

# WEEKLY WEATHER AND CROP BULLETIN

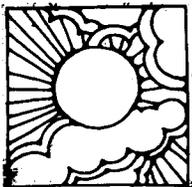
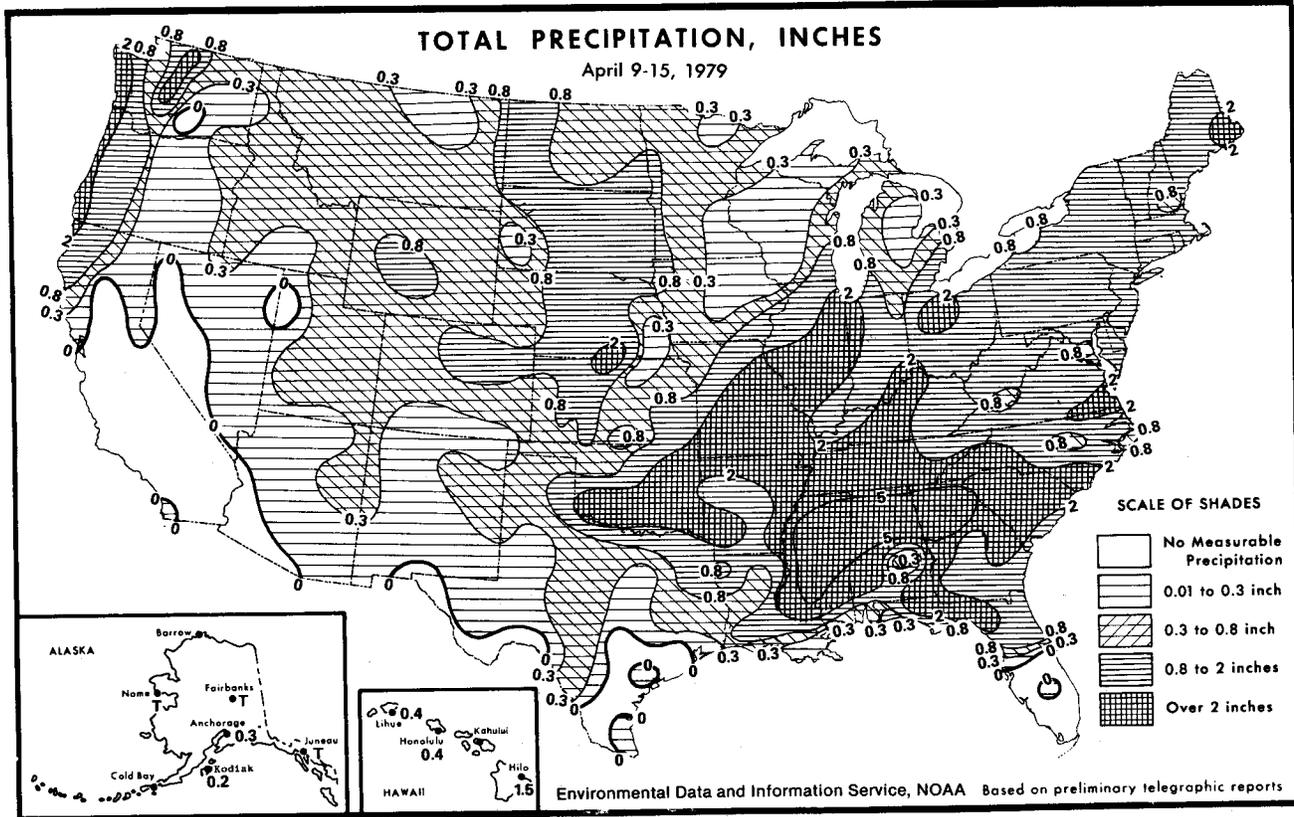
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## National Weather Summary

April 9 - 15

**HIGHLIGHTS:** Heavy rains in Mississippi brought record floods to most of the State. The moisture extended through the northern parts of Alabama and Georgia. Some rain fell in nearly all the Nation except the lower half of California, southwestern Arizona, and southern Florida.

Thunderstorms and tornadoes stretched from central Texas eastward to the Atlantic and northward into the Midwest. A group of tornadoes along the Texas/Oklahoma border inflicted many deaths and extensive property damage.

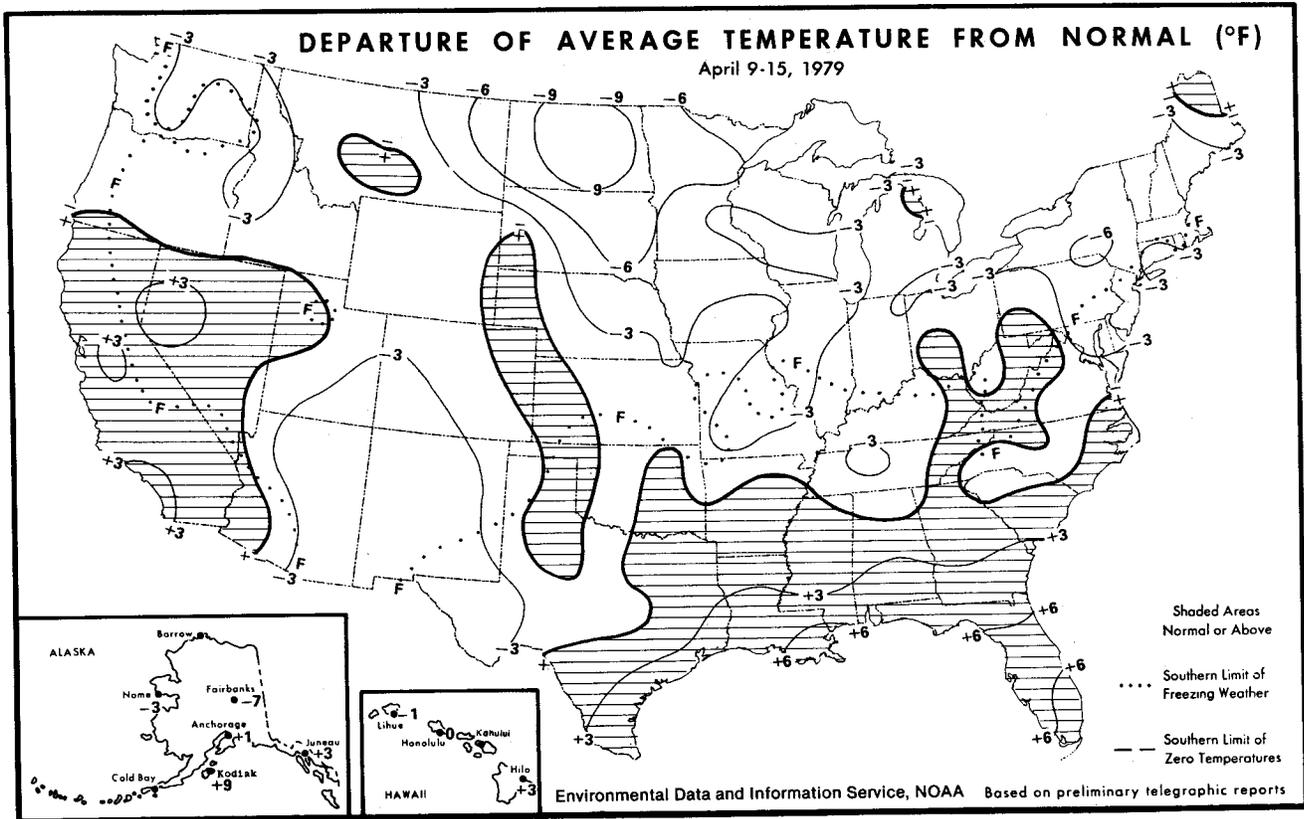
Springtime snowfalls hit the Plateau Region, Rockies, Plains, and New England.

Temperatures generally ranged near normal except in the northern Plains, where readings averaged 10 degrees below normal. By contrast, the mercury rose to the century mark in extreme southern Texas.

On Monday, severe thunderstorms extended from Texas and the lower Mississippi Valley through the Deep South, while winter held stubbornly in the Northeast.

One-half to an inch and a half of rain soaked a large section of the Nation's southern tier. Many tornadoes and hail accompanied the storms at several stations.

Meantime, up to a half-foot of snow blanketed an area from New York State through New England. Several devastating tornadoes rushed over the Texas/Oklahoma border area on Tuesday. Especially hard hit were the Texas cities of Wichita Falls and Vernon and Lawton, Okla., where many lives were lost, and some sections were leveled. Rain-fall totals topped an inch in Oklahoma City, Tulsa, and Wichita, Kans.



A strong low pressure system spread snow over the Rockies and southern Plateau Region. Up to three-quarters inch of rain dampened parts of Maine.

Rockford, northern Illinois, set a record low temperature of 19°.

Heavy rains, tornadoes, and hail continued to plague the country from the southern Plains to the Ohio Valley. Several damaging twisters hit from the northern portions of Texas and Louisiana to southern Indiana.

Jackson, Miss., weathered more than 4.5 inches of rain. Other areas scoring two-inch-plus rains included Page, southeastern Oklahoma, Greenwood, west central Mississippi, and Memphis.

Snow reached from the Rockies to the western Plains; Denver chalked up 4 inches, and Sidney, in the Nebraska Panhandle, collected 7 inches.

A deluge of rain swamped Mississippi and Alabama on Thursday adding to the large amounts of the day before. Tornadoes also formed frequently.

Widespread flooding covered a large part of the Deep South. Louisville, east central Mississippi, pushed the week's total rainfall to 18 inches. Jackson managed more than 8 inches. Meridian, eastern Mississippi, gathered more than 5 inches in a six-hour period. More than 2 inches soaked much of Alabama.

Scattered snow persisted from the Rockies to Wisconsin.

On Friday, the heavy rains moved eastward dousing Georgia, Florida, the Carolinas, and southern Virginia.

Birmingham, central Alabama, noted 8 inches of rain and flooding, while a large section of Mississippi fought extensive overflow. Atlanta's

combined total ran to 5.5 inches of rain. Friday's 4.44 inches was the wettest April day on record in Atlanta. About 3 inches doused Columbus, western Georgia, and Tallahassee, Fla. Nearly 2 inches drenched Anderson, northwestern South Carolina, and Norfolk, Va.

Storms rumbled over the Great Lakes and Ohio Valley; Detroit got nearly an inch in one hour, and Findlay, northwestern Ohio, tallied an inch and one-half.

Freezing temperatures covered the Rockies and much of the western Plains; Albuquerque set a record-tying 26°.

On Saturday, record flooding continued in Mississippi and Alabama.

Early-morning thunderstorms rolled over northern Florida dumping more than an inch on Gainesville and Cross City; a tornado touched down at Hawthorne, just southeast of Gainesville.

In all, the week's severe weather produced 110 tornadoes in the central and southern United States.

Some light showers dotted the Appalachians and Northeast; the heaviest amounts reached about a half-inch in New York and Connecticut.

On Sunday, a large part of Mississippi continued to suffer its worst flooding on record. The Jackson area saw little relief at week's end with the Pearl River's crest yet to come.

Light showers moistened the Pacific Northwest, and up to 3 inches of snow whitened the lower half of New Hampshire and western Maine.

The northern Plains displayed a sharp contrast in temperatures. At sunset, Bismarck, N. Dak., noted 38°, and Philip, west central South Dakota, reported 75°.



## National Agricultural Summary

April 9 - 15

**HIGHLIGHTS:** Heavy rains throughout the eastern third of the Nation kept soil moisture in the surplus category except on the Florida Peninsula where moisture was short. Elsewhere, soil moisture rated adequate to surplus. Low temperatures, especially in the northern part of the Nation, pushed soil temperatures below normal. The wet soils and cold condition held planting progress in check in most of the Nation. Plowing also advanced very slowly with most of the completed land tillage done last fall. Plowing ranged from 55 to 71 percent in the Corn Belt, far ahead of last year and slightly ahead of normal. Southern land preparation ranged from 40 to 57 percent, falling behind last year and the average. Farmers had 3 to 4 days suitable for fieldwork in the Atlantic Coast States and the southern Great Plains, but only 1 or 2 days elsewhere in the South and north central States. Pastures rated fair to good and generally improving, but temperatures remained too low for optimum growth. Wet soils prevented use of some grasslands. Livestock scored fair to good; calving and lambing moved well along. Winter wheat rated fair to good; some deterioration occurred on water-logged soils. Heading advanced across the South. Cold and wet soils held spring small grain planting in check. Spring wheat planting stood at 1 percent, short of the 3 percent last year and the 11 percent average. Oats and spring barley seeding fell farther behind than spring wheat. Rice seeding stood at 19 percent in the Delta States, less than half the 1978 figure of 48 percent and the 41 percent average. Cotton planting, excluding California, stood at 10 percent, only slightly behind last year and the average. Corn planting just began in southern sections of the Corn Belt. Less than 1 percent of the soybeans were planted in the Southeast and virtually none elsewhere. Deciduous tree bloom reached into Tennessee, Virginia, and Oregon. Frost damaged some peach trees in Georgia and the Carolinas. Wet soils delayed vegetable activity in northern areas. Severe weather damaged some vegetable stands in the south central States.

**SMALL GRAINS:** Winter wheat rated fair to good, although low temperatures slowed growth and wet soils deteriorated some stands. Heading ranged from 10 percent in Alabama to 27 percent in California, 30 percent in Louisiana, and 33 percent in Mississippi. Texas wheat rated excellent; insect damage was minimal. South Texas wheat headed and reached the boot stage in the Low Plains. Low Kansas temperatures slowed growth; only 5 percent advanced to the joint stage compared with 10 percent last year and the 20 percent average. Oregon farmers finished reseeding stands hurt by winterkill.

Spring small grain seeding lagged far behind last year. Spring wheat planting reached only 1 percent in the five major producing States with most of the progress confined to Idaho where 25 percent of the crop was planted. Last year, these five States reached 3 percent and on the average 11 percent. Wet soils, and in some areas lingering snow, delayed seedings.

Oats seeding lagged more than spring wheat seedings. Iowa reached 11 percent, Minnesota planted none, and South Dakota only 1 percent. This is 20 to 40 points less than the average, but only slightly lower than last year when a cold, wet spring delayed seedings too.

Minnesota planted no barley, South Dakota only 1 percent, and Idaho 20 percent. Average figures for the respective States are 7 percent in Minnesota and 18 percent for South Dakota.

**COTTON:** Cotton planting with the exception of California stood at 10 percent, slightly less than the 13 percent last year and the 11 percent average. California planting stood at 64 percent, but comparable data for previous years were unavailable. Planting progress for 1979 with California included is 16 percent. Delta States needed warmer and drier conditions before seeding any cotton. Southeastern States made good progress exceeding the average in some States. Texas growers continued land preparations, but North Texas producers waited for higher soil temperatures to assure better germination. New Mexico seeding should start soon. Arizona planting moved rapidly. California winds damaged seedbeds and depleted soil moisture, however, growers planted almost half the cotton acreage during the week.

**OTHER CROPS:** Corn planting ranged from below normal in the south central States to surpassing normal in the Southeast. Wet soils and rainy weather delayed corn planting west of the Atlantic Coast States. Very minor corn acreage was planted in the north central States.

Virtually no soybeans were planted; only Georgia reported 1 percent seeded.

Texas grain sorghum seeding advanced to 41 percent, short of the 61 percent in 1978 and the 56 percent average. Some grain sorghum was planted in minor States, but none was planted in other major producing States.

Rice seeding reached 19 percent in the Delta; virtually none was planted in California. Last year, 48 percent of the rice was in the ground and on the average 41 percent usually is planted by this time of the season. Wet soils plagued seedings.

**FRUITS AND NUTS:** Peach trees bloomed in Arkansas, Tennessee, Virginia, and New Jersey. Peach freeze damage became evident in several States including Pennsylvania, Georgia, and Virginia. Apples bloomed in the southern States and reached the pre-pink to pink stages in Pennsylvania and Virginia. Pecans budded in Texas and New Mexico. Filberts leafed out in Oregon. Cherries, peaches, and pears reached full bloom in Washington's Yakima Valley. California growers irrigated, sprayed, and thinned early fruit.

California citrus bloomed in the San Joaquin Valley. Arizona Valencia harvest reached full volume; grapefruit harvest was limited but active. Grove conditions improved showing good new crop bloom and fruit prospects. Florida citrus trees showed stress in areas without adequate soil moisture; most areas irrigated. New crop bloom ended; fruit set started. Late orange harvest increased.

**VEGETABLES:** Producers planted summer crops such as tomatoes, cucumbers, and sweet corn as far north as Virginia's Eastern Shore. Rains and wet soils delayed planting in many parts of the South. Severe weather damaged some vegetable stands. Florida vegetables rated fair to very good. Above-normal temperatures improved plant growth, fruit set, and size. Shipments increased 18 percent from the previous week on the strong volumes of cauliflower, cucumbers, and tomatoes. Texas growers harvested some cabbage and carrots in the Valley, while planting onions, carrots, and potatoes

(continued on page 23)

