

# 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

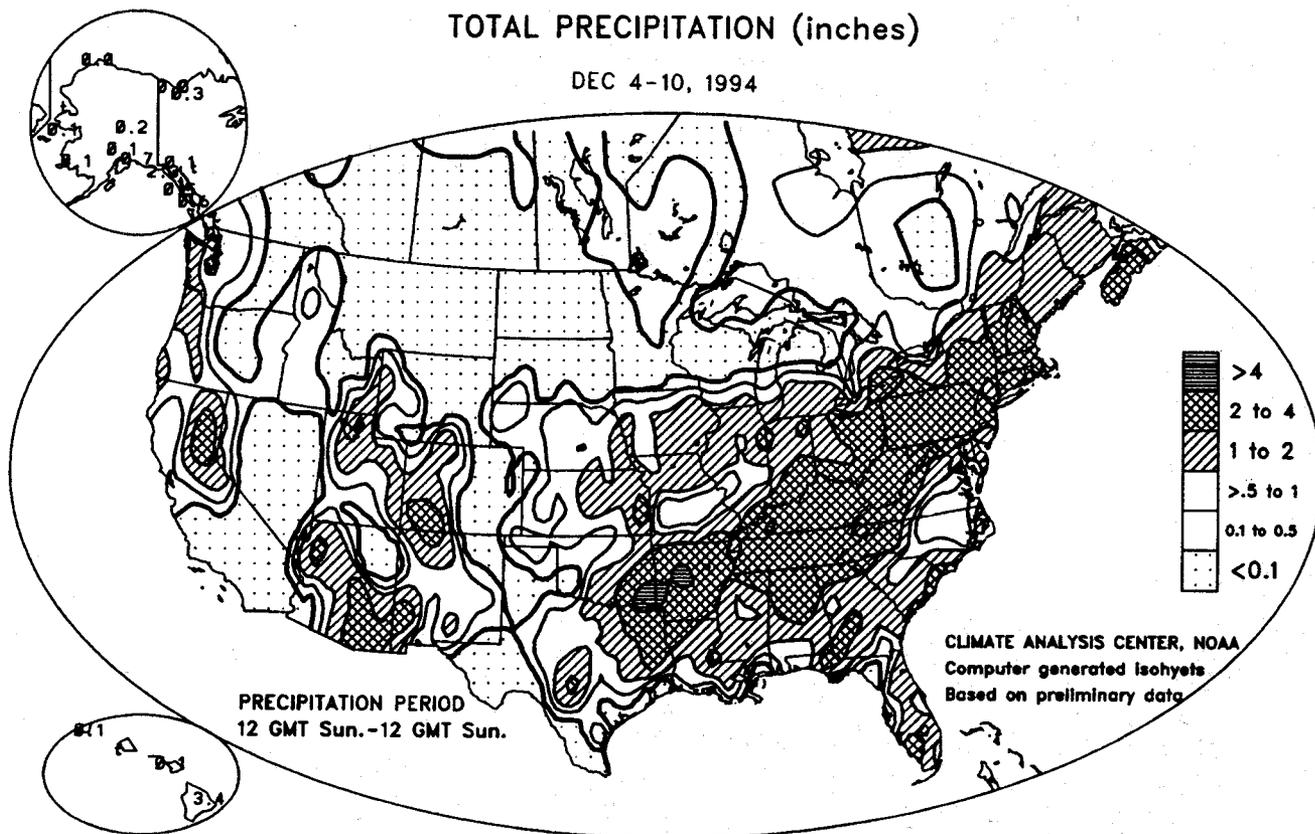
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December 13, 1994

## TOTAL PRECIPITATION (inches)

DEC 4-10, 1994



## HIGHLIGHTS

December 4 - 10, 1994

A shallow wedge of cold air seeped southward across the Nation, providing an overrunning surface for abundant sub-tropical energy. A midweek surge of moisture dumped heavy snow from Nebraska to New York and brought sleet and freezing rain to the central Plains, while a late-week system spread heavy precipitation from northeastern Texas into the Northeast. Preceding the cold air's advance, about 30 daily-record highs were established in the Atlantic and Gulf Coast States. The cold outbreak was responsible for 10 daily-record lows, including a reading of -28°F in Williston, ND on Monday.

Early in the week, the storm system responsible for last week's heavy rain in the central Gulf Coast States accelerated northeastward and weakened. Nevertheless, 1- to 2-inch totals were common along the storm's path from

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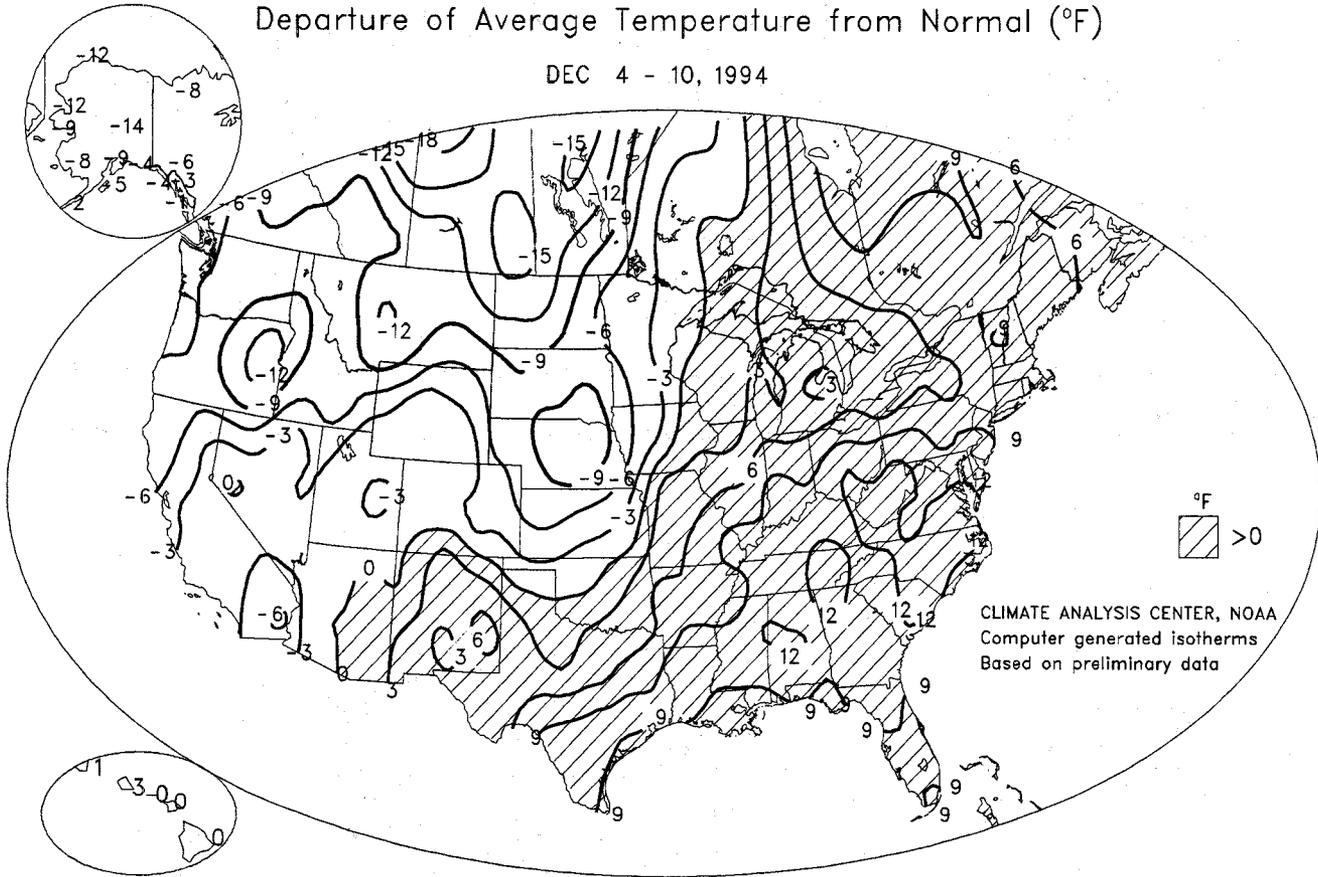
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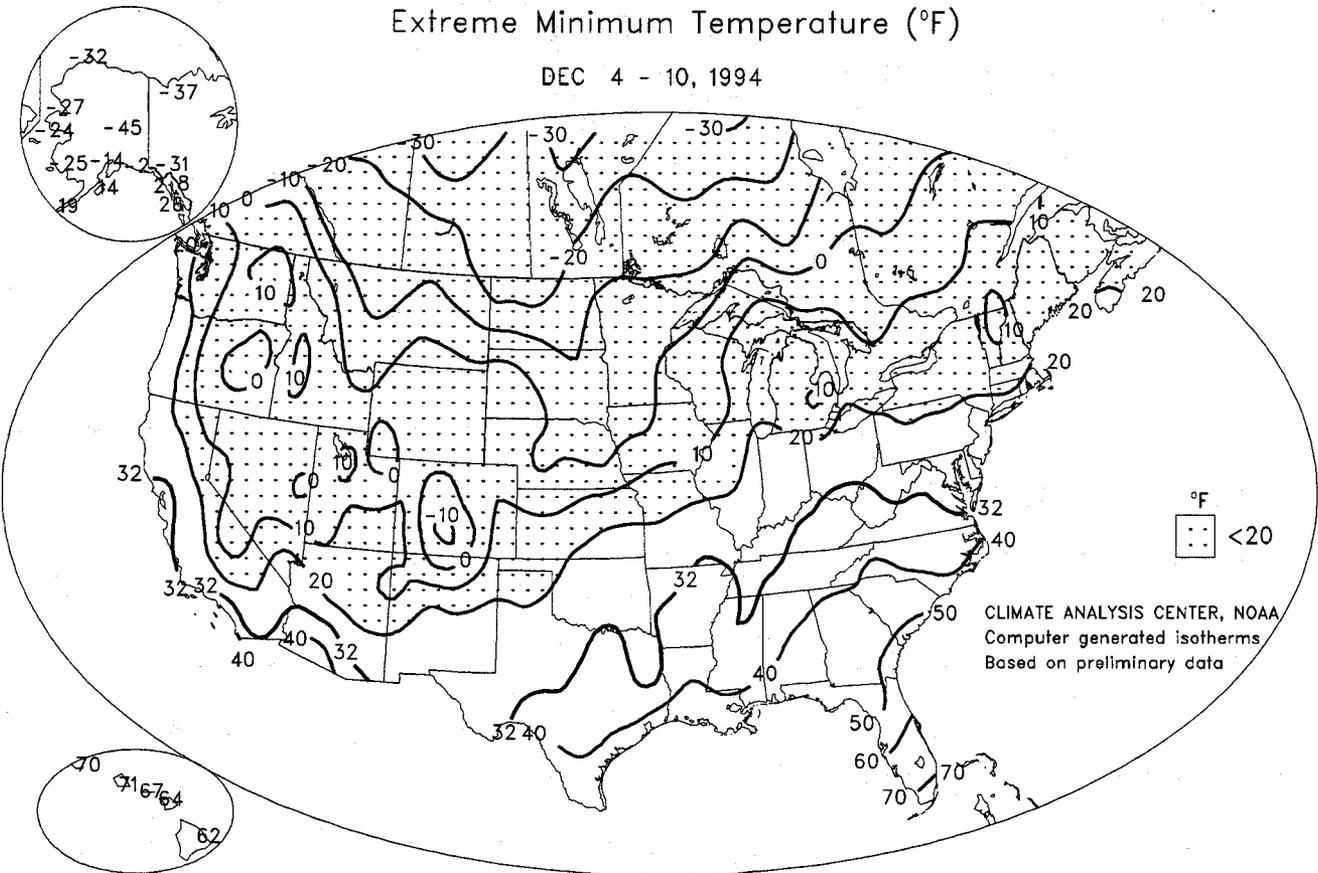
Departure of Average Temperature from Normal (°F)

DEC 4 - 10, 1994



Extreme Minimum Temperature (°F)

