

# WEEKLY WEATHER AND CROP BULLETIN

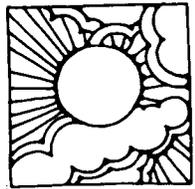
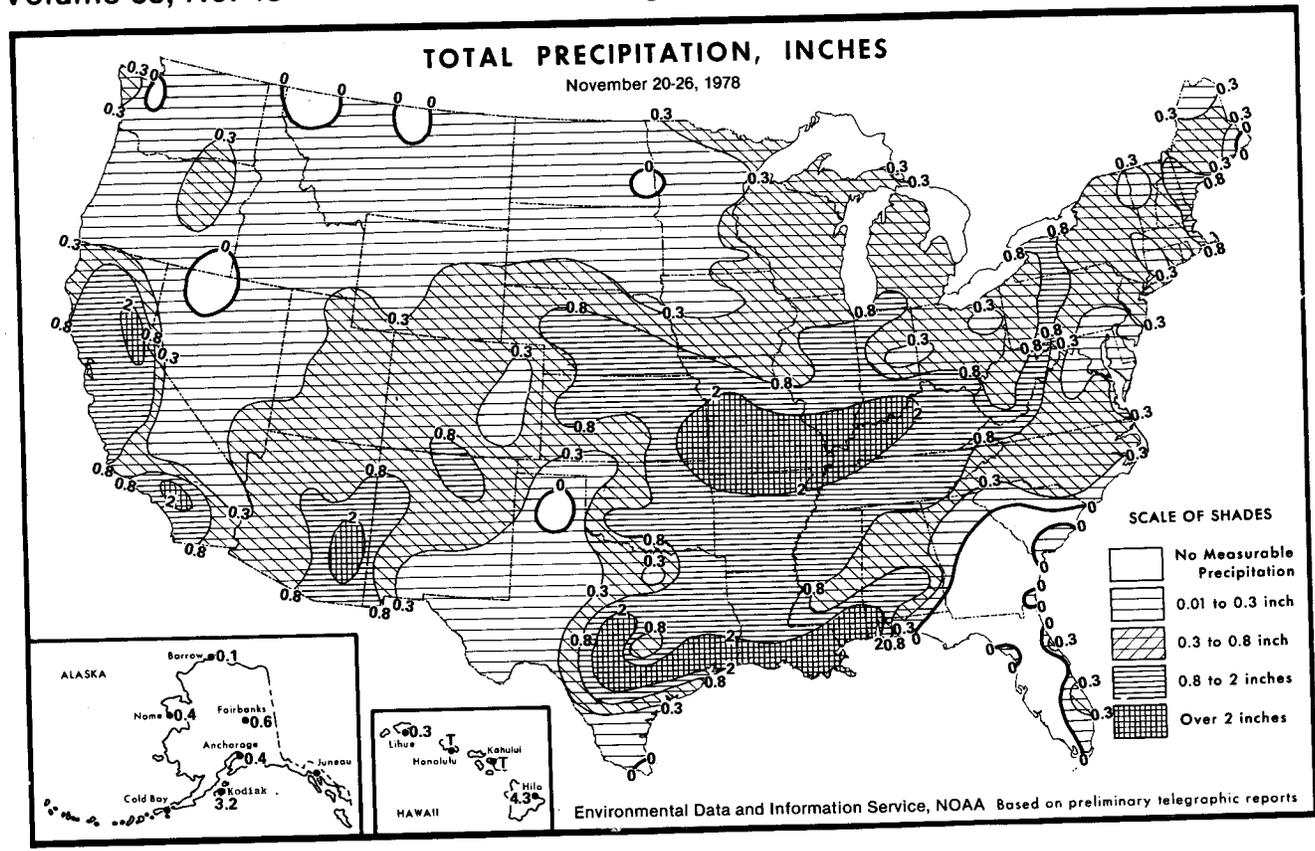
U.S. DEPARTMENT OF COMMERCE  
Environmental Data and Information Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE  
Economics, Statistics, and Cooperatives Service

Volume 65, No. 48

Washington, D.C.

Nov. 28, 1978



## National Weather Summary

November 20 - 26

**HIGHLIGHTS:** Early in the week, cold air moved into the northern Rockies and spread eastward. Meantime weather systems cutting through the Southwest brought snow and freezing rain to the upper two-thirds of the Great Plains with rain to the south. By week's end, severe weather with damaging winds hit East Texas and the Gulf Coast.

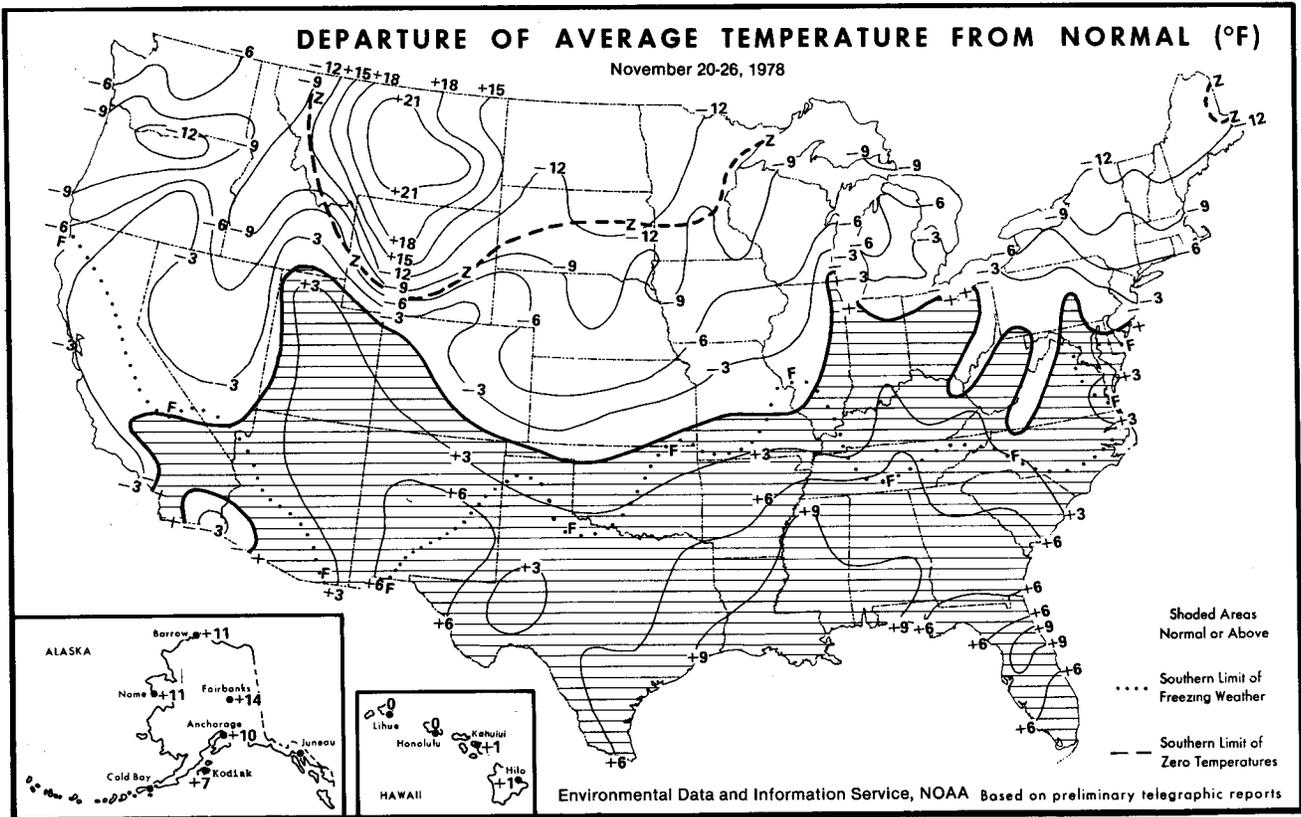
In the northern Rockies, temperatures dipped as much as 20 degrees below normal. The cold air edged eastward dropping the mercury by 10 to 12 degrees colder than normal in the western Great Lakes. The South stayed warmer than normal by as much as 10 degrees, especially in the extreme lower Mississippi Valley along the Gulf Coast.

Heavy snow carried over into the new week for the mountains of eastern Oregon and northern California. On Monday, snow depths ranged from 9 to 19 inches from the Pacific Northwest across the northern tier of States to Upper Michigan. Compounding the problem, subzero temperatures raced into several of the States by day's end.

Meantime snow and freezing rain covered the central Plains and the upper half of the Mississippi Valley with rain or drizzle over Oklahoma and eastern Texas. Rains totaling one-half to one inch dampened the northern third of California.

On Tuesday, snow persisted in California's Sierra Nevada Mountains and extended to Nevada. Rain fell in much of the rest of California with Fresno and San Diego both counting a half inch. Once again snow and freezing rain bothered the central Plains and upper half of the Mississippi Valley. New England marked its first measurable snowfall of the year; Boston got only an inch.

Icy cold continued to grip the north central U.S.; Williston, northwestern North Dakota, equaled its 1900 record low reading with  $-22^{\circ}$ .



Wednesday weather patterns changed little from the previous two days. Snow persisted in the California mountains while rain dotted other sections of the State. Rain, snow, and freezing rains stretched from the central Plains across the upper half of the Mississippi Valley to the Ohio Valley; moisture totals, however, were light with half-inch rains at Memphis and Peoria.

As midnight approached, a low pressure system that had developed in Colorado swung northeastward and brought some steady snow to the upper Midwest.

Most of the Nation enjoyed decent weather on Thanksgiving Day except for an area of snow from the upper Midwest across New York State to New England and gray, drizzly skies from the Ohio Valley to the Atlantic Coast. Green Bay, eastern Wisconsin, netted 4 inches of snow, and a third to one-half inch of rain dampened points from Kentucky northeastward through New York and eastward to the middle Atlantic States.

While a storm brewed in the Southwest on Friday, light rain and snow tapered off in New England.

The western disturbance spread rain and snow from southern California to the Texas Panhandle; some points in southern and eastern Arizona gathered 2 to 4 inches of rain, and the mountains of Arizona, New Mexico, and Utah collected up to 7 inches of snow. Stations in California reported about a half inch of rain.

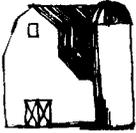
Florida basked under unseasonable warmth. Records included 81° at Apalachicola and Pensacola's 83°. Miami hit a record-tying 85°.

On Saturday, snow stretched from the mountains of the Southwest as far north as Wyoming and across the central Plains to Iowa. Rain fell heavily in the middle Mississippi Valley; in southern Missouri, West Plains measured 1.58 in. and Springfield, 1.35 in. Other areas of rain amounted to less than an inch in the southern Plains and Delta Region.

More than a half-foot of snow whitened portions of the central Plains on Sunday. Farther south, Oklahoma City tallied 1.4 inches of rain.

Moisture moved across the Mississippi and Ohio Valleys reaching the Atlantic Coast States by midnight---mainly as snow.

Rain was rather heavy from Texas and Louisiana through Missouri and Kentucky; Jonesboro, north-eastern Arkansas, and San Antonio both chalked up about an inch and a half. Severe thunderstorms with high winds did some damage in East Texas. In Missouri, West Plains and Springfield brought their 24-hour totals to 3.41 in. and 2.38 in. Hopkinsville, southern Kentucky, noted an inch and one-third. In the Gulf Coast region, New Orleans had 2 inches and Baton Rouge, nearly 2.5 inches.



## National Agricultural Summary

November 20-26, 1978

**HIGHLIGHTS:** Winter storms dumped rain and snow throughout many areas of the eastern half of the United States, California, and some of the Southwest. The precipitation delayed final harvests of many row crops. Corn harvest was complete in most States, but advanced only a few points during the week in States with acreage standing. Soybean harvest in the north central States was virtually complete and stood at 95% in the south central States. Cotton harvest in the 11 major Southern States struggled to 59%, a one-point increase for the week compared with 86% last year and the 66% average. Grain sorghum harvest was about done in the seven major States with the exception of Texas and Oklahoma. Soil moisture rated adequate except in the Southeast and some of the south central States. Winter wheat rated fair to good responding to the new moisture supplies received in many areas. Pastures rated poor to fair across the South, but rains improved grazing conditions throughout the South and Southwest. Snows drove cattle from rangeland in northern areas of the Nation.

**SMALL GRAINS:** Southern rains boosted moisture supplies and improved moisture conditions for winter wheat across southern areas of the Nation. Winter wheat in the dry Southeast continued to rate only poor to fair with some improvement from recent moisture. Texas winter wheat showed excellent response to improved soil moisture. Oklahoma wheat rated good with 91% up to stand--the same as normal but slightly behind the 97% for last year; about 7% was grazed. Kansas livestock producers pastured 5% of the wheat acreage, half of the 10% for last year and average. Nebraska and Missouri wheat rated fair to good. Snow protected winter wheat in the northern Great Plains. In the Pacific Northwest, snow also provided a protective cover and some moisture. Rains helped the New Mexico crop.

**CORN:** Corn harvest neared completion in most States. Exceptions included Indiana at 95%, Missouri at 93%, Georgia at 97%, and Kansas at 99%. Rains slowed final harvests throughout the Nation.

**SOYBEANS:** Soybean harvest was virtually finished in the north central States, just ahead of the season's first storm. In the south central States, harvest reached 95%, a modest 2-point increase for the week but well ahead of last year's 84% and the 86% average. Rains delayed harvest throughout the south central States. In the Southeast, harvest ranged from 72% to 84% complete, well ahead of both last year and the average.

**COTTON:** Cotton picking in the 11 major southern States advanced to 59% compared with 86% last year and the 66% average. Progress for the week slowed to only a one-point gain because of severely restricted harvesting in Texas and Oklahoma. Picking in the other major States wound down to virtual completion. In Texas, cold, wet rains held harvest progress to 40%--the same as a week earlier and less than half of last year's 85%. In Oklahoma,

harvest advanced to 23%, well behind last year's 57% but only 5 points off the average. Arizona rains slowed harvest, but the first picking was almost complete. New Mexico ginnings stood at 20%, very late because of the wet weather. California picking stalled at 60%, also slowed by rainy weather.

**OTHER CROPS:** Grain sorghum harvest was virtually complete in the 7 major producing States with the exceptions of 72% in Oklahoma and 94% in Texas. Growers on the southern Plains need clear weather and dry soils to finish the harvest.

Sugarcane cutting hit full swing in Florida and advanced to 67% in Louisiana, well ahead of last year's 54% and the 58% average.

Wet weather improved stripping conditions for burley tobacco.

**FRUITS AND NUTS:** Winter storms limited orchard pruning in northern production areas. Pecan harvest reached 60% in Louisiana and 62% in Georgia, followed by 23% in Oklahoma. Pecan conditions rated fair to excellent depending on the soil moisture available during the growing season. Oklahoma Native pecans were smaller than normal because of the dry weather. Wet conditions slowed the New Mexico pecan harvest.

Florida citrus groves showed drought stress; most growers irrigated although some wilt, leaf drop, and fruit softening was noted. Fruit had a good natural early color. Arizona citrus groves rated good with lemon, Navel, and grapefruit harvests continuing. California rains slowed Navel harvest, but fruit size was large, quality good, and color improving.

**VEGETABLES:** In Florida, overall shipments held steady from the previous week. Cabbage supplies increased considerably along with lesser increases for carrots, celery, chinese cabbage, lettuce, and peppers. Volume of other vegetables held steady or declined. Texas supplies of bell peppers, cabbage, carrots, cucumbers, and tomatoes were good. Texas producers planted spinach and prepared land for spring vegetables and watermelons. Rains slowed California vegetable harvests. Moderate to heavy supplies of broccoli and cauliflower moved from the central coast. Lettuce harvest started in the Imperial Valley.

