

# 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

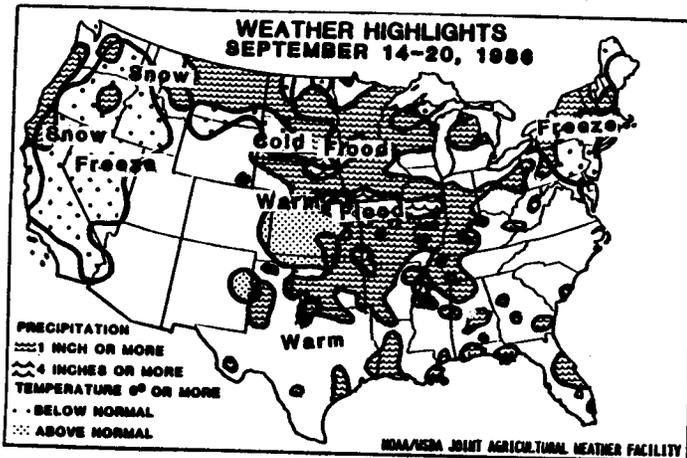
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Sept. 23, 1986

## National Weather Summary

September 14 to 20, 1986



**HIGHLIGHTS:** Showers and thunderstorms covered most of the Nation except the far Southwest. Snow fell in the high elevations of the Plateau, the Rockies, and the northern Appalachians. Heavy rain fell from the upper Mississippi Valley through upper Michigan and from eastern Nebraska to central Indiana. Local flooding resulted from Minnesota to Michigan and from eastern Nebraska through southern Iowa and northern Missouri. Showers were very light through most of the East Coast States, but isolated heavy amounts fell in the Southeast. Heavy storms also covered the area from the Texas Panhandle to southwestern Missouri. It was much cooler than normal in the West and the northern Great Plains, but warmer-than-normal weather reached from the central and southern Rockies to the lower Ohio Valley and southeastward to Florida.

**SUNDAY...** Showers and a few thunderstorms were widespread through the northern Plains and the Great Lakes. The heaviest rain reached from southern Minnesota across Wisconsin into central Michigan. Some of the rainy areas in Michigan still had not recovered from previous flooding. Light rain fell in the Northwest and heavy thunderstorms reached from the Texas Panhandle into Oklahoma. The weather was generally mild, but freezing weather covered Northwest high elevations.

**MONDAY...** Showers were widespread through the Northwest with some heavy thunderstorms in parts of the Columbia River Basin. Light showers covered most of the Great Plains with heavy storms from southeastern Kansas into Arkansas. Showers and thunderstorms again covered the Great Lakes. Moderate to heavy showers fell from the eastern Lakes to southern New England. Light showers covered the Appalachians.

**TUESDAY...** Heavy showers and thunderstorms with severe weather reached from Oklahoma and Arkansas through the upper Mississippi Valley. Lighter storms covered most of the Plains and the Northwest to central California. Widely scattered showers fell in the Southeast and New England. Very cold air covered the upper Great Lakes.

**WEDNESDAY...** Showers and thunderstorms continued in the Northwest well into central California and over the central Plateau. Moderate to heavy showers again fell in parts of the Columbia Basin in Washington. Thunderstorms were widespread through the Mississippi Valley, the Great Lakes, the Ohio Valley, and parts of the Southeast. The cold air reached into the central Appalachians.

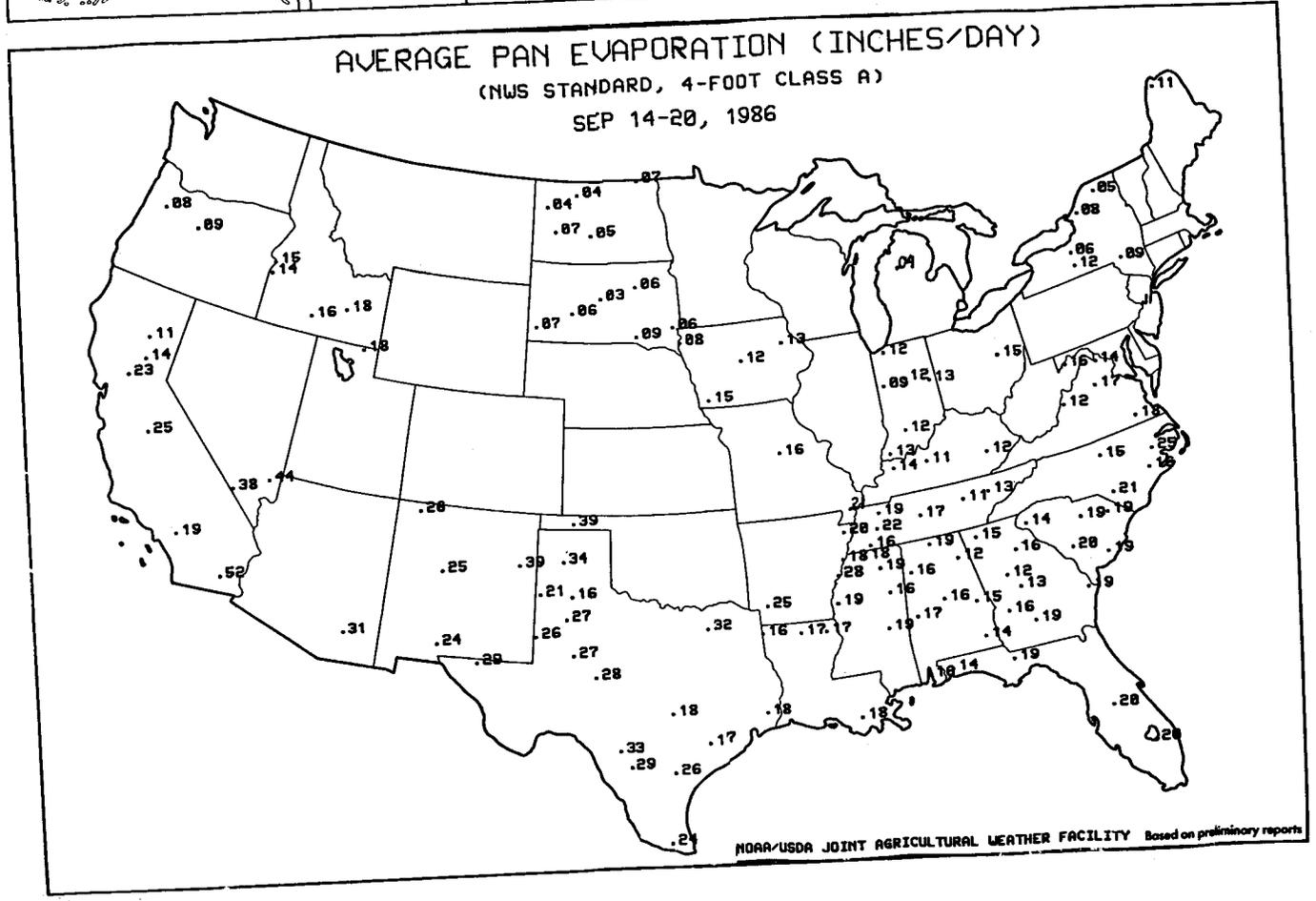
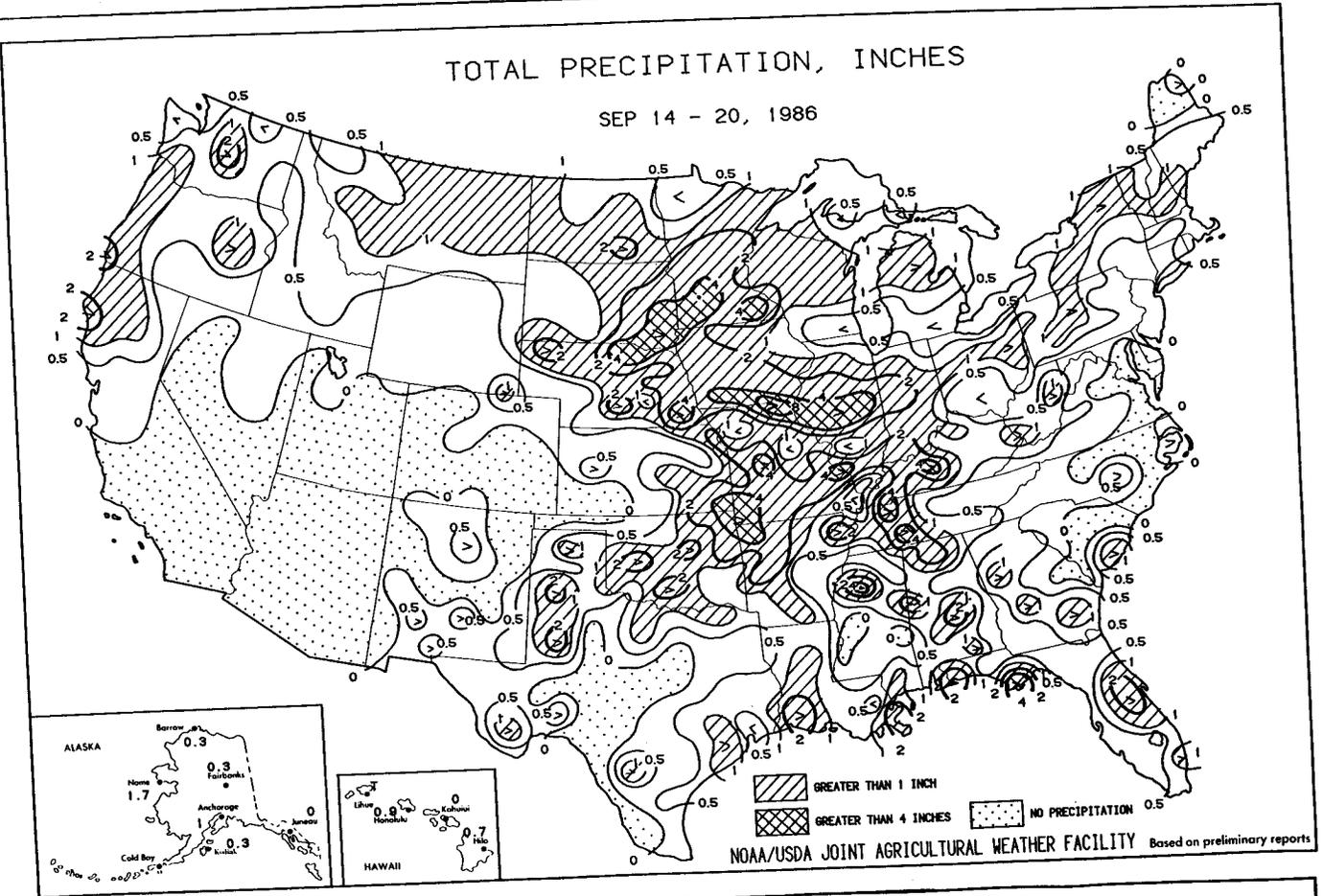
**THURSDAY...** Showers, rain, or thundershowers covered the Nation except for the Southwest. Moderate to heavy storms reached from eastern Montana to central Illinois, upper Ohio Valley, and Tennessee Valley. Flood-producing thundershowers fell in southern Iowa and northeastern Missouri. Light showers reached the mid-Atlantic States. Cold air covered the Northeast and the central Plateau region.

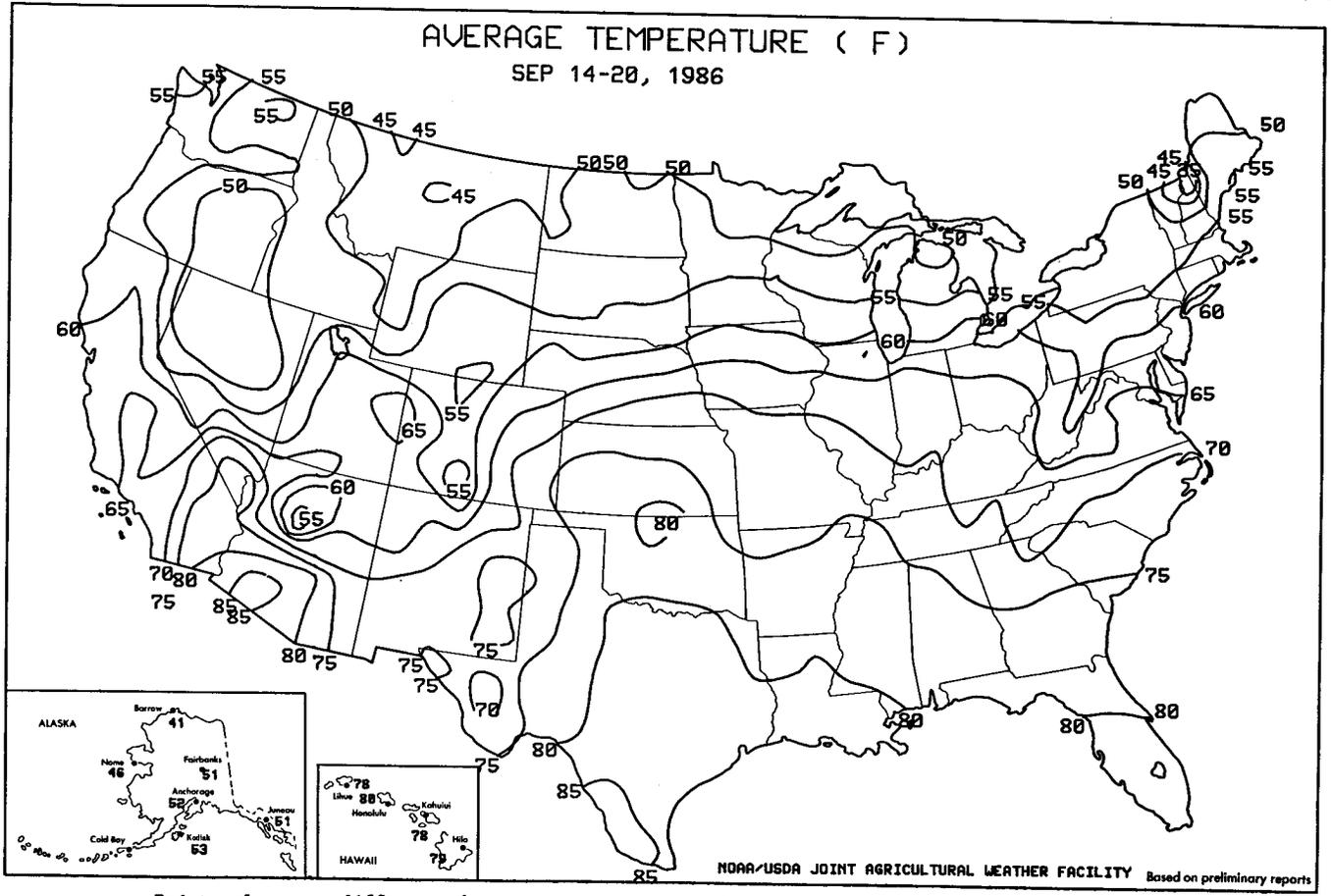
**FRIDAY...** Thunderstorms were widespread from the northern Plains through the Great Lakes region, through the Ohio and Tennessee Valleys, and to the Appalachian Mountains from North Carolina northward. A few showers fell along the east coast. Showers continued in the Northwest with snow falling at higher elevations.

(Continued to back cover)