DEC 4 - 10, 1994



# National Weather Data for Selected Cities

Weather Data for the Week Ending December 10, 1994

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		92 AND BELOW	
																90 AND ABOVE	92 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	66	51	72	37	59	12	2.6	1.5	1.6	3.3	205	59.6	117	96	80	0	0	3	2
MOBILE	72	55	78	43	63	9	.3	-.9	.2	2.4	142	54.2	90	98	71	0	0	2	0
MONTGOMERY	69	56	76	45	62	13	2.0	.8	1.2	2.7	170	57.5	112	97	77	0	0	3	2
AK ANCHORAGE	17	0	32	-14	9	-8	.3	.0	.2	.3	83	11.9	78	87	66	0	7	2	0
BARROW	-16	-27	-6	-32	-22	-12	.4	.0	.3	.1	200	4.2	98	75	66	0	7	0	0
FAIRBANKS	-8	-29	27	-45	-18	-14	.2	.0	.2	.3	89	9.5	92	80	71	0	7	4	0
JUNEAU	30	21	38	8	25	-3	.2	-.8	.2	.2	13	51.8	101	95	83	0	6	1	0
KODIAK	32	21	38	14	26	-5	2.9	1.5	1.5	4.3	206	79.5	127	91	62	0	5	4	2
Nome	5	-7	29	-24	-1	-9	.1	-.1	-.1	.1	36	16.9	117	75	65	0	7	2	0
AZ PHOENIX	63	46	67	36	55	-1	1.3	1.1	.7	1.3	419	7.1	100	85	43	0	0	3	2
PRESOTT	48	28	54	16	38	0	.4	-.1	.4	.4	84	11.9	64	78	37	0	5	2	0
TUCSON	63	43	72	32	53	0	2.5	2.3	2.1	2.5	794	10.5	93	89	49	0	1	3	1
YUMA	63	46	67	41	54	-3	.1	.0	.1	.1	62	2.2	78	73	43	0	0	1	0
AR FORT SMITH	56	42	71	32	49	6	2.7	1.9	2.1	2.7	241	53.1	136	93	66	0	1	2	2
LITTLE ROCK	57	47	65	35	52	7	3.1	2.0	1.4	3.1	191	54.0	117	92	65	0	0	4	2
CA BAKERSFIELD	56	37	62	28	47	-2	.2	-.1	.1	.1	40	5.5	103	87	48	0	2	0	0
EUREKA	50	34	52	29	42	-7	.5	-.9	.2	1.6	80	29.9	89	95	73	0	3	4	0
FRESNO	54	38	59	29	46	0	.7	-.3	.3	.7	2	8.9	93	91	49	0	2	0	0
LOS ANGELES	66	49	69	44	58	0	.7	-.4	.3	.7	0	7.0	65	83	36	0	0	0	0
REDDING	51	31	57	24	41	-5	.3	-1.0	.3	1.6	92	21.8	74	91	50	0	4	1	0
SACRAMENTO	51	36	54	29	44	-3	.7	-.2	-.7	.9	114	7.7	49	97	59	0	2	1	1
SAN DIEGO	64	48	68	40	56	-2	.2	-.3	.2	.7	4	8.7	98	80	47	0	0	1	0
SAN FRANCISCO	53	43	56	40	48	-2	.1	-.5	-.1	.3	30	17.1	98	80	56	0	0	3	0
CO DENVER	40	20	61	13	30	-2	.1	-.1	-.1	.1	46	10.8	72	92	52	0	7	2	0
GRAND JUNCTION	40	25	51	13	33	-1	.6	-.4	.5	.6	254	7.0	70	92	59	0	6	3	1
PUEBLO	39	16	65	-4	27	-6	.1	.0	.1	.1	44	15.2	139	95	65	0	7	1	0
CT BRIDGEPORT	49	36	58	23	43	5	1.7	.9	1.3	1.7	148	39.0	99	84	57	0	2	4	1
HARTFORD	47	30	63	18	39	6	2.6	1.7	1.6	2.6	200	50.2	121	91	56	0	4	4	2
DC WASHINGTON	58	44	71	34	51	9	1.6	.9	.6	1.6	158	36.9	101	88	62	0	0	4	2
FL PANAMA CITY	70	55	75	51	63	8	2.3	1.3	2.1	2.3	159	51.6	83	99	79	0	0	2	1
DAYTONA BEACH	78	62	83	57	70	9	.1	-.4	.1	.2	19	64.1	139	100	66	0	0	1	0
JACKSONVILLE	78	60	84	52	69	9	.8	-.2	.6	.8	95	64.2	135	98	64	0	0	2	1
KEY WEST	83	74	86	72	79	7	1.1	-.7	1.0	1.4	197	43.6	114	90	71	0	0	2	1
MIAMI	84	73	85	71	78	8	.2	-.3	.2	1.4	233	76.0	139	91	65	0	0	3	0
ORLANDO	81	64	85	60	72	9	.7	-.2	.6	.7	101	65.6	140	99	71	0	0	3	1
TALLAHASSEE	75	54	78	48	64	10	1.1	.0	1.0	1.1	69	88.3	142	97	69	0	0	2	1
TAMPA	81	63	86	55	72	9	.0	-.5	.0	.0	0	45.7	108	98	67	0	0	0	0
WEST PALM BEACH	82	69	84	66	76	7	.9	.4	.7	1.1	147	68.9	119	96	70	0	0	2	1
GA ATLANTA	67	52	72	44	59	13	1.2	.2	.6	1.2	86	59.7	125	99	74	0	0	2	1
AUGUSTA	70	48	75	42	59	10	.8	-.1	.6	.8	76	45.2	107	97	69	0	0	2	1
MACON	68	52	71	44	60	10	1.8	.9	1.5	1.8	143	59.4	143	98	72	0	0	3	1
SAVANNAH	73	58	77	52	65	12	1.6	1.0	1.1	1.6	183	66.5	141	98	72	0	0	3	1
HI HILO	79	66	83	62	73	0	3.4	.5	1.3	4.6	108	180.4	149	94	77	0	0	6	3
HONOLULU	84	72	85	71	78	3	.7	.0	.7	.7	2	14.0	72	80	56	0	0	1	0
KAHULUI	80	68	81	64	74	0	.1	-.6	.1	.1	12	11.1	60	80	62	0	0	2	0
LIHUE	79	71	80	70	75	1	.1	-1.0	.1	.1	8	27.0	68	77	64	0	0	1	0
ID BOISE	30	16	32	11	23	-9	.3	.0	.1	1.4	307	9.0	81	93	63	0	7	5	0
LEWISTON	30	20	38	12	25	-11	.7	-.3	.7	.7	0	8.6	74	84	60	0	7	0	0
POCATELLO	29	11	41	1	20	-7	.9	.6	.4	1.0	283	8.7	76	92	74	0	7	4	0
IL CHICAGO	40	30	56	21	35	5	1.2	.6	.4	1.2	131	29.4	86	94	76	0	4	5	0
MOLINE	38	25	56	11	32	3	1.2	.6	.8	1.2	153	31.7	84	95	72	0	6	5	1
PEORIA	40	30	56	14	35	5	1.7	1.1	1.4	1.8	208	24.8	71	95	83	0	4	4	1
QUINCY	41	30	60	15	36	4	1.1	.5	.9	1.1	124	20.1	53	88	71	0	6	2	1
ROCKFORD	36	23	53	16	30	2	.9	.4	.7	.9	127	36.4	104	100	85	0	5	5	1
SPRINGFIELD	45	33	62	17	39	6	1.2	.5	.9	1.3	134	34.8	104	94	79	0	3	4	1
IN EVANSVILLE	53	42	63	30	48	8	1.4	.5	.7	1.4	105	35.6	82	96	78	0	1	4	2
FORT WAYNE	44	34	60	23	39	7	1.6	.9	.6	1.6	166	28.7	87	99	86	0	4	6	1
INDIANAPOLIS	49	39	57	25	44	10	1.0	.2	.4	1.0	91	31.0	82	93	75	0	2	4	0
SOUTH BEND	40	31	56	20	36	4	1.6	.8	.8	1.7	148	37.0	100	94	81	0	4	6	2
IA DES MOINES	32	20	49	6	26	-1	1.8	1.5	1.4	1.8	371	27.6	83	96	75	0	6	4	1
SIOUX CITY	24	9	36	-3	17	-8	.6	.4	.5	.6	200	25.7	102	90	75	0	7	3	1
WATERLOO	31	17	51	4	24	0	1.0	.6	.7	1.0	200	34.9	106	97	76	0	6	4	1
KS CONCORDIA	35	19	61	12	27	-5	1.0	.8	1.0	1.0	327	17.5	62	95	70	0	7	1	1
DODGE CITY	36	23	61	16	30	-5	.6	.4	.6	.6	233	18.6	88	95	74	0	7	2	1
GOODLAND	32	15	45	9	24	-7	.3	.1	.2	.3	156	15.0	84	95	78	0	7	2	0
TOPEKA	38	26	62	17	32	-1	1.0	.7	1.0	1.0	196	26.1	76	96	69	0	6	1	1
WICHITA	41	27	64	20	34	-3	.4	.0	.4	.4	73	23.9	70	97	73	0	6	1	0
KY BOWLING GREEN	56	45	61	32	50	10	2.2	1.0	1.1	2.2	132	48.5	102	99	88	0	1	3	2
LEXINGTON	54	42	60	31	48	10	2.9	2.0	1.4	2.9	220	44.7	107	97	79	0	1	4	2
LOUISVILLE	53	44	60	32	49	9	2.5	1.7	1.2	2.5	204	35.1	84	94	79	0	1	4	3
LA BATON ROUGE	71	53	79	41	62	8	.3	-1.0	.3	1.1	64	57.3	100	100	79	0	0	1	0
LAKE CHARLES	73	58	81	43	66	10	1.0	-.2	.5	3.9	245	41.1	80	99	77	0	0	2	0
NEW ORLEANS	74	55	82	44	65	9	.3	-1.0	.2	1.5	80	48.8	84	96	71	0	0	4	0
SHREVEPORT	68	52	80	41	60	11	3.5	2.4	1.1	3.5	226	50.1	109	97	71	0	0	5	3

Based on 1961-90 normals.

Weather Data for the Week Ending December 10, 1994

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	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
ME CARIBOU	31	21	44	11	26	7	1.2	.4	.7	1.4	128	36.7	106	84	63	0	6	6	5	1		
PORTLAND	45	27	56	15	36	7	1.8	.7	1.4	1.8	116	40.0	97	92	65	0	5	5	3	2		
MD BALTIMORE	56	40	68	27	48	9	1.6	.8	.8	1.6	145	42.9	112	91	66	0	2	2	4	1		
SALISBURY	60	44	70	27	52	11	1.0	.2	.5	1.0	83	39.7	93	94	67	0	2	3	1	2		
MA BOSTON	50	36	65	24	43	7	2.1	1.2	1.4	2.1	158	44.4	114	86	52	0	3	4	1	1		
CHATHAM	51	40	59	28	46	9	.4	-.7	.3	.4	25	35.9	85	89	63	0	1	2	4	0		
MI ALPENA	37	24	49	11	30	4	T	-.4	T	T	4	29.4	107	95	72	0	5	1	1	0		
DETROIT	43	31	58	15	37	6	1.2	.5	.7	1.2	128	29.9	97	97	76	0	5	6	1	0		
FLINT	39	25	53	4	32	2	1.1	-.6	.5	1.2	161	33.1	115	98	78	0	5	5	1	0		
GRAND RAPIDS	38	30	53	21	34	4	.8	-.1	.3	.8	80	46.3	135	94	78	0	5	1	6	0		
HOUGHTON LAKE	35	24	48	10	30	4	.1	-.4	.0	.1	7	27.2	101	94	74	0	5	4	6	0		
LANSING	38	26	52	11	32	3	.9	-.4	.4	1.0	142	34.9	116	99	82	0	5	5	6	0		
MARQUETTE	29	18	38	8	24	3	.2	-.4	.1	.2	25	34.1	72	92	65	0	6	5	0	0		
MUSKOGON	38	27	51	17	33	2	.7	.0	.4	.7	68	32.7	107	95	75	0	5	5	0	0		
SAULT ST. MARIE	32	22	40	12	27	5	.1	-.6	.1	.1	12	27.5	85	89	60	0	6	4	0	0		
MN ALEXANDRIA	20	4	30	-5	12	-5	.1	-.1	.1	.1	50	18.9	75	92	72	0	7	1	0	0		
DULUTH	22	5	35	-4	13	-3	.1	-.2	.1	.1	30	29.0	100	86	70	0	7	1	0	0		
INT'L FALLS	18	-3	33	-10	8	-4	.3	-.1	.2	.3	96	24.2	102	90	76	0	7	3	0	0		
MINNEAPOLIS	25	14	35	3	20	-2	.2	-.1	.2	.2	42	29.3	106	87	69	0	7	1	0	0		
ROCHESTER	26	15	38	2	21	0	.3	.0	.1	.3	66	30.9	106	94	75	0	7	3	0	0		
MS GREENWOOD	64	53	69	32	59	10	.7	-.7	.4	1.0	51	44.6	106	94	75	0	7	1	0	0		
JACKSON	67	50	76	35	58	10	.7	-.7	.4	1.0	94	54.7	108	98	80	0	0	3	0	0		
MERIDIAN	69	54	75	38	61	11	1.1	-.3	.9	1.5	296	64.3	122	96	79	0	0	3	1	0		
MO CAPE GIRARDEAU	53	43	62	29	48	9	1.5	.5	.9	1.5	102	43.9	101	99	74	0	3	3	2	0		
COLUMBIA	43	33	65	19	38	5	1.4	-.3	.3	1.4	47	37.8	102	96	82	0	4	2	0	0		
KANSAS CITY	39	27	62	15	33	0	1.4	1.0	1.4	1.4	255	38.0	77	96	76	0	6	1	1	0		
SAINT LOUIS	51	37	65	25	44	8	.2	-.5	.1	.3	28	33.5	94	95	77	0	1	4	0	0		
SPRINGFIELD	51	37	70	23	44	6	.3	-.5	.3	.3	25	48.2	115	97	75	0	4	3	0	0		
MT BILLINGS	25	10	32	4	18	-10	.3	-.1	.1	.2	75	13.6	93	77	54	0	7	0	0	0		
GLASGOW	17	-4	30	-13	7	-12	T	-.1	T	T	42	9.6	90	86	66	0	7	0	0	0		
GREAT FALLS	22	2	34	-15	12	-14	T	-.2	T	T	16	9.7	67	89	60	0	7	0	0	0		
HAVRE	20	-4	32	-16	8	-12	T	-.1	T	T	0	7.1	66	84	64	0	7	0	0	0		
HELENA	24	4	33	-7	14	-9	T	-.1	T	T	11	7.4	66	89	61	0	7	1	0	0		
KALISPELL	24	9	33	1	16	-8	T	-.4	T	T	7	10.9	71	90	64	0	7	1	0	0		
MILES CITY	24	4	34	-3	14	-8	T	-.4	T	T	10	9.5	70	88	58	0	7	0	0	0		
MISSOULA	26	10	32	3	18	-7	.1	-.2	.1	.3	100	11.2	89	87	66	0	7	1	0	0		
NE GRAND ISLAND	28	9	47	0	18	-10	.4	-.2	.4	.4	137	22.5	92	90	73	0	7	1	0	0		
LINCOLN	29	12	50	-1	21	-8	.5	.3	.5	.5	159	20.1	72	95	71	0	7	1	1	0		
NORFOLK	25	6	38	-4	16	-10	.5	.3	.5	.5	181	28.3	115	86	70	0	7	3	0	0		
NORTH PLATTE	30	6	41	-3	18	-8	.3	.2	.3	.3	162	18.5	97	92	66	0	7	1	0	0		
OMAHA	30	13	48	2	22	-6	.5	.2	.5	.5	127	29.4	100	90	73	0	7	1	0	0		
SCOTTSBLUFF	31	8	39	-2	19	-9	.4	.2	.2	.4	180	15.4	104	92	60	0	7	3	0	0		
VALENTINE	29	6	45	1	17	-10	.2	.1	.2	.2	100	17.6	79	85	57	0	7	1	0	0		
NV ELY	34	11	42	-5	22	-5	.2	.0	.2	.2	75	8.5	88	95	53	0	7	1	0	0		
LAS VEGAS	55	36	60	27	46	-1	.0	-.1	.0	.0	0	1.5	39	72	25	0	2	0	0	0		
RENO	44	25	50	17	34	0	T	-.2	T	T	10	5.0	74	93	41	0	5	0	0	0		
WINNEBOCCA	36	20	42	12	28	-3	T	-.2	T	T	23	7.2	93	92	65	0	7	1	0	0		
NH CONCORD	45	26	62	10	35	8	1.4	.6	1.0	1.4	127	33.3	97	97	59	0	6	4	1	0		
NJ ATLANTIC CITY	58	37	66	21	47	9	1.9	1.1	.9	1.9	170	42.2	111	94	66	0	2	5	2	0		
NM ALBUQUERQUE	50	32	59	21	41	4	.6	.4	.3	.6	344	11.1	131	79	37	0	4	2	0	0		
CLOVIS	59	33	76	23	46	6	.4	.2	.2	.4	180	10.3	60	84	33	0	3	2	0	0		
ROSWELL	61	36	72	28	49	6	T	-.1	T	T	0	7.6	62	77	28	0	2	0	0	0		
NY ALBANY	44	29	54	14	36	7	1.7	1.0	1.0	1.7	171	33.9	99	94	67	0	5	5	1	0		
BINGHAMTON	40	29	54	17	35	6	2.2	1.5	1.5	2.2	216	41.3	118	91	72	0	4	6	1	0		
BUFFALO	42	30	54	16	36	4	2.1	1.2	.6	2.1	165	36.2	100	93	71	0	4	5	2	0		
NEW YORK	54	40	64	28	47	8	1.7	.9	.8	1.7	148	42.5	107	85	53	0	2	5	2	0		
ROCHESTER	43	32	56	18	38	6	1.9	1.2	.7	1.9	197	29.1	96	91	69	0	4	5	1	0		
SYRACUSE	42	29	56	16	36	4	1.8	1.0	1.1	1.8	162	38.4	104	93	70	0	4	4	1	0		
NC ASHEVILLE	62	45	70	40	53	12	2.5	1.5	2.0	2.5	172	57.0	107	97	72	0	0	3	1	0		
CHARLOTTE	65	51	75	42	58	13	.5	.2	.4	.5	49	35.3	87	93	59	0	0	2	0	0		
GREENSBORO	63	46	74	33	54	12	.2	-.5	.2	.2	20	34.2	85	91	57	0	2	0	0	0		
HATTERAS	68	55	72	47	62	11	2.5	1.5	1.3	2.5	174	66.5	125	91	59	0	0	2	2	0		
NEW BERN	69	52	76	39	60	11	.2	-.6	.2	.2	17	34.7	67	95	63	0	0	2	0	0		
RALEIGH	66	47	77	33	57	12	.2	-.6	.1	.2	17	35.3	90	93	46	0	0	4	0	0		
WILMINGTON	69	52	76	42	61	12	1.3	.5	.8	1.3	109	55.8	103	99	65	0	0	3	1	0		
ND BISMARCK	16	-3	32	-11	6	-11	T	-.1	T	T	6	18.7	123	84	67	0	7	1	0	0		
FARGO	22	2	29	-5	12	-3	T	-.1	T	T	0	22.9	120	85	66	0	7	0	0	0		
GRAND FORKS	17	-1	27	-8	8	-6	T	-.1	T	T	0	23.1	129	87	59	0	7	0	0	0		
WILLISTON	12	-12	28	-28	0	-16	.2	.0	.1	.7	412	15.6	117	86	68	0	7	2	0	0		
OH AKRON-CANTON	48	37	60	26	43	9	2.4	1.7	.6	2.4	237	39.9	114	93	76	0	4	6	3	0		
CINCINNATI	51	41	59	30	46	10	2.2	1.5	1.1	2.2	205	37.6	96	97	82	0	2	6	2	0		
CLEVELAND	47	37	61	29	42	8	2.2	1.4	.6	2.2	206	28.7	83	93	74	0	2	6	2	0		
COLUMBUS	51	40	61	28	45	12	1.7	.9	.5	1.7	158	31.1	87	95	78	0	3	6	0	0		
DAYTON	49	39	59	29	44	10	1.9	1.2	.6	1.9	191	34.0	98	96	79	0	3	6	2	0		

