

Weekly Weather & Crop Bulletin

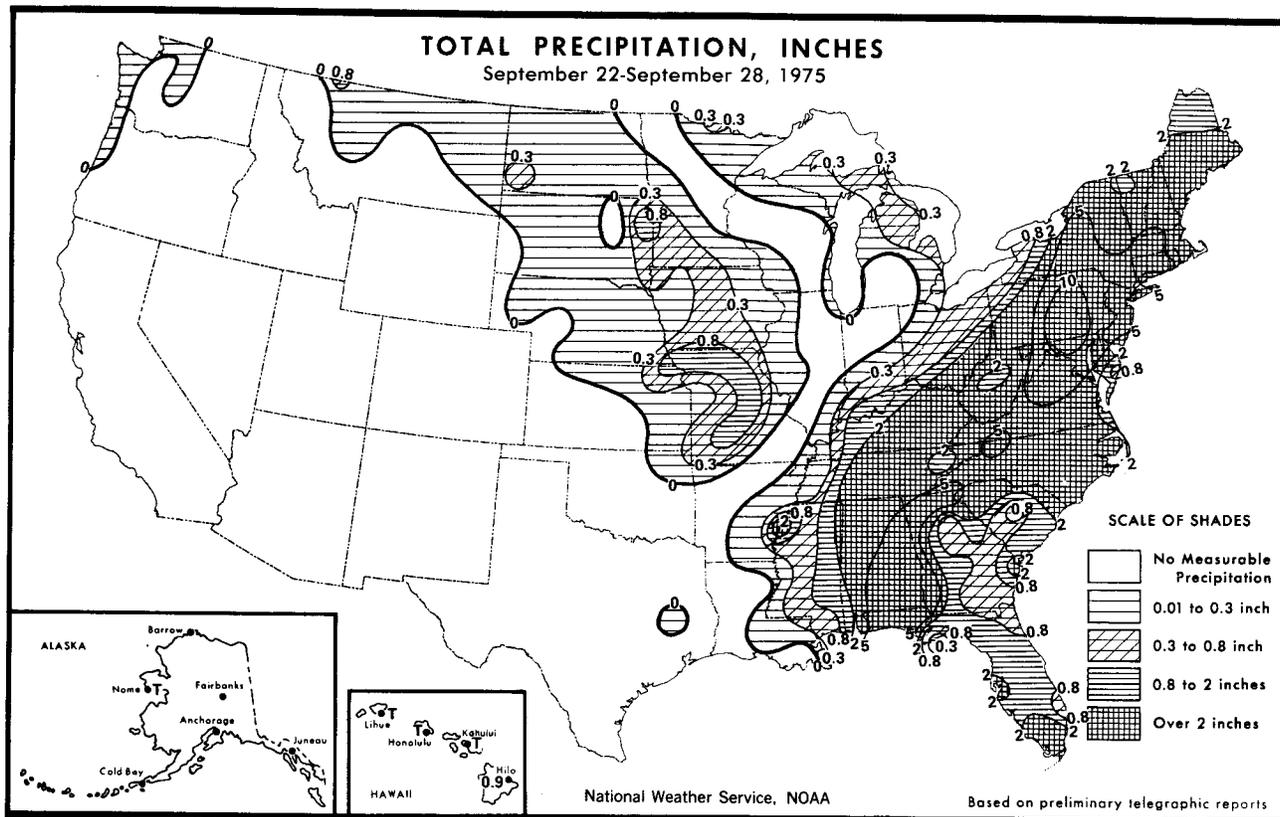
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NATIONAL WEATHER SUMMARY

For the Week of September 22-28

HIGHLIGHTS: Hurricane Eloise made headlines across the Nation when heavy rains in the path of the storm deluged the eastern part of the Nation during the week. Precipitation followed a course from the lower Mississippi Valley, through the mid Atlantic States, and into New England. Temperatures slipped as low as 15° below normal over central U.S. amid a large cool air mass but soared up to 15° above normal in the extreme Southwest, where a number of record highs were tied or broken.

At the beginning of the week it was mostly a wait-and-see weather story. But it didn't take long to find out what was going to happen.

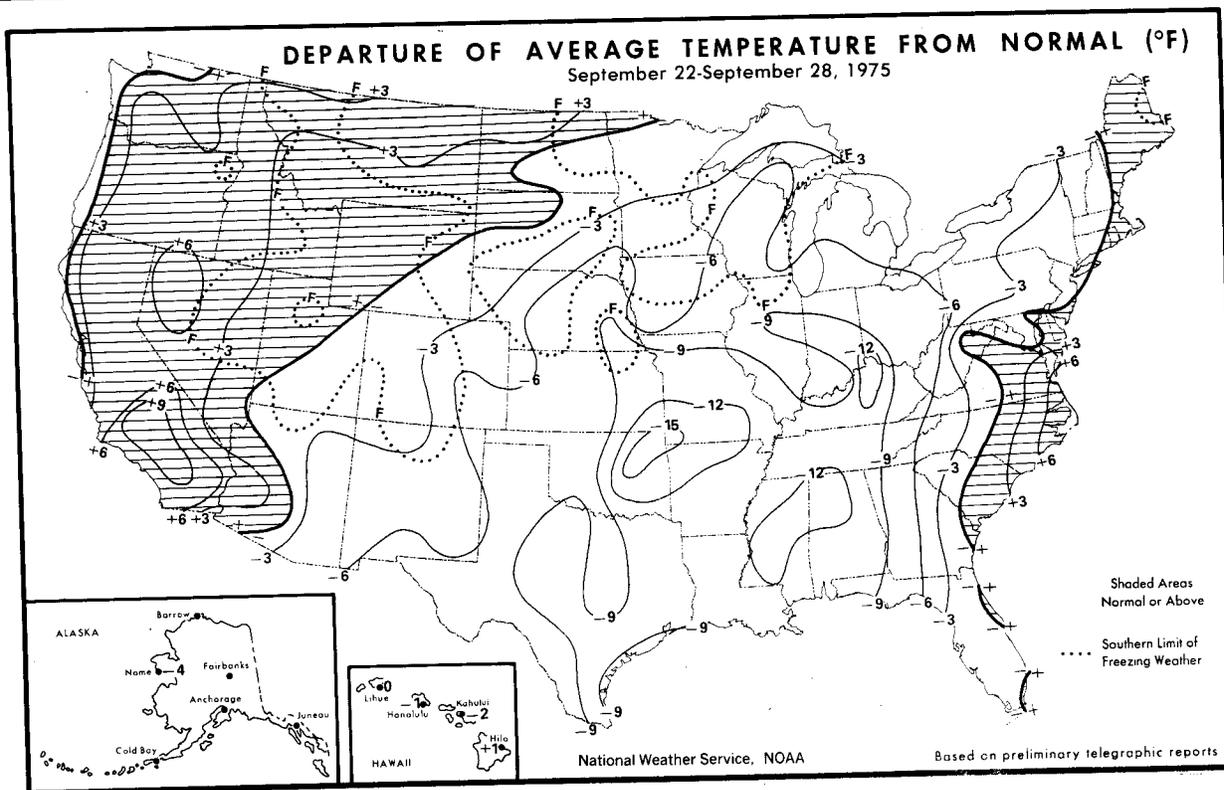
Upgraded to hurricane status, a better-organized Eloise picked up speed in moving towards the northern Gulf Coast, and at 1 p.m. Monday was poised 210 miles south of New Orleans. Maximum winds gusted to 85 mph.

Showers and thunderstorms rumbled in a large area southeast of a line from the east Texas Coast to New England. Some produced locally heavy rains, and all grew stronger as the Hurricane got closer.

Except for the lower Mississippi Valley, early afternoon skies were fair west of the Mississippi, and packed with clouds east of the River.

It wasn't surprising on Monday when temperatures again topped 100° in the desert Southwest. The upper Great Lakes region and northern Minnesota were only half as hot, with readings in the 50's. And in the Plains and New England the mercury hovered in the 60's and 70's.

On Tuesday, just 1 week since Eloise first appeared in the Atlantic, the eye of the hurricane moved inland, and at 9 a.m. was centered southwest of Dothan, Ala. By that time, however, the storm had lost much of its punch. Heavy rains falling along and to the north of the storm track



now posed the greatest threat. Flash flood watches were posted in an area from the mountains of south-east New York through most of Virginia, and parts of South Carolina, Tennessee, Kentucky, Ohio, and Pennsylvania. Showers and storms pounded the East Coast and Ohio and southern Mississippi Valleys.

Meantime areas west of the Mississippi fared under sunny skies, except the Pacific Northwest, where clouds gathered. Temperatures in southern California warmed to well above seasonal normals and even soared to a record 103° in San Diego.

A large mass of cool air pushed Wednesday morning's mercury down into the 30's and 40's across the central part of the Nation. In central Nebraska temperatures even skidded into the mid-20's. Warmer readings were confined to the southern Atlantic Coast, California, and desert Southwest. Associated with the cold front showers and storms spread from the lower Mississippi into the Ohio Valley and throughout the Atlantic Coast States.

The midweek rainfall pattern changed rapidly as the tropical storm advanced steadily northward. Most of the shower activity occurred along and east of the Appalachians and from Florida north into the lower Great Lakes and New England. A smaller area of light rains dampened the middle Missouri Valley.

Circled by strong winds, heavy rains got an early start on Thursday and moved into the middle Atlantic States and southern New England.

Meanwhile frost in the central Plains crept into portions of Kansas and Missouri and probably ended the growing season in parts of Iowa. Record lows extended from Kansas to central Texas and as far east as southern Alabama. Clouds held temperatures in the 50's in the Pacific Northwest. Later in the day the northern Plains thawed under sunny skies but most of the Midwest remained cool: 50's and 60's in the Great Lakes and 60's and 70's

in the Mississippi Valley. Temperatures ranged to 10° below normal in the southern Plains.

On Friday morning rainfall tapered off over a large area from the Carolinas into southern New England. But flash floods still plagued the Northeast. Heaviest afternoon rains focused on an area from northeast Virginia to southeast New York. Major rivers in parts of Virginia, Pennsylvania, Connecticut, and New York swelled above flood stage.

Looking at flood damage, Pennsylvania and New York State seemed hardest hit--5 to 6 feet of water covered highways, several bridges collapsed, and rock and mudslides caused problems.