**PASTURE AND LIVESTOCK:** Snow covered rangeland across the extreme northern areas of the Nation although some cattle continued to graze on stubble. In southern areas, rains improved pastures, but grasslands generally rated only poor to fair because of previously dry soils. Grazing was particularly short in the Southeast. In Florida, pastures rated from very poor in northern areas to good in the southern Peninsula. Scattered rains and showers improved Texas ranges and pasture, although grasses were short. Texas stock water supplies remained low because many areas had very little run-off. California rains improved rangeland and stock water supplies held adequate.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Nov. 26, 1978

States and Stations	Temperature OF		Precipitation Inches		States and Stations	Temperature OF		Precipitation Inches		States and Stations	Temperature OF		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham	58	+ 8	.4	-.6	LA. Baton Rouge	67	+10	2.4	+ 1.4	Youngstown	36	- 1	.4	-.3
Mobile	66	+10	2.6	+ 1.6	Lake Charles	67	+ 9	2.1	+ 1.0	OKLA. Okla. City	48	+ 2	.8	+ .5
Montgomery	62	+ 9	.9	0	New Orleans	69	+11	2.0	+ .9	Tulsa	48	+ 2	.9	+ .5
ALASKA. Anchorage	28	+10	.4	+ .2	Shreveport	61	+ 7	1.7	+ .8	OREG. Astoria	37	- 8	T	+ 2.4
Barrow	7	+11	.1	0	MAINE. Caribou	14	-14	.3	-.5	Burns	31	- 2	.3	-.1
Fairbanks	12	+14	.6	+ .5	Portland	25	-11	1.0	-.2	Medford	36	- 6	.1	-.7
Juneau	40	+ 7	3.2	+ 2.0	MD. Baltimore	43	0	.2	-.6	Pendleton	26	-13	.3	-.1
Kodiak	23	+11	.4	+ .2	MASS. Boston	34	- 8	.9	-.2	Portland	32	-12	T	+ 1.4
Nome	43	+ 1	.8	+ .4	Chatham	38	- 7	1.1	0	Salem	33	-11	T	+ 1.5
ARIZ. Flagstaff	33	+ 1	.8	+ .4	MICH. Alpena	25	- 7	.6	0	PA. Allentown	38	- 1	.4	-.5
Phoenix	59	+ 2	.6	+ .5	Detroit	34	- 3	.6	+ .1	Erie	34	- 3	.5	-.4
Tucson	57	+ 1	1.0	+ .9	Flint	33	- 2	.4	-.1	Harrisburg	42	+ 1	.2	-.6
Winslow	44	+ 4	.7	+ .6	Grand Rapids	29	- 6	.4	-.2	Philadelphia	42	- 1	.1	-.7
Yuma	52	+ 4	.4	+ .3	Houghton Lake	26	- 5	.4	-.2	Pittsburgh	38	0	.3	-.3
ARK. Fort Smith	52	+ 4	1.5	+ .8	Lansing	32	- 3	.6	+ .1	Scranton	32	- 6	.3	-.4
Little Rock	54	+ 4	1.0	0	Marquette	24	- 7	.4	-.3	R.I. Providence	33	- 7	.4	-.7
CALIF. Bakersfield	52	0	.1	-.1	Muskegon	30	- 6	.5	-.2	S.C. Charleston	59	+ 5	T	-.5
Eureka	46	- 5	.4	- 1.0	S. Ste. Marie	19	-10	.3	-.5	Columbia	56	+ 5	T	-.6
Fresno	50	- 1	.9	+ .6	MINN. Duluth	14	-10	.3	-.1	Greenville	52	+ 4	.2	-.6
Los Angeles	56	- 5	1.3	+ .7	Internatl Falls	8	-12	.3	0	S.D. Aberdeen	12	-14	.1	0
Red Bluff	51	+ 0	1.5	+ .7	Minneapolis	20	- 8	.4	+ .1	Huron	19	- 9	.1	0
San Diego	61	+ 1	1.0	+ .6	Rochester	17	-11	.3	+ .1	Rapid City	21	-11	.3	+ .2
San Francisco	51	+ 3	1.4	+ .8	St. Cloud	17	- 9	.1	-.1	Sioux Falls	22	- 7	T	-.2
Stockton	56	+ 6	1.3	+ .8	MISS. Jackson	63	+10	.8	-.2	TENN. Chattanooga	52	+ 6	.8	-.2
COLO. Denver	33	+ 4	.4	+ .3	Meridian	61	+ 9	.8	-.2	Knoxville	51	+ 4	.9	0
Grand Junction	38	+ 2	.3	+ .2	MO. Columbia	39	- 1	1.4	+ 1.0	Memphis	56	+ 8	1.9	+ .9
Pueblo	36	- 2	.2	+ .1	Kansas City	36	- 4	1.2	+ .9	Nashville	49	+ 3	1.2	+ .3
CONN. Bridgeport	39	- 4	.1	-.8	St. Louis	40	- 2	2.0	+ 1.4	TEX. Abilene	56	+ 5	.2	0
Hartford	30	- 8	.5	-.6	Springfield	43	+ 1	2.6	+ 2.1	Amarillo	46	+ 3	T	-.1
D.C. Washington	47	+ 2	.2	-.5	MONT. Billings	12	-21	T	-.1	Austin	61	+ 4	.6	+ .1
FLA. Apalachicola	64	+ 5	0	-.7	Glasgow	9	-16	T	-.1	Beaumont	70	+12	3.0	+ 1.9
Daytona Beach	73	+10	.3	-.1	Great Falls	13	-19	T	-.2	Brownsville	72	+ 6	0	-.3
Ft. Myers	75	+ 7	0	-.2	Havre	5	-21	T	-.1	Corpus Christi	70	+ 7	.1	-.3
Jacksonville	62	+ 3	T	-.4	Helena	14	-15	T	-.1	Del Rio	61	+ 4	.3	+ .2
Key West	78	+ 4	0	-.5	Kalispell	21	- 7	T	-.4	El Paso	55	+ 6	T	-.1
Lakeland	75	+ 4	-.2	-.2	Miles City	6	-23	T	-.1	Fort Worth	58	+ 5	.3	-.2
Miami	72	+ 7	0	-.3	Missoula	20	-10	T	-.2	Galveston	68	+ 7	.6	-.2
Orlando	62	+ 5	0	-.7	NEBR. Grand Island	26	- 8	1.1	+ 1.0	Houston	66	+ 7	2.5	+ 1.5
Tallahassee	72	+ 7	0	-.4	Lincoln	26	- 9	.9	+ .7	Lubbock	51	+ 5	T	-.1
Tampa	73	+ 3	.3	-.1	Norfolk	24	- 8	.3	+ .2	Midland	53	+ 2	.1	0
W. Palm Beach	73	+ 3	.3	-.1	N. Platte	25	- 8	.9	+ .8	San Angelo	56	+ 3	.2	0
GA. Atlanta	55	+ 6	.1	-.8	Omaha	26	- 8	.3	+ .1	San Antonio	64	+ 7	2.2	+ 1.8
Augusta	58	+ 7	0	-.6	Valentine	22	- 9	.4	+ .3	Victoria	66	+ 6	.3	-.2
Macon	60	+ 7	0	-.6	NEV. Ely	27	- 4	.1	-.1	Waco	58	+ 3	1.3	+ .8
Savannah	62	+ 7	T	-.5	Las Vegas	50	0	.6	+ .5	Wichita Falls	59	+ 3	.6	+ .3
HAWAII. Hilo	74	+ 1	4.3	+ .9	Reno	35	- 3	.4	+ .2	UTAH. Blanding	33	+ 4	.4	+ .2
Honolulu	76	0	T	-.8	Winnemucca	32	- 3	T	-.2	Salt Lake City	42	-12	.3	-.1
Kahului	76	+ 0	T	-.6	N.H. Concord	24	-11	.7	-.3	VT. Burlington	22	-6	.2	-.4
Lihue	75	+ 0	T	-.6	N.J. Atlantic City	43	0	.3	-.7	VA. Lynchburg	44	0	.4	-.2
IDAHO. Boise	37	-10	.1	-.3	Trenton	40	- 3	.4	-.4	Norfolk	53	+ 4	.3	-.4
Lewiston	29	- 9	T	-.3	N. MEX. Albuquerque	47	+ 6	.4	+ .3	Richmond	47	+ 1	.4	-.4
Pocatello	32	- 1	.1	-.2	Roswell	50	+ 6	T	0	Roanoke	43	- 1	.6	0
ILL. Cairo	47	+ 2	4.0	+ 3.0	N.Y. Albany	28	- 8	.2	-.5	WASH. Colville	28	- 4	.1	-.3
Chicago	39	+ 2	.7	+ .2	Binghamton	28	- 7	.5	-.2	Omak	28	- 4	.1	-.3
Moline	31	- 5	.8	+ .4	Buffalo	31	- 6	.5	-.4	Quillayute	38	- 5	.4	- 2.9
Peoria	33	- 3	.9	+ .4	New York	40	- 4	.7	-.2	Seattle-Tacoma	37	- 6	T	+ 1.5
Rockford	29	- 5	.6	+ .1	Rochester	32	- 5	.4	-.2	Spokane	25	- 8	T	-.6
Springfield	37	- 1	.7	+ .2	Syracuse	29	- 9	.5	-.3	Walla Walla	29	-11	.3	-.2
IND. Evansville	44	+ 2	2.1	+ 1.3	N.C. Asheville	48	+ 4	.3	-.4	Yakima	30	- 6	T	-.3
Ft. Wayne	36	- 1	.5	-.1	Charlotte	52	+ 4	.4	-.3	W.VA. Beckley	41	+ 2	.7	0
Indianapolis	40	+ 2	.2	-.5	Greensboro	46	0	.4	-.2	Charleston	44	+ 1	.6	-.1
South Bend	35	- 1	.9	+ .3	Hatteras	56	+ 2	.2	-.9	Huntington	42	- 1	1.0	+ .3
IOWA. Burlington	32	- 4	.5	+ .1	Raleigh	48	+ 1	.4	-.3	Parkersburg	41	- 1	.5	-.1
Des Moines	29	- 5	.6	+ .3	Wilmington	54	+ 1	.2	-.5	WISC. Green Bay	23	- 7	.5	+ .1
Dubuque	26	- 6	.5	-.1	N. DAK. Bismarck	13	-12	T	-.1	La Crosse	24	- 7	.5	+ .2
Sioux City	21	-11	.1	-.1	Fargo	10	-14	T	-.1	Madison	24	- 7	.5	+ .2
KANS. Concordia	31	- 7	.9	+ .8	Williston	11	-13	.1	0	Milwaukee	33	0	.7	+ .2
Dodge City	36	- 3	.6	+ .5	OHIO. Akron-Canton	39	+ 2	.2	-.4	WYO. Casper	21	-10	.4	+ .2
Goodland	27	- 8	.5	+ .4	Cincinnati	41	0	.8	0	Cheyenne	30	- 3	.3	+ .2
Topeka	35	- 4	1.1	+ .8	Cleveland	39	+ 1	.3	-.3	Lander	12	-16	.1	-.1
Wichita	39	- 2	.5	+ .3	Columbus	40	+ 1	.4	-.2	Sheridan	13	-17	T	-.2
KY. Lexington	43	+ 1	1.4	+ .6	Dayton	40	+ 2	.3	-.3	P.R. San Juan	81	+ 3	.4	-.8
Louisville	45	+ 3	2.0	+ 1.2	Toledo	35	- 1	.5	-.1					

Based on 1941-70 normals

Publication of the Weekly Weather and Crop Bulletin began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44USC 213), 53d Congress, 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit. Standard copy for the Bulletin is prepared by Donald J. Haddock, Lyle Denny, and O. W. Byrd, Environmental Data and Information Service,

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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 10° above normal. Limited rainfall northwest 23d, statewide 26th, heaviest south.

Fieldwork: 6.1 days suitable. Soil moisture short. Crop harvest main activity. Cotton 96% harvested, 83% 1977, 79% average. Soybeans 94% harvested, 72% 1977, 82% average. Sorghum 94% harvested, 71% 1977. Small grains 79% seeded. Wheat, pastures mostly poor condition.

**ARIZONA:** Storm, heavy rain eastern areas. Snowfall 2 to 5 in. common as low as 7,000 feet. Several southeastern rivers above flood stage. Moisture amounts west, 0.25 to 0.75 in. Temperatures slightly below normal west, slightly above east.

Harvest halted due to rain. Cotton harvest moving ahead, first pick completed many areas, some final, post-harvest activities. Sorghum harvest nearing completion some areas. Sugarbeet harvest continued, good yields and sugar content. Spring beets good stands, growing well. Alfalfa haying seasonally slow. Limited planting small grains. Lettuce harvest continued, increasing scale. Later plantings lettuce, other vegetables good progress. Melon harvest complete. Lemon harvest continued. Navel, grapefruit harvests continued, increasing scale. Citrus groves generally good condition. Rains continued to increase soil moisture. Stock tanks mostly full. Cattle, calves good shape. Lambing continued desert valleys.

**ARKANSAS:** Temperatures above normal; rain general. Rainfall totals generally between 0.50 to 2.00 in. Extremes: 74 and 31°.

Rain delayed harvesting operations for cotton and soybeans. Warm temperatures and increased soil moisture improved fall seeded pastures and small grains. Soil moisture adequate. Fieldwork: 2.9 days. Soybean harvest 92% completed, 85% 1977, 91% average. Cotton harvest 94%, 96% 1977, 94% average. Small grains most fields good stands. Wheat plantings 91% completed, 95% 1977, 96% average. Oats 95% planted, 100% 1977. Pecans good to excellent condition. Cattle fair to good condition; marketings normal. Pastures providing below adequate grazing.

**CALIFORNIA:** Precipitation to all parts of State. Amounts over 3.00 in. recorded in Sacramento Valley while amounts of over 2.00 in. reported by several mountain stations. Cool air kept temperatures near or slightly below normal with greatest departure of -8° recorded in mountains.

Cotton harvest continued. Heavy rains wet soil, cotton harvest standstill San Joaquin Valley. Cotton 60% harvested. Dry bean harvest continued Sacramento Valley, standstill San Joaquin Valley. Rains slowed burning rice; rice harvest complete. Winter grain planting continued. Alfalfa seeding continued. Corn harvest delayed Sacramento Valley along with sugarbeet harvest south coast. Rains slowed orchard and vineyard activities; pruning, fertilizing, and winter weed spraying. Emperor table grapes moving to market. Spraying peach leaf curl and shothole fungus. Persimmons picked and packed. Desert grapefruit moving slow, little demand. Rains slowed Navel orange harvest. Fruit sizes large, quality good; color improving. Rains slowed mandarin harvest. Rains slowed vegetable harvest. Broccoli, cauliflower moderate to heavy

supplies central coast. Celery increasing south coast, still heavy central coast. Fall sweet corn, melons about finished desert. Lettuce about peak Palo Verde Valley, started Imperial Valley. Range, pastures improving with additional rain. Supplemental feeding continued most areas. Stock water supplies good. Calving, lambing continued.

**COLORADO:** Light snow, freezing drizzle, and fog over eastern Plains 20th through 22d. Fair weather elsewhere. Storm system from southwest brought a foot of snow to mountains and 2 to 8 in. at lower elevations later in week. Temperatures 5° below normal over eastern Plains and near normal in most other areas.

**FLORIDA:** Mostly fair 20th. Cold front entered Panhandle early 21st, passing to southern tip of Peninsula by night; no significant rainfall and little temperature change. High pressure system prevailed 22d to 26th with continued above normal temperatures and no significant rainfall. Winds mostly northerly in Panhandle and northeast to southeast, central and south.

