WEEKLY WEATHER AND CROP BULLETIN

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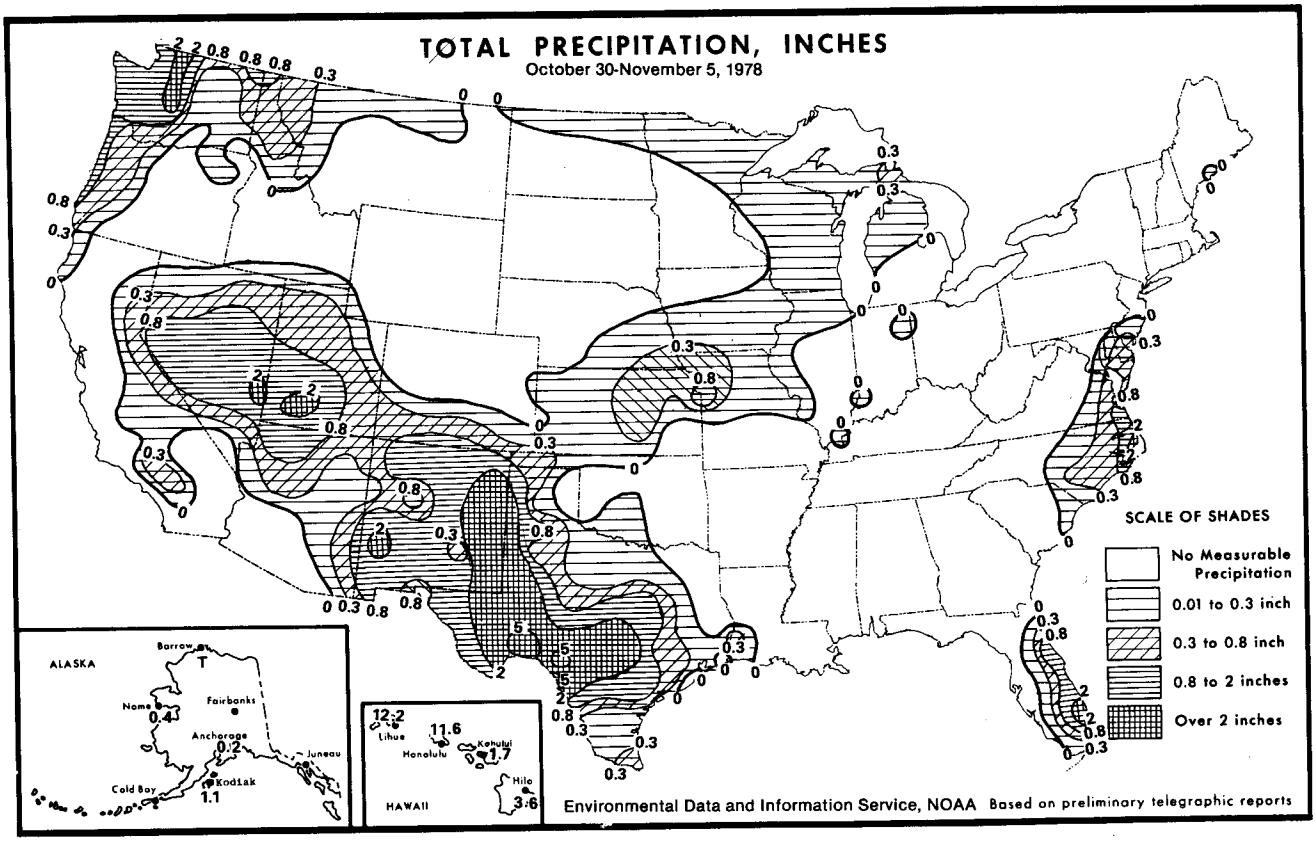


National Weather Summary

October 30 - November 5

HIGHLIGHTS: A low pressure trough in the Southwest triggered heavy snows in the Plateau Region and west central Rockies at the beginning of the week. The moisture edged eastward combining with moist air from the Gulf. This mass produced heavy rains in New Mexico and West Texas. A tropical system formed in the Atlantic, moved northward, and spread light rain along much of the Eastern Seaboard.

Most of the Nation stayed warmer than normal; a large portion of the Mississippi Valley averaged 10 to 15 degrees above normal. The Pacific Northwest was slightly cooler than normal.

Two high pressure systems---one over Washington State, the other over Maine---dominated the Nation's weather on Monday. Only a few light showers touched Florida while 2 to 4 inches of snow blanketed the mountains of southern California and Nevada.

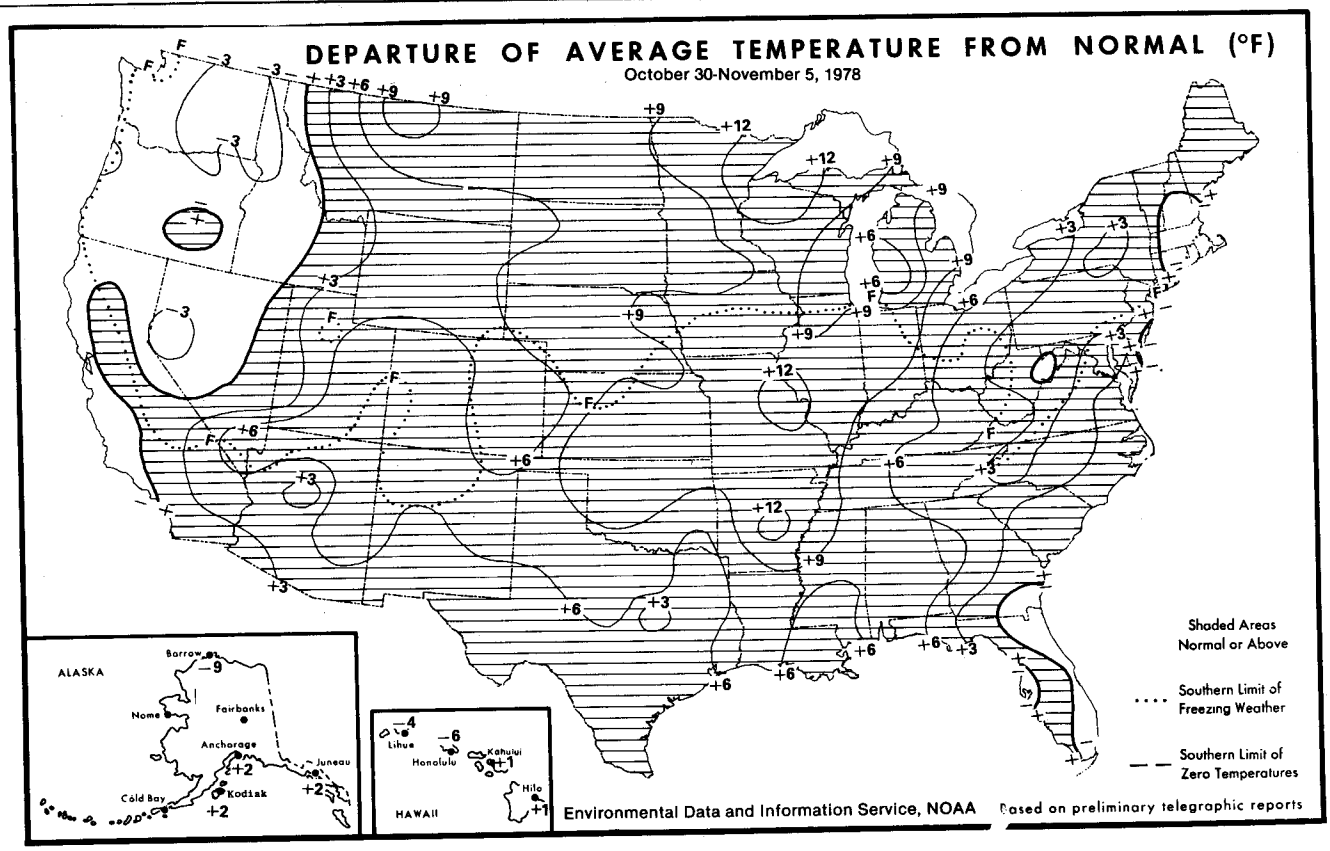
Although Hurricane Kendra stayed 600 miles off the northern Florida coast, high tides and strong winds produced some beach erosion along the lower sections of the Atlantic Seaboard.

Hurricane Kendra weakened rapidly in the Atlantic, and snow continued falling in the West on Tuesday.

An upper air disturbance in the Southwest pulled cold air over the mountains triggering hefty amounts of snow. Ely, east central Nevada, collected 5 inches. Bridgeport, east central California, chalked up more than a foot.

Light showers dotted the central Plains while heavier rain soaked portions of the Southwest and Florida. Deming, southwestern New Mexico, notched 1.15 in., and Vero Beach, eastern Florida, topped an inch and one-half.

The country's hottest spot was eastern Texas; Beaumont hit a record-breaking 87°. Meantime Portland, Oreg., marked a new low reading of 31°.



On Wednesday, snow persisted in the high elevations of Nevada and California. Rain, sometimes heavy, also continued in New Mexico and Florida. Nearly 2 inches drenched Truth or Consequences, southwestern New Mexico, and West Palm Beach, Fla., saw an inch and one-half. Rains of less than a half-inch dampened southern Texas and the Southwest.

Beaumont, Tex., reported another record high temperature of 87°. Bismarck, N. Dak., at 70°, also opened the record books to a new high reading.

The snow dissipated over Nevada on Thursday but the moisture headed eastward into warmer air. Thunderstorms carrying hail and up to 2 inches of rain rumbled over Utah---most of them in the southern part of the State. Several rivers ran high.

Showers covered the Pacific Northwest where Seattle gathered a half-inch.

Record warmth sent the mercury rising over the middle third of the Nation from the northern Plains to Texas. A sampling showed 75° at Bismarck, Minneapolis/St. Paul's 72°, Wichita's 80°, and 87° at Port Arthur, eastern Texas.

By contrast, cold air surged into the Northeast. The 17° at Concord, N.H., was a record low and the country's cold spot. Windsor Locks, northern Connecticut, shivered at a new low of 23°.

Areas of heavy rain made for a wet Friday in the Pacific Northwest, most of New Mexico, the northern Panhandle of Texas, and the North Carolina coast. In eastern New Mexico, Tucumcari gathered 1.75 in. and Clayton, 1.08 in. Washington's Bellingham notched 1.28 in. and Olympia got 0.82 in. Dalhart, Tex., collected 1.2 inches while Cape Hatteras, N.C., was soaked by 1.85 in.

Unseasonable autumn temperatures brought a mild day to the eastern half of the country. Stations reported records from the Dakotas and Minnesota southward to Texas---among them, 76° at Sioux Falls, S. Dak., 81° at Sioux City, Iowa, Kansas City's record-tying 81°, and 88° at Port Arthur, Tex.

Heavy rain edged into West Texas on Saturday dumping an inch and three-quarters on Midland and nearly an inch on Del Rio. One-inch rains also drenched parts of the Pacific Northwest, Elizabeth City, northeastern North Carolina, and Oceana, southeastern Virginia.

High winds raced into the northern sections of the Rockies and Plains while the Midwest basked in record warmth.

Temperature records fell as the mercury rose. A sampling showed Chicago's 74°, Kansas City's 81°, 73° at Cedar Rapids, Iowa, 74° at South Bend, Ind., and St. Louis's 82°.

On Sunday, extremely heavy rain inundated portions of West and South Texas. Austin measured 3.5 inches; San Antonio and Del Rio got nearly 3 inches; and Sanderson, on the Rio Grande River in the Southwest Plains, weathered flooding after 9 inches of rain. One-half to three-quarters inch dampened eastern Kansas and western Missouri.

Record warmth again stretched from the upper half of the Mississippi Valley across the Great Lakes to New York State. For example, the record book showed Milwaukee's 73°, Detroit's 74°, St. Louis's 82°, 76° at South Bend and Toledo, and 76° at Alpena, northern Michigan, which broke the 1975 mark by 12 degrees.

National Agricultural Summary

October 30 - November 5

HIGHLIGHTS: Another week of open weather gave farmers between 6 and 7 days to harvest crops and finish winter wheat seedings. However, soil moisture continued to decline. Soil moisture was very short to short across the South; mostly adequate in the North; and short to adequate in the Southwest. Pastures reflected soil moisture conditions and generally rated poor in the southern half of the Nation and fair to good in the northern half. Winter wheat seeding moved well along in the Corn Belt, ranging from 93 to 100% complete. Corn harvest reached 86% in the Nation, compared with 76% last year and the 74% average. Soybean harvest advanced to 85%, surpassing the 1977 71% and the 76% average. Cotton harvest in the 11 southern States reached 51%, lagging 1977's 65% but ahead of the 46% average. Grain sorghum harvest in the 7 major producing States advanced to 88%, ahead of last year's 86% and the 79% average. Deciduous fruit harvests neared completion. Citrus harvests got underway. Vegetable activity centered in the southern States.

SMALL GRAINS: Winter wheat seedings were virtually finished except for a few Corn Belt States and Texas. Dry soil delayed planting in several of the southeastern States. Texas planting reached 94%, ahead of last year's 86% and the 92% average. On the northern High Plains, irrigated wheat rated good, but dryland stands needed moisture. The southern Low Plains wheat crop looked better than in many years, however, much Texas wheat needed rain for germination and growth. Kansas winter wheat lacked good top growth and secondary root development with very little being grazed. Oklahoma wheat was 81% up to stand, lagging recent years; a small amount of pasture was available. Nebraska wheat rated fair to good but needed moisture in the west and central areas. Winter wheat in the Corn Belt was 70 to 80% emerged. Mild temperatures accelerated germination and growth. In the Pacific Northwest, winter wheat seeding neared completion. Stands rated good but required additional moisture.