Also on Friday rainshowers dotted the northern Plains near a cold front. Otherwise sunshine west of the Mississippi to the Pacific Coast brought temperatures to near normal levels for late September over much of the area.

Rains returned in full force to New England on Saturday morning, as the stationary front responsible for the prolonged rains along the Atlantic seaboard moved eastward. As the day progressed, though, precipitation diminished to light afternoon showers in parts of New England, New York, and Pennsylvania, and it was clear the big rains were over. The Northeast began its long drying out period as sunny skies brightened much of the area. By this time streams and rivers in New York, northern Virginia, and Maryland had crested and were falling. Owing to the storm, September in New York was ending three times as wet as usual.

New shower activity turned up over the weekend as a cold front moving eastward across the Nation's midsection touched off light rains from southern Minnesota into west central Missouri. But in general, rainfall was noticeable by its absence.

On Sunday afternoon showers and thunderstorms were scattered from the upper half of the Mississippi Valley into the eastern Plains.

NATIONAL AGRICULTURAL SUMMARY

For the Week of September 22-28

HIGHLIGHTS: Subnormal temperatures slowed row crop maturity over much of the main growing area, while strong winds and heavy rain occurred across much of the Eastern third of the Nation. Hot, dry weather over most of the West allowed good harvest progress. Corn, cotton, sorghum, and soybean harvests are gaining momentum as weather conditions permit.

SMALL GRAINS: Small grain harvest is moving into the final stage as dry conditions in the Northern Plains and Mountain States favored good harvesting progress.

Spring wheat combining on September 28th was 97% complete. Harvest was 98% finished in North Dakota, ahead of both 1974 and average progress, while in Montana and Idaho, where combining continues, harvest is normally complete.

Seeding of the 1976 winter wheat crop was 37% finished by September 28th. In Kansas, 45% of the crop had been seeded, equal to normal progress. Wheat seeding in Texas was 34% done, much behind the 55% in 1974 and normal 73%. Oklahoma winter wheat seeding reached 21% completion versus 38% in 1974.

CORN: Development of late corn was hampered by subnormal temperatures, while harvest was gaining momentum. By September 28th, 11% of 1975 corn for grain was harvested, ahead of the 8% for both 1974 and normal.

In the North Central States, corn for grain harvest was 8% finished, twice the 1974 level and slightly ahead of the average 5%. Scattered frosts damaged corn in northern Iowa, Kansas, Minnesota, and Nebraska. Growers in many areas are waiting for a hard frost to aid drying and combining. In Illinois, harvest was 12% complete and in Iowa 5% done; both were much ahead of the 1974 level. Harvest was slow in Ohio and Indiana, but advanced well in Kansas, Missouri, and Nebraska.

Hurricane Eloise limited corn combining in most Southern States. Harvest was 35% finished in the South Atlantic States and 25% in the South Central Region.

COTTON: Wind and heavy rain associated with Hurricane Eloise hit several producing areas, while subnormal temperatures continued to slow development.

Cotton harvesting as of September 28th, was 10% finished in the 11 major Southern States, much behind last year and normal in most States. Harvest made little advancement in Georgia, Missouri, and Tennessee while picking elsewhere was minimal, except in Texas. Cotton harvest made good progress in the Texas Blacklands and Upper Gulf Coast and was underway in the Trans-Pecos and Edwards Plateau areas. Texas harvest reached 18% complete, trailing 21% in 1974 and 20% average.

Hot weather hastened maturity in California and defoliation was underway in all areas. In New Mexico, cotton is late and very little cotton has opened. Cotton in Arizona made good progress as irrigation continues.

SOYBEANS: Cool temperatures continued to limit soybean development over most of the major pro-

ducing area. Harvest of the 1975 crop was 8% complete on September 28th, ahead of both 1974 and normal.

In the North Central States, harvest was 11% finished, versus 9% in 1974 and 8% normal. In Illinois, harvest advanced to 26% complete, far ahead of the 5% in 1974 and 8% average. Soybean harvest reached 5% in Indiana and Iowa, 6% in Missouri, 12% in Minnesota, and 15% in Nebraska. Wet fields limited activity in Ohio.

In the South, combining is in the early stages and was limited by wet, cool weather in many areas. Harvest was slow in Arkansas, 3% done in Mississippi; 4% in Kentucky; and 9% in Louisiana.

OTHER CROPS: Sorghum harvest made good progress and in the 7 major States combining was 41% done by September 28th, ahead of the 30% in 1974 and normal. Harvest ranged from 64% finished in Texas to only 10% in South Dakota. The major harvest is not yet underway in Colorado.

Burley tobacco was 79% harvested in Kentucky and 89% in Tennessee. Houseburn caused light to moderate damage to nearly one-third of the already housed crop in Kentucky.

Peanut harvest was 39% finished in Texas, ahead of both the 1974 and average pace. In Alabama, 68% has been dug and 59% combined. Harvest was underway in Oklahoma.

Potato digging continued active in most fall producing States. In Aroostock County, Maine, digging was in full swing. Harvest was 5% complete in Idaho, 54% in North Dakota, and 55% in Minnesota.

FRUITS AND NUTS: Heavy rain delayed the apple harvest in many Eastern States, but harvest continued strong elsewhere. Raisin grape laying was about complete in California where growers were turning, rolling, and boxing in nearly ideal weather. The wine grape harvest continued to increase as the sugar content reached the required level. Almond shaking in California was near peak. Pecan harvest began in Louisiana and in south Texas and along the Upper Coast. Wind damage occurred in Alabama and Georgia. Early citrus varieties in Florida have an excellent color break.

VEGETABLES: The northern vegetable supply continues the seasonal decline, however, harvests of cabbage and cauliflower remain active in New York and cabbage, carrots, celery, and dry onions in Michigan. In California, broccoli, cauliflower, carrots, celery, and bell peppers were in good supply. Canning tomatoes were heavy in the Sacramento Valley.

Vegetable seeding resumed in the Lower Rio Grande Valley where some transplanting or replanting of cabbage will be necessary.

PASTURES AND LIVESTOCK: Pastures and range feed continue in mostly good condition for this time of year. Livestock on western ranges are being moved down from the higher elevations. Pasture conditions were adequate in Texas, but declining due to short moisture. Dry weather over much of the West enabled many farmers and ranchers to make good progress in their haying activities. Livestock remain in mostly good condition.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Sept. 28, 1975

