

WEEKLY WEATHER AND CROP BULLETIN

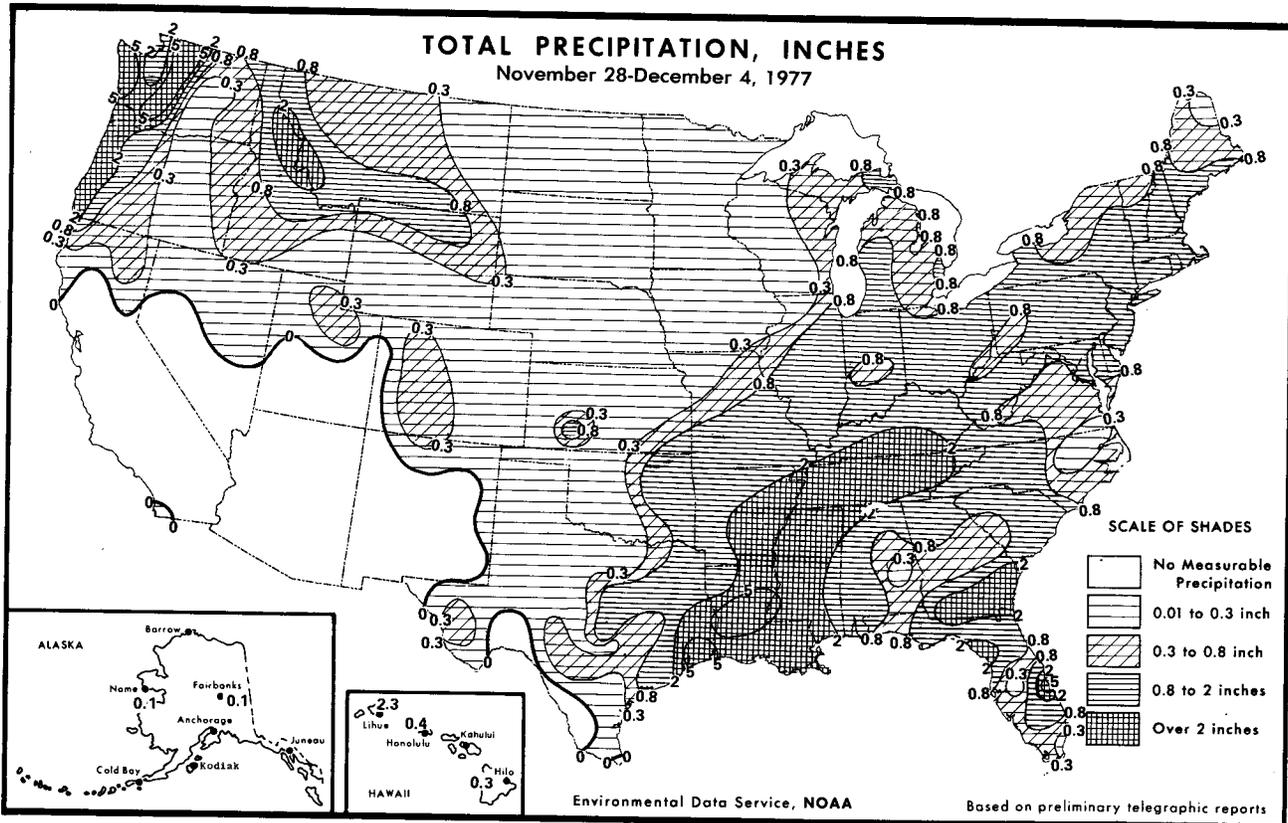
U.S. DEPARTMENT OF COMMERCE
Environmental Data Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 64, No. 49

Washington, D.C.

Dec. 6, 1977



National Weather Summary

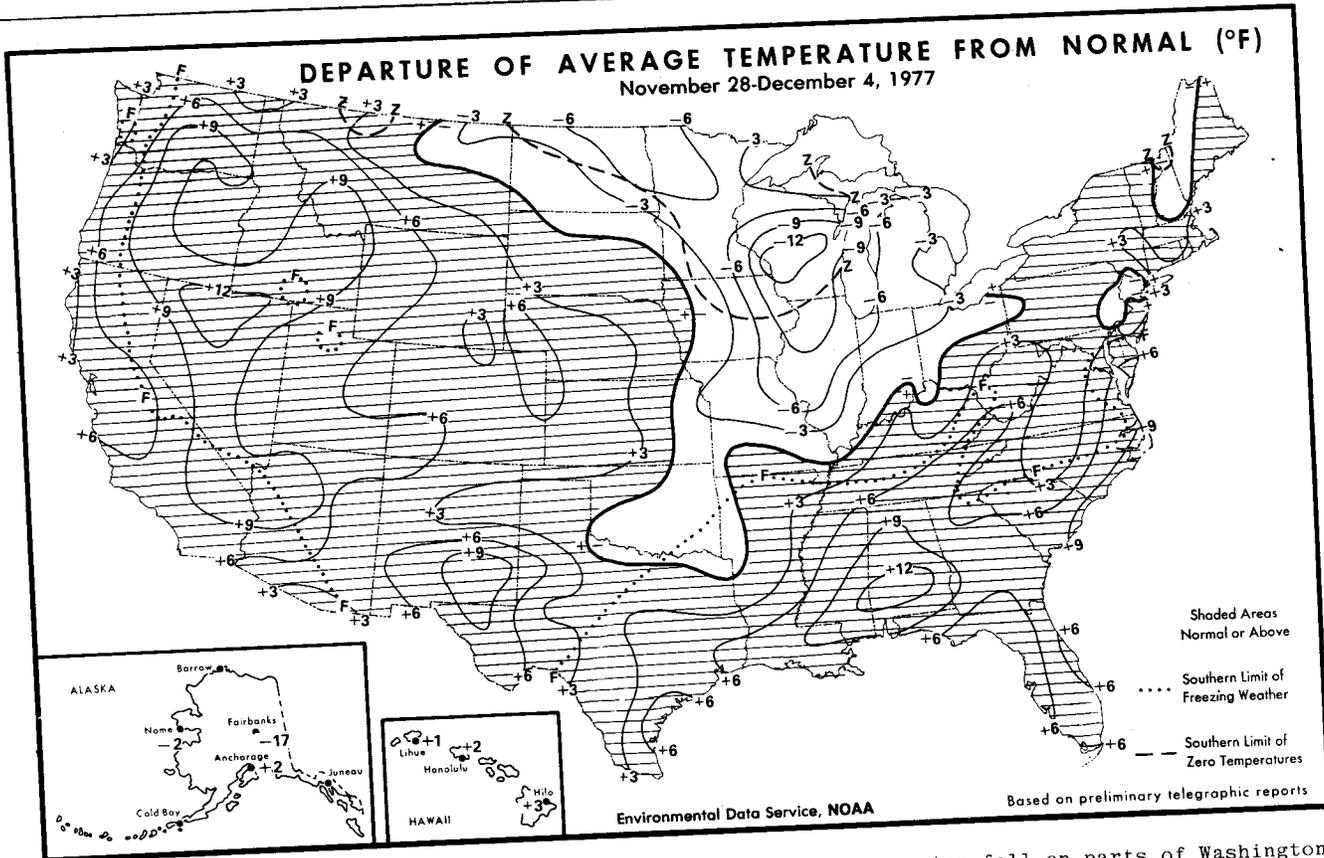
November 28 - December 4

HIGHLIGHTS: The heaviest precipitation covered the Pacific Northwest, southeastern Texas/central Louisiana, and the southeastern quadrant of the Nation. Wet conditions of the previous week persisted in the Northwest where storms marched in from the ocean dumping heavy rains. Tropical air from the Gulf set off heavy rain and brought warm temperatures to the South. The Desert Southwest, most of California, and the central Intermountain Region remained dry.

Temperature minima plummeted below zero from the northern Rockies southeastward to the Illinois/Wisconsin border. Weekly averages were as much as 15° below seasonal in parts of the upper Mississippi Valley and 7° below normal into northeastern Missouri and central Illinois. Pockets of warm air, some 7-12° above normal, were common in the Southeast, the Texas/New Mexico border area, and most of the Nation west of the Rockies except the

Pacific Coast from Washington to south of San Francisco.

Two systems dominated the Nation at the beginning of the week. A Pacific front trudged through the northern Rockies triggering rain and snow while a low pressure center over Michigan and a front extending along the western Appalachians to the Texas Coast touched off rain, snow, and thunderstorms from New England to the Gulf. New Orleans measured an inch and one-quarter of rain. More than four inches of snow fell in the Buffalo area by noon. Early afternoon rain and snow covered a large section of Kansas and Oklahoma. At night-fall heavy rains soaked the country from East Texas through the lower Mississippi Valley into Alabama and Tennessee. Huntsville, Ala., recorded 2.19 in. of rain.



Unsettled weather plagued the South on Tuesday from Texas to Florida. Thunderstorms, hail, and tornadoes hit several areas. In eastern Texas, Liberty was drenched by 3 inches of rain in 40 minutes and Nederland totaled 4.55 in. by evening. Other areas of heavy precipitation included Knoxville, Tenn., 1.05 in.; northeastern Mississippi and southeastern Texas, 3 inches; and Lake Charles, La., 1.50 in.

A front moved eastward through Washington and Oregon spreading rain with snow in the higher elevations.

The front stretching from Louisiana to South Carolina persisted in producing heavy rains across the South. Another front moving into the Midwest made Wednesday wet for much of the Nation east of the Mississippi River. Beaumont, Tex., received 5.50 in. in all; Jackson, Miss., 3.66 in. Tornadoes were sighted near Mobile, Ala., and Cameron, La. Northern Florida noted more than an inch of rain.

Further north, western Maryland and northern West Virginia were hit by flash flooding after rain. And Philadelphia set a record of 10 days in a row with precipitation.

Thursday began with snow over the Dakotas, upper half of the Mississippi Valley, upper Great Lakes, and lower Ohio Valley. Rain pushed into New England and thunderstorms ranged from Florida to the Carolinas. Parts of Georgia had over an inch of rain; Islip, N.Y., got more than one inch; and Providence, R.I., was dampened by nearly an inch. Rain became heavy in the Pacific Northwest where Quillayute, Wash., collected 3 inches and Olympia, Wash., had three-quarters inch. Several rivers neared flood stage.

Roanoke, Va., set a record high temperature for the day of 66° and Pittsburgh equalled its 1881 high mark of 65°.

Stormy weather blasted an area from the Northwest to the northern half of the Rockies on

Friday. Heavy rains fell on parts of Washington and Oregon sending some rivers over their banks. Some Washington points were deluged by more than 7 inches of rain. Heavy snows hit many sections of Montana while strong winds whipped through Colorado; gusts southeast of Boulder were clocked at 103 mph.

A combination of snow and showers swept over Lake Erie dumping 2 inches of snow on Buffalo. Late evening heavy rains drenched Indianapolis, and 7 inches of snow whitened Peoria.

Rain slacked off in the Northwest on Saturday, but not before Brookings in southwestern Oregon picked up 3.71 in. Most swollen rivers began to recede. Snow continued over the northern Rockies and into the northern Plains. Another area of snow from Ohio and western Pennsylvania moved to the upper half of the Appalachians.

High temperature records were set at Dodge City, Kans., 69°, and in Texas, Abilene posted 81° and Waco, 83°.

Snow and plunging temperatures pushed through the northern half of the Plains to the upper Midwest on Sunday. A band of rain extended from the Tennessee Valley across the southern Appalachians to the middle Atlantic Coast. Memphis and Nashville both declared more than an inch of rain. Severe thunderstorms popped up in the lower Mississippi Valley by evening. Tornadoes were sighted in Tennessee and Alabama and hail pummeled Forest City, Ark.

Temperatures plunged sharply, some below zero, from the northern Rockies to the Wisconsin/Illinois border after a cold rush of arctic air. Most record readings, however, went the other way. Record high temperatures were set or equalled at stations in Texas, Louisiana, and Alabama. Green Bay, Wisc., broke the 1893 low point of -4° for the day by shivering through -8°.

National Agricultural Summary

November 28 - December 4

HIGHLIGHTS: Wet fields in the south and snow-covered land in northern areas made harvesting operations difficult but not entirely impossible. Farmers in the western Corn Belt and southern Great Plains enjoyed reasonably good harvest conditions. Soil moisture was adequate to surplus from the eastern Great Plains to the Atlantic Coast. A storm dumped heavy precipitation through the Delta States and on across Tennessee and Kentucky. Western States rated short to adequate, but much-needed precipitation fell in the Northwest. Corn harvest reached 96% and soybeans 92%, each 4 points above the previous week. Cotton picking advanced to 92%, mostly because of good progress in Texas and Oklahoma; but harvest completion in other areas was delayed by the heavy rains and wet fields. Grain sorghum harvest was almost complete as were winter wheat seedings. Fall plowing for 1978 row crops lagged both last year and the average in many States.

SMALL GRAINS: Winter wheat seeding was nearly complete in the major producing States; Texas growers were 98% finished. In other southern States planting was about 90% complete. Snow covered wheat land in the Dakotas, Montana, and Minnesota. Most of the Nation's crop rated good with adequate moisture.

