

WEEKLY WEATHER AND CROP BULLETIN

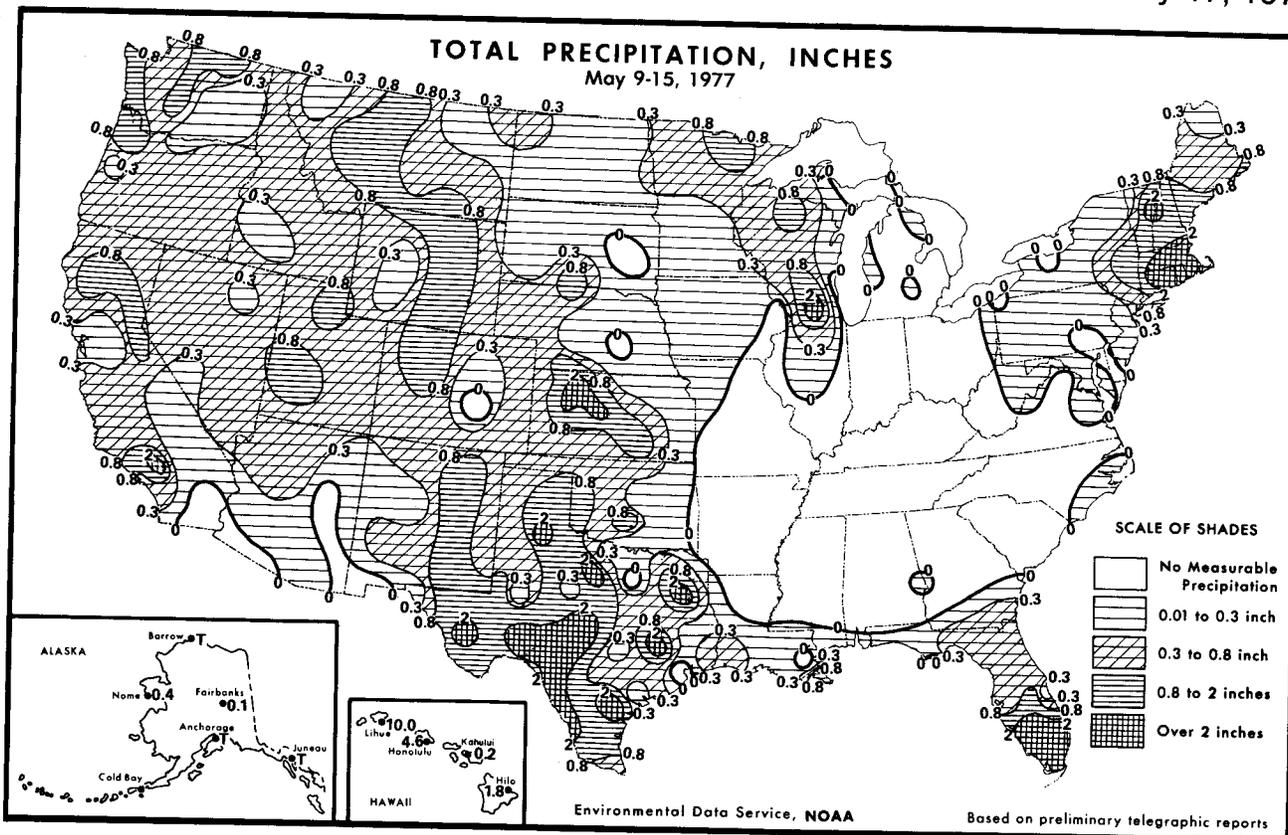
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National Weather Summary

For the Week of May 9-15

HIGHLIGHTS: Moisture was borne by showers and thunderstorms throughout the Nation. Recorded precipitation was spotty, though, at times, locally heavy; no major storm system dominated. A large portion of the drought-stricken western U. S. welcomed a week of intermittent rain which turned to snow in the higher elevations. Little or no rain was reported from Michigan southwestward to northern Louisiana and southeastward to the southern Atlantic Coast. Summerlike showers fell over most of Florida, the further south the heavier. Early in the week, springtime snow took the place of May showers in the Northeast.

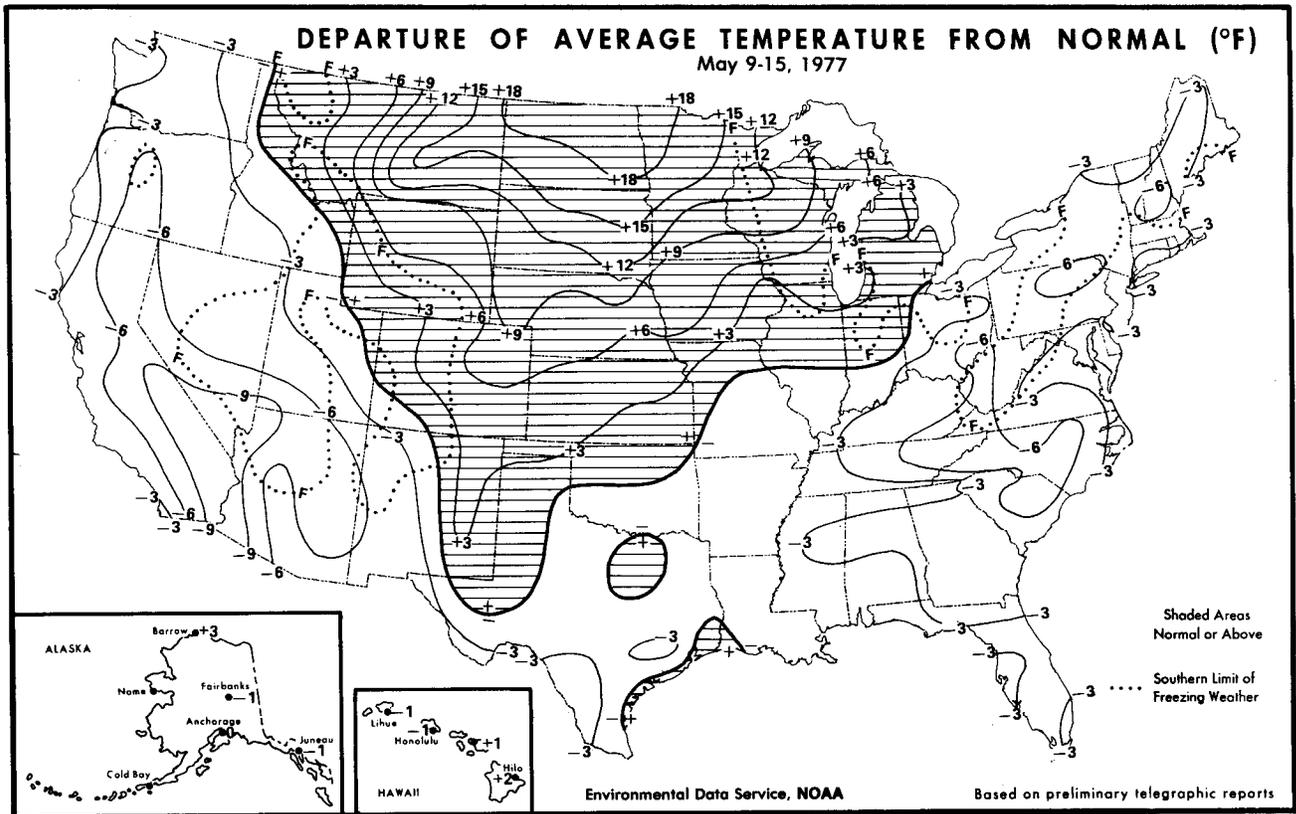
Average temperatures were as much as 6° cooler in the East and West. The central U. S. warmed up to readings well above normal. Minnesota and North Dakota notched 16-20° higher than expected.

Heavy snow took the spring out of portions of New York State and southern Vermont on Monday.

Bucks County in Pennsylvania and Trenton, N.J., experienced a rare treatment of a thundershower that mixed hail, sleet, and snow. A taste of winter touched lightly in extreme northern California where snow showers salted the area. Rains began to diminish in the southern portion of the State.

Thunderstorms developed in Texas and Oklahoma, central South Dakota into central Nebraska, and along the Gulf Coast into the southern Atlantic Coast States. Some hail was reported in west central Texas. Showers and thunderstorms were scattered through the northern Rockies into the central and southern Plateau region.

Snow blanketed more of the Northeast early Tuesday; record measurements exceeded 10 inches in many locales. Since documentation began in the 1870's, no readings had approached the Connecticut and Massachusetts accumulations. Cold air sped down the Atlantic Coast setting new low temperatures as far south as South Carolina. Meanwhile, a record



high temperature of 89° broke a 77-year old mark in Grand Forks, N.D.

Showers and occasional thunderstorms remained along the western Gulf Coast and southern Florida. Thundershowers covered portions of Texas, eastern Colorado, the northern Rockies, and the Pacific Northwest. As Tuesday closed, heavy rains fell in northeastern New Mexico and northwestern Texas, and triggered flooding in the southern half of Texas.

Two frontal systems, one over the central Plains and the other off the Oregon coast provided only sparse rain. Light showers moistened the middle Mississippi Valley; the Nation's heaviest precipitation fell in southern Texas where Corpus Christi received more than one inch in 15 minutes.

A large high pressure system over the Canadian/U.S. border brought another chilly morning to the East Coast southward to Georgia. A stationary front astride southern Florida brought showers which drenched the area; Coral Gables was swamped by two and one-half inches in one hour. Toward evening, locally heavy thunderstorms rumbled through parts of Nebraska, Texas, Louisiana, and Mississippi.

Most of Thursday was dominated by a general lack of rain throughout the country. It began with cold air over the Northeast and Pacific Northwest, and progressed to unseasonably warm temperatures in the northern Plains and upper Great Lakes. Showers persisted over the West Coast, especially in California where some areas reported rain each day through May 12.

Toward evening, heavy precipitation hit southern Florida and thunderstorms dumped rain and hail over the west and south central Plains. Rain-showers dampened the Pacific Northwest coast, the northern Rockies eastward to the Dakotas, and the upper northeastern coast.

Precipitation was widely dispersed over the country on Friday. Occasional early showers sprinkled northern New England, Michigan, extreme southern Florida, southern Utah and Nevada, Arizona, and western Washington. Toward Friday evening, a few thundershowers fell from the northern and eastern Great Lakes into the upper half of the Appalachians; they also were felt from the southern Plateau to Oklahoma and the western Dakotas. Four tornadoes were spotted in North Dakota.

A large high pressure center over Arkansas controlled much of the Nation's weather east of the Rockies. Several cities in the upper Great Lakes and northern Plains set high temperature records.

Intense thunderstorms carried hail, high winds, and heavy rain to the Great Plains on Saturday. Hail pummeled Colorado, Oklahoma, Wyoming, and Kansas where it piled up to one and one-half feet in the northwestern town of Hoxie; a tornado zipped through Kimball, Nebr., and Dalhart, Texas. Showers were seen in northern New England, northern Minnesota and Wisconsin, the upper Mississippi Valley, and the Rockies. For the first time in more than a year, rainfall exceeding one inch in a six-hour period surprised southwestern Utah.

Sunday's storm roster showed three Oklahoma tornadoes; hail scattered from Wisconsin to Texas; and wind damage from North Dakota and Minnesota to Oklahoma.

A moist, cool air mass continued to dominate the Pacific Northwest with showers that reached the Rockies' upper half and turned to snow, sometimes heavy, in several mountain passes. Fair weather and warm temperatures ruled most of the Nation east of the Mississippi River.

National Agricultural Summary

For the Week of May 9-15

HIGHLIGHTS: Clear weather throughout most of the U.S. gave farmers the opportunity to plant with almost no interruptions. Corn Belt farmers planted enormous acreages of corn and soybeans; nationally, corn planting reached 82% complete, staying ahead of last year and the average. Soybean seeding advanced to 32% complete, also exceeding both 1976 and the average. Cotton planting attained 56% complete in the 11 southern States, 3 points below 1976's pace, but 1 point ahead of average. Sorghum planting reached 38% complete, sweeping past the 31% for last year and the average. Spring wheat sowing was almost complete in the major producing States. Winter's last punch pushed temperatures below freezing in some areas of the Nation which damaged some fruits and vegetables and slowed crop germination and development. Soil moisture supplies slipped toward the short side, but most areas had enough moisture to germinate recent plantings.

SMALL GRAINS: The winter wheat crop rated good in the major production areas on the southern Great Plains; further north on the Plains, the crop was fair to good. East of the Great Plains, winter wheat was fair to good also. In the west some wheat was poor; most rated fair. Harvesting was underway in several States including Florida, Texas, and Arizona, but did not gain much momentum. Spring wheat seeding advanced to 95% complete in the major producing States. In recent years, farmers planted only 65% by this date on the average.

CORN: U.S. farmers planted 82% of the corn crop this season, slightly ahead of the 79% attained last year and far advanced from the 58% average for this date. Clear weather permitted Corn Belt farmers to plant very rapidly. Farmers nearly finished planting in some States. In 1 week the Nation's farmers planted 24% of the 1977 corn crop.

Farmers in the eastern North Central States advanced to 77% of the corn acreage planted, a point more than last year and 24 points more than the average. Illinois farmers reached 93% complete; in other States planting advanced to 65 to 70% complete. After a slow start farmers in Ohio, Indiana, Michigan, and Wisconsin planted 35 to 40% of the 1977 crop this week. In Ohio, low temperatures slowed emergence and farmers replanted some fields. About 40 to 50% of the Indiana crop emerged. The Illinois crop rated good.

In the western North Central States, corn farmers reached 85% complete compared with 80% last year and the 56% average. Minnesota, Iowa, and Missouri farmers almost finished planting corn, and turned their attention to soybeans. South Dakota, Nebraska, and Kansas farmers advanced to 60 to 75% complete. Farmers in the western North Central States enjoyed an excellent planting season. Nebraska farmers planted over one-third of the crop, and South Dakota farmers almost half. The Iowa crop rated good and 59% emerged.

COTTON: Producers in the 11 southern States reached 56% complete for planting the 1977 cotton crop. This was 3 points less than 1976, and 1 point more than the average. Farmers in all the States except Oklahoma and Texas advanced to 90% complete or greater. Delta farmers generally surpassed last year's pace; in eastern areas

farmers nearly equalled 1976. Rains delayed planting in Oklahoma and Texas. Oklahoma farmers seeded 12% of the crop compared with 5% last year and 19% normal. Rains slowed Texas cotton planting, and heavy rains damaged some new plantings on the southern High Plains. Early stands emerged on the northern High Plains. Farmers rotary hoed fields to aid emergence.

Low temperatures slowed development of the California crop. Arizona cotton grew well; planting was almost complete. New Mexico growers planted cotton.

SOYBEANS: Plantings of the United States soybean crop advanced to 32% complete, ahead of both 1976's 28% and the 16% average. Producers in the eastern North Central States planted 26% of the soybean crop which lagged the 1976 pace of 34%, but surpassed the 20% average. Western North Central farmers planted 39% of the crop exceeding 1976's 31% and the 12% average. North Central States soybean planting lagged in areas where much corn remained to be planted. Planting in the South Central States advanced to 30% complete, 9 points ahead of 1976 and double the average. Dry soils delayed planting in Arkansas and South Carolina.

OTHER CROPS: Sorghum planting in the major producing States reached 38% complete moving ahead of the 1976 and average pace of 31%. Texas planting advanced to 66% complete, equalling last year's rate and average.

Rice planting in the southern States, ranged from 89 to 99% complete. Some fields began tillering.

Peanut planting was 9% complete in Oklahoma, 24% in Texas, 60% in Mississippi, 74% in Alabama, 86% in Georgia, 49% in Virginia, and virtually complete in South Carolina.

