

# WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service and World Agricultural Outlook Board

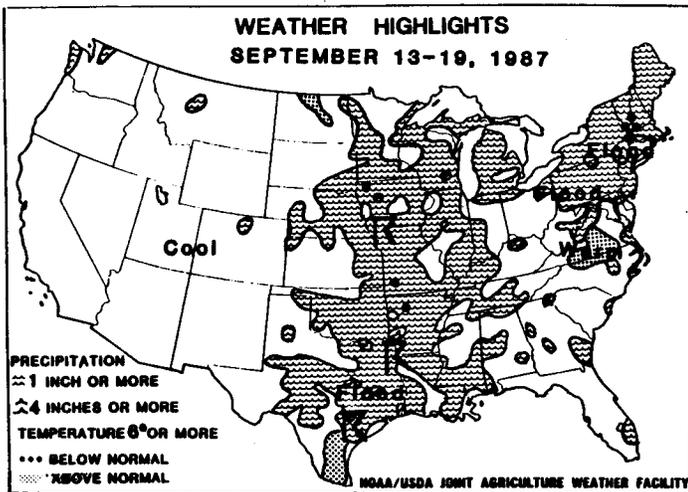
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Sept. 22, 1987

## National Weather Summary

September 13 to 19, 1987



**HIGHLIGHTS:**...The week was generally wet in the Mississippi Valley, parts of the central and southern Plains, the Great Lakes, and the Northeast. Local flooding developed in Texas, Oklahoma, Pennsylvania, southern New York, and southern New England. The western third of the Nation had mostly fair weather, except for western Washington. There were some relatively dry pockets in the Ohio Valley and the Tennessee Valley, also along the Coastal Plains from Georgia to North Carolina. Florida was generally warm and dry. High pressure over the Pacific Northwest and northern Rockies brought scattered frost to those regions.

**SUNDAY:**...A warm front extending from the upper Great Lakes to the mid-Atlantic Coast caused widespread heavy showers and thunderstorms from the Middle Atlantic States to New England. Showers and thunderstorms were associated with a frontal system extending from the Great Lakes southwestward into Texas. Large hail caused some damage in northwest Texas. Generally fair weather was observed over most of the West and over the northern Plains.

**MONDAY:**...Along the Atlantic Coast, the heavy rain since Sunday came gradually to an end. Severe thunderstorms with hail developed in the central United States from Minnesota southward to Texas. The severe weather was associated with a developing low-pressure system over the central Plains. In the meantime, rain was falling in the Pacific Northwest.

**TUESDAY:**...Scattered heavy showers and thunderstorms continued over the central and southern Plains and the Mississippi Valley, and local

flooding developed, particularly in parts of Texas where soils were already saturated. A few showers and thunderstorms also developed over northern Florida.

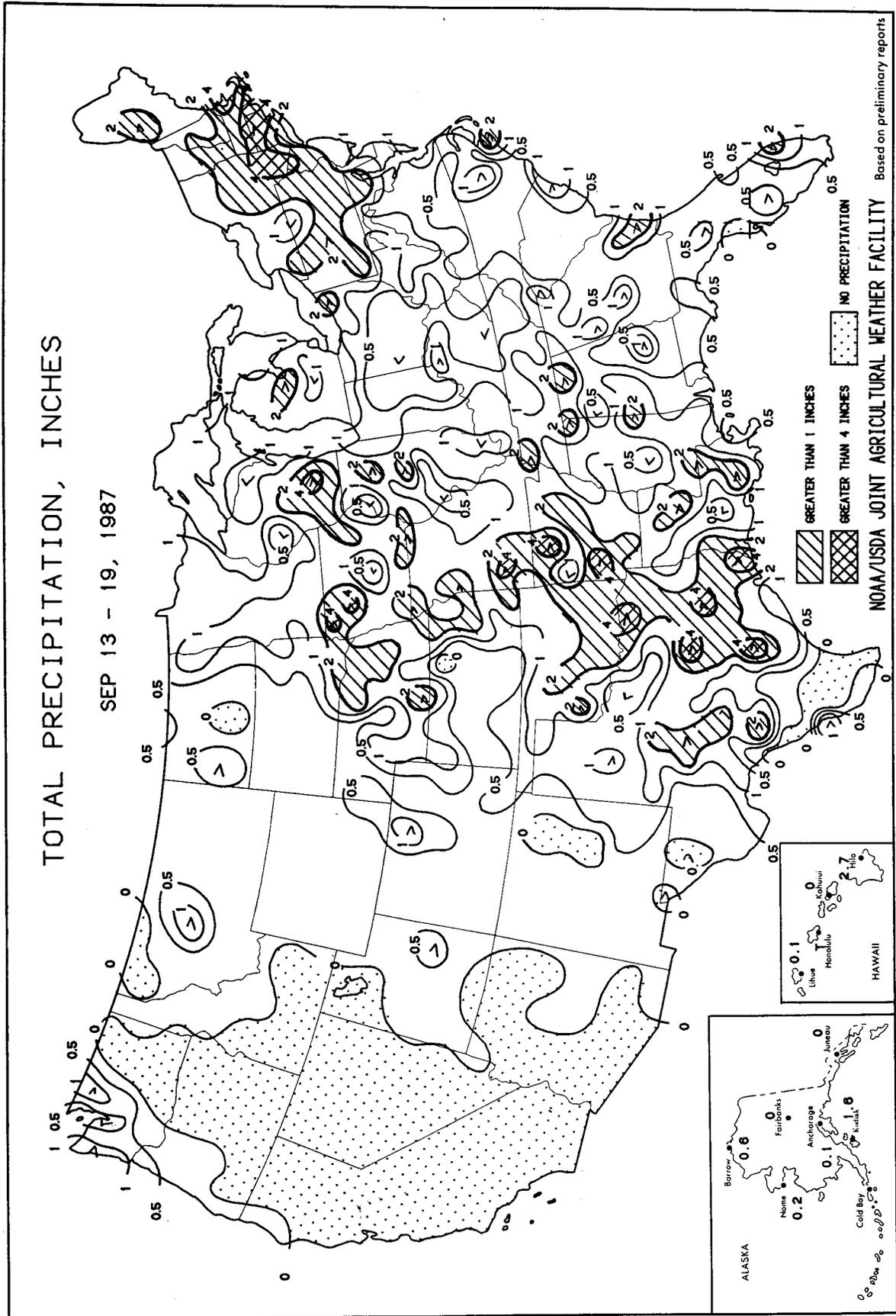
**WEDNESDAY:**...Showers fell across the central and northern Plains, Great Lakes, and Ohio Valley. Scattered, heavy showers and thunderstorms with strong gusty winds swept across parts of Texas, Louisiana, and Arkansas. It was mostly sunny from the Rocky Mountains to the Pacific Coast. Florida experienced unusually warm weather.

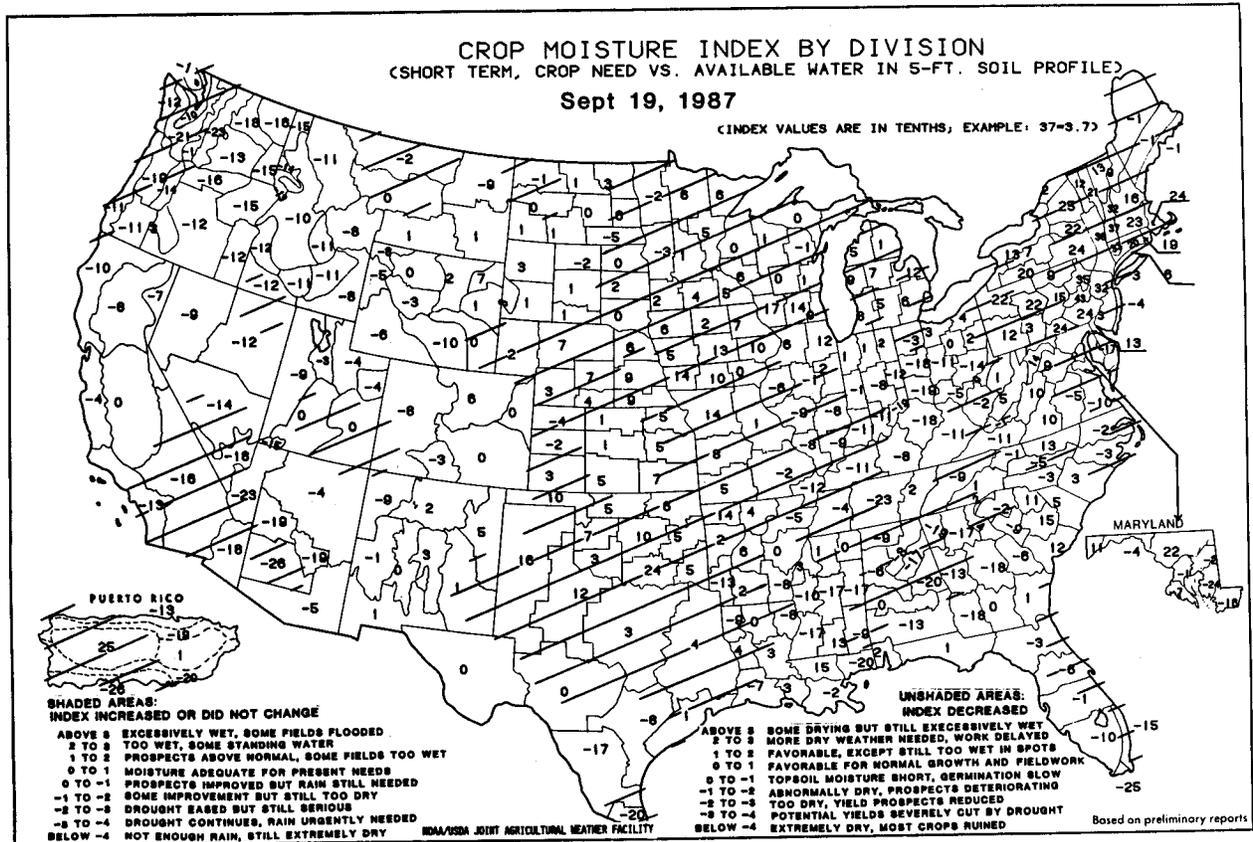
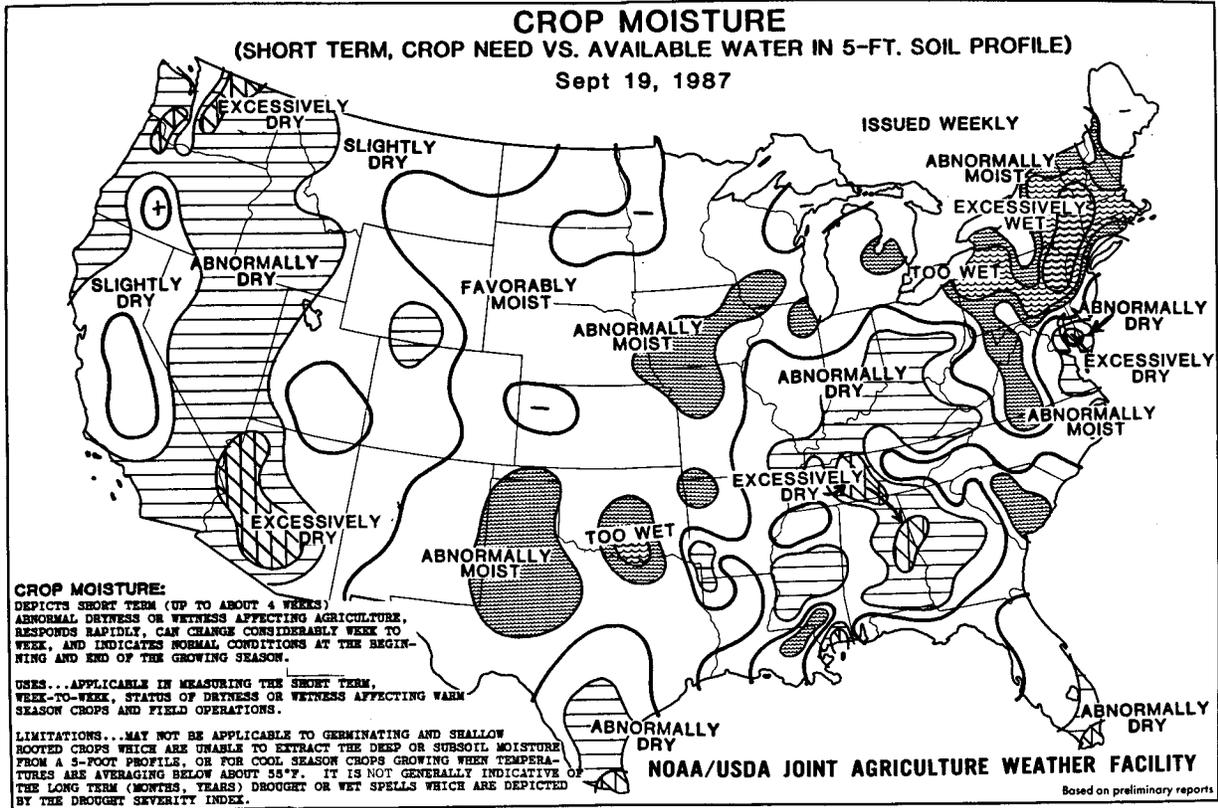
**THURSDAY:**...Skies cleared gradually over the southern Plains and parts of the central Plains. Morning temperatures were mostly in the 30's and 40's across Idaho, Montana, and Wyoming, but some were in the 20's. Mild weather prevailed over most of the eastern half of the Nation, with generally warm weather over the Gulf States. Frontal systems brought scattered showers and thunderstorms from the upper Great Plains eastward all the way to the Atlantic Coast, with heaviest rainfall in the Corn Belt and over the Great Lakes. Another band of precipitation appeared along the Gulf Coast, with parts of Texas and Louisiana receiving over 3 inches of rainfall.

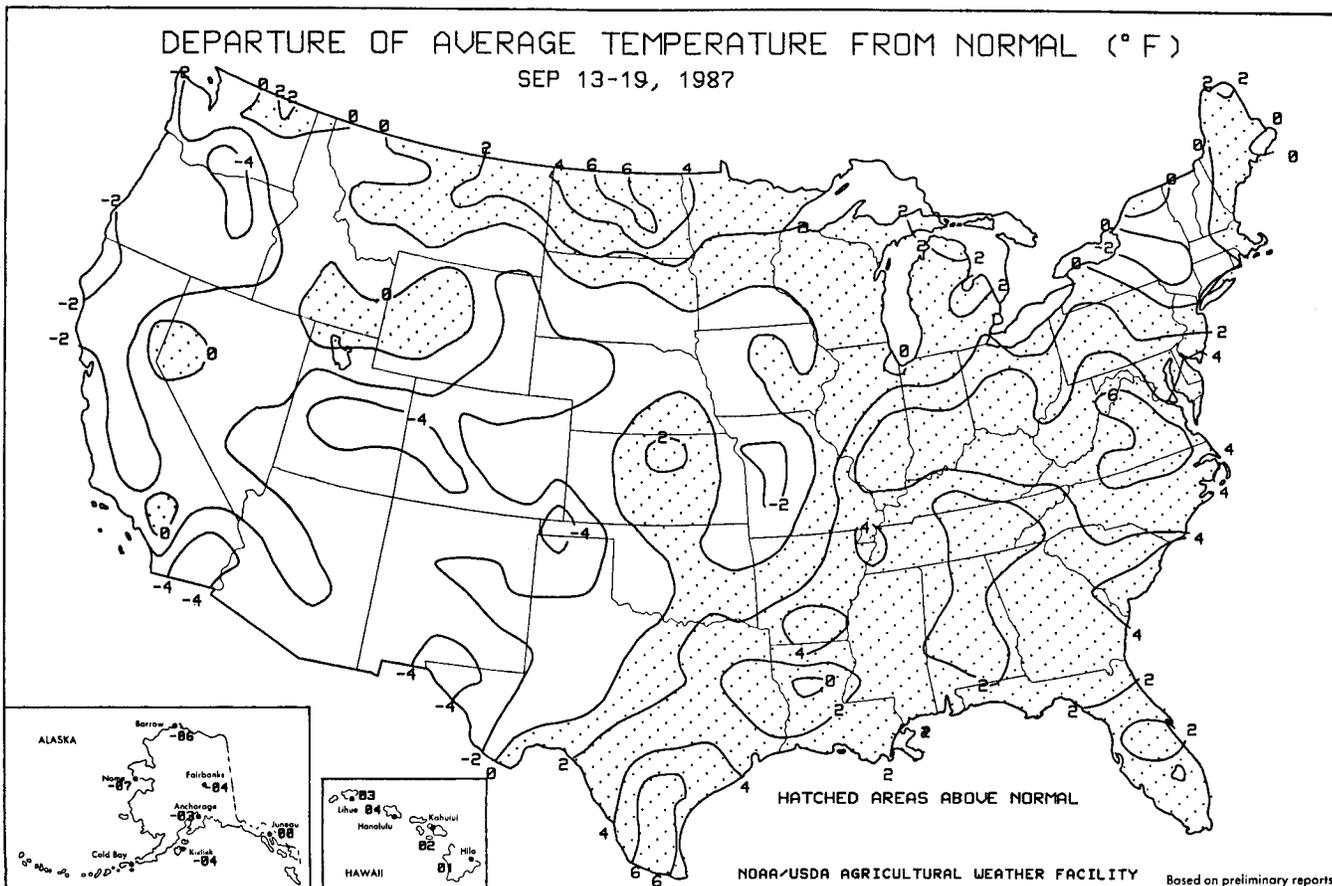
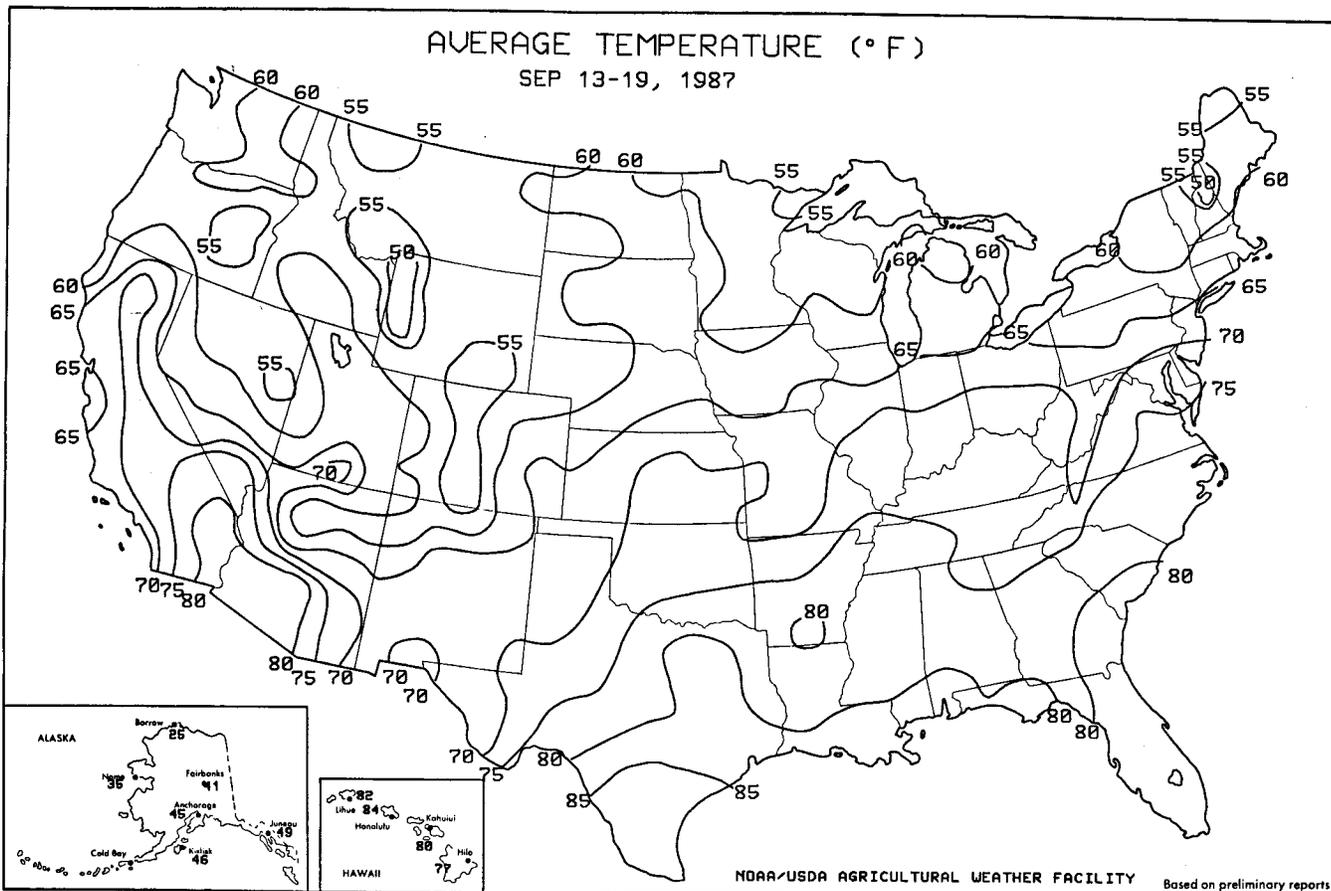
**FRIDAY:**...Flash flooding struck parts of southwestern Pennsylvania. Heavy rains fell along a front stretching from west to east from the Great Lakes to southern New England. Showers and thunderstorms extended from eastern New Mexico and Texas across parts of Oklahoma, Kansas, and Nebraska. Some local flooding occurred in Texas and Oklahoma. Showers and thunderstorms spread into Arkansas, Louisiana, and Mississippi late in the day. High pressure continued to give fair weather with scattered frost to the Pacific Northwest and the northern Rockies.