Based on 1961-90 normals.

Weather Data for the Week Ending December 10, 1994

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	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
TOLEDO	44	34	59	19	39	8	2.1	1.3	.7	2.1	205	28.3	91	97	82	0	0	4	6	2	2	
YOUNGSTOWN	46	35	60	24	40	8	2.2	1.5	.6	2.2	218	37.1	105	94	77	0	0	4	6	1	1	
OK OKLAHOMA CITY	50	34	69	26	42	0	.9	.5	.8	.9	172	27.4	84	96	69	0	0	4	2	0	0	
TULSA	50	37	63	28	43	2	.5	-.1	.4	.5	61	48.7	124	99	72	0	0	4	2	0	0	
OR ASTORIA	43	32	47	24	38	-6	2.2	-.2	.5	2.7	80	63.8	108	96	74	0	0	4	6	2	0	
BURNS	25	4	33	-1	15	-12	.2	-.1	.1	.2	38	4.9	53	89	61	0	0	7	2	0	0	
MEDFORD	43	27	47	24	35	-4	.3	-.7	.3	.2	16	11.2	67	97	57	0	0	7	2	0	0	
PENDLETON	32	20	41	12	26	-10	.1	-.3	.1	.2	29	11.8	107	86	55	0	0	7	1	0	0	
PORTLAND	40	31	44	24	36	-5	.5	-.9	.2	.7	34	30.8	96	88	63	0	0	3	5	0	0	
SALEM	43	29	51	25	36	-5	.9	-.7	.5	1.1	49	33.8	98	90	57	0	0	7	4	0	0	
PA ALLENTOWN	51	36	63	22	43	9	2.4	1.6	1.3	2.4	206	48.0	116	93	62	0	0	2	4	2	2	
ERIE	45	35	58	24	40	5	2.6	1.7	.7	2.6	203	39.9	102	93	65	0	0	3	6	2	2	
HARRISBURG	51	39	63	27	45	9	2.0	1.3	1.1	2.0	184	45.9	120	81	54	0	0	2	5	2	0	
PHILADELPHIA	56	40	66	28	48	11	1.4	.6	.7	1.4	118	44.3	102	91	58	0	0	2	5	2	0	
PITTSBURGH	52	39	63	26	45	11	1.7	1.0	.4	1.7	178	41.1	118	86	68	0	0	3	6	0	0	
SCRANTON	47	35	58	21	41	8	1.7	1.0	.8	1.7	188	41.5	120	89	61	0	0	3	6	2	0	
RI PROVIDENCE	52	35	62	22	43	8	1.8	.8	1.1	1.8	126	42.0	99	90	53	0	0	3	4	2	2	
SC CHARLESTON	72	57	79	50	65	12	2.2	1.6	1.3	2.3	241	66.3	135	96	64	0	0	0	3	2	0	
COLUMBIA	69	51	77	45	60	11	.6	-.2	.4	.6	55	46.8	99	95	58	0	0	0	2	0	0	
FLORENCE	70	54	78	47	62	13	.8	-.2	.7	.9	91	40.2	97	97	56	0	0	0	3	1	0	
GREENVILLE	64	48	74	41	56	11	1.4	.5	1.1	1.4	108	48.9	101	93	59	0	0	0	2	1	0	
SD ABERDEEN	18	-2	31	-15	8	-10	.2	-.1	.1	.2	100	20.5	99	88	74	0	0	7	3	0	0	
HURON	21	5	32	-6	13	-8	.1	.0	.0	.1	75	20.4	103	89	76	0	0	7	4	0	0	
RAPID CITY	29	11	39	8	20	-6	.1	-.1	.0	.1	31	10.2	63	88	59	0	0	7	3	0	0	
STOUX FALLS	22	6	33	-4	14	-7	.2	.0	.1	.2	62	22.7	97	91	79	0	0	7	4	0	0	
TN CHATTANOOGA	63	48	67	38	55	12	2.8	1.6	1.3	3.5	212	73.3	147	98	73	0	0	0	3	2	0	
KNOXVILLE	62	47	66	38	55	12	1.5	.5	.9	1.6	108	62.8	143	99	78	0	0	0	3	1	0	
MEMPHIS	58	47	63	33	52	7	3.8	2.4	1.4	3.8	194	47.3	98	96	79	0	0	0	5	3	0	
NASHVILLE	60	47	65	32	53	10	2.3	1.2	1.1	2.5	163	60.0	136	93	77	0	0	1	4	2	0	
TX ABILENE	59	40	77	29	49	2	-.1	-.1	.1	.2	66	27.6	116	97	59	0	0	1	2	0	0	
AMARILLO	51	27	73	19	39	0	.1	.0	.1	.1	50	17.1	89	92	50	0	0	6	1	0	0	
AUSTIN	73	53	81	40	63	9	.3	-.1	.2	.7	105	36.2	118	96	66	0	0	0	3	0	0	
BRAUNTOWN	73	56	80	42	65	9	.2	-.9	.2	.9	57	64.2	119	100	67	0	0	0	1	0	0	
BROWNSVILLE	80	61	86	47	71	7	.7	-.3	.7	.1	21	22.2	86	97	60	0	0	0	1	0	0	
CORPUS CHRISTI	78	61	85	45	69	9	.8	.5	.7	2.9	733	33.8	116	96	70	0	0	0	2	1	0	
DEL RIO	74	54	81	42	64	10	.2	-.1	.1	.2	66	18.9	79	88	61	0	0	0	3	0	0	
EL PASO	62	41	71	33	51	6	.3	.2	.3	.3	174	4.2	49	83	37	0	0	0	2	0	0	
FORT WORTH	60	45	73	35	52	5	1.5	1.0	.7	1.5	217	42.6	119	98	69	0	0	0	2	2	0	
GALVESTON	71	62	78	48	67	8	.7	-.8	.7	.6	51	23.7	59	97	74	0	0	0	1	0	0	
HOUSTON	74	56	83	38	65	11	.4	-.7	.4	2.1	130	40.4	79	98	69	0	0	0	2	0	0	
LUBBOCK	60	33	74	23	47	4	.7	-.1	.7	.7	20	13.0	71	96	40	0	0	3	1	0	0	
MIDLAND	64	39	76	28	51	4	.7	-.1	.7	.7	6	9.7	65	96	43	0	0	1	0	0	0	
SAN ANGELO	65	42	79	31	54	6	.4	.2	.4	.4	129	18.6	93	97	61	0	0	1	1	0	0	
SAN MARCO	76	54	83	34	65	11	.1	-.3	.1	.6	104	37.5	125	94	63	0	0	0	3	0	0	
VICTORIA	76	58	82	38	67	10	.2	-.5	.1	3.8	390	42.4	98	97	64	0	0	0	3	0	0	
WACO	63	47	76	33	55	5	1.1	.7	1.0	1.1	171	30.0	98	98	73	0	0	0	3	1	0	
WICHITA FALLS	58	38	75	28	48	3	.4	.1	.3	.5	90	13.4	43	92	57	0	0	2	2	0	0	
UT CEDAR CITY	37	19	44	3	28	-4	.1	-.1	.1	.1	48	9.0	82	88	49	0	0	5	1	0	0	
SALT LAKE CITY	40	26	51	16	33	1	.5	.1	.3	.5	100	14.4	94	84	58	0	0	5	4	0	0	
VT BURLINGTON	40	26	53	12	33	7	1.2	.6	1.0	1.3	144	34.5	105	87	62	0	0	4	5	1	0	
VA NORFOLK	68	51	78	34	60	14	.7	.0	.6	.7	69	51.9	122	85	59	0	0	0	2	1	0	
RICHMOND	64	45	76	31	54	12	.7	-.1	.5	.7	63	43.4	106	89	59	0	0	2	3	1	0	
ROANOKE	59	43	72	36	51	11	1.7	1.1	.8	1.7	178	42.0	107	88	57	0	0	0	3	2	0	
WA QUILLAYUTE	41	31	46	21	36	-3	2.8	-.7	1.4	3.4	67	87.9	93	97	88	0	0	3	6	2	0	
SEATTLE-TACOMA	41	32	46	21	36	-3	.3	-1.0	.1	.7	37	27.4	82	88	65	0	0	3	6	0	0	
SPOKANE	27	16	32	10	22	-7	.1	-.5	.0	.1	8	11.8	79	92	69	0	0	7	3	0	0	
YAKIMA	33	17	43	8	25	-6	.7	-.3	.7	.7	2	5.5	78	87	65	0	0	7	1	0	0	
WV BECKLEY	55	44	60	33	50	13	1.4	.7	.7	1.4	136	46.6	120	89	72	0	0	0	4	2	0	
CHARLESTON	58	43	63	35	51	11	2.1	1.3	1.0	2.1	180	48.9	121	97	75	0	0	0	4	2	0	
HUNTINGTON	56	44	62	35	50	13	2.8	2.0	1.2	2.8	239	45.6	111	95	73	0	0	0	4	2	0	
PARKERSBURG	54	42	62	31	48	11	2.5	1.9	.9	2.5	277	47.0	122	96	67	0	0	1	6	3	0	
WI GREEN BAY	34	21	43	15	28	4	.1	-.3	.1	.1	14	27.5	99	89	66	0	0	7	4	0	0	
LACROSSE	32	20	45	11	26	3	.7	-.3	.7	.7	0	34.5	116	88	63	0	0	6	0	0	0	
MADISON	34	14	49	5	24	-1	.9	.5	.5	.9	156	33.4	107	93	73	0	0	7	5	1	0	
MILWAUKEE	39	25	49	16	32	5	.8	.2	.3	.8	94	27.0	86	96	76	0	0	6	4	0	0	
WAUSAU	30	19	38	12	25	3	.7	-.3	.7	.7	6	22.2	70	87	59	0	0	6	1	0	0	
WY CASPER	34	12	47	8	23	-2	.1	-.1	.1	.1	50	13.4	111	86	50	0	0	7	2	0	0	
CHEYENNE	38	16	53	8	27	-2	.1	.0	.1	.1	69	13.1	93	87	44	0	0	7	2	0	0	
LANDER	35	14	49	8	24	2	.7	-.1	.7	.7	0	11.6	92	79	37	0	0	7	0	0	0	
SHERIDAN	28	11	34	6	19	-5	.1	-.1	.0	.1	25	14.9	106	86	60	0	0	7	2	0	0	
PR SAN JUAN	86	73	87	71	80	1	.5	-.7	.2	1.6	93	39.4	80	87	58	0	0	0	7	0	0	

Based on 1961-90 normals.

# November Weather in Historical Perspective

Nationally, November 1994 was the 36th warmest such month in the past 100 years, as near-record warmth in the Eastern United States was partially offset by frigid weather in the West (table 1). The Nation's average temperature of 43.3°F was 0.6°F above the 1961-1990 normal (fig. 1).

Twenty-five States in the East reported November temperatures within the warmest 10 percent of the historical distribution (fig. 2). In contrast, California and Nevada, which comprise the West region, both established November records for coldness.

