

# 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

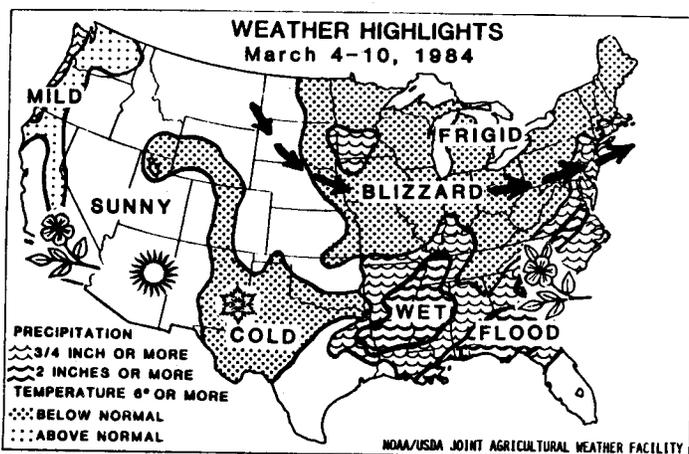
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March 13, 1984

## National Weather Summary

March 4 to 10



while another snowy storm system was forming rapidly in the northeastern Rockies. Fair weather and seasonal temperatures dominated the West.

WEDNESDAY...Blizzard conditions developed across the northern Plains and upper Midwest as winds hit 50 to 60 mph in blowing snow. The storm center headed southeastward into the central part of the Nation, bringing unusually frigid air behind it. The rest of the Nation had tranquil, seasonal weather.

THURSDAY...Near blizzard conditions accompanied the intense storm as it rapidly sped eastward through the Ohio Valley. By evening it had dumped moderate to heavy snow from northern Virginia into Pennsylvania. The bitter cold, strong winds, and blinding snow associated with the storm caused several fatalities. Frigid, arctic air raced southward through the Great Plains, while the far West remained pleasant.

HIGHLIGHTS...Torrential rains, triggered by a cold front and squall line, were dumped on the Delta States and the lower Southeast, flooding some localities. Meanwhile, another major winter storm with blizzard conditions developed over the northern Plains, then tracked eastward across the Midwest to the coast, causing hazardous conditions which took over 20 lives. It ushered in unusually frigid, arctic air over the eastern two-thirds of the Nation, breaking low-temperature records around the Great Lakes and in the Northeast, and freezing some southeastern peach blooms.

FRIDAY...The notorious late winter storm blew out to sea after causing over 20 deaths. It produced heavy snow over parts of New England, while pulling frigid air southward over the area east of the Rockies. Record-low temperatures for this date were tied or broken over much of the Great Lakes region. Snow developed in parts of the central Rockies and Plains.

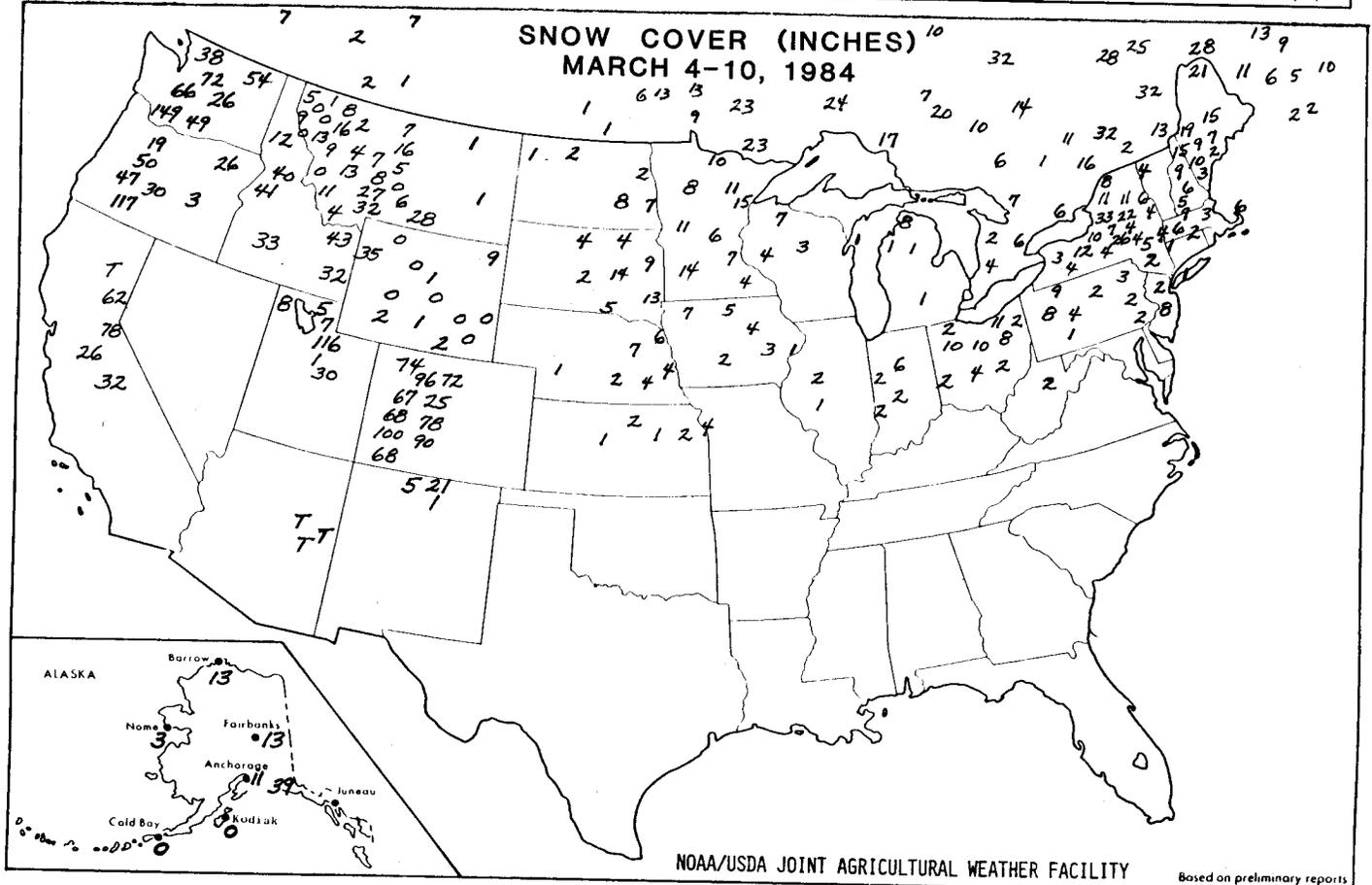
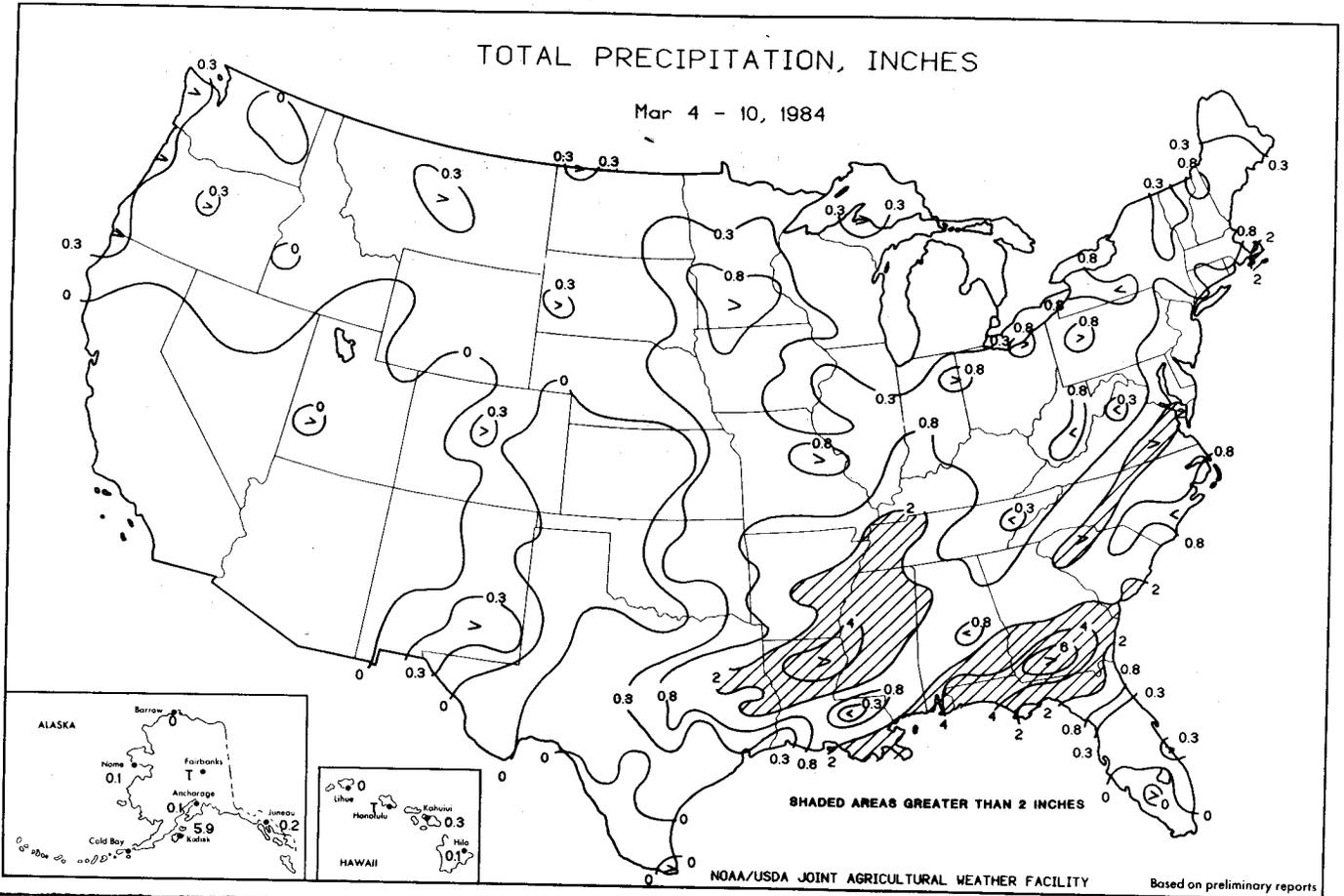
SUNDAY...A very wet, low-pressure storm system moved northeastward through the central part of the Nation. It produced widespread snow from the eastern Northern Plains into the western Great Lakes, and thunderstorms with heavy rains from eastern Texas into western Tennessee. Frigid air over the Northeast slowly moved out to sea, while the West was fair.

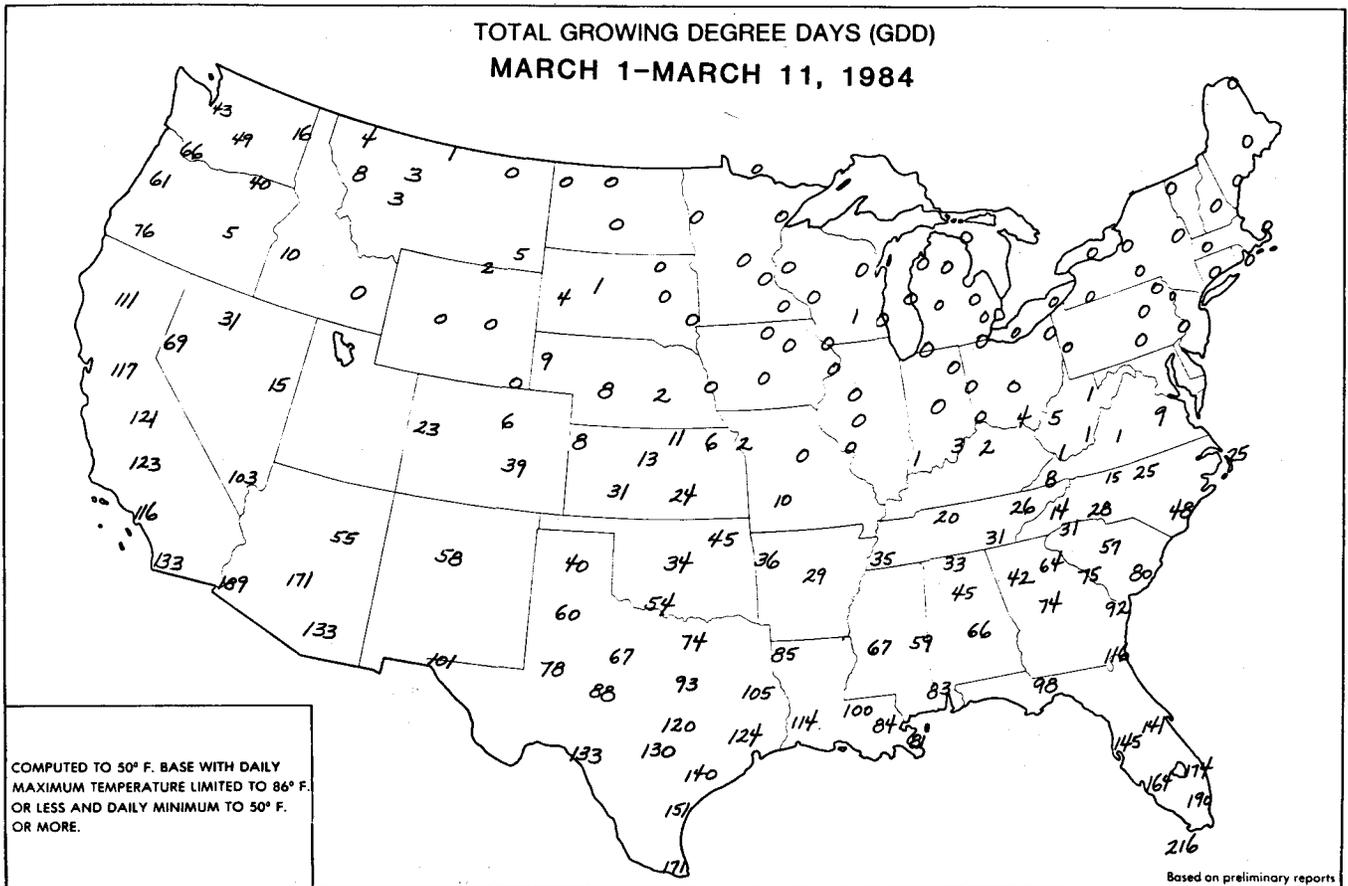
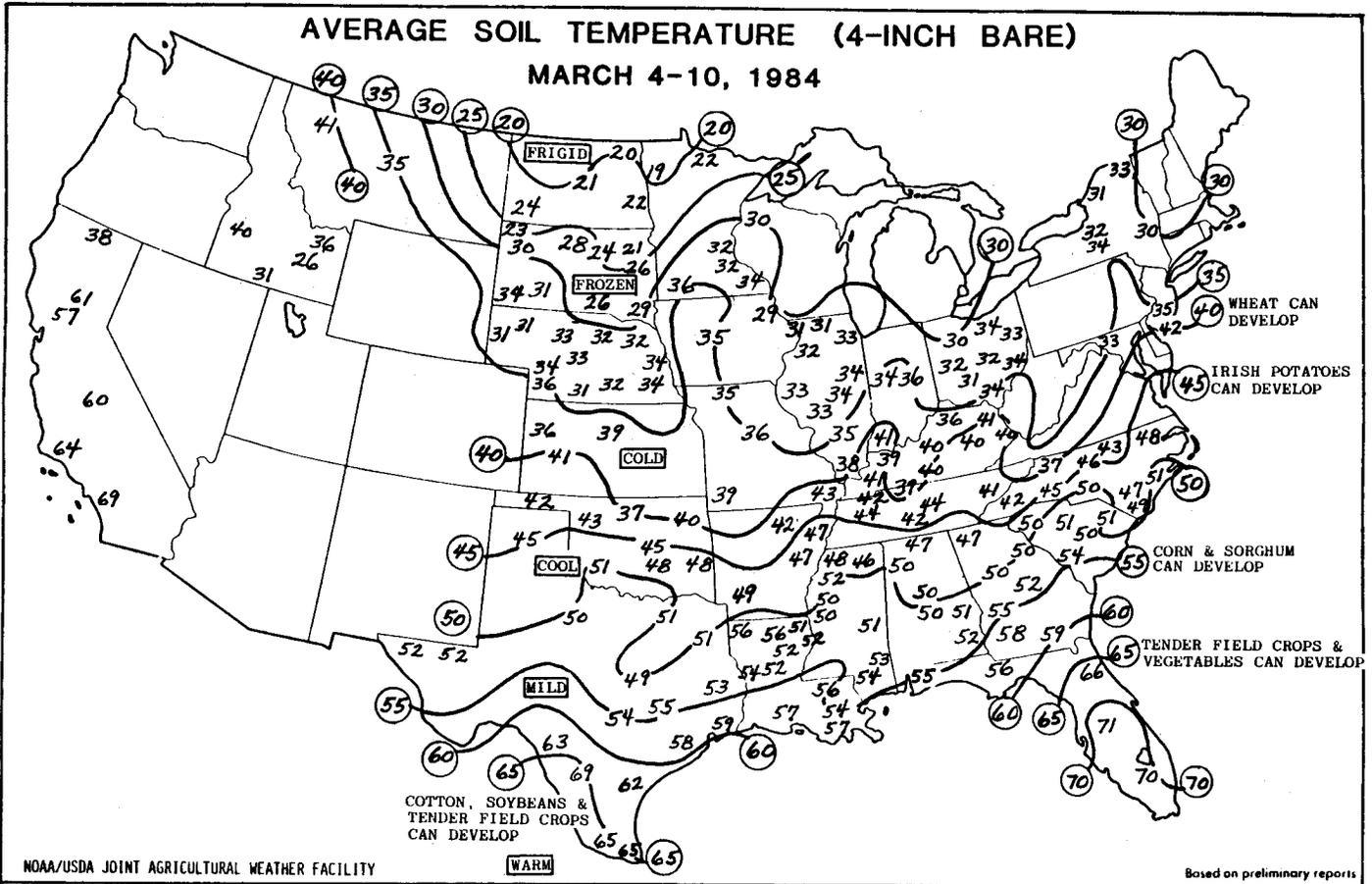
SATURDAY...Frigid, arctic air hovered over the Northeast, with record-low temperatures reported at more than 30 locations. Freezing temperatures dipped through southeastern peach orchards, thinning blooms. Meanwhile, another reinforcing blast of arctic air was sweeping through the northern Plains, causing near blizzard conditions. Temperatures warmed into the 70's and 80's in southern parts of Florida, Texas, and California.