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 . . .	58	-13	3.0	+2.2	La. Baton Rouge . . .	65	-10	T	-.8	Youngstown . . .	55	-5	.6	0
Mobile . . .	64	-11	1.7	+ .4	Lake Charles . . .	66	-10	0	-.9	OKLA. Okla. City . . .	61	-9	0	-.8
Montgomery . . .	63	-11	5.5	+4.5	New Orleans . . .	65	-11	T	-1.2	Tulsa . . .	55	-15	.1	-.9
ALASKA, Anchorage . .	---	---	---	---	Shreveport . . .	65	-10	T	-.7	OREG. Astoria . . .	60	+5	0	-.7
Barrow . . .	---	---	---	---	MAINE, Caribou . . .	53	+2	.8	0	Burns . . .	60	+3	0	-.1
Fairbanks . . .	---	---	---	---	Portland . . .	58	+2	2.4	+1.7	Medford . . .	65	+3	0	-.2
Juneau . . .	---	---	---	---	MD, Baltimore . . .	65	+1	7.0	+6.3	Pendleton . . .	65	+4	0	-.5
Kodiak . . .	---	---	---	---	MASS, Boston . . .	62	0	4.4	+3.7	Portland . . .	62	+2	T	-.5
Nome . . .	35	-4	T	-.5	Chatham . . .	62	---	4.1	---	Salem . . .	60	0	0	-.5
ARIZ, Flagstaff . . .	54	-1	T	-.4	MICH, Alpena . . .	50	-4	.2	-.5	PA, Allentown . . .	60	-2	4.7	+3.9
Phoenix . . .	84	+3	0	-.1	Detroit . . .	55	-6	3	-.2	Erie . . .	55	-4	.7	-.1
Tucson . . .	74	-4	0	-.3	Flint . . .	53	-5	.2	-.4	Harrisburg . . .	61	-3	12.4	+11.8
Winslow . . .	63	-4	0	-.1	Grand Rapids . . .	52	-7	T	-.8	Philadelphia . . .	64	-1	6.0	+5.4
Yuma . . .	85	+1	0	0	Houghton Lake . . .	50	-4	.4	-.4	Pittsburgh . . .	55	-6	2.3	+1.7
ARK, Fort Smith . . .	59	-12	0	-.8	Lansing . . .	51	-8	T	-.6	Scranton . . .	59	-1	3.8	+2.2
Little Rock . . .	60	-11	T	-.8	Marquette . . .	49	-6	.3	-.5	R.I. Providence . . .	61	0	4.3	+3.6
CALIF, Bakersfield . .	84	+10	0	-.1	Muskegon . . .	52	-7	T	-.8	S.C. Charleston . . .	75	+2	1.4	+ .3
Eureka . . .	55	-1	0	-.3	S. Ste. Marie . . .	50	-3	.2	-.7	Columbia . . .	72	0	.2	-.7
Fresno . . .	76	+4	0	-.1	MINN, Duluth . . .	50	-2	T	-.6	Greenville . . .	64	-5	2.6	+1.8
Los Angeles . . .	80	+8	0	0	Internat'l Falls . .	50	0	-.3	-.4	S.D. Aberdeen . . .	56	0	T	-.4
Red Bluff . . .	78	+5	0	-.1	Minneapolis . . .	54	-3	T	-.6	Huron . . .	53	-4	T	-.4
San Diego . . .	76	+7	0	0	Rochester . . .	51	-5	T	-.7	Rapid City . . .	56	-1	T	-.3
San Francisco . . .	62	-2	0	-.1	St. Cloud . . .	52	-3	T	-.5	Sioux Falls . . .	52	-6	.4	-.2
Stockton . . .	75	+5	0	-.1	MISS, Jackson . . .	61	-12	.5	-.1	TENN, Chattanooga . .	58	-11	4.7	+3.8
COLO, Denver . . .	56	-4	0	-.3	Meridian . . .	62	-11	1.8	+1.1	Knoxville . . .	61	-8	1.8	+1.2
Grand Junction . . .	63	-1	0	-.2	MO, Columbia . . .	53	-10	.9	-.2	Memphis . . .	60	-11	.1	-.5
Pueblo . . .	57	-6	0	-.1	Kansas City . . .	57	-9	.2	-.8	Nashville . . .	57	-12	2.8	+2.1
CONN, Bridgeport . . .	63	-1	4.4	+3.8	St. Louis . . .	56	-11	T	-.7	TEX, Abilene . . .	63	-10	0	-.6
Hartford . . .	60	0	7.7	+6.9	Springfield . . .	53	-13	1.1	+ .1	Amarillo . . .	59	-8	0	-.4
D.C. Washington . . .	66	-2	9.1	+8.5	MONT, Billings . . .	59	+3	T	-.3	Austin . . .	68	-9	0	-.9
FLA, Apalachicola . .	69	-8	.1	-1.7	Glasgow . . .	58	+4	T	-.1	Beaumont . . .	67	-10	0	1.1
Daytona Beach . . .	79	+1	1.0	-.6	Great Falls . . .	59	+5	.1	-.2	Brownsville . . .	71	-9	T	1.2
Ft. Myers . . .	79	-2	2.0	+ .1	Havre . . .	57	+3	.1	-.1	Corpus Christi . . .	71	-8	0	1.1
Jacksonville . . .	75	-1	.3	-1.4	Helena . . .	53	+1	T	-.2	Del Rio . . .	70	-8	0	-.8
Key West . . .	80	-2	3.1	+1.3	Kalispell . . .	54	+4	0	-.2	El Paso . . .	64	-8	0	-.3
Lakeland . . .	77	-2	1.0	-.2	Miles City . . .	58	+2	T	-.3	Fort Worth . . .	67	-8	0	-.8
Miami . . .	81	0	2.2	0	Missoula . . .	55	+3	0	-.2	Galveston . . .	71	-7	0	1.2
Orlando . . .	78	-1	1.9	+ .3	NEBR, Grand Island .	54	-7	.2	-.3	Houston . . .	66	-11	T	-1.1
Tallahassee . . .	88	-8	.9	-.5	Lincoln . . .	53	-9	T	-.6	Lubbock . . .	62	-6	0	-.6
Tampa . . .	79	-1	4.5	+3.3	Norfolk . . .	53	-7	.1	-.4	Midland . . .	65	-8	0	-.4
W. Palm Beach . . .	80	-1	.4	-2.1	N. Platte . . .	51	-8	T	-.4	San Angelo . . .	64	-10	0	-.7
GA, Atlanta . . .	62	-8	.6	-.1	Omaha . . .	56	-5	.1	-.5	San Antonio . . .	68	-9	0	-.9
Augusta . . .	70	-2	.4	-.3	Valentine . . .	54	-4	T	-.3	Victoria . . .	69	-9	0	1.1
Macon . . .	66	-7	.7	0	NEV, Ely . . .	56	+2	0	-.1	Waco . . .	68	-8	0	-.8
Savannah . . .	74	0	2.4	+1.2	Las Vegas . . .	78	+1	0	-.1	Wichita Falls . . .	64	-10	0	-.8
HAWAII, Hilo . . .	76	+1	.9	-.8	Reno . . .	63	+5	0	-.1	UTAH, Blanding . . .	59	-1	0	-.2
Honolulu . . .	79	-1	T	-.2	Winemucca . . .	62	+6	0	-.1	Salt Lake City . . .	63	+3	0	-.2
Kahului . . .	76	-2	T	-.1	N.H. Concord . . .	56	-1	4.2	+3.5	VT, Burlington . . .	53	-3	1.5	+ .8
Lihue . . .	85	0	T	-.5	N.J. Atlantic City .	64	0	3.5	+2.9	VA, Lynchburg . . .	62	-3	4.1	+3.4
IDAHO, Boise . . .	65	+5	0	-.1	Trenton . . .	62	-2	7.5	+6.8	Norfolk . . .	75	+6	.9	0
Lewiston . . .	65	+5	0	-.2	N. MEX, Albuquerque	62	-5	0	-.2	Richmond . . .	70	+3	4.2	+3.4
Pocatello . . .	57	+1	0	-.1	Roswell . . .	63	-4	0	-.4	Roanoke . . .	62	-3	2.0	+1.2
ILL, Cairo . . .	58	-11	T	-.8	N.Y. Albany . . .	58	-1	2.8	+2.1	WASH, Colville . . .	58	+3	0	-.2
Chicago . . .	56	-7	T	-.7	Binghamton . . .	55	-2	5.8	+5.1	Omak . . .	59	0	0	-.1
Moline . . .	54	-6	.2	-.7	Buffalo . . .	55	-4	.4	-.3	Quillayute . . .	55	-1	.3	1.3
Peoria . . .	54	-9	T	-.8	New York . . .	63	-2	8.2	+7.5	Seattle-Tacoma . . .	61	+3	T	-.6
Rockford . . .	52	-8	0	-.9	Rochester . . .	56	-4	1.6	+1.1	Spokane . . .	61	+5	0	-.2
Springfield . . .	56	-8	T	-.8	Syracuse . . .	56	-4	5.4	+4.8	Walla Walla . . .	65	+2	0	-.2
IND, Evansville . . .	58	-8	.8	+ .2	N.C. Asheville . . .	59	-5	4.1	+3.3	Yakima . . .	61	+3	0	-.1
Ft. Wayne . . .	54	-8	T	-.6	Charlotte . . .	66	-3	2.7	+1.9	W. Va. Beckley . . .	57	-3	2.0	+1.3
Indianapolis . . .	55	-9	.2	-.4	Greensboro . . .	64	-3	3.3	+2.5	Charleston . . .	58	-7	2.0	+1.3
South Bend . . .	53	-8	.2	-.5	Hatteras . . .	78	+6	1.7	+ .4	Huntington . . .	57	-8	2.2	+1.6
IOWA, Burlington . . .	55	-8	.2	-.7	Raleigh . . .	69	+1	4.4	+3.6	Parkersburg . . .	56	-9	2.9	+2.1
Des Moines . . .	56	-5	.4	-.3	Wilmington . . .	78	+6	2.1	+ .9	WIS, Green Bay . . .	50	-6	0	-.7
Dubuque . . .	51	-8	.2	-.8	N. DAK, Bismarck . .	53	-1	.1	-.2	La Crosse . . .	52	-7	.1	-.6
Sioux City . . .	53	-7	.2	-.4	Fargo . . .	54	-1	.1	-.3	Madison . . .	51	-6	0	-.7
KANS, Concordia . . .	57	-7	T	-.7	Williston . . .	56	+3	.1	-.2	Milwaukee . . .	55	-3	.1	-.6
Dodge City . . .	58	-8	0	-.4	OHIO, Akron-Canton	55	-6	.6	0	WYO, Casper . . .	55	0	T	-.2
Goodland . . .	58	-3	T	-.3	Cincinnati . . .	53	-12	.6	0	Cheyenne . . .	54	-1	0	-.2
Topeka . . .	56	-9	.1	-.6	Cleveland . . .	53	-8	.7	+ .1	Lander . . .	56	+1	0	-.3
Wichita . . .	59	-8	T	-.9	Columbus . . .	56	-6	.7	+ .2	Sheridan . . .	56	+1	T	-.3
KY, Lexington . . .	54	-12	2.4	+1.8	Dayton . . .	55	-9	.5	0	P.R. San Juan . . .	82	+1	.3	-1.0
Louisville . . .	58	-8	1.2	+ .5	Toledo . . .	53	-8	.2	-.3					

Based on 1941-70 Normals

The Weekly Weather and Crop Bulletin is published by the National Weather Service, NOAA, and Statistical Reporting Service, USDA.
Standard copy for the Bulletin is

prepared by Dr. Richard E. Felch, agricultural climatologist, Lyle M. Denny, Orus W. Byrd, meteorologists, DeLon Brown, agricultural statistician, and Susan E. Atkins, editor.

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, NOAA.

ALABAMA: Hurricane Eloise slammed into south-east morning of 23d and moved rapidly north-northeast. Wind gusts were recorded to 88 mph at Dothan, 76 mph at Auburn and 52 mph at Anniston. Damage was greatest in southeast quarter. After the very heavy rains of 22d and 23d, it remained cloudy and very cool through 26th.

Rains halted harvesting of crops. Principal activities were repair and cleanup due to storm. Corn good condition, 95% matured, 31% harvested, 26% 1974, average 21%. Soybean condition good; 55% leaves turning yellow, 21% matured; insects and disease present. Cotton condition fair; 24% open bolls, 34% 1974; insects high. Peanut condition good, 68% dug, 59% combined. Pecan condition poor to fair, some trees uprooted, insects and diseases present. Hay harvest halted, 86% harvested. Soil moisture surplus, pastures good.

ALASKA: Near normal temperatures and precipitation.

Harvest of hay, silage, and grain in various stages of completion throughout Railbelt. Potato harvest began in Homer area with harvest near completion in Matanuska Valley and 75% complete in Tanana Valley.

ARIZONA: No precipitation. Temperatures below normal except central, western deserts.

Cotton good progress, some fields ready defoliation; irrigations continue; 75% open in west. Harvest grain sorghum limited. Preparations, plantings spring sugarbeets. Renovation, replanting alfalfa hay good progress west, central. Lettuce good progress Salt River Valley, Pima, Pinal Counties. Stand establishment difficult Yuma County. Chili harvest continued, Cochise County. Other mixed vegetables, seasonal progress. Lemon harvest continued limited Desert very dry. Mountain ranges fair, adequate water. Cattle, sheep mostly good condition.

ARKANSAS: Cool temperatures prevailed, 9 to 14° below normal. Extremes: 83 and 32°. Precipitation early, widespread and light; amounts less than 0.30 in.

Fieldwork: 4.7 days. Field activities harvesting rice, cotton, soybeans, sorghum, planting small grains. Soil moisture adequate to surplus. Cotton in fair condition. Wet soils, cool temperatures caused excessive growth, rotting bottom bolls, immature top bolls. Bolls 35% open, 29% 1974, 43% average; limited picking. Rice harvest 43% complete, 20% 1974, 26% average. Drying facilities crowded. Cool temperatures slowed maturity of late rice. Soybean condition good; cool temperatures slowed ripening; late beans fruiting heavily, filling well; early varieties dropped leaves; combining continued on limited scale. Late sorghum maturing, harvest continuing as conditions permit. Small grain plantings up to good stands. Land preparation continued. Hay cuttings hard to cure, damp weather, morning dew. Grasslands got boost from ample soil moisture, providing adequate forage.