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t.,

April 15, 1979

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	63	+ 1	7.9	+ 6.8	LA. Baton Rouge . . .	72	+ 4	1.0	- .2	Youngstown . . .	46	- 1	1.2	+ .4
Mobile . . .	72	+ 5	.4	- 1.0	Lake Charles . . .	72	+ 4	1.2	+ .2	OKLA. Okla. City . .	58	- 1	1.6	+ .9
Montgomery . . .	67	+ 3	.1	- 1.0	New Orleans . . .	75	+ 7	T	- 1.0	Tulsa . . .	61	+ 1	2.4	+ 1.4
ALASKA Anchorage . .	35	+ 1	.3	+ .2	Shreveport . . .	68	+ 2	.7	- .5	OREG. Astoria . . .	46	- 1	2.1	+ .9
Barrow . . .	20	- 1	-	-	MAINE. Caribou . . .	37	+ 2	.9	+ .3	Burns . . .	41	- 2	.1	0
Fairbanks . . .	- 2	- 7	T	- .7	Portland . . .	39	- 4	1.0	+ .2	Medford . . .	49	0	.9	+ .7
Juneau . . .	41	+ 3	T	- .7	MD. Baltimore . . .	50	- 3	1.0	+ .3	Pendleton . . .	48	- 2	.2	0
Kodiak . . .	45	+ 9	.2	- .7	MASS. Boston . . .	44	- 3	.9	+ .1	Portland . . .	49	- 1	.8	+ .3
Nome . . .	14	- 3	T	- .2	Chatham . . .	41	-	1.6	-	Salem . . .	48	- 1	1.0	+ .5
ARIZ. Flagstaff . . .	37	- 4	.3	- .1	MICH. Alpena . . .	40	+ 1	.3	- .3	PA. Allentown . . .	46	- 3	1.6	+ .7
Phoenix . . .	67	0	T	- .1	Detroit . . .	44	- 3	2.1	+ 1.3	Erie . . .	41	- 3	1.3	+ .5
Tucson . . .	62	- 3	T	- .1	Flint . . .	44	- 1	.6	- .1	Harrisburg . . .	46	- 6	1.3	+ .6
Winslow . . .	50	- 3	.4	+ .3	Grand Rapids . . .	44	- 1	.4	- .4	Philadelphia . . .	47	- 5	1.8	+ 1.0
Yuma . . .	71	+ 1	0	0	Houghton Lake . . .	39	- 2	.3	- .3	Pittsburgh . . .	49	0	1.5	+ .7
ARK. Fort Smith . . .	59	- 2	1.7	+ .6	Lansing . . .	44	- 1	.3	- .4	Scranton . . .	42	- 5	1.1	+ .4
Little Rock . . .	62	+ 1	1.4	+ .2	Marquette . . .	33	- 3	.3	- .4	R.I. Providence . . .	42	- 4	1.2	+ .3
CALIF. Bakersfield . .	62	0	0	- .2	Muskegon . . .	42	- 2	.4	- .4	S.C. Charleston . . .	66	+ 2	1.1	+ .4
Eureka . . .	50	+ 1	1.8	+ 1.1	S. Ste. Marie . . .	34	- 3	.4	- .1	Columbia . . .	63	0	2.3	+ 1.5
Fresno . . .	61	+ 2	0	- .3	MINN. Duluth . . .	31	- 6	.4	- .2	Greenville . . .	59	- 1	4.1	+ 3.0
Los Angeles . . .	64	+ 3	0	- .3	Internat Falls . . .	32	- 5	.3	- .1	S.D. Aberdeen . . .	37	- 6	1.7	+ 1.2
Red Bluff . . .	60	+ 1	T	- .4	Minneapolis . . .	42	- 2	.1	- .3	Huron . . .	38	- 6	1.7	+ 1.2
San Diego . . .	63	+ 3	T	- .2	Rochester . . .	40	- 3	.2	- .3	Rapid City . . .	43	0	.3	- .2
San Francisco . . .	55	0	T	- .4	St. Cloud . . .	37	- 4	.3	- .2	Sioux Falls . . .	40	- 5	1.8	+ 1.3
Stockton . . .	62	+ 4	0	- .4	MISS. Jackson . . .	65	0	8.6	+ 7.5	TENN. Chattanooga . .	58	- 2	4.0	+ 2.9
COLO. Denver . . .	45	- 1	.9	+ .5	Meridian . . .	65	0	4.3	+ 3.1	Knoxville . . .	59	0	1.8	+ .9
Grand Junction . . .	49	- 3	.3	+ .1	MO. Columbia . . .	51	- 3	2.6	+ 1.7	Memphis . . .	62	0	3.4	+ 2.1
Pueblo . . .	46	- 1	1.6	+ .8	Kansas City . . .	51	- 2	.7	- .1	Nashville . . .	56	- 3	2.1	+ 1.1
CONN. Bridgeport . . .	44	- 2	1.5	+ .6	St. Louis . . .	52	- 4	4.9	+ 4.0	TEX. Abilene . . .	64	0	.4	- .1
Hartford . . .	44	- 3	.7	+ .1	Springfield . . .	52	- 4	2.7	+ 1.7	Amarillo . . .	53	- 2	.6	+ .3
D.C. Washington . . .	52	+ 5	.3	- .6	MONT. Billings . . .	44	+ 1	.5	+ .1	Austin . . .	68	0	T	- .8
FLA. Apalachicola . .	73	+ 5	.7	+ .5	Glasgow . . .	36	- 5	.2	+ .1	Beaumont . . .	73	+ 5	T	- 1.0
Daytona Beach . . .	76	+ 7	1.1	+ .6	Great Falls . . .	40	- 2	.5	+ .2	Brownsville . . .	78	+ 4	T	- .3
Ft. Myers . . .	79	+ 6	T	- .5	Havre . . .	42	0	.6	+ .4	Corpus Christi . . .	77	+ 5	T	- .5
Jacksonville . . .	72	+ 5	1.2	+ .5	Helena . . .	42	0	.6	+ .4	Del Rio . . .	71	0	T	- .3
Key West . . .	81	+ 3	0	- .5	Kalispell . . .	40	- 1	.7	+ .5	El Paso . . .	59	- 4	0	- .1
Lakeland . . .	-	-	-	-	KalisPELL . . .	40	- 4	.4	+ .1	Fort Worth . . .	66	+ 2	.3	- .7
Miami . . .	80	+ 5	T	- .8	Miles City . . .	41	- 2	.5	+ .3	Galveston . . .	71	+ 3	T	- .6
Orlando . . .	77	+ 6	0	- .7	Missoula . . .	46	- 3	1.5	+ 1.0	Houston . . .	72	+ 3	T	- .8
Tallahassee . . .	71	+ 4	3.8	+ 2.8	NEBR. Grand Island .	48	- 2	.2	- .0	Lubbock . . .	59	0	.2	0
Tampa . . .	78	+ 7	0	- .5	Lincoln . . .	44	- 3	.5	0	Midland . . .	60	- 3	.1	0
W. Palm Beach . . .	76	+ 3	T	- .8	Norfolk . . .	44	- 3	.9	+ .5	San Angelo . . .	64	- 2	.5	+ .1
GA. Atlanta . . .	61	+ 1	6.2	+ 5.1	N. Platte . . .	45	- 2	.9	+ .2	San Antonio . . .	71	+ 2	T	- .6
Augusta . . .	64	+ 1	2.2	+ 1.4	Omaha . . .	44	- 5	.4	- .2	San Antonio . . .	74	+ 4	T	- .6
Macon . . .	66	+ 1	1.7	+ .9	Valentine . . .	42	- 3	1.3	+ .9	Victoria . . .	74	+ 4	T	- .6
Savannah . . .	69	+ 4	1.2	+ .5	NEV. Ely . . .	40	0	.1	- .2	Waco . . .	65	- 2	.1	- .8
HAWAII. Hilo . . .	75	+ 3	1.5	- 1.6	Las Vegas . . .	64	+ 1	.1	0	Wichita Falls . . .	62	- 1	1.1	+ .4
Honolulu . . .	75	0	.4	+ .1	Reno . . .	49	+ 3	T	- .1	UTAH. Blanding . . .	42	- 4	.4	+ .2
Kahului . . .	73	- 1	1.7	+ 1.4	Winnemucca . . .	47	+ 3	.2	+ .1	Salt Lake City . . .	49	+ 1	.4	- .1
Lihue . . .	72	- 1	.4	- .4	N.H. Concord . . .	39	- 4	.8	+ .1	VT. Burlington . . .	38	- 4	1.2	+ .6
IDAHO. Boise . . .	45	- 3	.5	+ .2	N.J. Atlantic City . .	47	- 3	1.2	+ .4	VA. Lynchburg . . .	54	- 2	1.1	+ .5
Lewiston . . .	47	- 2	.4	+ .1	Trenton . . .	47	- 4	1.6	+ .9	Norfolk . . .	57	0	2.8	+ 2.2
Pocatello . . .	42	- 2	.2	0	N.MEX. Albuquerque . .	50	- 5	.1	0	Richmond . . .	56	- 1	1.6	+ 1.0
ILL. Cairo . . .	58	- 1	1.3	+ .3	Roswell . . .	56	- 3	T	- .1	Roanoke . . .	55	0	1.3	+ .7
Chicago . . .	44	- 5	2.3	+ 1.4	N.Y. Albany . . .	41	- 5	1.8	+ 1.2	WASH. Colville . . .	42	- 3	.5	+ .3
Moline . . .	47	- 2	1.2	+ .3	Binghamton . . .	38	- 6	1.2	+ .5	Omak . . .	44	- 4	.6	+ .4
Peoria . . .	47	- 3	2.0	+ .9	Buffalo . . .	40	- 4	.8	+ .1	Quillayute . . .	43	- 2	2.7	+ .7
Rockford . . .	42	- 5	1.0	+ .1	New York . . .	46	- 5	1.5	+ .7	Seattle-Tacoma . . .	47	- 1	.5	- .1
Springfield . . .	49	- 3	4.5	+ 3.5	Rochester . . .	40	- 5	.8	+ .2	Spokane . . .	41	- 4	.1	- .2
IND. Evansville . . .	55	- 1	1.2	+ .3	Syracuse . . .	40	- 5	.8	0	Walla Walla . . .	50	- 2	.4	0
Ft. Wayne . . .	45	- 3	.8	+ .0	N.C. Asheville . . .	54	- 1	2.7	+ 1.9	Yakima . . .	45	- 3	T	- .1
Indianapolis . . .	49	- 2	1.5	+ .6	Charlotte . . .	59	- 1	2.0	+ 1.2	W.VA. Beckley . . .	51	0	.7	- .1
South Bend . . .	47	0	1.2	+ .2	Greensboro . . .	58	0	.8	0	Charleston . . .	54	- 1	1.3	+ .5
IOWA. Burlington . . .	47	- 3	1.5	+ .6	Hatteras . . .	59	+ 1	.7	0	Huntington . . .	56	+ 1	1.1	+ .3
Des Moines . . .	46	- 2	.3	- .4	Raleigh . . .	58	- 1	.6	- .1	Parkersburg . . .	51	- 3	1.0	+ .2
Dubuque . . .	42	- 4	.1	- .9	Wilmington . . .	65	+ 3	2.1	+ 1.4	WISC. Green Bay . . .	40	- 3	.6	0
Sioux City . . .	44	- 4	1.1	+ .6	N.DAK. Bismarck . . .	32	- 10	.5	+ .1	La Crosse . . .	44	- 2	.1	- .5
KANS. Concordia . . .	50	- 2	.2	- .3	Fargo . . .	34	- 7	.8	+ .3	Madison . . .	41	- 3	.4	- .2
Dodge City . . .	53	0	.6	+ .2	Williston . . .	34	- 7	1.0	+ .7	Milwaukee . . .	42	- 2	1.4	+ .8
Goodland . . .	49	+ 1	.7	+ .4	OHIO. Akron-Canton . .	46	- 1	1.1	+ .3	WYO. Casper . . .	41	- 1	.4	+ .1
Topeka . . .	50	- 3	.6	- .2	Cincinnati . . .	51	- 2	2.1	+ 1.3	Cheyenne . . .	41	- 1	.4	0
Wichita . . .	54	- 2	.5	- .2	Cleveland . . .	47	0	1.3	+ .5	Lander . . .	41	- 1	1.4	+ .9
KY. Lexington . . .	53	- 1	1.7	+ .8	Columbus . . .	50	0	1.9	+ 1.1	Sheridan . . .	40	- 2	.4	- .1
Louisville . . .	55	0	2.6	+ 1.6	Dayton . . .	50	0	1.9	+ 1.1	P.R. San Juan . . .	79	+ 2	.8	+ .1
					Toledo . . .	45	- 2	1.6	+ .9					

Based on 1941-70 normals

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## 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 2° above normal. Extensive flooding from heavy rains on 12th and 13th. Rainfall up to 10.0 in. northern half. Much lighter southern half, amounts up to 3.00 in.  
Fieldwork: 1.7 days suitable. Soil moisture surplus. Very little outside work other than normal chores. Plowing 57% complete. Corn 39% planted, 45% 1978, 26% average. Cotton 2% planted, 17% 1978, 11% average. Wheat headed 10%, 27% 1978. Wheat in fair condition. Pastures fair, beginning to furnish adequate feed.

**ARIZONA:** Cold front, strong winds, widespread precipitation, unseasonably cold temperatures. Temperatures mostly 3 to 6° below normal. Northeast, mountains averaged 0.20 to 0.30 in. precipitation, other areas less than 0.10 in.

Cotton planting full swing central, east. Planting west virtually complete. Planting 37% complete statewide, 30% year ago. Wheat, barley good progress, heading accelerating rate. Planting corn, grain sorghum, safflower, seasonal progress. Sugarbeet development very good. Alfalfa haying full swing. Harvest lettuce, mixed vegetables full swing. Recent warmer temperatures accelerated maturity. Cantaloup, watermelon planting virtually complete. Thinning, weeding, vine turning active. Valencia harvest full swing, grapefruit harvest active but limited. Grove condition improving. New crop bloom, fruit prospects good. Livestock water, soil moisture adequate. Livestock enjoying good feed. New calves doing well.

**ARKANSAS:** Temperatures near normal except few degrees above normal south and southwest. Abundant rainfall. Lowest normal 57°; highest 64°. Lowest mean 55°; highest 67°. Extremes: 31 and 86°  
Least precipitation 0.46 in.; most 3.06 in.

Land preparation and plantings limited due to excessive rain and cold wet soils. Soil moisture surplus. Fieldwork: 1.9 days available. Soybean plantings 0% 1979, 0% 1978, less than 1% average. Cotton fieldwork at standstill. Plantings this year 0%, 2% 1978, 4% average. Rice plantings limited; planting to date 4%, 23% 1978, 18% average. Corn and sorghum fields southern area good stands. Corn planting 5%, 29% 1978, 34% average. Sorghum planting 1%, 19% 1978, 24% average. Small grain crop conditions fair to good. Plant growth good to excellent. Fruit trees good to excellent condition; no frost or hail damage. Peaches full bloom. Apples blooming. Grapes excellent condition. Strawberries good to excellent condition. Tomatoes fair condition. Plant damage due to strong winds, rain and hail. Hay and pasture, plant growth good. Pastures improved; average condition. Cattle good condition; gaining weight.

**CALIFORNIA:** Strong gusty northerly winds developed first part of the period. Winds in excess of 50 mph occurred in southern deserts. Considerable cloudiness prevailed through midweek with intermittent rain in northern third. Over 1.50 in. fell on extreme north coast. Fair mild weather returned on last three days of week. Temperatures near to a little below normal. Warming trend at first and latter part, with highs in Sacramento and San Joaquin Valleys reaching into upper 70's.

Planting cotton full swing. Wind caused damage cotton bed preparation San Joaquin Valley. Cotton 64% planted, 23% emerged. Sacramento Valley

grains boot stage. Non-irrigated grains given boost by rains. Small grains 27% headed. Small grains lodging San Joaquin Valley. Spraying weed control active central north coast, San Joaquin Valley. Alfalfa growth desert area good. Weevil control active Sacramento Valley. Corn 6% planted. Sugarbeet planting continued Sacramento and San Joaquin Valleys. Harvesting beets continued central coast, San Joaquin, Sacramento Valleys. High wind damaged newly planted beets south coast. Riverside County excessive water damaged beets. Safflower planting continued San Joaquin Valley. Safflower good growth Sacramento Valley. Orchards, vineyards irrigated, sprayed. Early stone fruit thinned. Grapes sulfured. Citrus bloomed San Joaquin Valley. Almonds dropped. Artichoke harvest heavy. Asparagus declining desert, active other areas. Broccoli harvest slowing temporarily central coast. Lettuce harvest nearly done desert, increasing San Joaquin Valley, Ventura, Santa Maria. Strawberries increasing south coast still very light Santa Maria. Range conditions very good. Livestock making good gains. Water supplies abundant. Sheep shearing Sacramento Valley.

**COLORADO:** Midweek storm brought 4 to 8 in. snow to lower elevations east of front range. Up to 2 feet in several foothill locations. Temperatures generally a little below normal.

Winter wheat good condition. Some spotty stands result of winterkill. Seeding of spring crops delayed by wet conditions. Fieldwork: 2.5 days suitable. Oats seeded 7%, 54% 1978, 48% average; emerged 3%, 25% 1978, 20% average. Spring barley seeded 25%, 35% 1978, 41% average. Onions seeded 20%. Sugarbeets seeded 6%, 70% 1978, 31% average. Alfalfa good condition. Ranges and pastures fair condition. Topsoil moisture adequate, subsoil moisture nearly adequate. Livestock good condition. Calving 65% complete; lambing 43% complete. Death losses near average.

**FLORIDA:** Weak cold fronts midweek brought some rain and thundershowers of 1.00 to 2.00 in. generally to Panhandle, northern Peninsula areas, but little or no rain central, southern Peninsula. Temperatures several degrees above normal with daily highs occasionally near 90° over Peninsula.

Soil moisture mostly adequate west and north, mostly short central and south. Corn growth slow. Warmer temperatures would be beneficial. Peanut planting active. Preparing land for soybeans active. Tobacco transplanting practically complete. Small grains heading, good to excellent condition. Sugarcane good growth. Pasture condition declined. Moisture stress conditions continued. Pastures poor to fair; small grain pastures in Panhandle fair. Cattle fair to good condition. Stress showing in citrus where trees have not had adequate rain; irrigation underway. Bloom completed. New crop fruit set period started. Late type orange harvest increasing. Overall vegetable crop conditions fair to very good, some excellent. Strong winds continue to whip plants, scar fruit some areas. Warmer weather increasing plant growth. Fruit set, size generally very good. Fruit continues to size well. Plant wilt evident high, dry spots some fields. Irrigation very heavy. Harvest increasing; shipments up 18% from previous week. Supplies cauliflower, cucumbers, tomatoes up considerably. Harvest cabbage, eggplant, parsley, peppers increased while

snap beans, sweet corn, lettuce, radishes, squash held steady. Carrot, chinese cabbage, escarole, okra, strawberry supplies decreased. Strawberry crop condition generally good. Supplies decreasing Plant City area. Quality, size good. Most fields open to u-pic. Watermelon crop condition mostly good; warm days, nights very beneficial to plant growth, fruit set, sizing. Light scrapping expected few fields this week southwest area. Most fields west central area showing false blooms, setting fruit. Plants progress good north central area. Planting practically complete north. Stands good. Early plantings coming up to good stands west.

GEORGIA: Temperatures mid-50's north to near 70° south. Extremes: 88 and 29°. Rainfall over north and central heavy latter week.

Soil moisture surplus northern half, mostly adequate to surplus south. Fieldwork: 1 day suitable north, 5 days south. Heavy flooding lowlands north. Some wind damage to poultry and buildings. Corn fair to mostly good; 84% planted, last year 70%, average 55%; sidedressing active south. Tobacco fair to mostly good; 89% transplanted, last year 73%, average 83%. Watermelons fair to good; 84% seeded, last year 81%. Cotton fair to good; 32% planted, last year 27%, average 21%. Soybeans mostly fair to good; 1% planted, last year 1%. Peanuts fair; 10% planted, last year and average 12%. Sorghum 9% seeded, last year 8%. Small grains fair to mostly good. Peaches good, spraying active. Apples good, some frost north but damage not assessed. Onion harvest underway. Vegetable plantings delayed north, well advanced south. Pastures, cattle, and hogs good. Leafy vegetables moving, fair volume, good quality.

HAWAII: Weather favorable. Showers generally light; however isolated heavier rains Waianae area, Island of Oahu, April 12, slightly damaged leafy crops.

Most areas crop progress fair to good and improving. Vegetable supplies: All cabbage crops getting heavy. Others gradually increasing. Banana supplies light. Papaya supplies light but increasing; diseases subsided but spray program continued. Pineapple harvesting getting active on Molokai. Steady on Oahu. Sugar harvesting active. Pastures generally fair to good. Some beneficial showers Kau section Island Hawaii.

IDAHO: Temperatures below normal. Week ended with warming trend. Precipitation heavy north and southwest, with light rain southeast.

Fields wet north and southeast. Seeding activity behind last 2 years but near normal. Spring wheat 25% seeded, last year 35%, normal 25%. Spring barley 20% seeded, last year 30%. Onions nearly all planted. Potato planting active southwest.

ILLINOIS: Temperatures 1 to 4° below normal. Precipitation 1.00 to 3.00 in. north, up to 4.50 in. south, flooding in many areas.

Soil moisture surplus. Winter wheat good. Oats seeding 12% complete, 20% 1978, 64% average. Alfalfa good. Plowing corn, soybean acreage 71% complete, 55% 1978, 76% average. Pastures good. Fieldwork: 0.25 day suitable.

