

WEEKLY WEATHER AND CROP BULLETIN

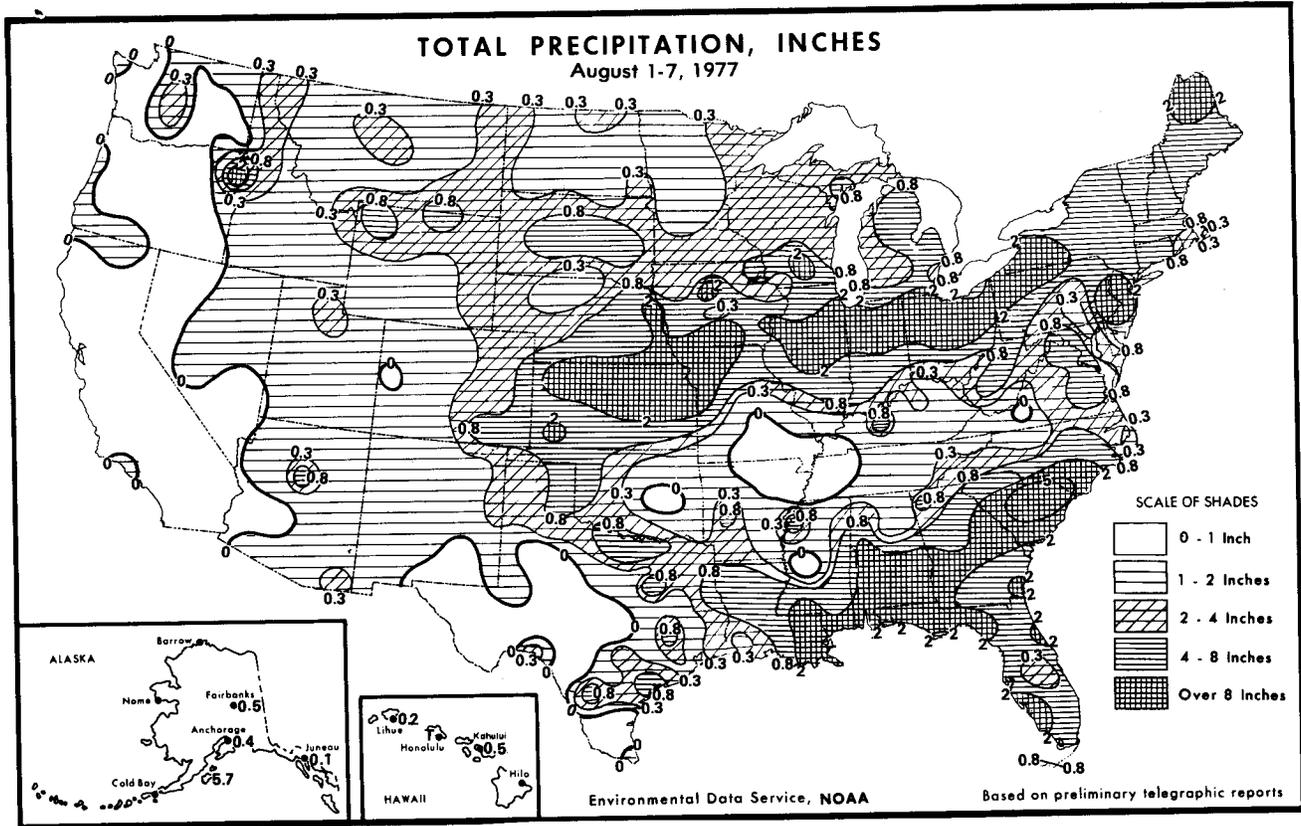
U.S. DEPARTMENT OF COMMERCE
Environmental Data Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 64, No. 32

Washington, D.C.

Aug. 9, 1977



National Weather Summary

August 1 - 7

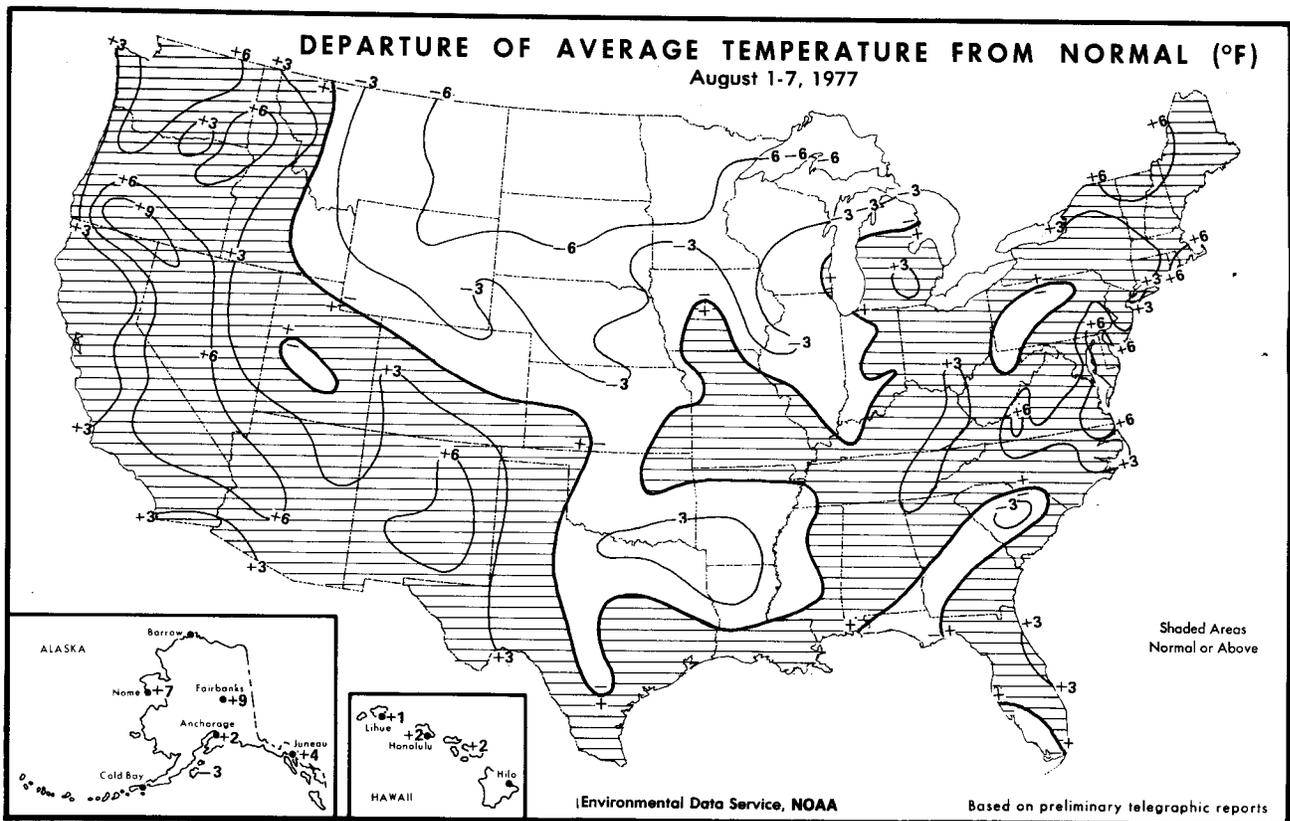
HIGHLIGHTS: The Corn Belt received 1 to 2 in. of rain from central and southern Iowa eastward. This moisture should help the corn crop's critical filling stage. As the reporting period ended, large amounts of rain were falling from south central Iowa eastward and northward. The dry Southeast was soaked in several areas; the precipitation extended into the middle Atlantic States, but by-passed most of the parched portions of western Virginia.

Cool weather moved from Canada into the Plains and parts of the Midwest. The northern Plains were 6 to 8° cooler than normal.

August began on a calm note, but by afternoon of the first day thunderstorms increased over the entire Atlantic Seaboard. A cold front triggered heavy rains in the eastern States; Tallahassee and Columbia, S.C., measured more than two inches of rain while downtown Philadelphia, Pa., was soaked

by four inches. Further west, another area of thunderstorms rumbled over the upper Mississippi Valley and central Great Plains. A tornado and large hail hit parts of Kansas. A few showers cropped up over the southern sections of New Mexico and Arizona and several locales in California.

Tuesday dawned with little rain, but by early afternoon three separate thundershower areas had developed--the largest over the Gulf and southeastern Atlantic Coast States; another group was scattered from the upper Mississippi Valley through the western Great Lakes and down to northwestern Texas; and the third was on a narrow line from central Oregon to northern California. More than two inches of rain fell over Myrtle Beach, S.C., Augusta, Ga., Daytona Beach, Fla., and Ft. Rucker, Ala. A twister was spotted outside Guymon, Okla., and hail fell on points in Iowa, South Dakota, and Kansas.



Rainfall continued into Wednesday in the southern half of the Atlantic Coast States, eastern Gulf Coast, upper Mississippi Valley, and the Plains. A stationary front extended across northern Maryland, then southward along the Appalachians to the Gulf Coast. This produced rain in several areas and was heaviest in portions of Georgia; Columbus was awash with six inches. Rain also fell over parts of the central Plains, middle Mississippi Valley, and upper Great Lakes. A tornado was reported 25 miles north of Janesville, Wisc., and large hail fell near Madison, Wisc., and Alliance, Nebr. Scattered thunderstorms, some severe, created an unsettling night for the central Plains and South Atlantic Coast.

Thunderstorms and strong winds hit Kansas and Nebraska on Thursday morning. That weather moved eastward to the Mississippi Valley dumping two to five inches of rain on southern Mississippi; the precipitation produced street flooding in New Orleans.

Evening storms were spread from the Gulf Coast into the Tennessee Valley and the Carolinas. Others extended from New England across the Great Lakes to the upper Mississippi Valley and through the lower Ohio Valley. Another band of thunderstorms roamed around the eastern slope of the lower half of the Rockies into the western Plains. Showers dotted the northern half of the Intermountain Region, and a tornado formed near Colorado Springs.

Temperatures ranged from 117° at Palm Springs, Calif., to 42° at International Falls, Minn.

A series of storms marched from the central Plains to the middle Mississippi Valley on Friday morning. Showers and thunderstorms moved through the Great Lakes into New York dumping locally

heavy rain. Toward evening large hail pummeled parts of Kansas and Nebraska; a severe storm hit Salt Lake City.

Temperatures were hot on the East Coast and in the Southwest; El Paso reached the century mark for the 22nd day this year. In Virginia, Richmond tied a record for the day, notching 99° while Roanoke set a new one, 97°.

Saturday morning precipitation fell from the central Plains through New York to New England. Buffalo reported more than two inches. Heavy rains caused some overflow in northwestern Missouri while showers were scattered over the middle Mississippi and lower Ohio Valleys, Gulf Coast region, central Montana, and eastern North Dakota. Thunderstorms formed over the Rockies across the northern Intermountain Region to the Pacific Northwest; a few showers dampened parched northern California. Five tornadoes touched down--three in Illinois and one in Missouri and Florida.

The temperature crept to 100° at Norfolk, Va.; northeastern Minnesota told of a slightly different story--32° at one locality.

Sunday began on a dreary note from the Iowa/Missouri border eastward to New York as thunderstorms covered the area. Atwater, in northeastern Ohio, received eight inches; more than three inches fell in parts of Indiana. Before nightfall large hail battered portions of Iowa, Missouri, and Nebraska. Twisters were sighted in Nebraska, Missouri, and Texas. Other storms were located from Arizona through the southern half of the Rockies to the west central Plains and over the upper half of the Mississippi Valley. Thunderstorms also hit portions of the Atlantic and Gulf Coasts and the Appalachians.

National Agricultural Summary

August 1-7

HIGHLIGHTS: Rains swept through the Corn Belt spreading relief from Kansas and into New England. Another band of precipitation quenched parched southeastern soils. Very little rain fell elsewhere although enough to disrupt small grain harvests in the northern and some Mountain States. The rain and lower maximum temperatures reduced crop stress. Soil moisture rated short to adequate throughout most of the Nation. Exceptions included adequate ratings in South Carolina and Mississippi, and short supplies in the West and most of the north central States. Small grain harvest stayed far ahead of normal in spite of some showers. Row crops pushed on toward maturity. Conditions generally rated fair to good except in the Southeast. Rains helped southeastern soybeans most, also cotton, but was no help to corn; additional acreage was diverted to forage uses. Eastern pastures improved, but western rangeland worsened and if and when rains do return may erode the almost barren soils.

