

# WEEKLY WEATHER AND CROP BULLETIN

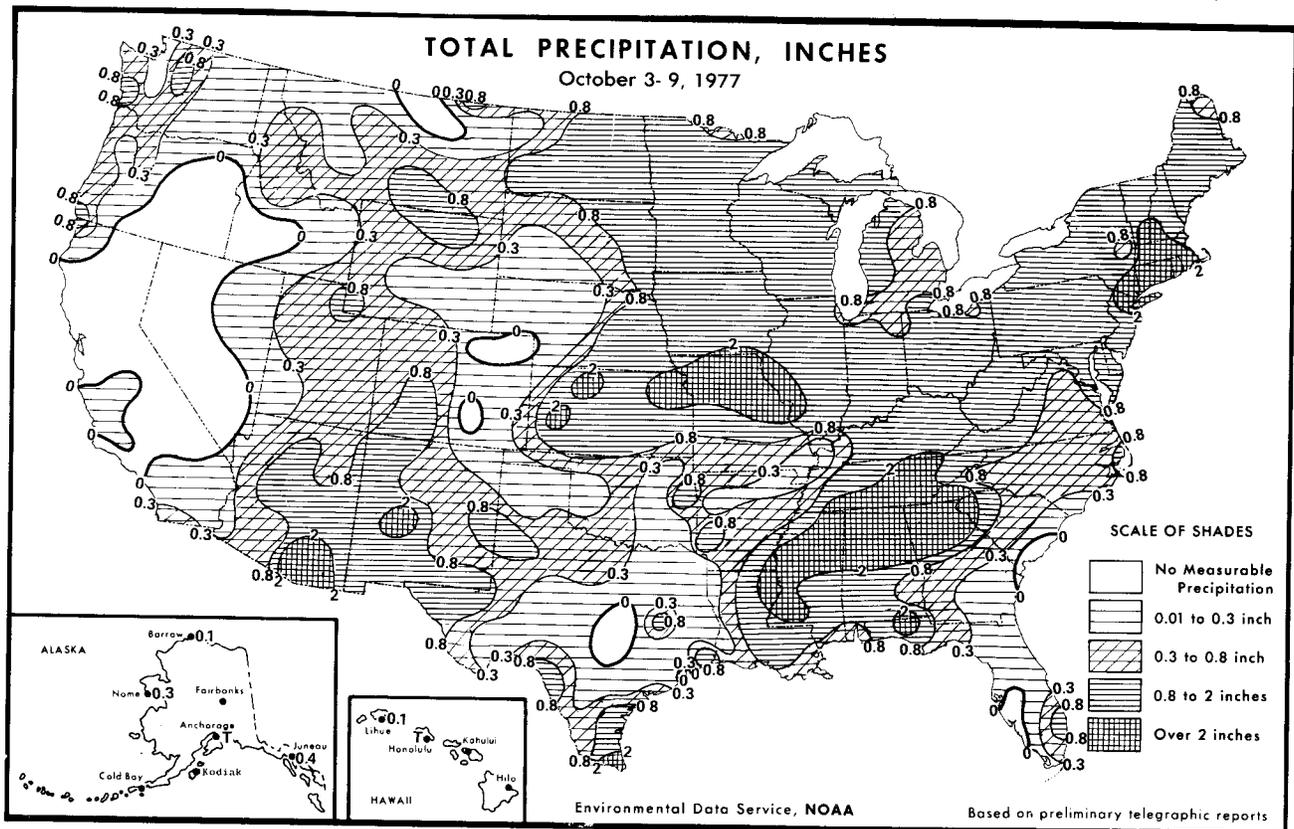
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## National Weather Summary October 3 - 9

**HIGHLIGHTS:** Widespread precipitation along frontal surfaces brought rain to much of the Nation. Snow covered many sections from the Rockies to the Great Lakes. Moisture spawned by Hurricane Heather surged into the Southwest bringing rain as far northeast as the Rockies.

A succession of cold air waves from the polar regions caused ever-lowering temperatures throughout the country except the Southwest. This cooling air ushered in some of the first freezes of the season.

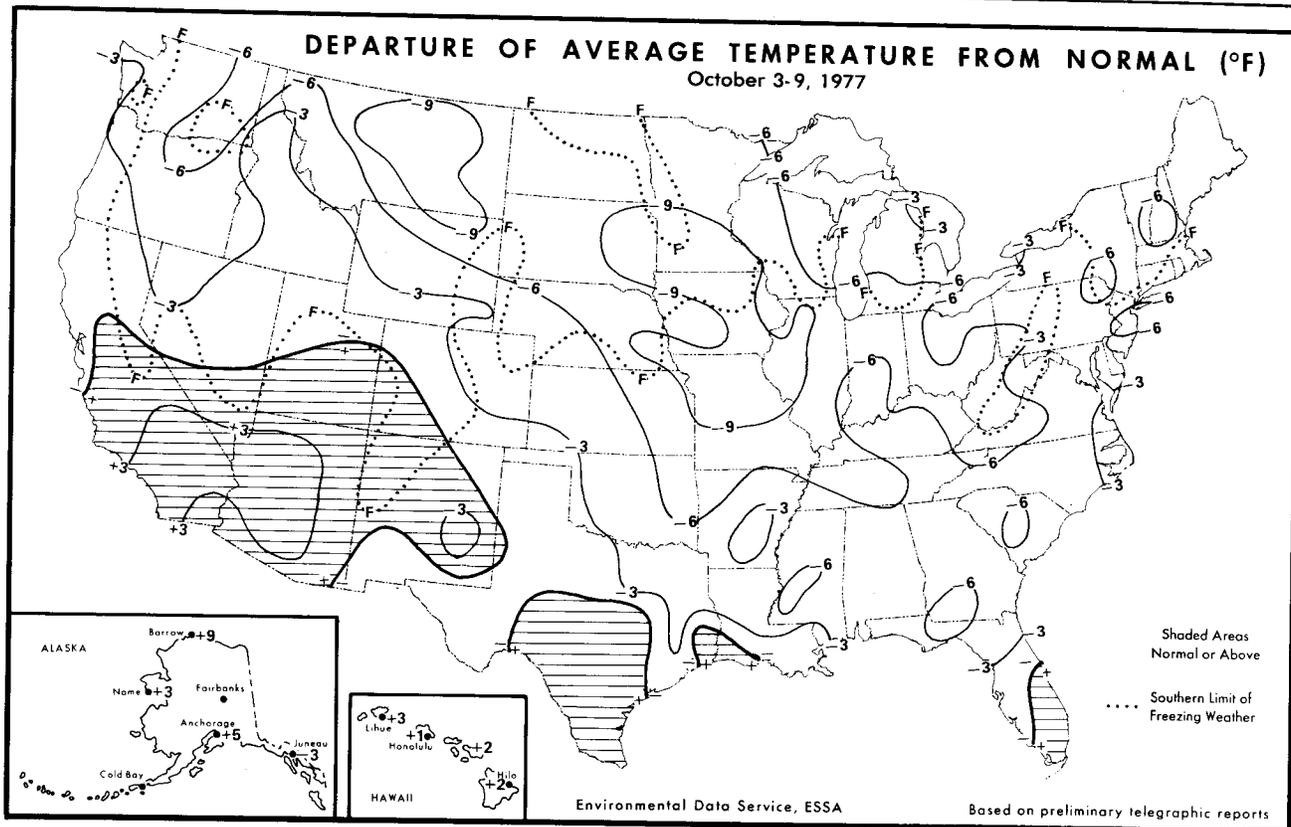
Autumn edged over the Nation on Monday as temperatures dipped in many sections. Frost and freezes were reported from central lower Michigan to the northern tier of States. Record high temperatures included Miami Beach's 95° and 102° tying the Phoenix mark. Most precipitation was confined

to the southern half of Florida and the lower reaches of Texas; Brownsville, Tex., measured 1.54 in.

Tuesday's precipitation was generally light. A few showers started the day in New Mexico and Texas. Later some showers touched stations from central Oklahoma northeastward to the Great Lakes.

Some September notes--Chicago had its wettest August/September since 1961, over 19 inches. Dallas/Fort Worth had its fourth hottest summer, sweltering under an average high temperature of 96°. The record stands at 98° set in the summer of 1954.

Temperatures continued on the chilly side; even northeastern Alabama shivered at 36°. Missoula and Kalispell in Montana read 23°. The desert areas remained hot, however. Gila Bend, Ariz., copped the country's high reading, 103°.



A large mass of cool air settled over the Nation plunging temperatures to new lows in Florida; Tallahassee showed 42° while Jacksonville and Orlando also opened the record books. There was also a hard freeze in Montana.

Some light showers preceded Wednesday's cold front in the middle Mississippi Valley where St. Louis measured nearly one-half inch. Hurricane Heather triggered locally heavy thunderstorms in southern California and parts of Arizona.

Although Hurricane Heather was far south of Baja, California, on Thursday she set off rains in the Southwest and southern California. Some sections were soaked by 2 inches; Tucson reported over 1 inch by evening. As nightfall approached, precipitation crept into the west central Plains. Other areas of light rain included the Rockies, Intermountain Region, Pacific Northwest, upper Mississippi Valley, and Florida where West Palm Beach measured nearly an inch.

Heather was downgraded to a tropical depression as it nudged toward the mainland on Friday; rain continued to fall in the Southwest where Nogales, in southeastern Arizona, notched 3.61 in.

Rain, heavy at times, drenched the central portions of the Plains and Mississippi Valley. Further north, rain and snow mixed and the ground

was covered by the white stuff in several locales of western Minnesota and North Dakota. Two inches splashed down on central Illinois and northeastern Missouri; and St. Louis reported nearly one and one-half inches of rain.

Rain persisted in southern Arizona and stretched to southwestern Texas. Precipitation moved through the Great Lakes and reached all the way to the Atlantic Coast. Many areas east of the Mississippi River received rain. Much of this activity was triggered by a frontal system extending from low pressure centered over Wisconsin. Parts of Tennessee and Alabama were especially hard hit; nearly 4 inches inundated an area near Birmingham.

Another front was bearing down on the Pacific Northwest, and northern Minnesota got a taste of winter when 5 inches of snow blanketed the region.

Rain connected with the frontal system marched through the Gulf and Atlantic Coast States dumping as much as 2 inches on points from Georgia to New York. Some northeastern rivers reached the tops of their banks.

Heavy rains continued to surge through southern Arizona; by Sunday evening Nogales had been inundated by more than 8 inches for the week. Heavy snow whitened Montana and moved into northern Wyoming.

## National Agricultural Summary

October 3 - 9

**HIGHLIGHTS:** Corn, sorghum, and soybean harvest continued at a slow pace because of wet, cool weather over much of the eastern two-thirds of the United States. Corn harvest reached 33% completion and sorghum 49%, both ahead of average. Soybean harvest reached 24% completion, though well behind average. Cotton picking continued at a fairly rapid pace at 32% harvested, nearly double the average as of this date. Winter wheat seeding neared the average with 73% planted. Soil moisture improved slightly over the eastern two-thirds of the United States with short supplies the norm west of the Rocky Mountains through central California.

**SMALL GRAINS:** The delayed small grain harvest in the Pacific Northwest and North Dakota made progress and was nearly complete. Fall plowing was well underway in many north central locations.

Winter wheat seeding for the 1978 crop reached 73% completion, just ahead of last year's 67%, but slightly behind the 77% average. Planting was somewhat hindered by wet conditions in west north central States and the northern Great Plains. In Oklahoma progress was well ahead of average while in Texas conditions were variable as some areas were still waiting for adequate planting moisture. Colorado growers were nearing completion of winter wheat seeding while in Washington and Oregon conditions have just become adequate to allow seeding to proceed. Winter wheat condition is good in Montana.

**CORN:** Corn harvest reached 33% completion compared with 30% in 1976 and a 21% average. The cool damp weather prevailing in the north central States slowed corn harvest considerably.

In the eastern north central States harvest reached 21% compared with 16% last year and a 15% average. The harvest was mostly hampered by the wet weather in these States. Many fields were too wet to allow the combines into the fields.

In west north central States, corn harvest picked up a bit reaching 34% completion compared with 38% last year and much ahead of the 19% average. Conditions were somewhat dryer in these States.

Across the South harvest moved well ahead of average, reaching 69% completion in south central States and nearly 80% in the south Atlantic States.

**SOYBEANS:** Soybean harvest reached 24% completion, still far behind last year's 47% progress but coming closer to the average of 31%. Again corn was taking priority where possible with the wet weather in soybean areas causing further harvest delays.

In east north central States combining was 31% complete compared with 64% a year ago and a 48% average. Some soybeans were lodging from tall growth and wet conditions.

The west north central States reached 27% harvested compared with 64% last year and a 35% average. The wet weather has taken its toll with some beans lodging and winds causing some shattering in local areas.

Southern States' soybeans are faring much better with 13% harvested, the same as a year ago and compared with an 11-percent average for this date. Late plantings are benefiting from additional pod fill, but may become a freeze risk in northern areas of the South.

**COTTON:** Cotton harvest in the eleven southern States advanced to 30%, over twice the rate of a year ago and one and two-thirds times the 18% average. In Texas harvest was accelerating although stripping was slowed by damp weather. Many fields were ready to harvest. Harvest was 42% complete in Mississippi compared with 16% average and 39% in Arkansas compared with 19% average. Some areas may show damage from heavy precipitation and some growers having problems defoliating regrowth.

**OTHER CROPS:** Sorghum harvest advanced reaching 49% completion compared with 53% last year and 42% average. Wet weather was a problem. Harvest in the leading States remained ahead of average.

Irish potato harvest was very limited at about 60% completion because of wet fields. Many low spots may be abandoned unless dried out soon. North Dakota was also slowed by wet weather. Idaho's crop was 50% harvested, the same as last year at this time. Harvest conditions were improved.

Rice harvest in Arkansas was 76% complete, compared with 65% last year and 73% average. Harvest is slow as much of the remaining crop is lying on the ground.

**VEGETABLES:** Florida vegetable crops were in good condition and improving. Planting was active with many crops complete. Sweet corn harvest was in full swing and pole bean harvest gaining. In Texas' San Antonio-Winter Garden area cucumber harvest continues. Laredo area honeydew harvest continued. Trans-Pecos area tomato harvest was interrupted by wet fields. Production of other items active. Cauliflower, celery, bell peppers and sweetpotato harvest continued heavy in California. Cantaloup, lettuce, market and processing tomatoes were declining.

**FRUIT AND NUTS:** Apple harvest was going strong in Washington and Oregon. New England apple harvest was slowed by wet weather, but harvest moving well in New York and New Jersey.

Grapefruit harvest for fresh market was active in Florida. Robinson tangerine movement starting. Citrus groves condition excellent. Texas pecan harvest on increase, splitting shucks throughout central, south Texas. Pecans in Georgia were fair to good and 5% harvested compared with 1% last year. California table and wine grapes being harvested; raisins were 90% boxed. Navel oranges were sizing well and Freestone peach harvest was continuing.

