

# 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

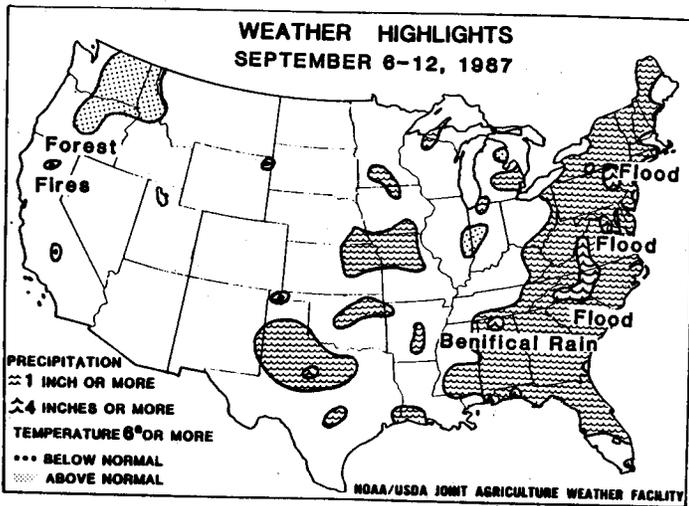
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Sept. 15, 1987

## National Weather Summary

September 6 to 12, 1987



the Rockies. Smokey conditions continued in parts of the West from forest fires raging across northern California and southern Oregon.

WEDNESDAY...Rain persisted through midmorning over the Northeast, causing flooding in New York and Pennsylvania. Heavy rain caused more flooding in South Carolina. Showers were scattered over the central and southern Plains and across the Southeast.

THURSDAY...Thunderstorms broke out over a large part of the Nation east of the Rockies. Thunderstorms again occurred over the central and southern Plains and across the Southeast. Heavy rain fell over Michigan. Cooler weather moved over the northern and central Rockies and into the northern Plains.

FRIDAY...Showers and thunderstorms were again scattered across the Central and Eastern United States. Numerous thunderstorms developed across the central Gulf Coast and Florida. Cooler air continued to move into the northern Plains. Sunny skies prevailed in the West.

SATURDAY...Scattered rains continued to soak the eastern two-thirds of the Nation. Severe thunderstorms with strong winds swept across Oklahoma and Texas. A frontal system pushed southward into the southern Plains, bringing chilly weather to the Central United States.

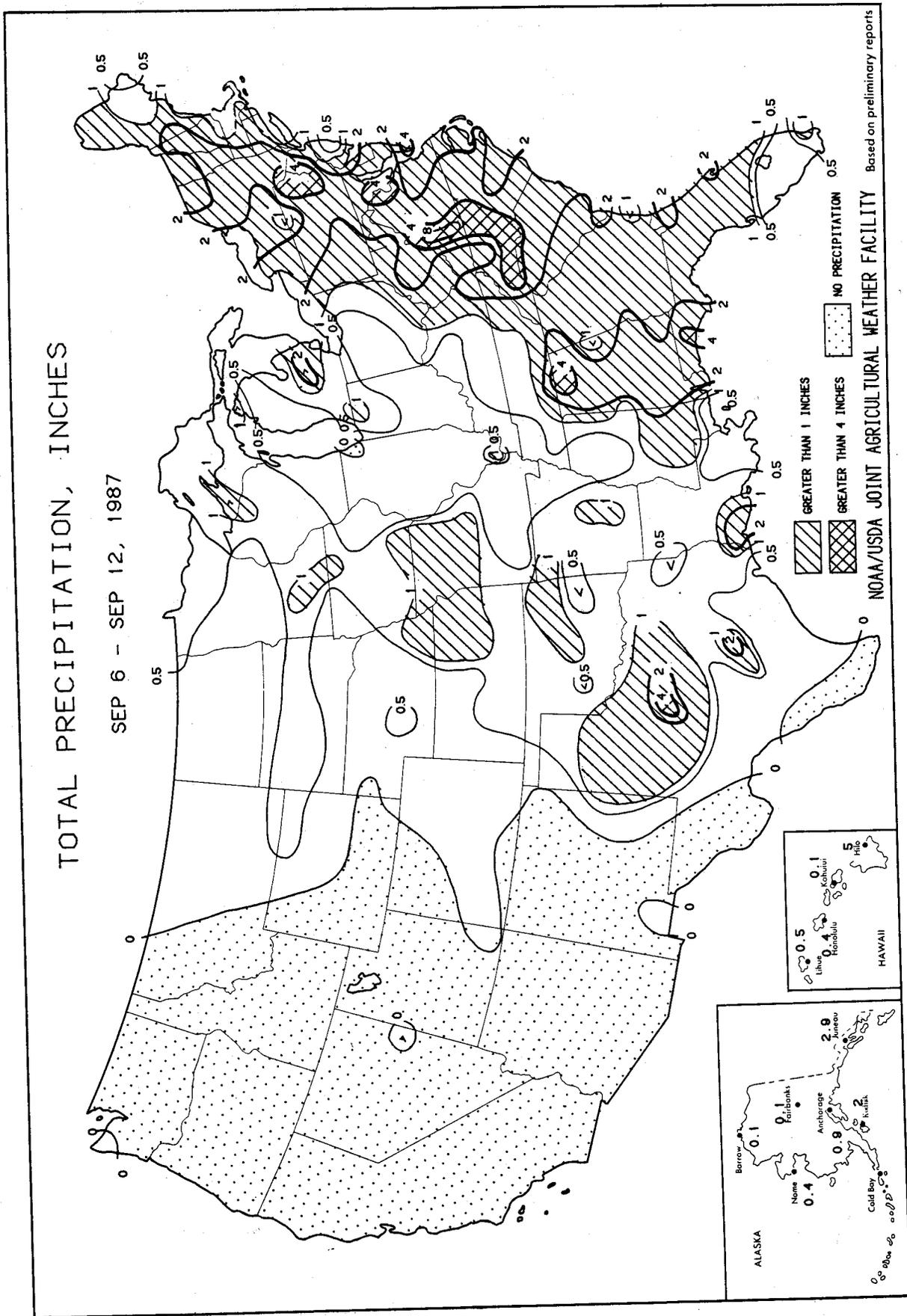
**HIGHLIGHTS:** Much of the Nation east of the Rockies experienced a wet Labor Day weekend. The rains persisted through the week and soaked much of the Atlantic and Gulf Coast States, the central and southern Great Plains, and parts of the Great Lakes region. Some flooding occurred along the Atlantic Coast. Fair weather prevailed in the West, but parts had skies obscured by smoke from forest fires in southern Oregon and northern California. At week's end, chilly weather moved into the north-central United States.

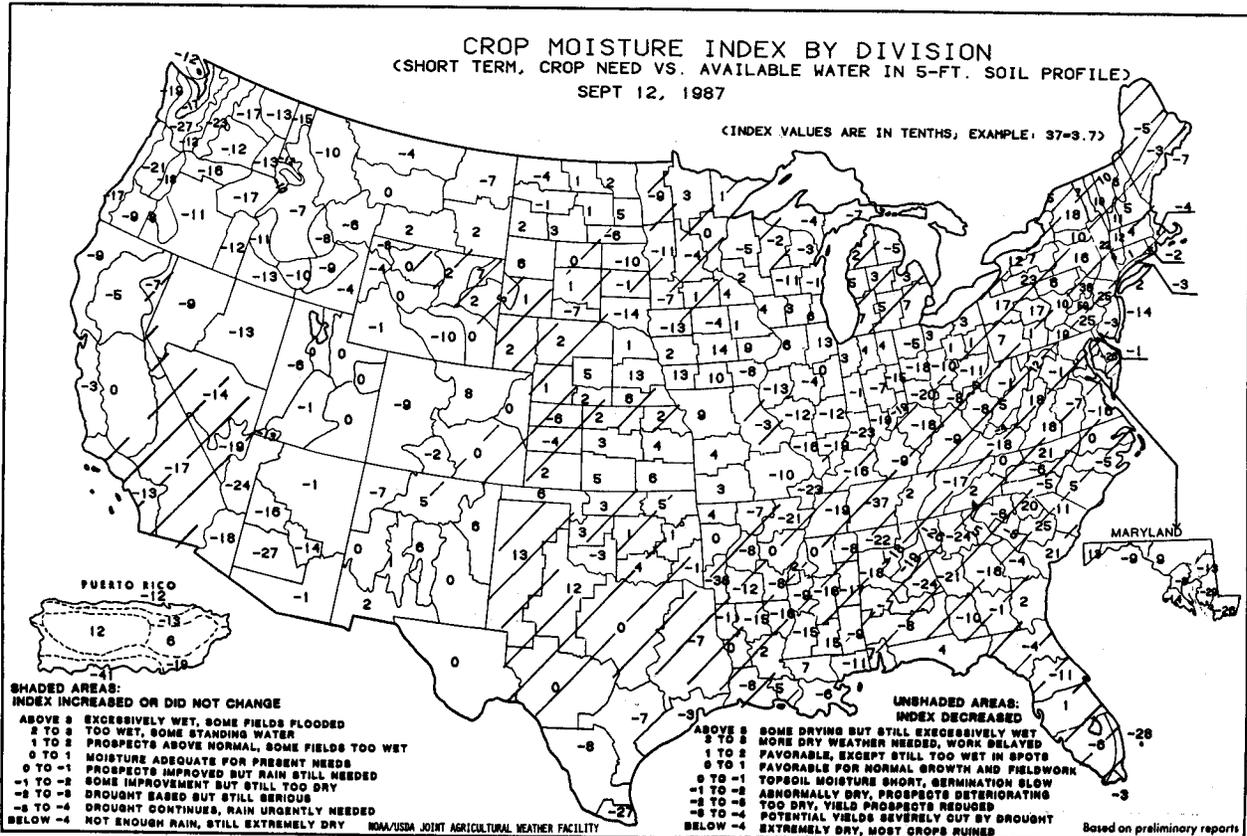
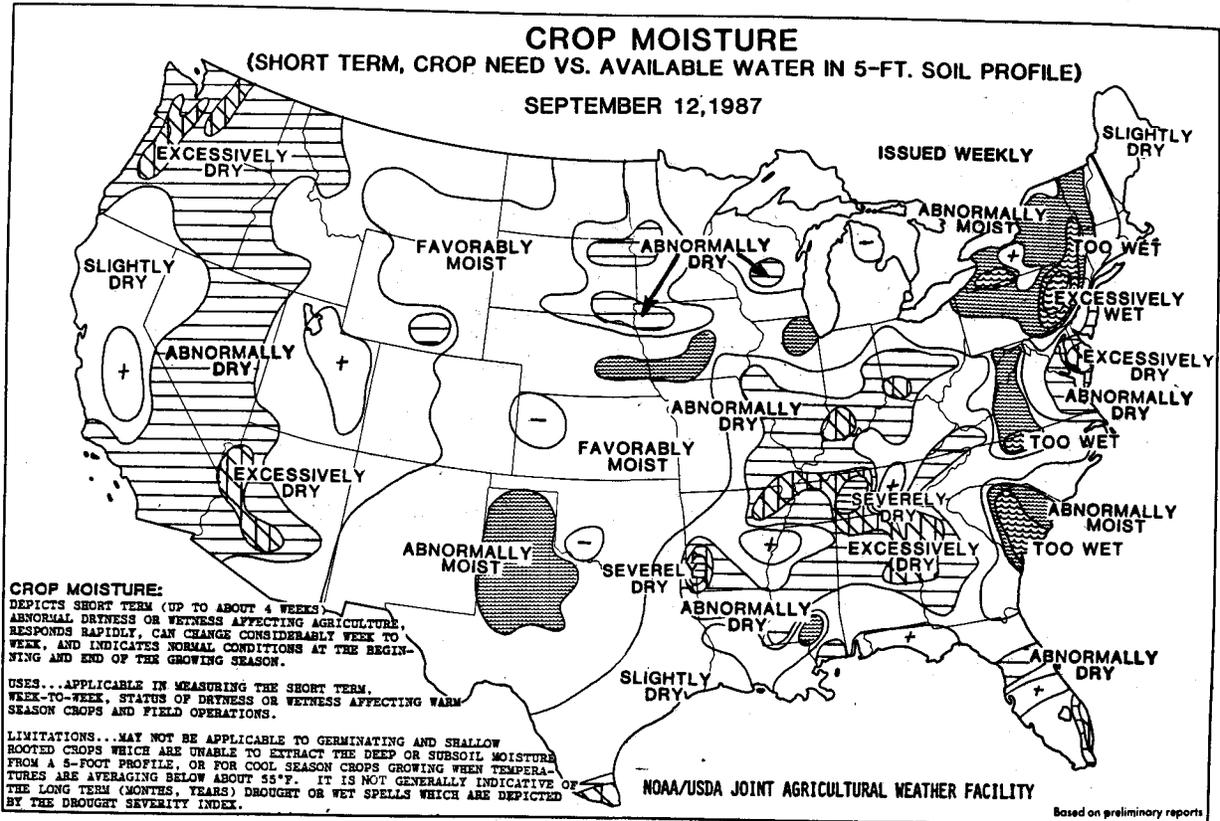
SUNDAY...Rain continued throughout the middle and southern Atlantic Coast States. Locally heavy rain on saturated ground caused flooding in South Carolina. Showers and thunderstorms were scattered from New Mexico and Texas across the central Great Plains to the upper Great Lakes. Fair weather prevailed west of the Rockies; however, smoke from forest fires obscured skies over parts of southern Oregon, northern California, and west-central Nevada.

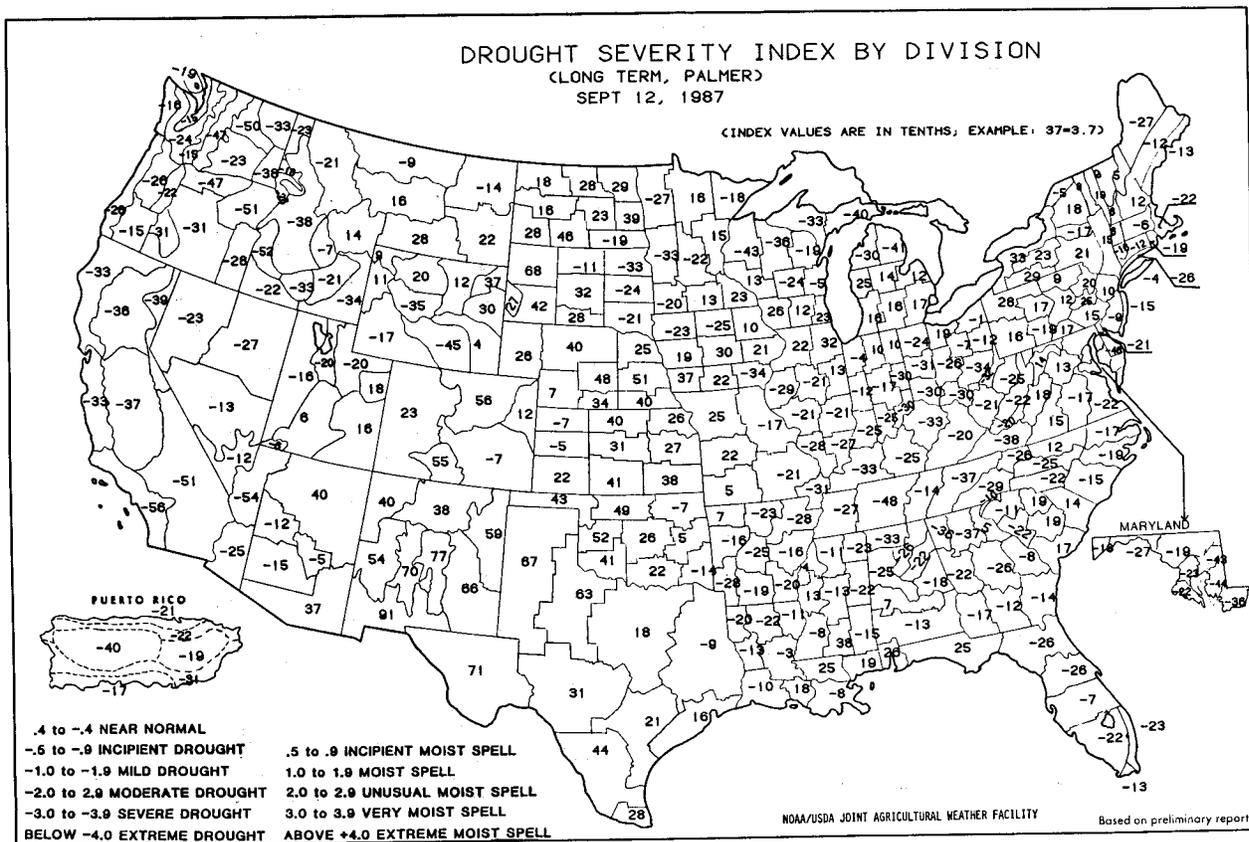
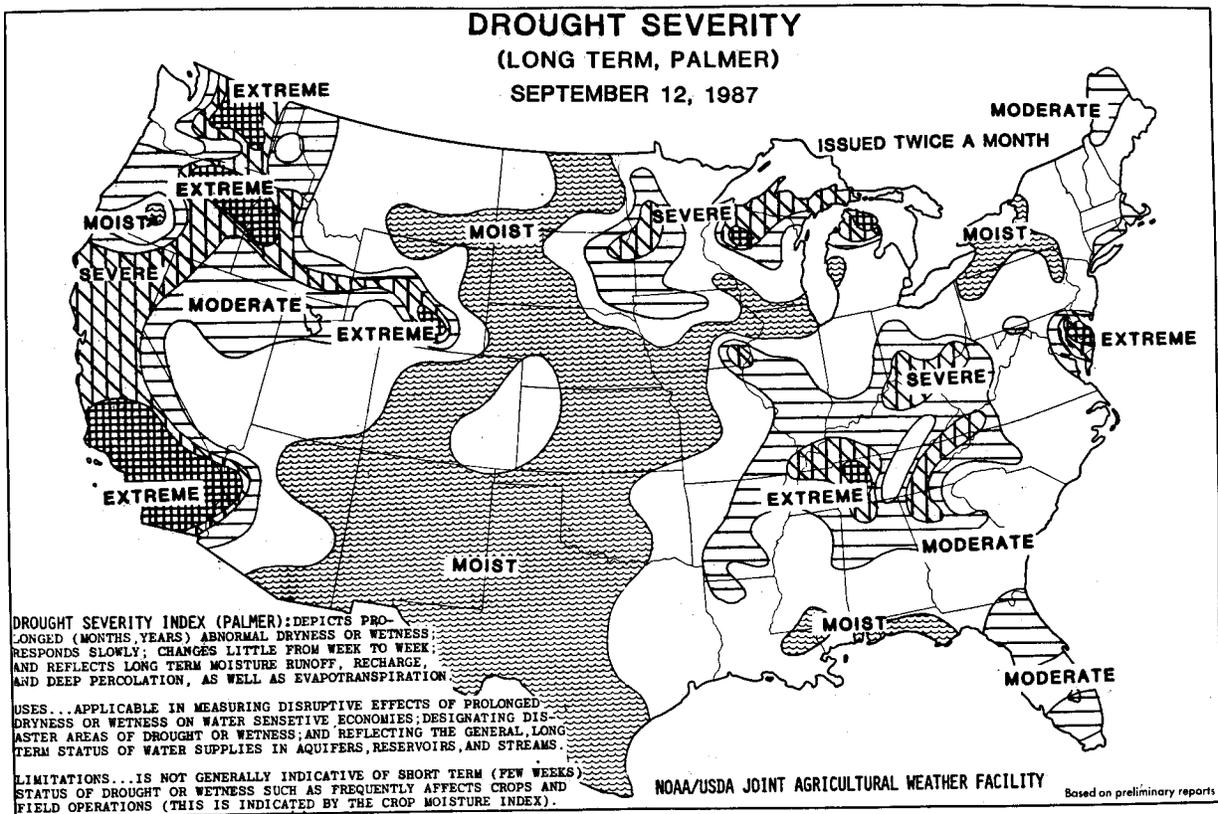
MONDAY...Rain and thunderstorms remained in the Appalachians and mid-Atlantic States due to a tropical depression which moved up the coast. The heavy rain caused flooding in Virginia. Scattered showers and thunderstorms extended over the southern and central Great Plains and across the Southeast. Skies were mostly clear in the West and northern Plains.