SMALL GRAINS: Winter wheat harvest was almost complete except in the Mountain and Pacific Northwest States. Montana farmers reached 55% complete and Idaho 25%. Rains delayed some farmers, however, progress was far ahead of normal.

Spring wheat harvest ranged from 15% in Montana, 25% in North Dakota, 59% in Minnesota to 86% in South Dakota. Progress was far ahead of normal but on a par with the 1976 rate.

Oats harvest was almost complete in most major production States; South Dakota and Iowa were virtually complete, Minnesota 79%, Wisconsin 60%, and North Dakota 40%.

Farmers prepared land for seeding the 1978 winter wheat crop. Ohio farmers plowed 20% of the wheat land and Illinois 50%. Oklahoma rains sprouted volunteer wheat seeds giving growers a chance to work up seed beds, but in the Northwest fields were too dry to work.

CORN: Corn for grain harvest was confined to Texas and Florida although from 27 to 48% of the crop was mature in the Gulf Coast States. Ironically rain slowed silage harvest in South Carolina where earlier dry weather forced farmers to elect using corn for forage rather than grain. Corn rated poor to fair along the Atlantic Coast from Virginia to Florida; elsewhere corn was fair to good.

Corn Belt rains came just in time to help late plantings. In the eastern north central States, development reached from 30 to 80% dough stage and in Illinois 47% of the corn was in the dent stage. In the western north central States, the dough stage ranged from 26 to 81% but mostly 50 to 65%; dent stage ranged from 10 to 41%. Development was two weeks early. Dry soils and earlier high temperatures stressed some South Dakota fields beyond recovery.

SOYBEANS: Soybeans also developed rapidly and rains helped the crop both in the Corn Belt and in the Southeast. Soybeans rated fair to good nationally, but stress conditions existed in the Dakotas and some south central States. In the eastern north central States, podding ranged from 35% in Michigan to 90% in Ohio; ahead of both

1976 and the average. In the western north central States, pod set reached from 47% in Missouri to 87% in Minnesota. Among the south central States, bloom ranged from 63% complete in Alabama to 90% in Tennessee.

COTTON: Cotton rated poor to fair in South Carolina and fair to good elsewhere in the 11 southern States; rains which poured across the Cotton Belt should help improve prospects. Boll set was well advanced and a few bolls were opening in almost every State. The Texas harvest advanced to 2% complete compared with 1% last year and 2% average. Irrigated cotton on the Plains fruited heavily, but dryland cotton was stressed. Arizona cotton matured and a few bolls opened. California cotton grew well and growers moved bees into cotton fields.

OTHER CROPS: The Texas sorghum harvest reached 46% complete, surpassing both 1976's 34% and the 40% average. Dryland stands were stressed. In other major producing States, sorghum heading showed 50% in Kansas, 60% in Oklahoma, 80% in South Dakota, and 85% in Missouri and Nebraska. About 5% of the Kansas crop turned color.

Rice harvest reached 57% in Texas, well ahead of 45% in 1976 and the 38% average. Louisiana growers harvested 21% and Arkansas producers should begin soon; some fields were drained. California rice headed out and the Mississippi crop was 55% headed.

Maine potatoes made good progress but stands varied from poor to excellent. Idaho potatoes rated good with 90% of the acreage growing closed in the middle of the rows. Pacific Northwest growers harvested early varieties.

FRUITS AND NUTS: Peach picking was almost complete in southern areas and about 30% harvested in northern sections of the country. Various seasonal groups of apples were harvested depending on the locality. Growers picked grapes in the South, but the fruit only began showing color in the North. Florida citrus groves rated excellent with adequate moisture and abundant new growth. Late bloom continued; fruit already set sized well. California growers harvested a wide variety of fruit.

VEGETABLES: Growers in northern areas harvested tomatoes, sweet corn, onions and snap beans. Earlier high temperatures dropped blossoms which reduced fruit set. Vegetable harvest for processing became widespread. Southern growers prepared fields for fall planting; Florida and Texas growers seeded some acreage. California growers moved a large selection of fresh produce, and also increased the processing tomato harvest.

PASTURES AND LIVESTOCK: Recent rains improved grasslands in the Corn Belt and the Southeast, but many pastures remained in only poor to fair condition but were improving. Pastures in many of the south central States, the Dakotas, Missouri, Texas, and the West need moisture and rate only poor to fair. Some western ranges lay almost barren raising the probability that rains could erode topsoils.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., August 7, 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 . . .	82	+ 2	.2	-.9	La. Baton Rouge . . .	82	0	1.7	+ .4	Youngstown . . .	72	+ 1	2.3	+1.5
Mobile . . .	83	+ 1	3.0	+1.3	Lake Charles . . .	83	0	.2	-1.0	OKLA. Okla. City . . .	83	0	0	-.5
Montgomery . . .	81	0	3.3	+2.4	New Orleans . . .	83	+ 1	3.6	+2.3	Tulsa . . .	84	+ 1	T	-.2
ALASKA Anchorage . . .	60	+ 2	.4	-.1	Shreveport . . .	80	+ 4	1.2	+ .6	OREG. Astoria . . .	64	+ 3	T	-.2
Barrow . . .	---	---	---	---	MAINE. Caribou . . .	89	+ 5	4.2	+3.3	Burns . . .	74	+ 5	T	-.1
Fairbanks . . .	67	+ 9	.5	0	Portland . . .	71	+ 3	1.0	+ .4	Medford . . .	81	+ 9	.2	+ .1
Juneau . . .	60	+ 4	1.1	-1.0	MD. Baltimore . . .	82	+ 6	.1	-.9	Pendleton . . .	75	+ 1	T	-.1
Kodiak . . .	52	+ 7	5.7	+4.9	MASS. Boston . . .	78	+ 5	1.4	+ .7	Portland . . .	75	+ 7	0	-.1
Nome . . .	57	+ 5	T	-.8	Chatham . . .	71	---	---	---	Salem . . .	73	+ 6	0	-.1
ARIZ. Flagstaff . . .	70	+ 5	T	-.8	MICH. Alpena . . .	65	- 1	1.0	+ .4	PA. Allentown . . .	77	+ 3	2.0	+1.0
Phoenix . . .	97	+ 6	.9	+ .3	Detroit . . .	74	+ 2	1.5	-.3	Erie . . .	70	+ 1	3.6	+2.8
Tucson . . .	89	+ 4	T	-.3	Flint . . .	72	+ 2	1.8	+1.1	Harrisburg . . .	78	+ 2	T	-.8
Winslow . . .	81	+ 3	.1	-.5	Grand Rapids . . .	72	0	.7	+ .1	Philadelphia . . .	79	+ 3	2.2	+1.2
Yuma . . .	96	+ 2	0	-.3	Houghton Lake . . .	66	0	1.8	+1.3	Pittsburgh . . .	70	- 2	1.1	+ .3
ARK. Fort Smith . . .	82	- 2	T	-.1	Lansing . . .	74	+ 3	.3	-.3	Scranton . . .	72	0	1.7	+ .9
Little Rock . . .	79	- 3	T	-.7	Marquette . . .	62	- 5	.4	-.2	R.I. Providence . . .	78	+ 6	.5	-.3
CALIF. Bakersfield . . .	89	+ 6	0	0	Muskegon . . .	71	+ 1	.6	+ .1	S.C. Charleston . . .	83	+ 3	2.8	+1.2
Eureka . . .	57	0	T	0	S. Ste. Marie . . .	59	- 6	.4	-.2	Columbia . . .	78	- 3	5.8	+4.5
Fresno . . .	83	+ 3	0	0	MINN. Duluth . . .	61	- 5	.6	-.2	Greenville . . .	79	0	1.1	+ .2
Los Angeles . . .	78	+ 4	0	0	Internat'l Falls . . .	58	- 8	.3	-.5	S.D. Aberdeen . . .	66	- 7	.3	-.2
Red Bluff . . .	84	+ 2	0	0	Minneapolis . . .	68	- 4	.4	-.3	Huron . . .	70	- 5	1.0	+ .6
San Diego . . .	74	+ 3	T	0	Rochester . . .	68	- 3	.4	-.4	Rapid City . . .	69	- 5	.7	+ .3
San Francisco . . .	64	+ 2	T	0	St. Cloud . . .	64	- 7	.2	-.6	Sioux Falls . . .	72	- 2	.4	-.2
Stockton . . .	79	+ 3	0	0	MISS. Jackson . . .	81	- 1	0	-.9	TENN. Chattanooga . . .	83	+ 4	T	-.9
COLO. Denver . . .	73	- 1	.1	-.2	Meridian . . .	82	0	1.3	+ .3	Knoxville . . .	81	+ 2	.3	-.6
Grand Junction . . .	81	+ 3	T	-.2	MO. Columbia . . .	79	+ 1	.1	-.6	Memphis . . .	82	+ 0	T	-.8
Pueblo . . .	77	+ 1	.6	+ .1	Kansas City . . .	79	- 1	3.8	+3.0	Nashville . . .	80	0	T	-.5
CONN. Bridgeport . . .	77	+ 3	1.0	+ .1	St. Louis . . .	79	0	.6	-.1	TEX. Abilene . . .	84	- 1	0	-.8
Hartford . . .	72	0	1.2	+ .4	Springfield . . .	81	+ 2	T	-.6	Amarillo . . .	81	+ 2	.3	-.4
D.C. Washington . . .	81	+ 2	1.6	+ .5	MONT. Billings . . .	68	- 5	.1	-.1	Austin . . .	87	+ 1	0	-.4
FLA. Apalachicola . . .	82	0	1.6	-.2	Glasgow . . .	64	- 8	.1	-.2	Beaumont . . .	86	+ 2	.6	-.7
Daytona Beach . . .	84	+ 3	2.8	+1.3	Great Falls . . .	65	- 5	.4	+ .2	Brownsville . . .	87	+ 2	.1	-.2
Ft. Myers . . .	82	- 1	3.0	+1.3	Havre . . .	67	- 4	.2	0	Corpus Christi . . .	86	0	0	-.5
Jacksonville . . .	83	+ 2	1.7	0	Helena . . .	66	- 3	.1	-.1	Dallas . . .	---	---	---	---
Key West . . .	84	- 1	.6	-.2	KallsPELL . . .	67	+ 2	.3	+ .1	Del Rio . . .	89	+ 2	T	-.1
Lakeland . . .	83	+ 1	.6	-1.1	Miles City . . .	69	- 7	.3	+ 1.1	El Paso . . .	86	+ 4	T	-.3
Miami . . .	85	+ 2	1.7	+ .3	Missoula . . .	75	+ 4	.2	0	Fort Worth . . .	84	- 2	.3	-.1
Orlando . . .	83	+ 1	.5	-1.1	NEBR. Grand Island . . .	71	- 2	1.1	+ .5	Galveston . . .	84	0	.1	-.8
Tallahassee . . .	82	0	3.8	+2.1	Lincoln . . .	76	- 2	.8	+ .1	Houston . . .	84	0	.1	-.8
Tampa . . .	84	+ 2	1.6	-.3	Norfolk . . .	73	- 3	.9	+ .3	Lubbock . . .	81	+ 1	0	-.4
W. Palm Beach . . .	84	+ 2	1.3	-.1	N. Platte . . .	70	- 5	.8	+ .3	Midland . . .	85	+ 2	.1	-.3
GA. Atlanta . . .	77	+ 1	.8	-.1	Omaha . . .	74	- 2	.9	0	San Angelo . . .	87	+ 1	0	-.2
Augusta . . .	79	- 2	3.4	+2.3	Valentine . . .	70	- 5	.1	-.5	San Antonio . . .	84	- 2	T	-.4
Macon . . .	80	- 2	1.7	+ .8	NEV. Ely . . .	70	+ 2	.1	0	Victoria . . .	85	0	1.4	+ .8
Savannah . . .	82	+ 1	.3	-1.3	Las Vegas . . .	95	+ 6	T	-.1	Waco . . .	88	+ 1	.1	-.2
HAWAII. Hilo . . .	---	---	---	---	Reno . . .	72	+ 3	T	-.1	Wichita Falls . . .	84	- 3	1.9	+1.5
Honolulu . . .	82	+ 2	T	-.2	Winnemucca . . .	78	+ 7	0	0	UTAH. Blanding . . .	75	+ 2	.1	-.3
Kahului . . .	80	+ 1	.5	+ .4	N.H. Concord . . .	74	+ 5	1.8	+1.2	Salt Lake City . . .	79	+ 2	.5	+ .3
Lihue . . .	80	+ 1	.2	-.3	N.J. Atlantic City . . .	78	+ 3	1.7	+ .5	VT. Burlington . . .	77	+ 8	.8	0
IDAHO. Boise . . .	78	+ 3	T	-.1	Trenton . . .	78	+ 2	4.7	+3.7	VA. Lynchburg . . .	78	+ 2	.7	-.3
Lewiston . . .	82	+ 8	0	-.1	N.MEX. Albuquerque . . .	82	+ 4	.1	-.3	Richmond . . .	85	+ 7	.4	-1.0
Pocatello . . .	71	- 1	T	-.1	Roswell . . .	86	+ 7	T	-.4	Roanoke . . .	83	+ 5	1.3	0
ILL. Cairo . . .	81	0	0	-.7	N.Y. Albany . . .	73	+ 1	.8	+ .2	WASH. Colville . . .	81	+ 6	T	-.9
Chicago . . .	75	0	2.6	+1.8	Binghamton . . .	70	+ 1	1.9	+1.1	Omak . . .	78	+ 8	.1	0
Moline . . .	73	- 2	1.5	+ .7	Buffalo . . .	72	+ 2	3.4	+2.6	Quillayute . . .	62	+ 3	T	-.5
Peoria . . .	72	- 3	4.5	+3.8	New York . . .	79	+ 2	1.5	+ .5	Seattle-Tacoma . . .	74	+ 4	.3	+ .2
Rockford . . .	71	- 2	1.0	+ .2	Rochester . . .	74	+ 3	.9	+ .2	Spokane . . .	74	+ 4	.3	-.1
Springfield . . .	75	- 1	2.7	+2.0	Syracuse . . .	72	+ 1	1.0	+ .2	Walla Walla . . .	82	+ 6	.5	+ .5
IND. Evansville . . .	77	- 1	.1	-.6	N.C. Asheville . . .	74	0	.7	-.4	Yakima . . .	77	+ 6	.5	+ .6
Ft. Wayne . . .	73	0	2.4	+1.7	Charlotte . . .	80	+ 1	1.1	+ .1	W.Va. Beckley . . .	72	+ 2	.3	-.5
Indianapolis . . .	76	+ 1	.8	+ .1	Greensboro . . .	80	+ 3	.1	-.9	Charleston . . .	76	+ 1	1.4	+ .4
South Bend . . .	73	+ 1	1.3	+ .5	Hatteras . . .	81	+ 3	T	-1.5	Huntington . . .	79	+ 4	.6	-.5
IOWA. Burlington . . .	73	- 3	1.5	+ .8	Raleigh . . .	80	+ 2	1.8	+ .6	Parkersburg . . .	76	+ 1	.6	-.2
Des Moines . . .	77	+ 2	.7	0	Wilmington . . .	82	+ 2	3.2	+1.5	WIS. Green Bay . . .	68	- 2	.3	-.2
Dubuque . . .	70	- 2	.7	-.1	N.DAK. Bismarck . . .	64	- 8	.2	-.2	La Crosse . . .	70	- 3	.5	-.3
Sioux City . . .	73	- 3	.6	0	Fargo . . .	64	- 8	.3	-.4	Madison . . .	69	- 2	2.4	+1.7
KANS. Concordia . . .	76	- 3	2.7	+2.0	Williston . . .	63	- 8	.4	0	Milwaukee . . .	72	+ 1	.7	+ .1
Dodge City . . .	81	+ 1	1.4	+ .8	OHIO. Akron-Canton . . .	74	+ 2	2.4	+1.7	WYO. Casper . . .	68	- 4	.2	+ .1
Goodland . . .	74	- 2	2.0	+1.4	Cincinnati . . .	76	0	.3	-.4	Cheyenne . . .	65	- 5	.4	0
Topeka . . .	79	0	3.7	+2.8	Cleveland . . .	73	+ 2	1.5	+ .8	Lander . . .	67	- 5	.3	+ .2
Wichita . . .	80	- 2	1.2	+ .5	Columbus . . .	75	+ 2	2.3	+1.5	Sheridan . . .	66	- 6	1.2	+1.0
KY. Lexington . . .	77	+ 1	.5	-.4	Dayton . . .	78	+ 2	1.1	+ .5	P.R. San Juan . . .	79	- 2	2.2	+ .6
Louisville . . .	79	+ 2	T	-.7	Toledo . . .	73	+ 1	2.5	+1.8					

