

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

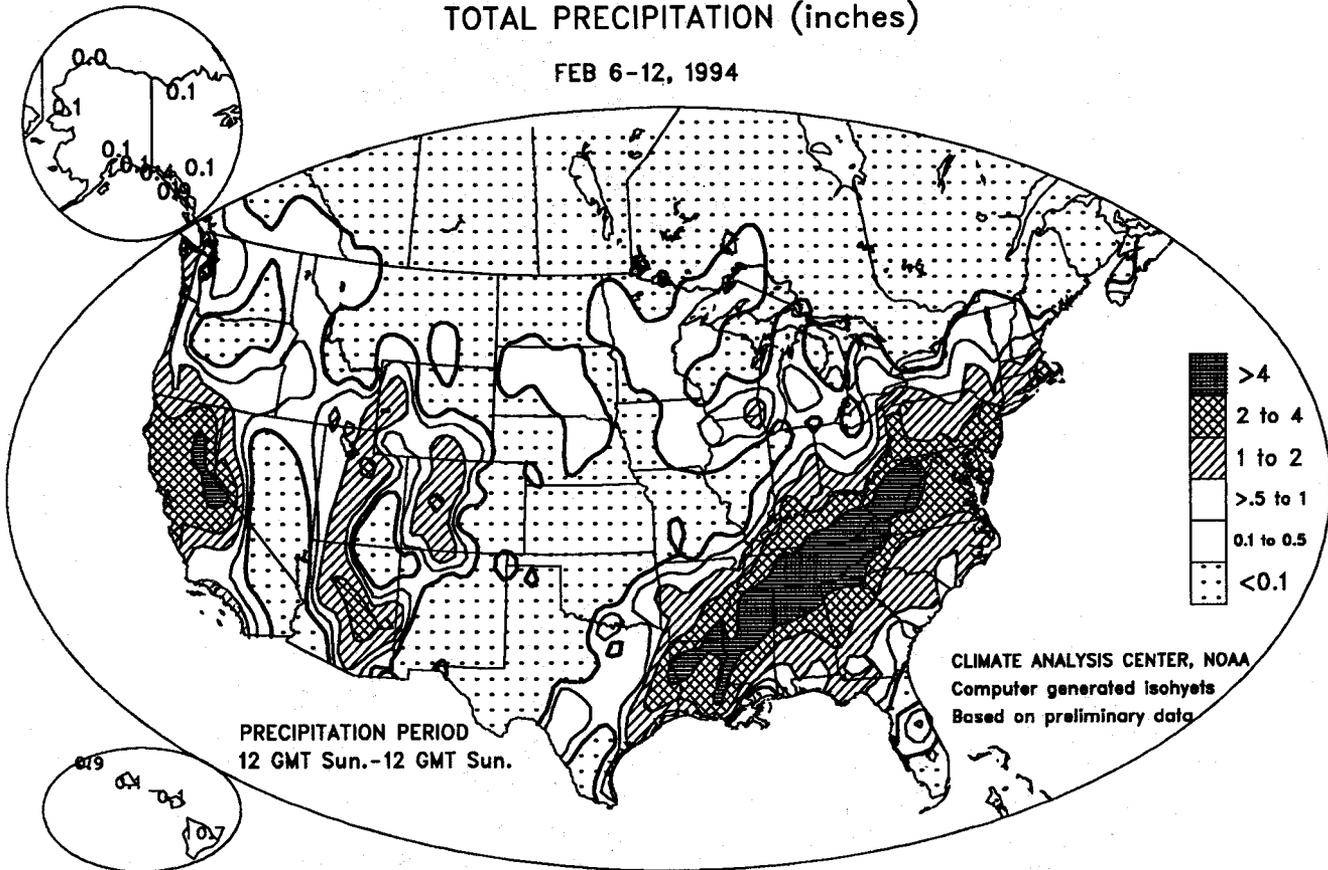
Volume 81, No. 7

Washington, D.C.

February 15, 1994

TOTAL PRECIPITATION (inches)

FEB 6-12, 1994



HIGHLIGHTS

February 6 - 12, 1994

Winter's furious 8-week rampage in the Northeast culminated with a pair of snow and ice storms. Elsewhere, a coast-to-coast storm train delivered heavy precipitation to the Western and Southeastern States. Early in the week, moisture surged into the West, while frigid air seeped southward into the Northern States. In northern California, Redding netted 3.30 inches of rain. Heavy rain also drenched southern California, where highland totals surpassed 6 inches atop Mt. Palomar and near Lake Arrowhead. In the Los Angeles Basin, rain initiated debris flows in canyons burned by last autumn's fires. Heavy snow blanketed the Rockies from Montana to Arizona. Totals included 18 inches in Flagstaff, AZ, up to 38 inches in Utah's Wasatch Range, and as much as 48 inches in Colorado's San Juan Mountains. Farther east, extreme cold edged southward. Among the 2 dozen

(Continued to p. 23)

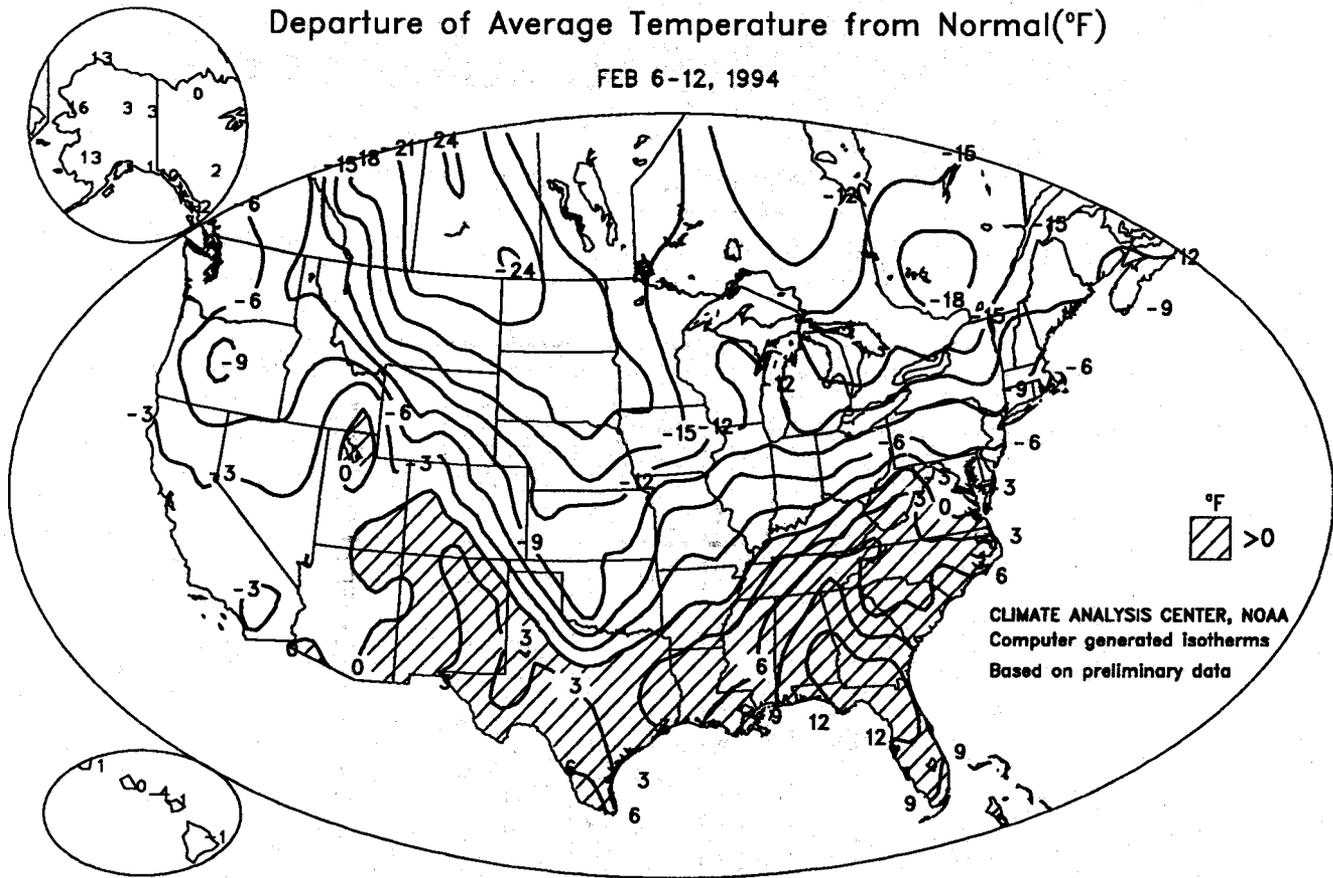
Contents

Page

Highlights & Total Precipitation Map	1
Temperature Departure & Extreme Minimum Temperature Maps	2
National Weather Data for Selected Cities	3
Weekly Heating Degree Table	6
National Agricultural Summary & U.S. Satellite Image (February 8)	7
State Summaries of Weather and Agriculture ...	8
International Weather and Crop Summary & January Temperature/Precipitation Maps	11
Subscription and Mailing Permit Information & Snow Cover Map	24

Departure of Average Temperature from Normal(°F)

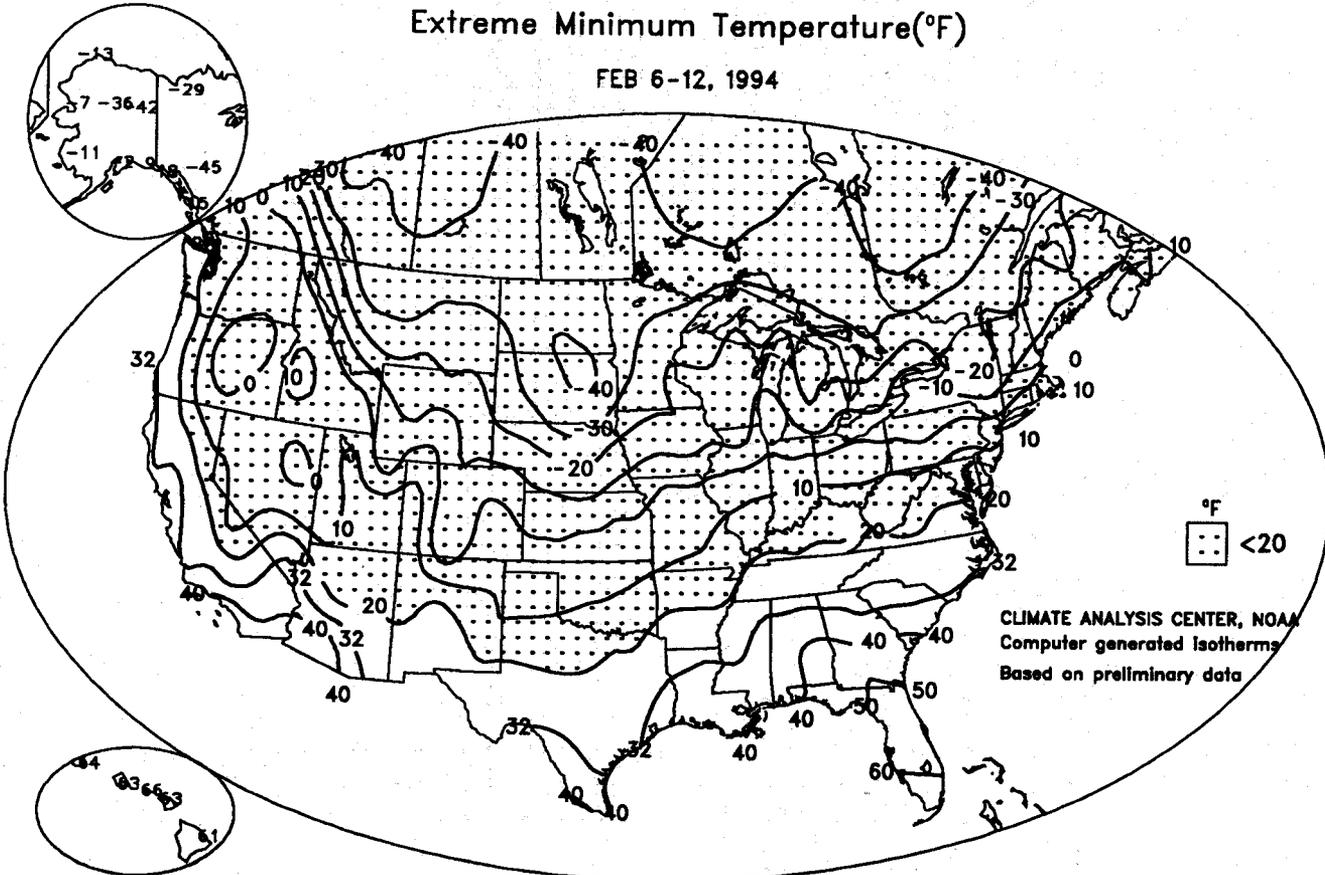
FEB 6-12, 1994



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

Extreme Minimum Temperature(°F)

FEB 6-12, 1994



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

National Weather Data for Selected Cities

Weather Data for the Week Ending February 12, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE	MAXIMUM	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	PRECIP.	
																				.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	65	41	74	36	53	9	2.2	1.1	1.5	11.8	97	7.8	110	97	70	0	0	0	0	5	1
MOBILE	73	51	80	36	62	10	2.8	0.5	0.8	11.4	93	7.7	111	99	65	0	0	0	0	2	1
MONTGOMERY	72	48	83	40	60	14	1.3	0.0	0.8	13.8	112	9.1	128	94	64	0	0	0	0	3	1
AK ANCHORAGE	24	17	29	9	21	3	4	0.0	0.0	1.1	50	0.8	72	84	64	0	0	7	7	0	0
BARROW	0	-9	6	-13	-4	13	4	0.0	0.0	66	1	41	81	77	0	0	7	7	2	0	0
FAIRBANKS	7	-10	15	-37	-2	4	1	0.1	0.1	1.2	81	0.8	118	83	74	0	0	7	7	4	1
JUNEAU	27	19	35	13	23	-4	1.6	0.6	0.9	14.0	131	8.1	129	92	61	0	0	7	7	3	1
KODIAK	37	28	43	16	32	2	1.5	0.1	0.8	25.4	153	14.6	148	83	63	0	0	5	5	4	1
NOME	22	11	30	-4	17	13	2	0.0	0.2	3.2	163	1.3	119	86	77	0	0	7	7	1	0
AZ PHOENIX	65	47	73	41	56	-1	0.5	0.4	0.4	7	36	0.7	71	77	26	0	0	0	0	0	0
PRESCOTT	49	29	55	20	39	0	0.8	0.4	0.4	1.5	41	1.1	50	88	35	0	0	5	5	2	0
TUCSON	66	41	76	33	53	0	0.9	0.7	0.6	1.1	48	0.9	79	79	22	0	0	0	0	1	0
YUMA	69	51	76	47	60	0	0.3	0.2	0.3	3	29	0.3	59	57	23	0	0	0	0	3	0
AR FORT SMITH	47	28	63	19	38	-2	0.7	0.1	0.7	7.1	120	4.2	147	90	58	0	0	4	4	1	1
LITTLE ROCK	52	34	75	20	43	1	1.0	0.2	0.7	10.5	116	6.1	140	88	58	0	0	4	4	1	1
CA BAKERSFIELD	63	41	69	34	52	0	0.3	0.1	0.2	2.0	103	1.4	105	66	36	0	0	0	0	3	0
BURKEA	53	41	56	35	47	-2	2.6	1.5	1.2	14.8	105	7.7	95	86	53	0	0	0	0	2	0
FRESNO	58	41	61	31	50	-1	0.7	0.2	0.4	2.9	70	1.9	68	95	36	0	0	1	1	4	3
LOS ANGELES	64	49	66	43	56	-1	1.2	0.6	1.0	3.1	61	2.2	62	81	27	0	0	0	0	4	1
REDDING	54	38	57	27	46	-4	3.3	2.2	1.5	9.8	72	6.6	82	92	50	0	0	1	4	3	3
SACRAMENTO	56	39	61	30	48	-2	1.3	0.5	0.8	4.4	59	2.7	54	96	58	0	0	1	3	1	0
SAN DIEGO	64	49	72	42	56	-2	0.8	0.5	0.5	3.0	74	2.2	91	84	30	0	0	0	0	0	0
SAN FRANCISCO	56	45	58	38	51	-1	2.6	1.8	1.5	7.3	82	5.1	88	90	55	0	0	0	4	2	0
CO DENVER	42	15	50	2	29	-3	0.3	0.2	0.2	1.3	94	0.8	120	80	44	0	0	7	7	0	0
GRAND JUNCTION	43	26	49	20	35	0	0.2	0.1	0.1	1.2	86	0.6	89	85	46	0	0	7	7	2	0
PUEBLO	43	13	57	2	28	-5	0.0	0.0	0.0	0.0	55	0.5	112	85	39	0	0	7	7	0	0
CT BRIDGEPORT	28	16	43	4	22	-7	2.1	1.4	1.1	11.8	147	7.2	161	81	51	0	0	7	7	3	3
HARTFORD	26	11	42	1	18	-6	1.9	1.1	0.8	11.9	137	7.7	161	82	46	0	0	7	7	2	2
DC WASHINGTON	37	24	56	17	30	-6	2.4	1.7	1.1	11.0	158	6.7	172	94	65	0	0	7	7	5	2
FL APALACHICOLA	70	57	75	50	64	10	1.2	0.2	1.2	10.5	110	7.7	141	100	59	0	0	0	0	1	1
DAYTONA BEACH	80	58	85	50	69	11	0.0	0.0	0.0	7.5	113	5.6	138	100	59	0	0	0	0	0	0
JACKSONVILLE	78	57	84	48	68	12	0.1	0.0	0.1	8.5	112	6.7	140	93	52	0	0	0	2	0	0
KEY WEST	82	72	84	64	77	7	0.0	0.0	0.0	4.8	100	2.6	93	92	71	0	0	0	0	0	0
MIAMI	83	70	86	64	76	8	0.0	0.0	0.0	5.2	109	4.7	163	89	61	0	0	0	0	0	0
ORLANDO	83	62	87	56	73	12	1.8	1.1	1.8	6.6	116	5.8	166	99	60	0	0	0	2	1	1
TALLAHASSEE	75	54	79	46	65	13	1.2	0.1	0.7	12.5	104	9.5	135	98	67	0	0	0	2	2	0
TAMPA	82	64	83	55	73	12	0.0	0.0	0.0	5.0	93	3.7	116	98	61	0	0	0	0	0	0
WEST PALM BEACH	82	66	84	59	74	8	0.0	0.0	0.0	8.6	143	7.7	209	97	62	0	0	0	0	0	0
GA ATLANTA	61	44	79	34	52	9	2.2	1.0	1.1	10.6	95	8.0	119	99	81	0	0	0	0	3	3
AUGUSTA	62	45	80	35	53	8	1.0	0.1	0.5	8.3	90	5.6	96	97	75	0	0	0	3	0	0
MACON	64	48	77	38	56	9	1.5	0.3	0.7	9.4	87	6.6	101	98	73	0	0	0	5	2	0
SAVANNAH	72	50	80	45	61	11	0.2	0.0	0.2	7.2	90	5.0	101	96	63	0	0	0	1	0	0
HI HILO	76	65	81	61	70	-1	10.7	8.2	3.9	40.2	154	24.1	172	95	76	0	0	0	7	3	3
HONOLULU	80	67	84	63	74	1	-1.1	-0.4	-1.1	1.0	11	0.7	15	83	58	0	0	2	0	0	0
KAHULUI	81	66	84	63	73	2	-1.1	-0.7	-1.1	2.0	22	1.4	26	85	59	0	0	2	0	0	0
LIHUE	77	69	78	64	73	1	0.9	0.0	0.6	7.9	63	5.2	69	82	68	0	0	0	3	1	0
ID BOISE	37	20	46	13	29	-6	0.4	0.1	0.2	2.6	80	1.7	86	90	50	0	0	7	4	0	0
LEWISTON	40	22	48	9	31	-7	0.7	0.2	0.2	1.7	59	0.9	54	75	43	0	0	7	1	0	0
POCATELLO	36	16	45	1	26	-1	0.6	0.3	0.3	1.7	69	1.1	75	88	66	0	0	6	5	0	0
IL CHICAGO	22	4	34	-8	13	-10	0.3	0.0	0.2	3.2	71	2.2	108	85	56	0	0	7	4	0	0
MOLINE	22	3	34	-9	13	-10	0.4	0.2	0.4	2.6	62	1.5	74	78	53	0	0	7	2	0	0
PEORIA	26	11	43	2	19	-5	0.1	0.3	0.0	2.2	48	1.0	47	81	59	0	0	7	2	0	0
QUINCY	29	12	46	2	20	-6	0.7	0.3	0.3	1.3	31	0.4	21	86	52	0	0	7	1	0	0
ROCKFORD	19	-2	29	-19	8	-12	0.7	0.4	0.4	2.9	78	1.7	99	88	57	0	0	7	3	0	0
SPRINGFIELD	30	16	48	5	23	-4	0.1	0.3	0.1	2.3	47	1.2	57	84	59	0	0	7	1	0	0
IN EVANSVILLE	40	24	55	17	32	-3	0.4	0.4	0.3	6.3	78	3.6	84	88	65	0	0	7	2	0	0
FORT WAYNE	26	9	45	1	17	-7	0.2	0.2	0.2	4.4	81	3.0	113	88	61	0	0	7	4	1	0
INDIANAPOLIS	30	16	47	11	23	-4	0.6	0.0	0.5	5.5	83	3.3	101	84	56	0	0	7	2	0	0
SOUTH BEND	22	3	37	-9	13	-12	0.2	0.3	0.1	4.3	69	2.8	95	87	58	0	0	7	2	0	0
IA DES MOINES	19	0	33	-8	10	-13	0.2	0.0	0.1	2.3	86	1.5	111	82	59	0	0	7	3	0	0
SIoux CITY	15	-4	29	-19	6	-16	0.1	0.0	0.1	1.8	118	1.3	170	78	57	0	0	7	3	0	0
WATERLOO	14	-8	27	-23	3	-15	0.3	0.1	0.1	2.3	93	1.5	134	86	65	0	0	7	0	0	0
KS CONCORDIA	28	7	48	-7	18	-11	0.7	0.1	0.1	1.7	107	0.6	79	80	43	0	0	7	0	0	0
DODGE CITY	34	10	54	-1	22	-11	0.7	0.1	0.1	1.4	104	0.4	55	81	45	0	0	7	0	0	0
GOODLAND	30	7	45	-8	18	-13	0.7	0.1	0.1	0.4	42	0.4	73	85	50	0	0	7	0	0	0
TOPEKA	32	10	53	-2	21	-10	0.7	0.2	0.2	1.3	49	0.4	32	83	40	0	0	7	0	0	0
WICHITA	37	13	58	3	25	-9	0.7	0.2	0.2	0.4	14	0.0	0	76	36	0	0	7	0	0	0
KY BOWLING GREEN	48	27	73	18	37	2	3.5	2.5	1.5	15.1	143	8.8	161	97	67	0	0	5	4	4	3
LEXINGTON	41	24	56	15	33	0	2.3	1.6	1.0	10.2	126	6.9	167	94	68	0	0	6	6	1	1
LOUISVILLE	40	25	53	17	32	-2	1.1	0.3	0.7	7.8	99	5.2	125	91	65	0	0	7	3	1	1
LA BATON ROUGE	63	49	77	35	56	4	1.8	0.4	1.6	12.3	96	9.0	123	97	72	0	0	0	0	3	0
LAKE CHARLES	66	49	76	37	58	5	0.3	0.6	0.2	7.2	65	4.8	77	97	70	0	0	0	0	3	1
NEW ORLEANS	73	53	83	38	63	10	0.1	-1.4	0.1	6.4	48	3.5	46	95	66	0	0	0	2	4	0
SHREVEPORT	62	42	83	29	52	4	2.7	1.7	1.9	7.8	72	6.3	105	96</							

