

# WEEKLY WEATHER AND CROP BULLETIN

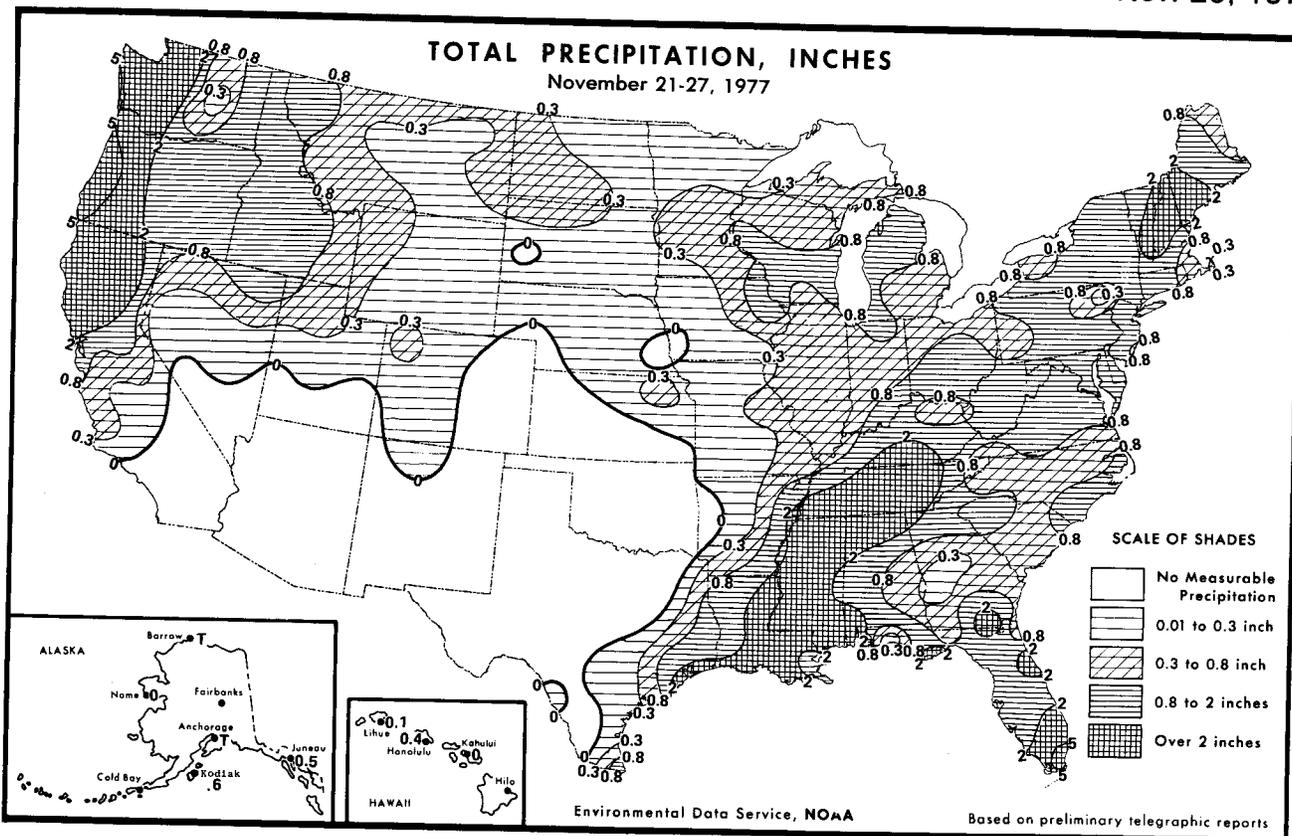
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## National Weather Summary

November 21 - 27

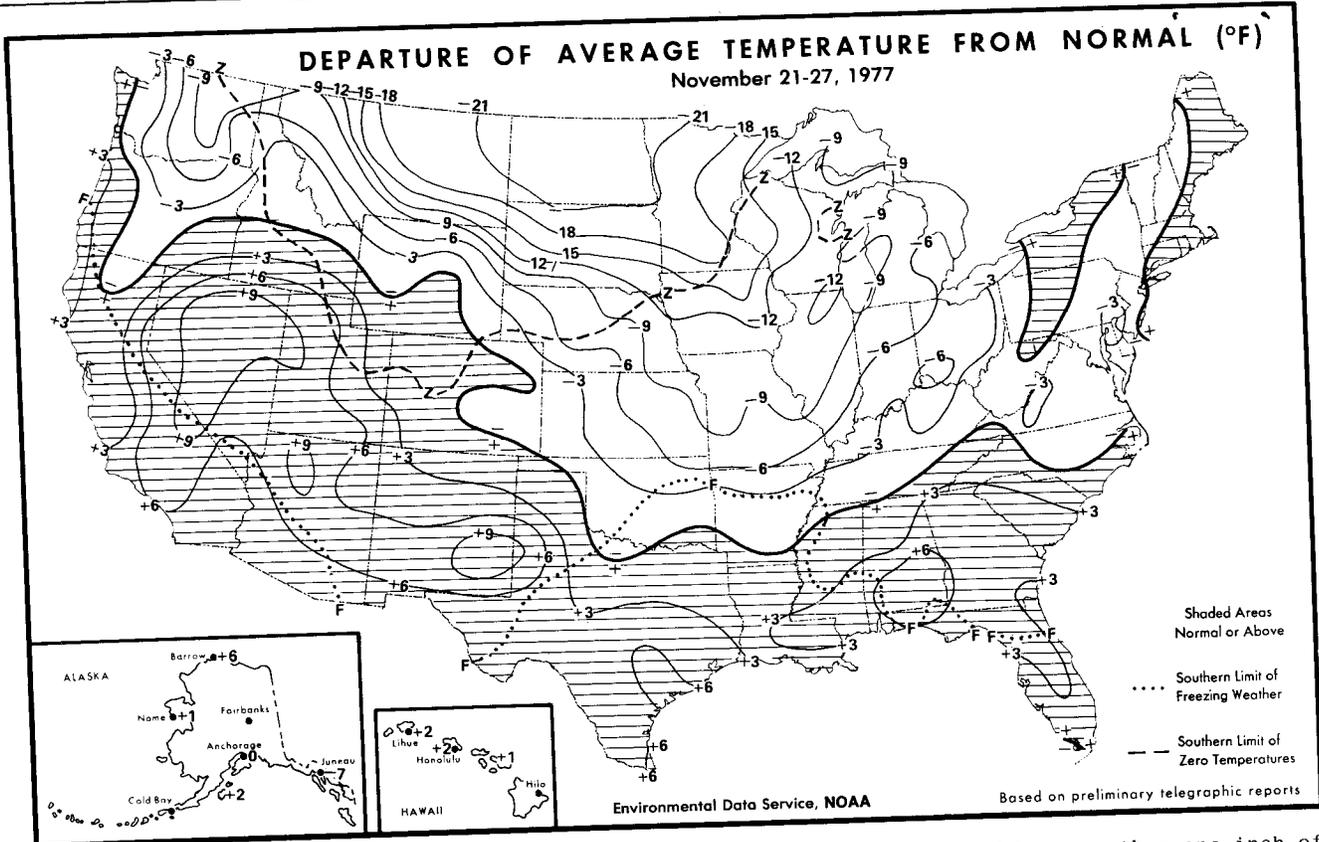
**HIGHLIGHTS:** Two major patterns highlighted U.S. weather for the week. A flattening of the upper ridge of high pressure in the eastern Pacific Ocean allowed storms and cold air to enter the Northwest. Welcome precipitation, heavy at times, descended as far south as Marin County, California, and extended eastward to the northern Plateau Region.

Severely cold air for so early in the season hit the northern Plains and upper Mississippi Valley--average temperatures plunged as much as 23° below normal. Many sub-zero readings were recorded. Much of the Deep South was above normal--6 to 8° higher than expected for this time of year in Alabama, and 10° warmer than normal in the southwestern Plateau area.

The week began with heavy snows and rains and bone-chilling temperatures in several sections of the country. Monday morning brought below zero

temperatures from Montana and Wyoming to the central Plains. In Washington, Seattle and Olympia set record low readings of 21° and 14°. A low pressure system off the northern California coast carried rain and snow to the upper portion of the Golden State and Oregon. Meantime heavy thunderstorms inundated southeastern Texas and showers fell on the upper half of the Atlantic Coast.

The storms moved through East Texas during the afternoon dumping 1 to 3 inches on many stations and drenching Liberty with 11.30 in. The precipitation continued eastward and soaked Jackson, Miss., with more than two and one-half inches. Storms also trekked into the northern half of the Intermountain Region carrying up to a foot of snow to parts of southern Idaho. Much-needed moisture persisted in northern California where heavy snow covered the mountains and 6 inches of rain fell on Kentfield.



Precipitation worked its way into the Oregon/northern California area and across the northern Intermountain Region into Colorado on Tuesday. Five inches of snow blanketed Portland, Oreg., while 3 inches of snow whitened Boise. A frontal system trailed through the Gulf and lower East Coast States; Mobile, Ala., notched nearly 2 inches and Valparaiso, Fla., had almost an inch and one-quarter.

By early Wednesday morning, one inch of snow salted Seattle and Spokane and Bismarck, N. Dak. Showers extended along the Atlantic Coast from southern New England to Florida. Light snow dusted the upper Mississippi Valley and as far east as Indiana. Light rain still fell on parts of the extreme western U.S. while rain became a bit heavier in the Southeast; Daytona Beach, Fla., recorded 1.09 in.

