

# WEEKLY WEATHER AND CROP BULLETIN

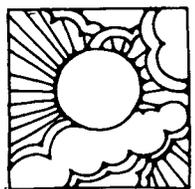
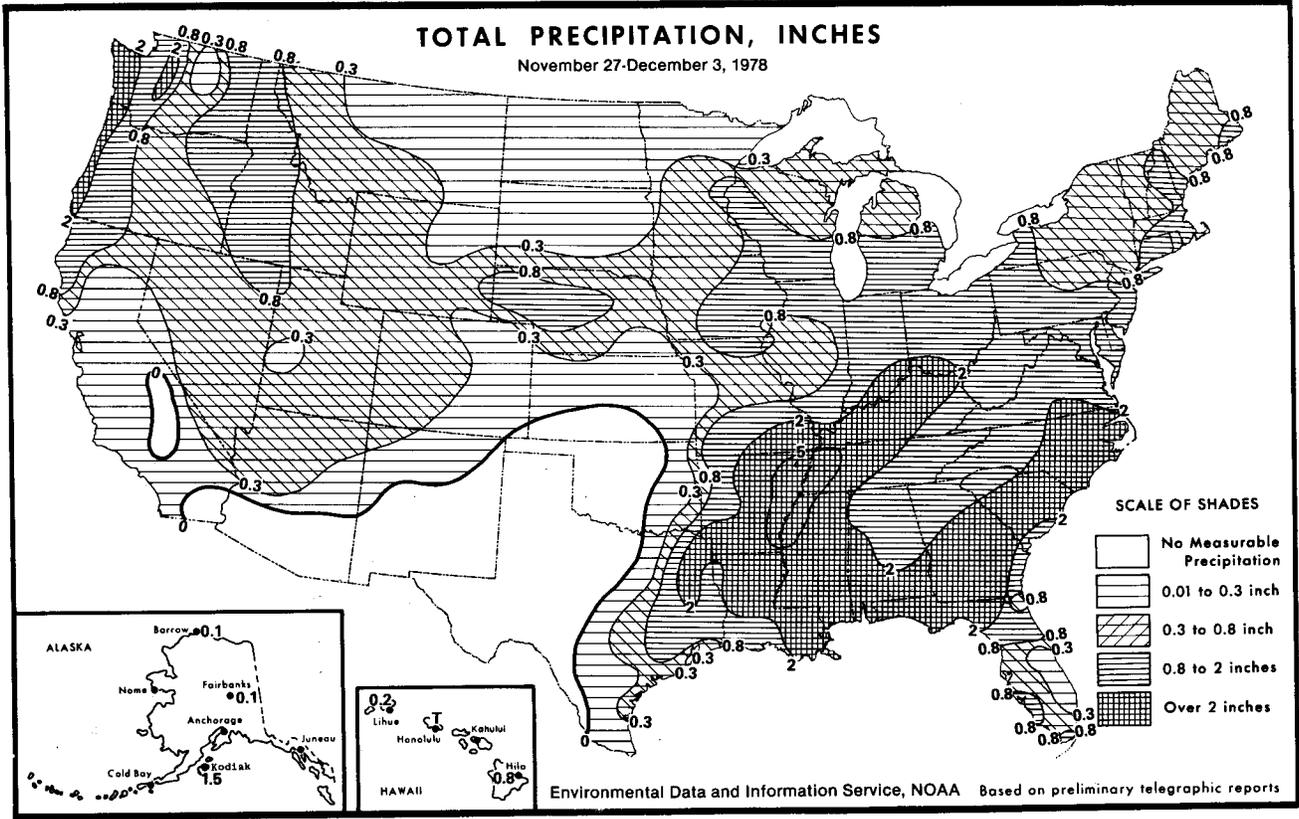
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## National Weather Summary

November 27 - December 3

**HIGHLIGHTS:** Both ends of the week brought hefty rains to the eastern slopes of the Appalachians and the Southeast. Severe weather battered an area from East Texas to western Kentucky. Elsewhere seasonally moderate rains dampened the Northwest with snow in the northern Plateau Region and northern half of the Rockies. Snowcover extended southward through Iowa and Nebraska.

From the Rockies across the Great Lakes to New England and southward to the Texas Panhandle, temperatures dropped to colder than normal. The greatest departure from normal saw the northern Plains record readings 18 to 21 degrees colder

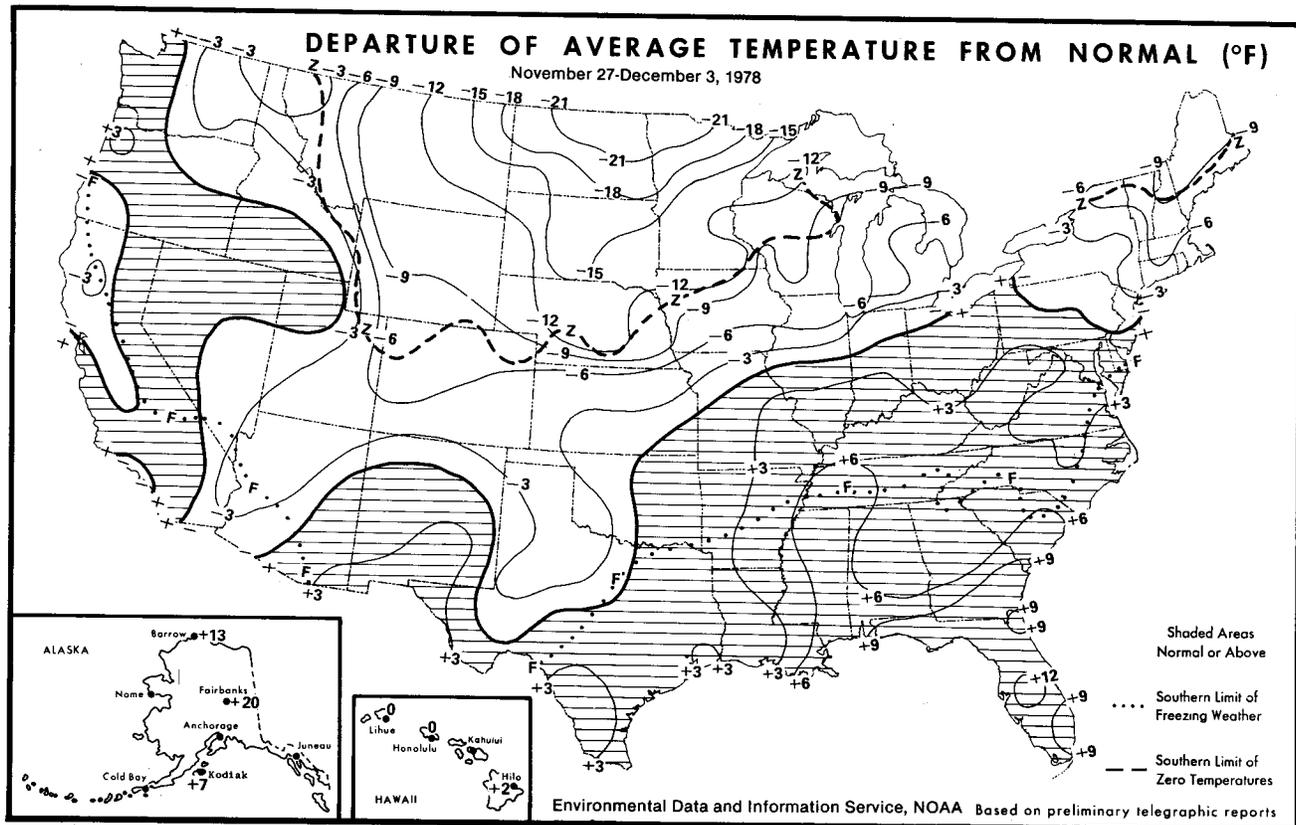
than expected this time of year. Single-digit readings dipped as far south as Oklahoma.

The northern half of the East Coast awoke to a white Monday; 3 inches of snow blanketed Baltimore and Washington, D.C., and extended northward later in the day. Light snow also fell from the upper Mississippi Valley across the Great Lakes.

Other areas of snow included the Pacific Northwest where Spokane, eastern Washington, collected an inch and the Rockies where Leadville, central Colorado, notched 8 inches.

Heavy rains drenched the Gulf Coast and stretched up the southern Atlantic Seaboard. New Orleans tallied a 24-hour total of 4 inches; Biloxi, southern Mississippi, received more than an inch; and Apalachicola, on Florida's peninsula, chalked up an inch and one-quarter. Points in East Texas and northeastern Arkansas noted 2 to 3 inches.

On Tuesday, a cold front pushed heavy snows ahead into the northern sections of the Rockies and Plains; up to 9 inches covered some Idaho stations.



Snow also fell from Minnesota through the Great Lakes to New England. Some portions reported as much as 15 inches. Snow and up to three-quarters inch of rain dotted the Northwest and northern California.

Late in the day, temperatures hovered well below zero along the northern tier with high winds gusting in the Rockies.

An intense low pressure system brought snow to the upper Midwest and Great Lakes on Wednesday. International Falls, northern Minnesota, counted more than a foot. Snow and biting cold persisted in the Rockies and extreme northern Plains; Salt Lake City saw an inch of snow. Rainstorms dumped more than an inch along the Gulf Coast States through the Tennessee Valley to the lower half of the Atlantic Coast. The Carolinas measured one to 2 inches.

Unusual warmth settled over Florida; both Jacksonville, at 85°, and Daytona Beach, at 87°, topped old records by 3 degrees. The reading at Daytona Beach was its warmest ever this late in the year.

A stationary front lying over the Southeast continued to drop as much as 2 inches of rain on Georgia and the Carolinas on Thursday. Light snow fell over the Midwest, Great Lakes, and New England while heavier amounts accumulated in western Colorado.

A frontal system drove into the Pacific Northwest and reached the northern Plateau Region by day's end. A half-inch to more than an inch of rain cut into Washington, Oregon, and northern California. In Washington's Cascade Mountains and its eastern slopes, snow collected quickly. Stampede Pass got 7 inches to add to the 20 already fallen; Spokane reported a half-foot.

Half-inch rains dampened parts of Florida, and a tornado touched down near Tampa.

On Friday, a cold front spread snow from the Great Lakes Region to the Rockies. Cedar Rapids, east central Iowa, marked up to 10 inches of snow while Chicago called in 5 inches. More than a foot of snow fell in the mountainous regions west of the Great Plains. The front pulled very cold air behind the snow; International Falls, Minn., was chilled by a record -25°, down 5 degrees from the former mark.

Another cold front carried rain to Florida where 1 to 3 inches soaked the northern part and about an inch fell to the south.

A winter storm continued to spread snow from the Rockies to the Plains on Saturday; about 12 inches blanketed a large portion of Nebraska. Chicago counted 10 inches of snow from the day before; as midnight approached, freezing rain glazed the city.

At nightfall the storm center passed through Missouri moving northeastward, but not before triggering a tornado in Springfield, central Arkansas. Hail pelted southeastern Missouri.

Temperatures warmed considerably over Florida; Key West's record-breaking 86° topped the 1947 reading by 3.

Sunday warm air ahead of a cold front set off devastating tornadoes in the Nation's Delta Region. Four twisters ripped northeastern Mississippi; northern Louisiana and southern Arkansas counted several tornadoes. Numerous deaths, many injuries, and extensive damage marked this unusual winter weather.

Meantime rain fell heavily to the northeast. Memphis gathered nearly five and one-half inches of rain; Nashville measured 3.83 in.; and Louisville reached 2.8 inches. Four inches soaked an area from west central to northeastern Arkansas.

Even further north, heavy snows whitened the upper Midwest and Great Lakes. Totals ranged from

(continued on backcover)



## National Agricultural Summary

November 27-December 3

**HIGHLIGHTS:** Winter storms struck many areas of the United States particularly the Pacific Northwest and the eastern half of the Nation. Rains held fieldwork to three days or less throughout the South where some crops were still being harvested. Cotton picking in the 11 southern States reached 60%, well behind last year's 91% and the 75% average. Slow progress in Oklahoma and Texas held the harvest percent to that low level. Soybean harvest was virtually complete except in the Southeast which ranged from 74 to 90%. Corn harvest was virtually complete. Grain sorghum harvest centered in Texas and Oklahoma. Rains replenished topsoil moisture, and most areas rated adequate with the exception of the Southeast and some parts of the Great Plains. Winter wheat scored fair to good with the additional moisture and snowcover in the northern areas. Southern pastures rated mostly fair but improving.

**SMALL GRAINS:** Winter wheat rated fair to good throughout most of the Nation. Rains and snow provided improved growing conditions.

Texas wheat seedings were virtually complete; some farmers may replant to establish better stands. Wheat on the High and Low Plains made good growth and furnished fair to good grazing. Oklahoma wheat rated good and had adequate soil moisture. Cattle grazed 18% of the acreage. Kansas wheat showed normal condition for this time of the year gaining additional soil moisture and relief from low temperatures. Winter wheat in Nebraska and the Dakotas scored fair to good with rain and snowcover improving conditions in the northern Plains. In the Pacific Northwest, rain, snow, and mild temperatures improved growing conditions and may help establish dry-seeded wheat.