INDIANA: Another wet week. Temperatures slightly below normal; range 20 to 80°. Rainfall southeast 2.00 in., southwest 1.50 in., central 1.30 in., northeast 1.00 in. Sunshine 50% of possible. Soil temperatures near normal, high 40's north, low 50's south.

Fieldwork: No full day suitable. Topsoil and subsoil moisture surplus. Spring planted crops 55% plowed, 1978 47%, average 55%. No corn or

sorghum planted. Oats 15% seeded, 1978 15%, average 50%. Clover 50% seeded, 1978 40%. Wheat fair to good. Wheat 5 in., 1978 3 in., average 7 in. Peaches full bloom April 21. Pastures fair.

IOWA: Continued cold with moderate precipitation midweek.

Soils warming. Mud in abundance. Plowing 54% complete, last year 44%, normal 67%. Oat acreage seeded 11%, last year 34%, normal 56%. Fertilizer applied 40%, last year 32%. Fieldwork: Less than 1 day suitable. Livestock in fair condition, slow rate of gain.

KANSAS: Precipitation 1.20 in. southeast and east central to 0.50 to 0.75 in. elsewhere. Temperatures 49° northwest to 56° southeast or 2° above normal northwest to 1 to 2° below normal north central and south central.

Wheat moisture adequate, cool temperatures continue to slow growth, 5% wheat jointing, last year 10%, average 20%. Corn planting begun in southeast less than 5% complete, 5% average. Oat seeding 40% complete, last year 70%, average 75%. Barley seeding 50% complete, last year 80%, average 75%. Fieldwork: 1.5 days suitable.

KENTUCKY: Temperatures near normal with rain falling almost each day. Rainfall heaviest 9th and again 12th and 13th. Fieldwork: 1 day suitable. Plowing 40% complete, last year 51%, average 55%. Most plowing done last fall. Heavy spring rain caused serious erosion some areas. Pastures good condition. Grazing light on wet fields. Tobacco beds mostly seeded east and central, west well behind normal. Beds with plants emerged 40%, average 48%. Fruit crop mostly good. Some spots of light to moderate frost damage. Spring work 10 days behind normal. Warm, dry weather needed.

LOUISIANA: Temperatures normal to 5° above normal. Extremes: 87 and 47°. Showers statewide.

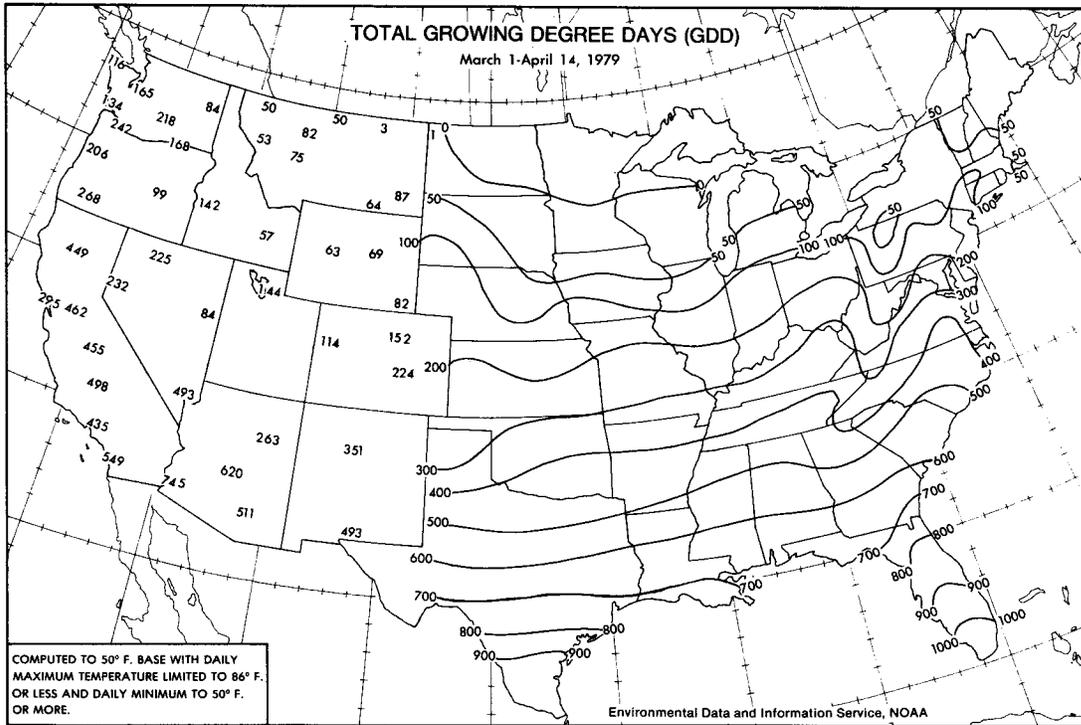
Fieldwork: 2.8 days suitable. Soil moisture adequate to surplus. Fieldwork limited. Rice 37% planted, 67% last year, 58% average; 20% emerged. Corn 54% planted, 71% last year, 60% average; 30% emerged. Cotton 0% planted, 5% last year, 3% average. Sugarcane weed control, fertilizing. Pruning and staking tomatoes. Strawberry harvest active. Small grains and cattle fair to good. Wheat 30% headed. Pastures average.

MARYLAND & DELAWARE: Temperatures 5° below normal. Highs in upper 50's and lows in 30's. Precipitation light with stations reporting about 0.75 in. Fair and cool 14th. Early morning thundershowers followed by fair and cool 15th.

MICHIGAN: Temperatures ranged from 3 to 6° below normal Upper and 1 to 4° below normal Lower. Minimums 5° above in western Upper and 20's Lower. Maximums reached 70's in southern Lower and 40's Upper. Precipitation ranged from 0.12 in. to over 1.20 in. southwest Lower and northwest Upper and reached 2.00 in. around Detroit. Major ice storm ended early 2d over southwest Lower followed by flash floods 6th extreme southeast Lower.

Few farmers beginning fieldwork.

MINNESOTA: Temperatures 5° subnormal north and west to 2° subnormal southeast. Extremes: 8 and 66°. Precipitation 0.40 in. above normal west, 0.25 in. subnormal east. Precipitation ranged from 1.60 in. extreme southwest to less than 0.25 in. north central through southeast. Snow depths none most of south half, 6 to 15 in. north central and northeast.



No fieldwork begun. Fields still snow covered northern half; wet and cold southern half. Limited activity may begin later this week in parts of east central, south central. Seeded: Spring wheat 0%, 1978 0%, normal 16%; oats 0%, 1978 0%, normal 18%; barley 0%, 1978 0%, normal 7%.

**MISSISSIPPI:** Temperatures near normal. Extremes: 36 and 86°. Heavy rains midweek; over 10.00 in. several locations. Weekend sunny and warm.

Soil moisture excessive except in south central and southeast where moisture surplus. Fieldwork: 1.2 days suitable. Heavy rains caused extensive flooding; further delayed soil preparation. Acreage plowed 47%, 77% 1978, 65% average. Corn fair to good condition; 35% planted, 51% 1978, 37% average; 22% up to stand, 25% 1978. Cotton 0% planted, 2% 1978, 4% average. Rice about 1% planted, 51% 1978, 24% average; less than 1% up to stand, 14% 1978, 5% average. Winter wheat good to fair condition except where flooded; 78% jointing, 70% 1978; 3% headed, 3% 1978. Irish potatoes 72% planted. Watermelon 65% planted. Peaches fair to good condition. Livestock fair to good condition. Pastures good to fair condition.

**MISSOURI:** Precipitation heavy, flash flooding on most rivers and major tributaries across south and central midweek. Rains averaged 0.50 to 1.00 in. northwest prairie, 2.00 to 4.00 in. elsewhere, up to 6.00 in. St. Louis and Bootheel. Temperatures 4 to 5° below normal north, 2 to 3° below normal elsewhere.

Fieldwork: 0.4 day suitable. Plowing 61% complete, last year 26%, normal 58%. Oats 17% planted, last year 13%, normal 66%. Corn 1% planted, last year 3%, normal 12%. Cotton 0% planted, last year 1%, normal 2%. Winter wheat and pastures mostly fair to good. Soil moisture supplies mostly surplus.

**MONTANA:** Major spring snow storm hit extreme east. Foot or more of snow fell over that area midweek accompanied by strong winds. Precipitation statewide generally moderate to heavy. Temperatures mostly 1 or 2° below normal. East, temperatures 5° below normal.

Soil moisture adequate. Fieldwork just starting on high ground. Winter wheat condition fair to good. Winterkill damage uncertain. Greening in most areas. Planting very limited, average on small grains 10%, last year 5%. Calving 70% complete, lambing 60% complete. Shearing 50% complete. Livestock in good condition. Ranges dormant.

**NEBRASKA:** Temperatures near or slightly below normal. Precipitation general averaging 0.50 to 1.50 in.

Winter wheat fair to good. Wheat winterkill, crown rot evident; some thin stands. Oats planting 10% complete, 40% year ago, 60% normal. Barley seeding 5% complete, 30% year ago, 65% normal. Soil moisture adequate to surplus. Calving near completion; death losses near normal.

**NEVADA:** Cool, windy early, warming temperatures last half of week. Precipitation varied widely, greatest amounts north. Cool and warm periods averaged to near normal. Extremes: 88 and 17°.

Fair progress fieldwork. Cutting alfalfa hay confined to extreme southern valleys. Some livestock moved to summer ranges.

**NEW ENGLAND:** Snow early week ranging from 1 to 2 in. south and 2 to 6 in. far north, but changed to rain 10th. Amounts ranged from 0.50 to 0.75 in. north to 2.34 and 1.79 in. along coast with temperatures 5 to 15° below normal. Midweek tranquil with no significant rainfall and normal temperatures. Readings over south coastal areas 15° below

normal with 0.50 in. rain at weekend; elsewhere readings normal.

**NEW JERSEY:** Temperatures 4 to 6° below normal. Extremes: 24 and 69°. Rainfall 1.64 in. north, 1.64 in. central, 1.50 in. south. Soil moisture, in percent of field capacity, 99% north, 98% central, 98% south. Soil temperature 43° north, 49° central and south.

Plowing, planting, liming, fertilizing, harvest of spinach, asparagus. Potato and oat planting complete in some areas, not started in others due to excess rain or heavy soils, cool weather slowed drying. Early lettuce damaged by cold winds. Peaches up to 25% bloom. Early strawberry varieties forming buds. Winter grains very nice but some low spots damaged by water.

**NEW MEXICO:** Widespread rain and snow through midweek except southeast. Some totals to 0.75 in. Windy 11th and 12th and turning colder.

Alfalfa being irrigated. Good growth in most areas, but alfalfa weevils a problem southeast. Cotton planting will start soon, but soil temperatures a little cool. Wheat and barley good; 10% jointed main area. Little barley and corn planted. Lettuce and onions good. Chile planted some areas. Pecan trees budding. Sugarbeets coming up. Pasture fair, but winds hurting moisture. Livestock good. Calving, lambing, and a limited amount of shearing continued.

**NEW YORK:** Temperatures in mid-30's to mid-40's; near to slightly below normal. Precipitation was well above normal ranging from 0.75 in. west to around 2.00 in. east. Above average snowfall for April early week with most areas receiving 5 to 10 in. Highest amount, mainly in a belt throughout the central portion.

**NORTH CAROLINA:** Temperatures around normal. Precipitation more than inch.

Fieldwork: 3.6 days suitable. Soil moisture mostly adequate to surplus. Condition of small grains, pasture, truck crops, tobacco and Irish potatoes, fair to mostly good. Peaches mostly good. Planted: Corn 33%, 1978 52%, average 36%; cotton 10%, 1978 18%, average 7%. Flue-cured tobacco, sorghum, and soybeans just getting underway.

**NORTH DAKOTA:** Midweek storm dominated. Wet snow accumulated to 7 in. over much of central. Rain in Red River Valley more than 1.00 in. southeast. Precipitation from 0.43 in. central to 1.71 in. east central. Temperatures 3 to 7° below normal. Extremes: -15 northeast to 60° southwest. Snow-cover general north and north central.

Planting expected to start May 1. Secondary roads muddy, few blocked with snow. Some flooding. Some calving losses due to wet weather. Planting progress: Other spring wheat none currently planted, none planted 1978, 4% average.

**OHIO:** Cool, wet, cloudy weather. Precipitation exceeded normal, frequent and heavy. Totals ranged 0.50 in. north central and northeast to 1.00 to 3.00 in. central, south and northwest. Temperatures 1 to 3° subnormal. Extremes: 76 and 21°.

Virtually no fieldwork. Condition of wheat regressed slightly, still good, water standing on fields. Seeding oats behind schedule, soil temperatures sufficient for good germination, some growth early planted fields. Soils need several days of dry weather before producers can plant. Rains prevented livestock return to pasture. Oats planted 15%, 15% 1978. Corn planted less than 1%, 1% 1978, less than 1% average. Sugarbeets planted 0%, 5% 1978, 30% average. Tobacco beds sown 45%, 80% 1978, 75% average. Spring and fall plowing 70%,

60% 1978, 65% average. Fieldwork: 0.50 day favorable. Pasture condition good. Soil moisture surplus.

**OKLAHOMA:** Temperatures 1 to 2° below normal western third, near normal central third and 1 to 2° above normal eastern third. Precipitation statewide but heaviest southeast two-thirds. Heavy rains, scattered hail, high winds and tornado activity particularly hard hit southwest where several farmsteads damaged or destroyed by tornadoes and lost crops and livestock.

Wheat good condition with 70% jointing, 65% 1978, 80% average. Alfalfa good condition with growth and development progressing rapidly. Pastures providing limited grazing east central and southeast but State as whole just beginning to green. Cattle good to fair condition. Fieldwork: 4.0 days suitable.

**OREGON:** Temperatures 2 to 5° below normal. Maximums ranged in upper 50's to upper 60's. Minimums in 30's west, 20's east. Precipitation well above normal. Rainfall averaged 0.20 to 0.40 in. along coast; 0.50 in. interior valleys of west; 0.20 to 0.40 in. east.

Soil moisture surplus west; adequate east. Fieldwork slowed by rain. Most reseeding of fall grains complete. Fertilizing about complete. Most fruit trees in bloom or finished. Strawberries relatively good condition and developing normally; heavy mite populations causing concern. Caneberries continue to decline as result of freeze and disease. Filberts leafing out. Onion planting virtually complete west; about 85 to 90% complete Malheur County. Potato planting well underway some areas, not yet started in others. Livestock and poultry condition good. Feed supplies adequate. Pasture growth slowed due to cool weather. Range condition good.

**PENNSYLVANIA:** Cool, mostly cloudy, and wet. Temperatures from 1 to 3° below normal west and 4 to 6° below normal central and east. Daily temperatures from 30's to 50's. Extremes: 14 and 73°. Precipitation every day but 10th totaled from 0.50 in. south central to 2.00 in. parts of southeast. Elsewhere mostly 1.00 to 1.50 in. Up to 2 in. new snow northern tier 9th.

Fieldwork: 1 day suitable. Soil moisture mostly surplus to adequate. Activities: Equipment preparation; fence repair; plowing, and discing; spreading manure, lime, fertilizer; trimming, tying grapes; orchard pruning, spraying; planting oats, alfalfa, green peas. Plowing 16%, same as 1978. Oats 7% sown, same as 1978. Potatoes 5% planted, under 5% last year. Tobacco beds 31%, last year 54%. Corn under 5% planted, same as last year. Wheat, barley trace in boot, above usual winter-kill. Hay stand condition good to fair. All fruit pre-pink stage, bud swell on cherries. Freeze damage to peach buds. Asparagus emerging.

**PUERTO RICO:** Island average rainfall 0.45 in. or 0.48 in. below normal. Temperatures averaged about 76° on coasts and 71° interior. Extremes: 89 and 51°.

**SOUTH CAROLINA:** Below normal temperatures climbed well above normal midweek, finally near normal; 84° several locations 11th. Heavy rains 11th thru 13th with flooding developing on several rivers.

Soil moisture adequate to surplus. Fieldwork: 3 to 4 days available. Tobacco plants plentiful; near ideal weather 57% transplanted, 27% last year, average 54%; stands good. Cotton condition good; 11% planted, 26% last year, 20% average. Corn good condition; 74% planted, 82% last year, 66% average. Planting completion snap beans 81%; all cucumbers 84%; tomatoes 89%. Peanut planting completion

8%, 4% last year, 12% average. Watermelons 68% planted, 81% last year, 77% average. Peach and apple condition very good. Pastures growing rapidly.

**SOUTH DAKOTA:** Temperatures 3 to 6° below normal. Extremes: 5 and 77°. Snow and rain widespread, ranging from 0.25 in. west to 2.60 in. east.

Fieldwork fell further behind. Oats 1% seeded, 1978 3%, average 23%. Spring wheat 1% seeded, 1978 8%, average 22%. Barley 1% seeded, 1978 2%, average 18%.

**TENNESSEE:** Heavy rains. Squall line brought 2.00 to 4.00 in. midweek. Flooding some low areas. Fair weekend. Temperatures normal.

Soil moisture surplus. Fieldwork: 0.9 day suitable. Spring plowing 47%, 1978 66%, average 62%. Tobacco plantbeds 89% seeded, 1978 94%, average 97%. Corn planted 3%, 1978 20%, average 13%. Cotton planted 0%, 1978 2%, average 3%. Small grains fair, some fields flooded. Cattle good. Fruit trees blooming. Commercial vegetable planting halted by rains.

**TEXAS:** Cold front first of week triggered thunderstorms, some severe. Rest of week high pressure dominated resulting in fair skies. Rainfall above normal western Panhandle, Edwards Plateau; below normal east; near normal rest State. Temperatures 1 to 3° above normal northwestern half; 5 to 7° above normal southeastern half. Soil temperatures 70's south, southeast, coastal plains; upper 60's Blacklands, northeast; low 60's southern High Plains, rolling plains; middle 50's Panhandle.

Strong winds caused evaporation and soil erosion Panhandle, Trans-Pecos while heavy rains continued drench east. Farmers central, east resumed ground preparation, planting on limited basis. Irrigation prevalent Rio Grande Valley as dry winds further depleted soil moisture. Some cotton attained six-leaf stage lower Rio Grande Valley as cultivation commenced south. Most replanted fields south emerged with good stands. Rest of State continued preplant activities as conditions permitted. Warmer weather needed to raise soil temperatures to plant remaining areas of State. Good stands early planted American-Pima noted El Paso, where irrigation applied to planted and prepared fields. Sorghum planting behind schedule. Cool nights slowed growth, germination central. South growth good, cultivation begun. Land preparation, pre-plant watering continued High Plains with limited planting underway Low Plains. East farmers planting as ground dries but most fields still wet. Corn planting picked up pace as weather conditions improved. Warmer weather induced germination; growth good, especially south. Good stands noted south, replanted because of cutworm damage. Many fields central, east too wet for planting but planting underway on both High, Low Plains. Wheat excellent growth; fields headed south while boot stage noted as far north as Low Plains. Wireworms and armyworms present problem isolated fields High Plains; insect damage statewide minimal. Rust formation observed Blacklands. Peanut planting delayed due to cool soil temperatures. Rice planting behind schedule, but stands on earlier planted fields good. Oat fields survived harsh winter making growth. Booting observed throughout Low Plains while heading observed Edwards Plateau. Fields with poor stands grazed out while others will be cut for hay. Damage from armyworms east. Hay prospects good as result excellent spring rains. First cutting alfalfa commenced in Trans-Pecos. Alfalfa weevil buildup noted. Sugarbeet plantings remain ahead of schedule on Plains. Corn planted 33%, 37% 1978, 44% average. Cotton 12%, 16% 1978,

15% average. Peanuts 9%, 6% 1978, 12% average. Rice planted 36%, 79% 1978, 77% average. Sorghum planted 41%, 61% 1978, 56% average. Sugarbeets planted 67%, 53% 1978, 58% average.