**PASTURES AND LIVESTOCK:** Fall pastures vary from fair to excellent in north central States dependent upon amount of precipitation accumulated in past few weeks - improvement is noted. Pastures fair to good in South Atlantic area as fall growth occurs. Grass supply still short in many areas. South central pastures were generally fair, some good except in dry areas of Texas where fall, winter grazing prospects were poor. Some ranges in West have improved to fair but generally still below normal. Southwest Texas, west slope Rocky Mountain areas, and west through central California still have dim prospects for fall and winter grazing despite slight improvement in conditions.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Oct. 9, 1977

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	61	-6	3.7	+ 2.8	La. Baton Rouge . . .	69	-3	.9	- .1	Youngstown . . .	52	-4	1.3	+ .7
Mobile . . .	67	-5	.5	-1.2	Lake Charles . . .	74	+1	T	-1.0	OKLA. Okla. City . . .	61	-5	.3	- .5
Montgomery . . .	66	-4	.7	- .4	New Orleans . . .	71	-2	.5	- .9	Tulsa . . .	61	-6	T	- .9
ALASKA Anchorage . . .	45	+5	T	.6	Shreveport . . .	67	-4	.1	- .6	OREG. Astoria . . .	52	-3	.6	+ .1
Barrow . . .	30	+9	.1	0	MAINE Caribou . . .	44	-3	.7	- .1	Burns . . .	48	-3	0	- .1
Fairbanks . . .	42	-3	.4	- .9	Portland . . .	48	-4	1.9	+ 1.2	Medford . . .	55	-2	.2	+ .1
Juneau . . .	42	-3	.4	- .9	MD. Baltimore . . .	57	-4	1.2	+ .4	Pendleton . . .	49	-3	.1	0
Kodiak . . .	42	-3	.4	- .9	MASS. Boston . . .	55	-3	.9	+ .1	Portland . . .	54	-3	.7	+ .4
Nome . . .	36	+3	.3	- .4	Chatham . . .	54	-3	.8	- .1	Salem . . .	52	-4	.2	0
ARIZ. Flagstaff . . .	56	+5	1.0	+ .6	MICH. Alpena . . .	48	-3	.8	- .1	PA. Allentown . . .	54	-4	1.1	+ .2
Phoenix . . .	82	+4	.2	+ .2	Detroit . . .	49	-8	.7	+ .2	Erie . . .	52	-3	1.5	+ .7
Tucson . . .	77	+3	2.2	+ 1.8	Flint . . .	50	-5	.6	+ .2	Harrisburg . . .	55	-5	1.0	+ .4
Winslow . . .	65	+3	.6	+ .4	Grand Rapids . . .	49	-7	.9	+ .1	Philadelphia . . .	55	-6	1.1	+ .3
Yuma . . .	82	+7	.3	- .5	Houghton Lake . . .	46	-5	.8	+ .1	Pittsburgh . . .	50	-7	1.1	+ .5
ARK. Fort Smith . . .	60	-7	.3	- .5	Lansing . . .	49	-6	.3	- .3	Scranton . . .	49	-7	.9	+ .2
Little Rock . . .	83	-3	.5	- .3	Marquette . . .	48	-4	1.3	+ .5	R.I. Providence . . .	53	-4	2.3	+ 1.5
CALIF. Bakersfield . . .	63	+2	T	0	Muskegon . . .	49	-6	.9	+ .1	S.C. Charleston . . .	65	-4	T	-1.3
Eureka . . .	53	-2	.1	0	S. Ste. Marie . . .	45	-5	1.2	+ .3	Columbia . . .	61	-7	.4	- .7
Fresno . . .	70	+2	T	0	MINN. Duluth . . .	42	-7	2.0	+ 1.2	Greenville . . .	61	-4	1.3	+ .4
Los Angeles . . .	74	+4	0	- .1	Internatl Falls . . .	40	-8	.5	- .3	S.D. Aberdeen . . .	44	-9	1.4	+ 1.0
Red Bluff . . .	68	-1	0	- .1	Minneapolis . . .	45	-9	1.0	+ .3	Huron . . .	44	-10	.8	+ .4
San Diego . . .	72	+4	.4	+ .4	Rochester . . .	45	-9	1.9	+ .1	Rapid City . . .	46	-8	.2	- .1
San Francisco . . .	60	-3	0	0	St. Cloud . . .	43	-9	1.7	+ 1.0	Sioux Falls . . .	45	-10	1.3	+ .6
Stockton . . .	68	+1	0	0	MISS. Jackson . . .	64	-6	1.3	+ .5	TENN. Chattanooga . . .	59	-6	2.2	+ 1.4
COLO. Denver . . .	53	-3	T	- .2	Meridian . . .	65	-4	1.4	+ .6	Knoxville . . .	60	-5	1.6	+ .9
Grand Junction . . .	61	+1	.4	+ .2	MO. Columbia . . .	52	-10	2.2	+ 1.2	Memphis . . .	63	-4	.6	- .2
Pueblo . . .	56	+3	T	- .2	KANSAS City . . .	53	-10	2.1	+ 1.1	Nashville . . .	58	-7	1.7	+ .9
CONN. Bridgeport . . .	58	-2	1.4	+ .7	St. Louis . . .	54	-9	2.5	+ 1.8	TEX. Abilene . . .	69	-1	.2	- .3
Hartford . . .	52	-4	2.1	+ 1.2	Springfield . . .	56	-7	.4	- .5	Amarillo . . .	63	-1	T	- .5
D.C. Washington . . .	60	-4	1.1	+ .3	MONT. Billings . . .	44	-9	1.0	+ .6	Austin . . .	74	+1	T	- .8
FLA. Apalachicola . . .	69	-5	.5	- 1.8	Glasgow . . .	41	-10	T	- .3	Beaumont . . .	74	+1	1.1	- .2
Daytona Beach . . .	74	-2	.1	- .7	Great Falls . . .	41	-11	T	- .3	Brownsville . . .	80	+2	2.2	+ 1.0
Ft. Myers . . .	77	-2	T	- 1.9	Havre . . .	42	-9	.7	+ .1	Corpus Christi . . .	79	+2	1.4	+ .2
Jacksonville . . .	69	-5	.1	- 1.9	Helena . . .	43	-6	.1	- .2	Dallas . . .	76	+1	.8	+ .1
Key West . . .	82	+1	T	- 1.6	Kalispell . . .	42	-4	.5	+ .2	Del Rio . . .	66	-2	1.4	+ 1.1
Lake Land . . .	76	-1	0	- 1.6	Miles City . . .	45	-8	.1	- .2	El Paso . . .	66	-5	.1	- .6
Miami . . .	81	+2	.6	- 1.3	Missoula . . .	43	-5	.4	+ .1	Fort Worth . . .	74	-2	0	- 1.4
Orlando . . .	77	0	T	- 1.7	NEBR. Grand Island . . .	52	-6	1.1	+ .5	Galveston . . .	74	-2	0	- 1.4
Tallahassee . . .	66	-7	.6	- 1.1	Lincoln . . .	50	-9	1.3	+ .5	Houston . . .	71	-3	1	- 1.0
Tampa . . .	76	+1	1.1	- 1.6	Norfolk . . .	50	-7	.9	+ .3	Lubbock . . .	65	0	.9	+ .4
W. Palm Beach . . .	80	+1	1.1	- 1.0	N. Platte . . .	50	-5	.1	- .4	Midland . . .	69	-1	.4	0
GA. Atlanta . . .	61	-5	2.2	+ 1.4	Omaha . . .	50	-9	1.4	+ .6	San Angelo . . .	73	+2	.2	- .4
Augusta . . .	63	-5	.5	- .3	Valentine . . .	47	-7	T	- .4	San Antonio . . .	75	+1	T	- .8
Macon . . .	64	-5	.4	- .4	NEV. Ely . . .	49	-1	.1	0	Victoria . . .	75	0	.2	- .8
Savannah . . .	66	-4	0	- 1.4	Las Vegas . . .	76	+4	0	- .1	Waco . . .	74	+1	T	- .7
HAWAII. Hilo . . .	77	+2	1.3	- .5	Reno . . .	52	+2	0	0	Wichita Falls . . .	69	-1	T	- .6
Honolulu . . .	81	+1	T	- .1	Winemucca . . .	49	-3	T	- .1	UTAH. Blanding . . .	58	+2	.5	+ .2
Kahului . . .	80	+2	0	0	N.H. Concord . . .	46	-7	2.0	+ 1.3	Salt Lake City . . .	56	-1	.7	+ .5
Lihue . . .	81	+3	.1	- .3	N.J. Atlantic City . . .	55	-5	1.8	+ 1.0	VT. Burlington . . .	47	-5	1.3	+ .5
IDAHO. Boise . . .	52	-4	T	- .1	Trenton . . .	55	-6	1.4	+ .6	VA. Lynchburg . . .	55	-7	.8	0
Lewiston . . .	55	-1	.1	- .1	N.MEX. Albuquerque . . .	65	+2	.8	+ .6	Norfolk . . .	63	-2	.5	- .6
Pocatello . . .	50	-2	T	- .1	Roswell . . .	67	+3	.5	+ .2	Richmond . . .	58	-5	.7	- .2
ILL. Cairo . . .	59	-7	.1	- .8	N.Y. Albany . . .	50	-5	.6	- .1	Roanoke . . .	54	-8	1.0	+ .2
Chicago . . .	52	-8	.6	- .1	Binghamton . . .	48	-6	1.0	+ .3	WASH. Colville . . .	44	-7	.1	- .1
Moline . . .	51	-8	1.3	+ .4	Buffalo . . .	52	-3	.8	+ .0	Omak . . .	47	-5	T	- .1
Peoria . . .	50	-9	1.7	+ .9	New York . . .	56	-6	2.3	+ 1.5	Quillayute . . .	49	-4	.5	- .4
Rockford . . .	48	-9	1.0	0	Rochester . . .	52	-4	1.1	+ .5	Seattle-Tacoma . . .	52	-3	.2	- .2
Springfield . . .	52	-9	1.3	+ .6	Syracuse . . .	54	-4	1.6	+ .9	Spokane . . .	45	-7	T	- .2
IND. Evansville . . .	57	-5	1.0	+ .3	N.C. Asheville . . .	55	-5	.6	- .3	Walla Walla . . .	52	-7	.1	0
Ft. Wayne . . .	51	-7	.6	0	Charlotte . . .	61	-4	.5	- .3	Yakima . . .	49	-5	1	0
Indianapolis . . .	55	-5	.8	+ .1	Greensboro . . .	58	-5	.6	- .3	W.Va. Beckley . . .	48	-8	1.3	+ .5
South Bend . . .	50	-7	.7	- .1	Hatteras . . .	58	-2	.8	- .6	Charleston . . .	58	-8	1.3	+ .5
IOWA. Burlington . . .	51	-9	1.6	+ .7	Raleigh . . .	66	-2	.8	- .6	Huntington . . .	53	-8	1.5	+ .8
Des Moines . . .	51	-8	1.2	+ .4	Wilmington . . .	59	-5	.5	- .5	Parkersburg . . .	53	-8	1.1	+ .4
Dubuque . . .	48	-8	1.0	- .1	N.DAK. Bismarck . . .	64	-5	1.0	- .4	WIS. Green Bay . . .	48	-5	.9	+ .1
Sioux City . . .	49	-8	.8	+ .1	Fargo . . .	43	-8	1.0	+ .6	La Crosse . . .	47	-9	1.1	+ .3
KANS. Concordia . . .	55	-6	1.4	+ .6	Williston . . .	44	-8	1.6	+ 1.1	Madison . . .	46	-8	.9	+ .1
Dodge City . . .	59	-3	.8	+ .4	OHIO. Akron-Canton . . .	51	-6	1.1	+ .5	Milwaukee . . .	50	-5	1.3	+ .6
Goodland . . .	53	-4	T	- .4	Cincinnati . . .	54	-7	1.0	+ .4	WYO. Casper . . .	48	-4	T	- .3
Topeka . . .	55	-7	2.2	+ 1.4	Cleveland . . .	54	-4	.5	- .2	Cheyenne . . .	48	-4	.3	+ .1
Wichita . . .	59	-5	1.0	+ .2	Columbus . . .	53	-5	1.1	+ .5	Lander . . .	47	-4	.1	- .1
KY. Lexington . . .	57	-5	1.2	+ .5	Dayton . . .	52	-8	1.4	+ .8	Sheridan . . .	43	-9	1.1	+ .8
Louisville . . .	56	-6	1.0	+ .3	Toledo . . .	51	-6	.8	+ .2	P.R. San Juan . . .	81	0	3.7	+ 2.4

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 SRS State offices in cooperation with the National Weather Service.

**ALABAMA:** Cool week with weekend rainfall. Temperatures averaged 5° below normal.

Fieldwork: 5.3 days suitable. Soil moisture mostly adequate. Major activities harvesting corn, cotton, soybeans, and peanuts and seeding small grains. Cotton 31% harvested, 3% 1976, 7% average. Corn 76% harvested, 56% 1976, 45% average. Soybeans fair condition, 12% harvested, 10% 1976, 13% average. Peanuts 41% combined, 73% 1976, 84% average. Pastures fair to good. Pecans fair.

**ARIZONA:** Tropical storm, rain, flooding southeast. Amounts to 8.30 in. Nogales, over 3.00 in. Fort Huachuca, Bisbee, Douglas. Central basins, mountains mostly 1.00 to 3.00 in. Temperatures 1 to 5° above normal.

Rain halted field operations all areas. Cotton harvest halted, increased lint drop. Sorghum harvest continues, conditions permitting. Wet fields delaying corn harvest. Fall sugarbeets good condition, spring beets Yuma, Salt River Valley good stands. Alfalfa hay activity seasonally slow, cut hay damaged, rain. Renovation, planting active. Lettuce harvest delayed Willcox area, some hail damage. Lettuce other areas rapid growth, warmer temperatures; planting virtually complete. Cantaloup harvest good progress Salt River Valley, melons approaching maturity western areas. Citrus harvest delayed rain, muddy fields. Recent rains very beneficial, improved winter browse lower deserts. Soil moisture, stock water improved. Cattle, calf condition improving lower ranges; good to excellent condition, mountain ranges.

**ARKANSAS:** Highest normal 70°, lowest 63°. Highest mean 66°, lowest 57°. Means 3 to 8° below normal. Extremes: 87 and 35°. Most precipitation 2.51 in., least trace.

Soil moisture short 7% of counties, adequate 60%, surplus 33%. Days suitable fieldwork averaged 5.1. Soybean harvest 8% complete, 7% last year and average. Recent moisture helped fill pods late planted varieties. Some acreage lost to flooding. Cotton picking resumed many areas by middle of week. Harvest 39% complete, 11% 1976, average 19%. Open bolls 94% of acreage, 67% year ago. Yields damaged some areas because of heavy precipitation. Cotton again backing up some gin yards. Many growers problems defoliating re-growth from excessive moisture conditions. Rice harvest continued but very slow because of much remaining crop being down. Crop 76% harvested, 65% last year, average 73%. Corn harvest 90% complete, 89% 1976. Sorghum harvest 91% complete, 85% year ago, average 75%. Small grain planting expectations most areas down considerably. Armyworm damage reported several counties. Wheat planting 20% complete, 16% 1976. Limited hay harvest accomplished. Better curing weather needed. Pastures providing average or above amounts feed 91% of counties.

**CALIFORNIA:** Tropical moisture off southern California coast brought small amounts of moisture to southern fourth of State late in week. Disturbance off Oregon coast dropped small amounts of precipitation extreme northern part of State at same time. Most California remained dry throughout week. Temperatures departed very little from normal with only the mountain areas reporting readings of 4 to 7° below normal.

Land preparation small grains active. Alfalfa all stages. Harvested corn grain and silage.

Sugarbeets dug. Dry beans harvested. Early milo fields cut. Rice harvest continued. Cotton defoliated, picking and ginning increasing. Picking of apples in full swing with good size. Table and wine grapes being harvested, raisins 90% boxed. Navel oranges sizing well. Freestone peach harvest continuing. Brussels sprouts, carrots continue steady. Cauliflower, celery, bell peppers, sweetpotato harvest continues heavy. Cantaloup, lettuce, market and processing tomatoes declining. Sweet corn, cucumbers light supply. Fall potatoes increasing. Range, pasture in northern part benefited from early fall rains. Water supplies increased somewhat. Rangeland rest of State remains dry. Supplemental feeding, hauling water continues. Calving begun some areas. Sheep moved to alfalfa stubble. Beekeepers supplementally fed bees because of lack of floral source.

**COLORADO:** October 6 and 7 storm brought moderate to heavy precipitation to mountains and western slope. Eastern plains had scattered light rains. Temperatures were 2 to 5° below normal in eastern plains. Many stations in plains recorded season's first frost. Mountain and western valleys were near or slightly above normal.

Winter wheat seeding 94% 1977, 96% 1976, 94% average. Corn grain harvest 44% 1977, 6% 1976, 8% average. Dry beans threshed 92% 1977, 82% 1976, 80% average. Alfalfa 4th cutting 48% 1977, sorghum 84% ripe, 19% 1977 harvested, 6% 1976, 7% average. Soil moisture short except western slope very short. Range and pasture poor west slope, fair elsewhere. Livestock good condition.

**FLORIDA:** Weak cold front moved south reaching Keys by 4th. Rainfall averaged around 0.25 in. with heaviest amounts panhandle, south. Another weak cold front moved in late week with little weather change. Rainfall varied from none to over 1.00 in. at West Palm Beach and Marianna. Temperatures averaged near normal south and 2 to 3° below normal north.

Soil moisture mostly adequate. Peanut harvest active. Some loss from wet conditions. Corn harvest complete, some lost to mold. Early soybean harvest underway. Haymaking continues. Pecan harvest underway. Land preparation small grains underway. Sugarcane condition good. Planting continues. Pasture conditions mostly fair to good. Hot, dry weather causing decline some areas. Mole crickets damaging pastures scattered locations. Cattle condition mostly good statewide. Citrus grove condition excellent. Rain needed, irrigation underway. Very little new growth. Cool nights aiding natural fruit coloring, grapefruit harvest active for fresh markets, Robinson tangerine movement just starting. Vegetable crops good condition, improving. Plantings active, many crops complete. Plant growth, sizing, fruit set very good. Cooler temperatures very beneficial. Sweet corn harvest in full swing. Pole bean harvest gaining momentum. Harvest cucumbers, eggplant, squash, Gadsden County tomatoes, light to moderate. Very light tomato harvest Palmetto-Ruskin area.