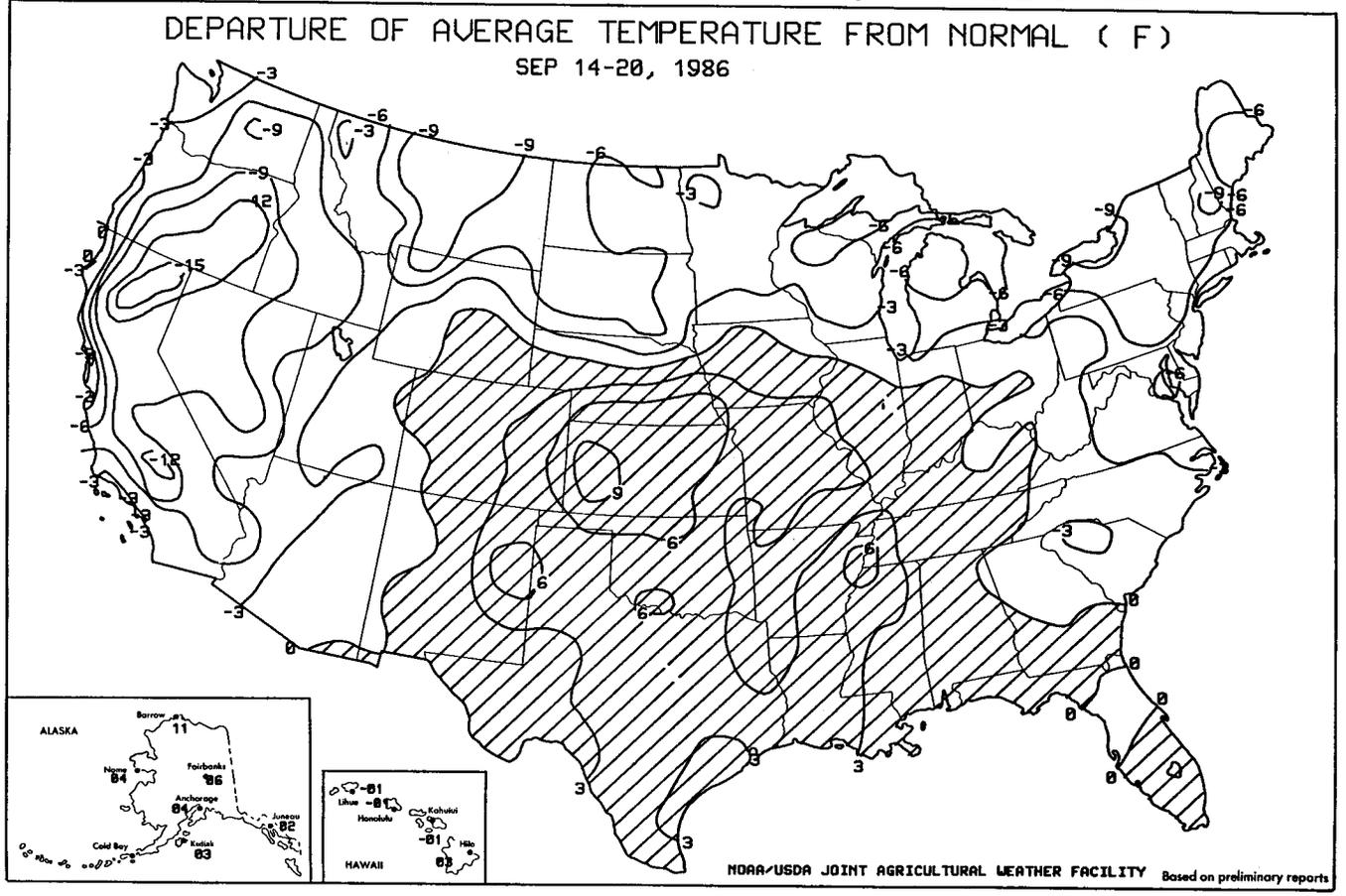
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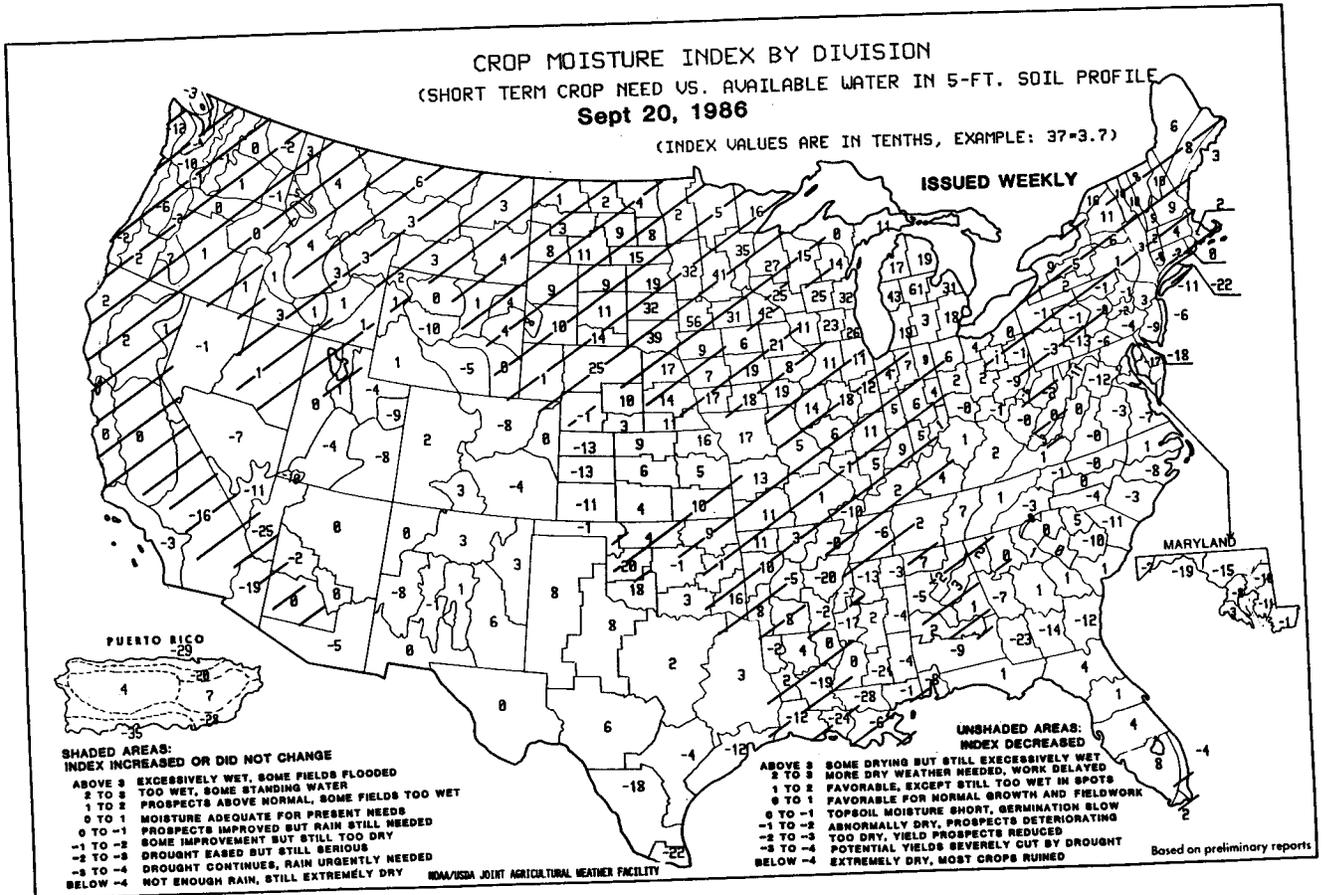
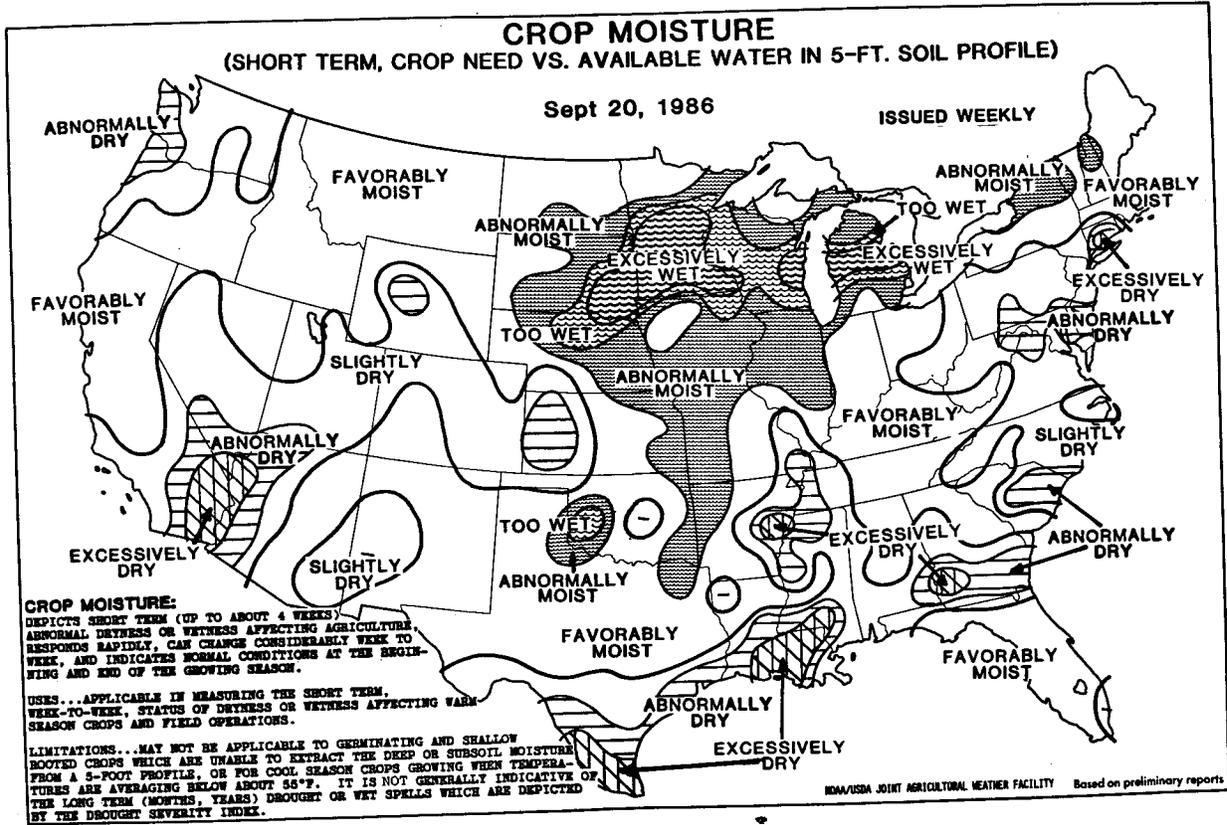
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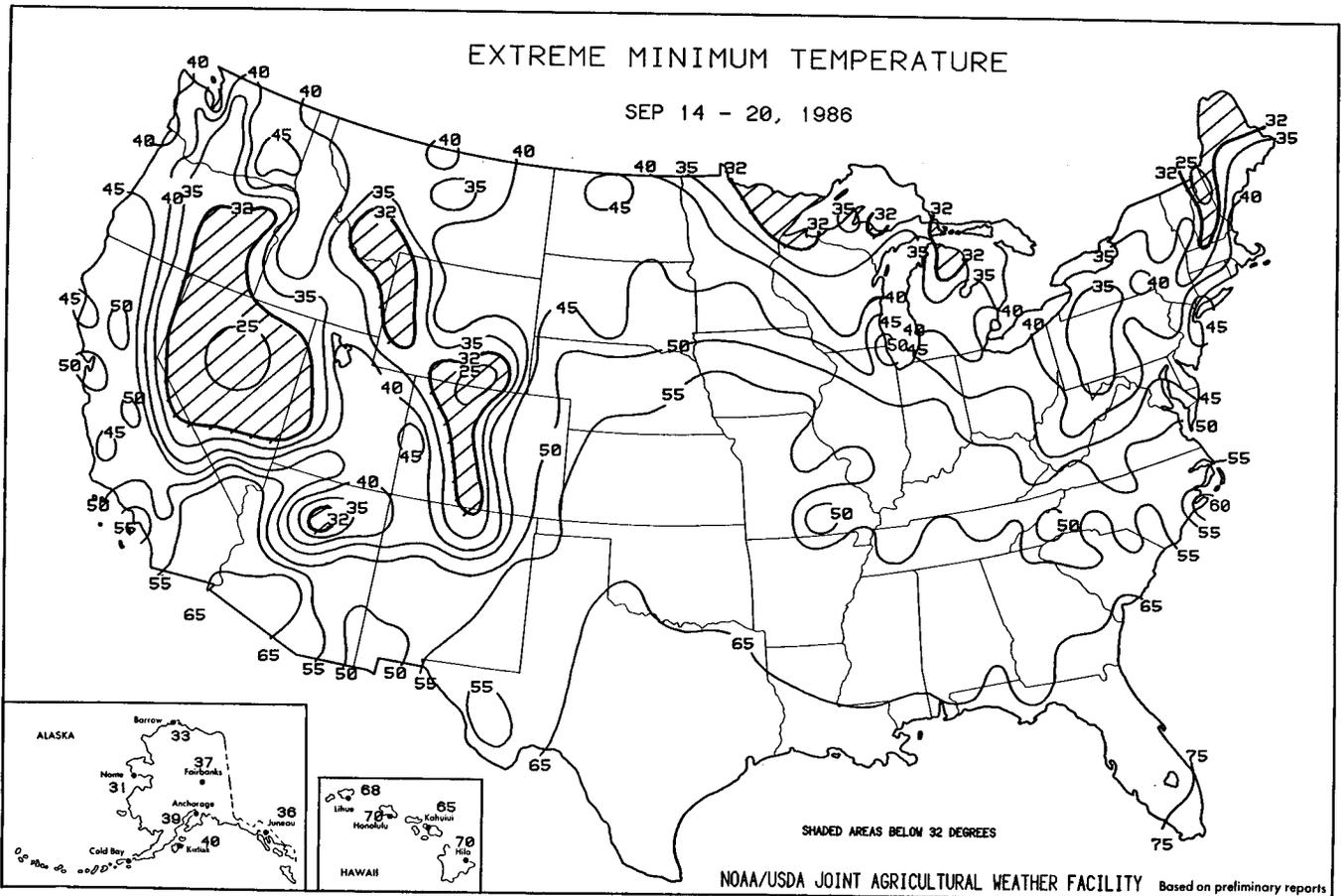
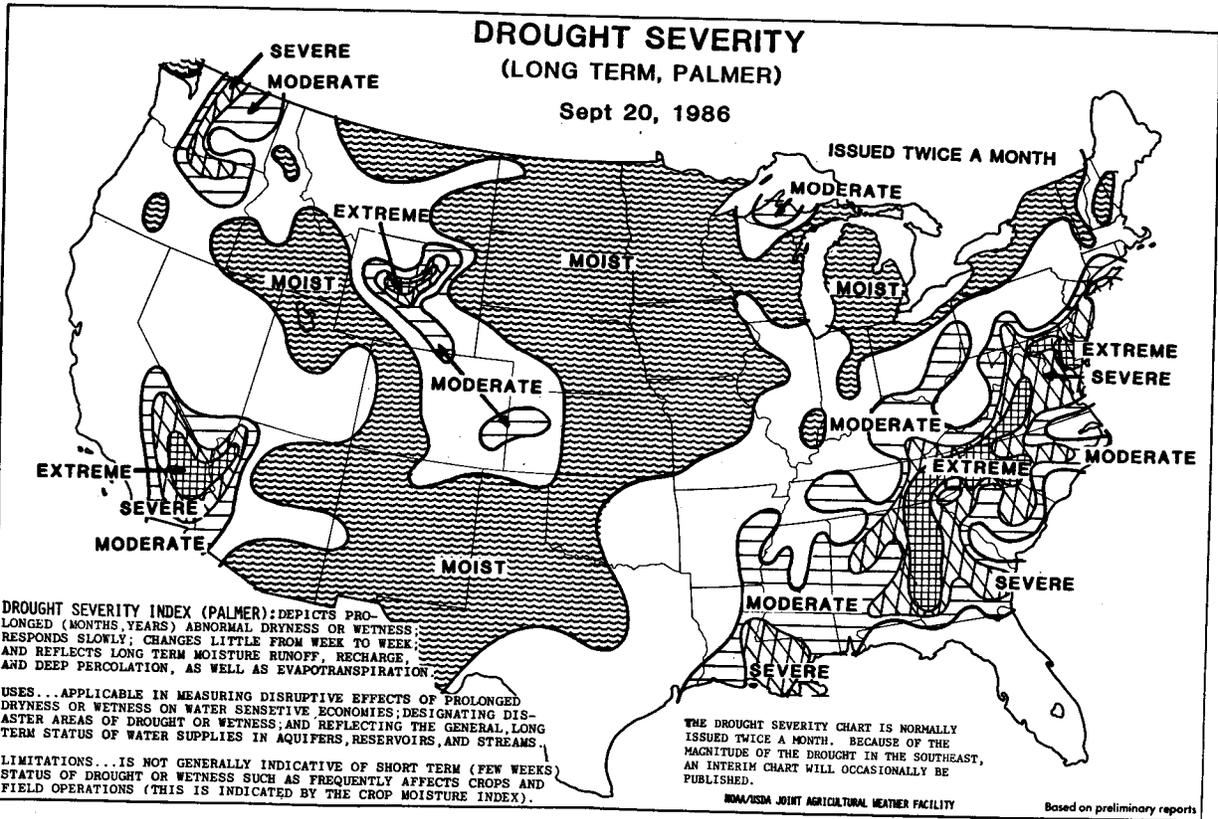




Point values may differ on these computerized maps from the reported values in the tables.







# National Water Conditions

UNITED STATES  
Department of the Interior  
Geological Survey

CANADA  
Department of the Environment  
Water Resources Branch

## AUGUST 1986

Record-low flows for August occurred at five index stations: One in Quebec, three in Georgia, and one in Alabama. Monthly mean discharge of the Apalachicola River at Chattahoochee, Florida was an all-time low for the 58 years of record at that site, and the river was closed to barge transportation early in the month. The Apalachicola Bay oyster industry that provides 95 percent of the commercial oysters in Florida and was adversely affected by ree hurricanes in 1985, will probably be adversely affected by the low river flows. Increased salinity in the area of the oyster beds makes predation by salt-water species such as the oyster drill more likely. Streamflow conditions generally improved elsewhere in the Southeast. Streamflow at the 16 index stations in the Carolinas, Georgia, and Alabama averaged about 69 percent of median during August, compared with 36 percent of median for July. Flow ranged from about 24 percent of median in Georgia to 113 percent of median in North Carolina.

The heavy rains of August eased drought conditions in parts of the Southeast but also caused flooding which killed two people near Newberry, South Carolina on August 18. About 10.5 inches of rain fell in 7 hours causing extensive damage to homes, bridges, and culverts in Newberry, but rainfall in the surrounding area was spotty. Charlie also caused coastas and small-stream flooding from South Carolina to New Jersey on August 16-18. In Milwaukee, Wisconsin two people drowned after 6.79 inches of rain fell (4 inches in 2 hours) on the evening of August 6 causing both stream and urban flooding. Peak discharge of the Kinnickinnic River at Milwaukee was more than twice the previous record flood and almost twice that of the 100-year flood. Record-high flows for the month occurred in Nova Scotia and New York, and above-normal flows persisted in the area of Utah's Great Salt Lake. The lake fell only 0.30 foot during August and was at an elevation of 4,210.85 feet on August 31. About 40 percent of the 1-foot fall from the lake's maximum elevation of 4,211.85 on August 3-8 was due

to the August 9 dike breach at the Amax Magnesium Company. A pumping station and canals are to be built to circulate water from the Great Salt Lake to a 500-square-mile artificial lake east of Great Salt Lake in order to both lower lake levels by the spring of 1987 and also to keep Great Salt Lake levels below elevations that cause problems. Alaska's Russell "Lake" continued to rise behind the ice dam of Hubbard Glacier. Instrumentation to measure glacier motion, ice-dam stability, and lake stage is being installed.

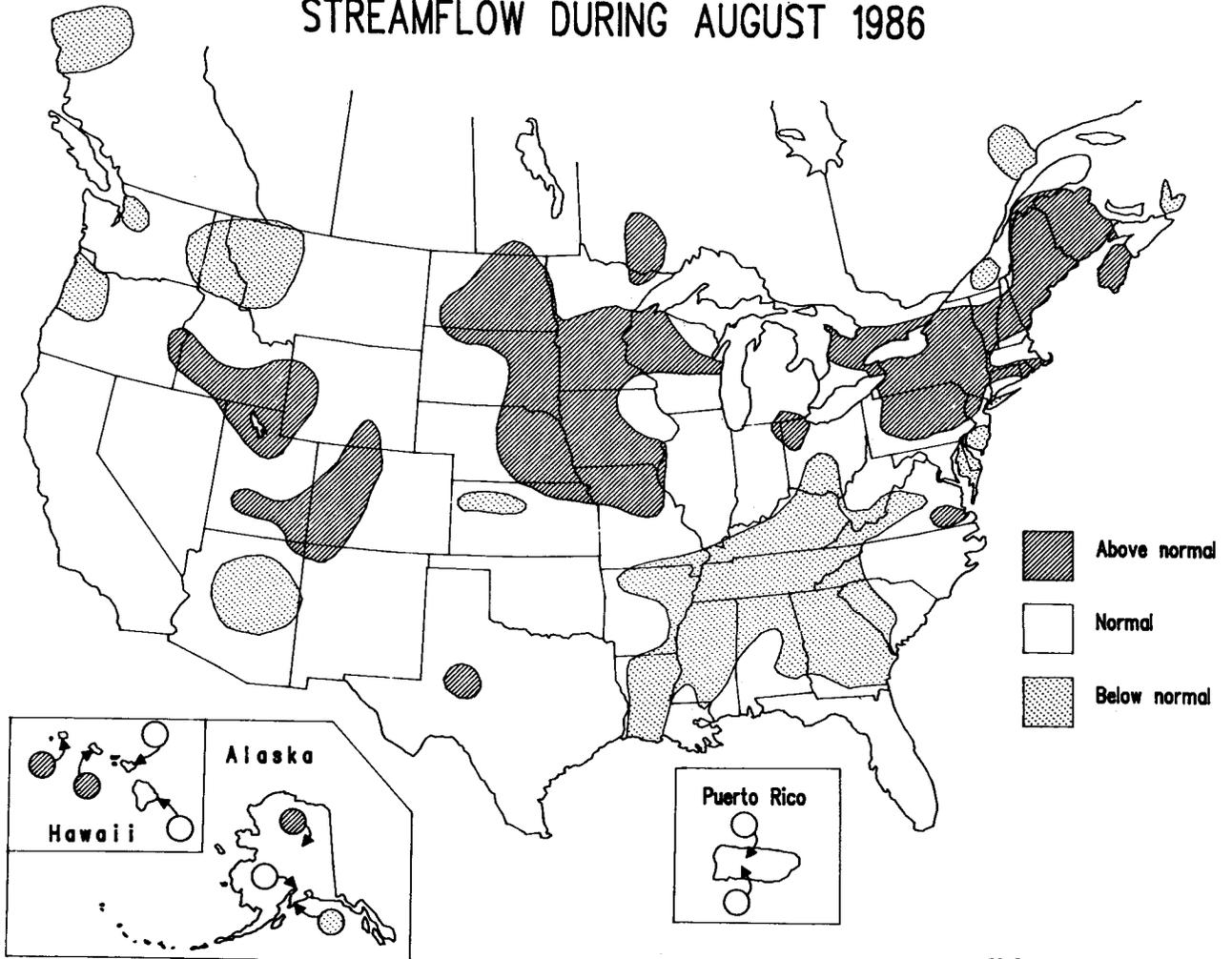
Streamflow generally increased contraseasonally in New Brunswick, Maine, New Hampshire, Rhode Island, Massachusetts, New York, and South Carolina; increased seasonally in North Carolina; changed variably in New Jersey, Maryland, Virginia, Tennessee, Georgia, Florida, and Puerto Rico; and generally decreased seasonally in the rest of southern Canada and the United States. About 74 percent of the 188 index stations reporting data for August had flows in the normal to above-normal range, compared with the 77 percent in those ranges for July.

Contents of 82 percent of reporting reservoirs were at or above average for the end of August. Only the Baltimore municipal system in Maryland, Douglas Lake and the Little Tennessee Projects in the Tennessee Valley, and Buffalo Bill reservoir in Wyoming reported both below-average contents and declines in contents exceeding 5 percent during August.

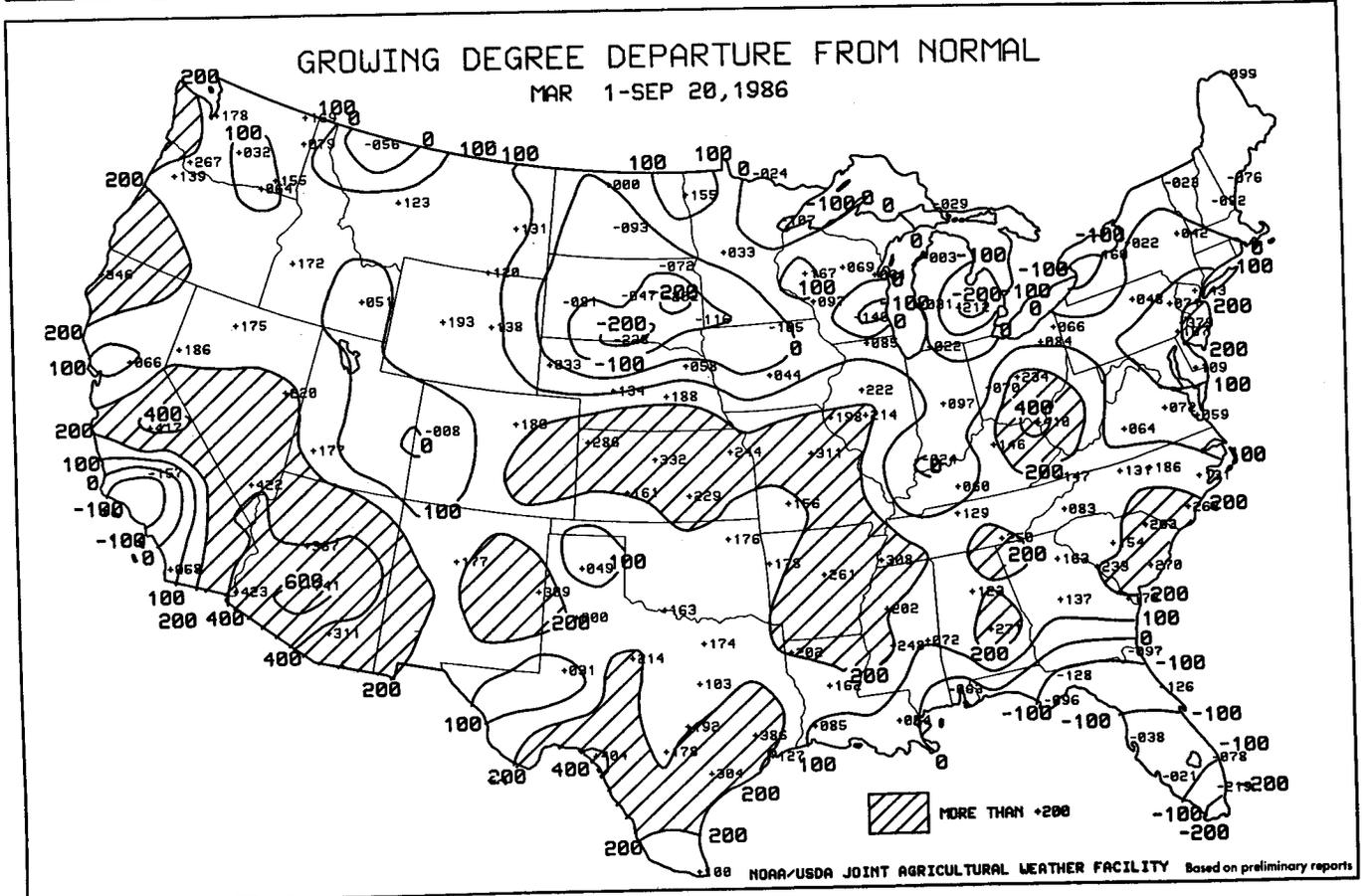
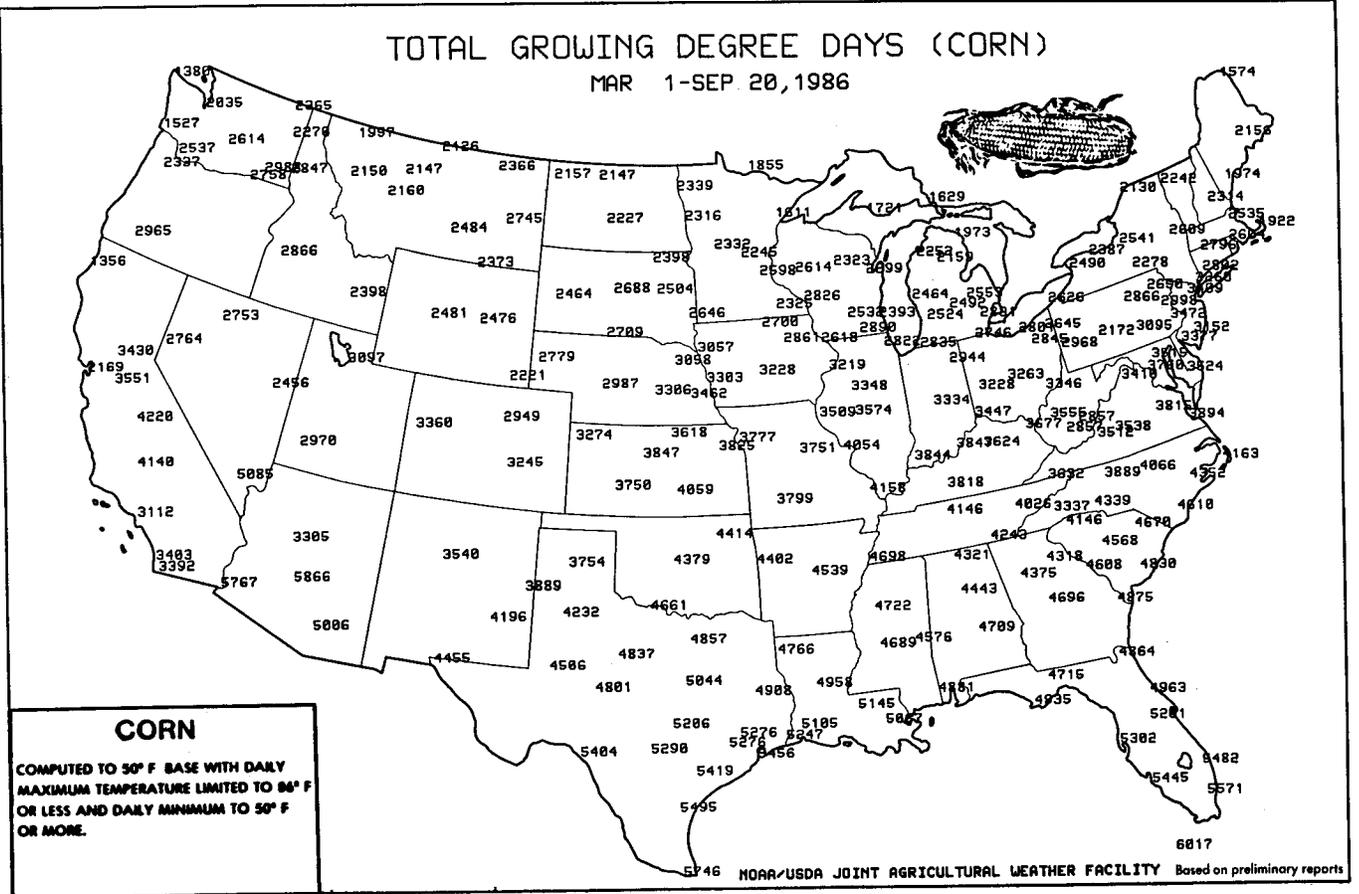
Water levels in some key index wells in Tennessee and Georgia reached an all-time low.