Weather Data for the Week Ending February 12, 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	.01 INCH OR MORE		.50 INCH OR MORE	
																			0	1	0	1
ME CARIBOU	6	-15	18	-24	-5	-14	.1	-.4	.1	7.7	120	3.8	116	72	42	0	7	2	0	0		
PORTLAND	20	3	34	-5	12	-10	.5	-.4	.4	11.2	118	5.8	117	68	33	0	7	3	0	0		
MD BALTIMORE	35	22	54	15	29	-5	2.3	1.6	1.4	11.4	147	6.9	158	97	63	0	7	5	2	1		
SALISBURY	41	25	55	16	33	-2	1.4	.6	.7	10.1	116	5.4	107	99	61	0	7	4	2	1		
MA BOSTON	27	13	38	3	20	-9	1.7	.8	.7	13.6	148	7.0	136	84	46	0	7	3	2	1		
CHATHAM	33	22	44	14	28	-2	1.7	.7	.9	15.7	157	8.0	147	95	55	0	7	4	1	1		
MI ALPENA	12	-13	24	-25	-1	-18	.2	-1.1	.1	2.6	62	2.2	101	83	56	0	7	3	0	0		
DETROIT	23	5	39	-7	14	-9	.4	.0	.3	4.1	77	3.3	134	82	51	0	7	4	0	0		
FLINT	19	-2	33	-19	8	-14	.5	.2	.4	2.8	71	2.3	123	84	58	0	7	2	0	0		
GRAND RAPIDS	18	-1	31	-14	9	-14	.5	.2	.2	4.8	92	3.4	141	86	59	0	7	0	0	0		
HOUGHTON LAKE	15	-8	26	-25	4	-13	.2	-1.1	.1	2.9	73	2.1	109	83	54	0	7	4	0	0		
LANSING	18	-6	33	-25	6	-14	.6	.3	.4	3.2	81	2.5	130	88	58	0	7	4	0	0		
MARQUETTE	10	-13	31	-27	-2	-14	.1	-1.3	.1	3.1	56	1.8	61	79	47	0	7	0	0	0		
MUSKEGON	19	2	29	-9	11	-13	.2	-1.1	.2	4.1	68	3.0	102	95	55	0	7	0	0	0		
SAULT ST. MARIE	7	-13	20	-23	-3	-16	.2	-1.2	.1	5.1	83	2.5	79	82	47	0	7	0	0	0		
MN ALEXANDRIA	5	-16	20	-31	-6	-17	.4	.2	.1	1.5	81	.9	71	86	69	0	7	5	0	0		
DULUTH	6	-14	25	-27	-4	-14	.3	.2	.2	3.5	125	2.2	144	79	49	0	7	4	0	0		
INT'L FALLS	3	-18	21	-36	-8	-13	.3	.1	.1	1.2	59	.7	64	80	53	0	7	4	0	0		
MINNEAPOLIS	12	-8	30	-16	2	-13	.3	.1	.1	2.1	89	1.5	121	79	57	0	7	4	0	0		
ROCHESTER	10	-8	25	-18	1	-14	.1	.0	.1	2.1	102	1.4	131	84	64	0	7	3	0	0		
MS GREENWOOD	59	40	76	32	50	4	3.2	2.2	2.6	9.2	74	6.3	93	98	68	0	1	3	0	0		
JACKSON	58	42	77	31	50	4	2.8	1.6	2.0	16.3	118	13.4	179	97	76	0	1	3	2	2		
MERIDIAN	64	43	79	35	54	6	1.2	-1.1	1.0	17.0	127	13.7	187	97	68	0	0	0	1	1		
MO CAPE GIRARDEAU	40	26	56	18	33	-2	.5	.3	.4	7.8	91	.9	120	93	64	0	6	4	0	0		
COLUMBIA	33	15	53	4	24	-5	.1	-1.3	.0	2.4	50	.9	40	89	59	0	7	2	0	0		
KANSAS CITY	32	11	53	0	21	-8	.1	-1.2	.0	1.8	60	.7	49	78	39	0	7	2	0	0		
SAINT LOUIS	35	21	55	11	28	-4	.1	-1.3	.1	3.7	67	2.3	88	84	56	0	7	2	0	0		
SPRINGFIELD	41	19	57	8	30	-3	T	-1.4	T	3.1	61	1.5	61	87	51	0	7	1	0	0		
MT BILLINGS	24	2	38	-16	13	-15	.1	.0	.1	.7	34	.5	39	70	49	0	7	3	0	0		
GLASGOW	5	-18	31	-34	-7	-22	.1	.0	.1	1.0	112	.8	169	81	60	0	7	3	0	0		
GREAT FALLS	23	-2	37	-34	11	-16	.1	.0	.1	1.1	53	.8	65	72	51	0	7	3	0	0		
HAVRE	10	-17	35	-44	-4	-23	T	-1.1	T	T	0	T	0	80	60	0	7	2	0	0		
HELENA	24	-2	37	-27	11	-14	.1	.1	.1	.4	27	.3	31	73	46	0	7	1	0	0		
KALISPELL	21	0	35	-21	10	-15	.4	.1	.2	3.1	81	1.5	73	84	66	0	7	3	0	0		
MILES CITY	17	-8	33	-22	5	-17	.1	.0	.1	1.0	74	.9	123	84	62	0	7	2	0	0		
MISSOULA	29	8	43	-12	18	-10	T	-1.1	T	1.2	88	.8	116	83	58	0	7	1	0	0		
NE GRAND ISLAND	18	1	32	-21	9	-16	T	-1.1	T	.8	28	.4	22	84	55	0	7	1	0	0		
LINCOLN	21	1	37	-12	11	-13	T	-1.1	T	.9	53	.5	61	85	53	0	7	1	0	0		
NORFOLK	17	-3	33	-20	7	-16	.2	.0	.1	1.4	92	.9	125	79	55	0	7	3	0	0		
NORTH PLATTE	27	4	44	-14	16	-10	T	.0	T	.8	84	.6	116	81	52	0	7	2	0	0		
OMAHA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
SCOTTSBLUFF	32	6	50	-18	19	-10	.2	.1	.2	1.4	115	.8	126	82	44	0	7	2	0	0		
VALENTINE	19	-3	35	-31	8	-18	T	-1.1	T	.8	73	.3	53	77	50	0	7	1	0	0		
NV KLY	35	8	44	-12	21	-7	.8	.6	.4	1.5	87	1.3	134	88	48	0	7	2	0	0		
LAS VEGAS	58	40	67	37	49	-1	.1	.0	.1	.7	68	.5	74	69	26	0	0	2	0	0		
RENO	46	26	54	15	36	-1	.4	.1	.1	.6	24	.4	28	84	37	0	6	4	0	0		
WINNEMUCCA	41	24	46	14	32	-3	.4	.3	.2	1.2	62	.8	82	88	54	0	5	3	0	0		
NH CONCORD	20	0	33	-12	10	-10	.3	.3	.2	7.1	106	3.8	106	86	42	0	7	3	0	0		
NJ ATLANTIC CITY	36	19	51	10	27	-5	1.8	1.1	1.0	10.2	126	6.0	125	95	67	0	7	3	2	0		
NM ALBUQUERQUE	53	30	61	23	41	3	.2	.1	.1	.3	23	.2	35	72	28	0	5	2	0	0		
CLOVIS	58	23	68	8	41	1	T	-1.1	T	.5	46	T	5	71	21	0	6	0	0	0		
ROSWELL	45	30	75	17	47	4	.0	-1.1	.0	.1	13	T	4	81	34	0	5	0	0	0		
NY ALBANY	20	2	34	-15	11	-11	.7	.2	.5	7.0	112	3.9	118	76	46	0	7	3	0	0		
BINGHAMTON	20	5	32	-7	13	-9	.8	.2	.5	7.5	119	4.2	126	81	59	0	7	3	1	0		
BUFFALO	21	4	36	-5	13	-10	.3	-1.3	.3	7.3	99	3.7	99	80	53	0	7	2	0	0		
NEW YORK	29	19	44	7	24	-8	1.8	1.2	.8	11.1	145	6.6	157	82	49	0	7	3	2	0		
ROCHESTER	20	3	33	-7	11	-12	.5	.0	.3	4.9	86	3.3	111	82	56	0	7	4	0	0		
SYRACUSE	20	1	32	-13	10	-12	.4	-1.1	.2	7.1	110	3.9	120	80	51	0	7	4	0	0		
NC ASHEVILLE	56	34	67	26	43	5	1.7	.7	1.1	10.6	105	7.1	125	96	68	0	5	3	2	0		
CHARLOTTE	52	38	77	27	47	6	.8	-2.2	.4	7.8	89	4.5	84	94	61	0	2	3	0	0		
GREENSBORO	52	32	69	21	42	4	1.1	.3	.6	8.2	104	5.0	109	92	64	0	5	3	1	0		
HAYTERAS	58	39	68	36	49	4	1.3	.3	.7	12.7	109	8.6	120	97	71	0	0	2	2	1		
NEW BERN	60	39	81	31	49	5	1.0	-1.1	.6	8.5	86	6.9	112	94	60	0	2	2	1	1		
RALEIGH	54	36	74	23	45	5	1.3	.4	.8	9.0	109	5.3	105	93	63	0	3	3	1	1		
WILMINGTON	60	41	77	32	51	6	1.0	-1.1	.7	10.7	100	8.0	121	98	71	0	1	2	1	1		
ND BISMARCK	6	-20	25	-43	-7	-20	.2	-1.1	-1.1	1.7	146	.8	126	86	60	0	7	4	0	0		
FARGO	4	-18	18	-32	-7	-17	.2	-1.1	-1.1	2.0	131	1.0	114	77	60	0	7	4	0	0		
GRAND FORKS	0	-22	14	-32	-11	-19	.2	-1.1	-1.1	1.5	94	1.0	110	81	60	0	7	2	0	0		
WILLISTON	4	-21	25	-32	-8	-22	T	-1.1	T	1.4	109	1.1	146	78	57	0	7	3	0	0		
OH AKRON-CANTON	27	10	40	-2	19	-7	.6	.0	.5	6.9	115	4.1	135	89	63	0	7	2	1	1		
CINCINNATI	34	20	48	13	27	-3	.8	.2	.8	6.6	97	4.1	112	93	72	0	7	3	1	1		
CLEVELAND	26	9	43	2	18	-8	.3	-1.3	.2	5.1	84	2.9	98	85	59	0	7	2	0	0		
COLUMBUS	31	17	46	9	24	-2	.6	-1.1	.6	6.6	113	4.4	156	92	63	0	7	4	1	1		
DAYTON	29	14	47	8	22	-6	.9	.4	.8	7.5	127	4.7	158	89	63	0	7	4	1	1		

Based on 1961-90 normals.

Weather Data for the Week Ending February 12, 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
TOLEDO	23	5	41	-7	14	-9	.4	.1	.3	4.6	86	3.4	139	86	58	0	7	2	0	0		
YOUNGSTOWN	26	9	39	-4	18	-7	.4	.1	.4	5.8	98	3.1	107	86	60	0	7	2	0	0		
OK OKLAHOMA CITY	42	19	62	8	31	-9	.4	.3	.4	1.5	48	.2	32	81	40	0	7	0	0	0		
TULSA	46	20	61	9	31	-8	.4	.4	.4	5.6	.7	.30	89	41	0	7	0	0	0	0		
OR ASTORIA	46	31	49	21	39	-5	1.5	.5	1.1	17.9	75	8.3	62	93	65	0	4	4	1	0		
BURNS	34	11	42	1	23	-5	.3	.1	.2	1.4	56	.5	41	86	52	0	4	3	0	0		
MEDFORD	47	30	50	23	39	-3	.5	.0	.3	4.0	57	1.5	43	94	51	0	4	4	0	0		
PENDLETON	39	20	51	1	30	-8	.1	-.2	.1	2.6	70	1.7	82	77	44	0	4	4	0	0		
PORTLAND	47	31	51	25	39	-4	.1	-.9	.1	8.6	65	3.6	51	83	46	0	4	5	0	0		
SALEM	48	30	52	23	39	-3	.2	-1.0	.1	11.3	77	4.5	56	85	44	0	4	3	0	0		
PA ALLENTOWN	28	13	41	8	21	-7	2.0	1.2	1.0	12.6	160	7.7	174	83	53	0	7	2	0	0		
ERIE	23	6	40	-7	14	-10	.3	-.2	.3	5.8	87	3.0	95	84	58	0	7	2	0	0		
HARRISBURG	30	16	44	11	23	-7	1.8	1.1	.8	11.3	155	7.4	181	89	59	0	7	2	0	0		
PHILADELPHIA	34	21	51	10	27	-3	1.7	.9	.8	9.7	115	6.0	125	84	47	0	7	5	2	0		
PITTSBURGH	30	16	42	4	23	-4	.5	.0	.5	6.7	104	4.5	130	83	60	0	7	2	1	0		
SCRANTON	25	11	38	2	18	-7	.6	.0	.2	6.9	125	3.9	129	82	50	0	7	4	0	0		
RI PROVIDENCE	27	15	41	5	21	-8	1.0	.2	.6	12.4	126	6.6	122	86	47	0	7	1	1	0		
SC CHARLESTON	65	46	74	38	56	6	.4	-.4	.3	10.5	133	8.2	172	98	75	0	0	3	0	0		
COLUMBIA	61	45	81	31	53	7	1.1	-.1	.4	7.9	81	5.6	90	95	66	0	1	3	0	0		
FLORENCE	60	44	79	31	52	6	1.1	-.3	.3	7.6	95	5.7	118	96	60	0	2	5	0	0		
GREENVILLE	55	37	76	29	46	4	1.6	.5	.9	9.1	90	6.1	104	96	55	0	3	3	1	0		
SD ABERDEEN	6	-13	24	-45	-4	-18	.3	-.1	.2	1.7	126	1.2	135	81	62	0	7	4	0	0		
HURON	11	-14	24	-41	-2	-19	.2	-.1	.2	1.9	179	1.2	198	80	67	0	7	3	0	0		
RAPID CITY	21	-2	39	-25	10	-16	.3	-.1	.1	1.3	123	.7	130	82	56	0	7	4	0	0		
STOUX FALLS	11	-10	27	-29	1	-17	.1	.0	.1	1.4	99	1.1	154	80	60	0	7	3	0	0		
TN CHATTANOOGA	58	39	72	29	49	8	3.8	2.6	2.9	15.7	130	10.4	152	99	72	0	1	4	2	0		
KNOXVILLE	55	36	70	31	46	7	4.8	3.8	2.8	20.6	198	12.5	214	96	77	0	3	4	2	0		
MEMPHIS	55	36	74	25	46	3	2.6	1.6	1.2	13.7	123	8.2	150	90	65	0	4	3	2	0		
NASHVILLE	54	34	75	23	44	5	2.9	2.0	1.2	13.9	143	7.3	142	89	64	0	3	4	3	0		
TX ABILENE	64	30	80	19	47	1	.0	-.3	.0	2.0	79	1.1	73	89	37	0	5	0	0	0		
AMARILLO	51	20	67	7	36	-2	.0	-.1	.0	2.0	174	1.0	142	79	29	0	7	0	0	0		
AUSTIN	67	42	84	26	55	4	.7	-.1	.6	3.2	72	2.1	80	89	49	0	3	2	1	0		
BEAUMONT	68	49	77	36	58	5	.4	-.5	.3	9.9	89	8.0	126	98	73	0	0	2	0	0		
BROWNSVILLE	78	54	83	38	66	5	.7	-.3	.7	4.6	138	2.3	111	97	58	0	0	1	0	0		
CORPUS CHRISTI	73	49	82	31	61	4	.6	-.1	.6	6.7	172	1.9	71	97	63	0	1	2	1	0		
DEL RIO	70	45	79	33	57	5	.4	.0	.4	2.9	104	2.8	159	87	49	0	0	3	0	0		
EL PASO	65	38	74	27	51	4	.2	.1	.2	1.0	83	.3	45	66	21	0	1	1	0	0		
FORT WORTH	60	33	79	20	46	1	.1	-.5	.1	4.0	83	1.5	54	93	52	0	3	2	0	0		
GALVESTON	64	50	72	35	57	3	.1	-.5	.0	4.8	61	2.4	55	98	81	0	0	3	0	0		
HOUSTON	67	46	81	32	56	4	1.3	-.4	.9	6.1	60	3.4	64	96	69	0	2	3	1	0		
LUBBOCK	63	27	72	13	45	3	.1	-.1	.1	.8	66	.5	70	83	25	0	5	1	0	0		
MIDLAND	67	32	83	22	50	3	.7	-.1	.7	1.4	113	1.0	142	91	30	0	5	0	0	0		
SAN ANGELO	68	36	82	24	52	6	.7	-.3	.7	2.5	121	1.7	135	91	40	0	3	0	0	0		
SAN ANTONIO	71	43	87	29	57	5	.3	-.2	.3	2.3	57	1.8	73	92	46	0	3	2	0	0		
VICTORIA	66	45	79	28	56	2	.2	-.5	.2	5.8	75	1.7	37	93	61	0	3	3	0	0		
WACO	63	36	83	22	49	1	.5	.0	.5	3.5	80	2.0	80	98	60	0	3	1	1	0		
WICHITA FALLS	50	23	75	13	36	-4	.7	-.5	.7	2.8	77	.2	9	89	40	0	7	0	0	0		
UT CEDAR CITY	43	20	49	4	32	-2	.6	-.4	.4	1.2	70	.8	82	93	48	0	6	3	0	0		
SALT LAKE CITY	43	26	52	14	34	1	.5	-.2	.4	2.0	66	1.1	70	79	50	0	6	3	0	0		
VT BURLINGTON	14	-7	25	-18	4	-13	.2	-.2	.2	4.0	81	2.4	97	76	41	0	7	2	0	0		
VA NORFOLK	51	32	71	25	42	2	2.4	1.6	1.8	10.3	121	7.0	133	90	64	0	3	4	1	0		
RICHMOND	45	27	59	21	36	-1	2.4	1.6	1.1	9.4	120	5.4	123	92	45	0	7	4	3	0		
ROANOKE	48	28	63	20	38	-2	3.8	3.1	2.3	13.7	201	8.4	220	87	54	0	6	4	2	0		
WA QUILLAYUTE	43	31	47	21	37	-4	2.9	-.4	1.7	25.3	72	12.7	64	95	68	0	4	6	1	0		
SEATTLE-TACOMA	43	32	51	22	38	-4	.1	-1.0	.1	7.1	54	2.6	36	82	52	0	4	2	0	0		
SPOKANE	29	11	38	3	20	-12	.3	-.0	.3	3.4	71	1.8	67	84	56	0	7	1	0	0		
YAKIMA	40	20	51	4	30	-5	.7	-.2	.7	3.4	46	.4	24	81	45	0	7	1	0	0		
WV BECKLEY	45	26	59	16	36	5	3.5	2.8	2.1	12.7	171	8.2	197	92	59	0	6	4	3	0		
CHARLESTON	45	26	58	16	36	2	3.8	3.1	1.6	13.6	181	10.4	250	93	64	0	7	4	3	0		
HUNTINGTON	42	23	51	14	33	1	3.4	2.7	1.4	11.9	152	8.6	201	91	63	0	7	4	3	0		
PARKERSBURG	35	21	46	12	28	-3	2.6	1.9	1.9	11.7	160	9.7	221	94	64	0	7	4	1	0		
WI GREEN BAY	16	-1	28	-11	7	-9	.2	.0	.1	2.1	69	1.7	109	73	49	0	7	2	0	0		
LACROSSE	15	-3	30	-14	6	-12	.1	.1	.1	.1	.1	.1	.1	78	53	0	7	1	0	0		
MADISON	17	-6	28	-19	6	-13	.7	.4	.4	2.5	78	2.1	139	83	56	0	7	3	0	0		
MILWAUKEE	21	5	28	0	13	-8	.9	.6	.4	3.8	85	3.1	146	85	57	0	7	4	0	0		
WAUSAU	13	-4	29	-16	4	-11	.2	.0	.1	1.6	59	1.0	81	68	38	0	7	2	0	0		
WY CASPER	28	4	40	-8	16	-9	.3	-.1	.1	1.6	108	.9	114	77	55	0	7	4	0	0		
CHEYENNE	36	9	40	-6	23	-6	.5	.5	.5	1.5	163	1.2	235	81	48	0	7	3	0	0		
LANDER	27	2	35	-13	14	-9	.2	-.1	.1	1.7	133	1.3	187	85	49	0	7	3	0	0		
SHERIDAN	22	-5	37	-22	9	-16	.1	.0	.1	2.5	145	2.1	203	78	52	0	7	2	0	0		

Based on 1961-90 normals.

