

# WEEKLY WEATHER AND CROP BULLETIN

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National Weather Service

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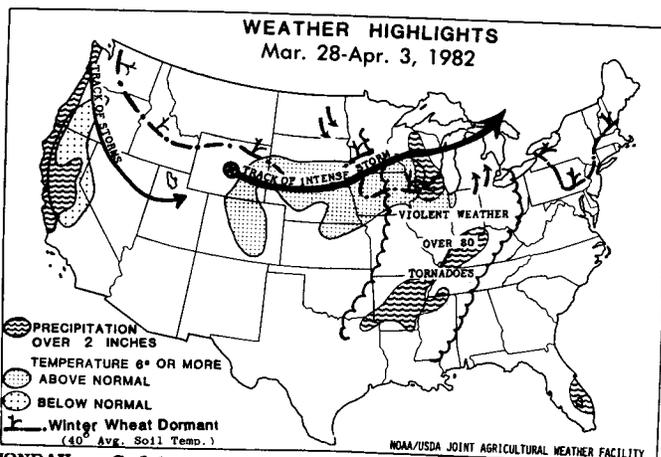
April 6, 1982

## National Weather Summary

March 28-April 3

**HIGHLIGHTS:** A succession of cold fronts moved into the West and kept the weather cool and showery. Moderate to heavy rainshowers moved along the west coast, and snow piled deep in the mountains. A cold outbreak descended on the East early in the week, followed by a warming trend. Near the end of the week, a low pressure system deepened in the central Plains and moved slowly northeastward. Points in Wisconsin recorded the lowest pressure ever. Severe weather developed ahead of the storm from eastern Texas to the Lakes and moved eastward to the Atlantic. Tornadoes, hail, high winds, and heavy rain occurred along the front as it moved eastward.

**SUNDAY...**A cold front scattered rainshowers from California to the northern Rockies. The rain changed to snow in the higher mountains, and thunderstorms scattered hail from central California into Idaho. Early morning record low temperatures hit the eastern United States from Maine to the Carolinas. The cold outbreak damaged early blooming apples and peaches from Virginia to Georgia, and severely damaged them in the Piedmont of South Carolina. As the cold high pressure settled in the East, rainshowers broke out in Florida.



**MONDAY...**Cold weather continued in the East and set early morning low temperature records from Maine to North Carolina. Rainshowers, wind, and cold air covered the West, and snow fell in the mountains. Showers and thundershowers shook the Southeast. Warm, moist air from the gulf flowed northward through Texas and encountered a building storm in the central Plains. Showers and thunderstorms covered the Plains and moved into the western Lakes area.

**TUESDAY...**A cold front moved to the central Great Lakes and extended to eastern Texas. Showers and thunderstorms dumped rain along and ahead of the front as it moved eastward from North Dakota. The showers reached into the mid-Atlantic States and through Alabama. Heavy thunderstorms deluged parts of southern Mississippi and central Louisiana. Out West, showers continued from central California northward and eastward to the Rockies.

**WEDNESDAY...**The cold front in the East moved through the Northeast to the Virginia coast and to the lower Mississippi Valley. Light rain fell from the central

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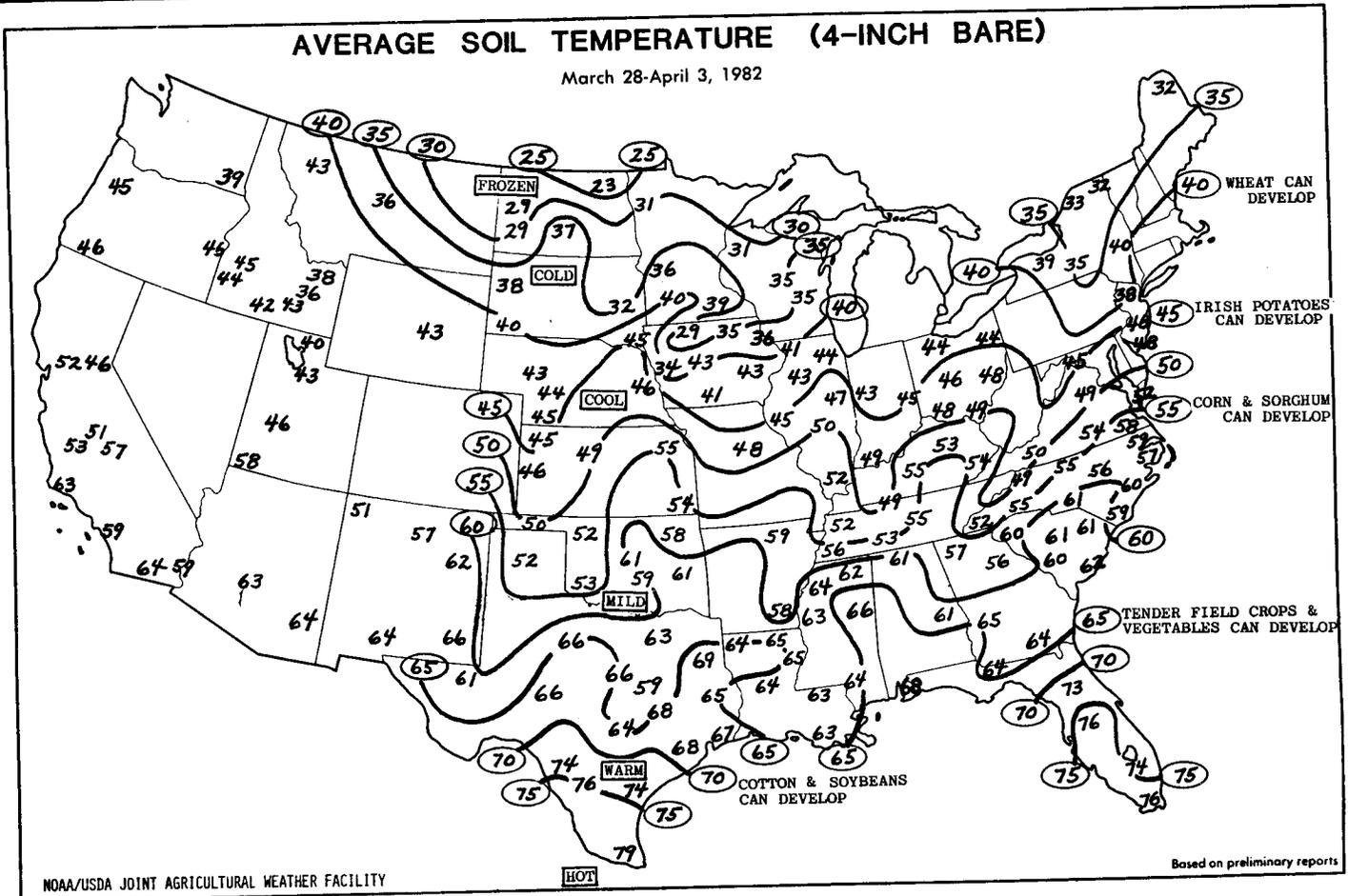
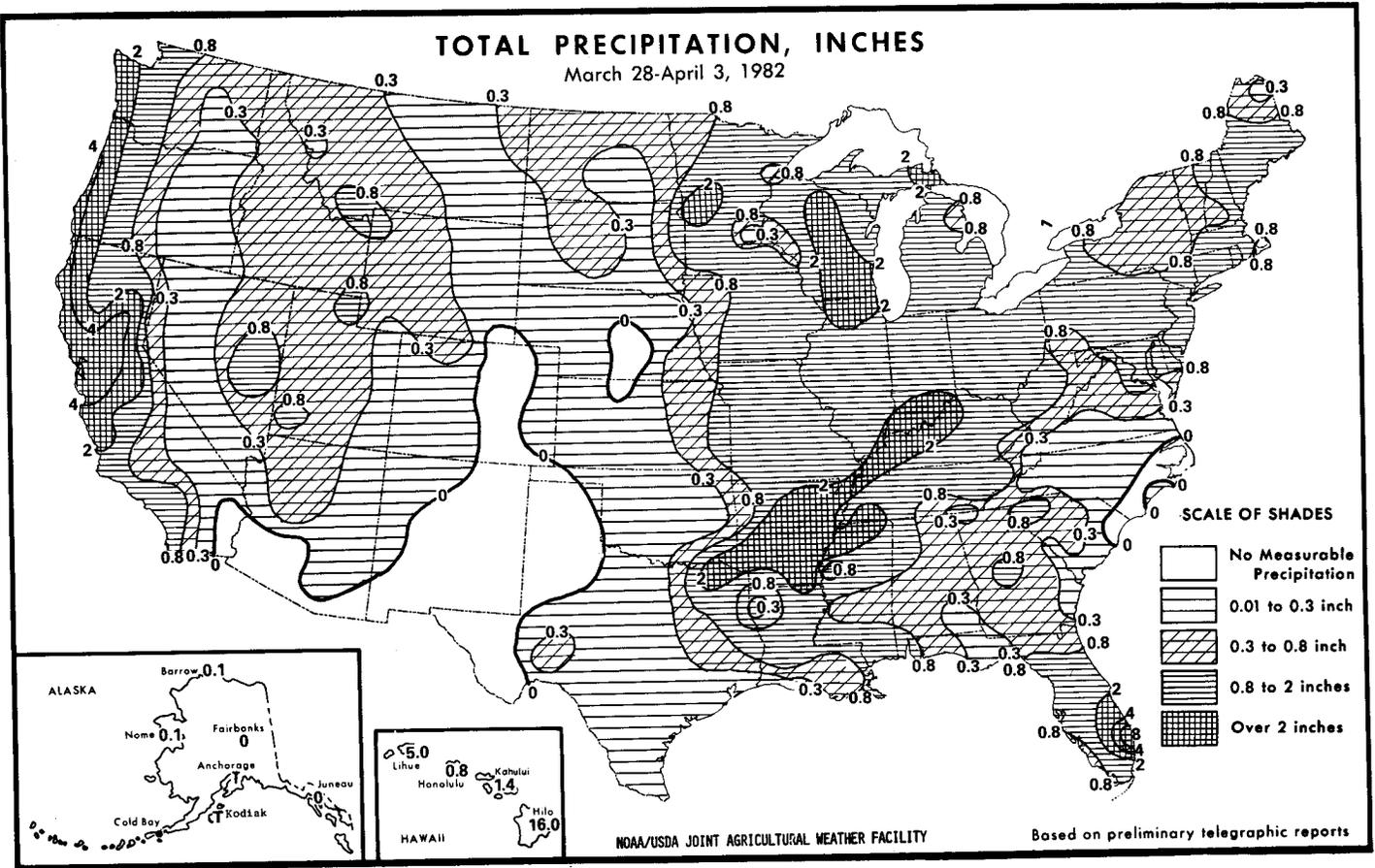
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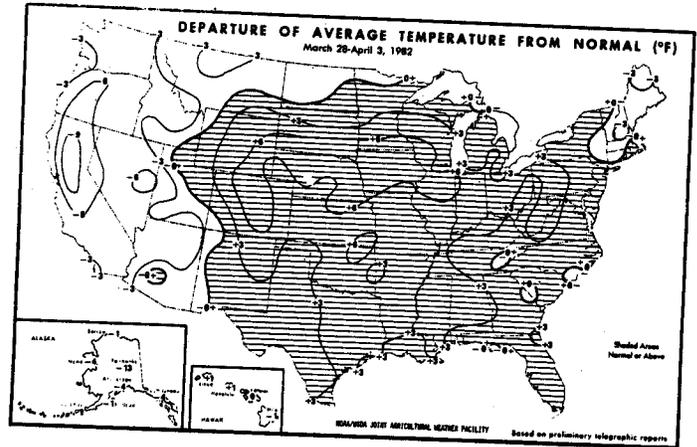
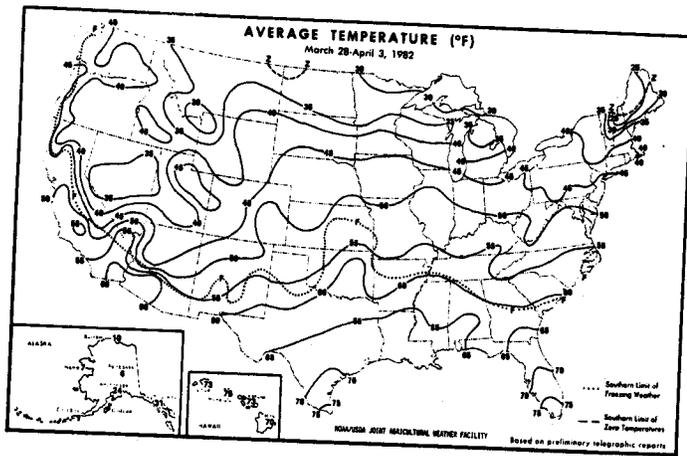
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ed on wheat and cereal leaf beetles have been spotted in central area barley fields.

**WASHINGTON: Weather:** A persistent low pressure system, centered just off the northwest coast, fed cool, moist, and unstable air over the State. Average temperatures were much below normal. Precipitation amounts varied considerably, typical of showers that occur in cool, unstable air.

**West:** Very little field activity due to cold and wet weather. Some liming and fertilizing was done. Early seeding of spinach, lettuce, and radishes was done. Field rhubarb and cabbage seed looks good. Harvest of winter cauliflower to begin soon. Daffodil and tulips were harvested. Pastures greening up. Livestock in good condition with some being placed on pasture.

**East:** Planting activities included spring wheat, barley, dry peas, potatoes, field corn, green peas, sweet corn, and tomatoes. Winter wheat and barley in average condition, with cheatgrass a concern to some growers. Asparagus has emerged, harvest to begin soon. Other fruits close to normal. Application of dormant sprays continues. Hay and pasture feed supplies remain adequate.

**WEST VIRGINIA:** Temperatures averaged near normal. High 82°, low 30°. Precipitation below normal in southern and northeastern areas, normal elsewhere. Range 0.04 to 1.22 in.

Soil moisture adequate to surplus. Days worked averaged: 3.1. Some plowing being done. Hay adequate to short. Grain and other feeds supplies adequate.

**WISCONSIN:** Week began on a pleasant note, partly cloudy skies and daytime temperatures 40's and 50's. Temperatures climbed into 60's in the south and 50's in the north. On 30th scattered thunderstorms developed producing tornadoes and hail in different areas. High winds of 15 to 30 mph with gusts up to 50 mph were recorded on 31st. Storms on 2nd and 3rd produced flash flood warnings and a travel advisory. Rainfall amounted to 1.00 to 2.50 in. and caused minor flooding. The temperature dropped on 3rd produced 1 to 3 in. of snow around the State with 5 to 10 in. reported in the Lake Superior snow belt. High winds with gusts up to 60 mph made visibility almost zero. High for the week was 68° in Madison on 31st. The low was 4° in Park Falls on the 3rd.

**WYOMING:** Temperatures averaged well above normal. Warmest temperatures in southeast. High temperature 78°. Coldest readings in northwest, -1°. Precipitation below normal most places. Greatest amount of moisture 0.96 in.