Soil moisture very short. Only southeast coastal area has adequate moisture. Soybean harvest nearing completion. Sugarcane harvest full swing. Peanut harvest complete. Cotton picking active. Gathering pecans about finished. Seeding small grains, winter grazing crops delayed due to very dry conditions. Early seeded grains poor condition. Grazing reduced in all areas; pastures mostly very poor north to good south. Cattle conditions declined drought stress areas; generally good central to south. Citrus groves showing stress from drought; most growers irrigating. Some wilt and leaf drop, some fruit softening. Fruit drop not excessive. Good natural early fruit color. Vegetable crops generally good, some excellent. Condition improving due to cooler, drier weather. Older fields declining seasonally, young crops holding up well after first pickings. Harvest gaining momentum. Overall shipments held steady from previous week. Supplies cabbage up considerably. Carrots, celery, chinese cabbage, lettuce, peppers increased. Shipments snap beans, cucumbers, tomatoes held steady but sweet corn, eggplant, escarole, okra, radish, squash supplies decreased. Quality, size, yields generally good most crops. Growth good to very good. Fruit continued to size well. Plantings active, complete some crops. Strawberry condition fair to very good. Plants beginning to bush out well. Cooler weather needed for growth, fruit set. Most fields being irrigated.

**GEORGIA:** Temperatures 3 to 8° above normal. Most of rain during first part of week. Extremes: 30 and 84°.

Soil moisture mostly very short to short. Fieldwork: 6 days suitable. Corn 97% harvested, 96% last year. Soybeans poor to mostly fair; 84% combined, 65% last year. Cotton mostly fair to good; 94% picked, 74% last year. Apples 99% picked, 98% last year. Pecans mostly fair to good; 62% gathered, 60% last year. Some small grain seeding, dry soils slowing planting; wheat 61% seeded, 81% last year; rye 63% seeded, 89% last year; other small grain 60% seeded, 89% last year. Pastures mostly poor to fair condition. Cattle mostly fair to good. Hogs fair to mostly good.

**HAWAII:** Heavy rains drenched part of Island Hawaii. Taro dikes and fields Waipio Valley extensively damaged by flooding waters. Continued wet weather. Puna district increasing phytophthora disease papaya fields. Rain Kau district beneficial to agriculture. Rainfall elsewhere Hawaiian chain light.

Vegetable supplies generally light. Banana supplies: Apple bluefield type light, chinese type steady. Papaya harvesting declining. Pine-apple harvesting slow. Sugar harvesting declining. Pastures generally good.

**IDAHO:** Temperatures near 10° below normal in the north but 1 to 5° above normal in south. Precipitation general but light; heaviest in north.

Potato marketing generally active. Farmers busy feeding and caring for livestock. Feed supplies adequate to surplus.

**ILLINOIS:** Temperatures normal to 6° below normal. Precipitation scattered through week, 0.50 to 0.75 in. by midweek, heavy weekend rains in south, snow in north.

Minimal fieldwork of corn harvesting, fall plowing, and applying fertilizer. Winter wheat mostly good. Pastures mostly fair to good. Soil moisture generally adequate.

**INDIANA:** Cloudy, rainy week. High temperatures averaged 4° below normal, low temperatures 2° above normal. Rainfall exceeded 2.00 in. parts of extreme south. Central and north averaged 0.50 to 0.80 in. Several inches snow extreme north weekend.

Fieldwork: 4 days suitable. Topsoil moisture mostly adequate to surplus. Subsoil moisture mostly adequate. Corn 95% harvested, 1977 90%, average 80%. Wheat stands 100% emerged, mostly good. Spring cropland 55% plowed. Tobacco 35% stripped.

**IOWA:** Cold with moderate precipitation. Snow fell over north and rain and freezing precipitation over south at midweek and snow fell again at weekend with heaviest amounts over south.

**KANSAS:** Wintry weather continued with exception 23d. Precipitation varied from few hundredths in extreme west to 1.75 in. southeast. Temperatures 1 to 8° below normal.

Fall row crop harvest virtually completed. Harvest activity few remaining fields delayed. Fieldwork: 1.0 day suitable. Corn harvest 99%, last year 95%, average 85%. Sorghum grain harvest 98%, last year 95%, average 85%. Soybean harvest 98%, last year 80%, average 90%. Wheat condition unchanged, 5% being pastured, last year and average over 10%. Topsoil moisture short western one-third, adequate elsewhere. Subsoil mostly short all areas except northeast. Livestock gains slowed by cold, wet weather. Hay supplies generally short northwest, south central, and southeast.

**KENTUCKY:** Cloudy and wet with near normal temperatures. Rainfall heavy west to near normal east ranging from 3.00 in. Jackson Purchase area to 2.00 in. central portion to 0.50 to 0.75 in. eastern highlands.

Rainfall held fall fieldwork to minimum, but has been very beneficial to tobacco stripping operation. Burley stripping major farm activity. Livestock maintenance light due to mild fall weather. Most of forage requirements still met by pasture. Condition of fall seeded grains improved with recent rains.

**LOUISIANA:** Temperatures 9 to 12° above normal. Extremes: 83 and 38°. Light showers north.

Fieldwork: 5.3 days suitable. Soil moisture short to adequate. Cotton 99% harvested, 95%

last year, 85% average. Soybeans 99% harvested, 93% last year, 89% average. Sugarcane 67% harvested, 54% last year, 58% average. Sweet-potatoes 99% harvested. Oat and wheat 97% planted, 86% last year. Pecans 60% harvested, 76% last year. Pasture poor to fair. Cattle fair to good, supplemental feeding.

**MARYLAND & DELAWARE:** Temperatures 4° above normal. Highs in upper 50's to 60 and lows in upper 30's to mid-40's. Precipitation widespread, averaging 0.50 to 0.75 in. Weekend partly cloudy and cold with snow flurries 26th.

Farmers continued with soybean harvest and finished planting small grains. Moisture beneficial to fall planted crops.

**MICHIGAN:** Temperatures 2 to 11° below normal. Week began in 20's, warmed to 30's and 40's by 23d and then turned cold. Precipitation ranged from 0.15 to 0.88 in. Most moisture fell 23d as snow over Upper and northern Lower and rain in south part of Lower. Several lakeshore areas picked up significant amounts of snow from cold winds off warm lakes.

Harvesting of corn continued at a slow pace until halted by rain and snow.

**MINNESOTA:** Cold with temperatures 7 to 14° below normal. Extremes: 36 and -18°. Precipitation less than 0.25 in. west half and 0.25 to 0.45 in. east half. Precipitation near normal except 0.10 to 0.20 in. below normal central through west central and southwest. Snowfall less than 1 in. central through southwest and 2 to 5 in. elsewhere. Snow depth ranged from 1 in. southwest to 10 in. north central and northeast.

**MISSISSIPPI:** Temperatures 5 to 10° above normal. Extremes: 29 and 82°. Rainfall widespread but light with greatest amounts in east central and north.

Soil moisture varied from mostly adequate in Delta and north central to short to very short in south third with supplies in other areas short to adequate. Fieldwork: 4.0 days suitable. Farmers winding up harvest and cleaning equipment. Rains gave boost to winter grazing and slowed harvest completion in northern areas. Soybeans 97% harvested, 82% 1977, 79% average. Cotton virtually 100% harvested, 95% 1977, 84% average. Corn virtually 100% harvested, 95% 1977, 92% average. Winter wheat 84% planted; fair to poor condition. Pastures poor condition. Livestock fair.

**MISSOURI:** Temperatures 3° above normal Bootheel, below normal elsewhere. Few days rain, precipitation heaviest in east Ozarks.

Fieldwork: 1.8 days suitable. Corn 93% harvested, last year 76%, normal 84%. Fall plowing for spring planted crops 56% completed, last year 35%. Condition of winter wheat fair to good. Condition of pasture mostly fair. Soil moisture supplies mostly adequate.

**MONTANA:** Cold Arctic high pressure all portions at first, with temperatures much below normal. Slow moderation midweek but temperatures continuing below normal weekend. Scattered light snow with a little accumulation.

Livestock condition good. Grazing difficult. Most livestock receiving some supplementary feed.

**NEBRASKA:** Temperatures 3 to 12° below normal. Precipitation light early portion; moderate latter part.

Corn harvest near 100%, year ago 95%, normal 90%. Winter wheat condition fair to good.

Freezing weather slowed or stopped fall tillage. Fieldwork: 3.1 days suitable.

NEVADA: Shower activity early all areas, late in week south. Temperatures near normal with cooling end of week. Extremes: 70 and 60°.

Cotton harvest full swing. Livestock doing well.

NEW ENGLAND: Temperatures 10 to 20° below normal. Frequent, light precipitation south and central; totals between 0.25 and 0.75 in. Northern sections amounts averaged under 0.50 in. water content and from 2 to 5 in. snow.

NEW JERSEY: Temperatures 3 to 5° below normal. averaging 36° north, 40° south, and 42° coastal. Extremes: 19 and 58°. Precipitation below normal averaging 0.61 in. north, 0.37 in. south, and 0.33 in. coastal. First snow of season on 21st and 22d.

Field corn and soybean harvest in clean-up stage. Fruit tree pruning begun. Light movement of hardy vegetables continued. Current snow halting all fieldwork.

NEW MEXICO: Extensive rains late week with totals over 2.00 in. southwest where flooding occurred.

More moisture so very little harvesting. Quality deteriorating on several crops. Cotton harvest late but still too wet to pick; about 20% ginned. Alfalfa cutting at standstill due to rain, but season practically over. Very little grain sorghum cut; 40% of crop in field. Rain helping winter wheat and barley. Pecans opening and dropping, but too wet to get in orchards. Quality dropping. Lots of peanuts still in wet fields. Red chili picking at standstill.

NEW YORK: Temperatures in 20's to low 30's; 5 to 15° below normal. Snow and rain ranged from 0.25 in. eastern areas to 1.50 in. Tug Hill Plateau. Precipitation below normal since last week of October.

NORTH CAROLINA: Temperatures 3 to 6° above normal. Precipitation light, 0.25 in. east to 1.00 in. mountains.

Fieldwork: 5.0 days suitable. Soil moisture short to adequate. Condition of wheat poor to fair; oats, barley, and rye fair to good. Pasture fair. Harvested: Soybeans 72%, 1977 57%, average 74%; cotton 88%, 1977 86%, average 80%; sorghum 95%, 1977 91%, average 91%. Planted: Wheat 88%, 1977 86%; oats 94%, 1977 90%; barley 95%, 1977 91%; rye 91%, 1977 88%.

NORTH DAKOTA: Cold, wintry weather prevailed. Temperatures stayed below freezing except 24th when daytime highs rose into 30's. Extremes: 39 and -22°. Precipitation light. Largest amount 0.12 in. northeast and southwest.

Soil moisture levels still low. Snow cover general and appears to be sufficient to protect wintering crops. Cattlemen shifting to winter feeding pastures as most pastures and winter grazing areas become snow covered. Some cattle still on stubble. Feed supplies still accessible and stock water supplies adequate.

OHIO: Temperatures normal or slightly below. High 57°, low 25°. Rain received through week but mostly on 25th and 26th. Weekly accumulation generally ranged from 0.25 to 0.50 in. but was over 1.00 in. along Ohio River. Accumulation was less than normal with exception of south. Light snow in snow belt area last part of week.

Limited plowing and corn harvest continued. Excellent weather for tobacco bulking and stripping.

OKLAHOMA: Precipitation all areas with averages ranging from 0.20 in. west central to 2.08 in. northeast. Temperatures above normal ranging from 3° below normal Panhandle to 4° above normal east central.

Topsoil moisture adequate, subsoil moisture short. Wheat good condition with 91% up to stand 1978 and normal, 96% 1977. About 7% is being grazed. Oats rated good to fair, barley rated good. Sorghum harvest 72% complete 1978 and normal, 91% 1977. Harvest hampered by wet weather. Cotton rated fair with 23% harvested, 57% 1977, 28% normal. Peanut and soybean harvest virtually complete. Pecans rated fair with 23% gathered. Summer drought caused natives to be smaller than normal. Pasture and range improved but still rated fair to poor. Livestock rated good to fair. Fieldwork: 3.1 days suitable.

OREGON: Temperatures near normal along southern border; elsewhere, temperatures 6 to 12° below normal. Precipitation well above normal along coast through Willamette Valley and along northern portion of east. Elsewhere, seasonal amounts reported. Amounts ranged from 1.50 to 2.50 in. west and 0.20 to 1.00 in. east. Extremes: Mid-50's, low 20's west; low 50's, low teens east.

Season's first snow in north last weekend reduced fieldwork considerably. Very cold nights in addition have put an end to most fall vegetable harvests. Storage crops, potatoes and onions, continue to be processed and move to market. Sugarbeet harvest ended. Pastures frosted and heavy feeding of livestock now commonplace. Feed supplies adequate.

PENNSYLVANIA: Mostly cloudy skies and a northeast breeze. Temperatures near to 6° below normal with extremes 57 and 10°. Rain south and mixture of rain and snow north mid-period with first snow storm of season end of period. Weekly precipitation 0.25 to 1.00 in. with 1 to 4 in. snowfall.

Farmers trying to complete corn harvest where weather and soil conditions permit.

PUERTO RICO: Island average rainfall 1.54 in. or 0.21 in. above normal. Temperatures averaged about 78° on coast and 73° interior. Extremes: 91 and 57°.

SOUTH CAROLINA: Temperatures warmer than usual, highest temperatures low 80's on 24th along south coast. Scattered showers during week, among heaviest was 0.49 in. 21st.

Soil moisture short. Fieldwork: 5 days available. Scrapping cotton continued, 97% harvested, 85% last year, 87% average. Soybeans 99% mature, 77% harvested, ahead of 59% last year, 64% average. Sorghum 89% harvested, 85% last year, 83% average. Small grain condition fair, improved with some needed moisture. Winter grazing 91% planted, 93% last year, 79% emerged compared to 89% last year. Pastures continued poor to fair; grazing supply short for winter season. Livestock condition fair to good, varying with pastures.

SOUTH DAKOTA: Cold temperatures continued. Readings 7 to 17° subnormal. Extremes: -19 and 53°. Precipitation mainly as snow although freezing drizzle east, 22d and 23d. Southwest and south central received greatest amounts of precipitation.

Corn harvest virtually finished.

TENNESSEE: Midweek rain; again weekend rain. Amounts 1.00 in. east, 1.50 in. west. Temperatures 5° above normal.

Harvest of corn, cotton, soybeans virtually complete. Burley tobacco stripping continued.

Small grain seedings benefited from rain. Pastures fair. Some cattle on supplemental feed.

TEXAS: Light showers statewide. 25th low formed over Panhandle, scattered showers again reported statewide. Cold front 26th triggered locally heavy rains central, east. Rainfall ranged from 0.06 Trans-Pecos to 2.70 east. Precipitation above normal east, north central, south central, Upper Coast, Edwards Plateau. Below normal Lower Valley, Coastal Bend, Plains. Near normal amounts across remainder of State. Temperatures ranged from mid-40's Panhandle, northern Plains to low 60's along coast and south.

