

# 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

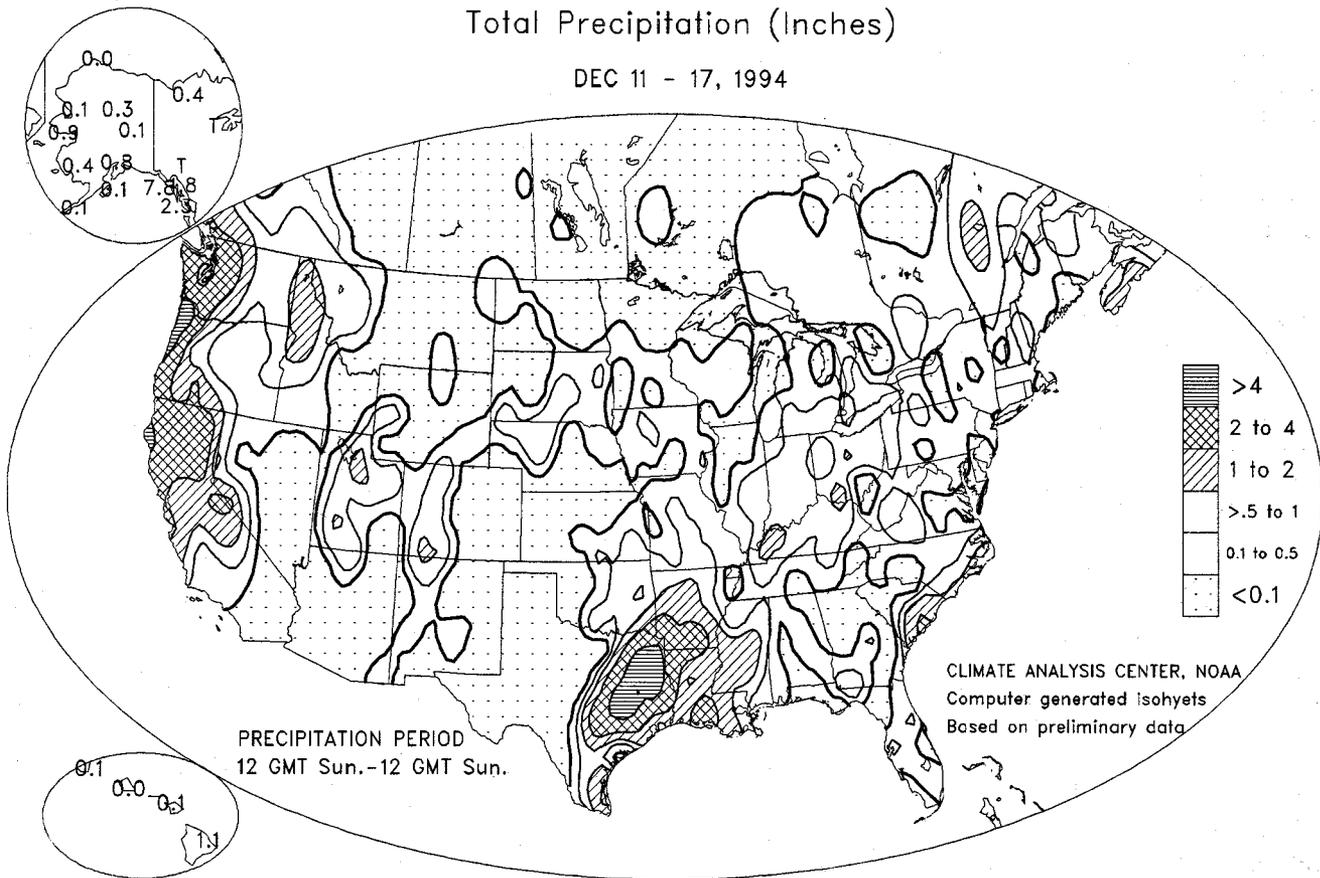
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December 20, 1994

## Total Precipitation (Inches)

DEC 11 - 17, 1994



## HIGHLIGHTS

December 11 - 17, 1994

Cold air eased its grip on the **Western and North Central States**, causing some snowmelt-enhanced flooding in the **Pacific Northwest** and eroding snow cover in the **northern High Plains**. Snow cover persisted, however, across the **upper Midwest** and the **interior Northeast**, bolstered by a few inches of new snow late in the week. Farther south, **eastern Texas** received up to 7 inches of rain on Thursday. Across the **West**, a northward shift in the storm track brought an end to heavy snow across the **Wasatch Range** and the **Sierra Nevada** by midweek. Early-week storminess in **southeastern Alaska** (7.27 inches of precipitation in Yakutat on December 12-13) overspread the **Pacific Northwest** toward week's end. In **Hawaii**, high winds buffeted windward areas, while little or no rain fell on the leeward slopes, prolonging the 2-month dry spell.

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## Long-Lead Outlook Debuts

On December 15, the Climate Analysis Center (CAC) released monthly and seasonal long-lead outlooks of average temperature and total precipitation, valid for January 1995 (fig. 1) and January through March 1995 (fig. 2), respectively. Beginning on January 12, 1995, and continuing on a monthly basis, CAC will issue a monthly outlook and a suite of 13 overlapping seasonal outlooks (for example, February-March-April [FMA] 1995, MAM, AMJ, MJJ, JJA, JAS, ASO, SON, OND, NDJ, DJF, JFM, and ending with FMA 1996). The new outlooks incorporate exhaustive research on El Niño/Southern Oscillation and ocean-atmosphere interactions. The area of forecast coverage is the continental United States, Alaska, and Hawaii (a separate text-and-tabular product).

**History:** Monthly outlooks of average temperature and total precipitation became operational in 1948. Seasonal outlooks were first issued in 1958 (4 per year), and the frequency was increased in 1982 to 12 per year. These products were contained in the "Monthly and Seasonal Weather Outlook," a twice-monthly publication that was terminated with the introduction of the new long-lead outlooks.

**Technical Aspects and Internet Access:** On November 22, 1994, CAC issued a 30-page document ("Technical Procedures Bulletin, Series No. 418") that contains a detailed history of long-range

prediction in the United States, and discusses the scientific basis for, and the skill of, the long-lead outlooks. Another document for those interested in technical details, "Long-Lead Seasonal Forecasts--Where Do We Stand?", appeared in the November 1994 *Bulletin of the American Meteorological Society*. Pertaining to the new product, a couple of important points follow:

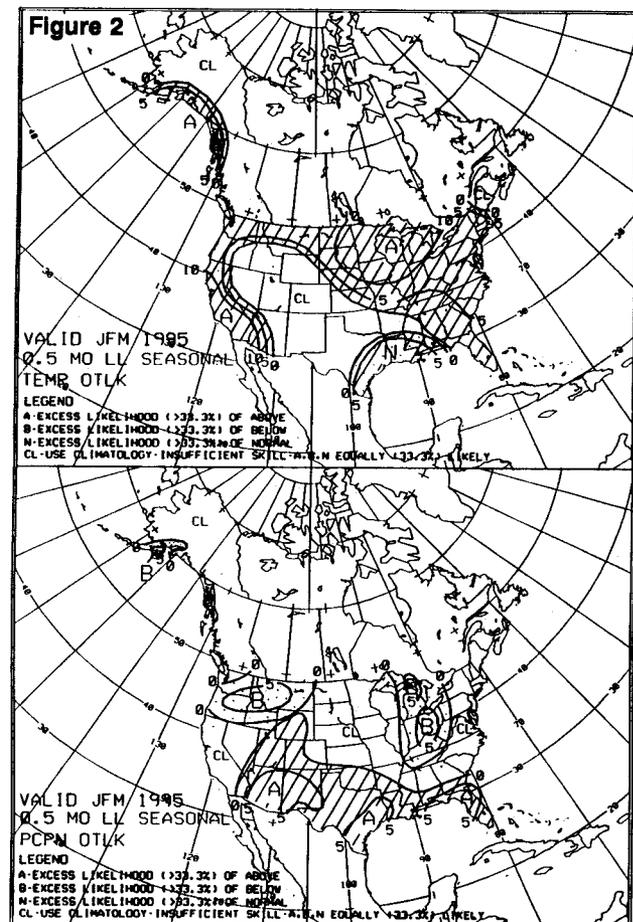
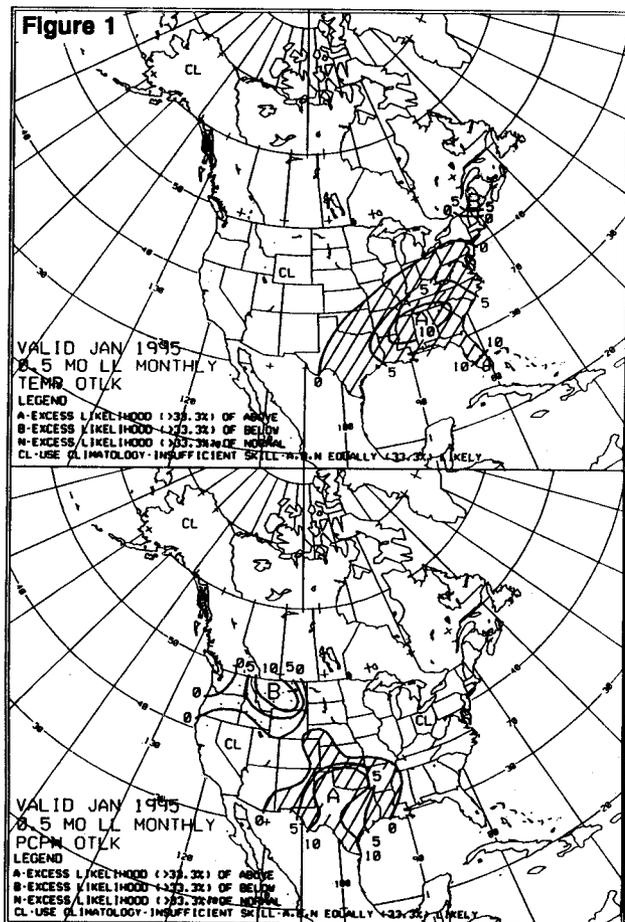
- \* The new outlooks are not forecasts of day-to-day weather, and therefore are not applicable to single-event planning.

- \* The new outlooks introduce a new category, the likelihood of near-normal conditions (see the temperature outlook for the western Gulf coast in fig. 2), not to be confused with the "CL" category, which indicates that there is insufficient skill to differentiate between chances for above-normal, normal, and below-normal conditions.

CAC will not issue the long-lead outlooks as a paper product; instead, they may be accessed via Internet:

<http://nic.fb4.noaa.gov/products/predictions/index.html>

The *Weekly Weather and Crop Bulletin* will routinely publish only the first of the 13 seasonal outlooks, as well as the monthly outlook. For more information, contact CAC at (301) 763-8155.



# National Weather Data for Selected Cities

Weather Data for the Week Ending December 17, 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		
AL BIRMINGHAM	53	36	56	26	44	-1	.1	-1.1	.1	3.7	134	60.0	115	90	62	0	2	1	0		
MOBILE	61	41	68	29	51	-2	.1	-1.0	.2	2.6	90	54.5	89	92	53	0	1	1	0		
MONTGOMERY	56	39	59	29	47	-1	.1	-1.1	.1	2.9	100	57.6	109	91	60	0	1	1	0		
AK ANCHORAGE	39	19	40	13	24	8	.8	.5	.4	1.1	180	12.7	82	94	77	0	6	6	0		
BARRROW	-19	-27	-10	-30	-23	-12	T	T	T	.1	114	4.2	98	73	68	0	7	7	0		
FAIRBANKS	9	-7	20	-15	1	7	.1	-1.1	.1	.4	77	9.6	91	87	80	0	4	4	0		
JUNEAU	35	27	41	17	31	4	1.8	.8	.9	2.1	86	53.7	103	97	80	0	5	5	2		
KODIAK	34	27	42	24	31	0	.1	-1.4	.1	4.4	123	79.7	124	87	70	0	6	3	0		
NOME	12	1	27	-29	6	-1	.9	.7	.4	1.0	215	17.8	122	87	77	0	7	5	0		
AZ PHOENIX	64	42	77	38	53	-1	.0	-2	.0	1.3	241	7.1	97	81	27	0	0	0	0		
PRESOTT	50	25	61	22	38	1	T	-4	T	.4	49	11.9	63	72	29	0	7	0	0		
TUCSON	65	38	75	35	52	0	.0	-3	.0	2.5	446	10.5	91	82	28	0	0	0	0		
YUMA	66	44	72	36	55	-1	.0	-1	.0	.1	33	2.2	75	66	31	0	0	0	0		
AR FORT SMITH	47	32	55	23	40	-1	.4	-3	.4	3.1	169	53.5	135	91	64	0	4	1	0		
LITTLE ROCK	46	34	56	24	40	-2	.7	-4	.5	3.8	139	54.7	115	84	66	0	3	3	1		
CA BAKERSFIELD	56	40	61	33	48	1	.1	.0	.1	.2	64	5.6	103	84	43	0	0	1	1		
FUREKA	55	41	64	35	48	-1	2.5	1.1	.9	4.1	120	32.3	93	91	62	0	0	6	2		
FRESNO	52	39	55	30	45	0	.3	.0	.2	.3	36	9.1	92	93	50	0	1	3	0		
LOS ANGELES	65	48	74	44	56	-1	.5	1.1	.4	.5	53	7.5	67	85	35	0	0	2	0		
REDDING	45	39	48	36	42	-3	2.7	1.5	.8	4.3	145	24.5	80	99	85	0	0	6	3		
SACRAMENTO	49	40	52	35	45	-1	.4	-2	.2	1.2	94	8.0	49	99	83	0	0	3	0		
SAN DIEGO	63	47	68	42	55	-2	T	-3	T	.1	6	8.7	94	82	35	0	0	1	0		
SAN FRANCISCO	53	43	55	40	48	-2	1.3	.6	.6	1.6	99	18.4	101	96	67	0	0	4	2		
CO DENVER	49	20	57	16	34	3	.0	-1	.0	.1	29	10.8	71	84	26	0	7	0	0		
GRAND JUNCTION	39	22	46	19	31	-1	T	-2	T	.6	152	7.0	69	87	49	0	7	0	0		
PUEBLO	51	14	59	8	33	1	.0	-1	.0	.1	27	15.2	138	88	34	0	7	0	0		
CT BRIDGEPORT	39	29	49	20	34	-1	.2	-6	.1	2.6	132	39.8	99	76	48	0	5	3	0		
HARTFORD	33	22	43	14	28	-2	.6	-3	.3	3.2	146	50.8	120	80	56	0	7	2	0		
DC WASHINGTON	45	34	48	29	40	0	.2	-5	.1	1.8	104	37.1	99	84	57	0	2	4	0		
FL PANAMA CITY	59	45	67	36	52	-2	T	-1.1	T	2.3	92	51.6	82	95	66	0	0	1	1		
DAYTONA BEACH	67	54	74	48	61	0	.2	-4	.2	.4	25	64.3	138	96	72	0	0	1	0		
JACKSONVILLE	62	47	71	42	55	-3	.6	-1	.4	1.4	92	64.7	134	95	74	0	0	3	0		
KEY WEST	78	69	84	67	73	2	T	-5	T	1.4	119	43.6	113	86	67	0	0	0	0		
MIAMI	80	64	83	61	72	3	.3	-1	.2	1.7	169	76.3	139	90	62	0	0	4	0		
ORLANDO	70	54	77	49	62	0	.4	-1	.3	1.1	89	65.9	140	95	76	0	0	2	0		
TALLAHASSEE	62	43	68	35	53	-1	.9	-3	.9	1.9	71	89.1	140	96	63	0	0	1	1		
TAMPA	74	52	79	44	63	1	.7	-2	.7	.7	61	46.4	108	99	68	0	0	1	1		
WEST PALM BEACH	78	60	82	57	69	1	T	-5	T	1.2	90	68.9	118	94	63	0	0	1	0		
GA ATLANTA	50	40	58	32	45	0	T	-1.0	T	1.2	51	59.7	122	88	66	0	2	1	0		
AUGUSTA	53	38	63	28	46	-2	.1	-7	.1	.9	49	45.3	105	91	59	0	2	2	0		
MACON	53	40	56	29	46	-3	T	-1.0	T	1.8	80	59.4	140	88	59	0	2	0	0		
SAVANNAH	56	44	67	37	50	-2	.6	.0	.5	2.2	145	67.2	141	95	72	0	0	3	1		
HI HILO	80	65	82	63	73	1	1.1	-1.6	.7	5.7	82	181.5	146	89	62	0	0	4	1		
HONOLULU	83	72	84	70	78	3	T	-9	T	T	1	14.0	69	71	54	0	0	0	0		
KAHULUI	80	69	81	67	75	2	.1	-6	.1	.3	15	11.2	58	76	56	0	0	1	0		
LIHUE	78	70	79	67	74	1	.1	-1.1	.0	.2	7	27.0	67	75	62	0	0	2	0		
ID BOISE	36	24	51	13	30	0	.3	.0	.2	1.6	219	9.3	81	92	49	0	6	4	0		
LEWISTON	39	31	46	27	35	1	T	-3	T	T	0	8.6	72	85	63	0	4	0	0		
POCATELLO	35	15	47	1	25	0	T	-2	T	1.0	172	8.7	75	88	65	0	7	2	0		
IL CHICAGO	33	23	42	14	28	1	.2	-3	.2	1.4	97	29.7	85	87	65	0	6	2	0		
MOLINE	31	20	42	6	26	0	.2	-4	.1	1.4	105	31.8	83	91	72	0	7	3	0		
PEORIA	36	22	49	8	29	1	.4	-2	.4	2.2	154	25.2	71	92	66	0	7	2	0		
QUINCY	37	23	49	9	30	1	.3	-2	.3	1.4	100	20.4	53	87	60	0	6	2	0		
ROCKFORD	29	16	38	2	22	-2	.2	-3	.1	1.2	97	36.6	103	99	81	0	7	2	0		
SPRINGFIELD	39	22	51	11	31	1	.4	-2	.4	1.7	105	35.2	103	90	67	0	7	3	0		
IN EVANSVILLE	43	30	51	22	36	-1	.6	-3	.6	2.0	92	36.2	82	90	63	0	5	1	1		
FORT WAYNE	35	27	47	21	31	2	.4	-3	.4	2.0	122	29.1	87	91	79	0	5	1	0		
INDIANAPOLIS	38	28	48	21	33	2	.5	-2	.5	1.6	82	31.5	82	82	68	0	5	2	1		
SCOTTS BEND	33	24	42	17	29	0	.4	-4	.4	2.1	111	37.4	99	91	75	0	6	2	0		
IA DES MOINES	30	17	39	-4	23	-1	.2	-1	.1	2.0	248	27.8	83	93	74	0	7	2	0		
SIOUX CITY	28	9	39	-8	18	-4	.2	.0	.2	1.7	159	25.9	102	91	73	0	7	1	0		
WATERLOO	27	11	36	-9	19	-2	.2	-1	.2	1.2	152	35.1	106	96	77	0	7	2	0		
KS CONCORDIA	38	22	50	14	30	0	T	-2	T	1.0	202	17.5	62	91	66	0	7	1	0		
DODGE CITY	44	23	55	17	34	1	.0	-2	.0	.6	147	18.6	88	88	50	0	7	0	0		
GOODLAND	41	22	50	19	32	2	.0	-1	.0	.3	104	15.0	83	89	57	0	7	0	0		
TOPEKA	43	25	55	12	34	3	.3	.0	.3	1.3	155	26.4	76	91	54	0	7	2	0		
WICHITA	43	26	55	19	34	0	.2	-1	.2	.6	71	24.1	70	92	60	0	7	3	0		
KY BOWLING GREEN	47	28	55	19	38	-1	T	-1.1	T	2.2	79	48.6	100	93	63	0	5	1	0		
LEXINGTON	44	29	49	22	36	0	.5	-4	.5	3.8	171	45.6	107	93	60	0	5	3	1		
LOUISVILLE	44	31	51	24	38	1	.3	-5	.3	2.9	138	35.4	83	89	62	0	5	1	0		
LA BATON ROUGE	60	41	69	29	51	-3	1.0	-3	1.0	2.1	69	58.3	100	99	61	0	2	2	1		
LAKE CHARLES	63	48	72	34	55	2	1.4	-3	1.4	5.3	193	42.5	81	89	65	0	0	1	1		
NEW ORLEANS	62	44	70	31	53	-2	.5	-8	.5	2.0	64	49.3	83	89	57	0	1	1	1		
SHREVEPORT	55	40	66	26	48	0	3.1	2.0	1.6	6.6	250	53.2	113	89	62	0	2	3	2		

Based on 1961-90 normals.