Topsoil moisture adequate 56% State. Subsoil moisture short 59% State. Four days suitable for fieldwork. Oats planted: 9%; last year 15%; normal 8%. A few fields of spring wheat had been planted. Barley planted: 25%; last year 45%; normal 23%. Sugarbeets planted: 9%; last year 10%; normal 4%. Winter wheat mostly fair, additional moisture needed for good development, scattered light wind damage. Spring calves born: 70%; last year 45%; normal 52%. Farm flock: Ewes lambed 60%; shorn 50%. Range sheep: Ewes lambed 30%; shorn 25%. Prospects for spring grazing mostly fair. Feed supplies adequate.

Weather Data for the Week Ending April 3, 1982

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 Feb. 28	PCT. NORMAL SINCE Feb. 26	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	74	50	84	35	62	4	.5	-.8	.3	3.5	43	17.6	106	84	33	0	0	3	0
MOBILE	74	58	82	42	66	2	.9	-.6	.9	5.1	65	16.1	97	82	49	0	0	1	1
MONTGOMERY	75	56	84	47	66	5	.3	1.0	.3	4.2	62	18.8	130	73	38	0	0	2	0
AK ANCHORAGE	32	17	35	13	24	-4	T	.1	T	.4	57	1.1	50	61	35	0	7	0	0
BARROW	-3	-17	18	-25	-10	-1	.1	0	.1	.3	150	.9	113	77	54	0	7	1	0
FAIRBANKS	19	-8	23	-16	6	-13	0	.1	0	.4	80	1.1	79	49	27	0	7	0	0
JUNEAU	39	23	42	20	31	-4	0	.7	0	6.3	162	10.6	97	80	38	0	7	0	0
KODIAK	39	26	45	19	33	-1	T	.8	T	1.8	41	13.1	94	72	40	0	7	2	0
NOME	17	-2	24	-15	7	-4	T	0	.1	1.0	100	4.1	158	79	57	0	7	3	0
AZ PHOENIX	75	53	85	49	64	1	T	.1	T	1.3	153	2.6	140	60	19	0	0	0	0
PRESCOTT	56	30	62	25	43	-5	.4	-.1	.2	2.1	124	5.1	106	99	38	0	6	3	0
TUCSON	74	44	82	42	59	-2	T	.1	T	1.3	153	2.5	121	65	13	0	0	1	0
YUMA	75	53	80	48	64	-3	0	0	.9	225	1.2	130	50	20	0	0	0	0	0
AR FORT SMITH	73	42	81	35	58	1	.3	-.6	.2	2.1	99	7.6	78	81	26	0	0	2	0
LITTLE ROCK	69	51	80	36	60	3	3.3	2.1	3.1	5.2	31	14.9	107	81	45	0	0	2	1
CA BAKERSFIELD	66	46	72	40	56	-3	.7	.5	.7	2.3	230	3.4	117	69	32	0	0	3	1
EUREKA	51	39	53	35	45	-4	4.1	3.2	.9	8.7	155	18.9	108	86	69	0	0	7	5
FRESNO	56	40	66	34	48	-8	1.6	1.2	.7	5.0	263	7.7	151	93	59	0	0	5	1
LOS ANGELES	60	49	63	43	54	-3	1.3	.9	1.0	4.5	196	7.9	116	80	54	0	0	3	1
RED BLUFF	51	43	59	41	47	-9	1.0	.5	.3	4.4	147	10.3	101	95	63	0	0	5	0
SACRAMENTO	53	42	60	37	47	-9	4.0	3.5	1.7	7.5	234	15.4	157	93	69	0	0	7	3
SAN DIEGO	63	53	66	50	58	-2	.9	.6	.5	4.9	306	8.5	170	80	47	0	0	4	1
SAN FRANCISCO	54	44	58	40	49	-5	5.4	4.9	1.9	8.7	311	20.3	207	91	68	0	0	7	5
CO DENVER	64	33	74	26	48	7	0	.4	0	.2	15	.6	25	48	12	0	3	0	0
GRAND JUNCTION	60	36	66	33	48	2	-1	-.1	T	1.0	111	1.7	77	71	22	0	0	3	0
PUEBLO	69	36	81	29	53	7	0	.2	0	.1	13	.9	60	48	16	0	3	0	0
CT BRIDGEPORT	53	32	63	20	43	0	.9	.1	.5	2.4	60	10.4	112	70	35	0	3	2	1
HARTFORD	55	27	67	18	41	-1	1.8	.9	1.1	3.7	88	11.3	111	79	28	0	6	2	2
DC WASHINGTON	66	40	74	23	53	2	.8	.1	.4	3.3	85	8.9	102	74	28	0	2	2	0
FL APALACHICOLA	71	55	81	45	63	-1	2	-.8	.2	7.7	145	16.6	139	92	67	0	0	3	0
DAYTONA BEACH	76	60	84	57	68	1	1.5	.8	1.0	5.9	151	10.4	120	91	61	0	0	2	1
JACKSONVILLE	78	58	85	53	68	3	.6	-.2	.4	4.4	107	9.1	88	96	56	0	0	2	0
KEY WEST	82	74	84	72	78	2	.5	.1	.4	3.6	189	5.7	108	81	62	0	0	2	0
MIAMI	80	70	82	68	75	2	1.5	.9	1.3	4.8	185	6.1	92	88	56	0	0	4	1
ORLANDO	79	61	85	57	70	1	1.5	.7	1.2	4.6	115	7.7	87	93	53	0	0	2	1
TALLAHASSEE	76	52	84	46	64	0	.2	-1.0	.1	4.8	72	14.0	95	95	63	0	0	2	0
TAMPA	77	60	83	53	69	0	.9	.1	.9	3.0	70	6.5	73	100	63	0	0	1	1
WEST PALM BEACH	78	69	82	66	73	2	9.2	8.4	5.5	16.7	439	20.2	231	87	60	0	0	5	2
GA ATLANTA	68	48	79	31	58	2	-.6	-.7	.4	4.5	56	16.2	107	76	32	0	1	3	0
AUGUSTA	72	44	82	29	58	-1	.3	-.7	.2	1.8	33	9.4	77	92	43	0	1	3	0
MACON	72	50	85	38	61	0	.9	-.1	.8	3.0	52	13.1	98	92	43	0	0	2	1
SAVANNAH	73	53	86	41	63	1	.1	-.8	.1	1.8	37	8.2	79	83	45	0	0	1	0
HI HILO	75	65	80	64	70	-1	16.0	13.0	6.5	45.4	289	60.0	165	96	77	0	0	7	4
HONOLULU	80	70	81	69	75	1	.8	.2	.3	4.0	114	19.0	192	81	65	0	0	6	0
KAHULUI	79	67	82	65	73	0	1.4	.9	.4	5.0	156	16.9	186	86	70	0	0	5	3
LIHUE	78	69	82	68	73	1	5.0	4.1	1.8	11.3	217	30.4	201	96	78	0	0	7	6
ID BOISE	50	33	57	29	41	-3	.4	.2	.2	1.7	131	4.7	118	85	42	0	3	7	0
LEWISTON	51	33	58	31	42	-5	.3	0	.1	.7	64	3.0	97	91	51	0	4	4	0
POCATELLO	45	29	58	22	37	-3	.7	.5	.4	2.2	183	4.6	144	92	53	0	5	4	0
IL CHICAGO	61	35	71	21	48	6	1.5	.8	.6	5.0	167	8.3	138	77	31	0	3	3	1
MOLINE	61	36	68	22	49	6	1.3	.6	.7	4.5	161	7.0	132	79	33	0	4	3	1
PEORIA	63	39	72	25	51	7	1.4	.5	.9	6.0	182	10.0	152	82	34	0	3	3	1
QUINCY	61	39	69	27	50	3	1.3	.6	.9	4.4	142	8.9	81	38	0	2	2	1	
ROCKFORD	59	33	69	21	46	5	2.1	1.3	1.4	5.5	172	7.3	120	82	31	0	3	2	2
SPRINGFIELD	64	38	72	25	51	5	1.5	.7	1.5	4.4	147	10.7	173	79	35	0	3	3	1
IN EVANSVILLE	66	41	72	26	53	3	2.1	1.0	1.0	5.5	106	16.3	139	95	37	0	2	4	2
FORT WAYNE	59	35	66	22	47	4	1.6	.8	1.0	5.5	157	12.4	157	84	44	0	3	3	2
INDIANAPOLIS	64	37	71	23	50	4	1.0	.1	.4	5.5	134	12.8	141	82	39	0	0	4	0
SOUTH BEND	57	33	62	17	45	4	1.3	.5	.8	4.9	163	9.0	130	79	34	0	3	4	1
IA DES MOINES	63	34	80	20	49	7	.9	.3	.6	4.2	162	7.6	162	73	31	0	2	4	1
SIOUX CITY	61	32	83	18	47	6	.1	-.4	.1	1.6	94	3.6	103	79	36	0	4	2	0
WATERLOO	61	35	70	17	48	8	1.1	.5	1.0	3.6	157	5.5	134	84	43	0	2	4	1
KS CONCORDIA	64	38	77	30	51	6	.3	-.2	.3	2.9	151	4.2	131	79	32	0	1	1	0
DODGE CITY	64	37	78	31	50	3	T	-.3	T	.8	57	2.3	110	84	35	0	2	2	0
GOODLAND	63	31	81	21	47	5	T	-.2	T	.4	40	1.2	75	69	23	0	5	1	0
TOPEKA	67	36	84	30	52	4	.3	-.4	.2	1.2	48	3.5	78	84	27	0	2	2	0
WICHITA	65	39	78	35	52	3	.2	-.3	.2	2.0	105	4.5	129	88	36	0	0	1	0
KY BOWLING GREEN	66	40	73	23	53	0	1.1	-.1	.6	3.7	53	12.4	80	91	34	0	2	3	1
LEXINGTON	66	40	74	20	53	4	1.9	-.9	1.0	4.8	31	12.4	101	78	29	0	2	3	2
LOUISVILLE	66	40	73	23	53	3	2.0	-.9	.7	7.0	123	13.8	110	81	27	0	2	3	3
LA ALEXANDRIA	75	59	83	43	67	4	2.3	1.1	2.0	3.6	64	12.9	87	56	0	0			

Weather Data for the Week Ending April 3, 1982

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 Feb. 28	PCT. NORMAL SINCE Feb. 28	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	75	55	85	39	65	3														
ME CARIBOU	37	18	48	-1	27	-3														
MD PORTLAND	47	25	57	12	36	1														
MD BALTIMORE	63	36	73	21	49	-1														
MD SALISBURY	63	37	71	22	50	0														
MA BOSTON	55	35	61	22	45	0														
MA CHATHAM	46	32	52	19	39	2														
MI ALPENA	43	24	52	9	34	1														
MI DETROIT	56	29	70	18	43	1														
MI FLINT	54	31	63	18	43	4														
MI GRAND RAPIDS	53	30	58	14	41	1														
MI HOUGHTON LAKE	44	25	51	3	35	1														
MI LANSING	53	29	61	17	41	2														
MI MARQUETTE	39	21	45	3	30	1														
MI MUSKOGON	50	29	55	9	39	0														
MI SAULT STE. MARIE	38	19	43	-1	29	-2														
MN ALEXANDRIA	41	27	47	12	34	1														
MN DULUTH	37	25	40	9	31	0														
MN INT'L FALLS	36	21	43	5	29	-1														
MN MINNEAPOLIS	53	30	59	10	42	5														
MN ROCHESTER	53	32	59	18	42	6														
MS GREENWOOD	74	56	82	43	65	5														
MS JACKSON	76	54	84	39	65	4														
MS MERIDIAN	76	52	84	42	64	4														
MO CAPE GIRARDEAU	66	45	76	30	55	3														
MO COLUMBIA	66	39	78	25	53	4														
MO KANSAS CITY	65	37	77	29	51	4														
MO SAINT LOUIS	66	41	74	27	54	4														
MO SPRINGFIELD	67	39	80	30	53	3														
MT BILLINGS	46	29	58	20	38	0														
MT GLASGOW	38	25	45	9	32	-2														
MT GREAT FALLS	41	24	53	10	33	-3														
MT HAVRE	38	25	46	11	31	-3														
MT HELENA	44	26	55	18	35	-1														
MT KALISPELL	45	24	54	19	35	-1														
MT MILES CITY	47	28	62	9	37	0														
MT MISSOULA	48	29	54	24	38	0														
NE GRAND ISLAND	61	33	77	26	47	5														
NE LINCOLN	65	35	82	25	50	6														
NE NORFOLK	60	32	77	20	46	6														
NE NORTH PLATTE	62	31	77	21	46	6														
NE OMAHA	63	33	82	19	48	6														
NE SCOTTSSBLUFF	62	27	77	15	45	4														
NE VALLNTINE	59	32	78	23	46	8														
NV ELY	45	15	52	-5	30	-7														
NV LAS VEGAS	66	44	74	36	55	-3														
NV RENO	44	26	51	19	35	-8														
NV WINNEMUCA	50	30	60	26	40	-1														
NH CONCORD	49	22	62	10	36	-3														
NJ ATLANTIC CITY	59	35	73	21	47	1														
NM ALBUQUERQUE	67	35	77	30	51	1														
NM CLOVIS	69	42	78	36	56	4														
NM ROSWELL	72	41	80	34	57	1														
NY ALBANY	51	27	66	16	39	-2														
NY BINGHANTON	51	28	64	14	40	2														
NY BUFFALO	53	26	69	15	40	1														
NY NEW YORK	55	37	63	23	46	0														
NY ROCHESTER	51	28	71	14	40	0														
NY SYRACUSE	52	28	71	16	40	0														
NC ASHEVILLE	65	38	75	19	51	0														
NC CHARLOTTE	69	45	77	25	57	2														
NC GREENSBORO	68	40	77	20	54	1														
NC HATTERAS	64	49	75	35	56	2														
NC NEW BERN	71	46	79	34	59	1														
NC RALEIGH	71	42	79	23	56	2														
NC WILMINGTON	69	47	75	31	58	-1														
ND BISMARCK	40	25	49	8	33	-1														
ND FARGO	39	27	45	10	32	0														
ND GRAND FORKS	39	26	45	10	32	0														
ND WILLISTON	40	24	52	5	32	-1														
OH AKRON-CANTON	60	31	70	12	46	3														
OH CINCINNATI	66	37	74	19	51	4														
OH CLEVELAND	61	31	73	9	46	4														
OH COLUMBUS	63	33	74	16	48	3														