CORN: The Nation's corn crop stood at 86% harvested, 10 points ahead of last year and 12 points ahead of the average.

In the eastern north central States, harvest reached 76%, a 15-point increase for the week. Last year and average progress were 67%. Storage facilities were getting full, but no apparent transportation or elevator storage problems existed.

In the western north central States, harvest stood at 90%, a 12-point increase for the week. Last year harvest reached 79% and the average was 75%. Harvest was almost complete in northern parts of the region. Storage facilities became full and some corn was dumped in temporary outside facilities.

In the South, corn harvest ranged from 84 to 95% complete--slightly ahead of last year and 10 to 20 points ahead of the average.

SOYBEANS: The U.S. soybean harvest advanced to 85%, well ahead of last year's 71% and the 76% average. Virtually all of the crop matured except in the normally late Southeast.

In the eastern north central States, harvest reached 94%, 10 points ahead of last week. Last year harvest reached 86% and on the average 91%.

In the western north central States, harvest also stood at 94%, an increase of 9 points for the week. Last year harvest advanced to 79% and on the average 87%. Most States in the region scored 90% or better; only Missouri harvest hit 84% which was well ahead of recent years.

In the south central States, harvest hit 76%, outpacing 1977's 61% and the 57% average. Virtually all soybeans in the region were mature.

In the dry Southeast, the drought-stressed crop matured quickly although beans stayed small. Maturity managed 80% or better, well ahead of last year.

COTTON: Harvest in the 11 southern States passed the halfway mark to reach 51%, lagging last year by 14 points but 5 points ahead of the average. Texas harvest lagged at 33%, compared with 61% last year. Growers on the Plains need a freeze to defoliate the crop. Farmers harvested some nonirrigated stands on the Plains. Rains delayed harvest in some parts of Texas. Oklahoma picking stood at 12%, almost half of last year's progress but 3 points ahead of average. Progress in the other southern States advanced well. South Carolina growers concentrated mostly on second pickings.

Arizona cotton picking hit full swing where conditions permitted. Rains delayed the New Mexico harvest with only 10% of the crop ginned. California harvest reached 30%; some pickings were stored in modules and ricks.

OTHER CROPS: Grain sorghum harvest reached 88%, surpassing 1977's 86% and the 79% average. Texas growers need a freeze to speed harvest on the Plains; damp weather and high moisture content of the grain slowed harvest.

California rice harvest reached 90%; growers burned stubble.

FRUITS AND NUTS: Grape and deciduous fruit harvests were about done. Apple picking in northern areas ranged from 90 to 95%. Pecans mostly rated poor to fair and ranged from 25 to 30% harvested.

Florida citrus grove conditions varied depending on rain and availability of irrigation. Some trees showed stress and wilt. Texas grapefruit quality and size rated excellent; orange sizes were smaller than normal. California Valencia harvest wound down; however, lack of fruit color delayed Navel harvest. Arizona growers picked lemons, early oranges, and grapefruit.

VEGETABLES: Florida vegetable shipments increased 75% from the previous week on the strength of a wide variety of crops; only okra and radish supplies held steady. Planting moved actively for many crops. Texas rains interrupted some vegetable harvests. California broccoli, cauliflower, lettuce, celery, and melons were in good supply contrasting light supplies of other crops.

PASTURE AND LIVESTOCK: Pastures in the north central States rated fair to good with some areas excellent. Cattle grazed stubble fields in several States. North Dakota needed moisture before the winter freeze. In the Southeast, grasslands rated mostly poor to fair and generally deteriorating. Stock water supplies dried up in some areas. South central States pastures also rated poor to fair and needed rain. Texas rains improved rangeland in some areas, but stock tanks were low and producers culled closely. In the West, most herds moved onto winter grazing areas. Rains in the Southwest greened grasses in parts of Arizona and New Mexico. California grasslands deteriorated; producers fed supplemental forage.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Nov. 5, 1978

States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
ALA.Birmingham	63	+ 6	0	- .7
Mobile	70	+ 7	0	- .5
Montgomery	65	+ 6	0	- .6
ALASKA.Anchorage	29	+ 2	.2	- .1
Barrow	- 3	- 9	T	- .1
Fairbanks	--	--	--	--
Juneau	--	--	--	--
Kodiak	39	+ 2	1.1	- .2
Nome	23	+ 2	.4	+ .1
ARIZ.Flagstaff	43	+ 2	.4	+ .1
Phoenix	70	+ 5	T	- .1
Tucson	66	+ 3	0	- .1
Winslow	55	+ 6	.1	0
Yuma	71	+ 2	0	- .1
ARK.Fort Smith	62	+ 6	0	- .8
Little Rock	67	+12	0	- .8
CALIF.Bakersfield	62	+ 1	0	- .1
Eureka	51	- 2	T	- 1.1
Fresno	56	- 2	T	- .2
Los Angeles	63	- 2	0	- .3
Red Bluff	60	+ 2	0	- .5
San Diego	66	+ 3	T	- .2
San Francisco	56	- 2	0	- .4
Stockton	58	+ 1	0	- .3
COLO.Denver	50	+ 6	0	- .2
Grand Junction	53	+ 7	T	- .2
Pueblo	51	+ 5	T	- .2
CONN.Bridgeport	53	+ 2	0	- .8
Hartford	45	- 2	0	- .9
D.C.Washington	57	+ 4	T	- .6
FLA.Apalachicola	69	+ 4	0	- .5
Daytona Beach	69	0	1.1	+ .3
Ft. Myers	73	+ 1	0	- .5
Jacksonville	61	- 4	T	- .6
Key West	77	0	T	- .9
Lakeland	72	+ 2	--	--
Miami	73	- 2	.2	- 1.0
Orlando	72	+ 2	.3	- .2
Tallahassee	64	+ 1	0	- .5
Tampa	69	- 1	T	- .4
W.Palm Beach	72	- 2	2.4	+ 1.3
GA.Atlanta	62	+ 6	0	- .7
Augusta	60	+ 2	0	- .4
Macon	63	+ 3	0	- .4
Savannah	63	+ 2	0	- .4
HAWAII.Hilo	75	+ 1	3.6	+ .7
Honolulu	72	- 6	11.6	+11.0
Kahului	77	+ 1	1.7	+ 1.3
Lihue	72	- 4	12.2	+11.0
IDAHO.Boise	43	- 2	T	- .3
Lewiston	41	- 4	T	- .3
Pocatello	42	+ 1	0	- .2
ILL.Cairo	63	+ 9	0	- .8
Chicago	56	+ 9	T	- .6
Moline	55	+ 9	.1	- .4
Peoria	56	+ 9	T	- .5
Rockford	53	+ 8	.1	- .5
Springfield	60	+11	T	- .6
IND.Evansville	58	+ 7	0	- .7
Ft. Wayne	55	+ 9	.2	- .5
Indianapolis	57	+ 9	0	- .7
South Bend	56	+10	T	- .7
IOWA.Burlington	58	+11	T	- .5
Des Moines	56	+11	.1	- .3
Dubuque	53	+10	.1	- .5
Sioux City	53	+ 9	T	- .2
KANS.Concordia	58	+10	.3	0
Dodge City	60	+11	.2	- .1
Goodland	48	+ 3	T	- .1
Topeka	59	+ 9	.3	- .1
Wichita	61	+10	.3	- .1
KY.Lexington	56	+ 6	0	- .6
Louisville	58	+ 7	0	- .7
LA.Baton Rouge	68	+ 5	T	- .7
Lake Charles	70	+ 6	.1	- .7
New Orleans	69	+ 5	0	- .6
Shreveport	67	+ 6	0	- .7
MAINE.Caribou	39	+ 1	T	- .8
Portland	44	0	T	- 1.0
MD.Baltimore	54	+ 3	T	- .7
MASS.Boston	48	- 2	0	- .9
Chatham	49	--	0	--
MICH.Alpena	50	+ 9	T	- .5
Detroit	53	+ 7	0	- .6
Flint	53	+ 9	0	- .6
Grand Rapids	50	+ 5	T	- .6
Houghton Lake	48	+ 7	.1	- .5
Lansing	52	+ 8	0	- .5
Marquette	52	+11	.1	- .6
Muskegon	48	+ 3	.1	- .6
S. Ste. Marie	47	+ 8	.4	- .3
MINN.Duluth	51	+15	.1	- .3
Internatl Falls	43	+ 9	.1	- .2
Minneapolis	52	+11	0	- .3
Rochester	49	+ 8	T	- .3
St. Cloud	46	+ 8	0	- .3
MISS.Jackson	65	+ 5	0	- .7
Meridian	63	+ 5	0	- .6
MO.Columbia	62	+12	.1	- .4
Kansas City	61	+11	1.1	+ .6
St. Louis	63	+12	.2	- .4
Springfield	61	+10	0	- .6
MONT.Billings	46	+ 4	T	- .1
Glasgow	44	+ 7	T	- .1
Great Falls	46	+ 6	T	- .1
Havre	46	+ 9	.1	0
Helena	40	+ 3	T	- .1
Kalispell	35	0	.3	0
Miles City	45	+ 6	0	- .1
Missoula	37	0	T	- .2
NEBR.Grand Island	52	+ 7	T	- .2
Lincoln	54	+ 8	.2	0
Norfolk	53	+ 9	T	- .2
N.Platte	51	+ 8	0	- .1
Omaha	55	+10	.1	- .2
Valentine	48	+ 7	0	- .1
NEV.Ely	40	+ 1	.9	+ .8
Las Vegas	65	+ 6	0	- .1
Reno	41	- 3	.7	+ .6
Winnemucca	41	- 1	.2	0
N.H.Concord	42	- 2	0	- .8
N.J.Atlantic City	50	- 1	.2	- .7
Trenton	53	+ 1	T	- .7
N.MEX.Albuquerque	55	+ 5	.3	+ .2
Roswell	57	+ 5	.7	+ .6
N.Y.Albany	45	0	0	- .6
Binghamton	48	+ 4	0	- .7
Buffalo	50	+ 5	0	- .8
New York	54	+ 2	0	- .8
Rochester	50	+ 4	0	- .6
Syracuse	49	+ 2	0	- .7
N.C.Asheville	53	+ 2	0	- .7
Charlotte	59	+ 3	0	- .6
Greensboro	56	+ 3	T	- .6
Hatteras	63	+ 3	2.4	+ 1.4
Raleigh	57	+ 3	.1	- .5
Wilmington	61	+ 1	.1	- .5
N.DAK.Bismarck	43	+ 6	T	- .1
Fargo	45	+ 8	T	- .2
Williston	43	+ 7	T	- .1
OHIO.Akron-Canton	50	+ 3	0	- .6
Cincinnati	55	+ 5	0	- .6
Cleveland	52	+ 5	0	- .6
Columbus	52	+ 5	0	- .5
Dayton	55	+ 7	0	- .5
Toledo	52	+ 6	0	- .5
Youngstown	50	+ 4	0	- .7
OKLA.Okla. City	65	+10	.1	- .3
Tulsa	65	+10	0	- .5
OREG.Astoria	47	- 2	1.4	- .6
Burns	42	+ 1	0	- .3
Medford	46	- 1	T	- .6
Pendleton	43	- 3	T	- .3
Portland	47	- 2	.5	- .6
Salem	45	- 3	.6	- .6
PA.Allentown	49	+ 1	0	- .7
Erie	50	+ 5	0	- .8
Harrisburg	50	+ 1	0	- .7
Philadelphia	53	+ 2	T	- .7
Pittsburgh	49	+ 2	0	- .6
Scranton	46	0	0	- .7
R.I. Providence	46	- 2	0	- .9
S.C. Charleston	62	+ 2	T	- .5
Columbia	59	+ 1	0	- .5
Greenville	59	+ 3	0	- .7
S.D. Aberdeen	44	+ 6	0	- .2
Huron	47	+ 7	0	- .2
Rapid City	49	+ 7	0	- .1
Sioux Falls	48	+ 7	0	- .2
TENN.Chattanooga	58	+ 4	0	- .7
Knoxville	57	+ 3	0	- .7
Memphis	67	+11	0	- .7
Nashville	59	+ 5	0	- .6
TEX.Abilene	66	+ 7	.2	- .2
Amarillo	58	+ 6	.1	- .1
Austin	69	+ 5	3.5	+ 3.0
Beaumont	73	+ 9	0	- .9
Brownsville	76	+ 5	.4	0
Corpus Christi	74	+ 5	T	- .4
Del Rio	69	+ 4	2.8	+ 2.6
El Paso	62	+ 5	.4	+ .3
Fort Worth	68	+ 7	.1	- .4
Galveston	73	+ 5	0	- .6
Houston	70	+ 5	.3	- .6
Lubbock	60	+ 6	.7	+ .5
Midland	61	+ 2	2.2	+ 2.0
San Angelo	64	+ 4	1.2	+ .9
San Antonio	68	+ 4	1.6	+ 1.1
Victoria	71	+ 4	1.7	+ 1.1
Waco	64	+ 2	1.2	+ .7
Wichita Falls	66	+ 8	.1	- .3
UTAH.Blanding	51	+ 7	.5	+ .3
Salt Lake City	50	+ 5	.4	+ .1
VT.Burlington	44	+ 1	0	- .6
VA.Lynchburg	55	+ 3	0	- .6
Norfolk	56	0	1.0	+ .4
Richmond	56	+ 2	.1	- .6
Roanoke	53	+ 1	0	- .6
WASH.Colville	--	--	--	--
Omak	37	- 3	.2	- .1
Quillayute	45	- 2	1.3	- 1.8
Seattle-Tacoma	46	- 2	1.7	+ .5
Spokane	35	- 5	.4	0
Walla Walla	46	- 1	T	- .4
Yakima	40	- 3	T	- .2
W.VA.Beckley	52	+ 5	0	- .6
Charleston	53	+ 3	0	- .6
Huntington	54	+ 3	0	- .6
Parkersburg	52	+ 2	0	- .5
WISC.Green Bay	47	+ 6	T	- .4
La Crosse	53	+10	T	- .4
Madison	49	+ 7	.2	- .2
Milwaukee	51	+ 8	T	- .4
WYO.Casper	44	+ 4	0	- .2
Cheyenne	44	+ 3	0	- .2
Lander	43	+ 5	0	- .3
Sheridan	44	+ 5	0	- .2
P.R.San Juan	83	+ 3	.9	- .4

Based on 1941-70 normals

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State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 5° above normal. No rain.
Fieldwork: 6 days suitable. Soil moisture very short. Harvest of crops major activity. Cotton 83% harvested, 72% 1977, 51% average. Corn 93% harvested, 91% 1977, 81% average. Soybeans 68% harvested, 49% 1977, 55% average. Small grains 59% seeded, 72% 1977, 73% average. Pecans mostly fair. Pastures poor.