**GEORGIA:** Temperatures averaged 2 to 4° below normal ranging from 50's mountains to near 70° southeast. Rainfall heaviest in northeast, averaging 1.00 to 1.50 in. Heaviest Hall County--nearly 3.50 in. None to less than 0.25 in. south of Carrollton to Augusta line, few 1.00 in. amounts. Over weekend 2.00 to 4.00 in. fell north of Atlanta--

Athens line, tapered off rapidly in mid-Georgia and almost none south.

Soil moisture short to mostly adequate, dryer than the previous week. Six days suitable fieldwork. Some insects remaining. Poor quality corn remains problem, 77% harvested, 67% last year, 46% average. Cotton rated poor to fair, slightly improved, 73% open, 23% harvested. Last year 64% open, 6% harvested, average 16% harvested. Soybeans mostly fair to good, slight decline from last week, 3% harvested, 1% last year, 2% average. Peanuts rated fair, 66% dug, 55% threshed, last year 87% dug, 78% threshed, average 92% dug, 84% threshed. Pastures mostly fair to good, some improved. Hay crops mostly fair to good. Cattle mostly fair to good. Hogs fair to mostly good. Apples fair to mostly good, 80% harvested, 93% last year. Pecans mostly fair to good, 5% harvested, 1% last year. Small grain planting, wheat 20%, rye 25%, other 27%, last year wheat 17%, rye 24%, other 24%.

HAWAII: Weather continued warm and humid. Volcano eruption Kilauea Rift zone, Hawaii subsided. No damage agriculture, from lava flow. Rainfall light on all islands. Irrigation heavy some sections. Spraying for insects frequent. Vegetable supplies, cucumber production increasing, other light to moderate. Banana harvesting seasonally up. Papaya supplies increasing, harvesting late year seasonal flush. Pineapple harvest light. Sugar harvest steady. Pastures fair to good.

IDAHO: Temperatures 3 to 8° below normal. Extremes: 79° at Jerome and 13° at Fairfield. Precipitation generally below normal and limited to northern and southeastern districts.

Typical early October weather allowed harvest activities to proceed rapidly. Ranges and emerged fields of winter wheat improved with moisture. Third cutting of alfalfa 85% harvested, same as last year. Dry beans 90% harvested, 80% in 1976. Winter wheat 75% planted, 80% in 1976. Barley 70% planted, same as last year. Potatoes 50% harvested, same as last year.

ILLINOIS: Temperatures: 5 to 10° below normal, cool period third straight week. Precipitation: less than 1.00 in. northern areas, 1.50 in. most remaining areas, heavier St. Louis, none extreme south.

Corn 29% harvested, 18% 1976, 19% average. Soybeans 36% combined, 82% 1976, 63% average. Grain sorghum 30% harvested. 1978 winter wheat 35% seeded, 50% last year, 52% average. Pastures mostly good to excellent. Soil moisture mostly adequate to surplus. Fieldwork: 3.75 days suitable.

INDIANA: Cool and rather wet week. Rainfall of 0.70 in. in north and east, 1.00 in. in southwest and south. Temperatures 5° below normal. Minimums in 40's, maximums averaged in 60's. Temperatures ranged from 31 to 75°. Considerable cloudiness.

Fieldwork averaged 4 days. Topsoil moisture adequate to surplus. Subsoil moisture mostly adequate to surplus. Pastures fair to mostly good. Corn 20% harvested, 1976 15%, average 15%. Soybeans 25% harvested, 1976 50%, average 30%. Wheat land 65% plowed, 1976 80%. Wheat 25% seeded, 1976 35%, average 45%. Apples 75% picked, 1976 75%, average 65%. Silos 90% filled, 1976 90%.

IOWA: Cold wet week. Temperatures averaged around 8° subnormal, precipitation totaled about twice normal, varying from less than 1.00 in. around Sioux City to over 1.50 in. in some southwest counties and extreme southeast.

Cool, damp weather continues to slow harvest. Four days suitable for fieldwork. Topsoil: 1%

short, 66% adequate, 33% surplus. Subsoil: 28% short, 63% adequate, 9% surplus. Corn virtually all mature; soybeans reported 98% mature. Ear droppage, corn borer, and molding continued problems. Silage cutting 90% complete. Corn for grain is 32% complete, 32% last year and 13% average. Soybean harvest 38% complete, 80% last year. Winter wheat seeding 67% complete. Fall plowing underway, slowed because of wet fields. Livestock generally good with interest increasing in feeder cattle.

KANSAS: Temperatures averaged 3 to 4° below normal west, 6 to 7° below normal northeast. Heavy frost across north on ninth. Precipitation averaged less than 0.25 in. west to over 1.00 in. east. Rainfall continues. Moisture conditions mixed, semi-dry west, adequate to surplus east. Slowdown harvesting east, muddy fields. 1978 wheat crop 80% seeded, last year 65%, average 80%, grasshoppers heavy. Harvesting corn 55% complete, last year 30%, average 25%. All corn mature, safe from frost. Sorghums mature 75%, last year 90%, average 70%. Sorghums harvested 25%, last year 40%, average 20%. Soybeans harvested 10%, last year and average 20%. Winter barley plantings 65%, last year 50%, average 60%. Pastures-ranges good to excellent. Cattle on native pastures, supplementary feeds adequate. Farm activities--silage cutting, wheat seeding, harvesting milo, corn.

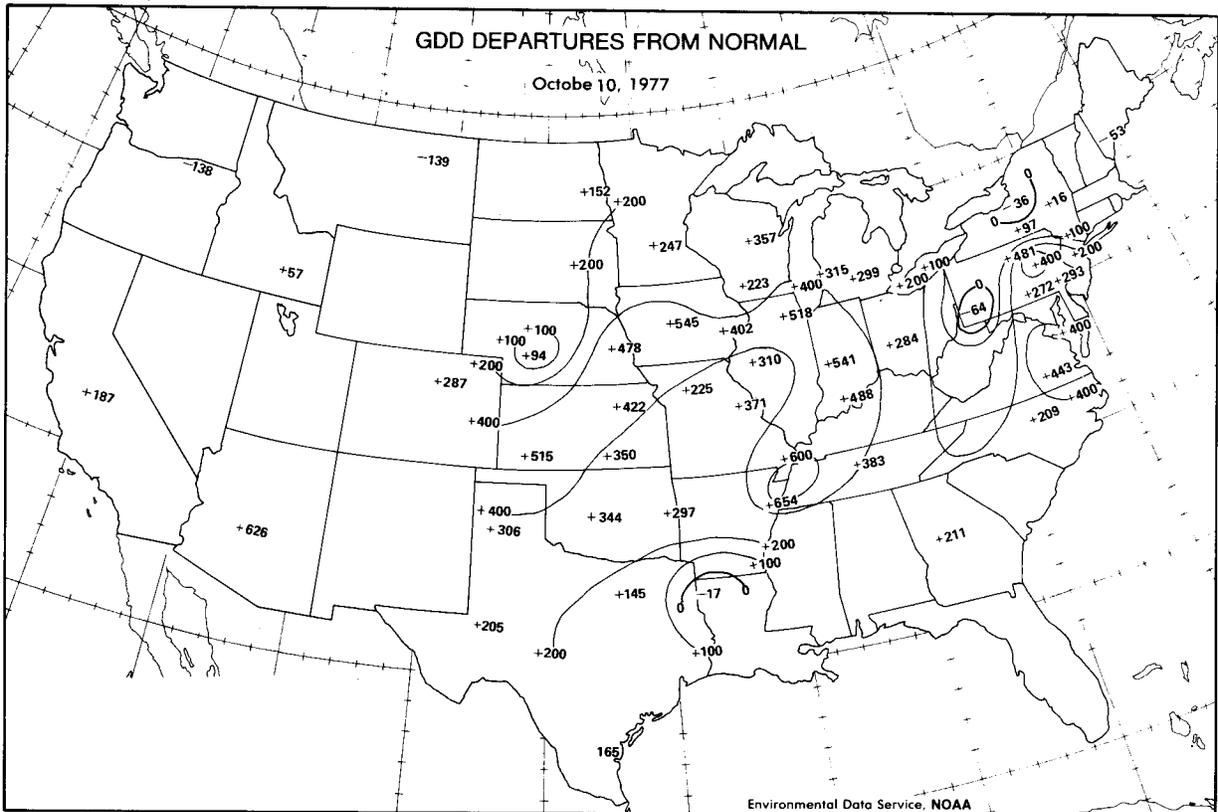
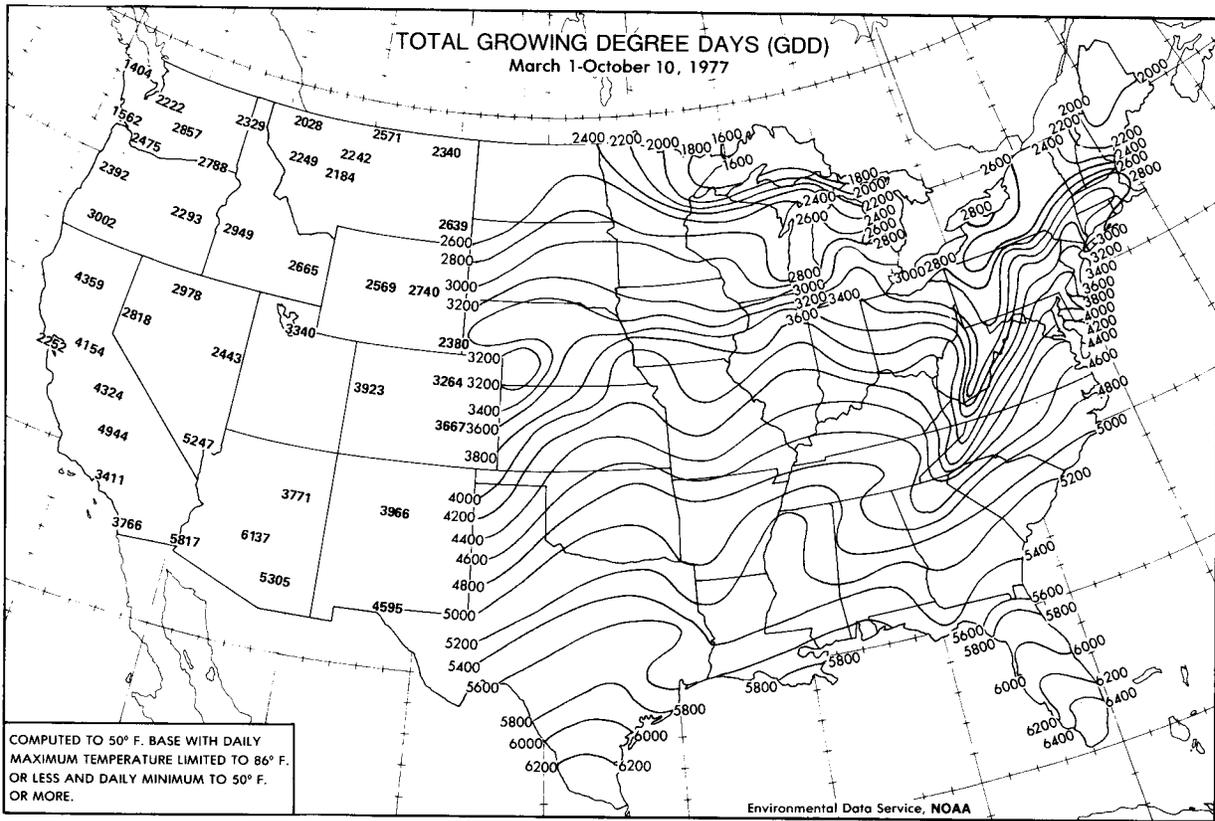
KENTUCKY: Temperatures averaged about 5 to 10° below normal for week. Readings were few degrees above normal first of week, but well below normal by week end. Precipitation averaged 1.00 to 1.50 in. over State, mostly falling at end of week. Only 4 days suitable fieldwork.

Many fields still too wet for harvest equipment following heavy rains previous week. Soil moisture adequate to surplus. Corn picking, combining soybeans, tobacco curing, and stripping, seeding small grains and cutting late hays were common activities, as weather permitted. About 42% corn for grain harvested; record progress, except for 1970, the corn blight year; 31% 10-year average, only 26% last year. Soybeans advancing slower, 14% harvested and 20% with leaves just yellowing or later, some late acreage subject to freeze damage. Burley tobacco stripping getting underway, with third of crop cured and ready for stripping. About 45% crop showing houseburn damage, generally moderate to light, but heavy in some barns central and northern counties. Firing dark types continues active. Only about 22% wheat seeded, farmers busy with more pressing harvest jobs. Some not intending to plant until mid-October. Much barley in ground, some already up. Late fall pastures excellent.

LOUISIANA: Temperatures 2 to 4° below normal. Extremes: 41 and 90°. Showers 8th north and central.

Soil moisture short north, adequate elsewhere. Main activities: planting sugarcane and small grains, harvesting cotton, soybeans and hay. Cotton fair to good; 82% open, 76% last year, 66% average; 26% harvested, 17% last year, 13% average. Soybeans fair to good; 70% turning color or past; 26% harvested, 32% last year, 21% average. Rice 95% harvested, 97% last year, 94% average. Corn 89% harvested, same as year ago. Sorghum fair; 82% harvested, 80% last year. Sugarcane good; harvest underway; 45% planted, 95% last year, 82% average. Sweetpotatoes fair to good; 66% harvested, 69% last year. Seeding of wheat and oats active. Hay last cutting. Pastures and livestock fair to good.

MARYLAND & DELAWARE: Temperatures averaged 4° below normal. Highs upper 60's, lows upper 40's



Precipitation widespread, mostly 0.25 to 0.50 in. Western areas received 2.00 in. Weekend cool, rain on Sunday.

Soil moisture short. Pastures supplying below average amounts feed. Corn for grain 75% harvested, 45% 1976, 52% average. Corn for silage 95% harvested, 90% 1976. Soybeans 75% shed leaves, week ahead of last year. Harvesting underway; 10% completed, 5% 1976, 7% average. Tobacco growers stripping crop, seeding cover crops and preparing plantbeds. Fall apple harvest continues in full swing. Seeding of small grains continues, need good rainfall for germination and growth.

**MICHIGAN:** Temperatures averaged below normal. Range: 3° below northeast Lower to 7° below southwest Lower. In Upper, 3° below east to 8° below west. Extremes: 23° west Upper and northeast Lower; 70° south central and southeast Lower. Precipitation: 0.50 to 1.50 in. Lower; 1.00 in. or more Upper.

Fieldwork: slowed by wet fields, 4 days suitable. Activity; silo filling, picking high moisture corn, combining dry beans, planting wheat and apple picking. Soil moisture 1/3 adequate, 2/3 surplus. Pastures providing good grazing. Corn 80% mature, 67% 1976, 60% normal; for grain 5% picked, silage 70%. Dry beans 35% picked, 95% 1976, 78% normal. Soybeans 5% picked, 25% 1976, 14% normal. Potatoes 60% dug, 72% 1976, 65% normal. Hay 3rd cut 65% done. Wheat 40% planted, 75% 1976. Apples picked: McIntosh 95%, Red Delicious 85%, Jonathans 90%, other 75%. Grapes, tomatoes and onions harvest finished. Cabbage, carrots and celery picking progressing.

**MINNESOTA:** Temperatures averaged 7 to 10° below normal. Extremes: 68 and 22°. Precipitation totals 0.50 to 1.00 in. north, 1.00 to near 2.00 in. south and central. Precipitation averaged normal to 0.30 in. above normal north, 0.50 in. above normal southeast and 1.00 to 1.50 in. above normal central and southwest.

Fair harvesting progress made until late week rain, snow halted fieldwork. Snow did little damage to corn but caused soybean lodging. Many fields now very wet. Soybeans drying slowly, delaying full-scale combining. Wet fields in Red River Valley making sugarbeet, potato harvests difficult. Corn 38% picked, 1976 51%, normal 21%; silage 91%, 1976 99%, normal 96%. Soybeans 30% combined, 1976 91%, normal 58%. Harvested: Sunflowers 48%, 1976 79%, normal 47%; potatoes 77%, 1976 90%, normal 78%; flax 82%, 1976 99%, normal 94%; sugarbeets 34%, 1976 23%, normal 38%.

**MISSISSIPPI:** Temperatures 1 to 3° subnormal. Extremes 95 and 36°. Greatest 24-hour rainfall 1.20 in. at Oxford on the 1st.

Soil moisture adequate. Fieldwork: 5.1 days suitable. Soybeans 84% shedding, 84% 1976, 53% mature, 43% 1976, 32% average; 21% harvested, 16% 1976, 14% average. Cotton 98% open bolls, 89% 1976, 65% average; 42% harvested, 9% 1976, 16% average. Rice 79% harvested, 67% 1976, 58% average. Corn 71% harvested, 55% 1976, 40% average. Sorghums 72% harvested, 81% 1976, 62% average. Winter wheat 37% planted, 45% 1976. Oats 35% planted, 41% 1976. Hay crops 89% harvested, 92% 1976, 88% average. Peanuts 87% harvested, 74% 1976, 68% average. Sweetpotatoes 54% harvested, 59% 1976, 56% average. Soybeans and cotton in fair to good condition. Pastures in good to fair condition. Pecans in fair condition.