The combined flow of the three largest rivers in the lower 48 States—Mississippi, St. Lawrence, and Columbia—averaged 786,600 cubic feet per second during August, 6 percent above median but 26 percent below July. Flow of the St. Lawrence River at Cornwall, Ontario was in the above-normal range for the 19th consecutive month; flow of the Mississippi River at Vicksburg, Mississippi was in the normal range; and flow of the Columbia River at The Dalles, Oregon was in the below-normal range for the 2nd month.

### STREAMFLOW DURING AUGUST 1986



U.S. Geological Survey



COOLING DEGREE DAY DATA WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 9-20-1986
ACCUMULATIONS ARE FROM JANUARY
\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL, WEEK TOTAL, WEEK DEV FROM NORM, WEEK DEV FROM L YR, CUM TOTAL, CUM DEV FROM NORM, CUM DEV FROM L YR, CUM DEV FROM L YR PRCT, CUM DEV FROM L YR PRCT. Rows list various states and cities with their respective cooling degree day data.

# National Weather Data for Selected Cities

## Weather Data for the Week Ending September 20, 1986

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	90 AND ABOVE	32 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		0.1 INCH OR MORE	0.50 INCH OR MORE		
AL BIRMINGHAM	85	67	88	62	76	2	T	-1.1	T	2.3	76	23.9	57	93	57	0	0	0	0	0	1
MOBILE	88	69	91	62	78	0	.9	-.7	.6	3.5	75	41.5	81	100	56	2	0	0	2	1	1
MONTGOMERY	88	68	91	61	78	1	3.2	2.0	2.9	4.7	143	35.3	94	99	57	3	0	0	3	3	1
AK ANCHORAGE	58	47	62	39	52	4	1.0	-.4	-.6	2.1	124	11.4	109	95	70	0	0	0	5	5	1
BARROW	46	36	51	33	41	11	.3	.2	.1	1.2	288	3.1	89	99	86	0	0	0	3	3	0
FAIRBANKS	59	43	65	37	51	6	.3	-.1	-.2	.6	71	7.2	91	96	55	0	0	0	0	0	0
JUNEAU	62	40	69	36	51	3	T	-1.5	T	.6	16	34.9	105	95	49	0	0	0	4	4	0
KODIAK	60	47	63	40	53	4	.3	-1.5	.1	1.0	22	48.4	100	97	73	0	0	0	4	4	0
NOME	48	43	52	31	46	4	1.7	1.1	1.0	6.1	360	13.6	120	95	78	0	1	1	7	7	1
AZ PHOENIX	98	71	99	68	84	0	0	-.1	0	T	0	5.3	108	36	13	7	0	0	0	0	0
PRESCOTT	77	47	78	45	62	-3	0	-.3	0	.8	72	8.9	62	51	19	0	0	0	0	0	0
TUCSON	96	63	100	60	80	-1	0	-.3	0	T	0	9.3	112	44	14	7	0	0	0	0	0
YUMA	96	70	99	68	83	-4	0	0	0	0	0	1.1	65	40	12	7	0	0	0	3	1
AR PORT SMITH	87	66	92	59	76	3	1.1	-.4	-.5	1.8	85	29.2	100	96	54	3	0	0	3	3	0
LITTLE ROCK	88	68	91	60	78	4	.2	-.7	.2	.9	34	28.4	84	87	53	3	0	0	2	0	0
CA BAKERSFIELD	77	52	82	47	65	-13	0	0	0	0	0	4.3	108	77	32	0	0	0	0	0	0
BUREKA	65	52	67	49	59	2	1.6	1.4	.6	1.6	326	29.0	124	94	67	0	0	0	5	0	2
FRESNO	79	56	83	52	67	-7	T	-.1	T	T	0	9.7	79	79	29	0	0	0	0	0	0
LOS ANGELES	74	59	77	55	66	-3	0	0	0	0	0	13.0	137	90	53	0	0	0	0	6	1
REDDING	68	51	73	46	60	-10	1.5	1.5	.6	1.5	65	16.5	150	95	39	0	0	0	0	0	0
SACRAMENTO	74	50	77	45	62	-10	-.1	0	.1	.1	65	16.5	150	95	39	0	0	0	0	0	0
SAN DIEGO	73	61	75	60	67	-4	0	-.1	0	0	0	7.7	118	84	56	0	0	0	0	2	0
SAN FRANCISCO	71	56	76	53	63	-1	-.1	0	.1	1.1	129	18.7	148	93	52	0	0	0	0	0	0
CO DENVER	79	48	86	44	64	2	T	-.3	T	.3	37	8.8	70	83	28	0	0	0	0	0	0
GRAND JUNCTION	80	56	85	45	68	1	T	-.1	T	.1	28	4.6	81	46	16	0	0	0	0	0	0
PUEBLO	87	49	91	42	68	3	0	-.2	0	.4	59	7.4	81	67	15	1	0	0	0	0	0
CT BRIDGEPORT	68	51	72	45	60	-6	-.2	-.5	.2	.3	15	21.0	71	82	50	0	0	0	1	2	0
HARTFORD	69	43	75	36	56	-7	.1	-.8	.1	.4	13	30.1	96	91	43	0	0	0	2	0	0
DC WASHINGTON	76	57	82	47	67	-4	T	-.7	T	.6	26	20.3	70	89	47	0	0	0	0	0	0
FL APALACHICOLA	85	73	87	70	79	0	6.8	4.7	5.7	9.4	153	42.7	99	92	69	0	0	0	4	3	1
DAYTONA BEACH	87	72	88	70	79	0	1.8	.2	1.7	3.4	74	36.0	98	93	60	0	0	0	0	0	0
JACKSONVILLE	87	69	89	65	78	0	-.7	-1.1	-.4	1.9	37	34.7	81	98	58	0	0	0	3	3	0
KEY WEST	89	79	89	77	84	1	.3	-1.3	.2	3.6	82	25.2	91	85	62	0	0	0	0	0	0
MIAMI	90	77	91	75	83	1	1.1	-.8	.6	2.8	53	53.6	124	88	55	5	2	0	0	4	1
ORLANDO	89	72	92	70	81	-1	2.3	1.0	2.0	4.4	111	38.8	98	95	52	0	0	0	3	3	0
TALLAHASSEE	89	69	92	62	79	1	-.4	-1.2	.2	3.4	73	52.5	101	96	51	5	5	0	0	0	0
TAMPA	91	74	95	72	83	2	.5	-1.0	.4	3.7	82	31.7	82	94	52	6	2	0	0	4	0
WEST PALM BEACH	89	76	90	75	83	1	-.7	-1.6	.4	3.2	53	43.3	100	88	56	2	0	0	0	4	0
GA ATLANTA	80	64	89	60	72	-1	.6	-.1	.6	3.2	146	25.7	69	95	60	0	0	0	2	1	0
AUGUSTA	86	62	92	57	74	0	T	-.8	T	.6	22	33.6	97	97	47	2	0	0	0	0	0
MACON	85	66	90	64	75	-1	.2	-.6	.2	5.3	228	25.7	72	98	59	2	2	0	2	0	0
SAVANNAH	87	67	93	64	77	0	0	-1.2	0	.3	9	34.2	83	95	51	2	0	0	0	0	0
HI HILO	86	72	87	70	79	3	.7	-.7	.4	2.7	61	105.3	119	93	66	0	0	0	3	1	0
HONOLULU	90	71	92	70	81	0	.9	-.7	.9	1.1	323	6.4	44	88	52	3	0	0	0	0	0
KAHULUI	88	68	90	65	78	-1	0	-.1	T	T	0	10.7	78	90	57	2	0	0	0	0	0
LIHUE	87	70	88	68	79	-1	T	-.5	T	.6	45	15.3	55	90	60	0	0	0	1	0	0
ID BOISE	63	45	73	41	54	-9	-.4	-.3	.2	1.1	300	11.1	137	92	44	0	0	0	3	0	0
LEMISTON	65	47	69	45	56	-7	.2	.1	.2	.3	65	7.9	88	85	47	0	0	0	3	0	0
POCATELLO	63	41	73	36	52	-7	.3	.2	.2	.6	160	10.3	132	89	45	0	0	0	3	0	0
IL CHICAGO	69	56	80	50	63	-2	1.3	-.4	.5	2.5	106	20.8	80	92	65	0	0	0	3	0	0
MOLINE	74	57	80	51	66	1	1.3	-.4	.9	2.0	79	29.9	102	96	62	0	0	0	2	1	1
PEORIA	77	59	83	53	68	3	2.0	1.1	1.9	2.9	116	25.4	93	94	56	0	0	0	4	3	0
QUINCY	81	60	87	54	71	4	4.2	3.2	2.7	5.5	193	28.2	97	98	53	0	0	0	4	3	0
ROCKFORD	68	54	76	44	61	-2	.3	-.6	.2	1.3	52	21.5	75	95	67	0	0	0	3	1	1
SPRINGFIELD	79	59	85	54	69	2	4.9	4.2	4.2	5.3	260	25.5	97	96	56	0	0	0	3	0	0
IN EVANSVILLE	81	59	91	51	70	1	3.0	2.3	2.7	3.6	200	29.7	95	98	61	1	0	0	4	1	0
FORT WAYNE	74	54	80	43	64	-1	.5	0	.2	1.9	107	33.1	127	95	59	0	0	0	3	0	0
INDIANAPOLIS	77	58	81	50	68	-1	2.2	1.6	1.3	3.5	186	32.3	109	95	56	0	0	0	4	2	1
SOUTH BEND	70	51	80	40	61	-4	.9	.2	.6	1.5	67	25.7	91	96	61	0	0	0	6	2	1
IA DES MOINES	76	59	80	53	68	3	2.6	1.9	1.4	4.5	203	34.8	138	99	68	0	0	0	6	6	2
SIOUX CITY	69	56	79	54	63	-1	3.4	2.8	1.4	3.6	207	26.9	127	99	76	0	0	0	6	6	1
WATERLOO	70	54	76	50	62	-1	1.0	-.2	.6	2.8	118	28.8	107	96	67	0	0	0	4	1	0
KS CONCORDIA	82	65	90	62	74	7	.3	-.4	.2	2.7	126	30.9	97	91	40	4	0	0	0	0	0
DODGE CITY	89	65	93	61	77	9	T	-.4	T	.5	38	17.0	97	94	36	2	1	0	1	0	0
GOODLAND	85	59	95	53	72	8	.3	0	.3	.9	88	12.8	91	93	56	0	0	0	2	0	0
TOPEKA	84	66	90	53	75	7	.4	-.4	.4	2.3	99	28.1	106	94	56	0	0	0	1	0	0
WICHITA	86	67	93	59	77	7	.2	-.6	.2	.8	34	22.8	101	92	49	4	0	0	3	1	1
KY BOWLING GREEN	81	60	86	52	71	0	1.7	-.9	1.5	4.3	196	23.4	64	99	63	0	0	0	3	1	1
LEXINGTON	76	59	82	50	68	-1	.9	-.1	.8	2.7	116	22.5	64	94	63	0	0	0	2	3	0
LOUISVILLE	80	61	87	53	71	1	.7	-.1	.4	2.1	91	26.5	81	92	58	0	0	0	3	3	0
LA ALEXANDRIA	91	71	92	65	81	3	1.1	-.5	1.0	2.6	153	28.9	72	85	51	6	0	0	3	3	0
BATON ROUGE	93	72	94	67	82	4	.5	-.4	.6	18	35.9	84	93	49	7	0	0	3	3	0	0
LAKE CHARLES	91	72	94	67	81	3	3.9	2.6	2.4	4.1	112	33.3	85	97	58	5	0	0	5	1	2
NEW ORLEANS	90	71	92	67	80	2	.2	-.2	.2	.7	17	31.3	68	97	52	5	0	0	0	0	0

Based on 1951-80 normals.

Weather Data for the Week Ending September 20, 1986

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	91	68	92	63	79	3	T	-8	T	2.5	110	36.6	113	97	51	5	0	1	0	
ME CARIBOU	58	36	64	29	47	-6	T	-8	T	1.4	60	25.2	60	94	45	0	2	1	0	
PORTLAND	63	41	72	36	52	-6	T	-4	T	1.9	89	30.5	104	94	47	0	0	1	0	
MD BALTIMORE	74	53	81	42	64	-6	T	-8	T	1.9	23	20.2	65	86	47	0	0	0	0	
SALISBURY	75	52	81	43	64	-6	T	-9	T	1.6	57	21.6	64	94	50	0	0	0	0	
MA BOSTON	67	50	72	45	58	-5	T	-1	T	1.6	57	21.6	64	94	50	0	0	0	0	
CHATHAM	64	51	66	47	57	-5	T	-3	T	1.8	34	28.4	93	88	49	0	0	2	1	
MI ALPENA	58	40	67	30	49	-4	T	-5	T	1.1	44	34.3	106	88	65	0	0	1	1	
DETROIT	70	52	80	42	61	-2	T	-7	T	3.9	188	23.0	106	99	69	0	0	1	1	
FLINT	67	48	72	36	58	-3	T	-4	T	1.0	66	23.8	102	93	61	0	0	6	1	
GRAND RAPIDS	66	48	71	36	57	-5	T	-5	T	6.4	386	28.0	127	97	66	0	0	3	0	
HOUGHTON LAKE	58	42	64	32	50	-7	T	-2	T	7.0	327	38.0	152	96	65	0	0	4	0	
LANSING	67	46	72	34	56	-5	T	-1	T	6.1	319	27.3	132	97	70	0	0	5	2	
MARQUETTE	55	38	58	29	47	-7	T	-3	T	2.7	153	26.8	121	98	67	0	0	4	0	
MUSKIEGON	66	48	69	35	57	-4	T	-2	T	1.9	72	23.4	86	96	66	0	0	4	0	
SAULT STE. MARIE	58	40	61	32	49	-5	T	-7	T	8.8	438	26.0	117	95	62	0	0	2	0	
MN ALEXANDRIA	57	47	61	43	52	-5	T	-5	T	4.9	181	29.4	125	96	59	0	0	2	0	
DULUTH	55	42	63	31	48	-5	T	-5	T	2.7	164	30.4	152	99	70	0	0	5	6	
INT'L FALLS	58	37	65	31	47	-5	T	-4	T	5.2	225	32.1	137	96	68	0	0	2	2	
MINNEAPOLIS	61	51	71	45	56	-4	T	-4	T	1.6	72	15.2	78	98	53	0	0	3	0	
ROCHESTER	61	51	72	42	56	-3	T	1.3	T	4.2	232	31.2	144	99	71	0	0	4	2	
MS GREENWOOD	90	68	93	59	79	3	T	3.5	T	7.9	364	32.6	142	100	83	0	0	5	1	
JACKSON	91	67	92	57	79	3	T	-1	T	1.9	86	22.0	56	94	47	5	5	5	3	
MERIDIAN	89	65	91	56	77	1	T	-7	T	2.5	101	30.5	77	97	44	6	0	1	0	
MO CAPE GIRARDEAU	83	63	90	53	73	1	T	-9	T	2.1	88	29.7	74	97	47	2	0	0	0	
COLUMBIA	81	63	89	55	72	4	T	-5	T	2.5	75	30.8	92	97	59	2	0	0	0	
KANSAS CITY	82	66	89	59	74	3	T	-7	T	2.3	95	23.9	87	96	59	2	0	2	0	
SAINT LOUIS	81	64	90	58	73	6	T	1.2	T	3.8	137	27.1	98	93	62	0	0	2	1	
SPRINGFIELD	80	65	88	56	72	3	T	1.4	T	2.8	156	21.7	84	91	57	1	0	2	1	
MT BILLINGS	55	45	67	41	50	-9	T	2.4	T	1.8	150	24.6	84	96	64	0	0	4	2	
GLASGOW	52	42	59	39	47	-9	T	-7	T	4.2	100	12.2	103	89	61	0	0	4	0	
GREAT FALLS	52	41	65	37	46	-10	T	1.9	T	1.7	406	10.7	106	96	79	0	0	5	6	
HAVRE	51	44	61	41	47	-9	T	-7	T	1.4	196	11.6	92	93	66	0	0	5	0	
HELENA	54	41	61	39	47	-8	T	1.5	T	3.61	12.9	137	82	66	66	0	0	5	2	
KALISPELL	59	42	64	37	51	-2	T	1.2	T	2.5	413	11.1	118	97	57	0	0	5	1	
MILES CITY	59	46	67	41	52	-7	T	0	T	2.0	248	13.8	117	89	48	0	0	5	0	
MISSOULA	60	42	65	39	51	-4	T	1.2	T	2.9	377	14.4	123	96	63	0	0	5	1	
NE GRAND ISLAND	78	60	92	54	69	6	T	1.7	T	3.1	432	14.1	140	98	52	0	0	6	0	
LINCOLN	81	63	89	59	72	5	T	-5	T	2.7	152	20.1	101	98	63	1	0	5	0	
NORFOLK	70	56	80	53	63	1	T	2.2	T	3.6	174	30.0	132	98	65	0	0	4	2	
NORTH PLATTE	75	56	86	52	66	4	T	1.5	T	1.0	7	25.7	125	99	79	0	0	6	2	
OMAHA	76	61	87	57	69	5	T	-5	T	1.6	9	14.8	87	98	66	0	0	4	0	
SCOTTSELUFF	71	52	84	49	62	1	T	2.4	T	1.9	183	28.5	114	100	86	0	0	4	2	
VALENTINE	64	50	72	45	57	-4	T	-2	T	1.0	135	18.3	146	96	60	0	0	1	0	
NV ELY	67	33	74	26	50	-6	T	1.0	T	1.7	165	16.5	109	92	74	0	0	3	1	
LAS VEGAS	85	64	89	57	75	-5	T	-2	T	0	20	5.7	83	71	20	0	0	3	0	
RENO	64	37	69	28	50	-10	T	0	T	0	0	1.3	42	32	11	0	0	3	0	
WINNEMUCCA	63	34	70	26	49	-10	T	-1	T	0	0	8.4	162	76	26	0	0	0	0	
NH CONCORD	64	36	75	31	50	-9	T	1.0	T	1.1	57	3.9	71	71	24	0	0	5	0	
NJ ATLANTIC CITY	72	46	77	40	59	-7	T	-3	T	1.4	65	28.9	114	96	46	0	0	2	3	
NM ALBUQUERQUE	84	54	87	50	69	0	T	-1	T	1.8	37	25.3	82	96	56	0	0	2	0	
CLOVIS	89	62	93	61	76	7	T	-2	T	2	31	9.5	156	73	21	0	0	0	0	
ROSMELL	89	61	93	58	75	3	T	-4	T	1.6	122	13.4	98	75	28	4	0	1	1	
NY ALBANY	64	43	69	35	53	-8	T	-4	T	3.3	272	15.2	200	93	31	4	0	0	0	
BINGHAMTON	61	46	68	40	53	-6	T	-5	T	0.9	40	31.6	123	98	55	0	0	3	0	
BUFFALO	61	46	68	37	54	-8	T	-3	T	1.4	61	31.8	119	92	61	0	0	5	0	
NEW YORK	70	55	76	48	63	-5	T	1.5	T	65	25.9	98	96	66	0	0	2	1		
ROCHESTER	61	43	66	35	52	-10	T	-1	T	1.0	42	25.1	81	83	47	0	0	3	0	
SYRACUSE	61	44	67	36	53	-9	T	1.5	T	81	23.6	104	100	68	0	0	3	1		
NC ASHEVILLE	76	55	84	49	66	-1	T	1.2	T	1.5	66	28.5	101	97	63	0	0	3	2	
CHARLOTTE	81	62	88	57	72	0	T	-2	T	3.2	115	20.9	57	98	53	0	0	1	0	
GREENSBORO	79	57	87	51	68	-2	T	-8	T	0.9	34	16.8	51	88	46	0	0	1	0	
HATTERAS	79	63	83	58	71	-3	T	-2	T	1.0	42	19.4	60	94	52	0	0	0	0	
NEW BERN	82	60	88	52	71	-3	T	1.1	T	2	35.8	90	86	56	0	0	0	1	0	
RALEIGH	80	57	87	49	69	-2	T	-1	T	3	6	35.2	86	94	44	0	0	2	0	
WILMINGTON	83	62	89	54	73	-2	T	-8	T	0.9	39	29.8	93	95	47	0	0	0	0	
ND BISMARK	56	47	61	43	52	-5	T	-1.4	T	2	4	44.2	105	92	49	0	0	0	0	
FARGO	58	46	63	41	52	-5	T	1.9	T	1.6	8	3.3	34.1	20.7	158	98	72	0	2	
GRAND FORKS	59	47	62	42	53	-3	T	0.8	T	4	5	3.1	237	21.2	130	97	60	0	0	
WILLISTON	53	46	58	43	49	-6	T	-4	T	1.1	76	12.4	82	89	53	0	0	3	0	
OH AKRON-CANTON	72	51	79	41	62	-2	T	1.7	T	1.4	6	2.3	235	18.9	162	96	75	0	2	
CINCINNATI	76	58	82	47	67	0	T	-6	T	1.6	79	20.1	73	94	50	0	0	3	1	
CLEVELAND	72	53	80	41	62	-1	T	-2	T	2.1	103	22.7	74	91	56	0	0	2	0	
COLUMBUS	76	56	82	46	66	0	T	-2	T	1.5	73	27.1	102	88	50	0	0	1	0	
								-1		2.3	116	23.9	82	91	51	0	0	1	0	

Based on 1951-80 normals.