ARIZONA: Rain, snow central Basin, central Mountains, northeast. Snow level 7000 ft. Rainfall amounts 0.10 to 0.75 in. Snowfall varied 2 to 7 in., 10 in. above 10,000 ft. Temperatures 2 to 6° above normal.
Cotton harvest full swing conditions permitting. Sorghum harvest nearing completion. Corn harvest halted by rain. Sugarbeet harvest underway, volume limited; wet ground. Alfalfa haying tapered off sharply. Preparations small grains well advanced. Lettuce harvest complete, southeast. Limited harvest underway central areas. Mixed vegetables making good growth. Melon harvest near completion. Lemon harvest nearing full volume. Early variety orange, grapefruit harvest active but limited. Recent rains beneficial; annual grasses greening. Stock tanks at lower elevations need more water. Cattle, calves fair to good condition lower to mid-elevations, good to excellent higher ranges.

ARKANSAS: Warm with no precipitation. Temperatures 6 to 11° above normal.
Harvest active; excellent harvesting conditions. Small grain seeding delayed until spring planted crops harvested. Soil moisture short. Fieldwork: 6.4 days available. Soybeans 69% combined, 54% 1977, 53% average. Cotton harvest 84% complete, 73% 1977, 87% average. Corn harvest remained behind the progress of a year ago when picking was completed Sorghum harvest 98% complete, same as last year. Oats 67% planted; 62% 1977. Wheat seeding 74% complete; 63% 1977, 67% average. Pasture conditions below average. Cattle fair condition.

CALIFORNIA: Midweek light rains in few scattered locations otherwise generally dry. Temperatures near normal; only mountains had departures of 5° below normal.
Cotton harvest full swing; some stored in modules and ricks. Cotton 30% harvested. Dry bean harvest complete. Rice stubble burning underway. Rice 90% harvested. Alfalfa cutting still underway. Alfalfa growing season over Central Valley. Field corn harvest 95% completed in San Joaquin Valley. Sugarbeet harvest underway. Milo harvest continued. Fall fieldwork for deciduous fruit orchards and vineyards progressing. Pruning, fumigating, irrigating and pesticide spraying requiring most time. Apple harvest active. Raisin reconditioning continued with varying success. Emperor table grapes packed, increased shipments. Olive harvest winding down; large crop, good quality. Grapefruit packing light, good quality. Desert lemon harvest continued. Navel harvest late, lack of fruit color. Valencia harvest winding down. Walnut harvest nearing completion. Broccoli, cauliflower, lettuce, celery, desert melons good supply. Artichokes, carrots, bell peppers, cabbage, slow, light supplies. Onions, potatoes complete in north. Fresh market tomatoes lighter south coast. Range conditions continue deteriorate. Supplemental feeding active. Stock water supplies adequate. Calving, lambing continued.

COLORADO: Precipitation confined to southwest and south central areas. San Luis Valley averaged 0.30 in. and Colorado Basin about 0.15 in. Temperatures 4 to 5° above normal.
Winter wheat emerged 90%, 96% 1977, 93% average. Corn for grain harvested 83%, 92% 1977, 65% average. Sorghum for grain harvested 69%, 88% 1977, 63% average; for forage harvested 98%, 100% 1977, 99% average. Sugarbeets harvested 81%, 95% 1977, 88% average. Winter barley good condition. Ranges and pastures poor condition. Livestock good condition. Fieldwork: 6 days suitable.

FLORIDA: Generally clear and dry Panhandle and north. Cool front south, central late 31st brought spotty showers, thundershowers to southeast through the 1st. Rainfall near 1.00 in. southeast with negligible amounts central, southwest. Dry, cooler air mass pushed into central, south mid-week with only spotty Atlantic coastal showers 3d. No precipitation weekend. Lowest temperatures for autumn on 5th with central Peninsula areas 50°; low to mid-50's south.
Soil moisture very short west and north, mostly short in central areas and mostly adequate south of Lake Okeechobee. Soybean harvest active; about complete west. Peanut harvest rapidly nearing completion. Sugarcane cutting declining for seed, increasing for sugar. Hay making about complete. Gathering pecans continued. Planting small grains 3 to 4 weeks behind schedule west and north. Panhandle pastures very poor; north and central poor to fair; south good condition. Cattle good condition except some drier areas of Panhandle. Citrus grove condition varies depending on rain and irrigation. Widespread irrigation, some stress and wilt. Harvest actively increasing. Vegetable crops continue fair to excellent. Cooler weather beneficial to fruit set. Harvest very active many crops. Overall shipments up 75% from previous week. Snap bean, celery, chinese cabbage, cucumber, escarole, lettuce, pepper, tomato shipments up considerably. Supplies cabbage, carrots, sweet corn, eggplant, squash increased. Okra, radishes steady. Plantings active various crops. Plant maturity, progress generally good. Strawberry crop in fair to very good condition. Cooler weather beneficial for plant growth. Light transplanting, spot resetting continues some areas.

GEORGIA: Temperatures above normal; departures 3 to 8°. Temperature mid-50's in mountains to upper 60's in south. Drought continues although portions of south received some rain 25th and 26th; most amounts light.
Soil moisture very short, new low for year. Fire hazard continued high. Fieldwork: 6 days available. Dry soils limited planting and land preparation. Corn 92% harvested, same last year. Peanut harvest complete. Soybeans poor to fair; 56% combined, last year 27%. Cotton mostly fair to good; 77% picked, 47% last year. Apples fair, 95% picked. Pecans mostly fair to good; 30% gathered, 32% last year. Small grain seeding and emergence restricted by drought; wheat 35% seeded, 62% last year; rye 32% seeded, 74% last year; other small grains 37% seeded, 70% last year. Pastures continue to decline under drought stress, mostly poor to fair. Cattle mostly fair to good, hogs fair to mostly good; both down.

HAWAII: Heavy rains drenched Hawaiian chain. Islands of Kauai, Oahu took brunt of storm.

Leafy crops heavily damaged Island Oahu. Elsewhere bottom rot affecting yields. Strong winds 1st, topples few papaya trees Island Kauai; severely damaged some banana orchards Island Oahu. Bruised various levels vegetable crops exposed areas. Vegetable supplies: Head cabbage sufficient, others light to moderate. Banana, storm damaged, production decline expected. Papaya supplies adequate. Pineapple harvesting slow. Sugar harvesting gradually declining. Pastures generally good.

IDAHO: Temperatures slightly below normal north, above normal south. High 75°, low 7°. Precipitation light and limited to north.

Sugarbeet harvest made good progress. Fall plowing continued. Soil moisture short to adequate. Livestock good condition.

ILLINOIS: Temperatures 9 to 12° above normal. Precipitation very light.

Corn 88% harvested, 1977 75%, average 80%. Soybeans 98% combined, 1977 88%, average 96%. Grain sorghum harvest 80% complete. Winter wheat good. Plowing 1979 corn and soybean acreage 50% complete, 1977 25%, average 37%. Pasture conditions fair to good. Fieldwork: 6.8 days suitable Soil moisture short to adequate.

INDIANA: Warm, sunny, dry week. Temperatures 10° above normal. No precipitation. Cloudy skies 10% of time.

Fieldwork: 7 days suitable. Topsoil and subsoil moisture adequate. Corn 75% harvested, 1977 70%, average 55%. Soybeans 90% combined, 1977 80%, average 83%. Wheat 93% seeded, 1977 80%, average 90%. Wheat 70% emerged; stands fair to mostly good. Spring crop land 35% plowed. Pastures fair.

IOWA: Unseasonably mild. Dry north to near-normal south. Most temperatures 10 or 11° above normal.

Fieldwork: 6.8 days favorable. Topsoil and subsoil moisture adequate. Corn harvested 93%, 76% 1977, 72% normal; harvest loss currently light to moderate. Corn storage space short, increase in outside storage. Soybeans harvested 98%, 86% 1977, 96% normal. Popcorn harvest 95%. Sorghum harvest 90%, 72% 1977, 83% normal. Fall plowing completed 32%, 22% 1977, 30% normal. Livestock good condition, utilizing stubble fields. Market movement increasing.

KANSAS: Well above normal temperatures with very beneficial rains end of week; 0.50 in. to over 1.00 in. received central and east. Generally less than 0.10 in. western one-third. Temperatures averaged 52° northwest to 62 to 64° east and south central, 7° above normal northwest to 10 to 14° above normal elsewhere.

Corn harvest 95% completed, last year 90%, average 70%. Sorghum harvest 90% completed, last year 80%, average 60%. Soybean harvest 90% complete, last year 65%, average 70%. Sugarbeet harvest virtually complete. Wheat 99% seeded, 95% last year. Wheat lacking top growth and secondary root development; very little being grazed, average is 5%. Fieldwork: 6.5 days suitable.

KENTUCKY: Warm, dry; temperatures 10° above normal. No precipitation.

Fieldwork: 6 days suitable. Corn and soybean harvest made good progress. Corn harvested 83%, last year 80%, average 79%. Soybeans harvested 80%, last year 68%, average 62%. Burley tobacco stripping running well behind normal with only 16% completed, last year 36%, average 26%. Higher humidity needed for leaf to come into case for stripping. Winter wheat and pasture need rain.

LOUISIANA: Temperatures 4 to 7° above normal. Extremes: 88 and 41°. Virtually no rain.

Fieldwork: 5.9 days suitable. Soil moisture short. Cotton 91% harvested, 78% last year, 58% average. Soybeans 89% harvested, 70% last year, 69% average. Sugarcane 29% harvested, 26% last year and average. Pecans poor to fair, 25% harvested. Sweetpotatoes 93% dug, 88% last year, 91% average. Oats and wheat 79% seeded, 63% last year, 76% average. Hay fair. Pasture poor to fair. Cattle fair to good.

MARYLAND & DELAWARE: Temperatures 2° below normal. Highs in upper 60's and lows in upper 30's. No precipitation.

Fieldwork: 7.0 days suitable. Soil moisture supplies short. Pastures below average. Corn for grain 95% harvested, 97% 1977, 85% average. Soybeans 60% harvested, 50% 1977, 49% average. Small grain seeding slow due to dry conditions. Tobacco growers stripping crop. Fall apple harvest continued

MICHIGAN: Daytime highs in the 70's. Temperatures ranged from 2 to 13° above normal. Early morning lows in 20's. Very little precipitation.

Fieldwork: 6 days suitable. Soil moisture adequate. Pasture feed supplies average. Fall acreage plowed 35% complete. Grain corn 65% harvested, 45% last year, 60% normal. Winter wheat 100% sown, 100% last fall and normal. Dry bean harvest complete. Soybeans 80% combined, 65% last season, 85% normal. Sugarbeets 95% dug, 75% last year, 85% normal. Potato harvest 100% complete, 95% last fall and normal. Apples: Picking of Jonathans and Red Delicious 95% complete. Grape harvest finished.

MINNESOTA: Temperatures 7 to 15° above normal. Extremes: 79 and 15°. Precipitation averaged 0.17 to 0.39 in. below normal. Precipitation totals less than 0.11 in.

Harvests nearly completed. East central and southeast last to complete corn picking, soybean combining. Topsoil moisture short. Corn 94% picked, 1977 89%, normal 99%. Soybeans 99% combined, 1977 96%, normal 98%.

MISSISSIPPI: Temperatures 5° above normal. Extremes: 30 and 87°. No rainfall.

