WEEKLY WEATHER AND CROP BULLETIN

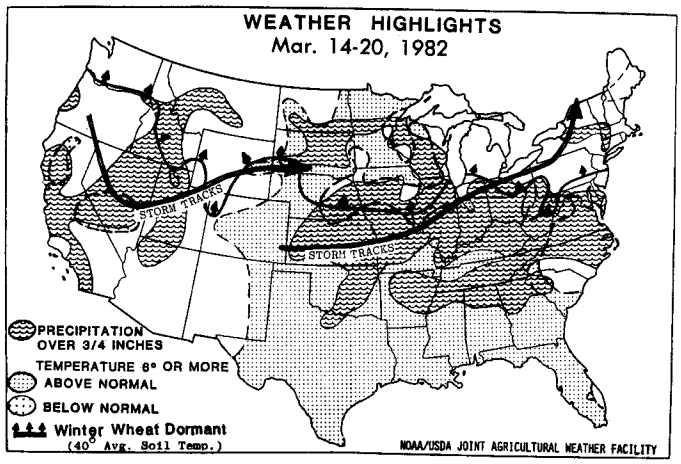
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

Volume 69, No. 12 | WASHINGTON, D.C. | Mar. 23, 1982

National Weather Summary

March 14-20, 1982



HIGHLIGHTS: **Rain was moderate** to heavy from the central Plains eastward to the mid-Atlantic States. Melting snow in the Great Lakes region combined with the moderate rain caused severe flooding from northern Illinois to northern Ohio. Temperatures were much warmer than normal in the East and cooler than normal in the West. Summer-like weather prevailed across the South as average temperatures were 18 to 21° warmer than normal.

SUNDAY...A low-pressure system, deepening in the southern Plains, spread warm, moist air from the Gulf of Mexico northward. Rain, showers, and thundershowers moved from east Texas through the central Plains and, gradually, northeastward through the Ohio and Tennessee Valleys to the mid-Atlantic States. Thunderstorms were heavy throughout the central Mississippi, Ohio, and Tennessee Valleys. At the same time, a cold front moved through the West and triggered showers from Arizona to western Montana and westward to the coast.

MONDAY...A new storm was generating in the central Rockies while a near stationary cold front lay from the central Plains through the Southeast. At the same time, another cold front moved into the West. Nearly all of the Nation had some precipitation. Moderate precipitation in the northern Mississippi Valley began as snow but turned to rain by noon. Moderate rain and melting snow through the Ohio Valley and lower Great Lakes added to the flood problems there.

TUESDAY...Rain, with snow at higher elevations, covered much of the West from Oregon southward and across the central Plateau to the northern Rockies and into Arizona. Snow fell through the northern Plains to the western Great Lakes, and rain fell eastward through New England. The precipitation in New England began as snow. Rain continued in the lower Great Lakes, the Ohio and Tennessee Valleys, and the mid-Atlantic States. Temperatures warmed into the 80's across the South and into the Ohio Valley, but the West remained cool.

WEDNESDAY...Rain and some snow covered New York and southern New England as a storm moved through the areas. A stationary front through the Southeast triggered showers and thunderstorms from northern Mississippi through Georgia and South Carolina. A general low-pressure area in the West caused showers of rain or snow through California across the Plateau to the northern Rockies. Thunderstorms produced heavy rains in southern California.

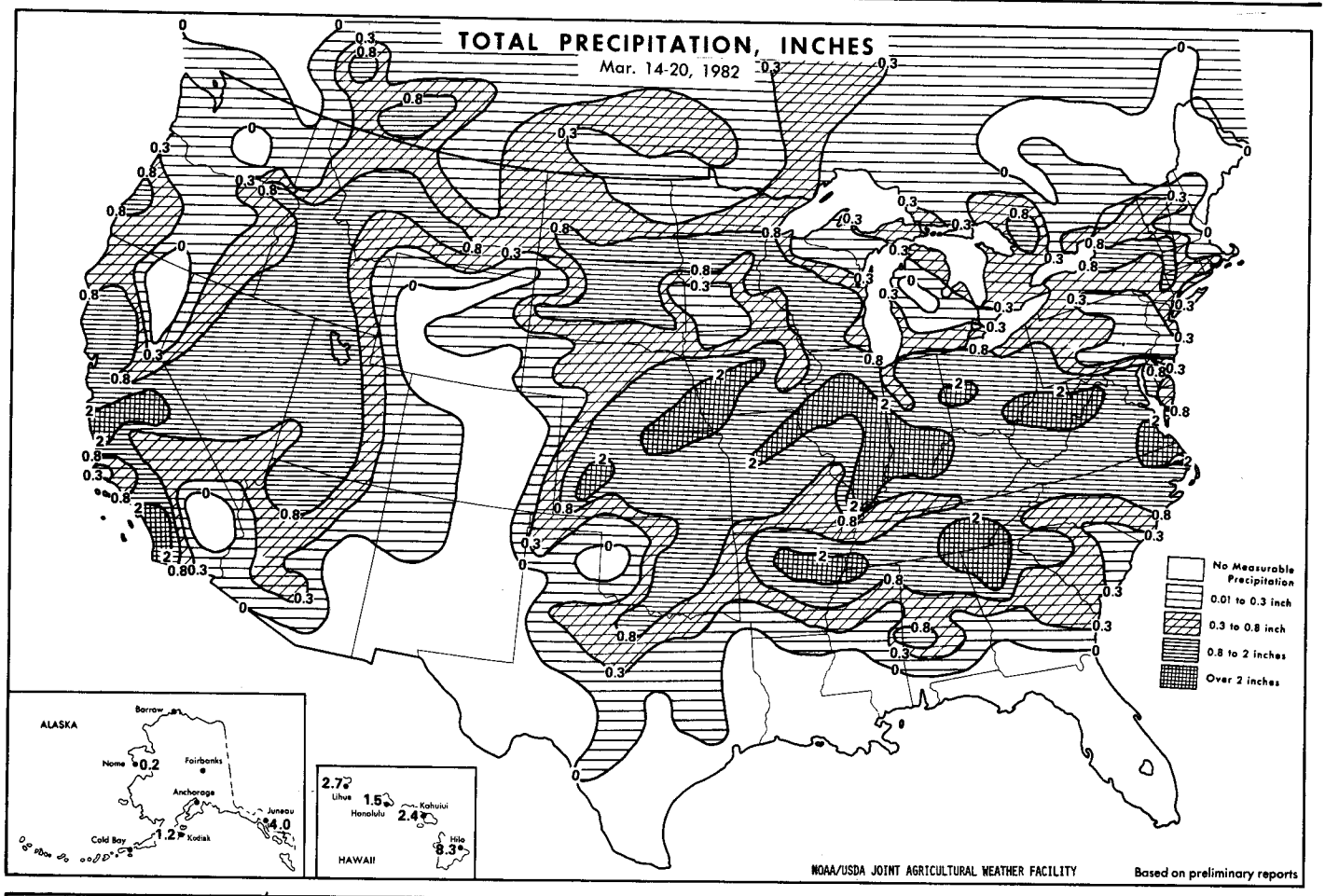
THURSDAY...The low pressure in the West continued to spread showers of rain or snow throughout the West. Snowshowers fell over the northern Plains, and rain was moderate to heavy, covering the area from southwest Kansas through Iowa. A few thunderstorms produced heavy rain, but rain generally fell through Missouri, Illinois, and the Ohio Valley. Temperatures again rose to the high 70's or 80's from the central Plains into the lower Ohio Valley, but it was cool to the north and in the West.

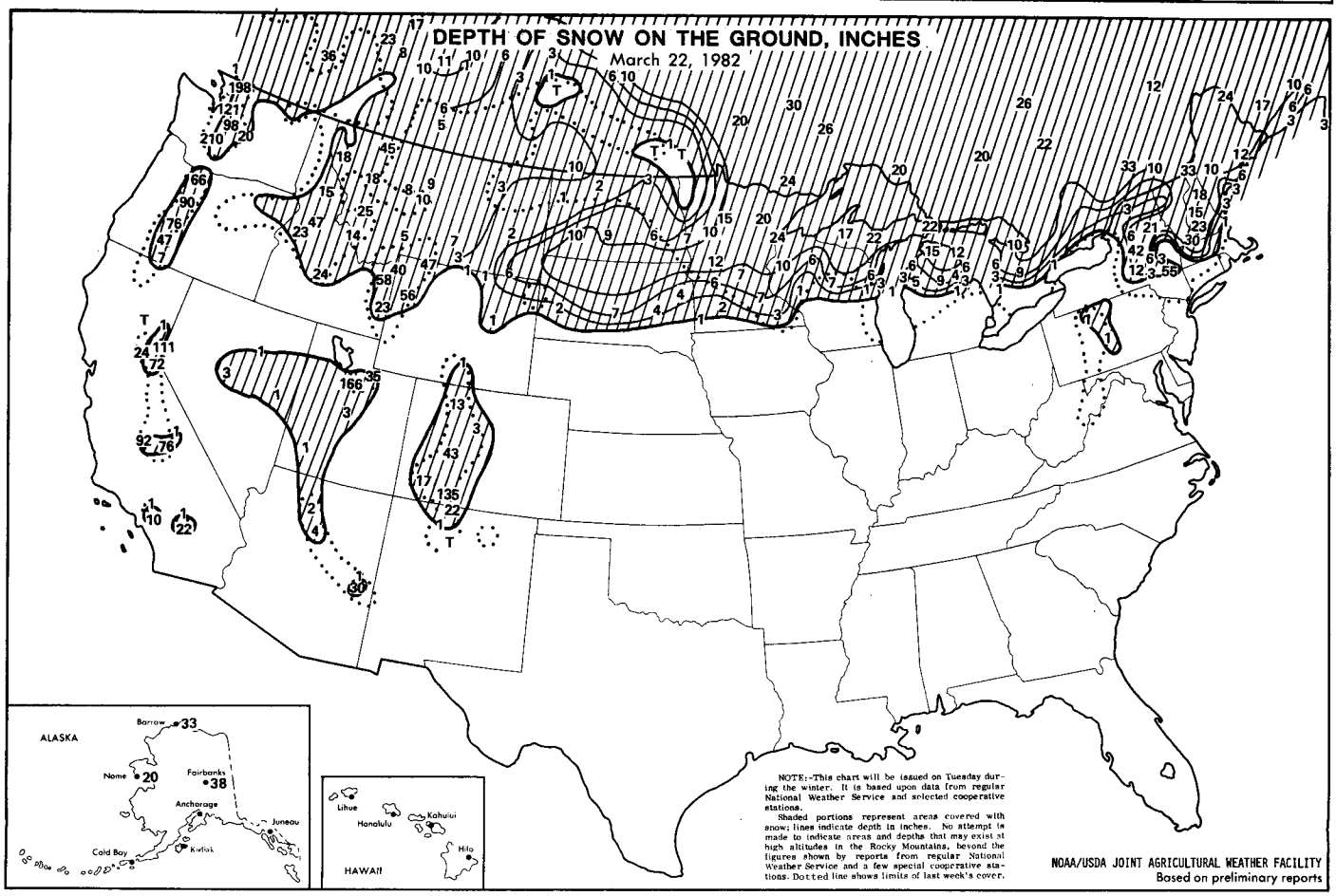
FRIDAY...A late winter storm moved out of the central Rockies and spread snow from the northern Rockies through the northern Great Lakes region. This storm also caused rain from Nebraska through the southern Lakes region down to the Ohio Valley. The snow was heavy across the northern Plains, and rain was heavy from eastern Iowa through Indiana. The heavy rain swelled already flooding rivers in the area. Rain was not so heavy throughout most of the Ohio River Valley and to the mid-Atlantic States.

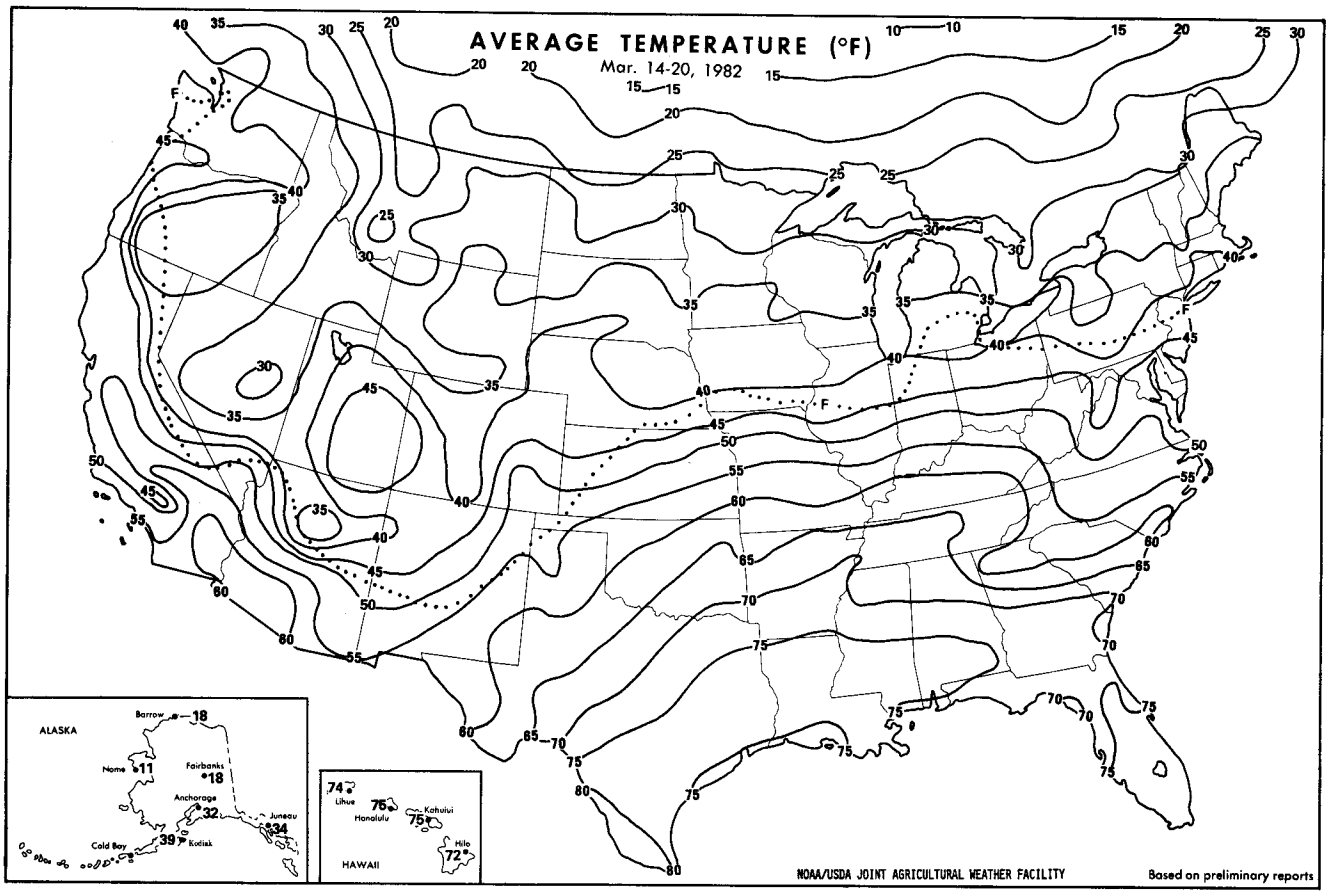
(Continued on page 8.)

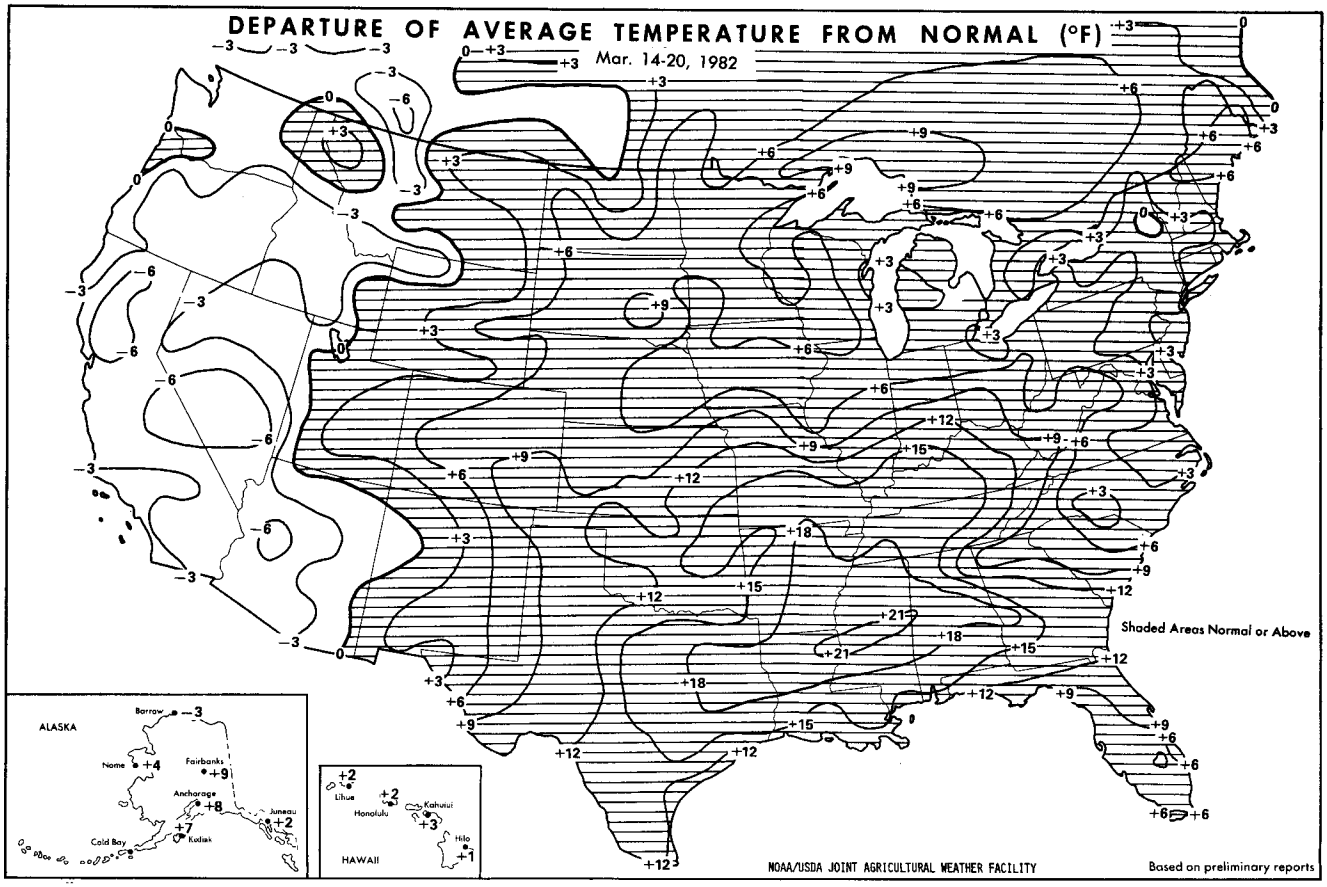
Contents

	Page
National Weather Summary	1
Precipitation & Snow	2
Average Temperature & Departure	3
Weather Data for Selected Cities	4
Heating Degree Days	7
Winter Weather Review	8
Winter Precipitation & Percent Normal	9
Winter Temperature & Departure	10
National Agriculture Summary	11
State Summaries of Weather & Agriculture	12
Average Date of Spring Freeze & State Summaries of Weather & Agriculture	16
Zones of Plant Hardiness & International Weather & Crop Summary	17
Soil Temperature & Subscription Information	20