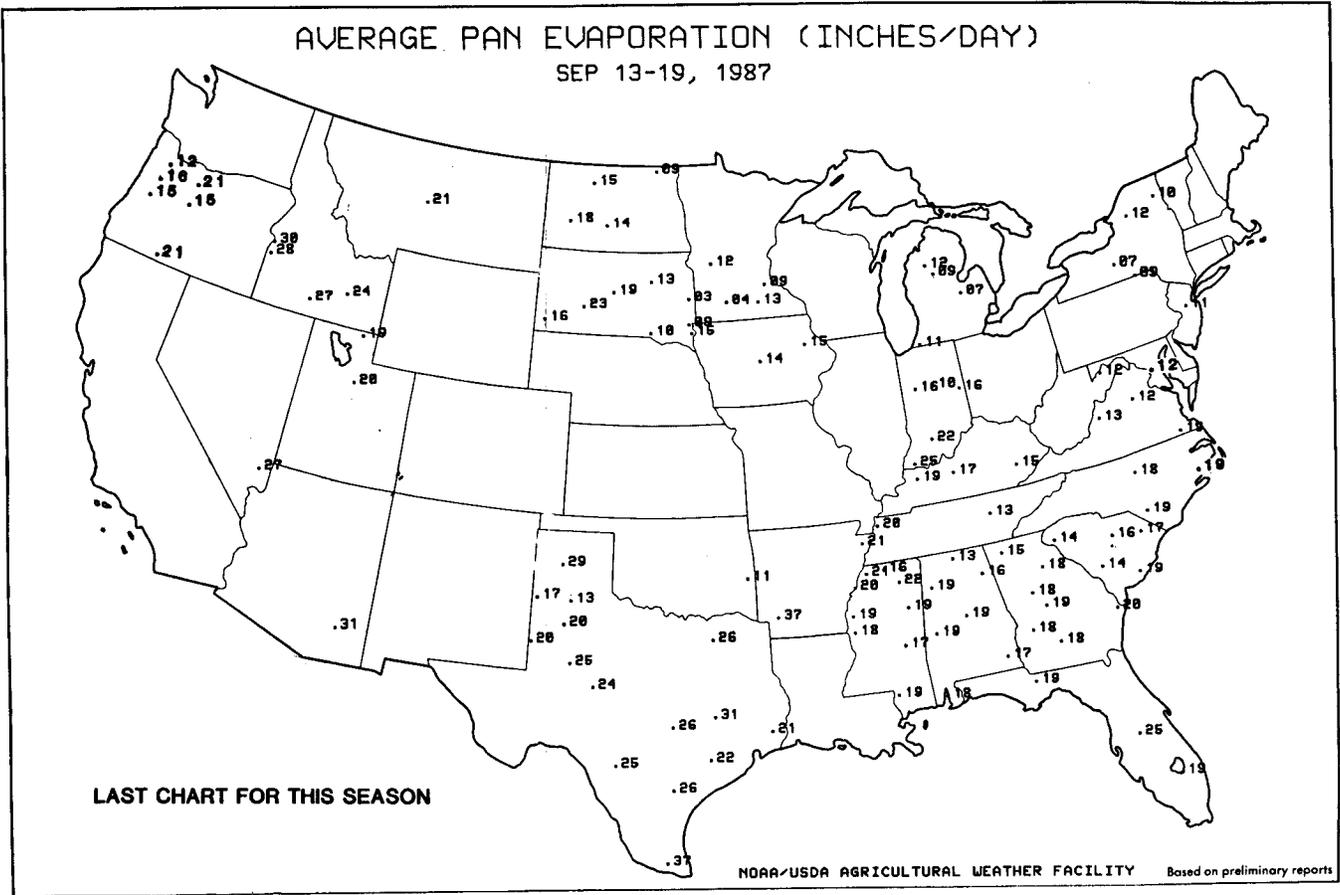
(continued to p. 9)

Contents	Page
National Weather Summary	1
Total Precipitation	2
Crop Moisture & Crop Moisture Index	3
Average Temperature & Departure	4
Pan Evaporation & North American Satellite Image	5
National Water Conditions, August 1987	6
Total Growing Degree Days & Departure	8
National Weather Data for Selected Cities	9
Summer Weather Review	12
Summer Precipitation & Percent of Normal	13
Summer Average Temperature	14
National Agricultural Summary	15
Crop Progress & Condition Tables	16
State Summaries of Weather and Agriculture	18
International Weather and Crop Summary	24
African Agricultural Summary	27
Subscription and Mailing Permit Information	28

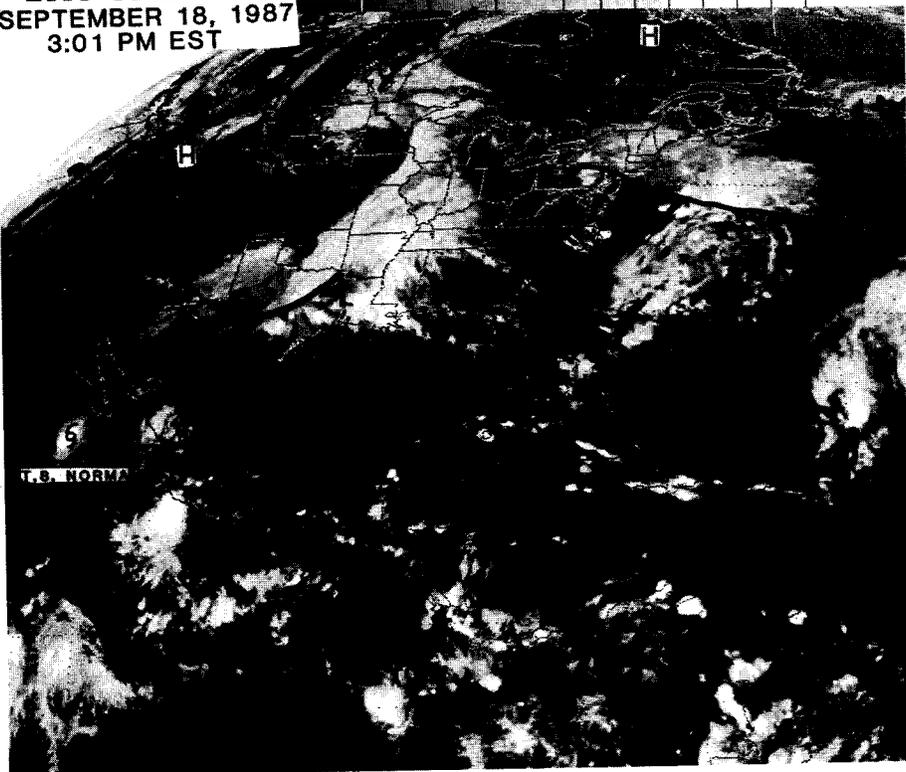








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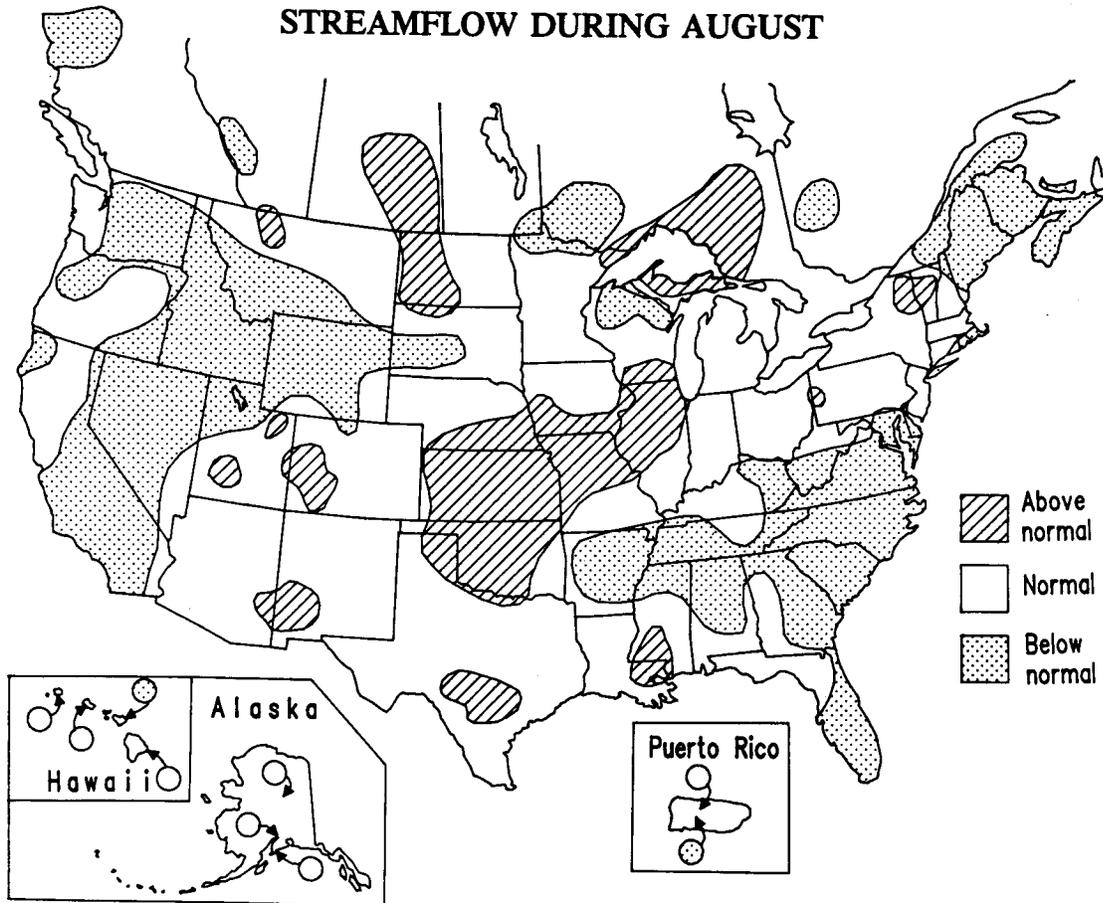
HEAVY RAIN FALLS OVER THE NORTHEAST. A SLOW MOVING LOW PRESSURE SYSTEM CAUSES WIDE-SPREAD SHOWERS AND THUNDERSTORMS OVER THE MISSISSIPPI VALLEY AND SOUTHERN PLAINS. THE MOST SEVERE THUNDERSTORMS ARE OVER TEXAS AND LOUISIANA. TROPICAL STORM NORMA OFF THE COAST OF BAJA CALIFORNIA LOSES STRENGTH RAPIDLY.

# National Water Conditions

UNITED STATES  
Department of the Interior  
Geological Survey

CANADA  
Department of the Environment  
Water Resources Branch

## AUGUST 1987



Severe flooding occurred in Cook and Du Page Counties in Illinois on August 14 and minor flooding occurred in southwestern Iowa August 25-26.

Flows generally increased from July to August in only two States, Arizona and Michigan. Streamflow generally changed variably in Alaska, Hawaii, New Mexico, Louisiana, Mississippi, Florida, Georgia, North Carolina, New Jersey, Connecticut, Illinois, Iowa, and Minnesota. Flow generally decreased in the rest of southern Canada and the United States.

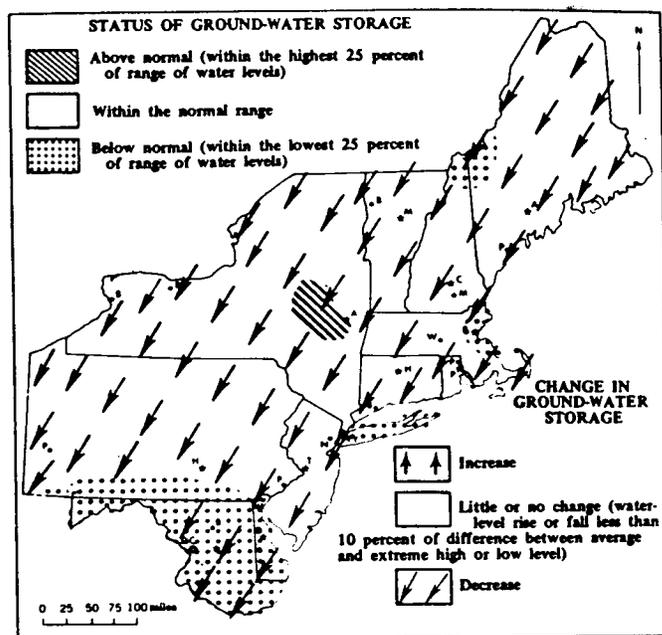
Streamflow was in the normal to above-normal range at 59.7 percent of the 191 reporting index stations in southern Canada, the United States, and Puerto Rico, compared with the 58 percent in those ranges for last month. This is the lowest percentage of stations with flow in the normal to above-normal range for August in the last 5 years. Total August flow was the lowest in the last 5 years, about 176,520 cubic feet per second (c.f.s.) and 12.3 percent below that of August 1985, the second lowest August during the period.

Mean August elevations for the Great Lakes (provisional National Ocean Service data) ranged from 0.86 foot (Lake Erie) to 1.70 feet (Lake Ontario) lower than those for August 1986.

The level of Utah's Great Salt Lake fell 0.60 foot during August, reaching 4,210.10 feet above National Geodetic Vertical Datum of 1929 on August 31.

Contents of 74 percent of reporting reservoirs were near or above average for the end of August, compared with 78 percent for the end of July.

The combined flow of the three largest rivers in the lower 48 States (Mississippi, St. Lawrence, and Columbia) averaged a below-normal 643,500 c.f.s. during August, 12.8 percent below median and 26.5 percent below last month's flow. Mean flow of the Columbia River at The Dalles, Oregon, set a record low for August after decreasing by about 41 percent from that for July and was in the below-normal range for the third consecutive month.



Map showing ground-water storage near end of August and change in ground-water storage from end of July to end of August.

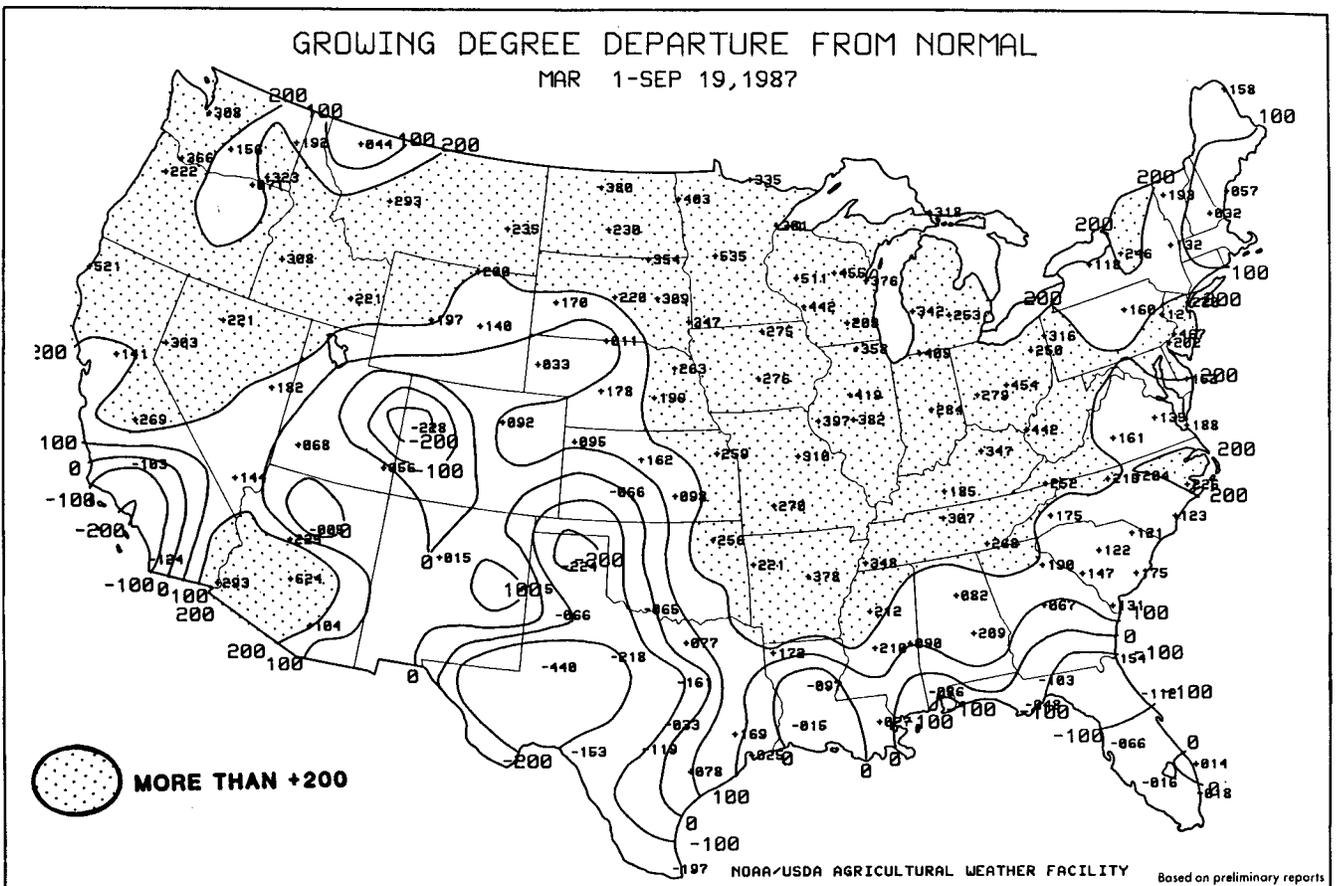
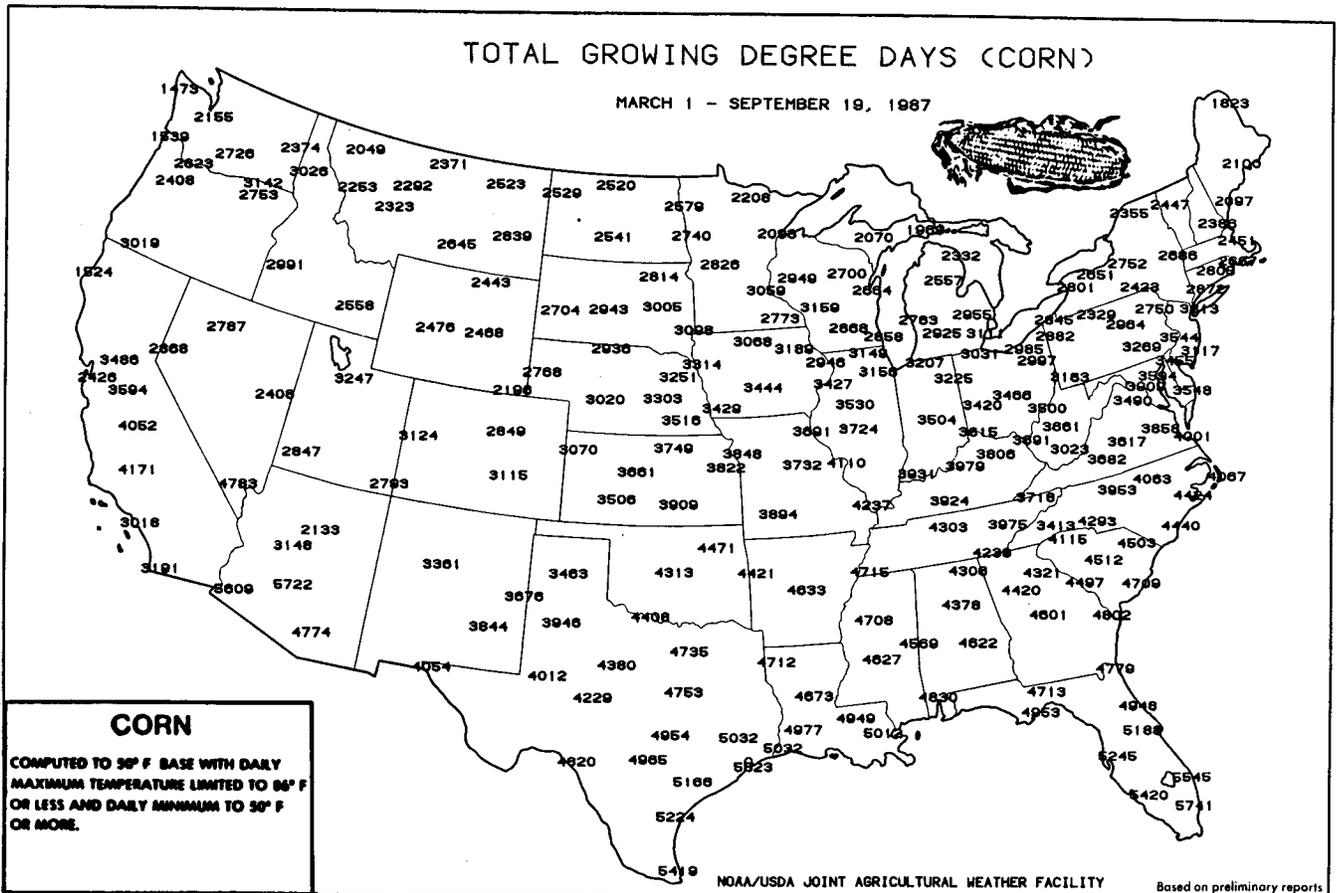
#### GROUND-WATER CONDITIONS DURING AUGUST 1987

Ground-water levels declined seasonally in nearly the entire Northeast region (See map). Levels near the end of August were near average for this time of the year in most of the region, except for Maryland and Delaware where below-average water-level conditions prevailed. Levels were below average also on Long Island, New York, in extreme northern New Hampshire, an adjoining part of Maine, and in part of the Boston, Massachusetts, metropolitan area. Levels were above average in part of east-central New York State.

In the Southeastern States, ground-water levels declined in Kentucky, Virginia, Arkansas, and Mississippi. Changes were mixed in West Virginia, North Carolina, Louisiana, and Georgia. A new low ground-water level for August occurred in the key well at Memphis, Tennessee, despite a slight net rise during the month. Several wells in the central delta of the Mississippi River reached new August low levels.

In the central and western Great Lakes States, ground-water levels rose in Iowa, declined in Wisconsin and Ohio, and changed variably in Minnesota and Michigan. Water levels were above average in Iowa, below average in Michigan and Ohio, and mixed with respect to average in Minnesota. Levels were near average in Wisconsin and in the normal range in Indiana. A new high level for August was in the key well at Marion, Iowa.

In the Western States, ground-water levels rose in Idaho and declined in Washington, southern California, Utah, and Arizona. Mixed water-level changes occurred in North Dakota, Nebraska, Nevada, Kansas, New Mexico, and Texas. Water levels were mixed with respect to average in Idaho, North Dakota, Nebraska, southern California, Nevada, Utah, Kansas, New Mexico, and Texas. New high August ground-water levels, despite net declines during the month, occurred in the Steptoe Valley well in Nevada, in the Blanding area well in Utah, and in the Berrendo-Smith well in New Mexico. New, August-low levels were in the Las Vegas Valley, Nevada; Logan, Utah; and in the key well at El Paso, Texas.