Weather Data for the Week Ending September 20, 1986

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	TEMPERA- TURE °F		PRECIPI- TATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	75	56	80	45	66	-1	.9	-.3	.7	2.1	126	29.7	110	95	56	0	0	2	1
TOLEDO	71	51	80	39	61	-2	.3	-.3	.3	2.4	132	28.0	116	97	61	0	0	1	0
YOUNGSTOWN	70	47	79	31	59	-4	1.1	-.4	1.0	1.8	85	32.7	116	98	55	0	1	3	3
OK OKLAHOMA CITY	86	68	90	64	77	5	1.5	.7	.7	3.2	144	25.1	103	96	56	1	0	0	1
TULSA	84	69	89	63	76	3	1.5	.5	.8	1.7	60	26.7	91	91	60	0	0	3	3
OR ASTORIA	64	45	67	37	55	-4	1.3	-.6	-.4	1.4	76	37.1	91	98	65	0	0	4	0
BURNS	57	34	65	29	46	-13	1.1	-.9	-.6	1.1	269	8.7	174	98	58	0	0	5	0
MEDFORD	63	48	71	47	56	-9	1.2	1.0	-.4	1.2	264	11.3	98	93	58	0	0	7	0
PENDLETON	64	46	67	43	55	-8	.5	-.4	.2	.6	163	8.1	103	86	44	0	0	5	0
PORTLAND	69	49	73	42	59	-4	1.0	-.6	-.6	1.4	137	19.6	89	97	53	0	0	5	0
SALEM	68	47	72	39	58	-4	1.1	-.7	-.4	1.1	119	23.6	100	97	49	0	0	5	0
PA ALLENTOWN	70	45	75	38	57	-7	.3	-.7	-.1	1.7	61	29.2	90	92	48	0	0	5	0
ERIE	66	51	76	43	59	-3	.5	-.4	-.3	1.4	54	28.7	103	93	57	0	0	1	0
HARRISBURG	71	48	75	40	60	-6	-.2	-.6	-.1	.6	26	24.3	79	89	47	0	0	2	0
PHILADELPHIA	73	51	79	44	62	-6	-.2	-.6	-.1	.9	47	25.7	92	84	45	0	0	1	0
PITTSBURGH	72	51	82	37	62	-3	.5	-.1	.5	.8	35	33.4	130	94	56	0	0	5	0
SCRANTON	65	44	68	36	54	-8	.5	-.3	-.3	.8	32	29.5	93	91	48	0	0	3	0
RI PROVIDENCE	69	47	72	41	58	-5	-.5	-.1	-.7	.7	18	19.5	49	94	53	0	0	1	0
SC CHARLESTON	85	66	89	62	75	0	1.8	.7	1.8	4.5	128	36.0	86	96	53	1	0	0	0
COLUMBIA	85	59	91	53	72	-3	0	-1.0	0	.6	17	19.9	57	92	45	1	0	0	0
FLORENCE	85	61	91	54	73	-2	T	-1.0	T	.5	17	19.9	57	92	45	0	0	1	0
GREENVILLE	80	59	88	51	69	-2	-.1	-1.0	-.1	2.6	88	23.7	62	97	55	0	0	4	0
SD ABERDEEN	58	48	64	45	53	-6	1.3	.9	-.9	2.5	240	25.5	167	100	76	0	0	6	2
HURON	61	50	72	45	56	-4	2.6	2.3	1.3	3.9	412	26.3	169	98	76	0	0	4	1
RAPID CITY	57	48	65	45	52	-8	.6	-.4	-.5	2.6	362	17.9	126	100	83	0	0	4	3
SIoux FALLS	64	51	74	47	57	-3	6.7	6.0	2.4	8.7	443	27.8	138	99	82	0	0	6	0
TN CHATTANOOGA	81	64	88	59	72	0	-.9	-.2	-.7	5.5	186	22.9	59	100	62	0	0	2	0
KNOXVILLE	81	62	85	54	72	0	-.4	-.3	-.4	3.2	162	20.5	58	97	57	0	0	2	0
MEMPHIS	90	69	92	60	80	6	T	-.9	T	1.2	46	22.4	57	93	48	5	0	0	0
NASHVILLE	84	63	89	56	74	2	.5	-.5	-.3	2.2	84	18.6	51	95	57	0	0	2	0
TX ABILENE	90	71	92	69	81	1	.1	-.6	-.1	1.3	62	18.7	105	87	42	5	0	1	0
AMARILLO	85	62	90	60	74	5	-.1	-.3	-.1	.5	43	19.9	124	91	45	1	0	2	0
AUSTIN	90	74	93	71	82	3	.3	-.6	-.2	4.2	56	37.3	97	96	59	5	0	4	0
BEAUMONT	90	73	92	72	82	3	.8	-.7	-.4	2.4	56	37.3	97	94	48	5	0	2	0
BROWNSVILLE	94	75	95	74	85	3	.1	-1.2	-.1	1.7	47	13.0	85	93	52	7	0	1	0
CORPUS CHRISTI	93	74	94	73	83	2	.7	-.9	-.7	1.7	41	18.7	85	85	44	5	0	0	0
DEL RIO	90	73	91	72	81	1	T	-.7	T	3.7	210	16.9	134	79	21	6	0	0	0
EL PASO	92	62	94	58	77	3	T	-.4	T	.3	27	8.5	144	79	21	6	0	0	0
FORT WORTH	91	73	93	71	82	4	0	-.8	0	4.1	188	24.4	109	90	47	6	0	3	0
GALVESTON	88	79	90	74	84	4	.3	-1.1	.2	1.6	39	17.9	62	81	60	3	0	2	0
HOUSTON	89	74	92	73	81	3	.3	-.9	.2	3.4	104	25.5	79	93	60	3	0	4	0
LUBBOCK	85	65	88	61	75	4	1.2	.7	1.1	4.1	291	17.8	124	98	56	0	0	4	0
MIDLAND	87	64	89	62	75	2	.3	-.2	.3	6.6	475	19.4	185	95	43	0	0	1	0
SAN ANGELO	90	69	92	67	80	0	.3	-.8	0	7.5	368	22.8	169	87	41	3	0	0	0
SAN ANTONIO	93	75	94	73	84	3	.5	-.5	-.2	2.6	104	27.0	127	92	44	7	0	2	0
VICTORIA	91	74	93	73	83	3	.2	-1.4	-.1	3.5	82	25.2	93	97	56	5	0	3	0
WACO	95	75	97	72	85	6	T	-.8	T	3.8	183	23.5	104	93	44	7	0	0	0
WICHITA FALLS	91	72	94	65	82	6	1.1	-.3	1.0	6.2	276	25.7	127	91	49	6	0	3	1
UT BLANDING	75	45	78	42	60	-3	0	-.2	0	.6	102	10.2	132	68	25	0	0	0	0
CEDAR CITY	73	48	75	42	61	-2	0	-.2	0	T	2	8.0	105	46	17	0	0	0	0
SALT LAKE CITY	71	51	79	44	61	-4	.2	0	-.2	1.1	181	16.1	142	74	35	0	0	2	0
VT BURLINGTON	59	44	63	37	52	-7	1.1	-.4	-.5	2.1	95	30.6	124	95	57	0	0	0	0
VA NORFOLK	78	60	84	51	69	-3	0	-1.0	0	.3	9	19.8	58	90	53	0	0	0	0
RICHMOND	78	54	83	44	66	-4	T	-.8	T	.5	22	26.4	81	95	48	0	0	0	0
ROANOKE	78	54	84	46	66	-2	.1	-.6	.1	3.0	141	21.7	75	94	51	0	0	3	0
WA COLVILLE	65	43	70	37	54	-4	.6	-.4	-.3	.7	115	15.5	134	91	49	0	0	3	0
QUILLAYUTE	64	43	67	36	54	-3	.1	-1.1	-.1	.3	10	65.5	107	99	59	0	0	3	0
SEATTLE-TACOMA	66	49	69	46	58	-2	.5	0	-.3	.5	54	21.3	95	95	45	0	0	3	0
SPOKANE	63	40	67	37	52	-8	.5	.3	-.4	.5	111	10.6	98	95	49	0	0	3	0
YAKIMA	65	43	68	34	54	-6	1.8	1.7	.8	1.8	770	7.1	139	96	46	0	0	4	2
WV BECKLEY	70	52	76	43	61	-2	.6	-.2	.5	2.2	95	26.5	82	95	63	0	0	0	0
CHARLESTON	76	55	83	43	66	-2	T	-.7	T	1.6	78	30.9	94	99	57	0	0	0	0
HUNTINGTON	78	58	84	48	68	0	.1	-.6	-.1	1.9	90	25.5	81	94	53	0	0	2	0
PARKERSBURG	76	55	82	43	66	-1	.5	-.1	.5	1.1	56	24.3	74	97	52	0	0	4	0
WI GREEN BAY	59	46	65	36	53	-6	1.4	.7	.6	4.7	215	24.8	114	96	71	0	0	0	1
LA CROSSE	63	53	70	41	58	-3	1.0	.2	-.4	4.2	171	23.4	95	98	73	0	0	5	0
MADISON	63	50	71	38	56	-3	.3	-.4	.2	2.8	133	24.2	100	99	74	0	0	2	0
MILWAUKEE	63	55	68	50	59	-2	.2	-.5	.2	4.3	214	34.6	145	93	71	0	0	4	2
WAUSAU	58	46	66	35	52	-5	1.8	.9	.7	4.4	159	21.4	85	98	69	0	0	0	0
WY CASPER	73	45	77	38	59	1	T	-.2	T	.7	146	11.1	122	94	27	0	0	1	0
CHEYENNE	71	45	78	40	58	1	1.4	1.2	1.4	2.0	257	11.3	99	93	34	0	0	0	0
LANDER	69	45	75	42	57	-1	T	-.2	T	.4	77	7.9	77	84	29	0	0	1	0
SHERIDAN	58	46	64	42	52	-5	-.1	-.2	-.1	1.5	192	11.9	101	98	73	0	0	0	0
PR SAN JUAN	89	76	91	75	83	1	0	-1.4	0	-.3	8	34.9	97	88	59	3	0	0	0

Based on 1951-80 normals.

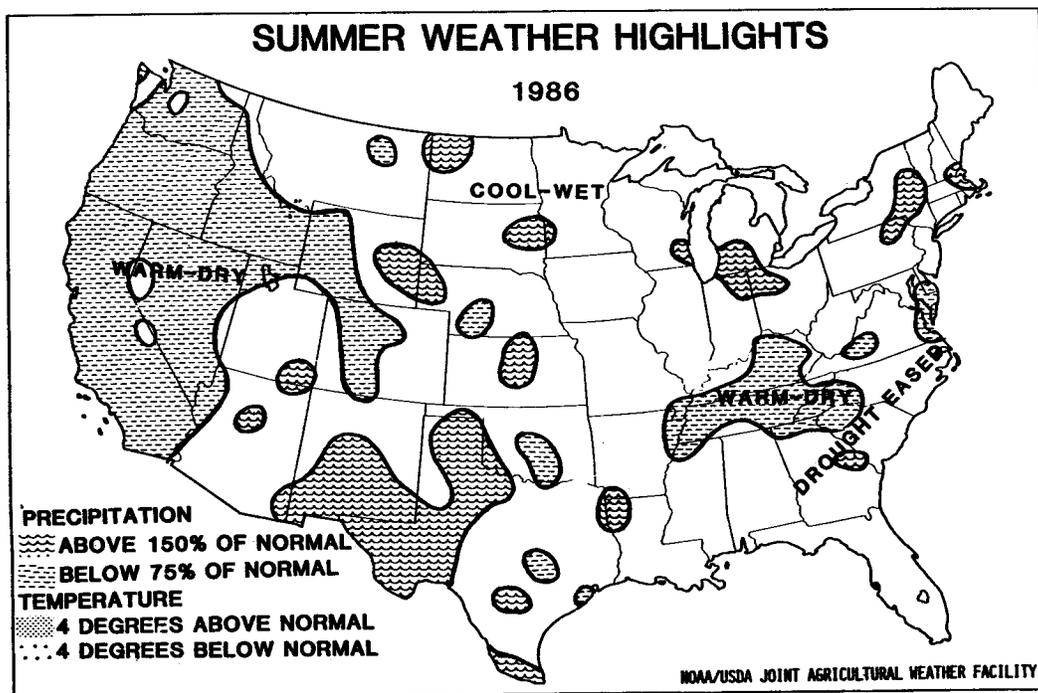
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HURRICANE NEWTON

SEPT. 21, 1986  
6:01 AM EST

5



## Summer Weather Review

JUNE, JULY, AND AUGUST

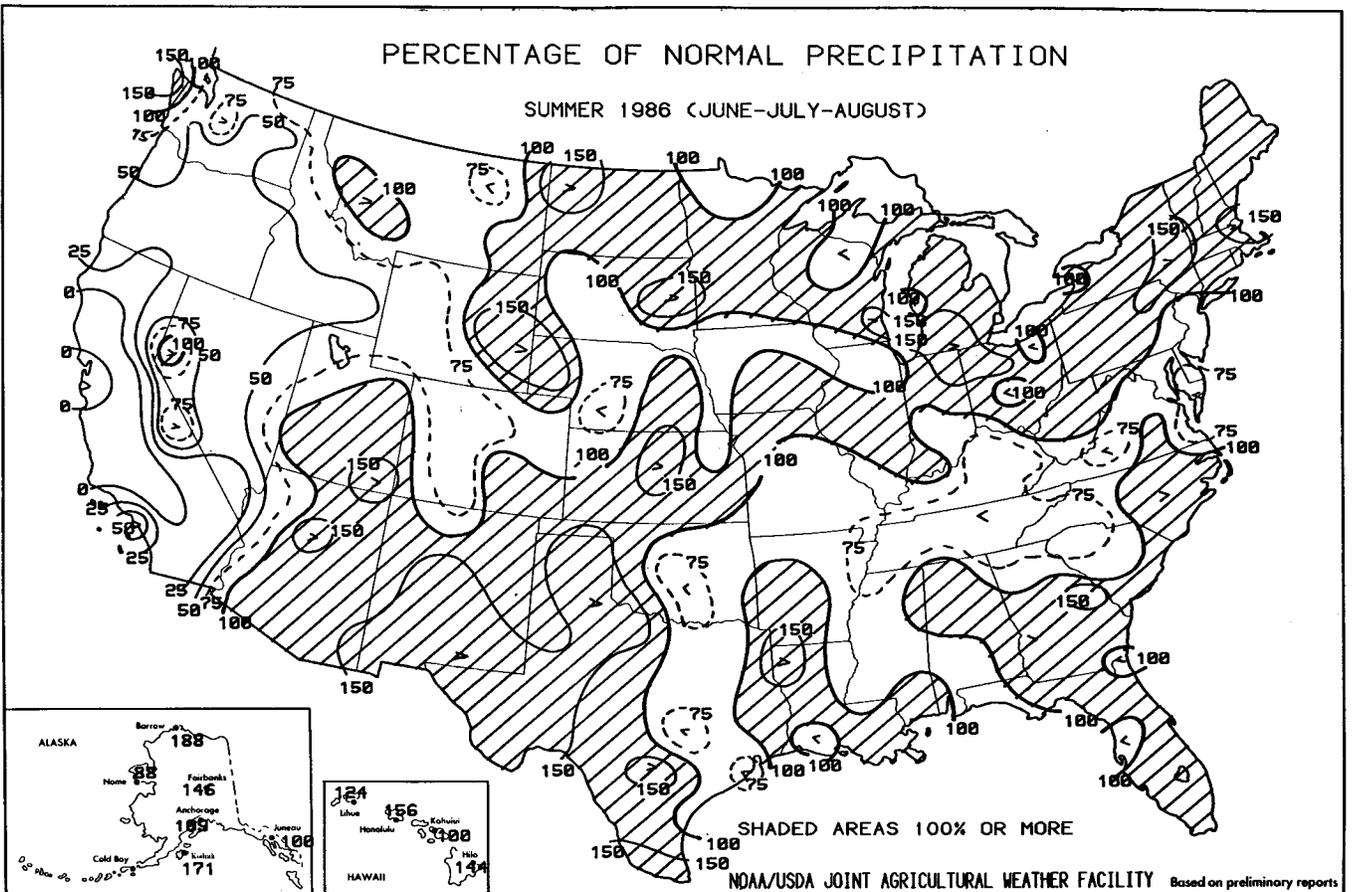
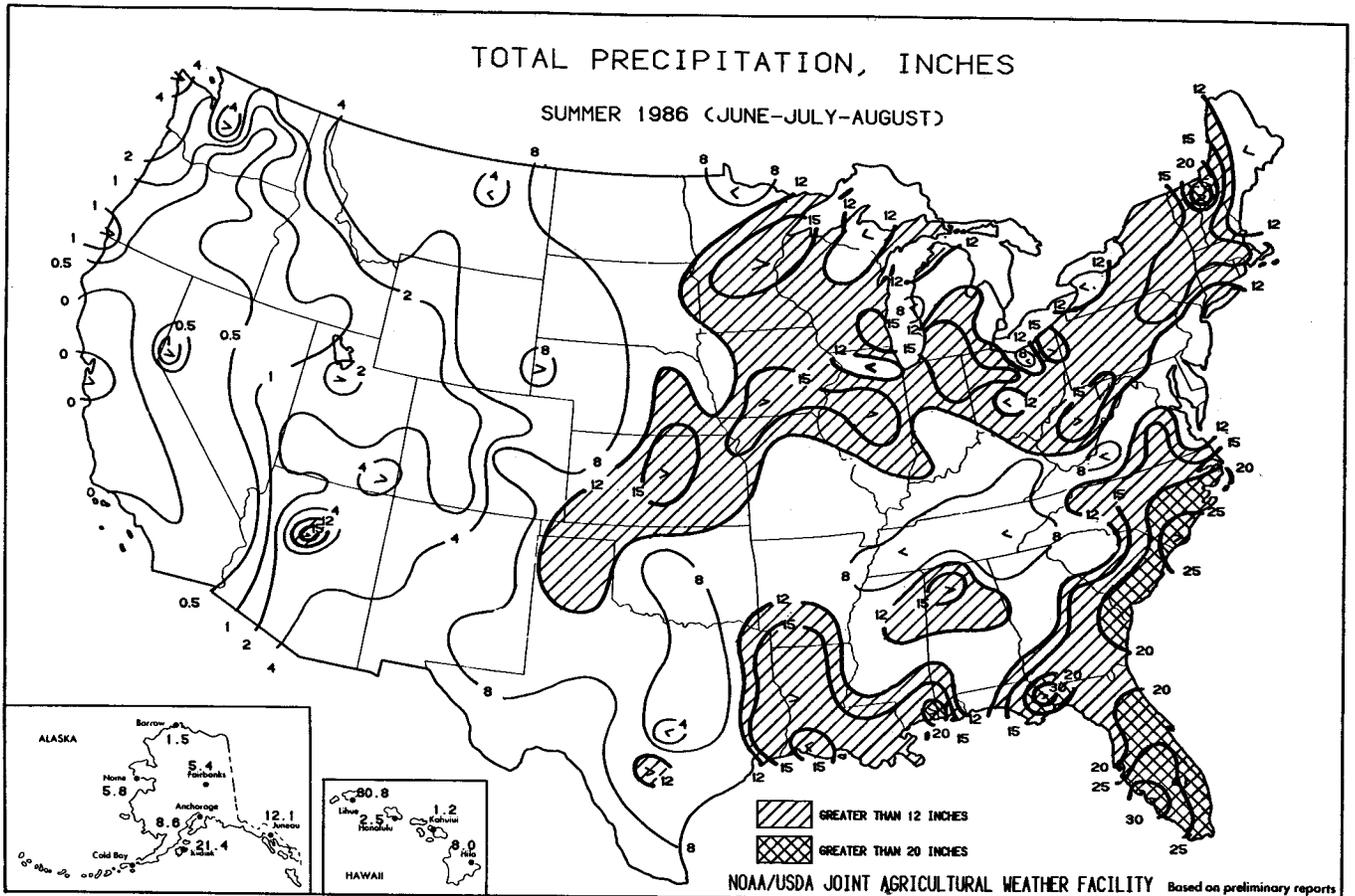
**HIGHLIGHTS:** Drought that began in December of 1985 persisted into the summer and became the worst drought of the century. The drought covered the area from the lower Mississippi Valley through Maryland and New Jersey to southern New England. A heat wave that lasted through most of July reached across the South and into North Carolina further stressing the water needs of the area. The frequency of showers and thunderstorms began to increase in late July, and by the end of summer most of the drought area was relieved of immediate stress. However, the drought effects lingered. Two tropical storms affected the coastal areas of the Nation during the season: Hurricane Bonnie moved into eastern Texas in July and Hurricane Charlie moved along the east coast from South Carolina to New Jersey in August. Thunderstorms were widespread in Arizona, New Mexico, Utah, and from western Texas through the Great Plains. Thunderstorms also produced above-normal rain across the Midwest and most of the Northeast. Temperatures were higher than normal in the central Plateau of the West and in the Southeast.

