

WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE
Economics and Statistics Service
World Food and Agricultural Outlook and Situation Board

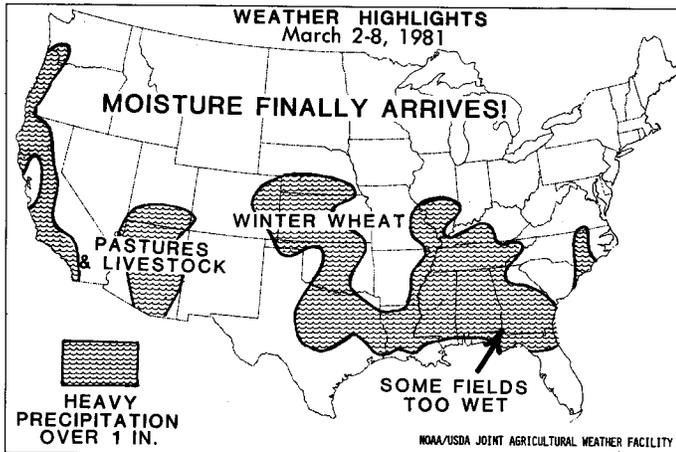
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National Weather Summary

MARCH 2 - 8, 1981



HIGHLIGHTS: Drought -- Rain and snow during the week greatly alleviated drought in the central High Plains, but only slight improvement was noted elsewhere in the Plains and middle and lower Mississippi Valley. Most of the winter wheat in the central Plains got an infusion of moisture at a very critical time -- the beginning of spring growth.

Two major storms affected parts of the Nation during the week. Forming in central California, the storms spread rains or snow through the deserts of the Southwest and moved through the central Rockies. Rain and snow with the first storm covered winter wheat in the central and southern Plains and spread showers and thunderstorms to the Atlantic coast and coastal New England. The second storm spread snow to the central Plains and rain showers through the southern Plains before dying out in the lower Mississippi Valley.

MONDAY...A low pressure system scattered showers from southern California into the southern half of the Rockies and southern high Plains. A few thundershowers were reported over the southern half of this area. The rain changed to snow in the mountains and some heavy amounts were recorded. Temperatures were mild over the northwestern part of the Nation and in the South but rather cool elsewhere.

TUESDAY...The low pressure center and associated cold front scattered showers and thunderstorms across Texas and spread rain through the rest of the southern Plains and into the middle and lower Mississippi Valley. The rain covered the drought-stricken parts of the central Plains. Snow accumulated through New Mexico, Colorado, and Wyoming. A half dozen tornadoes were reported through western Texas.

WEDNESDAY...Thunderstorms produced locally heavy rains over eastern Texas, the lower Mississippi

Valley, and into Alabama. Tornadoes were reported in Oklahoma and golfball-sized hail fell in western Arkansas. The same storm brought rain to the middle Mississippi Valley, lower Ohio Valley and Atlantic coast from Georgia to the Virginias.

THURSDAY...The winter storm began moving north-eastward along the Atlantic coast spreading snow from Virginia and West Virginia to the coastal area of southern New England. In the Southwest, a developing storm system was lashing the central and southern California coast with gale force winds. Rainshowers fell along the coast with snow at higher elevations of southern California and Nevada. The storm was tracking to the central Rockies as the earlier storm did.

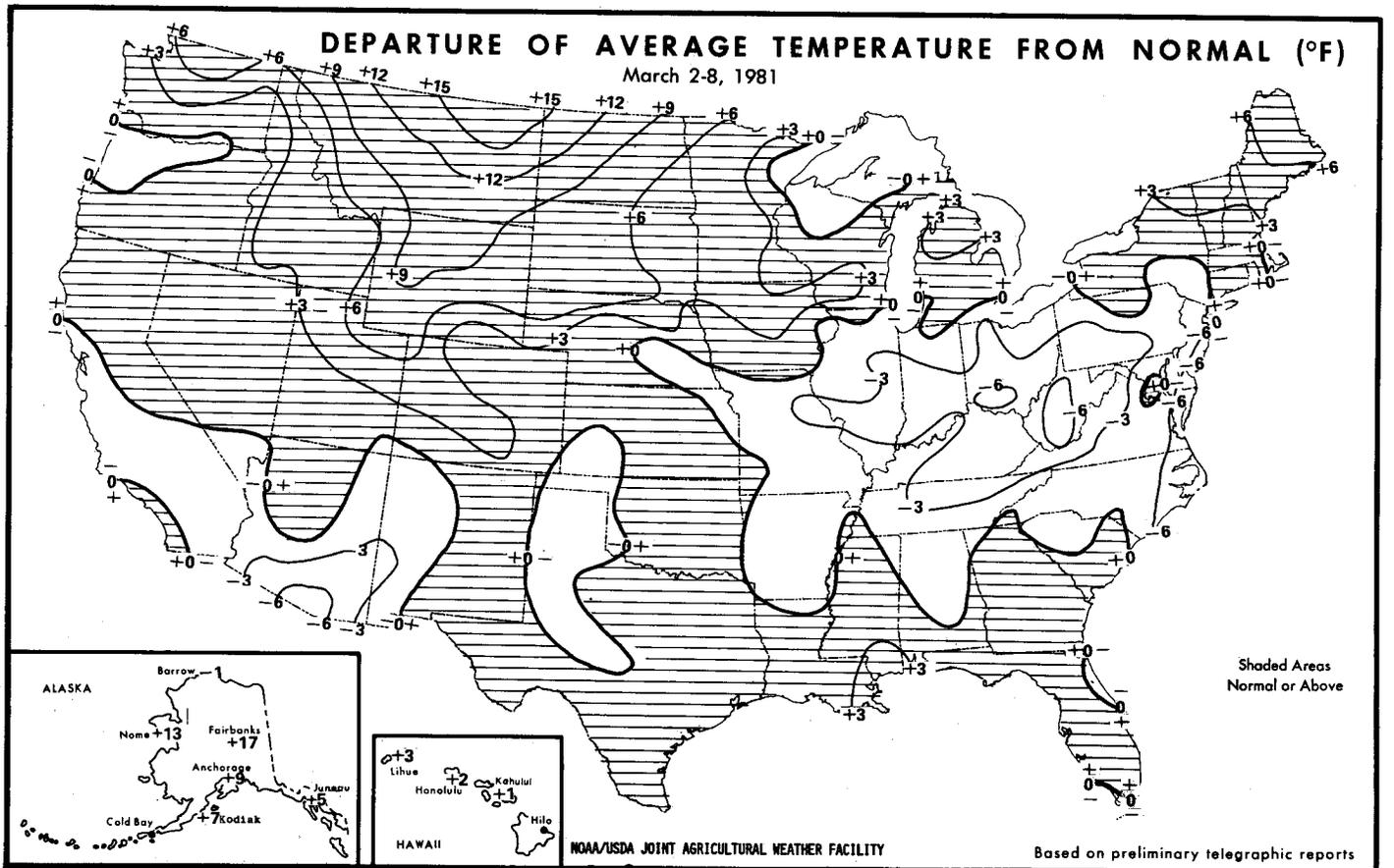
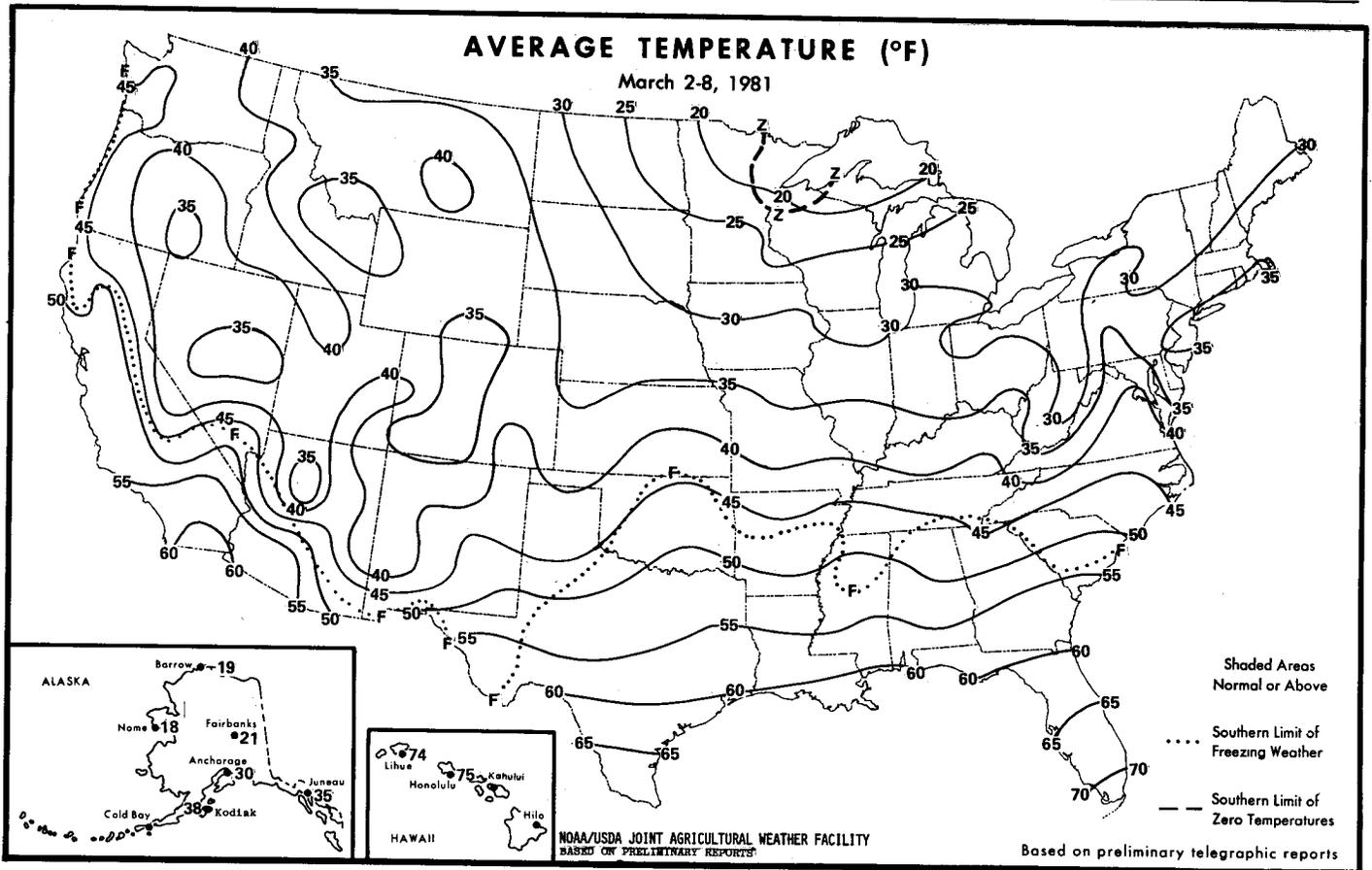
FRIDAY...The storm moved out of southern California spreading rain through the deserts. This latest in a series of winter storms dumped large amounts of snow in the mountains of the Southwest and over the southern Plateau region before moving into the central Rockies.

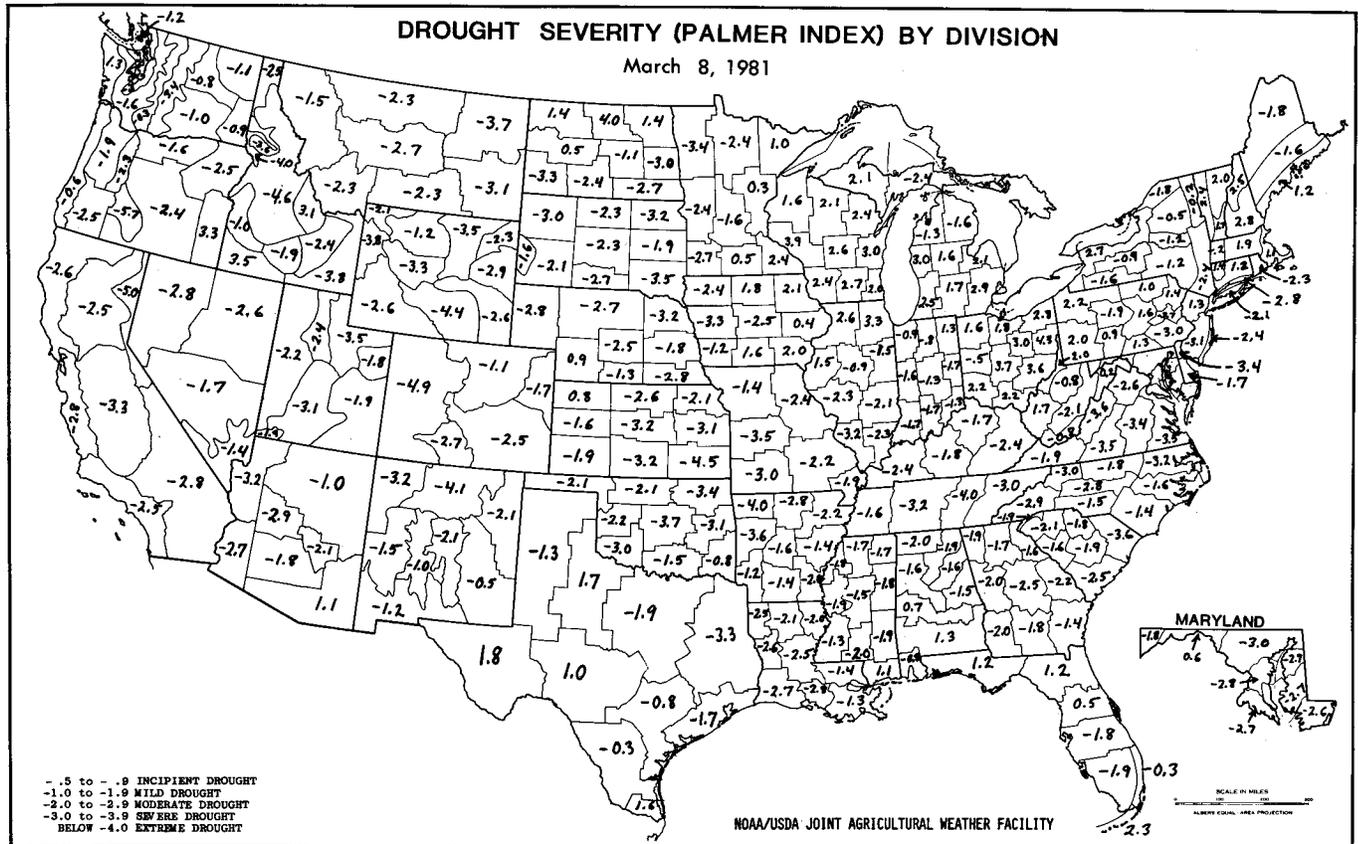
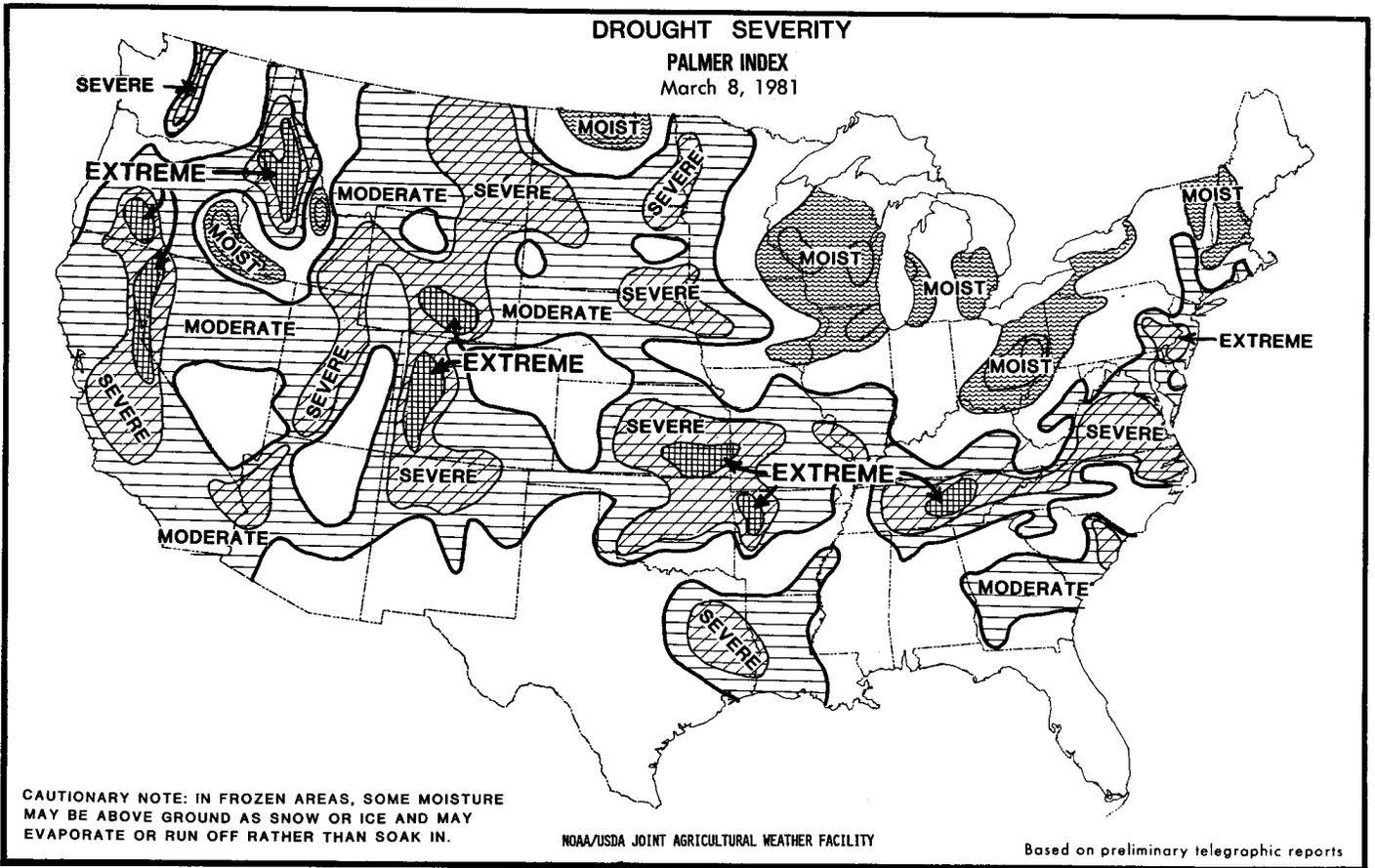
SATURDAY...The winter storm was centered in eastern Colorado early in the day, with a cold front extending through southwestern Texas. As the front moved into the Plains, it spread snow through western Kansas and eastern Colorado into Nebraska and Wyoming. Rain spread across Texas into central Oklahoma; locally heavy rain accompanied thunderstorms in north central Texas.