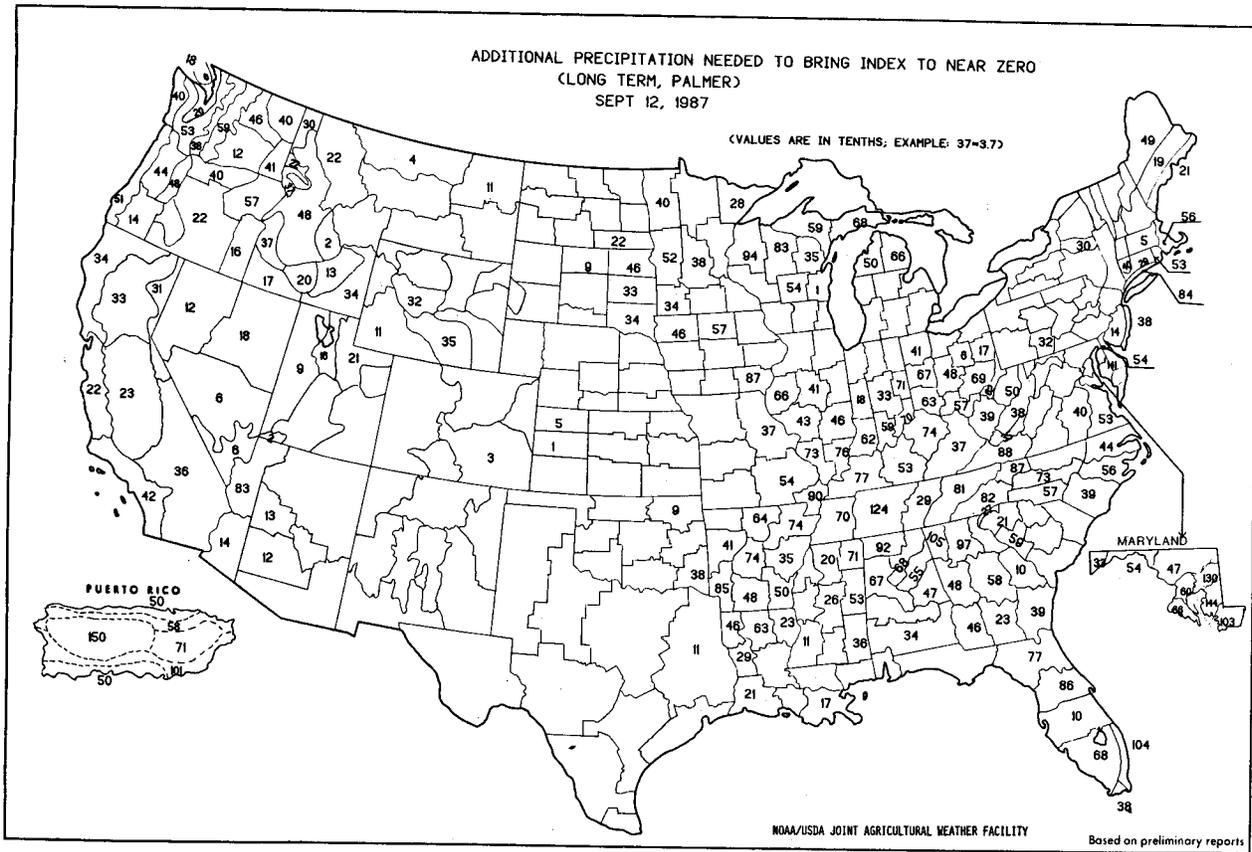
TUESDAY...The heavy rain moved up the eastern seaboard and by evening covered most of New England. Scattered rain fell over most of the Nation east of

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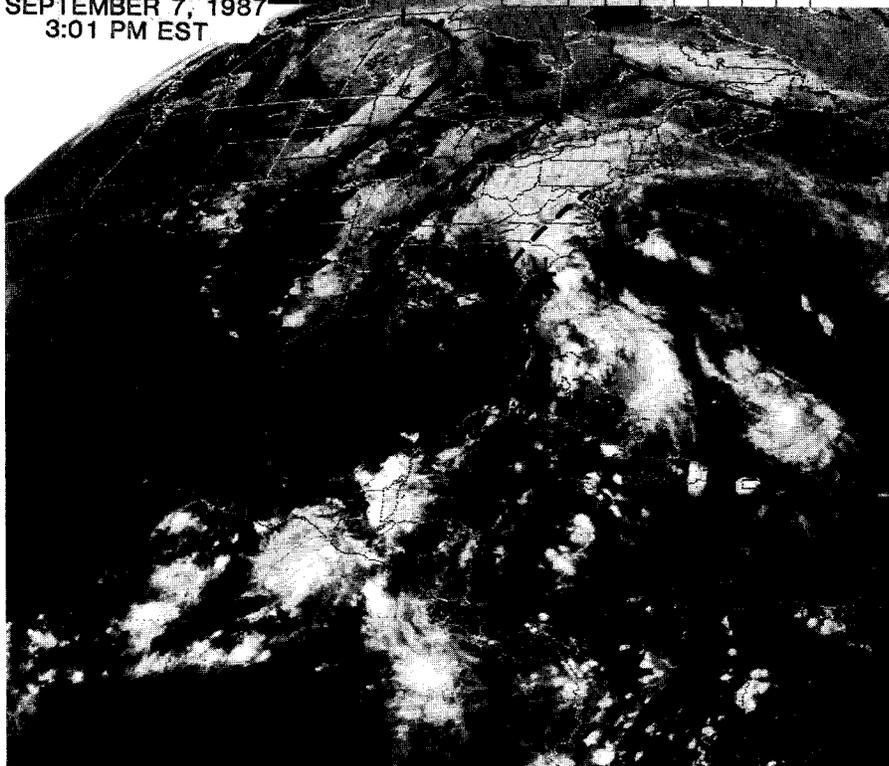




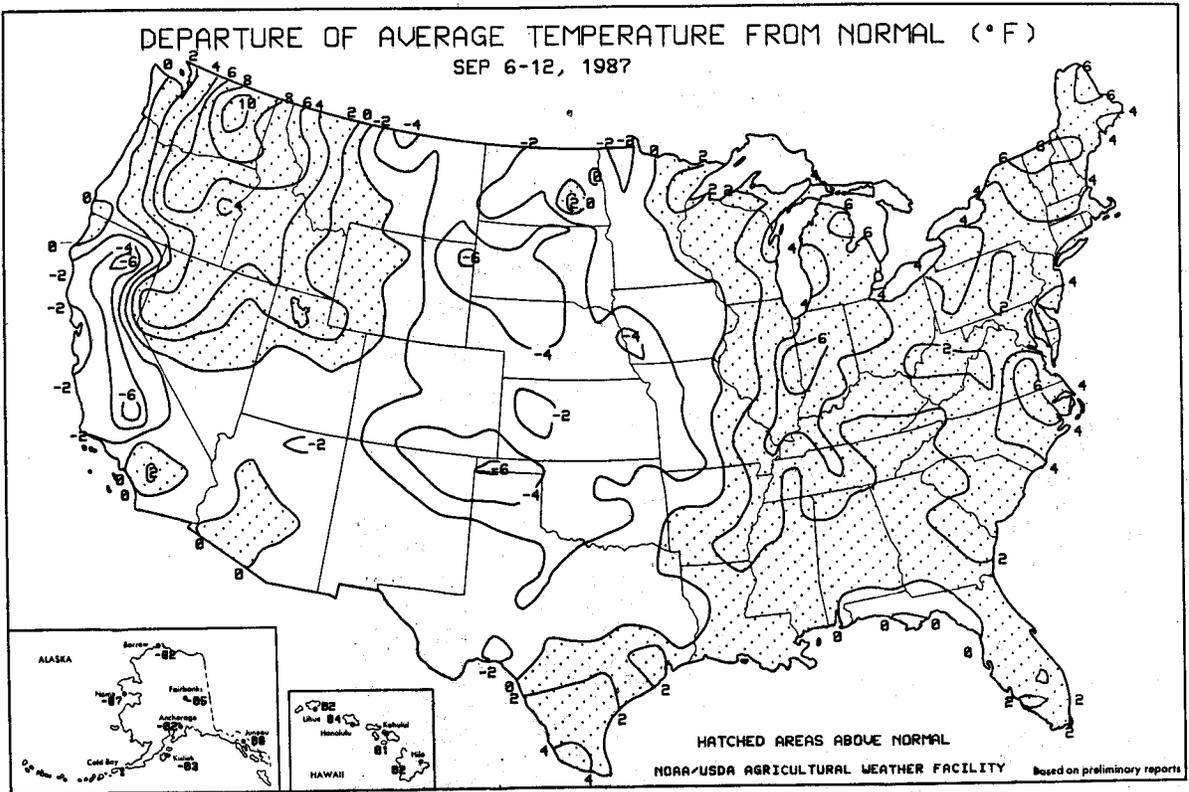
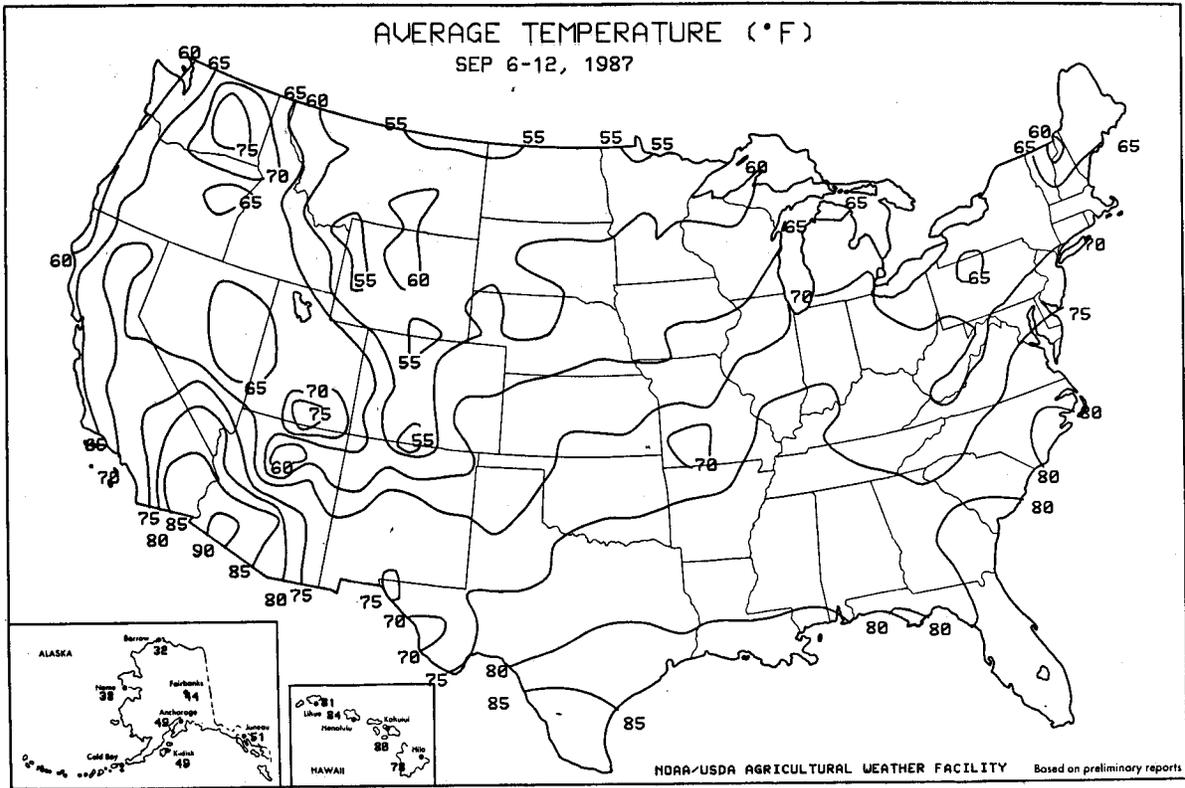


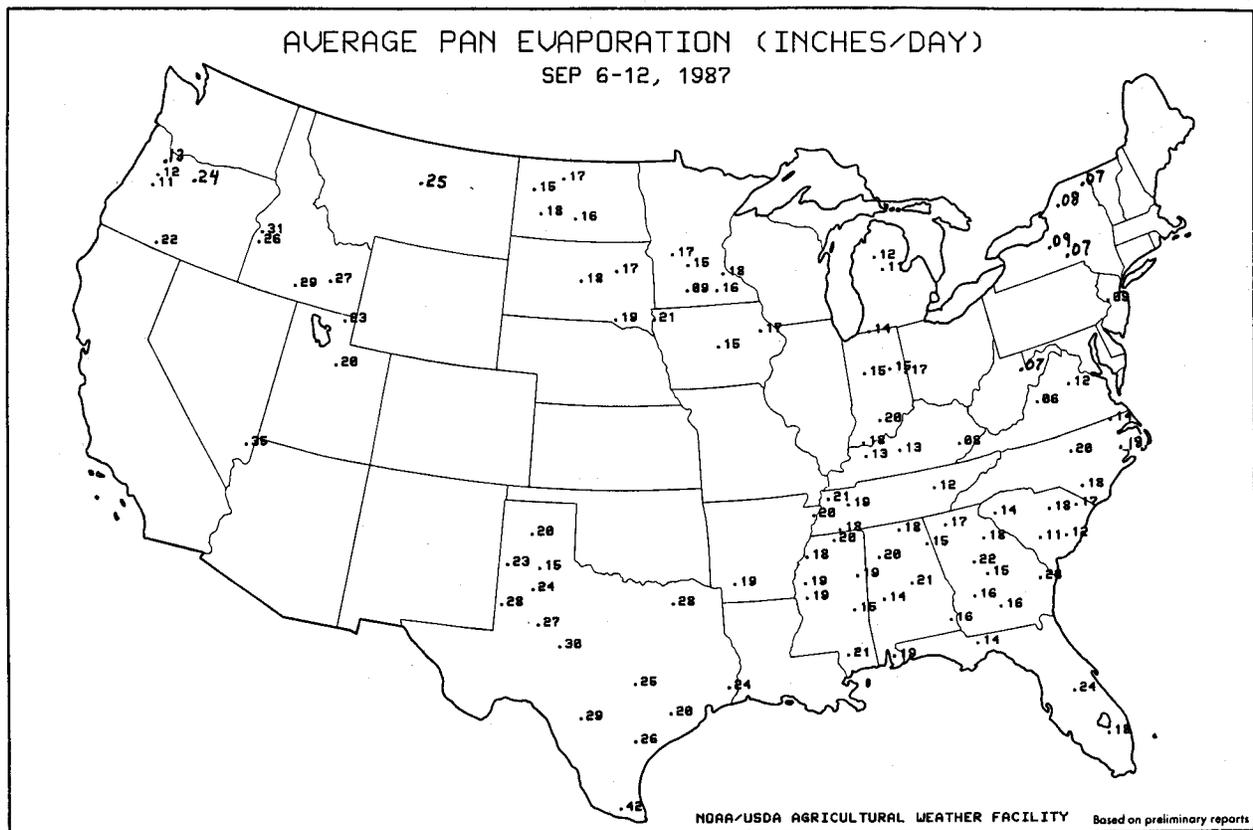
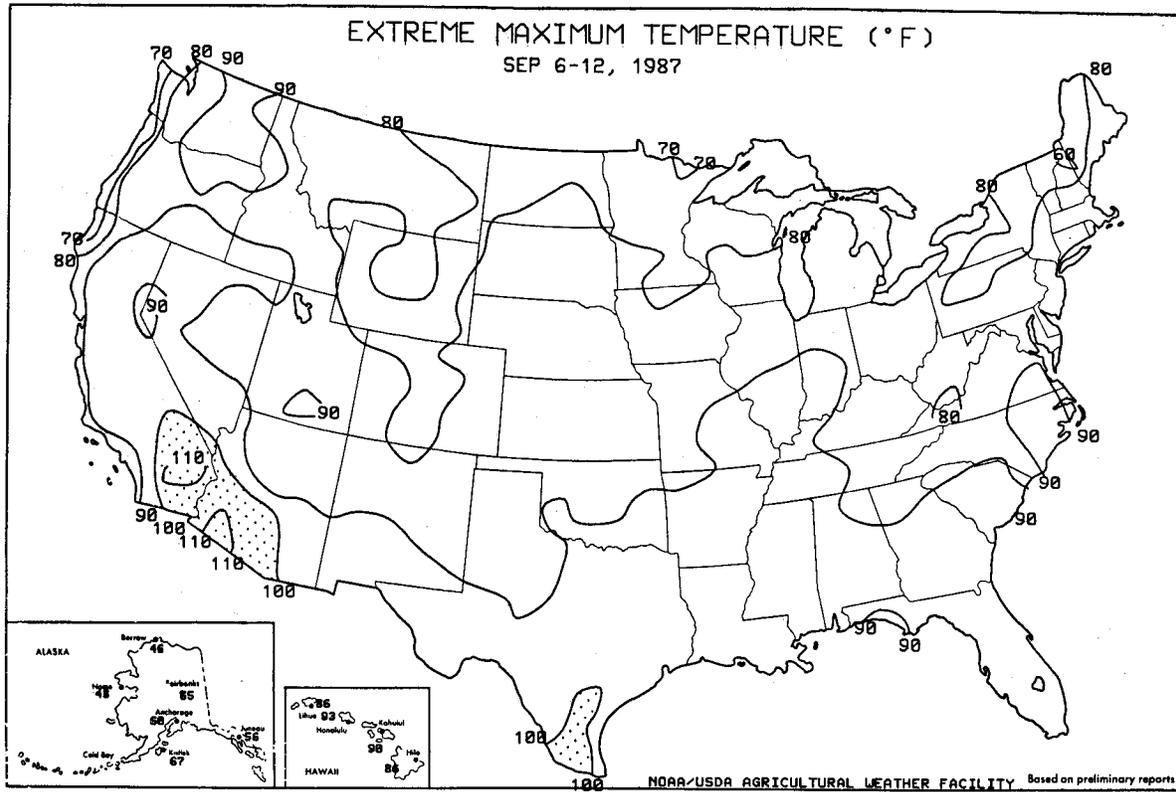


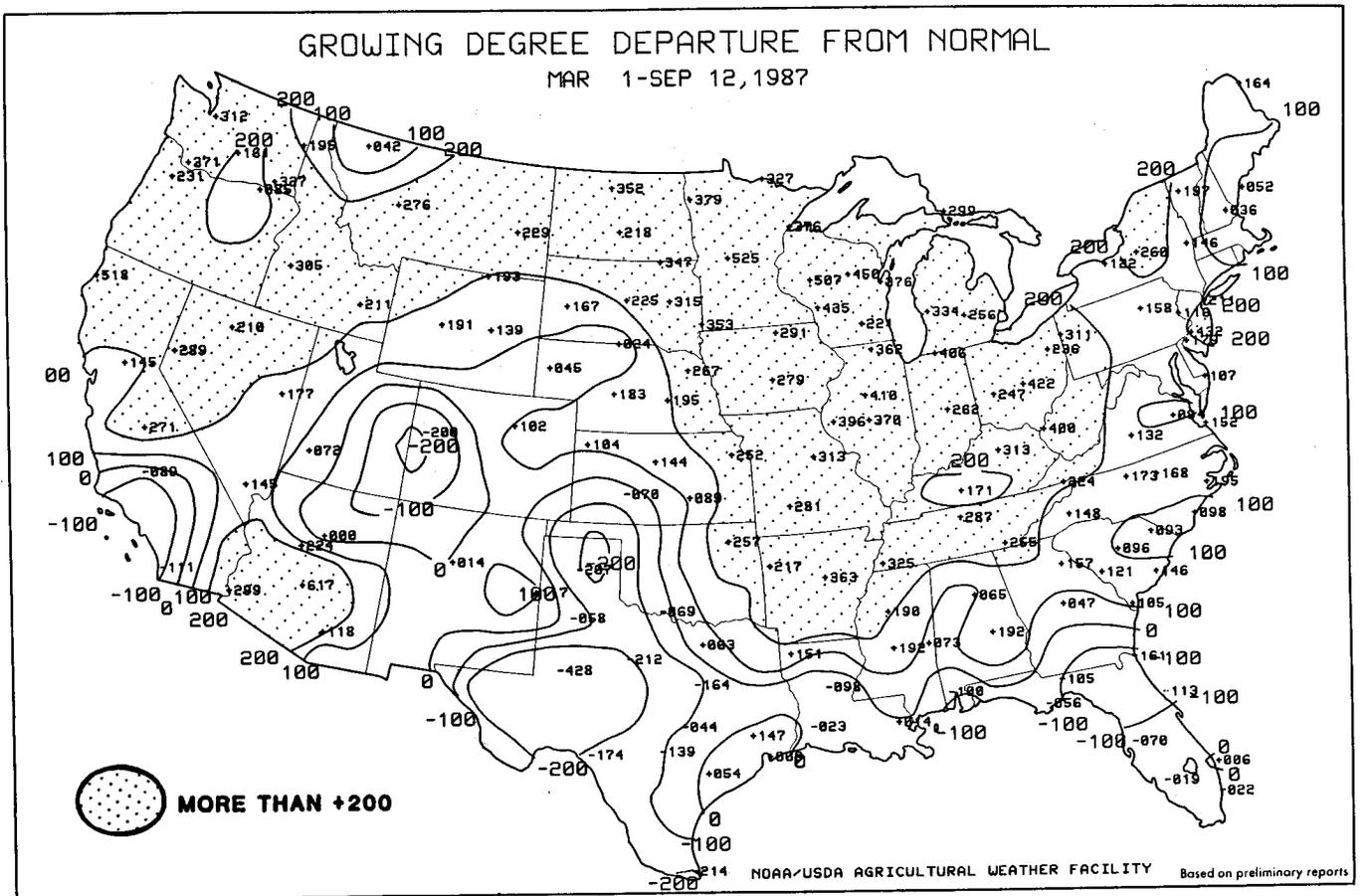
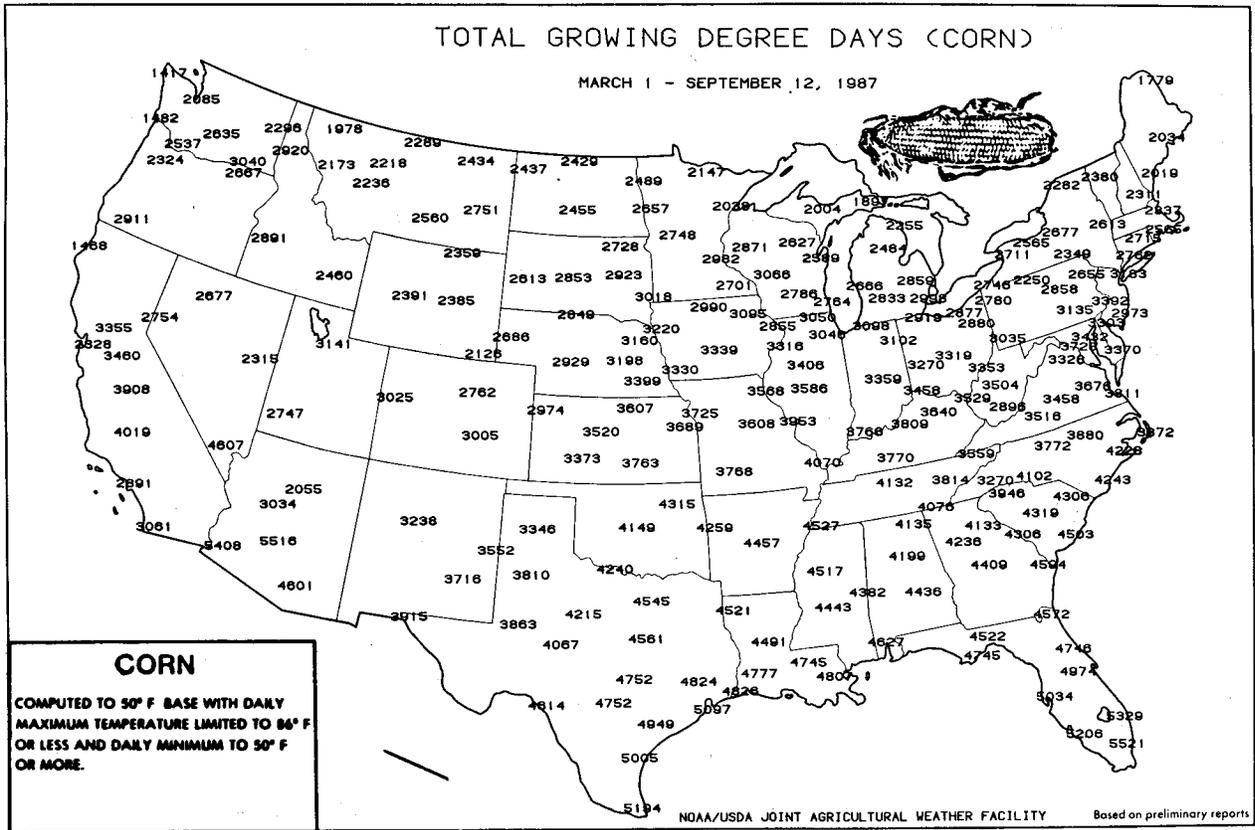
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 SEPTEMBER 7, 1987  
 3:01 PM EST



RAIN COVERS MUCH OF THE EASTERN TWO-THIRDS OF THE NATION ON LABOR DAY. THE HEAVIEST SHOWERS AND THUNDERSTORMS OCCUR IN THE BROAD MOIST SOUTHERLY FLOW OVER THE MID-ATLANTIC STATES AND AP-PALACHIAN MOUNTAINS. A TROPICAL DEPRESSION MOVES NORTHWARD ALONG THE COASTAL PLAIN, AHEAD OF THE FRONTAL SYSTEM MOVING ACROSS THE GREAT LAKES.