# National Weather Data for Selected Cities

## Weather Data for the Week Ending September 19, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT.	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	52 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		°F	°F	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	86	66	90	60	76	2	.8	-.2	.5	3.6	128	33.4	80	95	55	1	0	3	1		
MOBILE	90	71	94	70	81	2	1.0	-.5	.4	3.2	71	57.7	114	99	53	3	0	4	0		
MONTGOMERY	90	67	93	63	79	2	.2	-.9	.1	3.0	98	44.9	120	97	49	5	0	3	0		
AK ANCHORAGE	53	37	59	28	45	-3	1.1	-.4	.1	1.4	91	8.7	86	88	46	0	2	3	0		
BARROW	31	18	35	13	25	-6	.6	.5	.2	1.1	292	4.5	134	95	68	0	7	6	0		
FAIRBANKS	51	31	61	21	41	-4	.1	-.3	.1	.2	31	4.6	58	82	40	0	4	0	0		
JUNEAU	52	46	56	45	49	0	1.6	.1	.5	5.7	149	33.2	101	99	75	0	0	7	0		
KODIAK	52	39	56	33	46	-4	1.6	.1	.6	3.7	96	51.5	129	92	63	0	5	5	0		
NOME	41	29	43	20	35	-7	.2	-.3	.1	1.5	91	7.3	67	82	50	0	6	3	0		
AZ PHOENIX	96	72	99	68	84	-1	0	-.1	0	0	0	4.7	98	37	15	7	0	0	0		
PRESCOTT	82	48	85	42	65	0	0	-.3	0	.3	27	9.7	68	53	15	0	0	0	0		
TUCSON	93	63	97	57	78	-3	0	-.3	0	1.4	158	9.6	117	53	16	5	0	0	0		
YUMA	97	71	103	65	84	-4	0	-.1	0	0	0	1.1	70	50	18	6	0	0	0		
AR FORT SMITH	85	63	94	54	74	0	.7	-.1	.3	1.1	54	27.1	94	97	54	4	0	2	0		
LITTLE ROCK	85	66	91	61	76	1	2.2	1.2	.9	3.9	142	28.1	78	90	60	2	0	4	2		
CA BAKERSFIELD	88	58	96	55	73	-4	0	0	0	0	14	4.1	104	71	27	3	0	0	0		
EUREKA	63	52	70	47	58	1	0	-.2	0	0	2	18.0	78	90	72	0	0	1	0		
FRESNO	88	56	95	54	72	-2	0	0	0	0	6.7	94	80	27	3	0	0	0	0		
LOS ANGELES	73	63	75	61	68	-2	0	0	0	0	3.0	36	92	63	0	0	0	0	0		
REDDING	88	56	95	52	72	-4	0	-.2	0	0	19.3	75	62	19	3	0	0	0	0		
SACRAMENTO	86	53	93	50	70	-2	0	-.1	0	0	8.8	81	89	26	3	0	0	0	0		
SAN DIEGO	74	63	75	60	68	-3	0	-.1	0	0	0	5.1	81	85	64	0	0	0	0		
SAN FRANCISCO	73	55	84	52	64	0	0	0	0	0	8.5	68	89	47	0	0	0	0	0		
CO DENVER	73	47	87	39	60	-2	.6	.3	.4	.7	86	15.9	128	80	36	0	0	4	0		
GRAND JUNCTION	77	48	81	42	62	-5	.1	-.1	.1	.1	29	8.1	146	65	21	0	0	2	0		
PUEBLO	81	49	91	42	65	-1	0	-.1	0	.2	38	9.3	103	86	26	2	0	2	0		
CT BRIDGEPORT	71	60	80	53	66	0	1.5	.8	1.4	2.4	117	25.6	87	91	61	0	0	4	2		
HARTFORD	70	54	80	48	62	-1	5.5	4.6	3.2	6.8	267	35.5	114	98	61	0	0	2	1		
DC WASHINGTON	83	68	87	63	75	4	.3	-.4	.2	4.3	204	26.3	91	96	60	0	0	3	0		
FL APALACHICOLA	90	73	94	68	82	2	.7	-1.4	.7	4.0	69	40.2	94	97	60	4	0	2	1		
DAYTONA BEACH	90	71	93	70	81	1	.1	-1.5	.1	4.5	104	35.7	97	98	56	5	0	2	0		
JACKSONVILLE	92	73	93	70	82	3	.4	-1.1	.3	6.8	155	37.5	91	97	52	6	0	2	0		
KEY WEST	91	80	93	77	85	2	.1	-1.4	.1	2.4	61	27.5	102	86	59	7	0	1	0		
MIAMI	92	76	94	74	84	2	1.1	-.8	.6	1.5	30	28.1	66	93	56	6	0	5	1		
ORLANDO	94	75	96	74	84	3	.3	-1.2	.3	5.7	134	39.6	98	94	46	7	0	1	0		
TALLAHASSEE	92	68	94	65	80	1	.8	-.7	.8	3.6	83	60.0	117	98	47	6	0	2	1		
TAMPA	91	74	93	72	83	1	0	-1.5	0	1.9	44	39.9	104	96	54	6	0	0	3		
WEST PALM BEACH	91	75	94	73	83	2	3.0	.8	1.8	4.2	73	35.4	83	96	57	6	0	4	0		
GA ATLANTA	86	68	90	62	77	4	.2	-.5	.1	1.7	81	37.7	101	93	51	1	0	2	0		
AUGUSTA	89	68	94	67	79	4	.2	-.7	.2	1.6	67	35.1	102	97	49	4	0	1	0		
MACON	89	68	92	65	79	2	.4	-.4	.4	1.5	67	32.9	93	98	55	2	0	1	0		
SAVANNAH	90	73	92	71	81	5	.9	-.3	.9	7.8	218	52.4	127	96	56	4	0	2	1		
HI HILO	83	71	85	68	77	1	2.7	1.3	1.0	8.0	189	86.0	98	95	71	0	0	7	2		
HONOLULU	91	77	92	75	84	4	0	-.1	0	.5	157	4.1	28	80	50	7	0	2	0		
KAHULUI	88	72	90	70	80	2	0	-.1	0	.1	47	21.0	171	85	52	1	0	0	0		
LIHUE	86	78	87	76	82	3	.1	-.4	.1	1.5	120	16.9	62	83	66	0	0	1	0		
ID BOISE	77	45	88	35	61	-2	0	-.1	0	0	0	6.5	82	55	18	0	0	0	0		
LEWISTON	78	49	84	42	64	0	0	-.2	0	0	0	8.0	88	50	19	0	0	0	0		
POCATELLO	76	43	87	30	60	1	0	-.1	0	0	0	8.4	110	58	16	0	2	0	0		
IL CHICAGO	73	57	81	46	65	1	.6	-.4	.4	.8	22	32.9	125	98	62	0	0	5	0		
MOLINE	75	56	83	47	65	1	.4	-.5	.3	.8	31	28.8	99	96	58	0	0	3	0		
PEORIA	77	57	85	45	67	1	.7	-.1	.5	1.0	42	19.0	70	97	55	0	0	4	0		
QUINCY	78	56	84	48	67	0	1.1	.1	.9	1.4	52	21.8	75	93	57	0	0	3	1		
ROCKFORD	72	53	80	43	63	0	1.2	.3	1.0	1.3	56	32.3	115	100	65	0	0	4	1		
SPRINGFIELD	82	58	91	48	70	2	.3	-.4	.3	.4	20	19.3	73	95	46	1	0	3	0		
IN EVANSVILLE	87	.63	93	55	75	5	1.3	.6	.8	1.3	74	23.5	75	97	42	3	0	5	1		
FORT WAYNE	76	59	80	51	67	3	.4	-.2	.3	.7	39	24.6	95	98	58	0	0	3	0		
INDIANAPOLIS	81	60	88	54	71	4	.7	.1	.3	.9	52	24.3	82	95	49	0	0	3	0		
SOUTH BEND	72	58	77	50	65	1	1.4	.6	.8	2.6	126	24.2	87	96	61	0	0	4	1		
IA DES MOINES	73	56	81	47	65	0	.5	-.2	.2	1.4	67	30.1	121	95	62	0	0	4	0		
SIOUX CITY	72	53	86	46	63	-1	1.3	.8	.8	1.4	86	22.9	108	96	63	0	0	4	1		
WATERLOO	72	53	78	45	63	1	1.8	1.0	.7	1.8	80	26.9	102	97	58	0	0	6	2		
KS CONCORDIA	81	60	88	53	70	3	0	-.7	0	1.2	59	30.4	135	86	43	0	0	0	0		
DODGE CITY	80	57	88	52	69	0	.5	.1	.3	1.5	121	22.0	127	94	40	0	0	3	0		
GOODLAND	76	49	91	40	62	-2	1.3	1.0	1.1	1.5	158	18.2	132	95	40	1	0	3	1		
TOPEKA	79	58	82	48	69	0	.7	-.2	.6	1.8	81	31.4	119	94	52	0	0	2	1		
WICHITA	82	59	86	52	71	0	.2	-.6	.2	.8	37	32.6	145	96	46	0	0	2	0		
KY BOWLING GREEN	83	61	86	54	72	1	1.8	1.1	1.2	2.6	127	31.8	87	99	51	0	0	4	0		
LEXINGTON	84	63	89	53	74	5	.2	-.6	.1	.3	13	26.7	76	92	44	0	0	2	0		
LOUISVILLE	85	64	91	56	75	5	.4	-.4	.2	.7	31	24.5	75	94	41	1	0	4	0		
LA ALEXANDRIA	86	67	93	64	77	-1	1.0	.3	.5	1.5	74	39.9	101	98	68	3	0	5	1		
BATON ROUGE	89	72	93	69	81	3	.3	-.8	.1	.4	12	52.4	123	97	58	3	0	3	0		
LAKE CHARLES	90	71	93	66	80	2	1.2	-.1	.6	3.8	101	48.0	123	98	63	5	0	3	1		
NEW ORLEANS	90	72	93	70	81	3	.3	-1.1	.2	.4	11	53.2	116	98	51	4	0	3	0		

Based on 1951-80 normals.

(continued from front cover)  
 SATURDAY...Moderate to heavy rain continued in the Northeast, the Great Lakes region, and along the Appalachian Mountain range. The western half of the Nation experienced generally fair weather.

Weather Data for the Week Ending September 19, 1987

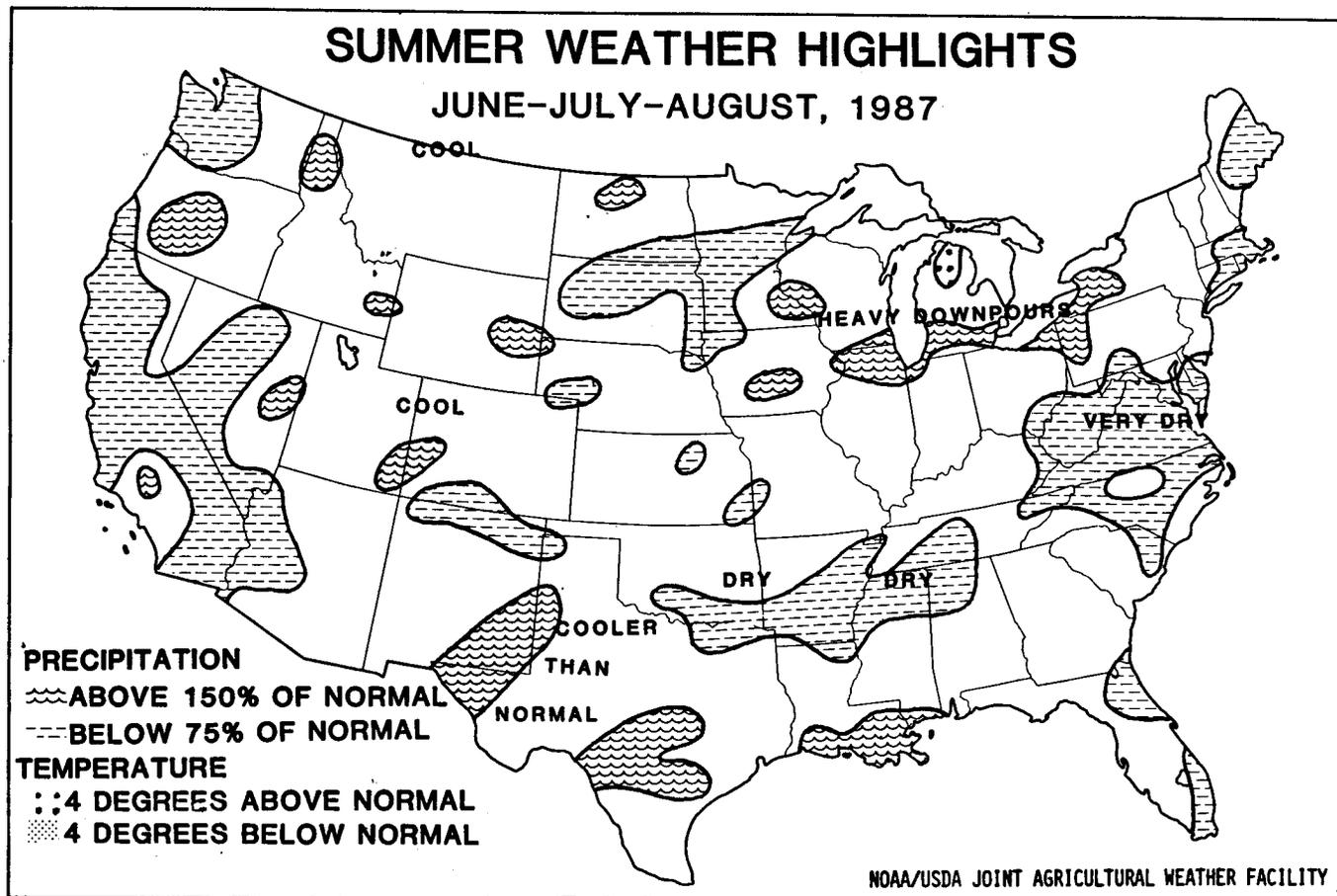
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	89	69	96	63	79	2	.6	-.2	.3	.7	35	29.5	91	97	52	3	0	4	0
ME CARIBOU	62	47	71	41	55	1	1.0	.2	.5	2.7	119	20.1	78	98	65	0	0	3	1
PORTLAND	70	52	78	48	61	2	1.2	.4	1.1	2.2	112	30.0	103	95	55	0	0	2	1
MD BALTIMORE	81	65	86	60	73	4	3.6	2.9	1.2	6.6	291	30.9	100	100	62	0	0	6	3
SALISBURY	83	67	87	63	75	7	.9	0	.6	3.7	139	28.8	86	98	55	0	0	3	1
MA BOSTON	72	60	81	58	66	1	4.7	3.9	2.3	5.9	272	35.9	118	89	63	0	0	3	3
CHATHAM	67	58	75	57	63	1	4.1	3.2	2.4	6.0	249	38.0	118	94	73	0	0	3	2
MI ALPENA	70	48	76	40	59	2	1.0	.3	.5	1.4	69	16.4	76	99	59	0	0	1	1
DETROIT	73	58	77	53	66	2	1.6	1.1	.8	2.1	142	27.9	121	99	64	0	0	5	1
FLINT	72	54	77	46	63	2	.6	.1	.4	4.4	277	20.3	93	100	68	0	0	3	0
GRAND RAPIDS	71	54	76	44	62	0	1.5	.7	.6	3.4	163	23.9	98	99	65	0	0	6	1
HOUGHTON LAKE	67	51	75	41	59	2	2.0	1.3	1.9	2.5	137	16.8	82	95	65	0	0	3	1
LANSING	72	53	76	44	63	1	.6	-.1	.4	2.7	137	20.2	92	98	61	0	0	4	0
MARQUETTE	67	46	78	40	57	0	1.3	.4	.5	1.7	71	23.5	106	97	58	0	0	4	0
MUSKEGON	71	55	78	44	63	2	1.4	.7	.9	1.5	79	21.6	98	97	64	0	0	5	1
SAULT ST. MARIE	69	48	75	43	59	4	1.1	.2	1.1	1.3	53	18.9	81	96	51	0	0	2	1
MN ALEXANDRIA	69	51	80	42	60	3	1.5	1.0	.7	2.4	156	14.8	74	98	54	0	0	3	2
DULUTH	65	47	78	41	56	2	1.7	1.0	.8	2.6	119	16.5	71	97	62	0	0	3	2
INT'L FALLS	67	48	76	39	57	5	.5	-.3	.3	1.3	64	17.8	93	96	56	0	0	2	0
MINNEAPOLIS	68	51	76	44	60	-1	.6	0	.3	1.2	72	28.2	132	96	62	0	0	4	0
ROCHESTER	67	49	74	42	58	-1	.6	-.2	.2	2.0	89	22.0	98	99	68	0	0	5	0
MS GREENWOOD	89	69	93	58	79	3	.9	.1	.6	1.0	47	31.5	81	94	51	3	0	3	1
JACKSON	88	68	94	62	78	1	.4	-.4	.2	1.5	65	39.3	101	98	58	2	0	4	0
MERIDIAN	88	67	93	63	78	2	1.1	.3	.6	4.2	183	46.5	115	100	58	4	0	5	1
MO CAPE GIRARDEAU	85	63	90	56	74	-1	1.7	.8	1.5	2.8	111	28.2	84	96	48	2	0	4	1
COLUMBIA	77	58	84	51	67	-2	.9	0	.5	2.1	83	22.2	79	95	58	0	0	4	1
KANSAS CITY	77	58	82	50	67	-2	2.0	1.0	1.2	3.6	132	28.6	102	96	55	0	0	4	2
SAINT LOUIS	82	63	90	53	73	3	.3	-.3	.3	.5	29	24.0	93	86	46	1	0	3	0
SPRINGFIELD	79	56	90	45	68	-2	3.2	2.2	1.7	3.9	145	35.5	121	98	58	1	0	4	2
MT BILLINGS	73	44	85	36	59	-1	T	-.3	T	.7	83	11.7	101	76	27	0	0	1	0
GLASGOW	75	46	87	37	60	3	.2	0	.2	.3	46	8.8	94	82	27	0	0	2	0
GREAT FALLS	71	42	86	38	56	-1	1.0	.8	.6	1.1	160	13.2	107	83	28	0	0	2	1
HAVRE	73	42	89	36	57	0	.4	.2	.3	.5	77	7.5	77	83	30	0	0	2	0
HELENA	74	41	86	30	58	2	.8	.6	.8	.8	143	9.5	101	86	21	0	1	2	1
KALISPELL	70	35	82	27	53	-1	T	-.3	T	T	0	12.8	110	91	28	0	3	0	0
MILES CITY	74	44	87	36	59	-1	T	-.2	T	.4	57	11.5	99	71	27	0	0	1	0
MISSOULA	73	38	88	30	55	0	T	-.2	T	T	1	8.7	89	76	23	0	2	1	0
NE GRAND ISLAND	74	53	83	41	64	0	.9	.3	.8	1.2	71	23.0	117	94	55	0	0	2	1
LINCOLN	75	57	82	46	66	1	1.3	.6	1.2	3.0	151	28.7	126	94	58	0	0	3	1
NORFOLK	70	53	84	45	62	-1	2.8	2.3	1.4	3.2	231	25.4	126	97	61	0	0	4	2
NORTH PLATTE	73	47	83	34	60	-1	.5	.1	.3	1.2	105	16.7	99	99	50	0	0	3	1
OMAHA	72	56	81	46	64	-2	.7	-.2	.5	1.2	52	28.8	116	93	68	0	0	3	1
SCOTTSBLUFF	72	44	82	34	58	-4	1.0	.7	.8	1.5	230	21.7	175	92	38	0	0	3	1
VALENTINE	72	46	81	35	59	-2	.3	0	.3	.3	34	18.3	122	86	43	0	0	2	0
NV ELY	76	34	81	28	55	-1	T	-.2	T	T	9	8.7	129	68	18	0	3	0	0
LAS VEGAS	93	64	98	60	79	-2	0	0	0	T	0	3.4	117	30	12	5	0	0	0
RENO	83	41	89	37	62	1	T	-.1	T	T	7	6.1	121	68	13	0	0	0	0
WINNEMUCCA	82	35	89	27	58	-1	0	-.1	0	T	0	6.9	128	41	13	0	2	0	0
NH CONCORD	69	49	79	42	59	0	1.8	1.1	1.5	3.3	166	28.0	111	97	58	0	0	3	1
NJ ATLANTIC CITY	78	63	84	56	70	3	1.8	1.1	1.0	2.8	142	33.6	111	97	68	0	0	4	2
NM ALBUQUERQUE	81	53	87	47	67	-2	.1	-.1	.1	.1	16	7.0	119	63	20	0	0	1	0
CLOVIS	78	57	89	54	67	-2	.7	.3	.6	3.2	259	22.0	162	88	41	0	0	2	1
ROSWELL	83	55	94	50	69	-2	.6	.2	.4	.8	65	13.9	169	90	32	2	0	2	0
NY ALBANY	68	51	76	45	59	-2	2.9	2.2	1.4	6.1	294	28.1	110	100	65	0	0	4	2
BINGHAMTON	67	53	72	45	60	0	2.3	1.5	.9	3.4	158	26.8	101	100	74	0	0	6	2
BUFFALO	69	56	77	50	63	1	1.2	.4	.8	4.1	185	31.1	118	96	72	0	0	4	1
NEW YORK	74	63	79	57	68	0	1.8	1.0	1.0	2.8	123	34.5	112	97	69	0	0	4	1
ROCHESTER	69	55	79	47	62	-1	1.2	.6	.6	2.5	141	24.9	110	98	69	0	0	3	1
SYRACUSE	67	53	78	46	60	-2	2.0	1.2	.8	5.0	235	24.6	88	98	69	0	0	5	2
NC ASHEVILLE	79	61	84	58	70	3	.2	-.7	.2	6.3	253	37.0	112	99	57	0	0	2	0
CHARLOTTE	86	69	89	67	77	5	T	-.8	T	6.2	264	30.4	93	94	48	0	0	1	0
GREENSBORO	85	66	87	63	76	6	T	-.8	T	6.8	288	39.6	124	97	53	0	0	1	0
HATTERAS	84	71	86	65	78	3	1.2	-.1	1.1	4.6	122	49.5	125	98	65	0	0	3	1
NEW BERN	89	70	92	66	79	5	.4	-1.0	.3	2.3	61	43.9	107	94	53	2	0	2	0
RALEIGH	86	67	89	64	76	5	.2	-.6	.1	4.9	223	35.4	111	99	52	0	0	2	0
WILMINGTON	88	70	91	67	79	4	.2	-1.1	.1	5.6	144	42.9	102	98	58	3	0	3	0
ND BISMARCK	73	46	86	37	60	3	T	-.3	T	.3	27	16.9	131	97	41	0	0	0	0
FARGO	71	50	82	37	60	3	.9	.4	.6	1.4	113	13.4	83	96	54	0	0	3	1
GRAND FORKS	74	49	83	35	61	5	1.1	.6	1.1	1.6	117	17.7	117	96	50	0	0	1	1
WILLISTON	77	44	93	34	60	4	.4	.1	.2	.4	47	11.1	98	87	30	1	0	2	0
OH AKRON-CANTON	73	59	78	55	66	3	.6	-.1	.3	1.3	68	23.1	85	98	69	0	0	5	0
CINCINNATI	83	61	88	51	72	4	.3	-.4	.2	.8	44	25.6	84	94	45	0	0	3	0
CLEVELAND	73	57	81	51	65	1	1.4	.7	.8	1.6	82	30.1	115	98	69	0	0	4	1
COLUMBUS	81	61	85	53	71	5	.3	-.4	.2	.6	34	19.8	69	98	52	0	0	3	0

Based on 1951-80 normals.