Thunderstorms rumbled over Florida on Thursday unleashing up to 3 inches of rain from Palm Beach into Dade County where 6.32 in. fell on Miami Beach. A low pressure center over Nebraska touched off snow from the Plains to the northern half of the Mississippi Valley. The snow and rain in the Pacific Northwest triggered some flooding in Oregon.

A Chinook wind blew down the eastern slope of the northern Rockies pushing Montana temperatures from 10° to 40° in a few minutes. However, it didn't reach Williston in northwestern North Dakota--the town was chilled by a -18° reading which plunged 5° below the former record set in 1900.

Snow became heavy over the upper Mississippi Valley on Friday. Milwaukee accumulated 9 inches of the white stuff and Chicago measured 4 inches. The low pressure center moved through the Great Lakes and headed for the Northeast. Rain picked up again in the Northwest where some Washington stations reported more than an inch. In the East,

Altoona, Pa., was soaked by more than one inch of rain.

After the snow, temperatures slid to record readings in the upper halves of the Plains and Mississippi Valley. International Falls, Minn., equalled its lowest November mark ever, -27°. It was 4° in Omaha, -9° in Waterloo, Iowa, and -12° in Minneapolis. In sharp contrast, southern California had unseasonably warm temperatures; Los Angeles showed 92° and Long Beach, 97°.

Two major storms were the primary weather factors on Saturday. One of them spread rain, snow, and freezing rain from the Ohio Valley eastward to the Atlantic Coast. South Bend, Ind., piled up 21 inches of snow while 9 inches fell on Binghamton, N.Y. The other storm brought some snow and high winds into the northern Rockies, later stretching into the Plains. By evening, freezing rain fell on Kansas, Nebraska, and Missouri.

The day was marked by many record low temperatures in the Plains, Midwest, and South. Rockford, Ill., dipped below its former record by 13° to -10°; Kansas City shivered at 9°; and Nashville noted 17°.

Sunday began drearily from Missouri to the lower Ohio Valley as snow and freezing rain covered the area; 5 inches of snow fell on St. Louis. Snow also hit the upper Great Lakes and thunderstorms ranged over Mississippi and Louisiana; two tornadoes were sighted in central Louisiana. Three-quarters inch of rain drenched Memphis. Snow trudged into the Appalachians by evening leaving 3 inches at Cincinnati and 11 inches at Pickens in east central West Virginia. Nighttime snow and freezing rain marched into the middle Atlantic Coast States.

Additional rain and light snow dampened the northern Pacific Coast and extended into the northern half of the Intermountain Region.

## National Agricultural Summary

November 21 - 27

**HIGHLIGHTS:** Rain or snow and cold temperatures over most of the eastern half of the country and the Northwest reduced fieldwork and hampered remaining harvest of most row crops. Soil moisture was adequate to surplus in most States; parts of Florida remained short, but many areas in the West showed improvement from a week ago. Winter wheat seeding was being wrapped up in most major States; most stands rated good. Corn harvest advanced 5 points to 92% complete and soybeans reached 88% harvested, up 4 points from the previous week. Cotton picking edged up 2 points to the 84% mark and grain sorghum made a 3 point gain to 96% complete. Pastures and livestock continued in good condition in most States.

**SMALL GRAINS:** Winter wheat seeding was nearing completion in major producing areas as rain or snow moved through many States interrupting fieldwork. Texas wheat advanced to 96% planted, above last year's 93% but slightly below average. Missouri growers edged up to 64% completion on winter wheat seeding, continuing to lag well behind the average. Condition of most wheat stands throughout the country was rated good, except in Texas where dry-land fields in the Plains lacked adequate moisture for good growth. In Oklahoma, 96% of the crop was up to stand, ahead of average, and grazing increased. The Kansas crop was above average despite continued appearance of leaf rust. Pasturing of wheat stood at 15%, ahead of 1976 but equal the average. Increased soil moisture supplies in much of the West improved the wheat outlook. Wyoming stands remained in need of additional moisture.

**CORN:** Harvest of the U. S. corn crop reached 92%, short of last year's 99% but ahead of the 90% average. The east north central States matched the Nation's pace, at 92% completed, but lagged 1976 by 5%. The west north central, at 90%, fell 10% short of 1976 but the south central States, at 99%, were 2% ahead of a year ago and rapidly winding up operations.

The Iowa harvest reached 89% complete, lagging last year's 100% and the 90% average. Harvest loss to stalk rot and ear droppage was moderate. Nebraska hit the 95% mark, 5% ahead of normal while Missouri reached 76% complete compared with a normal of 83%.

**SOYBEANS:** Harvest of the Nation's soybean crop advanced to 88% as growers' efforts were slowed by wet fields and cold temperatures in many States. This harvest rate compared with 96% last year and a 92% average. The east north central States show the most progress, at 96% complete, although last year's harvest was finished at this time.

In the western north central States, harvest advanced to 89%, lagging 1976's 100% and the average of 96%. Iowa edged up to 93% complete although last year and the average showed the crop wrapped up by this date. Light to moderate harvest loss from bean mold and pod scattering was reported. Nebraska hit the 95% mark, below last year and average.

In the south central States, Arkansas advanced to 85% complete, a 6 point gain during the week (93% in 1976, 85% average). Other States in the region progressed moderately with Mississippi at 82% (93% in 1976, 79% average) and Louisiana at 93% (100% 1976, 87% average).

**COTTON:** Cotton picking also advanced only moderately in many of the major producing southern

States, with operations slowed by wet fields. The region now stands at 84% complete, a 2 point advance last week, although well ahead of 1976's 60% and the 53% average. The Georgia harvest advanced 7 points from the previous week to 74% complete with the crop rated as poor to fair. Harvest of South Carolina's good quality crop made good progress despite rain interruptions. Picking in the Delta States was 95% complete or better, generally ahead of a year ago and well ahead of the average. In Arkansas, scrapping operations continued as weather permitted. Texas harvest, aided by favorable weather, continued to make good progress; it was 85% complete, nearly twice last year's level and well above the 39% average. Harvest was in full swing in the Southwest with Arizona gins running well behind. California harvest was nearly complete and shredding and discing of fields was active.

**OTHER CROPS:** Harvest of grain sorghum progressed to 96%, a 3 point gain from the previous week. This compared with 100% last year and the 92% average. In Oklahoma, cool weather and the Thanksgiving holiday slowed operations--now 92%, average 75%. Kansas and Nebraska both advanced to 95%, up 5 points from last week but below last year's 100%.

Sugarcane and sugarbeet harvest continued in Texas and sugarcane harvest made good progress in Louisiana and Florida. Beet processing was in full swing in Utah, while harvest continued in California and a few remained to be dug in Washington.

In Kentucky, the burley tobacco markets were active with heavy sales of the good quality crop.

**FRUITS AND NUTS:** Pecan harvest progressed well throughout the South with many areas at the three-quarter mark. In Florida, citrus groves were in excellent condition following the much needed rain during the week. Sizing was slow and harvest tapered off for the holiday. In California, some Desert grapefruit packing was done and navel orange harvest was underway. In Washington, pruning soft fruit and pear trees began; some old blocks were being pulled out for new plantings.

**VEGETABLES:** Florida's vegetable crops are in good to excellent condition with some declining seasonally. Harvest was active although shipments were off due to the holiday. Plantings continued active for most crops. In New Jersey, some light marketings of late fall hardy vegetables were available. California lettuce harvest was increasing in the Desert, while broccoli, cauliflower, and carrot volume was moderate; strawberry and tomato volumes were lighter.

**PASTURES AND LIVESTOCK:** Pastures and livestock over much of the Nation remained in good condition with the additional moisture received. Florida's pastures continued slow growth due to cool, dry weather. Texas livestock were in good to poor condition with only limited grazing on small grains. Western ranges improved somewhat with added rainfall; calving and lambing are underway in many areas. Supplemental feeding was necessary throughout the country.