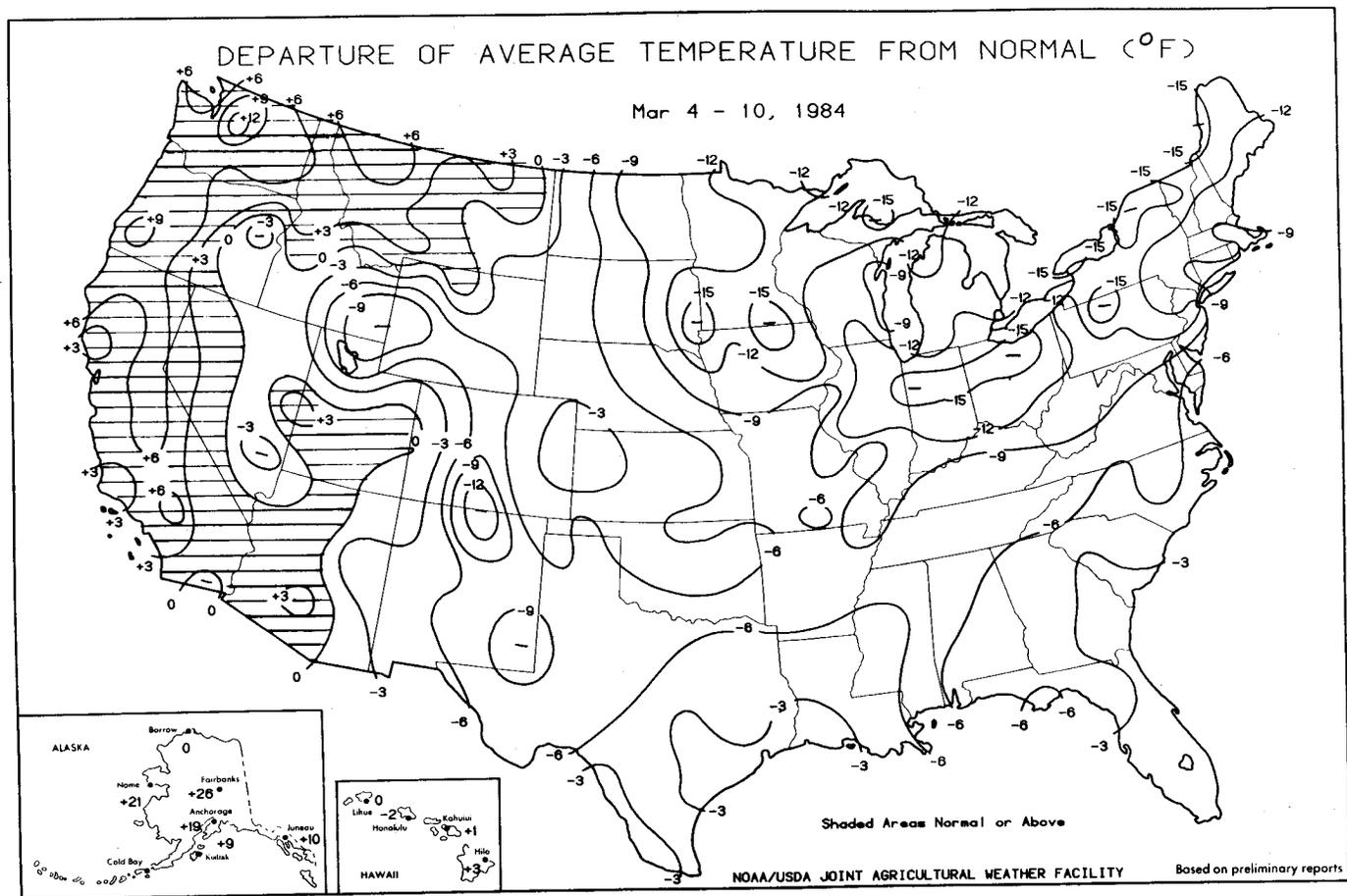
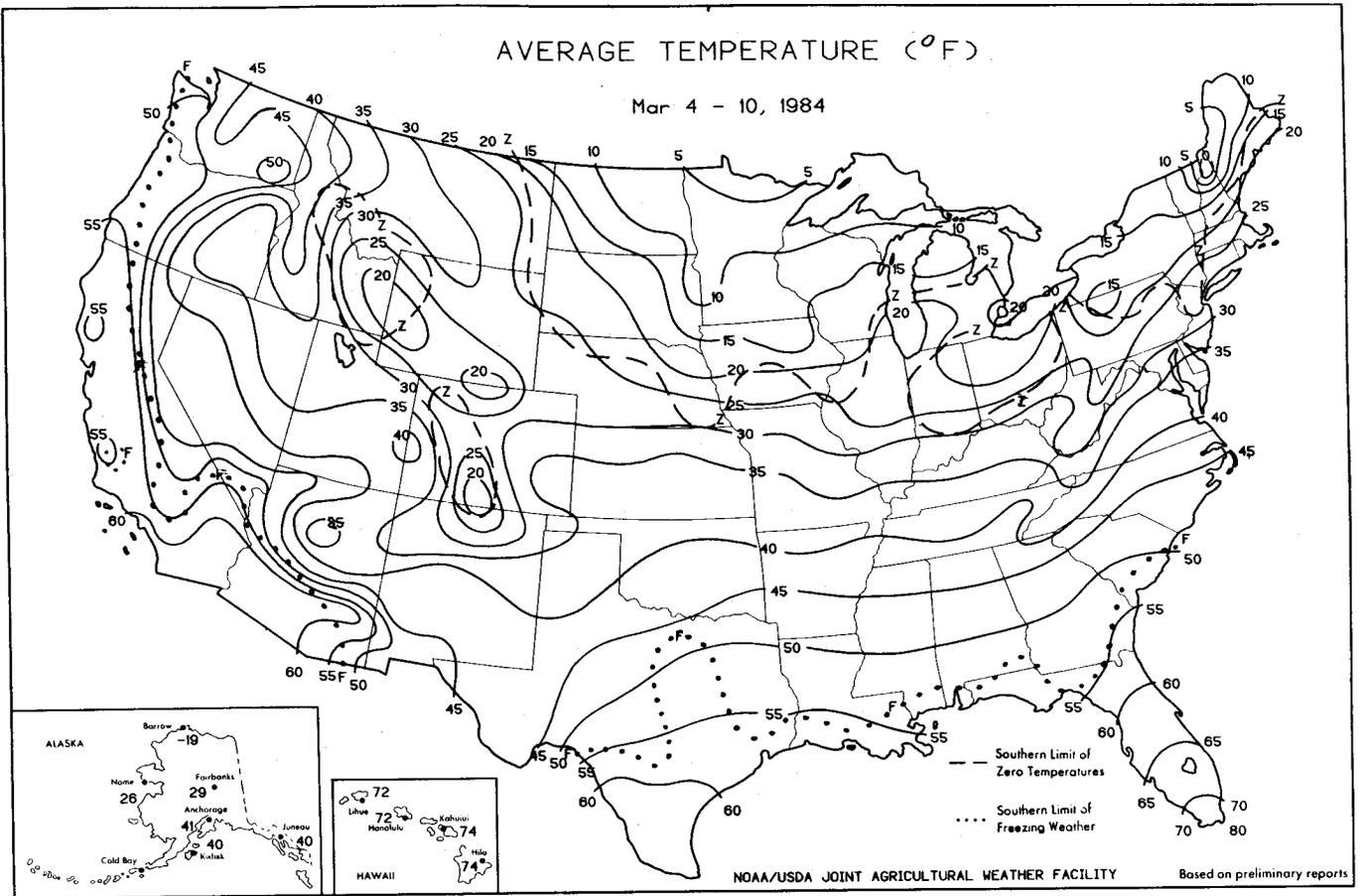
MONDAY...The snowy storm system moved across the Great Lakes with a trailing, rainy cold front extending southward through the Delta States. Heavy rain was dumped along the Gulf Coast States -- torrential amounts, 4 to 6 inches, locally flooded parts of the Florida Panhandle and southern Georgia. Snow fell over southeastern New Mexico and extreme western Texas -- El Paso had an unusual 5 inches of the white frosting.

TUESDAY...More rain was dumped on the lower Southeast as a squall line accompanied the cold front crossing the area. Unusually cold air invaded the eastern Plains and Mississippi Valley,

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Weather Data for the Week Ending MARCH 10, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT. NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	54	35	72	26	45	-7	1.5	0	1.5	1.5	100	8.7	71	75	39	0	3	3	1
MOBILE	63	42	70	31	53	-6	2.1	.7	1.7	2.1	150	13.1	111	83	42	0	1	2	1
MONTGOMERY	61	38	76	30	50	-5	.7	.7	.4	.7	50	10.0	93	86	42	0	3	2	0
AK ANCHORAGE	46	35	48	31	41	19	.1	.1	T	.1	50	2.4	133	74	54	0	2	2	0
BARROW	-15	-22	-5	-34	-19	0	0	0	0	0	+100	.3	150	79	66	0	7	0	0
FAIRBANKS	40	19	44	6	29	26	T	.1	T	0	0	1.6	145	88	61	0	7	0	0
JUNEAU	44	36	48	32	40	10	.2	.6	.1	.2	25	12.6	143	100	90	0	1	5	0
KODIAK	43	38	47	34	40	9	5.9	4.9	1.6	5.9	590	23.1	142	99	84	0	0	6	5
NOME	35	17	43	-14	26	21	.1	.1	T	.1	50	.9	56	82	58	0	5	2	0
AZ PHOENIX	78	49	83	45	63	4	0	.2	0	0	0	.3	21	39	13	0	0	0	0
PRESCOTT	59	26	66	20	42	1	0	.4	0	0	0	0	0	45	13	0	7	0	0
TUCSON	71	40	77	34	56	-1	0	.2	0	0	0	.6	38	38	10	0	0	0	0
YUMA	79	50	85	42	65	2	0	.1	0	0	0	.1	10	38	13	0	0	0	0
AR FORT SMITH	52	32	60	24	42	-6	.7	.1	.6	.7	88	4.1	73	85	43	0	5	3	1
LITTLE ROCK	50	34	63	23	42	-7	2.5	1.4	1.8	2.5	227	7.8	87	84	53	0	4	3	2
CA BAKERSFIELD	73	44	77	40	59	3	0	.2	0	0	0	.2	8	81	29	0	0	0	0
EUREKA	64	47	72	43	56	7	.3	1.0	.1	.3	23	5.9	42	88	61	0	0	2	0
FRESNO	73	46	75	42	59	6	0	.4	0	0	0	1.2	27	88	37	0	0	0	0
LOS ANGELES	69	52	75	49	61	3	0	.5	0	0	0	.4	6	86	43	0	0	0	0
RED BLUFF	69	46	72	42	57	5	0	.6	0	0	0	2.3	26	84	37	0	0	0	0
SACRAMENTO	70	46	73	41	58	6	0	.5	0	0	0	1.2	15	84	39	0	0	0	0
SAN DIEGO	70	53	74	48	61	3	0	.4	0	0	0	.6	14	86	44	0	0	0	0
SAN FRANCISCO	67	49	74	45	58	5	0	.6	0	0	0	1.9	21	82	47	0	0	0	0
CO DENVER	43	19	51	10	31	-5	.1	.2	.1	.1	33	1.1	79	80	34	0	7	2	0
GRAND JUNCTION	51	29	61	23	40	1	T	.1	T	0	0	.4	36	66	28	0	6	0	0
PUEBLO	51	16	63	9	34	-5	.1	.1	.1	.1	50	.4	44	85	25	0	7	1	0
CT BRIDGEPORT	35	21	43	8	28	-8	.7	.1	.4	.7	88	6.5	88	76	36	0	6	4	0
HARTFORD	32	14	41	1	23	-11	.8	.1	.4	.8	89	7.5	90	84	36	0	7	4	0
DC WASHINGTON	42	29	48	20	35	-8	.7	.1	.4	.7	88	5.8	91	77	39	0	4	3	0
FL APALACHICOLA	63	44	69	34	53	-6	1.3	.4	1.3	1.3	144	10.0	118	86	47	0	0	1	1
DAYTONA BEACH	72	49	85	37	61	-2	T	.7	T	0	0	5.0	75	84	45	0	0	1	0
JACKSONVILLE	70	46	79	34	58	-2	1.6	.7	1.6	1.6	178	8.4	104	90	40	0	0	1	1
KEY WEST	77	67	82	61	72	-1	.1	.3	T	.1	25	4.4	98	78	59	0	0	2	0
MIAMI	79	60	87	54	70	-1	T	.4	T	0	0	.9	19	86	47	0	0	1	0
ORLANDO	77	50	86	37	63	-2	.1	.7	T	.1	13	4.9	79	95	41	0	0	2	0
TALLAHASSEE	67	38	76	27	53	-6	3.7	2.4	2.1	3.7	285	13.8	119	96	39	0	3	2	2
TAMPA	75	52	82	40	63	-1	T	.9	T	0	0	4.9	75	88	42	0	0	1	0
WEST PALM BEACH	77	58	84	51	68	-1	T	.6	T	0	0	5.9	91	95	51	0	0	2	0
GA ATLANTA	55	35	68	24	45	-5	1.4	.1	1.4	1.4	108	12.2	108	75	43	0	3	2	1
AUGUSTA	64	37	73	28	50	-2	1.2	0	.8	1.2	100	9.5	96	88	39	0	3	2	1
MACON	63	38	73	25	50	-4	1.8	.6	1.2	1.8	150	10.5	96	89	40	0	2	2	2
SAVANNAH	66	44	74	32	55	-2	3.1	2.2	2.7	3.1	344	15.2	197	83	38	0	1	2	1
HI HLO	83	65	85	64	74	3	.1	3.1	.1	.1	3	19.7	70	84	55	0	0	1	0
HONOLULU	81	63	85	60	72	-2	T	.8	T	0	0	1.3	17	89	53	0	0	1	0
KAHULUI	85	64	89	60	74	1	.3	.5	.3	.3	38	3.5	41	84	54	0	0	1	0
LIHUE	82	62	84	59	72	0	0	1.0	0	0	0	3.0	26	88	55	0	0	0	0
ID ROISE	51	29	54	25	40	0	T	.2	T	0	0	1.7	57	81	40	0	5	0	0
LEWISTON	57	36	62	30	46	5	.2	.1	.1	.2	67	1.2	48	87	45	0	3	2	0
POCATELLO	35	14	41	-3	24	-9	T	.2	T	0	0	2.6	118	88	61	0	7	0	0
IL CHICAGO	28	13	34	5	21	-12	.2	.3	.1	.2	40	2.8	76	87	54	0	7	3	0
MOLINE	30	12	37	0	21	-11	.6	.1	.4	.6	120	2.3	62	77	52	0	7	3	0
PEORIA	29	13	35	0	21	-13	.4	.2	.2	.4	67	3.3	85	86	63	0	7	3	0
QUINCY	33	20	39	10	26	-9	.2	.4	.1	.2	33	2.4	65	80	57	0	7	2	0
ROCKFORD	28	10	33	-2	19	-11	.2	.3	.1	.2	40	2.2	65	90	50	0	7	3	0
SPRINGFIELD	29	17	35	7	23	-13	.3	.4	.1	.3	43	2.9	67	94	64	0	7	3	0
IN EVANSVILLE	41	26	52	18	33	-8	1.1	0	.8	1.1	100	4.5	60	82	52	0	6	4	1
FORT WAYNE	27	10	34	-7	18	-15	.8	.2	.5	.8	133	3.5	71	87	59	0	7	4	1
INDIANAPOLIS	33	14	37	-1	24	-13	.6	.2	.2	.6	75	4.8	77	83	54	0	7	4	0
SOUTH BEND	28	15	34	8	22	-11	.1	.5	.1	.1	17	2.5	46	79	49	0	7	4	0
IA DES MOINES	30	12	37	3	21	-10	.3	.1	.2	.3	75	2.2	79	81	54	0	7	2	0
ST LOUIS	28	9	39	-3	18	-12	.6	.3	.4	.6	200	2.1	111	88	67	0	7	4	0
WATERLOO	25	3	32	-12	14	-13	.3	.2	.1	.3	60	1.7	65	87	65	0	7	3	0
KS CONCORDIA	44	21	56	12	32	-5	T	.4	T	0	0	1.4	70	83	39	0	7	0	0
DODGE CITY	52	20	62	15	36	-4	T	.3	T	0	0	1.0	56	78	24	0	7	0	0
GOODLAND	46	20	56	14	33	-2	T	.2	T	0	0	2.3	209	89	39	0	7	0	0
TOPEKA	42	24	52	14	33	-6	.7	.2	.6	.7	140	2.4	92	76	46	0	6	2	1
WICHITA	48	25	60	18	36	-5	T	.4	T	0	0	2.0	95	85	37	0	7	0	0
KY BOWLING GREEN	43	27	59	19	35	-8	1.6	.4	1.4	1.6	133	7.6	74	89	59	0	5	2	1
LEXINGTON	41	23	53	13	32	-9	.4	.7	.2	.4	36	5.4	62	89	54	0	7	3	0
LOUISVILLE	42	24	55	15	33	-9	.6	.5	.4	.6	55	3.1	38	71	47	0	6	3	0
LA ALEXANDRIA	64	44	70	35	54	-4	2.4	1.2	1.9	2.4	200	17.0	142	79	49	0	0	2	1
BATON ROUGE	66	42	75	32	54	-4	.1	.9	.1	.1	10	9.3	84	88	43	0	1	1	0
LAKE CHARLES	67	46	73	35	57	-2	.3	.4	.2	.3	43	10.3	111	90	50	0	0	2	0
NEW ORLEANS	63	43	73	31	53	-6	1.3	.2	1.3	1.3	118	10.7	89	80	46	0	1	2	1