Weather Data for the Week Ending September 19, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	81	61	85	52	71	5	.1	-.5	0	.1	4	18.5	70	90	44	0	0	2	0
TOLEDO	74	57	78	50	66	2	1.3	-.7	.5	2.0	117	21.8	92	99	60	0	0	5	1
YOUNGSTOWN	72	56	79	46	64	1	1.7	1.0	.8	2.7	136	30.5	110	100	75	0	0	5	2
OK OKLAHOMA CITY	84	63	90	55	74	0	1.6	-.7	.8	3.1	144	35.6	148	95	47	1	0	2	2
TULSA	83	62	90	54	72	-1	1.1	-.1	.9	2.8	103	33.1	113	94	49	1	0	3	1
OR ASTORIA	66	45	71	40	56	-3	.8	-.1	.6	.8	47	33.5	83	96	59	0	0	3	1
BURNS	77	42	86	24	60	2	0	-.1	0	T	7	7.1	97	**	**	0	3	0	0
MEDFORD	80	45	87	37	63	-3	0	-.2	0	0	0	9.4	83	81	24	0	0	0	0
PENDLETON	74	47	80	40	60	-3	0	-.1	0	0	0	5.6	73	60	24	0	0	0	0
PORTLAND	73	49	82	45	61	-2	.1	-.2	.1	.1	14	19.7	90	91	42	0	0	2	0
SALEM	74	44	82	39	59	-3	.1	-.3	.1	.1	7	21.9	94	93	36	0	0	1	0
PA ALLENTOWN	74	58	80	50	66	1	2.4	1.5	1.2	8.6	324	37.9	118	99	71	0	0	4	3
ERIE	70	57	75	49	64	1	1.2	-.3	.8	4.3	169	32.2	116	97	73	0	0	5	1
HARRISBURG	78	60	82	56	69	2	3.4	2.6	2.1	7.5	322	29.1	102	98	64	0	0	4	3
PHILADELPHIA	79	64	84	58	72	3	1.9	1.1	1.0	2.2	99	26.5	87	97	64	0	0	5	2
PITTSBURGH	75	61	80	54	68	4	1.8	1.2	1.4	3.2	177	32.9	118	100	71	0	0	3	1
SCRANTON	71	55	77	49	63	0	2.9	2.2	1.2	7.5	360	32.9	130	99	71	0	0	6	3
RI PROVIDENCE	72	57	80	52	65	1	4.6	3.8	2.6	6.6	294	32.0	102	97	61	0	0	5	3
SC CHARLESTON	89	72	93	72	81	5	.7	-.5	.4	13.8	413	49.6	119	97	56	2	0	4	0
COLUMBIA	89	69	93	67	79	4	.1	-.9	.1	4.9	169	46.8	119	97	48	5	0	1	0
FLORENCE	89	70	92	68	79	4	T	-.9	T	3.6	132	31.1	89	97	52	3	0	1	0
GREENVILLE	84	65	88	61	74	2	T	-1.1	T	3.0	101	36.7	95	98	57	0	0	2	0
SD ABERDEEN	72	48	85	37	60	1	.2	-.2	.1	1.3	135	11.2	74	97	52	0	0	3	0
HURON	70	50	79	39	60	0	.4	-.1	.2	1.4	153	17.0	110	98	61	0	0	3	0
RAPID CITY	75	45	87	37	60	-1	.1	-.2	.1	.7	101	11.5	82	86	31	0	0	2	0
SIoux FALLS	70	51	74	42	60	-1	1.9	1.2	1.4	2.1	111	15.3	77	99	63	0	0	4	1
TN CHATTANOOGA	83	63	87	60	73	1	.6	-.5	.3	2.5	89	38.3	99	99	55	0	0	3	0
KNOXVILLE	84	63	89	58	73	2	.3	-.4	.3	1.9	102	29.4	84	100	55	0	0	1	0
MEMPHIS	87	69	91	63	78	3	.8	0	.4	1.0	41	28.4	73	95	51	2	0	4	0
NASHVILLE	86	65	90	58	75	3	.8	-.1	.7	1.2	48	20.2	56	96	50	3	0	4	1
TX ABILENE	87	63	95	54	75	-1	1.3	-.6	.7	2.0	106	21.1	119	94	45	3	0	4	2
AMARILLO	78	55	87	50	67	-3	.8	-.4	.7	2.7	231	18.0	113	92	45	0	0	2	1
AUSTIN	91	72	95	68	82	2	.9	-.1	.9	4.4	199	31.3	140	96	53	5	0	2	1
BEAUMONT	90	72	93	65	81	2	4.1	2.8	2.9	7.6	216	48.2	119	100	65	4	0	4	2
BROWNSVILLE	96	78	97	76	87	5	T	-1.3	T	.1	2	15.5	90	94	50	7	0	0	0
CORPUS CHRISTI	93	76	95	74	85	4	.2	-1.4	.2	.4	8	25.9	111	96	53	6	0	1	0
DEL RIO	92	72	97	66	82	2	T	-.7	T	.1	8	20.3	162	78	40	6	0	0	0
EL PASO	82	58	91	50	70	-5	.5	-.2	.5	.8	92	7.5	131	86	36	1	0	1	1
FORT WORTH	91	69	98	63	80	2	.3	-.5	.2	1.4	65	20.0	87	94	49	4	0	4	0
GALVESTON	89	78	90	74	83	3	.9	-.6	.7	1.3	33	28.9	99	85	67	4	0	2	1
HOUSTON	92	73	95	68	83	4	1.5	-.3	1.2	2.2	67	31.4	94	99	57	6	0	4	1
LUBBOCK	81	58	91	54	70	-1	1.0	-.5	.9	2.5	195	16.9	120	98	48	2	0	3	1
MIDLAND	86	60	96	50	73	-1	.2	-.3	.2	1.3	100	13.3	129	90	36	3	0	2	0
SAN ANGELO	86	63	94	57	75	-2	2.2	1.4	.8	3.9	202	28.7	217	96	48	4	0	4	2
SAN ANTONIO	92	75	96	67	83	4	.3	-.6	.3	1.9	81	32.4	155	94	50	5	0	1	0
VICTORIA	94	76	96	71	85	5	1.8	-.2	1.7	2.0	51	33.8	126	97	48	6	0	2	1
WACO	91	70	98	65	81	2	4.2	3.5	3.1	5.2	269	25.7	115	98	55	5	0	3	3
WICHITA FALLS	88	64	93	55	76	0	.4	-.5	.2	.9	42	26.8	134	94	46	4	0	3	0
UT BLANDING	73	46	80	39	60	-4	.5	-.3	.5	.7	125	14.2	183	70	38	0	0	1	0
CEDAR CITY	78	45	82	36	61	-2	.1	-.1	.1	.1	22	7.6	99	67	20	0	0	1	0
SALT LAKE CITY	77	50	84	43	64	-1	T	-.2	T	.1	10	9.1	81	58	18	0	0	0	0
VT BURLINGTON	66	51	75	47	59	0	1.5	-.8	1.5	2.8	135	20.0	82	95	58	0	0	2	1
VA NORFOLK	86	70	89	66	78	5	1.5	-.5	1.3	5.2	185	35.3	104	91	54	0	0	2	1
RICHMOND	85	67	88	64	76	6	.8	0	.5	3.3	143	31.9	99	97	54	0	0	2	1
ROANOKE	83	64	86	58	74	5	.9	-.2	.8	10.4	520	42.7	148	95	53	0	0	2	1
WA COLVILLE	73	44	78	35	59	1	T	-.2	T	.2	35	12.8	111	66	32	0	0	0	0
QUILLAYUTE	65	46	69	36	55	-2	1.1	-.4	.8	1.6	45	56.4	90	99	61	0	0	3	1
SEATTLE-TACOMA	68	50	77	45	59	-1	.6	-.1	.5	.6	53	20.0	90	93	50	0	0	3	0
SPOKANE	71	44	77	38	58	-2	T	-.2	T	T	2	11.3	106	76	25	0	0	1	0
YAKIMA	75	39	81	33	57	-4	0	-.1	0	0	0	4.6	92	87	28	0	0	0	0
WV BECKLEY	76	60	81	54	68	5	.7	-.2	.4	2.3	98	30.8	95	95	56	0	0	4	0
CHARLESTON	81	64	85	58	72	4	.4	-.3	.3	3.3	164	28.9	89	98	54	0	0	3	0
HUNTINGTON	83	63	87	58	73	5	.2	-.5	.1	1.4	71	24.9	79	99	53	0	0	2	0
PARKERSBURG	80	62	85	54	71	3	.5	-.2	.5	1.6	88	19.3	66	97	59	0	0	3	0
WI GREEN BAY	68	51	77	41	60	1	.8	-.1	.3	1.0	49	15.7	73	99	68	0	0	5	0
LACROSSE	72	53	79	44	62	1	1.3	-.5	.7	2.0	87	28.4	118	98	61	0	0	5	1
MADISON	69	52	76	40	60	0	3.1	2.4	1.2	3.2	155	24.4	101	100	69	0	0	6	2
MILWAUKEE	69	57	73	48	63	1	1.0	-.3	.4	1.5	79	29.2	124	95	69	0	0	7	0
WAUSAU	67	51	77	40	59	2	1.5	-.6	1.2	2.1	81	18.6	75	98	64	0	0	4	1
WY CASPER	73	41	85	29	57	-1	.7	-.1	.1	.6	134	11.2	126	76	25	0	1	1	0
CHEYENNE	70	42	81	33	56	-2	.7	-.4	.3	.9	131	13.7	120	90	32	0	0	4	0
LANDER	73	45	82	33	59	1	.1	-.1	.1	.3	67	12.3	121	60	21	0	0	1	0
SHERIDAN	74	40	86	32	57	-1	.3	0	.3	1.4	199	12.5	105	86	28	0	0	1	0
PR SAN JUAN	90	77	91	76	83	1	.6	-.8	.4	1.3	35	63.3	120	92	75	5	0	3	0

Based on 1951-80 normals.



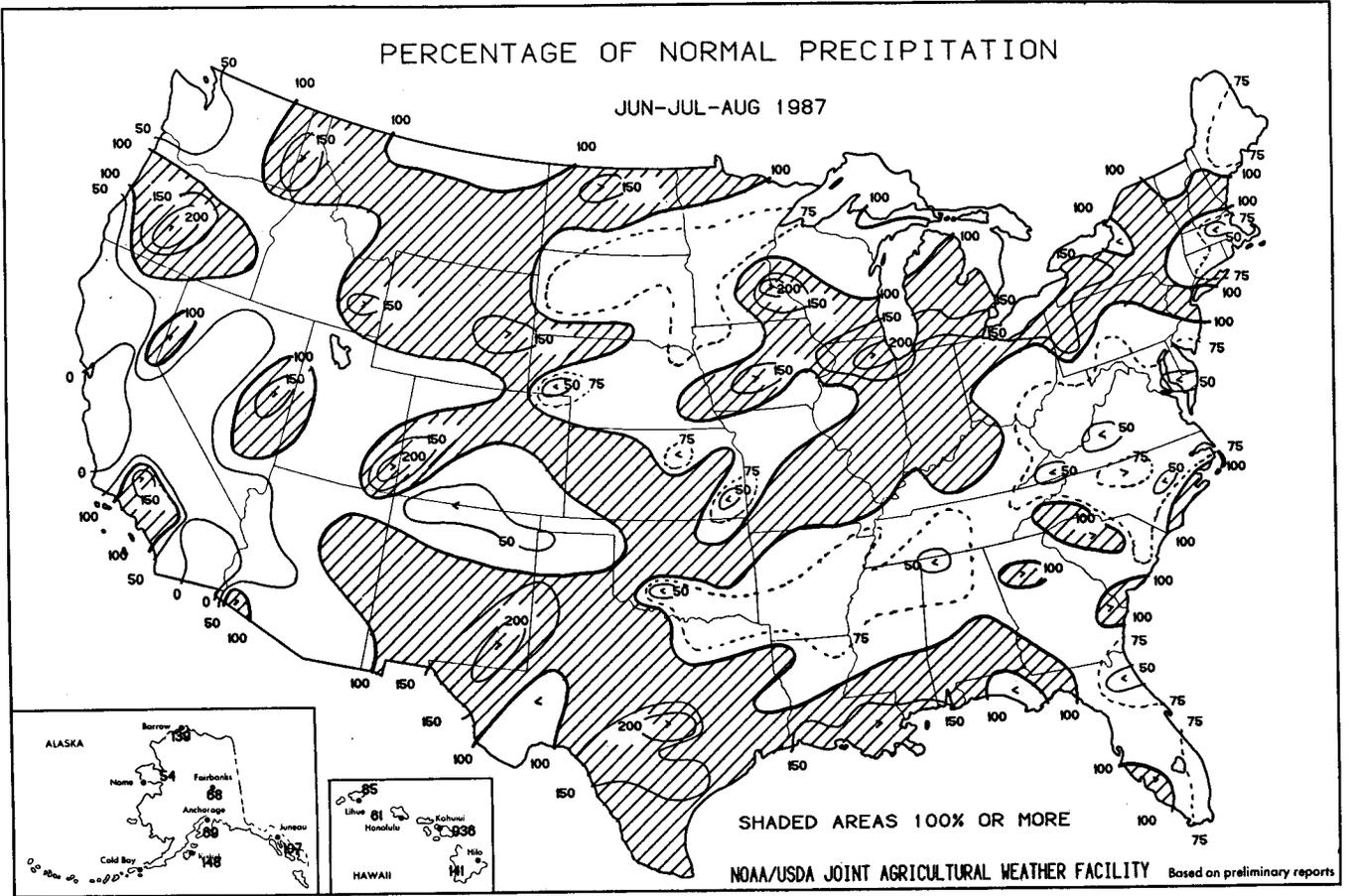
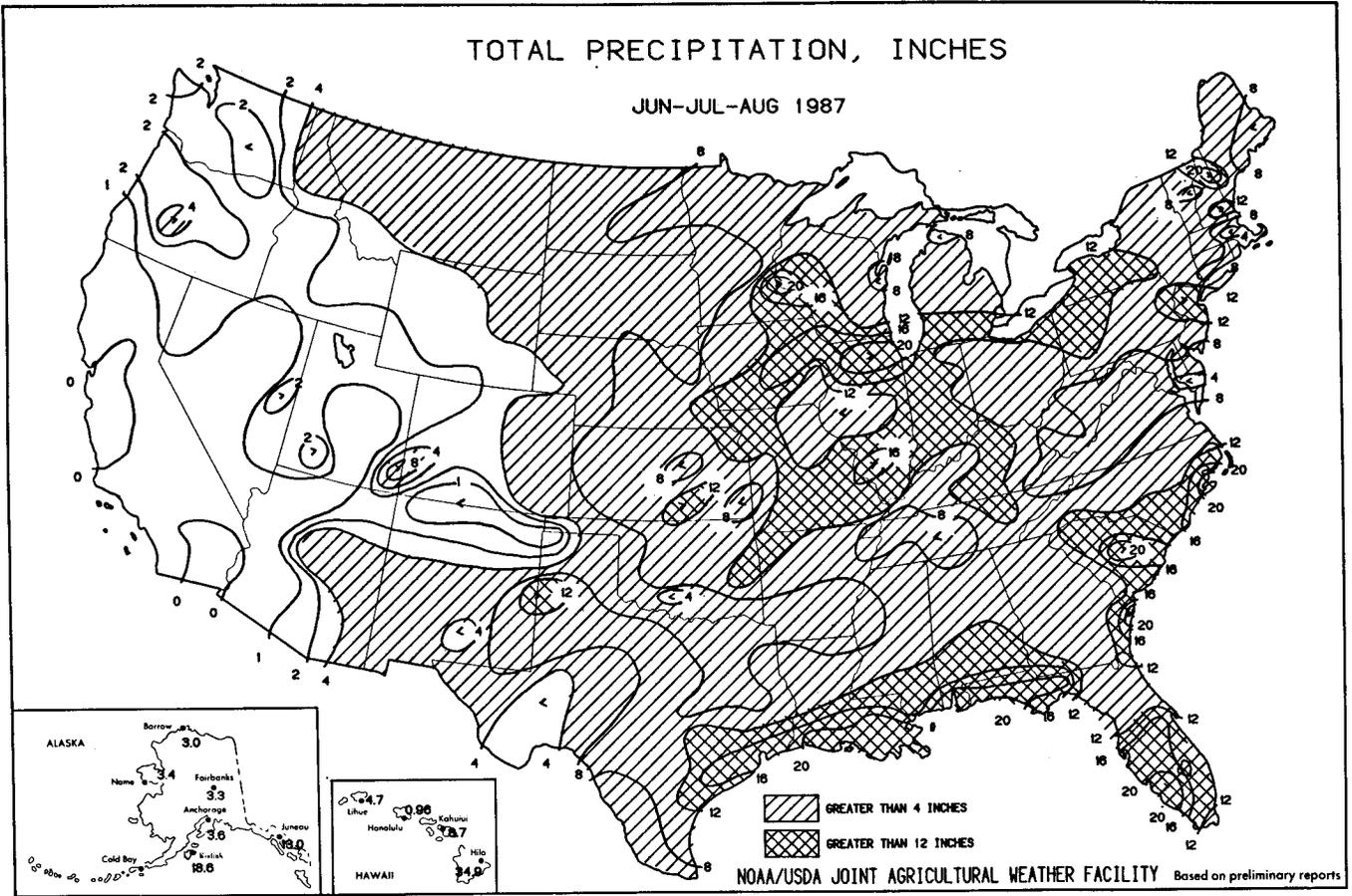
## SUMMER WEATHER REVIEW