TOTAL PRECIPITATION, INCHES
Mar. 14-20, 1982
No Measurable Precipitation
0.01 to 0.3 inch
0.3 to 0.8 inch
0.8 to 2 inches
Over 2 inches
ALASKA
Barrow
Nome 0.2
Fairbanks
Anchorage
Juneau 4.0
Cold Bay
1.2 Kodiak
2.7 Lihue
1.5 Honolulu
Kahului 2.4
Hilo 8.3
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPTH OF SNOW ON THE GROUND, INCHES
March 22, 1982
ALASKA
Barrow 33
Nome 20
Fairbanks 38
Anchorage
Juneau
Cold Bay
Kodiak
Lihue
Honolulu
Kahului
Hilo
HAWAII
NOTE:-This chart will be issued on Tuesday during the winter. It is based upon data from regular National Weather Service and selected cooperative stations.
Shaded portions represent areas covered with snow; lines indicate depth in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular National Weather Service and a few special cooperative stations. Dotted line shows limits of last week's cover.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
Mar. 14-20, 1982
ALASKA
Barrow 18
Nome 11
Fairbanks 18
Anchorage 32
Juneau 34
Cold Bay 39
Kodiak
HAWAII
Lihue 74
Honolulu 76
Kahului 75
Hilo 72
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
Mar. 14-20, 1982
Shaded Areas Normal or Above
ALASKA
Barrow -3
Nome +4
Fairbanks +9
Anchorage +8
Juneau +2
Cold Bay +7
Kodiak
HAWAII
Lihue +2
Honolulu +2
Kahului +3
Hilo +1
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Weather Data for the Week Ending Mar. 20, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 Feb. 28	PCT. NORMAL SINCE Feb. 28	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	84	61	89	57	73	19	.3	- 1.2	.2	2.0	44	15.7	113	91	46	0	0	2	0
MOBILE	83	68	85	63	76	16	T	- 1.6	T	1.3	28	12.3	91	92	55	0	0	0	0
MONTGOMERY	83	64	86	61	74	17	.4	- 1.0	.4	3.1	76	17.9	152	91	50	0	0	1	0
AK ANCHORAGE	37	26	44	10	32	8	T	- .2	T	.4	80	1.0	50	80	50	0	4	0	0
BARROW	-12	-24	-8	-30	-18	-3	T	0	T	0	+100	.6	100	74	59	0	7	1	0
FAIRBANKS	31	6	45	-15	18	9	T	- .1	T	.2	67	.9	75	71	41	0	7	0	0
JUNEAU	40	28	44	22	34	2	4.0	3.2	3.9	5.8	242	10.1	107	93	66	0	6	4	1
KODIAK	44	34	46	30	39	7	1.2	.3	.8	1.5	56	12.8	105	98	66	0	3	7	1
NOME	19	3	25	-10	11	4	.2	0	.1	.7	100	3.8	165	74	45	0	7	3	0
AZ PHOENIX	67	50	71	43	59	-1	.4	.2	.2	1.1	183	2.6	144	86	38	0	0	2	0
PRESCOTT	47	31	51	20	39	-6	.6	.2	.3	1.6	145	4.6	110	100	49	0	4	5	0
TUCSON	66	42	74	35	54	-4	.1	- .1	T	1.1	183	2.8	127	88	28	0	0	2	0
YUMA	68	50	71	44	59	-5	.2	.1	.2	.6	200	.9	100	63	27	0	0	1	0
AR FORT SMITH	77	55	84	45	66	15	.8	0	.8	1.8	72	7.3	91	93	50	0	0	1	1
LITTLE ROCK	80	60	86	43	70	18	1.4	.3	1.4	1.9	58	11.7	102	91	58	0	0	1	1
CA BAKERSFIELD	60	47	65	42	54	-3	.9	.7	.4	1.6	267	2.8	112	77	47	0	0	4	0
EUREKA	53	38	55	31	46	-2	.6	- .6	.3	3.5	97	13.6	88	85	67	0	1	4	0
FRESNO	54	41	59	33	48	-6	2.0	1.7	.8	3.1	282	5.7	133	95	61	0	0	4	2
LOS ANGELES	60	48	66	43	54	-3	2.1	1.6	.9	2.9	193	6.3	105	84	55	0	0	4	1
RED BLUFF	55	41	60	36	48	-5	.9	.3	.4	3.3	174	8.8	97	91	49	0	0	3	0
SACREMENTO	54	41	58	35	48	-7	1.2	.5	.6	3.2	152	11.1	128	95	63	0	0	5	1
SAN DIEGO	63	52	66	47	57	-1	3.4	3.1	2.0	3.5	389	6.9	160	83	54	0	0	6	2
SAN FRANCISCO	54	42	59	38	48	-5	1.4	.8	.7	3.0	167	14.7	167	87	58	0	0	5	1
CO DENVER	56	31	63	26	43	6	0	- .2	0	.2	33	.6	35	76	22	0	5	0	0
GRAND JUNCTION	58	35	68	25	47	5	.2	0	.1	.7	140	1.5	83	84	31	0	1	3	0
PUEBLO	65	38	71	28	51	11	0	- .1	0	.1	25	.7	64	68	20	0	1	0	0
CT BRIDGEPORT	49	34	56	30	42	4	.2	- .6	.2	1.3	54	8.7	113	68	34	0	2	1	0
HARTFORD	50	31	55	24	41	5	.4	- .4	.4	1.6	67	8.7	104	75	36	0	5	1	0
DC WASHINGTON	54	41	63	38	48	2	.8	0	.5	2.2	92	7.8	108	85	51	0	0	4	1
FL APALACHICOLA	77	66	85	62	71	10	T	- 1.1	T	3.7	116	10.5	107	96	79	0	0	1	0
DAYTONA BEACH	84	62	87	60	73	9	0	- .8	0	2.5	104	6.9	96	93	55	0	0	0	0
JACKSONVILLE	87	62	88	58	74	13	0	- .8	0	2.4	96	7.1	81	100	51	0	0	0	0
KEY WEST	85	75	86	74	80	5	0	- .4	0	2.2	183	4.3	93	82	61	0	0	0	0
MIAMI	85	71	87	67	78	6	0	- .5	0	1.8	120	3.1	56	88	53	0	0	0	0
ORLANDO	89	64	90	63	77	10	0	- .8	0	2.0	83	4.8	66	96	42	2	0	0	0
TALLAHASSEE	85	63	88	55	74	14	0	- 1.4	0	2.1	50	11.3	92	99	51	0	0	0	0
TAMPA	83	64	85	61	73	7	0	- .9	0	1.6	59	5.6	72	100	57	0	0	0	0
WEST PALM BEACH	85	68	87	66	76	6	0	- .8	0	6.4	278	10.0	137	92	53	0	0	0	0
GA ATLANTA	74	54	85	48	64	13	2.3	.9	1.3	3.3	80	15.0	120	96	58	0	0	3	2
AUGUSTA	75	52	85	46	63	9	.5	- .7	.3	1.2	34	8.8	86	98	57	0	0	2	0
MACON	82	60	87	55	71	14	.2	- 1.0	.2	1.3	36	11.4	103	99	58	0	0	1	0
SAVANNAH	81	60	89	58	71	13	.1	- .9	.1	1.1	37	7.6	89	90	52	0	0	2	0
HI HILO	78	66	80	62	72	1	8.3	5.1	2.8	18.9	195	33.2	109	95	67	0	0	5	5
HONOLULU	81	69	84	65	75	2	1.5	.8	.5	2.8	133	17.6	207	83	62	0	0	4	0
KAHULUI	83	66	87	63	75	3	2.4	1.7	.9	3.5	167	13.9	174	87	64	0	0	4	3
LIHUE	80	68	83	64	74	2	2.7	1.6	1.3	5.2	158	24.2	183	95	72	0	0	7	2
ID BOISE	46	30	50	25	38	-3	.8	.5	.3	1.3	144	4.6	128	90	49	0	6	4	0
LEWISTON	47	36	53	30	41	-1	.1	- .1	.1	.3	50	2.6	100	86	55	0	1	3	0
POCATELLO	42	27	48	24	35	-1	.8	.5	.4	1.5	188	3.9	139	96	63	0	7	7	0
IL CHICAGO	47	35	57	32	41	5	1.4	.8	.8	3.4	213	6.7	146	85	58	0	2	3	1
MOLINE	45	35	50	26	40	4	1.9	1.4	1.1	3.1	221	5.6	144	91	68	0	1	5	2
PEORIA	49	36	63	30	43	5	2.3	1.7	1.3	4.6	271	8.7	174	93	75	0	1	5	2
QUINCY	49	39	57	34	44	3	2.0	1.4	.6	2.8	165	7.3	--	99	81	0	0	5	2
ROCKFORD	44	33	51	27	39	4	1.5	.9	.9	3.2	188	5.0	109	87	62	0	1	3	2
SPRINGFIELD	53	40	67	35	46	7	1.0	.5	.4	2.5	167	9.0	191	97	78	0	0	4	0
IN EVANSVILLE	71	48	81	39	60	15	2.0	1.0	1.4	3.3	110	14.3	151	98	52	0	0	6	1
FORT WAYNE	47	34	69	33	41	4	1.4	.7	.7	3.6	180	10.5	164	90	71	0	0	4	2
INDIANAPOLIS	61	41	77	36	51	11	1.8	1.0	.8	4.1	178	11.5	158	91	62	0	0	4	2
SOUTH BEND	46	34	64	31	40	5	1.6	1.1	.6	3.5	233	7.8	144	86	62	0	2	4	2
IA DES MOINES	45	36	51	30	41	7	1.9	1.4	1.3	3.2	229	6.6	189	91	69	0	1	4	1
SIOUX CITY	44	33	53	27	38	5	1.1	.8	1.0	1.5	188	3.6	138	97	73	0	4	4	1
WATERLOO	44	32	50	27	38	6	1.9	1.5	.9	2.2	200	4.1	141	97	70	0	3	3	2
KS CONCORDIA	54	39	62	32	46	7	2.3	2.0	1.6	2.5	278	3.7	161	95	64	0	1	4	2
DODGE CITY	65	40	78	32	53	12	.6	.4	.3	.6	100	2.1	140	92	32	0	1	3	0
GOODLAND	56	32	66	22	44	8	.3	.1	.3	.4	67	1.2	100	90	37	0	1	1	0
TOPEKA	63	42	77	34	52	11	.6	.2	.3	.7	58	3.1	97	100	55	0	0	4	0
WICHITA	69	44	79	35	57	13	1.5	1.2	1.5	1.5	167	4.0	160	95	45	0	0	3	1
KY BOWLING GREEN	75	51	85	39	63	15	.7	- .5	.3	2.2	63	10.9	83	95	50	0	0	5	0
LEXINGTON	68	45	79	37	57	13	.9	- .2	.3	2.4	75	10.1	99	97	54	0	0	5	0
LOUISVILLE	69	46	81	37	58	13	3.0	1.8	.9	4.8	137	11.3	109	90	46	0	0	6	3
LA ALEXANDRIA	85	71	88	69	78	22	T	- 1.1	T	.8	24	10.1	--	87	50	0	0	0	0
BATON ROUGE	86	69	88	67	77	18	0	- 1.2	0	1.7	47	11.9	95	96	52	0	0	0	0
LAKE CHARLES	82	68	84	67	75	15	T	- .9	T	.2	7	4.8	44	100	65	0	0	1	0
NEW ORLEANS	87	71	89	67	79	18	T	- 1.3	T	.9	23	11.6	90	83	53	0	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Mar. 20, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 Feb. 28	PCT. NORMAL SINCE Feb. 28	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
SHREVEPORT	84	66	87	62	75	18	T	- .9	T	.6	22	7.4	73	92	51	0	0	0	0
ME CARIBOU	37	18	42	12	28	4	T	- .5	T	1.7	113	6.5	118	72	40	0	7	1	0
PORTLAND	46	29	50	24	38	5	T	- .9	T	2.0	74	9.7	105	72	32	0	5	1	0
MD BALTIMORE	53	39	62	36	46	3	1.0	.1	.8	2.1	81	9.4	118	88	45	0	0	3	1
SALISBURY	53	38	60	36	46	0	.5	- .4	.3	3.3	122	11.8	130	94	51	0	0	3	0
MA BOSTON	48	35	55	32	42	3	.2	- .8	.2	1.7	59	9.1	91	71	35	0	1	1	0
CHATHAM	46	33	52	31	40	--	.2	--	.2	2.9	--	11.0	--	82	54	0	3	1	0
MI ALPENA	35	27	40	16	31	5	.5	.1	.4	1.8	150	3.9	100	87	62	0	7	3	0
DETROIT	43	33	47	31	38	3	.6	.1	.5	2.3	153	6.8	136	88	61	0	2	2	0
FLINT	43	35	47	34	39	6	.2	- .2	.2	1.4	108	3.5	80	90	67	0	0	2	0
GRAND RAPIDS	43	34	49	32	39	5	.5	0	.3	2.3	153	5.6	119	78	58	0	1	3	0
HOUGHTON LAKE	36	29	41	24	33	6	.2	- .1	.1	1.8	200	4.5	129	85	63	0	7	2	0
LANSING	42	34	46	33	38	5	.2	- .3	.2	1.5	100	3.7	76	90	66	0	0	1	0
MARQUETTE	32	22	38	14	27	4	.3	- .1	.2	1.2	100	5.4	123	90	61	0	7	4	0
MUSKEGON	41	32	45	27	36	3	.3	- .2	.1	1.8	120	6.8	128	82	61	0	3	3	0
SAULT STE. MARIE	35	23	43	9	29	5	.6	.2	.3	2.4	200	7.4	164	88	54	0	7	4	0
MN ALEXANDRIA	36	27	41	21	32	8	1.4	1.2	.7	1.9	317	4.3	253	95	76	0	7	4	2
DULUTH	33	23	36	16	28	5	1.0	.6	.6	1.8	164	4.2	145	90	64	0	7	6	1
INT'L FALLS	35	18	43	1	27	6	.2	0	.1	1.1	183	2.8	127	93	58	0	7	4	0
MINNEAPOLIS	39	31	42	24	35	6	1.0	.7	.7	1.6	178	4.6	192	88	63	0	4	3	1
ROCHESTER	36	31	41	27	34	6	.6	.2	.5	.9	90	2.7	123	94	77	0	4	3	1
MS GREENWOOD	81	66	83	59	73	19	.7	- .7	.4	1.7	41	12.6	--	92	64	0	0	2	0
JACKSON	87	67	89	63	77	21	T	- 1.3	T	1.6	41	11.3	92	94	46	0	0	0	0
MERIDIAN	87	64	88	60	76	19	T	- 1.4	T	.9	21	10.7	84	97	47	0	0	0	0
MO CAPE GIRARDEAU	73	53	82	41	63	17	2.2	1.4	2.0	2.9	121	16.3	185	99	58	0	0	2	1
COLUMBIA	65	45	73	43	55	13	1.6	1.1	1.1	2.8	187	7.3	159	96	54	0	0	3	1
KANSAS CITY	63	42	79	37	53	12	1.3	.8	.6	1.6	107	5.5	145	99	52	0	0	4	2
SAINT LOUIS	62	45	78	42	53	10	.9	.2	.9	1.6	30	7.9	136	99	64	0	0	1	1
SPRINGFIELD	73	48	83	42	61	17	1.2	.5	1.2	1.7	85	6.5	120	94	44	0	0	1	1
MT BILLINGS	39	28	55	20	33	1	1.3	1.0	.8	1.6	200	2.6	130	90	62	0	6	6	1
GLASGOW	33	26	40	15	30	4	.3	.3	.1	.6	+100	1.9	317	84	69	0	7	4	0
GREAT FALLS	31	18	51	10	24	-6	1.2	1.0	.5	1.5	250	3.6	157	89	68	0	7	5	1
HAVRE	34	24	50	17	29	3	.1	0	.1	.3	100	1.6	123	85	67	0	7	1	0
HELENA	37	22	56	14	29	-1	.8	.7	.5	.9	225	2.3	192	86	56	0	7	7	0
KALISPELL	40	27	50	23	33	3	.5	.3	.4	1.1	183	5.3	183	84	53	0	7	3	0
MILES CITY	37	26	52	10	32	2	.4	.3	.2	.6	150	1.8	138	96	72	0	5	3	0
MISSOULA	40	29	49	25	35	1	.8	.7	.4	1.3	325	4.7	224	94	62	0	6	5	0
NE GRAND ISLAND	47	31	57	24	39	4	1.7	1.5	1.3	2.3	383	3.6	180	93	63	0	5	2	1
LINCOLN	49	33	60	28	41	5	2.0	1.7	1.3	2.6	289	3.8	141	96	70	0	3	5	1
NORFOLK	44	31	53	23	38	5	1.2	1.0	1.2	1.6	267	3.6	180	97	69	0	4	2	1
NORTH PLATTE	50	31	65	23	41	7	.3	.1	.2	1.0	200	1.3	100	95	40	0	4	2	0
OMAHA	45	35	51	27	40	5	2.2	1.9	2.0	2.5	278	4.0	154	94	79	0	1	3	1
SCOTTSBLUFF	53	31	62	22	42	6	.3	.2	.2	.4	133	.9	82	86	28	0	5	2	0
VALENTINE	45	33	64	20	39	8	.5	.4	.5	.8	200	1.3	118	79	52	0	3	1	0
NV ELY	40	20	44	6	30	-3	1.4	1.2	.6	1.8	300	3.3	194	93	55	0	7	6	1
LAS VEGAS	60	42	65	35	51	-4	.3	.2	.1	.3	100	1.5	136	79	32	0	0	3	0
RENO	47	28	54	21	38	-2	.2	0	.1	.7	117	2.3	88	79	34	0	6	5	0
WINNEMUCCA	42	28	52	19	35	-2	.9	.7	.4	1.1	183	1.6	67	99	59	0	5	7	0
NH CONCORD	45	26	51	15	35	2	T	- .6	T	1.4	78	8.4	124	79	33	0	6	1	0
NJ ATLANTIC CITY	53	39	63	34	46	5	.2	- .8	.2	2.1	70	8.1	84	84	45	0	0	1	0
NM ALBUQUERQUE	61	33	73	24	47	1	T	- .2	T	.7	140	1.2	109	76	24	0	4	1	0
CLOVIS	71	41	84	32	56	9	T	- .1	T	0	0	.7	--	71	19	0	1	0	0
ROSWELL	74	41	85	34	57	6	0	- .2	0	.2	33	1.0	67	61	15	0	0	0	0
NY ALBANY	43	28	50	20	36	2	.7	.2	.6	2.3	144	7.5	134	82	44	0	5	3	1
BINGHAMTON	42	29	48	27	36	4	.5	- .1	.3	1.7	94	7.4	119	83	48	0	7	2	0
BUFFALO	42	29	45	24	36	3	.4	- .3	.3	1.6	80	9.8	138	96	59	0	6	2	0
NEW YORK	49	38	57	34	44	3	.3	- .6	.2	1.9	70	8.7	105	78	37	0	0	2	0
ROCHESTER	42	28	46	26	35	2	.5	- .1	.4	1.1	61	6.4	98	96	62	0	7	3	0
SYRACUSE	42	28	47	22	35	2	1.0	.3	.6	2.5	119	7.4	100	94	60	0	7	4	1
NC ASHEVILLE	68	44	79	39	56	10	.5	- .6	.3	1.7	53	12.1	122	99	57	0	0	3	0
CHARLOTTE	63	46	71	39	54	4	.4	- .6	.4	1.4	47	10.7	107	98	65	0	0	1	0
GREENSBORO	61	42	78	36	52	4	1.0	.2	.7	2.3	96	10.0	114	97	63	0	0	4	1
HATTERAS	60	46	68	39	53	3	1.6	.7	1.1	5.9	219	18.7	175	96	68	0	0	4	1
NEW BERN	66	50	79	45	58	4	1.3	.4	1.1	3.7	137	15.1	150	90	57	0	0	5	1
RALEIGH	62	44	78	40	53	4	1.3	.5	.8	3.1	129	13.3	151	97	55	0	0	3	1
WILMINGTON	70	48	81	43	59	5	.4	- .6	.4	1.6	53	13.8	150	93	55	0	0	1	0
ND BISMARCK	34	26	49	15	30	5	.6	.5	.4	.8	267	1.8	150	95	79	0	6	5	0
FARGO	36	26	44	22	31	7	.8	.6	.4	1.1	220	3.0	231	93	72	0	7	5	0
GRAND FORKS	35	25	40	18	30	7	.2	0	.1	.6	120	2.5	192	97	76	0	5	3	0
WILLISTON	36	26	45	15	31	6	.4	.2	.2	1.0	250	2.8	165	90	75	0	6	3	0
OH AKRON-CANTON	50	36	57	35	43	7	1.2	.5	.9	3.0	150	9.0	138	82	56	0	0	4	1
CINCINNATI	65	42	79	35	53	11	1.7	.7	.4	3.7	128	11.8	131	90	52	0	0	6	0
CLEVELAND	50	37	58	35	43	7	.5	- .2	.4	2.4	120	7.8	118	80	53	0	0	2	0
COLUMBUS	55	38	68	35	46	7	1.5	.7	.8	3.4	148	9.5	134	93	63	0	0	4	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