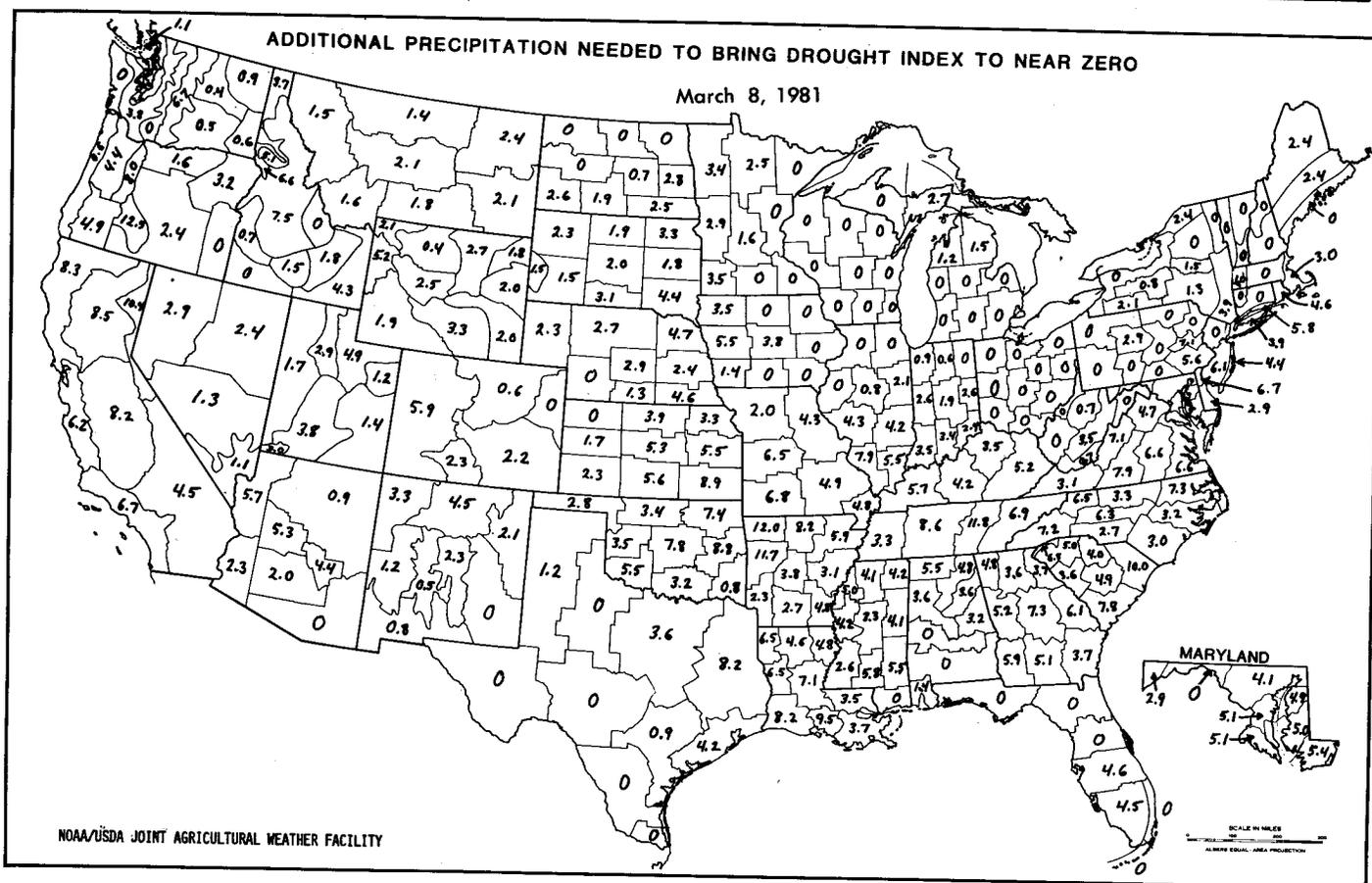
SUNDAY...The threatening winter storm weakened and died. Some light snow and freezing drizzle was scattered from eastern Colorado to northwestern Arkansas early in the day. A good blanket of snow was left on the ground before significantly colder weather covered the Plains. Temperatures warmed during the day and were seasonably mild over most of the Nation.

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A new chart, "Additional Precipitation Needed to Bring the Drought Index to Near Zero" is being issued to help depict and quantify the drought which covers over half of the country. This is a drought severity map -- with needed precipitation values given in inches -- which the user can apply in a practical way if the limitations of the data are taken into account. Precipitation values are theoretical, instantaneous, additional amounts required to end the meteorological drought in each climatological division.

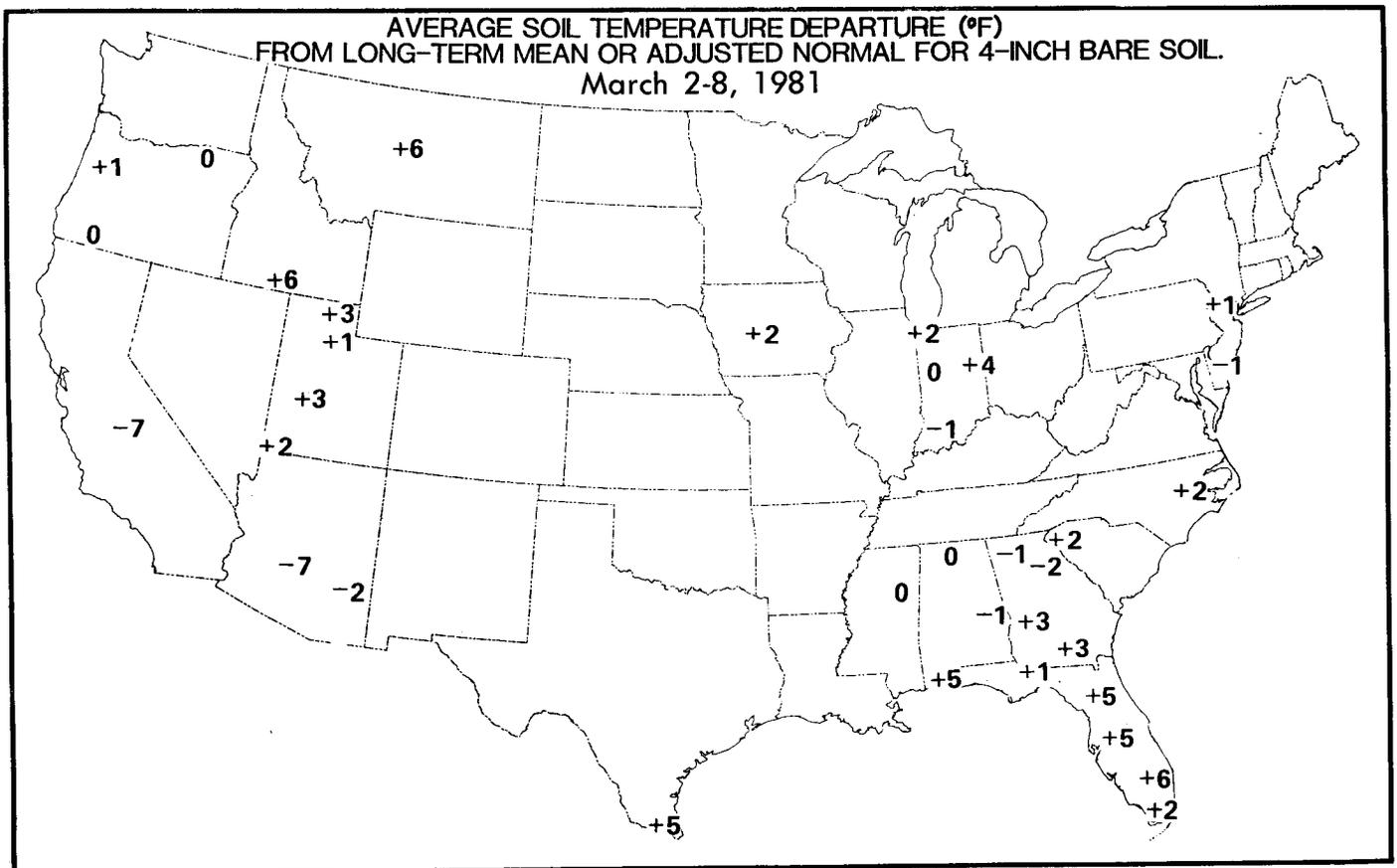
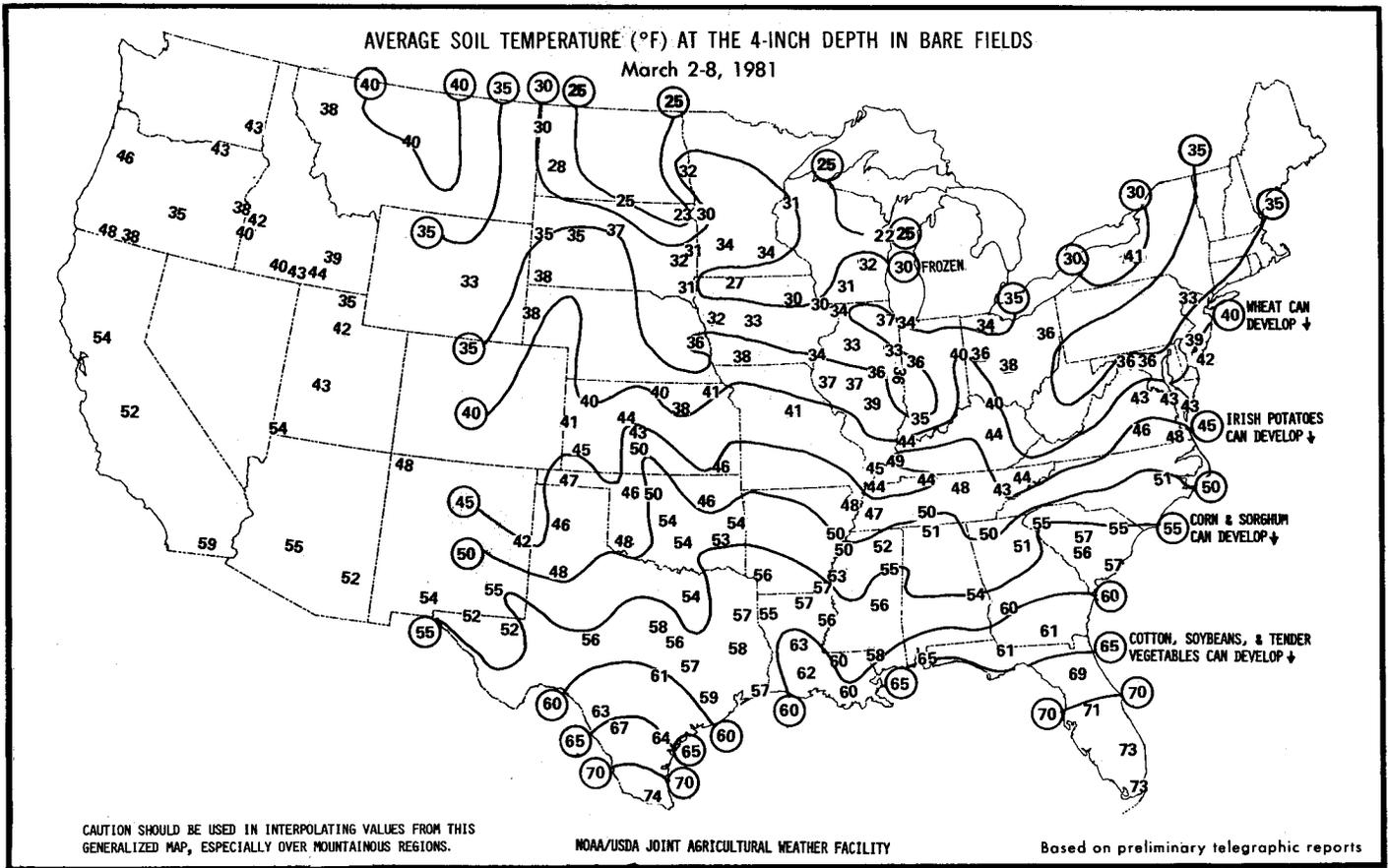
Variations in the data can be large between adjacent divisions or even within a division, as occurs naturally. In the case of very large values, caution should be used in assuming that a single, torrential rain would end the drought. Rain can fall so fast that most of it runs off instead of soaking into the subsoil. To be effective, it must fall slowly enough to allow normal infiltration and storage.

In using this chart to make projections, one must remember that the values are instantaneous, valid only at the time shown on the chart. These values will increase if rainfall is below normal during the oncoming period of interest: week, month, or season. For example, if 10 inches is needed now to end the drought in a certain division, and only the normal amount of rain falls during the coming period, the index would remain the same or improve only slightly. It would take 10 inches, plus near-normal rainfall to end the drought.

Large values needed to end the meteorological drought do not necessarily imply low crop prospects. The key to crop production often lies in the timeliness of the rain; occasional light amounts may be ample for germination and seedling growth, while moderate amounts may not be needed until a couple of months later during the flowering and filling stages.

These values depict meteorological drought, including all of the effects of a prolonged dry spell on the environment. Therefore, soil moisture may be entirely adequate for agriculture, but a drought will be depicted if rain has not produced enough additional water to feed rivers, lakes, and reservoirs.

Formulas used to calculate the drought severity values in these charts are imperfect. They are empirical for the most part, covering a complex situation and requiring numerous assumptions and adjustments. Errors can be made anywhere from the basic input data (divisional averages of precipitation, temperature, and daylength) through the calculation, to the printing of the data. Fortunately, they appear to be compensative and small, and the end product generally depicts a practical, broadview of the Nation's drought situation. Discrepancies noted between calculated and observed divisional conditions are usually small.