Weather Data for the Week Ending December 17, 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	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	17	0	27	-17	9	-7	.6	-.1	.6	2.0	110	37.3	106	85	62	0	7	1	1		
PORTLAND	31	17	44	9	24	-3	.6	-.5	.6	2.4	93	40.6	96	80	55	0	7	1	1		
ND BALTIMORE	44	32	48	27	38	1	.4	-.4	.3	2.0	105	43.3	110	88	55	0	4	3	0		
SALISBURY	47	34	55	27	41	1	.1	-.7	.1	1.1	56	39.9	91	96	71	0	4	1	0		
MA BOSTON	36	25	46	17	31	-3	.6	-.3	.3	2.7	120	45.0	113	82	59	0	4	5	0		
CHATHAM	41	33	54	24	37	2	.5	-1.0	.3	.4	16	35.9	83	78	53	0	2	1	0		
MI ALPENA	34	19	38	4	26	2	.3	-.1	.2	.4	32	29.8	107	88	61	0	7	3	0		
DETROIT	35	24	44	11	30	1	.2	-.2	.5	.4	32	29.8	107	88	61	0	7	3	0		
FLINT	32	17	39	8	25	-3	.5	-.2	.4	1.7	106	30.4	97	90	71	0	5	1	0		
GRAND RAPIDS	31	20	37	7	26	-3	.5	-.2	.4	1.7	134	33.6	114	89	66	0	7	2	0		
HOUGHTON LAKE	30	16	36	1	23	-5	.6	-.4	.2	1.0	62	46.5	133	90	70	0	5	1	0		
LANSING	31	17	37	3	24	-3	.6	-.2	.3	.7	59	27.8	101	90	68	0	7	3	0		
MARQUETTE	27	19	33	5	23	-2	.4	-.1	.4	1.4	116	35.3	115	97	72	0	7	1	0		
MUSKOGON	32	25	38	19	29	.3	.1	-.5	.1	.3	22	24.2	71	91	61	0	7	4	0		
SAULT ST. MARIE	31	21	35	6	26	0	.3	-.4	.2	.9	55	32.9	105	86	69	0	5	2	0		
MI ALEXANDRIA	21	6	27	-9	13	0	.2	-.3	.1	.5	28	27.9	84	91	55	0	7	6	0		
DULUTH	23	9	31	-13	16	0	.2	-.1	.2	.4	95	19.2	76	91	73	0	7	1	0		
INT'L FALLS	20	4	29	-16	12	0	.2	-.1	.1	.3	41	29.2	99	82	64	0	7	2	0		
MINNEAPOLIS	26	11	35	-3	18	0	.3	-.1	.1	.3	72	24.3	101	89	69	0	7	2	0		
ROCHESTER	24	10	33	-6	17	-1	.3	-.2	.2	.5	76	29.6	106	92	69	0	7	3	0		
MS GREENWOOD	53	37	62	27	45	-1	.3	-.0	.3	.5	82	31.2	106	93	76	0	7	3	0		
JACKSON	53	37	61	24	45	-2	1.0	-.5	.6	1.6	48	45.2	87	97	58	0	3	3	0		
MERIDIAN	56	39	66	28	48	-1	.5	-.9	.4	2.8	83	55.7	107	95	61	0	3	3	1		
MO CAPE GIRARDEAU	43	29	52	20	36	-1	.4	-.6	.4	6.1	185	64.7	120	91	59	0	2	3	0		
COLUMBIA	42	23	51	10	32	1	.1	-.6	.1	2.0	77	44.3	100	93	66	0	5	1	0		
KANSAS CITY	42	24	54	9	33	2	.1	-.2	.1	.5	32	37.8	101	93	57	0	6	1	0		
SAINT LOUIS	43	29	58	17	36	2	.5	-.2	.5	1.5	167	28.1	76	87	54	0	4	1	0		
SPRINGFIELD	45	26	56	12	35	0	.4	-.2	.4	.8	44	34.0	94	85	60	0	7	1	0		
MT BILLINGS	37	21	47	14	29	3	.0	-.2	.0	.7	42	48.7	115	90	58	0	6	2	0		
GLASGOW	25	6	34	1	16	0	.0	-.1	.0	.2	45	13.6	92	69	45	0	7	0	0		
GREAT FALLS	40	23	52	16	32	0	.0	-.2	.0	.1	25	9.6	90	92	70	0	7	0	0		
HAVRE	36	9	46	1	22	5	.0	-.1	.0	.0	9	9.7	66	74	43	0	7	0	0		
HELENA	32	12	46	1	22	1	.0	-.1	.0	.0	0	7.1	65	88	61	0	7	0	0		
KALISPELL	31	18	39	8	24	1	.1	-.3	.1	.2	18	11.0	70	94	72	0	7	2	0		
MILES CITY	34	9	44	4	22	2	.0	-.1	.0	.0	6	9.5	69	90	54	0	7	0	0		
MISSOULA	30	14	38	6	22	-2	.2	-.1	.1	.5	85	11.4	88	92	65	0	7	2	0		
NE GRAND ISLAND	33	14	44	2	23	-2	.0	-.2	.0	.4	86	22.5	91	93	66	0	7	0	0		
LINCOLN	34	13	45	-1	24	-2	.1	-.1	.1	.7	123	20.2	72	93	63	0	7	1	0		
NORFOLK	30	11	41	-11	21	-2	.2	-.0	.2	.7	155	28.5	115	92	65	0	7	1	0		
NORTH PLATTE	37	11	48	6	24	0	.0	-.1	.0	.3	111	18.6	97	93	64	0	7	1	0		
OMAHA	39	15	42	-6	24	-1	.1	-.2	.1	.5	87	29.4	100	91	67	0	7	1	0		
SCOTTSBLUFF	39	14	47	1	26	0	.1	-.1	.1	.5	136	15.5	103	88	49	0	7	1	0		
VALENTINE	34	6	40	0	20	-5	.3	-.1	.3	.5	145	17.8	80	86	60	0	7	1	0		
NV ELY	34	3	45	-11	19	-7	.1	-.1	.1	.3	72	8.7	87	92	63	0	7	1	0		
LAS VEGAS	55	34	63	29	45	-1	.0	-.1	.0	.0	0	1.5	38	56	25	0	4	0	0		
RENO	43	26	50	20	35	2	.1	-.1	.1	.1	24	5.1	73	90	51	0	7	3	0		
WINNEVOCCA	35	17	41	3	26	-4	.3	-.1	.3	.3	68	7.4	95	96	71	0	7	3	0		
NH CONCORD	32	13	43	5	22	-2	.5	-.2	.4	1.9	104	33.9	97	96	60	0	7	2	0		
NJ ATLANTIC CITY	45	30	53	20	38	1	.1	-.6	.1	2.0	108	42.3	109	94	62	0	5	2	0		
NM ALBUQUERQUE	47	28	56	24	38	2	.0	-.1	.0	.6	204	11.1	129	76	34	0	7	0	0		
CLOVIS	56	29	63	24	42	4	.0	-.1	.0	.4	112	10.3	59	74	23	0	7	0	0		
ROSWELL	59	30	65	25	45	4	.0	-.1	.0	.0	0	7.6	61	74	29	0	5	0	0		
NY ALBANY	33	18	39	6	26	-1	.2	-.5	.1	1.9	112	34.1	97	88	56	0	7	2	0		
BINGHAMTON	33	19	39	9	26	-1	.2	-.5	.1	2.4	142	41.5	116	84	62	0	7	3	0		
BUFFALO	35	21	46	6	28	-2	.4	-.5	.4	2.5	118	36.6	99	87	64	0	6	2	0		
NEW YORK	42	31	52	23	36	-1	.3	-.5	.2	2.0	104	42.8	105	80	51	0	3	2	0		
ROCHESTER	35	22	43	11	29	-1	.3	-.3	.2	2.1	136	29.4	95	84	56	0	6	3	0		
SYRACUSE	34	20	45	7	27	-2	.3	-.5	.1	2.1	112	38.6	103	84	59	0	6	3	0		
NC ASHEVILLE	46	32	57	21	39	-1	.0	-.1	.0	2.5	102	57.0	105	95	62	0	3	1	0		
CHARLOTTE	48	36	59	27	42	-1	.2	-.5	.1	.8	41	35.5	86	91	58	0	2	4	0		
GREENSBORO	46	32	56	24	39	-2	.1	-.7	.0	.3	18	34.3	83	89	63	0	3	5	0		
HATTERAS	60	51	69	46	55	6	1.0	-.1	.6	3.5	143	67.4	125	91	51	0	0	3	1		
NEW BERN	56	42	65	33	49	2	.6	-.2	.3	.8	42	35.3	67	91	72	0	0	3	0		
RALEIGH	49	35	62	24	42	-1	.5	-.2	.3	.7	40	35.9	90	91	53	0	2	3	0		
WILMINGTON	56	41	65	32	49	1	1.1	-.2	.7	2.5	116	56.9	103	93	70	0	1	4	1		
ND BISMARCK	22	1	33	-8	12	-2	.3	-.2	.3	.3	104	18.9	124	88	69	0	7	2	0		
FARGO	21	8	28	-5	15	2	.2	-.0	.1	.2	52	23.1	120	85	66	0	7	2	0		
GRAND FORKS	21	6	27	-7	13	3	.0	-.1	.0	.0	6	23.1	128	91	67	0	7	1	0		
WILLISTON	23	3	29	-8	13	-1	.8	-.7	.5	1.5	484	16.4	122	88	66	0	7	3	1		
OH AKRON-CANTON	38	24	46	15	31	0	.5	-.2	.4	2.9	169	40.4	114	91	65	0	5	3	0		
CINCINNATI	42	29	48	21	35	2	.6	-.1	.6	2.9	158	38.3	96	91	68	0	5	2	1		
CLEVELAND	39	23	48	14	31	-1	.5	-.2	.4	2.7	152	29.2	83	94	68	0	6	3	0		
COLUMBUS	42	27	50	20	34	4	.6	-.1	.6	2.2	127	31.6	87	88	63	0	6	1	1		
DAYTON	38	25	48	17	32	0	.7	-.0	.7	2.7	157	34.7	98	90	69	0	5	1	1		

Based on 1961-90 normals.

Weather Data for the Week Ending December 17, 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	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
TOLEDO	36	25	48	13	31	2	.6	.1	.6	2.7	158	28.9	91	92	73	0	5	1	1	
YOUNGSTOWN	37	21	45	9	29	2	.6	.1	.3	2.8	163	37.7	104	94	65	0	7	3	0	
OK OKLAHOMA CITY	47	30	59	22	39	1	.4	.0	.4	1.2	148	27.7	85	92	56	0	4	1	0	
TULSA	48	32	60	21	40	1	.5	.0	.5	1.0	75	49.2	124	94	58	0	4	2	0	
OR ASTORIA	49	39	56	30	44	1	3.3	.9	1.3	6.1	105	67.2	109	95	76	0	2	5	3	
BURNS	32	17	43	6	24	1	1.1	.2	.0	.3	38	5.0	52	90	73	0	7	4	0	
MEDFORD	47	33	62	28	40	3	2.3	.6	.1	.4	20	11.4	66	98	61	0	3	4	0	
PENDLETON	41	31	57	22	36	2	1.3	.1	.3	.4	47	12.1	106	94	51	0	5	5	0	
FORTLAND	48	38	56	28	43	2	2.3	.9	1.1	2.9	87	33.0	98	93	73	0	2	5	1	
SALEM	49	38	58	26	43	4	1.7	.2	.9	2.8	74	35.5	98	91	67	0	3	5	1	
PA ALLENTOWN	39	25	43	19	32	0	0	.2	.1	2.6	131	48.1	115	87	57	0	6	2	2	
ERIE	39	26	49	16	32	0	.5	.3	.3	3.1	146	40.4	101	89	59	0	5	3	0	
HARRISBURG	39	30	44	22	34	0	2	.6	.3	2.2	117	46.1	118	81	54	0	6	3	0	
PHILADELPHIA	42	31	49	24	36	2	1.1	.7	.1	1.5	75	44.4	100	83	57	0	6	2	0	
PITTSBURGH	42	27	50	19	34	2	2	.4	.3	1.9	119	41.3	116	83	55	0	5	2	0	
SCRANTON	39	26	44	17	33	2	1	.1	.1	1.8	121	41.6	118	80	54	0	6	2	2	
RI PROVIDENCE	38	27	49	19	33	0	2	.8	.1	2.1	85	42.3	97	82	55	0	7	2	0	
SC CHARLESTON	55	42	68	34	49	3	1.1	.4	.5	3.4	204	67.4	135	90	67	0	0	1	0	
COLUMBIA	51	38	63	31	44	3	1	.7	.1	1.7	37	46.9	97	90	65	0	1	4	1	
FLORENCE	54	40	63	31	47	1	1.0	.3	.6	1.9	116	41.3	98	95	61	0	1	4	1	
GREENVILLE	48	35	52	24	42	2	1	.1	.0	1.5	65	48.9	99	87	60	0	2	3	0	
SD ABERDEEN	21	2	29	-16	11	4	1	.1	.1	.3	97	20.6	99	88	74	0	7	1	0	
HURON	23	2	34	-8	13	6	4	.4	.3	.6	207	20.8	105	89	76	0	7	1	0	
RAPID CITY	35	13	41	-7	24	0	3	.3	.3	.4	130	10.5	64	84	56	0	7	1	0	
SIOUX FALLS	25	9	33	-7	17	1	1	.2	.0	.3	70	22.9	97	83	71	0	7	1	0	
TN CHATTANOOGA	51	34	57	26	42	1	1	.1	.1	3.6	128	73.4	144	91	54	0	4	2	0	
KNOXVILLE	48	31	55	24	40	1	2	.2	.1	1.8	71	63.0	140	96	68	0	5	2	0	
MEMPHIS	48	35	56	24	42	2	5	.8	.3	4.3	132	47.8	96	91	58	0	3	2	0	
NASHVILLE	49	32	58	23	41	0	2	.2	.2	2.7	103	60.2	133	87	54	0	5	1	0	
TX ABILENE	55	37	66	28	46	2	1	.2	.0	.3	48	27.7	115	91	57	0	3	2	0	
AMARILLO	52	26	59	20	39	2	0	.1	.0	.1	33	17.1	88	83	30	0	6	0	0	
AUSTIN	61	45	73	33	53	1	3.0	2.6	2.1	3.7	346	39.2	126	92	66	0	0	4	2	
BEAUMONT	63	49	71	36	56	2	1.3	.2	1.3	2.1	82	65.5	119	89	63	0	0	1	1	
BROWNSVILLE	76	60	84	41	68	6	8	.5	.7	.9	128	23.0	88	91	63	0	0	3	1	
CORPUS CHRISTI	72	57	81	40	65	6	2.2	1.9	2.1	5.0	752	36.0	122	89	64	0	0	3	1	
DEL RIO	65	47	75	37	56	3	1	.2	.1	.3	53	18.9	78	85	59	0	0	1	0	
EL PASO	60	35	64	27	47	3	T	.1	T	.4	112	4.2	49	74	32	0	2	2	0	
FORT WORTH	52	38	62	30	45	0	2	.3	.1	1.8	148	42.8	118	92	63	0	2	3	0	
GALVESTON	65	58	72	43	62	5	1.8	1.0	1.8	2.4	123	25.6	63	86	71	0	0	1	1	
HOUSTON	63	50	72	35	56	3	1.4	.3	1.1	3.6	130	41.9	80	93	63	0	0	3	1	
LUBBOCK	57	28	67	23	43	2	T	.1	T	T	13	13.0	71	92	32	0	6	0	0	
MIDLAND	61	33	71	26	47	1	T	.1	T	T	4	9.7	65	91	36	0	3	0	0	
SAN ANGELO	60	37	72	28	48	2	T	.2	T	.4	82	18.6	92	94	57	0	3	0	0	
SAN ANTONIO	65	47	76	31	56	4	.9	.6	.6	1.5	165	38.4	126	93	58	0	1	2	1	
VICTORIA	68	52	79	34	60	5	2	.2	.1	3.9	242	42.6	97	94	60	0	0	2	0	
WACO	55	40	62	32	47	1	2.2	1.8	.8	3.3	309	32.2	103	93	72	0	2	4	3	
WICHITA FALLS	51	35	58	27	43	0	1	.3	.1	.5	62	13.5	43	92	63	0	3	2	0	
UT CEDAR CITY	42	20	49	15	31	1	T	.2	T	.1	29	9.0	81	83	40	0	7	0	0	
SALT LAKE CITY	38	22	44	16	30	0	.7	.4	.7	1.2	150	15.1	96	85	58	0	7	1	1	
VT BURLINGTON	30	14	38	2	22	2	.3	.3	.2	1.5	105	34.7	104	87	56	0	7	2	0	
VA NORFOLK	52	43	63	37	48	4	.3	.4	.2	1.0	57	52.2	121	86	66	0	0	4	0	
RICHMOND	48	34	56	26	41	0	2	.6	.1	.8	46	43.6	105	91	40	0	3	3	0	
ROANOKE	43	28	51	19	36	3	.3	.4	.2	2.1	123	42.3	106	94	59	0	3	3	0	
WA QUILLAYUTE	46	37	52	28	41	1	4.1	.6	2.6	7.4	87	92.0	94	98	90	0	2	6	2	
SEATTLE-TACOMA	47	37	57	29	42	1	2.0	.7	.9	2.8	84	29.4	85	91	70	0	2	6	1	
SPOKANE	34	28	41	24	31	3	.6	.1	.3	.7	51	12.4	81	97	86	0	5	5	0	
YAKIMA	35	28	40	24	32	2	T	.3	T	T	3	5.5	75	95	81	0	6	1	0	
WV BECKLEY	41	29	49	18	35	1	2	.6	.1	1.6	91	46.8	118	91	61	0	4	4	0	
CHARLESTON	46	29	56	22	38	0	1	.7	.1	2.1	110	49.0	119	95	59	0	5	1	0	
HUNTINGTON	46	30	54	22	38	3	2	.7	.2	3.0	150	45.8	109	89	57	0	5	2	0	
PARKERSBURG	45	29	55	21	37	2	1	.5	.1	2.7	169	47.1	120	92	53	0	4	1	0	
WI GREEN BAY	30	19	36	6	24	4	.3	.1	.2	.4	38	27.8	98	87	70	0	7	2	0	
LACROSSE	28	18	36	2	23	2	T	.3	T	T	0	34.5	115	90	68	0	7	0	0	
MADISON	29	17	37	-1	23	1	1	.3	.1	1.0	107	33.5	107	89	71	0	7	2	0	
MILWAUKEE	32	24	39	12	28	3	.3	.3	.2	1.0	76	27.2	85	88	71	0	4	3	0	
WAUSAU	27	15	33	1	21	3	.3	.1	.2	.3	36	22.5	70	86	60	0	7	3	0	
WY CASPER	39	21	51	18	30	6	T	.1	T	.1	33	13.4	110	76	42	0	7	1	0	
CHEYENNE	42	20	52	14	31	3	1	.0	.1	.2	92	13.2	93	78	30	0	7	2	0	
LANDER	39	14	49	9	26	5	T	.1	T	T	0	11.6	91	77	31	0	7	0	0	
SHERIDAN	41	15	47	6	28	5	1	.1	.1	.1	30	15.0	105	82	43	0	7	1	0	
PR SAN JUAN	87	73	89	72	80	2	.5	.6	.3	2.1	76	40.0	79	89	59	0	0	5	0	

Based on 1961-90 normals.