Based on 1941-70 normals

Publication of the Weekly Weather and Crop Bulletin began in 1892 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44USC 213), 53d Congress, 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit. Standard copy for the Bulletin is prepared by Lyle Denny and O.W. Byrd, Environmental Data Service, National Oceanic & Atmospheric Admini-

stration; Harry DeLong and Jim Carlin, Statistical Reporting Service, U.S. Department of Agriculture. Yearly subscription rate: \$5.00 domestic and \$11.25 foreign airmail. Order from the Agricultural Weather Support Service, South Building Mail Unit, Room 1248, USDA, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

State Summaries of Weather and Agriculture

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

ALABAMA: Temperatures 2° above normal. Rainfall moderate to heavy.

Fieldwork: 4.1 days suitable. Soil moisture short to adequate. Cotton fair to good; 94% setting bolls, 68% 1976. Corn poor condition; rains came too late to help most crops, 42% mature, 39% 1976, 27% average. Soybeans fair to good; 63% blooming, 56% 1976, 69% average. Peanuts fair to good condition. Pastures and hay poor to fair.

ALASKA: Tanana Valley sunny and hot. Precipitation above normal. Matanuska Valley mostly cloudy, scattered showers. Temperatures above normal. Kenai Peninsula above normal temperatures, precipitation below normal. Kodiak Island wet and cool.

Dry conditions hastened crop development throughout railbelt. Condition small grains good to excellent. Most oat and barley fields in dough stage and turning color. Soil moisture ranges from short to adequate. Vegetable harvest active for radishes, lettuce, greens, squash and cabbage.

ARIZONA: Hot, dry weather prevailed. Temperatures 1 to 6° above normal. Rainfall heavy some stations but limited isolated thundershowers, mostly mountains, southeast.

Fieldwork uninterrupted. Major activities: Insecticide applications, irrigation, haying. Cotton maturing west, central areas. Some opening bolls Yuma, central. Hot weather may reduce boll set. Early sorghum ripe, Yuma. Corn progressing satisfactorily southeast. Alfalfa hay cutting continues, growers storing on farms. Preparations planting fall vegetables. Some hail damage chili peppers Cochise. Lemon harvest start soon. Other citrus developing satisfactorily. Rains sporadic most areas. Ranges improved mountains. Water hauling, supplemental feeding necessary many desert areas; range conditions poor. Livestock mostly fair to good higher elevations, poor to fair desert. Fewer light cattle being marketed, where conditions improved.

ARKANSAS: Temperature range 82 to 77°. Extremes: 102 and 55°. Most precipitation 3.24 in.; least 0.

Soil moisture short to adequate. Fieldwork: 5.8 days suitable. Soybeans good condition; dry weather stress northeast corner. Late weed problems reported. Cotton good; few open bolls, fruiting slowed down, insect activity increasing. Rice rapidly maturing, first harvest about one week away. Some fields already drained. Corn fair to good. Sorghum good, maturing rapidly. Some harvesting this week. Grape harvest underway, good production expected. Peach harvest almost complete. Watermelon harvest continued. Pastures below average.

CALIFORNIA: No precipitation and much above normal temperatures.

Small grain harvest complete. Cotton growth good. Rice heading out. Corn beginning to dry San Joaquin Valley. Almond, fig, prune orchards prepared for harvest. Apple, grape, Valencia orange, nectarines, freestone and clingstone peach, plum, pear harvests continue. Broccoli, cauliflower, cantaloup, carrots, celery, sweet corn, cucumbers, honeydews, lettuce, melons, bell peppers, and fresh market tomatoes continue active harvest. Processing tomatoes gaining momentum in Sacramento Valley. Rangeland dry, range fires constant threat.

Range barren, heavy rains may cause erosion. Some irrigated pastures have no water. Water hauling, supplemental feeding, and livestock culling continues. Grass high mountains fair to good, water short. Bees moved to cotton fields.

COLORADO: Numerous severe thunderstorms over front range and eastern Plains middle and latter part of week. Rainfall averaged less than 0.10 in. west; 0.50 in. east. Temperatures 1 to 2° above normal west, 1 to 3° below normal east.

Winter wheat harvested 96%, 92% last year, 96% average. Winter barley harvest 99% complete, 98% last year, 95% average. Corn condition very good; average height 70 in.; 88% silked, 93% tasseled. Alfalfa 2d cutting 61%, 3d cutting 22%. Most irrigated crops in good condition. Dryland crops poor in the west. Range and pasture conditions fair to good east; poor in west. Livestock fair to good condition. Soil moisture short to adequate in east; very short in west.

FLORIDA: Scattered showers, thundershowers daily. Amounts generally 0.50 to 1.00 in. but some locally heavy. Temperatures near normal.

Soil moisture short north, mostly adequate other areas. Corn harvest gaining. Tobacco harvest active. Peanuts making fair to good growth, some worm damage. Harvest green peanuts underway. Soybean progress good to poor; dry weather reduced prospects. Insects causing some problems. Sugar-cane growth good. Pasture conditions improving, but dry areas eastern Panhandle, northern Peninsula continue poor. Other areas mostly fair to good. Cattle condition poor, dry areas; mostly good elsewhere. Vegetable field, seedbed preparations very active. Eggplant transplanting gaining momentum. Some pepper seeding underway. Tomato transplanting underway. Citrus grove condition excellent. General rains provided adequate moisture. Abundant new growth; some late bloom continuing. Regular bloom fruit sizing well.

GEORGIA: Temperatures 3° below normal central; excessive cloudiness and rain. Temperatures 2° above normal extreme northwest and southeast. Extremes: 59 and 97°. Almost daily rains south. Extreme north had least rain, mostly less than 0.50 in.

Rains finally came, but too late for some crops. Late planted crops showed major improvement. Soil moisture varied from short to mostly adequate. North mostly short. Fieldwork: 3 days suitable. Heavy insect population increasing. Corn condition poor; cutting for silage or hay. Tobacco mostly fair to good; 55% harvested, 94% last year, average 86%. Cotton fair; 99% setting bolls, last year 98%; 7% bolls open, 1% open last year. Soybeans improved to mostly fair. Peanuts mostly fair to good; 99% blooming, 99% pegging, equal to last year. Pastures poor to mostly fair. Cattle mostly fair. Hogs improved to fair to mostly good. Peaches fair; 97% harvested, same as last year. Apples fair to good; 7% harvested, last year 9%. Watermelons poor to mostly fair, 93% harvested, last year 90%.

HAWAII: Weather warm and humid but favorable. Showers light and scattered confined mainly higher elevation.

Heavy irrigation continues in major crop areas. Vegetable supplies of leafy crop continue short,

others adequate. Banana supplies moderate to heavy. Papaya supplies decreasing seasonally. Pineapple harvesting active. Sugar harvesting steady. Pastures fair to good. Showers beneficial windward area Kauai.

IDAHO: Temperatures 3° above normal north to 6° below normal southeast. Precipitation light and spotty.

Good crop progress, more advanced than last year. Winter wheat 85% ripe, 50% 1976; harvested 25%; 10% 1976. Harvest active. Spring wheat 55% ripe, 20% 1976; harvest 10%, 0% 1976. Potatoes good condition; 90% closing middles, 95% 1976.

ILLINOIS: Temperatures normal to 3° below normal. Precipitation moderate to heavy north, little or no rain extreme south. Severe thunderstorms north and central after midweek, 1.00 to 5.00 in.

Corn good; 80% in dough, 49% 1976, 47% average; 47% dented, 13% 1976 and average. Soybeans good; 80% pods set, 46% 1976, 40% average. Wheat 50% plowing completed, 23% 1976, 17% average. Third crop alfalfa hay 35% cut, 15% 1976, 10% average; Mostly good. Pastures mostly fair. Soil moisture short to adequate. Fieldwork: 5.50 days suitable.

INDIANA: Rains came to the driest areas. Northwest averaged 3.70 in., west central 2.60, central 1.90, northeast 1.60 and east central 1.20. Southern third averaged 0.20 to 0.50 in. Temperatures averages 2° above normal.