Kansas wheat rated good to excellent although some areas reported leaf rust. About 15% of the wheat was pastured, equal the average but ahead of 1976's 5%. Texas growers almost finished seeding. Stands in many areas were growing well but dryland wheat in the Panhandle showed moisture stress. Greenbugs and spider mites also sapped growth in some Panhandle fields, and stands provided very little grazing. Nebraska wheat condition declined but rated fair to good, better than last year's fair condition. Oklahoma's wheat was 97% up to stand; cattle grazed on 35% of the acreage. Montana's wheat rated good with only fair to poor snow cover; wind damage was light.

CORN: Harvest of the corn crop reached 96%, short of last year when it was complete but edging out the 95% average. The east north central States advanced to 98%, a 6 point gain for the week; the 1976 harvest was complete except in Michigan. Most fields must either dry or freeze before farmers can finish harvesting.

In the west north central States harvest reached 95% (5 points for the week) 100% in 1976 and 94% average. Harvest was almost complete in these States except Iowa which stood at 95% and Missouri 84%, both slightly behind average. Some South Dakota corn will probably be harvested next spring.

In other areas harvest was almost complete with progress only where fields were dry.

SOYBEANS: Harvest of the Nation's soybeans advanced to 92%, lagging both 1976's 97% and the 95% average. Snow, rain and, wet conditions plagued the wrap-up of the 1977 season. Mold developed in a few local areas of the Southeast. Harvest was very slow in the east north central States. Progress reached 97%, only a point advance for the week. In most recent years harvest was complete.

Clear weather in the west north central States allowed farmers into the fields; harvest reached 95%, an increase of 6 points for the week but lagging 1976's 100% and the 97% average.

In the South, including both the Delta and the Atlantic Coast areas, progress reached 80%, short of 1976's 87% and the 86% average. Heavy rains mired harvest in a snail's pace.

COTTON: Picking advanced 8 points for the week in the major southern States pegging progress at 92%--far ahead of the 61% in 1976 and the 59% average. In the Atlantic Coast States picking ranged from 81% in Georgia to about 90% in the Carolinas, nearly equal last year's pace. Picking was almost complete in the Delta States where progress ranged from 96 to 99%. Oklahoma harvest reached 70%, short of 1976's 77% but far ahead of the 27% average. Cotton continued to stack up at gin yards. Texas cotton harvest continued to make rapid progress. Picking reached 92% compared with 60% in 1976 and the 49% average. Panhandle gins have a large backlog with harvest delayed by trailer shortages in some areas. The New Mexico harvest reached 85% and the Arizona harvest was winding down. California growers almost finished picking; they disced fields and shredded stalks.

OTHER CROPS: Grain sorghum harvest ranged from 91% in Missouri, 95% in Kansas, 99% in Nebraska and 100% in Texas.

Sugarcane harvest was active in Florida, Texas, and Louisiana. Texas growers first harvested fields, uncut last year because of wet weather. Louisiana cane harvest reached 66%, about equal with other years.

A good volume of Kentucky burley moved to market. Virginia fire-cured growers marketed more than in 1976; burley sales were active; sun-cured markets opened on December 6th.

FRUITS AND NUTS: Pecan harvest ranged from 74% in Georgia to 89% in Louisiana. Pacific Northwest fruit growers pruned orchards and vineyards. Florida citrus groves rated excellent. Growers shut down irrigation systems after rains replenished soil moisture. Low temperatures reduced foliate growth. Orange harvest was very active while Texas citrus volume increased. Arizona growers picked lemons, Navel and sweet oranges, tangerines, and grapefruit. California producers picked Navel oranges, lemons, grapefruit, and tangerines.

VEGETABLES: New Jersey growers provided a light supply of hardy leafy green vegetables. Florida supplies of most crops increased after the holiday lull. Volume increased for snap beans, cabbage, carrots, celery, chinese cabbage, sweet corn, escarole-endive, eggplant, lettuce, peppers, and tomatoes. Volume was steady for cucumbers and squash, but radishes declined. Quality and fruit size were very good. Strawberries showed bloom buds in the Plant City area. California growers harvested light volumes of market tomatoes, sweet corn, and melons; moderate supplies of broccoli and cauliflower, and a good volume of lettuce.

PASTURES AND LIVESTOCK: Southern pastures rated fair to good--northern grasslands provided very little grazing; some were snow covered. Unseasonably high temperatures and ample soil moisture maintained growth of southern grasslands. Rangeland in Florida and most of the West rated poor to fair although rains improved growth in these areas. Texas winter grasses grew well. California rangeland improved. Stock water supplies were far below normal in most of the West.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Dec. 4, 1977

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham	57	+9	.5	-.6	La. Baton Rouge	64	+9	3.3	+2.2	Youngstown	32	-1	.9	+.3
Mobile	64	+9	1.7	+.5	Lake Charles	63	+7	4.0	+2.8	OKLA. Okla. City	44	0	.2	-.1
Montgomery	64	+13	.2	-.9	New Orleans	65	+8	3.1	+2.0	Tulsa	44	0	.8	+.4
ALASKA. Anchorage	18	+2	.7	-.3	Shreveport	52	0	.9	0.0	OREG. Astoria	46	+2	4.7	+2.2
Barrow	---	---	---	---	MAINE. Caribou	23	0	.2	-.5	Burns	39	+8	0	-.4
Fairbanks	-23	-17	.1	-.1	Portland	31	0	1.2	+.1	Medford	47	+7	.5	-.3
Juneau	---	---	---	---	MD. Baltimore	43	+3	1.0	+.2	Mendleton	46	+8	.2	-.2
Kodiak	---	---	---	---	MASS. Boston	42	+4	1.6	+.5	Portland	48	+5	2.2	+.8
Nome	6	-2	.1	-.1	Chatham	43	---	1.5	---	Salem	49	+6	1.3	-.2
ARIZ. Flagstaff	42	+10	0	-.4	MICH. Alpena	24	-4	.8	+.3	PA. Allentown	35	-1	1.5	+.6
Phoenix	62	+7	0	-.1	Detroit	30	-3	.7	+.2	Erie	35	+1	.8	0
Tucson	57	+3	0	-.1	Flint	31	-1	.6	+.1	Harrisburg	38	+1	1.9	+1.1
Winslow	42	+5	0	-.1	Grand Rapids	27	-3	1.1	+.5	Philadelphia	39	-1	1.5	+.7
Yuma	65	+6	0	-.1	Houghton Lake	24	-4	.7	+.2	Pittsburgh	37	+2	.6	0
ARK. Fort Smith	44	+1	1.1	+.4	Lansing	28	-2	.6	0.0	Scranton	35	+1	1.0	+.3
Little Rock	46	+1	2.8	+1.8	Marquette	26	-2	.8	+.1	R.I. Providence	40	+3	1.4	+.3
CALIF. Bakersfield	58	+7	.0	-.2	Muskegon	27	-1	1.1	+.4	S.C. Charleston	61	+9	1.9	+1.3
Eureka	52	+2	.3	-1.2	S. Ste. Marie	17	-3	1.1	+.4	Columbia	55	+6	1.9	+.1
Fresno	52	+3	0	-.5	MINN. Duluth	10	-5	1.1	-.2	Greenville	51	+5	.2	+.1
Los Angeles	68	+8	0	-.4	Internatl Falls	18	-6	1	-.1	S.D. Aberdeen	26	+1	T	-.1
Red Bluff	66	+7	0	-.8	Minneapolis	17	-7	.2	0.0	Huron	31	+1	T	0
San Diego	66	+8	0	-.4	Rochester	17	-5	.3	+.1	Rapid City	26	+1	T	-.2
San Francisco	56	+4	0	-.7	St. Cloud	58	+7	3.9	+2.8	Sioux Falls	51	+7	1.2	+.1
Stockton	53	+5	0	-.5	MISS. Jackson	61	+11	1.6	+.5	TENN. Chattanooga	50	+6	2.3	+1.4
COLO. Denver	40	+5	1	0	Meridian	33	-4	.8	+.4	Knoxville	51	+5	3.1	+2.1
Grand Junction	38	+5	T	-.1	MO. Columbia	33	-4	.2	-.1	Memphis	48	+5	2.8	+1.9
Pueblo	41	+5	T	-.1	Kansas City	33	-4	1.2	+.7	Nashville	52	+3	T	-.2
CONN. Bridgeport	44	+5	1.2	+.3	St. Louis	41	+1	1.9	+1.3	TEX. Abilene	42	+1	T	-.1
Hartford	36	+2	1.6	+.6	Springfield	41	+1	.8	+.6	Austin	58	+3	.2	-.3
D.C. Washington	45	+3	1.0	+.3	MONT. Billings	33	+3	.2	+.1	Beaumont	64	+7	6.1	+5.0
FLA. Apalachicola	62	+5	.9	+.1	Glasgow	19	-3	.2	+.1	Brownsville	69	+4	T	-.3
Daytona Beach	67	+5	.7	+.3	Helena	31	+1	.4	+.2	Corpus Christi	68	+7	.2	-.2
Ft. Myers	72	+6	.5	+.3	Havre	25	+2	.4	+.3	Dallas	---	---	---	---
Jacksonville	63	+6	1.8	+1.3	Helena	36	+9	.6	+.2	Del Rio	58	+3	0	-.1
Key West	76	+3	.7	+.3	Kalispell	33	+6	.6	+.2	El Paso	53	+6	0	-.1
Lakeland	69	+5	.7	+.3	Miles City	29	+3	1.0	+.8	Fort Worth	52	+1	.3	+.1
Miami	77	+7	.6	+.2	Missoula	36	+8	T	-.1	Galveston	64	+4	.4	+3.8
Orlando	70	+7	.6	+.2	NEBR. Grand Island	36	+4	1	-.1	Houston	61	+4	T	0
Tallahassee	59	+4	1.5	+.6	Lincoln	33	+1	.2	+.1	Lubbock	50	+6	T	-.1
Tampa	67	+4	.7	+.2	Norfolk	31	+2	.2	+.1	Midland	52	+3	.1	0
W. Palm Beach	75	+7	.4	-.3	N. Platte	35	+5	0	-.1	San Angelo	53	+2	.5	+.1
GA. Atlanta	52	+6	1.1	+.2	Omaha	29	+1	.1	0	San Antonio	58	+2	.8	+.3
Augusta	57	+8	.4	-.4	Valentine	36	+7	T	-.2	Victoria	57	+4	1.0	+.5
Macon	59	+8	2.1	+1.5	NEV. Ely	57	+9	0	-.1	Waco	46	-2	T	-.3
Savannah	61	+3	.3	-3.4	Las Vegas	42	+6	T	-.2	Wichita Falls	39	+6	0	-.2
HAWAII. Hilo	75	+2	.4	-.4	Reno	46	+13	T	-.3	UTAH. Blanding	42	+8	.3	-.1
Honolulu	77	---	---	---	Winnemucca	29	-2	1.2	+.3	Salt Lake City	31	+2	.6	0
Kahului	75	+1	2.3	+.9	N.H. Concord	44	+4	1.1	+.1	VT. Burlington	43	+2	.7	0
Lihue	43	+8	.5	+.1	N.J. Atlantic City	41	+1	1.4	+.6	VA. Lynchburg	53	+7	.3	-.4
IDAHO. Boise	46	+9	.4	+.1	Trenton	42	+3	0	-.1	Norfolk	45	+2	.5	-.3
Lewiston	40	+9	1	-.2	N.MEX. Albuquerque	52	+10	0	-.1	Richmond	44	+3	.8	+.1
Pocatello	42	-1	1.3	+.4	Roswell	35	+3	1.2	+.5	Roanoke	33	+3	.6	+.1
ILL. Cairo	26	-7	.8	+.3	N.Y. Albany	32	+1	1.0	+.3	WASH. Colville	33	+3	.6	+.1
Chicago	22	-10	.2	-.2	Binghamton	34	+1	1.2	+.4	Onak	36	+6	.3	-.1
Moline	19	-9	.9	+.4	Buffalo	40	-1	1.3	+.4	Quillayute	44	+2	7.1	+3.7
Peoria	24	-9	.9	+.4	New York	40	-1	.7	+.1	Seattle-Tacoma	46	+4	.9	-.5
Rockford	19	-11	.3	-.2	Rochester	35	+1	.6	-.2	Spokane	38	+6	.3	+.1
Springfield	28	-7	.9	+.4	Syracuse	35	+1	.6	-.2	Walla Walla	50	+11	.5	+.1
IND. Evansville	38	-1	1.5	+.7	N.C. Asheville	46	+4	1.2	+.4	Yakima	44	+10	.1	-.2
Ft. Wayne	28	-5	1.0	+.4	Charlotte	49	+3	.9	+.2	W. Va. Beckley	42	+6	.7	0
Indianapolis	34	-1	.8	+.6	Greensboro	45	+2	1.4	+.7	Charleston	44	+4	1.4	+.7
South Bend	27	-6	1.2	+.1	Hatteras	61	+10	.7	-.4	Huntington	43	+3	1.1	+.4
IOWA. Burlington	26	-7	.5	+.1	Raleigh	47	+3	.2	-.2	Parkersburg	43	+4	.7	+.1
Des Moines	29	-1	.1	-.2	Wilmington	60	+9	.3	+.2	WIS. Green Bay	14	-12	.5	+.1
Dubuque	18	-10	.1	-.1	N.DAK. Bismarck	20	-1	.3	+.2	La Crosse	16	-11	.2	-.2
Sioux City	31	+2	.1	-.1	Fargo	12	-8	.2	+.1	Madison	22	-7	.4	0
KANS. Concordia	37	+2	.8	+.7	Williston	19	-2	.3	+.2	Milwaukee	34	+5	.2	+.1
Dodge City	41	+6	.1	0	OHIO. Akron-Canton	34	-1	1.7	+1.0	WYO. Casper	32	+1	.1	0
Goodland	39	+6	.1	0	Cincinnati	35	0	.9	+.3	Cheyenne	35	+8	.1	0
Topeka	35	-1	.1	-.2	Cleveland	36	+1	1.5	+.9	Lander	32	+3	1.0	+.8
Wichita	41	+2	1.2	+.4	Columbus	35	0	1.2	+.6	Sheridan	32	+3	.5	-.7
KY. Lexington	41	+2	1.2	+.4	Dayton	35	0	.7	+.1	P.R. San Juan	80	+2	.5	-.7
Louisville	42	+3	1.6	+.8	Toledo	29	-4	.7	+.1					

Based on 1941-70 normals

Correction: Vol. 64 No. 48, November 29, 1977--Table, page 4 should have been November 27, 1977.

