

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT
OF COMMERCE
National Oceanic and
Atmospheric Administration,
National Weather Service

U.S. DEPARTMENT
OF AGRICULTURE
National Agricultural
Statistics Service and
World Agricultural Outlook Board

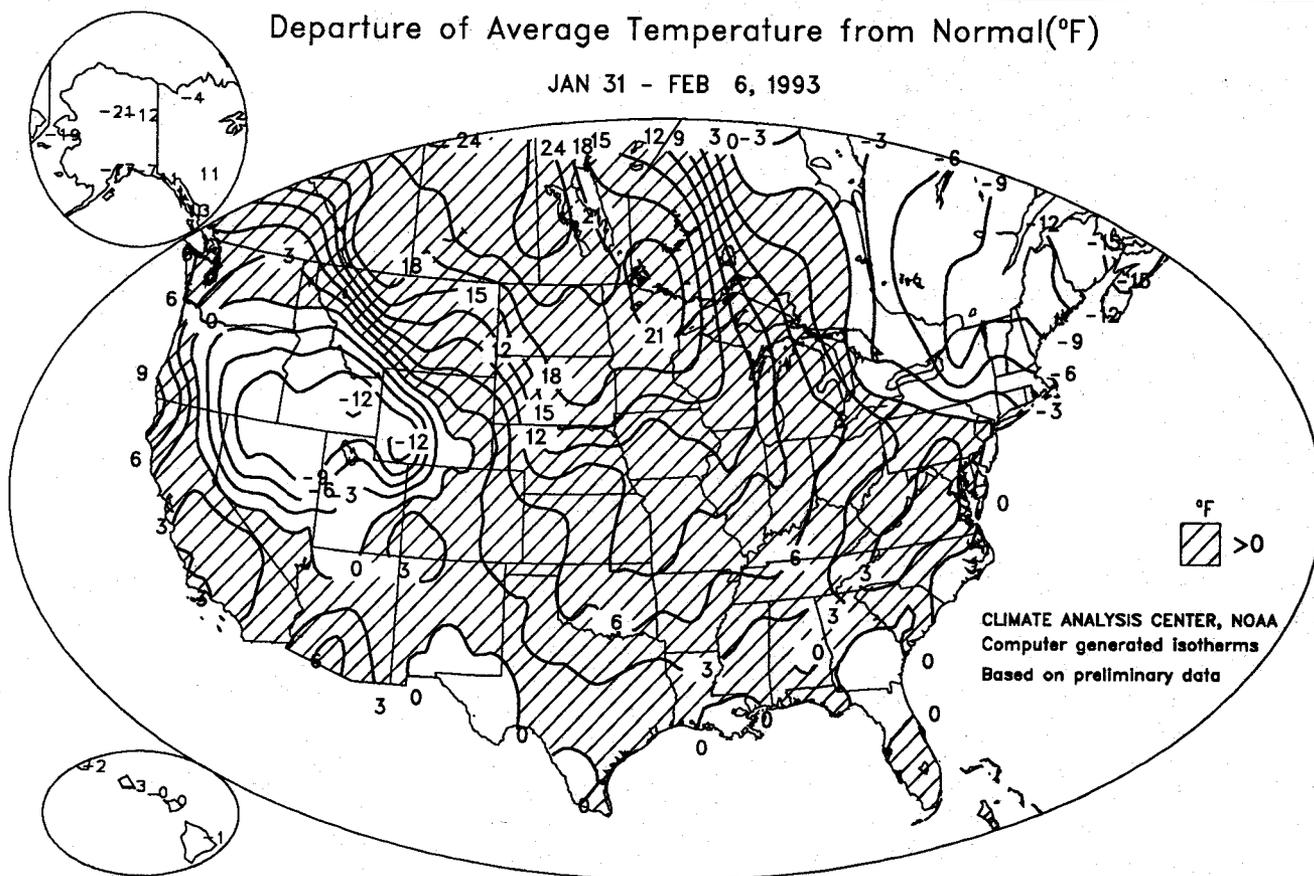
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Washington, D.C.

February 9, 1993

Departure of Average Temperature from Normal(°F)

JAN 31 - FEB 6, 1993



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

HIGHLIGHTS

January 31 - February 6, 1993

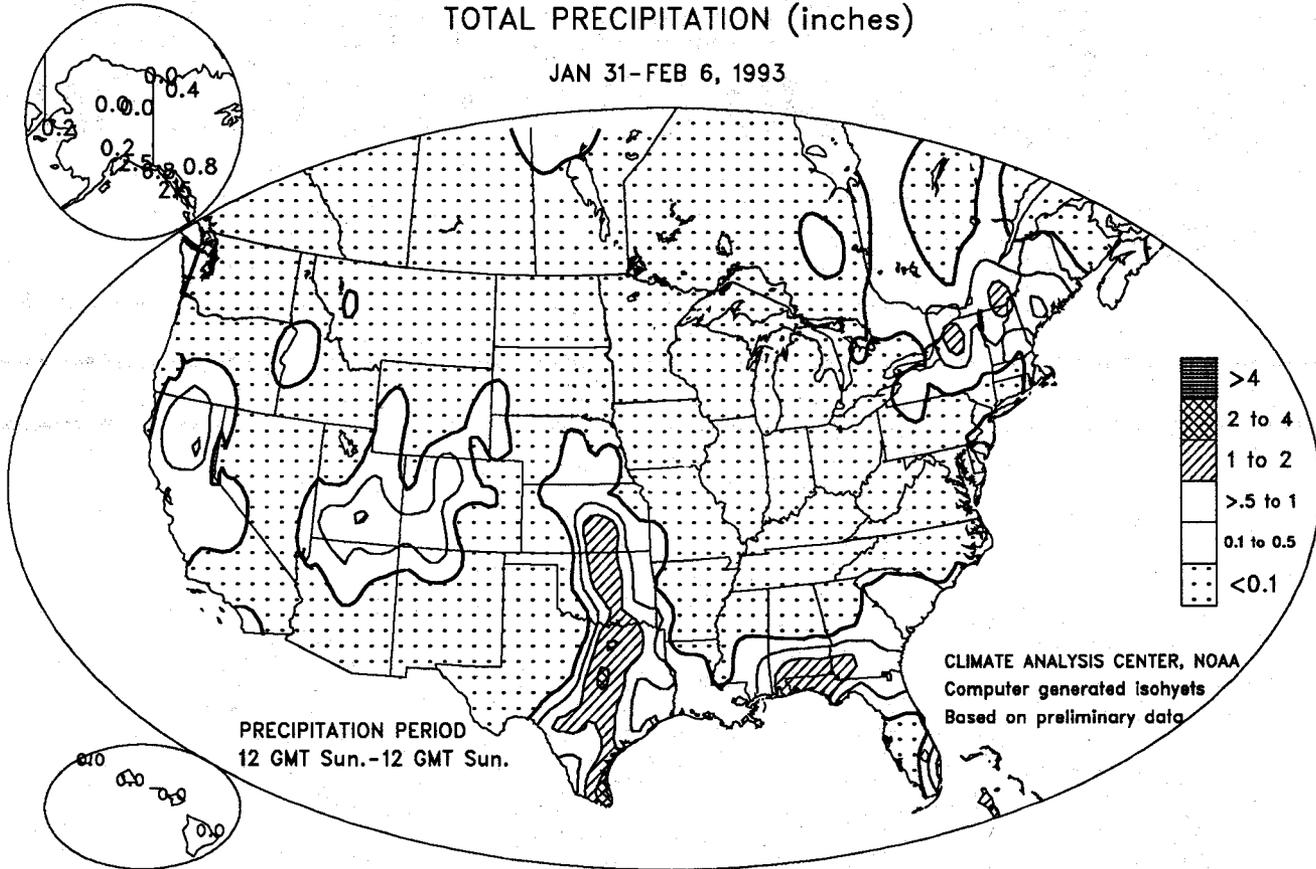
The approach and passage of arctic fronts kept temperatures oscillating in the Northeast, while brutal cold gave way to storminess in Alaska. Elsewhere, a pesky storm meandered from the Southwest to the central Plains, then drifted southward into Texas before pursuing an easterly course. Early in the week, a storm intensified east of New England, lashing coastal Maine and Massachusetts with wind-driven snow. Snowfall included 10 inches at South Portland, ME, and 8 inches at Chatham, MA. In the Southwest, snow blanketed the Four Corners States' mountains. More than 1 foot of snow fell at Wolf Creek Pass, CO, and Steamboat Springs, CO. Meanwhile in Alaska, the coldest airmass in 3 years remained entrenched until midweek. February low temperature records were set in Fairbanks on Tuesday (-58°F) and in Bettles on Wednesday (-61°F). Fairbanks' record (Continued to back cover)

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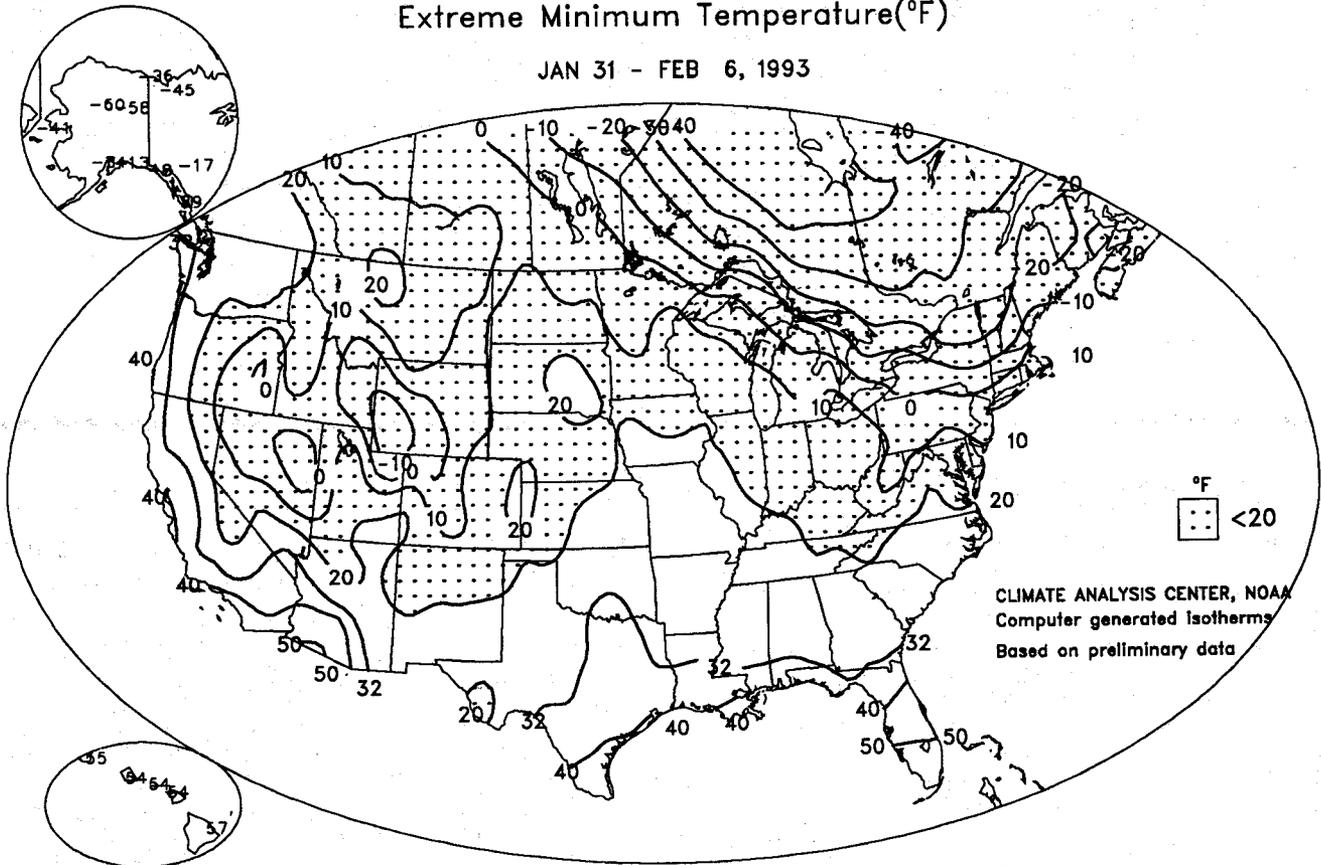
TOTAL PRECIPITATION (inches)

JAN 31-FEB 6, 1993



Extreme Minimum Temperature(°F)

JAN 31 - FEB 6, 1993



National Weather Data for Selected Cities

Weather Data for the Week Ending February 6, 1993

STATES AND STATIONS	TEMPERATURE °F					PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	62	31	66	22	47	3	.0	-1.1	.0	11.4	102	6.1	99	78	22	0	4	0	0	1	
MOBILE	63	40	70	34	52	0	.6	-1.5	.6	13.9	127	8.6	156	75	34	0	0	1	1	0	
MONTGOMERY	61	33	66	26	47	0	.1	-.9	.1	13.0	132	5.3	105	81	25	0	3	1	1	0	
AK ANCHORAGE	8	-7	19	-22	0	-15	.8	-.6	.6	2.5	122	1.8	187	84	49	0	7	4	1	1	
BARRROW	-27	-39	-8	-52	-33	-15	.1	.0	.1	.8	186	.5	183	74	66	0	7	1	0	0	
FAIRBANKS	-15	-37	11	-58	-26	-18	.1	-.1	.0	3.6	269	2.4	383	73	59	0	7	3	0	0	
JUNEAU	35	23	44	12	29	4	7.2	6.3	3.8	19.9	219	14.2	318	98	80	0	5	7	4	0	
KODIAK	22	7	28	-1	14	-16	T	-1.3	T	7.8	63	3.0	43	74	40	0	7	2	0	0	
NOME	-5	-25	9	-41	-15	-19	.2	.1	.2	2.6	174	1.4	148	75	52	0	7	4	0	0	
AZ PHOENIX	72	50	76	45	61	7	.0	-.1	.0	8.3	505	5.3	640	67	27	0	0	0	0	0	
PRESCOTT	53	28	59	24	40	1	.1	-.1	.1	6.7	300	4.7	415	86	35	0	6	0	0	0	
TUCSON	70	43	74	34	56	4	.0	-.2	.0	8.3	440	4.8	512	71	19	0	0	0	0	0	
YUMA	73	52	78	48	62	4	.0	-.1	.0	4.6	601	1.7	384	55	23	0	0	0	0	0	
AR FORT SMITH	57	35	66	25	46	7	.1	-.4	.1	9.6	190	4.1	182	92	43	0	2	2	0	0	
LITTLE ROCK	59	38	64	32	48	7	.0	-.9	.0	8.7	99	4.2	90	59	34	0	1	0	0	0	
CA BAKERSFIELD	69	41	78	33	55	4	.0	-.3	.0	4.1	224	2.3	194	82	32	0	0	0	0	0	
EUREKA	67	48	78	40	57	9	.1	-1.4	.1	16.6	115	7.2	88	75	45	0	0	1	1	0	
FRESNO	66	41	74	34	53	5	T	-.5	T	7.9	194	5.2	212	88	40	0	0	0	0	0	
LOS ANGELES	68	51	74	46	60	3	.2	-.5	.2	14.6	277	10.4	286	87	35	0	0	0	0	0	
REDDING	61	38	70	29	50	0	.4	-1.4	.4	21.1	124	10.8	107	95	40	0	3	1	1	0	
SACRAMENTO	61	41	68	35	51	3	.3	-.6	.3	14.0	183	9.0	189	96	53	0	0	0	0	0	
SAN DIEGO	68	51	71	49	60	2	.7	-.3	.7	11.6	307	9.1	374	88	42	0	0	1	1	0	
SAN FRANCISCO	62	47	65	41	54	4	.2	-.9	.1	17.4	193	11.4	209	90	49	0	0	0	1	0	
CO DENVER	47	24	59	20	35	4	.1	-.1	.1	1.1	101	1.5	74	89	38	0	7	2	0	0	
GRAND JUNCTION	44	26	48	22	35	6	.2	.0	.1	1.9	143	1.5	207	92	48	0	7	3	0	0	
PUEBLO	51	19	62	10	35	3	.1	.0	.1	1.9	150	1.4	145	95	34	0	7	1	0	0	
CT BRIDGEPORT	37	16	51	5	27	-3	T	-.6	T	7.0	93	2.7	70	67	27	0	7	1	0	0	
HARTFORD	35	12	51	2	23	-2	T	-.6	T	5.8	84	2.6	63	71	30	0	7	0	0	0	
DC WASHINGTON	50	25	63	1.6	38	2	.2	-.7	.2	8.6	90	2.9	89	60	26	0	5	0	0	0	
FL APALACHICOLA	63	44	69	37	54	4	.2	-.5	.2	5.0	96	4.5	150	97	58	0	0	1	0	0	
DAYTONA BEACH	66	50	71	44	58	1	.2	-.7	.1	4.6	75	4.0	108	93	46	0	1	2	0	0	
JACKSONVILLE	63	42	71	32	52	-2	.1	-.7	.1	8.0	209	8.0	370	84	56	0	0	0	0	0	
KEY WEST	75	66	80	64	70	1	.7	-.7	.4	7.7	177	5.8	230	86	47	0	0	4	0	0	
MIAMI	76	61	81	58	69	2	T	-.7	T	5.8	124	4.9	178	95	46	0	0	1	1	0	
ORLANDO	72	50	76	45	61	1	.8	-.4	.8	11.7	115	10.4	183	86	38	0	1	1	1	0	
TALLAHASSEE	66	38	72	31	52	0	T	-.7	T	4.6	94	3.6	133	94	49	0	0	0	0	0	
TAMPA	71	49	75	44	60	1	T	-.7	T	4.6	94	3.6	133	94	49	0	0	0	0	0	
WEST PALM BEACH	74	58	79	52	66	1	1.2	.5	1.1	10.9	199	9.1	278	92	52	0	0	2	1	0	
GA ATLANTA	60	36	64	30	48	5	.0	-.1	.0	10.3	103	3.9	68	68	29	0	3	0	0	0	
AUGUSTA	61	31	68	21	46	0	.4	-.6	.3	8.6	107	6.3	132	81	24	0	4	2	0	0	
Macon	62	33	67	23	47	0	T	-1.0	T	8.6	93	5.5	106	80	23	0	4	0	0	0	
SAVANNAH	61	39	69	28	50	0	.1	-.6	.1	7.2	109	5.6	150	76	32	0	2	1	0	0	
HI HILO	78	62	81	57	70	-1	.0	-2.9	.0	19.2	78	2.2	18	88	57	0	0	0	0	0	
HONOLULU	79	60	80	54	70	-3	T	-.7	T	7.2	92	7	16	86	48	0	0	0	0	0	
KAHULUI	79	62	81	54	71	-1	T	-.8	T	4.7	62	2.2	46	84	49	0	0	0	0	0	
LIHUE	77	60	83	55	69	-2	T	-1.1	T	23.0	182	.8	11	82	45	0	0	0	0	0	
ID BOISE	34	20	38	15	27	-6	T	-.3	T	2.5	79	1.7	87	92	60	0	7	0	0	0	
LEWISTON	45	29	54	24	37	1	.0	-.3	.0	1.4	47	1.0	61	80	46	0	7	0	0	0	
FOCATELLO	27	3	32	-4	15	-12	T	-.2	T	4.1	186	2.3	178	89	58	0	7	0	0	0	
IL CHICAGO	43	24	52	18	33	12	T	-.3	T	6.3	152	3.8	209	89	47	0	7	0	0	0	
MOLINE	42	24	49	19	33	11	T	-.3	T	6.0	159	2.0	109	96	56	0	7	0	0	0	
PEORIA	46	25	53	20	36	12	.0	-.3	.0	6.6	170	3.6	191	90	41	0	7	0	0	0	
QUINCY	44	26	54	23	35	10	T	-.3	T	4.2	127	2.2	139	89	51	0	7	0	0	0	
ROCKFORD	40	23	47	18	32	11	T	-.3	T	5.8	166	2.5	152	93	54	0	7	0	0	0	
SPRINGFIELD	48	27	57	21	38	12	.0	-.4	.0	6.3	159	4.0	212	90	44	0	7	0	0	0	
IN EVANSVILLE	54	26	61	21	40	8	.0	-.7	.0	5.3	75	3.6	100	73	31	0	7	0	0	0	
FORT WAYNE	43	21	52	13	32	8	T	-.5	T	7.9	161	5.2	213	86	38	0	7	0	0	0	
INDIANAPOLIS	46	24	55	18	35	7	T	-.6	T	5.2	85	3.3	105	80	34	0	7	0	0	0	
SOUTH BEND	43	22	50	16	33	9	.0	-.5	.0	7.4	128	3.4	118	82	35	0	7	0	0	0	
IA DES MOINES	39	26	45	22	32	11	T	-.2	T	3.6	163	1.6	137	92	68	0	7	1	0	0	
SIoux CITY	39	26	45	18	33	13	T	-.2	T	1.5	100	.7	92	99	78	0	7	1	0	0	
WATERLOO	38	23	42	15	30	14	T	-.2	T	2.2	106	.6	62	96	73	0	7	0	0	0	
KS CONCORDIA	40	28	45	21	34	6	.3	-.1	.2	3.0	209	1.7	223	95	73	0	6	2	0	0	
DODGE CITY	46	28	53	10	37	5	T	-.1	T	1.9	193	1.0	208	96	62	0	7	0	0	0	
GOODLAND	43	26	56	21	35	5	.1	-.1	.1	.6	72	.4	102	95	63	0	7	2	0	0	
TOPEKA	51	30	59	26	40	11	.1	-.1	.1	4.2	184	2.2	210	95	53	0	5	2	0	0	
WICHITA	50	31	57	26	41	9	1.1	-1.0	.7	3.2	186	2.1	265	95	61	0	5	3	1	0	
KY BOWLING GREEN	56	25	62	20	41	6	.0	-1.0	.0	5.8	58	2.8	52	85	28	0	7	0	0	0	
LEXINGTON	50	24	59	15	37	5	.0	-.8	.0	4.2	53	2.4	57	70	29	0	7	0	0	0	
LOUISVILLE	52	26	59	19	39	6	.0	-.7	.0	5.1	69	3.5	88	81	38	0	7	0	0	0	
LA BATON ROUGE	64	42	69	35	53	1	.1	-1.1	.1	18.2	171	13.5	239	83	40	0	0	2	0	0	
LAKE CHARLES	65	43	72	37	54	3	.2	-.7	.2	10.9	104	7.0	130	96	44	0	0	1	0	0	
NEW ORLEANS	62	43	70	41	53	-1	.4	-.9	.2	12.3	108	6.6	109	91	48	0	0	2	0	0	
SHREVEPORT	61	39	70	30	50	2	.3	-.6	.3	10.8	124	4.9	103	94	45	0	1	2	0	0	