Lower Rio Grande Valley onion harvest active. Limited supplies cabbage, carrots most to market. Coastal Bend melons, cucumbers up to good stand. Laredo onions progressing well. Carrot harvest active. San Antonio-Winter Garden bell peppers up to good stand. Both onion sets and cabbage developing well; growers increased irrigation activities many vegetable fields. Carrot harvest increased with open weather. East Texas rain a problem; land preparation and planting increased where conditions permitted. Central Texas watermelons doing well. Cutworm infestations reported some fields. North Texas potatoes and onions doing well. High Plains planting onions, carrots, potatoes. High winds delaying land preparation many areas. Trans-Pecos cantaloup planting continued. Peach trees south to central set a good crop; Gillespie County fruit approaching thinning size. North and High Plains, extensive damage reported from April freezes; full extent still undetermined. High Plains, some blooms that survived freeze damaged by high winds. Pecan trees budding southern High Plains. Trees leaf out central, zinc spraying increased. Trees in Trans-Pecos forming catkins.

Pastures and ranges improved with warmer weather and generally good moisture conditions. South dry weather limited forage supplies and many stock tanks low. Small grain pastures providing good grazing; cattle continue gain weight after hard winter. North and High Plains, bloat a problem to cattle wheat fields. With improved ranges, most producers stopped supplemental feeding. Very localized livestock injuries and losses reported in north from midweek tornadoes.

**UTAH:** Recurring rain or snow first half of period. Amounts light to moderate. Temperatures continued cool ranging near normal to 6° below.

Cold, damp weather slowing planting and crop growth. Fieldwork: 3 days suitable. Prospects good if weather warms. Fruit in good shape, slow blooming. Alfalfa and winter wheat progressing slowly. Spring planting behind normal progress. Wheat, barley and oats 20 to 30% planted. Calving, lambing, shearing progressing. Livestock in fair to good shape.

**VIRGINIA:** Temperatures little below normal. Extremes: 82 and 24°. Rainfall 0.75 to 1.00 in. with heaviest amounts southeast.

Topsoil moisture adequate to surplus. Fieldwork: 3.5 days available. Wet conditions delayed some corn planting east and southeast. Corn 11% planted, 25% 1978, 14% average. Southeastern corn emerging. Some widely-scattered frost damage to peaches in central Piedmont and to some early varieties of apples southwest. Peaches reaching full bloom; condition mostly good. Apples pre-pink to pink, full bloom southside and east; condition good. Fruit spraying very active. Wheat condition good, in early boot stage southeast, minor winterkill north. Planting tomatoes, sweet corn, cucumbers on Eastern Shore. Tobacco plant bed condition good, cool weather retarding growth central Piedmont and southwest. Spring oats seeding continued. Rye haylage cut central areas. Pastures good. Movement of livestock to grazing active.

**WASHINGTON:** West: Temperatures 2° below normal. Precipitation 0.70 in. above normal.

(continued on backcover)

## World Weather and Crop Update

March 1 thru mid-April

**USSR.** Spring planting is off to a slow start in much of the Soviet Union as the result of wet conditions, which have persisted for several weeks. Precipitation totals for March were generally well above normal in all areas west of the Volga River. As discussed in an accompanying article, the situation has become more serious because of abundant precipitation again this week. Accumulations are running 75 to 100 mm greater than normal since March 1 in a number of areas. The only area running drier than normal is in Krasnodar Kray, but most of the deficit was erased by good rains this past week. March precipitation ranged from slightly above to 50 percent of normal in the spring grains region of the New Lands. Planting in this area is still a month away with June rains a key to production prospects.

**CHINA.** The winter grains areas of China benefited from well above normal moisture during March even though rainfall totals reached the 25 to 75 mm range. This moisture was very beneficial for early development and also helped alleviate dryness which had persisted since last fall. Moisture was also well above normal in the southeastern rice-growing regions. However, the southwest was much drier than normal. So far in April, the winter wheat area has received good rainfall---15 to 25 mm this past week. Most of the winter wheat is normally irrigated, but the moisture will relieve any pressure on irrigation water supplies. Rains in the southwest helped alleviate stress from lack of moisture.

**AUSTRALIA.** The majority of the country was seasonally dry during March, except in northern areas where persistent tropical storm activity resulted in well above normal amounts of rain. The winter wheat areas to the south received little or no moisture. No moisture has fallen in the area so far in April, although some potential activity was developing. This past week, heavy rains fell along the northeast coast with more than 200 mm at some locations.

**INDIA-SOUTHEAST ASIA.** Most of India showed below-normal rain in March, and little moisture has fallen so far in April. Typically, this time of year is very hot and dry. Winter wheat harvest is just underway, and a record crop is expected for the third record in a row. Rainfall began to pick up in Thailand, mostly in the form of thunder-showers. Activity also increased in parts of North Vietnam where 25 to 40 mm fell.

**AFRICA.** March rainfall over Morocco ranged from 25 to 50 mm or about 50 to 75 percent of normal. Temperatures were somewhat cooler than normal which should have boosted the final grain filling period; good rains fell again this week. Soil moisture in Morocco, Tunisia, and Algeria should be ample for winter grain crops, which are approaching the harvest stage. In South Africa, precipitation neared normal over eastern parts of the Maize Triangle where 50 to 100 mm fell. However, the western portions were well below normal. No precipitation fell this past week except along the coast. The crop has matured sufficiently so that additional moisture should hold little benefit for the drought-damaged areas.

**EUROPE.** Very wet conditions in March have added to the concern over a very cold winter and its impacts on winter grains. It has also caused delays in reseeding of damaged fields with spring grains as well as completion of normal spring seedings. The wet pattern generally continued into April, although parts of eastern Europe have begun to dry out. No precipitation fell in most of Poland and East Germany last week, and field-work should be picking up. In western Europe, fields are still wet from heavy rains during the first week of April. Concern rises over the potential impacts on late-planted row crops as well as the spring grains.

**SOUTH AMERICA.** March weather returned to a drier pattern in March which, unlike the earlier dry weather, generally provided excellent weather for harvesting of the early soybean crop and allowed the medium bean harvest to start on schedule. In general, 50 to 100 mm fell over the area during the month. This past week, activity has picked up in southern Rio Grande do Sul and parts of Argentina where 40 mm or more were commonplace. Rains are continuing and are interfering with harvest.

**MEXICO.** Dry, sunny weather with near seasonal temperatures prevailed over most of the major exporting production areas. However, late in the week, scattered light showers fell over the north-eastern and central portions of the country and may have dampened a few strawberry fields and citrus orchards. The sparse rainfall probably did not significantly increase strawberry diseases nor improve the very short soil moisture in non-irrigated citrus. Favorable weather continued along the west coast for tomatoes, melons, and other spring vegetables.

WET WEATHER DELAYS USSR PLANTING

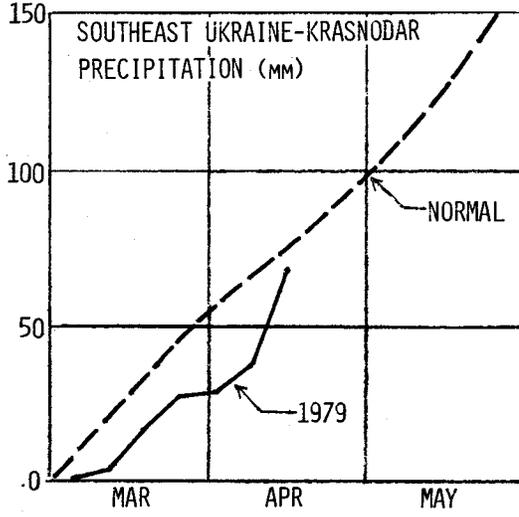
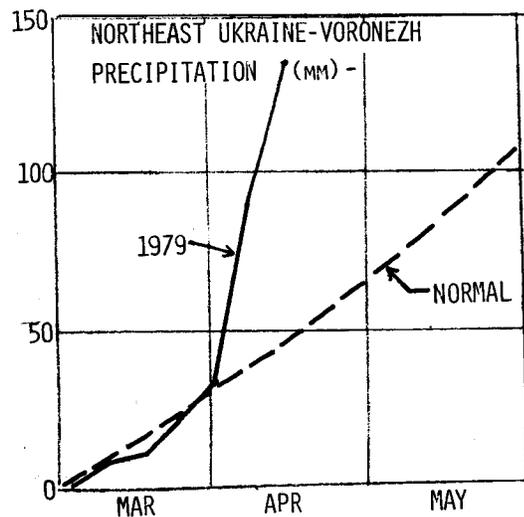
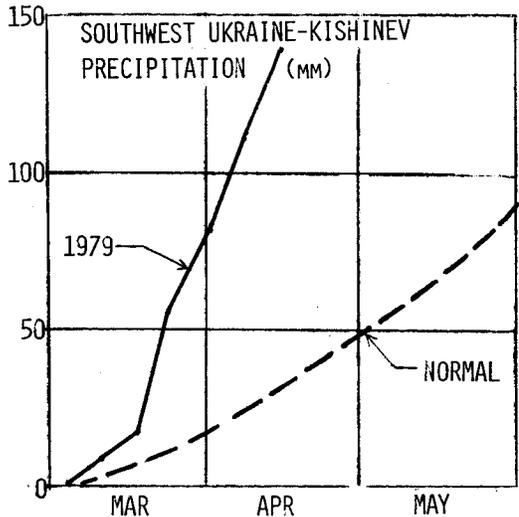
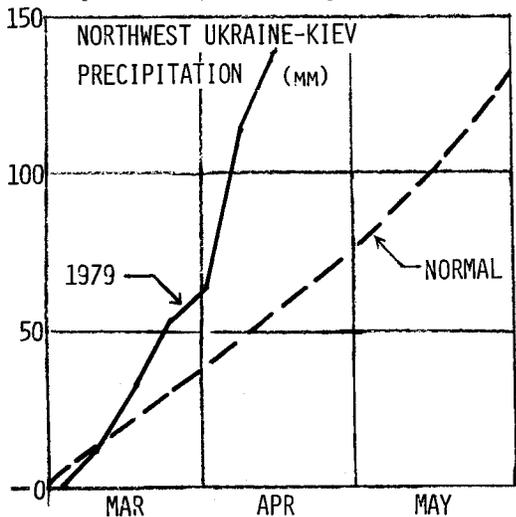
The major grain producing areas of the Soviet Union are experiencing significant delays in the seeding of spring grains because of excessive moisture the past 2 to 4 weeks. By April, total spring sowings stood at 7 million hectares, which is approximately 5 million hectares behind last year. This might not be considered serious under some circumstances. However, heavy rain and snow over most of the areas this past week resulted in additional slippage, and it will be several more days before fields dry sufficiently to permit resumption of fieldwork. After several weeks of much warmer than normal temperatures, the past two weeks have been running several degrees below normal, and this pattern is expected to continue for several more days. This will slow both the drying and soil-warming process.

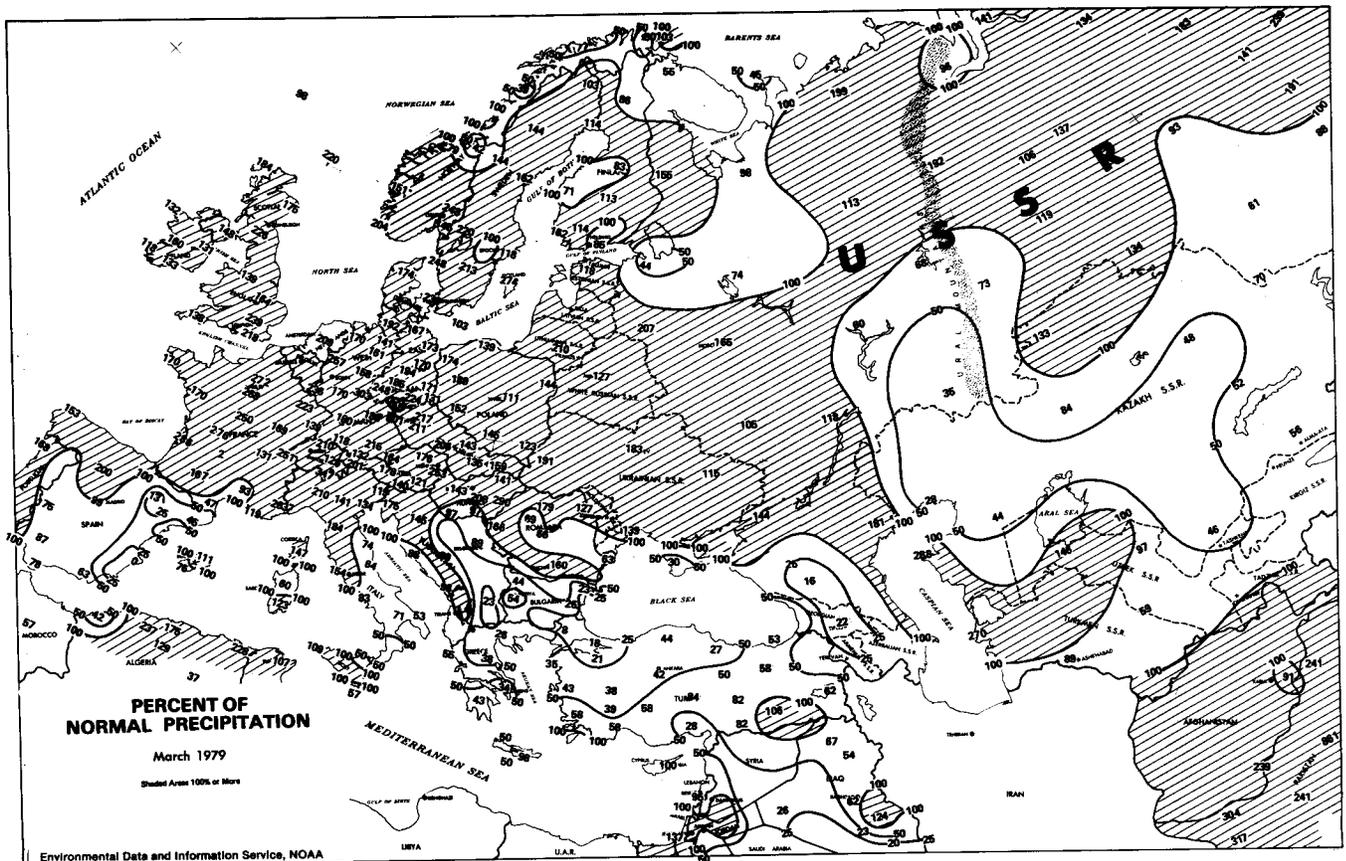
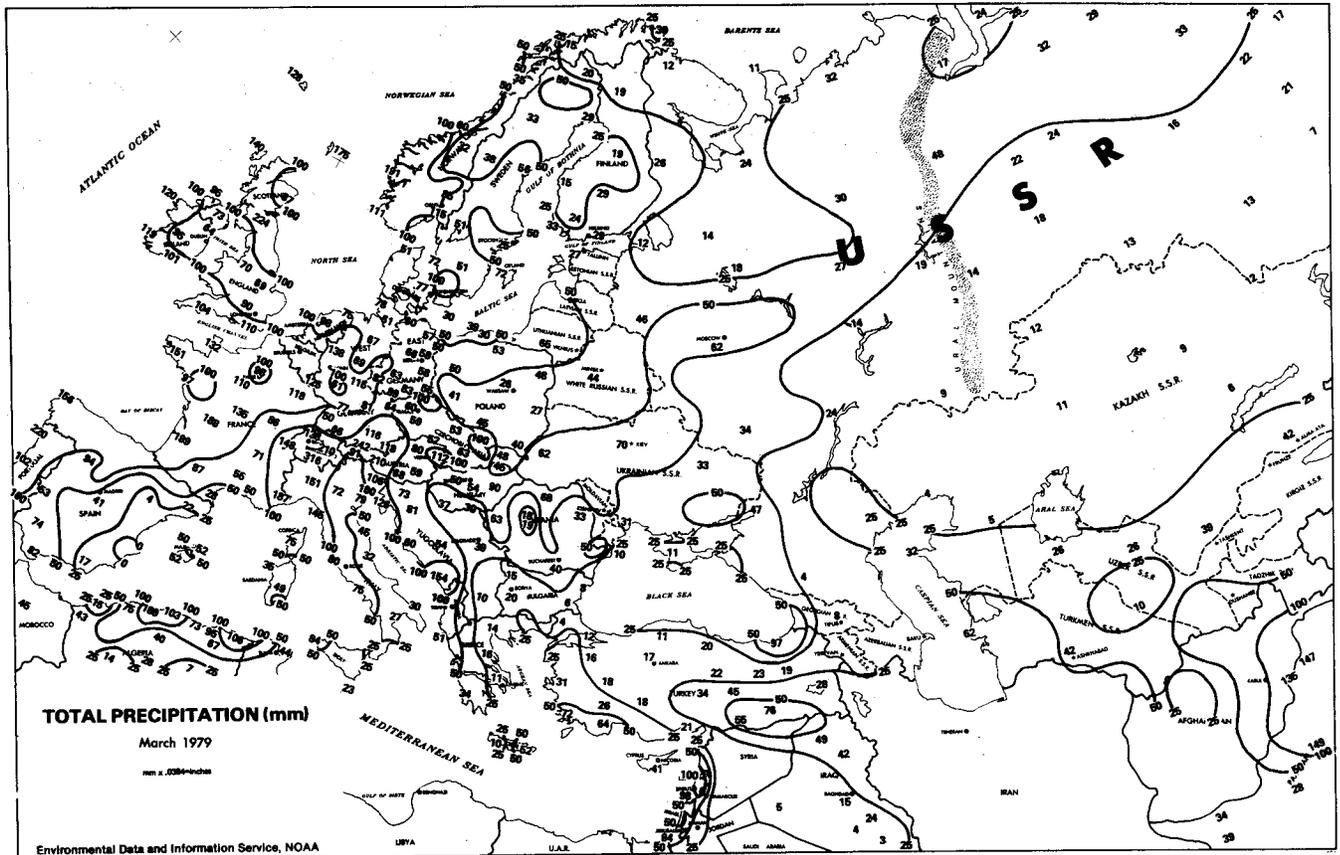
The accompanying charts show the situation. At Kiev, the moisture accumulation since March 1 is 139 mm compared with a normal of 57 mm. This past week 25 mm fell in the form of mixed rain and snow. The accumulations since April 1 have been particularly striking, because this is the period when planting should have been progressing steadily. In Voronezh, which is located in the northeastern Ukraine, 135 mm of precipitation has fallen---45 mm just this past week, including 25 cm (or 10 inches)

