

# 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

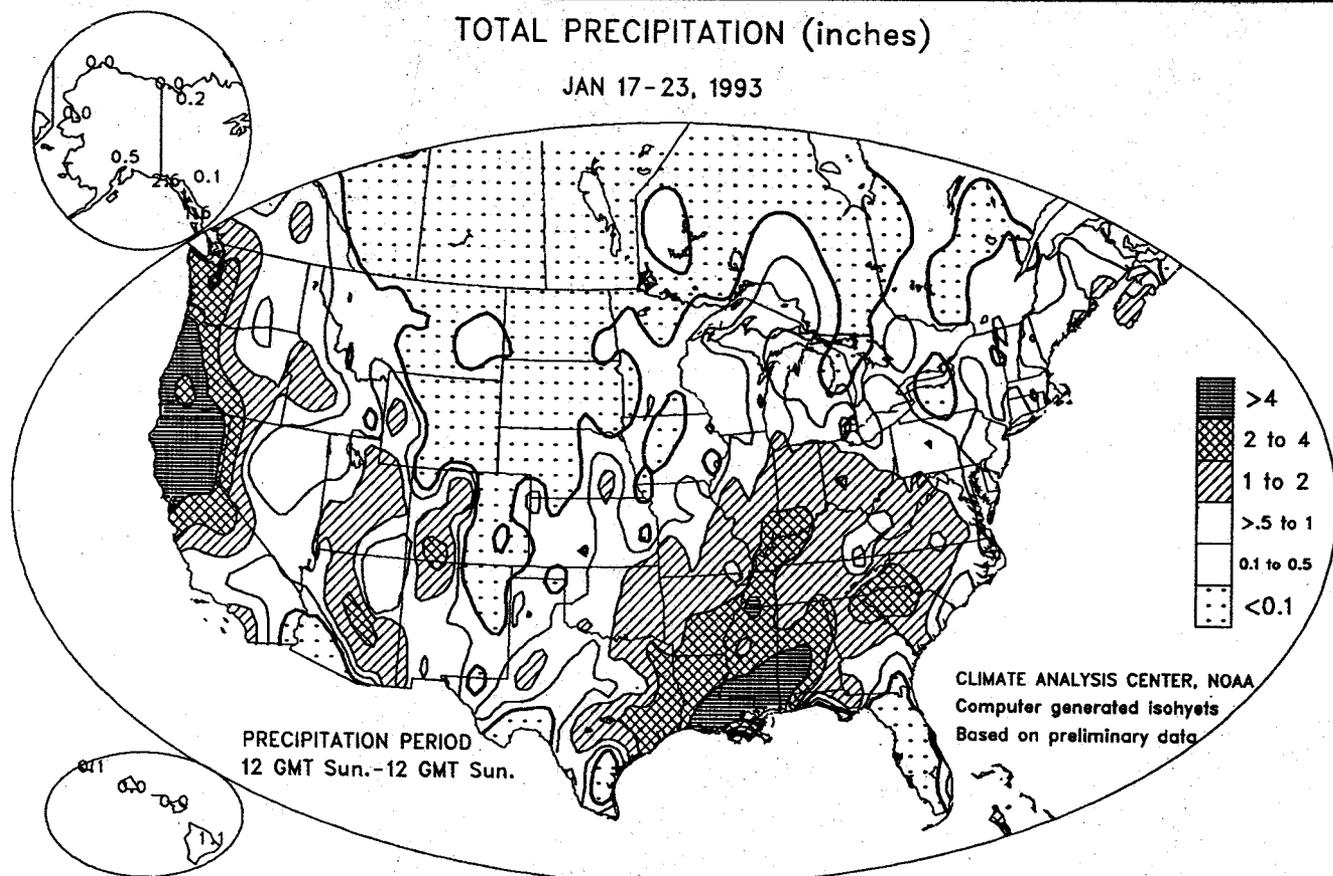
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January 26, 1993

## TOTAL PRECIPITATION (inches)

JAN 17-23, 1993



## HIGHLIGHTS

January 17 - 23, 1993

The West welcomed a change in the weather pattern that allowed the Southwest to dry out and brought heavy precipitation to the Pacific Northwest. But the Southeast endured a third consecutive week of heavy rain, with flooding reported in the central Gulf Coast States. Early in the week, up to 4 inches of rain pelted saturated ground in southern California, causing extensive flooding and numerous mudslides. As the storminess edged eastward, flooding resumed in Arizona on the Gila and Santa Cruz Rivers. But by Tuesday, dry weather overspread the Southwest for the first time since late December. Meanwhile, a storm in southern Alaska was responsible for ushering in much colder air into the interior, and for depositing 56 inches of new snow on Valdez. In Fairbanks, AK, weekly temperatures ranged from a high of 23°F on Sunday to a low of -50°F on

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# National Weather Data for Selected Cities

Weather Data for the Week Ending **January 23, 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	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	57	38	67	31	47	5	1.7	.5	.7	10.7	121	5.4	139	98	64	0	2	4	2
MOBILE	70	47	75	35	59	8	5.6	4.6	4.6	12.6	142	7.3	213	96	61	0	0	4	1
MONTGOMERY	62	39	73	31	51	4	2.6	1.7	1.4	12.2	153	4.4	141	97	60	0	2	4	2
AK ANCHORAGE	16	1	39	-15	9	-4	.2	.0	.2	1.4	84	.7	118	89	68	0	7	3	0
BARROW	-22	-35	-10	-48	-29	-14	.2	.4	.4	3.4	210	.4	222	76	59	0	7	0	0
FAIRBANKS	-16	-30	23	-50	-23	-11	.1	.1	.1	3.4	304	2.2	541	90	72	0	7	1	0
JUNEAU	34	27	38	21	30	9	2.2	1.4	1.4	8.7	118	3.0	107	99	78	0	6	3	2
KODIAK	23	14	40	5	19	-11	.6	.7	.5	5.7	58	.9	21	82	56	0	7	2	1
NOME	-13	-26	1	-31	-19	-7	.7	.2	.4	2.4	200	1.1	190	77	59	0	7	0	0
AZ PHOENIX	68	50	73	46	59	5	1.4	1.2	1.4	8.3	608	5.3	955	91	45	0	4	2	0
PRESCOTT	51	31	64	26	41	3	1.5	1.3	1.3	6.5	348	4.5	595	93	45	0	4	3	2
TUCSON	65	43	76	37	54	5	1.5	1.3	1.3	8.3	533	4.8	785	96	42	0	4	3	1
YUMA	70	52	75	48	61	6	1.4	1.2	1.4	4.6	762	1.6	604	72	34	0	3	0	0
AR FORT SMITH	49	34	66	29	41	1	1.4	1.0	1.0	9.5	228	4.1	296	98	68	0	3	4	1
LITTLE ROCK	50	35	68	27	42	2	1.3	1.0	1.0	7.7	116	3.7	128	88	74	0	3	4	2
CA BAKERSFIELD	61	46	67	40	54	5	1.3	.1	.2	3.7	280	1.9	278	96	56	0	3	2	0
BURKEA	55	42	60	34	48	4	2.6	1.0	.8	16.5	143	7.2	136	90	66	0	0	5	3
FRESNO	58	45	65	35	52	2	1.7	.2	.6	7.8	251	5.1	343	93	65	0	0	3	1
LOS ANGELES	62	49	75	44	56	6	1.4	.7	1.0	14.1	368	10.0	452	99	60	0	0	2	1
REDDING	54	40	57	34	47	0	5.2	3.2	2.7	20.7	154	10.4	162	93	57	0	0	4	2
SACRAMENTO	54	44	60	34	49	4	2.4	1.5	1.1	13.6	230	8.6	286	98	74	0	0	4	2
SAN DIEGO	63	50	70	47	57	0	1.4	.9	1.0	11.0	375	8.5	540	97	66	0	0	2	1
SAN FRANCISCO	57	47	60	41	52	3	2.3	1.3	1.3	17.3	245	11.3	323	93	72	0	0	5	2
CO DENVER	43	23	60	15	33	3	.3	.1	.8	1.9	106	.3	69	84	44	0	7	1	0
GRAND JUNCTION	41	28	48	24	35	5	.3	.2	1.6	1.56	1.3	280	97	68	0	4	2	0	0
PUEBLO	42	19	66	14	30	1	.1	.1	.9	187	.4	239	95	51	0	7	2	0	0
CT BRIDGEPORT	40	27	48	19	33	4	.4	.3	3	6.6	107	2.3	93	74	47	0	5	2	0
BARTFORD	36	17	42	7	27	1	.7	.1	.7	6.6	97	2.3	85	91	55	0	7	2	1
DC WASHINGTON	45	30	51	22	37	3	.5	.1	.5	5.8	110	2.9	139	86	46	0	5	2	0
FL APALACHICOLA	67	49	74	42	58	3	1.5	.8	1.1	11.0	115	5.5	210	96	66	0	5	2	0
DAYTONA BEACH	73	52	81	41	63	5	1.5	.6	1.9	4.9	1.4	84	99	56	0	0	0	0	0
JACKSONVILLE	68	46	75	39	57	3	.2	.5	1	4.0	88	3.4	161	98	56	0	0	3	0
KEY WEST	77	67	79	58	72	2	1.4	.4	1.4	5.4	184	5.3	431	85	62	0	0	0	0
MIAMI	79	65	81	57	72	5	1.5	.5	1.5	6.5	193	4.5	301	84	52	0	0	0	0
ORLANDO	75	54	80	43	65	5	1.0	.0	4.3	124	3.4	223	98	48	0	0	0	0	0
TALLAHASSEE	70	44	77	34	57	5	1.5	.5	1.5	10.2	128	8.9	258	95	49	0	0	1	1
TAMPA	76	56	80	46	66	7	.0	.0	3.5	96	2.6	167	96	51	0	0	0	0	0
WEST PALM BEACH	76	62	80	53	69	4	1.0	.6	7.7	182	5.9	295	91	56	0	0	2	0	0
GA ATLANTA	53	37	64	33	45	3	1.0	.2	7	10.0	126	3.6	98	98	62	0	0	4	1
AUGUSTA	59	38	67	29	48	3	.6	.3	.5	7.6	124	5.4	183	96	49	0	1	2	1
MACON	60	38	71	29	49	3	.7	.3	.5	8.5	117	5.3	167	96	55	0	2	3	1
SAVANNAH	64	44	71	37	54	5	.5	.3	.3	6.8	133	5.3	230	94	51	0	0	2	0
HI HILO	78	65	81	63	71	0	1.1	-1.0	.6	19.1	98	2.1	31	93	63	0	0	5	1
HONOLULU	80	65	82	59	72	0	.0	.9	.0	7.0	111	.5	16	87	51	0	0	0	0
KAHULUI	80	63	84	58	72	1	1	.9	1	3.4	59	.9	31	87	57	0	0	0	0
LIHUE	77	65	79	60	71	0	.1	-1.3	.1	22.8	223	.6	13	82	60	0	0	1	0
ID BOISE	37	23	44	16	30	0	.6	.2	.4	2.5	100	1.6	133	95	67	0	6	5	0
LEWISTON	36	27	45	21	31	-1	.1	.2	.1	.9	40	.6	52	87	62	0	6	1	0
POCATELLO	35	18	43	9	27	3	.5	.3	.2	4.1	236	2.3	283	92	65	0	7	4	0
IL CHICAGO	36	18	45	5	27	7	.8	.5	.6	6.3	174	3.8	297	92	61	0	6	3	1
MOLINE	34	16	44	2	25	5	.6	.2	.5	5.9	188	2.0	157	88	62	0	5	3	1
PRORIA	36	21	49	8	29	7	.9	.6	.9	6.6	202	3.6	289	92	64	0	6	2	1
QUINCY	34	21	45	10	28	4	.2	.1	.2	4.2	152	2.2	212	90	62	0	5	1	0
ROCKFORD	33	13	42	-4	23	5	.5	.2	.3	5.7	192	2.4	216	94	62	0	6	3	0
SPRINGFIELD	39	23	54	12	31	7	.9	.6	.9	6.3	192	4.0	333	92	66	0	4	3	1
IN EVANSVILLE	46	28	64	19	37	7	1.1	.4	.8	4.7	82	3.0	132	88	55	0	5	4	1
FORT WAYNE	34	17	44	3	26	3	.8	.4	.8	7.2	181	4.6	293	91	70	0	6	3	1
INDIANAPOLIS	40	22	53	10	31	5	1.0	.5	.5	4.9	99	3.0	152	90	63	0	6	4	1
SOUTH BEND	35	19	48	4	27	5	.5	.0	.3	7.3	152	3.3	176	92	62	0	6	4	0
IA DES MOINES	30	15	41	3	22	4	.3	.1	.3	3.6	203	1.6	221	87	61	0	7	2	0
SIoux CITY	27	14	39	2	21	5	.2	.1	.2	1.5	125	.7	156	91	68	0	7	1	0
WATERLOO	29	9	41	-11	19	5	.1	.1	.0	2.1	123	.5	85	90	62	0	7	2	0
KS CONCORDIA	30	16	41	9	23	-2	.6	.5	.4	2.4	211	1.1	238	92	68	0	7	3	0
DODGE CITY	32	17	47	14	25	-5	.2	.2	.2	1.9	233	1.0	323	95	67	0	7	1	0
GOODLAND	31	18	46	11	24	-3	.1	.1	.1	.4	68	.3	107	90	66	0	7	2	0
TOPEKA	34	21	46	12	27	1	.3	.1	.3	3.3	171	1.3	191	93	64	0	7	1	0
WICHITA	34	23	42	19	29	-1	.5	.3	.3	2.1	143	.9	188	95	70	0	7	2	0
KY BOWLING GREEN	48	29	64	21	39	5	.7	.3	.4	5.2	65	2.2	62	97	64	0	5	4	0
LEXINGTON	46	27	61	16	37	5	.7	.1	.6	3.9	60	2.1	78	88	58	0	5	4	1
LOUISVILLE	48	29	64	18	38	6	1.1	.3	.9	4.4	73	2.7	109	87	52	0	4	3	1
LA BATON ROUGE	69	48	77	35	59	8	9.0	8.0	9.0	17.8	212	13.1	386	100	68	0	0	2	1
LAKE CHARLES	68	48	75	39	58	8	2.6	1.6	2.2	10.5	122	6.6	188	100	73	0	0	3	1
NEW ORLEANS	71	48	77	36	60	7	.7	.4	.5	11.2	126	5.6	152	99	61	0	0	2	1
SHREVEPORT	60	39	76	35	50	4	2.2	1.3	1.2	10.4	151	4.6	152	100	69	0	0	5	1

