WEEKLY WEATHER AND CROP BULLETIN

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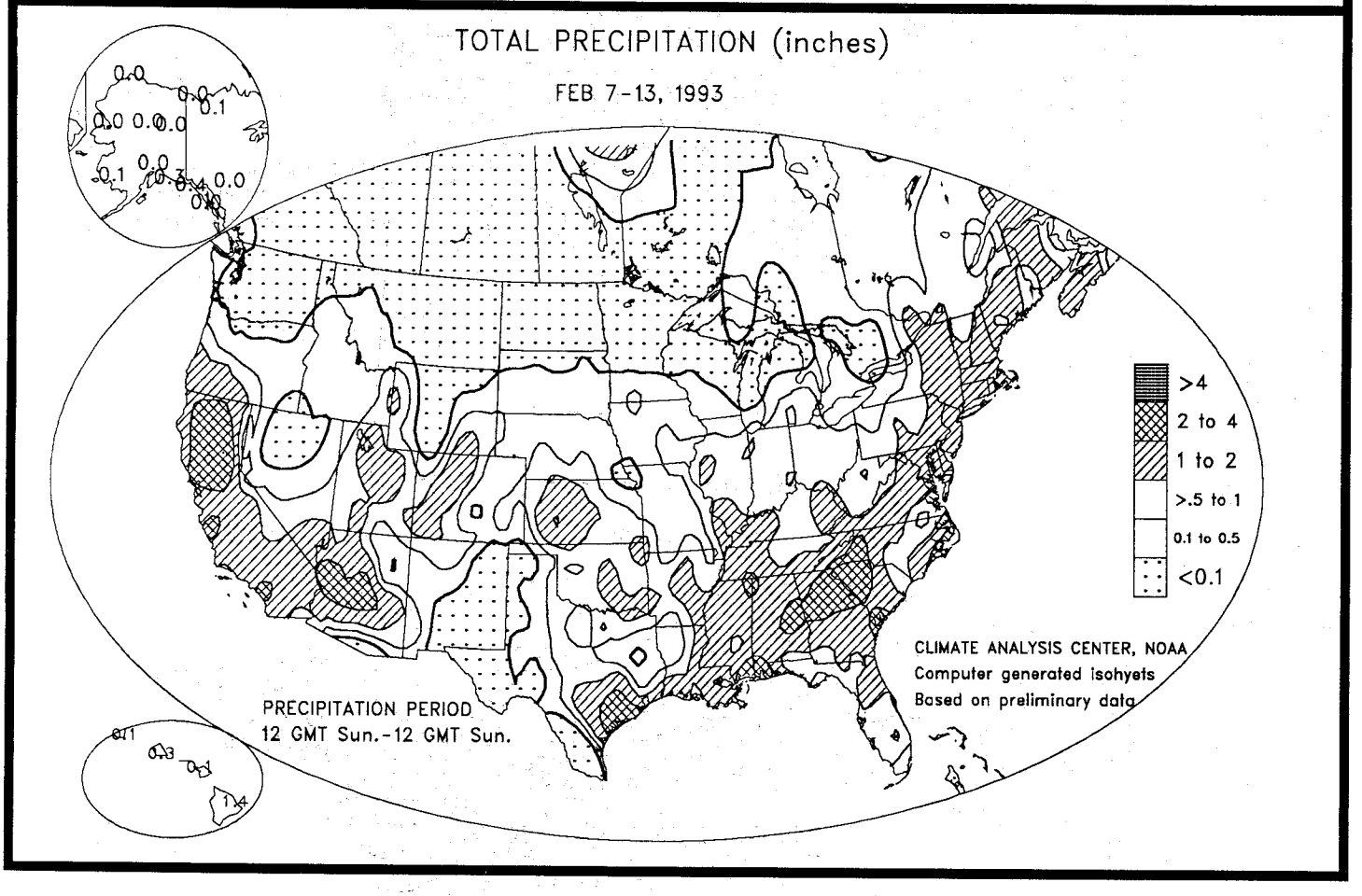

HIGHLIGHTS

February 7 - 13, 1993

Heavy precipitation returned to **California** and the **Southwest** on February 7 for the first time in nearly 3 weeks. Rain and snow spread eastward as the week progressed, reaching the **Northeast** by Friday. Prior to the arrival of stormy weather, **New England** experienced its coldest weather of the winter. On Sunday morning, **Island Pond, VT**, recorded -43°F. It was the coldest morning in **Albany, NY** (-14°F), since January 27, 1987, and the coldest in **Portland, ME** (-16°F), since January 22, 1984. Meanwhile, a powerful but compact storm center exited the **southern Atlantic coast** after producing up to 3 inches of rain in **Georgia** and **South Carolina**. Farther west, heavy rain spread into **southern California**, causing widespread flash flooding. Rainfall topped 6 inches at coastal **Malibu, CA**. Inland, rainfall maxima ranged from 5.03 inches in **Beaumont, CA**, to 7.81 inches at **Lake Arrowhead** (north of

(Continued to p. 7)

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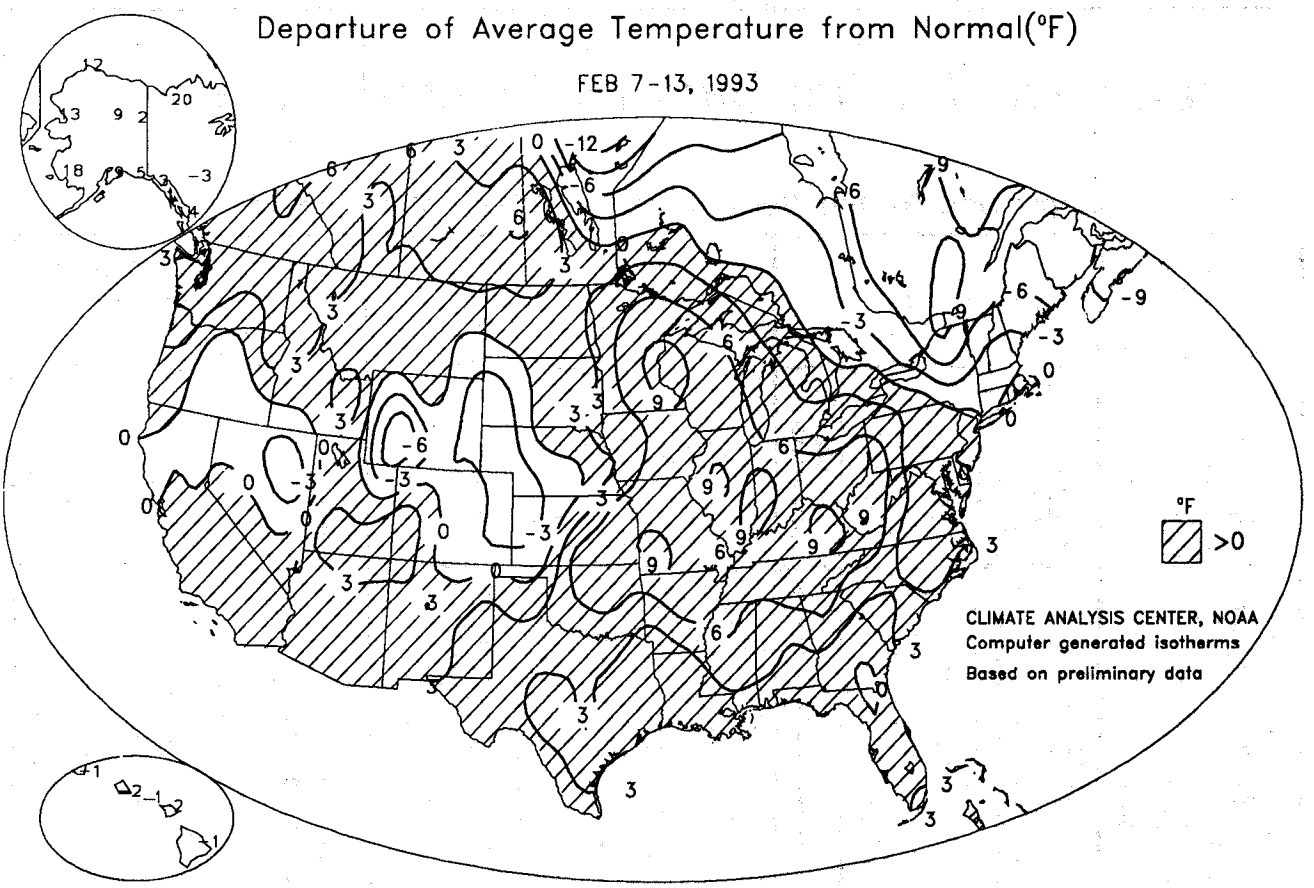
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°F
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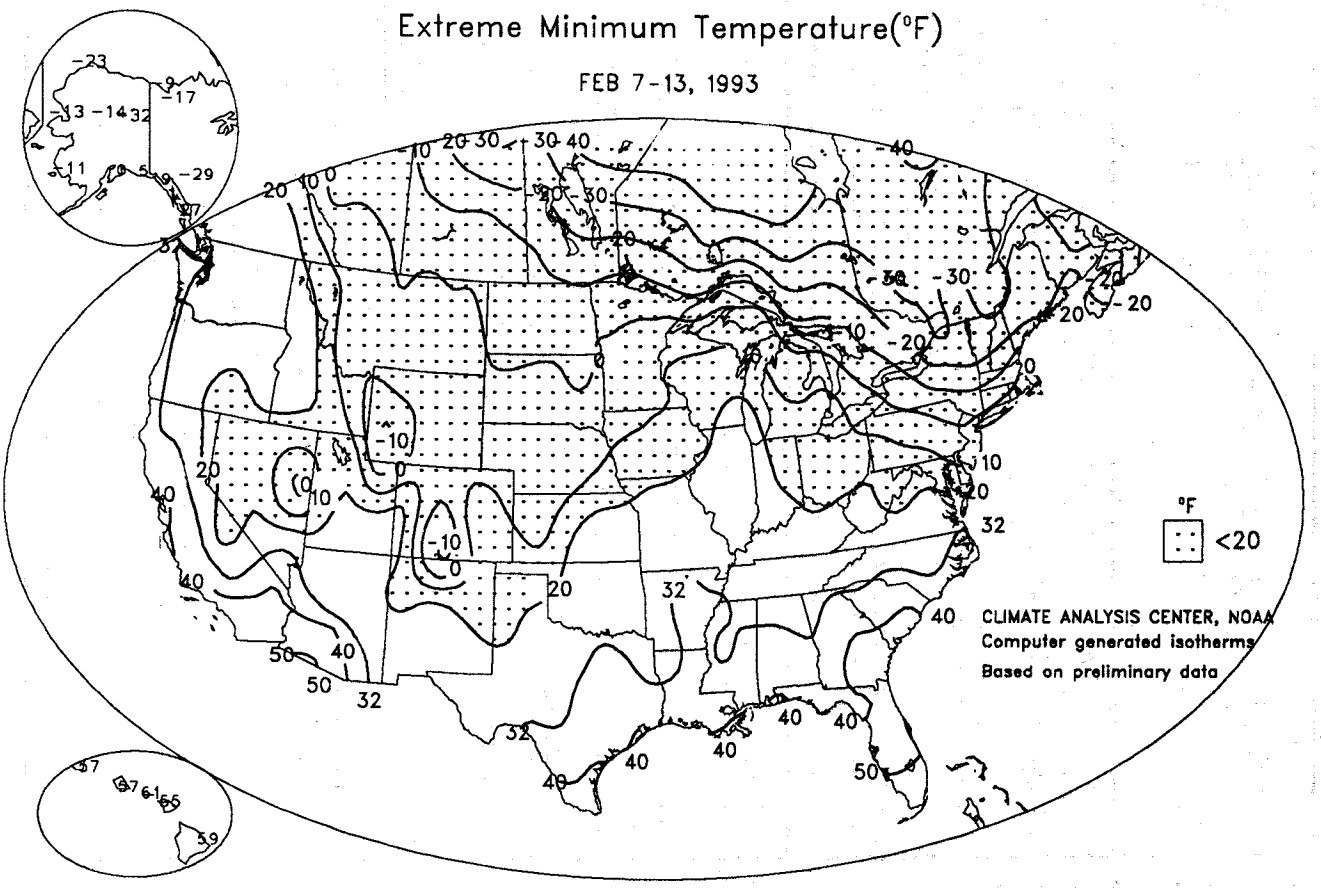
Computer generated isotherms
Based on preliminary data


Extreme Minimum Temperature(°F)
FEB 7-13, 1993
°F
<20
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

National Weather Data for Selected Cities

Weather Data for the Week Ending February 13, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	60	39	71	30	50	4	1.0	-.2	.9	12.3	101	7.1	97	92	54	0	2	2	1
MOBILE	65	43	71	37	54	1	1.9	.8	1.5	15.9	131	10.6	158	97	49	0	0	3	1
MONTGOMERY	61	42	72	33	51	3	2.4	1.3	1.2	15.4	141	7.6	125	96	55	0	0	3	2
AK ANCHORAGE	28	15	37	0	22	5	T	-.2	T	2.5	110	1.8	151	91	68	0	7	1	0
BARROW	2	-16	19	-23	-7	12	T	.0	T	.8	176	.5	169	83	73	0	7	1	0
FAIRBANKS	12	-14	23	-29	-1	4	.0	-.1	.0	3.6	249	2.4	326	84	68	0	7	0	0
JUNEAU	38	27	42	20	32	5	T	-.9	T	19.9	199	14.2	263	100	81	0	7	1	0
KODIAK	38	32	40	13	35	4	3.5	2.1	1.0	11.3	82	6.4	78	98	76	0	2	6	4
NOME	29	8	40	-13	18	15	.2	.1	.1	2.9	174	1.6	151	88	64	0	7	2	0
AZ PHOENIX	67	50	75	46	58	3	.9	.7	.8	9.2	517	6.1	636	82	40	0	0	3	1
PRESCOTT	50	30	57	27	40	0	1.9	1.7	1.5	8.6	351	6.6	492	92	51	0	5	4	1
TUCSON	66	45	77	37	56	2	.2	.0	.1	8.4	414	5.0	452	86	32	0	0	3	0
YUMA	70	53	76	48	62	2	.5	.5	.5	5.2	629	2.2	453	63	31	0	0	2	1
AR FORT SMITH	59	34	71	27	47	6	.4	-.2	.3	10.0	178	4.6	160	98	51	0	3	2	0
LITTLE ROCK	59	41	68	35	50	7	1.3	.3	.8	10.0	102	5.5	97	79	50	0	0	2	1
CA BAKERSFIELD	62	46	73	40	54	1	.7	.4	.5	4.8	228	3.0	204	94	55	0	0	2	0
EUREKA	56	45	59	37	51	2	1.6	.3	.8	18.2	116	8.9	93	91	66	0	0	5	1
FRESNO	61	44	68	35	52	3	1.1	.6	.6	9.0	198	6.3	215	92	56	0	0	3	1
LOS ANGELES	64	52	72	48	58	1	2.8	2.1	1.8	17.3	293	13.2	307	94	59	0	0	3	2
REDDING	56	43	62	35	50	-1	3.5	1.8	2.0	24.6	131	14.2	122	97	59	0	0	5	2
SACRAMENTO	59	43	63	35	51	1	2.1	1.4	1.3	16.1	192	11.1	201	99	63	0	0	4	1
SAN DIEGO	64	53	66	50	59	1	1.5	1.1	1.0	13.1	316	10.6	378	93	61	0	0	4	1
SAN FRANCISCO	58	47	60	43	53	1	.8	.0	.4	18.2	185	12.2	194	94	66	0	0	4	0
CO DENVER	43	20	52	10	32	-1	.6	.4	.4	1.7	134	1.0	134	90	44	0	7	3	0
GRAND JUNCTION	45	31	47	25	38	6	.2	.0	.1	2.1	143	1.7	195	98	59	0	6	4	0
PUEBLO	45	19	56	13	32	-2	T	.0	T	.9	144	.5	131	92	43	0	7	1	0
CT BRIDGEPORT	37	23	45	3	30	0	1.2	.5	.8	8.2	99	3.9	85	85	47	0	6	2	1
HARTFORD	36	19	50	-3	28	1	1.1	.3	.8	8.1	89	3.7	75	83	37	0	7	2	1
DC WASHINGTON	45	28	55	18	37	0	.9	.3	.9	6.7	95	3.8	98	93	50	0	5	2	1
FL APALACHICOLA	65	49	69	42	57	3	.4	-.5	.4	9.0	104	7.4	143	--	--	0	0	0	0
DAYTONA BEACH	70	52	77	46	61	3	1.5	.7	1.4	6.4	108	6.0	159	97	60	0	0	2	1
JACKSONVILLE	65	47	75	41	56	1	1.2	.3	1.0	5.9	83	5.2	114	99	64	0	0	5	1
KEY WEST	76	66	82	63	71	2	T	-.5	T	8.0	184	8.0	297	87	60	0	0	0	0
MIAMI	77	62	84	55	70	3	T	-.5	T	7.7	158	5.8	191	93	57	0	0	1	0
ORLANDO	72	53	81	46	63	2	.4	-.4	.3	6.1	113	5.3	150	96	52	0	0	2	0
TALLAHASSEE	67	45	71	36	56	3	.8	-.5	.7	12.5	109	11.1	162	95	53	0	0	2	1
TAMPA	69	53	77	44	61	1	.9	.2	.8	5.5	98	4.5	130	96	63	0	0	2	1
WEST PALM BEACH	77	58	83	55	68	2	.5	-.2	.4	11.4	185	9.6	244	95	56	0	0	2	0
GA ATLANTA	56	44	67	39	50	6	2.9	1.9	1.7	13.2	119	6.8	100	99	65	0	0	5	2
AUGUSTA	59	40	71	37	50	3	1.4	.4	.9	10.0	111	7.7	134	98	60	0	0	4	1
MACON	59	43	68	37	51	3	1.4	.3	1.1	10.0	97	6.8	109	94	65	0	0	3	1
SAVANNAH	59	46	74	44	53	2	2.2	1.4	.9	9.3	127	7.8	172	97	63	0	0	5	3
HI HILO	77	63	81	59	70	-1	1.4	-1.9	.8	20.5	73	3.5	23	92	59	0	0	4	1
HONOLULU	79	62	81	58	70	-2	.3	-.3	.3	7.5	89	1.1	21	93	52	0	0	1	0
KAHULUI	80	58	84	55	69	-2	.1	-.7	.1	4.8	58	2.3	42	88	49	0	0	1	0
LIHUE	77	63	82	58	70	-1	.1	-.8	.1	23.1	171	.9	11	86	55	0	0	2	0
ID BOISE	44	30	47	26	37	2	.1	-.1	.1	2.7	77	1.8	82	98	66	0	6	3	0
LEWISTON	47	35	54	31	41	3	.2	.0	.1	1.6	51	1.2	66	88	63	0	2	4	0
POCATELLO	39	25	43	9	32	3	.5	.3	.3	4.6	189	2.8	185	93	64	0	5	5	0
IL CHICAGO	35	27	39	25	31	8	.1	-.1	.1	6.4	146	3.9	190	94	74	0	6	3	0
MOLINE	35	29	40	20	32	8	.4	.1	.2	6.4	158	2.4	114	96	80	0	6	4	0
PEORIA	38	30	50	25	34	9	.5	.2	.4	7.1	169	4.1	188	95	76	0	6	4	0
QUINCY	42	31	59	24	37	9	.5	.1	.3	4.7	129	2.7	141	94	72	0	5	4	0
ROCKFORD	33	27	35	25	30	8	.2	-.1	.1	6.0	160	2.6	141	94	78	0	7	5	0
SPRINGFIELD	45	33	63	25	39	11	.5	.1	.4	6.8	156	4.5	198	96	71	0	3	3	0
IN EVANSVILLE	51	33	66	29	42	8	.5	-.2	.5	5.8	75	4.1	96	92	63	0	4	3	0
FORT WAYNE	38	25	50	15	32	7	.6	.2	.3	8.5	159	5.9	200	94	69	0	7	3	0
INDIANAPOLIS	44	30	65	20	37	9	.5	-.1	.3	5.6	85	3.8	102	93	69	0	4	3	0
SOUTH BEND	36	26	41	18	31	6	.2	-.3	.2	7.6	121	3.6	107	92	69	0	7	2	0
IA DES MOINES	32	27	37	15	29	6	.7	.5	.2	4.3	177	2.3	165	97	84	0	6	5	0
SIOUX CITY	30	23	33	11	27	5	.3	.1	.2	1.9	108	1.1	108	100	89	0	7	4	0
WATERLOO	32	27	35	15	30	11	.4	.2	.2	2.6	116	1.0	90	95	81	0	6	5	0
KS CONCORDIA	36	26	49	17	31	0	.4	.2	.2	3.3	208	2.0	220	97	79	0	7	2	0
DODGE CITY	43	24	60	10	34	0	1.5	1.4	1.3	3.4	313	2.5	425	96	65	0	7	2	1
GOODLAND	36	16	53	6	26	-5	.8	.7	.6	1.4	162	1.2	258	94	68	0	7	2	1
TOPEKA	49	31	63	21	40	9	.3	.1	.2	4.6	180	2.6	198	97	63	0	5	2	0
WICHITA	51	32	62	26	41	8	.6	.4	.3	3.8	199	2.7	279	96	64	0	6	2	0
KY BOWLING GREEN	57	30	67	19	43	7	.8	-.1	.6	6.7	61	3.6	57	100	62	0	4	2	1
LEXINGTON	53	32	64	20	42	9	.4	-.3	.2	4.6	53	2.8	57	96	60	0	4	3	0
LOUISVILLE	53	33	68	24	43	8	.7	.0	.4	5.8	71	4.2	89	96	64	0	4	3	0
LA BATON ROUGE	66	43	72	37	55	2	.7	-.6	.5	18.8	158	14.1	205	92	43	0	0	2	0
LAKE CHARLES	68	43	72	38	55	3	1.0	.2	1.0	11.9	105	8.1	129	97	44	0	0	1	1
NEW ORLEANS	66	45	71	37	56	2	1.2	-.2	.9	13.4	106	7.7	105	95	47	0	0	2	1
SHREVEPORT	64	36	71	28	50	1	.2	-.6	.2	11.0	115	5.2	91	99	43	0	1	2	0

Based on 1951-80 normals.

