

# WEEKLY WEATHER AND CROP BULLETIN

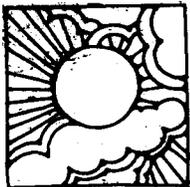
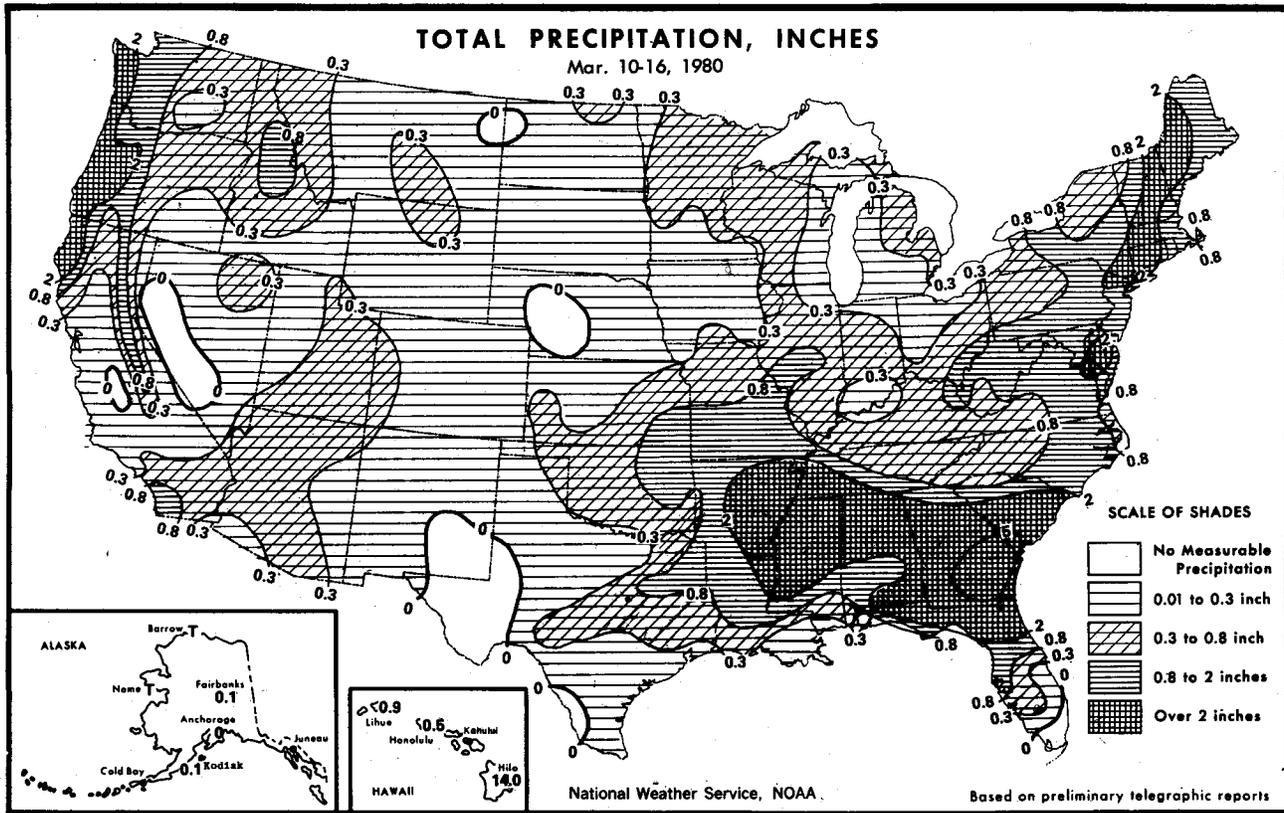
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National Weather Service, NOAA

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## National Weather Summary

March 10 - 16

**HIGHLIGHTS:** Early in the week, a storm system formed in Arkansas and moved northeastward spreading rain and then snow in its path. The storm weakened in the Ohio Valley as a new system began intensifying in the Southeast. The new system moved up the East Coast and dropped heavy rain before changing to freezing rain and then snow in the mid-Atlantic States. In the latter part of the week, some moderate amounts of precipitation fell in the Northwest and down into the Sierra Nevada Mountains. Some light amounts fell in the Southwest and southern Plateau Region

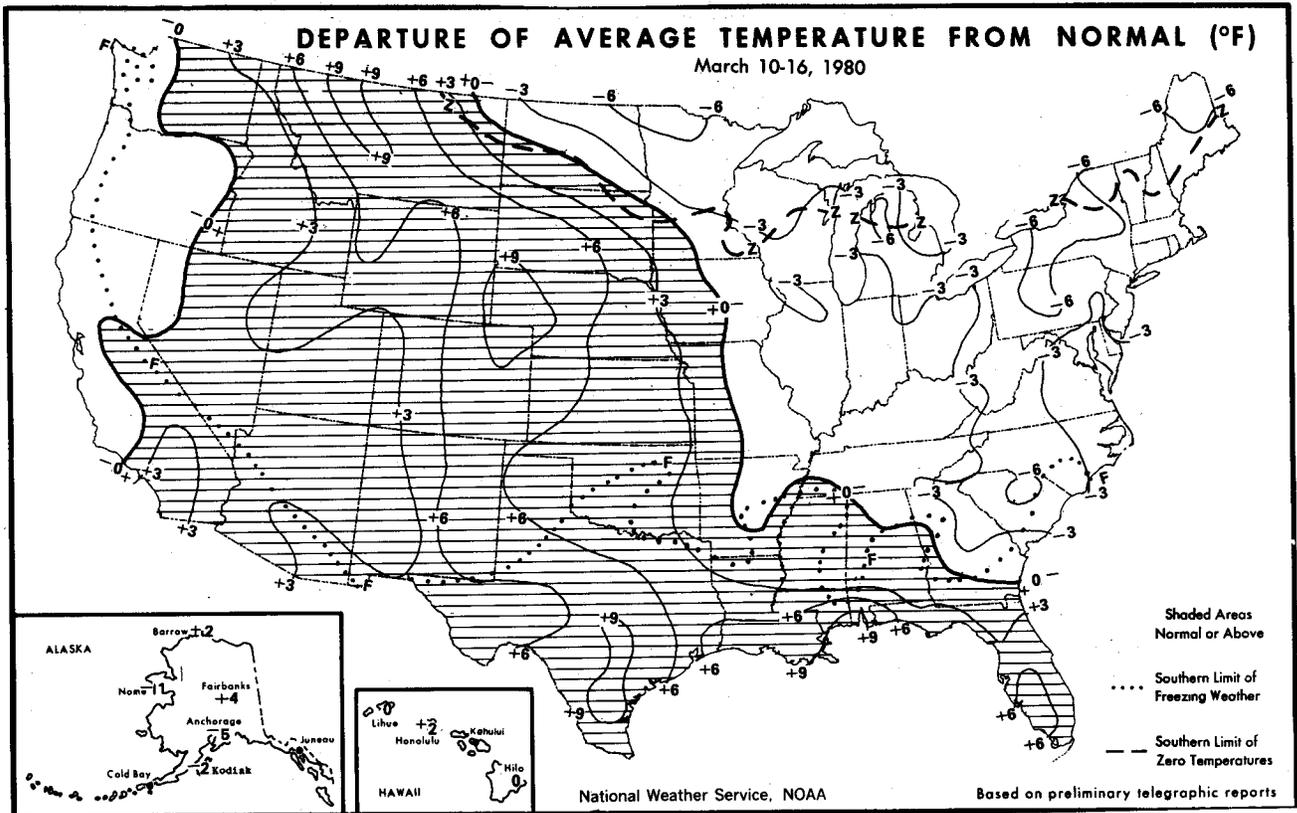
Average temperatures for the week were colder than normal from North Dakota eastward through New England and throughout the Appalachian Mountains.

On Monday, a cold front extended across the Gulf Coastal States bringing heavy rain, hail, and tornadoes. Northern Florida was especially hard hit; Jacksonville measured nearly 4 inches of rain, with two tornadoes reported just to the south. Other areas of rain showed about 3 inches at Alma, southeastern Georgia, and nearly an inch at Dothan, southeastern Alabama.

Rain also fell from Pennsylvania through Connecticut; New York City posted an inch. Showers also dampened the West Coast, where San Diego, Calif., gathered nearly an inch.

Unseasonably warm air pushed temperatures to record levels in Texas and Florida; new marks in Texas showed 89° at Houston and 85° at Port Arthur. Record-tying readings were 77° at Galveston and 80° at Pensacola, Fla.

Heavy snow fell over the northern sections of the Great Lakes and New England on Tuesday. More



than a half-foot blanketed Sault Ste. Marie, on the Michigan Peninsula, and Caribou, northern Maine.

Light rain fell from Maryland to southern New England; one-half to three-quarters inch moistened Baltimore and Hartford, Conn. Very light rains fell over West Texas and the Pacific Northwest. By day's end, up to three-quarters inch fell over some Oklahoma and Arkansas points.

Temperatures dipped very sharply in the north central States. Well-below-zero readings were common in North Dakota and Minnesota.

A low pressure system spread rain and snow through the Nation's midsection and rain through the Gulf Coastal States on Wednesday.

St. Louis accumulated 5 inches of snow, while Kansas City picked up 4 inches. To the south, heavy rains doused some sections. Nearly 4 inches deluged Dothan, Ala., while many stations from Mississippi through Georgia scored up to 2 inches.

Temperatures remained cold in the North, where Sault Ste. Marie tallied a record low  $-13^{\circ}$ . By contrast, Houston, Tex., posted a record high  $88^{\circ}$ .

The moisture spread from the Deep South up the East Coast, changing from rain to snow around the northern Virginia area on Thursday.

Rainfall included 1.2 inches at Baltimore and an inch and one-half at Charleston, S.C. The moisture wavered between rain and snow as far north as New York City; beyond that point, Bridgeport, southern Connecticut, logged 5 inches of snow. Albany, N.Y., measured a 3-inch mantle. Light snow also whitened the midlands from the central Plains through the upper Mississippi Valley.

Miami Beach, Fla., at  $87^{\circ}$ , notched a record high reading.

Much of the Nation enjoyed a fair and mild day on Saturday. However, a weather system moved from the Northwest through the upper half of the Rockies. One-third inch of rain moistened parts of Oregon and California. Snow fell over the northern reaches of the area; four inches whitened Washington's mountains, and reached Wyoming by day's end. Light rain dampened East Texas; Houston recorded a quarter-inch.

Southerly winds drove rain through the lower Mississippi Valley and Deep South into the Tennessee Valley on Sunday. One to 2 inches of rain soaked Monroe, northeastern Louisiana, Jonesboro, northeastern Arkansas, Memphis, Tenn., and Muscle Shoals, northwestern Alabama.

On Friday, snow persisted from the Appalachians through New England but gradually moved out to sea. As much as 8 inches of snow covered the ground from southern Vermont through Maine.

Light snow dusted the upper Great Lakes, and heavier amounts blanketed the northern Plateau region; seven inches fell over Grangeville, northern Idaho. Rain fell over the western portions of northern California, Oregon, and Washington.

Widely scattered light rain dampened sections of the Pacific Northwest and Wisconsin.

Snow continued in the upper half of the Rockies, as well as in eastern Colorado and the Nebraska Panhandle.



## National Agricultural Summary

March 10 - 16

**HIGHLIGHTS:** Above-normal temperatures throughout the Great Plains melted snowcover and provided moisture to winter wheat. Precipitation throughout the Southeast kept soils saturated and limited plowing and planting activities. Fieldwork across the Southeast was limited to only 1 to 4 days. Wet soils prevented much plowing; however, plowing in many areas was on schedule because much was accomplished last fall. Land preparations began on the better drained soils in the Corn Belt. Winter wheat rated fair to good; greening extended no further north than Kansas. Corn planting became more widespread across the South. Wet soils delayed cotton planting in the Southwest, and winds delayed land preparation on the southern Plains. Sorghum planting was well advanced in Texas; emerging stands extended as far north as the Blacklands. Rice planting was on schedule in Louisiana. Pastures rated mostly fair to good; earlier subnormal temperatures and currently saturated soils lowered the condition and slowed growth. Deciduous fruit growers continued to prune trees. It was too early to assess freeze damage to the southeastern peach crop.

**SMALL GRAINS:** Winter wheat generally rated fair to good; growers began spreading fertilizer in northern areas as field conditions permitted. Greening extended as far north as Kansas on the Great Plains; however, below-normal temperatures held the crop dormant in the Corn Belt. Some freeze damage became evident in the Southeast. Early stands headed in the Southwest and began jointing in other areas of the South.

Kansas winter wheat began greening but showed only limited growth. Some winterkill was evident in central Kansas where the crop entered the winter in a weakened condition. Oklahoma wheat developed well and rated fair to good; ranchers moved cattle off wheat to be harvested for grain. Texas winter wheat recovered from the low temperatures of previous weeks, but dry soils limited growth. New Mexico-irrigated wheat rated good, but dryland stands showed stress because winds dried soils. California and Arizona wheat rated good; early fields began heading. Northwestern stands rated good and showed some greening. Corn Belt winter wheat rated good; farmers spread fertilizer where fields conditions permitted.

Washington farmers began planting spring wheat.

**OTHER CROPS:** Cotton planting advanced very slowly in the Southwest because of wet, cool soils. Texas cotton planting reached 8%, surpassing last year's 6% and the 5% average. Winds on the Plains slowed land preparation.

Corn planting became widespread throughout the South, reaching 7% in Alabama and Mississippi and about 20% in Texas and Louisiana. Some freeze damage became more evident in the South.

Texas sorghum planting reached 34%, well ahead of last year's 20% and the 23% average. Stands emerged as far north as the Blacklands.

Louisiana rice planting reached 7%, equaling the average but 1 point more than last year. Texas rice growers along the Gulf Coast prepared land for planting.

Tobacco plantbeds rated fair to mostly good. Virginia tobacco plantbeds reached 36% seeded.

**FRUITS & NUTS:** Deciduous fruit growers in northern areas continued to prune trees. Peaches showed buds as far north as South Carolina and parts of Texas and California. It was too early to assess freeze damage in Georgia peach orchards.

Florida citrus groves rated very good with adequate moisture. Blooms and new growth showed in all areas; however, full bloom was 1 to 2 weeks away. Early and midseason orange harvests reached the final stages. The grapefruit harvest gained momentum with an improved labor supply. The Texas Valencia harvest continued, while grapefruit picking wound down. The Arizona Valencia harvest increased; grapefruit picking held steady but had not reached full volume; and lemon picking declined rapidly. Arizona citrus trees reached full bloom, showing new growth, and rating good. California lemon harvesting began in the Bakersfield area.

**VEGETABLES:** Wet soils delayed vegetable planting throughout most of the Southeast. Most activity centered in Florida, Texas, and California.

Florida vegetable crops generally rated good; plants responded to warmer weather. Shipments increased 12% from the previous week; only cabbage, carrots, escarole, and okra showed declines. Strawberries, potatoes, and watermelons recovered well from recent subnormal temperatures. Texas growers harvested carrots, cabbage, lettuce, and spinach. Some growers replanted freeze-damaged stands of cucumbers and melons. Producers continued to plant watermelons, onions, tomatoes, beans, peppers, and sweet corn. Arizona growers harvested lettuce and a variety of other vegetables; land preparation and planting of melons were well advanced. Wet fields delayed some California vegetable harvests, but volume increased for some crops as fields dried. Asparagus supplies from northern California increased. Lettuce harvest began in the San Joaquin Valley and finished in the Imperial Valley. Wet fields delayed the processing-spinach harvest; considerable acreage was lost to flooding. Tomato planting increased, although many Sacramento Valley fields were too wet for operations.

**PASTURES & LIVESTOCK:** Pastures generally rated only fair because of earlier low temperatures and recent rains which saturated soils. Most grazing was confined to southern areas of the Nation. Ranchers moved cattle off winter wheat earmarked for grain harvest.

Texas rangeland was dry, and grass grew slowly. California grasslands had adequate moisture but needed higher temperatures to improve growth. Some grasslands showed good development including stands in Arkansas and Oklahoma.

Cattle rated fair to good with many herds on supplemental rations because of the less-than-normal pasture growth. Calving and lambing advanced on schedule with losses below normal because of the milder weather particularly throughout most of the West. Livestock producers in the Southeast moved cattle to higher ground because of the flood threat from frequent rains on already-saturated soils. Feed supplies rated adequate except for a shortage of hay in the Northwest.