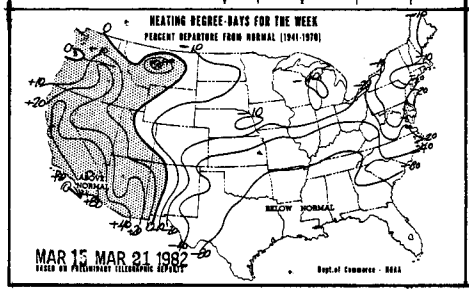
Weather Data for the Week Ending Mar. 20, 1982

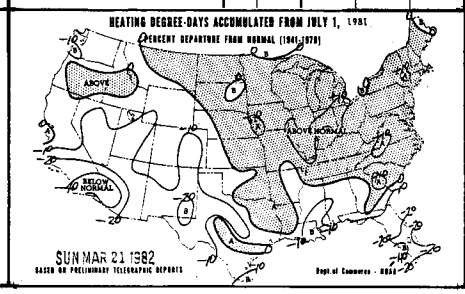
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 28	PCT. NORMAL SINCE Feb. 28	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
DAYTON	58	38	76	35	48	9	2.8	2.1	1.4	4.7	224	12.8	180	92	61	0	0	4	2
TOLEDO	43	34	61	33	39	3	.9	.4	.4	2.7	180	7.4	145	91	72	0	0	3	0
YOUNGSTOWN	47	34	51	32	41	5	.8	.1	.8	2.2	105	7.8	108	85	61	0	2	2	1
OK OKLAHOMA CITY	75	50	81	44	63	15	1.0	.6	1.0	1.0	91	5.7	173	76	34	0	0	1	1
TULSA	77	52	86	43	65	17	.9	.4	.9	.9	60	5.2	116	86	41	0	0	1	1
OR ASTORIA	53	35	58	31	44	0	.2	- 1.4	.1	5.2	106	29.8	139	90	52	0	2	3	0
BURNS	38	26	43	22	32	-4	.3	.1	.2	.6	86	3.2	91	85	47	0	6	4	0
MEDFORD	51	34	54	30	42	-2	.5	.1	.2	1.3	108	6.1	91	93	55	0	1	3	0
PENDLETON	46	32	50	29	39	-5	.6	.4	.3	1.2	171	3.4	106	85	52	0	4	4	0
PORTLAND	57	36	63	32	46	1	.1	- .8	.1	1.5	56	13.7	114	89	40	0	1	1	0
SALEM	54	29	58	24	42	-3	.2	- .9	.2	1.9	58	13.7	96	92	42	0	6	1	0
PA ALLENTOWN	49	34	55	32	41	3	.2	- .6	.1	1.3	54	7.1	90	84	42	0	2	2	0
ERIE	46	33	53	29	39	6	.3	- .3	.3	1.6	94	6.6	108	81	51	0	3	1	0
HARRISBURG	46	36	56	32	41	0	.4	- .4	.4	2.0	87	7.5	106	83	44	0	1	2	0
PHILADELPHIA	53	38	66	36	45	3	.3	- .5	.3	2.2	92	9.7	133	75	39	0	0	2	0
PITTSBURGH	50	35	59	33	43	4	.9	.1	.7	2.3	100	8.6	121	73	47	0	0	4	1
SCRANTON	47	34	53	31	40	4	.2	- .3	.2	1.5	100	6.6	127	71	47	0	1	2	0
RI PROVIDENCE	50	33	56	30	41	4	.4	- .5	.3	2.7	100	11.9	129	90	38	0	4	3	0
SC CHARLESTON	79	55	88	50	67	10	.2	- .9	.2	1.3	41	7.1	80	97	47	0	0	1	0
COLUMBIA	72	50	89	44	61	7	.7	- .4	.7	1.6	48	9.7	96	99	57	0	0	2	1
FLORENCE	68	49	81	42	58	4	.2	- .8	.2	.7	25	9.9	115	91	56	0	0	1	0
GREENVILLE	67	48	82	41	58	7	1.1	- .2	1.0	1.7	45	13.2	110	95	60	0	0	2	1
SD ABERDEEN	38	31	57	25	35	7	--	--	--	--	--	--	--	93	79	0	3	2	0
HURON	42	34	55	26	38	9	1.3	1.1	1.2	1.4	233	2.9	171	99	86	0	2	3	1
RAPID CITY	45	29	62	18	37	6	.9	.7	.4	1.1	183	1.9	119	89	59	0	5	4	0
SIOUX FALLS	42	32	56	26	37	7	.9	.6	.8	1.1	122	2.0	80	95	74	0	2	5	1
TN CHATTANOOGA	73	52	86	40	62	12	2.6	1.3	1.8	3.9	100	18.2	128	90	53	0	0	3	2
KNOXVILLE	72	53	82	39	63	13	1.8	.6	1.0	4.0	111	15.6	124	95	63	0	0	5	2
MEMPHIS	76	61	82	47	69	17	2.9	1.8	1.8	3.6	106	14.4	114	93	57	0	0	3	3
NASHVILLE	77	56	86	42	66	18	1.1	0	.6	2.6	79	14.0	116	88	47	0	0	3	1
TX ABILENE	80	57	87	48	69	14	.3	.1	.3	.3	50	2.5	100	75	27	0	0	1	0
AMARILLO	73	37	82	32	55	9	.2	.1	.2	.3	100	.9	75	72	17	0	1	1	0
AUSTIN	83	70	87	68	76	17	T	- .4	T	.1	7	1.7	28	91	59	0	0	2	0
BEAUMONT	81	70	83	67	76	15	T	- .7	T	.3	14	5.7	56	93	67	0	0	0	0
BROWNSVILLE	89	71	92	71	80	13	0	- .1	0	0	0	.8	26	90	52	4	0	0	0
CORPUS CHRISTI	83	70	87	70	77	12	T	- .2	T	0	0	6.3	150	98	69	0	0	0	0
DEL RIO	84	66	92	60	75	12	T	- .1	T	0	0	2.6	124	86	53	1	0	0	0
EL PASO	73	41	87	35	57	2	0	- .1	0	0	0	.8	73	54	18	0	0	0	0
FORT WORTH	81	63	85	57	72	17	.2	- .3	.2	.5	33	4.9	91	93	42	0	0	1	0
GALVESTON	75	66	78	64	71	10	0	- .6	0	.5	26	8.1	116	93	73	0	0	0	0
HOUSTON	83	70	88	68	77	16	T	- .6	T	.3	16	3.7	43	94	59	0	0	1	0
LUBBOCK	76	45	83	34	60	11	.3	0	.3	.5	63	1.0	59	73	22	0	0	1	0
MIDLAND	80	48	83	38	64	9	0	- .1	0	0	0	.6	46	73	19	0	0	0	0
SAN ANGELO	81	52	87	49	67	10	T	- .2	T	0	0	2.7	117	84	28	0	0	1	0
SAN ANTONIO	81	68	85	67	74	14	T	- .3	T	0	0	1.9	42	95	60	0	0	2	0
VICTORIA	81	70	85	69	75	13	T	- .4	T	0	0	5.8	114	95	66	0	0	0	0
WACO	82	65	87	59	74	17	.2	- .3	.2	.3	19	3.6	63	92	47	0	0	1	0
WICHITA FALLS	79	52	83	44	65	13	1.2	.9	1.2	1.2	133	3.4	117	87	36	0	0	1	1
UT BLANDING	48	27	58	18	38	-1	.2	0	.1	--	--	--	--	85	50	0	4	2	0
CEDAR CITY	48	31	58	21	40	1	1.0	.8	.8	1.3	217	4.9	233	80	40	0	4	5	1
SALT LAKE CITY	49	34	55	30	42	2	.8	.5	.3	1.9	211	3.6	109	81	49	0	1	6	0
VT BURLINGTON	41	24	47	15	33	3	.2	- .2	.1	1.1	92	5.4	117	91	47	0	7	5	0
VA NORFOLK	57	41	80	39	49	1	1.3	.5	.6	3.1	129	12.2	140	88	55	0	0	4	2
RICHMOND	59	43	82	39	51	4	1.9	1.1	.9	3.7	154	11.0	138	91	56	0	0	4	2
ROANOKE	58	40	78	35	49	3	1.2	.4	.5	2.2	92	10.8	137	93	58	0	0	4	1
WA COLVILLE	48	31	49	27	39	2	T	- .3	T	1.4	156	5.5	128	--	--	0	4	1	0
QUILLAYUTE	53	28	57	24	41	-1	T	- 2.6	T	6.8	86	45.8	138	95	44	0	7	2	0
SEATTLE-TACOMA	51	35	57	30	43	-1	.2	- .7	.1	2.9	107	15.3	123	80	41	0	2	2	0
SPOKANE	44	31	49	27	38	0	.2	- .1	.1	1.0	111	4.3	88	88	51	0	4	3	0
YAKIMA	53	29	59	23	41	-1	T	- .1	T	.3	100	2.1	88	76	31	0	5	0	0
WV BECKLEY	60	41	72	34	51	10	1.3	.3	.9	2.2	76	8.0	83	92	49	0	0	5	1
CHARLESTON	64	42	76	34	53	8	1.3	.4	.8	3.6	133	10.6	118	87	44	0	0	4	1
HUNTINGTON	64	41	76	33	53	8	1.4	.5	.5	3.3	122	10.2	120	90	49	0	0	4	1
PARKERSBURG	57	39	67	34	48	5	3.4	2.5	2.0	5.5	204	9.5	101	80	48	0	0	4	2
WI GREEN BAY	37	28	40	25	32	4	.8	.5	.7	1.5	188	3.0	100	93	69	0	7	3	1
LA CROSSE	41	31	51	23	36	5	.9	.5	.7	1.1	100	2.6	90	95	71	0	4	3	1
MADISON	41	32	47	24	36	6	.9	.5	.6	1.9	173	3.5	113	91	70	0	3	3	1
MILWAUKEE	41	32	46	28	36	5	.7	.2	.4	2.5	192	5.6	140	86	62	0	5	3	0
WAUSAU	37	27	45	22	32	6	.8	.5	.6	1.3	144	3.2	100	96	64	0	7	4	1
WY CASPER	49	24	63	16	37	6	.2	0	.1	.3	60	1.5	107	84	33	0	7	4	0
CHEYENNE	49	26	61	20	37	6	T	- .2	T	.1	17	.7	47	94	31	0	6	2	0
LANDER	46	25	57	19	36	4	.1	- .1	.1	.3	50	1.0	56	83	31	0	6	3	0
SHERIDAN	45	28	63	16	36	5	.3	.1	.1	.7	117	1.6	80	82	54	0	6	4	0
PR SAN JUAN	85	71	85	70	78	2	.1	- .3	.1	1.1	85	9.8	136	87	57	0	0	3	0

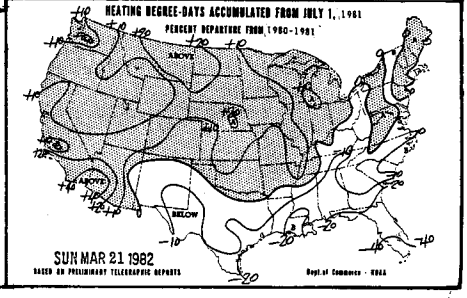
HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING MAR. 21, 1982.