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending April 3, 1982

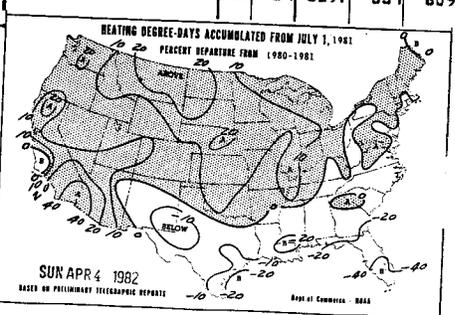
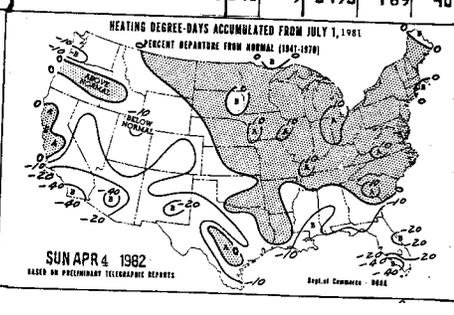
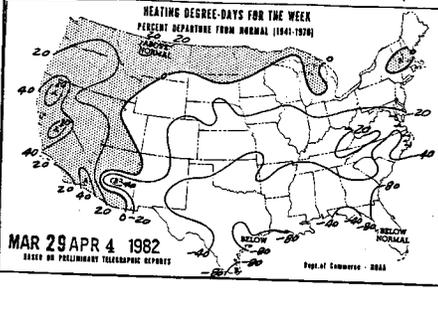
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 28	PCT. NORMAL SINCE Feb. 28	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	62	37	72	19	49	4	1.4	.6	.4	6.5	176	14.4	166	82	41	0	2	4	0
TOLEDO	58	30	70	14	44	2	1.2	.6	.8	4.5	157	9.3	148	89	38	0	4	3	1
YOUNGSTOWN	58	29	68	10	43	2	.9	.1	.7	3.3	92	9.1	105	80	34	0	4	2	1
OK OKLAHOMA CITY	70	45	84	39	57	3	.1	.6	.1	1.6	70	6.3	140	74	31	0	0	1	0
TULSA	74	49	86	42	61	7	.1	.7	.1	1.0	34	5.3	90	68	23	0	0	2	0
OR ASTORIA	49	38	51	36	44	-2	2.8	1.5	.9	9.2	121	33.7	139	89	63	0	0	7	3
BURNS	42	30	45	19	36	-4	1.1	.1	T	.7	64	3.6	92	11	11	0	6	3	0
MEDFORD	48	33	52	30	41	-6	1.2	.9	.4	2.5	139	7.6	104	93	59	0	2	5	0
PENDLETON	51	34	56	28	42	-5	1.1	.1	.1	1.3	118	3.6	100	81	42	0	2	4	0
PORTLAND	53	39	59	36	46	-2	1.2	.5	.4	3.0	73	15.2	113	95	55	0	0	6	0
SALEM	51	35	55	27	43	-4	1.5	.8	.6	3.7	76	15.7	99	87	56	0	1	7	1
PA ALLENTOWN	57	31	63	17	44	0	1.5	.7	1.1	3.0	73	9.1	95	76	31	0	3	2	1
ERIE	56	30	70	11	43	4	1.7	1.0	1.2	3.6	120	8.7	118	71	30	0	5	4	1
HARRISBURG	57	35	65	20	46	0	1.5	.8	1.4	3.6	97	9.2	108	76	28	0	3	2	1
PHILADELPHIA	60	36	69	22	48	1	1.3	.5	.9	3.6	88	11.2	124	71	32	0	3	2	1
PITTSBURGH	61	30	70	11	46	2	.5	.3	.4	3.3	85	9.7	111	62	25	0	4	2	1
SCRANTON	55	32	65	17	44	1	1.3	.7	.9	3.2	119	8.2	128	62	32	0	4	2	0
RI PROVIDENCE	55	31	65	20	43	1	1.7	.8	1.3	4.7	134	13.5	126	69	27	0	4	2	1
SC CHARLESTON	72	49	81	30	60	0	T	.9	T	1.5	29	7.3	68	88	49	0	1	1	0
COLUMBIA	73	45	82	29	59	0	.7	.3	.5	2.4	45	10.5	87	91	39	0	1	3	1
FLORENCE	72	47	80	28	60	1	T	.9	T	.8	17	10.0	96	84	31	0	1	0	0
GREENVILLE	66	45	76	26	56	0	1.1	.1	.9	3.0	48	14.5	101	80	38	0	2	3	1
SD ABERDEEN	44	31	56	13	38	2	1.1	.1	1.1	1.1	1.1	1.1	86	69	0	3	1	0	0
HURON	54	32	67	15	43	6	.1	.2	.1	1.5	125	3.0	130	92	60	0	2	1	0
RAPID CITY	59	28	73	17	43	6	.3	.1	.2	1.4	117	2.2	100	83	25	0	6	2	0
SIoux FALLS	57	30	78	12	44	6	.6	.2	.5	1.7	106	2.6	81	88	50	0	3	3	0
TN CHATTANOOGA	68	46	78	31	57	2	.2	1.0	1.1	4.9	77	19.1	114	73	34	0	1	3	0
KNOXVILLE	68	41	75	27	54	-1	1.5	.6	1.5	6.3	115	17.2	119	84	37	0	2	3	1
MEMPHIS	70	50	83	34	60	3	2.0	.7	1.4	5.9	100	16.7	111	84	41	0	0	3	1
NASHVILLE	69	43	79	25	56	1	.9	.1	.5	3.7	69	15.0	106	84	32	0	2	4	1
TX ABILENE	72	48	87	37	60	0	T	.3	T	.4	33	7.6	84	82	34	0	0	1	0
AMARILLO	69	34	81	26	51	1	T	.2	T	.4	57	.9	56	61	20	0	3	0	0
AUSTIN	77	60	90	41	69	5	.1	.4	.1	1.4	61	3.1	45	88	55	1	0	3	0
BEAUMONT	75	61	81	43	68	3	T	.8	T	3.1	84	8.6	74	91	64	0	0	1	0
BROWNSVILLE	84	68	91	50	76	5	.1	0	.1	.2	33	1.0	30	91	60	4	0	1	0
CORPUS CHRISTI	78	63	95	44	71	2	.1	.3	.1	.5	38	8.7	181	98	66	1	0	1	0
DEL RIO	79	57	99	45	68	1	.1	.2	T	.2	22	2.8	108	79	59	1	0	2	0
EL PASO	77	44	80	33	60	1	0	.1	0	0	0	.9	69	49	14	0	0	0	0
FORT WORTH	73	53	89	41	63	3	.2	.6	.1	1.9	63	6.1	88	89	37	0	0	4	0
GALVESTON	72	61	78	43	67	2	T	.6	T	1.6	52	7.4	90	93	65	0	0	1	0
HOUSTON	76	60	85	41	68	3	.1	.5	.1	1.6	52	5.0	51	92	61	0	0	2	0
LUBBOCK	71	41	81	33	56	1	T	.2	T	.5	42	.9	43	64	22	0	0	0	0
MIDLAND	76	44	87	36	60	1	T	.1	T	0	0	.6	40	71	22	0	0	1	0
SAN ANGELO	75	49	89	38	62	0	T	.3	T	.4	40	3.0	107	89	39	0	0	1	0
SAN ANTONIO	77	58	92	39	68	2	.2	.3	.2	.7	39	2.7	51	91	51	1	0	2	0
VICTORIA	78	61	85	42	70	3	.1	.4	.1	.2	10	6.0	100	94	61	0	0	1	0
WACO	75	56	90	41	66	4	.2	.5	.1	3.9	139	7.2	104	90	54	1	0	4	0
WICHITA FALLS	74	48	90	40	61	3	T	.5	T	2.1	117	4.8	126	87	35	1	0	1	0
UT BLANDING	52	27	59	21	40	-3	.2	0	.1	1.6	150	3.1	107	84	36	0	6	3	0
CEDAR CITY	52	31	60	22	42	-1	.9	.6	.3	2.2	133	5.8	215	78	34	0	4	4	0
SALT LAKE CITY	54	35	66	21	45	1	.8	.3	.4	2.8	136	4.4	105	70	32	0	2	4	0
VT BURLINGTON	48	27	62	13	38	2	.8	.3	.4	2.6	124	6.8	124	77	34	0	5	2	0
VA NORFOLK	64	42	77	25	53	0	T	.6	T	3.1	84	12.1	121	78	26	0	2	2	0
RICHMOND	68	40	77	25	54	2	.3	.4	.2	4.0	105	11.2	119	79	27	0	2	2	0
ROANOKE	65	35	72	17	50	-1	.2	.5	.1	2.6	58	11.1	119	72	25	0	3	3	0
WA COLVILLE	47	28	51	26	38	-4	.6	.4	.3	2.0	154	6.1	130	91	72	0	5	5	0
QUILLAYUTE	46	33	49	32	40	-4	2.1	.1	.5	10.6	85	49.9	133	99	72	0	3	7	1
SEATTLE-TACOMA	49	36	51	33	42	-3	1.0	.3	.4	4.1	100	16.7	121	85	47	0	0	5	0
SPOKANE	47	30	54	19	38	-3	.5	.2	.3	1.5	100	4.7	85	89	51	0	4	4	0
WYAKIMA	51	32	54	25	42	-4	.4	.3	.1	.7	140	2.5	96	80	36	0	3	4	0
BECKLEY	63	35	73	9	49	3	.7	.2	.5	3.1	65	8.9	77	74	25	0	2	3	0
WV CHARLESTON	69	34	80	17	52	1	1.1	.2	.7	5.3	118	12.3	114	80	20	0	2	3	1
HUNTINGTON	67	36	79	16	52	2	1.3	.4	.6	5.2	113	12.1	116	74	22	0	2	3	1
PARKERSBURG	65	35	75	15	50	2	.6	.3	.5	6.5	144	10.1	90	65	24	0	2	3	0
WI GREEN BAY	50	30	60	16	40	4	1.9	1.4	.8	3.5	206	5.0	128	89	46	0	5	3	2
LA CROSSE	57	32	62	19	44	7	.7	.1	.5	1.8	82	3.3	83	92	38	0	3	3	0
MADISON	57	30	68	17	44	6	2.3	1.7	1.4	4.2	191	5.8	138	89	37	0	4	4	2
MILWAUKEE	55	30	65	17	43	5	2.6	2.0	1.3	5.2	217	8.4	165	81	35	0	3	4	2
WAUSAU	47	27	53	12	37	3	2.4	1.9	1.6	3.9	205	5.8	138	91	47	0	5	4	1
WY CASPER	55	28	66	21	42	5	.3	0	.3	.7	70	1.4	74	73	25	0	5	2	0
CHEYENNE	57	27	70	25	42	6	T	.3	T	.1	8	.7	33	62	21	0	7	0	0
LANDER	50	28	61	18	39	3	.5	.1	.5	.9	59	1.5	60	64	24	0	6	2	0
SHRIFAN	54	28	72	18	41	5	.1	.3	.1	1.2	72	2.2	81	76	32	0	5	1	0
PR SAN JUAN	86	72	88	70	79	2	.3	.2	.2	1.8	32	11.0	136	91	58	0	0	3	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING APR. 4, 1982.

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

Table with columns for STATES AND STATIONS, WEEKLY DEPARTURE\*, SEASONAL ACCUMULATION +, and DEPARTURE FROM 1980-81. Rows list various cities across the United States.



## March Weather and Crop Summary

**HIGHLIGHTS:** It was a typical spring month as warm temperatures pushed northward and cold air moved across the northern States and occasionally invaded the South. Above-normal precipitation moved through much of the northern Plains and Midwest. Heavy rain, combined with melting snow, caused flooding in many areas, especially south of the Great Lakes. A succession of cold fronts onto the west coast produced above-normal precipitation over most of the area west of the Rockies. Snow piled up in the high mountains throughout the month. Average temperatures for the month were warmer than normal through the South and over the Rockies and their eastern slopes. Most of the West averaged near or slightly cooler than normal. Late in the month, a cold outbreak damaged early blooming fruit trees in the Southeast.

**FIRST WEEK...**Pacific storms produced wind and rain along the west coast and rain with snow in the higher elevations across the Plateau and Rockies. Snow piled high in the central and northern Rockies and extended further south in the Plains, Great Lakes region, and from the central Appalachians northward through New England. A mixture of rain, sleet, and snow fell from eastern Kansas and Nebraska, across the lower Great Lakes to the upper Ohio Valley, and through Pennsylvania and Maryland. Late in the week, storms from the Gulf of Mexico triggered thunderstorms and showers across the South and spread rainshowers northeastward to the mid-Atlantic States.

**SECOND WEEK...**Early in the week, cold air pushed southward through the Plains and carried freezing temperatures through Texas and to most of the gulf coast. Only the west coast, Florida, and the southeastern coast remained above freezing. Later, warmer air covered most of the Nation, leaving the northern Mississippi Valley and the Great Lakes region colder than normal. The snowline receded northward to the northernmost States and to the higher elevations. Rain covered much of the Nation and was significant in the Southwest in areas that needed the moisture. Snow fell over the northern tier of States.

**THIRD WEEK...**The warming trend continued east of the Rockies, but cooler than normal weather covered the West. Early morning freezing temperatures reached the Pacific coast in parts of Washington and Oregon and into the Southwest. In contrast, springlike weather prevailed across the Rockies. Average temperatures for the week were 18 to 21° warmer than normal from eastern Texas into Georgia and were more than 6° above normal in the northern Plains and in New England. Rainshowers, with snow in the mountains, spread through the West to the western slopes of the Rockies. Heavy

showers fell in central and southern California. Storms, building in the central Plains, moved east-northeastward and spread light to moderate rain to the mid-Atlantic States. Snowshowers fell across the northern tier of States. The gulf coast remained clear, allowing delayed fieldwork to progress.

**FOURTH WEEK...**Thunderstorms across the South produced heavy rain, hail, and at least one tornado. The rain was beneficial in Florida and the lower Mississippi Valley but delayed fieldwork. The warming trend continued early in the week, but at midweek, a cold outbreak reached through the Southern Plains. As the week ended, another cold outbreak swept eastward and threatened early blooming fruit trees in the Southeast.

In the last 4 days of the month, a cold outbreak in the East damaged early blooming fruit trees in the Piedmont of the Southeast. A succession of cold fronts into the West spread rain, with snow in the western mountains, over the entire Nation.