Weather Data for the Week Ending March 16, 1980

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 March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
ALA. Birmingham.	62	43	73	33	52	-1	4.2	-2.8	3.6	10.4	242	76	44	0	0	3	2
Mobile.	77	58	85	47	68	9	.3	-1.3	.2	1.3	27	78	47	0	0	2	0
Montgomery.	66	46	75	36	56	0	1.2	-.2	1.2	3.8	90	82	44	0	0	2	1
ALASKA. Anchorage.	26	7	31	3	17	-5	0	-.1	0	.1	33	66	51	0	7	0	0
Barrow.	11	-16	-6	-21	-14	2	T	0	T	0	66	62	6	0	6	0	0
Fairbanks.	17	-1	31	-25	11	4	.1	0	.1	.3	100	70	48	0	6	2	0
Kodiak.	36	24	43	18	30	-2	.1	-.8	.1	1.3	46	61	40	0	7	2	0
Nome.	7	-15	21	-22	-5	-11	T	-.1	T	.5	83	62	55	0	7	1	0
ARIZ. Flagstaff.	45	24	52	16	35	1	.7	-.3	.4	2.9	242	87	38	0	7	2	0
Phoenix.	73	51	78	49	62	3	.4	-.2	.4	1.2	200	76	33	0	7	2	0
Tucson.	71	48	78	41	60	2	.3	-.2	.2	.6	200	67	28	0	0	2	0
Winslow.	59	33	67	26	46	1	.1	0	.1	.4	133	---	---	0	4	1	0
Yuma.	77	54	85	50	65	2	.2	-.1	.1	.5	167	53	26	0	0	2	0
ARK. Fort Smith.	65	35	75	26	50	0	.8	0	.3	1.7	71	78	32	0	2	3	0
Little Rock.	62	41	80	36	51	-1	2.0	-.9	1.3	4.0	121	73	46	0	0	3	2
CALIF. Bakersfield.	64	45	68	38	55	-2	T	-.2	T	.9	150	---	---	0	0	0	0
Eureka.	53	42	55	33	47	-1	3.0	1.9	1.3	6.9	203	89	63	0	0	5	2
Fresno.	64	42	67	35	53	-1	T	-.4	T	1.7	142	87	41	0	0	0	0
Los Angeles.	66	52	70	51	59	0	T	-.5	T	1.5	94	65	54	0	0	1	0
Red Bluff.	62	42	68	35	52	-1	.2	-.4	.2	1.8	100	75	40	0	0	1	0
San Diego.	69	57	73	55	63	-5	1.0	-.6	1.0	3.0	250	76	58	0	0	1	1
San Francisco.	61	44	67	39	52	-1	.1	-.5	T	2.0	111	83	49	0	0	2	0
Stockton.	65	42	69	37	53	1	T	-.4	T	.7	54	---	---	0	5	0	0
COLO. Denver.	58	29	68	23	44	7	.1	-.2	.1	.3	38	54	21	0	6	1	0
Grand Junction.	53	31	64	26	42	1	.4	-.3	.2	1.3	433	77	33	0	6	2	0
Pueblo.	66	28	77	18	47	7	.1	0	.1	.2	67	---	---	0	6	1	0
CONN. Bridgeport.	40	26	48	21	33	-4	2.2	1.4	.8	4.7	196	54	37	0	6	4	3
Hartford.	38	20	50	13	29	-6	2.2	1.4	.7	5.0	208	63	33	0	7	4	3
D.C. Washington.	53	34	65	31	44	-1	1.2	-.4	1.2	2.6	108	74	36	0	2	3	1
FLA. Apalachicola.	70	57	75	47	64	3	.5	-.6	.3	2.2	67	74	66	0	0	3	0
Daytona Beach.	76	59	81	53	68	4	1.2	-.4	.9	2.4	100	86	55	0	0	2	1
Ft. Myers.	82	65	86	56	74	5	.1	-.6	.1	.2	10	90	55	0	0	1	0
Jacksonville.	73	53	79	44	63	2	2.7	1.9	1.7	6.8	283	88	60	0	0	2	2
Key West.	81	72	82	70	76	2	0	-.3	0	0	91	71	0	0	0	0	0
Miami.	82	69	88	62	75	4	T	-.4	T	0	88	56	0	0	0	0	0
Orlando.	80	58	88	51	69	3	.2	-.6	.1	.4	17	91	46	0	0	2	1
Tallahassee.	76	51	83	37	63	3	4.4	3.0	3.5	11.9	283	75	48	0	0	2	1
Tampa.	77	61	82	52	69	3	.9	0	.9	1.8	67	90	60	0	0	2	1
W. Palm Beach.	80	64	88	56	72	2	0	-.8	0	0	91	56	0	0	0	0	0
GA. Atlanta.	61	40	74	34	50	0	2.3	1.0	2.3	8.1	208	67	44	0	0	2	1
Augusta.	63	38	74	28	51	-4	3.6	2.5	3.5	9.0	273	74	45	0	1	2	1
Macon.	64	42	75	31	53	-3	3.7	2.5	3.6	10.0	278	82	47	0	1	2	1
Savannah.	63	47	74	39	55	-3	3.7	2.6	3.0	8.1	253	77	48	0	0	2	2
HAWAII. Hilo.	---	---	---	---	71	0	14.0	10.9	---	28.0	298	---	---	0	0	---	---
Honolulu.	81	69	83	68	75	2	.5	-.3	---	1.0	43	90	60	0	0	---	---
Kahului.	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	---	---
Lihue.	---	---	---	---	72	0	.9	-.2	---	2.3	70	---	---	0	0	---	---
IDAHO. Boise.	51	32	61	21	41	1	.4	-.2	.2	1.3	186	70	37	0	3	3	0
Lewiston.	51	36	60	31	43	1	.4	-.2	.2	1.3	217	72	37	0	1	2	0
Pocatello.	45	28	55	20	37	2	-.1	-.1	.1	.6	100	67	43	0	6	3	0
ILL. Cairo.	53	37	71	29	45	-1	.8	-.3	.6	2.0	61	---	---	0	1	2	1
Chicago.	42	23	57	13	32	-3	.3	-.3	.2	1.0	59	79	50	0	6	3	0
Moline.	42	24	59	12	33	-2	.4	-.1	.2	1.3	87	79	49	0	6	2	0
Peoria.	42	26	58	15	34	-3	.5	-.1	.3	1.8	106	80	55	0	6	3	0
Rockford.	38	22	49	8	30	-3	.2	-.4	.1	.6	35	79	60	0	6	2	0
Springfield.	45	28	62	18	37	-2	1.2	-.6	.7	3.0	176	82	60	0	5	3	1
IND. Evansville.	49	33	66	25	41	-3	.3	-.8	.2	1.1	34	80	61	0	6	3	0
Ft. Wayne.	40	24	54	15	32	-4	.3	-.3	.2	1.6	89	74	53	0	7	3	0
Indianapolis.	45	26	61	19	36	-3	.4	-.4	.2	1.5	63	77	51	0	6	3	0
South Bend.	42	26	60	16	34	-1	.2	-.4	.1	1.4	82	88	61	0	6	3	0
IOWA. Burlington.	44	24	62	15	34	-1	.3	-.3	.2	1.5	88	---	---	0	6	2	0
Des Moines.	43	23	61	13	33	0	.3	-.2	.3	.9	64	79	52	0	6	1	0
Dubuque.	38	20	52	6	29	-2	.5	-.1	.2	1.3	76	80	43	0	6	2	0
Sioux City.	44	24	63	14	34	2	.2	-.1	.1	.5	56	83	43	0	7	2	0
KANS. Concordia.	52	31	69	23	42	3	.1	-.3	.1	.3	27	77	46	0	5	3	0
Dodge City.	59	34	78	29	46	6	.2	-.1	.1	.4	50	71	45	0	4	3	0
Goodland.	56	28	70	26	42	7	.3	-.1	.2	.6	100	81	41	0	7	2	0
Topeka.	55	32	71	23	44	3	.3	-.1	.2	.6	50	77	38	0	4	3	0
Wichita.	58	35	68	27	47	4	.7	-.3	.4	1.4	127	73	47	0	2	2	0
KY. Lexington.	51	30	65	20	41	-2	.5	-.6	.2	2.2	67	67	42	0	6	3	0
Louisville.	52	31	65	23	41	-2	.2	1.0	.1	1.1	31	70	43	0	6	3	0

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending March 16, 1980

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-hours, in.	Total, in., since March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
LA. Baton Rouge	74	59	80	44	66	7	T	-1.1	T	.7	21	82	49	0	0	1	0
LA. Lake Charles	73	56	78	46	65	5	T	-1.1	T	.7	1.5	85	60	0	0	3	1
LA. New Orleans	76	60	82	51	68	7	T	-1.3	T	1.2	31	81	52	0	0	0	0
LA. Shreveport	72	46	83	38	59	3	1.0	.1	.5	2.1	78	82	39	0	0	1	0
MAINE. Caribou	25	6	34	-2	16	-	1.6	1.1	.7	3.7	247	82	57	0	0	3	1
MAINE. Portland	35	18	42	11	27	-	2.0	1.2	1.4	5.2	217	53	42	0	0	4	2
MD. Baltimore	48	29	60	27	39	-	1.6	.8	1.6	3.5	146	61	42	0	0	3	3
MASS. Boston	40	24	50	18	32	-6	1.7	.8	1.4	4.2	156	52	33	0	0	4	1
MASS. Chatham	42	26	46	21	34	-	1.7	.8	1.4	4.2	156	52	33	0	0	4	1
MICH. Alpena	31	16	47	0	24	-1	.3	-	.4	2.0	74	61	42	0	0	3	0
MICH. Detroit	39	19	57	9	29	-6	.3	-	.3	1.3	87	84	52	0	0	4	0
MICH. Flint	36	18	54	8	27	-5	.2	-	.2	1.3	87	84	52	0	0	2	0
MICH. Grand Rapids	39	20	58	8	30	-3	.1	-	.1	.8	57	84	43	0	0	2	0
MICH. Houghton Lake	32	6	49	-10	19	-7	.3	-	.4	.1	27	87	55	0	0	2	0
MICH. Lansing	37	17	55	6	27	-4	.2	-	.1	.8	67	84	48	0	0	2	0
MICH. Marquette	27	6	43	-11	17	-10	.2	-	.2	.1	47	88	48	0	0	2	0
MICH. Muskegon	36	19	57	7	28	-5	.2	-	.3	.1	47	88	48	0	0	2	0
MICH. S. Ste. Marie	25	9	35	-17	17	-6	.7	-	.3	.3	79	54	6	0	0	2	0
MINN. Duluth	26	7	35	-8	17	-6	.7	-	.3	1.5	125	88	66	0	0	5	0
MINN. Internatl. Falls	24	3	34	-22	14	-6	.6	-	.3	1.4	127	75	61	0	0	4	0
MINN. Minneapolis	35	15	44	1	25	-2	.5	-	.3	1.3	217	72	48	0	0	5	0
MINN. Rochester	34	14	42	-4	24	-3	.3	-	.2	1.2	109	69	46	0	0	3	0
MINN. St. Cloud	33	8	42	-14	20	-4	.3	0	.2	1.0	91	79	57	0	0	7	0
MISS. Jackson	68	46	78	35	57	2	4.6	3.3	2.6	10.1	259	89	46	0	0	4	2
MISS. Meridian	67	44	80	31	56	0	1.2	-	.9	4.9	117	81	44	0	0	3	1
MO. Columbia	49	28	66	17	39	-3	.8	.2	.6	1.8	106	79	50	0	0	4	1
MO. Kansas City	51	29	68	19	40	-	.6	0	.4	1.3	76	73	43	0	0	5	0
MO. St. Louis	50	32	68	21	41	-2	.8	.1	.6	1.7	85	67	56	0	0	3	0
MO. Springfield	56	32	70	23	44	-1	1.7	1.1	.8	3.4	189	77	39	0	0	4	1
MONT. Billings	48	27	62	22	38	6	.5	.3	.2	1.4	233	76	43	0	0	6	2
MONT. Glasgow	36	17	47	5	27	2	T	-	T	.1	33	69	62	0	0	7	0
MONT. Great Falls	49	29	61	23	39	9	.1	-	.1	.4	67	63	31	0	0	6	0
MONT. Havre	43	21	58	10	32	7	.2	-	.1	.6	200	88	50	0	0	7	0
MONT. Helena	44	26	56	23	35	4	T	-	T	.6	200	72	40	0	0	7	0
MONT. Kalispell	41	29	44	18	35	5	.3	-	.2	.8	133	89	56	0	0	6	0
MONT. Miles City	46	23	62	8	35	5	T	-	T	.2	67	83	48	0	0	7	0
MONT. Missoula	45	29	53	23	37	5	.4	.3	.2	1.2	400	83	48	0	0	5	0
NEBR. Grand Island	47	28	68	21	38	3	.1	-	.1	.7	117	78	49	0	0	6	0
NEBR. Lincoln	48	29	68	20	38	3	.2	-	.1	.7	78	87	45	0	0	6	0
NEBR. Norfolk	47	25	64	18	36	4	.1	-	.2	T	.3	89	50	0	0	7	0
NEBR. N. Platte	55	29	75	25	42	9	T	-	T	.1	17	74	33	0	0	6	0
NEBR. Omaha	45	27	66	16	36	0	T	-	T	.1	78	92	51	0	0	5	0
NEBR. Valentine	49	25	63	14	37	5	.2	-	.1	.7	33	88	48	0	0	6	0
NEV. Ely	48	22	55	11	35	3	.2	0	.2	1.3	217	63	30	0	0	6	0
NEV. Las Vegas	66	46	73	40	56	1	.2	-	.2	.8	267	56	23	0	0	2	0
NEV. Reno	53	23	60	15	38	-2	T	-	T	.1	25	77	25	0	0	7	0
NEV. Winnemucca	53	25	64	12	39	2	.1	0	.1	.4	100	61	27	0	0	5	0
N.H. Concord	37	16	48	6	26	6	1.4	.8	.8	3.6	200	60	37	0	0	7	2
N.J. Atlantic City	45	27	54	23	36	-5	1.3	.3	.8	2.6	87	70	48	0	0	6	1
N.J. Trenton	44	30	57	23	37	3	1.6	.7	.8	3.5	135	--	--	0	0	5	2
N.MEX. Albuquerque	63	33	71	24	48	3	.1	0	.1	.2	67	53	17	0	0	3	0
N.MEX. Roswell	70	41	77	32	56	8	0	-	.1	0	0	--	--	0	0	1	0
N.Y. Albany	36	16	49	4	26	-7	1.0	.4	.6	3.0	167	67	38	0	0	7	1
N.Y. Binghamton	35	16	45	11	25	-5	1.2	.6	.8	3.5	194	67	41	0	0	7	3
N.Y. Buffalo	35	19	51	14	27	-5	.6	0	.2	1.8	100	72	48	0	0	7	0
N.Y. New York	41	29	50	24	35	-5	1.4	.5	.4	3.4	126	52	38	0	0	5	0
N.Y. Rochester	35	16	46	8	26	-7	1.1	.5	.4	2.8	156	76	49	0	0	7	0
N.Y. Syracuse	35	14	47	4	25	-8	.7	0	.4	2.3	110	82	57	0	0	7	0
N.C. Asheville	55	32	70	28	43	-2	.5	.6	.3	1.5	45	74	42	0	0	5	0
N.C. Charlotte	57	35	69	29	46	-5	.7	.4	.4	2.7	82	65	41	0	0	3	2
N.C. Greensboro	56	33	67	28	44	-3	.1	.7	.1	.9	38	67	25	0	0	3	0
N.C. Hatteras	60	39	68	31	49	-1	.8	.1	.6	2.4	89	77	53	0	0	2	1
N.C. Raleigh	55	33	68	29	44	-5	1.0	.2	.8	2.5	104	79	44	0	0	4	3
N.C. Wilmington	61	39	66	32	50	-4	1.6	.6	1.3	3.5	117	71	39	0	0	1	1
N.DAK. Bismarck	34	14	49	2	24	0	.1	0	T	.2	67	79	57	0	0	7	2
N.DAK. Fargo	26	10	37	-10	18	-6	.3	.2	.3	.6	200	75	65	0	0	7	0
N.DAK. Williston	32	11	43	-5	21	-3	T	-	T	0	0	87	61	0	0	7	0
OHIO. Akron-Canton	42	24	61	12	33	-3	.5	-	.3	2.6	124	76	53	0	0	7	0
OHIO. Cincinnati	49	28	67	20	39	-2	.3	.6	.2	3.5	130	76	45	0	0	6	0
OHIO. Cleveland	41	24	64	15	33	-3	.1	-	.1	1.3	65	74	45	0	0	6	3
OHIO. Columbus	47	27	66	17	37	-2	.3	.5	.2	1.7	74	72	51	0	0	6	2
OHIO. Dayton	46	25	64	17	36	-3	.2	-	.1	1.7	81	78	48	0	0	6	0
OHIO. Toledo	41	21	59	10	31	-4	.2	-	.2	1.2	71	81	55	0	0	7	0
OHIO. Youngstown	38	20	59	7	29	-6	.6	-	.3	2.8	133	67	50	0	0	7	0

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending March 16, 1980

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-hours, in.	Total, in., since March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
OKLA.Okla. City . . . . .	66	39	78	34	52	5	.3	-.1	.3	.6	50	73	34	0	0	2	0
Tulsa . . . . .	66	39	82	34	52	5	.9	-.4	.6	1.8	120	74	37	0	0	1	1
OREG.Astoria . . . . .	49	38	51	35	43	-1	2.6	1.1	.7	6.1	133	88	77	0	0	3	2
Burns . . . . .	44	26	57	17	35	-1	T	-.2	T	.3	50	82	38	0	5	2	0
Medford . . . . .	53	33	65	28	43	-1	.7	-.3	.3	1.8	150	83	47	0	4	6	0
Pendleton . . . . .	48	34	59	29	41	-2	.5	-.3	.3	1.5	214	79	50	0	3	3	0
Portland . . . . .	50	38	56	34	44	-2	1.6	-.7	.5	3.7	137	90	68	0	0	6	1
Salem . . . . .	49	36	53	34	43	-2	1.9	-.9	.7	4.2	135	94	66	0	0	6	1
PA.Allentown . . . . .	41	26	54	20	33	-4	1.6	-.8	.7	3.6	150	56	47	0	7	2	0
Erie . . . . .	36	20	63	11	28	-5	.5	-.2	.2	2.2	122	--	--	0	7	3	3
Harrisburg . . . . .	43	26	58	20	34	-6	1.4	-.6	1.0	3.3	143	48	41	0	7	3	1
Philadelphia . . . . .	43	30	55	24	37	-5	2.0	1.2	1.4	4.3	179	65	46	0	6	3	3
Pittsburgh . . . . .	41	23	63	13	32	-6	.7	-.1	.4	3.0	125	82	42	0	7	2	0
Scranton . . . . .	38	21	52	16	30	-5	1.2	-.6	.8	2.7	159	64	41	0	7	4	1
R.I.Providence . . . . .	41	22	49	13	32	-5	1.6	-.7	1.2	3.5	130	47	32	0	7	4	1
S.C.Charleston . . . . .	63	42	74	34	53	-4	3.7	2.6	2.1	9.1	276	73	57	0	0	2	2
Columbia . . . . .	60	34	70	25	47	-7	2.3	1.2	2.0	5.9	179	78	42	0	2	2	1
Greenville . . . . .	56	35	68	29	46	-5	.7	-.6	.6	3.6	95	71	41	0	1	2	1
S.DAK.Aberdeen . . . . .	34	17	53	5	26	-1	.2	0	0	.5	100	74	60	0	7	2	0
Huron . . . . .	42	21	63	10	32	-3	.2	0	.1	.5	83	80	53	0	6	2	0
Rapid City . . . . .	50	25	65	16	37	-7	T	-.2	T	.2	40	83	42	0	6	1	0
Sioux Falls . . . . .	43	24	62	12	34	-5	.2	-.1	.1	.4	44	85	56	0	5	3	0
TENN.Chattanooga . . . . .	57	36	68	28	46	-3	1.1	-.2	.7	5.3	136	69	41	0	2	3	1
Knoxville . . . . .	57	36	69	29	47	-3	3.3	-.8	.2	2.2	65	74	42	0	1	3	0
Memphis . . . . .	61	40	74	34	51	-0	3.1	-2.0	2.5	7.1	215	77	45	0	0	3	2
Nashville . . . . .	57	35	71	28	46	-2	.7	-.5	.6	2.3	64	71	43	0	2	3	1
TEX.Abilene . . . . .	72	49	77	40	61	-7	1.1	-.1	.1	.2	33	47	29	0	0	1	0
Amarillo . . . . .	66	33	76	23	49	-4	.2	-.1	.2	.5	167	47	21	0	4	1	0
Austin . . . . .	78	57	91	50	68	-9	.2	-.2	.1	.4	31	63	37	1	0	3	0
Beaumont . . . . .	75	58	85	49	67	-8	.1	-.5	T	.5	25	81	53	0	0	2	0
Brownsville . . . . .	82	64	88	51	73	-5	T	-.1	T	0	0	91	55	0	0	1	0
Corpus Christi . . . . .	82	64	93	57	73	-9	.1	-.1	.1	.2	29	78	45	1	0	2	0
Del Rio . . . . .	81	58	90	54	69	-7	.1	0	-.2	.2	50	47	26	1	0	0	0
El Paso . . . . .	70	44	77	36	57	-3	.2	-.1	.2	.4	133	52	19	0	0	2	0
Fort Worth . . . . .	71	48	78	35	60	-5	.1	-.4	.1	.2	13	73	41	0	0	1	0
Galveston . . . . .	68	60	77	56	64	-4	.1	-.5	-.1	.3	17	71	70	0	0	1	0
Houston . . . . .	76	56	89	47	66	-6	.2	-.4	.2	.5	26	67	46	0	0	4	0
Lubbock . . . . .	71	41	78	28	56	-8	T	-.2	T	0	0	54	17	0	2	1	0
Midland . . . . .	72	44	82	31	58	-4	T	-.1	T	0	0	54	18	0	1	0	0
San Angelo . . . . .	73	49	78	40	61	-4	.2	0	.2	.4	67	59	30	0	0	1	0
San Antonio . . . . .	80	57	91	52	68	-8	T	-.3	T	0	0	65	34	1	0	1	0
Victoria . . . . .	79	59	89	51	69	-7	.2	-.2	.2	.4	33	71	50	0	0	2	0
Waco . . . . .	75	49	83	39	62	-6	.3	-.2	.3	.6	40	81	37	0	0	3	0
Wichita Falls . . . . .	70	40	81	33	55	-3	T	-.4	T	0	0	70	35	0	0	1	0
UTAH.Blanding . . . . .	48	25	58	20	37	-0	.3	.1	.2	1.0	167	82	40	0	7	2	0
Salt Lake City . . . . .	54	34	64	24	44	-5	.2	-.2	.2	1.3	118	61	34	0	2	1	0
VT.Burlington . . . . .	32	14	44	3	23	-6	.7	-.3	.6	2.0	167	70	47	0	7	4	1
VA.Lynchburg . . . . .	51	31	68	27	41	-3	.7	-.1	.7	1.7	71	69	27	0	5	2	1
Norfolk . . . . .	56	35	65	33	46	-2	.8	0	.6	1.6	67	74	39	0	0	2	1
Richmond . . . . .	56	33	72	30	45	-1	1.4	.6	1.4	2.9	121	67	36	0	2	1	1
Roanoke . . . . .	51	29	68	25	40	-5	1.0	.2	1.0	2.3	96	72	40	0	7	3	1
WASH.Colville . . . . .	47	31	51	22	39	-3	.7	.4	.2	1.9	211	--	--	0	3	6	0
Omak . . . . .	50	30	55	20	40	-2	.1	-.1	.1	.3	50	58	--	0	4	3	0
Quillayute . . . . .	46	34	49	31	40	-2	4.2	1.7	1.3	9.3	122	93	70	0	2	7	4
Seattle-Tacoma . . . . .	46	36	50	33	41	-3	.9	.1	.4	2.1	84	87	69	0	0	6	0
Spokane . . . . .	46	32	52	25	39	-2	.5	.1	.2	1.1	92	90	51	0	3	4	0
Walla Walla . . . . .	51	39	61	33	45	-1	.7	.4	.3	1.9	211	79	47	0	0	5	0
Yakima . . . . .	52	32	54	25	42	-0	.1	0	T	.4	133	78	39	0	3	2	0
W.VA.Beckley . . . . .	46	26	67	18	36	-4	.4	-.6	.3	1.0	33	77	40	0	5	4	0
Charleston . . . . .	52	27	74	19	40	-4	.7	-.2	.5	2.4	89	78	34	0	6	4	0
Huntington . . . . .	52	28	72	21	40	-4	1.0	0	.8	2.8	97	80	38	0	6	4	1
Parkersburg . . . . .	48	27	70	22	38	-4	.9	.1	.8	3.0	125	78	43	0	7	3	1
WISC.Green Bay . . . . .	33	16	52	4	25	-3	.1	-.3	.1	.5	45	85	45	0	6	2	0
La Crosse . . . . .	38	17	50	1	28	-3	.3	-.1	.2	.9	75	73	57	0	6	2	0
Madison . . . . .	37	17	52	3	27	-3	.2	-.2	.2	.8	67	80	48	0	6	2	0
Milwaukee . . . . .	37	21	56	9	29	-2	.2	-.3	.1	.7	50	76	52	0	6	2	0
WYO.Casper . . . . .	45	23	55	12	34	-4	.2	0	.1	.9	150	76	42	0	7	3	0
Cheyenne . . . . .	49	29	57	18	39	-9	.1	-.1	.1	.5	83	56	32	0	4	2	0
Lander . . . . .	48	23	56	14	36	-5	.1	-.1	.1	.3	50	74	31	0	7	1	0
Sheridan . . . . .	46	23	56	14	35	-4	.4	-.1	.2	1.0	125	81	47	0	7	4	0
P.R.San Juan . . . . .	85	73	86	73	79	-3	.3	-.1	.1	1.1	85	90	60	0	0	5	0