**MISSOURI:** Below normal temperatures reported during week. Scattered frost occurred early in

week. Rainfall heavy north Missouri. 1.00 to 2.00 in. common north of Missouri River. In Ozarks rainfall was spotty, averaging less than 0.50 in. but some stations received over 2.00 in. The Bootheel received least rainfall averaging 0.10 in., but many stations received no measurable precipitation.

Fieldwork: 2.7 days suitable. Corn 48% harvested, last year 52%, normal 32%. Soybeans 64% mature, last year 82%, normal 60%. Soybeans 14% harvested, last year 31%, normal 20%. Grain sorghum 90% mature, last year 89%, normal 79%. Grain sorghum 50% harvested, last year 46%, normal 33%. Cotton 26% harvested, last year 8%, normal 18%. Winter wheat seeding 17% completed, last year 24%. Fall plowing 10% completed, last year 16%. Pasture condition mostly good. Soil moisture adequate to surplus.

**MONTANA:** Cool week ending with snow. Temperatures averaged between 5-10° below normal all divisions. Warmest maximum middle 60's, minimum mostly 20°. Week began dry except southcentral and southeast divisions. Snow storm end of week over plains. Precipitation about normal but much above normal southcentral, southeast.

Topsoil moisture mostly adequate. Subsoil moisture still short. Winter wheat condition good. Wet conditions hamper harvest. Sugarbeets 15% out, 27% last year. Potatoes 40% dug, 65% last year. Corn silage 85% chopped, 100% last year. Dry beans 55% combined, last year 100%. 65% cattle and 70% sheep moved from summer pasture, last year 45% cattle and sheep moved. Livestock condition mostly good.

**NEBRASKA:** Precipitation averaged below 0.10 in. west and southwest to 1.30 in. east. Temperature minimums reached freezing and below last part of period.

Corn harvest near 30% completed, 25% year ago, 20% normal. Grain sorghum harvest over 30% completed, 50% year ago, 30% normal. Soybean harvest over 20% completed, 55% year ago, 35% normal. Winter wheat 90% seeded, same as year ago and normal. Sugarbeet harvest beginning. Soil moisture adequate nearly all areas.

**NEVADA:** Shower activity 6th and 7th east and southeast. Remainder of week generally sunny and dry. Average temperatures from 5° above normal to 6° below normal. Extremes: 96 and 12°.

Excellent potato digging weather, harvest full swing. Alfalfa seed harvest about completed. Good progress winter grain seeding.

**NEW ENGLAND:** Temperatures averaged below normal most of week. Widespread killing frost occurred on 9th and early on 10th across northern New England with frost also common many interior lowlands of southern New England. Generally fair weather prevailed but continuing rain occurred on night of 10th through most of 11th with accumulation of 1 to 4 in.

Maine potato harvest hampered by wet fields. Many low spots being left unharvested, will be abandoned unless conditions improve drastically. About 60 percent of crop harvested. Most vegetable crops near end. Apple and cranberry harvest slowed by wet weather but both crops look good. Good silage corn crop but difficult harvesting. Too wet to harvest much hay.

**NEW JERSEY:** Cold wet week with frost. First freeze of season. Temperatures averaged 6° below normal. Extremes: 30° Neshanic station 7th, 72° Long Branch 5th. Weekly rainfall averaged 1.71 in. north,

1.62 in. central and 1.55 in. south. Four-inch soil temperatures today averaged: 53° north, and 61° south.

Soil moisture adequate to excessive most areas. Sweetpotato and cranberry harvest at peak. White potato and apple harvest well advanced. As fields and crops dry, harvest of field corn and soybeans will increase. Harvest of fall vegetables continues though declining. Sowing of cover crops and fall grains is active.

**NEW MEXICO:** Scattered showers most sections throughout week. More widespread and heaviest rains Thursday as moist air from tropical storm moved east across State. Weekly totals above 1.00 in. several places and more than 2.00 in. at Socorro.

General light showers during week delayed most fall harvest operations. All crops in good condition. Cotton, 5% harvested. Alfalfa harvest delayed with fourth cutting underway in north and fifth cutting in progress in south. Grain sorghum harvest 10% completed. Corn for silage and grain harvest continuing. Fall lettuce harvest has begun but hampered by rains. Winter wheat seeding 85% complete with good stands for irrigated crop and fair stands for dryland fields. Ranges fair to good. Livestock good.

**NEW YORK:** Showers 3rd, 6th and 8th; heavy rain on 9th. Heaviest amounts in southeast, Mohawk Valley and Adirondacks. First killing frost hit most of north country on 9th. Extremes: 16° at Newcomb, 70° at Albany.

Limited fieldwork. Corn silage harvest 30% done, 50% 1976. Corn grain harvest started. Winter wheat planting way behind. Third cutting alfalfa 60% in, 80% 1976. Central and western onion harvests delayed. Potato harvest at standstill. McIntosh apple harvest about done, Delicious and Cortlands starting.

**NORTH CAROLINA:** Temperature: 3° below normal. Precipitation: light to moderate.

Fieldwork: 5.3 days suitable. Soil moisture: Short to adequate. Conditions: Soybeans, cotton, pastures fair; peanuts fair to good. Harvested: Burley tobacco 97%, 1976 94%, average 94%; corn for grain 82%, 1976 72%, average 67%; peanuts dug 66%, 1976 37%, peanuts threshed 51%, 1976 23%; sweetpotatoes 53%, 1976 50%, apples 65%, 1976 71%, average 69%; sorghum grain 60%, 1976 53%; cotton 13%, 1976 5%, average 8%. Planted: Wheat 16%, 1976 13%, average 21%.

**NORTH DAKOTA:** Measurable snow during past week, some areas up to 6.00 in. Moisture put southern and east central portions of State near or slightly above normal for month. Temperatures 5 to 7° below normal. Extremes: 20 and 70°.

Row crop operations slowed most of week by continued wet weather. Soybean harvest 45% complete, sunflowers 20%, corn picking 40%, sugarbeet lifting 38%. Small grain harvest has been completed or is nearing completion all areas of State except northwest district. Wet weather causing problems for hay movers.

**OHIO:** Temperatures below normal. Scattered frost 4th and 6th (not killing). Scattered showers from 5th to 9th. Highest 1.42 in. Dayton; least 0.52 in. Findlay. High temperature 71° Cincinnati; low 34° Zanesville.

Harvest completed: Corn 15%, same as last year, 10% average. Soybeans 30%, 40% 1976, 35% average. Corn silage 85%, 80% normal; potatoes 70%, 80% 1976, 75% normal; sugarbeets less than 10%, same as last year and normal; popcorn 15% behind

schedule; apples 60% on schedule; grapes 60%, slightly less than average. Excellent conditions for fall seeded grains. Some wheat emerged. Few reports of armyworms. Moisture supplies: 74% adequate, 26% surplus. Pasture conditions good to excellent. Fieldwork: 5 days suitable.

**OKLAHOMA:** Temperatures averaged 5 to 6° below normal over the eastern 2/3 Oklahoma and 1 to 3° below normal over western 1/3. Precipitation light, all divisions reported rain. Heaviest average was 0.42 in. southeast.

Topsoil moisture supplies short in west, adequate in east. Subsoil moisture adequate. Wheat rated fair to good; 42% up-to-stand, 23% 1976, 29% normal. Wheat seeding continues steadily, now 78% complete, 64% 1976, 68% normal. Oats fair to good condition, 19% up-to-stand, 19% 1976, 22% normal. Barley fair condition, 13% up-to-stand, 8% 1976, 15% normal. Corn fair condition, 63% harvested, 50% 1976, 47% normal. Sorghum rated good, 76% mature, 79% 1976, 85% normal. Cotton good condition, 67% open bolls, 47% 1976, 52% normal. Peanuts good condition, 80% mature, 72% 1976, 77% normal. Peanut harvest 10% complete, 7% 1976, 10% normal. Soybeans fair to good condition, 78% mature, 47% 1976, 55% normal. Soybean harvest 7% complete, 4% 1976, 7% normal. Alfalfa hay good condition. Native pasture and ranges good condition. Livestock good condition.

**OREGON:** Rain fell over all but southeast corner of State during week and was generally near 0.50 in. along coast and in Willamette Valley. Elsewhere amounts were generally less than 0.10 in. Temperatures averaged 3 to 5° below normal west and 4 to 8° below in east. Extremes: High 70's, mid 30's west; mid 60's, low 20's east.

Fall seeding and land preparation continued as weather permits in most counties. Spring grain harvest is close to completion in east. Apple, pear, prune harvests continue. Rain damage heavy in some prune orchards. Filbert harvest underway. Potato and onion harvests continue. Onion quality varies. Pastures and ranges showing good regrowth with recent rains. Cattle continue to move from summer range, stock condition good.

**PENNSYLVANIA:** Changeable conditions daily. Rainfall on 4 to 6 days from close to 1.00 in. most places to near 2.00 in. several scattered mountain locations. Temperatures 2 to 7° below normal for coolest since mid-May. Extremes: 70 and 28°.

Fieldwork: Near 4 days suitable. Moisture adequate to surplus. Activities: Fall plowing; seeding barley and wheat; digging potatoes; filling silos; picking corn; haymaking; harvesting apples and grapes. Potatoes 75% dug, 79% 1976. Plowing 83%, 73% 1976. Wheat 62% sown, same as last year. Barley 85% sown, same as last year. Ensilage corn cut 73%, last year 70%. Corn for grain 65% mature, last year 46%; 8% harvested, last year 5%. Alfalfa third cut 90%, fourth cut 44%. Clo-tim second cut complete. Hay quality fair to poor. Feed from pastures average to above average.

**PUERTO RICO:** Island average rainfall 2.46 in. or 0.59 in. above normal. Highest weekly total 5.86 in. at Yabucoa. Highest 24 hour total 3.15 in. Temperatures averaged 76° interior divisions. Mean station temperatures ranged from 82° to 68°. Extremes 94 and 54°.

**SOUTH CAROLINA:** Temperatures averaged warmer than usual during week except near normal northeast. Highest temperature 91° at Charleston. Mountains and northwest above average rainfall but near or

below average elsewhere. Weekend scattered showers many areas. Largest rainfall was 3.54 in. Saturday at Walhalla.

Soil moisture short to adequate. Few dry fields concern for late soybeans and winter grazing. Corn harvest nearing completion most areas. Corn harvested: 93% 1977, 85% 1976, 73% average. Cotton harvested: 24% 1977, 8% 1976, 13% average. Soybeans fair condition. Mostly adequate moisture for well-rooted plants. Pastures fair condition. Some renovation and seeding underway except dry areas. Winter grazing disking and seeding still active. Planting about half completed with about one-third emerged. Pecans in poor to fair condition. Some starting to fall. Apples about harvested. Fall vegetables in fair condition. Cucumber, squash and snap bean harvest has begun.

**SOUTH DAKOTA:** Temperatures 4 to 12° below normal. Extremes: 23 and 75°.

Topsoil moisture adequate. Rain heaviest northeast. Most stations have received a frost. High moisture content and wet fields delaying harvest. Corn borer and wind causing ear droppage. Rain and wind causing lodging and shattering in some soybeans. Corn harvested 16%, 1976 61%, normal 27%. Grain sorghum harvested 11%, 1976 74%, normal 43%. Soybeans harvested 21%, 1976 86%, normal 49%. Sunflowers 16% harvested.

**TENNESSEE:** Temperatures 4 to 7° below normal. Days suitable for fieldwork 3.8. Precipitation averaged 1.00 in.

Soil moisture adequate. Pastures excellent, cattle good. Most harvesting slowed by frequent rains. Some flood and wind damage. Soybeans mature 30% 1977, 25% 1976, 28% normal. Soybeans harvested 5% 1977, 7% 1976, 6% normal. Cotton bolls open 89% 1977, 42% 1976, 57% normal. Cotton harvested 38% 1977, 4% 1976, 19% normal. Corn mature 95% 1977, 90% 1976, 91% normal. Corn harvested 40% 1977, 33% 1976, 33% normal. Burley tobacco stripped 35% 1977, 28% 1976, 19% normal. Lespedeza hay harvested 87% 1977, 91% 1976, 91% normal. Fall plowing completed 70% 1977, 69% 1976, 73% normal. Wheat seeded 50% 1977, 43% 1976, 43% normal. Oats seeded 70% 1977, 66% 1976, 70% normal. Barley seeded 60% 1977, 65% 1976, 70% normal.

**TEXAS:** Cold front moved central Texas midweek became stationary. Another cold front moved through latter half week. Temperatures 2 to 5° below normal past week. Rainfall normal southcentral Texas, Coastal Bend, Lower Valley, Northern, Southern High Plains, below normal elsewhere.

Harvest active, although damp weather slowed cotton, corn, sorghum harvest portions of Plains. Progress to date well ahead of schedule. Recent rains most area not enough to help small grains. Wheat, oat planting slowed; many growers waiting for rain. Cotton harvest continues to accelerate on Plains although stripping some areas slowed by damp weather. Many fields ready for harvest; stripping should increase rapidly weather permitting. Corn harvest on High Plains excellent progress despite damp weather some areas. Sorghum harvest slowed by damp weather on Plains but good progress made. Peanut harvest continuing. Some fields, Cross-Timbers baled for hay due to poor yield prospects. Soybean harvest accelerating. Late varieties maturing, dropping leaves. The second rice cutting in progress; generally good yields, quality. Sugarbeet harvest starting on High Plains. Wheat seeding slowing; many producers waiting for rain. Some early planted fields will be replanted because stands died from lack of moisture. Some growers still planting in dry seedbeds. Oat seeding

slowing. Some replanting necessary where stands spotty. Some growers continuing to plant in dry seedbeds; others waiting for rain. Sorghum harvested 81% 1977, 70% 1976, 69% average. Corn harvested 92% 1977, 52% 1976, 66% average. Cotton harvested 30% 1977, 12% 1976, 18% average. Peanuts harvested 42% 1977, 44% 1976, 41% average. Soybeans harvested 14% 1977, 8% 1976, 2% average. Wheat planted 67% 1977, 58% 1976, 68% average. Oats planted 57% 1977, 45% 1976, 62% average.

Commercial vegetables: Lower Rio Grande Valley, harvest grapefruit, early season oranges in light volume. Seeding cabbage, onions, and carrots continues. Coastal Bend recent showers improved fall cucumber growth. Land preparation and planting spring cucumbers active. San Antonio-Winter Garden cabbage and bell peppers making progress after slow start caused by hot, dry weather. Spinach planting active some areas and behind schedule due hot temperatures. Cucumber harvest continues. Laredo, onion seeding activity increasing. Honeydew harvest continues. East Texas, sweetpotato harvest active. Lack of moisture delayed development fall vegetables. Central Texas, dry conditions continue hamper land preparation, crop development. High Plains, production carrots, cabbage, lettuce, bell peppers, tomatoes, cucumbers active. Trans-Pecos, tomato harvest interrupted wet field conditions. Pecans continue to split shucks throughout central, south Texas. Harvest activity on increase. Initial harvest in Trans-Pecos underway. Range and livestock: Grazing continues decline due extended dry weather. Livestock holding up well, but ranchers drier areas feeding to hold condition because poor fall, winter grazing prospects. Range fire hazard decreased with damp, cooler weather.

**UTAH:** Scattered shower and thunderstorm activity middle of period. Accumulated amounts of moisture generally light to moderate but locally heavy with hail few stations. Average temperatures quite variable ranging from 3° below normal to 5° above. Soil moisture continues critical all areas except extreme northwest portion of State.

Winter wheat planting progressed to about 80% completed. Soil moisture for planting generally short. Third crop alfalfa hay harvest 90% completed in areas where applicable. Other harvest progress: Silage corn 84%, apples 58%, dry onions 53%, potatoes 45%, grain corn 15%. Prospects for fall and winter range feeds around 60% of normal. Cattle and sheep movement from summer ranges about 50 and 60% completed, respectively.

**VIRGINIA:** Rainfall averaged 0.50 in. Temperature slightly below normal. Extremes: 90 and 29°.

Topsoil moisture 74% short, 24% adequate, 2% surplus. Pasture livestock watering supplies 34% adequate, 41% short, 6% critical. Less favorable than two weeks earlier. Very little frost damage. Corn combining 65%, 40% 1976, 34% usual; 90% done east. Soybean combining 3%, 11% 1976, 4% average. Peanut digging 47%, 12% 1976, 30% usual; combining 24%, 4% 1976, 17% average. Tobacco harvests near end. Seeding: Wheat 15%, 21% 1976, 19% usual; barley 44%, 37% 1976 and average; winter oats 53%, 38% 1976, 41% usual. Apples 56% picked, 60% 1976. Pastures fair. Sweetpotatoes dug Eastern Shore 65%. Cotton 75% picked southeast.