Soil moisture very short. Fieldwork: 6.4 days suitable. Harvest continued at rapid pace with many producers already through. Dry weather continued to hold back planting and growth of winter grazing crops. Soybeans 99% mature, 98% 1977; 75% harvested, 62% 1977, 52% average. Cotton 93% harvested, 84% 1977, 63% average. Corn 94% harvested, 90% 1977, 78% average. Sorghum 98% harvested, 94% 1977, 88% average. Hay crops 99% harvested, 97% 1977. Winter wheat 65% planted, 76% 1977, 74% average. Pecans poor to fair. Wheat and pastures very poor to poor. Livestock fair.

MISSOURI: Conditions dry with no precipitation. Temperatures 10° above normal. Daytime high readings mostly in 70's. Few lower 90's establishing record high temperatures latter part of week. Nighttime temperatures mostly in mid-30's to mid-40's.

Fieldwork: 6.3 days suitable. Soybeans 84% harvested, last year 58%, normal 70%. Corn 75% harvested, last year 69%, normal 68%. Grain sorghum 80% harvested, last year 77%, normal 71%. Cotton 90% harvested, last year 84%, normal 61%. Winter wheat seedings 84% complete, last year 72%.

Fall plowing for spring planted crops 41% complete, last year 24%. Condition of pasture fair. Soil moisture supplies short to adequate.

MONTANA: Winds 50 mph or more 3rd and 4th caused considerable damage. Mild temperatures; normal over west to much above normal north. Precipitation confined to west.

Livestock condition good, supplemental feeding started some areas. Range grasses still ample most places.

NEBRASKA: Temperatures below normal early, above normal rest of week. Precipitation very light and scattered.

Corn harvested 85%, last year 75%, normal 70%. Sorghum harvested 95%, last year 85%, normal 85%. Soybeans harvested 95%, last year 85%, normal 90%. Sugarbeet and dry bean harvest completed. Winter wheat condition good to fair; west and central need additional moisture. Livestock grazing fall crop residues. Fieldwork: 6.8 days suitable.

NEVADA: Warm, sunny early; cool, showery weather mid-week. Snow many areas. Warm, dry weather returned week end. Temperatures 2 to 5° below normal except extreme south. Extremes: 85 and 10°.

Alfalfa hay, potato, onion harvests finished. Livestock movement from summer ranges completed.

NEW ENGLAND: Dry; little light rain over northern Maine 31st. Sunny days 30th thru Nov. 3d with some fog appearing on weekend primarily over coastal areas. Low 30th of 10°; temperatures moderated thereafter with most areas above normal.

NEW JERSEY: Temperatures near normal, averaging 47° north, 50° south and 51° coastal. Extremes: 26 and 71°. Precipitation well below normal, none north, 0.07 in. south and 0.24 in. coastal.

Light supplies of hardy vegetables continue to move to market. Apple and cranberry harvest about complete. Combining of field corn and soybeans progressing rapidly. Fall sown grains growing nicely.

NEW MEXICO: Appreciable rainfall except extreme southwest mostly falling 2nd and 3rd. Totals near 3.00 in. extreme southeast. More rain weekend.

Most harvesting slowed or stopped. Cotton crop late; only 10% ginned. Alfalfa harvest at standstill. Grain sorghum harvesting light, but rain helping winter wheat and barley. Lettuce and chile picking slow due to muddy fields. Sugarbeets in excellent condition. Livestock shipments heavy.

NEW YORK: Temperatures in 40's to low 50's averaged near to slightly above normal. No precipitation. Conditions very dry at many locations due to minimal rain since 26th.

NORTH CAROLINA: Temperatures 1 to 5° above normal. Precipitation east 0.25 in., elsewhere none.

Fieldwork: 6.5 days suitable. Soil moisture very short to short. Condition of wheat, oats, barley and pasture poor to fair. Rye mostly fair. Harvested: Corn nearing completion, 1977 100%, average 88%; cotton 60%, 1977 57%, average 49%; soybeans 38%, 1977 14%, average 23%; sorghum 87%, 1977 79%, average 76%. Planted: Wheat 58%, 1977 55%; oats 64%, 1977 72%; barley 74%, 1977 72%; rye 58%, 1977 64%.

NORTH DAKOTA: Continued dry, unseasonably mild weather. Only insignificant rainfall. Largest amount reported 0.04 in. north central. Temperatures 8 to 10° above normal.

Precipitation needed to replenish soil moisture before winter freeze. Weather conditions provided excellent conditions for fall fieldwork. Livestock good condition as winter season approaches and still mostly on pasture and ranges.

OHIO: Temperatures 9° above normal. Extremes: 76 and 22°.

Soil temperatures at 4 in. under bare soil well into 50's. More than normal fall plowing and fertilizing. Nursery work very active. Limited hay acreage cut. Some seasonal wait at elevators, no unusual transportation problems. Winter wheat stands good; warm weather sped germination and growth. Corn harvested 75%, 70% 1977, 65% average. Soybean harvested 90%, 90% 1977, 90% average. Sugarbeet harvested 95%, 85% 1977, 75% average. Popcorn harvested 80%, 70% 1977, 75% average. Apples harvested 90%, 90% 1977. Wheat planted 95%, 90% 1977, 95% average. Wheat emerged 80%. Fieldwork: 7 days favorable. Pasture condition good. Soil moisture adequate.

OKLAHOMA: Temperatures 6 to 9° above normal. Precipitation 0.03 in. east central to 0.52 in. north central.

Topsoil and subsoil moisture supplies short. Rain fell late 5th and will help situation some but more is needed. Wheat 81% up to stand, 84% 1977, 79% normal. No wheat pasture yet. Sorghum rated fair with harvest 53% complete, 57% 1977 and normal. Cotton rated fair, prospects brightened as harvest begins; harvest 12% complete, 23% 1977, and 9% normal. Hay supplies very short. Range and pastures grazed heavily. Livestock good to fair condition. Fieldwork: 6.7 days suitable.

OREGON: Temperatures near to a little below normal. Rain occurred at most areas but amounts less than 0.01 in. except northwest where rainfall averaged 0.03 to 0.06 in. Extremes: Low 70's, high 20's west; low 70's, teens east.

Good soaking rain west near weekend helped fall seeded crops. Field activity winding down as several frosty nights stopped growth of tender vegetables still to be harvested. Cole crop harvest continued. Filberts nearly done, walnuts picking up. Pastures and ranges got soaked from rains. Livestock in good shape.

PENNSYLVANIA: Sunny, mild days and cool, clear nights except 4th when cloudy east and trace of rain at Philadelphia. Temperatures to 6° above normal with daily highs 50's and 60's and overnight lows 20's and 30's. Extremes: 18 and 72°.

Open weather allowed continuation of harvesting and small grain seeding.

PUERTO RICO: Island average rainfall 2.43 in. or 0.80 in. above normal. Temperatures averaged about 79° on coasts and 73° interior. Extremes: 93 and 58°.

SOUTH CAROLINA: Fair weather, nighttime temperatures in 40's except mountains where 30's prevailed. Afternoon temperatures in 70's. Showers only in northeastern portion 4th.

Soil moisture very short. Fieldwork: 6 days available. Corn practically harvested. Cotton harvested 88%, 70% last year, 66% average; second picking remains. Soybean condition fair; 80% mature in dry weather, 61% last year; 40% harvested, 18% last year, 20% average; bean size smaller than average. Small grain condition fair; needs more rainfall. Dry conditions discouraged planting small grains, pasture due to germination diffi-

culty. Spotted stands on early plantings. Pastures poor, deteriorating fast. Fall vegetable harvest virtually complete except greens, cole crops.

SOUTH DAKOTA: Temperatures 2 to 12° above normal, averaged 70's days, 20's evenings. Extremes: 8 and 83°. No precipitation.

Topsoil moisture short, critically short in fall grain areas. Fieldwork: 6.5 days suitable. Corn for grain 87% harvested, 1977 75%, normal 81%. Grain sorghum 95% harvested, 1977 85%, normal 88%. Sunflowers 95% harvested, 1977 83%.

TENNESSEE: Very light showers; amount 0.10 in. Temperatures 3 to 5° above normal east, 9 to 11° above normal west.

Fieldwork: 6.0 days suitable. Soil moisture very short. Corn harvested 85%, 1977 77%, average 65%. Cotton harvested 90%, 1977 83%, average 52%. Soybeans harvested 85%, 1977 67%, average 42%. Burley tobacco stripped 35%, 1977 60%, average 53%. Fall plowing completed 80%, 1977 82%, average 84%. Wheat seeded 80%, 1977 80%, average 74%. Oats seeded 93%, 1977 94%, average 91%. Barley seeded 94%, 1977 95%, average 92%. Cattle fair on supplemental feed.

TEXAS: Showers from lower Valley to Plains. Heavy rains Edwards Plateau, Trans-Pecos and western sections south Texas. Rainfall much above normal Trans-Pecos region, Edwards Plateau, south central, upper Coast; much below normal northeast, lower Valley, Coastal Bend. Northern Plains, north central, south, rainfall above normal, near normal elsewhere. Temperatures 5 to 10° above normal except east where temperatures near normal.

Cotton harvest not very active as most growers on Plains waiting for hard freeze. Most cotton harvested non-irrigated. Southern High Plains and Trans-Pecos harvest hampered by damp conditions. Sorghum harvest on Plains slow due to damp weather and high moisture content of grain. Hard freeze needed to speed up harvest. Corn harvest virtually complete on High Plains. Few peanut fields in Cross-Timbers will not be dug due to poor nut yields. Additional moisture needed some areas to aid digging. Soybean harvest moved forward at rapid pace as good harvest conditions prevailed. Sugarbeet harvest active. Wheat seeding continued ahead of schedule; on northern High Plains, irrigated wheat making good growth while dryland stands need moisture. On southern Low Plains, wheat crop looks better than in years. From Cross-Timbers east, more rain needed for germination and growth. Corn harvested 100%, 100% 1977, 98% average. Cotton harvested 33%, 61% 1977, 38% average. Peanuts harvested 84%, 81% 1977, 89% average. Pecans harvested 15%, 18% 1977, 13% average. Sorghum harvested 90%, 97% 1977, 96% average. Soybeans harvested 68%, 69% 1977, 62% average. Sugarbeets harvested 39%, 55% 1977, 48% average. Sunflowers harvested 86%, 92% 1977, 82% average. Flax planted 25%, 5% 1977, 8% average. Oats planted 93%, 80% 1977, 87% average. Wheat planted 94%, 86% 1977, 92% average. Harvest honeydew melons, cabbage, carrots, cucumbers and bell peppers active.

Grapefruit quality and size excellent; oranges slightly smaller than normal. Rain interrupted harvest of some vegetables. Pecan harvest active; nut size small. Wet weather slowed harvest Trans-Pecos. Stockers moved to stalks and wheat pastures High Plains. Recent rains eased grazing pressure some ranges. Pastures and ranges declined Blacklands and north central Texas; many pastures overgrazed. Water tanks running low; producers hauling water. Some ranchers heavily culling herds. Upper Coast, oat and rye pastures need rain; some moisture stressed. South Texas livestock and ranges good condition.

UTAH: Recurring rain or snow principally south and east. Amounts locally very heavy southeast. Temperatures showed cooling trend latter period but averaged generally much above normal. Averages ranged from 2° below to 9° above.

Soil moisture short. Sugarbeet harvest nearly completed. Potato harvest completed. Some harvesting of corn for grain in progress.

VIRGINIA: Temperatures slightly above normal. Extremes: 77 and 20°. No rainfall except light showers southeast first part of period.

Topsoil moisture short. Fieldwork: 6.1 days available. Pastures poor. Harvest progress: Corn 84%, 83% 1977, 74% average; soybeans 55%, 17% 1977, 34% average; sorghum 41%, 28% 1977; peanuts dug 99%, 96% 1977; peanuts picked 97%, 77% 1977, 88% average. Seeding progress: Wheat 49%, 62% 1977, 69% average; barley 71%, 85% 1977; winter oats 84%, 95% 1977. Pasture area water supply for livestock mostly short with some ponds dried up. Burley, fire-cured tobacco producers having handling problems due to dry leaves. Some small grain seedings will not be made due to lateness and inability to prepare dry, hard soils.

WASHINGTON: West: Temperatures near normal. Precipitation 1.70 in. below normal to 0.20 in. above normal.

Farm activity slowing down. Celery, cauliflower, sweet and silage corn near completion. Potato and carrot digging continued. Pastures good.

East: Temperatures 3° below normal to normal.

Cold nights hastened dormancy in orchards. Cleanup and rodent control main orchard activities. Grape picking near complete. Field corn, sugarbeet, and potato harvests continued. Wheat seeding complete in many areas; stands look good but need rain. Greenbug, aphids still a problem. Livestock being moved to lower pastures.

WEST VIRGINIA: Temperatures near normal northeast, below normal central and above average elsewhere. No precipitation.

Fieldwork: 5.8 days suitable. Soil moisture mostly adequate to short. Major activities: Harvesting corn, caring for livestock and seeding small grains. Third cutting hay 99% cut. Corn harvested 74%. Wheat planted 88%. Barley sown 92%. Hay and pasture condition good to fair. Hay supply adequate. Cattle still grazing. Wheat slow to germinate.

WISCONSIN: Temperatures 10° above normal. Highs reached 70's 3d. Lowest readings in 20's 1st. Extremes: 75 and 21°. Sunshine prevailed every day except some cloudiness and showers 5th. Rainfall very light at 0.10 to 0.20 in. southern areas.