# National Weather Data for Selected Cities

## Weather Data for the Week Ending

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
AL BIRMINGHAM	87	67	91	65	77	0	2.8	1.8	1.6	2.8	158	32.6	80	98	55	3	0	3	3
MOBILE	89	70	94	68	79	1	2.1	.5	1.9	2.1	73	56.6	115	97	57	3	0	3	1
MONTGOMERY	90	69	93	67	80	1	2.5	1.4	1.3	2.8	145	44.6	124	97	55	5	0	4	2
AK ANCHORAGE	53	45	60	39	50	-1	.9	.3	.2	1.3	129	8.6	89	89	62	0	0	7	0
BARROW	37	26	46	23	32	-2	.1	0	.1	.5	204	3.9	121	94	70	0	6	3	0
FAIRBANKS	52	36	65	28	44	-5	.1	-.2	.1	.2	46	4.6	60	90	44	0	2	3	0
JUNEAU	54	48	57	42	51	1	2.9	1.5	1.3	4.1	176	31.6	101	100	86	0	0	7	2
KODIAK	57	41	67	33	49	-3	2.0	.6	1.5	2.2	91	50.0	130	96	54	0	0	5	1
NOME	44	32	48	25	38	-7	.4	-.2	.1	1.3	119	7.2	68	92	62	7	3	6	0
AZ PHOENIX	103	74	107	72	89	2	0	-.2	0	T	0	4.7	101	33	10	0	0	0	0
PRESCOTT	85	51	88	49	68	1	0	-.4	0	.3	38	9.7	69	48	14	0	0	0	0
TUCSON	99	65	102	62	82	0	0	-.3	0	1.4	236	9.6	121	54	14	7	7	0	0
YUMA	104	74	107	72	89	0	0	-.1	0	T	0	1.1	73	34	11	7	0	0	0
AR FORT SMITH	88	64	94	60	76	0	.4	-.3	.4	.4	33	26.4	94	97	44	3	0	2	0
LITTLE ROCK	87	67	96	65	77	1	1.7	.7	1.3	1.7	98	26.0	74	82	50	3	0	4	1
CA BAKERSFIELD	88	57	97	54	72	-7	0	0	0	T	25	4.1	104	71	27	2	0	0	0
EUREKA	62	54	67	52	58	1	0	-.2	0	T	0	18.0	79	91	76	0	0	0	0
FRESNO	87	58	94	55	72	-4	0	0	0	T	0	6.7	95	81	29	2	0	0	0
LOS ANGELES	76	62	81	58	69	-1	0	0	0	0	0	3.0	36	95	56	0	0	0	0
REDDING	87	54	95	51	71	-7	0	-.2	0	0	0	19.3	75	77	24	1	0	0	0
SACRAMENTO	84	55	92	53	69	-3	0	0	0	0	0	8.8	82	87	35	1	0	0	0
SAN DIEGO	77	64	84	60	70	-1	0	0	0	0	0	5.1	82	89	62	0	0	0	0
SAN FRANCISCO	72	58	79	56	65	1	0	0	0	0	0	8.5	69	86	53	0	0	0	0
CO DENVER	77	49	83	45	63	-2	T	-.3	T	.1	19	15.3	126	86	28	0	0	1	0
GRAND JUNCTION	83	52	85	51	68	-2	T	-.2	T	T	4	7.9	148	53	17	0	0	1	0
PUEBLO	81	50	83	46	65	-3	.2	0	.1	.2	44	9.3	105	96	30	0	0	4	0
CT BRIDGEPORT	75	66	82	60	71	3	.5	-.2	.2	.9	70	24.1	84	94	68	0	0	3	0
HARTFORD	78	61	85	54	69	4	1.1	.1	.7	1.2	76	30.0	99	97	63	0	0	4	1
DC WASHINGTON	83	69	86	66	76	3	3.9	3.1	2.0	4.0	286	26.0	92	98	68	0	0	4	4
FL APALACHICOLA	89	73	91	72	81	1	.6	-1.6	.3	3.3	89	39.5	97	97	64	3	0	2	0
DAYTONA BEACH	90	72	93	71	81	1	1.5	-.1	.7	4.5	160	35.6	101	97	61	4	0	4	1
JACKSONVILLE	91	73	94	72	82	2	1.4	-.2	.5	6.3	221	37.1	93	99	56	5	0	3	2
KEY WEST	90	79	91	76	85	1	1.1	-.4	.7	2.3	93	27.3	107	91	63	6	0	3	1
MIAMI	92	77	97	74	84	2	.3	-1.6	.2	.4	14	27.0	66	92	55	5	0	2	0
ORLANDO	93	74	95	73	84	2	1.8	-.2	.8	5.4	196	39.2	101	93	51	7	0	3	2
TALLAHASSEE	90	69	93	65	79	-1	1.5	-.1	.7	2.8	98	59.2	119	100	57	4	0	4	2
TAMPA	91	74	94	73	82	1	.6	-1.0	.6	1.9	66	39.9	108	97	60	5	0	2	1
WEST PALM BEACH	91	75	93	73	83	1	1.0	-1.1	.8	1.2	34	32.3	80	94	58	6	0	3	1
GA ATLANTA	86	69	90	66	77	2	1.3	.6	.7	1.5	112	37.5	103	93	52	1	0	4	1
AUGUSTA	90	70	94	69	80	4	1.2	.3	1.1	1.4	93	34.9	104	99	54	5	0	3	1
MACON	88	70	92	68	79	1	1.0	.2	.5	1.0	73	32.4	94	99	62	2	0	4	1
SAVANNAH	90	73	94	72	81	3	2.4	1.1	2.2	6.9	292	51.5	129	96	59	4	0	2	1
HI HILO	85	70	86	68	78	2	5.0	3.5	2.8	5.2	191	83.3	96	95	65	0	0	6	3
HONOLULU	91	76	93	74	84	3	.4	.3	.4	.4	259	4.0	28	78	48	6	0	2	0
KAHULUI	88	72	90	67	80	1	.1	0	.1	.1	78	21.0	171	84	53	1	0	2	0
LIHUE	85	77	86	75	81	2	.5	-.1	.5	1.4	188	16.7	62	84	65	0	0	3	0
ID BOISE	87	53	89	50	70	5	0	-.1	0	0	0	6.5	84	45	15	0	0	0	0
LEWISTON	91	57	94	55	74	8	0	-.2	0	0	0	8.0	90	45	16	6	0	0	0
POCATELLO	84	43	88	39	63	2	0	-.1	0	0	0	8.4	112	61	14	0	0	0	0
IL CHICAGO	81	59	88	54	70	4	T	-1.0	T	T	0	32.3	127	96	49	0	0	0	0
MOLINE	78	57	82	50	68	1	.4	-.5	.2	.4	23	28.4	101	98	50	0	0	3	0
PEORIA	81	59	88	52	70	2	.3	-.6	.2	.3	17	18.3	70	96	46	0	0	3	0
QUINCY	80	58	87	52	69	0	.3	-.7	.1	.3	20	20.7	74	96	47	0	0	3	0
ROCKFORD	77	56	81	51	67	1	.2	-.7	.1	.2	11	31.2	114	98	57	0	0	2	0
SPRINGFIELD	84	60	90	54	72	2	.1	-.7	.1	.1	9	19.0	74	98	40	1	0	1	0
IN EVANSVILLE	90	63	93	58	76	4	T	-.6	T	T	3	22.3	73	97	40	3	0	1	0
FORT WAYNE	83	60	87	56	72	5	.3	-.4	.2	.3	24	24.2	95	99	52	0	0	3	0
INDIANAPOLIS	87	61	91	54	74	5	.2	-.4	.2	.2	21	23.6	82	95	40	2	0	2	0
SOUTH BEND	81	60	86	55	71	5	1.2	.4	.9	1.3	95	22.8	84	95	51	0	0	4	1
IA DES MOINES	76	56	82	49	66	-1	.7	-.1	.4	.9	67	29.6	122	97	51	0	0	3	0
SIoux CITY	76	51	84	45	63	-3	0	-.6	.1	.1	9	21.6	105	97	45	0	0	2	0
WATERLOO	76	52	82	42	64	0	T	-.8	T	T	2	25.1	98	95	50	0	0	2	0
KS CONCORDIA	79	57	85	48	68	-2	1.1	.4	.8	1.2	91	30.4	139	93	47	0	0	3	1
DODGE CITY	81	58	87	53	69	-2	.9	.4	.7	1.0	119	21.4	127	96	45	0	0	4	1
GOODLAND	79	52	84	47	65	-1	.1	-.3	.1	.2	29	16.9	126	92	36	0	0	1	0
TOPEKA	79	57	83	48	68	-2	1.2	.3	1.0	1.2	82	30.7	121	98	50	0	0	3	1
WICHITA	79	61	84	57	70	-3	.6	-.2	.3	.6	42	32.4	150	96	58	0	0	4	0
KY BOWLING GREEN	84	63	85	59	73	1	.8	-.1	.5	.8	63	30.0	84	100	56	0	0	4	0
LEXINGTON	84	64	89	59	74	3	.1	-.7	.1	.1	10	26.5	77	96	52	0	0	2	0
LOUISVILLE	86	66	90	61	76	4	.2	-.6	.1	.2	16	24.1	76	95	50	1	0	3	0
LA ALEXANDRIA	90	68	93	64	79	0	.5	-.3	.4	.5	39	38.9	101	96	55	5	0	2	0
BATON ROUGE	90	71	93	69	81	1	.1	-1.0	.1	.1	5	52.1	125	97	53	5	0	1	0
LAKE CHARLES	92	71	94	69	81	2	2.6	1.2	1.4	2.6	107	46.7	124	97	51	6	0	5	2
NEW ORLEANS	91	72	93	69	81	1	.1	-1.4	.1	.1	5	52.9	119	97	53	5	0	2	0

Based on 1951-80 normals.

Weather Data for the Week Ending

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	
ME SHREVEPORT	91	68	97	65	79	0	.2	-.6	.1	.2	13	28.9	92	94	44	4	0	2	0	
ME CARIBOU	70	53	81	48	62	6	1.5	-.7	1.5	1.7	117	19.1	77	99	70	0	0	2	1	
MD PORTLAND	74	58	81	54	66	5	2.9	-.2	.5	1.1	86	28.9	102	97	69	0	0	3	1	
MD BALTIMORE	80	68	86	63	74	3	2.9	2.0	1.3	3.0	199	27.3	91	100	72	0	0	5	3	
MA SALISBURY	84	67	88	64	76	5	2.7	1.8	1.6	2.7	158	27.9	85	100	62	0	0	2	2	
MA BOSTON	77	62	86	57	70	3	.9	.1	.6	1.3	90	31.2	105	98	66	0	0	3	1	
MI CHATHAM	70	59	76	58	65	1	.5	-.4	.2	1.9	125	34.0	108	94	80	0	0	2	0	
MI ALPENA	75	56	84	52	66	6	.4	-.4	.2	.4	29	15.4	74	100	62	0	0	3	0	
MI DETROIT	79	63	83	59	71	5	.4	-.1	.2	.5	48	26.3	117	98	62	0	0	2	2	
MI FLINT	79	61	84	56	70	7	3.6	3.1	2.3	3.8	362	19.7	93	100	64	0	0	2	1	
MI GRAND RAPIDS	77	59	84	52	68	4	1.7	1.0	1.6	1.9	146	22.5	95	98	57	0	0	5	0	
MI HOUGHTON LAKE	73	57	81	52	65	6	.4	-.2	.3	.5	46	14.9	75	96	63	0	0	4	0	
MI LANSING	80	59	84	55	69	6	2.0	1.3	.7	2.1	167	19.6	92	97	56	0	0	5	3	
MI MARQUETTE	71	49	79	44	60	1	.3	-.6	.1	.4	28	22.2	104	94	53	0	0	2	0	
MI MUSKOGON	75	57	78	47	66	3	.1	-.6	.1	1.1	11	20.2	95	97	62	0	0	3	0	
MI SAULT ST. MARIE	70	52	75	44	61	4	.2	-.7	.1	.3	16	17.8	79	98	67	0	0	3	0	
MN ALEXANDRIA	71	49	78	41	60	0	.3	-.3	.2	.9	88	13.3	68	93	46	0	0	2	0	
MN DULUTH	69	48	76	44	59	2	.2	-.6	.1	.9	62	14.8	66	96	52	0	0	4	0	
MN INT'L FALLS	65	47	71	40	56	1	.7	-.1	.3	.9	65	17.3	94	98	57	0	0	5	0	
MN MINNEAPOLIS	73	53	79	49	63	0	.6	0	.4	.6	56	27.7	133	94	45	0	0	3	0	
MN ROCHESTER	71	50	76	44	61	0	.5	-.3	.3	1.4	97	21.5	99	96	53	0	0	4	0	
MS GREENWOOD	91	67	93	66	79	2	.1	-.7	.1	.1	8	30.6	80	96	49	4	4	1	0	
MS JACKSON	91	67	94	64	79	1	1.1	.2	.5	1.1	72	38.9	102	100	50	3	0	4	2	
MS MERIDIAN	89	67	93	64	78	0	3.1	2.3	2.2	3.1	214	45.4	115	100	55	3	0	3	0	
MO CAPE GIRARDEAU	88	64	93	61	76	6	1.0	.1	.4	1.0	64	26.5	81	95	48	3	0	4	0	
MO COLUMBIA	81	59	90	54	70	-1	1.2	.2	.6	1.2	75	21.3	79	98	49	1	0	4	1	
MO KANSAS CITY	79	57	82	51	68	-4	1.6	.6	1.1	1.6	92	26.6	98	98	51	0	0	4	0	
MO SAINT LOUIS	84	64	92	61	74	-2	.2	-.5	.1	.2	17	23.7	94	93	43	1	0	3	0	
MO SPRINGFIELD	80	58	90	53	69	-3	.4	-.6	.4	.6	38	32.3	114	99	54	1	0	4	0	
MT BILLINGS	75	49	80	44	62	0	.1	-.2	0	.6	131	11.7	104	86	29	0	0	3	0	
MT GLASGOW	73	42	80	38	58	-3	.1	-.1	.1	.1	23	8.6	94	84	31	0	0	2	0	
MT GREAT FALLS	74	45	83	41	59	-1	T	-.2	T	T	9	12.2	100	82	32	0	0	0	0	
MT HAVRE	73	39	83	36	56	-3	.1	-.2	.1	.1	16	7.1	74	87	30	0	0	1	0	
MT HELENA	78	43	85	39	60	2	0	0	0	T	0	8.7	95	81	23	0	0	0	0	
MT KALISPELL	80	41	83	38	60	4	0	-.3	0	0	0	12.8	113	89	26	0	0	0	0	
MT MILES CITY	74	47	81	41	60	-2	.2	-.1	.1	.4	84	11.5	101	69	25	0	0	2	0	
MT MISSOULA	84	44	87	41	64	5	T	-.3	T	T	0	8.7	91	76	21	0	0	0	0	
NE GRAND ISLAND	77	50	83	39	63	-4	.2	-.4	.1	.3	31	22.2	116	97	42	0	0	3	0	
NE LINCOLN	76	54	82	45	65	-3	1.7	-.9	1.6	1.7	135	27.5	125	95	51	0	0	2	1	
NE NORFOLK	77	50	86	40	64	-2	.4	-.1	.5	.4	44	22.6	114	97	39	0	0	2	1	
NE NORTH PLATTE	77	44	83	32	60	-4	.5	-.1	.6	.6	90	16.1	98	97	39	0	1	2	0	
NE OMAHA	73	54	83	47	63	-5	.6	-.3	.4	.6	37	28.1	117	94	61	0	0	3	0	
NE SCOTTSBLUFF	78	45	83	40	61	-3	T	-.3	T	T	135	20.8	171	91	25	0	0	0	0	
NE VALENTINE	76	41	82	29	58	-6	T	-.3	T	T	6	18.0	123	87	32	0	1	2	0	
NV ELY	79	40	83	36	60	1	0	0	T	T	0	3.4	120	25	10	7	0	0	0	
NV LAS VEGAS	97	68	100	64	82	0	T	-.1	T	T	0	6.1	123	63	15	0	0	0	0	
NV RENO	87	49	89	44	68	6	T	-.1	T	T	11	6.9	131	37	13	4	0	0	0	
NV WINNEMUCCA	90	43	93	37	67	5	0	-.1	0	0	0	6.9	106	97	63	0	0	3	1	
NH CONCORD	76	58	84	47	67	6	1.4	-.6	.8	1.5	116	26.1	106	97	64	0	0	2	0	
NJ ATLANTIC CITY	81	66	85	60	73	4	.2	-.6	.2	1.0	77	31.9	107	97	68	0	0	1	0	
NM ALBUQUERQUE	85	56	88	54	71	-1	T	-.2	T	T	8	7.0	122	66	18	0	0	7	1	
NM CLOVIS	81	60	83	58	70	0	1.6	1.2	.6	2.5	313	21.2	162	91	49	0	0	3	0	
NM ROSWELL	87	60	89	55	73	0	.2	-.3	.1	.2	25	13.3	170	88	36	0	0	5	2	
NY ALBANY	76	60	81	53	68	5	3.2	2.4	1.9	3.2	242	25.2	102	100	66	0	0	5	0	
NY BINGHAMTON	70	59	75	50	64	3	1.1	.3	.4	1.1	79	24.5	95	100	75	0	0	5	1	
NY BUFFALO	76	62	81	56	69	5	2.7	1.9	2.1	2.9	201	29.9	117	95	67	0	0	4	1	
NY NEW YORK	78	68	84	65	73	2	.9	.1	.7	1.0	65	32.7	109	97	70	0	0	4	1	
NY ROCHESTER	76	60	80	49	68	4	1.1	.5	.8	1.2	111	23.7	108	97	67	0	0	3	1	
NY SYRACUSE	76	59	81	51	68	4	2.8	2.0	2.2	3.0	221	22.6	83	98	65	0	0	5	3	
NC ASHEVILLE	80	62	84	61	71	2	5.3	4.3	2.3	6.1	377	36.8	114	100	67	0	0	7	5	
NC CHARLOTTE	85	68	88	66	77	2	5.0	4.1	1.3	6.2	411	30.4	95	99	64	0	0	7	2	
NC GREENSBORO	83	68	87	65	75	3	6.0	5.2	3.5	6.8	447	39.6	127	99	67	0	0	5	1	
NC HATTERAS	86	73	88	70	79	3	1.9	.5	1.5	3.3	139	48.2	126	99	70	0	0	2	1	
NC NEW BERN	90	74	93	71	82	6	1.7	.2	1.2	2.0	78	43.5	110	95	58	3	0	5	4	
NC RALEIGH	86	71	91	67	78	5	4.4	3.6	1.7	4.7	328	35.2	113	99	66	1	0	6	1	
NC WILMINGTON	89	73	91	71	81	4	1.9	.5	1.4	5.4	213	42.7	105	98	65	2	0	5	0	
ND BISMARCK	71	43	80	36	57	-3	.1	-.3	.1	.3	42	16.9	134	97	39	0	0	2	0	
ND FARGO	70	46	78	43	58	-3	.3	-.2	.2	.6	69	12.6	80	96	48	0	0	3	0	
ND GRAND FORKS	73	43	82	40	58	-1	.4	-.1	.3	.6	63	16.6	114	96	39	0	0	3	0	
ND WILLISTON	71	41	78	34	56	-4	T	-.3	T	T	2	10.7	97	91	31	0	0	1	0	
OH AKRON-CANTON	76	61	81	58	68	3	.7	-.1	.4	.7	55	22.4	84	99	69	0	0	4	0	
OH CINCINNATI	84	63	88	59	73	3	.5	-.2	.4	.5	42	25.2	85	97	49	0	0	3	0	
OH CLEVELAND	77	60	82	57	69	2	.1	-.6	.1	.2	15	28.7	112	98	65	0	0	2	0	
OH COLUMBUS	80	65	88	63	72	4	.4	-.3	.3	.4	31	19.5	69	99	61	0	0	3	0	

Based on 1951-80 normals.