Harvest of cotton, sorghum, soybeans, peanuts remained near standstill following three weeks wet weather. Few farmers able to get into fields in scattered localities but progress very slow. Wheat, oats, barley show excellent response to improved moisture conditions and growth has been good. Grazing available most localities from south to High Plains. Cotton harvest remained at standstill because cold, wet weather. Few High Plains, Trans-Pecos farmers able to harvest a little cotton before driven out by rain. Sorghum harvest stopped on High, Low Plains by rain, cold weather. Most areas on High Plains need fair weather to allow farmers complete harvest. Peanut harvest on schedule with last year even though most farmers were unable to do much this past week. Grades and yields continue to vary widely. Soybean harvest little progress as moderate to heavy rains fell where harvest still active. Prospects poor in Blacklands, northeast where drought conditions plagued crop through growing season. Wheat seeding 99% complete and slightly ahead schedule. Most stands good growth and grazing available from South Texas, High Plains. Oat fields showing excellent growth from Blacklands southward in response to recent rains. Grazing adequate to abundant but some fields are too wet to support livestock at this time. Cotton harvested 40%, 85% 1977, 59% average. Peanuts harvested 96%, 96% 1977, 97% average. Pecans harvested 45%, 56% 1977, 45% average. Sorghum harvested 94%, 100% 1977, 100% average. Soybeans harvested 83%, 92% 1977, 93% average. Sugarbeets 70%, 94% 1977, 83% average. Sunflowers harvested 97%, 98% 1977, 95% average. Flax planted 56%, 52% 1977, 49% average. Oats planted 99%, 97% 1977, 97% average. Wheat planted 99%, 96% 1977, 98% average.

Bell peppers, cabbage, carrots, cucumbers, tomatoes good supply. Citrus harvest well underway; continue to increase approach of holiday season. Land preparation spring vegetables and watermelons continued. Spinach planting well underway. Pecan harvest delayed by rain and damp conditions. Trans-Pecos, pecans hand harvested; too muddy many orchards for machine harvesting.

Scattered rains and showers continued improve range and pasture conditions in most areas. High Plains, native ranges remained short, livestock on wheat pasture good condition. North central Texas, pastures and ranges remained short; oat fields greening-up response to recent rain. Stock water supplies still low some areas since little run-off. Supplemental feeding and culling. East Texas, small grain pastures receiving rain making

good growth. Trans-Pecos, South Texas, ranges and livestock good to excellent condition.

UTAH: Rain and snow amounts generally light to moderate but locally heavy. Temperatures extremely variable ranging from 7° below normal to 10° above.

Major farm activities limited to care and feeding of livestock on winter rangelands, feedlots, and farms. Apple, onion, and potato producers continued to process and market current stock. Sugarbeet processing continued.

VIRGINIA: Temperatures little above normal. Extremes: 67 and 25°. Rain over most areas on 23d. Mixed rain and snow, west 26th. Rainfall averaged about 0.50 in.

Topsoil moisture short to adequate. Subsoil moisture reserves low. Fieldwork: 4.2 days suitable. Harvest progress: Corn 95%, 91% 1977, 89% average; soybean 87%, 60% 1977, 78% average; sorghum 74%. Wheat seeding 83%, 82% 1977. Pastures, small grains greening due to recent rain, in mostly good condition. Activities: Seedbed preparation; livestock care, marketing apples, grains and livestock; tobacco sorting, grading and selling.

WASHINGTON: West: Temperatures averaged 6 to 7° below normal. Precipitation ranged from 1.30 in. below normal to 0.30 in. above.

Snow brought an end to most farm activity. Some carrot digging and berry pruning continued as weather permitted. Pasture reduced by heavy frosts and snow. Cattle on supplemental feed.

East: Temperatures averaged 8 to 9° below normal. Precipitation ranged from 0.20 in. above to 0.30 in. below average.

Frozen ground halted sugarbeet digging. Snow slowed corn harvest. Orchard work also slowed by weather. Snowfall welcome to winter grain where moisture needed. Cattle on winter rations.

WEST VIRGINIA: Temperatures 3 to 4° above normal. Precipitation above normal central section, well below normal elsewhere.

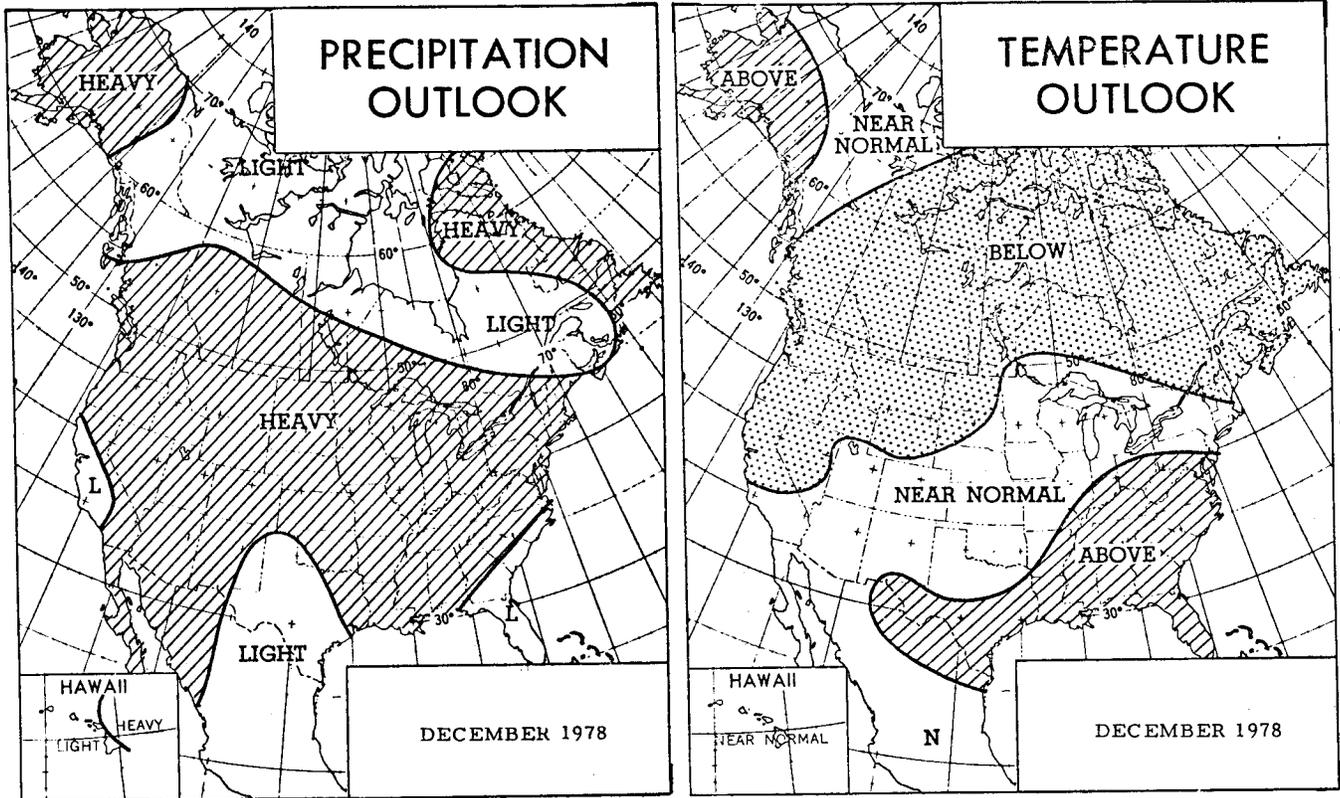
Fieldwork: 5.5 days suitable. Soil moisture adequate. Main activities: Picking corn, butchering livestock and deer hunting. Fall pasture fair to poor. Small grains germinating from recent rains. Water levels remain low southwest. Hay supply adequate. Grain supply adequate.

WISCONSIN: Generally cold with several periods of snow. Light snow south 20th with 1 to 3 in. in east central. Snow again 22d night and early 23d with most of state receiving 2 to 6 in. although extreme southeast received rain. Snow developed on 26th with 1 to 3 in. in southeast and less than an inch in northwest.

WYOMING: Precipitation light with largest amount 0.28 in. Temperatures mostly below normal with exception of Upper Platte drainage. Departures much as 24° below normal in Big Horn drainage. Maximums mostly in 30's and 40's and minimums near zero.

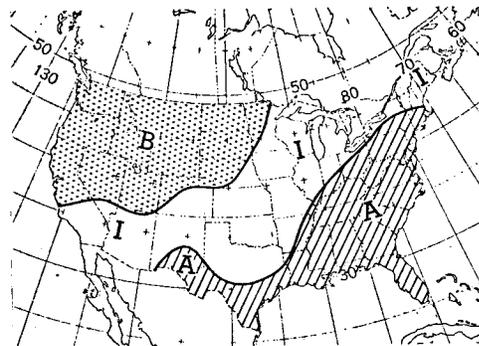
Winter wheat fair to good condition with snow cover. Livestock mostly in good condition. Ranchers feeding in most areas.

Average Monthly Weather Outlook



OUTLOOK FOR WINTER AVERAGE TEMPERATURES

December 1978 through February 1979



- Above Normal, 65% chance of occurrence
- Below Normal, 65% chance of occurrence
- Indeterminate, 50% chance of Above Normal  
50% chance of Below Normal

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the years 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 65% probability of occurring where forecast (shaded area), based on the verification scores of nineteen years of experimental seasonal predictions.

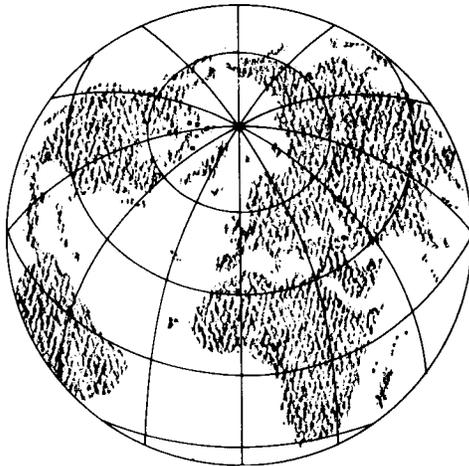
NOAA, National Weather Service  
Climate Analysis Center

November 28, 1978

## World Weather and Crop Update

November 20 - 26 and October Summary

USSR. In contrast to the very wet conditions which prevailed in September, precipitation stayed generally below normal across most of the Ukraine. Precipitation so far in November also has been very light. These dry conditions permitted the successful completion of the sunflower harvest. Soil moisture is generally adequate for winter wheat across the Ukraine, but the Lower Volga River region may be developing some moisture deficiencies as the result of two and a half months of drier-than-normal weather. Conditions continue to be very wet in northern European Russia with only a short break in early November. Last week precipitation ranged from 15 to 40 mm in the area to the south and west of Moscow extending to the western border. In the New Lands, October moisture also fell below normal following a dry September. However, a substantial snowcover has been accumulating in recent weeks, particularly in northern parts of the region.



PEOPLE'S REPUBLIC OF CHINA. October rainfall in the PRC ranged above normal, but most of it fell during the final days of the month. Most likely this was too late to help the crop before going into dormancy. Additional rains the second week of November also helped; the crop should be dormant now as freezing temperatures are occurring regularly in the northern part of the belt. Last week, above-normal rains of 15 to 30 mm fell only in the Yangtze Valley. Other parts of the country received less than 10 mm.

AUSTRALIA. Following the much-above-normal rainfall of September, very little rain fell in the wheat belt of Victoria, New South Wales, and Queensland. Soil moisture scored adequate to carry the crop through the growing season. However, above-normal rains possibly caused some lodging of ripening wheat during the first week of November in Queensland and during the third week in Victoria and southern New South Wales. Reports remain optimistic, however, while very little rain fell on the belt last week with harvest in progress.

INDIA. Precipitation over India stayed generally well below normal in October---a welcome relief after the heavy rains of late summer, particularly on the Ganges Plain. The winter wheat areas of the north remained virtually rainless, but the heavier early rains have assured an adequate water supply for the crop season with early forecasts pointing to a possible record winter wheat crop. The outlook for other rabi (spring and early summer harvested) crops also appears promising because

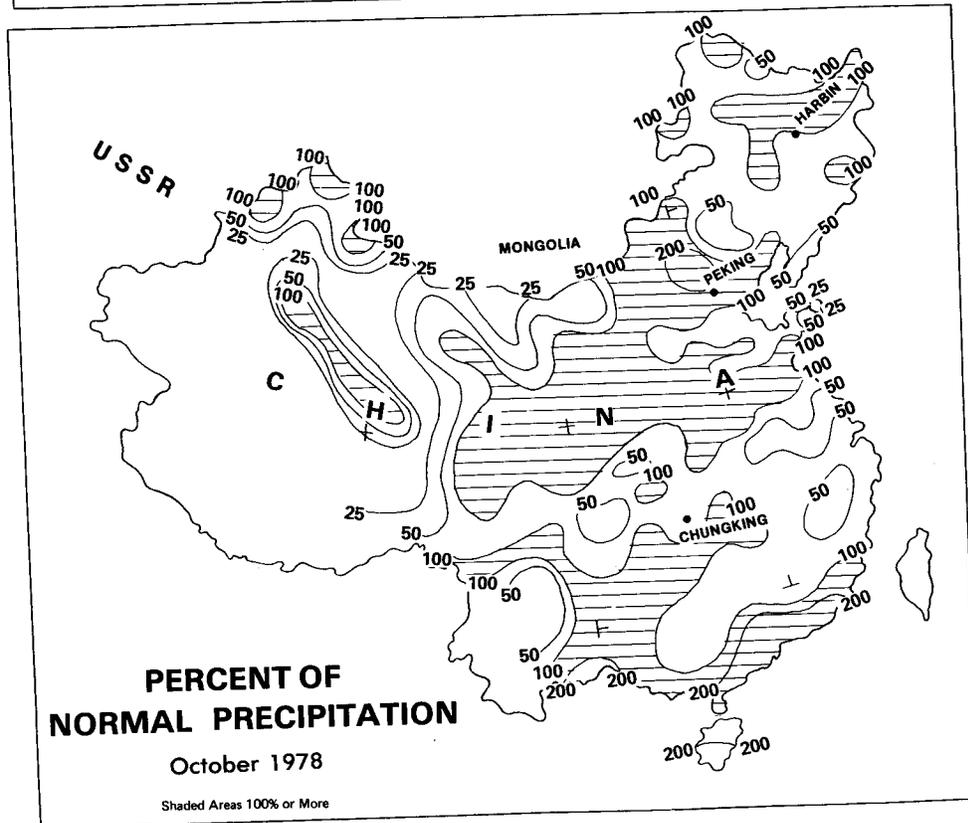
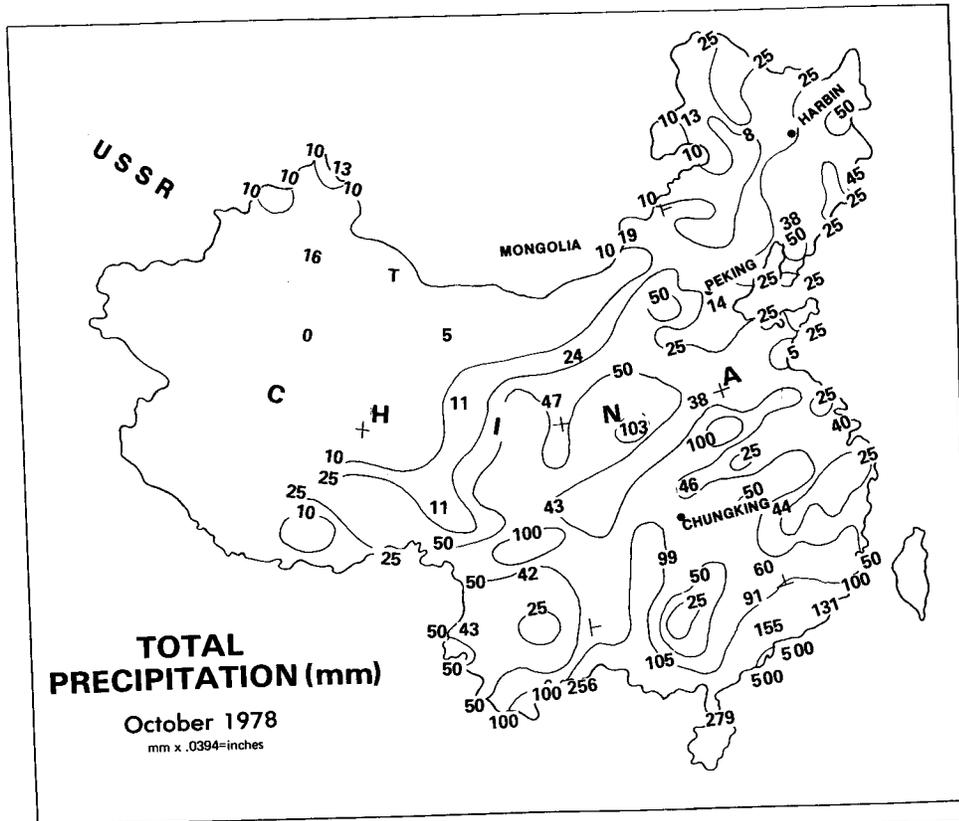
of ample soil moisture, adequate water for power, and adequate supplies of fertilizer. Rainfall in the extreme south has generally been normal with some deficits in September and some excesses in November. The northeast monsoon, which is of great importance for the main rice crop in Tamil Nadu and adjoining areas in southern India arrived on October 24. Though about a week later than normal, the monsoon appeared within the range of expected arrival. In Sri Lanka, very heavy rains during the past three weeks have caused extensive flooding and damage.