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending MARCH 10, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT., NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT., NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	61	41	70	29	51	-4	2.5	1.7	2.0	2.5	313	10.2	116	89	50	0	1	2	1
ME CARIBOU	20	-2	38	-19	9	-12	.1	.4	.1	.1	20	5.5	102	84	46	0	7	2	0
ME PORTLAND	30	10	44	4	20	-9	.5	.3	.5	.5	63	8.2	95	73	36	0	7	2	1
MD BALTIMORE	38	24	47	13	31	-9	.9	0	.6	.9	100	6.7	89	84	42	0	5	3	1
MD SALISBURY	48	28	60	19	38	-4	1.7	.8	.7	1.7	189	8.2	100	86	47	0	5	3	2
MA BOSTON	32	17	42	6	25	-11	.6	.4	.3	.6	60	10.9	117	77	31	0	6	3	0
MA CHATHAM	35	22	44	16	28	-7	2.2	1.3	1.1	2.2	244	10.0	90	77	31	0	6	3	2
MI ALPENA	27	2	39	-8	14	-9	.1	.4	T	.1	20	1.8	46	90	41	0	7	2	0
MI DETROIT	29	12	38	5	20	-12	.2	.4	.2	.2	33	2.4	53	79	45	0	7	1	0
MI FLINT	27	10	36	1	18	-11	.1	.4	.1	.1	20	1.2	31	87	41	0	7	2	0
MI GRAND RAPIDS	29	13	35	6	21	-9	.1	.4	T	.1	20	2.1	51	88	43	0	7	4	0
MI HOUGHTON LAKE	24	3	34	-7	14	-10	T	.4	T	0	0	2.0	59	79	52	0	7	1	0
MI LANSING	27	10	35	3	18	-11	.1	.4	.1	.1	20	1.4	34	89	46	0	7	2	0
MI MARQUETTE	21	-10	35	-22	5	-15	.4	.1	.1	.4	80	5.4	113	98	52	0	7	5	0
MI MUSKEGON	28	12	35	2	20	-10	.1	.4	.3	.1	20	2.7	55	80	44	0	7	5	0
MI SAULT STE. MARIE	18	-5	32	-15	7	-14	.2	.2	.2	.2	50	3.8	81	90	49	0	7	3	0
MN ALEXANDRIA	21	-1	28	-11	10	-10	.7	.5	.5	.7	350	2.3	178	89	48	0	7	3	1
MN DULUTH	17	-4	28	-20	7	-12	.2	.2	.1	.2	50	1.6	59	80	46	0	7	2	0
MN INT'L FALLS	16	-9	28	-20	3	-13	.1	.1	.1	.1	50	1.1	58	73	36	0	7	3	0
MN MINNEAPOLIS	22	2	30	-8	12	-13	1.0	.6	.8	1.0	250	3.4	162	79	42	0	7	4	1
MN ROCHESTER	21	0	28	-11	10	-14	.3	0	.3	.3	100	2.5	125	91	61	0	7	3	0
MS GREENWOOD	56	38	72	30	47	-6	3.5	2.1	2.0	3.5	250	11.4	97	87	47	0	3	3	2
MS JACKSON	60	37	74	26	49	-6	3.0	1.7	2.1	3.0	231	10.6	91	88	48	0	3	2	2
MS MERIDIAN	60	33	73	23	46	-7	2.0	.5	2.0	2.0	133	9.7	82	97	45	0	5	2	1
MO CAPE GIRARDEAU	44	29	56	19	36	-	.7	.4	.6	.7	64	5.9	79	93	59	0	5	2	1
MO COLUMBIA	37	24	46	16	30	-8	.9	.3	.7	.9	150	4.6	98	86	61	0	6	5	1
MO KANSAS CITY	38	22	46	14	30	-8	.7	.2	.5	.7	140	2.8	100	86	55	0	6	4	1
MO SAINT LOUIS	38	23	44	14	31	-9	.9	.2	.8	.9	129	5.4	104	96	61	0	6	5	1
MO SPRINGFIELD	45	27	51	17	36	-6	.7	0	.7	.7	100	5.6	117	78	49	0	6	2	1
MT BILLINGS	41	26	45	23	33	2	.3	.1	.2	.3	150	2.0	111	75	43	0	6	2	1
MT GLASGOW	35	16	41	6	25	3	.1	0	.1	.1	100	.7	78	82	45	0	7	3	0
MT GREAT FALLS	44	24	51	20	34	5	.4	.1	.3	.4	133	1.9	83	86	47	0	7	5	0
MT HAVRE	39	15	46	2	27	1	T	.1	T	0	0	.7	70	93	48	0	7	1	0
MT HELENA	44	23	51	14	34	4	.1	.1	.2	.1	50	.5	36	88	42	0	7	3	0
MT KALISPELL	48	25	54	19	37	7	.2	0	T	.2	100	1.7	55	85	45	0	6	1	0
MT MILES CITY	35	18	43	11	26	-2	.1	0	.1	.1	100	.2	20	89	51	0	7	1	0
MT MISSOULA	49	25	55	16	37	5	.2	0	.1	.2	100	1.4	56	94	43	0	6	3	0
NE GRAND ISLAND	38	15	50	1	26	-6	.2	.1	.1	.2	67	2.6	153	83	49	0	7	2	0
NE LINCOLN	37	15	45	-7	26	-7	.5	.1	.2	.5	125	2.3	105	91	60	0	7	3	0
NE NORFOLK	30	9	39	-8	19	-11	.4	.1	.1	.4	133	3.6	200	80	60	0	7	4	0
NE NORTH PLATTE	41	14	55	6	27	-5	T	.2	T	0	0	1.4	108	78	39	0	7	2	0
NE OMAHA	30	12	39	-1	21	-10	.7	.3	.4	.7	175	1.9	79	86	68	0	7	5	0
NE SCOTTSBLUFF	41	18	54	10	29	-4	T	.2	T	0	0	.9	82	79	32	0	7	1	0
NE VALENTINE	34	10	48	-2	22	-7	.1	.1	.1	.1	50	.9	90	81	50	0	7	2	0
NV ELY	49	20	58	11	35	3	T	.7	T	0	0	.8	44	88	38	0	7	0	0
NV LAS VEGAS	67	42	74	32	54	1	0	.1	0	0	0	0	0	31	15	0	1	0	0
NV RENO	62	26	67	21	44	4	0	.2	0	0	0	.6	23	73	21	0	6	0	0
NV WINNEMUCCA	55	25	64	17	40	2	T	.1	T	0	0	1.0	50	82	29	0	7	2	0
NH CONCORD	29	9	42	-4	19	-10	.3	.3	.3	.3	50	7.6	123	77	35	0	7	2	0
NJ ATLANTIC CITY	41	21	54	5	31	-7	1.2	.3	.5	1.2	133	7.2	88	91	45	0	6	3	2
NM ALBUQUERQUE	54	25	66	15	40	-4	0	.1	0	0	0	.3	30	65	20	0	6	0	0
NM CLOVIS	50	27	66	20	38	-6	.1	.1	T	.1	50	.5	42	67	30	0	7	2	0
NM ROSWELL	55	28	69	19	42	-9	.5	.4	.4	.5	500	.5	63	76	30	0	5	2	0
NY ALBANY	29	10	40	0	19	-11	.2	.4	.2	.2	33	3.9	68	77	38	0	7	1	0
NY BINGHAMTON	26	8	35	-1	17	-11	.3	.4	.2	.3	43	5.3	87	87	45	0	7	3	0
NY BUFFALO	26	9	41	-7	17	-13	.2	.4	.2	.2	33	5.4	86	92	52	0	7	2	0
NY NEW YORK	35	23	42	12	29	-9	1.2	.2	.6	1.2	170	7.0	91	84	41	0	5	4	1
NY ROCHESTER	26	8	42	0	17	-13	.3	.2	.3	.3	60	5.4	100	84	45	0	7	3	0
NY SYRACUSE	25	4	40	-6	15	-15	.3	.4	.2	.3	43	5.0	79	92	51	0	7	5	0
NC ASHEVILLE	49	26	57	19	37	-7	.9	.3	.6	.9	75	9.7	108	96	49	0	5	2	1
NC CHARLOTTE	53	33	62	27	43	-5	2.1	1.0	1.7	2.1	191	12.0	130	84	44	0	4	2	1
NC GREENSBORO	50	29	59	20	40	-6	1.5	.6	1.3	1.5	167	10.3	123	79	39	0	5	4	1
NC HATTERAS	53	39	66	30	46	-3	.4	.6	.2	.4	40	6.2	60	80	50	0	2	3	0
NC NEW BERN	56	34	68	29	45	-5	1.0	.1	.5	1.0	111	9.5	99	88	50	0	3	3	0
NC RALEIGH	52	30	62	22	41	-6	1.6	.7	1.0	1.6	178	12.1	144	83	50	0	5	3	2
NC WILMINGTON	58	36	70	28	47	-5	.8	.2	.7	.8	80	8.3	95	87	50	0	3	3	1
ND BISMARCK	23	5	32	-14	14	-8	.2	.1	.1	.2	200	.9	100	82	59	0	7	5	0
ND FARGO	17	-2	31	-7	9	-10	.4	.3	.3	.4	400	2.3	192	69	48	0	7	3	0
ND GRAND FORKS	18	-1	30	-10	8	-9	.1	0	.1	.1	100	1.2	97	79	51	0	7	2	0
ND WILLISTON	29	7	37	-10	18	-4	.1	.1	.1	.1	100	1.0	91	84	54	0	7	3	0
OH AKRON-CANTON	29	13	44	0	21	-12	.7	0	.4	.7	100	4.7	81	82	51	0	7	4	0
OH CINCINNATI	36	16	47	2	26	-13	.6	.2	.3	.6	67	3.8	51	89	55	0	7	3	0
OH CLEVELAND	27	11	40	-5	19	-15	.8	.2	.6	.8	133	5.6	95	88	53	0	7	4	1
OH COLUMBUS	31	13	43	-6	22	-15	.5	.2	.3	.5	71	3.5	58	81	50	0	7	4	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending MARCH 10, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT. NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE °F		PRECIPIT- ATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	31	13	42	-1	22	-14	.6	0	.3	.6	100	4.5	79	83	55	0	7	4	0
TOLEDO	26	10	36	-6	18	-14	.4	.1	.3	.4	80	2.6	55	84	50	0	7	7	0
YOUNGSTOWN	28	12	44	-1	20	-12	.4	.3	.3	.4	57	4.0	66	81	53	0	7	2	0
OK OKLAHOMA CITY	52	30	63	24	41	-5	.4	0	.4	100	2.0	67	76	34	0	5	1	0	
TULSA	54	32	63	25	43	-3	.3	.3	.3	50	3.6	92	74	35	0	4	1	0	
OR ASTORIA	60	41	64	34	50	6	.3	-1.4	.2	.3	18	15.6	71	93	56	0	0	2	0
BURNS	45	21	48	11	33	-3	.2	.1	.1	.2	200	1.2	133	86	60	0	6	2	0
MEDFORD	67	35	69	30	51	7	.1	.4	.1	.1	20	2.8	44	92	35	0	3	1	0
PENDLETON	59	37	64	29	48	5	.1	.2	.1	.1	33	2.5	74	85	42	0	2	1	0
FORTLAND	65	42	68	32	53	8	.2	.2	.2	.2	22	6.2	53	89	36	0	1	1	0
SALEM	65	35	67	27	50	5	.1	1.0	.2	0	0	7.7	58	47	0	3	1	0	
PA ALLENTOWN	33	17	42	4	25	-10	.8	0	.4	.8	100	6.0	78	78	36	0	7	3	0
ERIE	29	11	44	1	20	-11	.4	.3	.3	.4	57	4.4	76	79	48	0	7	3	0
HARRISBURG	33	20	39	5	26	-11	.8	0	.5	.8	100	6.3	90	80	39	0	7	2	0
PHILADELPHIA	37	21	48	7	29	-10	1.6	.7	.8	1.6	178	6.5	88	85	39	0	6	4	0
PITTSBURGH	33	14	49	3	24	-12	.5	.3	.3	.5	63	4.0	62	80	46	0	7	3	0
SCRANTON	30	14	38	0	22	-11	.5	.1	.2	.5	83	4.7	87	78	44	0	7	3	0
RI PROVIDENCE	34	18	45	6	26	-9	.6	.4	.4	.6	60	9.9	104	70	32	0	6	3	0
SC CHARLESTON	62	42	70	32	52	-2	2.0	1.0	1.1	2.0	200	10.6	129	91	52	0	1	2	2
COLUMBIA	60	34	70	25	47	-5	1.2	0	.6	1.2	100	10.2	98	94	47	0	5	2	2
FLORENCE	58	36	67	28	47	-5	.6	.4	.4	.6	60	7.9	94	94	56	0	3	2	0
GREENVILLE	54	35	62	27	44	-4	1.4	0	1.1	1.4	100	11.6	106	78	40	0	3	3	1
SD ABERDEEN	24	6	34	-5	15	-9	.5	.3	.4	.5	250	1.9	136	86	63	0	7	3	0
HURON	26	7	36	-1	16	-9	.3	.1	.2	.3	150	1.9	127	89	63	0	7	3	0
RAPID CITY	35	14	47	5	25	-6	.3	.1	.2	.3	150	1.9	127	89	63	0	7	3	0
SIoux FALLS	23	-2	36	-14	10	-16	.6	.3	.5	.6	200	2.4	141	86	65	0	7	3	1
TN CHATTANOOGA	52	31	65	23	41	-6	.6	.9	.5	.6	40	8.3	67	79	42	0	4	2	0
KNOXVILLE	51	31	64	23	41	-6	.3	1.0	.2	.3	23	7.1	65	80	41	0	4	2	0
MEMPHIS	51	35	65	25	43	-6	2.7	1.5	2.2	2.7	225	9.1	83	84	49	0	3	3	2
NASHVILLE	48	28	67	18	38	-8	1.2	.1	.7	1.2	92	5.4	50	83	47	0	5	3	1
TX ABILENE	58	33	68	25	46	-8	.1	.1	.1	.1	50	1.6	70	72	34	0	2	1	0
AMARILLO	52	22	63	13	37	-7	0	.2	0	0	0	1.0	83	65	24	0	7	0	0
AUSTIN	68	44	79	39	56	-2	.4	.1	.4	.4	133	3.1	66	71	40	0	0	2	0
BEAUMONT	67	48	71	36	58	-2	.2	.5	.2	.2	29	10.9	122	96	56	0	0	2	0
BROWNSVILLE	73	52	80	38	63	-4	T	.1	T	0	0	5.3	177	93	51	0	0	1	0
CORPUS CHRISTI	71	49	75	34	60	-4	.1	.1	.1	.1	50	6.5	176	87	47	0	0	2	0
DEL RIO	69	47	78	34	58	-3	T	.1	T	0	0	1.6	107	71	32	0	0	0	0
EL PASO	64	33	74	22	48	-5	.4	.3	.4	.4	400	.7	78	74	21	0	4	1	0
FORT WORTH	60	38	71	26	49	-4	T	.5	T	0	0	4.1	98	74	33	0	1	1	0
GALVESTON	63	51	67	44	57	-2	T	.5	T	0	0	4.2	70	90	65	0	0	2	0
HOUSTON	68	44	75	31	56	-3	.3	.3	.2	.3	50	8.5	113	87	46	0	1	2	0
LUBBOCK	56	27	69	19	41	-6	T	.2	T	0	0	.2	18	65	27	0	6	0	0
MIDLAND	58	32	71	22	45	-8	T	.1	T	0	0	.6	50	67	30	0	4	0	0
SAN ANGELO	60	36	69	27	48	-7	.2	0	.2	.2	100	3.2	188	82	39	0	1	1	0
SAN ANTONIO	69	43	80	31	56	-3	T	.3	T	0	0	2.3	61	73	35	0	1	0	0
VICTORIA	72	47	76	38	60	-2	.1	.2	T	.1	33	4.6	94	94	44	0	0	2	0
WACO	63	40	74	35	52	-4	1.2	.7	.8	1.2	240	3.0	65	84	46	0	0	3	1
WICHITA FALLS	56	31	68	23	44	-7	0	.4	0	0	0	1.0	37	72	29	0	4	0	0
UT BLANDING	50	22	60	15	36	-1	T	.2	T	0	0	.7	25	66	29	0	7	1	0
CEDAR CITY	51	24	60	20	38	0	T	.2	T	0	0	1.5	75	76	27	0	7	0	0
SALT LAKE CITY	42	22	47	13	32	-6	T	.3	T	0	0	1.4	45	86	53	0	7	0	0
VT BURLINGTON	23	1	38	-9	12	-14	.1	.4	.1	.1	20	3.9	89	78	38	0	7	2	0
VA NORFOLK	48	31	62	26	40	-6	1.6	.7	.8	1.6	178	9.2	108	79	45	0	5	4	1
RICHMOND	47	26	55	17	37	-7	1.6	.7	1.0	1.6	178	9.7	124	89	42	0	5	3	1
ROANOKE	45	26	52	15	36	-8	.4	.5	.3	.4	44	6.7	89	82	39	0	5	4	0
WA COLVILLE	49	30	50	23	40	4	0	.3	0	0	0	3.0	73	78	47	0	1	0	0
QUILLAYUTE	59	38	65	29	48	6	.5	2.3	.4	.5	18	33.5	106	99	58	0	2	2	0
SEATTLE-TACOMA	61	42	64	35	51	8	.1	.8	.1	.1	11	7.6	66	90	48	0	0	1	0
SPOKANE	54	32	60	25	43	7	T	.3	T	0	0	2.5	56	88	48	0	4	0	0
YAKIMA	61	31	67	24	46	6	.1	.1	.1	.1	50	1.1	44	80	37	0	4	1	0
WV BECKLEY	38	19	52	8	28	-10	.1	.8	T	.1	11	5.7	69	96	60	0	6	5	0
CHARLESTON	42	22	59	12	32	-10	.5	.5	.3	.5	50	4.7	57	81	44	0	6	4	0
HUNTINGTON	41	25	57	15	33	-9	.4	.5	.2	.4	44	4.7	58	72	45	0	5	3	0
PARKERSBURG	38	21	54	9	30	-10	.3	.6	.1	.3	33	3.0	35	98	60	0	6	3	0
WI GREEN BAY	25	8	34	-3	17	-8	.1	.3	.1	.1	25	2.2	81	84	46	0	7	2	0
LA CROSSE	26	6	33	-3	16	-11	.4	0	.3	.4	100	1.4	58	85	43	0	7	2	0
MADISON	28	6	32	-3	16	-12	.1	.3	.1	.1	25	1.7	63	93	48	0	7	4	0
MILWAUKEE	28	14	34	5	21	-8	.2	.3	.1	.2	40	2.3	61	79	43	0	7	6	0
WY WAUSAU	24	2	33	-10	13	-10	.3	.1	.2	.3	75	2.2	96	77	42	0	7	2	0
CASPER	36	16	43	8	26	-4	.2	0	.1	.2	100	2.0	143	91	54	0	7	3	0
CHEYENNE	35	16	44	8	25	-5	.1	.2	T	.1	33	1.5	100	85	48	0	7	2	0
LANDER	30	12	35	5	21	-9	.2	0	.2	.2	100	2.5	192	87	59	0	7	2	0
SHERIDAN	38	16	48	11	27	-3	.5	.3	.2	.5	250	1.6	89	87	53	0	7	3	0
PR SAN JUAN	87	72	89	69	79	2	.2	.3	.2	.2	40	5.4	92	82	51	0	0	1	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

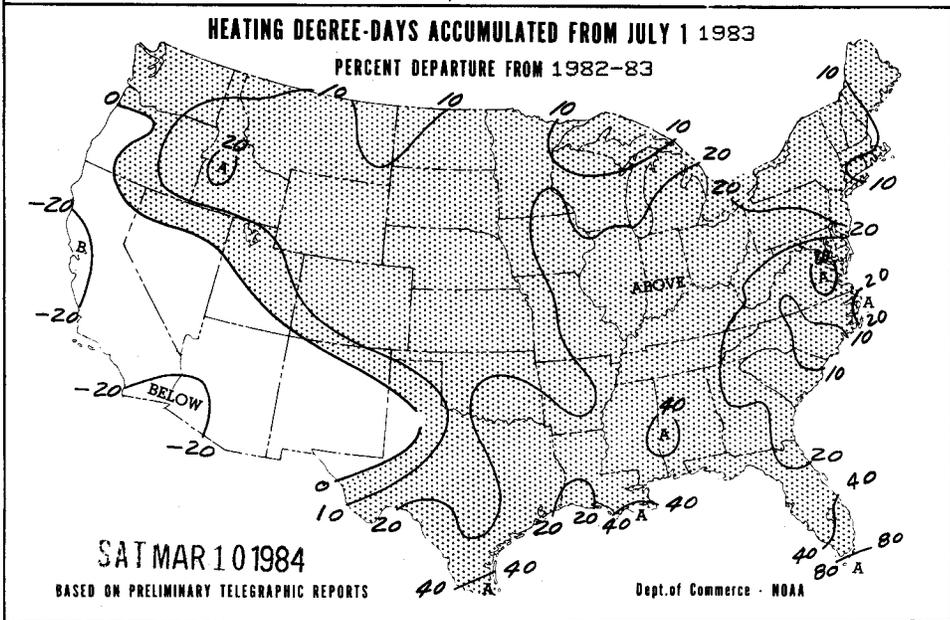
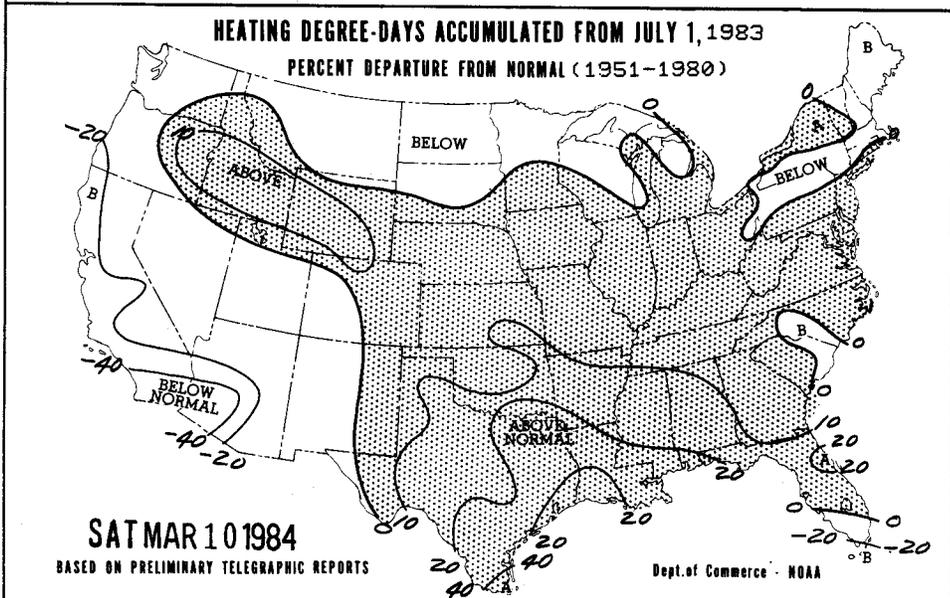
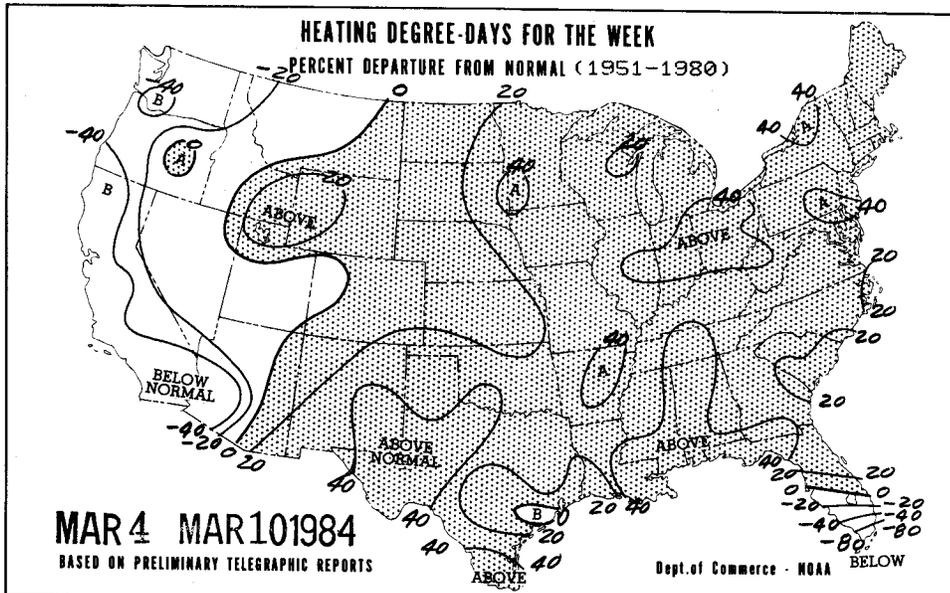
HEATING DEGREE DAY DATA WEEKLY SUMMARY  
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA  
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 3-10-1984  
ACCUMULATIONS ARE FROM JULY 1  
\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK WEEK, WEEK WEEK, CUM TOTAL, CUM DEV, CUM DEV, CUM DEV, CUM DEV, STATE CITY, CALL WEEK, WEEK WEEK, WEEK WEEK, CUM TOTAL, CUM DEV, CUM DEV, CUM DEV, CUM DEV. Lists cities and their corresponding weather data points.

FAX CHART 136

OCT 73



## National Agricultural Summary

March 5 to 11

**HIGHLIGHTS:** Topdressing of small grains and land preparation was limited because of snow across the Corn Belt. Heavy rains from the Delta States through the Southeast caused all field activities to lag behind schedule. Farmers in this region had less than 2 days suitable for fieldwork. Dry weather persisted in the Southwest, allowing rapid land preparation and pre-irrigation of cotton fields. Soil moisture supplies were rated short in the Southwest and portions of the southern Plains, short to adequate in Montana and Wyoming, and adequate to surplus elsewhere in the Nation.