### March Fieldwork

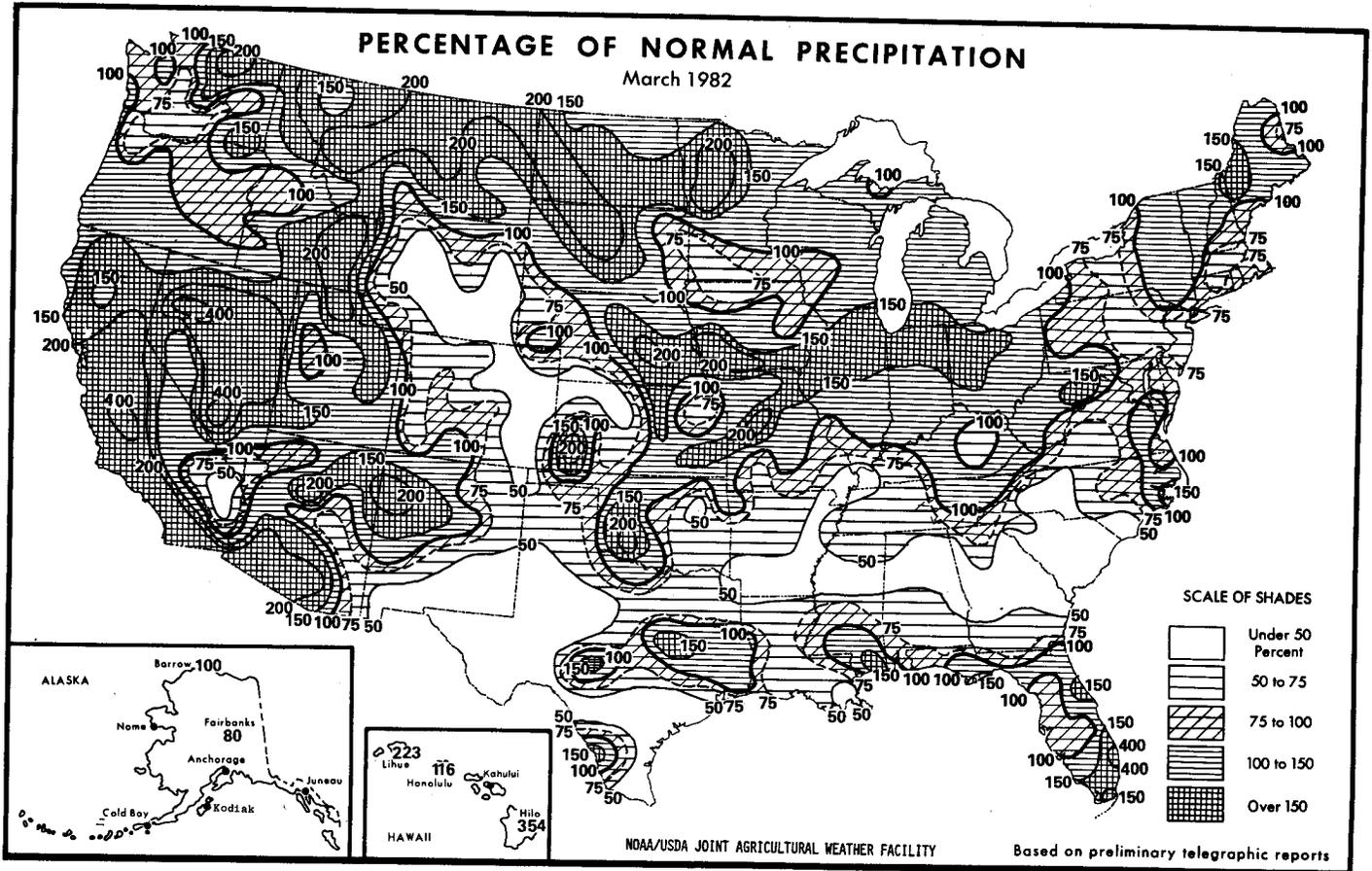
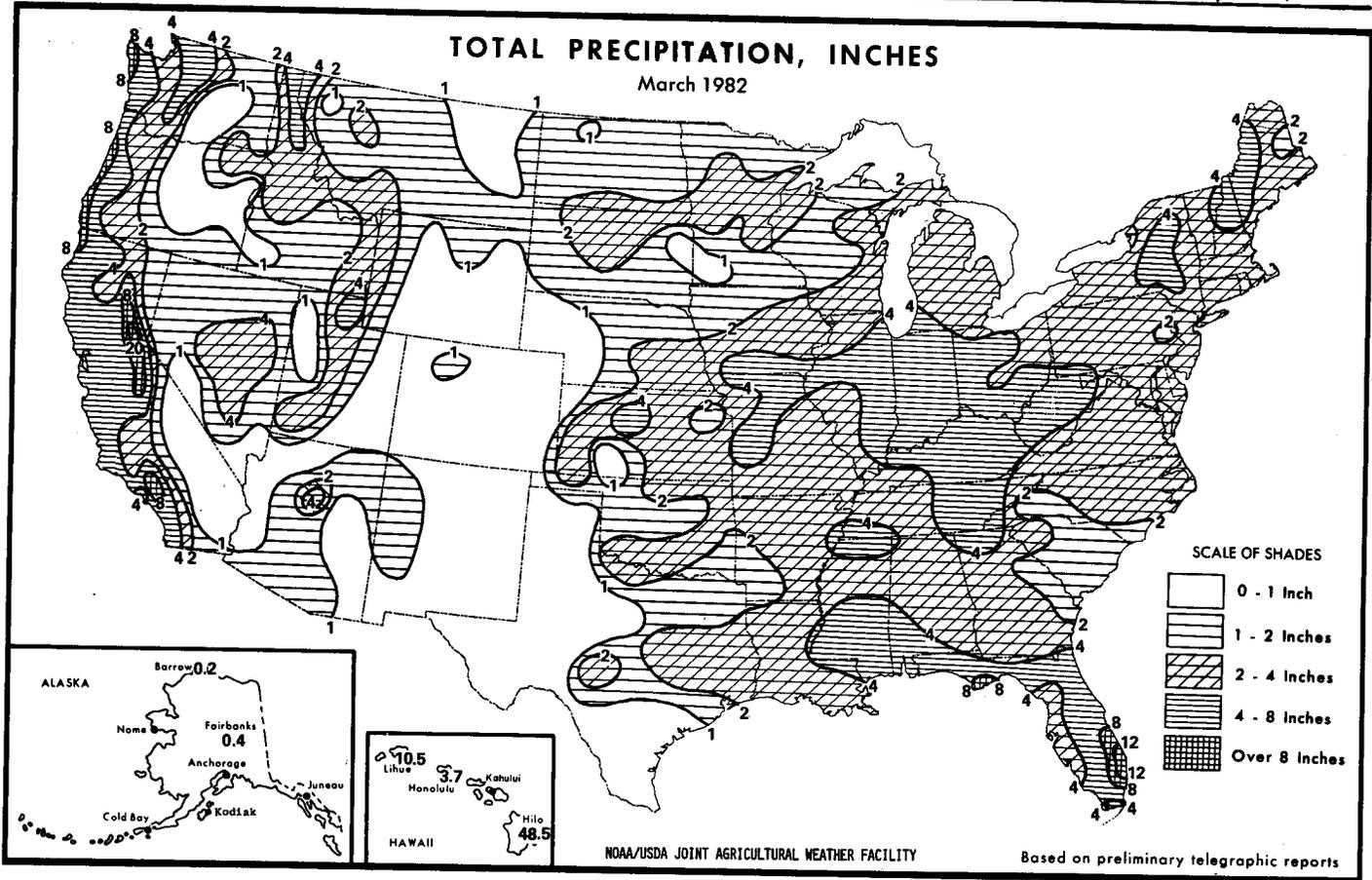
Rain and wet fields delayed spring fieldwork in much of the Southeast during March. Melting snow and heavy rains at midmonth caused flooding throughout the Midwest, halted spring fieldwork, and caused damage to some winter grains. At the end of March, freezing temperatures plunged southward threatening early blooming fruit trees from Virginia to Georgia.

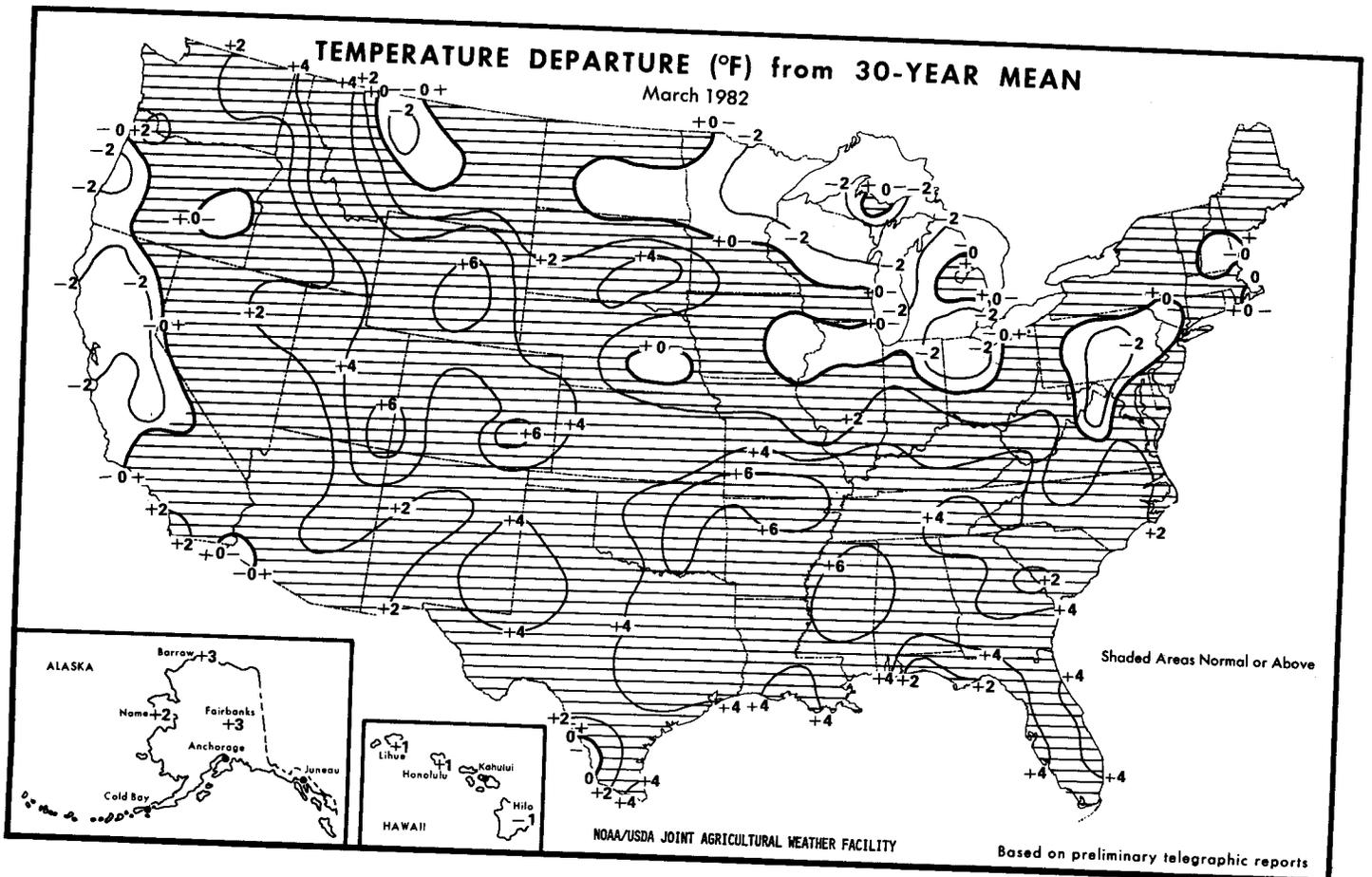
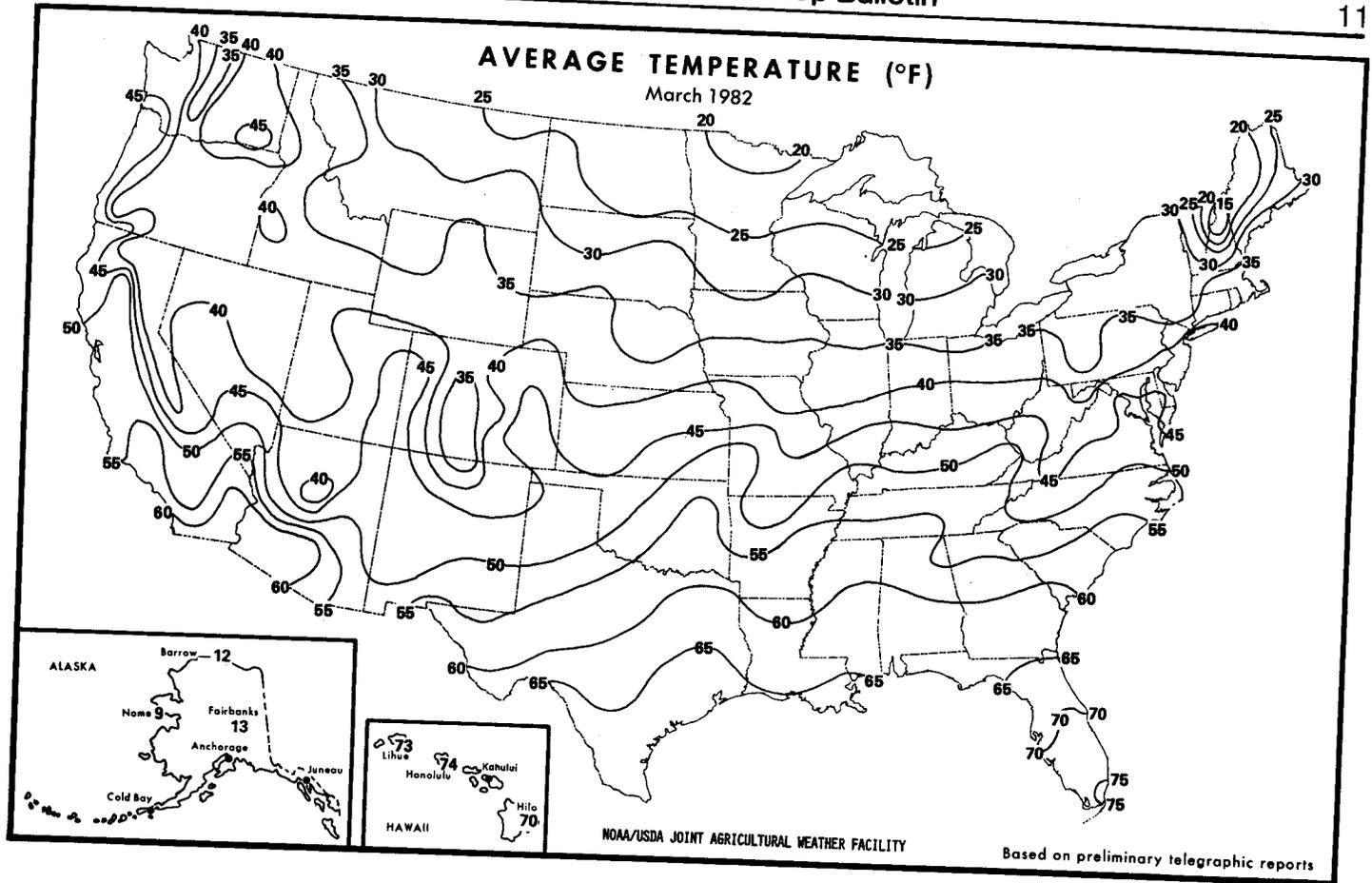
As March began, corn planting was active from Texas to Georgia. Wet fields delayed planting in the Southeast. By the end of March, planting extended as far north as Virginia and into parts of Kansas. The 1982 crop was emerging in the extreme South. Plants were in fair to mostly good condition. Grain sorghum planting centered in Texas and was running slightly behind normal. Cotton planting was concentrated in Arizona and Texas. Planting in these two States was in full swing as March ended and was getting underway in other producing States. However, wet fields delayed planting in California. Earliest plantings produced good stands and were growing well. At the end of March, rice seeding was active in Texas, Louisiana, and Mississippi. Cool, wet weather delayed progress in California. Tobacco growers seeded plantbeds. Transplanting was underway in Georgia and neared completion in Florida as March ended. Plants were in fair to good condition. Freezing temperatures dipped southward near the end of March and damaged apple and peach crops from Virginia to Georgia. Some damage also became evident from the extremely cold winter weather.