Rains across the South improved germination and put the crop in fair to good condition.

**COTTON:** Cotton harvest in the 11 major southern States struggled to 60%, shy of last year's 91% and the 75% average. Picking in most States was complete with the exception of North Carolina at 90%, Georgia at 96%, Oklahoma at 28%, and Texas at 42%. Texas cotton harvest resumed on the High and Low Plains under clear skies. A hard freeze defoliated most stands and picking should move rapidly if clear weather continues. Backlogs began developing at some gins. The Arizona harvest was about done, and farmers prepared fields for later plantings. A hard freeze aided the New Mexico cotton harvest with picking 25% complete; in the previous 10 years, the lowest amount ginned by December 1 was 64%. Rains slowed the California harvest which stood at 75%.

**OTHER CROPS:** The Nation's corn harvest was nearly finished with only a few States reporting some fields to be picked. These included Georgia at 97% and Virginia at 95%. Indiana farmers also had some areas remaining to harvest.

Soybean combining was virtually complete in the north central States and well along in the south central States. Rain delayed the Arkansas harvest and the Oklahoma harvest stood at 87%. In the Southeast, harvest surpassed last year by 10 to 15 points and ranged from 74 to 90% complete.

Grain sorghum harvest centered in Oklahoma and Texas where progress ranged from 80% in Oklahoma to 95% in Texas. Both States lagged last year's pace.

**FRUITS AND NUTS:** Orchard growers pruned trees and grapevines in several States including New Jersey, South Carolina, and Virginia. Orchard maintenance reached a standstill in the Pacific Northwest because of rainy weather. Pecan picking continued across the South with progress at 65% in Georgia and 72% in Louisiana.

Rains improved Florida citrus trees, but growers supplemented moisture-short areas with irrigation. Orange harvest increased and more concentrate plants opened. The Texas citrus harvest continued. The Arizona citrus harvest moved actively in the Yuma and central areas. California grapefruit volume increased, desert lemon picking continued, Navel color improved.

**VEGETABLES:** Florida vegetable crops rated fair to very good with conditions improving. Warm weather speeded growth. Harvests were very active with overall shipments up 11% from the previous week. Supplies of cabbage, chinese cabbage, and lettuce increased considerably. Carrots, celery, eggplant, escarole, peppers, squash, and tomatoes also registered moderate increases. Shipments of other crops held steady or declined. Texas growers harvested bell peppers, cabbage, cucumbers, spinach, carrots, and broccoli. California harvested light amounts of artichokes, brussels sprouts, and cabbage and moderate supplies of broccoli, cauliflower, and celery. Lettuce harvest continued in the desert. Market tomato picking continued in the South.

**PASTURE AND LIVESTOCK:** Snow covered most northern pastures, but feed remained adequate and accessible in most areas. Grazing was available as far north as Kentucky in the eastern half of the Nation. Pastures across the South rated mostly fair, however, rain improved growing conditions. Texas cattle continued to move to wheat pastures and stalk stubble. Recent freezing temperatures should promote curing of warm season grasses. Arizona stock tanks were full, but forage was short. Rains improved California grass growth reducing the need to feed supplemental forage. Florida grasslands rated fair to good; rains improved pastures in northern areas.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Dec. 3, 1978

States and Stations	Temperature of		Precipitation Inches		States and Stations	Temperature of		Precipitation Inches		States and Stations	Temperature of		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham.	52	+4	1.4	+ .3	LA. Baton Rouge.	57	+2	1.5	+ .4	Youngstown.	34	-0	1.2	+ .6
Mobile.	61	+6	2.0	+ .8	Lake Charles.	58	+1	.8	+ .4	OKLA. Okla. City	42	-2	0	- .3
Montgomery.	56	+5	1.4	+ .4	New Orleans.	63	+6	2.1	+ 1.0	Tulsa.	45	+1	T	- .4
ALASKA Anchorage.	---	---	---	---	Shreveport.	54	+2	1.2	+ .3	OREG. Astoria.	46	+2	3.0	+ .6
Barrow.	5	+13	.1	- 0	MAINE. Caribou	13	-11	.5	- .2	Burns.	33	+2	.7	+ .3
Fairbanks.	15	+20	.1	- .1	Portland.	26	-6	.8	- .3	Medford.	38	-2	1.1	+ .3
Juneau.	---	---	---	---	MD. Baltimore.	41	+1	1.7	+ .9	Pendleton.	37	-1	1.4	+ 1.0
Kodiak.	39	+7	1.5	+ .3	MASS. Boston.	35	-4	1.1	0	Portland.	44	+1	1.6	+ .2
Nome.	---	---	---	---	Chatham.	40	---	1.7	---	Salem.	47	+4	1.6	+ .1
ARIZ. Flagstaff.	28	-4	.7	+ .3	MICH. Alpena.	23	-6	.4	- .1	PA. Allentown.	34	-2	.9	0
Phoenix.	54	-1	0	- .1	Detroit.	30	-4	1.2	+ .7	Erie.	34	0	1.2	+ .4
Tucson.	56	+2	0	- .2	Flint.	28	-4	.8	+ .3	Harrisburg.	38	0	1.0	+ .2
Winslow.	38	0	.3	+ .2	Grand Rapids.	25	-7	.9	+ .3	Philadelphia.	39	-1	1.5	+ .7
Yuma.	56	+3	0	- .1	Houghton Lake.	23	-5	.4	- .1	Pittsburgh.	36	+1	1.6	+ 1.0
ARK. Fort Smith.	47	-2	.2	- .5	Lansing.	26	-6	1.1	+ .6	Scranton.	32	-2	.4	- .3
Little Rock.	48	+3	1.6	+ .6	Marquette.	19	-9	.4	- .2	R.I. Providence.	34	-3	1.2	+ .1
CALIF. Bakersfield.	54	+3	.3	+ .1	Muskegon.	25	-8	.9	+ .2	S.C. Charleston	60	+8	1.9	+ 1.3
Eureka.	48	-2	1.7	+ .2	S. Ste. Marie.	17	-9	.6	- .1	Columbia.	54	+5	2.3	+ 1.6
Fresno.	48	-1	.3	- .1	MINN. Duluth.	7	-14	.3	- .1	Greenville.	49	+3	1.7	+ .9
Los Angeles.	57	-3	T	- .5	Internat Falls.	5	-21	.2	- .1	S.D. Aberdeen.	7	-16	.1	0
Red Bluff.	53	-4	T	- .8	Minneapolis.	14	-11	.5	+ .3	Huron.	12	-13	-1	0
San Diego.	59	0	.1	- .3	Rochester.	10	-15	.4	+ .2	Rapid City.	20	-10	.2	+ .1
San Francisco.	52	0	.2	- .5	St. Cloud.	6	-12	.5	+ .3	Sioux Falls.	14	-12	.4	+ .2
Stockton.	49	0	.2	- .3	MISS. Jackson.	56	+5	2.8	+ 1.7	TENN. Chattanooga.	49	+5	1.7	+ .6
COLO. Denver.	28	-7	.3	+ .2	Meridian.	56	+6	2.3	+ 1.2	Knoxville.	48	+4	1.6	+ .7
Grand Junction.	27	-7	.7	+ .6	MO. Columbia.	41	+3	.3	- .1	Memphis.	52	+6	5.6	+ 4.5
Pueblo.	33	-3	.2	+ .1	Kansas City.	36	-1	.1	- .2	Nashville.	49	+5	4.0	+ 3.1
CONN. Bridgeport.	35	-5	.9	0	St. Louis.	42	+3	.4	- .1	TEX. Abilene.	47	-3	0	- .2
Hartford.	28	-6	.9	- .2	Springfield.	42	+2	1.3	+ .7	Amarillo.	37	-5	T	- .1
D.C. Washington.	44	+2	1.5	+ .8	MONT. Billings.	21	-10	.5	+ .3	Austin.	57	+2	.3	- .2
FLA. Apalachicola.	68	+10	3.7	+ 2.9	Glasgow.	10	-12	.2	+ .1	Beaumont.	61	+4	.5	- .6
Daytona Beach.	73	+11	1.0	+ .6	Great Falls.	20	-10	.3	+ .1	Brownsville.	66	+1	.1	- .2
Ft. Myers.	76	+9	1.4	+ 1.2	Havre.	15	-9	.1	0	Corpus Christi.	65	+3	.3	- .1
Jacksonville.	66	+8	.6	+ .2	Helena.	22	-5	.5	+ .4	Del Rio.	57	+2	T	- .1
Key West.	86	+13	T	- .4	Kalispell.	26	-1	.4	0	El Paso.	51	+4	T	- .1
Lakeland.	---	---	---	---	Miles City.	14	-13	-1	0	Fort Worth.	51	0	T	- .4
Miami.	78	+8	.3	- .1	Missoula.	24	-4	.6	+ .3	Galveston.	61	+1	.3	- .5
Orlando.	72	+9	.2	- .2	NEBR. Grand Island.	18	-14	.5	+ .1	Houston.	59	+2	1.3	+ .3
Tallahassee.	65	+10	2.6	+ 1.7	Lincoln.	22	-10	.3	+ .4	Lubbock.	43	-1	0	- .1
Tampa.	75	+11	.8	+ .3	Norfolk.	19	-11	.7	+ .6	Midland.	46	-3	T	- .1
W. Palm Beach.	75	+7	.1	- .3	N. Platte.	18	-13	.8	+ .7	San Angelo.	51	0	T	- .1
GA. Atlanta.	52	+5	1.3	+ .4	Omaha.	20	-11	.4	+ .2	San Antonio.	59	+3	.2	- .2
Augusta.	53	+4	2.2	+ 1.5	Valentine.	14	-15	.5	+ .4	Victoria.	60	+1	.2	- .3
Macon.	56	+5	2.1	+ 1.3	NEV. Ely.	28	-1	.4	+ .2	Waco.	53	0	T	- .3
Savannah.	62	+9	1.8	+ 1.2	Las Vegas.	46	-2	.8	+ .7	Wichita Falls.	45	-3	T	- .3
HAWAII. Hilo.	74	+2	.8	- 2.9	Reno.	38	+2	T	- .2	UTAH. Blanding.	30	-3	.6	+ .4
Honolulu.	75	0	T	- .8	Winnemucca.	35	+2	.4	+ .1	Salt Lake City.	36	+2	.6	+ .2
Kahului.	76	+2	0	- .6	N.H. Concord.	24	-7	.7	- .2	VT. Burlington.	24	-6	.5	- .1
Lihue.	74	0	.2	- 1.2	N. J. Atlantic City.	41	+1	1.8	+ .8	VA. Lynchburg.	42	0	1.7	+ 1.0
IDAHO. Boise.	37	+2	.9	+ .5	Trenton.	39	-1	1.1	+ .3	Norfolk.	50	+4	1.5	+ .8
Lewiston.	36	-1	.9	+ .6	N. MEX. Albuquerque.	39	0	0	- .1	Richmond.	44	+1	1.6	+ .8
Pocatello.	32	+1	.6	+ .4	Roswell.	46	+4	0	- .1	Roanoke.	41	0	1.3	+ .7
ILL. Cairo.	46	+3	4.8	+ 3.9	N. Y. Albany.	29	-3	.6	- .1	WASH. Colville.	28	-2	.9	+ .4
Chicago.	28	-6	1.4	+ .9	Binghamton.	30	-1	.4	- .3	Omak.	26	-4	.2	- .2
Moline.	25	-7	1.5	+ 1.1	Buffalo.	31	-2	.9	+ .1	Quillayute.	42	0	3.7	+ .3
Peoria.	30	-3	.6	+ .1	New York.	39	-2	.8	- .1	Seattle-Tacoma.	44	+2	1.7	+ .3
Rockford.	23	-8	1.1	+ .6	Rochester.	32	-2	.7	+ .1	Spokane.	29	-3	1.0	+ .4
Springfield.	36	0	.5	0	Syracuse.	31	-3	.6	- .2	Walla Walla.	38	-1	1.7	+ 1.3
IND. Evansville.	42	+3	1.5	+ .7	N.C. Asheville.	45	+3	1.7	+ .9	Yakima.	33	-1	.3	0
Ft. Wayne.	33	-1	1.3	+ .7	Charlotte.	49	+3	1.3	+ .6	W.VA. Beckley.	41	+5	1.6	+ .9
Indianapolis.	38	+3	.9	+ .2	Greensboro.	48	+5	1.3	+ .6	Charleston.	45	+5	1.4	+ .7
South Bend.	31	-2	1.3	+ .7	Hatteras.	56	+5	4.2	+ 3.1	Huntington.	42	+2	1.6	+ .9
IOWA. Burlington.	29	-4	.4	0	Raleigh.	47	+2	2.2	+ 1.5	Parkersburg.	40	+1	1.2	+ .6
Des Moines.	23	-8	.9	+ .6	Wilmington.	55	+4	2.7	+ 1.9	WISC. Green Bay.	19	-8	.3	- .1
Dubuque.	21	-8	1.4	+ .9	N. DAK. Bismarck.	6	-15	.1	0	La Crosse.	20	-8	1.4	+ 1.1
Sioux City.	18	-11	.5	+ .3	Fargo.	0	-20	.2	+ .1	Madison.	19	-9	1.0	+ .6
KANS. Concordia.	32	-3	T	- .1	Williston.	2	-19	.1	0	Milwaukee.	25	-5	1.0	+ .6
Dodge City.	35	-2	T	- .1	OHIO. Akron-Canton.	35	+1	1.5	+ .9	WYO. Casper.	20	-9	.3	+ .2
Goodland.	28	-5	.2	+ .1	Cincinnati.	39	+1	2.0	+ 1.3	Cheyenne.	24	-8	.1	0
Topeka.	34	-3	T	- .3	Cleveland.	36	+1	1.0	+ .4	Lander.	16	-10	.4	+ .3
Wichita.	37	-2	T	- .2	Columbus.	37	+2	1.6	+ 1.0	Sheridan.	18	-11	.3	+ .1
KY. Lexington.	43	+4	2.7	+ 1.9	Dayton.	37	+1	1.7	+ 1.1	P.R. San Juan.	81	+3	1.0	- .2
Louisville.	45	+6	3.0	+ 2.2	Toledo.	31	-2	1.0	+ .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 6° above normal. Rainfall generally 1.00 to 3.00 in. all areas; near 5.00 in. some southern areas.