# National Agricultural Summary

December 12 - 18, 1994

**HIGHLIGHTS:** Precipitation along California's northern coast hampered field activities, while citrus growers started frost protection measures. Unseasonably warm weather in the northern High Plains melted most of the protective cover for the winter wheat. The protective snow cover in Montana was rated mostly poor to fair. The southern half of North Dakota needed snow cover, while snow cover in the northern part of the State was adequate to protect the fall-seeded crops. Heavy rain in the lower Mississippi Valley saturated some wheat fields, where some producers began to graze cattle on the wheat fields. Rains, late in the week, slowed the sugarcane harvest in Louisiana. The late freeze in the Southern States extended the cotton harvest, while snow and ice in the Great Lakes States prevented some farmers from harvesting the last corn fields. Elsewhere in the Midwest, farmers applied fertilizer as the snow melted and the weather allowed.

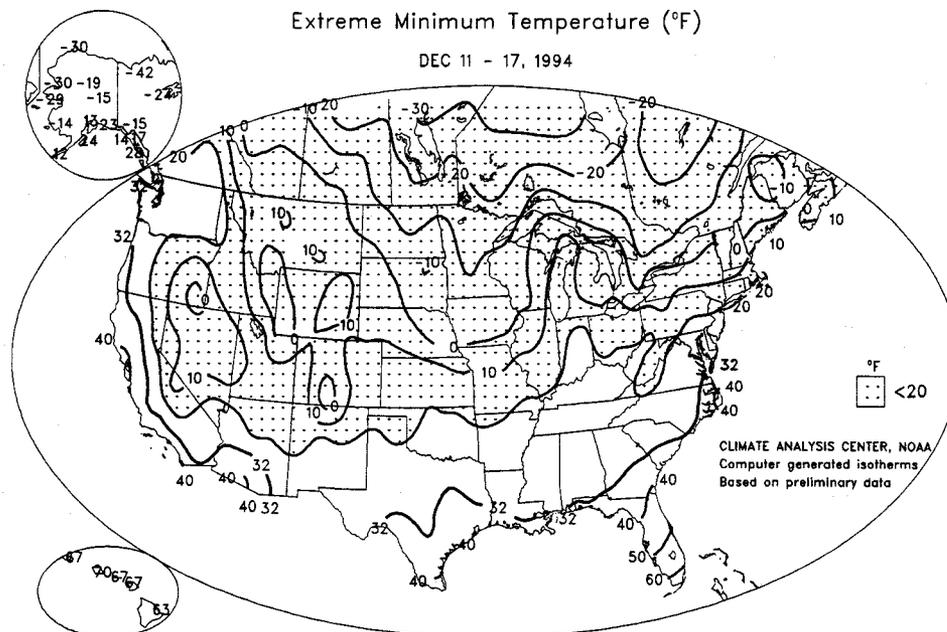
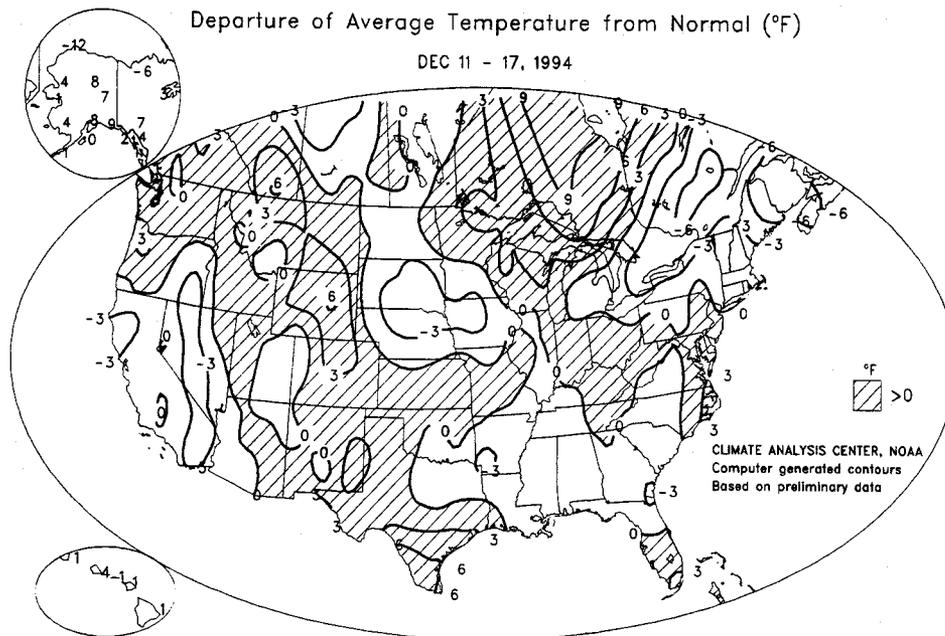
lower Mississippi Valley left some wheat fields saturated. Wheat planting in South Carolina made good progress, while east Texas' producers were hoping for sunshine and dry weather. Wheat planting in eastern Texas was hampered by wet fields, while dry land fields in the Plains needed more moisture. Producers were applying insecticides to control greenbugs in the northern Low Plains and Blacklands of Texas.

**Corn harvest** of the last remaining fields in the Great Lakes States was hampered by snow and ice.

**Cotton harvest** in Texas made good progress despite wet fields. Cotton harvested in Texas reached 93 percent (%), 6 percentage points behind last year. Arizona cotton harvested neared completion, and stalk shredding and plowdown activities were moderately active.

Warm weather melted the snow cover in Montana, leaving the winter wheat vulnerable to freeze damage. Precipitation in the

**Soybeans harvested** in Georgia made limited progress due to wet fields. The soybean harvest in Texas reached 100% complete.



## 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 0.03 to 0.66 in. north, none to 0.79 in. central; none to 0.34 in. south. Temperatures 2 to 4° above normal statewide. Lows 20 to 30° north; 19 to 31° central; 23° to 36° south. Highs 52 to 60° north; 54 to 62° central; 59 to 69° south.

Seasonal activities: Scraping cotton fields, weaning calves, selling cattle, other seasonal chores.

**ARIZONA:** Temperatures 4° below to 2° above normal. Extremes 11°; 69° higher elevations; 25°; 77° deserts. Precipitation only upper elevation stations; 0.01 in. to 0.39 in.

Farmers back into fields; cotton harvested 99%, 100% 1993, 100% avg. Stalk shredding, plowdown moderately active. Alfalfa 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, dry onions, green onions, leeks, mixed greens, radishes, swiss chard, turnips available central areas. Tomatoes available eastern areas.

**ARKANSAS:** Temperatures normal with widespread rain, heaviest in the southern region. Extremes 21°; 62°. Precipitation 0.19 to 3.23 in.

Wheat fields continue to be saturated. Pecans in very poor condition in Lafayette county, with 90% harvested. Due to summer drought in the northwestern region, Newton county is authorized to begin Livestock Feed Programs through FSA. Some producers were winter grazing cattle on wheat fields.

**CALIFORNIA:** North coast of State received significantly more precipitation than southern portions of the State. Timing of the systems was one every few days.

Rain, wet soil hampered field activities Sacramento Valley, northern San Joaquin Valley. Elsewhere, fieldwork progressed normally. Rice stubble burned where conditions, air quality regulations permitted. Cotton fields shredded, disced for pink bollworm control; plowdown compliance deadlines neared. Few scattered fields remained for harvest. Grain sorghum harvested Tulare County. Small grains, winter forages, new alfalfa, sugarbeets seeded, pre-irrigated, sprayed weeds. Emerging alfalfa, grains good growth most areas. Some established alfalfa cross-disced, encourage regrowth. General ground preparation for planting small grains, alfalfa, sugarbeets progressed where soil moisture permitted. Winter cultural activities progressed. Apples packed, shipped export markets. Kiwifruit movement slowed. Grapefruits, lemons, tangerines, tangelos picked. Navel orange harvest continued. Growers used frost protection measures. Broccoli, cauliflower harvested Monterey County, Imperial, San Joaquin Valleys. Harvest cabbage west side Fresno County continued. Carrots harvested Riverside County. Celery harvested Monterey, Riverside Counties. Harvest fall head, leaf lettuce fields continued San Joaquin, Desert Valleys, Monterey County. Onions harvested Tulare County. Peas, spinach planted Stanislaus County, while spinach harvested Riverside County. Spring potato planting took place Kern County. Winter potatoes harvested

Riverside County. Fresh market tomato harvest San Joaquin Valley completed. Other crops harvested: Squash, bok choy, ginger root, cucumbers, green onions, eggplant, radishes, turnips, oriental vegetables. Rangeland pasture conditions mostly fair to good northern, central areas. Continued rains improved overall pasture condition, cold weather hampered grass growth. Water supplies adequate, continued supplemental feeding. Southern regions dry, pasture remained poor. Sheep grazing alfalfa fields. Cattle, sheep in good condition.

**COLORADO:** High pressure system prevented moisture for the entire week. Beginning of the week had near normal temperatures while remainder of week had above normal temperatures.

Major farm activities: care and feeding of livestock.

**FLORIDA:** Temperature near normal north, 1 to 3° above normal Peninsula. Highs; mid 60s Panhandle, low 70s Big Bend, northeast, upper 70s central, low 80s south. Lows; low 30s Panhandle, upper 30s Big Bend, northeast, mid 40s central, mid 40s south. Rainfall most locations received less than 0.25 in.

Soil moisture short to adequate Panhandle, mostly adequate Peninsula with scattered areas of short, surplus. Cotton harvest virtually complete. Sugarcane harvest, planting active. Winter wheat planting for grain is complete. Tobacco growers making preparations for seeding tobacco beds. Citrus groves, trees very good to excellent condition, light rains some areas. Advanced maturity levels forcing rapid harvest of early fruit. Early, mid oranges moving rapidly to processors. Grapefruit harvest busy on lower east coast. Tangelo, tangerine movement active for the Christmas trade. Caretakers cutting cover crops, banking young trees, placing, fueling heaters. Cool nights, sunny days boosted vegetable growth, development. Most current yields running below normal due to mid November, early December storms that blew off blooms, fruit buds. Radish harvest increasing as fields planted after mid-November storm reach maturity. Volume leaders: Tomatoes, peppers, cucumbers, snap beans, squash. Pasture feed 10% poor, 15% fair, 70% good, 5% excellent. Ranchers feeding hay, supplements in northern counties. Cattle condition continues mostly good.

**GEORGIA:** Temperatures across north 1 to 3° above normal, temperatures across southern areas 4 to 1° below normal. Warmest mid to upper 50s north, mostly low to mid 60s central, south. Coolest low to mid 20s extreme north, upper 20s to low 30s elsewhere north, central, mostly mid to upper 30s south. Rain 1 to 3 days during week. Rain totals mostly under 0.25 in.

Soil moisture surplus. Field activity limited most areas due to wet fields. Pecan harvest slow progress. Soybean, cotton harvest limited progress. Onion planting, field preparation behind normal, condition good. Tobacco bed preparation as weather permitted, condition good. Pasture feed fair, livestock good. Small grain seeding nearing completion, condition good.

**HAWAII:** After several weeks of strong, blustery trade winds, high pressure system north of State weakened around mid-week allowing return to lighter, more normal wind. Mostly cool, dry with some passing showers windward, mountain locations. Wind 20 to 30 mph, gusts to 40+ mph early in week, 10 to 15 mph by weekend. Temperatures mid 60s to low 80s. Rainfall from none to 1.80 in.

Mostly sunny skies beneficial to agriculture, allowing increase in farm activities some previously wet, muddy locations. Lighter winds allowed spray programs to control disease, insects. Cooler temperatures slowing crop development, forage grass growth.

**IDAHO:** Temperatures 6° below to 2° above normal. Extremes -6°; 53°. Precipitation 0.15 to 1.35 in. north, 0.14 to 0.65 south-west, none to 0.58 in. south central, 0.01 to 0.25 in. southeast.

Hay, roughage supply 1% very short, 13% short, 85% adequate, 1% surplus. Livestock in good condition. Activities: Marketing grain, feeding livestock, shop work, educational meetings, preparing taxes.

**ILLINOIS:** Temperatures normal to 5° above. Highs in the 30s north to low to mid 40s south. Lows were mainly in the 20s to low 30s. Extremes from lows in the single digits, teens 13th morning to highs in the 40s to 50s 16th. Precipitation between 0.25 to 0.75 in. most areas. Some northwestern areas had less than 0.25 in.

Corn harvest is virtually complete with only a few isolated fields in northern Illinois. Fertilizer application continues as weather permits. Grain movement is slow. Livestock conditions are good with the mild weather. Soil moisture 5% short, 87% adequate, 8% surplus. Winter wheat 31% excellent, 62% good, 7% fair.

**INDIANA:** Week started cold, then slowly, steadily warmed, so highs were in the 40s to lower 50s by the weekend. Inch or so of snow cover in central areas at the start of the week disappeared. Week was dry until 16th with rain most areas. Despite cold start, week averaged 1 to 4° above normal most areas. High temperatures in middle 30s to middle 40s. Lows in middle 20s to lower 30s. Extreme lows in teens to 20s 13th morning to highs in 40s to low 50s 16th. Precipitation 0.30 to 0.75 in. most areas; most came on 16th form of rain. Four-inch soil temperatures in the 30s.

Very few fields of corn remain for harvest. Winter wheat mostly good condition. Other activities: Weaning calves, fall tillage, spreading fertilizer, tax preparation, moving grain, hauling manure, chopping stalks, processing tobacco, equipment maintenance, repair, mending fence, attending meetings, care of livestock. Feedlots remain muddy. Hay supplies mostly adequate.

**IOWA:** Temperatures near normal west to 3° above normal southeast. Extremes -3° north central, 13th; 47° southeast, 17th. Light to moderate snow statewide 14th night; light rain, freezing rain east half 16th. Precipitation 0.10 to 0.56 in.; State 0.22 in., normal 0.29 in. Remaining snowcover 4 to 8 in. northwest two-thirds, none southeast one-third on 13th.

Outside corn piles continue to diminish.

**KANSAS:** Temperatures normal in the eastern districts, 3° below normal in the north central district, 2 to 1° below normal across the remaining districts. Rainfall generally light with amounts less than 0.25 in. over all, southeast where the average was 0.35 in. Daytime highs rising into low to mid 50s were rule across State at weekend. Temperature were normal in eastern third, 3 to 1° below normal across the remaining districts. Precipitation amounts were light with less than a 0.50 in. reported in any district. Precipitation was mainly limited to the eastern half of the State.

Feeding, tending livestock now constitutes most farm activity.

**KENTUCKY:** Early week high temperatures only lower 30s, by weekend readings upper 40s to lower 50s. Lowest overnight temperatures upper teens to lower 20s. Temperatures 37 to 41°, 1 to 3° above normal. All reporting stations received rain weekend.

Rainfall between 0.25 to 0.50 in. Heaviest rain fell along Ohio River, 0.50 and 0.75 in.

Topsoil moisture mostly adequate. Kentucky burley sales reached 310 million lbs. thru 12/15. Avg. price \$184.67 per cwt. Market closed for holidays, sales resume 1/9. Burley Co-op pool received 7.4% of sales to date. Pastures limited. Livestock satisfactory condition, supplemental feeding most areas.

**LOUISIANA:** Weather data not available.

Conditions were wet across the northern area, fieldwork was at minimum. West Carroll parish reported a few acres of sweet potatoes that were harvested. Winter grazing of lush rye grass pasture, hay feeding were active during the week. Farmers were busy marketing the remainder of their crops, booking seed for next season, doing bookkeeping tasks, winterizing equipment. The only fieldwork active for the week was sugarcane southern areas harvest. Conditions were drier until rains came on 16th which slowed cane harvest once again. Cane tonnage, sucrose was good, most all growers should finish harvest in ten to fourteen days. Rice farmers water leveled selected fields, crawfish growers managed ponds. Cattlemen actively grazed herds on rye grass, fed hay.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 0.75 in., normal 0.77 in. Temperature 37.2°, normal 37.5°. Extremes 12°; 57°.

Livestock, pasture good condition. Hay supplies adequate. Small grains in good condition. Cutting firewood, preparations for winter.

DELAWARE: Precipitation 0.59 in., normal 0.83 in. Temperature 39.0°, normal 38.7°. Extremes 22°; 55°.

Small grains in good condition. Cutting firewood, preparing for winter. Pasture feed, livestock good condition. Hay supplies adequate.

**MICHIGAN:** Extremes -3°; 40°. Precipitation 0.03 to 0.74 in.

Corn harvest was virtually complete. Some growers cannot get to fields due to snow, ice. Livestock are in good condition. Major activities included cutting wood, getting ready for Christmas, pruning orchards, doing paperwork, repairing machinery, spreading manure.

**MINNESOTA:** Temperatures 1 to 6° above normal for the State. Extremes -15°; 38°. Precipitation 0.06 in. northwest district to 0.33 in. south central. Greatest weekly total was 1.00 in.

Seasonable weather to date has not placed any heavy burden on livestock. Feed supplies remain ample. High quality feed is anticipated to bring a premium as the winter progresses.

**MISSISSIPPI:** Weather data not available.

Days suitable for fieldwork 1.7. Soil moisture 62% adequate, 38% surplus. Wheat 99% planted, 100% 1993, 100% avg.; 97% emerged, 97% 1993, 94% avg.; 21% fair, 75% good, 4% excellent. Pecans 93% harvested, 88% 1993, 91% avg. Livestock 23% fair, 69% good, 8% excellent. Hay supply 100% adequate. Feed grain supply 92% adequate, 8% surplus. Pasture 90% of normal. Activities: Wet conditions continue to delay completion of harvest.

**MISSOURI:** Temperatures 4° below normal Caruthersville to 4° above normal Kansas City. Precipitation around 0.10 in. west central to above 2.00 in. at Caruthersville.

Slightly above normal temperatures prevailed. Farmers preparing for holiday season, as well as performing winter chores.

**MONTANA:** Temperatures normal to below normal while precipitation was generally below normal in most locations.

Protectiveness of snow cover for winter wheat 34% poor, 26% fair, 25% good, 15% excellent. Grazing was rated mostly difficult.

**NEBRASKA:** Precipitation generally less than 0.10 in. Amounts varied from a trace south central to 0.23 in. northeast.

Producer activities included livestock care, recordskeeping.

**NEVADA:** A series of relatively weak storm systems crossed the State. Light snow fell in central, northern areas, with heaviest precipitation totals central. Weak high pressure system resulted in clearing over the weekend. Temperatures slightly below normal across the State. Extremes -14° Mountain City; 63° Las Vegas.

Livestock required additional supplemental feeding as snow covered much of north, central. Livestock, hay marketing remained active. Fall seeded crops protected by snow cover in much of the North. Main farm, ranch activities: livestock feeding, hay marketing, equipment repair.

**NEW ENGLAND:** Precipitation 0.08 to 0.58 in. regionwide. Temperatures 8 to 24° north; 22 to 33° south. Maximum temperatures 27 to 44° north; 26 to 49° south. Minimum temperatures -18 to 13° north; 9 to 24° south. No significant snowfall accumulation to date.