Temperature and Precipitation Data for March 1982

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
AL BIRMINGHAM	58	5	2.2	-4.0	LA BATON ROUGE	63	3	2.8	-2.3	TOLEDO	33	-3	3.7	1.2
MOBILE	64	5	6.8	-.3	LAKE CHARLES	64	4	2.7	-1.1	YOUNGSTOWN	35	0	3.2	-.0
MONTGOMERY	62	5	3.8	-2.2	NEW ORLEANS	66	5	2.6	-2.9	OK OKLAHOMA CITY	53	5	1.6	-.5
AK ANCHORAGE	12	3	.2	-.0	SHREVEPORT	61	4	2.6	-1.5	TULSA	55	7	1.0	-1.5
BARROW	13	3	.4	-.1	ME CARIBOU	25	1	2.7	-.5	OR ASTORIA	45	1	7.2	.6
FAIRBANKS	13	3	.4	-.1	PORTLAND	32	0	3.2	-.4	BURNS	35	-1	.8	-.1
JUNEAU	---	---	---	---	MD IALTIMORE	43	0	3.0	-.7	MEDFORD	45	0	2.3	.7
KODIAK	---	---	---	---	MA BOSTON	39	1	2.2	-1.8	PENDLETON	44	0	1.2	.2
NOME	9	2	---	---	CHATHAM	37	-1	3.4	-.3	PORTLAND	49	3	2.4	-1.2
AZ FLAGSTAFF	35	1	5.7	3.9	MI ALPENA	25	-1	2.3	.4	SALEM	45	0	2.8	-1.5
PHOENIX	62	2	1.3	.5	DETROIT	33	-2	3.1	.6	PA ALLENTOWN	37	-1	2.0	-1.6
TUCSON	58	0	1.3	.7	FLINT	33	0	2.5	.4	ERIE	34	1	3.5	.7
WINSLOW	47	2	.3	-.1	GRAND RAPIDS	33	0	3.4	.9	HARRISBURG	39	-2	2.2	-1.0
YUMA	63	-1	1.2	1.0	HOUGHTON LAKE	26	-1	2.4	.7	PHILADELPHIA	42	0	2.7	-1.0
AR FORT SMITH	54	4	2.0	-1.6	LANSING	31	-2	3.0	.6	PITTSBURGH	38	0	3.5	-.1
LITTLE ROCK	56	4	2.6	-2.4	MARQUETTE	23	1	1.9	-.2	SCRANTON	36	-1	2.6	.0
CA BAKERSFIELD	58	1	2.1	1.3	MUSKOGON	30	-3	2.4	.0	RI PROVIDENCE	39	2	3.8	-.2
EUREKA	48	0	7.1	2.3	SAULT STE. MARIE	22	-2	3.2	1.5	SC CHARLESTON	59	2	1.3	-3.5
FRESNO	51	-3	4.8	3.2	MN DULUTH	21	-3	2.1	.3	COLUMBIA	57	3	1.7	-3.0
LOS ANGELES	58	-1	3.4	1.7	INT'L FALLS	19	-2	1.6	.5	GREENVILLE	53	2	2.8	-2.5
RED BLUFF	50	-3	3.6	1.1	MINNEAPOLIS	29	1	2.1	.4	SD ABERDEEN	---	---	---	---
SAN DIEGO	61	3	4.7	3.1	ROCHESTER	29	1	1.3	-.4	HURON	33	4	1.6	.5
SAN FRANCISCO	51	-2	7.6	5.1	SAINT CLOUD	25	-1	1.8	.5	RAPID CITY	33	2	1.4	.4
STOCKTON	52	-1	6.6	4.6	MS JACKSON	62	6	5.1	-.5	TN SIoux FALLS	33	3	1.2	-.2
DENVER	41	4	.2	-1.0	MERIDIAN	62	6	4.5	-1.7	CHATTAHOOGA	53	3	4.8	-.8
GRAND JUNCTION	46	5	.8	.0	MO COLUMBIA	45	3	3.2	.6	KNOXVILLE	53	3	6.4	1.5
PUEBLO	46	6	.3	-.4	KANSAS CITY	43	2	2.9	.3	MEMPHIS	56	5	4.5	-.6
CT BRIDGEPORT	38	0	2.8	-.7	SAINT LOUIS	45	1	2.9	-.1	NASHVILLE	53	4	3.0	-2.0
HARTFORD	37	1	2.2	-1.6	SPRINGFIELD	50	-6	2.2	-.8	TX ABILENE	58	3	.4	-.6
DC WASHINGTON	46	1	2.6	-.7	MT BILLINGS	33	0	1.8	.8	AMARILLO	47	1	.5	-.3
FL APALACHICOLA	62	1	8.0	3.3	GLASGOW	25	0	.7	.3	AUSTIN	65	5	1.4	.5
DAYTONA BEACH	67	3	5.8	2.4	GREAT FALLS	28	-3	2.0	1.0	BEAUMONT	65	5	3.1	.0
FORT MYERS	73	4	3.3	.2	HAVRE	27	0	1.0	.5	BROWNSVILLE	72	4	.2	-.5
JACKSONVILLE	65	4	4.3	.7	ELENA	34	3	1.6	.9	CORPUS CHRISTI	67	2	.5	-.6
KEY WEST	77	2	3.4	1.8	KALISPELL	36	5	.9	.0	DEL RIO	65	2	.1	-.6
MIAMI	75	4	4.2	2.1	MILES CITY	31	1	.7	.0	EL PASO	58	3	T	-.4
ORLANDO	70	4	4.9	1.4	MISSOULA	38	5	1.5	.8	FORT WORTH	60	5	1.7	-.8
TALLAHASSEE	63	3	4.6	-1.3	NE GRAND ISLAND	35	-1	2.4	1.2	GALVESTON	63	2	1.2	-1.4
TAMPA	68	2	3.0	-.9	LINCOLN	36	-1	2.7	1.2	HOUSTON	65	4	1.6	-1.1
WEST PALM BEACH	73	3	16.8	13.5	NORFOLK	34	1	1.7	.3	LUBBOCK	54	5	.4	-.5
GA ATLANTA	57	6	3.8	-2.0	NORTH PLATTE	36	2	1.0	.0	MIDLAND	58	4	T	-.6
AUGUSTA	56	1	1.5	-3.2	OMAHA	36	1	3.2	1.6	SAN ANGELO	59	2	.4	-.5
MACON	60	3	2.1	-3.1	VALENTINE	35	4	1.1	.3	SAN ANTONIO	63	2	.7	-.8
SAVANNAH	62	4	1.6	-2.8	NV ELY	34	1	2.1	1.2	VICTORIA	65	3	.2	-1.7
HI HILO	70	-1	48.5	34.8	LAS VEGAS	55	0	.3	.0	WACO	62	5	3.8	1.4
HONOLULU	74	-1	3.7	.5	RENO	40	0	1.1	.4	WICHITA FALLS	55	2	2.0	.4
KAHULUI	---	---	---	---	WINNEMUCCA	39	1	1.4	.7	UT BLANDING	45	7	1.0	-.1
LIHUE	73	1	10.5	5.8	NH CONCORD	30	-2	2.5	-.3	SALT LAKE CITY	43	3	2.4	.8
ID BOISE	41	0	1.4	.4	NJ ATLANTIC CITY	43	2	2.7	-1.6	VT BURLINGTON	30	1	2.3	.4
LEMISTON	44	1	1.3	.3	TRENTON	---	---	---	---	VA LYNCHBURG	46	0	2.4	-1.1
POCATELLO	37	2	2.0	1.1	NM ALBUQUERQUE	47	1	.8	-.3	NORFOLK	49	1	3.0	-.4
IL CAIRO	53	5	2.2	-2.5	ROSWELL	53	4	.1	-.4	RICHMOND	49	2	3.7	.3
CHICAGO	35	-1	4.2	1.7	NY ALBANY	33	0	3.2	.6	ROANOKE	45	0	2.3	-1.0
MOLINE	35	-1	3.9	1.3	BINGHAMTON	32	1	2.6	-.3	WA COLVILLE	40	3	1.9	.8
PEORIA	38	-1	4.8	2.0	BUFFALO	33	1	2.6	-.3	OMAK	43	4	2.1	1.3
ROCKFORD	33	-1	3.6	.9	NEW YORK	41	0	2.4	-1.6	QUILLAYUTE	42	0	9.1	-1.7
SPRINGFIELD	40	1	3.0	.3	ROCHESTER	34	1	1.7	-.9	SEATTLE-TACOMA	44	0	3.7	.1
IN EVANSVILLE	48	4	5.1	.4	SYRACUSE	33	0	2.6	-.4	SPOKANE	40	2	1.5	.0
FORT WAYNE	35	-2	4.9	2.0	NC ASHEVILLE	50	4	1.9	-.2	WALLA-WALLA	46	0	2.7	1.3
INDIANAPOLIS	43	3	4.7	.9	CHARLOTTE	53	2	1.6	-2.9	YAKIMA	43	1	.3	-.3
SOUTH BEND	35	0	4.5	1.7	GREENSBORO	49	1	2.4	-1.3	WV BECKLEY	44	4	3.5	-.7
IA BURLINGTON	36	-1	4.9	2.2	HATTERAS	52	1	6.0	2.2	CHARLESTON	47	2	5.0	1.0
DES MOINES	35	1	3.3	1.0	RALEIGH	52	3	3.0	-.4	HUNTINGTON	46	2	4.4	.3
DUBUQUE	---	---	---	---	WILMINGTON	56	2	1.8	-2.3	FARKERSBURG	44	1	4.9	1.1
SIoux CITY	34	1	1.5	.0	ND BISMARCK	24	-1	1.1	.4	WI GREEN BAY	28	-2	2.0	.3
KS CONCORDIA	41	2	2.8	1.2	FARGO	23	-1	1.3	.5	LA CROSSE	31	0	1.5	-.5
DODGE CITY	44	3	.8	-.3	WILLISTON	26	1	1.3	.7	MADISON	31	1	2.1	.2
GOODLAND	40	4	.4	-.5	OH AKRON-CANTON	38	2	3.8	.6	MILWAUKEE	32	1	3.2	1.0
TOPEKA	43	2	1.1	-1.1	CINCINNATI	44	2	4.7	.6	CASPER	38	7	.6	-.3
WICHITA	46	2	2.1	.3	CLEVELAND	37	1	3.8	.7	CHEYENNE	36	4	.2	-.9
LEXINGTON	47	3	3.9	-.9	COLUMBUS	40	1	4.0	.6	LANDER	36	5	.4	-.8
LOUISVILLE	47	3	5.9	.8	DAYTON	40	1	5.5	2.3	SHERIDAN	35	4	1.3	.1
									PR SAN JUAN	---	---	---	---	

Based on 1941-70 normals





## National Agricultural Summary

March 29 - April 4

**HIGHLIGHTS:** In California, heavy rains slowed harvesting and delayed spring planting. Hail damaged grapes and stone fruits. Snow in western and northern regions of the country stopped spring fieldwork and stressed livestock. In the Southeast, planting progressed well until the end of the week when rains again halted fieldwork. This region had 3 to 6 days suitable for fieldwork. Soil moisture supplies were mostly adequate. Corn planting moved northward in Virginia and into Kansas where a few fields were seeded. In Georgia, planting was 79% finished. Sorghum planting in Texas reached 57% completion. Cotton planting started in New Mexico, South Carolina, and Georgia and gained momentum in Arizona and Texas. Rice seeding continued in Mississippi, Louisiana, and Texas. Peanut planting started in Georgia. Winter wheat continued in mostly good condition. Topdressing and weed control became more widespread. Poor pollination weather affected some of California's fruit crops. Rain and wet fields slowed vegetable harvesting and planting in California. In the South, pastures were in fair to good condition and improved due to good soil moisture and mild weather. Cold, snowy weather in the West and North stressed livestock.

**SMALL GRAINS:** Winter wheat continued in mostly good condition. Topdressing and weed control gained momentum as weather permitted. The crop jointed and headed in many parts of the South.

Kansas winter wheat showed good growth and started to joint in the south-central and southeastern areas of the State. Light to moderate wind damage was evident. Spring seeding of oats and barley passed the halfway mark. Emerged stands showed good growth.

Oklahoma wheat was in good to excellent condition and developed rapidly; 50% of the crop was jointing.

Texas winter wheat was in fair to good condition. The crop was heading in all areas except the northern High Plains. Dryness stressed dryland fields in the northern High Plains, and some fields will be grazed out. Recent rain in central areas helped crop development. The oat crop was heading in central Texas.

Nebraska's winter wheat crop was in fair to mostly good condition.

Montana winter wheat was in fair to good condition and showed only light wind damage.

**OTHER CROPS:** Corn planting moved northward in Virginia and began in Kansas. Progress ranged from 16% completion in North Carolina to 79% completion in Georgia. Emerged plants in Georgia were in fair to good condition.

Rain interrupted sorghum planting in Texas. Planting was 57% finished, 6 points ahead of schedule. Cutworms damaged some stands in the southern part of the State. These stands will be replanted.

Cotton planting gained momentum in Arizona and Texas and was underway in New Mexico, South Carolina, and Georgia. In Texas, planting started in south-central growing areas. Eleven percent of the State's acreage had been planted, 1 point ahead of normal. Planting in western areas of Arizona was 50% complete and 10 percent complete in central areas. Some cotton was planted in California, but wet weather slowed fieldwork and put growers behind schedule.

Tobacco transplanting was 82% finished in Georgia and 10% complete in South Carolina. In other areas, producers seeded and cared for beds. Plants were in fair to good condition.

Rice seeding was 8% finished in Mississippi, 24% in Louisiana, and 31% complete in Texas.

Emerging fields were in fair to good condition. In California, wet weather delayed preparations for planting.

Peanut planting started in Georgia on a limited scale. Only 1% of the acreage had been planted.

**FRUITS AND NUTS:** Freezing temperatures damaged some apple and peach trees in the Southeast. California's fruit showed damage from hail while poor pollination weather also affected some crops.

Florida's citrus groves were in excellent condition. Moisture was adequate and very little irrigation was needed. New crop fruit started to set. The Valencia orange harvest was slow, but grapefruit movement to processors continued active.

Arizona's citrus groves were in good condition. The lemon harvest tapered off and grapefruit picking was slow due to limited demand.

Texas producers continued harvesting grapefruit and Valencia oranges. Peach trees were blooming and many trees were leafing out.

Hail in southern Fresno County, California, damaged grapes and stone fruits. Damage to grapes varied from shredded shoots to complete bud removal. Significant damage to plums included shredded foliage and bruised fruit. Peaches and nectarines were also hurt but less severely. Poor pollination weather has affected many fruits throughout the State. Blooming occurred when temperatures were low and rains frequent. Fungicide applications have been delayed, causing concern over Brown Rot outbreaks. Water was standing in some orchards. The citrus harvest was active as weather permitted. The Valencia orange harvest increased in volume.

**VEGETABLES:** Land preparation for spring planting progressed well in northern areas during the first part of the week, but rain and high winds halted activities toward the end of the week. Some early-season crops were planted before weather conditions forced fieldwork to stop.

Florida's vegetable shipments increased 6% from the previous week. Only eggplant, parsley, and strawberries registered declines. Crops showed good growth.

Arizona's lettuce harvest was seasonally slow in central and western growing areas. Harvests of other vegetables progressed normally.

In the Rio Grande Valley of Texas, watermelons and tomatoes made excellent growth. The carrot harvest was nearing completion. In the San Antonio-Winter Garden area, carrot harvesting continued active, the onion harvest was underway, and spinach harvests were nearing completion. Tomato, watermelon, and cucumber planting was active in the Coastal Bend area. East Texas producers started planting tomatoes, cantaloup, and watermelons. In north Texas, the soil was dry. Most onions and potatoes have been planted but need moisture.