Winter wheat received beneficial precipitation from eastern portions of the Great Plains through the Corn Belt. Stands were rated fair to good in the major producing regions. However, cold temperatures limited wheat growth in most southern areas. Sorghum planting increased in Texas. Corn planting became more widespread in Texas, but was delayed by wet fields from Louisiana to Georgia. Cotton planting increased in Arizona and Texas. Tobacco plantbed preparation and seeding gained momentum but transplanting was delayed by wet conditions in the extreme Southeast. Peach blooming became more widespread in Georgia and South Carolina. Colder temperatures caused beneficial thinning of excess fruit in these areas. Vegetable growth was slowed by cool temperatures across the South. Pastures continued in poor to fair condition. Livestock were in fair to good condition. Producers continued supplemental feeding because of snow and muddy conditions.

**SMALL GRAINS:** Winter wheat continued in fair to good condition in the major producing areas. Beneficial precipitation fell from eastern portions of the Great Plains through the Corn Belt. However, cold temperatures limited wheat growth across the South. Wheat fields were greening from Kansas to southern Indiana and jointing from the southern Plains into the Southeast.

Kansas winter wheat had only light wind damage and minor disease infestations. The crop was in mostly good condition with adequate soil moisture, but some western areas had thin stands. Dry, cool weather limited wheat growth in Oklahoma. Wheatlands were in fair to good condition with no appreciable insect activity. Producers continued spraying weed infestations. Wheat producers on the Texas Plains topdressed stands. Irrigated wheat made excellent growth on the High Plains, but dryland wheat provided little or no grazing. Wheat made good growth with no insect problems in central and east Texas, and in the Coastal Bend area. Stands were mostly fair to good, but moisture is needed Statewide for development. Montana's winter wheat remained dormant and was rated good with only light wind damage. Snow halted topdressing of wheat across the Corn Belt.

**OTHER CROPS:** Corn planting was slowed by wet fields from Louisiana to Georgia, but planting was widespread in Texas where 24% of the crop was planted. Early planted fields were emerging in central and south-central Texas. Sorghum planting in Texas reached 12%, lagging the average of 15%. Growers prepared fields for planting on the Texas Plains. Tobacco producers increased plantbed preparation and seeded the crop across the Southeast. Wet conditions delayed transplanting in Florida and Georgia. Cotton planting was limited to Yuma County, Arizona, and the Rio Grande Valley of Texas. Cool soil temperatures limited planting

in Texas. Seedbed preparation and pre-irrigation for cotton planting is well-advanced from California to Texas.

**FRUITS AND NUTS:** Colder weather returned to the Southeast, but was not severe or prolonged enough to cause significant damage to blooming peaches. Producers reported beneficial thinning of excess fruit in most areas. Pruning and spraying of northern deciduous fruit orchards was delayed by snow in many areas.

Citrus groves were in good condition with adequate moisture in Florida. The bloom cycle continued with all sizes of bloom buds. Early and midseason orange picking was ending, but the harvest of Valencia oranges continued. Grapefruit harvesting was active on the east coast. Texas citrus producers monitored regrowth of trees. Light pruning continued. Arizona growers harvested seasonal volumes of lemons, grapefruit, tangerines, and Valencia oranges. Citrus groves were rated good. Good weather in California aided fieldwork and pollination. Table grapes were 3 to 5 weeks ahead of normal in the Coachella Valley. Thompson seedless grapes were budding. Apricot, early cherry, peach, plum, and prune orchards bloomed. Almond orchards were in or past the petal-fall stage, while early walnuts were budding. Growers picked grapefruit, lemons, and tangelos. Navel orange harvesting was over half finished. Producers reported large sizes and some quality problems. Small volumes of Valencia oranges were packed.

**VEGETABLES:** Cooler temperatures slowed vegetable development in Florida. Total shipments increased 25% from the previous week. Tomato movement increased 20% and continued as the volume leader. Radish and squash shipments continued steady, while sweet corn volumes declined. Strawberry picking approached peak levels. Watermelons bloomed and set fruit in southwestern areas. Texas producers harvested cabbage and carrots in fair volumes in the Rio Grande Valley, while onion harvesting is expected within two weeks. Spring vegetables made good growth elsewhere in the State.

Heavy volumes of spring lettuce were cut in Arizona's Yuma and Parker-Poston areas, while volumes increased from the Salt River Valley. Growers in all areas harvested increasing volumes of a wide variety of vegetables. Warm, dry weather in California promoted land preparation and planting of vegetables. Tomato planting continued heavy in both the San Joaquin and Sacramento Valleys. Strawberry volumes from along the southern coast and Santa Maria area are substantially above last year. Lettuce harvesting neared completion in the Imperial Valley and reached peak levels in the Palo Verde Valley. Asparagus cutting continued in the Desert, and increased in the Delta, Salinas Valley, and San Joaquin Valley. Quality was good and demand was strong. Harvesting of broccoli, cauliflower, and celery continued along the central and southern coast.

**PASTURES AND LIVESTOCK:** Pastures were rated poor to fair across the South as cold temperatures slowed grass growth. Producers continued supplemental feeding of livestock because of snow and wet conditions. Calving and lambing continued with less than ideal weather conditions in many areas. Feed supplies were mostly adequate, but hay supplies continued tight in many areas.

## 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 Statistical Offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures averaged 5 to 10° below normal. Rainfall less than 1.00 in. north to over 3.00 in. south.

Fieldwork 2.3 days. Activities: Care of livestock and poultry, pruning and spraying fruit trees, planting of corn and some vegetables, soil testing and applying nitrogen to wheat. Pasture and stored feed, mostly short. Fieldwork behind schedule. Plowing 16%. Conditions: Pastures, wheat and livestock mostly fair.

**ARIZONA:** Dry weather, low humidities continued, mostly sunny south, partly cloudy north. Few areas light snow Grand Canyon, Mogollon Rim, White Mountains. Moisture amounts ranged from traces to locally 0.10 in. Cool first half, mild remainder of week. Average temperatures 5° below normal Winslow to 4° above Phoenix.

Most cotton fields Yuma area furrowed, pre-irrigated, about 20% of acreage planted. Seedbed preparation, pre-irrigation well advanced other areas, planting expected to start soon. Wheat, barley good condition, weed, insect controls used as needed. Alfalfa good condition, some hay harvested Yuma. Alfalfa weevils aphids problem most areas, control measures effective. Safflower planting continued Yuma, some stands established. Spring lettuce packing active, volumes heavy Yuma, Parker-Poston, increased volumes Salt River Valley. Harvest expected to start Harquahala Valley by 15th. Yuma growers harvested moderately heavy volumes cauliflower. Broccoli, cabbage, asparagus packing tapered off. Some Romaine, leaf lettuce harvested. Picking green onions, greens heavy Salt River Valley, carrots increasing. Growers harvested beets, broccoli, cabbage, cauliflower, escarole, endive, rapini, parsley, radishes, spinach, turnips. Potato planting winding down Salt River Valley. Seedbed preparation, planting of melons continued Yuma, planting started Parker-Poston. Lemon, grapefruit, tangerine, Valencia harvests continued, seasonal volumes picked. Groves good condition.

**ARKANSAS:** Temperatures below normal. Rainfall light, mostly beginning of week. Temperatures averaged 6 to 13° below normal. Low 14°, high 68°. Least rainfall 0.22 in., most 2.57 in.

Little activity due to excess moisture. Most wheat has been fertilized once. Livestock conditions good, but pastures in poor condition.

**CALIFORNIA:** The State experienced much warmer than normal temperatures. The Sacramento and San Joaquin Valleys averaged 6° above normal. Precipitation was limited to the northwest part of the State with a weak Pacific cold front on 9th. The highest was 88° at Thermal with 16° the low at Alturas and Tulalake.

Irrigated small grains good progress. Some chopping for green feed, silage. Weed controls active, tapering off. Dryland grain stressed, moisture short. Some desert fields chopped for dairy feed to prevent total loss. Land preparation, spring planting active, ahead of normal most areas. Most cotton land ready to seed after pink bollworm quarantine of March 15 southern and March 20 central. Still seeding some alfalfa. Weed, insect controls active. Desert harvest continues. Yield, quality good, demand below last year. Rodent controls active many crops. Sugarbeets mostly good stands San Joaquin Valley. Some seeding continues. Reseeding Fresno due horned lark bird damage. Good weather aided fieldwork and pollination. Apricots

blossoming, new planting noted. Haas avocados harvested, fair movement. Early cherries blossomed. Thompson seedless grapes pushing buds, growers applied herbicides and fertilizer. Table grapes 3 to 5 weeks ahead of normal, Coachella Valley. Wine grape pruning nearly completed. Blossoms observed in peach, plum, and prune orchards. Wet peach orchards farrowed to speed drying. Citrus growers irrigated and fertilized. Harvest of grapefruit, lemons, and tangelos continues. Naval orange harvest past the halfway point, quality problems noted, large sizes. Valencias packed in small numbers. Almonds in or past petal fall, growers fertilizing and irrigating. Early walnuts budding, growers treated trees for scale. Dry weather, warm temperatures promoted field preparation, planting. Artichoke volume light. Asparagus cutting continued, Desert, increased Delta, Salinas Valley, San Joaquin Valley, good quality and strong demand. Planting, harvest broccoli active Central Coast. Light harvest continued San Joaquin Valley, South Coast. Harvest cauliflower active Central, South Coast. Celery harvest active South Coast. Transplanting increasing Central Coast. Cucumber planting full swing San Joaquin Valley. Lettuce harvest nearing completion Imperial Valley, strong demand. Palo Verde Valley harvest continues at peak level. Spring lettuce harvest begin 2 weeks, San Joaquin Valley. Shipments fall potatoes slowed during week Tulalake-Butte Valley, light digging winter potatoes Kern, Riverside. Strawberry volume South Coast, Santa Maria area substantially above last year. Planting market tomatoes remained active. Planting processing tomatoes remained heavy both San Joaquin and Sacramento Valleys. Foothill, rangeland grasses showing moisture stress, especially central, southern districts. Calving, lambing continue most areas. Stock water supplies adequate.

**COLORADO:** Dry weather prevailed through 8th, followed by three days of rain and snow showers. Precipitation amounts were generally less than 0.20 in. at most locations. Up to 6 in. of new snow fell in some mountain locations. Temperatures were 2 to 7° below normal for the period in the mountain areas and 5 to 10° below normal in the San Luis Valley.

**FLORIDA:** A slow moving cold front dumped rain amounts averaging 4.00 to 5.00 in. Panhandle; 2.00 in. northeast, 5th, 6th. The front weakened as it pushed through Peninsula, 7th where rains averaged less than 0.10 in. Dry, cooler Statewide, 8th to 10th, then warmer, 11th. Light freeze, frost Panhandle, north mornings of 8th, 10th with patchy frost central Peninsula, 8th. No frost south during week. Temperatures averaged 5° below normal north to less than 2° below, south.

Soil moisture mostly adequate central, south; surplus in upper north and parts of Panhandle. Land preparation continues but delayed by cold, wet weather many areas. Corn planting delayed in west. Tobacco plants fair condition, transplanting about ready to begin. Small grains good progress. Young sugarcane slow growth. Pasture condition remains mostly good, south; varies from poor to fair elsewhere. Moisture condition adequate but pastures in need of more favorable weather. Cattle condition mostly fair, upper Peninsula, Panhandle; fair to good, lower Peninsula. Citrus trees good condition. New growth most areas, moisture generally adequate. Bloom cycle continues with all sizes of bloom buds. Early and mid orange harvest

ending; picking of damaged Valencias continues. East coast grapefruit harvest active. Warm days, cool nights prevailed vegetable growing areas. Growth most vegetables slowed by cool temperatures. Only light, scattered showers occurred. Overall shipments increased 25% from previous week. Crops registering greatest increase were snap beans, cabbage, carrots, cauliflower, celery, Chinese cabbage, cucumbers, eggplant, escarole, lettuce, parsley, peppers, potatoes, strawberries, tomatoes. Radishes, squash shipments were steady. Sweet corn volume declined. Strawberry picking expected to reach peak level next week. Tomato movement increased 20% and continued as volume leader. Watermelons blooming, setting fruit southwest area.

GEORGIA: Rainfall Statewide on 5th and mainly southeast on 6th. Locally heavy rain south on 5th and early 6th. Totals near 0.50 in. extreme north to near 3.00 in. coast except 5.00 to 6.00 in. in many southern counties. Temperatures well above normal 3rd to 5th, but otherwise cooler than normal. Overall 1 to 3° below normal. It was partly cloudy and cool over the weekend of the 10th and 11th with no significant precipitation.

Soil moisture surplus. Small grains mostly fair to good. Topdressing of small grains and land preparation very limited due to wet fields. Corn planting only showed slight progress south. Washing from heavy rains damaged early planted corn southern areas. Some peach bloom damage reported central areas, extent of damage not determined. Tobacco plants fair condition, transplanting not yet started. Pasture fair. Cattle and hogs mostly fair to good.

HAWAII: A stationary high pressure area provided the State with abundant sunshine, dry conditions, and very light winds.

Irrigated vegetable crops made good progress under these conditions. Crops dependent on natural rainfall were beginning to suffer from stress and experiencing lower yields. Renewed volcanic activity on Hawaii Island caused an inconvenience to farmers nearby. Fallout from the eruption settled on fruit and flower crops in the area. As a result, bruising damage will show up on papayas and anthuriums for the next few weeks. Chinese cabbage supplies heavy, with yield and quality reported good. Head cabbage and head lettuce output will also continue heavy. Papaya production, although decreasing, will be relatively high. Banana supplies will decrease in the coming week.

IDAHO: Weak weather disturbances moved through the State at the beginning of the period and again late in the period. Precipitation was recorded at most locations with amounts ranging from traces to 0.20 in. at Orofino. Overall precipitation was well below normal across the State. Temperatures ranged from 14° below normal in the southeast to 6° above normal at Coeur D'Alene. Lewiston, Moscow, and Grangeville edged above the 60° mark for the first time this year. Temperatures in the southeast are still below normal due to the snow cover which varies up to 16 in. in some areas.

With warming temperatures, farmers thoughts were turning toward their fieldwork. Equipment was being readied as a few areas reported some aerial application of fertilizer. Calving and lambing were reported in many areas. Feed supplies were generally adequate.

ILLINOIS: Temperatures 7 to 17° below normal. Precipitation none to 0.40 in.

Wheat condition mostly good. Livestock condition mostly fair.

INDIANA: A snowfall generally 3 to 5 in. across central areas with some areas 8 in. Precipitation

totals from 0.07 to 0.62 in. Lightest amounts in north and south ends of State. Temperatures averaged 12 to 15° below normal. Highs from mid 20's north to upper 30's south. Lows from low teens north to low 20's south with below zero over much of central part. Lowest was a -10°.

Statewide snow cover limited outside activity mostly to snow removal. Some hauling and spreading of manure, limited topdressing of wheat, pruning orchards and vineyards, attending sales, some sowing of clover and alfalfa on wheat, doing shopwork, buying chemicals and seed, caring for livestock and usual chores.

IOWA: A very cold week with temperatures averaging 13° below seasonal normals in the southeast and 19° sub-normal in the northwest. Precipitation, in the form of snow, was generally below normal except in the extreme west. Snowfall amounts up to 10 in. were reported on the 3rd and 4th in the extreme northwest corner of the State.

KANSAS: Precipitation averaged 0.50 to 0.75 in. central and east to less than 0.10 in. west. Temperatures averaged 32 to 35° in northern two-thirds and 36 to 37° south. These were 2 to 4° below normal west and south central and 5 to 6° below normal east and north central.

About 40% oats and barley seeded. Some topdressing of wheat, only light wind damage and minor disease infestation. No insect damage. Thin stands in areas where wheat was just emerging. Adequate soil moisture. Calving and lambing in full swing.

KENTUCKY: Light rain fell early and again middle of week. Rain amounts averaged 0.50 to 0.75 in. High temperatures averaged mainly in low to mid 40's and average lows were in mid to upper 20's.

Fall seeded grains greening. Some winter damage from extreme cold at Christmas. Field activity will begin soon if weather cooperates. Calving well advanced on many farms. February weather was favorable but early March cold and damp.

LOUISIANA: Rainfall amounts ranged from zero to 1.57 in. Average temperatures were 2 to 5° below normal. High 78°, low 28°.

Soil moisture surplus. Days suitable for fieldwork 2.0. Spring plowing 14% complete 1984, 15% 1983, 24% average. Corn planted 6% 1984, 5% 1983, and 7% average. Winter wheat condition fair. Topdressing of wheat continues. Pasture and vegetables condition poor to fair. Sugarcane and livestock condition fair. Activities: Transplanting vegetables, land preparation, repairing equipment.

MARYLAND AND DELAWARE: Maryland: The week was 4 to 9° below normal. High temperatures were mostly in the high 40's to mid 50's. Minimum temperatures were minus 2° in extreme west to mostly the 20's elsewhere. Precipitation totals averaged near 1.00 in. with amounts ranging from 0.31 in. at Hagerstown to high of 1.85 in. at Patuxent. Weekend weather was cool with no precipitation.

Farmers were able to apply fertilizer on a limited basis due to wet fields. No other significant fieldwork has begun.

Delaware: Temperatures were 3 to 9° below normal. Central areas were 3 to 4° below normal while the Wilmington area was 9° below and Georgetown was 6° below normal. Precipitation averaged 1.07 in. Central areas received just over an inch while northern and southern areas received just under an inch. Weekend temperatures were around 30 for the high on 10th with lows in the low teens. The 11th was warmer with highs in the north in the mid 30's and near 50 in the south. Low temperatures were in the high teens to mid 20's on 11th.

Some fertilization taking place now as farmers were able to get into the fields. No other fieldwork has begun as temperatures have been cool and soils too wet to work.

**MICHIGAN:** Another week of winter weather. Temperatures averaged 13° below normal. Light to moderate amounts of snow fell in all areas.

**MINNESOTA:** Temperatures average 12 to 19° below normal. High 38°, low -24°. Precipitation averaged 0.06 to 0.57 in. above normal for west central, central, southwest, and south central; and near normal to 0.26 in. below normal elsewhere. Greatest weekly total: 1.34 in.

Snowfall averaged 1 to 3 in. Snow depth at weeks end averaged 5 in. for the northwest and southeast, and 8 to 12 in. elsewhere.

**MISSISSIPPI:** Average temperatures were 2 to 9° below normal. Extremes 18 and 76°. Heavy rain fell on the 4th and 5th causing some flash flooding. Greatest weekly rainfall 4.71 in. A cold front on the 9th brought 1 to 2 in. of snow to most of the northern third of the State.

Soil moisture adequate in the southern third of the State and surplus in all other areas. Fieldwork 1.2 days suitable, 1.5 1983, 2.9 average. Plowing 16% completed, 13% 1983, 26% average. Corn planting 2% completed, 4% 1983. Wheat fair; 9% jointing, 11% 1983. Livestock condition fair; pasture condition fair to poor. Hay supplies short; feed grain supply short to adequate.

**MISSOURI:** Snow covered ground and a series of cold fronts kept temperatures down as they averaged 6 to 11° below normal. Precipitation was widespread averaging around 1.00 in. over the southern half and 0.50 in. over the northern half as snow continued to plague the State.

**MONTANA:** Below normal temperatures in east. Above normal temperatures in west and central. Temperatures averaged 6° below normal in parts of northeast to 7° above normal in west. Number of storms crossed State leaving light to moderate amounts of precipitation. Some places in central and south central received 0.50 in. or more.

Winter wheat in good condition. Wind damage light. Crop still dormant in most areas. Soil moisture short in north central and eastern portions of State, mostly adequate elsewhere. Hay supplies becoming short but feed requirements lessened due to warm weather. Calving 35% complete. Lambing 30% complete. Stock water supplies adequate.

**NEBRASKA:** Cold week. Temperatures ranged from 3° below normal west to 14° below normal northeast. Precipitation in form of snow ranged from 0.02 in. in Panhandle to 0.50 in. east.

**NEVADA:** High pressure ridge dominated entire period. A few weak upper level disturbances broke through midweek. Most significant periods of precipitation end of week, confined mostly to northern areas. Morning lows on cool side. High pressure system kept afternoon temperatures warmer than normal. Average temperatures ranged from near normal to 5° above.

Good progress seedbed preparation extreme south and central portions. Snow and mud still problem north.

**NEW ENGLAND:** Temperatures averaged 8 to 10° below normal. The average temperatures ranged from 7 to 10° across the far north to the mid 20's over southern New England. Precipitation was light across the northwest, and heavy over the southeast.

Precipitation fell mainly as snow early in the week, with as much as 10 to 14 in. of snow over portions of Cape Cod. The melted precipitation was between 0.20 and 0.40 in. over Maine, New Hampshire, and Northern Vermont; 0.50 to 1.00 in. over the rest of New England, with 1.00 to 1.50 in. over Cape Cod.