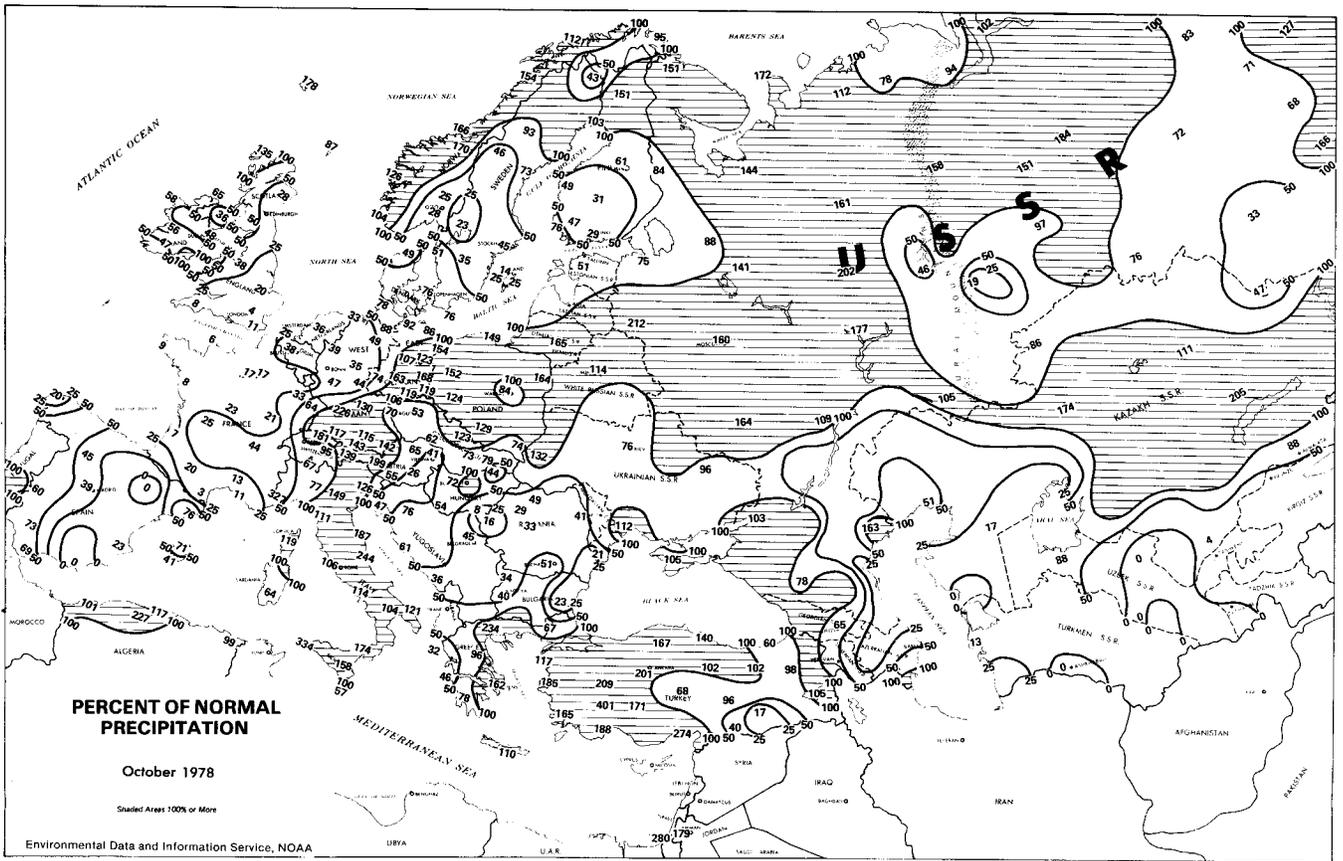
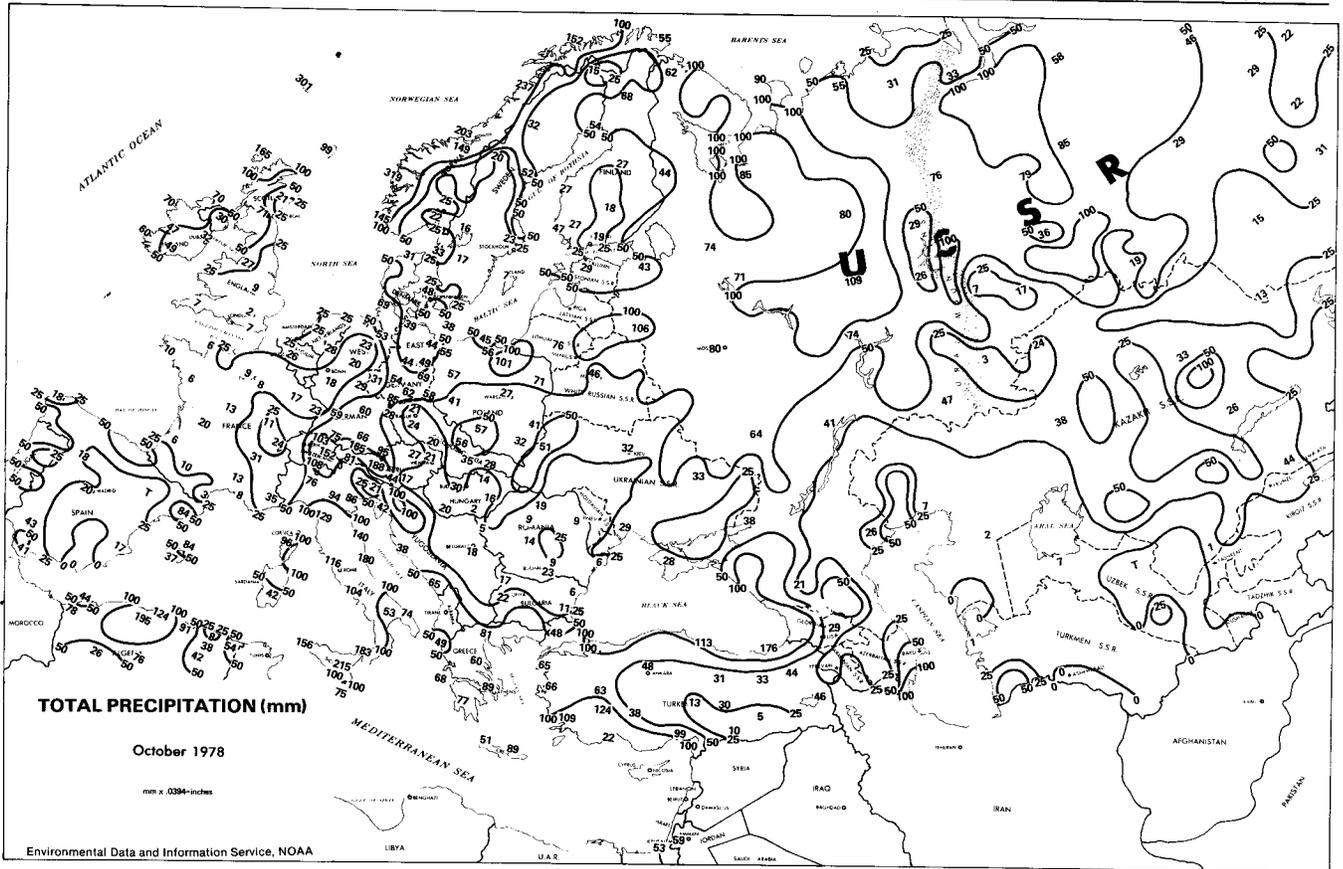
AFRICA. Much of northern Africa continued to receive below-normal moisture in October, and only Tunisia and western Libya have satisfactory conditions for wheat planting. November was nearly rainless in Morocco and Algeria creating poor prospects for a successful winter wheat planting. In South Africa, above-normal rainfall continued over most of the Maize Triangle in October providing reasonable conditions for corn planting which is underway. However, additional moisture during the next few days will be critical for the eastern production areas. The first day of December is generally considered the last feasible planting date. Normally planting continues into late December in western areas.

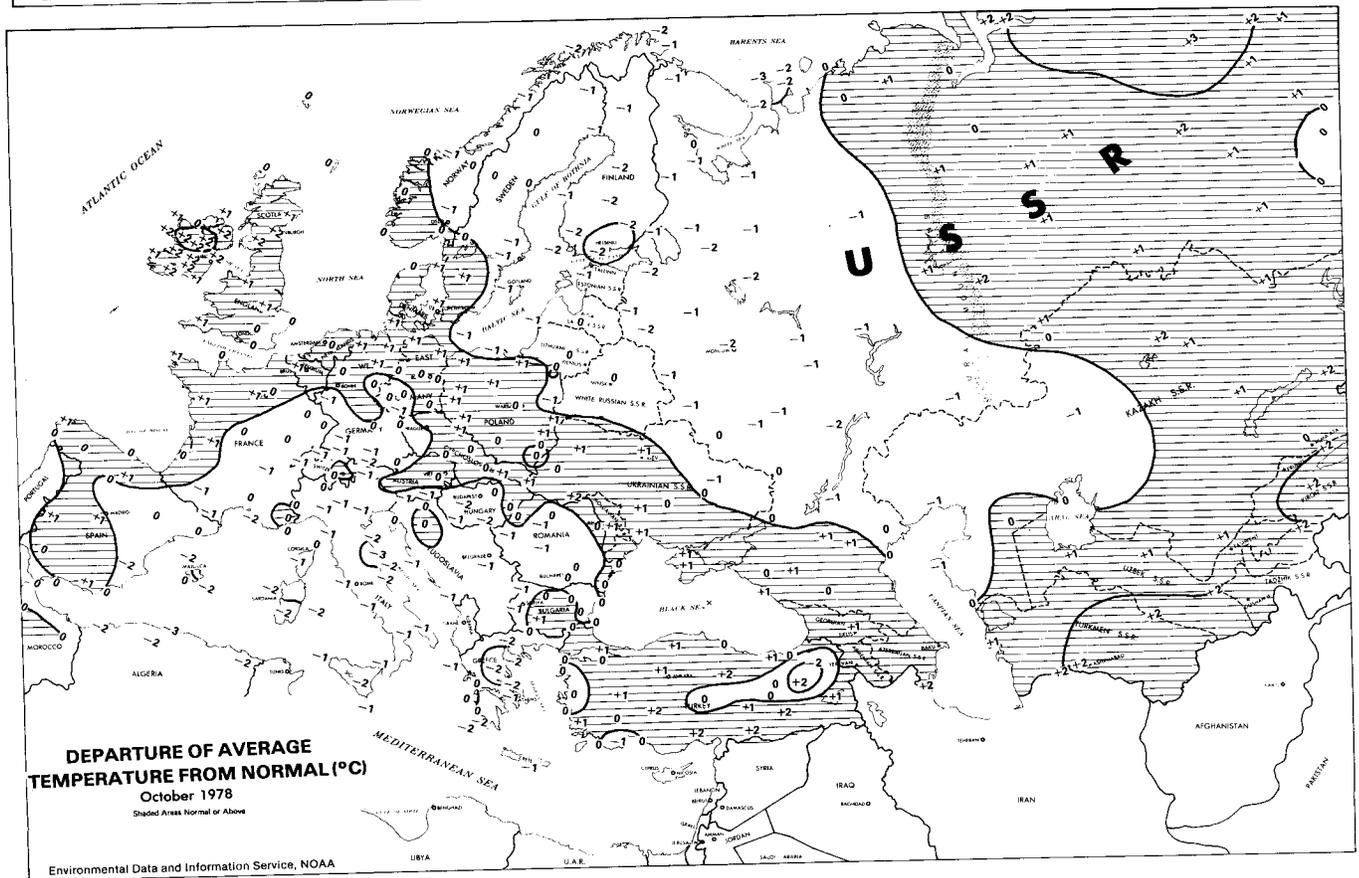
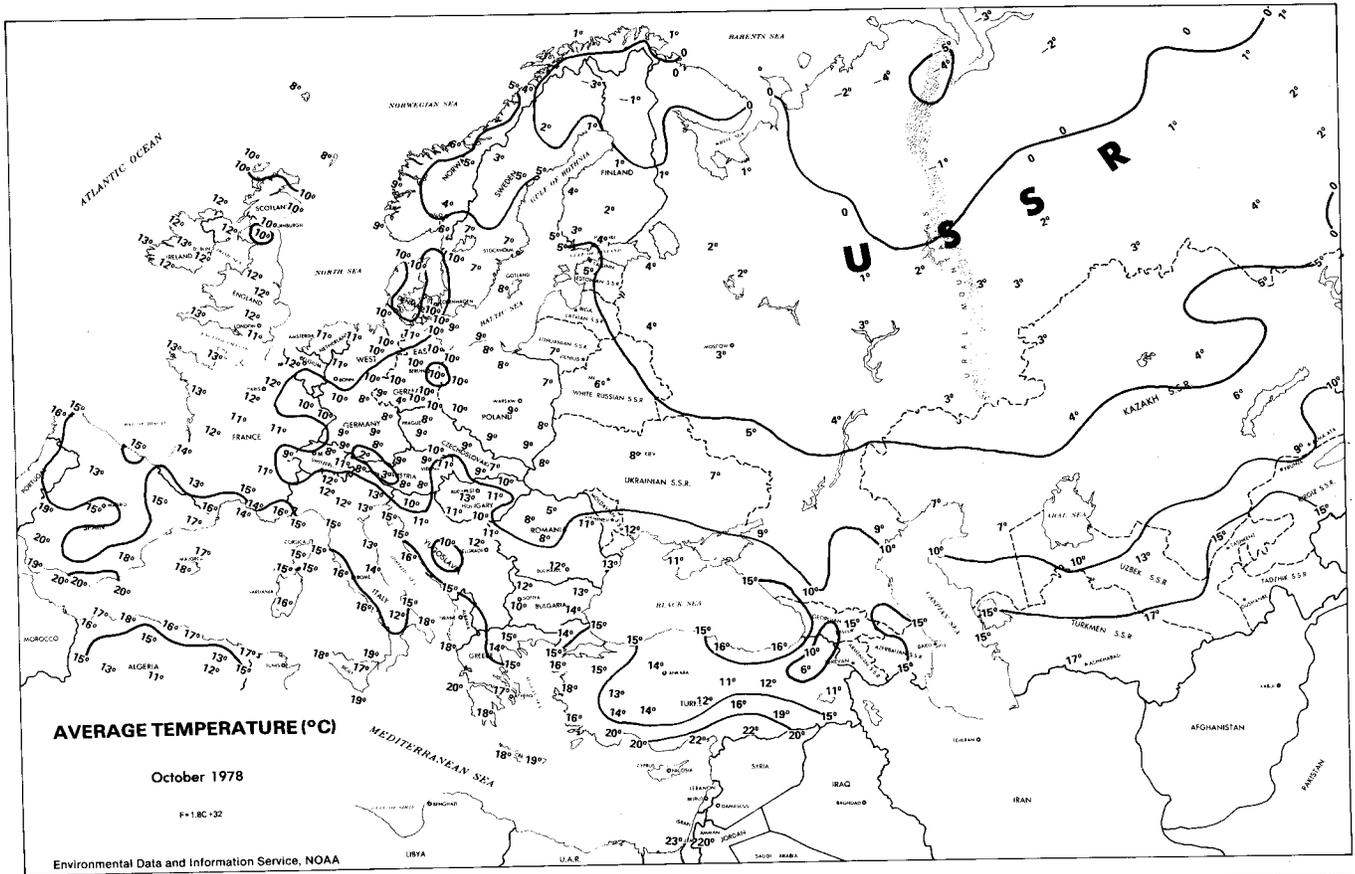
EUROPE. Moisture continued to be well below normal in October over most of western Europe. For the second consecutive month, amounts were only 25 to 50 percent of normal over most of Spain, France, and much of the United Kingdom. The only significant relief to date occurred the second week of November for much of Spain; the United Kingdom has benefited the past two weeks from 30 to 50 mm. However, considerable additional moisture is needed in England, particularly in southwestern areas. With the unusually dry and warm October, a large winter wheat acreage was planted. Optimum soil moisture was reported in West Germany. This past week, France had 50 percent coverage of 10 to 20 mm with heaviest amounts in central regions. Winter grains in this area definitely need moisture. A moisture deficiency in southeastern Europe began to develop in the middle of October and has persisted.