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 (44 USC 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 Service, National Oceanic and

Atmospheric Administration; Harry DeLong and Jim Carlin, Statistical Reporting Service, U.S. Department of Agriculture.

Yearly subscription rate: \$5.00 domestic and \$11.25 foreign airmail. Order from the Weekly Weather and Crop Bulletin, South Building Mail Unit, Room 1248, USDA, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

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: Warm with temperatures averaging 9° above normal. Rainfall with heaviest amounts in Tennessee Valley.

Fieldwork: 2 days suitable. Soil moisture adequate to surplus. Harvest slowed by rains and wet fields. Cotton 85% harvested, 85% 1976, 88% average. Soybeans 77% harvested, 92% 1976. Pastures fair.

ARIZONA: Sunny and mild; no precipitation. Temperatures 3 to 7° above normal.

Cotton harvest winding down some areas, gins well behind. Small grain preparations, planting good progress. Sugarbeets excellent growth. Alfalfa hay new renovated fields good progress. Lettuce harvest full swing Yuma County, winding down central areas. Mixed vegetables growing well, harvest early planted just underway. Harvest lemons, Navel, sweet oranges, early tangerines full swing. Grapefruit harvest limited. Ranges higher elevations good condition but drying. Conditions mid-to-lower elevations generally poor to fair. Stock water, soil moisture short. Cattle, calves, sheep and lambs mostly good condition.

ARKANSAS: Highest normal 50°, lowest 41°. Highest mean 51°, lowest 41°. Extremes: 79 and 27°. Most precipitation 2.78 in.; least 1.04 in. Rain first half ending 1st.

Virtually no fieldwork accomplished due to wet conditions. Only scattered cotton fields to be picked or scrapped. Small grain planting complete; considerable amount planted as cover crop. Livestock producers vaccinating, dehorning, worming, repairing fences. Livestock good condition.

CALIFORNIA: No major storms; several weak storms brushed extreme north depositing less than 0.50 in. precipitation. Santa Ana winds brought above average temperatures; many stations in south averaged 10° or more above normal.

Small grains field preparation planting. Alfalfa green chopped. Sugarbeet harvest continues. Cotton harvest nearing completion. Fields disced, shredded. Pruning deciduous trees, vines active. Irrigation, weed control continue, some dormant spraying. Navel orange harvest increasing with maturity, color improvements. Freeze damage Fresno, Contra Costa groves with inadequate protection. Lemon harvest increasing desert. Grapefruit, tangerine harvests seasonally active. Riverside County date harvest active. Avocado harvest continues. High winds, south coast dropped some immature fruit. Artichoke, melon, sweet corn, market tomato light harvest. Broccoli, cauliflower moderate. Lettuce volume good. Rangeland improved from rains. Warm days, night fog, heavy morning dew helping newly sprouted seed. Stock water levels far below normal, supplemental feeding continues. Good conditions for calving, lambing.

COLORADO: Steady snow and blowing in central and northern mountains. High wind warnings issued for eastern slopes. Eastern slopes and plains had mild temperatures. Lower temperatures in mountains and lower elevations.

Winter wheat good condition; 7% being pastured. Winter barley good condition. Range and pasture poor west slope, fair elsewhere. Hay and roughage supplies slightly below average. Soil moisture short to very short. Livestock condition good.

FLORIDA: Scattered rains and mild weather gave way to fair, dry weather on weekend. Temperatures slightly above normal. Rainfall ranged between 0.75 and 1.50 in. with locally higher amounts.

Rainfall benefited small grain pasture growth. Planting winter pastures continues. Permanent pastures poor to fair. Cattle condition mostly good. Soil moisture adequate Panhandle, south; short north, parts of central area. Soybean harvest nearing completion. Pecan harvest slowing. Sugarcane harvest active. Small grains about planted. Early plantings good condition. Tobacco plant beds being prepared. Citrus grove condition excellent, rain most of last week. Irrigation discontinued. Cool weather reduced foliage growth. Orange harvest very active. Vegetable supplies gained most crops after holiday lull. Market sluggish some crops. Volume increased snap beans, cabbage, carrots, celery, chinese cabbage, sweet corn, escarole-endive, eggplant, lettuce, peppers and tomatoes. Volume remained steady cucumbers, squash. Radish shipments declined. Quality, fruit size most crops very good. Good volume expected December. Strawberry bloom buds showing Plant City area.

GEORGIA: Temperature departures ranged from 2° below normal northeast to 5° above normal central. Normals ranged from 44° northeast to 60° south. Cool early week, warm late week. Extremes: 17 and 79°. Rainfall mid through late week. Amounts generally 0.50 to 1.25 in.

Soil moisture mostly adequate to excessive. Wet fields slowing harvest and damaging some northern soybeans. Corn harvest 97% complete, 94% last year. Cotton mostly poor to fair; 81% picked, same last year. Soybeans mostly fair to good; 75% combined, 80% last year. Pastures and cattle fair to good, up slightly from last week due to rain. Hogs mostly good. Pecan harvest 74% complete, 68% last year. Wheat, rye, other small grains, 88%, 93%, 91%, seeded respectively. Last year 86%, 91%, 90%. Apples 100% harvested, equal to last year.

HAWAII: Weather variable. Strong winds 3d caused light damage banana orchards and vine crops exposed areas Waimanalo, Luluku areas Oahu. Accompanying rains beneficial. Elsewhere weather favorable.

Heavy irrigation continuing some areas Maui and Hawaii. Banana and Papaya supplies heavy. Vegetable supplies generally light. Pineapple plantings continuing; harvesting light. Sugar mills stopped grinding for annual repairs. Pastures fair to good.

IDAHO: Temperatures 5 to 10° above normal. Precipitation above normal except upper Snake River Valley and scattered areas Treasure Valley which were below normal.

Farm activity centered on caring for livestock and marketing. Increased fresh potato market activity. Livestock generally good condition. Feed supplies generally adequate.

ILLINOIS: Temperatures 5 to 11° below normal northern two-thirds; near normal south. Precipitation up to 1.00 in. northern half; 1.75 in. extreme south.

Corn 99% harvested, 100% 1976, 97% average. 1978 corn and soybean acreage 45% plowed, 65% last year, 60% average. Winter wheat mostly good. Pas-

tures mostly fair to good. Soil moisture mostly adequate to surplus. Fieldwork: 2.0 days suitable.

INDIANA: Subnormal temperatures in north, near normal south. Precipitation 1.00 in. north to 2.50 in. south. Freezing rain and snow weekend. Heaviest central and south. Snow storm in progress halting traffic and closing schools. Temperatures range from 8° on 30th to 61° extreme southeast on 1st.

Fieldwork averaged 1 day. Topsoil moisture adequate to mostly surplus. Subsoil moisture mostly adequate to surplus. Corn 95% harvested, 1976 100%, average 90%. Soybeans over 90% combined, 1976 100%. Acres intended for 1978 spring planted crops 40% plowed, 1976 50%. Tobacco 60% stripped. Pastures fair.

IOWA: Temperatures 4° below normal. Precipitation about normal, falling in later part of week with intermittent periods of snow, becoming locally heavy by 5th.

Corn harvest 95% complete, 100% last year, 94% normal. Soybean harvest 98% complete, 100% last year, 100% normal. Winter wheat good condition. Little acreage lost from harvest delay. Hay, roughages adequate. Increasing interest feeder cattle. Hogs good condition.

KANSAS: Light precipitation confined primarily first 3 days and week end. Local amounts ranged 0.50 in. to over 0.75 in. east and south. Temperatures ranged 36° northeast and east central, 42° southwest, 1° below normal northeast, 2 to 5° above normal central and southwest, to 8° above normal northwest.

Finishing touches placed fall harvest. Favorable harvesting conditions prevailed. Moisture conditions mixed; very dry west, adequate central and east. Condition of wheat good to excellent; leaf rust noticeable. Wheat being pastured 15%, last year 5%, average 15%. Virtually all corn harvested, last year near 100%, average 90%. Harvesting soybeans 90%, last year near 100%, average 95%. Sorghum grain harvest over 95%, last year near 100%, average 90%. Pastures and ranges good shape despite some hard freezes. Ample supplies supplementary feeds. Principal farm activities caring for livestock, fertilizing, irrigating wheat, general farm chores.

KENTUCKY: Temperatures above normal with below normal readings first of week and above normal remainder of period. Precipitation above normal.

Harvesting operations slow but some corn and soybeans harvested. Pastures providing good grazing. Fall sown wheat in good condition with adequate growth. Burley tobacco markets had good volume but lower demand.

LOUISIANA: Temperatures 2 to 11° above normal. Rains general.

Soil moisture mostly surplus. Activities: Harvesting cotton, soybeans and sugarcane. Cotton 97% harvested, 98% last year, 87% average. Soybeans 95% harvested, 100% last year, 91% average. Sugarcane 66% harvested, 66% last year, 68% average. Pecans 89% gathered. Oats 99% seeded; wheat 96%. Pastures fair. Cattle fair to good.

MARYLAND & DELAWARE: Temperatures 1° below normal. Highs in upper 40's; lows in 30's. Western areas slightly cooler. Precipitation widespread with most areas receiving 1.00 to 2.00 in. of rain.

Soybean harvest continued in areas dried enough to get machinery back onto fields. Recent rains very beneficial to fall planted crops. Pasture conditions improved.

MICHIGAN: Temperatures ranged from 1 to 6° below normal. Extremes: -11 and 55°. Precipitation: 0.60 to 1.20 in. over north, southwest Lower and east Upper: 0.10 to 0.60 in. west Upper and 0.40 to 0.80 in. elsewhere.

Farm activity limited to feeding livestock, storing machinery, cleaning barns and spreading manure. Fields generally too wet to harvest. Corn picked 80%, 98% 1976. Soybeans combined 85%, 100% 1976. Dry beans 90% picked. Pasturing finished. Fall plowing 30% complete. Need hard freeze to allow farmers to finish harvesting.

MINNESOTA: Temperatures 5 to 9° below normal northwest, central, southeast; near normal southwest and northeast. Extremes: 43 and -19°. Precipitation 0.25 to 0.30 in. below normal northeast, near normal to 0.20 in. below normal elsewhere. Precipitation totals ranged from trace extreme northeast to 0.27 in. central. Snowfall ranged from trace extreme northeast to 4 in. east central. Snow on ground varied from less than 1 in. southwest to 12 to 18 in. northwest and north central.

MISSISSIPPI: Temperatures 2 to 3° subnormal north; 8 to 4° above normal south. Extremes: 20 and 80°.

Soil moisture surplus. Fieldwork: 0.4 days suitable. Soybeans 83% harvested, 96% 1976, 85% average. Cotton 96% harvested, 97% 1976, 89% average. Corn 96% harvested, 98% 1976, 94% average. Pecans 81% harvested, 83% 1976, 76% average. Winter wheat and oats good condition. Pastures and livestock good to fair condition.

MISSOURI: Temperatures 20's and 30's beginning of week; 40's and low 50's later; 4° below normal. Rainfall greatest in east, averaging 1.00 in. northwest prairie had 0.22 in.; west central plains and west Ozarks had 0.50 to 1.00 in. Snow fell in north.

Fieldwork: 2.5 days suitable. Soybeans 88% harvested, last year 100%, normal 88%. Corn 84% harvested, last year 100%, normal 86%. Grain sorghum 91% harvested, last year 100%, normal 88%. Intended winter wheat seeding 72% completed. Plowing for spring planted crops 34% completed. Condition of winter wheat fair to good. Condition of pasture mostly good. Soil moisture supply adequate to surplus.