Weather Data for the Week Ending February 13, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	14	-3	29	-24	6	-6	.8	.3	.7	4.6	72	3.0	92	79	48	0	7	4	1
PORTLAND	31	9	42	-16	20	-2	1.2	.4	.7	6.5	66	4.4	81	84	43	0	7	2	2
MD BALTIMORE	43	25	57	12	34	0	1.2	.4	1.1	8.5	111	3.9	90	90	51	0	7	2	1
SALISBURY	46	26	57	17	36	0	.7	-.1	.7	10.3	120	4.8	99	100	67	0	5	3	1
MA BOSTON	38	21	48	2	30	0	2.1	1.2	1.2	12.6	125	4.3	77	81	43	0	7	2	2
CHATHAM	38	25	45	13	31	1	.7	-.3	.5	10.2	91	3.2	50	89	64	0	7	3	1
MI ALPENA	28	12	33	2	20	2	.1	-.2	.1	2.7	64	1.5	64	90	60	0	7	3	0
DETROIT	36	22	45	15	29	4	.4	.0	.3	6.7	132	4.3	168	85	55	0	7	3	0
FLINT	32	19	37	10	26	4	.3	.0	.2	5.2	124	3.1	143	90	62	0	7	4	0
GRAND RAPIDS	33	20	37	12	27	3	.2	-.2	.1	7.7	148	4.4	168	93	69	0	7	3	0
HOUGHTON LAKE	28	13	33	1	21	4	.1	-.2	.1	3.9	98	1.9	91	91	62	0	7	5	0
LANSING	33	20	38	15	27	6	.3	-.1	.2	5.6	121	3.5	156	88	64	0	7	3	0
MARQUETTE	25	12	30	6	19	5	.3	-.2	.2	5.3	101	2.8	100	90	74	0	7	3	0
MUSKEGON	33	21	37	13	27	4	.1	-.3	.1	5.4	95	2.7	87	89	65	0	7	3	0
SAULT ST. MARIE	23	2	30	-8	13	-1	.1	-.3	.1	5.8	106	2.4	79	79	52	0	7	2	0
MN ALEXANDRIA	23	12	27	1	18	7	T	-.1	T	1.8	94	.9	79	94	75	0	7	2	0
DULUTH	25	14	29	8	19	9	.1	-.1	.1	3.2	114	2.0	129	90	66	0	7	2	0
INT'L FALLS	20	2	24	-7	11	5	T	-.2	T	2.4	116	.7	60	86	57	0	7	1	0
MINNEAPOLIS	29	20	33	11	25	9	.2	.0	.1	2.5	128	1.4	129	92	68	0	7	4	0
ROCHESTER	28	20	32	6	24	10	.3	.1	.1	2.7	141	1.4	134	98	84	0	7	4	0
MS GREENWOOD	64	39	71	30	52	6	.8	-.3	.7	9.6	76	3.9	55	97	42	0	2	2	1
JACKSON	66	39	73	31	52	4	.9	-.1	.9	10.3	84	6.0	86	97	44	0	2	1	1
MERIDIAN	65	40	73	33	52	4	1.0	-.1	.8	18.9	149	12.9	186	94	41	0	0	2	1
MO CAPE GIRARDEAU	52	34	65	27	43	--	1.1	.4	1.1	8.1	103	6.3	151	98	63	0	3	2	1
COLUMBIA	49	30	65	23	39	8	.4	.0	.3	5.4	121	2.8	111	96	63	0	5	2	0
KANSAS CITY	47	30	63	20	39	7	.3	.0	.3	6.1	195	2.3	138	96	66	0	5	1	0
SAINT LOUIS	50	34	65	29	42	9	.6	.1	.6	7.8	164	4.2	161	95	59	0	2	3	1
SPRINGFIELD	55	34	66	28	45	10	.4	.0	.3	7.5	152	3.3	134	95	56	0	4	3	0
MT BILLINGS	40	23	52	12	31	4	T	-.1	T	1.0	50	.5	39	79	46	0	6	1	0
GLASGOW	23	7	33	-2	15	1	.1	.0	.1	.5	64	.3	60	93	74	0	7	2	0
GREAT FALLS	37	19	52	4	28	2	.2	.0	.1	1.7	79	1.4	102	89	55	0	6	2	0
HAVRE	29	8	43	-6	19	-1	T	-.1	T	1.2	88	.6	80	86	67	0	7	0	0
HELENA	36	18	45	7	27	2	.3	.2	.3	1.7	113	1.1	125	89	58	0	7	2	0
KALISPELL	36	22	38	15	29	3	T	-.2	T	3.7	99	1.7	80	94	65	0	7	1	0
MILES CITY	29	10	42	2	20	-1	T	-.1	T	1.0	70	.6	74	95	74	0	7	1	0
MISSOULA	35	22	40	12	29	1	.1	-.1	.1	1.7	58	1.0	53	93	67	0	7	2	0
NE GRAND ISLAND	31	18	47	5	25	-1	.4	.2	.3	2.8	194	1.9	244	97	80	0	7	3	0
LINCOLN	32	22	43	10	27	2	.2	.0	.1	1.8	110	1.0	94	98	81	0	7	4	0
NORFOLK	31	19	45	5	25	3	.5	.3	.3	2.9	205	1.9	245	96	81	0	7	4	0
NORTH PLATTE	35	14	53	0	24	-2	.6	.5	.4	1.8	184	1.5	254	96	68	0	7	3	0
OMAHA	30	24	35	11	27	1	.5	.3	.2	2.5	140	1.5	141	94	85	0	7	3	0
SCOTTSBLUFF	35	14	46	-2	25	-4	.8	.8	.7	2.3	215	1.7	281	94	62	0	7	2	1
VALENTINE	33	14	51	5	24	1	.3	.2	.3	.9	107	.8	156	93	62	0	7	2	0
NV ELY	33	13	39	-8	23	-5	.5	.3	.2	3.5	196	2.6	250	93	71	0	7	5	0
LAS VEGAS	59	43	62	39	51	2	1.4	1.2	1.3	4.7	476	3.0	429	85	42	0	0	2	1
RENO	47	29	50	21	38	1	.1	-.2	.0	4.4	151	2.5	147	92	42	0	5	2	0
WINNEMUCCA	43	27	45	18	35	0	.1	-.1	.0	3.1	154	2.1	178	93	63	0	6	3	0
NH CONCORD	32	10	43	-20	21	0	.4	-.2	.3	4.2	57	1.9	50	81	40	0	7	2	0
NJ ATLANTIC CITY	43	23	56	4	33	0	.9	.1	.8	7.6	90	3.7	74	95	52	0	5	2	1
NM ALBUQUERQUE	55	31	60	25	43	4	.2	.1	.2	2.3	226	1.2	213	80	31	0	4	2	0
CLOVIS	60	28	66	17	44	4	T	-.1	T	.8	64	.5	83	81	25	0	6	1	0
ROSWELL	65	30	69	23	47	4	.0	-.1	.0	1.3	138	.7	130	70	20	0	5	0	0
NY ALBANY	32	10	43	-14	21	-1	1.4	.9	.7	6.6	105	3.6	108	84	45	0	7	2	2
BINGHAMTON	30	14	43	-8	22	0	.9	.3	.5	6.0	94	3.1	87	88	50	0	7	2	0
BUFFALO	34	14	41	-5	24	0	.3	-.3	.2	8.6	115	4.8	117	87	47	0	7	2	0
NEW YORK	39	26	50	5	32	0	1.3	.5	1.1	10.2	127	4.8	108	90	49	0	6	2	1
ROCHESTER	31	14	38	-6	22	-1	.4	-.2	.2	6.0	101	3.0	90	96	56	0	7	3	0
SYRACUSE	31	10	40	-13	21	-3	.6	.0	.4	6.3	91	3.7	99	87	50	0	7	3	0
NC ASHEVILLE	53	34	63	24	44	5	.8	.1	.6	8.3	108	4.6	102	95	57	0	2	2	1
CHARLOTTE	57	37	67	32	47	5	1.2	.3	.6	10.2	115	7.4	135	93	50	0	1	4	1
GREENSBORO	52	32	65	27	42	3	1.2	.3	.9	7.3	87	4.8	95	90	51	0	3	4	1
HATTERAS	56	44	60	41	50	5	3.5	2.5	1.9	15.1	135	9.4	139	97	70	0	0	5	2
NEW BERN	57	40	66	33	48	3	2.0	1.0	1.2	10.9	114	7.9	134	94	60	0	0	4	2
RALEIGH	55	34	67	29	44	4	.8	-.1	.5	7.7	94	5.3	103	97	58	0	3	4	0
WILMINGTON	59	41	69	33	50	3	1.9	1.0	1.2	12.4	143	7.9	151	95	63	0	0	4	2
ND BISMARCK	21	9	29	-9	15	2	.1	.0	.1	.9	76	.4	62	91	76	0	7	2	0
FARGO	20	6	29	1	13	4	.1	.0	.1	1.4	110	.9	127	89	72	0	7	2	0
GRAND FORKS	19	2	27	-3	11	3	T	-.1	T	1.1	67	.4	36	92	69	0	7	1	0
WILLISTON	24	7	40	0	16	2	.1	.0	.1	.8	64	.3	45	93	72	0	7	2	0
OH AKRON-CANTON	40	24	54	10	32	6	.5	.0	.3	6.8	110	4.5	130	94	62	0	7	3	0
CINCINNATI	49	30	64	19	39	8	.7	.0	.4	5.9	81	4.5	105	93	60	0	5	3	0
CLEVELAND	38	24	47	9	31	5	.6	.1	.4	9.4	153	5.1	150	93	66	0	6	4	0
COLUMBUS	46	28	63	16	37	8	.5	-.1	.2	5.9	94	4.6	124	95	64	0	5	3	0
DAYTON	45	28	63	16	37	8	1.2	.7	.7	6.7	112	5.1	145	90	61	0	6	3	1

Based on 1951-80 normals.

Weather Data for the Week Ending February 13, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTRME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	37	23	42	14	30	5	.5	.1	.5	7.3	136	3.7	134	96	66	0	7	3	0
YOUNGSTOWN	40	23	54	7	31	6	.6	.1	.4	7.8	123	4.3	118	100	67	0	6	2	0
OK OKLAHOMA CITY	57	34	68	28	45	6	.4	.1	.4	5.9	221	2.8	187	92	54	0	3	1	0
TULSA	57	35	69	25	46	7	.3	-.1	.2	8.1	213	2.9	143	94	49	0	2	2	0
OR ASTORIA	55	39	62	31	47	3	.1	-1.8	.1	12.6	48	6.6	45	91	61	0	1	5	0
BURNS	35	25	37	20	30	-3	.4	.1	.2	3.3	90	2.1	102	94	72	0	7	3	0
MEDFORD	53	37	59	30	45	3	.2	-.4	.1	6.5	82	3.0	67	99	59	0	2	5	0
PENDLETON	45	33	51	25	39	0	T	-.3	T	2.6	65	1.8	79	96	73	0	2	0	0
PORTLAND	53	40	56	33	47	4	.1	-.9	.1	8.1	56	3.2	39	87	59	0	0	1	0
SALEM	55	37	63	30	46	4	.5	-.7	.2	13.1	79	5.2	56	94	56	0	1	5	0
PA ALLENTOWN	39	22	52	3	30	2	1.2	.5	.9	6.4	77	3.2	68	85	44	0	7	2	1
ERIE	37	21	42	3	29	5	.4	-.1	.2	7.1	110	3.8	116	94	63	0	6	3	0
HARRISBURG	39	24	52	10	32	1	.9	.3	.9	4.6	62	2.6	61	95	63	0	7	1	1
PHILADELPHIA	43	27	52	9	35	3	1.4	.7	1.3	8.1	103	3.5	79	87	45	0	4	2	1
PITTSBURGH	44	26	60	13	35	7	.6	.1	.3	6.5	101	3.7	94	92	58	0	5	3	0
SCRANTON	36	19	51	0	27	1	.4	-.1	.3	5.3	95	2.4	77	86	45	0	7	2	0
RI PROVIDENCE	38	21	49	-2	29	1	2.0	1.1	1.6	11.5	113	4.7	81	91	45	0	7	2	1
SC CHARLESTON	60	46	73	42	53	4	1.6	.8	1.1	12.5	159	11.0	231	96	58	0	0	4	1
COLUMBIA	58	41	67	36	49	3	1.5	.6	1.1	12.7	131	9.4	153	100	60	0	0	5	1
FLORENCE	60	44	74	39	52	6	.7	-.1	.4	11.5	143	7.8	154	92	53	0	0	4	0
GREENVILLE	54	38	70	33	46	3	1.9	.8	.7	14.1	138	9.1	147	97	61	0	0	6	2
SD ABERDEEN	24	10	32	-4	17	3	.3	.1	.2	1.1	87	.9	118	95	81	0	7	3	0
HURON	27	12	34	-2	19	3	.3	.1	.2	1.0	80	.6	91	95	80	0	7	3	0
RAPID CITY	30	13	44	2	21	-4	.3	.2	.2	1.7	156	1.1	172	96	73	0	7	4	0
SIOUX FALLS	26	17	31	4	22	4	.3	.1	.1	1.8	117	1.0	115	95	82	0	7	3	0
TN CHATTANOOGA	61	40	68	30	50	10	1.4	.3	1.0	12.2	98	6.6	90	93	50	0	3	2	1
KNOXVILLE	59	36	67	27	47	7	.6	-.4	.4	11.4	103	4.7	73	97	55	0	3	3	0
MEMPHIS	61	39	70	33	50	8	.6	-.5	.4	7.6	67	4.2	63	95	55	0	0	2	0
NASHVILLE	58	36	68	29	47	8	.7	-.2	.7	6.4	59	3.5	56	94	49	0	3	3	1
TX ABILENE	64	38	69	29	51	4	.4	.1	.3	2.3	100	1.3	90	84	34	0	1	2	0
AMARILLO	54	26	68	19	40	2	T	-.1	T	1.3	105	.8	118	85	43	0	6	1	0
AUSTIN	68	45	73	39	56	4	1.0	.4	.8	9.1	191	5.8	212	87	46	0	0	2	1
BEAUMONT	69	43	73	37	56	2	1.3	.2	1.3	18.0	163	11.5	189	97	44	0	0	1	1
BROWNSVILLE	77	53	82	43	65	3	.1	-.4	.1	5.4	172	4.5	226	100	48	0	0	1	0
CORPUS CHRISTI	71	49	77	39	60	3	.4	.0	.4	2.8	77	1.8	76	97	55	0	0	1	0
DEL RIO	72	44	74	35	58	3	.4	.1	.3	1.7	116	1.3	139	74	31	0	0	3	0
EL PASO	63	38	70	28	51	3	T	-.1	T	2.7	287	1.4	240	72	26	0	1	1	0
FORT WORTH	63	41	71	34	52	4	.3	-.2	.3	8.5	201	4.3	170	87	46	0	0	1	0
GALVESTON	65	52	69	45	59	4	2.2	1.6	2.1	15.8	205	12.0	290	91	57	0	0	2	1
HOUSTON	69	44	73	37	56	2	.4	-.4	.4	9.9	112	6.5	127	95	41	0	0	2	0
LUBBOCK	62	30	71	20	46	4	.1	-.1	.1	2.5	259	1.1	183	80	29	0	5	1	0
MIDLAND	66	34	72	25	50	4	.3	.2	.3	2.3	209	1.6	251	84	26	0	3	1	0
SAN ANGELO	67	36	74	29	52	3	T	-.2	T	1.7	103	.9	92	88	29	0	4	0	0
SAN ANTONIO	70	42	74	33	56	2	2.0	1.5	1.6	6.2	166	4.0	168	89	43	0	0	2	1
VICTORIA	69	46	73	37	58	3	2.5	1.9	2.1	8.6	169	6.5	221	98	49	0	0	3	1
WACO	65	40	72	34	52	3	.4	-.1	.3	7.6	170	4.3	166	94	46	0	0	2	0
WICHITA FALLS	62	34	72	26	48	4	.3	.0	.2	3.7	148	1.5	113	89	41	0	4	2	0
UT CEDAR CITY	45	29	48	25	37	4	.2	.0	.1	3.8	235	2.8	285	95	43	0	4	4	0
SALT LAKE CITY	39	28	45	21	33	0	.6	.3	.3	4.9	150	3.8	198	98	68	0	7	6	0
VT BURLINGTON	25	-1	33	-27	12	-5	.8	.4	.5	4.2	84	3.3	126	93	51	0	7	3	0
VA NORFOLK	47	35	56	31	41	1	.7	-.1	.5	8.8	105	5.6	108	95	65	0	2	4	0
RICHMOND	52	30	62	25	41	3	1.2	.5	1.1	8.5	106	5.7	124	98	55	0	5	2	1
ROANOKE	52	29	65	23	41	4	.8	.1	.7	7.2	101	4.6	109	88	45	0	5	2	1
WA QUILLAYUTE	53	37	60	28	45	3	.3	-2.8	.2	18.3	49	8.5	42	97	62	0	1	2	0
SEATTLE-TACOMA	56	41	64	34	49	6	T	-1.1	T	8.2	56	4.1	51	88	48	0	0	2	0
SPOKANE	40	30	44	24	35	4	T	-.4	T	3.6	62	1.4	44	97	71	0	5	1	0
YAKIMA	45	29	50	22	37	3	T	-.2	T	3.3	106	1.0	53	93	64	0	5	1	0
WV BECKLEY	52	30	64	25	41	10	.3	-.5	.2	5.8	73	1.9	40	91	51	0	5	3	0
CHARLESTON	55	30	66	22	43	8	.6	-.1	.3	6.0	74	2.5	51	93	47	0	5	3	0
HUNTINGTON	54	30	67	22	42	7	.8	.1	.4	5.9	77	3.0	68	98	56	0	5	3	0
PARKERSBURG	50	28	65	19	39	6	.5	-.1	.3	4.8	72	2.8	71	91	52	0	6	3	0
WI GREEN BAY	29	19	33	15	24	7	T	-.2	T	3.7	125	1.5	91	89	70	0	7	1	0
LACROSSE	30	23	34	19	27	9	.3	.2	.2	3.1	133	1.5	120	91	74	0	7	3	0
MADISON	31	24	34	19	28	8	.3	.1	.1	4.3	144	1.9	128	88	71	0	7	4	0
MILWAUKEE	33	27	36	24	30	8	.2	-.1	.2	5.3	127	2.9	132	90	70	0	7	3	0
WAUSAU	27	17	31	13	22	8	T	-.2	T	3.4	132	1.6	122	93	70	0	7	1	0
WY CASPER	34	17	40	8	26	-1	.4	.3	.4	2.1	177	1.3	179	85	60	0	7	2	0
CHEYENNE	38	19	48	12	29	0	.4	.3	.3	1.4	152	.9	167	85	50	0	7	3	0
LANDER	24	7	28	-4	16	-9	T	-.1	T	1.8	146	1.0	136	95	69	0	7	1	0
SHERIDAN	36	17	51	10	27	1	.1	-.1	.1	1.9	105	.7	60	95	63	0	7	1	0

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F)
February 7 - 13, 1993

(Cumulative totals and departures from normal are for the period July 1, 1992 - February 13, 1993)