Based on 1951-80 normals.

Weather Data for the Week Ending February 6, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	8	-10	25	-23	-1	-11	.2	-.3	.1	3.8	65	2.2	81	74	57	0	7	3	0	0		
PORTLAND	23	3	42	-8	13	-.9	-.7	-.2	.4	5.2	58	3.1	69	77	41	0	7	3	0	0		
MD BALTIMORE	49	21	62	14	35	2	1	-.7	1.4	7.4	106	2.7	76	58	21	0	7	0	0	0		
SALISBURY	47	21	54	13	34	-1	1	-.8	1.1	9.6	123	4.1	101	83	36	0	6	1	0	0		
MA BOSTON	32	15	50	6	24	-5	-.3	-.6	10.5	114	2.3	47	72	33	0	7	3	0	0			
CEATHAM	35	19	40	13	27	-3	-.6	-.4	9.4	93	2.4	47	81	54	0	7	5	0	0			
MI ALPENA	34	10	45	-1	22	5	1	-.3	2.6	66	1.4	68	85	49	0	7	1	0	0			
DETROIT	40	21	51	12	31	7	1	-.4	6.3	134	3.9	181	69	37	0	7	0	0	0			
FLINT	37	18	44	9	27	6	1	-.3	4.8	126	2.8	153	83	50	0	7	2	0	0			
GRAND RAPIDS	37	20	44	11	29	6	1	-.3	7.5	155	4.2	185	90	55	0	7	2	0	0			
HOUGHTON LAKE	34	13	44	-1	23	7	1	-.3	3.7	102	1.7	99	89	53	0	7	1	0	0			
LANSING	37	19	44	9	28	8	1	-.3	5.4	124	3.2	169	86	50	0	7	0	0	0			
MARQUETTE	35	11	48	4	23	11	1	-.3	5.0	104	2.5	106	81	53	0	7	2	0	0			
MUSKOGON	37	21	45	13	29	6	1	-.4	5.3	100	2.6	96	87	57	0	7	0	0	0			
SAULT ST. MARIE	29	1	44	-15	15	3	0	-.4	5.7	112	2.2	87	85	51	0	7	0	0	0			
MN ALEXANDRIA	35	20	42	8	27	19	1	-.2	1.8	101	.9	88	97	76	0	7	0	0	0			
DULUTH	37	23	45	16	30	21	1	-.1	3.1	118	1.9	139	88	52	0	6	2	0	0			
INT'L FALLS	37	17	44	6	27	24	1	-.2	2.4	126	.7	69	91	53	0	7	1	0	0			
MINNEAPOLIS	36	25	45	20	31	17	1	-.2	2.3	130	1.3	134	95	75	0	6	0	0	0			
ROCHESTER	34	20	40	10	27	15	1	-.1	2.5	135	1.2	124	97	79	0	7	0	0	0			
MS GREENWOOD	62	34	66	25	48	3	0	-.1	8.8	76	3.2	52	81	28	0	1	0	0	0			
JACKSON	63	34	67	25	48	2	0	-.7	9.4	83	5.0	86	90	33	0	4	2	0	0			
MERIDIAN	62	34	66	26	48	1	0	-.5	17.8	154	11.9	202	89	27	0	3	0	0	1			
MO CAPE GIRARDEAU	56	27	66	23	42	1	0	-.7	7.0	97	5.2	149	84	29	0	6	0	0	0			
COLUMBIA	52	27	59	24	40	9	0	-.4	5.0	123	2.4	113	87	37	0	7	0	0	0			
KANSAS CITY	51	30	57	27	40	10	0	-.2	5.8	203	2.0	145	92	50	0	6	1	0	0			
SAINT LOUIS	51	30	62	25	41	10	0	-.4	7.2	167	3.3	168	80	36	0	6	0	0	0			
SPRINGFIELD	54	32	62	26	43	10	0	-.4	7.1	157	2.8	144	85	37	0	4	0	0	0			
MT BILLINGS	46	25	50	20	36	11	0	-.2	1.0	52	.2	42	64	30	0	7	0	0	0			
GLASGOW	34	11	37	5	23	11	0	-.1	4	58	.2	45	94	63	0	7	0	0	0			
GREAT FALLS	51	32	55	25	42	18	0	-.2	1.5	77	1.2	103	65	28	0	3	0	0	0			
HAVRE	42	19	46	17	31	14	0	-.1	1.2	97	.6	93	88	60	0	7	0	0	0			
HELENA	37	15	45	11	26	3	0	-.1	1.4	101	.8	104	94	56	0	7	0	0	0			
KALISPELL	34	23	38	15	29	5	0	-.3	3.7	106	1.7	89	95	73	0	7	0	0	0			
MILES CITY	38	14	42	10	26	8	0	-.1	1.0	75	.6	85	94	64	0	7	0	0	0			
MISSOULA	30	15	36	10	23	-3	0	-.2	1.7	59	.9	54	96	74	0	7	0	0	0			
NE GRAND ISLAND	39	22	45	7	31	7	4	-.2	2.4	189	1.5	247	95	74	0	5	1	0	0			
LINCOLN	39	22	45	14	31	8	4	-.2	1.6	110	.7	90	97	73	0	7	0	0	0			
NORFOLK	41	25	46	20	33	12	0	-.1	2.4	193	1.4	233	96	71	0	6	1	0	0			
NORTH PLATTE	44	25	55	18	34	10	1	-.1	1.2	134	.8	178	98	63	0	7	3	0	0			
OMAHA	38	28	47	24	33	10	0	-.2	2.1	129	1.1	119	90	73	0	6	0	0	0			
SCOTTSBLUFF	41	19	51	8	30	3	4	-.3	1.5	148	.8	161	94	57	0	7	2	0	0			
VALENTINE	49	24	58	17	37	16	1	-.1	1.6	80	.4	119	90	48	0	7	0	0	0			
NV BLY	31	2	37	-6	16	-11	1	-.1	3.0	187	2.1	242	93	66	0	7	1	0	0			
LAS VEGAS	59	40	63	35	49	2	0	-.1	3.3	382	1.6	286	77	37	0	0	1	0	0			
RENO	44	25	48	19	35	-1	0	-.3	4.3	163	2.4	168	94	52	0	6	0	0	0			
WINNEMUCCA	38	14	42	2	26	-8	0	-.2	3.0	163	2.0	200	87	59	0	7	0	0	0			
NE CONCORD	25	1	46	-13	13	-7	2	-.4	3.8	56	1.5	46	82	38	0	7	1	0	0			
NJ ATLANTIC CITY	46	16	56	8	31	-1	2	-.6	6.8	88	2.8	68	72	24	0	7	2	0	0			
NM ALBUQUERQUE	51	27	54	20	39	2	0	-.1	2.1	226	.9	204	81	30	0	7	0	0	0			
CLOVIS	56	26	65	22	41	2	0	-.1	.8	69	.5	98	92	30	0	6	0	0	0			
ROSWELL	58	31	67	23	44	3	0	-.1	1.3	157	.7	161	81	28	0	4	0	0	0			
NY ALBANY	32	4	47	-11	18	-3	2	-.3	5.3	91	2.2	79	79	41	0	7	4	0	0			
BINGHAMTON	29	7	43	-6	18	-3	1	-.4	5.1	88	2.2	73	84	44	0	7	2	0	0			
BUFFALO	31	14	40	-4	22	-1	1	-.4	8.3	121	4.5	128	82	57	0	7	4	0	0			
NEW YORK	44	21	55	9	32	1	4	-.3	9.0	122	3.5	94	61	26	0	7	1	0	0			
ROCHESTER	30	11	42	-6	20	-3	4	-.2	5.6	104	2.6	94	88	58	0	7	4	0	0			
SYRACUSE	27	3	42	-9	15	-7	4	-.2	5.7	90	3.1	100	85	49	0	7	2	0	0			
NC ASHEVILLE	57	25	65	19	41	4	0	-.7	7.5	108	3.8	101	73	18	0	7	0	0	0			
CHARLOTTE	59	32	67	24	46	4	0	-.9	9.0	113	6.2	136	54	16	0	4	0	0	0			
GREENSBORO	56	25	66	20	41	3	0	-.8	6.1	81	3.7	87	62	16	0	7	0	0	0			
HATTERAS	51	36	60	26	43	-1	0	-.1	11.6	115	6.0	104	78	39	0	1	1	0	0			
NEW BERN	57	29	66	22	43	-1	0	-.1	8.9	104	5.9	120	67	22	0	5	0	0	0			
RALEIGH	57	27	67	20	42	3	0	-.9	6.9	94	4.5	106	67	16	0	6	0	0	0			
WILMINGTON	58	32	68	22	45	-1	2	-.7	10.5	134	6.0	137	66	22	0	3	1	0	0			
ND BISMARCK	40	19	46	12	30	19	0	-.1	.8	71	.3	50	97	65	0	7	0	0	0			
FARGO	33	17	41	9	25	18	0	-.1	1.3	109	.8	127	95	78	0	7	0	0	0			
GRAND FORKS	34	19	40	11	27	22	0	-.1	1.0	71	.3	38	95	74	0	7	0	0	0			
WILLISTON	37	12	42	5	24	14	0	-.1	.7	61	.2	38	99	70	0	7	0	0	0			
OH AKRON-CANTON	41	19	51	11	30	5	0	-.5	6.3	111	4.0	135	83	34	0	7	0	0	0			
CINCINNATI	46	23	54	16	34	4	0	-.7	5.2	78	3.8	105	76	28	0	7	0	0	0			
CLEVELAND	40	23	53	12	32	6	1	-.4	8.9	157	4.5	157	79	41	0	6	2	0	0			
COLUMBUS	43	21	54	12	32	4	0	-.5	5.5	95	4.1	130	82	35	0	7	0	0	0			
DAYTON	44	20	54	12	32	4	0	-.5	5.5	100	3.9	129	79	33	0	7	0	0	0			

Based on 1951-80 normals.