MONTANA: Most of week well above normal temperatures. Arctic outbreak by end of week, with subzero readings over Plains. Temperatures averaged 10° above normal southwest to 2° below northeast. Precipitation well above normal, mostly from snow. Brief warming before cold outbreak brought between 1.00 to 2.00 in. rain west central.

Subsoil moisture short, topsoil moisture adequate. Winter wheat condition good--snow cover fair to poor, wind damage light. Livestock condition good; 60% on supplemental feed. Grazing open most areas except east. Weekend snow will improve snow cover but restrict grazing.

NEBRASKA: Temperatures 5 to 10° above normal west, near normal elsewhere. Precipitation 0.10 in. most areas; 0.25 in. south central.

Corn, sorghum grain, soybean harvest virtually complete, only isolated fields remain. Normally harvest expected near completion. Year ago, harvest finished. Winter wheat condition declined, fair to good. Year ago, mostly fair. Soil moisture adequate; driest area southwest Panhandle.

NEVADA: Warm weather with limited precipitation. Snow depth decreased in Sierra. Temperatures ranged from 77 to 16°.

Cotton harvest continues. Caring for live-stock main activity.

NEW ENGLAND: Mild with temperatures about 10° above normal. Temperatures 5° below normal in northern areas 28th. Up to 2 in. snow in northern areas 28th. Widespread heavy rains of 2.00 in. southern areas.

NEW JERSEY: Temperatures 4° below normal north and normal elsewhere; averaging 34° north, 40° south and 43° coastal. Extremes: 20 and 61°. Precipitation 0.60 in. above normal; averaging 1.46 in. north, 1.37 in. south and 1.26 in. coastal. Snowfall reports from central and north 29th. Soils very wet. Harvest mostly limited to very light supply some leafy green hardy fall vegetables. Considerable acreage of field corn and soybeans yet to be harvested. Livestock farmers beginning winter feeding schedules as temperatures turning colder and most animals confined to buildings and dry lots.

NEW MEXICO: Very light showers and snow flurries northeast and northern mountains early week; few light showers east central 1st, dry elsewhere. Cotton 85% harvested. Pecan harvest continued. Irrigated winter wheat good; dryland winter wheat fair. Ranges poor to fair. Livestock good. Limited supplemental feeding in progress.

NEW YORK: Near normal temperatures, mainly in the 30's except mid to upper 20's in normally colder spots. Precipitation 0.50 to 1.50 in., mainly rain.

NORTH CAROLINA: Precipitation light. Temperature cold early week; mild later.

Fieldwork: 1.5 days suitable. Soil moisture adequate to surplus. Condition: Pastures fair to good; small grains good. Harvested: Cotton 90%, 1976 and average 87%; soybeans 64%, 1976 76%, average 78%. Planted: Wheat 88%, 1976 88%, average 87%; oats 91%, 1976 90%; barley 93%, 1976 90%; rye 93%, 1976 90%.

NORTH DAKOTA: No major storms. Precipitation amounts generally came as light snow or light rain, with weekly precipitation totals ranging from 0.10 to 0.20 in. During midweek warming trend in west and south. Extremes: 43 and -18°.

Condition of winter wheat and rye mostly good due to wet conditions and snow cover. Topsoil moisture supplies adequate to plentiful. Subsoil moisture adequate to plentiful. Prospective supplies of hay and forage for feeding during coming winter adequate to surplus.

OHIO: Unsettled weather with frequent periods of precipitation. Freezing rain south 29th; 1 to 3 in. of snow north on 3d with locally heavier amounts in northeast snow belt. Temperatures rose well into the 50's over south on 30th; strong winds brought colder air 1st.

OKLAHOMA: Temperatures near normal. Moderate to light precipitation.

Topsoil moisture supplies short northwest, generally adequate elsewhere. Wheat condition good with 97% up to stand, 96% 1976, 94% normal. About 35% of wheat acreage being grazed. Fall seeded oats and barley are 95% up to stand and in good condition. Sorghum harvest 97% complete, the same as last year but ahead of 78% average. Cotton harvest made good progress, now 70% complete, 77% 1976 and 27% normal. Cotton continues to stack up at gins. Soybean combining now over 90% complete, the same as last year. Ranges in good to fair

condition and providing adequate grazing. Live-stock in mostly good condition.

OREGON: Temperatures 5 to 10° above normal. Maximum temperatures ranged in the 50's and lower 60's; minimum 30's and lower 40's but dipped well into the 20's in east midweek. Rainfall well above seasonal normal. Coasts received 2.00 to 4.00 in. Interior valleys of west amounts ranged from 0.75 to 1.50 in. Elsewhere amounts generally 0.25 to 0.50 in.

Farm activity light as wet weather continues. Spray programs continue in fall grain fields. General orchard work continues. Repair and service activity continue on equipment. Livestock feeding continues. Stock in good to excellent shape. Feed supplies locally adequate.

PENNSYLVANIA: Unsettled conditions through 3d with mixture of rain, freezing rain, sleet and snow. Sunny 4th but return to snow, sleet and freezing rain 5th. Temperatures near normal with extremes 59 and 17°. Precipitation from 0.50 in. west to 1.50 in. east. Up to several inches new snow north.

Weather conditions kept most farmers indoors except for winter chores.

PUERTO RICO: Island average rainfall 1.38 in. or 0.23 in. above normal. Temperatures averaged about 79° on coasts and 73° interior. Extremes: 95 and 56°

SOUTH CAROLINA: Above normal temperatures, scattered rains first half of week. Heaviest rainfall south.

Soil moisture mostly adequate. Fieldwork: 2 days suitable. Cotton harvest 88% complete; slowed by rains. Soybeans all mature. Rain, moisture delayed drying, harvesting. Pastures, livestock fair to good condition. Winter grazing 96% planted. Small grains good to fair condition. Pecans smaller, less filled out than last year. Harvest continuing.

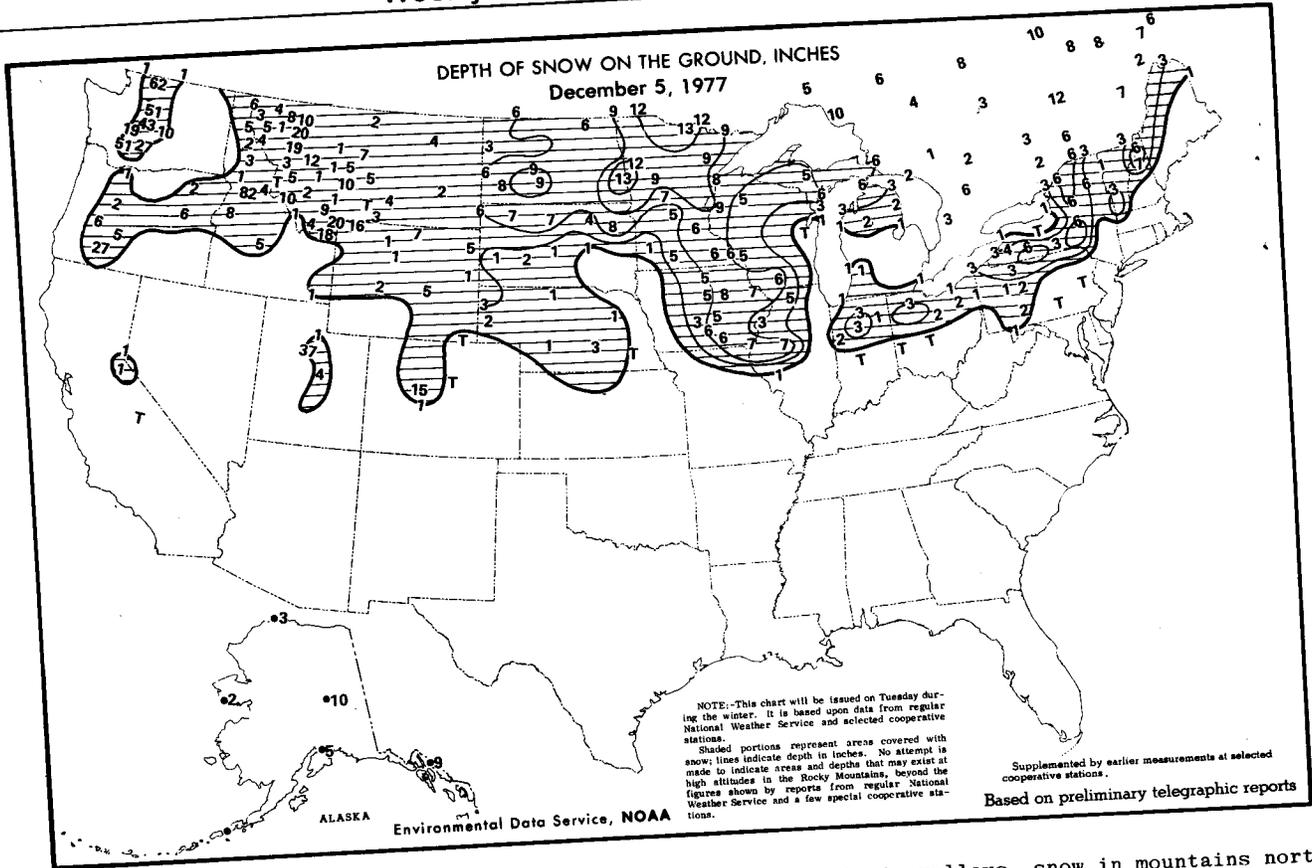
SOUTH DAKOTA: Temperatures 4° below to 4° above normal. Extremes: -10 and 57°. Warm temperatures more common early week. Moisture generally less than 0.25 in.

Some corn still to be harvested. Most will wait until spring.

TENNESSEE: Temperatures averaged 5 to 7° above normal with highs in 50's and 60's and lows in 30's and 40's. Precipitation ranged from 3.94 to 0.98 in. Rainy conditions lasted all week with thunderstorms developing 4th.

TEXAS: Rain east. Late week fair, partly cloudy skies, mild temperatures. Rainfall below normal except east, upper Gulf Coast above normal. Temperatures above normal.

Cotton harvest continuing rapid progress. Gins Panhandle have large backlog; harvest some areas slowed by trailer shortage. Soybean harvest nearing completion although growers along coast again delayed by rain. Peanut harvest nearly complete. Sunflower harvest virtually complete. Sugarbeet harvest virtually complete. Sugarcane harvest active Lower Rio Grande Valley. Fields not harvested last year due wet weather being cut first. Wheat seeding approaching completion. Stands many areas beginning good growth but dry-land stands Panhandle moisture stressed. Greenbugs, spider mites also hindering growth some fields Panhandle. Oat stands improving, making good growth. More fields being grazed. Seeding



nearly complete. Flax seeding good progress although planting along coast limited by wet fields. Stands south need rain. Cotton harvested 92%, 60% 1976, 49% average. Peanuts harvested 98%, 93% 1976, 92% average. Soybeans harvested 98%, 98% 1976, 94% average. Pecans harvested 65%, 66% 1976, 62% average. Sugarbeets harvested 100%, 89% 1976, 99% average. Sunflowers harvested 100%, 93% 1976, 94% average. Sorghum harvested 100%, 100% 1976, 100% average. Wheat planted 98%, 96% 1976, 98% average. Oats planted 99%, 95% 1976, 98% average. Flax planted 65%, 33% 1976, 68% average.

Lower Rio Grande Valley harvest cabbage, green peppers, carrots continues. Growers bedding cantaloup, honeydew fields. Windbreaks planted spring pepper fields. Irrigation active throughout area. Citrus harvest gaining momentum. Coastal Bend cucumber harvest slowed because weak market prices. San Antonio-Winter Garden land preparation begun spring melons, potatoes. Spinach harvest continues, quality improving since cool weather. Kale harvest started; cabbage harvest sporadic. Onion sets being transplanted. Laredo vegetable fields being irrigated. Upper Coast frost curtailed production. Central Texas winter vegetables good condition result mild weather and moisture. High Plains carrot harvest almost complete. Trans-Pecos land preparation spring vegetables continues fields deep plowed and mulched. Pecan harvest continues.

Winter grasses making good growth, providing some grazing. More cattle moved onto small grain but dryland wheat Panhandle providing almost no grazing due to little moisture. Rains east improved winter grazing. Livestock condition holding; ranchers feeding hay, supplements.

UTAH: Rain in valleys, snow in mountains north-west. Accumulated amounts moisture generally light to moderate but locally heavy, few higher elevation stations. Temperatures continue 2 to 10° above normal.

Doing routine chores, caring for livestock. Sugarbeet processing continuing. Sorting, grading and marketing potatoes, onions and apples from storage.

VIRGINIA: Temperatures slightly below normal. Extremes: 74 and 8°. Rainfall averaged 0.90 in. occurring almost daily. Several inches snow fell in southwest.