Major farm activities: Caring for livestock, selling Christmas trees.

**NEW JERSEY:** Temperatures slightly above normal. Averaged 30° north, 37° south, 40° coastal. Extremes 8°; 53°. Rainfall 0.17 in. north, 0.23 in. south, 0.19 in. coastal. Heaviest 24 hour total 0.18 in. on 17th, 18th.

Farming activities include cutting, selling Christmas trees, and winterizing farm equipment.

**NEW YORK:** Temperatures well above normal. Only cold days 12th, 13th, averaging 15 to 10° below normal. Otherwise, temperatures averaged 5 to 15° above normal. The week was dry with most stations reporting less than 0.33 in of precipitation.

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

**NORTH CAROLINA:** No weather data available.

Days suitable for fieldwork 3.0. Soil 12% short, 44% adequate, 44% surplus. Crop conditions: Wheat 38% fair, 62% good; oats 26% fair, 74%; barley 23% fair, 77% good; rye 22% fair, 78% good; pasture feed 19% poor, 45% fair, 36% good; soybeans 59% fair, 41% good; hay, roughage supplies 8% short, 71% adequate, 21% surplus; feed grains supplies 4% short, 67% adequate, 29% surplus; soybeans harvested 83%, 91% 1993, 90% avg.; wheat emerged 95%, 86% 1993, 87% avg. Activities included: Harvesting soybeans, preparing land. Other activities included: Tending livestock; equipment repair, general farm maintenance.

**NORTH DAKOTA:** Normal to below normal temperatures throughout the State. Temperatures normal, east central to -3° below normal, south central. Extremes -19° north central, northeast; 39° central.

Snowcover sufficient to protect fall seeded crops in northern districts. Southern districts lacking snow cover. Livestock conditions good with adequate feed supplies. Livestock marketing normal to below normal.

**OHIO:** Seasonably mild temperatures, near normal precipitation were noted for the period. Early week was the coldest when temperatures were close to normal, they soon peaked into the mid 40s to low 50s on the 17th. Early week noted temperatures well into the teens in north, central areas, with the far south in the low 20s. For the week temperatures 2 to 5° above normal with averages low to mid 30s. Mean highs upper 30s to mid 40s with mean lows from the low to mid 20s north to near 30°. Precipitation was noted generally on the 16th. Otherwise, the week was mainly dry. Precipitation amounts mainly held between 0.50 to 1.00 in. although the far southeast was drier with totals of less than 0.25 in.

Cool weather benefitted fall seeded crops such as wheat, rye. Tobacco growers are winding up stripping. Grape growers are now pruning vines. Apple growers are busy cleaning under trees, arranging storage.

**OKLAHOMA:** Temperatures 2.3° below normal southeast to 2.1° above normal Panhandle. Precipitation none Panhandle district to 0.62 in. northeast.

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

**OREGON:** Precipitation across State abundant, Willamette Valley averaging 2.00 in., southwestern valleys 0.25 to 1.00 in., coast 3.00 to 4.50 in., elsewhere 0.25 to 0.50 in. Temperatures unseasonably warm. Temperatures 1 to 5° above normal, exception coast normal. Exceptionally high freezing levels caused avalanches, mud slides, heavy stream runoff.

Soil moisture adequate. U-cut Christmas tree harvest winding down. Winter pruning, dormant spraying continued, fruit orchards. Supplemental feeding continued statewide.

**PENNSYLVANIA:** Light snow, sleet, freezing rain over northern sections. Light rain in south. Temperature 33°, 1° above normal. Extremes 6°; 53°. Precipitation 0.22 in., 0.50 in. below normal. Activities: Hauling manure; fixing fence; caring for livestock.

**PUERTO RICO:** Rainfall averaged 0.29 in., was 0.77 in. below normal. Highest total rainfall 1.60 in. at Sabana Grande, 1.35 in. at Pico del Este, 1.04 in. at San Lorenzo. Island temperatures 76 to 78° on the Coasts, 71 to 73° interior with mean station temperature 80.4° at Roosevelt Roads to 66.9° at Pico del Este. Extremes 50°; 91°.

**SOUTH CAROLINA:** Rainfall 0.30 in. Statewide temperatures averaged near normal.

Farm activities: Small grain planting made excellent progress. Cotton harvest was nearing completion, soybean harvest was near normal. Pasture, feed livestock were in good condition.

**SOUTH DAKOTA:** Temperatures 4° above normal, west; 1° below normal, east. Extremes -10°; 56°. Melted precipitation 0.40 to 0.60 in., southwest, north central; generally 0.10 to 0.30 in. elsewhere. Heaviest 0.57 in., Oelrichs, Faulkton.

Major farm activities: Routine chores, feeding livestock.

**TENNESSEE:** Temperatures within 2° of normal. Extremes 20° Bristol; 58° Nashville. Precipitation below normal. Rainfall 0.08 in. Bristol to 0.56 in. Jackson.

Wheat good condition. Feeding hay.

**TEXAS:** Week started mild and dry in most areas. However, a strong flow of gulf moisture set up by mid week, interacted with a

warm front, then a cold front. Rain was common over the eastern half latter half of week. Some rainfall amounts were quite heavy over parts of south central Texas, southern east Texas. College Station reported a 24-hour total of 6.00 in. Rain lingered in the Lower Rio Grande Valley late in the week. Temperatures cooled mid to late week, started warming in the west over the weekend. For the week, temperatures ran near to or above normal except for slightly below normal readings on the southern low plains, in the Blacklands. The south central area was 8° above normal. Rainfall was above normal over roughly the eastern two-thirds of the State except for slightly below normal readings in the Coastal Bend. Rain ran below normal in the west, Cross Timbers with no precipitation reported on the High Plains.

**Crops:** Cotton: Harvest continued to make good progress in most areas of the Plains. Damp, foggy conditions caused delays until mid-day. Wet weather conditions in the northern low plains, Cross Timbers hampered harvest activities. Harvest was winding down in the Trans-Pecos, 93% harvested, 99% 1993. Peanuts: Delays to harvest continued across most areas. Wet, cold weather in Cross Timbers, Blacklands caused additional delays to peanut harvest. Harvest was slowed in Edwards Plateau due to poor drying conditions, 92% harvested, 95% 1993. Soybeans: Dry weather conditions in the Upper Plains allowed harvest to be virtually completed, 100% harvested, 100% 1993. Small grains: Planting was limited in areas remaining to be planted due to saturated soils, wet weather conditions. Winter wheat, oats made good progress across the State, dryland fields remained short, need of additional moisture. Elsewhere, most fields need sunshine, dry conditions. Some fields in the Northern Low Plains, Blacklands remained infested by greenbugs, producers were busy applying insecticides. Winter wheat 73% normal, 66% 1993; 97% planted, 100% 1993; 95% emerged, 97% 1993. Oats 97% planted, 97% 1993. Sugarbeets 98% harvested, 86% 1993. Sunflowers 98% harvested, 100% 1993.

**Commercial Vegetables:** Rio Grande Valley: Dry weather conditions helped land preparations for spring vegetables to continue at a good pace. Harvest of tomatoes, peppers continued on a limited basis. Citrus harvest remained active. San Antonio-Winter Garden area: Cabbage, spinach harvest continued. East Texas: Harvest of cabbage, collards remained active. Preparations for planting of spring vegetables were active in areas where field conditions allowed. Trans-Pecos area: Land preparations for spring planting of cantaloupes got underway. Red chile pepper harvest remained active. High Plains: Land plowing, bedding, fertilizer applications continued as producers prepared for planting of spring vegetables. Pecans: Drizzling rain throughout the week caused delays to pecan harvest. Orchard cleanup continued in the Edwards Plateau where conditions allowed. Pecans 69% harvested, 79% 1993.

**Range and Livestock:** Winter pastures continued to provide adequate grazing for livestock. In some areas, however, muddy pastures were causing problems for livestock. Ranges, pastures remained short, dry in the Plains. Supplemental feeding of cattle increased as wet weather conditions prevailed. Livestock remained in fair to good condition.

**UTAH:** Temperature maximums 5° below normal; minimums averaged 2° below normal. Precipitation light to moderate across the entire State with southeast division receiving only 0.01 in.

Major farm, ranch activities were feeding, caring for livestock, preparing year-end records, hauling manure, repairing machinery, harvesting corn when weather permitted. Fall seeded grains are in good condition.

**VIRGINIA:** Temperatures near normal. Extremes 14°; 60°. Precipitation near normal.

Days suitable for fieldwork 3.5. Topsoil 8% short, 79% adequate, 12% surplus. Pasture feed 16% poor, 47% fair, 37% good. Livestock 25% fair, 73% good, 2% excellent. Soybeans harvested 97%, 95% 1993, 96% avg. Small grain, grazing crop 7% fair, 90% good, 3% excellent. Forage from pastures, winter grazing crops dairy cattle 22%, beef cattle 41%, sheep 44%. Producers pruned fruit trees, limed.

**WASHINGTON:** Temperatures 7° below to near normal west; 6 to 1° below normal east. Precipitation 0.20 to 2.26 in. west; 0.06 to 0.66 in. east.

Days suitable for fieldwork 4.6. Soil moisture 35% short, 60% adequate, 5% surplus. Hay, other roughage supplies 1% very short, 10% short, 88% adequate, 1% surplus. Range, pasture feed 25% very poor, 49% poor, 20% fair, 6% good. Winter wheat, dryland 10% very poor, 21% poor, 47% fair, 22% good; irrigated, 11% fair, 87% good, 2% excellent. Cold, wet weather limited fieldwork. Pruning of fruit trees continued. Oyster, clam, mussel harvest in full swing. Christmas tree harvest nearly complete.

**WEST VIRGINIA:** Temperature 36°. Extremes 15°; 60°. Precipitation 0.29 in.

Farm activities: Bookkeeping, general maintenance, fencing, marketing livestock.

**WISCONSIN:** Temperature 22°. Extremes -13°; 44°. Precipitation 0.10 to 0.40 in. As of 18th: frost depth 2.10 in.; 0.50 in. 1993; 4.30 in. 33-yr avg. Snow depth 4.3 in.; 0.5 in. 1993; 4.3 in. 33-yr avg. Warmer than normal temperatures have continued for most of the State. Precipitation came later in the week with snowfall reports of 1 to 4 in. Soil moisture has been reported as good by cemetery officials.

Farming activities have decreased with fewer hours of daylight each day. Most farmers are busy milking, feeding their dairy cattle. Some farmers are working in the shop and doing book work.

**WYOMING:** Temperatures were below normal except for near normal temperatures in the north central portion of the State. Jackson was the cold spot 10° below normal while Riverton was the warmest 1° above normal. Precipitation was also below normal across State. The exception was the southeast's Lower Platte Drainage, measuring as much as 0.30 inch above normal. Moran received the largest amount of precipitation at 0.65 in.

Hay, roughage supplies are mostly short, the livestock condition is good to excellent.

# International Weather and Crop Summary

## HIGHLIGHTS

December 11 - 17, 1994

**FSU-WESTERN:** A storm system produced widespread rain and snow over the region and ushered in bitter cold by week's end.

**EUROPE:** Rain preceded seasonably colder weather for winter grains across the north.

**SOUTHEAST ASIA:** Seasonal rain continued over Java's rice areas.

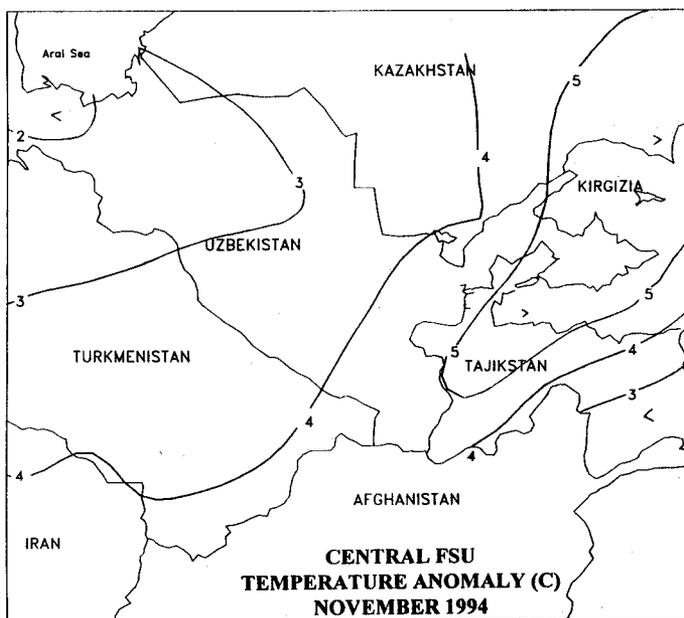
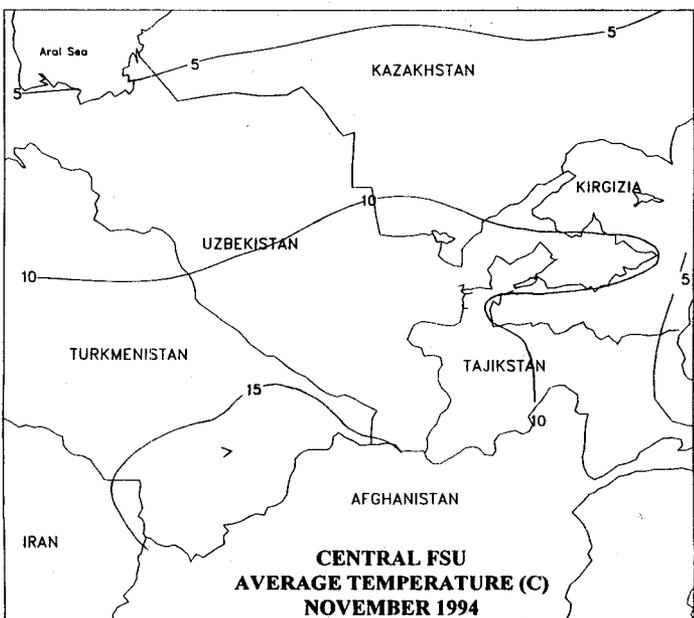
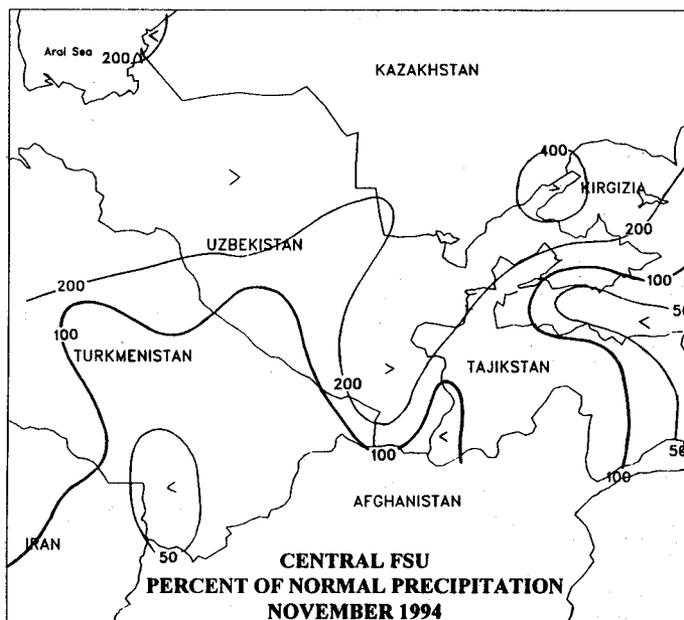
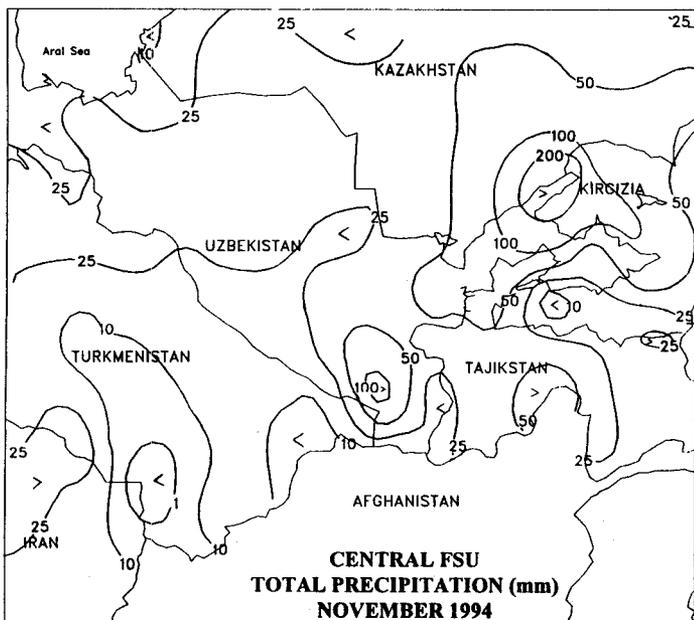
**EASTERN ASIA:** Cool weather hardened winter wheat across the North China Plain.

**AUSTRALIA:** Mostly dry, warm weather prevailed across the eastern summer crop areas, where rain is needed for germinating crops.