HEATING DEGREE DAYS (Base 65° F) February 6 - 12, 1994

(Cumulative totals and departures from normal are for the period July 1, 1993 - February 12, 1994)

STATES AND STATIONS	WEEKLY		CUMULATIVE		STATES AND STATIONS	WEEKLY		CUMULATIVE		STATES AND STATIONS	WEEKLY		CUMULATIVE				
	TOTAL	DEPARTURE	TOTAL	DEPARTURE		TOTAL	DEPARTURE	TOTAL	DEPARTURE		TOTAL	DEPARTURE	TOTAL	DEPARTURE	DEP fm 92-93		
AL BIRMINGHAM	79	-66	2188	71	348	LA BATON ROUGE	68	-25	1539	248	515	TULSA	236	51	2927	253	265
HUNTSVILLE	116	-48	2526	145	415	LAKE CHARLES	59	-28	1273	49	260	OR ASTORIA	182	35	3151	51	-30
MOBILE	33	-64	1472	167	434	NEW ORLEANS	33	-51	1274	116	440	EUGENE	193	43	3076	235	144
MONTGOMERY	43	-72	1827	173	375	SHREVEPORT	101	-19	1794	98	157	MEDFORD	183	21	2944	-75	248
AK ANCHORAGE	311	-21	5806	-1060	-1220	ME BANGOR	403	76	5372	369	200	NORTH BEND	158	32	2708	12	143
BARROW	478	-100	10700	-1347	-1260	PORTLAND	372	69	4855	228	227	PENDLETON	245	57	3468	-70	-355
BETHEL	312	-108	7013	-1094	-1262	MD BALTIMORE	253	31	3394	251	465	PORTLAND	180	25	2695	-190	-125
COLD BAY	218	-48	5093	-636	-759	MA BOSTON	312	61	3865	340	261	REDMOND	277	69	4358	163	-258
FAIRBANKS	462	-35	8360	-1126	-1234	MI ALPENA	454	118	5689	564	556	SALEM	181	21	2832	-213	-46
JUNEAU	291	29	4750	-899	-728	DETROIT	353	65	4399	161	478	PA ALLENTOWN	307	46	4099	309	466
KING SALMON	293	-64	5847	-1329	-1318	FLINT	395	95	5097	647	808	BRADFORD	361	43	5251	180	513
KOTZEBUE	374	-116	8375	-1019	-1604	GRAND RAPIDS	393	94	4989	507	667	ERIE	353	68	4372	490	749
MCCRATH	367	-121	8006	-1561	-1349	LANSING	410	103	5059	499	632	PHILADELPHIA	261	26	3152	-105	276
NOME	338	-91	7650	-845	-1712	MUSKOGEE	380	87	4816	496	552	PITTSBURGH	293	28	4088	188	563
ST PAUL ISLAND	237	-61	5721	-627	-867	TRaverse CITY	404	81	5139	362	402	SCRANTON	326	48	4407	343	611
YAKUTAT	261	-2	5007	-841	-1100	MN DULUTH	477	95	6937	598	791	WILLIAMSPORT	321	51	4387	410	703
AZ FLAGSTAFF	253	15	4198	-166	-33	INT'L FALLS	504	86	7404	479	646	RI PROVIDENCE	307	52	3949	274	328
PHOENIX	63	2	747	-219	22	MINNEAPOLIS	434	89	5832	467	658	SC CHARLESTON	64	-47	1518	28	287
TUCSON	79	0	1031	-151	-51	ROCHESTER	447	98	6014	533	533	COLUMBIA	92	-46	2007	74	200
AR FORT SMITH	189	16	2596	74	286	MS JACKSON	110	-20	2086	254	599	GREENVILLE	131	-29	2519	210	219
LITTLE ROCK	151	-13	2453	104	284	MERIDIAN	82	-40	1859	61	378	SD ABERDEEN	473	121	6222	536	490
CA FRESNO	105	3	1662	-160	54	MO COLUMBIA	286	44	3890	316	438	HURON	462	128	5932	596	600
LOS ANGELES	58	2	540	-257	-139	KANSAS CITY	305	55	3897	171	283	PIERRE	434	125	5427	467	326
SACRAMENTO	118	13	1805	-52	65	SAINt LOUIS	258	28	3437	143	364	RAPID CITY	385	109	4757	18	-358
SAN DIEGO	60	11	649	-65	-22	SPRINGFIELD	242	25	3412	199	420	ST LOUIS	447	116	5758	483	532
SAN FRANCISCO	99	7	1472	-359	07	MT BILLINGS	361	101	4574	-105	-254	TN BRISTOL	151	-54	3094	82	356
CO COLORADO SPRINGS	248	12	4185	91	24	GILSON	496	150	6102	252	151	CHATTANOOGA	113	-59	2442	-91	269
DENVER	251	24	3870	-25	-251	GREAT FALLS	378	107	5147	139	-158	KNOXVILLE	132	-53	2847	108	427
GRAND JUNCTION	211	-16	3875	-17	151	HAVRE	477	157	5810	164	-121	MEMPHIS	140	-16	2339	100	289
CT HARTFORD	324	51	4387	369	374	HELENA	375	95	5138	-154	-443	NASHVILLE	147	-37	2800	160	445
DE WILMINGTON	265	34	3401	145	396	KALISPELL	381	103	5306	-198	-283	TX ABILENE	126	-7	2046	120	217
DC WASHINGTON	240	37	3095	341	371	MISSOULA	327	68	4917	-208	-500	AMARILLO	205	15	3163	213	-12
FL DAYTONA BEACH	4	-52	665	-2	295	NE GRAND ISLAND	385	109	4570	190	-76	AUSTIN	80	-15	1241	-61	69
FORT MYERS	0	-28	206	-124	118	W NORTH PLATTE	344	72	4618	3	-173	BROWNSVILLE	20	-20	476	-53	114
JACKSONVILLE	5	-75	1104	30	315	OMAHA	393	107	4797	407	453	CORPUS CHRISTI	47	-12	723	-79	108
KEY WEST	0	-7	24	-51	21	SCOTTSBLUFF	320	70	4607	203	-264	DALLAS FT WORTH	128	-2	1852	61	235
MIAMI	0	-14	78	-84	58	NV ELKO	277	35	5068	482	-384	EL PASO	94	-33	1866	-160	34
ORLANDO	0	-47	469	-65	206	ELY	303	48	5131	345	161	HOUSTON	75	-12	1233	26	241
PENSACOLA	27	-60	1258	37	426	LAS VEGAS	108	4	1680	-74	-100	LUBBOCK	136	-27	2501	22	113
TALLAHASSEE	12	-80	1305	32	435	RENO	202	6	3202	-528	-471	LUFKIN	90	-13	1616	137	175
TAMPA	0	-43	450	-103	182	WINNEBUCCA	226	15	4158	36	-240	MIDLAND ODESSA	105	-31	2060	-2	118
WEST PALM BEACH	0	-23	137	-117	83	NH CONCORD	328	69	5206	345	373	SAN ANGELO	93	-35	1770	-80	374
GA ATHENS	112	-33	2252	167	282	NJ ATLANTIC CITY	263	30	3572	254	407	SAN ANTONIO	67	-23	1223	-50	129
ATLANTA	88	-63	2060	-100	175	NEWARK	286	52	3389	211	486	VICTORIA	78	7	994	-20	157
AUGUSTA	86	-47	1919	37	272	NM ALBUQUERQUE	166	-19	2922	-175	-7	WACO	118	-2	1838	202	342
MACON	65	-58	1927	187	356	NY ALBANY	375	73	4910	447	521	WICHITA FALLS	197	45	2448	218	397
SAVANNAH	29	-73	1390	-8	254	BINGHAMTON	365	59	5136	521	425	UT CEDAR CITY	233	13	3779	-80	-89
ID BOISE	253	40	3919	-7	-228	BUFFALO	362	69	4640	423	517	SALT LAKE CITY	215	-12	3677	-170	-412
POCATELLO	269	9	4766	109	-223	MASSENA	455	104	5670	365	322	VT BURLINGTON	425	85	5381	371	484
IL CHICAGO	361	70	4665	362	550	NEW YORK	286	56	3321	188	316	VA LYNCHBURG	183	-22	3064	108	371
MOLINE	365	69	4669	311	477	SYRACUSE	374	82	4819	576	462	NORFOLK	162	-14	2420	99	313
PEORIA	320	35	4337	195	493	CAPE HATTERAS	112	-30	1521	-223	166	RICHMOND	200	6	2799	63	280
ROCKFORD	394	86	4978	370	527	CHARLOTTE	126	-40	2295	-45	211	ROANOKE	187	-18	3193	217	386
SPRINGFIELD	293	26	4059	206	613	GREENSBORO	160	-25	2802	136	196	WA OLYMPIA	203	32	3270	-263	-67
IN EVANSVILLE	229	1	3379	113	519	RALEIGH DURHAM	138	-33	2536	124	258	QUILLAYUTE	195	33	3351	-183	-111
FORT WAYNE	332	47	4340	222	477	WILMINGTON	103	-29	1749	8	187	SEATTLE TACOMA	191	37	2909	-140	-3
INDIANAPOLIS	290	28	4082	289	622	ND BISMARCK	496	137	6482	510	432	SPOKANE	312	82	4407	-78	-298
SOUTH BEND	365	82	4648	515	728	FARGO	500	114	6595	427	458	YAKIMA	241	31	3981	-58	-321
IA DES MOINES	384	88	4853	431	518	MINOT	501	137	6611	534	430	WV BECKLEY	203	-38	3276	43	464
MASON CITY	441	103	5765	512	526	WILLISTON	507	150	6568	445	267	CHARLESTON	203	-16	3317	160	465
SIOUX CITY	410	107	5210	488	493	OH AKRON CANTON	323	47	4433	443	589	HUNTINGTON	224	3	3388	201	529
WATERLOO	428	98	5293	258	520	CLEVELAND	331	56	4305	358	642	WI EAU CLAIRE	437	81	6033	482	801
KS CONCORDIA	329	80	3975	183	-107	COLUMBUS	284	23	3950	159	570	GREEN BAY	400	61	5570	327	564
DOODGE CITY	297	77	3750	321	-247	COLOMBUS	267	22	3872	326	583	MADISON	414	91	5290	263	615
GOODLAND	324	87	4286	331	-202	CINCINNATI	304	42	4177	382	621	MILWAUKEE	363	58	4603	-53	353
RUSSELL	306	68	3806	151	-164	DAYTON	354	64	4557	277	693	WY CASPER	342	65	4625	-284	-132
TOPKA	308	66	3850	181	279	TOLEDO	330	46	4518	328	556	CHEYENNE	294	40	4764	200	145
WICHITA	279	56	3421	79	85	YOUNGSTOWN	330	46	4518	328	556	LANDER	352	64	5070	-83	-442
KY LEXINGTON	225	-2	3558	298	614	OK OKLAHOMA CITY	240	61	2903	275	333	ROCK SPRINGS	315	23	5467	155	-228
LOUISVILLE	229	12	3378	270	687						SHERIDAN	390	111	5083	11	-296	

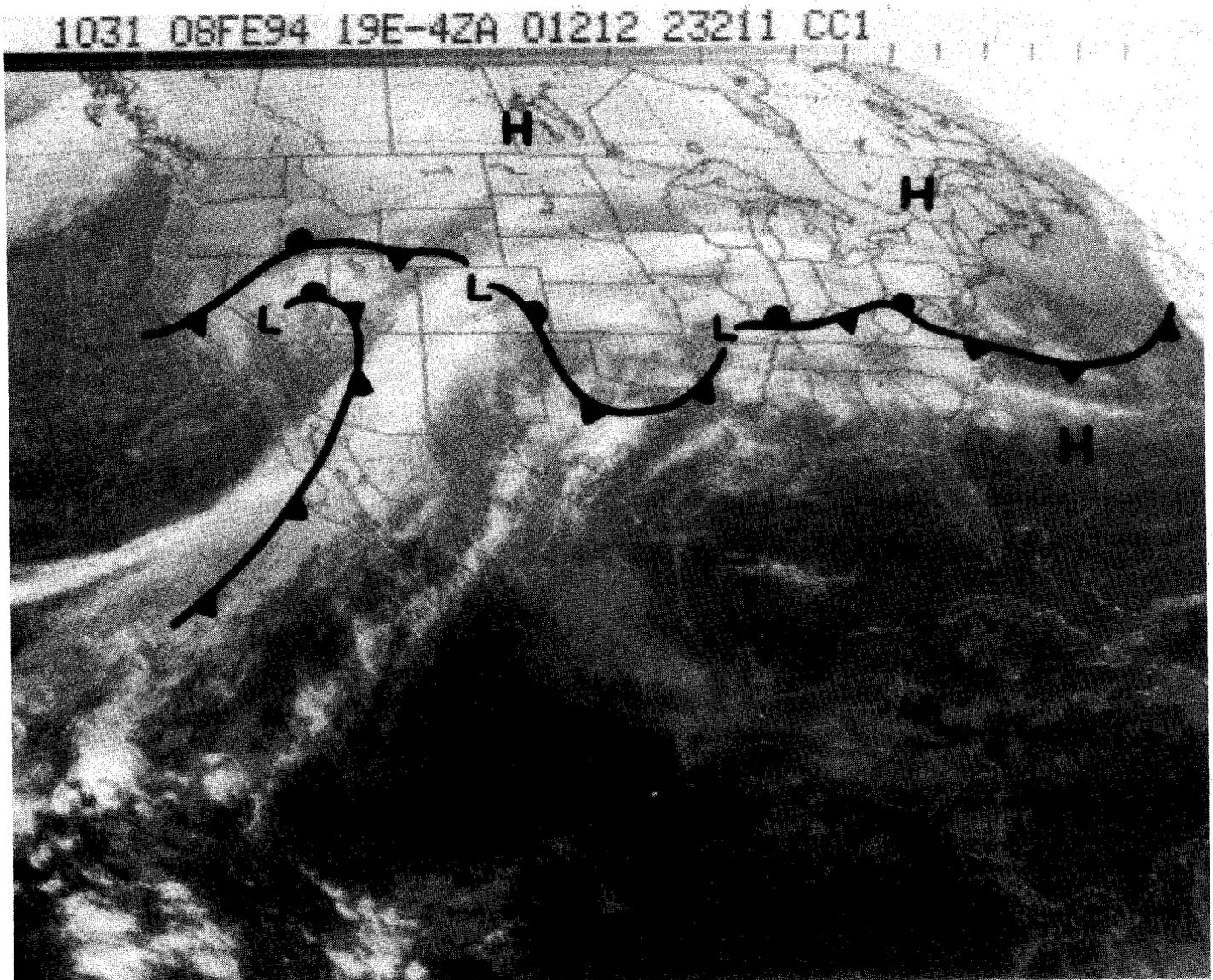
Based on 1961-90 normals.

National Agricultural Summary

February 7 - 13, 1994

An early-week storm brought rain and snow to the Pacific Coast and parts of the northern Rockies. The storm provided some snow cover for wheat in Idaho and Montana, but little snow cover to wheat in Washington. By midweek, a second storm brought sleet and snow from the Midwest to the Northeast, which stressed livestock and increased the need for supplemental feeding. A third storm brought sleet, ice, snow from east Texas to the Northeast at the end of the week. The storm slowed crop growth in the Southeast and stressed livestock. Temperatures from Arizona to Virginia were above normal. Elsewhere, temperatures were below normal with some record-cold temperatures recorded in the northern Plains. Snow cover for winter wheat in the northern Plains appeared to provide adequate protection from cold weather. Wheat pro-

ducers in the middle Mississippi Valley and the east-central Plains were concerned about the lack of snow cover. Wheat development in the southern Plains continued to be slowed by the cold, dry conditions. Precipitation delayed fieldwork in the Southeast, hindered vegetable planting in California, and caused delays in the California winter potato harvest. Low temperatures caused some problems to fruit and vegetables in Texas. Above-normal temperatures boosted vegetable growth in Florida. Rain improved pasture feed conditions in California. Pasture feed conditions in the Southeast still suffered from the cold, damp weather. Pastures in Texas still needed more rain. The cold weather prompted livestock producers to feed more forage to their cattle. Some forage shortages were reported in parts of the Southeast.



Infrared satellite image of North America from February 8, 5:30 a.m. EST. Surface fronts and high- and low-pressure centers have been added to clarify the boundary between arctic air and sub-tropical air.

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 1.10 to 5.22 in. north; 0.74 to 4.19 in. central; 0.52 to 1.86 in. south. Temperatures 1 to 10° above normal north; 2 to 11° above normal central; 5 to 13° above normal south. Lows 17 to 27° north; 16 to 32° central; 24 to 31° south. Highs 69 to 79° north; 75 to 83° central; 79 to 83° south.

Primary activities: General care of livestock, poultry, catfish.

ARIZONA: Temperatures generally below normal, 3° below to 1° above. Extremes 6°; 70° higher elevations; 26°; 76° deserts. Precipitation all stations; rainfall 0.01 to 1.72 in.

Small grains planting complete. Small grain seeded 100%, 100% 1993, 100% avg.; established 99%, 97% 1993, 98% avg. Alfalfa condition good. Harvest light, sheepling off activities light; stand renovation, new stand establishment below normal to normal. Citrus harvest active. Grapefruit, navel, sweet oranges, lemons available central, western areas. Also, valencia oranges available western areas, tangerines, tangelos available central area. Winter vegetable harvest active. Available from western, central areas: Bok choy, broccoli, cabbage, cauliflower, cilantro, leaf, romaine lettuces, napa, parsley, spinach. Western harvest also included: Anise, asparagus, broccoflower, celery, iceberg, boston lettuce, endive, escarole, salad savoy. Central crops available included: Beets, carrots, dill, kohlrabi, leeks, mixed greens, green onions, radishes, rappini, rutabagas, swiss chard, turnips, watercress. Tomatoes continued available eastern areas.

ARKANSAS: Major ice storm throughout State last part of week, worst in southeast. Temperatures to average below normal for the week. Extremes 10°; 82°. Precipitation 0.25 to 4.02 in.

Soil moisture supplies remain adequate to surplus. Wheat condition fair to good, farmers looking for dry weather to apply nitrogen. Livestock, pastures good. Scattered hay shortages reported in southwest. Reports of ice storm damage to pecan trees in southeast.

CALIFORNIA: Rain helped bring season totals closer to normal.

Intermittent rains hampered progress field activities most areas. Small grains, forage crops, new alfalfa growing well with increased moisture. Fertilizers, herbicides applied small grains, dry beans, established alfalfa between rains. Sugarbeets irrigated, thinned, treated weeds. Some established alfalfa fields chemically burned to stimulate new growth; others sprayed aphids, weevils. General ground preparation for planting cotton, safflower, sugarbeets where conditions allowed. Alfalfa, oats, sudangrass cut hay, green-chopped limited areas. Bees placed almond, stone fruit orchards. Pruning, shredding brush, application chemicals continued, some rain delay. Navel orange harvested. Puff, other rind defects caused heavy grading. Fuji apples packed. Olives pruned Tulare county. Strawberries showed good growth. Broccoli harvest continued in the San Joaquin, Imperial Valleys. Broccoli and cabbage fields were treated to control aphids, mildew in the central valley. Cabbage harvested remained active in the desert valleys. Cucumber plantings were delayed due to wet field conditions. Garlic was irrigated and treated for weeds in Fresno County. Head lettuce fields were thinned, treated for mildew, irrigated in the San Joaquin Valley. Planted fields were progressing well. Harvest of head lettuce fields took place in the central and desert valleys. Planting of melons continued in the Palo Verde Valley. Onion fields were developing nicely in the Coachella Valley. Winter potato harvest in Riverside County was slowed due to wet fields. Fall potatoes, sweet potatoes continued to be marketed out of storage. Processing tomato beds were being treated with pre-emergent herbicides, irrigated, planted in the central valley. Eggplants were being started in greenhouses in Fresno County. Other crops being harvested include taro root, turnips, various oriental vegetables. Additional rains, warmer temperatures improved rangeland feed, waters supplies. Condition fair to good. Livestock good, some feeding continuing. Bee hives moved to almond orchards.

COLORADO: Two strong winter storms moved through the State. First storm dumped heavy snow in the mountains, especially

over the southwest where as much as 4 feet of snow was reported. Heaviest snowfall from the second storm occurred over the northern, central mountains, the Front Range. Some thunder snowshowers were also observed over the Front Range on the 11th. Overall cold wintry weather dominated through most of the week before warmer air returned on the 12th. Snow blanketed much of the eastern plains, beneficial to winter wheat.