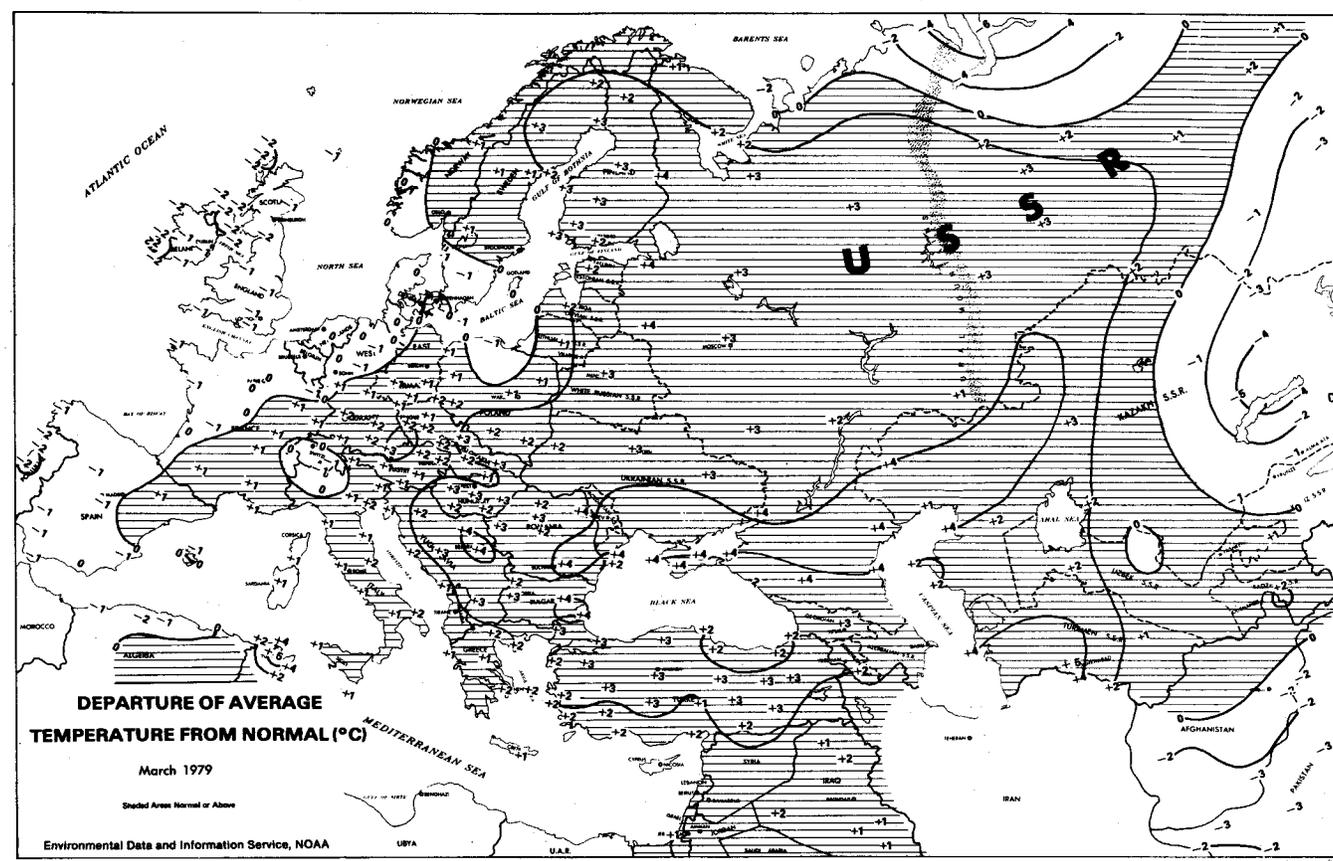
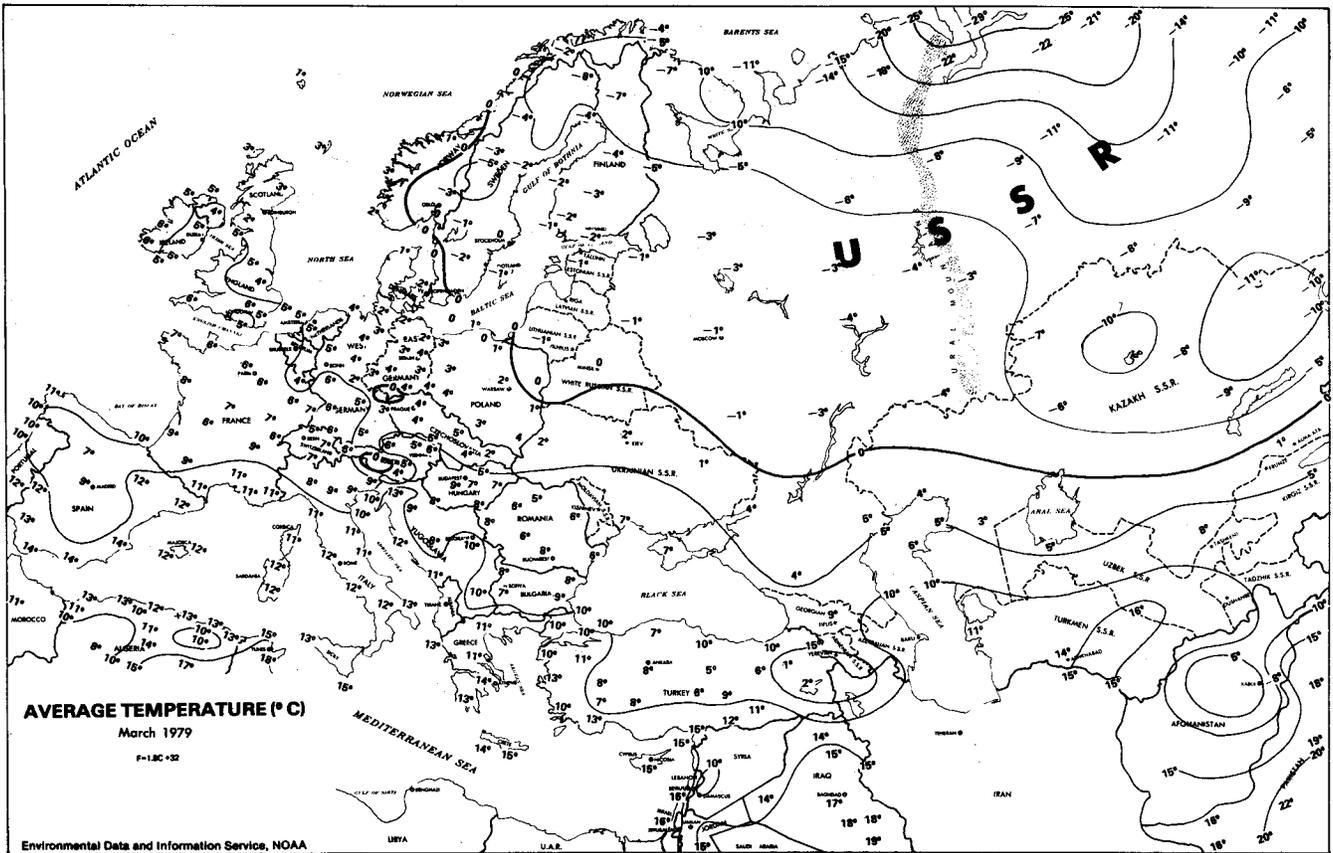
of snow. The greatest differentials are found in the southwestern Ukraine. In Kishinev, 138 mm have fallen compared to a normal of only 31 mm since March 1.

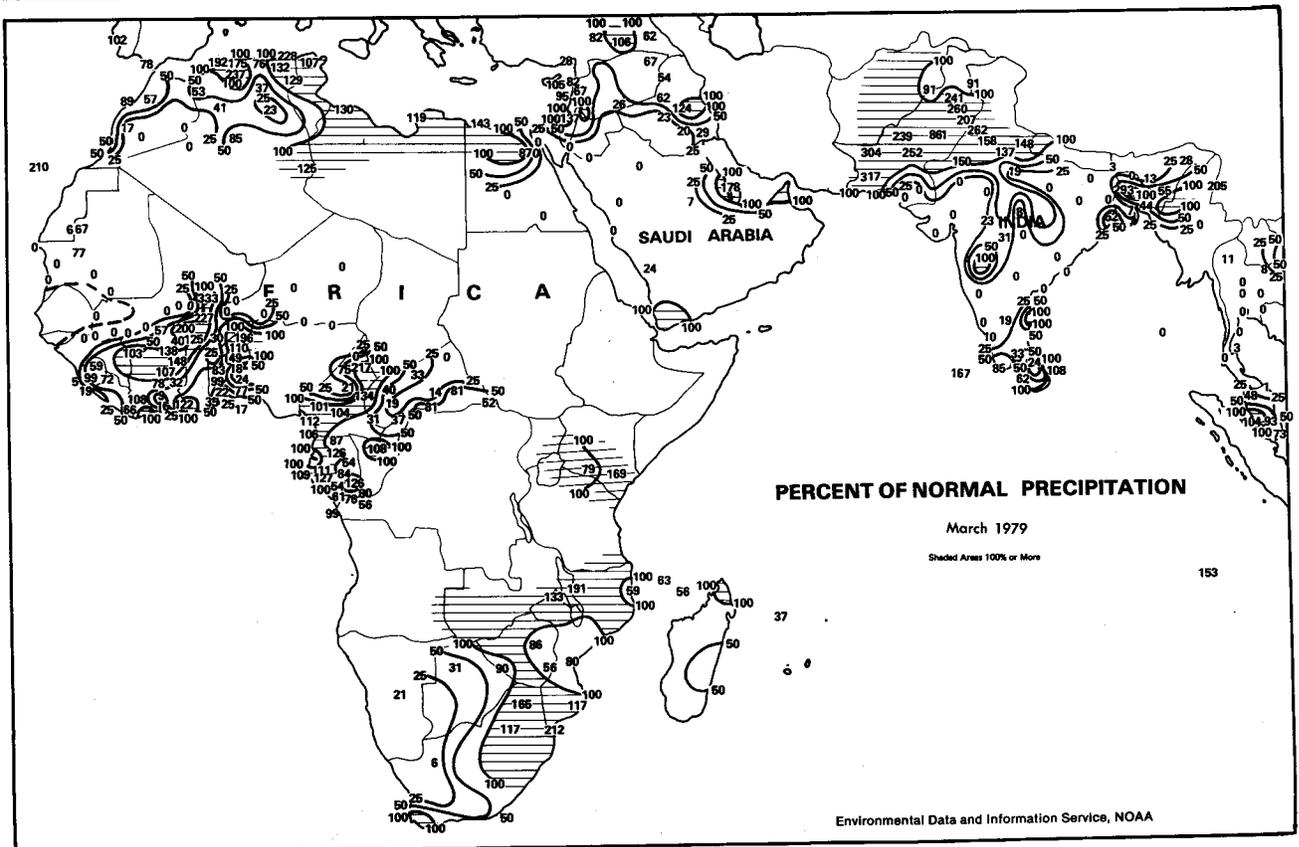
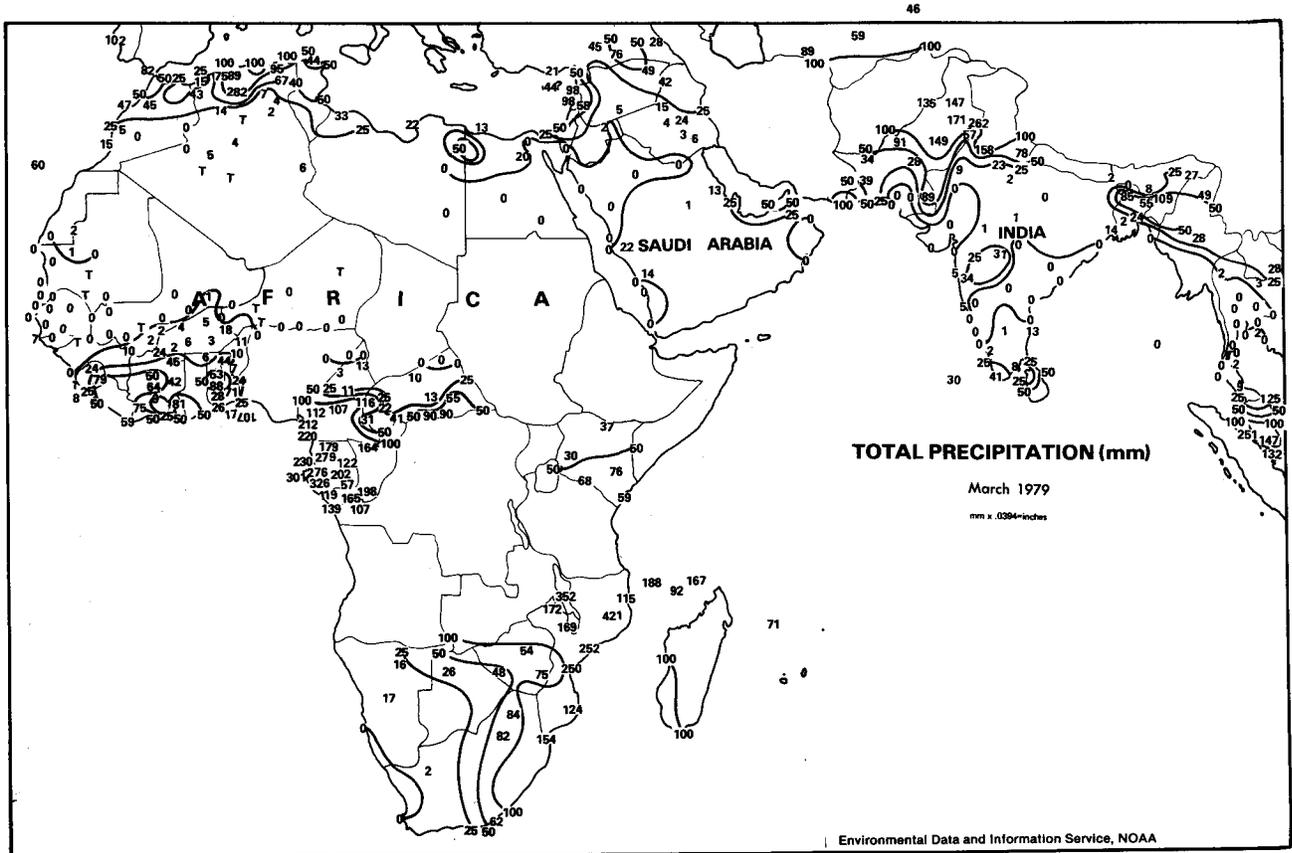
The only relatively dry area has covered the Krasnodar Kray region just east of the Black Sea. Until above-normal rainfall this past week, the area had been running about 30 mm on the dry side. However, 30 mm this past week reduced the deficit to 8 mm. This moisture was particularly timely because the winter wheat in this area is growing, and moisture demand will be fairly high. Soil moisture in the area has been running near normal.

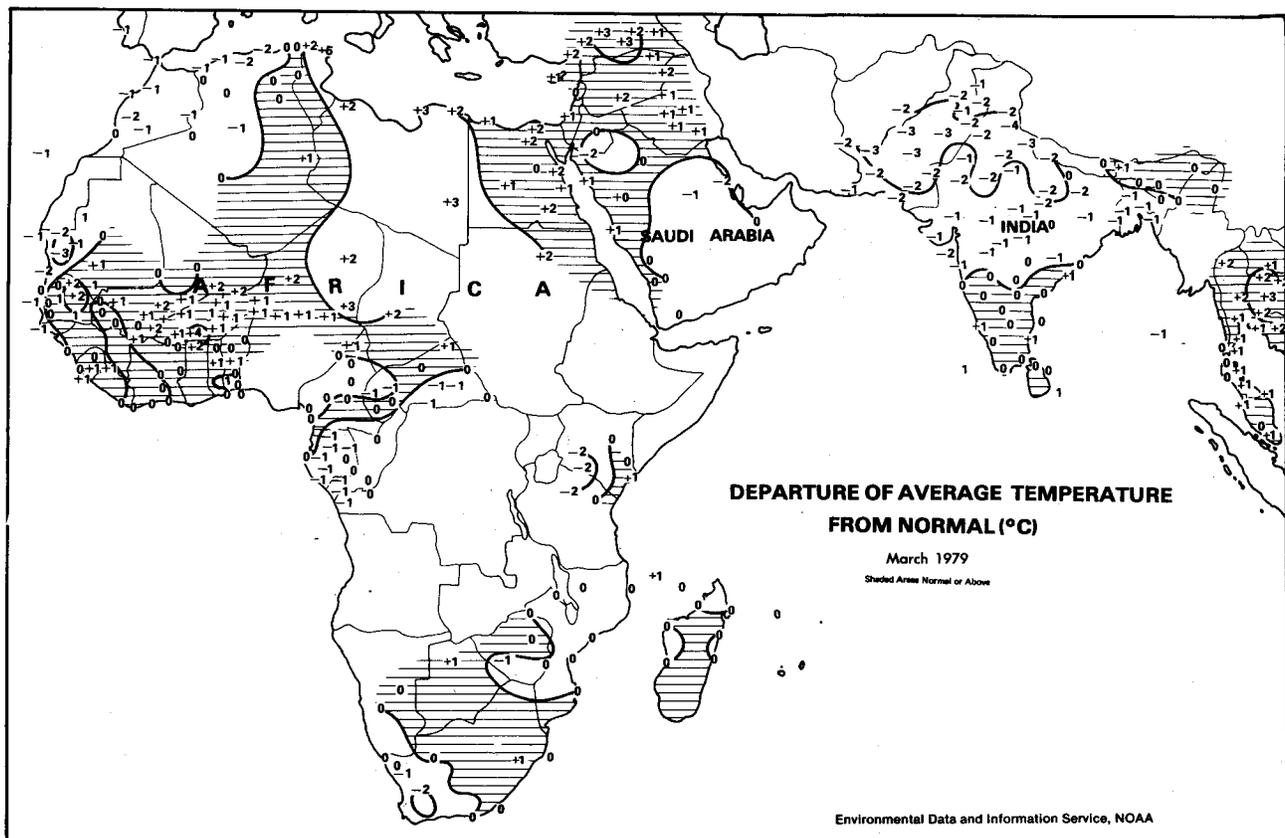
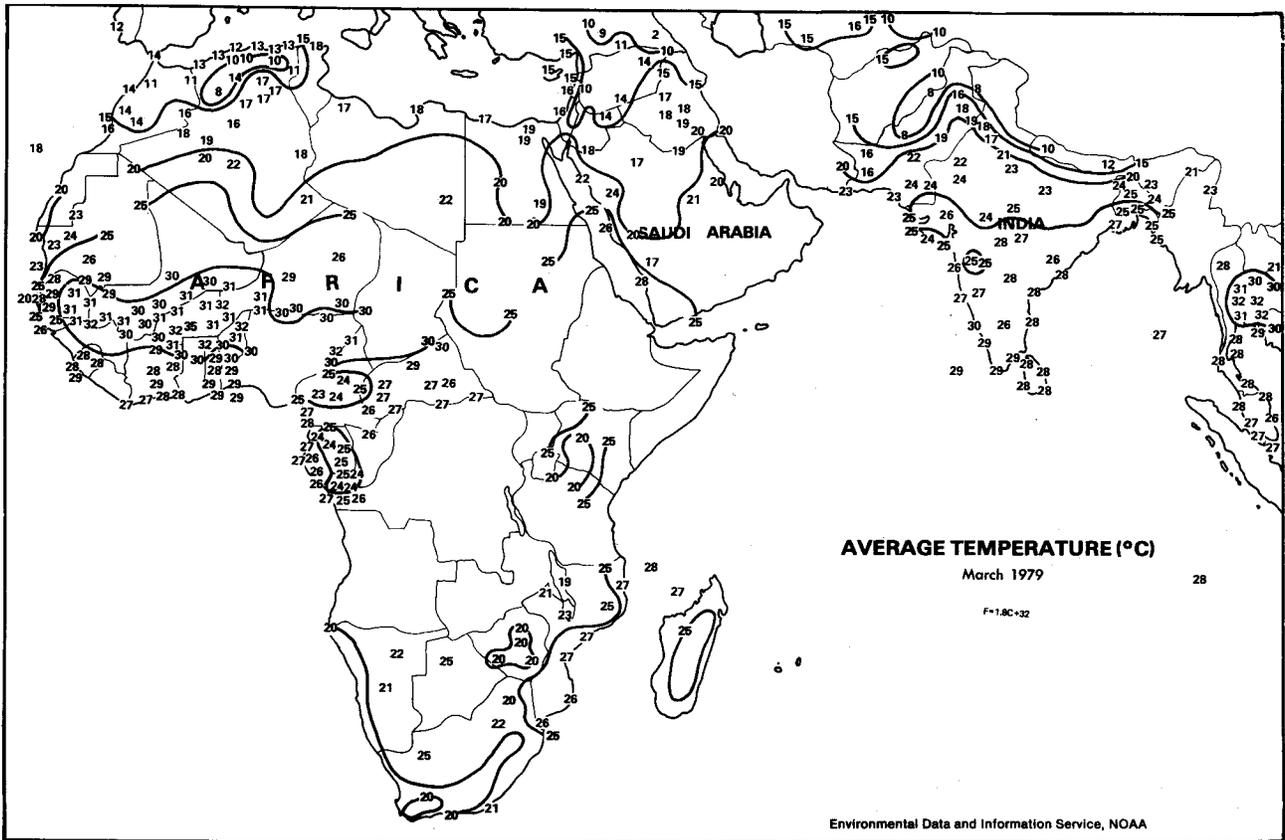
In summary, the major grain areas of the Soviet Union are experiencing many of the same problems appearing in the United States. Spring grain seedings are well behind normal planting schedules, and current moisture levels are extremely high with temperatures running cooler than normal. The chances of any significant improvement is very small over the next 10 days in Russia and delays will become long enough to hinder field operations for seedings of coarse grains and other row crops. Spring wheat seeding in the New Lands is still several weeks away, and moisture conditions are considered to be good over that area.

