

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

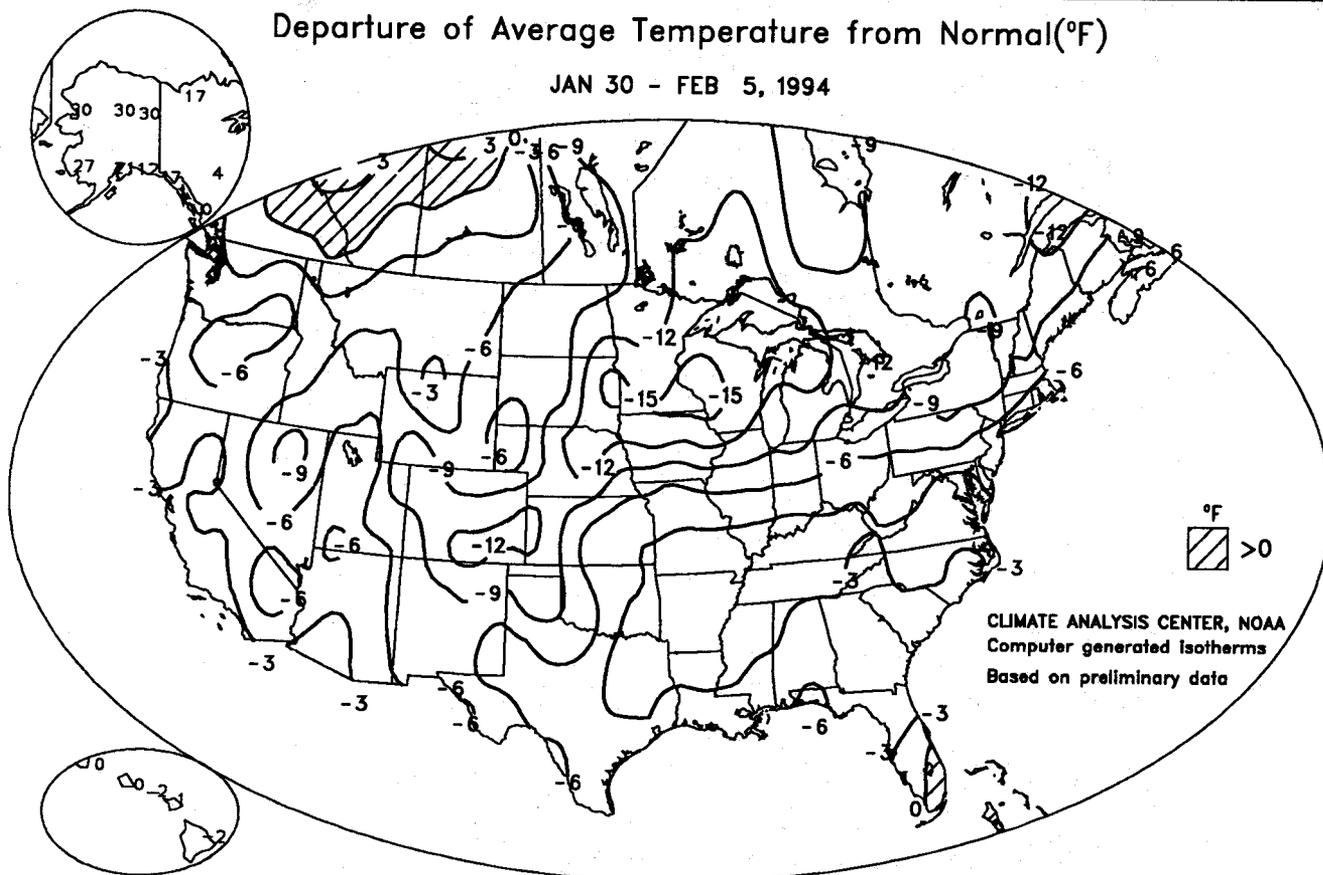
Volume 81, No. 6

Washington, D.C.

February 8, 1994

Departure of Average Temperature from Normal(°F)

JAN 30 - FEB 5, 1994



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

HIGHLIGHTS

January 30 - February 5, 1994

Cold air settled across the Nation, ending a 5-week warm spell in the West, and prolonging the severe winter from the eastern Dakotas to New England. Snow flurries were observed at midweek as far south as Houston, TX, New Orleans, LA, and Pensacola, FL, but crop areas of southern Texas and Peninsular Florida escaped without a freeze. Early in the week, brutal cold returned to the North Central States, while snow whitened the southern High Plains. In Florida, West Palm Beach recorded 86°F on Sunday before collecting more than 2 inches of rain over a 4-day span. On Monday, La Crosse, WI registered -30°F, while Dubuque, IA notched -23°F. Meanwhile in Texas, snow depths reached 10 inches in Amarillo, 3 inches in Midland, and 1 inch in San Angelo. Cold air sagged southward to the Gulf coast by midweek. Temperatures fell to 20°F as far south as San Antonio, TX and

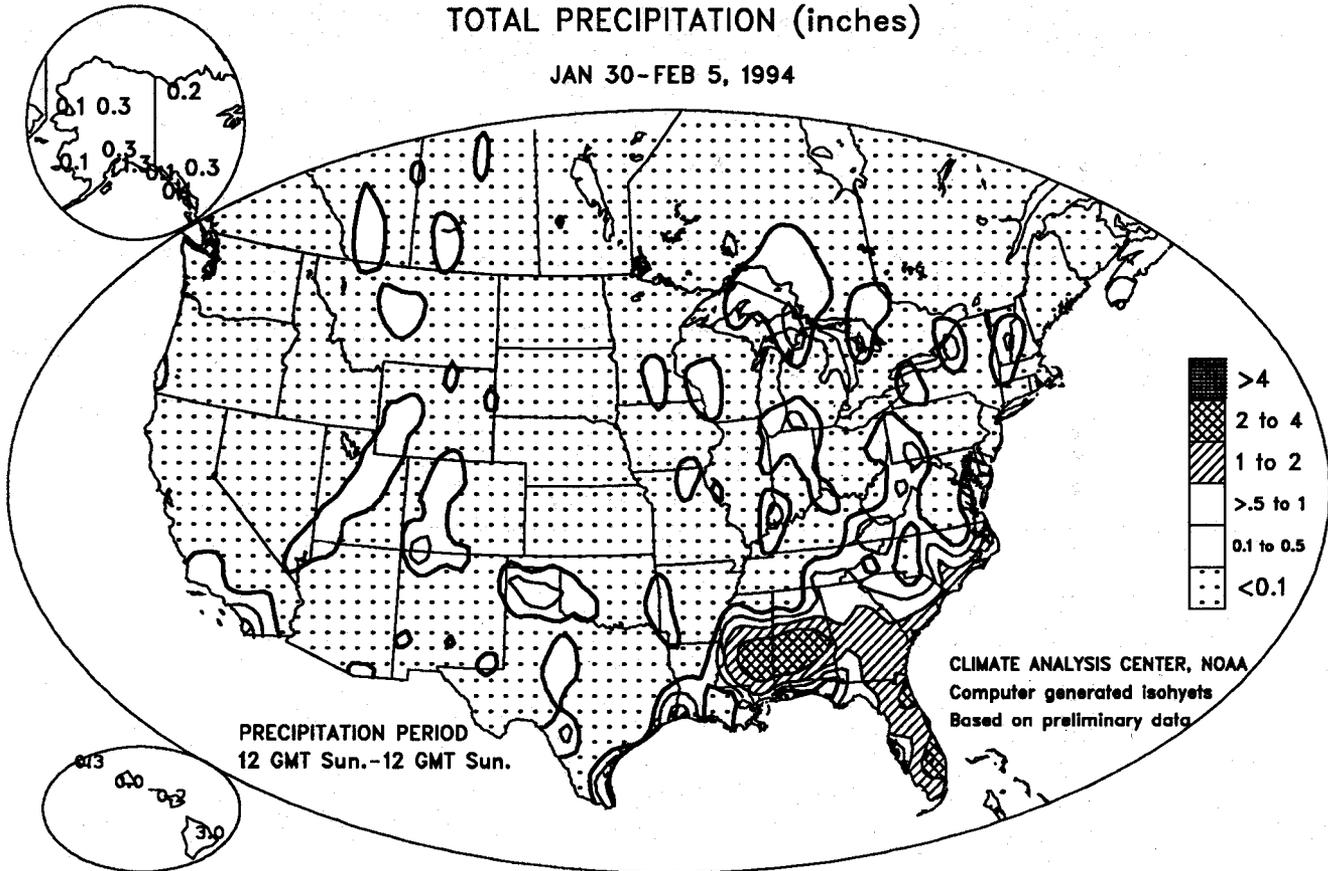
(Continued to p. 13)

Contents

	Page
Highlights & Temperature Departure Map	1
Total Precipitation & Extreme Minimum Temperature Maps	2
National Weather Data for Selected Cities	3
Weekly Heating Degree Day Table	6
January Weather and Crop Summary	7
January Precipitation and Temperature Maps	8
January Weather Data for Selected Cities	10
January Weather in Historical Perspective	11
January Heating Degree Day Table	12
National Agricultural Summary	13
State Summaries of Weather and Agriculture	14
International Weather and Crop Summary & January Temperature/Precipitation Table	18
Tropical Cyclone Geralda Thrashes Madagascar	23
Subscription and Mailing Permit Information & Snow Cover Map	24

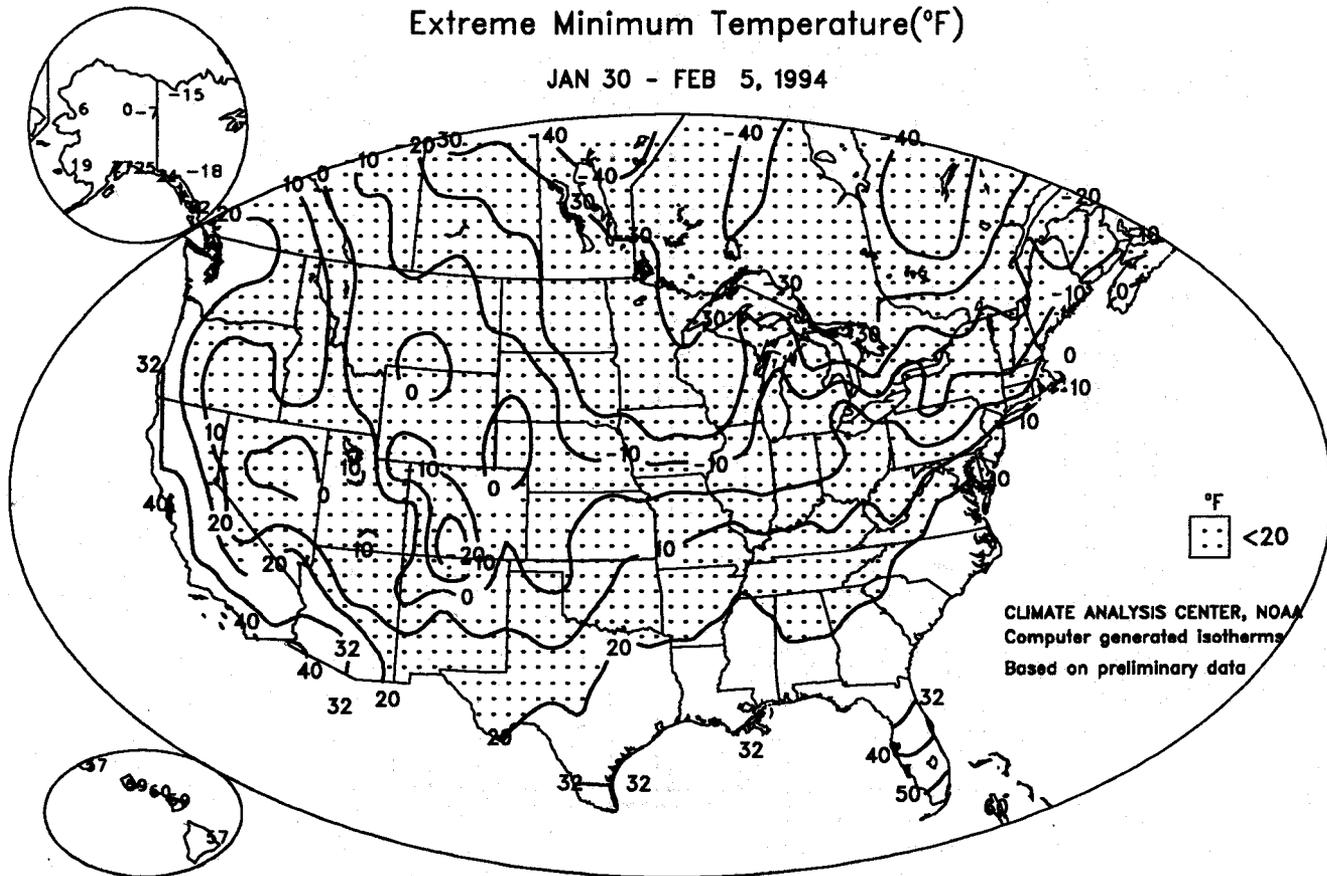
TOTAL PRECIPITATION (inches)

JAN 30-FEB 5, 1994



Extreme Minimum Temperature(°F)

JAN 30 - FEB 5, 1994



National Weather Data for Selected Cities

Weather Data for the Week Ending February 5, 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
AL BIRMINGHAM	49	27	65	16	38	-5	.4	-.7	.4	9.5	86	5.5	84	87	46	0	6	1	0
MOBILE	55	35	73	25	45	-4	.4	-.8	.2	10.6	97	6.9	122	94	43	0	4	4	0
MONTGOMERY	52	29	61	21	41	-5	4.0	2.8	3.6	12.5	114	7.8	134	84	37	0	6	3	1
AK ANCHORAGE	40	30	45	24	35	19	.2	.0	.1	1.1	53	.8	84	93	76	0	4	2	0
BARRON	16	3	29	-10	10	26	T	.0	T	.2	73	.1	50	89	81	0	7	1	0
FAIRBANKS	29	12	36	2	20	28	.1	.0	.1	1.0	72	.6	104	92	81	0	7	1	0
JUNEAU	33	28	36	24	30	4	.1	-.9	.1	12.4	128	6.5	123	99	92	0	7	1	0
KODIAK	43	35	45	27	39	9	2.7	1.2	1.1	24.0	157	13.2	156	96	81	0	3	5	2
NOME	35	29	38	23	32	27	.6	.4	.3	3.0	167	1.1	116	95	90	0	5	5	0
AZ PHOENIX	65	42	70	35	53	-2	T	-.1	T	.2	9	.1	18	48	16	0	0	1	0
PRESCOTT	46	23	53	15	35	-3	T	-.3	T	.8	23	.3	17	79	25	0	6	2	0
TOCSON	64	35	70	27	49	-3	T	-.2	T	.2	8	T	2	57	17	0	3	0	0
YUMA	68	47	72	41	58	-1	.0	-.1	.0	T	0	T	0	35	16	0	0	0	0
AR FORT SMITH	48	28	59	16	38	-1	.1	-.4	.1	6.4	121	3.5	155	77	35	0	5	1	0
LITTLE ROCK	48	32	58	19	40	-1	T	-.7	T	9.5	115	5.1	144	71	37	0	4	1	0
CA BAKERSFIELD	61	38	67	33	50	-1	.5	.2	.3	1.7	100	1.0	99	70	30	0	0	2	0
BURENA	56	38	60	37	47	-2	.0	-.2	.0	12.2	94	5.1	74	83	56	0	0	0	0
FRESNO	58	36	62	31	47	-2	.1	-.4	.1	2.2	60	1.2	53	96	30	0	0	1	1
LOS ANGELES	66	48	70	43	57	0	-.7	.0	.7	2.0	44	1.0	34	64	19	0	3	0	0
REDDING	61	30	65	26	45	-4	.0	-.2	.0	6.5	52	3.3	48	84	27	0	6	0	0
SACRAMENTO	57	35	62	31	46	-2	.0	-.8	T	3.2	47	1.5	34	98	49	0	3	0	0
SAN DIEGO	65	48	71	43	57	-1	.7	.3	.4	2.2	59	1.4	67	73	27	0	0	0	0
SAN FRANCISCO	57	43	60	40	50	0	.0	-.9	.0	4.7	58	2.5	50	86	48	0	0	0	0
CO DENVER	38	7	50	0	22	-9	.0	-.1	T	1.0	79	.5	95	76	32	0	7	0	0
GRAND JUNCTION	33	14	37	7	23	-8	.2	-.2	.1	1.0	80	.5	76	76	42	0	7	1	0
PUEBLO	39	5	53	-3	22	-10	.2	-.1	T	.5	59	.5	128	87	42	0	7	0	0
CT BRIDGEPORT	32	17	40	8	24	-4	.2	-.7	T	9.7	133	5.2	137	76	35	0	7	2	0
HARTFORD	29	5	41	-4	17	-8	.2	-.8	T	10.0	127	5.8	146	79	42	0	7	0	0
DC WASHINGTON	40	26	47	23	33	-2	T	-.6	T	8.7	138	4.3	134	77	42	0	7	1	0
FL APALACHICOLA	58	39	70	27	49	-4	.6	-.3	.6	9.3	108	6.5	144	89	42	0	0	1	1
DAYTONA BEACH	64	45	77	34	54	-3	2.0	1.3	1.9	7.5	127	5.6	170	95	54	0	1	2	2
JACKSONVILLE	61	37	76	26	49	-4	1.1	-.2	1.1	8.5	127	6.6	174	89	42	0	3	1	1
KEY WEST	75	64	82	57	70	0	.4	-.1	.3	4.8	110	2.6	111	91	74	0	0	1	1
MIAMI	74	62	85	52	68	0	1.3	.8	.6	5.2	123	4.7	139	90	67	0	0	3	2
ORLANDO	69	48	79	37	58	-2	.9	-.3	.9	4.8	97	4.0	145	94	58	0	1	1	1
TALLAHASSEE	60	32	78	20	46	-5	.7	-.5	.7	11.3	105	8.3	145	88	44	0	4	1	1
TAMPA	68	47	75	35	57	-3	.9	.3	.9	5.0	108	3.7	150	87	54	0	0	2	1
WEST PALM BEACH	73	60	86	50	67	1	2.3	1.7	1.2	8.6	163	7.7	259	96	71	0	0	4	1
GA ATLANTA	49	32	58	22	41	-1	.7	-.4	.7	8.4	85	5.8	104	82	44	0	4	2	1
AUGUSTA	52	30	62	21	41	-4	.8	-.2	.6	7.3	89	4.6	95	86	44	0	5	2	1
MACON	52	31	61	21	41	-5	1.6	.5	1.3	8.0	82	5.1	95	92	38	0	4	2	1
SAVANNAH	54	35	64	27	44	-5	1.0	.2	.8	7.0	98	4.8	116	86	52	0	3	2	1
HI HILO	77	61	78	57	69	-2	3.0	.7	2.0	29.5	125	13.4	116	87	64	0	0	3	2
HONOLULU	80	66	81	59	73	0	.0	.7	T	.8	10	.5	13	77	52	0	0	0	0
KAHULUI	79	66	80	59	73	0	.0	.7	T	.8	10	.5	13	77	52	0	0	0	0
LIHOE	76	67	78	58	72	0	.2	-.6	.2	1.7	21	1.2	24	77	59	0	0	2	0
ID BOISE	40	19	44	16	29	-3	.0	-.3	.2	7.0	60	4.3	65	74	60	0	0	2	0
LEWISTON	36	23	41	19	30	-7	.0	-.3	.0	2.3	76	1.3	78	83	40	0	7	0	0
POCATELLO	34	2	40	-1	18	-8	.0	-.3	T	1.7	63	.9	61	87	53	0	7	0	0
IL CHICAGO	19	4	27	-9	12	-10	.1	-.2	.0	1.2	51	.5	42	89	42	0	7	0	0
MOLINE	22	4	28	-8	13	-8	.1	-.2	.1	2.9	68	1.9	107	82	55	0	7	3	0
PRORIA	25	6	33	-8	13	-7	.1	-.2	.0	2.2	55	1.1	61	75	52	0	7	3	0
QUINCY	28	11	38	-3	15	-7	.1	-.2	.1	2.1	51	.9	53	79	54	0	7	2	0
ROCHFORD	15	-1	23	-14	7	-12	.1	-.2	.1	1.2	32	.4	23	84	48	0	7	1	0
SPRINGFIELD	29	10	39	-2	20	-6	.1	-.2	.1	2.3	65	1.1	72	85	57	0	7	1	0
IN EVANSVILLE	39	23	51	11	31	-2	.1	-.3	T	2.2	49	1.2	66	85	54	0	7	1	0
FORT WAYNE	27	6	36	-7	16	-7	.1	-.7	T	5.9	80	3.2	90	80	48	0	7	0	0
INDIANAPOLIS	31	12	39	-1	22	-5	.1	-.3	.1	4.2	83	2.7	125	85	63	0	7	2	0
SOUTH BEND	21	4	29	-7	12	-11	.1	-.5	T	4.9	80	2.7	100	77	55	0	7	2	0
IA DES MOINES	22	2	33	-11	12	-9	.2	-.2	.1	4.2	71	2.7	104	86	62	0	7	5	0
SIOUX CITY	20	-3	33	-13	8	-11	.1	-.1	T	2.1	84	1.2	112	82	56	0	7	1	0
WATERLOO	14	-5	21	-23	4	-12	.1	-.2	T	1.7	118	1.1	179	84	54	0	7	1	0
KS COMCORDIA	32	10	45	2	21	-6	.1	-.2	T	2.0	89	1.2	131	85	60	0	7	0	0
DODGE CITY	37	11	47	1	24	-8	.1	-.1	T	1.7	116	.6	94	86	56	0	7	0	0
GOODLAND	37	3	41	-6	16	-14	.1	-.1	T	1.4	115	.4	67	88	56	0	7	0	0
TOPEKA	37	13	48	3	25	-4	.1	-.1	T	.4	45	.4	86	84	63	0	7	0	0
WICHITA	41	16	52	5	29	-4	.1	-.2	T	1.3	53	.4	39	84	45	0	7	0	0
KY BOWLING GREEN	41	23	52	13	32	-2	.1	-.9	T	.4	15	T	0	80	37	0	7	0	0
LEXINGTON	36	21	49	5	29	-3	.1	-.6	.0	11.6	121	5.3	118	85	45	0	7	0	0
LOUISVILLE	40	23	54	11	31	-1	.1	-.6	.0	7.8	106	4.5	134	80	58	0	7	3	0
LA BATON ROUGE	54	38	71	25	46	-5	.6	-.7	.4	6.7	95	4.1	122	80	45	0	7	2	0
LAKE CHARLES	56	39	71	28	48	-3	.6	-.3	.4	10.5	92	7.2	122	93	44	0	3	2	0
NEW ORLEANS	57	41	76	26	49	-3	.1	-.3	.1	6.9	68	4.4	85	87	54	0	3	2	0
SHREVEPORT	56	34	76	25	45	-1	.1	-.3	.1	6.3	53	3.4	56	86	38	0	2	2	0
							T	-.1	T	5.1	52	3.6	73	79	33	0	5	0	0

Based on 1961-90 normals.