FRUIT AND NUTS: Low temperatures brought frost to some fruit areas of the North Central and Northeast. Damage varied by locality. Growers applied post-bloom sprays and thinned orchards. The peach harvest advanced into Georgia where trees needed moisture to size the fruit. Producers also picked peaches in Florida, Louisiana, Texas, Arizona, and California. Citrus growers harvested oranges and grapefruit in Florida, Texas, Arizona, and California. Florida citrus groves needed rain; irrigation was applied continually. Dryness slowed new growth.

VEGETABLES: Low temperatures slowed development and damaged vegetable crops in northern production areas. Rains delayed harvests in California, Texas, and Florida. Rains hurt California strawberries and lettuce; berries were diverted to processors. Other California crops harvested included broccoli, cauliflower, onions, sweet corn, carrots, and potatoes. Texas growers picked peppers, carrots, onions, cabbage, squash, and cucumbers. Florida vegetable shipments increased 20% from the previous week.

PASTURES AND LIVESTOCK: Grasslands rated fair to good with the exception of the western States and parts of Florida. Rains improved pastures in Texas, Florida, and parts of California. Some California rangeland, deteriorated by the long drought, was not revived by the recent rains. Washington livestock producers culled cattle herds to match the available forage supplies. Herds moved to spring and summer pastures throughout the West; cattle were in fair to good condition.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., May 15, 1977

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	66	-4	0	-.8	La. Baton Rouge	73	-1	.2	-.8	Youngstown	53	-3	.1	-.8
ALA, Mobile	73	-1	.1	-.9	LA, Lake Charles	74	0	.4	-.8	OKLA, Okla. City	67	0	.3	-.9
ALA, Montgomery	70	-1	T	-.8	LA, New Orleans	73	-1	T	-.9	OKLA, Tulsa	69	+1	.1	-1.0
ALASKA, Anchorage	45	0	T	-.1	LA, Shreveport	71	-1	T	-1.2	OREG, Astoria	49	0	.9	+.4
ALASKA, Barrow	20	+3	T	0	MAINE, Caribou	45	-3	.2	-.4	OREG, Burns	46	-1	.6	+.0
ALASKA, Fairbanks	44	-1	.1	0	MAINE, Portland	48	-3	1.9	+1.1	OREG, Medford	53	-1	.4	+.4
ALASKA, Juneau	45	-1	T	-.8	MD, Baltimore	60	-2	.2	-.6	OREG, Pendleton	54	-2	.8	+.1
ALASKA, Kodiak	-	-	-	-	MASS, Boston	53	-4	3.3	+2.5	OREG, Portland	51	-2	1.1	+.3
ALASKA, Nome	33	0	.4	+.3	MASS, Chatham	50	-	1.0	-	OREG, Salem	55	-1	.2	+.6
ARIZ, Flagstaff	43	-6	.4	+.3	MICH, Alpena	50	+1	.1	-.5	PA, Allentown	55	-1	.2	-.6
ARIZ, Phoenix	70	-5	.1	0	MICH, Detroit	59	+2	T	-.7	PA, Erie	49	-4	T	-.9
ARIZ, Tucson	66	-6	.1	0	MICH, Flint	56	+2	0	-.7	PA, Harrisburg	59	-3	.1	-.7
ARIZ, Winslow	55	-7	T	-.1	MICH, Grand Rapids	59	+3	0	-.7	PA, Philadelphia	54	-4	.1	-.7
ARIZ, Yuma	68	-10	T	0	MICH, Houghton Lake	55	+4	T	-.6	PA, Pittsburgh	54	-4	.2	-.7
ARK, Fort Smith	67	-2	T	-1.3	MICH, Lansing	56	+1	T	-.7	PA, Scranton	53	-3	2.2	+1.4
ARK, Little Rock	67	-2	0	-1.3	MICH, Marquette	57	+8	0	-.6	R.I., Providence	66	-5	0	-.8
CALIF, Bakersfield	64	-5	.4	+.3	MICH, Muskegon	55	+1	T	-.6	R.I., S.C. Charleston	65	-3	0	-.8
CALIF, Eureka	51	-1	.6	+.1	MICH, S. Ste. Marie	52	+4	.1	-.6	R.I., Columbia	65	-3	0	-.8
CALIF, Fresno	60	-7	.8	+.7	MINN, Duluth	60	+12	.8	+.1	R.I., Greenville	65	-3	0	-.8
CALIF, Los Angeles	59	-5	.8	-.8	MINN, Internatl Falls	65	+16	1.1	+.5	R.I., S.D. Aberdeen	70	+16	T	-.5
CALIF, Red Bluff	60	-6	1.9	+1.7	MINN, Minneapolis	67	+11	.2	-.5	R.I., Huron	69	+13	T	-.6
CALIF, San Diego	61	-2	.1	0	MINN, Rochester	62	+7	.2	-.5	R.I., Rapid City	64	+10	T	-.7
CALIF, San Francisco	54	-4	.1	0	MINN, St. Cloud	66	+12	.2	-.6	R.I., Sioux Falls	68	+12	T	-.7
CALIF, Stockton	60	-4	.1	0	MISS, Jackson	72	0	T	-1.0	TENN, Chattanooga	64	-3	0	-.7
COLO, Denver	62	+6	.1	-.5	MISS, Meridian	68	-3	0	-.9	TENN, Knoxville	69	-1	0	-1.0
COLO, Grand Junction	63	+2	.5	+.4	MO, Columbia	61	-2	0	-1.1	TENN, Memphis	69	-1	0	-1.0
COLO, Pueblo	65	+5	T	-.4	MO, Kansas City	65	+1	.1	-.8	TENN, Nashville	69	-2	.1	-.8
CONN, Bridgeport	55	-2	.8	0	MO, St. Louis	63	-1	0	-.8	TEX, Abilene	64	0	.9	+.3
CONN, Hartford	54	-3	2.4	+1.6	MO, Springfield	63	-1	0	-1.1	TEX, Amarillo	73	-1	.1	-.8
D.C., Washington	63	-2	T	-.8	MONT, Billings	69	+15	.6	+.2	TEX, Austin	75	+1	.7	-.4
FLA, Apalachicola	72	-2	0	-.6	MONT, Glasgow	67	+14	T	-.2	TEX, Beaumont	78	+1	.4	-.1
FLA, Daytona Beach	73	-1	.6	+.1	MONT, Great Falls	55	+3	.8	+.3	TEX, Brownsville	77	0	1.6	+.9
FLA, Ft. Myers	74	-3	4.6	+3.9	MONT, Havre	60	+6	1.3	+1.0	TEX, Corpus Christi	-	-	-	-
FLA, Jacksonville	70	-4	.5	-.1	MONT, Helena	55	+4	1.1	+.7	TEX, Dallas	74	-3	1.3	+.7
FLA, Key West	78	-2	4.1	+3.6	MONT, Kalispell	51	+1	.2	-.2	TEX, Del Rio	67	-4	T	-.7
FLA, Lakeland	73	-3	.7	0	MONT, Miles City	69	+14	.6	+.2	TEX, El Paso	67	+3	0	-1.1
FLA, Miami	74	-4	2.6	+1.3	MONT, Missoula	53	+2	.4	0	TEX, Fort Worth	75	0	T	-.7
FLA, Orlando	73	-3	.8	+.3	NEBR, Grand Island	66	+7	0	-.8	TEX, Galveston	72	-3	T	-1.2
FLA, Tallahassee	70	-4	.6	-.2	NEBR, Lincoln	66	+5	.1	-.6	TEX, Houston	68	+1	.4	-.3
FLA, Tampa	73	-4	.5	+.1	NEBR, Norfolk	68	+9	.1	-.7	TEX, Lubbock	72	+1	.1	-.4
FLA, W. Palm Beach	74	-3	3.0	+2.0	NEBR, N. Platte	64	+7	.1	-.6	TEX, Midland	73	-1	1.6	+1.0
GA, Atlanta	64	-4	0	-.8	NEBR, Omaha	67	+7	.2	-.7	TEX, San Angelo	72	-3	T	-.9
GA, Augusta	66	-5	0	-.8	NEBR, Valentine	65	+9	.9	+.3	TEX, San Antonio	76	0	T	-.9
GA, Macon	69	-4	0	-.8	NEV, Ely	45	-4	.8	+.6	TEX, Victoria	73	0	.6	-.5
GA, Savannah	69	-3	T	-.9	NEV, Las Vegas	62	-10	.3	+.3	TEX, Waco	69	-2	T	-1.1
HAWAII, Hilo	75	+2	1.8	-.6	NEV, Reno	47	-7	.8	+.6	TEX, Wichita Falls	53	-3	.4	+.3
HAWAII, Honolulu	76	+1	4.6	+4.3	NEV, Winnemucca	49	-4	.6	+.4	UTAH, Blanding	56	-1	1.1	+.7
HAWAII, Kahului	76	+1	.2	+.1	N.H., Concord	48	-6	1.3	+.5	UTAH, Salt Lake City	52	-1	T	-.7
HAWAII, Lihue	74	-1	10.0	+9.4	N.J., Atlantic City	55	-5	.1	-.7	VT, Burlington	60	-4	0	-.7
IDAHO, Boise	54	-3	.2	-.1	N.J., Trenton	57	-4	.1	-.7	VA, Lynchburg	63	-3	0	-.8
IDAHO, Lewiston	57	0	.4	0	N.MEX, Albuquerque	61	-3	.1	0	VA, Norfolk	62	-3	.1	-.7
IDAHO, Pocatello	54	0	.4	+.1	N.MEX, Roswell	70	+3	.8	+.6	VA, Richmond	60	-3	0	-.8
ILL, Cairo	67	-1	0	-1.2	N.Y., Albany	51	-5	1.1	+.4	VA, Roanoke	62	-2	.3	-.1
ILL, Chicago	61	+3	0	-.8	N.Y., Binghamton	49	-5	.2	-.7	WASH, Colville	52	-2	1.5	+1.3
ILL, Moline	62	+2	0	-.8	N.Y., Buffalo	50	-4	.1	-.6	WASH, Omak	47	-3	1.7	+.6
ILL, Peoria	61	+1	T	-.9	N.Y., New York	57	-3	.4	-.4	WASH, Quillayute	53	-1	.2	-.2
ILL, Rockford	62	+5	3.6	+2.8	N.Y., Rochester	51	-4	T	-.6	WASH, Seattle-Tacoma	52	-2	.3	0
ILL, Springfield	62	0	.1	-.7	N.Y., Syracuse	50	-5	.2	-.5	WASH, Spokane	56	-4	.1	-.3
IND, Evansville	62	-2	0	-1.0	N.C., Asheville	56	-7	0	-.7	WASH, Walla Walla	52	-5	.2	+.1
IND, Ft. Wayne	60	+2	0	-.8	N.C., Charlotte	62	-6	0	-.6	WASH, Yakima	52	-5	T	-.8
IND, Indianapolis	61	0	0	-.9	N.C., Greensboro	62	-4	0	-.6	W.Va, Beckley	57	-6	T	-.8
IND, South Bend	60	+3	0	-.7	N.C., Hatteras	65	-1	.2	-.5	W.Va, Charleston	58	-5	0	-.9
IOWA, Burlington	62	+2	0	-.8	N.C., Raleigh	60	-6	0	-.8	W.Va, Huntington	57	-6	0	-.9
IOWA, Des Moines	65	+6	.1	-.8	N.C., Wilmington	65	-5	.3	-.6	W.Va, Parkersburg	57	-6	.2	-.8
IOWA, Dubuque	60	+3	0	-1.0	N.DAK, Bismarck	70	+17	.1	-.3	WIS, Green Bay	66	+8	.7	-.1
IOWA, Sioux City	66	+6	T	-.7	N.DAK, Fargo	72	+19	.6	+.1	WIS, La Crosse	66	+5	1.2	+.5
KANS, Concordia	65	+4	.2	-.7	N.DAK, Williston	71	+18	.3	0	WIS, Madison	58	+5	T	-.6
KANS, Dodge City	67	+4	.6	-.1	OHIO, Akron-Canton	56	-1	0	-.9	WIS, Milwaukee	58	+6	1.5	+1.0
KANS, Goodland	63	+6	.4	-.2	OHIO, Cincinnati	58	-4	0	-.8	WYO, Casper	54	+3	.4	-.2
KANS, Topeka	68	+5	.1	-.7	OHIO, Cleveland	53	-4	T	-.8	WYO, Cheyenne	58	+6	.1	-.5
KANS, Wichita	66	+1	.9	+.1	OHIO, Columbus	56	-4	0	-.9	WYO, Sheridan	59	+7	1.3	-.8
KANS, Lexington	59	-5	0	-.9	OHIO, Dayton	60	0	0	-.8	P.R., San Juan	84	+5	0	-1.5
KANS, Louisville	61	-3	0	-.9	OHIO, Toledo	56	-1	0	-.8					

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 SRS State offices in cooperation with the National Weather Service.

ALABAMA: Mild and dry. Temperatures 3° below normal. No rain.

Soil moisture short. Serious shortages south-east. Fieldwork: 6 days suitable. Cotton fair to good; 96% planted, 93% 1976, 89% average. Corn fair to good; 89% planted, 89% 1976, 81% average. Soybeans 31% planted, 24% 1976, 23% average. Peanuts 74% planted, 86% 1976, 86% average. Planting delayed by dry soils. Wheat 61% turning color, 41% 1976. Pastures fair.

ALASKA: Tanana Valley cooler than normal and precipitation greater than normal. Matanuska Valley temperatures 2 to 4° below normal. Precipitation below normal. Kenai Peninsula temperatures near normal. Precipitation near 0.20 in. below normal. Kodiak Island temperatures near normal. Wet, but below normal rainfall.

Fertilizing, ground preparation, seeding became general. Fieldwork on schedule. Oat and barley seeding ranged up to 20% complete. Soil moisture adequate or better. Livestock in good condition.

ARIZONA: Temperatures 3 to 12° below normal. Showers; central mountains, northern areas received 0.33 in. or more.

Weather conditions near ideal until rain late week. Cotton growing well, planting virtually complete. Early planted small grains reached maturity, harvest underway. Sorghum activity increasing, planting 60% complete central, western. Sugarbeet harvest full swing central, west. Alfalfa hay 2d cutting nearly complete central, west. Lettuce harvest winding down. Potato, dry onion harvest. Cantaloups, watermelons satisfactory progress. Valencia oranges, grapefruit picking. Harvest peaches underway central. Little relief from drought. Conditions vary; very poor deserts, marginally good higher elevations. Cattle fair to good.

ARKANSAS: Temperatures to 5° below normal. Extremes: 92 and 36°. Precipitation on 9th.

Soil moisture short to mostly adequate. Fieldwork: 6 days available. Soybeans 31% planted, 21% 1976, average 15%. Rain needed for additional planting. Shortage of seed reported. Cotton planting 90% complete, 86% last year, average 75%. Acceptable stand 73% of acreage. Rice seeding 95% complete, 94% year ago, average 89%. Corn planting nearing completion. Sorghum planting 91% complete, 77% 1976. Greenbug damage widespread. Wheat and oats good condition. Pastures providing adequate feed.

CALIFORNIA: Much below normal temperatures and considerable precipitation. Temperatures over 12° below normal southeast interior to 6° below normal along coast. Well over 1.00 in. precipitation fell at most mountain stations.

Small grain various stages maturity. Some grain hay in windrows damaged by rain. Rice planting continues, early fields emerged. Safflower responding to rain. Digging overwintered sugarbeets San Joaquin Valley, new crop beets Imperial Valley. Cotton growth slowed by cool weather. Irrigation continues where water available. Thinning apples, nectarines, peaches, plums. Delicious apple set spotty. Rains delayed avocado harvest. Cherry, lemon, orange harvests continue. Bing cherry harvest to begin this week. Peach harvest started

San Joaquin Valley. Prunes sizing well. Strawberry harvest hurt by rain; heavy diversion to processors. Lettuce also hard hit but decreased supply should increase depressed prices. Other crops harvested: Artichokes, broccoli, cauliflower, dry onions, sweet corn, carrots, and spring potatoes. Cool, cloudy, showers improving range-lands. Grasses, north, east slopes of foothills showed greening; grasses elsewhere too dry for rains to benefit. Ranchers hoping rains will germinate dormant seeds, start new growth. Rains aided stock water supplies, some areas had runoff. Sheep shearing continues.