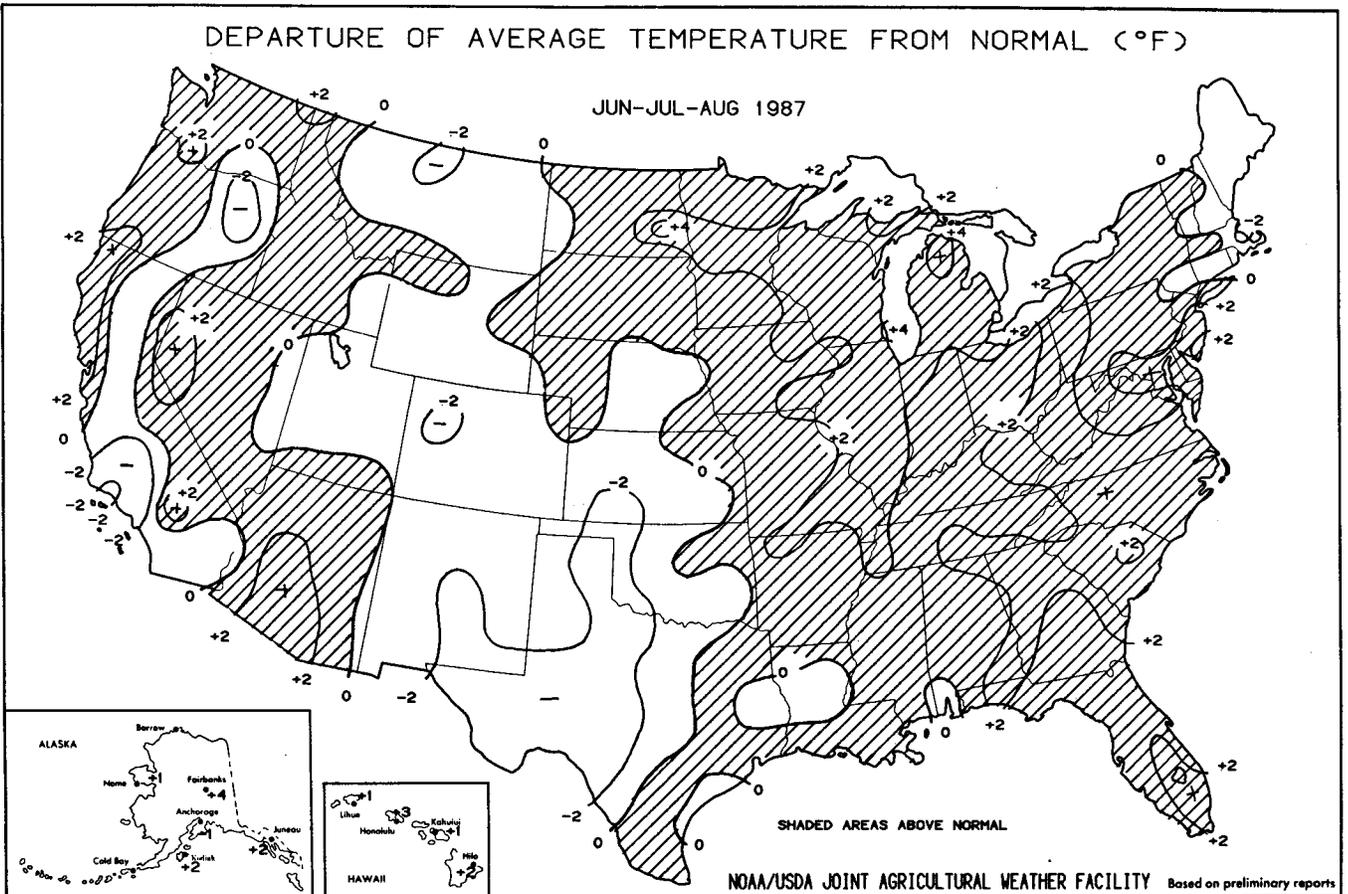
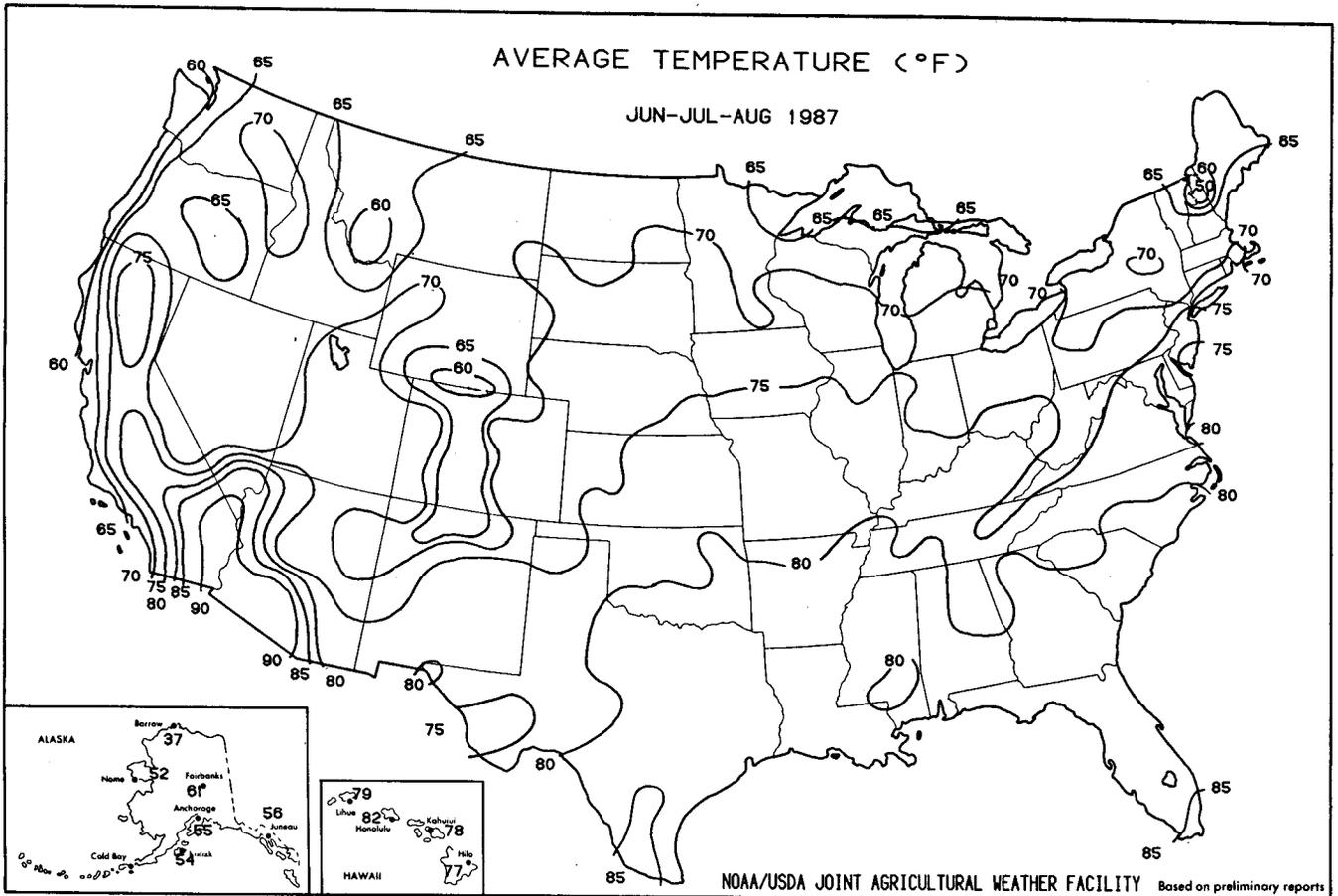
**HIGHLIGHTS:** Heavy rain accumulated to above-normal amounts through much of the central and western Corn Belt. Moisture was much scarcer from the upper Ohio Valley through the mid-Atlantic States. Parts of Virginia and southern Maryland had less than half of normal rainfall and the dryness extended through much of the lower East Coast States. Very dry weather also extended from southeastern Oklahoma through Arkansas and the Tennessee Valley. Most of Texas and the gulf coast had normal or more rain in the form of thunderstorms. Most of the Nation was warmer than normal. Temperatures were consistently cooler than normal from western Texas and the southern Rockies to central Nebraska, especially in western Texas. Cool temperatures extended through most of the Rockies into Canada.

**JUNE...**Widespread thunderstorms across the Nation produced intermittent moderate to heavy downpours in many areas. Normal to above-normal rainfall accumulated from most of the eastern Corn Belt to central New England. The western Corn Belt and from the eastern Great Lakes through the northern Great Plains had less than normal. However, timely showers through most of the areas kept crops supplied with needed moisture. Heavy rain in parts of southern Texas caused serious flooding, while parts of the Panhandle were too dry. Thunderstorms and severe weather occurred almost daily across the South. Most of the Nation was warmer than normal. The West and the northern Great Plains were the warmest.

**JULY...**Thunderstorms covered nearly all parts of the Nation. Heavy precipitation accumulated from western Iowa through the upper Mississippi Valley and from southern Missouri to central Ohio. Rain was scarce from western Pennsylvania to central Georgia, except for isolated areas of relatively light showers. Dry weather also plagued parts of the central and southern Plains, the Southwest, and much of the Mississippi Delta. Temperatures were warmer than normal east of the Mississippi River and in the central and northern Plains. At month's end, an intense heat wave covered the central and northern Plains but was relieved as the month ended. The West was cooler than normal.

**AUGUST...**Precipitation was bountiful from central Wyoming through the southern Great Lakes and to west-central Pennsylvania. More than double the normal precipitation accumulated from central Iowa through northern Illinois and southern Wisconsin. This provided ample moisture for most of the western and northern Corn Belt. On the other hand, very dry weather plagued most of Minnesota and part of Wisconsin. The area from northeastern Missouri through the Ohio Valley to eastern Maryland and Virginia southwestward through the Appalachians, and from Oklahoma to Georgia also remained very dry. Temperatures were rather cool most of the month in the northern and central Great Plains, but parts of those areas experienced hot spells.





## National Agricultural Summary

September 14 to 20, 1987

**HIGHLIGHTS:** Light to moderate precipitation through much of the midwest slowed harvest. Heavier rains in the Delta area helped late maturing soybeans and improved pastures. Temperatures were generally above normal across the eastern half of the Nation and below normal in the West. The Southeastern States remained relatively dry except for good precipitation along some coastal areas.

Winter wheat was 35 percent (%) planted, jumping 15 percentage points from last week. Fifteen percent was emerged, 5% ahead of the 5-year average. Corn was 16 percent harvested, compared with the 7% average. Most States were well ahead of normal except in the Southeast. Sorghum harvest was 34% complete, 5% ahead of normal. Soybeans advanced to 11% harvested, well ahead of the 3% average. Illinois, Indiana, and Ohio were the major States having 20% or more harvested. Cotton was 14% harvested, 4 points above the average and equal to 1986. Cool weather has delayed cotton development in New Mexico and Oklahoma. Rice was 62% harvested, 14 points above normal. Livestock were mostly good. Ranges and pastures were fair to good.

**SMALL GRAINS:** Winter wheat was 35% planted, 9 points above normal and 2 points ahead of 1986. Nebraska jumped 35 points from the previous week and was 70% planted. South Dakota was 85% planted and Montana 56% planted, up 25 and 26 points, respectively, from the previous week. Kansas plantings reached 30%, 15 points above the previous week. Winter wheat was 15% emerged, 5 points above normal and 1 point ahead of last year.

**CORN:** Corn was 86% mature, 26 points ahead of normal and 17 points above a year ago. Corn was maturing ahead of normal in all major producing States except Colorado. Corn was 16% harvested, up only 6 points from last week as rain slowed harvest activities. However, harvest was still 9 points ahead of normal in the major producing States. Only in Colorado and North Carolina were corn harvests behind the average. Crop condition was mostly good.

**SOYBEANS:** Soybeans dropped leaves on 60% of the acreage, 18 points ahead of the average and 13 points more than a year ago. Georgia, Mississippi, and South Carolina were the only States behind normal. Harvested area more than tripled from the previous week, totaling 11%. This was 8 points above the average and 6 points more than last year. Illinois, Indiana, and Ohio lead with 29, 28, and 20% of the crop harvested, respectively. Precipitation throughout the midwest slowed harvest activities. Harvest had not begun in Arkansas, North Carolina, South Carolina, and Tennessee. Crop condition was generally good to fair in the midwest and mostly fair in the South and East. Precipitation in the Delta States helped late maturing soybeans.

**SORGHUM:** Sorghum turned color on 93% of the acreage, 11 points ahead of normal. Fifty-eight percent of the crop was mature, also ahead of normal. Sorghum was 34% harvested, 5% ahead of average. Harvest activities were well ahead of normal in Arkansas, Illinois, Mississippi, and Tennessee. Harvest was behind normal in Louisiana, Oklahoma, and Texas. The crop was generally in good condition.

**COTTON:** Cotton bolls were 60% open, 7% above the average. New Mexico, Oklahoma, and South Carolina were the only States behind normal. Cotton acres were 14% harvested, 4 points ahead of the average but equal to last year. Missouri continues to be well ahead of normal with 40% harvested. Alabama, with 24% harvested, was 20 points ahead of normal. Arkansas, 24% harvested, and Tennessee, 25% harvested, were 13 points ahead of the average. Cotton was mostly good to fair, with poorer conditions prevailing in South Carolina, North Carolina, and Alabama.

**OTHER CROPS:** Rice was 62% harvested, 14% ahead of normal. Arkansas, Louisiana, and Mississippi continued to harvest ahead of schedule. Harvest activities were complete in Texas and were slightly behind in California.

Tobacco harvests were over 80% complete in all States except Virginia, where flue-cured was 56% harvested, fire-cured was 70% harvested, and burley was 74% harvested.

Peanuts were good to fair in Alabama and Georgia with 18 and 31% of the area dug, respectively. Harvest in North Carolina was just starting with most fields good to fair. In Virginia, harvest activities have been limited.

Flax harvest continues with 66% harvested in North Dakota and 91% harvested in Minnesota. Potato harvest continues in many areas.

**FRUIT AND NUTS:** Citrus harvest continues with valencia oranges in California, lemons in Arizona, early oranges in Texas, and grapefruit in Florida. Fruit and nuts continue to be harvested along the West Coast. Apple harvest continues in the northern areas of the Nation.

**VEGETABLES:** Vegetable planting increased in Florida. In Texas, cucumbers, carrots, cabbage, peppers, and tomatoes were harvested but delayed by rain in some areas. Artichoke, broccoli, carrot, cauliflower, celery, sweet corn, cucumber, and melon harvests were active in California.

**PASTURES AND LIVESTOCK:** Livestock remained in mostly good condition. Dry weather across the western third of the Nation did not help pastures and rangeland grasses. Rain in the midwest kept pastures in fair to good condition.

### Crop Progress

FOR WEEK ENDING SEPTEMBER 20, 1987

	CORN % MATURE		
	1987	1986	AVG.
COLO	29	37	42
GA	100	100	100
ILL	98	93	82
IND	98	87	60
IOWA	95	78	63
KANS	80	80	60
KY	92	86	71
MICH	60	25	45
MINN	87	30	35
MO	93	92	79
NEBR	70	70	47
N C	98	99	96
OHIO	84	63	61
PA	38	37	19
S DAK	86	48	58
TEX	94	90	90
WIS	67	38	43
17 STATES	86	69	60

THESE 17 STATES PRODUCED 94% OF THE 1986 CORN CROP.

	SOYBEANS % DROPPING LEAVES		
	1987	1986	AVG.
ALA	26	20	18
ARK	12	15	12
GA	20	18	23
ILL	77	73	62
IND	95	72	58
IOWA	65	47	50
KANS	50	55	40
KY	49	35	27
LA	30	26	23
MICH	70	40	55
MINN	98	40	51
MISS	25	53	26
MO	47	43	33
NEBR	45	40	29
N C	5	5	5
OHIO	90	68	58
S C	4	6	6
S DAK	92	52	66
TENN	45	30	20
19 STATES	60	47	42

THESE 19 STATES PRODUCED 96% OF THE 1986 SOYBEANS CROP.

	SOYBEANS % HARVESTED		
	1987	1986	AVG.
ALA	11	1	1
ARK	0	0	0
GA	1	NA	NA
ILL	29	15	10
IND	28	7	3
IOWA	4	1	2
KANS	4	3	2
KY	8	3	1
LA	3	4	3
MICH	2	0	0
MINN	10	0	1
MISS	2	5	1
MO	5	5	3
NEBR	2	1	2
N C	0	0	0
OHIO	20	8	6
S C	0	0	0
S DAK	4	0	3
TENN	0	0	0
19 STATES	11	NA	NA

EXCL. STATES WITH NA 11 5 3

THESE 19 STATES PRODUCED 96% OF THE 1986 SOYBEANS CROP.

NA - NOT AVAILABLE.

	CORN % HARVESTED		
	1987	1986	AVG.
COLO	0	0	1
GA	84	89	83
ILL	29	13	7
IND	19	7	3
IOWA	8	3	4
KANS	30	25	10
KY	35	28	15
MICH	5	1	1
MINN	4	0	0
MO	32	28	21
NEBR	5	3	2
N C	32	43	46
OHIO	14	5	3
PA	4	2	0
S DAK	9	0	0
TEX	69	73	66
WIS	3	0	0
17 STATES	16	10	7

THESE 17 STATES PRODUCED 94% OF THE 1986 CORN CROP.

	WINTER WHEAT % PLANTED		
	1987	1986	AVG.
ARK	0	0	3
CALIF	0	0	0
COLO	52	68	72
GA	0	4	3
IDAHO	23	40	27
ILL	3	2	3
IND	4	4	5
KANS	30	40	20
MICH	10	3	5
MO	6	6	6
MONT	56	19	28
NEBR	70	55	55
N MEX	65	55	NA
N C	0	0	0
OHIO	2	2	4
OKLA	35	30	15
OREG	8	5	6
S DAK	85	54	72
TEX	38	34	23
WASH	52	45	47
20 STATES	35	34	NA

EXCL. STATES WITH NA 35 33 26

THESE 20 STATES PRODUCED 91% OF THE 1986 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

	WINTER WHEAT % EMERGED		
	1987	1986	AVG.
ARK	0	0	NA
CALIF	0	0	0
COLO	22	28	38
GA	0	NA	NA
IDAHO	10	8	9
ILL	0	NA	NA
IND	2	2	1
KANS	10	15	NA
MICH	0	0	NA
MO	3	1	1
MONT	35	0	8
NEBR	35	40	38
N MEX	50	44	NA
N C	0	0	0
OHIO	0	0	0
OKLA	15	5	3
OREG	0	0	0
S DAK	45	44	36
TEX	11	14	5
WASH	22	30	NA
20 STATES	15	NA	NA

EXCL. STATES WITH NA 17 14 12

THESE 20 STATES PRODUCED 91% OF THE 1986 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

	RICE % HARVESTED		
	1987	1986	AVG.
ARK	59	63	36
CALIF	2	4	3
LA	91	95	84
MISS	72	83	44
TEX	100	100	100
5 STATES	62	66	48

THESE 5 STATES PRODUCED 97% OF THE 1986 RICE CROP.

GRAIN SORGHUM  
% COLORING

	1987	1986	AVG.
ARK	100	96	NA
ILL	99	89	NA
KANS	85	85	65
LA	100	100	100
MISS	100	100	NA
MO	95	93	90
NEBR	97	96	87
OKLA	90	97	95
S DAK	100	84	82
TENN	100	95	92
TEX	95	87	89

11 STATES 93 89 NA

EXCL. STATES WITH NA 92 89 81

THESE 11 STATES PRODUCED 96% OF THE 1986 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

GRAIN SORGHUM  
% MATURE

	1987	1986	AVG.
ARK	94	88	NA
ILL	90	59	NA
KANS	35	40	20
LA	97	100	96
MISS	95	100	92
MO	77	69	67
NEBR	50	46	30
OKLA	20	35	35
S DAK	70	27	35
TENN	93	88	65
TEX	70	67	70

11 STATES 58 56 NA

EXCL. STATES WITH NA 55 54 45

THESE 11 STATES PRODUCED 96% OF THE 1986 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

GRAIN SORGHUM  
% HARVESTED

	1987	1986	AVG.
ARK	85	80	63
ILL	45	8	5
KANS	10	5	5
LA	86	96	88
MISS	82	86	55
MO	38	25	26
NEBR	4	0	1
OKLA	5	5	10
S DAK	8	1	1
TENN	70	60	35
TEX	58	57	62

11 STATES 34 30 29

THESE 11 STATES PRODUCED 96% OF THE 1986 GRAIN SORGHUM CROP.

COTTON  
% BOLLS OPENING

	1987	1986	AVG.
ALA	82	77	66
ARIZ	87	88	87
ARK	94	83	77
CALIF	95	78	73
GA	65	56	59
LA	93	96	78
MISS	95	100	86
MO	100	65	80
N MEX	50	97	93
N C	96	87	87
OKLA	10	15	25
S C	75	81	77
TENN	89	87	75
TEX	34	22	32

14 STATES 60 52 53

THESE 14 STATES PRODUCED 100% OF THE 1986 COTTON CROP.

COTTON  
% HARVESTED

	1987	1986	AVG.
ALA	24	5	4
ARIZ	5	3	2
ARK	24	17	11
CALIF	0	0	0
GA	3	3	5
LA	23	40	16
MISS	17	34	11
MO	40	8	7
N MEX	0	0	0
N C	5	0	0
OKLA	0	0	0
S C	3	5	5
TENN	25	12	6
TEX	16	14	14

14 STATES 14 14 10

THESE 14 STATES PRODUCED 100% OF THE 1986 COTTON CROP.

Crop Condition

FOR WEEK ENDING SEPTEMBER 20, 1987

SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	24	57	19	0
ARK	4	6	54	36	0
GA	1	2	50	39	8
ILL	0	3	30	63	4
IND	0	7	22	59	12
IOWA	1	1	11	68	19
KANS	0	0	4	25	71
KY	10	35	41	14	0
LA	0	7	46	47	0
MICH	1	9	25	50	15
MINN	0	0	20	60	20
MISS	2	15	60	23	0
MO	3	8	35	50	4
NEBR	0	0	10	81	9
N C	1	8	41	45	5
OHIO	1	8	31	49	11
S C	0	1	43	51	5
S DAK	0	0	8	69	23
TENN	5	20	65	10	0

CORN

STATE	VP	P	F	G	EX
COLO	0	1	17	65	17
GA	0	1	28	67	4
ILL	0	1	17	67	15
IND	0	1	8	65	26
IOWA	1	1	10	62	26
KANS	0	0	27	42	31
MICH	3	17	30	40	10
MINN	1	1	22	58	18
MO	0	1	25	63	11
NEBR	0	1	7	74	18
OHIO	2	6	21	54	17
PA	3	9	22	40	26
S DAK	0	2	18	61	19
TEX	0	6	22	53	19
WISC	0	0	6	54	40

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

COTTON

STATE	VP	P	F	G	EX
ALA	0	5	70	25	0
ARIZ	0	0	0	95	5
ARK	0	1	4	76	19
CALIF	0	0	0	35	65
GA	0	4	31	60	5
LA	0	2	18	78	2
MISS	0	0	27	73	0
MO	0	0	15	77	8
N MEX	0	13	38	49	0
N C	0	16	47	32	5
OKLA	0	0	20	80	0
S C	3	11	86	0	0
TENN	0	6	20	63	11
TEX	1	1	26	62	10

GRAIN SORGHUM

STATE	VP	P	F	G	EX
ARK	0	7	20	66	7
ILL	0	0	10	85	5
KANS	0	7	10	35	48
MISS	0	3	46	47	4
MO	0	1	28	67	4
NEBR	0	0	4	73	23
OKLA	0	1	7	90	2
S DAK	0	1	29	58	12
TEX	0	4	11	57	28

## 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 NASS State Statistical Offices in cooperation with the National Weather Service.

**ALABAMA:** Rainfall totals mostly 0.50 in. or less; local amounts 1.00 in. Temperatures averaged 1 to 2° above normal.

Days suitable for fieldwork 5.7. Soil moisture 56% short, 44% adequate. Scattered showers helped some areas; more needed for soybeans, pastures. Corn 74% harvested, 75% 1986, 73% avg. Sorghum 49% harvested, 50% 1986, 50% avg.; 7% poor, 68% fair, 25% good. Cotton 82% bolls opened, 77% 1986, 66% avg.; 24% harvested, 5% 1986, 4% avg.; 5% poor, 70% fair, 20% good. Soybeans 47% turning color, 44% 1986, 41% avg.; 26% dropping leaves, 20% 1986, 18% avg.; 18% mature, 12% 1986, 10% avg.; 11% harvested, 1% 1986, 1% avg.; 24% poor, 57% fair, 19% good. Peanuts 18% dug, 20% 1986, 36% avg.; 10% combined, 10% 1986, 23% avg.; 79% fair, 21% good. Wheat 12% seeded, 10% 1986, 5% avg. Pastures mostly fair; livestock mostly good. Primary activities: Harvesting corn, sorghum, peanuts, cotton, vegetables, catfish; defoliating cotton; seeding small grain crops; soil testing; repairing equipment; routine care livestock, poultry.

**ALASKA:** Colder than normal seasonal temperatures, scattered rain continued, all areas. Temperature lows 2 to 6° cooler than normal, highs 1 to 5° colder than normal. Seasonal precipitation 3.00 in. drier than normal to 3.00 in. wetter than normal.

Days suitable for making hay or harvesting grain 4.0. Topsoil moisture 2% short, 90% adequate, 8% surplus. Subsoil moisture 10% short, 87% adequate, 3% surplus. Barley for grain 80% harvested, 85% 1986. Second cutting hay 65% harvested. Hardy vegetable harvest continued. Commercial potatoes 75% harvested. Winter hay availability mostly adequate.

**ARIZONA:** Upper level low pressure system moved across State 13th, bringing cooler conditions. Minimum temperatures 14th lowest since spring. Temperatures warmer 15th. Cloudiness associated with remnants of hurricane Max prevailed 16th. Afternoon, evening showers, thunderstorms White Mountains, southeast, 17th to 19th. Precipitation traces to 0.20 in. east, none west. Average temperatures 1 to 5° below normal.