CALIFORNIA: Fair inland areas and some night and morning low cloudiness immediate coastal sections, mainly north coast. Warming midweek, especially southern coastal areas due to Santa Ana winds. Cooling immediate coast late week.

Highs near 100 Central Valley, inland coastal valleys, and south coast with lows mostly in 60's. Averages near normal north coast and southeast desert areas and 3 to 9° above elsewhere.

Land preparation continues. Alfalfa hay, alfalfa seed and small grain harvests continue. Milo harvest getting started. Field corn and rice harvest increasing. Sugarbeet harvest seasonal high. Dry bean threshing gaining. Cotton defoliation all areas, some wilt reported. Stone fruit harvest about complete, apple, walnut harvests increasing. Almond shaking near peak. Raisin grape laying about complete. Growers turning, rolling and boxing. Ideal drying weather held rain damage below expected. Wine grape harvest increasing. Packing wine varieties for juice. Tokay picking active Lodi, many to cold storage. Valencia orange and grapefruit picking at low season end levels. Broccoli, cauliflower, carrots, celery, bell peppers good supply, lettuce heavy Salinas. Cantaloup slowing down. Fresh market tomatoes and sweetpotatoes continuing San Joaquin Valley. Sweet corn continues Orange County. Potato digging Riverside. Honeydews slow and canning tomatoes heavy Sacramento Valley. Fall calving increasing. Supplemental feeding increased many areas. Cattle being moved onto winter ranges. Sheep, cattle grazing stubble fields. Lambing San Joaquin Valley. Stock water ample most areas.

COLORADO: Temperatures 3 to 9° below normal. Highs 70's and 80's, lows 30's and 20's. Precipitation 0.25 to 1.00 in. southeast early week. Scattered precipitation over south. Cool and dry rest of week.

Corn silage 82% harvested, 88% 1974, 73% average. Corn for grain 75% mature, 81% 1974, 74% average. Winter wheat 84% seeded, 81% 1974, 86% average; 56% emerged. Winter barley 82% seeded, 90% 1974, 81% average; 40% emerged. Grain sorghum 80% colored, 30% ripe. Third cutting alfalfa 66%, 4th cutting 14%. Ranges and pastures good except southeast poor. Livestock good condition. Soil moisture short.

FLORIDA: Hurricane Eloise caused extensive damage to crops in wide area of Panhandle including primarily Okaloosa, Walton, Holmes, Washington and Bay Counties. Soybeans suffered heavy losses, plants blown down or twisted very badly. Small unharvested corn acreage flattened. Dug peanuts blown about causing heavy losses. Pecan crop suffered extensive losses. A large number of trees were uprooted and most of the pecans were blown to the ground prematurely. Crops continue in fair to good condition in north, central areas. Harvest of mature crops interrupted by rains. Pastures are in mostly good condition. Cattle, calves good condition. Citrus tree condition excellent, rainfall adequate. Early varieties excellent color break. Some fruit splitting. Grapefruit harvest ahead of 1974. Vegetable crop conditions and plant growth good to excellent. Plantings continue active. Harvest light to active, sweet corn, cucumbers, squash, quality, yield fair to good.

GEORGIA: Remnants of Eloise brushed west on 23d, maximum winds exceeding 60 mph, relatively light rainfall amounts. Temperatures ranged from near normal south and east to 4 to 7° below

normal central, west and north. Precipitation averaged 0.50 in. southwest to more than 2.50 in. north. Fair and cool weather over weekend.

Soil moisture surplus north third, mostly adequate to surplus elsewhere. Fieldwork restricted by hurricane Eloise, averaged 2 days suitable end of period. Crop damage moderate, heavier along west border and north. Corn declined, fair to mostly good, considerable lodging west. Bottom land flooding north, county yield loss varied; harvest 35% complete, 1974 29%, average 30%. Cotton mostly fair to good; wind and rain damage moderate; boll rot increased; harvest remained at 1% completion, 1974 10%, average 20%. Peanut condition good, little, if any, damage, 72% dug, 56% threshed, 1974 79% and 65%, average 92% and 85%. Soybeans fair to mostly good, very light hurricane damage, insect problems widespread, harvest inactive. Tobacco marketing continued. Pecans declined, mostly fair to good; some loss due to limb breakage and green nut fall; harvest just begun. Some apple and peach trees blown over west central. Northern apple harvest continued. Wheat 5% planted, rye 8%, other small grains 11%. Pastures and cattle good.

HAWAII: Weather favorable to crop growth. Most sections remained dry. Some light scattered showers along windward area all Islands. Heavy irrigation continuing vegetable and fruit crops. Vegetable supplies adequate. Melon production declining, peak harvest over. Banana production moderate to heavy. Papaya production fluctuating. Pasture feed low some areas on Kauai, dry conditions. Pineapple harvesting slow. Nonirrigated sugarcane fields dry on Hawaii, Kauai, and Oahu.

IDAHO: Weather sunny and dry. Afternoon temperatures upper 60's and low 70's early, rose 10° midweek, declined toward weekend. Frost general high valleys southeast, upper Snake River Valley and central mountains. No precipitation.

Excellent weather allowed harvest to progress unhampered. Harvest small grains near completion. Potato harvest and sugarbeet harvest underway limited scale; full swing end of this week. Winter wheat harvest 95%, 100% 1974. Spring wheat harvest 90%, 100% 1974. Sweet corn for processing 90% complete, 100% 1974. Potato crop 5% harvested, 15% 1974. 1976 winter wheat crop 40% seeded, 30% 1974. Pastures and ranges provide adequate forage, all ranges need moisture. Cattle moving off summer ranges.

ILLINOIS: Temperatures 7 to 12° below normal. Precipitation mostly 0 to 0.25 in.

Corn harvest 12% complete, 4% 1974, average 5%. Soybeans shedding leaves 88%, 43% 1974, average 65%; 26% combined, 5% 1974, average 8%. Seeding 1976 winter wheat 17% complete, 15% 1974, average 17%. Pastures mostly good to excellent. Soil moisture 4% short, 79% adequate, 17% surplus. Fieldwork: 5 days suitable.

INDIANA: Cool cloudy week. Temperatures ranged from 33 to 74°. Daily highs much below normal. Precipitation 0.10 to 0.40 in. north and central, 1.00 in. south. Sunshine and evaporation below normal.

No frost yet. Fieldwork averaged 3 days. Topsoil and subsoil moisture mostly adequate to surplus. Corn 5% harvested; 80% mature, 1974 45%, average 65%. Soybean combining 5% complete, same as 1974, average 10%; soybeans 45% mature. Plowing wheat land 70% complete, 75% 1974 and

average. Wheat seeded 10%, 1974 15%, average 20%. Silos 75% filled, 1974 45%. Apples 50% picked, same as average and 1974. Tobacco 70% harvested, 1974 65%. Pastures fair to good, unchanged.

IOWA: Temperatures 4 to 7° below normal, greatest departure east. Precipitation 0.20 to 0.50 in. below normal.

Excellent weather for crop maturity. Light frost caused no damage. Hard frost 25th, 26th caused localized damage north. Mature crops could use hard frost for drying, killing weeds. Corn harvest beginning, all areas. Harvested corn high in moisture. Corn yields better than expected in many areas. Corn 94% mature and safe from frost, 69% 1974, 84% average; 5% harvested. Soybeans 94% shedding leaves, 67% 1974, 85% mature and safe from frost, 56% 1974, 74% average; 5% harvested, 3% 1974, 5% average. Winter wheat 44% seeded, 35% 1974, 49% average. Soil moisture mostly adequate. Fieldwork averaged 6.9 days suitable.

KANSAS: Unseasonably cool, significant moisture 0.50 to over 1.00 in. confined few counties east. Temperatures averaged 3° below normal northwest, 7 to 9° below normal elsewhere. Light frost many localities, damage insignificant.

Wheat 45% planted, same as average, 55% 1974. Short soil moisture delaying seeding southwest and south central. Sorghum grain 50% mature, 25% 1974 and 40% average; 15% harvested, 5% 1974, 10% average. Corn 80% mature, 75% average and 1974, 25% harvested, 15% average and 1974. Alfalfa 4th cutting, 40% completed, 45% 1974, 50% average. Alfalfa seeded 95%, 85% 1974, 90% average.

KENTUCKY: Cloudy, cool and rainy 22d through 26th. Clearing and slightly warmer 27th and 28th. Precipitation averaged 1.00 in. west to 2.25 in. east. Temperatures averaged 10° below normal.

Soil moisture generally surplus, especially east. Little field activity due persistent rainfall, only slightly over 1 day favorable. Tobacco and corn harvest slowed by wet weather. Burley 79% cut, 1974 77%, average 82%. Houseburn damage to third of housed crop, severity generally light to date. Corn 70% mature, 10% harvested, 1974 7%, average 12%. Soybeans mostly yellowing and shedding leaves, 25% still green, about 4% harvested, 1974 none, 6% average. Fall pastures improving.

LOUISIANA: Temperatures 10 to 15° below normal. Rain extreme southeast 21st and 22d. Greatest 1-day rainfall 0.48 in. Diamond. Temperature extremes: 86° 21st; 40° 26th.

Statewide 5.6 days fieldwork. Ideal weather conditions. Activities insect control, defoliation, harvesting rice and soybeans, planting sugarcane, digging sweetpotatoes, and hay making. Soybeans fair to good; harvested 9%, 14% 1974, 8% average. Cotton fair to good; 33% open, 55% 1974. Insecticide application decreased; defoliation and limited harvest began. Rice harvest 90%, 96% 1974, 89% average. Scattered fields remain southwest, harvest 40% northeast. Corn yields good; harvest 80%. Grain sorghum harvest 33%. Sugarcane stands and growth excellent; 40% planted. Sweetpotato harvest 45%. Pecan harvest began. Hay 70% harvested. Pastures average, cattle good.