Fieldwork: 3.0 days suitable. Soil moisture mostly adequate. Livestock care main activity. Crop harvest virtually complete. Small grains 80% seeded. Wheat, pastures mostly fair condition.

**ARIZONA:** High pressure early, weak weather disturbance 1st produced rain over central, northern mountains. Temperatures 1 to 3° below normal except north central, northwest 4 to 7° below normal.

Field activities resumed. Cotton harvest full swing, first pick complete most areas. Many fields complete, prepared for later crops. Sorghum harvest about complete, fall sugarbeet harvest winding down. Spring beets, good growth. Alfalfa haying seasonally slow. Planting small grains increasing. Lettuce harvest full volume Yuma area, tapering off central area. Harvest broccoli, cauliflower, other mixed vegetables increasing. Planting winter, early spring crops about complete. Citrus harvest active Yuma, central areas. Moisture started winter annuals growing. Stock tanks full, adequate soil moisture. Cattle, calves good condition. Due to good prices, shortages of forage, some herd reduction. Many ranchers have little reserve winter, spring feed.

**ARKANSAS:** Rainfall abundant most areas; amounts ranged 1.00 to 4.00 in. Temperatures few degrees above normal. Extremes: 74 and 22°.

Cotton and soybean harvest limited; delayed by rain and wet soils. Small grain plantings good condition; growth improved with recent moisture and normal temperatures. Soil moisture adequate to surplus. Pasture grazing below average to average. Cattle fair to good condition; improving where small grain pastures available; marketings steady.

**CALIFORNIA:** Rain or snow reported virtually all areas. Temperature averages a mixed bag with all areas showing some above normal as well as some below normal. Warmest temperatures in south and coldest northeast interior and Sierra. Precipitation greatest higher Sierra Nevada and extreme north coast, and San Joaquin Valley averaged close to 0.25 in.

Rain slowed cotton harvest. Cotton 75% harvested. Dry bean harvest complete San Joaquin Valley. Discing field crop stubble active San Joaquin Valley. Rain slowed winter grain planting. Corn fields continue harvested. Sugarbeets being harvested. Milo remains to be harvested. Alfalfa being sheeped off. Pruning, spraying and pulling taking up most time in orchards and vineyards. Avocado harvest light. Coachella Valley Cardinal table grape harvest finished this week. Quality excellent citrus maturity tests improving. Grapefruit volume increasing. Desert lemon picking continuing. Navel orange coloring well; harvest increasing. Quality good to very good. Walnut and almond pruning continued. Artichoke, brussels sprouts, cabbage harvested light amounts. Broccoli, cauliflower, carrot, celery supplies moderate. Lettuce harvest complete San Joaquin Valley, continues desert. Market tomatoes finished San Joaquin Valley, continues south. Ranges, pastures showing growth. Supplemental feeding tapering off; pastures furnish more feed. Calving, lambing continued.

**COLORADO:** Light snow in mountains early week followed by major storm 1st that dropped 3 to 4 feet of snow. Amounts at lower elevations averaged 2 to 4 in. Temperatures cold in west. Warm east early week, late in week temperatures dropped as low as zero to -5° in east and down to -25° in mountains following storm.

**FLORIDA:** Showers moved into Panhandle, 27th, preceding weak cold front. Front remained stationary over north through 29th. Low pressure formed along front over north central Gulf areas. Low continued to intensify and began moving south by 2d and dissipated with a high pressure ridge dominating on 3d. Front brought moderate to heavy rainfall with heaviest over Panhandle and north sections; most amounts averaging 0.25 to 0.75 in. Temperatures continued above normal.

Soil moisture mostly short. Recent rain helpful some areas west, north. Soybean harvest about complete. Sugarcane harvest full swing. Pecan harvest practically complete. Planting small grains behind schedule; early planted grains mostly poor condition. Pasture conditions improved Panhandle, north. Many local areas still need rain. Central and southern pastures good condition. Cattle good condition. Rain improved citrus tree condition; more moisture needed all areas, irrigation continues. Orange harvest increasing, more concentrate plants opening. Vegetable crops fair to very good, some excellent; condition improving. Growth rapid due to warmer weather. Harvest very active. Overall shipments up 11% from previous week. Supplies cabbage, chinese cabbage, lettuce up considerably. Carrots, celery, eggplant, escarole, peppers, squash, tomatoes increased. Shipments snap beans, okra held steady. Sweet corn, cucumbers, radish supplies decreased. Quality, size, yields mostly good. Fruit sizing well. Poor market conditions slowing harvest. Strawberry condition fair to good; growth very good. Warm weather holding back some fruit set. First harvest expected late December but will be light due to light fruit set.

**GEORGIA:** Rainfall 1.00 to 3.00 in. Temperatures 3° above normal north to 8° above normal south.

Soil moisture short to mostly adequate. Fieldwork: 2 days suitable. Corn 97% harvested, same last year. Soybeans poor to mostly fair; 90% combined, 75% last year. Cotton mostly fair to good; 96% picked, 81% last year. Apples 99% picked, 100% last year. Pecans mostly fair to good; 65% gathered, 74% last year. Wheat 67% seeded, 88% last year. Rye 70% seeded, 93% last year. Other small grain 70% seeded, 91% last year. Pastures poor to fair condition. Cattle mostly fair to good. Hogs fair to mostly good.

**HAWAII:** Weather improving. Showers light, mainly windward and central areas. Occasional low nighttime temperatures Islands Hawaii, Maui, slowed crop progress.

Vegetable supplies generally light. Banana supplies light to moderate. Papaya: Disease occurring, yields declining. Pineapple harvesting slow. Few sugar mills stopped grinding. Pastures generally good.

**IDAHO:** Temperatures below normal first 4 days of week, above normal balance of week. High tempera-

tures generally in 40's. Precipitation widespread but southeast received least. Most precipitation 1.06 in. Snow in higher elevations.

Precipitation good for fall seeded crops. Most livestock receiving supplemental feed.

ILLINOIS: Temperatures 4 to 8° below normal north, 3° above normal south. Precipitation 0.50 to 1.33 in. northern two-thirds, 4.75 in. extreme south, 3 to 7 in. snow north.

Minimal fieldwork of fall plowing and applying fertilizer. Winter wheat mostly good. Livestock generally good condition. Soil moisture adequate.

INDIANA: Rainy south; snow, freezing rain and rain north. Temperatures 2° above normal south, 3° below normal north. Precipitation 1.30 in. south, 1.00 in. central, and 0.80 in. north. Snowcover of few inches extreme north.

Wet fields hampered field activity until late in period. Some harvesting and tilling completed 1st. Other activities: Storing equipment, hauling manure, stripping tobacco, caring for livestock.

IOWA: Temperatures 9° subnormal. Moderate to heavy precipitation on 30th, 1st, and 2d fell as snow, rain, freezing rain, or drizzle south and east and mostly as snow northwest. Weekend snowcover from 2 to 4 in. south; 5 to 10 in. north and east central. Much of south and east central moderate to locally heavy ice accumulation. Season's first subzero temperatures occurred on 28th.

KANSAS: Precipitation generally less than 0.10 in. resulting from rain southeast and freezing drizzle followed by snow elsewhere during weekend. Temperatures averaged 29° northwest to 42° southeast or 2° above normal southeast to 1 to 4° below normal elsewhere.

Wheat condition normal; relief from cold and additional moisture improved wheat outlook. Surface moisture generally adequate; subsurface moisture short.

KENTUCKY: Light rain at midweek and abundant rainfall during weekend. Rainfall averaged 3.00 to 4.00 in. Temperatures near or a little above normal. Highs in 40's and 50's. Lows in 30's.

Some late fall fieldwork prior to heavy rain over weekend. Surplus rain fell certain areas, but will replenish moisture in subsoil before winter season. Damp weather favorable for tobacco stripping. Livestock satisfactory condition, many still on pasture.

LOUISIANA: Temperatures 2 to 6° above normal. Extremes: 87 and 34°. Rain statewide.

Fieldwork: 2.9 days suitable. Soil moisture adequate. Cotton and soybean harvest virtually complete. Sugarcane 78% harvested, 64% last year, 67% average. Oat and wheat 99% planted, 97% last year. Pecans 72% harvested, 87% last year. Pasture fair. Cattle fair to good; supplemental feeding.

MARYLAND & DELAWARE: Temperatures 2° below normal. Highs in 40's, lows in 30's. Precipitation widespread with 0.75 to 2.00 in. rain. Weekend cloudy and mild with rain 3d.

MICHIGAN: Temperatures ranged from 4° below normal in southern Lower to 12° below normal in Upper. Sub-zero temperatures reported in Upper. Maximum temperatures reached 40's to near 50's. Precipitation from 0.25 to 1.60 in. resulting in snow as deep as 22 in. at Keweenaw Peninsula.

Main farm activities: Chores, repair of farm machinery, and feeding livestock.

MINNESOTA: Temperatures 18° below normal north and 12° below normal south. Extremes: 38 and -30°. Precipitation near normal north, 0.20 in. above normal south. Precipitation ranged from 0.15 in. northwest to 0.51 in. east central. Snowfall 1 to 4 in. north, 6 to 11 in. south. Depth ranged from 4 to 6 in. west and central, 10 to 14 in. north central through northeast, southeast into east central.

MISSISSIPPI: Temperatures 1 to 7° above normal. Extremes: 27 and 82°. Widespread rainfall early and midweek with heaviest amounts in coastal area.

Soil moisture adequate. Fieldwork: 2.0 days suitable. Rains finally came statewide. Harvest completion interrupted but condition of winter grazing crops improved. Soybeans 98% harvested, 83% 1977, 84% average. Cotton 100% harvested, 96% 1977, 89% average. Corn 100% harvested, 96% 1977, 94% average. Winter wheat 93% planted; fair condition. Pastures poor to fair condition; livestock fair.

MISSOURI: Temperatures averaged 1° above normal northwest, 5° above normal Bootheel and 2 to 3° above normal elsewhere. Precipitation general; Kansas City area received less than 0.50 in.; 2.00 to 3.00 in. common in Bootheel; elsewhere averaged over 1.00 in.

MONTANA: Cold, snowy. Temperatures 5 to 10° below normal east of Divide, near normal west. Coldest temperatures near end of week. Precipitation above normal with some areas of heavy snow. Strong winds caused considerable drifting snow.

Winter wheat condition and snowcover good. Soil moisture adequate. Livestock condition good. Supplemental feeding: cattle 80%, sheep 90%. Grazing difficult. Stockwater adequate.

NEBRASKA: Temperatures 10 to 15° below normal. Precipitation statewide with snow measuring 2 to 6 in.

Rain and snow improved soil moisture supplies and winter wheat condition. Topsoil and subsoil moisture short to adequate. Winter wheat condition fair to good. Fieldwork: 1.9 days suitable.

NEVADA: Temperatures warmed slightly above normal midweek, cold storm near end of period. Precipitation recorded all areas. Temperature extremes: 64 and 1°.

Cotton harvest continued. Caring for livestock main ranch activity.