Nov. 21 1977

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

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 . . .	52	+ 2	1.0	0	La. Baton Rouge . . .	60	+ 4	2.1	+ 1.1	Youngstown . . .	34	- 3	.7	0
Mobile . . .	61	+ 3.8	4.8	+ 3.8	Lake Charles . . .	59	+ 1	1.6	+ .5	OKLA. Okla. City . . .	44	- 2	0	- .3
Montgomery . . .	60	+ 3.0	.4	+ .6	New Orleans . . .	61	+ 3	1.9	+ .8	Tulsa . . .	41	- 5	T	- .4
ALASKA Anchorage . . .	18	+ 0	T	- .2	Shreveport . . .	56	+ 2	1.2	+ .3	OREG. Astoria . . .	46	+ 1	3.7	+ 1.3
Barrow . . .	1	+ 0	T	- .1	MAINE Caribou . . .	27	0	2.5	+ .3	Burns . . .	33	0	1.9	+ 1.5
Fairbanks . . .	- 1	+ 0	T	- .1	Portland . . .	35	0	2.5	+ 1.3	Medford . . .	42	0	4.2	+ 3.4
Juneau . . .	23	+ 7	.5	+ .7	MD. Baltimore . . .	42	- 1	1.2	+ .4	Pendleton . . .	31	- 8	1.3	+ .9
Kodiak . . .	35	+ 2	2.6	+ 1.4	MASS. Boston . . .	44	+ 2	1.3	- .8	Portland . . .	41	- 3	3.0	+ 1.6
Nome . . .	13	+ 0	0	- .2	Chatham . . .	43	-	.3	-	Portland . . .	47	+ 3	3.9	+ 2.4
ARIZ. Flagstaff . . .	43	+ 9	0	- .4	MICH. Alpena . . .	23	- 8	.9	+ .3	PA. Allentown . . .	38	- 1	1.7	+ .8
Phoenix . . .	63	+ 6	0	- .1	Detroit . . .	30	- 6	.6	+ .1	Erie . . .	36	- 1	1.1	+ .3
Tucson . . .	61	+ 6	0	- .1	Flint . . .	30	- 5	.4	- .1	Harrisburg . . .	39	- 2	1.2	+ .4
Winslow . . .	46	+ 0	0	- .1	Grand Rapids . . .	27	- 8	.5	+ .1	Philadelphia . . .	40	- 3	1.6	+ .8
Yuma . . .	64	+ 3	0	- .1	Houghton Lake . . .	23	- 8	.8	+ .2	Pittsburgh . . .	38	0	.4	- .2
ARK. Fort Smith . . .	47	+ 0	0	- .7	Lansing . . .	27	- 8	.6	+ .1	Scranton . . .	36	- 2	3	- .4
Little Rock . . .	45	+ 2	.3	- .7	Marquette . . .	22	- 8	.5	+ .2	R.I. Providence . . .	41	+ 1	.5	- .6
CALIF. Bakersfield . . .	40	+ 7	T	- .2	Muskegon . . .	26	- 10	.8	+ .1	S.C. Charleston . . .	59	+ 5	.6	+ .1
Eureka . . .	56	+ 5	2.6	+ 1.2	S. Ste. Marie . . .	20	- 9	.7	- .1	Columbia . . .	55	+ 4	.7	+ .1
Fresno . . .	54	+ 3	.2	- .6	MINN. Duluth . . .	9	- 15	.2	- .2	Greenville . . .	51	+ 3	.9	+ .1
Los Angeles . . .	67	+ 6	0	- .6	Internat Falls . . .	- 1	- 20	.2	- .1	S.D. Aberdeen . . .	7	- 19	.2	+ .1
Red Bluff . . .	51	+ 0	2.4	+ 1.6	Minneapolis . . .	10	- 18	.7	+ .4	Huron . . .	12	- 16	.1	0
San Diego . . .	64	+ 5	0	- .4	Rochester . . .	12	- 16	.6	+ .4	Rapid City . . .	19	- 13	T	- .1
San Francisco . . .	54	+ 3	1.8	+ 1.1	St. Cloud . . .	7	- 18	.5	+ .3	Sioux Falls . . .	14	- 14	.2	0
Stockton . . .	53	+ 3	.5	- .1	MISS. Jackson . . .	54	+ 1	2.9	+ 1.9	TENN. Chattanooga . . .	29	+ 3	3.0	+ 2.0
COLO. Denver . . .	38	+ 1	T	- .1	Meridian . . .	57	+ 5	1.7	+ .7	Knoxville . . .	48	+ 2	1.2	+ .3
Grand Junction . . .	38	+ 2	0	- .1	MO. Columbia . . .	31	- 9	.3	- .1	Memphis . . .	48	0	2.3	+ 1.3
Pueblo . . .	37	- 1	1.0	+ .1	Kansas City . . .	29	- 11	.2	- .1	Nashville . . .	42	- 3	2.4	+ 1.5
CONN. Bridgeport . . .	46	+ 4	1.3	+ .2	St. Louis . . .	31	- 10	.4	- .2	TEX. Abilene . . .	52	+ 1	T	- .2
Hartford . . .	38	- 0	1.4	+ .7	Springfield . . .	34	- 8	.3	+ .5	Amarillo . . .	46	+ 3	0	- .1
D.C. Washington . . .	44	- 1	1.4	+ .2	MONT. Billings . . .	18	- 14	.3	+ .2	Austin . . .	62	+ 6	T	- .5
FLA. Apalachicola . . .	62	+ 3	2.2	+ 1.5	Glasgow . . .	5	- 20	.2	+ .1	Beaumont . . .	64	+ 6	3.7	+ 2.6
Daytona Beach . . .	66	+ 3	2.4	+ 2.0	Great Falls . . .	16	- 15	.2	0	Brownsville . . .	72	+ 6	1.5	+ 1.2
Ft. Myers . . .	70	+ 2	.9	+ .7	Havre . . .	6	- 20	.4	+ .3	Corpus Christi . . .	68	+ 5	.1	- .3
Jacksonville . . .	61	+ 2	.5	+ .1	Helena . . .	22	- 7	.3	+ .2	Dallas . . .	61	+ 4	0	- .1
Key West . . .	73	- 1	3.2	+ 2.7	Kalispell . . .	21	- 7	.9	+ .5	Del Rio . . .	54	+ 5	0	- .1
Lakeland . . .	67	+ 2	1.3	+ .9	Miles City . . .	8	- 20	.5	+ .4	El Paso . . .	54	+ 1	0	- .5
Miami . . .	72	+ 1	5.2	+ 4.8	Missoula . . .	27	- 3	.6	+ .4	Fort Worth . . .	66	+ 5	3.1	+ 2.3
Orlando . . .	69	+ 4	1.0	+ .7	NEBR. Grand Island . . .	28	- 6	T	- .1	Galveston . . .	63	+ 4	1.4	+ .4
Tallahassee . . .	61	+ 5	.7	- .1	Lincoln . . .	25	- 10	T	- .2	Houston . . .	66	+ 3	0	- .1
Tampa . . .	66	+ 1	1.4	+ 1.0	Norfolk . . .	23	- 9	T	- .1	Lubbock . . .	53	+ 7	0	- .1
W. Palm Beach . . .	70	+ 1	3.5	+ 3.1	N. Platte . . .	26	- 7	.1	0	Midland . . .	54	+ 4	0	- .1
GA. Atlanta . . .	53	+ 4	.5	- .4	Omaha . . .	23	- 11	T	- .2	San Angelo . . .	56	+ 3	T	- .1
Augusta . . .	57	+ 6	.5	- .1	Valentine . . .	24	- 7	T	- .1	San Antonio . . .	61	+ 4	.2	- .2
Macon . . .	57	+ 4	.2	- .5	NEV. Ely . . .	40	+ 9	T	- .2	Victoria . . .	66	+ 6	.2	- .3
Savannah . . .	60	+ 5	.4	- .1	Las Vegas . . .	55	+ 5	0	- .1	Waco . . .	59	+ 4	T	- .5
HAWAII. Hilo . . .	78	+ 2	.4	- .4	Reno . . .	45	+ 7	.2	0	Wichita Falls . . .	49	- 1	0	- .3
Honolulu . . .	76	+ 1	0	- .6	Winnemucca . . .	45	+ 10	.3	0	UTAH. Blanding . . .	41	+ 6	0	- .2
Kahului . . .	77	+ 2	.1	- 1.3	N.H. Concord . . .	34	0	1.0	0	Salt Lake City . . .	44	+ 8	.3	- .1
Lihue . . .	76	+ 2	.1	- 1.3	N.J. Atlantic City . . .	44	+ 1	.8	- .2	VT. Burlington . . .	33	0	1.4	+ .8
IDAHO. Boise . . .	38	+ 1	1.5	+ 1.1	Trenton . . .	42	+ 1	1.6	+ .8	VA. Lynchburg . . .	42	- 2	1.4	+ .7
Lewiston . . .	33	- 5	1.0	+ .7	N. MEX. Albuquerque . . .	46	+ 5	0	- .1	Norfolk . . .	48	- 1	.8	+ .1
Pocatello . . .	36	+ 3	.8	+ .5	Roswell . . .	54	+ 10	0	0	Richmond . . .	44	- 2	1.0	+ .2
ILL. Cairo . . .	40	- 5	.5	- .5	N.Y. Albany . . .	35	- 1	1.5	+ .8	Roanoke . . .	41	- 3	1.5	+ .9
Chicago . . .	26	- 10	.6	+ .1	Binghamton . . .	32	- 2	1.0	+ .3	WASH. Colville . . .	22	- 10	.8	+ .3
Moline . . .	24	- 11	.5	+ .1	Buffalo . . .	36	0	.6	- .3	Omak . . .	44	+ 1	4.4	+ 1.1
Peoria . . .	26	- 10	.4	0	New York . . .	43	- 1	1.3	+ .4	Quillayute . . .	42	- 1	2.2	+ .7
Rockford . . .	21	- 12	.6	+ .1	Rochester . . .	37	0	.6	0	Seattle-Tacoma . . .	28	- 5	1.2	+ .6
Springfield . . .	28	- 10	.6	+ .1	Syracuse . . .	37	0	1.4	+ .6	Spokane . . .	34	- 6	1.3	+ .8
IND. Evansville . . .	36	- 5	.8	0	N.C. Asheville . . .	46	+ 2	.7	0	Walla Walla . . .	29	- 7	.5	+ .2
Ft. Wayne . . .	30	- 6	.4	- .2	Charlotte . . .	49	+ 1	.8	+ .1	Yakima . . .	38	- 1	1.3	+ .6
Indianapolis . . .	33	- 5	.5	- .2	Greensboro . . .	43	- 2	.6	0	W. Va. Beckley . . .	41	- 1	1.0	+ .3
South Bend . . .	30	- 6	1.7	+ 1.1	Hatteras . . .	56	+ 3	1.3	+ .2	Charleston . . .	41	- 1	.6	- .1
IOWA. Burlington . . .	25	- 11	.3	- .1	Raleigh . . .	46	- 1	.4	- .3	Huntington . . .	39	- 3	.5	- .1
Des Moines . . .	23	- 10	.1	- .2	Wilmington . . .	54	+ 1	1.2	+ .5	Parkersburg . . .	19	- 11	.7	+ .3
Dubuque . . .	23	- 8	1.2	+ .6	N. DAK. Bismarck . . .	2	- 22	.3	+ .2	WIS. Green Bay . . .	19	- 11	.7	+ .3
Sioux City . . .	20	- 12	.1	- .1	Fargo . . .	2	- 21	.1	0	La Crosse . . .	16	- 15	.9	+ .6
KANS. Concordia . . .	29	- 9	.3	+ .2	Williston . . .	1	- 23	.3	+ .2	Madison . . .	19	- 11	.7	+ .3
Dodge City . . .	36	- 3	0	- .1	OHIO. Akron-Canton . . .	34	- 3	.7	+ .1	Milwaukee . . .	23	- 9	1.2	+ .7
Goodland . . .	35	0	T	- .1	Cincinnati . . .	33	- 8	1.0	+ .2	WYO. Casper . . .	32	+ 1	T	- .1
Topeka . . .	31	- 8	.3	0	Cleveland . . .	35	- 3	.6	0	Cheyenne . . .	32	- 1	T	- .1
Wichita . . .	36	- 5	T	- .2	Columbus . . .	34	- 5	1.0	+ .4	Lander . . .	27	- 1	T	- .2
KY. Lexington . . .	37	- 4	.7	- .1	Dayton . . .	33	- 5	.8	+ .2	Sheridan . . .	22	- 8	T	- .2
Louisville . . .	39	- 3	1.2	+ .4	Toledo . . .	30	- 6	.6	0	P.R. San Juan . . .	79	+ 1	9.8	+ 8.5