**NEW JERSEY:** Temperatures averaged 11° below normal. Extremes were -6° on the 10th and 55° on the 7th. Weekly rainfall averaged 1.12 in. north, 1.22 in. central and 1.12 in. south. The heaviest 24-hour total was 0.88 in. on the 5th to 6th. Estimated soil moisture, in percent of field capacity, average 100% north, 100% central and 100% south. Four inch soil temperatures averaged 33° north, 33° central and 36° south. Greatest 24-hour snowfall total was 12 in. Snow on ground morning of 12th ranged from none to 5 in.

Farmers planning spring crop planting, tending to livestock, ordering supplies, attending meetings, plowing snow, and other winter chores.

**NEW MEXICO:** Average temperatures below normal. Minimum temperature: -5°, central highlands. Maximum temperature: 77°, southern desert. Precipitation amounts from winter storm generally less than 0.25 in.

Soil moisture very short to short. Irrigated wheat, barley fair to good, grazing heavy some locations. Dryland fields fair, needing moisture. All wheat slow recovering from dormant stage. Alfalfa fields showing limited early growth. East side potato planting continues. Mesilla Valley onion transplanting, chile planting continue. Lettuce rated good. Cattle, sheep fair to good. Supplemental feeding, lambing continues. Irrigating permanent pasture. Ranges poor to fair.

**NEW YORK:** Considerably colder than normal. Light rain and snow on 5th and 6th. Storm brought 4 to 8 in. of snow to lower Hudson Valley and Long Island on 8th. Dry in northeast. Precipitation below normal in west and northwest, about normal in southeast.

**NORTH CAROLINA:** Temperatures 5 to 7° below normal. Precipitation: general, about 1.00 in. Statewide.

Soil moisture 29% adequate, 71% surplus. Days suitable for fieldwork: 1.7. Condition: Wheat 2% poor, 34% fair, 64% good; oats 3% poor, 52% fair, 45% good; barley 2% poor, 40% fair, 58% good; rye, 2% poor, 40% fair, 58% good. Pasture 16% poor, 52% fair, 32% good and tobacco beds 3% poor, 40% fair, and 57% good. Farm feed supplies: hay and roughage 32% short, 68% adequate; feed grains 24% short, 76% adequate. Plantings: Irish potatoes 7%, 1983 6%, average 14%. Major farm activities: Topdressing small grains and pastures, preparing and planting tobacco plant beds, general farm maintenance, land preparation for spring planting, tending livestock and pruning orchards.

**NORTH DAKOTA:** Cold, stormy week. Temperatures from 11° below normal east to 3° below normal southwest. Extremes ranged from 37° west to -24° in the north central. Precipitation was 0.33 in. from the northwest through central North Dakota to 0.10 in. in the northeast, most from Statewide winter storm on the 7th. Snowfall from this storm ranged from 3 to 6 in. across central portion of the State to a trace in the northeast. Very strong winds caused blizzard conditions on the 7th over the west and central and in the east on March 10.

Blizzard conditions twice for many areas of the State as livestock producers were well into calving and lambing season. Losses could be substantial for some operations. Bitter cold

following the weather systems could seriously affect winter wheat where snow cover was not adequate.

**OHIO:** Weekly temperatures 8 to 17° below normal. Extremes ranged from upper 50's, to -14°. Precipitation from 0.10 to 0.50 in. Snow cover 2 to 4 in. south and 6 to 11 in. central and north.

Winter wheat fair to good condition. February precipitation normal.

**OKLAHOMA:** Average temperatures below normal across State, ranging from 4° below normal Panhandle, northeast, and east central to 7° below normal north central. Precipitation averaged from zero Panhandle and west central to 1.14 in. southeast.

Dry, cool weather limited wheat growth. Spraying continued for weed infestations. No appreciable insect activity reported. Producers pulling cattle off wheat pasture. Wheat good to fair, pastures and ranges fair, and cattle in good to fair condition. Wheat jointing: 5%, 10% 1983, 5% average.

**OREGON:** Spring like weather slipped into State with temperatures 4 to 5° above normal in all areas. Less than 0.20 in. of precipitation scattered throughout the State at the beginning and end of week. Midweek was dry in all areas.

Soil moisture adequate Statewide. Winter wheat in mostly good condition, although some freeze damage has occurred. In the higher elevations of the east, most grain fields still under snow. In the Columbia Basin, spring seeding and range weed control have started. In the west, spring grains being seeded and fertilizer being applied to winter wheat and barley. Pruning of fruit trees about finished. Late dormant spraying of pears wrapping up. Peaches, cherries and apricots nearing blossoming with dates expected to be a few days ahead of normal. Livestock generally in good condition.

**PENNSYLVANIA:** Week was cold with near normal precipitation. Temperatures were quite cold with overnight lows ranging from 9° below zero in the central mountains to the single digits elsewhere. The State average temperatures was 12° below normal. Precipitation occurred several days during the week, mostly in the form of snow, with freezing rain and rain also observed. Snowfall covered the entire State the latter part of the week with amounts ranging from 3 to 8 in.

**PUERTO RICO:** Island average rainfall 0.15 in. or 0.39 in. below normal. Highest weekly total 1.66 in. Highest 24-hour total 0.72 in. Temperature averaged about 78 to 75° on coasts and 71 to 69° Interior Divisions. Mean station temperature ranged from 79.6 to 62.4°. Extremes 91 and 51°.

**SOUTH CAROLINA:** Warm, then colder than usual with lows in 20's except coastal 30's. General rains at first mostly 1.00 to 2.00 in.

Peaches blooming becomes widespread with cold injury minimal, amounting to beneficial thinning excess fruit. Producer expectations great. Land preparation or spring planting of corn, vegetables continues.

**SOUTH DAKOTA:** Average temperatures 1 to 16° below normal. Extremes: 53 and -18°. Eastern third of State received from 0.50 to 1.32 in. of precipitation. Western half of State continues to have below normal precipitation. Very little precipitation fell in the west and south central. Snow depth of a foot or more across the extreme east central and southeast.

**TENNESSEE:** Cold front moving through the State 5th and 8th produced heavy rains in the west with less

amounts centrally and in the east. Light rain was reported Statewide with 8th's front. Temperatures were below normal Statewide and averaged 5° below normal in the west, 2° below normal centrally and 6 to 8° below normal in the east. Precipitation levels associated with 5th's front were in excess of 1.00 in. through middle areas with amounts over 2.00 in. in the west. Lesser amounts of rain were reported later in the week.

General farm chores main activities.

**TEXAS:** Weak cold front moved across State midweek, stalled South Central Texas. Moist, southerly flow overran stationary front, resulting widespread cloudiness, light rain later week. Upper level system moved over State on 11th, producing additional heavier rains northern, eastern portions. Temperatures 1 to 5° below normal Northwest Texas, near normal readings elsewhere. Precipitation above normal West Texas, North Central, Northeast Texas, near normal elsewhere.

**Crops:** Return fair, mild conditions stepped up field operations, crop planting progress Statewide. Pre-watering grain crops, topdressing wheat fields main activities Plains. Some planting corn, grain sorghum underway North Central Texas, where soil temperatures permit. Wheat continues well remainder Central Texas. Planting picked up Rio Grande Valley. Fruit trees continuing bloom East Texas, wet conditions holding up spring plantings. South Texas ranges, pastures continue need moisture further growth. Sorghum good progress Central Bend, Rio Grande Valley. Good stands Valley, cooler temperatures slowed growth South Texas. Sorghum beds watered Plains. Early planted corn good progress Coastal Bend. Good stands Rio Grande Valley, now temperatures warmed. Corn planting continue north central portion State when soil temperatures warm up slightly. Early planted corn Central, South Central Texas started come up. Pre-plant watering Plains. Cotton planting Rio Grande Valley small scale. Most soil temperatures this area still too cool. Small grains fair, good growth Statewide. Irrigated wheat High Plains excellent growth, providing adequate grazing. Dryland wheat provide little, no grazing. Cattle moved off dryland pastures, into feedlots or market. Wheat making good growth Central Texas. Topdressing nitrogen. No major insect problems. Cattle moved off some Central Texas fields allow regrowth. Oats looking better after topdressed. Wheat making good growth East Texas to Coastal Bend. Moisture needed Statewide at critical stage of development. Statewide wheat condition 63% of normal, compared with 80% a year ago. Current reported conditions are: 3% excellent; 20% good; 65% fair; and 12% poor.

Cotton planted 1%, 1% 1983, 3% average. Sorghum planted all purposes 12%, 8% 1983, 15% average. Corn planted for all purposes 24%, 10% 1983, 11% average.

**Commercial vegetables:** Rio Grande Valley, harvest cabbage, carrots continues fair volume. Some cantaloup, honeydews beginning germinate, few watermelons. Onion harvest begin ten days to two weeks. Citrus producers continue monitor tree regrowth. Light pruning. San Antonio-Winter Garden, both fall, spring vegetables doing good. Trans-Pecos, onions doing fine. Fields ready tomato planting. High Plains, some onions, potatoes planted remainder follow week or two.

**Range and livestock:** Ranges continue green up most areas, pastures provide good grazing. Recent snows West Texas, light showers remainder State allowed winter grasses grow. West Texas hit hardest this winter, cattle movement off ranges, area heavy. Range conditions other areas improving warmer weather. Recent rains helped stock tank levels. Supplemental feeding occurring, slower pace. Cattle conditions good overall. Markets continue steady. No lice, tick problems showing up yet.

UTAH: Precipitation light for part of period for all divisions except Dixie and southeast with no precipitation. Temperatures average 5° below normal ranging from 16° below to 1° above.

With the disappearance of snow cover, early season grasses and plants beginning to green up on lower levels. Lambing and calving in progress. Wool shearing also in progress. Turkey poult placements continue. Some activity continues in potato pits and apple storage plants.

VIRGINIA: Unseasonably cold temperatures prevailed through week, averaging several degrees below normal. Some letup during midweek. Precipitation light to moderate, averaging about 0.50 in. western sections and 1.00 in. eastern sections, occurring mainly middle and last of week.

Cool, wet weather conditions kept days suitable for fieldwork down to 1.3 with topsoil moisture averaging 45% adequate and 55% surplus. Fieldwork very limited. Some overseeding of hay fields and pasture. Topdressing small grains, seeding spring grains and pruning fruit trees. Fall seeded grains, tobacco seed bed and pasture conditions rated good to excellent. Seed tobacco beds 36% complete. Livestock in good condition, calving and lambing active.

WASHINGTON: High pressure over western States extended into Canada and remained nearly stationary through week. Pacific fronts weakened by high pressure and deposited little precipitation while crossing State. Minimum temperatures at or below freezing almost all stations early in period, but weekly average temperatures much above seasonal means.

Western counties, many areas remain too wet for spring field preparation. Throughout State, pastures and ranges beginning to grow. Truck gardeners preparing raised beds for vegetable production. Planting spring grains, peas and potatoes in progress where soils dry enough. Growers preparing asparagus and hops fields. Weed control and fertilizing alfalfa nearly complete. Fall-seeded grains in average to above average

condition. In southeast, winter injury to Vinifera grapes apparent with bud damage ranging from slight to heavy. Late dormant sprays being applied on stone fruits. Calving and lambing continue. Livestock in good condition.

WEST VIRGINIA: Temperatures averaged nearly 10° below normal Statewide except for the north central area averaging 5° below normal. The high temperature in the State was 59° in Charleston and the low -8° at Green Bank. Precipitation averaged well below normal Statewide.

Soil moisture adequate to surplus. Days suitable for fieldwork average 1.8. Feed supplies adequate to short. Main activities: Pruning fruit trees, calving and lambing.

WISCONSIN: Temperatures and precipitation averaged well below normal as northwesterly winds in the upper atmosphere prevailed. A storm was in the process of ending on 5th with 1 to 3 in. of additional snow. This was the warmest day of the week with highs generally in the 30's. The 6th through 11th, daily highs were mostly in the teens and 20's, well below normal for the period with 1 to 3 in. of snow in the south late 7th into 8th followed by a reinforcing surge of cold. Another shot of cold entered the State on 10th accompanied by a brief period of light snow. Some lake effect snows also occurred along both lakes Michigan and Superior shorelines, even so, melted precipitation equivalents for the week in State were mainly less than 0.20 in. The highest temperatures was 38° at both Oshkosh and Peshtigo on the 5th, the coldest a -34° at Lake Thompson early on the 7th.

WYOMING: Temperatures below normal except Big Horn Basin. Most significant precipitation Big Horn Basin and northeast Plains.

Winter wheat mostly good condition, additional moisture will be needed for good development. Livestock mostly good condition. Supplemental feeding continuing in areas with snow cover. Hay supplies short some areas. Calving, lambing, shearing underway.

## March Crop Production Highlights

CITRUS production forecast at 10.9 million tons, 19 percent below last season.

ORANGE production forecast at 178 million boxes, fractionally higher than last month, 21 percent less than 1982-83.

GRAPEFRUIT production, excluding California "Other Areas" crop, forecast at 47.8 million boxes, 4 percent less than last month, 17 percent below last season.

LEMON production, at 23.5 million boxes, down 4 percent from last month, 6 percent less than 1982-83 season.

WINTER POTATO production forecast at 2.86 million cwt, up 31 percent from last year, 26 percent above 1982.

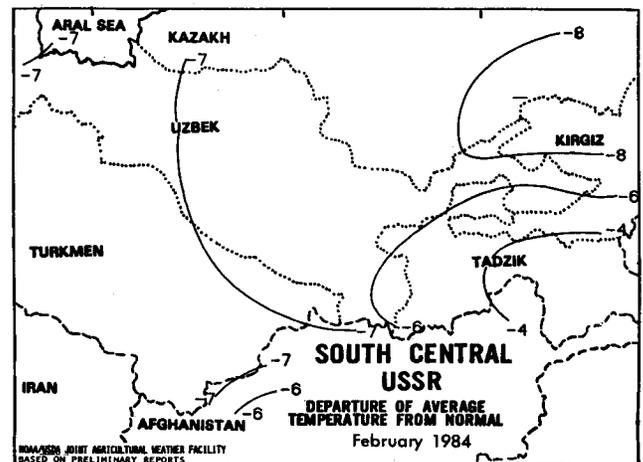
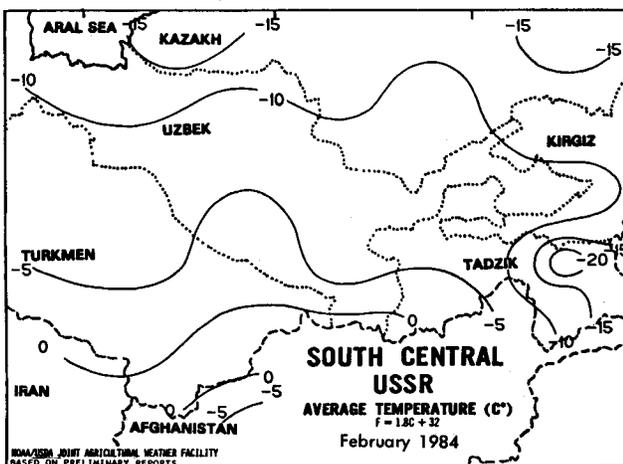
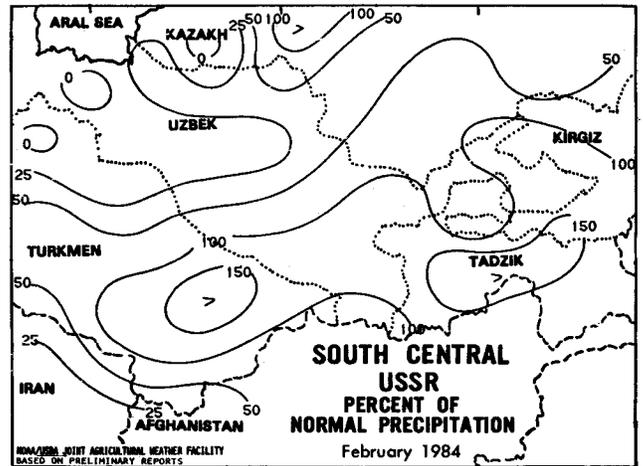
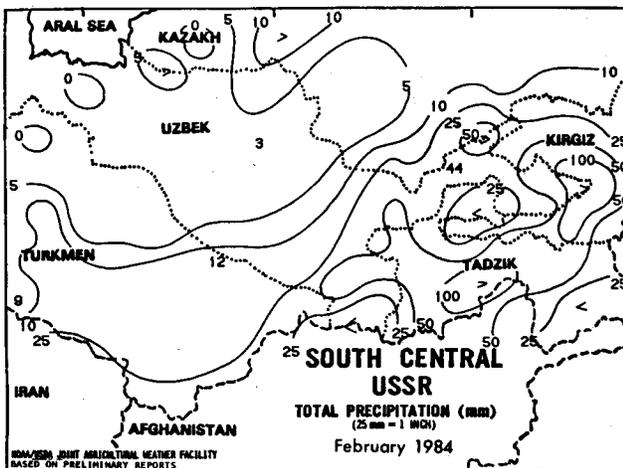
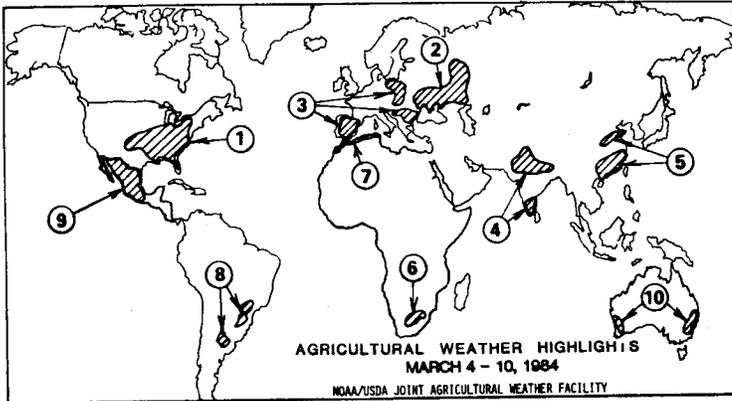
SPRING POTATO planted area estimated at 82.7 thousand acres, up 4 percent from last year, 5 percent above 1982.