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1, 1981

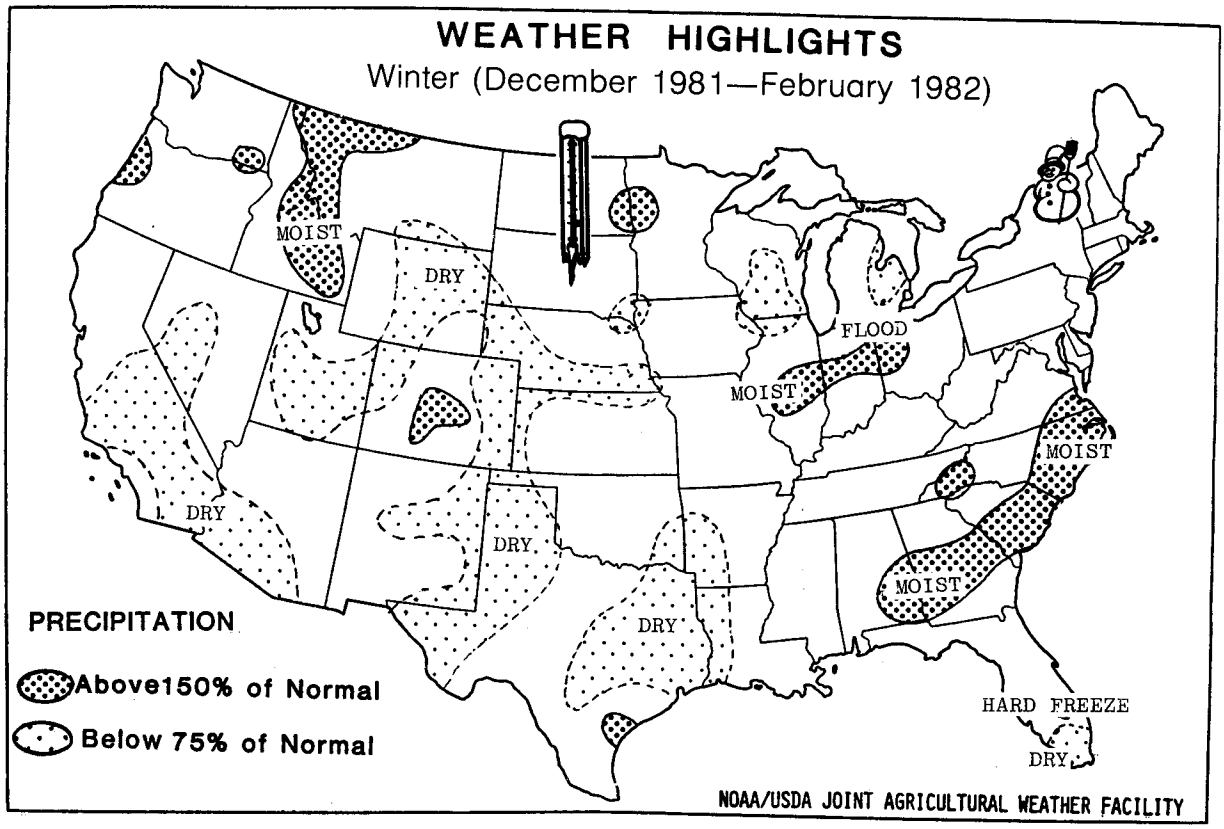
STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1980-81
ALA. BIRMINGHAM	5	-81	2520	-93	-277
MOBILE	0	-47	1483	-111	-280
MONTGOMERY	0	-66	2008	-106	-347
ARIZ. FLAGSTAFF	255	41	5020	-647	555
PHOENIX	46	6	833	-615	216
TUCSON	80	27	1335	-275	136
WINSLOW	172	33	3596	-474	-38
YUMA	40	19	598	-363	229
ARK. FORT SMITH	10	-95	3249	179	146
LITTLE ROCK	12	-92	2994	-84	28
CALIF. BAKERSFIELD	82	24	1591	-358	0
EUREKA	136	17	3207	-170	207
FRESNO	123	47	2291	-22	242
LOS ANGELES	77	16	940	-417	219
RED BLUFF	123	41	2219	-75	359
SAN DIEGO	49	0	651	-517	133
SAN FRANCISCO	117	33	2313	-5	222
STOCKTON	115	30	2270	-132	146
COLO. DENVER	165	-30	4358	-548	303
GRAND JUNCTION	137	-27	4640	-202	749
PUEBLO	108	-66	4030	-565	142
CONN. BRIDGEPORT	168	-19	4895	417	63
HARTFORD	168	-34	5330	-2	-191
DEL. WILMINGTON	136	-23	4435	202	-104
D.C. WASHINGTON	125	-10	3755	43	284
FLA. APALACHICOLA	0	-37	1095	-198	-501
DAYTONA BEACH	0	-25	761	-95	-398
FORT MYERS	0	-7	225	-225	-275
JACKSONVILLE	0	-38	1123	-143	-423
KEY WEST	0	0	50	-12	-123
LAKELAND	0	-16	566	-88	-347
MIAMI	0	-1	151	-55	-114
ORLANDO	0	-19	550	-152	-294
TALLAHASSEE	0	-39	1493	-3	-331
TAMPA	0	-18	584	-108	-359
WEST PALM BEACH	0	-4	253	-46	-104
GA. ATLANTA	25	-73	2778	-34	-20
AUGUSTA	22	-54	2741	376	89
MACON	0	-65	2035	-63	-50
SAVANNAH	3	-52	1679	-150	-359
IDAHO. BOISE	196	31	4901	114	427
LEWISTON	169	15	4306	-200	438
POCATELLO	215	9	5685	-45	266
ILL. CAIRO	54	-67	3911	430	345
CHICAGO	168	-32	5977	496	484
MOLINE	173	-28	6112	601	630
PEORIA	157	-33	5452	197	157
ROCKFORD	186	-26	6252	434	481
SPRINGFIELD	133	-43	5308	467	514
IND. EVANSVILLE	45	-99	4160	-64	-27
FORT WAYNE	169	-27	5865	608	419
INDIANAPOLIS	101	-72	5183	373	142
SOUTH BEND	173	-31	5843	420	778
IOWA. BURLINGTON	164	-28	5898	588	610
DES MOINES	176	-39	5935	163	740
DUBUQUE	198	-28	6642	464	839
SIOUX CITY	196	-23	6431	442	915
KANS. CONCORDIA	134	-45	5017	166	742
DODGE CITY	91	-75	4309	-55	526
GOODLAND	151	-50	4816	-290	274
TOPEKA	95	-71	4767	184	432
WICHITA	64	-85	4439	302	709
KY. LEXINGTON	53	-95	4268	133	-143
LOUISVILLE	54	-92	4148	72	154
LA. BATON ROUGE	0	-45	1411	-181	-476
LAKE CHARLES	0	-44	1444	-16	-332
NEW ORLEANS	0	-40	1194	-201	-282
SHREVEPORT	5	-59	2204	176	-27
MAINE. CARIBOU	256	-28	7708	-62	-45
PORTLAND	196	-31	6135	87	0
MD. BALTIMORE	137	-15	4396	301	114
MASS. BOSTON	170	-14	4994	344	-44
MICH. ALPENA	238	-30	6962	141	191
DETROIT	187	-17	6021	650	196
FLINT	182	-41	6361	544	277
GRAND RAPIDS	186	-34	5964	307	149
HOUGHTON LAKE	225	-39	6946	136	102
LANSING	189	-32	6302	554	228
MARQUETTE	255	-41	7958	252	311
MUSKEGON	202	-21	6115	477	214
S. STE. MARIE	240	-43	8005	677	47
MINN. DULUTH	247	-38	8356	434	543
INTERNATL FALLS	260	-45	8695	-35	337
MINNEAPOLIS	210	-42	7163	248	824
ROCHESTER	218	-39	7320	395	849
ST. CLOUD	233	-35	7576	114	690
MISS. JACKSON	1	-67	2036	-110	-477
MERIDIAN	2	-65	1911	-317	-403
MO. COLUMBIA	74	-88	4678	237	137
KANSAS CITY	94	-74	4988	309	501
ST. LOUIS	80	-71	4608	421	533
SPRINGFIELD	41	-106	4074	55	193
MONT. BILLINGS	238	12	5881	-16	1156
GLASGOW	264	-12	7720	257	1697
GREAT FALLS	299	56	6698	537	1282
HAVRE	263	-5	7554	310	1547
HELENA	263	23	6259	-354	524
KALISPELL	223	-18	6809	-56	929
MILES CITY	243	1	6780	191	1413
MISSOULA	218	-3	6319	-95	746
NEBR. GRAND ISLAND	183	-21	5929	448	1037
LINCOLN	166	-31	5679	308	777
NORFOLK	199	-23	6219	258	943
NORTH PLATTE	183	-31	5657	9	566
OMAHA	185	-7	5997	740	564
VALENTINE	202	-33	6179	98	772
NEV. ELY	259	35	5465	-629	62
LAS VEGAS	106	35	1985	-397	285
RENO	196	23	4382	-390	144
WINNEMUCCA	218	26	4722	-547	70
N.H. CONCORD	214	-10	6592	515	74
N.J. ATLANTIC CITY	131	-32	4396	194	-596
TRENTON	147	-16	4620	393	114
N.MEX. ALBUQUERQUE	129	-4	3533	-256	-59
ROSWELL	56	-52	2673	-693	-416
N.Y. ALBANY	200	-16	6366	577	201
BINGHAMTON	200	-32	6238	250	-102
BUFFALO	203	-24	5929	275	258
NEW YORK	153	-14	4402	244	-170
ROCHESTER	198	-22	6028	483	219
SYRACUSE	201	-18	5930	404	73
N.C. ASHEVILLE	55	-76	3755	-69	-37
CHARLOTTE	62	-40	3137	212	-145
GREENSBORO	87	-33	3653	229	-14
HATTERAS	80	-22	2598	223	-320
RALEIGH	78	-32	3239	-80	-232
WILMINGTON	38	-40	2301	-57	-542
N.DAK. BISMARCK	264	-11	7776	195	1351
FARGO	248	-32	8224	412	1000
WILLISTON	249	-29	7738	84	1337
OHIO. AKRON-CANTON	145	-52	5300	-85	-107
CINCINNATI	76	-83	4879	-489	-51
CLEVELAND	148	-50	5470	343	-57
COLUMBUS	126	-50	5241	363	279
DAYTON	116	-62	5189	359	27
TOLEDO	179	-21	6128	761	253
YOUNGSTOWN	166	-38	5685	329	-212
OKLA. OKLAHOMA CITY	29	-90	3350	7	256
TULSA	24	-93	3328	-13	256
OREG. ASTORIA	146	0	3512	-419	334
BURNS	236	35	6207	492	488
MEDFORD	154	14	3763	-192	191
PENDLETON	181	33	4205	-130	132
PORTLAND	126	-8	3322	-465	219
SALEM	159	20	3808	26	263
PA. ALLENTOWN	166	-18	5268	334	363
ERIE	176	-45	5472	-75	-239
HARRISBURG	163	-1	4841	315	-227
PHILADELPHIA	141	-16	4559	378	-2
PITTSBURGH	150	-33	5448	416	-6
SCRANTON	172	-27	5563	270	48
R.I. PROVIDENCE	170	-24	5200	299	1
S.C. CHARLESTON	10	-56	2091	-89	-172
COLUMBIA	34	-45	2524	-106	-324
GREENVILLE	46	-53	3147	-270	-57
S.DAK. ABERDEEN	234	-26	7243	-33	938
HURON	209	-38	6709	-119	685
RAPID CITY	218	-18	6047	90	996
SIOUX FALLS	203	-38	6701	52	680
TENN. CHATTANOOGA	21	-86	3239	-71	-134
KNOXVILLE	17	-90	3276	-139	-381
MEMPHIS	5	-95	2981	20	364
NASHVILLE	12	-104	3408	-65	-62
TEXAS. ABILENE	13	-65	2165	-242	-143
AMARILLO	80	-54	3537	-118	-24
AUSTIN	0	-48	1381	-261	-260
BEAUMONT	0	-44	1393	-46	-141
BROWNSVILLE	0	-20	547	-88	-120
CORPUS CHRISTI	0	-28	871	-36	-216
DEL RIO	0	-34	1310	-162	-130
EL PASO	56	-15	2201	-308	-168
FORT WORTH	8	-66	2207	-6	-27
GALVESTON	0	-41	1150	-13	-225
HOUSTON	0	-41	1315	-55	-156
LUBBOCK	43	-70	2809	-384	-161
MIDLAND	23	-53	2191	-246	-522
SAN ANGELO	13	-50	2148	-51	-54
SAN ANTONIO	1	-40	1493	-3	-40
VICTORIA	0	-34	1187	-9	-138
WACO	6	-55	1928	-8	-118
WICHITA FALLS	22	-69	2754	76	230
UTAH SALT LAKE CITY	171	-5	4445	-514	132
VT. BURLINGTON	228	-19	6737	225	-34
VA. LYNCHBURG	116	-17	4090	360	132
NORFOLK	108	-9	3251	181	-158
RICHMOND	97	-29	3607	104	-205
ROANOKE	110	-25	4248	487	252
WASH. QUILLAYUTE	166	5	4349	-71	517
SEATTLE-TACOMA	153	6	3764	-254	366
SPOKANE	193	1	5313	-233	273
WALLA WALLA	159	24	3738	-330	57
YAKIMA	170	9	4915	-86	810
W.VA. BECKLEY	94	-76	4888	-153	-161
CHARLESTON	74	-67	4203	-191	-218
HUNTINGTON	77	-65	4313	-278	-44
PARKERSBURG	101	-50	4457	-270	-201
WIS. GREEN BAY	225	-25	7066	346	467
LACROSSE	204	-29	6733	391	617
MADISON	199	-41	6818	347	628
MILWAUKEE	200	-32	6647	541	612
WYO. CASPER	209	-29	5789	-253	516
CHEYENNE	205	-30	5393	-333	482
LANDER	216	-18	5815	-555	377
SHERIDAN	222	-16	5879	-338	523







Winter Weather Review



HIGHLIGHTS: The winter was severe. Many record cold temperatures were broken. Frigid arctic outbreaks relentlessly poured into the northern Plains and spread southward, eastward, and occasionally westward. Average winter temperatures were 4 to 8° colder than normal from the northern Rockies to the central Mississippi Valley and to the eastern Great Lakes. Freezing weather reached into southern California, the lower Rio Grande Valley, and through all but the southern tip of Florida. Precipitation was above normal over much of the Nation and abundant in the drought areas in the East and Southeast. The drought areas in the northern Plains had above-normal snow, but some parts will need good spring rains.

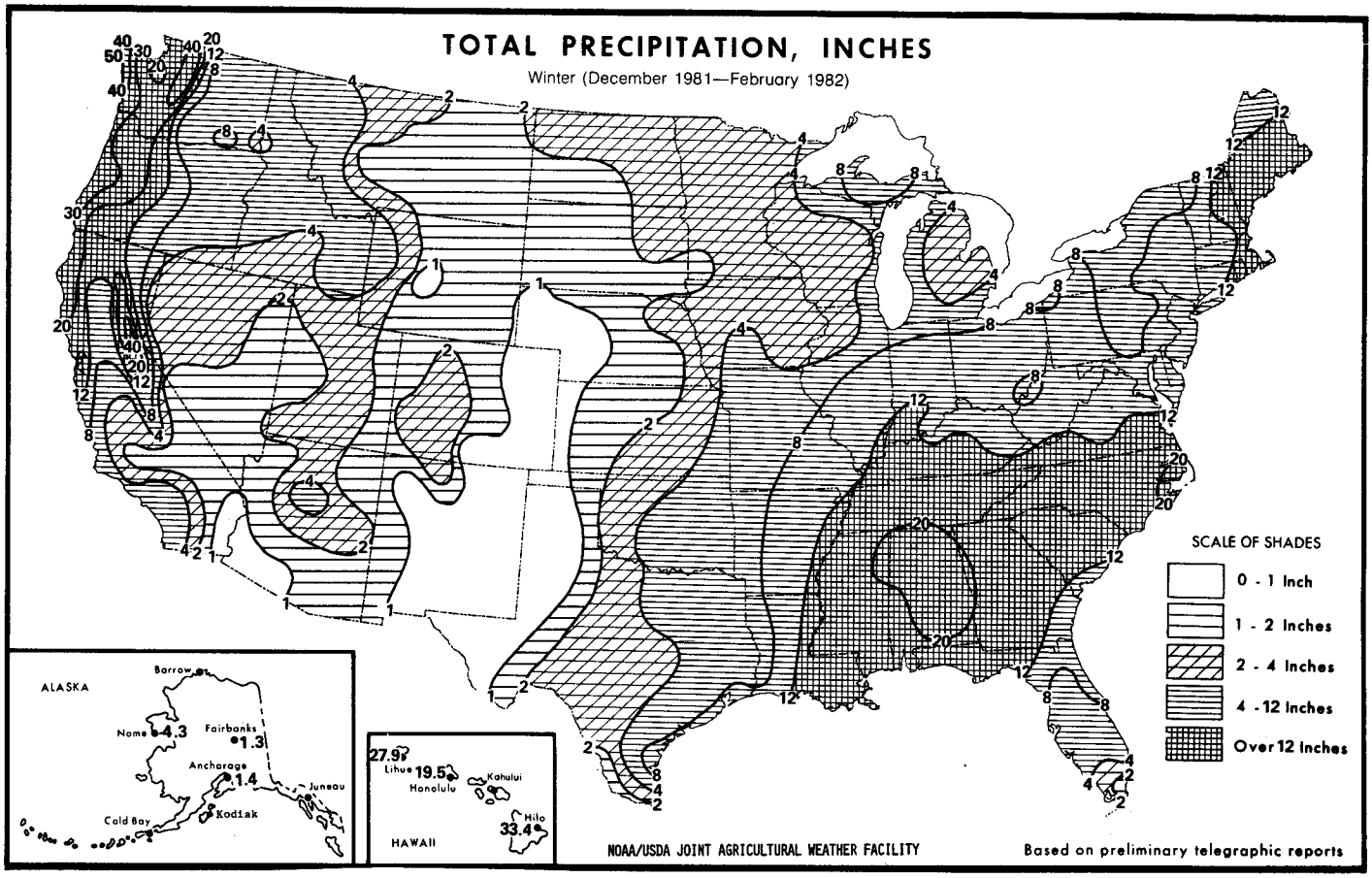
DECEMBER...Heavy rain fell along the northwest coast down to northern California. The same storms brought heavy snow to the Cascade Mountains, the northern Sierras, and the northern Plateau region. Storms weakened and then regenerated in central Colorado where heavy snow piled up in the mountains. As the renewed storms moved northeastward, they spread moderate snow over the northern Plains and Great Lakes region. A low-pressure center moving northward along the northeast coast brought heavy snow to that area. Cold northerly winds accompanied the heavy snow and created blizzard conditions. Those same northerly winds bore very cold air southward to northern Florida. Another surge of cold air at midmonth pushed freezing temperatures to the northern Everglades in southern Florida. Rainshowers and thunderstorms began moving out of the Gulf of Mexico and covered the South and Southeast with much needed rain after a very dry fall. In the latter part of the month, another outbreak of very cold air brought freezing temperatures to southern Texas and a hard freeze across the South and into Florida. Damage to citrus was slight, but vegetables were severely hurt.

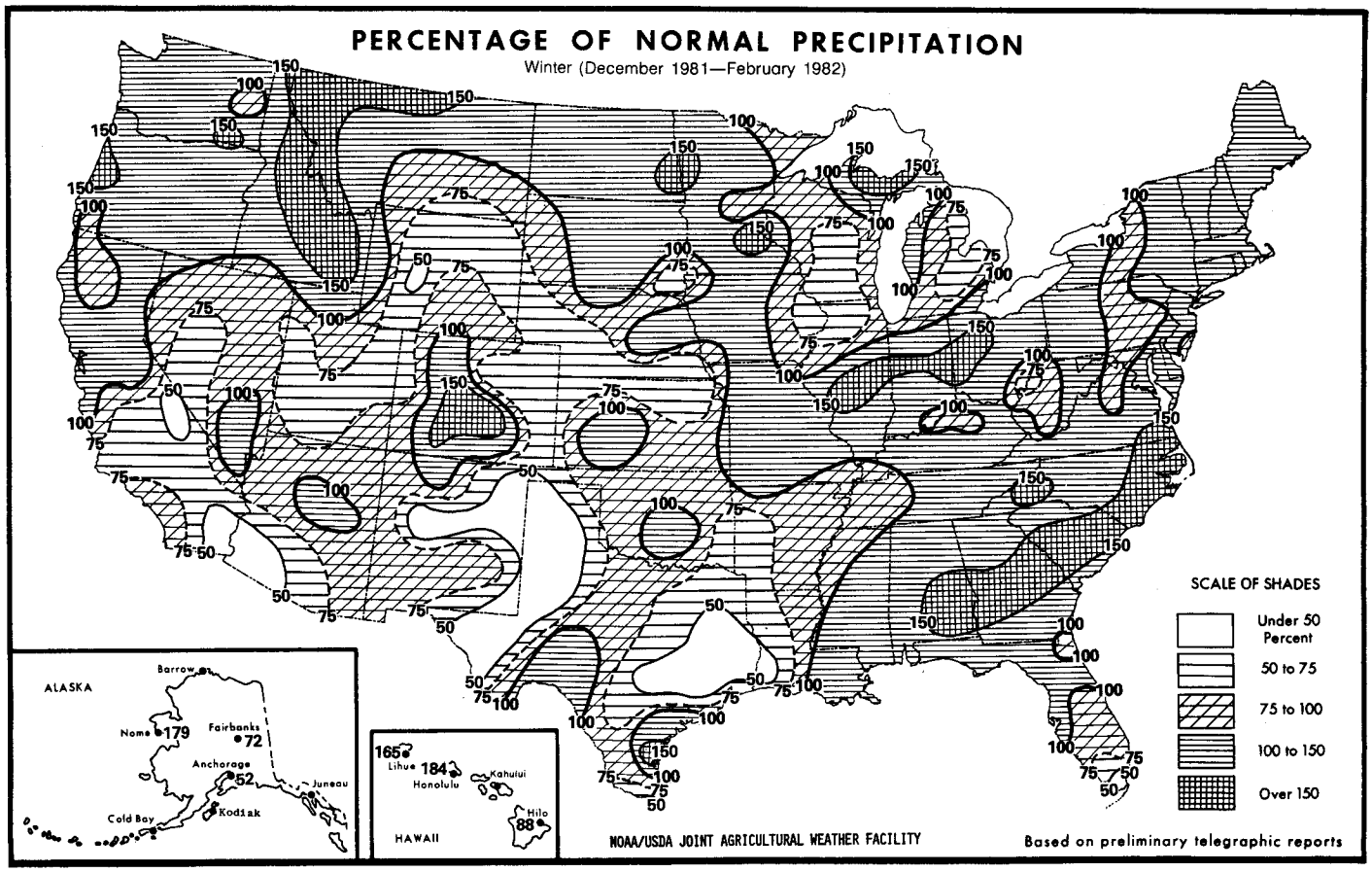
JANUARY...Severe winter weather dominated the Nation. Cold outbreaks spread in all directions from the northern Plains. Freezing temperatures reached into the valleys of California, the lower Rio Grande Valley of Texas, and again into Florida. Damage in the first two areas was confined to tender vegetables, but this time, a hard freeze reached into southern Florida, and losses to citrus and vegetables were severe. Precipitation was above-normal in most of the Nation. A protective blanket of snow covered most of the winter grain areas in the northern Plains and parts of the central Plains. Rain or snow was heavy through the Great Lakes and Ohio Valley.