Weather Data for the Week Ending February 6, 1993

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	42	22	53	11	32	8	T	-4	T	6.8	136	3.2	134	82	37	0	0	6	0	0	0	
YOUNGSTOWN	40	19	51	9	29	5	T	-5	T	7.3	124	3.8	120	88	36	0	0	6	2	2	1	
OK OKLAHOMA CITY	54	35	64	31	45	7	T	.5	T	5.5	233	2.5	203	96	59	0	0	2	3	3	0	
TULSA	56	35	65	29	45	8	T	.0	T	7.8	227	2.6	157	95	51	0	0	4	1	1	0	
OR ASTORIA	57	40	61	34	48	6	T	-1.9	T	12.5	52	6.5	52	87	46	0	0	0	0	0	0	
BURNS	25	5	34	-7	15	-16	T	.0	T	2.9	86	1.7	96	92	68	0	0	7	0	0	0	
MEDFORD	62	35	69	26	48	8	T	.0	T	6.3	85	2.8	72	95	40	0	0	3	2	0	0	
PENDLETON	38	29	47	25	34	-3	T	-3	T	2.5	70	1.8	90	83	71	0	0	2	0	0	0	
PORTLAND	52	34	58	27	43	2	T	-1.1	T	8.0	59	3.1	43	83	48	0	0	7	0	0	0	
SALEM	53	32	58	25	43	1	T	-1.3	T	12.6	83	4.8	58	87	50	0	0	3	0	0	0	
PA ALLENTOWN	43	16	54	5	30	2	T	-7	T	5.3	69	2.0	51	64	24	0	0	7	1	0	0	
ERIE	36	20	48	4	28	4	T	-4	T	6.8	113	3.4	123	79	45	0	0	5	6	1	0	
HARRISBURG	43	24	56	11	34	4	T	-6	T	3.7	54	1.6	46	55	25	0	0	7	2	0	0	
PHILADELPHIA	46	21	57	10	34	2	T	-5	T	6.7	94	2.1	56	63	25	0	0	6	7	1	0	
PITTSBURGH	43	21	53	11	32	5	T	-5	T	5.9	99	3.0	91	80	36	0	0	7	2	0	0	
SCRANTON	39	14	48	1	27	1	T	-5	T	4.9	95	2.0	75	66	29	0	0	7	7	3	0	
RI PROVIDENCE	33	14	50	2	23	-5	T	-6	T	9.5	102	2.6	54	77	33	0	0	2	1	1	1	
SC CHARLESTON	60	38	67	27	49	1	T	-3	T	10.9	155	9.4	238	70	28	0	0	5	2	2	0	
COLUMBIA	61	29	67	20	45	2	T	-5	T	11.2	129	8.0	153	82	23	0	0	4	1	0	0	
FLORENCE	61	34	68	23	48	0	T	-5	T	10.8	150	7.1	168	64	21	0	0	3	3	0	0	
GREENVILLE	59	29	67	20	44	2	T	-1.0	T	12.3	134	7.2	140	66	17	0	0	4	0	0	0	
SD ABERDEEN	36	24	43	19	30	19	T	-1	T	.8	74	.6	100	98	79	0	0	7	0	0	0	
HURON	42	26	49	22	34	20	T	-1	T	.6	62	.3	62	98	67	0	0	7	0	0	0	
RAPID CITY	40	22	50	15	31	7	T	.0	T	1.3	144	.8	154	90	56	0	0	7	2	0	0	
SIoux FALLS	37	26	44	19	32	16	T	-2	T	1.5	113	.7	108	96	78	0	0	7	0	0	0	
TN CHATTANOOGA	60	28	65	22	44	4	T	-1.1	T	10.7	95	5.2	84	90	25	0	0	6	0	0	0	
KNOXVILLE	56	27	62	22	42	3	T	-1.0	T	10.8	107	4.1	74	72	24	0	0	7	0	0	0	
MEMPHIS	60	33	63	28	47	6	T	-1.0	T	7.1	68	3.6	65	74	29	0	0	3	0	0	0	
NASHVILLE	58	28	63	23	43	5	T	-1.0	T	5.7	57	2.8	52	75	21	0	0	6	0	0	0	
TX ABILENE	57	37	69	29	47	2	T	-2	T	1.9	94	.9	78	98	54	0	0	2	1	1	0	
AMARILLO	55	25	64	22	40	3	T	-1	T	1.2	112	.8	134	97	38	0	0	0	3	1	0	
AUSTIN	61	46	71	39	54	3	T	.8	T	8.0	195	4.7	226	95	62	0	0	0	0	1	0	
BEAUMONT	65	44	70	36	55	1	T	-8	T	16.7	168	10.2	204	95	46	0	0	0	0	3	1	
BROWNSVILLE	68	56	75	46	62	1	T	2.7	T	5.3	195	4.5	280	95	74	0	0	0	0	3	1	
CORPUS CHRISTI	65	52	68	43	59	2	T	.9	T	.8	74	1.4	70	90	62	0	0	0	0	3	0	
DEL RIO	65	46	69	35	56	3	T	.3	T	1.4	107	.9	131	81	45	0	0	4	0	3	0	
EL PASO	60	33	66	26	46	0	T	-1	T	2.7	324	1.4	293	78	28	0	0	4	0	0	0	
FORT WORTH	60	43	69	35	51	5	T	2.3	T	1.9	8.3	218	4.0	193	95	57	0	0	2	2	2	
GALVESTON	62	53	68	47	57	3	T	.6	T	-1	6	13.6	192	98	278	87	58	0	0	1	1	
HOUSTON	65	45	71	35	55	2	T	-2	T	9.5	119	6.0	143	92	53	0	0	0	2	0	0	
LUBBOCK	60	27	69	22	44	3	T	.0	T	2.4	290	1.0	224	92	30	0	0	7	0	0	0	
MIDLAND	59	31	68	24	45	0	T	-1	T	1.9	203	1.3	251	96	38	0	0	3	1	0	0	
SAN ANGELO	59	38	67	30	49	1	T	-2	T	1.7	119	.9	118	96	53	0	0	1	0	0	0	
SAN ANTONIO	62	44	68	33	53	1	T	.8	T	.3	4.2	130	2.1	108	94	57	0	0	0	3	0	
VICTORIA	63	47	70	37	55	2	T	.8	T	.2	.3	6.1	135	4.0	168	94	64	0	0	4	0	
WACO	60	42	71	33	51	3	T	1.5	T	1.0	1.3	7.2	183	3.9	189	97	64	0	0	3	1	
WICHITA FALLS	59	37	68	32	48	6	T	-2	T	3.4	150	1.2	112	98	57	0	0	1	1	0	0	
UT CEDAR CITY	36	16	42	11	26	-6	T	.5	T	.3	3.6	252	2.6	329	99	71	0	0	7	2	0	0
SALT LAKE CITY	33	20	35	16	27	-5	T	-3	T	4.3	147	3.3	203	95	69	0	0	7	2	0	0	
VT BURLINGTON	20	-3	35	-26	8	-8	T	.6	T	.2	.3	3.4	74	2.5	113	89	52	0	0	7	3	
VA NORFOLK	52	29	65	20	41	1	T	.0	T	.8	8.0	106	4.9	111	70	22	0	0	6	0	0	
RICHMOND	54	27	60	18	41	4	T	-7	T	.0	7.3	100	4.5	116	66	20	0	0	6	0	0	
ROANOKE	56	26	63	19	41	5	T	-7	T	.0	6.4	101	3.8	110	52	15	0	0	6	0	0	
WA QUILLAYUTE	59	42	65	33	50	10	T	-4	T	-2.8	4	18.0	52	8.2	48	91	49	0	0	1	0	
SEATTLE-TACOMA	58	37	64	28	47	6	T	-1.2	T	8.1	61	4.1	58	77	34	0	0	1	0	0	0	
SPOKANE	36	23	44	14	30	0	T	-5	T	3.6	67	1.4	49	94	71	0	0	7	0	0	0	
YAKIMA	39	28	43	20	34	1	T	-2	T	3.3	113	.9	58	94	69	0	0	5	3	0	0	
WV BECKLEY	47	21	52	9	34	3	T	.0	T	-8	.0	5.5	76	1.6	38	67	22	0	7	0	0	
CHARLESTON	48	22	55	13	35	2	T	.0	T	-8	.0	5.4	73	1.9	45	71	25	0	6	0	0	
HUNTINGTON	49	22	56	14	35	2	T	.0	T	-7	.0	5.1	73	2.2	59	74	28	0	7	0	0	
PARKERSBURG	45	20	56	9	32	1	T	-6	T	.0	4.3	71	2.3	69	77	32	0	0	7	0	0	
WI GREEN BAY	37	21	49	11	29	14	T	-2	T	3.7	135	1.4	105	85	56	0	0	7	1	0	0	
LACROSSE	38	22	45	16	30	14	T	-2	T	2.8	129	1.2	111	92	61	0	0	7	0	0	0	
MADISON	41	23	47	20	32	14	T	-2	T	4.0	144	1.6	125	86	56	0	0	7	0	0	0	
MILWAUKEE	41	25	50	20	33	13	T	-3	T	5.1	131	2.7	142	84	54	0	0	7	1	0	0	
MAUSAU	37	19	48	12	28	15	T	-2	T	3.3	143	1.6	144	97	56	0	0	7	0	0	0	
WY CASPER	37	19	43	11	28	3	T	.1	T	.0	1.7	160	.9	147	79	49	0	0	7	1	0	
CHEYENNE	45	21	59	14	33	5	T	.1	T	.0	1.1	.9	118	.5	107	79	34	0	7	3	0	
LANDER	24	5	34	-4	14	-9	T	-1	T	1.8	163	1.0	164	89	62	0	0	7	0	0	0	
SHERIDAN	40	15	46	11	28	4	T	.0	T	.0	1.8	111	.6	61	88	48	0	0	7	0	0	

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F) January 31 - February 6, 1993

(Cumulative totals and departures from normal are for the period July 1, 1992 - February 6, 1993)

STATES AND STATIONS	WEEKLY	CUMULATIVE		STATES AND STATIONS	WEEKLY	CUMULATIVE		STATES AND STATIONS	WEEKLY	CUMULATIVE							
	TOTAL DEPARTURE	TOTAL DEPARTURE	DEP fm 91-92		TOTAL DEPARTURE	TOTAL DEPARTURE	DEP fm 91-92		TOTAL DEPARTURE	TOTAL DEPARTURE	DEP fm 91-92						
AL BIRMINGHAM	127	-19	1756	-186	-50	SHREVEPORT	104	-20	1552	-24	58	DAYTON	231	-34	3395	-150	21
MOBILE	91	-8	977	-226	-293	ME CARIBOU	455	77	5792	10	127	TOLEDO	228	-62	3655	-355	44
MONTGOMERY	121	1	1376	-198	-200	PORTLAND	366	58	4352	-66	184	YOUNGSTOWN	248	-39	3763	-185	130
AK ANCHORAGE	449	104	6768	42	636	MD BALTIMORE	208	-16	2739	-189	-81	OK OKLAHOMA CITY	139	-50	2459	-27	243
BARRON	679	98	11567	-41	-355	SALISBURY	216	6	2591	-121	49	TULSA	138	-54	2560	53	435
FAIRBANKS	634	122	9211	-54	415	MA BOSTON	288	37	3387	95	208	OR ASTORIA	114	-41	3077	98	351
JUNEAU	251	-29	5281	-253	568	CHATHAM	266	21	3245	-52	171	BURNS	348	112	5213	991	1096
KODIAK	353	110	5340	237	480	MI ALPENA	300	-39	4859	-44	231	MEDFORD	117	-55	2580	-356	113
NOME	556	131	9090	801	1298	DETROIT	239	-50	3708	-275	72	PENDELTON	218	17	3661	334	657
AZ FLAGSTAFF	233	-16	4040	-157	176	FLINT	261	-44	4055	-164	43	PORTLAND	153	-12	2717	-94	451
PHOENIX	27	-49	687	-312	53	GRAND RAPIDS	253	-48	4093	-66	124	SALEM	155	-11	2768	-147	355
PRESCOTT	170	-20	2671	-248	07	HOUGHTON LAKE	290	-52	4780	-143	207	PA ALLENTOWN	244	-20	3422	-148	212
TUCSON	59	-29	1029	-113	25	LANSING	260	-46	4197	-6	106	ERIE	259	-30	3412	-500	31
WINSLOW	189	-17	3253	108	-99	MARQUETTE	291	-78	5712	68	136	HARRISBURG	215	-33	3171	-138	152
YUMA	19	-34	581	-130	165	MUSKEGON	251	-46	4039	-43	195	PHILADELPHIA	218	-19	2696	-352	20
AR FORT SMITH	131	-47	2210	-145	114	SAULT ST MARIE	346	-20	5495	68	306	PITTSBURGH	229	-37	3351	-314	07
LITTLE ROCK	116	-48	2088	-61	142	MN ALEXANDRIA	262	-137	5625	-72	331	SCRANTON	267	-13	3570	-287	22
CA BAKERSFIELD	65	-32	1374	-69	-191	DULUTH	242	-155	5875	-140	81	RI PROVIDENCE	290	31	3403	-88	270
EUREKA	55	-64	2278	-401	-22	INT'L FALLS	266	-168	6444	-140	325	SC CHARLESTON	109	-10	1159	-295	-98
FRESNO	80	-35	1539	-219	-122	MINNEAPOLIS	240	-119	4939	-84	59	COLUMBIA	138	0	1710	-74	53
LOS ANGELES	36	-27	637	-209	122	ROCHESTER	265	-97	5248	99	222	FLORENCE	121	-17	1514	-207	-26
REDDING	100	-16	1705	-11	85	SAINT CLOUD	256	-131	5533	-64	203	GREENVILLE	145	-16	2185	44	244
SACRAMENTO	95	-21	1663	-94	07	MS GREENWOOD	116	-25	1610	-262	-85	SD ABERDEEN	241	-134	5456	67	670
SAN DIEGO	27	-23	585	-113	128	JACKSON	114	-14	1416	-231	-141	HURON	212	-145	5071	-27	615
SAN FRANCISCO	75	-26	1394	-429	-72	MERIDIAN	119	-9	1410	-300	-158	RAPID CITY	237	-55	4857	410	969
STOCKTON	98	-19	1620	-126	-78	MO CAPE GIRARDEAU	162	-59	2750	-153	170	STOUX FALLS	233	-117	4974	3	469
CO DENVER	206	-28	3925	282	293	COLUMBIA	178	-71	3310	-28	262	TN CHATTANOOGA	145	-31	2093	-285	-24
GRAND UCT.	206	-41	3566	-161	-370	KANSAS CITY	172	-82	3468	57	333	KNOXVILLE	162	-18	2322	-105	13
FUEBLO	208	-18	3948	487	424	SAINT LOUIS	168	-72	2945	-248	233	MEMPHIS	126	-41	1871	-193	39
CT BRIDGEPORT	269	17	3152	-39	160	SPRINGFIELD	153	-68	2881	-122	186	NASHVILLE	153	-36	2256	-221	-8
HARTFORD	291	18	3786	2	302	MT BILLINGS	202	-79	4627	206	887	TX ABILENE	125	-13	1745	-80	-190
DE WILMINGTON	213	-23	2813	-252	64	GLASCOW	296	-78	5669	103	1052	AMARILLO	173	-21	3030	287	218
DC WASHINGTON	191	-14	2554	-54	165	GREAT FALLS	163	-130	5087	360	1158	AUSTIN	78	-22	1122	-132	-36
FL APALACHICOLA	78	-12	616	-360	-346	HAYVE	239	-109	5661	244	1254	BRAUMONT	72	-20	909	-152	-123
DAYTONA BEACH	45	-12	350	-254	-190	HELENA	239	-24	5357	316	678	BROWNSVILLE	23	-19	345	-112	-154
FORT MYERS	7	-28	78	-234	-89	KALISPELL	252	-42	5374	181	747	CORPUS CHRISTI	44	-20	583	-128	-96
JACKSONVILLE	90	6	744	-245	-217	MILES CITY	269	-61	5089	118	1038	DEL RIO	64	-21	968	-172	-91
KEY WEST	0	-14	3	-81	-9	MISSOULA	295	15	5198	322	759	EL PASO	127	-4	1745	-155	-90
MIAMI	0	-21	18	-122	-32	NE GRAND ISLAND	240	-49	4415	271	806	FORT WORTH	96	-32	1547	-54	-29
ORLANDO	28	-21	248	-212	-130	LINCOLN	239	-57	4241	151	715	GALVESTON	51	-33	673	-192	-161
TALLAHASSEE	87	-11	820	-335	-341	NORFOLK	226	-87	4469	7	566	HOUSTON	68	-25	944	-163	-157
TAMPA	30	-20	243	-265	-157	NORTH PLATTE	212	-73	4554	212	777	LUBBOCK	148	-24	2277	-76	-120
W. PALM BEACH	5	-23	53	-129	-63	OMAHA	221	-71	4127	137	423	MIDLAND-ODESSA	138	1	1851	-3	-239
GA ATLANTA	119	-36	1801	-215	79	SCOTTSBLUFF	243	-21	4635	474	796	SAN ANGELO	114	-10	1585	-54	-153
AUGUSTA	133	-1	1555	-191	-88	VALENTINE	197	-109	4760	200	602	SAN ANTONIO	86	-9	1039	-122	-69
MACON	120	-3	1493	-82	-9	NV ELY	339	71	4738	186	435	VICTORIA	69	-11	795	-120	-65
SAVANNAH	103	-2	1065	-274	-115	LAS VEGAS	109	-12	1702	-50	129	WACO	99	-20	1426	-58	28
ID BOISE	265	43	3980	357	539	RENO	210	3	3517	-150	502	WICHITA FALLS	116	-41	1955	-116	-9
LEWISTON	196	-9	3544	110	511	WINNEMUCA	274	54	4218	307	677	UT BLANDING	226	-17	3571	-223	96
POCATELLO	350	82	4796	441	550	NH CONCORD	363	48	4556	31	315	CEDAR CITY	269	39	3702	64	150
IL CHICAGO	220	-74	3917	-50	122	NJ ATLANTIC CITY	239	8	2970	-69	62	SALT LAKE CITY	266	31	3902	264	242
MOLINE	224	-79	4002	-94	226	NM ALBUQUERQUE	178	-16	2800	-97	-23	VT BURLINGTON	394	51	4570	-195	-7
PEORIA	204	-87	3668	-270	53	CLOVIS	166	-18	2655	9	-160	VA LYNCHBURG	161	-45	2541	-220	96
QUINCY	208	-67	3662	-18	280	ROSWELL	143	-7	2168	-19	-237	NORFOLK	170	-5	1963	-180	31
ROCKFORD	232	-82	4245	-87	206	NY ALBANY	327	20	4122	-87	152	RICHMOND	170	-26	2374	-180	146
SPRINGFIELD	191	-79	3300	-288	04	BINGHAMTON	327	19	4453	94	473	ROANOKE	165	-38	2662	-103	235
IN EVANSVILLE	174	-56	2731	-338	-92	BUFFALO	296	2	3875	-123	115	WA COLVILLE	256	-3	4752	250	715
FORT WAYNE	230	-58	3667	-224	62	NEW YORK	228	-3	2808	-130	228	QUILLAYUTE	102	-68	3347	-79	371
INDIANAPOLIS	212	-53	3302	-261	85	ROCHESTER	312	18	4096	130	217	SEATTLE-TACOMA	122	-44	2819	-206	383
SOUTH BEND	224	-64	3717	-171	67	SYRACUSE	347	46	4063	33	188	SPokane	245	-5	4529	251	748
IA DES MOINES	226	-82	4131	-17	307	NC ASHEVILLE	167	-27	2565	-172	121	YAKIMA	219	-8	4136	268	772
DUBUQUE	240	-91	4638	34	273	CAPE HATTERAS	151	10	1270	-329	-70	WV BECKLEY	217	-26	-----	-----	-----
SIoux CITY	226	-94	4497	59	441	CHARLOTTE	135	-33	1976	-227	191	CHARLESTON	207	-14	2726	-273	14
WATERLOO	240	-101	4570	-176	187	GREENSBORO	168	-21	2469	-43	304	HUNTINGTON	206	-15	2728	-267	-12
KS CONCORDIA	216	-47	3884	297	717	NEW BERN	152	1	1574	-297	-37	PARKERSBURG	227	-6	2974	-149	-67
DODGE CITY	197	-33	3808	572	782	RALEIGH-DURHAM	157	-18	2152	-144	150	WI GREEN BAY	252	-98	4759	-179	161
GOODLAND	211	-37	4258	483	745	WILMINGTON	138	5	1472	-159	-70	LA CROSSE	242	-100	4651	-73	99
TOPEKA	172	-80	3429	-33	429	ND BISMARCK	247	-138	5755	75	827	MADISON	231	-103	4453	-277	122
WICHITA	167	-64	3199	77	418	FARGO	277	-130	5842	-14	523	MILWAUKEE	219	-94	4042	-332	180
KY BOWLING GREEN	169	-42	2612	-198	46	GRAND FORKS	267	-153	6076	-68	517	WAUSAU	259	-108	5214	-49	100
LXINGTON	194	-35	2821	-239	17	WILLISTON	283	-101	6019	231	1043	WY CASPER	256	-27	4528	-58	258
LOUISVILLE	177	-44	2568	-341	20	OH AKRON-CANTON	243	-37	3653	-130	68	CHEYENNE	223	-38	4409	127	324
LA BATON ROUGE	82	-18	967	-229	-162	CLEVELAND	230	-48	3464	-247	62	LANDER	353	57	5227	380	403
LAKE CHARLES	76	-19	958	-165	-137	COLUMBUS	231	-33	3222	-323	07	SHERIDAN	261	-33	5151	368	890
NEW ORLEANS	86	-5	782	-272	-302	CINCINNATI	215	-33	3143	-172	95						

Based on 1951-80 normals.