MARYLAND & DELAWARE: Temperatures averaged

below normal in western Maryland, above normal Eastern Shore, and near normal elsewhere. Precipitation ranged from 1.05 to 14.38 in. Heaviest amounts occurred north central Maryland causing flooding in some areas.

Corn for grain 30% harvested; 17% 1974, average 25%. Corn for silage 80% harvested, equal to 1974 and average. Soybeans 55% yellowed; 30% shedding leaves; 50%, 22% 1974. Tobacco 90% harvested, 90% 1974, average 95%. Apple harvest delayed due to rain. Expected to peak during week. Seeding of small grains active.

MICHIGAN: Temperatures 2 to 8° below normal. Northern Lower and west Upper Peninsula below freezing midweek. Precipitation mostly 0.20 to 0.40 in.

Soil moisture surplus. Wet fields slowed fieldwork; nearly 4 days suitable. Corn 50% mature, 25% 1974, 50% normal; corn high in moisture; harvest beginning. Corn silage harvest 50%, 35% 1974, 50% average. Soybeans 15% mature, 40% 1974, and normal. Combining starting. Dry bean harvest 65%, 55% 1974. Potato digging nearing halfway mark. Sugarbeet digging starting. Wet fields delaying winter wheat planting; nearly 30% planted, 50% 1974, and normal. Third cutting alfalfa 40% done, 55% average. Pasture feed supplies average to above average. McIntosh apples 70% picked, 65% 1974. Jonathan 10%; Red Delicious 20%. Grapes 10%. Cabbage and carrots 50% harvested. Celery and dry onions 80%.

MINNESOTA: A cool dry week. Temperatures little below normal north and 2 to 4° below south. Extremes: 75 and 27°. Precipitation averaged only 0.10 to 0.20 in., about 0.50 in. below normal. Scattered frost and early morning freezing temperatures were common.

Condition favorable for field drying of corn and sunflowers and permitted several days of silo filling, harvesting of flaxseed, soybeans, dry edible beans, potatoes and sugarbeets. Soybeans harvest 12% completed, 1974 frost-damaged crop 42% combined, average 16%. Corn for grain 4% combined or picked, same as 1974 and average. Flax 79% combined, average same progress. Fall potatoes 55% dug, 1974 44%, average 47%, quality of crop good, size mostly medium. Dry edible bean combining complete central, underway northwest. Topsoil moisture mostly adequate, subsoil short to adequate.

MISSISSIPPI: Temperatures 8 to 12° subnormal north and central, 4 to 7° subnormal south. Extremes: 91 and 40°. Greatest 24-hour rainfall was 1.77 in. at Merrill.

Soil moisture mostly adequate. Fieldwork 3.8 days suitable. Cotton 61% open bolls, 48% 1974, 48% average; 2% harvested, 2% 1974, 10% average. Soybeans 69% turning; 37% shedding; 13% mature, 16% 1974, 13% average; 3% harvested, 4% 1974, 7% average. Rice 79% mature; 37% harvested, 30% 1974. Corn 84% mature, 86% average; 21% harvested, 30% 1974, 23% average. Sorghum 78% mature, 38% harvested. Winter wheat 20% and oats 27% planted. Harvested: Sweetpotatoes 44%, peanuts 52%, hay crops 84%, corn silage 90%, sorghum silage 79%. Cotton in poor to fair condition. Other crops in fair to good condition.

MISSOURI: Temperatures 9° below normal. Precipitation light east Ozarks 0.33 in. and Bootheel 0.30 in. only significant amounts.

Soil moisture adequate. Fieldwork: 5 days suitable. Corn 90% mature, 53% 1974; 31% harvested, 14% 1974, 15% average. Soybeans 63%

turning color, 38% 1974; 26% mature, 13% 1974; 6% harvested, 3% 1974, 6% average. Grain sorghum 80% mature, 48% 1974, 56% average; 33% harvested, 8% 1974, 13% average. Cotton 85% open bolls, 26% 1974, 38% average, 4% harvested. Winter wheat 15% seeded. Plowing for spring planted crops 7% complete. Pastures fair to good. Fuel and fertilizer supplies adequate.

MONTANA: Warm week. Temperatures averaged near normal central to 5° above normal northeast. Light precipitation east, dry west and southwest.

Grain harvest enters final stages. Almost 85% spring wheat and oats, 75% barley combined. Last year and normal 100%. Potato digging, 20% done, 1974 35% and normal 21%. Harvesting 2d cutting alfalfa 90%, dry beans 35% and corn silage 60%. Winter wheat seeding 70% done, 1974 85%, normal 90%. Grasshoppers eating field edges many areas. Germination mostly good except dry areas. Topsoil moisture short south and central. Nearly 25% cattle and 30% sheep moved from summer pastures.

NEBRASKA: Temperatures on 26th 1 to 13° above normal, otherwise, below normal. Few brief showers on 27th.

Dry weather, killing frosts hastening maturity row crops. Topsoil moisture supplies 93% short, 1974 89%. Subsoil moisture supplies 92% short. Corn 10% harvested, ahead of 1974 and normal; 90% mature, 1974 75%, 85% normal. Sorghum 90% ripe, 60% 1974, 65% normal; 25% harvested, 10% 1974, 5% normal. Soybeans 65% mature, 55% 1974, 45% normal; 15% harvested, 10% 1974, 5% normal. Wheat 90% seeded, 80% 1974, 85% normal. Alfalfa hay growth slowed, 40% fourth cutting harvested. Dry bean harvest nearing completion. Sugarbeet harvest begins October 1st. Pasture and range feed supplies 89% short, 1974 90%. Supplemental feeding continues.

NEVADA: Sunny warm days, clear cool nights. No precipitation. Temperatures above normal most areas. Extremes: 18° Mountain City, 97° Las Vegas and Logandale.

Dry weather near ideal for harvesting, seedbed preparation. Potato digging started Winnemucca area 18th. Third cutting alfalfa hay nearly complete except west. Sixth cutting alfalfa extreme south. Few livestock moving to hay lands.

NEW ENGLAND: Record heavy, persistent rain caused flooding, especially Connecticut. Many locations received 2.00+ in. in 24 hours. Clearing began on 27th. Temperatures near normal on 21st, 22d and 27th, otherwise near 10° below normal.

Rain stopped fieldwork except northern Maine. Potato digging Aroostook County, Maine full swing. Rain stopped corn harvest and late haying. Apple and cranberry harvest delayed.

NEW JERSEY: Temperatures averaged near normal. Extremes: 38° at Long Valley and Newton with frost on 29th and 84° at Hammonton and Seabrook on 24th. Rainfall averaged 6.82 in. north, 7.16 in. central and 4.67 in. south. Heaviest 24-hour total 3.40 in. at Canoe Brook. Record breaking rains, 10.51 in. New Brunswick and 10.00 in. at Canoe Brook.

Estimated soil moisture, in percent of field capacity averaged 90 north, 94 central and 92 south. Extensive rain all week. Outside farm work slowed considerably. Light flooding in low areas. No major crop damage reported.

NEW MEXICO: Essentially dry with only a few light showers. Mostly clear skies, ample sunshine and

little wind. Temperatures averaged 4 to 8° below normal.

Light rainfall, cooler temperatures, moisture mostly adequate. Cotton fair, 2 weeks late, very little open; 1st bale ginned on 23d. Alfalfa good, 4th cut started north, 4th cut near through and 5th started south; some harvest hampered from dews. Grain sorghum good, limited harvest, very little greenbug damage. Limited corn grain harvest started; corn silage harvest well advanced, crop good. Winter wheat, barley planting 50% complete, good stands. Peanuts excellent, digging begun. Potatoes good, digging near complete. Apples fair to good, harvest active. Lettuce, sunflower good. Ranges fair to good. Livestock good, market activity slow.

NEW YORK: Rain frequent and heavy, serious flooding south. Most rain 23d to 26th with over 8.00 in. New York City area and more than 3.00 in. common central and south. Rain also plentiful northeast but below normal extreme west. Temperatures moderate. Extremes: 75 to 41°. Clearing trend developed during weekend.

Soil moisture surplus most areas. Extreme wet conditions halted field activity. Field crop harvest limited to some corn silage, now half complete. Dry bean yield prospects reduced as mature beans and those pulled were damaged by wet weather. Cabbage and cauliflower harvest continues. Available supplies most other vegetables declining rapidly. McIntosh apple harvest continues with Cortland, R. I. Greening and Delicious beginning. Grape harvest active all areas.

NORTH CAROLINA: Heavy rainfall and near normal temperatures prevailed.

Days suitable fieldwork 1.1. Soil moisture 19% adequate, 81% surplus. Harvest activities hampered by excessive rain. Burley tobacco 87% barked, 1974 72%. Corn 41% combined, 1974 46%, average 29%. Cotton 3% picked, 1974 1%, average 8%. Sweet potatoes 23% dug, 1974 29%. Peanuts 5% dug, 3% threshed. Small grains 9% planted, 1974 12%, average 10%. Soybeans fair to good. Sorghum grain and pastures fair to mostly good.

NORTH DAKOTA: Temperatures averaged below normal except northwest and west central. Precipitation below normal except southwest. Weekend cooler with showers.

Small grain harvest virtually complete. Hard red spring wheat combining about 98% complete, 96% 1974, 95% average. Durum 95%, 90% 1974, 88% average. Dry bean combining about 44% complete. Potato digging 54% and sugarbeet lifting 7%. Light frost in some areas. Livestock good condition.

OHIO: Precipitation every day except 28th. Greatest amount 2.84 in. southeast; least 0.15 in. northwest. Temperatures well below normal. Extremes: 72° southeast, 35° northwest.

Most field activities at standstill due to muddy fields. Corn 85% mature, 75% 1974 and normal; 5% harvested, 5% 1974 and 10% normal. Soybeans 60% mature, 45% 1974 and 55% normal; 5% harvested, 10% 1974 and 15% normal. Winter wheat only 10% seeded, 25% 1974 and normal. Barley 15% seeded, 55% normal. Harvest completed: Corn silage 65%, 60% 1974 and 65% normal; tobacco 85%, 85% normal; potatoes 50%, 60% normal; sugarbeets and popcorn started; apples 25%; grapes 30%. Soil moisture 87% surplus, 13% adequate. Fieldwork: 2 days favorable.