**SOUTH AFRICA:** Unfavorable dryness persisted over the region, worsening prospects for corn and sugarcane.

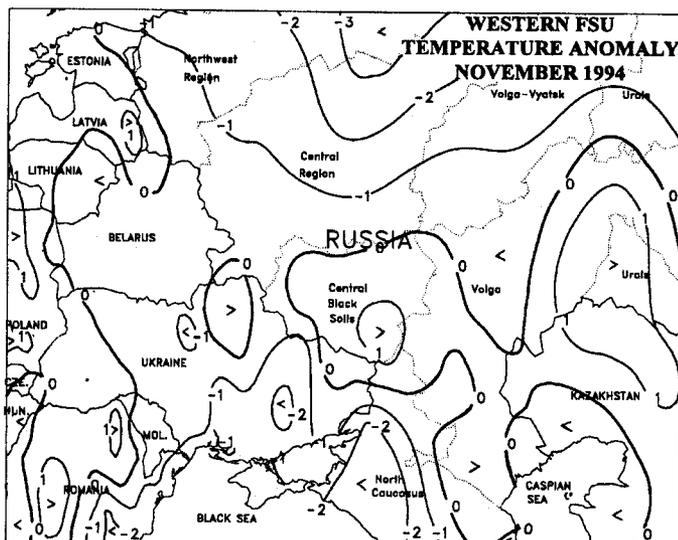
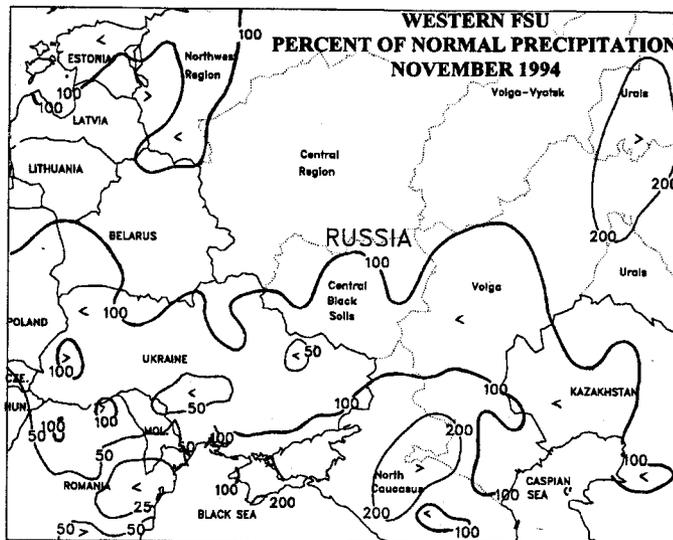
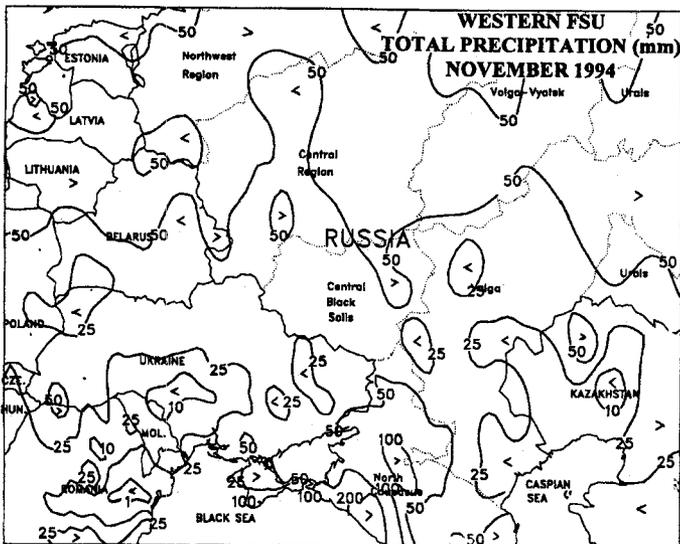
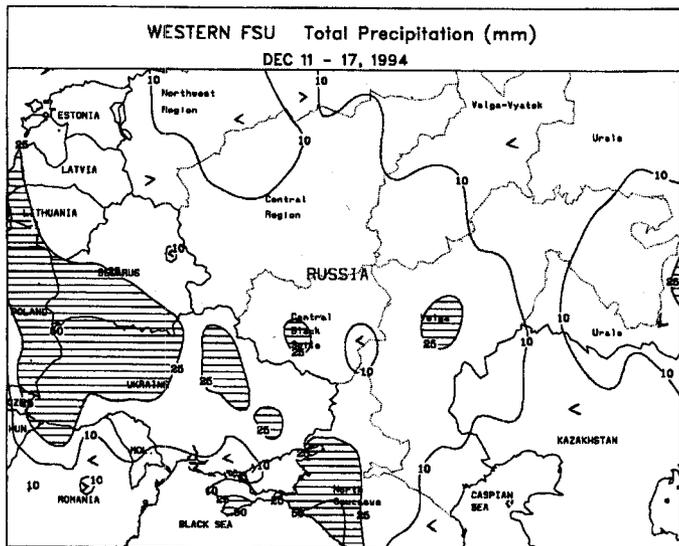
**NORTHWESTERN AFRICA:** Persistent dryness hampered winter grain emergence and establishment in Morocco, Algeria, and Tunisia.

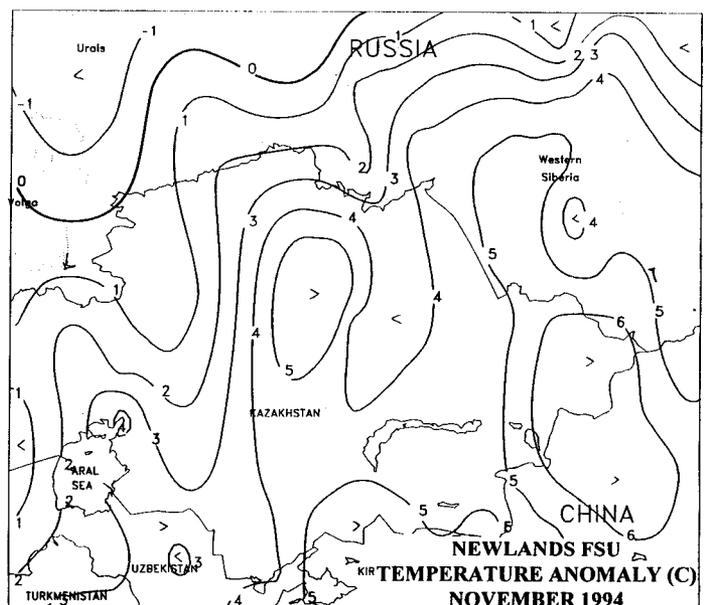
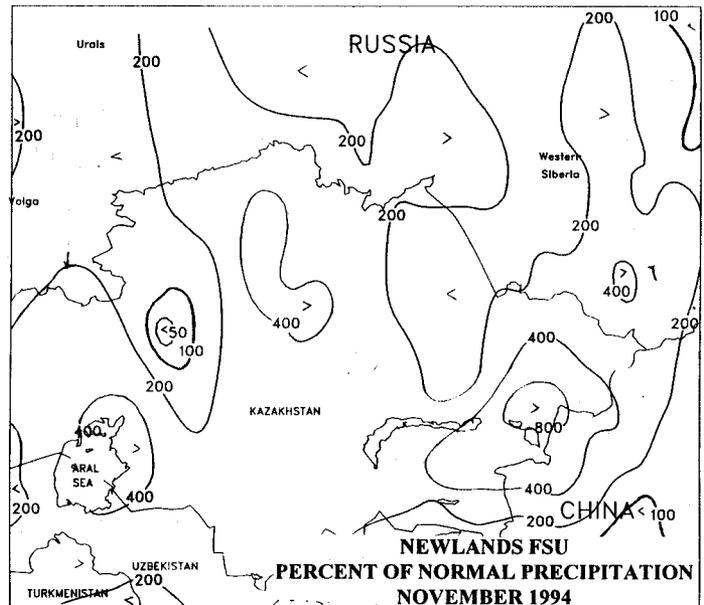
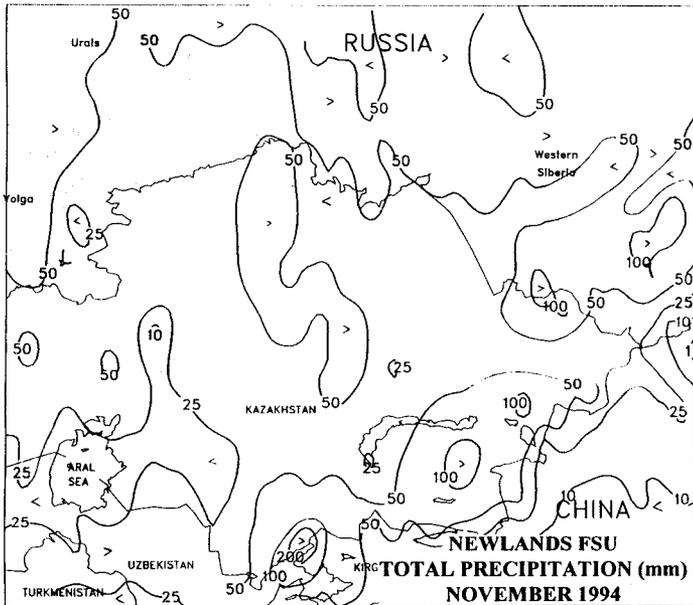
**SOUTH AMERICA:** Rain eased dryness for summer crops across central Argentina. Showers kept soils moist for germinating to vegetative soybeans across southern Brazil.

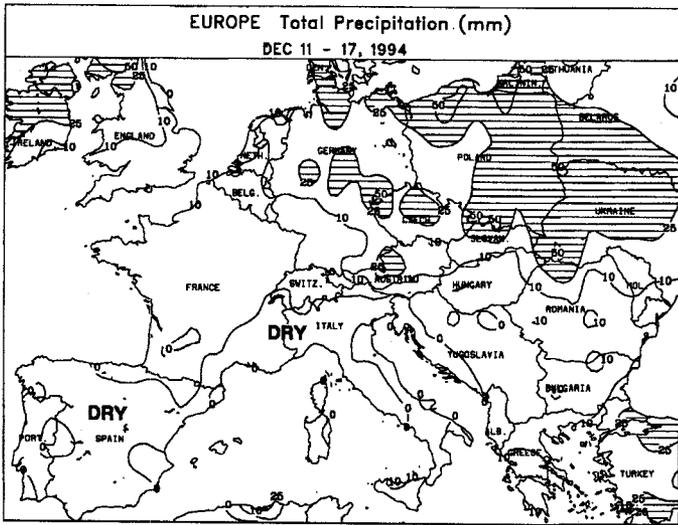


**FSU-WESTERN:** A storm system produced widespread precipitation over the region. Rain changed to snow over Ukraine, Belarus, the Baltic States, and the North Caucasus region in Russia, where weekly precipitation totals ranged from 10 to 40 mm.

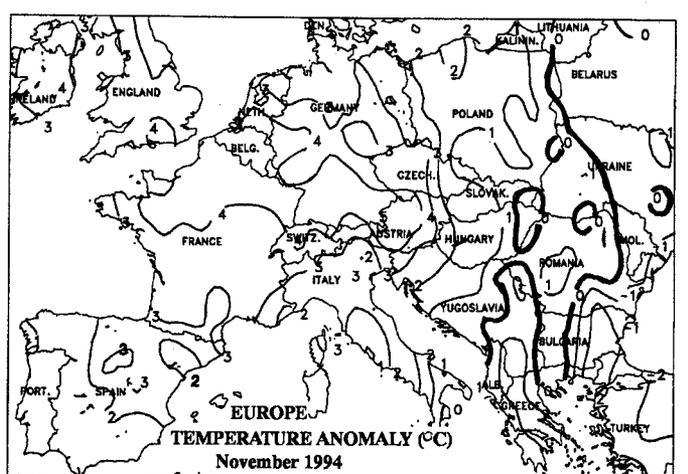
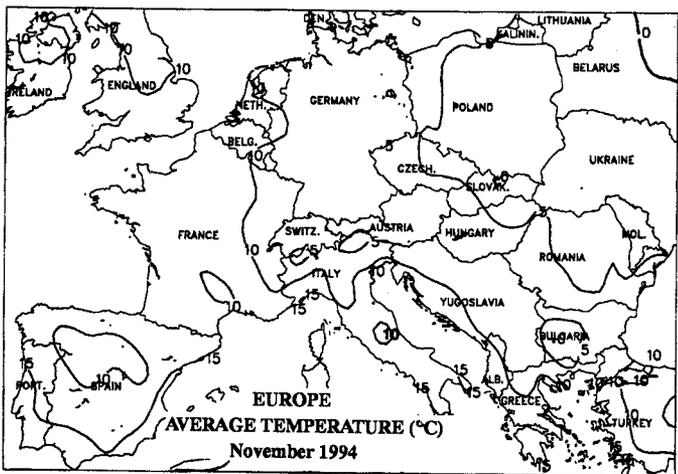
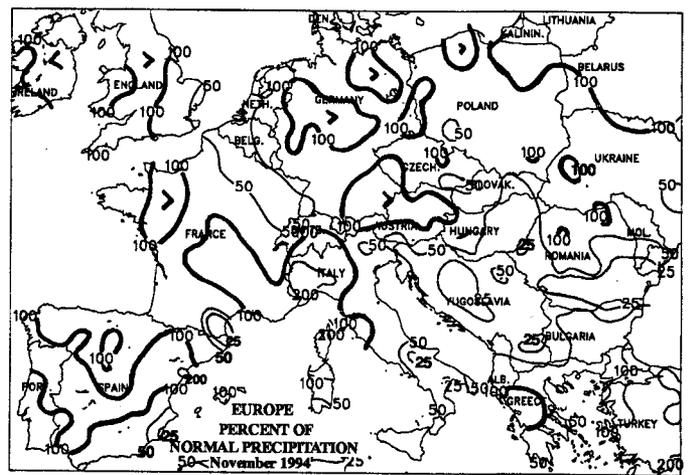
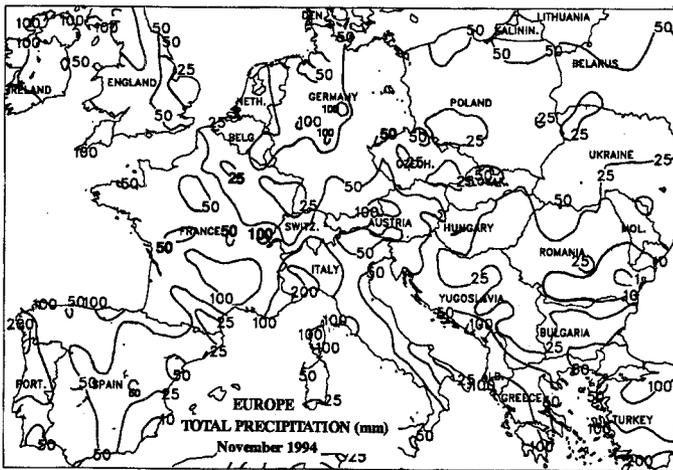
The storm produced mostly snow over northern Russia (central Region, northern Black Soils Region, Volga Vyatsk, and upper Volga Valley), where liquid equivalent precipitation ranged from 10 to 25 mm. By week's end, the storm was ushering in bitter cold over northern Russia. In November, a Siberian air mass early in the month brought unusually cold weather to winter grains in Russia, Ukraine, Belarus, and the Baltic States. Temperatures as low as -12 degrees Celsius (C) were widespread as far south as Ukraine and southern Russia (central Black Soils Region, lower Volga Valley, and North Caucasus). The wintry weather halted further growth of poorly established winter grains in Ukraine and southern Russia, inducing crops into early dormancy. As a result of the autumn drought and unusually cold weather in early November, winter wheat in traditional growing areas of Ukraine and southern Russia entered dormancy poorly established, making the crop more susceptible to winterkill. Around mid-November, a warming trend over most winter grain areas reversed early-month bitter cold, improving conditions for dormant winter grains. Above-normal precipitation in November eased chronic drought in the North Caucasus region in Russia, improving soil moisture levels. Precipitation continued below normal over Ukraine and the lower Volga Valley region in Russia, where soil moisture is unfavorably low.



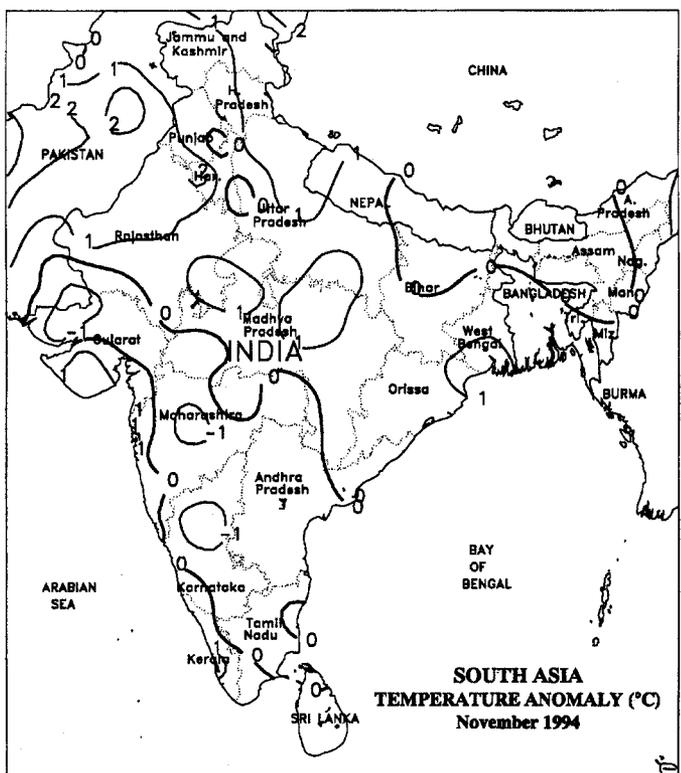
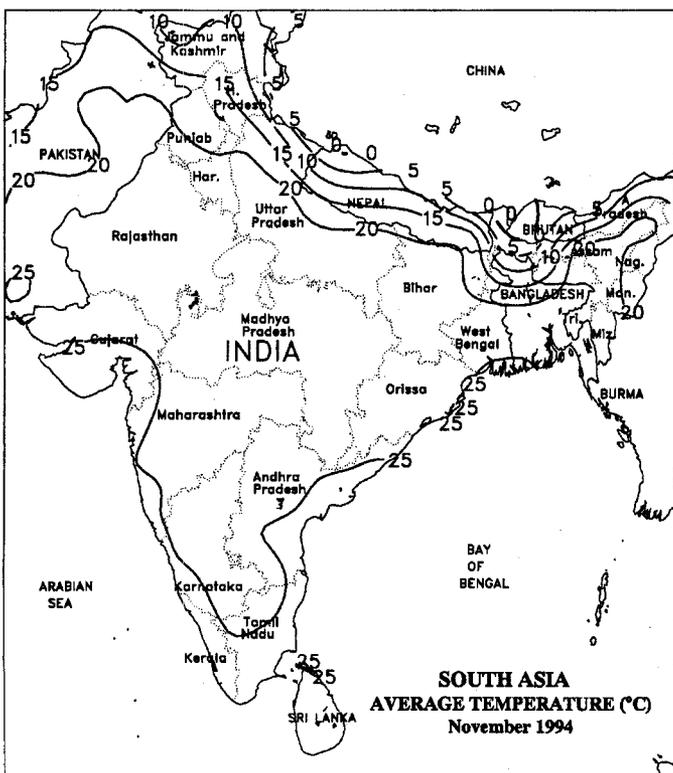
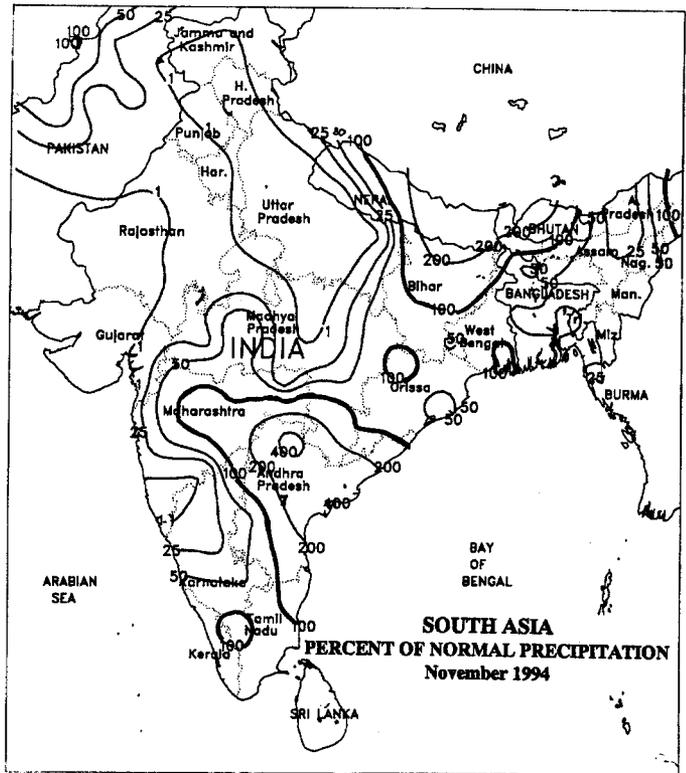
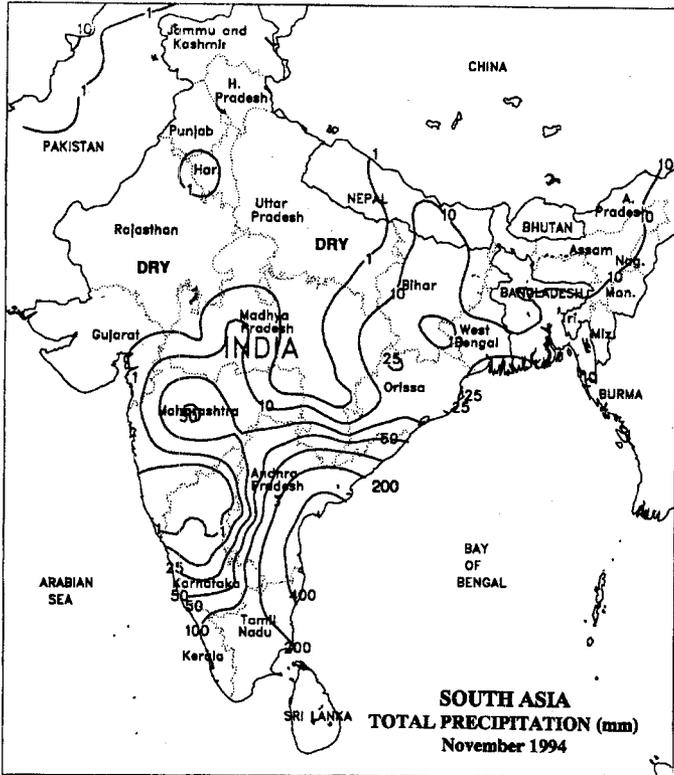