Cotton harvest active; residue disposal prompt. White fly problem west. Irrigation selective, defoliation active west. Alfalfa fair to good. New stands planted west. Harvest slow central. Good quality west, production stacked. Sorghum good. Aphids caused problems west. Turning color central. Corn excellent, harvesting southeast. Lemon harvest continued west, groves good. Planting, thinning, sprinkling winter vegetables active west. Lettuce thinned, cultivated central. Green onions, greens shipped, central valley. Green chile harvested southeast. Cantaloup, honeydews shipped, Aguila, central valley; watermelons shipped southeast. Apple harvest continued southeast.

**ARKANSAS:** Temperatures near to slightly above normal. Locally heavy rains midweek, weekend. Temperature extremes 48°; 98°. Rainfall 0.09 to 5.75 in.

Days suitable for fieldwork 5.0. Soil moisture 40% short, 54% adequate, 6% surplus. Major farming activities: Harvesting sorghum, rice, corn, cotton; irrigating soybeans; applying cotton defoliants; baling hay; fertilizing pastures; preparing fall seedbeds;

Cotton 1% poor, 4% fair, 76% good, 19% excellent. Blast, sheath blight affected rice yields some counties. Rains brought relief to late maturing soybeans. Sorghum progressed, 100% turning color, 94% mature, 85% harvested. Corn mostly good, 92% harvested. Livestock still being fed; marketings up.

**CALIFORNIA:** Low pressure dominated most of week. Temperatures almost all stations few degrees below normal. Temperatures warmed toward normal by end of week. No precipitation.

Cool weather slowed crop progress. Rice harvest slowly increased. Draining fields active. Cotton harvest progressed slowly south. Central valleys applied defoliants actively. Harvest expected few days. Harvests of dry beans, field corn, sugarbeets, safflower, sunflowers, alfalfa seed, alfalfa hay, green chop all active. Grain sorghum harvest began. Pest control normal. Ground preparation fall seeding active. Granny smith, golden delicious apples packed. Table grape harvest winding down. Wine grapes being crushed. Raisin type grapes drying on trays. Last peaches, nectarines, plums, prunes being packed. Good quality, excellent sized asian pears packed. General tree fruit pruning activities started. Navel orange sizes above normal. Valencia orange harvest continued; puff and aging defects caused heavy grade out. Almond, walnut, pistachio harvests continued. Artichokes light, good quality Salinas. Broccoli fairly heavy Salinas; moderate Santa Maria good quality. Fall plantings Westside good shape. Carrot fairly heavy Salinas. Production Kern-Tulare showed slight increase, fall marketing started up. Cauliflower moderate both Salinas, Santa Maria; variable, good quality respectively. Fall plantings looked good Westside. Celery fairly heavy, increased Salinas-Watsonville; fairly light Santa Maria-Oceano good quality. Sweet corn shipments continued Westside. Cucumber packing active Westside. Lettuce fairly heavy but decreased Salinas; moderate Santa Maria variable weight, quality. Fall plantings Westside looked very good. Watermelon, cantaloup, honeydew, mixed melon harvests active statewide. Watermelon picking completed Sacramento Valley, Westside nearly complete Eastside. Cantaloup harvest active Firebaugh fair to good quality. Some problems mosaic virus. Pepper fairly heavy Salinas good quality. Harvest active central valley good quality. Summer potato digging continued Hemet-San Jacinto. Fall potato fields some areas Tulalake-Butte Valley hit by frost. Helped growers by eliminating chemical defoliants. Digging early variety potatoes continued. Sweetpotato harvest continued Selma, Merced-Atwater; Westside fields progressed normally. Processing, fresh market tomato production continued good quality. Forest fires continued to burn but being brought under control. Movement livestock from summer grazing areas increased, calving increased. Supplemental feeding continued most districts poor range, pasture conditions. Stockwater supplies remained short.

**COLORADO:** Temperatures normal to 4° below normal. Showers eastern portions of State, dry San Luis Valley, West Slope. Precipitation trace to 0.94 in.

Days suitable for fieldwork 4.5. Soil moisture adequate. Corn, small grains good. Rain slowed progress corn maturity. Oats 88% harvested; barley 96% harvested; spring wheat 59% harvested. Dry

beans 61% cut, 29% threshed. Summer potatoes 60% harvested. Fall potatoes 15% harvested. Apple harvest just underway. Livestock, pastures good.

**FLORIDA:** Spotty rains mostly early week, weekend. Few over 3.00 in.; otherwise mostly hot, dry. Record highs 16th through 20th interior, central, southeast.

Soil moisture generally adequate, except short to surplus few scattered areas. Peanut, hay harvest active. Corn harvest about complete. Cotton, soybeans, sugarcane good progress. Upper, central Peninsula pastures poor to fair; elsewhere, mostly good to excellent. Cattle fair some central Peninsula areas; elsewhere, good to excellent. Citrus groves hot, dry; many growers watering. Some leaf curl, wilt. New growth slowed. New grapefruit in packing houses for 1st 1987-88 season shipments. Caretakers very active controlling cover crops. Recent hot temperatures moderated somewhat over vegetable producing areas. Growers increased plantings all areas. Light harvest, fresh sweet corn, Zellwood area; yellow squash, west central.

**GEORGIA:** Rain under 0.50 in. most areas. Most rain north. Temperatures 3° above normal. Extremes 44° Blairsville, 95° Jesup.

Days suitable for fieldwork 5.7. Soil moisture 10% very short, 42% short, 44% adequate, 4% surplus. Sorghum grain 6% poor, 36% fair, 50% good, 8% excellent; 41% harvested. Peanuts 2% poor, 43% fair, 55% good; 31% dug, 11% 1986, 45% avg.; 18% threshed, 6% 1986, 29% avg. Insect problems; rains slowed digging, threshing some areas. Soybeans insect pressure heavy some areas. Tobacco 98% harvested, 99% 1986, 100% avg. Rye 3% planted, 5% 1986, 5% avg. Seedbed preparation active for small grains, planting curtailed few areas due to dry soils. Other small grains 2% planted, 1% 1986, 3% avg. Apples 4% poor, 18% fair, 75% good, 3% excellent; 46% harvested, 70% 1986, 79% avg. Pecans 3% poor, 23% fair, 69% good, 5% excellent. Insects continued to cause problems. Pasture 7% poor, 41% fair, 48% good, 4% excellent. Hay 8% poor, 56% fair, 34% good, 2% excellent. Cattle 21% fair, 78% good, 1% excellent. Hogs 10% fair, 86% good, 4% excellent. Other activities: Planting fall vegetables; harvesting hay and silage, controlling insects.

**HAWAII:** Variable weather fair to good for crops. Mostly sunny, light to moderate showers. Irrigation heavy. Water restriction continued one major vegetable region. Temperatures mid 70s to low 90s. Trade winds 5 to 20 mph. Rainfall none to 2.70 in.

Days suitable for fieldwork 7.0. Banana production steady. Papaya production forecast to increase. Chinese, head cabbage supplies steady. Watermelon output lower, but still relatively high.

**IDAHO:** Temperatures within few degrees of normal statewide. Small amount of precipitation over north, remainder of State dry.

Days suitable for fieldwork 7.0. Winter wheat 23% seeded, 40% 1986, 27% avg. Winter wheat 10% emerged, 8% 1986, 9% avg. Potatoes good to excellent, 78% vines dying or killed. Potatoes 20% harvested, 13% 1986, 16% avg. Dry beans 57% harvested, 56% 1986, 43% avg. Onions 58% harvested, 50% 1986. Apples 32% harvested, 10% avg. Sugarbeet harvest underway. Third cutting alfalfa hay 60%. Livestock good. Range, pasture providing limited grazing.

**ILLINOIS:** Temperatures averaged 2 to 3° below normal north, 2 to 3° above normal south. Precipitation widespread 2.10 to 3.00 in.

Days suitable for fieldwork 5.0. Soil moisture 43% short, 51% adequate, 6% surplus. Soybeans 96%

turning yellow, 90% 1986, 85% avg. Alfalfa hay 3rd crop 95% cut, 100% 1986, 99% avg.; 5% poor, 14% fair, 59% good, 22% excellent. Harvesting corn, soybeans continued to progress well ahead of average, but slowed midweek some areas by rains. Harvest most active southern two-thirds of State. Pasture 2% very poor, 14% poor, 33% fair, 40% good, 11% excellent.

**INDIANA:** Temperatures 3 to 6° above normal. Lows lower 40s, highs low 90s. Rainfall widespread. Totals of 0.50 to 1.50 in. north, 0.30 to 0.50 in. central and south.

Days suitable for fieldwork 4.7. Topsoil moisture 40% short, 56% adequate, 4% surplus. Subsoil moisture 48% short, 51% adequate, 1% surplus. Corn mostly good to excellent. Soybeans mostly good. Soybeans 99% turning yellow, 93% 1986, 81% avg. Soybeans 75% mature, 34% 1986, 25% avg. Tobacco 92% harvested, 90% 1986, 61% avg. Wheatland 41% plowed, 35% 1986, 39% avg. Rye 22% seeded, 10% 1986, 11% avg. Silos 92% filled, 80% 1986, 63% avg. Pastures mostly fair. Harvest advanced despite scattered showers.

**IOWA:** Cloudy, wet week. Temperature extremes 39° Cascade, 86° Sioux City 15th. Precipitation above normal; 6.16 in. Sibley, 4.90 in. Storm Lake, 4.74 in. Cherokee. Damaging hail storm northwest to east central, 14th.

Days suitable for fieldwork 2.3. Topsoil moisture 47% adequate, 53% surplus; subsoil moisture 8% short, 71% adequate, 21% surplus. Winter wheat 4% seeded, 6% 1986, 15% avg. Third cutting alfalfa hay 90%, 89% 1986, 90% avg. Soybeans 95% leaves turning, 85% 1986, 82% avg. Pastures 3% poor, 13% fair, 55% good, 29% excellent. Livestock mostly good. Heavy movement of hogs to market. Cool weather made gains very good.

**KANSAS:** Temperatures averaged mid-60s northwest to 70° southeast, within 1° normal except north central 2° above normal. Precipitation moderate most areas, averaged 0.33 to 0.66 in. except eastern areas where amounts totaled 1.00 to 1.50 in.

Days suitable for fieldwork 4.5. Soil moisture 28% short, 57% adequate, 15% surplus. Most crops continued to make good progress, harvest underway, gaining momentum. Corn harvest good progress most active eastern counties, rain kept farmers out of fields until late week. Most stands mature or neared maturity. Few lodging or insect problems noted. Sorghum harvest gained momentum southern, eastern counties in spite of rain delays. No unusual disease or insect problems noted. Soybean progress generally ahead schedule, harvest underway early fields south, east. Wheat seeding good progress western areas where weather relatively dry. Good early emergence. Range, pastures relatively good for time of year but heavy culling continued.

**KENTUCKY:** Mild, mostly dry. Rainfall averaged around 0.80 in. west, less than 0.40 in. central and east. Mean daily temperatures averaged lower 70s, 3 to 4° above seasonal normals.

Days suitable fieldwork 5.5. Soil moisture 51% very short, 42% short, 7% adequate. Corn harvest advancing rapidly, yields good to excellent. Later corn hurt by heat, dry soils. Soybeans rapidly maturing. Condition deteriorating, especially double crop beans. Burley 95% cut, early tobacco curing well. Late tobacco smaller with variable quality. Houseburn minimal. Dark tobacco 91% cut. Pastures 31% very poor, 30% poor, 32% fair, 7% good. Hay feeding increased. General rains needed fall pastures, fall seedings.

**LOUISIANA:** Temperature 1 to 3° above normal. Temperature extremes 60°; 98°. Rainfall averaged 0.62 to 2.59 in.

Days suitable for fieldwork 5.1. Soil moisture 40% short, 47% adequate, 13% surplus. Corn 96% harvested, 99% 1986, 93% avg. Rice 97% ripe, 100% 1986, 94% avg. Soybeans 56% turning color, 57% 1986, 51% avg. Hay final cutting 79%, 85% 1986, 75% avg. Sweetpotatoes 66% harvested, 67% 1986, 59% avg. Sugarcane fair to good; 77% planted, 84% 1986, 52% avg. Livestock good; pastures fair to good; vegetables fair. Main activities: Harvesting corn, cotton, rice, sorghum, sweetpotatoes, vegetables; baling hay; planting sugarcane, fall vegetables; preparing winter pastures, wheat fields for planting; spraying for stinkbugs, worms in soybeans.

**MARYLAND & DELAWARE:** Maryland: Average temperature 74°, normal 67°. Precipitation averaged 2.53 in.

Days suitable for fieldwork 3.0. Topsoil moisture adequate to surplus, mostly adequate. Subsoil moisture short to adequate, mostly adequate. Corn fair; 95% dent, 90% avg. Corn 75% mature, 60% avg. Corn 30% harvested, 20% avg, 20% 1986. Soybeans fair; 45% turned color, 45% avg. Soybeans 20% shed leaves, 20% avg. Tobacco fair; 80% harvested, 80% avg. Apples good; 30% harvested, 20% avg.

**Delaware:** Temperatures averaged 75°, 68° normal. Precipitation averaged 1.66 in.

Days suitable for fieldwork 4.7. Topsoil moisture short to adequate. Subsoil moisture very short to short, mostly short. Soybeans poor to fair, mostly poor. Soybeans variable; 10% shedding leaves, 15% avg. Corn poor to fair, mostly fair. Corn 85% mature, 80% avg. Corn 40% harvested, 20% avg.

**MICHIGAN:** Temperatures ranged 2 to 5° above normal. Temperature extremes 36°; 78°. Precipitation from 0.20 to 4.10 in. across State.

Days suitable for fieldwork 2.5. Soil moisture 40% adequate, 60% surplus. Corn 60% mature, 25% 1986, 45% avg.; 5% harvested, 1% 1986, 1% avg.; 3% very poor, 17% poor, 30% fair, 40% good, 10% excellent. Soybeans 70% shedding, 40% 1986, 55% avg.; 2% harvested, none 1986, none avg.; 1% very poor, 9% poor, 25% fair, 50% good, 15% excellent. Dry beans 45% mature, 45% 1986, 55% avg.; 5% very poor, 30% poor, 35% fair, 25% good, 5% excellent. Winter wheat 10% planted, 3% 1986, 5% avg. Major activities: Wheat planting, corn silage, hay cutting; corn, soybean, dry bean harvesting. Harvest progress slowed by rains. Apple harvest active. Quality, size excellent. Vegetable harvest slow.

**MINNESOTA:** Temperatures averaged 1° below normal to 5° above normal for State. Temperature extremes 35°; 86°. Precipitation averaged well above normal, north 0.23 to 0.65 in. above normal, central 0.68 to 0.71 in. above normal, southwest highest 1.17 in. above normal, south central near normal to 0.47 in. above normal. Precipitation totals averaged 0.76 to 1.80 in. Greatest weekly totals 2.71 in.

Rains over most of State, hampered harvest activity. Corn borer infestations high southwest, southeast, west central. Farmers advised to harvest soon to prevent loss. Field corn 87% mature, 30% 1986, 35% avg.; 4% combined, none 1986, none avg.; 68% silage cut, 10% 1986, 21% avg. Soybeans 98% dropping leaves, 40% 1986, 51% avg.; 59% mature, 9% 1986, 15% avg.; 10% combined, none 1986, 1% avg. Sugarbeets 10% harvested, 6% 1986, 7% avg. Potatoes 65% harvested, 50% 1986, 36% avg. Flax 91% harvested, 51% 1986, 57% avg. Dry beans

78% harvested, 34% 1986, 31% avg. Winter wheat 92% planted, 74% 1986, 73% avg. Rye 91% planted, 66% 1986, 71% avg.

**MISSISSIPPI:** Temperatures normal to 4° above normal; extremes 60°; 97°. Rain below normal. Greatest 24-hour rainfall 1.95 in.; greatest weekly rainfall 2.42 in.

Days suitable for fieldwork 5.9, 6.0 1986, 5.7 avg. Soil moisture 20% very short, 50% short, 30% adequate. Corn 100% dented, 100% 1986; 98% mature, 100% 1986, 97% avg.; 77% harvested, 88% 1986, 60% avg.; 4% poor, 6% fair, 76% good, 14% excellent. Hay 91% harvested, 90% 1986, 89% avg. Sorghum silage 94% harvested, 99% 1986, 86% avg. Peanuts 60% harvested, 68% 1986, 51% avg. Sweetpotatoes 40% harvested, 60% 1986, 38% avg. Corn silage 97% harvested, 100% 1986, 96% avg. Wheat 8% planted, 5% 1986, 4% avg. Soybeans 96% podding, 100% 1986, 99% avg.; 57% coloring, 63% 1986; 25% shedding, 53% 1986, 26% avg.; 7% mature, 26% 1986; 2% harvested, 5% 1986, 1% avg.; 2% very poor, 15% poor, 60% fair, 23% good. Sorghum 100% coloring, 100% 1986; 95% mature, 100% 1986, 92% avg.; 82% harvested, 86% 1986, 55% avg.; 3% poor, 46% fair, 47% good, 4% excellent. Rice 100% heading, 100% 1986, 100% avg.; 95% mature, 100% 1986, 92% avg.; 72% harvested, 86% 1986, 55% avg.; 19% poor, 49% fair, 32% good. Cotton 95% open bolls, 100% 1986, 86% avg.; 17% harvested, 34% 1986, 11% avg.; 27% fair, 73% good.

**MISSOURI:** Temperatures averaged 1° below normal except southeast 3° above normal. Precipitation 1.00 to 2.00 in.

Days suitable for fieldwork 2.9. Topsoil moisture 22% short, 54% adequate, 24% surplus. Most surplus moisture north, still short east central, south central, southeast. Corn harvesting varies 93% southeast to 13% northwest. Soybean harvest slowed more by wet weather than corn, sorghum. Pasture 1% very poor, 12% poor, 36% fair, 49% good, 2% excellent.

**MONTANA:** Temperatures near normal. Rainfall varied, heavier amounts Helena northeast to west of Glasgow.

Days suitable for fieldwork 6.1. Topsoil moisture 19% short, 81% adequate. Subsoil moisture 17% short, 83% adequate. Spring wheat 96% harvested, 87% 1986, 92% avg. Barley 95% harvested, 85% 1986, 91% avg. Oats 93% harvested, 88% 1986, 92% avg. Sugarbeets 4% harvested, none 1986, none avg. Corn silage 46% harvested, 69% 1986, 56% avg. Dry beans 54% harvested, 70% 1986, 56% avg. Alfalfa hay 2nd cutting 93% harvested, 88% 1986, 91% avg. Cattle, calves moved from summer ranges 30%, 1986 30%, 40% avg. Sheep, lambs moved from summer ranges 33%, 40% 1986, 43% avg.

**NEBRASKA:** Temperatures averaged 2° below normal. Extremes 29°; 86°. Precipitation early week averaged 0.50 in. northwest up to 2.50 in. northeast.

Days suitable for fieldwork 3.6. Topsoil moisture 75% adequate, 25% surplus. Subsoil moisture 12% short, 78% adequate, 10% surplus. Cool, wet conditions slowed crop maturity. Progress still ahead of normal. Corn borer damage evident as stalk breakage eastern counties. Corn silage, dry bean harvest full swing. Other forage crops harvested. Third cutting alfalfa hay 95%, 95% 1986, 95% avg. Some 4th cutting east. Poor drying conditions. Pasture, range feed supplies adequate. Feedlots muddy. Calves weaned.

**NEVADA:** Low pressure system early brought spotty precipitation, cooler weather. Temperatures recovered rapidly, rest of week dry. Temperature extremes 14°; 101°.

Good progress alfalfa seed combining, potato digging operations. Movement cattle to lower elevations full swing.

**NEW ENGLAND:** Temperatures averaged near normal from low 50s near Canadian Border to low 60s southern coast. Precipitation averaged 3.00 to 5.00 in. across southern States, 1.00 to 3.00 in. across northern States.

Days suitable for fieldwork 4.0. Soil moisture 5% short, 38% adequate, 57% surplus. Grazing availability 53% short, 35% adequate, 12% surplus. Fieldwork progress 1.0 day ahead. Field corn 22% harvested, 21% 1986, 21% avg.; fair to good. Sweet corn 90% picked, 91% 1986, 90% avg.; fair to good south, good to excellent north. Second crop hay 92% cut, 90% 1986, 97% avg.; poor to fair south, good to excellent north. Third crop hay 50% harvested, 56% 1986, 63% avg.; fair to good south, good to excellent north. Apples 30% picked, 25% 1986, 22% avg.; fair to good, size small to large, color fair to good. Cranberry size average, color good. Major farm activities: Haying, harvesting fruits and vegetables, repairing and servicing machinery, fall clean-up chores.

**NEW JERSEY:** Temperatures averaged above normal. Extremes 46°; 87°. Rainfall averaged 0.99 in. north, 1.46 in. central, 1.14 in. south. Heaviest 24-hour total 1.60 in. on 17th, 18th. Estimated soil moisture percent field capacity averaged 98% north, 86% central, 75% south. Four inch soil temperatures averaged 66° north, 69° central, 71° south.

Soil moisture adequate to excessive. Cooler temperatures slowed crop growth but improved quality of late crops. Fall vegetable harvest active. Irish potato digging about 75%. Sweetpotato harvest continued. Fall apple harvest active. Peaches moved from storages. Cranberry harvest began. Corn silage making active. Scattered harvest of corn for grain began. Soybeans coloring. Preparation, planting of fall sown grains, cover crops continued as ground conditions permitted.

**NEW MEXICO:** Temperatures over State ranged 26° Quemado, 93° Carlsbad; temperatures statewide 1 to 5° below normal. Precipitation greatest east, southwest.

Days suitable for fieldwork 5.6. Soil moisture 91% adequate, 9% surplus. Some light localized hail damage. Cotton 13% poor, 38% fair, 49% good; cool temperatures delayed maturity, wet fields eastside also caused problems. Barley 40% fair, 40% good, 20% excellent; planting continued, rains eastside aided germination. Irrigated, dryland wheat fair to excellent, planting continued; good moisture supply. Irrigated grain sorghum 17% fair, 66% good, 17% excellent, unchanged from previous week. Dryland sorghum 25% fair, 50% good, 25% excellent; some bird, hail damage. Corn 38% fair, 49% good, 13% excellent; light harvest activity began. Pecans 25% fair, 75% good. Lettuce 100% good; cool nights favorable, good stands. Potato harvest continued, price still unfavorable to growers. Chile harvest heavy, crop poor to excellent. Cattle 25% fair, 58% good, 17% excellent; sheep 18% fair, 64% good, 18% excellent. Range 64% fair, 27% good, 9% excellent.