January Weather and Crop Summary

Weather

A rampage of storms guaranteed California's Sierra Nevada mountains of above-normal snowpack and runoff for the upcoming snowmelt season, but major flooding affected parts of southern California and Arizona. Several western stations realized seasonal record snowfall totals, in part due to the January storms. Farther east, cool weather and a combination of rain, ice, and snow hampered residual fieldwork activities in the central and southern Plains and the Midwest. Rainy weather plagued the Southeast. But in parts of the Northwest, precipitation was less than half of normal despite above-normal snowfall, renewing drought concerns. Less than half of the normal rainfall covered the Hawaiian islands, but this month's conditions were preceded by very wet weather in December.

Frigid air hung over the northwestern quarter of the Nation until mid-month, but ample snow cover protected winter wheat from readings as low as -25°F in Montana and -5°F in eastern Washington. Cold air never escaped the West's interior valleys, resulting in monthly temperatures averaging as much as 13°F below normal in eastern Oregon. Farther south, a strong subtropical jet stream limited cold air intrusions. Temperatures averaged up to 6°F above normal in parts of the Southwest and the Southeast.

Heavy precipitation washed across California on January 1 and 6-10, and on almost a daily basis between January 12 and 21. Statewide monthly average precipitation was nearly 9.5 inches, which was about 200 percent of normal. Only northwestern coastal portions of the State received below-normal amounts. Serious flooding affected southern California and Arizona, as well as neighboring portions of northwestern Mexico. Problems ranged from widespread flash flooding (as normally dry washes overflowed) to river flooding and mudslides. A warm, dry spell during the last 10 days of the month permitted the Southwest to dry, and allowed for considerable snowmelt in the Sierra foothills. Fortunately, much of the melting snow was captured by the State's reservoir system.

By February 1, California's 155 largest reservoirs contained 18.0 million acre feet (5.87 trillion gallons) of water, which is 77 percent of the long-term average. Last year, on February 1, 1992, reservoir storage stood at only 13.0 million acre feet (4.24 trillion gallons), or 55 percent of normal. In addition, the moisture content of the high elevation Sierra snowpack, based upon the observations of more than 100 automated sensors, was 175 percent of normal on February 1, promising additional hefty spring runoff. Even if no snow falls in the Sierras between now and April 1 (the traditional peak snowpack date), the water content of the snow would wind up at approximately 115 percent of normal.

Elsewhere, several stations, including Fairbanks, AK, and Klamath Falls, OR, surpassed seasonal snowfall records during January. This season's total of 78.0 inches of snow at Klamath

Falls is 10 times the amount (7.8 inches) that fell during 1991-92. Salt Lake City, UT, had its snowiest month ever. But in the East, most of the precipitation fell as rain. Beckley, WV, had its least snowy January on record, noting only 0.4 inches. Hollywood, FL, had more than its share of rain early in the month, setting a monthly rainfall record by January 11. A monthly rainfall record was also set in Miami Beach, where nearly 10 inches fell. Many locations in Arizona and southern California set January rainfall records, including San Diego, CA (second wettest month ever), and Tucson, AZ.

The relative quietude of the month's final 10 days was welcomed not only in California, but throughout the Nation as well. In the Nation's southeastern quadrant, mild, dry weather allowed fieldwork to resume after 3 stormy weeks. Warmer weather in the northern Plains eased stress on livestock, but also melted much of the winter wheat crop's protective snow cover from Montana southeastward to Colorado and Kansas.

In contrast, Alaskan weather turned sharply colder after mid-month. In Nome, AK, the temperature failed to rise above -10°F after the 19th, and their -46°F reading on January 30 was their coldest since January 28, 1989.

Crop Progress

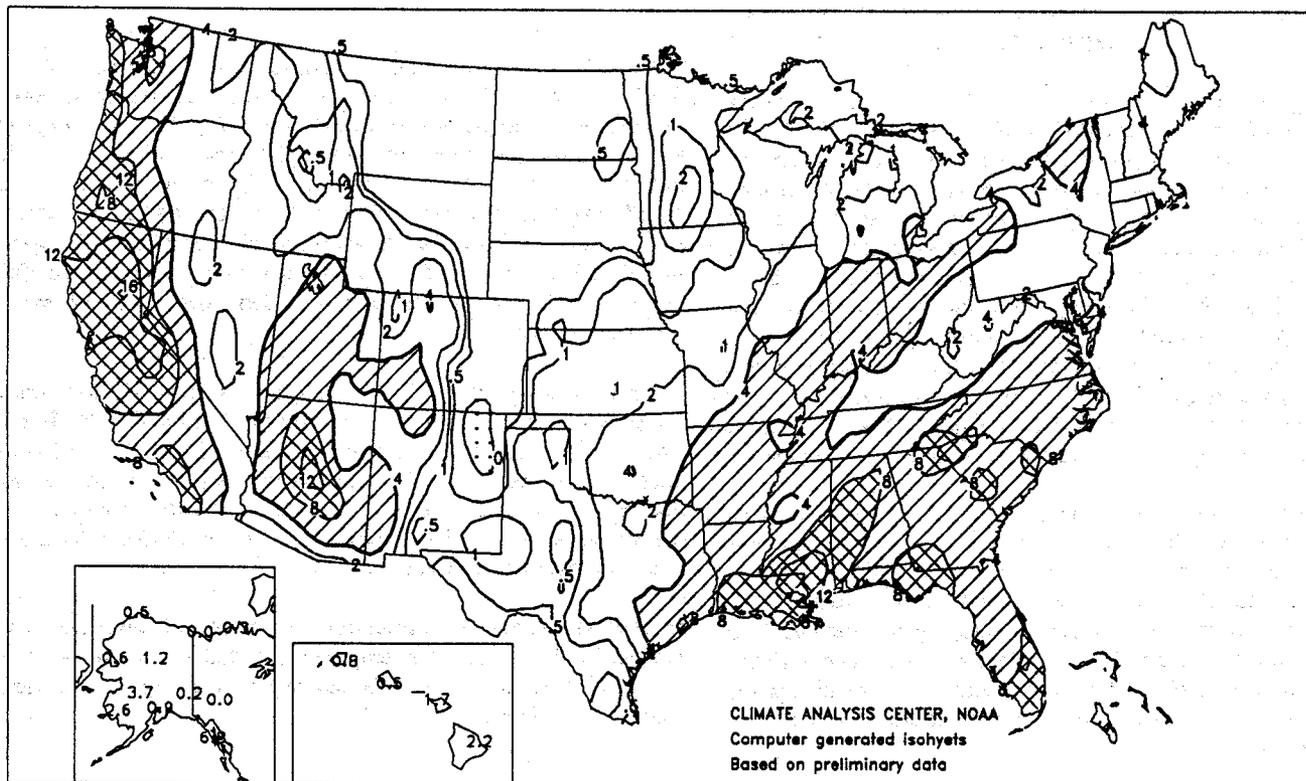
At the beginning of January, the winter wheat crop was in good condition in most areas except in Texas, where the crop condition compared unfavorably to last year. Early in the month, precipitation across the Nation brought ample snow cover to the Northwest and northern Great Plains, and excessive moisture to the South. The wet conditions in the South hurt stands and caused yellowing of grain fields. Although the excessive moisture helped control a greenbug and mite outbreak in Texas, their crop condition still compared unfavorably to last year. Warmer temperatures and sunny weather were needed at the end of the month to dry fields in the South. Mild weather over the Northwest and northern Great Plains the second part of the month melted some of that area's snow cover, but at the end of the month, the winter wheat was under adequate cover. Nationally, the condition of the winter wheat crop was rated fair to good.

In early January, the citrus harvest advanced in Florida and California. Rain in the West most of the month hindered or delayed harvests in California and Arizona. Mid-month rains delayed harvests in Florida. By the end of the month, citrus groves were drying and harvesting was advancing in all major areas.

Rain and snow hindered the harvesting of cotton, corn, and soybeans the first half of the month. The mild weather the end of the period allowed the corn harvest to advance in the Midwest, soybean harvest to finish in the Southeast, and cotton harvest to be completed in Texas and the Southeast.

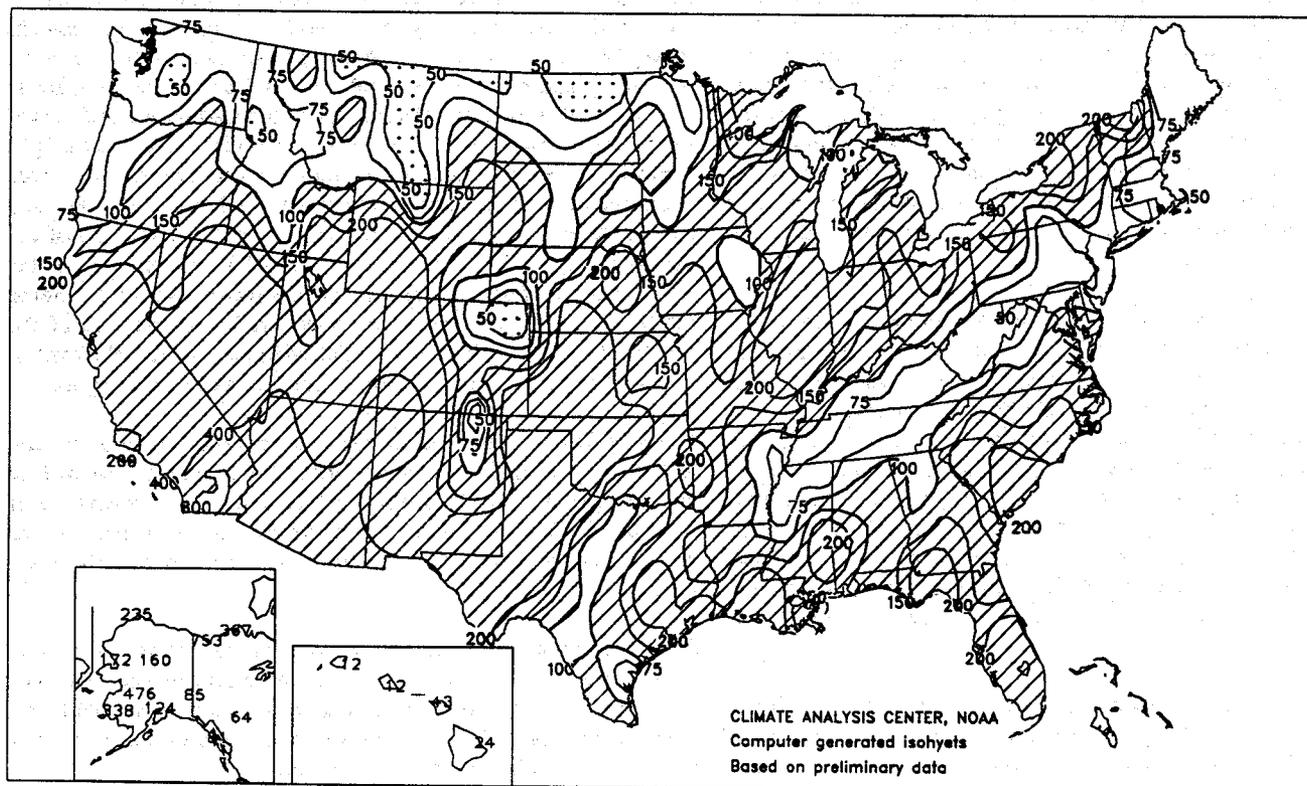
TOTAL PRECIPITATION (inches)

JAN 1993



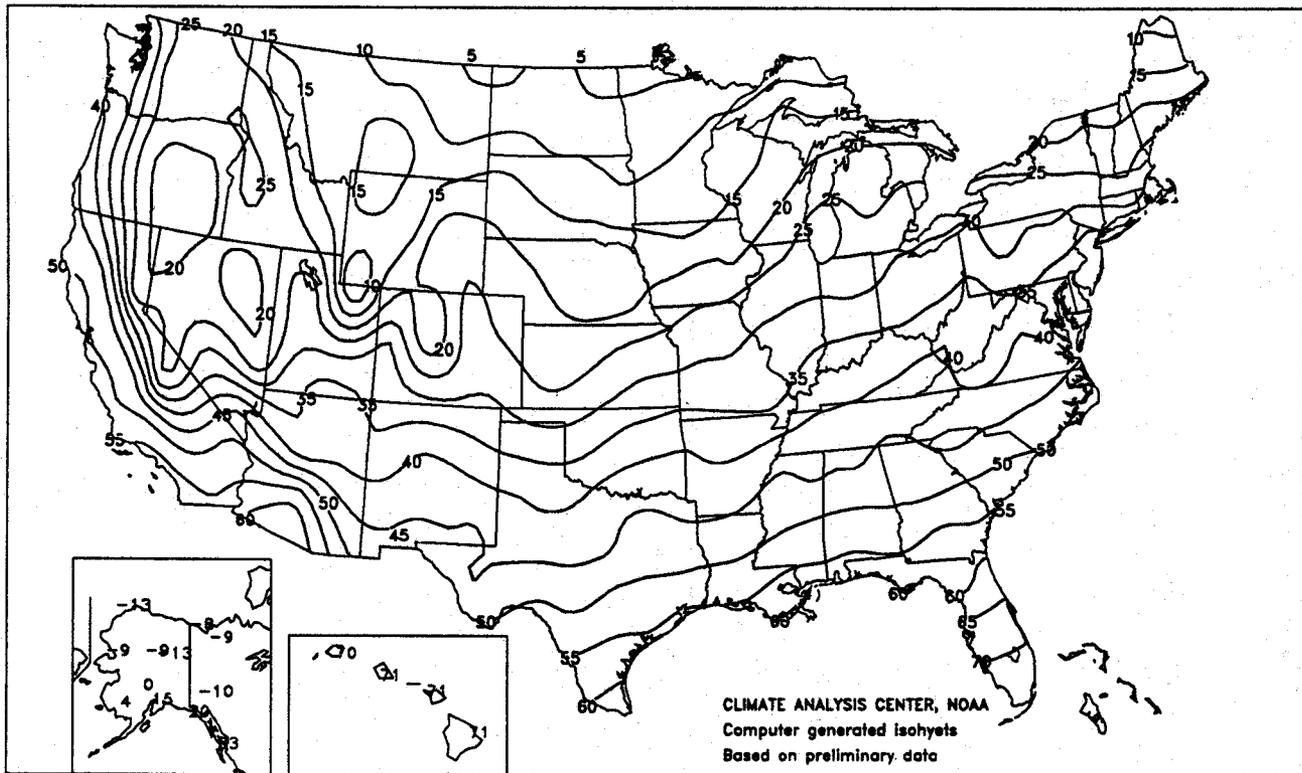
PERCENT OF NORMAL PRECIPITATION

JAN 1993



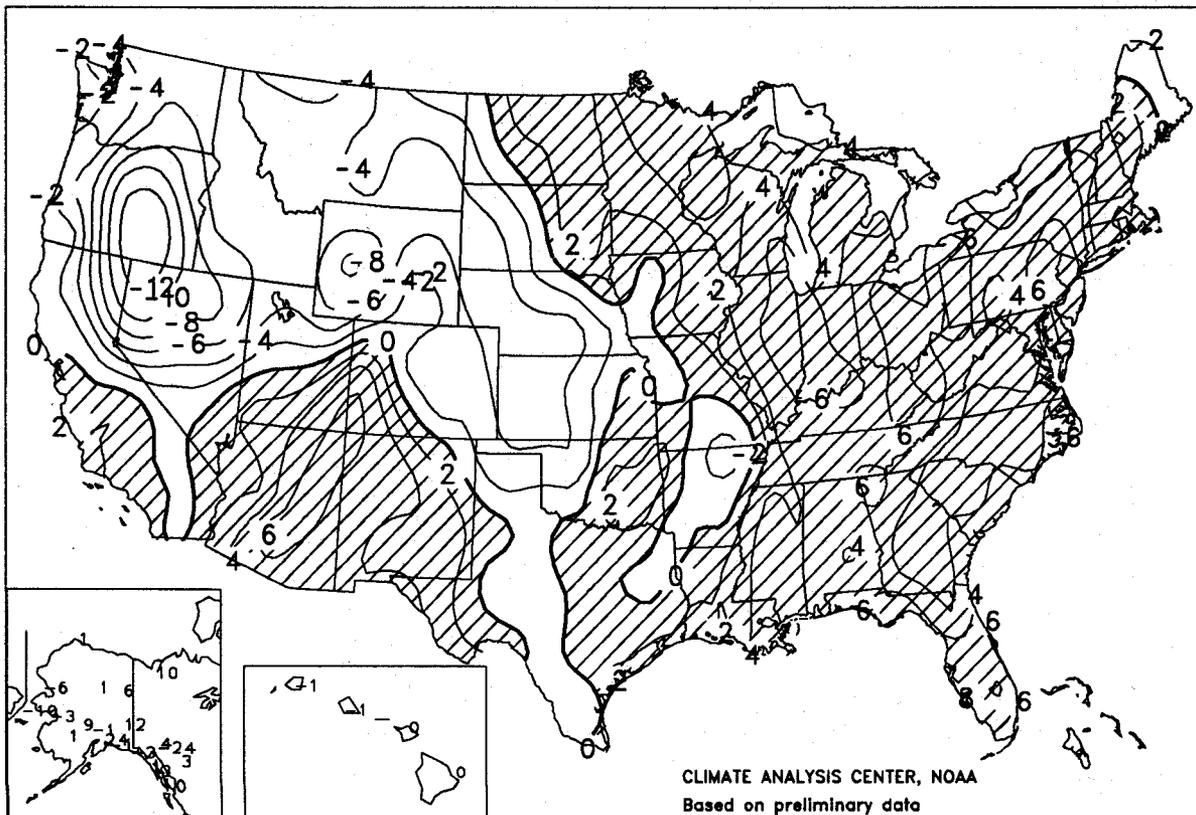
AVERAGE TEMPERATURE(°F)

JAN 1993



Departure of Average Temperature from Normal(°F)