Weather Data for the Week Ending Mar. 8, 1981

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. 2	PCT. NORMAL SINCE MAR. 2	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
														90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	60	38	62	32	49	-1	1.1	-.4	.9	1.1	73	79	38	0	1	2	1
MOBILE	70	49	77	42	60	3	.1	-1.4	.1	.1	7	75	37	0	0	1	0
MONTGOMERY	62	41	68	34	52	-2	1.5	.2	1.5	115	82	40	0	0	2	0	
AK ANCHORAGE	37	23	41	18	30	9	T	-.2	T	0	74	55	0	0	7	2	0
BARROW	-12	-24	1	-32	-19	-1	T	.1	T	0	85	80	0	0	7	0	0
FAIRBANKS	34	8	39	-1	21	17	T	-.1	T	0	58	38	0	0	7	1	0
JUNEAU	41	30	44	25	35	5	.3	-.5	.1	.3	38	96	62	0	6	4	0
KODIAK	43	33	45	25	38	7	1.9	-.9	1.1	1.9	190	85	68	0	2	4	0
NOME	26	10	31	5	18	13	.2	0	.1	.2	100	83	65	0	6	3	0
AZ FLAGSTAFF	40	25	45	16	33	1	1.6	1.2	.8	1.6	400	--	--	0	7	7	1
PHOENIX	66	50	73	47	58	0	.9	-.7	.6	.9	450	86	50	0	0	3	1
TUCSON	59	42	67	38	50	-6	1.9	1.8	.7	1.9	1900	88	53	0	0	5	2
WINSLOW	51	32	55	23	42	0	T	-.1	T	0	--	--	--	0	4	1	0
YUMA	71	48	76	53	60	-2	.2	.1	.2	.2	200	63	31	0	0	1	0
AR FORT SMITH	54	39	64	32	47	0	.8	0	.7	.8	100	90	56	0	1	2	1
LITTLE ROCK	53	39	67	34	46	-2	.9	-.2	.6	.9	82	84	57	0	0	2	1
CA BAKERSFIELD	62	46	67	42	54	-1	.4	.2	.4	.4	200	--	53	0	0	1	0
EUREKA	56	43	59	37	49	1	1.1	-.1	.6	1.1	92	80	64	0	0	3	1
FRESNO	60	43	67	41	52	0	.2	-.2	.2	.2	50	92	60	0	0	1	0
LOS ANGELES	62	50	68	46	56	0	1.7	1.1	.9	1.7	283	81	62	0	0	3	2
RED BLUFF	62	45	70	39	54	2	.8	-.1	.6	.8	114	--	56	0	0	2	1
SAN DIEGO	65	53	69	49	59	1	1.4	1.0	1.2	1.4	350	84	61	0	0	4	1
SAN FRANCISCO	58	46	65	40	52	-1	.4	-.2	.3	.4	67	85	62	0	0	2	0
STOCKTON	63	43	69	39	53	2	1.0	-.5	.9	1.0	200	--	54	0	0	2	1
CO DENVER	44	23	57	15	34	-1	1.0	.8	.5	1.0	500	81	52	0	6	4	1
GRAND JUNCTION	51	33	57	29	42	4	.4	-.2	.3	.4	200	82	46	0	4	2	0
PUEBLO	51	33	60	26	42	5	.4	-.3	.3	.4	400	79	45	0	4	2	0
CT BRIDGEPORT	40	30	45	22	35	0	.2	-.6	-.1	.2	25	78	66	0	6	2	0
HARTFORD	39	27	45	15	33	2	.1	-.8	.1	.1	11	58	43	0	6	1	0
DC WASHINGTON	48	35	52	32	42	1	.4	-.3	.3	.4	57	70	44	0	2	3	0
FL APALACHICOLA	68	54	75	48	60	2	.3	-.8	.3	.3	27	79	54	0	0	1	0
DAYTONA BEACH	72	52	83	44	62	-1	.4	-.4	.4	.4	50	85	47	0	0	1	0
FORT MYERS	82	58	84	52	70	3	.1	-.6	.1	.1	14	94	42	0	0	1	0
JACKSONVILLE	73	47	80	40	60	1	3.0	2.1	3.0	3.0	333	87	40	0	0	1	1
KEY WEST	77	66	81	62	71	-2	T	-.4	T	T	0	96	67	0	0	0	0
MIAMI	82	63	85	56	73	3	0	-.4	0	0	0	80	43	0	0	0	0
ORLANDO	78	52	82	47	65	1	.1	-.7	.1	.1	13	82	34	0	0	1	0
TALLAHASSEE	71	47	78	36	59	1	5.4	4.0	5.4	5.4	386	85	34	0	0	1	1
TAMPA	75	52	78	44	64	0	.3	-.6	.3	.3	33	91	45	0	0	1	0
WEST PALM BEACH	80	58	83	54	69	1	T	-.7	T	T	0	87	43	0	0	1	0
GA ATLANTA	60	39	65	33	49	1	.9	-.5	.9	.9	64	64	28	0	0	1	1
AUGUSTA	66	39	72	33	53	1	.8	-.2	.7	.8	80	78	29	0	0	2	1
MACON	68	44	73	37	56	2	1.2	-.1	1.1	1.2	92	68	33	0	0	3	1
SAVANNAH	68	47	76	41	57	2	1.1	-.1	.8	1.1	110	69	35	0	0	2	1
HI HILO	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HONOLULU	83	67	85	64	75	2	.5	-.3	.5	.5	63	84	63	0	0	1	0
KAHULUI	--	--	--	--	76	4	.1	-.6	--	--	--	--	--	0	0	--	0
LIHUE	--	--	--	--	74	3	.4	-.7	--	.4	36	--	--	0	0	--	0
ID BOISE	55	29	60	22	42	3	T	-.3	T	T	0	78	36	0	5	0	0
LEWISTON	54	33	59	26	44	3	.1	-.1	T	.1	50	81	41	0	4	2	0
POCATELLO	50	25	55	21	38	5	T	-.2	T	T	0	89	42	0	7	2	0
IL CAIRO	49	34	54	30	42	-2	.6	-.5	.6	.6	55	--	--	0	3	1	1
CHICAGO	38	21	43	16	29	-2	.1	-.4	.1	.1	20	84	50	0	7	1	0
MOLINE	39	21	44	13	30	-1	.2	-.2	.2	.2	50	82	47	0	6	2	0
PEORIA	40	22	44	15	31	-2	.2	-.3	.2	.2	40	92	48	0	7	2	0
ROCKFORD	38	23	44	15	30	0	.1	-.4	.1	.1	20	79	46	0	7	2	0
SPRINGFIELD	43	26	46	22	35	0	1.2	-.7	1.2	1.2	240	92	50	0	6	3	1
IN EVANSVILLE	46	29	50	23	37	-3	.6	-.4	.5	.6	60	81	53	0	6	2	1
FORT WAYNE	35	24	37	19	30	-3	.2	-.4	.2	.2	33	84	60	0	7	2	0
INDIANAPOLIS	39	25	41	20	32	-4	.7	0	.5	.7	100	87	54	0	7	2	1
SOUTH BEND	39	28	42	21	33	2	.1	-.4	.1	.1	20	82	57	0	6	3	0
IA BURLINGTON	41	24	45	18	33	1	.2	-.3	.2	.2	40	--	--	0	6	1	0
DES MOINES	41	23	46	17	32	3	.1	-.4	.1	.1	20	77	40	0	7	1	0
DUBUQUE	37	22	45	15	30	3	T	-.5	T	T	0	79	48	0	7	0	0
KS SIOUX CITY	42	18	50	12	30	2	.2	-.1	.2	.2	67	78	36	0	7	1	0
CONCORDIA	46	28	51	18	37	2	.7	.4	.5	.7	233	86	52	0	6	2	1
DODGE CITY	45	28	60	21	36	-2	.9	.7	.5	.9	450	92	62	0	5	5	1
GOODLAND	44	25	56	17	35	1	2.6	2.5	.9	1.6	2600	94	64	0	6	4	1
TOPEKA	48	28	53	21	38	1	.4	-.1	.3	.4	133	75	46	0	6	2	0
WICHITA	50	34	57	29	42	2	.8	-.5	.5	.8	267	72	48	0	4	5	1
KY LEXINGTON	43	28	46	22	36	-4	.8	-.3	.7	.8	73	82	51	0	5	2	1
LOUISVILLE	46	30	50	23	38	-2	.6	-.5	.5	.6	55	76	46	0	4	2	1
LA BATON ROUGE	68	51	71	43	60	3	.7	-.5	.7	.7	58	82	50	0	0	1	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Mar. 8, 1981

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. 2	PCT. NORMAL SINCE Mar. 2	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE °F		PRECIPI- TATION	
														90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
LAKE CHARLES	68	51	78	44	59	1	.6	-	.3	.4	.6	78	55	0	0	2	0
NEW ORLEANS	70	53	77	46	61	3	.1	-	1.2	.1	8	83	51	0	0	0	0
SHREVEPORT	62	45	78	38	54	0	.9	-	.1	.9	113	75	52	0	0	3	1
ME CARIBOU	33	20	38	6	27	7	.1	-	.4	.1	.1	20	90	63	0	6	2
PORTLAND	40	24	42	12	32	4	.3	-	.5	.2	.3	38	74	51	0	6	2
MD BALTIMORE	44	29	50	19	36	4	.7	-	.1	.6	.7	88	76	45	0	5	2
MA BOSTON	39	30	45	21	34	0	.2	-	.7	.2	.2	22	67	57	0	3	2
CHATHAM	38	29	46	21	34	-2	.4	-	-	.3	.4	-	78	66	0	4	3
MI ALPENA	33	21	39	17	27	5	.1	-	.3	.1	.1	25	-	-	0	7	2
DETROIT	37	24	43	20	31	-1	.1	-	.4	.1	.1	20	83	59	0	7	2
FLINT	35	24	38	19	29	1	T	-	.4	T	T	0	86	62	0	7	1
GRAND RAPIDS	36	22	40	19	29	1	T	-	.4	T	T	0	80	52	0	7	1
HOUGHTON LAKE	34	21	40	16	27	5	T	-	.4	T	T	0	81	47	0	7	0
LANSING	34	24	38	18	29	1	T	-	.5	T	T	0	85	57	0	7	0
MARQUETTE	28	8	39	-6	18	0	.8	-	.4	.3	.8	200	94	63	0	7	5
MUSKEGON	36	23	43	18	30	1	.1	-	.4	.1	.1	20	84	51	0	7	2
SAULT STE. MARIE	29	13	34	4	21	1	.2	-	.2	.1	.2	50	72	61	0	7	2
MN DULUTH	29	3	39	-4	16	-2	.1	-	.3	T	.1	25	73	51	0	7	2
INT'L FALLS	28	7	37	2	18	3	T	-	.2	T	T	0	80	51	0	7	0
MINNEAPOLIS	37	17	44	13	27	4	T	-	.3	T	T	0	72	41	0	7	0
ROCHESTER	32	16	38	13	24	2	T	-	.3	T	T	0	77	65	0	7	0
SAINT CLOUD	36	13	49	8	25	4	T	-	.2	T	T	0	84	-	0	7	0
MS JACKSON	63	43	66	33	53	0	2.3	1.0	2.3	2.3	177	83	47	0	0	1	1
MERIDIAN	67	43	73	35	55	2	2.1	.7	2.1	2.1	150	78	38	0	0	1	1
MO COLUMBIA	43	27	47	22	35	-3	.6	-	.1	.4	.6	120	78	49	0	6	3
KANSAS CITY	44	27	47	20	36	-1	.3	-	.2	.2	.3	60	78	51	0	6	2
SAINT LOUIS	44	28	48	23	36	-3	1.1	.5	.9	1.1	183	94	56	0	6	3	
SPRINGFIELD	48	32	54	25	40	0	.8	-	.1	.5	.8	114	83	54	0	5	4
MT BILLINGS	55	25	62	22	40	10	0	-	.2	0	0	59	25	0	7	0	
GLASGOW	50	24	55	21	37	17	0	-	.1	0	0	86	33	0	7	0	
GREAT FALLS	51	25	57	21	38	10	.1	-	.1	.1	.1	50	75	34	0	7	1
HAVRE	49	22	57	17	36	14	.1	-	0	.1	.1	100	88	41	0	7	2
HELENA	51	23	58	18	37	9	.1	-	.1	.1	.1	50	85	33	0	7	1
KALISPELL	46	25	55	21	36	8	.2	0	.2	.2	.2	100	91	48	0	7	1
MILES CITY	53	23	60	18	38	12	0	-	.1	0	0	68	27	0	7	0	
MISSOULA	51	24	55	20	37	7	T	-	.1	T	T	0	90	40	0	7	1
NE GRAND ISLAND	39	22	46	13	31	-1	1.1	.9	.8	1.1	550	82	66	0	6	2	
LINCOLN	42	22	47	17	32	0	1.0	.7	.8	1.0	333	87	57	0	6	2	
NORFOLK	44	20	50	14	32	4	T	-	.2	T	T	0	77	39	0	7	1
NORTH PLATTE	43	23	48	15	33	2	.8	.6	.5	.8	400	86	51	0	6	3	
OMAHA	41	22	46	17	32	2	.4	-	.1	.3	.4	133	78	54	0	7	2
VALENTINE	50	17	58	10	34	6	0	-	.1	0	0	78	32	0	7	0	
NV ELY	44	23	52	17	34	3	.6	.4	.4	.6	300	86	46	0	7	4	
LAS VEGAS	60	42	67	40	51	-1	.9	.8	.8	.9	900	81	47	0	0	3	
RENO	53	29	58	20	41	2	T	-	.2	T	T	0	87	36	0	6	1
WINNEMUCCA	55	22	60	12	38	2	T	-	.2	T	T	0	79	31	0	6	1
NH CONCORD	37	22	41	11	30	2	.2	-	.4	.2	.2	33	77	52	0	6	2
NJ ATLANTIC CITY	39	23	44	11	31	-6	.7	-	.3	.6	.7	70	78	58	0	7	2
TRENTON	41	30	48	25	36	-2	.4	-	.4	.4	.4	50	-	-	0	5	2
NM ALBUQUERQUE	56	29	64	26	43	-1	.3	.2	.3	.3	.3	300	88	29	0	7	3
ROSWELL	60	34	65	26	47	1	.1	0	.1	.1	100	-	-	0	3	1	
NY ALBANY	36	22	40	15	29	1	T	-	.5	T	T	0	84	59	0	7	1
BINGHAMTON	32	19	36	14	26	-1	.2	-	.5	.1	.2	29	79	67	0	7	3
BUFFALO	34	24	38	18	29	1	.2	-	.5	.1	.2	29	84	65	0	7	3
NEW YORK	41	32	47	27	37	0	.6	-	.3	.5	.6	67	68	54	0	4	3
ROCHESTER	35	24	40	17	29	0	.1	-	.5	.1	.1	17	77	55	0	6	3
SYRACUSE	38	24	44	17	31	2	.2	-	.5	.1	.2	29	88	59	0	6	4
NC ASHEVILLE	52	34	57	28	43	0	.6	-	.4	.6	.6	60	71	38	0	3	2
CHARLOTTE	56	35	65	29	46	-2	.5	-	.5	.4	.5	50	73	33	0	2	2
GREENSBORO	53	33	59	27	43	-1	.8	-	.1	.7	.8	89	66	36	0	4	2
HATTERAS	52	35	65	26	43	-5	.5	-	.4	.2	.5	56	65	47	0	3	3
RALEIGH	55	34	62	27	44	-1	.8	0	.6	.8	100	65	34	0	4	2	
WILMINGTON	59	40	68	31	49	-2	1.6	.6	.7	1.6	160	76	47	0	2	3	
ND BISMARCK	39	18	44	11	29	9	T	-	.1	T	T	0	84	43	0	7	0
FARGO	34	12	44	2	23	5	T	-	.1	T	T	0	84	55	0	7	0
WILLISTON	47	23	61	18	35	15	0	-	.1	0	0	78	42	0	7	0	
OH AKRON-CANTON	36	23	39	18	29	-3	.3	-	.3	.1	.3	50	78	59	0	7	6
CINCINNATI	40	25	43	19	32	-5	.6	-	.3	.4	.6	67	88	56	0	7	2
CLEVELAND	34	26	38	23	30	-2	.1	-	.5	T	.1	17	81	71	0	7	6
COLUMBUS	38	26	41	19	32	-3	.5	-	.2	.3	.5	71	77	61	0	7	4
DAYTON	38	25	42	20	31	-3	.7	0	.5	.7	100	79	65	0	7	4	
TOLEDO	36	23	43	14	30	-2	.1	-	.4	T	.1	20	81	59	0	7	2
YOUNGSTOWN	34	24	37	19	29	-2	.1	-	.6	T	.1	14	76	58	0	7	5
OK OKLAHOMA CITY	55	40	68	34	47	2	1.3	.9	.6	1.3	325	89	59	0	0	6	2

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

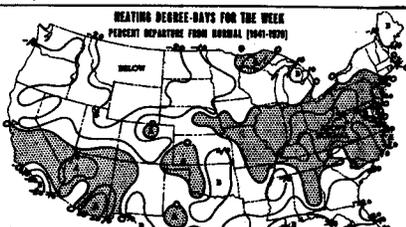
Weather Data for the Week Ending Mar. 8, 1981