Weather Data for the Week Ending February 5, 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	12	-16	22	-29	-2	-11	T	-1.5	T	7.7	128	3.7	133	78	48	0	7	0	0	0	
PORTLAND	25	2	35	-5	14	-7	T	-1.8	T	10.8	124	5.4	130	76	42	0	7	0	0	0	
MD BALTIMORE	39	23	45	17	31	-1	T	-1.7	T	9.1	130	4.6	128	75	41	0	7	0	0	0	
SALISBURY	40	23	49	18	32	-3	.5	-1.3	.5	8.7	110	4.0	94	95	54	0	7	2	0	0	
MA BOSTON	30	16	44	11	23	-5	.1	-1.8	.1	11.9	145	5.3	125	75	41	0	7	1	1	0	
CHATHAM	33	21	42	13	27	-2	.1	-1.9	.1	14.0	156	6.3	142	80	45	0	7	2	0	0	
MI ALPENA	16	-11	22	-25	3	-14	.1	-1.3	.1	6.2	62	2.0	108	87	62	0	7	2	0	0	
DETROIT	25	9	32	3	17	-6	.1	-1.3	.1	3.6	75	2.9	141	77	50	0	7	4	0	0	
FLINT	20	4	27	-2	12	-9	.1	-2.1	.1	2.3	62	1.8	113	85	60	0	7	2	0	0	
GRAND RAPIDS	19	3	25	-8	11	-10	.2	-1.1	.1	4.4	89	2.9	140	88	69	0	7	3	0	0	
HOUGHTON LAKE	16	-10	23	-24	3	-13	.1	-2.0	.1	2.7	74	2.0	115	86	67	0	7	3	0	0	
LANSING	20	4	27	-4	12	-7	.1	-2.2	.1	2.7	72	2.0	119	89	60	0	7	2	0	0	
MARQUETTE	8	-13	12	-24	-3	-14	T	-1.4	T	3.0	58	1.7	67	77	49	0	7	0	0	0	
MUSKEGON	19	8	25	-5	14	-9	.1	-1.3	.1	3.9	68	2.8	107	83	61	0	7	3	0	0	
SAULT ST. MARIE	10	-16	19	-25	-3	-15	.1	-1.3	.1	4.8	86	2.3	83	80	48	0	7	2	0	0	
MN ALEXANDRIA	5	-11	12	-22	-3	-12	T	-2.2	T	1.2	67	.5	46	84	58	0	7	0	0	0	
DULUTH	4	-16	7	-35	-6	-14	T	-2.2	T	3.2	121	1.9	137	77	45	0	7	1	0	0	
INT'L FALLS	3	-18	7	-34	-7	-10	T	-2.2	T	.9	51	.5	49	78	51	0	7	2	0	0	
MINNEAPOLIS	9	-9	14	-25	0	-14	T	-2.2	T	1.8	82	1.2	113	77	51	0	7	1	0	0	
ROCHESTER	6	-12	11	-25	-3	-16	T	-1.1	T	2.0	103	1.2	140	82	69	0	7	1	0	0	
MS GREENWOOD	52	31	67	20	42	-2	.2	-1.9	.2	6.0	52	3.0	53	90	40	0	5	1	0	0	
JACKSON	52	32	67	21	42	-2	2.3	1.2	2.2	13.5	107	10.6	168	88	41	0	4	2	1	0	
MERIDIAN	54	31	66	20	43	-4	4.3	3.1	3.9	15.8	131	12.5	207	90	37	0	5	2	1	0	
MO CAPE GIRARDEAU	40	24	51	11	32	-1	T	-1.7	T	7.3	94	4.6	133	82	50	0	6	0	0	0	
COLUMBIA	34	14	43	5	24	-3	T	-1.3	T	2.4	54	.8	47	87	43	0	7	2	0	0	
KANSAS CITY	35	13	46	1	24	-3	T	-2.2	T	1.8	62	.7	53	81	42	0	7	1	0	0	
SAINT LOUIS	35	21	46	11	28	-3	.1	-1.4	.0	3.6	71	2.1	101	77	44	0	7	2	0	0	
SPRINGFIELD	40	20	50	11	30	-2	T	-1.4	T	3.0	65	1.4	72	74	43	0	6	2	0	0	
MT BILLINGS	34	16	50	12	25	-1	T	-2.2	T	.6	31	.4	35	78	48	0	7	1	0	0	
GLASGOW	21	1	29	-8	11	-2	T	-1.1	T	.9	108	.7	165	83	63	0	7	2	0	0	
GREAT FALLS	28	8	38	-7	18	-6	.3	-1.1	.1	.9	50	.6	61	85	63	0	7	5	0	0	
HAVRE	25	2	34	-12	14	-4	T	-1.1	T	.0	0	T	0	87	67	0	7	0	0	0	
HELENA	33	4	44	1	19	-4	.1	-1.0	.0	.3	25	.2	28	89	56	0	7	2	0	0	
KALISPELL	31	9	32	6	20	-3	T	-1.3	T	2.7	77	1.1	62	89	67	0	7	1	0	0	
MILES CITY	25	4	37	-10	14	-5	.1	-1.1	.1	.9	69	.8	122	91	65	0	7	1	0	0	
MISSOULA	34	8	40	4	21	-5	T	-2.2	T	.7	29	.4	25	87	50	0	7	0	0	0	
NE GRAND ISLAND	24	-1	35	-8	12	-12	.1	-1.0	.1	1.2	94	.8	135	90	56	0	7	1	0	0	
LINCOLN	26	4	38	-6	15	-8	T	-1.1	T	.9	58	.5	74	88	55	0	7	0	0	0	
NORFOLK	22	-4	33	-15	9	-12	T	-1.1	T	1.2	90	.8	130	83	54	0	7	0	0	0	
NORTH PLATTE	31	2	40	-5	16	-8	T	-1.1	T	.8	85	.5	126	90	58	0	7	0	0	0	
OMAHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SCOTTSBLUFF	37	10	48	5	23	-4	T	-1.1	T	1.2	104	.6	107	82	29	0	7	0	0	0	
VALENTINE	25	-3	39	-10	11	-13	.1	-1.1	.1	.8	79	.3	62	83	57	0	7	0	0	0	
NV ELY	32	-4	42	-17	14	-13	.1	-1.1	.1	.8	48	.6	71	82	38	0	7	1	0	0	
LAS VEGAS	52	34	60	27	43	-5	.3	-1.2	.3	.6	61	.4	63	47	21	0	3	1	0	0	
RENO	47	20	53	14	34	-2	T	-1.3	T	.2	11	.1	5	65	25	0	7	0	0	0	
WINNEVOCCA	42	8	49	3	25	-8	.0	-1.2	.0	.8	44	.4	50	86	32	0	7	0	0	0	
NH CONCORD	25	-9	32	-15	8	-11	T	-1.6	T	6.8	112	3.5	119	86	47	0	7	0	0	0	
NJ ATLANTIC CITY	39	16	44	9	27	-4	T	-1.8	T	8.4	114	4.2	103	81	37	0	7	1	0	0	
NM ALBUQUERQUE	43	22	54	12	32	-4	T	-1.1	T	.1	5	T	4	60	26	0	7	0	0	0	
CLOVIS	47	21	63	12	34	-4	T	-1.1	T	.5	52	T	7	72	26	0	6	0	0	0	
ROSWELL	51	20	64	9	36	-6	T	-1.1	T	.1	14	T	5	86	34	0	7	1	0	0	
NY ALBANY	25	0	35	-5	12	-9	T	-1.5	T	6.3	111	3.2	116	81	43	0	7	0	0	0	
BINGHAMTON	21	5	36	-2	13	-8	T	-1.5	T	6.8	117	3.5	124	77	49	0	7	2	0	0	
BUFFALO	23	9	29	-4	16	-7	.4	-1.1	.2	6.9	102	3.3	107	83	55	0	7	3	0	0	
NEW YORK	34	21	45	17	28	-3	T	-1.6	T	9.2	133	4.8	135	69	35	0	7	1	0	0	
ROCHESTER	22	4	31	-10	13	-9	.2	-1.3	.1	4.4	84	2.8	113	80	51	0	7	2	0	0	
SYRACUSE	21	3	34	-8	12	-10	.1	-1.5	.1	6.6	112	3.5	127	83	49	0	7	2	0	0	
NC ASHEVILLE	42	24	56	13	33	-4	T	-1.0	T	8.9	99	5.4	116	85	50	0	6	0	0	0	
CHARLOTTE	48	32	57	27	40	0	.2	-1.7	.2	7.0	90	3.7	84	77	37	0	4	2	0	0	
GREENSBORO	45	27	56	20	36	-1	.2	-1.6	.2	7.1	99	3.8	102	82	42	0	6	2	0	0	
HATTIESBURG	51	37	62	29	44	0	1.3	-.2	1.1	11.4	107	7.3	119	87	60	0	1	2	1	0	
NEW BERN	50	30	60	24	40	-4	.4	-1.6	.4	7.5	86	5.9	117	95	56	0	5	1	0	0	
RALEIGH	46	28	59	19	37	-2	.5	-1.4	.4	7.7	105	4.0	96	91	48	0	6	3	0	0	
WILMINGTON	53	31	62	23	42	-2	1.3	-.2	1.2	9.7	102	7.1	128	88	54	0	5	3	1	0	
ND BISMARCK	14	-9	20	-29	3	-9	.1	-1.1	.0	1.5	144	.6	119	96	64	0	7	2	0	0	
FARGO	6	-12	13	-28	-3	-10	.1	-1.0	.1	1.8	125	.8	100	78	64	0	7	3	0	0	
GRAND FORKS	4	-14	9	-27	-5	-11	T	-1.1	T	1.2	84	.8	95	83	62	0	7	0	0	0	
WILLISTON	16	-5	22	-16	6	-6	.1	-1.1	.0	1.4	116	1.0	164	84	65	0	7	3	0	0	
OH AKRON-CANTON	26	10	33	0	18	-7	T	-1.5	T	6.3	115	3.5	141	86	49	0	7	1	0	0	
CINCINNATI	34	16	48	3	25	-3	T	-1.6	T	5.8	93	3.2	108	81	51	0	7	1	0	0	
CLEVELAND	27	10	34	1	18	-6	T	-1.4	T	4.8	88	2.6	109	80	52	0	7	2	0	0	
COLUMBUS	32	12	45	2	22	-2	.1	-1.4	.0	6.0	112	3.8	165	78	48	0	7	2	0	0	
DAYTON	31	11	41	-2	21	-6	.1	-1.4	.0	6.6	122	3.8	154	85	52	0	7	2	0	0	

Based on 1961-90 normals.

Weather Data for the Week Ending February 5, 1994

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
TOLEDO	25	7	31	-2	16	-7	.1	-.2	.1	4.2	84	2.9	145	80	58	0	7	4	0	0	
YOUNGSTOWN	25	9	32	1	17	-7	.1	-.2	.1	5.4	99	2.8	112	81	46	0	7	1	0	0	
OK OKLAHOMA CITY	45	19	59	10	32	-6	.4	-.3	.4	1.5	53	.2	15	83	38	0	7	1	0	0	
TULSA	46	22	58	12	34	-3	.4	-.4	.4	2.4	62	.7	37	83	34	0	7	0	0	0	
OR ASTORIA	50	29	55	26	39	-4	.0	-.1	.0	16.4	75	6.8	59	94	57	0	7	0	0	0	
BURNS	40	8	44	5	24	5	.0	-.2	.0	1.1	49	.3	24	82	30	0	7	0	0	0	
MEDFORD	56	20	60	19	38	-2	.0	-.5	.0	3.5	55	1.1	35	81	27	0	7	0	0	0	
PENDLETON	31	23	44	22	27	-9	.0	-.3	.0	2.5	74	1.6	91	93	63	0	7	0	0	0	
PORTLAND	48	26	54	22	37	-4	.0	-.1	.0	8.5	70	3.5	58	89	39	0	7	0	0	0	
SALEM	51	23	57	21	37	-4	.0	-.2	.0	11.1	82	4.3	63	86	40	0	7	0	0	0	
PA ALLENTOWN	31	7	38	0	19	-8	.0	-.7	.0	10.7	149	5.7	156	84	45	0	7	1	0	0	
ERIE	24	9	32	-1	16	-8	.1	-.4	.1	5.5	89	2.7	102	84	54	0	7	2	0	0	
HARRISBURG	32	12	37	5	22	-7	.1	-.7	.1	9.5	144	5.6	167	87	42	0	7	1	0	0	
PHILADELPHIA	39	23	45	20	31	1	.1	-.8	.1	8.0	104	4.3	107	66	34	0	7	0	0	0	
PITTSBURGH	30	12	44	3	21	-5	.1	-.4	.1	6.1	105	4.0	137	82	44	0	7	3	0	0	
SCRANTON	29	7	39	-3	18	-6	.1	-.5	.1	6.4	127	3.3	134	76	46	0	7	0	0	0	
RI PROVIDENCE	32	12	44	2	22	-5	.1	-.9	.1	11.3	127	5.6	123	77	36	0	7	1	0	0	
SC CHARLESTON	53	33	64	25	43	-6	1.3	.5	1.0	10.1	141	7.8	196	89	57	0	4	2	1	0	
COLUMBIA	51	29	61	22	40	-4	.5	-.5	.3	6.8	78	4.4	86	94	44	0	5	2	0	0	
FLORENCE	50	32	61	24	41	-4	.7	-.1	.4	6.5	91	4.6	113	91	51	0	4	3	0	0	
GREENVILLE	47	27	55	18	37	-4	.4	-.6	.3	7.5	84	4.6	94	81	43	0	5	2	0	0	
SD ABERDEEN	11	-12	18	-24	0	-12	.1	-.1	.0	1.4	118	.9	125	77	53	0	7	2	0	0	
HURON	14	-10	27	-29	2	-13	.1	-.1	.1	1.7	178	.9	200	82	63	0	7	1	0	0	
RAPID CITY	30	6	47	0	18	-6	.1	-.1	.0	1.0	111	.5	109	84	54	0	7	2	0	0	
SIoux FALLS	14	-11	27	-21	1	-14	.1	-.1	.1	1.3	99	1.0	164	81	54	0	7	0	0	0	
TN CHATTANOOGA	48	25	63	17	37	-2	.3	-.9	.3	11.9	109	6.6	116	94	47	0	6	1	0	0	
KNOXVILLE	42	26	49	16	34	-3	.6	-.3	.6	15.8	167	7.7	159	78	45	0	6	2	1	0	
MEMPHIS	46	32	57	22	39	-2	.1	-.9	.1	11.1	109	5.5	125	77	39	0	4	0	0	0	
NASHVILLE	44	27	57	17	36	-1	.1	-.8	.1	11.0	125	4.4	105	77	42	0	6	1	0	0	
TX ABILENE	49	29	58	14	39	-5	.2	-.1	.1	2.0	89	1.1	90	87	42	0	4	2	0	0	
AMARILLO	38	12	53	1	25	-12	.6	-.5	.6	2.0	197	1.0	173	84	50	0	7	1	1	0	
AUSTIN	58	38	78	26	48	-2	.1	-.5	.1	2.6	65	1.4	69	86	41	0	2	0	0	0	
BEAUMONT	58	39	77	26	49	-3	.7	-.2	.7	9.5	93	7.6	139	93	52	0	2	2	1	0	
BROWNSVILLE	65	47	80	39	56	-4	.4	-.0	.2	4.6	151	2.3	129	93	37	0	0	4	0	0	
CORPUS CHRISTI	61	43	77	23	52	-4	.2	-.3	.2	6.0	180	1.2	59	92	37	0	1	2	0	0	
DEL RIO	59	36	79	26	47	-3	.1	-.2	.1	2.5	103	2.4	172	85	44	0	3	1	0	0	
EL PASO	55	26	64	15	40	-5	.1	-.1	.1	.7	70	.7	6	87	23	0	6	0	0	0	
FORT WORTH	53	33	65	22	43	-1	.1	-.5	.1	4.0	92	1.4	65	85	38	0	4	0	0	0	
GALVESTON	58	46	73	33	52	-1	.3	-.4	.2	4.7	65	2.3	61	88	58	0	0	2	0	0	
HOUSTON	59	37	79	27	48	-3	.1	-.9	.1	4.8	52	2.1	48	94	47	0	3	3	0	0	
LUBBOCK	49	23	64	13	36	-5	.1	-.0	.1	.7	71	.4	81	85	39	0	5	1	0	0	
MIDLAND	53	26	66	11	40	-5	.1	-.1	.1	1.4	128	1.0	173	86	39	0	4	2	0	0	
SAN ANGELO	54	29	67	18	42	-4	.3	-.0	.2	2.5	140	1.7	172	92	39	0	4	2	0	0	
SAN ANTONIO	59	35	83	20	47	-3	.1	-.4	.1	2.0	56	1.6	76	85	39	0	3	1	0	0	
VICTORIA	59	40	81	28	50	-3	.1	-.7	.1	5.5	80	1.5	38	90	41	0	2	3	0	0	
WACO	54	34	71	22	44	-3	.1	-.5	.1	2.9	77	1.5	74	89	52	0	4	0	0	0	
WICHITA FALLS	46	24	61	13	35	-6	.1	-.3	.1	2.8	88	.2	12	84	49	0	6	1	0	0	
UT CEDAR CITY	38	12	45	3	25	-7	.2	-.0	.2	.7	43	.3	35	85	38	0	7	2	0	0	
SALT LAKE CITY	38	18	44	16	28	-3	.0	-.3	.0	1.5	54	.6	47	78	40	0	7	0	0	0	
VT BURLINGTON	19	-1	33	-13	9	-7	.1	-.4	.1	3.8	84	2.2	106	81	48	0	7	1	0	0	
VA NORFOLK	44	28	57	21	36	-3	.9	-.0	.5	7.9	103	4.6	103	96	47	0	6	4	0	0	
RICHMOND	43	27	55	20	35	-1	.2	-.5	.2	7.1	100	3.3	86	88	34	0	6	2	0	0	
ROANOKE	40	26	52	19	33	-2	.2	-.5	.1	9.9	163	4.6	148	76	44	0	6	3	0	0	
WA QUILLAYUTE	50	26	55	24	38	-3	.0	-.3	.0	22.5	70	9.9	59	95	62	0	7	0	0	0	
SEATTLE-TACOMA	47	29	52	25	38	-4	.0	-.1	.0	7.0	58	2.5	41	97	65	0	7	0	0	0	
SPOKANE	29	20	39	15	24	-6	.1	-.4	.1	3.2	69	1.4	63	93	73	0	7	1	0	0	
YAKIMA	33	22	47	16	28	-5	.1	-.2	.1	1.4	49	.4	26	91	71	0	7	0	0	0	
WV BECKLEY	32	20	45	4	26	-3	.2	-.5	.1	9.2	137	4.7	137	82	57	0	6	3	0	0	
CHARLESTON	37	21	53	10	29	-3	.2	-.5	.1	9.8	144	6.6	193	84	49	0	6	3	0	0	
HUNTINGTON	37	21	51	12	29	-1	.1	-.7	.1	8.5	120	5.2	148	78	47	0	7	1	0	0	
PARKERSBURG	34	16	50	5	25	-5	.1	-.7	.1	9.1	138	7.1	193	87	49	0	7	0	0	0	
WI GREEN BAY	11	-11	16	-21	0	-15	.1	-.2	.1	1.9	68	1.5	113	77	51	0	7	1	0	0	
LACROSSE	11	-9	15	-26	1	-15	2.0	1.8	2.0	1.8	62	1.5	113	81	48	0	7	1	1	0	
MADISON	13	-8	23	-20	3	-14	.1	-.2	.1	1.8	62	1.5	113	81	54	0	7	1	0	0	
MILWAUKEE	17	3	25	-6	10	-10	.1	-.2	.1	2.9	70	2.2	122	82	54	0	7	2	0	0	
WAUSAU	9	-11	12	-26	-1	-14	.1	-.2	.1	1.4	56	.8	79	88	41	0	7	0	0	0	
WY CASPER	30	8	38	-3	19	-5	.1	-.1	.0	1.3	100	.6	98	81	50	0	7	2	0	0	
CHEYENNE	30	9	40	0	19	-8	.1	-.1	.1	1.0	114	.7	153	84	39	0	7	1	0	0	
LANDER	26	2	36	-6	14	-8	.1	-.1	.1	1.5	131	1.1	191	78	43	0	7	1	0	0	
SHERIDAN	30	8	43	1	19	-4	.1	-.1	.1	2.4	152	1.9	227	83	57	0	7	1	0	0	

Based on 1961-90 normals.