Near-normal to above-normal precipitation covered eight of nine regions, propelling the Nation to its 31st wettest November since 1895. Only the Northwest (33rd driest November) was drier than normal. Areally averaged precipitation over the contiguous States was 2.35 inches (fig. 3).

*(Additional information on the West, provided by automated snow-measuring [SNOTEL] sites, appears on page 8. In most areas, above-normal snowfall has been deposited by frequent storms and sustained by cold weather.)*

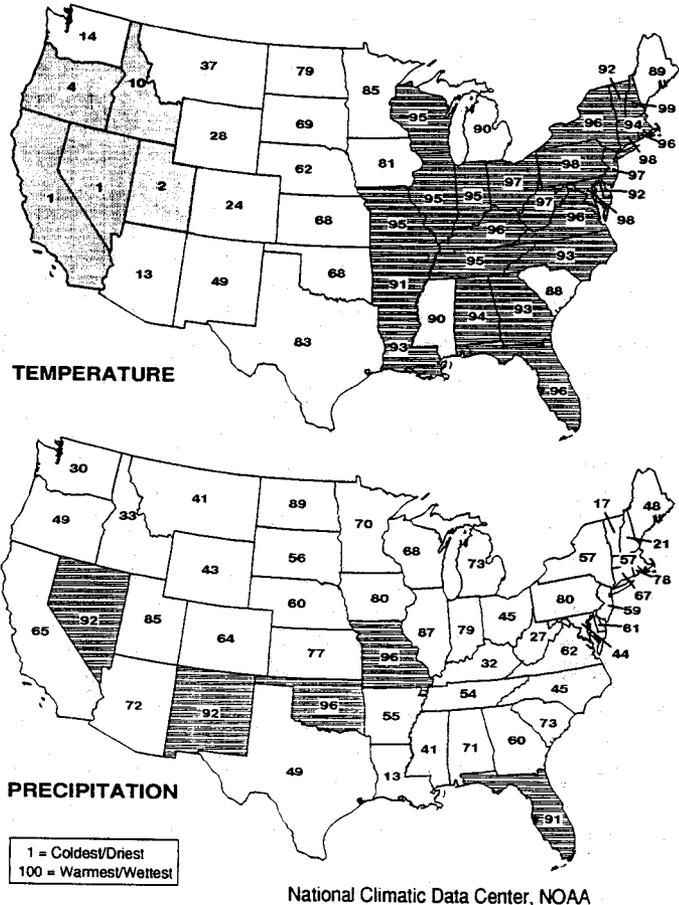
**Table 1**

Temperature and precipitation rankings for November 1994, based on the period 1895-1994. 1 = Driest/Coldest, 100 = Wettest/Hottest.

Region	Precipitation	Temperature
Northeast	57	97
East North Central	76	92
Central	75	97
Southeast	68	96
West North Central	55	51
South	58	85
Southwest	79	15
Northwest	33	7
West	70	1
National	70	65

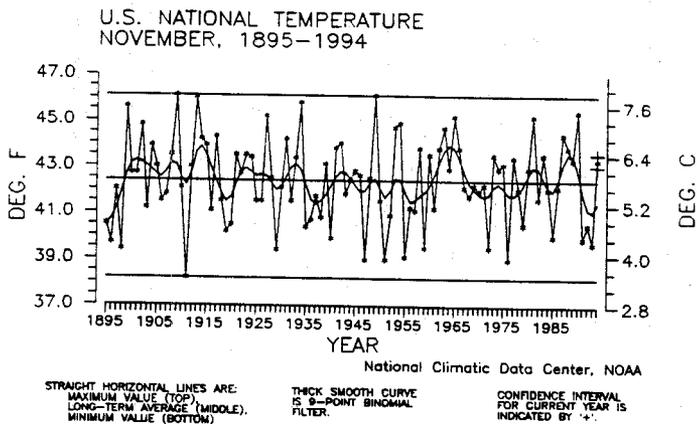
**Figure 2**

**NOVEMBER 1994 STATEWIDE RANKS**

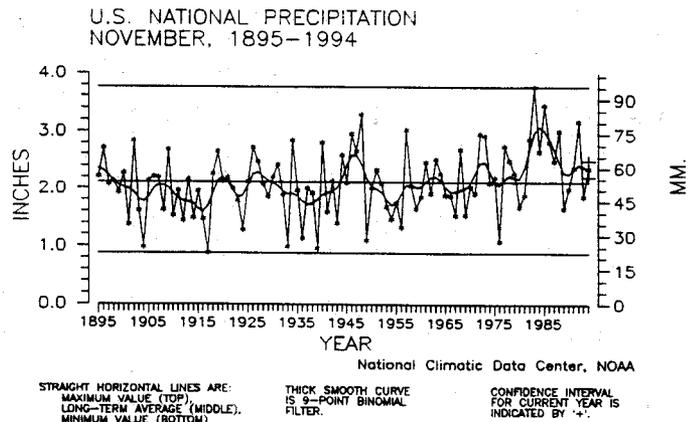


Temperature and Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1994. States having a rank of top ten coldest or driest (rank 1-10) or top ten warmest or wettest (rank 91-100) are shaded.

**Figure 1**



**Figure 3**



# Autumn Weather in Historical Perspective

On the strength of a western trough/eastern ridge pattern that developed in early October and persisted and amplified during November, areas east of the Rockies were subjected to an increasingly moist, but mild, southwesterly fetch. Cold, unsettled conditions pooled over the Western States. For the Nation as a whole, autumn 1994 was the 29th warmest (fig. 1), 33rd wettest (fig. 2) such period during the 100-year period of record. Regional temperature rankings ranged from fifth warmest in the East North Central region to 15th coldest in the West (table 1). Precipitation rankings varied from a 17th-wettest autumn in the Southeast to a 17th-driest autumn in the Northeast. State rankings of temperature and precipitation appear in figure 3.

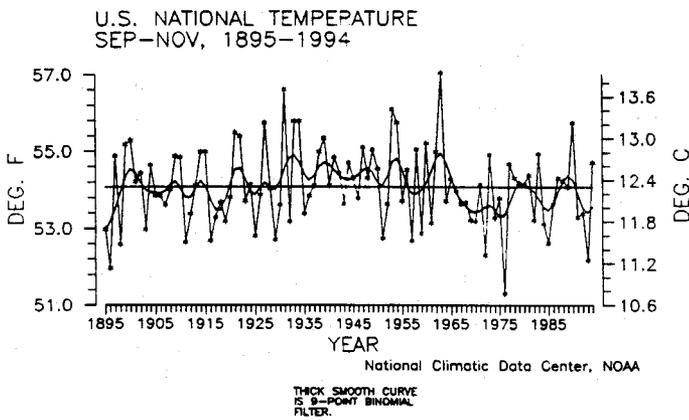
season conditions developed. Although autumn precipitation was within the "normal" third of the historical distribution, storms dropped their moisture primarily in the form of snow, and were often orographically driven, concentrating their fury on higher elevations (key watershed areas). (See page 8 for additional information.)

As autumn began, much of the West, comprising about 18 percent of the Nation, was in the throes of severe to extreme drought. By November, that figure had diminished to 10.8 percent of the Nation's acreage (fig. 4). Farther east, core areas of long-term wetness were situated over the Southeast, and in the North from the Dakotas to southern New England. Since October 1, areal coverage of wetness (Palmer Drought Index > 3.0) expanded 5 percent to nearly 15 percent of the Nation.

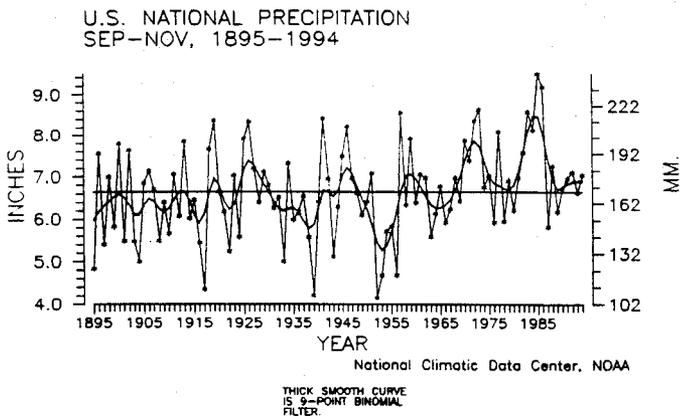
In the three westernmost regions, which are dependent upon mountain snowpack for summer water supplies, favorable early-

--Brad Rippey

**Figure 1**



**Figure 2**

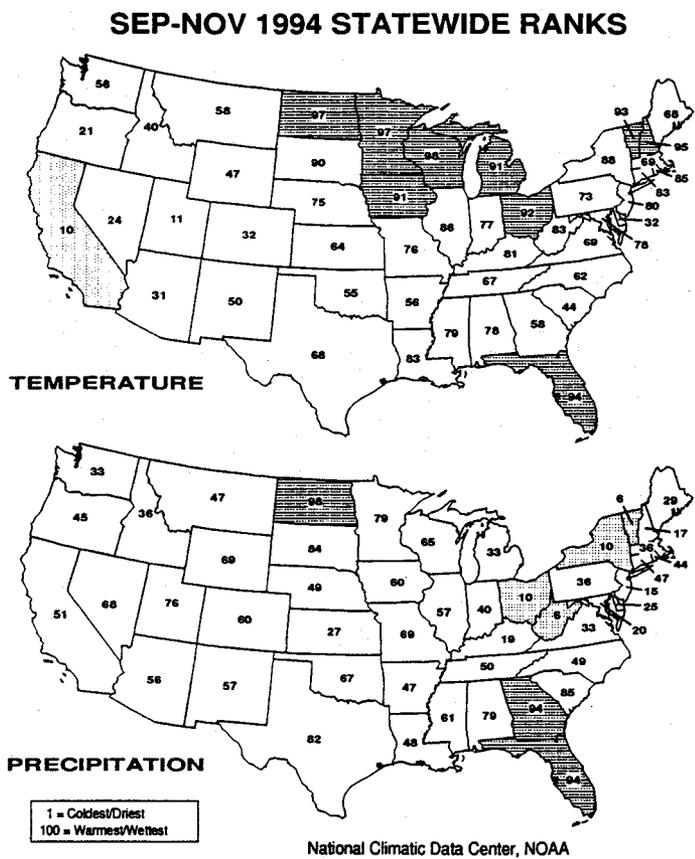


**Table 1**

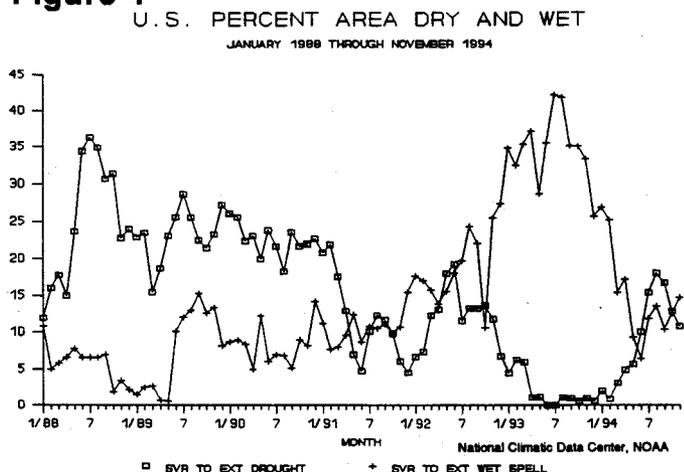
Temperature and precipitation rankings for Autumn 1994, based on the period 1895 to 1994. 1 = Driest/Coldest, 100 = Wettest/Hottest.

Region	Precipitation	Temperature
Northeast	17	83
East North Central	66	96
Central	39	80
Southeast	84	73
West North Central	80	78
South	74	65
Southwest	65	30
Northwest	35	36
West	52	15
National	68	72

**Figure 3**



**Figure 4**



(Continued from front cover)

the southern Appalachians to New England, and along its trailing cold front across the South Atlantic States. Meanwhile, a strong storm dropped southward along the west coast, drawing arctic air into the Northwest and tapping sub-tropical moisture. The system produced more than 7 inches of precipitation in the Sierra Nevada foothills at Blue Canyon, CA, and more than 2 feet of snow near Lake Tahoe. Farther north, daily-record lows in Washington included 6°F in Olympia on Sunday, and 21°F in Seattle on Monday. The west-coast storm turned northeastward on Monday, taking aim on the Four Corners States. Rainfall in Arizona included 2.54 inches at Tucson and 1.97 inches at Douglas. More than a foot of snow blanketed southwestern Colorado. Meanwhile in the East, daily-record highs were tied on Monday as far north as New York (JFK Airport), NY (62°F) and Roanoke, VA (72°F).

A narrow stripe of heavy snow developed on Tuesday from Nebraska to southern Michigan. Midweek snow depths in Nebraska included 4 inches at North Platte, Grand Island, and Lincoln. A foot covered Dubuque, IA, while 9 inches buried Madison, WI and Rockford, IL. Flint, MI netted 8 inches. Measurable snow fell as far south as Garden City, KS, but freezing rain slickened areas from central Kansas to northern Missouri. By Thursday morning, 4 inches of new snow covered Buffalo, Rochester, and Syracuse, NY. Farther south, however, record warmth persisted, as midweek highs surged to 83°F in Houston, TX and to 78°F in Norfolk, VA. But along the west coast, a low of 29°F on Thursday in Santa Barbara, CA not only tied a daily-record low, but was also the lowest temperature at that station since 1978. Late in the week, an offshore (Santa Ana) wind flow briefly developed over southern California, producing wind gusts to 60 mph that fanned a number of small blazes.

A new storm evolved over Texas on Thursday and lifted into the Ohio Valley by week's end, spelling a period of heavy rain along its track. Local rainfall topped 4 inches in the Ouachita highlands of southeastern Oklahoma and west-central Arkansas. Areas on the extreme northwestern edge of the storm's influence, from central Oklahoma to the interior Northeast, were affected by a narrow band of frozen precipitation. Snow depths by late Saturday reached 3 inches in Lima, OH and 1 inch in Indianapolis, IN. Six inches of new snow fell in Caribou, ME by early Sunday. Cold air continued to push southward in the storm's wake, and by Sunday morning, record-late first freezes were noted in Atlanta, GA (previous record was December 8, 1931), Little Rock, AR (December 6, 1923), and Memphis, TN (tied December 11, 1904).