Weather Data for the Week Ending

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	83	62	89	59	73	4	T	T	T	2	18.5	71	95	48	0	0	1	0		
TOLEDO	82	58	87	50	70	5	.6	0	.4	.7	60	20.5	89	100	52	0	0	2	0	
YOUNGSTOWN	75	59	79	52	67	3	1.0	.3	.5	1.0	79	28.8	106	100	73	0	0	4	1	
OK OKLAHOMA CITY	83	65	87	62	74	-2	1.5	.8	.6	1.5	116	34.0	146	93	48	0	0	4	1	
TULSA	82	65	87	62	74	-2	1.7	.7	1.6	1.7	100	31.9	113	93	53	0	0	4	2	
OR ASTORIA	63	54	67	51	59	-1	T	T	T	T	2	32.7	83	97	76	0	0	4	1	
BURNS	86	43	87	40	65	-4	0	-1	0	0	11	7.1	98	**	**	0	0	0	0	
MEDFORD	82	51	88	47	67	-1	0	-1	0	0	0	9.4	85	83	33	0	0	0	0	
PENDLETON	88	57	91	52	73	6	0	-1	0	0	0	5.6	74	49	19	2	0	0	0	
PORTLAND	76	57	87	54	67	2	T	T	T	T	0	19.5	91	95	51	0	0	0	0	
SALEM	76	51	87	46	64	0	0	-3	0	0	0	21.9	95	94	48	0	0	0	0	
PA ALLENTOWN	76	64	83	57	70	3	6.2	5.2	4.9	6.2	362	35.5	113	100	75	0	0	4	2	
ERIE	75	64	82	59	69	5	2.7	1.7	1.2	3.1	192	31.0	115	96	70	0	0	3	3	
HARRISBURG	76	64	82	60	70	1	4.0	3.2	1.7	4.0	276	25.6	92	98	73	0	0	5	2	
PHILADELPHIA	81	68	86	63	74	4	.4	-.5	.2	.4	25	24.7	83	94	66	0	0	4	0	
PITTSBURGH	77	63	82	57	70	4	1.3	-.7	.5	1.4	119	31.1	114	99	71	0	0	4	1	
SCRANTON	73	61	80	53	67	2	4.6	3.8	1.9	4.6	345	30.0	122	99	73	0	0	4	1	
RI PROVIDENCE	76	63	84	54	70	4	1.5	-.7	.8	2.0	140	27.4	89	98	65	0	0	3	1	
SC CHARLESTON	89	74	92	73	81	4	3.3	2.1	1.5	13.1	595	48.9	121	98	63	4	0	3	1	
COLUMBIA	88	71	92	69	79	3	3.5	2.4	1.0	4.8	253	46.7	122	99	61	4	0	5	4	
FLORENCE	87	71	90	69	79	2	2.2	1.2	.8	3.6	202	31.0	91	100	66	2	0	5	3	
GREENVILLE	83	66	89	64	74	0	2.4	1.3	1.1	3.0	159	36.7	97	98	70	0	0	6	2	
SD ABERDEEN	71	45	81	40	58	-4	.2	-.1	.1	1.1	175	11.0	75	97	43	0	0	2	0	
HURON	75	45	84	39	60	-3	.6	-.3	.6	1.0	174	16.6	110	97	40	0	0	1	1	
RAPID CITY	74	44	84	36	59	-4	.5	-.2	.4	.6	136	11.5	83	88	33	0	0	3	0	
SIOUX FALLS	78	49	84	41	64	0	.2	-.5	.2	.2	14	13.4	70	97	34	0	0	1	0	
TN CHATTANOOGA	85	67	90	64	76	1	1.9	.9	.8	1.9	110	37.7	100	99	55	1	0	6	2	
KNOXVILLE	84	65	90	62	75	1	1.7	1.0	1.1	1.7	140	29.1	85	100	61	1	0	4	1	
MEMPHIS	89	69	93	64	79	3	.2	-.7	.1	.2	10	27.6	73	93	48	4	0	2	0	
NASHVILLE	88	67	92	64	78	3	.3	-.6	.2	.3	21	19.4	55	97	47	2	0	4	0	
TX ABILENE	87	65	89	61	76	-2	.7	0	.3	.7	59	19.8	117	90	45	0	0	3	0	
AMARILLO	79	57	85	52	68	-4	.9	.4	.4	1.9	240	17.2	110	96	49	0	0	4	0	
AUSTIN	93	69	97	66	81	0	3.4	2.6	2.9	3.4	256	30.4	142	96	44	6	0	3	1	
BEAUMONT	93	70	95	67	81	0	3.6	2.3	2.8	3.6	158	44.1	113	100	55	6	0	5	1	
BROWNSVILLE	96	75	98	72	86	3	T	-1.2	T	.1	4	15.5	97	94	46	7	0	0	0	
CORPUS CHRISTI	94	73	95	72	84	1	.1	-1.5	.1	.1	4	25.7	119	95	50	7	0	1	0	
DEL RIO	92	70	96	65	81	-1	.1	-.5	.1	.1	13	20.3	171	83	43	6	0	2	0	
EL PASO	91	61	93	58	76	-1	0	-.3	0	.3	51	7.0	129	80	22	5	0	0	0	
FORT WORTH	90	68	95	65	79	-1	1.0	.3	.6	1.0	81	19.7	89	93	41	4	0	2	1	
GALVESTON	89	76	90	71	83	1	.5	-1.1	.5	.5	18	28.1	102	72	28	3	0	1	0	
HOUSTON	95	70	99	66	83	2	.7	-.5	.4	.7	33	29.8	93	97	41	7	0	4	0	
LUBBOCK	83	62	85	60	72	-1	1.4	-.9	1.1	1.6	188	15.9	117	97	52	0	0	5	1	
MIDLAND	88	62	92	57	75	-1	1.1	.6	.6	1.1	134	13.0	133	95	41	1	0	3	1	
SAN ANGELO	88	64	90	62	76	-2	1.7	1.0	1.3	1.7	144	26.6	212	96	47	1	0	3	1	
SAN ANTONIO	93	70	95	68	82	1	1.6	.7	1.5	1.6	109	32.1	160	94	45	7	0	3	1	
VICTORIA	95	72	98	70	83	2	.3	-1.2	.3	.3	11	32.1	126	97	46	7	0	1	0	
WACO	91	68	97	64	79	-2	1.0	-.2	.5	1.0	81	21.4	99	95	42	5	0	3	0	
WICHITA FALLS	86	65	90	62	76	-3	.5	-.2	.4	.5	42	26.5	138	95	44	1	0	3	0	
UT BLANDING	79	50	82	48	64	-1	T	-.2	T	-.2	69	13.7	181	78	41	0	0	1	0	
CEDAR CITY	84	48	87	44	66	0	T	-.2	T	T	0	7.4	101	63	21	0	0	0	0	
SALT LAKE CITY	85	55	89	51	70	3	0	-.2	0	.1	15	9.0	83	55	16	0	0	0	0	
VT BURLINGTON	75	61	78	58	68	7	1.3	.6	.8	1.3	99	18.5	78	96	69	0	0	3	1	
VA NORFOLK	85	73	88	69	79	5	3.3	2.2	1.2	3.8	205	33.9	102	95	64	0	0	4	3	
RICHMOND	86	70	90	67	78	6	1.4	-.5	.5	2.4	164	31.1	99	100	61	1	0	4	0	
ROANOKE	79	66	87	62	72	2	7.4	6.7	6.0	9.5	741	41.8	148	100	74	0	0	6	2	
WA COLVILLE	89	50	91	48	69	9	0	-.2	0	.2	54	12.8	113	64	24	3	0	0	0	
QUILLAYUTE	64	51	69	46	57	-1	.1	-1.2	0	.5	23	55.3	90	99	74	0	0	5	0	
SEATTLE-TACOMA	73	53	82	49	63	2	T	-.4	T	T	3	19.4	89	97	53	0	0	1	0	
SPOKANE	86	51	88	50	69	7	0	-.2	0	0	0	11.3	107	61	17	0	0	0	0	
YAKIMA	90	50	93	48	70	7	0	-.1	0	0	0	4.6	94	84	22	5	0	0	0	
WV BECKLEY	75	62	80	59	69	4	1.0	.1	.5	1.7	110	30.2	96	97	70	0	0	6	0	
CHARLESTON	77	65	84	62	71	1	2.4	1.6	1.3	2.9	219	28.5	90	100	75	0	0	5	2	
HUNTINGTON	81	65	87	62	73	2	1.2	.4	.6	1.2	95	24.7	80	100	67	0	0	4	1	
PARKERSBURG	78	64	85	63	71	1	1.0	.3	.5	1.1	95	18.8	66	99	70	0	0	4	1	
WI GREEN BAY	76	53	83	49	65	4	.1	-.7	.1	.2	14	14.9	72	98	52	0	0	2	0	
LACROSSE	74	54	81	48	64	0	.7	-.2	.5	.7	47	27.1	116	99	55	0	0	2	1	
MADISON	75	54	82	48	64	2	.1	-.7	0	.1	5	21.3	91	99	58	0	0	3	0	
MILWAUKEE	75	59	83	55	67	3	.1	-.6	.1	.5	39	28.2	123	95	60	0	0	2	0	
WAUSAU	72	52	77	47	62	2	.5	-.4	.4	.6	35	17.1	71	96	49	0	0	2	0	
WY CASPER	74	44	80	41	59	-2	T	-.1	T	.5	178	11.1	127	84	24	0	0	1	0	
CHEYENNE	72	44	79	42	58	-2	.2	-.1	.2	.3	57	13.0	117	93	28	0	0	1	0	
LANDER	76	47	81	44	61	0	0	-.2	0	.2	86	12.2	123	68	24	0	0	0	0	
SHERIDAN	73	44	80	40	58	-2	.7	-.5	.4	1.1	255	12.1	105	93	35	0	0	2	0	
PR SAN JUAN	91	76	92	75	83	2	.5	-1.0	.3	.7	30	42.7	123	91	75	7	0	4	0	

Based on 1951-80 normals.

Cooling Degree Days Summary

CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NEDDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 9-12-1987
ACCUMULATIONS ARE FROM JANUARY 1
\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK WEEK, CUM TOTAL, CUM DEV FROM, CUM DEV FROM, CUM DEV FROM, CUM DEV FROM, CUM DEV FROM. Rows list various cities and their corresponding cooling degree day data.

## National Agricultural Summary

September 7 to 13, 1987

**HIGHLIGHTS:** Scattered to moderate precipitation across the eastern half of the Nation benefited late planted crops. Cooler temperatures slowed crop development slightly throughout the Great Plains. Droughtlike conditions eased in the Southeast, but soil moisture remained short in the Delta and Corn Belt. Rain limited fieldwork to 4 days or less in the Southeast. Farmers were able to work 5 to 6 days in most other areas.

Spring wheat was 97 percent (%) harvested, 5 percentage points above normal. Harvest was virtually finished except in Montana. Winter wheat seeding advanced 11 points ahead of the previous week to 20% completion, 6 points above average. Early planted wheat was emerging in some areas. Corn was 10% harvested, compared with 4% normally. Harvest was underway in all major producing States except Colorado. Sorghum harvest advanced to 28% completion, 3 points above the 25% average. Soybeans were 5% combined, with harvest concentrated mostly in the Corn Belt. Soybeans dropping leaves reached 46% completion, 24 points above normal. Cotton was 11% picked, compared with the 7% average. Warm weather is needed in the southern Great Plains for cotton development. Rice was 51% combined, 13 points above normal. Burley tobacco harvest was ahead of normal in most States. Livestock was mostly good.

**SMALL GRAINS:** Spring wheat was 97% harvested, compared with 88% in 1986 and the 92% average. Harvest climbed only 3 points ahead of the previous week, but was nearing completion in Idaho, Minnesota, and North Dakota. Harvest reached 89% completion in Montana, 6 points above the previous week, but lagged 4 points behind normal.

Winter wheat was 20% planted, 6 points above normal and slightly ahead of 1986. Planting was underway in all major producing States, except Arkansas, California, Georgia, Illinois, and North Carolina. Seeding progressed well in Kansas, reaching 15% completion and 5 points above normal. Emergence occurred in some areas. Colorado, Nebraska, and South Dakota producers seeded a fourth of their acreage in 1 week, totaling 33, 35, and 60%, respectively. Thirty-eight percent of Washington's acreage was seeded, 3 points ahead of normal. Some growers were waiting for additional moisture to continue planting. Seeding lagged behind normal in Colorado, Georgia, and Idaho. In Montana, seeding was 30% finished, 12 points above normal.

**CORN:** Rain hampered corn harvest in the Southeast, southern and central Great Plains and western Corn Belt. Three-fourths of the acreage was mature, compared with 52% in 1986 and 39% normally. Harvest was up 4 points from the previous week to 10% completion, more than doubled the average. Harvest was underway in all major producing States except Colorado. Harvest lagged behind normal in only North Carolina by 12 points. In Nebraska, stalk damage from insects became more evident as the crop matures. Georgia harvest was 80% complete, 6 points above normal. Sixty-seven percent of Texas corn acreage was combined, compared with 61% normally. Harvest was just beginning in the northern Corn Belt and northern Great Plains.

**SOYBEANS:** Soybeans dropped leaves on 46% of the acreage, surpassing 1986 by 16 points and more than doubled the average. Soybeans dropped leaves in all major producing States, except North Carolina and was ahead of normal in nearly all States. Harvest reached 5% completion, 4 points above normal. Most areas combined were in the

Corn Belt thus far. Harvest was just beginning in the central Great Plains and some Corn Belt States and as far north as Iowa. Dry conditions continued plaguing soybeans in Arkansas.

**SORGHUM:** Sorghum was 28% harvested compared with 27% last year and 25% normally. Sorghum harvest surged 31 and 39 points ahead of normal in Arkansas and Mississippi, respectively. Tennessee harvesting pace was 30 points ahead of normal at 55% completion. Harvest had not begun in Nebraska. Eighty-five percent of the sorghum acreage had turned color, 5 points ahead of normal. Turning color neared completion except in Kansas and Oklahoma.

**COTTON:** Cotton was mostly good in the Delta and southern Great Plains and mostly fair in the Southeast. Crop condition was good to excellent in the Southwest. Fifty-six percent of cotton acreage opened bolls, 10 points above 1986 and 13 points above the average. Bolls opened rapidly except in New Mexico, Oklahoma, and South Carolina, which lagged behind normal. Harvest was 11% finished compared with 10% in 1986 and 7% normally. Harvest was underway in all States except New Mexico, North Carolina, and Oklahoma. Missouri harvest was 34% finished, more than 11 times faster than normal. Slightly more than 10% of the acreage was harvested in the Delta. Cotton needed warmer daytime temperatures for boll maturity in Oklahoma. Arizona producers began plowing under some harvested fields. Cotton harvest gained momentum in southern California. Growth regulators and defoliant application began in the central valley. The cool weather slowed cotton development in Texas. Most fields were harvested in southern areas and at Coastal Bend.

**OTHER CROPS:** Rice was 51% harvested, 2 points below 1986 but 13 points above average. First crop harvest was finished in Texas. Harvest was 22 points above normal in Arkansas at 42% completion. Cool weather slowed rice maturity in California. Harvest was underway on a limited scale.

Flue-cured tobacco harvest neared completion in Georgia and South Carolina. North Carolina and Virginia harvests were 12 and 18 points behind normal, respectively. Ninety percent of Kentucky's burley crop was cut, compared with 65% normally. Burley harvest was 10 points ahead of normal in Tennessee.

Peanuts were 22% harvested in Georgia and 13% harvested in Alabama. Both States lagged behind their normal progress. Damp, humid weather caused white mold problems in Georgia. In Texas, harvest was 6% complete, equaling the average.

**FRUIT AND NUTS:** New crop early oranges progressed well in Florida. Grapefruit harvest is expected to begin soon. Pecan harvest is expected to begin soon in southern and eastern Texas. Wine, raisin, and table grapes were harvested in California. Peach, plum, prune, and nectarine harvests neared completion. Some aging defects caused heavy grade-out in Valencia oranges.

**VEGETABLES:** Planting and related activities increased in southern Florida. Tomato planting was finished in the Ruskin area. Fall planted vegetables progressed well in Texas. Rain slowed vegetable harvest in some areas. Fall vegetable planting continued in California. Broccoli, artichokes, cauliflower, sweet corn, lettuce, cucumbers, carrots, and peppers were harvested.

**PASTURES AND LIVESTOCK:** Livestock was mostly good. Movement to winter pastures continued in the northern areas. Pastures were mostly fair and showed little improvement.

Crop Progress

FOR WEEK ENDING SEPTEMBER 13, 1987

WINTER WHEAT  
% PLANTED

	1987	1986	AVG.
ARK	0	0	0
CALIF	0	0	0
COLO	33	40	35
GA	0	3	2
IDAHO	13	28	15
ILL	0	0	0
IND	2	3	2
KANS	15	15	10
MICH	3	1	1
MO	4	3	2
MONT	30	16	18
NEBR	35	30	28
N MEX	50	47	NA
N C	0	0	0
OHIO	1	0	0
OKLA	20	15	10
OREG	3	0	2
S DAK	60	43	44
TEX	23	19	12
WASH	38	37	35

20 STATES 21 18 NA

EXCL. STATES WITH NA 20 18 14

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

NA - NOT AVAILABLE.

SPRING WHEAT  
% HARVESTED

	1987	1986	AVG.
IDAHO	93	87	86
MINN	99	88	91
MONT	89	87	93
N DAK	98	85	91
S DAK	100	98	99

5 STATES 97 88 92

THESE 5 STATES PRODUCED 94% OF THE 1986 SPRING WHEAT CROP.

COTTON  
% HARVESTED

	1987	1986	AVG.
ALA	10	1	1
ARIZ	2	2	1
ARK	15	7	4
CALIF	0	0	0
GA	1	2	3
LA	10	19	7
MISS	11	20	5
MO	34	5	3
N MEX	0	0	0
N C	0	0	0
OKLA	0	0	0
S C	1	2	0
TENN	15	5	2
TEX	15	12	13

14 STATES 11 9 7

EXCL. STATES WITH NA 11 10 7

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

NA - NOT AVAILABLE.

CORN  
% MATURE

	1987	1986	AVG.
COLO	25	24	22
GA	100	100	99
ILL	95	83	57
IND	95	72	39
IOWA	90	56	41
KANS	70	70	45
KY	86	79	55
MICH	45	10	20
MINN	76	15	17
MO	87	86	64
NEBR	40	28	15
N C	85	97	89
OHIO	67	42	40
PA	23	22	10
S DAK	53	37	34
TEX	84	85	86
WIS	57	24	24

17 STATES 75 52 39

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

SOYBEANS  
% DROPPING LEAVES

	1987	1986	AVG.
ALA	18	13	11
ARK	6	12	7
GA	12	11	15
ILL	62	56	39
IND	83	45	28
IOWA	45	24	20
KANS	30	35	25
KY	35	23	18
LA	18	15	12
MICH	50	20	25
MINN	93	19	20
MISS	15	36	16
MO	31	26	19
NEBR	25	23	14
N C	0	0	0
OHIO	76	39	26
S C	2	3	2
S DAK	71	40	42
TENN	30	20	12

19 STATES 46 30 22

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

COTTON  
% BOLLS OPENING

	1987	1986	AVG.
ALA	67	60	51
ARIZ	85	75	80
ARK	89	68	60
CALIF	85	75	59
GA	54	42	46
LA	90	93	68
MISS	92	100	73
MO	100	52	63
N MEX	40	95	88
N C	71	68	71
OKLA	10	5	15
S C	57	67	67
TENN	80	65	50
TEX	32	18	25

14 STATES 56 46 43

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

CORN  
% HARVESTED

	1987	1986	AVG.
COLO	0	0	0
GA	80	83	76
ILL	16	7	3
IND	10	3	0
IOWA	5	2	2
KANS	15	15	5
KY	24	18	8
MICH	3	0	0
MINN	2	0	0
MO	24	19	13
NEBR	2	0	0
N C	19	31	31
OHIO	6	1	0
PA	2	0	0
S DAK	1	0	0
TEX	67	68	61
WIS	1	0	0

17 STATES 10 6 4

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

SOYBEANS  
% HARVESTED

	1987	1986	AVG.
ALA	0	0	0
ARK	0	0	0
GA	0	NA	NA
ILL	14	8	3
IND	11	3	0
IOWA	2	0	0
KANS	1	2	1
KY	2	1	0
LA	1	1	1
MICH	1	0	0
MINN	4	0	0
MISS	1	1	NA
MO	3	2	0
NEBR	1	0	0
N C	0	0	0
OHIO	9	0	0
S C	0	0	0
S DAK	0	0	0
TENN	0	0	0

19 STATES 5 NA NA

EXCL. STATES WITH NA 5 2 1

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

NA - NOT AVAILABLE.

RICE  
% HARVESTED

	1987	1986	AVG.
ARK	42	41	20
CALIF	0	0	0
LA	86	92	78
MISS	48	68	29
TEX	100	96	94

5 STATES 51 53 38

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

GRAIN SORGHUM  
% COLORING

	1987	1986	AVG.
ARK	99	95	NA
ILL	95	82	NA
KANS	75	75	50
LA	99	100	99
MISS	99	100	NA
MO	93	86	84
NEBR	90	86	70
OKLA	85	95	85
S DAK	98	76	70
TENN	98	91	84
TEX	89	83	84

11 STATES	86	83	NA
EXCL. STATES WITH NA	85	82	70

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

NA - NOT AVAILABLE.

GRAIN SORGHUM  
% MATURE

	1987	1986	AVG.
ARK	92	84	NA
ILL	72	47	NA
KANS	25	25	10
LA	94	100	93
MISS	88	100	86
MO	67	50	52
NEBR	35	16	10
OKLA	10	30	30
S DAK	22	18	19
TENN	89	85	55
TEX	64	65	68

11 STATES	48	44	NA
EXCL. STATES WITH NA	45	42	36

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

NA - NOT AVAILABLE.

GRAIN SORGHUM  
% HARVESTED

	1987	1986	AVG.
ARK	80	75	49
ILL	15	0	0
KANS	5	4	2
LA	72	93	81
MISS	81	71	42
MO	31	17	17
NEBR	0	0	0
OKLA	3	3	5
S DAK	1	0	0
TENN	55	45	25
TEX	54	56	60

11 STATES	28	27	25
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THESE 11 STATES PRODUCED 96% OF THE 1986 GRAIN SORGHUM CROP.

Crop Condition

FOR WEEK ENDING SEPTEMBER 13, 1987

SOYBEANS

STATE	VP	P	F	G	EX
ALA	5	26	48	21	0
ARK	5	9	53	33	0
GA	0	15	44	40	1
ILL	0	1	32	62	5
IND	0	6	24	61	9
IOWA	0	1	9	70	20
KANS	0	0	6	27	67
KY	3	30	48	19	0
LA	0	7	36	53	4
MICH	1	9	25	45	20
MINN	0	0	20	62	18
MISS	0	17	71	11	1
MO	5	6	40	46	3
NEBR	0	0	21	71	8
N C	3	11	57	26	3
OHIO	2	8	29	51	10
S C	0	10	46	44	0
S DAK	0	1	7	72	20
TENN	8	18	51	16	7

COTTON

STATE	VP	P	F	G	EX
ALA	3	10	62	25	0
ARIZ	0	0	0	90	10
CALIF	0	0	0	35	65
GA	0	1	36	61	2
LA	0	0	20	80	0
MISS	0	4	45	51	0
MO	0	0	15	77	8
N MEX	0	0	33	67	0
N C	0	16	47	32	5
OKLA	0	0	10	90	0
S C	3	13	84	0	0
TENN	0	5	35	48	12
TEX	0	2	18	66	14

CORN

STATE	VP	P	F	G	EX
COLO	0	1	18	62	19
GA	0	5	32	57	6
ILL	0	2	19	62	17
IND	0	1	12	66	21
IOWA	0	1	10	63	26
KANS	0	0	14	33	53
KY	0	6	21	62	11
MICH	2	13	30	40	15
MINN	1	1	19	59	20
MO	0	1	25	63	11
NEBR	0	1	9	68	22
N C	13	45	30	10	2
OHIO	2	6	22	57	13
PA	4	11	20	37	28
S DAK	0	3	15	68	14
TEX	0	5	18	55	22
WISC	0	0	8	52	40

RICE

STATE	VP	P	F	G	EX
ARK	0	7	16	77	0
CALIF	0	0	0	80	20
MISS	0	16	24	60	0

GRAIN SORGHUM

STATE	VP	P	F	G	EX
ARK	0	7	21	72	0
ILL	0	0	23	68	9
KANS	0	6	5	44	45
MISS	0	3	61	36	0
MO	0	1	28	67	4
NEBR	0	0	5	76	19
OKLA	0	1	4	92	3
S DAK	0	0	9	86	5
TEX	0	2	15	58	25

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

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall totals mostly 1.00 in.; local areas 4.00 to 5.00 in. Temperatures averaged 1° above normal.

Days suitable for fieldwork 6.0. Soil moisture 75% short, 25% adequate. Scattered showers helped north, southwest; more moisture needed. Corn 66% harvested, 69% 1986, 64% avg. Sorghum 38% harvested, 40% 1986, 39% avg.; 12% poor, 63% fair, 25% good. Cotton 67% bolls opened, 60% 1986, 51% avg.; 10% harvested, 1% 1986, 1% avg.; 3% very poor, 10% poor, 62% fair, 25% good. Soybeans 92% setting pods, 97% 1986, 96% avg.; 32% turning color, 29% 1986, 26% avg.; 18% dropping leaves, 13% 1986, 11% avg.; 5% very poor, 26% poor, 48% fair, 21% good. Peanuts 13% dug, 9% 1986, 19% avg.; 8% combined, 3% 1986, 11% avg.; 23% poor, 54% fair, 23% good. Wheat 5% seeded, 3% 1986. Pastures mostly poor to fair; livestock fair to good. Primary activities: Harvesting corn, hay, sorghum, cotton, peanuts, vegetables; defoliating cotton; preparing land, seeding small grain crops; applying fungicides to peanuts; routine care of livestock, poultry.

**ALASKA:** Colder than normal temperatures, rain general all areas. Temperature lows near normal to 5° cooler than normal. Highs 4 to 15° colder than normal. Seasonal precipitation 3.00 in. drier than normal to 3.00 in. wetter than normal.

Days suitable for making hay or harvesting grain 2.0. Topsoil moisture 5% short, 84% adequate, 11% surplus. Subsoil moisture 10% short, 85% adequate, 5% surplus. Barley for grain 65% harvested, 80% 1986. Second cutting hay 60%. Hardy vegetable harvest continued. Commercial potatoes 20% harvested, under adverse conditions.

**ARIZONA:** Monsoon season ended. Winds shifted west, bringing drier air from Pacific. Sunny warm days, clear cool nights through 9th. Weak disturbance brought partly cloudy skies 10th, no rain. Daytime highs 80s high country to 100s lower deserts.