# International Weather and Crop Summary

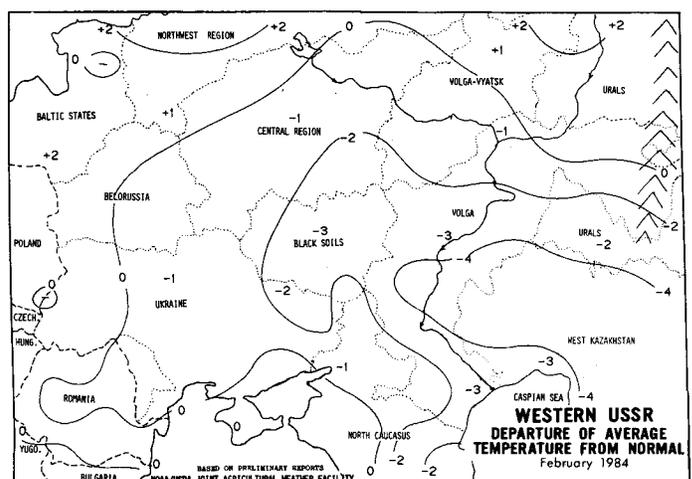
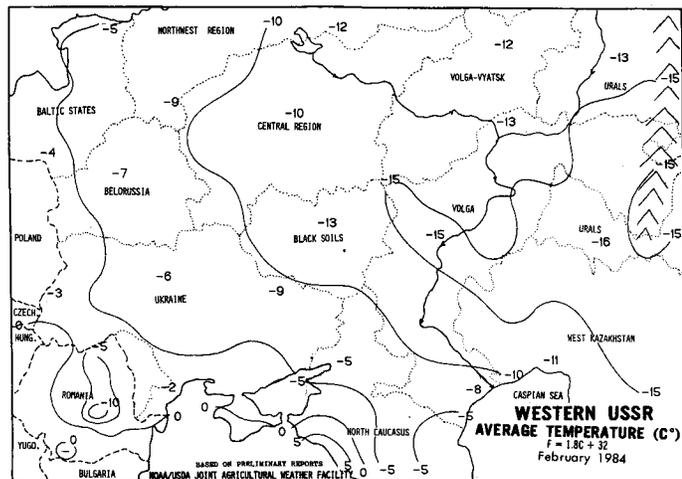
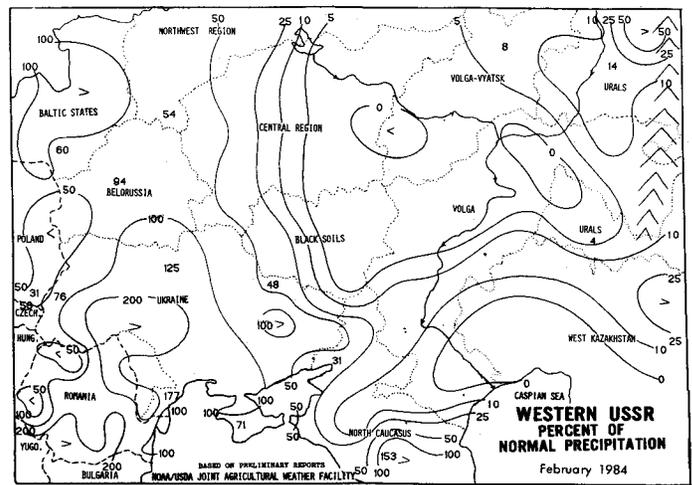
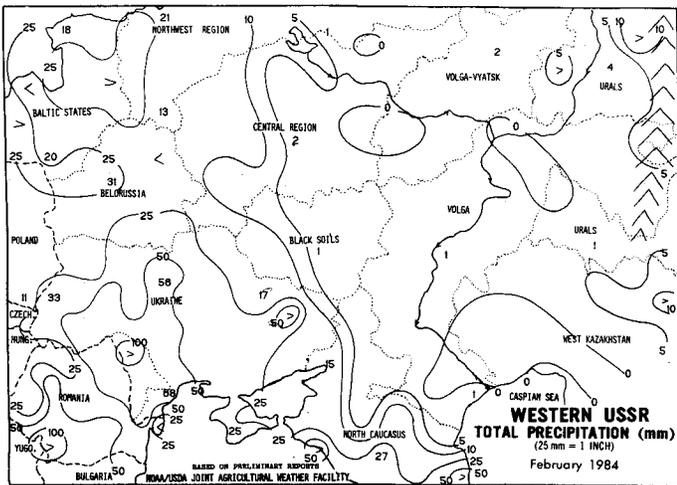
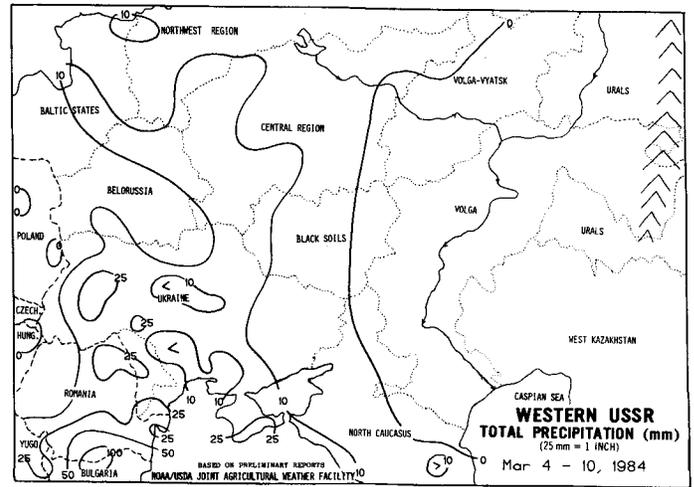
March 4 to 10

HIGHLIGHTS:

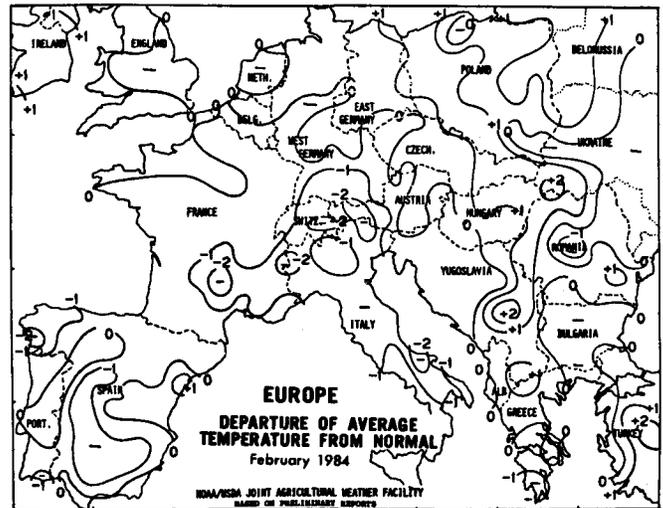
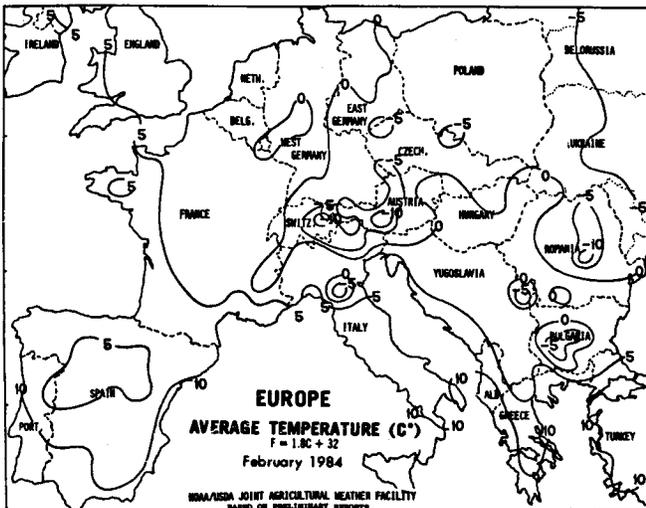
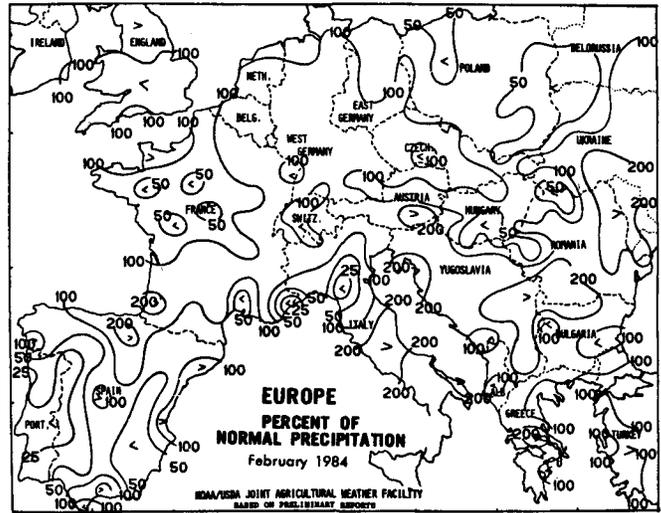
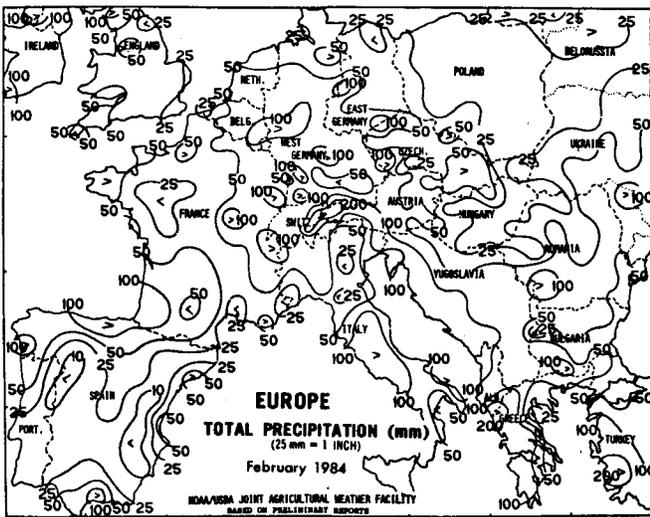
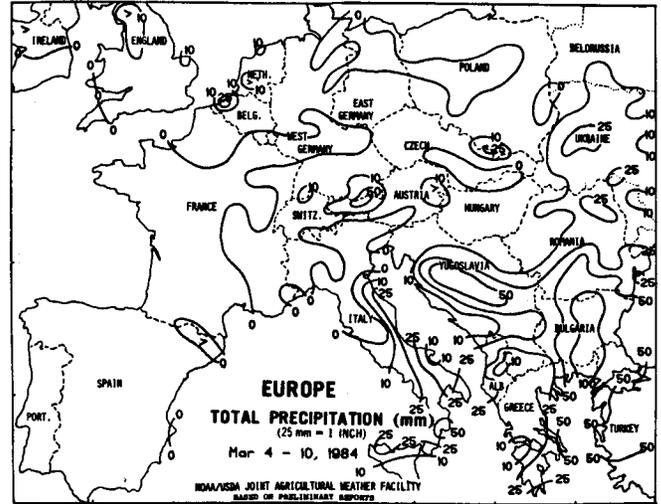
1. UNITED STATES ... Torrential rains from the Delta to the lower Southeast, and near blizzard conditions in the Corn Belt and Northeast halts fieldwork. Frigid air from the Rockies eastward stresses livestock, slows winter grain development, and thins fruit blooms.
2. WESTERN USSR ... Mild snow and rain continues to increase moisture supplies in the western grain areas. Showers would benefit the east where dry weather persists.
3. EUROPE ... Heavy rain and snow inundates Bulgaria and the surrounding Balkan countries, while mostly dry weather covers the remainder of Europe. Moisture is limited for vegetative growth of Spain's winter grains. Moisture reserves are low in Poland and Hungary, but winter crops in that area are still dormant.
4. SOUTH ASIA ... Dry weather continues in northern wheat areas but most wheat is in good condition. Wet weather in southern India is unseasonable but benefits summer rice.
5. EASTERN ASIA ... Light precipitation aids northern wheat. Seasonable rains in the south improve planting conditions for early rice. Additional showers would benefit all areas.
6. SOUTH AFRICA ... Rain continues in the Maize Triangle but is too late to help the crop. Additional precipitation would benefit wheat planting in April.
7. NORTHWESTERN AFRICA ... Showers fall in mountainous regions to the east of Morocco's dry winter grain area and along coastal crop areas of northeastern Algeria and northern Tunisia. Crops are in the vegetative growth stage.
8. SOUTH AMERICA ... Wet weather again returns to Argentina's summer crop areas, following a period of favorably dry weather for maturing and harvesting crops. Showers in Brazil's soybean area are too late for most of Parana's crop as the harvest season begins, but light rain in Rio Grande do Sul aids late crop development.
9. MEXICO ... Sunny weather over most areas favors fieldwork and growth of irrigated crops, but increasing dryness slows development of rainfed crops.
10. AUSTRALIA ... Dry weather aids late development of summer crops in the east, while showers from the remnants of Tropical Storm Chloe bring beneficial pre-season moisture to wheat areas in Western Australia. Tropical showers fall across the north and over sugarcane areas of east-coastal Queensland.

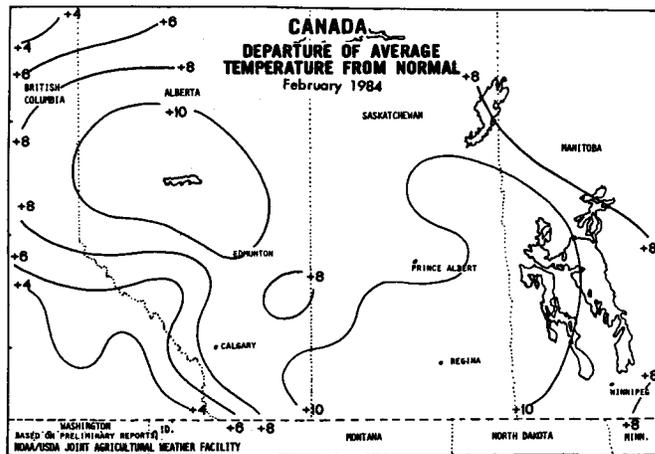
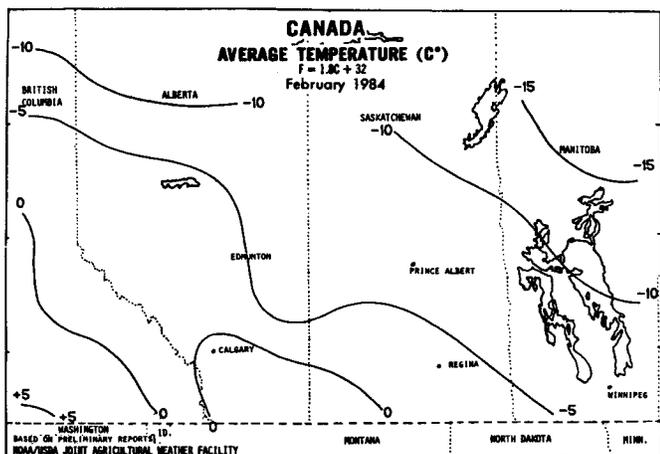
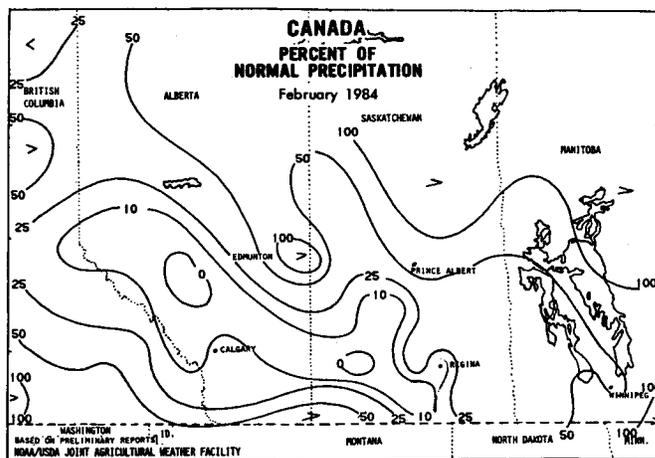
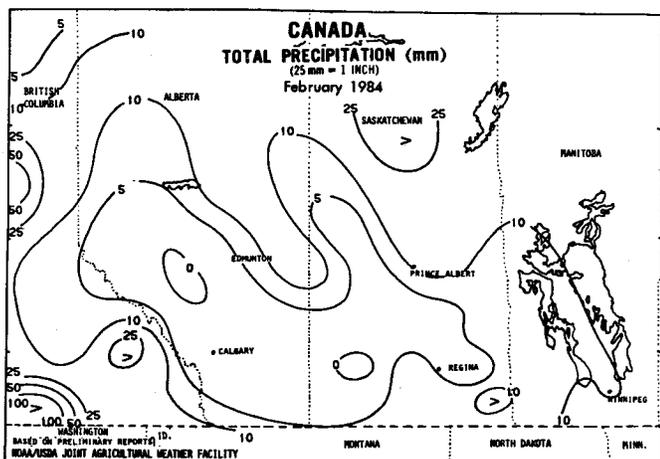
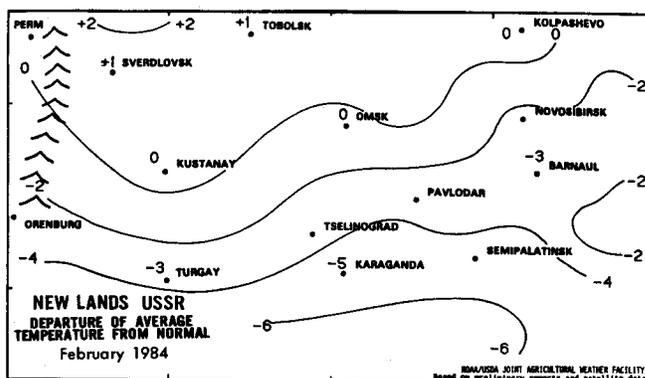
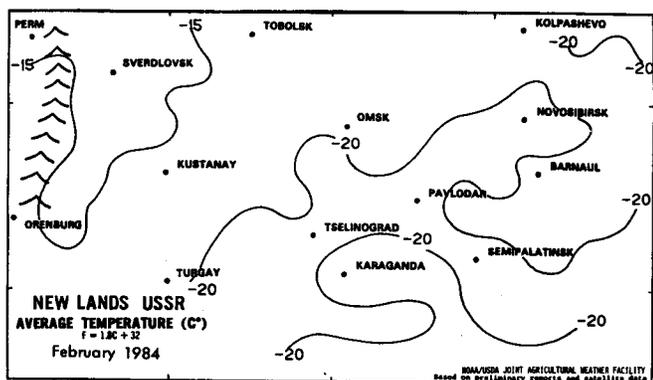
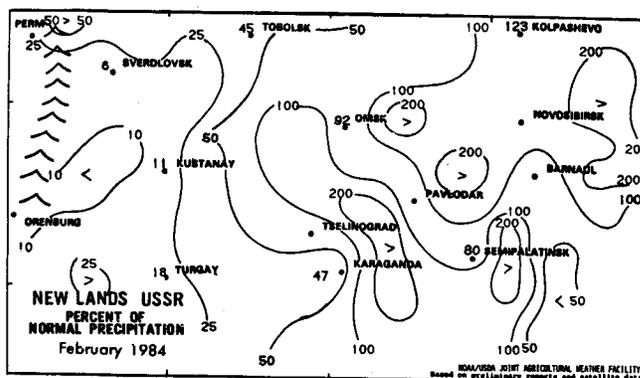
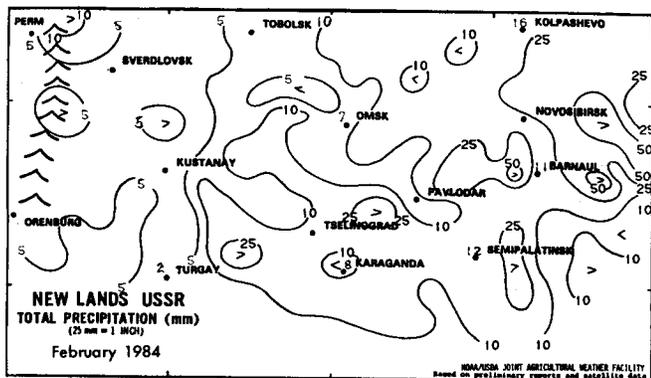


**WESTERN USSR...** Precipitation fell early this week in the southwest adding to generous moisture supplies for winter grains in the western two-thirds of the Ukraine. Light snow fell in the remainder of the west, while the North Caucasus and Volga Valley continued mostly dry. Temperatures were above normal this week but remained cool enough to keep winter grains dormant. A persistent ridge of high pressure, centered just to the west of the Ural Mountains, has dominated the weather in the east for several weeks. February precipitation was below normal in the North Caucasus, eastern Black Soils, and Volga Valley. Temperatures were also a little below normal in this region. Spring showers will be needed in the eastern winter grain areas when growth begins in late March and early April. Near-normal temperatures and above-normal precipitation during February aided winter grains over much of the Ukraine, except in the extreme east.