# National Agricultural Summary

December 5 - 11, 1994

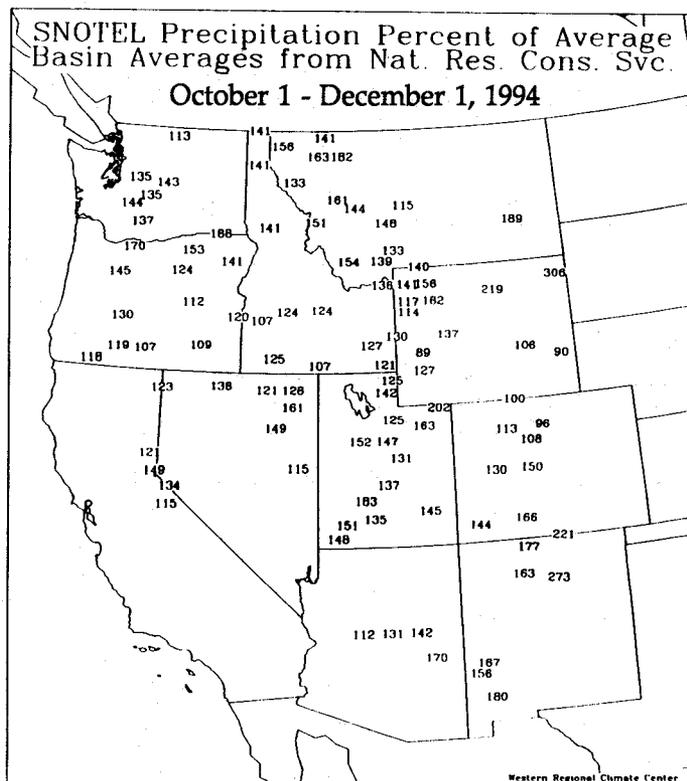
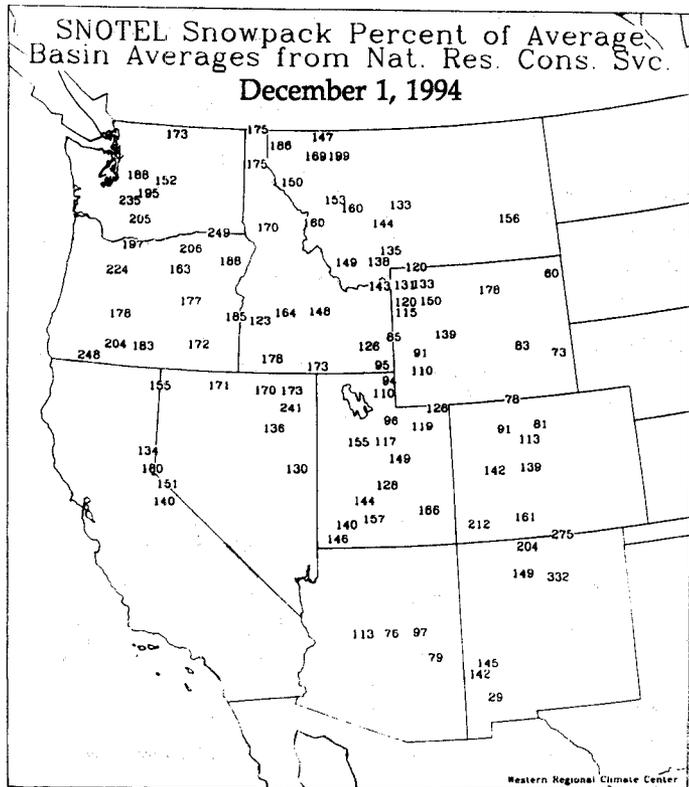
**HIGHLIGHTS:** A winter snowstorm dumped up to a foot of snow across the central Great Plains, the middle Mississippi Valley and the Great Lakes region, and brought fieldwork to an end. The winter storm threatened corn stored outdoors. Freezing rain stressed livestock in Kansas and required cattlemen in the Northern States to supplement feed livestock. Heavy rains that accompanied the winter storm flooded many wheat fields in the lower Mississippi Valley. Arctic temperatures over northern Great Lakes States froze fields, and allowed farmers to finish harvesting the last remaining corn and small grains. Snow cover in the northern Great Plains mostly protected small grain fields, but some areas needed more snow to protect the small grains from freeze damage. The domestic Christmas tree harvest neared completion in the Pacific Northwest. Unseasonably warm weather and a late freeze in the Southern States, combined with wet field conditions, prolonged the cotton harvest. Wheat seeding and emergence was aided by the warm weather in the Atlantic States. Wet fields limited fieldwork but provided ideal conditions for burley tobacco leaf casing and stripping in the Tennessee and Ohio Valleys. Florida's early and mid orange and tangerine harvest was active for the domestic Christmas market.

Snow covered most of the winter wheat in the Northern States, but some areas reported more snow cover was needed. Showers across the lower Mississippi Valley flooded some wheat fields. Unseasonably warm weather in the Southern States allowed planting to make good progress and helped wheat emergence. Wheat planting in Texas continued where possible, but green bugs remained a problem.

Corn harvest neared completion in the Great Lakes States, where arctic weather froze the ground and allowed farmers to harvest the final remaining fields. Snow threatened the corn stored on the ground in Iowa.

Cotton harvest was delayed by wet fields in the Southern States, where unseasonably warm weather and a late freeze has extended the cotton harvest. The cotton harvest in Texas continued but was delayed by fog and wet weather. Cotton harvested in Texas reached 88 percent (%), 8 percentage points behind last year. In Georgia, the cotton harvest was 6 percentage points behind the average at 90% complete, due to wet fields.

Soybeans harvested in Georgia were delayed by wet fields, and were 12 percentage points behind the average, at 83% complete. Wet conditions delayed the soybean harvest in Kansas, while the Mississippi harvest at 99% complete, was 1 percentage point ahead of the average.



## State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

**ALABAMA:** Rainfall 0.27 to 2.42 in. north; 0.06 to 1.84 in. central; 0.05 to 0.80 in. south. Temperatures 3 to 10° above normal statewide. Lows 20 to 30° north; 20 to 31° central; 22 to 34° south. Highs 62 to 70° north; 62 to 74° central; 73 to 79° south.

Seasonal activities: Scrapping cotton fields, seeding small grains, winter grazing pastures, weaning calves, selling cattle.

**ARIZONA:** Temperatures 3° below to 4° above normal. Extremes 10°; 68° higher elevations; 24°; 73° deserts. Precipitation all stations 0.11 to 2.54 in.

Rain slowed fieldwork; cotton harvested 99%, 100% 1993, 99% avg. Stalk shredding, plowdown active central, eastern areas, moderate western parts of State. Alfalfa condition mostly good. Harvest light. Sheeping off moderate. Stand renovation, stands established normal. Lemon, grapefruit, navel orange harvest western, central areas. Tangerine harvest central. Pecans central, eastern areas. Bok choy, broccoli, cabbage, cauliflower, endive, escarole, head lettuce, kale, leaf lettuce, napa, romaine, spinach harvested central, western areas. Salad savoy available western areas. Beets, carrots, green onions, kohlrabi, leeks, mixed greens, radishes, rappini, swiss chard, turnips available central areas. Tomatoes available eastern areas.

**ARKANSAS:** Temperatures averaged above normal during the first half of the week, turned cold at the end of the week. Heavy rain at the weekend. Extremes 17°; 79°. Precipitation 1.60 to 4.16 in.

Heavy rainfall has flooded many wheat fields. Several counties reported that producers were feeding hay to their cattle. Some producers were winter grazing their cattle on wheat fields.

**CALIFORNIA:** Cold low pressure system combined with moisture out of tropics to bring rainfall last weekend. Heaviest rainfall Sacramento Valley. High pressure ridge 2nd-half of weekend brought wintertime fog. Clouds, rain caused temperatures below normal.

Light rain, wet soil delayed field activities north. Elsewhere, fieldwork progressed normally. Rain halted rice stubble burning. Some fields re-flooded to break down stubble. Harvest complete. Cotton fields shredded, disced for pink bollworm control. Few scattered fields still to harvest. Corn harvest complete. Grain sorghum harvested lighter soiled areas. Small grains, winter forages, new alfalfa, sugarbeets seeded, fertilized, sprayed weeds. Growth of emerging alfalfa, grains slowed by cold, fog southern San Joaquin Valley. Elsewhere, growth, emergence excellent. General ground preparation small grains, alfalfa, sugarbeets ongoing where soil moisture permitted. Pruning deciduous trees, vines progressing. Weed control, dormant sprays, fertilizer applications continued. Fuji apples, kiwi packed. Lemons, grapefruit, tangerines, navel orange harvests continued. Foggy weather hampering harvest. Some picked fruit showed green spotting. Broccoli, cauliflower harvested Monterey County, Imperial, San Joaquin valleys. Harvest cabbage west side Fresno County, Riverside County continued. Carrots harvested Riverside County. Celery harvested Oxnard area, Monterey County. Garlic growth slowed cool weather Tulare County. Harvest fall head, leaf lettuce fields continued San Joaquin, Desert valleys, Monterey County. Winter 1995 lettuce fields Fresno County emerged. Onion progress Tulare County slowed due cool weather, while harvested Riverside County. Peas planted Stanislaus County. Spring potato planting Kern County. Winter potatoes harvested Riverside County. Fresh market tomato harvest San Joaquin Valley completed. Ground preparation next year's processing tomato crop. Other crops harvested: Squash,

bok choy, ginger root, cucumbers, green beans, green onions, eggplant, radishes, turnips, oriental vegetables. Recent rains greening northern, central areas rangeland pasture. Each rainfall improves pasture condition. Range, pasture feed behind rest State; central, southern areas need more rain. Warmer temperatures needed statewide to promote better grass growth. Livestock movement to lower elevations, supplemental feeding remained heavy. Fall calves good shape. Sheep grazing alfalfa fields. Cattle, sheep good condition.

**COLORADO:** Beginning of week had freezing rain in eastern plains with below normal temperatures. Mid-week dry with normal temperatures. Remainder of the week was dry with below normal temperatures. Major farm activities include care, feeding of livestock.

**FLORIDA:** Temperatures 3 to 7° above normal Panhandle, 5 to 10° above normal Peninsula. Highs upper 70s Panhandle, mid 80s Peninsula. Lows upper 20s Panhandle, upper 30s northern Peninsula, mid 40s central, mid 50s south. Rain totals; most locations central, south less than 0.50 in., west Panhandle 1.00 to 2.00 in.

Soil moisture adequate Panhandle, mostly adequate Peninsula with scattered areas of short, surplus. Cotton harvest winding down. Sugarcane harvest, planting active. Winter wheat planting for grain winding down. Citrus groves, trees, fruit very good to excellent condition. Moisture adequate to surplus, few showers this week. Very little new growth. Early, mid-orange harvest very active to move high ratio fruit as soon as possible. All seedless grapefruit harvest busy on lower east coast for domestic, export use. Tangelo, tangerine harvest active for Christmas markets. K-Early harvest over for the year. Caretakers cutting cover crops, repairing roads washed away by Tropical Storm Gordon in November. Above normal temperatures most of week, scattered rainfall most areas accelerated vegetable development. However, heavy rains early in week along eastern coast lowered yield prospects in some fields. Drier weather aided recovery of most southwestern vegetables from recent heavy rain. Cabbage harvest getting underway Dade County, West Central areas. Volume leaders: Tomatoes, peppers, cucumbers, squash, snap beans, watermelons, eggplant, strawberries. Pasture feed 5% poor, 35% fair, 60% good. Cattle condition mostly good.

**GEORGIA:** Warm temperatures, 7 to 9° above normal north, east, 5 to 8° above southwest. Highs middle 60s northwest lower 70s elsewhere, middle to upper 70s southeast. Lows around 20s mountains, around 30s elsewhere except lower 40s along coast. One to 3 rain days. Totals between 1.00 to 2.00 in. mountains, near 1.00 in. elsewhere except mostly under 1.00 in. extreme southeast.

Days suitable for fieldwork 3.6. Soil moisture 1% short, 53% adequate, 46% surplus. Cotton 38% fair, 53% good, 9% excellent; 90% harvested, 98% 1993, 96% avg.; wet fields slowing harvest. Sorghum 96% harvested for grain, 99% 1993, 99% avg. Soybeans 36% fair, 59% good, 5% excellent; 83% harvested, 95% 1993, 95% avg.; quality loss problems increasing. Wheat 1% poor, 12% fair, 86% good, 1% excellent; 79% planted, 90% 1993, 82% avg.; 61% emerged, 72% 1993, 60% avg.; scattered leaf disease. Rye 96% planted, 99% 1993, 98% avg. Other small grains 18% fair, 82% good; 92% planted, 97% 1993, 93% avg. Onions 26% fair, 74% good; 72% transplanted, 86% 1993, 81% avg. Other vegetables 3% very poor, 50% fair, 47% good; fall cabbage harvest, few peppers southern areas. Pecans 1% very poor, 20% poor, 61% fair, 17% good, 1% excellent; 83% harvested, 86% 1993, 88% avg. Pasture feed 1% very poor, 4% poor, 27% fair, 65% good, 3% excellent. Cattle, hogs good.

**HAWAII:** Strong trade winds, 15 to 30 mph, gusting to 40 mph buffeted island chain. Some passing showers, windward, mountain areas. Temperatures mid 60s to low 80s. Rainfall none to 5.70 in.

Strong winds, cooler temperatures fair for crop progress. Orchards, vine crops exposed areas suffered slight to moderate damage. Continuous wet weather causing some disease problems in papaya orchards.

**IDAHO:** Snowfall covered most of the State this week. Temperatures 1 to 11° below normal. Precipitation none to 0.73 in. north, 0.05 to 0.64 southwest, 0.08 to 1.00 in. south central, none to 0.97 in. southeast. Extreme -23°; 44°.

Hay, roughage supply 17% short, 82% adequate, 1% surplus. Livestock reported in good condition. Activities: Marketing grain, feeding livestock, shop work, educational meetings, preparing taxes.

**ILLINOIS:** Temperatures 1 to 5° above normal in most areas despite snow, cold at the weekend. Temperatures teens in the far north to 40s in the south. Extremes highs 60s on 6th to a low of -4° on 11th. Precipitation was above normal with totals ranging 0.75 to 1.75 in. Snow accumulations were as much as a foot at midweek in far north.

Farm activities included fall tillage, hauling grain, applying fertilizer, preparing machinery for storage, tending livestock.

