

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

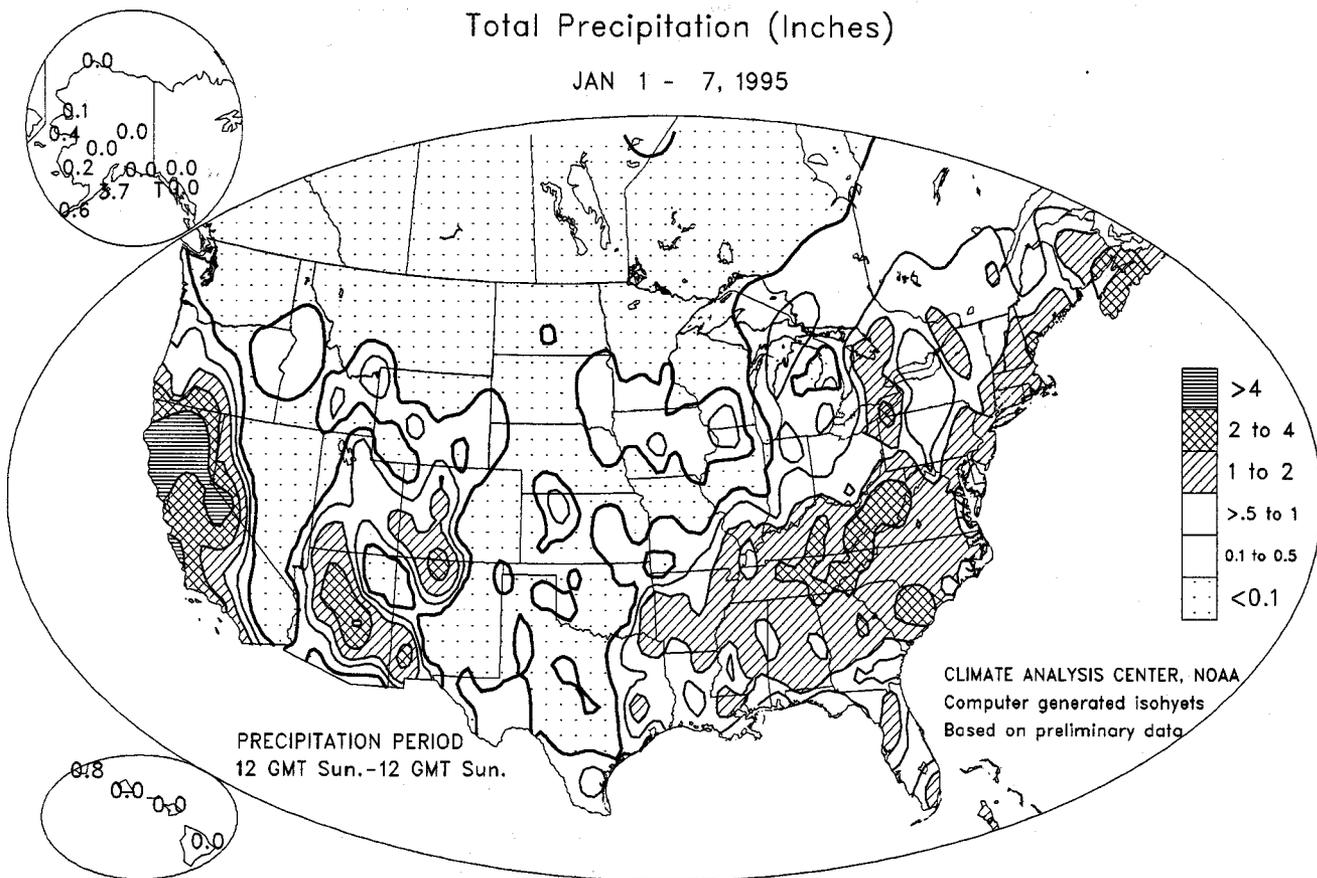
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Washington, D.C.

January 10, 1995

Total Precipitation (Inches)

JAN 1 - 7, 1995



PRECIPITATION PERIOD
12 GMT Sun.-12 GMT Sun.

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

HIGHLIGHTS

January 1 - 7, 1995

A potent late-week storm deluged northern California with several inches of precipitation, causing flash flooding and mud slides, but signaling a return of drought-easing precipitation. Earlier in the week, another strong storm dropped southward along the west coast, brushing northern California. The system then dropped heavy precipitation in the Southwest, left a swath of ice and snow from the southern Plains to the Northeast, and spawned an unusually violent January tornado outbreak in the Southeast. Across much of the Nation, early-week conditions were governed by an expansive arctic high pressure system that slowly shifted eastward. In contrast, weekly temperatures averaged more than 20°F above normal in western Alaska.

The first few days of the year brought an end to snow squall-free weather in the Great Lake States. By midweek, accumulations topped 5 feet
(Continued to p. 23)

Annual Weather Review

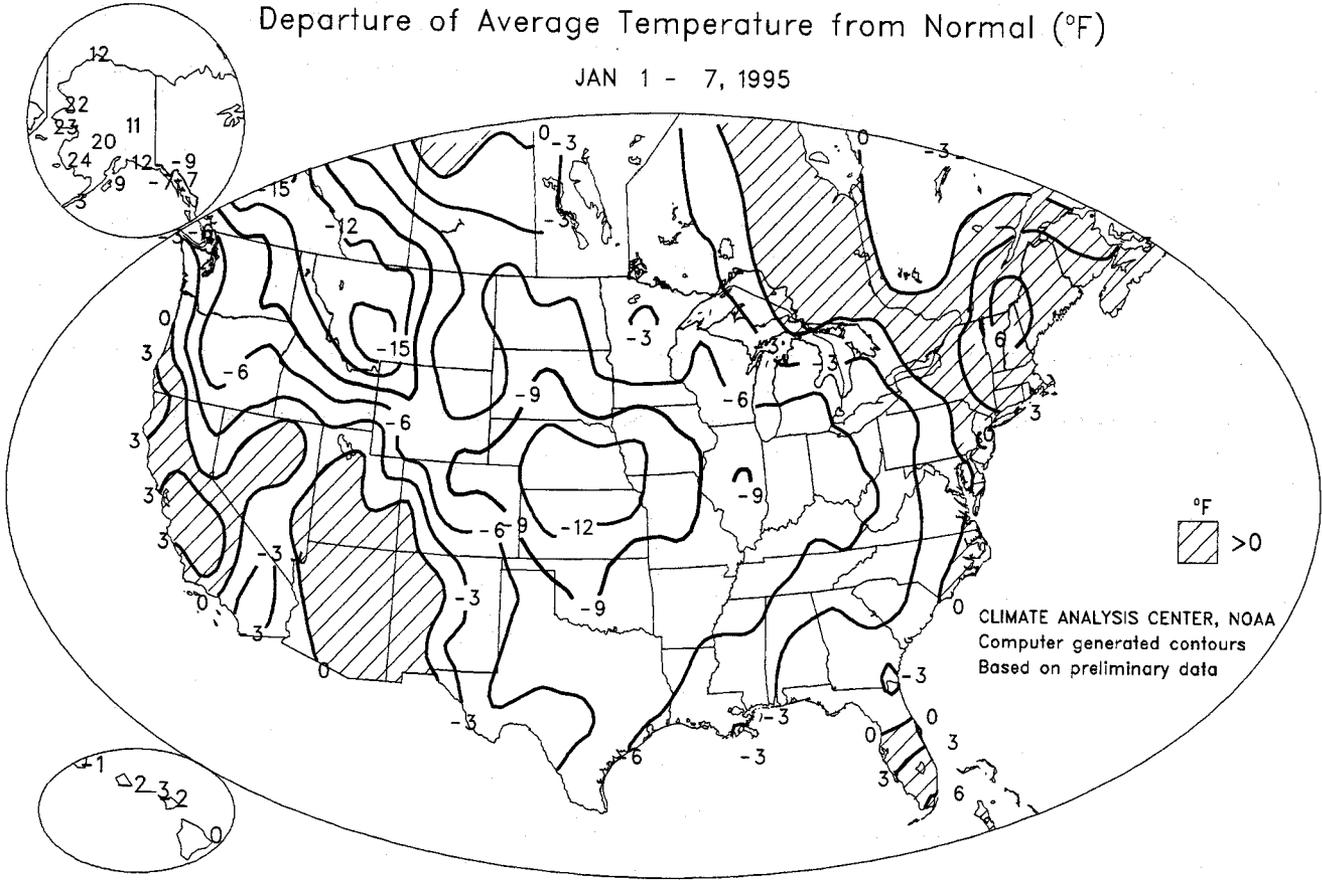
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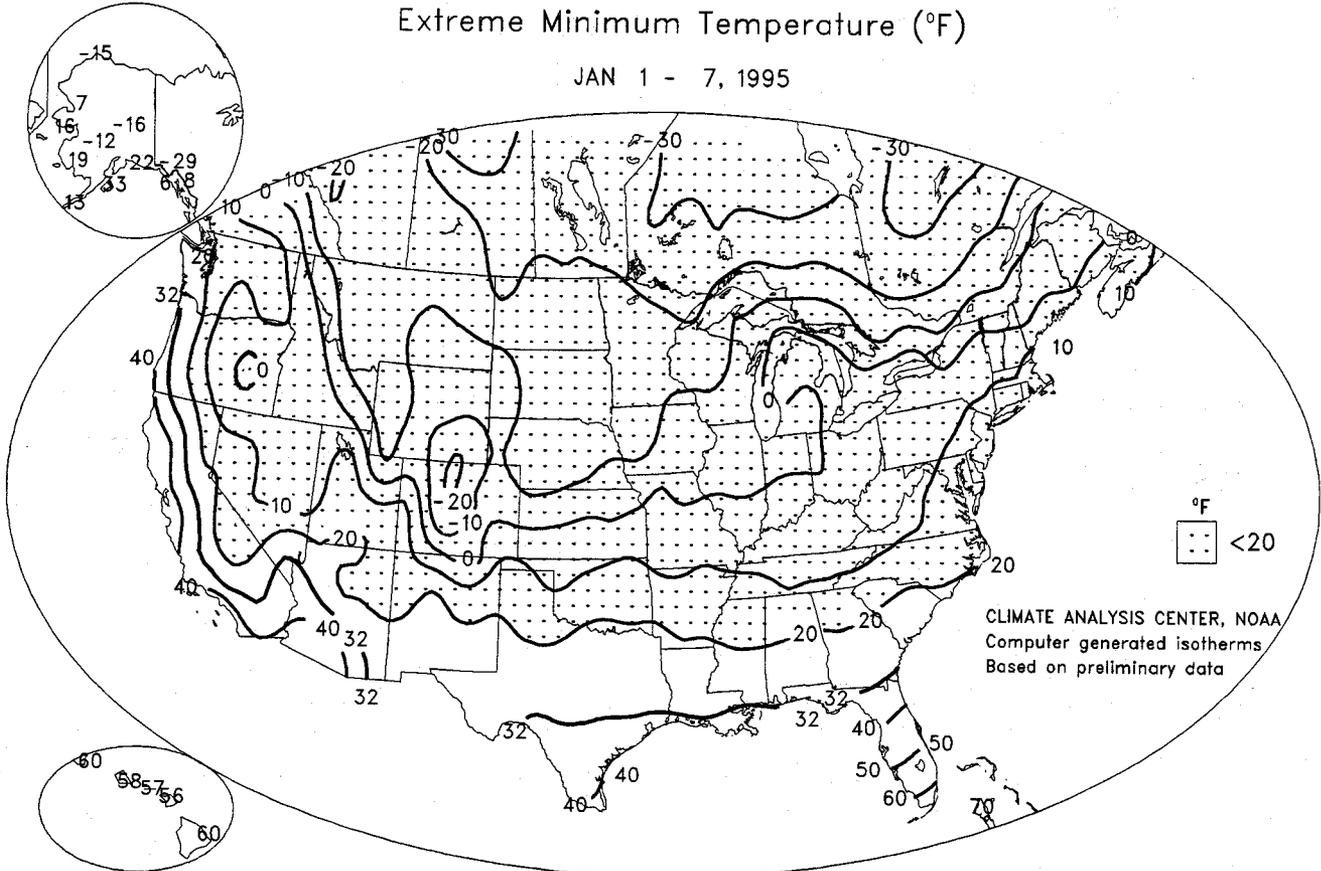
Departure of Average Temperature from Normal (°F)

JAN 1 - 7, 1995



Extreme Minimum Temperature (°F)

JAN 1 - 7, 1995



National Weather Data for Selected Cities

Weather Data for the Week Ending January 7, 1995

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	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	47	28	59	15	37	-4	.1	-1.1	.1	4.2	66	.1	4	87	50	0	0	4	1	0
MOBILE	56	38	71	27	47	-3	.5	.6	1.3	3.5	55	.5	45	81	41	0	0	1	3	0
MONTGOMERY	55	35	65	26	45	0	1.3	.2	1.3	5.8	93	1.3	119	80	42	0	0	2	2	1
AK ANCHORAGE	31	22	34	16	27	12	.3	.2	.3	1.5	117	.5	0	89	75	0	0	7	0	0
BARROW	6	-6	25	-15	0	12	.5	.0	.5	.2	100	.5	0	85	80	0	0	7	0	0
FAIRBANKS	8	-7	18	-16	0	11	.0	.0	.0	.5	49	.0	0	85	80	0	0	7	0	0
JUNEAU	23	12	25	8	18	-7	.7	-1.1	.7	3.5	65	.0	0	93	88	0	0	7	0	0
KODIAK	40	37	42	33	39	9	3.7	2.0	1.1	12.2	143	3.7	216	99	86	0	0	0	7	3
NOME	34	26	40	16	30	22	.4	.2	.4	2.2	211	.4	221	90	72	0	0	7	2	0
AZ PHOENIX	60	46	64	41	53	0	.9	.7	.6	3.9	342	.9	518	87	48	0	0	3	1	1
PRESCOTT	46	29	52	25	37	2	.7	-.4	.7	1.3	69	.0	0	82	50	0	0	6	0	0
TUCSON	62	42	66	37	52	1	1.0	.8	.5	4.7	364	1.0	441	86	45	0	0	2	1	1
YUMA	62	47	66	44	55	-1	1.5	1.4	.5	2.7	494	1.5	>1000	84	50	0	0	0	3	2
AR FORT SMITH	38	22	45	18	30	-7	.1	-.4	.1	3.8	108	.1	13	86	49	0	0	7	1	0
LITTLE ROCK	39	24	48	16	32	-7	.8	-.1	.7	4.9	89	.8	108	77	47	0	0	7	3	1
CA BAKERSFIELD	61	43	64	30	52	5	1.5	.4	.3	1.8	236	.5	306	77	44	0	0	1	3	0
BURBANK	57	45	62	42	51	4	1.4	.0	.6	8.4	113	1.4	97	86	63	0	0	6	1	0
FRESNO	57	41	61	32	49	5	1.7	1.3	.7	3.1	168	1.7	414	95	52	0	0	1	5	2
LOS ANGELES	62	50	68	46	56	-1	5.4	4.9	3.5	6.4	300	5.4	>1000	86	53	0	0	0	3	3
REDDING	49	41	54	39	45	1	1.0	-.4	1.0	6.4	93	1.0	69	95	71	0	0	1	1	1
SACRAMENTO	53	43	58	33	48	4	...	...	...	...	...	...	...	97	72	0	0	0	...	...
SAN DIEGO	61	50	63	45	55	-2	2.7	2.3	2.3	3.5	176	2.7	668	89	59	0	0	4	1	1
SAN FRANCISCO	53	47	59	45	50	2	2.4	1.4	.7	4.9	120	2.4	247	94	80	0	0	7	2	2
CO DENVER	33	7	55	-7	20	-9	.7	-.1	.7	.3	39	.7	0	85	49	0	0	7	0	0
GRAND JUNCTION	36	22	40	14	29	2	.2	.0	.1	.8	99	.2	123	87	57	0	0	7	2	0
PUEBLO	38	8	59	5	23	-6	.7	-.1	.7	.3	53	.7	38	89	47	0	0	7	2	0
CT BRIDGEPORT	40	27	53	16	33	3	.9	-.2	.7	4.7	109	.9	122	74	44	0	0	5	2	1
HARTFORD	36	21	44	10	28	3	1.2	.4	.6	6.6	139	1.2	147	79	44	0	0	6	3	1
DC WASHINGTON	40	25	52	15	32	-3	1.1	.5	1.1	3.5	93	1.1	178	80	39	0	0	5	4	1
FL PANAMA CITY	58	41	67	32	49	-2	.7	-1.1	.7	3.0	51	.7	2	87	54	0	0	1	1	0
DAYTONA BEACH	66	50	75	42	58	0	.7	-.6	.7	2.7	87	.7	5	97	62	0	0	0	1	0
JACKSONVILLE	61	41	75	33	51	-4	.2	-.5	.2	4.1	117	.2	30	91	59	0	0	2	0	0
KEY WEST	79	69	83	67	74	4	1.3	.8	.6	5.8	233	1.3	274	93	72	0	0	0	4	2
MIAMI	80	66	84	61	73	6	1.3	.9	.9	6.3	273	1.3	295	93	61	0	0	0	5	1
ORLANDO	69	52	79	44	61	1	1.3	-.2	.2	3.3	125	.3	54	95	70	0	0	0	2	0
TALLAHASSEE	60	39	72	33	49	-2	.6	-.5	.4	3.3	55	.6	57	86	53	0	0	0	3	0
TAMPA	70	53	77	44	61	1	.4	.0	.3	2.0	78	.4	105	95	71	0	0	0	2	0
WEST PALM BEACH	77	62	81	59	70	3	.7	-.1	.3	2.8	100	.7	127	95	68	0	0	0	3	0
GA ATLANTA	50	30	61	17	40	-1	1.0	-.1	.9	2.5	47	1.0	90	85	47	0	0	5	2	1
AUGUSTA	55	29	66	22	42	-2	.7	-.9	.7	3.0	69	.7	0	83	43	0	0	5	0	0
MACON	55	33	67	23	44	-2	.2	-.9	.1	2.9	55	.2	16	83	43	0	0	4	2	0
SAVANNAH	58	38	71	29	48	-1	.3	-.5	.2	4.8	127	.3	41	89	51	0	0	1	3	0
HI HILO	80	64	83	60	72	0	.7	-2.4	.7	6.0	42	.7	0	83	57	0	0	0	0	0
HONOLULU	81	62	83	58	71	-2	.0	-.9	.0	.2	3	.0	0	86	55	0	0	0	0	0
KAHULUI	79	60	81	56	70	-2	.7	-.9	.7	.3	8	.7	0	83	59	0	0	0	0	0
LIHUE	78	63	83	60	71	-1	.8	-.6	.8	.9	13	.8	56	79	53	0	0	0	1	1
ID BOISE	32	15	44	9	24	-4	.3	.0	.2	2.1	126	.3	88	86	48	0	0	7	3	0
LEWISTON	28	16	33	13	22	-11	.7	-.3	.7	1.1	70	.7	0	82	61	0	0	7	0	0
FOCATTELO	27	9	41	-3	18	-5	.4	-.1	.1	1.6	119	.4	140	86	66	0	0	7	4	0
IL CHICAGO	21	7	27	-1	14	-8	.3	-.2	.3	1.6	54	.3	64	84	54	0	0	7	2	0
MOLINE	20	4	28	-5	12	-8	.2	-.2	.1	1.9	71	.2	54	81	61	0	0	7	3	0
PEORIA	23	7	29	-2	15	-7	.1	-.3	.1	2.4	82	.1	34	82	51	0	0	7	1	0
QUINCY	25	8	33	-3	17	-8	.4	.0	.3	1.9	70	.4	111	89	68	0	0	7	2	0
ROCKFORD	18	4	27	-5	11	-8	.7	-.4	.7	1.3	52	.7	0	94	66	0	0	7	0	0
SPRINGFIELD	25	7	32	-3	16	-9	.2	-.2	.2	2.3	71	.2	57	86	53	0	0	7	3	0
IN EVANSVILLE	32	18	44	6	26	-7	.8	-.1	.7	3.4	75	.8	107	85	53	0	0	7	3	1
FORT WAYNE	25	9	36	-1	17	-6	.2	-.3	.1	2.4	72	.2	37	88	58	0	0	7	2	0
INDIANAPOLIS	28	11	40	1	20	-7	.6	.0	.6	2.2	57	.6	97	83	53	0	0	7	1	1
SOUTH BEND	21	8	33	-5	15	-10	.2	-.4	.1	2.8	71	.2	41	90	62	0	0	7	3	0
IA DES MOINES	18	0	29	-6	9	-11	.5	-.3	.4	3.0	183	.5	216	82	63	0	0	7	2	0
SIOUX CITY	18	-4	27	-12	7	-11	.1	-.1	.1	1.1	121	.1	64	83	63	0	0	7	2	0
WATERLOO	15	0	28	-7	7	-8	.1	-.1	.1	1.5	97	.1	55	84	62	0	0	7	1	0
KS CONCORDIA	22	4	29	-2	13	-13	.1	.0	.1	1.3	136	.1	73	90	64	0	0	7	2	0
DODGE CITY	27	7	34	3	17	-13	.1	-.1	.1	1.0	129	.1	45	90	68	0	0	7	1	0
GOODLAND	28	5	42	-8	16	-12	.7	-.1	.7	.4	86	.7	0	90	65	0	0	7	0	0
TOPEKA	24	4	32	-3	14	-13	.1	-.2	.1	1.6	96	.1	32	88	60	0	0	7	1	0
WICHITA	28	11	34	5	19	-11	.7	-.2	.7	1.0	65	.7	0	90	55	0	0	7	0	0
KY BOWLING GREEN	35	18	48	6	27	-7	.1	-.8	.1	2.5	41	.1	13	91	59	0	0	7	1	0
LEXINGTON	32	16	47	3	24	-7	1.7	1.0	1.4	5.5	118	1.7	232	89	57	0	0	7	3	1
LOUISVILLE	34	18	48	7	26	-6	.8	-.1	.7	3.7	86	.8	112	85	55	0	0	7	3	1
LA BATON ROUGE	54	38	72	28	46	-4	.5	-.6	.4	3.6	53	.5	46	89	54	0	0	2	3	0
LAKE CHARLES	54	38	71	31	46	-4	.4	-.7	.2	7.4	120	.4	35	88	63	0	0	1	2	0
NEW ORLEANS	58	42	75	34	50	-2	.3	-.8	.2	4.9	71	.3	28	80	50	0	0	0	3	0
SHREVEPORT	47	31	63	25	39	-6	.5	-.6	.4	8.5	146	.5	45	80	48	0	0	5	2	0