OKLAHOMA: Temperatures averaged 10 to 13° below normal. Precipitation averaged from 0.01 in. north-

east to 0.30 in. southwest. Weekend mild and dry most areas. Few showers east.

Seeding small grains active except dry areas. Soil moisture 66% adequate. Wheat 21% seeded, 1974 38%, average 37%. Seeding winter oats and barley beginning. Cool weather slowed maturity most crops. Corn 89% mature, 33% harvested, 29% 1974, 27% average. Sorghum 20% combined, 13% 1974, 14% average. Cotton bolls 11% open, 29% 1974, 37% average. Harvest of peanuts and soybeans beginning. Range and livestock remain mostly good. Some hay harvest continues.

OREGON: Temperatures averaged 3 to 7° above normal in western valleys and southeastern areas. Elsewhere, slightly above normal. Extremes: 90's and 30's. Only precipitation, 0.01 in. along coast.

Land preparation, fall seeding progressing. Combining red clover seed. Haying moderate. Cutting corn for silage. Pear harvest finishing. Apple, prune harvests continue. Filberts, walnuts look good. Sweet corn, green beans, cabbage, cauliflower, carrots, broccoli, beets, squash, and onions being harvested. Potato harvest continuing in Hermiston, Ontario, and Klamath Falls areas. Ranges, pastures dry. Livestock in good condition. Feed and water supplies adequate. Calves continue to be weaned.

PENNSYLVANIA: Cool wet week. Rainfall concentrated in lower and middle Susquehanna Valley where nearly 15.00 in. was recorded near Harrisburg. By 24th flooding on small streams and by 26th on Susquehanna which remained above flood at Harrisburg until noon of 29th. Weekly rainfall 0.50 to 2.00 in. west. Clear and mild weekend. Temperatures coolest since early May. Extremes: 81 and 28°.

Soil moisture excessively surplus. Limited activities included harvesting apples, grapes, vegetables and filling silos. Tobacco cut 85%, same as 1974. Potatoes 51% dug, 70% 1974. Corn 3% harvested; 37% mature, 30% 1974; 53% in dent, 51% 1974. Ensilage corn 42% harvested, 38% 1974. Fall plowing 57%, 1974 62%. Barley 56% sown, 57% year ago. Wheat 34% sown, 38% 1974.

PUERTO RICO: Island average rainfall 1.73 in. Highest weekly total 5.42 in. at La Mudacaguas. Highest 24-hour total 2.95 in. at La Mudacaguas. Temperatures averaged 79° on coasts and 74° interior. Extremes: 92 and 59°.

Soil moisture adequate in sugarcane areas where plantings are developing well. Farmers active cleaning drains and irrigation canals that were obstructed by recent floods. Much coffee grain lost due to last week's bad weather. Some rain showers and poor condition of roads hindering field operations. Tobacco farms starting new seedlings to replace the ones damaged by the heavy rains during passage of storm. Cleaning of pastures started all flooded sections. Pesticides for insect control used. Activities on food crops, centered on cultivating and replanting. Farmers harvesting what they can but damaged roads hindering operations.

SOUTH CAROLINA: Temperatures generally above normal. Rainfall varied excessive to generally deficient. Excessive rain higher elevations and northern areas, deficient central and south central.

Crop conditions still good. Corn harvested 64%, 56% 1974, 49% average. Cotton harvest 4%, 4% 1974, 4% average. Soybean turning color 35%, 28% 1974, 34% average; shedding 15%, 10% 1974, 15% average; mature 10%, 3% 1974, 8% average.

SOUTH DAKOTA: Temperatures averaged from 4° above to 8° below normal. Extremes: 88 and 27°. Only significant precipitation northeast.

Corn 6% harvested, 1974 6%, normal 4%. Most picked corn used for immediate feed. Soybeans 12% combined, 1974 18%, normal 12%. Sorghum 10% harvested, 1974 12%, normal 11%. Sunflower harvest just getting underway. Winter wheat 93% seeded, 1974 79%, normal 88%. Rye 91% seeded, 1974 63%, normal 86%. Fall seeded grain condition good to excellent central and north, poor to fair south. Silage cutting nearing completion. Pastures getting tough, generally adequate feed supplies west and are improving east.

TENNESSEE: Heavy rainfall associated with Hurricane Eloise caused flooding east. Precipitation less than 1.00 in. west to over 4.00 in. east. Temperatures averaged 10° below normal.

Soil moisture situation improved. Crops now need sunshine for maturing. Soybeans 4% mature, 1974 3%, normal 11%. Cotton 32% open bolls, 1974 18%, normal 43%; picking just started. Corn 15% harvested, 1974 10%, normal 16%. Tobacco harvest slowed by rains, 89% cut, 1974 83%, normal 90%. Stripping delayed by poor curing weather. Wheat 16% seeded, 1974 20%, normal 25%. Oats and barley 39% and 33% seeded, near 1974, less than normal.

TEXAS: Cold front continued, bringing cooler, drier air. Clear skies entire week. Temperatures averaged 6 to 10° below normal.

Cool, sunny weather prompted resumption harvest activities across State. Harvest corn, sorghum, cotton soon back in full swing. Seeding wheat, oats gained momentum. Cotton harvest good progress Blacklands, upper Gulf Coast. Drastic temperature changes on High and Low Plains caused moderate-severe defoliation. Concern crop may not develop normally. Harvest underway Trans-Pecos, Edwards Plateau. Corn harvest essentially complete Blacklands southward and making good progress High and Low Plains. Silage harvest essentially complete High Plains. Grain harvest resumed where moisture content low enough. Sorghum harvest essentially complete Blacklands southward. Nearing completion southern Low Plains. Fall stands sorghum south and Lower Rio Grande Valley late bloom, hard dough with few fields harvested. Peanut harvest making good progress south central early crop, and late crop making good growth. Harvest Cross-Timbers gains momentum as fields dry. Wheat from southern High Plains eastward to Cross-Timbers, farmers waiting for fields to dry to finish seeding. On northern High Plains, East and Edwards Plateau, farmers waiting for rain. Some dry seeded wheat received beneficial rains, now up good stands. Major crops percent harvested: Cotton 18, 1974 21, average 20; corn 44, 1974 48, average 64; sorghum 64, 1974 53, average 51; peanuts 39, 1974 29, average 34; rice 99, 1974 92, average 91. Major crops percent planted: Wheat 34, 1974 55, average 73; oats 36, 1974 27, average 41.

High Plains: Cabbage, carrots, cucumbers, peppers still being harvested. Light supplies potatoes available. East: Digging sweetpotato crop. San Antonio-Winter Garden: Cabbage, carrots continue making satisfactory growth. Onion planting underway. Cucumber harvest full swing. Spinach planting continues. Coastal Bend: Early cucumbers being picked. Lower Rio Grande Valley: Vegetable seeding resumed following heavy rains. Some cabbage replanting or transplanting will be necessary. Pecan harvest

underway south, along Upper Coast. Citrus good to excellent condition; harvest Marrs oranges gaining momentum, light grapefruit picking underway.

Pasture conditions adequate, but declining due short moisture. Many areas now making last cut hay. Ticks, screwworms, mosquitoes causing problems Low Plains southward.

UTAH: Fair and mild, no measurable moisture. Temperatures quite variable ranging from 5° below normal Uintah Basin to 2° above extreme southwest.

Winter wheat planting about 60%. Soil moisture short, but nothing like a year ago. Third crop alfalfa hay harvest 50% complete. Corn for silage 30% harvested, tonnage below normal. Dry onion harvest well underway, size and quality good. Peaches and pears nearing completion, size smaller than usual but demand good. Livestock condition good, moving from summer to fall ranges.

VIRGINIA: Rain over entire State through 26th, some flooding central and north. Rainfall averaged 6.00 to 8.00 in. central, north, around 2.00 in. southwest and less than 1.00 in. extreme southeast. Temperatures above normal southeast, near normal elsewhere. Extremes: 88 and 38°.

Fieldwork: 1.1 days suitable. Topsoil moisture 86% surplus, 14% adequate. Corn grain 20% harvested, 1974 27%; average 26%. Tobacco harvest progress: Flue-cured tobacco 92%, 1974 90%; fire-cured 89%, 1974 91%; burley 85%, 1974 80%; sun-cured 92%, 1974 93%. Soybean, peanut harvest just started. Pastures excellent condition. Unfavorable haying weather, some loss. Sweetpotato quality, yield good. Cucumber, snap bean harvest active. Slow harvesting progress on good apple crop. Fall plowing, small grain seeding delayed during poor weather. Wheat 6% seeded, oats 11% seeded, barley 12% seeded.

WASHINGTON: West: Temperatures averaged normal to 5° above normal. Precipitation negligible.

Harvesting: Sweet corn, cucumbers, cauliflower, blueberries, blackberries, vegetable beet seed. Silage corn harvest proceeding slowly. Cattle-men mowing, making, baling hay, green cropping grass and corn. East: Readings normal to 5° above normal, no precipitation.

Picking: Red Delicious, Golden Delicious apples and grapes. Digging: Potatoes and sugar-beets. Harvesting: Lima beans, sweet and silage corn, dry beans, alfalfa and red clover seed, isolated barley and oat fields. Fall seeding active. Moisture adequate in summerfallow but short in recrop. Other activities: Preparing seedbeds, fertilizing, chiseling, disking, plowing stubble. Some pasture growth slowed and cattle moved to alternate feed or market. Hay supplies adequate.

WEST VIRGINIA: Temperatures below normal west and normal east. Precipitation above normal throughout. Heaviest northeast with 5.71 in.