Based on preliminary reports and 1941-70 normals

## 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 ESCS State offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures 1° subnormal; light freeze north on 15th. Rains continued; heaviest west central, north.

Fieldwork: 1.2 days suitable. Soil moisture mostly surplus. Flooding low areas hindering cattle feeding; stock moved high ground. Corn 7% planted; freeze damage some early plantings. Pastures short, stored feed tightening. Livestock mostly fair.

**ARIZONA:** Several rain, snow storms near midweek. Rain totaling 0.70 in. central mountains, heaviest of storm. Snowfall mostly around 2 in. Remainder week breezy, near seasonal norms.

Small grains continued making good progress. Head emergence, flowering, seed setting, development continued at accelerating rate west. Central small grains well into stem elongation. Wet conditions hampered field preparation cotton. Very good progress continued sugarbeets; tap root, top growth well advanced. Safflower planting continued. Alfalfa haying continued after brief interruption due to rains. Lettuce, mixed vegetables harvests steady rate. Preparations, planting watermelons, cantaloups well advanced, earlier plantings growing well, stands good. Valencia orange harvest increasing steady rate, grapefruit steady but has not reached full volume, lemon harvest rapidly closing. Trees flushed blooms, new growth, groves remain good condition. LP gas, diesel, gasoline supplies adequate. Range, pasture conditions mostly fair with water short to adequate. Ranges supplying below average to average amounts feed. Cattle fair to good condition.

**ARKANSAS:** Mild southwest but cool elsewhere with below normal temperatures, brief rains midweek. Extremes: 81 and 17°. Average readings 3° above to 5° below normal. Most rainfall 3.03 in.; least 0.

Fieldwork ahead of normal but tempered midweek by showers. Pastures, small grains made rapid growth. Pastures good; fertilizer being applied. Cattle above average condition; supplemental feeding continued.

**CALIFORNIA:** Couple of Pacific storm systems, one moving into south followed by another one in north dropped generally light amounts of rain with most of it falling during midweek. Temperatures near normal.

Wet soil conditions limit field preparations. Small grains making good growth. Early planted grains heading. Drowning from rains low lying areas. Weed treatment major activity. Cotton growers concerned soil temperature, wet conditions. Sugarbeets Imperial Valley above normal growth, warm growing temperatures. Spraying for brown rot and shothole continued. Lemon harvest beginning in Bakersfield area. Peaches and apricots blooming San Joaquin Valley. Season ahead of normal northern coast. Asparagus supplies increased north as fields dried. Carrot harvest active desert, San Joaquin Valley. Broccoli harvest decreased central coast. Cauliflower harvest delayed by wet fields Salinas-Watsonville, south San Francisco Bay. Lettuce harvest full swing Palo Verde Valley, started San Joaquin Valley, nearly complete Imperial Valley. Melon planting about complete desert. Spring potato crop Kern County early, making good progress. Processing spinach harvest delayed by

wet fields; considerable acreage lost due flooding. Tomato planting increasing, many Sacramento Valley fields still too wet. Warmer weather needed increase range grass growth most areas. Livestock good condition. Soil moisture excellent. Bee colonies moved from almonds to citrus. Farm fuels generally adequate.

**COLORADO:** Weak front brought from 0.10 to 0.60 in. precipitation to mountains 11th, 12th. Little precipitation in east. Arctic front 15th, 16th brought widespread snow to area east of Divide, with negligible amounts west. Temperatures from 1 to 5° below normal southwest quarter, near normal San Luis Valley, elsewhere 1 to 5° above normal except southeast where averages 5 to 8° above normal.

Winter wheat very good condition. Livestock good condition. Ranges and pastures good condition. Plowing 28% complete, mostly fall. Very little spring fieldwork. Fuel supplies adequate.

**FLORIDA:** Waves of low pressure and a front that could not press south brought recurring and sometimes heavy showers in Panhandle and north through 10th to 13th. Additional rains 2.00 to 4.00 in. fell in many areas. On 13th cold front dipped south and a line of thunderstorms ahead of southern gusty winds and some hail south, central. Rainfall 0.50 to 1.00 in. from Tampa northeast to Jacksonville. Front moved through south early on 14th but failed to produce rains. Temperatures dipped into upper 30's early 15th with north having coldest reading, but otherwise week was warm. Brisk winds gusting in excess of 30 mph made for very breezy conditions 15th and 16th with warmer air returning. Temperatures averaged 5 to 7° above normal.

Soil moisture adequate south, central, most of north; excessive part of north and Panhandle. Corn planting full swing where moisture conditions permit. Land preparation continued. Small grains fair condition, showing more freeze damage. Sugarcane harvest nearing completion. Young cane fair condition. Fuel supplies mostly adequate. Pastures poor to fair condition. Cattle mostly fair. Most citrus groves very good condition, moisture adequate. New growth and bloom opening all areas, full open bloom one to two weeks away. Early and mid harvest in final stages. Grapefruit harvest gained with increased labor supply. Most of week warm, sunny vegetable growing areas. Weak cold front moved through areas late week lowering temperatures slightly. Daytime highs in 80's with nighttime lows in 60's. Winds moderate to strong. Rainfall limited to few light, widely scattered showers. Overall crop condition fair to generally good, some very good. Plants responding well to warmer weather. Harvest, planting, replanting active. Quality, size, yields fair to very good. Overall shipments up 12% from previous week. Shipments cauliflower, strawberries, tomatoes increased considerably; chinese cabbage, eggplant, parsley, peppers, potatoes, squash also increased. Snap beans, celery, sweet corn, lettuce, radishes held steady but cabbage, carrots, escarole, okra decreased. Recovery from previous adverse weather very good to excellent for strawberries, potatoes, watermelons. Strawberry, potato harvest active some areas; quality, size, yields good.

**GEORGIA:** Average temperatures above seasonal norms, ranging from 6 to 8° above in extreme south to

mostly 2 to 4° above elsewhere. Extremes: 27 and 81°. Rainfall heavy; generally 4.00 to 6.00 in.

Soil moisture surplus. Pastures good north central, central and southwest; fair north; fair to good southeast. Livestock condition good. Tobacco plants fair. Small grains fair condition southwest, good elsewhere. Rains delayed or limited field activity. Still too early for complete assessment of peach damage.

IDAHO: Temperatures ranged 2 to 7° above normal averaging 39°. Extremes: 7 and 64°. Precipitation well below normal except in north which had above normal readings.

Most areas too wet for fieldwork. Some work on light soils. Fertilizing, weed spraying, light plowing main activities. No problems concerning winter field crops. Calving and lambing proceeding well, general conditions good. Hay supplies adequate but expensive.

ILLINOIS: Temperatures 1 to 2° below normal. Precipitation 0.50 to 2.00 in., lightest north.

Soil moisture short to adequate. Winter wheat good. Livestock good condition, supplemental feeding continuing, minimal disease losses.

INDIANA: Temperatures near normal ranging from 15 to 66°. Precipitation 0.50 in. south to 0.80 north. Sunshine 60% of possible.

Soils thawed south, shallow freeze layer north. Minimum of fieldwork because of soft field conditions. Caring for livestock and preparing for spring.

IOWA: Cool followed by mild weekend. Temperatures averaged from 3° below normal northeast to 3° above normal southwest. Precipitation averaged from 0.20 to 0.40 in.; about 50% of normal. Snow storm on 12th left 1 to 4 in. which melted on 14th to 15th.

KANSAS: Precipitation ranged 0.10 to 0.20 in. west and north to over 1.00 in. south central, southeast. Temperatures averaged 42 to 45° west and north, 49° southeast; 4 to 8° above normal.

Small amount wheat, grasses greening; growth limited. Some winterkill evident central. Moisture mostly adequate. Barley seeding 5%, 8% last year, 20% average. Oats seeding 7%, 5% last year, 25% average. Fuel supplies stable, near adequate. Calving, lambing, farrowing in full swing.

KENTUCKY: Temperatures and precipitation averaged a shade below normal. Temperatures averaged 1 to 2° below normal and precipitation averaged near 0.50 in.

Warm, dry end of week. Limited field activity on well-drained soils; most cropland too wet to plow. Many calves on ground, no unusual calving losses. Supplemental feed supplies ample.

LOUISIANA: Temperatures 2 to 3° below normal northwest, 5 to 8° above normal elsewhere.

Fieldwork: 3.9 days suitable. Soil moisture adequate to surplus. Spring plowing 27% complete. Shaving, off-barring sugarcane; condition fair to good. Rice planting 7% complete, 6% last year, 7% average. Corn planting 20% complete, 3% year ago, 8% average. Vegetables fair. Small grains fair to good. Pastures fair. Livestock fair to good; supplemental feeding.

MARYLAND & DELAWARE: Temperatures averaged near normal with only 1 or 2° variance. Highs averaged in mid to upper 50's and lows in low 30's. Precipitation moderate, averaging 1.20 in. Weekend mostly clear, sunny.

MICHIGAN: Cool with temperatures 4 to 6° below normal. Average readings ranged from 17° western Upper to 30° southern Lower. Cold through week then much warmer 16th. Extremes: 58 and -19°. Precipitation slightly below normal ranging from 0.25 to 0.50 in. Lower and 0.10 to 0.70 in. Upper. Most precipitation fell as traces of snow early week but 1 to 3 in. snow fell over Lower 12th and 13th. Showers and thundershowers in western Upper 16th. Main activities: Feeding and chores.

MINNESOTA: Temperatures averaged 4 to 9° below normal north and central and near normal south. Extremes: 55 and 22°. Precipitation averaged 0.25 to 0.43 in. above normal north central and northeast and near normal elsewhere. Precipitation less than 0.25 in. southwest, 0.25 to 0.50 elsewhere except 0.50 to 0.68 in. north central and northeast. Snowfall 1 to 4 in. south half and 5 to 10 in. north half. Snow depth none southwest, 1 to 4 in. west, central, and south, and 5 to 23 in. north central through northeast.

MISSISSIPPI: Temperatures 6° above normal southeast, below normal north. Extremes: 26 and 83°.

Soil moisture surplus to excessive north and central, mostly adequate south. Fieldwork: 1.6 days suitable. Heavy rains limited spring plowing. Corn planted where fields dry enough. Farm activities: Feeding cattle, liming, machinery repair and fertilizing. Plowing completion 23%, 31% 1979, 31% average. Winter wheat 7% jointing, 7% 1979; condition good to fair. Corn 7% planted, 7% 1979. Hay and roughage supplies adequate. Feed grain adequate to short. Pasture conditions mostly fair central, fair to poor north, good to fair south. Livestock conditions fair to good. Diesel, gasoline and LP gas supplies adequate.

MISSOURI: Temperatures ranged from 2° below normal west Ozarks to 6° below normal east Ozarks. Precipitation midweek, mixing rain and snow, ranging from 0.30 in. Bootheel to 0.80 in. northeast Prairie and west central plains.

MONTANA: Precipitation moderate to heavy over portions of west and south central; northeast remained very dry. Very mild temperatures most of week with maximums reaching 50's and 60's towards end of week. Temperatures averaged from 6 to 9° above normal. Calving and lambing 30% complete; losses lighter than normal due to mild weather and good condition of livestock. Shearing 35% complete. Snowcover generally light. Wind damage to winter wheat light. Winter wheat fair condition.

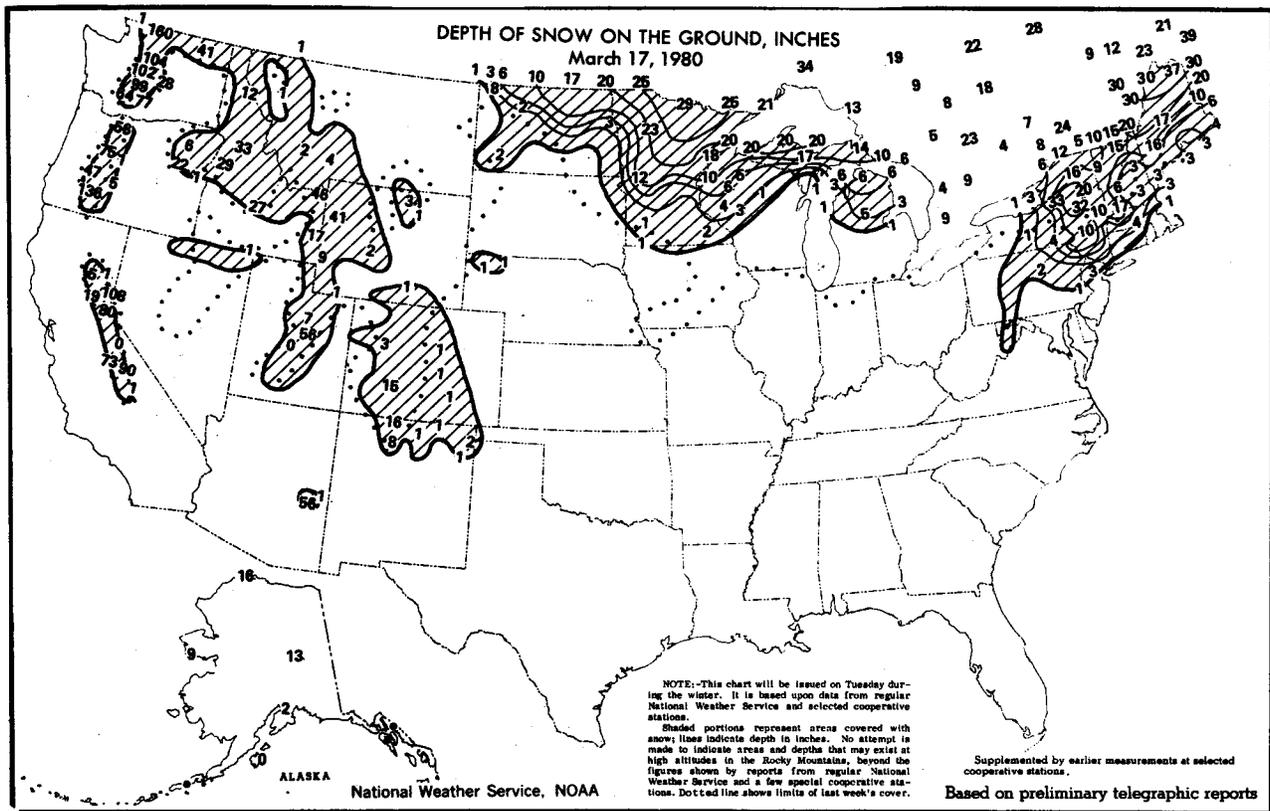
NEBRASKA: Temperatures 3° above normal east and 9° above normal west. Precipitation averaged above 0.50 in. southeast falling off rapidly to less than 0.10 in. in Panhandle and north.

NEVADA: Rain and snow north midweek and end of week. Daytime temperatures above normal but nights seasonal. Extremes: 10 and 73°.

Seedbed preparation delayed by high winds. Calving, lambing gaining momentum.

NEW ENGLAND: Temperatures 3 to 10° above normal early week, 3 to 18° below normal rest of period. Two storms brought mostly rain south and snow north. Precipitation ranged from 2.50 to 3.25 in. from central Connecticut to southwestern Maine and 1.25 to 2.00 in. elsewhere.

NEW JERSEY: Temperatures averaged 4 to 6° below normal. Extremes: 7 and 58°. Rainfall averaged 1.50 in. north, 1.89 in. central, 1.70 in. south.



Between 4 and 10 in. snow fell north. Soil temperature averaged 31° north, 40° central and south. Snow depth 2 to 5 in.

Farmers caring for livestock, pruning fruit trees, tending to normal chores.

**NEW MEXICO:** General light rains and snows except southeast 11th then again north 16th. Precipitation mostly less than 0.33 in. Temperatures averaged 3 to 6° above normal east and near normal west. Still some freezing temperatures statewide except a few southern points. Windy 12th and over weekend.