Excellent weather for harvesting crops. Fieldwork: 7 days suitable. Corn for grain 65% harvested, 1977 67%, average 72%. Some farmers done with corn harvest; stalks being baled for bedding and feed. Storage space full, additional storage being constructed. A few finishing silo filling on ground too wet earlier. Soybeans 70% harvested, 1977 60%, average 85%. Fall plowing 35% done, 1977 30%, average 45%. Moisture adequate for plowing but some ground plows hard because of compaction from heavy summer rains. Occasional field or hay still being green chopped or baled. New seedings in good condition except where grain lodged severely and volunteer oats growing. Winter wheat looks good. Pastures excellent for late fall. Harvesting ending for cranberries, apples, and vegetables. Late harvested tobacco curing favorably. Soil moisture mostly adequate.

WYOMING: Almost no precipitation. Temperatures 4 to 6° higher than normal. Maximum temperatures mostly low 60's western half to mid-70's east.

Minimums averaged from teens west to mostly low and mid-20's east.

Topsoil moisture short. Virtually all sugarbeets, potatoes harvested. Corn harvest behind normal; 54% harvested compared to last year's 74%. Winter wheat 91% emerged, mostly fair condition. Livestock sold: Yearlings 86%; calves 76%; lambs 87%. Stock water adequate.

DATELINE

MONTH OF OCTOBER

*Blues on the bayou---
Only a trace of rain during October 1978 matched October 1940 as the driest month on record in Baton Rouge, La.

*Concord flies low, then soars---
The New Hampshire city notched its lowest temperatures for so early in the season with 14° on the 17th and 13° on the 18th; a swift turnabout on the 22nd had 82° toppling the 100-year-old high mark of 78°.

*High and dry---
Jefferson County's Beaumont, East Texas, reached 87° on the 31st to tie Houston for the Nation's hot spot---a rare occurrence along the generally mild Gulf Coast. The rainless October was the fourth such month since 1914 in the county, and added to the 16.76-inch deficit of below-normal moisture.

*Troubled waters---
October's tropical storm activity was busiest since 1971 over the Gulf and Atlantic.

*A trace in North Carolina---
At 0.30 in., Asheville suffered its fourth driest October on record. Wilmington barely collected an inch making October the driest month of the year.

*Dry Dixie---
Southeastern Tennessee and northern Georgia head for one of the driest years on record. Through October, Chattanooga's yearly rainfall figured out to 13 inches below normal. Absolutely no rain fell in most of northern Georgia's Chatooga County.

World Weather and Crop Update

October 30 - November 5

USSR. Above-normal precipitation soaked the Upper Volga Valley and northern New Lands with amounts of 10 to 15 mm widespread. Much-above-normal amounts (up to 20 mm) drenched southern New Lands. Only light precipitation dampened the southern Ukraine and Lower Volga Valley providing favorable weather for final harvest operations there.

PEOPLE'S REPUBLIC OF CHINA. Very little precipitation fell over most of the PRC. The rainy season normally tapers off at this time of year; weekly amounts should now range from 8 mm in the winter wheat belt to 80 mm in some parts of the south. The winter wheat crop may have sufficient water (with irrigation) to carry it through to dormancy, but more precipitation is needed to bring stream levels up and provide soil moisture for planting next spring.

S.E. ASIA. Another tropical depression moved onto the coast of Vietnam late in the week, and dumped some heavy rains over southern Vietnam, Cambodia, southern Laos, and eastern Thailand before dissipating---no reports of damage.

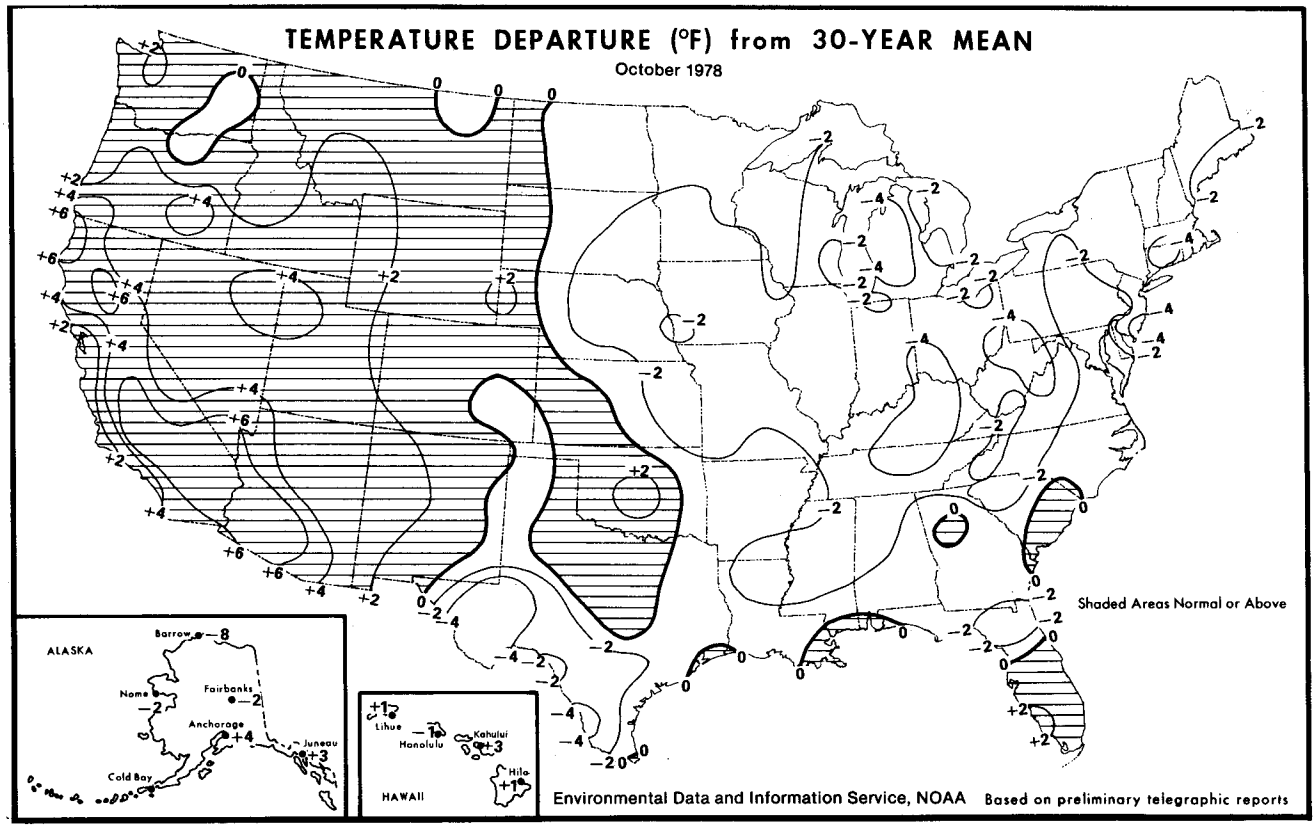
AUSTRALIA. Rainfall centered on southern Queensland and northern New South Wales where above-normal amounts of 15 to 45 mm fell; some points reported up to 70 mm. This was not beneficial to the wheat crop there which is nearly ready for harvest. Minimal rain fell to the south and west of this area.

INDIA. A tropical depression dropped heavy rains (more than 100 mm) over the extreme south (as much as 480 mm in Kerala). Northeastern areas received normal amounts of 5 to 20 mm, but the northwestern half stayed dry again. The month of November is normally the driest in northern India, and this year the post-monsoon showers ended in early October. Winter wheat planting should be about halfway completed; irrigation will be required to bring the crop through.

AFRICA. Substantial rainfall in northern Africa stayed along coastal areas of southeastern Tunisia and just to the east, where much-above-normal amounts of 50 to 75 mm fell. Growers delayed wheat planting in the dry areas to the west. Rainfall in central Africa was strongest in western areas, as is normal at this time. The Maize Triangle of South Africa received general coverage of 20 to 60 mm rainfall with a few amounts up to 100 mm. The moisture may cause problems for planting operations in some areas, but in general will assure a good start for the growing season there.

EUROPE. Only light, below-normal precipitation fell over most of Europe. Amounts were generally less than 5 mm with nearly none in the east and southwest. The fine weather aided the wrap-up of the corn harvest, but blunted wheat planting in Spain. Substantial rain will be required to wet parched soil there before planting can begin.

SOUTH AMERICA. Northern portions of the Argentina corn area, where planting is in full swing, received extensive rains of 25 to 50 mm. In Brazil's soybean area in Parana, rains of 10 to 40 mm have allowed planting to continue. Conditions are only marginal however, as October rainfall reached only 50% of normal in both Parana and Rio Grande do Sul.



October Weather Summary

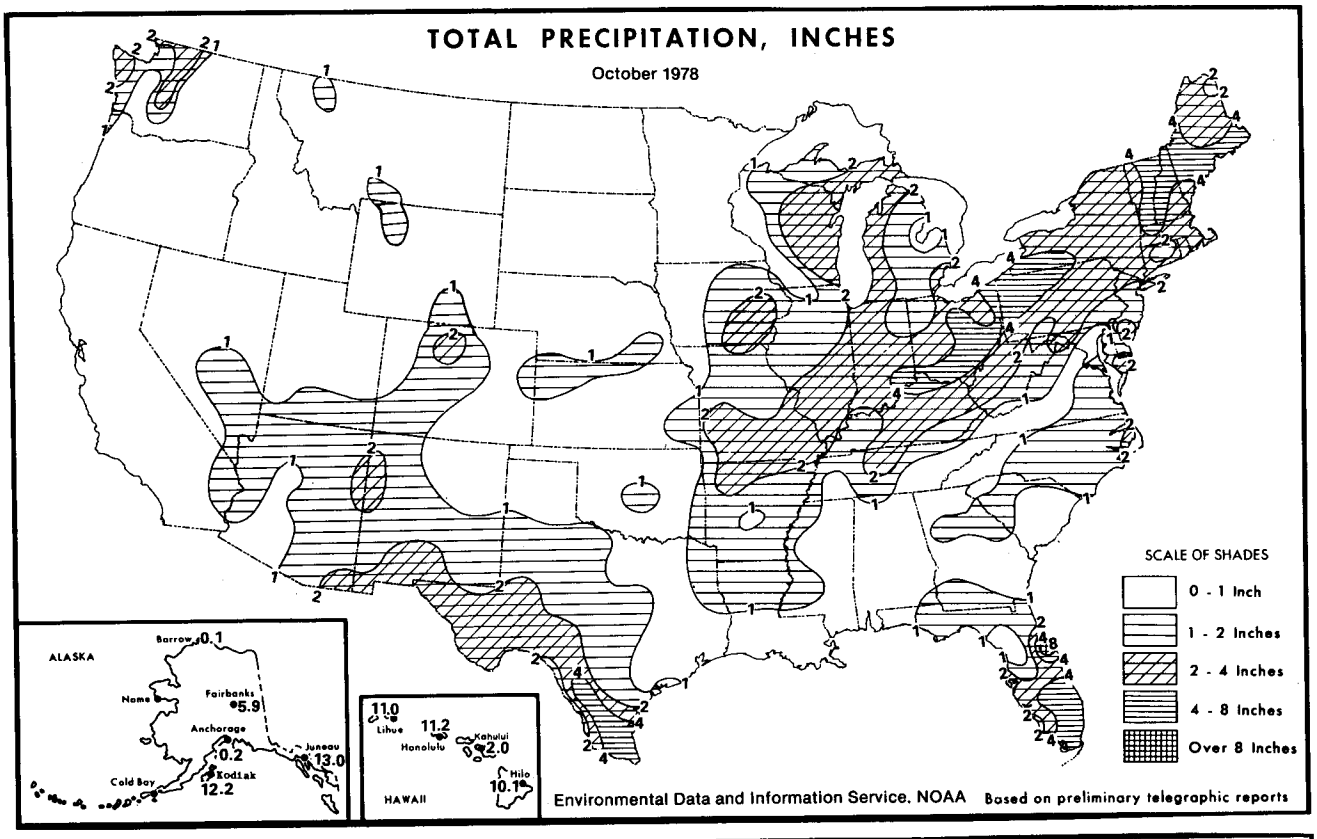
HIGHLIGHTS: Early in the month of October a blast of cool air from Canada spread snow throughout the Rockies. The accumulation was well above normal in the central portion. Later a trough of low pressure brought moisture northward and spread showers, some very heavy, from southern California and Nevada eastward to West Texas. Most of the winter wheat area of Texas, Oklahoma, and Kansas had only light rain during the month which was well below normal. The southeastern U.S. continued very dry. Temperatures averaged generally cool in the East and warm in the West.