**NEW YORK:** Above normal precipitation most of week. Temperatures near normal. Over 3.00 in. many areas. Rain slowed harvest progress considerably.

Days suitable for fieldwork 3.5. Soil moisture surplus. Corn excellent; hay, pastures good. Silage corn 13%, 11% 1986, 13% avg. Third cut alfalfa 67%, 50% 1986, 58% avg. Potato digging 50%. Dry bean harvest under 10%. McIntosh harvest complete. Started to pick empires, waynes. Labor

shortage due to early season. Rain caused extensive damage to onion crop.

**NORTH CAROLINA:** Temperatures averaged 1 to 3° above normal mountains, 4 to 6° above normal remainder of State. Temperature extremes 51°; 93°. Precipitation spotty, ranged none to 2.00 in. across State.

Days suitable for fieldwork 4.9. Soil moisture 6% short, 83% adequate, 11% surplus. Pasture 5% poor, 44% fair, 51% good. Flue-cured tobacco 82% harvested, 71% 1986, 89% avg. Burley tobacco 84% harvested, 68% 1986, 67% avg. Peanuts 5% poor, 36% fair, 59% good, harvest just began. Sorghum 24% harvested, 25% 1986, 20% avg. Sweetpotatoes 6% poor, 50% fair, 41% good, 3% excellent. Sweetpotatoes 17% harvested, 14% 1986, 20% avg. Corn for silage 92% harvested, 83% 1986, 83% avg. Apples fair to mostly good. Apples 56% harvested, 37% 1986, 50% avg. Major farm activities: Harvesting tobacco, corn for grain and silage, sweetpotatoes, hay, apples, grapes, sorghum; pasture improvements; preparing pasture, land for small grains; preparation for putting in conservation work; seeding alfalfa, pasture; tending livestock; preparing equipment for fall plantings; general farm maintenance.

**NORTH DAKOTA:** Temperatures averaged 1 to 4° above normal. Extremes 28° west central; 93° northwest. Showers statewide, precipitation heaviest east central 1.36 in.

Days suitable for fieldwork 5.8. Topsoil moisture above normal; 1% very short, 35% short, 62% adequate, 2% surplus. Subsoil moisture well above normal; 2% very short, 22% short, 76% adequate. Small grain harvest virtually complete. Late season crop development ahead of normal pace. Sunflower 46% bracts brown and beyond, 32% 1986, 37% avg.; soybeans 15% combined, 2% 1986, 6% avg.; corn grain 45% ripe, 9% 1986, 27% avg.; corn for silage 50% cut, 37% 1986, 50% avg.; potatoes 69% dug, 47% 1986, 38% avg.; flax 66% combined, 22% 1986, 54% avg.; dry beans 55% combined, 24% 1986, 36% avg.; sugarbeets 11% lifted, 7% 1986, 7% avg. Fall planting ahead of normal pace. Winter wheat 88% planted, 50% 1986, 72% avg.; rye 87%, 54% 1986, 75% avg. Pastures mostly fair.

**OHIO:** Temperatures averaged above normal. Extremes upper 70s to mid 80s and mid to upper 40s. Precipitation 1.00 to 1.50 in. north; 0.25 to 0.50 in. south.

Days suitable for fieldwork 4.8. Soil moisture 39% short, 50% adequate, 11% surplus. Corn good. Moisture content of harvested corn 18 to 25%; test weight of bushels light. Soybeans fair to mostly good. Weedy soybean fields need killing frost or spray to kill green weeds to improve harvest conditions. Grasslands need moisture to improve growth south. Wet conditions delayed vegetable harvests northern area; processing tomato quality down.

**OKLAHOMA:** Temperatures averaged 2° below normal northeast, southeast to 5° below normal Panhandle. Precipitation averaged 1.01 in. north central to 4.11 in. south central.

Days suitable for fieldwork 4.4. Topsoil moisture 5% short, 70% adequate, 25% surplus. Subsoil moisture 5% short, 95% adequate. Wheat 35% planted, 30% 1986, 15% avg.; 15% emerged, 5% 1986, 3% avg. Seeding, emergence 2 weeks ahead of average. Sorghum 1% poor, 7% fair, 90% good, 2% excellent; 90% coloring, 97% 1986, 95% avg.; 20% mature, 35% 1986, 35% avg.; 5% harvested, 5% 1986, 10% avg. Cool, wet weather hampered harvest. Cotton 20% fair, 80% good; 10% open bolls, 15% 1986, 25% avg.; none harvested, none 1986, none avg. Pastures, livestock good. Cattle marketings increased slightly, prices stable.

**OREGON:** Temperatures most of State 1 to 4° below normal. Some precipitation along coast, northwest interior. Astoria 0.80 in., Laurel Mountain 0.60 in., 0.10 in. Portland, Eugene.

Soil moisture 94% short, 6% adequate. Dry conditions east of Cascades delayed fall plantings of cereal crops. Early planted wheat emerged Pendleton area. Grass seed planting completed Jefferson County. Western growers planted grass seed, crimson clover. Field preparation for other fall planted crops underway. Red clover, hop harvest nearly completed, mid Willamette Valley. Third cutting alfalfa underway Klamath, Deschutes Counties. Corn silage continued southeast. Seed potato harvest underway northeast. Apple harvests underway most growing areas. Apple harvest slow due to labor shortage Gilliam County. Mid Willamette Valley prune harvest nearly completed, winter pear harvest began. Everbearing strawberry, raspberry harvest continued northwest areas. Coos County cranberry harvest began 20th; crop size, quality good. Filberts western orchards dropping. Malheur County onion harvest at peak. Onion, sweet corn harvest continued west. Cauliflower, broccoli harvest full swing, snap bean harvest completed mid Willamette Valley. Potato harvest to begin late this week eastern counties. Livestock mostly good statewide. Range, pasture fair. Forage, water supplies scarce northeast counties. Majority of non-irrigated pastures very dry. High ranges excellent condition, central areas of State.

**PENNSYLVANIA:** Week mild, very wet. Average temperature 65° 30° above normal. Temperature extremes 40°; 84°. Average precipitation 1.86 in., 1.02 in. above normal.

Days suitable for fieldwork 2.0. Soil moisture 50% adequate, 50% surplus. Corn 85% dent, 87% 1986, 75% avg.; 38% mature, 37% 1986, 19% avg.; 4% harvested, 2% 1986. Corn 3% very poor, 9% poor, 22% fair, 40% good, 26% excellent. Ensilage corn 44% harvested, 46% 1986, 34% avg. Soybeans 3% very poor, 7% poor, 21% fair, 44% good, 25% excellent. Potatoes 50% harvested, 78% 1986. Tobacco 85% harvested, 96% 1986. Third cutting alfalfa 67%, 90% 1986. Fourth cutting alfalfa 34%, 34% 1986. Second cutting clover-timothy 92%, 98% 1986. Quality of hay during week poor to fair. Apples 45% harvested, 51% 1986. Peaches 95% harvested, 98% 1986. Fall plowing 48%, 63% 1986. Winter wheat 28% planted, 34% 1986. Barley 42% planted, 29% 1986. Activities: Harvesting hay, haylage, corn for grain and silage, fruit, potatoes, other vegetables, tobacco; fall plowing; seeding alfalfa, wheat, barley; spreading lime, fertilizer; machinery maintenance, caring for livestock.

**PUERTO RICO:** Island average rainfall 1.79 in., 0.06 in. below normal. Highest weekly total rainfall 3.25 in. Dos Bocas, 3.08 in. Lares, 2.91 in. Lajas. Highest 24-hour total 2.89 in. Lajas. Divisional temperature averaged about 83 to 84° on coasts and 76 to 78° interior, mean station temperature ranging 76° Cayey to 86° Maguëyes Island. Lowest minimum temperature 65° Cayey. Highest maximum temperature 95° Maguëyes Island.

**SOUTH CAROLINA:** Temperatures near seasonal levels, rainfall generally less than 0.33 in.

Days suitable for fieldwork 5.0. Soil moisture 3% very short, 19% short, 78% adequate. Cotton 75% open bolls, 81% 1986, 77% avg.; 3% harvested, 5% 1986, 5% avg.; 3% very poor, 11% poor, 86% fair. Soybeans 17% leaves turning, 19% 1986, 18% avg.; 4% leaves shedding, 6% 1986, 6% avg.; 1% poor, 43% fair, 51% good, 5% excellent. Tobacco harvest virtually complete. Corn 64% harvested, 76% 1986, 76% avg. Peanuts fair to good; 11% harvested, 3% 1986, 11% avg. Apples 50% harvested. Pastures fair to mostly good. Livestock good.

**SOUTH DAKOTA:** Average temperatures 2° below to 2° above normal. Extremes 27°; 94°. Black Hills low 19°.

Days suitable for fieldwork 4.2. Topsoil moisture improved southeast part of State 11% critically short, 37% short, 46% adequate, 6% surplus. Major activities: Cutting silage, beginning row crop harvest, fall seeding. Harvest delayed by rain.

**TENNESSEE:** Precipitation heaviest west. Temperatures above normal. Extremes 49°; 92°.

Days suitable for fieldwork 4.9. Soil moisture 15% very short, 50% short, 34% adequate, 1% surplus. Corn 94% mature, 89% 1986, 80% avg. Corn silage 88% harvested, 85% 1986. Corn grain 40% harvested, 35% 1986, 20% avg. Burley 91% harvested, 75% 1986, 81% avg. Dark fired 87% harvested, 75% 1986, 75% avg. Dark air-cured 86% harvested, 75% 1986, 80% avg. Winter wheat 8% seeded, 7% 1986, 7% avg. Cattle, pastures mostly fair.

**TEXAS:** Upper level low triggered heavy showers, thunderstorms progressed across State early week. Warm, humid weather replaced by cooler conditions late week. Temperatures below normal north, west, near or above normal elsewhere. Precipitation above normal north, east, near or slightly below normal elsewhere.

**Crops:** Corn harvest underway Plains; midweek operations delayed by wet conditions. High winds caused lodging some fields. Harvest final stage Blacklands. Weekly showers slowed progress. Grain sorghum harvest slowed by midweek showers Plains. Early yields good, recent rains should improve outlook later fields. Harvest delayed end week Blacklands. Cotton progress slowed by cooler temperatures Plains following frontal passage. Warmer weather needed for faster maturing. Some spraying Low Plains. Harvest continued part week Blacklands. Yields good. Harvest virtually complete, stalk destruction in progress Coastal Bend, Rio Grande Valley. Showers Upper Coast hampered operations. Growth, development slow Trans-Pecos. Small grains previously sown will benefit from recent moisture. Many fields emerging, growth should increase. Planting operations active many areas until rain. Some producers fertilizing. Current growth continued, some fields Plains ready for grazing within couple weeks. Recent rains should improve planting moisture. Recent rains should benefit 2nd crop rice fields. Soybeans began maturing Plains. Harvest to begin as soon as ground dries. Harvest some progress Upper Coast. Average yields. Recent moisture benefit later fields. Rain helped peanuts Cross-Timbers. Harvest early varieties to begin soon. Harvesting continued south less rain. Diseases increased with humid, wet conditions. Other field crops: Peanuts 7% harvested, 13% 1986, 10% avg. Soybeans 17% harvested, 21% 1986, 8% avg. Sugarbeets none harvested, 1% 1986, 1% avg. Sunflowers 5% harvested, 5% 1986, 12% avg. Oats 18% planted, 18% 1986, 14% avg.

**Commercial Vegetables:** Rio Grande Valley cucumber harvest started. Tomatoes, carrots, cabbage, peppers good progress. Some other planting continued. Harvest early oranges underway. Quality good, most fruit clean. Sizes good. San Antonio-Winter Garden fall planting continued. Planted crops excellent progress. Cucumbers stressed for moisture Upper Coast. High Plains carrot, pepper harvest delayed by midweek rains. Trans-Pecos chili harvest underway. Bell peppers good progress. Harvest to begin soon. Pecan harvest underway south. Many central, eastern groves entering shuck split. High winds scattered areas some damage to trees. Final waterings Trans-Pecos.

Range and Pasture: Ranges, native pastures continued to improve most areas from recent rain. Small grains emerging, provide some grazing soon. Many stockers arrived Plains. Livestock good. Prices good.

UTAH: Precipitation none to light. Temperatures above normal north central, northern mountains, below normal rest of State.

Days suitable for fieldwork 6.6. Soil moisture 50% short, 50% adequate. Winter wheat 72% seeded, 69% 1986, 54% avg. Alfalfa hay 3rd cutting 73%, 45% 1986, 53% avg. Corn 75% dent, 84% 1986, 57% avg.; 49% mature, 51% 1986, 26% avg. Silage 45% harvested, 22% 1986, 16% avg. Apples 30% harvested, 22% 1986, 13% avg. Onion, potato harvests continued. Dry bean harvest began. Range feed 7% poor, 63% fair, 30% good. Cattle 21% fair, 72% good, 7% excellent. Sheep 22% fair, 64% good, 14% excellent.

VIRGINIA: Clear to partly cloudy, becoming cloudy end period. Isolated showers early, mid period. Temperatures averaged above normal, highs in upper 80s. Rainfall averaged 1.00 to 2.00 in.

Days suitable for fieldwork 4.4. Topsoil moisture 9% short, 76% adequate, 15% surplus. Corn 90% mature, 73% 1986, 83% avg. Grain corn 43% harvested, 38% 1986, 37% avg. Silage 70% harvested, 51% 1986, 70% avg. Soybeans poor. Corn earworm damage heavy some areas. Earworm problem declined. Late planted soybeans helped by rain. Peanuts good. Spraying more active with wet weather. No significant peanut acreage harvested yet. Flue-cured tobacco 56% harvested, 51% 1986, 77% avg. Burley tobacco 74% harvested, 53% 1986, 84% avg. Fire-cured tobacco 70% harvested, 57% 1986, 84% avg. Apples 46% harvested, 46% 1986, 45% avg. Pastures improved, fair. Wheat 6% seeded, 9% 1986, 4% avg. Barley 9% seeded, 16% 1986, 13% avg. Oats 9% seeded, 17% 1986, 16% avg.

WASHINGTON: Temperatures continued mostly warm. Precipitation light west, negligible elsewhere. First frost of season Goldendale. Temperature extremes 28° Goldendale, 93° Omak.

Days suitable for fieldwork 6.7. Soil moisture 70% short, 30% adequate. Dry conditions discouraged some farmers from planting, most farmers planted hoping for rain. Winter wheat 52% seeded, 45% 1986, 47% avg. Fall planting winter wheat 22% emerged. Third crop alfalfa hay harvest winding down. Fourth cutting alfalfa hay underway Columbia Basin. Second cutting timothy hay winding down Kittitas County. Potato, dry bean harvests continued; respectively 33%, 60%; mostly good both crops. Corn silage harvest continued. D'Anjou pear, golden delicious apple harvests neared completion. Warm temperatures delayed coloring red delicious apples. Some red delicious picked, many growers waiting for better color. Most orchards fruit at or past optimal maturity for long term storage. Grape, apple harvest activity increased

near end of week. Western area small fruit plantings being renovated. Range, pasture 80% short, 20% adequate. Stockmen continued to move cattle from ranges to stubble, hay fields, fall pasture. Beef producers began to prepare for fall weaning, marketing of calves. Hay, other roughage feed supplies 70% adequate, 30% surplus. Cool weather slowed vegetable development Franklin County where carrots, sweet corn, vegetable seed crops being harvested. Spanish type onions, peppers harvest in progress Yakima County. Some frost but damage negligible. Sweet corn harvest continued Kittitas County; yields lower this year compared to other years. Late harvest of summer vegetables continued King, Pierce Counties.

WEST VIRGINIA: Average temperature 69°, 4° above normal. Extremes 48° Weston; 90° Creston, Ripley. Precipitation averaged 0.91 in. Extremes 0.03 in. Parkersburg; 4.08 in. Moorefield.

Days suitable for fieldwork 4.2. Soil moisture 7% very short, 28% short, 65% adequate. Farm activities: Harvesting hay, corn, tobacco; chopping silage, general farm maintenance. Corn, pasture fair to poor. Hay, tobacco poor to fair. Apples fair to good. Second cut hay 95% harvested, 90% 1986.

WISCONSIN: Temperatures averaged 61°, 2° above normal. Extremes 32°; 84°. Rainfall 0.80 to 2.20 in. Heaviest rain southern third, northeast driest.

Days suitable for fieldwork 2.4. Soil moisture 16% short, 58% adequate, 26% surplus. Crops 1% poor, 13% fair, 74% good, 12% excellent. Corn 93% in dent, 79% 1986, 75% avg. Corn 67% mature, 38% 1986, 43% avg. Corn for grain 3% harvested, none 1986, none avg. Corn silo filling 45%, 11% 1986, 13% avg. Wet soils slowed activity. Soybeans 72% leaves turned, 69% 1986, 68% avg. Soybeans 45% leaves shed, 22% 1986, 31% avg. Third crop hay 70% cut, 54% 1986, 53% avg. Fall plowing 9%, 6% 1986, 5% avg.

WYOMING: Temperatures generally below normal. Precipitation mostly below normal.

Days suitable for fieldwork 6.0. Topsoil moisture 52% short, 48% adequate. Barley 5% mature, 5% 1986; 95% harvested, 95% 1986. Spring wheat most harvested, 95% 1986, 95% avg. Oats 5% mature, 10% 1986; 95% harvested, 90% 1986, 90% avg. Potatoes 40% harvested, 40% 1986, 45% avg. Dry beans 65% windrowed, 85% 1986, 70% avg.; 45% combined, 55% 1986, 60% avg. Sugarbeets 10% dug, 15% 1986, 5% avg.; average 15% sugar content. Corn silage 55% harvested, 50% 1986, 55% avg. Corn 5% milk; 15% dough, 15% 1986, 15% avg.; 55% dented, 55% 1986, 60% avg.; 25% mature, 30% 1986, 20% avg. Winter wheat 60% seeded, 80% 1986, 80% avg.; 20% emerged, 40% 1986, 45% avg.; mostly good development. Prospects for winter grazing mostly good. Livestock weights; calves mostly heavier; lambs no change to slightly heavier.

## International Weather and Crop Summary

September 13-19, 1987

### HIGHLIGHTS:

**UNITED STATES** ... Light to moderate precipitation through much of the midwest slows harvest. Heavier rains in the Delta area helps late maturing soybeans and improved pastures.

**U.S.S.R.** ... In Western U.S.S.R., generally dry weather in the Ukraine and North Caucasus helps fieldwork. In the New Lands, wet weather in the north causes significant harvest delays.

**EUROPE** ... Moderate to heavy showers continue to hamper harvest activities from the U.K. eastward to Poland. Warm, dry weather elsewhere benefits harvest and tillage operations.

**SOUTH ASIA** ... Hot, dry weather stresses crops in the northwest. Showers in parts of southern India help filling summer crops following a recent drying trend.

**SOUTHEAST ASIA** ... Heavy rain covers Thailand's rainfed grain areas, possibly causing some crop damage. Scattered showers cover the Philippines.

**EASTERN ASIA** ... Dry weather in the North China Plain and South Korea benefits maturing crops and fieldwork in preparation for winter grain planting.

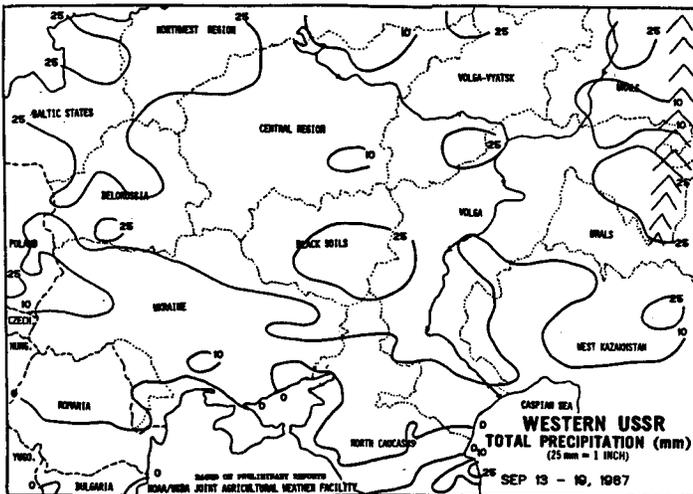
**CANADA** ... Dryness in the west favors crop harvest. Rain slows late harvesting in the east.

**SOUTH AMERICA** ... Mostly light rain covers Argentina and Brazil's wheat. Heavier showers fall over Uruguay.

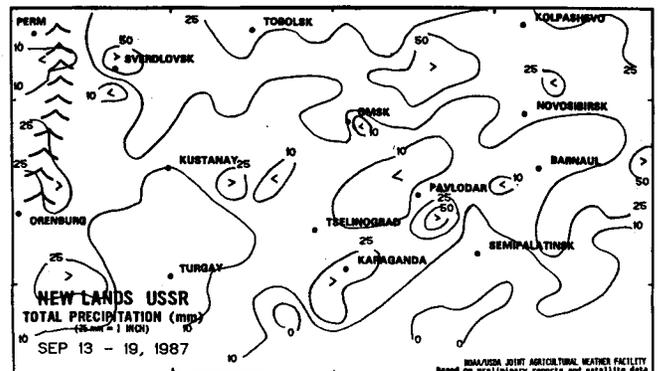
**AUSTRALIA** ... Light rain favors jointing to heading wheat in southern coastal areas, while most other grain production areas remain dry.