Preplant operations continued despite high winds. Soil moisture generally short. Winds depleting supplies rapidly. Irrigated winter grains in good condition. Dryland acreage showing wind stress. Alfalfa starting to grow. Ranges fair to good but showing effects of winds. Livestock generally good. Calving and lambing continued. Shearing on increase. Fuel supplies adequate from normal sources of supply.

**NEW YORK:** Precipitation ranged from 2.75 to 0.50 in. Snow ranged from near 2 in. southeast up to over 12 in. Adirondacks. Average temperatures mostly in 20's with readings in upper teens in north and low to mid-30's in extreme southeast.

**NORTH CAROLINA:** Temperatures 1 to 2° below normal. Precipitation spotty and below normal.

Soil moisture adequate to surplus. Conditions of wheat, oats, barley, rye fair to mostly good; pastures mostly fair to good. Plantings of spring potatoes underway but slowed by wet weather. Supplies of hay, roughage, feed grains mostly adequate. Major activities: Preparing and caring for plant beds, applying fertilizer, plowing where able, tending livestock. Some corn planted. Pastures, tobacco beds, spring Irish potatoes fair to good.

**NORTH DAKOTA:** Cold northeast but mild southeast. Temperatures averaged from 6° below normal northeast up to 6° above normal southwest. Extremes: -20° southeast to 58° southwest. Snow fell over much of east on 13th and in southwest on 15th; about 2 in. most locations. Most moisture received 0.42 in. northeast.

Calving and lambing underway. Livestock generally good condition. Feed supplies generally plentiful. Activities in preparation for fieldwork increasing. Most areas need spring moisture. Snowcover gone many areas; light cover elsewhere.

**OHIO:** Average high temperatures in 40's; 1 to 3° below normal. Precipitation light; totals 0.50 in. below normal. Soil temperatures at or below freezing north; thawing progressing central and virtually completed south.

Spring plowing for summer crops, topdressing wheat, and sheep shearing have begun.

**OKLAHOMA:** Mostly mild except for cold snap northwest weekend. Temperatures averaged 3 to 6° above normal statewide. Precipitation totals ranged from 0.25 in. west to 1.00 in. east. Extremes: 20 and 85°.

Small grain and native grass development aided by warmer temperatures and isolated rains. Wheat fair to good condition. Cattle being taken off wheat. Spring seedbed preparations progressing near average: Corn 30% 1980, 1979 and average; sorghums, soybeans, peanuts 20% 1980, 1979 and average; cotton 5% 1980, 25% 1979, 5% average. Fieldwork: 5.1 days suitable.

**OREGON:** Temperatures west of Cascades varied from 0 to 5° above normal; east of Cascades near normal. Rain 1.00 to 2.00 in. in Willamette Valley although Eugene reported over 3.00 in. Southwest interior varied near 0.50 in. to a little over 1.00 in.

Coastal sections reported 3.00 in. or more except Astoria where less than 2.00 fell. East of Cascades and north central sections reported 0.33 to 0.50 in. with other areas less than 0.10 in.

Soil moisture surplus west, adequate elsewhere. Winter wheat condition good. Fields too wet for fieldwork except a few isolated areas. Livestock condition fair to good. Range and pasture conditions variable. Hay supplies short. Fields greening.

PENNSYLVANIA: Cold, breezy, wet. Temperatures 5 to 10° below normal. Coldest 12th through 15th when maxima in 30's and minima teens and 20's. Mild beginning and end of period when maxima reached 50's and 60's. Extremes: 5 and 63°. Midweek storm brought 0.50 to nearly 2.00 in. precipitation with all except extreme southeast receiving greatest single snowfall of season measuring 3 in. north-west increasing to 12 in. Pocono Mountains.

Normal winter chores.

PUERTO RICO: Island average rainfall 0.47 in. or 0.04 in. below normal. Temperatures averaged about 77° on coasts and 73° interior. Extremes: 93 and 53°.

SOUTH CAROLINA: Temperatures ranged from above normal at beginning and end to considerably below normal at midweek. Precipitation heavy with 3.00 to 4.00 in. over south, lesser amounts elsewhere; major flooding in coastal plain.

Cropland generally too wet for plowing, delaying most vegetable planting along south coast. Peaches in south starting to bud.

SOUTH DAKOTA: Average temperatures 11° above normal to 6° below normal. Extremes: 75 and -7°. Precipitation light; highest was 0.36 in.

TENNESSEE: Warm, dry early week; cold front midweek brought rain. Fair again until 16th when shower arrived. Rains 1.00 in. or less most areas. Temperatures ranged from lows in 20's to highs in 70's.

Fieldwork: 0.9 day suitable. Soil moisture surplus. Spring plowing 32% complete, 1979 27%, average 33%. Tobacco plant beds 32% seeded, 1979 26%, average 44%. Pastures poor to fair. Cattle good; on supplemental feed. Wheat and oats fair. Topdressing active. Cabbage, onion planting just begun.

TEXAS: Cold front upper Texas Coast first of week produced showers over North, East Texas. Midweek front brought no significant weather. End of week saw showers, thunderstorms south, east sections ahead of Pacific cold front. Mean temperatures ranged from near 50° northwest, Panhandle to lower 60's South Texas, Coast. Actual temperatures 4 to 10° above normal except for 2° below normal extreme east. Mean precipitation ranged from less than 0.10 in. far west to over 1.00 in. extreme east. Precipitation above normal across central, far west, below normal elsewhere.

Warm, dry weather provided favorable conditions for fieldwork. Central, south planting corn, cotton, sorghum at steady pace. High winds swept across northern portion further depleting topsoil moisture. Traces of rain early week, again during weekend, provided little relief to drying conditions. Land preparation for corn, cotton, sorghum continues on Plains, Cross-Timbers. Machinery, land being prepared for rice planting along Gulf Coast. Moisture needed for growth of small grains, early planted field crops. Cotton planting progressed rapidly Rio Grande Valley. Warm, dry temperatures aided planting; high winds on Plains slowed land prepar-

ation. Cotton planting 8%, 1979 6%, average 5%. Corn planting advanced rapidly; 21% complete, 1979 13%, average 15%. Some earlier planted fields emerged Valley, south central areas. Sorghum planting 34%, 1979 20%, average 23%. Early fields up in south, central; scattered fields emerged as far north as Blacklands. Many fields ready for planting Low Plains, but producers await warmer soil temperatures. Small grains continue to feel effects of dry conditions. Many wheat, oat fields recovering from recent freezing temperatures, but have not progressed because of lack of moisture. Greenbugs, grain mites reported although damage minimal. Some small grain fields in Cross-Timbers, Blacklands being grazed.

Soil moisture short, slowed forage growth. Ranges, pastures beginning to green from spring weeds, grasses, however supplemental feeding still required to maintain livestock in good condition. Cattle continued to be moved off wheat pastures where grain harvest planned. Shearing sheep, goats continued on Edwards Plateau. Spring calving, lambing, kidding continued.

Lower Rio Grande Valley, onions making good growth. Supplies carrots, cabbage, lettuce available, however demand slow. Harvest Valencia oranges continued, grapefruit winding down. Coastal Bend replanting cucumbers, melons damaged by early March freeze continued. South Texas second cutting spinach underway. San Antonio-Winter Garden area planting spring vegetables continued. Some freeze damage to spring onions and cabbage became apparent. Carrot harvest continued with good volume. Many melons up but temporarily set back by cold temperatures in early March. Central Texas planting potatoes, onions, tomatoes, beans, peppers continued. East Texas planting watermelon initiated. Planting beans, sweet corn, tomatoes active. North Texas planting cabbage, onions active with some replanting. El Paso onions continued good progress. High Plains planting onions, potatoes active. Peach trees full bloom east, west, buds beginning to swell and some blooming begun. Pecan trees beginning to bud

UTAH: Scattered areas rain in valleys and snow in mountains forepart period. Few additional showers weekend. Amounts generally light to moderate but locally heavy few localities. Average temperatures variable ranging from 8° below normal to 7° above.

Soil moisture adequate. Livestock mostly good condition. Spring calving and lambing continued. Fruit trees one to two weeks ahead of schedule, pruning continued. Some farmers working fields in extreme south.

VIRGINIA: Temperatures averaged slightly below normal. Extremes: 72 and 10°. Mixed rain, snow and sleet occurring mainly on 13th averaged around 1.00 in.

Topsoil moisture surplus. Fieldwork: 2.0 days available. Pastures, barley, alfalfa, wheat good condition. Fruit prospects appear good. Tobacco plant beds 36% seeded; good condition. Seeding barley, alfalfa, clover; reseeding and overseeding pastures; topdressing; selling hay. Some potatoes seeded on Eastern Shore. Plowing and discing becoming active in Tidewater and southside areas. Other tasks: Feed and care of livestock; pruning fruit trees.

WASHINGTON: West: Temperatures averaged 1° below normal except near normal coastal areas and 1° above San Juans. Precipitation averaged 0.30 in. above normal.

Some tillage began for peas and grass seedlings. Harvest of daffodil and forced rhubarb continued. Caneberry pruning nearing completion. Ryegrass and cabbage seed fields showing growth. Calving and

lambling taking place. Cattle being put to pasture. Hay supplies adequate, though expensive.

East: Temperatures averaged near normal except 2° above northeast. Precipitation averaged near normal to 0.40 in. above normal.

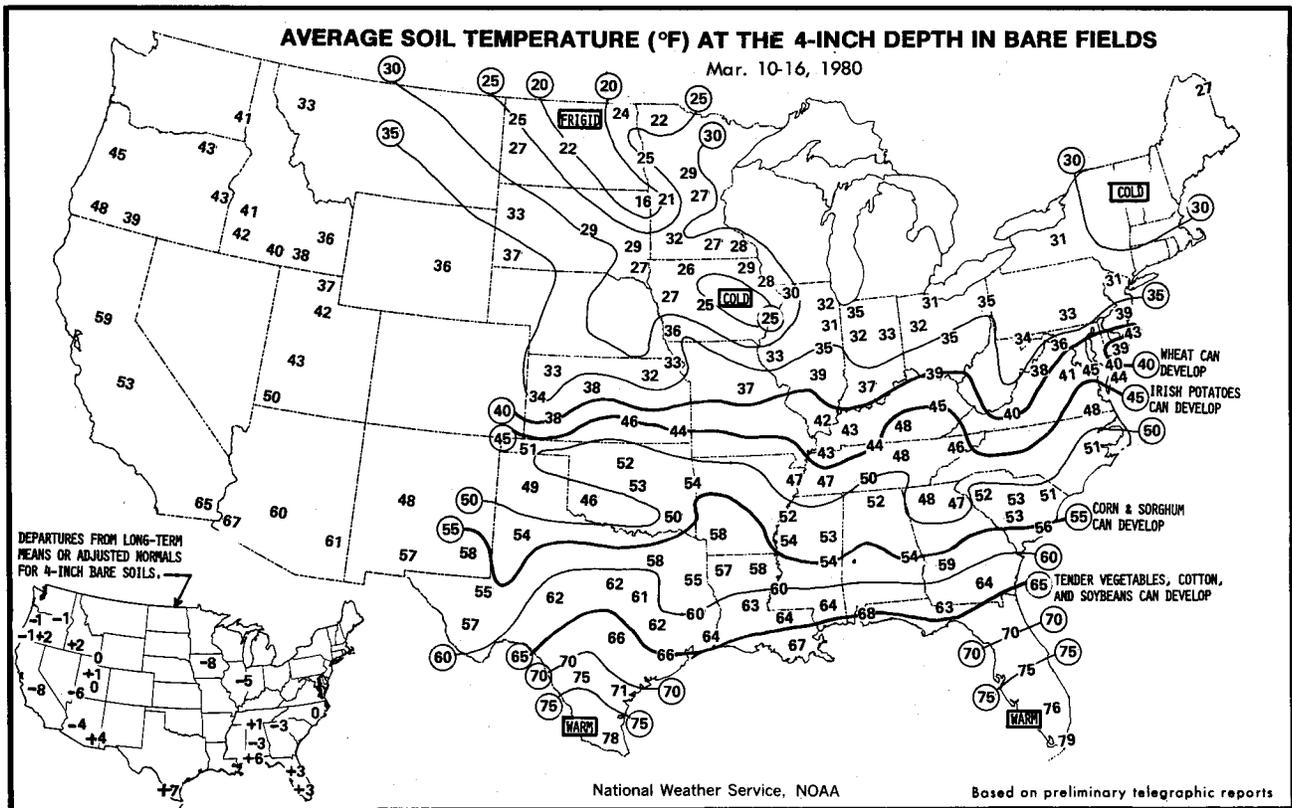
Spring plantings of wheat, potatoes, peas, barley beginning. Winter wheat in good condition. Fruit tree pruning increased. Cattle and sheep being turned out to pasture. Calving and lambing in full swing. Hay supplies short.

WEST VIRGINIA: Temperatures varied in 50's and 60's early week; cold latter part of week. Extremes: 11 and 65°. Precipitation varied. Snow late week in north central, east.

Soil moisture adequate to surplus. Fieldwork: 1.7 days suitable. Hay adequate to surplus. Grain, other feeds adequate. Fuel adequate to tight.

WISCONSIN: Temperatures moderating. Week began cold, moderated by 12th, continuing warming to spring-like temperatures 16th. Extremes: 56 and -13°. Cloudy, snow midweek. Snow northwest 6 in.; less elsewhere. Snow 13th 4 in. central, 2 in. southeast, less elsewhere. Rain 16th. Snow melting fast weekend but very little thawing. Deep frost making heavy runoff of melt, precipitation, not yet serious.

WYOMING: Temperatures much above normal. Extremes: 0 and 63°. Precipitation below normal. Winter wheat mostly good. Early lambing, calving underway. Livestock mostly good condition. Supplemental feed supplies adequate.