**INDIANA:** Low pressure moving northeast from lower Mississippi River Valley brought the first snowfall to central parts of State during the weekend with 1 to 2 in. some areas. A surge of arctic air swept into the State during the period. High temperatures averaged from the upper 30s in the north to the 40s in the south, which was close to normal in the north 1 to 4° above normal in the central, south. Lows mid to upper 20s in the north to the 30s, around 40° south. These readings 4 to 10° above normal in the central, south to 2 to 8° above normal in the north. Coldest readings were the teens to around 20 in the north to upper teens to 20s in the south. Precipitation totals averaged around 0.60 to 1.80 in. This was above normal by around 0.40 to 1.10 in., except for normal to above normal by up to 0.40 in. west central area.

Rainy week. Scattered fields of corn remain for harvest across the State. Winter wheat mostly good condition. Other activities; Fall tillage, fixing broken tile, spreading fertilizer, record keeping, moving grain, hauling manure, chopping stalks, processing tobacco, equipment maintenance, repair, mending fence, attending meetings, care of livestock. Feedlots are muddy. Hay, supplies mostly adequate.

**IOWA:** Major winter storm 6th brought heavy icing southeast one-third; 7 to 12 in. wet snow west central through northeast; 2 to 5 in. snow northwest one-quarter. Precipitation 0.11 in. northwest to 1.97 in. southeast; State average 0.83" (normal 0.31"). Temperatures 10° below normal west to near normal southeast; extremes 52° (southeast, 5th), -11° (central, 11th). Widespread power outages southeast. Snow, ice cover persists through week statewide with temperatures remaining below freezing most areas.

The recent winter storm could pose problems for those storing corn outside, for livestock.

**KANSAS:** Temperatures across State were mostly below normal the past week. All districts received precipitation. Rainfall 0.35 in. southwest to 1.33 in. northeast.

Wet conditions in the southeast continue to delay harvest of soybeans. Freezing rain in many areas stressed livestock, created difficulties in feeding, tending of livestock.

**KENTUCKY:** Weather much warmer, wetter than normal. High temperatures upper 40s to lower 50s, 2 to 5° above normal. Low temperatures lower to mid 40s, 10 to 15° above normal. Rainfall well above normal most locations, especially west, north. Weekly totals were from high of 3.13 in. Paducah to low of 0.42 in. Somerset. Many

locations had an inch, several had over 2.00 in. Normal amounts only 0.75 in. to near 1.50 in.

Soil moisture adequate to surplus. Wet conditions limited field work but benefitted burley tobacco stripping. About 48% 1994 burley production sold at auction thru December 7. Continued rain helping fill farm ponds. Livestock satisfactory condition, most producers supplemental feeding.

**LOUISIANA:** Temperatures 9.4 to 11.0° above normal. Extremes 41°; 82°. Rainfall 0.54 in. southeast to 2.96 in. northwest.

Days suitable for fieldwork 4.0. Soil moisture 57% adequate and 43% surplus. Cotton 100% harvested, 100% 1993, 100% avg. Pecans 93% harvested, 73% 1993, 80% avg. Sugarcane 89% harvested, 75% 1993, 85% avg. Harvest slowed by muddy fields. Sweet potatoes 99% harvested, 99% 1993, 99% avg. Wheat 1% poor, 44% fair, 55% good; 97% planted, 82% 1993, 91% avg.; 93% emerged, 81% 1993, 88% avg. Stands look good. Planting virtually complete. Livestock 3% very poor, 11% poor, 37% fair, 49% good. Pasture feed 9% poor, 9% fair, 77% good, 5% excellent. Vegetables 2% poor, 47% fair, 48% good, 3% excellent.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.93 in., normal 0.79 in. Temperature 50.9°, normal 39.6°. Extremes 12°; 73°.

Livestock, pasture in good condition. Hay supplies adequate. Small grains in good condition due to favorable weather conditions. Harvest winding down. Cutting firewood. Preparations for winter.

**DELAWARE:** Precipitation 0.63 in., normal 0.82 in. Temperature 51.6°, normal 41.1°. Extremes 25°; 69°.

Small grains in good condition due to favorable weather conditions. Harvest virtually completed. Cutting firewood. Preparations for winter. Pasture, livestock feed good condition. Hay supplies adequate.

**MICHIGAN:** Extremes 4°; 58°. Precipitation none to 1.47 in. across the State. Corn harvest was near completion. It was slowed by snow, ice that fell around midweek. Central, northern part of the State received 3 to 8 in. of snow on 6th night. Freezing rain fell 8th.

Livestock in good condition, adequate feed supplies. Major activities: Harvesting, fall tillage work when possible; repairing machinery; spreading manure.

**MINNESOTA:** Temperatures 7 to 1° below normal for the State. Extremes -16°; 47°. Precipitation 0.07 in. below normal for the State. Greatest weekly total 0.38 in.

Ground has frozen sufficiently allowing farmers to combine corn, small grains remaining in fields. Forage supplies are adequate, though there is some concern about the availability of good quality feed.

**MISSISSIPPI:** Temperatures 10.7° above normal. Extremes 35°; 80°. Soil temperature 59°. Precipitation 1.19 in., 0.17 in. below normal. Rainfall 0.14 in. coastal district to 2.37 in. north-central district.

Days suitable for fieldwork 2.2. Soil moisture 33% adequate, 67% surplus. Soybeans 99% harvested, 98% 1993, 98% avg. Wheat 97% planted, 100% 1993, 98% avg.; 93% emerged, 95% 1993, 88% avg.; 22% fair, 72% good, 6% excellent. Pecans 88% harvested, 80% 1993, 84% avg.; 22% very poor, 26% poor, 37% fair, 15% good. Livestock 20% fair, 72% good, 8% excellent. Pasture feed 84% of normal. Activities: Delay in completion of the cotton, soybean harvests due to wet fields. A few more dry days needed to complete harvest in the remaining cotton, soybean fields. Ryegrass conditions are exceptional.

**MISSOURI:** Temperatures 1° below normal St. Louis to 8° above normal Caruthersville. Precipitation 1.09 in. for State, ranging from around 0.60 in. central, east central, southwest to 2.31 in. southeast.

Cool temperatures, precipitation moved across the State toward weekend. Some freezing rain reported extreme north. Row crop harvest virtually complete. Farmers were feeding livestock, other winter activities.

**MONTANA:** Below normal temperatures across most of State early in the week, rebounded back to a little above normal by the end of the week. Precipitation was much below normal with the exception of a few stations. West Yellowstone received nearly 3.00 in. of liquid precipitation with over 60 inches of snow on the ground.

**NEBRASKA:** Temperatures 7 to 12° below normals. Precipitation in the form of snow fell first half of week. Water equivalent amounts varied 0.20 to 0.70 in.

Producer activities included livestock care, planning 1995 crop year.

**NEVADA:** Series of weather systems went through State during the first part of the week, bringing precipitation to the northern third of the State. Heaviest precipitation was along the Oregon, Idaho borders; McDermitt received 0.97 in., Mountain City 0.66 in. Temperatures 1 to 4° below normal most locations, 17° below normal at McDermitt.

Snowcover intensified feeding requirements in north. Livestock, hay marketing active. Fall seeded crops safe from freeze damage thus far.

**NEW ENGLAND:** Precipitation 1.14 to 3.03 in. regionwide. Temperatures 25 to 35° north; 33 to 43° south. Maximum temperatures 44 to 64° north; 36 to 67° south. Minimum temperatures 2 to 19° north; 9 to 24° south. No significant snowfall accumulation to date.

Major farm activities: Moving fruits, potatoes out of storage, caring for livestock, preparing for winter.

**NEW JERSEY:** Temperatures much above normal, 39° north, 44° south, 46° coastal. Extremes 13°; 69°. Rainfall 1.52 in. north, 1.15 in. south, 1.39 in. coastal. Heaviest 24 hour total 1.20 in. on 10th, 11th.

Limited harvesting of kale, parsley, broccoli, endive, escarole in southern areas. Other farming activities include cutting, selling Christmas trees, winterizing farm equipment.

**NEW MEXICO:** Temperatures for State about 3° above normal during the week. Greatest positive anomalies were at Roswell (+8), Socorro (+6). A winter storm brought rain, snow to most of State first few days of the week, although precipitation over the eastern plains was spotty, light. Higher precipitation totals were in the southwest. Heavier amounts included 2.79 in. at Silver City, 1.77 in. at Animas.

Cotton, pecan harvest are near completion. Livestock continue to be supplementally fed. The recent rains, warm temperatures will allow for some grass growth in southwestern areas.

**NEW YORK:** Early week was mild, late week seasonably cold. Over 1.00 in. of rain fell on central, eastern areas on 5th. New York City recorded a record high temperature that day. Colder air moved in on 7th bringing 1 to 4 in. of snow in west, central areas. Another cold front moved through late on 9th, 10th, bringing more light snow.

Major activities: Grading, packing potatoes, onions, apples; tending livestock; maintenance, repair; attending meetings; planning for upcoming year. Milder temperatures aided outside activities.

**NORTH CAROLINA:** Mean temperature 53° at Asheville to 62° at Cape Hatteras. Rainfall 0.17 in. at Raleigh to 2.51 in. at Cape Hatteras.

Days suitable for fieldwork 4.3. Soil 5% short, 68% adequate, 27% surplus. Crop conditions: Wheat 15% fair, 67% good, 18% excellent; oats 12% fair, 66% good, 22% excellent; barley 15% fair, 77% good, 8% excellent; rye 8% fair, 69% good, 23% excellent; pasture feed 4% poor, 28% fair, 61% good, 7% excellent; soybeans 38% fair, 55% good, 7% excellent; hay, roughage supplies 8% short, 78% adequate, 14% surplus; feed grains supplies 6% short, 75% adequate, 19% surplus; cotton harvested 95%, 98% 1993, 92% avg.; soybeans harvested 79%, 85% 1993, 84% avg.; wheat planted 95%, 92% 1993, 91% avg.; wheat emerged 92%, 80% 1993, 79% avg. Activities included: Harvesting cotton, soybeans, preparing land, planting small

grain. Other activities included: Tending livestock; equipment repair, general farm maintenance.

**NORTH DAKOTA:** Very cold week throughout the State. Temperatures 16° below normal, northwest to 5° below normal, east central. Extremes -35° north central; 35° southwest, south central.

Snowcover sufficient to protect fall seeded crops northern half of State, not enough some parts of southern half. Marketing a little below normal. Cattle, sheep good condition. Feed supplies appear adequate for winter.

**OHIO:** Seasonably mild temperatures gave way to cooler readings late in week, but for period as a whole averaged above normal. Precipitation was ample throughout the State. Mean temperatures of 35 to 44° were some 4 to 8° above normal. Maximums near 40° north to 50° south with mean low temperatures from near 30° north to the upper 30s south. Coldest readings were noted on last day of the period when they dipped into the mid teens to mid 20s. Most all stations in State noted between 1.00 to 2.00 in. of moisture for the week. Snow belt locations did report heavier totals of more than 2.00 in. as lake-effect snow was common.

Recent weather has been ideal for tobacco leaf casing, stripping. Condition of fall sown grains improved with recent rains. Livestock feed demand has increased as pastures do not provide sufficient feed. Growers have been busy marketing poinsettias, Christmas trees.

**OKLAHOMA:** Temperatures 9.4° below normal north central to 2.2° below normal southeast. Precipitation 0.14 in. west central, southwest districts to 2.68 in. southeast.

Prices for feeder steers, heifers were mostly \$1 to \$2 per cwt higher than previous week. Wheat pasture in very good condition statewide.

**OREGON:** Precipitation across State abundant, averaging 1 to 3 in. of snow, 0.50 in. rain in western valleys. Columbia River Basin averaged from 0.50 in. to 1.00 in. Other east side areas averaged around 0.20 in. Heavy snow continued Cascades, northeast mountains. Temperatures for the period were unseasonably cool, averaging 11° below in eastern areas and 5° below normal in western areas.

Soil moisture adequate. Major farm activities; dealing with the below normal temperatures. Domestic Christmas tree harvest about done, U-cut operations very busy. Livestock good. Supplemental feeding continued statewide.

**PENNSYLVANIA:** Unseasonably mild weather first half of week. Normal temperatures weekend. Temperature 44°, 9° above normal. Extremes 14°; 66°. Precipitation 2.04 in., 1.31 in. above normal.

Activities: Hauling manure; fixing fence; caring for livestock.

**PUERTO RICO:** Rainfall 1.08 in. was 0.08 in. below normal. Highest total rainfall 4.48 in. at Arecibo Ionos, 3.32 in. at San Sebastian, 3.31 in. at Pico del Este. Island temperatures 77° on the coasts, 71 to 74° interior with mean station temperature 64.7° at Pico del Este. Extremes 5°; 51°.

**SOUTH CAROLINA:** Rainfall 1.30 in. Temperatures 10° above normal.

Farm activities: Small grain planting continued to make good progress, emergence aided by unseasonably warm weather. Cotton harvest winding down, soybean harvest made good progress, near normal. Sorghum harvest nearing completion. Sweet potato harvest made good progress, still well behind normal. Pasture, livestock feed in good condition.

**SOUTH DAKOTA:** Temperatures 5° below normal, west; near normal, east. Extremes 2°; 62°. Statewide snow. Snow depths 10 in. extreme east; trace extreme west. Heaviest melted precipitation 1.16 in. at Sioux City.

Farm activities: Hauling hay, fall tillage, fixing fences, moving livestock, feeding livestock.

**TENNESSEE:** Temperatures 4 to 9° above normal. High temperature middle 50s, low temperature middle to lower 40s. Precipitation above normal west, middle, eastern areas generally below normal. Representative extremes, 3.34 in. Memphis, 0.73 in. Bristol.

Some cotton is yet to be harvested. Wheat is in good condition. Feeding hay.

**TEXAS:** A front moved into Texas last 5th, stalled over Central area. This system pushed northward during the day, southward overnight through 7th. Another cold front on 8th helped push this system through State by 9th evening. Rainfall was heaviest in East Texas, in Blacklands. Numerous locations in these areas recorded over an inch of rainfall. Lufkin, Longview received 2.86 to 2.54 in. of rainfall, respectively. Many locations in West Texas, Lower Valley did not receive any rainfall. Many climate districts recorded above average rainfall amounts, except Low Rolling Plains, Lower Valley, Upper Coast which were -0.11 in., -0.19 in., 0.67 in. below normal. Above normal departures +0.01 in. High Plains to +0.68 in. north central area. Trans Pecos area had 0.06 in. of rainfall, which is normal for this time of year. Many districts recorded above normal temperatures last week, except High Plains, Low Rolling Plains, north central which were -2°, -7°, -1° below average, respectively. Above normal departures +2° in Trans Pecos, Edwards Plateau to +6° in Southern Texas area, respectively. Soil temperatures 40° at Bushland to 67° at Beeville. Highest maximum soil temperature was 78° at Beaumont. Lowest minimum soil temperature was 30° at Bushland.