Topsoil moisture adequate to surplus. Pastures, small grains good to excellent. Livestock good. Rains hampering harvests. Soybeans: Prolonged drying weather or hard soil freeze needed to finish; 64% combined, 81% 1976, some mold damage reported. A few peanuts lost, wet conditions prevented digging. Corn 15%, grain sorghum 28% still in field. Fire-cured marketings above 1976. Burley sales active. Sun-cured markets open 6th. Some wheat seedings prevented by wet conditions. Feed, hay supplies short to adequate. Fieldwork: Less than 1 day favorable. Pasture watering supplies mostly adequate.

WASHINGTON: West: Temperatures 4 to 5° above normal. Precipitation 1.00 to 2.70 in. above normal.

Most farm activity limited to routine chores. Heavy run-off caused flooding of low-lying farmland. All crops harvested with exception of few carrots. Local hay available. Most livestock on winter feed.

East: Temperatures 4 to 6° above normal. Precipitation near normal to 0.40 in. above.

Harvest activity concluded except for grain corn, few sunflowers. Sugarbeets and potatoes moving to processors. Grape vineyard and orchard pruning underway. Topsoil moisture of dryland improved; subsoil needs more moisture, especially summerfallow.

WEST VIRGINIA: Temperatures 1 to 3° above normal. Precipitation near normal central and south; well above normal elsewhere. Heaviest early week.

Fieldwork: 1.5 days suitable. Soil moisture adequate to surplus. Fall pastures holding up well. Hay supplies short to adequate. Fall sown grains, livestock good.

WISCONSIN: Temperatures below normal. Storm late on 30th and continues 1st. Precipitation began as rain southeast, changed to snow with 1 to 3 in. accumulation. Heaviest snow of 3 to 5 in. fell in band southwest to northeast, with

lesser amounts northwest. Temperatures dropped below zero mornings 3d and 4th. Clouds developed late 3d and 4th, bringing light snow north and central.

Corn and soybean acreage left to harvest but field activity limited by snow cover and soft ground. Snow depths averaged over 7 in. as of 2d. Frost depths averaged 2.00 in. but many southern areas have no frozen ground to support harvesting equipment.

WYOMING: Temperatures above normal. Precipitation widespread. Greatest amount and greatest departure from normal in Green and Bear drainage. Driest was Wind River drainage with no precipitation.

Livestock mostly good condition, lighter than normal where grass was short during summer. Hay supplies mostly adequate. Some cattle and sheep still on beet fields. Most livestock marketing finished.

World Weather and Crop Update

November 28 - December 4

USSR. The mild fall has ended in European USSR as wintry weather brought below freezing temperatures to most areas. Heavy snowfalls in the more northern agricultural areas should provide sufficient protection to winter grains which are in generally excellent condition resulting from the extended vegetative period. Temperatures mostly remained above freezing in the southern regions--southern Ukraine, Moldavia and North Caucasus.

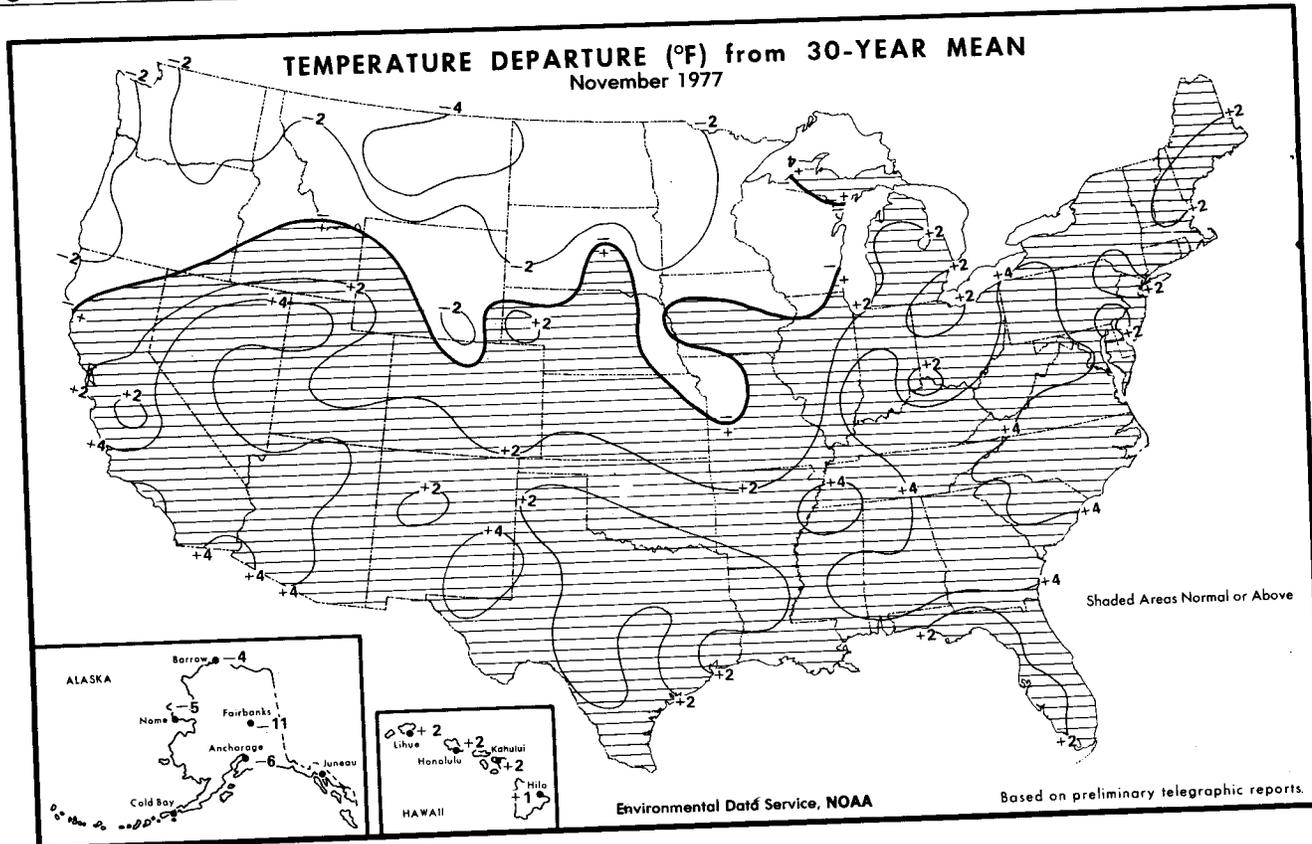
ASIA. Rain fell over the eastern half of South Australia, all of Victoria, and into New South Wales, but the grain harvest in most areas proceeded under favorable conditions. Row crops and pastures need rain as the drought continued over many important agricultural regions. Moderate rains moistened southern India, but precipitation was seasonally light in the north. Precipitation was also seasonally light over the China Mainland. Harvesting of late crops in the south continued under favorable conditions. As the harvest wound down, most of the activity in the Chinese agricultural scene was directed at improving land, irrigation, and drainage facilities.

AFRICA. Generous rains doused winter grains and pastures in Morocco, but Tunisia and Algeria were without significant moisture. Light to moderate showers, locally heavy, were general throughout the Transvaal in South Africa; precipitation was lighter and less extensive in the Orange Free

State. More rain is needed in some areas as sowing of spring crops is now underway.

SOUTH AMERICA. Harvesting of winter grains in Argentina was favored by generally fair weather until the weekend when moderate to heavy rains dampened much of the grain belt. Spring crops and pastures continued to progress satisfactorily although excessive precipitation may have created some local problems. Light to moderate, locally heavy, rains fell over most of Brazil's main agricultural areas in the south and east. But rain is needed in the northeast.

EUROPE. It was generally sunny and cool in the northern half of western Europe with light to moderate frosts. Moderate showers fell on much of Spain, and as the low pressure system moved eastward, central and northern Italy received some scattered light rain. Livestock continued to have access to forage in the absence of snow cover. More wintry weather prevailed in eastern Europe with light snow cover established over much of East Germany, Poland, and Czechoslovakia. Although precipitation was generally light throughout eastern Europe, locally heavy showers dampened southern Yugoslavia. Abundant rains in central and southern Greece should help restore depleted soil moisture in those areas. Winter grain areas in Turkey received some light rain at the end of the period.



November Weather Summary

HIGHLIGHTS: Temperatures for the month of November averaged above normal over most of the Nation. Exceptions were the northern states from the Great Lakes westward where the averages were 2 to 4° colder than normal and near normal averages in the Plains. Much-needed rain fell in the Pacific Northwest and as far south as San Francisco. Snow accumulated in the mountains eastward and from the northern Plains to western New England. Several storms moved from the Gulf of Mexico north-eastward spreading moderate to heavy rain in their wake.

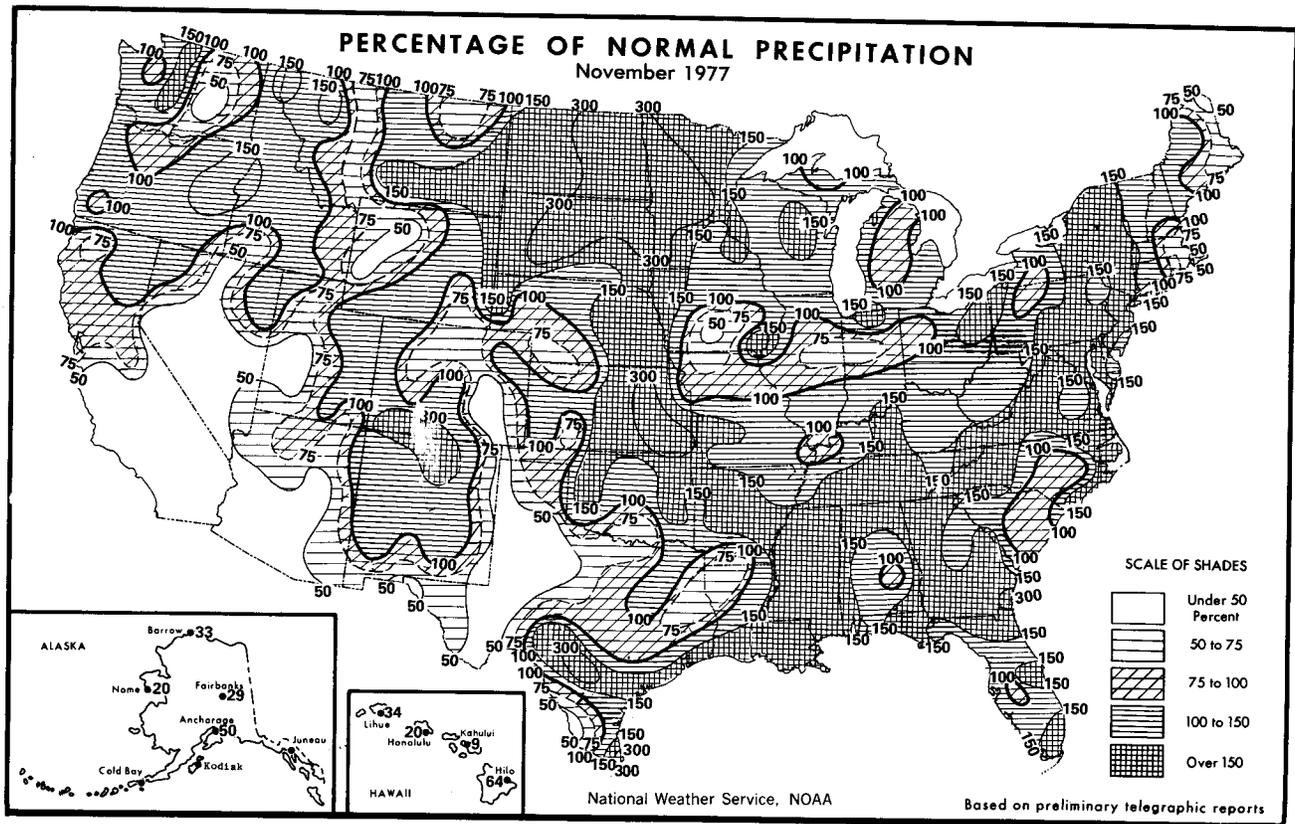
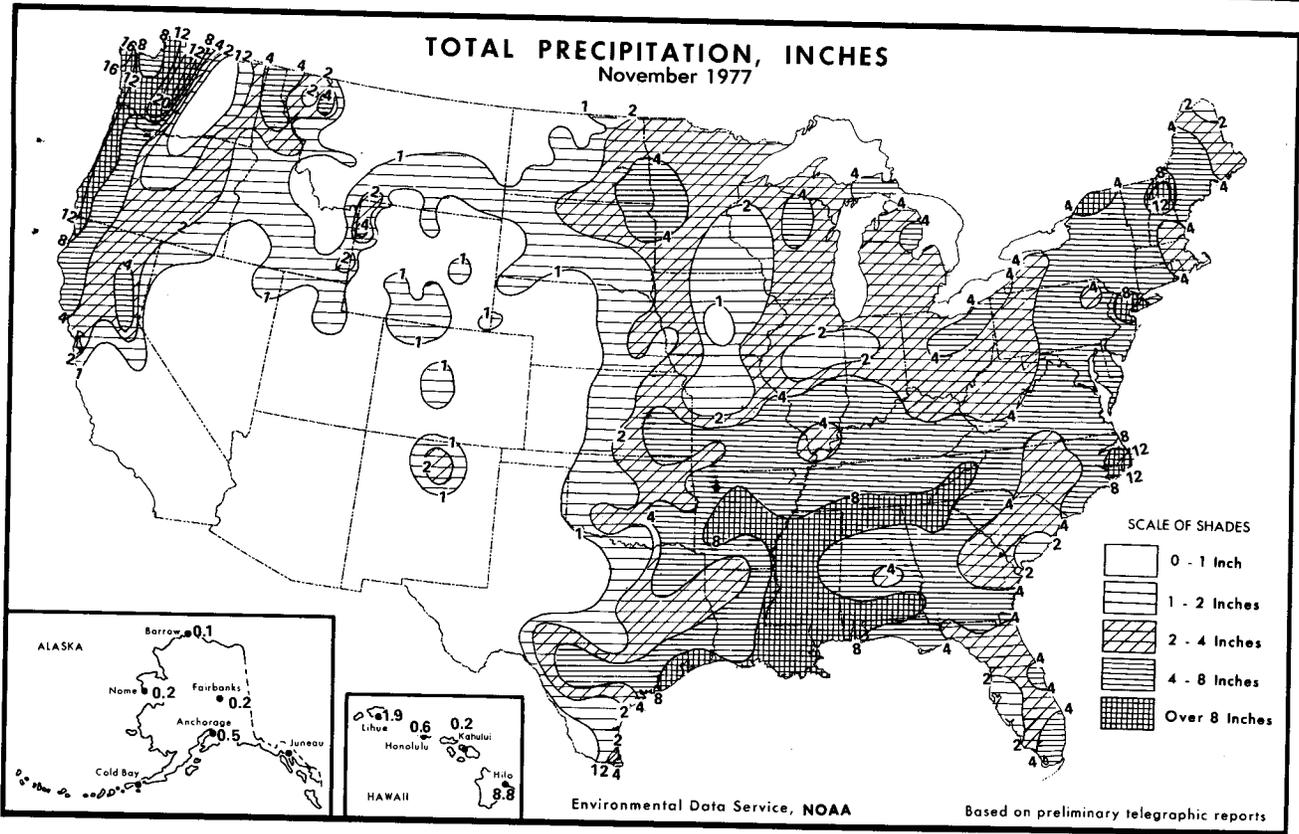
A complex low pressure system formed over the western portion of the Gulf States in the early days of November. Warm moist air from the Gulf of Mexico moved northward ahead of the system. Rain, heavy at times with some thunderstorms, was carried northward to the Great Lakes area. As the storm moved eastward heavy rain fell in the South and then through and east of the Appalachians. At the end of the first week another strong weather system moved onto the West Coast and spread light rain through California to the northern Rockies. Average temperatures for the week were quite warm ahead of the first storm, 15° above normal in the Ohio Valley; and averaged near normal behind the system to slightly cooler on the West Coast.