Wet fields in the Delta and Salinas Valley severely reduced California's asparagus production. Wet weather delayed broccoli and cauliflower harvests and spring planting on the central coast. The lettuce harvest, active in the Palo Verde Valley, gained momentum in the San Joaquin Valley and on the south coast. Planting was delayed on the central coast. On the south coast, rain interrupted strawberry picking. Cool, wet weather stunted the growth of market tomatoes. Wet fields seriously delayed planting of processing tomatoes in the northern half of the State.

(Continued on last page.)

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Temperatures above normal. Rainfall varied, up to 2.00 in. north, 0.50 in. south.

Fieldwork: 4.4 days. Soil moisture mostly adequate. Corn planted 47%, 1981 44%, average 16%. Activities: Routine farm chores, planting of corn and some vegetables, applying nitrogen and herbicides to wheat, preparing to plant cotton. Conditions: Livestock, pastures fair; pasture feed, stored feed mostly adequate; wheat fair to good; plowing 54%; fieldwork behind.

**ARIZONA:** Fair skies except 1st, 2nd when storm system moved across State. Moisture under 0.25 in., confined central basins, central mountains northward. Snow level down to 4,500 ft. Temperatures 9° below normal northwest, 2° above normal south central, southeast.

Field conditions improved, warm, dry weather. Small grains good progress heading, turning color western areas, jointing, heading other areas. Land preparation, planting cotton good progress. Planting western areas 50% complete, 10% central areas. Alfalfa growth good, weed problems present. Sugarbeets good tap root development. Safflower, sorghum, corn very good progress. Safflower rosette stage western areas. Lettuce harvest slowed seasonally central, western areas. Harvest broccoli, cabbage, cauliflower slow. Other mixed vegetable harvest progressed seasonally. Watermelons, cantaloups good progress, germination later plantings nearly complete. Most stands up, growing well. Insect, weed management utilized. Harvest Valencia oranges, tangerines satisfactory. Lemon harvest tapering off, grapefruit harvest slow, limited demand. New crop bloom very good. Groves good condition. Grape shoot thinning in perlettes, sulfur applied. All varieties started spring growth. Deciduous fruit good progress, fruit thinning early peach, apricots. Ranges mostly fair condition. Northern ranges very good condition. Poor conditions few southeastern areas. Livestock remained in fair, good condition. Water supplies adequate.

**ARKANSAS:** Entire State received rainfall. Highest temperature 85°, lowest 24°. All departures from normal ranged from 1 to 7°. Most rainfall 4.16 in., least 0.08 in.

Land was being prepared for spring planting. Limited planting of corn, sorghum and rice took place. An average of 6 days was available for fieldwork. Soil moisture was short to adequate and crop growth was moderate. Wheat was in good condition and growing rapidly. Pesticide applications were being applied to the fruit crop. Livestock were in fair to good condition.

**CALIFORNIA:** Very cold and very wet. A series of cold unseasonal storms moved across the State. Average temperatures were as much as 10° below normal. Precipitation amounts topped 5.00 in. in a number of locations. Snow accumulations in the Sierra Nevada were measured in feet, not the customary inches. Storms and gusty wind accompanied the cold and wet weather.

Heavy rains continue hampering fieldwork and small grains in northern areas. Grains spotting, yellowing, and rotting in low-lying areas of Sacramento Valley. Sugarbeet planting and harvest delayed due to rains. Some cotton planting in San Joaquin with two weeks behind schedule. Imperial Valley planting progressing normally. Many rice fields remain with stubble to be burned. Growers anticipating using more earlier maturity varieties if preparations delayed longer. Corn planting delayed,

northern areas. Alfalfa and oat green chopping active, San Joaquin Valley. Marble to golf ball sized hail southern Fresno County damaged grapes, stone fruits. Bing cherry pollination occurred during very poor weather, Burlat set looks normal. Grapes damaged in southern Fresno County varied from shredded shoots to complete bud removal. Poor pollination weather affecting pears Sacramento-San Joaquin area. Bloom occurred while temperatures were low and rains frequent. Pear bloom just beginning in Lake-Mendocino area. Plum damage significant in Fresno-Tulare County area, shredded foliage, bruise fruit. Peaches, nectarines also damaged, less severely. Prunes budding. Fungicide applications delayed causing concern over brown rot outbreaks. Standing water some orchards. Citrus harvest continues weather permitting. Valencia orange harvest increasing. Asparagus production severely reduced by wet fields, Delta, Salinas Valley. Broccoli, cauliflower harvest and planting delayed by wet fields Central Coast. Possible gap in acreage for harvest in June. Planting and harvest brussels sprouts delayed by wet fields. Carrot harvest active Desert, celery harvest South Coast hampered by rain at times. Planting delayed Salinas-Watsonville. Lettuce harvest active Palo Verde Valley, increasing San Joaquin Valley, South Coast. Planting delays on Central Coast will cause gaps in acreage for harvest in June. Some hail damage onions, limited area of San Joaquin Valley. Fall potato movement active Tulelake-Butte Valley. Strawberry harvest disrupted by rain South Coast, Santa Maria. Fruit set delayed by blossom damage, reduction pollination activity by bees. Market tomato growth held back by cool, wet weather. Some hail damage limited area San Joaquin Valley. Processing tomato planting seriously delayed due wet fields northern half of State. May cause problems with delivery schedule, early fall storms. Root rot and poor stands will reduce yields. Crop southern half of State progressing satisfactorily. Soil moisture more than adequate, warmer temperatures needed for grass growth. Supplemental feeding necessary some foothill areas due to rain, snow. Sheep shearing underway northern districts.

**COLORADO:** Precipitation averaged 0.10 in. or less over the eastern plains and 0.40 in. to the area west of the Continental Divide. Average temperatures were near normal in the west and San Luis Valley and averaged 5° above normal in the east.

Seeding of spring grains ahead of normal but germination being slowed by dry topsoils. Barley, 43% seeded; oats, 46%; spring wheat, 10% seeded. Sugarbeet seeding progressing rapidly with 34% in the ground, well ahead of last year and average. Winter wheat, fair to good condition with 16% of the acreage being pastured. Subsoil and topsoil moisture rated as short with winds rapidly deteriorating topsoil moisture. Five days suitable for fieldwork. Livestock in good condition with minimum death losses reported.

**FLORIDA:** Strong high pressure north of the State drifted southeast. Brisk northeast winds, clouds, rain continued into the 29th over most of Peninsula. A few showers continued near the East Coast into the 31st. Total rainfall of up to 10.00 in. occurred first of week in Palm Beach County. Little or no rain away from East Coast after 29th. Skies cleared with diminishing winds. A few light showers with rainfall of 0.10 in. or less fell Panhandle early weekend as a cold front moved through. The weakening front continued southeastward to south Florida, on the 4th, with no rain or

significant weather. The last few days of March were cooler than normal, but warmer conditions returned in April. Temperatures averaged near or above normal.

Soil moisture mostly adequate. Strong winds drying out topsoil very rapidly. Corn planting about complete, early corn good progress. Peanut land about prepared, some planting in central area. Tobacco transplanting about complete, resetting underway where necessary. Sugarcane good growth. Wheat heading; crop in good to excellent condition. Some wheat being sprayed with fungicides. Pastures mostly good to excellent condition. Cattle condition fair to mostly good. Citrus grove condition excellent. Moisture generally adequate, very little irrigation, new growth all areas. New crop fruit starting to set. Valencia harvest slow, grapefruit movement active to processors. Cloudy, wet, cool weather with brisk winds occurred during first part of week in vegetable areas. Rainfall generally light to moderate but heavy in Palm Beach County with some flooding. Latter part of week was warm, dry, sunny. Total shipments increased 6% from previous week. Harvest gained cabbage, carrots, sweet corn, cucumbers, escarole, okra, peppers, radishes and southern peas. Volume about steady snap beans, cauliflower, celery, Chinese cabbage, lettuce, potatoes, squash and tomatoes. Volume declined eggplant, parsley and strawberries. Commercial strawberry harvest about over Hillsborough-Manatee area. Light harvest of watermelons continues in Immokalee area. Crop progress good all other areas.

GEORGIA: A dry, cool week, rainfall generally less than 0.10 in. and average temperatures about 2 to 4° below normal. Rain moved across the State night of 2nd and morning of 3rd and again late, night of 4th. Temperatures warm.

Soil moisture adequate north and south, central short. Averaged 5 days suitable for fieldwork. Freeze damage to peaches and apples in northern third of State. Some cold and wind damage to corn and tobacco. Corn 79% planted, last year 72%, average 47%, condition 55% fair, 43% good. Cotton 5% planted, 3% last year, 2% average. Grain sorghum 5% planted, 2% last year and average. Peanuts 1% planted, condition fair. Tobacco 82% transplanted, 49% last year, 36% average, condition 40% fair, 56% good. Watermelons 75% planted, 62% last year, 54% average, condition 13% poor, 57% fair, 30% good. Wheat condition 43% fair, 47% good. Rust and mildew problems. Small grains 33% fair, 61% good. Vegetables showing some stress due to cool weather, condition fair to mostly good. Pasture condition 32% fair, 64% good. Cattle and hogs fair to mostly good.

HAWAII: Wet weather continues. Heavy rains drenched some low-lying areas inundating some crop, nursery and prawn operations. Most farm activities were affected. Harvesting was difficult and spoilage losses were reported to some leafy crops. Plantings of the 1983 ginger crop being delayed because of wet weather. Harvesting of current crop almost complete. Vegetables: Supplies still adequate. However, lettuce and cucumber harvest light. Bananas: Supplies light. Papayas: Roguing more evident as Phytophthora disease increased from the wet weather. Pineapples: Light harvest. Sugar: Field and harvest activities curtailed some plantations from the inclement weather. Pastures: Fair to good. Some low-lying areas soggy.

IDAHO: Temperatures began above normal but a cool moist flow off the Pacific lowered readings below normal by midweek. Average temperatures ranged from 1 to 6° below normal. High was 66° at Grandview with the low being -16° at Stanley. Precipitation was generally a little below normal in north and above normal in the south. Amounts ran-

ged from only 0.01 in. at Burley to 1.87 in. at Hailey.

Wet, stormy weather put a lid on fieldwork and plantings. Activity in the southwest was limited between storms, but growers did manage some fieldwork. Reports from the rest of the State show very little activity except for potato seed movement in east. Snow mold expected on winter at the higher elevations. Calving and lambing continue, with scours showing up in cattle and calves as the wet weather continues. Most areas indicate feed supplies to be adequate, with soil moisture and available irrigation water rated at a surplus.

ILLINOIS: Temperatures 3 to 7° above normal. Precipitation 1.00 to 2.00 in. over most of State.

Activities: Livestock feeding and care, general farmwork, ordering supplies, preparing machinery for fieldwork.

INDIANA: Warm, rainy, then windy and cold with snow in north. Two days of high winds caused considerable property damage. Tornado at Peru destroyed several buildings. No lives lost. Temperatures averaged near normal and ranged from 13 to 72°. Precipitation 0.80 to 1.00 in. in north, central, and southwest; 1.80 in. in southeast.

Activities limited by wet soils, but preparations for tilling and seeding continues as farmers await drier conditions. Greening-up continues. Activities mostly caring for livestock and usual chores.

IOWA: Temperatures averaged 4° above normal while precipitation was near normal west and north to well above normal southeast. It was a week of extremes with severe thunderstorms on 2nd followed by blizzard conditions on the 3rd. Temperatures ranged from 83° at Sioux City, Glenwood, and Shenandoah on 2nd to 14° at Waterloo on the 4th.

KANSAS: Precipitation averaged 0.10 to 0.25 in. west and central to 0.50 in. southeast and extreme east with locally over 1.00 in. Major wind storm 2nd producing much blowing dust, especially west. Temperatures averaged 51° northwest to 59° southeast, 5 to 8° above normal.

Spring seeding oats, barley normal progress, both past halfway mark. Emerged stands show good growth. Corn planting starting in southeast and east central areas. Wheat making good growth, starting to joint south central and southeast. Light to moderate wind damage in most areas. Topdressing with nitrogen and weed control still underway.

KENTUCKY: Temperatures averaged 3 to 6° above normal over all but the southeast sections. Several major storms with rain and damaging wind moved across the State. Rainfall amounts were heaviest across the west, central and northeast with lesser amounts across southeast. Totals ranged around 0.75 in. across southeast to over 2.00 in. across west.

Days suitable for fieldwork: 3.9. Soil moisture 68% adequate, 32% surplus. Plowing advanced to over 50% complete. Tobacco beds 75% seeded, plants emerged in 15% of beds. Corn planting underway in southern and western areas will advance rapidly when conditions favorable. Freezing temperatures slowed small grains and pasture growth, and damaged fruit buds. Fruit trees 45% budding or in bloom.

LOUISIANA: Rainfall averaged 0.10 to 0.40 in. southern third, 0.40 to 2.30 in. elsewhere. Temperatures 1 to 5° below normal.

Soil moisture adequate. Days suitable: 3.6. Spring plowing 58%, 75% 1981, 42% 1980. Corn planted 66%, 58% 1981, 41% average; emerged 54%, 36% 1981; condition fair to good. Rice planted 24%, 32% 1981, 31% average; emerged 14%, 19% 1981, con-

dition fair. Wheat headed 31%, 38% 1981; condition fair to good; rust expected to reduce yields in several parishes. Sorghum planted 8%. Sugarcane fair to good condition. Strawberry harvest in full swing. Green pepper plants have been transplanted. Some watermelon acreage required replanting due to cool, damp weather. Vegetables rated fair to good. Pastures rated good; livestock fair to good.

**MARYLAND AND DELAWARE:** Temperatures averaged 3° below normal. Highs averaged in the upper 50's to low 60's. Lows averaged in the mid 30's. The greatest amount of precipitation was reported at Hagerstown with 0.70 in. Frederick reported the least amount of precipitation at 0.09 in. The average of the remaining 14 stations was 0.40 in. Net sales the third week of the Maryland tobacco auction amounted to 4,628,490 pounds with a net value of \$8,199,774. The weighted average price for March 29 to April 1, was \$176.15.

**MICHIGAN:** Temperatures averaged from 2° below normal to 3° above. The week began with mild temperatures. The weekend turned cold as a strong storm dropped from 1 to 9 in. of snow and took temperatures down to the teens. Many stations reported wind damage as winds of up to 60 mph were recorded. Precipitation amounts ranged from 0.50 in. to over 2.00 in.

Farming activities include feeding cattle, hauling manure and other general work. Most fruit trees survived the hard winter and no problems expected at this time.

**MINNESOTA:** Temperatures averaged from 6° above normal south to 5° below normal north. Extremes: 77° at Worthington, 4° at Duluth. Precipitation totals 0.50 to 1.30 in. except 1.30 to 1.60 in. west central, central and northeast with local amounts to 2.71 in. west central. Precipitation averaged normal to 0.80 in. above normal except 0.80 to 1.10 in. above normal west central, central, and northeast. Snowfall ranged from zero south to 7 in. north central and northeast. Snowdepth ranged from zero south to 17 in. north central and northeast.