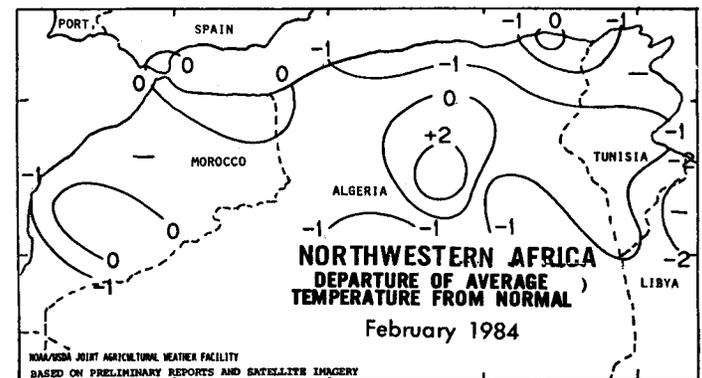
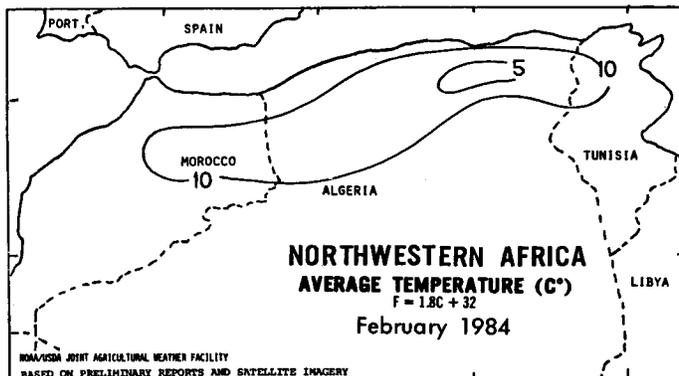
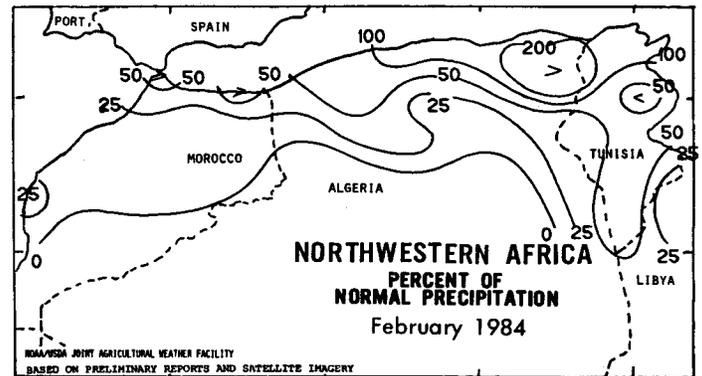
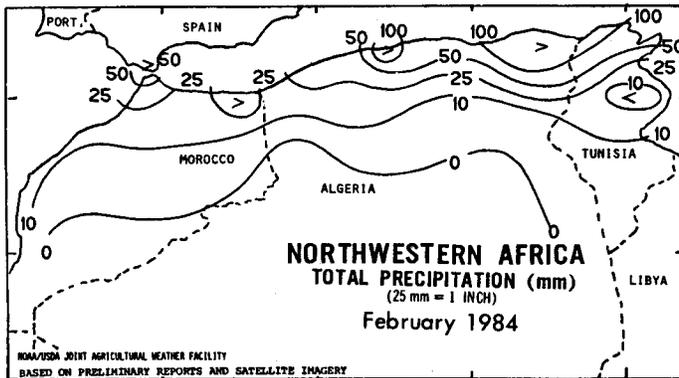
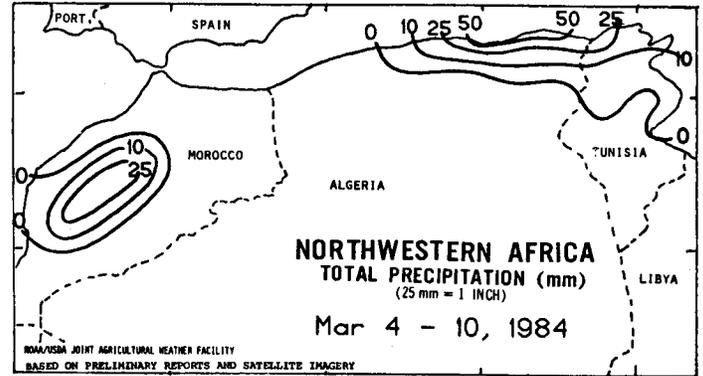


**EUROPE**...An intense storm system, which developed over the central Mediterranean region, brought heavy rain and snow to the Balkan countries early in the week. Flooding was reported in Bulgaria from the heavy downpour. Only scattered light showers occurred throughout the remainder of Europe. February rainfall was above normal in the southeast, slightly above normal from southern and eastern France through central Europe northward to the Benelux countries and West Germany, and below normal in Poland, Hungary, much of the Iberian Peninsula, and northwestern France. February's monthly temperatures did not deviate significantly from normal, but the trend was for slightly below-average temperatures in the south and west, and above-average temperatures in the north and east. Limited moisture is available for vegetative growth of Spain's winter grains. Moisture supplies are also low in Poland and Hungary, but winter grains are still dormant.

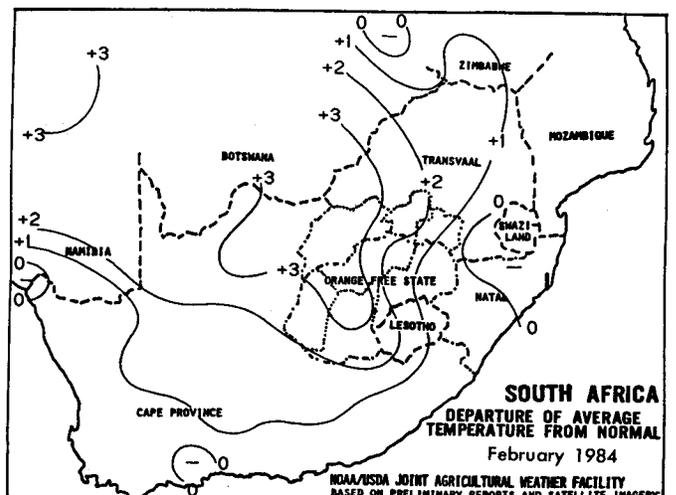
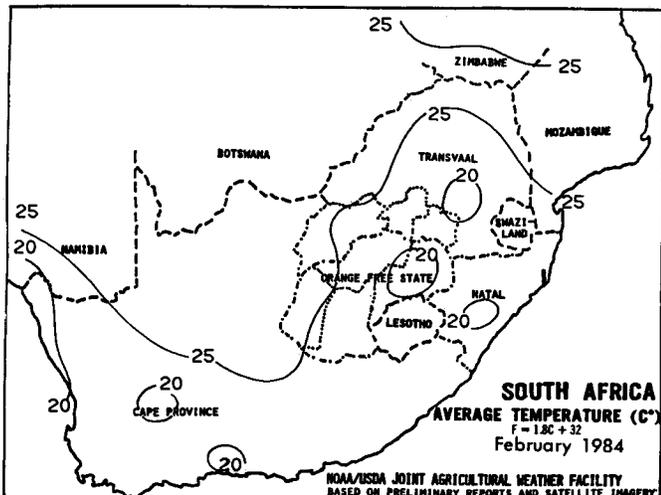
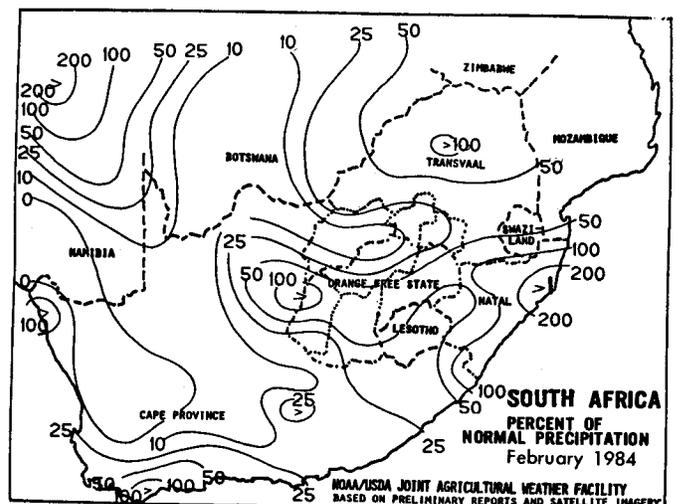
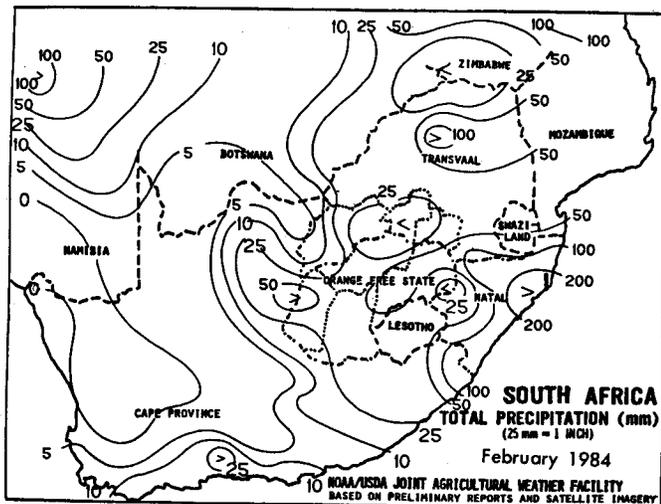
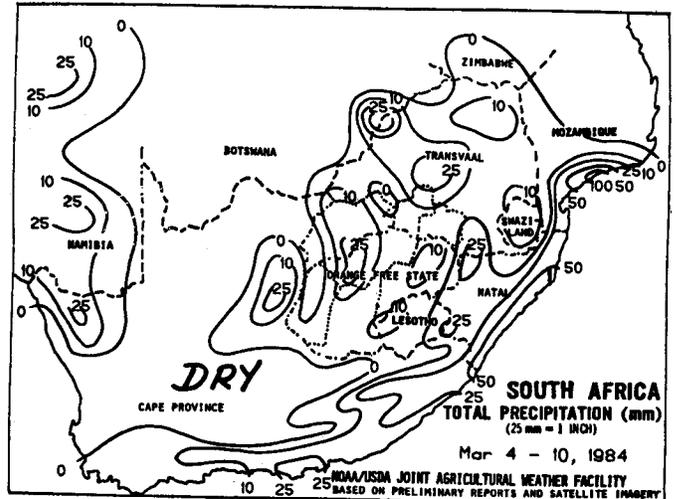




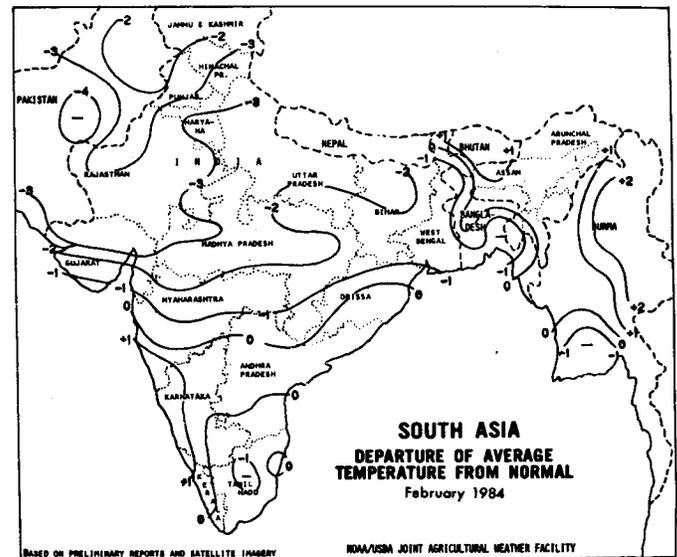
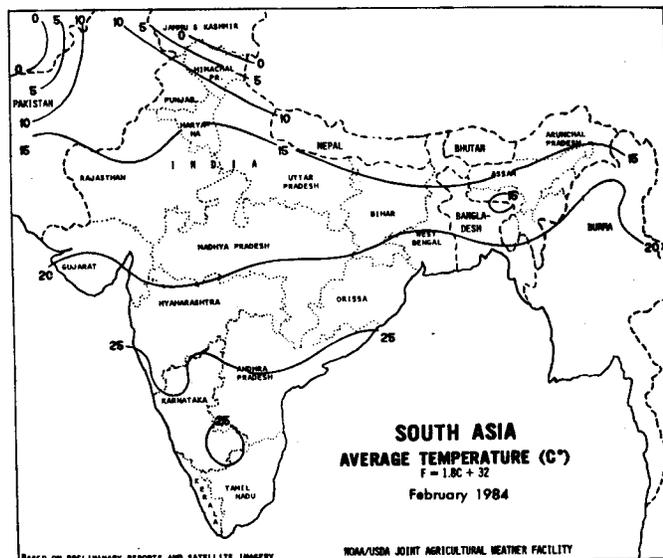
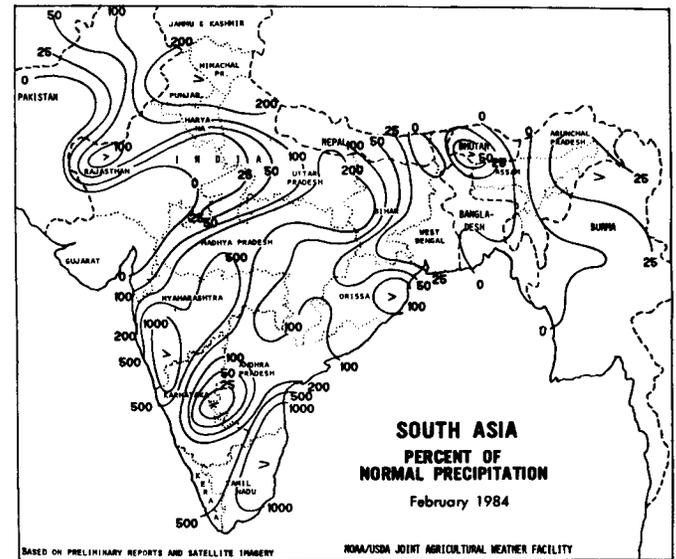
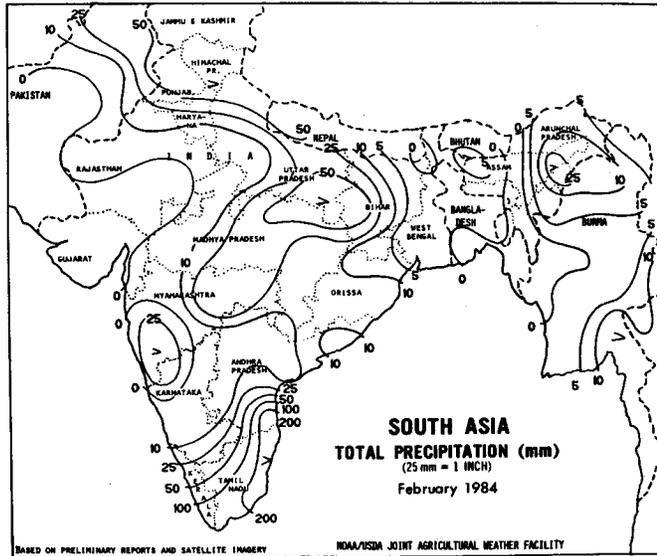
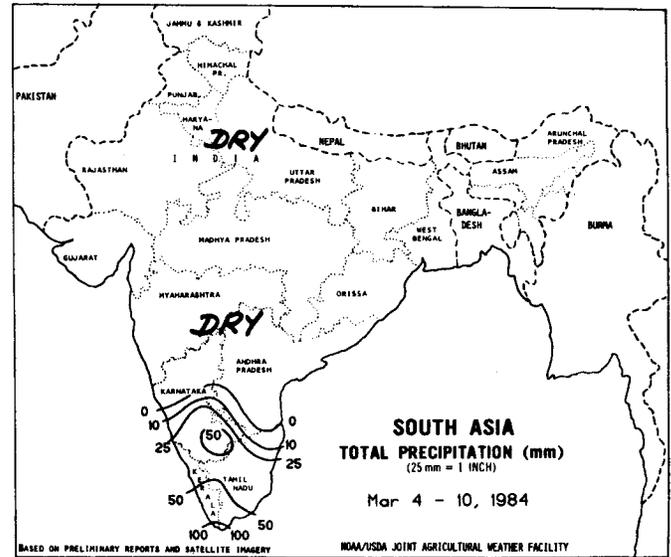
**NORTHWESTERN AFRICA...** Showers fell in the mountainous areas to the east of Morocco's major winter grain areas. February rainfall was much below average throughout Morocco, creating unfavorable moisture conditions for early vegetative growth. Winter grains are advancing toward the crucial reproductive phase and rain will be needed through April to compensate for the currently low soil moisture supplies. Elsewhere, a storm system lingered during the week in the central Mediterranean region, producing showers over coastal crop areas of northeastern Algeria and northern Tunisia. February rainfall was near to above average across the region, providing adequate moisture for vegetative growth of winter grains. Weekly temperatures throughout northwestern Africa were generally near normal which was similar to February's temperature pattern.



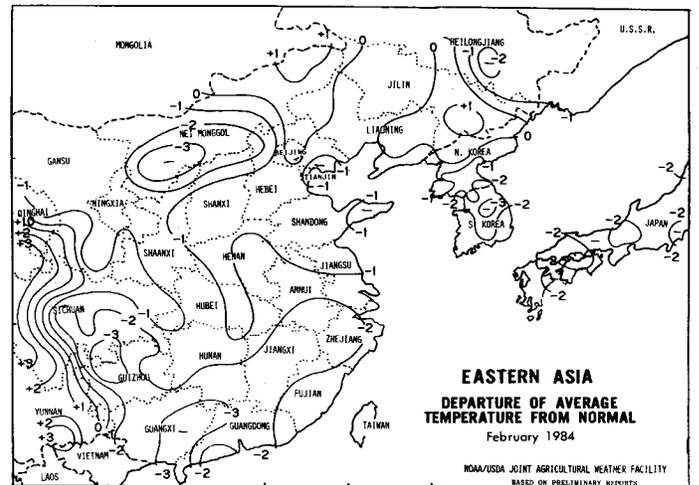
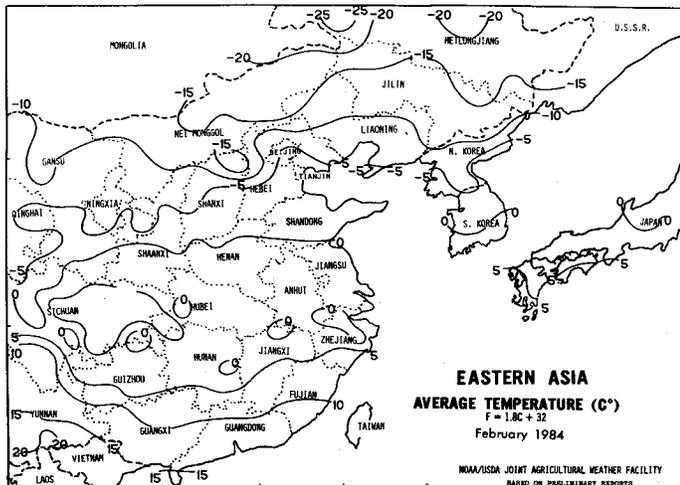
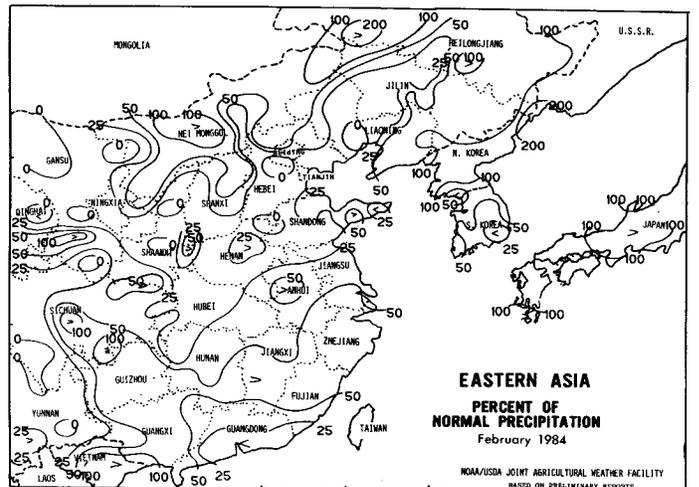
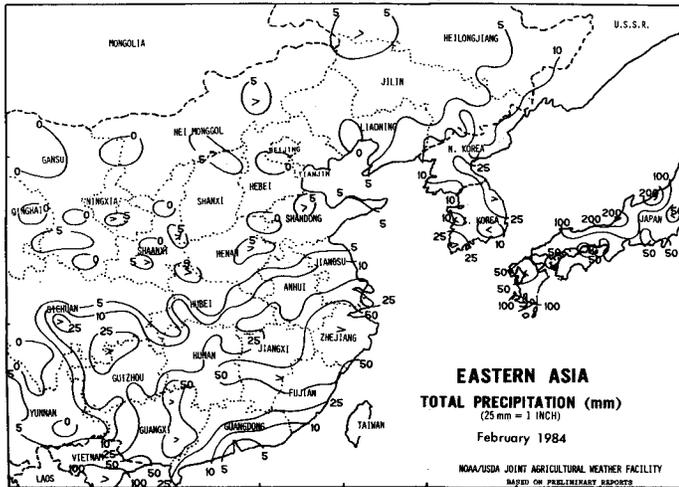
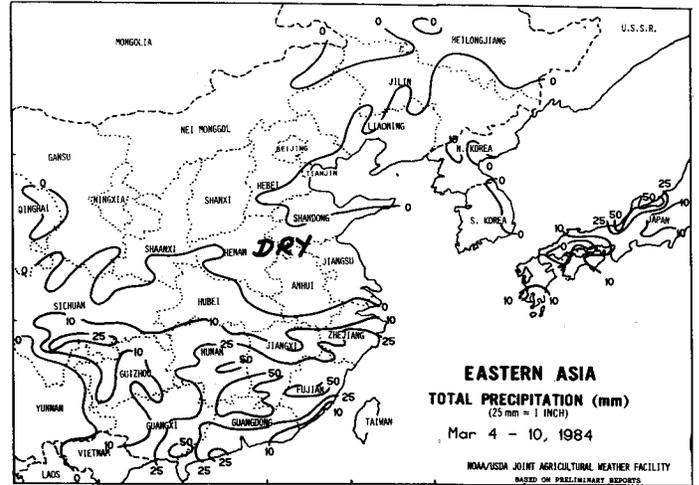
SOUTH AFRICA...Scattered showers fell across the region with mostly light to moderate amounts in the Maize Triangle. Rains finally arrived in the corn areas in late February and early March, following an extended hot, dry period. February precipitation was much below normal and temperatures averaged 2-3° C above normal across the major corn region, stressing the crop during the late reproductive and grain filling periods. Frontal passages have brought periods of cooler weather, and, while the recent moisture has likely arrived too late to improve the corn yield potential, it has benefited soil conditions for wheat planting which begins in April. The corn crop is in the maturing stage. The hot, dry weather during reproduction and grain filling has accelerated the growth cycle likely pushing the crop to maturity ahead of schedule.