HEATING DEGREE DAYS (Base 65° F) January 30 - February 5, 1994

(Cumulative totals and departures from normal are for the period July 1, 1993 - February 5, 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			
AL BIRMINGHAM	188	33	2109	137	363	LA BATON ROUGE	134	33	1471	273	520	TULSA	218	21	2691	202	151
AL HUNTSVILLE	199	26	2410	193	408	LA LAKE CHARLES	120	25	1214	77	270	OR ASTORIA	178	24	2969	16	-95
AL MOBILE	138	33	1439	231	479	LA NEW ORLEANS	115	20	1241	167	474	OR EUGENE	201	44	2883	192	93
AL MONTGOMERY	168	44	1784	245	421	LA SHREVEPORT	137	8	1693	117	157	OR MEDFORD	185	14	2761	-96	197
AK ANCHORAGE	209	-131	5495	-1039	-1214	ME BANGOR	389	56	4969	293	188	OR NORTH BEND	138	8	2550	-20	87
AK BARROW	384	-184	10222	-1247	-1239	ME PORTLAND	358	50	4483	159	193	OR PENDELTON	264	64	3223	-127	-413
AK BETHEL	225	-192	6701	-986	-1243	ME PORTLAND	237	7	3141	220	437	OR PORTLAND	193	29	2515	-215	-183
AK COLD BAY	186	-76	4875	-588	-755	MA BOSTON	291	34	3553	279	212	OR REDMOND	263	44	4081	94	-323
AK FAIRBANKS	311	-199	7898	-1091	-1230	MI ALPENA	432	96	5235	446	435	OR SALEM	194	28	2651	-234	-99
AK JUNEAU	241	-32	4459	-928	-798	MI DETROIT	337	43	4046	96	381	PA ALLENTOWN	320	54	3792	263	411
AK KING SALMON	187	-170	5554	-1265	-1329	MI FLINT	369	61	4702	552	695	PA BRADFORD	368	46	4890	137	441
AK KOTzebue	263	-217	8001	-903	-1568	MI GRAND RAPIDS	376	71	4596	413	548	PA ERIE	339	52	4019	422	663
AK MCGRATH	248	-253	7639	-1440	-1269	MI LANSING	370	62	4649	396	498	PA PHILADELPHIA	237	-4	2891	-131	233
AK NOME	231	-191	7312	-754	-1689	MI MUSKEGON	357	63	4436	409	443	PA PITTSBURGH	307	34	3795	160	481
AK ST PAUL ISLAND	206	-83	5484	-566	-820	MI TRAVERSE CITY	410	83	4735	281	305	PA SCRANTON	326	43	4081	295	556
AK YAKUTAT	218	-52	4746	-839	-1130	MI DULUTH	488	93	6460	503	631	PA WILLIAMSPORT	340	63	4066	359	641
AZ FLAGSTAFF	276	31	3945	-181	-72	MI ITHACA FALLS	497	64	6900	393	514	RI PROVIDENCE	297	38	3642	222	284
AZ PHOENIX	80	13	684	-221	-3	MI KANSAS CITY	450	91	5398	378	496	SC CHARLESTON	155	36	1454	75	307
AZ TUCSON	109	23	952	-151	-75	MI ROCHESTER	471	110	5567	435	358	SC COLUMBIA	171	26	1915	120	219
AR FORT SMITH	188	3	2407	58	216	MS JACKSON	158	19	1976	274	578	SC GREENVILLE	193	25	2388	239	217
AR LITTLE ROCK	175	2	2302	117	231	MS MERIDIAN	154	23	1777	101	385	SD ABERDEEN	455	87	5749	415	340
CA FRESNO	125	11	1557	-163	25	MO COLUMBIA	285	32	3604	272	319	SD HURON	439	92	5470	468	438
CA LOS ANGELES	53	-3	482	-259	-149	MO KANSAS CITY	283	20	3592	116	147	SD PIERRE	367	45	4993	342	186
CA SACRAMENTO	134	18	1687	-65	35	MO SAINT LOUIS	260	19	3179	115	261	SD RAPID CITY	326	41	4372	-91	-450
CA SAN DIEGO	56	7	589	-76	-40	MO SPRINGFIELD	244	16	3170	174	313	SD SIOUX FALLS	440	96	5311	367	373
CA SAN FRANCISCO	103	3	1373	-366	-12	MT BILLINGS	278	3	4213	-206	-385	TX BRISTOL	233	20	2943	136	342
CO COLORADO SPRINGS	318	75	3937	79	-8	MT GLASSBORO	379	17	5606	102	-6	TX CHATTANOOGA	196	13	2329	-32	253
CO DENVER	295	60	3619	-49	-284	MT GREAT FALLS	325	40	4769	32	-293	TX KNOXVILLE	212	18	2715	161	414
CO GRAND JUNCTION	289	41	3664	-1	129	MT HAVRE	358	24	5333	7	-287	TX MEMPHIS	181	15	2199	116	245
CT HARTFORD	332	52	4063	318	325	MT KELENA	322	28	4763	-249	-548	TX NASHVILLE	202	9	2653	197	418
DE WILMINGTON	255	17	3136	111	360	MT KALISPELL	314	22	4925	-301	-408	TX ABILENE	181	37	1920	127	197
DC WASHINGTON	222	12	2855	304	335	MT MISSOULA	306	34	4590	-276	-560	TX AMARILLO	279	81	2958	198	-48
FL DAYTONA BEACH	73	17	661	50	320	NE GRAND ISLAND	373	86	4185	81	-199	TX AUSTIN	119	14	1161	-46	54
FL FORT MYERS	28	-6	206	-96	128	NE NORTH PLATTE	339	54	4274	-69	-251	TX BROWNSVILLE	73	31	456	-33	120
FL JACKSONVILLE	110	22	1099	105	364	NE OMAHA	376	78	4404	300	314	TX CORPUS CHRISTI	91	22	676	-67	106
FL KEY WEST	5	-2	24	-44	21	NE SCOTTSBLUFF	291	29	4287	133	-310	TX DALLAS FT WORTH	152	12	1724	63	192
FL MIAMI	15	-4	78	-70	60	NV ELKO	324	67	4791	447	-403	TX EL PASO	170	33	1772	-127	49
FL ORLANDO	49	0	469	-18	222	NV ELY	354	88	4828	297	134	TX HOUSTON	120	26	1158	38	228
FL PENSACOLA	128	30	1231	97	462	NV LAS VEGAS	154	39	1572	-78	-119	TX LUBBOCK	203	32	2365	49	110
FL TALLAHASSEE	133	35	1293	112	483	NV RENO	216	10	3000	-534	-489	TX LUFKIN	136	22	1526	150	171
FL TAMPA	52	3	450	-60	208	NE WINNEBOCCA	281	57	3932	21	-263	TX MIDLAND ODESSA	174	29	1955	29	126
FL WEST PALM BEACH	14	-14	137	-94	84	NH CONCORD	396	74	4824	276	328	TX SAN ANGELO	161	24	1677	-45	111
GA ATHENS	173	18	2140	200	278	NH LYNTONIC CITY	263	25	3309	224	380	TX SAN ANTONIO	123	23	1156	-27	134
GA ATLANTA	169	8	1972	-37	181	NH NEWARK	262	24	3103	159	432	TX VICTORIA	110	30	916	-27	137
GA AUGUSTA	166	24	1833	84	293	NM ALBUQUERQUE	227	32	2756	-156	-17	TX WACO	146	17	1720	204	310
GA MACON	164	33	1862	245	382	NY ALBANY	368	60	4535	374	475	TX WICHITA FALLS	209	45	2251	173	314
GA SAVANNAH	141	31	1361	65	309	NY BINGHAMTON	362	54	4771	462	378	UT CEDAR CITY	280	50	3546	-93	-120
ID BOISE	249	21	3666	-47	-282	NY BUFFALO	342	48	4278	354	461	UT SALT LAKE CITY	256	17	3462	-158	-402
ID POCATELLO	328	56	4497	100	-252	NY MASSENA	414	57	5215	161	325	VT BURLINGTON	389	45	4956	286	464
IL CHICAGO	372	71	4304	292	423	NY NEW YORK	259	22	3035	132	266	VA LYNCHBURG	218	7	2881	130	361
IL MOLINE	362	56	4304	242	335	NY ROCHESTER	361	67	4445	494	407	VA NORFOLK	203	21	2258	113	316
IL PEORIA	345	49	4017	160	381	NY SYRACUSE	369	68	4561	532	563	VA RICHMOND	205	3	2599	57	246
IL ROCKFORD	400	81	4584	284	374	NC ASHEVILLE	220	19	2955	224	413	VA ROANOKE	225	15	3006	235	365
IL SPRINGFIELD	315	37	3766	180	496	NC CAPE HATTERAS	147	0	1409	-193	159	VA WA OLYMPIA	209	32	3067	-295	-132
IN EVANSVILLE	236	-2	3150	112	445	NC CHARLOTTE	174	-1	2169	-5	203	VA QUILLAPUTE	188	20	3156	-216	-179
IN FORT WAYNE	339	45	4008	175	380	NC GREENSBORO	202	9	2642	161	193	VA SEATTLE TACOMA	189	28	2718	-177	-90
IN INDIANAPOLIS	302	31	3792	261	525	NC RALEIGH DURHAM	194	16	2398	157	260	VA SPOKANE	282	40	4095	-160	-398
IN SOUTH BEND	367	77	4283	433	601	NC WILMINGTON	160	22	1646	37	193	VA YAKIMA	261	38	3740	-89	-367
IA DES MOINES	370	62	4469	343	371	ND BISMARCK	433	59	5986	373	271	WV BECKLEY	269	20	3523	81	422
IA MASON CITY	445	94	5324	409	351	ND FARGO	468	68	6095	313	302	WV CHARLESTON	248	21	3114	176	416
IA SIOUX CITY	394	78	4800	381	338	ND MINOT	425	48	6110	397	271	WV HUNTINGTON	250	20	3164	198	465
IA WATERLOO	423	81	4865	160	327	ND WILLISTON	413	40	6061	295	90	WI EAU CLAIRE	464	96	5596	401	651
KS CONCORDIA	305	43	3646	103	-210	OR ANCON CANTON	327	47	4110	396	500	WI GREEN BAY	451	102	5170	266	458
KS DODGE CITY	286	55	3453	244	-317	OH CLEVELAND	326	46	3974	302	554	WI MADISON	430	96	4876	172	463
KS GOODLAND	343	99	3962	244	-272	OH COLUMBUS	300	32	3666	136	481	WI MILWAUKEE	393	68	4240	-111	236
KS RUSSELL	287	38	3500	83	-249	OH CINCINNATI	277	22	3605	304	495	WI WY CASPER	322	36	4283	-349	-213
KS TOPEKA	279	24	3542	115	135	OH DAYTON	308	38	3873	340	517	WY CHEYENNE	318	59	4470	160	86
KS WICHITA	253	18	3142	23	-34	OH TOLEDO	343	46	4203	213	588	WY LARAMIE	357	57	4718	-147	-451
KY LEXINGTON	253	18	3333	300	539	OH YOUNGSTOWN	336	44	4188	282	469	WY ROCK SPRINGS	372	72	5152	132	-192
KY LOUISVILLE	234	7	3149	258	608	OK OKLAHOMA CITY	228	36	2663	214	225	WY SHERIDAN	319	28	4693	-100	-421

Based on 1961-90 normals.

January Weather and Crop Summary

Weather

Montana's weather was a representative microcosm of the Nation's highly variable conditions. In the west, monthly temperatures averaged 11°F above normal at Missoula, while precipitation was less than one-third of normal. But in the northeast at Glasgow, temperatures were below normal and precipitation was nearly 200 percent of normal. The same arctic front that sliced through Montana also governed weather conditions elsewhere in the United States. Precipitation was infrequent south and west of the front, and persistent but generally light farther north and east. One notable exception occurred from the Ohio Valley and Middle Atlantic States to New England, where heavier precipitation, often in the form of ice and snow, menaced major population centers.

The Northeast (Maryland to Maine) experienced its third coldest January of the century, behind only 1977 and 1918. Extremely harsh conditions also prevailed as far west as the Dakotas and as far south as the Ohio Valley. The arctic episode peaked on January 19, when more than a dozen all-time record lows were shattered from Indiana to Pennsylvania. New Whiteland, IN, about 15 miles south of Indianapolis, registered -36°F to establish a State record. St. Cloud, MN reported -40°F, 3 degrees shy of an all-time record, in the midst of a record 181-hour sub-zero spell that ended on January 20. Temperatures plunged below -20°F as far south as the Ohio River at Louisville, KY (-22°F). A brief thaw and unwelcomed heavy rain arrived in the Ohio Valley between January 25 and 27. Minor to moderate flooding quickly developed on the Ohio River and numerous tributaries from western New York to West Virginia and Ohio as runoff combined with melting snow. Storms had dumped a foot or more of snow on portions of the Ohio Valley on January 4 and 17.

Snow cover thickened considerably during the month from the upper Mississippi Valley and western Great Lakes States eastward into New England. Depths increased from a trace to 13 inches at Madison, WI, and from 4 inches to 15 inches at Concord, NH. The central Plains remained largely snow-free until January 26, when a storm blanketed western Kansas and Nebraska (except the panhandle) with up to 10 inches of snow. Beneficial moisture graced southern Plains wheat areas during a flurry of late-month snowstorms, and by January 31, 10 inches covered Amarillo, TX. Wheat areas of the Pacific Northwest received virtually no snow, but minimum temperatures remained well above 0°F.

At higher elevations of the West, snowfall continued to lag normal rates. The northern portion of California's Sierra Nevada was brushed by a storm during the first week of January; otherwise, dry weather prevailed (as it had since mid-December) until January 23-25. On February 1, Sierra Nevada snow pack stood at a meager 50 percent of normal, ranging from 35 percent of normal in the south to 60 percent of normal in the north.

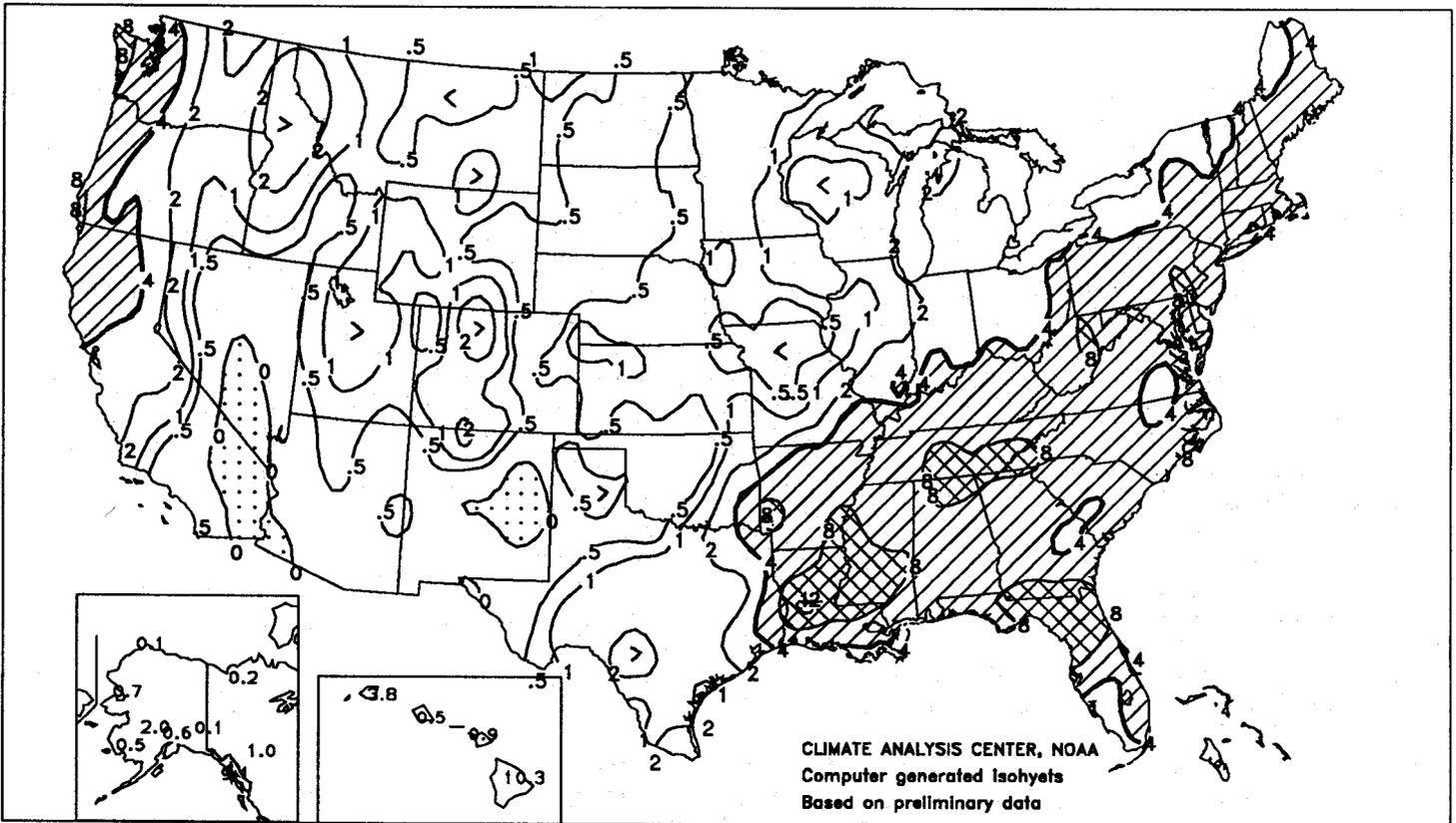
In contrast, numerous locations from the middle Ohio Valley to the Northeast experienced record snowfall. Parkersburg, WV received more snow during January (39.6 inches) than had fallen during the winters of 1991-92 and 1992-93 combined. Morgantown, WV had its snowiest month on record (39.7 inches), and Caribou, ME had its snowiest January (44.5 inches). In addition, Caribou experienced a sub-zero monthly average temperature (-0.7°F) for the first time ever.