**MISSISSIPPI:** Temperatures about 4° above normal. Extremes: 32 and 87°. Severe weather late in week with 2 known tornadoes touching down over the north central area. Three deaths reported.

Soil moisture adequate to surplus. Fieldwork: 3.6 days suitable. Land preparation, preplant herbicides and fertilizer applications were main farm activities. Plowing 50% completed, 69% last year, 53% average. Corn 38% planted, 43% last year, 28% average. Rice 8% planted, 12% last year. Watermelons 55% planted, 58% last year. Winter wheat 80% jointing, 73% last year; condition good. Pasture and livestock condition fair to good.

**MISSOURI:** Temperatures were above normal. The western section of the State had readings around 4° above normal and the eastern part of the State had temperatures of 1 to 3° above normal. One-third to two-thirds in. of rain fell. The heaviest rainfall was reported in the Bootheel where around 1.00 in. fell.

**MONTANA:** Cool and wet. Temperatures averaged 5° below normal north central to about 1° above normal southeast. Maximum temperatures in the 70's over some of southeast first of week. In north central maximum temperatures end of week were below 20°. Highest 70° at Broadus, lowest -6° at Butte. Precipitation heaviest over the southwest and the mountains of the south central. Between 1.00 and 3.00 in. in those areas.

Winter wheat condition fair to good, wind damage light. Fieldwork not started, except in a few southern and western locations where dry fields were beginning to appear. Frequent snow caused wet, muddy calving and lambing conditions.

**NEBRASKA:** Precipitation: Widespread, amounts ranged from less than 0.10 to 0.50 in. Temperatures: 3 to 6° above normal.

Winter wheat condition fair to mostly good. Some winterkill and root and crown rot appearing. Oats 5% seeded, 45% last year and 15% normal. Ground preparation for sugarbeets almost complete. Pasture and range feed supplies short to mostly adequate. Topsoil and subsoil moisture mostly adequate.

**NEVADA:** Another week of winter most areas. Series of winter storms moved across State daily dropping wet snow which melted in valleys to blizzard conditions higher elevations. Main roads Sierras closed most of period. Temperatures averaged below normal west, above normal northeast and south central. Extremes: 76 and -5°.

Fieldwork at standstill by strong winds and scattered snow showers. Winter grains greening slowly due winter like weather. Storms hard on newborn calves and lambs.

**NEW ENGLAND:** Temperatures north near normal, central and south 1 to 4° below normal. Week started cold, warmed up midweek, then cooled off again the 4th. Precipitation fell mainly as rain on 29th, 1st and 3rd. Greatest amounts, generally over 0.50 in., occurred along the coastal plain. Largest measured amounts were 2.24 in. at Brunswick, ME and 2.81 at Worcester, MA. Some flurries in northern mountains. Four inches snow measured at Caribou, ME.

**NEW JERSEY:** Temperatures averaged near normal. Extremes were 14° at Long Valley on 30th, and 73° at Pomona on 1st. Rainfall averaged 1.27 in. north, 1.66 in. central and 1.13 in. south. Heaviest 24-hour total 2.32 at New Brunswick on 3rd to 4th. Estimated soil moisture, in percent of field capacity, averaged: 99 north, 95 central and 95 south. Four inch soil temperature averaged: 41° north, 45° central and 45° south.

Weather conditions continue to slow progress. Strong winds causing erosion on recently cultivated fields. White potato planting begun. Warmer temperatures would be beneficial.

**NEW MEXICO:** Temperatures averaged slightly above normal except in the northern mountains. Precipitation was very light and occurred mostly over the northern and western mountains.

Soil moisture continues in an adequate supply in most areas. High winds continued to limit outdoor activities and deplete soil moisture. Irrigated wheat and barley in good condition. The dryland crops in poor to fair condition. Alfalfa fields making good growth with irrigation of fields active in the southern areas. Cotton planting just getting underway. Lettuce and onions remain in good condition. Apple trees beginning to bloom. Ranges in good condition in most areas in spite of lack of precipitation over the winter. Livestock wintered in good flesh with some supplemental feeding continuing.

**NEW YORK:** Early week temperatures normal, late week below normal. Precipitation near normal. Spring coming late many areas.

**NORTH CAROLINA:** Temperatures: 3 to 5° above normal except near normal in the mountains. Precipitation: Very little in the east to nearly 1.00 in. the north-west mountains.

Fieldwork: 5.7 days suitable. Soil moisture: 5% short, 91% adequate, and 4% surplus. Conditions: Wheat, oats, barley, rye and pasture fair to mostly good; tobacco plant beds mostly good; Irish potatoes mostly good; peaches mostly poor to fair; truck crops fair to mostly good. Plantings: Corn 16%, 1981 17%; Irish potatoes 84%, 1981 85%, 70% average; flue-cured tobacco underway. Supplies: Tobacco plants mostly adequate. Major farm activities: Land preparation, corn planting, and caring for tobacco beds.

**NORTH DAKOTA:** All districts had below normal temperatures and above normal precipitation, except the southeast. Average temperatures ranged from 25° north central, which was 7° below normal to 36° southeast, which was 3° above normal. Precipitation ranged from 0.57 in. northeast, which was 0.35 in. above normal to 0.11 in. southeast, which was 0.23 in. below normal.

Cold temperatures with additional rain and snow on 2nd to 4th kept conditions quite wet and left a light snow cover in many areas. Warm-up has been and is expected to continue gradual. Fieldwork at least several weeks away. Soil temperatures mostly 20's to low 30's. Travel difficult at times especially west. Inclement weather also rough on newborn livestock. Strong winds pushed wind chills below -30° and caused some structural damage.

**OHIO:** Intense low pressure pattern weekend cut short mild week. Average temperatures 2° above normal north, 5° above normal south. Total precipitation exceeded normal by 0.25 to 1.00 in. Average highs ranged from mid 50's north to mid 60's south. Daily lows averaged from mid 30's to mid 40's. Extreme highs hit upper 60's to mid 70's 2nd before plunging to teens and 20's 4th and 5th. Soil temperatures averaged low 40's north and upper 40's south.

Beginning of week farm activities: Applying anhydrous ammonia and other fertilizers; seeding oats, clover and grasses, as well as tobacco beds; setting cabbage; and moving bedding plants to market. End of week rains temporarily halted field activities.

**OKLAHOMA:** Precipitation varied from 0.02 in. central to 1.04 in. southeast. Temperatures averaged from 2° above normal north central and west central to 7° above normal east central.

Wheat good to excellent condition, growing and developing rapidly. Insects, weeds, diseases insignificant Statewide. Wheat jointing: 50%, 50% 1981, 40% average. Days suitable fieldwork: 5.6.

**OREGON:** Temperatures fell 4 to 8° below normal. Rainfall reported in all areas: 4.00 in. along coast; 1.00 to 1.50 in. through Willamette Valley; central areas up to 0.50 in.; eastern portions up to 0.25 in. Snow in Cascades, southern areas and other higher elevations.

Soil moisture supplies adequate to mostly surplus in west, mostly adequate east. Winter wheat condition fair to mostly good. Some yellowing in Willamette Valley due to wet, cool weather. Spring seeding of grains almost complete except for higher elevations. Grass seed fields in good shape. Alfalfa and clover showing early growth. Other field activities include fertilizing, spraying and tilling. Pear growers pruning, spraying, planting, fertilizing and spraying. Some cherries in bloom along with peaches and early plums. Poor weather for pollination and bee activity. Strawberry and caneberry fields being cultivated and sprayed. Some caneberry twig blight visible. Norgold potato plantings finishing in Hermiston-Boardman area as Russets get underway. Malheur County potato and onion plantings slowed due to wet fields; as were green pea seedings. Livestock condition mostly good. Range and pastures slow with cold weather. Snow pack better than average.

**PENNSYLVANIA:** Mildest week since early November but unseasonably cold 4th with brutally blustery winds to 60 miles per hour 31st and 4th. Temperatures averaged 2 to 5° above normal with extremes 72 and 8°. Storms midweek and 3rd produced 0.50 in. rainfall southwest to 2.50 in. locally southeast and northeast. Frequent snow flurries and snow squalls 4th with 1 to 2 in. new snow measured higher elevations along northern border. Small tornado reported Allentown area 3rd.

**PUERTO RICO:** Island average rainfall 0.19 in. or 0.38 in. below normal. Highest total 0.91 in. Temperatures averaged about 78 to 77° on Coasts and 73 to 71° Interior Divisions. Extremes: 94 and 52°.

**SOUTH CAROLINA:** Warmer than usual temperatures. Daily highs in the 70's and 80's. Light rainfall in some areas on 29th with more general showers later in the week.

Soil moisture adequate. Days available for fieldwork: 6. Corn 61% planted, 65 last year, 41 average. Tobacco 10% transplanted, 18 a year ago. Plant supply adequate. Cotton 1% planted. Wheat and oats 3 and 2% headed. Infestation of powdery mildew in wheat severe in some locations. Piedmont apple, peach blooms severely damaged by late March freeze, preliminary assessment up to 90% loss. Ridge peach damage seems much less severe, possibly 10 to 20% kill; assessment unfinished.

**SOUTH DAKOTA:** Weather varied dramatically. Very warm temperatures early in week gave way to rain, snow, cold and wind by weekend. Average temperature 3 to 4° below normal north, 3 to 4° above normal south. Extremes: 81 and 6°. Thunderstorms on 2nd dropped rain and hail over the southeast. Precipitation heaviest in west. Up to 1.40 in. west, 0.65 in. east. Yearly precipitation above normal by up to 2.57 in. in west but parts of southeast and east central below normal by as much as 1.67 in.

**TENNESSEE:** Weak cold front moved through 31st and 1st followed by a stronger cold front 2nd and 3rd. Severe thunderstorms and tornadoes were reported in the west on night of 2nd. Temperatures were 4 to 8° above normal. Rainfall amounts averaged 1.00 to 1.50 in. in west, 1.00 in. mid-State, and 0.25 in. in the east.

Early week farming activities included renewing pastures, land preparation, preparing tobacco seedbeds, planting corn.

**TEXAS:** Weather: Weak low pressure through moved into area 29th, late 30th. Heavy thunderstorms developed Southeast Texas. Fair skies 31st, increasing cloudiness spread northward 1st, 2nd as strong cold front moved across State; produced blowing dust. Triggered heavy thunderstorms North Central, East Texas 2nd. Fair skies 3rd. Cloudy skies, few showers over eastern half State 4th. Temperatures 3 to 5° above normal southern Texas, 6 to 10° above normal over remainder State. Rainfall near normal East Texas, Trans-Pecos; 0.25 to 0.50 in. below normal remainder Texas.

**Range and livestock:** Range, pasture condition continued to improve in most areas. Portions of Plains, Trans-Pecos region still short of moisture grazing poor. Supplemental feeding continues. Central, East Texas showers helpful in promoting growth of grasses, weeds which providing good grazing. Livestock in good condition.

**Commercial vegetables:** Rio Grande Valley, watermelons, tomatoes making excellent growth. Some wilting in watermelons, onions, seed stem problems increasing. Carrot harvest winding down. Harvest of grapefruit, Valencia oranges continues. San Antonio-Winter Garden area, carrot harvest continued, volumes decreased. Onion harvest getting underway, spinach harvest winding up. Coastal Bend, planting of tomatoes, watermelons, cucumbers active. Some delays due to scattered showers. East Texas, tomato, cantaloupe, watermelon planting underway. Land preparation for sweetpotatoes progressing well. North Texas, conditions dry, most onions, potatoes planted but need moisture. High Plains, virtually all onions, potatoes planted but need moisture. High Plains, virtually all onions, potatoes planted. Peach trees continue to bloom, many leafing out. Pecan

trees in South, Central portions in bud breaking stage.

**Crops:** High winds, blowing dust slowed field activities across High Plains. Scattered showers Central Texas provided needed boost to small grain fields. Wet soil, overcast skies interrupted planting operations. Along Coast cloudy, humid days preventing soil from drying out; most fieldwork at standstill. Cotton planting underway South Central Texas; cold, wet weather hampered germination. Planting remains active Lower Valley, Coastal Bend. Rain interrupted sorghum planting Blacklands, South Central Texas. Some stands southern part State damaged by cutworms; be replanted. Damage birds, greenbugs reported some fields. Planting underway limited areas Cross-Timbers. Corn planting making good progress. Preplant irrigation active High Plains; seeding getting underway shortly. Cutworm damage evident southern half State; some fields may be replanted. Birds damaging fields Coastal Bend. Small grains make good progress; some areas stands have stunted by lack of moisture. Oats heading in Central Texas. Wheat heading across State except Northern High Plains. Recent rains Central Texas helped crop development; high humidity prompted powdery mildew, rust problems Blacklands southward. Dryland wheat Northern High Plains moisture stress; some fields being grazed out. Some fields Blacklands being cut for hay because poor development. Reported condition across State 79% of normal with 10% excellent; 49% good; 39% fair; 2% poor. Rice planting continues along Coast. Alfalfa hay making good growth. Weevils causing heavy damage some stands High, Low Plains. Some newly emerged sugarbeet stands High Plains damaged high winds, blowing sand. Cotton planted 11%, 12% 1981, 9%

average. Rice planted 31%, 52% 1981, 40% average. Rice emerged 9%, 11% 1981, 11% average. Sorghum planted 57%, 61% 1981, 51% average. Wheat headed 4%. Corn planted 44%, 41% 1981, 31% average. Peanuts planted 2%, 6% 1981, 5% average. Sugarbeets planted 56%, 46% 1981, 39% average.

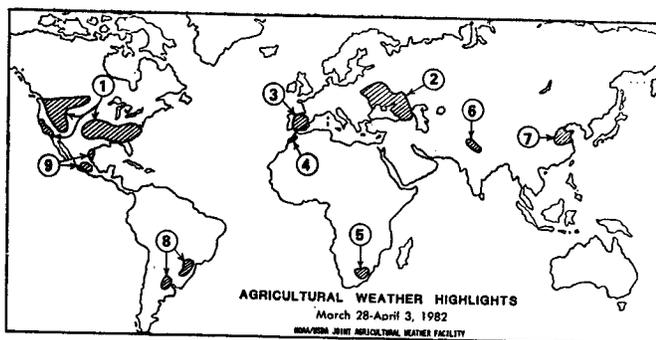
**UTAH:** Recurring periods precipitation. Accumulated amounts generally moderate, but locally heavy few localities. Average temperatures ranged from 5° below normal to 4° above.

Land preparation delayed in some areas due to recent accumulations of snow. Fruit growers anxious, unable to determine if fruit was damaged. Range feed and pasture conditions look very promising in most areas, calving and lambing nearing completion.

**VIRGINIA:** Clear and cold early in the week with overnight freezing. Warming trend with showers middle and thundershowers end of period. Average temperature 47°, 4° below normal. Average precipitation 0.20 in.

Topsoil moisture rated 2% short, 86% adequate, and 12% surplus. Days suitable for fieldwork: 4.4. Farmers finally were able to work actively in their fields applying fertilizer and breaking ground for corn and peanuts. Some low lying fields were still too wet for machinery. Tobacco bed seeding and potato planting were active. Tobacco bed seeding 97% complete and rated in excellent condition; potato planting 51% complete, 48% 1981, 33% average. Corn 1% planted, 7% 1981, 2% average. March freeze damage in major production areas was slight -- more damage was apparent in southern and southeastern areas. Peaches rated in good to excellent condition. Limited freeze burn was reported.