Care of livestock, machinery maintenance were producer activities.

FLORIDA: Temperatures 8 to 14° above normal. Highs upper 70s to upper 80s. Lows; upper 20s north, to 60s southeast coast. Rain 0 to 3 days during the week. Rain 0.33 to 1.00 in. Panhandle, Big Bend, to less than 0.33 in. elsewhere.

Soil moisture mostly adequate to surplus throughout State. Scattered areas of short moisture. Sugarcane harvest active. Maintaining tobacco beds. Making preparations for spring planted crops. Top-dressing winter wheat. Citrus groves, trees very good to excellent condition. Very warm temperatures, little rain, new growth, bloom buds starting with a few open blooms. Fruit loss from drops very minimal. Orange harvest active all areas. Grapefruit movement active East Coast. Half grapefruit going to fresh, half being processed. Temples, Honey tangerines going fresh. Caretakers cutting cover crops, hedging, topping, fertilizing. Near ideal growing conditions, warm weather, good soil moisture in major vegetable producing areas. Condition of many crops improved from past weeks' cool weather. Leading vegetable shipments: Tomatoes, peppers, cabbage, squash, sweet corn. Also available: Snap beans, carrots, celery, chinese cabbage, cucumbers, eggplant, escarole, iceberg lettuce, leaf lettuce, romaine, specialty lettuces, radishes, strawberries, tomatoes, cherry tomatoes. Pasture feed 10% poor, 25% fair, 60% good, 5% excellent. Cattle herds mostly fair to good condition.

GEORGIA: Warmer than normal temperatures; 3 to 8° above north and 8 to 13° above elsewhere. Warmest highs 70° northeast mountains to low 80s extreme south. Coolest lows mostly 20s north, 30s south few teens in mountains. Rained 3 to 5 days north, central, 1 or 2 days southeast. Rain heaviest northwest; 2.00 to 5.00 in. common. Rainfall 1.00 to 2.00 in. central, under 0.25 in. much of south.

Soil moisture surplus. Wet fields limiting land preparation, fertilizing small grains, completion about 1/3 for both. Small grains fair to good. Tobacco bed preparation nearly half complete, condition fair. Onions good, planting complete. Peach tree pruning active, condition good. Harvest of late 1993 crops virtually complete. Pastures poor to fair, greening some areas. Hay shortage causing problems for cattlemen north. Cattle, hogs fair to good, mostly good.

HAWAII: Variable conditions, cool, wet especially over the weekend. Rainfall as much as 5.00 in. over a 24 hour period. Rainfall 0.10 to 13.20 in. Temperatures high 50s to low 80s.

Some spraying delayed by wet conditions. Cool weather continued to slow crop progress. Insects, disease infestations controlled with regular spraying. Banana shipments moderate. Papaya output steady.

IDAHO: Temperatures 2° above to 11° below normal. Precipitation 0.01 to 0.38 north, 0.21 to 0.49 in. southwest, 0.15 to 0.71 in. south central, 0.05 to 0.54 in. east.

Soil moisture adequate. Hay, roughage supplies adequate. Activities: Marketing, educational, commodity meetings, shop activities, livestock care. Livestock good condition with calving, lambing active.

ILLINOIS: Northern portion of the State experienced cold arctic air, while in the south, temperatures were near normal last week. Highs low 20s to low 40s. Lows single digits to the mid 20s. Precipitation was greatest north, with 1.30 in. as a high, 0.25 to 0.75 in. south, below 0.20 in. most central areas.

Farmers continued monitoring winter wheat, livestock conditions.

INDIANA: Temperatures once again averaged below normal. High temperatures low to mid 20s in north to the 30s south, which was 5 to 13° below normal. Lows mostly single digits in the north to the 20s in the south, which was 2 to 11° below normal in the north, central,

near normal in the south. Precipitation, liquid equivalent, 0.15 to 0.40 in. over the north, central, 0.40 to 1.00 in. over the south. Snow, ice cover of 1 to 3 in. was mainly confined to the north.

Wheat condition reports continue to vary by location. Hay supplies reported to be good. Livestock continue to be reported in mostly good condition. Main activities this past week included: Grain marketing, hauling manure, some fertilizer top-dressing applied.

IOWA: Another very cold week with temperatures 8° below normal southeast to 15° below normal northwest; temperatures finally began to moderate at the weekend. Extremes -26°; 48°. Light to moderate snow early week, again at weekend. Precipitation 0.03 in. southwest to 0.65 in. northeast; State average 0.20 in. (normal 0.24 in.). Snowcover varies from trace amounts far southwest to 10 to 20 in. north one-third of State.

January data: average snowcover 6.0 in., average frost penetration 22.0 in. soil erosion 84% light to none, 16% moderate. Utilization of stubble fields for grazing 29% none, 44% limited, 19% moderate, 8% extensive. Availability of hay, roughage for livestock feed 43% short, 57% adequate. Quality of hay, roughage for livestock feed 50% poor, 46% fair, 4% good. Grain movement 4% none, 59% light, 35% moderate, 2% heavy. Cattle loss 8% below average, 85% average, 7% above average. Hog loss 5% below average, 83% average, 12% above average.

KANSAS: Cold temperatures took the mercury below zero over most of State at midweek. Sub-zero readings were common in the northern two-thirds of the State, zero to single digits southern third. Western districts were 12° below normal with the northwest district at 14° below normal for the week. Temperatures in the central, eastern districts 7 to 11° below normal. Warm weather returned at the end of the week. Precipitation continued to be quite light.

Concern as to the affects the lack of moisture might have on the wheat crop is beginning to mount. Precipitation was very light; most areas received only 0.01 in. or less for the week.

KENTUCKY: Somewhat below normal temperatures. High temperatures lower 40s, about 5° below normal; lows near normal averaging upper 20s. Precipitation varied widely, above average central, east, below normal west. Rainfall around 3.00 in. over central, east, more than 2.00 in. above mean; western third precipitation slightly below normal, mean amounts around 0.50 in.

Severe ice storm, south-central counties hardest hit. Many areas without power. Dairies especially vulnerable to no power, impassible roads. Lowland flooded some areas. Soil moisture ample, farmers beginning to think about early field activities. Condition small grains uncertain, growth minimal. Livestock stressed from wet, ice, cold.

LOUISIANA: Weather data not available.

Main activities: Winter feeding cattle, fertilizing winter pastures in drier areas. Farmers attending educational meetings, repairing farm equipment, keeping field drainage ditches clear. Ice storm in north on 10th kept farmers inside.

MARYLAND & DELAWARE: MARYLAND: Precipitation 2.11 in., normal 0.68 in. Temperature 29.9°, normal 33.2°. Extremes 6°; 58°.

Activities: Caring for livestock. Frozen ground impairing manure spreading, small grain top-dressing. Snow, ice are making general chores more difficult to accomplish. Widespread power outages making it necessary to use power generators.

DELAWARE: Precipitation 2.27 in., normal 0.73 in. Temperature 27.6°, normal 34.1°. Extremes 10°; 50°.

Activities: Caring for livestock. Frozen ground impairing manure spreading, small grain top-dressing. Snow, ice are making general chores more difficult to accomplish. Widespread power outages making it necessary to use power generators.

MICHIGAN: Extremes -28°; 45°. Precipitation 0.08 to 0.69 in. across the State. Moderate snow showers fell early in the week. Along with the snow came another blast of very cold temperatures which were near record lows in some areas. Warming trend pushed in over the weekend dropping another 1 to 4 in. of snow statewide.

Feed supplies remain adequate. Livestock generally fair to good although the cold weather has been hard on newborn animals. Activities: Plowing snow, pruning, purchasing seed for spring.

MINNESOTA: Temperatures 12 to 17° below normal for the State. Extremes -41°; 30°. Precipitation 0.02 to 0.10 in. below normal for the southeast, south central, 0.05 to 0.26 in. above normal elsewhere. Precipitation 0.09 to 0.43 in. State. Greatest weekly precipitation was 0.70 in. Snowfall 3 to 8 in. Snow depth at weekend 12 to 28 in.

Though the winter been cold, stayed cold, livestock are doing better than if the weather had continuously fluctuated between extreme cold, mild weather. Calving has begun in parts of the State.

MISSISSIPPI: Not available, due to power outage.

Days suitable for fieldwork 0.2, 3.4 1993, 1.9 5-yr avg. Soil moisture 33% surplus, 67% excessive. Hay supply 22% very short, 51% short, 27% adequate. Livestock 10% poor, 50% fair, 40% good. Pasture 68% of normal. Activities: Feeding livestock.

MISSOURI: Temperatures 4 to 8° below normal except the southeast where temperatures averaged 3° above normal. Precipitation 0.10 in. or less except the southeast, which averaged 1.30 in.

Cold temperatures continued to limit farm work to livestock care, maintenance work, tax preparation.

MONTANA: Temperatures 10 to 20° below normal. Precipitation light to moderate.

Protectiveness of snow cover for winter wheat is 14% poor, 16% fair, 36% good, 34% excellent. Wind damage to winter wheat 65% none, 26% light, 9% moderate. Grazing is 26% open, 55% difficult, 19% closed. Supplemental feed was given to 94% of the livestock. Calving 10% complete, lambing 7% complete.

NEBRASKA: Week unbearably cold with temperatures averaging 10 to 15° below normal. Precipitation in the form of snow occurred, averaging less than a tenth of an inch of moisture.

Producer activities included livestock care, tax work, machinery preparation for spring fieldwork.

NEVADA: Unsettled weather during first half of week. Precipitation on 7th, 8th. Cold front moved through on 10th dropping heavy snow north. Temperatures near normal. Extremes -12°; 67°.

Hay supplies adequate to meet winter feeding requirements which have been eased by generally mild weather. Calving, lambing increasing. Activities: care, feeding of livestock, tax preparation.

NEW ENGLAND: Precipitation none to 2.08 in. regionwide. Temperatures -4 to 12° north; 10 to 19° south. Maximum temperatures 18 to 39° north; 22 to 43° south. Minimum temperatures -5 to -29° north; 6 to -15° south.

Major farm activities: Caring for livestock. Chopping ice off roofs. Snow providing good winter cover for crops. Moving apples, potatoes out of storage. Attending farm meetings.

NEW JERSEY: Temperatures were below normal; 19° north, 24° south, 28° coastal. Extremes 1°; 53°. Precipitation was above normal; averaging 2.02 in. north, 2.01 in. south, 2.23 in. coastal. Heaviest 24 hour total 1.37 in. on 10th, 11th. Heaviest 24-hour snowfall 8.7 in. on the 8th, 9th. Snow on ground on 14th with little to 6 in. south, 8 to 16 in. central, 15 to 20 in. north.

Farmers busy caring for livestock, plowing snow.

NEW MEXICO: Scattered snows continued during the early part of the week; only the northern mountains had significant accumulations. A few heavier showers also developed over southwest, central areas. Temperatures moderated during the first half of the week, dipped again as a fresh push of arctic air moved in by the 11th.

Farming activities were still slow with land preparation, pre-irrigation the primary focus. Supplemental feeding of livestock remained the principal activity of the ranchers.

NEW YORK: Very cold winter weather continued. Coldest at midweek with temperatures only rising into the single digits, teens. Weather began to moderate at weekend. Extremes -30°; 44°. Week was also snowy, especially in southeast, on Long Island where two storms dumped nearly 2 ft. of snow. Several inches fell in other areas. Lightest amounts were near the Canadian Border.

Major activities: Tending livestock, spreading manure, maintenance work, attending meetings, snow removal. Heavy snowfalls have made it difficult to bring hay in from fields. Extreme cold weather made outside chores difficult.

NORTH CAROLINA: Weather data not available.

Days suitable for fieldwork 2.3. Soil moisture 60% adequate, 40% surplus. Crop conditions: Wheat 6% poor, 50% fair, 44% good; oats 9% poor, 50% fair, 41% good; barley 8% poor, 47% fair, 45% good; rye 7% poor, 43% fair, 49% good, 1% excellent; pasture 8% very poor, 33% poor, 42% fair, 17% good; hay, roughage supplies 15% very short, 28% short, 57% adequate. Feed grain supplies 2% very short, 16% short, 82% adequate. Activities included: Tobacco plant bed preparation; tending livestock; cutting wood.

NORTH DAKOTA: Temperatures 20 to 23° below normal. Extremes -48° south central; 38° south central. Record low temperatures were set in several areas.

Snow cover was sufficient to protect fall seeded crops in most areas. Cattle, sheep were stressed due to severely cold temperatures. Feed requirements were high, supplies remained adequate in most areas. Secondary road conditions remained difficult in some areas. Grain marketing was slow due to severe weather.

OHIO: Cold week. Temperatures averaged a few degrees below normal in the south to near 10° below normal in the north. With snow cover, the coldest locations had temperatures below zero in the north. Ice storms ravaged southern parts of the State, creating a significant coating of ice, downing some tree limbs, power lines. Snow, sleet, freezing rain, rain were observed across the State. Greatest amount of liquid precipitation, between 1.00 to 2.58 in., fell over extreme south. Lesser amounts at 0.50 in. or less were recorded central, north regions. Northwest region was the driest.

With the low temperatures, icy conditions, livestock producers increased amounts of supplemental feeding. Winter wheat did not suffer any serious damage.

OKLAHOMA: Temperatures 10° below normal north, west-central to 4° below normal southeast. Precipitation none most of State to 0.60 in. southeast, 0.72 in. east central.

Cold dry weather slowed livestock gains, small grain plant development. Feeder steers were steady to \$1.00 lower and feeder heifers steady to \$2.00 higher. Calves were \$1.00 to \$4.00 higher.

OREGON: Temperatures below normal; 8 to 14° northeast, 2 to 9° below normal elsewhere. Precipitation plentiful Statewide; western valleys, coast 1.00 in., elsewhere up to 0.75 in.

Soil moisture adequate. Cascade snowpack substantially increased during the week. Winter orchard pruning continued. Livestock good to excellent. Winter lamb grazing on grass seed fields continued. Supplemental feeding continued, statewide.

PENNSYLVANIA: Another cold week. Most areas reported at least 10 in. of snowcover. Temperature 20°, 6° below normal. Extremes -10°; 51°. Precipitation 1.15 in., 0.54 in. above normal. Activities: Hauling manure; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall 0.24 in. was 0.35 in. below normal. Highest weekly total rainfall 0.97 in. at Pico Del Este, 0.94 in. at Canovanas. Island temperatures about 75 to 77° on the coasts, 69 to 72° in the Interior with mean station temperature 78.4° at Vieques to 62.4° at Pico Del Este Luquillo. Extremes 51°; 91°.

SOUTH CAROLINA: Temperatures 4 to 6° above normal across State. Average precipitation 1.20 in.

Farm activities: Small grain condition good, some nitrogen, herbicide applied. Tobacco beds good. Fescue greened up. Some livestock producers purchasing feed.

SOUTH DAKOTA: Temperatures 11 to 21° below normal. Extremes -47°; 53°. Precipitation generally around 0.25 in. Maximum 0.50 in. Snow depth ranged from 2 in. southwest to 40 in. northeast.

Farm activities: Routine livestock care, moving snow to reach feed supplies, hauling grain, finalizing taxes.

TENNESSEE: Week started on a bright, unusually warm note, by midweek, a severe ice storm had crossed the State. Temperatures near record levels on the 7th, 8th. Cooler than normal from the 9th to the 13th. West areas had the coldest temperatures. Afternoon readings were held to around 30° there on the 10th, to the lower 30s on the 11th. Overnight temperatures dipped into the lower to middle 20s. Extremes: Nashville, 75° (8th); Crossville, 20° (13th). Entire State had above-normal precipitation. Wettest in the east; 3.71 in. above normal. West areas about 0.50 in. above normal.

Farmers were busy removing fallen trees caused by severe ice towards the end of the week. Fences had to be mended as well. No reports of livestock damage. Wheat is in mostly good condition. Soil moisture levels are adequate to surplus.

TEXAS: Warm, dry weather was rule early in the week. Record, near record highs south Texas. However, weather conditions changed drastically midweek as an arctic surge moved in. An upper level disturbance triggered precipitation, interacted with shallow, very cold air to produce freezing rain, sleet north-central, south-central, east Texas. Some heavy rains occurred east, southeast Texas. The lower valley spared from freezing temperatures. Moisture scant valley, west Texas. Temperatures moderated late-week. Precipitation averaged above normal east Texas, generally below normal rest of the State.

Crops: Small grains responded to warmer temperatures beginning of week Blacklands, Central Texas; however midweek cold front along with ice slowed progress some. Many oat fields showing very slow growth after two recent cold snaps. High Plains, situation not changed much. Most dryland fields continue need moisture. Irrigated fields showing little better progress. Recent snowfall provided some moisture; however more needed. Spraying activities

in the Cross Timbers continued until midweek. Some topdressing occurred during first part week.

Commercial Vegetable: Rio Grande Valley, onion fields continued make good progress. Land preparations, planting activities continued without much delay. Navel, mid season orange harvest virtually complete, grapefruit harvest past halfway point. High Plains, land preparations continued as weather permitted. In the San Antonio-Winter Garden, harvest spinach, beets continued with little delay. Demand light. Warmer temperatures during first part week caused some sprouting in scattered fields of broccoli, cauliflower. Land preparations continued as weather permitted. East Texas, freezing temperatures may have caused some damage. Land preparations for spring continued until midweek. Trans-Pecos, onion planting continued. Land preparations also continued. Planted fields making good progress. Peaches: Spraying, pruning activities winding down some parts State. Cold temperatures cause some problems early blooming trees Central, East Texas. The additional chilling hours should benefit crop in Hill Country.

Range and Livestock: Ranges, pastures across much State remained short. Growth winter grasses, clover providing some grazing; however supplemental feeding remained steady. Livestock conditions remained fair to good. Freezing conditions during late week caused some problems Hill Country.

UTAH: Temperature maximums 1° below normal, minimums 4 to 5° above normal. Precipitation was moderate to heavy across most of the State, with the southeast division receiving light precipitation.

Activities: marketing hay, grain; caring for livestock. Several areas reported supplemental feed increased due to cold weather, snow fall. Some early calving is occurring with no major losses reported.

VIRGINIA: Temperatures above normal the beginning of the week, below normal weekend. Extremes 16°; 66°. Precipitation above normal with the highest amount of 5.34 in. water equivalent recorded at Bristol. Most precipitation fell as sleet, snow, freezing rain.

Days suitable for fieldwork 0.6. Topsoil moisture 23% adequate, 77% surplus. Winter grains, grazing crops condition 3% very poor, 13% poor, 76% fair, 8% good. Forage from pastures, winter grazing crops dairy cattle 2%, beef cattle 8%, sheep 11%. Feeding, watering livestock, pesticide recertification, repairing machinery, working on farm records, some topdressing wheat.

WASHINGTON: Temperatures 5 to 7° below normal west; 2 to 10° below normal east. Precipitation 0.06 to 0.67 in. west; none to 0.33 in. east.

Days suitable for fieldwork 4.5. Soil moisture 55% short, 44% adequate, 1% surplus. Hay, other roughage supplies 17% short, 83% adequate. Range, pasture 30% very poor, 25% poor, 25% fair, 20% good. Winter wheat dryland 5% poor, 40% fair, 55% good; irrigated 2% fair, 98% good. Barley dryland 5% very poor, 5% poor, 80% fair, 10% good; irrigated 10% fair, 90% good. Sub-freezing temperatures returned during the week, with lows near zero in some locations; field work was limited. Concern over stressed, exposed winter grains increased; low precipitation, soil moisture remains major concern for 1994 crops. Orchard, vineyard pruning progressed as weather permitted. Early calving, lambing continued.

WEST VIRGINIA: Temperature 33°. Extremes 5°; 63°. Precipitation 3.24 in. Flooding problems occurred. Temperatures well above normal over the central, southern regions, below normal over both panhandles. Ice storm hit portions of the State 10th, 11th. Activities: Calving, lambing, feeding livestock, bookkeeping.

WISCONSIN: Temperature 4°. Extremes -32°; 32°. Snow almost every day with a warming trend toward the end of the week. Frost depth for mid-February 22.3 1994, 14.9 1993, 16.8 avg. Snow depth for mid-February 14.8 1994, 4.8 1993, 10.2 avg.

Snow, cold temperatures the past week have changed farming activities very little compared to the past 6 weeks. Frozen ground, lack of mid-season snow melt holds a potential for surplus moisture when/if the weather warms.

WYOMING: Past week was cold with precipitation near normal. Temperatures below normal. Exception was Evanston which averaged 2° above normal. Coldest was Alva which averaged 21° below normal. Rock Springs received the largest amount of precipitation with 0.87 in.

Winter wheat condition was good. Snow cover protection on winter wheat was improving. Wind damage to winter wheat not mostly light. Livestock condition for cattle, sheep was good. Grazing prospects were fair. Hay, roughage supplies were adequate. Spring calving, farm flock lambing have started. Farm flock sheep are being shorn.

International Weather and Crop Summary

HIGHLIGHTS

February 6 - 12, 1994

FSU-WESTERN: Bitter cold stressed winter grains in Russia and Ukraine.

EUROPE: Unseasonably mild weather persisted over east-central Europe.

SOUTH ASIA: Showers benefited reproductive winter grain and oilseeds.

EASTERN ASIA: Light precipitation favored moisture reserves for dormant winter wheat across the North China Plain.