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE	CUMULATIVE TOTAL	CUMULATIVE DEPARTURE	CUMULATIVE DEP fm 91-92
AL BIRMINGHAM	107	-30	1863	-216	-83
MOBILE	74	-19	1051	-245	-316
MONTGOMERY	94	-19	1470	-217	-226
AK ANCHORAGE	300	-34	7068	8	600
BARROW	502	-90	12069	-131	-403
FAIRBANKS	460	-34	9671	-88	436
JUNEAU	229	-35	5510	-288	553
KODIAK	208	-43	5548	194	451
NOME	325	-108	9415	693	1293
AZ FLAGSTAFF	219	-25	4259	-182	181
PHOENIX	46	-24	733	-336	67
PRESCOTT	173	-11	2844	-259	21
TUCSON	63	-21	1092	-134	31
WINSLOW	170	-23	3423	85	-99
YUMA	22	-24	603	-154	171
AR FORT SMITH	126	-39	2336	-184	95
LITTLE ROCK	103	-51	2191	-112	99
CA BAKERSFIELD	76	-12	1450	-81	-176
EUREKA	99	-15	2377	-416	06
FRESNO	87	-19	1626	-238	-98
LOS ANGELES	46	-13	683	-222	118
REDDING	101	-5	1806	-16	105
SACRAMENTO	95	-12	1758	-106	36
SAN DIEGO	37	-12	622	-125	125
SAN FRANCISCO	84	-11	1478	-440	-48
STOCKTON	90	-17	1710	-143	-49
CO DENVER	233	10	4158	292	341
GRAND JCT.	190	-39	3756	-200	-367
PUEBLO	227	14	4175	501	444
CT BRIDGEPORT	244	-2	3396	-41	127
HARTFORD	258	-12	4044	-10	255
DE WILMINGTON	221	-9	3034	-261	33
DC WASHINGTON	197	-3	2751	-57	146
FL APALACHICOLA	52	-32	667	-393	-386
DAYTONA BEACH	28	-28	378	-282	-221
FORT MYERS	11	-22	89	-256	-97
JACKSONVILLE	59	-22	803	-267	-253
KEY WEST	0	-10	3	-91	-11
MIAMI	2	-18	20	-140	-35
ORLANDO	21	-27	269	-239	-152
TALLAHASSEE	64	-24	884	-359	-392
TAMPA	31	-18	274	-283	-182
W. PALM BEACH	1	-22	54	-151	-77
GA ATLANTA	103	-45	1904	-260	49
AUGUSTA	106	-23	1661	-214	-125
MACON	95	-23	1588	-105	-40
SAVANNAH	85	-14	1150	-288	-141
ID BOISE	194	-14	4174	343	564
LEWISTON	167	-24	3711	86	514
POCATELLO	229	-26	5025	415	603
IL CHICAGO	234	-49	4151	-99	75
MOLINE	230	-59	4232	-153	184
PEORIA	213	-64	3881	-334	-3
QUINCY	198	-63	3860	-81	224
ROCKFORD	243	-58	4488	-145	164
SPRINGFIELD	183	-75	3483	-363	-63
IN EVANSVILLE	160	-60	2891	-398	-148
FORT WAYNE	231	-49	3898	-273	22
INDIANAPOLIS	192	-63	3494	-324	31
SOUTH BEND	236	-42	3953	-213	26
IA DES MOINES	249	-45	4380	-62	283
DUBUQUE	259	-56	4897	-22	230
SIOUX CITY	266	-37	4763	22	432
WATERLOO	247	-77	4817	-253	140
KS CONCORDIA	237	-10	4121	287	731
DODGE CITY	218	2	4026	574	798
GOODLAND	271	35	4529	518	799
TOPEKA	176	-60	3605	-93	395
WICHITA	163	-55	3362	22	393
KY BOWLING GREEN	150	-51	2762	-249	04
LEXINGTON	156	-65	2977	-304	-44
LOUISVILLE	154	-58	2722	-399	-27
LA BATON ROUGE	71	-19	1038	-248	-165
LAKE CHARLES	66	-20	1024	-185	-137
NEW ORLEANS	62	-23	844	-295	-324
SHREVEPORT	105	-10	1657	-34	72
ME CARIBOU	412	38	6204	48	122
PORTLAND	312	11	4664	-55	163
MD BALTIMORE	218	-2	2957	-191	-109
SALISBURY	201	-4	2792	-125	14
MA BOSTON	245	0	3632	95	171
CHATHAM	234	-7	3479	-59	137
MI ALPENA	315	-21	5174	-65	194
DETROIT	250	-33	3958	-308	27
FLINT	273	-26	4328	-190	05
GRAND RAPIDS	266	-31	4359	-97	90
HOUGHTON LAKE	308	-28	5088	-171	163
LANSING	268	-32	4465	-38	60
MARQUETTE	325	-37	6037	31	81
MUSKEGON	263	-31	4302	-74	152
SAULT ST MARIE	363	0	5858	68	275
MN ALEXANDRIA	330	-50	5955	-122	290
DULUTH	318	-62	6193	-202	-14
INT'L FALLS	376	-39	6820	-179	243
MINNEAPOLIS	281	-62	5220	-146	06
ROCHESTER	285	-60	5533	39	177
SAINT CLOUD	305	-65	5838	-129	139
MS GREENWOOD	92	-40	1702	-302	-120
JACKSON	87	-32	1503	-263	-165
MERIDIAN	86	-35	1496	-335	-188
MO CAPE GIRARDEAU	155	-52	2905	-205	134
COLUMBIA	177	-58	3487	-86	196
KANSAS CITY	183	-56	3651	1	285
SAINT LOUIS	162	-65	3107	-313	168
SPRINGFIELD	141	-68	3022	-190	122
MT BILLINGS	235	-27	4862	179	887
GLASGOW	351	-3	6020	100	1076
GREAT FALLS	259	-14	5346	346	1149
HAVRE	324	-3	5985	241	1248
HELENA	264	-16	5621	300	693
KALISPELL	251	-26	5625	155	775
MILES CITY	316	6	5405	124	1092
MISSOULA	253	-12	5451	310	802
NE GRAND ISLAND	279	6	4694	277	836
LINCOLN	263	-15	4504	136	727
NORFOLK	278	-20	4747	-13	577
NORTH PLATTE	284	13	4838	225	813
OMAHA	262	-12	4389	125	418
SCOTTSBLUFF	281	32	4916	506	859
VALENTINE	287	-5	5047	195	619
NV ELY	290	32	5028	218	521
LAS VEGAS	93	-16	1795	-66	139
RENO	187	-11	3704	-161	530
WINNEMUCCA	210	2	4428	309	727
NH CONCORD	308	1	4864	32	287
NJ ATLANTIC CITY	222	-8	3192	-77	19
NM ALBUQUERQUE	152	-34	2952	-131	-28
CLOVIS	146	-30	2801	-21	-149
ROSWELL	122	-18	2290	-37	-238
NY ALBANY	303	4	4425	-83	133
BINGHAMTON	300	-6	4753	88	430
BUFFALO	287	-3	4162	-126	73
NEW YORK	227	2	3035	-132	202
ROCHESTER	298	7	4394	137	190
SYRACUSE	311	17	4374	50	162
NC ASHEVILLE	148	-40	2713	-212	81
CAPE HATTERAS	103	-37	1373	-366	-114
CHARLOTTE	125	-36	2101	-263	158
GREENSBORO	160	-23	2629	-66	281
NEW BERN	114	-29	1688	-326	-83
RALEIGH-DURHAM	145	-25	2297	-169	116
WILMINGTON	103	-26	1575	-185	-112
ND BISMARCK	349	-15	6104	60	829
FARGO	359	-31	6201	-17	515
GRAND FORKS	380	-22	6456	-90	518
WILLISTON	343	-20	6362	211	1043
OH AKRON-CANTON	228	-44	3881	-174	06
CLEVELAND	234	-37	3698	-284	11
COLUMBUS	192	-64	3414	-387	-56
CINCINNATI	180	-59	3323	-231	37
DAYTON	196	-60	3591	-210	-48
TOLEDO	245	-38	3900	-393	04
YOUNGSTOWN	236	-46	3999	-231	66
OK OKLAHOMA CITY	135	-43	2594	-70	234
TULSA	129	-49	2689	4	410
OR ASTORIA	124	-23	3201	75	364
BURNS	242	18	5455	1009	1130
MEDFORD	140	-23	2720	-379	146
PENDLETON	184	-1	3845	333	667
PORTLAND	124	-32	2841	-126	452
SALEM	131	-28	2899	-175	356
PA ALLENTOWN	242	-16	3664	-164	177
ERIE	251	-36	3663	-536	-16
HARRISBURG	232	-10	3403	-148	125
PHILADELPHIA	208	-22	2904	-374	-19
PITTSBURGH	210	-52	3561	-366	-63
SCRANTON	262	-13	3832	-300	-69
RI PROVIDENCE	247	-10	3650	-98	232
SC CHARLESTON	83	-29	1242	-324	-130
COLUMBIA	110	-22	1820	-96	16
FLORENCE	91	-40	1605	-247	-75
GREENVILLE	134	-22	2319	22	215
SD ABERDEEN	337	-20	5793	47	669
HURON	318	-20	5389	-47	613
RAPID CITY	305	26	5162	436	997
SIOUX FALLS	304	-27	5278	-24	461
TN CHATTANOOGA	100	-68	2193	-353	-92
KNOXVILLE	122	-50	2444	-155	-37
MEMPHIS	100	-58	2071	-251	-5
NASHVILLE	126	-54	2382	-275	-55
TX ABILENE	97	-30	1842	-110	-195
AMARILLO	173	-12	3203	275	242
AUSTIN	61	-30	1183	-162	-24
BEAUMONT	61	-18	970	-170	-125
BROWNSVILLE	17	-18	362	-130	-155
CORPUS CHRISTI	33	-24	616	-152	-87
DEL RIO	48	-29	1016	-201	-85
EL PASO	99	-23	1844	-178	-84
FORT WORTH	91	-25	1638	-79	-28
GALVESTON	42	-30	715	-222	-165
HOUSTON	57	-24	1001	-187	-158
LUBBOCK	132	-32	2409	-108	-108
MIDLAND-ODESSA	101	-27	1952	-30	-232
SAN ANGELO	93	-22	1678	-76	-140
SAN ANTONIO	63	-21	1102	-143	-47
VICTORIA	50	-21	845	-141	-52
WACO	88	-21	1514	-79	39
WICHITA FALLS	117	-29	2072	-145	-5
UT BLANDING	196	-34	3767	-257	104
CEDAR CITY	196	-25	3898	39	168
SALT LAKE CITY	219	-4	4121	260	286
VT BURLINGTON	370	32	4940	-163	-6
VA LYNCHBURG	177	-23	2718	-243	53
NORFOLK	166	-8	2129	-188	05
RICHMOND	167	-23	2541	-203	108
ROANOKE	169	-28	2831	-131	184
WA COLVILLE	219	-26	4971	224	742
QUILLAYUTE	138	-24	3485	-103	378
SEATTLE-TACOMA	114	-44	2933	-250	371
SPOKANE	206	-28	4735	223	777
YAKIMA	190	-20	4326	248	778
WV BECKLEY	165	-71	----	---	---
CHARLESTON	155	-59	2881	-332	-46
HUNTINGTON	161	-52	2889	-319	-70
PARKERSBURG	182	-44	3156	-193	-131
WI GREEN BAY	286	-54	5045	-233	122
LA CROSSE	265	-62	4916	-135	62
MADISON	261	-60	4714	-337	69
MILWAUKEE	245	-58	4287	-390	144
WAUSAU	299	-54	5513	-103	47
WY CASPER	272	1	4800	-57	315
CHEYENNE	251	-1	4660	126	366
LANDER	344	63	5571	443	502
SHERIDAN	266	-13	5417	355	923

Based on 1951-80 normals.

National Agricultural Summary

February 8 - 14, 1993

HIGHLIGHTS: Precipitation in the southwestern and southeastern parts of the Nation the early part of the week hindered field activities. Precipitation across the lower Mississippi and the Ohio River Valleys the middle of the week caused difficulties for livestock producers. A major snowstorm in the central part of the Nation brought increased snow cover to small grains. Above-normal temperatures across most of the Nation caused feedlots to become muddy and some small grain crops to start turning green. Bitter cold temperatures pushed into the northern Plains at the end of the week.

SMALL GRAINS: Winter wheat and other fall-planted small grains were reported in fair to good condition nationwide. Winter wheat remained under adequate snow cover in the northern Great Plains. Surface moisture should ensure good wheat growth when the crop breaks dormancy in Kansas. Wheat condition in Texas rated 72 percent (%) of normal, compared with 80% last year at this time. Small grain crops in Texas responded well to the recent warm weather. Continued warm weather caused some fall-planted small grains to break dormancy in Kentucky. Producers continued top dressing small grains where field conditions allowed.

COTTON: Cotton field preparations continued in Arizona and California where weather permitted. Some fields were fertilized by plane in the Fresno area of California. The cotton harvest has ended in Oklahoma.

OTHER FIELD CROPS: Mild weather allowed corn harvest to continue in the upper Midwest. Reduced snow depth in Minnesota allowed producers to harvest some late-standing corn. In Michigan and Wisconsin, corn harvests advanced to 90% and 85%, respectively. Sugarcane harvest remained active in Florida. Tobacco growers were maintaining and preparing beds in the Southeast as weather permitted. Onions were rated as fair to good in Georgia and progressing well in Texas. Planting was active in the Kern-Tulare area of California. Georgia producers engaged in weed control activities. Potato harvest began in Florida. Summer potato planting was underway in Texas.

FRUIT AND NUTS: Citrus groves remained in good to excellent condition in Florida. The orange harvest continued active, while grapefruit harvest for processing and fresh market was strong. Temple and honey tangerine harvests reached the half-way point. In Arizona, the naval orange harvest neared completion as the Valencia harvest gained momentum. Lemons, grapefruits, and tangerines were harvested in central and western Arizona. The citrus harvest was slow but steady in California. Wet grounds hampered orchard activities. Fungicides were reapplied in some California orchards. Warm weather in Texas has caused most varieties of peaches to bud. Tree, vine, and cane pruning was active in Washington, Georgia, Virginia, and California.

VEGETABLES: The southern vegetable-growing areas of Florida had adequate soil moisture. Major crops harvested include tomatoes, cabbage, peppers, and cucumbers. Spring sweet corn planting had started in the Zellwood area. In western and central Arizona, vegetable harvest continued where weather permitted. Winter harvest and spring land preparation made headway in California. Rain delayed progress in the desert areas. Asparagus harvest was underway in the Imperial Valley. Broccoli harvest was moderate in the central coast, advancing in the Modesto-Turlock area, and completed in the Imperial Valley. Cauliflower harvest was moderate in the Santa Maria area, light in the Salinas-Watsonville area, and completed in the Imperial Valley. Some foliar diseases were reported on spring plantings in the Imperial Valley. Lettuce fields in the Westside area of California were maturing well. Planting of melons and other spring vegetables was underway in Texas.

PASTURES AND LIVESTOCK: Although livestock condition is rated fair to good, muddy lots, wet pastures, and temperature fluctuations have caused problems for the Nation's cattle producers. Damp weather stressed livestock in Iowa and Kentucky. Poor feed quality caused problems for some producers in Kansas and Michigan. Wet pastures hindered producers in Kansas. Timely rains continued to improve pastures in the West, while excessive moisture caused pastures to decline in the Southeast. Feed supplies were adequate with spot shortages reported in a few areas. Good quality hay is in short supply in Minnesota. Calving and lambing activities continued with few difficulties reported.

(Continued from front cover)
San Bernardino). **Las Vegas, NV**, experienced its wettest 24-hour period on record in February (1.30 inches), resulting in flash flooding. Farther north, new snowfall in the **Sierra Nevada** included 30 inches on **Mammoth Mountain, CA**, and 26 inches at **Sierra Ski Ranch, CA**. Flooding returned to **Arizona** on Monday as up to 4 inches of rain soaked the central and western highlands. **Kingman, AZ**, endured 4.04 inches. By midweek, snow spread into the **central Rockies** and **central Plains** as drier weather returned to the **Southwest**. Snowfall exceeded 2 feet at **Bryce Canyon, UT**, and reached 1 foot at **Douglas, WY**. Snowfall in the **Plains** ranged from more than 1 foot in **western Nebraska** to an inch at **Amarillo, TX**. Locally heavy rain developed in **southern Texas**, with amounts reaching 3.51 inches in **Corpus Christi**. Late in the week, wintry precipitation lifted into the **Northeast**. Snowfall topped 6 inches in many areas from the east slopes of the **central Appalachians** to **Maine**. **Northeastern coastal areas** grappled with mixed rain, freezing rain, sleet, and snow, along with gusty winds and high surf. By late Saturday, quieter weather overspread the **continental United States**, but a series of storms gathered strength in the **eastern Pacific Ocean**.

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 0.82 to 2.06 in. north; 0.84 to 1.72 in. central; 0.32 in. to 1.54 in. south. Temperatures normal to 6° above north; 2 to 6° above normal central; 1 to 6° above normal south. Lows 24 to 35° north; 25 to 35° central; 32 to 40° south. Highs 65 to 71° north; 69 to 73° central; 70 to 74° south.

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

ARIZONA: Rains statewide early week, heavy western, central areas. Sunny 10th to 12th, clouding 13th. Temperatures normal to 4° above. Extremes 16°; 69° higher elevations: 30°; 78° deserts.

Field activities slowed early week, resumed late week. Cotton field preparations active where conditions permitted. Alfalfa condition mostly good. Harvest light, all areas. Weed infestations moderate; insects, disease light. Small grains planted 100%, 100% 1992, 100% avg.; stands established 97%, 98% 1992, 97% avg.; jointing 13%, 11%, 18%. Fields are in good condition. Harvest vegetables active weather permitting. Broccoli, cabbage, cauliflower, leaf, Romaine lettuce, bok choy, cilantro, kale, parsley, napa, spinach, available western, central areas. Also available west: asparagus, broccoflower, celery, escarole, endive. Leeks, beets, dill, kohlrabi, radishes, rapini, mixed greens, carrots, green onions,turnips available, central. Citrus harvest continued central, western areas. Sweet, navel harvest near complete; valencia harvest gaining momentum. Lemons, grapefruit, tangerines, tangelos available both areas. Pecans harvest steady.

ARKANSAS: Warm weather with temperatures above normal. Scattered showers middle of week, statewide. Extremes 23°; 72°. Rainfall 0.26 to 1.35 in.

Wheat fair to good, needs sunshine, dry weather. Wheat fields saturated. Farmers continued to fertilize wheat first part of week. Rain halted field activities end of week. Livestock good. Producers feeding hay, supplies adequate. Pastures good. Fruit good.

CALIFORNIA: Week started dry, ended dry though a series of weather systems brought rain to the entire State midweek. Temperatures near normal.

Good progress fieldwork most areas, early week; until rains halted activities. Small grains, new alfalfa excellent growth central, south. Some northern wheat stunted excessive moisture. Few fields wheat, barley, alfalfa, safflower planted before rain. Small grains, forage crops sprayed broadleaf weeds. Established alfalfa treated aphids, weeds, weevils. Cotton fields fertilized aerially Fresno County. General ground preparation spring planted row crops ongoing. Bees placed almond, stone fruit orchards assisting pollination where underway. Orchards pruned, shredded brush, applied chemicals, wet ground hampered activities somewhat. Grape vines pruned, tied. Kiwifruit reconditioned, moved from storage. Few apples packed from storage. Citrus harvest movement slow, steady. Groves greening, weather warming. Some citrus growers reapplied fungicide. Winter vegetable harvest continued. Spring planting, ground preparation made headway, delayed by rain desert areas. Asparagus volume heavy Imperial Valley district. Broccoli shipments moderate variable quality central coast. Harvesting advanced Modesto-Turlock area. Westside fields developing normally. Cauliflower movement light Salinas-Watsonville, moderate Santa Maria variable quality. Imperial Valley district winter broccoli, cauliflower harvest done, foliar diseases starting to show up spring plantings. Carrot packing started Imperial Valley. Winter cabbage, lettuce harvests past halfway point Imperial Valley; spring cabbage, lettuce fields Westside maturing well. Onion, garlic planting active Kern-Tulare area. Fall potato movement Tulelake-Butte Valley storages slowed seasonally. Other crops harvested: Turnips, green onions, various oriental vegetables. Range, pasture very good. Additional rainfall received. Growth remained slow. Livestock good. Calving active. Limited supplemental feeding.

COLORADO: Cloudy period for the mountains, west as numerous storm systems moved across the State. Early in the week heavy snow was falling in the mountains, southwest, while the east was partly cloudy with mild temperatures. By the 10th, snow had extended into the east. By the 12th, snow was only falling in the high country, by the 14th precipitation ceased. Precipitation above normal for the week. Temperatures below normal. Early in the week temperatures in the 50s to 60s in the east, by weekend temperatures in 20s to 30s.