JAN 1993



TEMPERATURE AND PRECIPITATION SUMMARY

January 1993

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	47	4	6.1	0.9	LA BATON ROUGE	54	4	13.4	8.8	OK YOUNGSTOWN	31	7	3.8	1.1
AL HUNTSVILLE	44	4	4.4	-0.8	LA LAKE CHARLES	53	3	6.8	2.2	OK OKLAHOMA CITY	37	0	1.8	0.8
AL MOBILE	55	4	8.0	3.5	LA NEW ORLEANS	57	5	6.2	1.3	OK TULSA	36	1	2.3	1.0
AL MONTGOMERY	51	4	5.2	1.0	ME SHREVEPORT	46	1	4.6	0.8	OR ASTORIA	39	-2	6.3	-4.5
AK ANCHORAGE	15	3	1.0	0.2	ME CARIBOU	9	-0	2.2	-0.2	OR BURNS	15	-12	1.7	0.2
AK BARROW	-13	1	0.4	0.2	MD PORTLAND	24	2	2.8	-1.0	OR MEDFORD	38	-1	2.6	-0.8
AK FAIRBANKS	3	9	2.4	1.8	MD BALTIMORE	38	5	2.7	-0.2	OR PENDLETON	25	-8	1.8	0.1
AK JUNEAU	25	3	7.3	3.6	MD PORTLAND	40	4	4.1	0.7	OR PORTLAND	37	-2	3.1	-3.1
AK KODIAK	28	-2	3.0	-2.8	MA BOSTON	32	3	2.2	-1.8	OR SALEM	36	-3	4.8	-1.2
AZ NOME	-4	-10	1.1	0.4	MA CHATHAM	33	2	1.9	-2.4	PA ALLENTOWN	33	6	2.0	-1.4
AZ FLAGSTAFF	37	9	9.6	7.1	MI ALPENA	22	3	1.3	-0.4	PA ERIE	33	8	3.4	1.0
AZ PHOENIX	58	6	5.2	4.5	MI DETROIT	29	5	3.9	2.1	PA HARRISBURG	35	5	1.6	-1.4
AZ PRESCOTT	40	2	4.7	3.7	MI FLINT	26	4	2.8	1.2	PA PHILADELPHIA	38	7	2.0	-1.2
AZ TUCSON	55	4	4.8	4.0	MI GRAND RAPIDS	26	3	4.2	2.2	PA PITTSBURGH	35	8	3.0	0.2
AZ WINSLOW	39	7	1.5	1.1	MI HOUGHTON LAKE	21	4	1.7	0.2	PA SCRANTON	32	6	2.0	-0.2
AR YUMA	58	3	1.7	1.3	MI LANSING	26	5	3.2	1.6	PA WILLIAMSPORT	32	7	1.8	-0.7
AR FORT SMITH	39	2	4.0	2.2	MI MARQUETTE	17	5	2.4	0.4	RI PROVIDENCE	31	3	2.4	-1.6
CA LITTLE ROCK	40	0	4.2	0.3	MI MUSKEGON	26	3	2.6	0.3	SC CHARLESTON	54	6	8.9	5.6
CA BAKERSFIELD	49	1	2.3	1.4	MI SAULT ST. MARIE	17	3	2.2	0.1	SC COLUMBIA	47	3	7.5	3.1
CA BISHOP	--	--	--	--	MN ALEXANDRIA	9	3	0.9	0.0	SC FLORENCE	50	5	6.8	3.2
CA EUREKA	46	-1	7.2	0.2	MN DULUTH	12	5	1.8	0.6	SC GREENVILLE	44	3	7.2	3.0
CA FRESNO	47	2	5.2	3.2	MN INT'L FALLS	5	4	0.7	-0.2	SD ABERDEEN	10	2	0.6	0.2
CA LOS ANGELES	56	0	10.4	7.4	MN MINNEAPOLIS	15	3	1.2	0.4	SD HURON	14	3	0.3	-0.1
CA REDDING	43	-3	10.4	1.9	MN ROCHESTER	13	3	1.2	0.3	SD RAPID CITY	16	-5	0.7	0.3
CA SACRAMENTO	45	0	8.7	4.7	MN ST. CLOUD	11	4	1.0	0.2	SD SIOUX FALLS	14	1	0.7	0.2
CA SAN DIEGO	57	0	9.1	7.0	MS GREENWOOD	47	3	3.2	-2.0	TN BRISTOL	42	7	3.2	-0.4
CA SAN FRANCISCO	49	0	11.3	6.6	MS JACKSON	50	4	4.7	-0.3	TN CHATTANOOGA	46	7	5.2	0.0
CA STOCKTON	--	--	--	--	MS MERIDIAN	50	5	11.4	6.4	TN KNOXVILLE	44	5	4.1	-0.5
CO ALAMOSA	12	-4	0.3	0.0	MS TUPALO	45	4	2.9	-2.8	TN MEMPHIS	42	3	3.6	-1.0
CO CO. SPRINGS	27	2	0.4	0.1	MO CAPE GIRARDEAU	--	--	5.2	2.2	TN NASHVILLE	42	5	2.8	-1.7
CO DENVER	27	-2	0.2	-0.2	MO COLUMBIA	29	1	2.4	0.6	TX ABILENE	43	0	0.9	-0.1
CO GRAND JUNCTION	32	6	1.4	0.7	MO KANSAS CITY	26	-2	2.0	0.8	TX AMARILLO	33	-2	0.8	0.3
CO PUEBLO	26	-3	0.4	0.1	MO SAINT LOUIS	32	3	3.5	1.8	TX AUSTIN	50	1	3.4	1.8
CT BRIDGEPORT	34	4	2.6	-0.6	MO SPRINGFIELD	33	2	2.8	1.2	TX BEAUMONT	54	2	9.9	5.9
CT HARTFORD	29	3	2.6	-0.9	MT BILLINGS	18	-3	0.5	-0.5	TX BROWNSVILLE	61	1	1.8	0.6
DC WASHINGTON	40	4	2.9	0.2	MT GLASGOW	5	-6	0.2	-0.2	TX CORPUS CHRISTI	57	2	0.4	-1.2
FL APALACHICOLA	60	5	6.8	3.3	MT GREAT FALLS	15	-5	1.2	0.2	TX DEL RIO	52	2	0.6	0.1
FL DAYTONA BEACH	65	7	4.3	1.9	MT HAVRE	6	-6	0.6	0.1	TX EL PASO	49	4	1.4	1.0
FL FT. MYERS	70	7	5.3	3.4	MT HELENA	13	-6	0.8	0.1	TX FORT WORTH	45	1	1.7	0.0
FL JACKSONVILLE	59	5	3.8	0.9	MT KALISPELL	15	-4	1.7	0.1	TX GALVESTON	56	3	9.3	6.3
FL KEY WEST	74	4	8.0	6.2	MT MILES CITY	9	-5	0.6	0.0	TX HOUSTON	54	1	5.8	2.3
FL MIAMI	73	6	5.0	3.0	MT MISSOULA	15	-6	0.9	-0.5	TX LAREDO	57	1	0.6	-0.1
FL ORLANDO	66	6	4.9	2.7	NE GRAND ISLAND	18	-3	1.2	0.6	TX LUBBOCK	39	1	1.0	0.6
FL TALLAHASSEE	58	6	9.6	5.0	NE LINCOLN	18	-2	0.7	0.1	TX MIDLAND	43	0	1.3	0.9
FL TAMPA	67	7	3.6	1.4	NE NORFOLK	18	0	1.3	0.8	TX SAN ANGELO	45	-1	0.9	0.3
FL WEST PALM BEACH	72	6	8.0	5.3	NE NORTH PLATTE	19	-3	0.7	0.4	TX SAN ANTONIO	51	-1	1.3	-0.2
GA ATHENS	47	5	4.4	-0.5	NE OMAHA	20	-1	1.0	0.3	TX VICTORIA	54	2	3.2	1.3
GA ATLANTA	47	5	3.9	-1.0	NE SCOTTSBLUFF	21	-3	0.4	0.0	TX WACO	46	0	2.4	0.8
GA AUGUSTA	50	5	5.9	2.0	NE VALENTINE	18	0	0.4	0.2	UT WICHITA FALLS	41	-1	1.2	0.3
GA MACON	51	4	5.5	1.2	NV ELKO	16	-9	--	--	UT BLANDING	31	-2	5.3	4.0
GA SAVANNAH	55	6	5.5	2.4	NV ELY	20	-4	2.1	1.4	UT CEDAR CITY	32	2	2.4	1.8
HI HILO	71	0	2.2	-7.2	NV LAS VEGAS	46	1	1.6	1.1	VT SALT LAKE CITY	25	-4	3.2	1.9
HI HONOLULU	71	-2	0.7	-3.1	NV RENO	26	-6	2.4	1.2	VT BURLINGTON	21	5	2.2	0.3
HI KAHULUI	71	0	2.2	-1.8	NH WINNEMUCCA	22	-8	2.0	1.2	VA LYNCHBURG	40	5	4.1	1.0
HI LIHUE	69	-2	0.8	-5.5	NH CONCORD	23	3	1.5	-1.3	VA NORFOLK	44	4	4.9	1.2
ID BOISE	25	-5	1.7	0.0	NJ ATLANTIC CITY	37	5	2.6	-0.8	VA RICHMOND	41	5	4.5	1.3
ID LEWISTON	27	-5	1.0	-0.4	NM ALBUQUERQUE	40	5	0.9	0.6	VA ROANOKE	39	4	3.8	1.0
ID POCATELLO	18	-6	2.3	1.2	NM CLOVIS	38	1	0.5	0.1	WA COLVILLE	21	-4	1.6	-0.6
IL CHICAGO	27	6	3.8	2.2	NM ROSWELL	42	3	0.7	0.3	WA QUILLAYUTE	37	-2	7.9	-6.4
IL MOLINE	25	5	2.0	0.4	NY ALBANY	27	5	2.1	-0.2	WA SEATTLE-TACOMA	38	-1	4.1	-1.9
IL PEORIA	27	6	3.6	2.0	NY BINGHAMTON	26	4	2.1	-0.4	WA SPOKANE	22	-4	1.4	-1.0
IL QUINCY	27	3	2.2	0.8	NY BUFFALO	29	5	4.4	1.4	WA WALLA WALLA	25	-9	2.0	-0.4
IL ROCKFORD	24	5	2.4	1.1	NY NEW YORK	37	5	3.0	0.0	WA YAKIMA	24	-5	0.9	-0.5
IL SPRINGFIELD	30	6	4.0	2.4	NY ROCHESTER	28	4	2.3	0.0	WV BECKLEY	37	6	1.6	-1.8
IN EVANSVILLE	37	6	3.6	0.6	NY SYRACUSE	28	4	3.1	0.5	WV CHARLESTON	40	7	1.9	-1.6
IN FORT WAYNE	29	5	5.2	3.2	NC ASHEVILLE	42	5	3.8	0.6	WV ELKINS	36	9	1.7	-1.4
IN INDIANAPOLIS	32	5	3.3	0.7	NC CHARLOTTE	45	4	6.2	2.4	WV HUNTINGTON	39	6	2.2	-1.0
IN SOUTH BEND	29	5	3.4	0.9	NC GREENSBORO	40	3	3.6	0.2	WV PARKERSBURG	37	6	2.3	-0.5
IA DES MOINES	21	3	1.6	0.6	NC HATTERAS	51	6	6.0	1.2	WI GREEN BAY	20	5	1.4	0.2
IA DUBUQUE	21	5	1.4	0.0	NC NEW BERN	48	4	5.8	1.8	WI LACROSSE	17	3	1.2	0.3
IA SIOUX CITY	18	1	0.7	0.1	NC RALEIGH	43	4	4.5	1.0	WI MADISON	22	6	1.6	0.5
IA WATERLOO	19	4	0.6	-0.2	NC WILMINGTON	51	4	5.8	2.2	WI MILWAUKEE	26	6	2.6	1.0
KS CONCORDIA	22	-3	1.4	0.8	ND BISMARCK	8	1	0.3	-0.2	WI WAUSAU	16	4	1.6	0.6
KS DODGE CITY	25	-5	1.0	0.6	ND FARGO	8	3	0.8	0.3	WY CASPER	22	-1	0.7	0.2
KS GOODLAND	23	-4	0.3	-0.1	ND GRAND FORKS	5	3	0.3	-0.4	WY CHEYENNE	26	0	0.4	-0.1
KS TOPEKA	26	1	2.2	1.3	OH WILLISTON	6	-2	0.2	-0.3	WY LANDER	11	-8	1.0	0.5
KS WICHITA	29	-2	1.0	0.3	OH AKRON-CANTON	31	6	4.0	1.5	WY SHERIDAN	15	-5	0.6	-0.2
KY BOWLING GREEN	39	5	2.8	-1.8	OH CINCINNATI	35	5	3.8	0.7	PR SAN JUAN	77	1	2.4	-0.5
KY JACKSON	40	8	2.1	-1.8	OH CLEVELAND	32	7	4.4	2.0					
KY LEXINGTON	37	6	2.4	-1.2	OH COLUMBUS	34	7	4.1	1.4					
KY LOUISVILLE	38	6	3.5	0.2	OH DAYTON	32	5	3.9	1.3					
KY PADUCAH	38	5	3.8	0.1	OH MANSFIELD	30	5	5.5	3.2					
					OH TOLEDO	30	6	3.2	1.2					

Based on 1951-80 normals.

January Weather in Historical Perspective

Nationally, January was a very wet month with normal temperatures. The national normalized precipitation index attained its 7th highest January ranking on record and its greatest level since 1979 (fig. 1), boosted by extreme wetness in the Southwest, West, and Southeast regions (table 1). The Nation's average temperature of 30.7°F matched the 99-year mean (fig. 2).

Near-record wetness highlighted the month's weather in the West (6th wettest January) and Southwest (2nd wettest, behind only January 1916). An energetic sub-tropical jet stream also supplied above-normal precipitation to the Southeast, South, and East North Central regions. The Northwest (34th driest) was the driest-ranking region, as well as the coldest-ranking region.

Cold weather gripped the northwestern quarter of the Nation during the first half of the month, resulting in the 10th coldest January on record in the Northwest region. The West (18th coldest) and the West North Central regions (25th coldest) also endured frigid conditions early in the month. In contrast, the Southeast and Northeast regions both enjoyed their 19th warmest January since 1895.

In California, monthly precipitation was twice the normal level as a ceaseless train of storms roared across the State through January 21. Statewide precipitation since September 1, 1992, is approximately 140 percent of normal (fig. 3), becoming the wettest September-to-January period in 10 years, since September 1982 to January 1983.

Figure 1

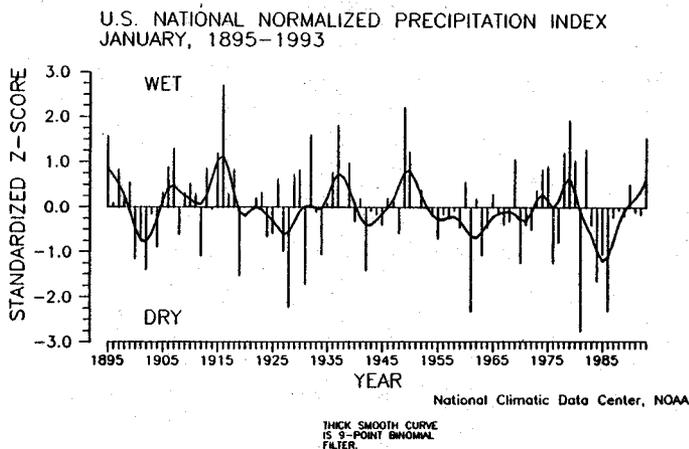


Figure 2

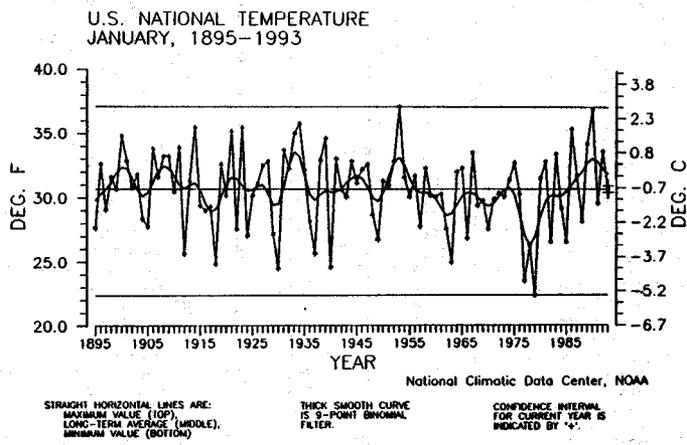
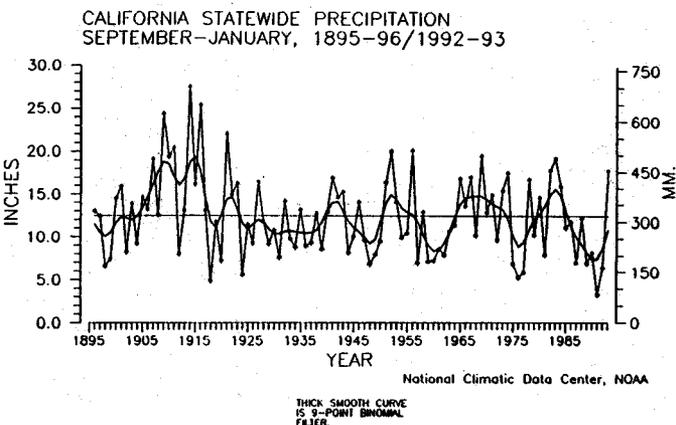


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR JANUARY 1993, BASED ON THE PERIOD 1895-1993. 1 = DRIEST/COLDEST, 99 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	39	81
EAST NORTH CENTRAL	80	59
CENTRAL	59	69
SOUTHEAST	89	81
WEST NORTH CENTRAL	64	25
SOUTH	79	44
SOUTHWEST	98	74
NORTHWEST	34	10
WEST	94	18
NATIONAL	93	47