Fieldwork

Winter wheat in the upper Great Plains, upper Mississippi Valley, Great Lakes, and in northern parts of the Ohio Valley had sufficient snow cover for protection from the cold for the month. The mid-month storm extended the snow cover to the middle Mississippi Valley and over most of the Ohio Valley, which helped protect the wheat from the frigid conditions which followed the storm. More mild conditions and rain reduced snow cover across much of the middle Mississippi Valley and most of the Ohio Valley. The melting snow and rain at the end of the month caused ponding and flooding of some wheat fields in parts of the Ohio Valley. In the Southeast, winter wheat progress was hindered by the cool, wet conditions for the month. Dry conditions in the central and southern Great Plains and California stressed the winter wheat crop. Precipitation fell over these areas by the end of the month and improved prospects. However, additional rainfall was needed to sustain the improvements. Little or no snow cover was available for wheat in the Northwest during January. Mild conditions allowed the wheat to go through the month with no real problems. However, these mild conditions allowed wheat to break dormancy in some parts of Idaho.

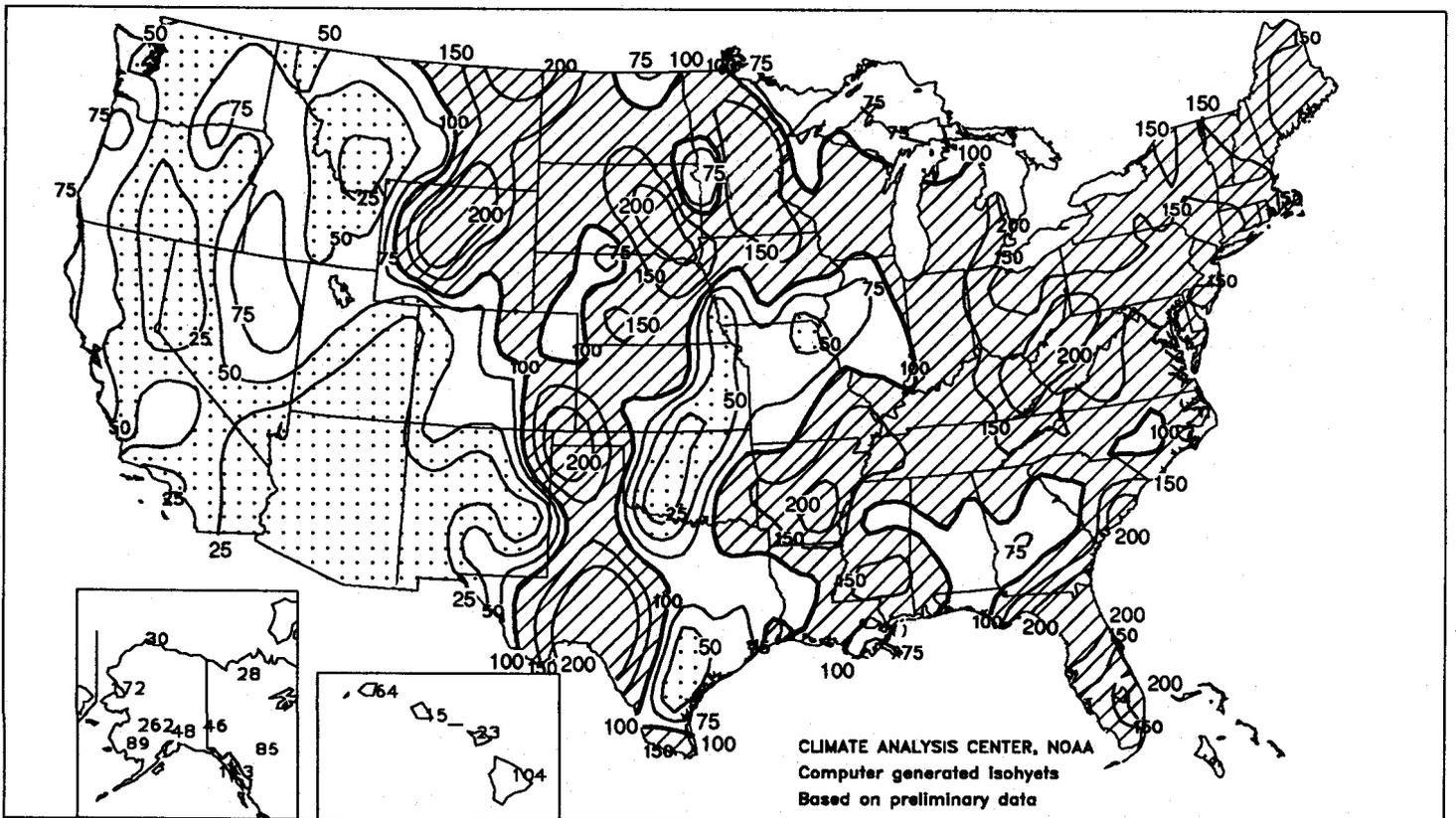
TOTAL PRECIPITATION (inches)

JAN 1994



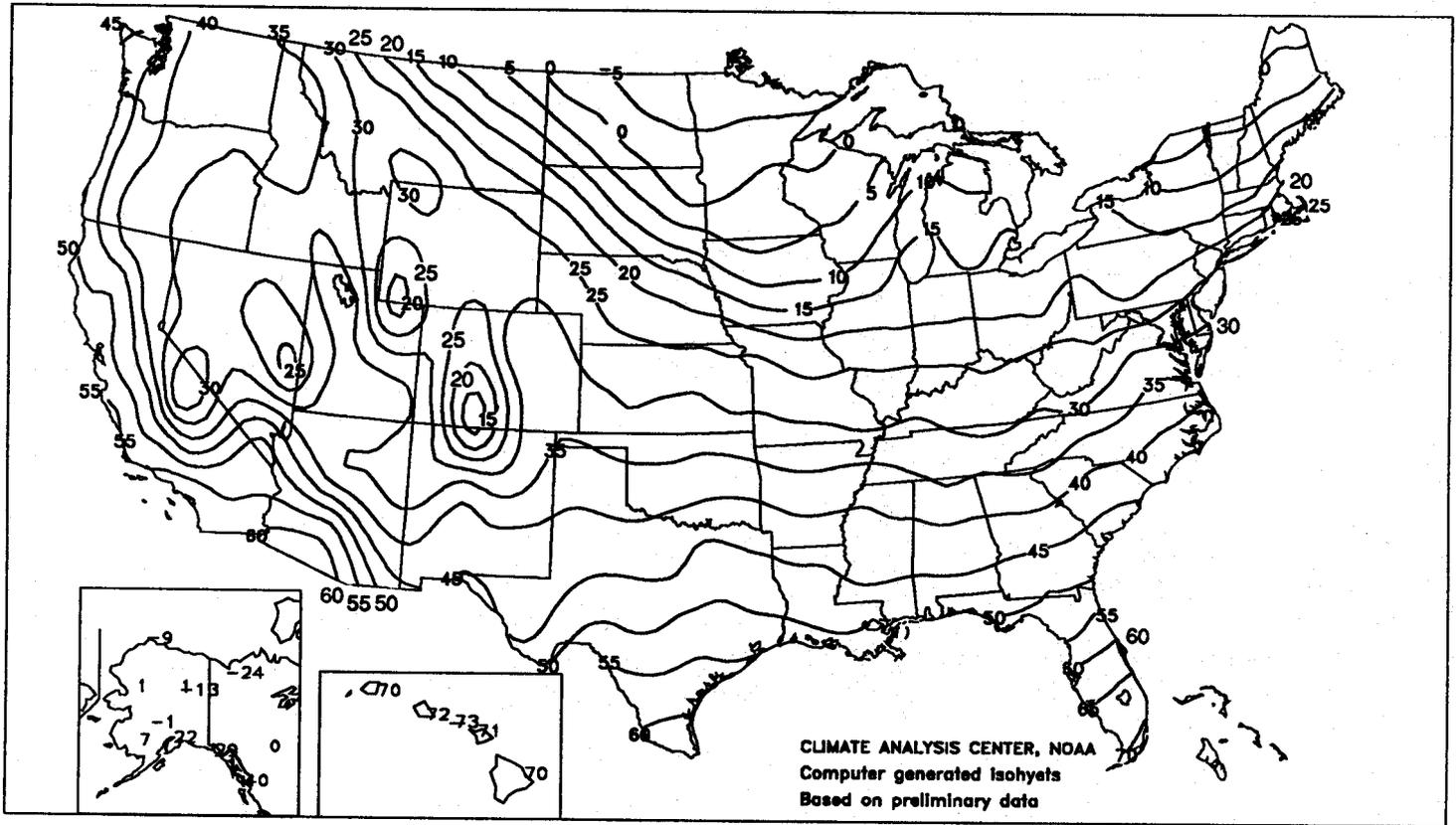
PERCENT OF NORMAL PRECIPITATION

JAN 1994



AVERAGE TEMPERATURE(°F)

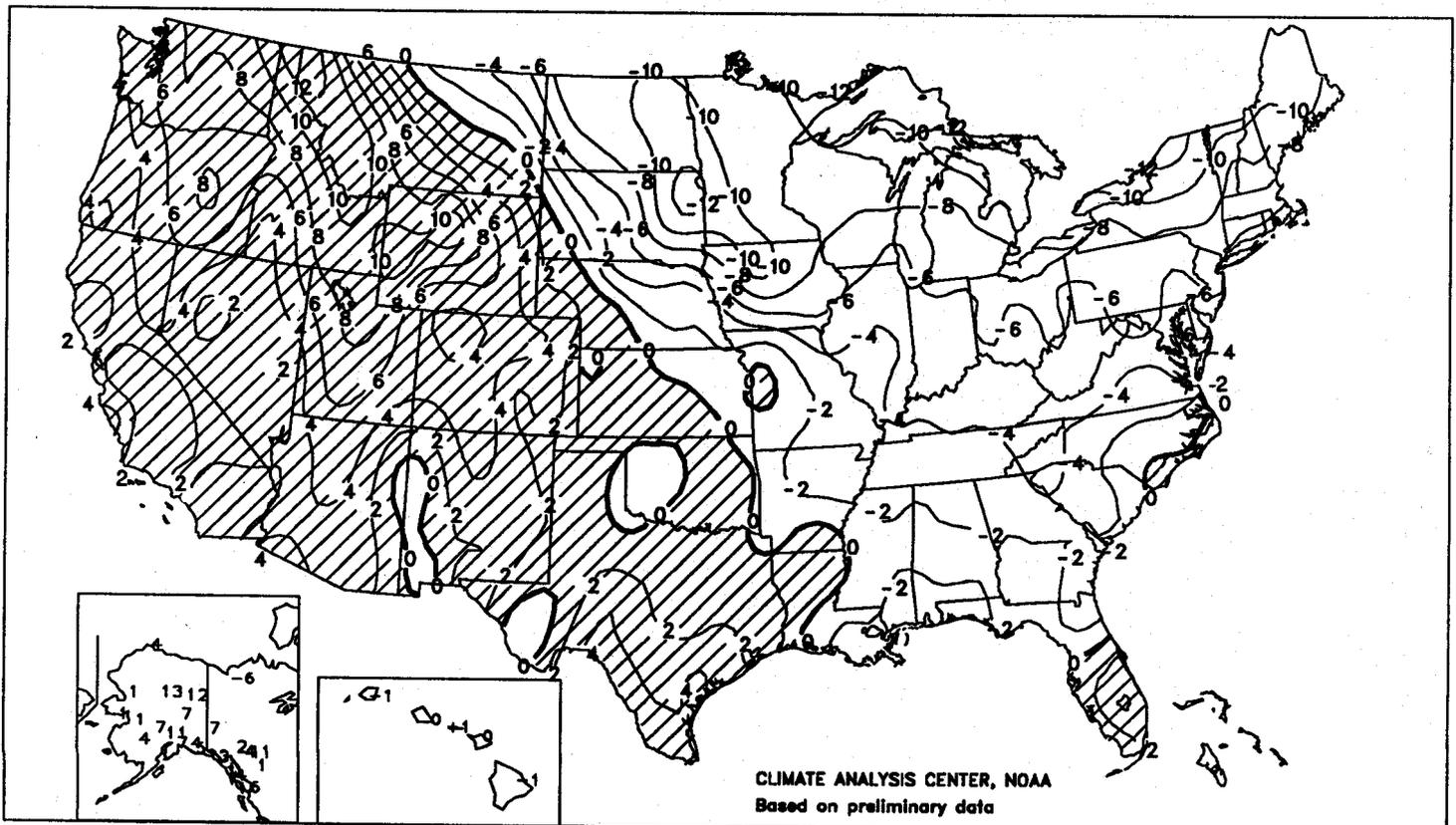
JAN 1994



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

Departure of Average Temperature from Normal(°F)

JAN 1994



CLIMATE ANALYSIS CENTER, NOAA
Based on preliminary data

TEMPERATURE AND PRECIPITATION SUMMARY

January 1994

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	40	-2	5.1	0.0	LA BATON ROUGE	48	-2	6.6	1.7	OK YOUNGSTOWN	18	-5	2.8	0.6
AL HUNTSVILLE	36	-3	6.5	1.3	LA LAKE CHARLES	51	0	3.8	-0.7	OK OKLAHOMA CITY	36	0	0.2	-0.9
AL MOBILE	47	-3	6.6	1.8	LA NEW ORLEANS	50	-1	3.2	-1.8	OK TULSA	35	0	0.7	-0.9
AK MONTGOMERY	44	-1	3.8	-1.1	ME SHREVEPORT	46	1	3.6	-0.6	OR ASTORIA	45	3	6.8	-3.2
AK ANCHORAGE	22	7	0.6	-0.2	ME CARIBOU	-1	-10	3.7	1.3	OR BURNS	32	2	0.3	-0.7
AK BARROW	-9	4	T	-0.1	ME PORTLAND	14	-7	5.3	1.8	OR MEDFORD	40	2	1.1	-1.6
AK FAIRBANKS	-1	9	0.5	0.0	MD BALTIMORE	27	-5	4.6	1.5	OR PENDLETON	41	1	1.6	0.1
AK JUNEAU	28	3	6.4	1.9	MD SALLISBURY	31	-3	3.5	-0.1	OR PORTLAND	44	4	3.6	-1.8
AK KODIAK	35	5	11.5	4.1	MA BOSTON	22	-7	5.2	1.6	OR SALEM	44	4	4.3	-1.5
AK NOME	5	-2	0.5	-0.2	MA CHATHAM	26	-4	6.2	2.5	PA ALLENTOWN	20	16	5.6	2.5
AZ FLAGSTAFF	33	4	0.4	-1.6	MI ALPENA	8	-10	2.0	0.3	PA ERIE	18	-7	2.6	0.4
AZ PHOENIX	57	3	0.1	-0.5	MI DETROIT	17	-6	2.8	1.0	PA HARRISBURG	22	-7	5.6	2.7
AZ PRESCOTT	40	4	0.3	-1.3	MI FLINT	13	-8	1.7	0.3	PA PHILADELPHIA	27	-3	4.3	1.1
AZ TUCSON	54	2	T	-0.8	MI GRAND RAPIDS	14	-8	2.7	0.8	PA PITTSBURGH	21	-5	3.9	1.4
AZ WINSLOW	35	3	0.2	-0.2	MI HOUGHTON LAKE	10	-7	1.9	0.4	PA SCRANTON	19	-6	3.3	1.2
AR FORT SMITH	37	0	3.5	1.6	MI LANSING	14	-6	1.9	0.4	PA WILLIAMSPORT	19	-7	3.5	0.9
AR LITTLE ROCK	37	-2	5.1	2.1	MI MARQUETTE	3	-9	1.6	-0.5	RI PROVIDENCE	22	-6	5.5	1.7
CA BAKERSFIELD	48	1	0.6	-0.3	MI MUSKOGEE	16	7	2.7	0.3	SC CHARLESTON	47	-2	7.5	4.0
CA BISHOP	39	2	T	T	MI SAULT ST. MARIE	0	-13	2.2	-0.2	SC COLUMBIA	43	-2	4.2	-0.3
CA EUREKA	51	3	5.1	-0.9	MN ALEXANDRIA	-2	-9	0.5	-0.4	SC FLORENCE	43	-1	4.4	0.8
CA FRESNO	47	1	1.2	-0.8	MN DULUTH	-2	-9	1.8	0.6	SC GREENVILLE	37	-3	4.2	0.1
CA LOS ANGELES	59	2	0.3	-2.1	MN INT'L FALLS	-8	-9	0.5	-0.4	SD ABERDEEN	0	-10	0.8	0.2
CA REDDING	48	3	3.3	-2.7	MN MINNEAPOLIS	4	-7	1.2	0.2	SD HURON	4	-9	0.9	0.5
CA SACRAMENTO	47	2	1.5	-2.2	MN ROCHESTER	3	-8	1.2	0.4	SD RAPID CITY	23	0	0.4	0.1
CA SAN DIEGO	58	1	0.7	-1.1	MS ST. CLOUD	0	-8	1.1	0.4	TN SIOUX FALLS	6	-8	1.0	0.5
CA SAN FRANCISCO	51	3	2.5	-1.8	MS GREENWOOD	41	-1	2.8	-2.0	TN BRISTOL	31	-3	4.7	1.5
CO ALAMOSA	19	4	0.2	-0.1	MS JACKSON	43	-1	8.3	2.8	TN CHATTANOOGA	36	-1	6.4	1.5
CO CO. SPRINGS	32	3	0.2	-0.1	MS MERIDIAN	43	-2	8.2	3.1	TN KNOXVILLE	32	-4	7.1	2.9
CO DENVER	34	5	0.5	0.0	MO TUPELO	37	-3	4.6	-0.3	TN MEMPHIS	38	-2	5.5	1.8
CO GRAND JUNCTION	32	7	0.2	-0.3	MO CAPE GIRARDEAU	29	-2	4.6	1.6	TN NASHVILLE	33	-3	4.4	0.8
CO PUEBLO	30	1	0.5	0.1	MO COLUMBIA	25	-1	0.8	-0.7	TX ABILENE	44	1	1.1	0.1
CT BRIDGEPORT	23	-6	5.1	1.9	MO KANSAS CITY	25	-1	0.6	-0.5	TX AMARILLO	37	1	1.0	0.5
CT HARTFORD	19	-6	5.8	2.4	MO SAINT LOUIS	27	-3	2.1	0.3	TX AUSTIN	52	3	1.4	-0.3
DC WASHINGTON	29	-6	4.3	1.6	MT BILLINGS	30	0	1.4	-0.3	TX BEAUMONT	52	1	6.9	2.1
FL APALACHICOLA	51	-1	6.5	2.6	MT SPRINGFIELD	28	5	0.4	-0.5	TX BROWNSVILLE	63	3	2.0	0.4
FL DAYTONA BEACH	58	0	5.6	2.8	MT GREAT LAGOON	8	-3	0.7	0.4	TX CORPUS CHRISTI	59	4	1.0	-0.7
FL FT. MYERS	65	1	2.4	0.6	MT GREAT FALLS	27	6	0.5	-0.4	TX DEL RIO	54	5	2.4	1.2
FL JACKSONVILLE	51	-4	6.6	3.5	MT HAVRE	14	-1	1.0	0.5	TX EL PASO	46	3	T	-0.4
FL KEY WEST	70	0	2.3	0.3	MT HELENA	30	10	0.2	-0.4	TX FORT WORTH	46	4	1.4	-0.4
FL MIAMI	69	2	3.6	1.6	MT KALISPELL	32	12	1.1	-0.4	TX GALVESTON	55	2	2.0	-1.2
FL ORLANDO	61	1	4.0	1.7	MT MILLS CITY	18	2	0.8	0.2	TX HOUSTON	53	3	2.1	-1.7
FL TALLAHASSEE	49	-1	8.2	3.5	NE MISSOULA	34	11	0.4	-0.9	TX LARDO	---	---	---	---
FL TAMPA	61	1	3.7	1.7	NE GRAND ISLAND	21	-1	0.7	0.2	TX LUBBOCK	41	2	0.4	0.0
FL WEST PALM BEACH	68	2	6.0	3.6	NE LINCOLN	21	-1	0.4	-0.1	TX MIDLAND	44	1	1.0	0.5
GA ATHENS	39	-3	3.9	-0.7	NE NORFOLK	17	-2	0.8	0.3	TX SAN ANGELO	47	3	1.7	0.9
GA ATLANTA	40	-1	5.1	0.4	NE NORTH PLATTE	24	2	0.5	0.2	TX SAN ANTONIO	52	3	1.6	-0.2
GA AUGUSTA	42	-2	3.9	-0.1	NE OMAHA	23	2	T	-0.6	TX VICTORIA	56	4	1.4	-2.0
GA MACON	43	-3	3.8	-0.8	NE SCOTT'S BLUFF	28	3	0.6	0.1	TX WACO	46	1	1.5	-0.2
GA SAVANNAH	48	-1	4.7	1.1	NE VALENTINE	19	-4	0.3	-0.1	TX WICHITA FALLS	40	1	0.2	-1.1
HI HILO	70	-2	10.4	0.5	WV ELKO	29	4	---	---	UT BLANDING	34	7	0.1	-1.1
HI HONOLULU	72	-1	0.5	-3.0	WV ELY	27	3	0.6	-0.1	UT CEDAR CITY	35	6	0.1	-0.6
HI KAHULUI	71	0	0.9	-3.2	WV LAS VEGAS	49	4	T	-0.4	UT SALT LAKE CITY	37	9	0.6	-0.5
HI LIHUE	70	-1	4.0	-1.9	WV RENO	38	5	0.1	-1.0	VT BURLINGTON	7	-9	2.2	0.4
ID BOISE	33	4	1.3	-0.2	WV WINNEMUCA	32	2	0.4	-0.3	VA LYNCHBURG	32	-2	4.8	1.9
ID LEWISTON	40	7	0.9	-0.4	WV COBURN	11	-8	3.5	1.0	VA NORFOLK	37	-3	4.1	0.3
ID POCASTELLO	32	9	0.5	-0.5	NJ ATLANTIC CITY	28	-4	4.1	0.7	VA RICHMOND	33	-2	3.1	-0.1
IL CAIRO	---	---	---	---	NM ALBUQUERQUE	38	4	T	-0.4	VA ROANOKE	31	-4	4.5	1.9
IL CHICAGO	16	-5	1.8	0.2	NM CLOVIS	38	2	T	-0.4	WA COLVILLE	---	---	---	---
IL MOLINE	15	-5	1.0	-0.5	NM ROSWELL	41	2	T	-0.3	WA QUILLAYUTE	45	5	9.9	-4.5
IL PEORIA	18	-3	0.9	-0.6	NY ALBANY	13	-8	3.2	0.8	WA SEATTLE-TACOMA	45	5	2.5	-2.9
IL QUINCY	20	-3	0.4	-1.0	NY BINGHAMTON	13	-8	3.5	1.1	WA SPOKANE	36	9	1.4	-0.6
IL ROCKFORD	13	-6	1.0	-0.3	NY BUFFALO	17	-7	2.9	0.2	WA WALLA WALLA	42	8	1.4	-0.9
IN SPRINGFIELD	21	-3	1.2	-0.4	NY NEW YORK	26	-6	4.7	1.7	WA YAKIMA	36	7	0.4	-0.8
IN EVANSVILLE	27	-5	3.2	0.2	NY ROCHESTER	15	-9	2.7	0.6	WV BECKLEY	26	-3	4.6	1.7
IN FORT WAYNE	19	-4	2.7	0.8	NY SYRACUSE	12	-10	3.4	1.0	WV CHARLESTON	28	-4	6.4	3.5
IN INDIANAPOLIS	22	-4	2.7	0.4	NC ASHEVILLE	32	-4	5.4	1.4	WV ELKINS	24	-3	5.2	2.1
IN SOUTH BEND	16	-7	2.5	0.2	NC CHARLOTTE	38	-1	3.5	-0.2	WV HUNTINGTON	27	-3	5.2	2.2
IA DES MOINES	13	-7	1.2	0.3	NC GREENSBORO	34	-3	3.7	0.5	WV PARKERSBURG	24	-6	7.1	3.9
IA DUBUQUE	10	-6	1.4	0.1	NC HATTERAS	45	1	7.4	2.1	WI GREEN BAY	6	-8	1.5	0.3
IA SIOUX CITY	12	-6	1.1	0.5	NC NEW BERN	42	-2	5.9	1.6	WI LACROSSE	6	-8	2.2	1.3
IA WATERLOO	8	-7	1.2	0.4	NC RALEIGH	37	-2	3.6	0.1	WI MADISON	9	-8	1.5	0.3
KS CONCORDIA	25	-1	0.6	0.0	ND WILLINGTON	44	0	7.0	2.3	WI MILWAUKEE	15	-4	2.2	0.6
KS DODGE CITY	29	0	0.4	-0.1	ND BISMARCK	1	-9	0.6	0.1	WI WAUSAU	4	-8	0.8	-0.1
KS GOODLAND	28	0	0.4	0.0	ND FARGO	-4	-10	0.7	0.0	WI CASPER	29	7	0.6	0.0
KS TOPEKA	26	-1	0.4	-0.5	ND GRAND FORKS	-7	-11	0.8	0.0	WI CHEYENNE	29	3	0.7	0.3
KS WICHITA	31	1	0.0	-0.9	ND WILLISTON	2	-7	1.0	0.4	WI LANDER	29	9	1.1	0.6
KY BOWLING GREEN	29	-4	5.3	1.5	OH AKRON-CANTON	19	-6	3.5	1.4	PR SHERIDAN	25	5	1.8	1.1
KY JACKSON	28	-5	8.0	4.2	OH CINCINNATI	23	-5	3.2	0.6	PR SAN JUAN	78	1	3.4	0.6
KY LEXINGTON	25	-6	4.5	1.6	OH CLEVELAND	19	-6	2.6	0.5					
KY LOUISVILLE	27	-5	4.1	1.2	OH COLUMBUS	21	-3	3.8	1.8					
KY PADUCAH	29	-4	4.1	0.8	OH DAYTON	20	-6	3.8	1.6					
					OH MANSFIELD	18	-7	2.5	0.5					
					OH TOLEDO	17	-6	2.8	1.1					