Based on 1951-80 normals.

Weather Data for the Week Ending January 23, 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	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	20	4	35	-11	12	2	.7	.2	.4	3.1	63	1.5	86	85	66	0	7	5	0	0		
PORTLAND	34	13	47	-1	24	2	.8	.5	.9	4.3	59	2.2	77	90	53	0	7	1	1	0		
MD BALTIMORE	45	28	51	20	36	2	.5	.5	.4	12.9	2.6	117	88	49	0	6	2	2	0	0		
SALISBURY	46	26	54	17	36	2	.5	.5	.4	15.2	4.1	159	95	55	0	6	2	2	0	0		
MA BOSTON	40	26	52	17	33	2	.3	.3	.3	10.1	1.8	61	75	50	0	5	2	2	0	0		
CHATHAM	39	24	50	8	32	2	.6	.6	.5	8.4	1.4	43	81	61	0	5	1	1	0	0		
MI ALPENA	33	17	37	6	25	2	.3	.3	.3	10.2	1.4	43	81	61	0	5	1	1	0	0		
DETROIT	35	20	44	9	28	2	.3	.3	.3	2.4	73	1.1	88	93	58	0	6	1	1	0		
FLINT	33	15	41	0	24	2	.9	.9	.8	6.0	153	3.6	256	90	55	0	6	2	2	0		
GRAND RAPIDS	34	14	41	0	24	2	.7	.7	.6	4.6	146	2.6	221	93	60	0	6	3	3	0		
HOUGHTON LAKE	31	13	38	-5	22	2	.5	.5	.4	7.4	180	4.1	266	95	64	0	6	4	4	0		
LANSING	34	15	41	0	24	2	.4	.4	.3	3.7	122	1.7	147	97	67	0	7	4	4	0		
MARQUETTE	30	15	36	-4	22	11	.7	.7	.6	5.1	137	2.9	226	93	57	0	7	2	2	0		
MUSKOGON	35	15	42	-2	25	2	.5	.5	.5	4.3	110	1.9	123	91	63	0	7	3	3	0		
SAULT ST. MARIE	31	17	35	-3	24	11	.7	.7	.5	5.1	116	2.4	134	96	62	0	6	4	4	0		
MN ALEXANDRIA	24	8	32	-9	16	11	.7	.7	.3	4.9	115	1.4	84	90	63	0	7	5	5	0		
DULUTH	26	13	35	1	20	13	.6	.6	.4	1.8	127	.9	140	92	70	0	7	2	2	0		
INT'L FALLS	25	8	32	-5	16	16	.6	.6	.6	2.7	126	1.5	166	82	56	0	7	4	1	0		
MINNEAPOLIS	27	10	36	-9	19	8	.2	.1	.1	2.2	148	1.1	180	89	60	0	7	3	3	0		
ROCHESTER	25	6	36	-15	16	7	.2	.0	.1	2.4	162	1.1	178	92	70	0	7	2	2	0		
MS GREENWOOD	61	40	74	33	51	7	1.5	.3	.9	8.8	94	3.2	81	97	66	0	0	4	1	0		
JACKSON	64	43	77	32	54	8	1.9	.8	1.3	8.8	97	4.5	120	99	64	0	1	4	1	0		
MERIDIAN	63	42	74	32	53	7	4.3	3.2	2.8	15.8	167	9.9	260	99	62	0	1	4	2	0		
MO CAPE GIRARDEAU	45	31	61	20	38	1	1.7	1.1	1.4	6.7	114	4.9	224	94	58	0	3	5	1	0		
COLUMBIA	37	23	53	11	30	2	.5	.1	.4	5.0	152	2.4	181	91	59	0	6	2	0	0		
KANSAS CITY	34	20	46	8	27	0	.3	.1	.3	5.8	243	2.0	216	92	61	0	7	3	3	0		
SAINT LOUIS	41	26	59	17	34	5	1.1	.7	1.0	7.2	207	3.5	274	90	54	0	4	4	1	0		
SPRINGFIELD	42	27	61	17	35	3	1.1	.7	.8	7.0	189	2.8	232	94	57	0	4	4	1	0		
MT BILLINGS	33	18	44	8	25	5	.5	.2	.2	.9	61	.4	54	75	48	0	7	0	0	0		
CLASOW	20	1	38	-14	11	3	.4	.1	.1	.4	73	.2	70	90	74	0	7	0	0	0		
GREAT FALLS	34	16	45	2	25	6	.5	.3	.5	1.4	94	1.1	153	88	54	0	6	3	0	0		
HAVRE	19	-1	43	-16	9	-3	.5	.3	.5	.5	53	.2	0	85	60	0	7	0	0	0		
HELENA	29	10	45	0	19	1	.4	.3	.2	1.4	122	.8	150	89	59	0	7	3	0	0		
KALISPELL	29	15	40	-2	22	3	.4	.3	.2	3.1	109	1.1	87	99	77	0	7	1	0	0		
MILES CITY	24	4	39	-7	14	0	.3	.2	.3	1.0	93	.6	133	92	69	0	7	1	0	0		
MISSOULA	30	16	43	4	23	2	.5	.2	.5	1.6	71	.8	78	92	67	0	7	4	0	0		
NE GRAND ISLAND	28	11	39	3	20	-1	.5	.4	.5	1.8	172	.9	244	92	70	0	7	1	1	0		
LINCOLN	28	12	40	1	20	1	.5	.3	.5	1.9	176	1.1	238	91	63	0	7	1	0	0		
NORFOLK	30	13	40	4	21	4	.5	.4	.5	2.3	233	1.3	367	87	60	0	7	1	0	0		
NORTH PLATTE	31	10	44	2	21	-1	.2	.1	.2	1.1	160	.7	274	94	66	0	7	2	0	0		
OMAHA	30	16	43	4	23	3	.3	.1	.3	2.1	162	1.1	196	77	62	0	7	1	0	0		
SCOTTSBLUFF	36	17	46	10	27	3	.3	.1	.3	1.1	130	.4	117	91	62	0	7	1	0	0		
VALENTINE	33	10	42	-8	21	4	.4	.1	.4	.6	66	.2	117	89	61	0	7	0	0	0		
NV ELY	33	14	41	-11	24	-1	1.0	.8	.5	3.4	268	2.5	469	88	58	0	7	3	1	0		
LAS VEGAS	58	42	60	38	50	5	.3	.2	.3	3.3	506	1.6	454	89	48	0	0	1	0	0		
RENO	41	25	50	17	33	0	1.1	.8	.5	4.3	202	2.4	261	91	60	0	6	4	0	0		
WINNEMUCCA	36	20	45	3	28	-3	.7	.5	.4	3.0	205	2.0	321	85	64	0	7	3	0	0		
NH CONCORD	34	12	43	-8	23	3	.4	.2	.4	3.4	61	1.1	54	91	53	0	7	1	0	0		
NJ ATLANTIC CITY	45	25	53	17	35	3	.5	.3	.3	6.6	107	2.6	102	87	42	0	6	2	0	0		
NM ALBUQUERQUE	52	33	60	28	42	7	.4	.3	.2	2.1	272	.9	324	88	41	0	4	3	0	0		
CLOVIS	53	29	67	23	41	4	.2	.1	.2	.8	83	.5	151	93	44	0	5	1	0	0		
ROSWELL	60	33	71	30	47	8	.5	.4	.5	1.3	202	.7	270	90	40	0	4	1	0	0		
NY ALBANY	34	16	43	-2	25	4	.4	.1	.3	5.1	106	2.0	112	95	57	0	6	4	0	0		
BINGHAMTON	30	18	39	6	24	3	.1	.4	.1	4.7	98	1.7	91	93	65	0	7	3	0	0		
BUFFALO	37	21	48	11	29	6	.6	.1	.5	7.3	128	3.5	151	85	50	0	5	3	0	0		
NEW YORK	42	31	52	22	37	5	.6	.1	.4	8.5	141	3.0	129	75	50	0	5	2	0	0		
ROCHESTER	34	17	43	7	26	2	.3	.3	.1	4.8	110	1.8	101	95	57	0	6	3	0	0		
SYRACUSE	34	20	43	10	27	5	.3	.3	.1	4.7	92	2.2	111	89	53	0	5	4	0	0		
NC ASHEVILLE	49	32	62	28	40	4	.9	.2	.9	7.0	126	3.3	139	94	54	0	4	3	1	0		
CHARLOTTE	53	34	64	30	43	3	2.3	1.5	2.3	8.4	136	5.6	201	90	42	0	2	2	1	0		
GREENSBORO	46	31	59	29	39	2	.8	.0	.8	5.8	96	3.3	125	87	46	0	4	1	1	0		
HATTERAS	55	43	66	39	49	4	.6	.5	.5	11.3	141	5.6	157	86	56	0	0	2	1	0		
NEW BERN	57	36	68	31	47	3	.4	.5	.3	8.6	129	5.5	186	91	49	0	2	2	0	0		
RALEIGH	51	31	61	24	41	2	1.2	.4	1.2	6.6	115	4.2	159	96	50	0	5	1	1	0		
WILMINGTON	60	37	71	31	49	3	.7	.2	.6	10.0	162	5.5	203	92	44	0	2	2	1	0		
ND BISMARCK	26	3	41	-9	15	8	.1	.0	.1	.8	88	.3	78	92	66	0	7	1	0	0		
FARGO	23	6	32	-12	15	11	.2	.1	.2	1.3	125	.7	176	90	69	0	7	3	0	0		
GRAND FORKS	22	4	31	-16	13	11	.2	.1	.2	1.0	85	.3	50	88	69	0	7	0	0	0		
WILLSTON	24	2	42	-13	13	6	.4	.1	.4	.7	79	.2	64	91	65	0	7	1	0	0		
OH AKRON-CANTON	38	22	50	11	30	5	.5	.1	.4	5.7	123	3.4	177	89	56	0	6	4	0	0		
CINCINNATI	42	24	58	13	33	4	1.1	.4	1.1	4.6	87	3.3	140	91	65	0	6	3	1	0		
CLEVELAND	39	22	49	9	31	5	.2	.3	.2	7.9	172	3.6	195	87	52	0	6	2	0	0		
COLUMBUS	40	26	52	17	33	6	1.0	.4	.9	4.9	106	3.6	173	84	48	0	5	2	1	0		
DAYTON	39	22	54	11	31	4	1.0	.4	.9	4.7	106	3.1	159	90	56	0	6	2	1	0		

Based on 1951-80 normals.