Figure 3



HEATING DEGREE DAYS (Base 65° F) January 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL BIRMINGHAM	550	-135	SHREVEPORT	569	-28	DAYTON	1011	-179
MOBILE	307	-162	ME CARIBOU	1747	61	TOLEDO	1072	-227
MONTGOMERY	421	-159	PORTLAND	1282	-67	YOUNGSTOWN	1044	-221
AK ANCHORAGE	1563	-49	MD BALTIMORE	834	-167	OK OKLAHOMA CITY	878	-24
BARROW	2414	-47	SALISBURY	781	-146	TULSA	903	-21
FAIRBANKS	2134	-278	MA BOSTON	1002	-95	OR ASTORIA	803	62
JUNEAU	1243	-96	CHATHAM	977	-74	BURNS	1538	375
KODIAK	1154	128	MI ALPENA	1341	-135	MEDFORD	816	-33
ROME	2159	324	DETROIT	1097	-193	PENDLETON	1231	233
AZ FLAGSTAFF	1024	-117	FLINT	1194	-161	PORTLAND	877	68
PHOENIX	205	-189	GRAND RAPIDS	1204	-129	SALEM	881	84
PRESCOTT	770	-123	HOUGHTON LAKE	1359	-129	PA ALLENTOWN	974	-198
TUCSON	298	-133	LANSING	1215	-130	ERIE	1002	-254
WINSLOW	797	-226	MARQUETTE	1485	-155	HARRISBURG	932	-172
YUMA	219	-71	MUSKEGON	1200	-99	PHILADELPHIA	824	-224
AR FORT SMITH	790	-63	SAULT ST MARIE	1486	-117	PITTSBURGH	920	-267
LITTLE ROCK	766	-12	MN ALEXANDRIA	1723	-122	SCRANTON	1017	-217
CA BAKERSFIELD	501	-20	DULUTH	1638	-182	RI PROVIDENCE	1036	-105
EUREKA	575	26	INT'L FALLS	1868	-144	SC CHARLESTON	354	-189
FRESNO	549	-56	MINNEAPOLIS	1557	-111	COLUMBIA	535	-102
LOS ANGELES	266	-20	ROCHESTER	1618	-62	FLORENCE	466	-164
REDDING	663	58	SAINTE CLOUD	1679	-119	GREENVILLE	639	-102
SACRAMENTO	596	-15	MS GREENWOOD	564	-111	SD ABERDEEN	1714	-44
SAN DIEGO	240	-18	JACKSON	461	-150	HURON	1561	-107
SAN FRANCISCO	480	-32	MERIDIAN	444	-172	RAPID CITY	1515	145
STOCKTON	587	-27	MO CAPE GIRARDEAU	907	-116	SIOUX FALLS	1576	-55
CO DENVER	1162	61	COLUMBIA	1094	-69	TN CHATTANOOGA	592	-223
GRAND JCT.	1026	-199	KANSAS CITY	1203	-9	KNOXVILLE	659	-172
FUEBLO	1186	95	SAINT LOUIS	1014	-108	MEMPHIS	686	-101
CT BRIDGEPORT	966	-135	SPRINGFIELD	970	-69	NASHVILLE	717	-148
HARTFORD	1114	-120	MT BILLINGS	1456	89	TX ABILENE	677	4
DE WILMINGTON	847	-201	GLASGOW	1861	100	AMARILLO	984	57
DC WASHINGTON	779	-145	GREAT FALLS	1556	121	AUSTIN	462	-43
FL APALACHICOLA	179	-222	HAVRE	1816	142	BEAUMONT	328	-103
DAYTONA BEACH	104	-160	HELENA	1631	177	BROWNSVILLE	152	-64
FORT MYERS	19	-131	KALISPELL	1533	116	CORPUS CHRISTI	264	-46
JACKSONVILLE	209	-187	MILES CITY	1709	131	DEL RIO	394	-56
KEY WEST	0	-49	MISSOULA	1537	182	EL PASO	504	-141
MIAMI	5	-71	NE GRAND ISLAND	1464	88	FORT WORTH	612	-15
ORLANDO	73	-139	LINCOLN	1472	68	GALVESTON	266	-110
TALLAHASSEE	230	-211	NORFOLK	1460	-16	HOUSTON	351	-91
TAMPA	58	-170	NORTH PLATTE	1436	81	LUBBOCK	788	-24
W. PALM BEACH	11	-81	OMAHA	1395	6	MIDLAND-ODESSA	665	5
GA ATLANTA	548	-168	SCOTTSBLUFF	1362	97	SAN ANGELO	619	14
AUGUSTA	457	-169	VALENTINE	1466	31	SAN ANTONIO	421	-42
MACON	441	-139	NV ELY	1383	124	VICTORIA	330	-56
SAVANNAH	320	-187	LAS VEGAS	591	-41	WACO	570	-21
ID BOISE	1239	151	RENO	1212	195	WICHITA FALLS	737	-29
LEWISTON	1172	152	WINNEMUCCA	1365	274	UT BLANDING	1030	-139
POCATELLO	1445	168	NH CONCORD	1277	-121	CEDAR CITY	1023	-74
IL CHICAGO	1196	-156	NJ ATLANTIC CITY	852	-177	SALT LAKE CITY	1237	109
MOLINE	1241	-170	NM ALBUQUERQUE	778	-158	VT BURLINGTON	1335	-165
PEORIA	1159	-190	CLOVIS	816	-52	VA LYNCHBURG	766	-161
QUINCY	1170	-113	ROSWELL	693	-39	NORFOLK	638	-140
ROCKFORD	1282	-166	NY ALBANY	1183	-178	RICHMOND	724	-156
SPRINGFIELD	1083	-169	BINGHAMTON	1214	-144	ROANOKE	786	-129
IN EVANSVILLE	879	-187	BUFFALO	1095	-192	WA COLVILLE	1361	105
FORT WAYNE	1121	-172	NEW YORK	875	-154	QUILLAYUTE	868	62
INDIANAPOLIS	1028	-181	ROCHESTER	1158	-125	SEATTLE-TACOMA	834	31
SOUTH BEND	1120	-176	SYRACUSE	1156	-152	SPOKANE	1331	113
IA DES MOINES	1344	-94	NC ASHEVILLE	708	-166	YAKIMA	1274	133
DUBUQUE	1362	-169	CAPE HATTERAS	421	-196	WV BECKLEY	865	-217
SIOUX CITY	1466	-47	CHARLOTTE	612	-148	CHARLESTON	760	-235
WATERLOO	1442	-139	GREENSBORO	756	-97	HUNTINGTON	789	-209
KS CONCORDIA	1324	81	NEW BERN	513	-169	PARKERSBURG	862	-186
DODGE CITY	1229	128	RALPHIGH-DURHAM	666	-121	WI GREEN BAY	1398	-183
GOODLAND	1301	129	WILMINGTON	449	-158	LA CROSSE	1487	-94
TOPEKA	1189	-17	ND BISMARCK	1757	-50	MADISON	1333	-198
WICHITA	1136	39	FARGO	1780	-102	MILWAUKEE	1211	-224
KY BOWLING GREEN	801	-163	GRAND FORKS	1832	-115	WAUSAU	1526	-142
LEXINGTON	847	-192	WILLISTON	1838	28	WY CASPER	1341	14
LOUISVILLE	819	-189	OH AKRON-CANTON	1036	-201	CHEYENNE	1198	-8
LA BATON ROUGE	329	-137	CLEVELAND	1009	-216	LANDER	1658	251
LAKE CHARLES	350	-92	COLUMBUS	942	-233	SHERIDAN	1539	128
NEW ORLEANS	248	-175	CINCINNATI	937	-182			

Based on 1951-80 normals.

National Agricultural Summary

February 1 - 7, 1993

HIGHLIGHTS: Above-normal temperatures continued across the Nation, except for the Great Basin and the Northeast. Precipitation occurred in the southern Great Plains and along the Gulf Coast the latter part of the week. Heavy rains fell in the Carolinas the end of the week, and a storm moved into southern California. Continued dry, mild conditions reduced snow cover from the central parts of the Nation, and have allowed the starting of spring field work in the South.

SMALL GRAINS: Winter wheat condition was fair to good nationwide. Although the warm weather has diminished snow cover in the central and northern parts of the Nation, much of the crop still enjoyed adequate protection. Dry weather allowed the crop to improve in Arkansas. Sunny weather allowed wheat and other small grains to improve in Texas. Greenbug populations had declined on Texas wheat, but problems due to powdery mildew and leaf rust had increased. Expectations of a good crop in Kansas continued with the return of warm, sunny weather. Producers were fertilizing their fields in Arkansas and Louisiana.

COTTON: The warm, dry weather allowed stalk shredding and cutting to continue in Arizona and Arkansas. Pre-planting activities had begun for the 1993 crop in Arizona and California. Warm, sunny weather allowed the harvest to near completion in Oklahoma.

OTHER FIELD CROPS: Mild weather allowed the Michigan corn harvest to advance to 85 percent (%) complete. Concerns still existed over the quality of previously harvested corn in the Midwest. Seed alfalfa and sugar beets were weeded in California. Safflower planting had begun in California. Sugarcane harvest was active in Florida. Onions were in good condition in Georgia and the Rio Grande Valley of Texas. Limited irrigation was applied to Texas onions. Land preparations were underway for onions and potatoes in east Texas. Tobacco beds were maintained in Florida, Georgia, and North Carolina. Tobacco plants were reported in good condition in Georgia.

FRUIT AND NUTS: Orange, lemon, and grapefruit harvests advanced in western and central Arizona. Citrus groves in Florida had ideal weather. Harvest of Florida's mid-season citrus was

active in all areas with processing plants operating around the clock. Grapefruit movement was active in the east coast areas. Tangerine movement was strong in all areas of Florida. The California harvests of oranges, grapefruit, lemons, and tangerines continued. Early peach trees began to bloom in California and started to bud in Texas. Almonds in northern California entered the green tip stage. Producers sprayed orchards in Texas and California. Peach trees were being pruned in Texas and Georgia.

VEGETABLES: Harvests of broccoli, cabbage, cauliflower, and lettuce continued in western and central Arizona. Mostly clear skies over major vegetable-producing areas of Florida allowed fields to dry. Planting activities were ending in the south, but were increasing in the central and Everglade regions. Tomato, cabbage, pepper, and celery harvests advanced in Florida. Strawberry growers weeded and thinned fields in the Eastside area of California. Broccoli shipments were light in most areas of California. Cauliflower movement in the Salinas-Watsonville and Santa Maria areas was also light. Spring lettuce was thinned in the Westside area. Spring vegetable planting was underway in the Coachella and San Joaquin Valleys of California and in east Texas. Spring melon planting began in Texas.

PASTURES AND LIVESTOCK: Pastures in the Northwest and California were improving with the warmer temperatures and excess moisture. Warm temperatures across the Midwest continued to reduce livestock stress. Wet pastures continued to plague livestock producers in South Carolina. Cattle conditions were rated mostly good. Although the mild weather reduced supplemental feeding requirements, spot shortages of feed were reported in Idaho and Wyoming. Calving and lambing activities benefited from the mild conditions.

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 none to 0.92 in. north; none to 1.32 in. central; 0.98 in. to 2.01 in. south. Temperatures 2° below normal to 5° above normal; 2° below normal to 4° above normal central; 3° below normal to 2° above normal south. Lows 20 to 35° north; 23 to 33° central; 26 to 40° south. Highs 62 to 66° north; 63 to 68° central; 65 to 71° south.

Activities: Harvesting timber; marketing cattle; maintaining farm records, land-use planning, management, repairing machinery, fences; general care of livestock, poultry, catfish.

ARIZONA: Sunny, warm. Scattered showers 31st, north, central. Showers 1st, far northeast. Sunny 2nd to 6th. Temperatures 1 to 5° above normal. Extremes 10°; 71° higher elevations; 26°; 80° deserts.

Cotton stalk shredding, plowdown resumed, central, southeastern. Pre-planting activities for 1993 crop begun. Alfalfa fair to good; harvest light, all areas. Weeds increasing. Small grains planted 98%, 100% 1992, 99% avg.; stands established 95%, 97% 1992, 96% avg. Small grains field activities active. Broccoli, cabbage,

cauliflower, lettuce, bok choy, cilantro, kale, parsley, napa, spinach, available western, central areas. Also available west: asparagus, broccoflower, escarole, endive. Leeks, beets, dill, kohlrabi, radishes, rapini, mixed greens, carrots, green onions, turnips available, central. Citrus harvest continued central, western areas. Oranges, lemons, grapefruit, tangerines, tangelos. Pecans, tomatoes harvested east.

ARKANSAS: Warm, dry week. Temperatures above normal; light showers west at midweek. Extremes 20°; 70°. Rainfall none to 0.30 in.

Soil moisture supplies adequate to surplus. Wheat fair to good, improving with dry weather. Farmers began to fertilize wheat. Cotton stalk cutting continues. Fieldwork activities began. Livestock good. Producers feeding hay, supplies adequate. Pastures good.

CALIFORNIA: High pressure brought sunny weather early in the week, with patchy, dense central valley fog. Later an upper trough approached, bringing increasingly cloudy skies, rain by late 4th.

Progress of field activities considerably improved, drier soils most areas. Small grains, new alfalfa growing well. Wheat, barley, alfalfa seeding resumed, except northern counties. Seed alfalfa, sugar beets hand weeded. Established alfalfa, small grains sprayed weed control. Discing, pre-plant herbicide applications cotton, safflower gained momentum. Planting safflower just underway, Sacramento, San Joaquin valleys. Normal cultural practices continued. Dormant sprays applied to nut, fruit crops. Northern areas, almonds in green tip stage. Early nectarine, peach trees beginning to bloom, leaf out. Orange harvest steady. Harvest grapefruit, lemons, tangerines, tangelos continued. Apples packed out of cold storage. Strawberry growers thinning, weeding eastside. Broccoli shipments light, variable quality Salinas-Watsonville, Santa Maria areas. Broccoli harvest trailing off Modesto, ending westside. Cauliflower movements Salinas-Watsonville, Santa Maria very light, quality variable. Westside spring lettuce thinned. Cabbage harvest ending westside. Planting sweet corn, spring potatoes began Coachella Valley. Planting spinach, peas, bedding tomato ground San Joaquin Valley. Other crops harvested: turnips, green onions. Range, pasture good condition. Improving with warmer days. Supplemental feeding decreasing. Sheep grazing alfalfa.

COLORADO: Precipitation was light across the State, more falling over the southern, western sections than over the northeast. Slow moving upper level system brought scattered snow showers during the first half of the period with light rain, a few thunderstorms reported in the southeast. Temperatures began the period quite mild, cooled to below normal readings by the 4th. However, they rebounded quickly, reached highs in the 50s, 60s on the 6th before dropping back to normal readings on the 7th. Overall, temperatures slightly above normal through the period.

Machinery repair, maintenance, care, feeding of livestock were the major farm activities.

FLORIDA: Temperatures 1 to 3° below normal Panhandle, northern Peninsula, 0 to 2° above normal Big Bend. Inland stations central Peninsula 1 to 2° below normal. Most coastal, southern Peninsula stations 0 to 3° above normal. Highs upper 60s to low 70s north, mid 70s to low 80s central, south. Lows; near freezing Panhandle, mid 30s elsewhere north, low to mid 40s center, upper 40s to low 50s south except mid to upper 50s southeast coast. Precipitation; 0.75 to 2.00 in. north, central, south received generally less than 0.25 in. except some southeast coastal locations, where 0.50 to 1.00 in. fell. Rain recorded 2 to 3 days north, 1 to 2 days center, inland south, 2 to 5 days southeast coast.

Soil moisture adequate throughout the State. Sugarcane harvest active. Tobacco growers maintaining plant beds. Field preparation for corn and tobacco. Topdressing small grains. Citrus groves near excellent, ideal weather this week, cool temperatures are holding new growth back. Early mid orange droppage increasing on remaining crops, early mid harvest active all areas, most processing plants running around the clock, early mid supplies running low, movement of all grapefruit active east coast areas. Temple, honey tangerine harvest for fresh, processing strong all areas. Mostly clear skies over major vegetable producing areas. Around 1.00 in. of rain east coast. Moderate winds, dry weather helped to dry out fields. Planting activity winding down south, picking up Everglades, central. Volume leaders: Tomatoes, cabbage, peppers, squash, celery. Also available: Snap beans, carrots, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, iceberg, romaine, specialty lettuces, potatoes, radishes, strawberries, cherry tomatoes. State's pastures poor to excellent. Pasture 5% poor, 30% fair, 55% good, 10% excellent. Moisture levels mostly adequate. State's cattle herds mostly good.

GEORGIA: Dry; low daytime humidity much of 1st to 5th. Several locations had afternoon humidity below 20% at midweek. Minimum temperatures teens mountains, 20s elsewhere, except low 30s near coast. Clouds, rain southern three-fourths of State 6th, 7th. Rain 1.00 in.; locally 2.00 in. common. No rain extreme north, northwest. Temperatures 1 to 4° above normal northern areas to a couple degrees below southeast areas. Warmest 60s, a few low 70s extreme south.

Land preparation limited. Harvest of soybeans, cotton, pecans nearly complete. Tobacco bed preparation, onion planting nearly complete, tobacco plants, onions good, disease control active in onions. Small grains fair to good, wet fields slowing topdressing. Peach tree pruning active. Pastures poor to fair. Cattle, hogs good.

HAWAII: Weather cool, gusty winds. Low pressure systems generated inclement weather. Temperatures plunged below normal with daily record low of 54° for Honolulu. Temperatures mid 50s to low 80s. High surf pounded windward shores of Islands causing road closures, inconvenience to vessels. Rainfall none to 1.60 in.

Crops sustained minor damages from the recent winds. Cool weather slowed progress of orchard crops; beneficial to cool season crops. Irrigation necessary some areas. Papaya shipments decreased.

IDAHO: Temperatures 13° below normal to 5° above normal. No precipitation reported.

Soil moisture varied across the State; adequate north, southwest; short to adequate south central, southeast. Activities: Hauling grain, repairing machinery. Hay, roughage supplies short to adequate. Live-stock activities: Cattle on winter hay, calving, lambing in progress. Livestock good, although Fremont County some early scours.

ILLINOIS: Drier than normal weather occurred last week with highs in the 40s, lows in the mid 20s. Little or no precipitation.

Farm activities: Tending livestock, hauling grain, repairing equipment. Winter wheat continues to look mostly good.

INDIANA: Temperatures 3 to 10° above normal in the north; 3 to 5° above in the south. Highs upper 30s to lower 50s. Lows the upper teens to middle 20s. Dry with no measurable precipitation reported.

Grain hauling, plowing were the main activities with the better than average weather this past week. Concerns still abound over grain that is going out of condition in many bins around the State. Farmers are still able to haul manure, spread fertilizer. Livestock are doing fair to good. Wheat remains steady with a good rating.