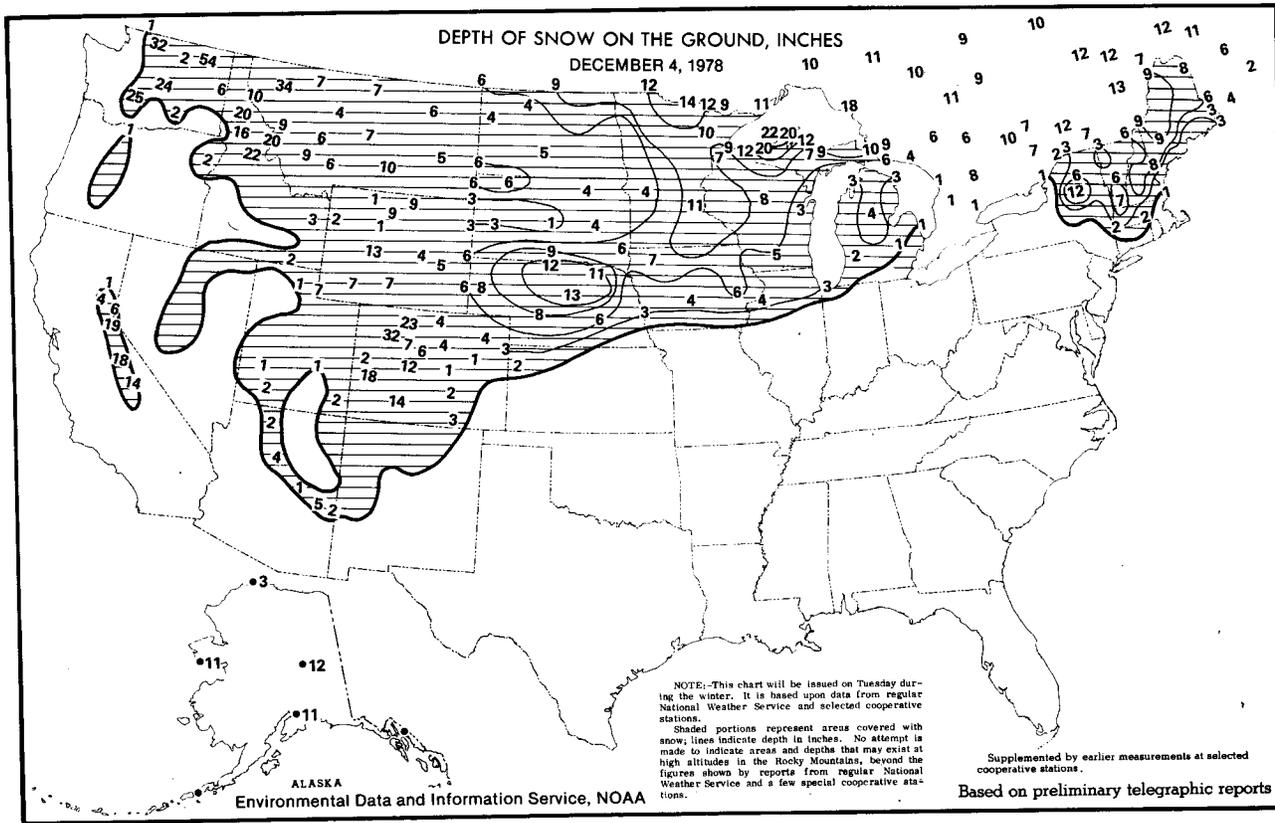
NEW ENGLAND: Temperatures 10 to 20° subnormal early and late week, near normal midweek. Snow 1 to 4 in. south; 6 to 10 in. 3 northern States 27th and 28th. Rain 0.50 to 0.75 in. south and 0.25 to 0.50 in. Maine and New Hampshire coasts late 29th. Third storm occurred on 3d.

NEW JERSEY: Temperatures 2 to 5° below normal, averaging 33° north, 37° south and 40° coastal. Extremes: 15 and 63°. Precipitation above normal southern and coastal sections; 0.86 in. north, 1.20 in. south and 1.70 in. coastal. Snow storm on 27th.

Field activity very limited; mainly fruit pruning, machinery repair, caring for livestock, moving crops from storage.

NEW MEXICO: Cold beginning of week warming through midweek then turning much colder weekend. Light rain and snow early week and again 2d.

Mostly clear dry weather permitted long delayed harvest to resume full swing by late week on cotton, grain sorghum, peanuts, pecans, red chili. Hard killing freeze all areas aiding harvest of cotton,



pecans, grain sorghum. Cotton 25% harvested; in previous 10 years lowest amount ginned by December 1 was 64%. Grain sorghum 70% complete, 100% last year. Pecans starting full swing. Alfalfa balers-cubers active cleaning up last of crop. Livestock continue mostly good condition.

**NEW YORK:** Temperatures in mid-20's to mid-30's; few degrees below normal. Precipitation 0.25 in. north to 1.75 in. Long Island. Most areas received 0.50 to 1.00 in.

**NORTH CAROLINA:** Temperatures near normal. Extremes: early week 10 to 15° above normal; weekend 10 to 15° subnormal. Daily rainfall 1.00 to 2.00 in. statewide. Rain heaviest southeast.

Fieldwork: 2.2 days suitable. Soil moisture adequate to surplus. Condition wheat poor to fair; oats, barley and rye fair to mostly good; pasture mostly fair to good. Harvested: Soybeans 74%, 1977 64%, average 76%; cotton 90%, 1977 88%, average 88%; sorghum 95%, 1977 94%, average 94%. Planted: Wheat 90%, 1977 88%; oats 95%, 1977 91%; barley 96%, 1977 92%; rye 93%, 1977 92%.

**NORTH DAKOTA:** Temperatures 15 to 20° below normal. Frost penetrated soil deeper than 20 in. through parts of east. Precipitation light and averaged less than 0.10 in.

Marketing stored grain slow due to boxcar shortage. Some problems with insects in stored grain. Winter wheat and rye fair to good. Snow-cover ranges from 2 to 18 in.; average about 6 in. Feed supplies appear to be adequate and accessible. Pastures mostly snowcovered. Most livestock receiving supplemental feed.

**OHIO:** Temperatures slightly below normal in northwest and slightly above normal in northeast. Cen-

tral and southern sections held near normal. Temperatures ranged from 15 to 60°. Precipitation slightly above normal with nearly all falling over weekend.

With heavy weekend rains, fall plowing virtually over for year.

**OKLAHOMA:** Precipitation sparse ranging from less than 0.10 in. north to 0.65 in. southeast. Temperatures near normal ranging from 1 to 2° above normal northeast to 2 to 3° below normal remainder.

Topsoil moisture adequate, subsoil supplies short in Panhandle, northeast, east central; adequate elsewhere. Wheat good condition with 18% grazed. Most of wheat belt has adequate supplies of moisture. Cotton harvest 28% complete, 68% 1977, 44% normal. Sorghum harvest 80% complete 1978 and normal, 96% 1977. Peanut harvest virtually complete. Soybean harvest 87% complete, 90% 1977, 71% normal. Range and pastures rated fair, but a lot of supplemental feeding required. Fieldwork: 4.3 days suitable.

**OREGON:** Precipitation well above normal. Rainfall along coast ranged from 2.75 to 3.75 in. Interior valley of west rainfall ranged from 1.14 to 2.36 in. Eastern amounts generally 0.30 to 0.80 in. Temperatures near to a little below normal. Maximum temperatures ranged in 40's and 50's. Extremes: Mid-50's, high 20's west; low 50's, low teens east.

Farm activity slowed considerably since middle of last week as rains finally came. All areas received some moisture, but whether the combination of rain and temperatures is enough to germinate a lot of dry seeded grain remains to be seen. Livestock in good shape. Sheep on ryegrass pasture doing well. Lambing beginning. Most farmers now supplemental feeding, many earlier than usual. Native pasture is nil.

**PENNSYLVANIA:** Seasonably cold with precipitation beginning, midweek, and end of period totaling 0.75 to 2.00 in. falling mostly as rain; 1 to 2 in. new snow north. Temperatures 20's to 40's. Extremes: 4 and 53°. Normal winter chores.

**PUERTO RICO:** Island average rainfall 0.39 in. or 0.76 in. below normal. Temperatures averaged about 78° on coasts and 72° interior. Extremes: 91 and 54°.

**SOUTH CAROLINA:** Above normal temperatures. Cloudy with frequent rains.

Soil moisture adequate. Fieldwork: 2 days available. Scrapping cotton about finished, 89% harvested last year. Soybeans all mature; 83% harvested, ahead of 70% last year. Sorghums held at 89% harvested, 86% last year. Small grains fair to good, benefitted by rains. Winter grazing 94% planted, same as last year; emergence improved, presently 86% compared to 91% last year. Pastures improved to fair condition, grazing supply short for winter season. Livestock condition good, improved with favorable weather. Pruning peach, apple trees, grape vines. Still harvesting some pecans.

**SOUTH DAKOTA:** Cold temperatures prevailed; average readings 9 to 17° below normal. Extremes: -20 and 42°. Precipitation in form of snow; rain-equivalent amounts ranged up to 0.50 in. east, up to 0.61 in. west.

**TENNESSEE:** High pressure early week; severe thunderstorms weekend. Rainfall heavy, amounts 4.00 in. mid-state to 6.00 in. west. Some wind damage. Temperatures 4 to 7° above normal.

Cotton, corn, soybean harvest virtually complete. Tobacco stripping 90% complete. Pastures poor. Rain should help cattle on supplemental feed. Small grain seeding complete; germination improved with rain.

**TEXAS:** Cold front moved through State early week leaving partly cloudy skies, cool temperatures. Warm temperatures 1st abruptly halted as cold front moved across State. Scattered thundershowers occurred parts East Texas, upper Gulf Coast. Temperatures below normal East Texas, Panhandle, High Plains areas. Temperatures above normal southwest, south central Texas, lower Rio Grande Valley. No rainfall or traces recorded from Panhandle, High Plains, far West Texas. Rainfall above normal over East Texas. Elsewhere rainfall below normal.

Clear, warm weather allowed farmers to return to fields toward end of week and resume harvest operations that had been at standstill for nearly three weeks. Wheat, oats excellent growth; grazing fair to good, prospects favorable for late planted fields most areas. Cotton harvest resumed on High, Low Plains as clear skies returned. Most stands defoliated by hard freeze; harvest activity promises to move at rapid pace if weather permits. Few gins building up backlogs as harvesting accelerated. Sorghum harvest continues lag behind schedule. Fair weather allowed farmers to resume harvest toward end of week. Peanut harvest on schedule; most fields dug, continued dry weather needed to finish threshing crop. Wheat seeding essentially complete; some farmers Blacklands considering replanting to establish better stands. Wheat High, Low Plains good growth many fields furnishing fair to good grazing. Oat seeding on schedule. Most stands providing good to excellent grazing. Few fields east, south central Texas too wet to support livestock. Flax seeding about on schedule. Relatively warm weather provided near

ideal growing conditions south Texas. Cotton harvested 42%, 92% 1977, 73% average. Peanuts harvested 98%, 98% 1977, 98% average. Pecans harvested 64%, 65% 1977, 61% average. Sorghum harvested 95%, 100% 1977, 100% average. Sugarbeets harvested 77%, 100% 1977, 90% average. Sunflowers harvested 100%, 100% 1977, 98% average. Soybeans harvested 96%, 98% 1977, 97% average. Flax planted 62%, 65% 1977, 64% average. Oats planted 99%, 99% 1977, 98% average. Wheat planted 100%, 98% 1977, 99% average.

Lower Rio Grande Valley harvest bell peppers, cabbage remained light result of low prices. Cucumber harvest near completion. Seeded onions making good progress, transplanting continued. Citrus harvest continued. Coastal Bend cucumber harvest near completion. Producers applying fertilizer in preparation for spring. Laredo harvest cabbage, bell peppers, spinach active. San Antonio-Winter Garden harvest carrots, cabbage active. Broccoli, spinach cutting underway. Some spinach suffering from disease. Diseases continued plague onion, cabbage. East Texas showers brought relief to fall, winter vegetables. High Plains carrot supplies running low. Trans-Pecos cabbage harvest active. Fall-seeded onions emerged at El Paso. Bell peppers being picked in Pecos area. Pecan harvest winding down in South Texas. Harvest activity should increase in north, central Texas following frost, freezing temperatures.

Livestock in fair to good condition. On High Plains, cattle continued move to wheat pasture and stalks. Native ranges short, some grazed out. Recent freezing temperatures should promote curing warm season grass. Although ranges short, cool season grass, legumes begun to respond to rains in north central, East Texas. Supplemental feeding continued. Winter grazing prospects improved and fall lambing active in Edwards Plateau. Native ranges, pastures providing adequate grazing in southeast, along upper Gulf Coast. South Texas and Trans-Pecos ranges and livestock in good to excellent condition.

**UTAH:** Recurring rain and snow; amounts light to moderate but locally heavy. Temperatures variable ranging from 8° below normal to 6° above.

Soil moisture improving. Doing routine chores, caring for livestock. Sugarbeet processing continuing, along with sorting, grading and marketing potatoes, onions and apples from storage.

**VIRGINIA:** Temperatures near normal. Extremes: 68 and 19°. Rainfall about 1.50 in. occurring as rain mostly on 27th, 28th and 30th except some snow northwest on 27th.

Topsoil moisture mostly adequate. Livestock watering supply mostly adequate. Pastures, winter grazing condition mostly fair. Fieldwork: 2.5 days suitable. Heavy rains delayed field activity but helped improve small grains, pastures, subsoil water reserves. Some small grain still spotty but warm weather helped germination and growth. Soybean 90% combined, 64% 1977. Corn 5% still in field; 24% sorghum still standing. Feed supply adequate. Livestock condition good. Calving, lambing started in most areas. Mild temperatures helped newborn. Other activities: Pruning fruit trees southwest, corn shelling, small grain seeding, fertilizing, plowing. Tobacco grading and marketing active.