Weather Data for the Week Ending January 23, 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	.01 INCH OR MORE		.50 INCH OR MORE
													OR MORE						OR MORE	OR MORE	OR MORE
TOLEDO	36	20	47	7	28	5	.9	.5	.9	6.5	157	2.9	188	93	57	0	5	1	1	1	
YOUNGSTOWN	38	20	49	5	29	5	.7	.2	.6	6.7	141	3.2	159	93	52	0	6	3	1	1	
OK OKLAHOMA CITY	43	30	60	25	37	1	.6	.4	.6	4.8	254	1.7	236	97	65	0	6	1	1	1	
TULSA	43	30	57	25	36	1	1.1	.8	.7	7.5	268	2.3	227	94	70	0	5	4	1	1	
OR ASTORIA	48	35	55	30	41	0	1.7	.6	.8	9.2	46	3.2	39	92	61	0	4	5	1	1	
BURNS	32	10	40	-10	21	-7	.5	.1	.3	2.9	105	1.7	142	93	70	0	7	4	0	0	
MEDFORD	46	32	53	25	39	1	1.6	.9	.9	6.2	101	2.7	102	99	66	0	3	4	2	2	
PENDLETON	37	25	51	16	31	-2	.5	.1	.4	2.4	81	1.7	126	92	69	0	5	4	0	0	
PORTLAND	43	32	52	23	38	-2	2.4	1.0	.8	7.7	69	2.7	58	92	59	0	3	5	2	2	
SALEM	46	30	52	21	38	-1	2.9	1.3	1.4	12.3	98	4.5	83	92	64	0	4	5	2	2	
PA ALLENTOWN	41	25	50	16	33	6	.4	-.4	-.2	5.1	83	1.9	74	81	44	0	6	2	0	0	
ERIE	38	23	52	15	31	7	.3	-.2	.2	6.0	118	2.7	146	88	47	0	5	5	0	0	
HARRISBURG	40	26	46	19	33	4	T	-.7	T	2.9	53	.9	39	76	43	0	6	0	0	0	
PHILADELPHIA	45	29	52	24	37	6	.4	-.3	.3	6.5	112	1.9	79	73	41	0	5	2	0	0	
PITTSBURGH	40	25	49	15	32	6	.8	-.2	.7	5.0	107	2.2	103	89	54	0	5	2	1	0	
SCRANTON	38	23	45	10	31	5	.1	-.4	.1	4.6	111	1.7	101	86	51	0	6	3	0	0	
RI PROVIDENCE	39	24	48	16	32	3	.6	-.3	.6	8.9	119	2.0	67	84	54	0	6	2	1	1	
SC CHARLESTON	62	43	70	37	53	5	.9	.2	.9	10.4	187	8.9	365	93	50	0	0	2	1	1	
COLUMBIA	57	36	66	29	46	2	1.8	.8	1.8	10.5	155	7.3	225	93	47	0	2	2	1	1	
FLORENCE	60	39	69	34	50	5	.7	-.1	.7	10.4	185	6.7	255	87	44	0	0	1	1	1	
GREENVILLE	52	33	64	29	42	1	1.9	.9	1.8	11.8	164	6.8	214	93	49	0	3	2	1	1	
SD ABERDEEN	27	6	40	-14	16	9	.1	.0	.1	.7	85	.5	144	93	69	0	7	2	0	0	
HURON	28	10	38	-6	19	9	.1	.0	.1	.6	83	.3	119	91	66	0	7	1	0	0	
RAPID CITY	31	12	42	4	22	1	T	-.1	T	1.3	180	.7	252	94	67	0	7	2	0	0	
SIoux FALLS	28	9	39	-6	18	6	.2	.1	.2	1.5	145	.7	194	88	62	0	7	2	0	0	
TN CHATTANOOGA	51	37	63	31	44	6	1.0	-.2	.5	9.3	102	3.7	94	98	63	0	2	4	0	0	
KNOXVILLE	50	35	61	29	43	5	.5	-.6	.3	9.6	119	2.9	83	97	61	0	2	3	0	0	
MEMPHIS	53	37	71	32	45	5	1.2	.1	.6	6.3	76	2.8	81	96	65	0	2	4	1	1	
NASHVILLE	49	34	64	27	42	5	.7	-.4	.3	5.2	64	2.3	67	94	56	0	4	4	0	0	
TX ABILENE	58	34	75	30	46	3	.5	.2	.4	1.8	111	.8	106	96	51	0	3	2	0	0	
AMARILLO	42	24	58	22	33	-2	-.4	.3	.4	1.1	134	.7	200	95	67	0	7	1	0	0	
AUSTIN	67	44	77	39	55	6	1.8	1.5	1.8	6.1	195	2.8	252	97	60	0	0	2	3	1	1
BEAUMONT	69	50	76	44	60	8	4.1	3.2	1.6	15.7	198	9.2	304	100	73	0	0	3	3	3	3
BROWNSVILLE	77	60	81	51	68	8	1.6	1.3	1.4	2.6	129	1.7	197	99	71	0	0	2	1	0	0
CORPUS CHRISTI	75	53	82	42	64	9	.1	-.3	.0	1.4	58	.4	35	98	57	0	0	1	1	0	0
DEL RIO	72	47	80	38	60	9	.1	.0	.1	.9	101	.5	132	80	43	0	0	2	2	0	0
EL PASO	61	41	69	32	51	6	.6	.5	.4	2.7	420	1.4	500	88	41	0	0	3	3	0	0
FORT WORTH	57	38	74	34	47	3	.8	.4	.7	5.6	187	1.3	103	97	70	0	0	4	1	1	1
GALVESTON	69	57	74	50	63	10	4.1	3.5	4.1	12.1	206	8.3	363	97	75	0	0	2	3	0	0
HOUSTON	72	47	80	41	60	8	2.2	1.4	1.1	8.3	130	4.9	187	97	61	0	0	3	2	0	0
LUBBOCK	53	30	68	26	41	3	.3	.2	.3	2.4	377	1.0	381	95	50	0	6	1	0	0	0
MIDLAND	62	33	77	31	48	4	1.0	.9	1.0	1.7	244	1.1	400	96	45	0	3	3	1	0	0
SAN ANGELO	64	37	77	33	50	5	.3	.2	.2	1.6	148	.8	184	91	46	0	0	2	1	0	0
SAN ANTONIO	70	45	77	39	58	7	1.2	.9	1.2	3.9	160	1.7	160	94	54	0	0	2	1	0	0
VICTORIA	73	49	80	44	61	9	.5	.1	.4	4.8	137	2.7	199	99	57	0	0	4	0	0	0
WACO	62	40	76	36	51	5	.4	.0	.0	4.6	149	1.3	107	96	65	0	0	3	0	0	0
WICHITA FALLS	49	32	64	29	41	1	.6	.4	.6	4.4	182	1.2	175	97	65	0	3	2	1	0	0
UT CEDAR CITY	44	28	51	21	36	7	.3	.0	.0	2.6	239	1.6	353	95	55	0	6	3	0	0	0
SALT LAKE CITY	40	25	48	19	32	3	.6	.5	.4	3.4	164	2.8	278	95	66	0	7	3	0	0	0
VT BURLINGTON	31	14	41	-1	23	6	.5	.1	.3	2.7	71	1.7	124	93	59	0	6	5	0	0	0
VA NORFOLK	49	33	60	25	41	1	.4	.4	.4	7.9	133	4.7	172	87	52	0	3	2	0	0	0
RICMOND	50	30	59	20	40	4	.4	.0	.5	7.1	123	4.3	180	93	47	0	4	2	1	1	1
ROANOKE	46	30	59	25	38	3	.7	.0	.7	6.0	120	3.4	162	82	47	0	6	2	1	1	1
WA QUILLAYUTE	44	31	48	25	38	-1	1.7	-.4	1.1	12.0	42	2.2	20	96	65	0	4	5	1	1	1
SKATTLIE-TACOMA	44	33	51	29	39	-1	2.0	.6	.7	6.2	57	2.2	47	93	61	0	3	5	2	0	0
SPokane	32	19	43	11	25	0	.6	.1	.4	3.4	78	1.3	68	95	76	0	7	2	0	0	0
YAKIMA	36	22	45	7	29	0	.6	.3	.3	3.2	135	.9	82	95	65	0	7	5	0	0	0
WV BECKLEY	43	29	57	25	36	6	.6	-.2	.5	5.2	92	1.3	51	90	56	0	5	3	0	0	0
CHARLESTON	48	31	62	21	39	7	.7	-.2	.6	5.1	87	1.6	61	92	49	0	5	4	1	1	1
HUNTINGTON	48	29	61	21	38	5	.5	-.1	.7	4.6	83	1.8	73	87	50	0	5	2	1	1	1
PARKERSBURG	44	27	55	18	36	4	1.0	.3	.8	3.9	80	1.9	89	87	46	0	5	2	1	1	1
WI GREEN BAY	32	11	41	-8	21	8	.6	.3	.5	3.5	154	1.2	139	90	63	0	6	2	0	0	0
LACROSSE	29	8	41	-13	19	5	.2	-.1	.1	2.7	151	1.1	158	91	58	0	7	2	0	0	0
MADISON	34	10	43	-10	22	7	.3	.1	.2	3.9	165	1.5	175	89	54	0	6	3	0	0	0
MILWAUKEE	35	19	42	8	27	8	.8	.4	.6	5.1	155	2.6	208	86	62	0	6	3	1	1	1
WAUSAU	27	9	35	-9	18	7	.5	.3	.3	3.1	159	1.3	190	94	68	0	7	3	0	0	0
WY CASPER	35	15	43	2	25	3	T	-.1	T	1.6	186	.7	200	83	57	0	7	1	0	0	0
CHEYENNE	37	20	44	15	29	3	T	-.1	T	.8	127	.3	126	85	51	0	7	1	0	0	0
LANDER	27	6	44	-6	17	-3	.2	.1	.1	1.8	207	1.0	275	86	56	0	7	2	0	0	0
SHERIDAN	30	9	40	3	20	0	T	-.2	T	1.5	115	.2	39	91	56	0	7	0	0	0	0

Based on 1951-80 normals.