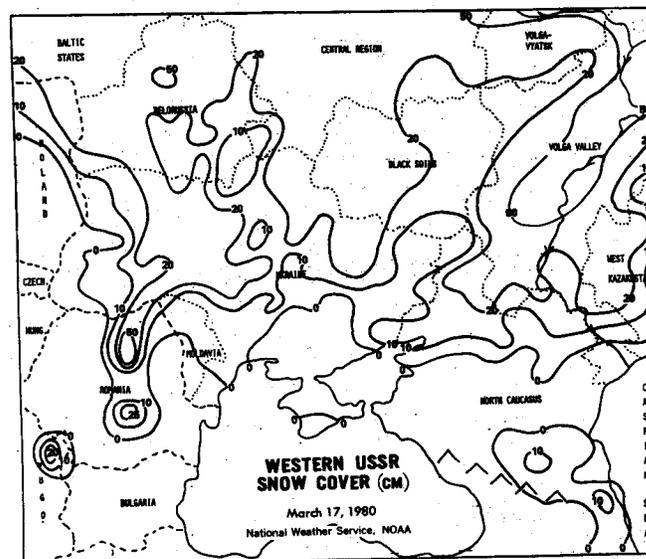


## International Weather and Crop Summary

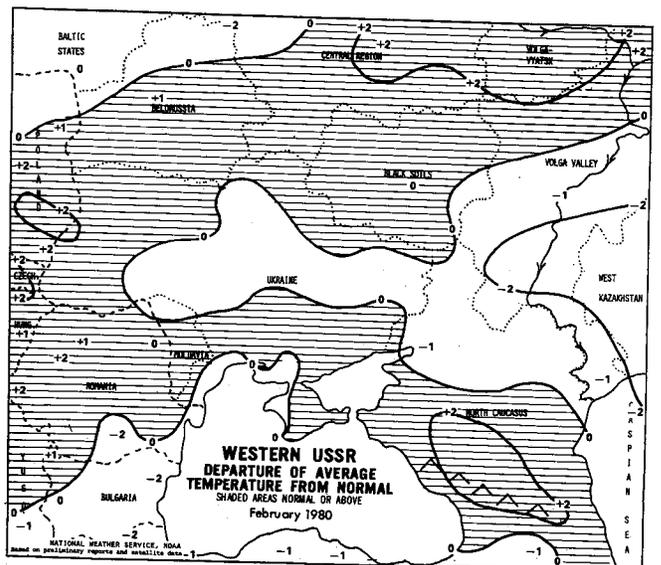
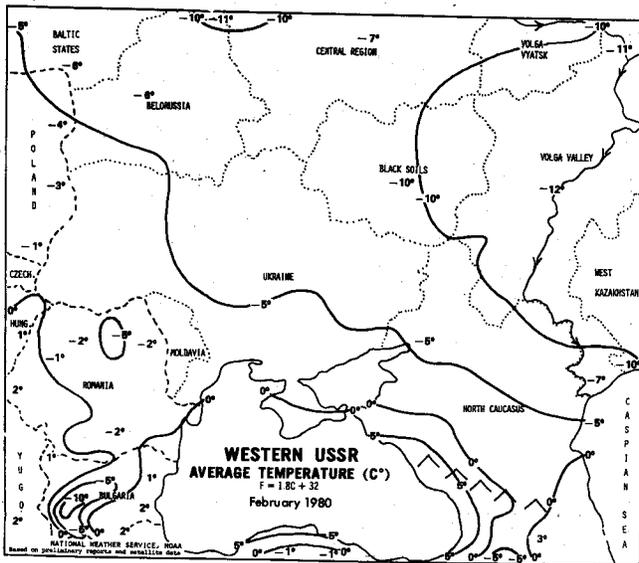
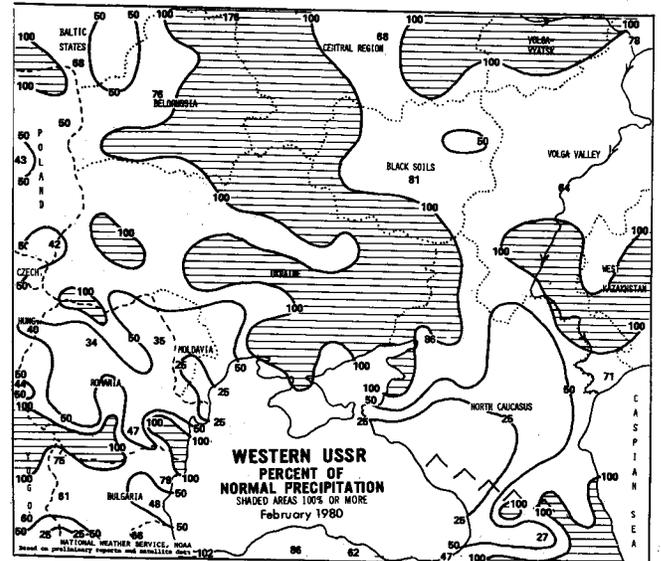
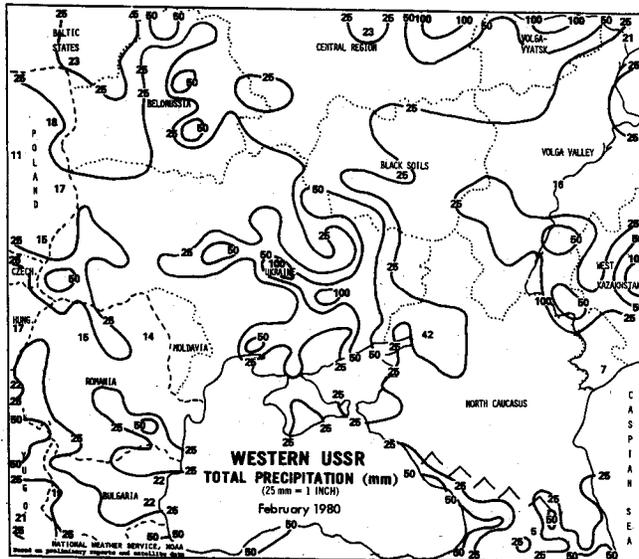
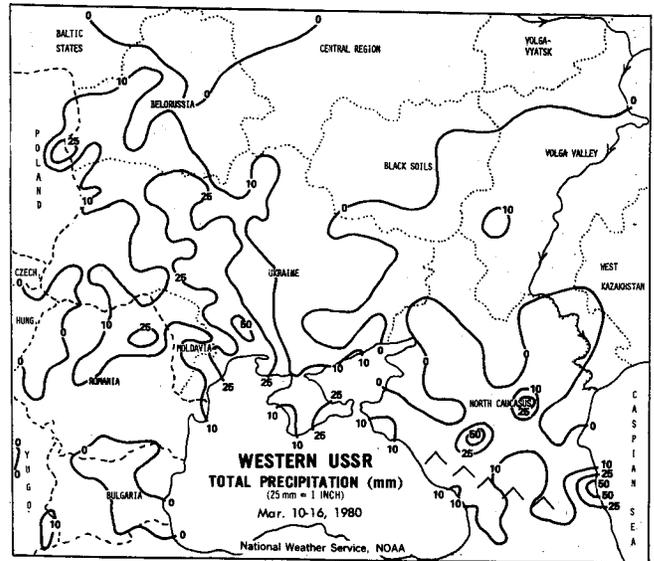
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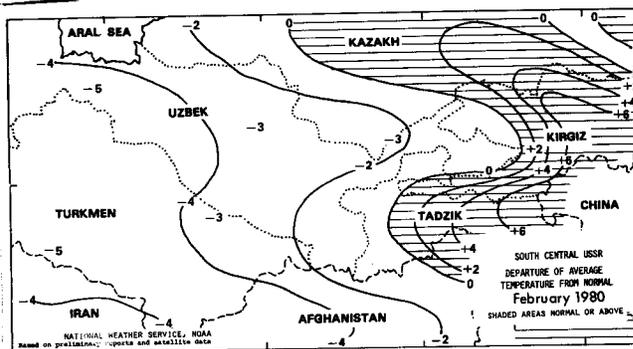
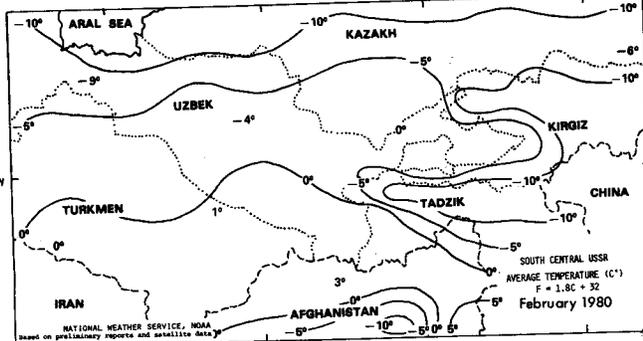
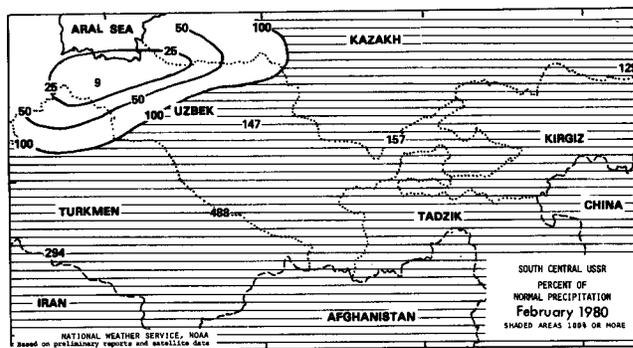
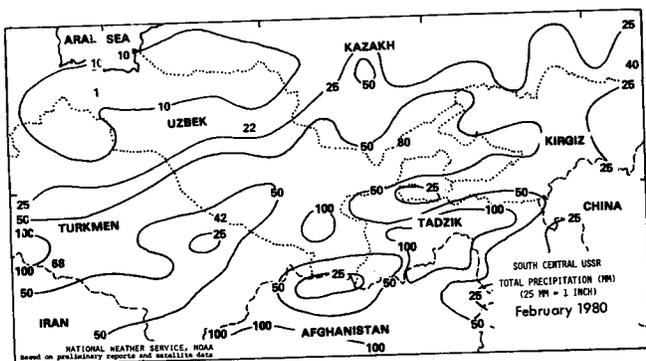
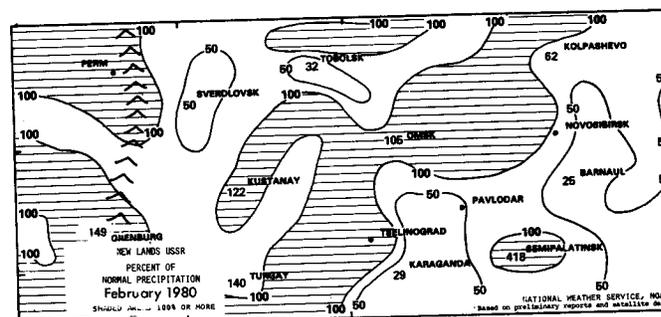
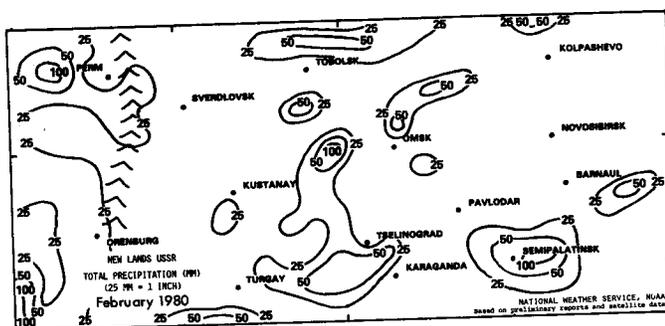
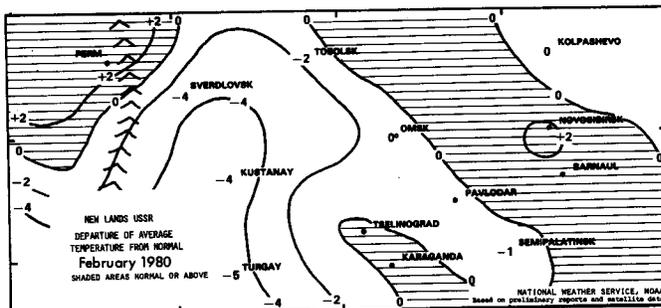
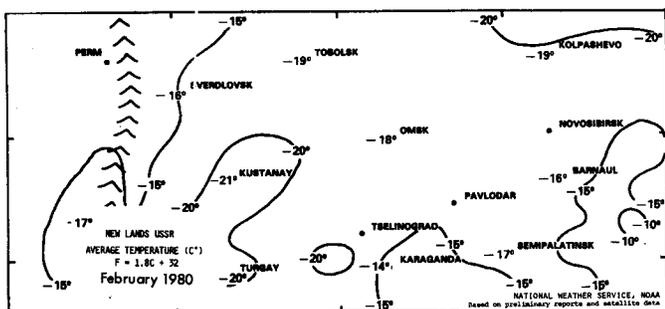
### HIGHLIGHTS:

- USSR.** Winter grains dormant...moderate precipitation in western Ukraine.
- EUROPE.** Winter grains mostly dormant, except in south...moderate precipitation in the northwest.
- CHINA.** Wheat growth only in south...adequate moisture.  
Rice planting in progress in south\*...continued too wet in some areas.
- INDIA.** Wheat should be in heading stage in north...unirrigated wheat is much too dry.
- AFRICA.** Northwestern: winter grains heading\*...adequate moisture.  
South: most maize mature\*.
- ARGENTINA.** Soybeans podding\*...soil moisture adequate in most areas.
- BRAZIL.** Harvesting soybeans in Parana...conditions too wet.  
Soybeans pod-filling in Rio Grande do Sul...continued beneficial rainfall.
- MEXICO.** Peak harvesting of fruits and vegetables...favorable weather.  
Wheat and livestock in the north stressed...drought problems.
- \*Based on normal crop calendar information.

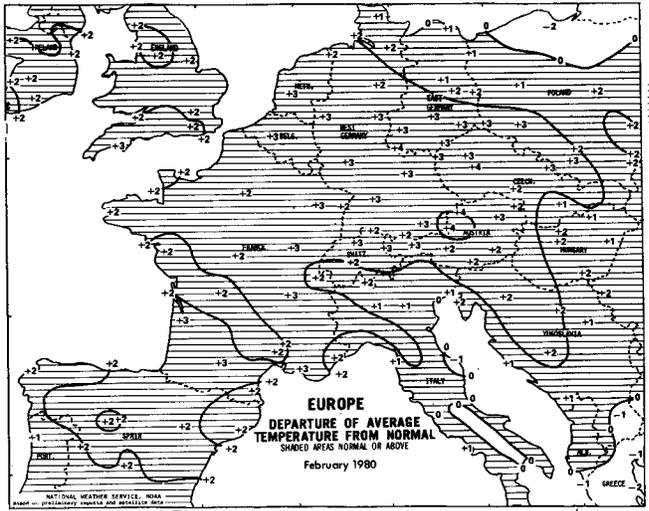
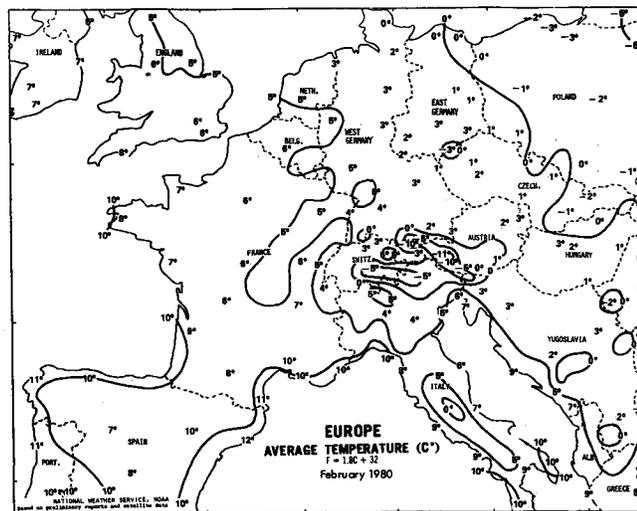
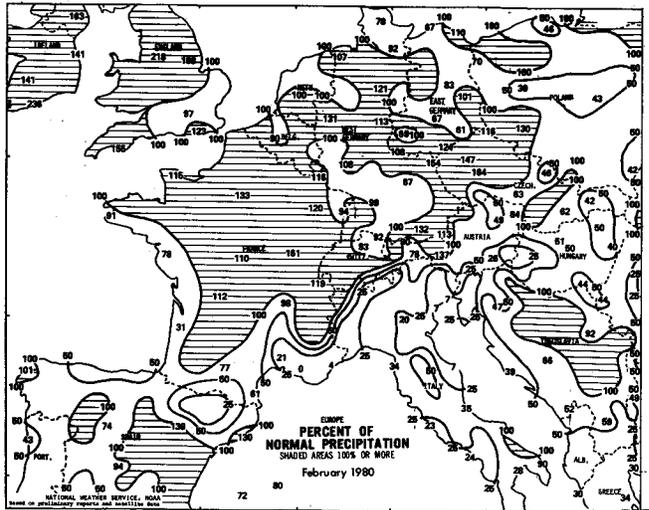
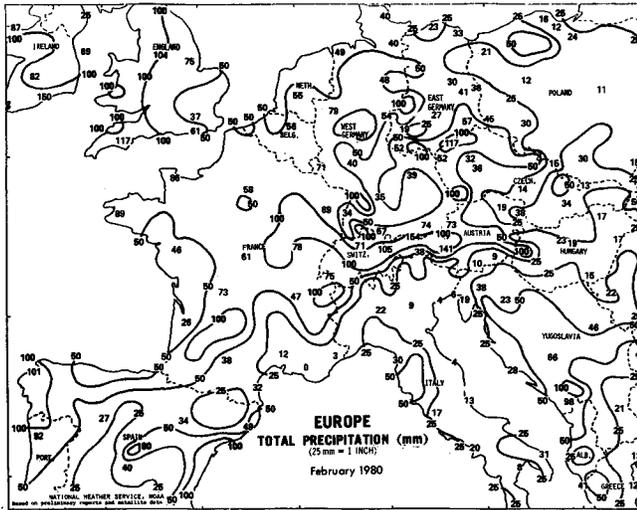
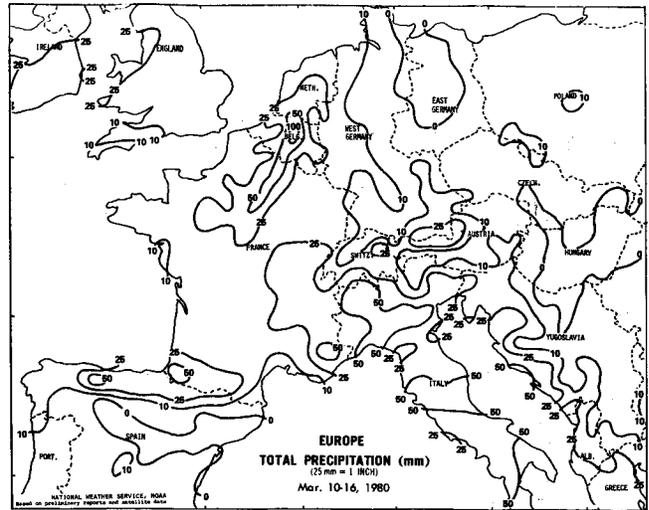


USSR. Above-normal precipitation of up to 40 or 50 mm in the western Ukraine added to snowcover in the northwest but fell as rain in the south near the Black Sea. Refreezing of this moisture may cause icing problems for overwintering grains. Some snowmelt occurred in the eastern Ukraine in spite of below-normal temperatures, but no extreme cold was reported, and snow depths remained quite adequate to protect the grains. Few temperature extremes have occurred this winter, and February readings averaged near normal. Only in a few eastern winter grain areas do some moisture shortages persist at this time. In the New Lands, a variable precipitation pattern in February added beneficial totals to some already wet areas, but the Sverdlovsk area and some eastern spring grain areas have received less-than-normal precipitation since the end of November 1979. Nearly all cotton-growing areas in south-central USSR received above-normal February precipitation, and winter snowfall in the mountains to the south and east appears to have been above normal again this year, so irrigation water will probably be in good supply.

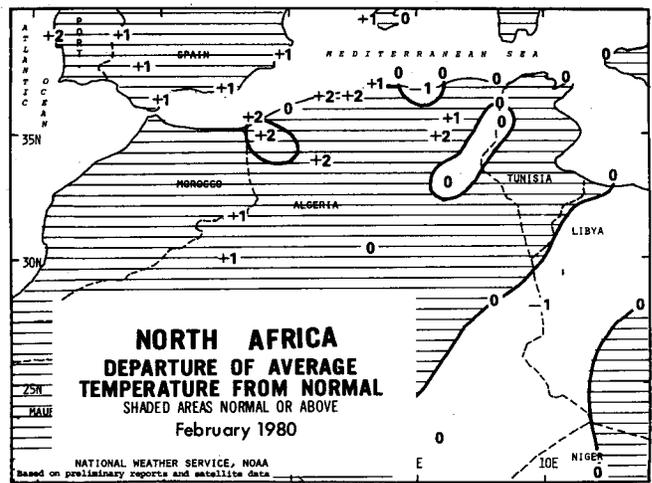
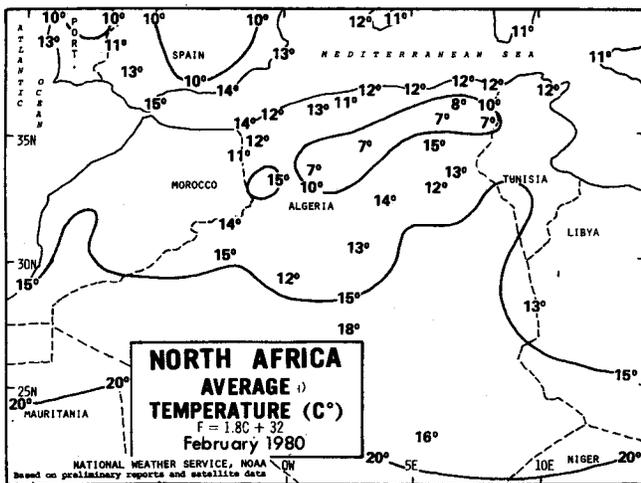
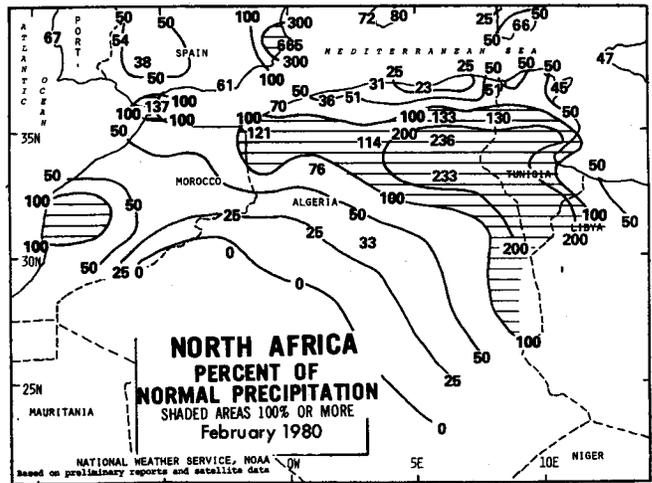
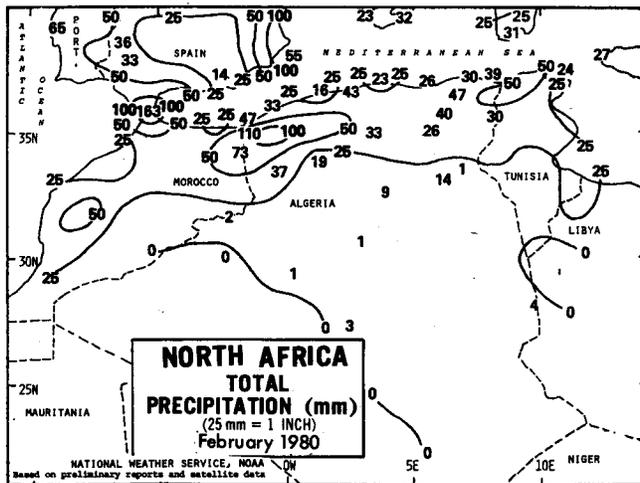
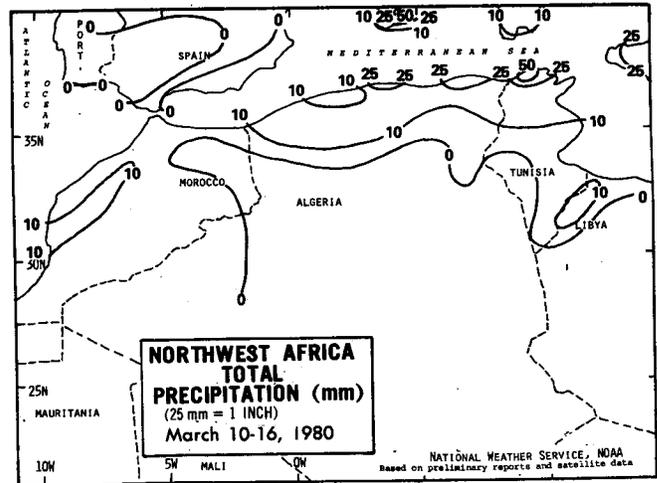