Based on 1961-90 normals.

January Weather in Historical Perspective

A quasi-stationary arctic front draped from Montana to the Gulf coast separated frigid air to its northeast from warm, dry air to its southwest. The nationally-averaged temperature of 29.8°F was nearly 1°F below the 100-year average (fig. 1), and the 33rd lowest since 1895 (table 1). Regionally, January temperatures ranged from the third lowest on record in the Northeast (fig. 2) to the second highest on record in the Northwest.

Precipitation averaged near-normal to below normal in all but the easternmost regions. In the Northeast, a 15th wettest January compounded the misery of bitter cold. Nationally, January was the 19th driest such month on record (table 1, fig. 3). Extremely dry weather covered areas from the High Plains to the Pacific coast, including California, which notched its 16th driest January. State rankings of precipitation and temperature appear in figure 4.

Figure 1

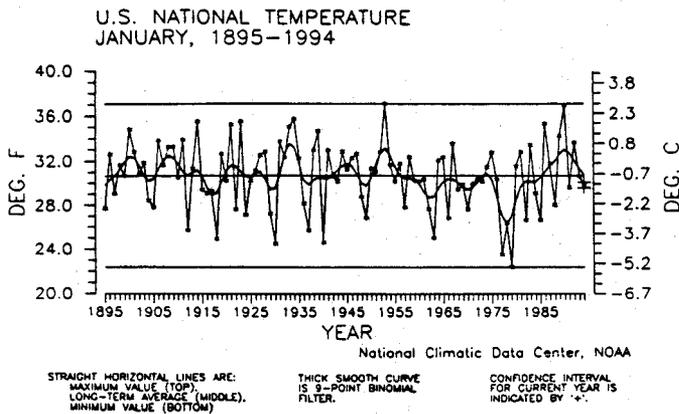


Figure 3

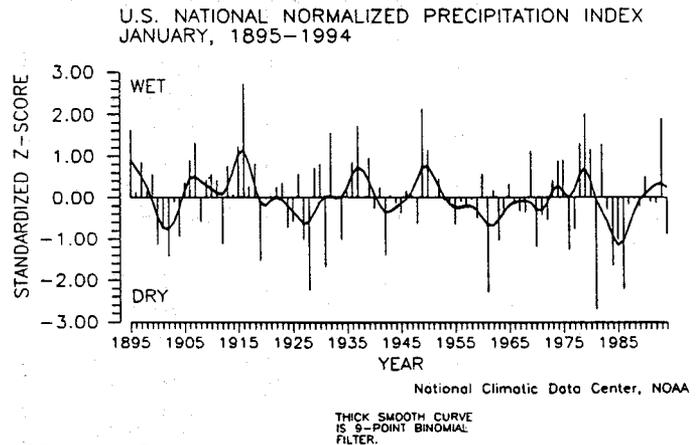


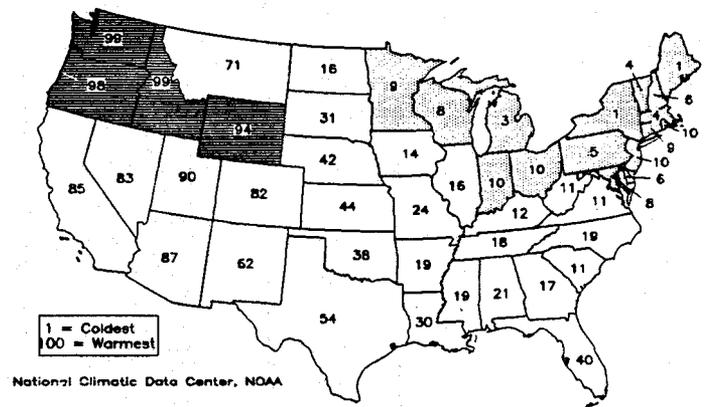
Table 1

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

Region	Precipitation	Temperature
Northeast	86	3
East North Central	58	7
Central	55	15
Southeast	83	18
West North Central	24	54
South	43	42
Southwest	3	83
Northwest	6	99
West	12	86
National	19	33

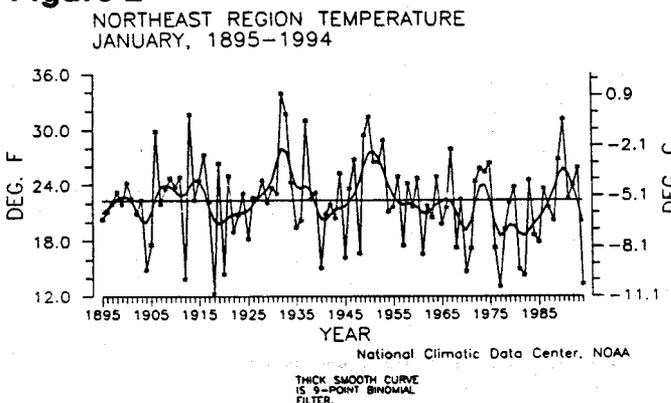
Figure 4

JANUARY 1994 STATEWIDE TEMPERATURE RANKS



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

Figure 2



JANUARY 1994 STATEWIDE PRECIPITATION RANKS



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

HEATING DEGREE DAYS (Base 65° F) January 1994

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL BIRMINGHAM	779	50	PORTLAND	1573	203	BRADFORD	1553	136
AL HUNTSVILLE	903	91	MD BALTIMORE	1174	145	ERIE	1438	210
MOBILE	543	51	MA BOSTON	1326	198	PHILADELPHIA	1158	85
AL MONTGOMERY	660	66	MI ALPENA	1751	282	PITTSBURGH	1358	152
AK ANCHORAGE	1324	-229	MI DETROIT	1471	166	SCRANTON	1421	172
BARROW	2262	-168	MI FLINT	1587	238	WILLIAMSPORT	1427	193
BETHEL	1769	-38	MI GRAND RAPIDS	1565	226	RI PROVIDENCE	1316	166
COLD BAY	1014	-114	MI LANSING	1560	201	SC CHARLSTON	574	26
FAIRBANKS	2035	-293	MI MUSKEGON	1514	221	COLUMBIA	704	39
JUNEAU	1153	-112	MI TRAVERSE CITY	1636	235	GREENVILLE	870	98
KING SALMON	1341	-212	MN DULUTH	2057	259	SD ABERDEEN	1989	287
KOTzebue	1960	-86	MN INT'L FALLS	2227	243	HURON	1863	257
MCCRATH	2021	-264	MI KINGSBAPOLIS	1859	210	PIERRE	1673	182
NOME	1839	41	MI ROCHESTER	1889	230	RAPID CITY	1306	-18
ST PAUL ISLAND	1167	-23	MS JACKSON	712	56	SIOUX FALLS	1807	220
YAKUTAT	1100	-137	MI MERIDIAN	676	48	TN BRISTOL	1046	85
AZ FLAGSTAFF	989	-136	MO COLUMBIA	1244	85	CHATTANOOGA	892	36
PHOENIX	246	-116	MO KANSAS CITY	1227	9	KNOXVILLE	1021	122
TUCSON	342	-83	MO SAINT LOUIS	1178	71	MEMPHIS	839	55
AR FORT SMITH	862	-9	MO SPRINGFIELD	1074	23	NASHVILLE	974	81
LITTLE ROCK	848	26	MT BILLINGS	1140	-168	TX ABILENE	640	-48
CA FRESNO	549	-49	MT GLASCOO	1765	79	AMARILLO	875	-52
LOS ANGELES	185	-73	MT GREAT FALLS	1166	-192	AUSTIN	396	-118
SACRAMENTO	545	-69	MT HAVRE	1608	36	BROWNSVILLE	130	-102
SAN DIEGO	211	-34	MT HELENA	1077	-330	CORPUS CHRISTI	211	-127
SAN FRANCISCO	409	-96	MT KALISPELL	1013	-367	DALLAS FT WORTH	594	-76
CO COLORADO SPRINGS	1019	-103	MT MISSOULA	959	-352	EL PASO	592	-96
DENVER	940	-154	NE GRAND ISLAND	1357	21	HOUSTON	391	-77
GRAND JUNCTION	1023	-217	NE NORTH PLATTE	1263	-82	LUBBOCK	753	-59
CT HARTFORD	1433	181	NE OMAHA	1553	173	LUFKIN	508	-42
DE WILMINGTON	1201	135	NE SCOTTSDALE	1141	-102	MIDLAND ODESSA	639	-59
DC WASHINGTON	1120	178	NV ELKO	1106	-131	SAN ANGELO	554	-106
FL DAYTONA BEACH	236	-46	NY ELY	1154	-98	SAN ANTONIO	389	-105
FORT MERR	71	-82	NY LAS VEGAS	472	-133	VICTORIA	288	-115
JACKSONVILLE	421	0	NEO RENO	838	-157	WACO	580	-40
KRY WEST	9	-35	WIMMEMOCCA	1011	-93	WICHITA FALLS	756	-25
MIAMI	27	-61	NE CONCORD	1657	219	UT CEDAR CITY	911	-190
ORLANDO	161	-73	NJ ATLANTIC CITY	1158	101	SALT LAKE CITY	867	-283
PENSACOLA	494	23	NEENAH	1223	157	VT BURLINGTON	1787	277
TALLAHASSEE	476	5	NM ALBUQUERQUE	819	-136	VA LYNCHBURG	1049	94
TAMPA	161	-73	NY ALBANY	1616	240	WOPOLK	879	76
WEST PALM BEACH	48	-74	NY BINGHAMTON	1585	224	RICHMOND	976	68
GA ATHENS	807	88	NY BUFFALO	1479	196	ROANOKE	1066	120
ATLANTA	762	18	MASSENA	1927	355	WA OLYMPIA	667	-170
AUGUSTA	706	52	NY NEW YORK	1214	169	QUILLAYUTE	617	-161
MACON	682	67	NY ROCHESTER	1548	265	SEATTLE TACOMA	616	-156
SAVANNAH	536	20	NY SYRACUSE	1616	295	SPOKANE	902	-273
ID BOISE	987	-129	NC ASHEVILLE	1007	99	YAKIMA	878	-216
POCATELLO	1004	-289	NC CAPE HATTERAS	600	-39	WV BECKLEY	1212	102
IL CHICAGO	1507	143	NC CHARLOTTE	825	28	CHARLESTON	1139	119
MOLINE	1546	148	NC GREENSBORO	951	74	HUNTINGTON	1173	150
PEORIA	1441	96	NC RALEIGH DURHAM	868	59	WI EAU CLAIRE	1921	238
ROCKFORD	1607	156	NC WILMINGTON	651	20	GREEN BAY	1805	233
SPRINGFIELD	1343	78	ND BISMARCK	1977	247	MADISON	1724	205
IN EVANSVILLE	1161	79	ND FARGO	2107	275	MILWAUKEE	1542	113
FORT WAYNE	1429	124	ND MIDOT	1996	260	WY CASPER	1105	-216
INDIANAPOLIS	1333	108	ND WILLISTON	1926	187	CHRYSTON	1089	-105
SOUTH BEND	1504	211	OH AKRON CANTON	1433	187	LANDER	1108	-303
IA DES MOINES	1597	183	OH CLEVELAND	1420	174	ROCK SPRINGS	1195	-188
MASON CITY	1852	246	OH COLUMBUS	1358	161	SHERIDAN	1224	-146
SIOUX CITY	1622	156	OH CINCINNATI	1289	145			
WATERLOO	1765	203	OH DAYTON	1392	183			
KS CONCORDIA	1227	15	OH TOLEDO	1481	163			
DODGE CITY	1095	4	OH YOUNGSTOWN	1434	151			
GOODLAND	1134	-1	OK OKLAHOMA CITY	896	-6			
RUSSELL	1152	-11	OK TULSA	917	-7			
TOPEKA	1202	15	OR ASTORIA	607	-109			
WICHITA	1046	-55	OR ROGHE	688	-62			
KY LEXINGTON	1231	171	OR MEDFORD	747	-87			
LOUISVILLE	1181	149	OR NORTH BEND	502	-106			
LA BATON ROUGE	529	39	OR PENDLETON	731	-246			
LAKE CHARLES	446	-21	OR PORTLAND	625	-162			
NEW ORLEANS	464	14	OR REDMOND	862	-180			
SHEVEPORT	577	-46	OR SALEM	627	-160			
ME BANGOR	1762	289	PA ALLENTOWN	1370	180			

Based on 1961-90 normals.

National Agricultural Summary

January 31 - February 6, 1994

Weather for the week was dry, except for late-week rains which came to parts of the South, Southeast, and southern California. Temperatures averaged 3 to 15 degrees below normal for the week. Low temperatures were below freezing as far south as southern Texas and north-central Florida. However, little or no crop damage has been reported. Winter wheat in the northern Great Plains enjoyed ample snow cover. In the middle Mississippi and Ohio Valleys, above-freezing temperatures caused a decline in snow cover, which concerned producers. In Ohio, some winter wheat in low-lying areas suffered freeze damage. A virus infection that appeared earlier in Texas wheat has now been reported in Kansas. Many wheat fields in Texas needed more moisture and warm weather to

promote growth. In the Northwest, wheat producers remained concerned about the lack of snow cover for their fields. This week's rains in the South and California delayed spring fieldwork, some vegetable planting, and harvest activities. The cool weather delayed the maturity of several vegetable crops in Florida. Pasture feed conditions and livestock conditions were rated fair to good across the Nation. Low temperatures in the Midwest required livestock producers to increase the amount of supplemental feeding. Muddy fields caused problems for livestock in Kentucky. California pastures benefited from the rain. Texas pastures needed additional moisture and warmth to promote growth. Some hay shortages were reported in parts of Texas, Louisiana, and Georgia.

(Continued from front cover)

McComb, MS on Wednesday, but extreme southern Texas remained above freezing. A day later, Tallahassee, FL noted 20°F, while frost reached into the central Peninsula, where Tampa observed 35°F. Cold air also spilled westward across the Rockies, resulting in daily record lows in Alamosa, CO (-26°F on Wednesday), and Redding, CA (26°F on Friday). In contrast, record warmth covered Alaska, where temperatures averaged up to 30°F above normal. The weekly average temperature of 10°F in Barrow, AK was higher than the 8-degree value in Sioux City, IA. Late in the week, a storm system spun through southern California before streaking into the Southeast. Rainfall on Friday in California included 0.74 inches at Palm Springs and 0.65 inches in Los Angeles, while 9 inches of snow blanketed Big Bear Lake. Farther east, locally heavy rain developed from Mississippi to Georgia. Meridian, MS received more than 4 inches.

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 0.17 to 2.56 in. north; none to 4.00 in. central; 0.23 to 3.10 in. south. Temperatures 2 to 7° below normal north; 1 to 6° below normal central; normal to 5° below normal south. Lows 12 to 20° north; 11 to 24° central; 19 to 27° south. Highs 60 to 66° north; 62 to 68° central; 68 to 78° south. Primary activities: General care of livestock, poultry, catfish.