## HEATING DEGREE DAYS (Base 65° F) January 17 - 23, 1993

(Cumulative totals and departures from normal are for the period July 1, 1992 - January 23, 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	122	-32	1484	-158	-93	SHREVEPORT	106	-30	1314	-5	10	DAYTON	240	-33	2931	-79	39
MOBILE	44	-63	783	-216	-321	ME CARIBOU	367	-18	4969	-52	58	TOLEDO	257	-38	3175	-251	91
MONTGOMERY	98	-35	1139	-182	-226	PORTLAND	287	-21	3705	-97	132	YOUNGSTOWN	252	-35	3261	-112	161
AK ANCHORAGE	392	29	5942	-85	526	MD BALTIMORE	199	-32	2317	-161	-48	OK OKLAHOMA CITY	197	-8	2142	44	161
BARROW	649	94	10224	-237	-402	SALTSBURY	200	-10	2186	-106	62	TULSA	199	-11	2240	130	354
FAIRBANKS	611	67	7993	-229	271	MA BOSTON	223	-26	2873	84	204	OR ASTORIA	165	-3	2844	184	335
JUNEAU	240	-66	4741	-217	449	CHATHAM	232	-6	2758	-51	182	BURNS	307	46	4487	750	793
KODIAK	322	93	4734	108	376	MI ALPENA	277	-59	4248	24	217	MEDFORD	180	-11	2288	-294	81
NOME	584	173	7871	422	1119	DETROIT	260	-34	3213	-187	99	PENDLETON	235	7	3278	368	563
AZ FLAGSTAFF	215	-44	3596	-98	155	FLINT	284	-24	3521	-85	52	PORTLAND	191	9	2426	-43	390
PHOENIX	40	-50	640	-200	30	GRAND RAPIDS	284	-20	3566	13	111	SALEM	187	5	2488	-86	306
PRESCOTT	165	-38	2338	-193	-30	HOUGHTON LAKE	299	-40	4186	-52	185	PA ALLENTOWN	221	-45	2938	-102	224
TUCSON	74	-24	921	-39	-1	LANSING	284	-24	3660	71	104	ERIE	237	-50	2912	-423	55
WINSLOW	169	-61	2877	158	-56	MARQUETTE	298	-76	5084	180	175	HARRISBURG	219	-33	2723	-86	168
YUMA	27	-36	542	-54	131	MUSKEGON	278	-16	3522	37	183	PHILADELPHIA	195	-43	2277	-296	48
AR FORT SMITH	164	-31	1900	-89	49	SAULT ST MARIE	287	-77	4797	105	306	PITTSBURGH	228	-45	2888	-239	57
LITTLE ROCK	159	-17	1816	3	105	MN ALEXANDRIA	340	-82	4986	102	267	SCRANTON	238	-42	3058	-239	16
CA BAKERSFIELD	77	-39	1185	-53	-147	DULUTH	315	-100	5256	47	68	RI PROVIDENCE	231	-28	2878	-95	241
EUREKA	115	-10	2112	-329	-47	INT'L FALLS	340	-119	5771	70	318	SC CHARLESTON	85	-40	938	-278	-104
FRESNO	92	-42	1324	-193	-107	MINNEAPOLIS	323	-59	4347	57	23	COLUMBIA	130	-17	1417	-89	04
LOS ANGELES	63	0	573	-147	107	ROCHESTER	342	-43	4617	206	164	FLORENCE	105	-39	1261	-182	-42
REDDING	122	-15	1500	29	118	SAINT CLOUD	338	-74	4897	90	150	GREENVILLE	157	-11	1874	60	203
SACRAMENTO	108	-28	1448	-65	36	MS GREENWOOD	98	-62	1345	-238	-126	SD ABERDEEN	339	-63	4896	275	604
SAN DIEGO	56	0	534	-58	116	JACKSON	77	-64	1181	-198	-169	HURON	318	-64	4560	191	559
SAN FRANCISCO	91	-24	1229	-383	-48	MERIDIAN	86	-59	1166	-280	-193	RAPID CITY	303	-10	4368	518	804
STOCKTON	100	-37	1383	-118	-65	MO CAPE GIRARDEAU	187	-44	2377	-74	133	SIoux FALLS	325	-47	4414	158	377
CO DENVER	224	-27	3504	339	236	COLUMBIA	241	-25	2899	70	210	TN CHATTANOOGA	145	-39	1792	-228	-63
GRAND JCT.	210	-67	3127	-89	-278	KANSAS CITY	263	-14	3034	146	254	KNOXVILLE	157	-32	1982	-79	-32
PUEBLO	241	-6	3511	515	364	SAINT LOUIS	218	-39	2548	-155	170	MEMPHIS	139	-41	1696	-126	01
CT BRIDGEPORT	219	-33	2660	-27	154	SPRINGFIELD	212	-26	2523	-28	134	NASHVILLE	163	-33	1918	-174	-54
HARTFORD	268	-12	3253	22	297	MT BILLINGS	276	-37	4206	367	757	TX ABILENE	132	-22	1466	-72	-221
DE WILMINGTON	199	-39	2387	-204	89	GLASGOW	378	-26	5058	259	858	AMARILLO	224	14	2672	326	178
DC WASHINGTON	192	-18	2170	-23	183	GREAT FALLS	277	-51	4711	593	1094	AUSTIN	65	-54	926	-116	-79
FL APALACHICOLA	50	-45	460	-335	-365	HAVRE	389	5	5154	456	1114	BEAUMONT	-37	-61	740	-131	-149
DAYTONA BEACH	24	-39	249	-235	-182	HELENA	319	-13	4845	421	578	BROWNSVILLE	3	-51	265	-103	-165
FORT MYERS	5	-30	57	-185	-83	KALISPELL	297	-26	4894	306	684	CORPUS CHRISTI	19	-52	458	-116	-137
JACKSONVILLE	55	-36	560	-259	-238	MILES CITY	357	-5	4526	235	808	DEL RIO	37	-68	789	-171	-115
KEY WEST	0	-14	3	-53	-8	MISSOULA	292	-15	4663	364	659	EL PASO	97	-48	1481	-150	-209
MIAMI	0	-20	13	-85	-29	NE GRAND ISLAND	316	1	3865	315	593	FORT WORTH	125	-21	1312	-23	-74
ORLANDO	17	-32	181	-181	-132	LINCOLN	313	-9	3680	198	517	GALVESTON	17	-74	543	-152	-158
TALLAHASSEE	56	-44	638	-321	-347	NORFOLK	304	-32	3931	111	416	HOUSTON	38	-67	774	-141	-173
TAMPA	13	-39	166	-236	-162	NORTH PLATTE	308	0	4064	307	646	LUBBOCK	164	-20	1962	-39	-156
W. PALM BEACH	4	-17	40	-89	-57	OMAHA	292	-26	3613	223	303	MIDLAND-ODESSA	120	-29	1545	-27	-283
GA ATLANTA	138	-23	1547	-153	48	SCOTTSBLUFF	267	-20	4160	540	685	SAN ANGELO	103	-35	1311	-72	-207
AUGUSTA	114	-30	1288	-184	-112	VALENTINE	304	-24	4303	368	507	SAN ANTONIO	51	-54	840	-121	-116
MACON	111	-26	1247	-77	-35	NV ELY	288	2	4067	61	204	VICTORIA	34	-57	625	-126	-125
SAVANNAH	75	-42	849	-278	-128	LAS VEGAS	103	-39	1470	-28	85	WACO	98	-38	1187	-49	-37
ID BOISE	243	-2	3451	285	358	RENO	225	-3	3054	-187	394	WICHITA FALLS	167	-8	1689	-55	-45
LEWISTON	234	3	3177	169	461	WINNEMUCCA	260	14	3626	170	461	UT BLANDING	209	-55	3093	-202	36
POCATELLO	267	-22	4094	287	284	NH CONCORD	293	-26	3912	17	264	CEDAR CITY	199	-48	3196	28	29
IL CHICAGO	265	-43	3444	76	125	NJ ATLANTIC CITY	207	-26	2519	-52	90	SALT LAKE CITY	228	-27	3333	177	181
MOLINE	280	-42	3500	24	203	NM ALBUQUERQUE	157	-53	2438	-61	-53	VT BURLINGTON	296	-47	3867	-212	-7
PEORIA	255	-53	3216	-128	50	CLOVIS	167	-29	2305	36	-195	VA LYNCHBURG	189	-21	2191	-154	97
QUINCY	260	-34	3203	85	223	ROSWELL	125	-42	1863	-15	-254	NORFOLK	167	-8	1640	-147	56
ROCKFORD	292	-38	3725	33	201	NY ALBANY	281	-29	3530	-64	153	RICHMOND	171	-32	2032	-129	167
SPRINGFIELD	237	-50	2874	-163	-14	BINGHAMTON	284	-24	3838	95	443	ROANOKE	185	-25	2295	-63	217
IN EVANSVILLE	193	-52	2354	-246	-92	BUFFALO	249	-45	3316	-94	112	WA COLVILLE	285	-1	4269	302	620
FORT WAYNE	273	-21	3190	-119	82	NEW YORK	198	-37	2378	-94	240	QUILLAYUTE	189	7	3117	40	374
INDIANAPOLIS	236	-42	2862	-163	72	ROCHESTER	275	-19	3507	129	198	SEATTLE-TACOMA	183	1	2574	-108	370
SOUTH BEND	261	-34	3252	-54	91	SYRACUSE	261	-37	3443	15	166	SPOKANE	276	-2	4072	310	647
IA DES MOINES	295	-34	3608	90	201	NC ASHEVILLE	171	-28	2213	-134	80	YAKIMA	253	-5	3692	297	668
DUBUQUE	305	-45	4091	161	260	CAPE HATTERAS	112	-28	1007	-309	-58	WV BECKLEY	199	-46	---	---	---
SIoux CITY	309	-37	3957	175	312	CHARLOTTE	150	-22	1686	-181	162	CHARLESTON	177	-52	2317	-237	22
WATERLOO	322	-40	4004	-47	151	GREENSBORO	181	-15	2114	-20	258	HUNTINGTON	186	-44	2318	-232	-14
KS CONCORDIA	292	7	3386	338	531	NEW BERN	128	-26	1282	-284	-45	PARKERSBURG	204	-34	2520	-132	-47
DODGE CITY	281	29	3360	597	625	RALEIGH-DURHAM	166	-15	1834	-112	134	WI GREEN BAY	303	-60	4193	-38	157
GOODLAND	284	18	3810	542	630	WILMINGTON	113	-33	1197	-167	-86	LA CROSSE	323	-39	4079	51	66
TOPEKA	262	-13	3020	77	357	ND BISMARCK	351	-63	5186	295	753	MADISON	298	-52	3927	-124	119
WICHITA	252	1	2795	147	309	FARGO	351	-79	5203	205	448	MILWAUKEE	263	-66	3541	-197	166
KY BOWLING GREEN	181	-40	2247	-135	19	GRAND FORKS	363	-83	5441	153	469	WAUSAU	327	-54	4620	100	95
LEXINGTON	197	-41	2417	-179	00	WILLISTON	361	-53	5407	407	929	WY CASPER	277	-24	4025	17	172
LOUISVILLE	186	-45	2201	-260	04	OH AKRON-CANTON	245	-37	3158	-64	107	CHEYENNE	254	-19	3956	205	257
LA BATON ROUGE	41	-66	781	-210	-191	CLEVELAND	238	-42	3001	-152	109	LANDER	336	16	4557	317	217
LAKE CHARLES	48	-57	774	-156	-170	COLUMBUS	220	-48	2758	-257	21	SHERIDAN	315	-7	4642	465	746
NEW ORLEANS	37	-61	611	-257	-324	CINCINNATI	222	-36	2701	-114	70						

Based on 1951-80 normals.

## National Agricultural Summary

January 18 - 24, 1993

**HIGHLIGHTS:** Mild temperatures dominated most of the Nation, except in the Northwest and the south-central Plains. Storms through midweek across the Northwest and the South brought moisture and high winds. Flooding in Louisiana halted farm activities in some areas. Buildings were damaged by high winds and flooding in Washington. Drier conditions prevailed across the Nation by week's end, allowing limited fieldwork and harvesting to resume in the Southeast and West.

**SMALL GRAINS:** Winter wheat remained in good condition across the Nation, with adequate snow cover across much of the Northwest and the Great Plains. Dry, sunny weather was needed to help saturated wheat fields dry out in the South. In Arkansas and Oklahoma, early-seeded fields appeared to handle the wet weather better than later-seeded fields. Some wheat fields drowned out in South Carolina. Nitrogen deficiencies due to excess moisture appeared in some wheat fields in the Cross Timber and Blackland regions of Texas. Melting snow left some small grain acreage susceptible to freeze damage in Washington and Missouri. Other small grains were reported in fair to good condition. Some flooded small grain fields in California may be reseeded to safflower.

**COTTON:** Cotton harvest continued across the South as drier weather conditions prevailed. In Texas, however, the remaining harvest on the plains was hampered by cold and wet conditions. Plowdown of harvested cotton fields for pink bollworm control was winding down in Arizona.

**OTHER FIELD CROPS:** The drier conditions allowed some soybean harvesting in Georgia and North Carolina. Some corn was harvested in Indiana, but progress remained stopped in Michigan. Tobacco bed preparation advanced in the Southeast but was hindered by wet fields. Onion transplanting in Georgia was slowed by wet fields. In Texas, wet weather slowed land preparation for onions in the Trans-Pecos, Rio Grande Valley, and eastern areas. Onions already planted in the Trans-Pecos and Rio Grande Valley areas were in good condition. Potato harvest in southwest Florida had begun. Some winter potato fields in the San Jacinto area of California were still flooded.