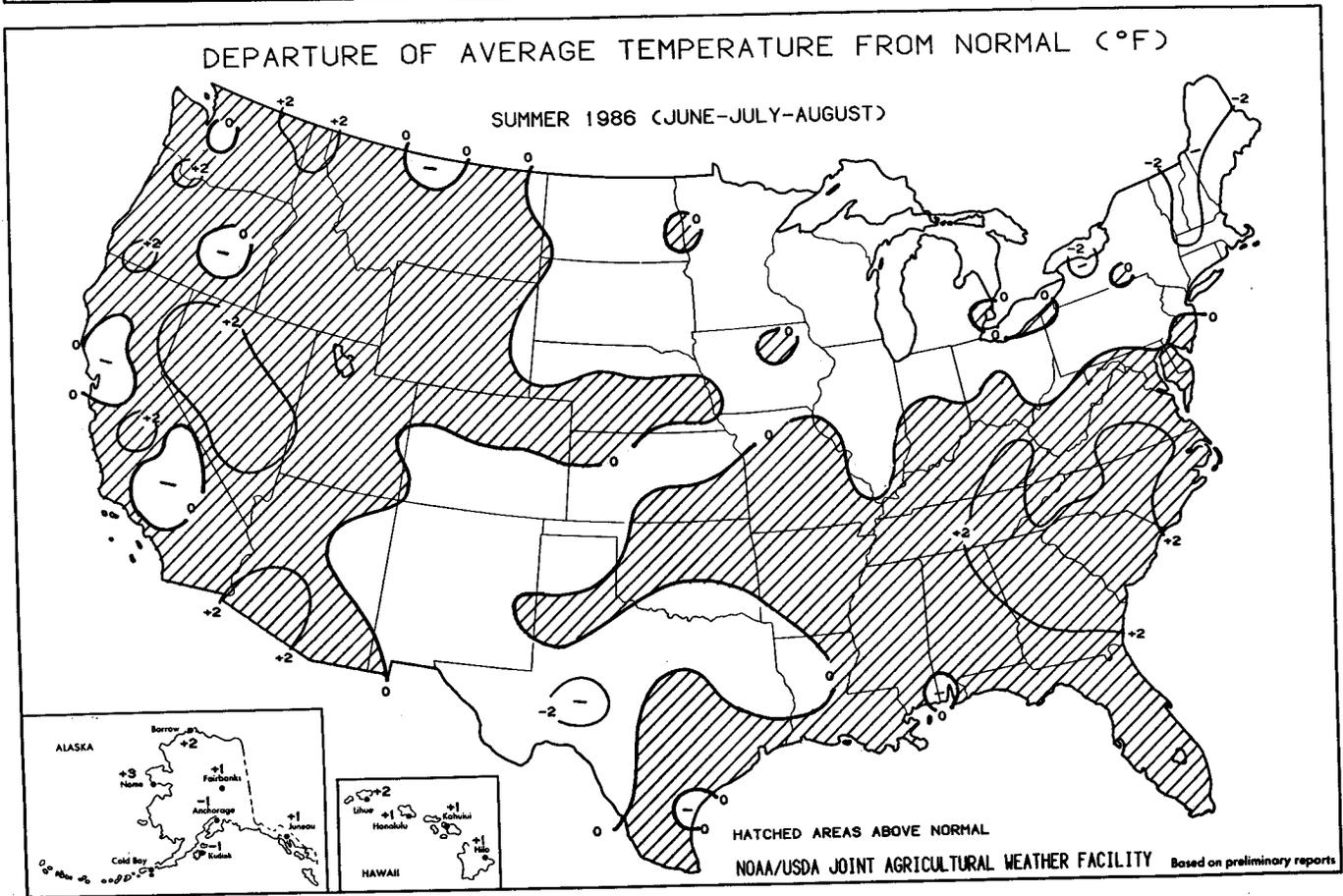
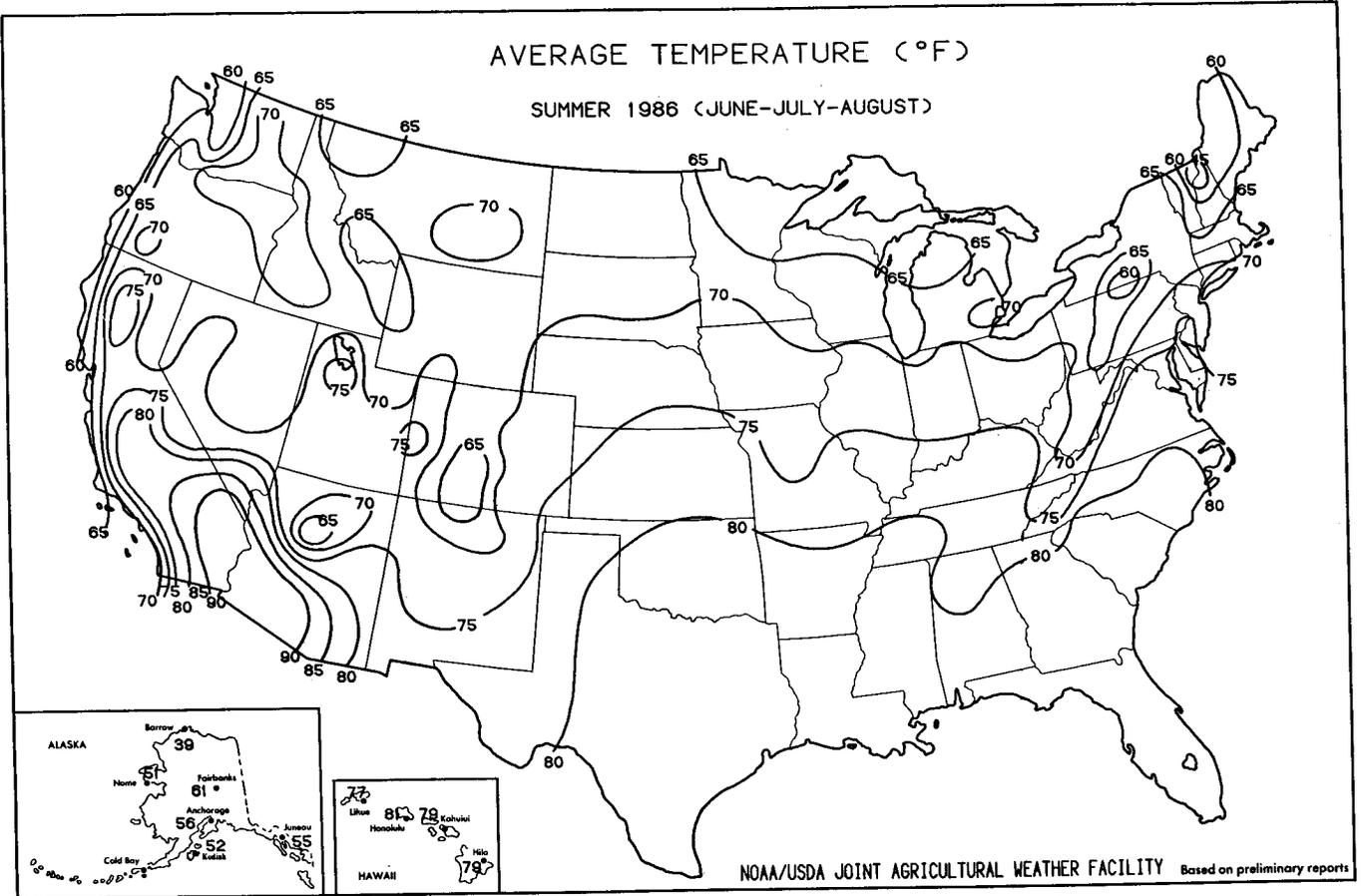
**JUNE...**Precipitation was much less than normal from Alabama to New Jersey and eastward. A few welcome showers fell along the coast, but inland areas remained very dry. Seasonal flow of moisture into the Southwest left its western portion dry, but strong thunderstorms dropped moderate to heavy rain from New Mexico through the eastern slopes of the Rockies. Above-normal precipitation accumulated from the western part of the Corn Belt through the Great Lakes to the upper Ohio Valley and southern New England. Thunderstorms were frequent from central Texas to the lower Mississippi Valley. Hurricane Bonnie moved into southeastern Texas and spread heavy

rain in eastern Texas, northern Louisiana, southern Arkansas, and then from north central Mississippi to western Tennessee. The weather was cool in the Northeast, the southern Rockies, and western Texas.

**JULY...**Dry weather persisted in the Southeast and spread across the South to southern Texas and Oklahoma. Most of the drought area in the Southeast had between 50 and 75 percent of normal rain, but some parts had little or none. Exacerbating the drought, a heat wave lasted most of the month from the central Plains across Arkansas to the Southeast from Georgia to North Carolina. Above-normal rain fell through the Corn Belt, the northern Plains, and the Northeast. Above-normal showers fell from Arizona and New Mexico northward into the Rockies.

**AUGUST...**Hot, dry weather persisted across the South and Southeast as the month began. However, scattered thundershowers began in the Southeast, and before the month was over most of the drought areas were relieved of immediate stress to crops. However, much of the Mississippi Delta and central Alabama were still too dry. At midmonth Tropical Storm Charlie developed off the Southeast coast. After remaining stationary for 2 days, the storm intensified and became a hurricane as it moved northward along the coast dropping heavy rain from North Carolina to New Jersey. As the storm weakened it veered sharply and moved eastward south of Long Island, New York. Thunderstorms were frequent from the Rockies and Great Basin to the Atlantic Coast. Surges of cooler air began to move into the East early in the month. In the last week, the coolest air of the season covered the East.





## National Agricultural Summary

September 15 to 21, 1986

**HIGHLIGHTS:** Rain provided moisture across the northern and central Great Plains and the Corn Belt but hampered crop harvest and winter grain seeding. Warm, dry weather is needed in these areas to mature crops. Fieldwork averaged 4 to 6 days in most areas but was limited to less than 4 days in Wisconsin, Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Missouri, Michigan, and Montana. Soil moisture was becoming increasingly short in the Delta and the Southeast. Some States in the Corn Belt could use additional moisture despite rain this week.

Spring wheat was 90 percent (%) harvested, 1 percentage point behind last year and 7 points behind the 5-year average. Rain delayed or prevented harvest in most areas. Winter wheat was 34% seeded compared with 27% last year and average. Seeding jumped 15 points from the previous week despite rain in some areas. Twelve percent of the acreage was emerged, 3 points above average. Corn was 11% harvested, 3 points above the average and last year. Seventy percent of the acreage was mature. Harvest was underway in all States except Colorado, Minnesota, South Dakota, and Wisconsin. Sorghum harvest advanced 3 points to 32% completion, 1 point above normal. Wetness restricted harvest in the central and northern Plains. Cotton was 15% harvested, 6 points above the 9% average. Harvest was underway in all States except California and Oklahoma. Rice ended the week 67% harvested, compared with 48% normally. Peanut harvest gained momentum but lagged behind normal in the Southeast. Burley tobacco harvest progressed well, but flue-cured trailed behind normal in North Carolina and Virginia. Livestock was mostly good.

**SMALL GRAINS:** Spring wheat harvest inched 1 point closer to completion at 90% harvested. This compares with 91% harvested last year and 97% normally. Rain slowed harvest in nearly all States. In Montana, harvest progress was unchanged from the previous week at 85% completion, 10 points behind 1985 and average. Some spring wheat may not be cut because of wet conditions in Minnesota. Harvest was up 4 points to 93% completion from the previous week but still lagged 3 points below the average. North Dakota's spring wheat was 86% harvested, 11 points below average.

Winter wheat was 34% seeded, 7 points ahead of last year and average. Seeding was underway in all major producing States except California. Wetness slowed seeding in the northern and central Plains and in some Corn Belt States. Twelve percent of the wheat was emerged compared with 9% normally. Seeding was 20 points ahead of normal at 40% completion in Kansas. In Nebraska, seeding was 60% finished, equaling the average. Oklahoma's wheat was 30% seeded, doubling the average.

**CORN:** Corn was mostly good throughout the Corn Belt and good to excellent in the central Plains. Rain provided moisture for additional development but hampered harvest in these areas. Corn was 96% dent and 70% mature. Corn in the dent stage was 3 points above normal, and corn mature was 10 points above the average. Corn was 11% harvested compared with 8% last year and average. Harvest was ahead of normal in 9 of the 17 major producing States.

**SOYBEANS:** Soybeans dropping leaves surged 17 points ahead of the previous week. Forty-eight percent of the acreage was dropping leaves, 5 points above the average. Harvest reached 5% completion just slightly ahead of normal. Harvest had not begun in Georgia, Michigan, Minnesota, North Carolina, South Carolina, South Dakota, and Tennessee.

**COTTON:** Cotton condition declined in the Southeast and parts of the Delta as soil moisture shortened. Condition was mostly fair to poor in the Southeast and fair to good in the Delta. Fifty-four percent of the acreage had reached the boll opening stage, 3 points slower than the average pace and 9 points behind 1985. Harvest was 15% complete, compared with 13% last year and 9% average. Louisiana and Mississippi were 34 and 23 points ahead of normal, respectively. Harvest was just beginning in the Southeast but trailed 1 to 2 points behind average.

**SORGHUM:** Sorghum continued turning color at a rapid pace and was ahead of normal in all States except Texas. Ninety percent of the acreage had turned color, 10 points above average. Sorghum was 55% mature compared with 49% mature last year and 50% average. Harvest was 31% finished exceeding last year and average by 1 point. Rain slowed and in some instances prevented harvest in the northern and central Plains.

**OTHER CROPS:** Rice was 67% harvested compared with 53% last year and the 48% average. Harvest was just beginning in California and neared end in Louisiana and Texas. Arkansas' harvest was 66% complete, 32 points above the average. Mississippi producers had cut 83% of their acreage, more than doubling the 41% average.

Peanut harvest gained momentum but lagged normal in the Southeast. Alabama peanuts were fair to good and 24% of the acreage dug and 10% was combined. Normally, 41% would have been dug and 27% combined. Eleven percent of Georgia peanuts were dug, 30 points below average. In Texas peanuts were 14% harvested, 3 points greater than normal. Moisture improved peanut condition, but disease increased.

Nearly two-thirds of flue-cured tobacco in Virginia and a fourth in North Carolina remained on the stalks. Burley harvest progressed normally. Burley cured well in Kentucky, but producers experienced houseburn with early-cut tobacco.

**FRUIT AND NUTS:** Florida citrus groves were very good to excellent. Moisture was adequate with irrigation limited to drier sand hill groves. Early-variety pecan harvest began in the Texas Blacklands. However, most areas were in the shuck split stage. Grapefruit picking was underway in Yuma, Arizona. Lemon harvest and packing continued in the Salt River Valley. California navel oranges showed good growth. Apple, date, table and wine grape, kiwifruit, olive, pomegranate, summer grapefruit, lemon, almond, pistachio, and walnut harvests were active.

**VEGETABLES:** Florida vegetable producers harvested squash, sweet corn, and cucumbers. Some irrigation took place, mostly in Dade County and the Southwest. Vegetable crops were generally good. Fall vegetable planting continued in Texas. Hot temperatures slowed tomato growth in the Rio Grande Valley. High Plains carrot, cabbage, cucumber, and watermelon harvest continued. In Arizona, lettuce, cauliflower, and broccoli seeding progressed. Fall lettuce harvest is expected to start around September 26. California vegetable harvest consisted mostly of snap beans, broccoli, carrots, cauliflower, celery, sweet corn, and lettuce. Melon harvest was winding down Statewide.

**PASTURES AND LIVESTOCK:** Livestock was mostly good. Movement from summer pastures continued. Pastures were mostly fair to good. Growth declined in the Delta and Southeast where moisture was short.

**CROP PROGRESS**

FOR WEEK ENDING SEPTEMBER 21, 1986

	CORN % DENT		
	1986	1985	AVG.
COLO	87	92	90
GA	100	100	100
ILL	100	100	99
IND	100	99	96
IOWA	100	99	93
KANS	99	97	90
KY	100	100	100
MICH	80	90	95
MINN	96	95	97
MO	100	99	97
NEBR	100	95	92
N C	100	100	100
OHIO	100	100	96
PA	88	77	76
S DAK	77	72	84
TEX	100	100	NA
WIS	80	71	77

17 STATES 96 95 NA

EXCL. STATES WITH NA 96 94 93

THESE 17 STATES PRODUCED 93% OF THE 1985 CORN CROP.

NA - NOT AVAILABLE.

	CORN % MATURE		
	1986	1985	AVG.
COLO	37	43	41
GA	100	100	100
ILL	95	81	78
IND	90	75	65
IOWA	80	74	63
KANS	80	70	60
KY	88	77	72
MICH	25	35	55
MINN	33	24	40
MO	93	90	76
NEBR	65	55	40
N C	100	97	96
OHIO	64	60	60
PA	33	18	20
S DAK	54	45	67
TEX	89	91	NA
WIS	40	28	50

17 STATES 70 62 NA

EXCL. STATES WITH NA 70 61 60

THESE 17 STATES PRODUCED 93% OF THE 1985 CORN CROP.

NA - NOT AVAILABLE.

	CORN % HARVESTED		
	1986	1985	AVG.
COLO	0	1	1
GA	89	86	79
ILL	14	6	6
IND	9	4	4
IOWA	4	5	5
KANS	25	15	15
KY	30	19	13
MICH	1	1	2
MINN	0	0	1
MO	29	19	20
NEBR	4	1	0
N C	45	51	52
OHIO	5	5	6
PA	3	0	0
S DAK	0	0	2
TEX	74	63	64
WIS	0	0	0

17 STATES 11 8 8

THESE 17 STATES PRODUCED 93% OF THE 1985 CORN CROP.

	SPRING WHEAT % HARVESTED		
	1986	1985	AVG.
IDAHO	92	98	94
MINN	93	87	96
MONT	85	95	95
N DAK	88	88	97
S DAK	100	100	100

5 STATES 90 91 97

THESE 5 STATES PRODUCED 95% OF THE 1985 SPRING WHEAT CROP.

	RICE % HARVESTED		
	1986	1985	AVG.
ARK	66	46	34
CALIF	4	1	4
LA	96	81	84
MISS	83	75	41
TEX	98	87	97

5 STATES 67 53 48

THESE 5 STATES PRODUCED 97% OF THE 1985 RICE CROP.

	GRAIN SORGHUM % COLORING		
	1986	1985	AVG.
ARK	96	NA	NA
ILL	90	NA	NA
KANS	90	70	65
LA	100	100	99
MISS	100	NA	NA
MO	91	87	84
NEBR	96	85	85
OKLA	95	95	95
S DAK	86	66	85
TENN	97	97	NA
TEX	87	91	90

11 STATES 91 NA NA

EXCL. STATES WITH NA 90 82 80

THESE 11 STATES PRODUCED 94% OF THE 1985 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	GRAIN SORGHUM % MATURE		
	1986	1985	AVG.
ARK	88	NA	NA
ILL	65	NA	NA
KANS	40	20	25
LA	100	98	95
MISS	100	98	91
MO	72	65	66
NEBR	45	35	30
OKLA	35	35	45
S DAK	31	21	40
TENN	88	85	NA
TEX	67	75	72

11 STATES 58 NA NA

EXCL. STATES WITH NA 55 49 50

THESE 11 STATES PRODUCED 94% OF THE 1985 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	GRAIN SORGHUM % HARVESTED		
	1986	1985	AVG.
ARK	81	66	63
ILL	9	4	5
KANS	5	3	5
LA	97	88	84
MISS	86	75	54
MO	26	20	25
NEBR	1	0	0
OKLA	5	15	10
S DAK	1	0	2
TENN	60	40	NA
TEX	58	64	65

11 STATES 32 31 NA

EXCL. STATES WITH NA 32 31 31

THESE 11 STATES PRODUCED 94% OF THE 1985 GRAIN SORGHUM CROP

NA - NOT AVAILABLE.

COTTON			
	% BOLLS OPENING		
	1986	1985	AVG.
ALA	78	84	66
ARIZ	89	90	85
ARK	86	80	76
CALIF	78	90	72
GA	56	72	58
LA	97	92	78
MISS	100	84	86
MO	67	53	82
N MEX	90	55	74
N C	89	93	89
OKLA	30	60	30
S C	81	88	76
TENN	87	85	65
TEX	21	40	38
14 STATES	54	63	57

THESE 14 STATES PRODUCED 100% OF THE 1985 COTTON CROP.

COTTON			
	% HARVESTED		
	1986	1985	AVG.
ALA	8	10	5
ARIZ	3	0	1
ARK	18	15	10
CALIF	0	0	0
GA	3	7	5
LA	45	27	11
MISS	34	20	9
MO	8	2	7
N MEX	1	0	1
N C	3	3	4
OKLA	0	2	1
S C	5	11	6
TENN	12	5	9
TEX	15	16	14
14 STATES	15	13	9

THESE 14 STATES PRODUCED 100% OF THE 1985 COTTON CROP.

WINTER WHEAT			
	% PLANTED		
	1986	1985	AVG.
ARK	1	4	5
CALIF	0	0	0
COLO	68	79	73
GA	4	2	2
IDAHO	40	23	31
ILL	3	3	3
IND	8	6	6
KANS	40	25	20
MICH	3	3	5
MO	6	5	6
MONT	20	35	30
NEBR	60	55	60
N MEX	55	NA	NA
N C	2	0	0
OHIO	3	6	4
OKLA	30	15	15
OREG	12	7	14
S DAK	53	66	76
TEX	36	20	23
WASH	46	50	49

20 STATES 35 NA NA  
EXCL. STATES WITH NA 34 27 27

THESE 20 STATES PRODUCED 91% OF THE 1985 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

WINTER WHEAT			
	% EMERGED		
	1986	1985	AVG.
ARK	0	0	NA
CALIF	0	0	0
COLO	28	37	40
GA	0	NA	NA
IDAHO	0	0	0
ILL	0	0	0
IND	3	2	2
KANS	15	10	NA
MICH	1	0	0
MO	0	0	0
MONT	0	0	0
NEBR	40	25	30
N MEX	44	NA	NA
N C	0	NA	NA
OHIO	0	0	0
OKLA	5	3	3
OREG	2	0	2
S DAK	41	40	38
TEX	13	4	3
WASH	0	0	0

20 STATES 12 NA NA  
EXCL. STATES WITH NA 12 9 9

THESE 20 STATES PRODUCED 91% OF THE 1985 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

SOYBEANS				SOYBEANS			
	% DROPPING LEAVES				% HARVESTED		
	1986	1985	AVG.		1986	1985	AVG.
ALA	20	19	19	ALA	1	2	1
ARK	15	11	11	ARK	1	2	1
GA	18	25	18	GA	0	2	NA
ILL	75	61	58	ILL	16	7	8
IND	75	60	60	IND	9	3	4
IOWA	50	62	57	IOWA	1	2	4
KANS	60	40	40	KANS	3	2	2
KY	36	24	26	KY	4	1	1
LA	28	24	26	LA	4	4	3
MICH	45	55	60	MICH	0	0	0
MINN	45	40	60	MINN	0	0	1
MISS	53	25	32	MISS	5	2	3
MO	46	24	27	MO	5	1	3
NEBR	40	30	35	NEBR	1	0	1
N C	5	7	6	N C	0	0	0
OHIO	68	51	55	OHIO	8	4	6
S C	6	4	6	S C	0	0	0
S DAK	54	47	72	S DAK	0	0	5
TENN	30	20	20	TENN	0	0	0
19 STATES	48	41	43	19 STATES	5	2	NA

THESE 19 STATES PRODUCED 96% OF THE 1985 SOYBEANS CROP.

EXCL. STATES WITH NA 5 2 3

THESE 19 STATES PRODUCED 96% OF THE 1985 SOYBEANS CROP.

NA - NOT AVAILABLE.