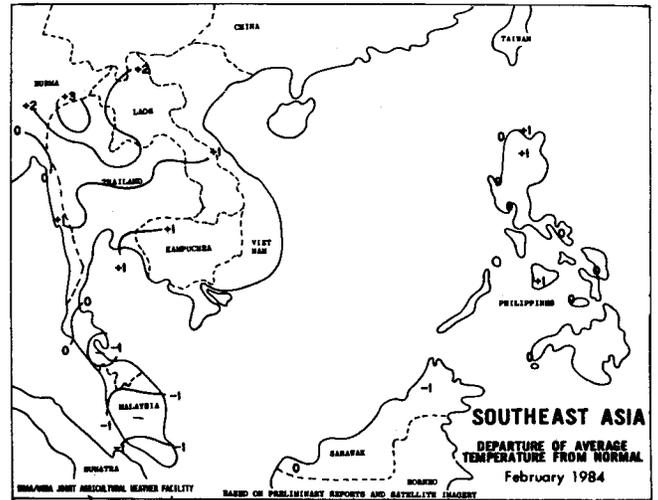
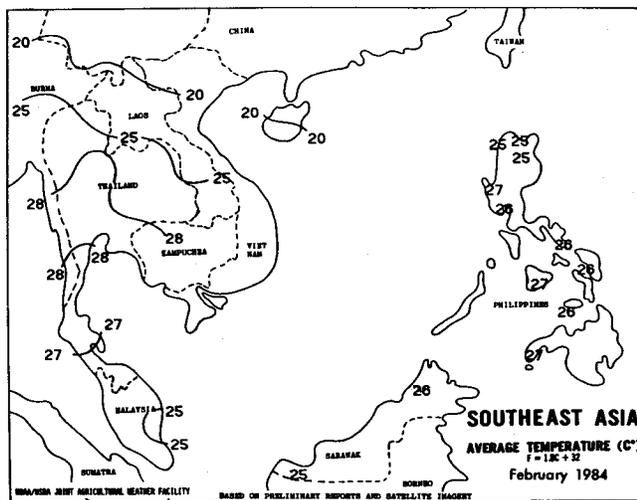
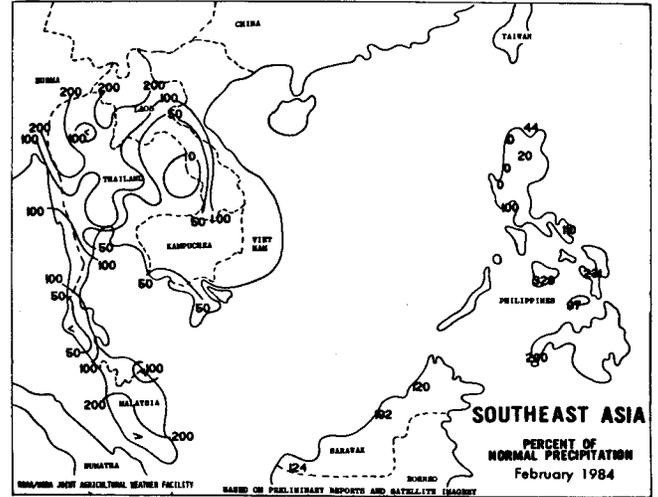
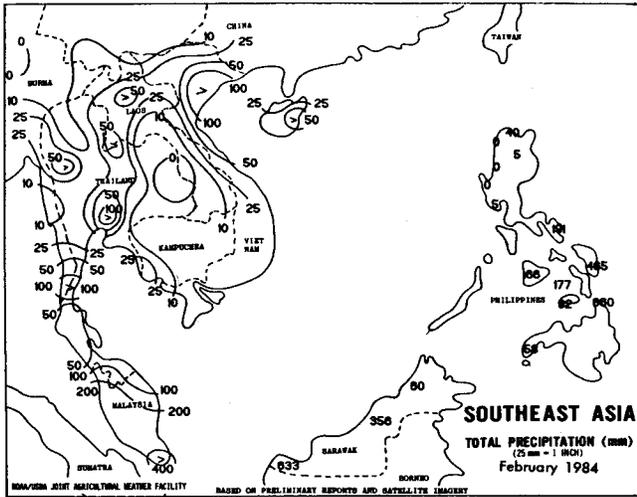


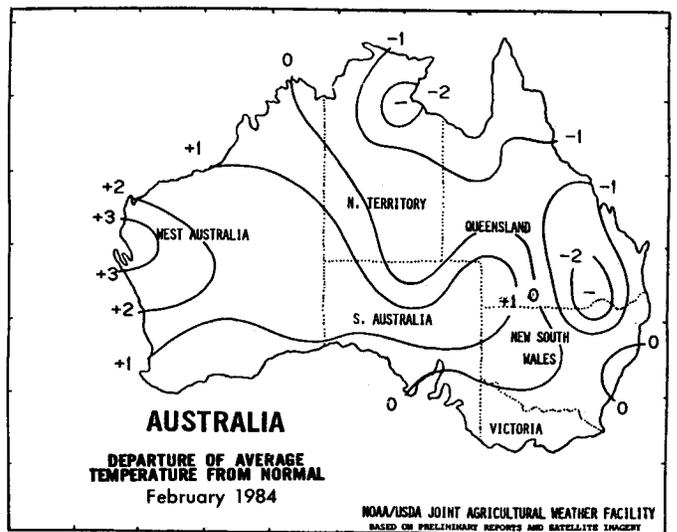
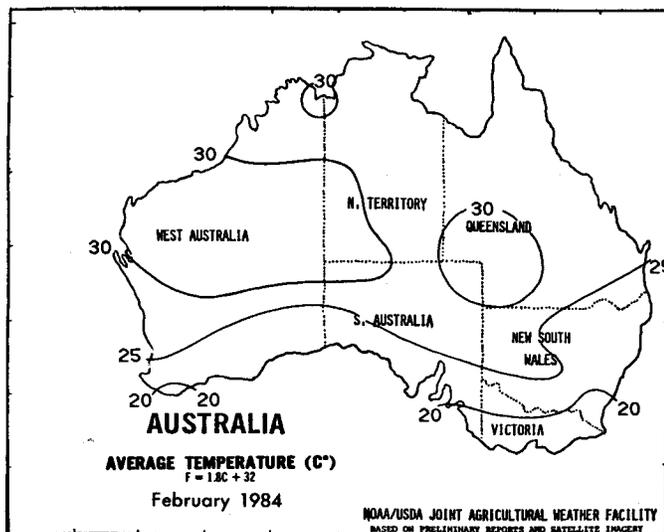
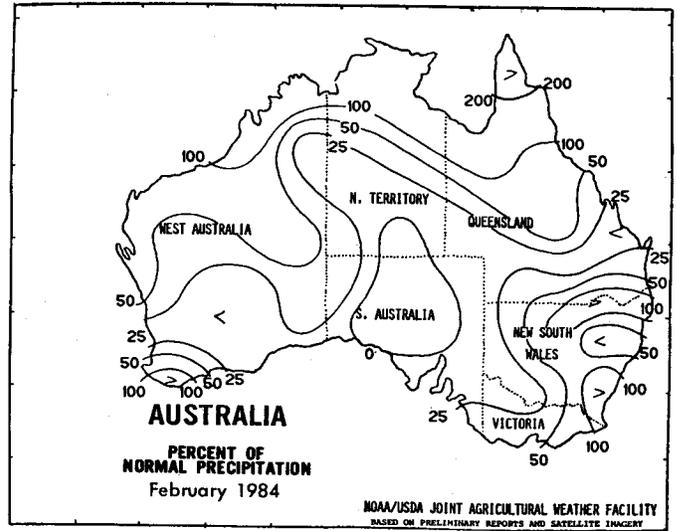
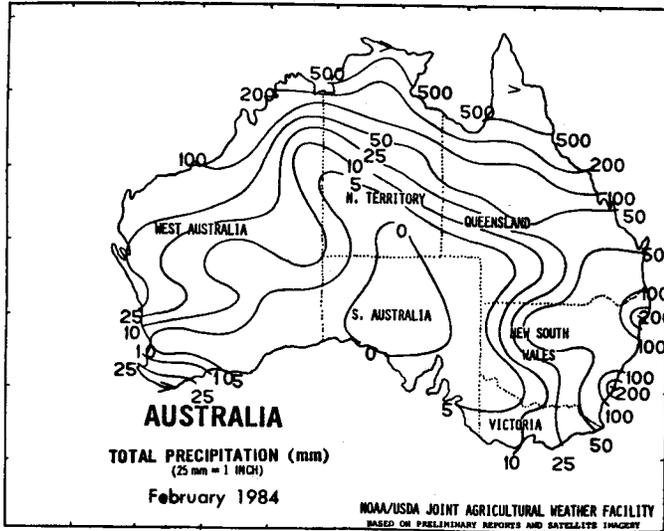
**SOUTH ASIA...** Dry conditions continued over northern and central India this week. Temperatures warmed slightly in the north, increasing to near-normal values. Moderate rains fell across most of the northern wheat belt in late February. The moisture was timely for wheat entering the heading stage. Earlier precipitation benefited wheat in the heading and grain filling stages in Madhya Pradesh. Relatively dry weather persisted over southern Haryana and western Uttar Pradesh, causing wheat to rely on irrigation reserves. Dry weather continued in the eastern summer rice region, but above-normal February rains fell along the coast, except in West Bengal. Unseasonable rains have persisted in southern peninsular India. Precipitation has been much above normal, benefiting summer rice, but increasing the flood potential.



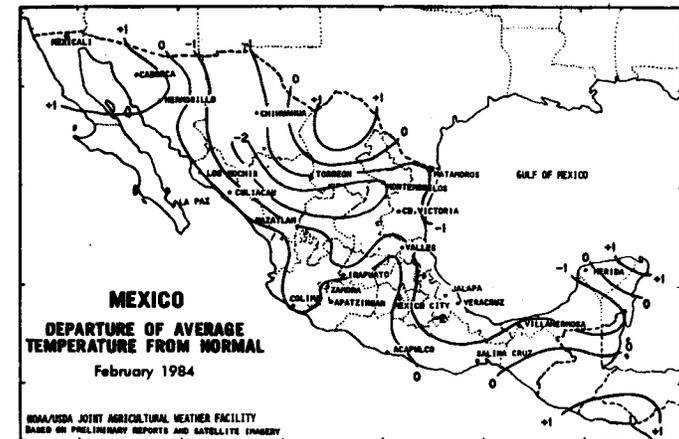
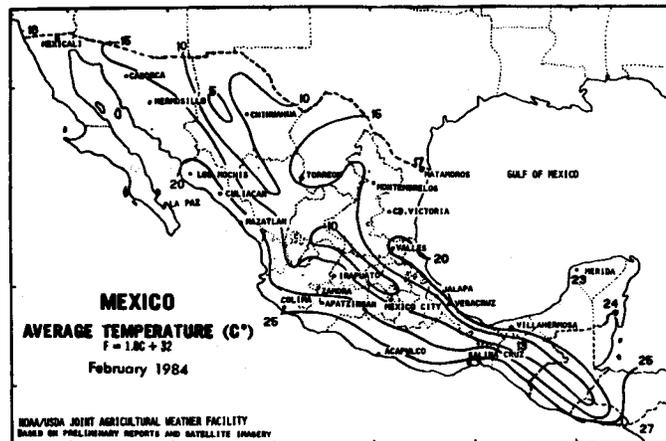
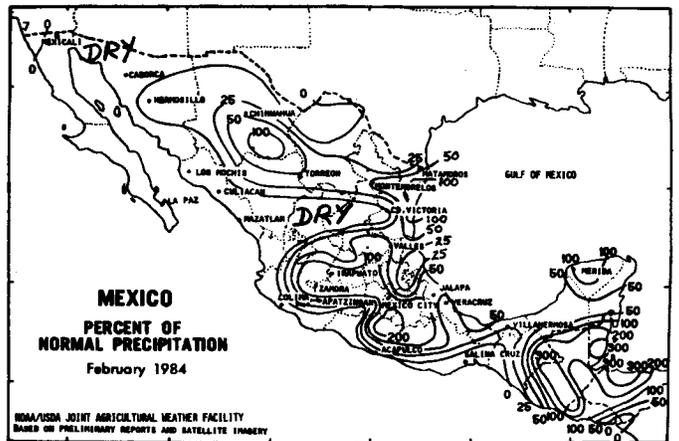
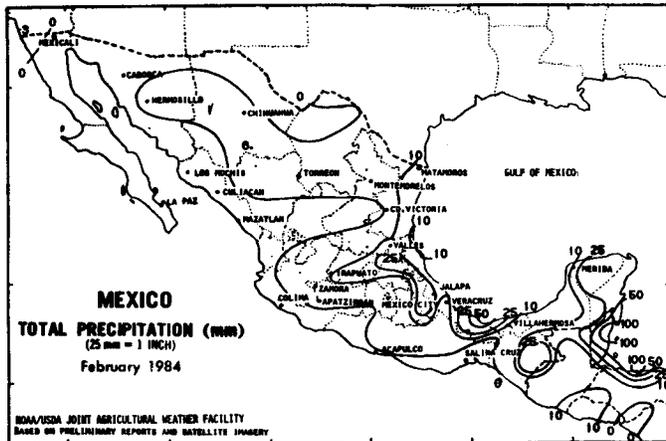
**EASTERN ASIA...** Precipitation increased in southern China this week. Moisture conditions for planting improved in rice areas; as much as 50 mm of rain fell in southern Hunan and northern Guangdong. Lighter showers fell in the southern major rice area of Guangdong and also along the coast into Fujian. February precipitation was below normal in the south following adequate rains in January. Light precipitation fell in parts of Hebei and Shandong, but most of the winter wheat region continued seasonally dry. Temperatures have been below normal in nearly all of eastern China, but wheat has broken dormancy in the Yangtze Valley. Wheat remains dormant in Hebei, Shandong, and northern Henan, and spring showers will benefit all wheat areas when crop growth becomes more active later this month.



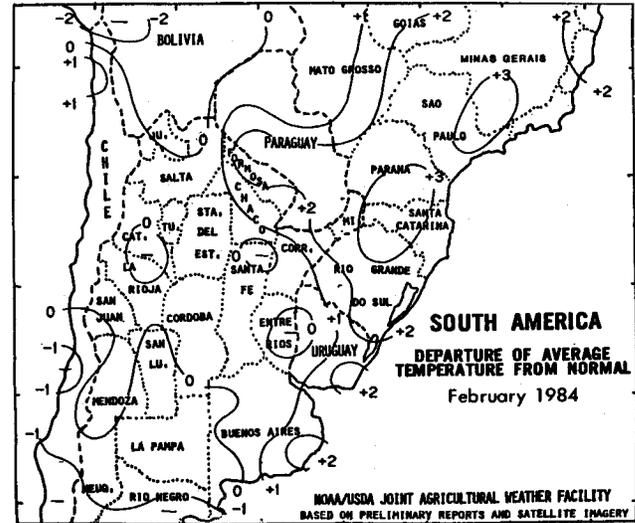
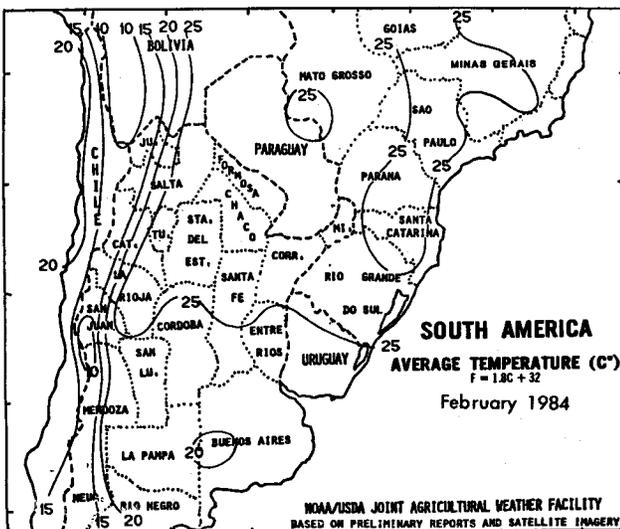
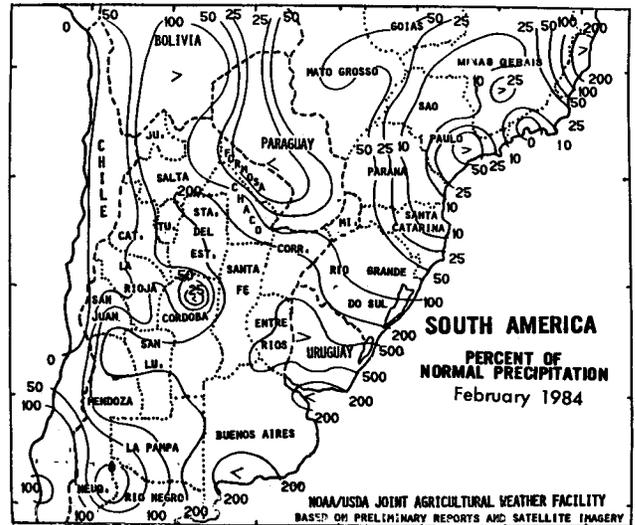
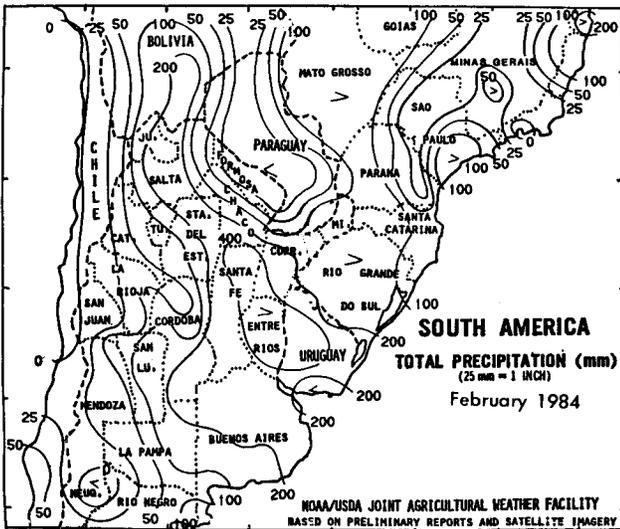
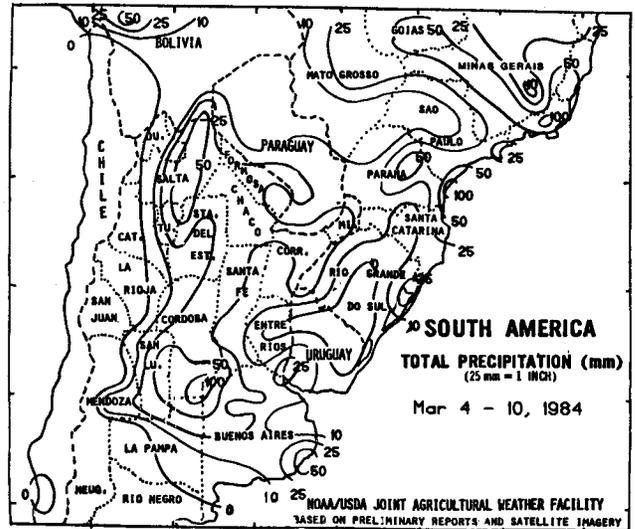




MEXICO...Sunny, dry weather continued to dominate most of the country, allowing fieldwork but decreasing soil moisture. Rain was very light, generally falling over the state of Vera Cruz and the east coast of the Yacatan Peninsular. The shortage of soil moisture could become a greater problem because the usual rainy season is still a couple of months away, especially in central and northern regions. The sunny, mild weather over the northeast and west coast favored vegetables, corn, and other early field crops. February was unusually dry over most of the northern half of the Nation, and combined with abnormal coolness in the north-central region caused rangeland grasses and rainfed crops to develop slowly. Seasonal weather benefited west coast vegetables.



SOUTH AMERICA...Showers covered most summer crop areas of Argentina and center-south Brazil. Locally heavy rain fell again late in the week over Argentina's sorghum area. Corn, sorghum, and sunflowers are maturing and dry weather is needed for harvesting following the recordbreaking February rains which produced totals exceeding 300 percent of normal. Early crop harvests were delayed, but crop yields were not seriously affected. Soybeans, which are filling pods, benefited from the recent moisture. In Brazil, some rain fell over the previously dry soybean areas of Parana, but the moisture came too late to aid maturing soybeans. About 10 percent of the state's soybean crop has been harvested, while about 20 percent of the crop is still filling pods. Below-average February rainfall and above-average monthly temperatures caused both corn and soybean yield reductions, especially in Parana and Sao Paulo. Weather conditions during February were more favorable for soybeans in Rio Grande do Sul. Soybean harvesting will begin in the south in mid-March.



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