Early in the second week the weakening storm caused moderate to heavy rain from the mid-Atlantic States through New England and, by midweek, a second storm system gathered strength in central U.S. Snow fell in the Rockies and then moved into

the northern Plains and upper Mississippi Valley. A cold front associated with the storm moved eastward and marked a line of thunderstorms and severe weather. Snow fell in Ohio, Pennsylvania, and parts of New England. Although the storm was of Pacific origin, it pulled cold Canadian air southward into the Rockies and eastward.

From November 14 to 20 a succession of weather systems ushered in a cold air mass to the northwestern U.S. that set the scene for an intense winter storm. Snow fell in the Northwest at the beginning and end of the week. At midweek a cold front extended from the Lakes area to East Texas. Rain and showers accompanied the front eastward with snow falling in the northern States. Flooding from heavy rain occurred from central Arkansas to southern Illinois. Freezing temperatures in the East gave way to warm air and then cold again by week's end. The Northwest was cold all week averaging 5 to 12° colder than normal.

The last ten days of November produced at least two typically winter weather situations. Early in the period the ridge of high pressure normally off the U.S. West Coast broke down and allowed Pacific storms to move further south bringing much-needed rain to northern California. Snow fell in the mountains of the Northwest and moved to the northern Plains. Then a trough of low pressure deepened in central U.S. bringing sub-zero temperatures to the upper Mississippi Valley. Moist, warm flow ahead of the cold air caused moderate to heavy rain from the mid-South northeastward. Snow fell in much of western New England.



November 1977

Temperature and Precipitation Data for

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 . . .	55	+ 3	4.1	+ .4	La. Baton Rouge . . .	61	+ 2	10.4	+ 6.6	Youngstown . . .	43	+ 3	4.6	+ 1.6
ALA. Mobile . . .	61	+ 2	9.5	+ 6.1	LA. Lake Charles . . .	62	+ 2	7.0	+ 2.9	OKLA. Okla. City . . .	51	+ 2	1.6	+ .2
ALA. Montgomery . . .	60	+ 5	2.8	- .6	LA. New Orleans . . .	63	+ 3	8.8	+ 4.9	Tulsa . . .	45	- 2	2.3	+ .4
ALASKA. Anchorage . . .	15	- 6	.5	- .5	MAINE. Shreveport . . .	57	+ 1	2.1	- 1.5	OREG. Astoria . . .	35	- 1	12.4	+ 2.6
BARROW. Barrow . . .	5	- 4	.1	- .2	MAINE. Caribou . . .	33	+ 2	1.6	- 1.9	BURNS. Burns . . .	38	- 2	2.1	+ .7
FAIRBANKS. Fairbanks . . .	- 8	- 11	.2	- .5	MD. Baltimore . . .	39	+ 0	6.5	+ 1.6	Medford . . .	42	- 3	4.9	+ 1.8
JUNEAU. Juneau . . .					MASS. Boston . . .	49	+ 3	5.0	+ 1.9	Pendleton . . .	38	- 2	5.6	+ .5
KODIAK. Kodiak . . .					MD. Baltimore . . .	48	+ 3	2.5	- 2.0	Portland . . .	43	- 0	6.2	+ .1
NOME. Nome . . .	11	- 5	.2	- .8	MASS. Boston . . .	47	+ 2	2.0	- 2.5	Salem . . .	45	+ 0	6.2	+ .1
ARIZ. Flagstaff . . .	41	+ 5	.8	- .5	Chatham . . .	35	+ 0	2.3	- .2	PA. Allentown . . .	44	+ 2	6.1	+ 2.5
Phoenix . . .	66	+ 6	T	- .5	MICH. Alpena . . .	41	+ 1	2.9	+ .6	Erie . . .	44	+ 4	6.3	+ 2.6
Tucson . . .	62	+ 3	.3	- .3	Detroit . . .	41	+ 3	2.7	+ .4	Harrisburg . . .	46	+ 0	5.6	+ 2.4
Winslow . . .	45	+ 2	.1	- .3	Flint . . .	40	+ 1	2.3	- .5	Philadelphia . . .	46	+ 5	2.6	+ .1
Yuma . . .	66	+ 2	T	- .2	Grand Rapids . . .	36	+ 2	2.1	- .4	Pittsburgh . . .	43	+ 1	4.0	+ 1.0
ARK. Fort Smith . . .	52	+ 2	3.2	+ .1	Houghton Lake . . .	40	+ 2	2.2	- .1	Scranton . . .	46	+ 3	3.2	- 1.3
Little Rock . . .	52	+ 2	8.7	+ 4.8	Lansing . . .	35	+ 1	2.5	- .5	R.I. Providence . . .	61	+ 5	1.8	- .2
CALIF. Bakersfield . . .	60	+ 4	.1	- .6	Marquette . . .	40	+ 1	3.1	+ .1	S.C. Charleston . . .	56	+ 2	2.1	- .2
Eureka . . .	51	- 1	4.5	- 1.3	Muskegon . . .	34	+ 1	4.7	+ 1.4	Columbia . . .	55	+ 4	4.4	+ 1.3
Fresno . . .	55	+ 3	.1	- 1.9	S. Ste. Marie . . .	28	+ 0	2.4	+ .7	Greenville . . .	27	- 3	2.4	+ 1.8
Los Angeles . . .	66	+ 1	3.1	- .0	MINN. Duluth . . .	23	- 2	3.5	+ 2.2	S.D. Aberdeen . . .	32	+ 0	1.6	+ .9
Red Bluff . . .	55	+ 4	.1	- 1.2	Internatl Falls . . .	31	- 1	1.4	+ .2	Huron . . .	33	- 2	.8	+ .3
San Diego . . .	65	+ 0	2.2	- .1	Minneapolis . . .	31	- 1	1.5	+ .5	Rapid City . . .	31	- 2	1.8	+ .9
San Francisco . . .	55	+ 2	.9	- .8	Rochester . . .	32	- 1	3.7	+ 2.6	Sioux Falls . . .	53	+ 4	8.7	+ 4.8
Stockton . . .	55	+ 0	.7	- .2	St. Cloud . . .	28	- 2	10.0	+ 6.1	TENN. Chattanooga . . .	53	+ 4	5.1	+ 1.5
COLO. Denver . . .	40	+ 1	.6	- .2	MISS. Jackson . . .	57	+ 2	5.9	+ 2.4	Knoxville . . .	55	+ 4	6.0	+ 2.1
Grand Junction . . .	40	+ 0	.1	- .3	Meridian . . .	59	+ 5	1.8	- .0	Memphis . . .	51	+ 3	6.0	+ 2.5
Pueblo . . .	50	+ 4	4.9	+ 1.1	MO. Columbia . . .	45	+ 1	1.8	- .1	Nashville . . .	55	+ 1	.6	- .6
CONN. Bridgeport . . .	44	+ 3	4.4	+ .1	Kansas City . . .	42	- 2	4.3	+ 1.8	TEX. Abilene . . .	47	+ 1	.3	- .2
Hartford . . .	52	+ 4	4.8	+ 1.9	St. Louis . . .	45	+ 0	3.0	+ .7	Amarillo . . .	62	+ 3	1.7	- .3
D.C. Washington . . .	62	+ 1	4.5	+ 1.8	Springfield . . .	47	+ 1	1.4	+ .7	Austin . . .	64	+ 4	10.8	+ 6.5
FLA. Apalachicola . . .	67	+ 2	3.0	+ .9	MONT. Billings . . .	25	- 4	.2	- .2	Beaumont . . .	70	+ 2	4.1	+ 2.8
Daytona Beach . . .	70	+ 1	1.5	+ .2	Glasgow . . .	31	- 4	.4	- .4	Brownsville . . .	68	+ 3	1.7	+ .1
Ft. Myers . . .	63	+ 2	3.1	+ 1.3	Great Falls . . .	27	- 3	.6	+ .1	Corpus Christi . . .	68	+ 3	1.7	+ .1
Jacksonville . . .	75	+ 0	4.2	+ 1.5	Havre . . .	31	- 1	.5	- .1	Dallas . . .	62	+ 2	.7	- .0
Key West . . .	68	+ 1	1.5	- .1	Helena . . .	29	- 2	1.5	+ .1	Del Rio . . .	54	+ 2	.1	- .2
Lakeland . . .	64	+ 2	5.9	+ 3.2	Kalispell . . .	29	- 3	1.5	+ 1.0	El Paso . . .	56	+ 0	1.8	- .2
Miami . . .	74	+ 3	2.6	+ 1.0	Miles City . . .	31	- 1	1.0	+ .0	Fort Worth . . .	65	+ 1	9.5	+ 6.3
Orlando . . .	70	+ 3	3.5	+ .7	Missoula . . .	39	+ 1	1.1	+ .5	Galveston . . .	62	+ 1	5.2	+ 1.2
Tallahassee . . .	60	+ 1	1.9	+ .1	NEBR. Grand Island . . .	38	- 1	2.0	+ 1.1	Houston . . .	52	+ 3	T	- .5
Tampa . . .	68	+ 1	5.8	+ 3.3	Lincoln . . .	36	+ 0	1.5	+ .9	Lubbock . . .	55	+ 2	T	- .5
W. Palm Beach . . .	73	+ 2	7.2	+ 3.8	Norfolk . . .	36	+ 0	.4	- .1	Midland . . .	57	+ 1	.7	- .2
GA. Atlanta . . .	54	+ 3	7.2	+ 3.8	N. Platte . . .	38	+ 0	1.7	+ .7	San Angelo . . .	61	+ 1	6.0	+ 4.2
Augusta . . .	58	+ 4	3.7	+ 1.5	Omaha . . .	34	- 1	.6	+ .1	San Antonio . . .	65	+ 2	3.6	+ 1.3
Macon . . .	59	+ 4	3.4	+ 1.0	Valentine . . .	36	+ 2	.2	- .5	Victoria . . .	60	+ 2	2.4	+ .1
Savannah . . .	61	+ 4	2.1	+ .2	NEV. Ely . . .	57	+ 4	T	- .4	Waco . . .	53	+ 0	.9	- .5
HAWAII. Hilo . . .	75	+ 1	8.8	- 5.0	Las Vegas . . .	42	+ 2	.2	- .5	Wichita Falls . . .	41	+ 3	.6	- .2
Honolulu . . .	79	+ 2	.6	- 2.4	Reno . . .	41	+ 4	.8	- .2	UTAH. Blanding . . .	43	+ 4	1.2	- .1
Kahului . . .	77	+ 2	.2	- 2.1	Winneucca . . .	39	+ 1	3.1	- .9	Salt Lake City . . .	40	+ 3	4.2	+ 1.3
Lihue . . .	77	+ 2	1.9	- 3.7	N.H. Concord . . .	50	+ 4	4.8	+ .6	VT. Burlington . . .	50	+ 3	5.7	+ 3.0
IDAHO. Boise . . .	40	- 0	1.9	+ .6	N.J. Atlantic City . . .	48	+ 2	6.6	+ 3.3	VA. Lynchburg . . .	55	+ 3	5.4	+ 2.5
Lewiston . . .	39	- 2	1.6	+ .3	Trenton . . .	46	+ 1	.4	+ .1	Norfolk . . .	52	+ 3	4.3	+ 1.1
Pocatello . . .	37	+ 1	.9	- .2	N.MEX. Albuquerque . . .	53	+ 6	.5	+ .2	Richmond . . .	49	+ 2	6.5	+ 4.0
ILL. Cairo . . .	51	+ 3	3.2	- .7	Roswell . . .	43	+ 3	4.9	+ 2.1	Roanoke . . .	31	- 3	1.7	- .3
Chicago . . .	41	+ 1	2.4	+ .2	N.Y. Albany . . .	40	+ 2	5.1	+ 2.0	WASH. Colville . . .	33	- 2	.9	- .7
Moline . . .	39	+ 0	2.8	+ .9	Binghamton . . .	43	+ 3	4.5	+ .8	Omak . . .	42	- 2	18.1	+ 4.3
Peoria . . .	40	+ 0	1.8	- .2	Buffalo . . .	47	+ 0	8.3	+ 4.5	Quillayute . . .	44	- 1	5.3	- .6
Rockford . . .	37	- 1	2.6	+ .2	New York . . .	44	+ 3	3.8	+ 1.0	Seattle-Tacoma . . .	34	- 2	2.1	- .1
Springfield . . .	43	+ 1	1.6	- .5	Rochester . . .	44	+ 3	5.3	+ 2.0	Spokane . . .	42	- 1	2.0	+ .1
IND. Evansville . . .	49	+ 4	4.3	+ 1.1	Syracuse . . .	49	+ 3	6.9	+ 4.0	Walla Walla . . .	36	- 2	.7	- .4
Ft. Wayne . . .	42	+ 2	2.4	- .3	N.C. Asheville . . .	54	+ 3	4.2	+ 1.5	Yakima . . .	46	+ 4	2.9	+ .0
Indianapolis . . .	46	+ 4	3.0	- .1	Charlotte . . .	50	+ 2	3.1	+ .5	W. Va. Beckley . . .	49	+ 4	3.8	+ 1.0
South Bend . . .	43	+ 3	4.3	+ 1.6	Greensboro . . .	59	+ 3	12.0	+ 7.5	Charleston . . .	50	+ 4	3.6	+ .7
IOWA. Burlington . . .	40	+ 0	3.3	+ 1.7	Hatteras . . .	52	+ 2	2.2	- .6	Huntington . . .	48	+ 3	2.6	+ .1
Des Moines . . .	39	+ 1	.7	- .7	Raleigh . . .	59	+ 3	6.3	+ 3.3	Parkersburg . . .	33	- 1	2.7	+ .8
Dubuque . . .	34	- 2	3.0	+ .5	Wilmington . . .	26	- 3	1.4	+ .8	WIS. Green Bay . . .	33	- 2	1.6	+ .1
Sioux City . . .	36	+ 0	1.9	+ 1.0	N.DAK. Bismarck . . .	26	- 3	4.6	+ 3.9	La Crosse . . .	34	- 1	2.1	+ .2
KANS. Concordia . . .	41	+ 0	1.7	+ .9	Fargo . . .	24	- 4	1.0	+ .5	Madison . . .	37	+ 0	2.6	+ .6
Dodge City . . .	45	+ 2	.4	- .2	Williston . . .	44	+ 3	4.2	+ 1.7	Milwaukee . . .	33	- 1	.8	+ .1
Goodland . . .	39	+ 0	.5	- .0	OHIO. Akron-Canton . . .	45	+ 1	3.9	+ .8	WYO. Casper . . .	34	- 2	.4	- .2
Topeka . . .	43	+ 0	3.4	+ 2.1	Cincinnati . . .	45	+ 3	3.6	+ .8	Cheyenne . . .	32	+ 0	.7	- .2
Wichita . . .	46	+ 1	2.4	+ 1.2	Cleveland . . .	45	+ 3	3.8	+ 1.1	Lander . . .	32	- 1	.7	- .2
Wichita . . .	49	+ 4	4.0	+ .6	Columbus . . .	45	+ 3	2.7	+ .1	Sheridan . . .	32	- 1	.7	- .2
KY. Lexington . . .	49	+ 4	6.1	+ 2.8	Dayton . . .	45	+ 3	2.7	+ .4	P.R. San Juan . . .	80	+ 1	12.4	+ 6.9
Louisville . . .	50	+ 5	6.1	+ 2.8	Toledo . . .	41	+ 1	2.7	+ .4					