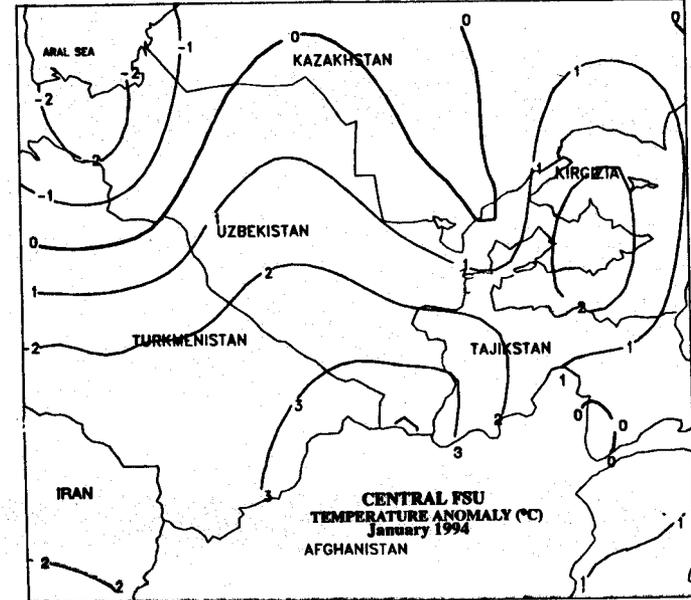
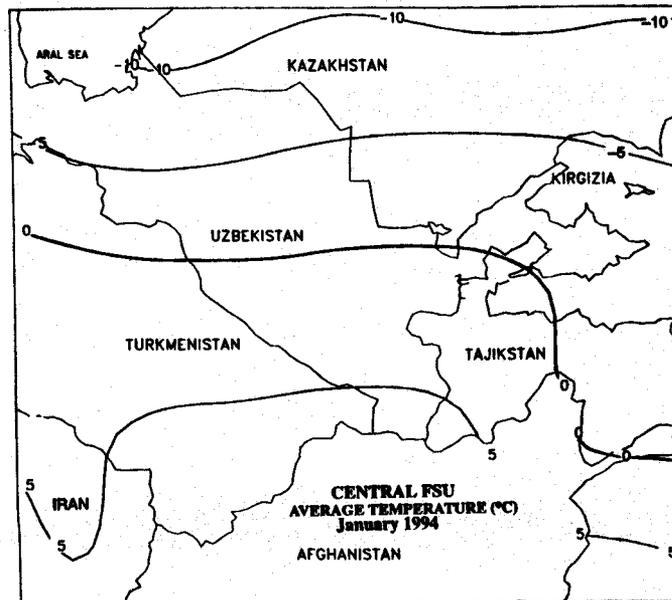
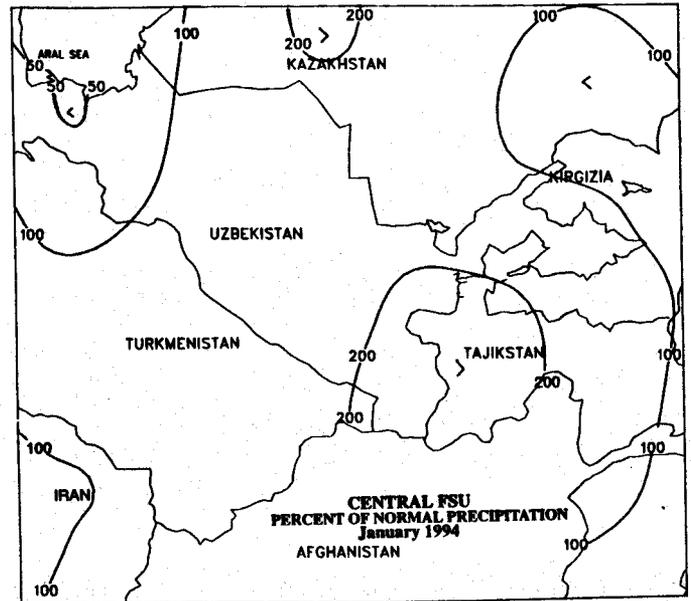
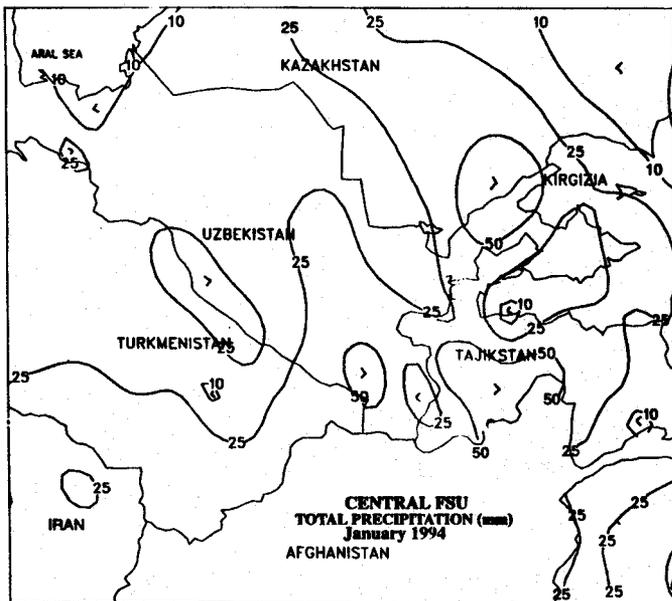
SOUTHEAST ASIA: Rainfall increased over primary rice and oil palm regions.

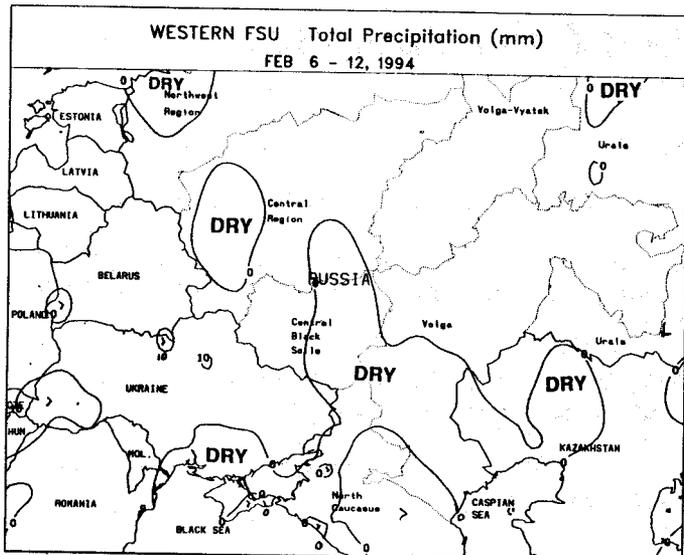
AUSTRALIA: Scattered showers benefited eastern summer crops.

SOUTH AMERICA: Moderate to abundant soil moisture favored reproductive summer crops across central Argentina and southern Brazil.

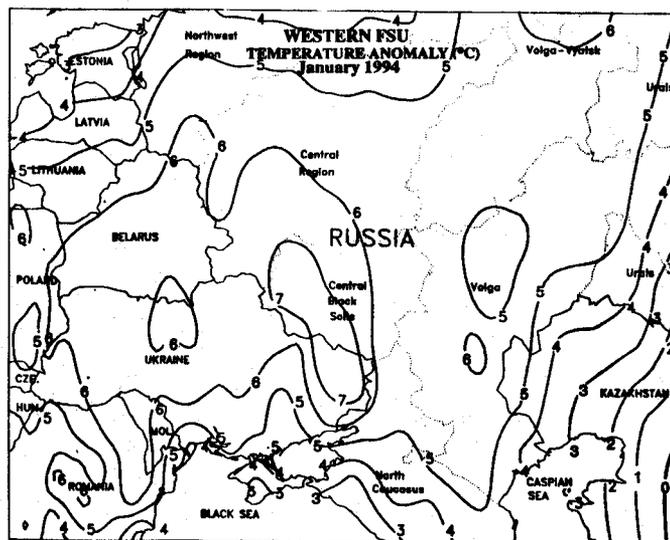
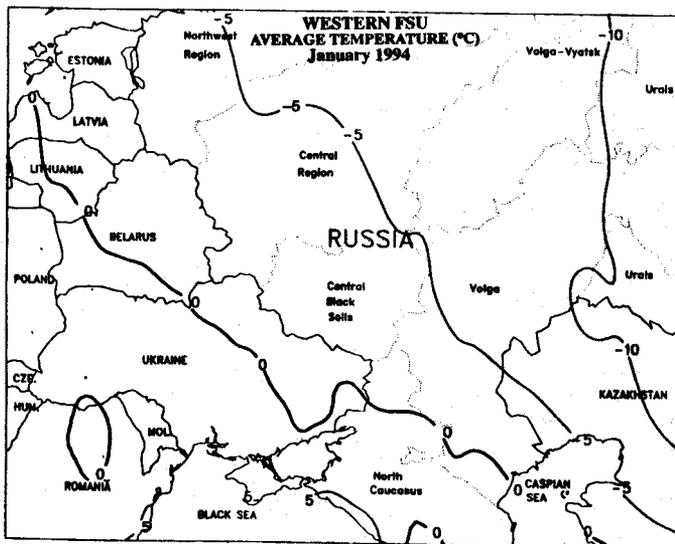
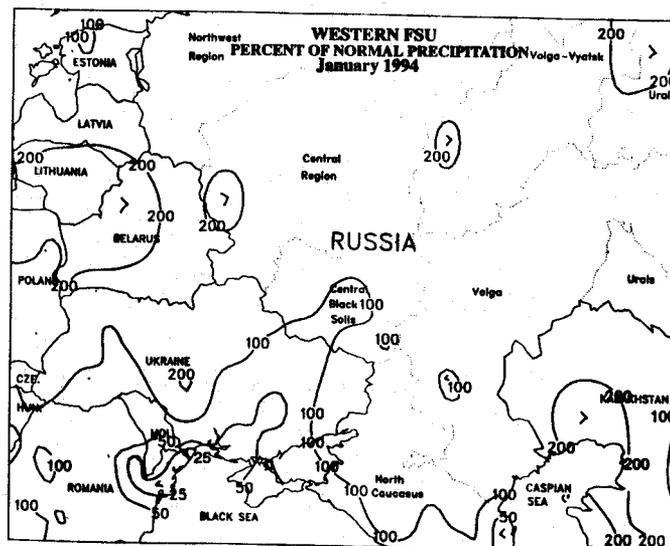
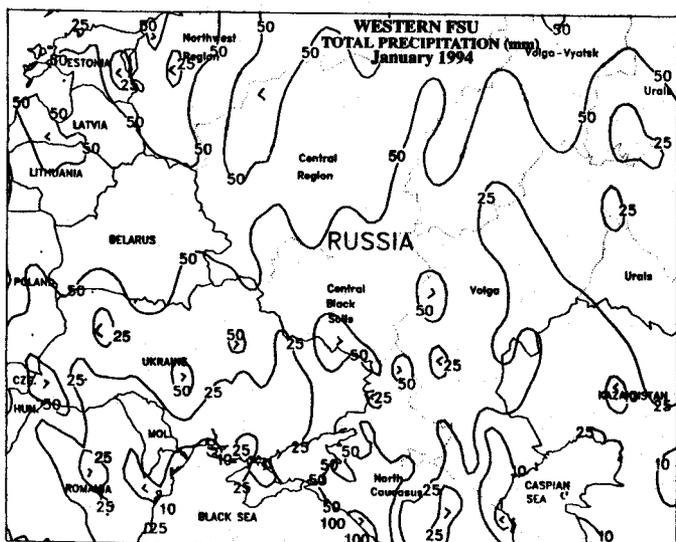
NORTHWESTERN AFRICA: Soaking rain stabilized conditions for winter grains in eastern Algeria and Tunisia.

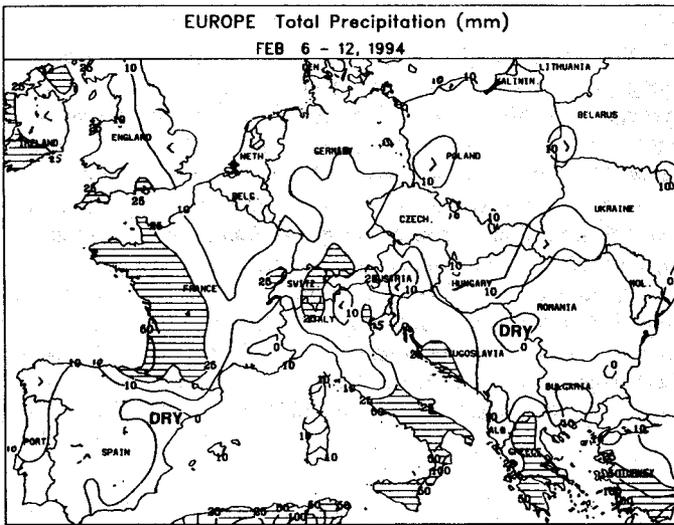
SOUTH AFRICA: Widespread showers benefited corn advancing through reproduction.



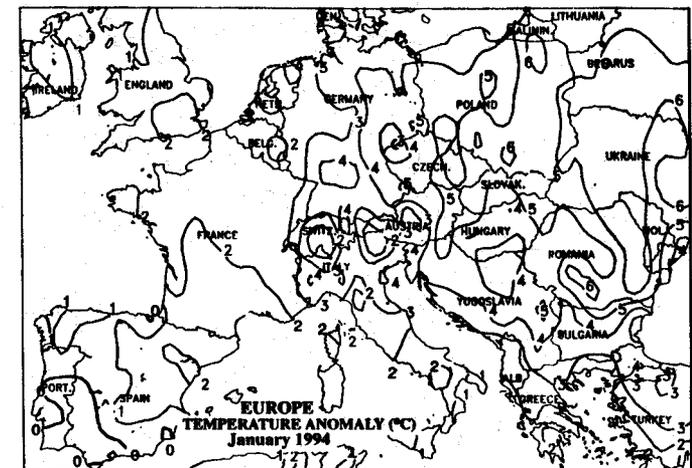
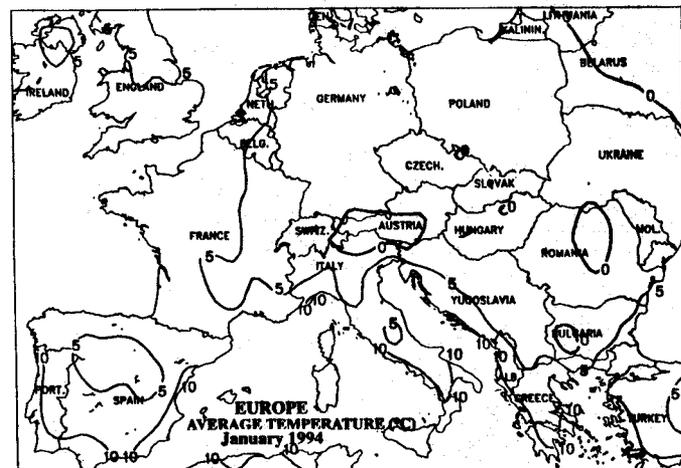
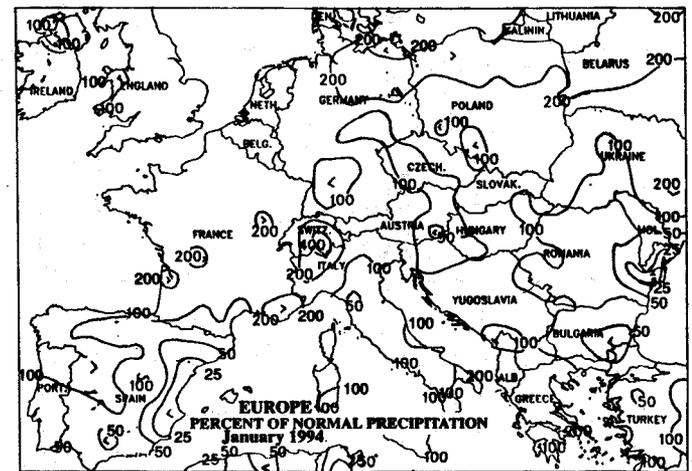
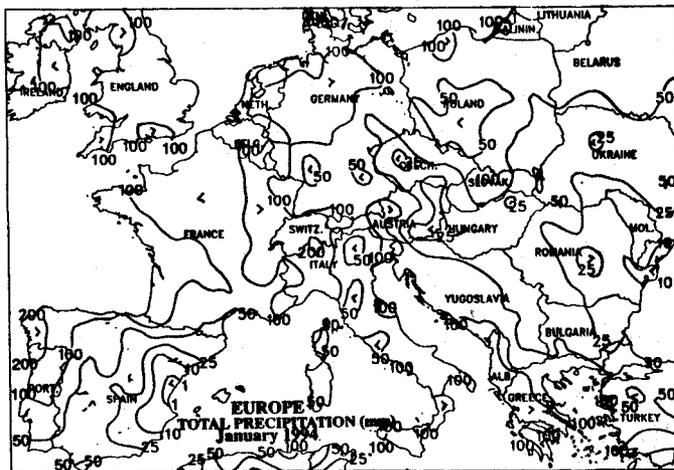


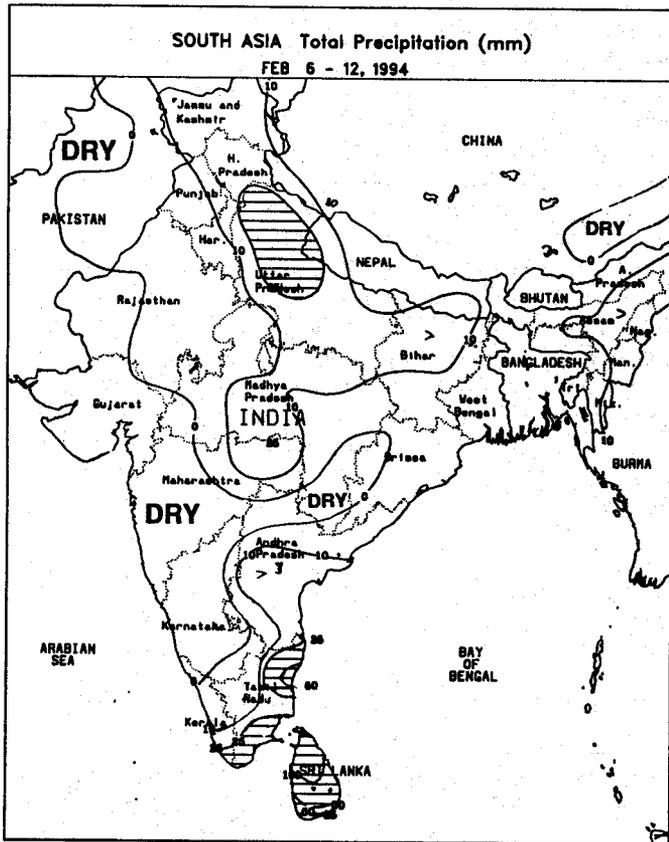
FSU-WESTERN: Arctic air from Siberia continued to pour into the region. Temperatures plunged below -20 degrees Celsius (C) over most of Russia, northeastern Ukraine, Baltic States, and Belarus. In most areas, snow cover was sufficient to protect winter grains from potential winterkill. In southern Ukraine and North Caucasus, Russia, where winter grain areas are snow free, temperatures ranging from -15 to -5 degrees C did not fall low enough to significantly damage crops. However, on February 13, temperatures in these areas fell to around -20 degrees C, threatening winter grains. Little, if any, precipitation covered winter grains over the region. In January, unseasonably warm weather (temperatures 5-8 degrees C above normal) prevailed in Russia, Ukraine, the Baltic States, and Belarus. However, January's mild weather did cause some loss in winter hardiness, making crops more susceptible to potential winterkill. Precipitation in January was near to above normal over the Baltic States, Belarus, and Russia, increasing snow cover. In contrast, below-normal precipitation in southern Ukraine limited moisture recharge.