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. 2	PCT. NORMAL SINCE Mar. 2	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
														90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OR TULSA	54	40	69	34	47	2	1.0	.5	.5	1.0	200	87	57	0	0	4	0
OR ASTORIA	55	37	62	32	46	2	.6	-1.1	.3	.6	35	88	60	0	2	5	0
BURNS	47	24	55	17	35	1	.2	0	.1	.2	100	76	43	0	7	2	0
MEDFORD	56	32	66	26	44	0	.4	-1.1	.3	.4	80	94	45	0	4	3	0
PENDLETON	50	33	55	27	41	-1	.1	-1.1	.1	.1	50	84	57	0	3	2	0
PORTLAND	56	35	63	28	46	1	1.0	.1	.7	1.0	111	82	57	0	2	3	1
SALEM	55	32	63	24	44	-1	1.0	0	1.0	1.0	100	96	54	0	3	2	1
PA ALLENTOWN	38	27	45	20	33	-1	.5	-1.3	.5	.5	63	67	55	0	6	2	1
ERIE	33	24	39	18	28	-2	.2	-1.4	.1	.2	33	--	--	0	7	6	0
HARRISBURG	38	28	43	19	33	-4	.6	-1.1	.5	.6	86	--	--	0	5	2	1
PHILADELPHIA	41	29	46	22	35	-3	.9	-1.1	.8	.9	113	78	54	0	5	2	1
PITTSBURGH	34	23	37	17	28	-6	.7	0	.4	.7	100	82	65	0	7	5	0
SCRANTON	36	26	40	20	31	-1	.2	-1.4	.1	.2	33	61	59	0	7	3	0
RI PROVIDENCE	40	28	44	19	34	1	.1	-1.8	.1	.1	11	63	52	0	5	3	0
SC CHARLESTON	67	44	77	35	56	2	.5	-1.6	.3	.5	45	77	39	0	0	2	0
COLUMBIA	64	36	71	30	50	-1	.5	-1.6	.4	.5	45	89	35	0	3	3	0
GREENVILLE	59	36	68	28	47	-1	.7	-1.5	.6	.7	58	57	30	0	2	2	1
SD ABERDEEN	41	13	55	7	27	5	T	-1.1	T	T	0	75	32	0	7	0	0
HURON	44	12	56	5	28	4	0	-1.2	0	0	0	85	30	0	7	0	0
RAPID CITY	50	19	57	17	35	7	0	-1.1	0	0	0	80	30	0	7	0	0
SIoux FALLS	43	16	53	10	29	4	T	-1.3	T	T	0	80	35	0	7	0	0
TN CHATTANOOGA	53	37	57	33	45	-1	1.1	-1.3	1.0	1.1	79	70	37	0	0	2	1
KNOXVILLE	51	35	57	27	43	-3	.8	-1.4	.7	.8	67	68	43	0	2	2	1
MEMPHIS	58	40	65	33	49	1	1.5	-1.4	1.4	1.5	136	77	49	0	0	3	1
NASHVILLE	51	33	57	28	42	-3	.9	-1.3	.9	.9	42	78	42	0	3	2	1
TX ABILENE	60	45	68	38	53	1	1.7	1.6	1.4	1.7	1700	87	57	0	0	3	1
AMARILLO	53	32	61	22	43	-1	.8	.7	.3	.8	800	93	50	0	4	4	0
AUSTIN	65	50	76	42	57	1	1.9	1.4	1.5	1.9	380	90	67	0	0	3	1
BEAUMONT	68	52	79	47	60	2	1.4	-1.6	1.4	1.4	175	85	59	0	0	2	1
BROWNSVILLE	81	61	90	53	71	5	T	-1.2	T	0	0	92	47	1	0	1	0
CORPUS CHRISTI	74	56	86	45	65	3	T	-1.3	T	0	0	86	49	0	0	1	0
DEL RIO	71	51	77	43	61	1	.2	0	.2	.2	100	82	45	0	0	1	0
EL PASO	65	41	70	36	53	1	.3	-1.1	.1	.3	150	72	29	0	0	3	0
FORT WORTH	59	46	71	40	53	1	2.5	-2.0	1.8	2.5	500	87	66	0	0	2	2
GALVESTON	65	56	79	52	60	2	.1	-1.6	T	.1	14	80	69	0	0	2	0
HOUSTON	68	50	81	41	59	1	.7	0	.5	.7	100	88	59	0	0	3	0
LUBBOCK	56	36	62	29	46	0	.7	.5	.2	.7	350	90	49	0	2	1	0
MIDLAND	60	41	66	34	51	0	.3	.1	.2	.3	150	80	42	0	0	2	0
SAN ANGELO	62	44	74	38	53	-1	1.0	.8	.5	1.0	500	90	50	0	0	3	0
SAN ANTONIO	70	51	77	45	61	3	.4	0	.3	.4	100	74	56	0	0	2	0
VICTORIA	71	52	81	46	62	2	.1	-1.3	.1	.1	25	86	59	0	0	2	0
WACO	62	45	71	37	54	0	1.0	.5	.6	1.0	200	89	65	0	0	2	1
WICHITA FALLS	55	42	69	37	49	0	1.2	.9	.8	1.2	400	89	65	0	0	4	1
UT BLANDING	46	26	51	21	36	0	1.3	1.1	.9	1.3	650	97	55	0	7	4	1
SALT LAKE CITY	51	34	55	31	43	6	.3	0	.2	.3	100	85	46	0	3	2	0
VT BURLINGTON	33	22	38	13	27	3	.3	-1.1	.2	.3	75	80	68	0	7	3	0
VA LYNCHBURG	49	31	51	26	40	-2	.6	-1.2	.4	.6	75	58	--	0	4	2	0
NORFOLK	48	34	54	28	41	-4	.5	-1.3	.4	.5	63	72	47	0	3	2	0
RICHMOND	50	30	55	24	40	-3	.5	-1.3	.2	.5	63	71	42	0	5	2	0
ROANOKE	47	30	52	23	38	-4	.4	-1.3	.1	.4	57	61	38	0	5	2	0
WA COLVILLE	49	30	54	23	39	4	.6	.3	.6	.6	200	--	--	0	5	2	1
OMAK	54	30	58	24	42	--	.5	--	.5	.5	--	--	--	0	5	2	1
QUILLAYUTE	53	35	57	28	44	2	1.3	-1.3	.9	1.3	50	85	61	0	3	4	1
SEATTLE-TACOMA	53	38	58	34	46	3	.7	-1.2	.6	.7	78	81	53	0	0	4	1
SPOKANE	47	27	52	21	37	2	.1	-1.2	.1	.1	33	93	54	0	6	1	0
WALLA-WALLA	52	35	58	30	44	0	.6	.3	.6	.6	200	83	58	0	2	2	1
YAKIMA	56	30	61	24	43	3	.1	-1.1	.1	.1	50	89	37	0	5	1	0
WV BECKLEY	37	24	45	18	30	-6	.7	-1.2	.6	.7	78	75	54	0	7	4	1
CHARLESTON	41	28	43	23	35	-6	.5	-1.4	.2	.5	56	83	56	0	5	4	0
HUNTINGTON	42	29	45	24	36	-5	.7	-1.2	.3	.7	78	73	48	0	5	3	0
PARKERSBURG	39	30	42	26	34	-5	.5	-1.3	.4	.5	63	78	60	0	5	2	0
WI GREEN BAY	34	17	46	14	26	2	.1	-1.2	.1	.1	33	86	60	0	7	3	0
LA CROSSE	38	19	45	13	28	2	T	-1.4	T	T	0	85	46	0	7	0	0
MADISON	39	18	47	12	29	3	T	-1.4	T	T	0	84	41	0	7	0	0
MILWAUKEE	37	21	44	13	29	2	T	-1.4	T	T	0	76	50	0	7	1	0
WY CASPER	51	22	56	13	36	8	T	-1.2	T	T	0	--	25	0	7	0	0
CHEYENNE	42	22	49	15	32	2	.2	0	.1	.2	100	86	49	0	7	2	0
LANDER	48	27	53	24	38	9	T	-1.2	T	T	0	70	33	0	7	0	0
SHERIDAN	53	24	62	20	39	10	0	-1.2	0	0	0	68	25	0	7	0	0
PR SAN JUAN	88	74	92	77	81	5	2.3	1.8	2.1	2.3	460	79	50	0	0	0	0

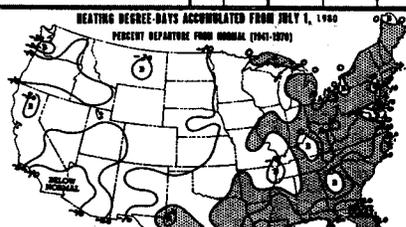
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING MAR. 8, 1981.
BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1, 1980.

Table with 15 columns: STATES AND STATIONS, WEEKLY TOTAL, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +, SEASONAL DEPARTURE*, DEPARTURE FROM 1979-80. Rows list various states and cities with their corresponding HDD values.



MAR 2 MAR 8 1981
BASED ON PRELIMINARY WEATHER REPORTS



SUN MAR 8 1981
BASED ON PRELIMINARY WEATHER REPORTS



SUN MAR 8 1981
BASED ON PRELIMINARY WEATHER REPORTS

February Weather Summary

HIGHLIGHTS: Heavy and regular rainfall ended the drought that had plagued parts of the South and Northeast since fall. Rains partially relieved drought in other parts of the East. The first half of the month was typical winter weather. Frequent outbreaks of arctic air from central Canada spread throughout the Rockies and the East. Near-blizzard conditions blew soil and snow in the central Plains. Temperatures turned unseasonably mild the latter half of the month, setting many record highs. Grasses greened in the South and wheat started to green as far north as Kansas.

FIRST WEEK...Unseasonably warm air was pushed eastward as frigid arctic air poured into the Nation early in the week. Ahead of the cold front, moderate rain fell along the gulf coast and in New England. Lighter rain changed to freezing rain in the Ohio Valley as the colder air moved in. After moderate to heavy rain caused some flooding in New England, snow began to cover the mountains. A storm system developed at midweek in the northern Mississippi Valley and spread snow across the northern Plains and Great Lakes. Another storm, in the Gulf of Mexico, spread rain from Texas to Florida and then northeastward along the east coast.

SECOND WEEK...A complex storm system moved out of the central Rockies into Texas and then northeastward through the Great Lakes. Strong, gusty winds in the central Plains kicked up a combination of dust and snow. The storm brought precipitation to all of the area from the Rockies eastward. Rain fell in the south--some very heavy amounts in the Southeast--and along much of the east coast while snow covered the area from the central Plains northward and through the Great Lakes. Another blast of arctic air moved in behind the storm and brought some of the coldest air of the winter into the Plains. Subzero temperatures reached into the Texas Panhandle.

THIRD WEEK...The weather warmed rapidly after the severe arctic outbreak. Average temperatures were well above normal for the week--as much as 27° above normal in the northern Plains and 30° above in northern New England. Temperatures rose to 70° as far north as Montana before another cool surge began at the end of the week. Moisture, borne northward on warm southerly winds, resulted in widespread rain east of the Mississippi River. Heavier rain caused flooding in the Northeast and Northwest.

FOURTH WEEK...Most of the Nation received some rainfall during the week, although parts of the central and northern Plains remained dry. Storms moving into the Pacific Northwest early in the week and later into central California spread rain throughout the West. Snow fell at higher elevations. Almost daily rains in New England caused flooding in many areas. Showers and thunderstorms caused heavy rains from central Texas through Arkansas. Unusually warm weather prevailed in central and northeastern United States but temperatures were near normal along the west coast and in the Southeast. (Prepared by NOAA/USDA Joint Agricultural Weather Facility).

February Agricultural Summary

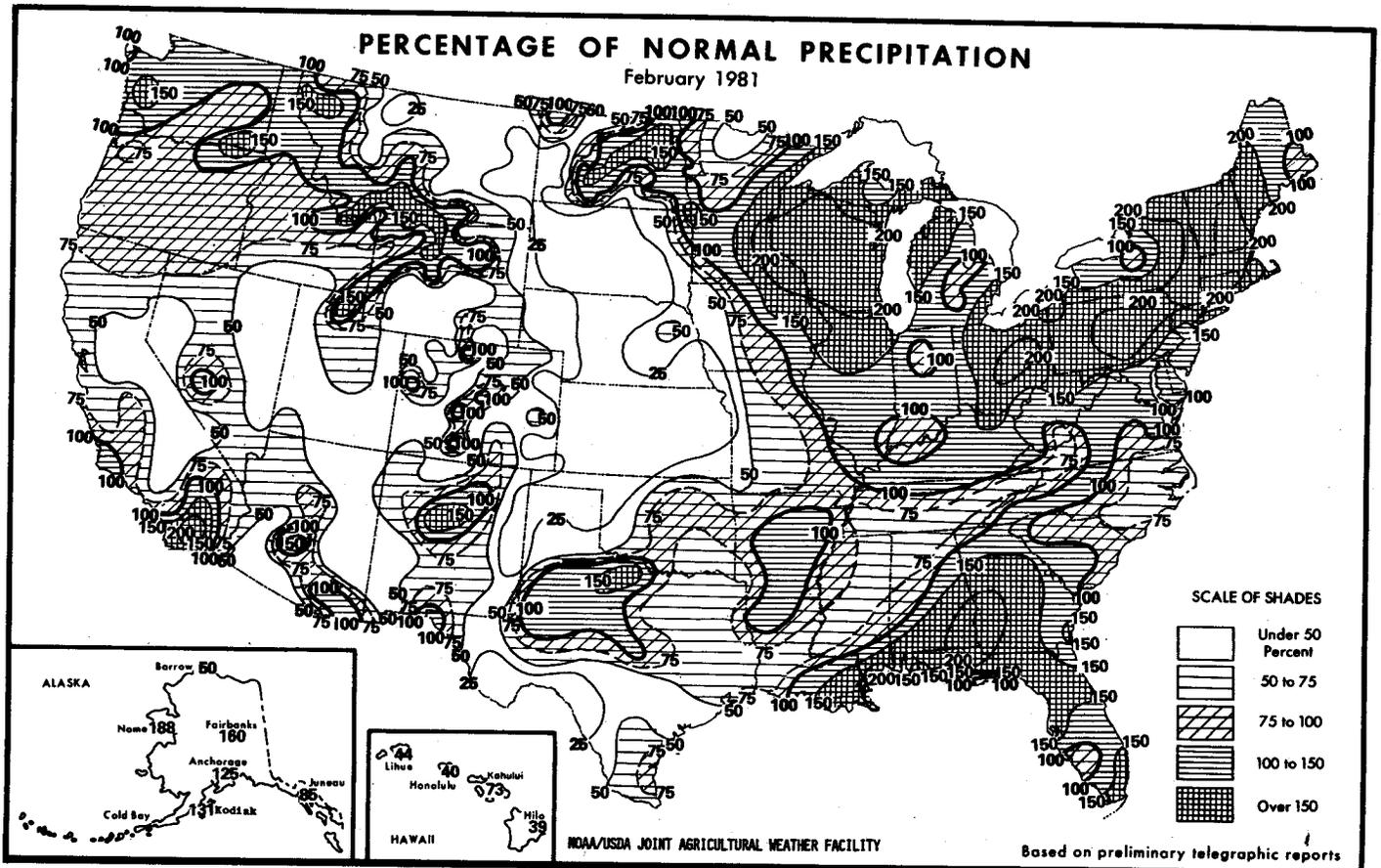
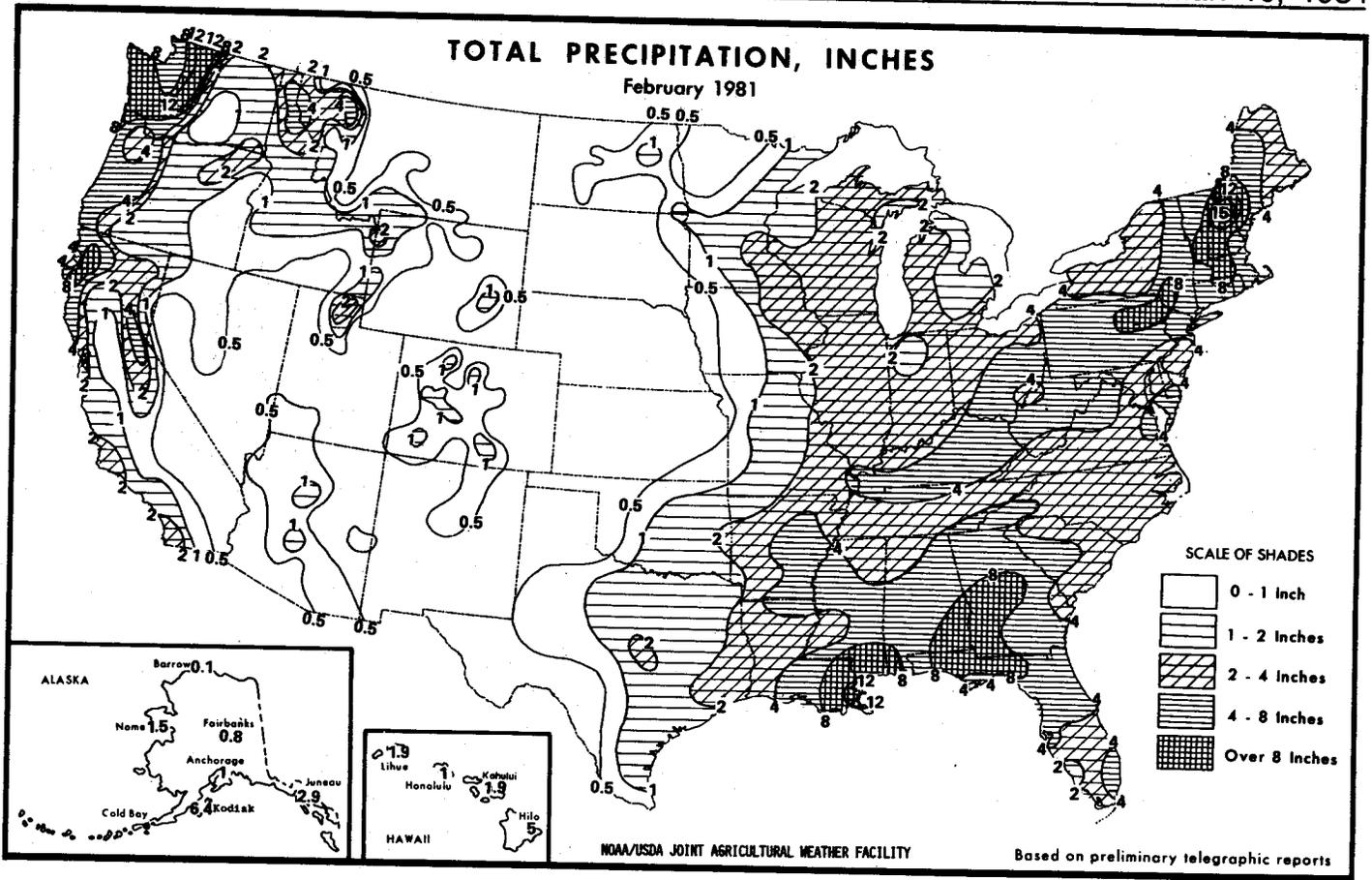
WINTER WHEAT