COLORADO: Precipitation light and isolated. South-west and south received light to moderate amounts. Several high elevations received several inches snow weekend. Temperatures above normal; eastern plains 5 to 7°. Mountains and San Luis Valley 3 to 5°, and western valleys 5°.

Winter wheat good to fair condition; jointed 73% 1977, 62% 1976, 52% average. Soil moisture short. Spring seeding: Sugarbeets, 95% 1977, 96% 1976, 93% average. Summer potatoes 91% 1977, 90% 1976, 80% average. Corn 71% 1977, 71% 1976, 57% average. Alfalfa in fair condition. Range and pasture in fair condition; livestock in good condition.

FLORIDA: Showers and thundershowers brought moderately light rain to northern, central areas; heavy amounts south. Fair weather returned weekend. Temperatures averaged near to slightly below normal. Rainfall averaged from less than 0.10 to near 6.00 in.

Soil moisture very short central, north, mostly short Panhandle. Topsoil moisture south much improved, adequate many areas. Corn condition poor to fair; however very good where irrigated. Peanut, soybean planting delayed due to dry soils. Tobacco making slow progress. Small grain harvest underway. Peach and nectarine harvest active. Sugarcane good condition. Grazing lands continue fair to good western Panhandle and south. Eastern Panhandle, north pastures mostly poor to fair. Central pastures continue very poor. Cattle, calf condition varies poor to good. Supplemental feeding necessary some areas. Citrus groves need rain, irrigation continues around the clock where available. New growth slowed due to dryness. Valencia, grapefruit harvest slowing. Vegetable growing area condition partly cloudy with warm days, mild nights. Light to moderate scattered showers few areas. Heavy rains southern areas delayed harvest. Overall shipments increased 20%. Supplies potatoes, tomatoes, watermelons increased. Snap beans, celery, lettuce, and radishes decreased. Cabbage, carrots, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, peppers and squash held steady. Irrigation heavy. Watermelon crop good. Some areas in need or rain. Fruit sizing well. Quality very good. Harvest very active some areas.

GEORGIA: Temperatures 1 to 2° below normal ranging from mid-60's north to low 70's central and south. Freezing 9th over mountains. Rainfall averaged near 0.25 in. Warm and dry weekend.

Soil moisture short. Fieldwork: 6 days suitable. Dry soils beginning to take toll. Planting progress at standstill. Crop conditions continue to weaken. Tobacco transplanting almost

complete. Condition mostly fair to good. Corn 97% planted, last year 97%, average 89%; condition fair to good. Cotton mostly fair to good; 93% planted last year 93%, average 81%, 74% has acceptable stand, last year 68%, average 51%. Peanuts mostly fair to good, 86% planted, last year 93%, average 86%. Soybeans mostly fair to good, 23% planted, last year the same, average 20%. Watermelon condition mostly fair to good. Small grain condition fair to good. Peaches fair to mostly good; needs moisture for sizing, mid-state harvest began. Apples fair to mostly good. Continued dry weather and cool nights affecting quality of vegetables. Pastures fair. Cattle fair to good. Hogs good.

HAWAII: Heavy rains drenched parts of Hawaiian Chain.

Some damage to tender and leaf crops. Truck crop farm activities limited to harvesting. Sugarcane harvest temporarily halted Kauai. Vegetable supplies light. Pineapples steady. Sugar production down. Pastures fair to good.

IDAHO: Precipitation general. Temperatures near to slightly above normal. Extremes: 28 and 80°.

Fieldwork slowed by storms. Planting and irrigating most active. Thinning sugarbeets beginning. Spring wheat, barley, oats and sugarbeets 80% emerged. Potatoes 60% planted, 20% emerged. Dry beans, 5% planted.

ILLINOIS: Temperatures 2 to 5° above normal north, 1 to 2° below normal south. Precipitation very light; many areas none. Scattered thunderstorms north.

Corn 93% planted, 85% 1976, 70% average; mostly good. Soybeans 33% planted, 37% 1976, 23% average. Winter wheat 80% headed, 83% 1976, 67% average; 25% filled, 31% 1976, 21% average; mostly good. Oats mostly good. First crop alfalfa hay 15% cut, 2% 1976, 1% average; alfalfa and red clover hay mostly good. Pasture mostly good. Soil moisture short to adequate. Fieldwork: 4.5 days suitable.

INDIANA: No rain. Temperatures ranged from 28 to 89°. Evaporation rates high. Humidity high over weekend.

Fieldwork: 5 days suitable. Soil moisture mostly adequate. Pastures mostly good. Wheat fair to mostly good. Land for spring planted crops 95% plowed, 1976 100%, average 95%. Corn 65% planted, 1976 85%, average 45%; 40% emerged, 1976 50%. Soybeans 15% planted, 1976 30%. Wheat 20 in. high, 1976 20 in.; 35% headed, 1976 50%, average 20%. Sorghum 40% seeded, 1976 20%. Alfalfa 15% cut once, 1976 5%, average 5%.

IOWA: Warm and dry. Scattered light weekend showers. Excellent weather for fieldwork: 6.5 days suitable. Soil moisture deteriorated; topsoil short to adequate, subsoil short. Corn planting: 95% complete, 89% last year, average 60%; acreage 59% emerged. Soybeans 46% seeded, last year 35%, average 10%. Insect damage included cutworm, alfalfa weevil, and spittle bug damage. First cutting alfalfa. Corn, oats, and clover hay mostly good. Wheat and pastures good to fair. Alfalfa mostly good to excellent. Livestock moving well.

KANSAS: Rainfall from 0.10 in. northeast to nearly 0.50 in. central. Temperatures 66 to 67° or from 2 to 4° above normal east and south to 9° above normal west.

Wheat 95% jointed compared to 100% last year and 95% average; 60% of wheat had reached heading

stage compared with 55% last year and 40% average. Corn planting 60% completed compared with 55% last year and average. Sorghum 15% completed compared with 5% last year, 10% averaged. Soybeans 10% planted compared with 5% last year and average. First cutting alfalfa 20% completed compared with 5% last year and 10% average.

KENTUCKY: Temperatures slightly below normal averaging upper 50's to low 60's. No precipitation.

Fieldwork: 5 day favorable. Soil moisture adequate. Corn planting 66% completed, 85% last year, 59% average. About 50% planted acreage emerged. Soybean seeding underway: 12% completed, 16% 1976 and 11% average. Tobacco beds generally excellent condition, except limited damage anthracnose and cutworms. About 4% burley set, 3% last year; ground preparation active. Much alfalfa and grass hay cut under favorable conditions; near 15% first cutting alfalfa completed. Pastures excellent. Strawberry picking underway.

LOUISIANA: Temperatures normal to 2° below. Extremes: 46 and 90°. Scattered showers.

Fieldwork: 5.3 days suitable. Main activities: Planting, cultivation, application of fertilizer and pesticides, and haying. Rice 94% planted, same as last year, 86% average. Cotton 90% planted, 73% last year, 53 average. Soybeans 31% planted, 18% last year, 15% average. Sorghum 57% planted, 50% last year, 32% average. Corn 95% up to stand, good condition. Sweetpotato transplanting 34% complete, 26% last year, 33% average. Irish potatoes yielding well. Peach harvest beginning; prospects good. Haying becoming general. Pastures and cattle condition good.

MARYLAND & DELAWARE: Temperatures 4 to 6° below normal. Highs mid-80's, low 30's to 40's. Precipitation light. Weekend sunny and nice.

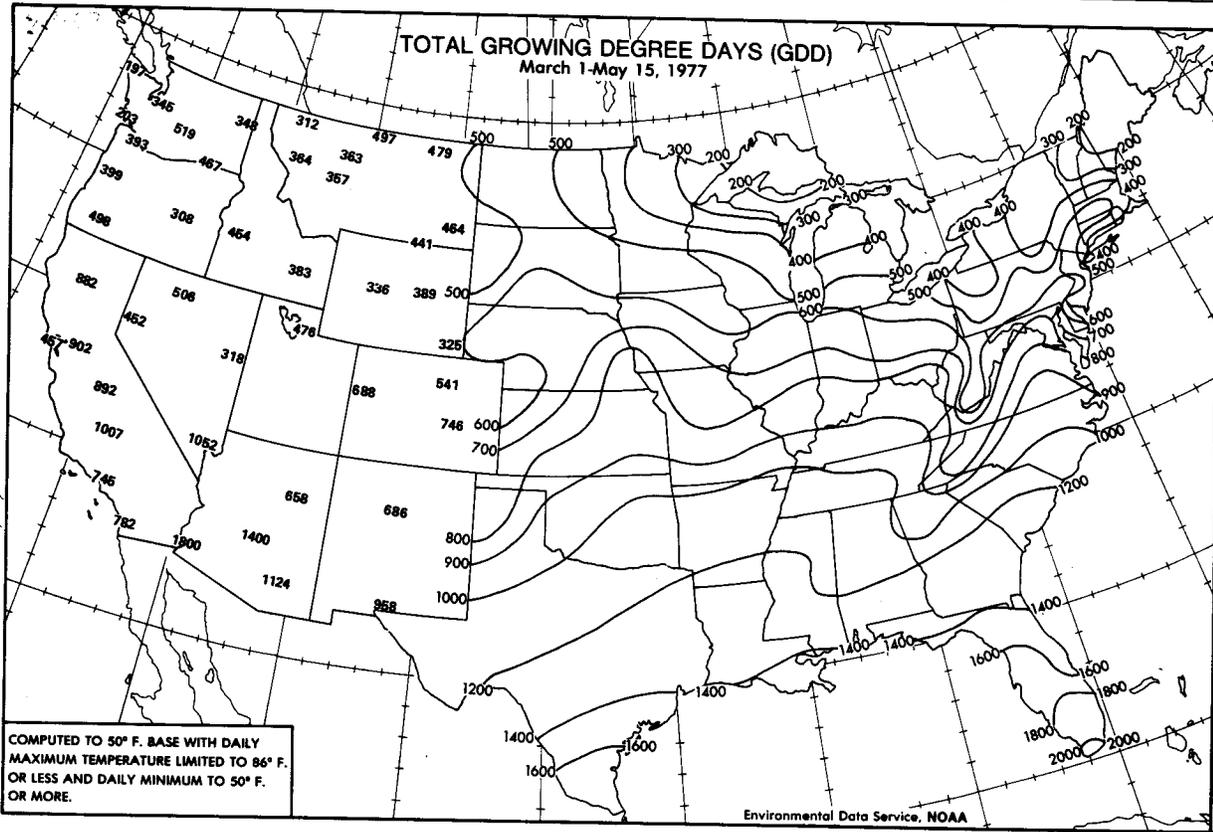
Soil moisture supplies adequate. Pastures supplying average amounts of feed. Corn planting 85%, 1976 85%, average 56%. Good stands emerging. Small grains fair condition, 70 to 90% headed. First cutting alfalfa 25% complete. Vegetable crops also suffered sand and wind damage, some fields will be replanted. Tobacco transplanting active. Fruit growers mowing and caring for orchards; thinning operations started.

MICHIGAN: Temperatures ranged up to 5° above normal Lower and 3 to 10° above normal Upper. Precipitation totaled less than 0.10 in.

Soil moisture short. Fieldwork: 6 days suitable. Pasture feed supplies short except south. Intended acreage plowed 90%. Corn 70% planted, 32% last year, normal 28%. Oats 98% planted, 90% last year, 75% normal. Sugarbeets planting complete, 82% last year, 80% normal. Potatoes 65% planted, 45% last year, 35% normal. Soybeans 10% planted, 3% in 1976, less than 1% normal. Vegetable planting proceeding rapidly. Some damage to early vegetables from dry weather, frost and high winds.

MINNESOTA: Temperatures 20° above normal northwest, 8° above normal southeast. Extremes: 93 and 28°. Precipitation less than 0.25 in. except 0.25 to 0.75 in. central and east central and 0.65 to 1.00 in. extreme northwest and north central.

Hot, dry conditions reduced topsoil moisture to short, south adequate. Most early planted fields in good condition, some showing stress in drier areas. Planting made rapid progress. Small



grain seeding completed. Some southern alfalfa fields to be cut by end of month. Percent planted: Corn 89%, 1976 90%, normal 58%; soybeans 51%, 1976 49%, normal 19%; spring wheat 98%, 1976 99%, normal 65%; oats 97%, 1976 99%, normal 74%; barley 95%, 1976 94%, normal 55%; flax 75%, 1976 70%, normal 47%; potatoes 63%, 1976 67%, normal 36%; sunflowers 66%, 1976 62%.

MISSISSIPPI: Temperatures 2° subnormal. Extremes: 36 and 93°.

Soil moisture adequate to short. Fieldwork: 5.4 days suitable. Soybeans 34% planted, 22% 1976, 13% average; 14% up to stand, 6% 1976. Cotton 94% planted, 88% 1976, 70% average; 76% up to stand, 48% 1976, 41% average. Rice 89% planted, 88% 1976, 68% average; 71% up to stand, 54% average. Corn 90% planted, 89% 1976, 67% average; 75% up to stand, 72% 1976. Wheat 8% ripe, 17% 1976. Oats 13% ripe, 23% 1976. Sorghums 32% planted, 35% 1976, 25% average. Sweetpotatoes 52% planted, 26% 1976, 29% average. Peanuts 60% planted, 63% 1976. Crops in good to fair condition.

MISSOURI: Temperatures 1 to 3° below normal. Scattered frost 10th and 11th in north. Precipitation light averaging 0.50 to 1.00 in. except Bootheel where no rain.

Fieldwork: 4.6 days suitable. Corn: 91% planted, 77% 1976, 58% normal. Soybeans: 31% planted; 21% 1976; 13% normal. Sorghum: 46% planted; 25% 1976; 22% normal. Cotton: 91% planted; 97% 1976; 65% normal. Wheat: 89% headed; 87% 1976; 52% normal. Wheat condition fair to good. Pasture condition fair to good. Soil moisture short to adequate.

MONTANA: Warm. Frequent thunderstorms beginning period. Major spring storm brought significant precipitation east of Divide weekend.

Weekend rains brought crop relief. Moisture reserves still short. Winter wheat mostly fair prior to rains. Parts of north central deteriorated to poor. About 5% now in boot. Spring grains mostly fair except drier areas where condition poor. Range grass growth slow. About 40% cattle and sheep on supplemental feed. Stock water shortages common. Nearly 40% all livestock moved to summer pastures.

NEBRASKA: Temperatures 6 to 10° above normal. Spotty rainfall with 0.10 to 1.17 in.

Fieldwork made rapid progress except where slowed temporarily by showers. Good conditions for seed germination. Topsoil moisture supplies adequate. Subsoil moisture supply short to adequate. Winter wheat mostly fair condition. Corn planting 75% completed compared to 70% 1976, 50% average. Grain sorghum planting 25% complete compared to 15% 1976 and normal 10%. Soybeans 20% planted compared to 10% 1976 and normal. Cattle moving to spring pasture.

NEVADA: Rain and snow. South Central received 1.00 in., northwest 0.70 in., northeast and extreme south nearly 0.50 in. Several inches snow fell in Sierra. Temperatures 5 to 10° below normal. Extremes: 25 and 82°.

Farming activities slowed by cold damp weather. Winter and spring grain crops also slow in developing. Sheep shearing continues. Calving almost finished.

NEW ENGLAND: Severe storm 9th; gale winds, 1.00 to 3.00 in. Leavy rains and 6 to 12 in. snow to

southern New England. Northern New England missed brunt of storm receiving only small amounts of rain. Temperatures 9th and 10th 15 to 25° below normal; coldest over south.