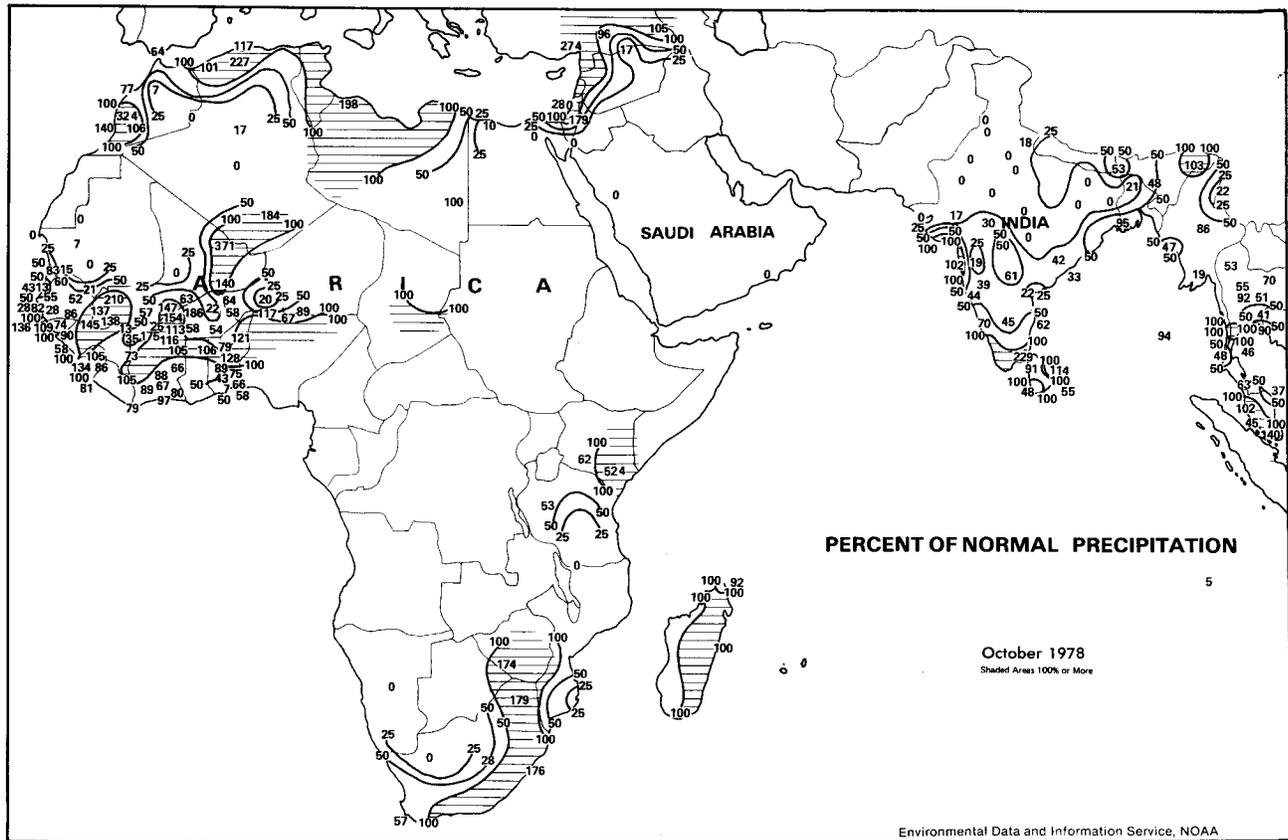
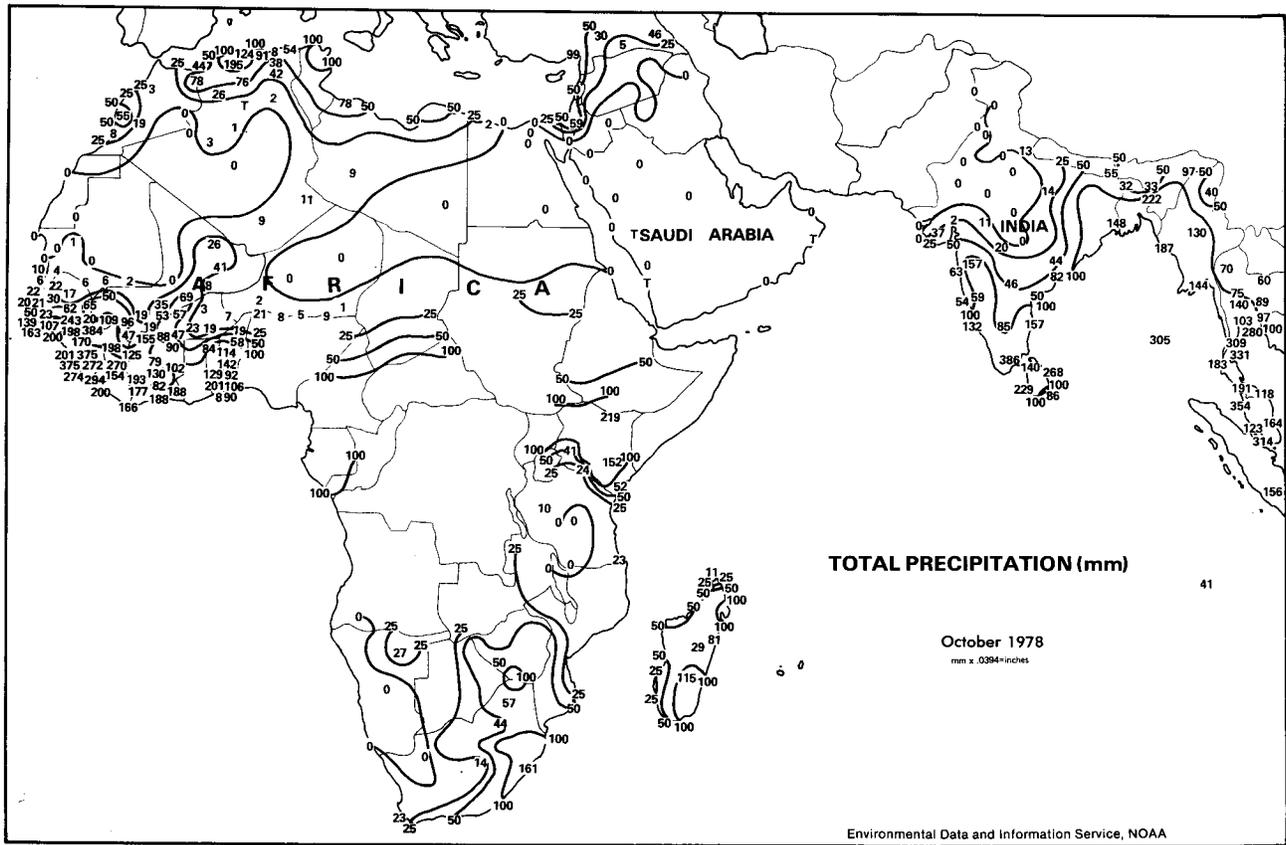
SOUTH AMERICA. Rainfall in the soybean-growing areas of Parana, Brazil, stayed much below normal in October continuing the pattern of September. Dry conditions delayed planting. However, increasingly normal rainfall patterns in November have improved the moisture situation for planting. Crop areas in Rio Grande do Sul were drier than normal in September but near normal in October; excessive moisture fell in November. It appears that damage will be light, although the wetness caused concern over the loss of soybean acreage. Winter wheat harvest started in early November with excellent yields reported from early fields. However, excessive moisture during the early harvest may have caused some lodging, particularly because of the heavy growth of the crop. In Argentina, October rainfall neared normal in the wheat belt of Buenos Aires and somewhat above normal in the corn belt just to the north. Heavy rains disrupted corn planting; the problem persists. Last week conditions in the wheat belt approached normal with rainfall amounts of 20 to 30 mm in the harvest area, but the situation is by no means satisfactory. In Chile, weather conditions were particularly favorable for the wheat crop in southern areas.

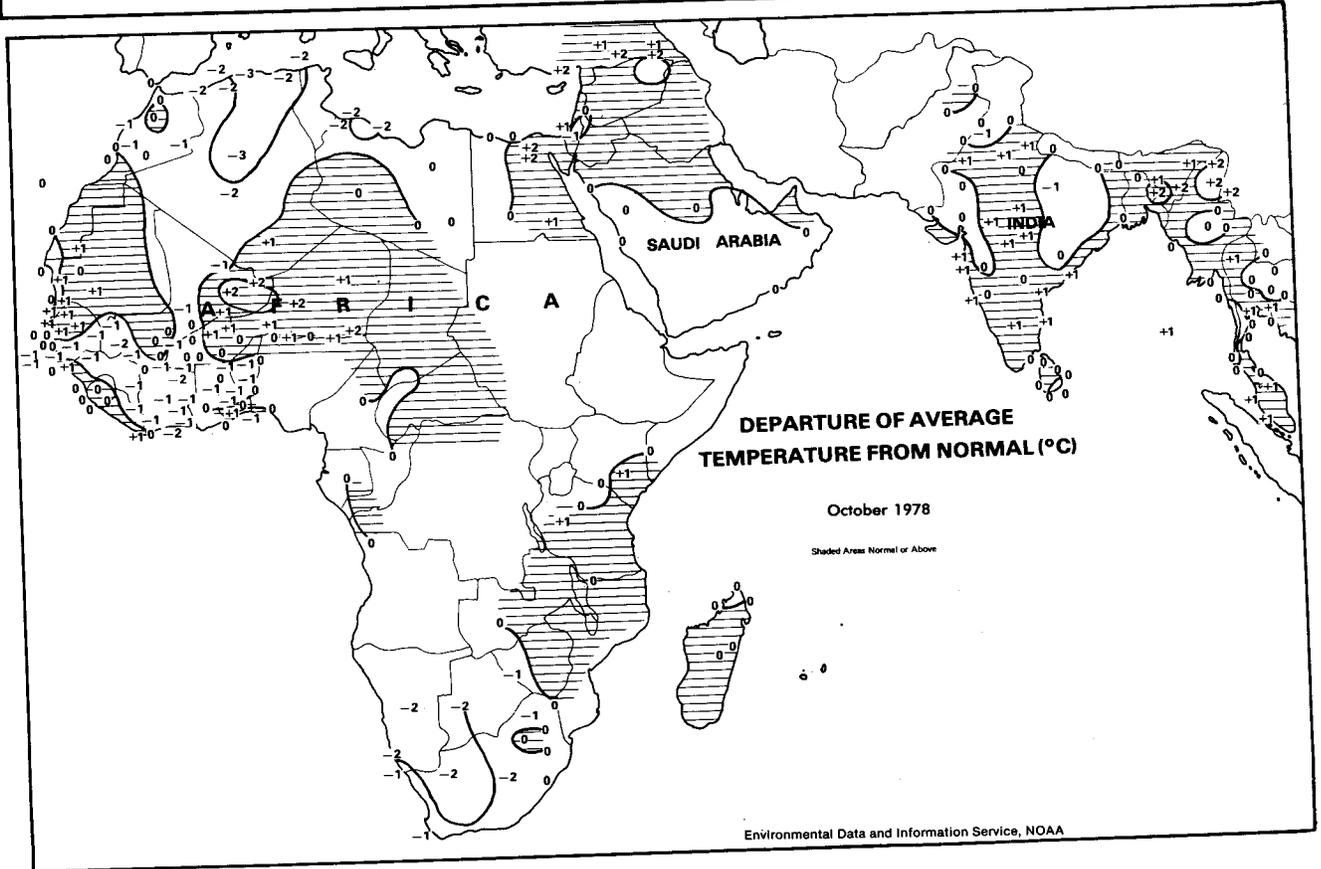
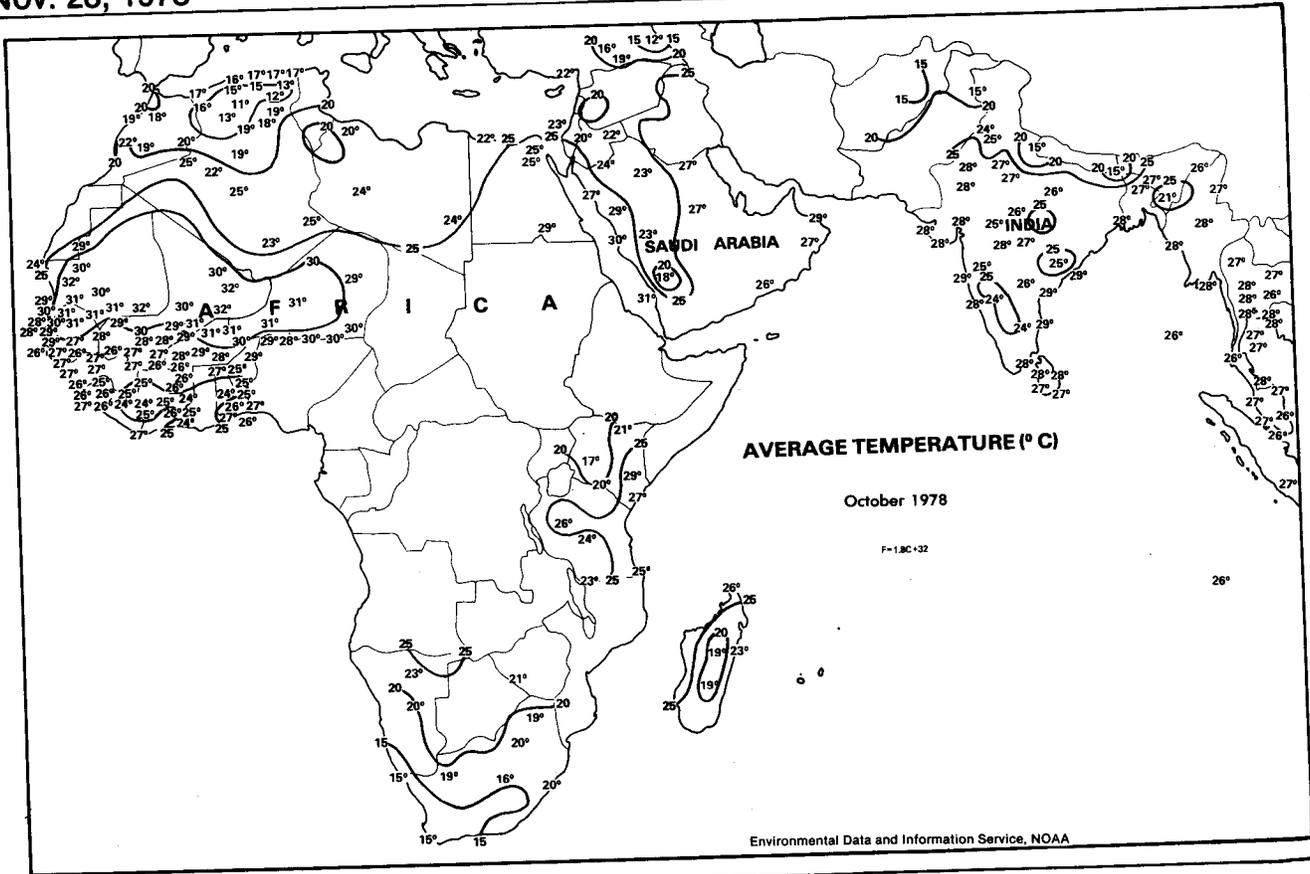
### China Precipitation