**Crops:** Cotton: harvest continued in the Plains as dry weather conditions prevailed. Fog, early morning dew caused minor delays in some areas, however. In the Trans-Pecos, harvest was active. In the Blacklands, after harvest clean-up activities were delayed again due to wet weather. Cotton 88% harvested, 96% 1993. Peanuts: harvest continued early across Cross Timbers, Blacklands, was delayed toward end of week due to rain, cold front that passed through. Harvest was virtually completed in most of the Plains. Peanuts 89% harvested, 90% 1993. Sorghum: harvest was virtually completed as dry weather conditions prevailed across Plains. Sorghum 100% harvested, 100% 1993. Soybean: harvest neared completion in High Plains as a few fields remained to be harvested. Soybeans 99% harvested, 100% 1993. Sugarbeets 96% harvested, 79% 1993. Sunflowers 95% harvested, 98% 1993. Small grains: winter wheat planting was delayed again at end of week in Cross Timbers, Blacklands. However, a few fields were planted. Across the Edwards Plateau, South Texas, planting continued. Most fields continued to make good progress, green bugs continued to cause problems in Northern Low Plains, Edwards Plateau. Small grains continued to provide adequate grazing. Irrigation remained active on High Plains. Winter wheat 75% normal, 66% 1993; 96% planted, 99% 1993; 91% emerged, 94% 1993. Oats 95% planted, 93% 1993.

**Commercial Vegetables:** Rio Grande Valley: harvest of citrus continued. San Antonio-Winter Garden area: warm weather conditions early in the week helped cole crops make good progress. East Texas: collards and other greens were harvested. Land preparation for spring crops got underway. Trans-Pecos area: red chile pepper harvest was active. High Plains: land preparations continued. Pecans: harvest continued at a rapid pace. In Edwards Plateau and throughout South Texas producers were busy cleaning up their orchards following harvest activities. Colder temperatures should help harvest continue at a fast pace. Peaches: preparations continued for next year's peach crop across most of the State. Producers were actively pruning trees, applying fungicides. Along the Upper Coast, some trees were beginning to bloom prematurely due to the unseasonably warm temperatures.

**Range and Livestock:** Winter forage growth on ranges, pastures in East Texas, South Central Texas made good progress. Range, pastures in the Plains remained dry, short. As the cold front passed through, supplemental feeding increased. Movement of cattle continued in Trans-Pecos due to limited amounts of grass available. Livestock remained in fair to good condition, but were stressed in some areas due to colder temperatures.

**UTAH:** Temperature 2° below normal; minimums 5° above normal. Precipitation light to moderate across the entire State.

Major farm, ranch activities were selling, buying forages, hauling manure, feeding cattle, keeping year end records, shipping onions, caring for livestock. Feed supplies are adequate to poor with some farmers holding supplies for possible higher prices.

**VIRGINIA:** Temperatures near normal. Extremes 24°; 80°. Precipitation near normal.

Days suitable for fieldwork 4.4. Topsoil 26% short, 64% adequate, 10% surplus. Pasture feed 3% very poor, 20% poor, 47% fair, 31% good. Livestock 25% fair, 73% good, 2% excellent. Soybeans harvest 95%, 93% 1993, 95% avg. Small grain and grazing crop condition 1% poor, 24% fair, 69% good, 7% excellent. Wheat seeded 100%, 95% 1993, 93% avg. Forage from pastures, winter grazing crops dairy cattle 9%, beef cattle 37%, sheep 34%. Growers are finishing soybean harvesting and have begun to take soil samples. Land is being limed for the 1995 crop.

**WASHINGTON:** Temperatures 4 to 10° below normal west; 6 to 12° below normal east. Precipitation 0.16 to 1.59 in. west; none to 0.61 in. east.

Days suitable for fieldwork 3.1. Soil moisture 42% short, 52% adequate, 6% surplus. Hay, other roughage supplies 1% very short, 8% short, 87% adequate, 4% surplus. Range, pasture feed 41% very poor, 34% poor, 22% fair, 3% good. Winter wheat, dryland 4% very poor, 24% poor, 56% fair, 16% good; irrigated, 11% fair, 84% good, 5% excellent. Cold, wet weather continued to limit most farm activities. Some east side areas hoped for more snow to protect winter wheat. Pruning of fruit trees continued. Brisk sales reported by U-cut Christmas tree operations.

**WEST VIRGINIA:** Temperature 46°. Extremes 21°; 68°. Precipitation 1.28 in.

Farm activities: General maintenance, winterizing of equipment, harvesting corn for grain, moving hay, marketing livestock.

**WISCONSIN:** Early in the week, all of Wisconsin saw precipitation. In the south it was in the form of rain, but as you progressed north it turned into sleet, then snow. The remaining part of the week was cloudy with some snow in the south. Some southeastern parts of the state received between 6 to 8 in. of snow. Temperature 21°. Extremes -14°; 50°. Precipitation amounts ranged from a trace to 0.40 in.

Fieldwork has come to a stop with snow covering the whole State. Snow, cold weather has kept most farmers inside. Farmers are busy milking their cows, working in the shop.

**WYOMING:** Temperatures were above normal for the south central, western portions of the State. The rest of the State was from 10 to 1° below normal. Precipitation was below normal in most areas. Western, southeastern portions of the State received above normal precipitation. Moran received the largest amount with 2.10 in. Corn harvest is wrapping up. Livestock is mostly in good condition, with supplemental feeding under way in those areas where winter grazing is inadequate.

# International Weather and Crop Summary

## HIGHLIGHTS

December 4 - 10, 1994

**NORTHWESTERN AFRICA:** Persistent dryness hampered winter grain planting and establishment in Morocco, Algeria, and Tunisia.

**SOUTH AFRICA:** Showers boosted topsoil moisture for corn germination and establishment.

**FSU-WESTERN:** A warming trend improved overwintering conditions for dormant winter grains.

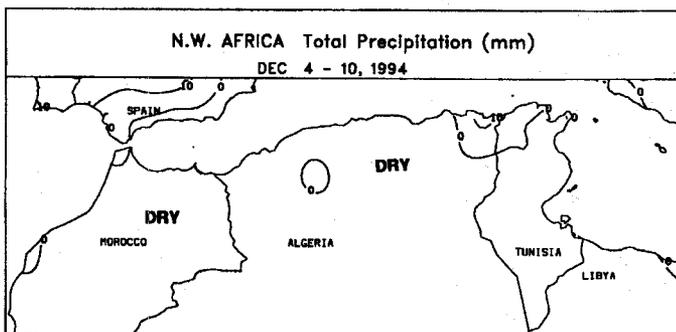
**SOUTHEAST ASIA:** Widespread, seasonably heavy rain improved Java's rice prospects.

**EASTERN ASIA:** Light rain benefited winter wheat across the North China Plain, as showers boosted reservoirs across the south.

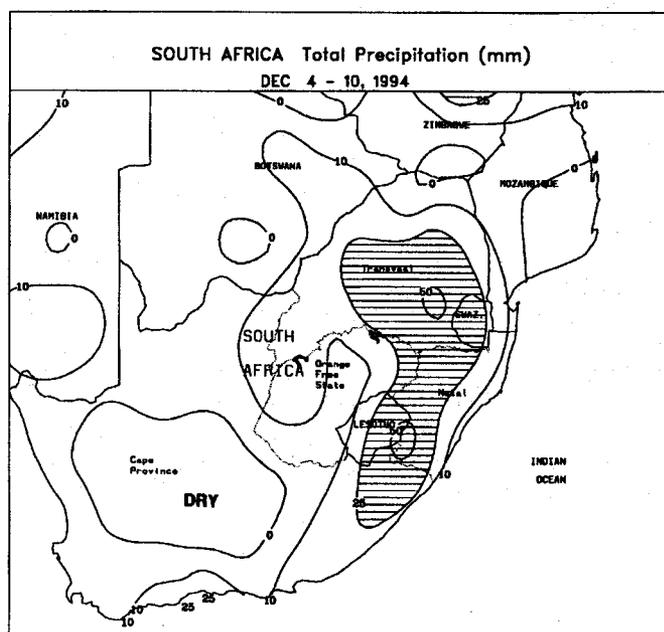
**EUROPE:** Rain and unseasonably mild weather prevailed in the west.

**AUSTRALIA:** Drier weather favored eastern summer crop planting, but additional rain is still needed.

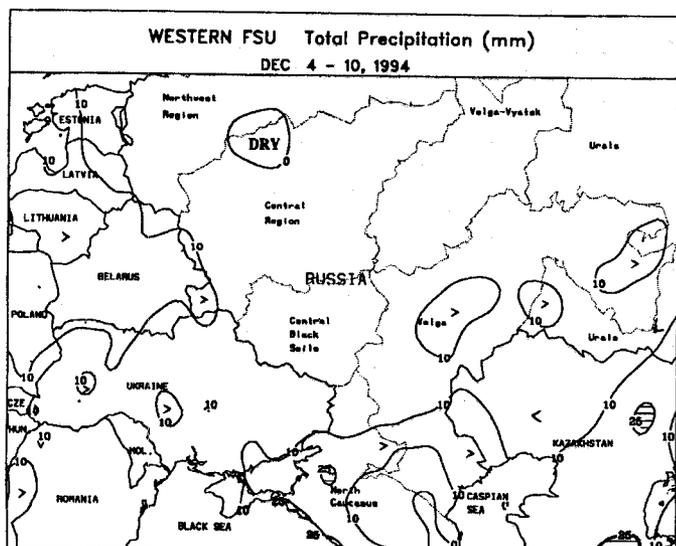
**SOUTH AMERICA:** Widespread showers favored germinating to vegetative soybeans across southern Brazil. Drier weather aided summer crop planting and winter wheat harvesting in central Argentina.



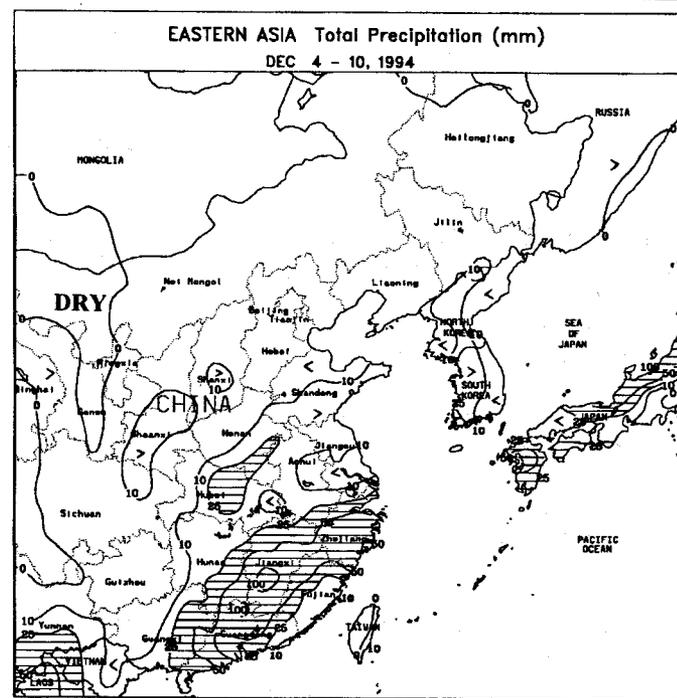
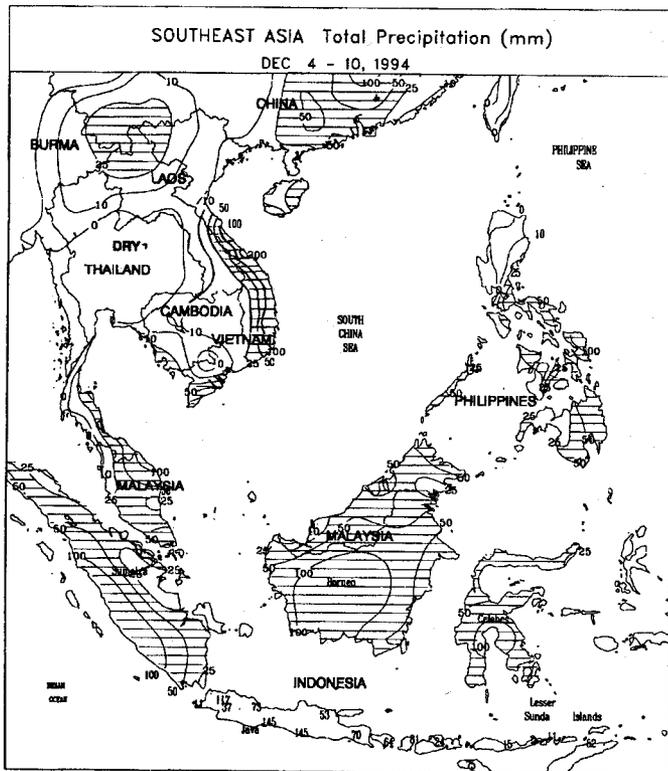
**NORTHWESTERN AFRICA:** Dryness persisted over most winter grain areas in Morocco, Algeria, and Tunisia. The dryness in these areas has depleted topsoil moisture for winter grain planting and establishment. As a result, planting is likely progressing slowly, especially in extreme southern Morocco, eastern Algeria, and Tunisia where conditions have been the driest. The bulk of winter grains are usually planted from mid-November to mid-December. Since planting can extend into early January, sufficient time remains for planting.



**SOUTH AFRICA:** Moderate rain (10-25 mm) brought some relief to recently dry areas of the western and southern corn belt. Temperatures averaged near to above normal, with highs in the mid 30's C, increasing crop moisture demands. Farther east, moderate to heavy rain (25-62 mm) maintained generally favorable conditions for vegetative corn in Eastern Transvaal and Kwazulu-Natal. However, rainfall continued unfavorably light (less than 10 mm) in coastal rainfed sugarcane areas.