Minimal damage reported to fruits, vegetables, and other crops due to wind, cold and snow. Season still several days ahead of normal.

NEW JERSEY: Dry with temperatures 5° below normal. Extremes: 30 and 84°. Rainfall averaged 0.17 in. north, 0.16 in. central and 0.04 in. south. Soil moisture in percent of field capacity 57 north and central, and 63 south. Soil temperature averaged 88° north, 73° central and 61° south. Rain, sleet and snow 9th. North up to 4 in. snow. Frost on 11th, 12th, 15th and 16th in central and north.

Topsoil moisture becoming short. Cool nights slowed crop development. Vegetable planting continues. Early plantings up but growth slow. Asparagus, lettuce, spring spinach, radishes and "greens" harvested. Apple and peach prospects questionable. Strawberry harvest began south. Wheat beginning to head. Barley in head but small and straw short. Field corn planting well advanced. Soybean planting began.

NEW MEXICO: Substantial rains except southwest 11th to 14th. Very cold some western sections 10th freezing temperatures higher elevations. Unseasonably cool weekend.

Dryland wheat fair. Irrigated wheat, durum wheat, alfalfa, barley, lettuce, onions, fair to good. First cutting alfalfa underway. Spring lettuce harvest active. Cotton, corn, grain sorghum planting active. Ranges, livestock, fair to good.

NEW YORK: Temperatures 40's to 50's, 2 to 9° below normal. Snowstorm on 9th left up to 13 in. in Catskills. Precipitation averaged below normal.

Mediocre for fieldwork. Oat planting 70% done. Corn planting 20% complete. Cool weather slowing growth. Onion seeding nearly complete. Potato planting nearly complete. Planting of other vegetable crops progressing. Poor pollinating conditions Hudson Valley; apple prospects variable. Western apple prospects fair to good. Peach and tart cherry prospects good. Sweet cherry prospects poor to fair due to cold injury.

NORTH CAROLINA: Cool, dry weather. Temperatures about 5° below normal, dipping into the upper 20's mountains to low 40's coast. Low scattered showers east.

Fieldwork: 5.7 days suitable. Soil moisture short to adequate. Farm activities: Planting field crops and transplanting tobacco and sweet-potatoes. Crop conditions: Wheat, oats, barley, tobacco in fields, and cotton mostly fair to good; corn, pastures, and Irish potatoes fair to good; and tobacco plant beds and peaches fair to mostly good. Planting: Corn 96% completed, 1976 92%, average 84%; cotton 91%, 1976 90%, average 84%; peanuts 76%, 1976 61%, average 58%; soybeans 37%, 1976 24%, average 22%; sorghum grain 43%, 1976 37%. Flue-cured tobacco transplanting 89% complete, 1976 80%, average 70%; burley 10%, 1976 13%. Sweet-potatoes 22% transplanted, 1976 23%.

NORTH DAKOTA: Temperatures 15 to 22° above normal. Extremes: 32 and 95°. West central received nearly 0.50 in. precipitation; other areas spotty and scarce.

Seeding hard red spring wheat 95% complete, last year 88%, average 57%. Durum, oats, barley

also nearing completion. Flax seeding 60% complete. Sugarbeets virtually complete; other row crops satisfactory progress. Livestock fair to good condition.

OHIO: Temperature near or slightly below normal. Light frost 9th and 11th. Extremes: 30 and 86°.

Fieldwork: over 5 days favorable. Soil moisture adequate. Planting completed: Corn 65%, 85% 1976 and 55% normal; some replanting due to cold wet weather, wet fields and soil crusting. Soybeans 25%, 35% 1976, 20% normal. Potatoes 75%, 80% 1976, 60% normal; some replanting. Barley less than 5% headed, 15% 1976, 5% normal. Barley 10% headed. Oats 82% emerged, 100% last year. Corn beginning to emerge, slowed by cool temperatures. Condition of wheat, oats, pasture, hay very good. Sugarbeets fair to good. Limited alfalfa being cut; some weevil infestation. Corn and hay spraying active.

OKLAHOMA: Temperatures 4° below normal southeast to 2° above normal Panhandle. Most areas received some rainfall ranging from trace in east central and 0.04 in. northeast to 1.43 in. south central.

Topsoil and subsoil moisture adequate. Wheat good condition. Growing conditions excellent. Harvest may begin in two weeks. Oats good condition. Barley good condition. Corn rated good; 84% planted, normal 62% and 1976 77%. Sorghum good condition; 19% planted, normal 10% and 1976 21%. Cotton planting slowed by wet fields; 12% seeded, 19% normal, and 1976 5%. Peanuts 9% planted, average 6%, last year 3%. Soybeans 14% seeded, normal 9%, 1976 11%; outlook good. Pasture and range condition good. Cattle good condition and making weight gains.

OREGON: Temperatures 5° below normal. Extremes: 70's, 30's, west; 70's, 20's, east. Precipitation along coast ranged 0.16 to 0.18 in; 0.06 to 0.64 in. Willamette Valley, 0.40 to nearly 2.00 in. east.

Soil moisture adequate in west, poor to fair east. Fall grains in good condition, west; poor to fair condition east. First cutting hay underway. Cherry sets fair to good; cover sprays being applied. Strawberries near full bloom. Vegetable plantings delayed by rain. Warm weather needed to spread harvesting dates of processing vegetables. Onion development good. Potato development at various stages. Range and livestock in good shape west. Spring lambs moving to market. Eastern low elevation pastures and range in poor to fair condition. Higher rangeland in fair to good condition. Livestock in poor to fair shape. Feed and water supplies low in some areas.

PENNSYLVANIA: Temperatures 2 to 8° below normal. Extremes: 83 and 23°. Light showers less than 0.10 in. extreme northeast, elsewhere 0.25 in.

Fieldwork: 5 days suitable. Moisture mostly adequate. Activities: Plowing; filling silos; soil preparation for planting; spraying orchards and hay fields; planting oats, corn, potatoes, soybeans and vegetables. Plowing 86%, last year 93%. Planting: oats 93%, last year 96%; potatoes 67%, last year 76%; corn 41%, last year 49%; soybeans 12%. Barley 40% boot, 23% headed, last year 31% headed. Wheat 35% boot, last year 45%. Hay condition mostly good. Pastures providing average amount of feed. Strawberries and green peas in or past bloom. Asparagus harvest in adequate volume.

PUERTO RICO: Island average rainfall 0.07 in. or 1.47 in. below normal. Temperatures about 80° on coasts and 74° interior. Extremes: 95 and 55°.

Above normal temperatures and practically no rainfall intensified drought conditions. Many rivers and streams reached record low flows. High temperatures increased evaporation rates and in many areas additional wells drilled. Cattle industry in serious condition and general crop production decreased significantly.

SOUTH CAROLINA: Temperatures near normal except cooler than normal first part week. Some scattered frosts west 10th. Extremes: 31 and 93°. About 99% tobacco transplanting complete. Corn, cotton, watermelon planting about complete. Soybean planting making some progress; delayed due to dry weather. Peanut planting virtually complete. Small grains in fair condition, drying rapidly. Other activities: Harvesting cabbage, cucumbers, squash; staking, tying, pruning tomatoes; thinning, spraying peaches. Corn planted: 99% 1977, 99% 1976, 94% average. Cotton planted: 97% 1977, 92% 1976, 87% average. Soybeans planted: 18% 1977, 15% 1976, 16% average.

SOUTH DAKOTA: Precipitation up to 1.50 in. west, to 0.05 in. east. Afternoon temperatures in 70's and 80's. Extremes: 36 and 91°.

Strong winds depleted topsoil moisture, caused some damage to grain. Topsoil moisture short except south central where adequate. Subsoil moisture short, critical except south central where adequate. Row crop plantings ahead of normal. Percent planted: Corn 63%, 1976 55%, normal 43%; soybeans 28%, 1976 17%, normal 12%; sorghum 9%, 1976 8%, normal 5%. Weeds causing serious problems in small grain; spraying in full swing. In or beyond boot stage: Rye 27%, 1976 35%, normal 7%; winter wheat 10%, 1976 27%, normal 7%. Pasture growth fair, most cattle moved to pasture. Alfalfa harvest to begin soon in southeast.

TENNESSEE: Precipitation averaged 0.50 in. Temperatures 5° below normal.

Soil moisture adequate. Some light frost. Livestock, pastures, small grain condition good. Plowing 90% complete. Alfalfa hay 50% harvested. Tobacco 25% transplanted, 30% last year, 15% normal. Corn 85% planted, 85% last year, 70% normal. Cotton 90% planted, 90% last year, 65% normal. Soybeans 30% planted, 25% last year, 15% normal. Wheat 95% headed, 95% last year, 90% normal. Oats 90% headed, 90% last year, 80% normal. Barley 100% headed, 95% last year, 90% normal.

TEXAS: Above normal rainfall over west, elsewhere, rainfall below normal. Rainfall 0.25 to 0.50 in. above normal west; 0.50 to 0.75 in. below normal east and south. Temperatures near normal.

Planting progressed slowly, delayed by scattered showers. Soybean planting began Upper Gulf Coast, Blacklands, northeast. Cotton planting slowed by showers. Early stands emerging northern High Plains. Heavy rains caused some damage new plantings southern High Plains. Some farmers running rotary hoes to enhance emergence. Cotton elsewhere progressing well. Insect activity building but still light to medium. Corn planting nearing completion. Early planted corn northern High Plains emerging; most fields up to good stands. Corn elsewhere making good growth. Early stands beginning to tassel south central southward. Wheat headed out, good progress most areas. Some dryland wheat northern High Plains showing stress where moisture very short. Early fields beginning to turn color. Limited harvesting underway south. Rice beginning good growth with warm weather. Fields tillering, some growers holding water on few fields. Planting near completion. Peanut planting little progress. Peanuts blooming,

pegging south; beginning to sprout, south central. Cotton planted: 32% 1977, 40% 1976, 45% average. Corn planted: 95% 1977, 98% 1976, 94% average. Sorghum planted: 66% 1977, 66% 1976, 66% average. Peanuts planted: 24% 1977, 17% 1976, 27% average. Rice planted: 99% 1977, 98% 1976, 97% average. Soybeans planted: 7% 1977, 6% 1976, 8% average. Oats harvested: 3% 1977, 0% 1976, 4% average. Flax harvested: 2% 1977, 7% 1976, 59% average.

Harvesting peppers, carrots, onions, cabbage, squash, cucumbers, potatoes. Rains delayed picking some areas. Citrus harvest near completion. Tomato, watermelon harvest will soon begin. Peach harvest active in south central with few early varieties picked in east. Cattle in good condition making good weight gains. Pastures and ranges average to excellent condition except few dry areas Trans-Pecos and northern High Plains.

UTAH: Few scattered showers and thunderstorms forepart of period with quite general precipitation weekend. Amounts ranged from light to moderate most localities. Temperatures ranged from near normal to 7° below.

Precipitation very beneficial to dryland crops and ranges to initiate growth but much more needed to continue development during coming summer season. Some light freezing temperatures scattered areas. Alfalfa hay condition fair to good, average height 8 in. Field and sweet corn 70 to 80% planted; potatoes and tomatoes 50 to 65% planted. Spring planted small grains and sugarbeets 85 to 90% emerged. Spring calving virtually completed, range lambing 60% completed. Cattle and sheep movement to spring ranges 75% completed.

VIRGINIA: Temperatures below normal. Scattered frost. Extremes: 91 and 23°. Moderate rainfall averaged 0.50 in. Strong damaging winds on 9th and 10th.

Topsoil moisture adequate to short. Fieldwork: 5.4 days suitable. Corn planting, hay cutting, land preparation main activities. Corn 83% planted, 80% in 1976, 63% average. Soybeans 16% planted, 19% in 1976, 11% average. Peanuts 49% seeded, 63% in 1976, 47% average. Small grain ensilage harvest and spraying active. Flue-cured tobacco 37% transplanted, 38% in 1976, 17% average. Frost damage to some plant beds. Fire-cured 19% planted, 10% in 1976, 6% average. Potatoes look good. Some vegetables need rain. Pasture good. First hay cuttings short. Some serious damage to corn by wind and sand.

WASHINGTON: West: Temperatures 2° below normal. Precipitation near normal.

Planting sweet corn, peas, corn silage and pastures on schedule. Early corn silage up. Fall and spring grains progressing. Livestock in good condition on pastures 10 days ahead of normal.

East: Temperatures 2 to 6° below normal. Precipitation near normal.

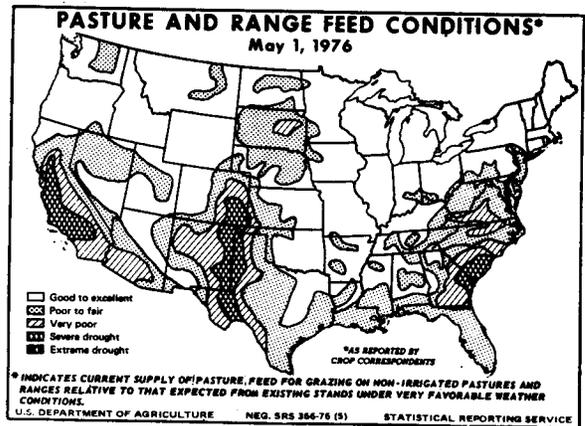
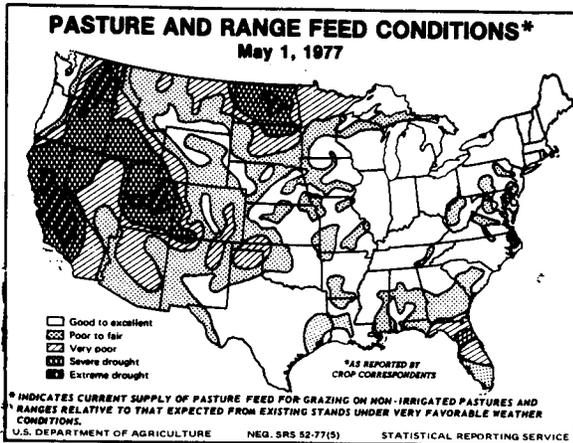
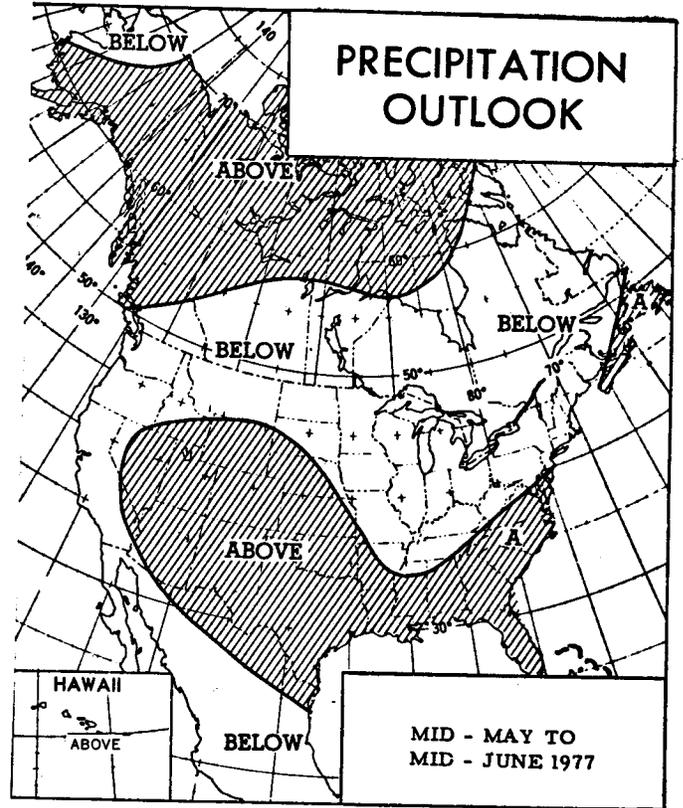
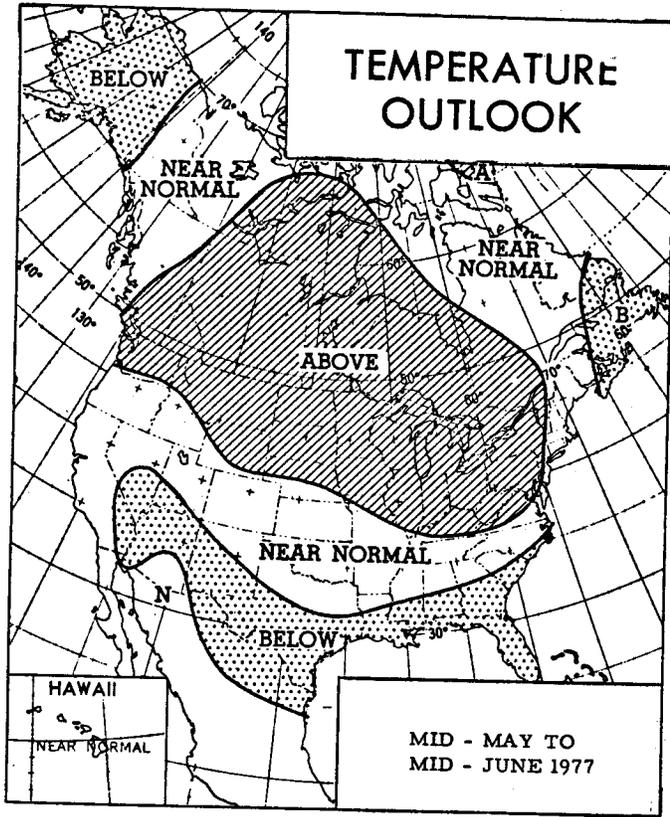
Planting corn, beans, potatoes. Early potatoes emerged and doing well. Alfalfa made good growth. Haying began. Post-bloom chemicals applied to orchards. Fall grains range from fair to good with reduced yields. Spring grains marginal and not responding to recent rains. Pastures dry. Culling herds to match grazing conditions.