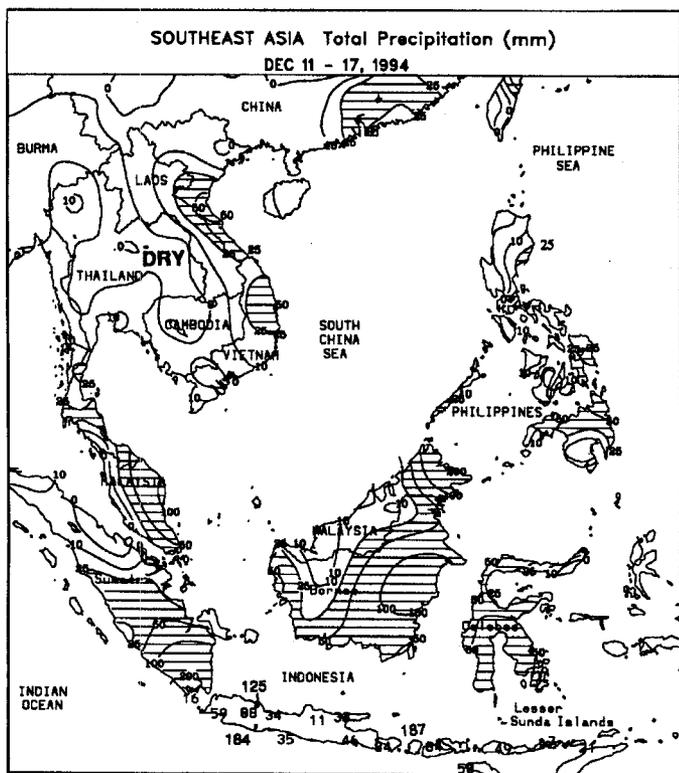


**EUROPE:** Precipitation (20-60 mm) boosted soil moisture from northern Germany and the Czech Republic to Poland. Precipitation diminished to less than 10 mm over east-central Europe, while mostly dry weather prevailed across the south. Soil moisture was unfavorably low for winter grain establishment in Spain. Colder weather late in the week across northern Europe was beneficial for slowing late-autumn growth of winter grains, and pushing the crops toward the required dormant state. For the week, temperatures still averaged 3-5 degrees C above normal across Europe. Above-normal temperatures were prevalent over most of Europe during November, promoting winter grain growth in the north but reducing topsoil moisture for winter grain planting in Spain. November's precipitation pattern was highly variable, with locally heavy rain in southeastern France and northwestern Italy but well-below average rainfall in Hungary, southern Romania, and the former Yugoslavia. Drier-than-usual weather also prevailed in extreme northern France and Belgium in November.

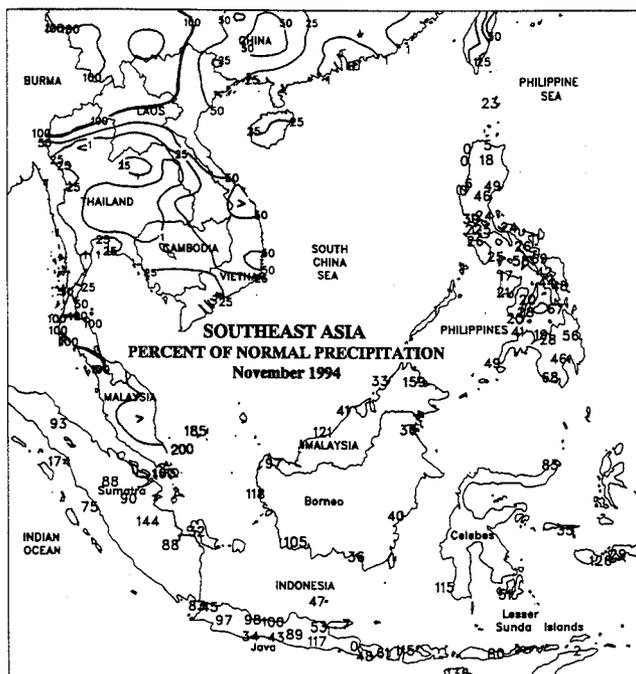
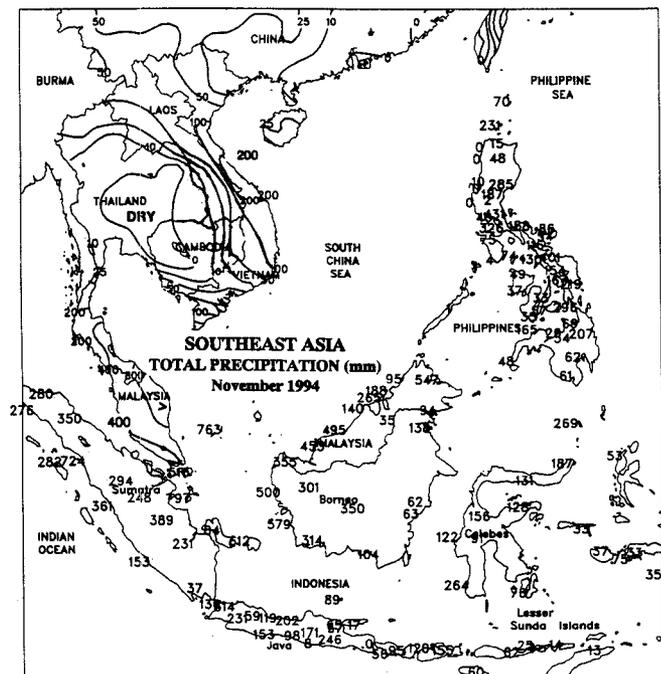


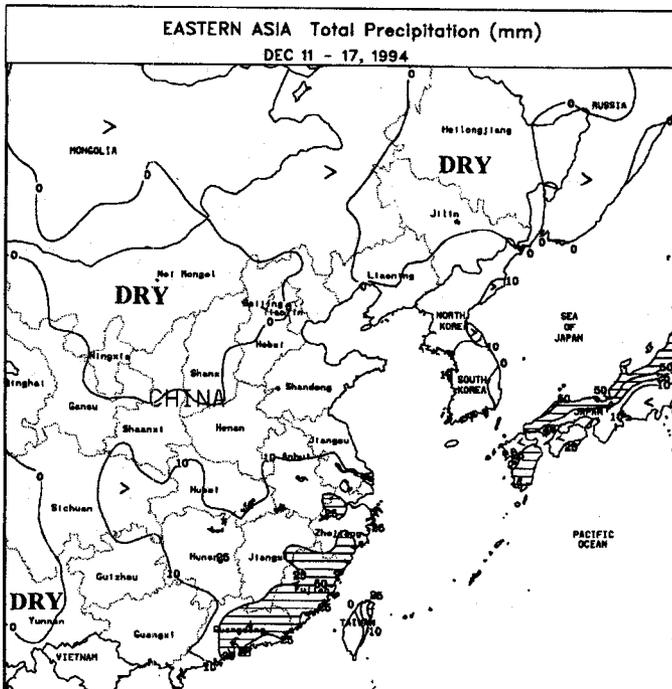
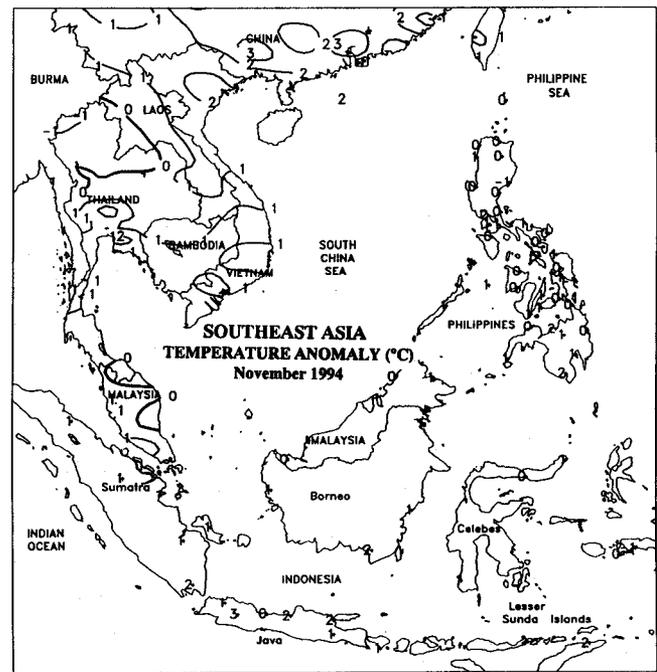
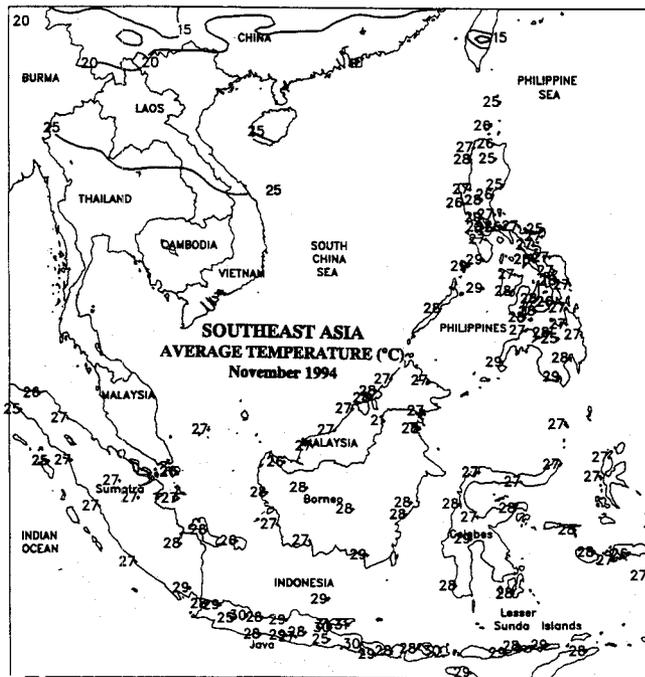
**SOUTH ASIA:** During November, seasonable dryness aided summer crop harvests across central, eastern, and northern India, as well as adjacent areas of Bangladesh and Pakistan. Winter grain and oilseed planting progressed throughout the north. Temperatures in the aforementioned areas averaged near to above normal, enhancing summer crop drydown and winter crop germination. In southern India, early-month showers, mainly from a dissipating tropical storm, caused some coastal flooding and rice damage. Further inland, rain from the storm benefited immature rabi crops, but dryness dominated the remainder of the month.



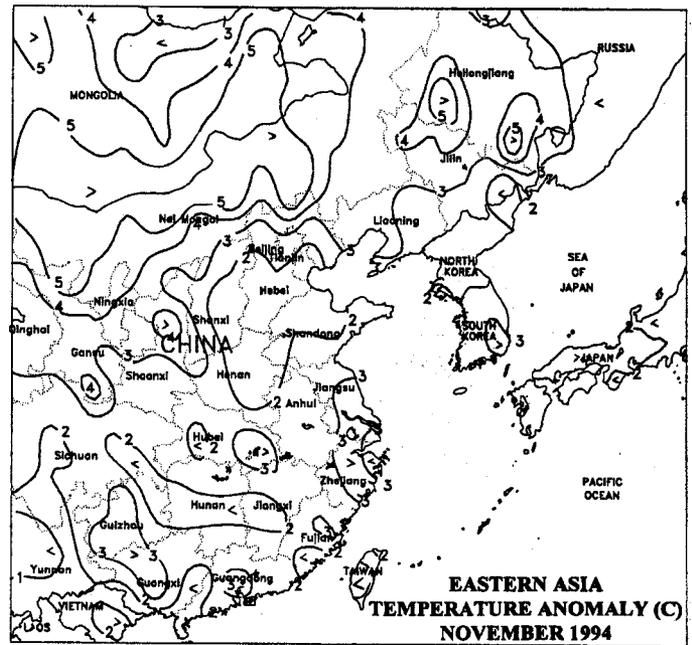
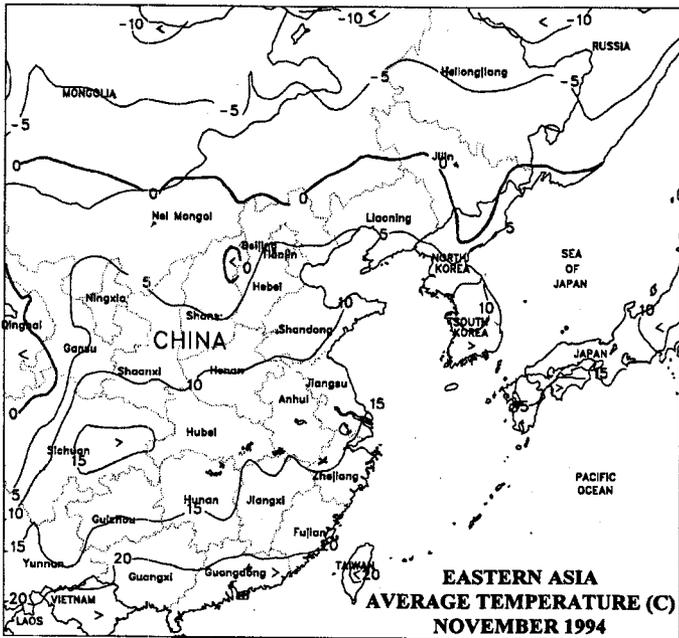
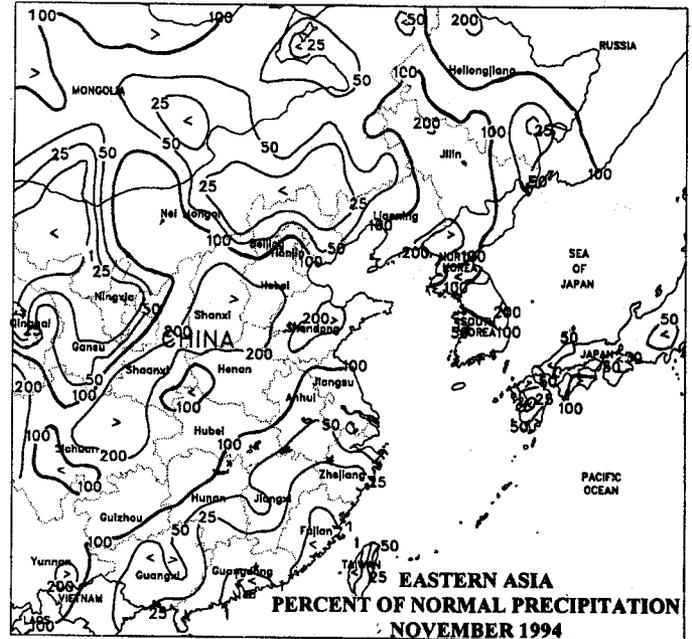
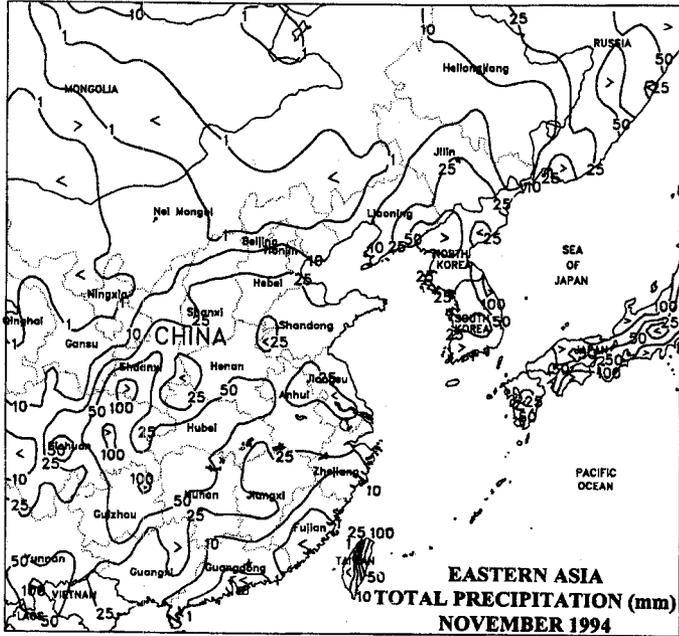


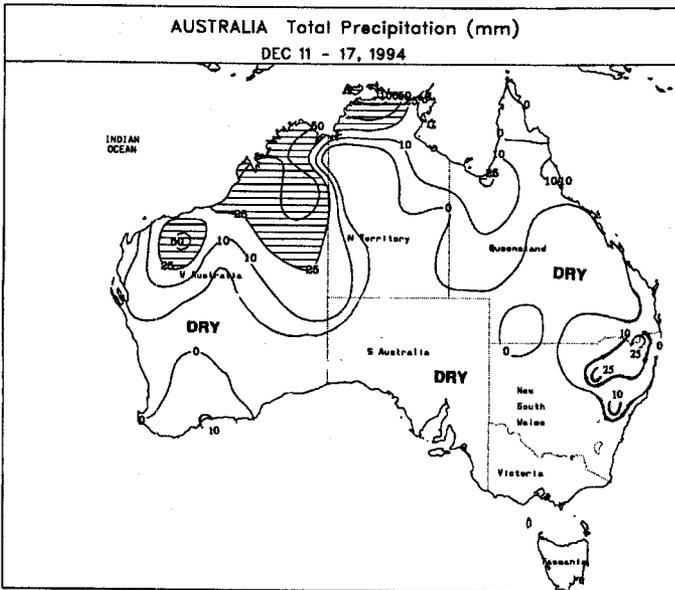
**SOUTHEAST ASIA:** Beneficial rain (25-50 mm or more) continued throughout Java, Indonesia, improving prospects for rice. Further north, heavy rain (50-105 mm) covered eastern oil palm areas of western Malaysia, as dryness dominated crop areas of the west coast. Seasonal rain (25-73 mm) continued along Vietnam's central coast. In the Philippines, widespread showers (10-65 mm) benefited grains and sugarcane. In November, seasonal showers finally reached Java, providing timely moisture for main-season rice planting. In contrast, rainfall was excessive over primary oil palm areas of western Malaysia. Over Indochina, seasonal showers covered coastal rice areas of central Vietnam, but accumulations of 100-200 mm or more were well below normal, reducing the risk of late-season flooding. November rainfall was frequent but below normal throughout the Philippines.