ARIZONA: Temperatures below normal, 2 to 6° below normal. Extremes -4°; 66° higher elevations; 16°; 73° deserts. Precipitation across State, generally under 0.25 in.

Small grains planting almost complete. Small grain seeded 100%, 98% 1993, 99% avg.; established 98%, 94% 1993, 96% avg. Alfalfa condition good. Harvest light, sheepling off activities light; stand renovation, new stand establishment mostly normal. Citrus harvest active. Grapefruit, navel, sweet oranges, lemons available central, western areas. Tangerines, tangelos, also available central area. Winter vegetable harvest active. Available from western, central areas: Broccoli, cabbage, cauliflower, leaf, romaine lettuces, spinach. Western harvest also included: Iceberg, Boston lettuce, endive, escarole. Central crops available included: Beets, carrots, mixed greens, green onions, radishes, rappini, turnips. Pecans, tomatoes continued available eastern areas.

ARKANSAS: Temperatures a few degrees below normal. Extremes 8°; 70°. Light precipitation, latter part of the week, mostly in southern half of State. Rainfall none to 0.86 in. Soil moisture supplies adequate to surplus.

Wheat fair to good, needs dry weather. Livestock, pastures good.

CALIFORNIA: Southern half of the State reported precipitation of 0.70 in. or less. Temperatures generally averaged a few degrees below normal.

Wet soils slowed field activities most areas. Small grains, winter forages, new alfalfa excellent growth. Fertilization, irrigation, weed treatments resumed as fields dried. Sugarbeets, dry beans, alfalfa irrigated, sprayed weeds. Fields prepared for planting cotton, other row crops where soil moisture conditions allowed. Established alfalfa, bermuda grass chemically burned to stimulate new growth. Alfalfa cut hay, greenchopped desert counties. Winter cultural practices continued orchards. Grape growers pruning, shredding bush, tying vines, spraying. Orchards pruned, treated with herbicides. Buds swelling almonds, early varieties nectarines. Some bee hives moved. Navel orange, lemon, grapefruit, tangerine harvests continued slow pace. Valencia orange harvesting begin soon Riverside County. Strawberry harvest desert valleys. Artichokes packed Riverside County. Asparagus harvested desert valleys good quality. Harvest broccoli San Joaquin, Imperial valleys. Cabbage harvested Coachella Valley. Carrots moved Kern County. Cauliflower harvested central, desert valleys, while celery harvested desert area. Head lettuce fields thinned, progressing nicely San Joaquin Valley. Head, Leaf, Romaine

lettuce harvested Coachella Valley. Melons planted desert valleys. Winter potatoes harvested Riverside, Kern counties, while spring potato planting Kern County. Planting peppers, squash, sweet corn Imperial Valley. Processing spinach developing nicely Tulare County. Processing tomato beds treated pre-emergent herbicides, irrigated, planted central valley. Other crops being harvested: sweet potatoes, taro root, turnips, various oriental vegetables. Range, pasture improving because of general rains previous week. New born calves, lambs doing well.

COLORADO: Cold high pressure dominated the State on the 31st, 1st resulting in fair skies, much below normal temperatures. A few western valleys received trace amounts of precipitation; otherwise, dry conditions prevailed. By the 2nd a strong dry northwesterly flow aloft resulted in gusty winds in the mountains, a return to more normal temperatures across the eastern plains. Temperatures east of the mountains continued to moderate due to the dry downslope westerly winds coming off the mountains. The only significant precipitation of the week occurred on the 4th over the southwest quarter of the State with up to 0.50 in. of moisture. Weekend was dominated by a strong westerly flow aloft resulting in windy, mild conditions in the east and dry weather statewide.

Care of livestock, equipment maintenance was the main producer activity.

FLORIDA: Temperatures 0 to 7° below normal except 0 to 2° above normal southeast Peninsula. Highs, low to mid 80s. Lows, 20s north, to mid 50s southeast coast. Rain 1 to 3 days. Rain 0.20 to 2.25 in.

Soil moisture mostly adequate to surplus throughout State, scattered areas of short moisture. Sugarcane harvest active. Sugarcane planting virtually complete. Maintaining tobacco beds. Making preparations for spring planted crops. Citrus groves very good to excellent condition, moisture adequate, few showers this week. New growth slowly progressing. Loss from droppage very light. Early mid orange harvest very active all areas. Seedless grapefruit movement for export, domestic use active, temple, Honey tangerine harvest increasing. Navel, early tangerine harvest vary as supplies are low. Caretakers cutting cover crops, hedging, topping all areas. Major vegetable producing areas received light to moderate amounts of rain. Crop conditions generally good. Fieldwork slightly hampered some areas by wet field conditions, rain. Cool weather delayed maturity of several crops. Leading vegetable shipments: Tomatoes, peppers, cabbage, squash, cucumbers. Also available: Snap beans, carrots, celery, chinese cabbage, sweet corn, eggplant, escarole, iceberg lettuce, leaf lettuce, romaine, specialty lettuces, radishes, strawberries, tomatoes, cherry tomatoes. Pasture feed 30% poor, 65% fair, 5% good. Cattle herds mostly poor to good condition.

GEORGIA: Temperatures 2 to 7° below normal. Highs 50s north, 60s central, southeast, 70s southwest, south central. Low teens north, 20s elsewhere. Rained 1 to 3 days. Totals 0.33 to 1.00 in. north, 0.50 to 2.25 in. in the central, south.

Soil moisture adequate central to northern areas, surplus south. Wet weather continues to delay field preparation south, some limited preparation north. Few reports of topdressing small grain fields, tobacco bed preparation. Soybean, cotton harvest complete. Pecan harvest progress little change from last week. Most crop fair to good, mostly good. Onions good. Pastures poor to fair, mostly fair. Cattle, hogs good. Cattle feed supply shortages increasing much northern two-thirds of State.

HAWAII: Cool, windy weather with some rain showers during week. A high pressure system, low pressure storm system generated gusty winds over the island chain. Rainfall none to 4.60 in. Temperatures high 50s to low 80s.

Spraying activities suspended or delayed by gusty winds. Cool weather continued to slow crop progress. Insects, disease infestations controlled with regular spraying. Banana shipments moderate. Papaya output near last week's level.

IDAHO: Temperatures 2° above normal to 7° below normal. Precipitation none north, none to 0.04 in. southwest, none to 0.02 in. south-central, none to 1.00 in. east.

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

ILLINOIS: Drier-than-normal weather occurred last week, as temperatures were mostly 5 to 7° below normal. Highs mid 20s to upper 30s. Lows averaged from the lower teens to upper teens. Precipitation less than 0.10 in. across the State. Snowcover limited to the far north with 1 to 6 in.

Farmers concerns continued in the areas of winter wheat, livestock conditions, supplies of quality hay.

INDIANA: Temperatures below normal. Temperatures near normal along the Ohio River to 5 to 10° below normal over the north. Highs were mostly in the 20s to 30s, while average lows were generally single digits, teens. Precipitation, liquid equivalent, 0.01 to 0.33 in. Many locations did not report any precipitation. Snow cover had pretty much disappeared by the end of the week.

Operators continue to report both good, poor conditions on wheat fields, depending on the snowcover that was available during the recent cold snap. The lack of snow now worries operators in case of another cold snap. Hay supplies are good to adequate. Livestock reported to be mostly in good condition. Main activities this past week included: Grain marketing, farm meetings, maintenance, hauling manure, tax preparation.

IOWA: Another very cold week. Temperatures 5° below normal southwest to 16° below normal northeast. Extremes 38° (south central, 5th); -22° (northwest, 1st). Very light snowfall early week; precipitation trace southwest to 0.07 in. northeast; 0.01 in. (normal 0.20 in.).

Cold temperatures has required livestock producers to feed high energy feed. There is some TGE in pigs.

KANSAS: Some relief from the cold occurred by the weekend. Low temperatures, below zero, covered most of the western two-thirds of the State, while the eastern one-third remained in the single digit readings. Temperatures at least 3° below normal across State. High temperatures at the end of the week were in the upper 40s to 50s. Precipitation was very light with all

districts averaging less than 0.10 in. A new virus infection found earlier in wheat in Texas has now also been identified in Kansas.

KENTUCKY: Highest temperatures rose into the low to mid 50s, low temperatures between 10 to 15°. Averaged low to mid 30s, near normal for period. Week was dry with only a few locations reporting precipitation. All amounts less than 0.10 in.

Soil moisture adequate to surplus. Limited field activity. Livestock benefited from more normal temperatures, but muddy field conditions prevailed. Burley Tobacco Market generally steady with twelve Ky markets remaining open for at least one more sale. Burley cooperatives received 35.4 percent of gross sales for season-to-date.

LOUISIANA: Temperatures 1.7 to 5.0° below normal. Extremes 20°; 80°. Rainfall 0.02 in. northwest to 0.74 in. northeast.

North: fieldwork was further delayed from last week's heavy rainfall. Most soils were too wet, keeping farmers from doing any major activities. Winter grazing of rye grass pasture, supplemental hay feeding continued active, however hay supplies were running a little short in some areas. Farmers continued equipment repair, attending various extension meetings around the State. South: fieldwork was limited due to heavy rains last week. Main activities: Cattle tending, grazing of rye grass, feeding of hay, repairing fencing. Sugarcane farmers continued drainage work, equipment maintenance while rice farmers made some progress on water leveling their fields. Farmers attended auctions, meetings around their areas.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.08 in., normal 0.69 in. Temperature 30.4°, normal 32.6°. Extremes -2°; 59°.

Activities: Caring for livestock. General chores. Frozen ground impairing manure spreading, small grain top-dressing.

DELAWARE: Precipitation none, normal 0.73 in. Temperature 30.5°, normal 33.5°. Extremes 16°; 51°.

Activities: Caring for livestock. General chores. Frozen ground impairing manure spreading, small grain top-dressing.

MICHIGAN: Extremes -29°; 38°. Precipitation none to 0.59 in. across the State. Most of the Lower Peninsula experienced daytime temperatures in the mid to upper 20s while nighttime temperatures continue to hover just below zero. Very light sporadic snow showers fell during the week giving way to a mostly clear, sunny weekend.

Overall, livestock remain in good condition with feed supplies adequate. Major activities included marketing crops, preparing tax returns, repairing machinery.

MINNESOTA: Temperatures 10 to 17° below normal for the State. Extremes -35°; 25°. Precipitation zero to 0.04 in., which was 0.08 to 0.17 in. below normal. Greatest weekly precipitation 0.10 in. Snowfall 1 in. or less for the State. Snow depth at week's end averaged 11 to 24 in. for the State.

Another week of below temperatures throughout the State kept outside activities to a minimum. Farmers busy ordering supplies for the 1994 growing season.

MISSISSIPPI: Temperatures 3.0° below normal. Extremes 11°; 79°. Precipitation minimal in the northern districts to 2.82 in. across the southeast district. Rainfall 0.93 in., 0.26 in. below normal. Soil temperature 44°.

Days suitable for fieldwork 1.6, 4.6 1993, 2.1 5 yr avg. Soil moisture 50% adequate, 38% surplus, 12% excessive. Hay supply 14% very short, 29% short, 57% adequate. Livestock 30% fair, 70% good. Pasture 77% of normal. Activities: Feeding livestock.

MISSOURI: Temperatures 1 to 6° below normal across State, warmer end of week. Precipitation about 0.02 in., largest amount central: 0.05 in.

Pasture feed 4% very poor, 17% poor, 56% fair, 23% good. Topsoil moisture 1% short, 62% adequate, 37% surplus. Subsoil moisture 76% adequate, 24% surplus. Wheat condition 7% very poor, 18% poor, 61% fair, 14% good. Supply of hay, roughage 11% short, 84% adequate, 5% surplus. Condition of livestock 28% fair, 69% good, 3% excellent.

MONTANA: Temperatures below normal. Precipitation none to light.

Protectiveness of snow cover for winter wheat mostly poor to fair. Grazing is mostly open to difficult. Farm, ranch activity mostly livestock care, feeding, general maintenance.

NEBRASKA: Temperatures 3° below normal in the Panhandle to 10° below normal in the central portions. Only trace amounts of precipitation fell across the State.

Producer activities included machinery repair, maintenance, livestock care, routine chores.

NEVADA: Showers accompanied passage of low pressure system across southern areas with precipitation 0.26 to 0.32 in. Temperatures colder than normal statewide. Extremes -19°; 62°.

Calving, lambing continues with no major problems reported. Mild weather easy on livestock feeding requirements. Major activities: Care, feeding of livestock, general maintenance.

NEW ENGLAND: Weather data not available.

Major farm activities: Caring for livestock.

NEW JERSEY: Temperatures were below normal; 20° north, 28° south, 30° coastal. Extremes -12°; 51°. Precipitation was below normal; 0.01 in. north, none south, coastal. Heaviest 24 hour total 0.05 in. on 1st, 2nd. Heaviest 24-hour snowfall 1 in. on the 1st, 2nd. Snow on ground on 7th with little in south, none to 4 in. central, 3 to 9 in. north.

Farmers busy caring for livestock, tending to other normal winter chores.

NEW MEXICO: Because of the extremely cold start, temperatures for the week averaged slightly more than 5° below normal for the State. Many of the colder spots experienced some readings below zero with extremes around the State reaching -15° north central mountains to 72° southeastern desert. Two minor winter storms affected the State. Higher precipitation near 0.50 in. several areas.

Farming activities were slowed due to the weather. Supplemental feeding was active around most of the State.

NEW YORK: Dry, arctic air over region. Temperatures well below normal. Dry, except for light snow in west.

Major activities: Tending livestock, spreading manure, attending meetings, maintenance. Continued coldness made outside activities difficult.

NORTH CAROLINA: Temperatures 4° below normal to near normal. Rainfall 2.67 in. at William O. Huske in Bladen County to no rain at several locations.

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; general farm maintenance, cutting wood.

NORTH DAKOTA: Temperatures 7 to 13° below normal. Extremes -33° northeast; 33° southwest. Snow depth was 16.9 in. compared to 6.6 in. last year.

Snow cover was sufficient to protect 99% winter wheat, 100% rye, alfalfa. Winter wheat 13% fair, 82% good, 5% excellent. Rye 6% fair, 84% good, 10% excellent. Calving, lambing was just underway in some areas. Cattle 26% fair, 74% good. Sheep 25% fair, 75% good. All livestock were receiving supplemental feed. Supplies of hay, forage were rated 1% short, 99% adequate. Sales of cattle, calves were 7% below normal, 93% normal. Secondary road conditions were 11% open, 89% difficult due mostly to drifting. Grain marketing normal to below normal.

OHIO: Weather turned cold, dry for most of the week before warmer air filtered into the State by the 5th. Temperatures 3 to 6° below normal with mean readings from the upper teens to mid 20s. Maximums ranged from the upper 20s to the upper 30s with mean lows ranging from the upper single digits north to upper teens south. After settling into the single digits below zero north, above zero south, mercuries peaked into the 40s to near 50° late in the period.

With most of the snow cover melted, the cold weather refroze any standing water. Winter wheat experienced some ice damage, especially in low-lying areas. Livestock required considerable amounts of roughage.

OKLAHOMA: Temperatures 5° below normal Panhandle 2° above normal east central. Precipitation none most of State to traces in northeast, east central, southeast.

Topsoil moisture 72% short, 28% adequate. Wheat 20% poor, 65% fair, 15% good. Feeders and calves steady to \$1.50 lower.

OREGON: Temperatures 3 to 6° below normal statewide. Precipitation: dry statewide.

Soil moisture: Adequate. Winter orchard pruning continued. Livestock good to excellent. Winter lamb grazing on grass seed fields continued. Supplemental feeding continued, statewide.

PENNSYLVANIA: Temperature, precipitation below normal. Temperature 19°, 8° below normal. Extremes -16°; 47°. Precipitation 0.06 in., 0.56 in. below normal.

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

PUERTO RICO: Rainfall 0.38 in., 0.23 in. below normal. Highest total 4.45 in. at Pico Del Este, 1.24 in. Rio Blanco Lower, 0.84 in. Canovanas. Highest 24 hour total 1.24 in. at Pico Del Este. Island temperatures 75 to 76° on the Coasts, 69 to 72° in the Interior with mean station temperature 78.8° at Guayama to 61.2° at Pico Del Este Luquillo. Extremes 51°; 91°.

SOUTH CAROLINA: Temperatures 2 to 4° below normal across State. Average precipitation 0.70 in.

Farm activities: Small grain condition good, some nitrogen applied. Tobacco beds good. Livestock good. Attending meetings.

SOUTH DAKOTA: Temperatures 1 to 15° below normal last week. Extremes -31°; 47°. Precipitation was generally light, below normal, except for the northern Black Hills which received several inches of snow. Maximum 0.76 in.

Topsoil 68% adequate, 32% surplus. Subsoil moisture 3% short, 68% adequate, 29% surplus. Winter rye was 100% good. Winter wheat 99% good, 1% excellent. Snow cover is mostly adequate to protect winter seedlings, isolated reports of wind erosion. Livestock: 16% fair, 67% good, 17% excellent. Feed supply 80% adequate, 20% surplus. Water supply 82% adequate, 18% surplus. Cold weather, snow, stress has increased energy demands for cattle, subsequently decreased performance. Ranchers busy caring for livestock, moving snow to reach feed supplies. Lambing underway in some areas. Other farm activities: Hauling grain, preparing taxes.

TENNESSEE: Temperatures 1 to 6° below normal with the Plateau being the coldest. Week began on a cold note, warming trend occurred by the weekend. Coldest temperature of the week was 11° degrees in Crossville on the 2nd. The warmest readings occurred in Chattanooga, where the high was 63° on both the 6th, 7th. Rainfall was well below normal for the week. None occurred in West, leaving an average departure of 1.06 in. for the area. Most rain fell on the 5th, 6th.

Winter feed supplies are dwindling, most cattle producers will be in good shape to make it to Spring. Wheat fields are in good condition. Routine maintenance, chores are the main activities.

TEXAS: High pressure maintained fair skies, cold conditions most of last week, however, southerly wind brought unseasonably mild weather over weekend. Eight of ten climate divisions recorded below normal mean temperature, -1° in South Central, Upper Coast division to -7° in Low Rolling Plains. North Central, East Texas divisions recorded near normal temperatures. Precipitation was below normal across State last week, as average amounts were less than 0.25 in., except for 0.28 in. Upper Coast division. Precipitation departures 0.07 in. Trans Pecos to 0.80 in. East Texas. Mean soil temperatures were mostly in 40s across State. Range of mean soil temperature was 32° at Bushland to 61° at Brownsville. Highest daily maximum soil temperature 74° at Beeville, lowest daily minimum soil temperature 29° at Pecos.

Crops: Small grains most fields across State should benefit from previous weeks moisture, precipitation that was received last week, more moisture, warm temperatures are needed. Some Blacklands wheat fields were being topdressed. Some Cross Timbers' producers were having the contend with greenbugs. In most areas of State, however, availability of forage from small grain pastures was very short. Statewide wheat condition 54% normal, 68% 1993.

Commercial Vegetables: In Rio Grande Valley onion crop made good progress, some watermelon acreage was planted. East Texas - some cool season crops were planted, while land preparation for warm season vegetables continued. High Plains some land preparation continued. San Antonio-Winter Garden area beets, cabbage, greens, spinach were harvested. Onion sets were planted. Trans Pecos earlier set onions made good progress while some producers continued to set onions. Fields were being prepared for additional vegetable planting. Peaches, pruning was active in many areas of State, producers continued to apply dormant oil spray. In East Texas, some producers were

concerned about limited number of chilling hours received. Freezing temperatures during first part of week damaged some early blooming trees in Edwards Plateau, South Central Texas.

Range and Livestock: Supplemental feeding continued in most areas. Hay supplies continued to decline. Pastures, ranges need additional moisture, warmer temperatures to promote forage growth. Southern High Plains producers were culling herds. Calving was active in some areas of Trans-Pecos. Livestock conditions remained varied across State.

UTAH: Both temperature maximums, minimums 6° below normal. Precipitation was light to moderate across Dixie, Western divisions, light across the rest of the State.

Major activities: Feeding, caring for livestock; general farm, equipment maintenance; marketing hay, grains; preparing taxes.

VIRGINIA: Temperatures above normal in the west, near normal over the rest of the State. Extremes 9°; 57°. Precipitation averaged above normal over central, southeast areas, near normal in the east, below normal over the rest of the State.