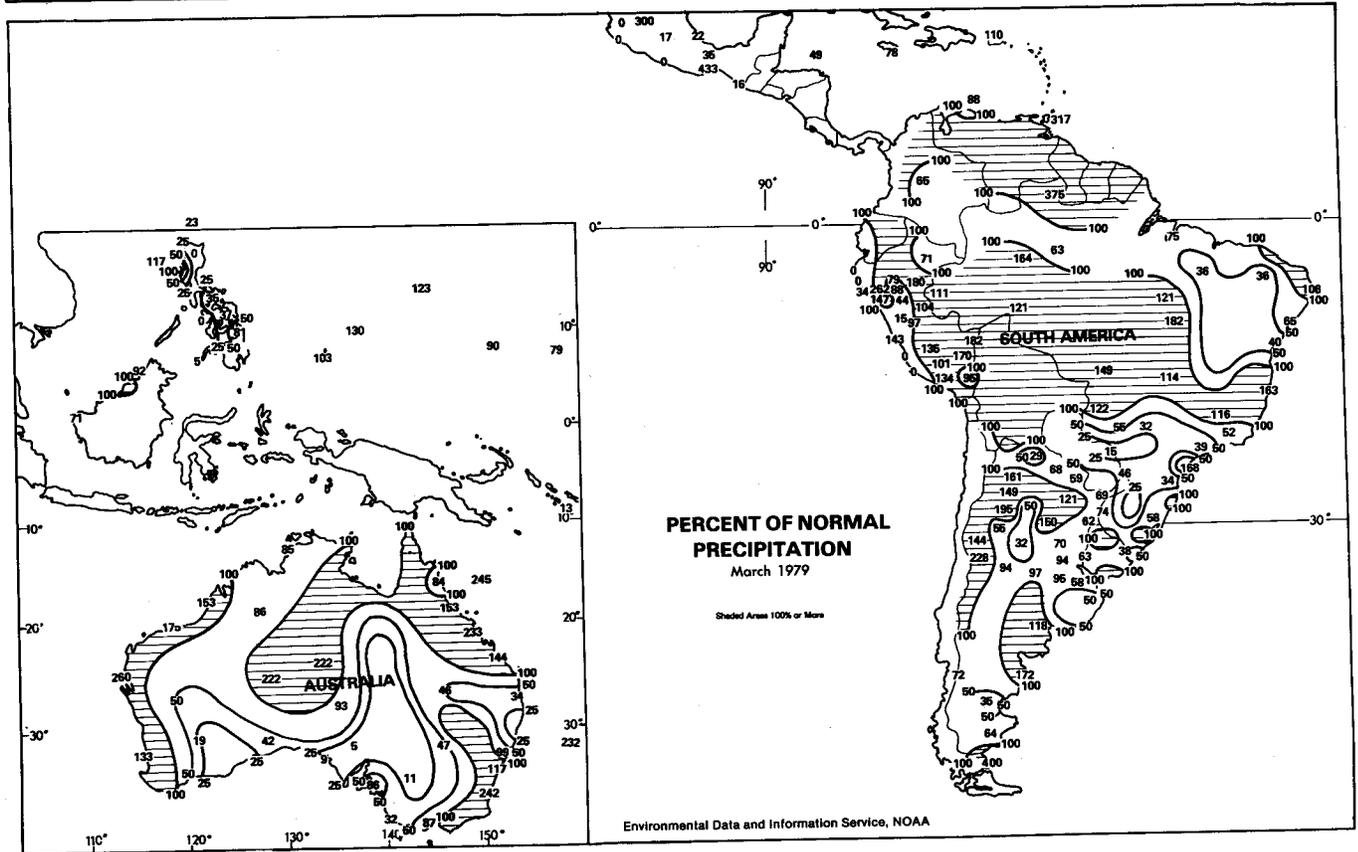
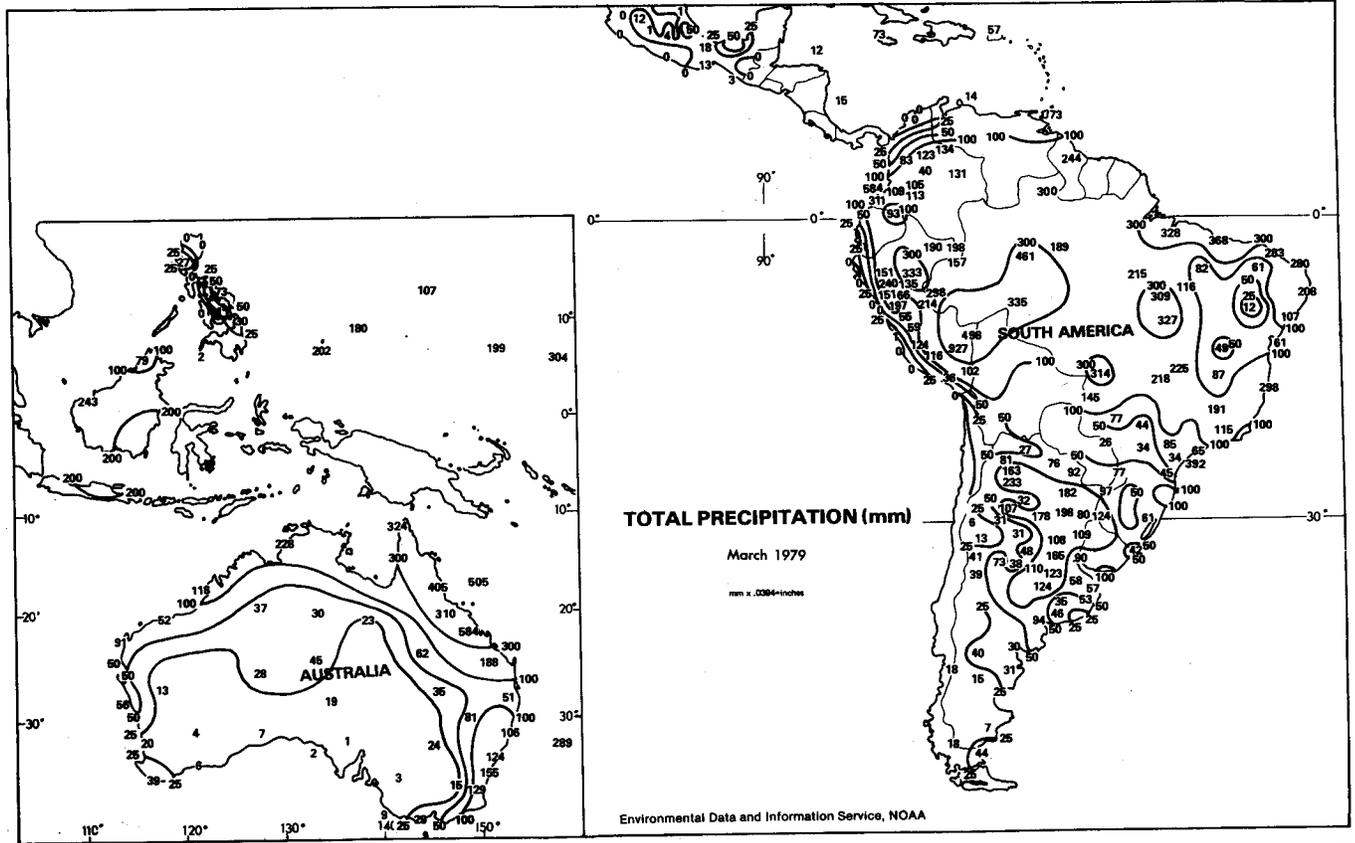


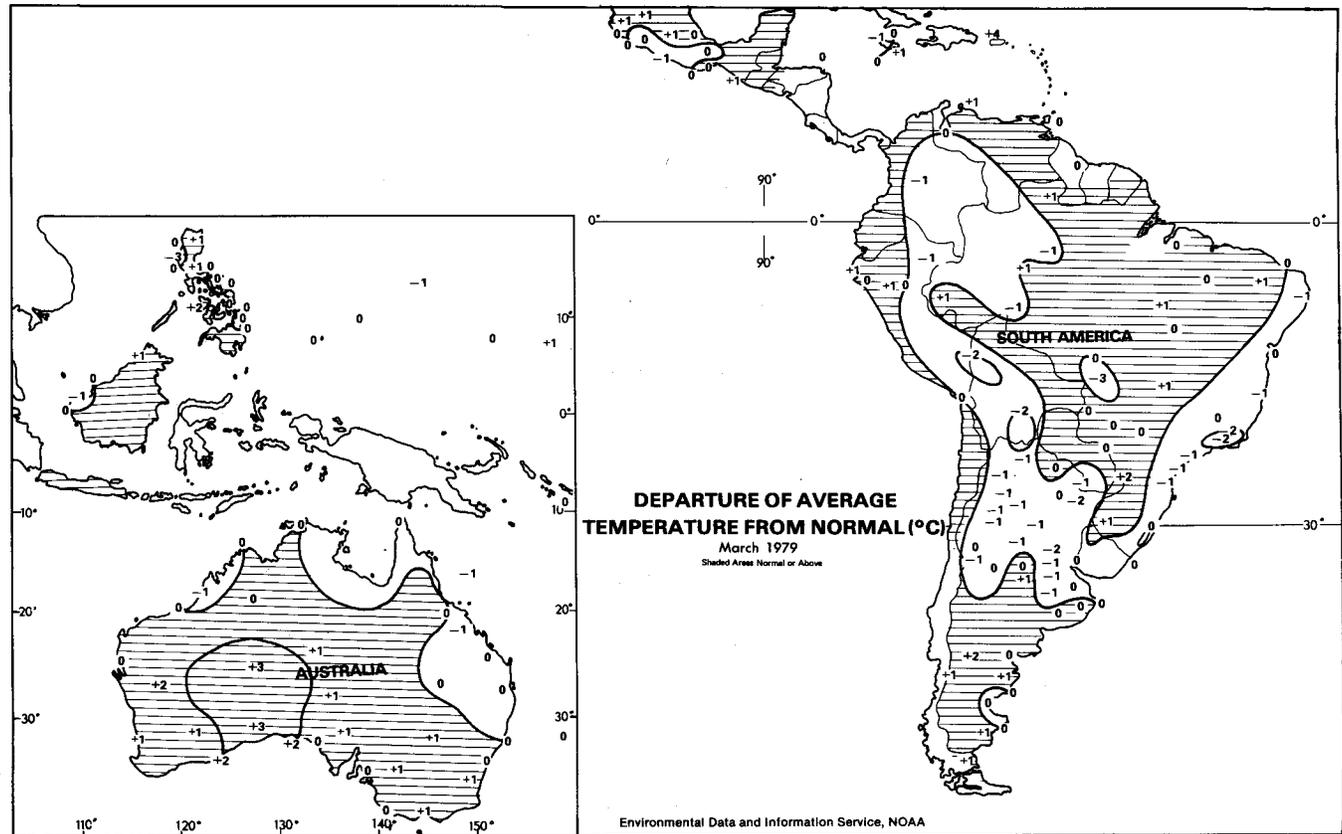
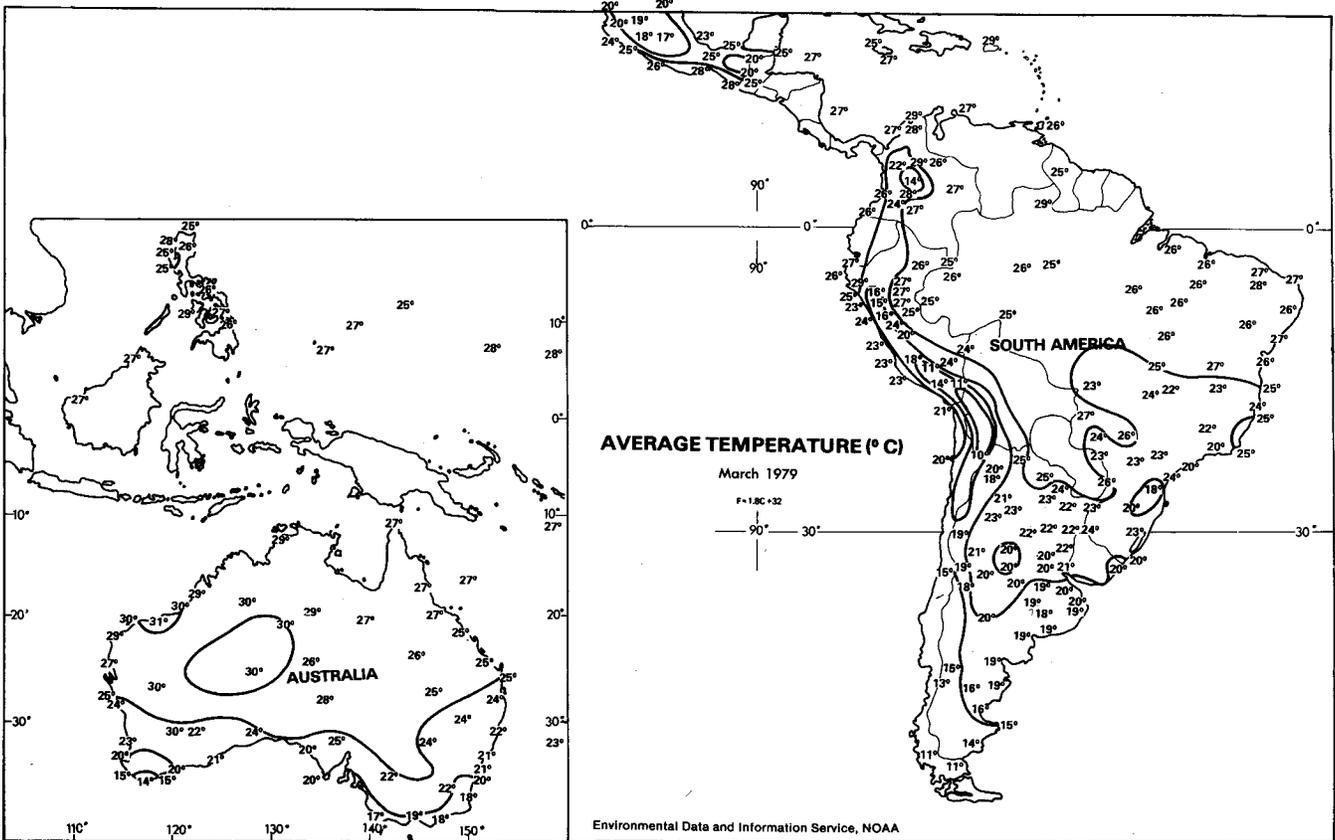




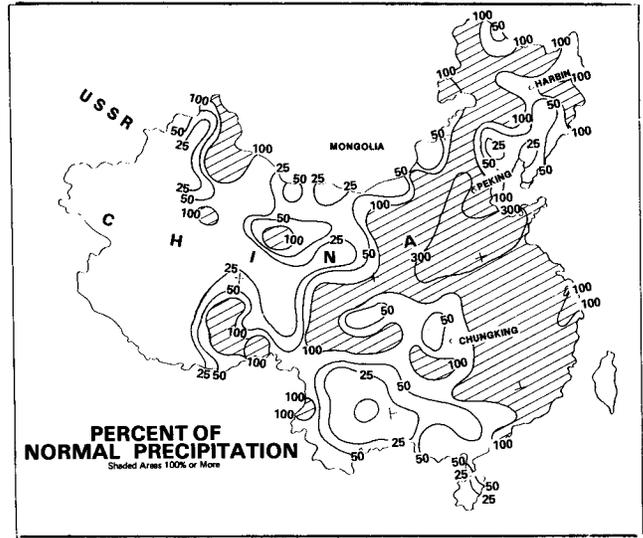
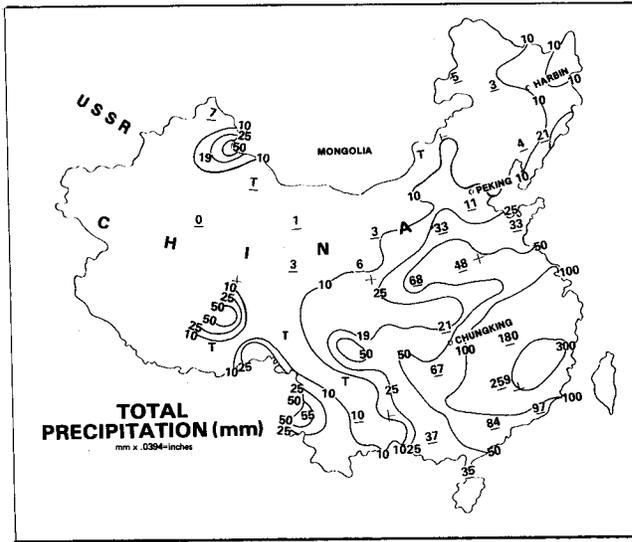