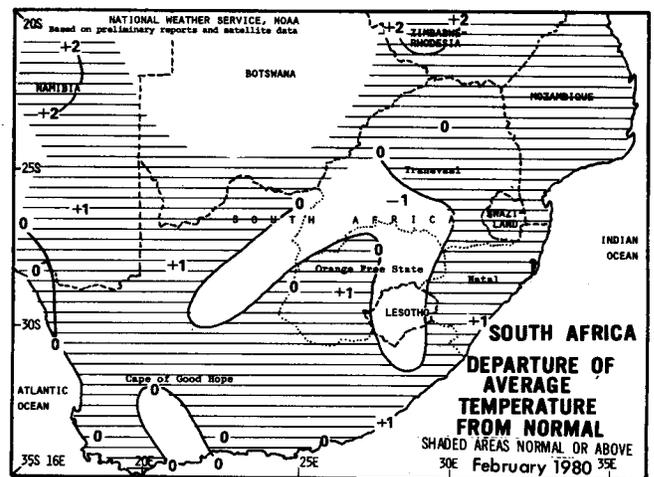
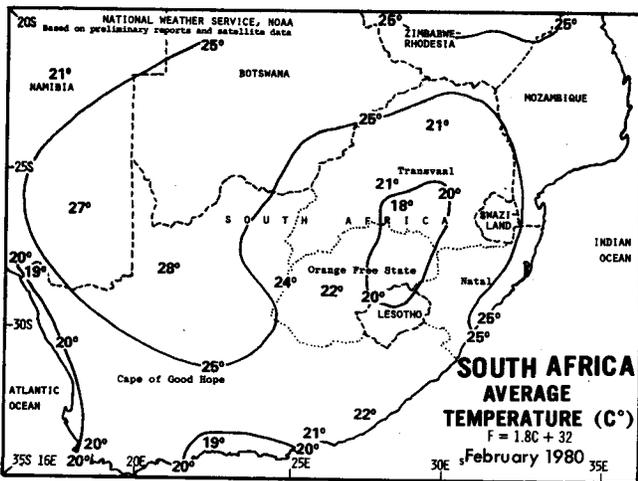
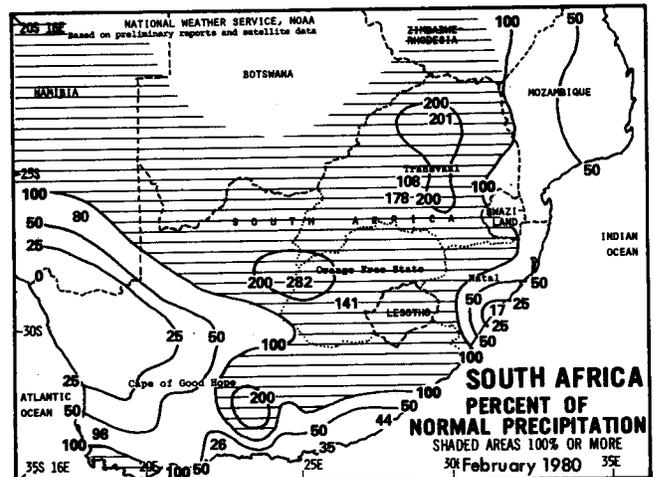
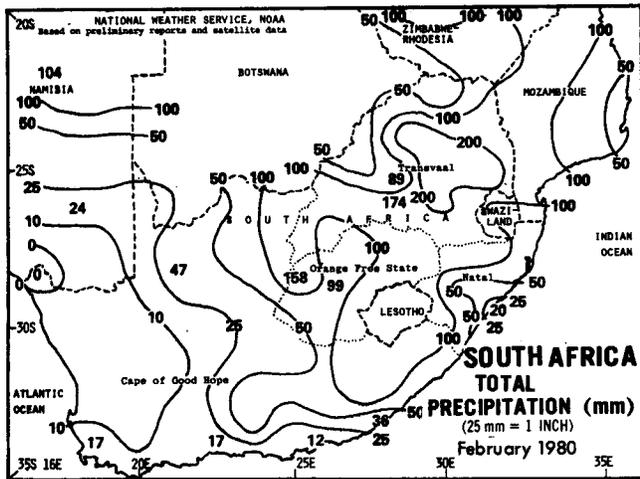
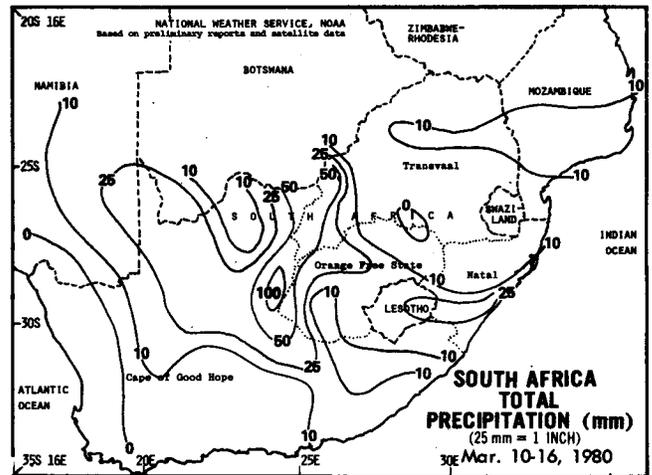
**EUROPE.** Precipitation fell in a pattern similar to the previous weeks and temperatures changed very little. Above-normal totals were measured in France, Belgium, the United Kingdom, the Netherlands, and parts of West Germany, continuing a trend which had developed in February. Temperatures had surged above normal in this region during the latter part of February, causing winter grains to break dormancy in many areas, but cooler conditions in recent weeks have allowed only limited growth. Eastern countries have seen drier weather since the beginning of the year, with extensive areas of below-normal precipitation. Very little moisture fell this week, but overwintering grains remained in good condition due to abundant precipitation early in the winter. In southern areas, dry weather persisted for a second week over Spain. Abundant precipitation near the end of February had improved conditions for winter grains markedly, but a good soaking will be needed soon to alleviate further previous dryness. Most of Italy received above-normal precipitation, further improving moisture conditions following a relatively dry February. Winter grain growth has begun again in all but the most northerly areas.



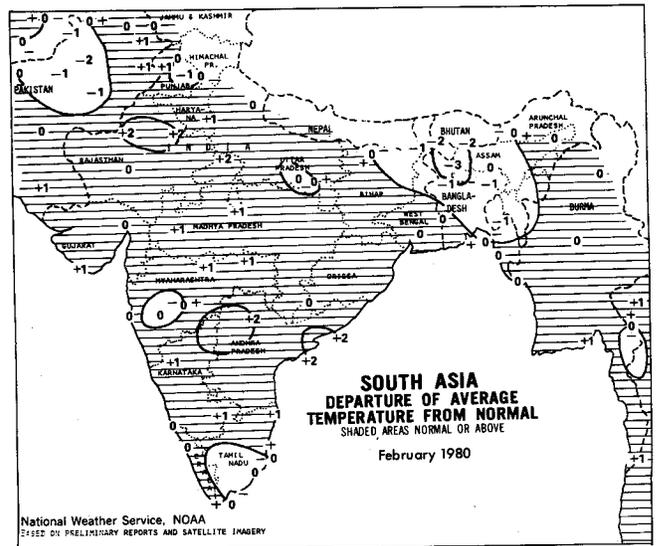
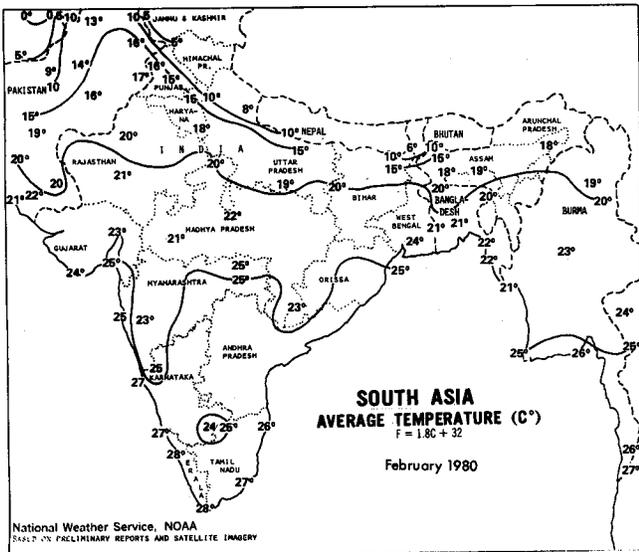
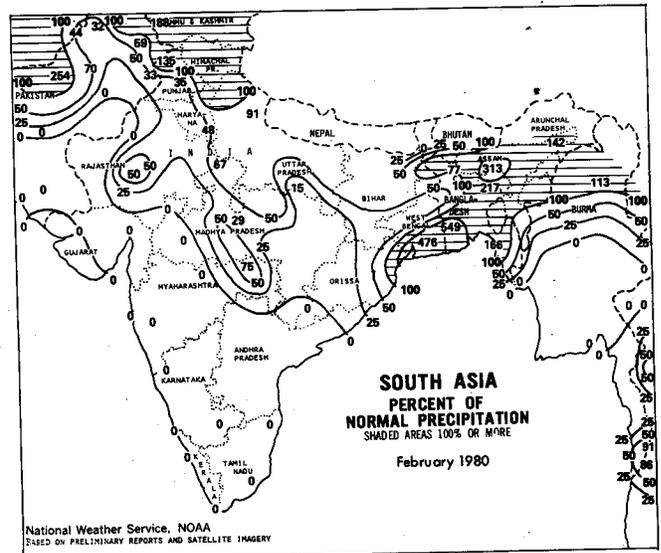
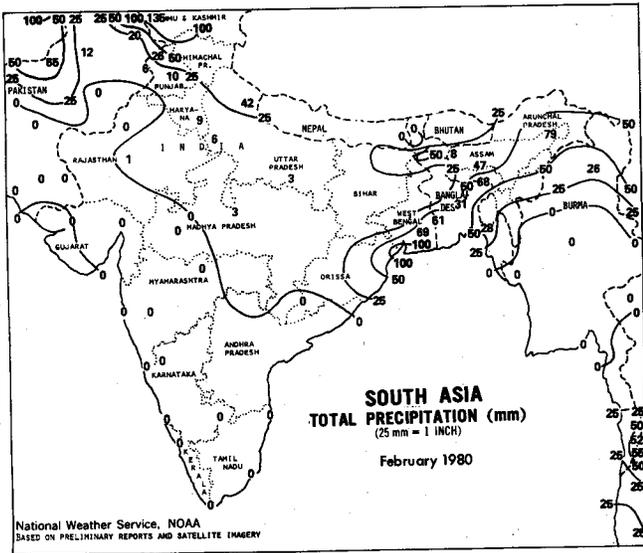
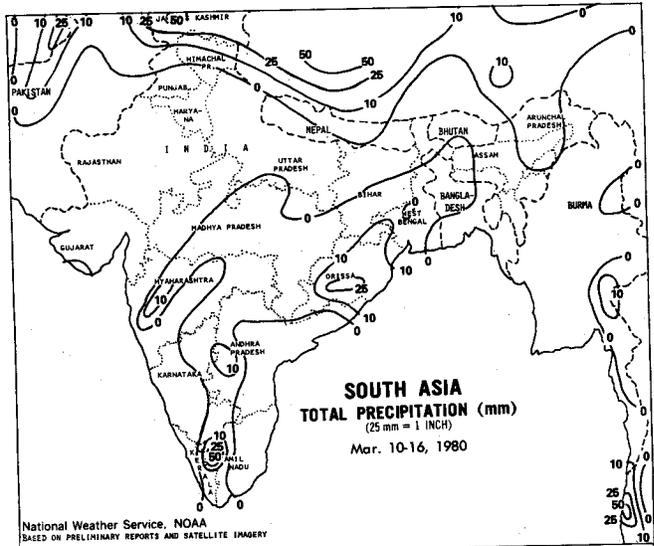
**NORTHWESTERN AFRICA.** Normal rainfall or greater continued across winter grain areas of Algeria and Tunisia, and light amounts fell in Morocco. These totals should have been sufficient to maintain fall-sown crops in reasonable condition as they went into the moisture-sensitive heading stage. With February temperatures running near normal, lack of moisture in many areas across the north was beginning to stress winter crops, but abundant rains in early March substantially improved conditions.

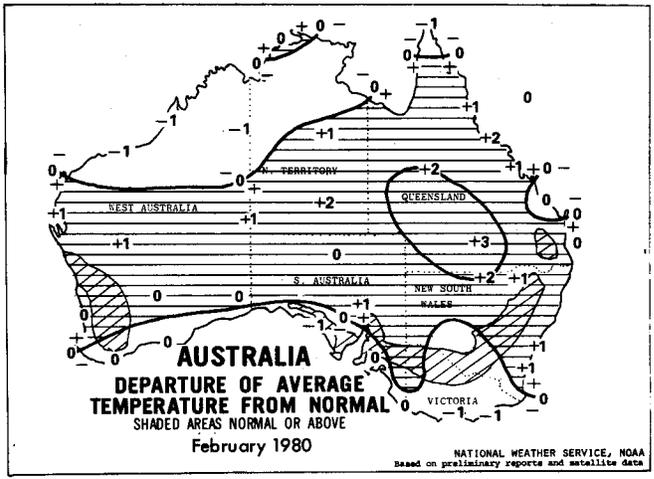
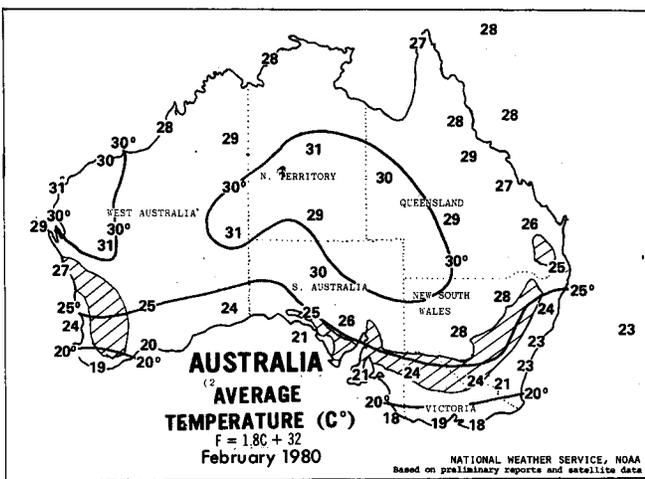
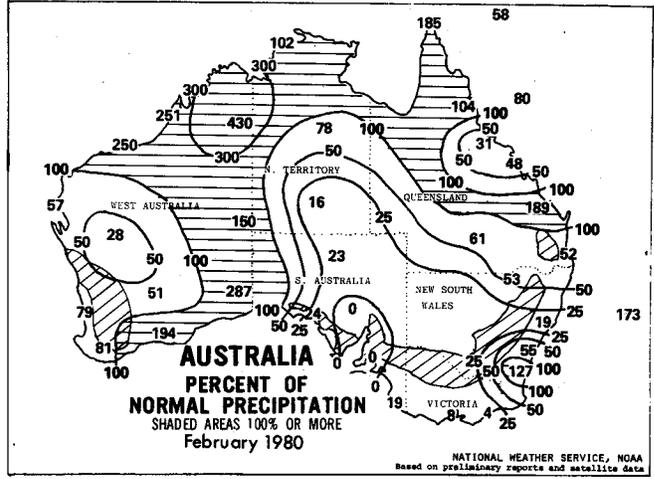
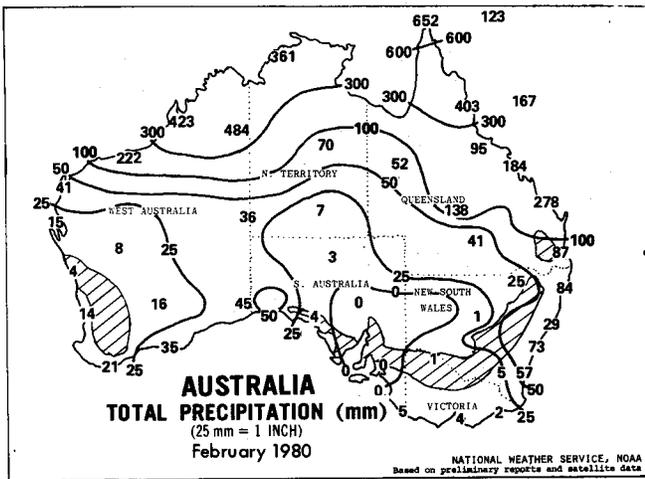


**SOUTH AFRICA.** Relatively dry weather prevailed over northeastern portions of the Maize Triangle, while quite heavy rainfall occurred in the west. However, these rains did not benefit maize to much degree, for most of it had already reached maturity. Much-above-normal rainfall in February, coupled with near-normal temperatures, did help the maize crop, and harvest expectations remain high.