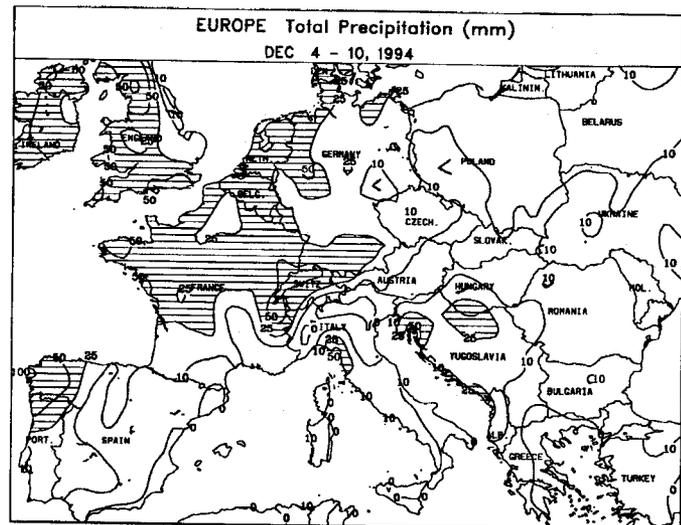
**FSU-WESTERN:** Following bitter cold early in the week, temperatures quickly rebounded to more seasonable levels by midweek, improving overwintering conditions for winter grains. Several days of light snow fell over most of Russia and eastern Ukraine, where precipitation amounts varied around 10 mm. A mixture of light rain and snow (5-23 mm) fell over western and southern Ukraine, Belarus, and the Baltic States. By week's end, snow cover ranged from shallow to moderate over Russia and eastern Ukraine. Snow cover over the remainder of Ukraine, Belarus, and the Baltic States was patchy or non-existent. Weekly average temperatures were 2-6 degrees C below normal over Russia and the eastern Ukraine, and 2-4 degrees C above normal over western Ukraine, Belarus, and the Baltic States.

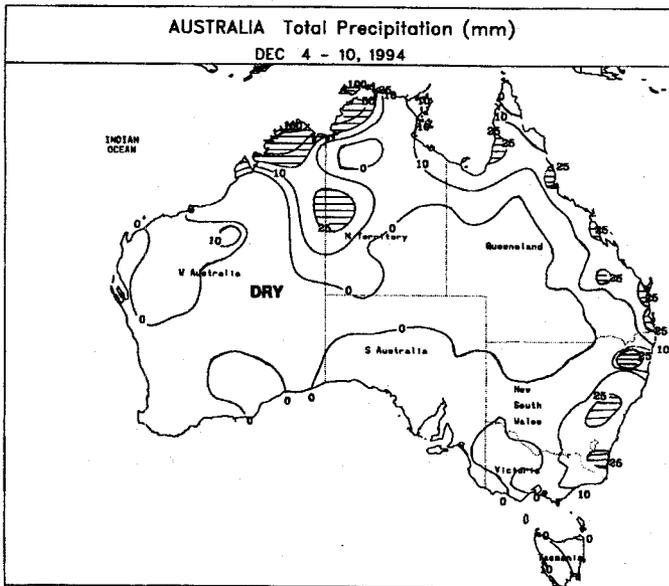


**EASTERN ASIA:** Widespread light rain (4-15 mm) covered the North China Plain, favoring vegetative winter wheat. Heavier rain (15-25 mm) fell across the southern portions of the wheat belt. While temperatures averaged 3-5 degrees C above normal across most of eastern China, temperatures were cool enough across portions of the northern wheat belt (southern Hebei) to induce dormancy. Moderate to heavy rain (30-100 mm, with isolated amounts greater than 100 mm) fell across southeastern China, boosting reservoirs levels.

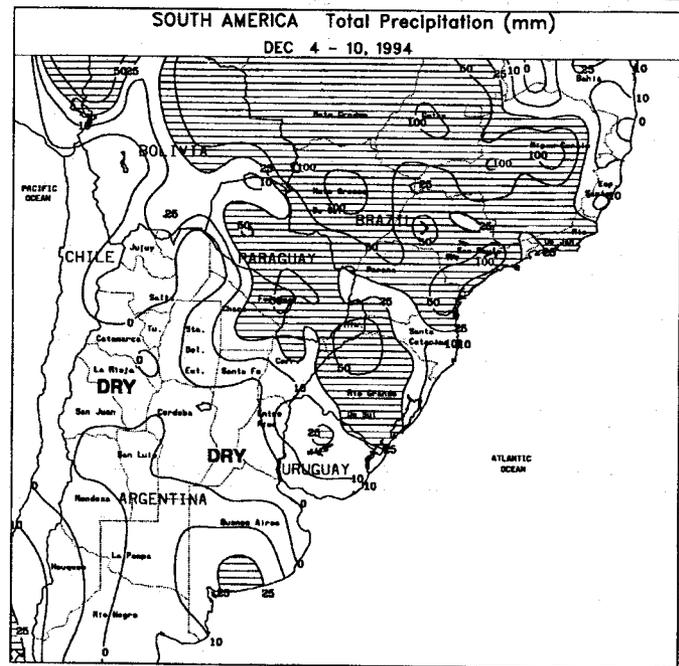
**SOUTHEAST ASIA:** Moderate to heavy rain (25-50 mm or more, with many locations receiving more than 100 mm) further improved Java's rice planting prospects. Showers were widespread elsewhere in Indonesia and Malaysia, but rainfall was below normal (less than 50 mm) across most oil palm areas of western Malaysia, providing additional flood relief. Further north, heavy showers (100-300 mm or more) over central Vietnam likely washed out some newly planted winter rice. In the Philippines, moderate to heavy rain (50-127 mm) covered most central and southern crop areas, boosting moisture for sugarcane, grain, and other crops.

**EUROPE:** Stormy weather returned to the northwest, with 25-80 mm of rainfall extending from extreme northwest Spain to northern Germany. Showers (10-25 mm) covered most of Poland, aiding topsoil moisture supplies for winter crops, but rainfall diminished to less than 10 mm over east-central Europe. Scattered, mostly light showers (1-13 mm) brought spotty topsoil moisture to Spain's winter crop areas, where early crop growth has been hampered by limited moisture. Light rain (1-9 mm) also prevailed over much of southeastern Europe. The unseasonably mild weather pattern continued, especially in the west where temperatures averaged 4-6 degrees above normal. Temperatures averaged 2-4 degrees above normal in Poland and the Czech Republic, while seasonable temperatures prevailed in the southeast. Average weekly temperatures ranging from 7 degrees in western Germany to 11 degrees in France likely promoted additional autumn growth of winter crops. A concern this late in the season, with more advanced growth than usual, is the possibility of insufficient time to harden winter crops prior to winter dormancy.





**AUSTRALIA:** Little or no rain fell across the major eastern summer crop areas, aiding cotton and sorghum planting. Light to moderate rain (5-30 mm) fell across east-central Queensland (northern summer crop area), increasing soil moisture for summer crop planting. However, additional rain is still needed across the region. Mostly dry weather favored wheat harvesting across western and southern crop areas. Light to moderate showers (10-30 mm) slowed late sugarcane harvesting across the northeastern coast of Queensland. Temperatures averaged 2-3 degrees C below normal across southern Queensland and northern New South Wales, 3-5 degrees C above normal across the south, and near normal in the west.



**SOUTH AMERICA:** Drier weather prevailed across most of central Argentina, aiding summer crop planting and winter wheat harvesting. Moderate showers (15-35 mm) covered southern Buenos Aires, slowing wheat harvesting. During the latter half of the week, temperatures climbed into the mid and upper 30's across the main crop areas, increasing evapotranspiration rates. In southern Brazil and Paraguay, widespread showers (25-100 mm, with isolated amounts greater than 125 mm) covered the primary crop areas, aiding germinating to vegetative soybeans. The showers continued to favor citrus, coffee, and sugarcane across Sao Paulo and southern Minas Gerais. Temperatures averaged 2-3 degrees C above normal across southern Brazil and central Argentina.

## November ENSO Update

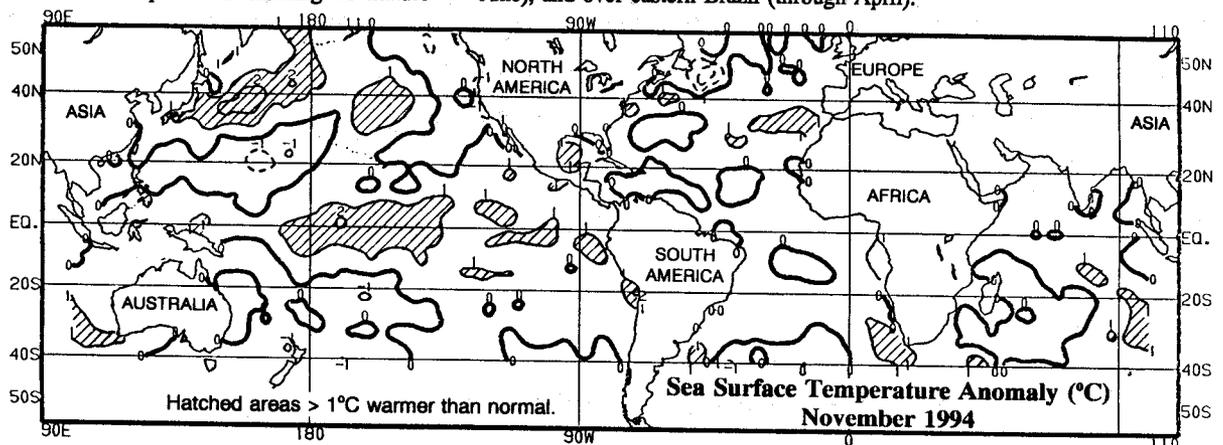
The following information was extracted from the latest ENSO (El Niño/Southern Oscillation) Advisory, issued December 12, 1994, by the Climate Analysis Center.

Most of the atmospheric and oceanic anomaly patterns indicate that warm episode conditions strengthened in the tropical Pacific during November. Sea surface temperature (SST) anomalies increased throughout most of the equatorial Pacific east of the date line, as the equatorial easterlies remained much weaker than normal. Consistent with this pattern, enhanced convective activity increased and became more persistent over the central tropical Pacific.

The persistent enhanced convection along the equator in the vicinity of the date line is an indication that the warm episode is entering its mature phase, which is likely to continue for the next several months. During the mature phase of a warm (El Niño/Southern Oscillation--ENSO) episode, enhanced convection over the central tropical Pacific is generally associated with an enhanced jet stream over the central North Pacific, anomalous ridging in the middle and upper troposphere over central Canada, and an enhanced

subtropical jet stream over northern Mexico and the northern Gulf of Mexico.

The precipitation and temperature anomalies that generally accompany the mature phase of a warm episode include: drier than normal conditions over northern Australia (through March), the Hawaiian islands (through May), Northeast Brazil (through March), and southeastern Africa (through May); wetter-than-normal conditions over the central tropical Pacific (through June), the Gulf Coast of the United States (through March), and southern Brazil, Uruguay, and central Argentina (through February). In addition, warmer-than-normal conditions are likely to be observed over southern Alaska, western Canada, and the upper Great Plains of the United States (through March), over southeastern Africa and southern Australia (through June), and over eastern Brazil (through April).



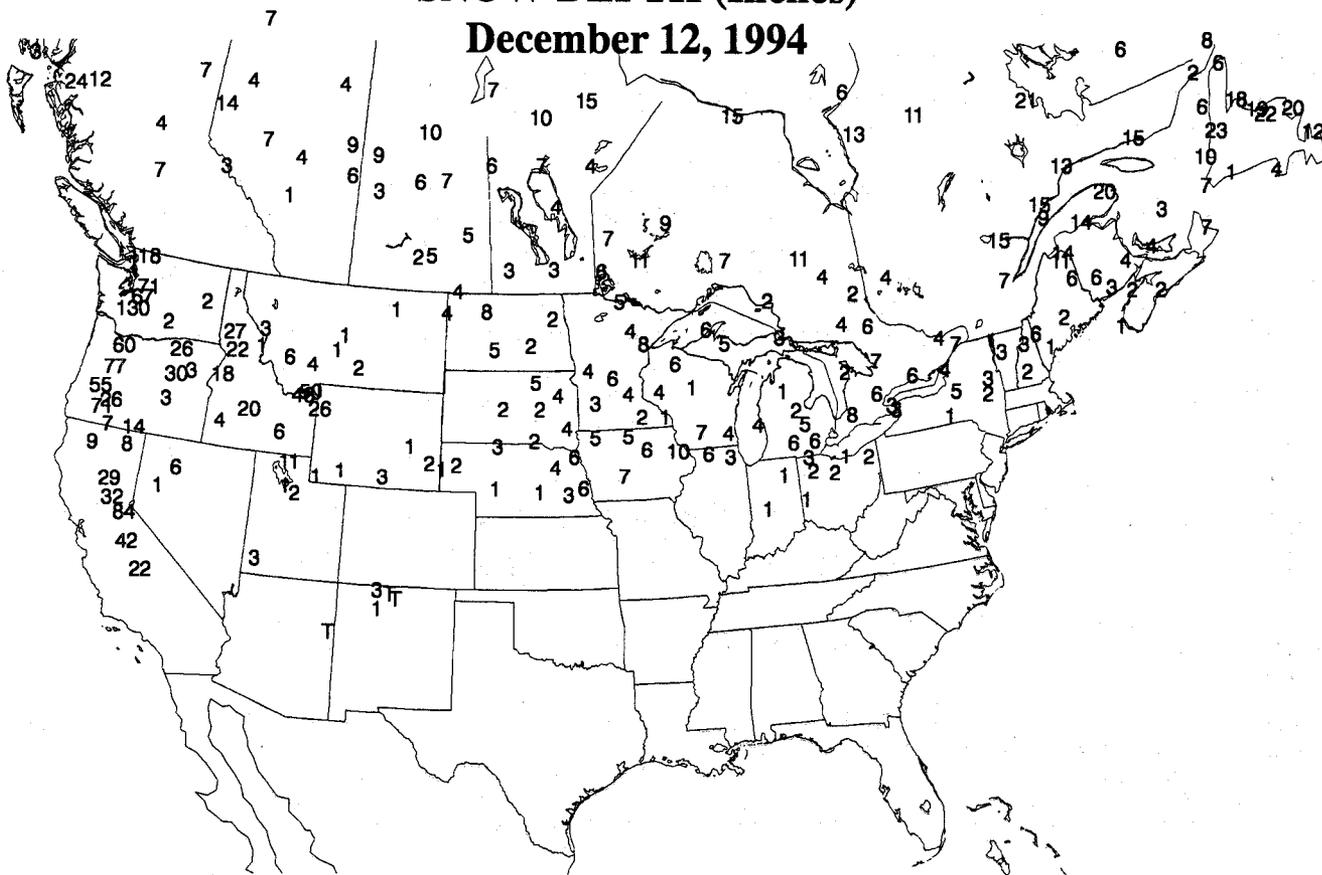
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## SNOW DEPTH (Inches) December 12, 1994



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
 Based on preliminary data

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