Care, feeding of livestock were the main activities for the week with some early calving, lambing underway.

FLORIDA: Rain 1 to 3 days. Temperatures 2 to 3° above normal Panhandle, Big Bend, 1 to 2° below normal northeast. Near normal central, south. Lows; middle 30s north, middle 50s southeast coast. Highs; low to middle 70s north to middle 80s south.

Soil moisture mostly adequate to surplus throughout State. Sugarcane harvest active. Tobacco growers maintaining plant beds. Field preparation for spring crops active. Farmers preparing to plant corn. Topdressing winter wheat active. Citrus groves, trees, fruit very good to excellent. Moisture levels vary depending on location. Bloom in beginning stages. Early to mid orange harvest continues active. Grapefruit movement strong for fresh, processing. Temple, Honey tangerine harvest about half over. Caretakers cutting cover crops, unbanking, unwrapping young trees. Mild days, clear skies southern vegetable growing areas early part of week, gusty winds, rain at weekend. Soil moisture adequate. Zellwood spring crop sweet corn planting started. Volume leaders: Tomatoes, cabbage, peppers, cucumbers, potatoes. Also available: Snap beans, carrots, chinese cabbage, celery, sweet corn, eggplant, escarole, iceberg lettuce, romaine, specialty lettuces, radishes, squash, strawberries, cherry tomatoes. State's pastures fair to excellent. Pasture rating, 45% fair, 50% good, 5% excellent. Moisture levels adequate to surplus. State's cattle herds mostly good.

GEORGIA: Temperatures 2 to 6° above normal most of State except southeast, 1° below to 2° above normal. Warmest highs upper 60s to low 70s. Coolest lows mid to upper 20s north, 30s central, south. Precipitation 0.50 to 1.50 in. north, extreme east, 0.10 to 0.50 in. central, south. Rain on 1 to 2 days western counties, 2 to 4 days east.

Soil moisture adequate to surplus. Land preparation more active, main activity. Topdressing applications of nitrogen to small grains also active south, west, where soils could support equipment. Small grains fair to good. Pruning peach trees active, some varieties lacking adequate chill hours. Onions fair to good, disease control active. Pastures poor to fair. Cattle, hogs fair to mostly good.

HAWAII: Weather mostly warm, sunny during daytime, cool nights, early morning. Showers variable, mainly windward, higher elevations. Trade winds returned after period of absence, brought moisture, warmer temperatures. Temperatures mid 50s to mid 80s. Rainfall none to 2.60 in.

Crops benefited from recent warm conditions, some recovery from previous weeks' winds. Field operations returned to normal schedules. Irrigation necessary some areas. More rainfall would be beneficial. Banana shipments near normal levels. Papaya shipments lower.

IDAHO: Temperatures normal to 7° above normal. Scattered precipitation fell throughout the State.

Soil moisture varied across the State: adequate north, southwest, southeast; short south central. Activities: Fertilizers applied on open fields, hauling grain, repairing farm machinery, attending meetings, preparing taxes. Hay, roughage supplies short to adequate. Livestock activities: Cattle on winter hay, calving, lambing in progress. Livestock fair to good.

ILLINOIS: Conditions turned damp last week as a storm system brought more than 1.00 in. of moisture to the far south, around 0.50 in. across the rest of the State. High temperatures 31 to 53° while lows ranged from the low 20s to mid 30s. Temperatures were 3 to 7° above normal.

Farm activities last week included tending, marketing livestock, hauling grain, repairing equipment. Winter wheat continues to look mostly good.

INDIANA: Temperatures 1 to 4° above normal in the north, 2 to 7° above in the south. Highs varied mid to upper 30s in the north to the 40s to near 50° south. Lows mid to upper 20s north to upper 20s to mid 30s south. Precipitation, water equivalent, 0.25 to 0.80 in. across State, except for around 0.20 in. or less in the far north.

Topdressing the winter wheat crop, hauling manure were the main activities reported this past week. Some farmers are tilling land they were unable to get done this past fall. Machinery repair, preparation is also on many operators' agendas.

IOWA: Temperatures 2° above normal west to 6° above normal east. Extremes -3° Estherville, 15th; 49° Burlington, 10th. Persistent light to moderate precipitation. Precipitation 0.18 in. Dubuque (northeast) to 0.86 in. Donnellson (southeast); average 0.46 in. (normal 0.24 in.)

Mud, ice, snow making life miserable for livestock farmers. Damp weather causing some respiratory problems, reduced rate of gain.

KANSAS: Temperatures normal west, 3 to 8° above normal central, 9 to 11° above normal east. Precipitation moderate west 1.00 to 1.25 in. Central, eastern areas precipitation light to moderate; average 0.30 in. to 1.00 in.

While rainfall was light to moderate, fields, feedlots continue to be waterlogged, muddy in most areas. Surface moisture should ensure good wheat growth when stands break dormancy later on. Calving started, muddy roads, pastures, lots creating problems for stockmen. Feed grain, hay supplies generally adequate, some poor quality hay noted.

KENTUCKY: Near normal precipitation, unseasonably warm. High temperatures lower 50s, about 7° above normal. Lows mid 30s, about 10° above mean. Precipitation near normal, 0.75 in. average.

Soil moisture improved, adequate statewide. Wet conditions limited fieldwork, much plowing accomplished prior to rain. Continued warm temperatures causing greening of fall seeded small grains. Burley sales finishing up. Damp weather stressed livestock.

LOUISIANA: Temperatures 1.3 to 4.1° above normal. Extremes 26°; 74°. Rainfall 0.23 in. northwest to 1.53 in. southeast.

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

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.86 in. Temperature 35.2°, normal 34.2°. Extremes 6°; 63°.

Hay supplies adequate. Cutting firewood, feeding hay, caring for livestock. Small grains good. Tax preparation. Making plans for spring planting.

DELAWARE: Precipitation 0.51 in. Temperature 35.8°, normal 35.1°. Extremes 5°; 58°.

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

MICHIGAN: Extremes -8°; 45°. Precipitation none to 0.56 in. across the State.

Snow fell in many parts of State at midweek, delaying corn harvest further in areas receiving significant accumulation. Overall, corn harvest advanced to 90%. High moisture, low test weights continued to plague the corn crop. Feed supplies are short to adequate. Livestock condition was in decline due to temperature swings, problems with moldy corn. Major activities: Caring for livestock, pruning, purchasing seed for spring planting, spreading manure, tax preparation.

MINNESOTA: Temperatures 2 to 7° above normal for the State. Extremes -14°; 35°. Precipitation 0.01 to 0.40 in., 0.12 in. below normal to 0.24 in. above normal. Greatest weekly total was 0.53 in. Snowfall 1 to 4 in. with depths averaging 12 to 14 in. northeast, north central, 4 to 9 in. elsewhere.

Much colder air entered over the weekend. Good quality hay is in short supply, prices are rising. Livestock in mostly good. Decreased snow depths in the southeast allowed some farmers to harvest corn. Few problems reported with stored grain.

MISSISSIPPI: Temperature 51°, 5.4 above normal. Extremes 25°; 74°. Rainfall across the State. State average 1.26 in., 0.01 in. below normal. Soil temperature 51°.

Days suitable for fieldwork 3.4, 2.3 1992, 1.6 avg. Soil moisture 67% adequate, 33% surplus. Wheat 20% fair, 80% good. Hay supply 20% short, 60% adequate, 20% surplus. Feed grain 80% adequate 20% surplus. Livestock 100% good. Activities: Field preparations, fertilizing, pastures, cotton scrapping, repairing farm equipments.

MISSOURI: Temperatures 10° above normal. Precipitation 0.46 in.; largest amounts southeast at around 1.00 in.

Farmers caring for livestock, preparing for spring work.

MONTANA: Temperatures normal to below normal west, above normal east. Precipitation normal.

Protectiveness of snowcover for winter wheat is 17% poor, 28% fair, 39% good, 16% excellent. Grazing 29% open, 55% difficult, 16% closed. More than 98% of livestock receiving supplemental feed. Calving 11% complete, lambing 5% complete.

NEBRASKA: Temperatures 8° below normal northwest to 3° above normal northeast. Precipitation occurred in the form of snow throughout the week varying 0.10 to 0.85 in. across the State.

Much of the western, southern wheat crop was snowcovered. Farm activities included monitoring, working with farm stored grain, record keeping, equipment maintenance, 1993 planning, livestock care, routine chores.

NEVADA: Heavy rain fell over much of southern areas early in the week with street flooding, dry washes running with 1 to 2 feet of water. Much lighter amounts of rain, snow were recorded in central, northern areas during 9th, 11th. Extremes 12° below zero; 68°.

Calving, lambing increasing. Hay supplies continued mostly adequate to meet winter feeding requirements. Main farm/ranch activities: Care, feeding of livestock, general maintenance, tax preparation.

NEW ENGLAND: Precipitation 2.01 in. Rhode Island, 0.29 to 1.73 in. elsewhere. Temperatures single digits to low 30s. Maximum temperatures mid 20s to mid 40s. Minimum temperatures minus 33° to minus 13° north, minus 14 to 3° south.

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

NEW JERSEY: Temperatures near normal, averaged 30° north, 34° south, 36° coastal. Extremes 8°; 56°. Precipitation above normal; averaged 1.53 in. north, 1.34 in. south, 1.30 in coastal. Heaviest 24 hour total 1.70 in. on 12th, 13th. Heaviest 24 hour snowfall 6 in. on 12th, 13th. Depth of snow on ground 16th: 4 to 5 in.

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

NEW MEXICO: Two winter storms moved across State during the week. Higher precipitation totals reached over 1.00 in. several areas. Temperatures 2 to 3° above normal for the State. Extremes 5°; 69°.

Farming activities were on the increase with land preparation for early crops.

NEW YORK: Temperatures varied greatly. The 7th saw record cold with temperatures 40° below zero in northern areas. Temperatures moderated during midweek with highs in the 30s to 40s on the 10th. It cooled down again at the end of the week. Extremes -38°; 50°. Precipitation was above normal except over western areas. Little fell until the 12th, 13th when a major snowstorm dumped 6 to 18 in. across much of the State. Sleet, freezing rain also fell in southern areas.

Major activities: Caring for livestock, maintenance work, cutting firewood, winter chores, attending meetings. Bitter cold made outside activities difficult.

NORTH CAROLINA: Temperatures 1 to 5° above normal. Precipitation 3.46 in. at Cape Hatteras to 0.04 in. at Mt. Mitchell.

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

NORTH DAKOTA: Temperatures 1° below normal southwest to 2° above normal northwest. Extremes -11° northeast, south central; 44° southwest. Precipitation 0.02 in. north central to 0.12 in. south central.

Warmer temperatures decreased snowcover levels in some areas. Overall, snowcover still mostly adequate, sufficient to protect winter wheat, rye, alfalfa. Livestock good to excellent, supplemental feed supplies were adequate. Livestock marketing slower pace than past weeks. Grain marketing normal.

OHIO: First half of the week was mostly dry although cloudy. Temperatures 4 to 10° above normal. Highs mid to upper 30s north to near 50° in the far south. Lows mid 20s to low 30s with extreme temperatures reaching the teens 9th morning. Warmest highs in the 60s across the south. Most of the precipitation came late in the week. Rainfall of 0.40 to 0.80 in. was common. First significant precipitation event in February for most locations.

Limited plowing took place with the dry weather. Wheat needs snowcover, as of this date, no winter kill has occurred.

OKLAHOMA: Temperatures 1° above normal Panhandle to 7° above normal northeast. Precipitation 0.39 in. Panhandle to 2.20 in. south central.

Prices for feeder steers, steer calves were steady to $4.00 per cwt. higher while feeder heifers, heifer calves were steady to $1.00 higher. Cotton harvesting has concluded.

OREGON: Temperatures 3° above normal western areas, south central 2° below normal, elsewhere at or slightly above normal. Precipitation 0.33 in. northern Cascades, 1.50 in. high plateau areas, central, southern coast 2.00 to 3.50 in., south central 0.40 in., northeastern mountains 0.20 in., elsewhere 0.10 in. or less.

Soil moisture mostly adequate statewide. Spring plowing underway, some spring wheat seeding underway, top dressing fertilizer started, Columbia Basin. Fruit, nut winter orchard activities continue, Willamette Valley. Livestock good. Lambing, calving continues, favorable conditions. Western pastures beginning to show regrowth.

PENNSYLVANIA: Above normal temperatures, above normal precipitation with significant snowfall in central, eastern portions

of the State. Temperature 31°, 5° above normal. Extremes: 0°; 64°. Precipitation 0.69 in., 0.08 in. above normal.

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

PUERTO RICO: Island rainfall 0.16 in. was 0.41 in. below normal. Highest rainfall 1.48 in. at Villalba, 1.33 in. at Pico Del Este, 0.72 in. at Maunabo. Highest 24 hour total 1.48 in. at Villalba on 3rd. WSFO San Juan mean temperature 79.1°, which was 3.0° above normal; rainfall was none which is 0.50 in. below normal. Island temperatures 75 to 77° on the coasts, 69 to 70° in the interior with mean station temperatures 60.9° at Cerro Marvilla to 80° at Roosevelt Roads. Extremes 50°; 91°.

SOUTH CAROLINA: Temperatures 4° above normal south coast to near normal Upstate. Rainfall 1.50 in. statewide.

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

SOUTH DAKOTA: Temperatures 0 to 3° above normal in the east, 2 to 8° below normal across the rest of the State. Extremes -16°; 57°. Precipitation widespread, mostly in the form of snow. Water equivalent 0.15 to 0.50 in. with a few locations reporting more than 0.70 in. Most reporting stations are above normal for the year-to-date.

Snow covered all of the State with depths 4 to 8 in.

TENNESSEE: Temperatures 3 to 10° above normal. All areas received precipitation towards the end of the week, amounts remained below normal.

Wheat mostly good. Farm activity remains limited: livestock care, general maintenance.

TEXAS: Weather systems brought precipitation early week then over following weekend while dry weather prevailed otherwise. Early week front brought rain all sections, especially Trans-Pecos, Lower Valley. Late-week storm associated with arctic surge dropped snow over Panhandle, northern south Plains with Panhandle snow depths over 6 in. Mild temperatures prevailed until cold air started to nose into the Panhandle 15th. Precipitation amounts above normal except Lower Valley, Blacklands, East Texas districts.

Crops: Small grain fields responded well to sunshine, warm conditions. Cross Timbers small grain fields showing signs excess moisture conditions. Minor rust, insect problems shown up. Blacklands fields need nitrogen top dressing application. Statewide wheat 72% normal compared 80% 1992.

Commercial vegetables: Rio Grande Valley, onions progressing well. Spring melon planting. High Plains, land preparation taking place. East Texas, weather land preparation onion, potato, lettuce, cabbage planting continued. Trans-Pecos, onion planted. Peaches Blacklands ready to bud. Early varieties already have. Buds swelling most peach varieties due to warm conditions.

Range and livestock: Supplemental feeding continued most areas. High Plains, snow drifts in pastures caused feeding problems. Blacklands cattle good to fair, calves arriving early. Winter pastures furnishing grazing. Overall livestock fair, good.

UTAH: Temperature maximums 4° lower than normal, minimums 4° above normal. Precipitation very heavy in the Dixie division to heavy elsewhere in the southern half of the State to moderate in the northern half of the State.

Major farm, ranch activities were feeding livestock, caring for heifers that are calving early, preparing for normal calving, lambing. Many sheep were reported to have been moved from winter range, put on feed due to snow depth.

VIRGINIA: Temperatures above normal, precipitation normal. Extremes 14°; 68°. Precipitation accumulations 0.25 to 1.50 in.

Days suitable for fieldwork 5.2. Topsoil 25% short, 71% adequate, 4% surplus. Pasture 18% poor, 54% fair, 28% good. Winter grains, grazing crops condition 11% poor, 51% fair, 36% good, 2% excellent. Forage from pastures, grazing crops dairy cattle 5%, beef cattle 14%, sheep 16%. Calving, lambing, completing soybean, cotton harvest. Pruning fruit trees, grape vines. Gassing, seeding tobacco plantbeds, topdressing small grains, fertilizing, liming land, plowing fields, attending production meetings, soil sampling, preparing for taxes.

WASHINGTON: Temperatures 8° above normal to 4° above normal west; 8° above normal to 3° below normal, east. Precipitation 0.03 to 0.25 in. west; none to 0.33 in. east.

Days suitable for fieldwork 5.2. Soil moisture 15% short, 84% adequate, 1% surplus. Hay, other roughage 13% very short, 21% short, 51% adequate, 15% surplus. Range, pasture 64% very poor, 21% poor, 8% fair, 7% good. Winter wheat dryland 40% fair, 60% good; irrigated 100% good. Barley dryland 50% fair, 50% good; irrigated 100% good. Mild weather continued. Manure/fertilizers being spread on westside as pastures, crop areas dry. Crop planning underway in east; livestock areas wet, hay supplies dwindling as gradual snow melt continues. Tree/cane fruit pruning, lambing/calving progressing well.

WEST VIRGINIA: Temperature 38°. Extremes 15°; 68°. Precipitation 0.57 in.

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

WISCONSIN: Temperature 23°. Extremes 3°; 40°. Above normal temperatures. A mixture of freezing rain, sleet, rain, snow spread across the south from the 9th to the 11th. Mainly snow fell across portions of northern, central areas. Up to 4 in. fell in some areas.

Corn harvest 14th, 85% complete.

WYOMING: Temperatures across most of the State 2 to 10° below normal with only isolated areas in the north, central regions above normal. Precipitation in the southwest, parts of the northwest was slightly below normal. Precipitation was above normal across the rest of State.

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

International Weather and Crop Summary
HIGHLIGHTS

February 7 - 13, 1993

FSU-WESTERN: Continued unusually mild weather accompanied little, if any, precipitation. Dry weather continued to limit soil moisture recharge in Ukraine.

EUROPE: Mostly light precipitation and seasonal temperatures prevailed, although some beneficial rain fell in Spain.

SOUTH ASIA: Dry, warm weather increased irrigation demands of vegetative winter grains and oilseeds.

EASTERN ASIA: Warm temperatures may induce premature greening of winter wheat.

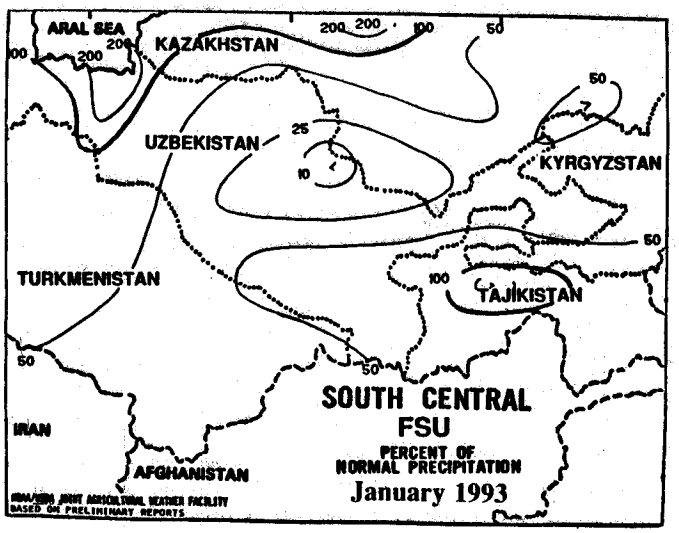
SOUTHEAST ASIA: Beneficial rain covered rice areas of southern Indonesia and the southern Philippines.

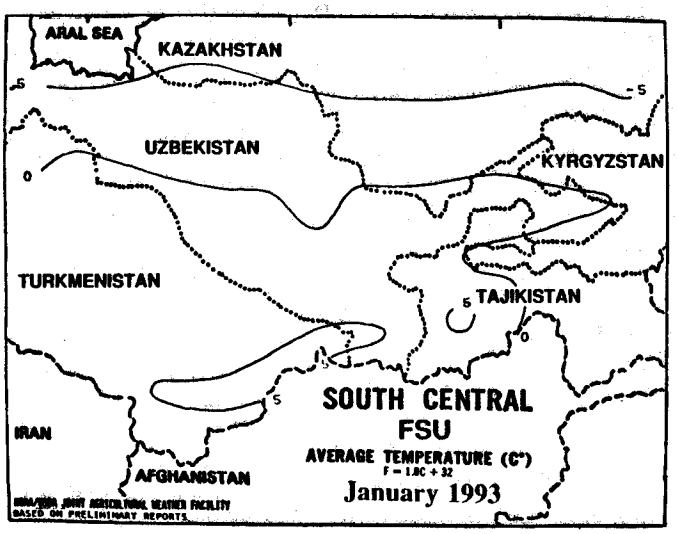
AUSTRALIA: Continued dry and renewed hot weather stressed eastern summer crops.