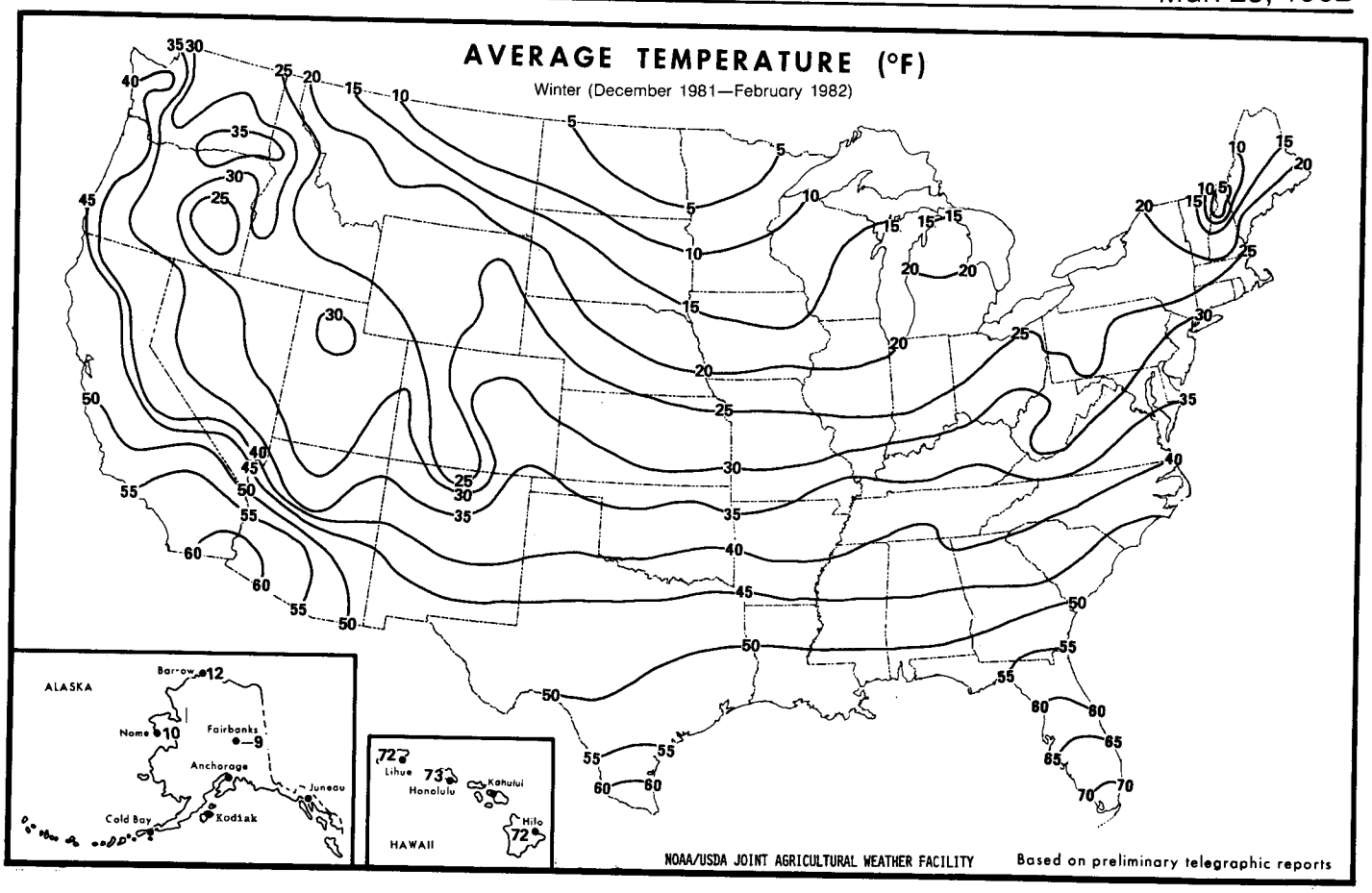
FEBRUARY...The severely cold weather spread over nearly all of the Nation during the first half of the month. Freezing weather pushed across the mountains into the central Valley of California and southward into southern Texas and the Mississippi Delta. Milder weather covered the east coast. Snow cover spread southward into northern Texas, helping to protect winter grain from the frigid temperatures. A warming trend began at midmonth, and melting snow and ice, coupled with rain, caused local flooding in many areas. Heavy precipitation in the Southeast changed drought conditions in the fall to excessively moist conditions, making fields too wet for early plowing. Some rain through most of Texas was helpful to the emerging winter grain which had spent a dry winter.

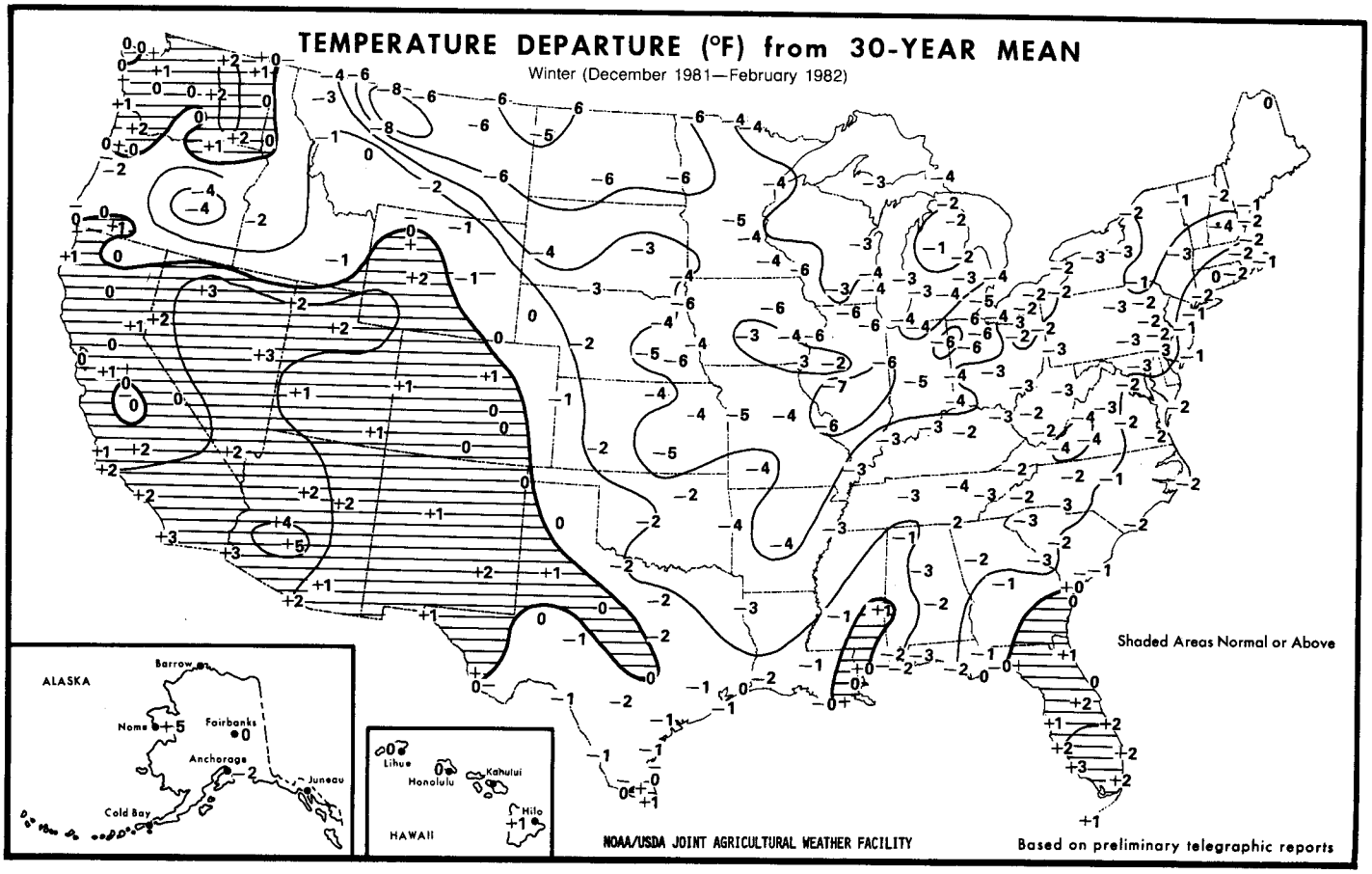
(Continued from page 1.)

SATURDAY...The complex storm system moved slowly into the Great Lakes region with a cold front southwestward through Louisiana. Snow was confined to the northern Rockies and eastward to the norhtern Great Lakes. The weather was cool behind the cold front, but very warm weather reached to the lower Ohio River and across the Southeast. Rain was light but occasionally moderate along the cold front and eastward into the mid-Atlantic States.


TOTAL PRECIPITATION, INCHES
Winter (December 1981—February 1982)
SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 12 Inches
Over 12 Inches
ALASKA
Barrow
Nome 4.3
Fairbanks 1.3
Anchorage 1.4
Juneau
Cold Bay
Kodiak
27.9
Lihue 19.5
Honolulu
Kahului
Hilo 33.4
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


PERCENTAGE OF NORMAL PRECIPITATION
Winter (December 1981—February 1982)
SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow
Nome 179
Fairbanks 72
Anchorage 52
Juneau
Cold Bay
Kodiak
165
Lihue 184
Honolulu
Kahului
Hilo 88
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


AVERAGE TEMPERATURE (°F)
Winter (December 1981—February 1982)
ALASKA
Barrow 12
Nome 10
Fairbanks 9
Anchorage
Juneau
Cold Bay
Kodiak
Lihue 72
Honolulu 73
Kahului
Hilo 72
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


TEMPERATURE DEPARTURE (°F) from 30-YEAR MEAN
Winter (December 1981—February 1982)
Shaded Areas Normal or Above
ALASKA
Barrow
Nome +5
Fairbanks 0
Anchorage
Juneau
Cold Bay
Lihue 0
Honolulu 0
Kahului
Hilo +1
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

National Agricultural Summary

HIGHLIGHTS: Heavy rains and flooding in Indiana, Ohio, and Kentucky delayed spring fieldwork and damaged some winter grains. Mild weather over the Central and Southern Plains promoted growth of winter wheat and pastures, but rain delayed oat and barley seeding. In the Southeast, rain kept many fields too wet for spring planting. Farmers in this region had 1 to 4 days suitable for fieldwork. Soil moisture was adequate to surplus in the Southeast, the Delta, and in parts of the Corn Belt. Corn planting was more widespread in the South, reaching 34% completion in Georgia. Progress was generally ahead of average but behind last year. Sorghum planting was limited to Texas where seeding was 32% complete. Rice planting was underway in Louisiana and Texas. Cotton planting continued in Arizona and Texas and was expected to start soon in California. Tobacco seeding and transplanting gained momentum; Maryland auctions were open. Peach buds swelled and showed color as far north as Virginia. Vegetable harvest was limited to the South, but planting crept northward. Pastures were in fair to good condition and were improving due to warm weather and ample soil moisture.

SMALL GRAINS: Winter wheat was in fair to mostly good condition in all major producing States. Topdressing and weed control became more widespread. Greening extended northward into parts of Nebraska. In the southern States, the crop was jointing.

Kansas winter wheat continued to show excellent growth. Wheat pastures furnished excellent forage. Rain delayed the spring seeding of oats and barley.

Texas small grain fields made good growth due to additional moisture and warm weather. However, many fields showed the effects of prolonged moisture stress. Moisture supplies in the northern High Plains remained short in most areas; fields were greening in areas where rain was received. Producers moved cattle off wheat pastures.

In parts of the Corn Belt, standing water damaged some fields. Wet fields also delayed fertilizing and spraying operations.

Unseasonably warm weather enabled Oklahoma small grains to grow and develop rapidly. Winter wheat was in good condition; 15% of the acreage was jointing.

OTHER CROPS: Corn planting was more widespread, reaching as far north as the extreme southern parts of Virginia. Most planting centered further South, ranging from 17% finished in Mississippi to 34% in Georgia and Texas. Progress across the South was above average but behind last year's rapid pace.

Sorghum planting, which centered in Texas, was 32% complete, slightly behind last year and the average. Emerged fields in southern parts of the State showed damage from greenbugs and aphids.

Rice planting was underway in Louisiana and along the Texas coast. Some Texas fields were still too wet for seeding. Planting reached 10% completion in Louisiana and 5% in Texas.

Tobacco transplanting was 21% finished in Georgia and neared completion in Florida. In other areas, growers seeded and cared for plantbeds. Maryland tobacco auctions were open for sales.

Cotton planting was active in Arizona as conditions permitted. Nearly 30% of the crop was planted in western areas of the State. In the Lower Valley of Texas, planting was in full swing. In the Coastal Bend area, farmers made rapid seeding progress except in some poorly drained fields which were still too wet for planting. Planting reached 4% completion, 3 points behind average. Planting in California was expected to start soon.

FRUITS & NUTS: Deciduous fruit tree pruning was nearing completion in most areas. As far north as Virginia, buds began to swell and show color on early varieties of peach trees. Some winter damage was evident on trees in Kentucky.

Florida's citrus groves were in very good condition. Irrigation was active in all areas. New growth and blooms were showing in most groves. The Valencia orange harvest increased, and grapefruit picking was still active.

Deciduous fruit trees in central and western Arizona were in full bloom. The lemon and grapefruit harvest continued active while the Valencia orange harvest increased in volume. Grapes were growing well; thinning was active.

The Texas citrus harvest continued active. Peach trees were blooming across the State.

California apples were leafing out on the northern coast. Grapes were leafing in the San Joaquin Valley and budding in the Napa Valley. Nectarines, peaches, and plums were nearly finished blooming. Rain slowed the Navel and Valencia orange harvests. Treatment of almonds for brown rot was also delayed. The lemon harvest continued active.

VEGETABLES: Seeding of early season vegetable crops crept northward. However, in most areas producers were preparing land for spring planting. Wet fields delayed progress in many areas.

Nearly ideal weather, warm days and mild nights, prevailed in Florida's vegetable growing areas. Limited rainfall made irrigation necessary. Total vegetable shipments increased 41% from the previous week. Cauliflower showed a decline while shipments of sweet corn, escarole, okra, and radishes were nearly steady. Harvests gained momentum for most other crops. The strawberry harvest was at peak levels. Watermelon planting continued in the North; harvest was expected to begin in the South toward the end of the month.

Arizona's lettuce harvest slowed seasonally in southern Yuma County, continued in full swing in the Parker-Poston areas, and gained momentum in central growing areas. Watermelon planting was completed, but cantaloup planting continued active.

In the Rio Grande Valley of Texas, harvest of cabbage, carrots, and onions continued, but the spinach harvest was nearly finished. Spring vegetable planting was active in the San Antonio-Winter Garden area. Carrot and spinach harvests were active. Land preparations for spring planting was wrapping up in the Coastal Bend area. In East Texas, tomato and watermelon planting continued. Potato and onion planting resumed in north Texas. Potato planting started in the Trans-Pecos region. On the High Plains, onion and potato planting began, additional moisture is needed for growth in this area.

Cool, wet conditions delayed asparagus cutting in California. Cantaloup planting was about complete in Desert areas, but continued in the San Joaquin Valley. Carrots were harvested in Desert areas. Cauliflower harvests continued on the south and central coasts. Lettuce harvests neared completion in the Imperial Valley, continued active in the Palo Verde Valley, and was expected to start this week in the San Joaquin Valley. Strawberry picking gained momentum on the south coast. Processing tomatoes were planted in central valleys as field conditions allowed.

PASTURES AND LIVESTOCK: Across the South, pastures were in fair to good condition and improving due to mild weather and plentiful soil moisture supplies. Despite improvement, additional moisture is needed in Texas to replenish sub-soil moisture. Cold weather and winter storms stressed livestock in northern areas. Supplemental feeding continued in many areas. Cattle were moved from wheat pastures. Calving and lambing continued.

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 SRS State Offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 15 to 20° above normal. Rainfall scattered, heaviest north.

Fieldwork: 3.7 days. Soil moisture mostly adequate. Activities: corn planted 19%, 1981 34%. Routine farm chores, planning crops, spraying and pruning fruit trees and pecan trees. Planting of corn and some vegetables. Applying nitrogen and herbicides to wheat. Conditions: Livestock, pastures fair; pasture feed mostly short; stored feed mostly adequate; wheat fair to good; plowing 45%; fieldwork behind.