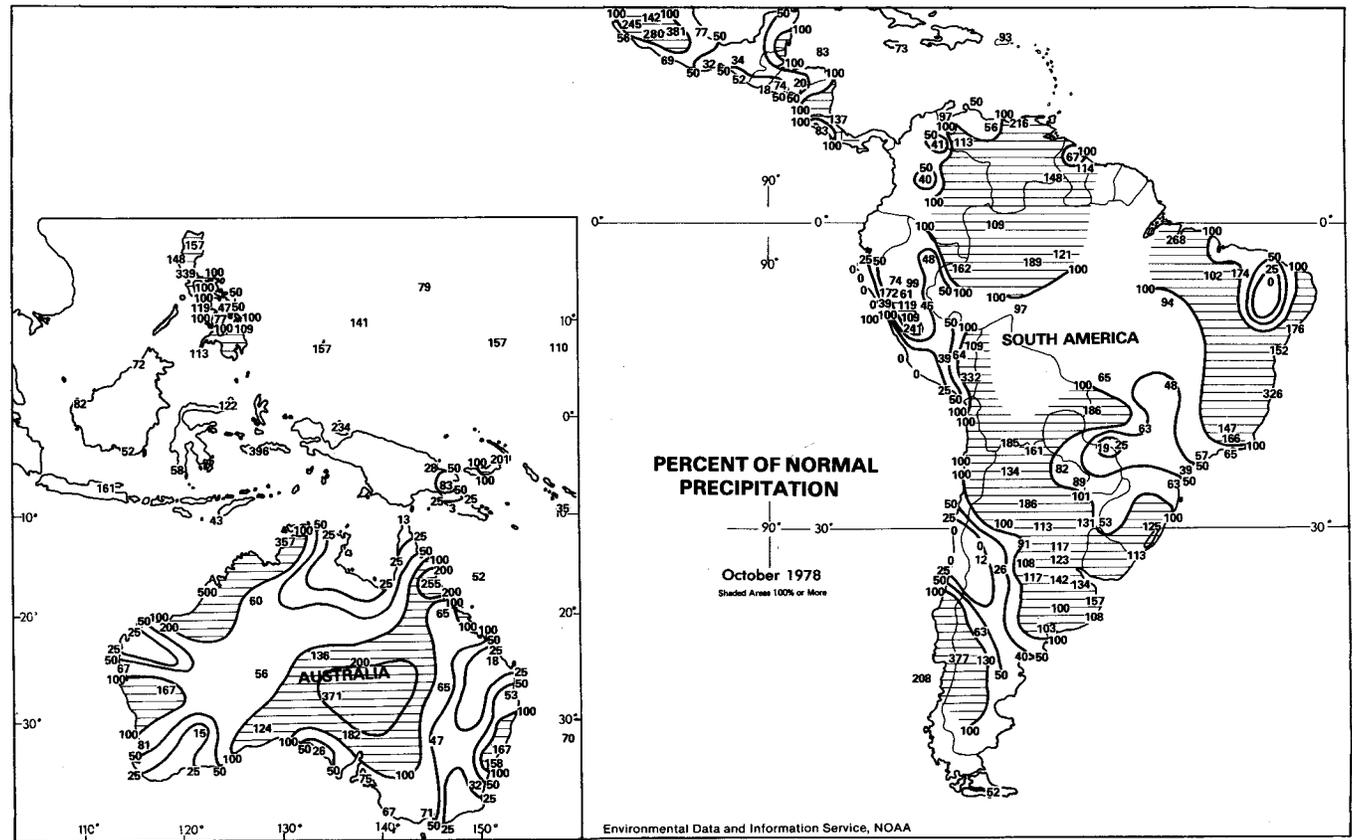
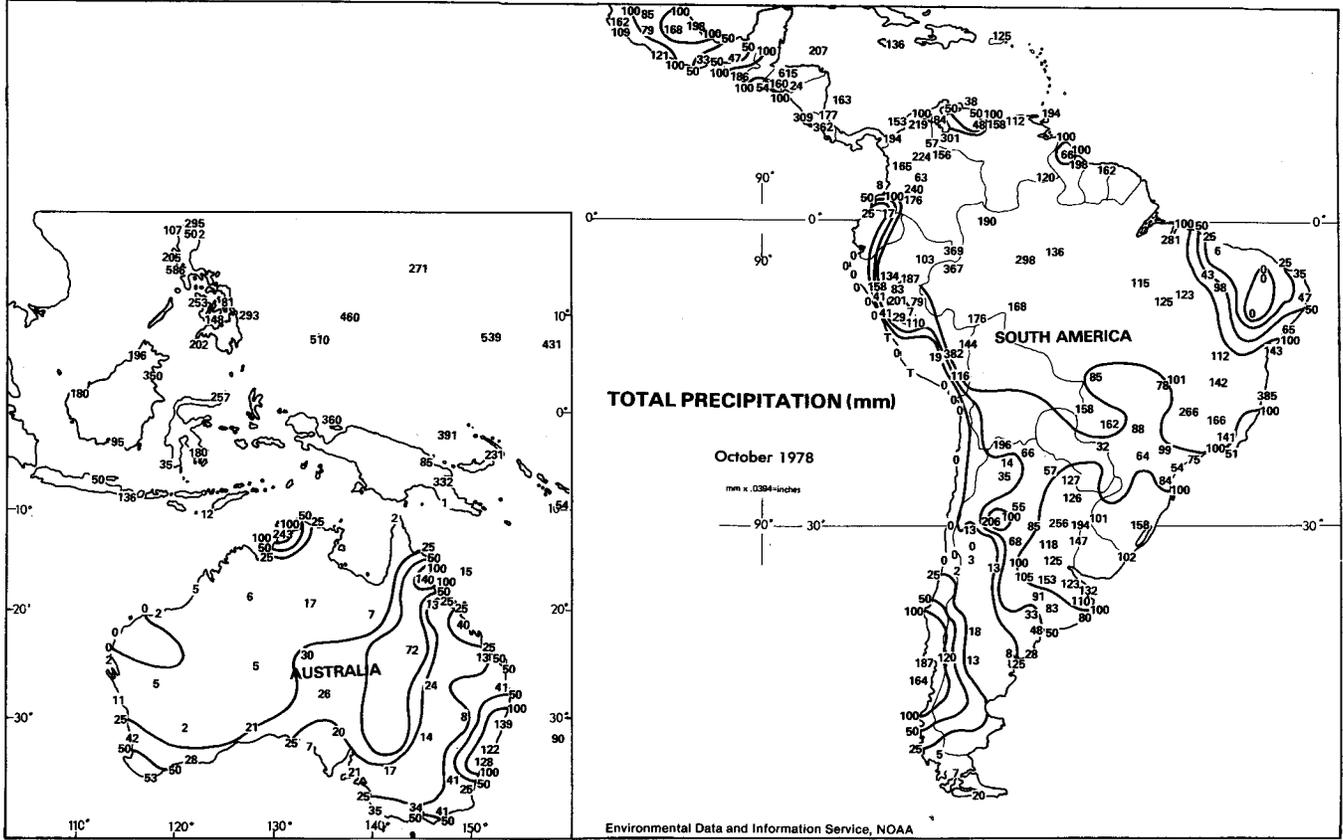


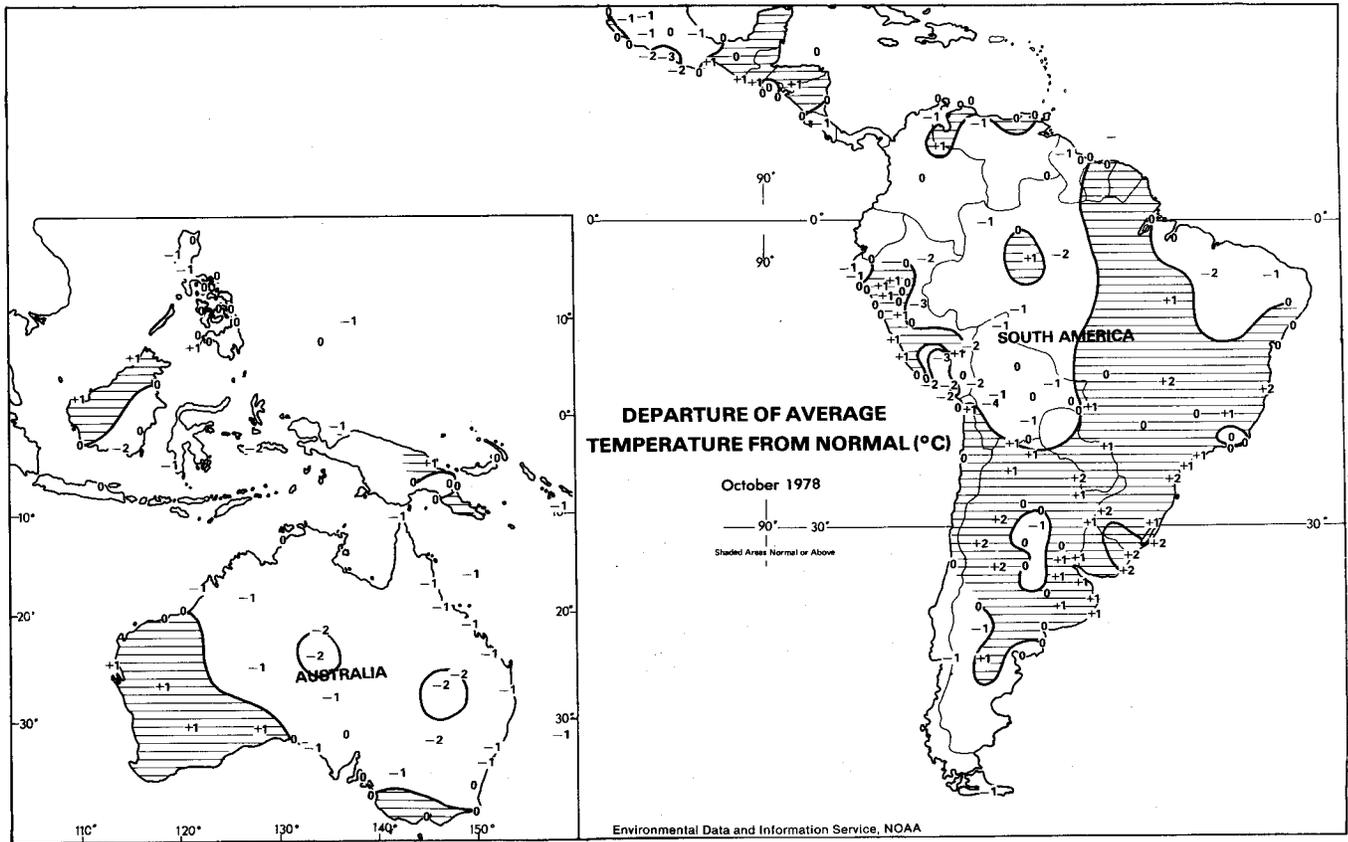
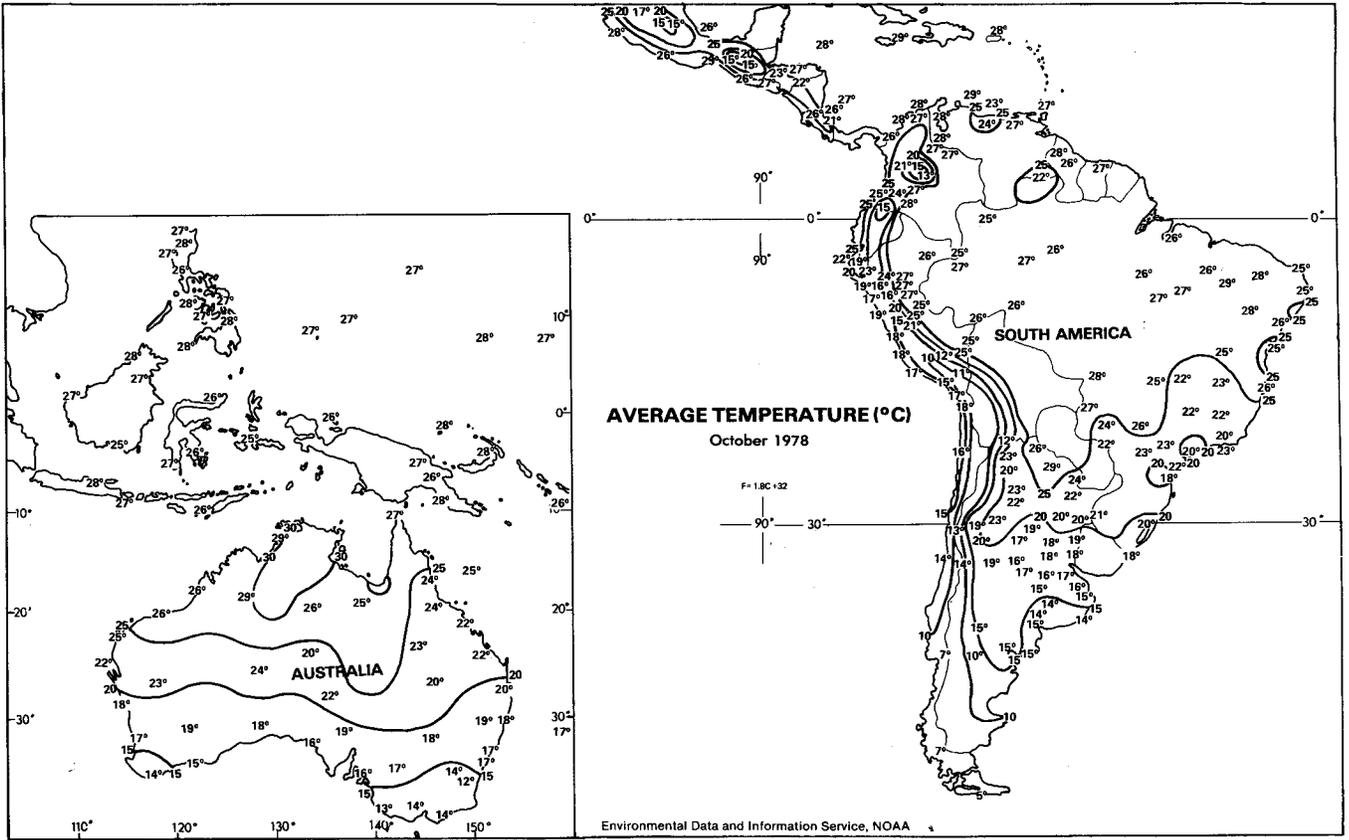