**WASHINGTON:** West: Temperatures near normal. Precipitation ranged from 2.00 in. below normal to 0.80 in. above normal.

Farm activity sparse. Carrot digging continued as weather permitted. Livestock on supplemental feed.

East: Temperatures 1 to 4° below normal. Precipitation ranged from slightly below to 0.50 in. above normal.

Sugarbeet digging underway again in previously frozen fields. Orchard activity at standstill due to weather. Rain and snow welcome in winter grain giving needed moisture and protective cover. Livestock continue on supplemental feed.

WEST VIRGINIA: Temperatures 1 to 3° above normal. Precipitation 0.25 to 0.50 in. above normal. Frosts midweek, warming trend by weekend.

Fieldwork: 2.4 days suitable. Soil moisture adequate to surplus. Main activities: Picking corn, feeding livestock. Small grains good condition. Wet weather slowed corn picking and stripping tobacco. Livestock good condition, about 50% fed hay. Hay supply adequate. Grain supply adequate.

WISCONSIN: Temperatures below normal. Several periods of snow. Snowfall 1 to 2 in. 27th, 1 to

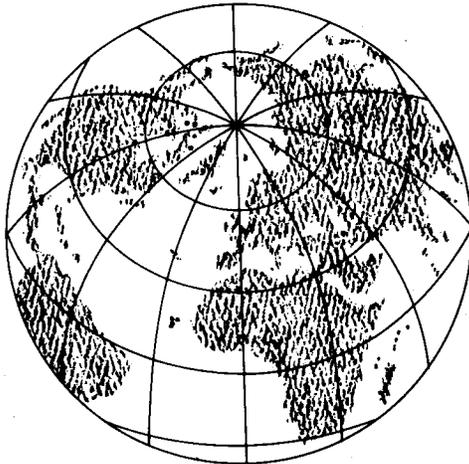
3 in. 28th to 29th, 1 to 4 in. December 1st extreme south near Illinois border, and 2 to 6 in. 2d and 3d with heaviest amounts south and west central. Coldest temperatures of season evening of 29th at 22° below extreme north. Snowcover limiting frost penetration. Frost depths averaged 1 in. as of December 1st. Snow depths averaged 4 in. but increased with weekend snow.

WYOMING: Precipitation widespread. Most drainage areas above normal amounts. Temperatures mostly below normal; departures as much as 10° below normal Big Horn drainage. Maximums mostly 30's and 40's and minimums near zero to slightly above.

Most winter wheat has snowcover. Ranges, pastures mostly good although many heavily snow covered. Supplemental feeding necessary in many areas due to snowcover. Livestock good condition with no unusual death losses.

## World Weather and Crop Update

November 27 - December 3



USSR. The first substantial snowfall of the season blanketed the Ukraine late in the week. The snow was equivalent to 20 to 50 mm of water, much above normal for this time but sorely needed. It was followed by colder temperatures ranging down to -12° C, but hopefully the snowcover was sufficient to protect the wheat crop. Snowfall occurred in normal amounts across the northern agricultural areas.

PEOPLE'S REPUBLIC OF CHINA. In most areas of the PRC, precipitation was no more than a few millimeters. The only area with greater amounts (10 to 20 mm) was the upper Yangtze River Valley with somewhat reduced rains from the previous several weeks but a normal pattern for this season.

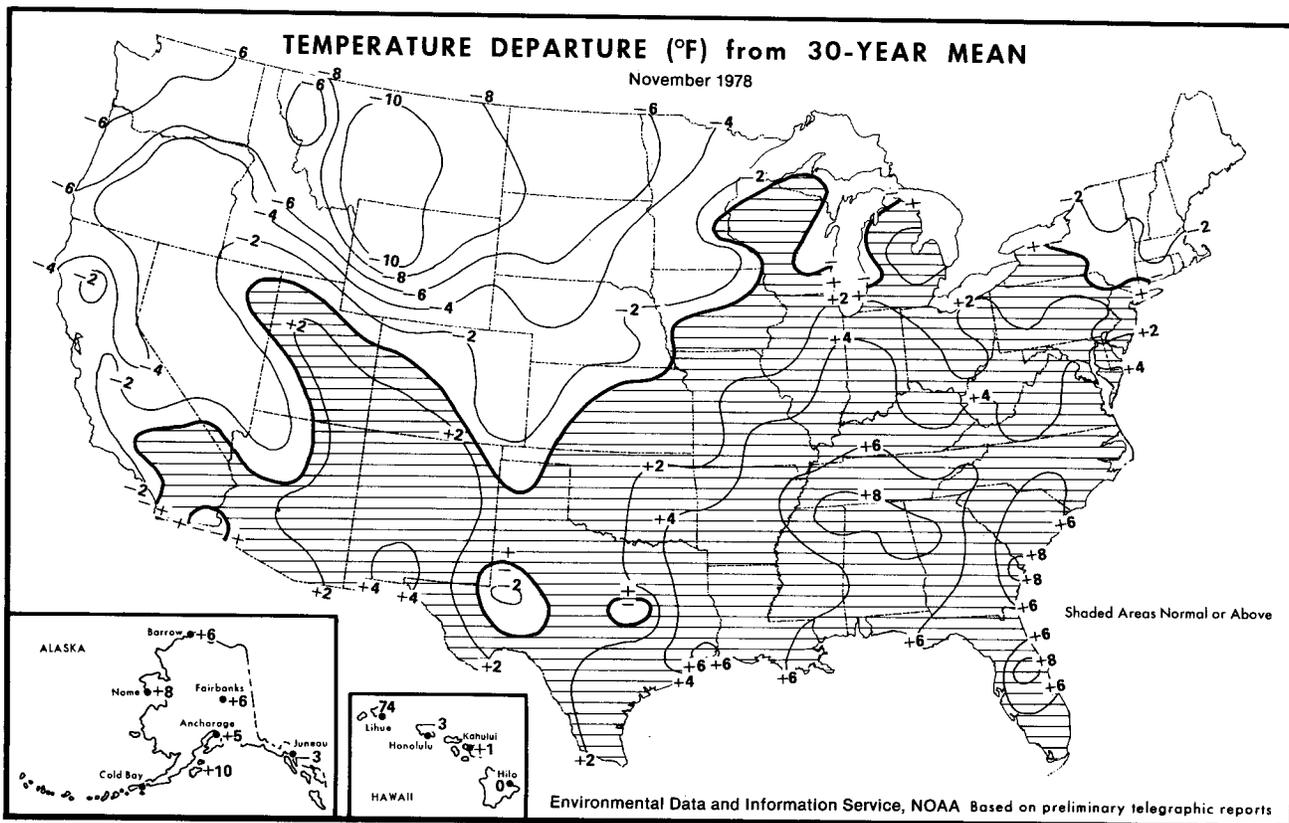
AUSTRALIA. As the wheat harvest continued, rains of 10 to 15 mm fell along the leading edge of the harvest in southeastern New South Wales. To the west only light amounts fell, and to the north there was none, so the harvest was probably not impeded.

INDIA. Abundant rains of 30 to 70 mm fell over much of the highland areas in central India. This is the southern portion of the winter wheat belt where irrigation water may not have been so plentiful during the dry autumn; these rains will benefit the crop immensely. The southern peninsula had rainfall only along the east coast, which was drier than normal.

AFRICA. Above-normal rains of 30 to 50 mm in northern Morocco should allow sowing of wheat to begin there, although soil moisture is not yet up to par. Coastal areas of Algeria continued to be dry in the west and wet in the east with some heavy rains of more than 100 mm. In southern Africa's Maize Triangle, rainfall was generally normal (20 to 30 mm) as planting was being completed. The crop should have sufficient, though not abundant, soil moisture.

EUROPE. Most of southeastern Europe received above-normal precipitation of 20 to 40 mm providing some relief from a prolonged dry spell. France continued with light but below-normal precipitation, and rains of 30 to 60 mm over much of the western half of Spain were above normal helping the winter wheat crop. However, dry conditions persisted in eastern Spain. Precipitation in northern Europe was variable, ranging from 5 mm to a much-above-normal 45 mm.

SOUTH AMERICA. Rainfall in most soybean areas of Brazil was only light (5 to 15 mm), but cumulative totals for the past several weeks have been sufficient for the most part and excessive in some areas of Rio Grande do Sul. In Argentina, above-normal rains of 30 to 60 mm continued to disrupt fieldwork in the corn belt and northern portions of the wheat belt. The quality of wheat from this year's harvest may take a downturn, and the area planted to corn will surely be reduced.



### November Weather Summary

**HIGHLIGHTS:** Rain during November eased the dry spell along the eastern slopes of the Appalachians from Virginia southward and brought a respite to the drought in the Southeast. The severe drought in Oklahoma and Arkansas has probably ended as well because more than twice the normal rain fell in those areas. Totals of 5 to 7 inches generally fell over the driest areas. Above-normal precipitation soaked a wide area from Arizona, New Mexico, and Texas northeastward to the western Lakes area. Heavy snow accumulated over the northern Rockies. The snow line extended southward in the Plains through Nebraska. Temperatures were colder than normal in the Pacific Northwest, the Plateau, most of California, and the Great Plains from Nebraska northward. Temperatures in parts of Montana and Wyoming averaged 11 degrees colder than a normal November. The East and South enjoyed warmer than normal weather.

November began with very dry areas along the east slopes of the Appalachians from Virginia southward through the Southeast and in eastern Oklahoma and western Arkansas. The first five days of the month brought no precipitation to these areas but parts of New Mexico and Southwest Texas were deluged with 3 to 5 inches of rain. Flooding on the Rio Grande resulted. Most of the Nation averaged warmer than normal during this first week. Averages such as 12 degrees warmer than normal were noted throughout the Mississippi River Valley.