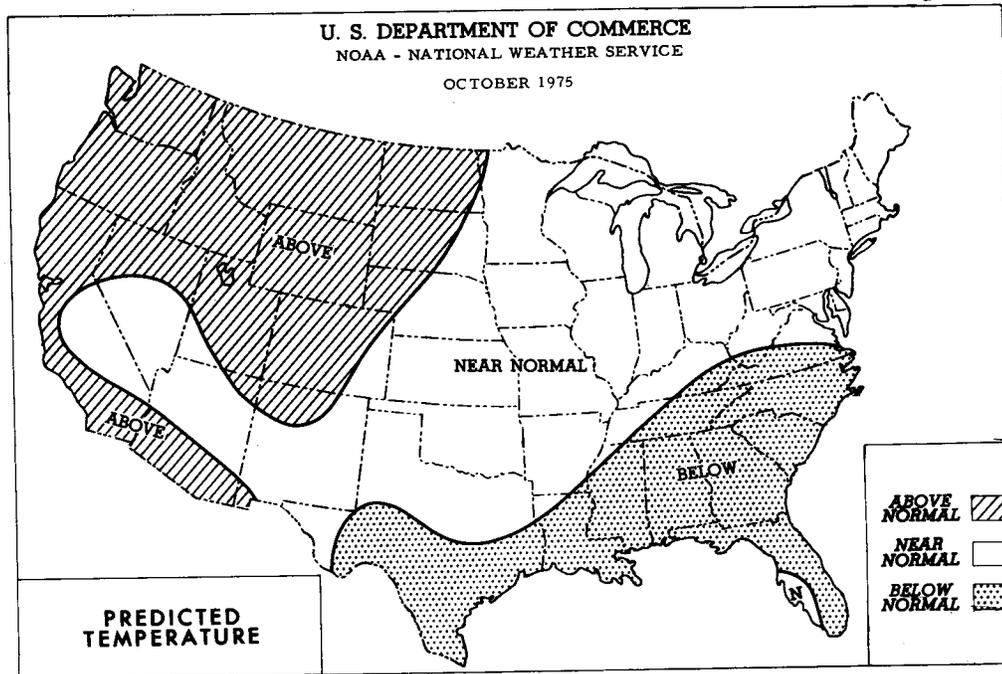
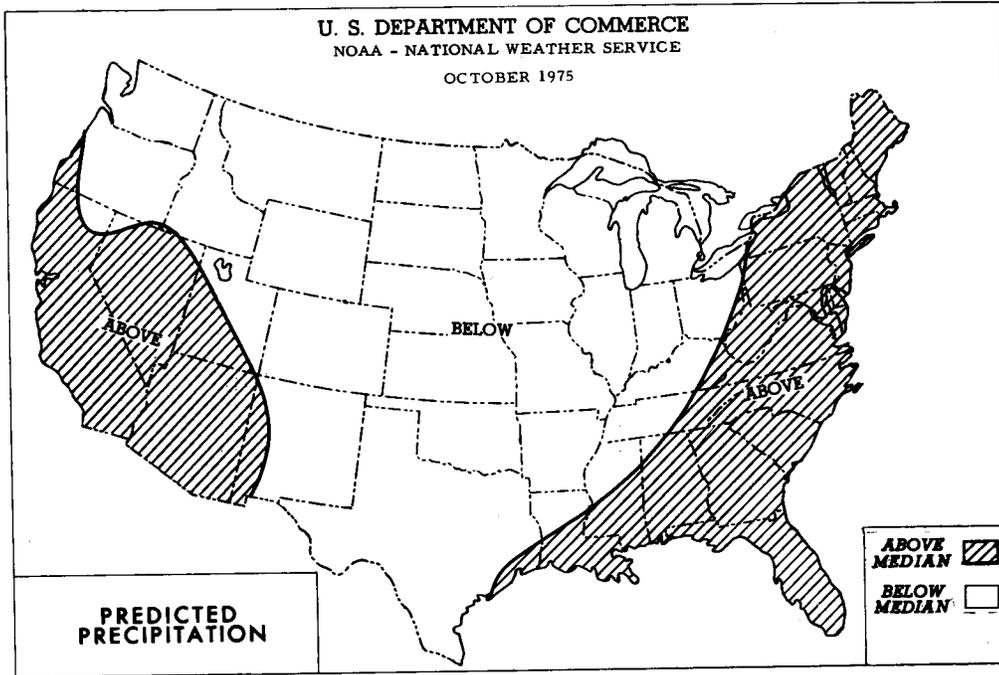
Favorable workdays 2.0. Soil moisture 34% adequate and 66% surplus. Main fieldwork: Clipping pasture, marketing livestock and harvesting corn silage. Potatoes 75% dug. Second cutting hay 91% and 3d cutting 61% complete. Tobacco harvested 96%. Corn good to fair; 31% dented, 50% matured and 19% harvested. Pasture mostly good. Livestock in good condition.

WISCONSIN: Temperatures averaged 6° subnormal. Frost most areas except extreme southwest and along Lake Michigan. Weekend warmer with con-

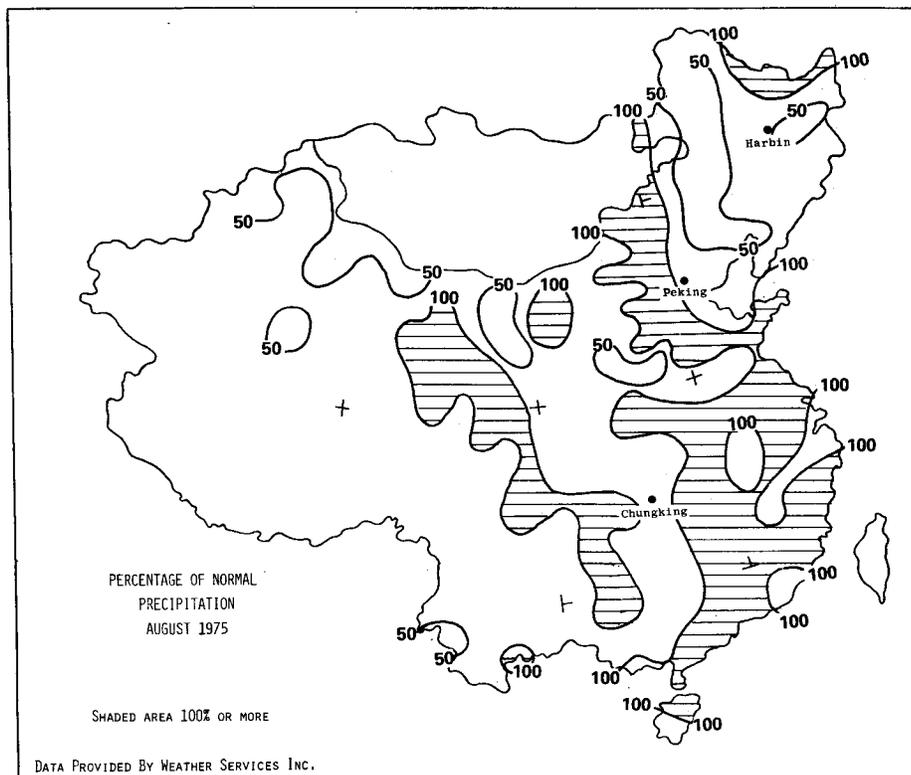
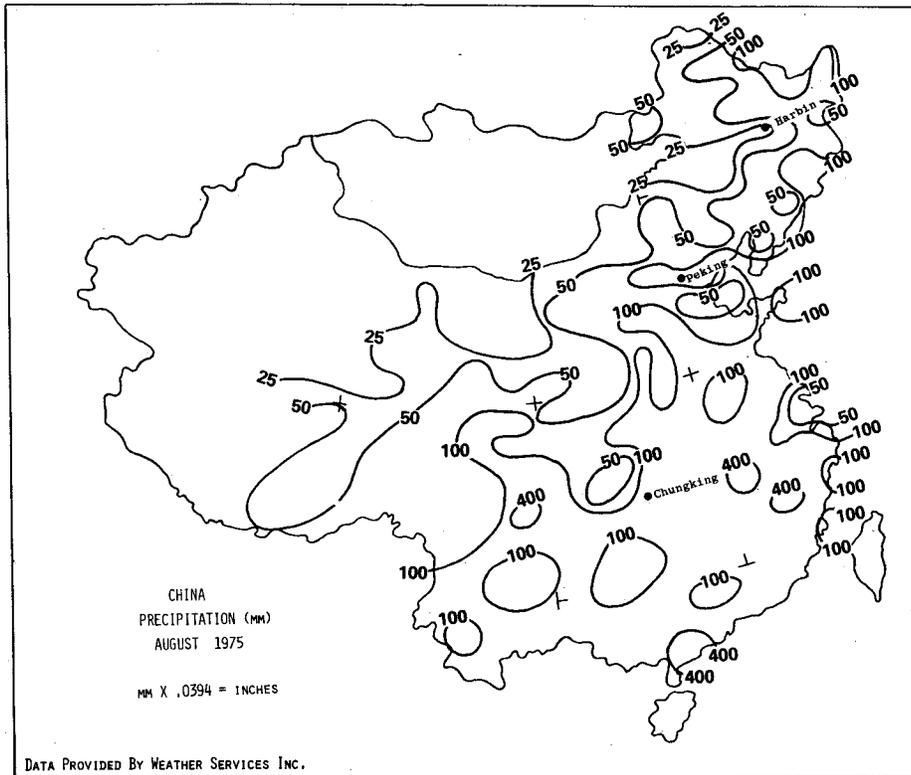
AVERAGE MONTHLY WEATHER OUTLOOK

AGRICULTURAL IMPLICATIONS: October precipitation is expected to be below normal across the Nation except in the Southwest and the Atlantic Coast States. Combined with near normal temperatures, conditions for harvesting and soybeans in the Corn Belt would be excellent. However, fall seeded grains could be short of needed moisture in currently dry areas of the Great Plains. Crops in

the Deep South, which are already late, will be delayed further if the weather continues wet and cool. Above normal precipitation in the rain-sodden Northeast would cause some problems in harvesting apples and fall vegetables. Winter pastures conditions would improve in the Southwest with above normal moisture.



CHINA



USING THE PALMER AND CROP MOISTURE INDEXES

The Palmer Index evaluates the scope, severity, and frequency of prolonged periods of abnormally wet or dry weather. For this purpose it works reasonably well. However, it does not provide a measure of the current status of agricultural drought, such as the effects of short periods of very dry weather. For this reason the Crop Moisture Index was developed to respond rapidly to changes in the soil moisture situation and to reflect only those moisture factors that affect vegetation and field operations.

The Palmer Index provides the best evaluation of the overall soil moisture situation since it reflects the effects of the weather over weeks and even months. The Crop Moisture Index is the most useful in determining the availability of moisture to meet current demands. For example, a recent rain may replenish the soil enough to meet current demands. But if the Palmer Index value is highly negative the overall soil moisture situation could still be very poor.