**WASHINGTON:** West: Temperatures averaged 3 to 4° below normal. Precipitation averaged 1.50 in. below normal coastal areas, 0.40 to 0.50 in. below normal elsewhere.

Weather generally excellent for harvest of late vegetable crops--cauliflower, potatoes, sweet corn. Silage also being harvested. Fall clean up of cropland, cultivation, and planting of cover crops

are major activities. Christmas tree growers giving final "grooming" to trees for the coming season. Pastures in excellent shape.

East: Temperatures 4 to 6° below normal. Precipitation 0.20 to 0.30 in. below normal. Apple harvest going strong. Potatoes, fall onions, processing carrots, grapes, alfalfa seed, clover seed, hay and silage still being harvested. Sugarbeet harvest should start in next few days. Good deal of fall grain still remains to be planted. Moisture conditions have just recently become adequate for planting in many areas. Some wheat is up--spot-ness in some areas will necessitate reseeding. Soil moisture currently adequate for germination, but a good deal of additional moisture is necessary for normal yields next year. Range and pasture feed conditions are improved, but still generally below normal most areas.

WEST VIRGINIA: Temperatures well below normal, frosting in higher regions. Rainfall near normal northeast, above normal elsewhere. Soil moisture mostly adequate.

Fieldwork: 3.7 days suitable. Hay making and corn harvesting for grain and silage main activities. Hay: 2d cutting 93% complete, 95% 1976, 94% average, 3d cutting 74% complete, 79% 1976, 71% average, condition fair to good. Corn development: 6% dough, 56% mature, 38% harvested, 16% 1976, 25% average, condition mostly good. Potatoes 82% dug, 93% 1976, 91% average. Tobacco 92% harvested. Wheat sown 46%, 27% 1976, 29% average. Barley sown 52%, 48% 1976, 53% average. Pasture conditions steady, mostly fair to good.

WISCONSIN: Temperatures averaged 6° below normal. Highs were in 60's with sunshine until midweek. Frosts occurred some mornings, generally in northern

half of State. Rain developed 7th and continued 8th before clearing again early 9th. Rainfall amounts ranged from 1.00 to 1.50 in. over much of State.

Some progress made on corn harvest during dry days. Silo filling 80% done, 1976 100%, normal 90%. Most silos full of corn and hay, some silage piled outside. More acres than usual left for grain corn due to long growing season. Grain corn harvest 15% completed, 1976 20%, normal 8%. Yields running high, moisture content mostly in 20's. Further delays in harvest could increase field losses from ear drop and stalk rot. Soybeans 8% combined, 1976 25%, normal 8%. Hard frost would help dry beans. Soybeans lodging from tall growth. Still some hay to be made in October, mostly green chopping of 3d and 4th crop alfalfa. Fall pasture conditions above normal. Fall plowing 15% done, 1976 12%, normal 20%. Winter wheat emergence good. Potato growers trying to finish digging crop, some fields muddy. Cranberry harvest in full operation. Topsoil moisture 5% short, 75% adequate, 20% surplus.

WYOMING: Temperatures generally below normal. Lowest temperature of 15° in Snake drainage. High of 82°, Lower Platte drainage. Precipitation generally above normal with Belle Fourche drainage reporting greatest amount. Lower Platte drainage received least amount.

Winter wheat 92% emerged, mostly excellent stands. Potatoes 84% harvested. Sugarbeet harvest slow, 14% dug, average 31%. Average sugar content 16.6%. Dry beans 93% combined. Grain corn 75% mature, 25% denting, 21% harvested. Stockmen moving and marketing livestock. Cattle, calves 24% marketed, 36% contracted. Sheep, lambs 39% marketed, 43% contracted. Stock water short half of State.

## World Weather and Crop Update

October 3 - 9

USSR. Small grain harvest reached the final stages. By October 3, threshing was completed on 118 million hectares with another million hectares in windrows. Harvest progress continued ahead of recent years. Harvesting of non-grain crops also progressed favorably although wet conditions prevailed in some areas. Cotton harvest proceeded at above-normal pace. Winter grains have been seeded on almost 36 million hectares, 82 percent of plan. Condition of winter grains continued generally favorable.

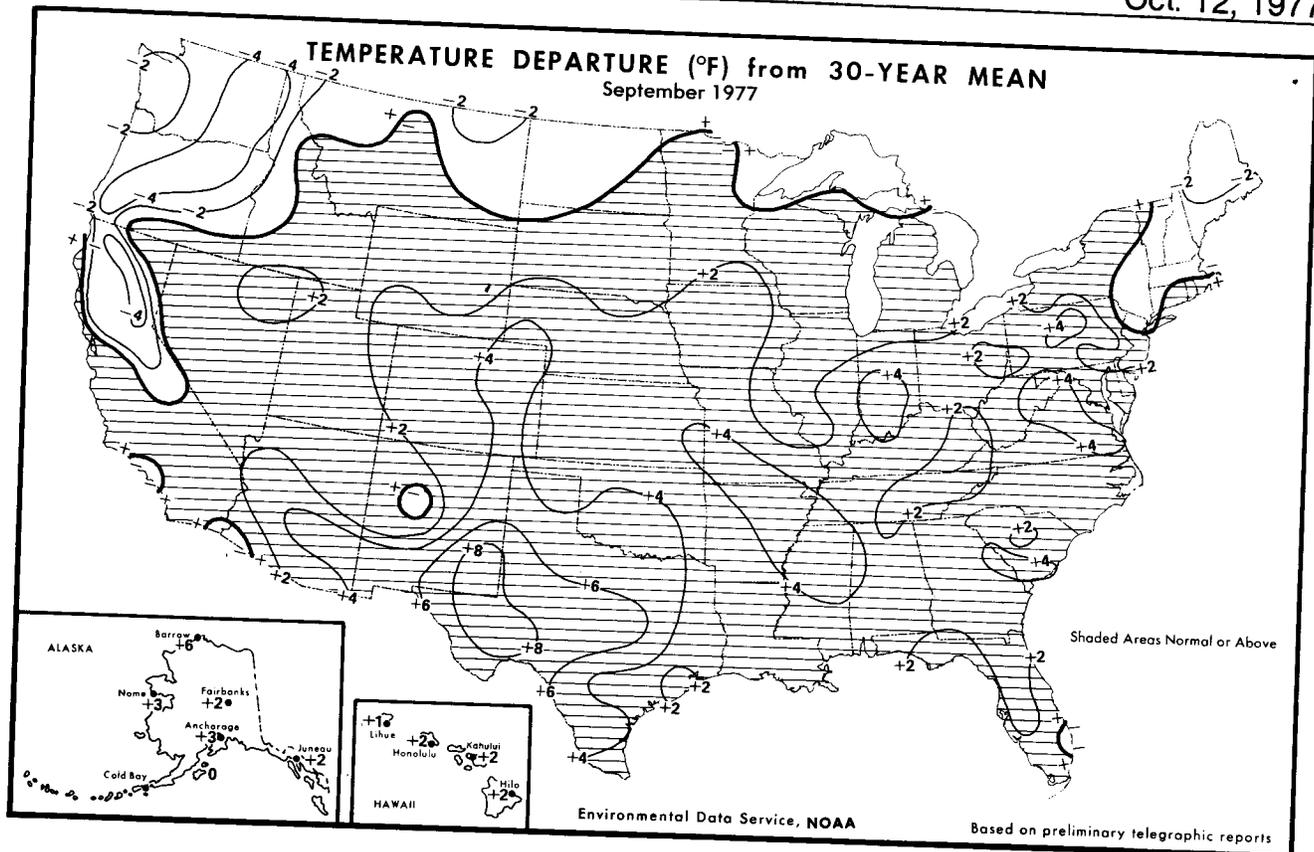
ASIA. In the People's Republic of China, generous rains fell along the southern fringe of the North China Plain, but most of northern China received only light precipitation--favorable for harvesting, but some areas needed surface moisture to get winter grains off to a good start. Light rain also fell over parts of the northeast. Moderate to heavy rains were fairly widespread south of the Yangtze River. Although the monsoon in India officially ended on September 30, some monsoonal weather systems were active bringing substantial rains. Light to locally moderate rains across the main grain areas of Australia have enhanced development of winter grains and pastures. But soil moisture is short in most areas, and more rain is urgently needed for normal crop development.

AFRICA. North Africa--Morocco, Algeria, and Tunisia--was treated to the first good rains of this autumn with heaviest recordings in Morocco. Only scattered light showers fell in the main agricultural areas of South Africa. Severe rainfall deficiencies continued over parts of Central Africa

especially in the agricultural areas of Mauritania and the Cape Verde Islands. Drought also has affected northern Senegal and those areas of Mali which border Mauritania. Parts of Niger, Chad, Sudan, Gambia, and Guinea Bissau have received less than 60 percent of normal rainfall during the current rainy season which is coming to an end.

EUROPE. Frequent showers--heavy in some areas--pestered farming activities throughout most of western Europe. Substantial rains fell over parts of Spain including the extreme south where a serious moisture deficiency had developed in recent months. Light to locally moderate, frequent showers kept farming activities at minimum in East Germany, Poland, and Czechoslovakia. But weather in the remaining countries in East Europe was generally favorable for harvesting and seeding of winter grains for most of the week. Scattered light showers, locally moderate, fell over Greece, and light to moderate rains dampened the main agricultural areas in Turkey.

AMERICAS. Winter grain areas in Argentina received light, locally moderate, rains, but only light scattered showers fell in Rio Grande do Sul, Brazil's most important wheat-producing state. Substantial rains fell throughout the other agriculturally important southeastern states and in the northeast. Snow, rain, and cold temperatures interfered with harvesting activities over much of the Prairie Provinces in Canada. Although swathing of most crops has been nearly completed, combining has been retarded by the inclement weather.



### September Weather Summary

**HIGHLIGHTS:** Early in September, tropical storms brought large amounts of precipitation to some of the southern coastal areas and from the Mississippi River Delta northeastward through the Appalachians to North Carolina. A succession of Pacific cold fronts moving across the Rockies and encountering warm, moist air in the Plains accounted for many of the rainy days recorded from the Plains northeastward. Wet fields caused delays in harvesting and seeding progress.

September was a warm month in most of the Nation. Only the northern portions had near normal temperatures. The Pacific Northwest was 2 to 4° cooler than normal on the average and some parts of Texas were 6 to 8° warmer than a normal September.

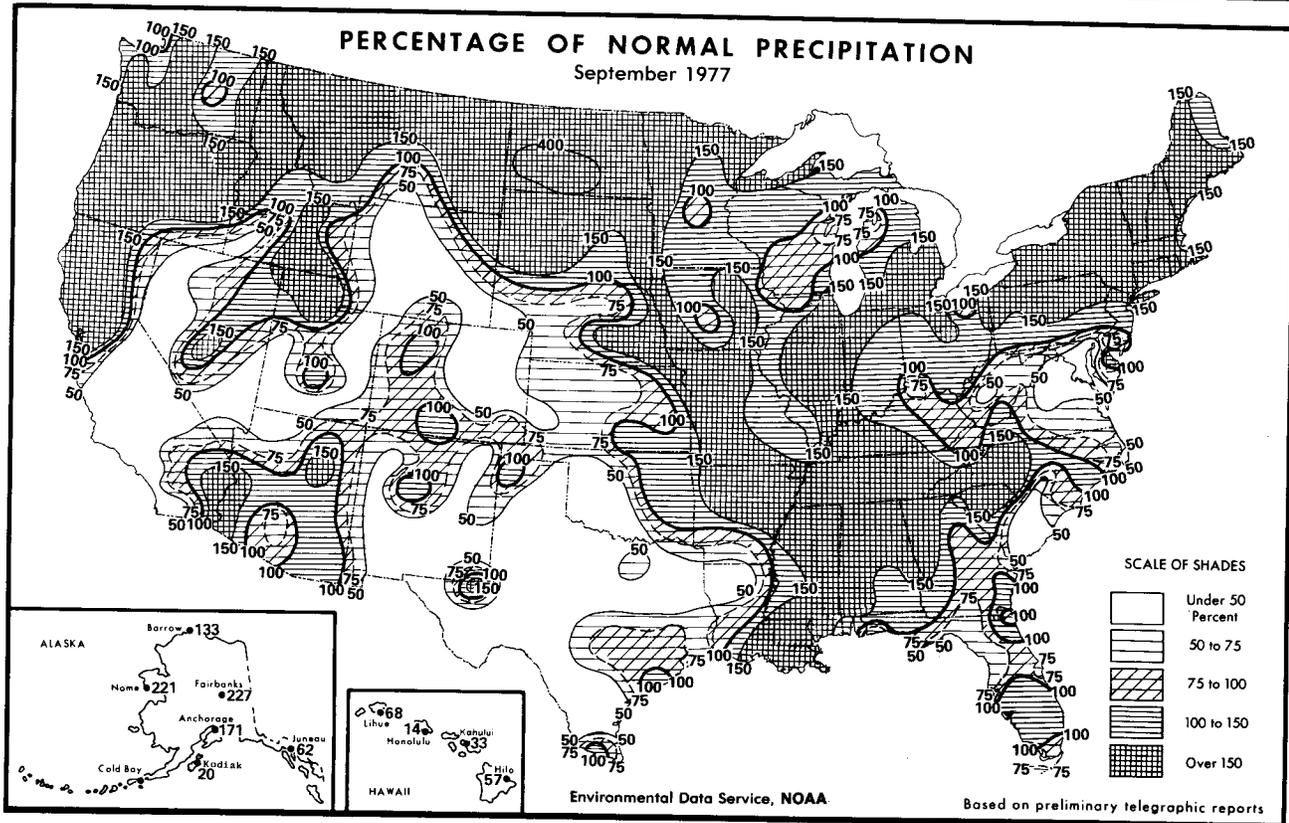
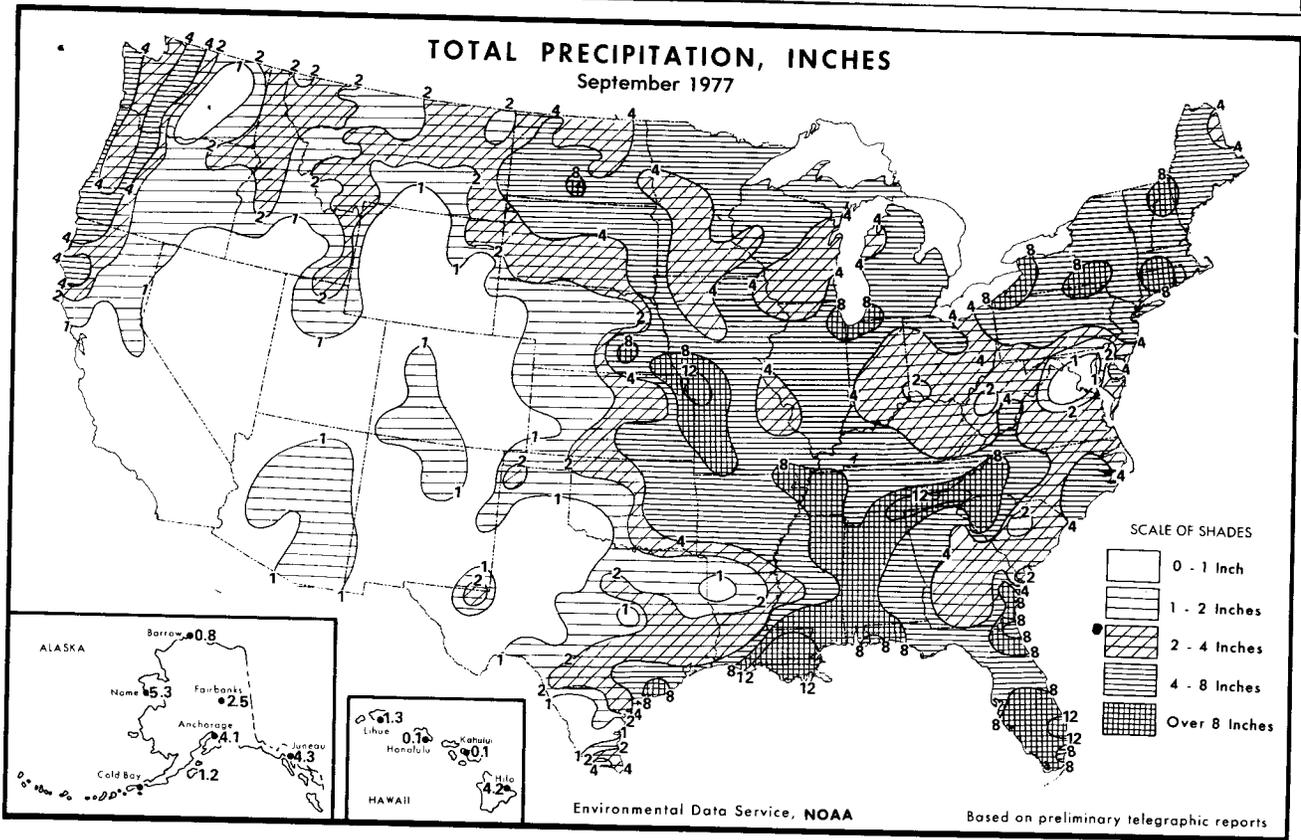
The month began with flooding rains inundating parts of the Midwest and Plains. Heaviest amounts drenched east central Minnesota, northwestern Wisconsin, southeastern Nebraska, and southwestern Iowa. Hurricane-related rainfall soaked southern sections of Texas, Louisiana, and Florida. All but the northwestern portion of the country was warmer than normal.