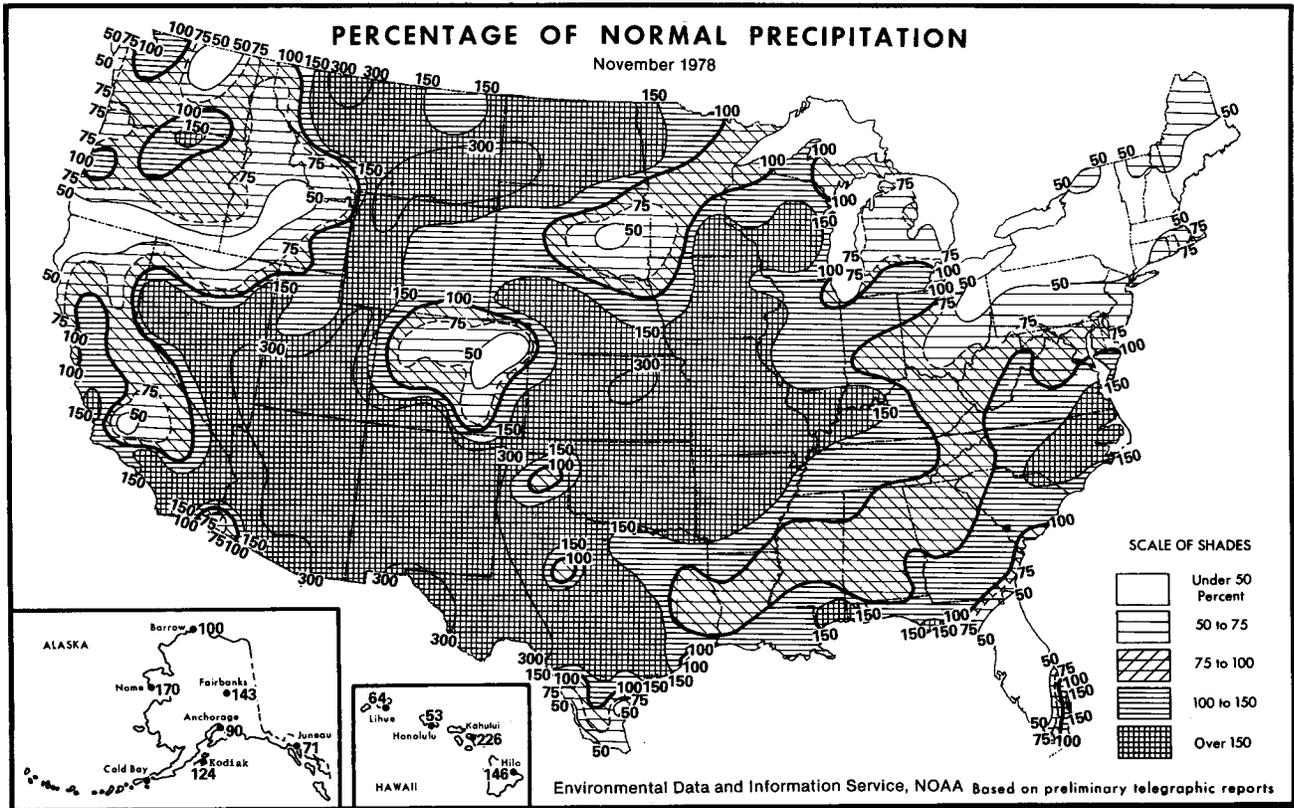
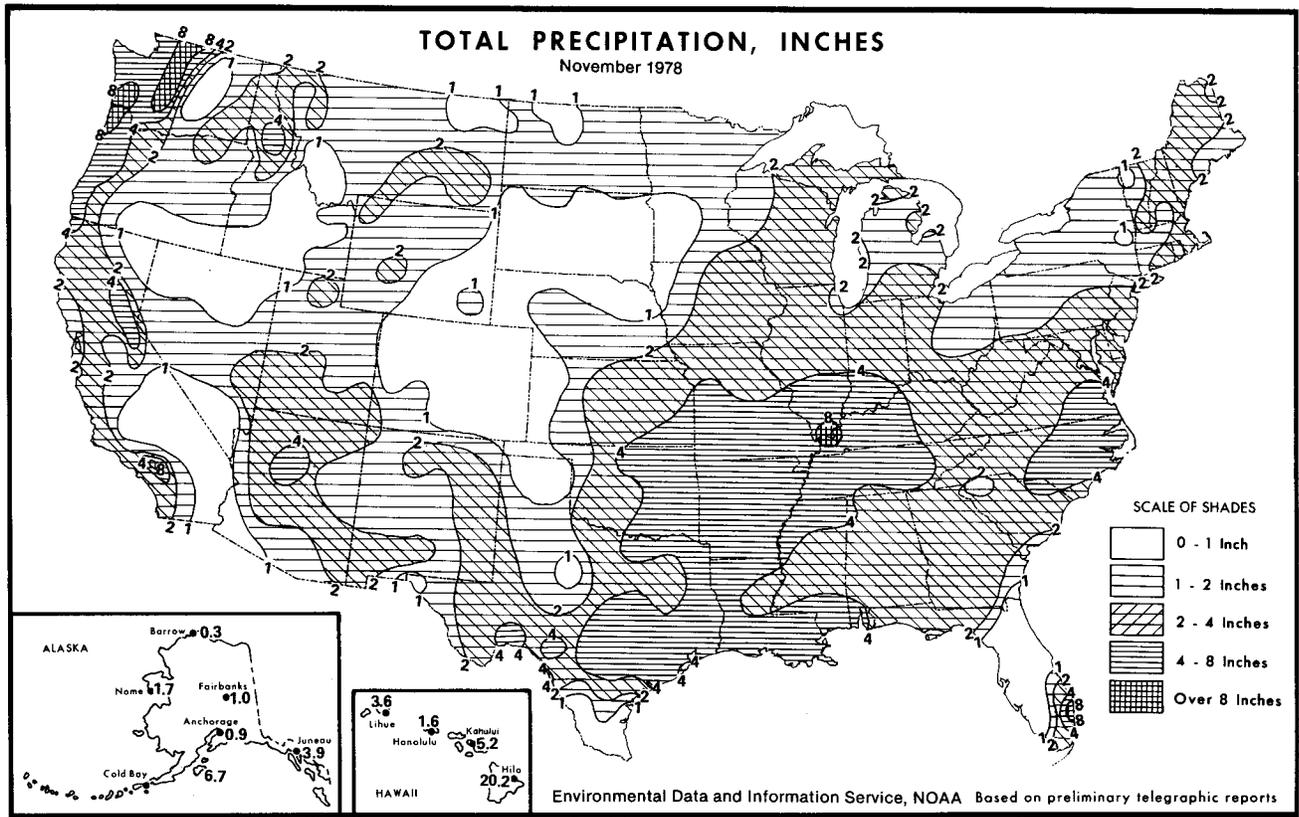
The second week of November, the 6th to 12th, saw some precipitation recorded in nearly all of the U.S. One exception turned up in the very dry portion of south central and southeastern Georgia. The other very dry areas had small amounts of rain. Heavy snow and strong winds followed by record cold weather moved into Montana and plunged southward to Arizona. The cold outburst brought sub-zero temperatures into Montana and the average for

the week in that area dipped 12 degrees colder than normal. The Southwest and east of the Rockies remained warmer than normal.

At mid-November (the 13th to 19th) an upper air disturbance in the Southwest kicked off a series of storm systems that brought heavy rain from eastern Texas into Indiana. Totals of 2 to 5 or more inches fell in the very dry portions of eastern Oklahoma and western Arkansas. Elsewhere, rain again dampened the east slopes of the Appalachians, lowering the fire danger there; however southern Georgia and most of Florida had no rain. The cold air enveloped all of the West and only the area east of the Great Plains averaged warmer than normal.

From November 20 to 26th, another upper air disturbance moved southward along the Pacific Coast and into the Southwest. Rain, some heavy, moved through California and into the Southwest. Elsewhere heavy rain occurred from central Texas along the Gulf Coast to southern Alabama. For the second consecutive week, the area from southern Missouri through the western Ohio Valley accumulated over 2 inches of rain. The southeastern quadrant was again rainless. Warmer air pushed back into the Southwest leaving only the northern half of the States colder than normal, but the below zero readings in Montana averaged twenty-one degrees below normal.

The last period of the month---through Friday, November 30th---brought very welcome relief to the dry areas along the Appalachians and the Southeast. General rains of over an inch covered the Appalachians and more than 2 inches were quickly absorbed in southern Georgia and northern Florida and extended northward to eastern North Carolina. Heavy accumulations of rain were recorded throughout the South, the Mississippi Valley, and the southern Lakes area. The colder than normal air moved eastward into the Plains. Snowcover extended southward in the Plains through Nebraska.



Temperature and Precipitation Data for November 1978

States and Stations	Temperature OF		Precipitation Inches		States and Stations	Temperature OF		Precipitation Inches		States and Stations	Temperature OF		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	58	+ 6	2.7	- 1.0	LA. Baton Rouge . . .	63	+ 4	4.9	+ 1.1	Youngstown . . .	42	+ 2	1.4	- 1.6
Mobile . . .	65	+ 6	5.1	+ 1.7	Lake Charles . . .	64	+ 4	4.1	0	OKLA. Okla. City . . .	50	+ 1	2.9	+ 1.5
Montgomery . . .	62	+ 7	3.1	- .3	New Orleans . . .	67	+ 7	4.7	+ .8	Tulsa . . .	52	+ 3	5.5	+ 3.6
ALASKA Anchorage . . .	26	+ 5	.9	- .1	Shreveport . . .	60	+ 4	4.2	+ .8	OREG. Astoria . . .	42	- 5	8.4	- 1.4
Barrow . . .	5	+ 6	.3	0	MAINE Caribou . . .	28	- 3	1.8	- 1.7	Burns . . .	33	- 3	1.2	- .2
Fairbanks . . .	9	+ 6	1.0	+ .3	Portland . . .	36	- 3	2.3	- 2.6	Medford . . .	39	- 5	1.5	- 1.6
Juneau . . .	30	- 3	3.9	- 1.6	MD. Baltimore . . .	49	+ 3	2.7	.4	Pendleton . . .	38	- 3	2.4	+ .9
Kodiak . . .	45	+10	6.7	+ 1.3	MASS. Boston . . .	44	- 1	2.2	- 2.3	Portland . . .	39	- 6	3.8	- 1.8
Nome . . .	24	+ 8	1.7	+ .7	Chatham . . .	45	- 1	3.4	—	Salem . . .	39	- 6	4.5	- 1.6
ARIZ. Flagstaff . . .	35	- 1	6.2	+ 4.9	MICH. Alpena . . .	36	+ 1	1.6	- .9	PA. Allentown . . .	44	+ 2	2.0	- 1.6
Phoenix . . .	62	+ 2	2.3	+ 1.8	Detroit . . .	41	+ 1	2.4	+ .1	Erie . . .	41	+ 1	1.5	- 2.2
Tucson . . .	59	0	1.6	+ 1.0	Flint . . .	41	+ 3	1.4	- .9	Harrisburg . . .	47	+ 3	2.1	- 1.1
Winslow . . .	46	+ 3	1.3	+ .9	Grand Rapids . . .	38	+ 1	1.8	- 1.0	Philadelphia . . .	48	+ 2	2.2	- 1.2
Yuma . . .	63	- 1	.1	- .1	Houghton Lake . . .	36	+ 2	1.3	- 1.2	Pittsburgh . . .	43	+ 2	1.6	- .9
ARK. Fort Smith . . .	53	+ 3	7.1	+ 4.0	Lansing . . .	40	+ 2	2.6	+ .3	Scranton . . .	41	- 1	1.0	- 2.0
Little Rock . . .	55	+ 5	6.6	+ 2.7	Marquette . . .	34	0	2.7	- .3	R.I. Providence . . .	42	- 1	2.6	- 1.9
CALIF. Bakersfield . . .	57	+ 1	.2	- .5	Muskegon . . .	38	- 1	2.4	- .6	S.C. Charleston . . .	63	+ 7	1.9	- .2
Eureka . . .	48	- 4	2.4	- 3.4	S. Ste. Marie . . .	32	- 1	2.6	- .7	Columbia . . .	60	+ 6	3.0	+ .7
Fresno . . .	52	- 2	1.3	+ .1	MINN. Duluth . . .	26	- 2	1.3	- .4	Greenville . . .	56	+ 5	1.9	- 1.2
Los Angeles . . .	58	- 5	2.3	+ .3	Internatl Falls . . .	21	- 4	1.6	+ .3	S.D. Aberdeen . . .	24	- 6	.8	+ .2
Red Bluff . . .	53	- 1	2.6	- .5	Minneapolis . . .	33	+ 1	1.8	+ .6	Huron . . .	29	- 3	.3	- .4
San Diego . . .	62	+ 1	2.1	+ .8	Rochester . . .	29	- 4	2.0	+ 1.0	Rapid City . . .	29	- 6	.6	+ .1
San Francisco . . .	53	- 2	1.7	- .6	St. Cloud . . .	28	- 2	1.0	- .1	Sioux Falls . . .	31	- 2	.5	- .4
Stockton . . .	52	- 1	1.7	0	MISS. Jackson . . .	60	+ 5	3.3	- .6	TENN. Chattanooga . . .	55	+ 6	2.8	- 1.1
COLO. Denver . . .	38	- 1	.5	- .3	Meridian . . .	59	+ 5	3.1	- .4	Knoxville . . .	54	+ 5	3.6	0
Grand Junction . . .	41	+ 1	.6	0	MO. Columbia . . .	47	+ 3	3.2	+ 1.4	Memphis . . .	58	+ 7	5.6	+ 1.7
Pueblo . . .	39	- 2	.2	- .2	Kansas City . . .	44	0	3.9	+ 2.4	Nashville . . .	54	+ 6	4.0	+ .5
CONN. Bridgeport . . .	47	+ 1	1.7	- 2.1	St. Louis . . .	48	+ 3	4.5	+ 2.0	TEX. Abilene . . .	55	+ 1	.9	- .3
Hartford . . .	39	- 2	2.1	- 2.2	Springfield . . .	47	+ 1	6.1	+ 3.8	Amarillo . . .	46	0	.5	0
D.C. Washington . . .	52	+ 4	2.3	- .6	MONT. Billings . . .	25	-11	2.3	+ 1.6	Austin . . .	61	+ 2	5.5	- .5
FLA. Apalachicola . . .	66	+ 5	4.4	+ 1.7	Glasgow . . .	21	- 8	.5	+ .1	Beaumont . . .	67	+ 7	4.8	+ .5
Daytona Beach . . .	71	+ 6	.1	- 2.0	Great Falls . . .	24	-11	1.4	+ .6	Brownsville . . .	71	+ 3	.8	- .5
Ft. Myers . . .	74	+ 5	T	- 1.3	Havre . . .	21	- 9	1.2	+ .7	Corpus Christi . . .	67	+ 2	.5	- 1.1
Jacksonville . . .	65	+ 4	.8	- 1.0	Helena . . .	23	- 9	1.2	+ .6	Del Rio . . .	61	+ 1	3.4	+ 2.7
Key West . . .	78	+ 3	1.8	- .9	Kalspell . . .	26	- 5	1.4	0	El Paso . . .	56	+ 4	.5	+ .2
Lakeland . . .	—	—	—	—	Miles City . . .	23	- 9	2.2	+ 1.7	Fort Worth . . .	58	+ 2	2.7	+ .7
Miami . . .	76	+ 4	3.2	+ .5	Missoula . . .	27	- 5	1.0	0	Galveston . . .	67	+ 3	3.0	- .2
Orlando . . .	72	+ 9	.2	- 1.4	NEBR. Grand Island . . .	35	- 3	1.4	+ .8	Houston . . .	65	+ 4	6.0	+ 2.0
Tallahassee . . .	64	+ 5	3.7	+ .9	Lincoln . . .	37	- 2	1.5	+ .6	Lubbock . . .	50	+ 1	1.1	+ .6
Tampa . . .	72	+ 5	T	- 1.8	Norfolk . . .	35	- 1	.8	+ .2	Midland . . .	50	- 3	2.3	+ 1.8
W. Palm Beach . . .	74	+ 3	11.0	+ 8.5	N. Platte . . .	32	- 4	1.0	+ .5	San Angelo . . .	56	0	1.8	+ .9
GA. Atlanta . . .	59	+ 8	3.0	- .4	Omaha . . .	37	- 1	1.1	+ .1	San Antonio . . .	62	+ 2	4.9	+ 3.1
Augusta . . .	59	+ 5	2.5	+ .3	Valentine . . .	30	- 5	.6	+ .1	Victoria . . .	65	+ 2	2.9	+ .6
Macon . . .	61	+ 6	2.1	- .3	NEV. Ely . . .	30	- 4	1.4	+ .7	Waco . . .	57	- 1	4.6	+ 2.3
Savannah . . .	65	+ 8	1.9	0	Las Vegas . . .	54	+ 1	.6	+ .2	Wichita Falls . . .	53	0	2.1	+ .7
HAWAII. Hilo . . .	74	0	20.2	+ 6.4	Reno . . .	37	- 3	1.3	+ .6	UTAH. Blanding . . .	40	+ 2	2.7	+ 1.9
Honolulu . . .	75	- 3	1.6	- 1.4	Winnemucca . . .	35	- 2	.6	- .4	Salt Lake City . . .	41	+ 2	1.7	+ .4
Kahului . . .	76	+ 1	5.2	+ 2.9	N. H. Concord . . .	35	- 3	1.8	- 2.2	VT. Burlington . . .	35	- 2	1.0	- 1.9
Lihue . . .	74	- 1	3.6	- 2.0	N. J. Atlantic City . . .	48	+ 2	3.0	- 1.2	VA. Lynchburg . . .	50	+ 3	3.2	+ .5
IDAHO. Boise . . .	37	- 3	1.1	- .2	Trenton . . .	47	+ 1	2.1	- 1.2	Norfolk . . .	56	+ 4	4.4	+ 1.5
Lewiston . . .	35	- 6	1.1	- .2	N. MEX. Albuquerque . . .	48	+ 3	1.0	+ .7	Richmond . . .	53	+ 4	4.6	+ 1.4
Pocatello . . .	32	- 4	1.4	+ .3	Roswell . . .	49	+ 2	1.3	+ 1.0	Roanoke . . .	50	+ 3	2.6	+ .1
ILL. Cairo . . .	52	+ 4	7.8	+ 6.9	N. Y. Albany . . .	39	- 1	.9	- 1.9	WASH. Colville . . .	—	—	—	—
Chicago . . .	42	+ 2	1.9	- .3	Binghamton . . .	39	+ 1	1.3	- 1.8	Omak . . .	31	- 4	.4	- 1.2
Moline . . .	39	0	3.3	+ 1.4	Buffalo . . .	40	0	1.6	- 2.1	Quillayute . . .	40	- 4	6.7	- 7.1
Peoria . . .	41	+ 1	2.5	+ .5	New York . . .	48	+ 1	2.2	- 1.6	Seattle-Tacoma . . .	41	- 4	6.1	+ .2
Rockford . . .	38	0	2.5	+ .1	Rochester . . .	41	0	1.1	- 1.7	Spokane . . .	29	- 7	2.0	- .2
Springfield . . .	45	+ 3	2.1	0	Syracuse . . .	40	- 1	1.3	- 2.0	Walla Walla . . .	36	- 7	2.4	+ .5
IND. Evansville . . .	49	+ 4	4.9	+ 1.7	N. C. Asheville . . .	52	+ 6	2.5	- .4	Yakima . . .	32	- 6	.9	- .2
Ft. Wayne . . .	42	+ 2	3.0	+ .3	Charlotte . . .	56	+ 5	2.8	+ .1	W. VA. Beckley . . .	47	+ 5	2.4	- .5
Indianapolis . . .	46	+ 4	2.4	- .7	Greensboro . . .	52	+ 4	3.2	+ .6	Charleston . . .	49	+ 4	2.3	- .5
South Bend . . .	43	+ 3	2.8	+ .1	Hatteras . . .	61	+ 5	6.8	+ 2.3	Huntington . . .	48	+ 2	2.7	- .2
IOWA. Burlington . . .	41	+ 1	2.8	+ 1.2	Raleigh . . .	55	+ 5	4.2	+ 1.6	Parkersburg . . .	46	+ 1	2.2	- .3
Des Moines . . .	39	+ 1	3.2	+ 1.8	Wilmington . . .	60	+ 4	3.7	+ .7	WISC. Green Bay . . .	33	- 1	2.9	+ 1.0
Dubuque . . .	36	0	2.9	+ .4	N. DAK. Bismarck . . .	23	- 6	1.1	+ .5	La Crosse . . .	36	+ 1	3.1	+ 1.6
Sioux City . . .	33	- 3	.7	- .2	Fargo . . .	23	- 6	1.1	+ .4	Madison . . .	34	- 1	3.1	+ 1.2
KANS. Concordia . . .	41	0	2.0	+ 1.2	Williston . . .	21	- 7	.9	+ .4	Milwaukee . . .	38	+ 1	2.1	+ .1
Dodge City . . .	43	0	1.3	+ .7	OHIO. Akron-Canton . . .	43	+ 2	1.1	- 1.4	WYO. Casper . . .	27	- 7	.9	+ .2
Goodland . . .	36	- 3	.7	+ .2	Cincinnati . . .	46	+ 2	2.7	- .4	Cheyenne . . .	34	- 2	.5	- .1
Topeka . . .	43	0	3.2	+ 1.9	Cleveland . . .	44	+ 2	1.2	- 1.6	Lander . . .	21	-11	2.2	+ 1.3
Wichita . . .	45	0	2.2	+ 1.0	Columbus . . .	44	+ 2	1.6	- 1.1	Sheridan . . .	24	- 9	1.5	+ .6
WY. Lexington . . .	48	+ 3	3.1	- .3	Dayton . . .	45	+ 3	2.0	- .6	P.R. San Juan . . .	82	+ 3	5.4	- .1
Louisville . . .	50	+ 5	5.1	+ 1.8	Toledo . . .	40	0	2.5	+ .2					