WEEKLY CROP WEATHER CONDITION PERCENT REPORT  
FOR WEEK ENDING SEPTEMBER 21, 1986

## GRAIN SORGHUM

STATE	VP	P	F	G	EX
ILL	0	0	8	78	14
KANS	1	3	6	25	65
MISS	3	12	65	20	0
MO	5	8	27	55	5
NEBR	0	0	9	40	51
OKLA	0	0	3	97	0
S DAK	0	2	31	60	7
TEX	0	0	28	57	15

## COTTON

STATE	VP	P	F	G	EX
ALA	2	29	58	11	0
ARIZ	0	0	0	85	15
ARK	4	8	38	50	0
CALIF	0	0	5	95	0
GA	3	28	60	9	0
LA	0	15	63	22	0
MISS	12	30	53	5	0
MO	8	17	67	8	0
N MEX	0	0	50	50	0
N C	0	5	70	20	5
OKLA	0	0	25	65	10
S C	25	63	12	0	0
TENN	2	0	55	43	0
TEX	0	8	58	33	1

## SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	27	64	9	0
ARK	7	27	55	11	0
GA	9	18	59	14	0
IND	0	4	36	57	3
IOWA	0	1	6	67	26
KANS	0	0	1	24	75
KY	1	8	40	51	0
LA	0	9	78	13	0
MICH	2	8	25	50	15
MINN	2	2	38	50	8
MISS	18	47	29	6	0
MO	3	3	34	54	6
NEBR	0	0	4	64	32
N C	0	11	54	35	0
OHIO	0	0	15	78	7
S C	4	16	65	15	0
S DAK	0	8	26	62	4
TENN	6	22	62	10	0

## CORN

STATE	VP	P	F	G	EX
COLO	4	8	21	55	12
IOWA	0	0	4	56	40
KANS	0	0	1	22	77
MICH	2	8	20	50	20
MINN	3	2	18	54	23
MO	1	7	13	53	26
NEBR	0	0	7	48	45
OHIO	0	0	12	73	15
PA	1	3	16	51	29
S DAK	0	2	13	72	13
TEX	0	2	7	66	25
WISC	1	0	7	46	46

## RICE

STATE	VP	P	F	G	EX
CALIF	0	0	10	80	10
MISS	2	9	22	67	0
TEX	0	0	15	63	22

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

## State Summaries of Weather and Agriculture

**ALABAMA:** Temperatures averaged 2 to 4° above normal. Rainfall totals mostly 0.50 to 1.00 in. Isolated areas 2.00 in.

Days suitable for fieldwork 5.2. Soil moisture 34% short, 64% adequate, 2% surplus. Harvest of most row crops underway; conditions favorable. Peanuts dug 24%, 57% 1985, 41% avg.; combined 10%, 42% 1985, 27% avg.; 54% fair, 46% good. Primary activities: Harvesting corn, sorghum, cotton, peanuts, hay; defoliating cotton; preparing land for sowing winter grazing crops; applying fungicides to peanuts; controlling insects on row crops; routine care of livestock and poultry.

**ALASKA:** Northern areas small amounts of precipitation, southern areas of Railbelt cloudy frequent rain showers. Temperature highs, lows warmer than normal. Seasonal precipitation generally wetter than normal.

Days suitable for fieldwork 4.0. Soil moisture adequate to slightly surplus. Barley for grain harvest 85% complete. Hay harvest nearing 80% complete. Commercial potato harvest 80% complete. Cabbage, carrot harvest continued excellent quality available.

**ARIZONA:** Considerable sunshine prevailed with some high clouds. Isolated sprinkles White Mountains, southeast. Dry, cool conditions continued. Minimum temperatures lower 30s high country, 40s at 5,000 FT., 60s lower deserts. Averages for week 1 to 9° below seasonal normals.

Cotton harvest increased west, few fields picked central. Weed infestation light to moderate. Irrigation declined. Defoliation moderate to heavy except southeast. Insect infestations light to moderate. Alfalfa harvest light, one more cutting expected. Prices high for quality hay. Field renovation west, central; no emergence. Corn harvested southeast. Sesame harvested. Grapefruit picking underway Yuma. Lemon harvest, packing continuous Salt River Valley, Yuma; groves good. Apples packed. Lettuce, cauliflower, broccoli planting progressed; emergence, thinning moderate. Cantaloup harvest continued. Fall honeydews good. Green onions packed central valley, harvest accelerating. Potato harvest advanced Willcox. Lettuce harvest Willcox to start 26th or 29th.

**ARKANSAS:** Temperatures warmed making week warmer than normal. Widely scattered showers with some isolated heavy amounts. Temperature extremes 54°; 97°. Rainfall none to 4.39 in.

Days suitable for fieldwork 5.0. Soil moisture 39% short, 53% adequate, 8% surplus. Crop growth moderate. Major activities: Fertilizing cool season forages; weaning calves; irrigating soybeans; defoliating cotton; harvesting crops; preparing wheat, oat seedbeds. Corn earworm problem alfalfa hay. Worm pressure decreasing soybeans. Blast major problem some rice varieties. Lines at rice driers.

**CALIFORNIA:** Upper level low pressure area formed in Gulf of Alaska slowly moved south along coast, bringing cold air, precipitation over north half State. First rain of season most stations. Blue Canyon, 5,000 ft., Sierra Nevadas, 19° below normal for week.

Cool temperatures, rain slowed crop progress. Rice, corn, sugarbeet, safflower, dry bean, alfalfa harvests underway. Cotton irrigation generally completed; defoliation underway. Ground

preparation active for winter grain planting. Apple, date, table, wine grape, kiwifruit, Manzanillo olive, pomegranate, summer grapefruit, desert lemon, almond, pistachio, walnut harvests active. Raisin grapes being dried. Navel oranges showing good growth. Artichokes very light variable quality; central coast. Snap bean harvest active; Los Angeles, Orange County, Coachella Valley, central valley; good quality. Broccoli moderate good quality; Salinas, Santa Maria. Winter crop; Fresno, Tulare counties; looked good, normal progress. Strawberry fields fumigated; south coast. Carrot moderate good quality; Salinas. Fields; Kings County; progressing well. Cauliflower, celery moderate, good quality; Salinas, Santa Maria. Planting cauliflower, celery continued; south coast. Winter fields; Tulare, Fresno; developing normally. Sweet corn harvest going well; Delta, south coast, Riverside County. Cucumber packing active; Tulare County; south coast. Lettuce moderate variable quality; Salinas. Fall fields; Westside; doing very well, some slow growth due cool temperatures. Growers Imperial Valley Blythe; busy thinning, weeding, applying pesticides fall fields. Watermelon, mixed melon harvests continued wind down; statewide. Honeydew melon harvest very active; Sacramento Valley. Dehydrator onions being dug; Westside. Pepper moderate; Salinas; light Santa Maria; good quality. Harvesting active Delta. Bell peppers finished; Kings County. Norgold potato harvest on; Tulelake-Butte Valley. Harvest Modoc County; slowed by rain; 20% Norgold left. Vines later fields killed; sprinkler pipes removed. Pumpkins progress well; Riverside County. Harvest started; Delta. Green-pack tomato harvest started; Fresno. Processing, fresh market tomato harvest wind down; statewide. Movement livestock winter grazing areas continued heavy most State. Showers central, northern districts reduced fire hazard. Fall calving gaining momentum. Stockwater supplies continued short most areas.

**COLORADO:** Temperatures averaged from 4° below to 5° above normal. Precipitation totals averaged none to 0.20 in.

Days suitable for fieldwork 5.9. Soil moisture 12% very short, 31% short, 55% adequate, 2% surplus. Barley harvested 95%, 92% 1985, 92% avg. Dry beans cut 71%, 86% 1985, 79% avg.; threshed 45%, 57% 1985, 47% avg. Sorghum turning color 75%, 85% 1985, 77% avg.; mature 10%, 10% 1985, 23% avg. Livestock, range, pasture good.

**FLORIDA:** Light easterly trade winds sustained typical summer weather with warm temperatures, widely scattered afternoon, evening thundershowers except for night, morning showers, middle lower Atlantic Coast. Rainfall averaged 1.00 in. lower East Coast to less than 0.50 in. elsewhere. Temperatures averaged near normal.

Soil moisture generally adequate. Peanut harvest active; yields better than expected. Cotton fair, frequent rains damaged crop. Light corn harvest continued. Soybeans good, early fields maturing. Haymaking active; armyworms damaged some fields. Sugarcane planting active. Land preparation for small grains underway. Pastures mostly good to excellent except some drier Panhandle, upper Peninsula areas poor to fair. Armyworms prevalent some pastures. Cattle mostly good to excellent except only fair in drier Panhandle, upper Peninsula localities. Citrus groves very good to excellent. Moisture adequate; limited irrigation

on drier sand hill groves. New crop fruit holding well; very little splitting. Several packers now moving 1986-87 crop grapefruit. Caretakers remain very active with fall grove practices. Mostly favorable weather vegetable producing areas. Precipitation limited to scattered showers, thunderstorms. Some irrigation, Dade County, southwest. All crops generally good. Harvest squash, sweet corn, cucumbers underway.

**GEORGIA:** Rain many locations, amounts light except isolated areas 1.00 to 2.00 in. Totals since January 1st still 7.00 to 25.00 in. below normal. Average temperatures above normal, hottest around 90° north, low or mid 90s central, south. Coolest 60s except 50s northeast mountains.

Days suitable for fieldwork 4.9. Soil moisture 3% very short, 27% short, 65% adequate, 5% surplus. Sorghum grain 23% poor, 64% fair, 13% good. Peanuts 7% very poor, 5% poor, 60% fair, 28% good; 11% dug, 77% 1985, 41% avg.; 6% threshed, 57% 1985, 24% avg. Soybeans 98% setting pods, 99% 1985, 97% avg. Tobacco 99% harvested, 100% 1985, 99% avg. Rye 5% planted, 4% 1985, 4% avg. Other small grains 1% planted, 1% 1985, 5% avg. Apples 4% very poor, 18% poor, 46% fair, 32% good; 70% harvested, 73% 1985, 76% avg. Pecans 3% very poor, 16% poor, 57% fair, 24% good. Pasture 1% very poor, 9% poor, 54% fair, 35% good, 1% excellent. Hay 4% very poor, 17% poor, 47% fair, 32% good. Cattle 2% poor, 48% fair, 50% good. Hogs 2% poor, 29% fair, 67% good, 2% excellent. Main activities: Hay and row crop harvest, insect controls, overseeding pastures, land preparation, small grain planting.

**HAWAII:** Conditions variable. Some afternoon showers followed mostly sunny mornings. Winds 5 to 15 mph. Light winds, sugar cane burning, resulted haze over some areas. Temperatures ranged upper 60s to lower 90s.

Days suitable for fieldwork 7.0. Soil moisture adequate some areas, irrigation heavy other areas. Bananas fair, output moderate. Papayas fair to good, production seasonal low. Leafy vegetables fair, some temperature related plant injury.

**IDAHO:** Normal early week, temperatures below normal, increased precipitation midweek. Temperatures 10° below normal.

Days suitable for fieldwork 4.0. Harvest of small grains wrapping up, harvest of potatoes gaining momentum. Potatoes good. Third cutting alfalfa hay active. Fall land preparation underway as weather permitted. Range, pastures improving. Livestock good.

**ILLINOIS:** Temperatures averaged 2 to 4° below normal north and 2 to 4° above normal south. Precipitation 0.40 to 5.40 in. Most areas greater than 1.00 in. heaviest central, north.

Days suitable for fieldwork 4.5. Soil moisture 37% short, 51% adequate, 12% surplus. Soybeans turning yellow 92%, 84% 1985, 83% avg. Pasture 8% poor, 39% fair, 45% good, 8% excellent. Major farm activities: Harvesting corn, soybeans.

**INDIANA:** Temperatures averaged near normal north to 1 to 4° above normal central, south. Maximums lower 70s north to around 80° south. Minimums lower 50s north to lower 60s south. Precipitation totals averaged from 1.50 in. north, to 1.90 in. central, to 1.50 in. south.

Fieldwork averaged 5.0 days. Topsoil moisture 30% short, 65% adequate, 5% surplus. Subsoil moisture 39% short, 60% adequate, 1% surplus. Corn mostly good, soybeans mostly good. Soybeans 95% turning yellow, 91% 1985, 85% avg. Soybeans 35% mature, 20% 1985, 30% avg. Tobacco 90% harvested, 75% 1985, 65% avg. Winter wheat cropland for 1987 44% plowed, 34% 1985, 43% avg. Rye 20% seeded, 10% 1985, 10% avg. Silos 80% filled, 55% 1985, 55%

avg. Harvest operations moved along despite scattered showers. Pastures fair.

**IOWA:** Warm, wet week. Rainfall particularly heavy 19th, amounts to 6.50 in.

Days suitable for fieldwork 2.2. Topsoil moisture 46% adequate, 54% surplus; subsoil moisture 83% adequate, 17% surplus. Hay 1% poor, 14% fair, 65% good, 20% excellent. Third crop alfalfa harvested 91%, 95% 1985, 93% avg. Winter wheat seeded 7%, 18% 1985, 18% avg. Wet conditions limit corn, soybean harvest. Soybeans with leaves turning 88%, 91% 1985, 85% avg.; soybeans mature 32%, 35% 1985, 33% avg. Livestock mostly good; no major disease problems. Pastures mostly good.

**KANSAS:** Precipitation averaged less than 0.10 in. southwest and west central, 1.10 to 2.75 in. east, 0.25 in. elsewhere. Temperatures averaged 74° southeast to 79° southwest, 4° above normal southeast to 8 to 12° above normal elsewhere.

Days suitable for fieldwork 4.0. Topsoil moisture 10% short, 59% adequate, 31% surplus. Sorghum excellent progress, rapid maturity. Harvest delayed by rain, progress ahead schedule. Corn maturing ahead schedule. Harvest excellent progress, especially southern areas. Soybeans dropping leaves ahead schedule, no harvest yet. Wheat seeding fast start, emergence ahead schedule. Adequate moisture most areas to complete planting, establish stands. Grazing pastures, ranges excellent except west moisture short stressing growth. Hay operations little progress but nearing completion for this year.

**KENTUCKY:** First half week began cool as front pushed through State into Tennessee. By 18th front moved backed into State bringing rain. By 20th system moved into Indiana allowing warm, humid conditions into State with scattered thundershowers. High temperatures for week averaged 80s with lows 50s to 60s. Soil temperatures 4.00 in. averaged 70s. Rainfall scattered averaging 0.25 to 4.50 in.

Days suitable fieldwork 4.6. Soil moisture 17% very short, 47% short, 36% adequate. Burley 84% cut, 90% 1985, 80% avg. Dark tobacco 80% cut, 86% 1985, 80% avg. Tobacco generally good quality, curing nicely. Houseburn experienced with 10% early cut tobacco. Corn harvesting most advanced west, west central areas with between one-third to one-half crop harvested. Soybean development continued ahead last year. Harvest hay, sow cover crops tobacco ground.

**LOUISIANA:** Temperature 2 to 4° above normal. Temperature extremes 56°, 96°. Rainfall averaged 0.10 to 3.00 in.

Days suitable for fieldwork 6.4. Soil moisture 57% short, 43% adequate. Corn 99% harvested, 97% 1985, 92% avg. Rice 100% ripe, 94% 1985, 95% avg. Soybeans 59% leaves turning color, 52% 1985, 53% avg. Sugarcane good; 87% planted, 36% 1985, 50% avg. Sweetpotatoes fair to good; 69% harvested, 61% 1985, 60% avg. Wheat 1% planted, 1% 1985, 1% avg. Hay final cutting 86% complete, 76% 1985, 72% avg. Vegetables, pasture fair; livestock fair to good. Main activities: Baling hay; harvesting rice, sorghum, sweetpotatoes, soybeans, cotton; planting sugarcane; fall ground preparation.

**MARYLAND & DELAWARE:** Maryland: Temperatures averaged 3° below normal over State; lowest temperature 32° Oakland; highest temperature 88° College Park, Wye R.C. Precipitation averaged 0.08 in., ranging from none several stations to 0.80 in. Cambridge.

Days suitable for fieldwork 6.9. Topsoil moisture short. Subsoil moisture short. Alfalfa fourth cutting 65% harvested, 71% 1985, 64% avg. Field corn fair; 24% harvested, 35% 1985, 22% avg.;

corn for silage 64% harvested, 88% 1985, 81% avg. Soybeans fair; 18% shedding leaves, 22% 1985, 19% avg. Tobacco good; 82% harvested, 89% 1985, 85% avg. Vegetables, melons harvested. Potatoes 77%, 100% 1985; watermelons 100%, 100% 1985; cantaloupes 99%; tomatoes 96%, 100% 1985; sweetpotatoes 6%. Pasture fair. Apples good; 24% harvested, 57% 1985, 46% avg. Peaches good. Peach harvest nearly complete.

Delaware: Temperatures averaged 5° below normal over State; lowest temperature 38° Georgetown; highest temperature 85° Georgetown. Precipitation averaged 0.11 in., ranging from 0.04 in. Wilmington to 0.17 in. Dover, Georgetown.

Days suitable for fieldwork 7.0. Topsoil moisture short. Subsoil moisture very short. Field corn fair; 25% harvested, 29% 1985, 22% avg.; corn for silage 90% harvested, 80% 1985, 81% avg. Soybeans fair to good; 9% shedding leaves, 20% 1985, 20% avg. Pasture fair. Apples good. Peaches good.

MICHIGAN: Temperatures ranged 2 to 6° below normal. Temperature extremes 30°; 80°. Precipitation ranged from 0.10 to 2.00 in. across State.

Days suitable for fieldwork 2.5. Soil moisture 30% adequate, 70% surplus. Corn 80% dent, 90% 1985, 95% avg.; 25% mature, 35% 1985, 55% avg.; 1% harvested, 1% 1985, 2% avg.; 2% very poor, 8% poor, 20% fair, 50% good, 20% excellent. Soybeans 45% shedding, 55% 1985, 60% avg.; none harvested, none 1985, none avg.; 2% very poor, 8% poor, 25% fair, 50% good, 15% excellent. Dry beans 85% shedding, 90% 1985, 95% avg.; 10% very poor, 15% poor, 40% fair, 30% good, 5% excellent. Winter wheat 3% planted, 3% 1985, 5% avg.; 1% emerged, none 1985, none avg. Wet weather continued. Some dry beans, sugarbeets, potatoes damaged. Dry bean harvest, winter wheat planting on hold. Major activities: Silage harvest, apple picking, potato digging, vegetable harvest.

MINNESOTA: Temperatures averaged 1 to 4° below normal for State. Temperature extremes 76°; 30°. Precipitation averaged 0.26 to 0.78 in. above normal for northern third State, 1.45 to 5.17 in. elsewhere. Greatest weekly total 8.61 in.

Days suitable for fieldwork 1.2. Topsoil moisture 1% short, 23% adequate, 76% surplus. Cool, very wet week across State. Another full week of rain nearly shut down fieldwork most areas. Crops need 2 to 3 weeks of warm, sunny weather to reach full maturity. Unharvested wheat may be left because of wet conditions reducing the quality and very weedy fields. Field corn 12% cut for silage, 10% 1985, 27% avg. Soybeans 93% turning yellow, 89% 1985, 94% avg.; 12% mature, 7% 1985, 20% avg. Dry edible beans 36% harvested, 22% 1985, 32% avg. Potatoes 53% harvested, 31% 1985, 38% avg. Sweet corn 87% harvested for processing, 89% 1985, 91% avg. Flax 52% harvested, 32% 1985, 60% avg. Winter wheat 76% seeded for 1987 crop, 50% 1985, 75% avg. Rye 69% seeded for 1987 crop, 54% 1985, 74% avg. Sugarbeets 7% harvested, 8% 1985, 7% avg. Small grain, hay 52% stubble plowed, 43% 1985, 61% avg.

MISSISSIPPI: Temperatures 4° above normal, extremes 51°; 94°. Cool first part of week, temperatures gradually increased for remainder of week. Rainfall averaged 0.33 in. statewide. Greatest 24-hour total 1.55 in.

Days suitable for fieldwork 6.0, 6.5 1985, 5.9 avg. Soil moisture 12% very short, 53% short, 35% adequate. Corn 23% fair, 59% good, 18% excellent; 100% dented; 100% mature; 88% harvested, 72% 1985, 59% avg. Hay 90% harvested, 88% 1985, 90% avg. Sorghum silage 99% harvested, 87% 1985, 84% avg. Corn silage 100% harvested, 98% 1985, 95% avg.

Sweetpotatoes 60% harvested, 39% 1985, 36% avg. Peanuts 68% harvested, 52% 1985, 49% avg.

MISSOURI: Temperatures averaged 4° above normal, ranging 2° above normal Bootheel to 6° above normal northwest. Precipitation high some localized areas, as much as 5.00 to 7.00 in. along eastern edge, up to 6.00 in. west and northwest, some flash flooding.

Days suitable for fieldwork 3.8. Soil moisture 23% short, 60% adequate, 17% surplus. Pasture 6% very poor, 13% poor, 45% fair, 33% good, 3% excellent.

MONTANA: Heavy rain mainly 1.00 to 2.00 in. Northeast especially heavy, nearly 3.00 in. Jordan. Small areas west less than 0.66 in. Temperatures well below normal, 2 to 4° west, 5 to 8° southwest and southeast, 8 to 11° remainder.

Days suitable for fieldwork 1.2. Topsoil moisture 5% short, 55% adequate, 40% surplus. Subsoil 16% short, 80% adequate, 4% surplus. Small grain harvest at standstill. Corn silage harvest 70% complete, 60% 1985, 55% avg. Second cutting alfalfa hay 85%, 90% 1985, 90% avg. Cattle 30% moved from summer ranges, 60% 1985, 40% avg. Grazing prospects on fall ranges 4% poor, 29% fair, 60% good, 7% excellent.

NEBRASKA: Amounts averaged 2.00 in. north, southeast, 0.50 in. elsewhere. Temperatures averaged 7° above normal southeast, south central, normal north central, Panhandle. Temperatures extremes 45°; 92°.

Days suitable for fieldwork 3.4. Topsoil moisture 4% short, 41% adequate, 55% surplus. Subsoil moisture 4% short, 72% adequate, 24% surplus. Corn good to excellent. Soybeans good to excellent. Soybeans turning color 90%, 80% 1985, 70% avg. Sorghum excellent to good. Pasture, range feed supplies mostly adequate. Muddy conditions feedlots.

NEVADA: Low pressure system prevailed throughout week bringing widely scattered showers, cool weather to all areas. Most rainfall northeast section. Temperatures averaged 5 to 15° below normal. Extremes 22°; 98°. Below freezing temperatures common.

Potato digging operations slowed temporarily by freezing morning temperatures. Alfalfa seed combining nearing completion. Cattle movement to lower elevation ranges in full swing.