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:** Above normal temperature over state until cold front on Friday night. Temperature in 20's over northern half. Precipitation amounts ranging from 1.00 to 4.00 in.

Fieldwork: 2.4 days suitable. Soil moisture adequate to surplus. Harvest of row crops slowed by wet fields. Cotton 83% harvested, 79% 1976, 80% average. Corn harvest nearly complete. Soybean 71% harvested. Pecans good condition. Pastures fair.

**ARIZONA:** No precipitation. Temperatures mostly 3 to 6° above normal.

Cotton harvest full swing; nearing completion western areas; gins running well behind. Sugarbeets good progress; weeding, thinning active. Small grain planting and land preparations active. Early plantings good stands. Alfalfa hay activity seasonally slow; many fields pastured; limited cutting warmer areas. Lettuce harvest full volume central, western areas. Mixed vegetables growing well. Cantaloup harvest nearing completion. Lemon harvest steady, full volume. Grapefruit harvest active, volume limited. Picking navel, sweet oranges increasing. Good stock water, soil moisture higher elevations. Conditions improved lower ranges. Most cattle for market shipped higher ranges. Sheep on lower desert pastures; lambing full swing. Livestock mostly good condition.

**ARKANSAS:** Temperature extremes 69 and 14°. Precipitation extremes 2.30 in. and trace.

Soil moisture adequate or surplus. Fieldwork: 2.7 days suitable. Soybean harvest 85% complete, 93% 1976, average 85%. Wet fields delayed final harvest. Cotton harvest 96% complete, 92% last year, average 37%. Scrapping operations continued as weather permitted. Stalk destruction continued. Wheat planting 95% complete, 96% 1976, average 91%. Growth good. Oat seeding complete, 99% last year. Pastures mostly average or above. Cattle good condition.

**CALIFORNIA:** Cold Arctic air moved south with some early morning temperatures below zero. Several inches of rain fell on North Coast and snow in the Sierra Nevada ranged from 2 to 3 ft. Light amounts of rain extreme north. South Coast and Los Angeles Basin high temperatures to the mid-90's.

Rainfall aids small grain growers. Alfalfa being planted. Cotton, milo and corn harvests nearly complete. Shredding and discing cotton fields was active. Sugarbeets continue, sugar content up. Pruning and post harvest irrigation continues for deciduous fruit and nut trees. Table grape storage at a peak with harvest finishing soon. Light volumes Desert grapefruit being packed. Navel orange harvest underway. Lettuce harvest increasing Desert. Broccoli, cauliflower, carrot moderate. Strawberries, tomatoes lighter. Rains, many areas gave relief to grasses. Some rangeland greening. New grasses pushing through soil. Supplemental feeding continues. Ranchers still hauling water. Calving, lambing continue.

**COLORADO:** Several weak frontal systems brought moderate snowfall central and northern mountains. Daily snowfall 1 to 4 in. Average temperatures 1 to 3° above normal southeast and San Luis Valley, near normal western valleys, 1 to 4° below normal remainder of state. Wind damage along front range foothills at week's end.

**FLORIDA:** Temperatures averaged 2 to 8° above normal except below normal 26th. Rainfall averaged 0.50 to 2.50 in. except up to 5.00 in. Southern Peninsula.

Grazing conditions poor to fair. Cool, dry weather slowing growth rye, ryegrass pastures. Planting small grain pastures continues. Cattle mostly good. Soil moisture short over Peninsula, adequate Panhandle. Soybean harvest nearing completion. Cotton harvest continues. Pecan harvest about complete. Small grains fair. Sugarcane harvest full swing, some planting continues, crop condition good. Citrus tree condition excellent with much needed rains. Fruit drop not excessive, sizing slow. Harvest slow due to Thanksgiving shipping holiday. Vegetable crops good to excellent condition. Harvest active. Crops showing increased movement: Cabbage, celery, sweet corn, tomatoes, chinese cabbage. Steady volume: Snap beans, lettuce, radishes, squash. Decreasing supplies: Carrots, cucumbers, eggplant, escarole, endive, okra, peppers. Plantings continue active most crops. Irrigation, spray programs active.

**GEORGIA:** Temperatures 8 to 11° above normal. Cool early in week, warmed midweek, cooled later. Extremes: 28 and 80°. Rainfall varied greatly. Amounts ranged 0.25 to 1.25 in. Most of State received rainfall.

Soil moisture mostly adequate, except surplus northern and extreme southwest. Corn harvest 96% complete, last year 94%; poor. Cotton poor to fair, 74% picked, 76% last year. Soybeans fair to good, 65% combined, last year 69%. Pastures and cattle mostly fair. Hogs mostly good. Pecan harvest 60% complete, last year 68%. Wheat 81% seeded, 85% last year. Rye 89% seeded, 91% last year. Other small grains 89%, same last year. Apples 98% harvested; fair to good.

**HAWAII:** Weather favorable. Beneficial rains Kauai, Oahu midweek. Other islands generally dry.

Heavy irrigation necessary. Spraying frequent minimize insect infestations. Vegetable supplies mustard cabbage, eggplant up. Others light. Banana, papaya supplies heavy. Pineapple harvesting light. Sugar few mills stop grinding. Additional mills will stop this week. Pasture condition generally fair to good.

**IDAHO:** Temperatures 3 to 16° below normal. Extremes: 60 and -7°. Precipitation above normal except northern border.

Little farm activity because of snow. Livestock good condition on winter feed. Feed supplies adequate.

**ILLINOIS:** Temperatures 8 to 13° below normal. Precipitation 0.50 to 0.75 in.

Corn 33% harvested, 98% 1976, 95% average. Soybeans 97% combined, 100% 1976 and average. Corn, soybean acreage 45% plowed, 61% last year, 57% average. Winter wheat fair to good. Pastures mostly good. Soil moisture adequate to surplus. Fieldwork: 4.5 days suitable.

**INDIANA:** Cold and snowy. Two storms early and late in period deposited several in. of snow; up to 2 ft. in extreme northwest; highway travel was very difficult. Very low temperatures, 2° in north, 8° in south.

Fieldwork averaged 2 days. Topsoil moisture adequate to mostly surplus. Subsoil moisture mostly adequate to surplus. Corn 90% harvested, 1976 95%, average 85%. Soybeans 90% combined, 1976 100%, average 95%. Sorghum 90% combined. Tobacco 50% stripped. Pastures mostly fair to good.

IOWA: Mid and late week snow up to 9 in. northeast and north central.

Topsoil and subsoil adequate to surplus. Fieldwork: 4.2 days suitable. Corn harvest 89% complete, 100% last year, 90% normal. Moderate corn harvesting loss. Soybean harvest 93% complete, 100% last year, 100% normal. Light to moderate soybean harvesting loss. Adequate storage space for corn, soybeans. Decreasing feeder cattle movement.

KANSAS: Precipitation limited east and north central. Temperatures averaged 29° north central to 38° south, from 2 to 3° below normal west, from 4 to 8° below normal central and east.

Conditions favorable for harvest portions week. Wheat condition above average, good stands many areas, leaf rust apparent. Pasturing wheat 15%, last year 10%, average 15%. Harvesting corn 95%, last year near 100%, average 85%. Harvesting sorghum grain 95%, last year near 100%, average 85%. Soybean harvest 80%, last year near 100%, average 90%. Pasture-range conditions fell slightly. Livestock grazing corn, sorghum stubble fields, wheat and native grasses. Supplementary feeds abundant. Farm activities: Harvesting, fertilizing, fencing wheat fields, caring livestock.