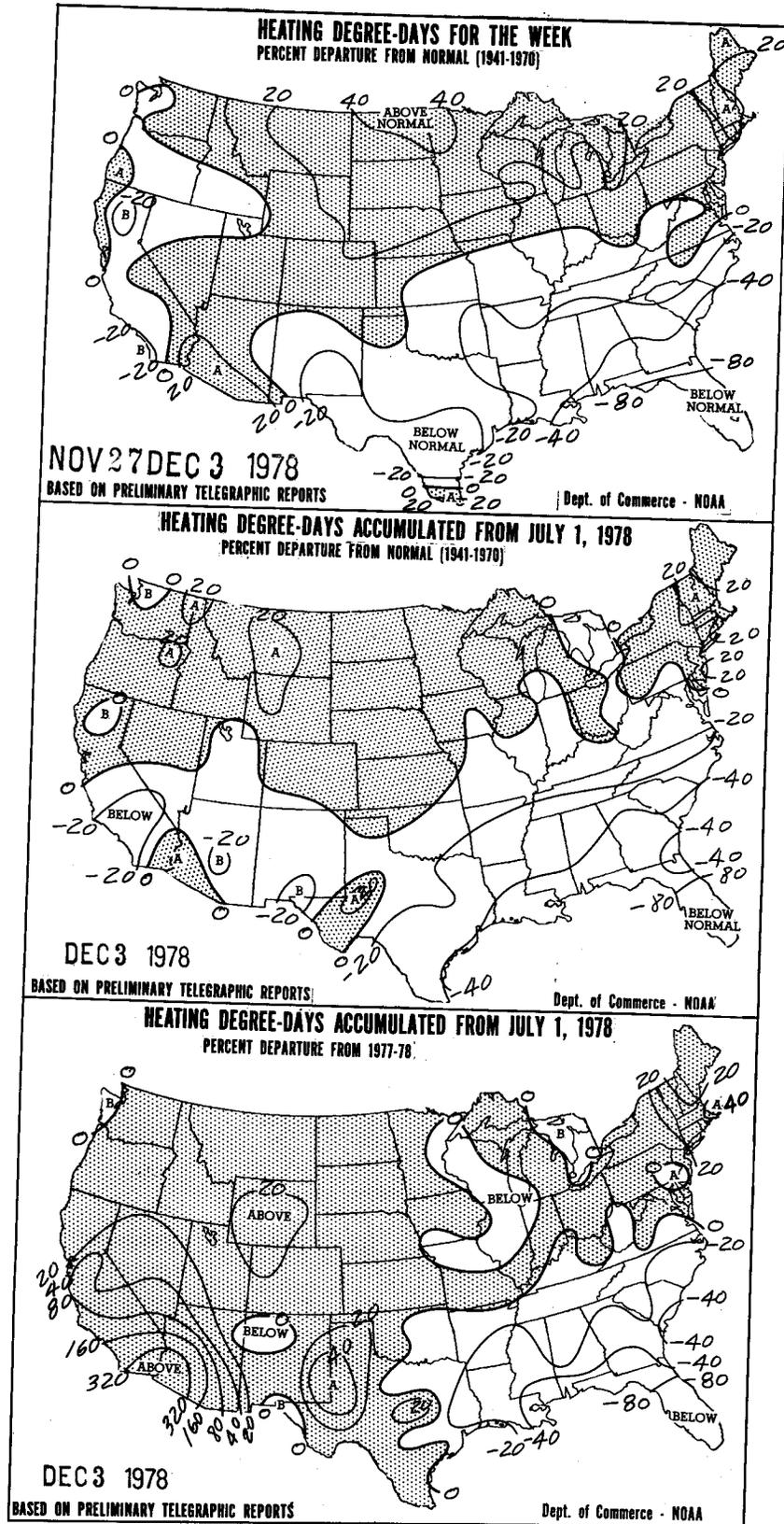
Based on 1941-70 normals

Heating Degree Days (Base 65° F.)

