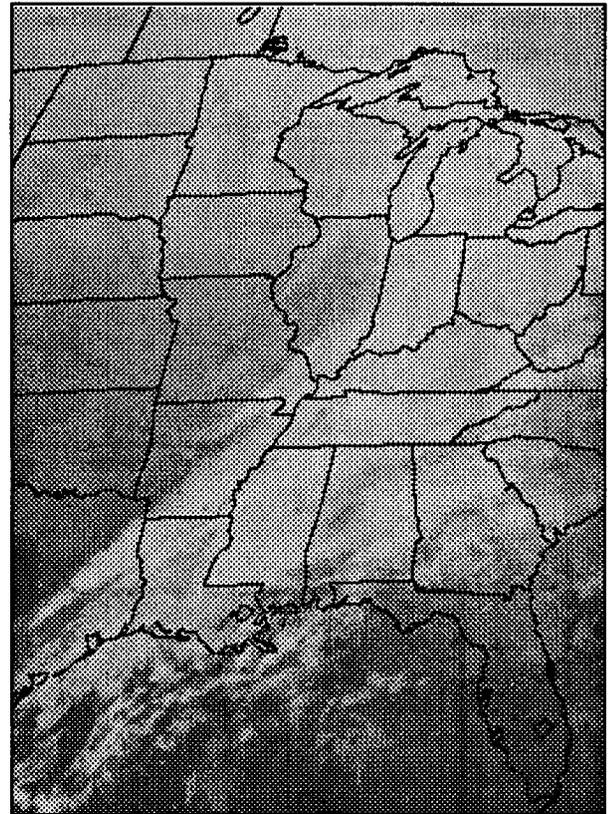
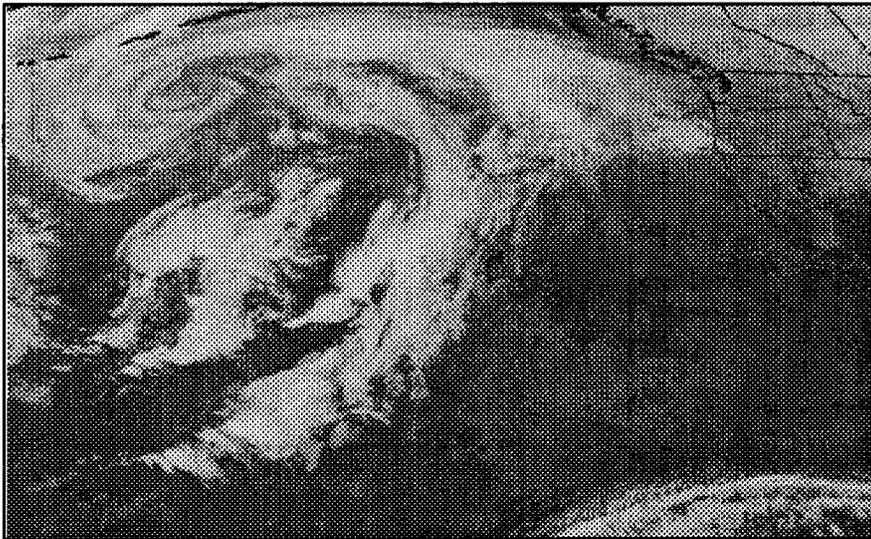
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A massive area of storminess over the northeastern Pacific Ocean (GOES-7 IR, December 7, 1995, 19:01 UTC), above, forces upper-level ridge formation in the extreme eastern Pacific, which in turn dislodges bitterly cold air from Alaska and western Canada. A day later, an arctic front surges into the lower 48 (GOES-8 IR, December 8, 1995, 20:45 UTC), right, preceded by a swath of rain and snow.

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