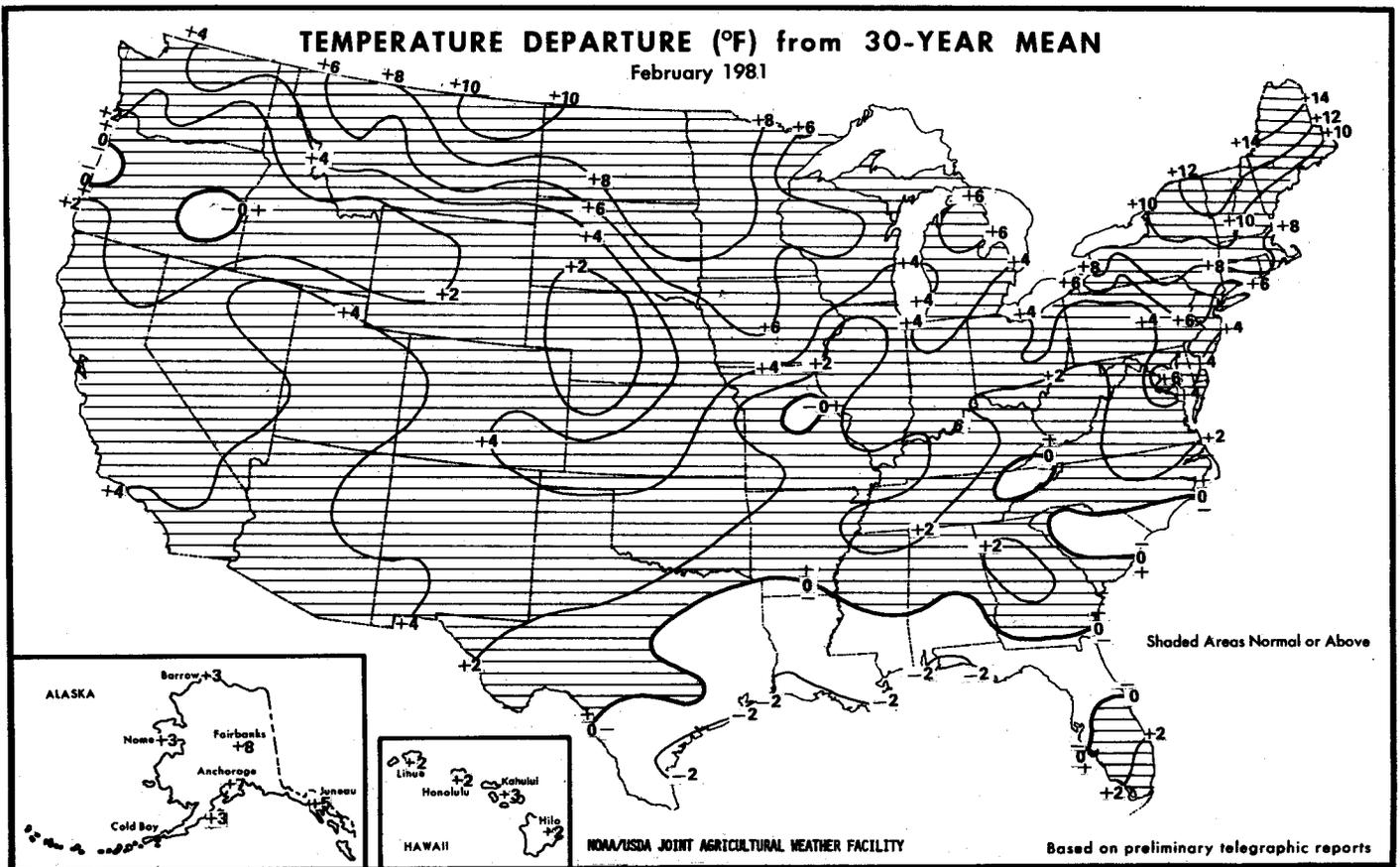
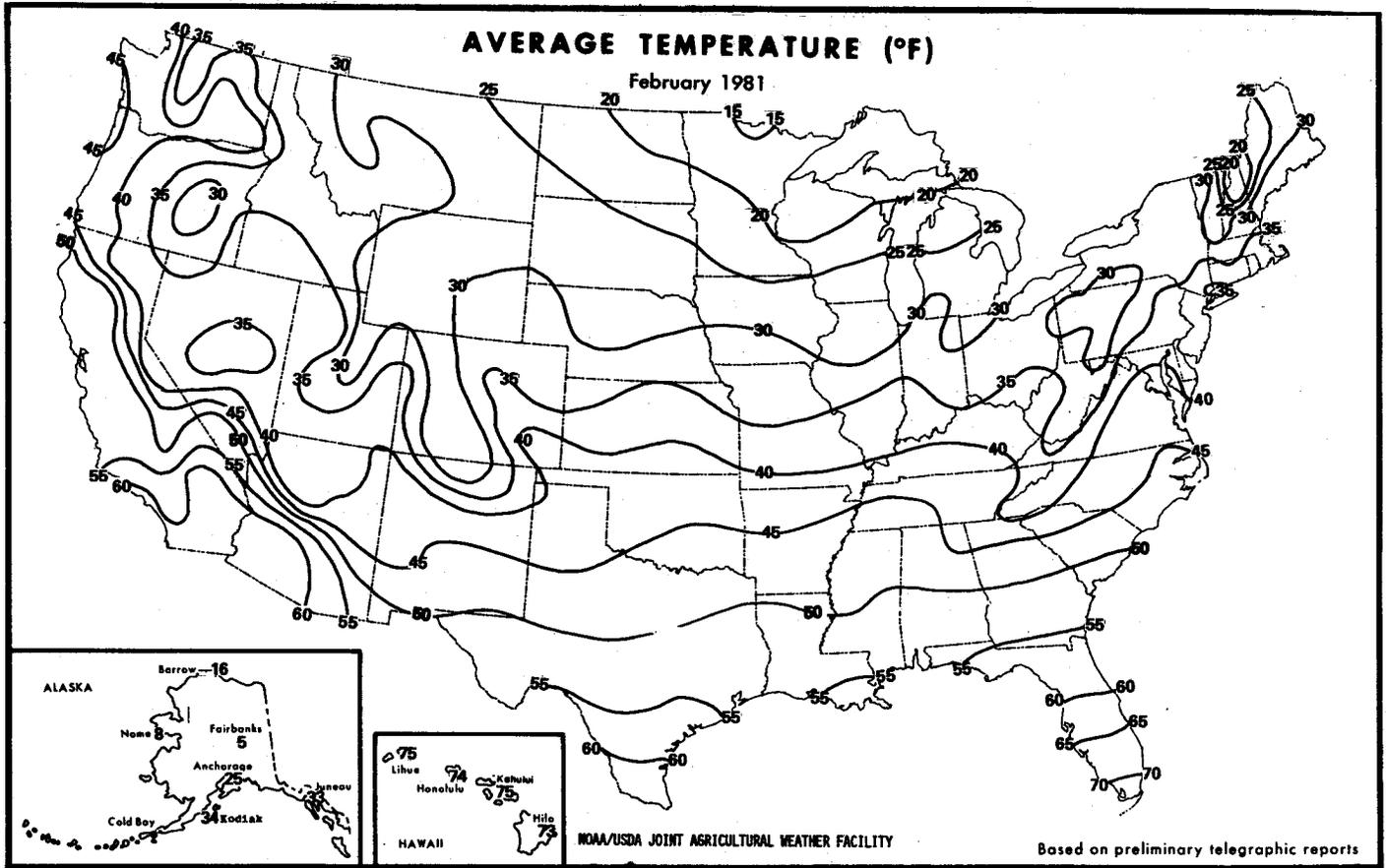
Winter wheat rated good to excellent in the Pacific Northwest and good in the Corn Belt and the Southwest at the beginning of March. In the Great Plains, winter wheat was in fair to good condition, except in Texas where the crop rated poor to good. Nearly all areas needed precipitation. Above normal temperatures in major production areas during the second half of February encouraged winter wheat to break dormancy, especially in southern areas. Farmers began fertilizing these fields.

Kansas winter wheat condition averaged fair on March 1, but was extremely variable throughout the State. There was scattered light wind damage in the southern third of the State. Short soil moisture supplies continued to pose a very serious problem as wheat began its spring growth. Winter wheat in Texas was in poor to good condition. Mild temperatures during the latter part of February encouraged winter wheat to emerge from dormancy; with limited moisture supplies, growth was slow. Nebraska wheat was in fair condition with variable amounts of wind damage evident in most areas. Oklahoma fields needed additional moisture for good growth. Arizona winter wheat made excellent progress with heads forming in some fields by March 1. California winter wheat received moisture during February and showed good development.

FEBRUARY FIELDWORK

Subnormal temperatures and widespread precipitation held outside activities to a minimum during the first half of February. Farmers spread fertilizer and manure where field conditions permitted. Above-normal temperatures during the latter part of the month melted most of the remaining snowcover in northern areas and encouraged growth of crops and pastures and promoted early planting in southern areas. Corn planting began shortly after mid-February in Texas and by the end of the month extended into Alabama, Arizona, Florida, Louisiana, and Mississippi. Grain sorghum planting began about mid-month in southern Texas and got underway in Arizona during the last week of the month. Tobacco growers prepared and seeded plantbeds; plants were in fair to good condition on March 1. Cotton growers prepared land for planting; some pre-irrigating was done in California. Deciduous fruit growers sprayed and pruned mature trees and set out new trees. Vegetable planting and harvest activities centered in the Southwest, Texas, and Florida. Maple sirup producers tapped trees and prepared equipment for the upcoming processing. Mild temperatures encouraged an early flow of sap.





Temperature and Precipitation Data for February 1981

States and Stations	Temperature Of		Precipitation Inches		States and Stations	Temperature Of		Precipitation Inches		States and Stations	Temperature Of		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham	48	+ 1	4.9	- .4	LA. Baton Rouge	53	- 1	7.1	+ 2.3	Youngstown	29	+ 2	3.9	+ 1.5
asMobile	53	- 1	8.8	+ 4.0	Lake Charles	53	- 2	3.1	- 1.4	OKLA. Okla. City	44	+ 3	1.2	- .1
Montgomery	50	- 1	6.9	+ 2.6	New Orleans	55	- 1	8.3	+ 3.5	Tulsa	44	+ 3	1.6	- .1
ALASKA. Anchorage	25	+ 7	1.0	+ .2	Shreveport	50	- 1	3.8	+ .1	OREG. Astoria	47	+ 3	8.7	+ .9
Barrow	-16	+ 3	.1	+ .1	MAINE. Caribou	28	+15	2.4	+ .3	Burns	29	- 2	.9	- .3
Fairbanks	5	+ 8	.8	+ .5	Portland	32	+ 9	7.1	+ 3.6	Medford	42	+ 1	1.7	- .5
Juneau	33	+ 5	2.9	+ .5	MD. Baltimore	39	+ 4	2.9	+ .1	Pendleton	39	0	1.4	+ .3
Kodiak	34	+ 3	6.4	+ 1.5	MASS. Boston	36	+ 6	6.7	+ 3.2	Portland	44	+ 1	3.9	- .2
Nome	8	+ 3	1.5	+ .7	Chatham	35	+ 4	5.8	+ 2.1	Salem	43	0	3.3	- 1.5
ARIZ. Flagstaff	36	+ 5	1.2	+ .3	MICH. Alpena	24	+ 6	1.9	+ .5	PA. Allentown	35	+ 6	4.8	+ 2.0
Phoenix	61	+ 6	1.1	+ .5	Detroit	29	+ 2	3.1	+ 1.3	Erie	30	+ 5	5.2	+ 3.1
Tucson	58	+ 4	.7	0	Flint	28	+ 4	1.8	+ .2	Harrisburg	35	+ 3	5.9	+ 3.5
Winslow	42	+ 3	.2	- .2	Grand Rapids	30	+ 5	2.0	+ .5	Philadelphia	38	+ 4	2.9	+ .3
Yuma	63	+ 4	.1	- .2	Houghton Lake	24	+ 6	2.1	+ .9	Pittsburgh	31	+ 2	4.2	+ 1.8
ARK. Fort Smith	43	0	2.7	- .5	Lansing	28	+ 4	1.4	- .2	Scranton	35	+ 7	8.1	+ 6.1
Little Rock	45	0	4.7	+ .3	Marquette	18	+ 4	2.2	+ .5	R.I. Providence	37	+ 8	4.8	+ 1.3
CALIF. Bakersfield	55	+ 3	.8	- .2	Muskegon	28	+ 3	2.9	+ 1.1	S.C. Charleston	51	0	2.2	- 1.1
Eureka	51	+ 3	3.7	- 1.5	S. Ste. Marie	19	+ 4	2.6	+ 1.1	Columbia	47	- 1	4.1	+ .4
Fresno	52	+ 2	1.3	- .4	MINN. Duluth	16	+ 4	1.5	+ .6	Greenville	43	- 1	3.9	- .5
Los Angeles	61	+ 5	1.6	- .7	Internatl Falls	15	+ 8	2.2	+ 1.5	S.D. Aberdeen	24	+ 9	.2	- .4
Red Bluff	53	+ 3	1.9	- 1.3	Minneapolis	23	+ 6	2.1	+ 1.3	Huron	26	+ 8	.1	- .7
San Diego	62	+ 5	2.3	+ .8	Rochester	22	+ 5	2.0	+ 1.3	Rapid City	29	+ 3	.1	- .5
San Francisco	54	+ 3	2.2	- .8	St. Cloud	21	+ 8	1.1	+ .3	Sioux Falls	26	+ 7	.3	- .7
Stockton	53	+ 4	.6	- 1.5	MISS. Jackson	49	- 1	2.6	- 2.0	TENN. Chattanooga	43	+ 1	5.1	- .1
COLO. Denver	36	+ 3	.4	- .3	Meridian	51	+ 1	4.7	- .2	Knoxville	42	- 1	3.6	- 1.1
Grand Junction	38	+ 5	.2	- .4	MO. Columbia	33	0	1.1	- .7	Memphis	47	+ 3	3.7	- 1.0
Pueblo	40	+ 5	.2	- .2	Kansas City	33	+ 1	.3	- 1.0	Nashville	43	+ 2	3.8	- .6
CONN. Bridgeport	34	+ 3	4.7	+ 2.0	St. Louis	37	+ 2	2.2	+ .1	TEX. Abilene	49	+ 2	1.1	+ .1
Hartford	35	+ 9	7.3	+ 4.1	Springfield	39	+ 2	1.6	+ .6	Amarillo	42	+ 2	1.2	- .4
D.C. Washington	44	+ 7	2.8	+ .3	MONT. Billings	33	+ 6	.2	- .4	Austin	53	0	1.2	- 1.9
FLA. Apalachicola	55	- 1	3.1	+ .7	Glasgow	26	+11	.1	- .2	Beaumont	54	- 1	3.3	- .9
Daytona Beach	59	- 1	5.5	+ 2.6	Great Falls	31	+ 4	.4	- .4	Brownsville	63	0	.8	- .7
Ft. Myers	66	+ 1	1.7	- .3	Havre	27	+ 9	.1	- .3	Corpus Christi	58	- 2	1.9	- .1
Jacksonville	55	- 1	4.5	+ 1.0	Helena	30	+ 5	.1	- .3	Del Rio	56	0	.2	- .8
Key West	75	+ 3	2.3	+ .8	Kalispell	31	+ 6	2.0	+ 1.0	El Paso	50	+ 2	.4	0
Lakeland	62	0	2.6	+ .1	Miles City	28	+ 6	.1	- .4	Fort Worth	49	0	1.4	- 1.0
Miami	70	+ 2	4.7	+ 2.7	Missoula	31	+ 4	.8	+ .1	Galveston	54	- 2	1.3	- 1.4
Orlando	62	0	4.4	+ 1.4	NEBR. Grand Island	31	+ 3	.2	- .6	Houston	55	0	2.2	- 1.3
Tallahassee	55	0	8.2	+ 3.4	Lincoln	32	+ 4	.2	- .7	Lubbock	45	+ 2	.7	+ .2
Tampa	61	- 1	5.3	+ 2.4	Norfolk	29	+ 5	.4	- .4	Midland	49	+ 1	.7	+ .1
W. Palm Beach	68	+ 2	4.2	+ 1.6	N. Platte	29	+ 1	.1	- .4	San Angelo	50	0	.7	- .1
GA. Atlanta	49	+ 4	6.6	+ 2.2	Omaha	31	+ 5	.2	- .8	San Antonio	54	- 1	1.0	- 1.1
Augusta	49	+ 1	5.3	+ 1.5	Valentine	26	+ 1	.2	- .4	Victoria	56	- 1	1.0	- 1.3
Macon	52	+ 2	8.3	+ 3.9	NEV. Ely	31	+ 3	.1	- .4	Waco	50	- 1	1.8	- .6
Savannah	53	+ 1	2.9	0	Las Vegas	53	+ 4	.2	- .1	Wichita Falls	49	+ 3	3.3	+ 2.1
HAWAII. Hilo	73	+ 2	5.0	- 7.9	Reno	39	+ 2	.2	- .7	UTAH. Blanding	37	+ 4	.4	- .5
Honolulu	74	+ 2	1.0	- 1.5	Winnemucca	37	+ 3	.5	- .3	Salt Lake City	38	+ 5	.8	- .4
Kahului	75	+ 3	1.9	- .7	N.H. Concord	31	+ 8	7.8	+ 5.3	VT. Burlington	33	+14	5.4	+ 3.7
Lihue	73	+ 2	1.9	- 2.4	N.J. Atlantic City	34	0	3.7	+ .3	VA. Lynchburg	41	+ 3	3.8	+ 1.0
IDAHO. Boise	37	+ 1	1.0	- .2	Trenton	39	+ 6	3.6	+ .9	Norfolk	43	+ 2	2.3	- 1.0
Lewiston	40	+ 2	1.2	+ .3	N.MEX. Albuquerque	43	+ 3	.7	+ .3	Richmond	42	+ 3	2.8	- .2
Pocatello	30	+ 1	.5	+ .3	Roswell	46	+ 3	.2	- .2	Roanoke	39	+ 1	2.4	- .7
ILL. Cairo	41	+ 1	4.1	+ .3	N.Y. Albany	33	+ 9	5.0	+ 2.9	WASH. Colville	35	+ 4	1.6	+ .2
Chicago	28	+ 2	2.4	+ 1.1	Binghamton	31	+ 8	3.9	+ 1.6	Omak	37	+ 7	1.7	+ .6
Moline	27	+ 1	2.5	+ 1.2	Buffalo	33	+ 9	3.5	+ .9	Quillayute	44	+ 3	11.0	- 1.0
Peoria	28	0	2.4	+ .9	New York	38	+ 5	5.4	+ 2.3	Seattle-Tacoma	44	+ 2	4.6	+ .4
Rockford	26	+ 2	2.4	+ 1.1	Rochester	32	+ 7	3.1	+ .7	Spokane	34	+ 2	1.4	- .3
Springfield	32	+ 2	2.1	+ .3	Syracuse	34	+ 9	2.7	- .1	Walla Walla	41	+ 1	3.2	+ 1.8
IND. Evansville	37	+ 1	2.9	+ .4	N.C. Asheville	40	+ 1	4.8	+ 1.2	Yakima	39	+ 3	.7	- .1
Ft. Wayne	29	+ 1	2.9	+ .8	Charlotte	44	0	3.6	- .2	W.VA. Beckley	34	+ 1	2.1	- 1.2
Indianapolis	33	+ 2	2.9	+ .5	Greensboro	42	+ 1	3.6	+ .2	Charleston	37	0	4.6	+ 1.5
South Bend	32	+ 6	1.9	0	Hatteras	46	0	2.0	- 2.2	Huntington	37	+ 1	4.2	+ 1.3
IOWA. Burlington	30	+ 3	1.6	+ .3	Raleigh	44	+ 2	3.0	- .3	Parkersburg	36	+ 1	3.9	+ 1.1
Des Moines	30	+ 6	1.0	+ .1	Wilmington	47	- 1	3.1	- .3	WISC. Green Bay	23	+ 5	2.8	+ 1.8
Dubuque	26	+ 4	2.4	+ 1.1	N.DAK. Bismarck	23	+ 9	.4	0	La Crosse	25	+ 5	2.1	+ 1.2
Sioux City	28	+ 5	.3	.6	Fargo	20	+ 9	.5	+ .1	Madison	25	+ 5	2.5	+ 1.5
KANS. Concordia	36	+ 4	.1	.8	Williston	23	+ 9	.2	- .3	Milwaukee	25	+ 2	2.9	+ 1.8
Dodge City	39	+ 4	T	.6	OHIO. Akron-Canton	32	+ 4	4.6	+ 2.4	WYO. Casper	30	+ 3	.2	- .3
Goodland	32	0	T	.4	Cincinnati	34	+ 1	3.9	+ .9	Cheyenne	32	+ 3	.2	- .3
Topeka	36	+ 3	.2	.8	Cleveland	32	+ 4	2.7	+ .5	Lander	27	+ 1	.3	- .4
Wichita	40	+ 4	.2	.8	Columbus	34	+ 4	4.6	+ 2.3	Sheridan	28	+ 2	.4	- .4
KY. Lexington	37	+ 2	4.8	+ 1.4	Dayton	33	+ 3	2.3	+ .1	P.R. San Juan	79	+ 4	2.7	+ .2
Louisville	39	+ 3	3.2	+ .3	Toledo	29	+ 1	3.3	+ 1.5					