**FRUIT AND NUTS:** Drier conditions in California, Arizona, and Florida allowed harvest activities to continue. Citrus harvests

advanced in central and western Arizona. Florida fruit was reported in very good condition. The early orange harvest was near its peak. The grapefruit harvest was very active as the fancy tangerine harvest was declining. Temple and honey tangerine harvests gained momentum. Stormy weather the last 2 weeks in California had caused wind damage and erosion in some orchards. Lemons were harvested, but navel orange picking was limited and the avocado harvest was delayed. The Georgia peach crop was reported in fair to good condition. Drier weather allowed the harvesting of late-season pecans in Arizona, New Mexico, Georgia, and Texas.

**VEGETABLES:** Drier conditions from the previous week allowed harvest to advance in Arizona and Florida, but wet weather slowed and halted winter harvesting and spring planting activities in California. Broccoli, cabbage, cauliflower, and lettuce were harvested in western and central Arizona. Clear skies and above-normal temperatures allowed tomato planting to finish in the Homestead area of Florida. The harvests of tomatoes, peppers, cabbage, celery, and sweet corn advanced in Florida. Most fields in Westside areas of California dried out enough for harvest to resume, but fields in the Kern-Tulare area remained too wet for harvest. The broccoli harvest was heavy in the Santa Maria area but very light in the Salinas-Watsonville area. Cauliflower and celery harvests were light in the Santa Maria area. Spring head lettuce fields in the Westside area were thinned.

**PASTURES AND LIVESTOCK:** Livestock continued in fair to good condition across the Nation. Milder temperatures reduced stress to livestock in the Midwest. Supplemental feeding continued, especially in the South where pastures were too wet to graze. Warm, wet weather encouraged pasture growth in California. Texas pastures needed sunny, dry weather for growth. Forage remained in adequate supply. Early lambing and calving continued in the West.

(Continued from front cover)

Friday. By midweek, heavy rains erupted in the central Gulf Coast States, while snow spread from the southern Rockies into the central Plains. Farther west, a powerful storm reached the Pacific Northwest. Two-day rainfall reached 10.83 inches in Lafayette, LA, 9.02 inches near New Orleans, LA, and 5.44 inches in Mobile, AL. Many roads in south-central Louisiana were submerged. In the Plains, new snowfall amounts included 7 inches in Grand Island, NE, and 8 inches in Concordia, KS. But the Northwest bore the fiercest conditions, as howling winds and heavy precipitation hit areas from the Cascades and Sierras westward. In northern California, 3-day (Wednesday to Friday) rainfall included 9.73 inches in Kentfield (north of San Francisco), 7.55 inches in Blue Canyon, and 6.70 inches at Ukiah. Adding to the runoff was considerable snowmelt below the 6,000-foot level (Truckee, at 5,818 feet, lost 16 inches of its 44-inch snow cover at midweek), and considerable flooding resulted in the northern

Sacramento Valley and in northwestern California. In the higher elevations, the storm dumped 32 inches of snow at Sierra Ski Ranch, CA, but also dealt unbelievable winds. On Thursday, atop the Sierra crest near Lake Tahoe, an automated station registered 122 mph sustained winds, with gusts to 176 mph. High winds also affected western Washington, knocking out power to more than 500,000 customers, according to press reports. Winds gusted to 69 mph in Seattle, WA. Late in the week, snow, ice, and wind spread across the Northern States, while warm, dry air covered the Southern States. Five inches of new snow blanketed Great Falls, MT, and 10 inches fell in Duluth, MN. Laramie, WY, recorded wind gusts to 64 mph. Freezing rain glazed surfaces from the upper Midwest to the Mid-Atlantic region. But farther south, temperatures attained daily record levels in Winslow, AZ (65°F), and Pensacola, FL (77°F). Late on Saturday, unusually severe thunderstorms (for January) erupted from Arkansas to Texas, producing large hail and strong winds.

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall 1.42 to 4.31 in. north; 1.93 to 5.37 in. central; 1.09 to 6.22 in. south. Temperatures 1° below normal to 8° above north; 4 to 9° above normal central; 5 to 10° above normal south. Lows 24 to 33° north; 26 to 34° central; 30 to 39° south. Highs 59 to 70° north, 65 to 74° central, 70 to 75° south.

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

**ARIZONA:** Precipitation 17th, 18th statewide, 19th east. Sunny skies, warmer weather prevailed 20th through 23rd statewide. Temperatures 3 to 10° above normal. Extremes 16°; 74° higher elevations, 31°; 75° deserts.

Cotton stalk shredding, plowdown light. Alfalfa fair to good; harvest light, all areas. Small grains planted 88%, 97% 1992, 96% avg.; stands established 80%, 88% 1992, 88% avg. Field activities remain slow, increasing as fields dry out. Vegetable, fruit harvest increased as drier weather prevailed. Broccoli, broccoflower, cabbage, cauliflower, lettuce, bok choy, cilantro, kale, parsley, napa, spinach, green onions available western, central areas. Also available west: escarole, endive. Leeks, beets, dill, kohlrabi, radishes, rapini, mixed greens, turnips available, central. Citrus harvest continued central, western areas. Pecans, tomatoes harvested east.

**ARKANSAS:** Mild, wet week, temperatures a little above normal. Widespread precipitation first half of week; thunderstorms weekend. Extremes 22°; 75°. Rainfall 0.61 to 2.91 in.

Soil moisture supplies adequate to surplus. Wheat fair to good, needs sunshine, dry weather. Some wheat fields saturated. Early planted wheat continues to do better than late planted wheat. Livestock good. Producers feeding hay, supplies adequate. Pastures good.

**CALIFORNIA:** Series of Pacific storms brought rain, snow entire State during first half last week. Upper level ridge high pressure moved in 22nd bringing dry weather.

Rain halted field activities, wet soils most areas. Improved growth small grains, forage crops northern counties; warmer temperatures, sunshine late week. Southern counties normal progress. Low-lying fields remained flooded; reseeding probable. Some growers may plant safflower instead. General ground preparation spring-planted row crops limited, land leveling sandier soils between rains. Few fields new alfalfa seeded where conditions allowed. Growers pruning, brush shredding, dormant spraying weather conditions permitting. Many areas vine tying, dormant spraying on hold. Erosion, wind damage noted. Navel orange picking limited. Lemons harvested, packed. Kiwifruit, Granny Smith apples packed. Avocado harvest delayed. Winter vegetable harvesting, spring planting activity Statewide slowed, brought to a halt due to continued rainfall. Broccoli fairly heavy Santa Maria, very light Salinas-Watsonville variable quality. Most fields Westside area dried sufficiently to resume harvesting. Kern-Tulare harvest

halted due to rain. Cauliflower light, variable quality Santa Maria. Celery packing neared completion Santa Maria, light, generally good quality. Spring head lettuce fields westside being thinned. Fall potato movement Tulalake-Butte Valley storages steady, moderate demand good quality. Some winter potato fields San Jacinto still flooded. Open ground scheduled for cucumber, tomato planting central valley sat idle wet conditions. Range, pasture grasses growing, increasing with warmer weather. Overall conditions rated good. Supplemental feeding continued.

**COLORADO:** Weather advisories for snow and blowing snow in the southern mountains on 18th, 19th. Mostly light rain showers across the west slope, the southwestern valleys, Durango reported nearly 1.50 in. of moisture. Fog moved into the west on the 20th, 21st while strong winds hit the mountains and the east. These winds increased on the 22nd when a strong cold front caused winds to gust to 80 miles an hour near the front range, produced a little precipitation the mountains. Winds decreased, skies cleared on 23rd, 24th. Moisture during the period at lower elevations in the State 0.10 to 0.20 in. north, east. In the San Luis Valley, southwest amounts mostly 0.50 to 0.75 in. Temperatures at most locations east of the Continental Divide were within a couple of degrees of normal for the period, except warmer at some locations near the eastern foothills. West of the Divide they were mostly 5 to 8° above normal.

Care, feeding of livestock was the main activity this past week.

**FLORIDA:** Temperatures 4 to 8° above normal north, 5 to 10° above normal central, south. Highs; upper 70s Panhandle, 80° central, south. Lows; middle 30s Panhandle, Big Bend, upper 40s central, lower 50s interior south. Rain 3 to 5 days Panhandle, 2 to 4 days elsewhere north, 2 or less days central, south, 2.00 to 4.00 in. Panhandle, generally less than 0.25 in. elsewhere except local areas over 1.00 in.

Soil moisture mostly adequate to surplus. Sugarcane harvest, planting active. Tobacco growers maintaining plant beds. Making preparation for planting corn. Citrus groves, trees, fruit very good. New growth, bloom buds, some trees all areas. Fruit droppage increasing on remaining oranges. Early mid orange harvest near peak. Ideal picking conditions. Grapefruit movement very active. Dancy tangerine harvest slowing, Temple, Honey tangerine harvest increasing. Caretakers cutting cover crops unbanking, unwrapping young trees due warm days, fertilizer being applied. Clear skies, average weekly temperatures 6 to 11° above normal all vegetable producing areas. Tomato planting Homestead complete. Southwest potato harvest begun. Volume leaders: Tomatoes, peppers, cabbage, celery, sweet corn. Also available: Snap beans, carrots, chinese cabbage, cucumbers, eggplant, escarole, iceberg lettuce, romaine, specialty lettuces, potatoes, radishes, squash, strawberries, cherry tomatoes. State's pastures fair to excellent. Pastures 15% fair, 75% good, 10% excellent. Moisture levels adequate to surplus. State's cattle herds fair to excellent.

**GEORGIA:** Another warmer than normal week. Temperatures 3 to 7° above normal. Extreme highs in low 60s north, mid 70s

south. Coolest readings mid 20s north, upper 30s south. Rain totals above normal north, near to slightly below normal center, south. Amounts 1.00 to 3.75 in. north, 0.67 to 1.50 in. center, southwest, less than 0.67 in. southeast. Rain on 4 to 6 days north, 3 to 4 days south.

Soil moisture surplus. Most field activities limited. Some cotton, soybeans harvested south, scattered fields still remaining. Pecan harvest also delayed. Tobacco bed preparation, onion transplanting again slowed. Tobacco plants good, onions fair, some fungicide applications. Very limited land preparation during week. Peaches fair to good, some varieties in south lacking adequate chill hours. Small grains good, pastures poor to fair, very muddy. Cattle fair to good, hogs good.

**HAWAII:** Sunny, cool weather prevailed in the State. Passing showers fell on higher elevations, windward areas. Temperatures high 50s to mid 80s with winds at 5 to 25 mph. Rainfall none to 1.20 in.

Although seasonably cool temperatures slowed crop progress, the increased sunshine, decreased rainfall aided disease control measures for orchard crops. Favorable weather allowed farmers to continue normal field operations. Papaya picking is expected near last week's level.

**IDAHO:** Temperatures in State 3° below normal to 6° above normal. Precipitation fell across the most of the State with Ketchum receiving the largest amount, at 2.59 in.

Soil moisture varied across State. Adequate amount southwest, southeast, north; short amount south central. Activities: Plowing snow off roads, marketing crops, repairing farm machinery, potato school in Pocatello. Hay, roughage supplies mostly adequate. Livestock activities: Cattle on winter hay, calving in progress, lambing activity continuing across the Idaho. Livestock reported in good although snow, wind have made feeding difficult in some regions of the State.

**ILLINOIS:** Seasonably mild damp weather prevailed last week with moisture, warm air from the south pushing northward. Low temperatures 20 to 30°, while highs mid 30s to upper 40s. Overall temperatures were 4 to 8° above normal. Precipitation was greatest in the south, just under 2.00 in., least in the north, around 0.50 in.

**INDIANA:** Temperatures 2 to 9° above normal. Highs mid 30s to mid 40s. Low temperatures upper teens to low 30s. Precipitation (water equivalent) totaled 1.00 to 2.00 in.

Frozen ground early in the week allowed farmers to spread manure, harvest some corn, topdress wheat fields. Some operators were able to till fields during the cold snap. Farming meetings were attended. Hay is in adequate supply while straw is reported to be short in several areas of the State. Other activities: Machinery repair, choosing seed, hauling grain, tending to livestock.