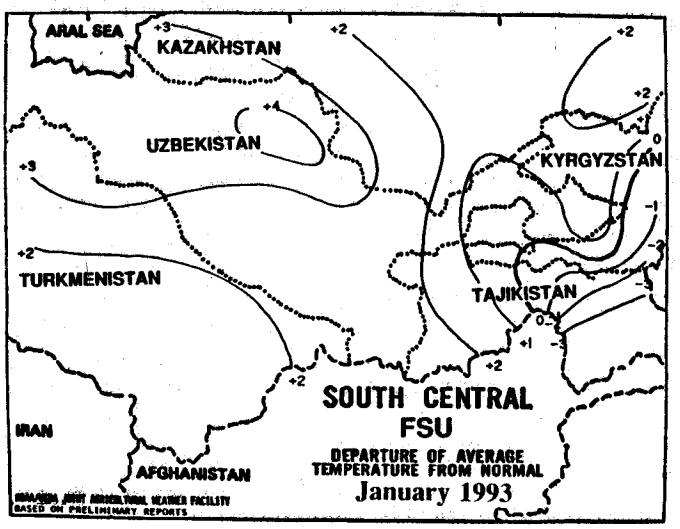
SOUTH AMERICA: Seasonable temperatures and adequate soil moisture aided crop development across Brazil and Argentina.

NORTHWESTERN AFRICA: Dry weather returned to vegetative winter grain areas in Morocco. Light showers dampened winter grains in eastern Algeria and Tunisia, following 4 weeks of dryness.

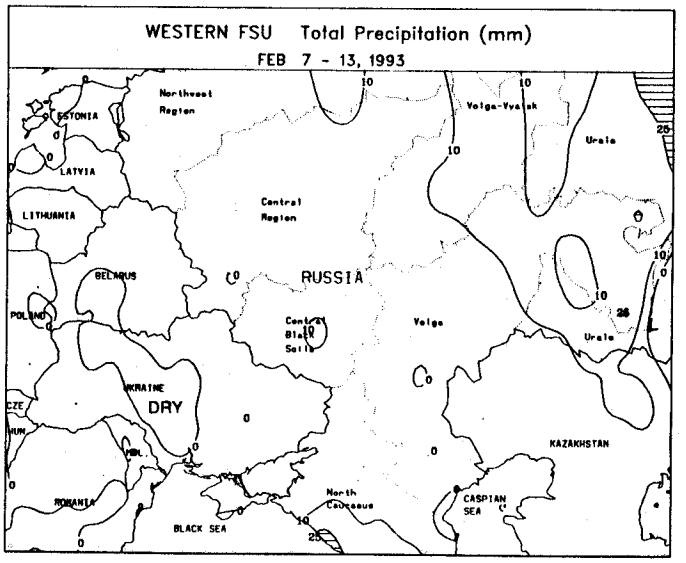
SOUTH AFRICA: Showers benefited filling corn.

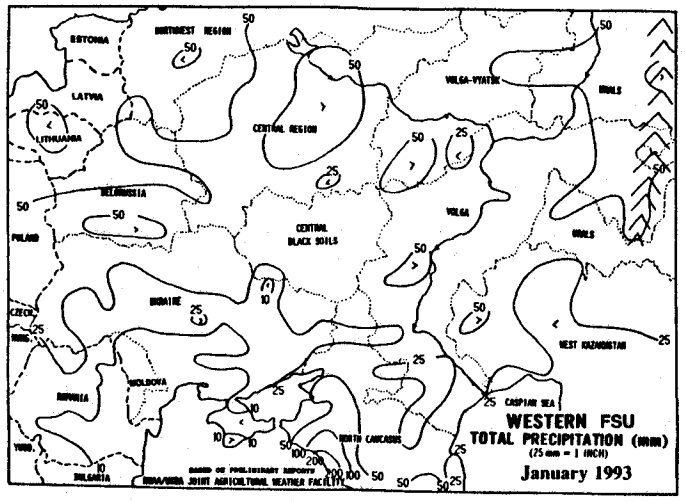


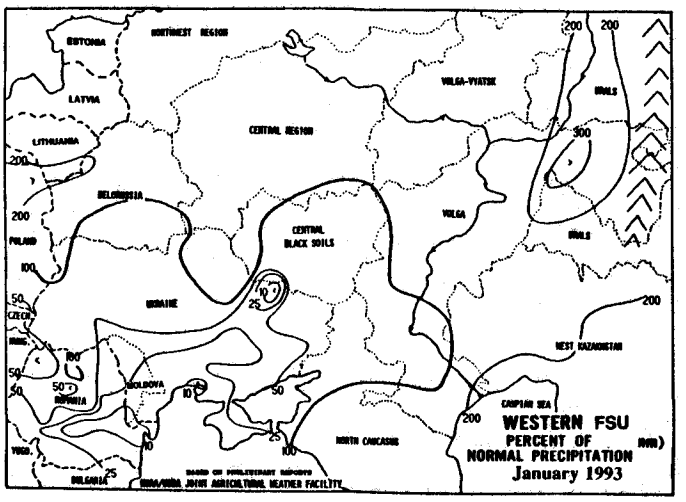


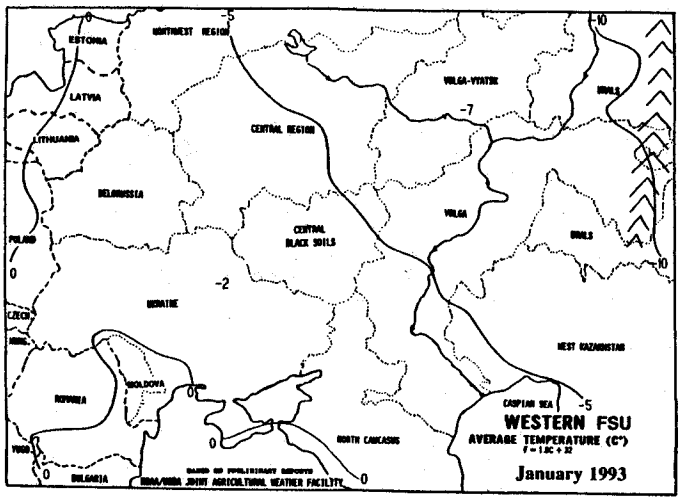


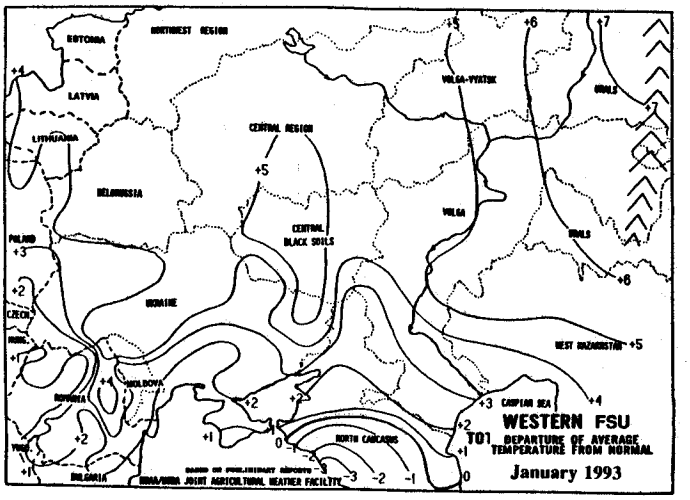
FSU-WESTERN: Continued unseasonably mild weather was accompanied by little, if any, precipitation. Highest maximum temperatures ranged from 2 to 4 degrees Celsius (C) in the north and from 5 to 9 degrees C in the extreme south. Although average temperatures, ranging from -1 to -9 degrees C, were lower than those of the previous week, temperatures remained 2-6 degrees C above normal. The exception was over crop areas in the Crimea and western North Caucasus, where temperatures averaged 2-4 degrees C below normal. Mostly dry weather over the Ukraine continued to limit soil moisture recharge. In January, above-normal precipitation over the Baltic States, Belarus, Northwest Region, Central Region, Volga Vyatsk, and the western North Caucasus increased soil moisture reserves. In contrast, continued below-normal precipitation over most of Ukraine and North Caucasus limited soil moisture recharge. Temperatures averaged 3-6 degrees Celsius above normal and provided favorable overwintering conditions for dormant winter grains, but caused some loss in winter hardiness and reduced protective snow cover.

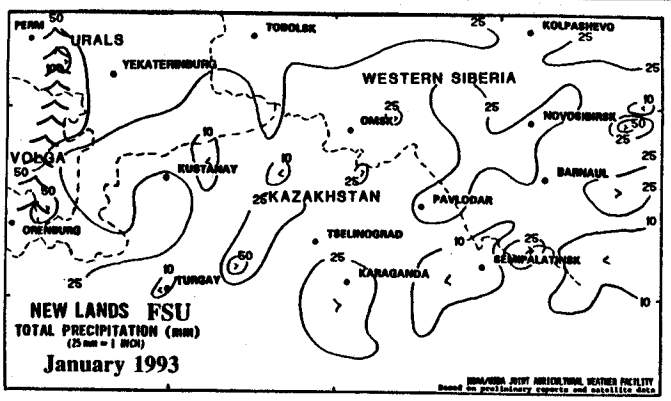


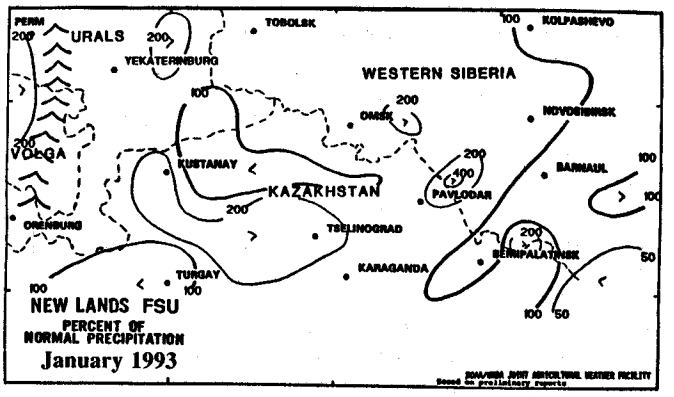


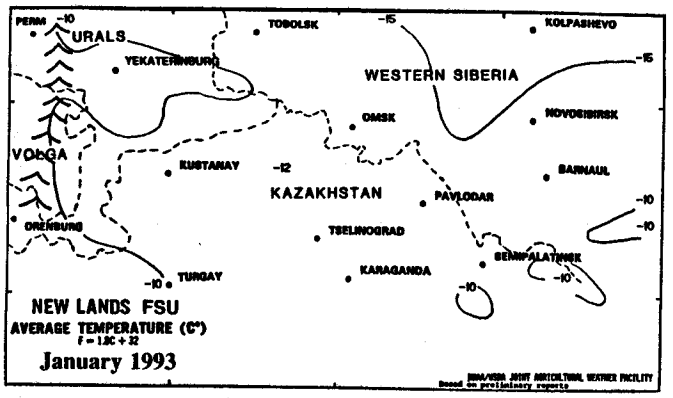


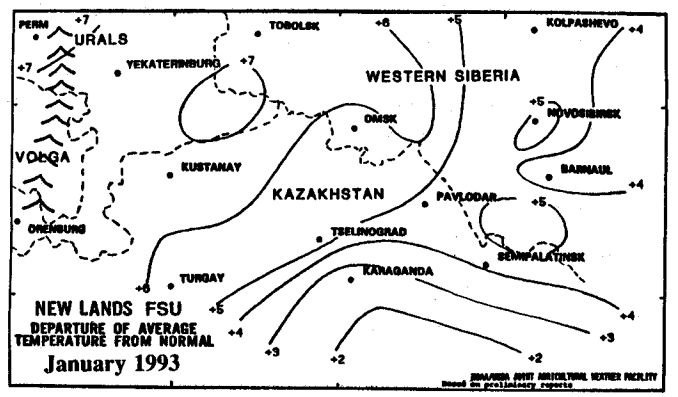


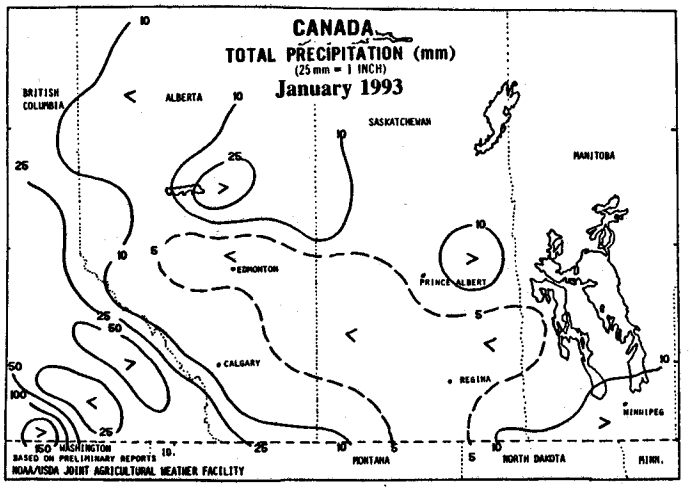


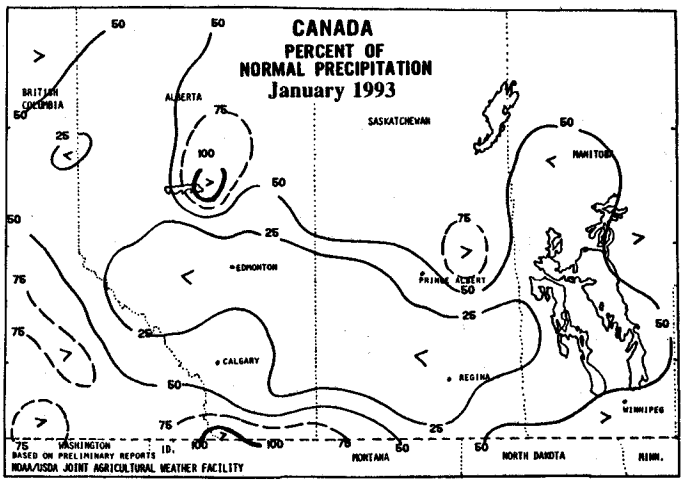

NEW LANDS FSU
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
January 1993
URALS
WESTERN SIBERIA
KAZAKHSTAN
VOLGA
PERM
TOBOLSK
KOLPASHEVO
YEKATERINBURG
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports and satellite data

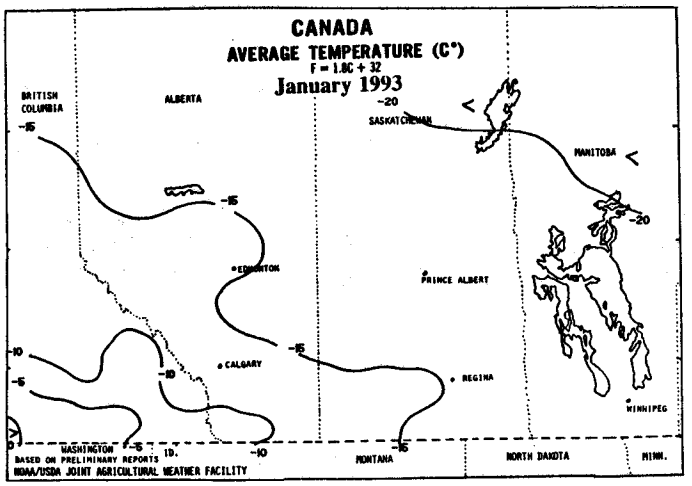

NEW LANDS FSU
PERCENT OF
NORMAL PRECIPITATION
January 1993
URALS
WESTERN SIBERIA
KAZAKHSTAN
VOLGA
PERM
TOBOLSK
KOLPASHEVO
YEKATERINBURG
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

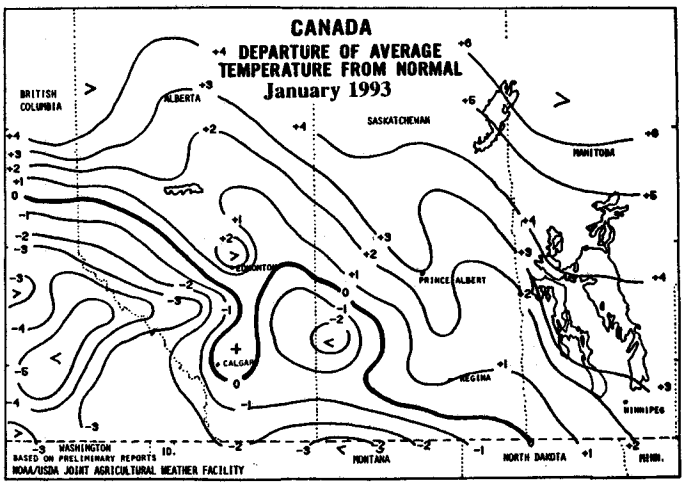

NEW LANDS FSU
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
January 1993
URALS
WESTERN SIBERIA
KAZAKHSTAN
VOLGA
PERM
TOBOLSK
KOLPASHEVO
YEKATERINBURG
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


NEW LANDS FSU
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
January 1993
URALS
WESTERN SIBERIA
KAZAKHSTAN
VOLGA
PERM
TOBOLSK
KOLPASHEVO
YEKATERINBURG
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

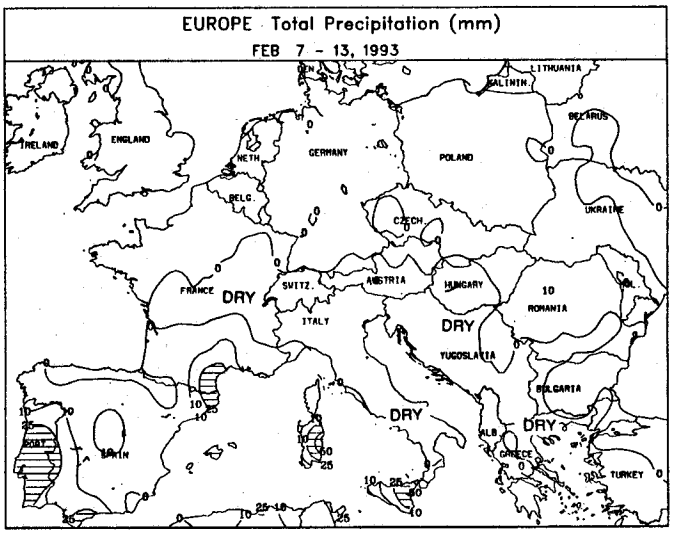

CANADA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
January 1993
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
EDMONTON
PRINCE ALBERT
CALGARY
REGINA
WINNIPEG
WASHINGTON
ID.
MONTANA
NORTH DAKOTA
MINN.
BASED ON PRELIMINARY REPORTS
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

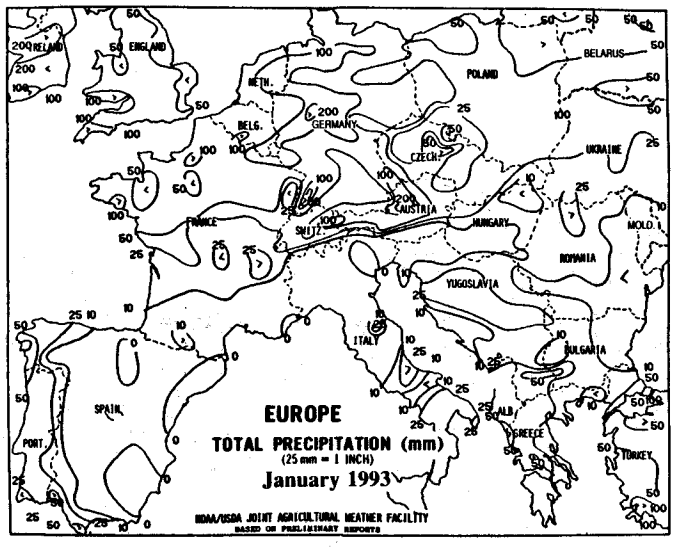

CANADA
PERCENT OF
NORMAL PRECIPITATION
January 1993
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
EDMONTON
PRINCE ALBERT
CALGARY
REGINA
WINNIPEG
WASHINGTON
ID.
MONTANA
NORTH DAKOTA
MINN.
BASED ON PRELIMINARY REPORTS
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