Based on 1961-90 normals.

Weather Data for the Week Ending January 7, 1995

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE	MAXIMUM	MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE	MINIMUM	TEMP. °F		PRECIP.	
																			90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	20	9	26	-6	15	5	1.0	.3	.7	4.0	104	1.0	153	87	57	0	7	7	5	1		
PORTLAND	30	19	35	7	24	3	2.4	1.5	1.0	8.6	158	2.4	276	89	57	0	7	7	2	0		
MD BALTIMORE	41	24	59	15	33	0	1.0	.3	.4	2.9	72	1.0	136	81	38	0	0	0	0	0		
SALISBURY	46	23	60	10	35	-1	.1	.8	.1	1.7	38	.1	12	93	48	0	5	5	0	0		
MA BOSTON	39	25	56	15	32	3	2.0	1.2	1.1	7.3	151	2.0	240	77	42	0	6	6	1	0		
CHATHAM	41	28	52	15	35	3	.5	.9	.7	1.7	30	.5	0	80	47	0	5	5	0	0		
MI ALPENA	24	12	31	4	18	-1	.4	.0	.4	.8	32	.4	95	88	51	0	0	0	0	0		
DETROIT	25	13	36	1	19	-5	.7	.2	.5	3.1	94	.7	147	87	54	0	7	7	0	0		
FLINT	20	8	32	-2	14	-8	.3	.0	.2	2.1	83	.3	89	89	65	0	0	0	0	0		
GRAND RAPIDS	22	11	33	-1	17	-6	.5	.1	.2	1.6	47	.5	90	91	68	0	7	7	0	0		
HOUGHTON LAKE	21	9	28	-2	15	-3	.4	.0	.3	.9	40	.4	105	86	67	0	7	7	0	0		
LANSING	21	10	32	-1	16	-6	.1	.0	.1	1.6	67	.1	18	94	63	0	7	7	0	0		
MARQUETTE	16	2	27	-12	9	-3	.2	.3	.1	1.6	18	.2	39	84	54	0	7	7	0	0		
MUSKEGON	26	16	33	7	21	-4	.4	.2	.3	1.5	40	.4	72	89	62	0	7	7	0	0		
SAULT ST. MARIE	22	9	29	-4	15	1	.9	.3	.2	1.5	42	.9	147	83	54	0	7	7	0	0		
MN ALEXANDRIA	12	-7	22	-15	3	-5	.5	.2	.2	.2	39	.2	0	87	61	0	7	7	0	0		
DULUTH	11	-8	21	-19	1	-6	.6	.3	.3	.3	21	.6	0	79	57	0	7	7	0	0		
INT'L FALLS	8	-13	24	-23	-2	-3	.7	.2	.7	.7	65	.7	0	79	53	0	7	7	0	0		
MINNEAPOLIS	15	0	26	-11	8	-4	.4	.2	.2	.6	45	.4	18	81	56	0	7	7	0	0		
ROCHESTER	13	-1	26	-11	6	-6	.1	.1	.1	.8	63	.1	68	84	72	0	7	7	0	0		
MS GREENWOOD	46	29	58	19	37	-6	.3	.2	.1	2.6	44	.3	4	80	48	0	4	1	0	0		
JACKSON	48	31	65	22	40	-4	.1	.3	.3	3.6	99	.3	26	79	42	0	4	1	0	0		
MERIDIAN	52	33	67	23	42	-3	.3	.9	.9	7.2	55	.9	71	87	53	0	7	7	0	0		
MO CAPE GIRARDEAU	33	18	41	7	25	-7	.5	.2	.2	2.8	55	.5	7	90	51	0	7	7	0	0		
COLUMBIA	25	8	33	-2	17	-10	.1	.3	.3	2.0	34	.1	29	90	53	0	7	7	0	0		
KANSAS CITY	24	3	32	-4	13	-12	.1	.2	.2	1.9	100	.1	32	83	51	0	7	7	0	0		
SAINT LOUIS	29	16	33	7	23	-7	.4	.1	.1	2.0	56	.4	90	82	50	0	7	7	0	0		
SPRINGFIELD	31	13	38	5	22	-8	.1	.4	.4	1.2	37	.1	11	85	37	0	7	7	0	0		
MT BILLINGS	29	9	33	3	19	-3	.7	.2	.2	.3	26	.7	9	88	41	0	7	7	1	0		
GLASGOW	13	-7	20	-18	3	-7	.7	.2	.2	.1	27	.7	0	85	64	0	7	7	0	0		
GREAT FALLS	22	-1	29	-8	11	-10	.7	.2	.2	.2	19	.7	9	88	55	0	7	7	1	0		
HAVRE	9	-13	18	-23	-2	-16	.2	.2	.2	.5	74	.2	0	84	65	0	7	7	0	0		
HELENA	16	-6	24	-14	5	-14	.2	.2	.2	.1	11	.2	0	83	63	0	7	7	0	0		
KALISPELL	14	-2	19	-10	6	-14	.4	.2	.2	.7	34	.4	0	86	64	0	7	7	0	0		
MILES CITY	22	0	28	-8	11	-4	.7	.1	.1	.1	7	.7	0	88	56	0	7	7	0	0		
MISSOULA	17	-1	24	-8	8	-14	.1	.2	.2	.7	47	.1	30	86	63	0	7	7	1	0		
NE GRAND ISLAND	20	-4	28	-13	8	-14	.7	.2	.2	.6	76	.7	36	86	60	0	7	7	1	0		
LINCOLN	20	-5	27	-9	7	-14	.1	.0	.1	1.2	119	.1	100	89	61	0	7	7	1	0		
NORFOLK	20	-4	26	-12	8	-11	.2	.2	.2	1.2	137	.2	138	80	60	0	7	7	2	0		
NORTH PLATTE	23	-7	35	-17	8	-13	.7	.2	.2	.7	120	.7	0	89	66	0	7	7	0	0		
OMAHA	18	-3	27	-11	8	-13	.7	.2	.2	1.2	100	.7	0	83	62	0	7	7	0	0		
SCOTTSBLUFF	20	-10	37	-21	5	-19	.1	.1	.1	1.0	145	.1	45	91	64	0	7	7	1	0		
VALENTINE	25	-5	39	-14	10	-12	.7	.1	.1	.6	103	.7	0	85	56	0	7	7	0	0		
NV ELY	29	12	33	-2	20	-3	.1	.1	.0	.7	79	.1	35	98	68	0	7	7	2	0		
LAS VEGAS	50	37	55	34	43	-1	1.5	1.4	.6	2.5	529	1.5	>1000	81	46	0	0	4	1	0		
RENO	39	25	49	21	32	0	.8	.6	.4	1.0	80	.8	328	87	60	0	6	4	0	0		
WINNEBEOCA	38	23	50	9	30	2	.1	.1	.1	.6	55	.1	42	82	60	0	5	1	0	0		
NE CONCORD	32	19	37	8	25	6	.4	.2	.2	4.6	121	.4	65	91	56	0	7	7	2	0		
NJ ATLANTIC CITY	43	23	54	13	33	1	1.3	.5	.7	3.5	84	1.3	161	88	44	0	5	3	1	0		
NM ALBUQUERQUE	44	28	49	24	36	3	.5	.3	.4	1.1	178	.5	409	78	44	0	7	7	2	0		
CLOVIS	41	27	58	21	34	-2	.7	.1	.1	.4	62	.7	0	90	55	0	4	0	0	0		
ROSWELL	45	28	64	21	37	-2	.7	.1	.1	.7	0	.7	0	90	55	0	6	0	0	0		
NY ALBANY	33	20	38	8	26	5	.5	.0	.3	3.1	89	.5	93	84	49	0	6	5	0	0		
BINGHAMTON	28	15	42	5	22	-1	.4	.2	.2	3.4	95	.4	66	83	58	0	6	4	0	0		
BUFFALO	28	16	38	7	22	-3	1.3	.6	.7	4.0	91	1.3	190	85	55	0	6	5	1	0		
NEW YORK	41	26	53	16	33	1	1.6	.9	.7	4.3	105	1.6	218	71	43	0	5	4	1	0		
ROCHESTER	31	19	40	5	25	0	.7	.2	.4	3.0	94	.7	139	80	51	0	6	3	0	0		
SYRACUSE	31	18	41	2	24	1	.4	.2	.1	2.9	76	.4	64	85	50	0	7	5	0	0		
NC ASHEVILLE	44	24	58	10	34	-3	.8	.1	.3	3.8	72	.8	89	85	44	0	6	3	0	0		
CHARLOTTE	44	27	54	19	35	-4	1.1	.2	1.1	3.0	69	1.1	127	78	42	0	6	1	1	1		
GREENSBORO	43	24	53	14	34	-4	1.2	.5	1.2	1.8	45	1.2	171	77	39	0	6	2	1	1		
HATTERAS	55	38	67	19	47	1	2.6	1.4	2.5	7.5	131	2.6	218	85	49	0	2	3	1	1		
NEW BERN	56	34	69	20	45	1	.7	.9	.7	1.3	28	.7	0	84	35	0	4	0	0	0		
RALEIGH	48	26	61	15	37	-2	1.3	.5	1.2	2.6	64	1.3	169	82	35	0	5	2	1	1		
WILMINGTON	54	34	68	23	44	0	.7	.1	.1	6.9	135	.7	0	83	40	0	3	0	0	0		
ND BISMARCK	13	-10	19	-22	1	-8	.7	.1	.1	.3	48	.7	0	83	63	0	7	0	0	0		
FARGO	13	-7	25	-14	3	-3	.7	.2	.2	.2	25	.7	0	79	61	0	7	0	0	0		
GRAND FORKS	10	-8	20	-15	1	-4	.7	.2	.2	.2	2	.7	0	82	56	0	7	0	0	0		
WILLISTON	12	-13	19	-25	0	-9	.7	.1	.1	1.0	144	.7	7	86	64	0	7	1	0	0		
OH AKRON-CANTON	28	13	44	1	21	-5	.8	.2	.4	3.8	108	.8	143	86	59	0	7	3	0	0		
CINCINNATI	31	14	46	1	22	-6	1.0	.3	.8	3.8	102	1.0	155	87	55	0	7	3	1	0		
CLEVELAND	29	14	43	4	21	-5	.6	.1	.4	3.5	98	.6	113	87	58	0	7	4	0	0		
COLUMBUS	30	11	46	1	21	-5	.5	.0	.3	2.7	78	.5	106	87	58	0	7	3	0	0		
DAYTON	29	12	45	-1	20	-7	.5	-.1	.4	3.2	93	.5	85	87	56	0	7	3	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending January 7, 1995