**IOWA:** Temperatures 5 to 8° above normal. Extremes -12° Decorah (northeast), 19th., 44° Burlington (southeast), 23rd. Freezing rain, light snow at midweek. Precipitation 0.08 in. Waterloo, Spencer (northern third) to 0.65 in. Oakland Mills (southeast); average 0.24 in. (normal 0.21 in.). Snowcover only none to 1 in. southeast, increasing to 7 to 12 in. north.

Farmers are preparing 1992 taxes, are busy with purchasing inputs for next year's crops.

**KANSAS:** Temperatures 2 to 4° below normal western district, 1 to 2° below central district, normal east district except east central 1° above normal. Precipitation 0.20 to 0.50 in. across State.

Precipitation form ranged from rain to freezing rain to snow across State again. Wet, cold weather continues to plague stockmen; more time required to provide feed, water, general care. Wheat crop continues good condition under protection of snowcover; plenty of moisture. Harvest of remaining crops at standstill.

**KENTUCKY:** Wet, mild. Temperatures 5 to 10° above normal. Highs 60s, extreme north upper 50s. Rainfall 0.66 in. east to over 2.00 in. some west areas. Normal 0.90 in. Most precipitation fell midweek, over weekend.

Wet weather stressed livestock. Producers busy providing feed. Mild temperatures favorable for winter crops. Soil moisture adequate. Burley prices continued to decline. Tobacco placed under loan increased considerably.

**LOUISIANA:** Temperatures 4.1° to 9.9° above normal. Extremes 30°; 78°. Rainfall 1.37 in. southeast to 7.71 in. east central.

Crawfishing, caring for livestock. Repair, maintenance of farm equipment. Flooding in some areas ceased all farm activities.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 0.57 in. Temperature 34.7°, normal 32.4°. Extremes 6°; 55°.

Hay supplies adequate. Cutting firewood, feeding hay, caring for livestock. Small grains good.

DELAWARE: Precipitation 0.52 in. Temperature 36.3°, normal 33.5°. Extremes 17°; 56°.

Hay supplies adequate. Pastures, livestock mostly excellent. Small grains good.

**MICHIGAN:** Extremes -5°; 44°. Precipitation 0.03 to 1.08 in. across State. Corn remained at 75% harvested. Freezing rain fell early in the week followed by rain, flurries.

Livestock good condition. Feed supplies are adequate to short. Major activities included: Hauling manure, pruning, tax preparation, repairing equipment.

**MINNESOTA:** Temperatures 6 to 14° above normal. Extremes -19°; 40°. Precipitation 0.11 to 0.48 in., 0.03 in. below normal to 0.31 in. above normal. Greatest weekly total was 1.06 in. Snowfall 1 to 5 in., with snow depths averaging 7 to 20 in. for the State.

Warmer temperatures were welcome, especially in northern areas of the State where temperatures have consistently been below normal through the winter. An ice storm at midweek created traffic problems; little structural damage was reported.

**MISSISSIPPI:** Temperatures 51°, 7.9° above normal. Extremes 27°, 81°. Entire State received heavy rainfall. Some of the cities near coast received 9.00 in. or more. State average was 3.24 in., 2.12 in. above normal. Soil temperatures 50°.

Days suitable for fieldwork 1.0, .8 1992, .5 avg. Soil moisture 33% surplus, 67% excessive. Wheat 26% poor, 74% fair. Hay supply 100% adequate. Feed grain 100% adequate. Livestock 48% fair, 52% good. Activities: Feeding livestock.

**MISSOURI:** Temperatures 1° above normal northwest to 5° above normal southeast. Precipitation 0.83 in., under 0.50 in. across northern districts to 1.62 in. southeastern district.

Farm work mostly limited to care of livestock. Snowcover disappearing with rain, warmer temperatures.

**MONTANA:** Temperatures normal to 3° above normal west, 1 to 9° above normal east. Precipitation most areas, heaviest in west, central. Lightest in south central, northeast. Precipitation up to 0.57 in. west, up to 0.50 in. central.

Winter wheat enjoys good snowcover protection. Grazing considered difficult to closed with more than 92% of livestock receiving supplemental feed.

**NEBRASKA:** Temperatures near normal across the State. Precipitation varying a trace west to over 0.50 in. east.

Producer activities included: Monitoring farm stored grains, record keeping, equipment maintenance, livestock care.

**NEVADA:** Week was dominated by a series of low pressure systems bringing precipitation as rain or snow statewide. Clearing behind systems latter part of period allowed overnight lows to fall below zero in northeast.

Moderate temperatures reduced livestock stress, eased feeding requirements. Calving, lambing getting started. Major farm/ranch activities: Care, feeding of livestock, general maintenance.

**NEW ENGLAND:** Precipitation 0.44 to 1.14 in. Maine, 0.21 to 0.74 in elsewhere. Temperatures mid teens to mid 30s. Maximum temperatures mid 30s to high 40s. Minimum temperatures -7 to 4° north, -3 to 19° south.

Major farm activities: Tending livestock, cutting firewood, making general repairs.

**NEW MEXICO:** Except for a few isolated spots, temperatures averaged a few degrees above normal. State was between 3 to 4° above normal, although a few locations were as much as 6 to 7° above normal. Most of the precipitation fell with the passage of a winter storm early in the week. Higher totals reached near 1.50 in. with most areas reporting around 0.50 in.

Drier weather during the latter part of the week allowed farmers to get back into fields for some late season harvest of pecans, red chile.

**NEW JERSEY:** Temperatures much above normal, 33° north, 37° south, 38° coast. Extremes 11°; 61°. Precipitation slightly above normal north, slightly below normal south, coast; averaged 0.94 in. north, 0.56 in. south, 0.52 in. coastal. Heaviest 24 hour total 1.07 in. on 21st, 22nd. Heaviest 24 hour snowfall none.

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

**NEW YORK:** Unseasonably mild. Temperatures 4 to 7° above normal. Week started cool then warmed up. Extremes -7°; 52°. Precipitation about normal. Freezing precipitation fell early on 17th, again on 21st. Light rain fell on 27th. Snow flurries, lake effect snow common on 18th, 19th.

Major activities: Caring for livestock, maintenance work, grading, packing onions, potatoes, apples, attending meetings. Warmer weather aided outside activities.

**NORTH CAROLINA:** Temperatures 0 to 4° above normal. Precipitation 3.17 in. at Lake Toxaway to none at Maple Springs, Asheville-French Broad.

Crop condition: Winter wheat 3% poor, 35% fair, 59% good, 3% excellent. Oats 4% poor, 30% fair, 64% good, 2% excellent. Barley 26% fair, 72% good, 2% excellent. Rye 2% poor, 25% fair, 71% good 2% excellent. Hay, roughage supplies 2% short, 93% adequate, 5% surplus. Feed grain supplies 2% short, 90% adequate, 8% surplus. Activities included: Harvesting soybeans, cotton; preparing tobacco plant beds; tending livestock; equipment repair; soil sampling; general farm maintenance.

**NORTH DAKOTA:** Temperatures 5° above normal in the southwest to 10° above normal northwest, north central, northeast. Extremes -21° east central; 42° southwest, south central. Precipitation none in the north to 0.15 in. south central.

Snowcover mostly adequate, sufficient to protect winter wheat, rye, alfalfa. Warmer temperatures provided relief to livestock. Livestock mostly good. Supplemental feed supplies were rated adequate to surplus. Livestock marketing above normal due to warmer temperatures for transportation, higher prices. Grain marketing normal to above normal.

**OHIO:** Milder, wetter than normal conditions prevailed across State the past 7 days. Temperatures upper 30s in the north to the 40s in the south which was 4 to 7° above normal. Lows, upper teens in the north to near 30° in the south. These low temperatures were 1 to 11° above normal. States extreme temperatures 5° at Hoytville on the 20th; 61° at Huntington on the 24th. Precipitation totals, water equivalent, averaged 0.70 to 1.40 in. over the central, north, 0.30 to 1.30 in. over the south. Rainfall 0.30 to 1.30 in. above normal across the State. Soil temperatures at the 4 in. depth under bare ground were averaging in the low to mid 30s across State.

**OKLAHOMA:** Temperatures 2° below normal west central to 4° above normal southeast. Precipitation 0.26 in. Panhandle to 1.27 in. southeast.

Limited cotton harvesting has resumed in southwestern areas as some areas have finally begun to dry out. Early planted wheat looks fairly good, hasn't been hurt as much by excessive moisture as the late planted stands. Prices for feeder steers, heifers steady to \$2.00 per cwt. higher.

**OREGON:** Mild Pacific air finally invaded State this past week. Mild air brought temperatures near normal to most of western areas, however eastern areas still averaging 3° below normal; this was mild compared to recent weeks. Precipitation was heavy during the period averaging 2.50 to 5.00 in. west, 0.20 to 0.70 in. in the east. High winds were reported on 20th, gusting from 40 mph to 60 mph in many areas of the State.

Soil moisture mostly adequate to surplus west, adequate east. Wheat snowcover adequate, Columbia Basin. Fruit, nut orchard winter activities continue, Willamette Valley. Livestock good. Mountain snowpack continuing to increase. Lambing continues, early calving is getting started. Pastures, ranges dormant, supplemental feeding, statewide.

**PENNSYLVANIA:** Above normal temperatures, below normal precipitation. Temperature 31°, 5° above normal. Extremes -1°; 52°. Precipitation 0.53 in., 0.12 in. below normal.

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

**PUERTO RICO:** Island rainfall of 0.28 in. was 0.35 in. below normal. Highest rainfall 2.84 in. at Pico Del Este, 0.99 in. at Rio

Blanco lower, 0.74 in. at Borinquen Airport. Highest 24 hour total 1.92 in. at Pico Del Este on 22nd. Mean temperature at WSFO San Juan was 77.1 which is 1.1° above normal, total rainfall was 0.10 in. which is 0.54 in. below normal. Temperatures 76° on the coast, 69 to 72° in the interior with mean station temperature 61.9° at Pico Del Este to 79.8° at Guayama. Extremes 50°; 92°.

**SOUTH CAROLINA:** Temperatures across the State were slightly above normal. Average rainfall 1.30 in.

Farm activities: More rain, wet fields delayed land preparation for small grains, tobacco bed preparation; some wheat drowned; pastures wet; livestock condition fair to good.

**SOUTH DAKOTA:** Temperatures 5 to 10° above normal in the far east, 5° below to 5° above normal across the rest of the State. Extremes -15°; 51°. Precipitation mostly less than 0.25 in., with many stations receiving less than 0.10 in. The northeast corner was the exception with precipitation amounts near 1.00 in.

Snowcover was generally close to 5 inches except for the south central with reports of 1 inch or less; and the northwest, northeast corners where the depth ranged from 10 to 15 in.

**TENNESSEE:** A wide range of weather occurred during the week. Freezing rains, thunderstorms, cold, and unseasonable warmth all came into play. The week started cold with a frontal system to the south that brought light precipitation to most of the State on the 18th, 19th. Freezing rain, sleet, snow all were observed. Another cold front moved through the State on the 21st, bringing rain. Dry conditions returned on the 22nd; unseasonably warm temperatures were recorded on the 23rd. A stronger cold front pushed across the State on the 24th producing scattered thunderstorms, colder temperatures. Temperatures 3 to 10° above normal. Highs mid 40s to mid 50s. Lows in the 30s. Precipitation generally 1.00 to 2.50 in.

Wheat mostly good. Farm activity remains limited with livestock care and general maintenance predominant.

**TEXAS:** Slow-moving system early last week triggered heavy rains over eastern portions of Texas. System was followed by dry, warm weather through weekend. Sharp cold front swept through during weekend, lowering temperatures. Another shot of heavy rains crossed East Texas, did not cover as wide an area as earlier rains. Precipitation near or above normal for the week. Rainfall were slightly negative North Central, South Texas areas. Most rainfall Upper Coast, Southeast Texas area more than 1.00 in. above normal.

**Crops:** Remaining cotton harvest hampered by cold wet conditions Plains. Small grain growth slowed due to cold temperatures, lack of sunlight. Wheat received adequate moisture early planted wheat being grazed. Later planted wheat progressing slowly. Cross Timbers, Blacklands, fields showing signs of nitrogen deficiencies due excess moisture, saturated soils. Wheat 67% normal compared 80% 1992.