Based on 1941-70 normals

Corrections: October 1977 values--Topeka, KAN. 263; Albany, N.Y. 471; Portland, ORE. 338; Los Angeles, CAL. 16.

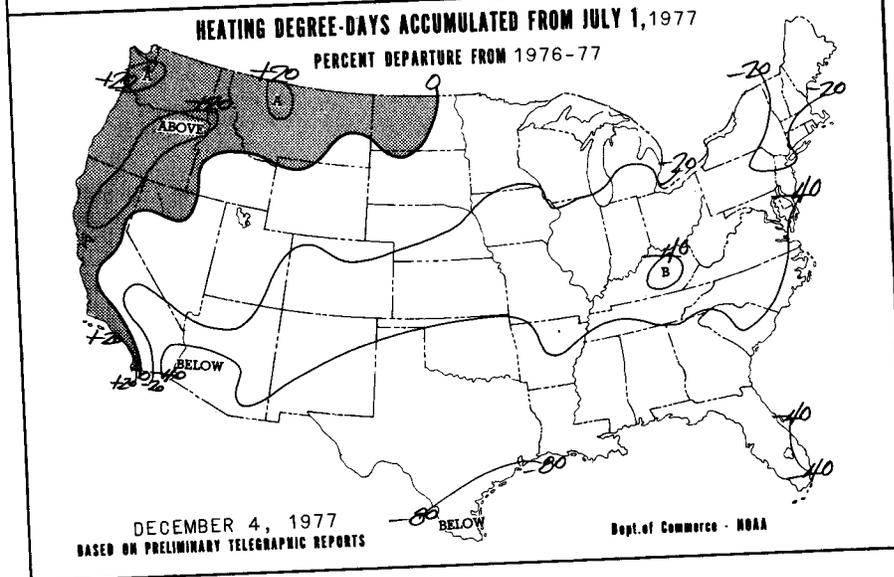
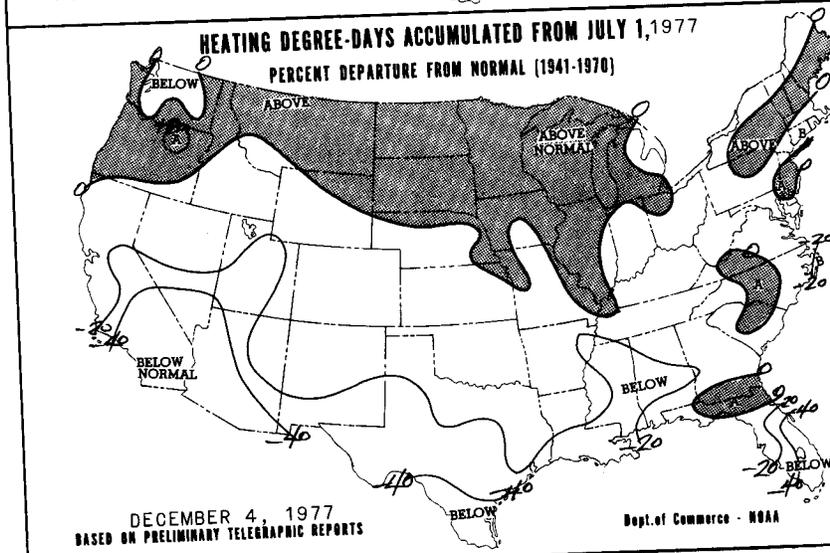
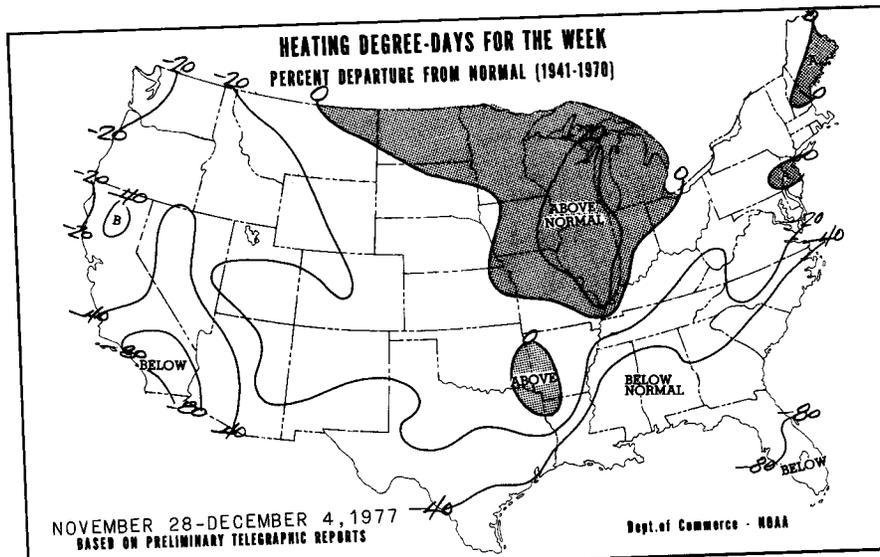
Heating Degree Days (Base 65° F.)

November 1977

ALA. Birmingham	294	MAINE, Caribou	944	OKLA. Okla. City	420
Mobile	149	Portland	761	Tulsa	413
Montgomery	164	MD. Baltimore	476	OREG. Astoria	606
ALASKA, Anchorage	1486	MASS. Boston	498	Burns U.	903
Barrow	2099	Chatham	541	Medford	673
Fairbanks	-----	MICH. Alpena	902	Pendleton	792
Juneau	-----	Detroit	729	Portland	644
Nome	1619	Flint	701	Salem	606
ARIZ. Flagstaff	715	Grand Rapids	759	PA. Allentown	623
Phoenix	42	Houghton Lake	869	Erie	636
Tucson	117	Lansing	757	Harrisburg	562
Winslow	593	Marquette U.	894	Philadelphia	558
Yuma	35	S. Ste. Marie	910	Pittsburgh	583
ARK. Fort Smith	377	MINN. Duluth	1101	Scranton	653
Little Rock	395	Internatl Falls	1266	R. I. Providence	568
CALIF. Bakersfield	162	Minneapolis	1016	S. C. Charleston	175
Eureka U.	409	Rochester	986	Columbia	277
Fresno	302	St. Cloud	1103	Greenville	322
Los Angeles U.	48	MISS. Jackson	246	S. DAK. Aberdeen	1128
Red Bluff	303	Meridian	200	Huron	1002
Stockton	284	Vicksburg U.	-----	Rapid City	944
San Diego	37	MO. Columbia	591	Sioux Falls	1000
San Francisco	284	Kansas City	673	TENN. Chattanooga	359
COLO. Denver	737	St. Louis	601	Knoxville	374
Grand Junction	736	Springfield	522	Memphis	313
Pueblo	723	MONT. Billings	988	Nashville	425
CONN. Bridgeport	443	Glasgow	1208	TEX. Abilene	314
Hartford	610	Great Falls	1021	Amarillo	522
D. C. Washington	406	Havre	1124	Austin	136
FLA. Apalachicola	122	Helena	1008	Beaumont	112
Ft. Myers	34	Kalispell	1081	Brownsville	25
Jacksonville	135	Miles City	1090	Corpus Christi	56
Key West	0	Missoula	983	Dallas	-----
Lakeland U.	48	NEBR. Grand Island	768	Del Rio	126
Miami	6	Lincoln	793	El Paso	328
Orlando	38	Norfolk	882	Fort Worth	257
Daytona Beach	63	North Platte	869	Galveston U.	63
Tallahassee	176	Omaha	803	Houston	150
Tampa	53	Valentine	914	Lubbock	373
GA. Atlanta	313	NEV. Ely	850	Midland	295
Augusta	215	Las Vegas	228	San Angelo	249
Macon	202	Reno	687	San Antonio	138
Savannah	165	Winemucca	729	Victoria	86
IDAHO, Boise	758	N. H. Concord	755	Waco	173
Lewiston	752	N. J. Atlantic City	457	Wichita Falls	345
Pocatello	831	Trenton U.	519	UTAH, Milford	782
ILL. Cairo U.	422	N. MEX. Albuquerque	551	Salt Lake City	670
Chicago	728	Roswell	353	VT. Burlington	740
Moline	780	N. Y. Albany	666	VA. Lynchburg	464
Peoria	734	Binghamton	735	Norfolk	321
Rockford	849	Buffalo	646	Richmond	401
Springfield	661	New York	524	Roanoke	496
IND. Evansville	495	Rochester	634	WASH. Colville	1007
Fort Wayne	694	Syracuse	624	Omak	-----
Indianapolis	575	N. C. Asheville	466	Quillayute	679
South Bend	670	Charlotte	356	Seattle-Tacoma	625
IOWA, Burlington	738	Greensboro	459	Spokane	921
Des Moines	769	Hatteras R.	196	Walla Walla U.	677
Dubuque	924	Raleigh	411	Yakima	862
Sioux City	878	Wilmington	231	W. VA. Beckley	564
KANS. Concordia	703	N. DAK. Bismarck	1153	Charleston	482
Dodge City	609	Fargo	1178	Huntington	455
Goodland	776	Williston U.	1212	Parkersburg U.	518
Topeka	662	OHIO, Akron-Canton	632	WIS. Green Bay	942
Wichita	558	Cincinnati U.	586	Madison	925
KY. Lexington	498	Cleveland	593	Milwaukee	827
Louisville	472	Columbus	594	WYO. Casper	945
LA. Baton Rouge	144	Dayton	605	Cheyenne	910
Lake Charles	133	Toledo	713	Lander	986
New Orleans	113	Youngstown	642	Sheridan	1001
Shreveport	260				

Preliminary reports from airport locations, except those marked U for urban and R for rural.