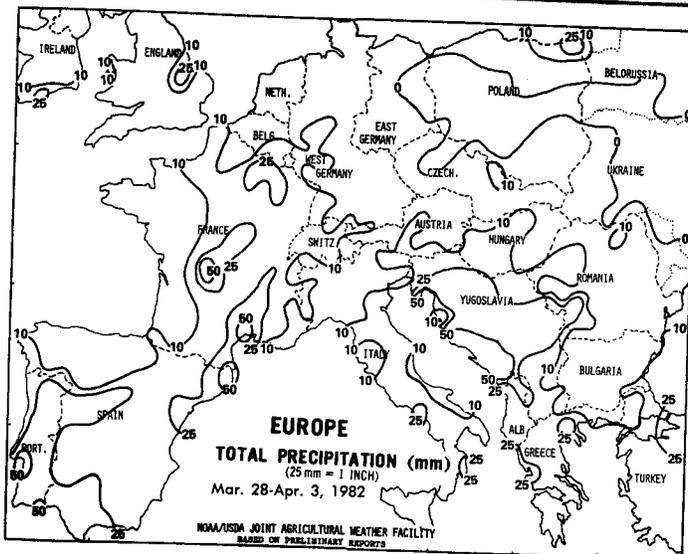
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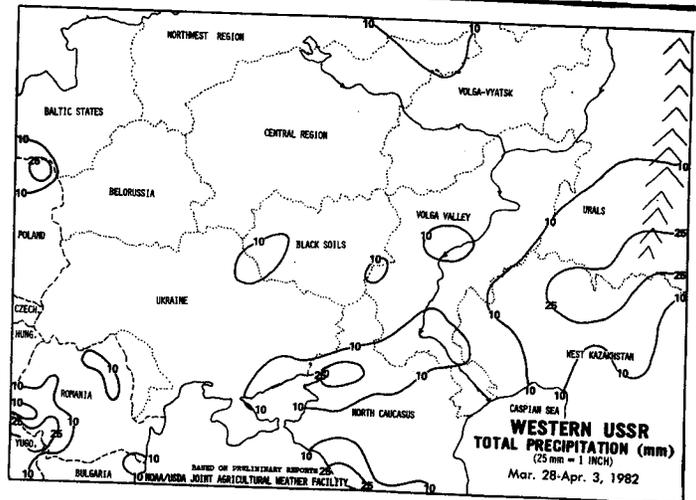
## International Weather and Crop Summary

March 28-April 3

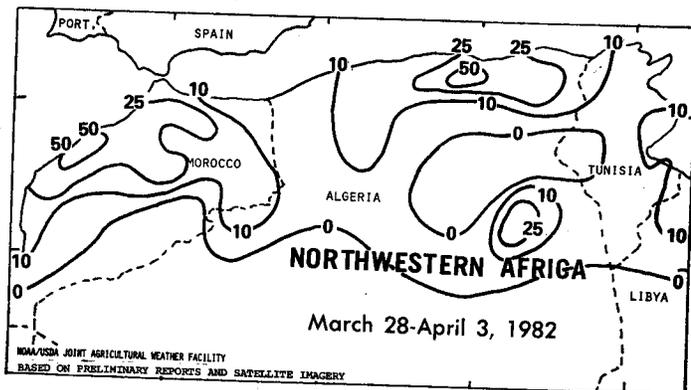
1. **UNITED STATES:** Prolonged cool, wet weather in California delays vegetable harvesting and spring planting and reduces fruit pollination. Hail damages some vineyards and stone fruits in central San Joaquin Valley. Unseasonable warmth pushes corn planting to central areas and promotes rapid wheat development. Winter storms stress livestock, especially newborn, over the West and northern Plains.
2. **WESTERN USSR:** Mostly dry conditions as winter grains break dormancy in the Ukraine and North Caucasus.
3. **EUROPE:** Wet weather in Spain benefits the winter grain crop.
4. **NORTHWESTERN AFRICA:** Beneficial rains improve winter grain conditions in Morocco.
5. **SOUTH AFRICA:** Warm dry weather favors harvesting of corn.
6. **SOUTH ASIA:** Fair weather benefits winter grains.
7. **EASTERN ASIA:** Some of China's winter grains get beneficial rains, but a large, unfavorably warm, dry area persists.
8. **SOUTH AMERICA:** Harvest delays in Argentina's crop area but mostly favorable harvest weather in Brazil.
9. **MEXICO:** Continued dry weather over most major agricultural areas further decreases soil moisture, causing stress to rainfed crops and lowering of reservoir levels in irrigated districts.



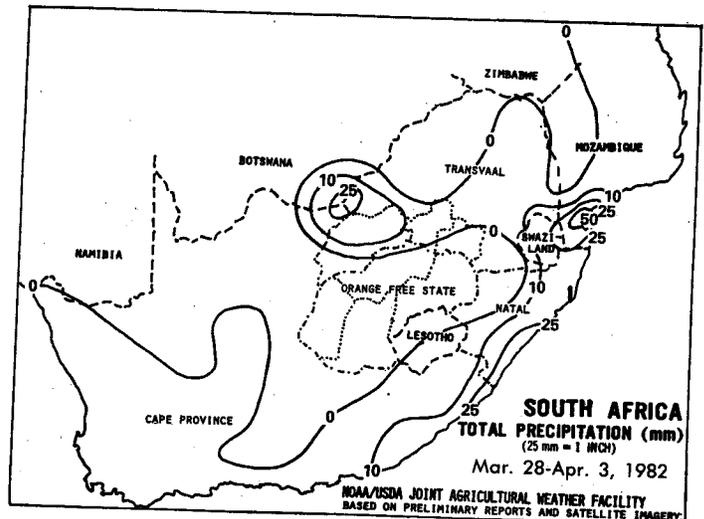
**EUROPE:** Mostly dry weather continued over northern winter grains while widespread precipitation occurred from France, southward into Spain, and eastward across the Mediterranean. The precipitation in Spain relieved a dry spell which had persisted for several weeks. Seasonal temperatures for the week over the region allowed slow growth of winter grains in many areas.



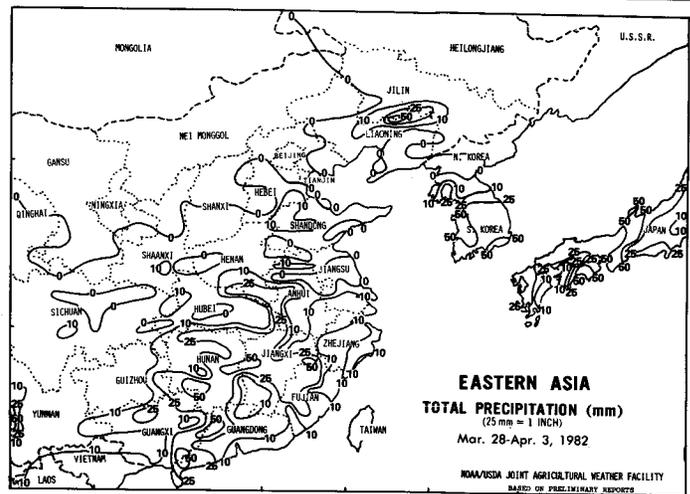
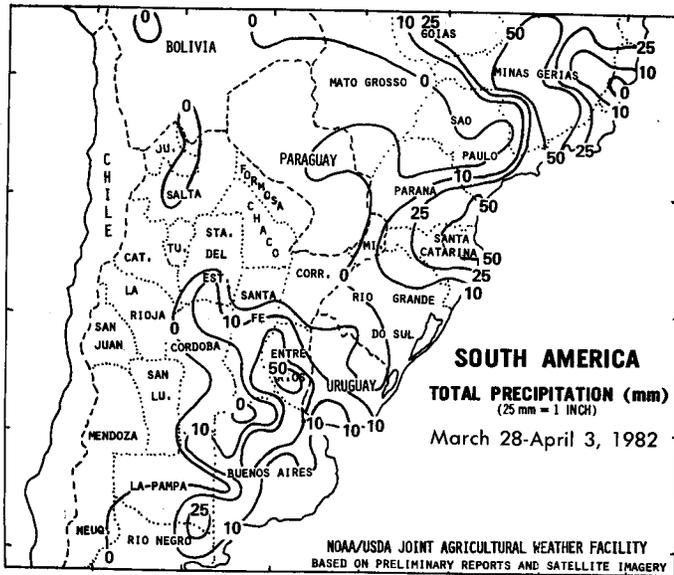
**WESTERN USSR:** Light, scattered showers fell across most of the region, except for a narrow band of widespread precipitation which fell northeastward from the eastern shore of the Black Sea into West Kazakhstan. Many winter grain areas of the Ukraine and North Caucasus broke dormancy during the week under low topsoil moisture conditions. As spring advances, these low topsoil moisture conditions could cause problems for the emerging crop if a persistent dry period extends into the growing season.



**NORTHWESTERN AFRICA:** Beneficial rainfall halted yield declines of winter grains in Morocco. Prospects were already below normal due to late sowing and dry conditions during early heading, but this moisture will allow the crop to complete the reproductive stage without further losses. Temperatures returned to near normal. Other winter grain areas from central Algeria eastward benefited from warm, wet weather, and crop prospects remained good.

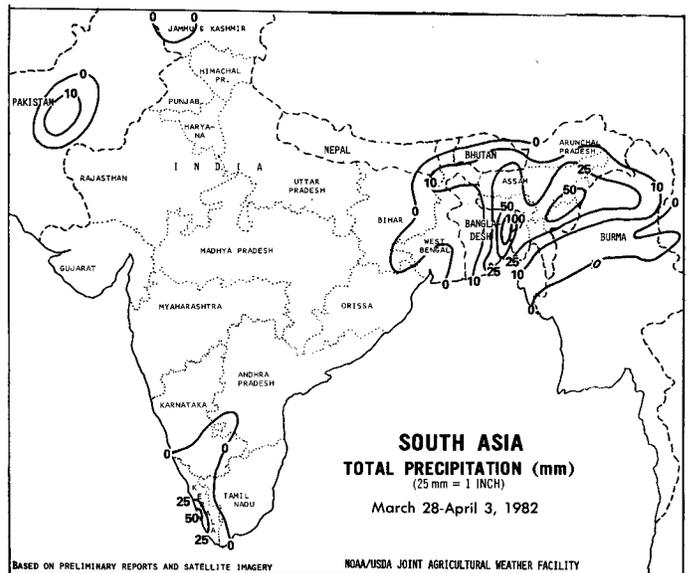


**SOUTH AFRICA:** Warm, dry weather returned to nearly all corn-growing areas, with most of the crop now mature. Weekly coverage of South Africa will be discontinued until next autumn as planting time begins. Monthly maps will be published throughout the year.



**SOUTH AMERICA:** A band of showers late in the week over eastern portions of Argentina's corn/soybean area caused temporary delays in the grain, sunflower, and first-crop soybean harvests. Dry weather is needed in this area to facilitate harvest activities. Dry conditions in Chaco favored the cotton harvest after a few weeks of showery weather. In Brazil, generally light rain fell in major crop areas, although heavier showers in northern Rio Grande do Sul, Santa Catarina, eastern Parana, and much of Minas Gerais interfered with crop harvests. Beneficially dry weather in Mato Grosso allowed resumption of the northern soybean harvest, but quality may have been affected by earlier, persistent rains. The harvest in major soybean areas of Parana and Rio Grande do Sul progressed well with several days of dry weather.

**EASTERN ASIA:** Beneficial rains of 10-25 mm fell over some eastern and southern parts of China's winter grain belt, but most of the dry area had little or no rainfall. Because of the water shortages, reportedly only half of the normally irrigable winter grainfields in that area are being watered. All others remain under stress, with about a third of them seriously so. Temperatures averaged above normal, with wide diurnal fluctuations sending highs into the mid-20's (C) at midweek. Winter grains, still in the vegetative stage, can withstand substantial stress, but additional moisture will be needed to avert serious yield declines when the crop begins heading in about 3 weeks. Conditions in Sichuan Valley are becoming too dry as well. Rainfall south of the Yangtze River increased, and although some south coastal areas may be too dry, conditions are generally favorable for the first rice crop. In South Korea, warm, wet weather encouraged growth of winter grains.



**MEXICO:** Mostly dry weather over the major agricultural areas further decreased soil moisture in nonirrigated fields. Dryness over the important corn growing belt of the southern Plateau caused additional delay in planting and development of recently emerged plants. Light, insignificant showers dotted the east-central and northeastern grain, citrus, and sugarcane districts. Irrigation, where available, was needed to maintain adequate soil moisture for the developing crops over most of the country, and the water drawdown for storage reservoirs was probably greater than usual.

**SOUTH ASIA:** No rain fell over winter grains in northern Pakistan and India. The dry weather and near-normal temperatures helped dry the mature crop and permitted harvesting. In Bangladesh, rainfall in the eastern hills improved irrigation supplies, but most crop areas had no rainfall. The southern tip of India experienced continued, localized rainfall from tropical weather systems.

# IMMEDIATE - U. S. Weather Report

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### National Weather Summary (Continued from front page.)

Great Lakes to the Tennessee Valley and eastward through the mid-Atlantic States. Showers scattered rain along the front from the western Carolinas to the lower Mississippi Valley. Another cold front moved into the West and spread rainshowers along the coast and rain or snowshowers across the central Plateau to the northern Rockies.

THURSDAY...A warm front reached from South Carolina to Arkansas and through central Texas. Warm, moist air from the Gulf of Mexico flowed into Texas and then veered northeastward into Arkansas. Light showers fell in Texas, but moderate to heavy showers and thunderstorms battered Arkansas and northern Mississippi. A complex frontal system through the West produced light to moderate rain and heavy snow in the mountains. The precipitation covered the area west of the Rockies and spread into the northern Plains.

FRIDAY...An intense low pressure system deepened in the central Plains. Severe weather moved ahead of the storm through the entire Mississippi Valley and spread slowly eastward to a line from the upper Ohio Valley through Alabama. Light showers and thunderstorms extended to the mid-Atlantic States by the end of the day. The low pressure center deepened to record intensity as it reached the Great Lakes area. Tornadoes, hail, high winds, and heavy rain lashed the area from northeastern Texas into Minnesota and

Wisconsin. Rain, wind, and snow from another storm hit the Pacific Northwest.

SATURDAY...The intense low pressure system moved slowly into the central Lakes area. The cold front, marking the line of severe weather, moved from the central Great Lakes, through the Appalachians to central New York State, and along the east coast to northern Florida. Thunderstorms were not as intense along the front as on Friday, but golf ball-sized hail and high winds were reported from New York to Georgia. Rainshowers, with snow in the mountains, spread into central California over the Plateau to the northern Plains.

### National Agricultural Summary (Continued from page 12.)

**PASTURES AND LIVESTOCK:** Pastures were in fair to good condition across the South. Conditions continued to improve due to good soil moisture supplies and mild weather. Supplemental feeding in Texas decreased as pastures and ranges improved. However, some areas of the State were still short of moisture and grazing was poor due to limited growth of grasses. Livestock were in mostly good condition although cold, wintery weather stressed herds in many areas and was particularly hard on newborn calves.

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