Fieldwork: 6 days suitable. Topsoil and subsoil moisture mostly short to adequate. Corn condition mostly fair to good; 75% in dough stage, 1976 40%. Soybeans condition fair to good; 90% bloomed and 60% podded; 1976 65% podded. Alfalfa 95% cut second time. Watermelons and cantaloupes 90% picked once. Tomatoes 30% picked once; 1976 20%. Peaches 30% picked; 1976 60%. Apples 30% picked. Pastures poor to fair.

IOWA: Seasonal temperatures with moderate to heavy rainfall while relieving drought brought on localized flooding.

Soil moisture deteriorated but weekend rains helped. Topsoil and subsoil moisture short to adequate. Fieldwork: 5.9 days suitable. Corn 30% in milk stage, 49% dough, 21% dent; last year 28% dough, 2% dent; average 26% dough, 2% dent. Soybeans 81% setting pods, last year 77%, average 62%. 3d cutting alfalfa 27% complete, 2d cutting clover hay 62% complete. Insect and hail damage severe in some areas. Corn and soybeans good. Clover and alfalfa hays fair to good. Pastures range from very poor to good depending on rainfall. Livestock mostly good.

KANSAS: Thunderstorms brought large hail, damaging winds and locally heavy rains. Temperatures averaged 80°, about normal. Rainfall averaged nearly 2.00 in.

Widespread showers many areas improved moisture conditions. Corn growing well, 60% dough stage, last year 35%, average 45%; dented stage 25%, last year 10%, average 15%. Corn fully mature 5%, last year, average none. Sorghums 50% headed, last year 25%, average 30%. Grain coloring 5%, last year and average none. Soybeans setting pods 50%, last year 35%, average 45%. Cutting alfalfa hay third time 70%, last year 55%, average 40%; fourth time 5%, last year and average none. Pastures, ranges doing better. Livestock grazing native pastures, wheat stubble. Principal farm activities: Haying, summer fallow ground tillage, irrigating.

KENTUCKY: Hot and humid with widely scattered thundershowers.

Soil moisture short to adequate. Fieldwork: 5.5 days suitable. Jobs included tobacco work, mowing and baling hay, spraying soybeans, and clipping pastures. Tobacco cutting already underway; about 60% burley topped, 55% dark types. Corn prospects good, 26% already dent stage, 44% dough and 30% milk or earlier. Over 50% soybeans podding. Crops 10 to 14 days ahead of normal progress. Third cutting alfalfa hay 58% completed. Conditions most crops holding well into maturing processes.

LOUISIANA: Temperatures 2° below to near normal. Extremes: 61 and 96°.

Soil moisture short to adequate. Fieldwork: 4.7 days suitable. Main activities: Applying pesticides, haying, harvesting rice and sweetpotatoes. Rice good; 82% headed, 40% ripe, 21% harvested. Cotton fair to good; 97% setting bolls. Corn fair; 94% dough stage, 48% mature. Sorghum fair to good; 92% headed. Soybeans fair to good; 82% blooming. Sugarcane mostly good: sweetpotatoes fair to good, harvest increasing. Hay and pasture fair. Cattle fair to good.

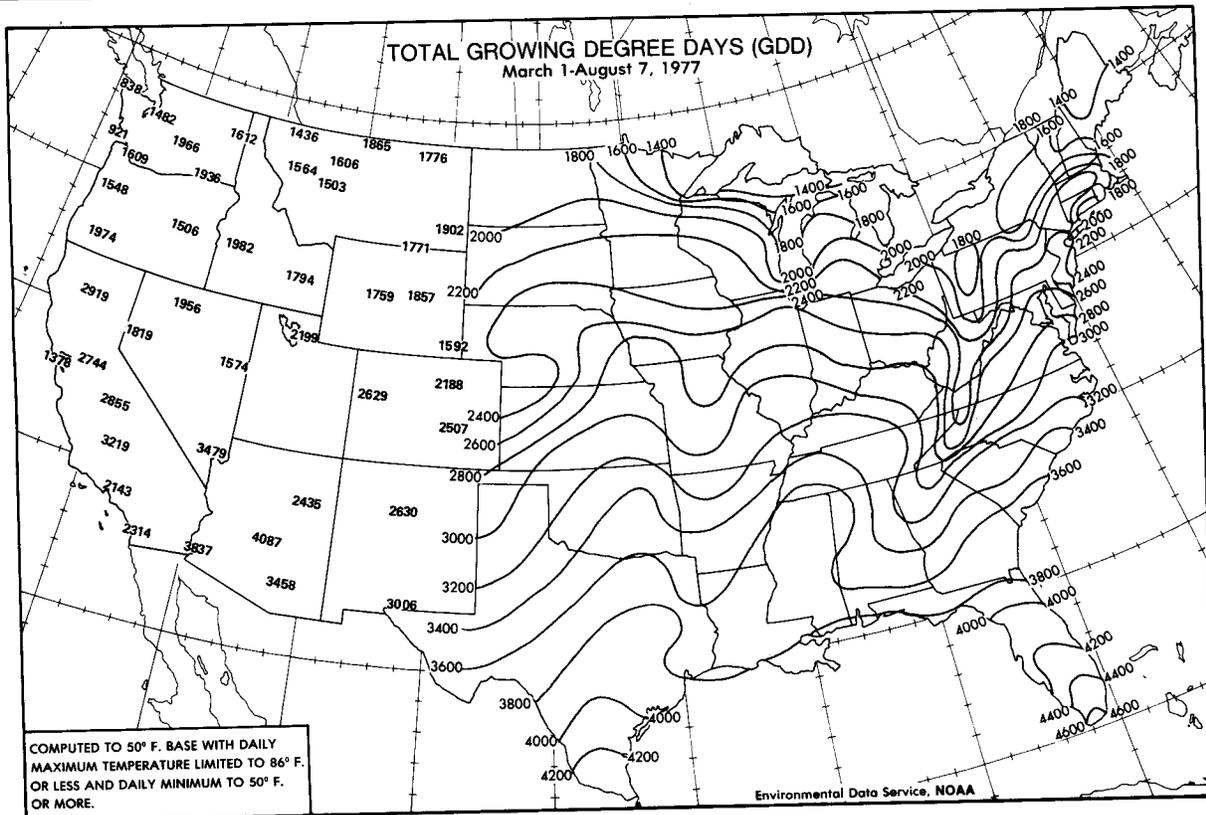
MARYLAND & DELAWARE: Temperatures about normal except slightly below in mountains. Precipitation light with some occasional heavy downpours over widely scattered locations.

Corn 90% silked, showing signs of moisture stress in east. Soybeans 40% bloomed, 55% 1976; 25% podded. Third cutting alfalfa 50%. Tobacco harvest started in south. Peaches ripening one week earlier than normal.

MICHIGAN: Temperatures 4° above normal in south central Lower and normal northern Lower to 5° below normal Upper. Precipitation 1.30 in. Lower to 0.57 in. Upper. Rains improved soil moisture but moisture generally short. Pasture feed supplies low, but improving. Fieldwork: 5 days suitable. Plowing for fall seedings. Second cut hay below average. Corn 75% silked, 70% 1976, 60% normal; 30% in dough. Wheat and tart cherry harvest near completion. Oat harvest 75%, 50% 1976, 30% normal. Dry beans 45% blooming, 45% pods set. Soybeans 45% blooming, 35% pods set. Potatoes 10% dug, 10% last year, 6% normal. Pickle harvest 30% picked, 20% 1976, 25% normal. Summer apple picking 25% complete, 18% last year and normal. Peaches 30% harvested, 10% 1976, 5% normal. Harvest of other fruits and vegetables continues.

MINNESOTA: Cool with below normal precipitation. Temperatures 7° below normal northwest to 3° below normal south. Extremes: 90 and 39°. Precipitation averaged 0.50 to 0.75 in. below normal much of central through south central and portions of extreme north; locally near normal to 0.25 in. below normal extreme west and east. Amounts ranged from less than 0.10 in. south central to more than 0.75 in. portions of extremes southwest to southeast.

Showers slowed small grain harvest but did not relieve short topsoil moisture in west. Cool temperatures moderated moisture stress condition. Corn good to excellent, soybeans mostly good. Corn 10% denting. Flax harvest increasing in south. Most sunflowers in good condition could use additional moisture. Sweet corn for processing 33% harvested. Corn 65% in dough or beyond, 1976 11%, normal 6%. Soybeans 87% setting pods, 1976 61%, normal 61%. Percent combined: Spring



wheat 59%, 1976 49%, normal 21%; oats 79%, 1976 73%, normal 44%; barley 83%, 1976 66%, normal 40%; winter wheat 95%, 1976 93%, normal 67%; rye 93%, 1976 93%, normal 71%; flax 16%, 1976 18%, normal 50%.

MISSISSIPPI: Temperatures down little. Extremes: 97 and 55°.

Soil moisture adequate. Fieldwork: 4.2 days suitable. Soybeans 84% blooming, 79% 1976, 54% average; 43% podding, 31% 1976. Cotton 96% setting bolls, 72% 1976, 83% average; starting to open. Rice 55% headed, 39% 1976. Corn 94% in dough stage, 87% 1976; 73% dented, 50% 1976, 27% mature. Sorghums 65% headed, 67% 1976. Hay crops 53% harvested, 66% 1976, 59% average. Peaches 92% harvested, 94% 1976, 88% average. Sweetpotatoes 7% harvested. Watermelons 77% harvested, 83% 1976, 66% average. Corn silage 43% harvested, 24% 1976. Peanuts 9% harvested. Soybeans in good to fair condition. Cotton and rice in good condition. Corn in fair condition. Pastures in fair to good condition.

MISSOURI: Temperatures close to normal. North 2 to 3° below normal. Precipitation ranged from 2.00 to 3.00 in. across north with little or no rainfall south.

Fieldwork: 5.7 days suitable. Soil moisture short. Soybean condition fair to good; 77% blooming or beyond, last year 66%, normal 64%; 47% setting pods, 28% last year, 36% normal. Corn condition fair to good; 81% in dough or beyond, 40% last year, 51% normal; 41% dented. Grain sorghum 85% headed, 57% last year, 59% normal. Cotton 98% setting bolls, 46% last year, 82% normal. Third cutting alfalfa 48% harvested, last year 30%, normal 33%. Pasture poor to fair.

MONTANA: Showers frequent after first of week, significantly cooling temperatures and giving varying amounts of precipitation. Temperatures averaged 7° below normal south central and east to 3° above normal west.

Soil moisture short but crops benefited from showers. Winter wheat harvest slowed some areas by showers 55% complete, normal 20%, last year 30%. Spring wheat and barley 15% harvested, normal less than 10%. Oats harvest 20%. Second cutting alfalfa 40% done, much ahead of normal. Wild hay 75% cut. Stockwater supplies mostly short.

NEBRASKA: Precipitation scattered, lightest in northwest and north central with south central and southeast receiving up to 5.00 in. Temperatures averaged 2 to 5° below normal.

Topsoil and subsoil moisture adequate to short. Corn 65% dough, 25% dent, 2 weeks ahead of last year and normal. Last year and normal dough stage under 25%. Sorghum 85% headed, 70% year ago, 70% normal. Soybeans 75% podding, 80% year ago, 70% normal. Third cutting alfalfa 35% completed, 15% year ago.

NEVADA: Drier, cooler near end of week. Temperatures averaged a few degrees below normal. Extremes: 115 and 30°. Widely scattered thunder-showers midweek resulted measureable rainfall northeast and south central.

Wild hay harvest full swing. Headed small grains benefited by cooler weather. Row crops later than normal.

NEW ENGLAND: Temperatures above normal. Showers brought 0.50 to as much as 5.00 in. locally.

Maine potatoes made good progress, however, stands vary from excellent to poor. Vegetable crops looked good. Peaches, early variety apples, and blueberries harvested. Field corn growth good. Farmers doing second cut hay.

NEW JERSEY: Temperatures 2 to 4° above normal. Extremes: 56 and 97°. Rainfall 1.85 in. north, 2.60 in. central and 1.33 in. south. Soil moisture in percent of field capacity averaged 77% north, 80% central and 42% south. Soil temperature averaged 72° north, 75° central and south.

Central and north received considerable rain but south very dry. Extremely high temperatures reduced supplies for some crops with accompanying losses of blooms. Most summer vegetables available in moderate volume. Processing tomato harvest increasing. Peach harvest becoming general. Irrigating vegetables heavy in south. Field corn and soybeans need rain in south.