WEST VIRGINIA: Temperatures below normal; highs upper 80's, lows low 20's. Precipitation below normal.

Fieldwork: 4.8 days suitable. Soil moisture adequate. Planting progress: Spring oats 95%,

(continued on page 19)

Average Monthly Weather Outlook



World Weather and Crop Update

USSR. Spring sowing, hampered by incessant rains in European USSR in the latter half of April, moved rapidly ahead under generally favorable conditions in most areas during the first half of May. By May 9, 79.6 million hectares of spring crops were planted, 52% of the plan, which was only slightly below the average seeding rate of recent years. Estimated soil moisture is good over most of the principal agricultural areas; there was a notable deficiency only in the southern Urals, an important spring wheat region. Widespread sowing of spring wheat was in progress in western and eastern Siberia and northern Kazakhstan; sowing conditions were favorable in most areas.

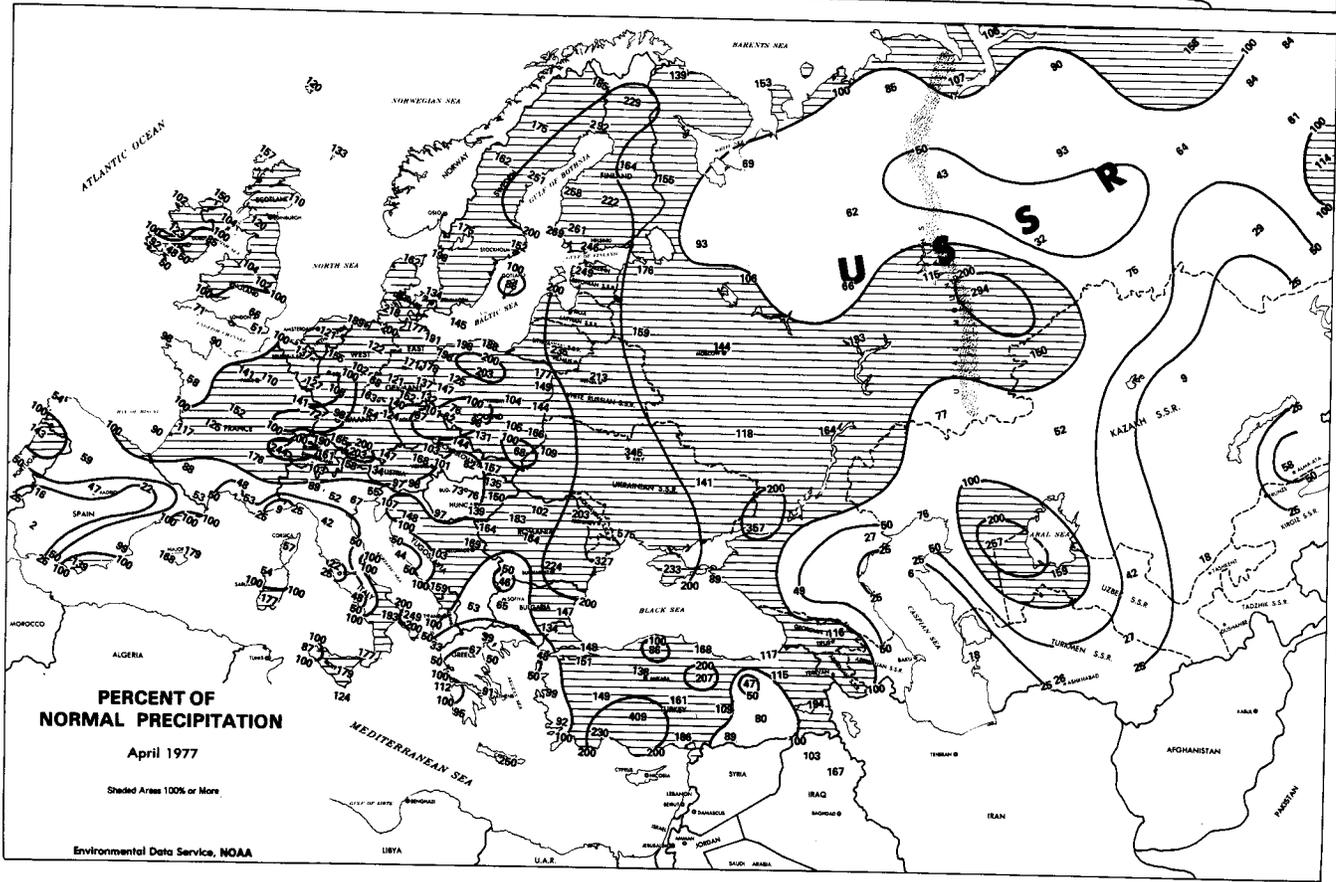
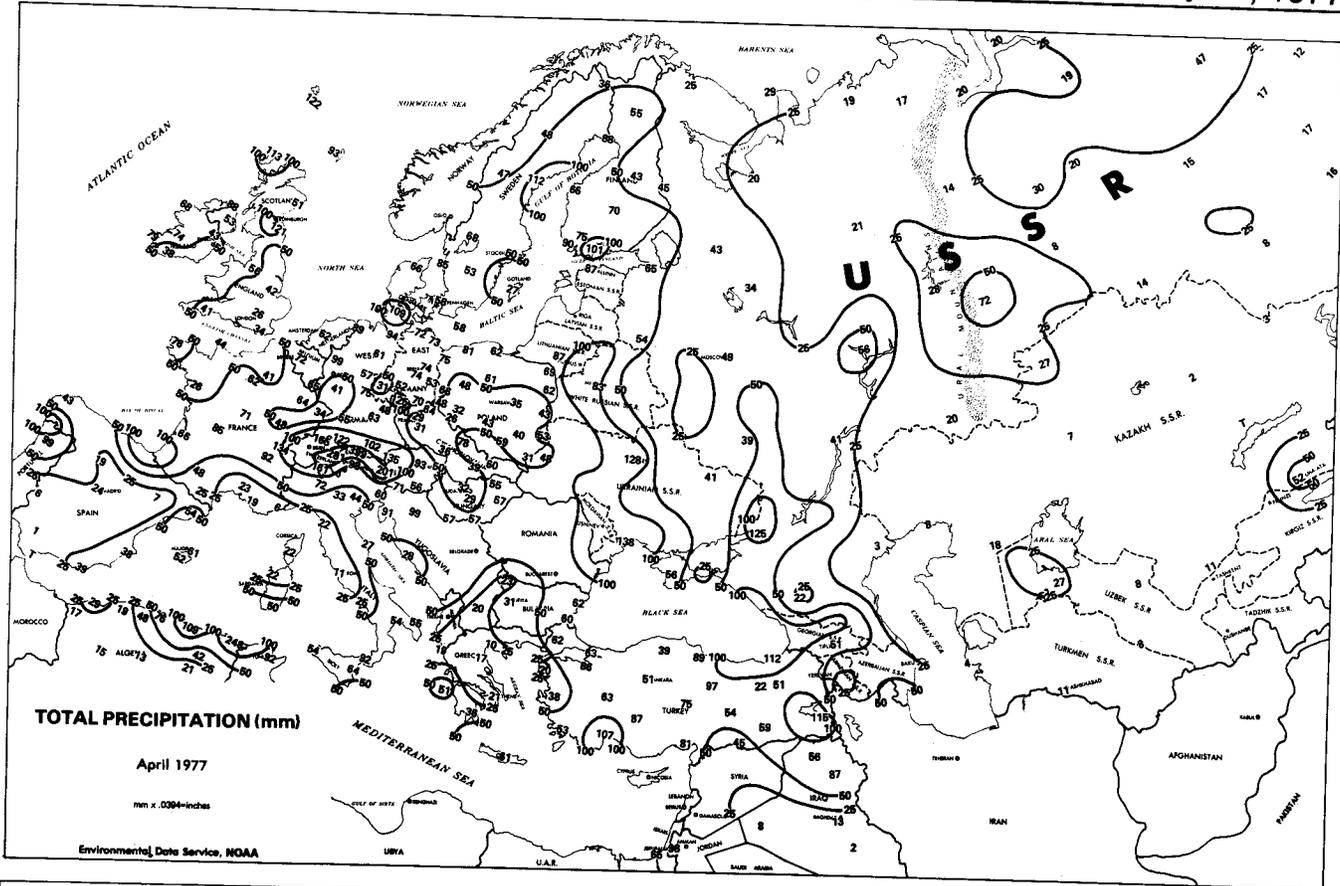
ASIA. Precipitation was generally above normal over many areas in the People's Republic of China in April. Heavy rains, excessive in places, fell over most major rice-producing provinces in central and southern China. Kwangtung Province, however, remained dry; transplanting of the early rice crops was delayed in places. Timely rains in mid-May improved the moisture situation in the main winter wheat belt in the north where unirrigated crops suffered from the moisture deficit. Rainfall was seasonally light in the northeast where planting of spring wheat neared completion. In India, the pre-monsoon moisture situation by mid-May was normal or better in 26 of 32 districts. Heavy showers again fell in the northeast and the southern third of the peninsula; lighter showers dampened the Ganges Plain. Earlier, unseasonally heavy rains in the wheat growing areas in the north damaged the wheat crop in some places. In Australia, timely rains covered most of the principal grain areas including southwestern Australia. Southern Australia, however, was dry. The recent rains helped germinate the newly-planted winter wheat crop.

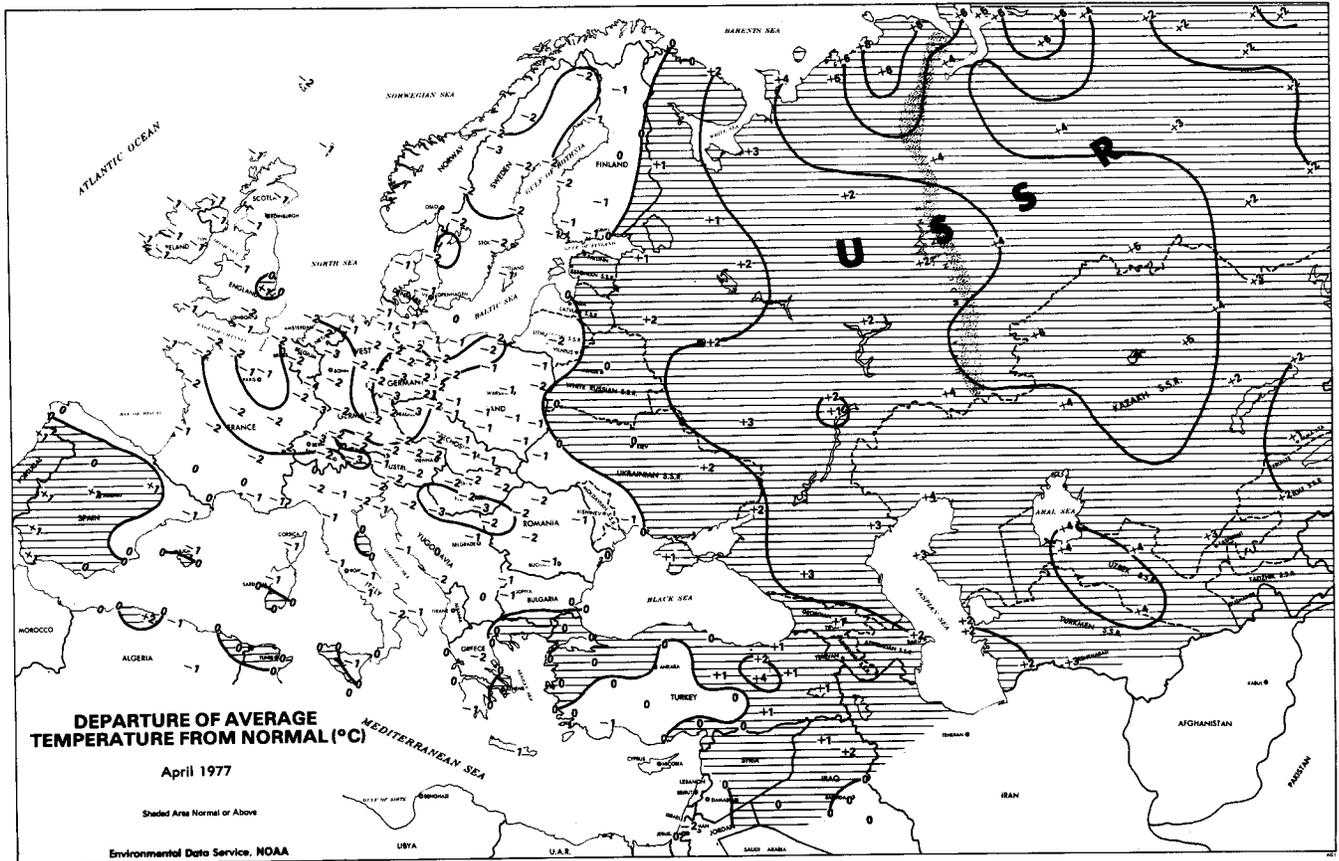
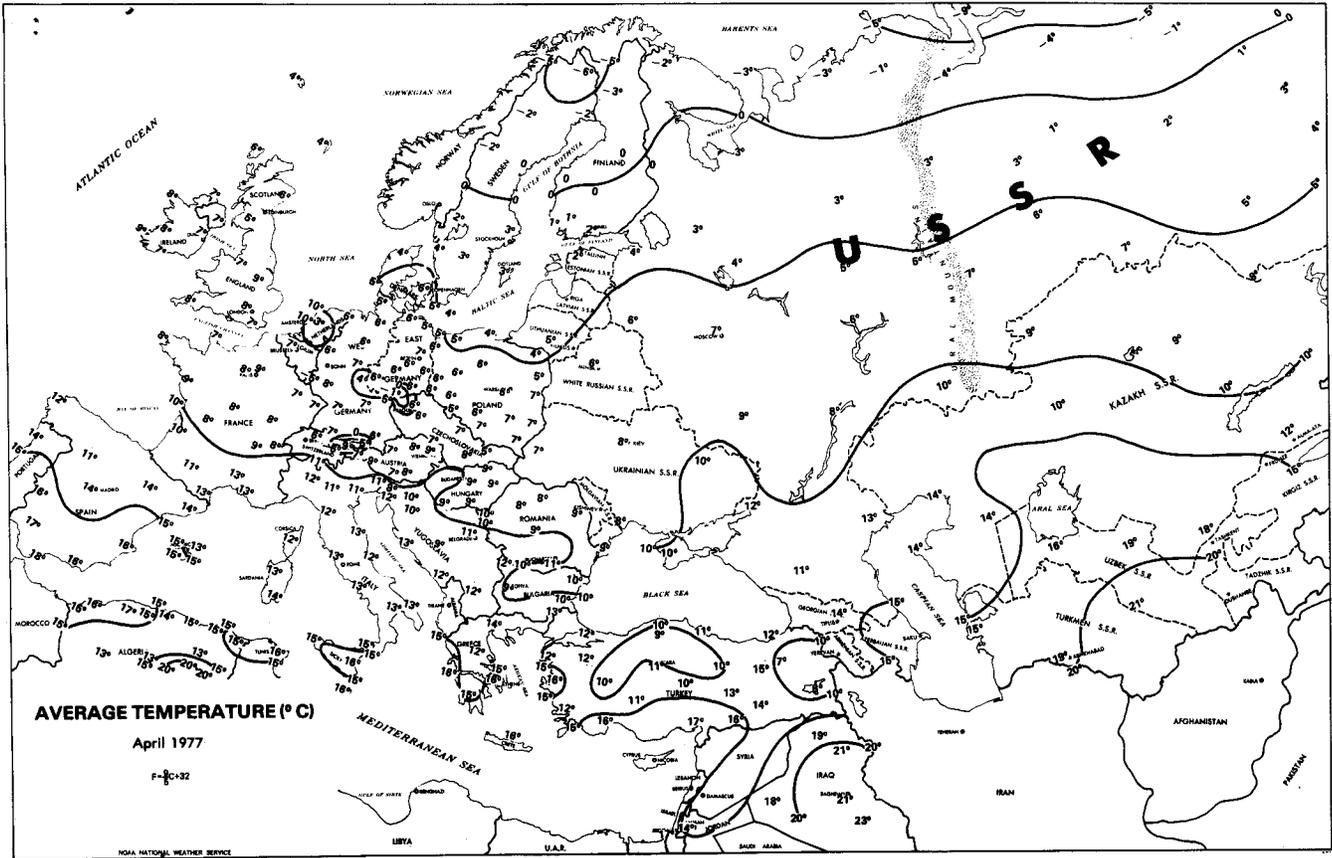
AFRICA. Corn harvesting in South Africa proceeded under generally favorable conditions. In North Africa, winter grains continued under considerable stress; scattered light showers in the past two weeks did not break the current dry spell.