The week prior to mid-month was dominated by the effects of Hurricane Babe which came into southern Louisiana and then moved northeastward as a low pressure center. Heavy rain fell along its path from Louisiana to North Carolina. Amounts in excess of 8 inches fell around Baton Rouge, La., and in parts of the southern Appalachians. Rains were light in the previously flooded parts of the Plains and Midwest, but some heavy amounts fell in the northern portions of North Dakota, Minnesota, and Wisconsin. Most of the Nation continued to bask under warmer than normal temperatures.

During the week of mid-month a series of waves formed on a cold front and moved from Kansas northeastward through New England. Warm, moist air from the Gulf of Mexico was pulled northward and caused heavy rain along the entire frontal surface. Kansas City measured over 12 inches of rain early in the week and rains in excess of 2 inches extended northeastward through the State of Maine. Elsewhere another storm system had moved into the U.S. and Canada from the Pacific causing rain and showers which became heavier as the system moved into the northern Plains. The continuing wet weather caused harvesting problems in the wheat areas of northern U.S. and Canada. Warm weather persisted over much of the Nation except west of the Rockies where temperatures averaged 3 to 5° below normal.

The week of September 19-25 showed continued heavy rain in the northern portion of the Nation from North Dakota to New England. Elsewhere moderate to heavy rain fell from southeastern Texas to southern Illinois. The continued influx of moisture from the Pacific into northwestern U.S. and southwestern Canada spread rain throughout those areas. Summer weather continued except west of the Rockies and along the northern tier of States.

The last days of September allowed some drying in the northern Plains but the central Plains, middle Mississippi Valley, and northeastward through New England continued to have moderate to heavy rain. The mid-Atlantic Coastal States had gotten very dry as significant rain tended to skirt the area. The Northwest and northern Rockies were still getting showers, and moisture moving into the Southwest caused extensive showers in Arizona and New Mexico. Southwestern Texas had some much needed moisture.



Temperature and Precipitation Data for September 1977

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	76	+ 2	10.4	+ 6.8	La. Baton Rouge . . .	80	+ 2	14.0	+10.2	Youngstown . . . . .	66	+ 3	5.1	+ 2.5
Mobile . . . . .	81	+ 3	9.6	+ 3.0	Lake Charles . . . . .	80	+ 2	4.0	- .1	OKLA. Okla. City . . .	78	+ 5	1.2	- 2.4
Montgomery . . . . .	79	+ 3	5.6	+ 1.2	New Orleans . . . . .	80	+ 2	13.4	+ 7.8	Tulsa . . . . .	76	+ 3	5.6	+ 1.5
ALASKA. Anchorage . .	51	+ 3	4.1	+ 1.7	Shreveport . . . . .	79	+ 2	.5	- 2.6	OREG. Astoria . . . . .	57	- 1	5.4	+ 2.6
Barrow . . . . .	36	+ 6	.8	+ .2	MAINE. Caribou . . . .	51	- 3	3.5	0	Burns . . . . .	56	- 2	1.1	+ .6
Fairbanks . . . . .	46	+ 2	2.5	+ 1.4	Portland . . . . .	58	- 1	4.6	+ 1.5	Medford . . . . .	64	0	4.2	+ 3.6
Juneau . . . . .	51	+ 2	4.3	- 2.6	MD. Baltimore . . . . .	72	+ 3	.6	- 2.5	Pendleton . . . . .	59	- 5	1.2	+ .6
Kodiak . . . . .	50	0	1.2	- 4.9	MASS. Boston . . . . .	64	- 1	4.0	+ .8	Portland . . . . .	61	- 1	3.3	+ 1.7
Nome . . . . .	45	+ 3	5.3	+ 2.9	Chatham . . . . .	61	- 1	6.5	-----	Salem . . . . .	59	- 3	2.4	+ .9
ARIZ. Flagstaff . . . .	60	+ 2	1.5	- .2	MICH. Alpena . . . . .	58	+ 2	4.0	+ .7	PA. Allentown . . . . .	87	+ 2	4.1	+ .5
Phoenix . . . . .	88	+ 4	.5	- .2	Detroit . . . . .	65	+ 1	4.2	+ 2.0	Erie . . . . .	63	+ 2	10.7	+ 7.1
Tucson . . . . .	82	+ 2	1.4	0	Flint . . . . .	62	+ 1	4.6	+ 2.1	Harrisburg . . . . .	68	+ 1	3.7	+ 1.0
Winslow . . . . .	71	+ 1	2.0	+ 1.1	Grand Rapids . . . . .	63	+ 1	4.3	+ 1.0	Philadelphia . . . . .	70	+ 2	3.4	+ .4
Yuma . . . . .	86	- 1	.5	+ .3	Houghton Lake . . . . .	58	+ 1	4.2	+ 1.0	Pittsburgh . . . . .	65	+ 1	3.1	+ .6
ARK. Fort Smith . . . .	77	+ 3	4.6	+ 1.3	Lansing . . . . .	63	+ 1	4.5	+ 1.9	Scranton . . . . .	63	0	6.0	+ 3.1
Little Rock . . . . .	77	+ 4	6.8	+ 3.2	Marquette . . . . .	57	0	5.2	+ 1.7	R.I. Providence . . . .	64	+ 1	5.6	+ 2.3
CALIF. Bakersfield . . .	79	+ 2	0	- .1	Muskegon . . . . .	62	0	4.4	+ 1.0	S.C. Charleston . . . . .	79	+ 4	2.5	- 2.7
Eureka . . . . .	57	0	3.4	+ 2.7	S. Ste. Marie . . . . .	54	- 1	4.3	+ .4	Columbia . . . . .	75	0	1.5	- 2.8
Fresno . . . . .	74	0	T	- .2	MINN. Duluth . . . . .	53	- 1	6.0	+ 2.9	Greenville . . . . .	74	+ 2	9.4	+ 5.6
Los Angeles . . . . .	72	- 1	0	- .1	Internatl Falls . . . . .	53	0	6.8	+ 3.5	S.D. Aberdeen . . . . .	60	+ 1	4.4	+ 2.7
Red Bluff . . . . .	73	- 2	1.3	+ 1.0	Minneapolis . . . . .	61	+ 1	4.4	+ 1.7	Huron . . . . .	62	+ 1	2.3	+ .5
San Diego . . . . .	72	+ 2	T	- .1	Rochester . . . . .	61	+ 2	3.7	+ .6	Rapid City . . . . .	61	0	2.9	+ .7
San Francisco . . . . .	64	0	.5	+ .3	St. Cloud . . . . .	59	+ 1	2.3	- .4	Sioux Falls . . . . .	62	+ 1	5.6	+ 2.7
Stockton . . . . .	73	+ 1	.6	+ .4	MISS. Jackson . . . . .	78	+ 2	3.9	+ .9	TENN. Chattanooga . . .	75	+ 3	14.2	+10.5
COLO. Denver . . . . .	67	+ 4	- 1	- 1.0	Meridian . . . . .	79	+ 4	6.6	+ 3.3	Knoxville . . . . .	74	+ 2	6.9	+ 4.1
Grand Junction . . . . .	70	+ 3	.5	- .3	MO. Columbia . . . . .	70	+ 2	6.7	+ 2.3	Memphis . . . . .	79	+ 5	6.4	+ 3.4
Pueblo . . . . .	68	+ 2	.1	- .7	Kansas City . . . . .	69	0	11.3	+ 7.1	Nashville . . . . .	74	+ 2	5.0	+ 3.9
CONN. Bridgeport . . . .	68	+ 1	7.3	+ 4.4	St. Louis . . . . .	71	+ 1	3.6	+ .7	TEX. Abilene . . . . .	83	+ 7	T	- 2.2
Hartford . . . . .	64	+ 1	8.2	+ 4.6	Springfield . . . . .	73	+ 4	9.0	+ 4.9	Amarillo . . . . .	74	+ 4	T	- 1.9
D.C. Washington . . . .	74	+ 3	.3	- 2.8	MONT. Billings . . . . .	59	0	.7	- .7	Austin . . . . .	84	+ 5	3.1	- .6
FLA. Apalachicola . . . .	80	+ 1	4.1	- 4.9	Glasgow . . . . .	55	- 2	2.6	+ 1.7	Beaumont . . . . .	83	+ 4	2.9	- 2.4
Daytona Beach . . . . .	81	+ 1	6.6	+ .5	Great Falls . . . . .	56	- 1	2.2	+ 1.0	Brownsville . . . . .	84	+ 2	2.8	- 2.4
Ft. Myers . . . . .	82	0	9.2	+ .5	Havre . . . . .	57	0	1.7	+ .6	Corpus Christi . . . . .	86	+ 5	.9	- 4.0
Jacksonville . . . . .	80	+ 2	7.5	+ .5	Helena . . . . .	56	0	1.9	+ .9	Dallas . . . . .	---	---	---	---
Key West . . . . .	83	0	3.7	- 3.6	Kalispell . . . . .	52	- 1	2.2	+ 1.1	Del Rio . . . . .	86	+ 6	1.4	- 1.7
Lakeland . . . . .	82	+ 2	8.5	+ 2.4	Miles City . . . . .	59	- 1	1.9	+ .7	El Paso . . . . .	79	+ 5	2.2	- 1.0
Miami . . . . .	83	+ 1	7.0	- 1.7	Missoula . . . . .	55	0	1.7	+ .6	Fort Worth . . . . .	82	+ 4	1.7	- 1.5
Orlando . . . . .	83	+ 3	7.0	- .2	NEBR. Grand Island . . .	66	+ 2	7.8	+ 5.3	Galveston . . . . .	81	+ 1	4.9	- .7
Tallahassee . . . . .	79	+ 1	5.3	- 1.3	Lincoln . . . . .	66	0	6.1	+ 3.2	Houston . . . . .	80	+ 1	3.9	- .8
Tampa . . . . .	82	+ 1	4.3	- 2.1	Norfolk . . . . .	66	+ 3	1.8	- .6	Lubbock . . . . .	77	+ 6	.5	- 1.7
W. Palm Beach . . . . .	81	- 1	13.2	+ 3.3	N. Platte . . . . .	64	+ 2	1.5	- .5	Midland . . . . .	82	+ 7	.1	- 1.4
GA. Atlanta . . . . .	74	+ 2	4.9	+ 1.7	Omaha . . . . .	66	+ 2	5.3	+ 2.1	San Angelo . . . . .	84	+ 7	.3	- 2.4
Augusta . . . . .	78	+ 4	3.3	0	Valentine . . . . .	63	+ 2	1.7	+ .2	San Antonio . . . . .	82	+ 3	2.1	- 1.6
Macon . . . . .	78	+ 2	3.3	+ .2	NEV. Ely . . . . .	57	0	.5	- .1	Victoria . . . . .	83	+ 3	3.2	- 1.4
Savannah . . . . .	78	+ 2	1.6	- 4.0	Las Vegas . . . . .	81	+ 1	.2	- .1	Waco . . . . .	86	+ 7	.3	- 2.9
HAWAII. Hilo . . . . .	78	+ 2	4.2	- 3.2	Reno . . . . .	61	+ 1	T	- .2	Wichita Falls . . . . .	82	+ 5	.4	- 2.6
Honolulu . . . . .	82	+ 2	.1	- .6	Winnemucca . . . . .	59	0	.2	- .1	UTAH. Blanding . . . . .	64	+ 1	.6	- .4
Kahului . . . . .	80	+ 2	.1	- .2	N.H. Concord . . . . .	59	- 1	5.6	+ 2.5	Salt Lake City . . . . .	66	+ 1	1.9	+ 1.2
Lihue . . . . .	80	+ 1	1.3	- .6	N.J. Atlantic City . . . .	69	+ 2	3.0	0	VT. Burlington . . . . .	59	0	6.3	+ 3.2
IDAHO. Boise . . . . .	62	- 1	1.2	+ .8	Trenton . . . . .	68	+ 1	5.1	+ 1.9	VA. Lynchburg . . . . .	70	+ 2	2.3	- 1.0
Lewiston . . . . .	61	- 2	2.2	+ 1.3	N.MEX. Albuquerque . . .	69	- 1	.8	0	Norfolk . . . . .	76	+ 4	3.0	- 1.2
Pocatello . . . . .	60	+ 1	1.0	+ .4	Roswell . . . . .	78	+ 8	.3	- 1.2	Richmond . . . . .	74	+ 4	2.2	- 1.4
ILL. Cairo . . . . .	75	+ 3	4.9	+ 1.4	N.Y. Albany . . . . .	61	- 1	6.6	+ 3.5	Roanoke . . . . .	70	+ 2	2.7	- .7
Chicago . . . . .	66	0	9.4	+ 6.4	Binghamton . . . . .	60	0	9.7	+ 6.7	WASH. Colville . . . . .	---	---	---	---
Moline . . . . .	66	+ 1	4.8	+ 1.0	Buffalo . . . . .	63	+ 1	9.0	+ 5.7	Omak . . . . .	---	---	---	---
Peoria . . . . .	66	0	6.3	+ 2.7	New York . . . . .	67	- 1	4.8	+ 1.6	Quillayute . . . . .	55	- 2	6.3	+ 1.1
Rockford . . . . .	63	0	3.9	- .1	Rochester . . . . .	63	+ 1	6.3	+ 3.9	Seattle-Tacoma . . . . .	59	- 1	2.6	+ .6
Springfield . . . . .	69	+ 2	5.9	+ 2.6	Syracuse . . . . .	63	0	6.5	+ 3.8	Spokane . . . . .	55	- 5	1.4	+ .6
IND. Evansville . . . . .	72	+ 3	4.6	+ 1.8	N.C. Asheville . . . . .	69	+ 2	9.1	+ 5.5	Walla Walla . . . . .	62	- 4	1.2	+ .3
Ft. Wayne . . . . .	67	+ 2	3.7	+ 1.1	Charlotte . . . . .	74	+ 2	6.4	+ 2.9	Yakima . . . . .	58	- 3	.9	+ .6
Indianapolis . . . . .	70	+ 4	3.4	+ .5	Greensboro . . . . .	72	+ 2	6.4	+ 2.8	W. Va. Beckley . . . . .	65	+ 2	4.1	+ .7
South Bend . . . . .	65	+ 1	9.0	+ 5.9	Hatteras . . . . .	77	+ 3	2.7	- 3.1	Charleston . . . . .	70	+ 2	1.1	- 1.8
IOWA. Burlington . . . .	66	+ 1	4.2	+ .5	Raleigh . . . . .	73	+ 2	3.9	+ .1	Huntington . . . . .	69	+ 1	3.3	+ .4
Des Moines . . . . .	67	+ 3	2.8	- .3	Wilmingon . . . . .	78	+ 3	4.9	- .7	Parkersburg . . . . .	70	+ 3	2.9	+ .1
Dubuque . . . . .	62	0	3.5	- 1.1	N.DAK. Bismarck . . . . .	57	- 1	6.9	+ 5.6	WIS. Green Bay . . . . .	60	+ 1	2.4	- .8
Sioux City . . . . .	65	+ 2	4.9	+ 2.1	Fargo . . . . .	58	0	3.2	+ 1.4	La Crosse . . . . .	62	0	4.1	+ .7
KANS. Concordia . . . . .	69	+ 1	2.1	- 1.0	Williston . . . . .	56	- 1	2.3	+ 1.1	Madison . . . . .	60	0	2.8	- .6
Dodge City . . . . .	72	+ 3	.9	- .8	OHIO. Akron-Canton . . .	65	+ 1	3.7	+ 1.1	Milwaukee . . . . .	62	+ 1	4.1	+ 1.1
Goodland . . . . .	72	+ 3	1.0	- .4	Cincinnati . . . . .	70	+ 2	1.8	- .8	WYO. Casper . . . . .	60	+ 1	.3	- .6
Topeka . . . . .	72	+ 4	3.2	- .1	Cleveland . . . . .	66	+ 2	2.5	- .3	Cheyenne . . . . .	61	+ 3	.2	- .8
Wichita . . . . .	73	+ 2	4.4	+ .7	Columbus . . . . .	68	+ 3	3.5	+ 1.1	Lander . . . . .	60	+ 2	.2	- .9
KY. Lexington . . . . .	72	+ 3	2.7	0	Dayton . . . . .	68	+ 2	2.7	+ .4	Sheridan . . . . .	58	0	.9	- .4
Louisville . . . . .	73	+ 4	3.7	+ .8	Toledo . . . . .	65	+ 1	4.3	+ 1.9	P.R. San Juan . . . . .	81	0	4.7	- 1.4

Based on 1941-70 normals

Heating Degree Days (Base 65° F.)