NEW MEXICO: Heaviest rainfall occurred over northeast from eastern slopes of Sangre de Cristo Mountains and east. Precipitation of 1.50 in. common. Except for isolated amounts of 0.50 to 1.00 in. over extreme southwest deserts and south central mountains, rainfall was sparse.

Cotton, irrigated grain sorghum, corn good. Dryland grain sorghum fair. Second cut alfalfa completed north, third cut completed south. Harvest of onions continuing. Ranges poor to fair. Livestock fair to good.

NEW YORK: Many showers; rainfall very spotty, from 0.50 to 3.50 in. Temperatures in 60's and 70's; from 1 to 9° above normal.

Corn in good condition but needs rain. Oat combining 25% complete. Wheat harvest about done. Second cutting alfalfa 60% complete. Many areas still dry. Onion, sweet corn harvest starting. Tomato, potato harvests beginning. Grapes ahead of normal; early varieties starting to show color.

NORTH CAROLINA: General rains fell mostly in east. Spotty rain in west. Temperatures in 90's beginning and end of week.

Fieldwork: 5.4 days suitable. Soil moisture mostly short to adequate. Conditions: Pastures mostly poor; corn and hay poor to fair; tobacco, soybeans, sweetpotatoes fair; peanuts, cotton and apples fair to good. Harvested: Flue-cured tobacco 33%, 1976 49%, average 43%; hay 75%, 1976 69%, apples just getting underway.

NORTH DAKOTA: Temperatures averaged 4 to 5° below normal. Extremes: 37 and 93°. Light showers common; precipitation averaged 0.10 in. southwest to 0.60 in. north central.

Harvest well underway and nearing completion southern areas. Harvest hard red spring wheat 25% complete, durum 10%, oats 40%, barley 60%. Row crops under moisture stress and need rain for normal development. Pastures deteriorating and need general rain for regrowth.

OHIO: Temperatures near normal. Extremes: 94 and 48°. Precipitation spotty; 2.46 to 0.09 in.

Fieldwork: 5.5 days suitable. Main activities: Vegetable harvesting, finishing oats combining, plowing winter wheat ground (20%), hay baling. Crop development: 35% corn in dough stage, 25% normal and 25% year ago. Soybeans 90% setting pods, 85% 1976, 65% average. Oats 95% harvested, same as last year, 85% normal. Potatoes 5% harvested, 10% 1976, 15% average. Alfalfa 95% of second crop cut, 90% 1976, 80% average. Clo-Tim 75% of second crop cut, 70% last year, 60% normal. Corn and soybeans fair to good. Crucial rain

received in west weekend. Soil moisture mostly short to adequate.

OKLAHOMA: Temperatures 1° above normal Panhandle and northeast, 1° below normal elsewhere. Precipitation light; western area averaged 0.50 to nearly 1.00 in., while eastern areas had 0.33 in. and less.

Scattered showers and high temperatures did little to change crop conditions. Hail storms hit corn and sorghum in Panhandle and a sizeable area of cotton in the southwest. Western rains sprouted volunteer wheat and allowed seedbeds to be worked. Corn 50% tasseled or later, below a year ago at 60% and 58% average. Aphids infested Panhandle sorghums and other areas need moisture. With 60% crop headed, it is earlier than year ago but later than 68% average. Cotton mostly good condition with bulk of acreage setting squares and near 60% setting bolls, compared with 40 to 45% average. Over 90% peanut fields now blooming, with 36% putting down spikes compared with 39% a year ago and average. Soybeans mostly good condition but need rain soon. Third cutting alfalfa 67% taken, and combining of seed will soon start. Ranges improved slightly where rainfall adequate.

OREGON: Temperatures ranged from a few degrees to 11° above normal. Warm daytime temperatures over interior valley. Highs climbed into the 100's. Spotty drizzle along coast. Isolated thunderstorms produced light precipitation in south central area. Extremes: low 90's, high 40's west; low 100's, low 40's south and east.

Grain harvest continued. Peppermint doing well, some harvesting started. Corn progressing well, some early harvesting for fresh markets. Potatoes doing well; harvest of early varieties underway. Livestock and range continues good shape west, poor to fair east. More water being hauled for both domestic and stock use. Fall and winter pasture outlook very dismal.

PENNSYLVANIA: Seasonably cool with maxima 70's and 80's and minima 50's and 60's first half, hot and very humid with temperatures 10 to 15° higher remainder of period. Extremes: 45 and 93°. Showers and thunderstorm activity southeast 1st and 3d and statewide last half provided 1.00 to 2.00 in. rainfall most areas with 2.00 to 3.00 in. few west, central and east but little or none lower Susquehanna Valley.

Fieldwork: 5 days suitable. Soil moisture adequate. Activities: Haymaking, wheat and oats combining, harvesting potatoes, tomatoes, sweet corn, picking of peaches and apples. Oats 66% harvested, 64% last year. Potatoes 6% harvested, 11% last year. Corn for grain 23% pre-silk, 15% in dough stage. Fall plowing 4% complete, 9% last year. Alfalfa hay second cut 82%, last year 72%; third cut 30%, last year 23%; fourth cut 15%, equal to 1976. Clo-tim second cut 53%, 41% last year. Quality of hay fair to good. Feed from pastures average.

PUERTO RICO: Island average rainfall 1.72 in. or 0.17 in. above normal. Temperatures about 80° on coasts and 75° interior. Extremes: 96 and 55°.

Recent rains all but south central coast greatly eased agricultural drought and ended water rationing. Additional moderate rains needed to bring municipal water supplies to full capacity and follow up planting operations of all crops.

SOUTH CAROLINA: Temperatures below normal. Rainfall above average. General precipitation becoming widely scattered end of week. Heaviest amount 2.97 in.

Soil moisture adequate most areas. Rainfall greatly helped crop condition except corn. Insect infestation high some areas. Tobacco fair condition; harvesting slowed due rainfall. Corn poor condition; rain keeping farmers from harvesting crop. Many producers chopping corn for silage. Cotton condition poor to fair; rain will help. Bollworms active; farmers spraying bugs. Some bolls opening. Soybean condition fair; rain helped condition plants. Armyworm activity high; producers spraying insects. Peach condition fair; rainfall too late. Watermelon condition poor; rain will have no substantial effect upon crop since most now harvested. Producers preparing land for fall tomatoes, cucumbers, snap beans.

SOUTH DAKOTA: Scattered showers, precipitation mostly less than 1.00 in. Temperatures below normal, highs mostly in 80's.

Topsoil moisture short. Lack of moisture causing stress in row crops. Corn burning many areas, some fields beyond recovery. All row crop development record early. Small grain harvest nearly complete. Spring wheat harvested 86%, 1976 90%, normal 62%. Oats harvested 95%, 1976 97%, normal 73%. Barley harvested 97%, 1976 97%, normal 33%. Flax harvested 26%, 1976 46%, normal 13%. Sorghum headed 80%, 1976 45%, normal 45%. Corn silked 93%, 1976 83%, normal 89%. Corn in dough stage 26%, 1976 4%, normal 3%. Soybeans podded 80%, 1976 63%, normal 58%. 2d cutting alfalfa harvested 85%, 1976 84%, normal 68%. Pastures only fair, drying fast. Cattle mostly good condition. Stock water supplies declining.

TENNESSEE: Temperatures near normal. Precipitation mostly under 0.50 in.

Cattle condition fair. Most crops good. Few tobacco fields central destroyed by storm. Soil moisture short. Fieldwork: 5.4 days suitable. Soybeans blooming 90%, 67% 1976, 67% normal. Soybeans setting pods 43%, 30% 1976, 26% normal. Cotton setting bolls 87%, 65% 1976, 73% normal. Corn silking 95%, 91% 1976, 88% normal. Corn in dough stage 73%, 58% 1976, 61% normal. Corn dented 34%, 20% 1976, 26% normal.

TEXAS: Precipitation concentrated over east, upper Coastal Plains, Panhandle where rainfall near to above normal. Elsewhere, dry trend continued with rainfall less than 0.25 in. Temperatures normal or below east, upper Coastal Plains, Panhandle; elsewhere above normal.

Most areas remain dry; scattered showers gave boost to crops, pastures parts of Panhandle, Cross-Timbers, Blacklands, and northeast. Cotton harvest full swing in Lower Valley, Coastal Bend; irrigated cotton on plains fruiting heavily; dryland cotton stressed, some areas given boost by scattered showers. Corn High Plains maturing rapidly; early fields dent stage. Sorghum harvest good progress; combining began southern Low Plains. Dryland sorghum High Plains stressed. Rice harvest excellent progress. Regrowth in harvested fields good. Peanut growth fair to excellent depending on rainfall. Many dryland stands need rain. Harvest continues early fields south Texas. Early sunflower fields High Plains maturing; some fields defoliated. Soybean fields, good progress; plants continue set pod. Sorghum harvested 46% 1977, 34% 1976, 40% average. Rice harvested 57% 1977, 45% 1976, 38% average. Corn harvested 5% 1977, 14% 1976, 14% average. Cotton harvested 2% 1977, 1% 1976, 2% average.

Seeding fall vegetables. Growers irrigating citrus groves, spraying for insect control. Melon harvest winding down. Tomatoes, peppers,

cucumbers, cantaloups moving to market. Lack of moisture stressing vegetables some areas.

Grass most areas dry, cured. Some regrowth where showers received. Livestock fair to good condition but supplemental feeding increasing.

UTAH: Few, widely scattered showers and thunderstorms. Accumulated amounts moisture generally light but locally moderate to heavy few isolated areas. Temperatures ranged from near normal to 7° above.

Effects of drought becoming more evident. Irrigation water depleted some areas and only 25 to 50% stream in most others, except few with good storage supplies. Range feed adequate but stock water supplies short many areas. Scattered rains delayed harvest somewhat. Winter wheat 50% harvested. Spring wheat, oats, barley 35% to 45% done. Second crop alfalfa hay harvest 55% complete and other hay about 75%. Apricot and sour cherry harvest nearing completion. Harvest of early peaches starting.

VIRGINIA: Rainfall averaged less than 0.50 in. Temperatures 2 to 3° above normal. Extremes: 99 and 52°.

Topsoil moisture short. Pasture area livestock watering supplies adequate to short. Corn poor, silage and green-chop harvests active. Soybeans fair, some stunted growth for late planted fields. Peanuts good, a few pegs burning in dry soils. Tobacco fair, flue markets open this week. Flue 12% pulled, 19% 1976, 14% normal. Fire 2% cut, 3% 1976, 1% normal. Sun 3% harvested. Burley just starting. Fieldwork: 4.9 days favorable.

WASHINGTON: West: Temperatures 2 to 5° above normal.

Green peas 50% harvested. Small grain and vegetable seed harvests continue. Local hay surplus. Low water tables and high fire danger.

East: Temperatures 3 to 5° above normal. Precipitation 0.10 in. below normal to 0.10 in. above normal.

Peach, nectarine harvest continues; early Bartletts starting. Sweet corn, cucumbers, mint, small grains harvested. Seeding conditions too dry for fall wheat and barley. Range and pasture feed conditions worsen. Livestock owners cull heavy in anticipation of sustained drought and local hay shortages.

WEST VIRGINIA: Temperatures above normal. Rainfall near normal except below southwest and north-east sections.

Fieldwork: 5.3 days suitable. Soil moisture short to adequate. 2d haying 49%, 34% 1976, 37% average. Small grain harvest: Wheat and barley near completion; oats 79%, 69% 1976, 71% average. Corn good to fair. Potatoes 20% dug, 19% 1976, 17% average. Pastures fair to good. Livestock in fair condition.

WISCONSIN: Temperatures 2° below normal. Highs in 70's and 80's under variable clouds. Showery with some rain every day. Heaviest amounts in south where local totals up to 3.00 in.; elsewhere 0.50 in. except lighter northwest.

Harvesting slowed by damp, humid weather. Oats 60% harvested, 1976 50%, normal 30%. Lodged oats and weed growth making combining difficult. Second crop hay 80% harvested, 1976 60%, normal 35%. Third crop growth coming fast. Pasture conditions improved. Corn 50% in dough, 1976 10%, normal 5%. Most corn looks excellent except where short of moisture. Reports of 2 ears on many stalks; early corn denting. Soybeans have large

growth. Tobacco being topped and harvesting under-
way for early crop. Early apples and potatoes
being harvested. Soil moisture supplies short to
adequate.

WYOMING: Temperatures below normal. Precipita-
tion measurable in all areas. Above normal pre-
cipitation southeast and north central; elsewhere
little below normal.