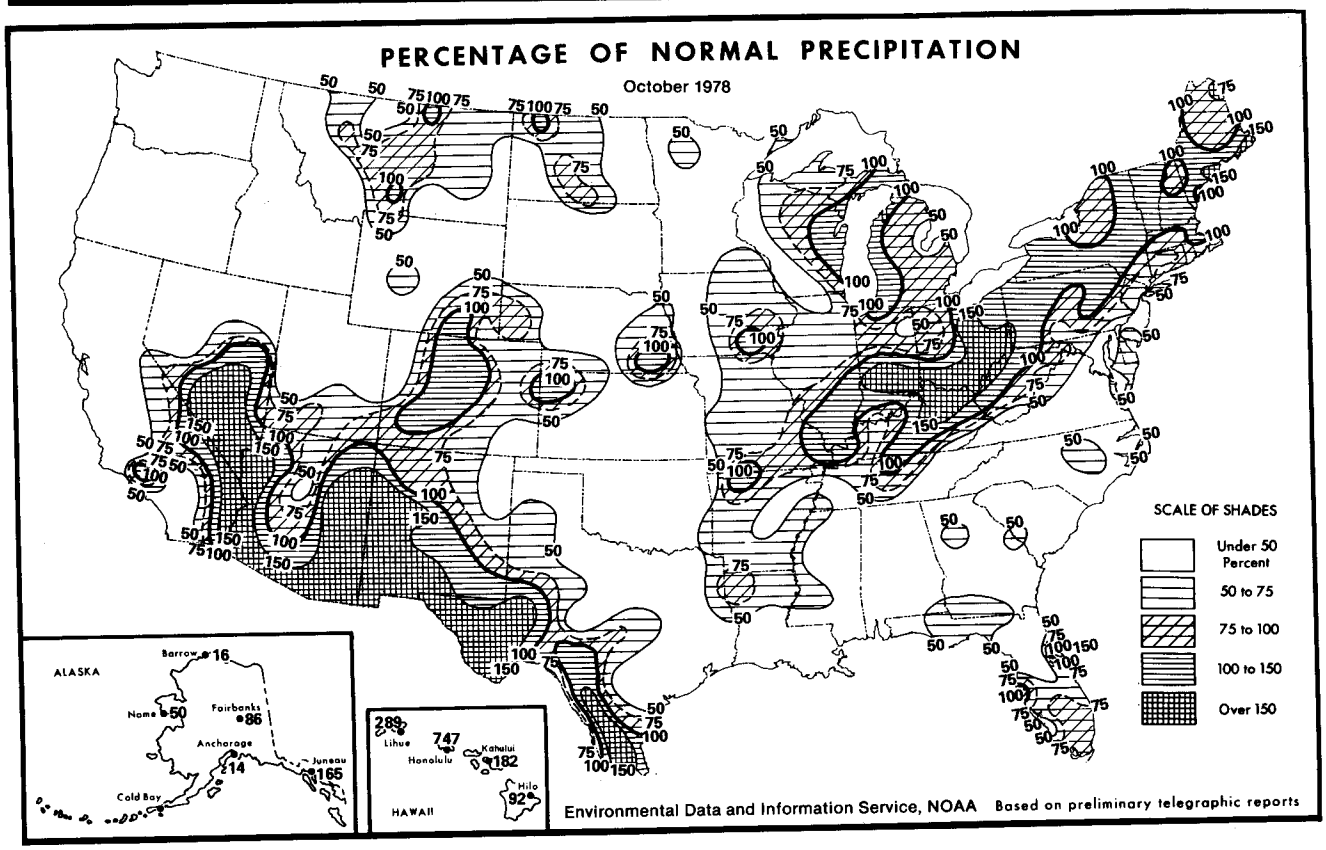
Unseasonably cool air from Canada moved into the northern Plains during the first week of October and spread into the Rockies and all of the Nation to the east. Only southern Florida was spared the cool spell. Freezing temperatures reached into the central Plains and the western portion of the Corn Belt. Average temperatures for the week dropped as much as 9 degrees cooler than normal in Alabama. The West held above normal---6 to 9 degrees warmer in central California. Significant rain was confined to the area east of the Rockies. Heavy rain deluged parts of Texas's Rio Grande Valley causing unusual flooding. The Southeast, except for southern Florida, again recorded little or no rain.

The second week of October, the 9th to 13th, was warm and dry from southern Louisiana to western Montana and westward. Exceptions included the far Northwest and an area in Southwest Texas where heavy rain continued into Monday. Warm temperatures in the West persisted with weekly averages as much as 12 degrees above normal in California. Heading eastward, heavy rain fell in the southern Corn Belt from southern Missouri to the upper Ohio Valley. Some very welcome rain fell in the southeastern U.S., but many of these dry areas recorded little or no rain. The East remained cool as the freeze line dipped into North Carolina.

A change in the general weather pattern occurred during the week of October 16 to 22. Incursions of cool air from the north failed to move very far southward, and by the end of the week, chilled only the northern tier of States. A trough of low pressure began carrying moisture northward into the southwestern U.S. Showers fell throughout the Southwest and spread slowly eastward into the Rockies. Snow fell in the Rockies, and rain extended into the central Plains. Light amounts of precipitation fell from the Great Lakes through New England. Southern and eastern Florida noted some heavy showers. The West's warm weather moved eastward through the Plains leaving only South Texas and the area east of the Mississippi River cooler than normal.

In the last period of October---from the 23rd to the 31st---low pressure in the Southwest edged northeastward and triggered another outbreak of cool air from the north which moved rapidly southward and eastward. Showers continued in the Southwest and heavy showers accumulated over two inches in Southwest Texas. Moderate to heavy rain fell from central Texas through New England. Moderate showers covered Florida and light rain extended northward along the East Coast. Another low pressure system formed in the Southwest. Cool air invaded the Pacific Northwest, but the area from California through the northern Plains remained slightly warmer than normal. A new outbreak of cool air brought the freezing line all the way into Oklahoma and Tennessee, however, the Southeast and East Coast averaged warmer than normal.


TOTAL PRECIPITATION, INCHES
October 1978
SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
Barrow 0.1
Nome
Fairbanks 5.9
Anchorage 0.2
Juneau 13.0
Cold Bay
Kodiak 12.2
HAWAII
Lihue 11.0
Honolulu 11.2
Kahului 2.0
Hilo 10.1
Environmental Data and Information Service, NOAA
Based on preliminary telegraphic reports


PERCENTAGE OF NORMAL PRECIPITATION
October 1978
SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow 16
Nome 50
Fairbanks 86
Anchorage 14
Juneau 165
Cold Bay
HAWAII
Lihue 289
Honolulu 747
Kahului 182
Hilo 92
Environmental Data and Information Service, NOAA
Based on preliminary telegraphic reports

Temperature and Precipitation Data for October 1978

States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
ALA.Birmingham	61	- 2	.2	- 2.4
Mobile	70	+ 1	T	- 2.6
Montgomery	65	- 1	.1	- 2.1
ALASKA.Anchorage	39	+ 4	.2	- 1.2
Barrow	7	- 8	.1	- .5
Fairbanks	23	- 2	.6	- .1
Juneau	45	+ 3	13.0	+ 5.1
Kodiak	44	+ 3	12.2	+ 5.9
Nome	27	- 2	.7	- .7
ARIZ.Flagstaff	50	+ 3	.6	- .8
Phoenix	79	+ 7	.4	- .1
Tucson	74	+ 4	1.9	+ 1.2
Winslow	59	+ 2	1.7	+ 1.0
Yuma	81	+ 5	.6	+ .3
ARK.Fort Smith	62	- 1	1.7	- 1.8
Little Rock	62	0	.9	- 2.1
CALIF.Bakersfield	75	+ 8	0	- .3
Eureka	61	+ 7	T	- 3.2
Fresno	70	+ 6	0	- .4
Los Angeles	70	+ 2	.1	- .2
Red Bluff	72	+ 7	0	- 1.2
San Diego	70	+ 4	.1	- .2
San Francisco	61	0	T	- 1.0
Stockton	68	+ 4	0	- .7
COLO.Denver	53	+ 1	1.5	+ .4
Grand Junction	55	0	T	- .9
Pueblo	54	- 1	.7	- .3
CONN.Bridgeport	55	- 2	2.5	- .3
Hartford	49	- 4	1.8	- 1.2
D.C.Washington	59	- 1	1.2	- 1.5
FLA.Apalachicola	69	- 2	1.9	- 1.0
Daytona Beach	74	+ 1	8.3	+ 2.8
Ft. Myers	78	+ 2	1.5	- 2.9
Jacksonville	68	- 3	1.3	- 3.2
Key West	80	0	4.2	- 1.4
Lakeland	--	--	--	--
Miami	79	+ 1	7.7	- .5
Orlando	75	+ 1	1.5	- 2.6
Tallahassee	68	- 1	1.7	- 1.2
Tampa	75	0	3.4	+ .9
W.Palm Beach	77	0	7.0	- 1.8
GA.Atlanta	63	+ 1	1.4	- 1.1
Augusta	63	- 1	1.1	- 1.1
Macon	65	- 1	.2	- 2.1
Savannah	67	0	.6	- 2.2
HAWAII.Hilo	76	+ 1	10.1	- .9
Honolulu	78	- 1	11.2	+ 9.7
Kahului	80	+ 3	2.0	+ .9
Lihue	78	+ 1	11.0	+ 7.2
IDAHO.Boise	53	+ 1	T	- .8
Lewiston	52	0	T	- 1.1
Pocatello	50	+ 2	.1	- .7
ILL.Cairo	59	- 3	3.2	+ .5
Chicago	52	- 3	1.4	- 1.2
Moline	52	- 2	2.0	- .7
Peoria	52	- 3	1.7	- .8
Rockford	50	- 3	.9	- 2.0
Springfield	54	- 3	1.6	- 1.5
IND.Evansville	55	- 3	1.6	- .9
Ft. Wayne	51	- 3	1.1	- 1.7
Indianapolis	53	- 3	3.8	+ 1.3
South Bend	52	- 1	4.0	+ .9
IOWA.Burlington	52	- 3	1.8	- 1.2
Des Moines	52	- 2	1.1	- 1.0
Dubuque	49	- 1	1.7	- 1.1
Sioux City	50	- 3	.8	- .8
KANS.Concordia	56	- 1	.5	- 1.3
Dodge City	58	0	T	- 1.7
Goodland	53	0	1.3	+ .3
Topeka	55	- 3	.4	- 2.3
Wichita	59	- 1	.1	- 2.4
KY.Lexington	54	- 4	3.2	+ 1.1
Louisville	56	- 2	2.3	- .1
LA.Baton Rouge	68	- 1	T	- 2.7
Lake Charles	69	- 1	.2	- 3.3
New Orleans	70	0	0	- 2.3
Shreveport	66	- 2	2.7	- .2
MAINE.Caribou	42	- 2	1.9	- 1.4
Portland	48	- 1	3.2	- .1
MD.Baltimore	56	- 1	.7	- 2.1
MASS.Boston	53	- 2	3.1	+ .1
Chatham	52	--	2.6	--
MICH.Alpena	46	- 1	1.3	- .7
Detroit	50	- 3	2.5	0
Flint	50	- 1	1.5	- .7
Grand Rapids	47	- 5	3.1	+ .5
Houghton Lake	44	- 4	1.4	- 1.2
Lansing	48	- 4	2.0	- .3
Marquette	47	- 2	1.7	- .7
Muskegon	48	- 4	3.1	+ .4
S. Ste. Marie	44	- 2	3.4	+ .5
MINN.Duluth	45	0	.8	- 1.5
Internatl Falls	43	- 1	.4	- 1.3
Minneapolis	50	0	.2	- 1.6
Rochester	46	- 4	1.0	- .8
St. Cloud	46	- 2	.1	- 1.6
MISS.Jackson	64	- 2	1.2	- 1.0
Meridian	63	- 2	.1	- 2.1
MO.Columbia	56	- 2	1.7	- 1.7
Kansas City	56	- 3	.3	- 2.9
St. Louis	56	- 3	2.3	- .5
Springfield	57	- 2	2.2	- 1.2
MONT.Billings	49	0	.3	- .6
Glasgow	45	- 1	.3	- .3
Great Falls	49	+ 1	.3	- .4
Havre	47	0	.2	- .5
Helena	47	+ 2	T	- .6
Kalispell	43	0	.1	- 1.1
Miles City	49	0	.4	- .3
Missoula	45	+ 1	T	- .9
NEBR.Grand Island	52	- 2	.6	- .5
Lincoln	52	- 3	1.5	0
Norfolk	51	- 2	.6	- .7
N.Platte	49	- 2	.4	- .6
Omaha	53	- 1	.6	- 1.2
Valentine	48	- 2	.1	- .8
NEV.Ely	49	+ 3	.8	+ .2
Las Vegas	74	+ 7	.6	+ .4
Reno	54	+ 4	.1	- .3
Winnemucca	51	+ 3	T	- .7
N.H.Concord	47	- 2	2.7	0
N.J.Atlantic City	53	- 4	1.2	- 2.3
Trenton	55	- 2	1.3	- 1.2
N.MEX.Albuquerque	60	+ 2	1.2	+ .4
Roswell	60	0	1.5	+ .3
N.Y.Albany	49	- 2	3.0	+ .4
Binghamton	48	- 2	3.6	+ .6
Buffalo	50	- 2	3.7	+ .7
New York	56	- 2	1.4	- 1.6
Rochester	51	- 1	2.6	0
Syracuse	50	- 3	2.7	- .4
N.C.Asheville	56	- 1	.3	- 3.0
Charlotte	60	- 2	1.2	- 1.5
Greensboro	57	- 2	1.3	- 1.6
Hatteras	64	- 1	3.2	- 1.6
Raleigh	60	0	1.5	- 1.3
Wilmington	64	- 1	1.0	- 2.3
N.DAK.Bismarck	46	- 1	.5	- .3
Fargo	46	- 1	.1	- 1.0
Williston	47	+ 1	.2	- .4
OHIO.Akron-Canton	50	- 3	2.6	+ .2
Cincinnati	53	- 4	5.0	+ 2.8
Cleveland	53	- 1	3.2	+ .6
Columbus	52	- 2	2.4	+ .5
Dayton	52	- 4	2.5	+ .6
Toledo	50	- 3	1.7	- .5
Youngstown	50	- 3	4.3	+ 1.4
OKLA.Okla. City	65	+ 3	1.0	- 1.6
Tulsa	64	+ 1	1.0	- 2.2
OREG.Astoria	54	+ 1	1.0	- 5.8
Burns	51	+ 4	0	- .9
Medford	57	+ 4	T	- 2.1
Pendleton	52	- 1	T	- 1.1
Portland	55	+ 1	.4	- 3.2
Salem	54	+ 1	.4	- 3.6
PA.Allentown	53	- 1	2.0	- .7
Erie	49	- 3	5.8	+ 2.6
Harrisburg	54	- 2	2.5	- .1
Philadelphia	56	- 1	1.2	- 1.3
Pittsburgh	49	- 4	3.4	+ .9
Scranton	51	- 2	3.4	+ .6
R.I. Providence	52	- 2	3.2	- .1
S.C. Charleston	66	0	.2	- 2.9
Columbia	64	0	.8	- 1.8
Greenville	60	- 2	.8	- 2.4
S.D. Aberdeen	47	- 1	.1	- 1.1
Huron	48	- 2	.1	- 1.4
Rapid City	51	+ 1	.3	- .6
Sioux Falls	48	- 2	.1	- 1.4
TENN.Chattanooga	59	- 2	.3	- 2.7
Knoxville	58	- 3	.8	- 1.9
Memphis	63	0	1.8	- .8
Nashville	57	- 4	2.3	+ .1
TEX.Abilene	67	+ 1	1.5	- 1.1
Amarillo	59	- 1	1.0	- .8
Austin	70	0	1.4	- 1.6
Beaumont	72	+ 2	T	- 3.7
Brownsville	76	0	4.5	+ 1.2
Corpus Christi	73	- 1	2.5	- .3
Del Rio	70	- 1	1.0	- 1.1
El Paso	64	0	2.3	+ 1.5
Fort Worth	69	+ 1	.6	- 2.1
Galveston	74	+ 1	.3	- 2.5
Houston	69	- 2	.1	- 4.0
Lubbock	62	+ 1	1.1	- 1.0
Midland	61	- 5	2.5	+ 1.1
San Angelo	65	- 2	.4	- 1.5
San Antonio	69	- 2	.6	- 2.2
Victoria	71	- 1	.6	- 3.0
Waco	70	+ 1	1.9	- .7
Wichita Falls	66	0	1.1	- 1.6
UTAH.Blanding	55	+ 3	1.3	- .1
Salt Lake City	56	+ 4	T	- 1.2
VT.Burlington	46	- 3	3.7	+ 1.0
VA.Lynchburg	56	- 2	.8	- 1.8
Norfolk	61	- 1	1.5	- 1.6
Richmond	58	- 1	1.2	- 1.7
Roanoke	54	- 4	.8	- 2.4
WASH.Colville	--	--	--	--
Omak	47	0	T	- .9
Quillayute	52	+ 1	3.1	- 8.5
Seattle-Tacoma	54	+ 2	1.0	- 2.9
Spokane	47	- 1	.1	- 1.3
Walla Walla	54	0	.3	- 1.2
Yakima	50	0	0	- .6
W.VA.Beckley	52	- 1	1.0	- 1.5
Charleston	54	- 3	2.7	+ .2
Huntington	54	- 3	3.1	+ 1.0
Parkersburg	53	- 4	3.5	+ 1.4
WISC.Green Bay	47	- 2	2.3	+ .4
La Crosse	51	- 1	.8	- 1.3
Madison	47	- 3	1.1	- 1.1
Milwaukee	50	- 1	2.2	+ .2
WYO.Casper	48	0	.4	- .5
Cheyenne	48	0	.5	- .5
Lander	48	+ 1	.7	- .5
Sheridan	48	0	.3	- .7
P.R.San Juan	83	+ 2	4.9	- .7