Cotton harvest continued; quality, yields good. Insect populations light west, except whiteflies Yuma County. Some picked fields plowed under. Defoliation active; limited irrigation continued. Boll weevil, spider mite controls applied central. Alfalfa renovation moderate to light west; some new fields seeded. Cutting continued, quality improved as temperatures fell. Sorghum generally good. Aphid populations high Yuma County. Lemon harvest active west, growers taking advantage strong early season markets. Picking expected central valley soon; quality good. Stand establishment lettuce, cauliflower, broccoli progressed satisfactorily west; growing conditions good as morning temperatures subsided, soil temperatures fell. Lettuce thinned west, southeast. Celery planted Yuma County. Green chile harvest continued southeast. Greens, green onions shipped central valley. Golden, red delicious apples harvested southeast. Pistachio harvest to begin shortly. Cantaloup, honeydew shipments continued at seasonal levels Aguila; movement central valley expected later in month. Fall melon crop La Paz County good.

**ARKANSAS:** Temperatures near to slightly below normal. Scattered showers, thunderstorms. Temperature extremes 53°; 98°. Rainfall normal to 3.65 in.

Days suitable for fieldwork 6.0. Soil moisture 81% short, 19% adequate. Major farming activities: Harvesting sorghum, rice, corn, cotton; irrigating soybeans; applying cotton defoliant; baling hay; fertilizing pastures; preparing fall seedbeds; tending livestock. Harvested cotton good yields. Sorghum 80% harvested, 75% 1986, 49% avg.; good yields. Blast affected rice yields southern counties. Drought stress still problem in soybeans. Pastures supplying below average feed for livestock; hay being fed. Livestock mostly good.

**CALIFORNIA:** Low pressure system dominated weather except during midweek when high pressure ridge moved over State. This resulted in warmer temperatures 9th, 10th. However, average temperatures cooler than normal for most stations. No precipitation.

Cool weather slowed crop maturity. Rice harvest earliest fields. Many drained, drying for harvest. Cotton harvest southern areas gained momentum. Yields, quality above normal. Most central valley fields final irrigation. Growth regulators, defoliant applications begun, preparation for harvest. Harvest good progress, corn grain and silage, sugarbeets, safflower, alfalfa seed, dry edible beans, sunflowers, alfalfa hay, green-chop. Apple, avocado harvests continued. Soft date harvest Coachella Valley. Wine grapes for crushing, raisin and table grapes harvested. Peach, plum, prune, nectarine harvests neared completion. Pomegranate, fig harvests full swing. Hachiya persimmons sizing normally, began to color. Navel oranges showed large size. Valencia orange harvest some aging defects caused heavy grade out. Desert lemon, summer grapefruit harvests Riverside County. Almonds harvested central valley. Walnut harvest began; large crop, small nut sizes. Most vegetables reduced due to Holiday. Artichokes moderate, good quality Salinas. Broccoli moderate both Salinas, Santa Maria, good quality. Fall plantings Westside. Carrot moderate Salinas, good quality. Production Kern-Tulare light but will pick up by end of September. Cauliflower moderate both Salinas, Santa Maria, good quality. Celery moderate both Salinas-Watsonville, Santa Maria-Oceano, good quality. Sweet corn shipments continued Westside. Cucumber packing active Westside. Lettuce fairly heavy Salinas; moderate Santa Maria; variable weight, quality. Fall plantings Westside. Watermelon, cantaloup, honeydew, mixed melon harvests active statewide. Watermelon neared completion Sacramento Valley, continued desert. Cantaloup active Firebaugh District. Pepper moderate Salinas, active central valley, good quality. Summer potato digging continued Hemet-San Jacinto. Fall potatoes Tulalake-Butte Valley, Hemet-San Jacinto good condition. Most completed irrigation. Early varieties being dug, good yields expected. Sweetpotatoes harvested Selma District, Merced-Atwater. Tomatoes for processing, fresh market full production good quality statewide. Harvest winding down Westside. Huron District complete; harvesting active Firebaugh District. Fires continued plague State. Livestock being moved from summer grazing districts earlier than normal due to extreme dry conditions, high fire hazard. Stockwater supplies extremely low most areas. Sheep grazing harvested fields San Joaquin Valley. Fall calving continued.

**COLORADO:** Temperatures 1 to 5° below normal. Showers eastern plains throughout week. Mostly dry

mountains, west slope. Precipitation none to 1.54 in.

Days suitable for fieldwork 5.8. Soil moisture adequate. Corn, small grains good. Oats 78% harvested; barley 95% harvested; spring wheat 47% harvested. Dry beans 41% cut, 22% threshed. Fall potatoes 5% harvested. Dry onions 24% harvested. Livestock good, pastures fair to good.

**FLORIDA:** Scattered showers, thunderstorms, sunshine, cloudiness occurred in checker board fashion over State. Temperatures lingered near normal.

Soil moisture adequate most areas; short few localities. Harvesting corn, hay, peanuts active. Cotton, soybeans, sugarcane good progress. Most pastures good to excellent; few central Peninsula fair. Cattle generally good. Citrus trees very good. Surface moisture adequate. Much new foliage. New crop early oranges progressed well. Grapefruit harvest expected soon. Caretakers continued spraying, cultivating. Typical weather over vegetable producing areas. Planting, related activities increased southern areas. Tomato plantings Ruskin area completed.

**GEORGIA:** Rain most areas; 1.00 to 3.00 in. common, few areas less than 0.50 in. Temperatures 1 to 3° above normal. Warmest 90° north to 95° elsewhere. Coolest 60s, except 50s mountains, low 70s near coast.

Days suitable for fieldwork 5.2. Soil moisture 11% very short, 48% short, 35% adequate, 6% surplus. Cotton defoliation active, insect control also active. Sorghum grain 5% poor, 37% fair, 55% good, 3% excellent; 29% harvested. Peanuts 4% poor, 48% fair, 44% good, 4% excellent; 22% dug, 6% 1986, 29% avg.; 10% threshed, 2% 1986, 17% avg. Damp, humid weather caused some white mold problems, insect pressure heavy some areas. Soybeans heavy insect pressure many areas. Tobacco 16% poor, 24% fair, 59% good, 1% excellent; 96% harvested, 96% 1986, 98% avg. Rye 1% planted, 3% 1986, 2% avg. Other small grains 1% planted, 1% 1986, 1% avg. Apples 4% poor, 4% fair, 89% good, 3% excellent; 43% harvested, 63% 1986, 71% avg. Pecans 2% poor, 25% fair, 69% good, 4% excellent. Rains good; mites, aphids, weevils caused problems. Pasture 3% very poor, 12% poor, 39% fair, 41% good, 5% excellent. Pastures most of north area need more rain to improve condition. Hay 25% poor, 37% fair, 36% good, 2% excellent. Harvest active between showers. Cattle 23% fair, 74% good, 3% excellent. Hogs 13% fair, 79% good, 8% excellent.

**HAWAII:** Passing shower areas produced light to heavy rainfall. Crops benefited from rainfall, generally cooler conditions due to increased cloudiness. Temperatures climbed into low 90s, but no new records. Irrigation, pesticide spraying heavy. Water restriction continued in one major vegetable growing region. Crops fair to good. Temperatures mid 70s to low 90s. Trade winds 10 to 25 mph. Rainfall ranged none to 7.70 in.

Days suitable for fieldwork 7.0. Banana production seasonally high. Papaya production on decline. Chinese, head cabbage production moderate, adversely affected by heat. Head lettuce output light, some improvement. Watermelon output heavy, quality good.

**IDAHO:** Temperatures near normal to 6° above over north, southwest, south central. Near normal to 3° below normal east. Precipitation below normal statewide.

Days suitable for fieldwork 7.0. Spring wheat 93% harvested, 87% 1986, 86% avg. Spring barley 93% harvested, 87% 1986, 83% avg. Dry beans 39% harvested, 35% 1986, 28% avg. Oats 90% harvested. Potatoes good to excellent, 81% vines dying or killed. Potatoes 15% harvested, 6% 1986, 8% avg.

Onions 40% harvested, 37% 1986. Third cutting alfalfa hay 50%. Apple harvest started. Peaches 94% harvested. Field preparation for fall crops underway. Winter wheat 13% seeded, 28% 1986, 15% avg. Livestock good. Range, pasture providing limited grazing. Irrigation supplies low some areas.

**ILLINOIS:** Temperatures averaged 1 to 2° below normal northern rural areas, 2 to 4° above normal south. Precipitation little to none, average 0.10 to 0.25 in., although few areas south 1.00 in.

Days suitable for fieldwork 6.3. Soil moisture 58% short, 39% adequate, 3% surplus. Soybeans 84% turning yellow, 82% 1986, 69% avg. Alfalfa hay 3rd crop 90% cut, 86% 1986, 91% avg.; 1% very poor, 6% poor, 18% fair, 62% good, 13% excellent. Pasture 4% very poor, 16% poor, 30% fair, 40% good, 10% excellent.

**INDIANA:** Temperatures above average. Lows 40s, highs 90s. Precipitation widespread, averaged 0.25 to 0.50 in. north, 0.10 to 0.50 in. south.

Days suitable for fieldwork 6.0. Topsoil moisture 55% short, 45% adequate. Subsoil moisture 53% short, 47% adequate. Corn mostly good to excellent. Soybeans mostly good. Soybeans 98% turning yellow, 79% 1986, 61% avg. Tobacco 86% harvested, 82% 1986, 40% avg. Wheatland 38% plowed, 32% 1986, 32% avg. Rye 11% seeded, 4% 1986, 5% avg. Silos 85% filled, 64% 1986, 35% avg. Pastures 7% very poor, 23% poor, 44% fair, 25% good, 1% excellent.

**IOWA:** Cool week. Temperatures 1 to 3° below normal. Iowa City 84° 7th, Marshalltown 40° 9th. Precipitation spotty with few thunderstorms less than 0.50 in. rain.

Days suitable for fieldwork 5.1. Topsoil moisture 2% short, 88% adequate, 10% surplus; subsoil moisture 10% short, 83% adequate, 7% surplus. Hay mostly good. Soybeans 80% leaves turning, 61% 1986, 60% avg.; 25% mature, 9% 1986, 12% avg. Livestock mostly good, good gains. Pasture 2% poor, 16% fair, 58% good, 4% excellent.

**KANSAS:** Days suitable for fieldwork 5.0. Soil moisture 28% short, 68% adequate, 4% surplus. Crops excellent progress corn, sorghum, soybeans neared maturity, harvest underway. Corn harvest most active east, south central. Harvest active southwest, mostly silage, high moisture grain for feedlots. Sorghum harvest active mostly eastern counties. Corn earworm, webworm activity seen southeast, control measures necessary some fields. Soybean harvest very early stages. Some corn earworm activity noted southeastern counties. Wheat seeding excellent progress, some emergence noted. Pastures furnish fair grazing but heavy culling underway, feedlots filling up. Alfalfa hay 3rd cutting winding down, 4th cutting excellent progress.

**KENTUCKY:** Temperatures averaged 2 to 4° above normal. Extremes upper 80s to middle 90s occurred mainly first half of week. Precipitation amounts varied widely. South central areas received greatest amounts averaging about 2.25 in.

Days suitable for fieldwork 5.4. Soil moisture 72% very short, 23% short, 5% adequate. Early corn yields good to excellent. Late corn suffered from dry conditions. Soybeans continued to fall, pods dropping. Burley tobacco 90% cut, 70% 1986, 65% avg. Housed tobacco fair to good. Pastures 27% very poor, 42% poor, 25% fair, 6% good. Hay feeding continued.

**LOUISIANA:** Temperature 1 to 2° above normal. Temperature extremes 62°, 98°. Rainfall averaged 0.14 to 2.39 in.

Days suitable for fieldwork 6.0. Soil moisture 61% short, 36% adequate, 3% surplus. Corn 92% harvested, 98% 1986, 89% avg. Rice 94% ripe, 98% 1986, 89% avg. Soybeans 100% setting pods, 98% 1986, 98% avg.; 40% turning color, 44% 1986, 34% avg. Hay final cutting 74%, 78% 1986, 65% avg. Sweetpotatoes good; 60% harvested, 58% 1986, 50% avg. Sugarcane good; 59% planted, 70% 1986, 36% avg. Livestock good; pastures fair to good; vegetables fair. Main activities: Harvesting corn, cotton, rice, sorghum, sweetpotatoes, vegetables; baling hay; planting sugarcane, fall vegetables; preparing winter pastures.

**MARYLAND & DELAWARE:** Maryland: Average temperature 72°, normal 69°. Precipitation averaged 2.24 in.

Days suitable for fieldwork 3.5. Topsoil moisture adequate. Subsoil moisture short to adequate. Corn fair; 85% dent, 85% avg.; 60% mature, 45% avg. Corn for grain 20% harvested, 10% avg. Soybeans poor to fair, mostly fair. Soybeans 85% set pods, 90% avg.; 30% turning color, 15% avg. Tobacco fair; 70% harvested. Apples good; 25% harvested, 25% avg. Tomatoes 95% harvested, 95% avg.

**Delaware:** Temperatures averaged 75°, normal 70°. Precipitation averaged 1.41 in.

Days suitable for fieldwork 4.8. Topsoil moisture short to adequate, mostly adequate. Subsoil moisture short to adequate, mostly short. Soybeans fair to good; 40% turning color, 30% avg. Corn poor to fair; 80% mature, 80% avg.; 25% harvested, 15% avg.

**MICHIGAN:** Temperatures ranged 2 to 8° above normal. Temperature extremes 41°; 86°. Precipitation ranged from 0.03 to 3.63 in. across State.

Days suitable for fieldwork 5.0. Soil moisture 10% short, 75% adequate, 15% surplus. Corn 97% dent, 60% 1986, 70% avg.; 45% mature, 10% 1986, 20% avg.; 2% very poor, 13% poor, 30% fair, 40% good, 15% excellent. Soybeans 50% shedding, 20% 1986, 25% avg.; 1% harvested, none 1986, none avg.; 1% very poor, 9% poor, 25% fair, 45% good, 20% excellent. Dry beans 65% shedding, 60% 1986, 70% avg.; 5% very poor, 25% poor, 40% fair, 25% good, 5% excellent. Winter wheat 3% planted, 1% 1986, 1% avg. Major activities: Making hay, harvesting corn for grain and silage, fertilizing wheat ground, maintaining set aside land, harvesting apples, grapes. Vegetable harvest active. Quality excellent.

**MINNESOTA:** Temperatures averaged 2° below normal to 2° above normal. Temperature extremes 31°; 85°. Precipitation totals averaged 0.13 to 0.25 in. above normal south central, southwest and near normal to 0.30 in. below normal elsewhere. Precipitation totals averaged 0.28 to 0.94 in. for State. Greatest weekly total 1.56 in.

Field corn 76% mature, 15% 1986, 17% avg.; 2% picked or combined, none 1986, none avg. Soybeans 93% dropping leaves, 19% 1986, 20% avg.; 31% mature, 3% 1986, 3% avg.; 4% combined, none 1986, none avg. Sugarbeets 5% harvested, 2% 1986, 3% avg. Potatoes 34% harvested, 17% 1986, 20% avg. Flax 89% harvested, 33% 1986, 48% avg. Dry beans 58% harvested, 20% 1986, 21% avg. Sweet corn 99% harvested, 78% 1986, 80% avg. Winter wheat 82% planted, 50% 1986, 54% avg. Rye 82% planted, 48% 1986, 52% avg.

**MISSISSIPPI:** Temperatures 1 to 5° below normal; extremes 58°; 97°. Scattered thunderstorms produced rainfall amounts generally between 1.00 to 2.00 in. Greatest 24-hour rainfall 2.18 in.

Days suitable for fieldwork 6.3, 5.7 1986, 5.4 avg. Soil moisture 20% very short, 65% short, 15% adequate. Corn 100% dented, 100% 1986; 97% mature, 100% 1986, 91% avg.; 71% harvested, 79% 1986, 45%

avg.; 3% poor, 21% fair, 67% good, 9% excellent. Hay 87% harvested, 88% 1986, 86% avg. Sorghum silage 93% harvested, 95% 1986, 79% avg. Watermelons 99% harvested, 100% 1986. Peanuts 56% harvested, 61% 1986, 44% avg. Sweetpotatoes 37% harvested, 51% 1986, 31% avg. Corn silage 95% harvested, 100% 1986, 90% avg. Wheat 6% planted, 3% 1986. Soybeans 99% blooming, 100% 1986; 87% podding, 94% 1986, 95% avg.; 40% coloring, 50% 1986; 15% shedding, 36% 1986, 16% avg.; 2% mature, 13% 1986; 1% harvested, 1% 1986; 17% poor, 71% fair, 11% good, 1% excellent. Sorghum 100% heading, 100% 1986; 99% coloring, 100% 1986; 88% mature, 98% 1986, 86% avg.; 81% harvested, 71% 1986, 42% avg.; 3% poor, 61% fair, 36% good. Rice 100% heading, 100% 1986, 99% avg.; 92% mature, 100% 1986; 48% harvested, 68% 1986, 29% avg.; 16% poor, 24% fair, 60% good. Cotton 92% open bolls, 100% 1986, 73% avg.; 11% harvested, 20% 1986, 5% avg.; 4% poor, 45% fair, 51% good.

**MISSOURI:** Temperatures averaged 3° below normal southwest to 3° above normal southeast. Rain up to 1.00 in. parts of northwest and central, 0.50 in. elsewhere except bootheel 0.10.

Days suitable for fieldwork 5.2. Topsoil moisture 37% short, 57% adequate, 6% surplus. East central, south central, southeastern areas very dry. Pastures 2% very poor, 17% poor, 41% fair, 39% good, 1% excellent.

**MONTANA:** Temperatures averaged 5° above normal west, near normal central and 2 to 4° below normal east. Rainfall scarce past week.

Days suitable for fieldwork 6.0. Topsoil moisture 15% short, 85% adequate. Subsoil moisture 12% short, 88% adequate. Barley 86% harvested, 82% 1986, 90% avg. Oats 86% harvested, 88% 1986, 93% avg. Second cutting alfalfa 89%, 86% 1986, 88% avg. Sugarbeets 3% harvested, none 1986, none avg. Corn silage 15% harvested, 31% 1986, 28% avg. Dry beans 16% harvested, 35% 1986, 36% avg. Cattle, calves moved from summer ranges 15%, 23% 1986, 32% avg. Sheep, lambs moved 18%, 31% 1986, 36% avg.

**NEBRASKA:** Precipitation midweek averaged 0.50 in., isolated amounts up to 1.00 in. Temperatures averaged 4° below normal. Extremes 29°; 84°.

Days suitable for fieldwork 4.7. Topsoil moisture 18% short, 58% adequate, 24% surplus. Subsoil moisture 20% short, 75% adequate, 5% surplus. Crop maturity remained ahead of normal. Limited row crop harvest continued. Spider mite, corn borer damage evident in brown spot, stalk damage as crop matures. Dry beans, potato, seed corn, silage harvests continued. Third cut alfalfa 93%, 83% 1986, 84% avg. Poor drying conditions slow harvest. Storage facilities, harvest machinery preparation continued. Calves weaned, yearlings sold, pasture feeds adequate.

**NEVADA:** Mostly sunny skies, continued warm temperatures early. Some isolated thunderstorms central areas but precipitation evaporated before reaching ground. Low pressure system end of period produced additional thunderstorms but rainfall amounts light, spotty. Average temperatures continued 2 to 5° above normal.

Potato digging operations full swing main producing areas. Alfalfa seed combining neared completion earlier areas. Dry range conditions forced more cattle off high elevation areas. Some contracting calves. Prices relatively good.

**NEW ENGLAND:** Temperatures averaged above normal ranging from low 60s near Canadian Border to near 70° southern coast. Precipitation averaged 2.00 to 3.00 in. Vermont, New Hampshire, western Massachusetts, 1.00 to 2.00 in. remainder.

Days suitable for fieldwork 5.0. Soil moisture 15% short, 60% adequate, 25% surplus. Grazing

availability 31% short, 63% adequate, 6% surplus. Fieldwork progress 3.0 days ahead. Maine potatoes 18% harvested, 5% 1986, 6% avg.; good to excellent. Maine oats excellent; 30% harvested, 49% 1986, 45% avg. Field corn 15% harvested, 11% 1986, 10% avg.; fair to good. Sweet corn 86% picked, 87% 1986, 84% avg.; fair to good south, good to excellent north. Shade tobacco good with harvest complete. Outdoor tobacco excellent, harvest complete. Second crop hay 89% cut, 85% 1986, 93% avg.; fair to good south, good to excellent north. Third crop hay 45% harvested, 41% 1986, 55% avg.; poor to fair south, good to excellent north. Apples 17% picked, 14% 1986, 15% avg.; fair to good, size small to medium, color fair to good. Maine blueberry harvest complete. Cranberry size small to average, color very good. Major farm activities: Haying, harvesting fruits and vegetables, repairing, servicing machinery.

**NEW JERSEY:** Temperatures averaged above normal. Extremes 51°; 88°. Rainfall averaged 3.88 in. north, 1.28 in. central, 1.09 in. south. Heaviest 24-hour total 2.70 in. on 13th, 14th. Estimated soil moisture percent field capacity averaged 97% north, 71% central, 46% south. Four inch soil temperatures averaged 68° north, 70° central 72° south.

Fall vegetable growth good under favorable temperatures, adequate soil moisture. Harvest of summer crops continued to wind down. Fall apple picking general. Peach harvest clean-up stage. Irish potato digging advanced as ground conditions permitted. Sweetpotato harvest general. Corn silage making active. Early soybeans, corn for grain started to color. Preparations, planting of fall sown grains and cover crops active. Pasture growth good.

**NEW MEXICO:** Temperatures over State ranged from 32° Quemado to 97° Carlsbad; slightly below normal north central mountains, northeast. Rainfall greatest over northeast; many other stations had showers, thundershowers.

Days suitable for fieldwork 5.9. Soil moisture 14% short, 57% adequate, 29% surplus. Some severe localized hail damage. Cotton 33% fair, 67% good; warmer temperatures still needed to encourage growth. Barley 50% fair, 50% good; planting continued; irrigated, dryland wheat good to excellent; planting continued High Plains area. Grain sorghum 17% fair, 66% good, 17% excellent. Corn 40% fair, 60% good. Pecans 100% good. Lettuce 100% good; cool nights favorable. Potato harvest continued; price reports unfavorable to growers. Chile harvest heavy. Cattle 29% fair, 71% good; sheep 20% fair, 80% good; ranges 57% fair, 29% good, 14% excellent.

**NEW YORK:** Temperatures above normal. Rainfall substantial, over 3.00 in. many areas. Rain delayed harvest.

Days suitable for fieldwork 4.5. Soil moisture adequate to surplus. Oat harvest virtually complete. Third cut alfalfa 51%, 31% 1986, 47% avg. Potatoes 33% harvested, dry bean harvest just underway. Pastures, hay good. Corn excellent. McIntosh apple harvest at peak. Peach harvest winding down.

**NORTH CAROLINA:** Temperatures averaged 1 to 6° above normal. Temperature extremes 54°; 93°. Precipitation ranged from 1.12 to 7.51 in. across State. Rains locally heavy.