China Precipitation



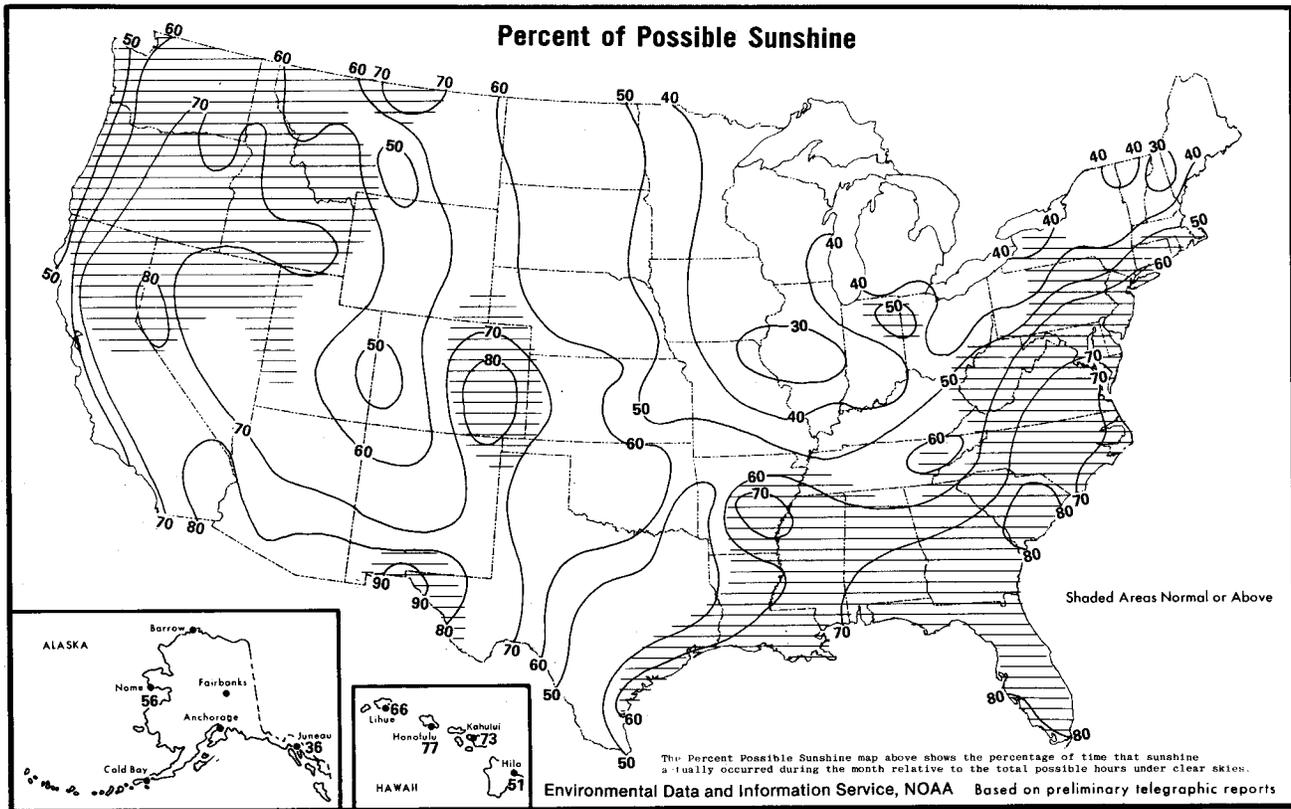
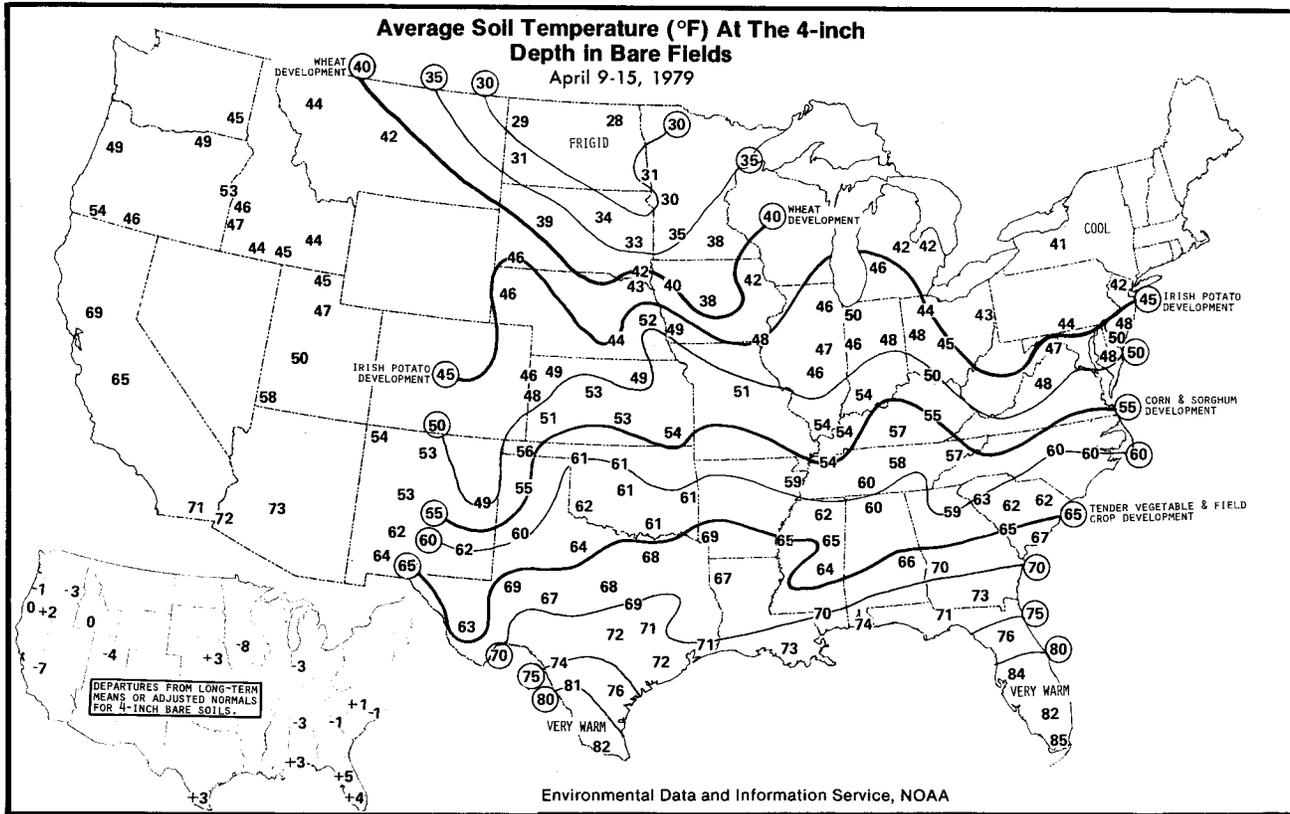
WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES  
Issued as of April 1, 1979

The table below shows the runoff forecast in percent of the 15-year (1963-1977) average. The forecasts are for the remainder of the water year (October thru September), except for the full water year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1979, for the Missouri, Yellowstone, and North Platte Basins;

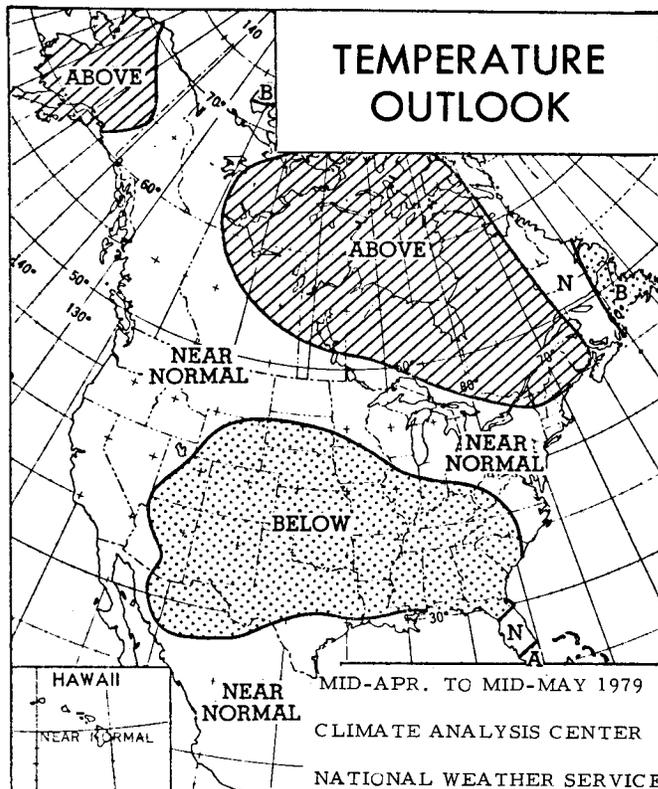
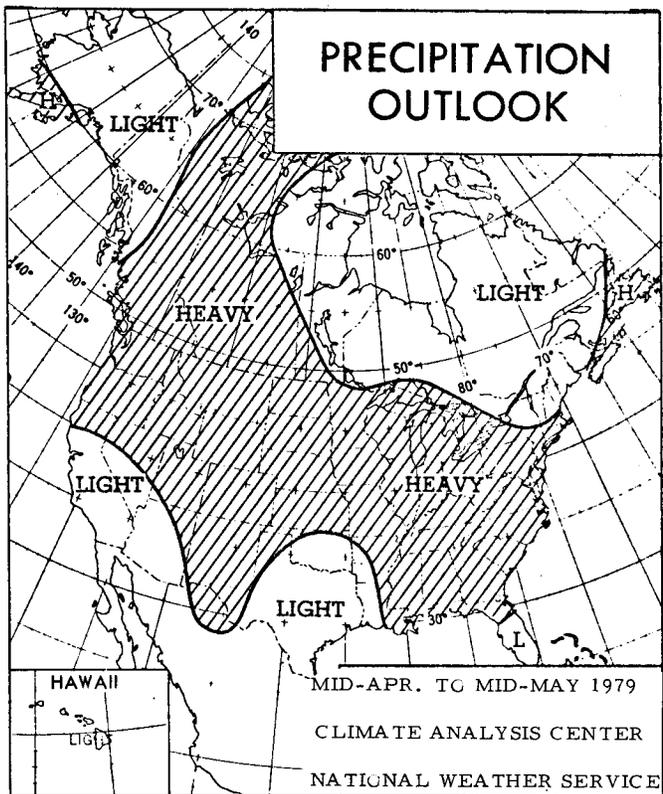
November 1, 1978 to June 30, 1979, for the Little Colorado Basins; and January 1 to June 30, 1979, for the Gila Basin. The publication "Water Supply Outlook for the Western United States," issued as of April 1, 1979, contains the complete water supply forecasts for about 375 stations in the Western United States.

River	Station	Forecast 1,000 Acre-feet	Percent 15-year average
Columbia	Grand Coulee, WA	56,700	83
Columbia	The Dalles, OR	81,700	79
Snake	Lower Granite, WA	18,200	79
Sacramento	Red Bluff, CA	5,500	61
San Joaquin	Big Creek, CA	1,500	117
Weber	Gateway, UT	264	86
Jordan	Utah Lake, UT	275	113
Truckee	L. Tahoe-Farad	206	79
Colorado	L. Powell infl.	11,000	158
Green	Green River, UT	3,500	118
San Juan	Bluff, UT	2,000	231
Little Colo.	Woodruff, AZ	67	554
Gila	Solomon, AZ	110	196
Rio Grande	San Marcial, NM	1,250	373
Arkansas	Pueblo, CO	365	145
Missouri	Ft. Peck, MT	4,190	85
Yellowstone	Sidney, MT	7,260	93
North Platte	Glendo, WY	1,050	109

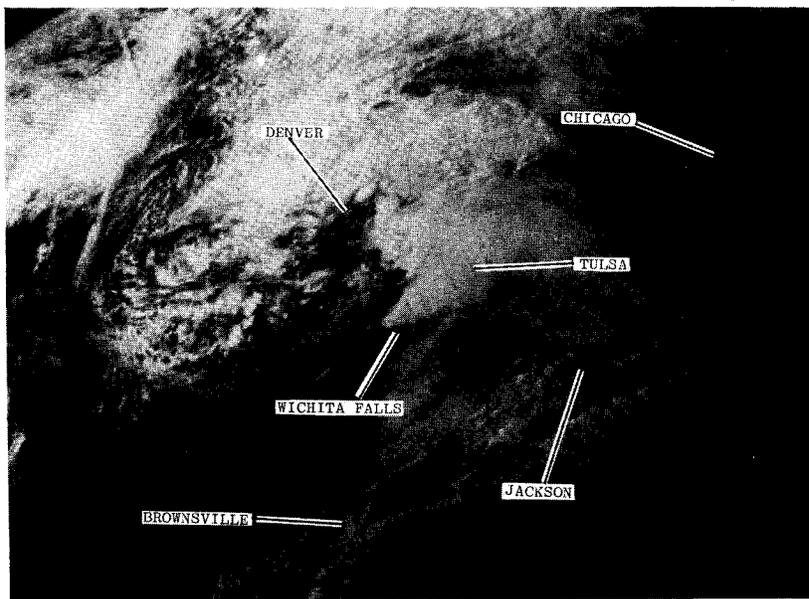
Office of Hydrology  
National Weather Service



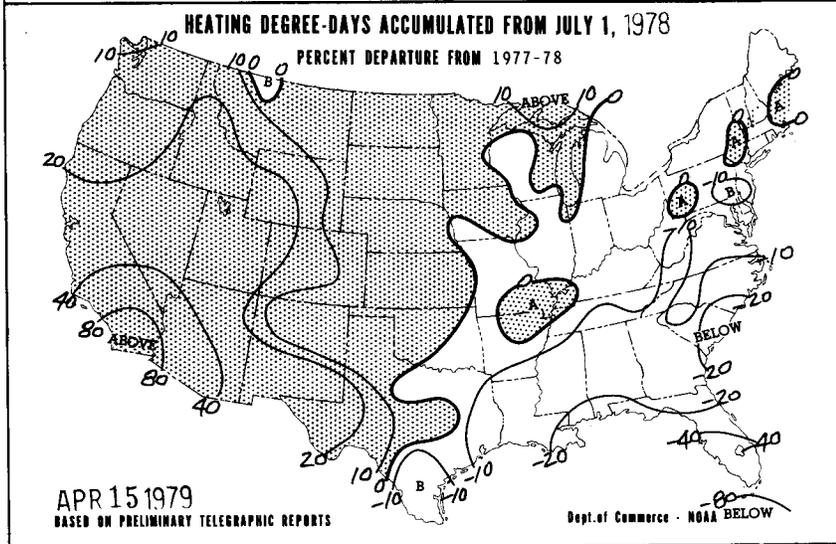
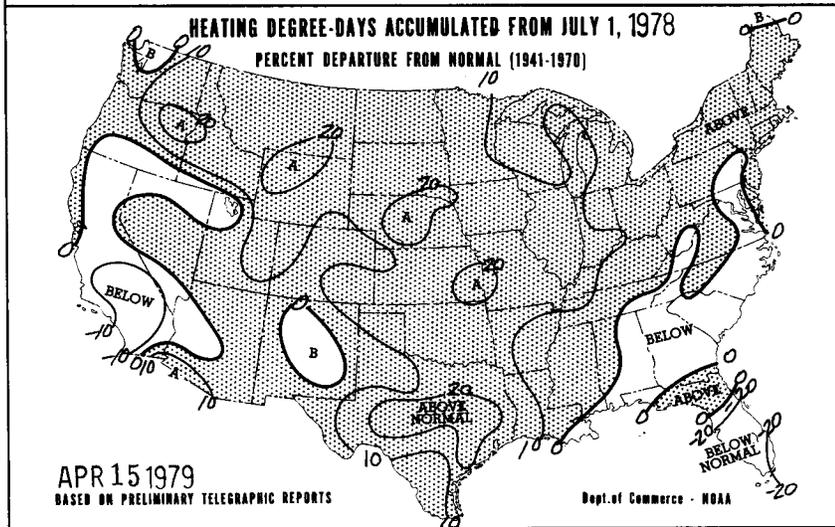
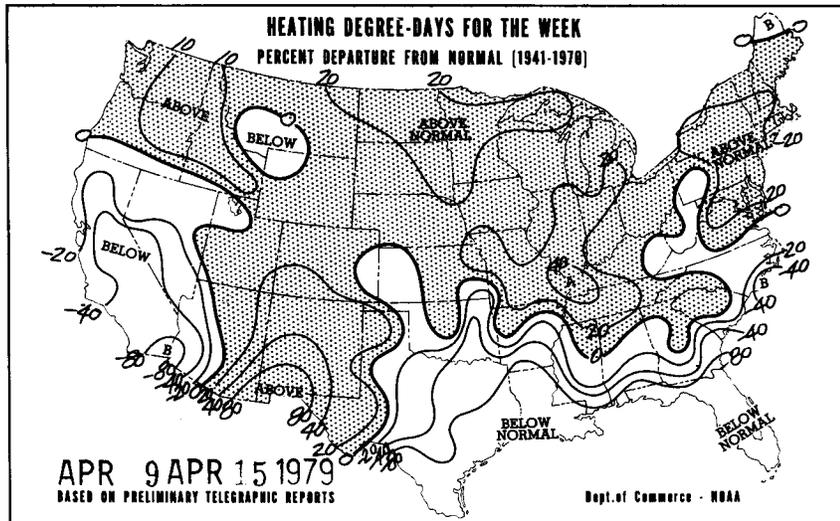
### Average Monthly Weather Outlook



NATIONAL ENVIRONMENTAL SATELLITE SERVICE

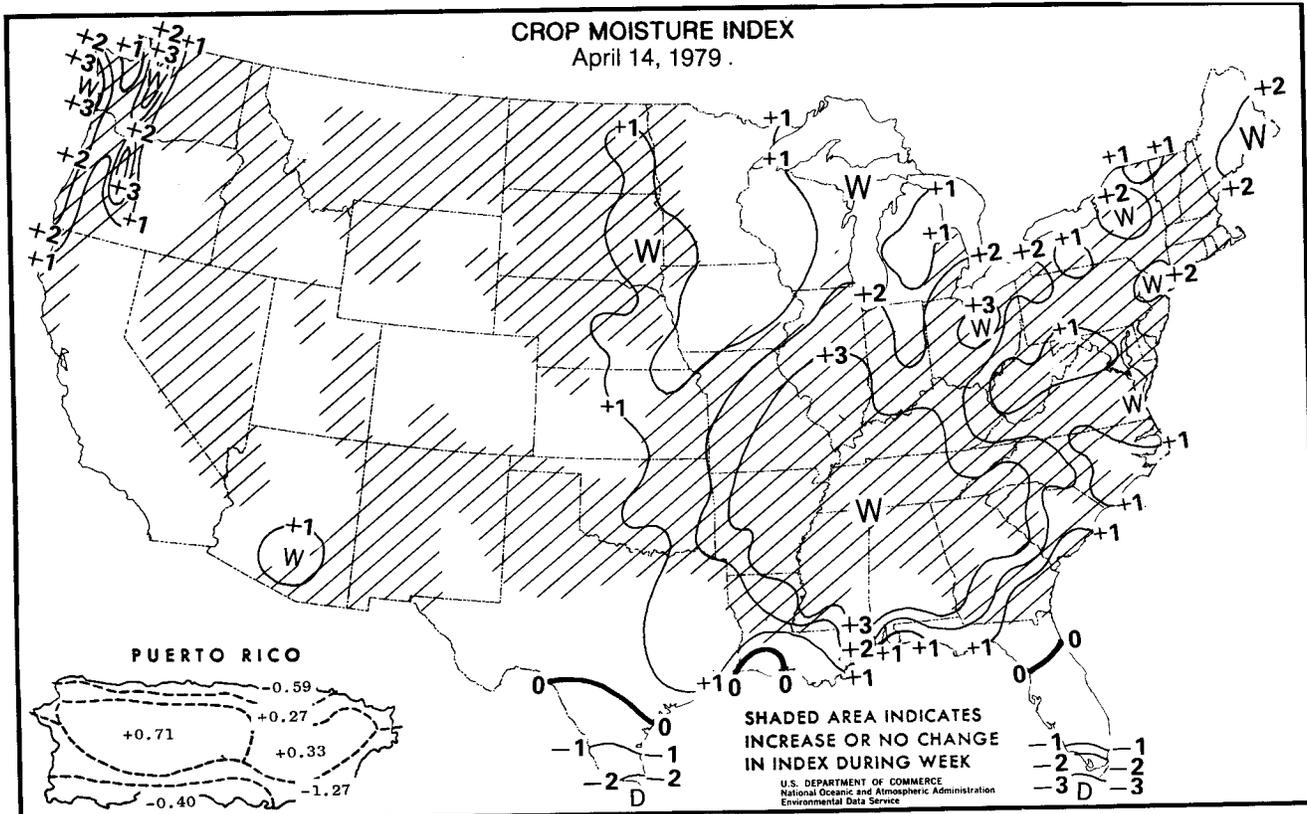


Last Tuesday's tornado outbreak appears as the carrot-shaped cloudmass stretching from northwest of Wichita Falls, Tex., to Tulsa. At the time of this picture--- 5 PM CST---a tornado was moving through northwestern Wichita County in Texas. Tuesday's weather activity began a very wet week for the South.



HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING APR. 15, 1979.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +							
	TOTAL	DEPARTURE*	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE*		TOTAL	DEPARTURE*	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE*					
ALA. BIRMINGHAM.....	28	1	3	2775	16	552	MAINE. CARIBOU.....	195	14	8475	138	208	OKLA. OKLAHOMA CITY.....	49	7	6086	175	327
MOBILE.....	1	1	3	1617	61	598	PORTLAND.....	184	20	6868	153	34	TULSA.....	28	19	4130	528	125
MONTGOMERY.....	1	1	7	1987	25	431	MD. BALTIMORE.....	103	17	4429	56	250	OREG. ASTORIA.....	27	2	4632	228	496
ARIZ. FLAGSTAFF.....	19	24	24	6658	329	1371	MASS. BOSTON.....	142	19	5309	141	128	BURNS.....	16	16	6338	613	111
PHOENIX.....	1	1	1	1438	105	602	MICH. ALPENA.....	171	12	7748	138	401	MEDFORD.....	10	10	4384	12	62
TUCSON.....	1	1	1	4705	951	989	DETROIT.....	151	12	6422	498	290	PENDLETON.....	10	10	5769	39	62
YUMA.....	1	1	1	1155	156	551	FLINT.....	151	12	6422	498	290	PORTLAND.....	10	10	4535	53	58
ARK. FORT SMITH.....	3	3	3	38	583	61	GRAND RAPIDS.....	141	14	6888	45	47	SALEM.....	17	17	5850	58	44
LITTLE ROCK.....	3	3	3	38	583	61	HOUGHTON LAKE.....	141	14	6888	45	47	PA. ALLENTOWN.....	13	13	5398	20	33
CALIF. BAKERSFIELD.....	25	13	13	1813	296	688	LANSING.....	171	12	7748	138	401	ERIE.....	13	13	6314	20	33
EUREKA.....	1	1	1	3210	126	666	MARQUETTE.....	171	12	7748	138	401	HARRISBURG.....	13	13	4424	20	33
FRESNO.....	1	1	1	1103	143	511	MUSKOGEE.....	171	12	7748	138	401	PHILADELPHIA.....	13	13	6226	3	88
LOS ANGELES.....	1	1	1	2259	269	388	S. STE. MARIE.....	171	12	7748	138	401	SCRANTON.....	13	13	6226	3	88
RED BLUFF.....	1	1	1	1057	119	581	MINN. DULUTH.....	171	12	7748	138	401	R.I. PROVIDENCE.....	15	28	5723	274	45
SAN DIEGO.....	1	1	1	2259	269	388	INTERNATIONAL FALLS.....	171	12	7748	138	401	S.C. CHARLESTON.....	13	13	1948	177	366
SAN FRANCISCO.....	1	1	1	2259	269	388	MINNEAPOLIS.....	171	12	7748	138	401	COLUMBIA.....	25	25	2331	185	734
STOCKTON.....	21	33	33	2477	119	584	ROCHESTER.....	171	12	7748	138	401	GREENVILLE.....	13	13	3101	11	294
COLO. DENVER.....	13	19	19	5894	433	792	ST. CLOUD.....	171	12	7748	138	401	S.DAK. ABERDEEN.....	45	39	9068	1103	167
GRAND JUNCTION.....	13	19	19	6300	1010	1663	MISS. JACKSON.....	16	16	2451	175	459	HURON.....	42	42	8559	1083	309
PUEBLO.....	13	19	19	5728	670	686	HERIDIAN.....	16	16	2519	158	319	RAPID CITY.....	42	42	9549	934	303
CONN. BRIDGEPORT.....	13	18	18	4987	15	252	MO. COLUMBIA.....	93	13	3369	536	74	ST. LOUIS.....	32	32	8334	1050	241
HARTFORD.....	13	18	18	6164	280	252	KANSAS CITY.....	93	13	3369	536	74	SPRINGFIELD.....	86	86	5096	727	21
DEL. WILMINGTON.....	12	23	23	4785	124	525	ST. LOUIS.....	93	13	3369	536	74	TENN. CHATTANOOGA.....	49	49	3320	79	409
D.C. WASHINGTON.....	88	20	20	3829	214	258	SPRINGFIELD.....	86	86	5096	727	21	KNOXVILLE.....	15	15	3490	117	347
FLA. APALACHICOLA.....	1	1	1	1401	4	516	MONT. BILLINGS.....	146	146	1234	1234	415	MEMPHIS.....	14	14	3204	35	177
DAYTONA BEACH.....	1	1	1	650	247	516	GLASSGOW.....	146	146	1234	1234	415	NASHVILLE.....	14	14	3818	22	422
FORT MYERS.....	1	1	1	650	247	516	GREAT FALLS.....	146	146	1234	1234	415	TEXAS. ABILENE.....	10	10	2827	255	74
JACKSONVILLE.....	1	1	1	1524	198	261	HAVRE.....	146	146	1234	1234	415	AMARILLO.....	10	10	4509	493	379
KEY WEST.....	1	1	1	39	13	184	HELENA.....	146	146	1234	1234	415	AUSTIN.....	10	10	2052	333	7
LAKELAND.....	1	1	1	545	13	184	KALISPELL.....	146	146	1234	1234	415	BEAUMONT.....	10	10	1615	99	199
MIAMI.....	1	1	1	185	13	184	MILES CITY.....	146	146	1234	1234	415	BROWNSVILLE.....	10	10	2827	255	98
ORLANDO.....	1	1	1	584	14	240	MISSOULA.....	146	146	1234	1234	415	CORPUS CHRISTI.....	10	10	1036	106	186
TALLAHASSEE.....	1	1	1	1743	18	339	NEBR. GRAND ISLAND.....	134	18	7210	1196	723	DEL RIO.....	10	10	2827	255	544
TAMPA.....	1	1	1	365	47	470	LINCOLN.....	134	18	7210	1196	723	FEL PASO.....	10	10	2827	255	231
N. PALM BEACH.....	1	1	1	248	51	197	NORTH PLATTE.....	134	18	7210	1196	723	FORT WORTH.....	10	10	1367	14	265
GA. ATLANTA.....	32	5	5	2749	275	557	OMAHA.....	115	16	6363	630	41	GALVESTON.....	10	10	1711	277	412
AUGUSTA.....	32	5	5	2749	275	557	VALENTINE.....	115	16	6363	630	41	HOUSTON.....	10	10	3357	117	173
MACON.....	32	5	5	2749	275	557	NEV. ELY.....	173	173	7182	400	1295	MIDLAND.....	10	10	3073	47	562
SAVANNAH.....	32	5	5	2749	275	557	LAS VEGAS.....	20	20	5507	42	769	SAN ANGELO.....	10	10	1770	49	516
IDAHO. BOISE.....	131	12	12	5886	610	1371	RENO.....	22	22	5842	237	1029	SAN ANTONIO.....	10	10	3505	71	126
LEWISTON.....	127	18	18	5690	732	1072	WINNEMUCA.....	22	22	5842	237	1029	VICTORIA.....	10	10	3505	71	126
POCATELLO.....	162	16	16	7058	726	1667	N.H. CONCORD.....	22	22	5842	237	1029	WICHITA FALLS.....	23	23	4432	58	7
ILL. CAIRO.....	66	30	30	4537	796	108	N.J. ATLANTIC CITY.....	123	21	4976	330	360	UTAH. SALT LAKE CITY.....	12	6	5453	5	1267
CHICAGO.....	144	31	31	6590	881	54	TRENTON.....	126	28	4736	77	308	VT. BURLINGTON.....	187	24	7471	272	145
MOLINE.....	122	18	18	7040	1020	221	N.MEX. ALBUQUERQUE.....	101	29	4004	125	343	VA. WINCHESTER.....	76	11	4216	165	233
PEORIA.....	145	33	33	5660	64	64	ROSMELL.....	63	14	3579	38	791	NORFOLK.....	59	1	3359	202	202
ROCKFORD.....	111	19	19	7211	841	118	N.Y. ALBANY.....	170	35	6677	302	95	RICHMOND.....	62	1	3996	1	285
SPRINGFIELD.....	111	19	19	6023	748	148	BINGHAMTON.....	100	40	6769	138	344	ROANOKE.....	73	1	4326	229	268
IND. EVANSVILLE.....	75	9	9	4938	506	262	NORFOLK.....	100	40	6769	138	344	WASH. GULLAVUTE.....	147	10	5064	110	328
FORT WAYNE.....	141	13	13	6178	507	92	BUFFALO.....	131	31	4848	245	175	SEATTLE-TACOMA.....	122	12	7470	176	497
INDIANAPOLIS.....	117	15	15	5678	425	92	NEW YORK.....	131	31	4848	245	175	SPOKANE.....	122	12	5219	110	1101
SOUTH BEND.....	127	1	1	6186	213	319	ROCHESTER.....	176	36	6363	213	115	SALLA HALLA.....	114	14	7009	550	676
IOWA. BURLINGTON.....	122	18	18	6816	1018	232	SYRACUSE.....	171	36	6443	320	109	VARTINA.....	137	21	6143	667	973
DES MOINES.....	133	16	16	6987	670	220	N.C. ASHEVILLE.....	75	4	3823	192	477	W. VA. BECKLEY.....	98	4	4986	194	578
DUBUQUE.....	159	1	1	7661	893	652	CHARLOTTE.....	45	7	3130	10	271	CHARLESTON.....	78	4	4459	98	469
SIOUX CITY.....	147	24	24	7871	1325	652	GREENSBORO.....	49	2	3727	31	493	HUNTINGTON.....	70	4	4580	154	280
KANS. CONCORDIA.....	99	3	3	6112	810	273	HATTERAS.....	42	1	3228	183	170	PARKERSBURG.....	86	4	4774	209	487
BOGIE CITY.....	112	1	1	5435	654	432	RALEIGH.....	46	10	2230	170	957	WIS. GREEN BAY.....	470	1	8128	729	182
GODDARD.....	112	1	1	5954	305	36	WILMINGTON.....	15	10	2230	170	957	LACROSSE.....	470	1	7344	504	566
TOPEKA.....	112	1	1	5994	1004	358	N.DAK. BISMARCK.....	227	63	9603	1292	662	HADSSON.....	470	1	7344	504	566
NICHITA.....	72	4	4	5283	792	377	FARGO.....	213	43	9801	1243	639	HILLAUREE.....	470	1	7344	504	566
KY. LEXINGTON.....	72	4	4	4776	276	358	WILLISTON.....	219	50	9639	1238	458	WYO. CASPER.....	467	1	7718	988	994
LOUISVILLE.....	75	3	3	4539	112	383	OHIO. AKRON-CANTON.....	130	6	5982	230	374	CHEYENNE.....	467	1	8826	1349	172
LA. BATON ROUGE.....	1	1	1	1748	78	353	CINCINNATI.....	96	11	5257	469	504	LAWRENCE.....	467	1	8826	1349	172
LAKE CHARLES.....	1	1	1	1718	220	293	CLEVELAND.....	132	11	5635	379	504	SHERIDAN.....	467	1	8826	1349	172
NEW ORLEANS.....	1	1	1	1453	10	440	COLUMBUS.....	100	11	5598	302	504						
SHREVEPORT.....	1	1	1	2405	257	556	DAYTON.....	100	11	5598	302	504						
							TOLEDO.....	142	17	6413	504	502						



THE AREA OF EXCESSIVE CROP MOISTURE IN THE MID-SOUTH IS INCREASING. THE LARGE AREA, INCLUDING MOST OF ARKANSAS, MISSISSIPPI, ALABAMA, GEORGIA, TENNESSEE, MISSOURI AND SOUTHERN ILLINOIS IS HIGHER THAN A PLUS THREE ON THE CROP MOISTURE SCALE WHICH INDICATES "EXCESSIVELY WET - SOME FIELDS FLOODED". PLANTING AND OTHER FIELD WORK HAS BEEN DELAYED. THE ONLY AREAS WHERE CROP MOISTURE IS SHORT ARE SOUTHERN FLORIDA AND SOUTHERN TEXAS. PASTURES ARE DETERIORATING IN FLORIDA.

The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and

UNSHADED AREAS: INDEX DECREASED	
ABOVE	3.0 SOME DRYING BUT STILL EXCESSIVELY WET
2.0 to 3.0	MORE DRY WEATHER NEEDED, WORK DELAYED
1.0 to 2.0	FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 to 1.0	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 to -1.0	TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1.0 to -2.0	ABNORMALLY DRY, PROSPECTS DETERIORATING
-2.0 to -3.0	TOO DRY, YIELD PROSPECTS REDUCED
-3.0 to -4.0	POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW	-4.0 EXTRFMELY DRY, MOST CROPS RUINED

the CMI gives a negative value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

SHADED AREA: INDEX INCREASED OR DID NOT CHANGE	
ABOVE	3.0 EXCESSIVELY WET, SOME FIELDS FLOODED
2.0 to 3.0	TOO WET, SOME STANDING WATER
1.0 to 2.0	PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 to 1.0	MOISTURE ADEQUATE FOR PRESENT NEEDS
0 to -1.0	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1.0 to -2.0	SOME IMPROVEMENT BUT STILL TOO DRY
-2.0 to -3.0	DROUGHT EASED BUT STILL SERIOUS
-3.0 to -4.0	DROUGHT CONTINUED, RAIN URGENTLY NEEDED
BELOW	-4.0 NOT ENOUGH RAIN, STILL EXTREMELY DRY

(continued from page 3)

in northern areas. Rain remained a problem in eastern areas for land preparation and planting. Arizona producers harvested lettuce and other mixed vegetables. California producers harvested asparagus, broccoli, lettuce, and strawberries.

**PASTURES AND LIVESTOCK:** Grasslands rated fair to good and generally improving. The northern tier

States reported pastures dormant. Subnormal temperatures continued to slow growth in some northern areas. Persistent wet conditions prevented cattle from grazing pastures across the South. Most herdsmen terminated supplemental feeding. Cattle rated fair to good and began to make weight gains. Calving and lambing were well advanced with death rates near normal.

**IMMEDIATE - U. S. Weather Report**

This Report Will be Treated in All Respects as Letter Mail

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COM 210

**SEEDING PROGRESS**

FOR WEEK ENDING APRIL 15

COTTON			
	1979	1978	AVG.
ALA	2	17	11
ARIZ	37	30	NA
ARK	0	2	4
CALIF	64	NA	NA
GA	32	27	21
LA	0	5	3
MISS	0	2	4
MO	0	1	2
N MEX	0	0	0
NC	10	18	7
OKLA	0	0	0
SC	11	25	20
TENN	0	2	3
TEX	12	16	15
14 STATES	16	-	-
EXCL CALIF	10	13	11

THESE 14 STATES PRODUCED 99%  
 OF THE 197A COTTON CROP.

(continued from page 9)

Planting raspberries complete; continue strawberries, lettuce, green peas, other vegetables, and grass. Currants, blueberries blooming. Harvest rhubarb and flowers, limited green chopping grass. Range, pasture supplies adequate.

East: Temperatures 3° below normal. Precipitation near normal.

Planting grain, potatoes, mint, peas, corn, alfalfa, other spring crops. Cherries, peaches, pears full bloom lower Yakima Valley. Light asparagus cutting underway. Dryland farmers summerfallowing. Spring grain growth slowed by cool weather.

WEST VIRGINIA: Temperatures and precipitation below normal northeast, above normal elsewhere. Extremes: 79 and 18°.

Fieldwork: 2.0 days suitable. Soil moisture adequate to surplus. Main activities: Fencing, plowing, and hauling manure. Livestock in good condition.

WISCONSIN: Most precipitation on 11th and 12th. Rain fell over east 11th and showers and thunderstorms moved over much of State night of 11th. 1.00

SPRING WHEAT			
	1979	1978	AVG.
IDAHO	25	35	25
MINN	0	0	16
MONT	1/	5	10
N DAK	0	0	4
S DAK	1	8	22
5 STATES	1	3	11

THESE 5 STATES PRODUCED 95%  
 OF THE 197A SPRING WHEAT  
 CROP EXCLUDING DURUM.  
 1/ LESS THAN 5%

RICE			
	1979	1978	AVG.
ARK	4	23	18
CALIF	NA	NA	NA
LA	37	67	58
MISS	1	51	24
TEX	36	79	77
5 STATES	19	48	41

THESE 5 STATES PRODUCED 99%  
 OF THE 197A RICE CROP.

NA NOT AVAILABLE

to 1.50 in. fell over southeast, 0.25 to 0.75 in. over northwest, and generally 0.10 in. over west. Showers and thundershowers developed again 12th leaving scattered amounts to about 0.25 in. of rain. Some small hail fell in west central. Scattered light precipitation fell over north and central on 13th. Some fell as snow over extreme north. Low temperatures mostly in teens and 20's early week but moderated to 30's and 40's later. Highs generally in 30's to 40's north and 40's to 50's south. Warmest 12th with highs in 60's and low 70's over south and central.

WYOMING: Temperatures and precipitation northwest little below normal. Southwest about normal in temperatures but below on precipitation. Elsewhere above normal in both temperature and precipitation.

Topsoil moisture adequate. Acreage planted: Spring wheat 15%; oats 17%; sugarbeets 10%; barley 26%; crop planting behind normal. Winter wheat, alfalfa and range conditions generally good. Fieldwork: 2 days suitable. Calves born 64%; range ewes lambed 31%; farm flock ewes lambed 73%; range sheep shorn 41%; farm sheep shorn 73%.