*Estimated.



HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING DEC. 4, 1977.

STATES AND STATIONS	WEEKLY ACCUMULATION +			STATES AND STATIONS	WEEKLY ACCUMULATION +			STATES AND STATIONS	WEEKLY ACCUMULATION +		
	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77
ALA. BIRMINGHAM...	2853	659	51	MAINE CARIBOU...	1987	27	2300	OKLA. OKLAHOMA CITY...	229	8	1363
ALA. MOBILE...	2233	758	27	MAINE PORTLAND...	1720	27	1720	OKLA. TULSA...	145	8	659
ALA. MONTGOMERY...	2233	758	27	MD BALTIMORE...	153	25	859	OREG ASTORIA...	30	1	155
ARIZ FLAGSTAFF...	155	74	1393	MASS BOSTON...	159	28	1017	OREG BURNS...	15	1	155
ARIZ PHOENIX...	155	74	1393	MICH ALPENA...	159	28	1017	OREG MEDFORD...	15	1	155
ARIZ TUCSON...	155	74	1393	MICH DETROIT...	159	28	1017	OREG PORTLAND...	15	1	155
ARIZ WINSTON...	155	74	1393	MICH GRAND RAPIDS...	159	28	1017	OREG SALEM...	15	1	155
ARIZ YUMA...	155	74	1393	MICH HOUGHTON LAKE...	159	28	1017	PA ALLENTOWN...	15	1	155
ARK FORT SMITH...	144	63	504	MICH LANSING...	159	28	1017	PA HARRISBURG...	15	1	155
ARK LITTLE ROCK...	144	63	504	MICH MARQUETTE...	159	28	1017	PA PHILADELPHIA...	15	1	155
CALIF BAKERSFIELD...	48	5	1502	MICH MUSKOGEE...	159	28	1017	PA PITTSBURGH...	15	1	155
CALIF FRESNO...	48	5	1502	MICH S. MARIE...	159	28	1017	PA SCRANTON...	15	1	155
CALIF LOS ANGELES...	48	5	1502	MINN DULUTH...	159	28	1017	RI PROVIDENCE...	177	22	1160
CALIF RED BLUFF...	48	5	1502	MINN INTERNATL FALLS...	159	28	1017	S.C. CHARLESTON...	30	62	96
CALIF SAN DIEGO...	48	5	1502	MINN MINNEAPOLIS...	159	28	1017	S.C. COLUMBIA...	30	62	96
CALIF SAN FRANCISCO...	48	5	1502	MINN ROCHESTER...	159	28	1017	S.C. GREENVILLE...	30	62	96
CALIF STOCKTON...	48	5	1502	MINN ST. CLOUD...	159	28	1017	S.DAK ABERDEEN...	30	62	96
COLD DENVER...	1669	140	1023	MISS JACKSON...	159	28	1017	S.DAK HURON...	30	62	96
COLD GRAND JUNCTION...	1669	140	1023	MISS MERIDIAN...	159	28	1017	S.DAK RAPID CITY...	30	62	96
COLD PUEBLO...	1669	140	1023	MISS MOBILE...	159	28	1017	S.DAK SIOUX FALLS...	30	62	96
CONN BRIDGEPORT...	148	32	185	MD COLUMBIA...	159	28	1017	TENN CHATTANOOGA...	97	1	86
CONN HARTFORD...	201	32	125	MD KANSAS CITY...	159	28	1017	TENN KNOXVILLE...	97	1	86
DEL WILMINGTON...	174	7	986	MD KANSAS CITY...	159	28	1017	TENN MEMPHIS...	97	1	86
D.C. WASHINGTON...	138	26	680	MD ST. LOUIS...	159	28	1017	TENN NASHVILLE...	97	1	86
FLA APALACHICOLA...	18	2	19	MD SPRINGFIELD...	159	28	1017	TEXAS ABILENE...	97	1	86
FLA DAYTONA BEACH...	18	2	19	MONT BILLINGS...	159	28	1017	TEXAS AMARILLO...	97	1	86
FLA FORT MYERS...	18	2	19	MONT GLASSBORO...	159	28	1017	TEXAS AUSTIN...	97	1	86
FLA JACKSONVILLE...	18	2	19	MONT GREAT FALLS...	159	28	1017	TEXAS BEAUMONT...	97	1	86
FLA KEY WEST...	18	2	19	MONT HAVRE...	159	28	1017	TEXAS BERKELEY...	97	1	86
FLA LAKELAND...	18	2	19	MONT HELENA...	159	28	1017	TEXAS BOZEMAN...	97	1	86
FLA MIAMI...	18	2	19	MONT KALISPELL...	159	28	1017	TEXAS BURTON...	97	1	86
FLA ORLANDO...	18	2	19	MONT MISSOULA...	159	28	1017	TEXAS CORPUS CHRISTI...	97	1	86
FLA TALLAHASSEE...	18	2	19	NEBR GRAND ISLAND...	159	28	1017	TEXAS DEL RIO...	97	1	86
FLA TAMPA...	18	2	19	NEBR INDIAN...	159	28	1017	TEXAS EL PASO...	97	1	86
FLA WEST PALM BEACH...	18	2	19	NEBR NORFOLK...	159	28	1017	TEXAS FORT WORTH...	97	1	86
GA ATLANTA...	148	44	55	NEBR NORTH PLATTE...	159	28	1017	TEXAS GALVESTON...	97	1	86
GA AUGUSTA...	148	44	55	NEBR OMAHA...	159	28	1017	TEXAS HOUSTON...	97	1	86
GA MACON...	148	44	55	NEBR VALENTINE...	159	28	1017	TEXAS LUBBOCK...	97	1	86
GA SAVANNAH...	148	44	55	NEV ELY...	159	28	1017	TEXAS MIDLAND...	97	1	86
IDAHO BOISE...	148	57	134	NEV LAS VEGAS...	159	28	1017	TEXAS SAN ANGELO...	97	1	86
IDAHO LEHISTON...	148	57	134	NEV RENO...	159	28	1017	TEXAS SAN ANTONIO...	97	1	86
IDAHO POCAHELLO...	148	57	134	N.H. CONCORD...	159	28	1017	TEXAS VICTORIA...	97	1	86
ILL. CHICAGO...	192	36	103	N.J. ATLANTIC CITY...	159	28	1017	UTAH SALT LAKE CITY...	161	58	1115
ILL. MOBILE...	192	36	103	N.J. TRENTON...	159	28	1017	VT BURLINGTON...	238	13	1735
ILL. PEORIA...	192	36	103	N.MEX ALBUQUERQUE...	159	28	1017	VA LYNCHBURG...	147	10	875
ILL. ROCKFORD...	192	36	103	N.MEX ROSWELL...	159	28	1017	VA NORFOLK...	147	10	875
ILL. SPRINGFIELD...	192	36	103	N.Y. ALBANY...	159	28	1017	VA RICHMOND...	147	10	875
IND. EVANSVILLE...	86	10	10	N.Y. BINGHAMTON...	159	28	1017	VA ROANOKE...	147	10	875
IND. FORT WAYNE...	86	10	10	N.Y. BUFFALO...	159	28	1017	WASH GULLAYUTE...	146	1	1911
IND. INDIANAPOLIS...	86	10	10	N.Y. NEW YORK...	159	28	1017	WASH SEATTLE-TACOMA...	146	1	1911
IND. SOUTH BEND...	86	10	10	N.Y. ROCHESTER...	159	28	1017	WASH SPOKANE...	146	1	1911
IOWA BURLINGTON...	64	4	74	N.Y. SYRACUSE...	159	28	1017	WASH WALLA WALLA...	146	1	1911
IOWA DES MOINES...	64	4	74	N.C. ASHEVILLE...	159	28	1017	WASH YAKIMA...	146	1	1911
IOWA DUBUQUE...	64	4	74	N.C. CHARLOTTE...	159	28	1017	W.VA BECKLEY...	60	4	1244
IOWA SIOUX CITY...	64	4	74	N.C. GREENSBORO...	159	28	1017	W.VA CHARLESTON...	60	4	1244
KANS. CONCORDIA...	93	14	114	N.C. HAYTERMS...	159	28	1017	W.VA HUNTINGTON...	60	4	1244
KANS. DODGE CITY...	93	14	114	N.C. RALEIGH...	159	28	1017	W.VA PARKERSBURG...	60	4	1244
KANS. GOODYEAR...	93	14	114	N.C. WILMINGTON...	159	28	1017	WIS. GREEN BAY...	96	85	1937
KANS. TOPEKA...	93	14	114	N.DAK BISHARCK...	159	28	1017	WIS. LACROSSE...	96	85	1937
KANS. WICHITA...	93	14	114	N.DAK FARGO...	159	28	1017	WIS. MADISON...	96	85	1937
KY. LEXINGTON...	145	17	890	N.DAK HILLSTON...	159	28	1017	WYO CASPER...	16	36	1768
KY. LOUISVILLE...	145	17	890	OHIO AKRON-CANTON...	159	28	1017	WYO CHEYENNE...	16	36	1768
LA. BATON ROUGE...	44	4	19	OHIO CINCINNATI...	159	28	1017	WYO LANDER...	16	36	1768
LA. LAKE CHARLES...	44	4	19	OHIO CLEVELAND...	159	28	1017	WYO SHERIDAN...	16	36	1768
LA. NEW ORLEANS...	44	4	19	OHIO COLUMBUS...	159	28	1017				
LA. SHREVEPORT...	44	4	19	OHIO TOLEDO...	159	28	1017				

BASED ON 1941-70 NORMALS. * ACCUMULATION FROM JULY 1, 1977.



FIRST CLASS MAIL

HARVESTING PROGRESS

Percent of acres harvested as of December 4

CORN				SOYBEANS			
	1977	1976	Avg.		1977	1976	Avg.
Ga	97	94	NA	Ala	77	92	NA
Ill	99	100	97	Ark	NA	NA	NA
Ind	95	100	90	Ga	75	80	NA
Iowa	95	100	94	Ill	100	100	100
Kans	99	100	90	Ind	90	100	NA
Ky	NA	NA	NA	Iowa	98	100	100
Mich	80	98	NA	Kans	90	100	95
Minn	NA	NA	NA	Ky	NA	NA	NA
Mo	84	100	86	La	95	100	91
Nebr	99	100	100	Mich	85	100	NA
N C	100	NA	NA	Minn	100	100	100
Ohio	NA	NA	NA	Miss	83	96	85
Pa	NA	NA	NA	Mo	88	100	88
S Dak	NA	NA	NA	Nebr	99	100	100
Tex	100	100	100	N C	64	76	78
Wisc	NA	100	NA	Ohio	100	100	NA
				S C	70	73	NA
				Tenn	NA	NA	NA
U. S.	96	100	95	U. S.	92	97	95

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

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

COTTON

	1977	1976	Avg.	
Ala	85	85	88	
Ark	99	96	NA	
Ga	81	81	NA	
La	97	98	87	
Miss	96	97	89	
Mo	NA	NA	NA	
N C	90	87	87	NA Not Available
Okla	70	77	27	
S C	88	89	NA	
Tenn	NA	NA	NA	
Tex	92	60	49	
11 Southern States	92	61	59	

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