ARIZONA: Major winter storm latter part week, precipitation Statewide. Snow level 4,000 ft., snowfall amounts mostly 1.0 to 4.0 in. central basins, 3.0 in. to 15.0 in. central mountains. Rainfall ranged 0.10 to 0.50 in. western, southern sections, 0.50 to 1.50 in. central basins, central mountains. Sunny skies, warmer weather over weekend. Average temperatures were mostly 1 to 9° below normal.

Rainfall delayed field activities. Small grains, most wheat, barley, responded well recent rains, mild temperatures, made good progress. Land preparations, planting cotton active, condition permitted. Approximately 30% crop planted western areas, central, eastern areas progress ranged preparing seedbeds, preirrigation, planting. Sugarbeets very good progress. Safflower, sorghum, corn making good progress, fairly good stands developed, land preparations corn for grain southeast making good progress. Alfalfa growing rapidly, slowed by cooler temperatures; cutting, baling delayed wet conditions. Lettuce harvest southern Yuma County slowing week's end, harvest Parker-Poston areas remained full swing, lettuce harvest central areas gaining momentum. Mixed vegetable harvest seasonal progress, conditions allowed. Watermelon planting complete, planting cantaloups active, earliest plantings good stand, growing well. Deciduous fruit trees central, western areas mostly full bloom. Grapes continued growing well, thinning active. Lemon harvest continued, grapefruit active, seasonally slow. Valencia oranges increasing volume. Ranges remained mostly fair, good condition. Livestock reported fair, good condition with adequate to surplus water supplies. Lower elevation areas showing range grass development brought by recent rains. Calving started northern areas.

ARKANSAS: Very warm with temperatures much above normal. Little rainfall received. Highest temperatures 89°, lowest 35°. All departures from normal ranged from +13 to +19°. Most rainfall 1.49 in., least 0.03 in.

Farmers were busy preparing fields for planting. In southwest several wheat fields were being treated for green bugs but overall wheat looked good throughout the State and was progressing ahead of a year ago. Livestock continued to graze on good pastures. Early varieties of peaches were in full bloom in southwest.

CALIFORNIA: Temperatures averaged 3 to 5° below normal, but with ample precipitation. Only one station, San Diego, reported above normal temperatures. South Coast stations averaged 2.40 in. of rain, unusual for any time of the year. San Joaquin Valley 1.90 in. of rain, Central Coast 1.80 in., and the Sacramento Valley 1.20 in. Last week was warm and wet, this week cold and wet.

Rains in San Joaquin and Sacramento Valleys slowed field operations. Small grains at various stages, some water stress and root rot problems. Rice straw remain unburned due to standing water. Cotton and corn fields expected to plant shortly. Alfalfa planting in progress and some cutting. Safflower and sugarbeets growing well. Widespread rain hampered most activities. Apples leafing out, North Coast. Avocado harvest continues. Grapes leafing, San Joaquin Valley, budding Napa Valley. Bloom nearly complete for nectarines, peaches, plums. Lemon harvest continues. Picking of Navel oranges slow, rain. Valencia harvest slowed by rain, Desert, harvest to begin soon in San Joaquin Valley. Treatment of almonds for Brown Rot and Shothold slowed by rain. Fieldwork delayed by wet fields. Artichokes good supply. Cool, wet conditions delaying asparagus cutting. Planting cantaloup about complete Desert, continues San Joaquin Valley. Carrot harvest active Desert. Cauliflower harvest continues South and Central Coast. Lettuce harvest complete Imperial Valley, active Palo Verde Valley, will start San Joaquin Valley this week. Peas for processing blooming San Joaquin Valley. Strawberry harvest increasing South Coast. Staking pole tomatoes South Coast and Cutler-Orosi. Planting processing tomatoes central valleys as field conditions allow. Range conditions northern, central districts excellent as result well spaced rains. Recent rains improved grazing prospects southern areas. Calving continues heavy northern counties.

COLORADO: Scattered showers began on 15th in the south and spread over the mountains and west on 16th through 19th. The 19th brough 0.70 in. of precipitation to northwest with a average of 3.40 in. of new precipitation west of the Continental Divide and in the San Luis Valley. Mostly dry east of the Continental Divide. Temperatures 5 to 10° above normal except 2 to 4° above normal in the San Luis Valley.

Seeding of small grains gaining momentum with 5.5 days suitable for fieldwork. Topsoil and subsoil moisture rated as short to adequate. Range and pasture beginning to green. Livestock in good condition with 40% of the cows now calved and 30% of the ewes lambed. Very little winter wheat being pastured.

FLORIDA: Fair, dry and very warm weather. Temperatures mostly 6 to 10° above normal. Most locations reported no rain with just a few receiving small amounts.

Soil moisture adequate south, west, short to adequate central, northeast. Corn planting active, tobacco transplanting nearing completion. Land being prepared for planting peanuts, soybeans. Wheat good progress. Sugarcane harvest complete. Young cane good condition. Panhandle and southern Peninsula pastures good to excellent. Other areas improved but most poor to fair. Cattle fair to good. Citrus grove condition very good, irrigation all areas. New growth and bloom showing most groves. Valencia harvest increasing. Grapefruit picking still active. Near ideal weather with warm days, mild nights in vegetable areas. Skies partly cloudy with a few scattered showers. Little to no rainfall most areas. Irrigation active. Winds light to moderate. Total shipments increased 41% from previous week. Harvest gained, snap beans, cabbage, carrots, celery, chinese cabbage, cucumbers, eggplant, lettuce, parsley, peppers, potatoes, southern peas, squash, strawberries, tomatoes.

Volume about steady sweet corn, escarole, okra, radishes. Volume declined, cauliflower. Strawberry harvest at peak level. Watermelon crop good progress south. First harvest expected late March. Planting continues north, the Panhandle.

GEORGIA: Very warm, temperatures generally 10° above normal. Rainfall around 1.00 in. north isolated amounts over 2.00 in.; less than 0.25 in. south and central. The 20th and 21st unseasonably warm but turned cooler north 21st. Dry south but rainfall averaged around 0.25 in. north 21st.

Soil moisture 73% adequate, 20% surplus, 6% short and 1% very short. Four days suitable for fieldwork. Corn 34% planted, last year 42%, average 24%; condition of emerged fields 69% good and 31% fair. Tobacco 21% transplanted, 7% last year, 5% average; condition 71% good and 29% fair. Watermelons 39% planted, 34% last year, 22% average; condition 65% good and 35% fair. Some reports of powdery mildew on wheat; condition of wheat 61% good, 31% fair, 6% excellent and 2% poor. Other small grains 64% good, 28% fair, 6% excellent and 2% poor. Spreading lime and fertilizer and applying weed sprays. Pastures 53% good, 36% fair, 6% excellent and 5% poor. Cattle and hogs fair to mostly good. Early reports indicated little or no damage to peaches from weekend storm.

HAWAII: Weather generally wet. Heavy showers reported parts of the Island chain. Isolated floodings occurred to some papaya orchards, Island of Oahu. Crop progress slow. Spraying frequent to control diseases. Vegetables: Chinese and mustard cabbage harvest heavy. Chinese cabbage Mainland shipments have commenced. Regular cucumber production very light. Bananas: Harvesting light. Papayas: Wet weather slowing orchard development. Production still active. Phytophthora damage increasing on Island of Kauai as a result of the continued wet conditions. Pineapples: List harvest. Sugar: Harvesting light. Pastures: Generally fair to good.

IDAHO: Temperatures averaged from near normal to 5° below normal. High of 60° in Kuna, low 0f -2° in Stanley. Generous amounts of precipitation fell in most areas with only below normal amounts recorded in the Panhandle.

Calves and lambs were stressed by the snow, rain, and winds and some farmers reported heavy losses. Most areas remained too cold and wet for fieldwork to begin, but some farmers in the southwest have begun planting onions, sugarbeets, and spring grains. Winter wheat beginning to green in the east.

ILLINOIS: Temperatures 2 to 4° below normal northwest, normal northeast, 6 to 18° above central and south. Precipitation 1.00 to 2.00 in. north and central areas, 0.03 to 0.33 in. south.

Winter wheat 3% excellent, 61% good, 36% fair. Soil moisture 34% adequate, 66% surplus. Activities: Livestock feeding and care, general farmwork, ordering supplies, preparing machinery for fieldwork.

INDIANA: Warm and wet. Severe flooding in north. Several thousand people displaced at Port Wayne. Rainfall averaged 1.00 to 1.70 in. Up to 2.80 in parts of Southwest. Moderate flooding central and southwest. Temperatures averaged 40° north to 55° in south and above normal from 3° north to 12° south. Temperatures ranged from 34 to 81°. Four in. soil temperatures from 30's north to 50's in south.

Wet fields limiting outside activities. Other preparations for 1982 season underway including buying chemicals and seed, readying equipment and making plans. Overwintering crops greening up but standing water causing damage in low spots. Otherwise, caring for livestock and usual chores.

IOWA: A warm, wet week. Moderate rains the 15, 16th were followed by moderate-to-heavy rainfall the 19th. Southern districts averaged in excess of 2 in. and Lamoni measured over 3 in. rain. Temperatures averaged 3 or 4° above normal. Mildest on the 20th with highs to 55° at Ottumwa.

KANSAS: Precipitation averaged 0.25 to 0.50 in. northwest to 1.00 to 2.00 in. elsewhere. Tornadoes southeast evening of 15th and southwest evening and night of 18th. Temperatures averaged 46° northwest and north central, 60° southeast; 16° above normal southeast, 7 to 12° above normal elsewhere.

Spring seeding oats, barley delayed by rain. In early seeded fields stands emerging and making good growth. Wheat continues excellent growth with warm weather and rains. Topdressing and weed control very active. Wheat pastures furnishing excellent forage.

KENTUCKY: Temperatures averaged 10 to 15° above normal. Afternoon highs 70's and 80's most places, cooler days over weekends. Rainfall was heavy with amounts greater than 1.00 in. with over 3.00 in. in some locations.

Field activity beginning but rain kept most soils too wet. Some flooding of bottom land. Wheat beginning to grow, generally looks good. Some pastures greening. Fruit trees breaking dormancy, some winter damage to peaches.

LOUISIANA: Rainfall averaged 1.50 to 1.90 in. north, 0.05 to 0.30 south. Temperatures 15 to 19° above normal. Extremes: 91 and 55°.

Soil moisture adequate. Days suitable: 5.9. Spring plowing 40%, 52% 1981, 31% 1980. Corn planted 30%, 32% 1981, 19% average; condition fair. Rice planted 10%, 16% 1981, 12% average; condition fair. Winter wheat condition fair to good. Sugarcane rated fair to good. Strawberries producing well. Watermelon planting in progress. Both pasture and livestock rated fair to good.

MARYLAND AND DELAWARE: Temperatures averaged 5° above normal. Highs averaged mid to upper 50's; lows were in upper 30's to low 40's. Greatest amount of precipitation reported at Oakland, 2.20 in. Least reported was at Wilmington Airport, 0.26 in. Average of remaining 12 stations was 0.71 in. Cloudy and rainy 20th and 21st. Highs in upper 40's to low 50's and lows were in upper 30 to 10w 40's.

Net sales of Maryland tobacco amounted to 3,213,524 pounds. The average price received for the week was $175.32 per hundred pounds. The total value of net sales amounted to $5,635,112. Daily average prices declined from $176.40 on 16th, opening day, to $174.69 on closing day 18th. The Maryland auction will be open Monday through Thursday 7 more weeks.

MICHIGAN: Temperatures averaged from 2 to 7° above normal. High temperatures the high 30's in the northeast Lower Peninsula, the 04's elsewhere, and a high of 50° reported on 16th. Low temperatures ranged from 9° in the Upper Peninsula to the mid 30's in other portions of the State. Precipitation was less than 1.00 in. in the Upper Peninsula and the east central Lower, and slightly over 1.00 in. in the southwest Lower Peninsula. Accumulations for the month of March, the east Upper, northeast Lower, east central Lower and the southwest Lower have gone above normal while other divisions around the State accumulating at about normal for the month.

MINNESOTA: Temperatures averaged 3 to 6° above normal. Average temperatures ranged from 36° in Redwood Falls to 27° in International Falls. Highest temperature was 51° at Pipestone, lowest temperature was 8° at International Falls.

Precipitation was less than 0.50 in. north, 0.50 to 1.10 in. central and south. Locally 1.81 in. west central. Snowfall was less than 1 in. extreme south and 2 to 4 in. elsewhere, except for a heavy band of 5 to 13 in., locally to 20 in. west central extending from west central to east central. Snowdepth at weeks end ranged from trace extreme south to 27 in. northeast.

MISSISSIPPI: Temperatures well above normal. Extremes: 48 and 90°. Rainfall heavy in many parts of the State. Greatest 24-hour precipitation 4.00 in.

Soil moisture adequate to surplus. Fieldwork: 3.9 days suitable. Land preparation, fertilizing wheat, equipment maintenance and farm planning were the main farm activities. Plowing 33% completed, 57% last year, 38% average. Corn 17% planted, 20% last year. Watermelons 24% planted, 30% last year. Winter wheat 28% jointing, 32% last year; condition good. Hay and roughage and grain supplies adequate. Pasture and livestock condition fair to good.

MISSOURI: A warm front split the State as temperatures averaged 2 to 6° above normal along the northern third and 10 to 16° above normal elsewhere.

Precipitation averaged over 1.00 in. except in the Bootheel where the average for the week was closer to 0.50 in.

MONTANA: Very wet week. Much of central and south central received over 1.00 in. of precipitation mostly in form of snow. Rest of State had from 0.33 to 0.75 in. of moisture. Week began very warm but much cooler temperatures common by 15th or 16th. In central divisions temperatures averaged 1° below normal. West, southwest and eastern temperatures 2° above normal.

Winter wheat condition fair to good, wind damage light, snow cover protection poor to fair. Wet snow and cool periods made calving and lambing more difficult.

NEBRASKA: Precipitation: Widespread, amounts ranged from 0.10 in. in northwest up to 2.00 in. southeast. Temperatures: 2 to 5° above normal.

NEVADA: Mostly cold and wet. Snow north and central. Week started cold, even more intense end of period. Temperatures below normal all areas. Extremes: 76 and 6°.

Inclement weather brought fieldwork to standstill. Calving and lambing progressing. Cold weather hard on newborn.

NEW ENGLAND: Temperatures a little above normal through most of week. Colder on weekend.

Precipitation 17th, 18th and 19th as snow north and mixed snow and rain south. Totals 0.25 to 0.50 in. north, and 0.50 to 0.75 in. south.

NEW JERSEY: Temperatures averaged 40° north, 43° south and 43° coastal. Extremes: 23° at Newton and 60° at Cape May Court House. Precipitation was below normal averaging 0.40 in. north, 0.40 in. south and 0.50 in. coastal. Heaviest 24-hour total was 0.51 in. at Cape May Court House.

Farm activities increasing slowly. Some early vegetables planted. Lime and fertilizer being applied. Fruit pruning continues.

NEW MEXICO: Average weekly temperatures were 5 to 10° above normal over the eastern plains and near normal over the mountains.

Open weather prevailed. Direct crop damage from high winds has not been extensive. Soil moisture remains in short to adequate supply in most areas. Irrigated winter wheat in good condition with the dryland crop in fair to good condition. Barley in good condition in most areas. Alfalfa fields in good condition. Lettuce and onions in good condition in the Mesilla Valley. Seeding of chile peppers continuing in the Mesilla Valley. Ranges were in fair to good condition. Livestock in good condition going into spring. Livestock continue to be moved off of grain fields.

NEW YORK: Temperatures 2 to 3° above normal. Moderate to heavy precipitation on 16th and 17th. Snowfall of 4 to 7 in. in upper Hudson Valley. Precipitation mostly 0.50 to 1.25 in.

NORTH CAROLINA: Temperatures: The mountains experienced temperatures 8 to 12° above normal while the northeast was 2 to 4° below normal. Precipitation: Amounts ranged from 1.00 to 2.00 in. in most areas to less than 0.50 in. in the southern Piedmont.

Soil moisture: 49% adequate and 51% surplus. Fieldwork: 2.3 days suitable. Conditions: All small grains fair to mostly good; tobacco beds 4% poor, 24% fair, 71% good, 1% excellent; Irish potatoes 38% fair, 62% good. Plantings: Irish potatoes 31%, 1980 68%, 28% average. Supplies: hay and roughage, feed grains, and all fuel mostly adequate. Major farm activities: Land preparation, topdressing small grains, and caring for tobacco plant beds.

NORTH DAKOTA: Above normal temperatures and above normal precipitation. Average temperatures from 24° north central, which was 2° above normal, to 32° southeast which was 6° above normal. Precipitation above normal especially in southern two-thirds. Average precipitation from 0.20 in. north central which was 0.05 in. above normal to 1.38 in. west central which was 1.24 in. above normal.

Major snowstorm on 19 and 20th dumped over a foot of new snow in many areas over the southern two-thirds. Travel impossible at times. Wet snow was a hazard for newborn calves and lambs. Livestock feeding season extended further tightening feed supplies. Spring snow added to soil moisture supplies but current conditions point to a late start on spring planting in most regions. It also increased flood potential for low lying farm land.

OHIO: Temperatures averaged normal; south averaged above normal; 5 to 8° warmer than normal. North 2 to 4° on the plus side. Soil temperatures warmed considerably with afternoon highs in the 50's and morning lows in mid to upper 30's. Precipitation widespread. Totals significant. Northeast at or close to normal levels. Northwest 0.33 to 0.50 in. above normal. Totals in central ranged from 0.75 to 1.50 in. above normal.

Severe flooding to many farms. Most fields still too wet for setting cabbage and topdressing winter wheat.

OKLAHOMA: Precipitation varied from zero northeast, west central, and southwest upward to 0.31 in. Panhandle and 0.36 in. southeast. Temperatures averaged 10 to 16° above normal.

Unseasonably warm weather enabled wheat and other small grains make rapid growth and development. Wheat good condition with no major pest problems. Winter grasses and clovers growing actively and providing some pasture. Wheat jointing: 15%, 1982; 20%, 1981; 10% average. Days suitable fieldwork: 3.8.

OREGON: Cooler air moved into State and brought precipitation. Temperatures averaged 2° below normal west of the Cascades and 4° below normal east of the Cascades. Coastal areas had an average of 1.00 in. of precipitation while the Willamette and southwestern valleys had amounts up to 0.50 in. Extreme eastern areas received 0.60 in. while the north and south central areas had amounts averaging 0.20 and 0.40 in.