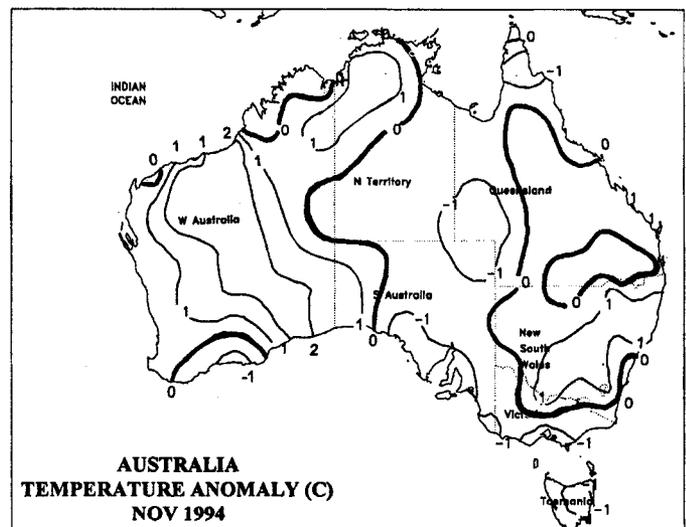
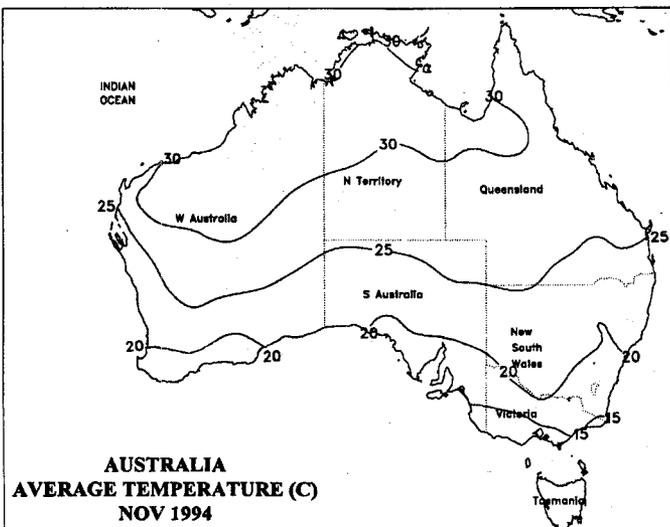
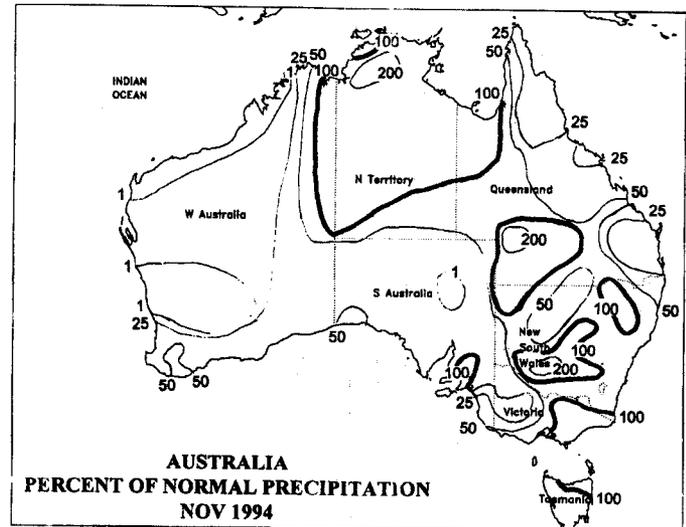
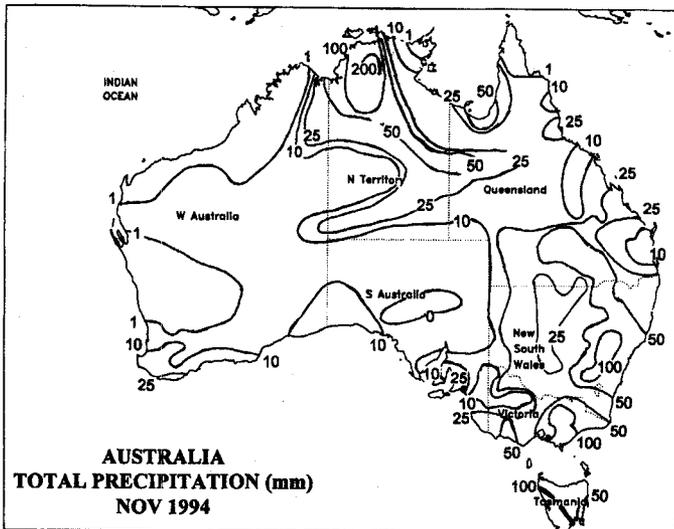


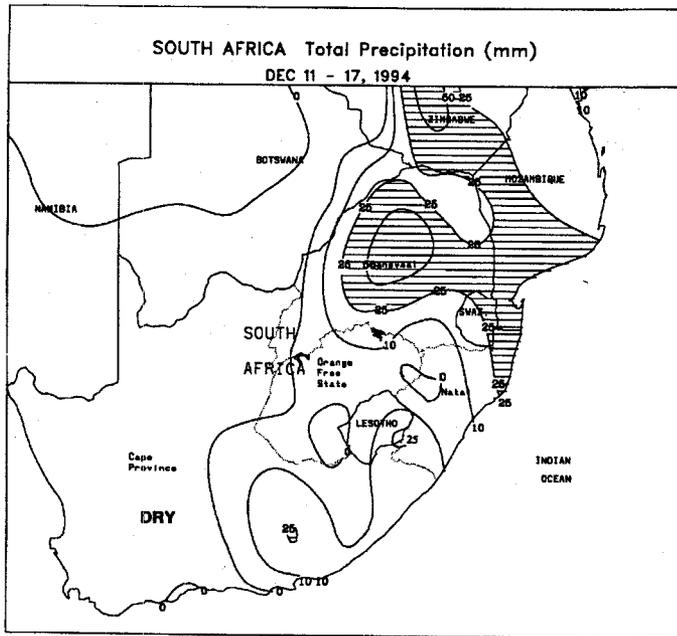
**EASTERN ASIA:** Cooler weather spread across the North China Plain, helping to harden winter wheat. Minimum temperatures reached -7 to -4 degrees C, causing some burn back of vegetative wheat. Another week of similar temperatures will cause most of the wheat crop to enter dormancy. Little or no rain fell across the wheat belt, where favorable moisture exists due to above-normal November rains. Weekly temperatures averaged near normal across most of China and 3-6 degrees C below normal across Manchuria. For the week, light to moderate rain (10-40 mm) increased irrigation supplies across the southeast. This region averaged less than 50 percent of normal November rainfall. November rainfall averaged near normal across South Korea and below normal across most of Japan.



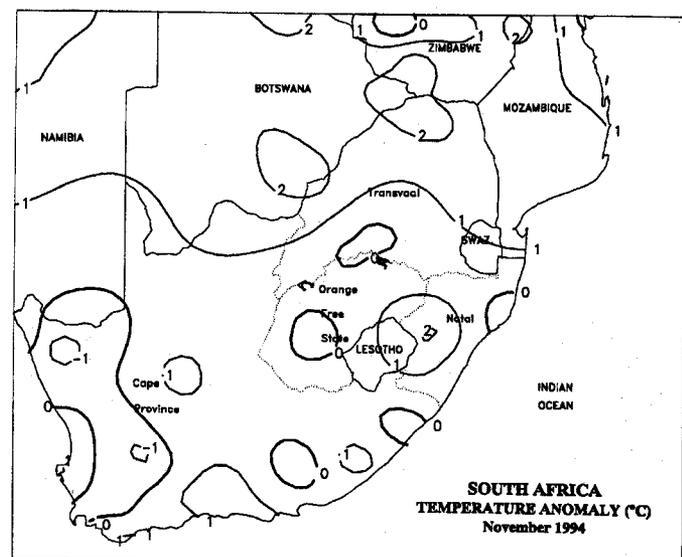
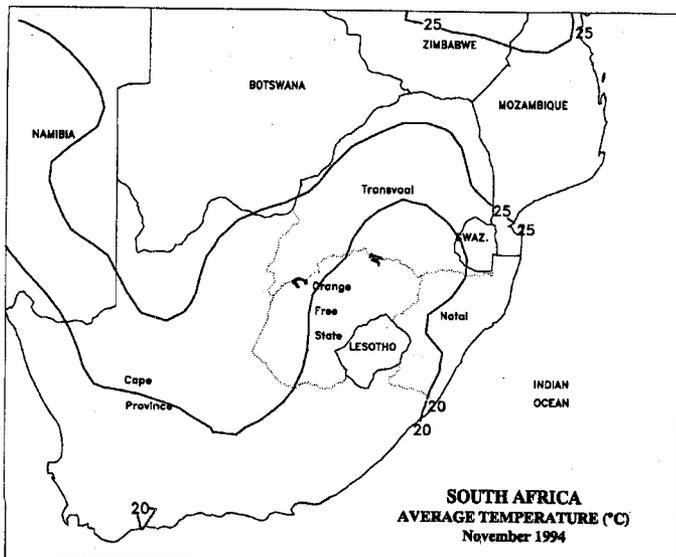
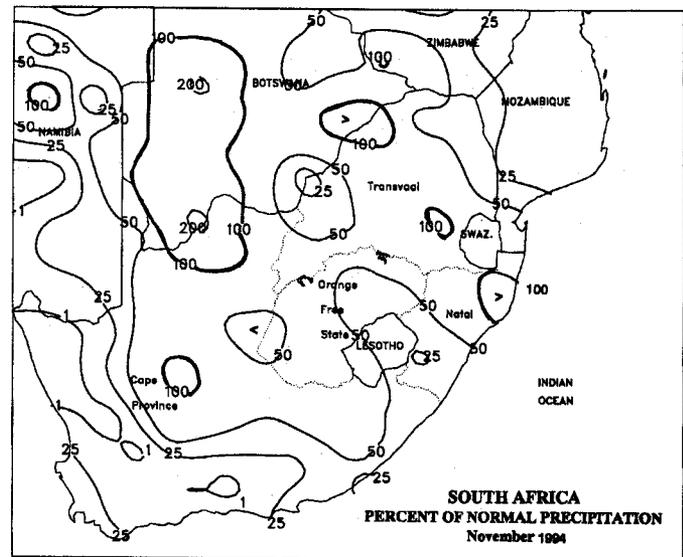
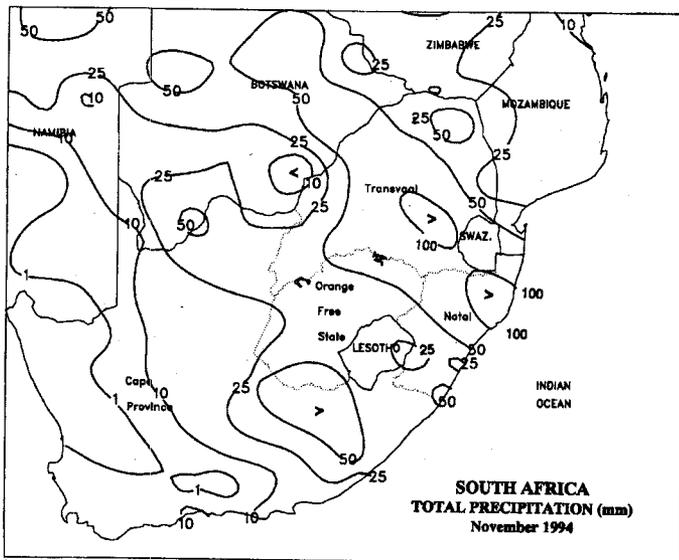


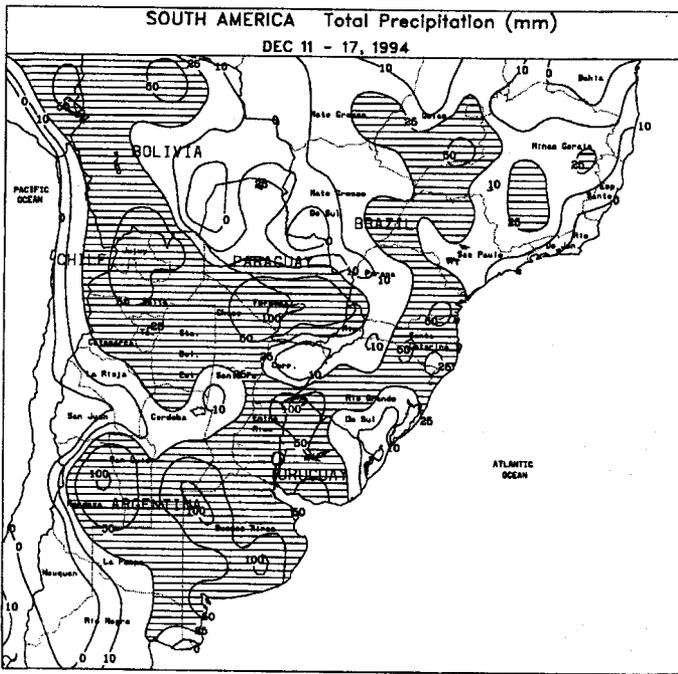
**AUSTRALIA:** Light to moderate rain (5-20 mm, with isolated amounts greater than 25 mm) fell across northern New South Wales, increasing soil moisture for summer crops. However, little or no rain fell across southern Queensland, where soil moisture continues to be unfavorably low. Substantial rain is needed across the region for summer crop development. Temperatures averaged 1-3 degrees C above normal across the east, increasing crop water use. Mostly dry weather favored wheat harvesting across the south and west. Tropical showers (25-50 mm) were widespread across northern Australia (Northern Territory and Western Australia), signaling an active monsoon. On November 18, Tropical Cyclone Annette came ashore across northwestern Western Australia, spreading showers inland but not impacting western wheat areas. During November, scattered showers benefited eastern summer crops, but southern Queensland received less than 50 percent of normal rainfall, perpetuating the drought. Above-normal rains did aid pastures in southwestern Queensland. Mostly below-normal November rainfall aided southern and western wheat harvesting and northeastern sugarcane harvesting.



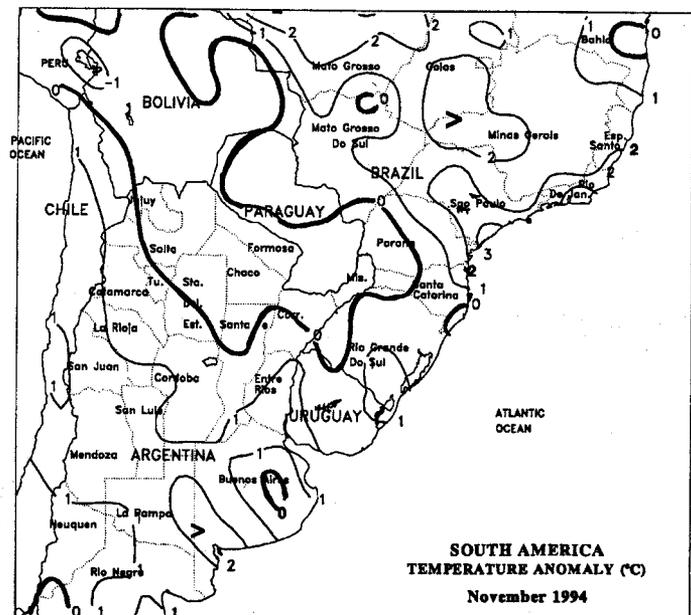
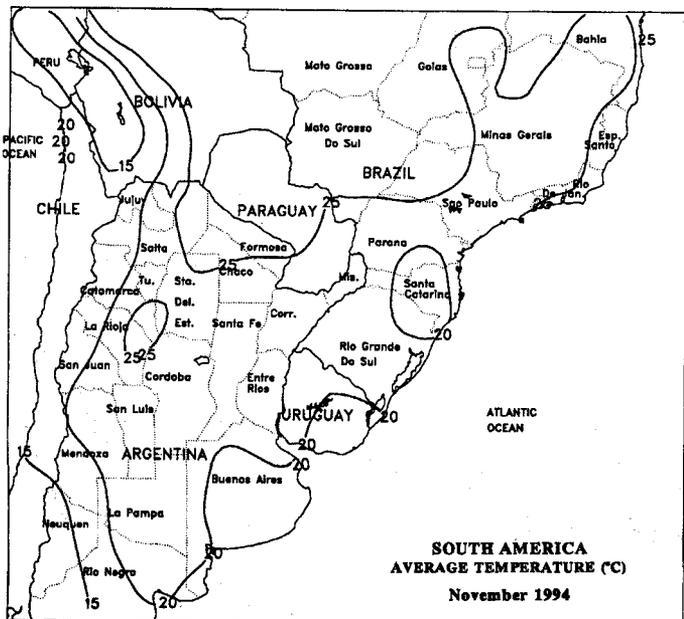
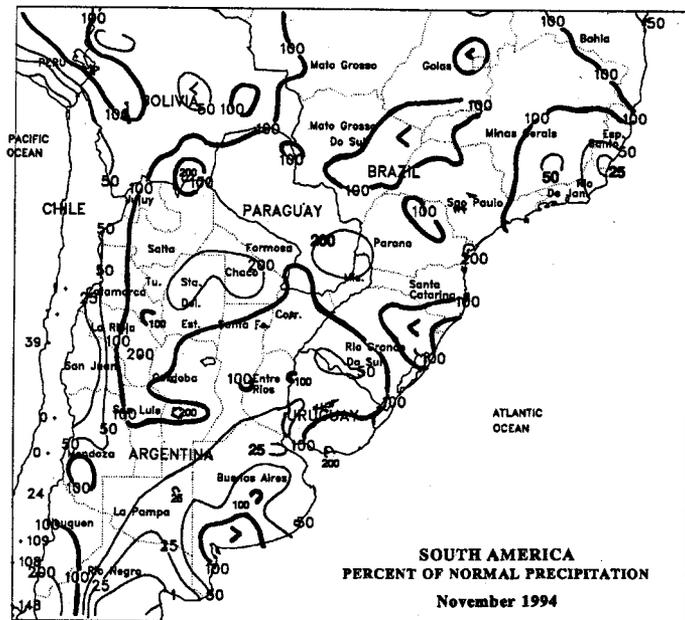
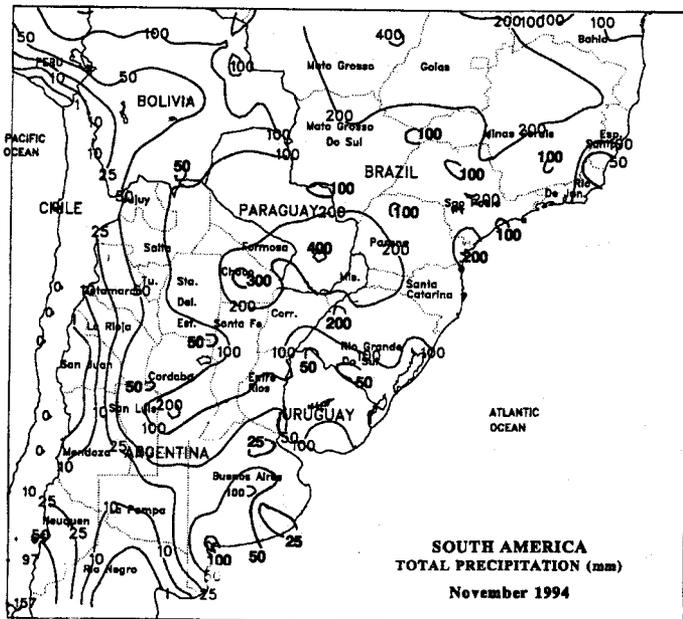