NEW ENGLAND: Average temperatures 3 to 7° below normal. Frost widespread north, central Maine, northern New Hampshire, Vermont, western, central Massachusetts, northwest Connecticut. Scattered frost elsewhere. Precipitation 0.75 to 1.25 in. north, 0.50 to 0.75 in. central, 0.25 to 0.50 in. south, coastal, less than 0.10 in. northern Maine.

Days suitable for fieldwork 6.0. Soil moisture 10% short, 70% adequate, 20% surplus. Cold week. Frost damage light. Grazing availability 95% adequate, 5% surplus. Fieldwork 3.5 days behind schedule north, on schedule south. Maine potatoes 10% dug, 10% 1985, 25% avg. Field corn 15% chopped, 20% 1985, 25% avg.; slow to mature. Oats 55% combined, 70% 1985, 85% avg. Sweet corn 95% picked; good to excellent. Shade tobacco stripping underway. Second crop hay 90% baled; good to excellent. Third crop hay 60% baled, 65% 1985, 70% avg. Apples 25% picked, 25% 1985, 25% avg. Cranberries 2% harvested; color excellent, size average.

NEW JERSEY: Temperatures averaged below normal. Extremes 32°; 81°. Rainfall averaged 0.22 in. north, 0.46 in. central, 0.12 in. south. Heaviest 24-hour total 0.47 in. on 20th, 21st. Estimated soil moisture percent field capacity averaged 72%

north, 55% central, 42% south. Four inch soil temperatures averaged 57° north, 60° central, 62° south.

Conditions good for growth, harvest of fall crops. Marketings of fall vegetable crops increased. Fall variety apple picking active. Irish, sweetpotato digging active. Silo filling made good progress. Grain corn, soybeans coloring. Small grain, cover crops seeding active. Showers helped pasture growth.

**NEW MEXICO:** Weekly temperatures 1 to 5° above normal eastern plains, near normal elsewhere. Rain over most of State. Precipitation none northeastern plains, southern desert to 0.89 in. southeastern plains, northern mountains.

Days suitable for fieldwork 5.6. Soil moisture 28% short, 66% adequate, 6% surplus. Hail damage 93% none, 7% moderate. Alfalfa 8% poor, 33% fair, 59% good. Corn 27% fair, 64% good, 9% excellent. Barley 33% fair, 67% good. Irrigated wheat 40% fair, 60% good. Dryland wheat 33% fair, 67% good. Irrigated grain sorghum 11% fair, 89% good. Dryland grain sorghum 67% fair, 33% good. Pecans 20% poor, 20% fair, 60% good. Chile 29% fair, 57% good, 14% excellent. Lettuce 100% good. Cattle 11% fair, 89% good. Sheep 100% good. Range 28% fair, 72% good.

**NEW YORK:** Temperatures averaged 10° below normal to near normal. Lows upper 20s to mid 40s. Highs 70s. Southern State near normal, 0.25 to 0.75 in. received. Central, northern State above normal with 0.75 to 2.00 in. received. Most rainfall 14th to 16th, 19th to 20th.

Days suitable for fieldwork 5.5. Soil moisture adequate. Corn crop good. Third cut alfalfa 50%, 58% 1985, 59% avg. Dry bean harvest continued. Corn silage harvest 11%, 12% 1985, 15% avg. Pastures fair to good. Harvesting of McIntosh near end; Cortland active; Red Delicious, Empire starting eastern State. Harvest Bosc, Seckel pear continued. Orange County onion harvest nearing end, crop quality excellent, size very good.

**NORTH CAROLINA:** Temperatures averaged 1° below normal across State. Temperature extremes 41°; 89°. Precipitation ranged from none to 0.68 in.

Days suitable for fieldwork 6.1. Soil moisture 3% very short, 54% short, 41% adequate, 2% surplus. Corn grain harvest slightly behind average. Corn silage harvested 84%, 87% 1985, 85% avg. Cotton mostly fair to good, bolls opening. Soybeans fair to good. Sorghum 5% very poor, 20% poor, 51% fair, 24% good; harvested 26%, 30% 1985, 22% avg. Flue-cured tobacco harvested 75%, 88% 1985, 92% avg. Burley tobacco harvested 72%, 84% 1985, 72% avg. Peanuts 38% fair, 62% good. Sweetpotatoes 40% fair, 56% good, 4% excellent; harvested 15%, 23% 1985, 21% avg. Apples 11% poor, 56% fair, 33% good; harvested 38%, 52% 1985, 52% avg. Pasture 2% very poor, 10% poor, 53% fair, 35% good. Major farm activities: Harvesting tobacco, corn, vegetables, apples, hay, sorghum; cutting corn silage; spraying soybeans, peanuts, cotton; marketing tobacco; digging peanuts, sweetpotatoes; tending livestock; mowing; preparing land for small grains; transplanting Christmas trees; planting alfalfa, pastures, small grains; defoliating cotton; general farm maintenance.

**NORTH DAKOTA:** Rain across State, entire week. Rainfall averaged 0.50 in. north central to almost 2.00 in. southeast. Temperatures much below normal for second week. Temperatures averaged 6° below normal, central to 3° below normal northeast; low 26° northeast, 14th; high 69° south central, 17th.

Days suitable for fieldwork 1.1. Recent rains increased average topsoil moisture levels to wettest ever for date; 6% short, 75% adequate, 19% surplus. Wet, cool weather allowed for little

progress towards harvest completion. Harvesting of all crops except potatoes, sugarbeets behind normal; however, all crops except flax, hard red spring wheat ahead of last year's late harvest. Sugarbeet harvest at normal pace. Condition of late season crops remained stable or improved over last week. Combining progress as follows: Hard red spring wheat 88%, 88% 1985, 97% avg.; durum wheat 83%, 73% 1985, 93% avg.; flax 23%, 33% 1985, 64% avg.; dry beans 25%, 13% 1985, 47% avg. Potatoes dug 49%, 28% 1985, 43% avg. Sunflower bracts brown 33%, 14% 1985, 41% avg. Pasture conditions improved to 8% poor, 27% fair, 55% good, 10% excellent. Fall planting of winter wheat, rye well behind normal and last year.

**OHIO:** Temperatures 1 to 2° above normal. Daily highs subnormal, lows above normal. Precipitation widespread ranging from 0.33 to 0.50 in.

Days suitable for fieldwork 5.1. Soil moisture 32% short, 61% adequate, 7% surplus. Activities: harvesting row crops, fruits, vegetables; preparing, planting wheat land. Corn good, grain moisture 18 to 28%. Stalks weak, may lodge if harvest delayed. Soybeans good, bean moisture 10 to 18%. Winter wheat planting slow until Hessian Fly-safe date past. Hay fair to good, pasture fair. Southeast areas dry; livestock producers hauling water to animals.

**OKLAHOMA:** Temperatures averaged 4° above normal central, east central to 7° above normal Panhandle. Precipitation averaged 0.01 in. Panhandle to 3.01 in. northeast.

Days suitable for fieldwork 4.4. Topsoil moisture 5% short, 75% adequate, 20% surplus. Subsoil moisture 5% short, 95% adequate. Wheat 30% planted, 15% 1985, 15% avg.; 5% emerged, 3% 1985, 3% avg. Rains slowed seeding. Sorghum 97% good, 3% fair; 95% coloring, 95% 1985, 95% avg.; 35% mature, 35% 1985, 45% avg.; 5% harvested, 15% 1985, 10% avg. Cotton 10% excellent, 65% good, 25% fair; 30% open bolls, 60% 1985, 30% avg.; none harvested, 2% 1985, 1% avg. Weather generally ideal for crop. Pastures mostly good. Fall grazing outlook excellent. Cattle good, prices generally higher. Stocker cattle demand increasing.

**OREGON:** Temperatures below normal across State, 14° below normal south central to 3° below normal Willamette Valley. Heavy precipitation. Most western locations over 1.00 in., 2.50 in. Brookings. Eastern average over 0.50 in., many stations southeast near 1.00 in.

Soil moisture 35% short, 64% adequate, 1% surplus. Rain slowed red clover seed harvest Willamette Valley. Fall grain seedbed moisture improved statewide, some eastern locations need more rain before seeding. Field preparation for fall seeding continued most areas. Crimson clover seeded west. Silage corn harvested Medford, Hermiston, Malheur County. Hay harvest slowed all regions. Some seed crops yet to be harvested central locations. Sugarbeet, seed bean harvests set to start Malheur County. Anjou pear harvest full swing Hood River, slight rain delays. Winter pear harvest continued Medford, good crop. Anjou ready Willamette Valley. Golden Delicious apple harvest underway Hood River. Red Delicious picking well underway Milton-Freewater, cool weather aided coloring. Evergreen blackberry harvest completed Willamette Valley; training, spraying programs underway all caneberry crops. Soil fumigation, weed control on strawberry fields. Filberts dropping. Norgold potato harvest nearing completion, Russet Burbank harvest full swing Hermiston. Norgold harvest about 50% completed, Russet vines being killed Klamath Basin. Potato vines killed, ready for harvest central area. Rain slowed onion harvest west, onion quality remains good. Onion harvest full swing Milton-Freewater;

crop 60% harvested Malheur County. Irrigating fall seeded Walla Walla sweet onions Milton-Freewater. Cauliflower harvest continued Willamette Valley, yields down. Sweet corn harvest continued west, good yields. Broccoli harvest continued west. Lily harvest interrupted by rain southern coast. Livestock mostly good. Cattle pastured on irrigated turnips or dryland grain stubble Hermiston. Seasonal movement yearling cattle continued most eastern areas. Ranges, pastures fair to good. Fire hazard reduced by rains. Pasture seedings started west, central areas.

**PENNSYLVANIA:** Cool, dry weather across State due to series of cold fronts, unseasonable highs from Canada. Hard frost, freeze occurred central, western mountains. Light showers accompanied frontal systems. Average temperature 58°, 4° below normal. Temperature extremes 28°; 82°. Average precipitation 0.56 in., 0.28 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 59% short, 41% adequate. Corn 88% dented, 33% mature, 3% harvested; 1985 98% dough, 77% dented, 18% mature; avg. 99% dough, 76% dented, 20% mature. Corn 1% very poor, 3% poor, 16% fair, 51% good, 29% excellent. Ensilage corn harvested 48%, 28% 1985, 35% avg. Soybean 1% very poor, 3% poor, 21% fair, 52% good, 23% excellent. Potato harvest 79% complete; 76% 1985. Tobacco harvest 98% complete; 98% 1985. Apple harvest 52% complete; 50% 1985. Peach harvest 99% complete; 100% 1985. Fall plowing 64% complete; 60% 1985. Fall barley planting 30% complete; 36% 1985. Fall wheat planting 35% complete; 25% 1985. Third cutting alfalfa 91% complete; 82% 1985. Fourth cutting alfalfa 35% complete; 38% 1985. Second cutting clover-timothy 98% complete; 95% 1985. Quality of hay made good to fair. Amount of feed being obtained from pastures average to below average. Activities: Making hay, haylage; harvesting soybeans, peaches, apples, grapes, tobacco, corn silage, potatoes, other vegetables; fall plowing; fall planting wheat, barley, alfalfa.

**PUERTO RICO:** Island average rainfall 0.11 in. or 1.74 in. below normal. Highest weekly total 0.64 in. Highest 24-hour total 0.64 in. Temperature averaged about 81 to 82° on coasts and 75 to 76° interior divisions. Mean station temperature ranged from 68 to 84°. Extremes 55°; 95°. San Juan mean temperature 83° plus 0.07 in. Total rainfall none to minus 1.40 in.

**SOUTH CAROLINA:** Temperatures averaged 3 to 4° below seasonal normals. Highs low 90s late week. Rainfall sparse, amounts mostly less than 0.25 in. statewide.

Days available for fieldwork 5.8. Soil moisture 5% very short, 51% short, 44% adequate. Cotton open bolls 81%, 88% 1985, 76% avg.; 5% harvested, 11% 1985, 6% avg.; 25% very poor, 63% poor, 12% fair. Soybeans blooming 100%, setting pods 90%, 97% 1985, 99% avg.; 19% leaves turning, 15% 1985, 19% avg.; 6% leaves shedding, 4% 1985, 6% avg.; 4% very poor, 16% poor, 65% fair, 15% good. Tobacco fair; 96% harvested, 100% 1985, 100% avg.; 40% stalks destroyed, 45% 1985, 53% avg. Peanuts fair; 3% harvested, 21% 1985, 15% avg. Corn poor; 76% harvested, 80% 1985, 78% avg. Apples fair to good; 37% harvested, 80% 1985, 69% avg. Grapes fair; 38% harvested, 90% 1985, 81% avg. Pastures fair. Hay fair to good. Crops experienced slower than average development.

**SOUTH DAKOTA:** Average temperatures none to 4° below normal east; 4 to 8° below normal central, west. Extremes 37°; 81°. Black Hills low 36°. Rainfall over entire State, flooding southeast; 1.00 to 2.00 in. west and northeast, 3.00 to 6.00 in. southeast.

Days suitable for fieldwork 1.3. Topsoil moisture surplus east half, south central, mostly adequate remainder; 2% critically short, 8% short, 39% adequate, 51% surplus. Crops mostly good. Winter grain seeding continued. Need hot, dry weather to help row crop maturity. Silage cutting beginning, slowed by rains. Range, pastures, livestock good to excellent. Feed, stockwater supplies adequate.

**TENNESSEE:** Temperatures slightly subnormal. Rainfall statewide. Range 0.25 to 1.00 in.

Days suitable for fieldwork 5.1. Soil moisture 12% very short, 38% short, 49% adequate, 1% surplus. Corn 85% mature, 80% 1985, 75% avg.; 25% harvested, 17% 1985, 12% avg. Burley tobacco 65% harvested, 80% 1985, 75% avg.; dark fired 65% harvested, 75% 1985, 70% avg.; dark air-cured 60% harvested, 75% 1985, 75% avg.; 1% very poor, 24% poor, 60% fair, 15% good. Wheat 5% seeded, 3% 1985, 4% avg. Cattle fair. Pastures mostly fair. Corn, milo harvest full swing. Tobacco harvest behind schedule.

**TEXAS:** Several disturbances brushed northwest early last week, rain activity High Plains. Heavy storms moved along Red River, soaked northeastern counties. West, mostly dry. Afternoon heating triggered thunderstorm activity part north, south. Rain above normal southern areas, northeast. Cloudiness Coastal Bend, High Plains, temperatures below normal. Otherwise, much State, below normal precipitation, temperatures few degrees above normal.

**Crops:** Harvest high moisture corn continued High Plains slow pace. Rain, high winds, some hail lodging many fields. Harvest low moisture corn begin soon. Grain sorghum harvest resumed Hill Country, Low Plains. Yields average to good. Crop looks very good High Plains, harvest nearing. Recent rains may further boost yields. Headworms still causing problems some fields. Headed 100%, 100% 1985, 100% avg. Cotton harvest good progress Blacklands, east, Upper Coast. Most harvest complete south. Recent rain, cool nighttime temperatures slowed maturing Plains, Trans-Pecos. Bollworms heavy damage fields Low Plains. Some fields damaged high winds, hail High Plains. Cotton opening; continued warmer, open weather conditions needed for better progress. Setting bolls 100%, 100% 1985, 100% avg. Small grain planting good progress many areas late last week. Many early planted fields good stands, showing good growth. Grazing prospects stocker cattle seem good. Land preparation planting good progress most areas not already planted. Rice harvest 1st crop about complete. Showers held up final stages. Second crop benefiting from rain, warmer temperatures. Peanut conditions improving Plains with moisture; diseases also increasing. Harvesting continued Cross-Timbers. Grade, yield improving. Some southern blight central. Crop good progress. Harvested 14%, 11% 1985, 11% avg. Soybeans improved Plains. Pods filling, podworm problems minor. Yields down early fields Upper Coast. Later fields yield better with all moisture. Harvested 21%, 10% 1985, 5% avg. Other crops harvested: Sunflowers 7%, 23% 1985, 16% avg. Other crops planted: Oats 17%, 15% 1985, 14% avg.

**Commercial Vegetables:** Rio Grande Valley, hot temperatures slowed tomato growth. Peppers making good growth. Planting fall vegetables continued. Harvest some vegetables near. San Antonio-Winter Garden, fall vegetable planting continued. Early stands good. Cabbage, pepper harvest about to begin. East, sweetpotato harvest resumed. Planting other fall vegetables continued. High Plains, harvest carrots, cabbage, cucumbers, watermelons continued. Few fields peppers harvested. Pumpkin harvest underway. Trans-Pecos, harvest chilies about completed. Land preparations

continued. Pecan harvest begun early varieties portions Blacklands, east, south. However, most areas shuck split stage. Recent rains improved conditions Trans-Pecos.

**Range and Livestock:** Ranges, pastures showing good greening, growth most areas. Portions south could use rain. Hay harvesting continued some areas. Spraying for armyworms underway east. Livestock continued good. Markets steady. Increase of stockers many areas.

**UTAH:** Precipitation moderate north central. Little to none elsewhere. Temperatures maximums 2 to 4° below normal, minimums 6° below to 6° above normal.

Days suitable fieldwork 6.6. Topsoil moisture 47% short, 53% adequate. Winter wheat 71% seeded, 60% 1985, 60% avg.; corn 85% dented, 71% 1985, 71% avg.; corn silage 24% harvested, 36% 1985, 26% avg.; alfalfa 3rd cutting 72%, 63% 1985, 72% avg.; apples 22% harvested, 13% 1985, 13% avg.; onions 42% harvested, 30% 1985, 33% avg.; potatoes 27% harvested, 22% 1985, 15% avg.; dry beans 32% harvested. Range feed fair to good; livestock generally good. Movement from summer range started.

**VIRGINIA:** Mostly dry, cool. Isolated showers 20th, 21st. Temperature averaged 3° below normal.

Days suitable for fieldwork 4.4. Soil moisture 52% short, 48% adequate. Corn in or beyond dent stage 90%, 92% 1985, 96% avg. Corn 72% mature, 84% 1985, 88% avg. Silage harvest 51% complete, 71% 1985, 77% avg. Grain corn harvest 40% complete, 45% 1985, 37% avg. Conditions favor high aflatoxin levels. Soybeans poor to fair. Some corn earworm damage. Harvest just beginning. Peanuts good to excellent; dug 6%, 19% 1985, 9% avg.; combined 3% complete, 12% 1985, 6% avg. Spraying for leafspot, blight continued. Sweetpotato harvest 51% complete, 60% 1985, 37% avg. Sun-cured tobacco harvest continued. Other tobacco types behind normal. Flue-cured harvest 38% complete, 82% 1985, 82% avg. Fire-cured harvest 62% complete, 86% 1985, 92% avg. Burley harvest 36% complete, 88% 1985, 87% avg. Fear early frost. Wheat seeding 11% complete, 2% 1985, 4% avg. Barley seeding 14% complete, 11% 1985, 13% avg. Oat seeding 22% complete, 13% 1985, 18% avg. Apple quality, yields good. Harvest 44% complete, 54% 1985, 45% avg. Vegetable harvest active. Pasture, hay land good to excellent. Hay cutting active. Some hay, pasture seeding. Livestock good to excellent. Preparing feeder calves for market.

**WASHINGTON:** Rain, cool statewide. Weekly precipitation above normal. Range 0.09 to 2.09 in. Thundershowers northwest. Temperatures averaged 1 to 12° below normal.

Days suitable for fieldwork 5.0. Soil moisture 50% short, 50% adequate. Winter wheat 46% planted, 50% 1985, 49% avg. Potatoes mostly good; 40% harvested. Dry beans 65% harvested. Fruit harvest full swing; apples, pears, grapes. Range, pasture 65% short, 35% adequate. Hay supplies 85% adequate, 15% surplus.

**WEST VIRGINIA:** Temperatures averaged near normal. Temperature extremes 28° Greenbank; 87° Romney. Average temperature 65°. Precipitation varied from 0.10 to 1.60 in. Average precipitation 0.55 in.

Days suitable for fieldwork 4.9. Soil moisture 28% very short, 35% short, 35% adequate, 2% surplus. Fall seeding: Wheat 26% complete; barley 29%.

**WISCONSIN:** Temperatures again cooler than normal, averaged 57°, 2° below normal, low 27°, high 80°. Rainfall 0.40 to 2.20 in.

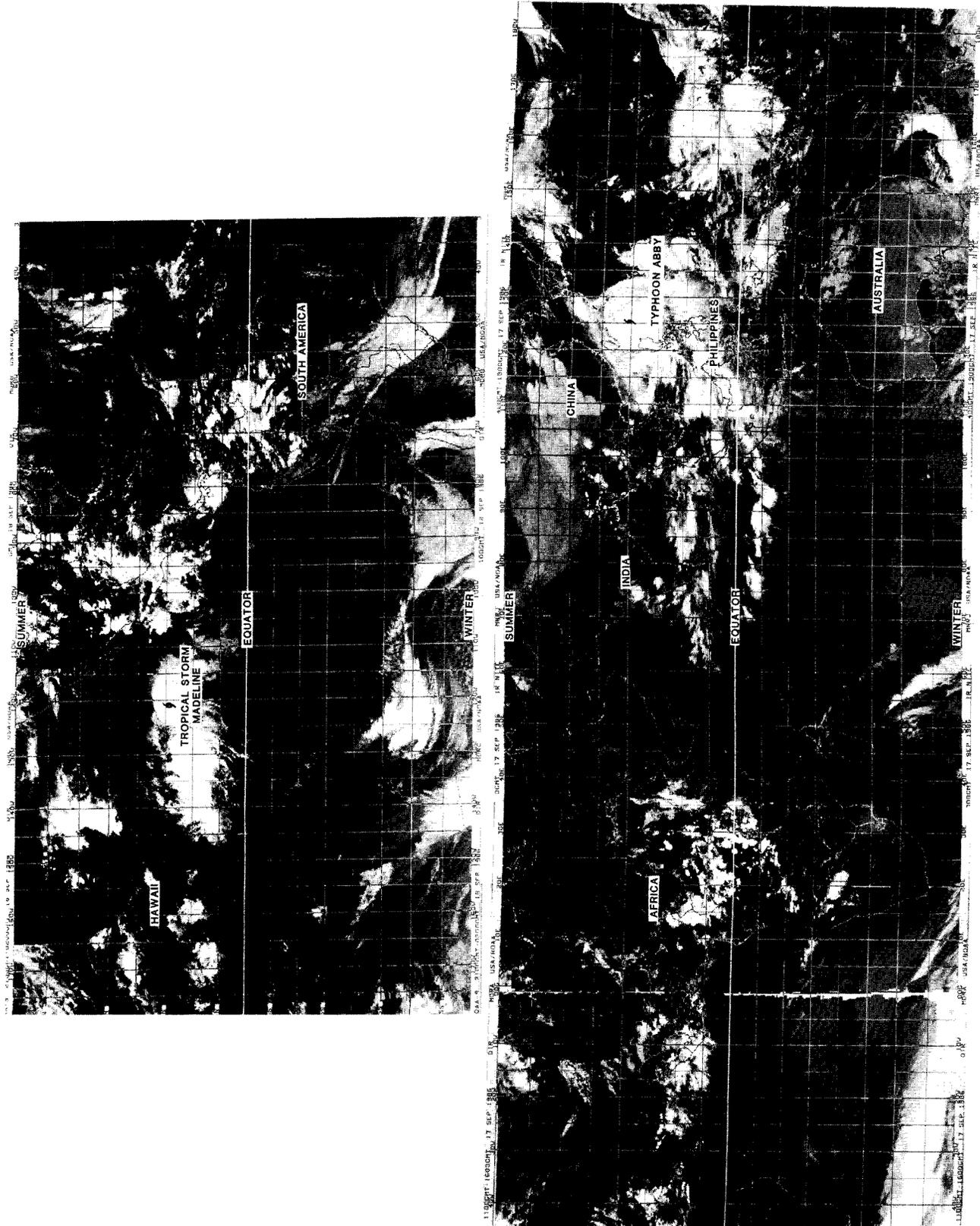
Days suitable for fieldwork 1.1. Frequent showers stalled fieldwork. Soil moisture 24% adequate, 76% surplus. Crops 1% very poor, 1% poor, 7% fair, 68% good, 23% excellent. Corn 1% poor, 7% fair, 46% good, 46% excellent. Corn in dent 80%, 71% 1985, 77% avg. Corn mature 40%, 28% 1985, 50% avg. Corn silo filling 11%, 11% 1985, 14% avg. Need 7 to 10 days warm weather for most corn, soybeans to mature. Soybean leaves turning 73%, 69% 1985, 70% avg. Soybeans dropping leaves 25%, 22% 1985, 37% avg. Third cutting hay 54% complete, 59% 1985, 56% avg. Fall plowing 6% complete, 11% 1985, 5% avg. Cabbage harvest underway. Cranberry crop excellent condition, harvest will start about one week.