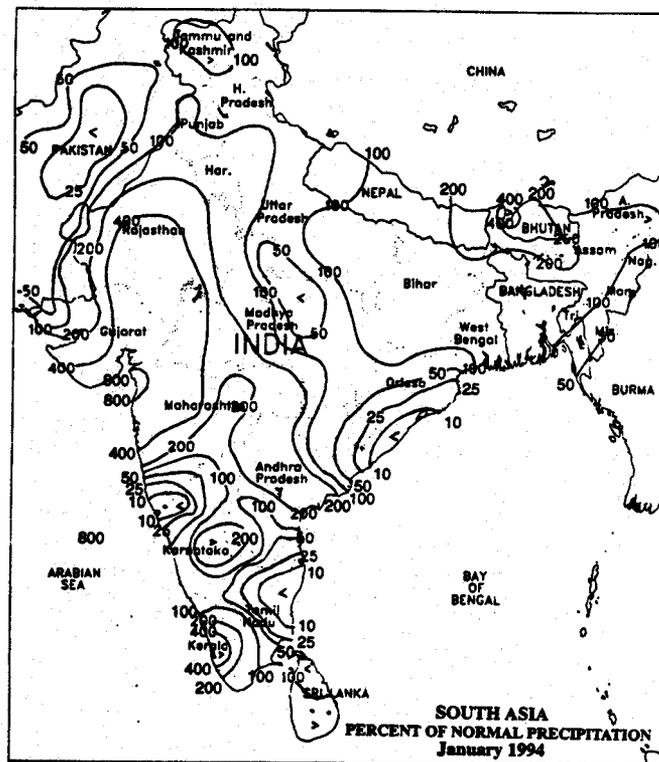
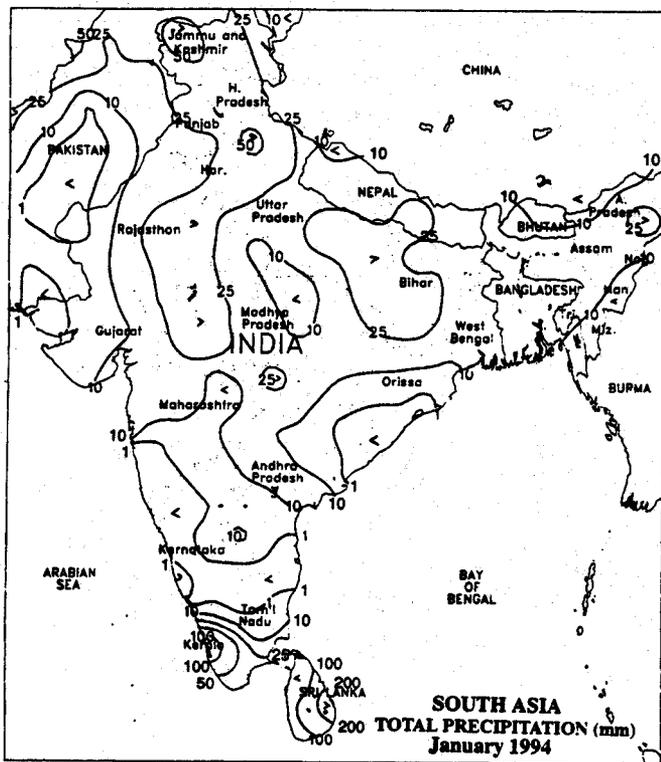


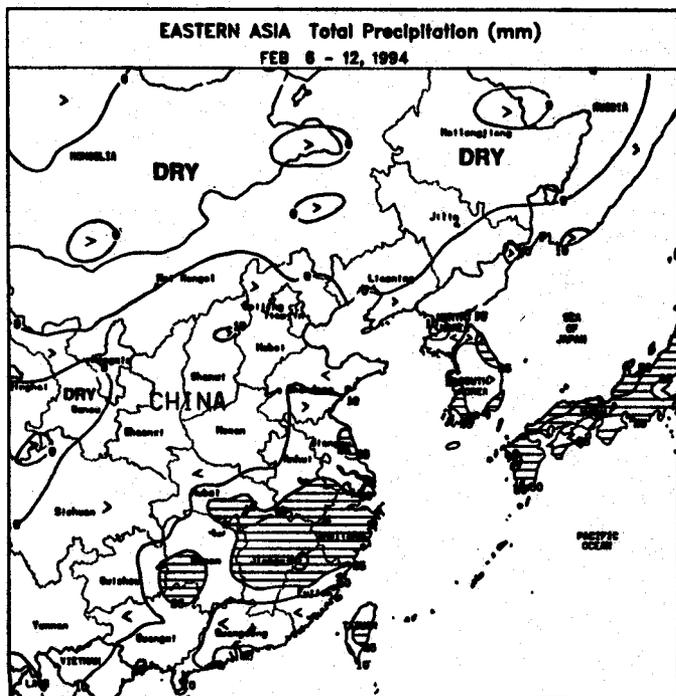
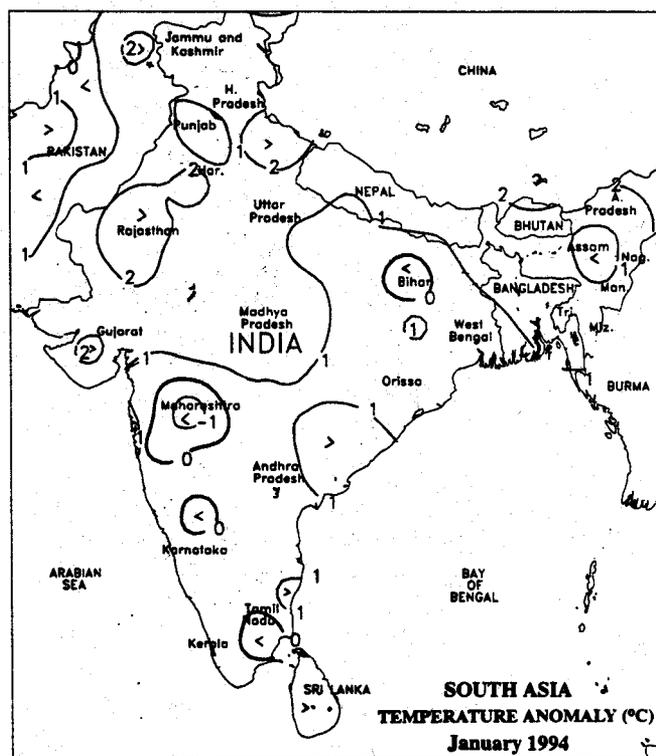
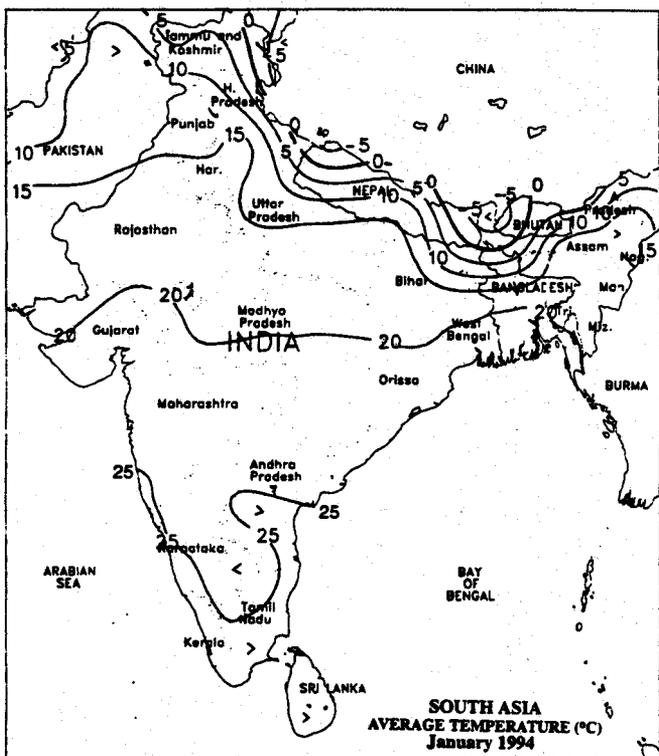
EUROPE: Unseasonably mild weather persisted over east-central Europe, with weekly temperatures averaging more than 4 degrees C above normal from extreme southern Poland to the former Yugoslavia. Winter crops are vulnerable to potential cold air outbreaks after losing some winter hardiness. January temperatures ranged from 4 to 6 degrees C above normal across eastern Europe. Another persistent weather pattern extending from January to this past week brought below-normal precipitation in southern and eastern Spain and in Romania and Bulgaria. This light precipitation was unfavorable for winter crop development in Spain and was insufficient to recharge soil moisture for dormant crops in Romania and Bulgaria. Elsewhere, mostly light precipitation across the north this week maintained adequate to ample soil moisture for dormant winter crops. Heavier rain (25-50 mm) soaked western France, while beneficial rain helped crops in the western Mediterranean region. January precipitation was near to above normal from France to Poland.



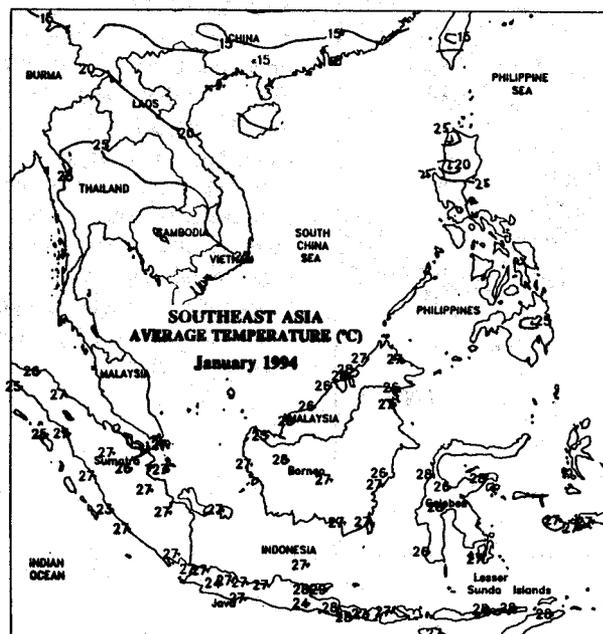
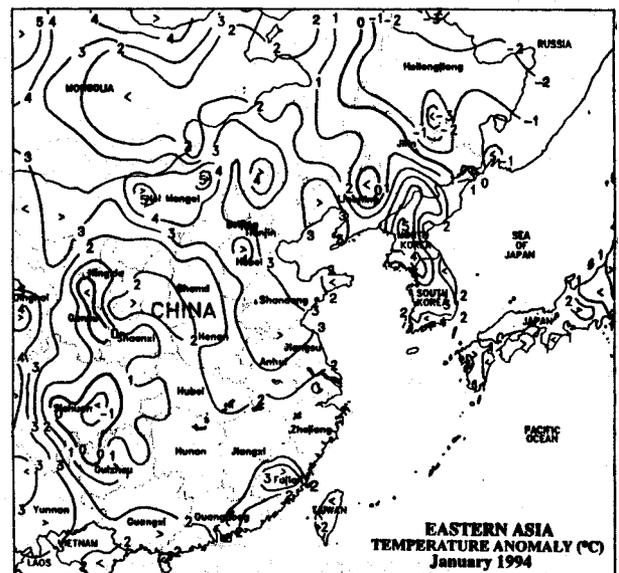
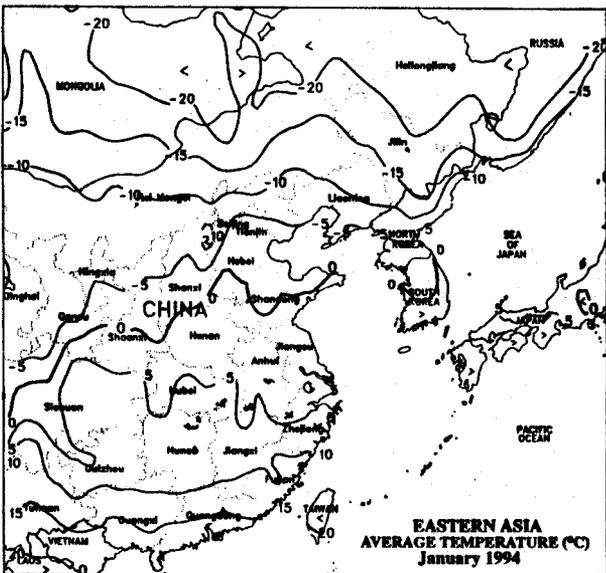
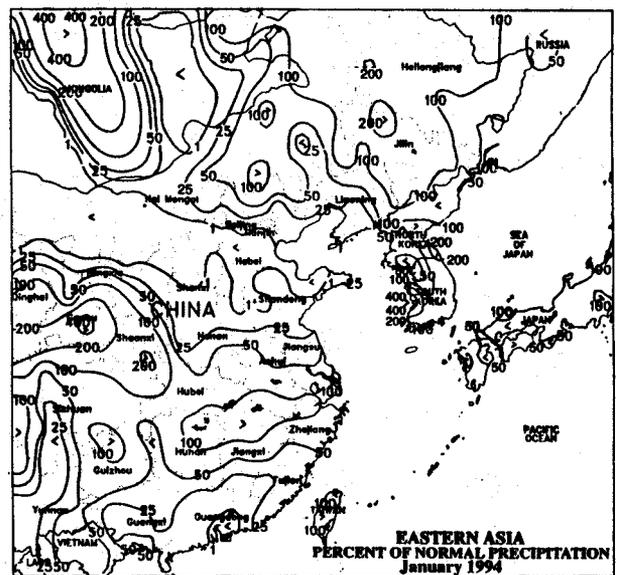
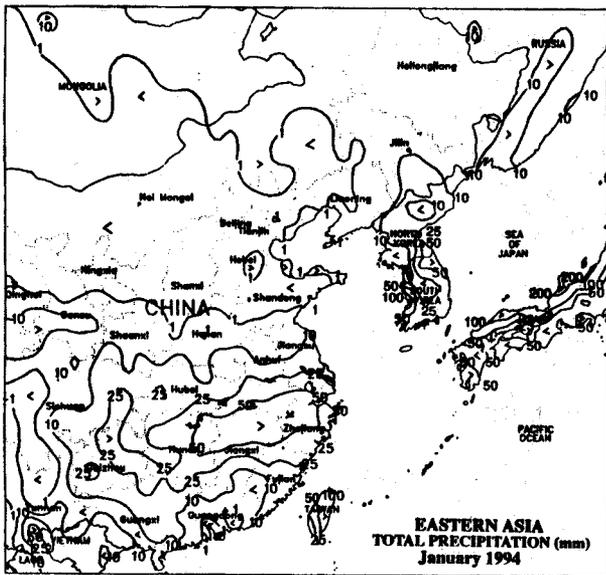


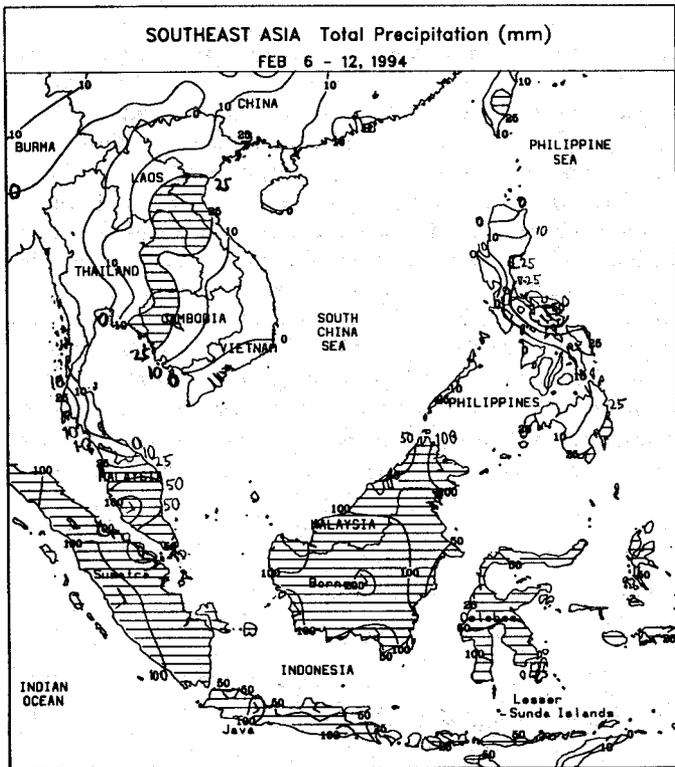
SOUTH ASIA: Light to moderate rain (10-48 mm) continued throughout winter crop areas of India and Bangladesh, benefiting reproductive rainfed crops. The rainfall spread further west and south than last week's timely rain. However, only very light, scattered rain (5 mm or less) fell in Pakistan's crop region. In the south, unseasonable rain totaled 8-25 mm or more, with 50-100 mm over Sri Lanka and isolated areas of Tamil Nadu increasing irrigation reserves for winter crops, including coastal rice in or nearing reproduction. In January, rainfall was near to above normal throughout India and Bangladesh, benefiting winter grains and oilseeds. However, rainfall continued below normal over Pakistan. Warmer-than-normal weather dominated the west, reducing available moisture for all crops, especially the region's rainfed winter wheat.



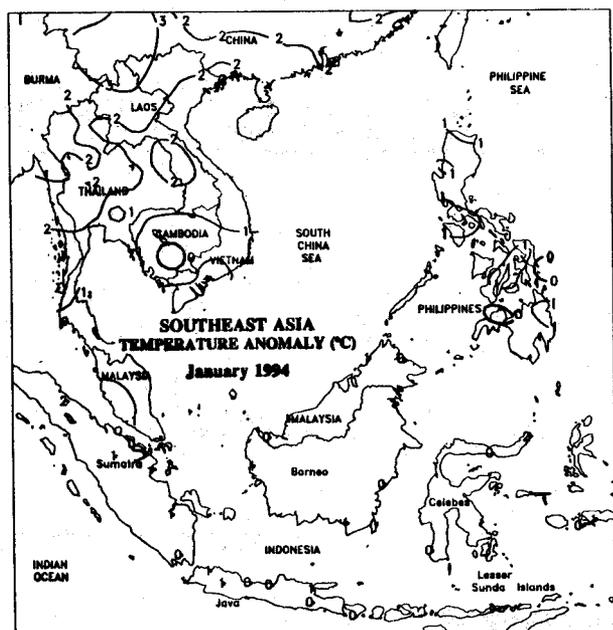
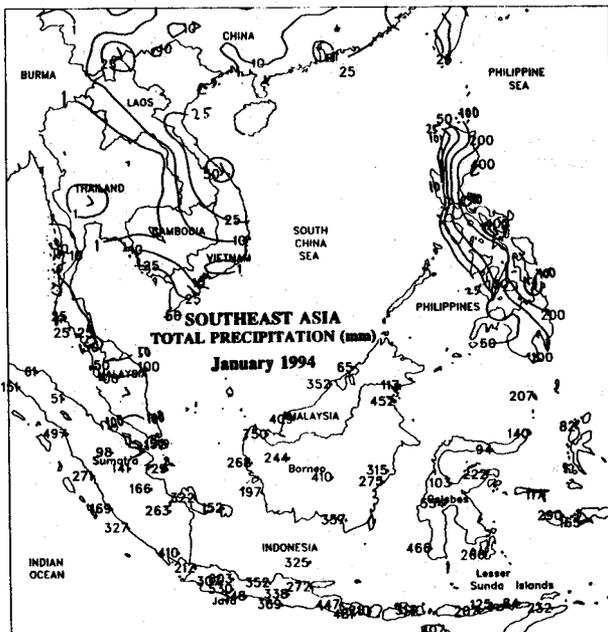
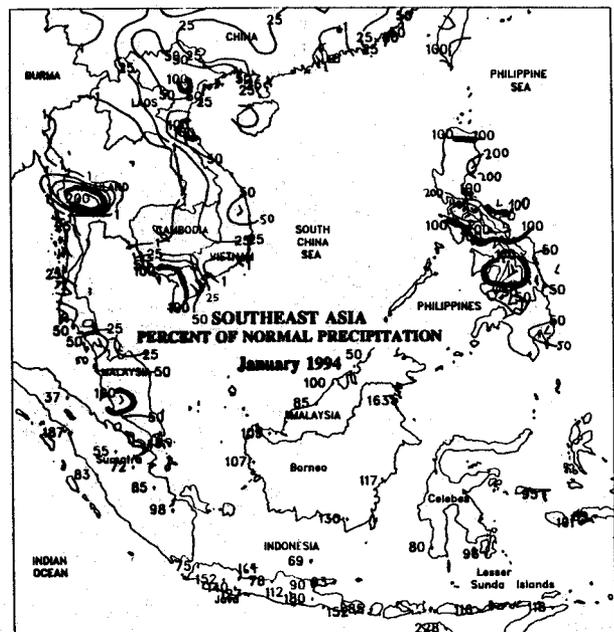


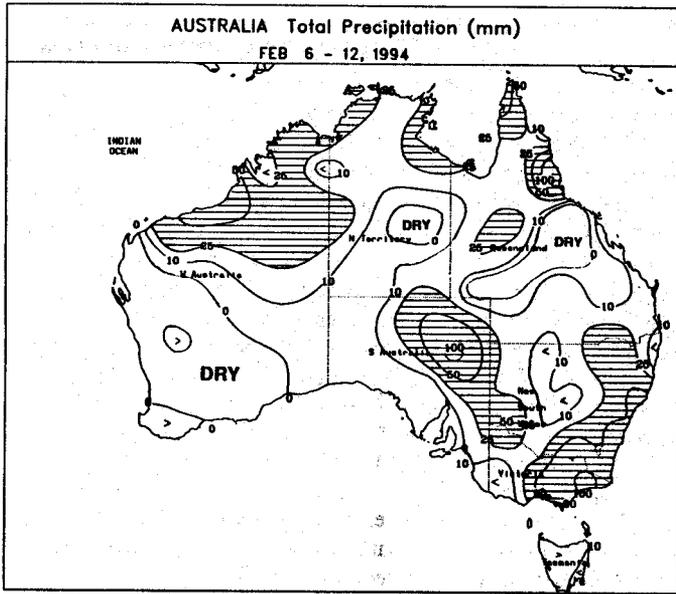
EASTERN ASIA: Light precipitation, with some light snow (2-10 mm), fell across the North China Plain, increasing moisture reserves for dormant winter wheat. Widespread rain (10-45 mm) covered the Yangtze Valley, increasing reservoir levels for next year's crops. Weekly temperatures averaged 1-4 degrees C across the North China Plain, just cool enough for winter wheat to remain dormant. As a rule, when weekly temperatures average 5 degrees C or greater for 2 consecutive weeks, wheat begins to break dormancy. During January, the North China Plain was seasonably dry, while near-normal showers prevailed across the Yangtze Valley. Monthly temperatures averaged 2-3 degrees C above normal, causing wheat to lose some winter hardiness, but not warm enough for wheat to break dormancy.