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	92 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	26	12	37	2	19	-4	.4	-.1	.2	3.5	102	.4	83	88	54	0	7	7	3	0
YOUNGSTOWN	29	16	44	3	22	-2	.9	-.3	.5	4.1	119	.9	161	88	59	0	7	7	3	0
OK OKLAHOMA CITY	38	18	46	15	28	-8	.9	-.3	.3	1.6	98	.7	0	85	51	0	7	7	0	0
TULSA	35	19	44	13	27	-8	.1	-.3	.0	1.3	51	.1	16	87	58	0	7	2	0	0
OR ASTORIA	46	36	49	33	41	0	.4	-2.0	.4	15.2	118	.4	16	66	52	0	0	2	0	0
BURNS	29	11	38	-3	20	-3	.7	-.3	.7	1.3	21	.7	0	84	56	0	7	0	0	0
MEDFORD	51	34	55	25	43	5	.2	-.5	.1	1.3	32	.2	28	85	57	0	2	3	0	0
PENDLETON	24	17	32	13	21	-12	.2	-.1	.2	1.1	56	.2	67	93	53	0	7	1	0	0
PORTLAND	42	32	44	29	37	-2	.3	-1.0	.3	5.2	69	.3	23	60	44	0	5	2	0	0
SALEM	43	32	46	29	38	-1	.5	-1.0	.4	5.4	65	.5	34	69	55	0	4	3	0	0
PA ALLENTOWN	35	21	47	11	28	1	.9	.2	.4	4.0	94	.9	122	83	52	0	7	3	0	0
ERIE	29	19	42	8	24	-3	1.2	.7	1.2	4.4	106	1.2	212	91	55	0	7	2	1	0
HARRISBURG	36	22	51	11	29	-1	.7	.1	.3	3.7	95	.7	117	75	38	0	5	4	0	0
PHILADELPHIA	29	23	53	14	31	1	1.6	.8	1.2	3.7	84	1.6	200	82	45	0	5	4	1	0
PITTSBURGH	31	14	47	1	23	-4	.4	-.2	.2	2.4	69	.4	70	86	58	0	7	4	0	0
SCRANTON	33	19	42	9	26	0	.1	.6	.5	3.4	114	1.1	228	84	57	0	6	3	1	0
RI PROVIDENCE	41	24	56	14	33	4	.9	.0	.3	5.5	103	.9	96	79	42	0	5	3	0	0
SC CHARLESTON	58	37	70	30	47	-1	.9	.2	.5	7.3	185	.9	121	85	41	0	2	3	0	0
COLUMBIA	54	28	67	19	41	-3	1.2	.2	1.1	7.0	153	1.2	119	83	39	0	5	2	1	0
FLORENCE	54	32	68	22	43	-1	.4	-.4	.2	9.8	248	.4	55	88	43	0	5	2	0	0
GREENVILLE	47	26	61	17	36	-4	1.4	-.4	1.4	5.3	105	1.4	146	81	38	0	6	2	1	0
SD ABERDEEN	19	-11	22	-20	1	-9	.7	-.1	.7	.4	58	.7	0	83	59	0	7	0	0	0
HURON	13	-3	30	-10	8	-5	.7	-.1	.7	.6	105	.7	12	83	59	0	7	1	0	0
RAPID CITY	30	3	45	-4	17	-5	.7	-.1	.7	.4	61	.7	0	77	37	0	7	0	0	0
SIOUX FALLS	17	-4	26	-14	6	-8	.7	-.1	.7	.3	37	.7	0	85	59	0	7	0	0	0
TN CHATTANOOGA	44	25	54	15	35	-3	1.3	.1	1.2	5.1	81	1.3	110	85	41	0	5	2	1	0
KNOXVILLE	39	23	51	12	31	-6	1.1	.1	1.1	3.1	56	1.1	113	83	49	0	6	3	1	0
MEMPHIS	39	25	49	14	32	-8	.7	-.9	.7	6.1	92	.7	4	85	49	0	6	1	0	0
NASHVILLE	38	22	52	10	30	-7	1.9	1.1	1.8	4.6	84	1.9	222	85	50	0	7	3	1	0
TX ABILENE	43	27	60	25	35	-7	.5	.3	.4	1.5	123	.5	227	86	54	0	6	3	0	0
AMARILLO	39	20	58	16	29	-5	.1	.0	.1	.4	79	.1	109	91	60	0	7	1	0	0
AUSTIN	51	35	71	30	43	-6	.1	-.3	.1	5.8	256	.1	27	85	49	0	2	3	0	0
BEAUMONT	53	38	71	33	46	-5	.7	-.1	.7	4.2	71	.7	0	94	54	0	0	0	0	0
BROWNSVILLE	56	45	72	40	51	-9	.2	-.2	.1	1.7	107	.2	57	99	71	0	0	0	0	0
CORPUS CHRISTI	54	42	70	40	48	-7	.5	-.2	.4	8.6	534	.5	156	87	57	0	0	0	0	0
DEL RIO	54	39	75	35	47	-2	.2	-.2	.2	3.2	238	.2	9	80	49	0	0	0	0	0
EL PASO	53	35	58	30	44	-2	.2	.1	.2	1.8	253	.2	145	79	46	0	3	0	0	0
FORT WORTH	45	28	61	25	36	-5	.2	-.2	.1	2.6	105	.2	49	85	50	0	6	0	0	0
GALVESTON	53	44	71	38	49	-5	.7	-.8	.7	4.9	114	.7	0	85	57	0	0	0	0	0
HOUSTON	53	37	71	32	45	-5	.2	-.7	.1	5.1	88	.2	19	90	59	0	2	4	0	0
LUBBOCK	41	23	64	20	32	-7	.7	.0	.2	.4	34	.1	75	94	64	0	7	2	0	0
MIDLAND	43	30	64	28	37	-7	.2	.1	.1	.6	98	.2	145	93	56	0	6	0	0	0
SAN ANGELO	47	30	68	26	39	-5	.2	.0	.1	1.4	146	.2	94	91	51	0	5	0	0	0
SAN ANTONIO	54	36	74	33	45	-4	.1	-.3	.1	3.4	183	.1	31	87	42	0	0	0	0	0
VICTORIA	53	39	72	37	46	-6	.1	-.7	.1	5.1	137	.1	8	89	54	0	0	0	0	0
WACO	47	31	66	25	39	-6	.1	-.3	.1	5.1	232	.1	25	89	54	0	5	3	0	0
WICHITA FALLS	41	24	49	20	32	-7	.7	-.3	.7	.9	46	.7	0	85	48	0	7	0	0	0
UT CEDAR CITY	38	23	41	15	30	2	.7	-.1	.7	.2	28	.7	0	93	61	0	7	0	0	0
SALT LAKE CITY	35	21	44	14	28	1	.2	-.1	.1	1.6	95	.2	68	90	64	0	7	2	0	0
VT BURLINGTON	29	17	32	0	23	5	.4	.0	.2	2.1	72	.4	91	78	53	0	7	4	0	0
VA NORFOLK	51	33	65	20	42	2	.7	-.2	.6	1.9	46	.7	79	72	41	0	3	3	1	0
RICHMOND	45	24	63	14	35	-2	1.2	.5	1.0	2.2	54	1.2	166	82	31	0	5	2	1	0
ROANOKE	40	22	58	10	31	-4	.9	.3	.9	3.3	93	.9	152	74	36	0	6	2	1	0
WA QUILLAYUTE	46	30	52	23	38	-2	.3	-3.1	.3	20.3	107	.3	7	86	67	0	6	1	0	0
SEATTLE-TACOMA	48	33	54	30	41	1	.1	-1.3	.1	8.2	114	.1	4	50	33	0	3	1	0	0
SPOKANE	26	11	27	8	19	-7	.1	-.4	.1	1.7	57	.1	18	85	61	0	7	1	0	0
YAKIMA	32	14	35	7	23	-5	.3	.0	.3	1.6	90	.3	93	76	62	0	7	1	0	0
WV BECKLEY	35	19	49	2	27	-3	1.6	.9	.9	3.5	88	1.6	229	89	50	0	6	3	1	0
CHARLESTON	37	16	52	3	26	-6	.8	.1	.4	3.3	82	.8	117	95	55	0	7	4	0	0
HUNTINGTON	35	18	51	5	27	-4	1.7	1.0	1.5	4.8	113	1.7	245	90	56	0	7	3	1	0
PARKERSBURG	34	15	49	2	25	-6	.1	-.6	.1	2.9	79	.1	14	86	55	0	7	1	0	0
WI GREEN BAY	19	4	26	-6	11	-4	.2	-.1	.2	.5	30	.2	62	71	46	0	7	1	0	0
LACROSSE	17	2	28	-6	9	-5	.7	-.2	.7	.7	47	.7	0	80	54	0	7	0	0	0
MADISON	19	4	26	-5	12	-5	.3	.0	.3	1.4	71	.3	103	83	52	0	7	2	0	0
MILWAUKEE	21	8	27	-1	15	-5	.3	-.1	.2	1.4	51	.3	67	85	56	0	7	3	0	0
WAUSAU	15	-2	25	-12	7	-6	.7	-.3	.7	.4	21	.7	0	73	47	0	7	0	0	0
WY CASPER	28	5	38	-5	16	-6	.7	-.1	.7	.4	45	.7	0	81	54	0	7	0	0	0
CHEYENNE	30	4	45	-12	17	-9	.7	-.1	.7	.6	114	.7	0	82	48	0	7	0	0	0
LANDER	19	0	37	-7	10	-9	.1	.0	.1	.4	57	.1	100	86	57	0	7	1	0	0
SHERIDAN	27	3	37	-6	15	-5	.2	-.1	.2	.4	47	.2	129	74	43	0	7	1	0	0
PR SAN JUAN	85	72	86	71	78	1	1.0	.2	.6	4.0	73	1.0	123	87	59	0	0	4	1	0

Based on 1961-90 normals.

December Weather and Crop Summary

Weather

Arctic air made its first serious plunge of the season into the northern Plains and the Pacific Northwest on December 3, but within a week, only a vestige of the chill remained. For the next 3 weeks, a "split" jet stream kept frigid air locked across extreme northern North America and deflected several storms to the south, where they typically entered the southwestern United States, occasionally tapping El Niño-enhanced sub-tropical energy. But with a pattern change toward month's end, an arctic front returned to the weather charts by December 28, ushering in a period of colder conditions east of the Rockies. However, the lengthy warm spell pushed monthly temperatures 5 to 10°F above normal in the High Plains and throughout the Nation's northeastern quadrant.

With a virtual absence of cold air across the Great Lakes States, lake-effect squalls were scarce. Along the Atlantic Seaboard, although several storms developed, precipitation fell primarily as rain. As a result, Baltimore, MD observed its first snowless December on record, while Binghamton, NY noted its least-snowy (4.0 inches), third-warmest (32.4°F) December. Yet Binghamton's rainfall of 1.52 inches on December 5 was the second-highest single-day December total. Monthly snowfall in Albany, NY (3.0 inches) was 16.5 inches below normal. Even Sault Sainte Marie, MI could muster only 5.1 inches during the month.

In the Northwest, heavy precipitation was confined to areas west of the Cascades, where three periods of storminess and persistent warm weather led to flooding and avalanches. For the month, rainfall included 20.00 inches at Quillayute, WA and 14.84 inches in Astoria, OR. Farther south, the Sierra Nevada saw a decrease in storminess after a Thanksgiving-week system, but managed to end the year with a snow pack at 110 percent (%) of normal. California's 155 primary reservoirs stood collectively at about 75% of normal levels at month's end. One year ago, the reservoirs contained a "normal" amount of water in the wake of heavy runoff from the exceptionally wet 1992-93 season, whereas 2 years ago, on January 1, 1993, they held less than 60% of their normal volume, a result of a 6-year drought.

East of the Rockies, the month's most impressive snow storm blanketed areas from Nebraska to New York with 4 inches or more on December 6-8. But when snow cover reached its minimum on December 28, only the North Central States and northern New England retained any. Several heavy rain storms affected eastern Texas and surrounding areas, particularly on December 7-9 and 14-16. An early-month storm unleashed heavy rain and caused flash flooding in the central Gulf coast region on December 3. Two days later, residual rain spread into New England.

A bizarre, double-barreled, east-coast storm complex battered the east coast--South Carolina and New England in particular--with high winds and heavy rain between December 20 and 24. And between December 24 and 29, as arctic air poised to return to the United States, a storm tracked across the Southern States, delivering significant precipitation.

In Hawaii, virtually no rain fell in leeward areas for the second month in a row, a signal consistent with the warm phase of the Southern Oscillation (El Niño). In Alaska, bitter cold encompassed northern areas until late in the month, when a pattern change forced arctic air to plunge toward the Lower 48.

Fieldwork

Heavy rainfall across the Mississippi Valley slowed the completion of the **cotton** harvest. A freeze in Texas early in December helped cotton producers make good harvest progress. The protective snow cover for the **winter wheat** crop in the Northern States started to accumulate, but remained spotty. Precipitation in the Pacific Northwest and northern California slowed field activity and caused flooding.

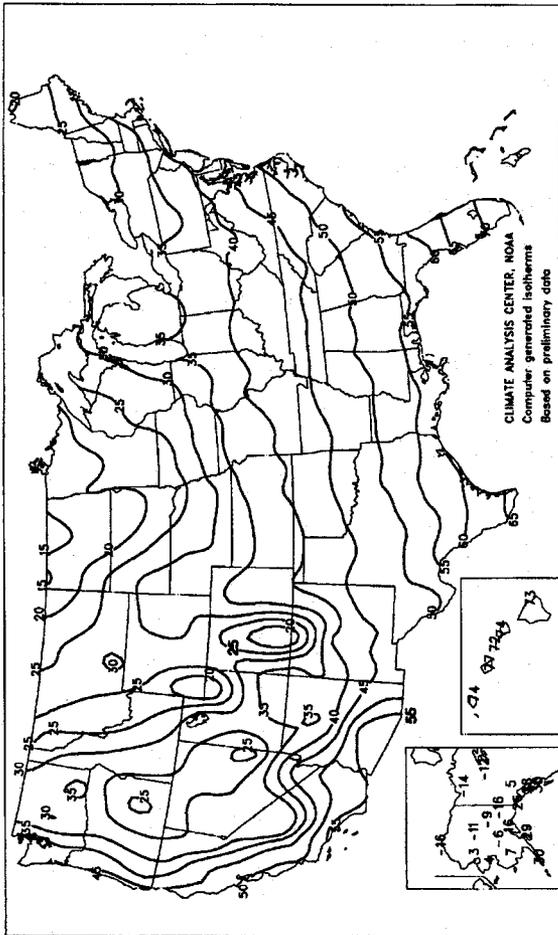
Early in December, a foot of snow was dumped across the central Great Plains bringing fieldwork to a halt. Freezing temperatures stressed livestock in Kansas, and caused producers to use supplemental feeding, while farther south, heavy rains in the lower Mississippi Valley flooded wheat fields. Many areas in the northern Great Plains still needed more snow to protect the small grains. Warm weather and a late killing freeze prolonged the cotton harvest in the Southeastern States.

By mid-December, unseasonably warm weather melted the snow cover in the Northern High Plains. The snow cover in Montana was rated mostly poor to fair. Later in the month, the warm weather reduced the snow cover in the Northern States. Wheat fields in the Mississippi Valley remained too wet to graze cattle, while wheat fields in the Texas Plains showed signs of stress from continued dry conditions. Heavy precipitation along the Pacific Northwest Coast melted the snow cover and caused flooding and mudslides.

The cotton harvest in California was complete toward the end of the month, while Texas farmers continued harvesting cotton as weather permitted. By the end of December, snow cover was less than last year's, and an Arctic air mass descended over the Northern States, but damage to the wheat crop was rated as none to light. Green bugs were reported as a problem in Texas, where 98 percent of the wheat crop was emerged. The year ended with more snow needed to protect the wheat crop in the Northern States.

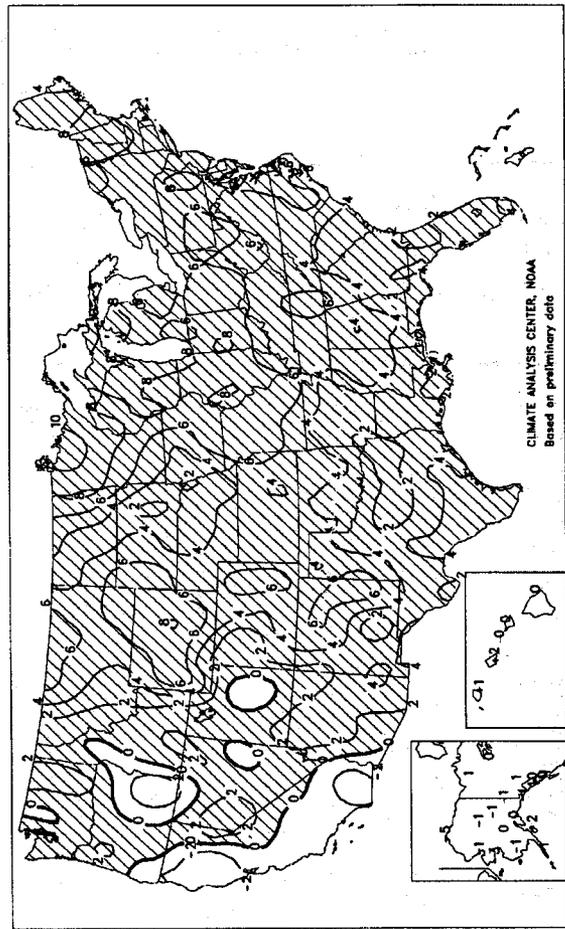
Average Temperature (°F)

DEC 1994



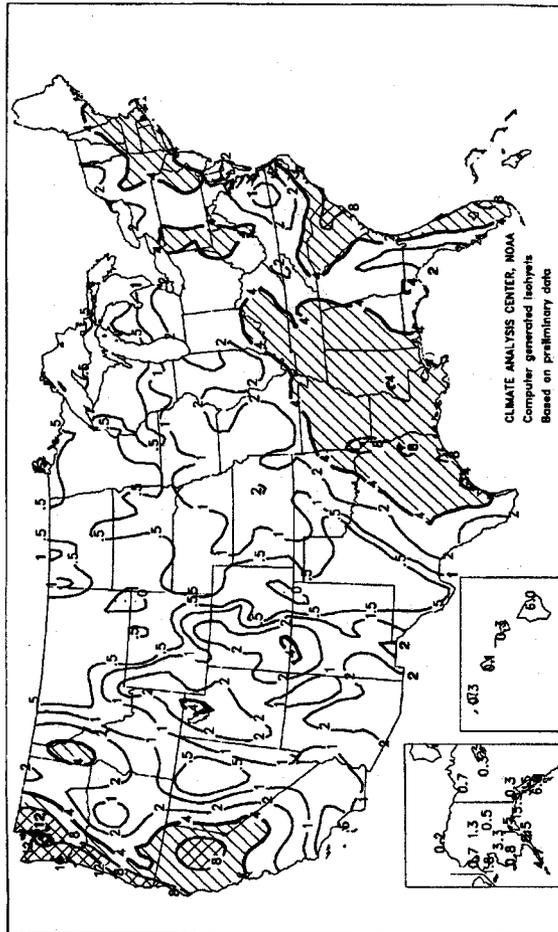
Departure of Average Temperature from Normal (°F)

DEC 1994



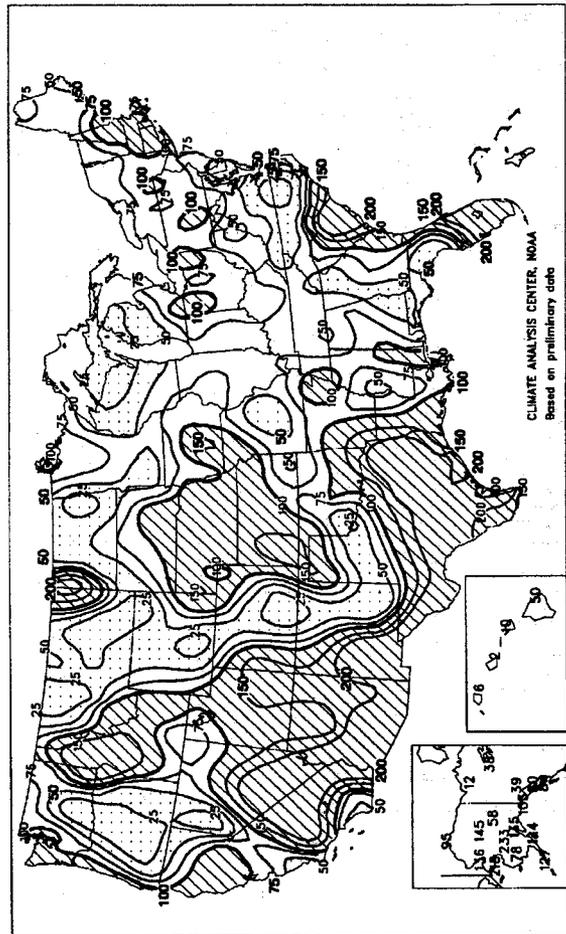
Total Precipitation (Inches)