**WYOMING:** Temperatures near normal south, below normal north. Precipitation near or slightly below normal.

Days suitable for fieldwork 5.0. Topsoil moisture 21% short, 70% adequate, 9% surplus. Barley mature 5%, 10% 1985; harvested 95%, 90% 1985. Spring wheat 5% mature; harvested 95%, 100% 1985. Oats mature 10%, 10% 1985; harvested 90%, 90% 1985. Corn dough stage 15%, 25% 1985, 25% avg.; dented 55%, 60% 1985, 55% avg.; mature 30%, 10% 1985, 15% avg.; harvested 0%, 5% 1985. Corn silage harvested 50%, 55% 1985, 45% avg. Potatoes harvested 40%, 55% 1985, 40% avg. Dry beans windrowed 85%, 75% 1985, 65% avg.; combined 55%, 60% 1985, 55% avg. Sugarbeets dug 15%, 15% 1985. Winter wheat seeded 80%, 75% 1985, 75% avg.; emerged 40%, 40% 1985, 40% avg.; mostly fair to good. Alfalfa 2nd cutting complete 95%, 95% 1985, 90% avg.; 3rd cutting complete 50%, 45% 1985, 30% avg. Winter grazing prospects good most areas. Livestock producers plan to winter less cattle, sheep than last year. Calf, lamb weights up slightly from last year.

# Global Weather Satellite Image

September 17, 18, 1986



## International Weather and Crop Summary

September 14 - 20, 1986

HIGHLIGHTS:

UNITED STATES ... Rain provides moisture across the northern and central Great Plains and the Corn Belt but hampers crop harvest and winter wheat seeding. Warm, dry weather is needed in these areas to mature crops.

U.S.S.R. ... The Western U.S.S.R.'s middle and upper Volga's first significant rain since June provides sufficient moisture for winter grain emergence. Prolonged dryness continues over major winter wheat producing areas. In the New Lands, most areas have favorable harvest weather except the northern Urals where late-week snow fell.

EUROPE ... Beneficial rain for the second consecutive week provides abundant topsoil moisture for winter grain planting in France. Persistent dryness in the southeast aids summer crop harvesting, but rain is needed for winter grain planting.

SOUTH ASIA ... Beneficial monsoon showers in southern and eastern India aid rice, cotton, and groundnuts, but the northwest remains dry.

EASTERN ASIA ... Typhoon Abby produces inundative rain over Taiwan and moderate to heavy rain over southeast China, South Korea, and Japan. Dry weather in the North China Plain favors maturing cotton.

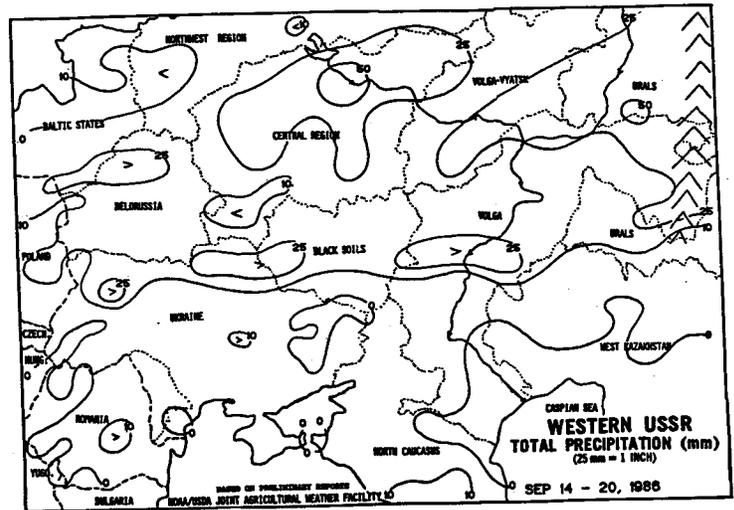
MEXICO ... Generally dry weather favors crop harvesting in the north. Showers benefit immature corn in the south.

CANADA ... Cool, wet weather delays crop harvesting across the Prairies.

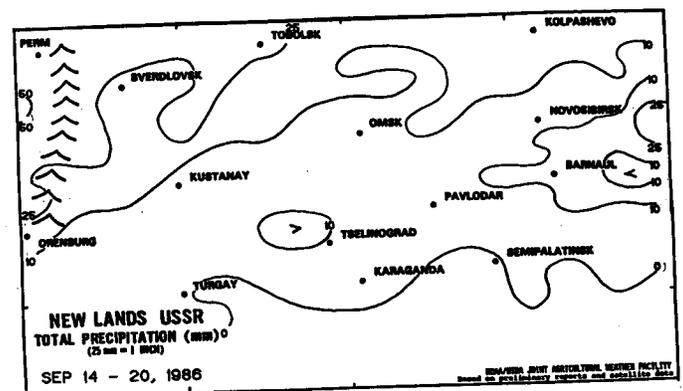
SOUTHEAST ASIA ... Scattered showers benefit upland crops in Thailand. Typhoon Abby brings mostly moderate tropical showers to the Philippines.

SOUTH AMERICA ... Locally heavy rain falls in southern Brazil, but generally dry weather prevails in Argentina's wheat areas.

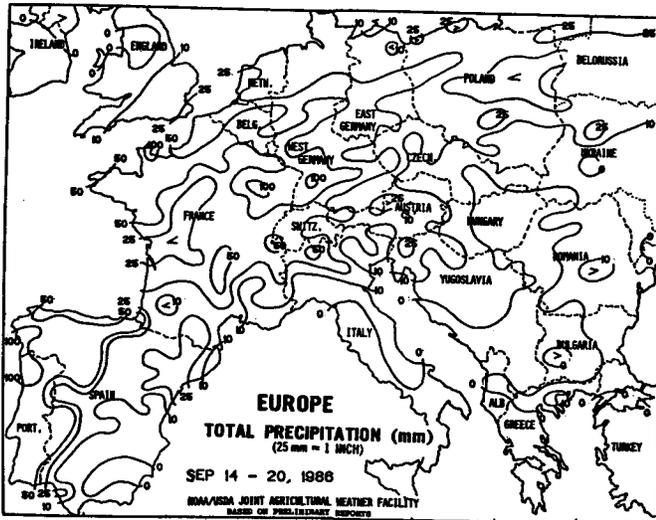
AUSTRALIA ... Showers benefit wheat throughout western and southeastern Australia, but dry weather persists in Queensland.



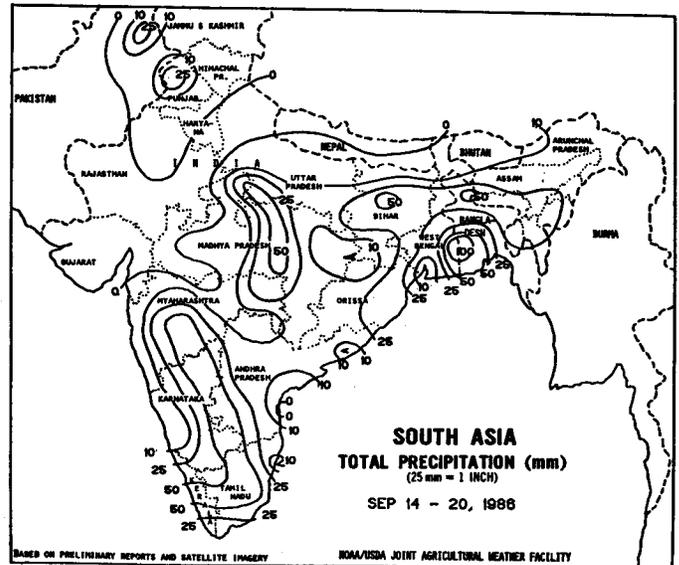
U.S.S.R. ... In Western U.S.S.R., the first significant rain since June covered the middle and upper Volga. The rain provided sufficient topsoil moisture for winter grain emergence, but additional rain will be needed for crop establishment. Further south, prolonged dryness continued over the southern and eastern Ukraine, North Caucasus, and lower Volga. The dry weather in these areas allowed summer crop harvesting to progress without delay, but rain is needed for winter grain planting that is normally just beginning in most areas. In the north, unseasonable cool weather accompanied frequent rain. Soil moisture across the north is abundant for winter grain emergence, but seasonable temperatures are needed for crop establishment.



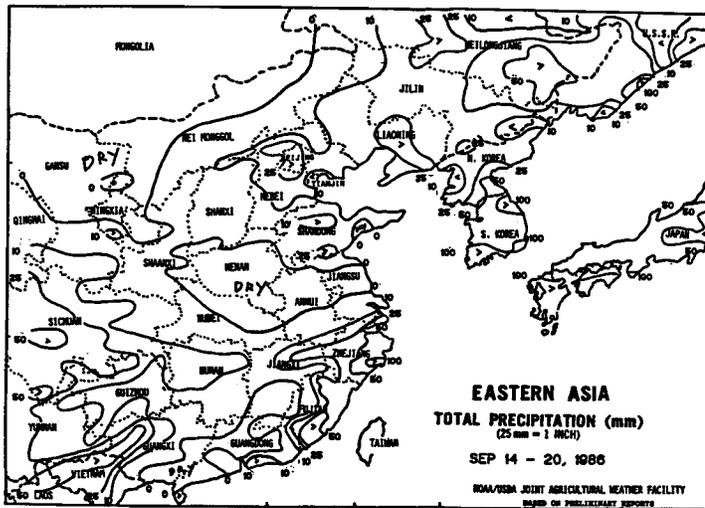
In the New Lands, rain changed to snow by week's end over the northern Urals, causing delays in spring grain harvesting. Rain (around 10mm) caused minor delays in harvesting over the northern fringe of the spring wheat area and Altai Kray. Spring wheat areas in Kazakhstan and most of Western Siberia had favorable harvest weather.



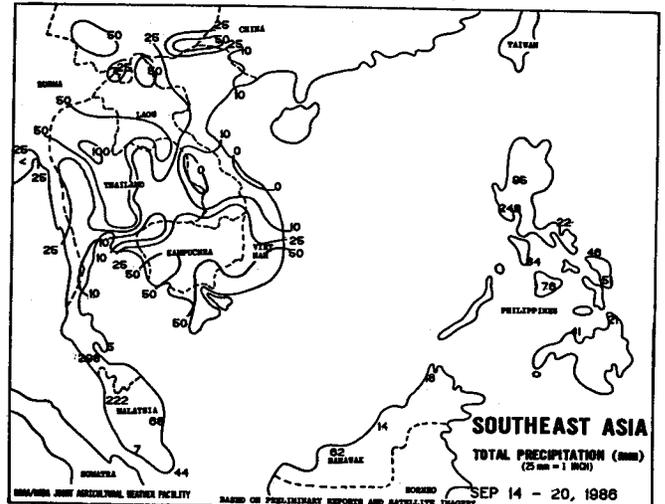
**EUROPE** ... Beneficial rain covered France for the second consecutive week. Rainfall amounts ranged from 25 to 50mm, providing abundant topsoil moisture for winter grain planting. However, the rain was unfavorable for maturing corn. Early-week rain in England, the Netherlands, Belgium, West Germany, East Germany, and Poland caused some delays in summer crop harvesting. However, dry weather by week's end allowed harvesting to resume. The dry weather pattern that has covered southeastern Europe since August continued this past week, helping summer crop harvesting. However, rain is needed in Hungary, Romania, Yugoslavia, and Bulgaria for winter grain planting. Elsewhere, early-season rains increased pre-planting moisture in Portugal and northern Spain.



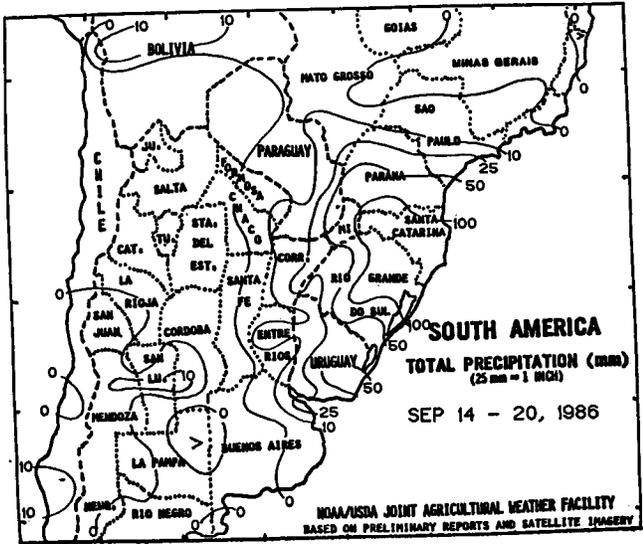
**SOUTH ASIA** ... Beneficial monsoon showers (25 to 75mm) in southern India aided rice, cotton, and groundnuts in their critical stages of development. Coverage extended from Maharashtra to Tamil Nadu, where moisture supplies have been unfavorable for crop development during most of the current growing season. In the northwest, groundnut and cotton regions in drought plagued Gujarat continued dry. Throughout India, groundnuts are mostly pod-filling, and cotton is normally flowering to boll forming. Scattered showers (25 to 76mm) benefited filling rice in central and eastern India but may have caused some local flooding in West Bengal and Bangladesh. Lighter rain (less than 25mm) fell from Uttar Pradesh to northern Andhra Pradesh. Rainfall is needed in the northern states, especially Uttar Pradesh, to ensure sufficient moisture for next month's planting of wheat.



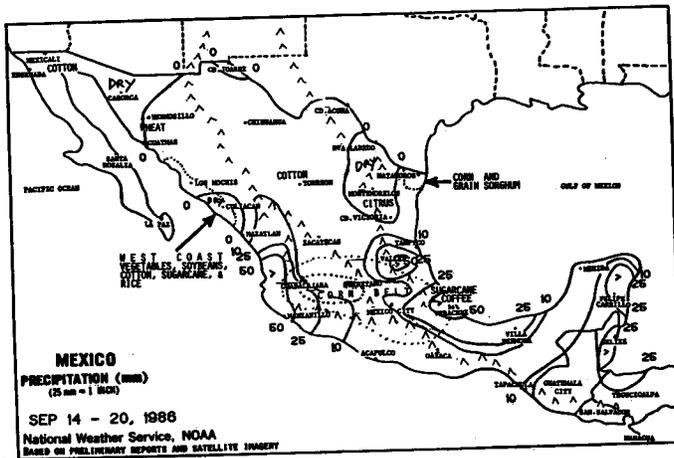
**EASTERN ASIA** ... Typhoon Abby spread moderate to heavy rain from Fujian and Zhejiang through South Korea and Japan. Abby produced inundative rain over Taiwan, with rainfall exceeding 100mm. The rain in Fujian and Zhejiang benefited late double cropped rice in the filling stage but was unfavorable for maturing rice in South Korea. Dry weather covered the North China Plain, favoring cotton maturation and early harvesting. Rain is needed in Shanxi, Hebei, and Shandong for winter grain planting that is usually beginning in most areas. In the northeast, early-week light showers in Liaoning and Jilin caused only minor delays in corn and soybean harvesting. Heavier rain (33 to 65mm) in Heilongjiang likely slowed harvesting.



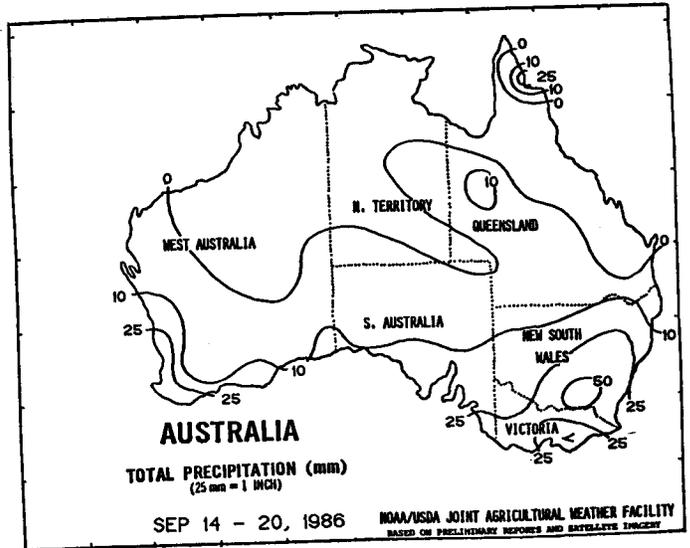
**SOUTHEAST ASIA** ... Moderate to heavy showers (50 to 100mm) benefited upland crops in western Thailand from Bangkok to the northern highlands. Lighter rain (less than 25mm) covered rainfed rice areas in the east. Light to moderate showers (25 to 63mm) fell throughout Kampuchea and southern Vietnam. Rainfall averaged less than 25mm in northern Laos and Vietnam and less than 10mm in southern Laos and central Vietnam. Typhoon Abby brought increased shower activity to the Philippines. Heaviest rain (more than 100mm) fell in the previously wet crop areas of western Luzon.



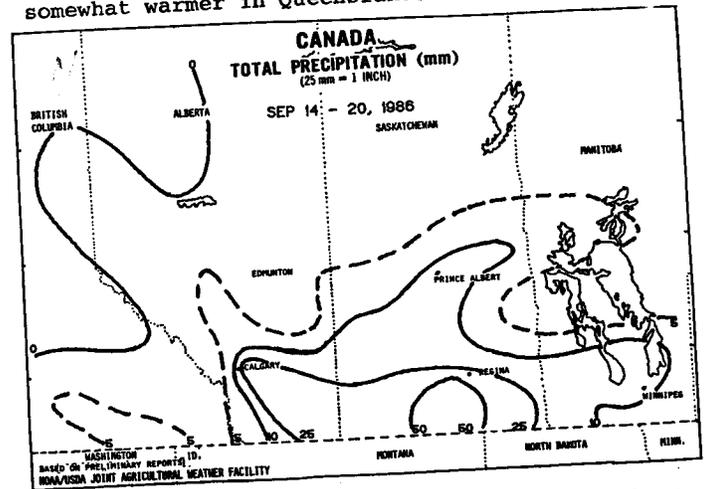
**SOUTH AMERICA** ... In Brazil, locally heavy rain (50 to 160mm) fell over Rio Grande do Sul, Santa Catarina, and southern Parana. The rain saturated topsoils and maintained abundant moisture for immature wheat. Topsoil moisture is favorable for corn planting. Shower activity diminished rapidly over northern Parana, and the coffee and citrus areas of Sao Paulo and Minas Gerais were mostly dry again. In Argentina, mostly light rain (less than 10mm) was confined to the east with some scattered, heavier showers (10 to 35mm) in northeastern Buenos Aires, Entre Rios, and the extreme northeast. Generally dry weather prevailed over most wheat areas, except for isolated showers (mostly less than 10mm) in northeastern La Pampa, bordering on Buenos Aires, and southwestern Cordoba. Moisture is generally adequate for wheat's vegetative growth.



**MEXICO** ... Mostly dry weather favored harvesting of corn, cotton, and vegetables throughout northern Mexico. Minimal rain (3mm or less) fell in the northwestern mountain watersheds that supply irrigation for wheat. The wheat crop is normally planted from September to January. Tropical showers produced 10 to 60mm of rain in the western end of the Southern Plateau corn belt but less than 10mm fell over central portions. Substantial rain (10 to 79mm) fell over the eastern corn belt, extending southward along the east coast into the Yucatan peninsula. The moisture helped immature corn but slowed early harvesting.



continued in New South Wales, Victoria, and South Australia, benefiting wheat in or nearing the heading stage. Rainfall in southeast Queensland was minimal (less than 3mm) for vegetative wheat. However, light showers (2 to 13mm) benefited pastures in western Queensland. Although rain in recent weeks has improved soil conditions in northern New South Wales, moisture supplies continued to be limited in Queensland for wheat development. Mostly light rain (4 to 10mm) covered wheat areas in Western Australia, with heavier amounts falling in coastal areas. Temperatures averaged 12 to 15 degrees C throughout Australia's wheat belt but were somewhat warmer in Queensland.



**CANADA** ... Cool wet weather delayed wheat harvesting in the Prairie Provinces. Substantial rain (25 to 50mm) fell over wheat areas of southern Saskatchewan and southern Alberta, bringing fieldwork to a halt. Weekly rainfall averaged 10 to 25mm over southern Manitoba and much of Saskatchewan's northern crop areas. Lighter showers (less than 10mm) were confined to northern-most Prairie crop areas. The quality of swathed and mature crops may be affected by wetness. In Saskatchewan, spring wheat is slightly over 90 percent swathed and about 60 percent combined. Rapeseed is about 95 percent swathed and 40 percent combined. Extreme minimum temperatures generally remained above freezing over most of Saskatchewan, but subfreezing temperature occurred in northern and eastern portions of the wheat belt.



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(Continued from front cover)

SATURDAY...Showers or thundershowers reached from Washington and Oregon in the West all the way to New England and southward from the Great Lakes through the Ohio and Tennessee Valleys. Another spate of thunderstorms covered eastern Texas, the lower Mississippi Valley, the western Carolinas, and Florida.

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