**MEXICO** ... Below-average rainfall covers most of the country.

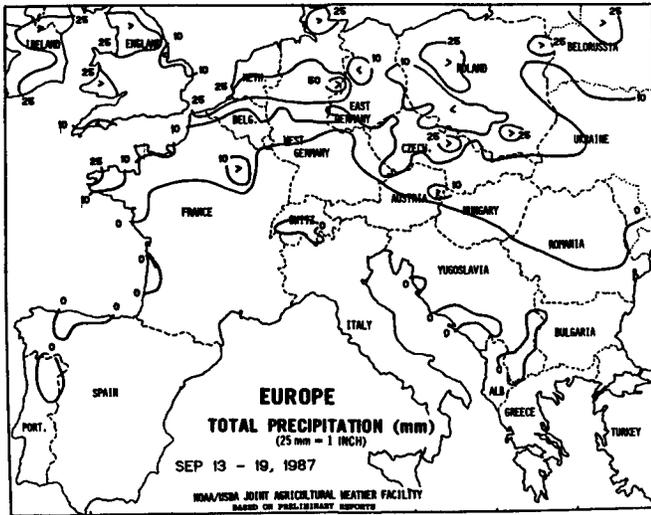
CORRECTION VOL. 74, NO. 37, SEPT. 15, 1987, INTERNATIONAL SECTION P. 28 AUGUST PRECIPITATION MAP SHOULD HAVE READ PERCENT OF NORMAL PRECIPITATION. THE PERCENT OF NORMAL PRECIPITATION SHOULD HAVE READ TOTAL PRECIPITATION.



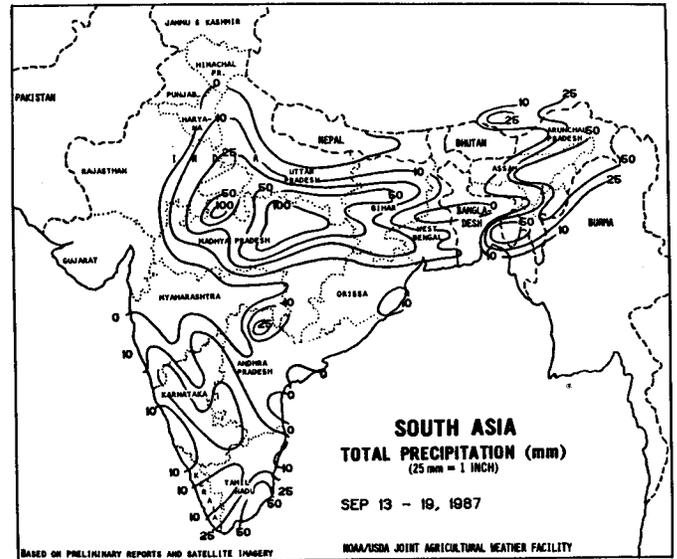
**U.S.S.R.** ... In Western U.S.S.R., light showers covered most crop areas except for those in the extreme south where the weather was mostly dry. Heaviest precipitation (25-35mm) covered the Black Soils Region, the Baltic States, the Northwest Region, and the southern Volga Vyatsk Region. Several days of dry weather over the Ukraine and North Caucasus helped summer crop harvesting and winter grain planting. Topsoil moisture over much of the region was favorable for winter grain emergence and early plant establishment. Weekly average temperatures were below normal everywhere except the Ukraine where temperatures were near to above normal. On September 18, scattered frost covered crop areas in the western Baltic States and western Belorussia, where minimum temperatures dropped to around 0 degrees C about 2 weeks earlier than usual. The early season frost in these areas had minimal effect on mature crops.



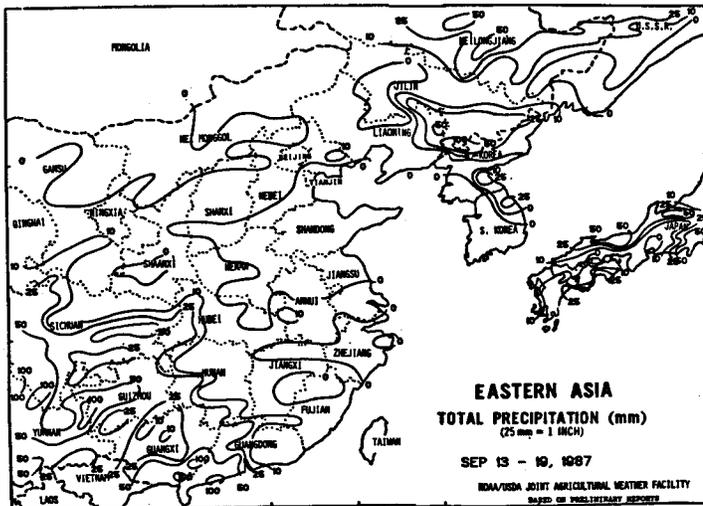
In the New Lands, widespread moderate rain (20-80mm) covered northern spring grain areas, including the Urals, northern Kazakhstan, and Western Siberia, causing significant harvest delays. Light showers in central Kazakhstan caused only minor delays in harvesting. Weekly average temperatures were near to above normal over much of the region.



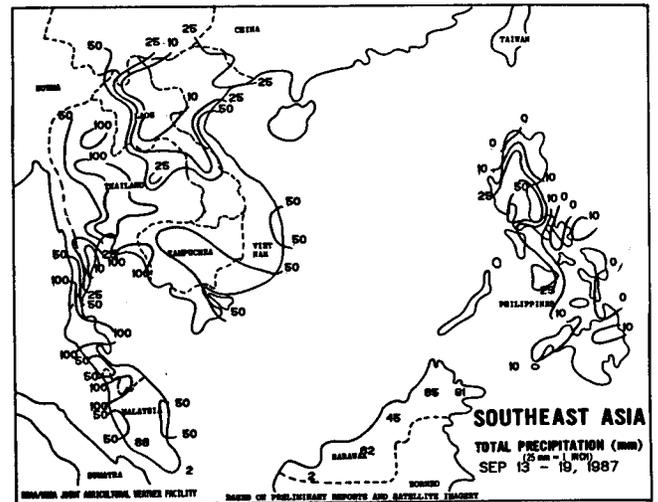
**EUROPE ...** A ridge of high pressure remained entrenched over southern Europe for much of the period, resulting in several rain-producing frontal passages in the north, and warm, dry weather in the south. Moderate to heavy showers (25-55mm) were common across Ireland, England, the Netherlands, northern West Germany, and Poland. The rains continued to hamper late harvest activities, lower grain quality, and delay fall tillage and planting operations, which are now normally in full swing. Warm, dry weather elsewhere across Europe benefited harvesting, including previously wet areas of northern France. The dry conditions in southeastern sections favored a rapid drydown of this year's corn crop, which has been hurt in some areas due to a lack of moisture and extended high temperatures.



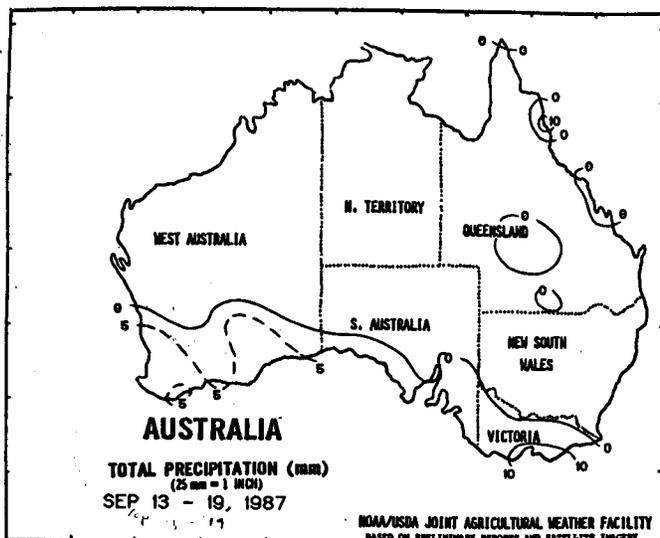
**SOUTH ASIA ...** Hot, dry weather persisted in northwestern India from Punjab to Gujarat and in Maharashtra, stressing reproductive to filling summer crops and further reducing moisture levels in areas most affected by this season's monsoon failure. The monsoon is normally withdrawn from the northwest by mid-September, increasing the need for post-monsoon showers to boost moisture levels for crop recovery and fall (continued to back cover)



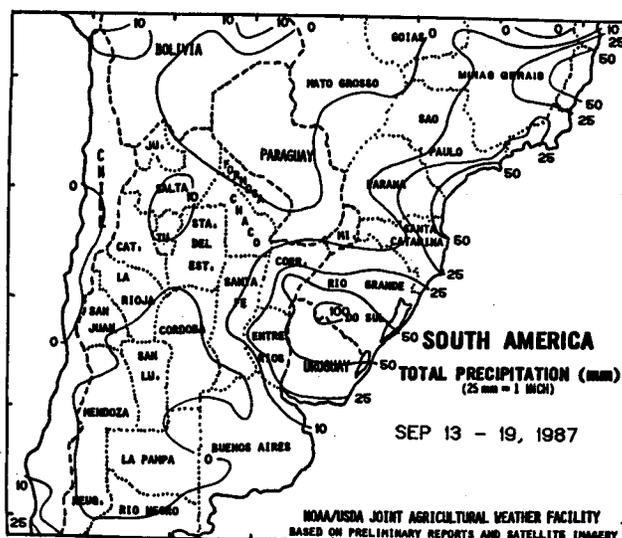
**EASTERN ASIA ...** The second consecutive week of dry weather covered the North China Plain, benefiting maturing corn, cotton, and soybeans and aiding fieldwork in preparation for winter wheat planting. Dry weather benefited maturing crops in South Korea. Wet weather (25 to 60mm) was unfavorable for maturing corn and soybeans in Heilongjiang and southern Jilin, but dry weather benefited crop maturation in Liaoning and northern Jilin. In southern China, dry weather in Jiangxi and Zhejiang was welcomed following last week's heavy rainfall. Light to moderate showers over south coastal areas of Guangxi and Guangdong benefited late double-cropped rice in the filling stage.



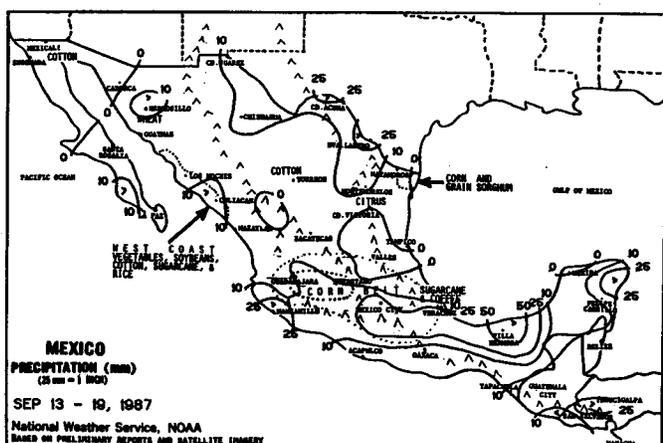
**SOUTHEAST ASIA ...** Moderate to heavy showers (25-164mm) continued in Thailand's rainfed grain areas with heaviest rain from the Northern Hills region to Bangkok. Heavy, tropical showers in Thailand since early-August boosted moisture levels for late rice planting, but some areas are too wet, with crop damage from flooding and lodging likely in local areas. Mostly moderate showers (25-84mm) fell elsewhere in Indochina, but drier weather persisted over parts of northern Laos and northern Vietnam. Moderate to heavy showers (25-100mm or more) covered peninsular Thailand and Malaysia and parts of western Indonesia, but dry weather persisted over Java. In the Philippines, moderate to heavy showers (25-80mm) continued in southwestern Luzon, reflecting the wet weather trend since June, which caused local flooding. Rainfall averaged less than 10mm elsewhere in Luzon, and in most rice, corn, and sugarcane areas to the south.



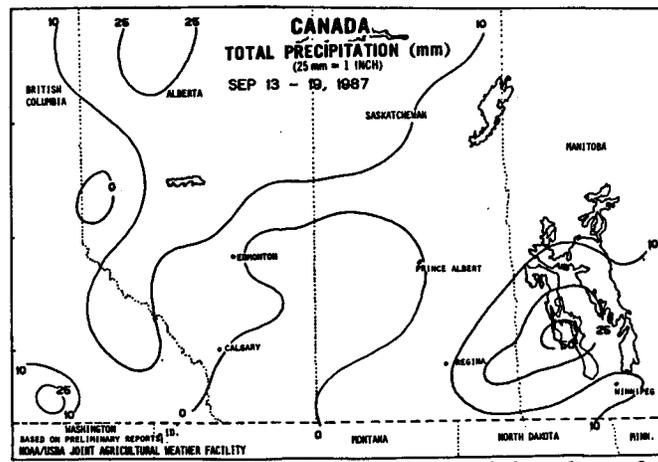
**AUSTRALIA** ... Scattered light showers (less than 14mm) fell over southern areas of Western Australia, South Australia, and Victoria, benefiting wheat in late jointing to heading stages. Most other grain production areas remained dry. Precipitation in Western Australia still remained below normal, however, and additional rainfall will be needed soon as wheat enters reproductive stages in the next few weeks. Mostly warm and dry weather favored sugar harvesting along Queensland's east coast, although light showers (less than 11mm) early in the period may have caused minor delays.



**SOUTH AMERICA** ... Generally below-average rainfall prevailed over much of Argentina and Brazil's center-south. Heavier rain, producing 25-104mm, was concentrated over Uruguay, Argentina's Entre Rios province, and southern Rio Grande do Sul, Brazil. In Brazil, substantial showers also covered east coastal areas from Santa Catarina to Minas Gerais. Light rain elsewhere in southern Brazil maintained moist growing conditions for wheat. In western Parana, rainfall averaged 6mm or less, providing minimal interference to early wheat harvesting. The rain in southeastern Minas Gerais and eastern Sao Paulo benefited coffee tree flowering. In Argentina, mostly dry weather covered vegetative wheat. Rainfall averaged 5mm or less in most of Buenos Aires and Santa Fe. No rain fell in northwestern Buenos Aires and Cordoba. Early summer crop planting began in northern crop areas.



**MEXICO** ... Light, scattered showers covered northern Mexico causing little interference to summer crop harvesting. Rainfall generally averaged 5mm or less across the north with isolated showers producing 10-18mm. Showers in the northwest benefited early wheat planting. Cotton harvesting progressed in north-central crop areas. In the Southern Plateau corn belt, weekly rainfall averaged less than 10mm in the north, 10-30mm in the west, and 25-78mm in the southeast. While the amounts averaged below normal, moisture is adequate for immature corn. Corn harvesting is underway. Tropical showers fell over much of southern Mexico, favoring corn growth. Light rain fell in the Yucatan peninsula, however.



**CANADA** ... Mostly dry weather, with only a few light scattered showers, covered the major crop areas of Alberta and the western two-thirds of Saskatchewan. Heavier rain (10-57mm) fell over eastern Saskatchewan and much of Manitoba's grain area. Wetness in the east delayed completion of the crop harvest. In the west, Alberta's grain and oilseed harvest progressed rapidly, while Saskatchewan's crop harvest was nearly complete in the south. Harvest reports indicate Alberta's crop progress reached over 80 percent swathed and over 40 percent combined. Saskatchewan's crops were over 90 percent swathed and over 60 percent combined. Manitoba's harvest was nearly complete. Minimum temperatures dropping below freezing slowed field drying in northern crop areas.

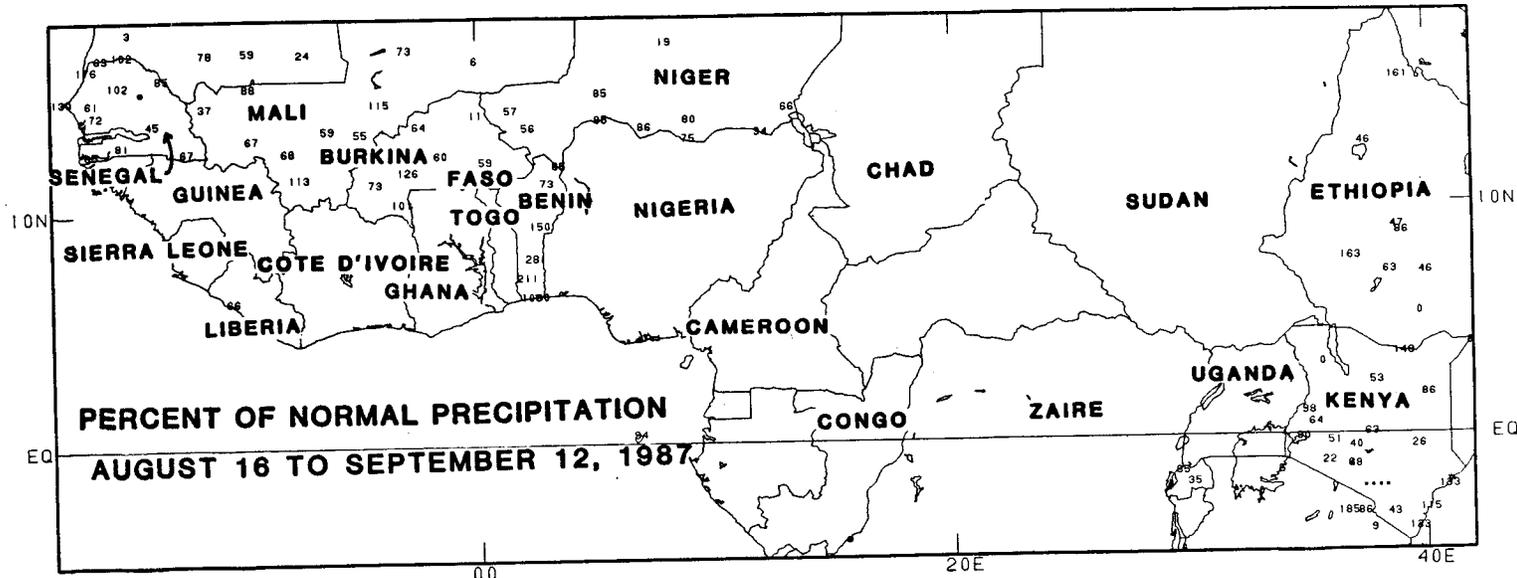
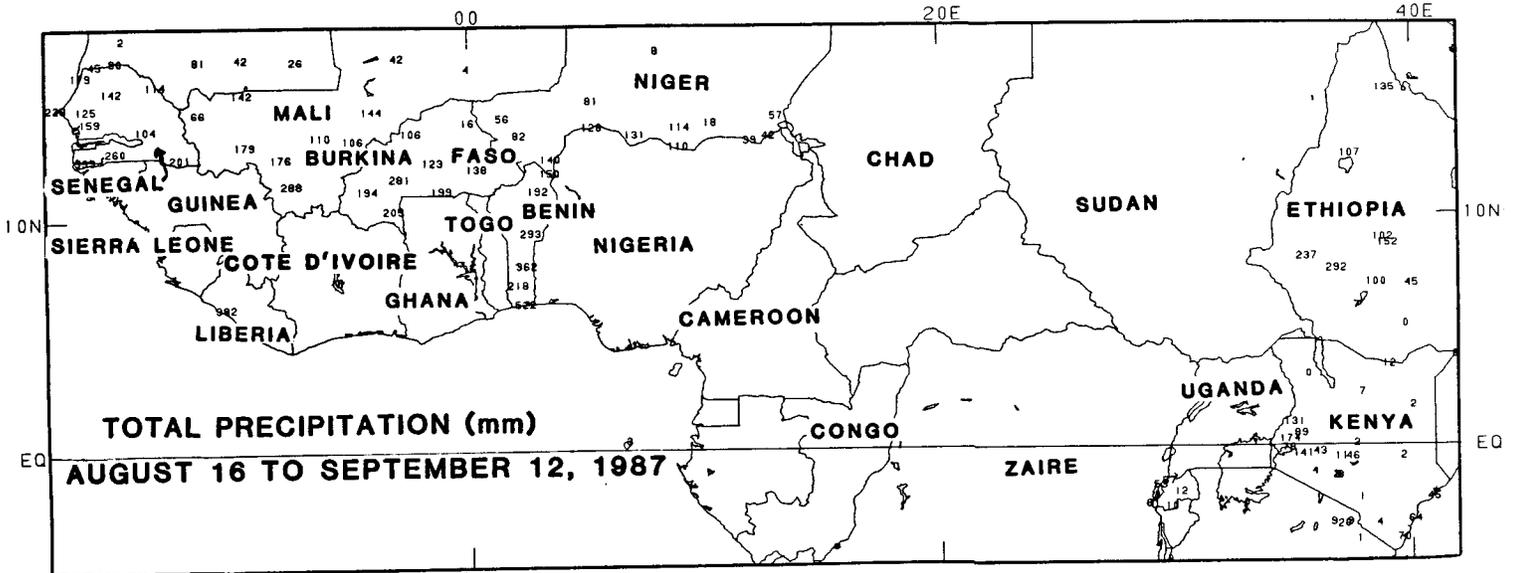
### African Agricultural Weather Summary

This overview summarizes current conditions in crop areas in Africa where the migratory rainy season and coincident crop growing season are underway. The primary growing season is now concentrated north of the equator.

In western Africa, showers continued in Senegal and reached into Mauritania, but temperatures continued above normal. Wet weather (25-50mm) covered southwestern Mali, the southern two-thirds of Burkina Faso, and extreme western Niger, bringing relief to reproductive and filling crops. During August, periodic hot, dry weather in these areas stressed crops in the vegetative to reproductive stages of development. Northern crop areas of central Mali, Burkina Faso, Niger, and Mauritania continued to receive limited rainfall. Showers since late-August in southern Cote d'Ivoire and southern Ghana broke a drying trend which had

stressed replanted grains but is now delaying harvest activities. Moderate to heavy showers delayed harvesting in southern Nigeria but favored reproductive to filling crops to the north. Infrequent showers occurred in Chad.

In eastern Africa, moderate showers continued in western Ethiopia, reflecting this season's favorable weather pattern for westernmost crops. Light to moderate rain (5-28mm) helped crops in northern and eastern Ethiopia, following dry weather since the beginning of the growing season in June. Dry weather persisted in southern Ethiopia, continuing the dry weather trend which has lasted since early August. Mostly dry weather in Kenya favored harvesting, but some heavy rain fell in westernmost areas. As indicated by satellite imagery, mostly dry weather covered Somalia while scattered showers fell over Sudan.



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(continued from p. 25)  
plantings. Showers (10-74mm) in southern India over Karnataka, Tamil Nadu, and parts of Andhra Pradesh helped filling crops following the drying trend that lasted since early August and stressed reproductive to filling crops. Showers (10-100mm or more) continued over north-central India from Haryana and Madhya Pradesh to West Bengal, benefiting filling rice and improving irrigation levels in the chronically dry northern wheat areas for the upcoming planting. Rainfall averaged less than 10mm along the southeast coast from eastern Andhra Pradesh to western Bangladesh, but moderate to heavy showers (25-97mm) continued over flooded regions of eastern Bangladesh and India's eastern states.

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