DEC 1994



Percent Of Normal Precipitation

DEC 1994



TEMPERATURE AND PRECIPITATION SUMMARY

December 1994

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	49	4	4.1	-1.0	LA BATON ROUGE	55	2	3.0	-2.5	OK YOUNGSTOWN	35	6	3.3	0.4
HUNTSVILLE	47	4	2.5	-3.4	LAKE CHARLES	57	4	7.0	1.9	OK OKLAHOMA CITY	42	3	1.6	0.2
MOBILE	55	2	3.0	-2.3	NEW ORLEANS	56	2	4.6	-1.1	TULSA	43	4	1.2	-1.0
MONTGOMERY	53	5	4.5	-0.7	SHREVEPORT	51	3	8.0	3.2	OR ASTORIA	42	0	14.8	4.3
AK ANCHORAGE	16	0	1.5	0.4	ME CARIBOU	20	5	3.0	-0.2	BURNS	23	-2	0.3	-0.9
BARROW	-16	-5	0.2	0.0	PORTLAND	31	5	6.2	1.6	MEDFORD	39	2	1.1	-2.2
FAIRBANKS	-9	-2	0.5	-0.4	MD BALTIMORE	43	6	2.0	-1.4	PENDLETON	35	1	0.8	-0.8
JUNEAU	28	0	3.5	-0.9	BALTIMORE	44	4	1.6	-2.0	PORTLAND	42	2	4.8	-1.3
KODIAK	29	-2	8.5	1.7	MA BOSTON	38	5	5.4	1.4	SALEM	42	2	4.9	-1.9
NOME	4	-4	1.8	1.0	CHATHAM	40	4	1.6	-2.9	PA ALLENTOWN	38	6	3.1	-0.4
AZ FLAGSTAFF	32	2	1.4	-1.0	MI ALPENA	32	8	0.4	-1.6	ERIE	37	5	3.2	-0.4
PHOENIX	55	1	3.0	2.0	DETROIT	35	7	2.4	-0.4	HARRISBURG	39	5	2.9	-0.3
PRESCOTT	40	3	1.3	-0.3	FLINT	32	5	1.8	-0.4	PHILADELPHIA	42	6	2.1	-1.3
TUCSON	54	2	3.7	2.6	GRAND RAPIDS	33	6	1.1	-1.7	PITTSBURGH	38	7	2.0	-0.9
WINNIPEG	36	3	0.4	-0.2	HOUGHTON LAKE	31	8	0.5	-1.4	SCRANTON	37	7	2.4	-0.2
YUMA	56	-1	1.2	0.7	LANSING	32	6	1.6	-0.5	WILLIAMSPORT	35	4	2.8	-0.2
AR FORT SMITH	44	4	3.7	0.7	MARQUETTE	28	10	0.4	-2.2	RI PROVIDENCE	38	6	4.6	0.2
LITTLE ROCK	46	4	4.1	-0.6	MUSKOGON	34	5	1.0	-2.0	SC CHARLESTON	54	3	6.4	3.2
CA BAKERSFIELD	46	-1	1.3	0.7	SAULT ST. MARIE	29	10	0.6	-2.3	COLUMBIA	50	3	5.8	2.2
BISHOP	37	-1	...	...	MN ALEXANDRIA	20	7	0.4	-0.3	FLORENCE	53	5	9.3	6.2
EUREKA	47	-2	7.0	1.0	DULUTH	21	9	0.3	-0.9	GREENVILLE	47	4	4.0	-0.2
FRESNO	45	0	1.3	-0.1	INT'L FALLS	19	12	0.7	-0.2	SD ABERDEEN	17	1	0.4	-0.2
LOS ANGELES	58	1	1.1	-0.6	MINNEAPOLIS	24	7	0.5	-0.6	HURON	20	2	0.6	0.1
REDDING	42	-3	5.5	-0.1	ROCHESTER	24	7	0.6	-0.4	RAPID CITY	30	6	0.4	-0.1
SACRAMENTO	44	-1	...	...	ST. CLOUD	20	6	0.5	-0.3	SIoux FALLS	22	3	0.3	-0.4
SAN DIEGO	56	-1	0.8	-0.8	MS GREENWOOD	50	4	2.6	-3.3	CHATTANOOGA	47	6	3.9	-1.3
SAN FRANCISCO	48	-1	2.5	-0.6	JACKSON	50	3	3.3	-3.0	KNOXVILLE	45	5	2.0	-2.5
SANTA MARIA	50	-1	1.1	-0.7	MERIDIAN	53	4	6.9	0.8	MEMPHIS	47	3	6.1	0.4
CO ALAMOSA	23	5	0.1	-0.4	TOPELO	47	4	4.8	-1.4	NASHVILLE	45	5	2.7	-1.9
CO. SPRINGS	34	4	0.1	-0.3	MO CAPE GIRARDEAU	42	6	2.3	-2.1	ASHLAND	48	2	1.0	0.0
DENVER	36	5	0.3	-0.3	COLUMBIA	38	7	0.9	-1.7	AMARILLO	42	5	0.3	-0.1
GRAND JUNCTION	33	2	0.6	0.0	KANSAS CITY	37	6	1.8	0.2	AUSTIN	56	4	5.6	3.8
FUERO	34	3	0.2	-0.2	SAINT LOUIS	42	7	1.5	-1.5	BEAUMONT	57	3	4.2	-0.6
CT BRIDGEPORT	39	4	3.7	0.2	SPRINGFIELD	40	6	1.1	-1.6	BROWNSVILLE	66	4	1.5	0.3
HARTFORD	35	5	5.4	1.5	MT BILLINGS	31	6	0.2	-0.5	CORPUS CHRISTI	63	5	8.0	6.8
DC WASHINGTON	44	5	2.4	-0.8	GLASGOW	20	5	0.2	-0.2	DEL RIO	57	5	3.1	2.0
FL PANAMA CITY	56	2	3.0	-1.7	GREAT FALLS	29	5	0.2	-0.7	EL PASO	49	5	1.6	1.0
DAYTONA BEACH	63	3	2.7	0.1	HAVRE	23	6	0.5	0.0	FORT WORTH	49	4	2.4	0.3
FT. MYERS	69	4	3.8	2.3	HELENA	24	3	0.1	-0.5	GALVESTON	61	4	4.9	1.4
JACKSONVILLE	58	1	3.9	1.1	KALISPELL	25	2	0.7	-1.0	HOUSTON	57	4	4.9	0.1
KEY WEST	74	2	4.5	2.5	MILES CITY	25	6	0.1	-0.6	LAREDO	...	...	...	...
MIAMI	72	3	5.0	3.1	MISSOULA	24	0	0.6	-0.6	LUBBOCK	45	5	0.2	-0.4
ORLANDO	65	3	3.0	0.9	NE GRAND ISLAND	29	3	1.1	0.2	MIDLAND	49	3	0.4	0.0
TALLAHASSEE	56	3	2.7	-2.3	LINCOLN	28	3	0.6	-0.1	SAN ANGELO	50	4	1.2	0.4
TAMPA	65	3	1.6	-0.6	NORFOLK	26	3	1.0	0.3	SAN ANTONIO	57	5	3.3	1.8
WEST PALM BEACH	69	1	2.1	-0.2	NORTH PLATTE	29	5	0.7	0.2	VICTORIA	59	4	5.0	2.1
GA ATHENS	49	4	1.9	-2.2	OMAHA	29	4	1.2	0.2	WACO	50	2	5.0	3.2
ATLANTA	50	6	1.6	-2.7	SCOTTSBLUFF	29	3	1.0	0.4	WICHITA FALLS	46	3	0.9	-0.7
AUGUSTA	50	3	3.0	-0.4	VALENTINE	28	2	0.6	0.1	BLANDING	37	7	1.7	0.5
MACON	51	2	2.8	-1.5	NV ELKO	28	2	...	...	CEDAR CITY	33	2	0.2	-0.5
SAVANNAH	55	3	4.5	1.5	ELY	25	-1	0.6	0.0	SALT LAKE CITY	32	2	1.4	0.0
HI HILO	73	1	6.0	-6.1	LAS VEGAS	47	2	1.1	0.7	BURLINGTON	29	6	1.7	-0.8
HONOLULU	77	3	0.2	-3.6	RENO	36	3	0.2	-0.8	LYNCHBURG	44	6	1.7	-1.5
KAHULUI	74	1	0.3	-2.9	WINNEMUCA	30	0	0.5	-0.4	NORFOLK	50	6	1.2	-2.0
LIHUE	74	1	0.1	-5.1	CONCORD	31	6	4.2	1.0	RICHMOND	46	5	1.0	-2.3
ID BOISE	30	0	1.8	0.4	NJ ATLANTIC CITY	40	4	2.2	-1.1	ROANOKE	43	5	2.4	-0.6
LEWISTON	35	0	1.1	-0.1	NM ALBUQUERQUE	41	6	0.6	0.1	COLVILLE	29	1	3.3	...
POCATELLO	26	1	1.3	0.2	CLOVIS	45	7	0.4	-0.2	QUILLAYUTE	41	1	20.0	4.5
IL CAIRO	...	...	...	...	ROSWELL	46	6	...	...	SEATTLE-TACOMA	42	1	8.2	2.3
CHICAGO	35	8	1.3	-1.2	NY ALBANY	32	5	2.6	-0.4	SPOKANE	30	3	1.6	-0.8
MOLINE	33	8	1.6	-0.6	BINGHAMTON	32	6	3.0	0.0	WALLA WALLA	38	3	2.2	-0.3
PEORIA	35	8	2.2	-0.2	SUFFALO	34	5	2.7	-1.0	YAKIMA	33	3	1.3	-0.1
QUINCY	36	7	1.5	-0.9	NEW YORK	42	6	2.7	-0.7	BECKLEY	40	6	1.9	-1.3
ROCKFORD	30	6	1.3	-0.8	ROCHESTER	35	6	2.3	-0.4	CHARLESTON	41	4	2.5	-0.9
SPRINGFIELD	37	8	2.0	-0.7	SYRACUSE	32	4	2.5	-0.7	ELKINS	38	6	2.6	-0.9
IN EVANSVILLE	42	5	2.6	-1.2	NC ASHEVILLE	44	4	3.0	-1.4	HUNTINGTON	41	6	3.0	-0.5
FORT WAYNE	36	7	2.2	-0.6	CHARLOTTE	48	5	1.9	-1.6	PARKERSBURG	40	5	2.8	-0.2
INDIANAPOLIS	39	8	1.7	-1.7	GREENSBORO	45	5	0.6	-2.8	GREEN BAY	30	9	0.3	-1.2
SOUTH BEND	35	6	2.5	-0.8	HATTERAS	56	7	4.9	0.4	LACROSSE	29	9	0.7	-0.6
IA DES MOINES	30	6	2.4	1.0	NEW BERN	53	6	1.3	-2.4	MADISON	29	7	1.1	-0.6
DUBUQUE	29	7	1.7	-0.2	RALEIGH	48	5	1.3	-2.0	MILWAUKEE	35	10	1.1	-1.2
SIoux CITY	23	2	1.0	0.3	WILMINGTON	53	6	6.9	2.8	WAUSAU	26	9	0.4	-1.1
WATERLOO	26	6	1.4	0.0	ND BISMARCK	16	2	0.3	-0.2	CASPER	32	8	0.4	-0.3
KS CONCORDIA	34	4	1.2	0.4	FARGO	21	9	0.2	-0.4	CHEYENNE	33	5	0.6	0.2
DODGE CITY	37	4	0.9	0.3	GRAND FORKS	19	9	T	-0.6	LANDER	29	8	0.3	-0.3
GOODLAND	34	3	0.4	0.0	WILLISTON	16	2	1.0	0.5	SHERIDAN	29	7	0.2	-0.5
TOPEKA	36	5	1.5	0.1	OH AKRON-CANTON	36	6	3.0	0.0	SAN JUAN	80	2	3.0	-1.7
WICHITA	37	3	1.0	-0.3	CINCINNATI	40	7	2.9	-0.3					
KY BOWLING GREEN	42	4	2.3	-2.7	CLEVELAND	37	6	2.9	-0.2					
JACKSON	43	5	2.8	-1.5	COLUMBUS	39	8	2.2	-0.8					
LEKINGTON	41	5	3.9	-0.1	DAYTON	38	6	2.8	-0.2					
LOUISVILLE	42	5	3.0	-0.7	MANSFIELD	36	6	1.4	-1.0					
PADUCAH	43	5	3.7	-1.0	TOLEDO	36	8	3.1	0.2					

Based on 1961-90 normals.

December Weather in Historical Perspective

Seven of nine climatic regions notched above-normal temperatures, fueling the Nation's 11th warmest December in the past 100 years. The nationally averaged temperature of 36.6°F was 3.8°F above the 30-year normal (fig. 1). Regional rankings ranged from a 44th coldest December in the West to a 7th warmest December in the Northeast (table 1).

Below-normal to normal precipitation was observed in eight of nine divisions, including a 10th-driest ranking in the West North Central region. The only "wet" region was the South, with a 21st wettest December. Nationally, an average of 1.96 inches of precipitation fell, 0.34 inches below normal, making December 1994 the 34th driest such month since 1895 (fig. 2). State rankings of temperature and precipitation appear in figure 3.

Figure 1

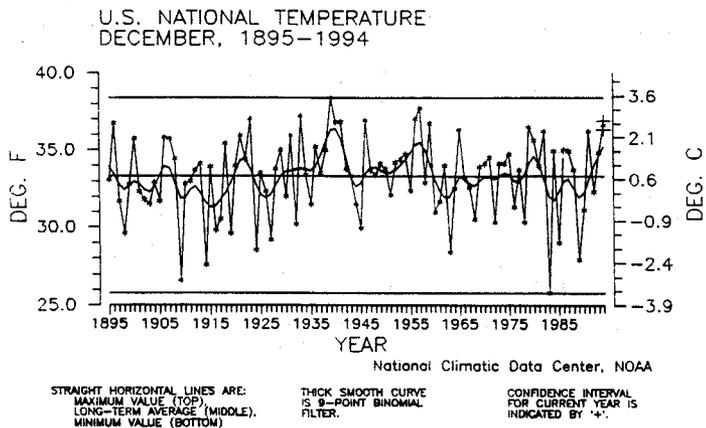


Figure 3

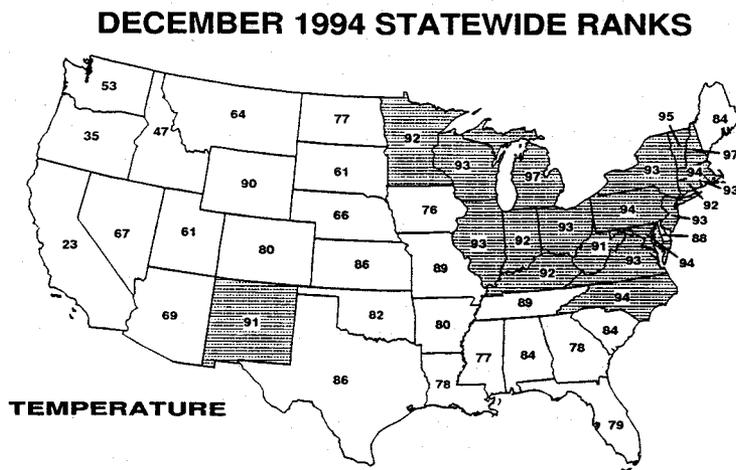


Table 1

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

Region	Precipitation	Temperature
Northeast	31	94
East North Central	21	91
Central	30	92
Southeast	34	91
West North Central	10	76
South	80	83
Southwest	55	78
Northwest	29	50
West	53	44
National	34	90

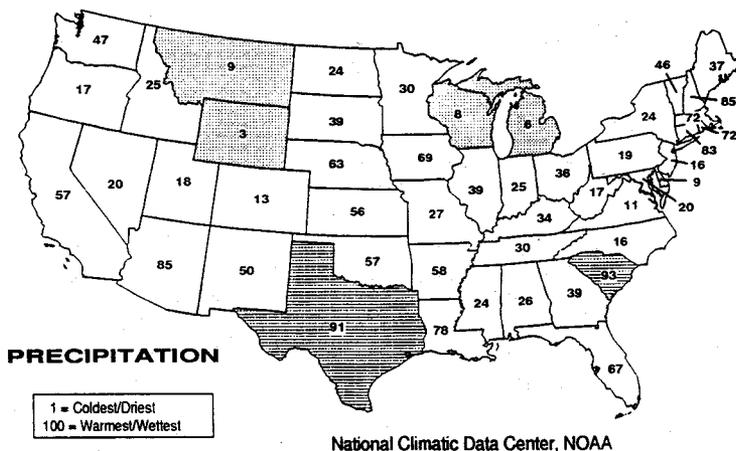
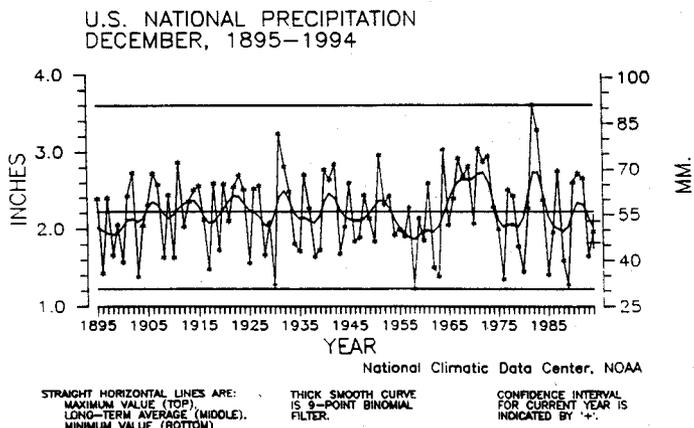


Figure 2



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

1994 Weather Review

The year featured extreme winter cold, snow, and ice in the East, searing spring and summer heat in the West, and severe flooding in Texas, Georgia, and Florida. Moderate summer rainfall and temperatures led to record high national corn, soybean, and cotton production.

Winter (December 1993 - February 1994)

Blasts of frigid air dove southeastward across the Central and Eastern States from late December through the middle of February. The arctic air masses delivered some of the lowest temperatures of this century and contributed to more than a dozen snow, sleet, and ice storms that wreaked havoc with transportation across the East. The West, meanwhile, had a drier- and milder-than-usual winter and, as a result, the driest year since 1985 and the 11th driest on record (table 1). Alaska enjoyed winter temperatures averaging up to 8°F above normal.

The influx of cold air began about December 21. The first major storm of the season rode up the east coast on January 3-4 and left a foot or more of snow from West Virginia northward through Pennsylvania and New York. A second storm dropped 15 inches of snow on Boston and Hartford on January 7. Rain, ice jams, and melting snow contributed to flooding in West Virginia, Indiana, and Ohio on January 28-29. An extensive ice, sleet, and snow storm stretched from Texas to New England on February 9-11, closing hundreds of schools in Texas, and shutting down Federal offices in Washington, DC and all three New York City airports.