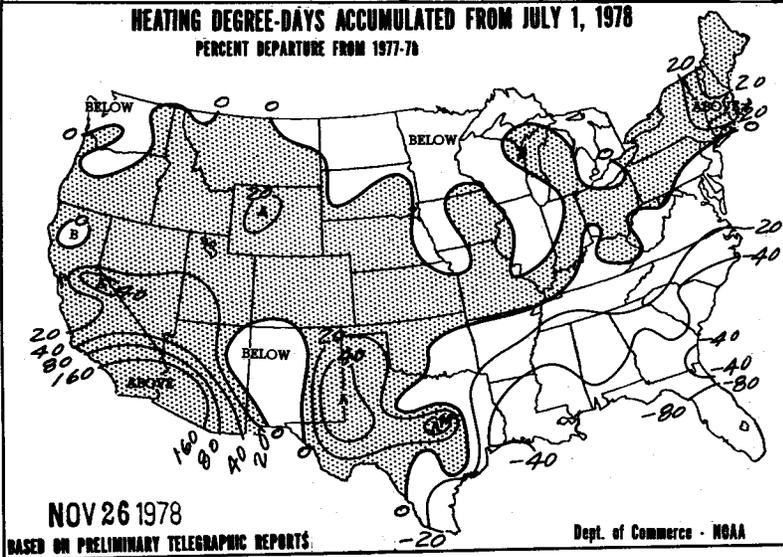
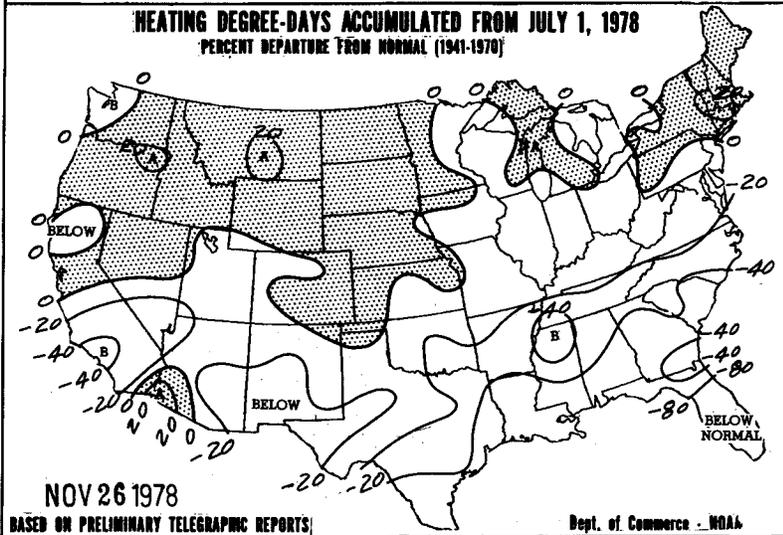
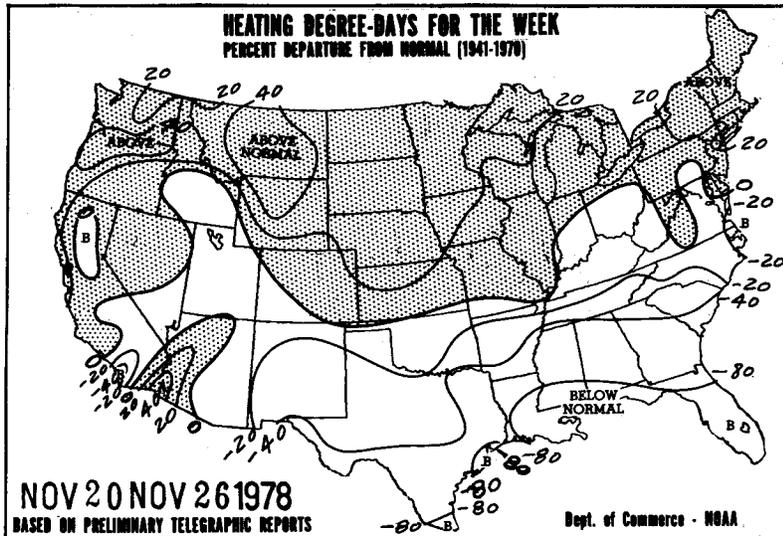












HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING NOV. 26, 1978.

STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78
ALA. BIRMINGHAM...	48	5	325	142	107	MAINE CARIBOU...	21	8	2105	15	223	YOUNGSTOWN.....	19	4	1136	19	107
MOBILE...	22	1	155	156	159	PORTLAND.....	24	8	1522	15	82	OKLA. OKLAHOMA CITY...	115	16	444	108	90
MONTGOMERY...	24	6	160	184	186	MD. BALTIMORE...	154	1	700	4	47	TULSA.....	116	14	449	12	12
ARIZ. FLAGSTAFF...	222	1532	131	296	77	MASS. BOSTON...	220	61	1078	201	297	OREG. ASTORIA...	192	53	1355	120	82
PHOENIX...	222	1532	131	296	77	MICH. ALPENA...	220	4	150	259	209	BURNS.....	231	33	1802	186	103
TUCSON...	222	1532	131	296	77	DETROIT...	220	4	150	259	209	MEFORD...	231	33	1802	186	103
WINSLOW...	222	1532	131	296	77	FLINT...	220	4	150	259	209	PENDLETON...	231	33	1802	186	103
YUMA...	222	1532	131	296	77	GRAND RAPIDS...	220	4	150	259	209	PORTLAND...	231	33	1802	186	103
ARK. FORT SMITH...	222	1532	131	296	77	HOUGHTON LAKE...	220	4	150	259	209	SALEM...	231	33	1802	186	103
LITTLE ROCK...	222	1532	131	296	77	LANSING...	220	4	150	259	209	PA. ALLENTOWN...	191	10	967	35	56
CALIF. BAKERSFIELD...	222	1532	131	296	77	HARSHETTE...	220	4	150	259	209	ERIE...	116	10	1153	115	11
EUREKA...	222	1532	131	296	77	HUSKEGON...	220	4	150	259	209	HARRISBURG...	116	10	1153	115	11
FRESNO...	222	1532	131	296	77	S. STE. MARIE...	220	4	150	259	209	PHILADELPHIA...	116	10	1153	115	11
LOS ANGELES...	222	1532	131	296	77	MINN. DULUTH...	220	4	150	259	209	PITTSBURGH...	116	10	1153	115	11
RED BLUFF...	222	1532	131	296	77	INTERNAT. FALLS...	220	4	150	259	209	SCRANTON...	116	10	1153	115	11
SAN DIEGO...	222	1532	131	296	77	WINNEPPOIS...	220	4	150	259	209	R. I. PROVIDENCE...	221	48	1170	175	244
SAN FRANCISCO...	222	1532	131	296	77	ROCHESTER...	220	4	150	259	209	S. C. CHARLESTON...	43	34	134	161	126
STOCKTON...	222	1532	131	296	77	ST. CLOUD...	220	4	150	259	209	COLUMBIA...	83	31	222	171	195
COLO. DENVER...	222	1532	131	296	77	MISS. JACKSON...	18	65	207	132	146	GREENVILLE...	83	31	222	171	195
GRAND JUNCTION...	222	1532	131	296	77	MERIDIAN...	18	65	207	132	146	S. DAK. ABERDEEN...	10	10	161	24	76
PUEBLO...	222	1532	131	296	77	MO. COLUMBIA...	178	6	753	62	4	HURON...	10	10	161	24	76
CONN. BRIDGEPORT...	167	11	800	225	153	KANSAS CITY...	200	6	74	11	11	RAPID CITY...	10	10	161	24	76
HARTFORD...	247	59	1367	274	37	ST. LOUIS...	177	6	72	11	11	SIoux FALLS...	10	10	161	24	76
DEL. WILMINGTON...	169	13	773	7	41	SPRINGFIELD...	156	6	72	11	11	TENN. CHATTANOOGA...	89	4	425	146	101
D.C. WASHINGTON...	128	12	491	133	6	MONT. BILLINGS...	374	148	1482	34	21	KNOXVILLE...	98	4	456	146	75
FLA. APALACHICOLA...	111	39	53	96	111	GLASGOW...	390	110	1100	203	21	MEMPHIS...	66	4	276	100	99
DAYTONA BEACH...	111	39	53	96	111	GREAT FALLS...	390	110	1100	203	21	NASHVILLE...	109	4	293	72	83
FORT MYERS...	111	39	53	96	111	HAYRE...	390	110	1100	203	21	TEXAS ABILENE...	109	4	293	72	83
JACKSONVILLE...	111	39	53	96	111	HELENA...	390	110	1100	203	21	AMARILLO...	109	4	293	72	83
KEY WEST...	111	39	53	96	111	KALISPELL...	390	110	1100	203	21	AUSTIN...	109	4	293	72	83
LAKELAND...	111	39	53	96	111	MILES CITY...	390	110	1100	203	21	BEAUMONT...	109	4	293	72	83
MIAMI...	111	39	53	96	111	MISSOULA...	390	110	1100	203	21	BROWNSVILLE...	109	4	293	72	83
ORLANDO...	111	39	53	96	111	NEBR. GRAND ISLAND...	275	33	97	97	97	CORPUS CHRISTI...	109	4	293	72	83
TALLAHASSEE...	111	39	53	96	111	LINCOLN...	275	33	97	97	97	DEL RIO...	109	4	293	72	83
TAMPA...	111	39	53	96	111	NORFOLK...	275	33	97	97	97	FEL PASO...	109	4	293	72	83
WEST PALM BEACH...	111	39	53	96	111	NORTH PLATTE...	275	33	97	97	97	FORT WORTH...	109	4	293	72	83
GA. ATLANTA...	66	4	259	223	172	OMAHA...	302	64	1480	100	33	HOUSTON...	150	31	519	37	133
AUGUSTA...	66	4	259	223	172	VALENTINE...	302	64	1480	100	33	LUBBOCK...	100	31	365	18	180
MACON...	66	4	259	223	172	NEV. ELY...	24	28	1858	130	307	HIDLAND...	61	9	465	3	36
SAVANNAH...	66	4	259	223	172	LAS VEGAS...	24	28	1858	130	307	SAN ANGELO...	61	9	465	3	36
IDAHO. BOISE...	190	131	127	100	225	RENO...	21	11	1474	210	226	SAN ANTONIO...	61	9	465	3	36
LEXINGTON...	190	131	127	100	225	WINNEMUCCA...	21	11	1474	210	226	VICTORIA...	61	9	465	3	36
POCATELLO...	190	131	127	100	225	N. H. CONCORD...	238	74	1660	252	194	ARCO...	61	9	465	3	36
ILL. CAIRO...	149	10	580	4	66	N. J. ATLANTIC CITY...	162	9	912	143	218	UTAH SALT LAKE CITY...	157	45	1020	147	86
CHICAGO...	149	10	580	4	66	TRENTON...	162	9	912	143	218	VT. BURLINGTON...	302	82	1716	252	302
HOLINE...	149	10	580	4	66	N. MEX. ALBUQUERQUE...	127	38	591	148	65	VA. LYNCHBURG...	14	2	642	74	43
PEORIA...	149	10	580	4	66	ROSMELL...	127	38	591	148	65	NORFOLK...	14	2	642	74	43
ROCKFORD...	149	10	580	4	66	N. Y. ALBANY...	127	38	591	148	65	RICHMOND...	14	2	642	74	43
SPRINGFIELD...	149	10	580	4	66	BINGHAMTON...	127	38	591	148	65	ROANOKE...	14	2	642	74	43
IND. EVANSVILLE...	145	17	706	66	47	BUFFALO...	127	38	591	148	65	WASH. QUILLAYUTE...	14	2	642	74	43
FORT WAYNE...	145	17	706	66	47	NEW YORK...	127	38	591	148	65	SEATTLE-YACOMA...	14	2	642	74	43
INDIANAPOLIS...	145	17	706	66	47	ROCHESTER...	127	38	591	148	65	SPOKANE...	14	2	642	74	43
SOUTH BEND...	145	17	706	66	47	SYRACUSE...	127	38	591	148	65	WALLA WALLA...	14	2	642	74	43
IOWA. BURLINGTON...	31	1031	46	935	119	N. C. ASHEVILLE...	119	28	64	176	108	VARINA...	14	2	642	74	43
DES MOINES...	31	1031	46	935	119	CHARLOTTE...	119	28	64	176	108	W. VA. BECKLEY...	171	11	907	203	108
DUBUQUE...	31	1031	46	935	119	GREENSBORO...	119	28	64	176	108	CHARLESTON...	171	11	907	203	108
STOIX CITY...	31	1031	46	935	119	HATTERAS...	119	28	64	176	108	HUNTINGTON...	171	11	907	203	108
KANS. CONCORDIA...	33	46	935	119	119	RALEIGH...	119	28	64	176	108	PARKERSBURG...	171	11	907	203	108
DODGE CITY...	33	46	935	119	119	WILMINGTON...	119	28	64	176	108	WIS. GREEN BAY...	293	50	1527	177	17
GOODLAND...	33	46	935	119	119	N. DAK. BISMARCK...	361	79	1898	118	34	LACROSSE...	281	4	1150	162	253
TOPEKA...	33	46	935	119	119	FARGO...	361	79	1898	118	34	MADISON...	281	4	1150	162	253
WICHITA...	33	46	935	119	119	HILLSTON...	361	79	1898	118	34	MILWAUKEE...	281	4	1150	162	253
KY. LEXINGTON...	156	7	766	31	102	OHO. AKRON-CANTON...	190	107	1070	31	31	WYO. CASPER...	303	64	1771	185	248
LOUISVILLE...	149	1	659	117	1	CINCINNATI...	165	11	843	11	11	CHEYENNE...	303	64	1771	185	248
LA. BATON ROUGE...	49	23	81	143	107	CLEVELAND...	181	1	919	11	11	LANDER...	303	64	1771	185	248
LAKE CHARLES...	49	23	81	143	107	COLUMBUS...	181	1	919	11	11	SHERIDAN...	303	64	1771	185	248
NEW ORLEANS...	49	23	81	143	107	DAYTON...	181	1	919	11	11						
SHREVEPORT...	49	23	81	143	107	TOLEDO...	181	1	919	11	11						

BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1978.

# IMMEDIATE - U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

## FIRST CLASS MAIL

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF COMMERCE

COM 210



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### HARVESTING PROGRESS

PERCENT OF ACREAGE HARVESTED  
AS OF NOVEMBER 26

#### cotton

	1978	1977	AVG.
ALA	96	83	79
ARK	94	96	94
GA	94	74	NA
LA	99	95	85
MISS	100	95	84
MO	100	92	NA
NC	88	86	80
OKLA	23	57	28
SC	97	85	87
TENN	100	NA	NA
TEX	40	85	59
11 STATES	59	86	66
CALIF	60	NA	NA

THESE 11 STATES PRODUCED 72%  
OF THE 1977 U.S. COTTON CROP.

NA NOT AVAILABLE

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