KENTUCKY: Temperatures 4 to 5° below normal. Precipitation averaged 1.00 to 1.50 in. Rain early week, snow at end.

Outside activities slowed by adverse weather. Harvest operation halted by rains and snow. Supplemental feeding necessary. Burley tobacco markets opened Monday; sales heavy, record prices.

LOUISIANA: Temperatures 1 to 4° above normal. Extremes: 32 and 80°. Rain throughout week.

Soil moisture short extreme northwest, surplus elsewhere. Main activities: Harvesting cotton, soybeans and sugarcane, seeding small grains and winter pastures. Cotton 95% harvested, 97% last year, 83% average. Soybeans 93% harvested, 100% last year, 87% average. Sugarcane 55% harvested, 60% last year, 59% average. Pecans 78% gathered. Oats 94% seeded, 98% last year. Wheat 87% planted, 96% last year. Pastures and cattle fair.

MARYLAND AND DELAWARE: Temperatures averaged 2° above normal. Extremes: 50's and upper 30's. Western areas slightly cooler. Precipitation widespread 0.50 to 1.50 in. of rain.

Farmers limited to inside work and normal farm chores due to wet conditions.

MICHIGAN: Temperatures 4 to 10° below normal. Extremes: -4 and 56°. Precipitation 0.80 to 1.80 in. over extreme southwest lower, Saginaw Bay and Thumb regions; elsewhere 0.25 to 0.75 in. Snow last half of week.

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

MINNESOTA: Temperatures averaged 15 to 22° below normal. Extremes: 36 and -27°. Precipitation averaged slightly below normal except normal to above normal central and southeast; totals less than 0.50 in. except 0.50 to 0.98 in. central and southeast. Snowfall amounts from 1 to 10 in. Snow depths from 2 to 19 in.

MISSISSIPPI: Temperatures 4 to 8° above normal. Extremes: 29 and 80°. Greatest rainfall 3.10 in.

Soil moisture surplus to excessive. Fieldwork: 0.4 days suitable. Soybeans 82% harvested, 93% 1976, 79% average. Cotton 95% harvested, 94% 1976, 83% average. Corn 95% harvested, 96% 1976, 92% average. Pecans 73% harvested, 68% 1976, 65% average. Winter wheat and oats in good condition. Pastures and livestock good to fair.

MISSOURI: Temperatures 4° below normal except 4° above normal in Bootheel. Precipitation 1.00 in. Bootheel, elsewhere 0.50 in.

Fieldwork: 3.8 days suitable. Soybeans 76% harvested, normal 86%. Corn 76% harvested, normal 83%. Grain sorghum 87% harvested, normal 84%. Cotton 92% harvested, last year 91%, normal 84%. Winter wheat seeding 64% finished. Plowing 31% completed, last year 72%. Pasture condition mostly good. Soil moisture adequate to surplus.

MONTANA: Cold, wet week except for west central and southwest. Temperatures averaged well below normal. Significant warming most sections by midweek. Minimum temperatures fell to below 0 first of week.

Moisture prospects improved with snowcover most areas. Range and pasture conditions remain fair.

NEBRASKA: Temperatures 5 to 10° below normal. Precipitation less than 0.10 in. Panhandle, north; little or none elsewhere.

Corn harvest 95% complete, 100% year ago, 90% normal. Grain sorghum harvest 95%, year ago complete, normal 100%. Soybeans 95% harvested, year ago complete, normal 100%. Winter wheat good. Soil moisture adequate.

NEVADA: Considerable moisture northwest and northeast; very little moisture southern areas. Temperatures moderate, ranging from 76 to -7°.

Cotton harvest gaining momentum. Livestock good condition.

NEW ENGLAND: Temperatures 4 to 8° above normal most of week but fell to 5 to 10° below normal at end of period. Precipitation 0.10 to 0.75 in.

NEW JERSEY: Temperatures below normal averaging 39° north, 41° south and 44° coastal areas. Extremes: 21 and 59°. Precipitation above normal averaging 1.53 in. north, 1.54 in. south and 1.76 in. coastal.

Harvest field corn and soybeans progressing on limited basis as weather and field conditions permit. Some losses reported because of excessive rains and wet soils. Light marketing of late fall vegetables.

NEW MEXICO: Second successive week dry and warm weather. Scattered, light snow showers high elevations north.

Cotton harvest 80% complete. Grain sorghum harvest completed. Harvesting pecans continued. Irrigated winter wheat good condition. Dryland winter wheat fair. Ranges poor to fair. Livestock good.

NEW YORK: Precipitation from 0.50 in. west to 2.00 in. east. Snow depths from 1 to 4 in. west to 4 to 11 in. east. Little snow in southeast. Average temperatures near or slightly below normal, ranging from upper 20's to low 40's.

NORTH CAROLINA: Mostly cloudy, damp. Temperatures averaged 3 to 4° above normal. Rainfall averaged 0.75 in., some 4.00 in. amounts in mountains.

Fieldwork: 2.8 days suitable. Soil moisture adequate to surplus. Small grains and pastures fair to mostly good. Soybean harvest 59% complete, 1976 63%, average 67%. Cotton 86% picked, 1976 63%, average 81%. Sorghum grain 91% harvested, 1976 90%. Wheat 88% seeded, 1976 81%.

**NORTH DAKOTA:** First large scale blizzard struck the State, depositing large amounts of moisture. Snow now covers the entire State. Temperatures took a dramatic plunge from above normal to well below. All divisions had mean temperatures from 10 to 15° below normal. Extremes: 44 and -24°.

Snow and cold weather stopped all fall work and forced ranchers to start feeding range cattle. Very little movement of grain due to the heavy snowfall.

**OHIO:** Mostly cloudy during the week. Rain amounts 0.75 to 1.50 in. in the central and southwest and 0.25 in. or less over remainder of the State. Locally heavy snow in the snow belt area on 26th and general snow averaged 2 to 4 in. over the entire State on the 27th. Temperatures averaged near or little above normal most of week then much colder on weekend.

**OKLAHOMA:** Temperatures 1 to 3° below normal for north central; northeast 3 to 6° below. Precipitation limited to few stations reporting traces. Cool weather and holiday held down harvest progress last week. Wheat continues mostly good condition with 96% up to stand, same as year earlier and just ahead of 94% average. Fall seeded oats and barley good condition, with 90% seedings up to stand. Sorghum harvest slow last week; 92% harvested, later than year ago but well ahead 75% average. Cotton 58% picked, 57% 1976, 20% average. Some stack-up of seed cotton at gins. Soybean combining made good progress eastern Oklahoma, now over 80%, same as year ago. Nearly 45% of the pecan crop has been gathered. Ranges good to fair, far better than year ago. Use of small grains for grazing increased last week.

**OREGON:** Cold air moved across state at beginning of week, dropping 6 to 10 in. of snow with up to 2 ft. of new snow in Cascades. By end of week heavy rains had occurred over most of western Oregon. Precipitation amounts exceeded 6.00 in. along south coast and ranged from 2.00 to 4.00 in. in Willamette Valley. Eastern Oregon reported from 1.00 to 2.00 in. Temperatures averaged 5 to 10° below normal west and 8 to 15° below normal east. Weather limited farm activity. Snowfall and rains have improved outlook for fall grains. Spraying programs continue for ryegrass and wild oats. Pastures and ranges improving. Cattle and calves good. Stock being prepared for winter. Feeding underway.

**PENNSYLVANIA:** Cool and cloudy with light rain and drizzle. Strong northwest winds through weekend. Temperatures averaging near normal to 4° below. Extremes: 57 and 11°. Almost daily precipitation totaled 0.50 to 1.50 in. Weekend snowfall from traces south east to 6 to 11 in. north. Farmers doing normal wintertime chores.

**PUERTO RICO:** Island average rainfall 5.52 in. or 4.19 in. above normal. Temperatures averaged about 78° on coasts and 72° interior. Extremes: 93 and 58°.

**SOUTH CAROLINA:** First half of week much warmer than usual. Mountain temperatures averaged near normal, north central 3° above normal, northwest 7° above normal, remainder 7 to 10° warmer than

normal. Rainfall 1.00 in. over northwest half, southeast half averaged 0.50 to 0.75 in.

Soil moisture short to adequate. Fieldwork: 4 days suitable. Cotton harvest good progress despite rain; 88% harvested, 84% in 1976, 86% average. Few growers sold small mixed lots. One of best weekly quality records for bales classed. Soybeans 99% mature, same as 1976. Rains delayed some harvest completion. Harvest 63% complete, 59% 1976, 66% average. Pasture condition fair, improving with rain. Winter grazing 95% planted, 90% emerged. Small grains good condition. Plantings: Wheat 82%, oats 93%, barley 86%, rye 84%. All well emerged. Pecan harvest continues.

**SOUTH DAKOTA:** Average temperatures 11 to 22° below normal. Extremes: -24 and 47°. Precipitation in the form of snow. Northern sections received greater amounts.

**TENNESSEE:** Temperatures ranged from normal in west to 3° below normal in middle and 2 to 3° above normal in east. Precipitation from 2.00 to 3.00 in. across state. Freezing rain over weekend for some areas and snow in northeast.

**TEXAS:** Weak cold front midweek resulted in light precipitation, another cold front late. Rainfall below normal except Coastal Plains, 0.25 in. above normal. Temperatures near to above normal.