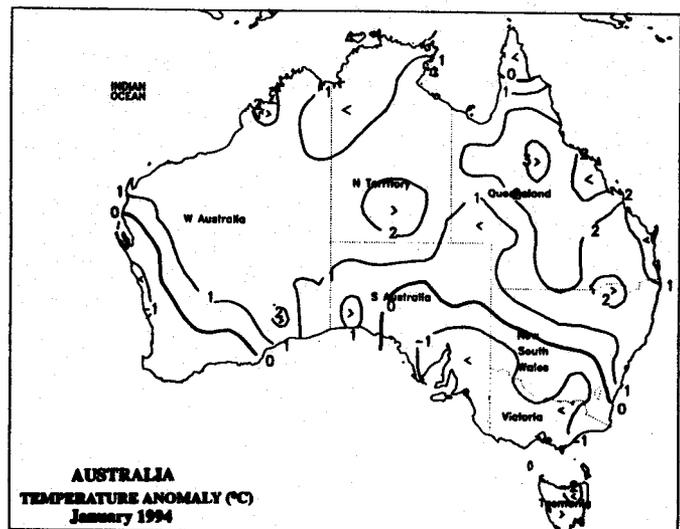
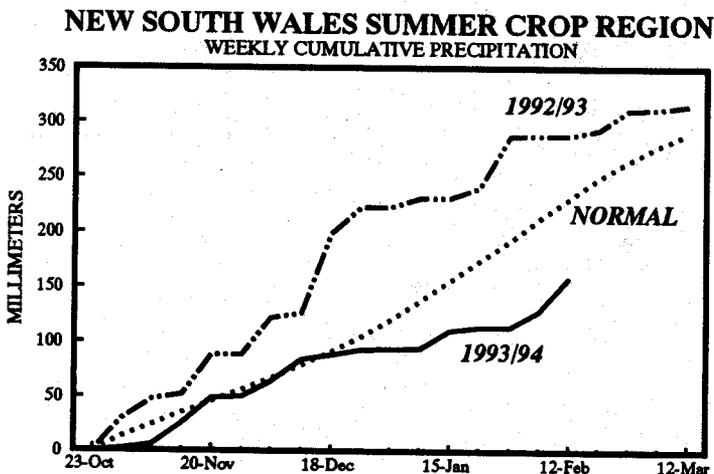
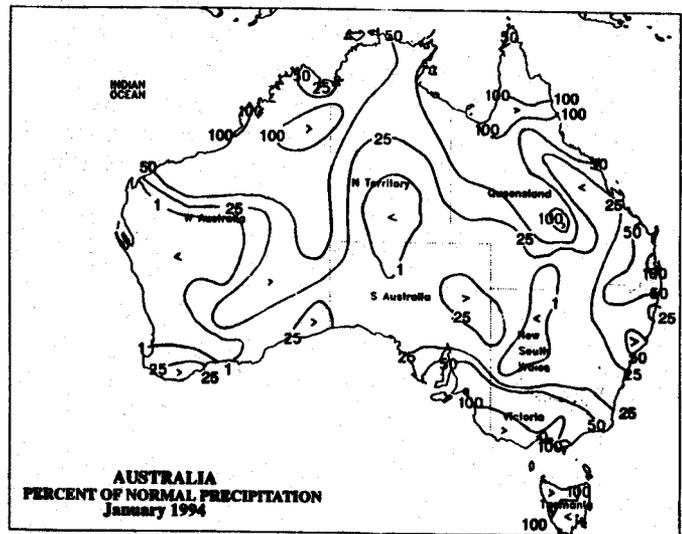
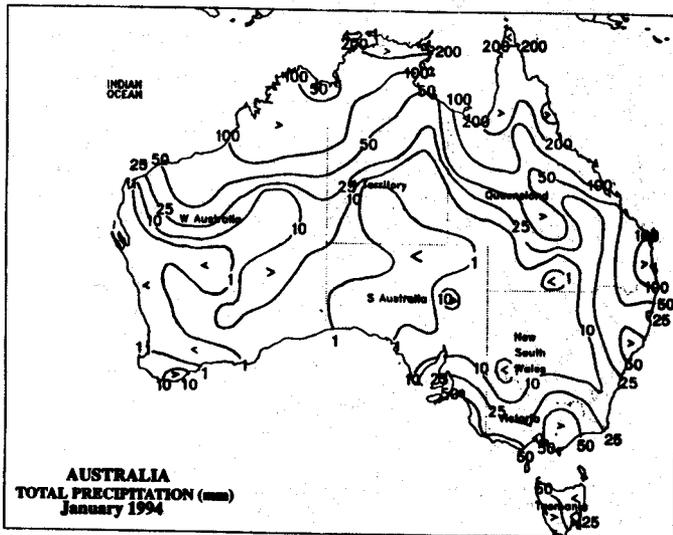


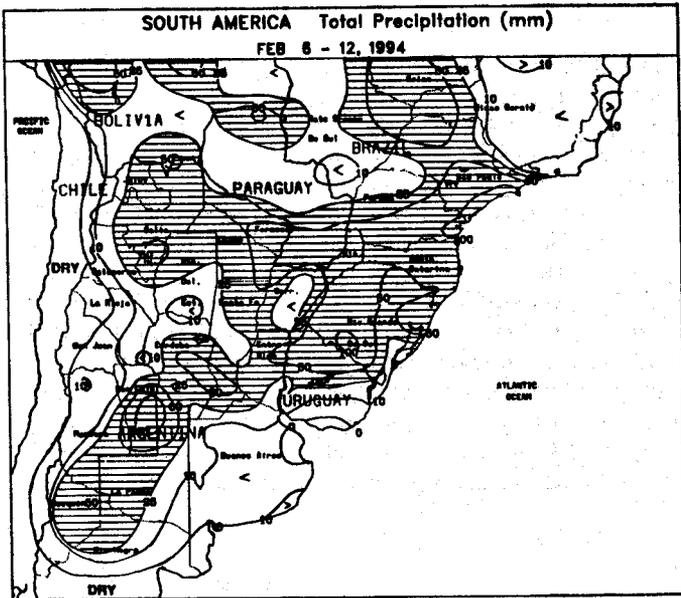
SOUTHEAST ASIA: Moderate to heavy showers (35-100 mm or more) covered primary rice and corn areas of Indonesia and Malaysia. To the north, unseasonable showers (10-52 mm) increased irrigation reserves in Thailand's eastern rice areas. However, weekly temperatures averaged 3-5 degrees C above normal, increasing the moisture demand of newly planted crops. In the Philippines, light to moderate rain (10-48 mm) fell throughout eastern crop areas. In January, above-normal rainfall maintained adequate to abundant moisture in Java's rice areas but was periodically intense, causing some flooding. Rainfall was near to below normal over rice and oil palm areas of western Malaysia. Thailand's secondary rice areas were seasonably dry for the month, but warmer-than-normal conditions increased evaporative losses and hastened development of newly planted crops. January rainfall was near to above normal throughout the Philippines, aided partly by an early-month tropical depression.



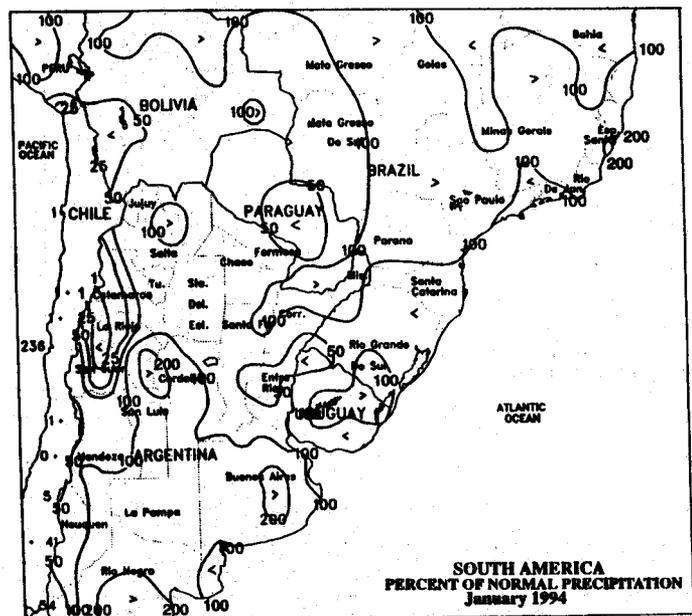
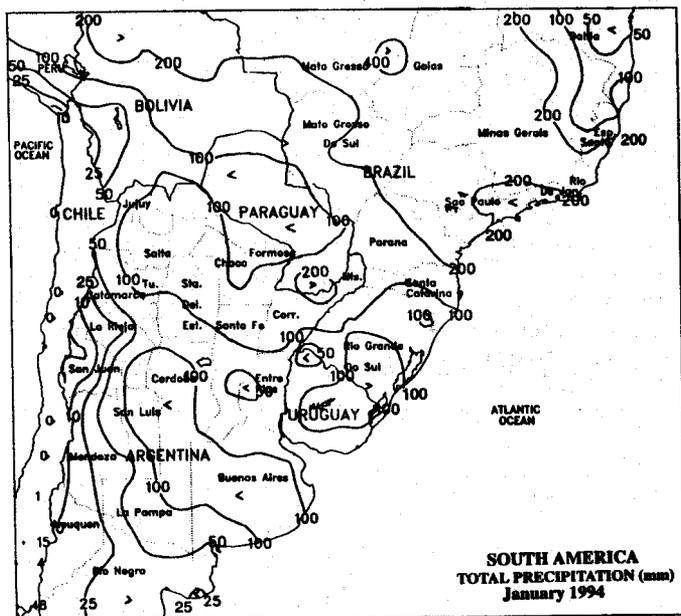


AUSTRALIA: Late-week scattered showers (10-50 mm) fell across the eastern summer crop region, bringing relief to vegetative to reproductive cotton and sorghum. While rainfall has increased the past 2 weeks, severe moisture deficits still exist for developing summer crops. Late-planted crops (December and January), which usually account for 10-15 percent of the planted area, will benefit the most from the rains. Typically, summer crops are planted from September to November in southern Queensland and northern New South Wales and December to January in east-central Queensland (near the city of Emerald). The northeastern coast of Queensland received light to moderate showers (5-25 mm, with an isolated amount near 200 mm), favoring sugarcane. Temperatures averaged near normal across the eastern summer crop region. During January, dry (20-50 percent of normal rainfall) and hot (1-2 degrees C above normal) weather stressed eastern summer crops.

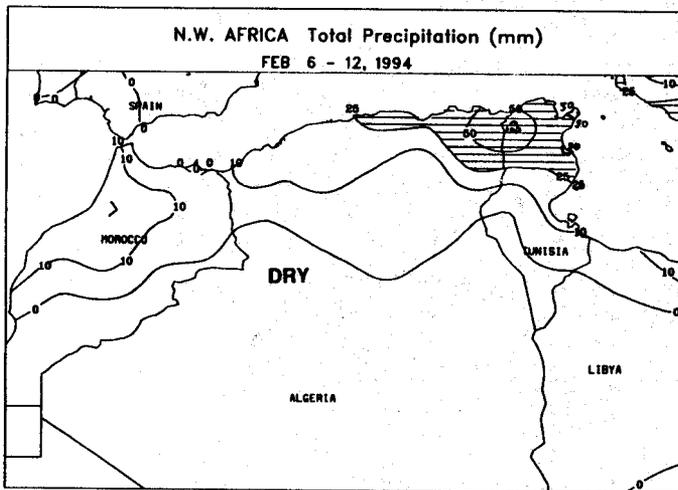
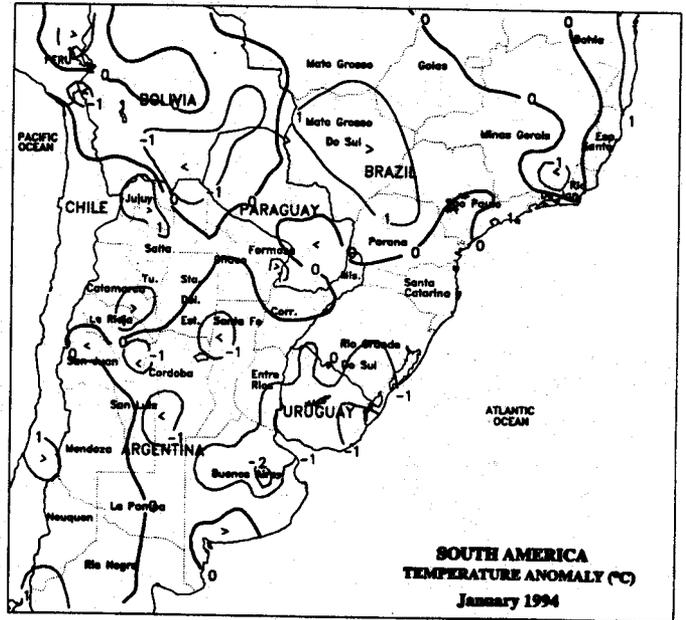
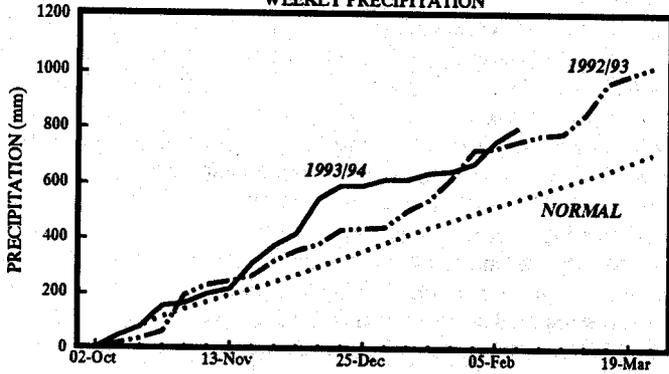




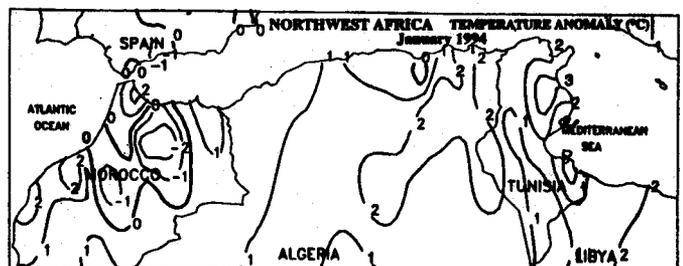
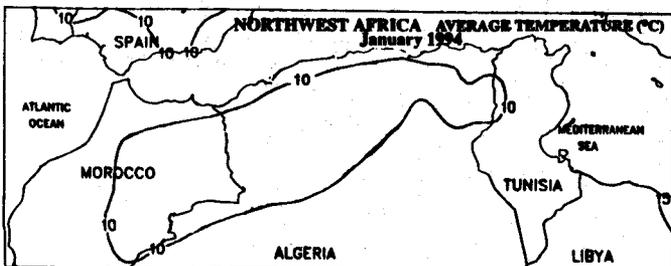
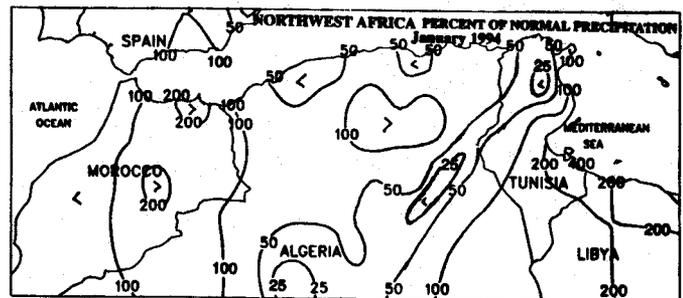
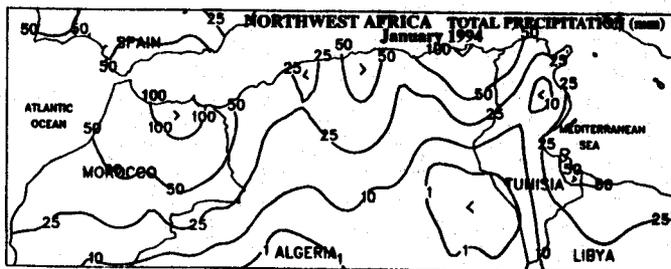
SOUTH AMERICA: In Argentina, moderate showers (20-70 mm) fell across southern Santa Fe and southern Cordoba, favoring vegetative to early-reproductive corn and soybeans. Buenos Aires received lighter showers (3-12 mm), helping to keep soils moist for summer crops. Weekly temperatures averaged 2-4 degrees C below normal, which reduced evaporation rates for summer crops. The northern cotton region received moderate showers (30-60 mm, with isolated amounts greater than 100 mm), aiding cotton. During January, near- to above-normal rainfall favored developing summer crops across central Argentina. Monthly temperatures averaged 0.5 to 1 degrees C below normal, helping to reduce crop water use over the area. Across southern Brazil, near optimal soil moisture exists for reproductive corn and soybeans. Widespread showers (30-80 mm) covered Rio Grande do Sul, Santa Catarina, and western Parana, aiding reproductive soybeans. Over Mato Grosso do Sul, Goias, and Mato Grosso, light to moderate showers (10-50 mm) favored reproductive to filling soybeans. Weekly temperatures averaged near normal across extreme southern Brazil and 1-2 degrees C above normal over south-central Brazil. In January, near- to above-normal rainfall favored summer crops across most of southern Brazil. In southern Paraguay, showers (20-60 mm) over the last week benefited soybeans and cotton, which had experienced a somewhat dry January (25-50 percent of normal rainfall.)

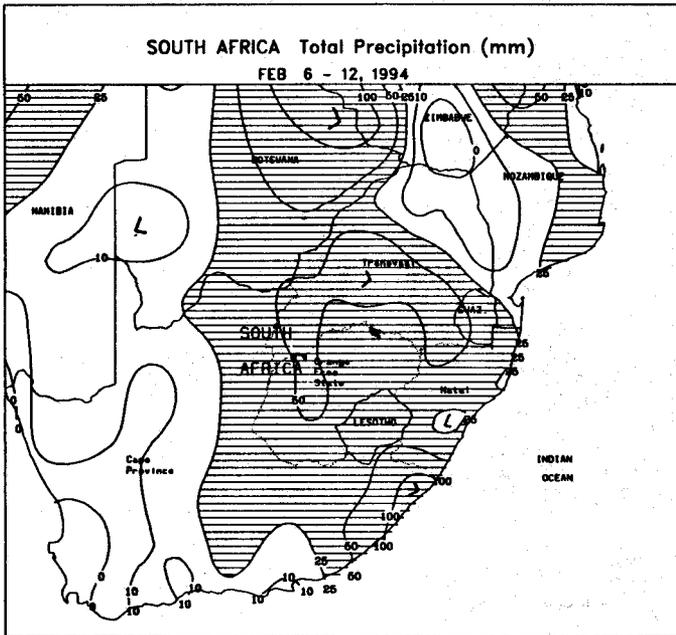


BRAZIL - RIO GRANDE DO SUL
WEEKLY PRECIPITATION

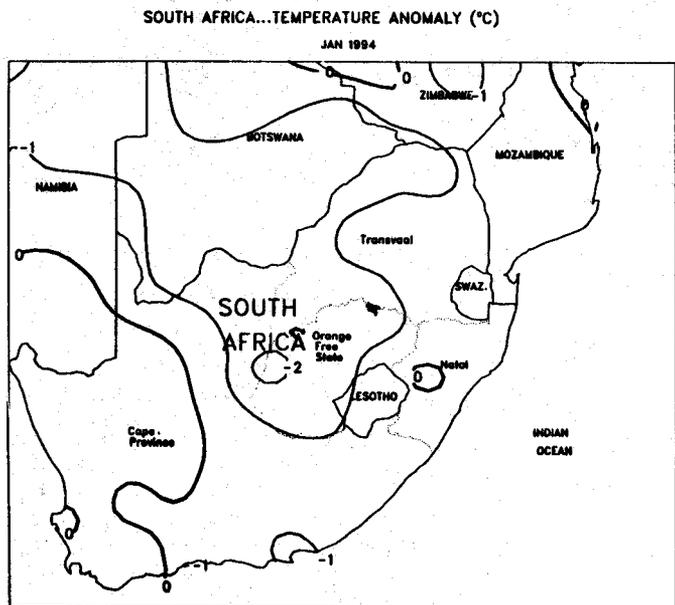
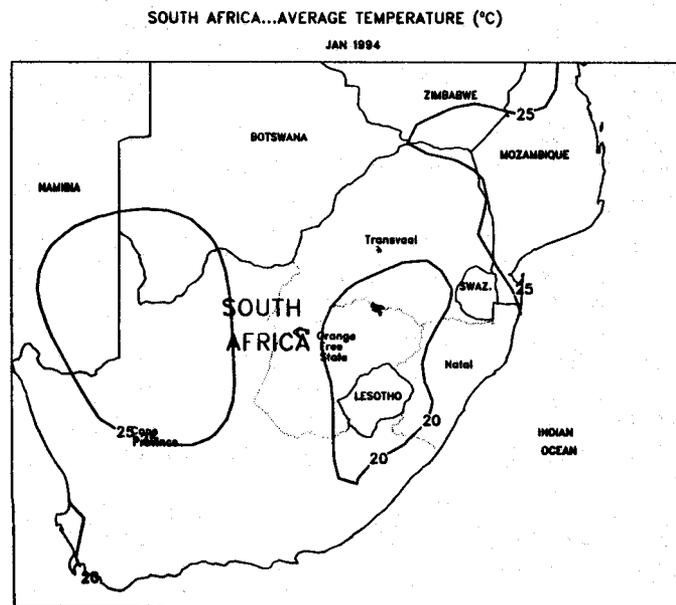
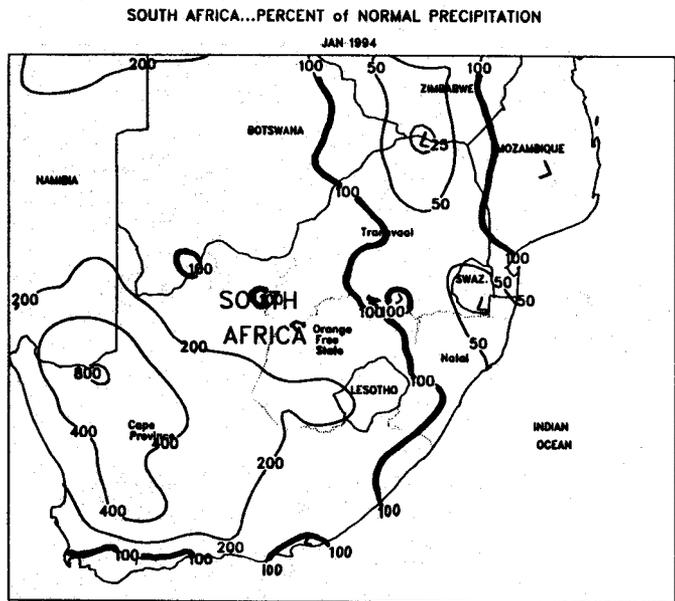
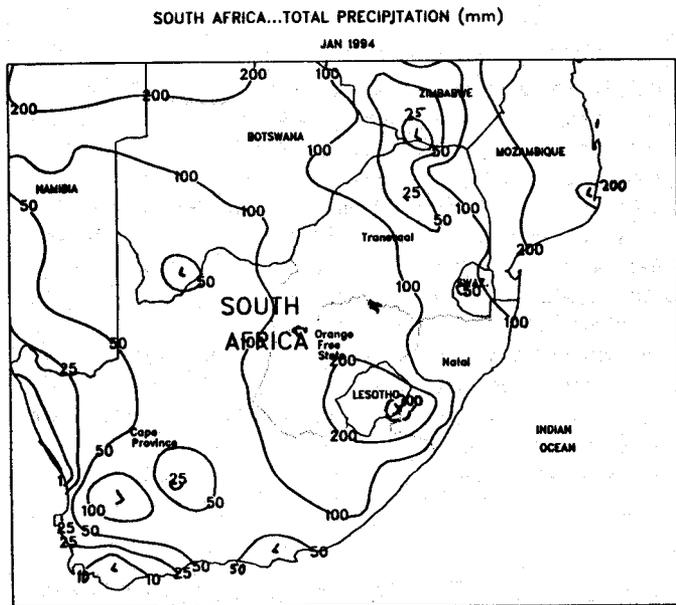