**Commercial vegetables:** Rio Grande Valley, onion crop progressing well. Spraying insect control continues. East Texas, land preparation halted by wet weather. Producers preparing soil spring planting. Trans-Pecos, onions progressing well. Weather slowed field operations. Pecan harvest winding down all areas, average yields, quality.

**Range and livestock:** Supplemental feeding continued all areas. Small grain grazing limited from wet conditions. Ranges,

pastures need open, dry weather promote winter forage growth. Overall livestock conditions fair, good.

**UTAH:** Temperature maximums 1° above normal, minimums 10° above normal. Precipitation was heavy in the Dixie region, moderate elsewhere.

Several areas report difficulty in feeding, watering cattle due to deep snow. Major farm activities include shipping onions, feeding cattle, filing income taxes.

**VIRGINIA:** Temperatures, precipitation both averaged above normal. Extremes 11°; 69°. Rain fell the last 4 days of the week in most locations, averaged 0.50 to 1.00 in. statewide.

Days suitable for fieldwork 1.6. Topsoil 34% adequate, 66% surplus. Winter grains, grazing crops 3% very poor, 7% poor, 50% fair, 37% good, 3% excellent. Forage from pastures, grazing crops dairy cattle 7%, beef cattle 21%, sheep 19%. Pruning apple trees, marketing dark-fired, burley tobacco, repairing machinery, fences, attending meetings, soil sampling, preparing for taxes.

**WASHINGTON:** Temperatures 2° above normal to 3° below normal west; 3° above normal to 6° below normal east. Precipitation 0.58 in. to 2.46 in. west; 0.32 in. to 1.20 in. east.

Days suitable for fieldwork 3.0. Soil moisture 13% short, 84% adequate, 3% surplus. Hay, other roughage 22% short, 60% adequate, 18% surplus. Range, pasture 45% very poor, 39% poor, 16% fair. Winter wheat dryland 45% fair, 55% good; irrigated 100% good. Barley dryland 60% fair, 40% good; irrigated 100% good. Frigid weather subsided, but farm activity limited. Major windstorm in west resulted in structural, flood damage in rural areas. Melting snow left some small grain acreage susceptible to cold, raised erosion concerns. Early calving/lambing, winter feeding programs continued.

**WEST VIRGINIA:** Temperature 36°. Extremes 9°; 62°. Precipitation 0.94 in.

Hay feed supplies adequate. Other feed supplies adequate. Cattle good. Sheep good. Activities: maintenance, feeding livestock.

**WISCONSIN:** Temperature 22°. Extremes -23°; 46°. Above-normal temperatures. Messy weather developed on the 20th; light freezing rain, freezing drizzle, drizzle over the western part of the State, gradually spreading eastward throughout the night. This continued into 21st northwest while temperatures warmed up enough in the southeast to produce rain, drizzle. Light snow in the northwest on the 22nd. On the 23rd, 2 to 5 in. of snow fell across many areas of the northern half of the State; it remained dry in the south. Late January frost depth 13.7 in., 9.6 in. 1992, 14.4 in. 31 year avg. Snow depth 8.1 in., 3.1 in., 1992, 9.7 in. avg. Data on snow, frost relates to January 22, 1993.

**WYOMING:** Warm, dry weather. Temperatures 1 to 7° above normal with only isolated regions in the northwest reporting below normal temperatures. Precipitation 0.01 to 0.17 in. below normal across the State with the exception of scattered areas in the northwest where precipitation was about 0.10 in. above normal.

1993 Winter wheat crop fair to good, snowcover adequate in most areas. Livestock mostly good. Snow, cold weather increasing feed requirements. Stress due to wind, cold temperatures. Supplemental feeding continuing. Hay supplies dwindling in scattered regions. Farm, ranch activities: Feeding, caring for livestock, routine maintenance, preparation for calving, lambing, tax season.

## International Weather and Crop Summary HIGHLIGHTS

January 17 - 23, 1993

**FSU-WESTERN:** Unseasonably mild weather continued to melt protective snow cover.

**EUROPE:** Unseasonably mild weather also prevailed throughout the region, and unfavorable dryness persisted in Spain.

**NORTHWESTERN AFRICA:** Adverse dryness continued over winter grain areas in Morocco and western Algeria.

**SOUTH AFRICA:** Rain benefited reproductive crops in the eastern corn belt, but conditions worsened in the west.

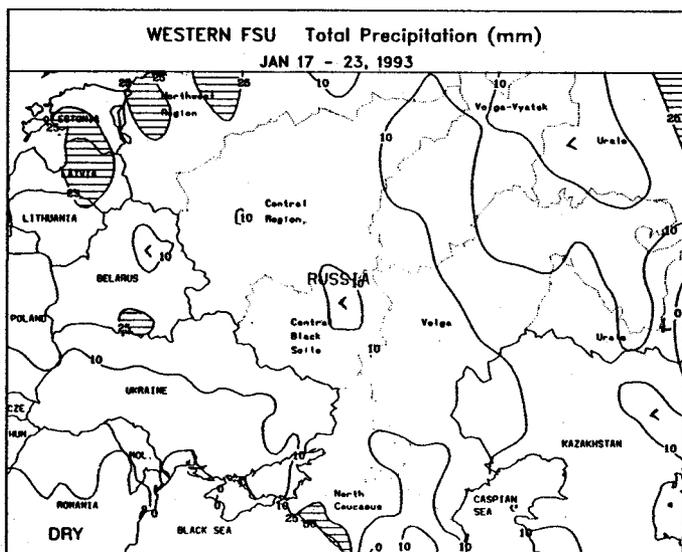
**SOUTH ASIA:** Dry, cool weather, with some local frost, slowed vegetative growth of winter grains and oilseeds.

**SOUTHEAST ASIA:** Scattered showers continued over rice and oil palm areas of Indonesia and Malaysia.

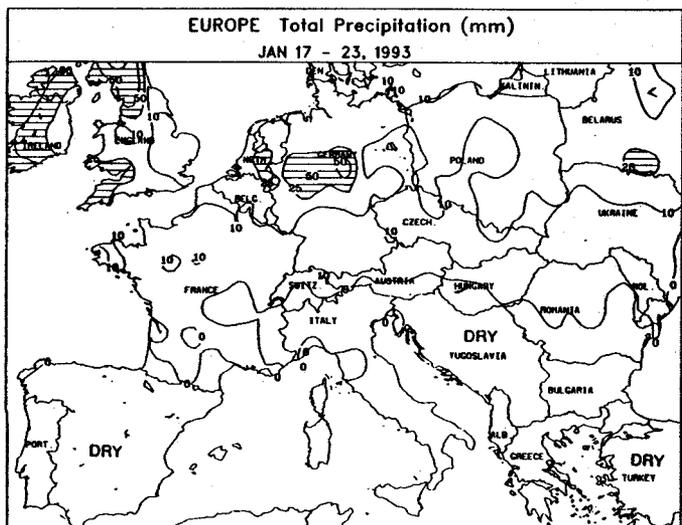
**EASTERN ASIA:** Cold, dry weather prevailed across most of China.

**AUSTRALIA:** Showers benefited eastern summer crops but delayed southern wheat harvesting.

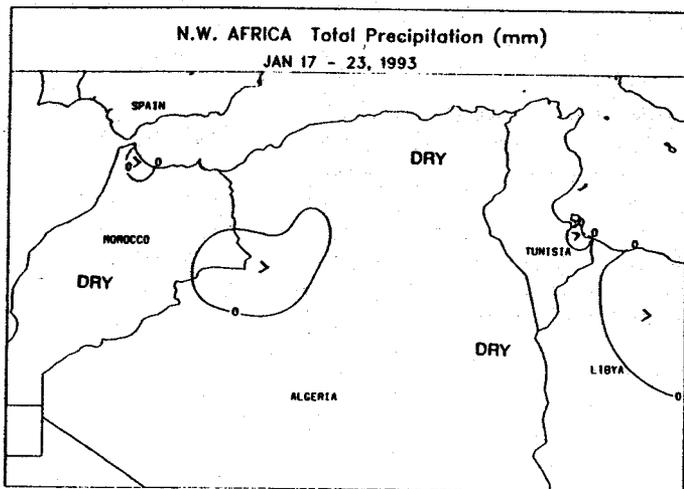
**SOUTH AMERICA:** Widespread showers and seasonable temperatures favored summer crop development in Brazil and Argentina.



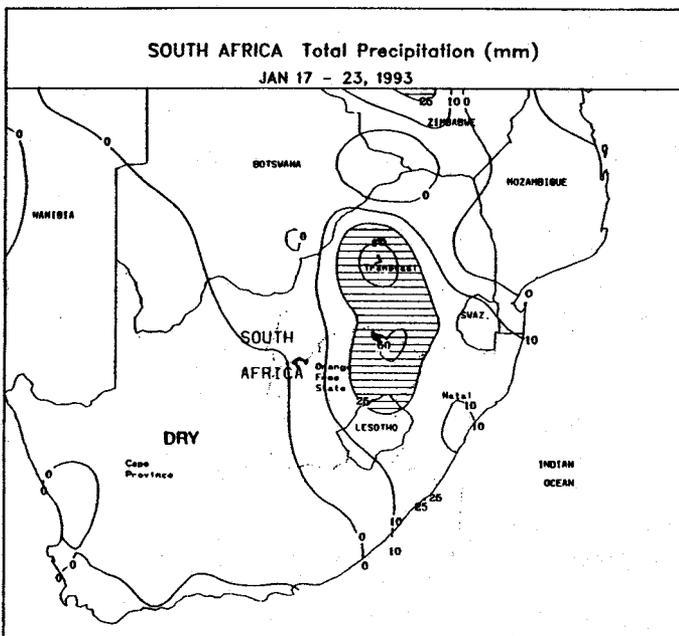
**FSU-WESTERN:** A weather pattern similar to last week's prevailed over the region, as a mild westerly surge of air from Europe ushered in unseasonably high temperatures. Highest temperatures ranged from 7 to 12 degrees Celsius (C) in the west and south and from 3 to 5 degrees C in the east. Average temperatures ranged from 3 to 6 degrees C in the Baltic States, Belarus, Ukraine, and North Caucasus (8-11 degrees C above normal). Average temperatures in Central Region, Volga Vyatsk, Central Black Soils, and Volga Valley ranged from -5 to 2 degrees C (8-11 degrees C above normal). Mild weather continued to cause significant melting of snow. Most of the major winter wheat areas lacked a protective snow cover. Precipitation over the region continued light (around 10 mm). Greatest amounts of rainfall (20-39 mm) covered the Baltic States, southern Belarus, parts of Central Region, and the western portion of North Caucasus.



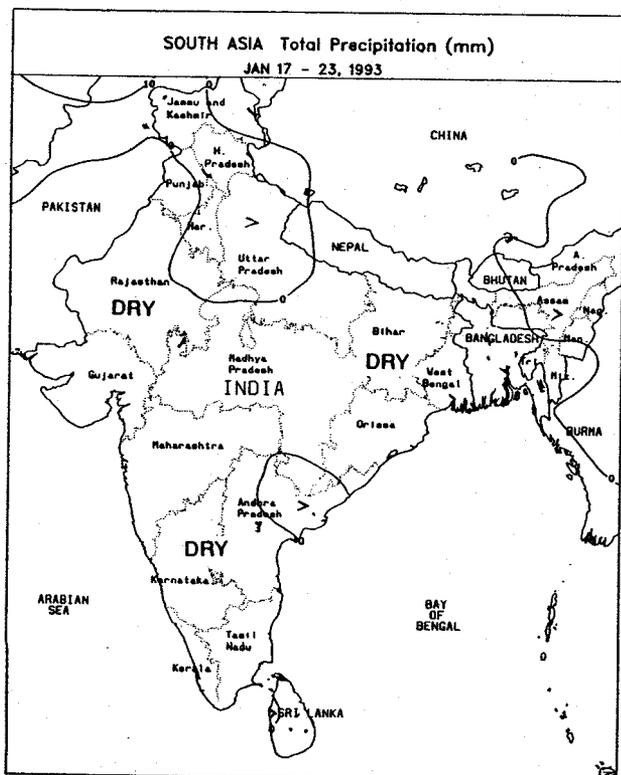
**EUROPE:** The weather pattern changed little from the previous week, except rainfall diminished considerably over England and northern France. While most of northern Europe received about 10 mm of rain, heavier amounts (25-72 mm) were confined to north-central Germany, the Netherlands, and Ireland. Beneficial showers (6-16 mm) helped winter crops in Poland, while variable precipitation (1-17 mm) was scattered across winter grain areas of east-central Europe. The Mediterranean region remained dry, raising concern not only for winter crops but also for replenishment of irrigation reserves for the summer growing season. Mild weather continued across Europe, with temperature departures averaging 5-10 degrees C above normal in all except the Mediterranean region. In fact, average minimum temperatures remained above freezing in Poland and Czechoslovakia, eliminating any protective snow cover for winter crops.