Good weather for harvesting, other fieldwork prevailed most areas except along Coast, Lower Rio Grande Valley interrupted by rain. Cotton harvest continuing rapid pace. Many gins Panhandle have backlog of trailers, modules. Soybean harvest progressing well, but slowed by rain Upper Coast. Peanut harvest approaching completion. Sunflower harvest nearing completion. Sugarcane harvest full swing Lower Valley. Sugarbeet harvest continues High Plains. Wheat stands most areas improving but lack of moisture on Plains dryland wheat. Seeding approaching completion. Oat seeding nearing completion. Stands late but making good growth. Many areas need rain. Flax seeding making good progress but need rain. Cotton harvested 85%, 43% 1976, 39% average. Peanuts harvested 96%, 90% 1976, 89% average. Soybeans harvested 92%, 94% 1976, 86% average. Pecans harvested 56%, 56% 1976, 44% average. Sugarbeets harvested 94%, 77% 1976, 98% average. Sunflowers harvested 98%, 87% 1976, 92% average. Sorghum harvested 100%, 99% 1976, 99% average. Wheat planted 96%, 93% 1976, 97% average. Oats planted 97%, 92% 1976, 96% average. Flax planted 52%, 16% 1976, 54% average.

Lower Rio Grande Valley citrus harvest slowed by rains. Good supplies bell peppers. Harvest: Cucumbers, squash, tomatoes, cabbage. Coastal Bend cucumber harvest active, cabbage continues progress well. San Antonio-Winter Garden spinach harvest continues, quality fair because warm weather. Onions ready transplanting soon. Eagle Pass cabbage, spinach harvest in progress. East Texas frost stopped production most fields. High Plains carrot harvest continues. Pecan harvest continues across state.

Small grain, cool season grass growth improving but providing limited grazing. Number small grain stands ready for grazing increasing slowly. Live-stock poor to good, ranchers feeding supplements, hay to hold condition. Low stock water supplies problem Cross Timbers, South Texas.

**UTAH:** Recurring periods of rain in valleys. Snow in mountains northwest. Accumulated amounts moisture generally moderate to heavy most stations northwest, light south boundary. Average temperatures ranging from 6° below normal to 3° above.

Activities: Care and feeding of sheep and cattle on rangelands, feedlots and farms; potatoes, dry onions, apples being graded, sorted and marketed; sugarbeets were being processed.

VIRGINIA: Rainfall from 0.75 to 1.00 in. Temperatures above normal. Extremes: 73 and 19°. Wet fields held fieldwork to 1.5 days suitable. Corn for grain combining 91%, 87% 1976, 86% usual. Soybean harvest 60%, 76% 1976, 77% average. Wheat 82% seeded, 84% 1976. Winter grains, grazing crops, pastures good to excellent. Small grains need colder weather to prevent premature jointing.

WASHINGTON: West: Temperatures 7 to 9° below normal. Precipitation near normal to 0.50 in. above in Sound area.

Cauliflower harvest completed, carrots nearing end. Most livestock on winter rations. Some hay coming in from eastern Washington. Christmas tree harvest underway.

East: Temperatures 10 to 13° below normal. Precipitation normal to 0.30 in. above.

Some field corn and sugarbeets remain to be harvested. Pruning of soft fruit and pear trees continues; apple trees not yet started. Orchardists cutting down old blocks of trees preparatory to new

planting. Most farm activity routine chores and feeding.

WEST VIRGINIA: Temperatures above normal, dropping sharply to near record lows at end of week. Precipitation twice normal eastern half state, near normal elsewhere.

Fieldwork: 2.3 days suitable. Soil moisture adequate to surplus. Fall pastures good. Hay supply short to adequate. Fall sown grains doing well. Livestock good shape.

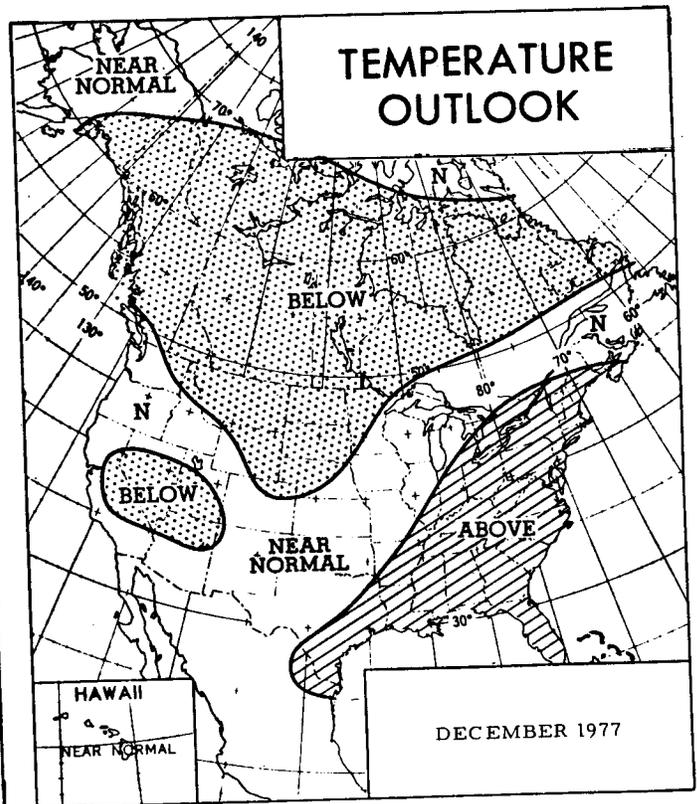
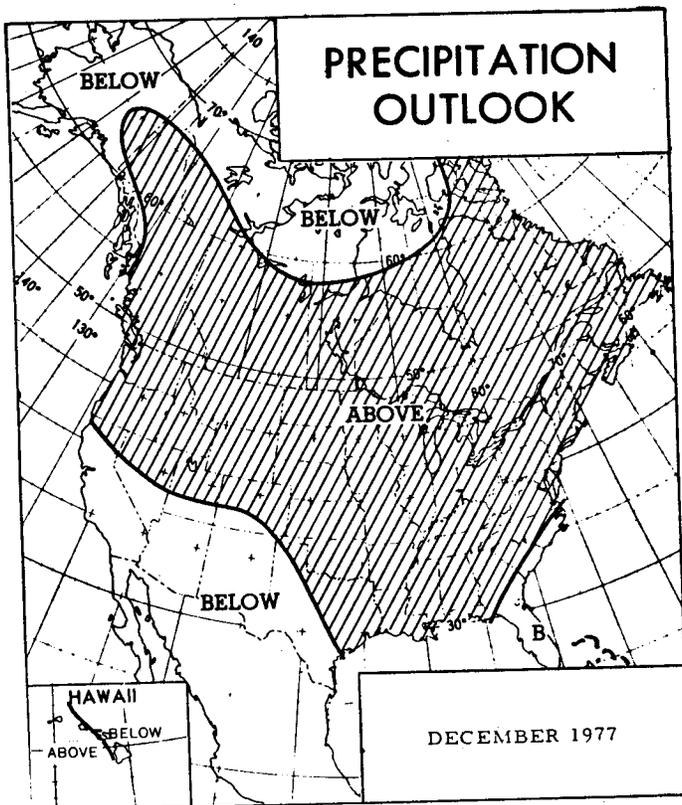
WISCONSIN: Temperatures below normal with highs in 20's and 30's until midweek, teens later. Several periods significant snowfall. Heaviest southeast at 6 to 9 in. Milwaukee area, 1 to 4 in. central part of state.

Crop harvest and plowing stopped by several inches snow on ground. Some corn and soybean acreage remains to be harvested.

WYOMING: Temperatures below normal. Precipitation for most part above normal.

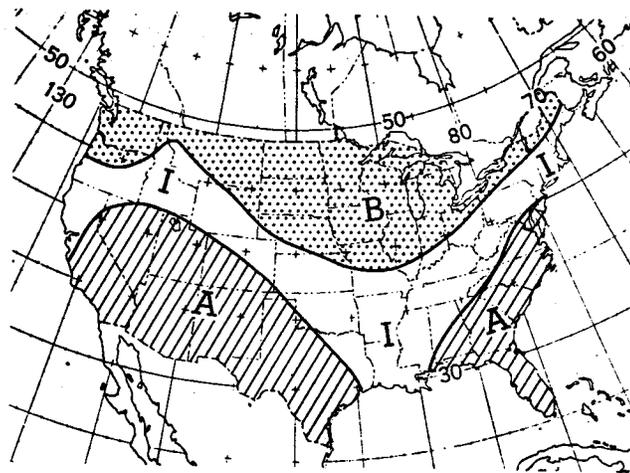
Some supplemental feeding. Livestock mostly good condition with no unusual death losses. Winter wheat needs additional moisture most areas.