Based on 1941-70 normals

Heating Degree Days (Base 65° F.)

February 1981

ALA. Birmingham	463	MAINE, Caribou	1040	OKLA. Okla. City	587
Mobile	323	Portland	910	Tulsa	598
Montgomery	421	MD. Baltimore	727	OREG. Astoria	507
ALASKA, Anchorage	1122	MASS. Boston	794	Burns U.	996
Barrow	---	Chatham	820	Medford	630
Fairbanks	1676	MICH. Alpena	1129	Pendleton	724
Juneau	---	Detroit	1008	Portland	583
Nome	1595	Flint	1023	Salem	610
ARIZ. Flagstaff	794	Grand Rapids	969	PA. Allentown	823
Phoenix	131	Houghton Lake	1143	Erie	967
Tucson	122	Lansing	1026	Harrisburg	844
Winslow	642	Marquette U	1303	Philadelphia	752
Yuma	90	S. Ste. Marie	1297	Pittsburgh	936
ARK. Fort Smith	600	MINN. Duluth	1343	Scranton	835
Little Rock	555	Internat'l Falls	1411	R. I. Providence	769
CALIF. Bakersfield	285	Minneapolis	1160	S. C. Charleston	393
Eureka U.	377	Rochester	1185	Columbia	506
Fresno	359	St. Cloud	1230	Greenville	602
Los Angeles U	147	MISS. Jackson	454	S. DAK. Aberdeen	1146
Red Bluff	322	Meridian	398	Huron	1098
Stockton	341	MO. Columbia	878	Rapid City	993
San Diego	101	Kansas City	880	Sioux Falls	1087
San Francisco	301	St. Louis	783	TENN. Chattanooga	600
COLO. Denver	801	Springfield	735	Knoxville	641
Grand Junction	754	MONT. Billings	905	Memphis	492
Pueblo	697	Glasgow	1091	Nashville	621
CONN. Bridgeport	866	Great Falls	953	TEX. Abilene	439
Hartford	824	Havre	1051	Amarillo	630
D. C. Washington	592	Helena	986	Austin	340
FLA. Apalachicola	273	Kalispell	962	Beaumont	315
Ft. Myers	70	Miles City	1033	Brownsville	117
Jacksonville	273	Missoula	934	Corpus Christi	221
Key West	18	NEBR. Grand Island	926	Del Rio	281
Lakeland U.	---	Lincoln	933	El Paso	405
Miami	25	Norfolk	995	Fort Worth	448
Orlando	119	North Platte	1000	Galveston U.	314
W. Palm Beach	65	Omaha	961	Houston	291
Tallahassee	288	Valentine	1075	Lubbock	563
Tampa	127	NEV. Ely	937	Midland	452
GA. Atlanta	502	Las Vegas	344	San Angelo	411
Augusta	452	Reno	727	San Antonio	332
Macon	349	Winnemucca	779	Victoria	272
Savannah	342	N. H. Concord	953	Waco	417
IDAHO, Boise	783	N. J. Atlantic City	855	Wichita Falls	455
Lewiston	700	Trenton U	732	UTAH. Milford	853
Pocatello	988	N. MEX. Albuquerque	611	Salt Lake City	742
ILL. Cairo U.	668	Roswell	521	VT. Burlington	894
Chicago	1031	N. Y. Albany	885	VA. Lynchburg	670
Moline	1056	Binghamton	951	Norfolk	610
Peoria	1037	Buffalo	895	Richmond	633
Rockford	1089	New York	739	Roanoke	744
Springfield	906	Rochester	908	WASH. Colville	825
IND. Evansville	771	Syracuse	869	Omak	---
Fort Wayne	1004	N. C. Asheville	696	Quillayute	591
Indianapolis	889	Charlotte	574	Seattle-Tacoma	577
South Bend	915	Greensboro	630	Spokane	867
IOWA, Burlington	985	Hatteras R.	524	Walla Walla U.	676
Des Moines	977	Raleigh	583	Yakima	712
Dubuque	1097	Wilmingon	510	W. VA. Beckley	849
Sioux City	1023	N. DAK. Bismarck	1173	Charleston	774
KANS. Concordia	822	Fargo	1266	Huntington	777
Dodge City	728	Williston U	1162	Parkersburg U.	797
Goodland	915	OHIO. Akron-Canton	920	WIS. Green Bay	1175
Topeka	822	Cincinnati U.	858	Madison	1107
Wichita	692	Cleveland	935	Milwaukee	1106
KY. Lexington	777	Columbus	864	WYO. Casper	979
Louisville	728	Dayton	894	Cheyenne	913
LA. Baton Rouge	350	Toledo	1015	Lander	1051
Lake Charles	344	Youngstown	989	Sheridan	1023
New Orleans	275				
Shreveport	425				

National Agricultural Summary

March 2-8, 1981

HIGHLIGHTS: Precipitation fell throughout most of the Nation and helped restore soil moisture supplies to drought-stricken areas. Farmers had 2 to 4 days suitable for fieldwork in the Southeast but were able to accomplish some discing, plowing, spraying, fertilization, and planting. Winter wheat generally rated fair to good, except in Texas where condition varied from poor to good. Corn planting advanced slowly in the South due to wet conditions. Sorghum planting was delayed in Texas and Arizona by rain. Cotton planting was confined to the Southwest. Tobacco plants in the Southeast were in fair to good condition. Vegetable harvesting and planting continued active across the South and in California. Pastures rated fair to good and were improving due to recent rains and warm temperatures. Livestock were in fair to good condition. Calving and lambing was active throughout the Nation.

SMALL GRAINS: Winter wheat condition was fair to good in all major producing States except Texas where conditions varied from poor to good. The crop greened as far north as Nebraska. Most stands have no snowcover and are vulnerable to damage from cold weather. Farmers fertilized fields, especially where mild temperatures encouraged early spring growth.

Kansas wheat condition rated fair. Rainfall during the week helped restore soil moisture; surface moisture was adequate in some areas but subsurface moisture remained short. There was light to moderate greenbug infestation in the southern two-thirds of the State. The oat crop was 50% planted and spring barley seeding was 20% finished.

Rainfall and warmer temperatures aided wheat and other small grain development in Oklahoma. Growers continued to move cattle from winter wheat pastures and sprayed fields for weed and insect control.

Texas winter wheat made excellent growth and small grain pastures provided increased grazing. Dryland fields on the Plains need additional moisture for development. Greenbugs continued to present problems in many areas. Wheat condition rated poor to good.

Montana winter wheat was in fair condition with no snowcover and light wind damage.

Pacific Northwest winter wheat rated good to excellent; spraying continued for weeds and disease problems.

OTHER CROPS: Corn planting advanced slowly during the week due to wet field conditions. Limited acreage was planted across the South from Arizona to Florida and Georgia. Progress ranged up to 6% complete in Mississippi.

Texas sorghum planting advanced to 16% complete, equal to last year's progress but surpassing the 12% average. Planting in Texas and Arizona was slowed during the week due to wet fields.

Cotton planting got underway in the Lower Rio Grande Valley of Texas. Warm temperatures were favorable for early planting; activity should increase as fields dry. Rain delayed planting in Arizona. California growers prepared and seeded plantbeds. Plants were in fair to good condition; some plants in South Carolina were ready to transplant.

FRUITS AND NUTS: Deciduous fruit growers continued to prune trees in northern areas. In the Pacific Northwest, fruit trees were budding. Some peach buds were killed or damaged in Ohio when temperatures fell below zero on February 12 after several warm days.

Florida's citrus trees continued post freeze recovery, with an abundance of new growth. Bloom buds were forming and there were some open blooms in southern areas. The early and mid-season orange harvest was nearly complete. Grapefruit harvesting was very active.

In the Rio Grande Valley of Texas citrus harvest was active. Grapefruit picking was ending, but the Valencia orange harvest moved into full swing.

The Arizona citrus harvest was active as weather permitted. The lemon and grapefruit harvests were seasonally slow, but the Valencia orange harvest gained momentum.

Rain delayed the southern California citrus harvest, although bee activity was good in all areas. Movement of bee hives from almond orchards got underway.

VEGETABLES: Near-ideal conditions continued in Florida's vegetable growing areas. Strawberry and potato harvests were active in some regions. Watermelons responded well to the warm daytime temperatures. Overall vegetable shipments increased 16% from the previous week. Shipments of Chinese cabbage, cucumbers, eggplant, peppers, and tomatoes decreased, cauliflower, okra, and parsley held steady, while most other vegetables increased.

Growers in the Rio Grande Valley of Texas harvested lettuce, carrots, and cabbage and planted watermelons, tomatoes, okra, and squash. In East Texas, planting of potatoes and spring vegetables was underway. Carrot and cabbage harvests continued in the San Antonio-Winter Garden area. In the Trans-Pecos region, growers prepared land for planting spring vegetables.

Lettuce and mixed vegetable harvests were active in the Yuma area of Arizona, but were interrupted by rain and wet conditions in the Salt River Valley. Lettuce and mixed vegetables for harvest later in the year made very good growth.

On the Central Coast of California, artichokes and broccoli were in good supply and asparagus made fairly good growth, although some fields were still dormant. Celery harvesting was active in Oxnard and Orange Counties. Lettuce harvesting was virtually complete in the Imperial Valley, but increasing in the Blythe area. Harvest was expected to start next week in the Kern area. The Riverside potato harvest was nearly complete. Supplies of strawberries were light due to rain. Tomato planting continued active in the San Joaquin Valley.

PASTURE AND LIVESTOCK: Across the South, pastures were in fair to good condition and were improving as a result of recent rains and mild temperatures. Cattle were in fair to good condition and calving and lambing continued throughout the Nation. Feed and hay supplies proved adequate except in a few isolated areas. Mild weather allowed producers to stretch short supplies.

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 ESS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 2° subnormal. Rain less than 0.25 in. Gulf Coast area, 1.00 to 2.00 in. remainder of State.

Fieldwork: 3.0 days suitable. Soil moisture adequate. Plowing 67% complete. Corn planted 4%, last year 7%. Fieldwork on schedule. Feed supply from pasture short. Stored feed supply very short to short. Condition: Wheat fair; pastures poor to fair; livestock fair. Activities: Care of livestock and poultry, spreading fertilizer and lime, plowing, topdressing of small grains, preparation of sweetpotato beds.

ARIZONA: Rain and snow fell most of week. Amounts mostly 0.50 to 2.00 in., local amounts over 3.00 in. White Mountains. Average temperatures 1° above to 7° below normal.

Land preparations, planting cotton delayed by rain, muddy conditions. Small grains made excellent progress with earliest plantings heading, flowering, setting seeds; most other plantings were in stem elongation stage. Sugarbeets made excellent progress. Alfalfa haying continued, conditions permitting. Safflower made good progress. Land preparations, planting corn, sorghum progressed when conditions allowed. Lettuce, mixed vegetable harvest active Yuma; Salt River Valley harvest interrupted by rain, muddy conditions. Lettuce, mixed vegetables for later harvest made very good progress. Citrus harvest progressed, weather permitting. Lemon harvest was winding down. Grapefruit harvest was seasonally slow. Valencia orange harvest gaining momentum. Grapes growing at an accelerated rate, deciduous fruit made good progress. Desert ranges rated poor to fair; higher elevations fair; Mohave, Apache counties very poor to poor. Livestock poor to fair. Water adequate.

ARKANSAS: A cool week with precipitation at the beginning and end. Highest temperature 77°, lowest 23°. Departures from normal ranged from -6 to -1°. Most rainfall 1.92 in., least 0.67 in.

Wheat condition excellent, growth progress above normal to date. Wheat is now susceptible to late freeze. Nitrogen fertilizer application limited. Pastures rated average to slightly above average. Rye grass and small grain pastures making very good growth. Cool temperatures and wet fields limited fieldwork. Livestock in good condition.

CALIFORNIA: An upper level disturbance slipped south along the coast, settling over the Los Angeles Basin. Rainfall from this storm system ranged upwards to about 6.00 in. over parts of the south while the north received totals around 1.00 in. While weekly average temperatures were near seasonal normals, the trend was toward below normal with the southeast interior uniformly below normal by several degrees. Light rains continue to supply needed moisture. Small grains 8 to 12 in. in height and in boot stage. Herbicide applications made for broadleaf weed control. Cotton fields continue to be worked up, beds formed and fertilized, irrigated and herbicides applied for weed control. Alfalfa crop doing well but pesticides applied for weevil control, Tulare County. Rain delayed citrus harvest in south. Bee activity good in all areas. Artichokes, broccoli good supply, Central Coast. Asparagus has fairly good movement, some fields still dormant. Carrots doing well, Imperial; cauliflower light. Celery active, Oxnard, Orange. Lettuce harvest virtually complete Imperial; Blythe increasing; harvest to begin next week Kern. Riverside potato harvest nearly complete. Spinach harvest near, San Joaquin Valley. Range conditions gen-

erally excellent. Grass making good growth. Supplemental feeding discontinued many areas. Water supplies good. Calving, lambing active. Movement bee hives from almond orchards underway.

COLORADO: Low pressure system brought rain and snow to most areas late on 2d and 3d, more rain and snow to the mountains and west on 6th and the east late 6th and 7th. Snowfall varied from a couple of inches in the southeast to 12 in. in Denver and up to 3 feet in some mountain areas. Temperatures were 4 to 5° above normal in all areas.