In January, two cold waves of historical proportions crossed the Central and Eastern United States. The first struck on January 14-16 and resulted in at least 21 daily record low temperatures. Days later, extensive snow cover allowed an even colder surge of air to plunge across the Central and Eastern States with little modification. On January 18, there were 18 daily record lows, including -21°F in Chicago. The following day, January 19, was one of the coldest days of the past 100 years in the East, with some 66 record daily lows, 14 record monthly lows, and 12 all-time record lows, including -25°F in Akron, OH and Clarksburg, WV; -22°F in Columbus and Youngstown, OH; and -20°F in Cleveland. The low of -36°F at New Whiteland, IN was an all-time record low for the State. The next day, another 17 record lows were set, including -28°F at Concord, NH. All told, there were more than 130 record low temperatures broken from January 15 to 20. On January 21, another four all-time records were broken or tied in Pennsylvania, including -21°F at Wilkes-Barre.

The West was unusually mild during this arctic outbreak, with temperatures rising to near 80°F in southern California on January 20. Missoula, MT posted a record 56°F on January 18, with temperatures averaging 14 degrees above normal for the month to date.

Another cold wave in early February brought extreme thermometer readings to the northern Plains, with Bismarck, ND, recording -43°F on February 9, its lowest reading in more than 26 years. Aberdeen, SD measured -45°F, its lowest ever February temperature.

When mild air finally appeared in the Central and Eastern States on February 17-19, setting three dozen daily high temperature records, snowmelt sent numerous creeks and rivers to bankful or above. Bradford, PA saw its snow cover diminish from 31 inches on February 13 to 4 inches on February 19. But the thaw did not spell the end of winter, as storms and high winds continued to plague much of the country into March.

Table 1. Temperature/Precipitation Rankings for 1994

Based on the Period 1895-1994

1 = Driest/Coldest, 100 = Wettest/Hottest

Region	Precipitation	Temperature
Northeast	78	41
East North Central	59	59
Central	57	55
Southeast	93	63
West North Central	36	78
South	62	73
Southwest	44	95
Northwest	11	93
West	22	88
National	55	85

Based on December-February rankings, this was the coldest winter since 1977-78 in the Northeast. Warmer-than-normal weather prevailed from the High Plains westward, with Idaho posting its 10th warmest winter. The Southwest had its third driest winter and the Northwest its seventh driest. With April snowpack just 30 percent of normal (compared with 150 percent the prior year), concern for California's water supplies increased as the dry season approached.

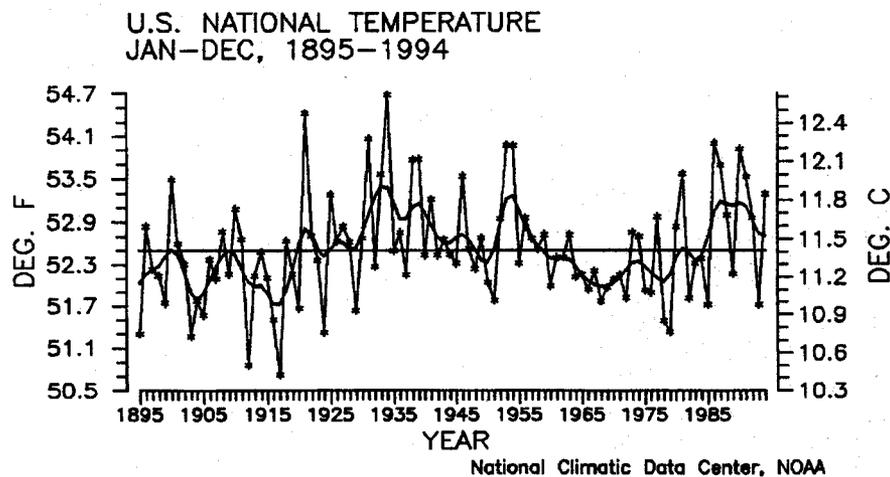


Figure 1.

Spring (March - May)

A major Nor'easter on March 1-4 dumped more than 12 inches of snow from the interior mid-Atlantic States to northern New England. As a result, Boston's seasonal snowfall total reached 89.5 inches, breaking a record that went back more than 100 years. Boston went on to end the season with 96 inches.

Heavy rain and severe storms struck the East on March 27-29, with numerous tornadoes on Palm Sunday, March 27. The death toll in five States from tornadoes totaled at least 44, with 20 deaths after a twister struck a church in Piedmont, AL. The storm also left 2 to 5 inches of rain on the southern and central

Appalachians, bringing floods to eastern Tennessee, western North Carolina, and southwestern Virginia.

Dryness and unusual cold snaps affected the central and southern Plains in the early spring. Rains across Kansas on April 9 broke a dry weather pattern that had affected the region since autumn. Lack of moisture stunted western Nebraska wheat, and freezes, coupled with dryness, hurt dryland wheat fields in the Texas High Plains. Amarillo recorded a record 17 °F on April 7. Little precipitation fell from March into mid-April over parts of west Texas, especially in the southern Low Plains.

In mid-April, 3 days of torrential rains brought rivers and streams to well-above flood stage from Oklahoma to Ohio. Columbia, MO had its wettest April ever, with 11.69 inches. By April 18, the Mississippi River was above flood stage from St. Louis to the southern tip of Missouri. Nevertheless, damage in this region was minimal and the flooding thankfully bore no resemblance to 1993's "Flood of the Century."

Though the East enjoyed one of its warmest Aprils ever, winter was still not over for parts of the country. A storm on April 25-28 left 30 inches of snow on the Black Hills of South Dakota; even Dalhart, TX had 2 inches on the ground on April 28.

Summer (June - August)

High pressure aloft stagnated over the Western States nearly the entire summer, leaving the western half of the country unusually hot and dry. With heat covering most of the country in June, the western and eastern third of the country in July, and the western half of the country in August, the contiguous 48 States recorded their warmest summer since 1988. The summer warmth contributed to this year's annual temperatures being much above last year's average and well above the long-term mean (fig. 1).

Above-normal temperatures encompassed all but the northwestern part of the country in June, resulting in the Nation's warmest June since 1933. The Southwest endured its warmest June in at least 100 years, as temperatures regularly rose into the 90's and 100's. A heat wave of historical proportions smothered the Southwest from June 24 to July 2. On June 27, Lakewood, NM hit 119° F, establishing the State's all-time high temperature record. Midland, TX broke its all-time high, hitting 116° F. El Paso broke its all-time high the same day with 113° F, the third of a 7-day streak of consecutive 110° F, or higher, readings. El Paso soon broke the

new record with a reading of 114°F on June 30. On June 28, Laughlin, NV set a new State record with 124° F. On June 29, Lake Havasu City, AZ and Death Valley, CA recorded 128° F. This was not only an all-time record for Arizona, but also the hottest official June temperature ever measured for anywhere in the country. The 125° F reading that day at Laughlin broke the State record for Nevada.

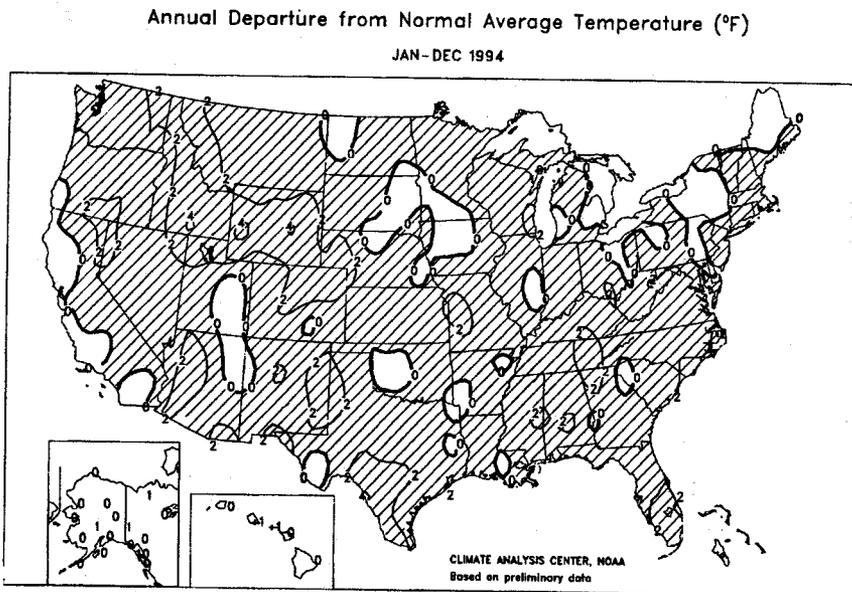


Figure 2.

The heat shifted northward during July and persisted through most of August. Denver set a record this summer with 55 days of 90° F, while Boise, ID set a record with 44 consecutive days at or above 90° F. Salt Lake City, UT sizzled with a record-tying 21 days of 100-degree heat. The reading of 106° F on August 4 set a new monthly record. This was the hottest August in at least 100 years in New Mexico and Arizona and the third hottest in Utah and Idaho. This was also the hottest summer this century in Utah and New Mexico.

The Great Basin and upper Colorado Basin recorded their driest summer since at least 1895. The Pacific Northwest had its driest summer since 1949. The

heat and dryness contributed to widespread brush and forest fires across the West. By the end of August, western wildfires had scorched 3.1 million acres, compared with the 5-year average of 2.2 million acres.

Persistent hot weather from June 13 to 21 stretched from the Plains to the east coast, with mid to upper 90-degree temperatures widespread. At Washington, DC, this was the hottest June ever. Across the Corn Belt, widespread showers relieved dryness during June 23-25. With July and August temperatures below normal and no extended period of widespread dryness, farmers enjoyed record yields of corn and soybeans.

Puerto Rico, however, contended with water shortages this summer as rainfall from August 1993 through early September was well below normal. Water rationing began in May and by midsummer affected half the island. Following 3 weeks of rainfall, water rationing ended for some areas in late September,

Tropical Storm Alberto struck the Florida Panhandle on July 3. Over the next week, as the storm's remains meandered across Georgia, torrential rainfall caused some of the worst flooding ever observed across portions of Georgia, Alabama, and Florida. Flooding was extensive across southwestern Georgia, severely affecting Macon and Albany. A July-record 18.16 inches of rain, three-fourths of which fell on July 3-7, inundated Macon. On July 11, the Flint River in Albany broke a flow record set in 1893. Floodwaters in Georgia forced approximately 50,000 people from their homes and resulted in residences being without tap water for up to 19 days. The floods, which were responsible for 30 deaths in Georgia and 2 in Alabama, caused an estimated \$750 million in damages across the three affected States.

On August 15, Tropical Storm Beryl moved inland only 50 miles east of Alberto's landfall position. Unlike Alberto, Beryl headed straight up the Appalachians, leaving a 1,000-mile swath of torrential rains and triggering an outbreak of severe thunderstorms and tornadoes.

In the central Pacific, unusually warm waters southeast of Hawaii energized a steady progression of hurricanes this summer. In July, Emilia and Gilma were the most intense storms ever observed in the central Pacific, both bearing estimated winds of 160 m.p.h. and

passing to the south of Hawaii. In August, Hurricane John, which passed 500 miles south of the Big Island, exceeded both storms in strength and also broke all records for longevity. John's estimated sustained winds reached a phenomenal 175 m.p.h. on August 23.

Autumn (September - November)

Heavy rainfall again pounded Georgia in October, with the State recording its highest October totals of record. The heavy rains this month, along with the rains from Tropical Storms Alberto, Beryl, and Gordon, caused the Southeast to have the wettest year since 1984 and the eighth wettest year of record (table 1).

In southeast Texas, a southerly tropical flow of moist air contributed to heavy rains and catastrophic flooding. Rainfall totaled 14

to 16 inches on October 15-18 across Harris County north of Houston. Isolated rainfall totals reached as much as 28.86 inches northeast of Houston. Flooding damaged 15,000 to 19,000 residences, caused 18 deaths, and resulted in disaster declarations for 38 Texas counties. Preliminary estimates place the maximum flood discharge of the San Jacinto River below Lake Houston at about 1.6 times the 100-year-frequency flood flow.

After taking a destructive path through the Caribbean, Tropical Storm Gordon brought heavy rains and flooding to the Florida peninsula on November 13-16. Totals of 4 to 13 inches were common in southern and eastern Florida, and the resultant floodwaters damaged winter vegetable crops. Eight deaths were linked to Gordon in Florida. The storm, which briefly attained hurricane force while south of Cape Hatteras, traveled northeastward and damaged coastal areas of North Carolina and Virginia before returning to Florida as a weak tropical depression. Gordon will be remembered as one of the most long-lived and erratic November storms in history.

The northeast quadrant of the country enjoyed an exceptionally sunny and mild autumn, with the Northeast and Central regions experiencing one of the 10 warmest October-November periods of record. In the Great Lakes region, the first snow of the season waited until November 22, the latest date on record in Buffalo and Rochester, NY.

A decidedly different pattern took hold across the West, with a long-wave trough over the western part of the continent ensuring a steady progression of Pacific storms. California and Nevada racked up the coldest November on record. Monthly precipitation was more than twice normal over much of Utah, Nevada, and New Mexico, with record snows piling up in the Wasatch Range and the Sierra Nevada. Salt Lake City measured a record 33.3 inches of snow for the month, more than five times normal.

Autumn was unusually dry in Hawaii, except for the Big Island. During November, less than 10 percent of normal rain fell throughout Kauai, Oahu, and Maui. The city of Hilo, on the other hand, recorded a remarkable November total of 34.5 inches, some 20 inches above normal.

Farther north, brutally cold weather struck Alaska late in the month, with Fairbanks dropping to 45°F on November 24, its lowest temperature so early in the season. On the same date, Juneau's 53 inches of snow for the month to date set a November record.

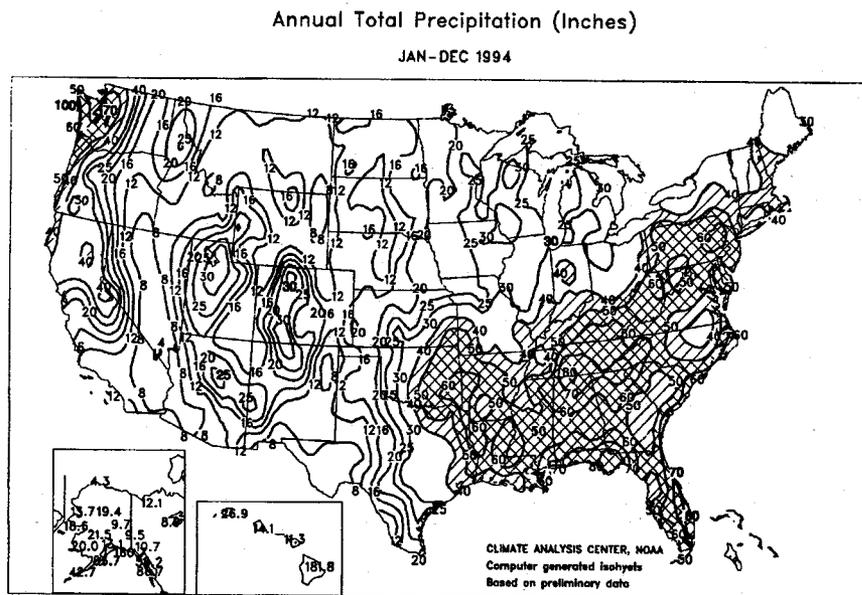
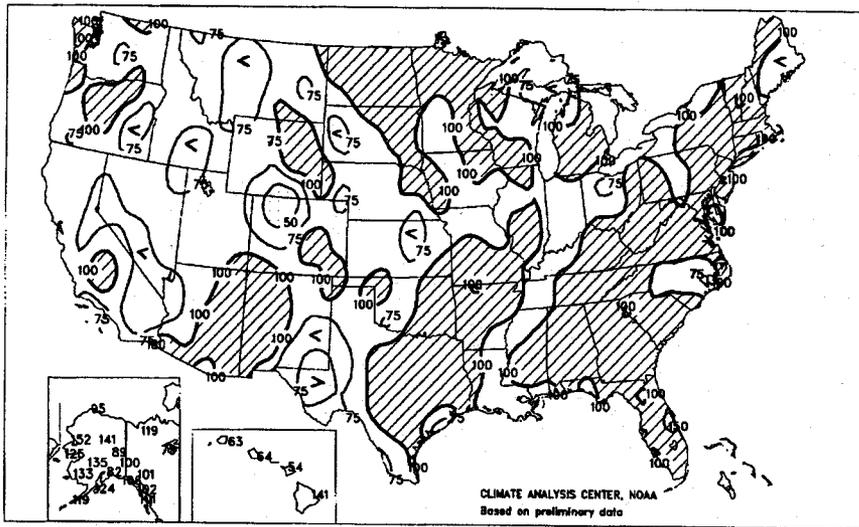


Figure 3.

Annual Percent of Normal Precipitation

JAN-DEC 1994

**Figure 4.**

21-24, with winds on December 23 gusting to 84 m.p.h. at Nantucket, MA.

December 1994

December continued the stormy trend in the West and the anomalous warmth in the East. Wind gusts along the Oregon coast reached 67 m.p.h. on December 15, and nearly 9 inches of rain soaked the Washington coast during December 17-20. Mild weather dashed hopes for a white Christmas across most central and eastern parts of the country. A double-barreled Nor'easter brought heavy rain and high winds from Florida to Maine on December

Summary

The contiguous United States measured its 16th mildest year, with temperatures above normal nearly everywhere (fig.2). Annual averages were as much as 4°F above normal in Idaho and Wyoming. The year saw abundant rainfall (figs. 3 and 4) across the Southeast, Mid-Atlantic region, and the Northeast, with annual precipitation totals up to 135 percent of normal in Florida, Georgia, and Tennessee. Florida recorded its fourth wettest year in the past 100 years of record. The northern Plains and much of east Texas and east Oklahoma measured up to 125 percent of normal precipitation. Annual totals were mainly below normal west of the Continental Divide, with Wyoming having its 4th driest year of record and Oregon its 12th.