Days suitable for fieldwork 1.1. Topsoil moisture was 44% adequate, 56% surplus. Winter grains, grazing crops condition 1% very poor, 10% poor, 66% fair, 23% good. Forage from pastures, winter grazing crops dairy cattle 1%, beef cattle 7%, sheep 6%. Feeding, watering livestock, pesticide recertification, repairing machinery, working on farm records, preparing tobacco plantbeds, some topdressing wheat.

WASHINGTON: Temperatures 2 to 4° below normal west; 5° below normal to 5° above normal east. Precipitation none west; none to 0.03 in. east.

Days suitable for fieldwork 6.2. Soil moisture 35% short, 64% adequate, 1% surplus. Hay, other roughage supplies 10% short, 89% adequate, 1% surplus. Range, pasture 15% very poor, 15% poor, 40% fair, 35% good. Winter wheat dryland 4% very poor, 5% poor, 25% fair, 65% good, 1% excellent; irrigated 2% fair, 97% good, 1% excellent. Barley dryland 8% very poor, 8% poor, 64% fair, 20% good; irrigated 10% fair, 90% good. Snow cover for the winter grains continued to be lacking. Grass continued to grow in many pastures with the continued mild weather. Pruning in orchards, vineyards, berries continued. Some early peas were being planted. Christmas trees growers started planting. Calving, lambing proceeded with few problems.

WEST VIRGINIA: Temperature 28°. Extremes 1°; 54°. Precipitation 0.09 in. Temperatures 0 to 4° below normal. Precipitation averaged well below normal.

Farm activities: Calving, lambing, feeding livestock, bookkeeping, general maintenance.

WISCONSIN: Temperature 0°. Extremes -36°; 30°. Snowfall light during week. Sunny, seasonably cold for week.

Farm activity limited to animal husbandry, yard maintenance. Meetings, tax preparation provided adequate office work to fill remaining hours in the day.

WYOMING: Past week cold, dry over most of the region. Temperatures mostly below normal. Exception was Worland which averaged 1° above normal. Coldest was Afton which averaged 15° below normal. Precipitation was below normal except in the central area, northeast. Sundance received largest amount of precipitation 0.74 in.

Winter wheat good. Snow cover protection on winter wheat was improving. Wind damage to winter wheat mostly light. Condition for cattle, sheep was good. Grazing prospects fair. Hay, roughage adequate. Spring calving, farm flock lambing have started. Farm flock sheep are being shorn.

January 1994

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
 *** = DATA NOT AVAILABLE

International Weather and Crop Summary
HIGHLIGHTS
January 30 - February 5, 1994
FSU-WESTERN: Bitter cold covered winter grains in Russia.

NORTHWESTERN AFRICA: Showers benefited vegetative winter grains in Morocco and western Algeria.

EUROPE: Unfavorable dryness persisted in eastern Spain.

SOUTH ASIA: Showers in northeastern India and Bangladesh helped rainfed reproductive winter wheat.

SOUTHEAST ASIA: Heavy showers continued over Java's rice areas.

SOUTH AFRICA: Widespread rain benefited reproductive corn but likely caused some flooding.

EASTERN ASIA: Seasonably dry weather continued across the North China Plain, as wheat remained dormant.

AUSTRALIA: Scattered showers benefited eastern summer crops.

SOUTH AMERICA: Widespread showers continued to favor summer crops across southern Paraguay and southern Brazil.

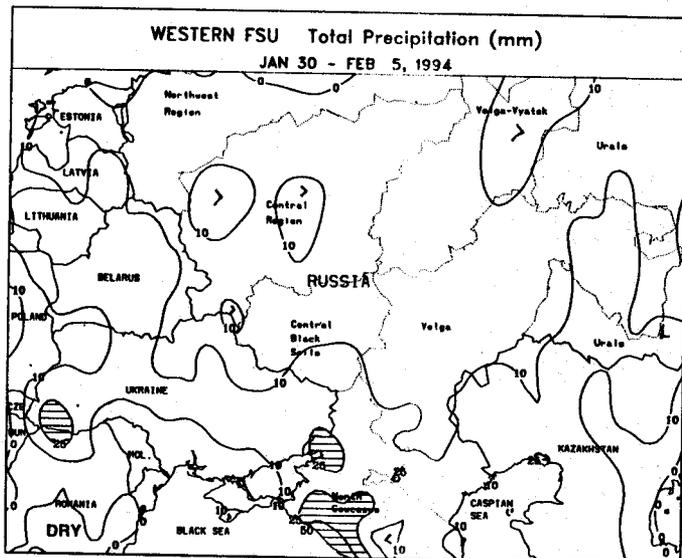
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI	LO	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	-5	-10	4	-23	-8	-0.7	97	37
SWEDEN	STOCKHOLM	-1	-4	8	-14	-2	0.5	40	2
FINLND	HELSINKI	-3	-6	3	-21	-4	2.6	64	23
U KING	GLASGOW	6	2	10	-4	4	0.6	142	10
	EDINBURGH	6	2	11	-3	4	0.4	67	9
	BIRMINGHAM	8	3	12	-3	5	1.7	75	15
	LONDON	8	3	13	-3	6	1.7	142	64
IRELND	DUBLIN	8	4	12	-2	6	0.6	85	15
ICELND	REYKJAVIK	0	-4	9	-12	-2	-1.3	43	-33
DENMRK	COPENHAGEN	4	1	8	-8	2	2.3	80	31
LUXEMB	LUXEMBOURG	4	1	10	-7	3	2.6	98	27
SWITZL	ZURICH	5	1	14	-7	3	2.8	123	55
	GENEVA	6	2	11	-6	4	2.9	86	6
FRANCE	PARIS/ORLY	8	4	13	-2	6	***	70	**
	STRASBOURG	6	2	14	-8	4	3.1	42	6
	BOURGES	8	3	13	-6	6	2.3	76	16
	BORDEAUX	11	5	17	-5	8	2.5	193	97
	TOULOUSE	10	4	16	-5	7	1.7	43	-10
	MARSEILLE	12	4	17	-3	8	1.5	93	48
SPAIN	VALLADOLID	8	1	12	-8	5	0.6	63	15
	MADRID	11	1	17	-5	6	0.9	18	-33
	SEVILLE	16	6	23	2	11	0.3	52	-12
PORTUG	LISBON	14	9	18	3	12	0.3	79	-41
GERMNY	HAMBURG	6	3	11	-3	4	3.6	120	59
	BERLIN	5	2	11	-4	4	3.8	87	44
	DUSSELDORF	7	3	11	-4	5	2.9	100	37
	LEIPZIG	6	2	13	-5	4	4.1	32	-2
	DRESDEN	6	2	13	-4	4	5.1	63	25
	STUTTGART	5	1	13	-8	3	3.8	40	-9
	NURNBERG	6	2	12	-9	4	4.2	44	-2
AUSTRI	VIENNA	7	2	15	-8	5	5.8	25	-3
	INNSBRUCK	5	-1	14	-8	2	3.7	61	13
CZECH	PRAGUE	5	0	12	-8	2	4.5	18	-5
POLAND	WARSAW	4	0	11	-8	2	5.4	46	24
	LODZ	4	0	9	-10	2	4.4	35	-3
	KATOWICE	5	1	15	-9	3	5.4	40	-2
	PRZEMYSL	5	0	15	-7	3	6.0	41	11
HUNGAR	BUDAPEST	6	1	15	-7	4	5.0	47	15
F YUGO	BELGRADE	8	2	19	-6	5	4.5	40	-9
ROMANI	BUCHAREST	7	-1	15	-11	3	5.5	28	-19
BULGAR	SOFIA	6	-1	11	-7	3	4.0	17	-22
ITALY	MILAN	9	1	14	-4	5	3.9	88	24
	VERONA	10	2	15	-3	6	3.7	44	-35
	VENICE	10	3	15	-3	6	4.0	55	-6
	GENOA	12	8	16	5	10	2.3	107	18
	ROME	14	7	19	1	11	2.4	35	-49
	NAPLES	14	7	19	0	10	1.9	116	11
GREECE	THESSALONIKA	12	5	16	-1	8	3.2	86	46
	LARISSA	12	3	17	-4	8	2.4	70	12
	ATHENS	15	9	17	2	12	1.8	127	71
TURKEY	ISTANBUL	11	6	17	1	8	3.2	48	-38
	ANKARA	7	-3	13	-9	2	1.8	61	29
CYPRUS	LARNACA	18	10	20	7	14	2.0	134	40
ESTONI	TALLINN	-2	-5	4	-15	-3	2.2	50	-1
FSU	ST. PETERSBURG	-2	-5	4	-17	-3	4.3	41	4
LITHUA	KAUNAS	1	-1	5	-9	0	5.1	86	50
FSU	MINSK	1	-2	4	-14	-1	6.0	93	55
	KAZAN	-7	-11	1	-22	-9	4.3	51	20
	MOSCOW	-2	-5	3	-16	-4	5.3	66	25
	YEKATERINBURG	-8	-13	0	-22	-10	3.8	14	-9
	OMSK	-12	-19	0	-30	-15	1.8	27	5
	KUSTANAY	-11	-18	-1	-30	-15	1.9	18	1
	KRASNOYARSK	-10	-16	-2	-39	-13	2.8	21	4
	NOVOSIBIRSK	-12	-16	-3	-30	-14	5.4	28	7
	BARNAUL	-10	-16	20	-28	-13	1.8	21	-3
	KHABAROVSK	-20	-29	-12	-34	-24	-3.5	4	-8
	VLADIVOSTOK	-11	-18	-2	-26	-15	-1.5	14	2
	KIEV	2	-1	7	-8	0	5.6	42	0
	LVOV	4	-1	13	-8	2	5.8	39	3
	KIROVOGRAD	3	-1	8	-9	1	5.9	24	-11

Based on Preliminary Reports

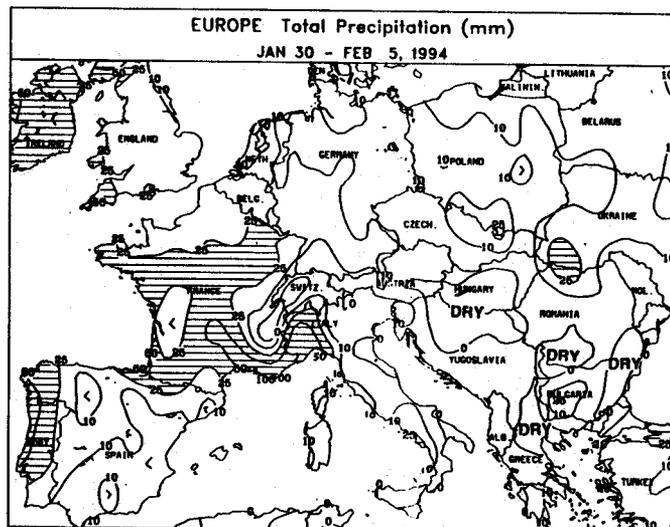
January 1994

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			DPART F/NRM
		AVG MAX	AVG MIN	HI	LO	AVG	DPART	TOTAL		
FSU	ODESSA	5	1	10	-5	3	4.2	9	-34	
	YALTA	8	4	14	-1	6	2.1	37	-29	
	VORONEZH	-1	-5	4	-21	-3	5.5	33	-7	
	SARATOV	-4	-8	2	-15	-6	4.8	37	4	
	KHARKOV	1	-3	6	-14	-1	5.6	27	-17	
	VOLGOGRAD	-1	-5	2	-17	-3	5.2	28	-7	
	ROSTOV	3	-1	10	-12	1	5.2	56	4	
	ASTRAKHAN	1	-4	6	-19	-2	3.8	23	9	
	KRASNOGAR	6	-2	16	-13	2	2.4	65	-1	
	ORENBURG	-8	-14	1	-30	-11	2.6	32	6	
	TSELINOGRAD	-11	-19	2	-33	-15	2.3	13	6	
	KARAGANDA	-10	-17	-1	-31	-13	0.0	19	-1	
	TBILISI	**	**	17	-7	**	**	**	**	
	TASHKENT	6	-3	15	-12	2	0.5	33	-19	
	ASHKABAD	9	1	22	-5	5	2.8	30	5	
SYRIA	DAMASCUS	15	3	20	-1	9	2.6	32	-2	
ISRAEL	JERUSALEM	14	6	20	1	10	1.6	140	3	
PAKIST	KARACHI	26	12	30	1	19	0.9	22	16	
INDIA	AMRITSAR	20	7	24	2	14	1.9	27	2	
	NEW DELHI	22	9	28	5	15	1.2	32	14	
	AHMEDABAD	29	15	34	9	22	1.7	8	6	
	INDORE	27	13	33	6	20	1.9	41	35	
	CALCUTTA	27	13	31	9	20	0.2	14	2	
	VERAVAL	30	17	34	12	23	1.6	4	3	
	BOMBAY	32	18	35	12	25	1.4	18	18	
	POONA	29	12	33	4	21	0.2	1	1	
	BEGAMPET	29	16	33	14	23	0.8	18	13	
	VISHAKHAPATNAM	28	21	30	19	25	**	1	**	
	MADRAS	30	21	32	18	26	1.0	2	-25	
	MANGALORE	33	22	36	11	27	0.7	3	-2	
	H KONG	KINGS PEAK	21	15	27	7	18	**	0	**
	N KREA	PYONGYANG	-1	-10	9	-20	-5	3.4	6	-3
	S KREA	SEOUL	3	-4	10	-12	0	4.5	6	-11
JAPAN	SAPORO	-2	-8	3	-14	-5	-0.3	81	-27	
	NAGOYA	10	1	14	-3	5	1.5	26	-18	
	TOKYO	9	3	17	-1	6	0.6	52	7	
	YOKOHAMA	9	3	17	-1	6	1.0	40	-22	
	KYOTO	9	2	14	-2	6	1.7	52	-5	
THAILN	OSAKA	10	3	14	-1	7	1.3	33	-14	
	PHETCHABUN	34	18	36	14	26	3.1	0	-9	
MALAYS	BANGKOK	33	22	34	17	27	0.8	0	-9	
	KUALA LUMPUR	32	24	34	22	28	1.7	247	84	
VIETNM	HANOI	21	16	30	11	19	1.8	22	4	
CHINA	HARBIN	-15	-27	-6	-35	-21	-0.4	3	0	
	HAMI	-1	-15	7	-21	-8	2.4	0	-1	
	LANCHOW	2	-9	11	-14	-4	2.4	0	-1	
	BEIJING	3	-6	8	-12	-1	2.8	0	-3	
	TIENHSIN	3	-7	8	-12	-2	1.3	0	-3	
	LHASA	10	-7	16	-11	2	3.3	0	0	
	KUNMING	19	4	22	1	12	3.7	0	-12	
	CHENGCHOW	8	-3	19	-6	3	2.0	2	-11	
	YEHCHANG	10	3	16	-2	6	1.5	11	-8	
	HANKOW	9	2	16	-4	5	2.4	23	-11	
	CHUNGKING	10	6	14	1	8	**	15	**	
	CHIHKIANG	10	3	17	-5	6	1.7	18	-21	
	WU HU	8	1	15	-6	5	**	41	**	
	SHANGHAI	8	2	15	-2	5	**	48	**	
	NANCHANG	9	3	15	-4	6	1.3	75	19	
TAIPEI	19	15	25	9	17	1.5	72	-18		
CNRY I	CANTON	20	13	26	5	16	2.7	0	-43	
	NANNING	19	12	26	4	16	3.0	4	-32	
MOROCC	LAS PALMAS	20	14	25	10	17	-0.1	50	34	
	CASABLANCA	16	8	20	5	12	-0.7	57	-8	
ALGERI	MARRAKECH	18	6	23	3	12	0.2	21	-4	
	ALGER	17	6	22	3	12	0.7	81	-14	
TUNISI	BATNA	11	3	19	-3	7	2.1	16	-24	
	TUNIS	17	10	23	5	13	1.8	30	-43	
NIGER	NIAMEY	32	18	39	13	25	0.6	0	0	
MALI	TIMBUKTU	27	12	31	9	20	-1.5	0	0	
MAURIT	BAMAKO	31	19	34	17	25	-0.2	5	5	
	NOUAKCHOTT	27	14	32	10	21	-0.5	1	1	
SENEGL	DAKAR	25	17	31	14	21	0.3	0	-2	
CHAG A	DIEGO GARCIA	**	25	33	24	**	**	363	35	
LIBYA	TRIPOLI	18	9	26	6	14	1.7	49	-11	
	BENGHAZI	17	11	20	8	14	1.5	105	39	
EGYPT	CAIRO	20	11	23	7	15	1.6	2	-4	
	ASWAN	25	12	31	7	19	2.9	0	0	
ETHIOP	ADDIS ABABA	24	6	26	1	15	-1.0	0	-25	

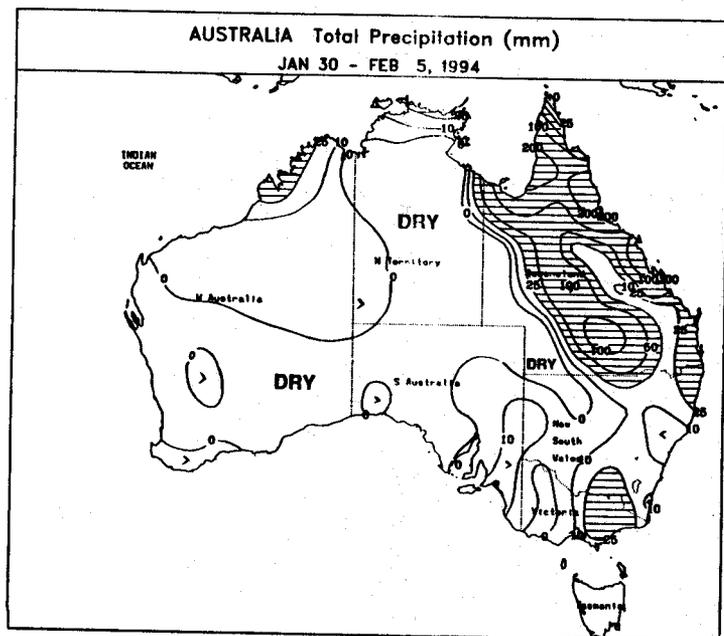
Based on Preliminary Reports



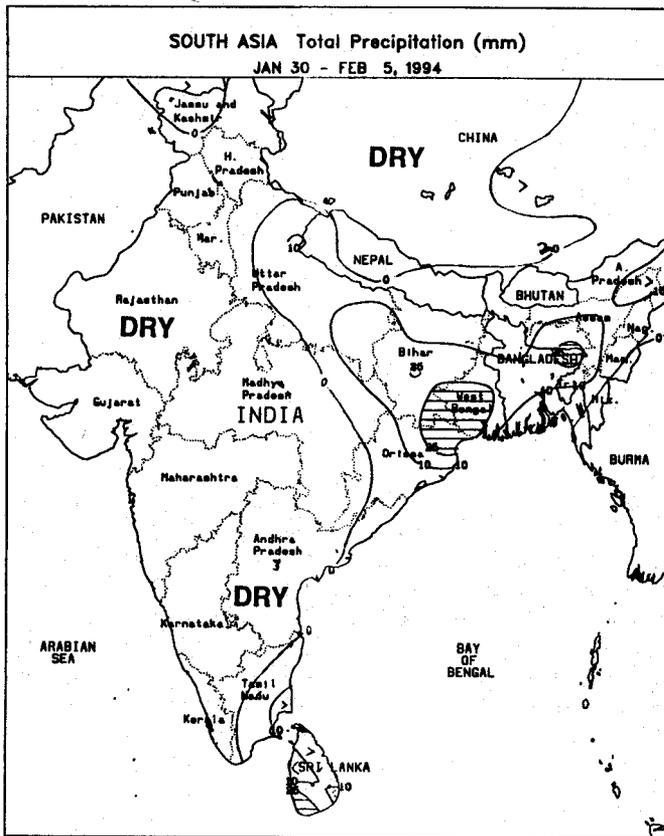
FSU-WESTERN: Colder weather spread gradually westward and southward over the region. Bitter cold covered winter grains in Lithuania, Latvia, and northern Russia (Northwest Region, Central Region, Volga Vyatsk, Urals, Central Black Soils Region, and Volga Valley), where minimum temperatures ranged from -25 to -15 degrees Celsius (C). Although temperatures in these areas approached the threshold for winterkill, a moderate to deep snow cover provided adequate protection from widespread damage. Further south, unseasonably warm weather continued over Ukraine and North Caucasus, Russia, accompanied by widespread light to moderate precipitation (5-25 mm). Although these weather conditions provided mostly favorable overwintering conditions for winter crops, some loss in winter hardiness occurred. Lowest temperatures in these areas ranged from -10 to -5 degrees C.