Days suitable for fieldwork 3.6. Soil moisture 3% short, 72% adequate, 25% surplus. Pasture 3% very poor, 22% poor, 43% fair, 30% good, 2% excellent. Tobacco 15% poor, 53% fair, 32% good. Flue-cured tobacco 71% harvested, 66% 1986, 83% avg. Burley tobacco 58% harvested, 49% 1986, 47% avg. Peanuts 4% very poor, 9% poor, 41% fair, 46%

good. Hay 3% very poor, 25% poor, 47% fair, 25% good. Sweetpotatoes 4% poor, 43% fair, 39% good, 14% excellent. Sweetpotatoes 13% harvested, 9% 1986, 12% avg. Corn for silage 79% harvested, 75% 1986, 72% avg. Apples mostly fair to mostly good. Apples 33% harvested, 30% 1986, 37% avg. Major farm activities: Tobacco related spraying, irrigation, harvesting, curing, marketing; harvesting hay, vegetables, apples, corn silage, corn grain, sweetpotatoes; spraying soybeans, peanuts; Christmas tree tagging; tending livestock; preparing equipment for fall plantings; general farm maintenance.

**NORTH DAKOTA:** Temperatures averaged 2 to 5° below normal. Extremes 28° west central; 83° north central. Scattered showers, precipitation heaviest south central 0.50 in.

Days suitable for fieldwork 6.1. Topsoil moisture above normal; 2% very short, 30% short, 68% adequate. Subsoil moisture well above normal; 2% very short, 19% short, 79% adequate. Small grain harvest nearly complete. Spring wheat 98% combined, 85% 1986, 91% avg.; durum wheat 96% combined, 78% 1986, 85% avg. Most late season crops ahead of normal development. Sunflower 32% bracts brown and beyond, 22% 1986, 23% avg.; soybeans 63% mature and beyond, 43% 1986, 37% avg.; corn 15% ripe, 7% 1986, 13% avg.; corn silage 28% cut, 24% 1986, 31% avg.; potatoes 52% dug, 33% 1986, 21% avg.; flax 42% combined, 15% 1986, 43% avg.; dry beans 32% combined, 16% 1986, 25% avg.; sugarbeets 8% lifted, 5% 1986, 3% avg. Fall planting of winter wheat, rye ahead of normal pace. Pastures mostly fair.

**OHIO:** Average high temperatures upper 70s to low 80s; average lows upper 50s to low 60s. Average 5 to 8° above normal. Extremes 50°; 90°. Precipitation less than 0.50 in. north, central; over 1.00 in. south.

Days suitable for fieldwork 6.1. Soil moisture 48% short, 49% adequate, 3% surplus. Corn harvest advanced slowly; grain moisture content 18 to 24%. Soybean harvest continued; some west central fields sprayed to control bean leaf beetle. Southern area pastures very bad; statewide pasture, hay fair to good. Peach harvest ending northwest. Fall apple, grape harvests continued.

**OKLAHOMA:** Temperatures averaged 2° below normal southwest to 5° below normal central. Precipitation averaged 0.42 in. Panhandle to 1.12 in. southeast.

Days suitable for fieldwork 5.6. Topsoil moisture 20% short, 65% adequate, 15% surplus. Subsoil moisture 9% short, 91% adequate. Wheat 20% planted, 15% 1986, 10% avg.; 5% emerged. Sorghum 1% poor, 4% fair, 92% good, 3% excellent; 85% coloring, 95% 1986, 85% avg.; 10% mature, 30% 1986, 30% avg.; 3% harvested, 3% 1986, 5% avg. Cotton 10% fair, 90% good; 10% open bolls, 5% 1986, 15% avg.; none harvested, none 1986, none avg. Cotton requires warmer daytime temperatures for boll maturity. Pastures, cattle good. Marketings average, prices higher.

**OREGON:** Coastal temperatures 1 to 2° below normal. Interior valley temperatures 1 to 4° above normal. East of Cascades, north, south central 7° above normal, while northeast 3° above normal. Only precipitation along coastline, Willamette Valley, north cascades.

Soil moisture 79% short, 21% adequate. Field preparation activities underway statewide. Red clover seed, hop, mint harvests winding down, mid Willamette Valley. Last of alfalfa baled Douglas County. Corn silage harvest began, alfalfa seed harvest last stages, southeastern areas. Most winter rapeseed fields drilled Pendleton area. Most fruit harvests complete. Apple harvest began

Gallium, Benton Counties. Apple picking continued Hood River, Milton-Freewater areas. Winter pears picked Medford area. Prune harvest complete Douglas County. Vegetable harvest continued with excellent harvest conditions Willamette Valley. Irrigated fields yielding above average. Western growers continued harvest of sweet corn, completed spring onion harvest, finished sowing overwintering onions. Onion, potato harvest continued Hermiston area. Klamath County early potatoes dug; crop smooth, good quality. Southwest potato harvest began, dry bean harvest continued. Livestock fair to good. Range, pasture poor to fair. Pastures very dry except where irrigated. Some hay being fed Willamette Valley. Shipping yearling cattle continued Klamath County.

**PENNSYLVANIA:** Week mild, very wet. Average temperature 67° 2° above normal. Temperature extremes 39°; 86°. Average precipitation 3.19 in., 2.34 in. above normal.

Days suitable for fieldwork 3.0. Soil moisture 5% short, 62% adequate, 33% surplus. Corn 74% dent, 78% 1986, 62% avg.; 25% mature, 22% 1986, 10% avg.; 2% harvested. Corn 4% very poor, 11% poor, 20% fair, 37% good, 28% excellent. Ensilage corn 33% harvested, 34% 1986, 22% avg. Soybeans 2% very poor, 8% poor, 25% fair, 40% good, 25% excellent. Potatoes 48% harvested, 74% 1986. Tobacco 76% harvested, 80% 1986. Third cutting alfalfa 63%, 86% 1986. Fourth cutting alfalfa 26%, 27% 1986. Second cutting clover-timothy 91%, 96% 1986. Quality of hay during week poor to fair. Apple 36% harvested, 48% 1986. Peaches 90% harvested, 95% 1986. Fall plowing 42%, 58% 1986. Winter wheat 26% planted, 28% 1986. Barley 30% planted, 23% 1986. Activities: Harvesting hay, haylage, corn for grain and silage, fruit, potatoes, other vegetables; tobacco; fall plowing; seeding alfalfa, wheat, barley; clipping pastures, machinery maintenance, caring for livestock.

**PUERTO RICO:** Island average rainfall 0.88 in., 0.96 in. below normal. Highest weekly total rainfall 3.18 in. Pico Del Este-Luquillo, 2.95 in. Toa Baja, 2.79 in. Mayaguez. Highest 24-hour total 1.40 in. Pico Del Este-Luquillo. San Juan mean temperature 84° 2° above normal. Total rainfall 0.40 in., 1.00 below normal. Divisional temperature averaged about 82 to 83° on coasts, 73 to 78° interior. Mean station temperature 69° Pico Del Este-Luquillo to 85° Roosevelt Roads. Lowest minimum temperature 59° San Sebastian. Highest maximum temperature 96° Mayaguez.

**SOUTH CAROLINA:** Temperatures seasonal, normal. Rainfall excess of 5.00 in., first substantial rain since June.

Days suitable for fieldwork 3.4. Soil moisture 5% very short, 8% short, 63% adequate, 24% surplus. Cotton 57% open bolls, 67% 1986, 67% avg.; 1% harvested, 2% 1986; 3% very poor, 13% poor, 84% fair. Soybeans 100% blooming; 85% setting pods, 76% 1986, 87% avg.; 9% leaves turning, 9% 1986, 9% avg.; 2% leaves shedding, 3% 1986, 2% avg.; 10% poor, 46% fair, 44% good. Tobacco fair to good; 95% harvested, 93% 1986, 95% avg.; 37% stalks cut, 32% 1986, 36% avg. Corn fair to good; 52% harvested, 66% 1986, 64% avg. Peanuts fair to good; 9% harvested, 1% 1986, 5% avg.

**SOUTH DAKOTA:** Average temperatures 7° below to 2° above normal. Extremes 28°; 87°. Black Hills low 28°.

Days suitable for fieldwork 5.7. Topsoil moisture improved from previous week 5% critically short, 63% short, 31% adequate, 1% surplus. Major activities: Cutting silage, fall seeding. Corn 6 days ahead of normal, soybeans 10 days ahead, sorghum 7 days ahead, sunflowers about normal.

**TENNESSEE:** Precipitation near normal west, below normal middle, above normal east. Temperatures above normal. Extremes 57; 93°.

Days suitable for fieldwork 5.7. Soil moisture 40% very short, 48% short, 12% adequate. Corn 85% mature, 85% 1986, 70% avg. Corn silage 85% harvested, 75% 1986. Corn grain 30% harvested, 25% 1986, 13% avg. Burley 80% harvested, 60% 1986, 70% avg. Dark fired 75% harvested, 65% 1986, 60% avg. Dark air-cured 75% harvested, 60% 1986, 65% avg. Tobacco 3% very poor, 21% poor, 65% fair, 11% good. Cattle mostly fair. Pastures poor. Main activities: Harvesting; cotton defoliation; wheat, pasture seeding.

**TEXAS:** Weather generally unsettled after series of upper air disturbances, weak cold fronts moved across State. Thunderstorm activity focused Panhandle, High Plains; isolated widely scattered afternoon thunderstorms northern, south central, southeast. Far west, far south very little precipitation, remained under mostly fair skies. Precipitation totals much State below normal; above normal amounts High Plains, Rolling Plains. Temperatures below normal Panhandle, High Plains, north central because weak cool fronts. Otherwise, temperatures across State near, slightly above normal.

**Crops:** Producers trying to start corn harvest Plains; however, rain slowed beginning operations. Crop maturity slowed because cooler temperatures. Harvest winding down many eastern, central areas. Harvest progress varied Blacklands depending amount of rain. Corn 100% dented, 98% 1986, 99% avg. Grain sorghum harvest many northern areas slowed by rain. Most producers few insect problems. Harvest operations to begin High Plains as conditions dry out. Cool weather slowed crop maturity. Cotton need warmer, drier weather Plains to make good progress. Hail damage scattered over area. Insect problems Low Plains. Harvesting continued Blacklands between showers. Yields good. Bolls opening Trans-Pecos. Most harvest complete south, Coastal Bend. Small grain planting slowed by rain Plains; needed moisture benefit fields already seeded, increased soil moisture for planting. Early planted fields began to emerge. Some spraying for greenbugs underway. Fertilization continued many areas. Planting will increase as ground dries. Wheat 5% emerged, 4% 1986, 1% avg. Harvest 1st crop rice virtually complete. Fields kept for 2nd crop benefited from rain. Soybeans benefit from rains Plains, Upper Coast. Harvest early varieties Upper Coast delayed. Additional rain help later maturing beans. Peanuts excellent progress under recent moisture most northern, central areas. Rain well received central. Some blight scattered fields. Intermittent harvest continued south. Other field crops: Peanuts 6% harvested, 10% 1986, 6% avg. Soybeans 15% harvested, 13% 1986, 5% avg. Sunflowers 1% harvested, 3% 1986, 7% avg. Oats 9% planted, 6% 1986, 6% avg.

**Commercial Vegetables:** Rio Grande Valley cabbage, celery, tomatoes, peppers good progress. Land preparations onions underway. Planting carrots continued. San Antonio-Winter Garden planting cabbage, carrots, spinach continued. Land preparation underway for onions. East sweetpotato harvest continued. Rain still needed for improved production. High Plains harvest potatoes continued between showers. Carrot harvest slowed. Peppers good. Pecans continued to mature across State. Many problems occurred over State; average crop expected. Harvest to begin soon south, east.

**Range and Pasture:** Ranges, pastures had additional moisture many areas. Increased greening, growth resulted. Small grains pasture benefit from moisture. Livestock body condition remained good. Markets steady, prices good. Shearing operations continued Hill Country.

**UTAH:** Precipitation none to very light. Temperatures normal.

Days suitable fieldwork 6.6. Soil moisture 34% short, 66% adequate. Winter wheat 54% seeded, 59% 1986, 43% avg. Oats 93% harvested, 86% 1986, 78% avg. Alfalfa 3rd cutting 59%, 38% 1986, 37% avg. Corn 68% dented, 71% 1986, 39% avg.; corn silage 18% harvested, 5% 1986, 5% avg. Peach harvest almost completed. Apple, onion harvests continued. Dry bean, potato harvests underway. Livestock good to excellent.

**VIRGINIA:** Widespread heavy rain beginning period all areas except coast. Minor to major flooding. More scattered showers, thunderstorms end period. Rainfall totals 1.45 to 13.23 in. Temperatures averaged above normal, range 50 to 90°.

Days suitable for fieldwork 2.5. Topsoil moisture 14% short, 54% adequate, 32% surplus. Abrupt end to drought, some low lying crop land flooded. Rain too late to help most crops. Corn 76% mature, 66% 1986, 76% avg. Grain corn 32% harvested, 22% 1986, 26% avg. Silage 50% harvested, 40% 1986, 59% avg. Soybeans poor. Peanuts good. Sprayed peanuts to control disease. Flue-cured tobacco 50% harvested, 37% 1986, 68% avg. Fire-cured 66% harvested, 53% 1986, 79% avg. Burley 52% harvested, 26% 1986, 61% avg. Apples 30% harvested, normal pace. Sweetpotatoes 33% harvested, 38% 1986, 25% avg. Just beginning small grain seeding. Pastures improved but poor. Less demand on stored feed. Fall cattle sales started.

**WASHINGTON:** Hot, dry weather continued. Temperatures well above average statewide. Temperature extremes 42° Goldendale, 94° Omak. No measurable precipitation.

Days suitable for fieldwork 7.0. Soil moisture 70% short, 30% adequate. Winter wheat 38% planted, 37% 1986, 35% avg. Some growers waiting for additional moisture before planting. Alfalfa seed harvest continued Walla Walla County. Fourth cutting alfalfa hay in progress Grant County. Hop harvest winding down. Dry bean, corn silage harvest underway. Irrigation water shut off Kittitas County. Potato harvest continued Columbia Basin. Potato harvest 29%; quality excellent. Hot weather continued problem for apple growers, sunburned fruit some areas. Growers delaying harvest of red delicious apples until temperatures cool. Harvest of golden delicious, most other apple varieties full swing. Wine grape harvest continued. Concord grape harvest expected to begin this week. Winter pear, other late fruit harvest winding down. Berry growers irrigated strawberries, raspberries. Raspberry canning underway. Range, pastures 70% short, 30% adequate. Pastures west of Cascades dry, except those with irrigation. Fall

calving in progress. Hay, roughage supplies 70% adequate, 30% surplus. Vegetable growers busy bringing in late crops before fall frosts. Cannery corn harvest continued. Sweet corn yields Kittitas County below normal. Carrot harvest continued Columbia Basin. Onion harvest progressed well. Western area broccoli, cauliflower, leafy vegetable harvest continued.

**WEST VIRGINIA:** Average temperature 70°, 3 to 5° above normal. Extremes 46° Weston; 89° Ripley. Precipitation averaged 1.93 in. Heavy rain central, northeast. Extremes 0.36 in. Weston; 5.54 in. Romney.

Days suitable for fieldwork 4.0. Soil moisture 9% very short, 42% short, 49% adequate. Farm activities: General farm maintenance; harvesting hay, corn, tobacco; livestock care. Corn fair to poor. Hay, pasture very poor to fair. Tobacco poor to fair. Fruit mostly fair. Second cut hay 91% harvested; 85% 1986.

**WISCONSIN:** Temperatures averaged 64°, 2° above normal. Extremes 36°; 83°. Rainfall 0.30 to 0.80 in.

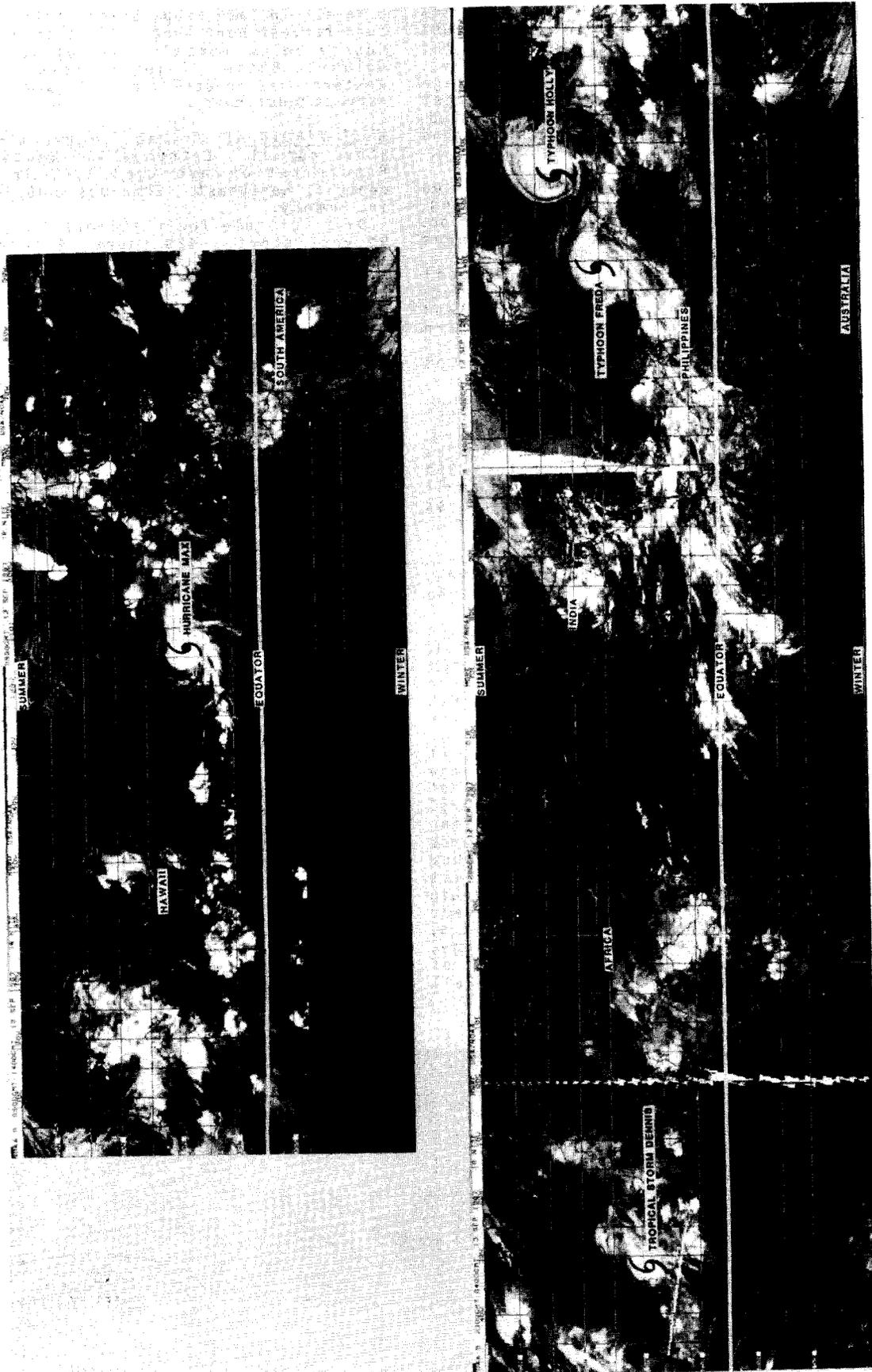
Days suitable for fieldwork 5.7. Soil moisture 32% short, 64% adequate, 4% surplus. Crops 1% poor, 12% fair, 74% good, 13% excellent. Corn 90% in dent, 72% 1986, 60% avg. Corn 57% mature, 24% 1986, 24% avg. Corn for grain 1% harvested, none 1986, none avg. Corn borer damage continued few locations south. Corn silo filling 24%, 8% 1986, 7% avg. Firm soils help machinery. Soybeans 66% leaves turned, 37% 1986, 45% avg. Soybean 22% leaves shed 22%, 9% 1986, 20% avg. Third crop hay 64% cut, 52% 1986, 45% avg. Fall plowing 7%, 4% 1986, 3% avg. Winter wheat being seeded. Tobacco curing nicely. Cranberries good color.

**WYOMING:** Temperatures below normal. Precipitation above normal northeast, north central, dryer than average elsewhere.

Days suitable for fieldwork 6.0. Topsoil moisture 68% short, 32% adequate. Barley 5% mature, 10% 1986; 95% harvested, 90% 1986, 85% avg. Spring wheat 5% mature, 10% 1986; 95% harvested, 90% 1986, 90% avg. Oats 10% mature, 15% 1986; 90% harvested, 85% 1986, 80% avg. Dry beans 100% turning color, 85% 1986, 75% avg.; 60% windrowed, 45% 1986, 50% avg.; 30% combined, 35% 1986, 35% avg. Corn 10% milk; 30% dough, 35% 1986, 30% avg.; 55% dented, 50% 1986, 55% avg.; 5% mature, 15% 1986, 10% avg. Corn silage 30% harvested, 30% 1986, 30% avg. Potatoes 10% harvested, 10% 1986, 20% avg. Winter wheat 35% planted, 55% 1986, 60% avg.; 10% emerged, 20% 1986, 30% avg. Winter hay supplies adequate. Hay for sale good quality. Livestock good.

# Global Weather Satellite Image

September 12, 1987



# International Weather and Crop Summary

September 6-12, 1987

**HIGHLIGHTS:**

**UNITED STATES** ... Scattered to moderate precipitation across the eastern half of the Nation benefits late planted crops. Cooler temperatures slow crop development slightly throughout the Great Plains.

**U.S.S.R.** ... In Western U.S.S.R., dry weather helps fieldwork in the south. In the New Lands, wet weather delays harvest in the northern Urals.

**EUROPE** ... Periodic showers continue to delay harvesting and lower quality of mature grains in northern and central areas. Warm, mostly dry weather favors fall tillage in the south.

**SOUTH ASIA** ... Dry weather covers India's western half, stressing reproductive to filling summer crops. Showers in north-central India boost irrigation reserves for heading rice and crop planting but cause local flooding.