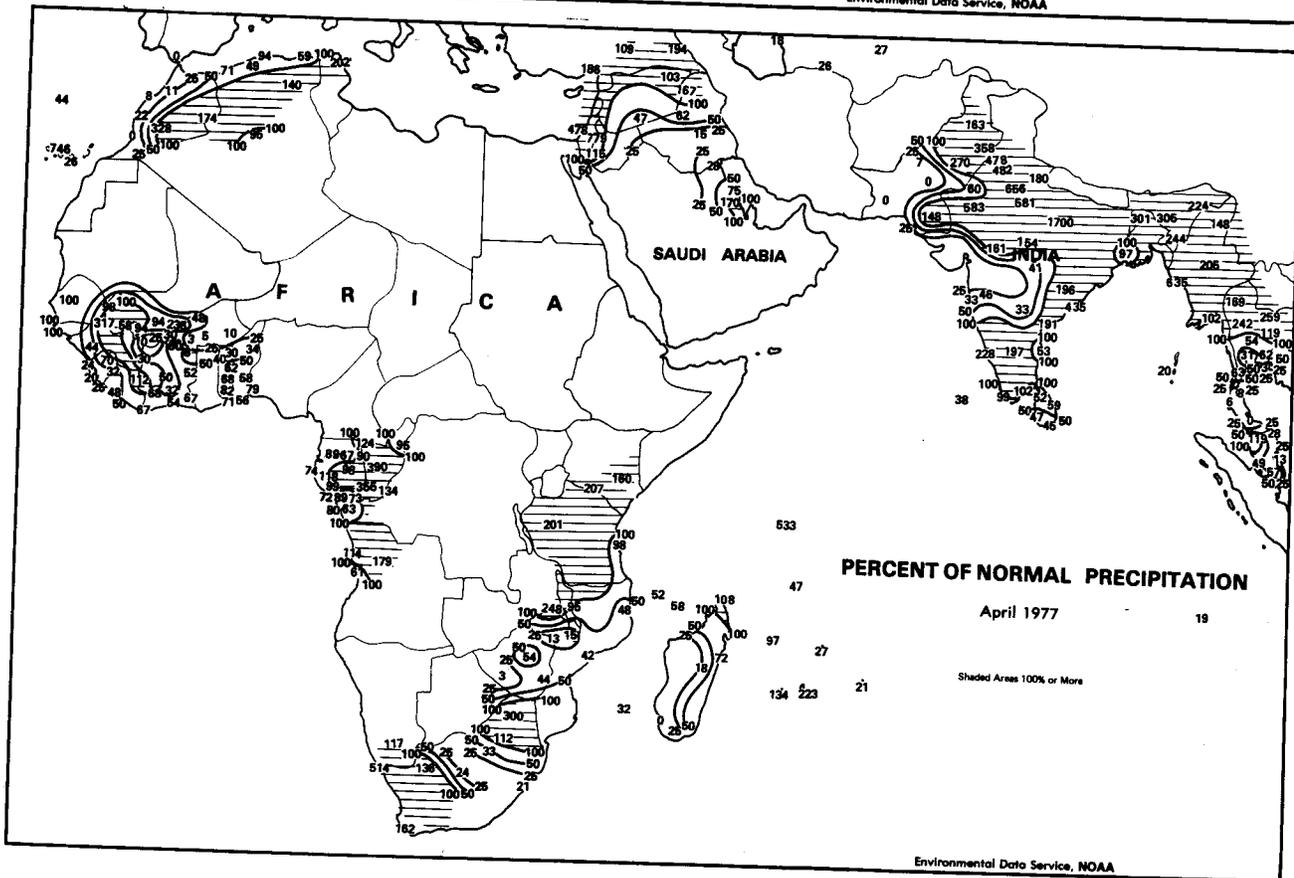
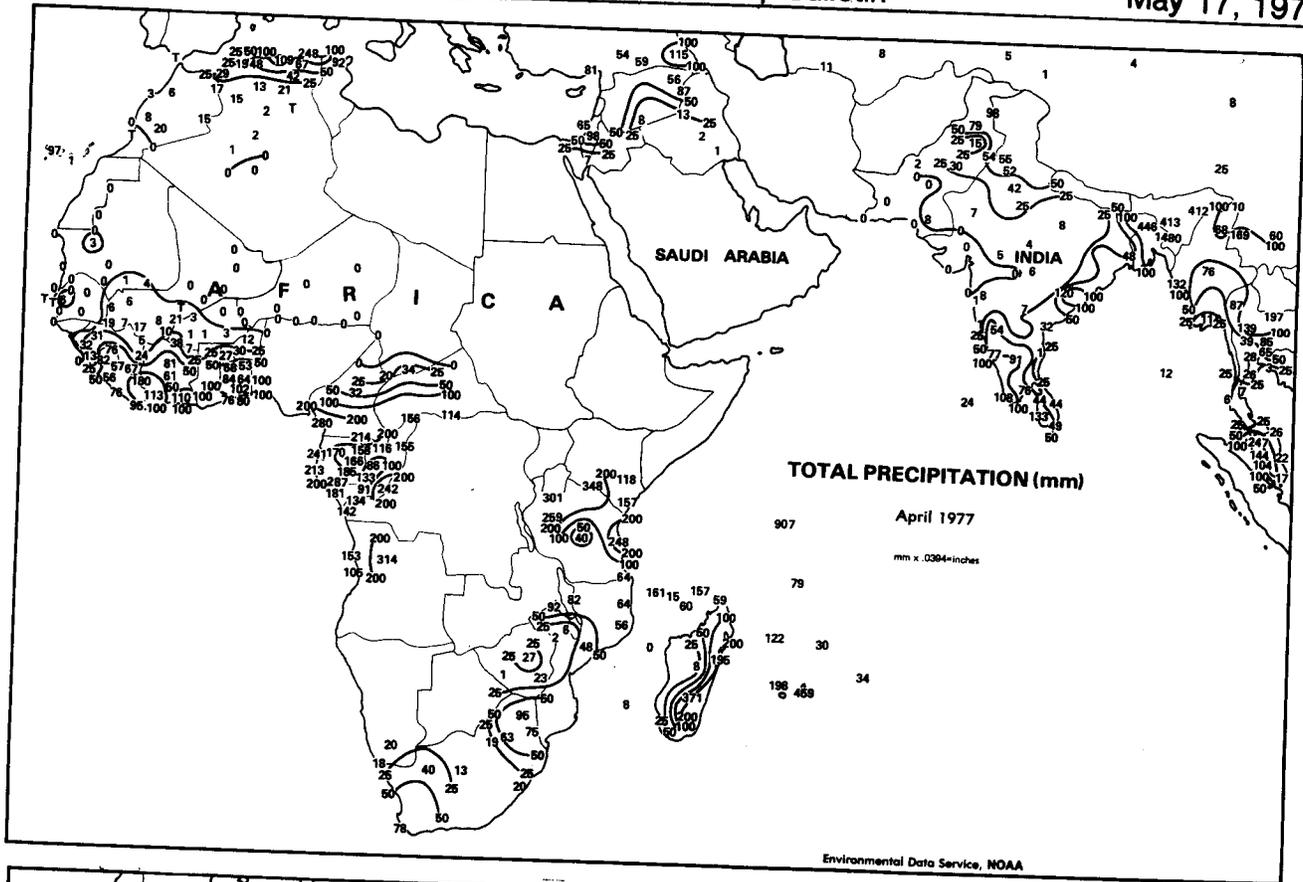
SOUTH AMERICA. Light to moderate showers fell during the past week in the southern states of Brazil, but the harvest was virtually completed. Showers also fell along the central and upper eastern coast region. In Argentina, the corn harvest preceded under generally favorable conditions. Night temperatures fell below freezing over the western Pampas.

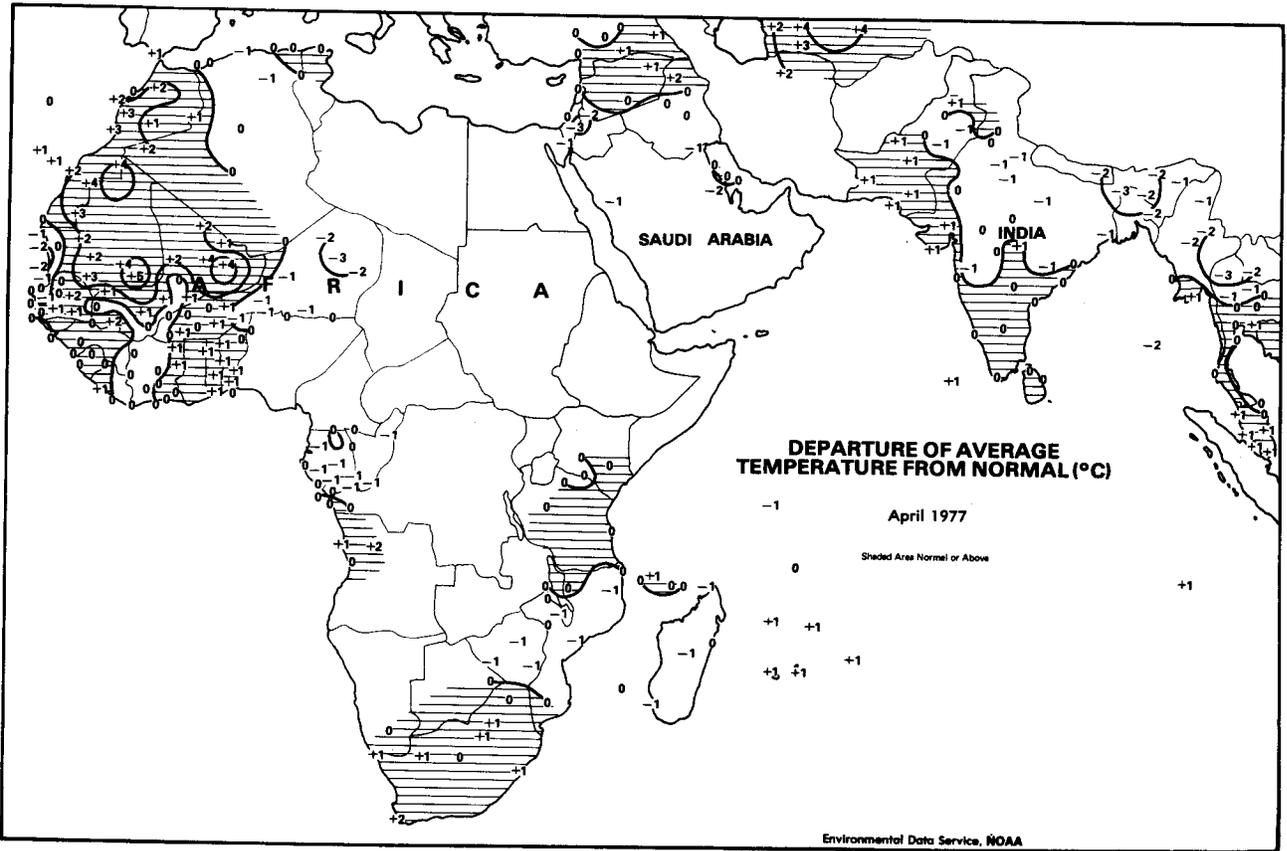
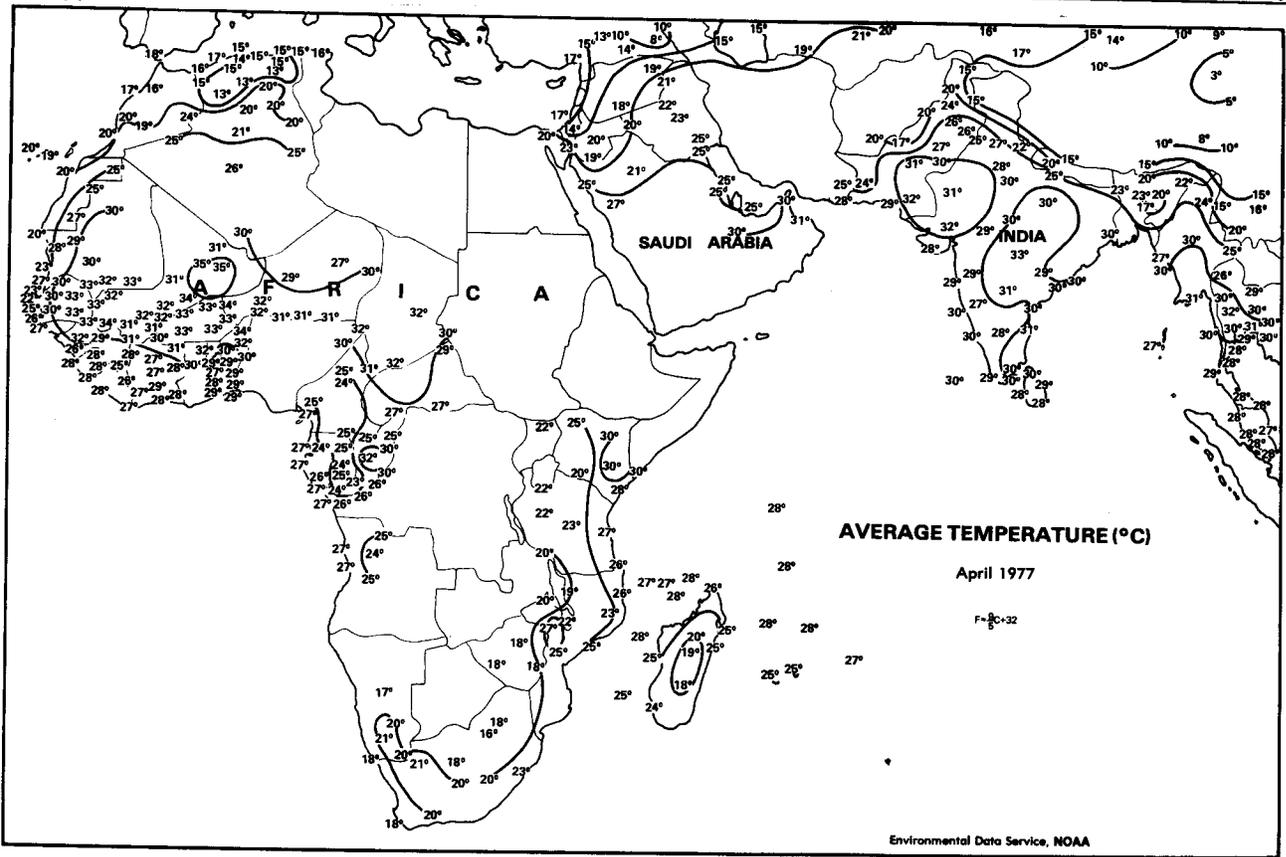
EUROPE. Cool, wet weather continued to hamper field operations over much of western Europe. Almost daily precipitation and lack of sunshine retarded development of winter grains and delayed spring sowing in some areas. Crop development in northern Italy was also adversely affected by excessive rainfall. However, it was essentially dry over most of Spain where inadequate moisture placed unirrigated crops under stress. Eastern Europe's estimated soil moisture is about normal except Bulgaria which was about 20% below normal at the end of April. Frequent rains, however, hampered fieldwork in East Germany and retarded development of winter grains in some places. Elsewhere in eastern Europe, winter grains were in generally good condition. There was no improvement in the moisture deficit in Greece. Crop prospects continue favorable in Turkey.