FLORIDA: Increasing cloudiness but no significant rain accompanied a weak cold front on the 2d. A cool, dry high pressure dominated the 3d and 4th. A cold front moved southeast through the State on the 5th causing heavy rainfall north, lighter amounts south. High pressure built again from the 5th through the 8th but a trough in the Gulf caused increasing cloudiness with a few sprinkles. Rainfall averaged 3.00 in. Panhandle, 1.00 in. north, 0.25 in. central; 0.10 in. south. Temperatures averaged about 2° above normal.

Soil moisture mostly short south, central, short to adequate north, west. Corn planting active. Land being prepared for planting peanuts. Tobacco plants about ready for transplanting. Small grains good condition. Sugarcane harvest nearing completion. Young cane for next season's harvest improving with warmer weather. Pastures improved, but need additional moisture. Cattle mostly fair to good condition. Citrus trees continue post freeze recovery. Abundance of new growth. Bloom buds forming with some open bloom south areas. Early and mid orange harvest all but over. Grapefruit harvest very active. Weather continued near ideal with warm days, cool nights vegetable areas. Temperatures averaged slightly above normal. Cloudy skies, light rains, strong gusty winds accompanied a front on the 5th. Overall shipments were 16% above previous week. Shipments for snap beans, sweet corn, lettuce, radishes, squash and strawberries increased considerably; cabbage, celery, escarole and potatoes also increased. Cauliflower, okra and parsley held steady but Chinese cabbage, cucumbers, eggplant, peppers and tomatoes decreased. Strawberry, potato harvest active some areas. Watermelon plants responding to warm days.

GEORGIA: Temperatures averaged 3 to 6° above normal. Temperatures were near 50° in the mountains and in the low 60's in south areas. Coldest period was late in the week, following rain which fell Statewide. Amounts of rain were 1.00 to 1.50 in. nearly Statewide, except portions of extreme south which received 2.00 to 3.00 in.

Soil moisture rated adequate. Corn and watermelon planting was increasing. Small grains were in good condition. Final applications of nitrogen and topdressing being applied. Pastures rated fair to mostly good condition, tobacco plants and cattle fair to good. No reports of cold damage to peaches.

HAWAII: Weather favorable. Rains broke drought Island of Hawaii. Water reservoirs replenished. Water use restrictions lifted February 27. Field activities increasing. However, some pastures upper eastern part, remain poor. Supplemental feed necessary. Some animals moved to feedlot. Elsewhere Island chain, soil moisture adequate from periodic rainfall. Crop progress fair to good. Vegetables: Supplies most crops continue light. Head cabbage harvest remains active. Bananas:

Total supplies light. Rains beneficial to orchards. Papayas: Supplies moderate. Most orchards received beneficial rains. Pineapples: Harvesting down and erratic. Sugar: Harvesting increasing. Pastures: Rains beneficial. Drought experienced areas still poor.

IDAHO: Temperatures ranged from 2 to 11° above normal. Precipitation was well below normal. All stations received less than 0.20 in.

Calving and lambing continue strong. Feed supplies adequate. Fieldwork on the lighter soils becoming very active. Some spraying and burning. Sugarbeet and potato seed movement active.

ILLINOIS: Temperatures normal to 3° below normal. Precipitation; none northwest, over 1.00 in. southern quarter, 0.20 in. most other areas.

Winter wheat mostly good condition. Livestock mostly good condition. Activities: Machinery repair, livestock feeding, manure hauling, general farmwork.

INDIANA: Temperatures averaged 3° below normal. Extremes: 17 and 50°. Precipitation 0.20 in. north to 0.70 in. south. Sunshine 37% of possible.

Soil temperature in 30's. Fields mostly too wet to support equipment, but where conditions permitted farmers spread fertilizers and manure and seeded legumes and grass seed and stepped up readying equipment for the 1981 season. Otherwise caring for livestock and usual chores.

IOWA: A seasonal to mild week with light rain on the 3d and 4th in all areas except the southwest and southern and southern south central counties. Frost is mostly out of the ground in southern areas but northern soils remain frozen to near-normal depths.

KANSAS: Moisture generally 0.50 to 1.00 in. with local amounts over 1.00 in. parts of west and central. Greatest total extreme northwest with 2.50 in. Temperatures averaged near normal southwest and northeast and between 2 and 4° above normal elsewhere.

Wheat rated fair. Surface moisture adequate in one-half counties reporting, subsurface moisture remains short. Light to moderate greenbug infestations southern two-thirds State. Oat seedings 50% complete, barley seedings 20% complete. Fieldwork: 3.5 days suitable.

KENTUCKY: Temperatures averaged 3 to 4° below normal. Rainfall was near normal with amounts averaging 0.75 to 1.00 in.

Field activities limited by moisture and cool weather. Soil moisture has improved, but still below normal. Winter grains and livestock remain in satisfactory condition.

LOUISIANA: Rainfall was general. Temperatures were 2° below to 2° above normal. Extremes: 34 and 88°.

Fieldwork: 3.4 days suitable. Soil moisture adequate. Spring plowing 39% complete, 24% 1980. Corn planting light. Rice planting underway. Irish potato planting active. Vegetables fair to good. Wheat, pastures, livestock fair to good. Supplemental feeding continued.

MARYLAND AND DELAWARE: Temperatures averaged near normal. Highs averaged in low 80's and lows averaged in upper 20's. Most precipitation 1.69 in. at Oakland, least 0.41 in. at Washington National Airport. The rest of the State averaged little less than 0.75 in.

MICHIGAN: Temperatures generally above normal, Upper Peninsula normal to 1° above normal, Lower Peninsula 5° above normal north to near normal south. Precipitation light most areas. Average precipitation Upper 0.10 to 0.30 in. Snowfall

of trace to 11 in. Average precipitation Lower less than 0.10 in. Snowfall minimal.

MISSISSIPPI: Temperatures ranged from 3° above to 6° below normal. Extremes: 25 and 76°. Clear to partly cloudy early in week. Cold front at midweek brought rain throughout area.

Soil moisture adequate. Fieldwork: 2.3 days suitable. Rains limited fieldwork. Plowing 44% complete. Corn 6% planted. Winter wheat 7% jointing; good to fair condition. Hay and roughage and feed grain supplies short to adequate. Pasture condition fair. Livestock condition fair to good.

MISSOURI: Cool air returned as temperatures averaged 2 to 3° below normal. Most areas received at least 0.50 in. of precipitation. Precipitation was heaviest in the east and southeast. Most of the Bootheel received over 1.50 in. of precipitation.

MONTANA: Mild and mostly dry. Temperatures averaged 5 to 17° above normal. Highest 66° at Roundup, lowest -8° at West Yellowstone. Some light snow fell at end of week in parts of west, north central and central.

Winter wheat condition generally fair. Snow-cover none, wind damage light. Topsoil moisture short to adequate except adequate in northwest. Cattle and sheep condition good. Calving 20%, lambing 25% complete. Newborn calf and lamb losses somewhat lighter than normal. Shearing 35% completed. Grazing remains open.

NEBRASKA: Temperatures averaged near normal. Precipitation was widespread along southern third of State. Amounts ranged from 0.50 in. to an excess of 2.00 in. of moisture.

NEVADA: Unsettled weather prevailed. Weak storm fronts brought light precipitation north, moderate to heavy amounts south and central. Temperatures mostly mild throughout period as cloud cover and southerly winds prevailed. Average temperatures up to 10° above normal northeast, near normal south and central. Extremes: 70 and 10°.

Seedbed preparation made good progress extreme south. Calving and lambing operations aided by mild weather. Livestock good condition.

NEW ENGLAND: Temperatures averaged slightly above normal South and were up to 10° above normal north. Skies were cloudy most of the week. Light precipitation over the region on 6th and 7th.

The maple run continues with the quality improving and the flow from fair to good.

NEW JERSEY: Temperatures averaged 2 to 5° below normal. Extremes: 11° at Pomona on the 4th and 50° at several stations on the 3d. Rainfall averaged 0.58 in. north, 0.71 in. central and 0.77 in. south.

Estimated soil moisture, in percent of field capacity, averaged: 100 north, 100 central and 100 south. Four inch soil temperature averaged: 33° north, 39° central and 42° south. Farmers caring for livestock and tending to other normal winter chores.

NEW MEXICO: Storm early in week brought rain and snow to all sections except the southeast plains. Some additional precipitation 6th and 7th. Temperatures averaged 1 to 5° cooler than normal.

Soil moisture continued in short supply in most areas. Fieldwork was interrupted by rain and snow. Plowing and preirrigating were the main activities. Irrigated winter wheat in good condition while dryland in poor condition. Grazing of irrigated winter wheat continues around 50%, but some areas reported less than 10% being grazed. Barley in fair to good condition. Alfalfa

fields in the south beginning to green and show growth as irrigation getting underway. Fruit trees blooming in the southern regions. Lettuce and onions continue to make good progress and Chile planting is expected to start within the week. Ranges continue in poor to fair condition. Livestock in fair to good condition with calving well underway. Shearing of sheep continuing in the southeast.

NEW YORK: Temperatures averaged near normal with the highest readings generally at the very beginning and toward the end of the week. Precipitation averaged lower than normal except for extreme southeast where precipitation averaged near or a little above normal.

NORTH CAROLINA: Temperatures were seasonal. Precipitation averaged 0.03 to 1.95 in.

Soil moisture: 1% very short, 32% short, 66% adequate, 1% surplus. Fieldwork: 4.3 days suitable. Conditions: Wheat, oats, barley, and rye fair to mostly good; tobacco beds fair to mostly good; pastures and Irish potatoes mostly fair to good. Plantings: Spring potatoes 45%; some spring cabbage. Supplies: Hay, roughage, and feed grains mostly adequate. Major activities: Top-dressing small grains and pastures, disking, caring for tobacco plant beds, pruning fruit trees, planting Christmas trees, tending livestock and poultry, and planting gardens.

NORTH DAKOTA: Mild temperatures prevailed with virtually no precipitation. Average temperatures were 5 to 15° above normal. Extremes: -1 and 55°.

Calving and lambing increased but will not get into full swing for at least one more week. Early calves mostly in good condition with expectations of fewer losses than usual if warm dry weather continues. White muscle disease is more prevalent this year due to poor quality roughage and Vitamin E deficiency. Frost depth less than usual in the southern one-third of the State with some locations now having up to the top 4 in. frost free. Fieldwork currently expected to start ahead of normal in southern locations.

OHIO: Average temperatures were from 2 to 5° below normal. Lows ranged from the mid teens to the low 20's. Highs were in the 50's in the south. Precipitation ranged from only a few hundredths of an inch in the northwest to nearly 0.75 in. in the southeast. Amounts were generally 0.25 to 0.60 in. below normal. Snowcover ranged from trace amounts to around 1 in. Soil temperatures averaged mostly in the mid to upper 30's under both grass and bare cover. Soil freeze layers are gone, and any new freezing of soil was limited to the upper inch on cold mornings.

Wheat is greening in the heavy wheat area of northwest. Little damage has been done by the above normal February precipitation. Limited plowing is being done. The warm weather late in February has reduced maple syrup production. Peach buds were killed or damaged 12th when after 2 to 3 days of temperatures above 50°, thermometer reading dived below zero.

OKLAHOMA: Beneficial rain occurred Statewide. Amounts ranged from 0.71 in. southwest to 1.83 in. south central. Temperatures averaged near normal.

Rains and warmer temperatures aiding wheat, other small grains, pasture and range development. Cattle continue to come off wheat; some bloat problems reported after rains. Spraying to control weeds and insects, fertilizing wheat and pastures, and caring for livestock were primary activities. Days suitable fieldwork: 4.1.

OREGON: Balmy springlike weather prevailed. Portland reported alltime highs of 64, 67, and 63° on 1st, 2d, and 3d. Despite rain that fell toward the end of the week, rainfall totals continued below

normal. Coastal stations received an average of less than 0.80 in. while the Willamette Valley fared slightly better with 1.00 in.; southwestern valleys reported 0.40 in.; less than 0.20 in. fell elsewhere in the State.

Soil moisture supplies mostly adequate. Winter wheat condition good to excellent; spraying continuing for weeds and disease problems. Planting of onions underway in Malheur County. Green peas going in at the lower elevations. Early potatoes being planted.

PENNSYLVANIA: Storm moved into the State during midweek depositing 1 to 6 in. snow. Heaviest amounts fell in the Lower Susquehanna Valley. Precipitation averaged around 0.40 in. Temperatures ranged from 2 to 4° below normal. Extremes: 48 and 6°.

PUERTO RICO: Island average rainfall 0.74 in. or 0.20 in. above normal. Temperatures averaged about 78 to 77° on Coasts and 73 to 71° Interior divisions. Extremes: 93 and 52°.

SOUTH CAROLINA: Unseasonably warm weather changed to slightly below normal by end of week. Light frost reported over much of the State. Rainfall during midweek measured below normal.

Peaches starting to bloom in Ridge area. Vegetable planting active along South Coast. Tobacco plants in some areas ready for transplanting.

SOUTH DAKOTA: Extremely dry conditions continued. Only a trace of moisture was reported at scattered locations. A few stations in the northeastern and east central portions of the State have received as much as 1.00 in. of moisture thus far in 1981. Other reporting stations are significantly below normal. Temperatures remained mild with warm days and cool nights. Averages were in upper 20's to mid-30's. Temperatures were about 5° above normal in the northeast, 4° above normal in the southeast and 8° above normal west of River. High temperatures for the week ranged in the 50's to low 60's. Oral had the maximum reading with 65°, followed by Edgemont with 64 and Hot Springs, Oelrichs and Armour all with 63°. Low temperatures were generally between 6 and 12° east of the River and 10 to 14° west of the River. Belle Fourche claimed the lowest with 4° below zero, followed by Mellette with 1° and Conde, Eureka and Faulkton with 2°.

TENNESSEE: Temperatures were mostly below normal, averaging 1° below normal in the west and about 3° below normal in both central and eastern areas. Precipitation averaged 1.00 in. in east and mid-State, about 1.25 in. on the Cumberland Plateau and nearly 1.50 in. in the west.

Farm activities include topdressing of small grains, tobacco bed preparation and seeding, pasture renovation, spring plowing, vegetable planting, general farm chores and caring for livestock.

TEXAS: Weather: Low pressure system triggered heavy thunderstorms Panhandle, some tornadoes on 3d and 4th. Fair skies prevailed 5th and 6th. Saturday showers, heavy thunderstorms. Sunday, cloudy skies prevailed, some drizzle northwest. Temperatures 10° above normal extreme West Texas. Most of State was 5 to 8° below normal. Precipitation near normal West, South Texas, Panhandle, while 0.50 to 1.50 in. above normal over remainder of State.

Range and livestock: Range, pasture conditions improved. Grasses, small grains showed excellent growth. Pastures providing good grazing, supplemental feeding continued. Livestock fair to good. Markets active.

Commercial vegetables: Rio Grande Valley harvest of lettuce, carrots, cabbage continued.

Volumes good, cabbage off. Onions maturing rapidly. Planting of watermelons, seeding of tomatoes, okra, squash active. Citrus harvest active, grapefruit wrapping up, Valencia oranges in full swing. East Texas planting of potatoes, spring vegetables underway. Onions doing well. San Antonio-Winter Garden area spinach, onions doing well. Harvest of carrots, cabbage continued. Trans-Pecos region onions progressing well, land preparation continued. Coastal Bend area cantaloups, watermelons progressing well.

Crops: Scattered showers over most of State during week. Moisture conditions improved, additional rain needed to replenish topsoil moisture. Land preparation, planting delayed by wet conditions. Corn planting continued South Texas, Rio Grande Valley. Preplant preparation continued Central, East Texas, planting expected soon. Plains, producers beginning land preparation. Sorghum planting delayed due to wet fields. Planting expected to begin East Texas to Low Plains. Small grains made excellent growth. Small grain pastures providing increased grazing. Plains dryland fields need of additional moisture. Greenbugs continued problem. Wheat condition Statewide is 7% excellent; 26% good; 44% fair; 23% poor. Northern High Plains condition 9% good; 50% fair; 41% poor. Cotton planting has begun Lower Rio Grande Valley. Warm temperatures favorable for early planting, activity should increase as fields dry. Cotton planted 1%, 2% 1979, 1% average. Sorghum planted 16%, 16% 1979, 12% average.

UTAH: Average temperatures ranged from 2° below to 8° above normal. Moisture moderate forepart period to heavy middle of week. Mostly snow in mountains, rain and snow in valleys, lighter amounts northern section.

Storms reduced soil moisture deficiencies in some southern areas. Lambing on western ranges full swing, calving also in progress. Turkey placements continue. Fruit tree pruning and orchard cleanup in progress. Some apples and potatoes still moving to market.

VIRGINIA: Seasonally cool during the week. Extremes: 40's and 50's to 20's and 30's. State-side rain mainly 4th and 5th, averaging 0.75 in. most locations.

Fieldwork: 3.3 days suitable. Topsoil moisture supply adequate to short. Winter grains and pasture condition continues only fair. Livestock condition mostly normal, and calving and lambing operations good due to warm weather trend. Feed supplies continue short, but may hold through winter because warmer weather has reduced demand. Hay supplies short in central region. Farmers

were active topdressing small grains, fertilizing and liming, overseeding pastures and hay fields, preparing and seeding tobacco plant beds, land preparation for spring planting, soil sampling and manure spreading.