Soil moisture improved; topsoil short to ade-
quate. Winter wheat harvest progressing normally,
69% complete. Spring grain harvest about a week
ahead of normal. Percent harvested: Spring wheat
33%, oats 21%; barley 39%. Alfalfa second cutting
36% put up. Other hays 72% harvested. Potato
development behind previous years, only 60% in
bloom. Dry beans 84% in bloom. Fall and winter
grazing prospects poor in some areas, generally
fair overall. Livestock in good condition.

World Weather and Crop Update

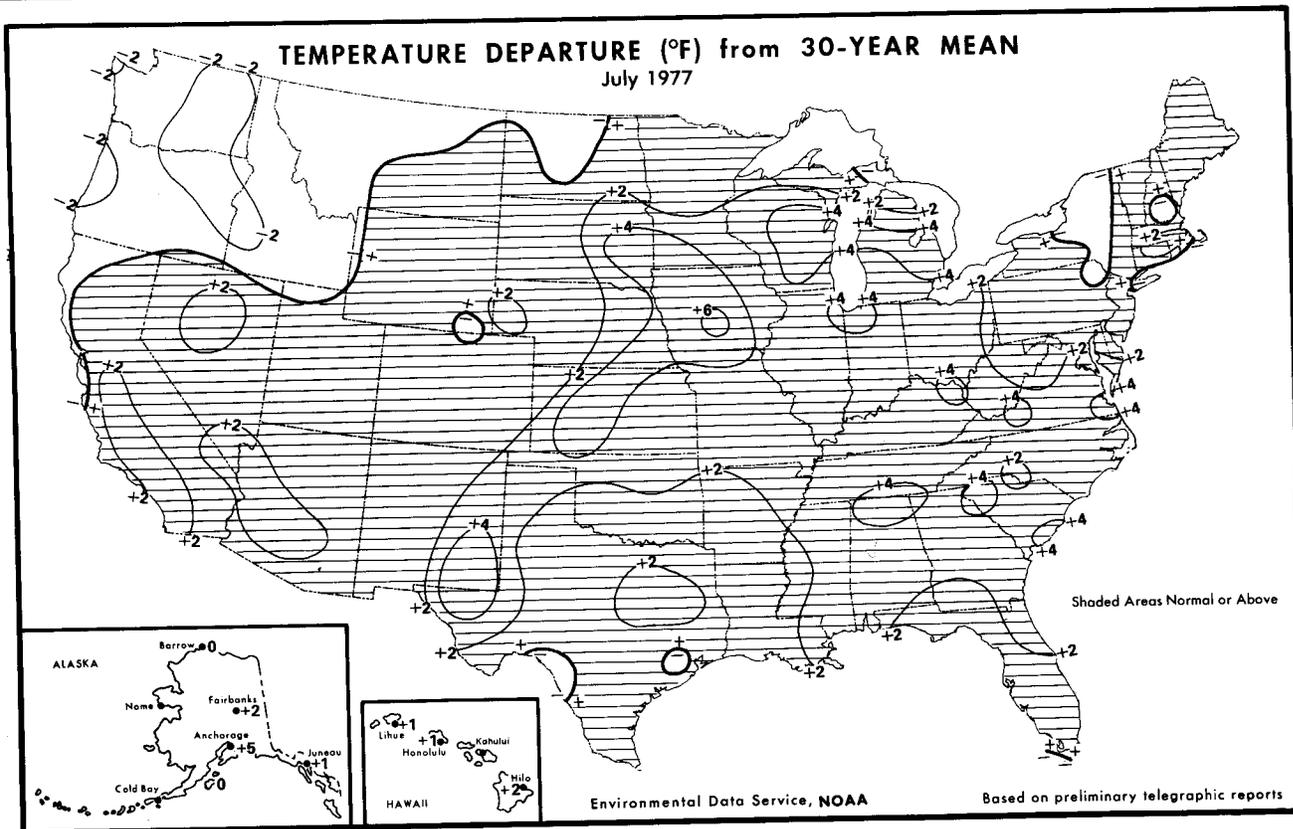
USSR. Heavy rains continued over large sections
of Belorussia, the Baltics, Central Region, and the
southwestern Ukraine. Rainfall was light and
scattered in most other areas of European USSR.
Soviet grain harvesting reached 44.5 million
hectares cut by August 1, or about one-third the
area sown. Threshing is 78 percent complete on the
area cut versus 65 percent last week. Practically
no rainfall occurred in West Kazakhstan where
drought conditions began to appear. Rainfall was
also sparse in Northeast Kazakhstan with the area
around Pavlodar practically dry. Rainfall was
light in the grain producing areas of West Siberia
while East Siberia continued to receive abundant
precipitation.

ASIA. Rainfall was much lighter in the far north-
east provinces and the center part of the People's
Republic of China. However, heavy rains continued
in other northern areas and along the southern
coast. The monsoonal flow patterns over India
continued favorable with heavy moisture reported
in the north central areas on the 6th and 7th. In
Australia, at least four frontal systems passed
across the southern parts of the country, but mois-
ture was generally light.

AFRICA. Most rainfall activity on the continent
occurred in the central and east central areas.
The only rain in South Africa was along the coast
on the 3d as a frontal system moved through.
Heavy cloud cover was indicated across the central
areas on the 2d and 3d, with potentially heavy
thundershower activity over Mali and Chad on the
4th and 5th.

SOUTH AMERICA. Moisture patterns were light--most
of it over southern Brazil and Paraguay. Cool,
moist air covered the dry wheat areas of Argentina
on the 8th, but no significant moisture, if any,
was indicated.

NORTH AMERICA. Some of the best rains of the
summer fell across the Corn Belt during the past
week. Amounts of three to six inches were reported
in a number of areas. This should help the filling
of corn, soybeans, and pastures, although the corn
crop is well advanced. July moisture was quite
variable; there were some very dry and very wet
areas. The very dry Southeast also received excel-
lent moisture. This will improve late-planted
crops and pastures, but most of the corn is already
mature and will not be affected by the moisture.



July Weather Summary

HIGHLIGHTS: Hot weather, thunderstorms and tornadoes marked a typical July. The average temperature for the month was even warmer than normal in a large part of the eastern U.S. Temperatures averaged 4 to 6° above normal in the central Plains and southwestern Lakes region. Although part of this area had less than normal precipitation, it fell in regular intervals during the hottest parts of the month so the high evaporation rate did not put heavy stress on most crops. Much of the dry area in the East accumulated only 20 to 30% or less of their normally expected rainfall.

July began, typically, with warm weather, showers, and thunderstorms. Showers were especially welcome in the Southeast where much of the area from Mississippi through Georgia was dampened.

The first week of the month brought showers, thunderstorms, and some tornadoes to nearly all areas from the Rockies to the East Coast. Needed rain covered most of the very dry area of eastern North Dakota and northwestern Minnesota. Much of Nebraska and eastward across the northern half of Iowa enjoyed one to two inches of rain. Significant rain fell in the lower Mississippi Valley, Ohio Valley, and central Florida, but from central Alabama through northern Florida and Georgia northward to western Virginia, the showers were light and spotty. Most of the East was warmer than normal. The central Plains and parts of the Corn Belt averaged 3 to 6° warmer than normal.

The second week of July was even warmer than the first; only the Pacific Northwest was cooler than normal. The warmest areas were again the central Plains and the area from Iowa into Ohio where temperatures averaged 6 to 9° warmer than normal for the week. One hundred degree readings occurred at a number of stations in these areas.

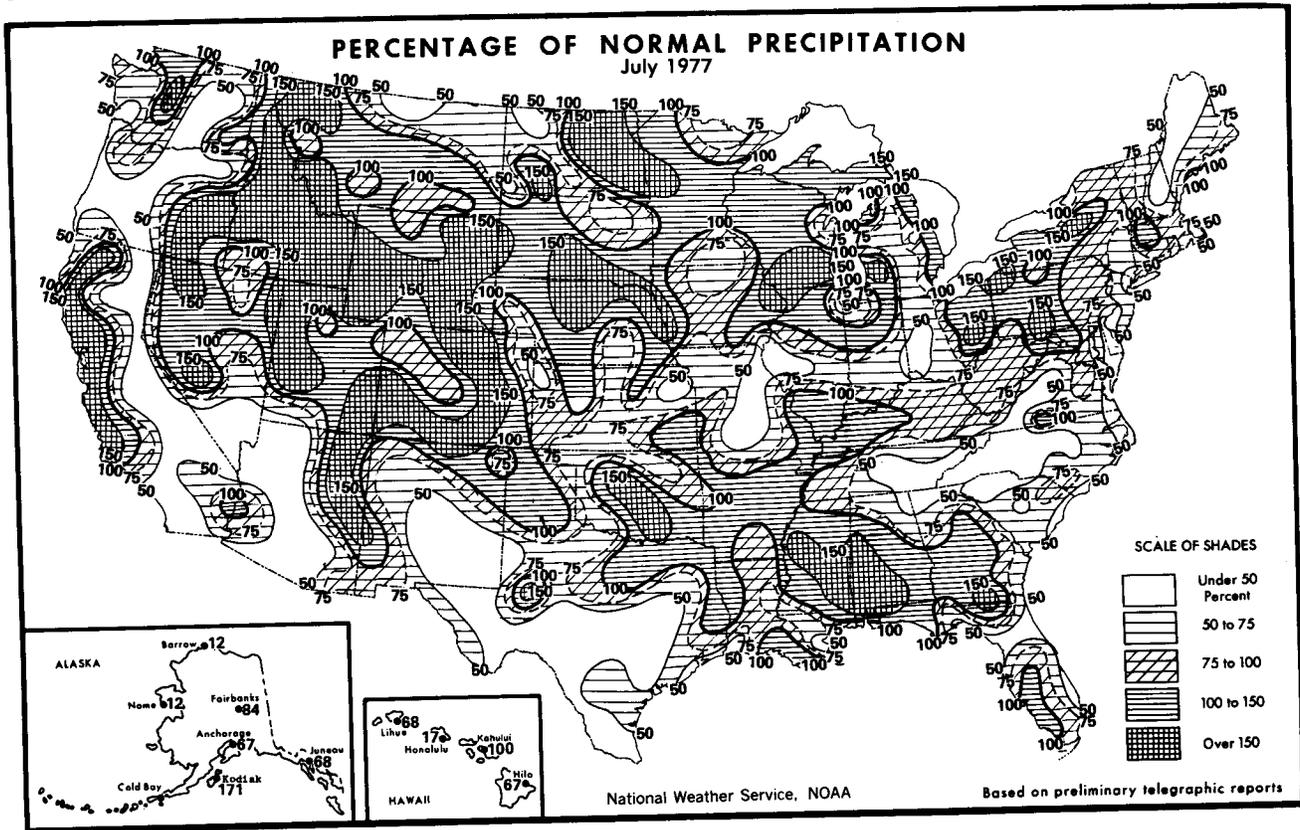
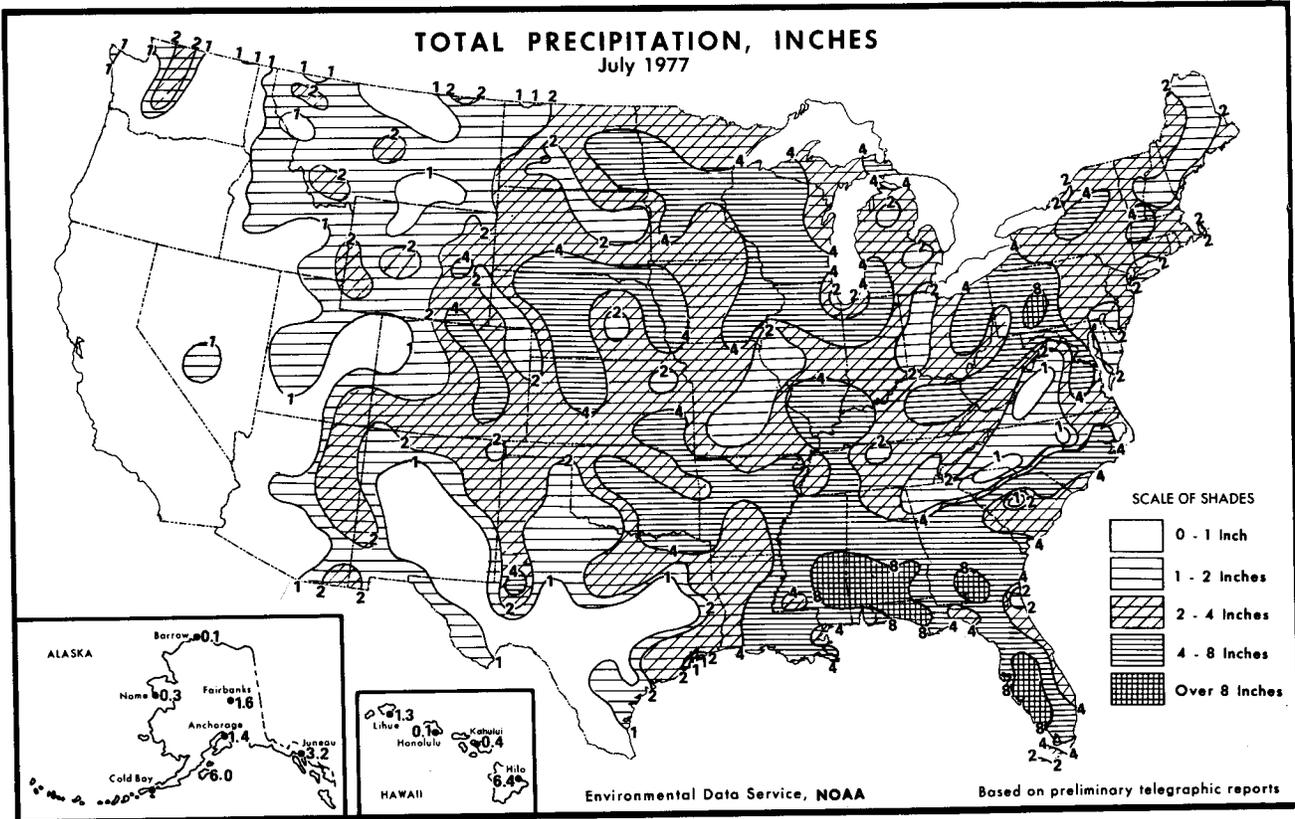
Good rains came to much of the warmest areas tending to offset the high rate of moisture depletion from hot weather.