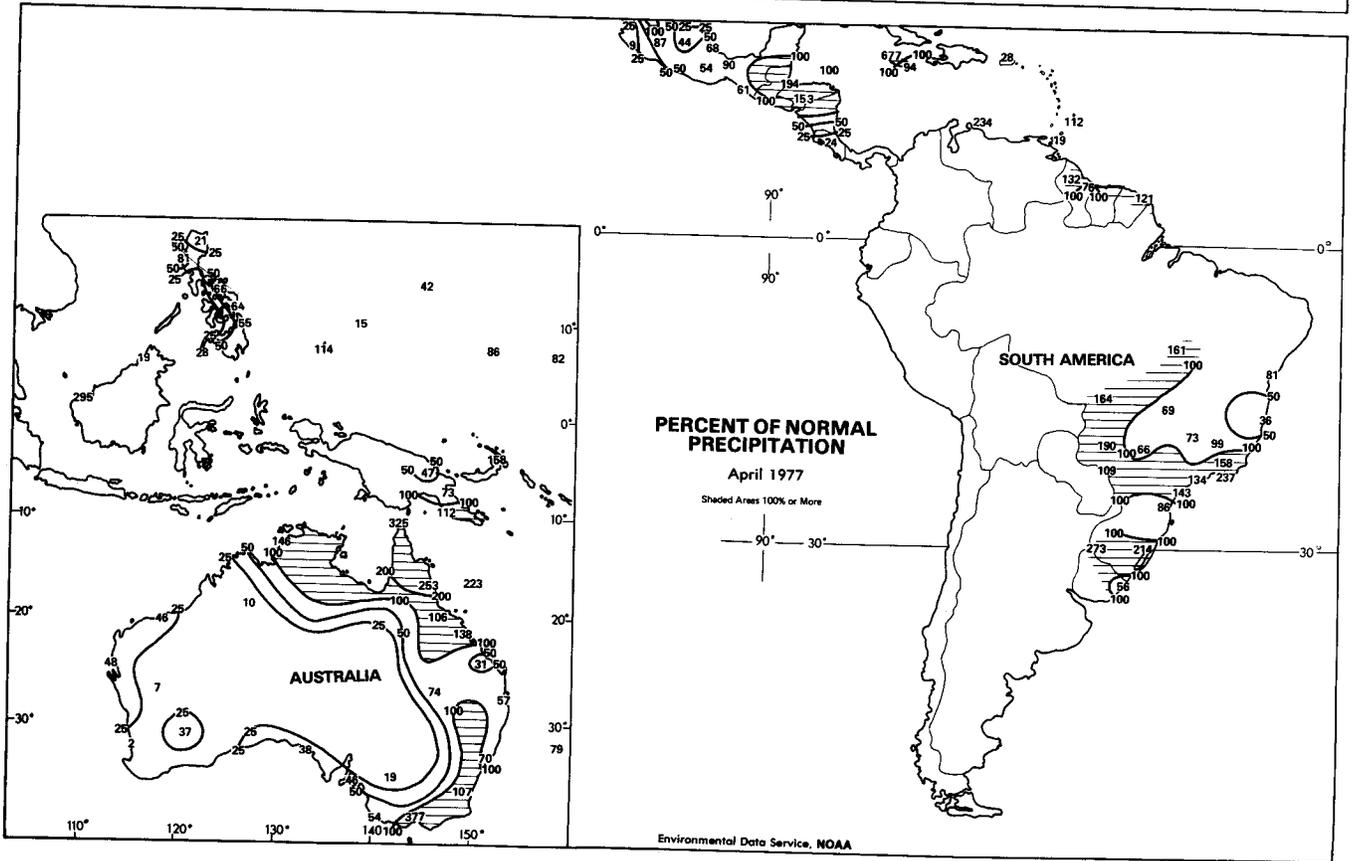
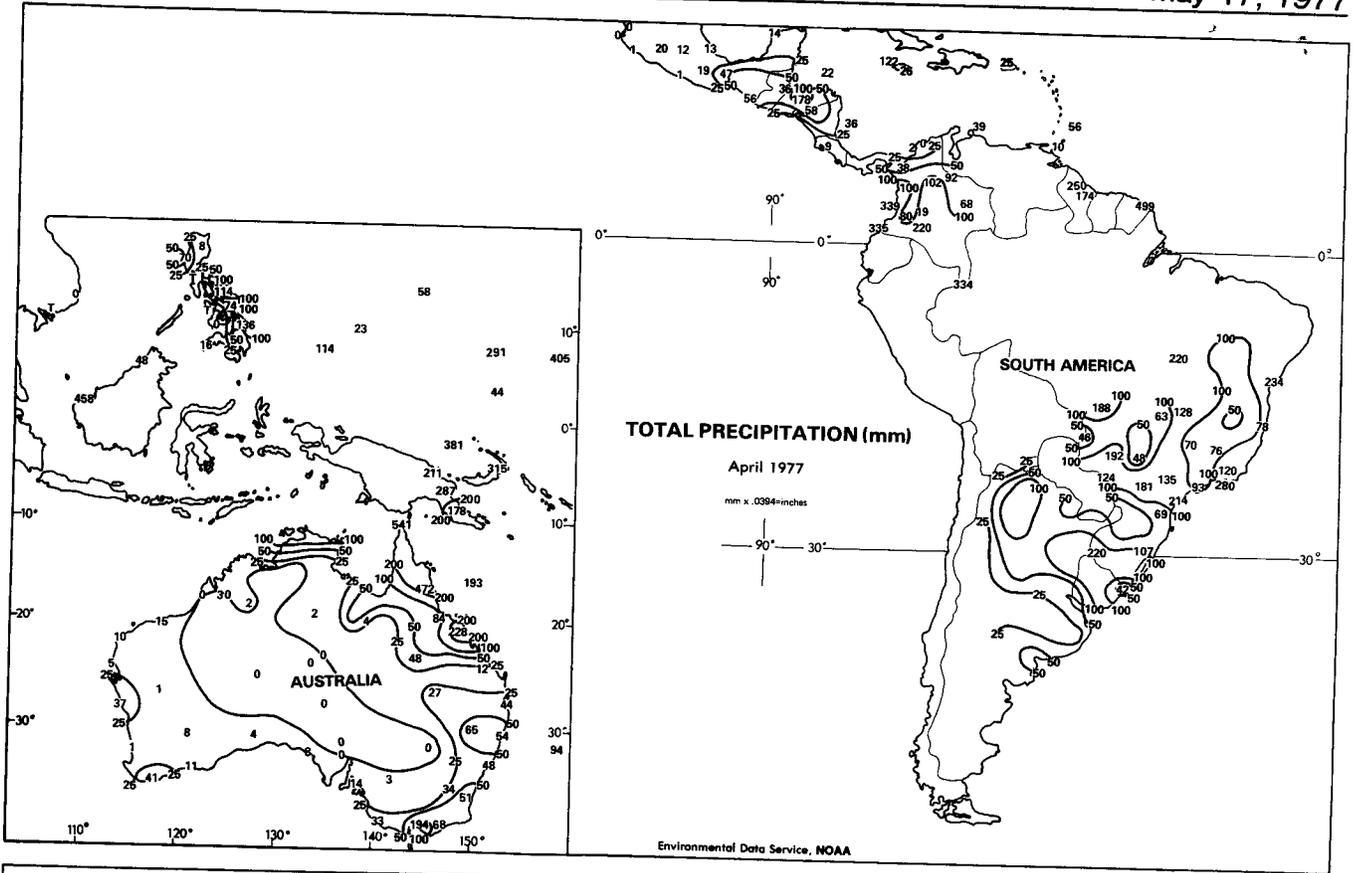
NORTH AMERICA. Excellent rains during the first half of May greatly improved the moisture situation in the hard spring wheat regions in the northern Great Plains and the adjacent Prairie Provinces of Canada. These timely rains insured a good start for the wheat crop, but soil moisture was still below normal over much of the spring wheat region of both countries. Additional rain moistened the heart of the hard winter wheat belt in the U.S. Unseasonally heavy rains brought needed moisture to parts of California, but the main drought area generally received less than 0.5 inch of rainfall. Light rains also dotted the wheat areas in the Pacific Northwest.

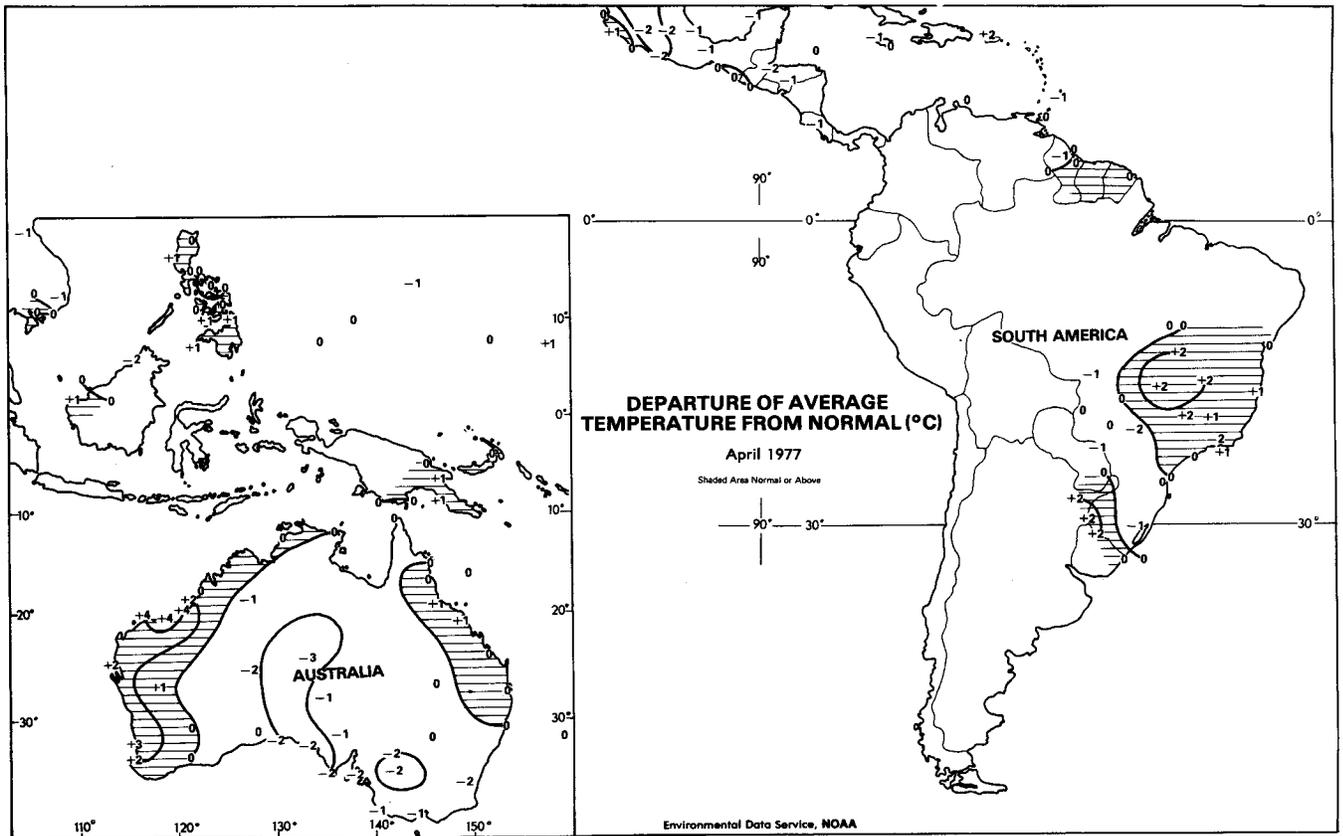
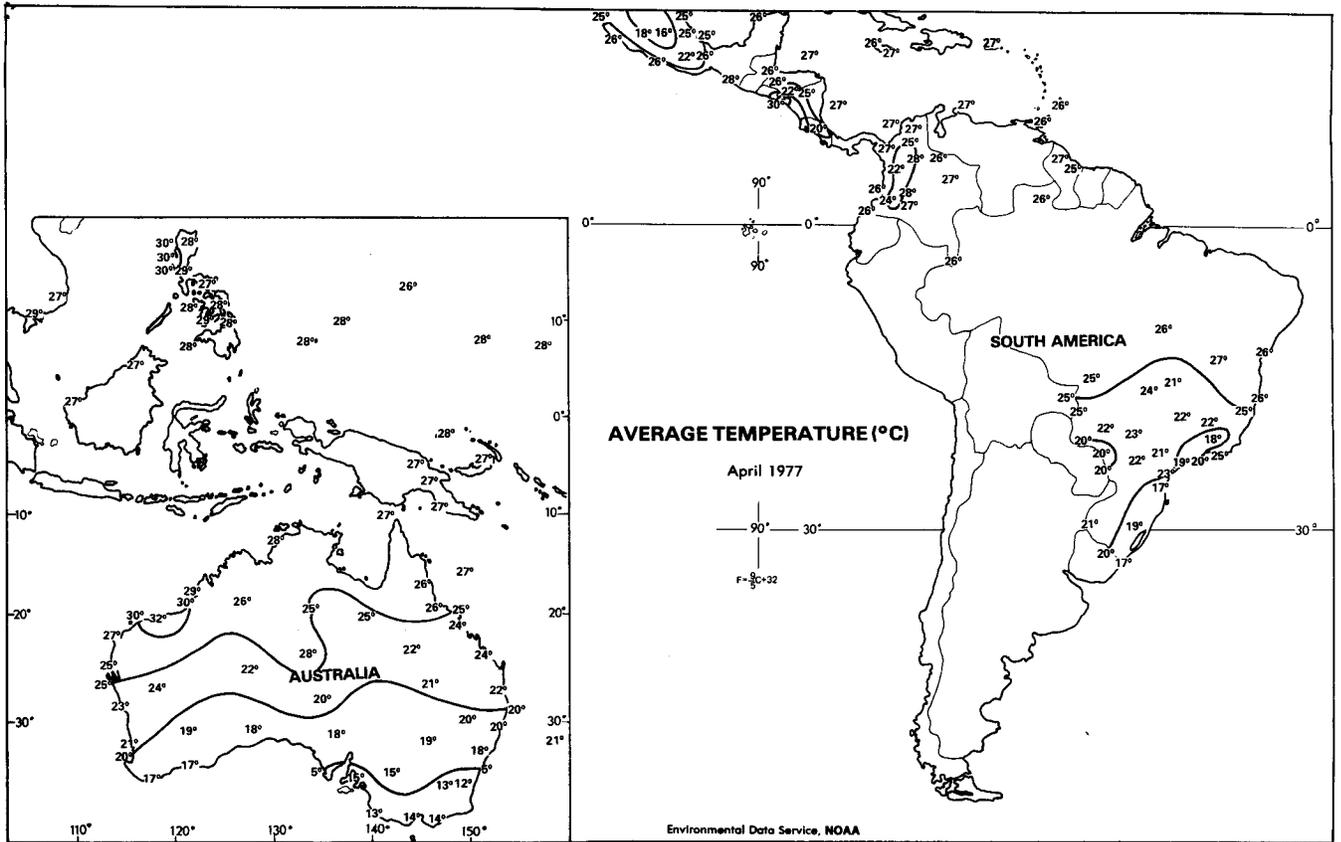