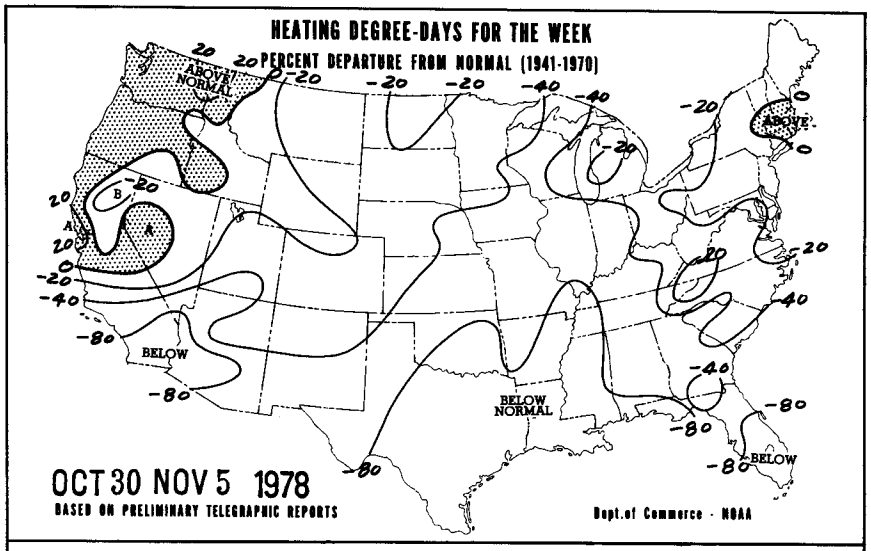
Based on 1941-70 normals

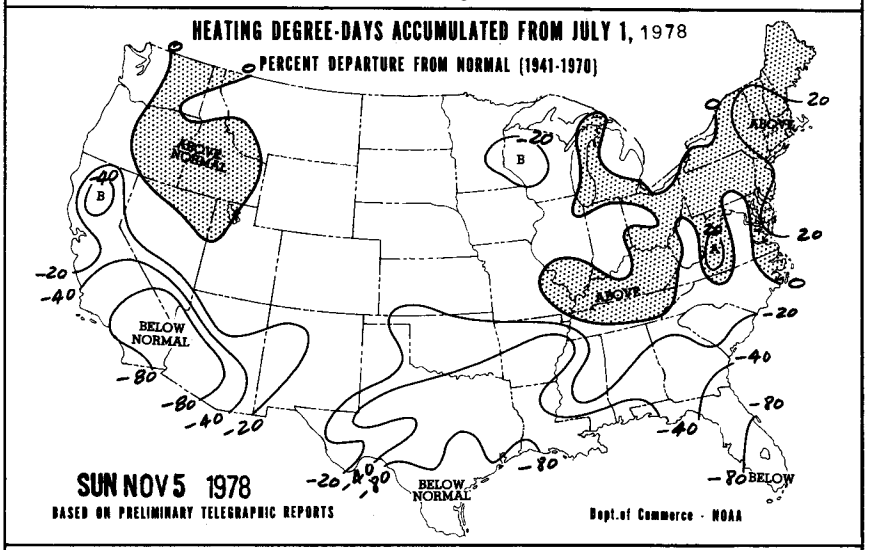
Heating Degree Days (Base 65° F.)

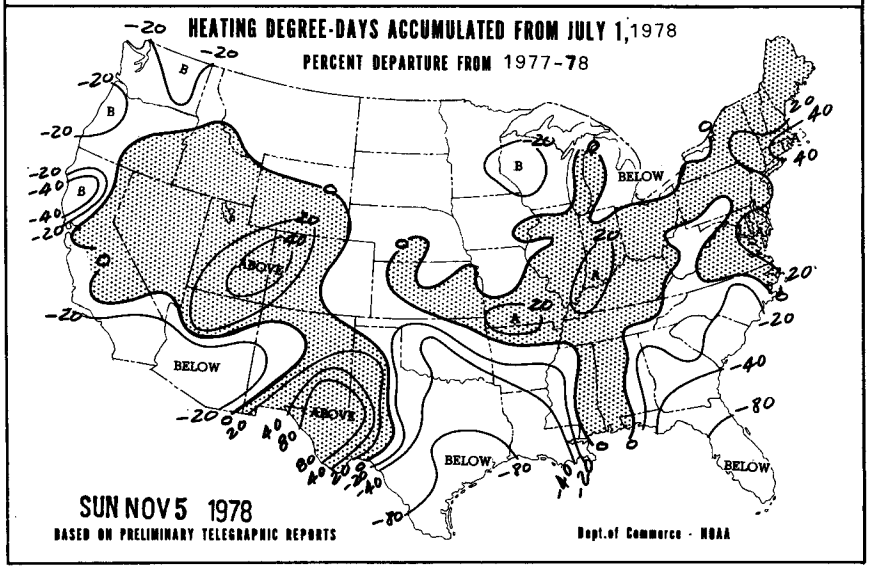
October 1978

ALA.Birmingham	162	MAINE,Caribou	717	OKLA.Okla. City	89
Mobile	20	Portland	513	Tulsa	121
Montgomery	72	MD.Baltimore	280	OREG.Astoria	324
ALASKA,Anchorage	792	MASS.Boston	381	Burns U.	443
Barrow	793	Chatham	391	Medford	244
Fairbanks	286	MICH.Alpena	577	Pendleton	403
Juneau	612	Detroit	452	Portland	312
Nome	--	Flint	449	Salem	328
ARIZ.Flagstaff	465	Grand Rapids	545	PA.Allentown	368
Phoenix	1	Houghton Lake	636	Erie	481
Tucson	15	Lansing	507	Harrisburg	321
Winslow	180	Marquette U	554	Philadelphia	296
Yuma	0	S. Ste. Marie	645	Pittsburgh	485
ARK.Fort Smith	133	MINN.Duluth	613	Scranton	436
Little Rock	126	Internatl Falls	661	R.I.Providence	412
CALIF.Bakersfield	9	Minneapolis	464	S.C.Charleston	57
Eureka U.	310	Rochester	577	Columbia	89
Fresno	30	St. Cloud	579	Greenville	152
Los Angeles U	7	MISS.Jackson	98	S.DAK.Aberdeen	540
Red Bluff	17	Meridian	110	Huron	539
Stockton	32	Vicksburg U	--	Rapid City	443
San Diego	0	MO.Columbia	280	Sioux Falls	525
San Francisco	143	Kansas City	272	TENN.Chattanooga	192
COLO.Denver	366	St. Louis	292	Knoxville	210
Grand Junction	313	Springfield	268	Memphis	116
Pueblo	347	MONT.Billings	487	Nashville	240
CONN.Bridgeport	290	Glasgow	601	TEX.Abilene	56
Hartford	489	Great Falls	496	Amarillo	197
D.C.Washington	192	Havre	546	Austin	5
FLA.Apalachicola	24	Helena	564	Beaumont	4
Ft. Myers	0	Kalispell	685	Brownsville	0
Jacksonville	46	Miles City	504	Corpus Christi	1
Key West	0	Missoula	609	Dallas	--
Lakeland U.	--	NEBR.Grand Island	400	Del Rio	8
Miami	0	Lincoln	392	El Paso	106
Orlando	0	Norfolk	434	Fort Worth	27
Daytona Beach	0	North Platte	488	Galveston U.	0
Tallahassee	144	Omaha	385	Houston	22
Tampa	0	Valentine	515	Lubbock	129
GA.Atlanta	112	NEV.Ely	490	Midland	138
Augusta	103	Las Vegas	2	San Angelo	74
Macon	70	Reno	347	San Antonio	12
Savannah	45	Winnemucca	442	Victoria	3
IDAHO,Boise	370	N.H.Concord	564	Waco	23
Lewiston	390	N.J.Atlantic City	365	Wichita Falls	76
Pocatello	473	Trenton U	301	UTAH,Milford	375
ILL.Cairo U.	190	N.MEX.Albuquerque	167	Salt Lake City	284
Chicago	410	Roswell	173	VT.Burlington	571
Moline	415	N.Y.Albany	503	VA.Lynchburg	289
Peoria	390	Binghamton	533	Norfolk	162
Rockford	461	Buffalo	472	Richmond	214
Springfield	349	New York	287	Roanoke	335
IND.Evansville	323	Rochester	428	WASH.Colville	--
Fort Wayne	431	Syracuse	470	Omak	--
Indianapolis	377	N.C.Asheville	283	Quillayute	404
South Bend	399	Charlotte	155	Seattle-Tacoma	324
IOWA,Burlington	384	Greensboro	238	Spokane	562
Des Moines	385	Hatteras R.	90	Walla Walla U.	322
Dubuque	505	Raleigh	184	Yakima	470
Sioux City	448	Wilmington	91	W.VA.Beckley	411
KANS.Concordia	288	N.DAK.Bismarck	585	Charleston	344
Dodge City	271	Fargo	571	Huntington	334
Goodland	375	Williston U	566	Parkersburg U.	366
Topeka	319	OHIO.Akron-Canton	466	WIS.Green Bay	549
Wichita	210	Cincinnati U.	381	Madison	543
KY.Lexington	348	Cleveland	362	Milwaukee	473
Louisville	293	Columbus	411	WYO.Casper	522
LA.Baton Rouge	32	Dayton	396	Cheyenne	523
Lake Charles	26	Toledo	466	Lander	519
New Orleans	16	Youngstown	456	Sheridan	525
Shreveport	57				

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


HEATING DEGREE-DAYS FOR THE WEEK
PERCENT DEPARTURE FROM NORMAL (1941-1970)
ABOVE NORMAL
BELOW
BELOW NORMAL
ABOVE
OCT 30 NOV 5 1978
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1978
PERCENT DEPARTURE FROM NORMAL (1941-1970)
ABOVE NORMAL
BELOW NORMAL
ABOVE
BELOW
SUN NOV 5 1978
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1978
PERCENT DEPARTURE FROM 1977-78
ABOVE
BELOW
SUN NOV 5 1978
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING NOV. 5, 1978.