IOWA: A very mild, dry week. Temperatures 10 to 13° above normal. Extremes 10° Fayette, Mason City, 4th; 48° Burlington, 5th. Precipitation confined to extreme west; maximum 0.01 in. at Sidney.

Mild weather melted most ice and snow allowing better utilization of stalk fields. There is some concern about grain being spoiled due to warmer temperatures.

KANSAS: Temperatures 4 to 6° above normal western two-thirds, 9 to 10° above east. Rainfall 0.25 in. northwest, west central, north central districts, 0.50 to 0.75 in. central, south central, southeast districts. Slight amounts elsewhere. Light to moderate drizzle crossed State again. Daytime highs increased from mid 30s early-week to upper 50s, low 60s by week's end.

Snowcover in sheltered, shaded areas began to disappear rapidly. Bright sunshine, warm air helped raise soil temperatures, especially across southern tier. Expectations for good wheat crop continue.

KENTUCKY: Above normal temperatures, no rain. Temperatures upper 30s to lower 40s, 4 to 7° above normal. Highest temperatures upper 60s south, upper 50s north. Second week of no precipitation.

Topsoil moisture short to mostly adequate. Dry conditions allowed some early fieldwork. Only 9 Kentucky burley markets remain open for sales. Sales volume light with increased amounts placed under loan. Livestock benefited from mild weather, feed usage lessened.

LOUISIANA: Temperatures 0.8° to 4.2° above normal. Extremes 26°; 72°. Rainfall 0.02 in. north central to 0.38 in. west central.

Excellent weather last week enabled farmers to begin fieldwork in some areas. Wheat fertilization of a few fields was active. Crawfishing continued as well as tending of livestock, pasture fertilization for the spring.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.02 in. Temperature 36.6°, normal 33.2°. Extremes 4°; 63°.

Hay supplies adequate. Feeding hay, caring for livestock. Small grains good. Light snow over weekend.

DELAWARE: Precipitation 0.01 in. Temperature 35.8°, normal 34.1°. Extremes 12°; 58°.

Hay supplies adequate. Pastures, livestock mostly excellent. Small grains good. Tax preparation. Making plans for spring planting.

MICHIGAN: Extremes -15°; 51°. Precipitation none to 0.30 in. across the State. Warm weather ended with cool temperatures, clear, sunny skies on the weekend.

Corn harvested advanced to 85%. Livestock good with feed supplies adequate to short. Major activities included buying fertilizer, seed, hauling manure, marketing crops, preparing tax returns, pruning, repairing machinery.

MINNESOTA: Temperatures 14 to 20° above normal. Extremes 1°; 48°. Precipitation was light, limited to the northeast; 0.12 to 0.18 in. below normal. Greatest weekly total was 0.05 in. Snow depths 12 to 13 in. northeast, north central; 2 to 7 in. elsewhere. Fog was common throughout the week due to melting snow.

Farmers are busy feeding livestock, ordering seed, fertilizer, other supplies for the coming crop season. Livestock good.

MISSISSIPPI: Temperatures 47°, 2.6 above normal. Extremes 17°; 72°. Northern third of the State received no rainfall, rest of the State received light rainfall. Rainfall 0.18 in., 1.02 in. below normal. Soil temperatures 47°.

Days suitable for fieldwork 4.6, 2.6 1992, 1.3 avg. Soil moisture 83% adequate, 17% surplus. Wheat 49% fair, 51% good. Hay supply 100% adequate. Feed grain 100% adequate. Livestock 97% good, 3% excellent. Activities: Beginning field preparations.

MISSOURI: Temperatures 7° above normal southeast to 12° above normal west. Precipitation 0.02 in., greatest amount by district, 0.10 in. southwest.

Mild, dry weather permitted more outdoor work around farm yard, eased mud problem in feed lots. Farmers working taxes, planning for new crop year.

MONTANA: No precipitation. Temperatures west normal, east above normal.

Snowcover protection for winter wheat has diminished. Most livestock receiving supplemental feed. Calving, lambing progressing under mild conditions.

NEBRASKA: Temperatures near normal northwest to 14° above normal northeast. Precipitation varied trace amounts to 0.40 in.

Farm activities included monitoring, working with farm stored grain, record keeping, equipment maintenance, 1993 planning, livestock care, routine chores.

NEVADA: Upper level low pressure system beginning of week produced some precipitation in the southeast. The upper low moved east early in week, with high pressure holding over State remainder of week, bringing dry weather. Extremes 10° below zero; 66°.

Calving, lambing benefiting from generally mild temperatures. Mild weather also easy on livestock feeding requirements. Main farm/ranch activities: Care, feeding of livestock, tax preparation.

NEW ENGLAND: Precipitation 0.14 to 0.54 north, none to 0.18 in. south. Temperatures -2° to mid teens north, low teens to high 20s south. Maximum temperatures mid 20s to mid 40s north, low 40s to low 50s south. Minima -38 to -5° north, -14 to 3° south.

Activities: Tending livestock, cutting firewood, making repairs.

NEW JERSEY: Temperatures below normal, 22° north, 27° south, 31° coastal. Extremes -6°; 62°. Precipitation below normal; 0.11 in. north, 0.08 in. south, 0.10 in. coastal. Heaviest 24 hour total 0.29 in. on 6th, 7th. Heaviest 24 hour snowfall 3.5 in. on 6th, 7th. Depth of snow on ground 8th 2.0 in.

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

NEW MEXICO: Temperatures averaged within a few degrees of normal. Extremes 2° north; 70° south. Two minor winter storms affected State, mainly in the north. Higher precipitation near 0.50 in. the north central highlands; southern portions were mostly untouched.

NEW YORK: Temperatures rode a roller coaster of extremes. Week began with lows of -10 to 5°, cooled dramatically with lows below zero, highs 5 to 20° on 1st to 2nd. Moderated to 30s to 40s until weekend. It turned very cold again on 6th when lows plunged to 5 to -20°, highs of only 0 to 10°. Extremes -38°; 55°. Several inches of snow fell north of the Mohawk Valley with an inch or two south of it on the 1st. Late in the week widespread light snow fell across the region. Accumulations were 1 to 2 in.

Activities: Caring for livestock, attending meetings, cutting firewood. Bitter cold made outside activities very unpleasant.

NORTH CAROLINA: Temperatures 1° below normal to 5° above normal. Precipitation 0.08 in. at Laurinburg to none at most locations.

Crop condition: Winter wheat 5% poor, 37% fair, 55% good, 3% excellent. Oats 5% poor, 41% fair, 52% good, 2% excellent. Barley 4% poor, 42% fair, 52% good, 2% excellent. Rye 4% poor, 31% fair, 62% good 3% excellent. Hay, roughage supplies 3% short, 91% adequate, 6% surplus. Feed grain supplies 1% short, 91% adequate, 7% surplus. Activities included: Completing soybean, cotton harvests; tobacco plant bed preparation, maintenance; tending small grains, field preparation; tending livestock; equipment repair.

NORTH DAKOTA: Temperatures 14° above normal in the southwest to 20° above normal in the north central. Extremes 1° in the south central; 58° north central. No precipitation was reported.

Snowcover was sufficient to protect winter wheat, rye, alfalfa. Livestock good. Some producers have started calving, lambing. Supplemental feed supplies were adequate. Grain, livestock marketing was normal.

OHIO: No precipitation. Days proved bright, sunny; nights were clear, cold. Temperatures 2 to 5° above normal with means of 26 to 34°. Highs varied between 36 to 45°, while nighttime lows 14 to 23°.

Winter wheat conditions average. Some ponding is reported in most areas of the State. Not adequate snowcover for severe cold weather. However, temperatures have remained above critical stage. Livestock in good conditions requiring normal amounts of feed. Pastures have

been greatly damaged by earlier rains, livestock traffic. Open weather this week welcomed, improved these conditions somewhat.

OKLAHOMA: Temperatures 5° above normal southeast to 10° above normal northeast. Precipitation 0.01 in. Panhandle, west central, southwest to 0.83 in. south central.

Prices for feeder steers, steer calves were \$1.00 to \$3.00 per cwt. lower while feeder heifers, heifer calves were \$2.00 to \$3.00 lower. Cotton harvesting nearing completion with warm, sunny weather.

OREGON: Temperatures 7° above normal coast, southwestern interior, near normal Willamette Valley, 5° below normal eastern portions. Precipitation 0.10 to 0.30 in. southwestern interior, coast, south central areas; elsewhere traces.

Soil moisture mostly adequate to surplus west, adequate east. Fruit, nut winter orchard activities continue, Willamette Valley. Southern coast nurseries worried about advance maturity in retail deciduous trees, warm temperatures. Livestock good. Mountain snowpack, excellent. Lambing, calving continues, excellent conditions. Pastures, ranges dormant, supplemental hay supplies short eastern areas. Western pastures beginning to show regrowth.

PENNSYLVANIA: Normal temperatures, below normal precipitation. Temperature 27°, normal. Extremes -7°; 57°. Precipitation 0.06 in.; 0.56 in. below normal.

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

PUERTO RICO: Average rainfall 0.88 in., 0.29 in. above normal. Highest weekly total 4.08 in. at Adjuntas Aes. Highest 24-hour total 2.55 in. at Adjuntas Aes on February 1. Temperatures averaged 75° on the coasts to 70° interior. Extremes 54°; 89°.

SOUTH CAROLINA: Temperatures 2° above normal Coast to near normal Midlands, Upstate. Average rainfall 0.40 in.

Farm activities: More rain, wet fields delayed small grain, tobacco fieldwork; some late cotton, soybean harvest; some small grain damage; pastures wet; livestock fair to good.

SOUTH DAKOTA: Temperatures 5 to 10° above normal west; 14 to 20° above normal central, northeast; 10 to 15° above normal in the southeast. Extremes -5°; 63°. Precipitation was light; only trace amounts reported. Snow still covered most of the west, northeast.

Topsoil 7% short, 84% adequate, 9% surplus. Subsoil 2% very short, 21% short, 73% adequate, 4% surplus. Rye 3% fair, 97% good. Winter wheat 1% fair, 98% good, 1% excellent. In most areas the snowcover is adequate for the winter grains. Some areas reported problems with feeding, storing high moisture grain. Livestock 86% good, 14% excellent. Feed supplies 87% adequate, 13% surplus. The major activities by most farmers, ranchers were feeding livestock, preparing for calving, lambing season. The warmer weather has relieved stress on livestock. Some feed problems were experienced due to mold corn. Muddy feedlots were becoming a problem in some areas.

TENNESSEE: Temperatures 3 to 7° above normal. No precipitation for the second straight week.

Wheat mostly good. Cotton still being ginned. Farm activity remains limited: Livestock care, general maintenance.

TEXAS: Persistent low pressure system caused precipitation and mild winter conditions. Heaviest amounts southeast. Western areas drier than normal. Temperatures below normal South Plains, Coastal Bend, Lower Rio Grande Valley. Elsewhere temperatures at or above normal; departures up to +6° northern Panhandle.

Crops: Remaining cotton harvested Plains. Small grain growth improved with increased sunshine. Greenbug populations declining wheat fields in Blacklands, powdery mildew, leaf rust increasing with excess moisture. Several fields Blacklands exhibited signs nitrogen deficiency from surplus moisture. Grazing small grain fields increasing. Statewide wheat 68% normal, 79% 1991.

Commercial Vegetables: Rio Grande Valley, onions progressing well with limited irrigation. Spring melon planting began. High Plains, land preparation delayed by moisture. East Texas, land preparation for onion, potato, lettuce, cabbage planting underway. Trans Pecos, spring onion transplants set out. Weed control continued. Pecan harvest completed all areas. Peach pruning winding down most areas, spraying of dormant oil began. Several varieties budding East Texas, Hill Country, Central Texas.

Range and Livestock: Supplemental feeding continued most areas. Hay supplies declining several places. Winter pastures improving with warmer, sunny conditions. More cattle put on small grain pastures. Lice infestations increasing Blacklands, East Texas. Overall livestock condition fair, good.

UTAH: High temperatures 6° below normal; minimums approximated normal. Precipitation heavy in Dixie, south central divisions to moderate in the western, southeastern divisions; light elsewhere.

Major farm, ranch activities were feeding, caring for livestock, preparing taxes, hauling manure. Difficulties with feeding cattle, sheep were reported in several areas due to heavy snowfall.

VIRGINIA: Temperatures above normal. Extremes 7°; 65°. No precipitation.

Days suitable for fieldwork 4.5. Topsoil 16% short, 77% adequate, 7% surplus. Winter grains, grazing 5% poor, 68% fair, 24% good, 3% excellent. Forage from pastures, grazing crops dairy cattle 5%, beef cattle 15%, sheep 18%. Completing soybean, cotton harvest. Pruning fruit trees, grape vines. Repairing machinery, fences, topdressing small grains, fertilizing some land, attending production meetings, soil sampling, preparing for taxes, making maple syrup.

WASHINGTON: Temperatures normal to 8° above normal west; 5° above normal to 5° below normal, east. Precipitation none to 0.11 in. west; none to 0.05 in. east.

Days suitable for fieldwork 4.7. Soil moisture 12% short, 87% adequate, 1% surplus. Hay, other roughage 30% short, 57% adequate, 13% surplus. Range, pasture 58% very poor, 21% poor, 8% fair, 13% good. Winter wheat dryland 40% fair, 60% good; irrigated 100% good. Barley dryland 50% fair, 50% good; irrigated 100% good. Dry weather increased farm activity. Springlike weather in west prompted some early fertilizer applications. Tree fruit pruning, lambing/calving activities accelerated. Most livestock still on winter feeding programs. Gradual snow melt improving soil moisture, minimizing erosion problems.

WEST VIRGINIA: Temperature 33°. Extremes 3°; 62°. Precipitation none.

Hay feed supplies adequate. Other feed supplies adequate. Cattle good. Sheep good. Wheat fair. Farm activities: General maintenance, feeding livestock, calving, lambing, bookkeeping.

WISCONSIN: Temperature 28°. Extremes 0°; 50°. Past week was very mild. Sunshine, March-like temperatures were common for most of the week. Over the weekend, there was some light snow or patchy freezing drizzle from time to time.

Mid-February frost depths 15.7 in.; 11.9 in. 1992; 16.9 in. 31-year avg. Snow depths 4.6 in.; 2.8 in. 1992; 10.2 in. avg. Data for snow, frost depths relates to February 5, 1993.

WYOMING: Temperatures 1 to 12° below normal in the western half, scattered regions in the southeast while temperatures 1 to 13° above normal throughout the rest of the State. Precipitation 0.01 to 0.12 in. above normal in the southeast, the far northeast regions. Remainder of the State had 0.02 to 0.60 in. lower than normal precipitation.

1993 Winter wheat crop fair to good. Livestock mostly good. Supplemental feeding continuing. Hay supplies dwindling in scattered regions. Farm, ranch activities include feeding, caring for livestock, routine maintenance, preparation for calving, lambing, tax season. Producers beginning to calve, lamb.

International Weather and Crop Summary HIGHLIGHTS

January 31 - February 6, 1993

FSU-WESTERN: Unseasonably mild weather returned to winter grain areas.

EUROPE: Beneficial rain fell in eastern Spain, but cold, drier weather prevailed over most of Europe.

NORTHWESTERN AFRICA: Showers continued to stabilize conditions for winter grains in Morocco. The fourth consecutive week of dryness covered crop areas in eastern Algeria and Tunisia.

SOUTH AFRICA: Drier weather returned to the west, where corn is reproductive to filling.

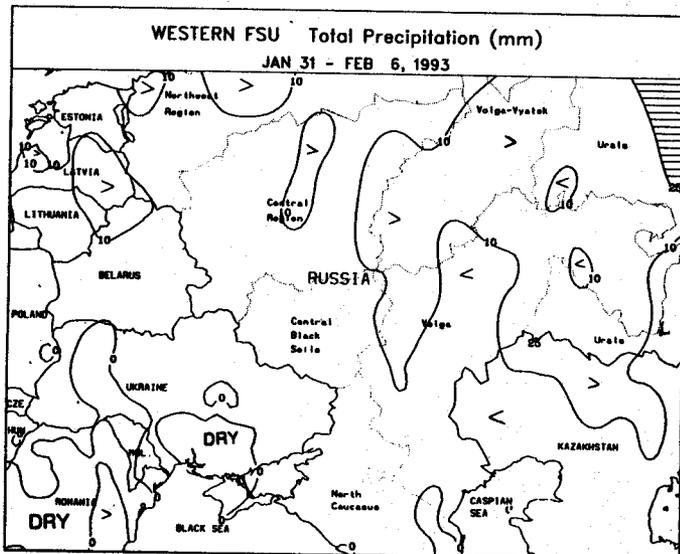
SOUTH ASIA: Dry, warm weather enhanced vegetative growth of winter grains and oilseeds.

SOUTHEAST ASIA: Unseasonably dry weather continued over Malaysia. Heavy showers hit the southern Philippines.

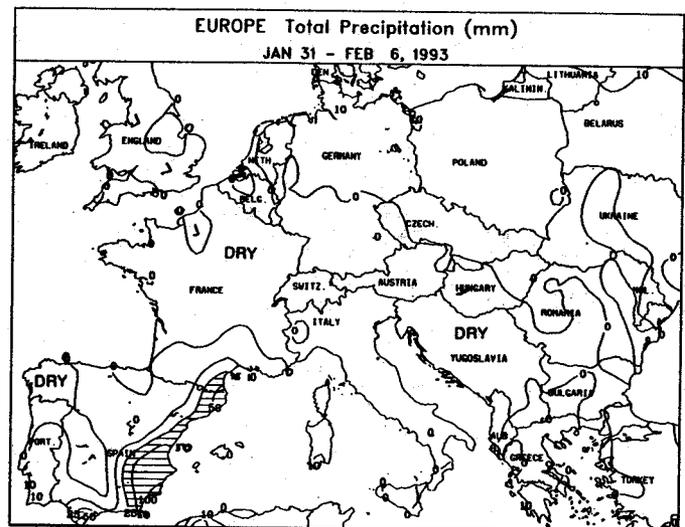
EASTERN ASIA: Dry weather continued across China, as temperatures warmed considerably.

AUSTRALIA: Hot, dry weather stressed eastern summer crops.