--Douglas Le Comte

Crop Progress 1994

The 1994 winter wheat experienced a mild winter in the western half of the Nation, while a severe winter gripped the Central and Eastern States. A drier, mild winter in the Northwestern and Rocky Mountain States reduced the protective snow cover for the winter wheat, but only limited damage was reported. The upper Great Plains and middle Mississippi Valley States started the year with adequate snow cover for winter wheat and provided protection from the record low temperatures in January and February. Dry conditions in the Southern Plains slowed winter wheat growth, while the mild weather in the Western States encouraged the wheat to break dormancy early. The winter wheat's development was hindered by the cool, wet weather in the Southeastern States in February, and freezing temperatures in Texas threatened wheat growth, while an early snow melt in the Ohio Valley stressed the wheat crop. Early spring brought a warming trend that started along the Pacific Coast and moved Eastward, melting the snow pack. By mid-March, the warm weather in the upper Great Plains melted the snow and saturated fields, while soil moisture shortages persisted in the Central Plains. In early April, winter wheat remained dormant in the northern Great Plains where the snow cover was virtually gone. April storm systems brought added moisture to the already soaked Tennessee Valley. Kansas wheat producers reported that wheat was in fair condition and insect and disease problems were light, while Texas wheat withstood freezing temperatures in April. Wheat started heading in April equal to the average, but fell behind as spring proceeded. Summer-like weather in May accelerated wheat development and caused the wheat to turn color early, while in the Southeastern States the wheat harvest began ahead of the average. Dry conditions continued to threaten the wheat in the Pacific Northwest as the summer approached. Development of wheat was aided by the persistent hot weather in June that caused wheat to turn color and ripen early. The wheat harvest progressed quickly and remained ahead of schedule until July rains slowed the combines. The hot, dry weather continued into August, when the winter wheat harvest concluded 10 percentage points ahead of the previous year.

Producers delayed planting the 1995 winter wheat crop in August in the drought-stricken Western States, while planting was delayed in the Great Plains by wet fields. By September, early planted wheat was standing at 2 inches in the Great Lakes region, while many Western States still delayed planting due to dry soil conditions. Many producers felt it was still too dry to plant wheat in the Pacific Northwest, but half of the 1995 wheat crop was seeded in October. Planting for the Nation remained on schedule despite the delays in the Western States in October. Wheat planting was completed in November slightly behind the average due to dry conditions in the Pacific Northwest. The season's first winter storm arrived in November, and wheat emerged finished the year ahead of average. In December, mild winter weather raised concerns for adequate snow cover for the 1995 wheat crop, but snow in the Northern States arrived to protect wheat over the winter.

Planting of the 1994 spring wheat crop was hampered by saturated fields in the Mississippi and Ohio Valleys in April, and started the year behind the average. Rains early in May left spring wheat planting slightly behind the average. Above-normal temperatures in June advanced the spring wheat crop's development and started the summer ahead of the average. Cool weather in July broke the previous month's heat wave, and spring wheat continued to mature ahead of normal. Cool weather in the Eastern States and hot, dry weather in the Western States caused the Nation's spring wheat harvest to start slightly behind the average in August. Continued hot, dry weather in the West allowed the spring wheat harvest to finish slightly ahead of the average by mid-September.

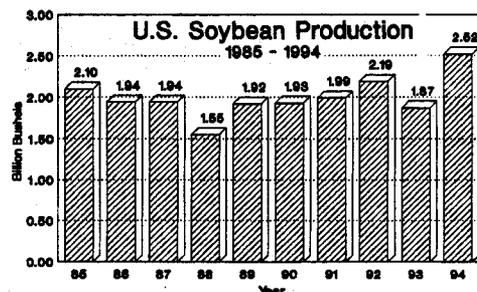
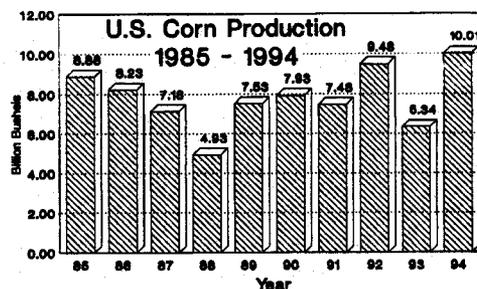
Corn planting in early March was complete in southern Texas, while a late-season storm deposited up to 1 foot of snow from Texas to southern Illinois. Planting progress was 42 percent complete by the end of April, and was ahead of the average in all States. Corn producers planted as soon as possible to avoid a repeat of 1993's difficulties, and some fields required replanting. Corn planting was delayed by rains in early May but was completed by month's end. The heat wave in June stressed the crop, but corn condition remained 18 percent excellent. The average corn height started April at 7 to 8 inches and by month's end jumped to 19 to

39 inches. The cool weather in July slowed corn silking, but the corn crop continued to outpace the average. Corn condition declined slightly at the beginning of August, amid reports of soil moisture shortages. Corn denting began in August and by month's end had reached 54 percent complete, 15 points ahead of the average. Corn started September at 17 percent mature and by the end of the month was 14 points ahead of the average. Rains in mid-September improved soil moisture supplies in the Corn Belt, and combined with autumn dry-down weather later in the month, pushed the corn crop past the danger of frost damage. The corn harvest started in September equal to the 5-year average, but fell behind as producers shifted their effort to the soybean harvest. October provided ideal autumn weather for harvest activity, with warm, sunny days and a late killing frost that extended the growing season and contributed to record yields. Grain elevators across the Corn Belt were at full capacity in November as the first major snow storm of the year slowed harvest activity but not enough to pull the corn harvest behind the average. By the end of November, the corn harvest was virtually concluded.

Planting of the 1994 soybean crop was slowed by rain early in May, but producers continued to plant rapidly as soon as the fields dried. By the end of May, over three-quarters of the crop was planted. Producers

opted to plant soybeans early and risked poor germination from cool weather. Record high temperatures in June and dry weather allowed producers to continue planting soybeans ahead of the average. By mid-June, a heat wave stressed the soybeans in parts of the Corn Belt. At the end of June, hail damage in the middle Mississippi Valley required some soybeans fields to be replanted. Cool weather arrived in July as farmers completed planting double-cropped soybeans. By mid-July, soybeans setting pods were 10 points ahead of the average, and increased to 15 points ahead by month's end. In mid-August, the soybean condition ratings fell from 79 percent of the crop rated from good to excellent to 66 percent by month's end, because of dry soil conditions that hindered the crops development. By the end of August, soybeans finished setting pods and began dropping leaves. Warm, dry weather continued into September and pushed the soybeans to maturity ahead of normal. Timely rains in the Midwest improved the soybeans condition by the end of September. Storm systems in early October slowed the soybean harvest, which approached the halfway mark. The soybean harvested neared completion by the end of October and was assisted by ideal harvest weather late in the month. November brought the season's first major snow storm, but it did not prevent the soybean harvest from finishing early in the month.

Sorghum planting in southern Texas was nearly completed by early March. As planting spread northward, progress was interrupted by soaking rains and wet soil conditions. Spring storms in early April limited grain sorghum planting progress to near-normal, with one-quarter of the crop in

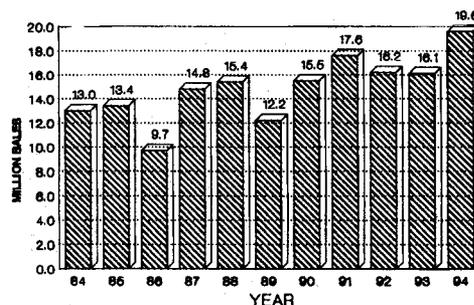


the ground. Producers resumed planting in early May as fields dried. June's warm weather dried the fields and allowed producers to finish planting sorghum by mid-June ahead of the average by 10 points. Cooler weather in July slowed sorghum development, but sorghum headed remained ahead of the average. In July the sorghum harvest in Texas was underway. The hot, dry weather in August pushed sorghum headed to 24 points ahead of the average, but lowered the grain sorghum condition rating. Sorghum turning color remained ahead of the average for August, and the early harvest in south Texas neared completion. The hot, dry weather continued into September and lowered sorghum condition to 57 percent of the crop rated as good to excellent, but accelerated the crop's maturity. The sorghum harvest started in mid-September, and reached the halfway mark by the end of September, 11 points ahead of the average. Warm, dry weather during October provided ideal conditions for sorghum harvesting. By the end of October, the harvest was almost over, ahead of normal, and was completed early in November.

Planting of the cotton crop started in Texas in March. Dry weather in April allowed cotton planting to start and stay ahead of the average in the Southeastern States. Cool, damp conditions in May slowed cotton germination. Cotton planting in the Southern Plains was curtailed by May rains and some fields were washed out. Record hot, dry weather in June accelerated cotton growth early in the month, but the continued hot, dry weather stressed the crop. Cotton squaring advanced past the halfway mark toward the end of June. Cooler weather in July slowed cotton development, but the crop's progress remained ahead of the average. Heavy rains washed out some fields in the Southeastern States, while the continued dry weather in the Southwest caused blowing sands that damaged some young plants. Cotton bolls opening began slightly ahead of the average, while cotton setting bolls was virtually over by early August. During August, the first bale of cotton was harvested in Arizona, while the crop's condition rating declined due to continued dry conditions in the Southwestern States and heavy rains in the Southeast. September brought cooler weather that stalled cotton development, while the persistent dry weather brought the condition of the crop below the previous month's rating. The cotton harvest started at the end of September, 4 points

ahead of the average and despite adverse weather in October, harvest activity stayed ahead of the average during October. Wet weather in November slowed the cotton harvest but producers finished the month 3 points ahead of the average.

U.S. ALL COTTON PRODUCTION



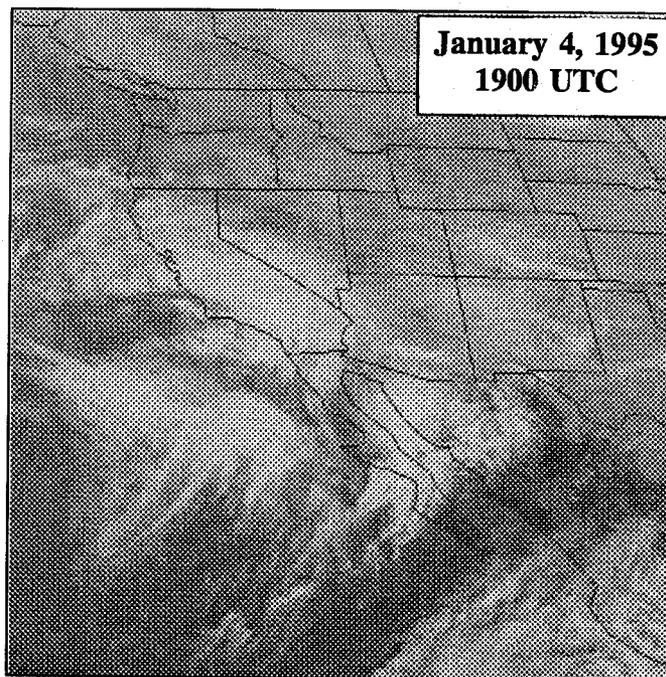
Soaking rains late in March delayed rice field preparation. Wet fields during April hindered fieldwork, but when possible producers planted and put 63 percent of the crop in the ground. Rice planted entered May 20 points ahead of the average and was virtually complete by the end of May. The rice crop was unaffected by June's heat wave and rice condition was rated as mostly good, above last year's. Rice headed began in July ahead of the average and was half completed by the end of the month. Early in July disease problems were reported in the Delta region. Clear weather allowed the rice harvest to start at the end of July. Heavy rains in the Delta and Coastal Bend region delayed some second cutting of rice fields during August and early September. The rice harvest began in October, 16 points ahead of the average but was delayed by continued heavy rains in the Delta and Coastal region and was concluded by mid-month 6 points ahead of normal.

National Agricultural Summary

January 2 - 8, 1995

HIGHLIGHTS: Heavy rains deluged California, bringing all field activities to a virtual stop. Small grains in California realized excellent growth from the above-normal precipitation, but wheat in low-lying fields was flooded and yellowing from the surplus water. In western Washington, flooding decreased but damage to winter cereal crops was reported. A widespread storm system deposited heavy rains across Arizona, slowing field work. Winter hit the Nation as the new year began, bringing extreme cold and the first major winter snow storm of the year. The cold winter weather slowed small grain growth across the Nation. An appreciable amount of Iowa grain stored outside still remained at the end of December. Snowfall late in the week in the Great Lakes region was accompanied by very cold temperatures. States in the upper Mississippi Valley and the northern Great Plains remained concerned with the lack of adequate snow cover. Without sufficient protection from the snow cover, fall-seeded crops are at greater risk to winter kill. The low temperatures in the southern Great Plains helped keep insect problems to a minimum. Light snow and rain across the Texas High Plains delayed the completion of the cotton harvest, but benefited moisture-stressed fields. Cotton harvested in Texas was 98 percent complete, 2 percentage points behind last year.

January 4, 1995
1900 UTC



State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 0.58 to 1.50 in. north; 0.42 to 1.45 in. central; 0.07 to 1.08 in. south. Temperatures 3 to 8° below normal statewide. Lows 9 to 20° north; 10 to 26° central; 17 to 28° south. Highs 49 to 63° north; 51 to 67° central; 66 to 74° south.

Seasonal activities: Weaning calves, selling cattle, other seasonal chores.

ARIZONA: Temperatures 1° below normal to 7° above normal. Extremes 14°; 65° higher elevations; 26°; 70° deserts. Precipitation again all areas; 0.21 to 3.31 in.

Rain once again slowed fieldwork. Cotton stalk shredding, plowdown light to active, weather permitting. Alfalfa mostly good. Harvest light. Sheeping off moderate. Stand renovation, stands established mostly normal. Lemon, grapefruit, sweet orange, tangelo harvest western, central areas. Tangerine harvest steady central. Navel orange winding down. Pecan harvest continued central, eastern areas. Vegetable harvest steady. Volume leaders: Head lettuce, broccoli, carrots, green onions, mixed greens. Also available: Beets, bok choy, broccoflower, cabbage, cilantro, endive, escarole, kale, leaf lettuce, leeks, napa, parsley, radishes, rapini, romaine, spinach, swiss chard. Light, steady volume tomatoes available.

ARKANSAS: Temperatures below normal with mixture of winter precipitation weekend, heaviest moisture in the southern region. Extremes 4°; 66°. Precipitation 0.10 to 1.80 in.

Wheat in good condition. Water was standing in some wheat fields. Livestock producers feeding hay. Livestock in good condition.

CALIFORNIA: All portions of State received above to much above normal precipitation except a few places in central valley. Some areas received 25% to 75% of yearly average precipitation especially southern areas. Cloudy skies kept temperatures above normal in northern, central portion of State, below normal southern areas.

Field activities at virtual standstill, general rains most areas. Small grains, winter forages, excellent growth, emergence with above normal precipitation. Many low-lying fields flooded, yellowing from excessive moisture. Some fields sprayed broadleaf weeds between rains. Ground preparation planting small grains, new alfalfa, sugarbeets, other row crops halted until soils dried. Alfalfa greenchopped Tulare County. Bermudagrass, ryegrass cut hay Imperial Valley. Deciduous trees, vine pruning progressed; weed control, dormant spray, fertilizer applications active. Lemon, desert valley grapefruit, navel orange, tangerine harvests continued. Rains caused delays broccoli, cauliflower harvest Monterey County, Imperial, Coachella, San Joaquin Valleys. Harvest cabbage west side Fresno County continued. Carrot harvest delayed Kern County. Celery harvest continued Monterey, Riverside Counties. Tulare County garlic fields progressed well. Fall head, leaf lettuce fields harvested Imperial, Coachella Valleys. Fall head lettuce harvest completed San Joaquin Valley. Spring melons planted Imperial County. Onion growth promoted due recent rains Tulare County. Spring potato planting Kern County slowed due

rain, along with harvest winter potatoes Riverside County. Other crops harvested: Oriental vegetables, ginger root, green onions, radishes, turnips. Preparation, planting spring crops continued where possible. Rainy, cold weather continued to green range, pastures; little growth: Conditions fair to mostly good northern two thirds, poor to mostly fair elsewhere. Supplemental feeding heavy, lighter in areas with better grass growth. Soil moisture adequate, good snowpack in mountains. Cattle, sheep good condition, more sheep pasturing Imperial Valley. Sheep were grazing on alfalfa. Livestock movement moderate to heavy.

COLORADO: Beginning of week had below normal temperatures with minimum amounts of precipitation. Remainder of week had 1 to 2 ft. of snow in mountains while eastern plains had windy, mild, dry conditions.

Winter wheat still snow covered, ranging from trace amounts to 3 in. Major farm activities: Care, feeding of livestock.

FLORIDA: Temperature 2 to 6° below normal north, 1 to 3° below normal central, south. Highs; low 70s northwest to low 80s southeast. Lows; mid 20s western Panhandle, upper 20s Big Bend, northeast, mid 30° central, low 40s interior south, low 50s southeast coast. Rainfall scattered showers Peninsula first half of week, rain, thunderstorms, locally severe strong winds, isolated tornadoes late 6th, 7th. Rainfall 0.50 in. to locally 1.50 in.

Soil moisture short to adequate Panhandle, northern Peninsula, adequate to surplus central, southern Peninsula. Sugarcane harvest, planting active. Tobacco growers planting, tending tobacco beds. Growers making preparations for spring planted crops. Rain most citrus areas, amounts varied, cool temperatures followed. A little new growth southern areas. Rapid harvest of early-mid oranges. Grapefruit most active lower east coast. Tangerine harvest slowing. Temple movement increasing. Caretakers cutting cover crops, hedging, topping, burning trash. Dry, mostly warm weather sped vegetable growth, development, most of week. Scattered storms interrupted field activities late in week. Temperatures in 30s arrived over the weekend in northern, some central areas with no vegetable damage occurring. Planting delayed by mid-November storm now causing some supply gaps in Dade County, some southeastern localities. Volume leaders: Tomatoes, peppers, cabbage, cucumbers, squash, snap beans, strawberries. Pasture feed poor 5%, fair 40%, good 55%. Cattle mostly good.