The warm, moist air resulted in extensive thunderstorms throughout the week. Heavy amounts of rain fell in parts of the Midwest and in the south central States, but again showers were light and spotty from western Virginia to Georgia.

The week following mid-July brought even more widespread showers. All the way from the Inter-mountain and Plateau regions in the West to the East Coast, showers of varying intensity fell. Exceptions were western North Dakota, eastern Montana, parts of Virginia, and Texas where little or no rain occurred. Most of the northern portion of the Corn Belt had 1 to 2 inches of rain from showers. Heavy rain in west central Pennsylvania resulted in catastrophic flooding at Johnstown.

Warm weather persisted, but some cooling began in the northern States. However, the week averaged well above normal temperatures over most of the U.S. On at least one day, every State save Washington and Oregon reported temperatures above 90°.

The last week of July again produced widespread precipitation from the western Rockies to the East Coast although many areas reported only light showers. A frontal system moved into the South and caused heavy rain in Mississippi, Alabama, Georgia, and eastern North and South Carolina. The rain came too late for some crops, but helped others. Additional rain was needed from Georgia northward. The Nation cooled to near normal temperatures in most areas except parts of New England where readings averaged 3 to 6° cooler than normal.



Temperature and Precipitation Data for July 1977

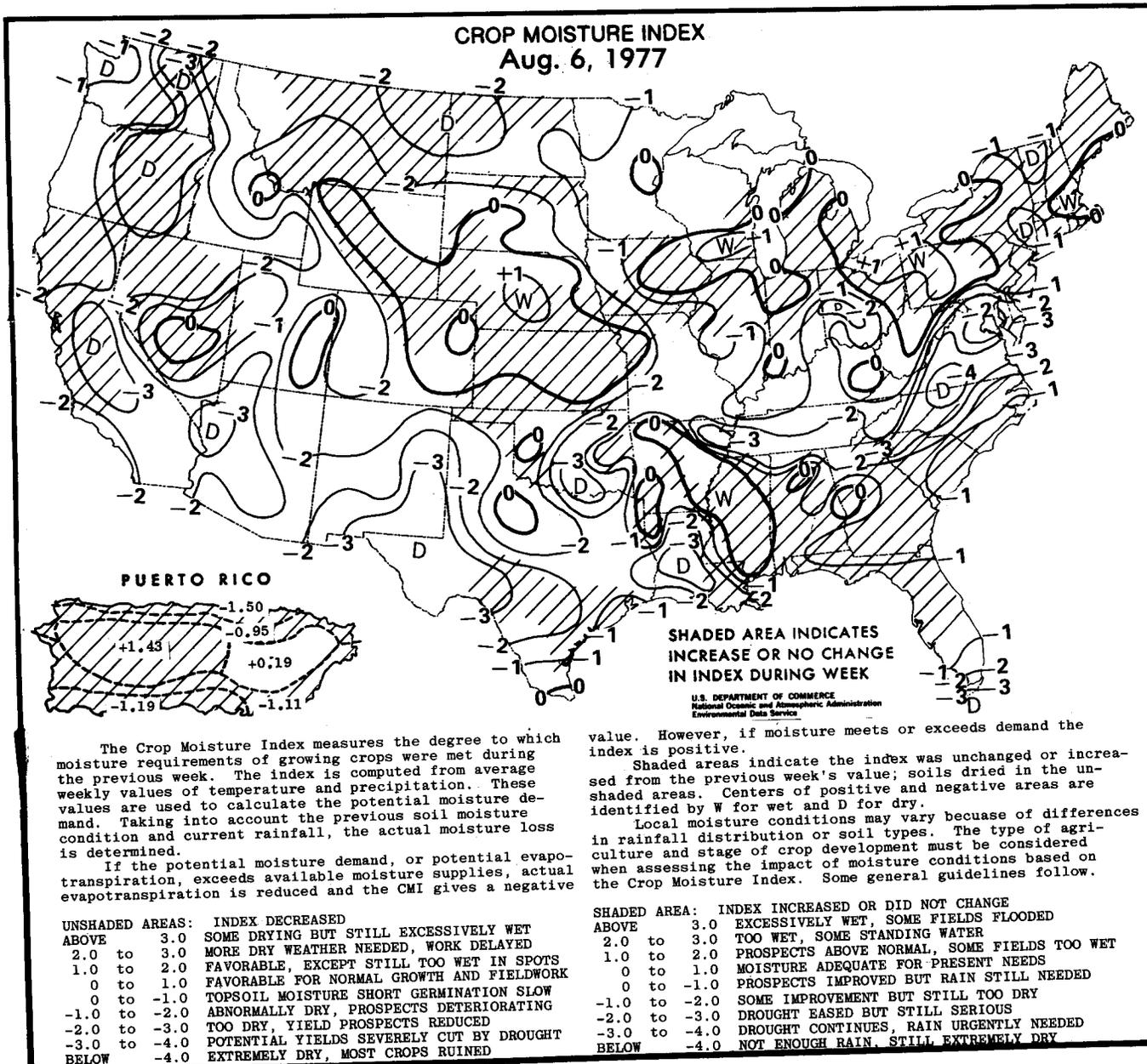
States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	83	+ 3	6.2	+1.0	La. Baton Rouge . . .	83	+ 1	6.4	- .1	Youngstown . . .	72	+ 1	5.7	+1.8
Mobile . . .	84	+ 2	7.8	-1.1	Lake Charles . . .	82	0	3.2	-3.4	OKLA. Okla. City . . .	83	+ 1	4.1	+1.4
Montgomery . . .	84	+ 3	6.6	+1.5	New Orleans . . .	84	+ 2	2.9	-3.8	Tulsa . . .	85	+ 3	2.0	-1.5
ALASKA. Anchorage . . .	63	+ 5	1.4	- .7	Shreveport . . .	84	+ 1	3.9	+1.0	OREG. Astoria . . .	59	- 1	.4	- .6
Barrow . . .	39	0	1.1	- .8	MAINE. Caribou . . .	65	0	1.8	-2.2	Burns . . .	67	- 1	.5	+ .2
Fairbanks . . .	63	+ 2	1.6	- .3	Portland . . .	68	0	2.8	+ .2	Medford . . .	72	0	.2	- .1
Juneau . . .	57	+ 1	3.2	-1.5	MD. Baltimore . . .	79	+ 2	2.6	-1.5	Pendleton . . .	70	- 4	.1	- .2
Kodiak . . .	54	0	6.0	+2.5	MASS. Boston . . .	75	+ 2	2.2	- .5	Portland . . .	66	- 1	.4	- .1
Nome . . .	51	- 1	.3	-2.1	Chatham . . .	68	- 1	1.3	- .1	Salem . . .	65	- 2	.3	- .1
ARIZ. Flagstaff . . .	67	+ 1	.4	-2.1	MICH. Alpena . . .	67	+ 1	3.4	+ .9	PA. Allentown . . .	76	+ 2	4.3	- .1
Phoenix . . .	95	+ 4	.3	- .5	Detroit . . .	76	+ 4	3.3	+ .2	Erie . . .	70	+ 1	6.7	+3.2
Tucson . . .	87	+ 1	.8	-1.6	Flint . . .	74	+ 4	1.9	-1.1	Harrisburg . . .	76	0	3.0	- .7
Winslow . . .	79	+ 1	2.0	+ .8	Grand Rapids . . .	74	+ 2	5.2	+2.1	Philadelphia . . .	78	+ 1	1.5	-2.6
Yuma . . .	95	+ 1	.1	- .1	Houghton Lake . . .	70	+ 4	1.7	-1.4	Pittsburgh . . .	72	0	3.4	- .4
ARK. Fort Smith . . .	83	+ 1	2.6	- .6	Lansing . . .	74	+ 3	2.0	- .8	Scranton . . .	71	- 2	3.4	- .9
Little Rock . . .	82	+ 1	3.6	+ .2	Marquette . . .	67	+ 1	3.9	+ .8	R.I. Providence . . .	74	+ 2	2.0	- .9
CALIF. Bakersfield . . .	86	+ 2	T	0	Muskegon . . .	72	+ 2	2.4	- .1	S.C. Charleston . . .	84	+ 4	3.9	-4.3
Eureka . . .	55	- 1	T	- .1	S. Ste. Marie . . .	63	- 1	4.9	+2.3	Columbia . . .	83	+ 2	.6	-5.1
Fresno . . .	82	+ 1	T	0	MINN. Duluth . . .	66	0	3.9	+ .2	Greenville . . .	82	+ 4	.8	-3.4
Los Angeles . . .	74	+ 1	0	0	Internatl Falls . . .	67	+ 1	2.2	-1.8	S.D. Aberdeen . . .	74	+ 2	2.2	- .5
Red Bluff . . .	83	+ 1	T	0	Minneapolis . . .	75	+ 3	3.7	0	Huron . . .	79	+ 5	1.5	- .7
San Diego . . .	72	+ 2	T	0	Rochester . . .	73	+ 3	2.3	-1.4	Rapid City . . .	73	0	3.0	+ .9
San Francisco . . .	62	- 1	.4	+ .4	St. Cloud . . .	71	+ 1	4.3	+1.1	Sioux Falls . . .	77	+ 4	3.6	+ .7
Stockton . . .	79	+ 2	T	0	MISS. Jackson . . .	83	+ 1	6.2	+1.9	TENN. Chattanooga . . .	83	+ 4	1.0	-4.1
COLO. Denver . . .	74	+ 1	3.0	+1.2	Meridian . . .	84	+ 3	10.1	+5.0	Knoxville . . .	80	+ 2	1.1	-3.6
Grand Junction . . .	80	+ 1	.9	+ .4	MO. Columbia . . .	79	+ 2	1.6	-1.8	Memphis . . .	85	+ 3	3.4	- .1
Pueblo . . .	78	+ 1	3.0	+1.1	Kansas City . . .	80	+ 1	2.7	-1.7	Nashville . . .	82	+ 2	1.2	-2.6
CONN. Bridgeport . . .	73	- 1	1.0	-2.4	St. Louis . . .	81	+ 2	4.3	+ .6	TEX. Abilene . . .	84	0	1.8	- .5
Hartford . . .	75	+ 2	3.4	0	Springfield . . .	80	+ 2	1.5	-2.1	Amarillo . . .	81	+ 2	3.1	+ .1
D.C. Washington . . .	81	+ 2	4.1	0	MONT. Billings . . .	73	+ 1	.8	- .1	Austin . . .	85	0	.2	-1.7
FLA. Apalachicola . . .	82	+ 1	5.7	-2.3	Glasgow . . .	69	- 2	.8	- .6	Beaumont . . .	85	+ 2	2.1	-3.8
Daytona Beach . . .	83	+ 2	2.2	-4.6	Great Falls . . .	68	- 1	1.9	+ .6	Brownsville . . .	85	+ 1	.3	- .9
Ft. Myers . . .	87	+ 4	9.6	+ .7	Havre . . .	70	0	.4	-1.0	Corpus Christi . . .	85	0	1.2	- .7
Jacksonville . . .	83	+ 2	2.0	-5.4	Helena . . .	66	- 2	1.4	+ .4	Dallas . . .	86	- 1	.1	- .9
Key West . . .	84	- 1	1.9	-2.2	Kalispell . . .	64	0	2.6	+1.6	Del Rio . . .	82	0	1.1	- .4
Lakeland . . .	83	+ 1	9.3	+1.2	Miles City . . .	74	0	1.9	+ .3	El Paso . . .	82	0	1.1	- .4
Miami . . .	84	+ 2	5.2	-1.7	Missoula . . .	66	- 1	.7	- .2	Fort Worth . . .	87	+ 2	2.2	+ .4
Orlando . . .	82	+ 1	6.6	-1.7	NEBR. Grand Island . . .	79	+ 3	1.7	-1.3	Galveston . . .	83	0	.7	-3.7
Tallahassee . . .	82	+ 1	3.2	-5.7	Lincoln . . .	81	+ 4	3.8	+ .5	Houston . . .	82	- 1	2.7	-1.4
Tampa . . .	83	+ 1	5.4	-3.0	Norfolk . . .	78	+ 2	3.3	+ .1	Lubbock . . .	80	0	1.1	-1.1
W. Palm Beach . . .	82	0	2.2	-4.3	N. Platte . . .	75	+ 1	4.4	+1.4	Midland . . .	84	+ 2	4.0	+2.2
GA. Atlanta . . .	80	+ 2	4.3	- .6	Omaha . . .	79	+ 4	7.3	+3.6	San Angelo . . .	85	0	.5	- .7
Augusta . . .	83	+ 3	3.1	-2.0	Valentine . . .	75	+ 1	6.1	+3.6	San Antonio . . .	85	0	1.0	- .7
Macon . . .	83	+ 2	5.0	+ .5	NEV. Ely . . .	67	0	.5	- .1	Victoria . . .	84	0	.8	-2.0
Savannah . . .	83	+ 2	5.6	-2.3	Las Vegas . . .	92	+ 2	T	- .4	Waco . . .	89	+ 3	.2	-1.3
HAWAII. Hilo . . .	77	+ 2	6.4	-3.1	Reno . . .	70	+ 1	.1	- .2	Wichita Falls . . .	86	0	1.5	- .7
Honolulu . . .	81	+ 1	.1	- .5	Winnemucca . . .	73	+ 2	.3	+ .1	UTAH. Blanding . . .	73	0	3.2	+2.2
Kahului . . .	78	0	.4	0	N.H. Concord . . .	69	- 1	1.3	-1.8	Salt Lake City . . .	77	0	.6	- .1
Lihue . . .	79	+ 1	1.3	- .3	N.J. Atlantic City . . .	75	0	2.8	-1.6	VT. Burlington . . .	70	0	3.3	- .2
IDAHO. Boise . . .	73	- 2	.4	+ .2	Trenton . . .	77	+ 1	3.1	-1.6	VA. Lynchburg . . .	78	+ 2	1.2	-2.9
Lewiston . . .	73	0	.4	- .1	N.MEX. Albuquerque . . .	79	0	.7	- .7	Norfolk . . .	82	+ 4	2.7	-3.0
Pocatello . . .	71	- 1	.6	+ .2	Roswell . . .	84	+ 5	.5	-1.2	Richmond . . .	81	+ 3	4.2	-1.4
ILL. Cairo . . .	83	+ 2	4.3	+1.1	N.Y. Albany . . .	72	0	2.3	- .8	Roanoke . . .	80	+ 5	.5	-3.2
Chicago . . .	79	+ 4	1.4	-2.7	Binghamton . . .	70	+ 1	3.3	- .5	WASH. Colville . . .	66	- 2	.4	- .3
Moline . . .	78	+ 3	6.0	+1.4	Buffalo . . .	70	0	3.3	+ .4	Omak . . .	57	- 2	1.9	- .5
Peoria . . .	78	+ 3	3.4	- .3	New York . . .	77	0	1.5	-2.4	Quillayute . . .	57	- 2	1.9	- .5
Rockford . . .	75	+ 2	4.7	+ .4	Rochester . . .	73	+ 2	3.3	+ .4	Seattle-Tacoma . . .	65	0	.4	- .3
Springfield . . .	79	+ 3	1.2	-2.6	Syracuse . . .	71	- 1	4.8	+1.7	Spokane . . .	87	- 3	.1	- .3
IND. Evansville . . .	81	+ 3	4.8	+1.0	N.C. Asheville . . .	76	+ 2	1.0	-3.9	Walla Walla . . .	73	- 3	.3	0
Ft. Wayne . . .	76	+ 3	4.0	+ .1	Charlotte . . .	80	+ 1	.8	-3.8	Yakima . . .	69	- 2	T	- .2
Indianapolis . . .	77	+ 2	2.6	-1.1	Greensboro . . .	80	+ 3	1.5	-2.9	W.Va. Beckley . . .	72	+ 2	3.3	-1.1
South Bend . . .	76	+ 4	2.7	-1.0	Hatteras . . .	81	+ 3	2.5	-3.4	Charleston . . .	77	+ 2	4.9	- .1
IOWA. Burlington . . .	79	+ 4	1.2	-2.6	Raleigh . . .	81	+ 3	.9	-4.2	Huntington . . .	79	+ 4	3.2	-1.0
Des Moines . . .	81	+ 6	2.6	- .7	Wilmington . . .	82	+ 2	3.3	-5.0	Parkersburg . . .	77	+ 2	3.8	- .5
Dubuque . . .	74	+ 2	6.5	+2.2	N.DAK. Bismarck . . .	70	- 1	1.4	- .8	WIS. Green Bay . . .	73	+ 4	2.1	-1.0
Sioux City . . .	78	+ 3	6.3	+3.0	Fargo . . .	72	+ 1	5.4	+2.2	La Crosse . . .	75	+ 2	4.3	+ .8
KANS. Concordia . . .	82	+ 4	2.3	-1.0	Williston . . .	71	+ 1	1.3	- .7	Madison . . .	74	+ 4	6.6	+2.8
Dodge City . . .	84	+ 5	2.6	- .5	OHIO. Akron-Canton . . .	75	+ 3	4.8	+1.0	Milwaukee . . .	73	+ 3	6.0	+2.6
Goodland . . .	76	0	1.3	-1.4	Cincinnati . . .	78	+ 2	1.9	-2.2	WYO. Casper . . .	72	+ 1	1.9	+ .9
Topeka . . .	79	+ 1	1.4	-2.8	Cleveland . . .	73	+ 2	3.9	+ .4	Cheyenne . . .	68	- 1	3.5	+1.7
Wichita . . .	84	+ 3	4.0	- .4	Columbus . . .	76	+ 2	2.5	-1.7	Lander . . .	71	0	2.5	+1.9
KY. Lexington . . .	78	+ 2	4.6	- .2	Dayton . . .	78	+ 3	1.7	-1.8	Sheridan . . .	70	0	1.7	+ .6
Louisville . . .	80	+ 3	3.3	- .5	Toledo . . .	75	+ 3	1.8	-1.4	P.R. San Juan . . .	81	0	4.6	-1.8