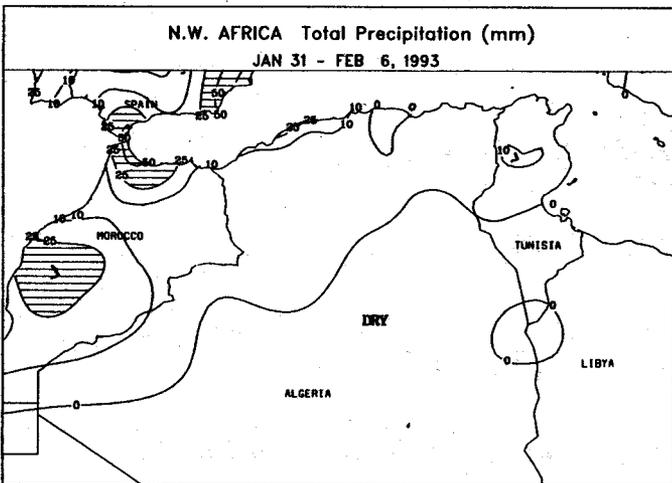
SOUTH AMERICA: Weather was favorable for summer crop development across Brazil and Argentina.



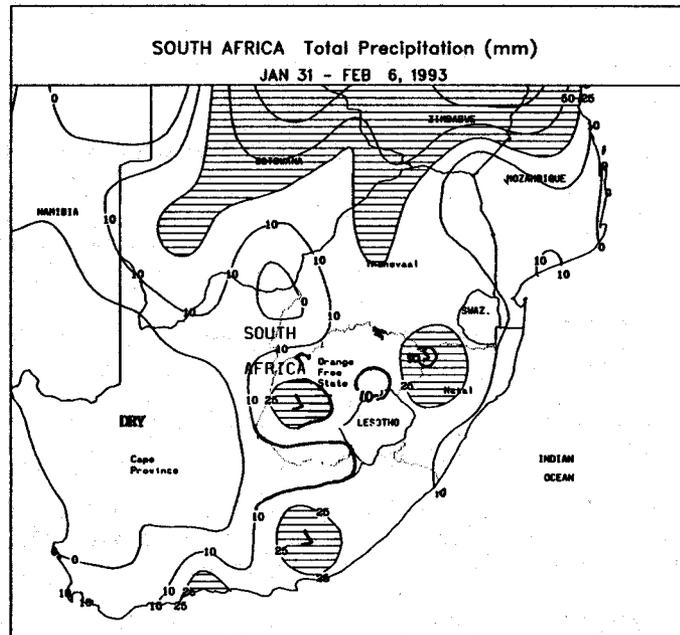
FSU-WESTERN: A warming trend returned to the region, accompanied by light precipitation. Highest maximum temperatures ranged from 3 to 5 degrees Celsius (C) in the north and 7 to 13 degrees C in the south. Average temperatures ranged from -4 to 2 degrees C over the region (3-8 degrees C above normal). The unusually warm weather caused winter grains to lose winter hardiness and melted most of the snow cover in the major winter grain-producing area of Ukraine and North Caucasus. Little, if any, precipitation covered the Ukraine, continuing a below-normal precipitation pattern since early December. Winter grain areas further north received precipitation that varied around 10 mm.



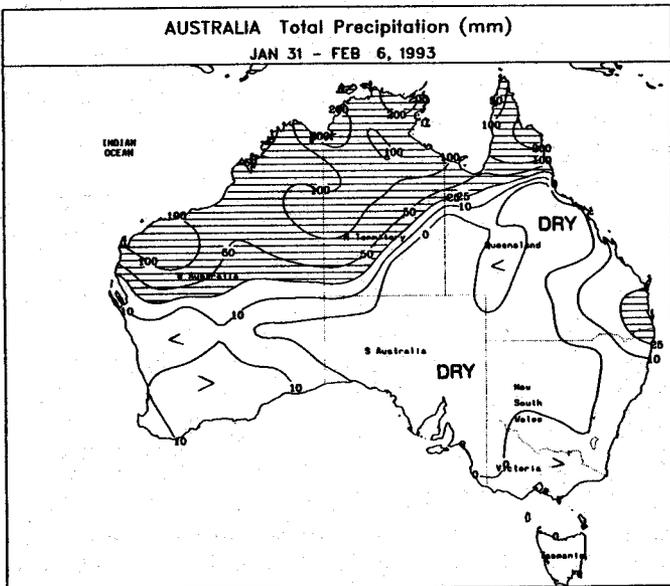
EUROPE: A cold, mostly dry weather pattern prevailed over Europe. Locally heavy showers (25-75 mm, with isolated heavier amounts) fell in extreme eastern Spain, easing the moisture deficiency for crops grown near the Mediterranean Sea. Rainfall diminished to less than 5 mm over the interior and western portions of Spain, however. Light precipitation (1-9 mm), mostly in the form of snow, provided some protection for dormant winter grains in Poland, northern Germany, the Czech Republic, and Slovakia. Dry weather dominated the remainder of Europe. Colder air settled over most of the region, with average temperatures several degrees below freezing in eastern Europe and near the freezing level in northern France. Daily minimum temperatures dipped as low as -15 degrees C in Poland and -19 degrees C in the Czech Republic. Below-freezing minimum temperatures reached interior portions of Greece.



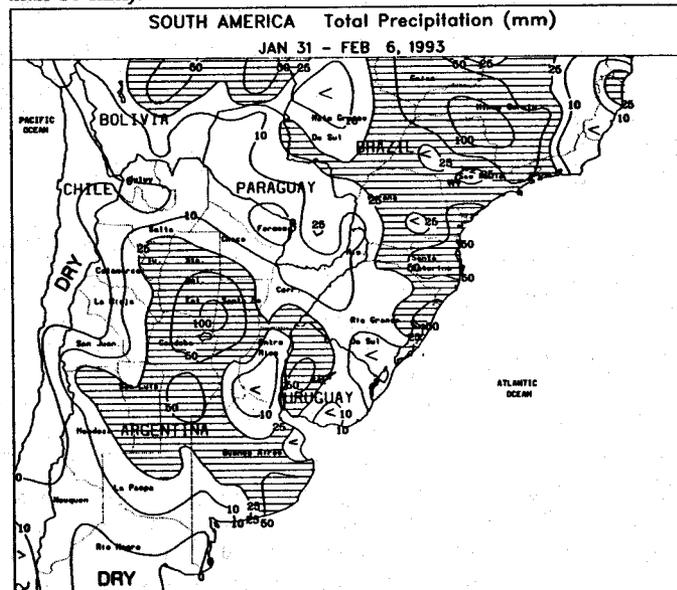
NORTHWESTERN AFRICA: Showers continued over Morocco, with greatest amounts of rain (25-38 mm) covering southern winter grain areas. Northern Morocco received lesser amounts (7-11 mm) of precipitation. The rain over Morocco helped to stabilize conditions for drought-stressed winter grains in the vegetative stage. Further east, light, scattered showers (1-11 mm) brought only temporary relief to drought-stressed winter grains in western Algeria. The fourth consecutive week of dryness covered eastern Algeria and Tunisia. Moisture reserves are becoming unfavorably low for crops in these areas, and rain is needed soon to alleviate increasing stress on crops.



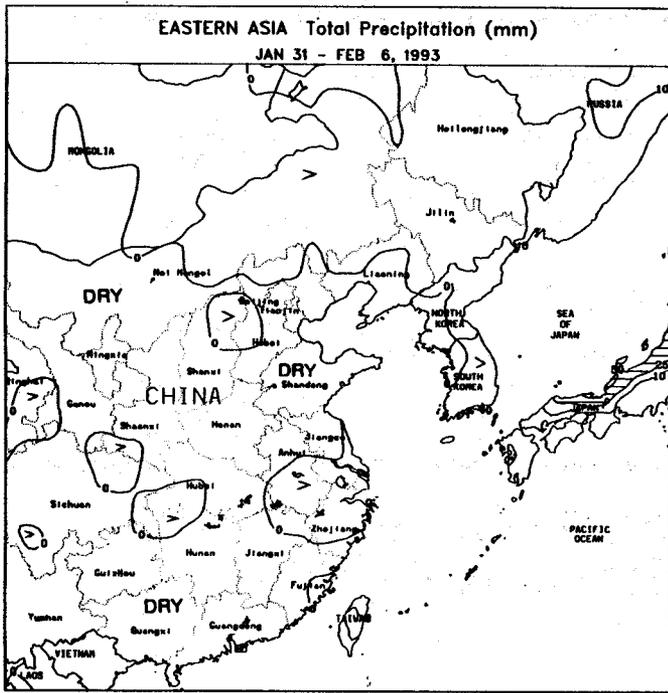
SOUTH AFRICA: Showers tapered off over western crop areas following last week's highly beneficial rain. Rainfall totaled 25 mm or less over many locations in southwestern Transvaal and central Orange Free State and, by week's end, maximum temperatures were reaching the low to mid 30's C. In the east, light to moderate showers (8-28 mm) covered primary grain areas of south-central Transvaal, eastern Orange Free State, Natal, and eastern Cape Province. While the recent return to more seasonable rainfall and temperatures helped stabilize reproductive to filling corn, subsoil moisture reserves were low. More rain is needed to prevent further losses in yield potential. Rain is also critically needed in Natal's sugarcane areas, where rainfall continued well below normal (less than 10 mm).



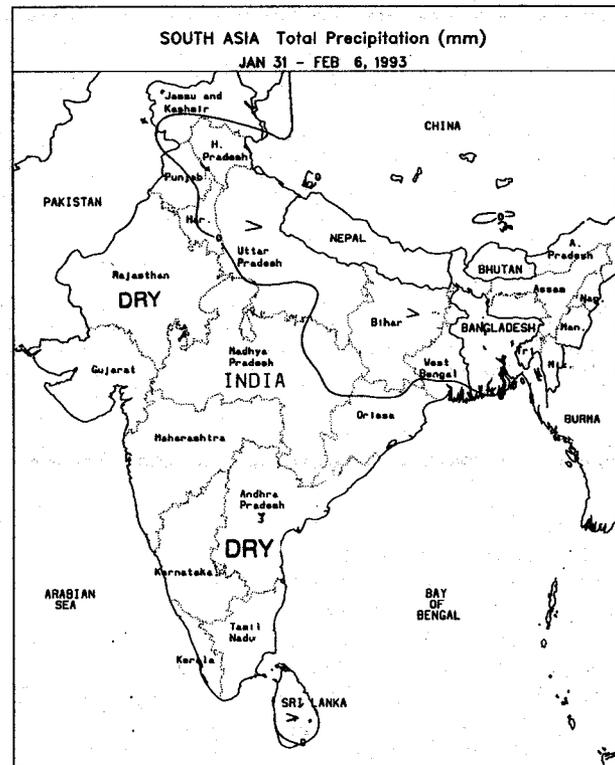
AUSTRALIA: Hot, mostly dry weather prevailed across southern and eastern Australia, stressing eastern summer crops, especially in southern Queensland. Maximum temperatures ranged from 38 to 42 degrees C (3-5 degrees C above normal). Previous dry weather reduced soil moisture levels across southern Queensland and, coupled with the recent hot weather, has further stressed vegetative cotton and sorghum. Although light rain (9-16 mm) fell across the region late in the week, additional rain is needed to stabilize yield prospects. The warm, dry weather aided late winter wheat harvesting across the south. Tropical showers (50-120 mm, with isolated amounts in excess of 200 mm) persisted over northern Australia, causing local flooding. While the heavy rains extended into the extreme northern portion of Queensland's sugarcane region, the remaining areas received only light rain (9-22 mm).



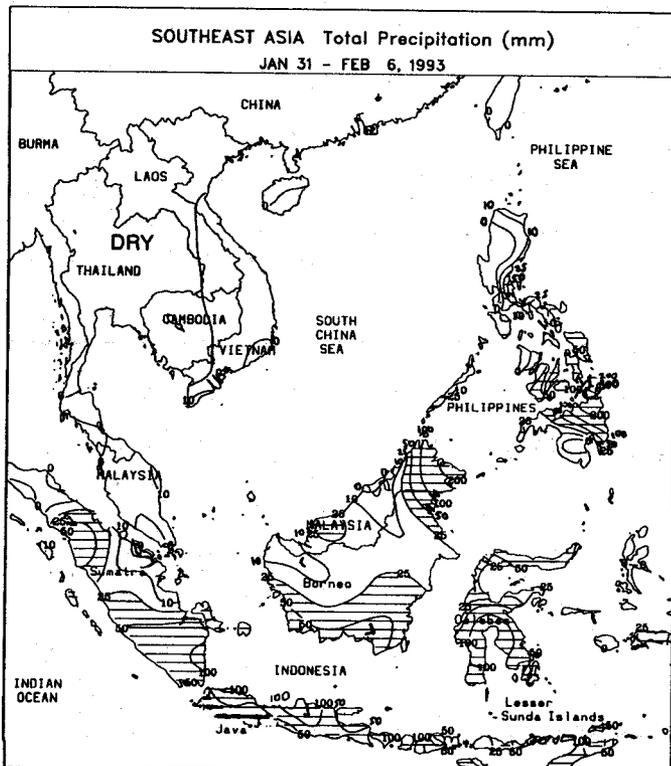
SOUTH AMERICA: Moderate showers (15-50 mm) kept soils well watered across southern Brazil for vegetative to reproductive soybeans. Heavy showers (60-150 mm) fell across eastern Minas Gerais and northern Sao Paulo, favoring sugarcane, citrus, coffee, and soybeans. Yield prospects for corn and soybeans are favorable to excellent. Temperatures were seasonable with maximums ranging from the upper 20's to lower 30's. Argentina's main summer crop region received moderate rain (17-70 mm), favoring vegetative corn, soybeans, and sunflowers. Temperatures averaged slightly below normal, allowing for excellent crop development.



EASTERN ASIA: Temperatures warmed considerably as dryness continued across most of China. Temperatures averaged 4-8 degrees C above normal over the country, with maximum temperatures ranging from 18 to 22 degrees C across the North China Plain. Continued unseasonably warm temperatures could induce winter wheat to break dormancy prematurely.



SOUTH ASIA: Dry, warmer-than-normal weather across Pakistan and northern India spurred vegetative growth of winter grains and oilseeds. Pockets of light rain (1-12 mm) over Bihar and Assam provided little help to the mostly irrigated crops. February rainfall typically ranges from 10 to 25 mm across northern India, increasing irrigation levels and benefiting rainfed crops that are in or nearing reproduction by March.



SOUTHEAST ASIA: Rainfall continued to be well below normal (less than 10 mm) over western Malaysia's primary rice and oil palm areas. The dryness extended northward into peninsular Thailand, which recently received beneficial showers. Further south, moderate to heavy showers (25-100 mm or more) continued over primary rice areas of southern Indonesia, likely causing some more flooding. In the Philippines, moderate to heavy showers (25-50 mm or more, with isolated totals exceeding 200 mm) covered the southern half of the islands, causing some flooding but increasing moisture for secondary grain plantings.

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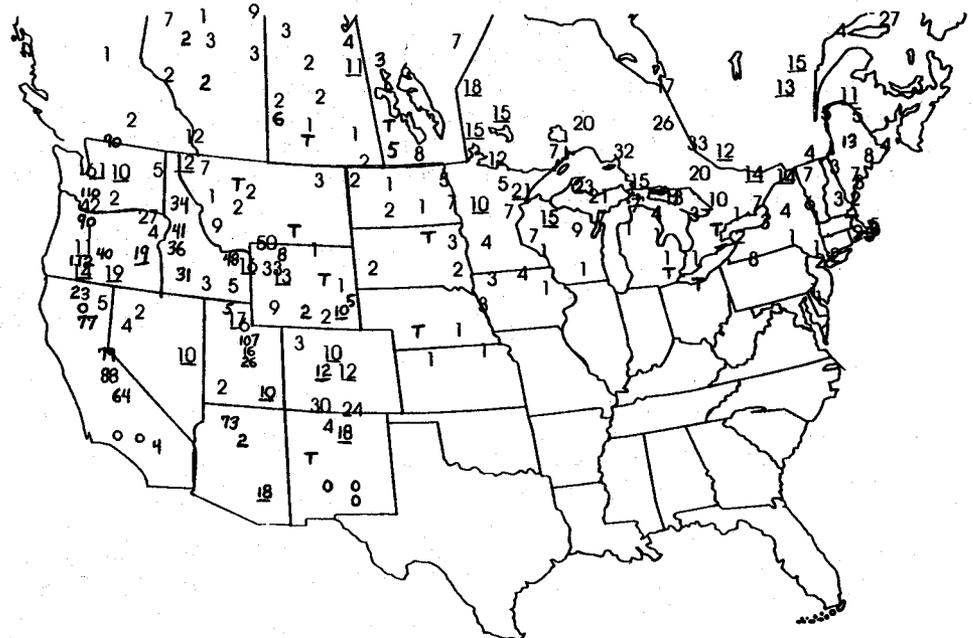
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(Continued from front cover)
had stood since 1910. The strength and expanse of the cold airmass was evidenced by temperatures in New England on Tuesday. Lows reached -27°F in Watertown, NY, and -32°F in Canton, NY. Farther west, stagnant, seasonably warm air covered the North Central States, resulting in widespread fog. Dense fog plagued the upper Mississippi Valley from Tuesday night through week's end. On Thursday, up to 3 inches of snow fell in central Kansas, while more than 2 inches of rain pelted Ft. Worth, TX. A half dozen daily record highs were reported farther west, including 78°F in Eureka, CA, and 63°F in Seattle, WA. The warm air even reached the Northeast briefly on Friday, pushing the temperature to 47°F in Albany, NY. But within 18 hours, the latest arctic front lowered their temperature to -5°F. Accompanying snowfall reached 4 inches in New York City (LaGuardia), NY, and 2 inches in Wilmington, DE. A winter storm charged into southern Alaska late in the week, helping to flush out the bitterly cold air. Storm-total snowfall neared 50 inches in Valdez, AK, and winds gusted to 98 mph at Ketchikan, AK. Fairbanks, AK, "warmed" to 11°F. At week's end, heavy rain developed from western Florida to southern Georgia as the meandering storm edged across the northern Gulf of Mexico.

Total Snow Cover (Inches) February 8, 1993



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