Soil moisture supply adequate to surplus. Winter wheat condition good. Fertilizing and spraying continuing. Some plowing and disking where field conditions permit. Re-seeding wheat fields in a few areas. Orchards being fertilized; buds swelling; delayed dormant spraying continues. Potato planting continues in Hermiston-Boardman area. Livestock condition good. Range and pastures improving with warmer temperatures. Feed supplies adequate. Calving continues.

PENNSYLVANIA: Mildest week since mid-November and driest since end of February. Temperatures 2 to 5° above normal with extremes 60 and 27°. Mostly rain 16th into 17th with a mixture of rain and snow central and northern higher elevations and light showers 20th totaled 0.25 to 0.50 in. north and east increasing to 1.00 to 1.25 in. southwest. One to three in. new snow central and northern mountains but northern snowpack overall decreased 3 to 6 in. during week with depths now ranging up to 6 in. north central mountains.

PUERTO RICO: Island average rainfall 0.38 in. or 0.13 in. below normal. Highest total 3.17 in. Temperatures averaged about 76 to 75° on Coasts and 70 to 67° Interior Divisions. Extremes: 93 and 51°.

SOUTH CAROLINA: Rather cool early but later highs in 70's and 80's brought average above normal. Most rainfall occurred early, generally below normal.

Ridge peaches blossomed several days ahead of last season. Heavy crop ahead, spraying schedules maintained. Wheat looks real good except for wet fields that have not received nitrogen. Tobacco beds look good, Blue Mold not a factor at this point. Coastal tomato, other vegetable planting progressing well, a bit ahead of schedule.

SOUTH DAKOTA: Average temperatures ranged 2 to 4° above normal. Extremes: 67 and 1°. Precipitation as rain and/or snow fell throughout the State. Up to 3.23 in. precipitation northern half with most areas reporting over 1.00 in. Up to 20 in. of snow was reported. Most of West River has received above normal precipitation for the year. Parts of southeast and along eastern border are below normal.

TENNESSEE: Low pressure brought rain on 15th. A cold front moved through 17th and became stationary. Another cold front swept through late on 20th and 21st. Temperatures averaged 12 to 20° above normal and ranged from 58 to 69°. Precipitation was heavy averaging over 1.00 in. and 2.00 in. in extreme eastern areas.

Land preparation over 35% complete compared with the average of about 30%. Topdressing wheat renewing pastures, and preparing tobacco seedbeds continue as major farm activities.

TEXAS: Weather: Frontal boundary across central Texas separate warm, humid air south, east from drier air north, west. Weekend front moved Coastal Plain bringing considerably cooler air. As moist air overran surface based cool air, widespread showers/thunderstorms occurred central Texas eastward. Rainfall ranged from near 0.75 in. East Texas to less than 0.05 in. over much West, South Texas. Average temperatures generally well above normal.

Crops: Land preparation, planting good progress. Corn, sorghum planting rapid progress with warmer temperatures. Scattered showers interrupted seeding operations some areas Blacklands; wet fields along coast delay planting some areas. Moisture supplies remain short. Panhandle high winds depleted most surface moisture received from rain. Cotton planting full swing Lower Valley. Planting rapid progress Coastal Bend; poorly drained fields still too wet to plant. Corn planting good progress. Planting almost complete South central Texas; most emerged fields up to good stand. Corn emerging Northern Blacklands. High Plains producers prewatering fields. Sorghum planting rapid progress with warmer temperatures. Scattered showers interrupted planting areas of Blacklands. Emerged fields southern Blacklands, South central Texas showing damage from greenbug, aphid infestations. Most small grain fields making good growth with additional moisture, warmer temperatures. Many fields show effects of prolonged moisture stress; stunted plants, poor stands. Moisture supplies Northern High Plains remain short most wheat fields. Scattered field greening up where rain received. Producers moving cattle off wheat. Moderate, heavy weed infestations problem scattered fields. Cross Timbers beneficial insects helping control greenbugs. Producers continue spraying activities. Scattered fields head southern areas. Reported condition 79% of normal; 8% excellent; 52% good; 38% fair; and 2% poor. Rice planting underway along Coast; some fields still too wet to seed. Cotton planted 4%, 5% 1981, 7% average. Rice planted 5%, 12% 1981, 11% average. Sorghum 32%, 37% 1981, 35% average. Corn planted 34%, 27% 1981, 20% average.

Commercial vegetables: Rio Grande Valley harvest of cabbage, carrots, onions continued. Spinach harvest wrapping up. Potatoes, tomatoes, early planted watermelons making good growth. Citrus harvest continued. San Antonio-Winter Garden area planting of spring vegetable active. Preplant irrigation continuing. Carrot, spinach harvest active. Coastal Bend, land preparation wrapping up, planting of watermelons, tomatoes, cucumbers starting soon. East Texas, tomato, watermelon planting continued. Transplanting of green peppers getting started. North Texas, planting of potatoes, onions resumed. Fields remained dry. Trans-Pecos region, potato planting getting underway. Good progress made by onions, cabbage. High Plains, planting onions, potatoes began. Conditions remain dry. Peach trees blooming. Producers applying insecticides, herbicides.

Range and livestock: Range, pastures continued to improve. Warm temperatures, scattered showers helped promote growth of grasses, weeds. Despite improvement, additional moisture needed to replenish subsoil moisture. With supplemental feeding continuing, livestock in good condition. Plains producers busy moving cattle off wheat pastures.

UTAH: Recurring periods precipitation all areas. Accumulated amounts locally very heavy. Eight stations accumulated in excess of 2.00 in. and 16 out of 45 in excess of 1.00 in. Average temperatures ranged from 3° below normal. to 6° above.

Winter grains generally in good condition with more than ample soil moisture. Frost in south has damaged fruit tree blossoms slightly. Crop propsects generally good with ample supplies of irrigation water forecast. Spring calving and lambing continues.

VIRGINIA: Rain and showers throughout the period averaging 1.50 in. with least in the southeast and most in western districts. Temperatures

averaged 7° above normal. Extremes: 84° at Blackstone and 30° at Wytheville.

Fields continued to be too wet to support machinery. Some plowing and preparation for spring planting was accomplished on drier ground, and some topdressing was applied to barley and wheat. Topsoil moisture rated 42% adequate and 58% surplus. Only 1.1 days were judged suitable for fieldwork. Pastures, alfalfa fields, peaches, barley, wheat and oats were rated good to excellent. However, peaches in southwest rated only poor to fair while barley, wheat and alfalfa fields in southeast were also poor to fair. Topdressing small grains limited by wet fields. Seeding of tobacco beds active and 84% now planted. Corn planting was reported in Buchanan County in south. Fruit tree and grape pruning continues with peach buds swelling and showing color in central and eastern areas. Producers concerned with possible freeze damage if bloom is early. Livestock in good condition and being treated for lice and grubs. Some pastures now being grazed as calving and lambing continue. Potato planting behind last year's early pace as only about 10% have been planted.

WASHINGTON: West: Average temperatures were 1 to 2° below normal. Coastal totals were 2.00 in. below normals. The Interior ranged from 0.10 to 0.40 in. below normal. Fields beginning to dry and spring work has begun. Early peas and spring grains were planted. Strawberries and raspberries were also planted. Daffodil harvest continues. Pastures in good condition with livestock being put onto pastures.

East: Average temperatures were below normal, ranging from 1° in the north and east to 4° in the Central Basin. Precipitation was 0.10 to 0.20 in. below normal except over the Blue Mountains where totals were 0.10 to 0.40 in. above normal. Spring wheat and barley planting in full swing. Potato seeding beginning. Soil moisture conditions excellent as all grain crops in good condition. Orchard cleanup about complete while application of dormant sprays continue. Hop growers busy cleaning and tying up yards. Hay supplies remain adequate. Livestock in good condition, with some calving activity taking place.

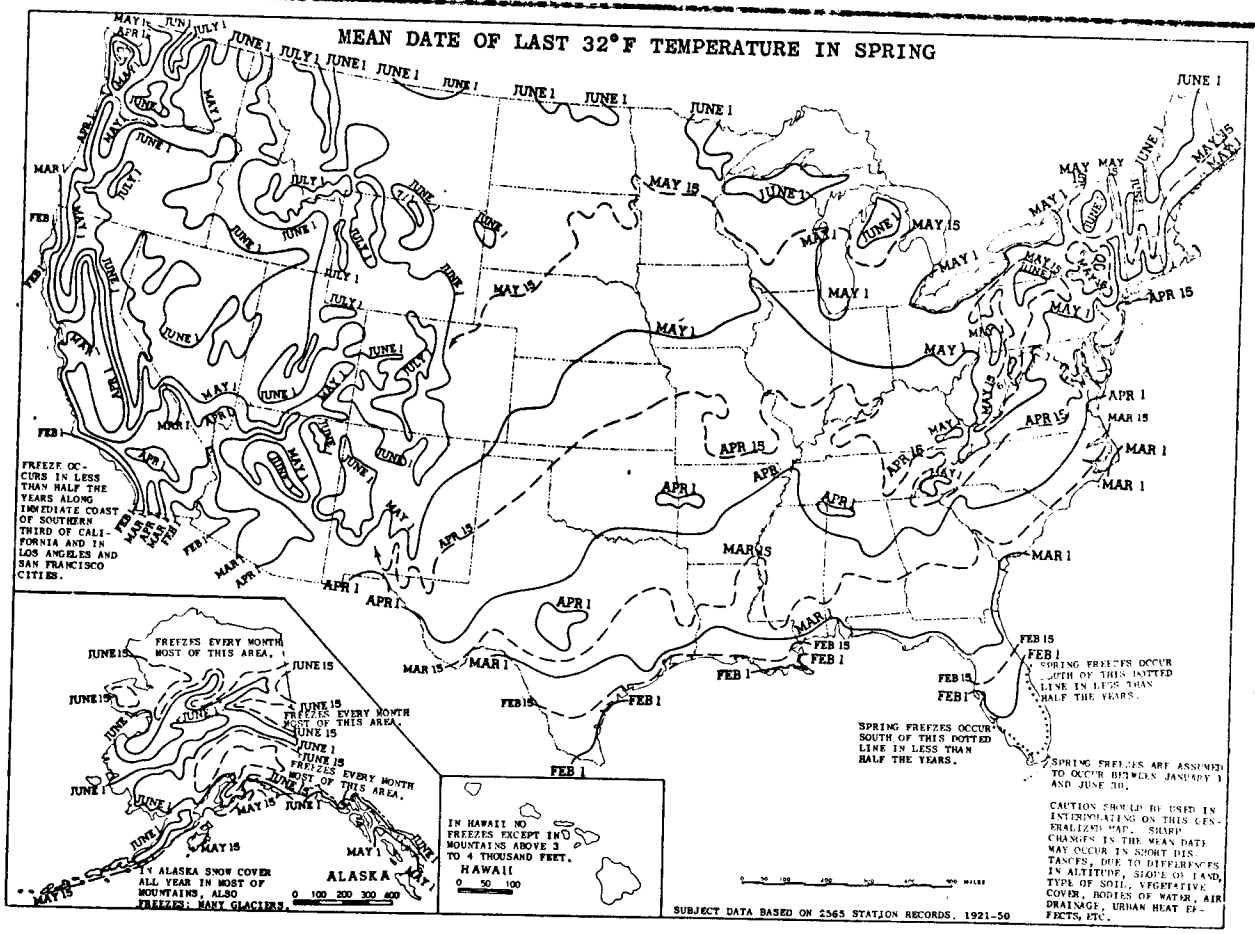
WEST VIRGINIA: Temperatures averaged 10° above normal. High 76°, low 28°. Precipitation heavy most areas. Heaviest was 3.39 in.

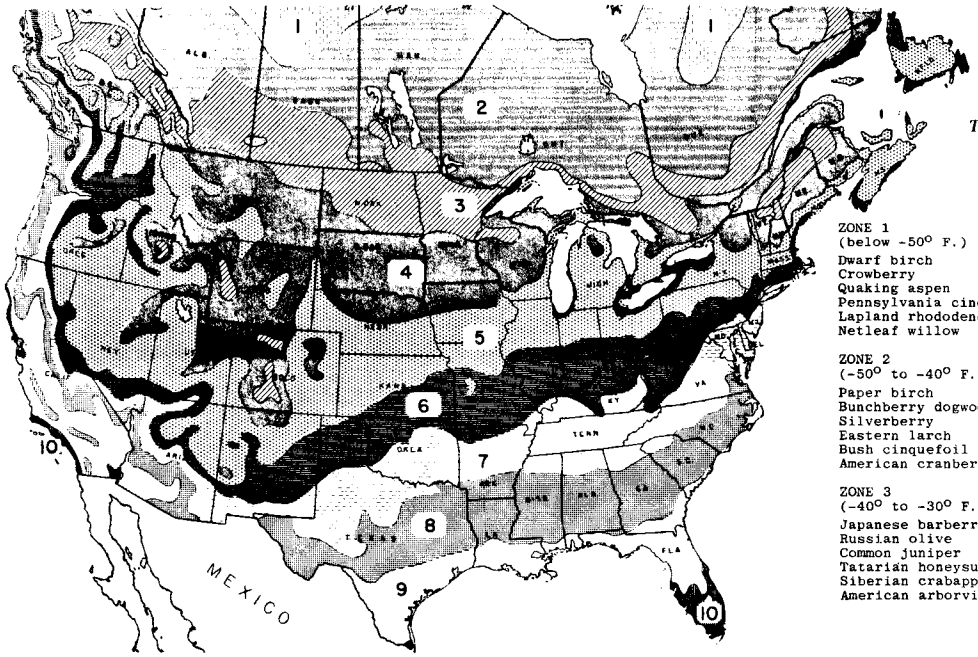
Soil moisture adequate to surplus. Days worked averaged 2.2. Hay short to adequate. Grains and other feed supplies adequate.

WISCONSIN: Generally cloudy. Showers and thundershowers crossed through central areas on the 15th and 16th resulting in some minor flooding. A late winter storm hit northern areas late in the week and brought 1 to 4 in. of new snow. Rain and sleet pelted southern areas during the same storm. Temperatures averaged near normal. High temperature of 49° was recorded at Racine on the 16th while Pence recorded the low of 18° on the 20th.

WYOMING: All stations above seasonal temperatures. Average about 5° above normal. Warmest 68°, coldest -8°. Precipitation slightly below normal most areas. All stations recorded at least some moisture. Snake Drainage continued wet winter with 0.50 in. of moisture.

Winter wheat mostly good condition, crops starting to need moisture. Spring plowing starting; some barley planted. Livestock mostly good condition. Lambing, calving increasing.





The Zones of Plant Hardiness

ZONE 1
(below -50° F.)
Dwarf birch
Crowberry
Quaking aspen
Pennsylvania cinquefoil
Lapland rhododendron
Netleaf willow

ZONE 2
(-50° to -40° F.)
Paper birch
Bunchberry dogwood
Silverberry
Eastern larch
Bush cinquefoil
American cranberry bush

ZONE 3
(-40° to -30° F.)
Japanese barberry
Russian olive
Common juniper
Tatarian honeysuckle
Siberian crabapple
American arborvitae

ZONE 4
(-30° to -20° F.)
Sugar maple
Panicle hydrangea
Chinese juniper
Amur River privet
Virginia creeper
Vanhoutte spirea

ZONE 5
(-20° to -10° F.)
Flowering dogwood
Slender deutzia
Common privet
Boston ivy
Japanese rose
Japanese yew

ZONE 6
(-10° to 0° F.)
Japanese maple
Common box
Winter creeper
English ivy
American holly
California privet

ZONE 7
(0° to 10° F.)
Bigleaf maple
Kurume azaleas
Atlas cedar
Small-leaf cotoneaster
English holly
English yew

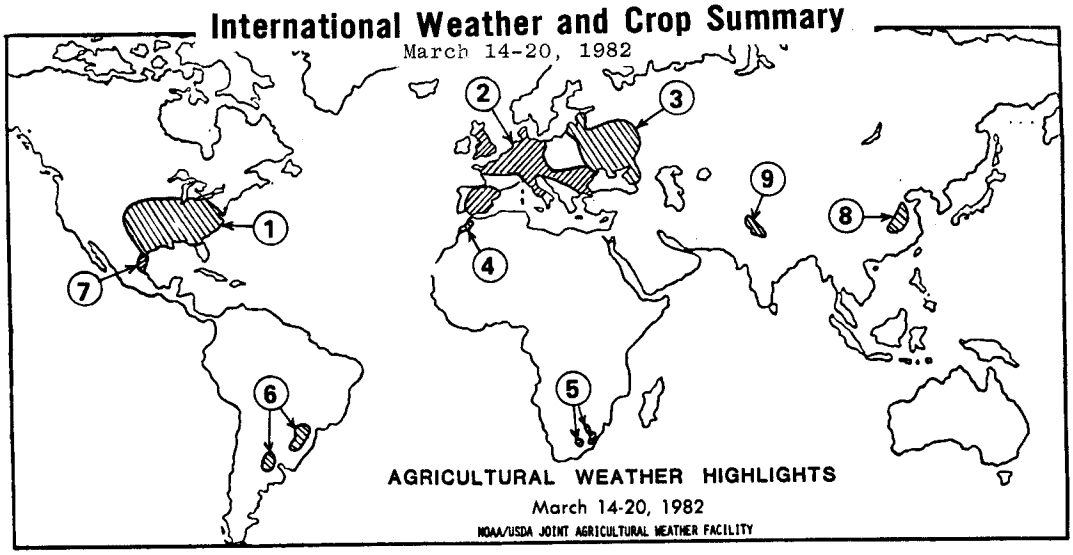
ZONE 8
(10° to 20° F.)
Strawberry tree
Mexican orange
New Zealand daisy-bush
Japanese pittosporum
Cherry-laurel
Laurestinua

ZONE 9
(20° to 30° F.)
Asparagus fern
Tasmanian blue gum
Brush cherry
Fuchsia
Silk-oak
California pepper tree

ZONE 10
(30° to 40° F.)
Bougainvillea
Golden shower
Lemon eucalyptus
Rubber plant
Banana
Royal palm

International Weather and Crop Summary

March 14-20, 1982



1. UNITED STATES: Heavy rains slow fieldwork from the central Plains to the mid-Atlantic coast while floods damage some winter grains in the midwest. Unseasonable warmth over central and southern areas promote growth of winter grains and pastures, but wetness slows planting. Cool, wet conditions delay vegetable harvesting in California.