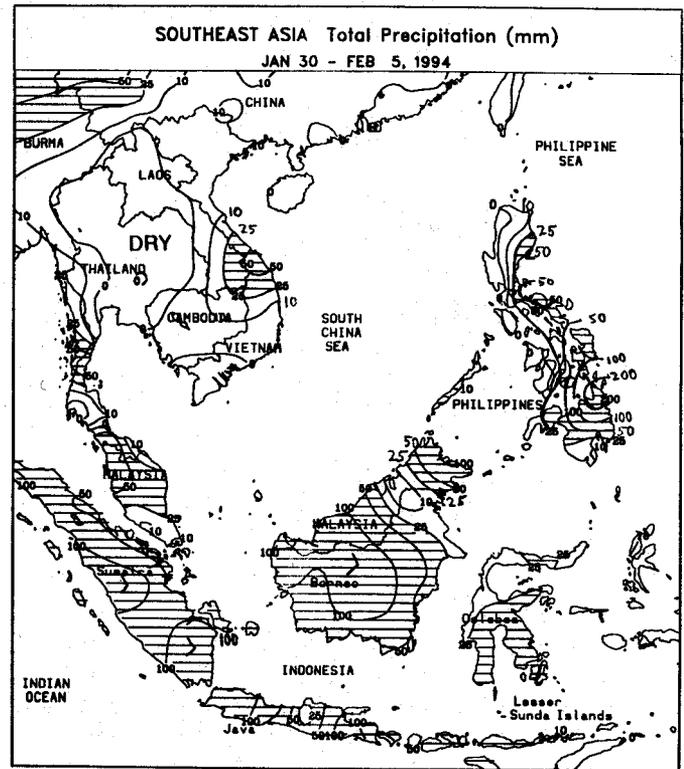
EUROPE: Substantial rain (20-50 mm or more) provided ample moisture for dormant winter grains in France and for winter crop growth in western portions of the Iberian peninsula. In contrast, light showers (5 mm or less) in eastern Spain did not overcome unfavorable dryness hampering crop development. Some precipitation (5-15 mm) across northern Europe was generally favorable for dormant winter crops. The drier weather in north-central Europe, especially over northern Germany, was beneficial after last week's drenching rain. Mostly dry weather prevailed across southeastern Europe, from Hungary to Greece. Unseasonably mild weather continued over the Balkans, with average temperatures ranging from 3 to 7 degrees C above normal and daily maximum temperatures reaching as high as 15 to 19 degrees C. Winter crops have lost some hardiness and are vulnerable to potential cold air outbreaks.



AUSTRALIA: Tropical cyclone Sadie came ashore on January 30, at the south end of the Gulf of Carpentaria, with sustained winds of 35 to 45 mph. The storm quickly dissipated, but the remnants spread southeastward, bringing heavy showers (60-180 mm, with isolated amounts greater than 200 mm) across most of eastern Queensland. Across the eastern summer crop areas, most areas received widespread showers, but isolated areas reported less than 10 mm. The rains were very beneficial for sorghum and cotton, especially for late-planted crops. However, additional rain is still needed across the area. The rains also benefited sugarcane along the northeastern coast, but isolated torrential showers (greater than 200 mm) caused local flooding. Temperatures averaged 1-4 degrees below normal across the eastern summer crop region.

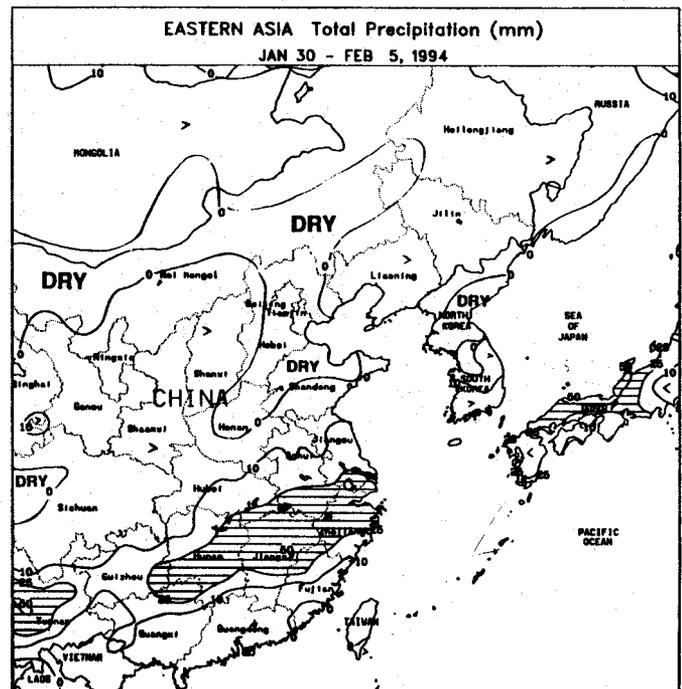


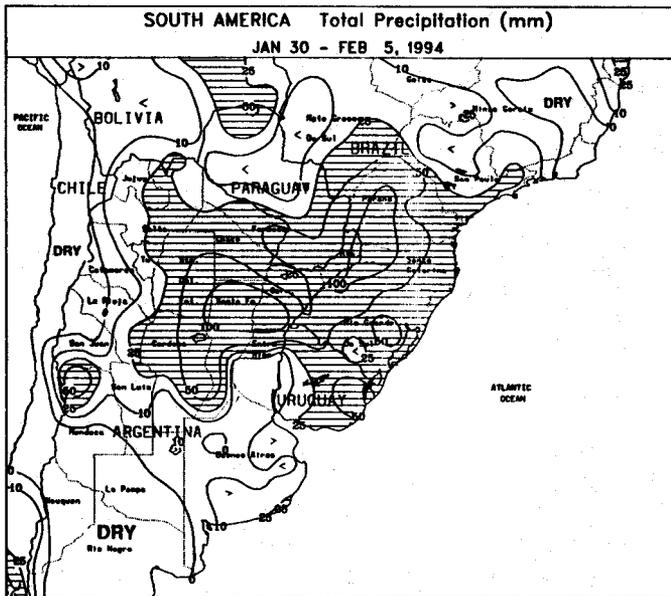
SOUTH ASIA: Light to moderate rain (10-45 mm) benefited winter grains and oilseeds in northeastern India and Bangladesh. The moisture was especially timely for reproductive rainfed crops in eastern Uttar Pradesh and Bihar. Weekly temperatures averaged above normal in the northwest, increasing crop moisture usage. Temperatures were near to below normal elsewhere.



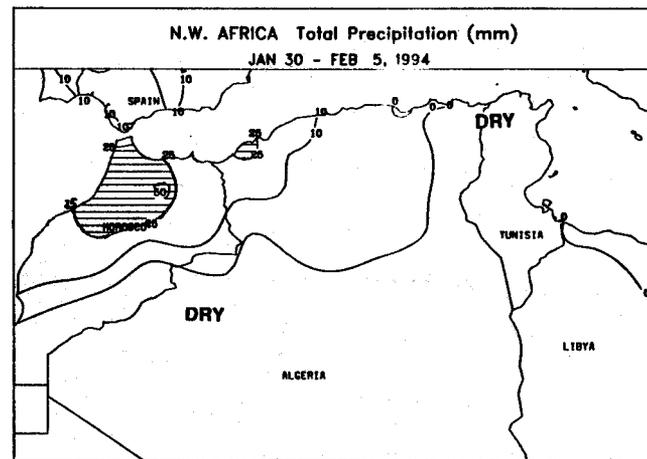
SOUTHEAST ASIA: Moderate to heavy showers (60-143 mm) maintained adequate to abundant irrigation reserves for rice over most of Java. Moderate showers (50-123 mm) returned to most oil palm and rice areas of western Malaysia. Further north, unseasonable warmth returned to Thailand's dry-season rice areas, increasing moisture requirements of newly planted crops and accelerating seedling growth. In the Philippines, moderate to heavy showers (50-100 mm or more) fell in eastern rice and corn areas, aiding dry-season crops but causing additional flooding. Light showers (10-32 mm) benefited grains and sugarcane in the western Visayans.

EASTERN ASIA: Seasonably dry weather continued across the North China Plain. Widespread showers covered the Yangtze Valley, increasing reservoir levels. Temperatures averaged 2-4 degrees C above normal, but were low enough for winter wheat to remain dormant.

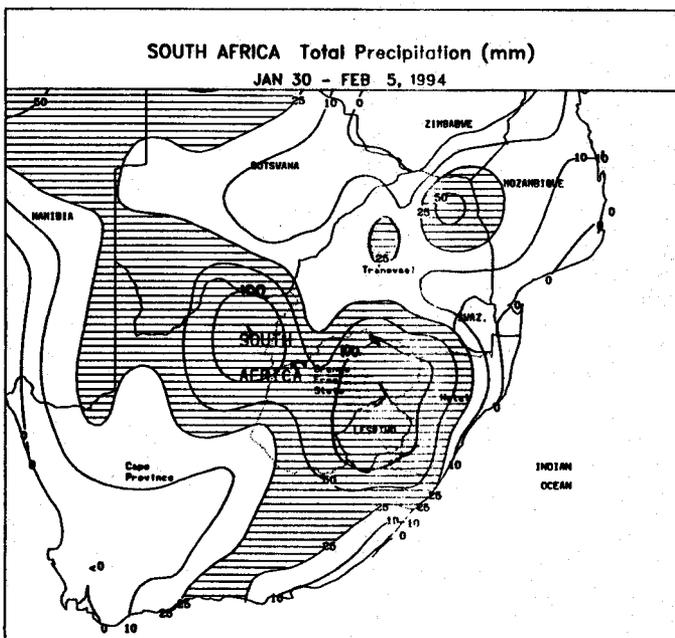




SOUTH AMERICA: Scattered, light showers (1-18 mm) prevailed across central Argentina, after last week's beneficial rain. Isolated heavy showers (100-150 mm) were reported in southern Cordoba and northern Santa Fe, causing local flooding. Soil moisture for corn and soybean development remains adequate across most areas. Moderate showers (20-80 mm) benefited cotton across northern Argentina. In southern Brazil, widespread moderate to heavy showers (30-150 mm) fell across most of the crop areas, favoring vegetative to reproductive corn and soybeans. Moderate showers (20-55 mm) benefited reproductive to filling soybeans across Mato Grosso and Goias. Nearly ideal soil moisture and favorable temperatures existed for soybeans across southern Brazil. Temperatures averaged near normal across central Argentina and 2-3 degrees above normal across southern Brazil. Southern Paraguay received moderate showers (30-100 mm), favoring reproductive cotton and soybeans.



NORTHWESTERN AFRICA: Widespread light to moderate rain (10-25 mm, with local amounts in excess of 25 mm) benefited vegetative winter grains in Morocco and western Algeria. Persistent dryness in central and eastern Algeria and northern Tunisia limited moisture for vegetative crops. Crop conditions in these areas are likely deteriorating, and rain is needed soon to stabilize declining crop prospects. Weekly average temperatures were near normal over the region.

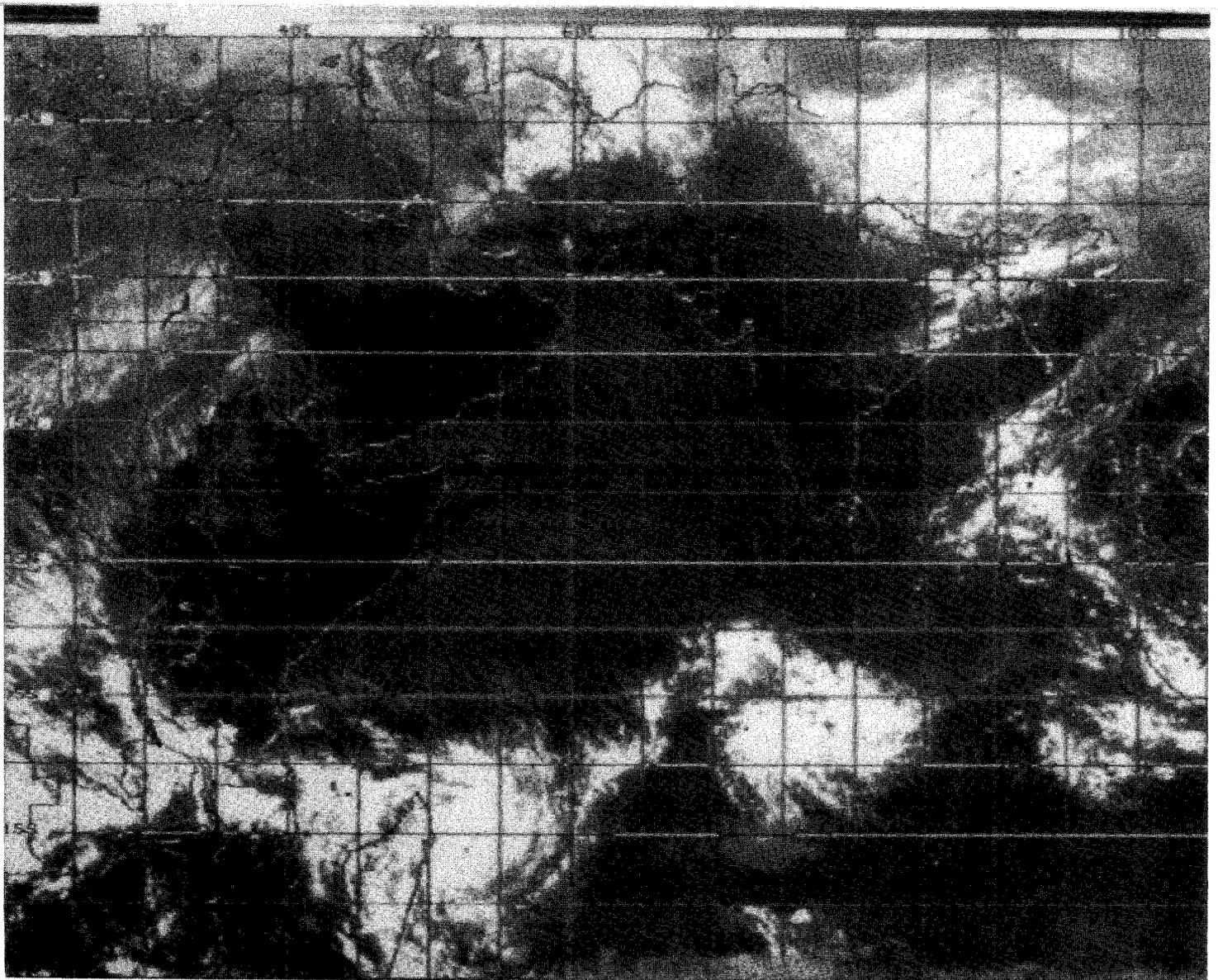
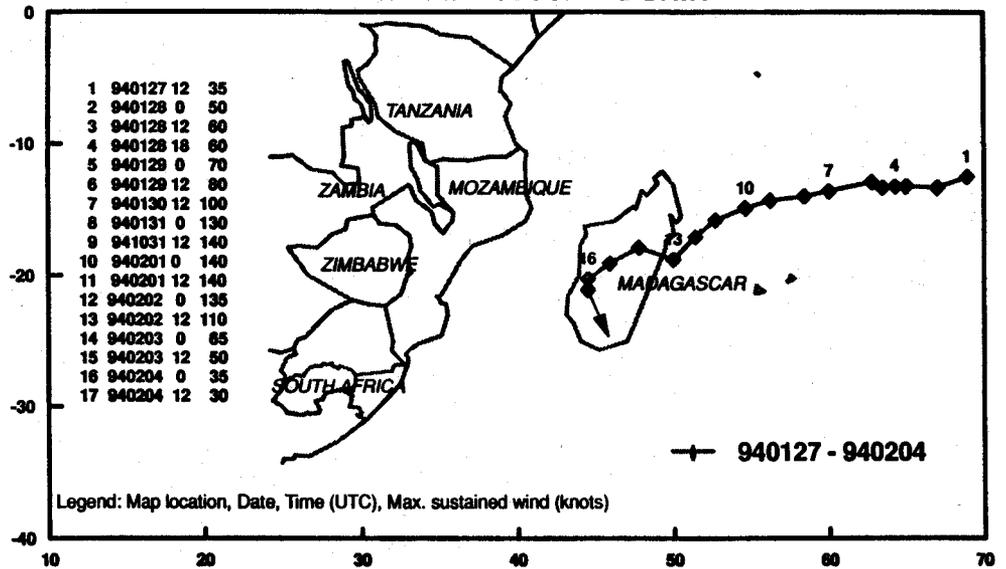


SOUTH AFRICA: Widespread, moderate to heavy rain (15-100 mm or more) covered most corn areas, boosting moisture for crops advancing through reproduction. However, excessive rainfall (100-160 mm) over a broad area of Orange Free State, western Natal, and Lesotho resulted in some flooding. Rainfall continued unseasonably light (25 mm or less) over Natal's sugarcane areas. Temperatures throughout the region were seasonably mild.

Cyclone Thrashes Madagascar

CYCLONE GERALDA TRACK AND ASSOCIATED DATA

Cyclone Geralda struck Madagascar's east coast near the port city of Toamasina on February 2. The NOAA-11 polar-orbiter satellite captured the image (below) on February 1 as the storm was heading toward Madagascar. At the time of the image, estimated maximum winds were as high as 140 knots, making this one of the most intense cyclones on record in the South Indian Ocean. Winds diminished to about 110 knots as the storm struck the east coast. Media reports indicate major property and crop damage occurred, with Toamasina almost completely destroyed.



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 Bjercknes and Jeff Savadel

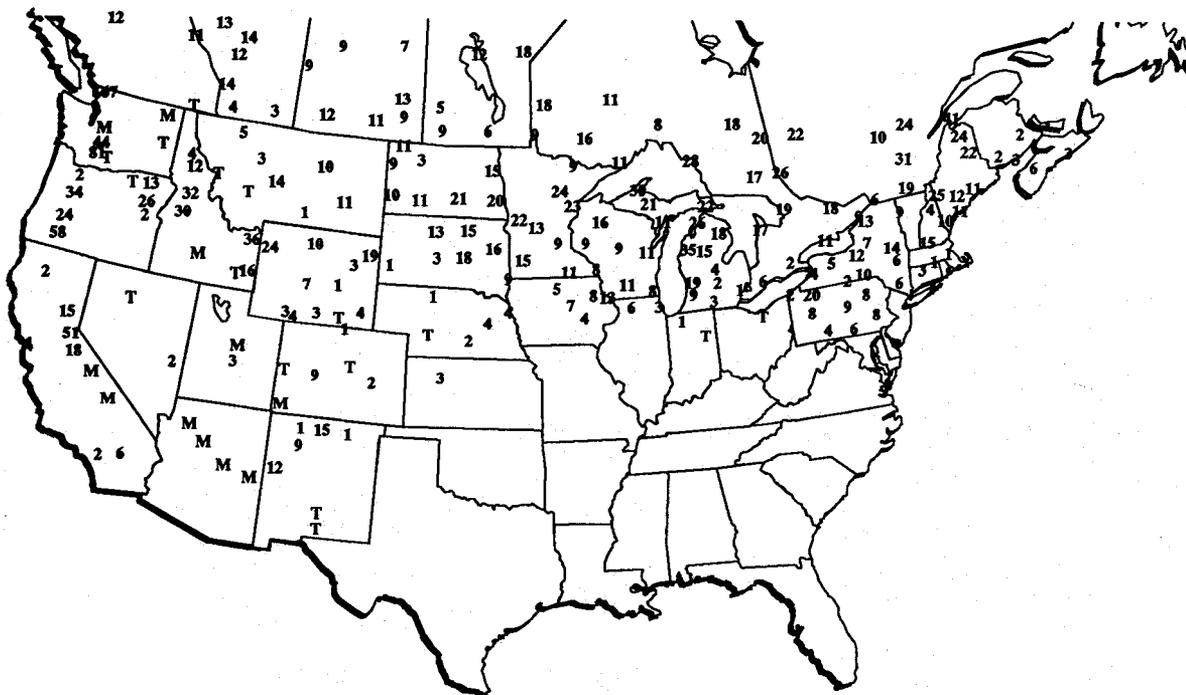
Subscriptions **Joyce Houston** (202) 720-7917

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 7, 1994



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

WEEKLY NEWS BULLETIN FIRST CLASS

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

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

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300