**SOUTHEAST ASIA** ... Heavy showers flood some grain areas of Thailand and the Philippines.

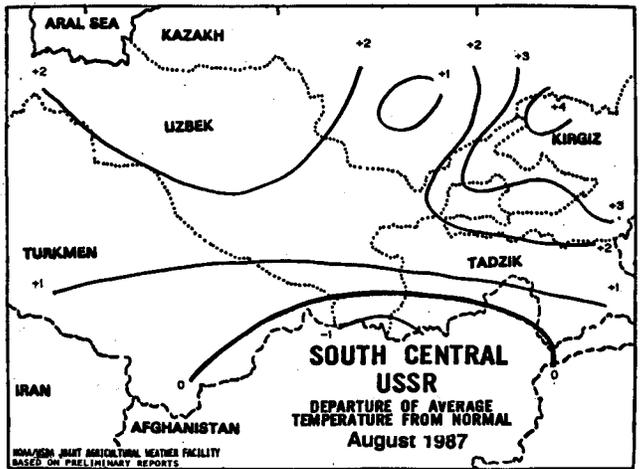
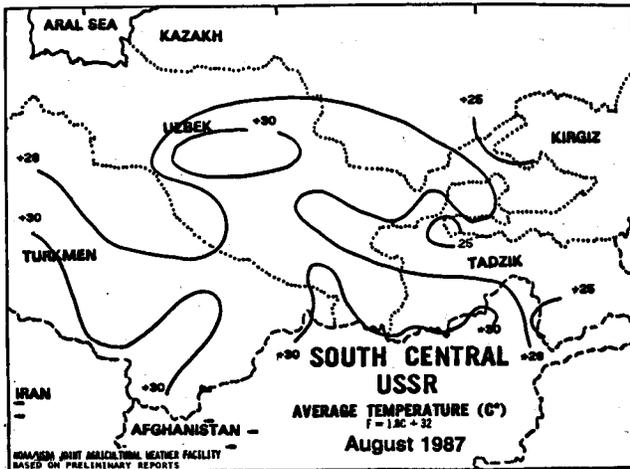
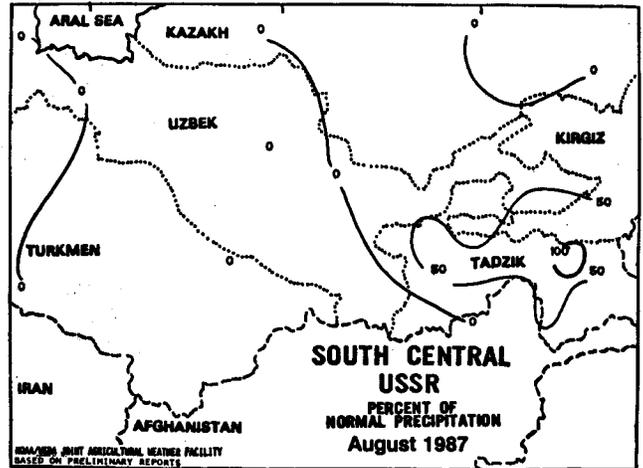
**EASTERN ASIA** ... Typhoon Gerald produces moderate to heavy rain over southeastern China. Dry weather benefits crops in the North China Plain.

**CANADA** ... Light showers cover the wheat belt, causing only minor harvest delays. The grain harvest nears completion in the east.

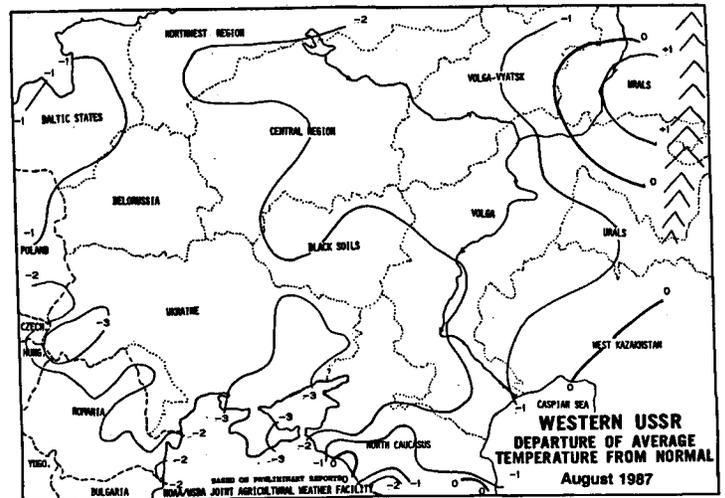
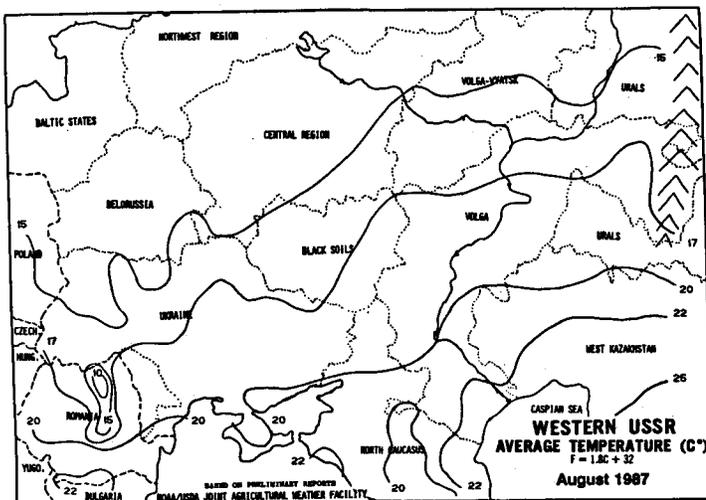
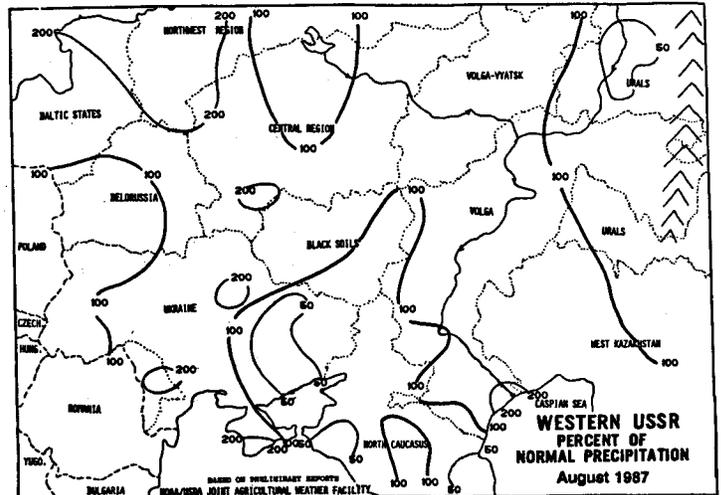
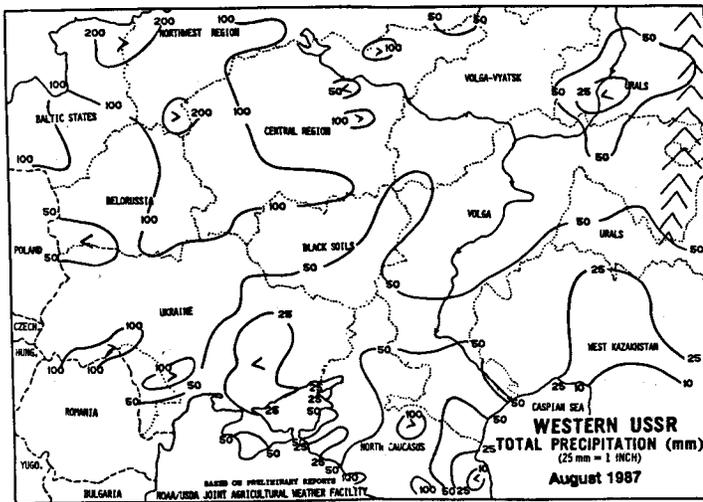
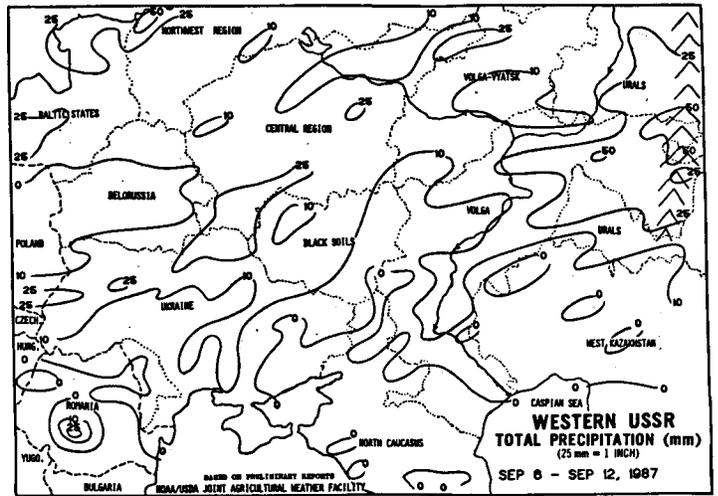
**SOUTH AMERICA** ... Showers favor Argentina's wheat and early summer crop planting in south-central Brazil.

**AUSTRALIA** ... Showers in Victoria and New South Wales benefit heading wheat. Mid-week showers delay sugarcane harvesting in Queensland.

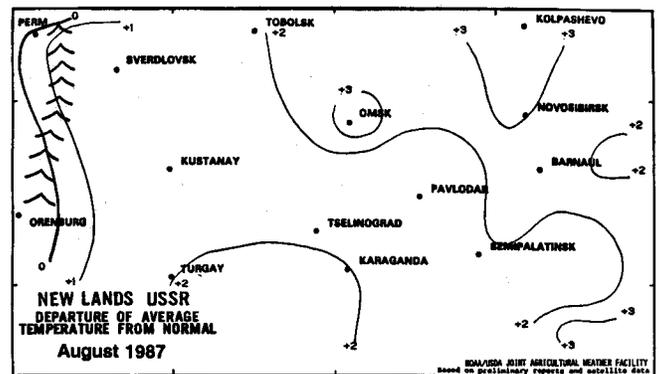
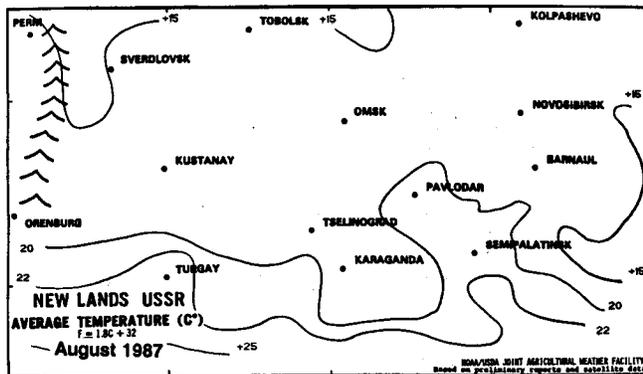
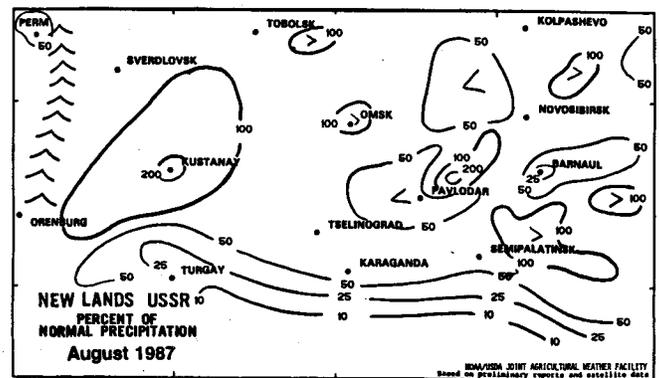
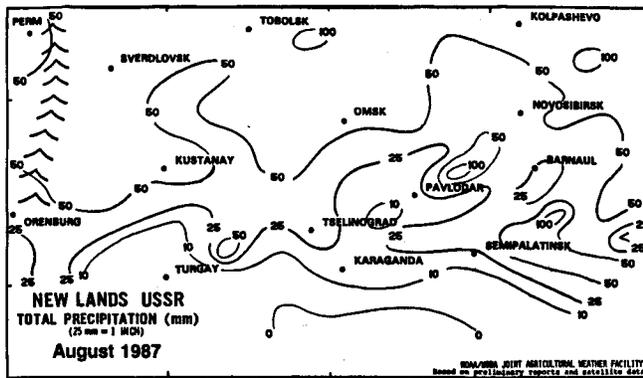
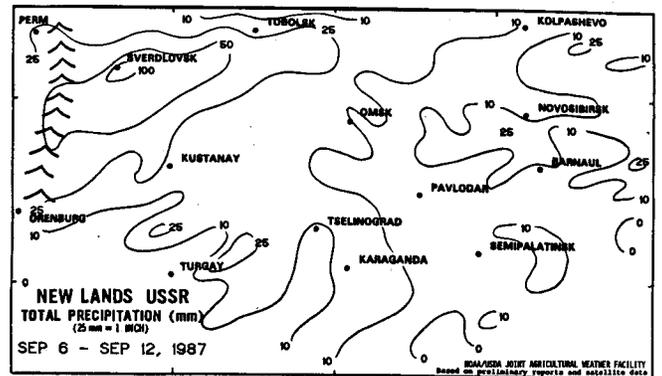
**MEXICO** ... Dry weather favors harvesting in the north, while tropical rain benefits immature crops in the south.



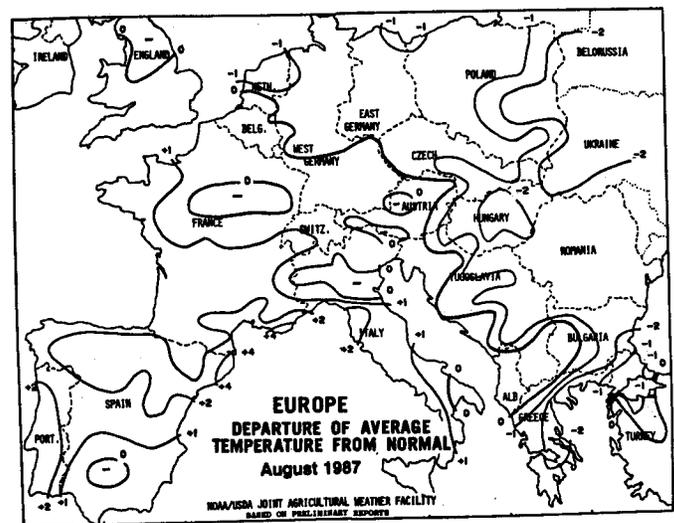
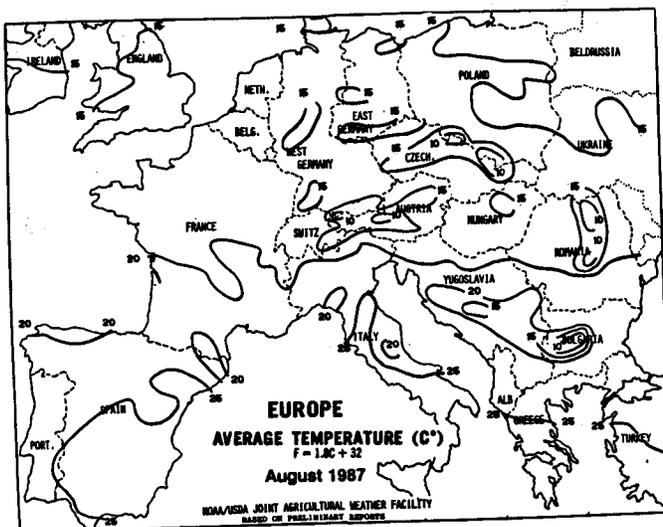
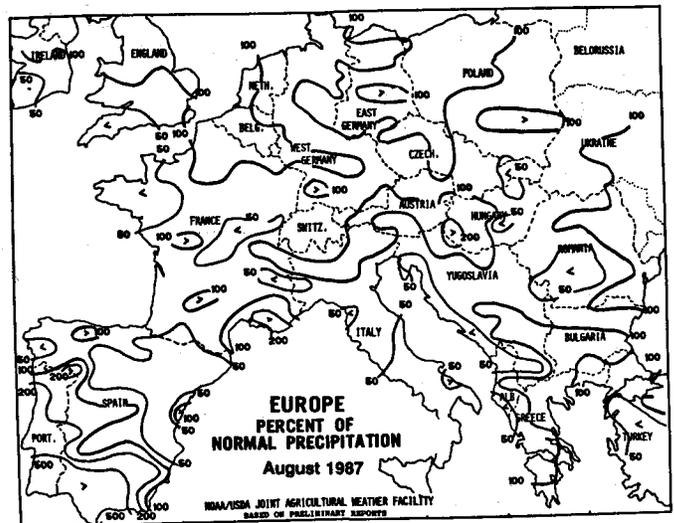
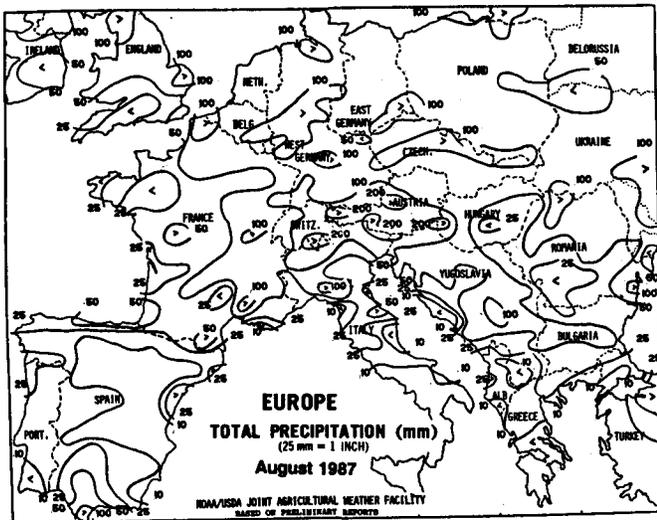
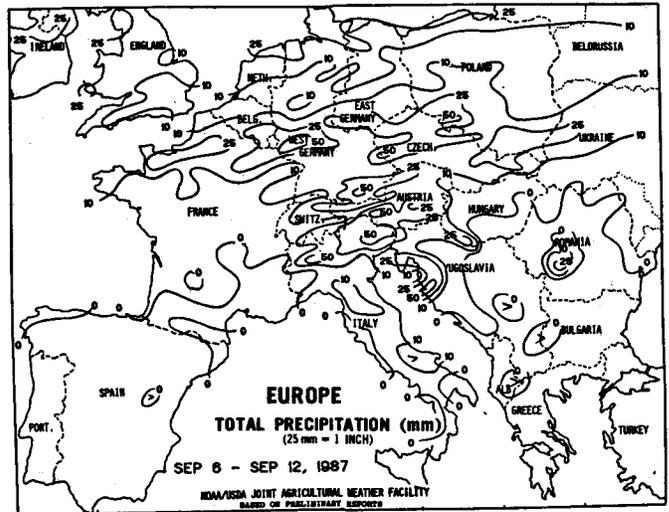
Western U.S.S.R.... Crop harvesting is normally nearing completion, and winter grain planting is normally occurring over major winter wheat producing areas of the Ukraine and North Caucasus. Light showers (10-25mm) over the Baltic States and the northern Ukraine caused only minor delays in fieldwork. Mostly dry weather covered the southern half of the Ukraine and the North Caucasus, allowing fieldwork to progress at a rapid pace. In August, frequent showers during the first half of the month produced above-normal precipitation over the Baltic States, eastern Belorussia, the western portion of the Central Region, the western half of the Ukraine, the Volga Vyatsk, and the Volga, causing some delays in harvesting and winter grain planting. However, dry weather over these areas from August 17 through August 27 improved harvest conditions. Below-normal August precipitation over eastern areas of the Central Region, the Black Soils Region, the eastern Ukraine, and the western North Caucasus allowed harvesting to progress with minimal delays. Continued unseasonably cool weather since July over major corn producing areas has slowed corn development.

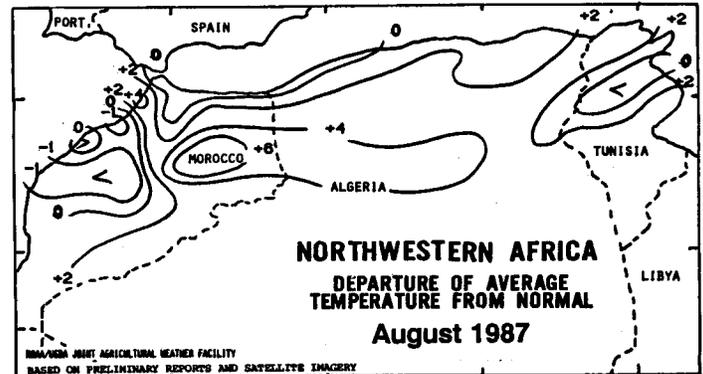
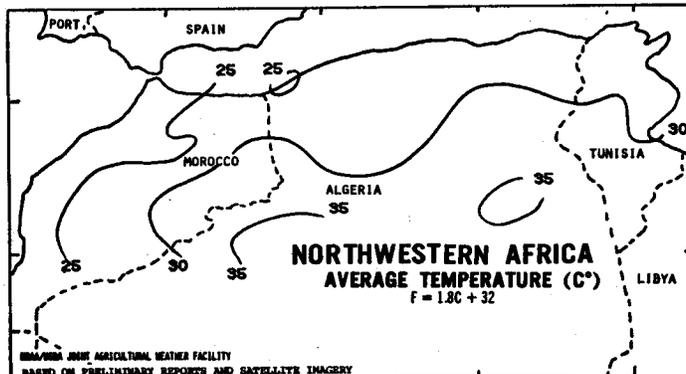
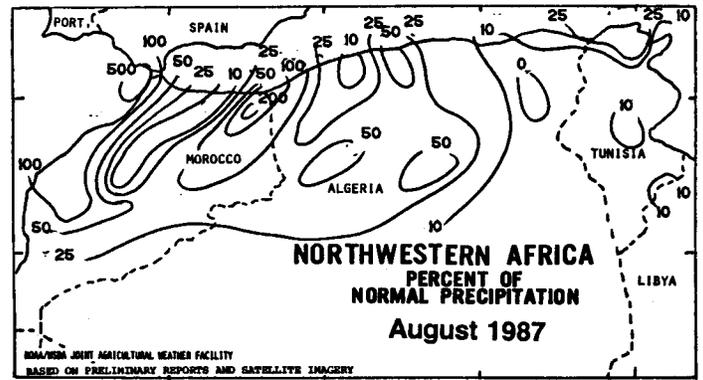
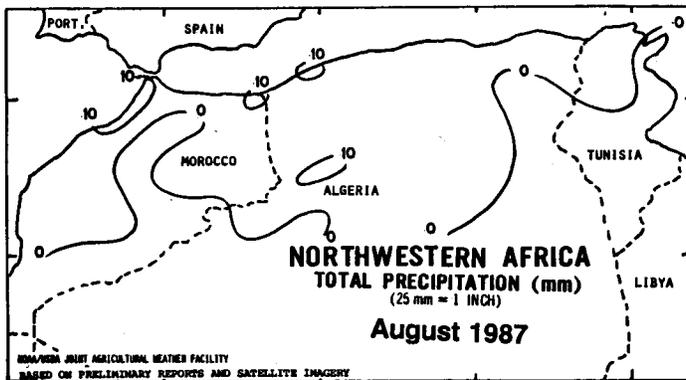
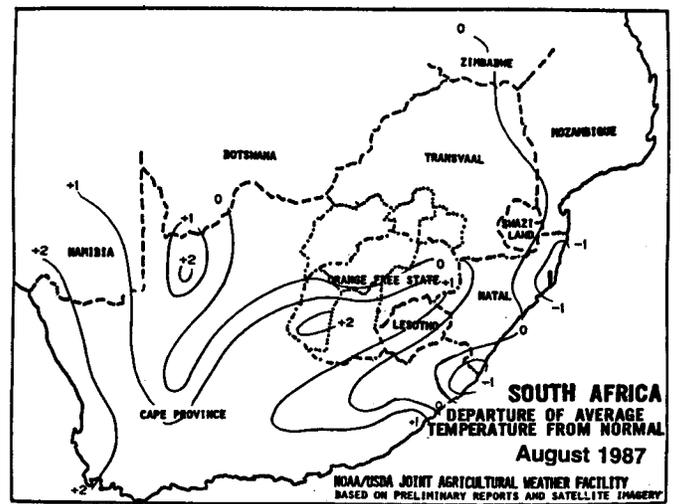
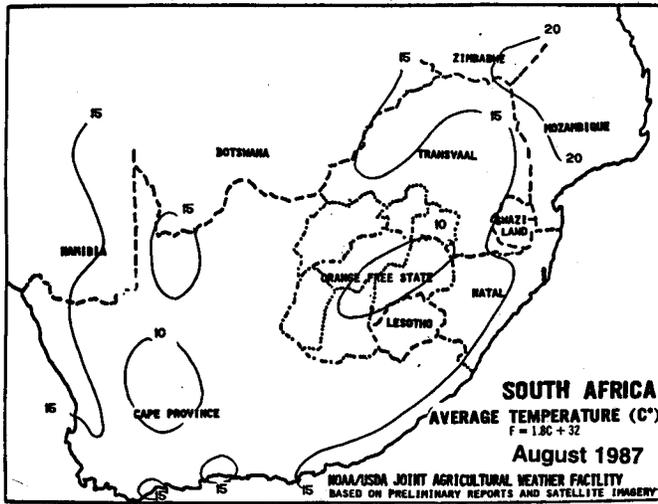
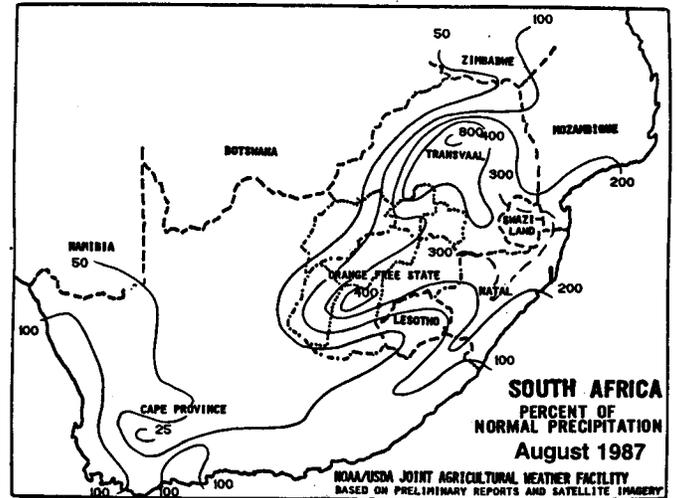
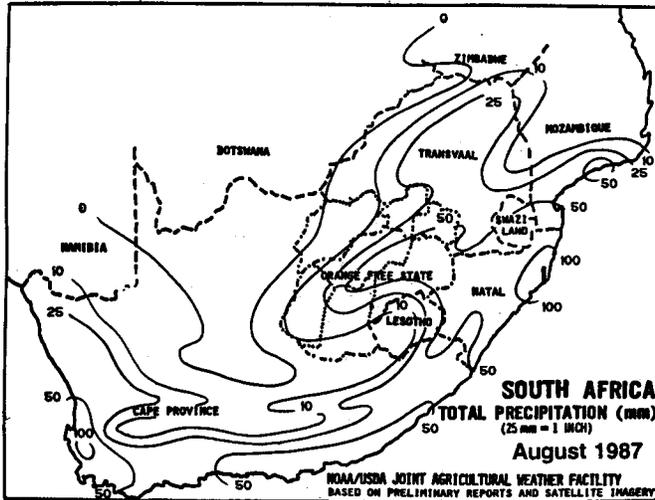