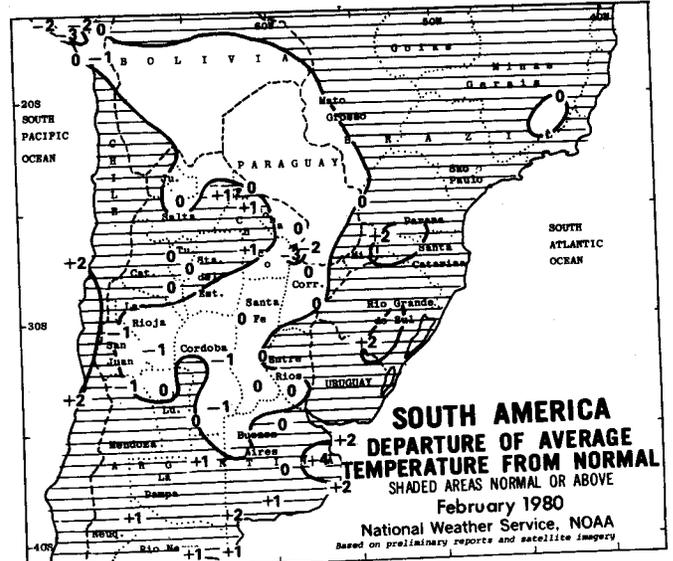
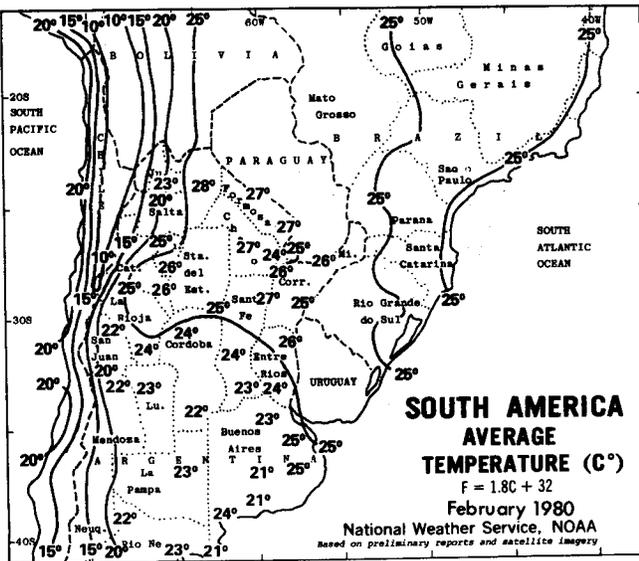
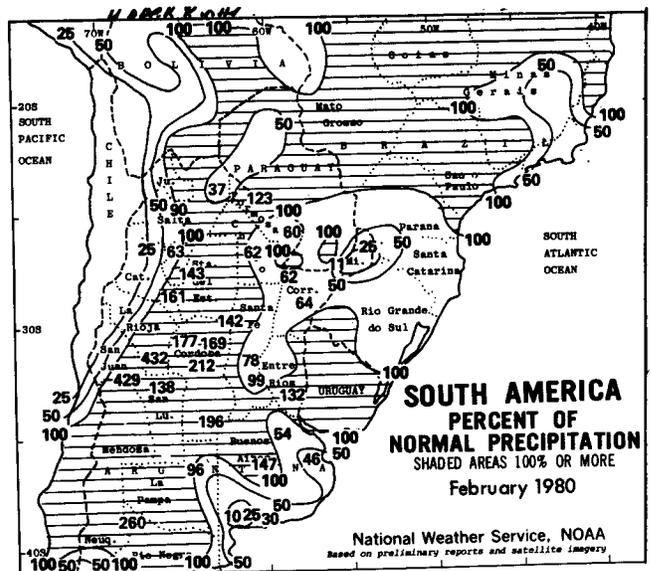
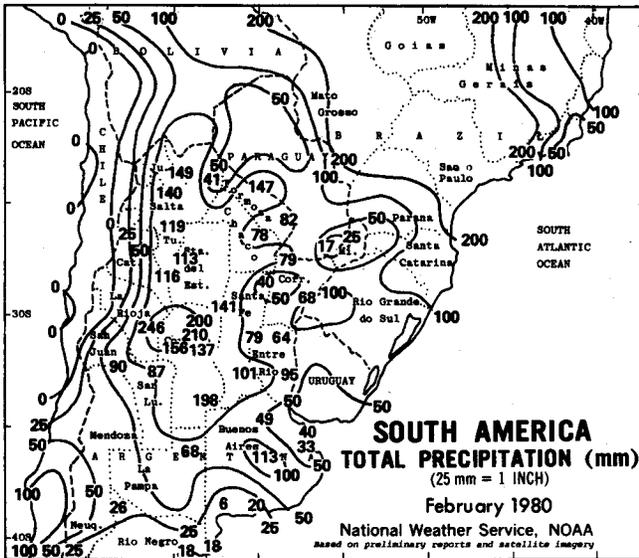
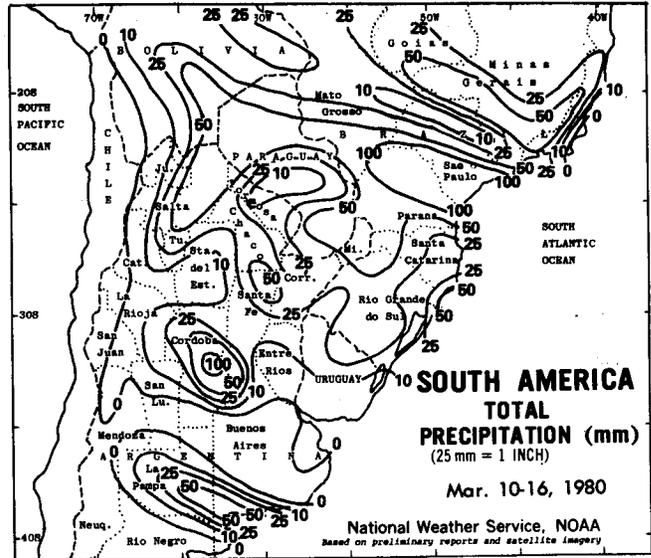


**INDIA.** Dry weather returned to the winter wheat fields of northern India, and all unirrigated wheat, which did not receive rain last week, continued to suffer. Temperatures averaged slightly below normal, but daily highs still frequently reached 30°C. Rainfall increased slightly in February, but drastic shortfalls persisted in most areas. Wheat harvest should show progress in those southern crop areas where planting proceeded on schedule, but yields should be down.

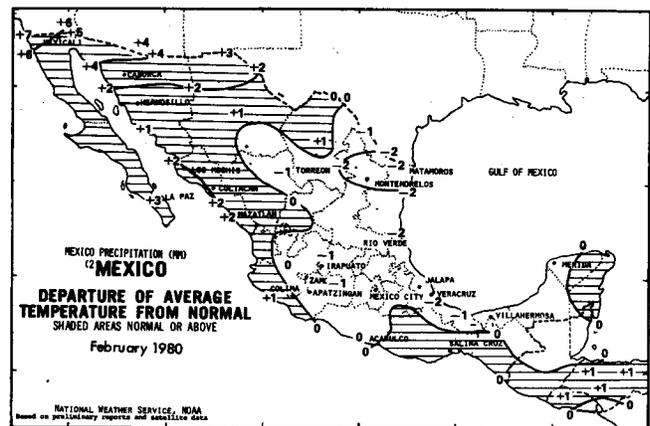
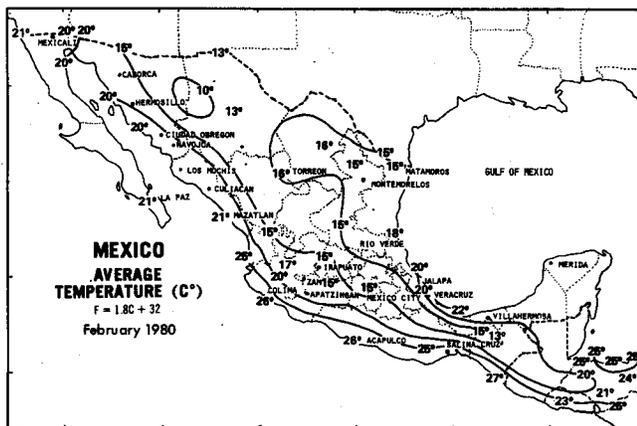
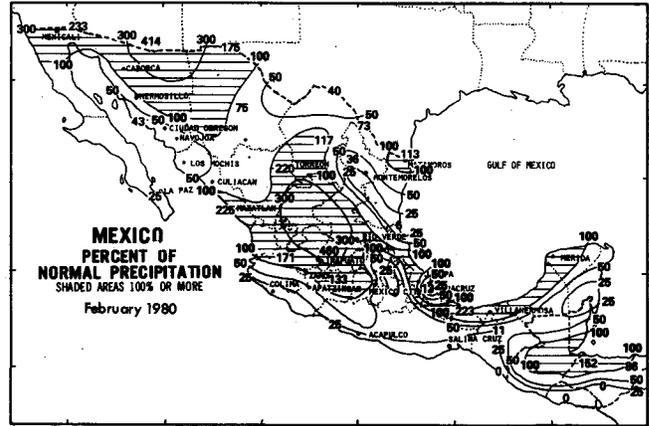
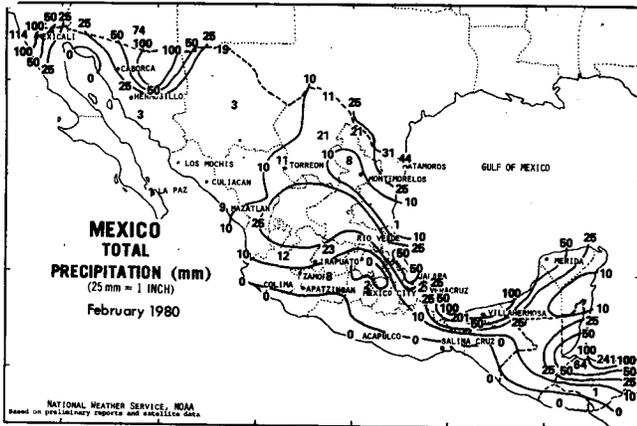
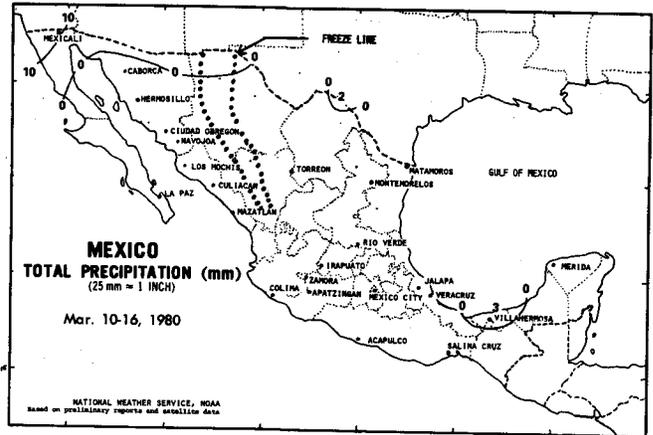




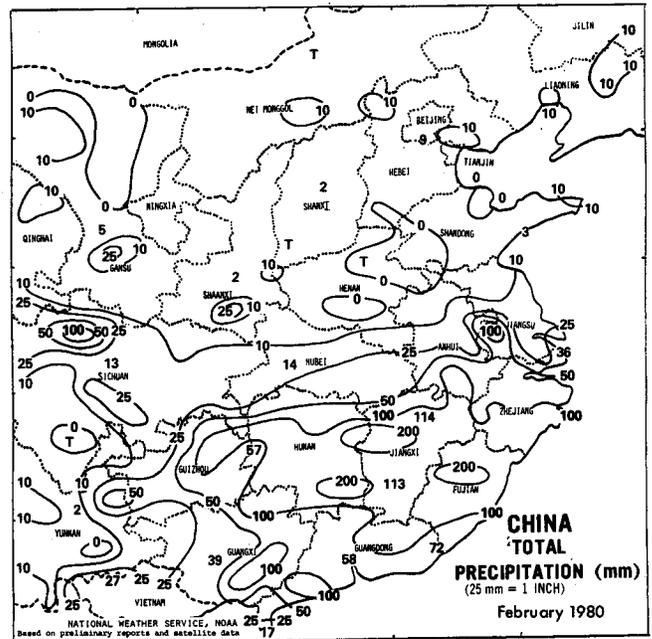
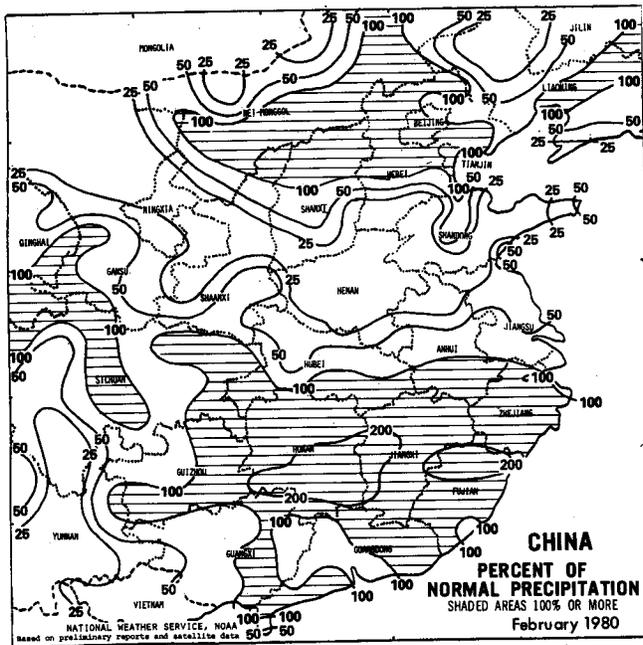
**SOUTH AMERICA.** Northwestern portions of Argentina's soybean belt received abundant rainfall, but other areas turned drier. Soil moisture remained adequate at most locations, but dryness may be returning to southwestern fields, and some areas in the northeast may not yet have returned to conditions favorable for soybean flowering since the January dry spell. February rainfall was above normal in southwestern soybean areas (in southeastern Cordoba), but it occurred almost entirely during the first 2 weeks. Temperatures in the belt stayed near normal during February. Brazil's southern soybean area in Rio Grande do Sul received near-normal rainfall again this week, virtually assuring a good crop. Moisture deficits, which had developed in western Rio Grande de Sol during January and early February, caused some local yield reductions, but rainfall in recent weeks has improved crop prospects dramatically. Heavy rains over the weekend in Parana have caused harvest disruptions again in some areas, but it is too soon to say whether the delays will become serious.

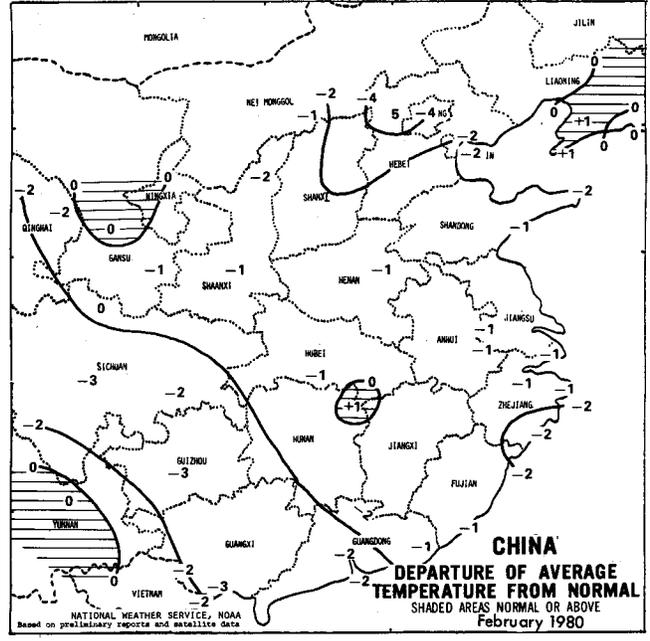
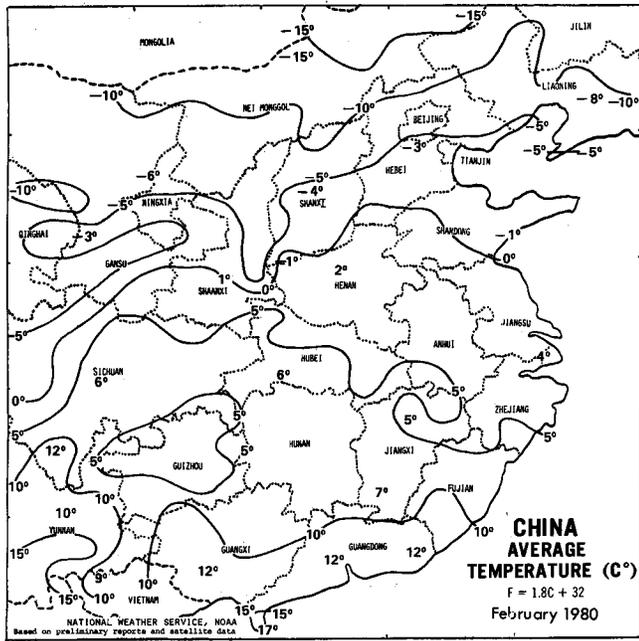


**MEXICO.** Excellent weather for west coast vegetables continued throughout February and into mid-March. However, reservoir levels were relatively low because of heavy irrigation requirements. Warm, dry conditions over most of the north also intensified the drought, which hurt some wheat and pastures and livestock, and may affect cotton plantings. Eastern citrus was blooming and needed additional moisture in nonirrigated portions of the northern belt; rains were adequate in the south during February and early March. Corn, beans, and wheat benefited from above-normal rains in parts of the southern plateau during February. Mostly warm conditions since mid-February favored grain sorghum germination and growth around Matamoras; soil temperatures had climbed to 26°C by mid-March. Mexicali cotton planting was delayed by frequent rains, even though soils had warmed to 19°C by mid-March. Torreon's sunny weather favored cotton planting, but a shortage of irrigation water may be a problem. In mid-March, Culiacan's afternoon maxima had risen to 29°C with a relative humidity of 40 percent, while overnight minima averaged 14°C with an 87-percent humidity.

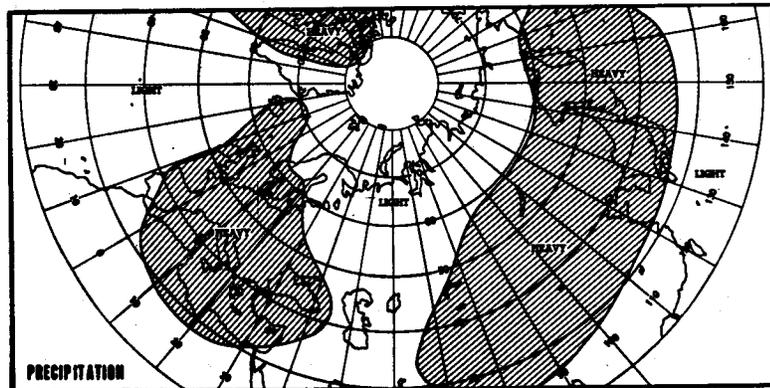
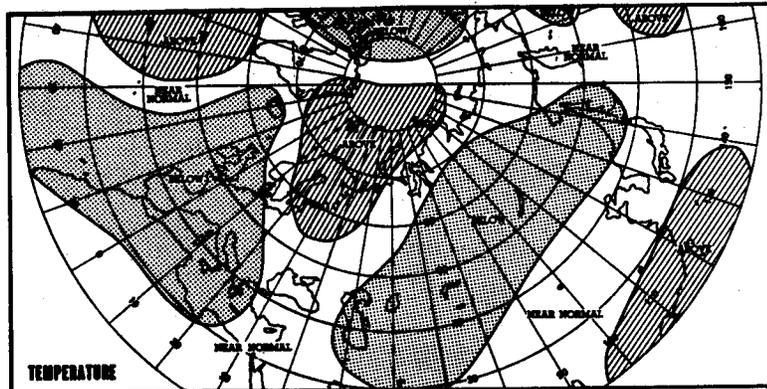


**CHINA.** Above-normal rainfall continued over southern portions of the lower Yangtze Valley, but totals decreased sharply from last week's excessive values. Drier weather to the south and west allowed rice planting to resume, and most areas should have quite adequate moisture due to above-normal February precipitation. Most winter wheat growing areas received only light rainfall early in the week, and while this maintained adequate moisture, temperatures dropped too low for wheat growth to continue. February had seen very little precipitation in the major winter wheat belt, but beneficial rainfall in early March improved conditions markedly.