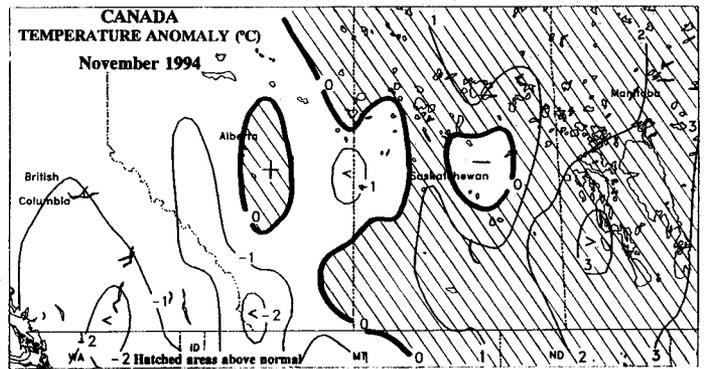
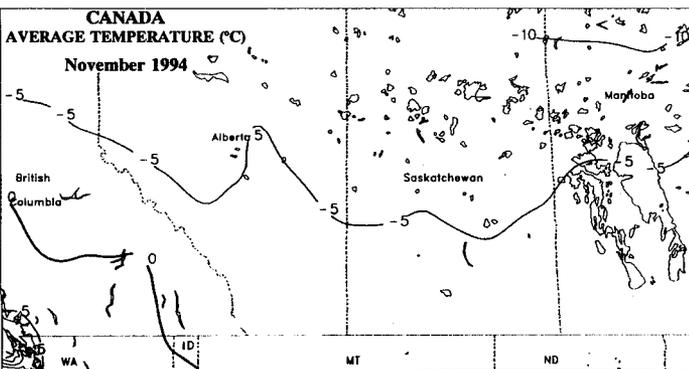
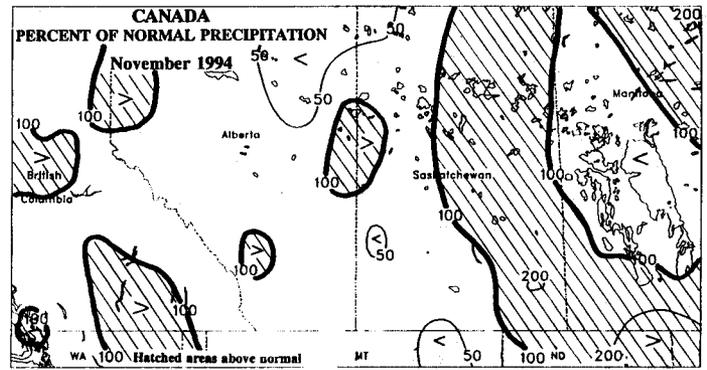
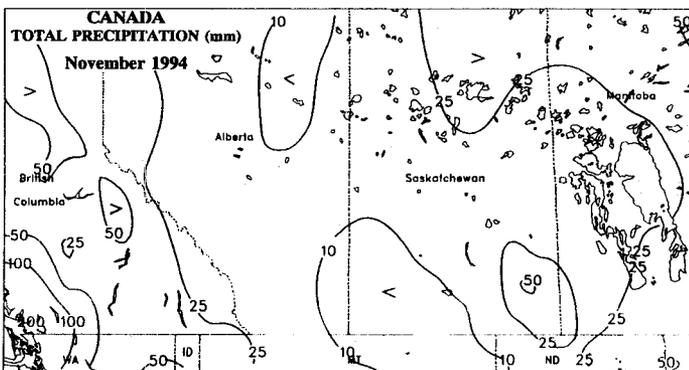
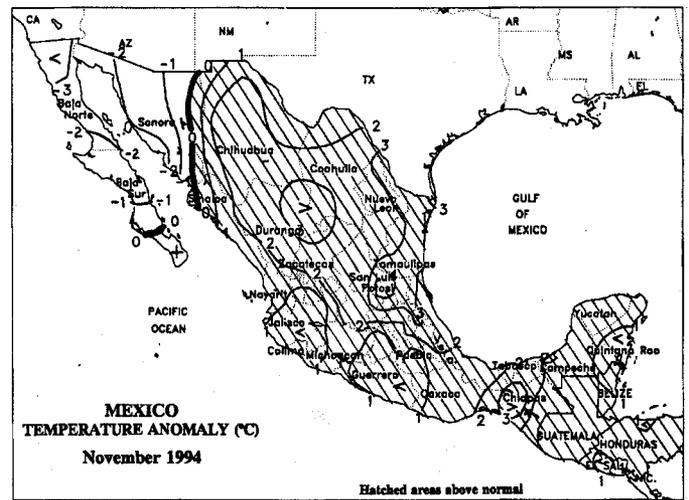
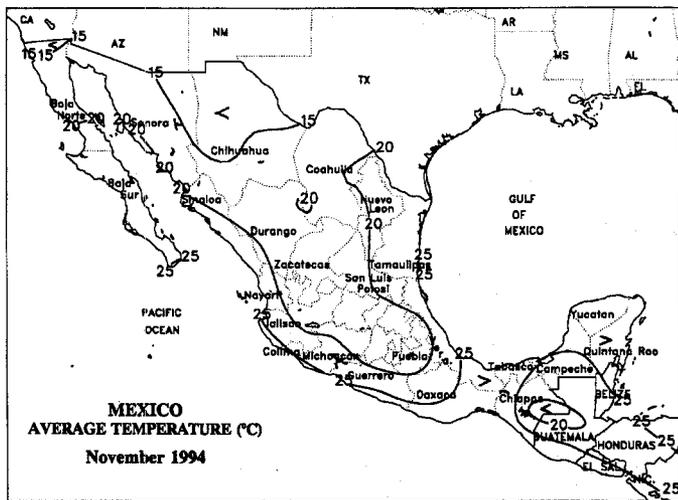
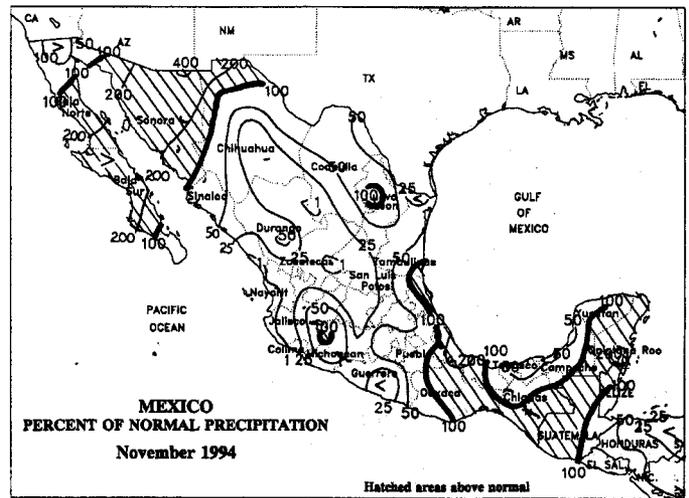
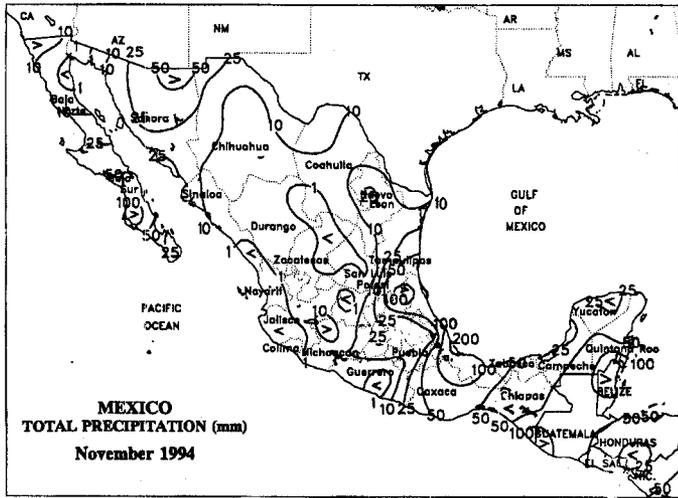
**SOUTH AFRICA:** Warm, dry weather persisted throughout the western half of the primary corn belt, further depleting soil moisture reserves for germination and establishment. Mostly light rain (10-20 mm) in eastern corn areas maintained generally adequate moisture reserves for early corn development. However, persistent, unfavorably dry weather (10 mm or less) in rainfed sugarcane areas of southern Kwazulu-Natal raised further concern for sugarcane. During November, drier-than-normal weather dominated major growing areas, reducing moisture for corn planting in the western half of the corn belt. Consequently, planting was likely delayed across a broad area, putting the later planted crop at a higher risk of summer heat stress. Rainfed sugarcane was also adversely affected by the dryness, with most areas receiving less than half their normal monthly rainfall.

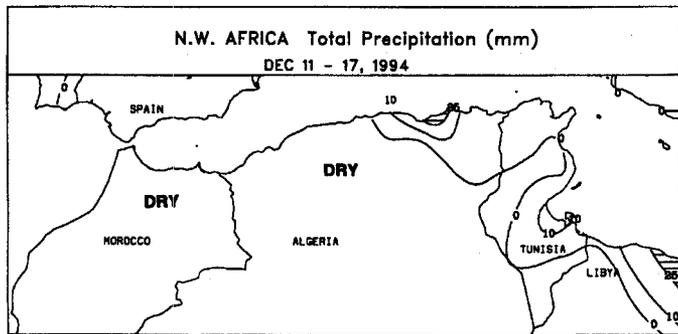




**SOUTH AMERICA:** Moderate to heavy showers (25-100 mm) covered central Argentina, easing recent dryness for summer crops. The rains were especially favorable for corn, which is entering the reproductive stage. Early in the week, maximum temperatures ranged from 35 to 39 degrees C, but moderated the latter half of the week. However, temperatures still averaged 2-4 degrees C above normal across central Argentina. Moderate showers (30-50 mm) fell across northern Argentina, favoring cotton. In southern Brazil, light showers (10-20 mm) covered the soybean areas of Mato Grosso, Mato Grosso do Sul, western Parana, and northwestern Rio Grande do Sul, keeping soils moist for germinating to vegetative crops. Heavier showers (20-50 mm) fell across Goias, northern Parana, and Sao Paulo. Temperatures averaged 2-4 degrees C above normal across most of southern Brazil. During November, central Argentina received below-normal rainfall (40-70 percent of normal), aiding summer crop planting and wheat harvesting, but reducing soil moisture for summer crops. Southern Buenos Aires and northern Brazil, November rainfall averaged near- to above-normal rainfall. In southern Brazil, November rainfall averaged near to above normal, increasing soil moisture for summer crops.

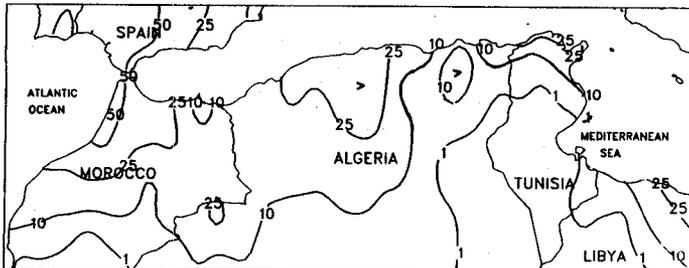




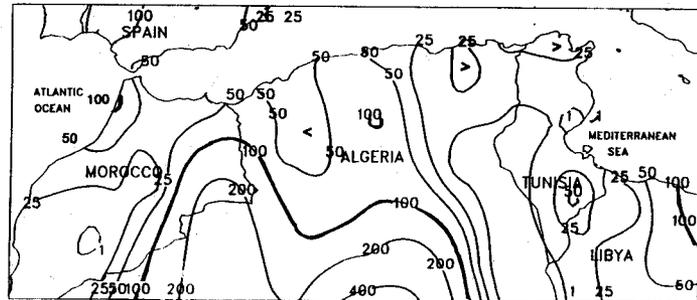


**NORTHWESTERN AFRICA:** Little, if any, precipitation continued over winter grain areas in Morocco, Algeria, and Tunisia. The dryness in these areas has persisted since early November, hampering winter grain emergence and early development. Planting continues to progress slowly on dry topsoils, and significant rain is needed soon to improve prospects for emergence and early growth. Although planting can continue as late as mid-January, based on normal weather conditions, planting after mid-January usually results in lower yields. In November, widespread rain fell over most of Morocco, Algeria, and Tunisia early in the month, providing favorable moisture for early winter grain planting. However, a drying trend began over most areas about November 6, and continued until month's end, diminishing topsoil moisture for crop emergence and early growth.

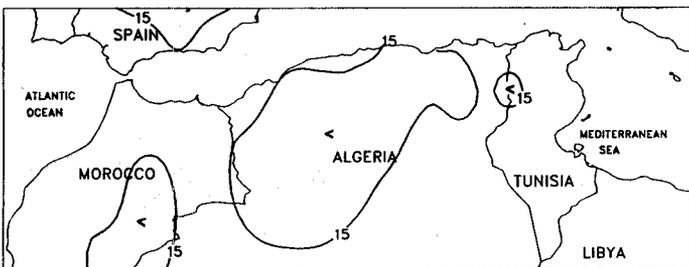
**NORTHWEST AFRICA  
TOTAL PRECIPITATION (mm)  
November 1994**



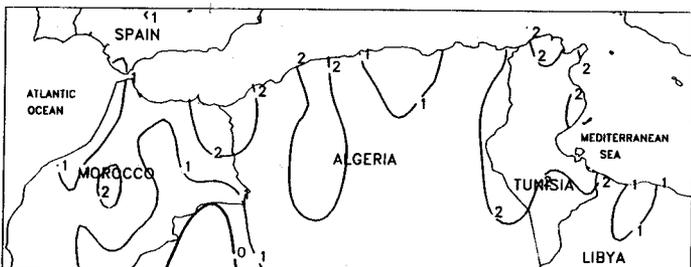
**NORTHWEST AFRICA  
PERCENT OF NORMAL PRECIPITATION  
November 1994**



**NORTHWEST AFRICA  
AVERAGE TEMPERATURE (°C)  
November 1994**



**NORTHWEST AFRICA  
TEMPERATURE ANOMALY (°C)  
November 1994**



(Continued from front cover)

Early in the week, a high pressure system slid eastward from the Plains to New England. Lows on Sunday included -16°F in Aberdeen, SD and a daily-record low of -6°F in Omaha, NE. By Tuesday, the high began a 5-day residence over southeastern Canada, provoking sustained northeasterly winds along the Atlantic Seaboard. Cape Hatteras, NC recorded a peak gust of 37 mph on Wednesday. Closer to the center of the cold dome, Houlton, ME noted a midweek minimum of -18°F.

in Huron, SD, and 2 inches in Minneapolis, MN and Mason City, IA. Myriad forms of wintry precipitation, including freezing rain, plagued areas from the Great Lakes States into the interior Northeast, as well as the east-central Plains.

In northern California, nearly 3 inches of precipitation fell by midweek at Blue Canyon and Redding. Moisture in the Sierra Nevada boosted the snow depth to 58 inches on Thursday at Mammoth Mountain, up 20 inches from 4 days earlier. Nearly 3 feet of new snow buried Alta in Utah's Wasatch Range. Rain developed over eastern Texas at midweek and intensified a day later. A storm-total rainfall of 7.03 inches pounded College Station, TX, while more than 2 inches soaked Austin, Corpus Christi, Waco, and Lufkin, as well as Shreveport, LA and El Dorado, AR. As the precipitation shield spread northeastward, its areal coverage increased but its intensity diminished. Nevertheless, several inches of new snow blanketed the upper Midwest by Thursday morning, including 6 inches

A late-week storm brought windy, warm, and wet weather to the Pacific Northwest. Along the Oregon coast, wind gusts were clocked at 67 mph on Cape Blanco (on Thursday) and at 63 mph in Netarts (on Saturday). On Friday, high winds and warm weather reached the chinook zones of the northern High Plains, eliminating snow cover. A wind gust to 69 mph was measured in Casper, WY. Warmth overspread the Pacific Northwest, where on Saturday daily-record highs included 56°F in Portland, OR and 57°F in Seattle, WA. With the warmth came rain and mountain snow melt, inducing rapid river rises west of the Cascades, and avalanches in the mountains. River-flood warnings were issued for more than a half-dozen basins, including the Nehalem and Siuslaw Rivers in Oregon, and parts of Washington's Olympic Peninsula. Precipitation totals in Washington included 4.06 inches in Quillayute and nearly 3 inches at Stampede Pass. Daily-record rainfall totals in Oregon on Saturday included 1.67 inches in Astoria and 1.19 inches in Portland.

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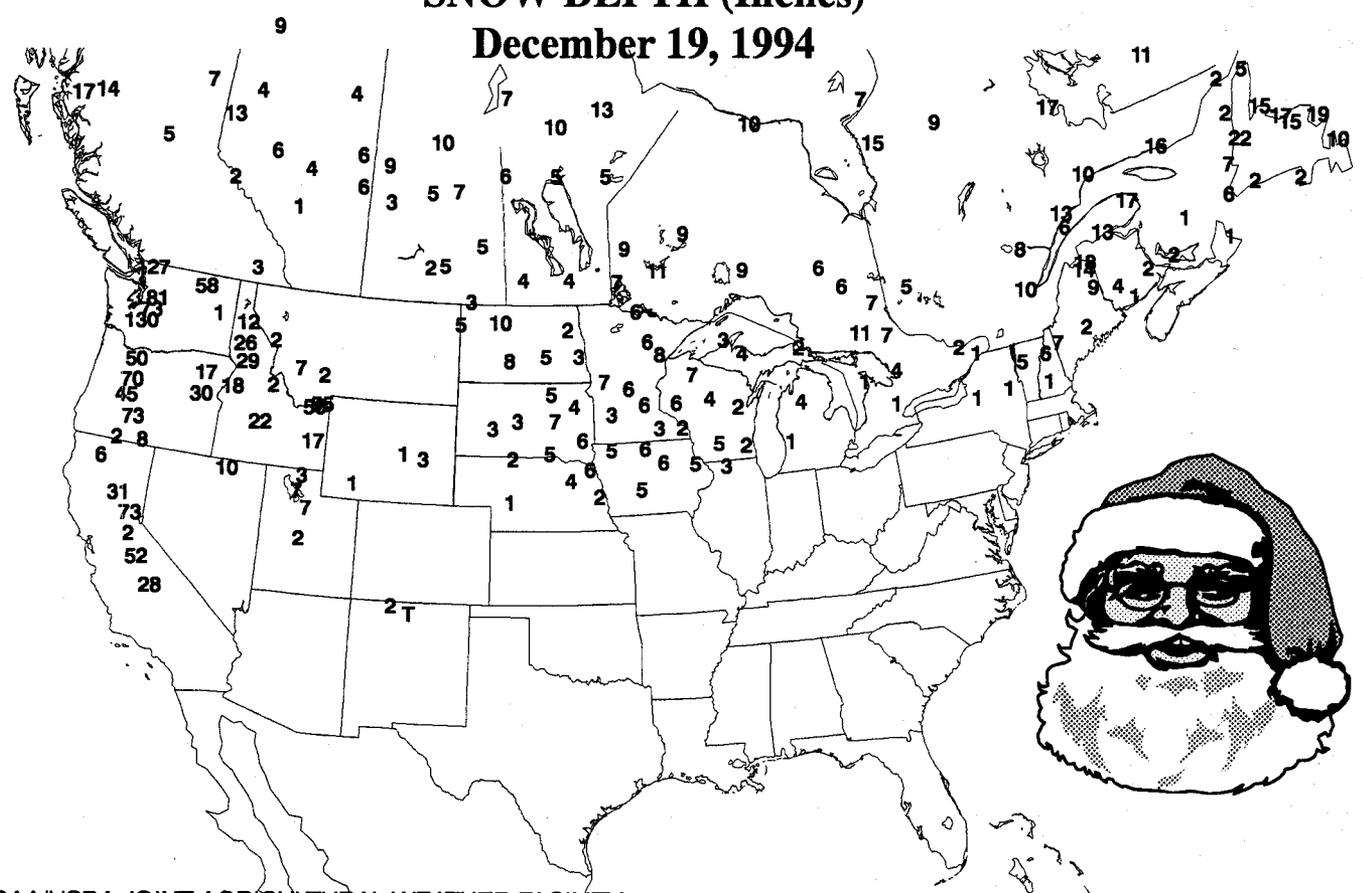
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## SNOW DEPTH (Inches) December 19, 1994



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
 Based on preliminary data

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