November 1978

ALA. Birmingham . . . . .	222	MAINE, Caribou . . . . .	1114	OKLA. Okla. City . . . . .	437
Mobile . . . . .	53	Portland . . . . .	852	Tulsa . . . . .	406
Montgomery . . . . .	109	MD. Baltimore . . . . .	483	OREG. Astoria . . . . .	693
ALASKA, Anchorage . . . . .	1153	MASS. Boston . . . . .	635	Burns U. . . . .	965
Barrow . . . . .	1786	Chatham . . . . .	581	Medford . . . . .	768
Fairbanks . . . . .	1689	MICH. Alpena . . . . .	862	Pendleton . . . . .	930
Juneau . . . . .	1037	Detroit . . . . .	728	Portland . . . . .	772
Nome . . . . .	1225	Flint . . . . .	725	Salem . . . . .	763
ARIZ. Flagstaff . . . . .	907	Grand Rapids . . . . .	816	PA. Allentown . . . . .	614
Phoenix . . . . .	148	Houghton Lake . . . . .	859	Erie . . . . .	723
Tucson . . . . .	213	Lansing . . . . .	751	Harrisburg . . . . .	544
Winslow . . . . .	573	Marquette U . . . . .	921	Philadelphia . . . . .	507
Yuma . . . . .	136	S. Ste. Marie . . . . .	989	Pittsburgh . . . . .	656
ARK. Fort Smith . . . . .	359	MINN. Duluth . . . . .	1159	Scranton . . . . .	728
Little Rock . . . . .	316	Internatl Falls . . . . .	1329	R. I. Providence . . . . .	673
CALIF. Bakersfield . . . . .	236	Minneapolis . . . . .	968	S. C. Charleston . . . . .	83
Eureka U. . . . .	503	Rochester . . . . .	1069	Columbia . . . . .	162
Fresno . . . . .	382	St. Cloud . . . . .	1115	Greenville . . . . .	276
Los Angeles U . . . . .	209	MISS. Jackson . . . . .	164	S. DAK. Aberdeen . . . . .	1221
Red Bluff . . . . .	353	Meridian . . . . .	178	Huron . . . . .	1070
Stockton . . . . .	398	Vicksburg U . . . . .	--	Rapid City . . . . .	1031
San Diego . . . . .	102	MO. Columbia . . . . .	552	Sioux Falls . . . . .	1004
San Francisco . . . . .	371	Kansas City . . . . .	617	TENN. Chattanooga . . . . .	299
COLO. Denver . . . . .	811	St. Louis . . . . .	529	Knoxville . . . . .	310
Grand Junction . . . . .	737	Springfield . . . . .	535	Memphis . . . . .	230
Pueblo . . . . .	779	MONT. Billings . . . . .	1208	Nashville . . . . .	338
CONN. Bridgeport . . . . .	524	Glasgow . . . . .	1306	TEX. Abilene . . . . .	308
Hartford . . . . .	790	Great Falls . . . . .	1228	Amarillo . . . . .	574
D. C. Washington . . . . .	378	Havre . . . . .	1317	Austin . . . . .	186
FLA. Apalachicola . . . . .	35	Helena . . . . .	1283	Beaumont . . . . .	75
Ft. Myers . . . . .	0	Kalispell . . . . .	1167	Brownsville . . . . .	35
Jacksonville . . . . .	68	Miles City . . . . .	1262	Corpus Christi . . . . .	57
Key West . . . . .	0	Missoula . . . . .	1141	Dallas . . . . .	--
W. Palm Beach . . . . .	0	NEBR. Grand Island . . . . .	886	Del Rio . . . . .	147
Miami . . . . .	0	Lincoln . . . . .	848	El Paso . . . . .	272
Orlando . . . . .	0	Norfolk . . . . .	900	Fort Worth . . . . .	247
Daytona Beach . . . . .	4	North Platte . . . . .	982	Galveston U. . . . .	72
Tallahassee . . . . .	76	Omaha . . . . .	837	Houston . . . . .	111
Tampa . . . . .	2	Valentine . . . . .	1042	Lubbock . . . . .	447
GA. Atlanta . . . . .	194	NEV. Ely . . . . .	1047	Midland . . . . .	374
Augusta . . . . .	184	Las Vegas . . . . .	324	San Angelo . . . . .	294
Macon . . . . .	130	Reno . . . . .	826	San Antonio . . . . .	152
Savannah . . . . .	53	Winnemucca . . . . .	908	Victoria . . . . .	121
IDAHO, Boise . . . . .	841	N. H. Concord . . . . .	882	Waco . . . . .	256
Lewiston . . . . .	890	N. J. Atlantic City . . . . .	512	Wichita Falls . . . . .	365
Pocatello . . . . .	990	Trenton U . . . . .	521	UTAH, Milford . . . . .	920
ILL. Cairo U. . . . .	387	N. MEX. Albuquerque . . . . .	521	Salt Lake City . . . . .	714
Chicago . . . . .	671	Roswell . . . . .	468	VT. Burlington . . . . .	897
Moline . . . . .	752	N. Y. Albany . . . . .	784	VA. Lynchburg . . . . .	439
Peoria . . . . .	704	Binghamton . . . . .	765	Norfolk . . . . .	268
Rockford . . . . .	806	Buffalo . . . . .	732	Richmond . . . . .	366
Springfield . . . . .	592	New York . . . . .	497	Roanoke . . . . .	461
IND. Evansville . . . . .	473	Rochester . . . . .	711	WASH. Colville . . . . .	--
Fort Wayne . . . . .	686	Syracuse . . . . .	735	Omak . . . . .	--
Indianapolis . . . . .	571	N. C. Asheville . . . . .	390	Quillayute . . . . .	732
South Bend . . . . .	656	Charlotte . . . . .	255	Seattle-Tacoma . . . . .	706
IOWA, Burlington . . . . .	727	Greensboro . . . . .	381	Spokane . . . . .	1083
Des Moines . . . . .	776	Hatteras R. . . . .	123	Walla Walla U. . . . .	863
Dubuque . . . . .	869	Raleigh . . . . .	292	Yakima . . . . .	975
Sioux City . . . . .	948	Wilmington . . . . .	154	W. VA. Beckley . . . . .	521
KANS. Concordia . . . . .	719	N. DAK. Bismarck . . . . .	1263	Charleston . . . . .	462
Dodge City . . . . .	667	Fargo . . . . .	1261	Huntington . . . . .	504
Goodland . . . . .	876	Williston U . . . . .	1322	Parkersburg U. . . . .	555
Topeka . . . . .	655	OHIO, Akron-Canton . . . . .	670	WIS. Green Bay . . . . .	953
Wichita . . . . .	598	Cincinnati U. . . . .	552	Madison . . . . .	940
KY. Lexington . . . . .	492	Cleveland . . . . .	620	Milwaukee . . . . .	960
Louisville . . . . .	442	Columbus . . . . .	610	WYO. Casper . . . . .	1133
LA. Baton Rouge . . . . .	104	Dayton . . . . .	597	Cheyenne . . . . .	938
Lake Charles . . . . .	98	Toledo . . . . .	732	Lander . . . . .	1321
New Orleans . . . . .	39	Youngstown . . . . .	680	Sheridan . . . . .	1235
Shreveport . . . . .	181				

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. 3, 1978.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +				
	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		
ALA. BIRMINGHAM...	100	18	425	144	72	358	MAINE CARIBOU...	358	72	2553	270	328	1364	23	134
MORILE	225	18	186	156	272	142	PORTLAND...	272	42	1794	159	142	574	103	3
MONTGOMERY...	45	11	205	222	64	177	MD BALTIMORE...	177	5	877	18	80	563	101	6
ARIZ FLAGSTAFF...	24	17	1774	83	397	358	MASS BOSTON...	217	37	1295	262	371	103	7	16
PHOENIX	71	11	172	45	118	122	MICH ALPENA...	316	55	1808	168	152	209	56	16
TUCSON	179	11	125	126	12	12	DETROIT...	316	61	1337	76	101	209	12	26
WINSLON	59	15	161	39	12	12	FLINT...	316	45	1337	76	101	209	12	26
YUMA	59	15	161	39	12	12	GRAND RAPIDS...	316	45	1337	76	101	209	12	26
ARK FORT SMITH...	10	20	519	38	48	88	HOUGHTON LAKE...	316	45	1337	76	101	209	12	26
LITTLE ROCK...	10	20	519	38	48	88	LANSDALE...	316	45	1337	76	101	209	12	26
CALIF BAKERSFIELD...	7	1	429	88	81	81	MARQUETTE...	316	45	1337	76	101	209	12	26
EUREKA	7	1	429	88	81	81	MUSKOGEE...	316	45	1337	76	101	209	12	26
FRESNO	7	1	429	88	81	81	S STE. MARIE...	316	45	1337	76	101	209	12	26
LOS ANGELES...	14	28	200	10	118	108	MINN DULUTH...	95	15	2372	84	47	149	29	113
RED BLUFF	7	1	429	88	81	81	INTERWAT FALLS...	95	15	2372	84	47	149	29	113
SAN DIEGO	7	1	429	88	81	81	MINNEAPOLIS...	95	15	2372	84	47	149	29	113
SAN FRANCISCO...	103	10	529	44	175	90	ROCHESTER...	95	15	2372	84	47	149	29	113
STOCKTON	103	10	529	44	175	90	ST. CLOUD...	95	15	2372	84	47	149	29	113
COLO DENVER...	248	41	1401	103	199	221	MISS JACKSON...	95	15	2372	84	47	149	29	113
GRAND JUNCTION...	224	28	1248	104	115	115	MERIDIAN...	95	15	2372	84	47	149	29	113
PUEBLO	224	28	1248	104	115	115	MO. COLUMBIA...	95	15	2372	84	47	149	29	113
CONN BRIDGEPORT...	89	9	999	74	217	217	KANSAS CITY...	95	15	2372	84	47	149	29	113
HARTFORD	256	42	1623	347	445	445	ST. LOUIS...	95	15	2372	84	47	149	29	113
DEL WILMINGTON...	193	18	966	49	9	9	SPRINGFIELD...	95	15	2372	84	47	149	29	113
D.C. WASHINGTON...	156	2	647	114	14	14	MONT BILLINGS...	95	15	2372	84	47	149	29	113
FLA APALACHICOLA...	10	1	63	12	10	10	GLASGOW...	95	15	2372	84	47	149	29	113
DAVTON BEACH	10	1	63	12	10	10	GREAT FALLS...	95	15	2372	84	47	149	29	113
FORT MYERS	10	1	63	12	10	10	HAVRE...	95	15	2372	84	47	149	29	113
JACKSONVILLE...	25	1	141	7	7	7	HELENA...	95	15	2372	84	47	149	29	113
KEY WEST	25	1	141	7	7	7	KALISPELL...	95	15	2372	84	47	149	29	113
LAKELAND	25	1	141	7	7	7	SITES CITY...	95	15	2372	84	47	149	29	113
MIAMI	25	1	141	7	7	7	MISSOULA...	95	15	2372	84	47	149	29	113
ORLANDO	25	1	141	7	7	7	NEBR GRAND ISLAND...	95	15	2372	84	47	149	29	113
TALLAHASSEE	25	1	141	7	7	7	LINCOLN...	95	15	2372	84	47	149	29	113
TAMPA	25	1	141	7	7	7	NORFOLK...	95	15	2372	84	47	149	29	113
NEST PALM BEACH...	25	1	141	7	7	7	NORTH PLATTE...	95	15	2372	84	47	149	29	113
GA ATLANTA...	91	3	350	241	175	175	OMAHA...	95	15	2372	84	47	149	29	113
AUGUSTA	83	3	330	221	157	157	VALENTINE...	95	15	2372	84	47	149	29	113
MACON	83	3	330	221	157	157	NEV ELY...	95	15	2372	84	47	149	29	113
SAVANNAH	83	3	330	221	157	157	LAS VEGAS...	95	15	2372	84	47	149	29	113
IDAHO BOISE...	194	12	1505	144	154	154	RENO...	95	15	2372	84	47	149	29	113
LENISTON	307	14	1515	174	103	103	HINNECCA...	95	15	2372	84	47	149	29	113
POCATELLO	35	2	1858	183	300	300	N.H. CONCORD...	285	52	1945	336	257	273	137	370
ILL. CAIRO...	132	20	712	45	45	45	N.J. ATLANTIC CITY...	285	16	1100	182	273	200	132	137
CHICAGO	50	34	1243	60	29	29	TRENTON...	285	16	1100	182	273	200	132	137
MOLINE	67	41	1351	75	29	29	N.MEX ALBUQUERQUE...	285	6	763	129	35	43	22	
PEORIA	38	18	1240	17	17	17	ROSNELL...	285	41	706	95	253	170	18	
ROCKFORD	38	18	1240	17	17	17	N.Y. ALBANY...	285	29	1729	306	328	22	5	
SPRINGFIELD...	202	1	1055	36	29	29	BINGHAMTON...	285	29	1682	120	94	94	14	
IND. EVANSVILLE...	163	14	869	56	34	34	BUFFALO...	285	31	1505	85	189	111	49	
FORT WAYNE	331	15	1280	32	21	21	NEW YORK...	285	91	956	122	23	23	18	
INDIANAPOLIS	199	19	1071	35	21	21	ROCHESTER...	285	91	956	122	23	23	18	
SOUTH BEND	37	17	1229	96	21	21	SYRACUSE...	285	91	956	122	23	23	18	
IOWA BURLINGTON...	662	41	1293	74	55	55	N.C. ASHEVILLE...	285	22	751	176	210	162	103	
DES MOINES	300	38	1333	10	69	69	CHARLOTTE...	285	15	473	131	101	84	44	
DUBUQUE	300	38	1333	10	69	69	GREENSBORO...	285	15	473	131	101	84	44	
SIoux CITY...	300	38	1333	10	69	69	HATTERAS...	285	26	516	141	170	137	109	
KANS CONCORDIA...	216	9	1151	34	78	78	RALEIGH...	285	26	516	141	170	137	109	
DOGE CITY	190	9	1031	151	151	151	WILMINGTON...	285	26	516	141	170	137	109	
GOODLAND	339	19	1443	179	125	125	N.DAK. BISMARCK...	285	26	516	141	170	137	109	
TOPEKA	199	11	1087	58	102	102	FARGO...	285	26	516	141	170	137	109	
NICHITA	179	3	911	8	118	118	MILLISTON...	285	26	516	141	170	137	109	
KY LEXINGTON...	166	11	932	18	112	112	OHIO AKRON-CANTON...	285	6	1288	60	60	275	356	
LOUISVILLE	151	25	810	118	118	118	CINCINNATI...	285	6	1288	60	60	275	356	
LA BATON ROUGE...	48	19	129	153	88	88	CLEVELAND...	285	6	1288	60	60	275	356	
LAKE CHARLES	51	19	130	153	88	88	COLUMBUS...	285	6	1288	60	60	275	356	
NEW ORLEANS	24	3	70	167	101	101	DAYTON...	285	6	1288	60	60	275	356	
SHREVEPORT	68	21	244	130	121	121	TOLEDO...	285	6	1288	60	60	275	356	

BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1978.

# IMMEDIATE - U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

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U.S. DEPARTMENT OF COMMERCE

COM 210



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### HARVESTING PROGRESS

#### cotton

PERCENT OF ACREAGE HARVESTED  
AS OF DECEMBER 3

	COTTON		
	1978	1977	AVG.
ALA	100	85	88
ARK	NA	NA	NA
GA	96	81	NA
LA	100	97	87
MISS	100	96	89
MO	100	NA	NA
NC	90	88	88
OKLA	28	68	44
SC	100	89	NA
TENN	100	NA	NA
TEX	42	92	73
11 STATES	60	91	75
CALIF	75	NA	NA

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

NA NOT AVAILABLE

(continued from page 2)

5 to 14 inches in Minnesota, Wisconsin, and Michigan. Rain reached most of the Atlantic Coast by nightfall with a variety of precipitation in the Northeast.

High winds and very cold air rushed down the eastern slopes of the Rockies to put the Plains under a cold snap; Scottsbluff, western Nebraska, set a record  $-10^{\circ}$ , undercutting the 1919 reading by 4. Temperatures in the western half of Kansas dropped below  $10^{\circ}$  combining with a lack of snow to pose a threat to winter wheat. By contrast, unseasonable warmth stretched from New Orleans across the Gulf Coast to Florida. A sampling of new records showed New Orleans  $84^{\circ}$ , and in Florida,  $86^{\circ}$  at Key West, Daytona Beach's  $85^{\circ}$ , Pensacola's  $81^{\circ}$ , and  $78^{\circ}$  at Apalachicola.