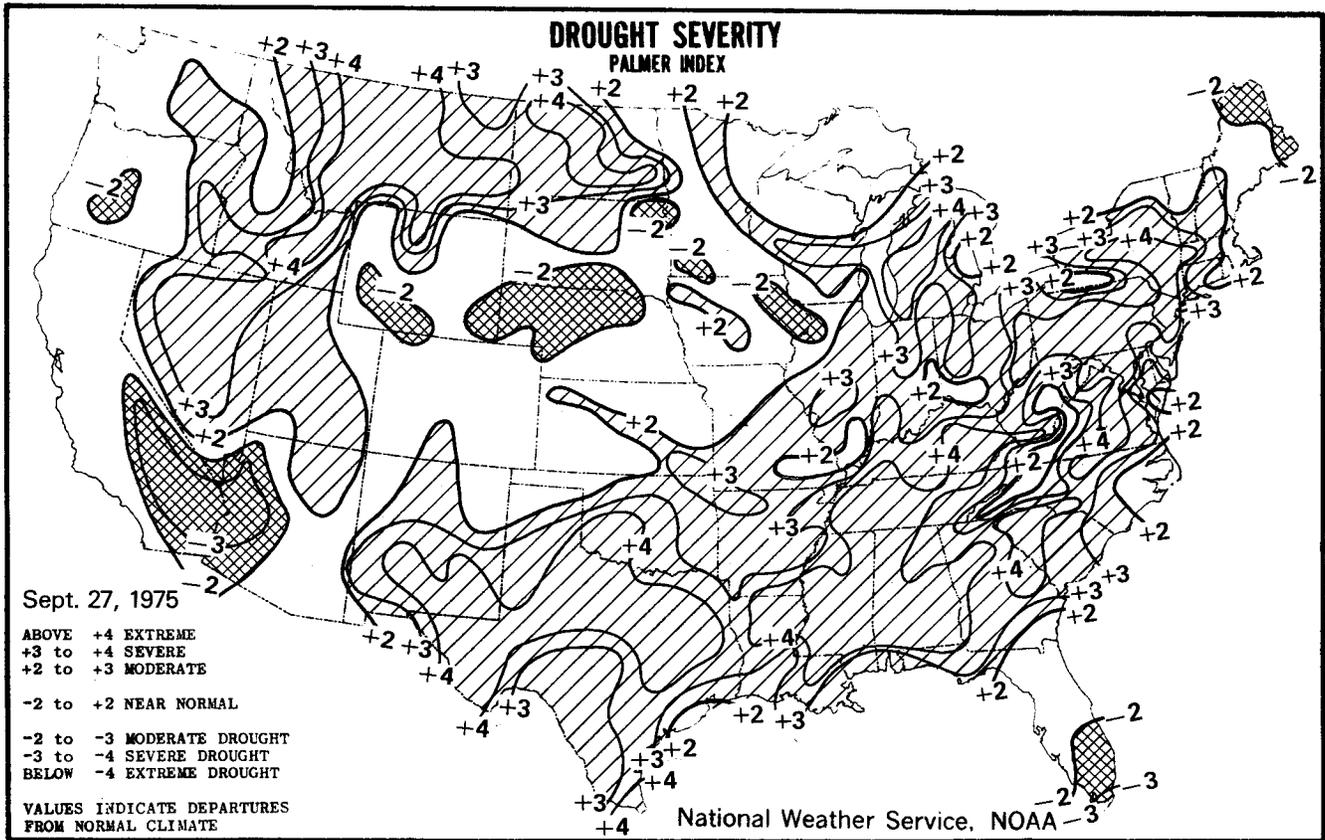
Negative CMI values mean that the demand for moisture, or the potential evapotranspiration, exceeded available supplies, and thus reduced actual

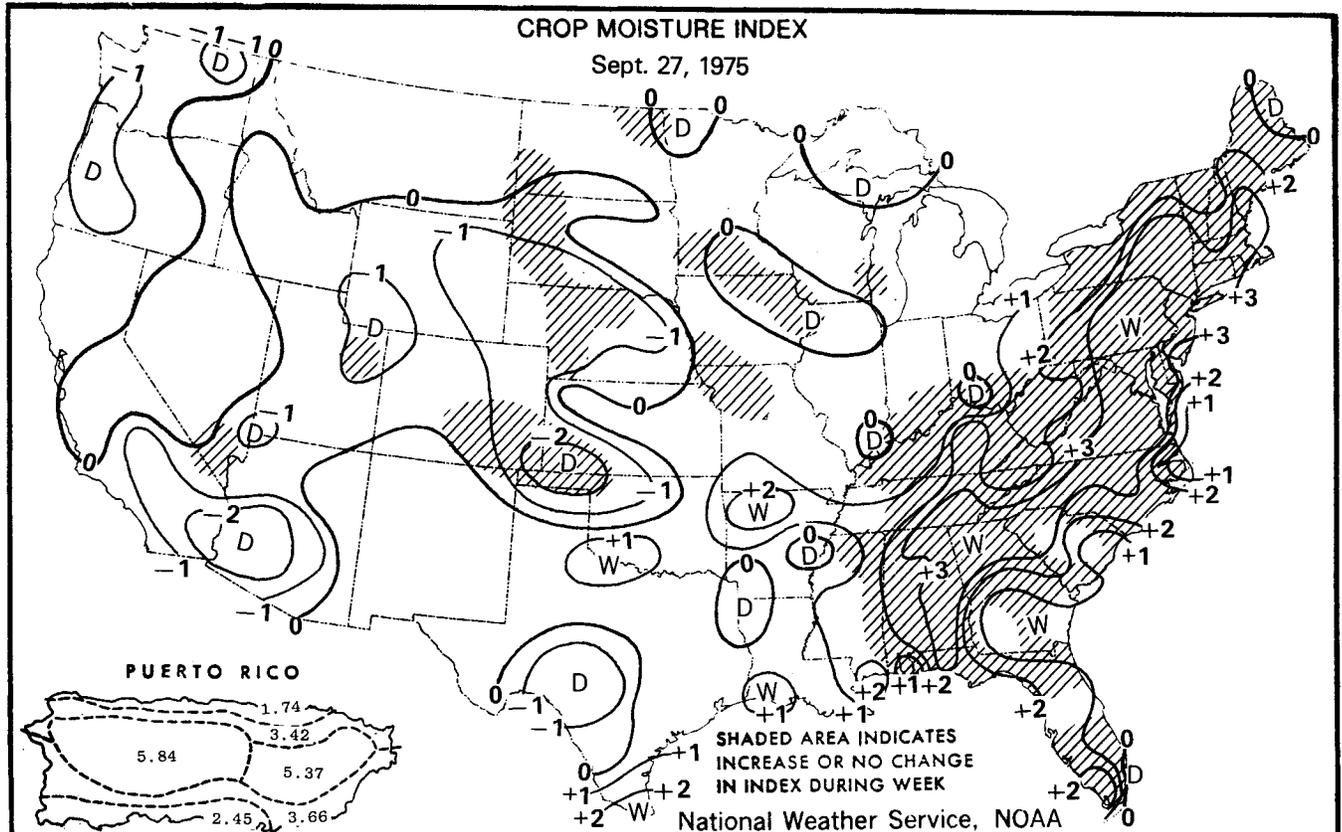
transpiration. On the other hand, positive CMI values mean either that actual evapotranspiration was greater than expected, or that recent rainfall exceeded crop moisture requirements and additional moisture went into the soil or was regarded as runoff.

Negative Palmer Index values imply negative abnormalities of evapotranspiration, moisture stored, in or added to the soil, runoff, or a combination of all these types of moisture shortages. In other words, negative PI values indicate abnormally dry weather but do not reflect the exact effects of dry weather.

Positive PI values indicate that the moisture supply either from current or previous rainfalls exceeds the amount needed to sustain soil moisture at a level considered normal and appropriate for the climate of the area.

In brief, Palmer Index values are based on all aspects of the moisture situation, but Crop Moisture values refer only to the current moisture requirements. PI values show long-term moisture conditions, whereas CMI values are more responsive to recent rainfall or its absence.





The map above gives a general picture of how wet or dry the nation was last week. The lines show the crop-moisture situation according to an index computed from values of temperature and precipitation by areas. Previous weekly computations of soil moisture account for the effect of prior weather.

Shaded areas are those where precipitation increased the index last week or where soils did not dry. Unshaded

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

areas dried last week. The centers of wet or dry areas are marked: W for wet; D for dry. Use the legend to interpret.

Local variations caused by isolated rain or by soil differences are not shown. Any interpretation must consider the type of agriculture and the stage of crop development.

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



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FARM PROGRESS

SEEDING

Percent of Acreage Seeded
 as of September 28

winter wheat

	Average	1975	1976
Colo.	86	81	84
Idaho	1/	30	40
Ill.	17	15	17
Ind.	20	15	10
Kans.	45	55	45
Mo.	1/	1/	15
Mont.	90	85	70
Nebr.	85	80	90
Ohio	23	23	10
Okla.	37	38	21
Pa.	1/	38	34
S. Dak.	88	79	93
Tenn.	25	20	16
Tex.	73	55	34
U. S.	1/	1/	37

HARVESTING

Percent of Acreage Harvested
 as of September 28

corn

	Average	1974	1975
Ga.	30	29	35
Ill.	5	4	12
Ind.	2/	2/	5
Iowa	5	2/	5
Kans.	15	15	25
Ky.	12	7	10
Mich.	1/	1/	2/
Minn.	4	4	4
Mo.	15	14	31
Nebr.	2/	5	10
N. C.	29	46	41
Ohio	10	5	5
Tex.	64	48	44
Wis.	1/	1/	2/
U. S.	8	8	11

soybeans

Average 1974 1975

Ark.	1/	1/	2/
Ga.	1/	1/	2/
Ill.	8	5	26
Ind.	10	5	5
Ia.	5	3	5
La.	8	14	9
Minn.	16	42	12
Miss.	7	4	3
Mo.	6	3	6
Ohio	15	10	5
U. S.	6	6	8

sorghum

Average 1974 1975

Colo.	1/	1/	2/
Kans.	10	5	15
Mo.	13	8	33
Nebr.	5	10	25
Okla.	14	13	20
S. Dak.	11	12	10
Texas	51	53	64
7-State	30	30	41



1/Data not available
 2/Less than 5%