## September 1977

ALA. Birmingham . . . . .	0	MAINE, Caribou . . . . .	408	OKLA. Okla. City . . . . .	0
Mobile . . . . .	0	Portland . . . . .	233	Tulsa . . . . .	1
Montgomery . . . . .	0	MD. Baltimore . . . . .	9	OREG. Astoria . . . . .	231
ALASKA, Anchorage . . . . .	421	MASS. Boston . . . . .	85	Burns U. . . . .	278
Barrow . . . . .	871	Chatham . . . . .	131	Medford . . . . .	105
Fairbanks . . . . .	573	MICH. Alpena . . . . .	206	Pendleton . . . . .	198
Juneau . . . . .	557	Detroit . . . . .	85	Portland . . . . .	131
Nome . . . . .	598	Flint . . . . .	96	Salem . . . . .	181
ARIZ. Flagstaff . . . . .	157	Grand Rapids . . . . .	99	PA. Allentown . . . . .	56
Phoenix . . . . .	0	Houghton Lake . . . . .	199	Erie . . . . .	110
Tucson . . . . .	0	Lansing . . . . .	118	Harrisburg . . . . .	35
Winslow . . . . .	5	Marquette U . . . . .	244	Philadelphia . . . . .	24
Yuma . . . . .	0	S. Ste. Marie . . . . .	335	Pittsburgh . . . . .	78
ARK. Fort Smith . . . . .	0	MINN. Duluth . . . . .	347	Scranton . . . . .	119
Little Rock . . . . .	0	Internatl Falls . . . . .	367	R. I. Providence . . . . .	103
CALIF. Bakersfield . . . . .	0	Minneapolis . . . . .	145	S. C. Charleston . . . . .	0
Eureka U. . . . .	231	Rochester . . . . .	143	Columbia . . . . .	1
Fresno . . . . .	0	St. Cloud . . . . .	191	Greenville . . . . .	2
Los Angeles U . . . . .	0	MISS. Jackson . . . . .	0	S. DAK. Aberdeen . . . . .	172
Red Bluff . . . . .	8	Meridian . . . . .	0	Huron . . . . .	129
Stockton . . . . .	2	Vicksburg U . . . . .	---	Rapid City . . . . .	163
San Diego . . . . .	0	MO. Columbia . . . . .	14	Sioux Falls . . . . .	125
San Francisco . . . . .	55	Kansas City . . . . .	21	TENN. Chattanooga . . . . .	5
COLO. Denver . . . . .	38	St. Louis . . . . .	11	Knoxville . . . . .	3
Grand Junction . . . . .	17	Springfield . . . . .	4	Memphis . . . . .	0
Pueblo . . . . .	34	MONT. Billings . . . . .	208	Nashville . . . . .	3
CONN. Bridgeport . . . . .	52	Glasgow . . . . .	292	TEX. Abilene . . . . .	0
Hartford . . . . .	112	Great Falls . . . . .	281	Amarillo . . . . .	1
D. C. Washington . . . . .	1	Havre . . . . .	242	Austin . . . . .	0
FLA. Apalachicola . . . . .	0	Helena . . . . .	270	Beaumont . . . . .	0
Ft. Myers . . . . .	0	Kalispell . . . . .	375	Brownsville . . . . .	0
Jacksonville . . . . .	0	Miles City . . . . .	198	Corpus Christi . . . . .	0
Key West . . . . .	0	Missoula . . . . .	310	Dallas . . . . .	---
Lakeland U. . . . .	0	NEBR. Grand Island . . . . .	77	Del Rio . . . . .	0
Miami . . . . .	0	Lincoln . . . . .	42	El Paso . . . . .	0
Orlando . . . . .	0	Norfolk . . . . .	45	Fort Worth . . . . .	0
Daytona Beach . . . . .	0	North Platte . . . . .	96	Galveston U. . . . .	0
Tallahassee . . . . .	0	Omaha . . . . .	41	Houston . . . . .	0
Tampa . . . . .	0	Valentine . . . . .	122	Lubbock . . . . .	0
GA. Atlanta . . . . .	4	NEV. Ely . . . . .	238	Midland . . . . .	0
Augusta . . . . .	0	Las Vegas . . . . .	0	San Angelo . . . . .	0
Macon . . . . .	0	Reno . . . . .	154	San Antonio . . . . .	0
Savannah . . . . .	0	Winnemucca . . . . .	203	Victoria . . . . .	0
IDAHO, Boise . . . . .	145	N. H. Concord . . . . .	221	Waco . . . . .	0
Lewiston . . . . .	153	N. J. Atlantic City . . . . .	28	Wichita Falls . . . . .	0
Pocatello . . . . .	189	Trenton U . . . . .	38	UTAH, Milford . . . . .	110
ILL. Cairo U. . . . .	0	N. MEX. Albuquerque . . . . .	141	Salt Lake City . . . . .	73
Chicago . . . . .	51	Roswell . . . . .	0	VT. Burlington . . . . .	207
Moline . . . . .	50	N. Y. Albany . . . . .	156	VA. Lynchburg . . . . .	12
Peoria . . . . .	39	Binghamton . . . . .	166	Norfolk . . . . .	0
Rockford . . . . .	88	Buffalo . . . . .	110	Richmond . . . . .	4
Springfield . . . . .	21	New York . . . . .	59	Roanoke . . . . .	18
IND. Evansville . . . . .	3	Rochester . . . . .	113	WASH. Colville . . . . .	---
Fort Wayne . . . . .	61	Syracuse . . . . .	121	Omak . . . . .	---
Indianapolis . . . . .	30	N. C. Asheville . . . . .	14	Quillayute . . . . .	290
South Bend . . . . .	58	Charlotte . . . . .	3	Seattle-Tacoma . . . . .	179
IOWA, Burlington . . . . .	47	Greensboro . . . . .	7	Spokane . . . . .	289
Des Moines . . . . .	35	Hatteras R. . . . .	0	Walla Walla U. . . . .	133
Dubuque . . . . .	121	Raleigh . . . . .	4	Yakima . . . . .	217
Sioux City . . . . .	55	Wilmington . . . . .	0	W. VA. Beckley . . . . .	67
KANS. Concordia . . . . .	23	N. DAK. Bismarck . . . . .	246	Charleston . . . . .	19
Dodge City . . . . .	3	Fargo . . . . .	211	Huntington . . . . .	35
Goodland . . . . .	40	Williston U . . . . .	267	Parkersburg U. . . . .	46
Topeka . . . . .	6	OHIO. Akron-Canton . . . . .	68	WIS. Green Bay . . . . .	162
Wichita . . . . .	1	Cincinnati U. . . . .	32	Madison . . . . .	161
KY. Lexington . . . . .	6	Cleveland . . . . .	60	Milwaukee . . . . .	106
Louisville . . . . .	6	Columbus . . . . .	36	WYO. Casper . . . . .	162
LA. Baton Rouge . . . . .	0	Dayton . . . . .	45	Cheyenne . . . . .	150
Lake Charles . . . . .	0	Toledo . . . . .	71	Lander . . . . .	183
New Orleans . . . . .	0	Youngstown . . . . .	65	Sheridan . . . . .	232
Shreveport . . . . .	0				

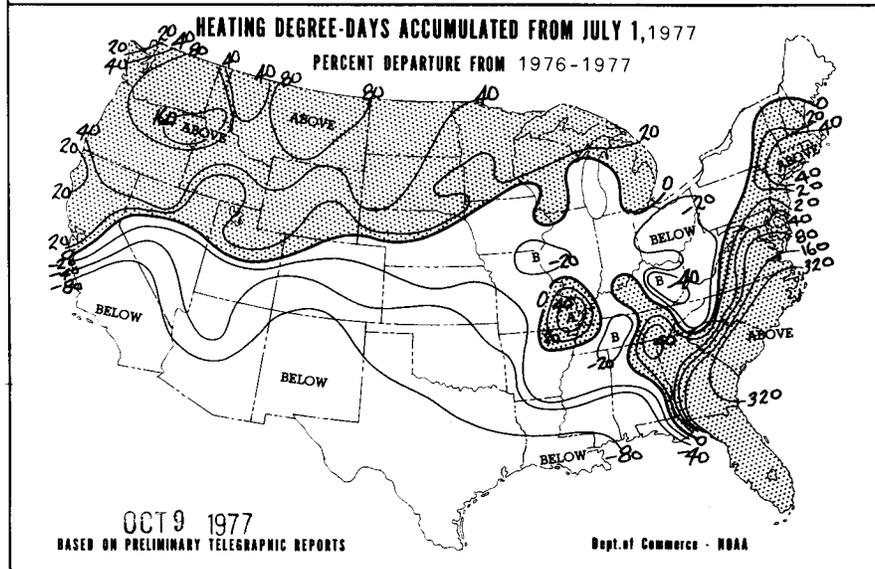
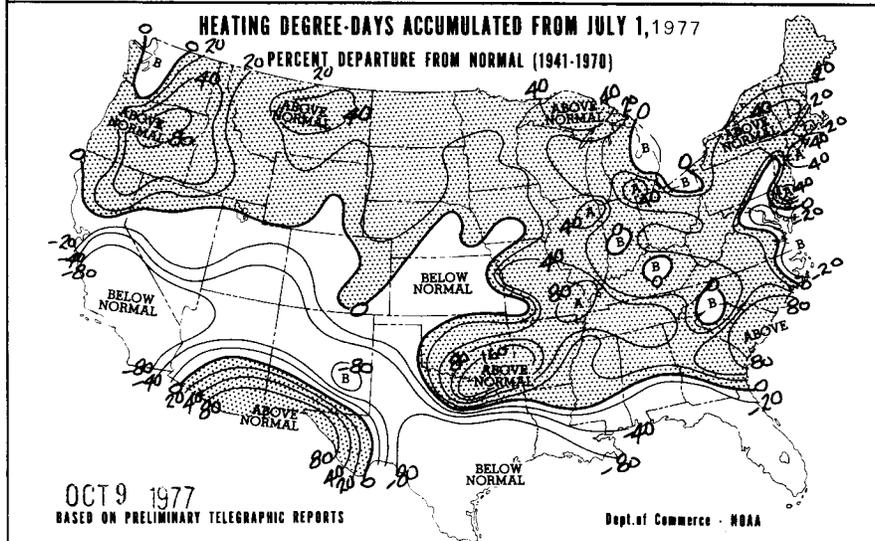
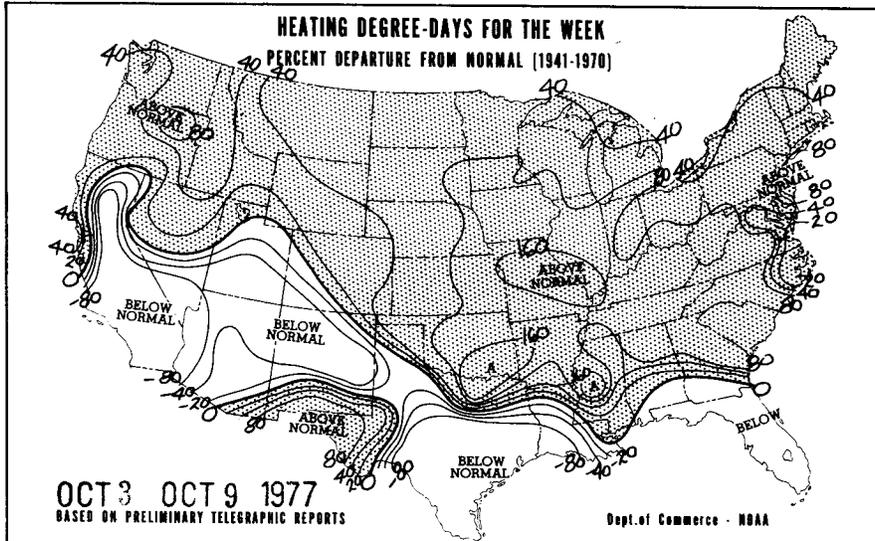
Preliminary reports from airport locations, except those marked U for urban and R for rural.  
\*Estimated.

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING OCT. 9, 1977.