GEORGIA: Coldest week so far this winter. Temperatures 3 to 6° below normal. Freezing statewide. Coldest single digits, low teens northeast mountains to mostly upper 20s to low 30s extreme south, near coast. Warmest from near 50° north to mid 70s southeast. Rain, locally severe thunderstorms night of 6th. Rain 0.50 in. to locally 2.00 in. or more, heavier central through northeast.

Soil moisture adequate to surplus. Pruning peach trees major activity. Fieldwork limited. Cotton, soybean harvest nearing completion. Pecan harvest winding down. Small grain planting nearing completion. Tobacco bed sowing steady progress, about 10% remaining. Onion transplanting nearing completion. Routine care of livestock, poultry. Pastures mostly poor, cattle fair to good, hogs good.

HAWAII: Several high pressure systems prolonged cool, dry weather over most of State. Temperatures mid 50s to low 80s. Rainfall none to 0.50 in. Winds were light, variable.

Lack of rainfall during this period of usually increased precipitation having mixed effects on agriculture. Crops in wet, windward areas fairing better with increased periods of sunshine, while leeward area crops, especially orchard crops, pastures showing signs of stress from the extended dry conditions.

IDAHO: Temperatures 2 to 14° below normal. Precipitation none to 0.10 in. north, 0.07 to 0.38 in. southwest, none to 0.52 in. south central, none to 0.30 in. southeast. Extreme -29°; 49°. Weather was bitter cold last week. Livestock were receiving more feed because of the low temperatures.

Hay, roughage supply 1% very short, 14% short, 84% adequate, 1% surplus. Calving completed 6%. Lambing completed 4%. Activities: Marketing onions, potatoes, preparing for lambing, calving, monitoring conditions in potato storages, shop work, educational meetings.

ILLINOIS: Winter finally hit State as the new year began. The jet stream dove southward over the central, eastern part of the country letting arctic air plunge into the U.S. as the persistent mild pattern broke. Temperatures 5 to 12° below normal week. Highs teens northwest area to about 33° in the southern tip. Lows were mostly in the single digits, teens. Precipitation 0.10 to nearly 1.00 in. Carbondale reported 1.66 in. At the end of the period northern, central areas had a couple inches of snow on the ground.

Fieldwork became minimal to none. Livestock is stressed with the extreme cold, feedlots have become solid with the frozen topsoil. Grain hauling has increased with the seasonal movement beginning.

INDIANA: Unseasonably cold temperatures dominated early in the week followed by the seasons' first winter storm. Temperatures 8 to 12° below normal for the week with mean readings ranging from the teens north to mid 20s south. Mean daytime highs varied from near 20° north to around 30° south with average lows between 7 to 19°. Coldest readings for the week ranged from 5° below zero north to around 5° above south. Precipitation fell mainly as snow north with a mixture of snow, freezing rain and rain south. Water-equivalent amounts ranged from around 0.25 in. north to near 0.90 in. south.

Cold weather, snow, rain halted most field activities. Winter wheat mostly good condition. Other activities: Hauling grain, applying fertilizer, spreading manure, production meetings, purchasing seed, fertilizer, weaning calves, tax preparation, processing tobacco, equipment maintenance, mending fence, cutting wood, care of livestock. Hay supplies mostly adequate.

IOWA: Cold week with temperatures 8 to 12° below normal. Extremes 29° southeast, 6th; -18° northeast, 7th. Snowfall all but extreme northwest 5th, 6th; greatest amounts southwest, central, northeast with 5 to 8 in. Total snow cover at weekend from 2 in. far northwest, southeast corners to 5 to 10 in. from southwest through northeast. Precipitation trace northwest to 0.61 in. southwest; average 0.27 in., normal 0.22 in.

By the end of December 1994, snow cover across the State averaged 2 in. while frost penetration averaged 5 in. Soil moisture 8% short, 87% adequate, 5% surplus. Quality of hay, roughage supplies 34% fair, 66% good. Availability of hay, roughage supplies 1% short, 94% adequate, 5% surplus. Utilization of stubble fields for grazing 4% none, 46% limited, 43% moderate, 7% extensive. Cattle, calf losses 40% below

average, 56% average, 4% above average. Hog; pig losses, 32% below average, 65% average, 3% above average. Grain movement 3% none, 72% light, 23% moderate, 2% heavy. Approximately 10% of the total grain stored outside during the 1994 harvest remained outside at the end of December.

KANSAS: Temperatures were below normal. Temperatures 12° below normal for the western regions, 9° below for the central, 6° below for the eastern regions. Precipitation above normal. Colder than normal temperatures with below zero readings extended across the State at mid week. Nighttime lows reached zero to 7° below zero across much of State. Some snow cover helped protect the wheat from the severe temperatures. Snow at the weekend provided only limited additional cover since the wind moved most new snow into drifts. Precipitation 0.20 to 0.50 in.

Livestock experienced stress from the extreme cold.

KENTUCKY: Colder, wetter than normal. Temperatures colder, highs 5 to 10° below normal. Normal highs 40 to 45°. Lows 1 to 10° below normal. Normal lows 23 to near 30°. High of 37°, Glasgow, Berea, a few other locations. Lows of zero, Williamstown, Grayson. Single digit lows many locations. Rainfall 0.10 or 0.20 in. above normal to as much as 1.00 in. above normal southeast. Highest amount, Jackson with 2.28 in. London, Somerset recorded over 2.00 in. Normal rainfall a few tenths to 0.75 in. Light snow, freezing rain or drizzle recorded.

Soil moisture adequate to surplus. Fall seeded grains, good condition. Burley stripping active in preparation for market reopening on 1/9. Livestock satisfactory, ample feed supply. Light snow, freezing rain coated roads late in week limiting farm activity some.

LOUISIANA: Weather data not available.

Cool temperatures, wet soils kept farmers out of the fields for most of the week. Main farm activities included: Feeding hay, supplements to livestock because of cold weather, maintaining winter pastures; cane harvest complete, hauling in equipment from sugarcane cane fields, repairing, winter drainage work in cane; crawfishing; harvesting of cold weather crops in Tangipohoa parish. Wheat crop in good shape.

MARYLAND & DELAWARE: MARYLAND: Precipitation 1.03 in., normal 0.78 in. Temperature 30.7°, normal 34.5°. Extremes -2°; 60°.

Livestock, pasture, small grains all remain in good condition. Hay supplies adequate. Activities include preparations for spring planting, general maintenance of equipment, machinery.

DELAWARE: Precipitation 0.90 in., normal 0.80 in. Temperature 31.5°, normal 35.5°. Extremes 50°; 13°.

Small grains, pasture, livestock all remain in good condition. Hay supplies adequate. Activities include general maintenance of equipment, machinery, preparation for spring planting.

MICHIGAN: Extremes -14°; 39°. Precipitation 0.21 to 1.43 in. across the State. Heavy snow fell across the State giving way to very cold temperatures late in the week, over the weekend.

Feed supplies are adequate, livestock are in good condition. Major activities included: Pruning, hauling corn, soybeans to the elevator, getting ready for taxes, plowing snow.

MINNESOTA: Temperatures 3 to 7° below normal. Extremes -23°; 29°. Precipitation 0.16 in. below normal.

Open weather to date this winter has not placed heavy pressure on livestock. A lack of snow cover leaves fall seeded crops at a greater risk to winter kill.

MISSISSIPPI: Weather data not available.

Days suitable for fieldwork 1.9. Soil moisture 60% adequate, 40% surplus. Livestock 27% fair, 73% good. Hay supply 100% adequate. Feed grain supply 100% adequate. Pasture feed 87% of normal. Activities: Feeding livestock. Frost, cold temperatures affecting ryegrass, livestock.

MISSOURI: Temperatures 5° below normal at Caruthersville to 13° below normal at Kansas City. Precipitation 0.34 in. for the State, ranging from 0.14 in., north central to 0.94 in., southeast.

Rain, snow, sleet, freezing rain occurred in varying amounts across the State. Farmers caring for livestock, other winter activities.

MONTANA: Below normal temperatures. Little precipitation, southwest division receiving the most.

Winter wheat 16% poor, 36% fair, 48% good. Protectiveness of snow cover for winter wheat 77% poor, 23% fair. Wind damage to winter wheat fields 8% none, 90% light, 2% moderate. Grazing 88% open, 12% difficult.

NEBRASKA: Temperatures 6 to 13° below normal. Scattered precipitation in the form of snow produced rainfall equivalents varying from less than 0.10 in. west to 0.75 in. east.

Producer activities included marketing, delivering grain, monitoring grain bins, record keeping, financial planning, livestock care, routine chores.

NEVADA: New year began with dry, seasonal weather, strong Pacific storm moved into western areas on 4th, dropping up to two feet of snow in the central Sierra, over 1.00 in. of rain at some southern locations. Unsettled weather remained in the State through 6th, when another strong storm arrived. Heavy snows, high winds created blizzard conditions in the central, northern Sierra through the weekend. Precipitation over 5.00 in. at some Sierra locations, 1.43 in. Las Vegas. Precipitation was lightest in the northeast. Temperatures slightly above normal.

Main farm, ranch activities: Livestock feeding, hay marketing, equipment maintenance, record keeping, attending meetings.

NEW ENGLAND: Precipitation 0.15 to 2.21 in. north, 0.92 to 2.14 in. south. Temperatures 13 to 25° north; 22 to 35° south. Maximum temperatures 25 to 38° north; 37 to 56° south. Minimum temperatures -12 to 20° north; -2 to 19° south.

Major farm activities: Caring for livestock, preparing for lambing, moving crops out of storage, general maintenance.

NEW JERSEY: Temperatures were below normal, 24° north, 29° south, 32° coastal. Extremes 5°; 55°. Rainfall 1.01 in. north, 1.46 in. south, 1.41 in. coastal. Heaviest 24 hour total 1.58 in. on 7th, 8th. Traces of snowfall in numerous locations.

Farmers winterizing equipment, caring for livestock.

NEW MEXICO: Winter storm hit the State midweek leaving generally 6 to 12 in. of snow above 5000 ft., excess of 2 ft. of snow above 9000 ft. Rapid warming followed storms toward week's end. Temperatures a few degrees below normal in the east, normal to a little above normal in the central, western sections of State. Precipitation 1.93 in. at Silver City, 1.39 in. at Chama.

A majority of State ranchers continued to supplementally feed their livestock. Winter storm during the week provided much needed moisture to State. Many ranchers are still having to haul water to their livestock.

NEW YORK: Light snow fell in early week in the northwest, rain was received in the southeast. A flow of cold air at midweek brought heavy snow to the western Adirondacks. A continuation of the cooling trend brought low temperatures to below zero on the 5th. Light snow returned at weekend. Extremes: -16°; 72°.

Major activities: Grading, packing potatoes, onions, apples, tending livestock, maintenance, winter chores. Snow, ice, cold weather made outside work difficult.

NORTH CAROLINA: Mean temperature 53° at Asheville to 62° at Cape Hatteras. Rainfall 0.17 in. at Raleigh to 2.51 in. at Cape Hatteras.

Days suitable for fieldwork 4.3. Soil 5% short, 68% adequate, 27% surplus. Crop conditions: Wheat 15% fair, 67% good, 18% excellent; oats 12% fair, 66% good, 22% excellent; barley 15% fair, 77% good, 8% excellent; rye 8% fair, 69% good, 23% excellent; pasture feed 4% poor, 28% fair, 61% good, 7% excellent; soybeans 38% fair, 55% good, 7% excellent; hay, roughage supplies 8% short, 78% adequate, 14% surplus; feed grains supplies 6% short, 75% adequate, 19% surplus; cotton harvested 95%, 98% 1993, 92% avg.; soybeans harvested 79%, 85% 1993, 84% avg.; wheat planted 95%, 92% 1993, 91% avg.; wheat emerged 92%, 80% 1993, 79% avg. Activities included: Harvesting cotton, soybeans, preparing land, planting small grain. Other activities included: Tending livestock; equipment repair, general farm maintenance.

NORTH DAKOTA: Below normal temperatures throughout the State. Temperatures 3° below normal, southeast to 5° below normal, central, southwest, south central. Extremes -25° northwest, north central; 29° southwest.

Additional snow improved cover in some areas. Plowed fields in many areas still lacking snow cover. Livestock conditions good to excellent with adequate feed supplies. Livestock, grain marketing normal.

OHIO: Drier, colder than normal weather occurred the past seven days. A winter storm associated with low pressure moved across the State 7th, early 8th. It produced freezing rain, sleet, snow. High temperatures low to mid 20s in north, central to the upper 20s, lower 30s in south, which was mostly 6 to 10° below normal. Lows averaged from the single digits to mid-teens in the north, central to the teens, around 20° south, which was mostly 2 to 9° below normal. Coldest readings were in the single digits to a few degrees below zero. Precipitation totals, water equivalent, averaged mostly around 0.30 to 0.70 in. This was below normal by 0.10 to 0.40 in. across the state, except for above normal in the far south by up to 0.30 in. Snow cover by the end of the seven-day period averaged around 1 in. or less in the south half of State, up to 5 in. north.

Snow accumulation will help protect winter sown grains.

OKLAHOMA: Temperatures 2.8° below normal southwest to 7.1° below normal north central. Precipitation 0.03 in. central to 0.41 in. southeast.

Prices for feeders steers, heifers are mostly steady to firm.

OREGON: Temperatures below normal statewide, except southern coast 1 to 5° above normal. North central coldest 11° below normal. Precipitation high plateau region 1.30 in., coast 0.90 in., western sections 0.50 in., elsewhere less than 0.40 in.

Soil moisture adequate. Winter pruning continued, fruit orchards, grapes, berries. Nurseries balling, burlapping deciduous, evergreens. Supplemental feeding continued statewide.

PENNSYLVANIA: First appearance of cold Arctic air. Cold, dry week. Temperature 24°, 3° below normal. Extremes -10°; 53°. Precipitation 0.66 in., 0.01 in. below normal.

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

PUERTO RICO: No weather data available.

SOUTH CAROLINA: Rainfall 1.90 in. with freezing rain on 6th in Upstate. Temperatures 2° below normal.

Farm activities: Few activities due to excess rainfall. Pasture, livestock condition remained good, with supplemental feeding.

SOUTH DAKOTA: Temperatures generally near normal to 10° below normal. Extremes outside of Black Hills -20°; 47°. Little or no measurable precipitation statewide.

Lack of snow cover on winter wheat becoming a concern over most of the State. Major farm activities: Routine chores, feeding livestock.

TENNESSEE: Temperatures 6 to 10° below normal. Wintery mix; rain, freezing rain, sleet 6th. Extremes 4° Crossville; 53° Memphis. Precipitation below normal east, middle areas, above normal across Cumberland Plateau, west.

Wheat good condition. Feeding hay.

TEXAS: Series of upper air disturbances, a couple of surges of Arctic air resulted in cold, wet weather much of week. Snows of generally 1 to 2 in. recorded in parts of Panhandle, at a few areas in northern south plains. Freezing temperatures occurred in southeast, south central, southwest Texas. Spell of warmer, dry weather started late in week. Temperatures below normal except for northern high plains. Readings 11° below normal in Lower Rio Grande Valley. Precipitation was recorded in all districts. However, amounts were below normal except for near normal amounts in far southern areas outside of Lower Valley.

Crops: Light snow, rain across the Low Plains continued to hamper completion of cotton harvest. Few fields were harvested as weather conditions allowed, 98% harvested, 100% 1993. Colder temperatures continued to cause delays to completion of peanut harvest at beginning of week, but weekend harvest was virtually completed, 100% harvested, 100% 1993. Small grain growth was beginning to slow, as freezing temperatures prevailed. Snow, light rain across Plains should benefit moisture stressed fields in area. Colder weather has helped control greenbugs, other insect problems. Fields across much of central Texas, Blacklands remained too wet for grazing. Winter wheat 71% normal, 58% 1993; 99% emerged, 100% 1993.

Commercial Vegetables: Rio Grande Valley: Drizzling rain, cooler temperatures slowed citrus harvest in some parts. Cabbage harvest was also delayed in some areas. Peppers, onions continued to make good progress. Preparations for vegetable planting continued on irrigated land as weather conditions permitted. San Antonio-Winter Garden area: Colder temperatures, light rains caused minimal delays to spinach, cabbage and broccoli harvest. East Texas: Most land preparations were halted due to colder temperatures, wet conditions across much of east Texas. Trans-Pecos area: Colder temperatures caused minor delays to land preparations for spring planting. High Plains: Land preparations continued as weather conditions allowed. Pecans: Colder temperatures caused some delays to completion of pecan harvest. Harvest in many areas was virtually completed due to short crop. Orchard cleanup continued in south Texas, 89% harvested, 93% 1993.

Range and Livestock: Livestock remained in good condition, however some were showing signs of stress due to the week's extreme cold temperatures. Across much of State, producers increased supplemental feeding due to cold, freezing temperatures. Producers were also busy breaking ice throughout the Plains.

UTAH: Temperature maximums 6° below normal; minimums normal. Precipitation light to moderate across State, with Dixie division receiving 1.02 in.

Major farm, ranch activities were cleaning corrals, feeding, caring for livestock, shipping onions, preparing farm records, repairing machinery. Fall seeded grains are in good condition where there is adequate snow cover.

VIRGINIA: Temperatures below normal. Extremes 1°; 51°. Precipitation averaged above normal.

Days suitable for fieldwork 4.6. Topsoil moisture 37% short, 59% adequate, 4% surplus. Pasture feed 2% very poor, 27% poor, 47% fair, 24% good. Livestock 21% fair, 79% good. Small grain, grazing crop 41% fair, 57% good, 2% excellent. Forage from pastures, winter grazing crops dairy cattle 8%, beef cattle 25%, sheep 20%. Activities: Liming, plowing fields, production meetings, taxes. Other activities: Feeding livestock, fence repair, routine farm chores.

WASHINGTON: Temperatures normal to 8° below normal west; 4 to 15° below normal east. Precipitation none to 0.06 in. west; none to 0.02 in. east.

Days suitable for fieldwork 3.5. Soil moisture 51% short, 45% adequate, 4% surplus. Hay, other roughage supplies 3% very short, 6% short, 91% adequate. Range, pasture feed 40% very poor, 55% poor, 5% fair. Winter wheat, dryland 5% very poor, 33% poor, 47% fair, 15% good; irrigated, 13% fair, 82% good, 5% excellent. Flooding decreased on west side of State. Flood damage reported on some winter cereal crops. Oyster, crab harvest continued. Some snow received on east side of State. Livestock feed increased because of colder weather.