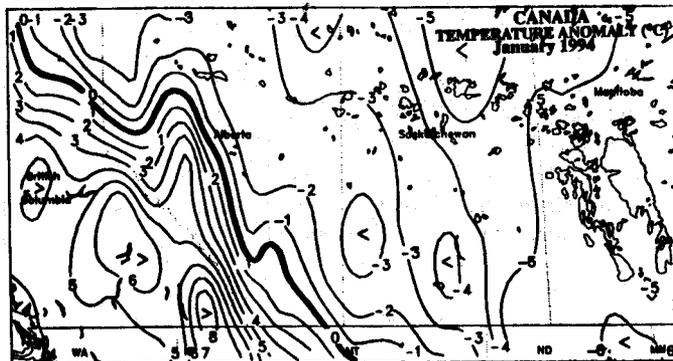
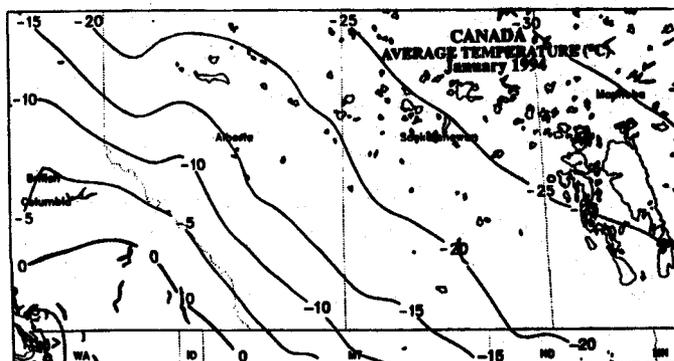
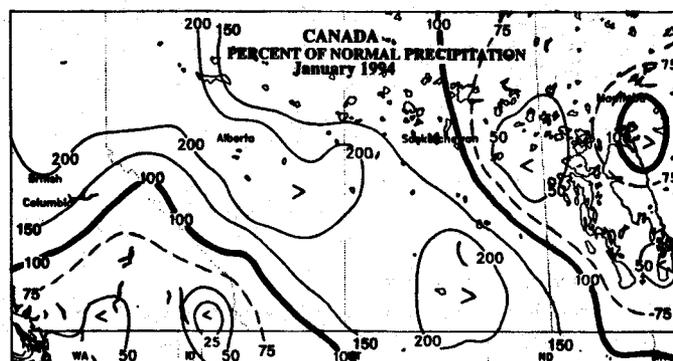
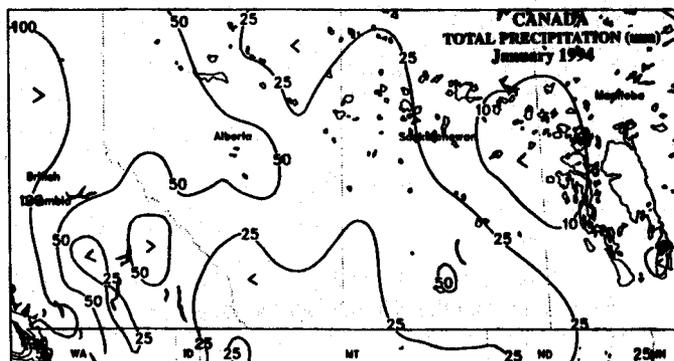
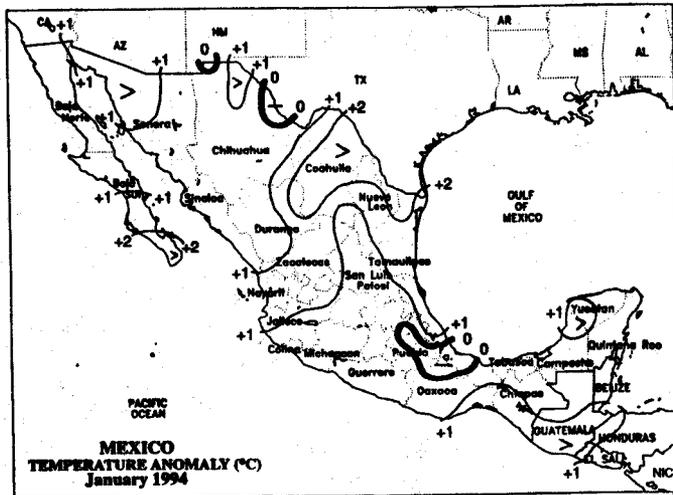
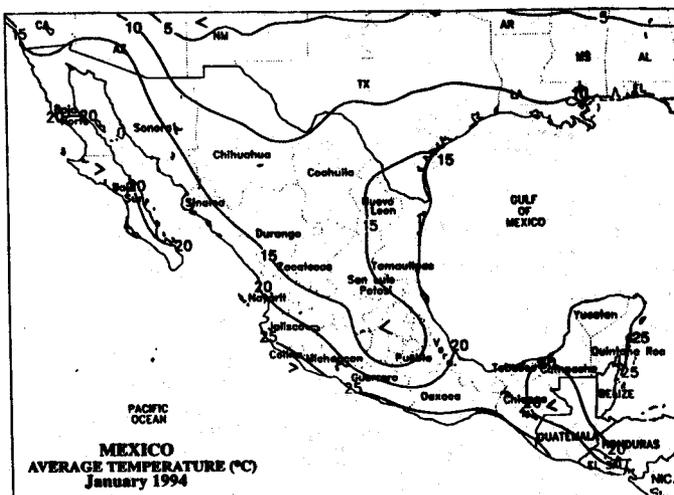
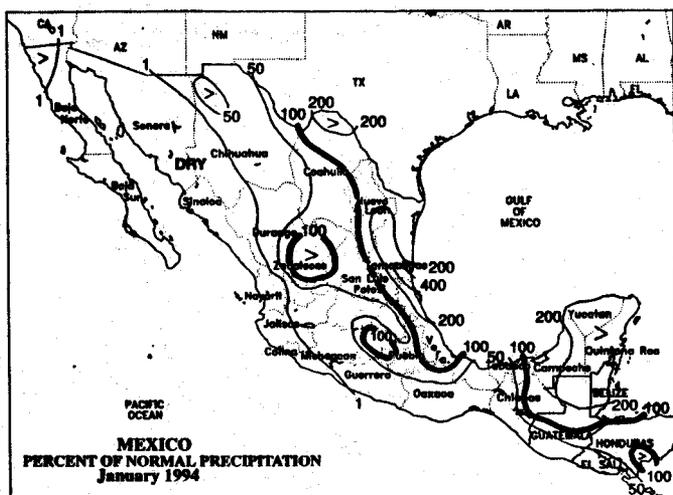
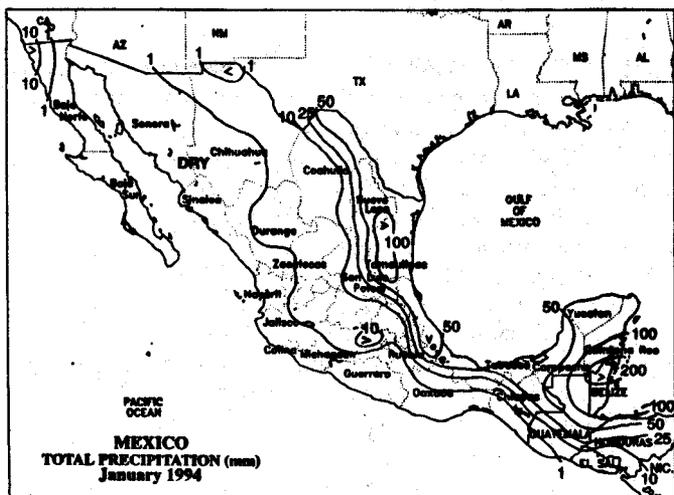
NORTHWESTERN AFRICA: Soaking rain (25-50 mm, with local amounts in excess of 100 mm) fell over winter grain areas in eastern Algeria and Tunisia. The rain stabilized conditions for crops previously stressed by persistent dryness. Further west, light showers (around 10 mm) maintained adequate moisture for winter grains in the vegetative stage. In January, although below-normal rainfall covered winter grains in Morocco and western Algeria, rainfall ranging from 30 to 60 mm, with local amounts in excess of 75 mm, maintained adequate moisture for crop growth. However, in southernmost crop areas of eastern Algeria and most of Tunisia, January rainfall was well below normal (around 25 mm), limiting moisture for growth. While this past week's rain in these areas improved moisture conditions, timely rains will still be required in upcoming week's as crops advance through reproduction.

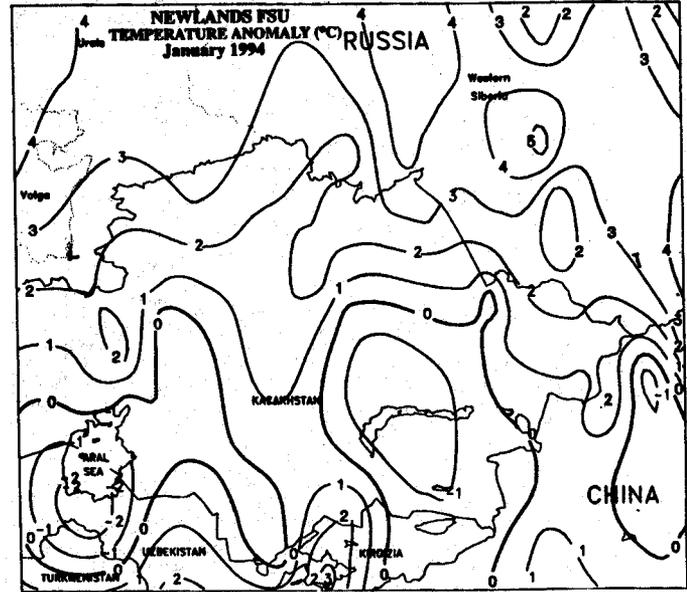
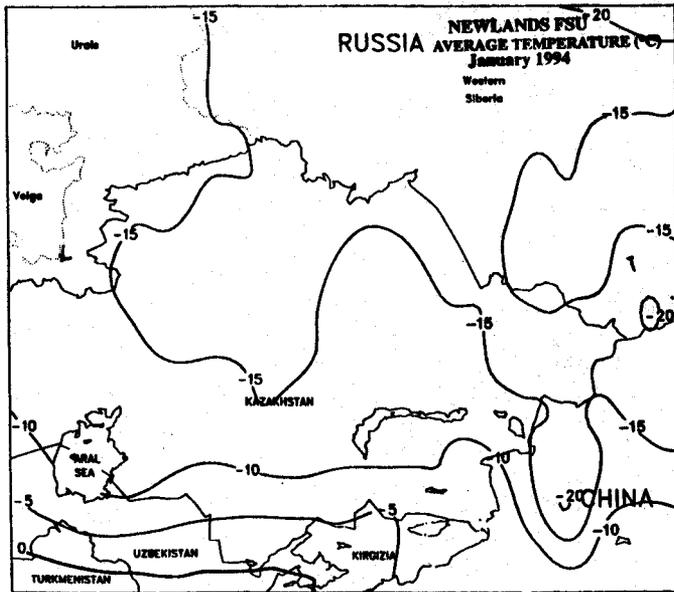
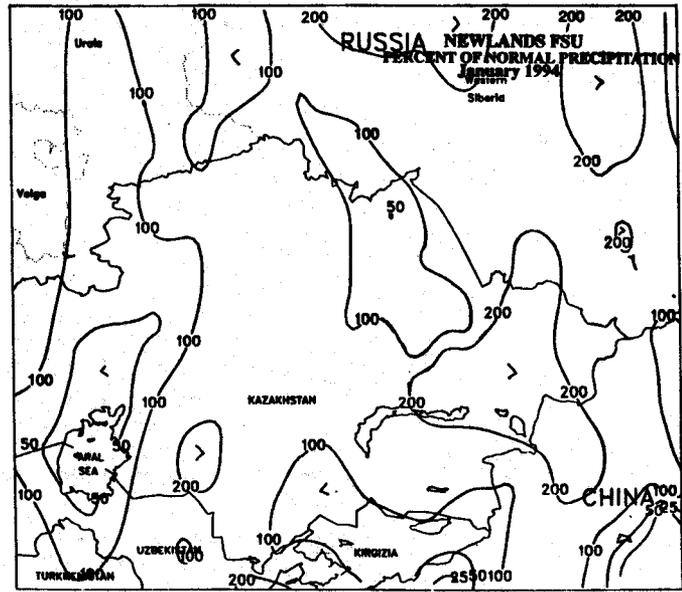
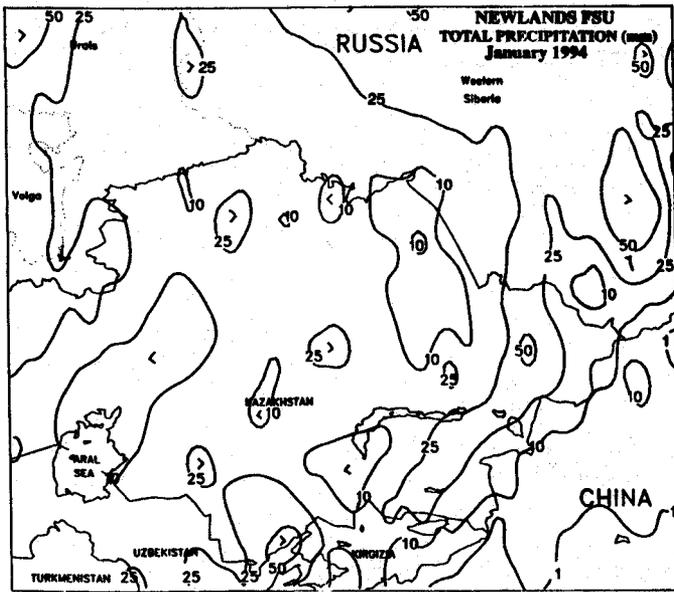




SOUTH AFRICA: Moderate to heavy showers (25-50 mm or more) continued throughout the region, maintaining adequate to abundant topsoil moisture for reproductive to filling corn. Moderate showers (21-47 mm) fell in Natal's sugarcane regions. Temperatures averaged 1-2 degrees C below normal, and rain fell nearly every day, reducing sunshine needed for normal crop growth. Warmer, drier weather is especially needed in the east, which received an additional 40 to 53 mm following last week's locally inundating rain. In January, near- to above-normal rainfall, timely for reproduction, increased soil moisture across the western corn region. Rainfall trended below normal in eastern corn areas, but cooler-than-normal weather reduced crop moisture demands. Much-drier-than-normal weather prevailed over Natal's coastal sugarcane.







(Continued from front cover)

daily records were lows of -36°F in International Falls, MN on Monday, and -44°F in Havre, MT on Tuesday. Meanwhile, unusually warm air overspread the Southern States, setting up a remarkable north-south temperature contrast. On Wednesday, temperatures ranged from -52°F in Promise, SD to 87°F in McAllen, TX. In addition, Bismarck, ND (-43°F) noted its lowest temperature since December 31, 1967. Huron, SD (-41°F) and Aberdeen, SD (-45°F) set February records. Temperatures fell to -20°F or below as far south as Norfolk, NE, and as far east as Lansing, MI. In winter wheat areas of the lower Ohio Valley, wet ground refroze; in the Pacific Northwest and portions of the central Plains, temperatures fell to near- or below zero. Lows included 1°F

in Pendleton, OR on Tuesday, and -7°F in Concordia, KS on Wednesday. But the Nation's most disruptive weather continued in the Northeast, where snow and ice plagued the region on February 8-9, and again from late February 10 through the week's end. More than 20 inches of snow buried Boston, MA, and Newark, NJ. Between storms, a brief thaw brought renewed flooding to the Tennessee and Ohio Valleys. Weekly precipitation included 4.79 inches in Knoxville, TN and 3.80 inches in Charleston, WV. The latter storm also proved destructive from eastern Texas to the Tennessee Valley and southern Middle Atlantic region; ice accumulations caused significant damage to trees and power lines. Elsewhere, heavy rain caused scattered flooding on Hawaii Island, where Hilo reported a weekly total of 10.66 inches.

The Weekly Weather and Crop Bulletin is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44- USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

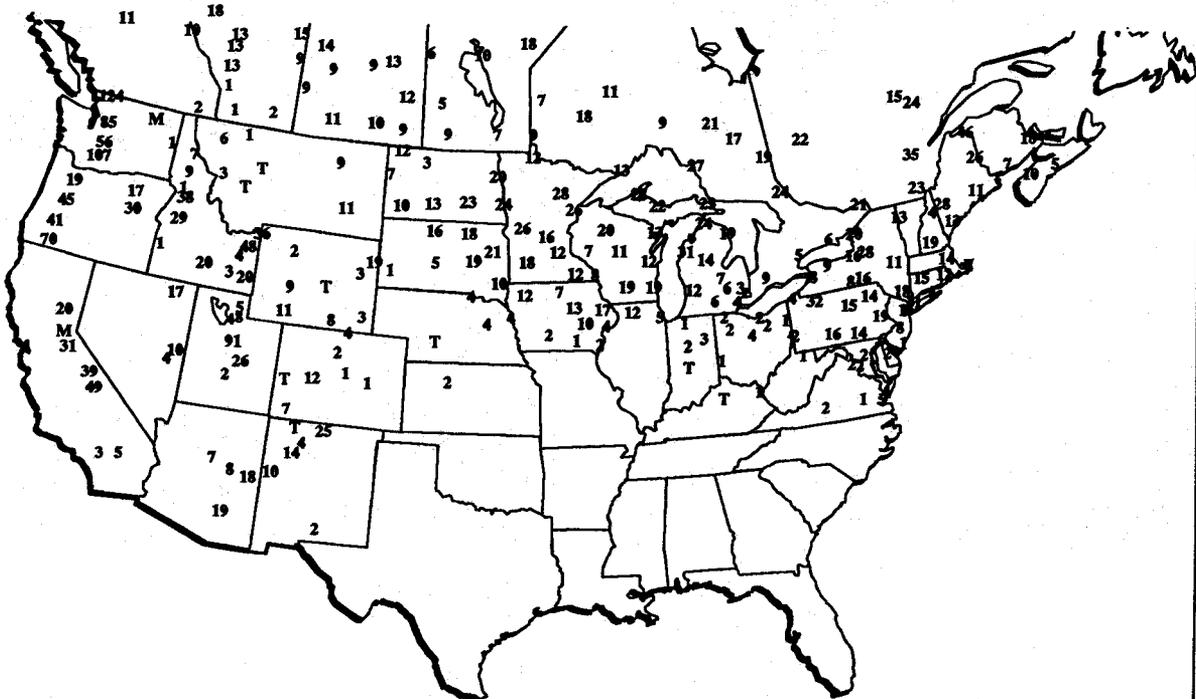
Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250. Order subscriptions from the office and address listed above. First class postage paid at Washington, DC, and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Weather Service/Climate Analysis Center
 Managing Editor **Douglas Le Comte** (202) 720-7919
 Editor **Brad Rippey** (202) 720-1444
 Meteorologists **David Secora**
Vilhelm Bjerknes and Jeff Savadel

Subscriptions **Joyce Houston** (202) 720-7917

U.S. DEPARTMENT OF AGRICULTURE
 Economics Management Staff
 E.M.S. Editor **Sharon Lee**
 National Agricultural Statistics Service
 Agricultural Statistician . . **David Mueller** (202) 720-2157
 State Summaries Editor . . . **Klara Haskins** (202) 720-8033
 World Agricultural Outlook Board
 Agricultural Weather Analysts . . **Ray Motha** (202) 720-9805
Tom Puterbaugh, Mark Brusberg, and Bob Stefanski

Total Snow Cover (Inches) February 14, 1994



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

NOAA/USDA Joint Agricultural
 Weather Facility
 USDA South Building, Room 5844
 Washington, DC 20250

WEEKLY NEWS BULLETIN FIRST CLASS

FIRST CLASS MAIL
 POSTAGE & FEES PAID
 NOAA
 PERMIT NO. G-19

OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300