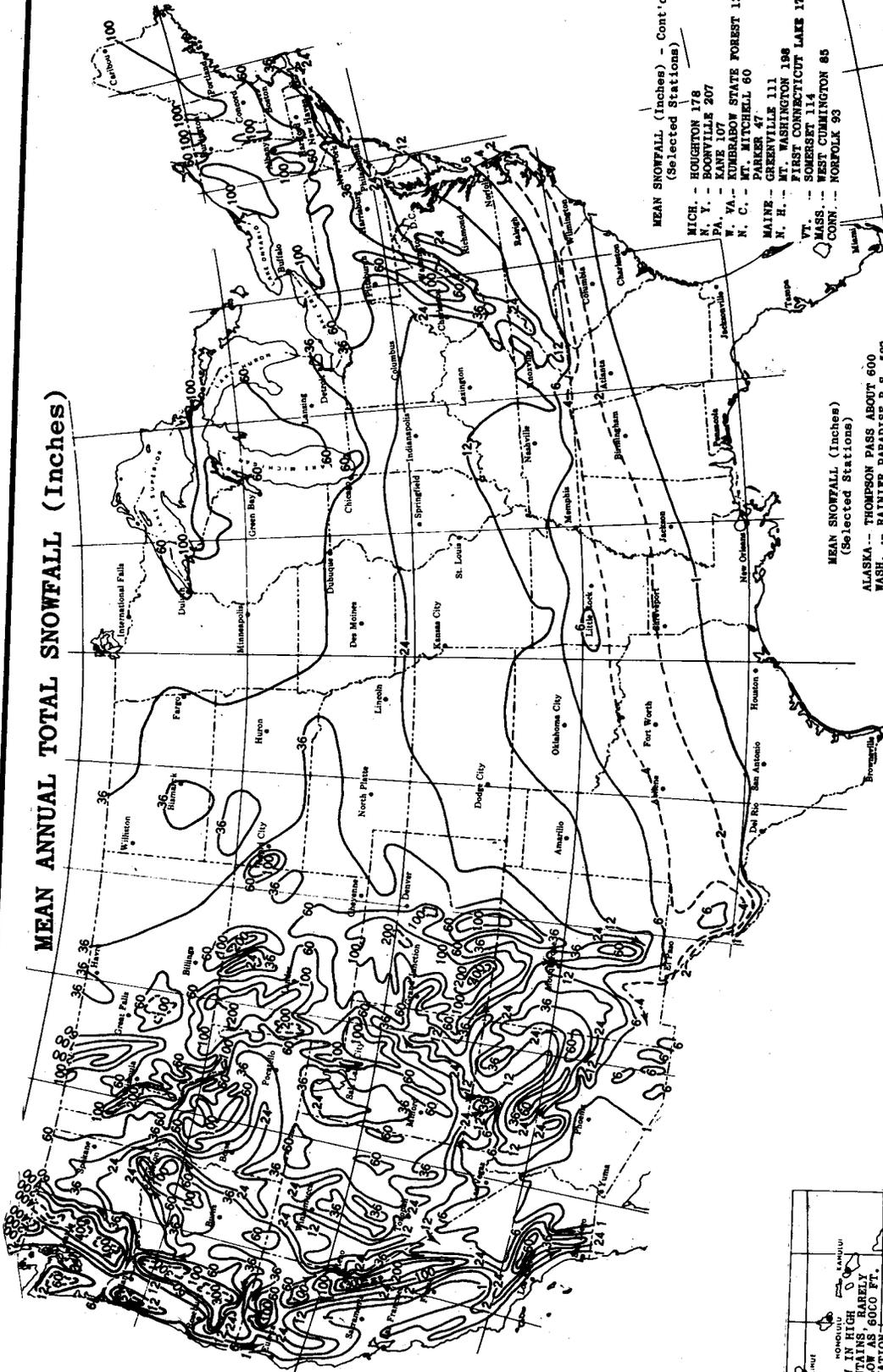
STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +	
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*
ALA. BIRMINGHAM...	30	14	31	12	MAINE CARIBOU...	34	20	732	83	YOUNGSTOWN...	92	30	220	8
MOBILE...	0	0	0	0	PORTLAND...	12	3	123	1	OKLA. OKLAHOMA CITY...	25	14	142	7
MONTGOMERY...	0	0	0	0	MD. BALTIMORE...	57	23	68	1	TULSA...	25	14	35	7
ARIZ. FLAGSTAFF...	6	3	266	23	MASS. BOSTON...	74	2	169	6	OREG. ASTORIA...	14	6	635	21
PHOENIX...	1	1	0	0	MICH. ALPENA...	11	1	11	1	BURNS...	14	6	103	32
TUCSON...	1	1	0	0	DETROIT...	11	1	11	1	MEDFORD...	14	6	103	32
WINSTON...	1	1	0	0	FLINT...	11	1	11	1	PENOLETON...	14	6	103	32
YUMA...	1	1	0	0	GRAND RAPIDS...	11	1	11	1	PORTLAND...	14	6	103	32
ARK. FORT SMITH...	23	12	31	12	HOUGHTON LAKE...	11	1	11	1	SALEM...	14	6	103	32
LITTLE ROCK...	1	1	0	0	LANSDALE...	11	1	11	1	PA. ALLENTOWN...	7	7	0	0
CALIF. BAKERSFIELD...	0	0	0	0	MARQUETTE...	11	1	11	1	ERIE...	7	7	0	0
EUREKA...	0	0	0	0	MUSKEGON...	11	1	11	1	HARRISBURG...	7	7	0	0
FRESNO...	0	0	0	0	S. STE. MARIE...	11	1	11	1	PHILADELPHIA...	7	7	0	0
LOS ANGELES...	0	0	0	0	MINN. DULUTH...	11	1	11	1	PITTSBURGH...	7	7	0	0
RED BLUFF...	0	0	0	0	INTERNATI. FALLS...	11	1	11	1	SCRANTON...	7	7	0	0
SAN DIEGO...	0	0	0	0	MINNEAPOLIS...	11	1	11	1	R. I. PROVIDENCE...	83	27	202	29
SAN FRANCISCO...	0	0	0	0	ROCHESTER...	11	1	11	1	S. C. CHARLESTON...	1	1	1	1
STOCKTON...	0	0	0	0	ST. CLOUD...	11	1	11	1	COLUMBIA...	1	1	1	1
COLO. DENVER...	18	10	170	31	MISS. JACKSON...	22	1	22	1	GREENVILLE...	1	1	1	1
GRAND JUNCTION...	0	0	0	0	MERIDIAN...	1	1	1	1	S. DAK. ABERDEEN...	151	41	414	7
FUEBLO...	0	0	0	0	MO. COLUMBIA...	1	1	1	1	HURON...	151	41	414	7
CONN. BRIDGEPORT...	15	10	129	33	KANSAS CITY...	0	0	0	0	MARY CITY...	151	41	414	7
HARTFORD...	0	0	0	0	ST. LOUIS...	0	0	0	0	SIOUX FALLS...	151	41	414	7
DEL. WILMINGTON...	73	38	107	33	SPRINGFIELD...	0	0	0	0	TENN. CHATTANOOGA...	50	15	19	19
D. C. WASHINGTON...	33	9	34	15	MONT. BILLINGS...	45	4	45	4	KNOXVILLE...	50	15	19	19
FLA. APALACHICOLA...	0	0	0	0	GLASGOW...	45	4	45	4	MEMPHIS...	50	15	19	19
DAYTONA BEACH...	0	0	0	0	GREAT FALLS...	45	4	45	4	NASHVILLE...	50	15	19	19
FORT MYERS...	0	0	0	0	HAVRE...	45	4	45	4	TEXAS. ABILENE...	2	2	2	2
JACKSONVILLE...	0	0	0	0	HELENA...	45	4	45	4	AMARILLO...	2	2	2	2
KEY WEST...	0	0	0	0	KALISPELL...	45	4	45	4	AUSTIN...	2	2	2	2
LAKELAND...	0	0	0	0	MILES CITY...	45	4	45	4	BEAUMONT...	2	2	2	2
MARTIN...	0	0	0	0	MISSOULA...	45	4	45	4	BROWNSVILLE...	2	2	2	2
ORLANDO...	0	0	0	0	NEBR. GRAND ISLAND...	0	0	0	0	CORPUS CHRISTI...	2	2	2	2
TALLAHASSEE...	0	0	0	0	LINCOLN...	0	0	0	0	DEL PASO...	2	2	2	2
TAMPA...	0	0	0	0	NORFOLK...	0	0	0	0	EL PASO...	2	2	2	2
NEXT PALM BEACH...	0	0	0	0	NORTH PLATTE...	0	0	0	0	GALVESTON...	2	2	2	2
GA. ATLANTA...	2	1	2	1	ORAMA...	0	0	0	0	HOUSTON...	2	2	2	2
AUGUSTA...	0	0	0	0	NEV. EL PASO...	113	7	431	52	LUBBOCK...	2	2	2	2
Macon...	0	0	0	0	RENO...	8	0	8	0	MIDLAND...	2	2	2	2
SAVANNAH...	11	0	11	0	MINNEAPOLIS...	116	0	116	0	SAN ANGELO...	2	2	2	2
IDAHO. BOISE...	9	6	9	6	N. H. CONCORD...	132	46	491	140	SAN ANTONIO...	2	2	2	2
LEWISTON...	0	0	0	0	N. J. ATLANTIC CITY...	70	32	105	24	VICTORIA...	2	2	2	2
POCATELLO...	1	0	1	0	TRENTON...	71	32	109	24	HACO...	2	2	2	2
ILL. CAIRO...	60	44	60	44	N. MEX. ALBUQUERQUE...	8	12	15	15	UTAH. SALT LAKE CITY...	61	17	15	15
CHICAGO...	60	44	60	44	ROSWELL...	8	12	15	15	VT. BURLINGTON...	129	40	452	81
SPRINGFIELD...	60	44	60	44	N. Y. ALBANY...	107	33	369	99	VA. LYNCHBURG...	74	40	91	19
IND. EVANSVILLE...	7	7	7	7	BINGHAMTON...	121	33	400	110	RICHMOND...	40	20	10	10
FORT WAYNE...	7	7	7	7	BUFFALO...	121	33	400	110	ROANOKE...	40	20	10	10
INDIANAPOLIS...	7	7	7	7	NEW YORK...	121	33	400	110	WASH. QUILLAVUTE...	117	81	77	118
SOUTH BEND...	7	7	7	7	ROCHESTER...	121	33	400	110	SEATTLE-TACOMA...	117	81	77	118
IOWA. BURLINGTON...	0	0	0	0	SYRACUSE...	121	33	400	110	SPOKANE...	117	81	77	118
DES MOINES...	0	0	0	0	N. C. ASHEVILLE...	70	30	309	10	HALLA HALLA...	117	81	77	118
DUBUQUE...	0	0	0	0	CHARLOTTE...	53	30	309	10	VARINA...	117	81	77	118
SIOUX CITY...	0	0	0	0	GREENSBORO...	53	30	309	10	VA. BECKLEY...	117	81	77	118
KANS. CONCORDIA...	73	33	73	33	HATIERAS...	53	30	309	10	CHARLESTON...	117	81	77	118
DODGE CITY...	73	33	73	33	RALEIGH...	53	30	309	10	HUNTINGTON...	117	81	77	118
GOOPLAND...	73	33	73	33	WILMINGTON...	53	30	309	10	PARKERSBURG...	117	81	77	118
TOPEKA...	73	33	73	33	N. DAK. BISHARCK...	57	25	233	157	WIS. GREEN BAY...	114	119	119	41
WICHITA...	73	33	73	33	FARGO...	57	25	233	157	LACROSSE...	114	119	119	41
KY. LEXINGTON...	6	6	6	6	MILLISTON...	57	25	233	157	MADISON...	114	119	119	41
LOUISVILLE...	6	6	6	6	OHIO. AKRON-CANTON...	100	45	450	83	MILWAUKEE...	114	119	119	41
LA. BATON ROUGE...	1	1	1	1	CINCINNATI...	100	45	450	83	WYO. CASPER...	114	119	119	41
LAKE CHARLES...	1	1	1	1	CLEVELAND...	100	45	450	83	CHEYENNE...	114	119	119	41
NEW ORLEANS...	1	1	1	1	COLUMBUS...	100	45	450	83	LANDER...	114	119	119	41
SHREVEPORT...	1	1	1	1	DAYTON...	100	45	450	83	SHERIDAN...	114	119	119	41
					TOLEDO...	100	45	450	83					

\* BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1977.



MEAN ANNUAL TOTAL SNOWFALL (Inches)



MEAN SNOWFALL (Inches) - Cont'd  
(Selected Stations)

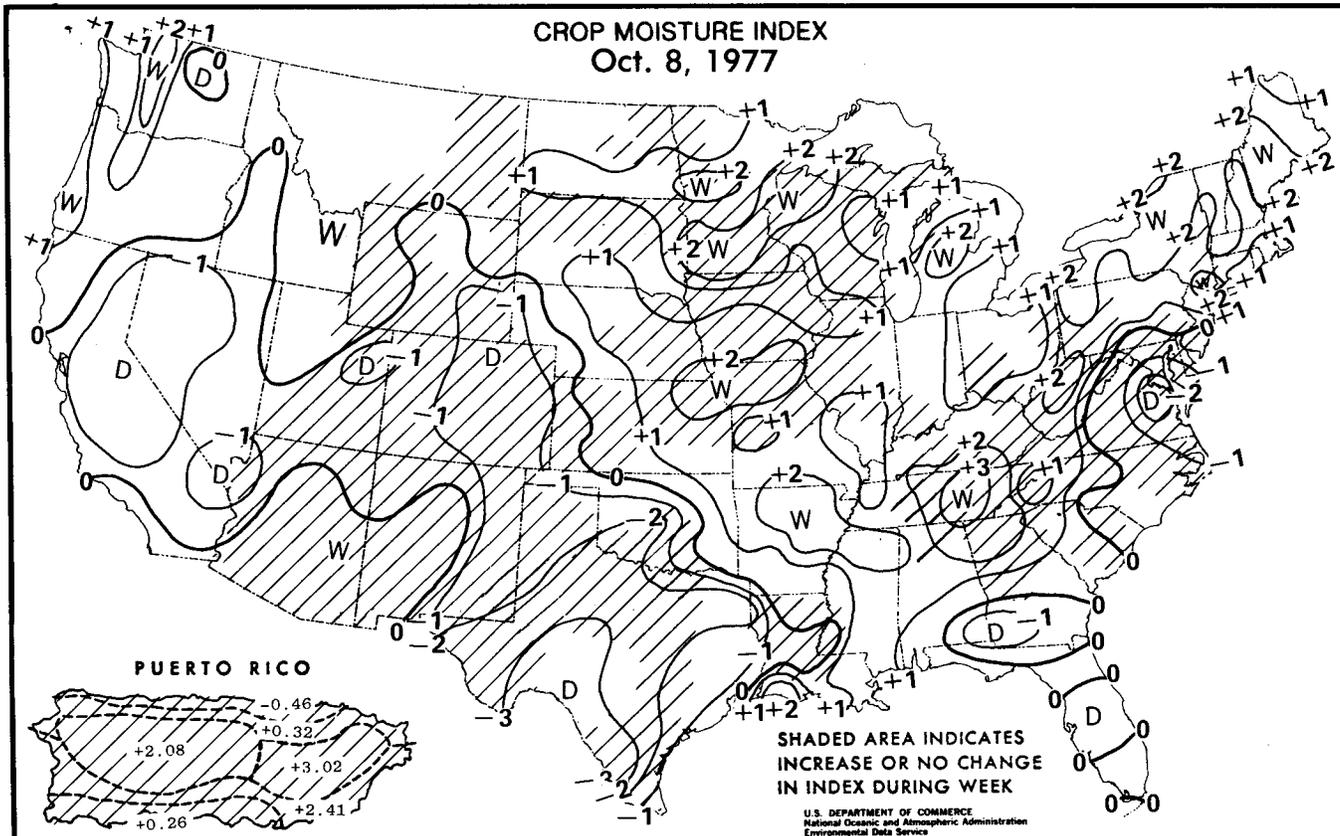
- MICH. - HOUGHTON 178
- N. Y. - BOONVILLE 207
- PA. - KANE 107
- W. VA. - KUMBRABOW STATE FOREST 126
- N. C. - MT. MITCHELL 60
- PARKER 47
- MAINE - GREENVILLE 111
- N. H. - MT. WASHINGTON 196
- VT. - FIRST CONNECTICUT LAKE 172
- VT. - SHERBURN 114
- MASS. - WHEAT CUMMINGTON 85
- CONN. - NORFOLK 95

CAUTION SHOULD BE USED IN INTERPOLATING ON THESE UNREALIZED MAPS PARTICULARLY IN MOUNTAINOUS AREAS. DATA BASED ON PERIOD OF RECORD THROUGH 1960.

MEAN SNOWFALL (Inches)  
(Selected Stations)

- ALASKA - THOMPSON PASS ABOUT 600
- WASH. - RAINIER PARADISE R.S. 587
- OREG. - CRATER LAKE 521
- CALIF. - TAMARACK 445
- SODA SPRINGS 398
- IDAHO - ROLAND WEST PORTAL 275

CROP MOISTURE INDEX  
Oct. 8, 1977



SHADED AREA INDICATES INCREASE OR NO CHANGE IN INDEX DURING WEEK

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
Environmental Data Service

The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and

the CMI gives a negative value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

UNSHADED AREAS: INDEX DECREASED	
ABOVE	3.0 SOME DRYING BUT STILL EXCESSIVELY WET
2.0 to	3.0 MORE DRY WEATHER NEEDED, WORK DELAYED
1.0 to	2.0 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 to	1.0 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 to	-1.0 TOPSOIL MOISTURE SHORT GERMINATION SLOW
-1.0 to	-2.0 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2.0 to	-3.0 TOO DRY, YIELD PROSPECTS REDUCED
-3.0 to	-4.0 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW	-4.0 EXTREMELY DRY, MOST CROPS RUINED

SHADED AREA: INDEX INCREASED OR DID NOT CHANGE	
ABOVE	3.0 EXCESSIVELY WET, SOME FIELDS FLOODED
2.0 to	3.0 TOO WET, SOME STANDING WATER
1.0 to	2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 to	1.0 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 to	-1.0 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1.0 to	-2.0 SOME IMPROVEMENT BUT STILL TOO DRY
-2.0 to	-3.0 DROUGHT EASED BUT STILL SERIOUS
-3.0 to	-4.0 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW	-4.0 NOT ENOUGH RAIN, STILL EXTREMELY DRY

**FIRST CLASS MAIL**

POSTAGE AND FEES PAID  
 U.S. DEPARTMENT OF COMMERCE  
 COM 210



**HARVESTING PROGRESS**

Percent of acres harvested as of October 8

	CORN		
	1977	1976	Avg.
Ga	77	67	46
Ill	29	18	19
Ind	20	15	15
Iowa	32	32	13
Kans	55	30	25
Ky	42	26	31
Mich	5	10	NA
Minn	38	51	21
Mo	48	52	32
Nebr	30	25	20
N C	82	72	67
Ohio	15	15	10
Pa	8	5	NA
S Dak	16	61	27
Tex	92	52	66
Wisc	15	20	8
U. S.	33	30	21

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

**COTTON**

	1977	1976	Avg.
Ala	31	3	7
Ark	39	11	19
Ga	23	6	16
La	26	17	13
Miss	42	9	16
Mo	26	8	18
N C	13	5	8
Okla	NA	NA	NA
S C	24	8	13
Tenn	38	4	19
Tex	30	12	18
11 Southern States	32	11	17

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

**SORGHUM**

	1977	1976	Avg.
Colo	19	6	7
Kans	25	40	20
Mo	50	46	33
Nebr	30	50	30
Okla	NA	30	NA
S Dak	11	74	43
Tex	81	70	69
7 States	49	53	42

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

**SOYBEANS**

	1977	1976	Avg.
Ala	12	10	13
Ark	8	7	7
Ga	3	1	2
Ill	36	82	63
Ind	25	50	30
Iowa	38	80	NA
Kans	10	20	20
Ky	14	19	NA
La	26	32	21
Mich	5	25	14
Minn	30	91	58
Miss	21	16	14
Mo	14	31	20
Nebr	20	55	35
N C	NA	NA	NA
Ohio	30	40	35
S C	NA	NA	NA
Tenn	5	7	6
U. S.	24	47	31

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

**SEEDING**

Percent of acres planted as of October 8

	WINTER WHEAT		
	1977	1976	Avg.
Colo	94	96	94
Ill	35	50	52
Ind	25	35	45
Kans	80	65	80
Mo	17	24	NA
Mont	NA	100	100
Nebr	90	90	90
Ohio	NA	50	NA
Okla	78	64	68
Tex	67	58	68
U. S.	73	67	77

These 10 States produced 74% of the 1977 U. S. winter wheat crop.