Heating Degree Days (Base 65° F.)

July 1977

ALA. Birmingham	0	MAINE, Caribou	56	OKLA. Okla. City	0
Mobile	0	Portland	29	Tulsa	0
Montgomery	0	MD. Baltimore	0	OREG. Astoria	190
ALASKA, Anchorage	75	MASS. Boston	0	Burns U.	47
Barrow	802	Chatham	8	Medford	14
Fairbanks	101	MICH. Alpena	49	Pendleton	20
Juneau	243	Detroit	1	Portland	40
Nome	274	Flint	7	Salem	57
ARIZ. Flagstaff	9	Grand Rapids	3	PA. Allentown	0
Phoenix	0	Houghton Lake	29	Erie	9
Tucson	0	Lansing	7	Harrisburg	0
Winslow	0	Marquette U	50	Philadelphia	0
Yuma	0	S. Ste. Marie	111	Pittsburgh	11
ARK. Fort Smith	0	MINN. Duluth	46	Scranton	14
Little Rock	0	Internatl Falls	34	R.I. Providence	0
CALIF. Bakersfield	0	Minneapolis	0	S.C. Charleston	0
Eureka U.	302	Rochester	1	Columbia	0
Fresno	0	St. Cloud	6	Greenville	0
Los Angeles U	0	MISS. Jackson	0	S. DAK. Aberdeen	2
Red Bluff	0	Meridian	0	Huron	0
Stockton	0	Vicksburg U	---	Rapid City	1
San Diego	0	MO. Columbia	0	Sioux Falls	0
San Francisco	103	Kansas City	0	TENN. Chattanooga	0
COLO. Denver	2	St. Louis	0	Knoxville	0
Grand Junction	0	Springfield	0	Memphis	0
Pueblo	0	MONT. Billings	0	Nashville	0
CONN. Bridgeport	4	Glasgow	32	TEX. Abilene	0
Hartford	1	Great Falls	37	Amarillo	0
D.C. Washington	0	Havre	20	Austin	0
FLA. Apalachicola	0	Helena	52	Beaumont	0
Ft. Myers	0	Kalispell	85	Brownsville	0
Jacksonville	0	Miles City	0	Corpus Christi	0
Key West	0	Missoula	59	Dallas	---
Lakeland U.	0	NEBR. Grand Island	0	Del Rio	0
Miami	0	Lincoln	0	El Paso	0
Orlando	0	Norfolk	0	Fort Worth	0
Daytona Beach	0	North Platte	2	Galveston U.	0
Tallahassee	0	Omaha	0	Houston	0
Tampa	0	Valentine	0	Lubbock	0
GA. Atlanta	0	NEV. Ely	9	Midland	0
Augusta	0	Las Vegas	0	San Angelo	0
Macon	0	Reno	10	San Antonio	0
Savannah	0	Winemucca	0	Victoria	0
IDAHO, Boise	8	N. H. Concord	37	Waco	0
Lewiston	16	N. J. Atlantic City	2	Wichita Falls	0
Pocatello	1	Trenton U	0	UTAH, Milford	0
ILL. Cairo U.	0	N. MEX. Albuquerque	0	Salt Lake City	0
Chicago	0	Roswell	0	VT. Burlington	24
Moline	0	N. Y. Albany	7	VA. Lynchburg	0
Peoria	0	Binghamton	0	Norfolk	0
Rockford	0	Buffalo	15	Richmond	0
Springfield	0	New York	0	Roanoke	0
IND. Evansville	0	Rochester	9	WASH. Colville	---
Fort Wayne	2	Syracuse	14	Omak	---
Indianapolis	0	N. C. Asheville	0	Quillayute	240
South Bend	2	Charlotte	0	Seattle-Tacoma	34
IOWA, Burlington	0	Greensboro	0	Spokane	57
Des Moines	0	Hatteras R.	0	Walla Walla U.	10
Dubuque	1	Raleigh	0	Yakima	32
Sioux City	0	Wilmington	0	W. VA. Beckley	8
KANS. Concordia	0	N. DAK. Bismarck	17	Charleston	0
Dodge City	0	Fargo	7	Huntington	0
Goodland	2	Williston U	8	Parkersburg U.	0
Topeka	0	OHIO. Akron-Canton	0	WIS. Green Bay	3
Wichita	0	Cincinnati U.	0	Madison	6
KY. Lexington	0	Cleveland	4	Milwaukee	8
Louisville	0	Columbus	1	WYO. Casper	3
LA. Baton Rouge	0	Dayton	0	Cheyenne	21
Lake Charles	0	Toledo	3	Lander	2
New Orleans	0	Youngstown	9	Sheridan	12
Shreveport	0				

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



Agricultural Climatology Service Office
South Building Mail Unit
U. S. Department of Agriculture
Washington, D.C. 20250

IMMEDIATE - U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

FIRST CLASS MAIL

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE

COM 210