WEST VIRGINIA: Temperature 25°. Extremes -2°; 50°. Precipitation 1.21 in.

Farm activities: General farm maintenance, fence repair, feeding, marketing livestock, preparing for lambing season, bookkeeping.

WISCONSIN: Temperature 8°. Extremes -21°; 32°. Precipitation trace to 0.20 in. Cold temperatures were predominant across the State with highs in the teens, low 20s early in the week. Highs were only in single digits as the week progressed. Snowfall began late in the week with accumulations of 1 to 2 in. the north to 3 to 5 in. south.

Farming activity was minimal over the past week due to cold temperatures. Most of the activity was farmers plowing snow.

WYOMING: Temperatures below normal for the entire State. Jackson was the cold spot 25° below normal. Rest of the State 10 to 15° below normal. Precipitation was below normal for most of State. Exception was portions of the southeast. Southwest was as much as 0.50 in. below normal. Chugwater, Archer received the most precipitation with 0.18 to 0.17 in. reported, respectively.

Hay, roughage supplies are still short, livestock are in good to excellent condition.

International Weather and Crop Summary

HIGHLIGHTS

January 1 - 7, 1994

NORTHWESTERN AFRICA: Although showers benefited winter grains in Algeria and Tunisia, a developing drought threatened crops in Morocco.

SOUTH AFRICA: Hot, dry weather reduced moisture for normal corn development, with heat stress in western corn areas.

FSU-WESTERN: Overwintering conditions were favorable for winter grains.

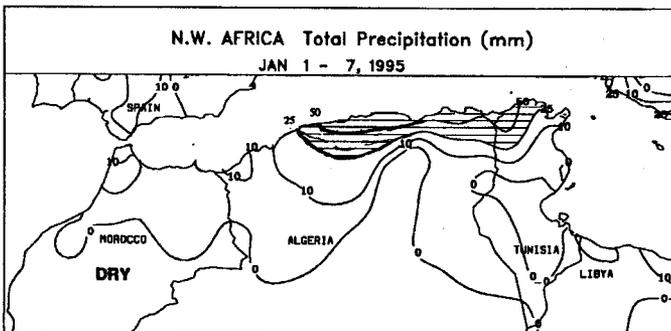
SOUTHEAST ASIA: Heavy rains returned to Java and the Philippines, increasing irrigation reserves but causing some localized flooding.

EASTERN ASIA: Winter wheat remained dormant across the North China Plain despite mild weather.

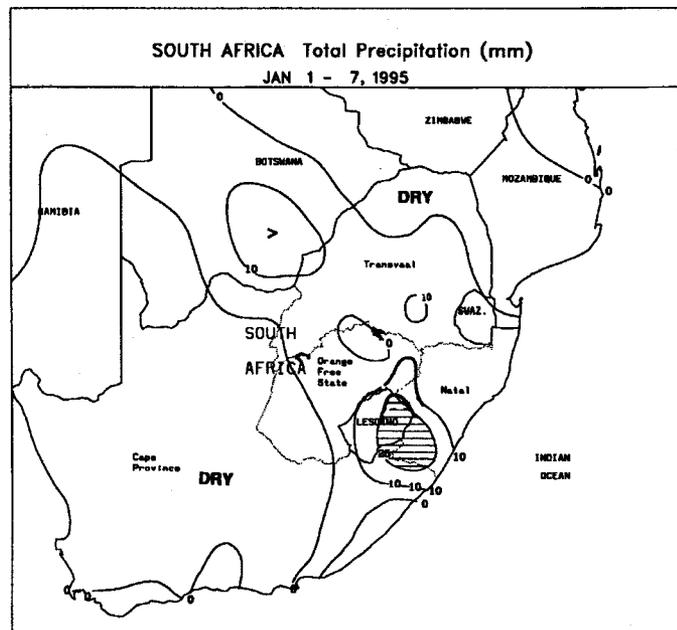
EUROPE: Some beneficial rain fell in northern Spain, while snow protected winter grains from colder weather across the north.

AUSTRALIA: The first significant rain of the season brought relief to eastern summer crops.

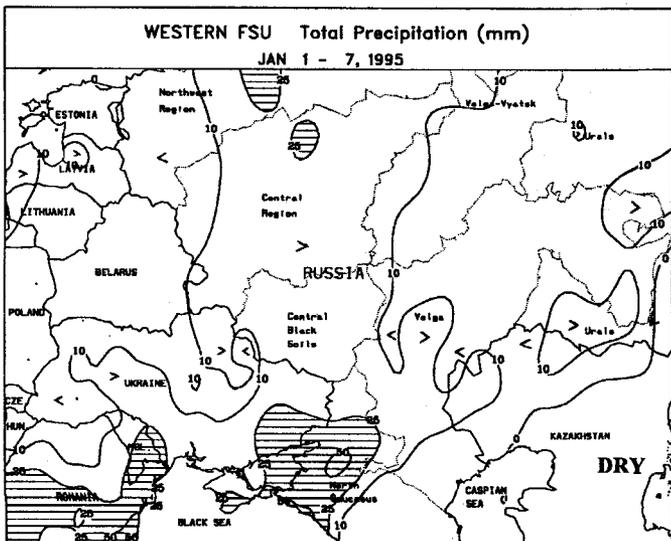
SOUTH AMERICA: Widespread showers benefited reproductive corn and vegetative soybeans across the region.



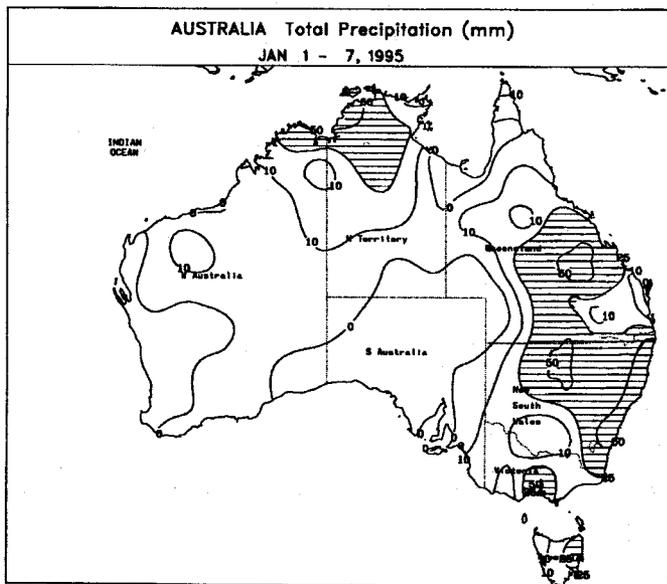
NORTHWESTERN AFRICA: Wet weather (25-80 mm) continued along northernmost winter grain areas in Algeria and Tunisia, maintaining favorable moisture for winter grain development. Light showers (around 10 mm) over western Algeria and inland crop areas in eastern Algeria and Tunisia improved conditions for emergence and early crop growth. However, soil moisture reserves remained limited in these areas and continued rain is needed for normal winter grain development. In Morocco, chronic dryness continued to adversely affect winter grain development, reducing crop prospects. The dryness in Morocco has persisted since early November, depleting soil moisture reserves.



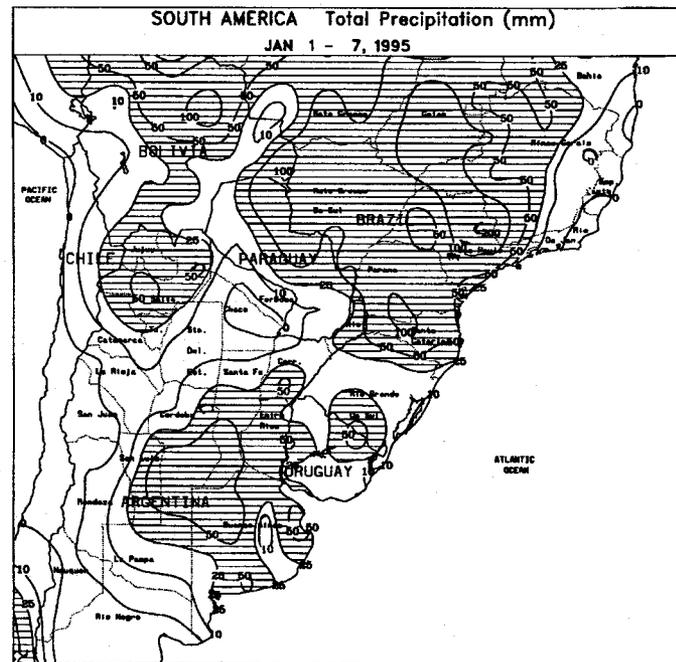
SOUTH AFRICA: Hot, dry weather dominated the region, reducing moisture for normal crop development and further stressing western corn. Highs in the west reached the mid 30's C daily, as weekly average temperatures across the entire corn belt ranged from 2 to 3 degrees C above normal. In eastern corn areas, where conditions had been generally favorable, only a few locations received more than 10 mm. The dryness extended to rainfed sugarcane areas of Kwazulu-Natal, where rainfall totaled less than 25 mm following last week's beneficial rains.



FSU-WESTERN: Unseasonably warm weather early in the week was followed by a cooling trend that ushered in more seasonable temperatures. High temperatures, that ranged from 1 to 13 degrees Celsius (C) early in the week, fell to below freezing by week's end. Light snow accompanied the cooler weather, providing a fresh snow cover over most areas. The exception was in eastern Ukraine and the North Caucasus Region in Russia, where the precipitation (10-59 mm) fell mostly in the form of rain. On January 7, snow cover amounts reportedly ranged from 7 to 31 cm in northern Russia, 1 to 10 cm in western Ukraine, 1 to 3 cm in Belarus, and 4 to 7 cm in the Baltic States.



AUSTRALIA: Widespread rains (10-50 mm) covered interior eastern Australia, bringing relief to drought-stressed summer crops. This was the first significant rain of the season and should stabilize yield prospects for cotton and sorghum. The rains even reached into western Queensland and western New South Wales, benefiting pastures. Light to moderate rain (10-25 mm) aided newly planted sugarcane across the northeast coast of Queensland. Temperatures averaged near normal across the east.



SOUTH AMERICA: In Argentina, widespread moderate showers (25-75 mm) fell across the main summer crop areas, aiding reproductive corn and vegetative soybeans. Rainfall in the past 2 weeks has greatly increased soil moisture for summer crops across the region. Temperatures averaged near normal across central Argentina, keeping evapotranspiration rates at seasonal levels. Only light rain (5-15 mm) fell across the northern cotton areas, where soil moisture should still be adequate. In southern Brazil, widespread moderate to heavy showers (20-100 mm) again covered the primary soybean areas, favoring vegetative to early reproductive soybeans. Heavy showers (75-125 mm, with isolated amounts greater than 200 mm) fell across Sao Paulo and southern Minas Gerais favoring coffee, citrus, and sugarcane, but causing some local flooding. Coastal areas of Espirito Santo and eastern Bahia received only scattered light rain (5-15 mm). These regions have been receiving below-normal rainfall for several months. Light rain (6-15 mm) fell over southern Paraguay, where soil moisture is still adequate for soybeans and cotton. Temperatures averaged 1-3 degrees C above normal across southern Brazil and Paraguay.

(Continued from front cover)

at Montague, NY, east of Lake Ontario. In the Lake Erie snowbelt, Silver Creek, NY measured 29 inches. Along the leading edge of the arctic boundary, a developing storm dumped heavy snow in coastal New England, including a foot in Bath, ME. Farther west, Scottsbluff, NE reported -16°F on Sunday, and a daily-record of -22°F on Wednesday after a reinforcing arctic surge. Elsewhere on Wednesday, lows included -40°F in Wisdom, MT, -13°F in Spencer, IA, and -5°F in Moline, IL. Winter wheat in the Plains and the Ohio Valley was largely insulated by snow cover where temperatures dipped below 0°F, while most unprotected areas had readings no lower than the single digits.

Meanwhile in the West, the last in a series of storms to drop southward along the coast charged ashore in southern California at midweek. Well in advance of the system, snow, sleet, and freezing drizzle plagued the southern High Plains. By Tuesday morning, 4 inches of snow blanketed Abilene, TX, while an inch covered Midland, TX. In Utah's Wasatch Range, Alta tallied 41 inches of snow in 4 days, 26 inches of which fell in 24 hours on January 5 - 6. In Arizona, 24-hour amounts (January 4 - 5) included 18 inches at Greer, 17 inches at Alpine, and 16 inches at Pinetop. Belmont, AZ, near Flagstaff, collected a storm total of 17.6 inches. Seven Springs, NM, near Santa Fe, netted 30 inches of new snow. Farther west, in southern California, heavy rain caused a few mud slides and extensive urban flooding. On Wednesday, Riverside established a single-day January rainfall record with 3.16 inches; San Diego received its 14th heaviest 1-day deluge on record with 2.24 inches. Los Angeles absorbed a storm total of 5.37 inches.

Precipitation spread rapidly northeastward after midweek. On Friday, snowfall included 9 inches in Des Moines, IA, 5½ inches in Madison, WI, 5 inches in Moline, IL, 4 inches in Russell, KS, and 2 inches in Kirksville, MO. Freezing rain plagued areas from eastern Oklahoma to the central Appalachians. Farther south, a broad area of rain overspread the Southeast and the Atlantic Seaboard. Nearly 2 inches of rain fell in Nashville, TN and Boston, MA. On Friday into early Saturday, the storm's trailing cold front swept across the Southeast, producing 13 tornadoes. Five tornadoes hit Louisiana before noon, followed by three twisters apiece in North Carolina, South Carolina, and Florida. One tornado in Florida, a quarter-mile wide, traveled 12 miles across Marion County, reportedly destroying 150 homes. A fatality occurred at Elizabethtown, NC. In addition, straight-line (non-tornadic) winds gusted to 147 mph in Goldsboro, NC.

Meanwhile, a powerful storm took aim on the West. On Saturday, winds were clocked to 128 mph in the central Sierra Nevada atop Slide Mountain (near Reno, NV). Nearly 3 feet of new snow cloaked Mammoth Lakes, CA. Farther east, a foot of snow buried Virginia City, NV. At lower elevations of northern California, heavy rain caused flooding and mud slides. Weekly rainfall (through 4 p.m. PST on January 8) included 8.77 inches at the Marin Civic Center, 7.31 inches at Blue Canyon (rain and liquid-equivalent snow), 6.54 inches at Kentfield, and 6.15 inches at Mount Shasta.

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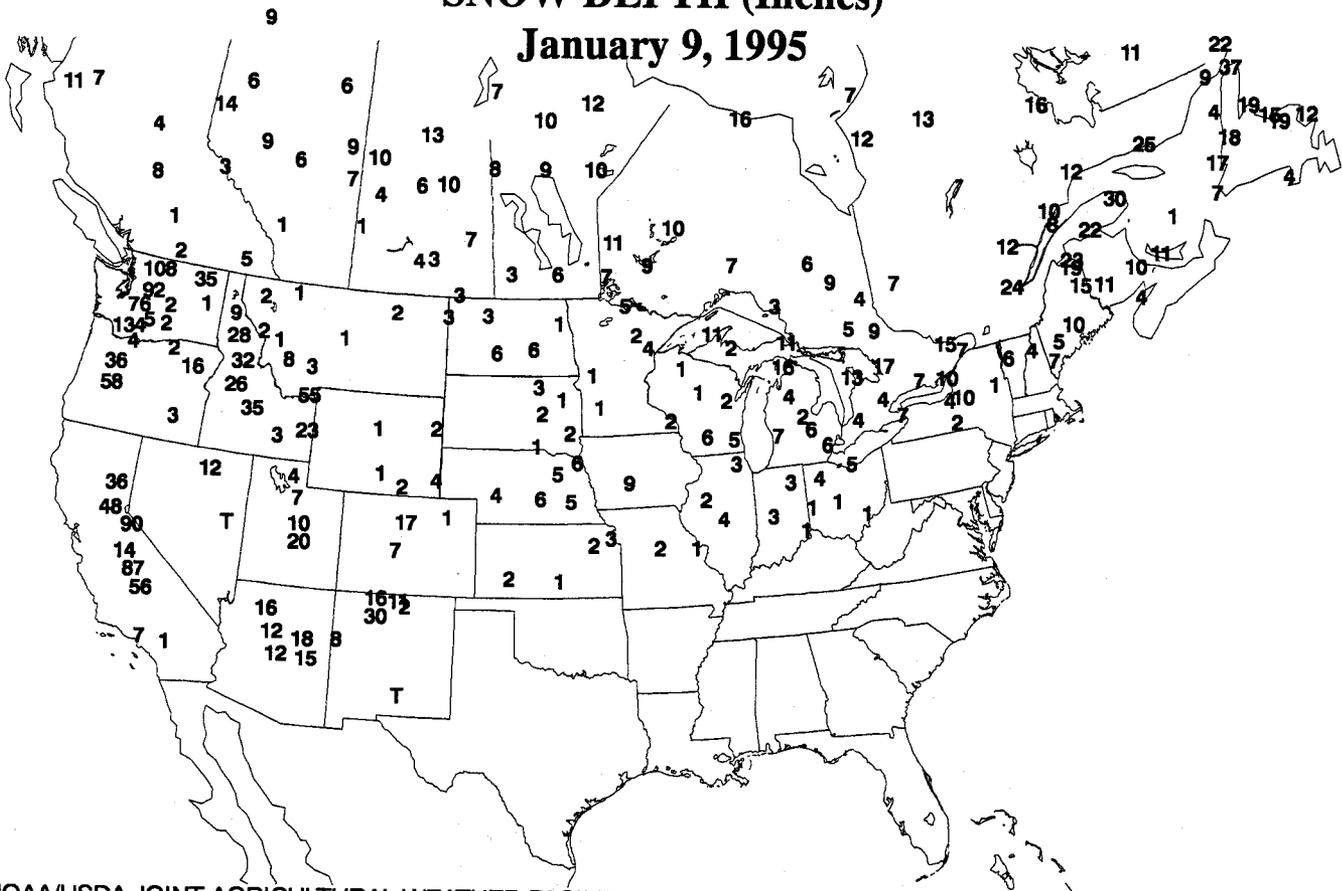
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SNOW DEPTH (Inches)

January 9, 1995



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