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1977-78
ALA. BIRMINGHAM	21	-42	182	-8	2
MOBILE	0	-29	20	-41	-68
MONTGOMERY	10	-36	81	-46	-11
ARIZ. FLAGSTAFF	141	-29	882	-175	165
PHOENIX	1	-19	2	-31	2
TUCSON	13	-15	28	-23	23
WINSLOW	72	-38	271	-81	-5
YUMA	0	-8	0	-8	0
ARK. FORT SMITH	24	-43	146	-39	-18
LITTLE ROCK	2	-67	118	-81	-9
CALIF. BAKERSFIELD	22	-14	22	-60	-4
EUREKA	99	15	1102	-57	-41
FRESNO	57	8	70	-57	-4
LOS ANGELES	13	-15	14	-138	-8
RED BLUFF	33	-15	40	-78	-60
SAN DIEGO	2	-18	35	-45	35
SAN FRANCISCO	62	13	394	-22	0
STOCKTON	51	-2	125	-3	54
COLO. DENVER	106	-37	541	-92	36
GRAND JUNCTION	84	-47	466	-14	147
PUEBLO	99	-32	468	-18	-7
CONN. BRIDGEPORT	85	-11	452	79	113
HARTFORD	142	15	818	224	249
DEL. WILMINGTON	90	-8	429	71	29
D.C. WASHINGTON	52	-29	236	-28	32
FLA. APALACHICOLA	3	-16	24	-13	-35
DAYTONA BEACH	2	-6	2	-6	-21
FORT MYERS	0	-4	0	-4	-5
JACKSONVILLE	27	8	72	38	1
KEY WEST	0	0	0	0	0
LAKELAND	3	-2	4	-1	-8
MIAMI	0	0	0	0	0
ORLANDO	0	-5	0	-5	-6
TALLAHASSEE	17	-9	59	-8	-39
TAMPA	2	-3	2	-3	-17
WEST PALM BEACH	1	1	1	1	1
GA. ATLANTA	21	-42	132	-60	-64
AUGUSTA	33	-19	131	-11	-23
MACON	19	-25	90	-25	-33
SAVANNAH	15	-21	58	-29	-38
IDAHO. BOISE	155	14	674	26	24
LEWISTON	164	23	648	-5	-80
POCATELLO	156	-12	868	19	97
ILL. CAIRO	15	-62	235	10	30
CHICAGO	61	-63	498	26	13
MOLINE	69	-63	520	-11	-11
PEORIA	58	-70	477	-22	-9
ROCKFORD	80	-64	566	-58	-71
SPRINGFIELD	36	-81	404	-20	27
IND. EVANSVILLE	46	-54	364	20	72
FORT WAYNE	76	-55	549	-12	22
INDIANAPOLIS	52	-67	452	-6	93
SOUTH BEND	61	-74	508	-89	-30
IOWA. BURLINGTON	64	-63	479	-12	5
DES MOINES	59	-79	469	-89	-22
DUBUQUE	74	-79	642	-64	-96
SIOUX CITY	84	-63	571	-38	-11
KANS. CONCORDIA	49	-68	359	-75	-29
DODGE CITY	41	-69	297	-72	-6
GOODLAND	110	-33	525	-75	-6
TOPEKA	44	-65	379	-15	54
WICHITA	33	-63	256	-58	-26
KY. LEXINGTON	60	-43	415	53	130
LOUISVILLE	49	-51	336	-14	32
LA. BATON ROUGE	0	-31	30	-47	-43
LAKE CHARLES	0	-24	26	-28	-29
NEW ORLEANS	0	-25	24	-35	-29
SHREVEPORT	0	-41	57	-44	-46
MAINE. CARIBOU	184	-7	1420	92	100
PORTLAND	148	-1	926	43	8
MD. BALTIMORE	76	-20	372	25	73
MASS. BOSTON	118	15	640	180	191
MICH. ALPENA	98	-72	896	-227	-180
DETROIT	89	-44	608	-11	-63
FLINT	88	-57	638	-98	-35
GRAND RAPIDS	102	-40	776	-114	-91
HOUGHTON LAKE	119	-51	1069	-5	-33
LANSING	90	-54	723	-25	-6
MARQUETTE	92	-77	970	-33	-39
MUSKEGON	119	-23	777	-63	-52
S. STE. MARIE	124	-56	1221	-5	-175
MINN. DULUTH	137	-64	1140	-107	-191
INTERNATL FALLS	157	-61	1277	-91	-156
MINNEAPOLIS	91	-81	618	-185	-209
ROCHESTER	108	-64	818	-34	-13
ST. CLOUD	123	-65	846	-114	-134
MISS. JACKSON	6	-40	102	-23	-50
MERIDIAN	14	-39	124	-26	-2
MO. COLUMBIA	26	-77	313	-52	-4
KANSAS CITY	36	-67	326	-27	-48
ST. LOUIS	30	-67	332	-2	-13
SPRINGFIELD	37	-59	308	-34	-54
MONT. BILLINGS	127	-36	836	-16	-11
GLASGOW	146	-52	1019	-11	-161
GREAT FALLS	130	-43	912	-58	-177
HAVRE	127	-67	873	-161	-122
HELENA	172	-22	989	-157	-144
KALISPELL	210	-3	1332	-74	-74
MILES CITY	134	-44	753	-128	-99
MISSOULA	188	-8	1207	-6	-12
NEBR. GRAND ISLAND	88	-52	516	-57	0
LINCOLN	66	-67	454	-60	-92
NORFOLK	84	-66	541	-100	-26
NORTH PLATTE	113	-44	687	-23	-13
OMAHA	53	-72	424	-46	-37
VALENTINE	113	-53	685	-78	-69
NEV. ELY	172	-10	1062	-9	131
LAS VEGAS	10	-39	11	-100	-1
RENO	168	23	763	-33	118
WINNEMUCCA	160	-2	866	-17	113
N.H. CONCORD	163	13	1041	202	98
N.J. ATLANTIC CITY	102	4	563	194	212
TRENTON	79	-16	406	46	23
N. MEX. ALBUQUERQUE	69	-34	235	-66	-27
ROSWELL	48	-41	247	-31	132
N.Y. ALBANY	139	2	926	232	193
BINGHAMTON	121	-26	871	75	26
BUFFALO	101	-37	721	22	57
NEW YORK	77	-12	418	99	11
ROCHESTER	102	-30	643	-13	-33
SYRACUSE	111	-18	745	114	78
N.C. ASHEVILLE	81	-19	355	-37	-11
CHARLOTTE	38	-29	189	-22	-39
GREENSBORO	64	-20	300	-5	-32
HATTERAS	16	-23	111	-6	-8
RALEIGH	57	-18	236	-17	-63
WILMINGTON	28	-13	106	-5	-38
N.DAK. BISMARCK	156	-39	957	-55	-96
FARGO	142	-52	888	-92	-79
WILLISTON	160	-43	953	-124	-151
OHIO. AKRON-CANTON	104	-25	599	13	27
CINCINNATI	70	-38	452	-58	-21
CLEVELAND	90	-35	483	-89	-1
COLUMBUS	90	-33	510	-6	-50
DAYTON	68	-52	509	-44	-47
TOLEDO	92	-43	632	-37	-12
YOUNGSTOWN	101	-32	659	-26	-112
OKLA. OKLAHOMA CITY	8	-65	97	-117	-68
TULSA	13	-57	129	-76	-13
OREG. ASTORIA	127	15	835	-139	-165
BURNS	170	-1	1067	70	35
MEDFORD	128	4	516	-55	-67
PENDLETON	146	11	713	-115	-114
PORTLAND	122	7	566	-87	-62
SALEM	133	15	565	-103	-187
PA. ALLENTOWN	114	-5	555	33	106
ERIE	106	-31	659	-64	-20
HARRISBURG	97	-13	411	-13	-28
PHILADELPHIA	80	-16	392	35	21
PITTSBURGH	111	-16	660	67	73
SCRANTON	135	4	736	103	31
R.I. PROVIDENCE	131	14	705	167	178
S.C. CHARLESTON	19	-20	76	-27	-36
COLUMBIA	39	-13	122	-28	-73
GREENVILLE	39	-26	189	-13	-3
S.DAK. ABERDEEN	134	-53	753	-149	-136
HURON	126	-48	795	-5	-40
RAPID CITY	112	-52	665	-150	-135
SIOUX FALLS	114	-54	729	-52	-52
TENN. CHATTANOOGA	46	-34	225	-25	-24
KNOXVILLE	53	-24	254	12	3
MEMPHIS	0	-65	116	-81	-10
NASHVILLE	41	-39	266	17	4
TEXAS. ABILENE	5	-44	66	-60	-36
AMARILLO	48	-45	263	-32	-40
AUSTIN	0	-27	3	-57	-31
BEAUMONT	0	-25	6	-48	-30
BROWNSVILLE	0	-6	0	-6	-3
CORPUS CHRISTI	0	-7	1	-11	-8
DEL RIO	0	-22	9	-41	-7
EL PASO	23	-36	134	-2	34
FORT WORTH	2	-38	27	-63	-64
GALVESTON	0	-12	0	-22	-20
HOUSTON	0	-19	17	-22	-41
LUBBOCK	31	-47	183	-45	-44
MIDLAND	29	-21	194	76	104
SAN ANGELO	8	-35	80	-25	-3
SAN ANTONIO	2	-21	12	-37	-23
VICTORIA	0	-14	3	-22	-18
WACO	2	-30	23	-52	-27
WICHITA FALLS	6	-48	81	-51	-32
UTAH SALT LAKE CITY	102	-40	484	-132	53
VT. BURLINGTON	147	-8	1068	193	162
VA. LYNCHBURG	70	-21	358	24	5
NORFOLK	62	-1	220	23	56
RICHMOND	62	-17	281	-1	12
ROANOKE	80	-13	422	87	30
WASH. QUILLAYUTE	141	12	1059	-112	-194
SEATTLE-TACOMA	127	-5	658	-159	-76
SPOKANE	207	34	1066	-143	-26
WALLA WALLA	123	-2	452	-58	-157
YAKIMA	169	15	815	-37	-68
W. VA. BECKLEY	92	-35	551	-68	-39
CHARLESTON	81	-21	424	-36	-35
HUNTINGTON	80	-21	415	-30	-46
PARKERSBURG	80	-22	358	-31	-12
WIS. GREEN BAY	121	-45	838	-40	-18
LACROSSE	73	-81	522	-163	-213
MADISON	112	-51	782	-37	-88
MILWAUKEE	94	-59	634	-109	-62
WYO. CASPER	139	-38	889	-35	81
CHEYENNE	145	-25	904	-28	-37
LANDER	155	-35	911	-40	-39
SHERIDAN	141	-38	908	-60	-46

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1. 1978.

Agricultural Weather Facility
USDA South Bldg., Room 1248
Washington, DC 20250

IMMEDIATE – U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

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HARVESTING PROGRESS

PERCENT OF ACREAGE HARVESTED
AS OF NOVEMBER 6

soybeans

	1978	1977	AVG.
ALA	68	49	55
ARK	69	54	53
GA	56	27	NA
ILL	98	88	96
IND	90	80	83
IOWA	98	86	96
KANS	90	65	70
KY	80	68	62
LA	89	70	69
MICH	80	65	85
MINN	99	96	98
MISS	75	62	52
MO	84	58	70
NEBR	95	85	90
NC	38	14	23
OHIO	90	90	90
SC	40	18	20
TENN	85	67	42
TEX	68	69	62
U.S.	85	71	76

THESE 19 STATES PRODUCED 96%
OF THE 1977 U.S. SOYBEAN CROP.

sorghum

	1978	1977	AVG.
COLO	69	88	63
KANS	90	80	60
MO	80	77	71
NEBR	95	85	85
OKLA	53	57	57
S DAK	95	85	88
TEX	90	97	96
7 STATES	88	86	79

THESE 7 STATES PRODUCED 93%
OF THE 1977 U.S. SORGHUM CROP.

corn

	1978	1977	AVG.
GA	92	92	NA
ILL	88	75	80
IND	75	70	55
IOWA	93	76	72
KANS	95	90	70
KY	83	80	79
MICH	65	45	60
MINN	94	89	90
MO	75	69	68
NEBR	85	75	70
NC	98	100	88
OHIO	75	70	65
PA	NA	NA	NA
S DAK	87	75	81
TEX	100	100	98
WISC	65	67	72
U.S.	86	76	74

THESE 16 STATES PRODUCED 94%
OF THE 1977 U.S. CORN CROP.

cotton

	1978	1977	AVG.
ALA	83	72	51
ARK	84	73	87
GA	77	47	NA
LA	91	78	58
MISS	93	84	63
MO	90	84	61
NC	60	57	49
OKLA	12	23	9
SC	88	70	66
TENN	90	83	52
TEX	33	61	38
11 STATES	51	65	46
CALIF	30	NA	NA

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

NA NOT AVAILABLE