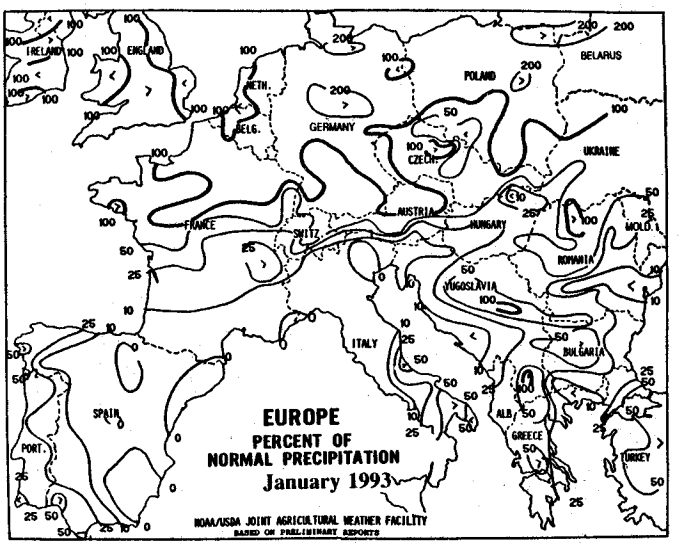

CANADA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
January 1993
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
EDMONTON
PRINCE ALBERT
CALGARY
REGINA
WINNIPEG
WASHINGTON
ID.
MONTANA
NORTH DAKOTA
MINN.
BASED ON PRELIMINARY REPORTS
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

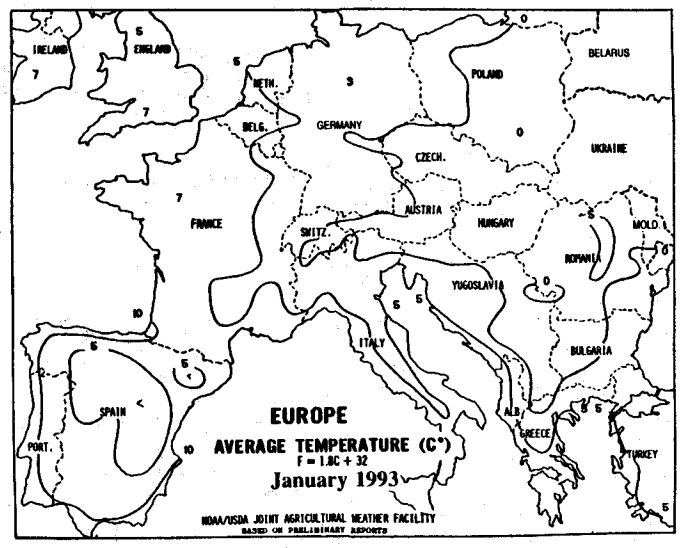

CANADA
+4 DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
January 1993
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
EDMONTON
PRINCE ALBERT
CALGARY
REGINA
WINNIPEG
WASHINGTON
ID.
MONTANA
NORTH DAKOTA
MINN.
BASED ON PRELIMINARY REPORTS
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

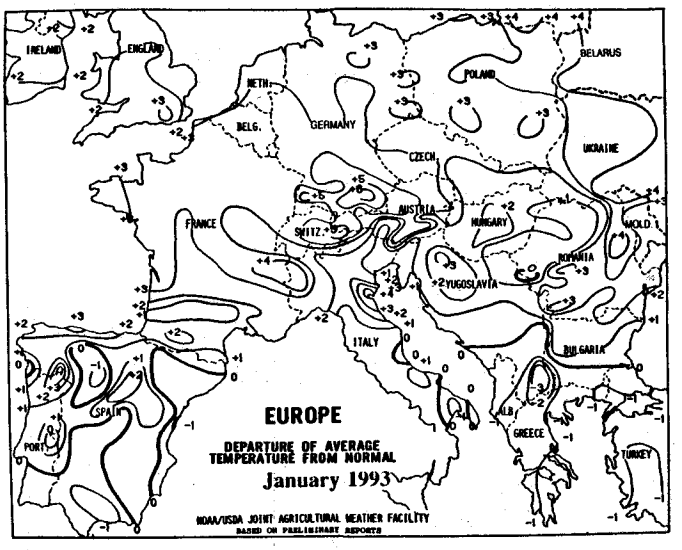
EUROPE: Very light precipitation (5 mm or less) continued across most of Europe, while heavier rain (10-46 mm) fell in Portugal and southwestern Spain. Winter precipitation has been inadequate for crops in Spain. Dry weather also prevailed over Italy. Temperatures averaged slightly above normal, posing no threat to dormant winter grains across northern Europe after the previous week's brief cold air intrusion. In January, precipitation averaged above normal across northern Europe, boosting moisture supplies for the upcoming growing season. However, well-below-normal rainfall across the Mediterranean region, with virtually no rain in Spain and northern Italy, hampered winter crop growth. The unfavorable dryness was especially acute in southeastern Spain, where December's rainfall was also well below average. Rainfall has also trended below normal in east-central and southeastern Europe, raising concern for adequate moisture in the spring.

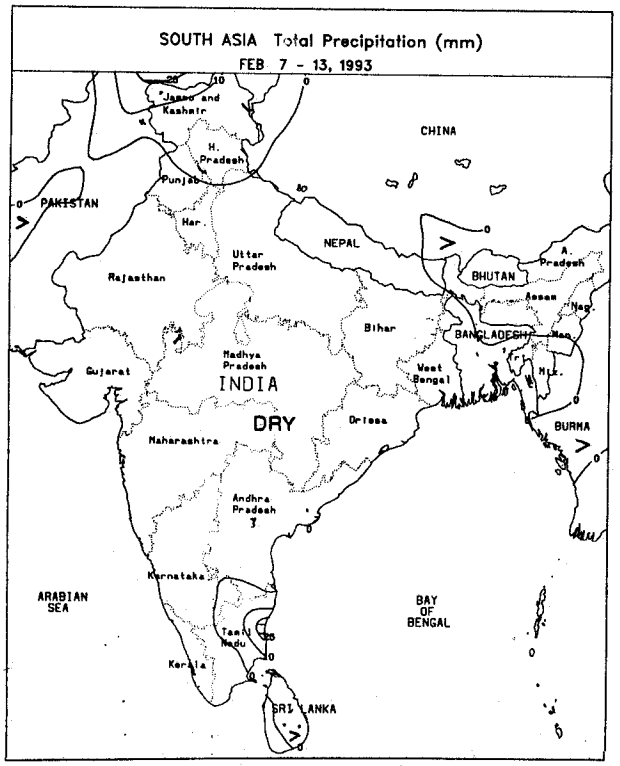




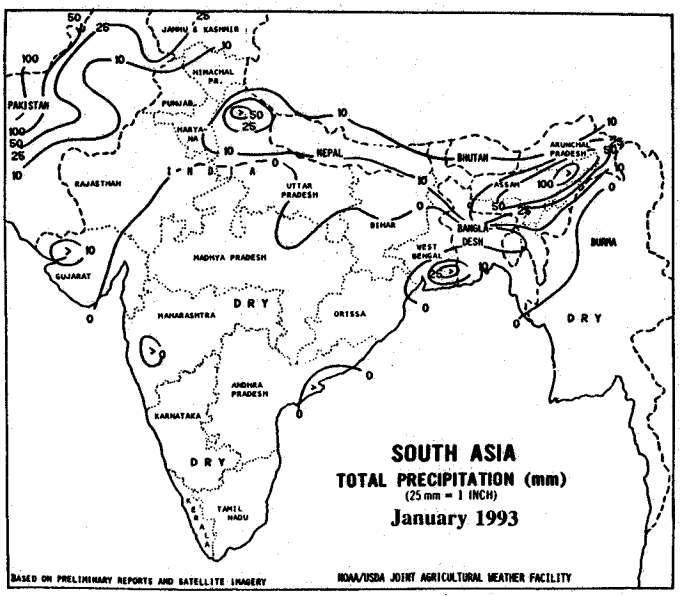


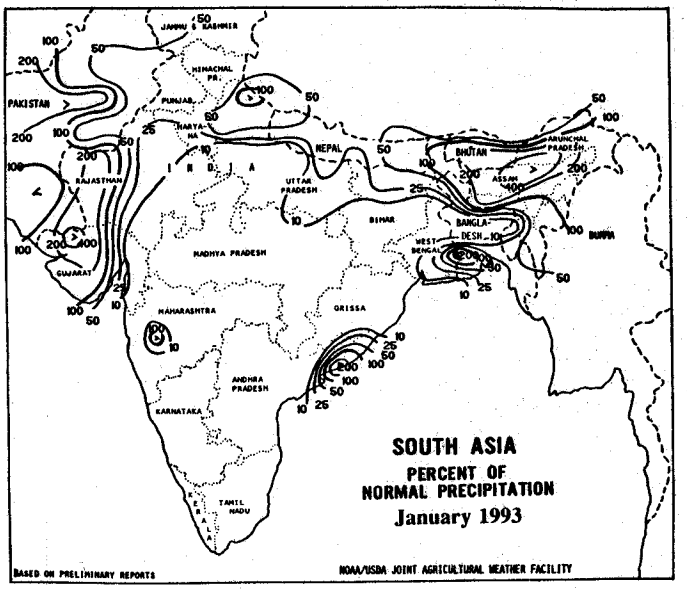


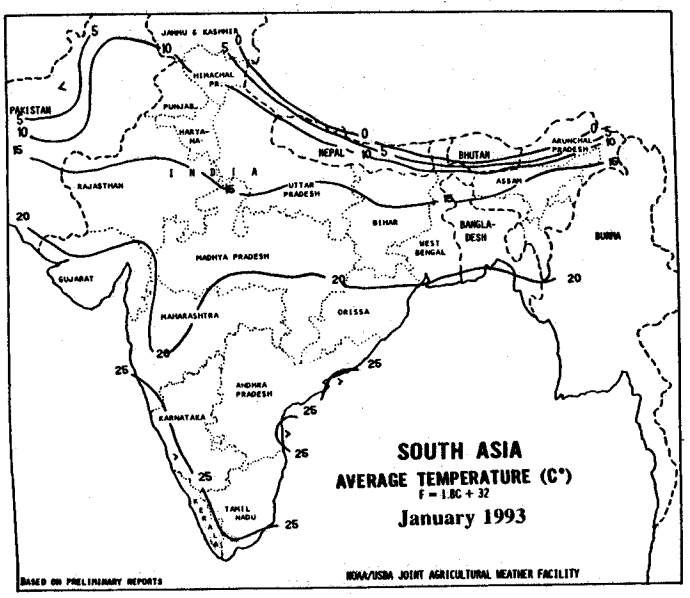


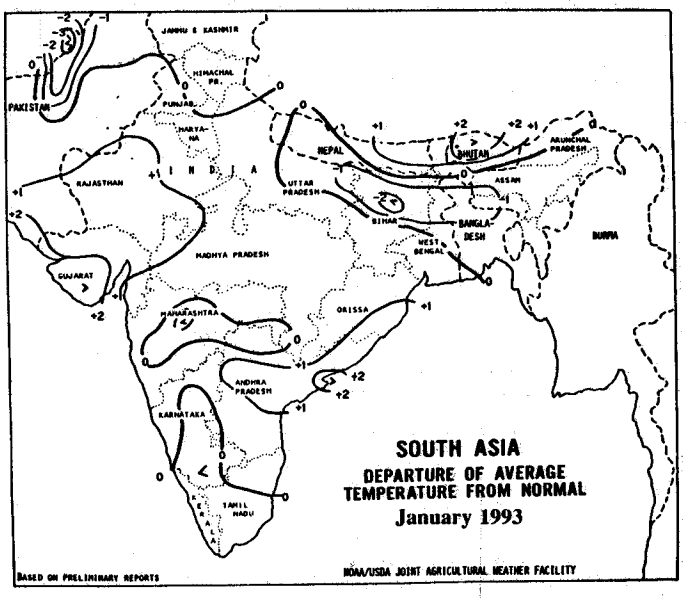


SOUTH ASIA: Dry, unseasonably warm weather spread across winter grain and oilseed areas of Pakistan and northern India, increasing irrigation requirements of vegetative crops. High temperatures reached into the low to mid 30's C over most northwestern and central winter crop areas. During January, early-month showers boosted reservoirs in north-central and eastern India, but dry weather dominated the region thereafter. Temperatures averaged near normal, but were cool early in the month with some isolated frost.

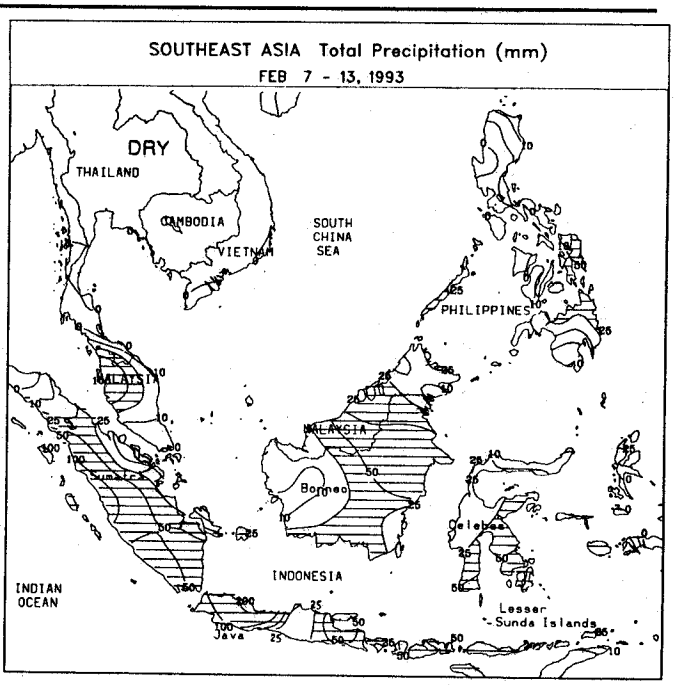


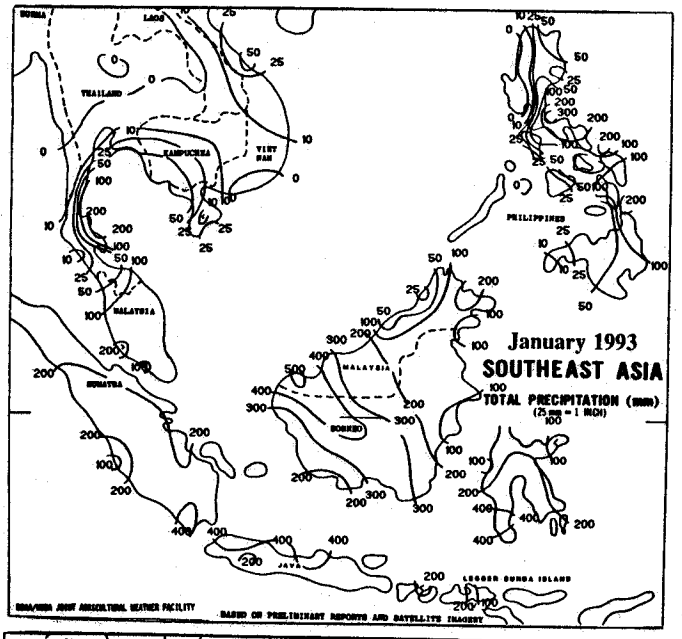


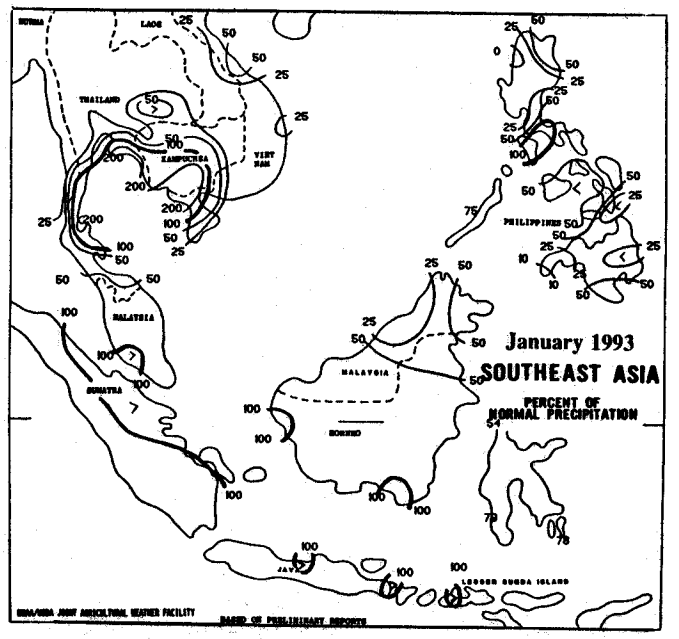


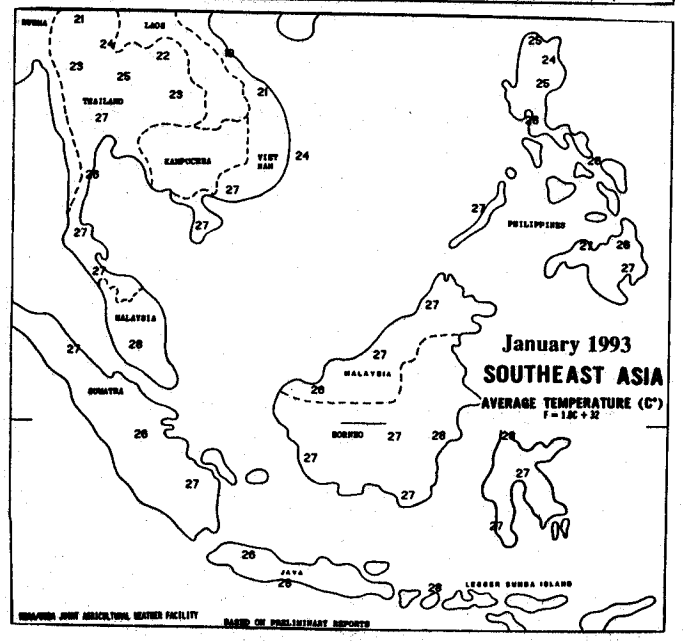


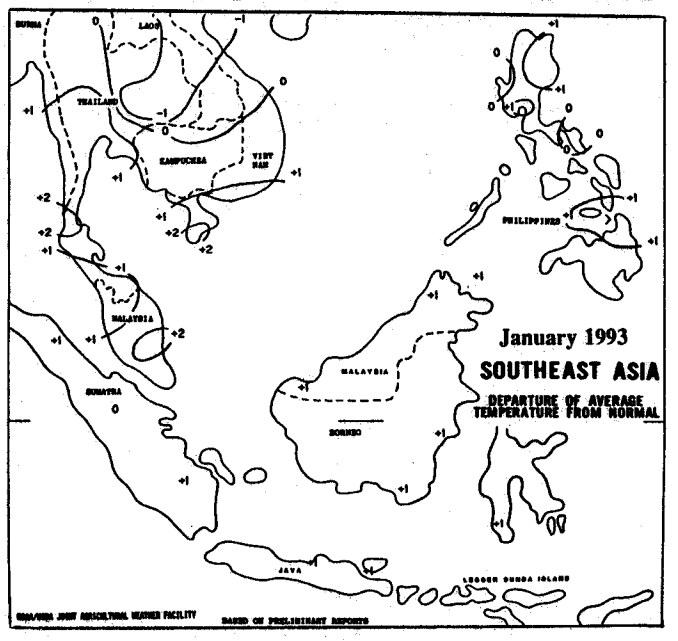
SOUTHEAST ASIA: Moderate to heavy showers (25-50 mm or more) continued over southern Indonesia, maintaining reservoir levels for rice. Heavy showers (50-113 mm) covered rice and oil palm areas of northwestern peninsular Malaysia, but precipitation was mostly light (25 mm or less) elsewhere. January rainfall was near to above normal over primary crop areas of Indonesia and Malaysia but, while rainfall was frequent and resulted in flooding over Java, periods of dry weather occurred in Malaysia. In the Philippines, beneficial rain (20-50 mm or more) continued over southern rice and corn areas, improving planting conditions. Additional widespread rain is needed following January's below-normal precipitation.