WASHINGTON: West: Temperatures were 1 to 3° above normal. Precipitation was mainly about 25% of normal with the southern part almost 75% of normal.

Foggy fields holding back fieldwork. Only minor cultivation and fertilization. Daffodil cutting continues. Cauliflower harvest to begin in two weeks. Fruit trees budding and pruning near completion. Raspberries being topped and new plantings started. Christmas tree shearing and planting persists. Hay supplies adequate. Pastures putting on rapid growth.

East: Temperatures were 2 to 6° above normal. Precipitation was mostly about 25% of normal. The exception being in the northern part with normal to twice the normal amount. Fruit pruning accelerated. Spraying pear psylla. Potato and cereal crops being planted. Soil moisture adequate. Foot rot and stripe rust showing in wheat. Fertilizing and herbicide applications in grain. Livestock good condition. Calving and lambing active.

WEST VIRGINIA: Temperatures averaged below normal. Extremes: 57 and 12°. Precipitation averaged below normal. Some rain and snow fell during the latter part of the week.

Soil moisture adequate. Days suitable for fieldwork: 2.4. Main activities: Some plowing, calving, general chores. Hay, grain and other feed supplies adequate.

WISCONSIN: Temperatures near or slightly above normal. Highs in 30's and 40's, lows mostly teens except colder north. Extremes: 52 and -13°. Precipitation light snow or flurries, with locally heavier snow near Lake Michigan and Lake Superior. No snowcover except extreme north. Frost depths continuing to decrease.

WYOMING: Weather continued unseasonably warm and dry; exception was southern counties and Platte River drainage which receive significant snow from two storms that passed across area. Big Horn drainage was warmest with 63°. Coldest was Snake River drainage at 3°.

Winter wheat mostly good condition, many areas have short topsoil moisture. Livestock mostly good condition. Some early calving underway. Lambing continued.

International Weather and Crop Summary

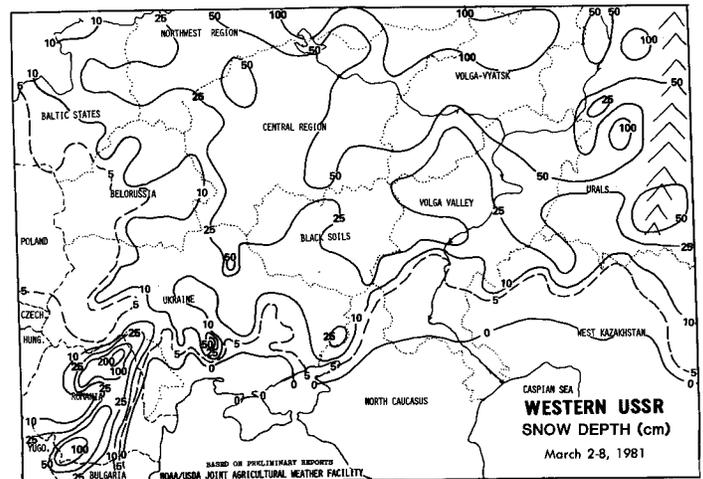
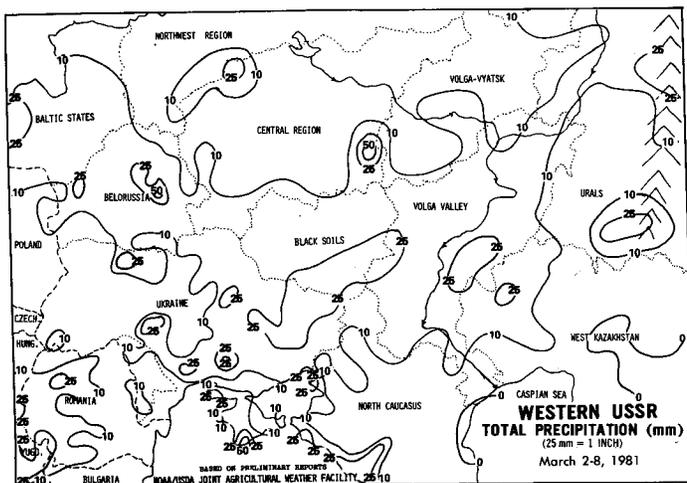
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HIGHLIGHTS

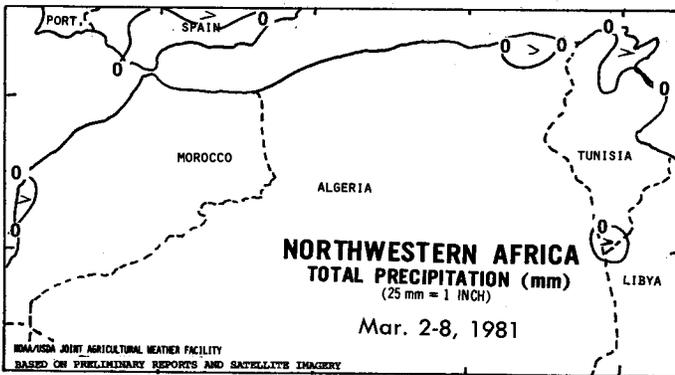
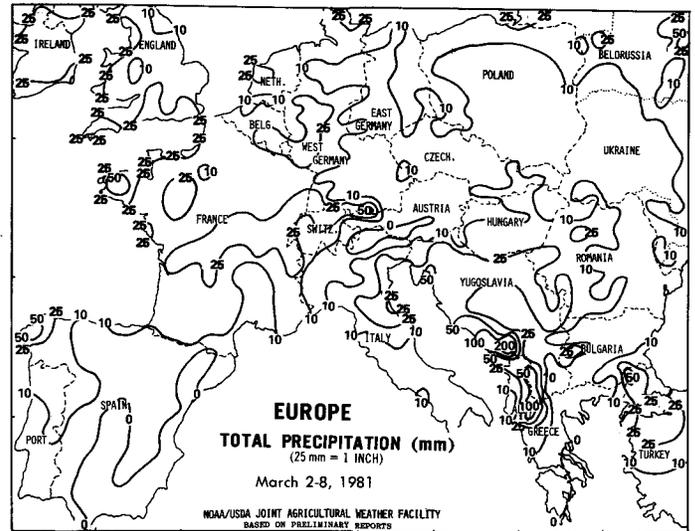
- WESTERN USSR:** Above-normal precipitation and temperatures near freezing again raised the danger of frost-heaving damage to winter grains in the southern and eastern Ukraine. Snow depths changed little from the previous week.
- EUROPE:** Beneficial precipitation moved into some dry portions of Portugal, Spain, and northern Italy, but winter grain conditions continued to deteriorate in southern Portugal and Spain, and to a lesser extent, in the western part of the Po Valley in Italy.
- NORTHWESTERN AFRICA:** With no precipitation falling in the region, conditions remained good in Tunisia and Algeria, but continued to decline in Morocco.
- SOUTH AFRICA:** Sunshine and showers provided favorable growth conditions for corn as it advances through the grain-filling stage.
- CHINA:** Conditions warmed enough for winter grain growth, but little or no precipitation fell. Irrigation supplies are short in the north.
- INDIA:** Precipitation in the hills benefited winter grains, and dryness elsewhere was favorable for harvesting.
- MEXICO:** Warm conditions favored northeastern corn and sorghum, and hastened citrus bloom. Northwestern rains benefited wheat and rangelands, and increased water storage.
- SOUTH AMERICA:** Crop harvests have begun in northern areas of the Brazil/Argentina corn and soybean belt. Soil moisture supplies are generally adequate except in northern Brazil where dry weather has caused rapid crop maturation.

WESTERN USSR: Above-normal precipitation returned to winter grain areas in the southern and eastern Ukraine. Nearly all winter grain areas received at least some additional moisture. In spite of the danger of frost-heaving damage to overwintering grains due to freezing and thawing of wet soils, the abundance of moisture will benefit crops as dormancy breaks. Temperatures during the

week remained cold enough to prevent winter grain growth. Snow depths changed very little from the previous week. The greatest danger for winterkill by extreme cold persists in the lower Volga Valley, but no threat currently exists, and the probability of such an occurrence is decreasing as spring approaches.

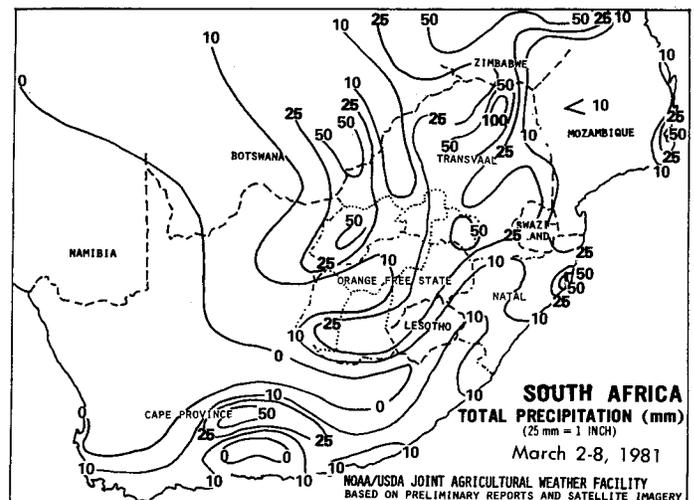


EUROPE: Above-normal precipitation in many parts of the northwestern countries maintained favorable conditions for winter grains. Some beneficial moisture moved into dry portions of Portugal, Spain, and northern Italy, but winter grain conditions continued to deteriorate in southern Portugal and Spain, and to a lesser extent in the western part of the Po Valley in Italy. Light to moderate precipitation in eastern countries kept soils adequately moist. Above-normal temperatures melted the snow in most eastern agricultural areas, but conditions remained cool enough to prevent winter grain growth. It warmed enough in the west to permit winter grain to resume growth in many countries.



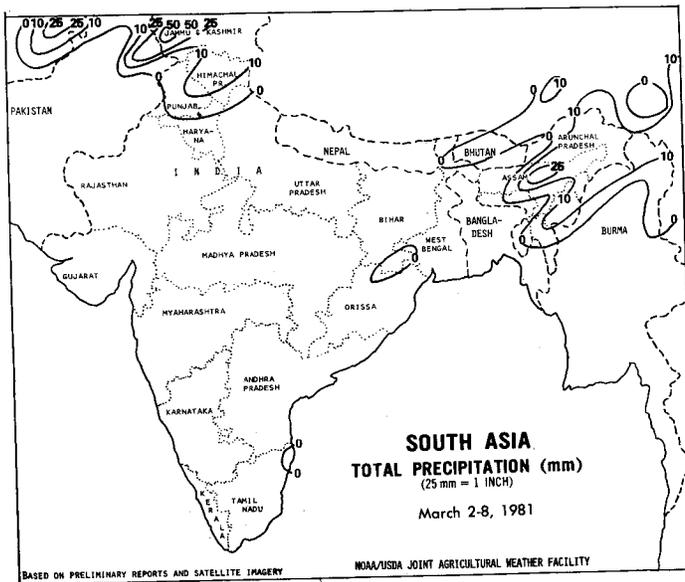
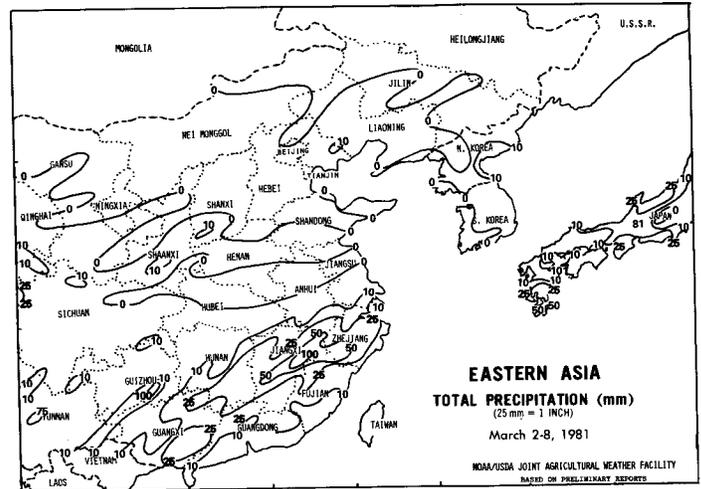
NORTHWESTERN AFRICA: Virtually no precipitation fell in the region. Winter grains in Algeria and Tunisia should still have adequate moisture, but conditions in Morocco continue to deteriorate. Yield prospects in southern grain areas of Morocco are poor, and in northern areas they are steadily declining. Above-normal temperatures continue to stress crops.

SOUTH AFRICA: Showers produced 10 to 50 mm of rainfall throughout the Maize Triangle. Heaviest amounts were generally concentrated in the northern portion of the Orange Free State. Soil moisture supplies are adequate for corn growth in most areas. The crop is now in the grain-filling period and several consecutive sunny days should have benefited early-season varieties which will mature during the next several weeks. Yield prospects remain good for this season's crop.



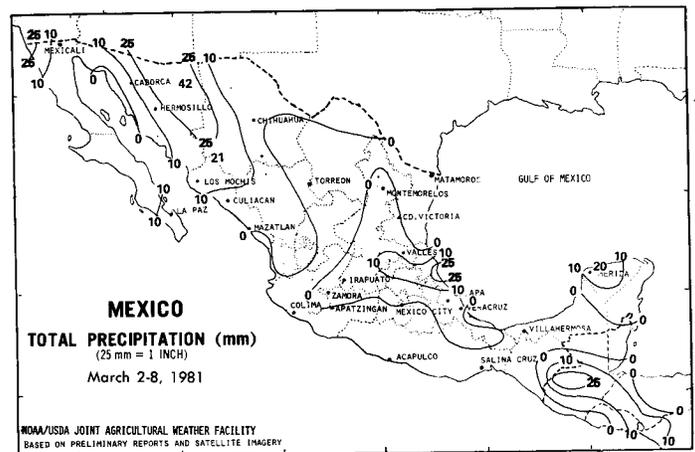
EASTERN ASIA: Conditions warmed again early in the week over China's winter grain belt. Air temperatures actually became warm enough for winter grains to resume growth over most of the belt, but little or no precipitation fell. Southern portions of the belt probably had adequate moisture due to abundant precipitation in mid-February, but persistent dryness in the north may have reduced potential yields, even though crops have been dormant. The hilly areas south of the Yangtze River continued to receive above-normal rainfall.

In South Korea, very little precipitation fell on barley fields, but soil moisture remained adequate. Conditions became warm enough for growth only along the southern coast.



SOUTH ASIA: Precipitation in winter grain areas was limited mostly to hilly terrain in northern India, with lighter amounts in Punjab and northeastern Pakistan. The later-developing grains in these northerly areas will benefit from the moisture. The dryness elsewhere was favorable for harvesting. Precipitation also continued in extreme northeastern India, a pattern normal for this season. The normal onset of rains in southern India has not yet begun, but agricultural consequences remain minimal so far.

MEXICO: Warm temperatures over the northeast kept young corn and grain sorghum progressing well. Citrus began blooming a little earlier than usual. It was cool and damp over much of the northwest. Heavy rains continued west of Hemosillo, while light amounts extended into parts of the West Coast vegetable area. For the most part, the moisture benefited winter wheat, rangelands and livestock and increased reservoir levels.



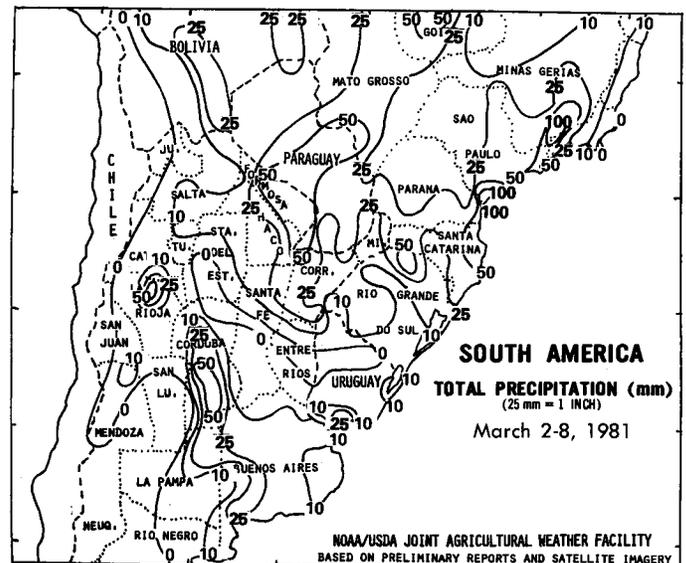
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SOUTH AMERICA: Showers and thunderstorms produced varying amounts of weekly rainfall throughout the Brazil/Argentina corn and soybean crop areas. In Brazil, 35 to 50 mm of rain fell in Santa Catarina State while more northern and western crop areas, as well as Rio Grande do Sul, generally received less than 20 mm of weekly rainfall. Much of Argentina's corn and soybean areas received some rainfall (less than 20 mm), but sorghum areas of Cordoba received 30 to 50 mm of rain. Conditions remain generally favorable for crop growth in most areas. The dry weather in northern crop areas of Brazil (Goias and Minas Gerais in particular) may speed up maturing crops as the harvest season begins. The sorghum harvest has also begun in northern crop areas of Argentina with favorable yield prospects expected.



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