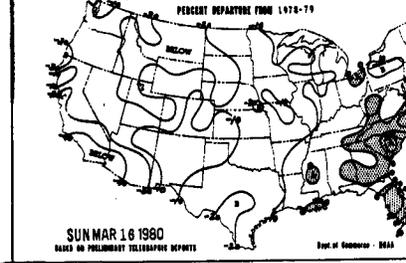
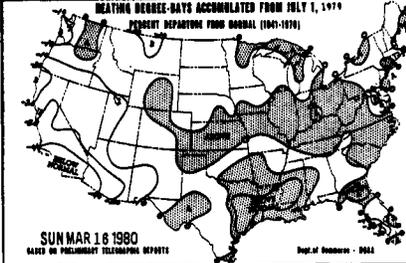
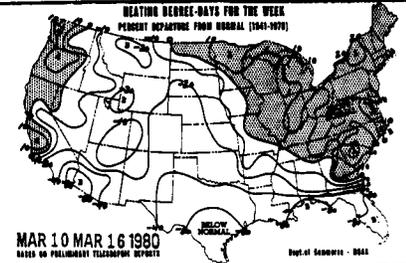
EURASIA OUTLOOK FOR MID-MARCH TO MID APRIL-1980



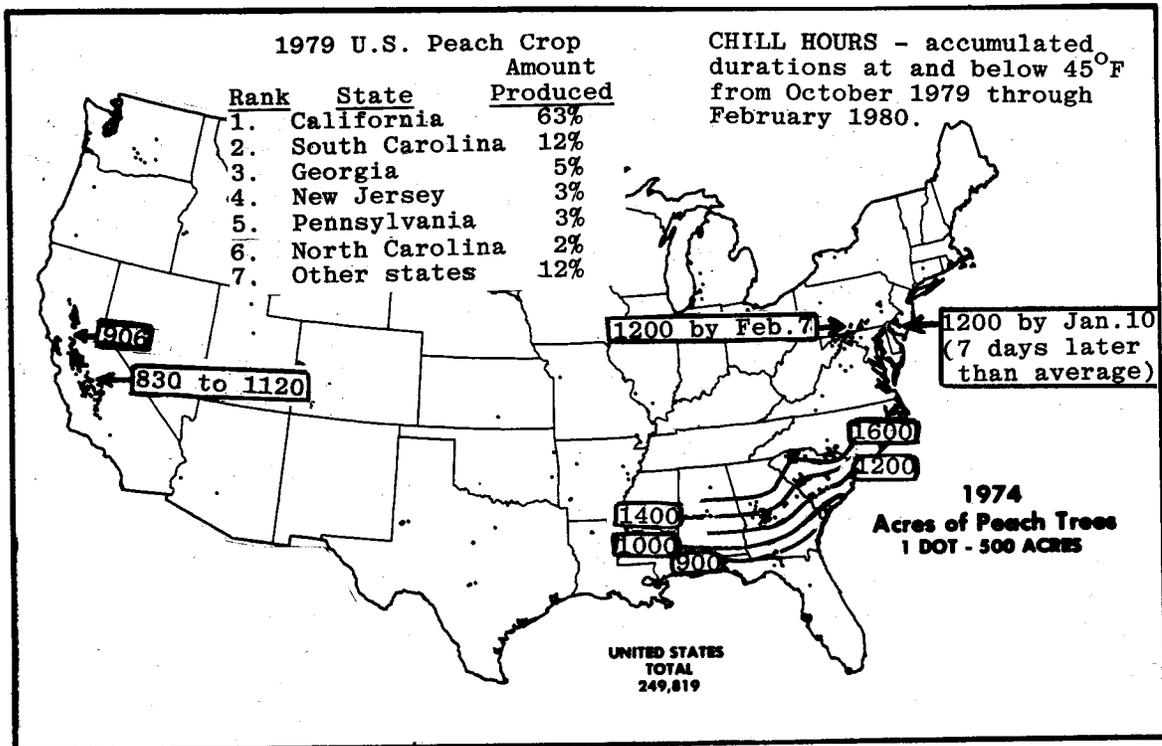
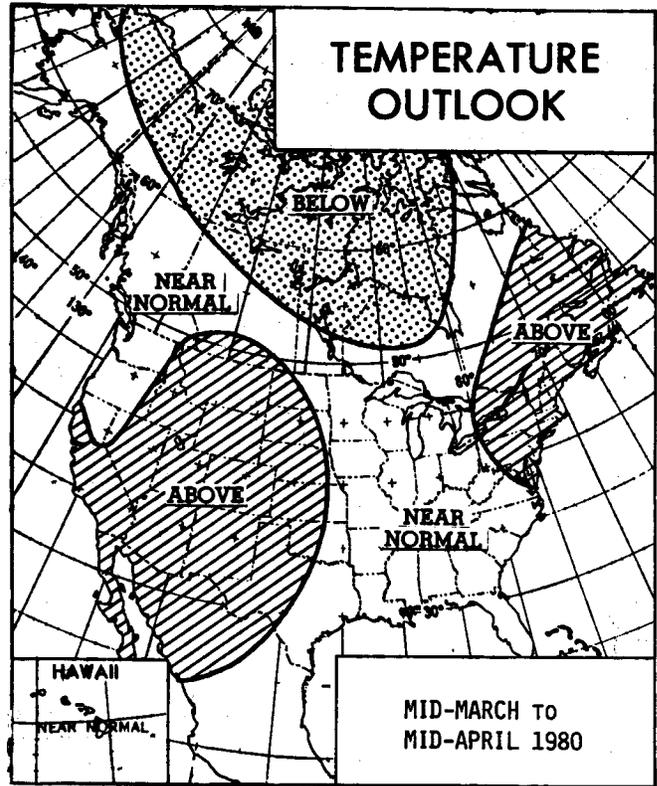
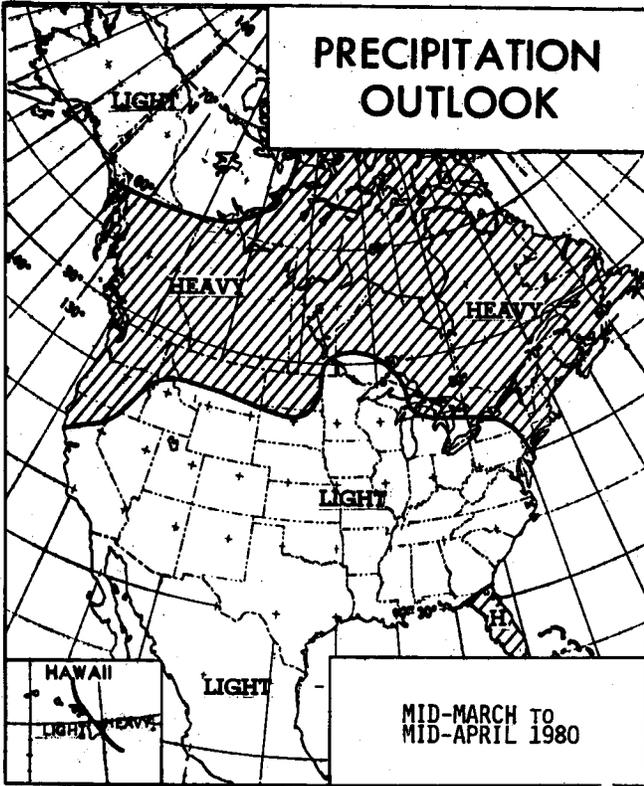
HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING MAR. 16, 1980.

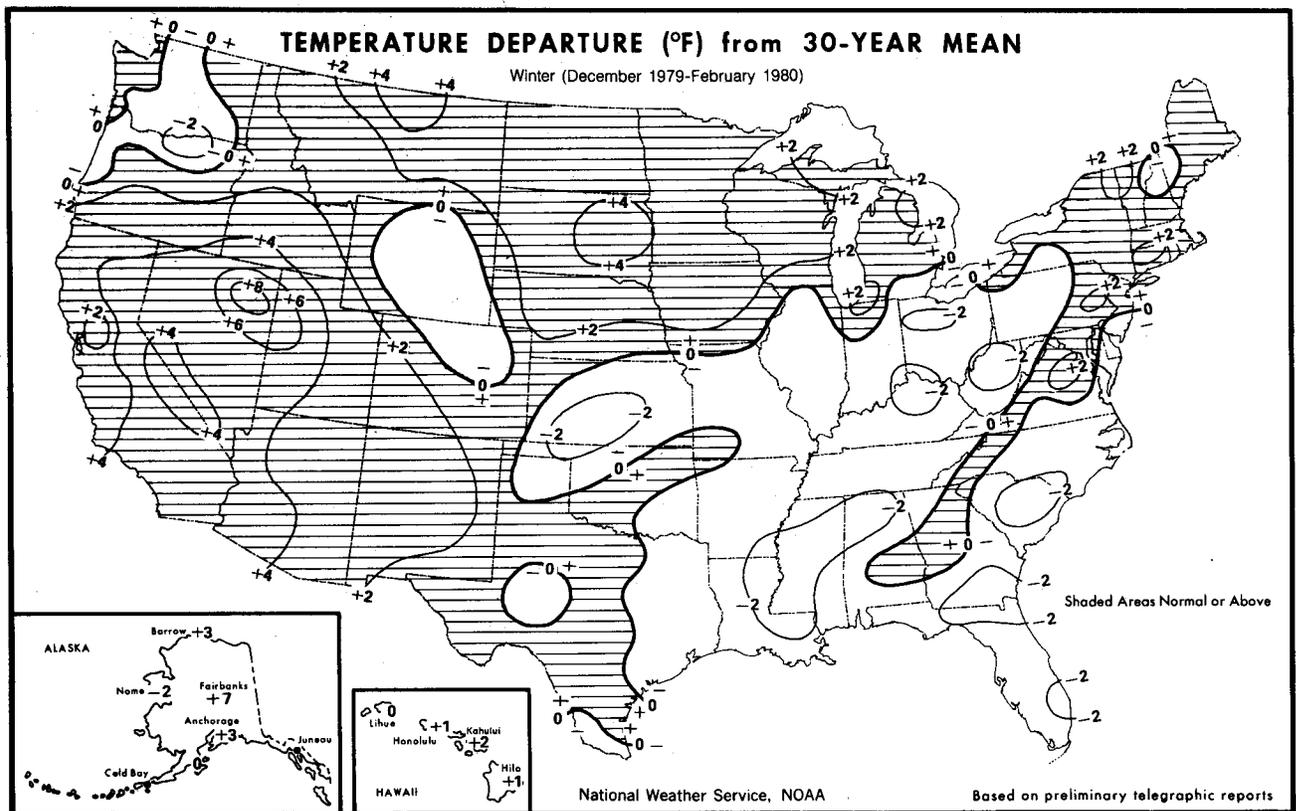
BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1, 1979.

Table with columns for STATES AND STATIONS, WEEKLY ACCUMULATION, and SEASONAL ACCUMULATION. It lists data for various states including ALA., ARIZ., ARK., CALIF., COLO., CONN., DEL., FLA., GA., IDAHO, ILL., IND., IOWA, KANS., KY., LA., MAINE, MD., MASS., MICH., MINN., MISS., MO., MONT., NEBR., NEV., N.H., N.J., N.MEX., N.Y., N.C., N.DAK., OHIO, OKLA., OREG., PA., R.I., S.C., S.DAK., TENN., TEXAS., UTAH, VT., VA., WASH., W.VA., WIS., and WYO. Each entry includes weekly total and departure, and seasonal total and departure from 1978-79.



Average Monthly Weather Outlook





### Winter Weather Review

December, January, February

**HIGHLIGHTS:** The winter season averaged warmer than normal in the Southwest, the northern Plains, and the upper Mississippi Valley. The latter two areas were variable, experiencing some very cold periods and then warming to above normal. The rest of the Nation averaged near to slightly below normal, although some record cold days were recorded in the South. Snowfall was comparatively light east of the Rockies, but the west piled up deep snow in the mountains. Precipitation, in general, was below normal in the East. Parts of New England measured less than half the expected amount. Precipitation fell heavily in the Southwest and was above normal in most of the West.

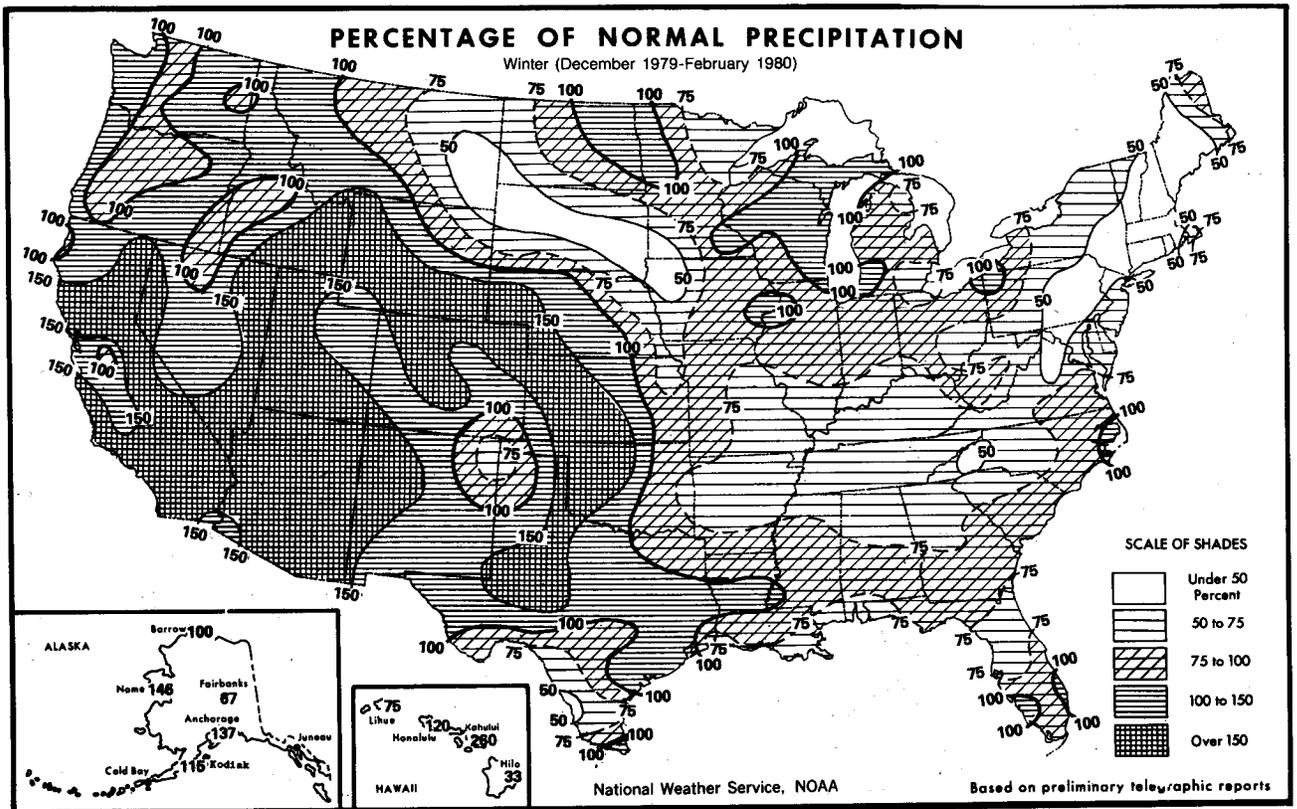
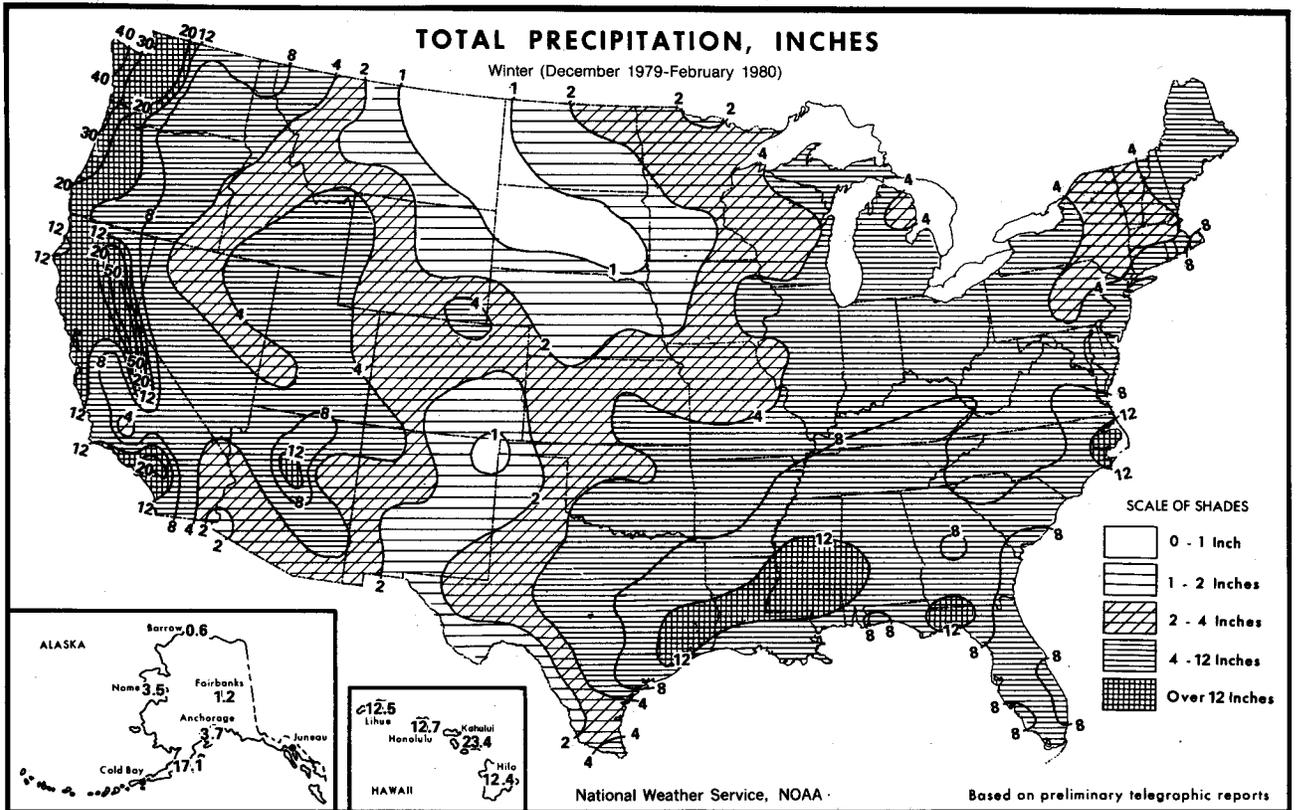
Winter began in the month of December with rapidly changing temperatures from the Rockies eastward. Many areas reported both record high and record low temperatures during the month. The last cold outbreak spread freezing temperatures into northern Florida. On the average for December, however, most of the Nation was warmer than normal---8 to 10 degrees in the northern Plains and about 6 degrees warmer in the mid-Atlantic and southern New England areas.

Precipitation for December was heaviest in the Northwest and from the lower Mississippi Valley to the eastern Great Lakes area. Near mid-December, a storm system moved from the Southwest through southern New Mexico and West Texas and deposited 1 to 4 inches of moisture in the form of snow or freezing rain. The moisture was welcome in these dry areas, but livestock was stressed by the cold, wet wind. Later, snow accumulated in the western mountains and spread into the central Plains.

The midwinter month of January began rather warm over much of the Nation, however, another freeze dipped into northern Florida. Again, the month as a whole was generally warmer than normal. The exception was an important one--an area from the Pacific Northwest through Montana and south-eastward through and along the east slopes of the Rockies was much colder than normal. This region was very cold from January 20th through the end of the month. Extreme minimum temperatures reached as low as  $-25^{\circ}$  on several consecutive nights in the Montana winter wheat area.

January precipitation was abundant over most of the Nation. Only parts of the northern Plains, the extreme southern Plains, and the area from northern Arkansas through New England recorded below-normal moisture. The heaviest precipitation was in the Far West and in the Gulf Coast States.

Winter was in full swing as February began. Freezing temperatures dipped into central Florida and below-zero readings reached into Kansas. Fortunately, Kansas was protected by snowcover. A severe winter storm moved up the East Coast and left record-breaking snow depths along the coastal areas of parts of the mid-Atlantic States. Near mid-February, a series of storms began moving into the Southwest and deluged southern California. Heavy losses resulted from the torrential rain and resultant flooding. The rain carried over into Arizona and the southern Plateau Region. The storms ushered in much warmer air which spread over the entire United States. Winter reasserted itself in the last days of February as another arctic outbreak moved southward and spread over the eastern two-thirds of the Nation by the end of the month.





# FIRST CLASS MAIL

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