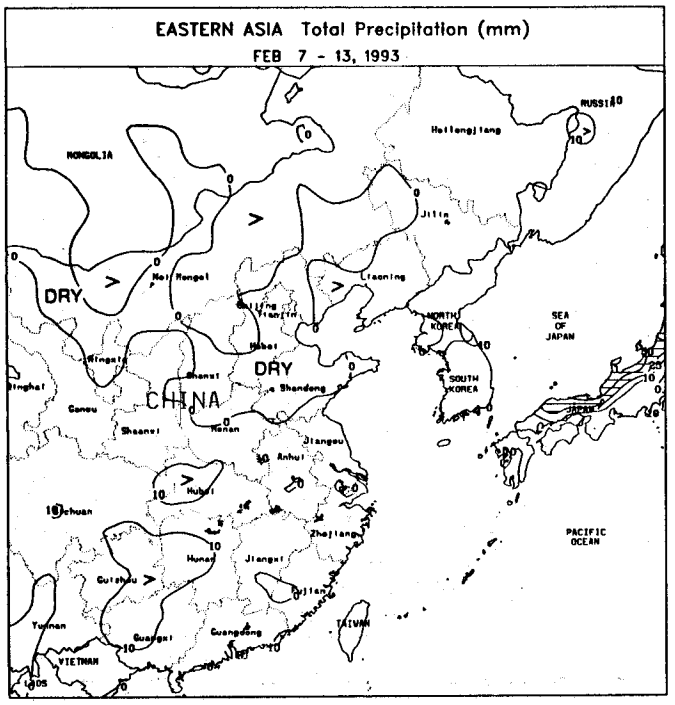




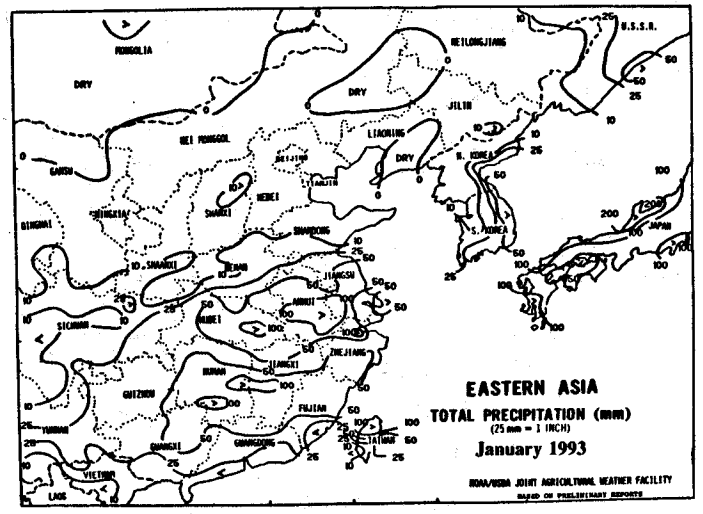


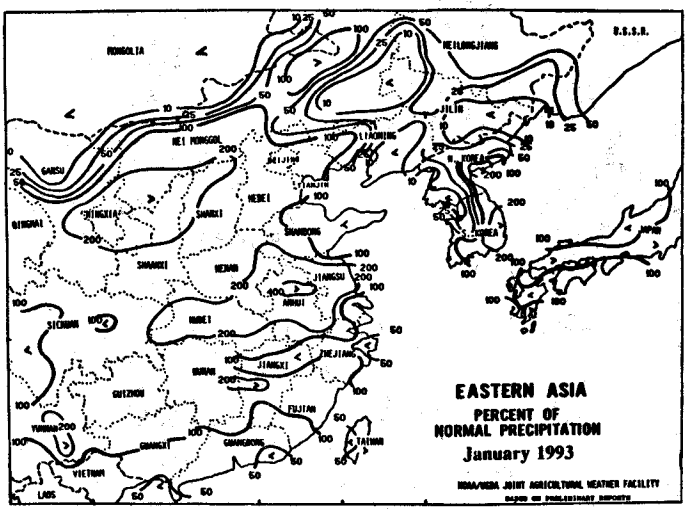


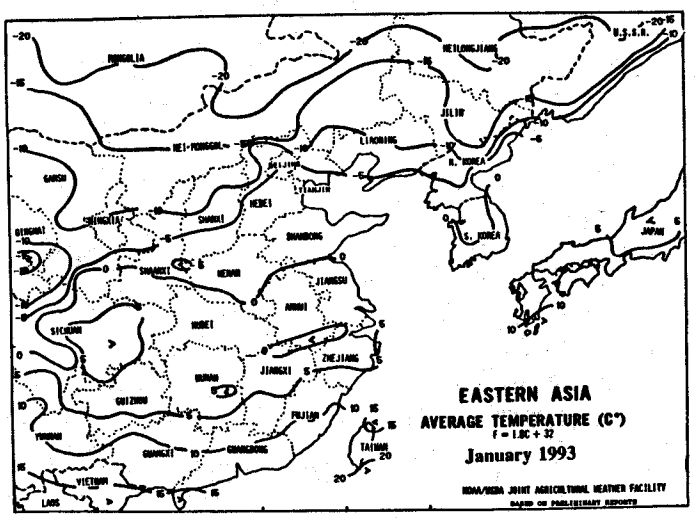


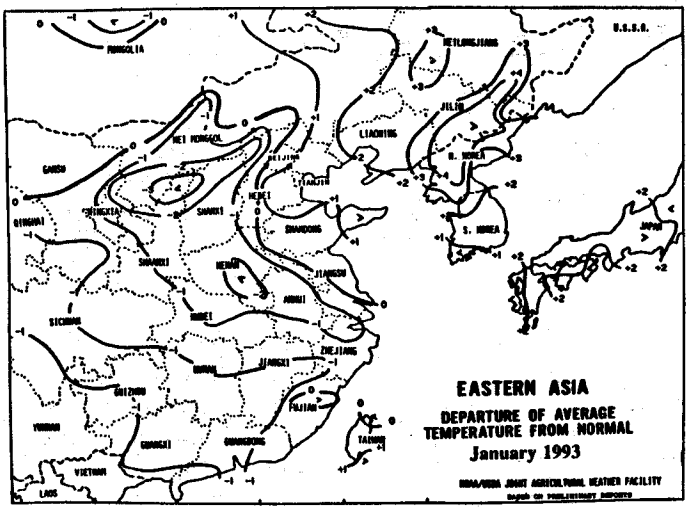


EASTERN ASIA: Seasonably dry weather continued across the North China Plain, while scattered light rain (7-20 mm) prevailed across central and southern China. Temperatures moderated from last week's unseasonably warm weather, but still averaged 2-6 degrees C above normal. The continued warm temperatures may cause winter wheat to break dormancy, making wheat vulnerable to any late-season cold air outbreak. During January, precipitation averaged above to much above normal, especially across central China. The moisture benefited reservoirs recovering from last season's dryness. The North China Plain received above-normal precipitation, with actual amounts totaling under 15 mm over most areas and 15-40 mm across the southern portions.

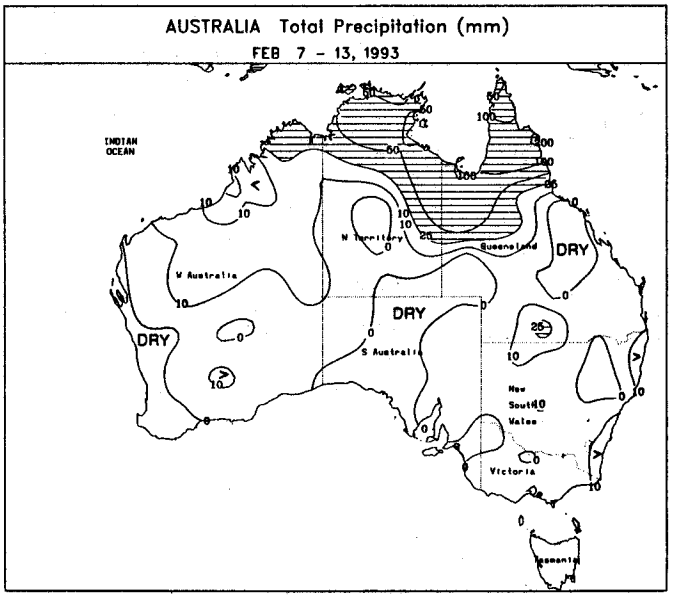


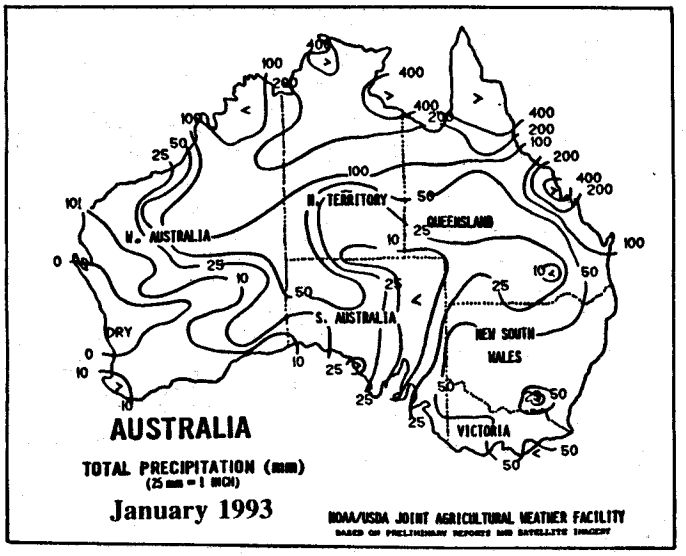


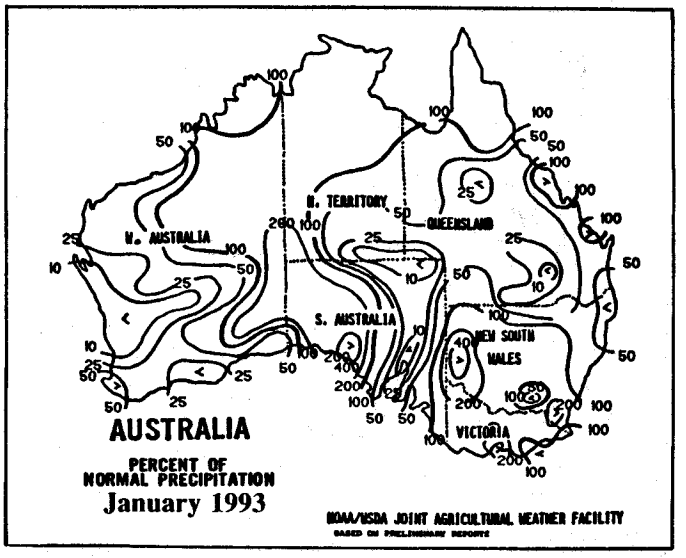


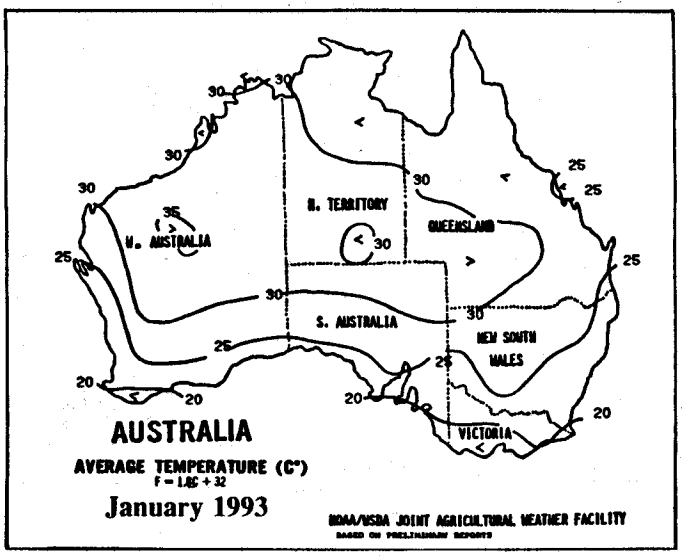


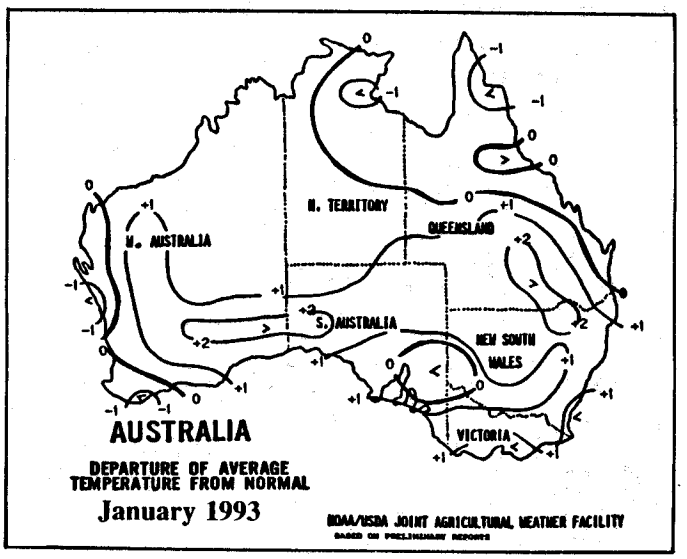
AUSTRALIA: Southern Queensland received some relief from hot weather last week, but maximum temperatures climbed back into the upper 30's by week's end. The continued dry (only scattered rainfall amounts of 2-7 mm) and renewed hot weather increased water stress for cotton and sorghum in the region. Significant moisture is needed in this region to stabilize crop yield prospects. Further south in northern New South Wales, maximum temperatures remained in the lower to mid 30's. Temperatures averaged 1-3 degrees above normal across the eastern summer crop region. The majority of Queensland's sugarcane region reported only light rain (less than 10 mm), while the extreme northern portion continued to receive moderate to heavy showers (50-200 mm). During January, New South Wales and Victoria received near- to above-normal rainfall, delaying late-winter wheat harvesting, but favoring soil moisture for summer crops. Below- to much below-normal January rainfall (ranging from 10 to 50 percent of normal) across Southern Queensland helped to deplete soil moisture for summer crops. The northeastern sugarcane region received near-normal rainfall during the month.

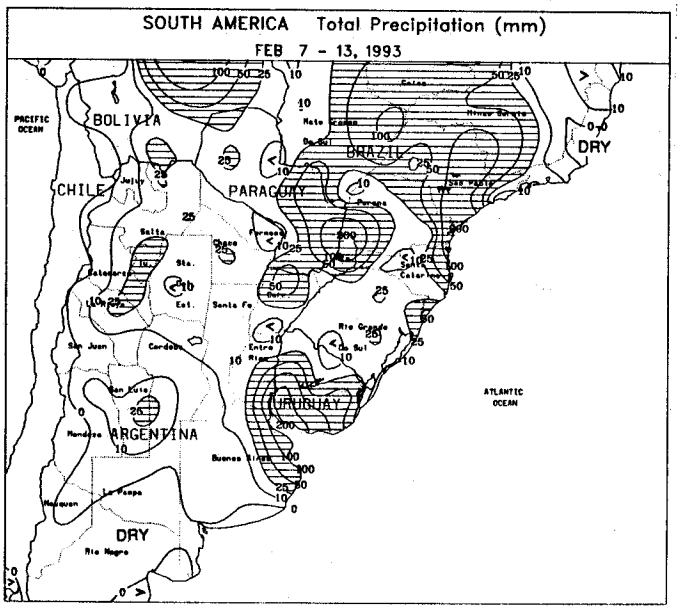




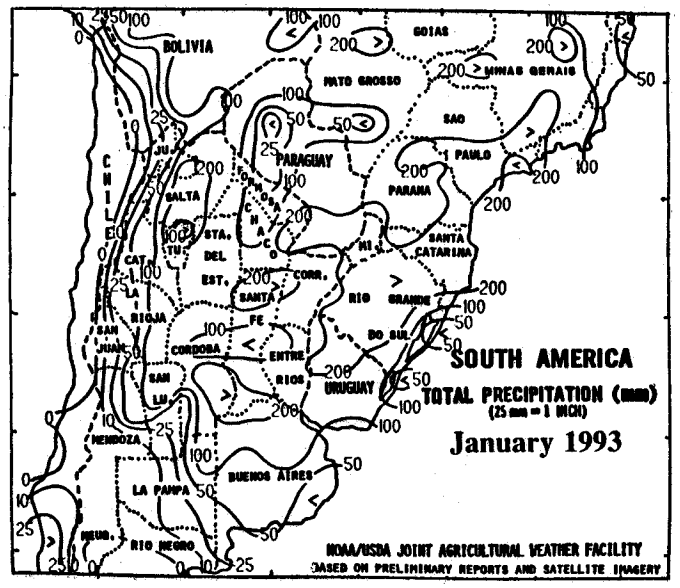


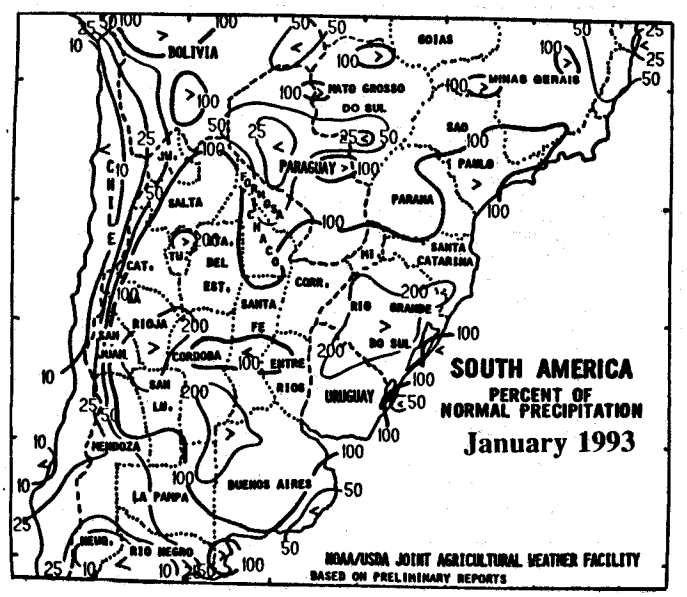


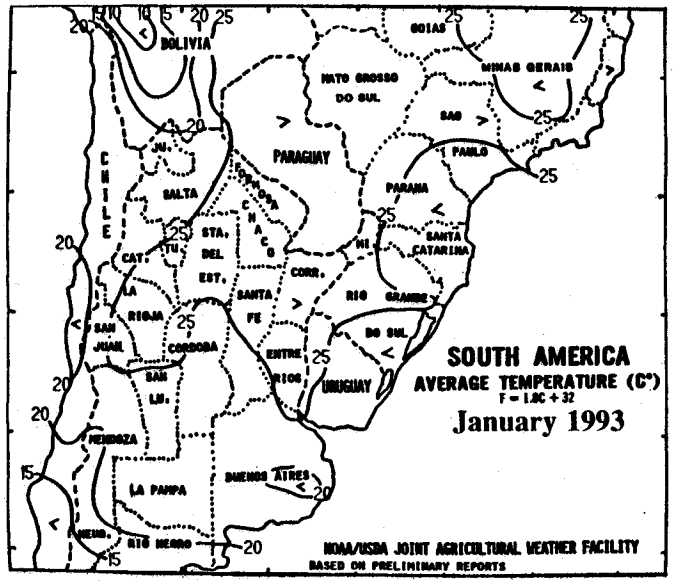


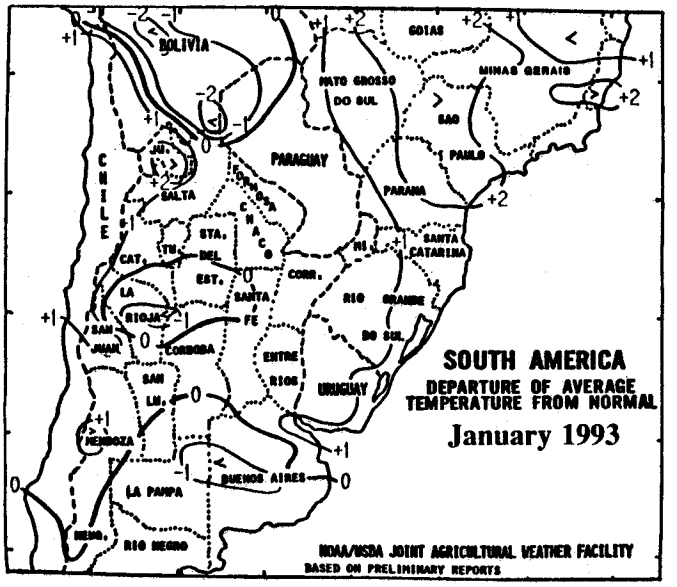


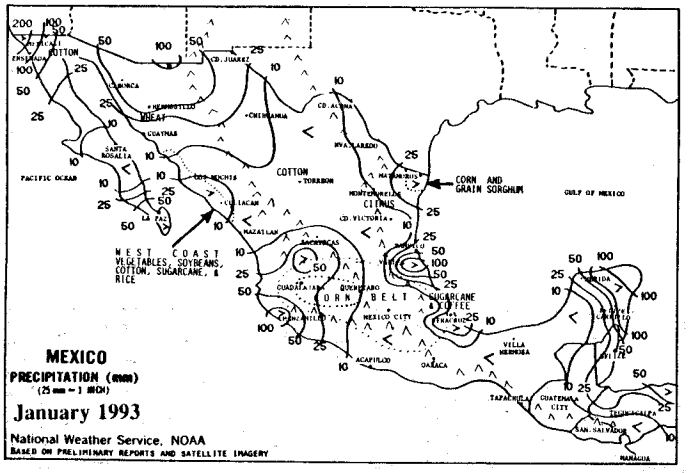
SOUTH AMERICA: Moderate to heavy showers (20-70 mm) fell across most of southern Brazil, favoring flowering to pod-filling soybeans. Heavier amounts (greater than 100 mm) were reported in portions of western Parana, eastern Sao Paulo, and southern Minas Gerais. Southern Mato Grosso, which had been somewhat dry, especially benefited from the rains. Temperatures averaged near normal across southern Brazil. During January, rainfall averaged near to above normal across Rio Grande do Sul, keeping soil moisture levels very favorable for summer crops. Further north, near-normal rainfall was reported, with a few dry pockets (50-80 percent of normal rainfall) in southern Mato Grosso and Mato Grosso du Sol. Across central Argentina, scattered showers (4-20 mm) and cool temperatures (2-4 degrees C below normal) favored summer crop development. Heavy showers (100-200 mm) were reported near the city of Buenos Aires, causing local flooding, but the impact to summer crops was minimal. Widespread above-normal rains during January kept soil moisture levels adequate to abundant.