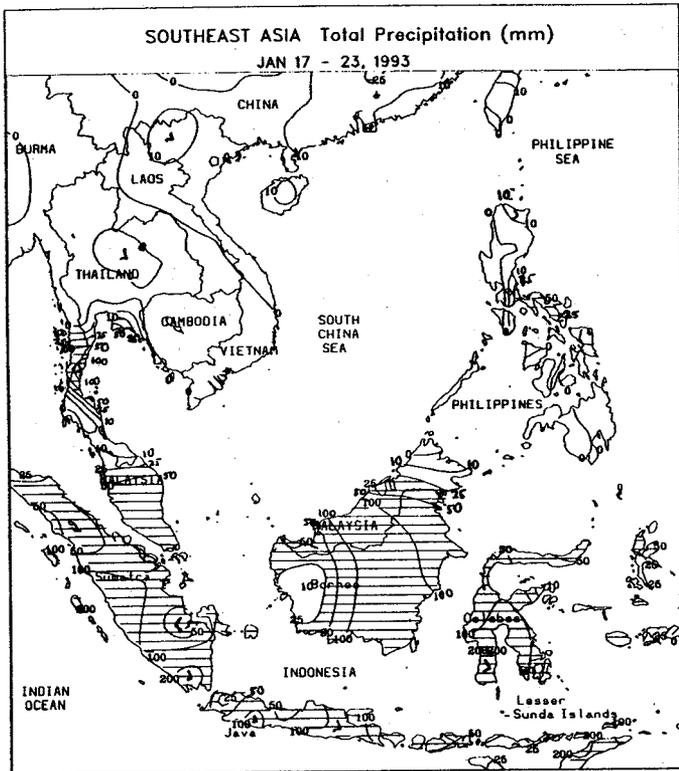
**NORTHWESTERN AFRICA:** Dry weather continued over vegetative winter grains in Morocco and western Algeria, where chronic dryness since the beginning of the growing season has likely caused poor germination, reduced tillering, and stunted early plant growth. Rain is needed soon to help prevent further declines in yield prospects. Further west, although the second consecutive week of dry weather covered winter grain areas in eastern Algeria and Tunisia, moisture reserves were adequate to meet crop-water requirements. Average temperatures were 1-3 degrees C above normal over Morocco and western Algeria and near normal in eastern Algeria and Tunisia.



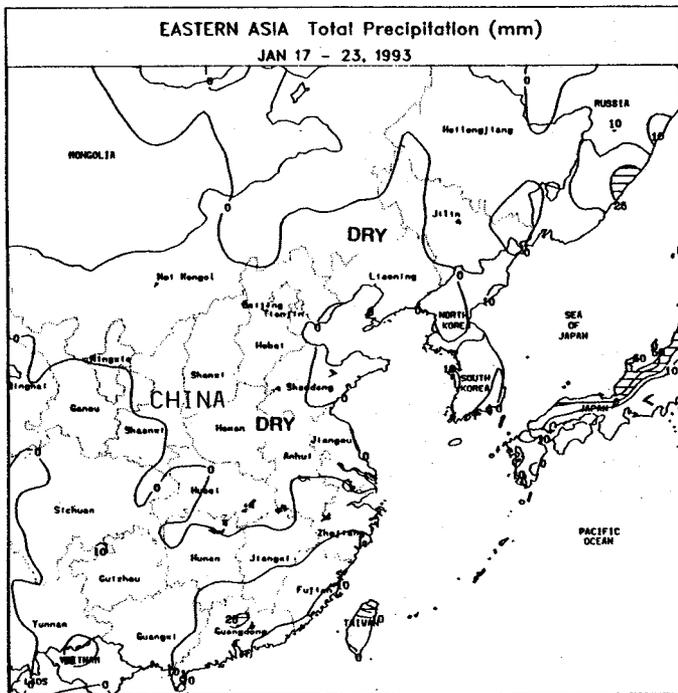
**SOUTH AFRICA:** Moderate to heavy showers (20-66 mm) benefited reproductive corn in eastern Orange Free State and south-central Transvaal. However, drought-stricken crops further west received less than 10 mm. Temperatures averaged 3-4 degrees C above normal across South Africa's corn belt, with highs in the mid to upper 30's C across the west compounding stress on reproductive crops. Drier, warmer conditions returned to primary crop regions of Natal and eastern Cape Province, with many locations receiving less than 10 mm.



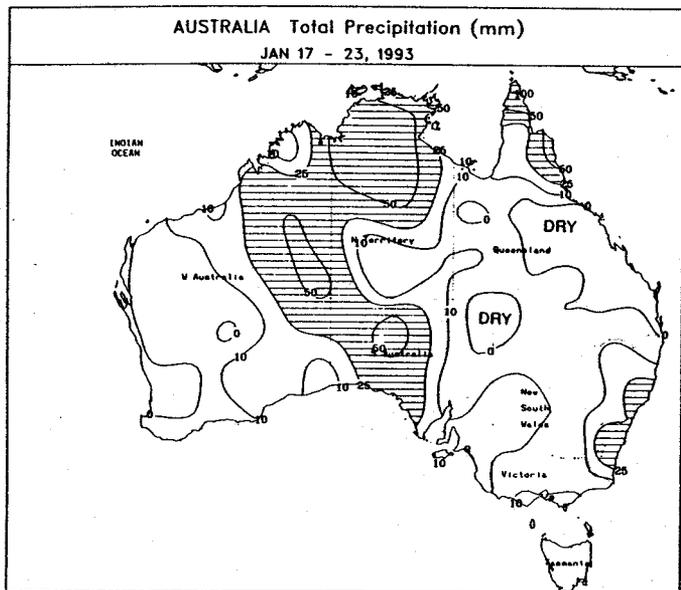
**SOUTH ASIA:** Seasonably dry weather prevailed across the region. Temperatures averaged 1-3 degrees C below normal over most winter grain and oilseed areas of Pakistan and India, slowing crop growth. Local frost likely burned back vegetative growth for the second week in Pakistan and India's northern crop areas.



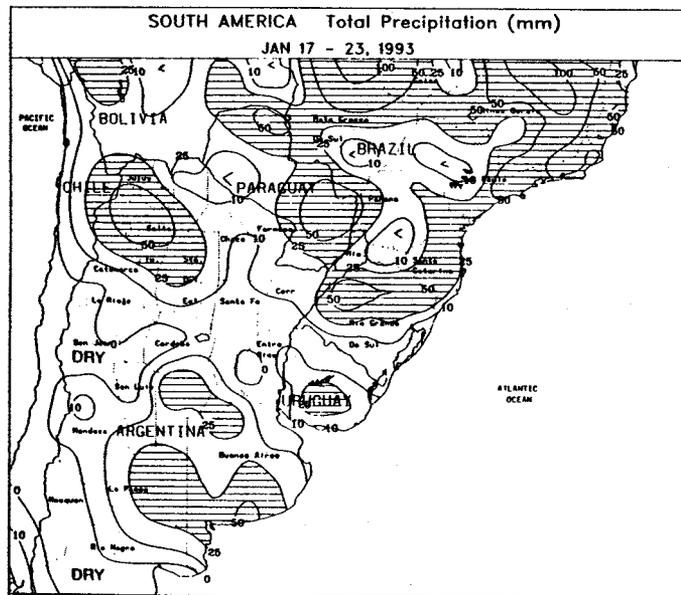
**SOUTHEAST ASIA:** Moderate to heavy showers (50-100 mm or more) covered most primary rice and oil palm regions of Indonesia and Malaysia. Beneficial rain (25-50 mm or more) returned to northern portions of the Thai peninsula following months of drier-than-normal conditions. In the Philippines, most areas reported less than 10 mm, except for southern Luzon which received locally beneficial rain (25-86 mm). The dry weather favored grain harvests, but the winter-long drying trend has reduced moisture for planting of secondary rice crops.



**EASTERN ASIA:** Seasonably dry weather prevailed across northern and central China. Light to moderate rain (5-25 mm) fell across southern China, benefiting reservoirs. Much colder temperatures (3-8 degrees C below normal) covered the whole country. Freezing temperatures were reported as far south as Fujian and northern Guangdong, causing possible damage to winter vegetables. Winter wheat should be sufficiently hardened across most areas of the North China Plain.



**AUSTRALIA:** Light to moderate rain (4-14 mm) fell across northern New South Wales, favoring vegetative cotton and sorghum. South Australia and Victoria received several days of rain (11-40 mm), delaying winter wheat harvesting. Temperatures averaged near normal across the southern wheat areas and 2-4 degrees C above normal in the eastern summer crop region.



**SOUTH AMERICA:** Moderate to heavy showers (20-75 mm) fell across southern Brazil's main soybean belt, favoring vegetative to reproductive soybeans. Lesser amounts (5-15 mm) were reported in southern Mato Grosso do Sul. Overall, soybean yield prospects have steadied or even increased in some areas due to the rain the last several weeks. Tropical showers (30-100 mm) aided soybeans in Mato Grosso and Goias, except in southwestern Mato Grosso where only light rain (less than 10 mm) prevailed. In Argentina, widespread showers (15-50 mm) fell throughout Buenos Aires, southern Santa Fe, and southern Cordoba, keeping soil moisture levels adequate for summer crops but delaying wheat harvesting. Temperatures remained seasonable in the main summer crop regions of Brazil and Argentina.

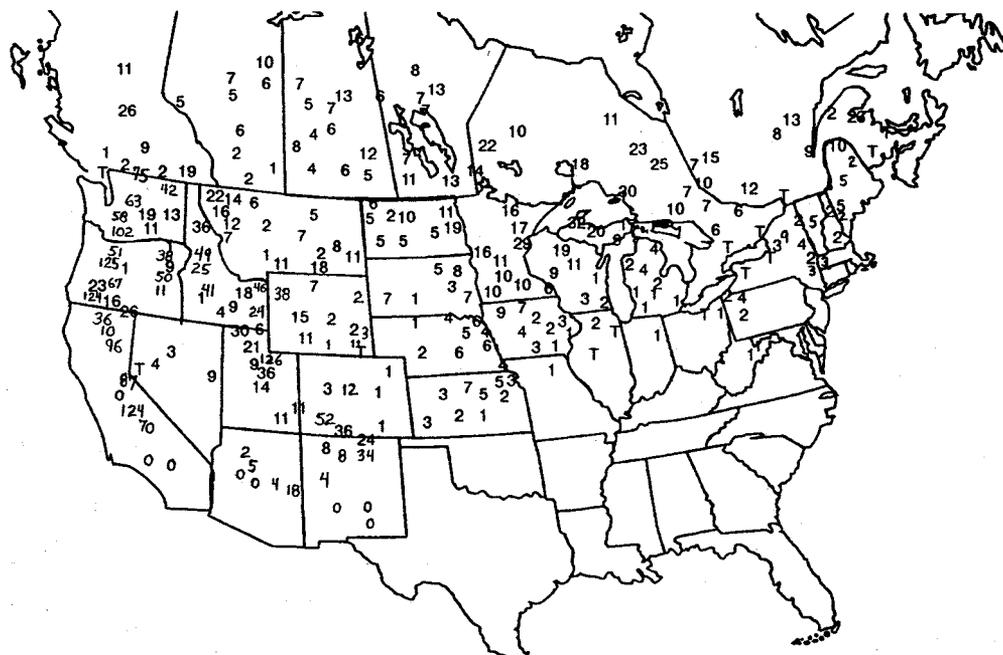
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# Total Snow Cover (Inches) January 25, 1993



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
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