### Average Monthly Weather Outlook



OUTLOOK FOR WINTER AVERAGE TEMPERATURES

December 1977 through February 1978



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  
Long Range Prediction Group

**World Weather and Crop Update**

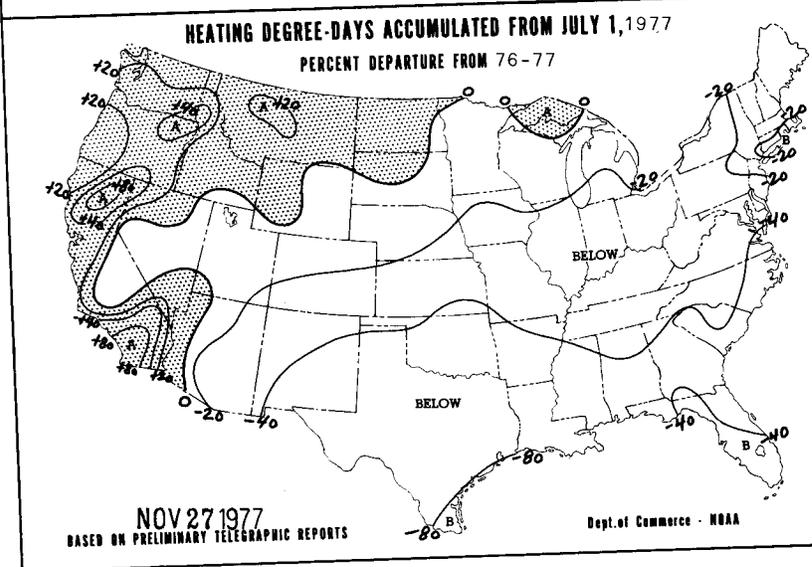
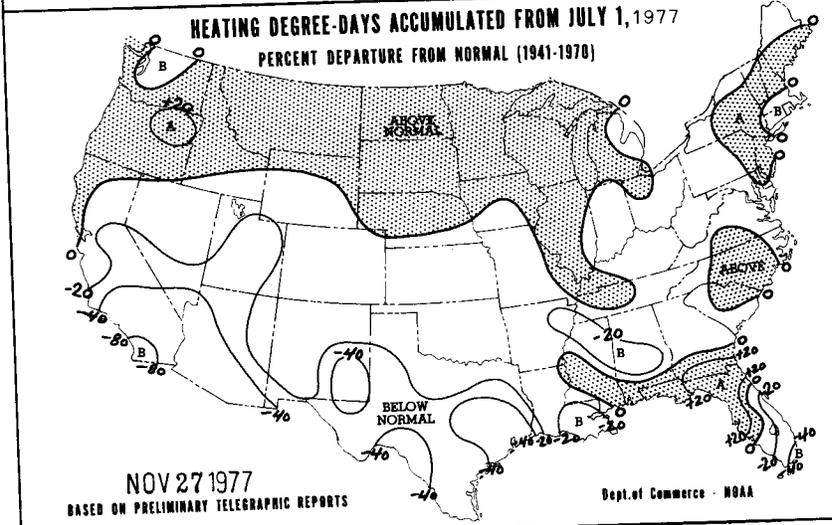
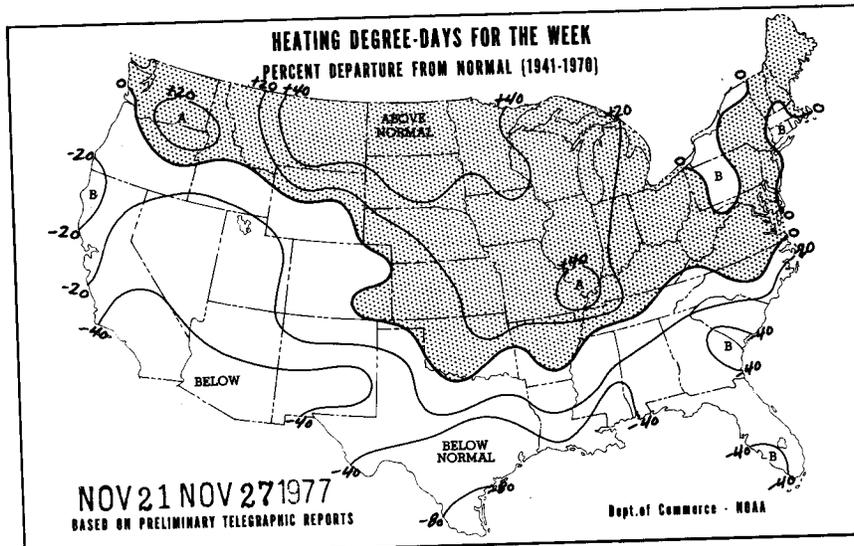
November 21 - 27

USSR. Relatively mild, wet weather persisted in European USSR. Daytime temperatures over most of European USSR have generally been above freezing while precipitation fell mainly as rain. Lack of snow cover at this time of the year leaves crops vulnerable to sudden incursions of cold Arctic air in the principal winter grain areas.

ASIA. Generally ideal weather for harvesting prevailed over the grain areas of Australia. Harvesting of wheat and barley crops was well underway in most portions. Spring crops and pastures, however, needed moisture as the drought continued over many important agricultural districts. With low subsoil moisture in many areas, the higher temperatures and

greater evaporation rates normally experienced in summer will aggravate the existing dry conditions. Heavy rain is needed almost everywhere in the eastern states and South Australia while additional rainfall is required in western Australia to prevent further deterioration of crops and pastures. India, hit by cyclonic storms on November 12 and 19, is still attempting to assess losses to crops and livestock in the southern states of Andhra Pradesh and Tamil Nadu. Crops, especially rice, were partially or completely destroyed on hundreds of thousands of acres in these two states. Recent heavy rains pelted coastal regions in the southeast

(continued on last page)



HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING NOV. 27, 1977.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			
	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	
ALA. BIRMINGHAM...	87	22	463	274	20	274	MAINE. CARIBOU...	87	28	2013	449	59	1134	51	538	OKLA. OKLAHOMA CITY...	43	30	463	109	386
MOBILE...	41	41	225	254	103	354	PORTLAND...	11	11	1522	254	31	463	465	401	TULSA...	31	31	463	109	386
ARIZ. FLAGSTAFF...	156	62	1238	457	269	269	MD. BALTIMORE...	164	8	706	6	337	OREG. ASTORIA...	14	14	1466	14	333			
PHOENIX...	166	42	1111	133	269	269	MASS. BOSTON...	173	10	858	4	213	BURNS...	33	33	1466	14	333			
TUCSON...	166	42	1111	133	269	269	MICH. ALPENA...	173	10	858	4	213	REDFORD...	33	33	1466	14	333			
WINSLON...	166	42	1111	133	269	269	DETROIT...	173	10	858	4	213	PORTLAND...	33	33	1466	14	333			
YUMA...	166	42	1111	133	269	269	FLINT...	173	10	858	4	213	SALEM...	33	33	1466	14	333			
ARK. FORT SMITH...	122	12	451	6	450	450	GRAND RAPIDS...	173	10	858	4	213	PA. ALLENTOWN...	33	33	1466	14	333			
LITTLE ROCK...	122	12	451	6	450	450	HOUGHTON LAKE...	173	10	858	4	213	BRIDGEVILLE...	33	33	1466	14	333			
CALIF. BAKERSFIELD...	35	47	154	137	12	12	LANSING...	173	10	858	4	213	PHILADELPHIA...	33	33	1466	14	333			
EUREKA...	35	47	154	137	12	12	MARQUETTE...	173	10	858	4	213	PITTSBURGH...	33	33	1466	14	333			
FRESNO...	35	47	154	137	12	12	HUSKESON...	173	10	858	4	213	SCRANTON...	33	33	1466	14	333			
LOS ANGELES...	35	47	154	137	12	12	S. STE. MARIE...	173	10	858	4	213	R.I. PROVIDENCE...	33	33	1466	14	333			
RED BLUFF...	35	47	154	137	12	12	MINN. DULUTH...	173	10	858	4	213	S.C. CHARLESTON...	33	33	1466	14	333			
SAN DIEGO...	35	47	154	137	12	12	INTERNAT. FALLS...	173	10	858	4	213	COLUMBIA...	33	33	1466	14	333			
SAN FRANCISCO...	35	47	154	137	12	12	MINNEAPOLIS...	173	10	858	4	213	GREENVILLE...	33	33	1466	14	333			
STOCKTON...	35	47	154	137	12	12	ROCHESTER...	173	10	858	4	213	S. DAK. ABERDEEN...	33	33	1466	14	333			
COLO. DENVER...	122	12	1066	159	311	311	ST. CLOUD...	173	10	858	4	213	HURON...	33	33	1466	14	333			
GRAND JUNCTION...	122	12	1066	159	311	311	MISS. JACKSON...	173	10	858	4	213	RAPID CITY...	33	33	1466	14	333			
PUEBLO...	122	12	1066	159	311	311	NERIDIAN...	173	10	858	4	213	ST. LOUIS...	33	33	1466	14	333			
CONN. BRIDGEPORT...	122	27	708	91	311	311	MO. COLUMBIA...	173	10	858	4	213	SPRINGFIELD...	33	33	1466	14	333			
HARTFORD...	122	27	708	91	311	311	KANSAS CITY...	173	10	858	4	213	TENN. CHATTANOOGA...	33	33	1466	14	333			
DEL. WILMINGTON...	163	4	812	22	270	ST. LOUIS...	173	10	858	4	213	KNOXVILLE...	33	33	1466	14	333				
D.C. WASHINGTON...	149	6	542	104	348	SPRINGFIELD...	173	10	858	4	213	MEMPHIS...	33	33	1466	14	333				
FLA. APALACHICOLA...	29	1	174	18	180	MONT. BILLINGS...	173	10	858	4	213	WASH. WASHINGTON...	33	33	1466	14	333				
DAYTONA BEACH...	29	1	174	18	180	GLASSBORO...	173	10	858	4	213	TEXAS. ABILENE...	33	33	1466	14	333				
FORT MYERS...	29	1	174	18	180	GREAT FALLS...	173	10	858	4	213	AMARILLO...	33	33	1466	14	333				
JACKSONVILLE...	29	1	174	18	180	HAVRE...	173	10	858	4	213	AUSTIN...	33	33	1466	14	333				
KEY WEST...	29	1	174	18	180	HELENA...	173	10	858	4	213	BEAUMONT...	33	33	1466	14	333				
LAKELAND...	29	1	174	18	180	HELENA...	173	10	858	4	213	BIRMINGHAM...	33	33	1466	14	333				
MIAMI...	29	1	174	18	180	HELENA...	173	10	858	4	213	BROWNVILLE...	33	33	1466	14	333				
ORLANDO...	29	1	174	18	180	HELENA...	173	10	858	4	213	CORPUS CHRISTI...	33	33	1466	14	333				
TALLAHASSEE...	29	1	174	18	180	HELENA...	173	10	858	4	213	DEL RIO...	33	33	1466	14	333				
TAMPA...	29	1	174	18	180	HELENA...	173	10	858	4	213	EL PASO...	33	33	1466	14	333				
NEXT PALM BEACH...	29	1	174	18	180	HELENA...	173	10	858	4	213	FORT WORTH...	33	33	1466	14	333				
GA. ATLANTA...	122	12	1066	159	311	NEBR. GRAND ISLAND...	173	10	858	4	213	GARLAND...	33	33	1466	14	333				
AUGUSTA...	122	12	1066	159	311	LINCOLN...	173	10	858	4	213	HOUSTON...	33	33	1466	14	333				
MACON...	122	12	1066	159	311	NORFOLK...	173	10	858	4	213	LUBBOCK...	33	33	1466	14	333				
SAVANNAH...	122	12	1066	159	311	NORTH PLATTE...	173	10	858	4	213	MIDLAND...	33	33	1466	14	333				
IDAHO. BOISE...	122	12	1066	159	311	OMAHA...	173	10	858	4	213	SAN ANGELO...	33	33	1466	14	333				
LEWISTON...	122	12	1066	159	311	VALENTINE...	173	10	858	4	213	SAN ANTONIO...	33	33	1466	14	333				
POCATELLO...	122	12	1066	159	311	NEV. ELV...	173	10	858	4	213	SAN JOSE...	33	33	1466	14	333				
ILL. CAIRO...	122	12	1066	159	311	LAS VEGAS...	173	10	858	4	213	VICTORIA...	33	33	1466	14	333				
CHICAGO...	122	12	1066	159	311	RENO...	173	10	858	4	213	WICHITA FALLS...	33	33	1466	14	333				
HOLINE...	122	12	1066	159	311	MINNEAPOLIS...	173	10	858	4	213	UTAH. SALT LAKE CITY...	33	33	1466	14	333				
PEORIA...	122	12	1066	159	311	N.H. CONCORD...	173	10	858	4	213	VT. BURLINGTON...	33	33	1466	14	333				
SPRINGFIELD...	122	12	1066	159	311	N.J. ATLANTIC CITY...	173	10	858	4	213	VA. LYNCHBURG...	33	33	1466	14	333				
IND. EVANSVILLE...	122	12	1066	159	311	TRENTON...	173	10	858	4	213	NORFOLK...	33	33	1466	14	333				
FORT WAYNE...	122	12	1066	159	311	N. MEX. ALBUQUERQUE...	173	10	858	4	213	RICHMOND...	33	33	1466	14	333				
INDIANAPOLIS...	122	12	1066	159	311	ROSWELL...	173	10	858	4	213	ROANOKE...	33	33	1466	14	333				
SOUTH BEND...	122	12	1066	159	311	N.Y. ALBANY...	173	10	858	4	213	WASH. QUILLAYUTE...	33	33	1466	14	333				
IOWA. BURLINGTON...	122	12	1066	159	311	BINGHAMTON...	173	10	858	4	213	SEATTLE-TACOMA...	33	33	1466	14	333				
DES MOINES...	122	12	1066	159	311	BUFFALO...	173	10	858	4	213	SPOKANE...	33	33	1466	14	333				
DUBUQUE...	122	12	1066	159	311	NEW YORK...	173	10	858	4	213	MALLA MALLA...	33	33	1466	14	333				
ST. LOUIS...	122	12	1066	159	311	ROCHESTER...	173	10	858	4	213	YAKIMA...	33	33	1466	14	333				
KANS. CONCORDIA...	122	12	1066	159	311	SYRACUSE...	173	10	858	4	213	W. VA. BECKLEY...	33	33	1466	14	333				
DODGE CITY...	122	12	1066	159	311	N.C. ASHEVILLE...	173	10	858	4	213	CHARLESTON...	33	33	1466	14	333				
GOODLAND...	122	12	1066	159	311	CHARLOTTE...	173	10	858	4	213	HUNTINGTON...	33	33	1466	14	333				
TOPERA...	122	12	1066	159	311	GREENSBORO...	173	10	858	4	213	PARKERSBURG...	33	33	1466	14	333				
WICHITA...	122	12	1066	159	311	HATTERAS...	173	10	858	4	213	WIS. GREEN BAY...	33	33	1466	14	333				
KY. LEXINGTON...	122	12	1066	159	311	WILMINGTON...	173	10	858	4	213	LACROSSE...	33	33	1466	14	333				
LOUISVILLE...	122	12	1066	159	311	N. DAK. BISHARCK...	173	10	858	4	213	MADISON...	33	33	1466	14	333				
LA. BATON ROUGE...	122	12	1066	159	311	FARGO...	173	10	858	4	213	HILMAURKE...	33	33	1466	14	333				
LAKE CHARLES...	122	12	1066	159	311	MILLSTON...	173	10	858	4	213	WYO. CASPER...	33	33	1466	14	333				
NEW ORLEANS...	122	12	1066	159	311	OHIO. AKRON-CANTON...	173	10	858	4	213	CHEYENNE...	33	33	1466	14	333				
SHREVEPORT...	122	12	1066	159	311	CINCINNATI...	173	10	858	4	213	LANDER...	33	33	1466	14	333				
						CLEVELAND...	173	10	858	4	213	SHERIDAN...	33	33	1466	14	333				
						COLUMBUS...	173	10	858	4	213										
						DAYTON...	173	10	858	4	213										
						TOLEDO...	173	10	858	4	213										

BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1977.



**FIRST CLASS MAIL**

**HARVESTING PROGRESS**

Percent of acres harvested as of November 27

	CORN			SOYBEANS		
	1977	1976	Avg.	1977	1976	Avg.
Ga	96	94	NA	Ala	71	NA
Ill	93	98	95	Ark	85	93
Ind	90	95	85	Ga	65	69
Iowa	89	100	90	Ill	97	100
Kans	95	100	85	Ind	90	100
Ky	NA	NA	NA	Iowa	93	100
Mich	NA	NA	NA	Kans	80	100
Minn	NA	NA	NA	Ky	NA	NA
Mo	76	NA	83	La	93	100
Nebr	95	100	90	Mich	NA	NA
N C	100	NA	NA	Minn	100	100
Ohio	NA	NA	NA	Miss	82	93
Pa	NA	NA	NA	Mo	76	NA
S Dak	NA	NA	NA	Nebr	95	100
Tex	100	100	100	N C	59	63
Wisc	NA	NA	NA	Ohio	100	100
				S C	63	59
				Tenn	NA	NA
U. S.	92	99	90			

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

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

	1977	1976	Avg.
Ala	83	79	80
Ark	96	92	87
Ga	74	76	NA
La	95	97	83
Miss	95	94	83
Mo	92	91	84
N C	86	83	81
Okla	58	57	20
S C	88	84	86
Tenn	NA	NA	NA
Tex	85	43	39

11 Southern States 84 60 53

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

	1977	1976	Avg.
Colo	NA	NA	NA
Kans	95	100	85
Mo	87	NA	84
Nebr	95	100	100
Okla	92	NA	75
S Dak	NA	NA	NA
Tex	100	99	99
7 States	96	100	92

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

NA Not Available

(continued from page 9)

and southwest, and spin-off rains from the last cyclonic storm penetrated into central India. However, it was seasonally dry in the north. Precipitation was seasonally light over the China mainland; harvesting of late crops in South China proceeded under favorable conditions.

AFRICA. Winter grains and pastures received a welcome boost as timely rains fell throughout North Africa (Morocco, Algeria and Tunisia). Heavier amounts occurred along coastal regions in these countries, but interior agricultural regions also were helped by the badly needed moisture. The main agricultural regions in South Africa experienced scattered showers of light to moderate intensity while heavy rains fell in Bechuanaland.

SOUTH AMERICA. Moderate to heavy rains, locally excessive, fell on maturing winter grain crops over most of the Argentine grain belt. Abnormal weed and disease problems may have developed in some areas, especially in the northern grain regions which have been hit by excessive moisture in recent weeks. The main agricultural regions in southern and eastern Brazil also received ample rainfall.

EUROPE. Light precipitation and seasonally cool temperatures dominated the weather over the northern half of western Europe including the United Kingdom. Moderate to heavy showers, however, fell over southern France, northern Spain, and all of Italy. Central and southern Spain received little significant moisture. In eastern Europe, it was seasonably cool with general light rain in East Germany, Poland, and Czechoslovakia. Showers fell over the southern half of the region at the end of the period. Dry conditions continued in the main winter grain areas of Turkey.