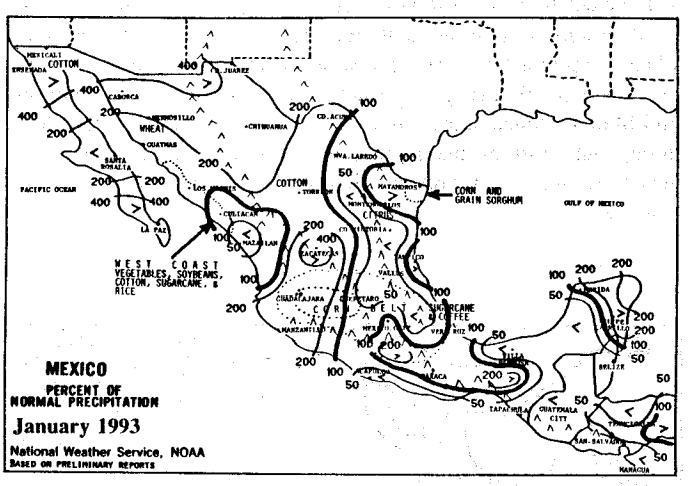


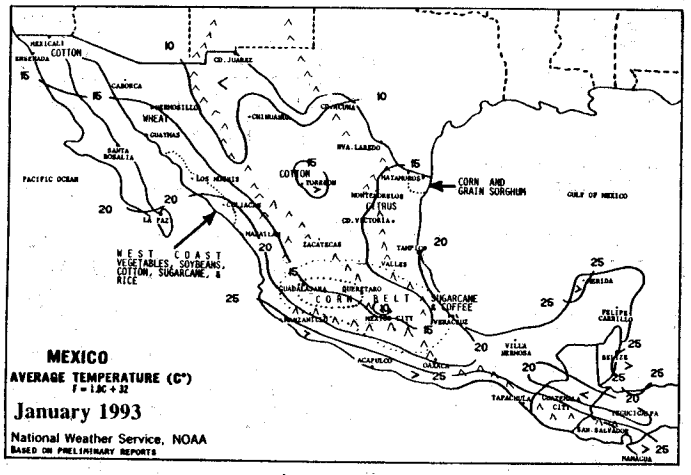


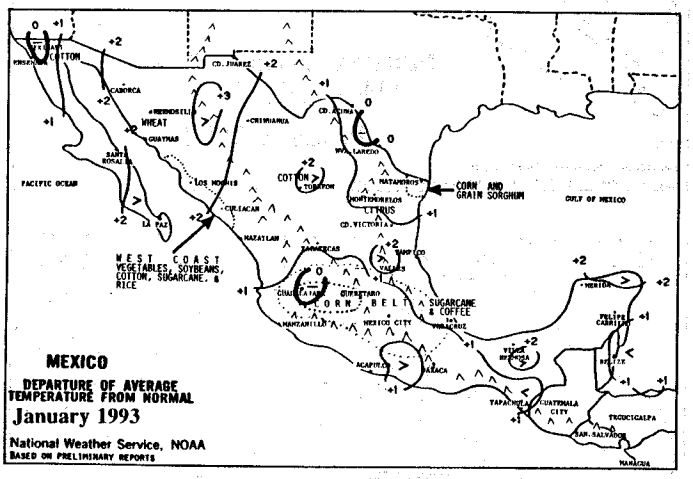




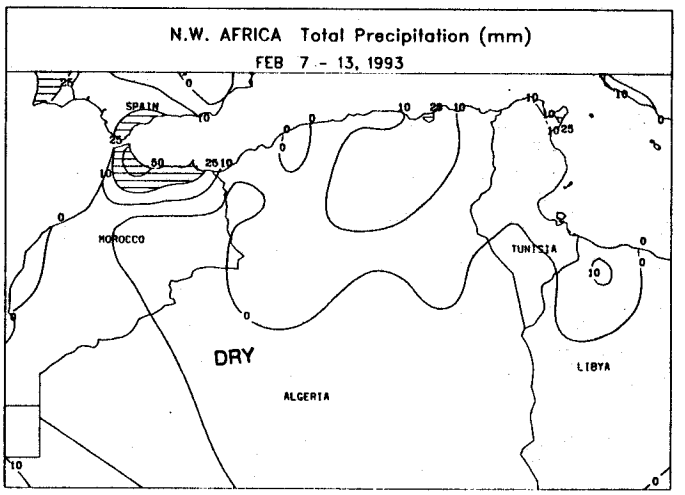

MEXICO
PRECIPITATION (mm)
(25 mm ~ 1 INCH)
January 1993
National Weather Service, NOAA
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY
WEST COAST VEGETABLES, SOYBEANS, COTTON, SUGARCANE, & RICE
CORN BELT
CORN AND GRAIN SORGHUM
SUGARCANE & COFFEE
COTTON
WHEAT
CITRUS
PACIFIC OCEAN
GULF OF MEXICO

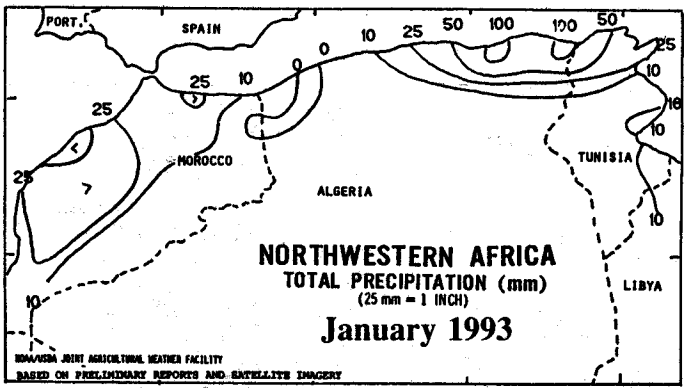

MEXICO
PERCENT OF NORMAL PRECIPITATION
January 1993
National Weather Service, NOAA
BASED ON PRELIMINARY REPORTS
WEST COAST VEGETABLES, SOYBEANS, COTTON, SUGARCANE, & RICE
CORN BELT
CORN AND GRAIN SORGHUM
SUGARCANE & COFFEE
COTTON
WHEAT
CITRUS
PACIFIC OCEAN
GULF OF MEXICO

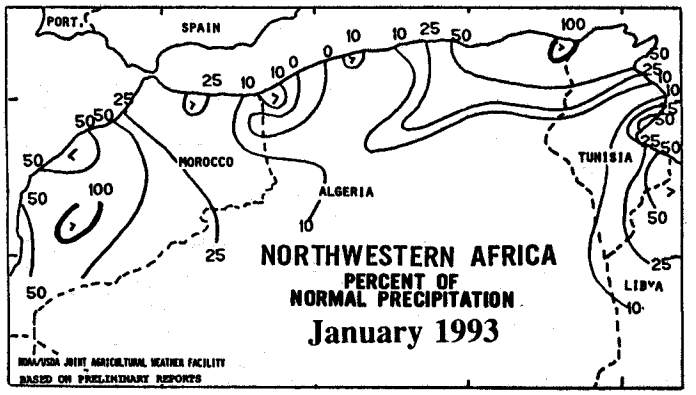

MEXICO
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
January 1993
National Weather Service, NOAA
BASED ON PRELIMINARY REPORTS
WEST COAST VEGETABLES, SOYBEANS, COTTON, SUGARCANE, & RICE
CORN BELT
CORN AND GRAIN SORGHUM
SUGARCANE & COFFEE
COTTON
WHEAT
CITRUS
PACIFIC OCEAN
GULF OF MEXICO

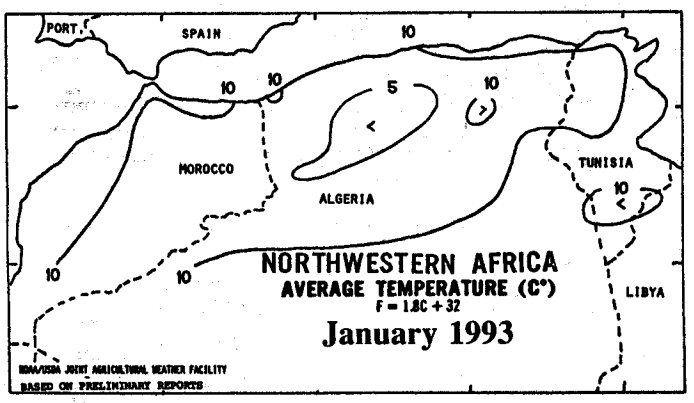

MEXICO
DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL
January 1993
National Weather Service, NOAA
BASED ON PRELIMINARY REPORTS
WEST COAST VEGETABLES, SOYBEANS, COTTON, SUGARCANE, & RICE
CORN BELT
CORN AND GRAIN SORGHUM
SUGARCANE & COFFEE
COTTON
WHEAT
CITRUS
PACIFIC OCEAN
GULF OF MEXICO

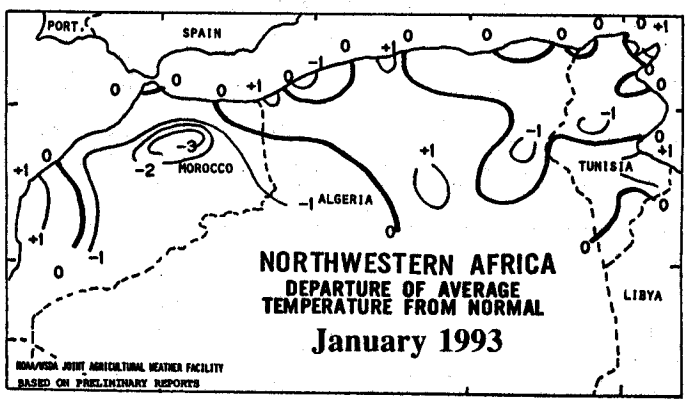
NORTHWESTERN AFRICA: Following 2 weeks of beneficial rain, dry weather returned to winter grain areas in Morocco. Mostly dry weather over winter grain areas in western Algeria continued a chronically dry weather pattern that has covered crop areas since the beginning of the growing season. Further east, light showers over eastern Algeria and Tunisia dampened winter grain areas. In January, below normal precipitation covered winter grains in Morocco, Algeria, and Tunisia. January's below-normal precipitation exacerbated dryness in Morocco and western Algeria, and reduced moisture reserves in eastern Algeria and Tunisia. Most winter grains were in the jointing stage, a time in the growth cycle when crop-moisture use increases, reaching its peak during reproduction. Winter grains usually begin to enter reproduction in mid-March. Since subsoil moisture reserves are unfavorably low throughout most of the region, timely rains will be needed in upcoming weeks to prevent significant declines in crop yield potential.

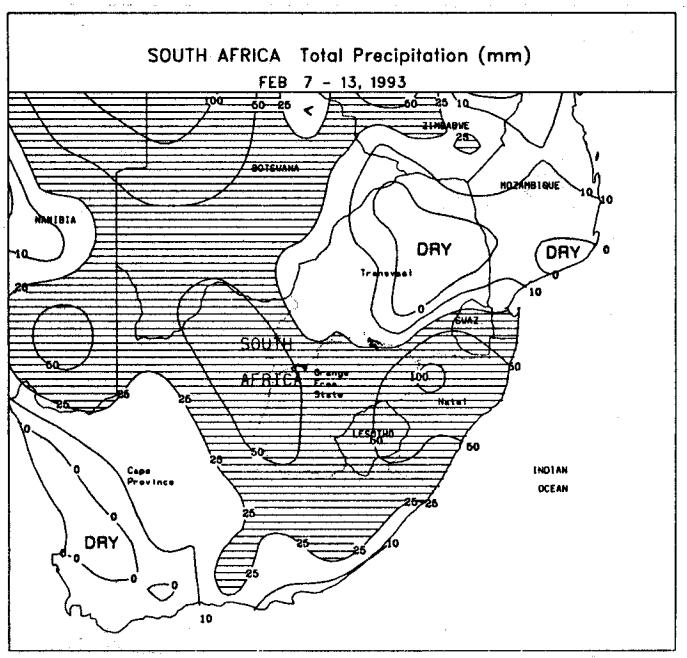




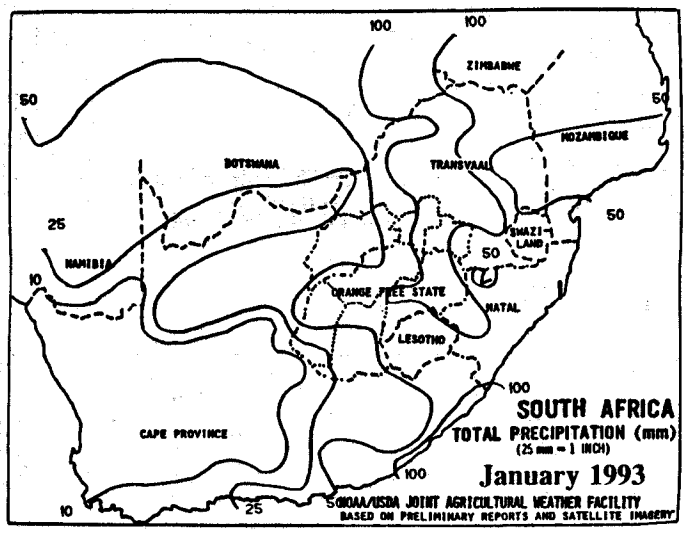


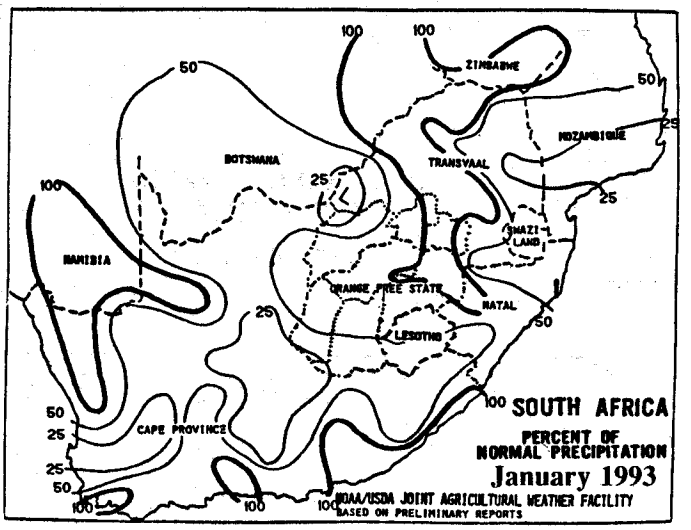


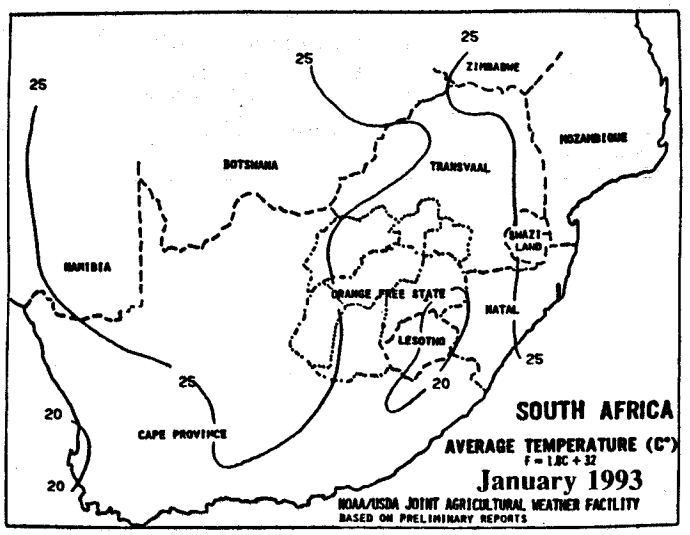


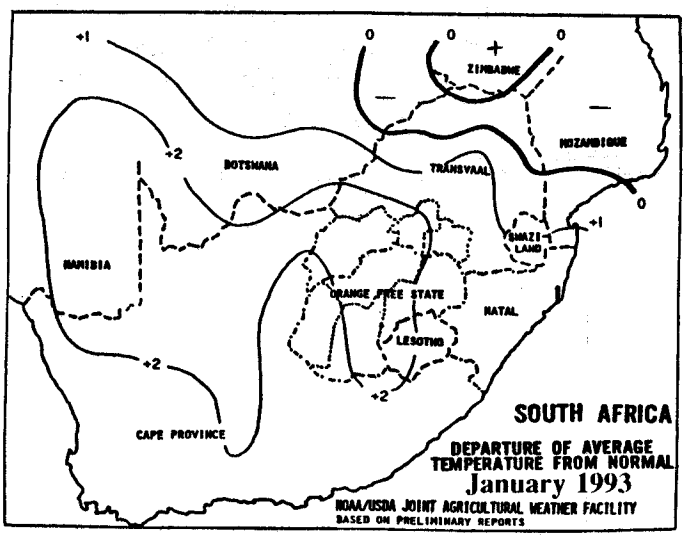


SOUTH AFRICA: Moderate to heavy showers (25-50 mm or more) returned to primary corn areas, of western Transvaal and Orange Free State, benefiting filling crops. The rain also reached crop areas of eastern Cape Province and Natal, including coastal sugarcane areas, but missed south-central Transvaal, where only 1-5 mm fell. Temperatures were seasonable, with highs averaging in the mid to upper 20's C. During January, stressful growing conditions dominated western corn areas until month's end, resulting in the second month of temperatures 2 degrees C above normal and rainfall near or below 50 percent of normal. However, late-month rain and milder temperatures helped reproductive to filling corn. Following an early-month dry spell, eastern corn areas experienced better growing conditions the last week of January, but Natal and the eastern Cape Province were drier and warmer than normal throughout the month.









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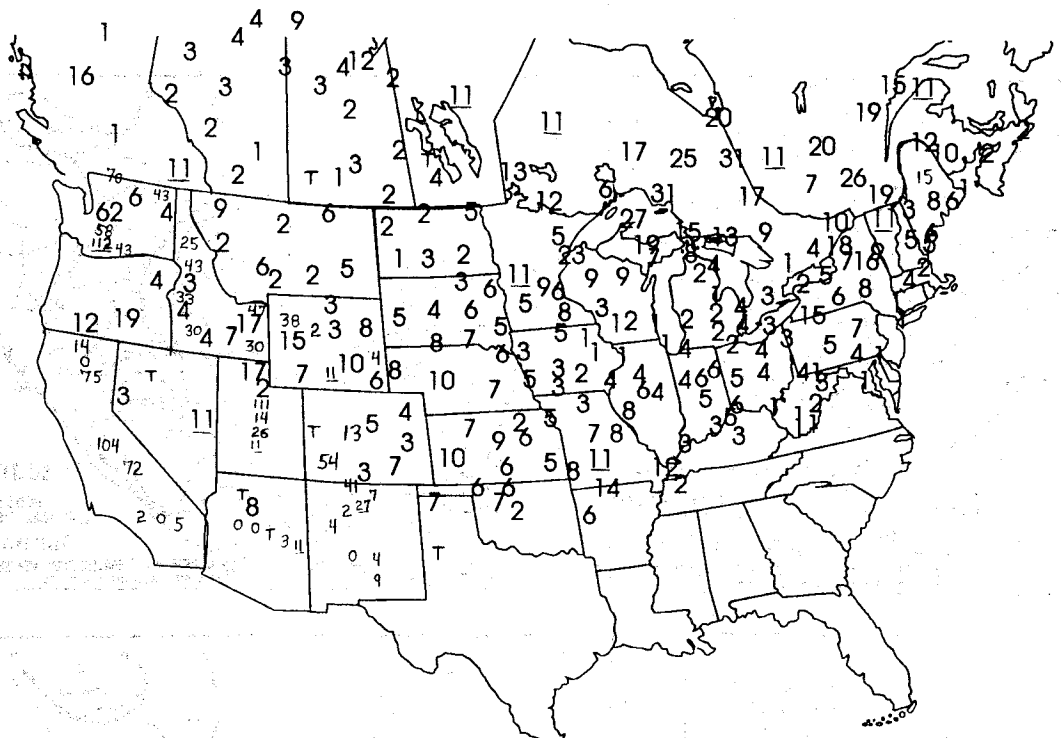
Total Snow Cover (Inches)
February 16, 1993



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