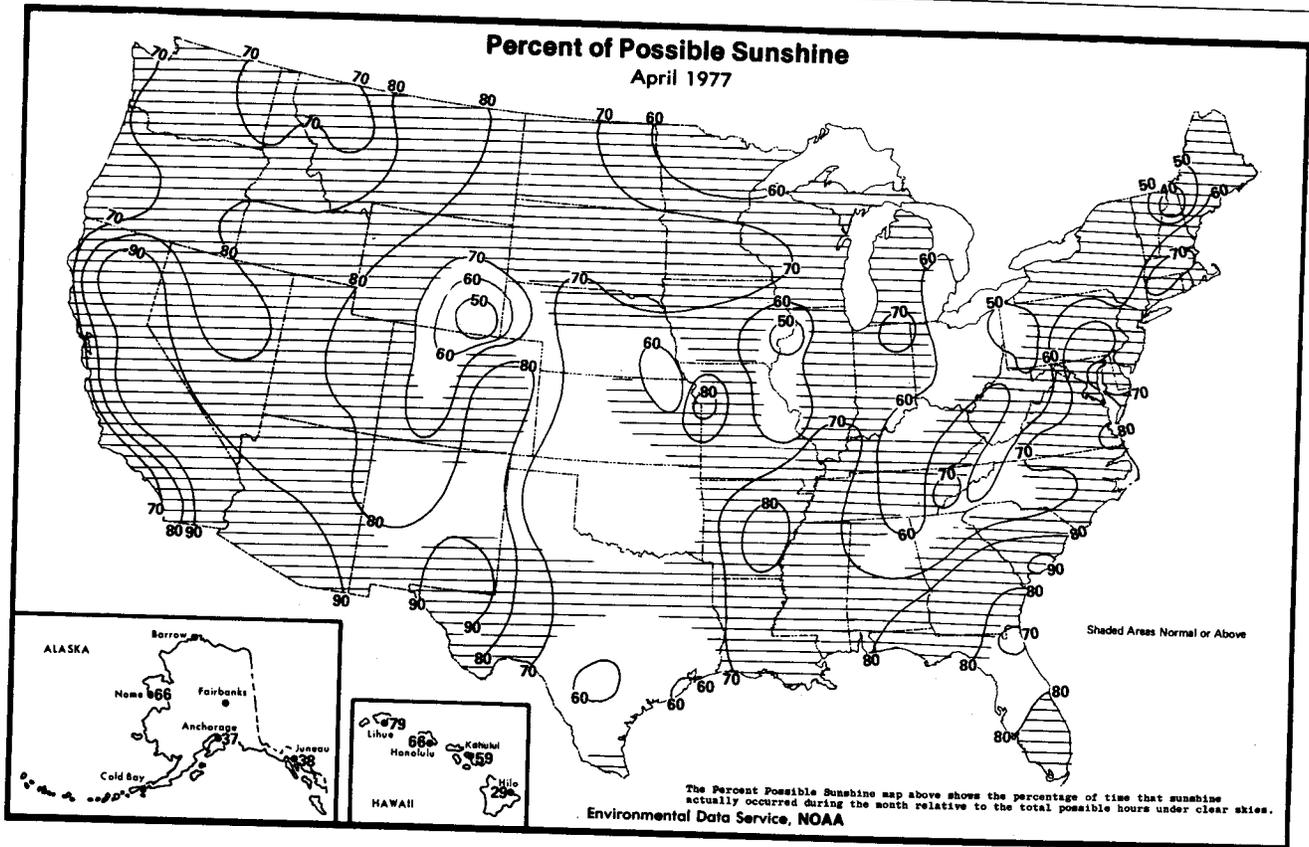
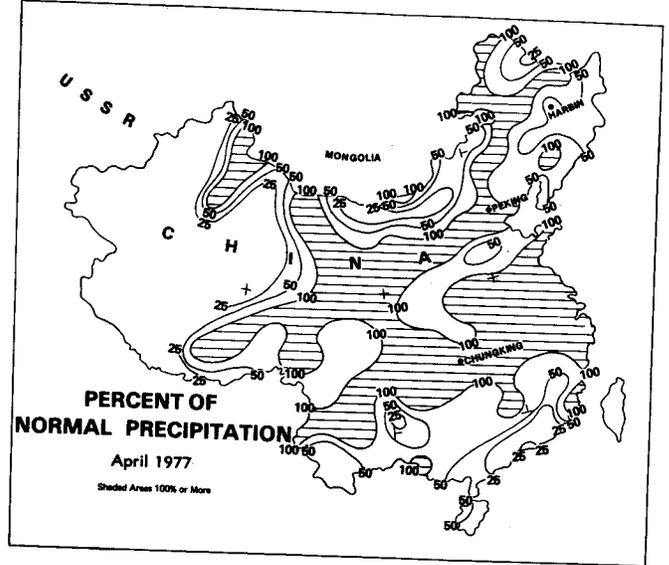
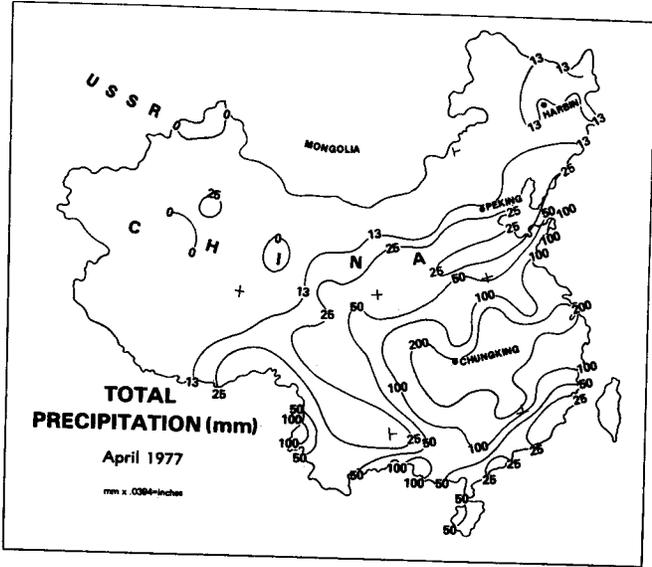


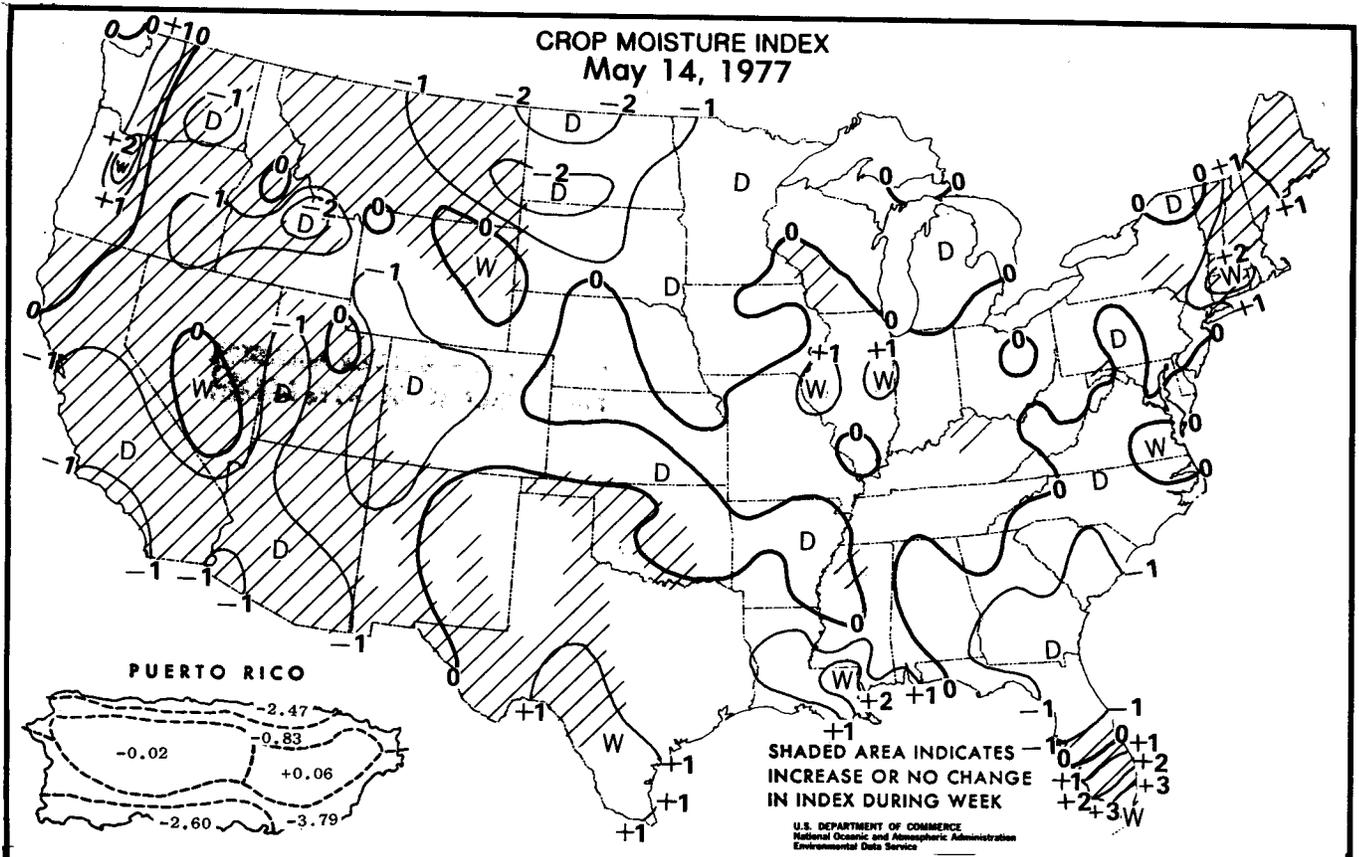






China Precipitation





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 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.

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	EXTREMELY DRY, MOST CROPS RUINED

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 CONTINUES, RAIN URGENTLY NEEDED
BELOW -4.0	NOT ENOUGH RAIN, STILL EXTREMELY DRY

(continued from page 9)

potatoes 88%, corn 56%. Emerged: Spring oats 73%, potatoes 60%, tobacco 92%, corn 23%. Condition of growing crops mostly fair, heavy frost and freeze damage. Main farm activities planting corn and fencing.

WISCONSIN: Temperatures 6° above normal. Frost on 9th warming to 80's by midweek. Scattered showers north 10th and 14th. Sunny until 15th when showers and thunderstorms occurred. Rainfall varied greatly.

Planting progressed rapidly in dry, dusty field conditions. Corn 70% planted, 1976 50%, normal 30%. Many farmers done planting except for late silage corn. Early corn up in rows, being sprayed for weed control. Soybean planting underway. Small grains need moisture. Early oats up 6 in., late oats slow growing. Some herbicide residue damage in oats. Some green chopping. Alfalfa growth good, needs a soaking rain to finish first

crop growth. Alfalfa fields budding, haying to start soon. Poor fertility hay fields stunted by frost and lack of moisture. Pasture growth slowed, needs rain. Potato planting done central area, full swing northeast. Early peas show frost damage. Tobacco beds coming good. Apple and cherry trees hurt by frost in south and east. Soil moisture short. Crops in critical need of moisture to avoid repeat of 1976 drought.

WYOMING: Temperatures above normal. Precipitation below normal.

Soil moisture short. Plantings running close to normal. Sugarbeet seeding finished. Barley drilling 89% completed. Corn 58% planted, 10% emerged. Potatoes 21% planted. Activities: Moving livestock to summer range, planting. Winter wheat and alfalfa prospects fair to good. Spring calves 90% dropped. Farm flock lambing and shearing nearing completion. Range sheep: Ewes 55% lambing; 82% shorn.

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PLANTING PROGRESS Percent of Acreage Planted as of May 15	SOYBEANS			CORN			
	1977	1976	Avg.	1977	1976	Avg.	
	Ala.	31	24	23	Ga.	97	97
Ark.	31	21	15	Ill.	93	85	70
Ga.	23	23	20	Ind.	65	85	45
Ill.	33	37	23	Iowa	95	89	60
Ind.	15	30	15	Kans.	60	55	55
Iowa	46	35	10	Ky.	66	85	59
Kans.	10	5	5	Mich.	70	32	28
Ky.	12	16	11	Minn.	89	90	58
La.	31	18	15	Mo.	91	77	58
Mich.	10	3	1	Nebr.	75	70	50
Minn.	51	49	19	N. C.	96	92	84
Miss.	34	22	13	Ohio	65	85	55
Mo.	31	21	13	Pa	41	49	NA
Nebr.	20	10	10	S. D.	63	55	43
N. C.	37	24	22	Texas	95	98	94
Ohio	25	35	20	Wisc.	70	50	30
S. C.	18	15	16	U. S.	82	79	58
Tenn.	30	25	15				
U. S.	32	28	16				

These 18 States produced 96% of the 1976 U. S. soybean crop.

These 16 States produced 92% of the 1976 U. S. corn crop.

COTTON			SORGHUM			SPRING WHEAT					
1977	1976	Avg.	1977	1976	Avg.	1977	1976	Avg.			
Ala.	96	93	89	Colo.	NA	NA	NA	Idaho	NA	NA	NA
Ark.	90	86	75	Kans.	15	5	10	Minn.	98	99	65
Ga.	93	93	81	Mo.	46	25	22	Mont.	90	90	60
La.	90	73	53	Nebr.	25	15	10	N. D.	95	88	57
Miss.	94	88	70	Okla.	19	10	21	S. D.	100	100	96
Mo.	91	97	65	S. D.	9	8	5	5-States	95	92	65
N. C.	91	90	84	Texas	66	66	66				
Okla.	12	5	19	7-States	38	31	31				
S. C.	97	92	87								
Tenn.	90	90	65								
Texas	32	40	45								
11-States	56	59	55								

These 11 States produced 67% of the 1976 U. S. cotton crop.

These 7 States produced 90% of the 1976 U. S. sorghum crop.

These 5 States produced 96% of the 1976 U. S. spring wheat crop other than durum.

NA - Not Available