2. EUROPE: Wet weather benefits some winter grains; continued dry weather in Spain producing crop stress.

3. WESTERN USSR: Generally dry weather continues over most winter grain areas.

4. NORTHWESTERN AFRICA: Unfavorable warm and dry weather continues in most Moroccan winter grain areas.

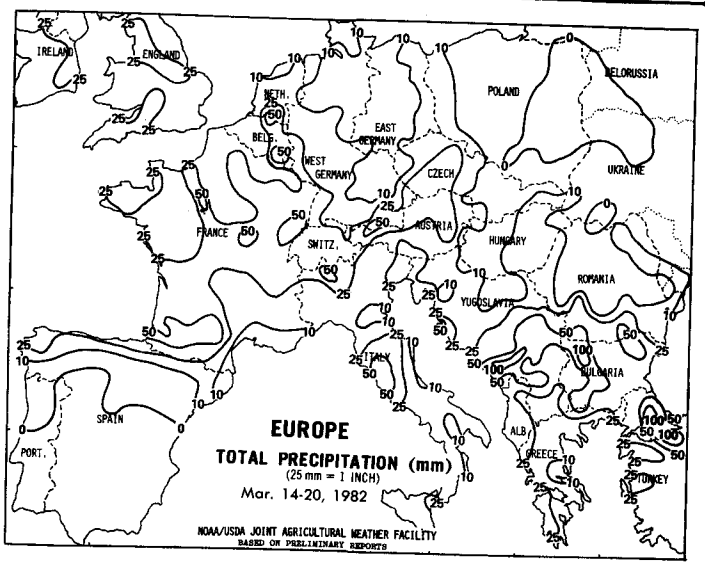
5. SOUTH AFRICA: Moderate, localized rainfall is mostly too late.

6. SOUTH AMERICA: Showers cause minor delays in early harvest but aid maturing crops.

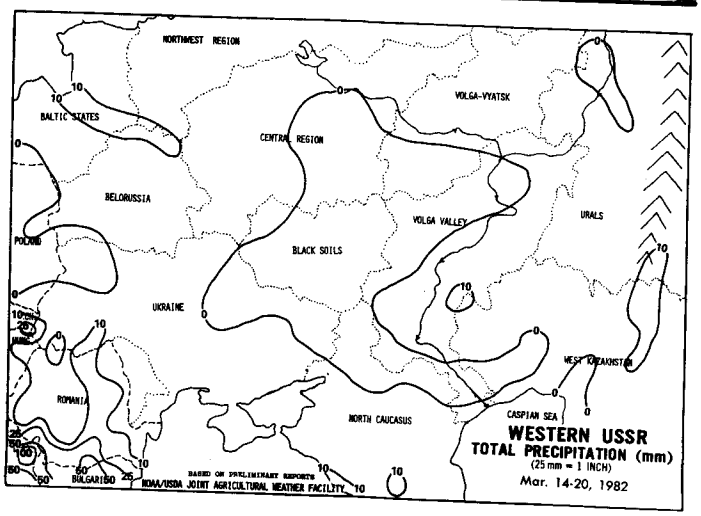
7. MEXICO: Dry weather likely slows crop development in several corn, bean, and citrus areas. Unseasonable warmth intensifies crop stress in the nonirrigated districts of the northeast.

8. EASTERN ASIA: Rain and cooler weather ease stress in some winter grain areas, but unfavorable conditions are returning.

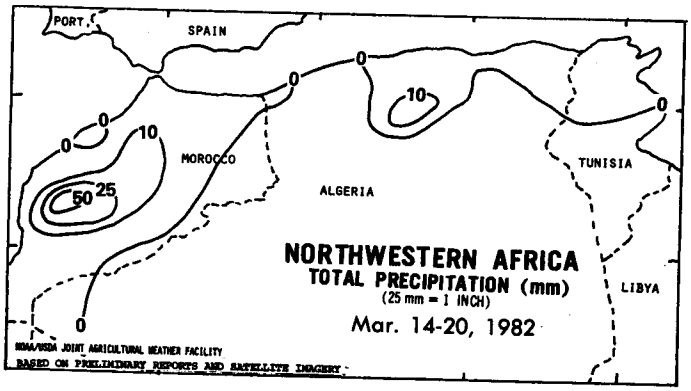
9. SOUTH ASIA: Somewhat drier and warmer weather benefits mature winter grains.



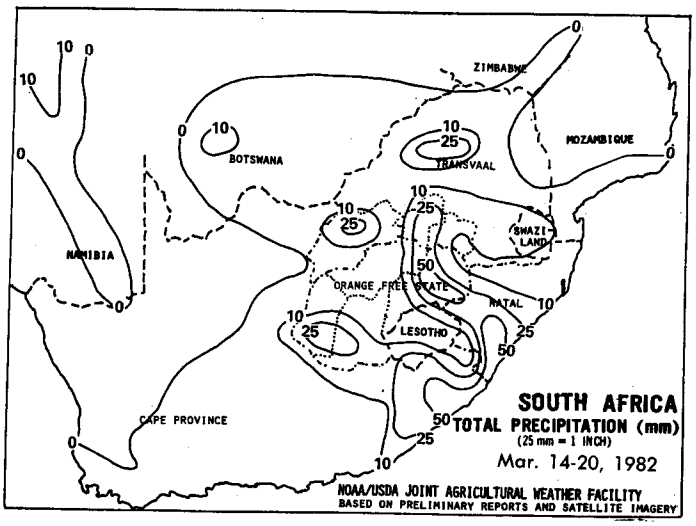
EUROPE: The precipitation patterns became more widespread and increased in intensity. Crop areas of Spain, however, continued to be dry--a pattern which has persisted for 3 weeks. The dry weather is stressing almond trees which are currently flowering along southeastern coastal areas. In addition, timely rains during upcoming weeks will be required by the winter grain crop as it enters the critical flowering stage. Highly beneficial rains fell on crops in northern Italy and in the southeast, improving soil moisture and water reservoir levels. Only light precipitation fell on winter grains in Poland and western Romania while wet weather continued from England southward into France and eastward into Central Europe. Temperatures this week averaged near normal in the west and south and below normal in the north.



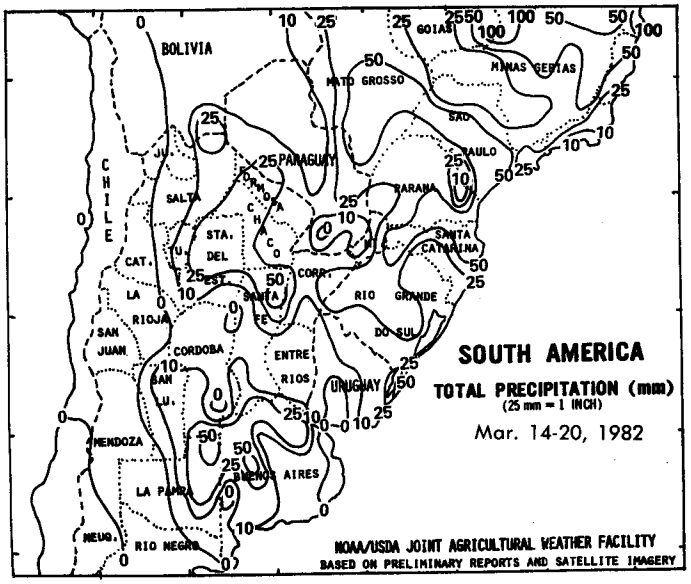
WESTERN USSR: Only widely scattered precipitation occurred as rain- producing storms failed to enter the region. Satellite imagery indicates that the major winter grain areas of the Ukraine, North Cancasus, and Volga Valley are without snow cover. Temperatures in the eastern Ukraine and Volga Valley fell from above normal early in the week to below normal by week's end. However, lowest temperatures were not sufficiently cold to produce winterkill.



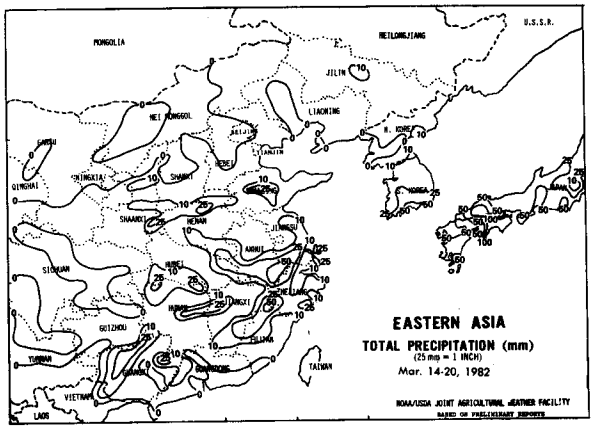
NORTHWESTERN AFRICA: Light precipitation fell on some Moroccan winter grains but others remained dry as the crop advanced into the heading stage. The dryness allowed temperatures to rise above normal, stressing the crop somewhat at a critical developmental stage. Light precipitation in Tunisia and eastern Algeria maintained generally adequate moisture for winter grain growth. Conditions became drier in central Algeria, and although winter grains in the heading stage should not yet be stressed, additional moisture will be needed soon. Temperatures in Algeria and Tunisia remained slightly below normal.



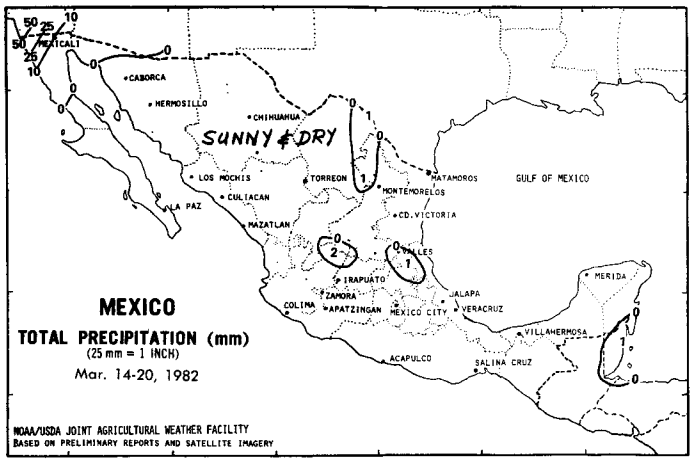
SOUTH AFRICA: Some parts of the Maize Triangle had above-normal rainfall, but most of the area received lighter amounts. The moisture may have benefited filling of late-planted varieties, but for the most part it was too late. Generally above-normal temperatures favored drying and harvesting of early planted varieties.



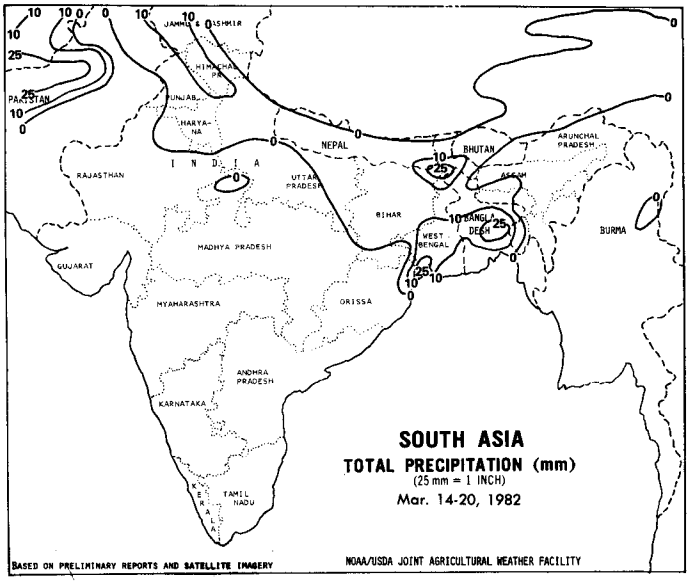
SOUTH AMERICA: Widespread showers over most crop areas of Brazil and Argentina were beneficial to a major portion of the summer crops which have not yet reached maturity. Brazil's soybean harvest--about 25 percent complete in the State of Parana and just beginning in Rio Grande do Sul--was temporarily delayed due to wet weather during the first half of the week. The substantial rainfall improved topsoil moisture supplies for late maturing soybeans in southern Brazil and aided fruit development in Sao Paulo and Minas Gerais. In Argentina, overall conditions remained favorable for maturing grain and oilseed crops. Weekly rainfall totals were highly variable, but some delays likely occurred in the cotton harvest in Chaco, where yield prospects are very good, and in the sunflower harvest which was about to begin in Buenos Aires.



EASTERN ASIA: Temperatures on the North China Plain plummeted as a cold front moved through at midweek. Daytime highs dropped from the mid-20's (C) on Monday to 5-10°C on Tuesday. The coolness and showers associated with the front alleviated stress on young wheat plants which had been suffering from dry conditions. Light frost occurred during the cool spell, but only localized, superficial damage was likely. In some dry areas, the precipitation was only light, and by the week's end, rising temperatures were again threatening. Showers in the Yangtze Valley and southward remained patchy. However, soil moisture was adequate for wheat in the vegetative stage and for newly planted early rice. In South Korea, generous rains of 25-50 mm benefited winter grains as above-normal temperatures allowed continued growth.



MEXICO: Sunny, warm weather over most principal agricultural areas further reduced topsoil moisture. Development of some young, shallow-rooted crops may be slowed in nonirrigated corn and bean districts. Rainfall was unusually low across the country, only being significant west of the Mexicali cotton area where temperatures were cool. The northeast was much warmer than normal, aiding crops where mositure was adequate but stressing those, including some citrus, in nonirrigated districts.



SOUTH ASIA: Generally warmer and drier weather favored winter grains in northern Pakistan and India, which should be turning color now. Some localized, light rains may have delayed the drying process, but conditions are generally improving. Continued seasonable rains in Bangladesh and eastern India maintained favorable growing conditions. Southern India remained in its dry season, but tropical weather systems appear to be shifting northward and should be influencing the region soon.

NOAA/USDA Joint Agricultural
Weather Facility
Room 5844 USDA South Building
Washington, D.C. 20250

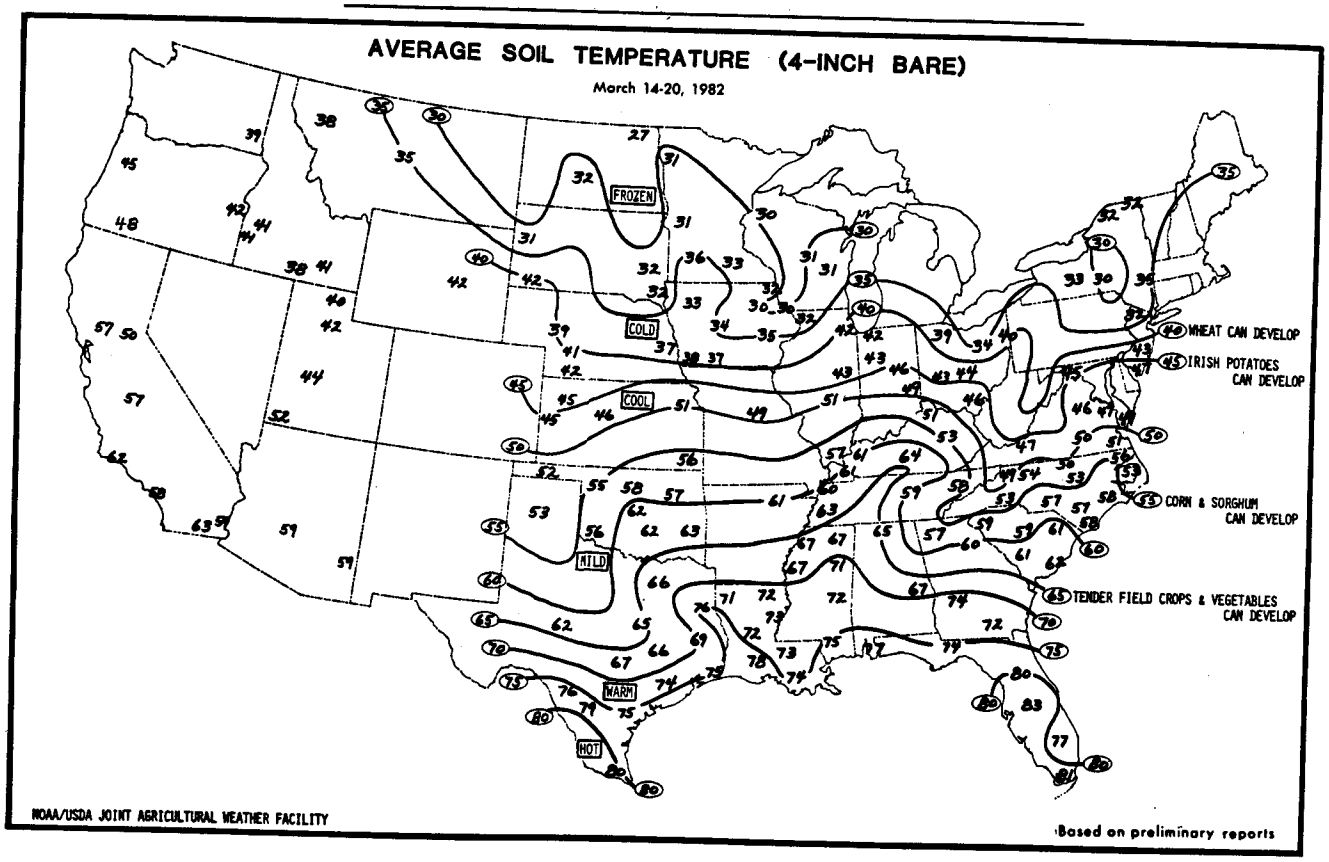
IMMEDIATE – U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

FIRST CLASS MAIL

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
210

U.S.MAIL



The Weekly Weather and Crop Bulletin is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44 USC 213), 53rd Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the Bulletin. The contents may be reprinted freely, with proper credit.

Annual subscription: $13 domestic and $18 foreign airmail. Draft checks on U.S. banks or international money orders in U.S. funds, payable to U.S. Department of Commerce, NOAA. Order from the NOAA/USDA Joint Agricultural Weather Facility, USDA South Bldg., Room 5844, Washington, DC 20250.

Multi-year subscriptions are encouraged to ensure continous coverage, reduce paperwork, and eliminate your receiving annual renewal letters.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor . . . . . Don Haddock
Meteorologists . . . . . Jim Williams
Ray McInturff Wes Byrd
Lyle Denny Karen Brown

Subscriptions (202) 447-7917 . . . . Tamara Bibber

U.S. DEPARTMENT OF AGRICULTURE
Economic Management Service
Editor . . . . . Linda Hatcher
Statistical Reporting Service
Agricultural Statistician . . . . . Bill Blackson
World Agricultural Outlook Board
Agricultural Weather Analysts . . . . Laras Lambert
Ray Motha Tom Puterbaugh