**New Lands...** Harvest activities were normally well underway over much of the region. Moderate to heavy rain (30-100mm) over the northern Urals likely caused significant harvest delays. Light showers (10-25 mm) over Kazakhstan and Western Siberia caused only brief delays. In August, unseasonably warm, dry weather covered most of the region. Crop areas that received above-normal precipitation included areas around Kustanay and extreme eastern areas. From August 1 through August 20, above-normal temperatures and generally dry weather helped early spring grain harvesting in Kazakhstan and hastened crop maturity in Western Siberia. From August 21 through the end of the month, a cooling trend and frequent showers over most areas slowed harvesting.

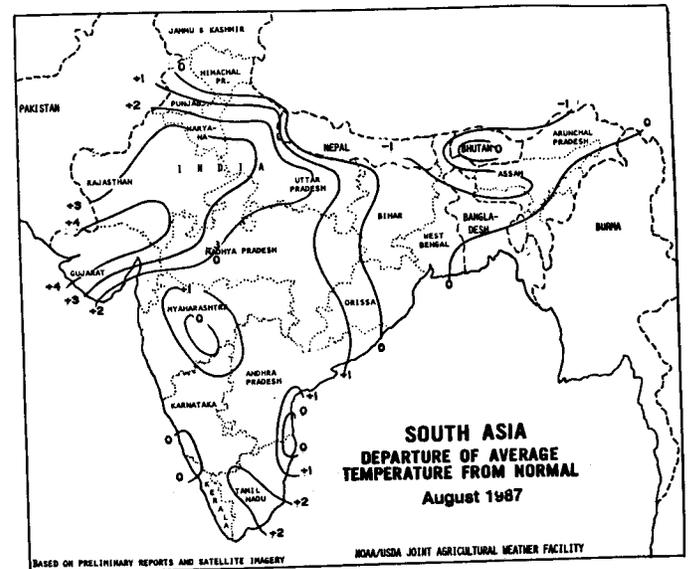
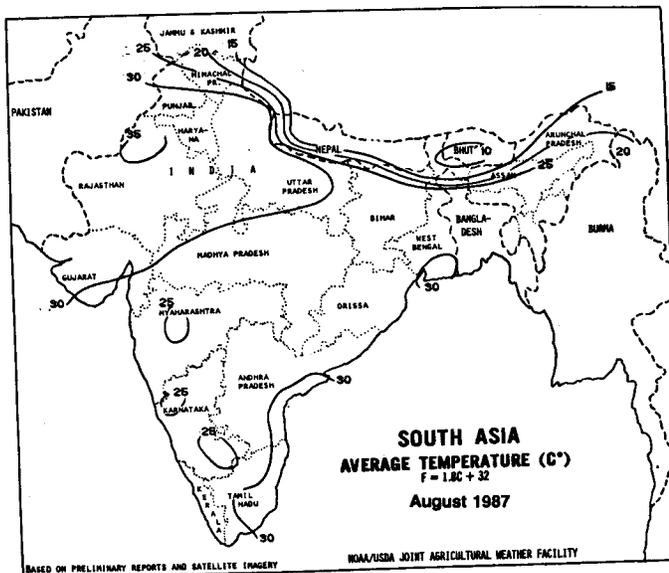
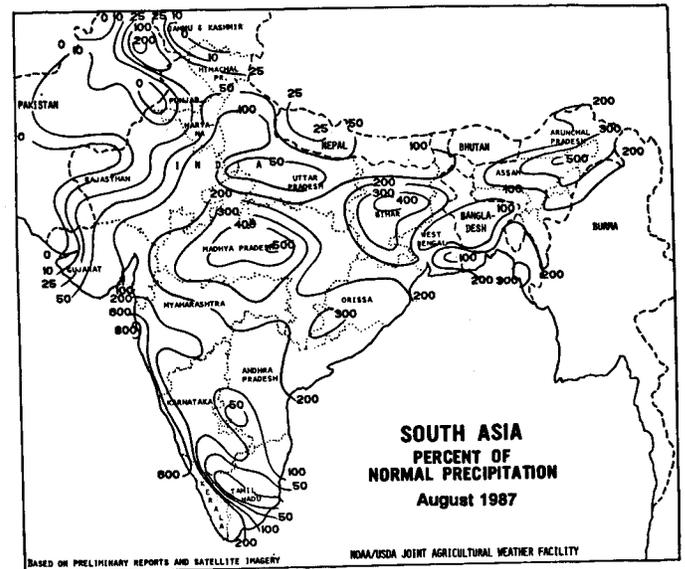
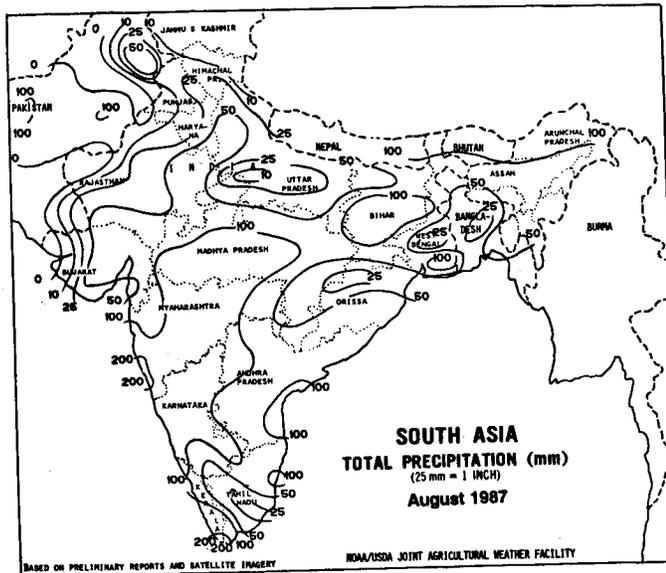
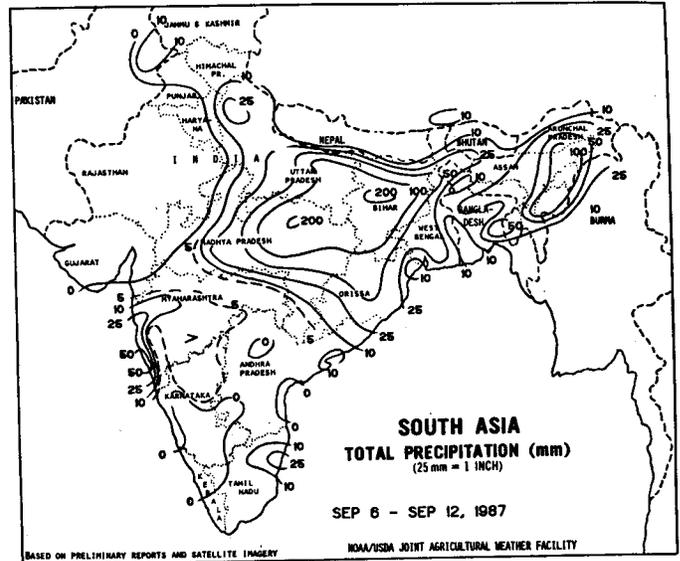


EUROPE ... Much of northern and central Europe received moderate to heavy rainfall (25-50mm), triggered by a series of cool fronts and the remnants of tropical storm Cindy. Heaviest rain fell from the northern U.K. eastward to northern West and East Germany and eastern Poland. Heavy rain also covered areas of central West Germany, southern East Germany, Czechoslovakia, Austria, and northern Italy. The wet weather continued to delay harvest, lower grain quality, and damage mature grain in northern and western areas. The harvest problems were complicated by a wetter-than-normal August and cooler-than-normal temperatures. In contrast, warm and dry weather persisted in southern Europe, favoring late maturing spring crops and fall tillage activity. Scattered light to moderate rains (less than 25mm) were reported across southern France, central Italy, and the eastern Balkans, increasing soil moisture levels in advance of winter grain emergence. Continued dryness over much of Yugoslavia, Romania, and Bulgaria, however, likely caused further deterioration of corn nearing maturity. In August, below-normal rainfall covered much of southern Europe from northeastern Spain eastward to the Balkans.

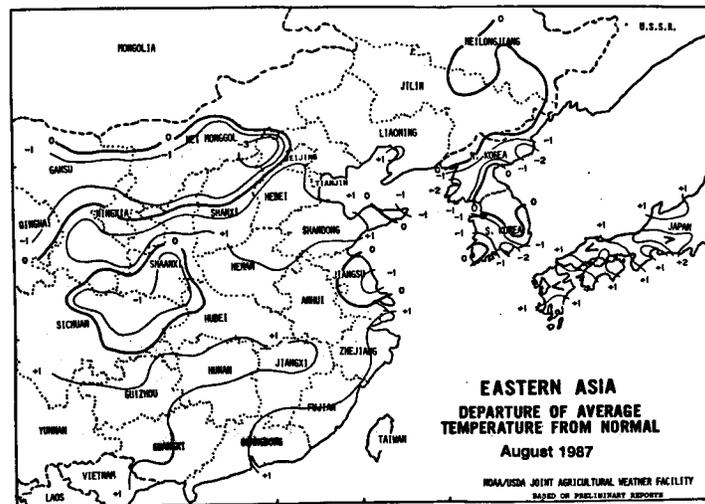
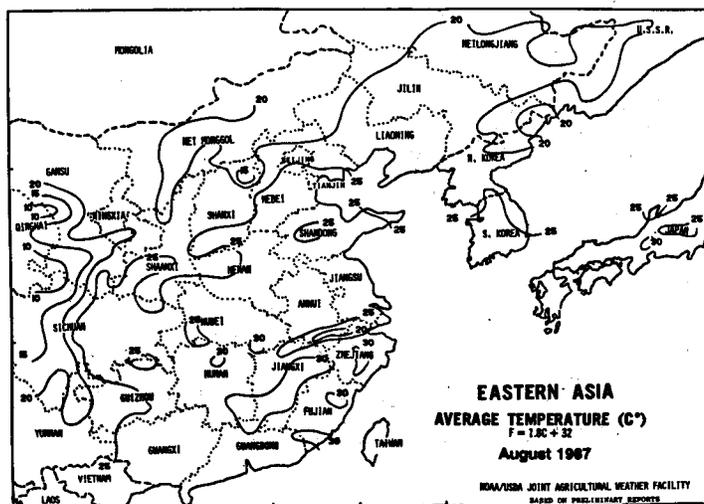
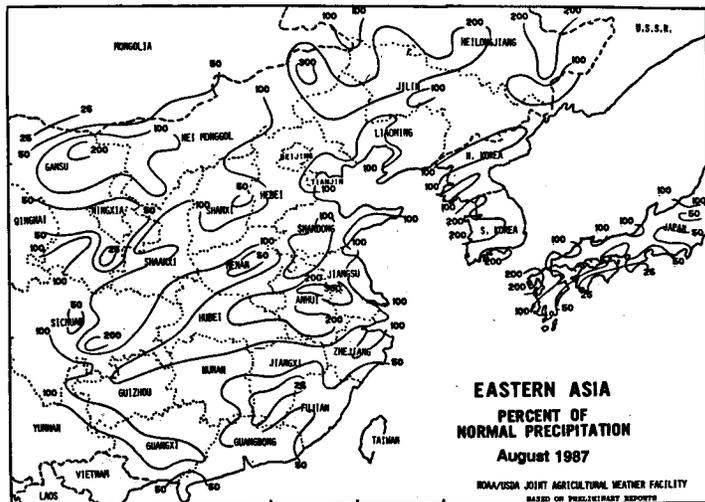
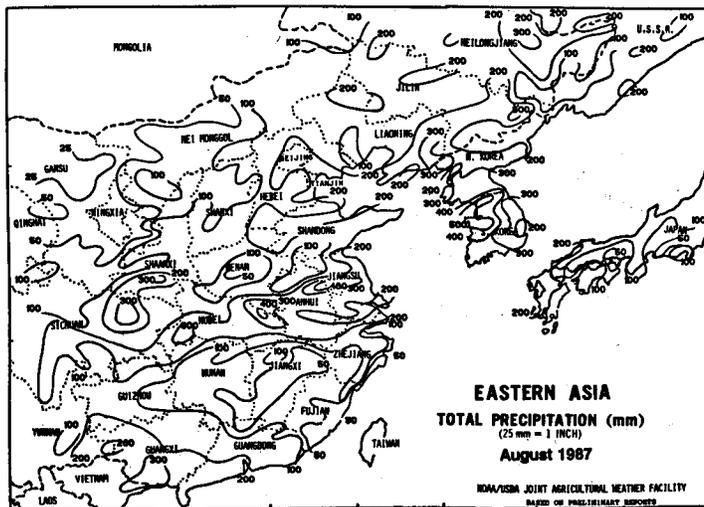
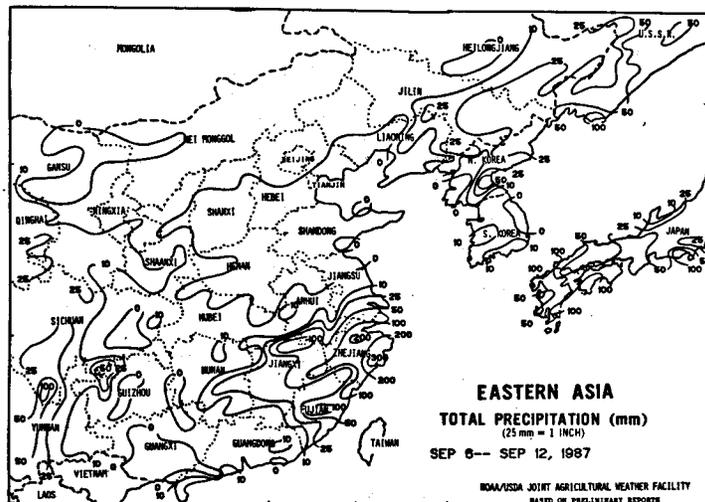




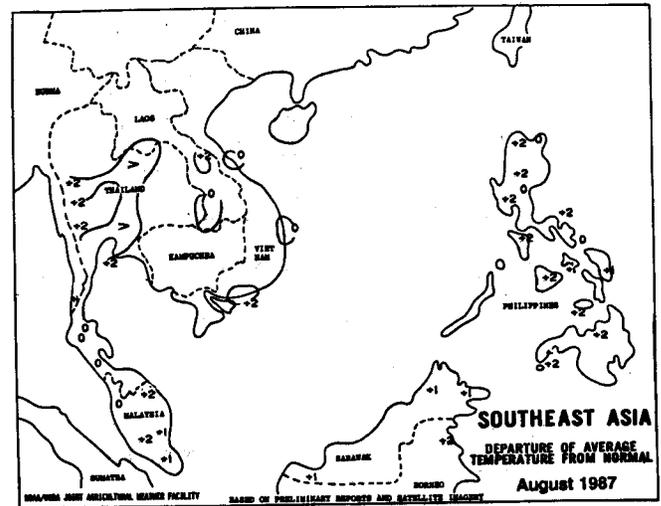
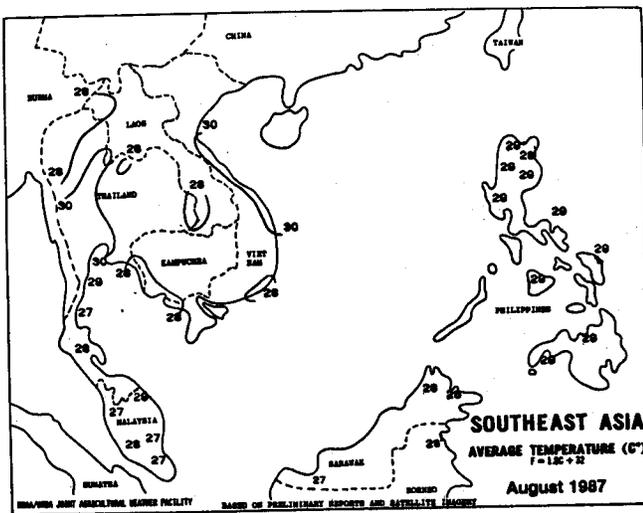
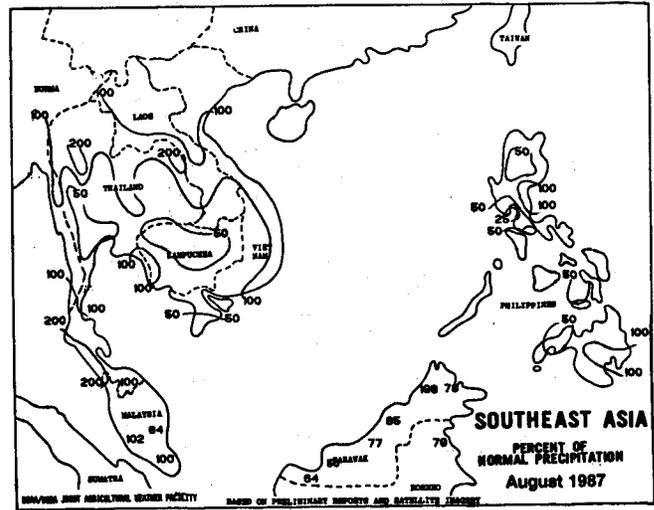
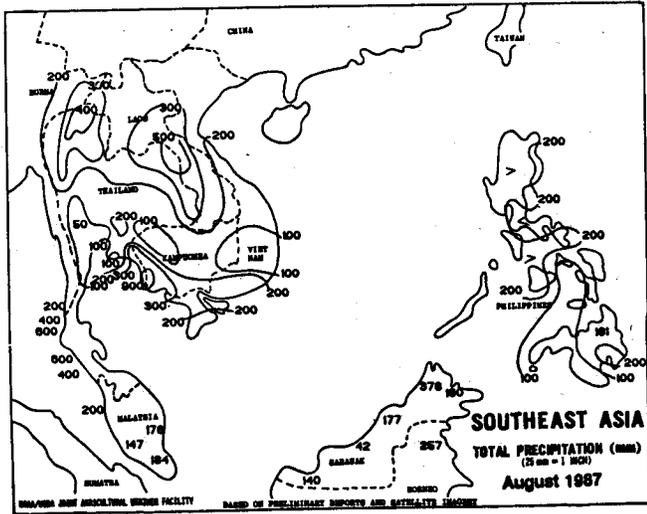
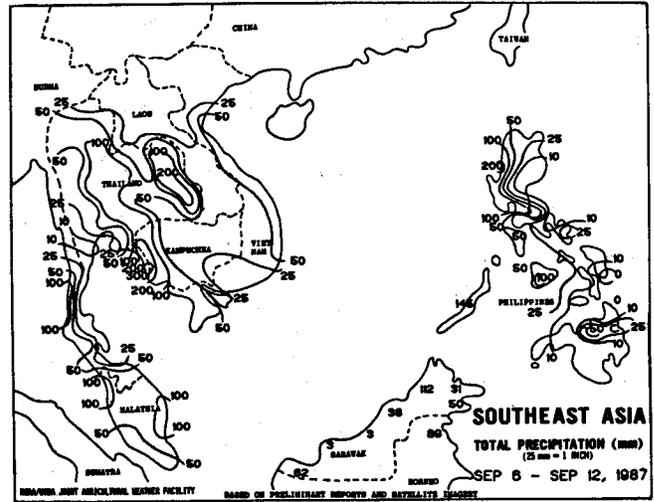
**SOUTH ASIA ...** Rainfall averaged less than 10mm in India's western half, from the northern states through western Madhya Pradesh southward to Tamil Nadu. The drying trend in southern India has persisted since early August, limiting moisture for the normal development of rice, cotton, and groundnuts, currently reproductive to filling. Hot weather accompanied the dryness in the north and northwest, continuing this season's pattern of hot, dry weather. Late-August showers, however, improved irrigation levels in the north and northwest. Beneficial showers (25-123mm) continued over Uttar Pradesh, Bihar, eastern Madhya Pradesh, and northern Orissa, boosting irrigation levels for heading to filling rice and the upcoming wheat planting. Local flooding is likely in Bihar following heavy August rainfall, but the showers to the west helped conditions following this season's much-below-normal rainfall. Welcomed dry weather developed in Bangladesh, but heavy showers persisted to the east, flooding already wet areas. August rainfall was above normal in eastern and central India, benefiting reproductive to filling summer crops but likely causing some flooding.



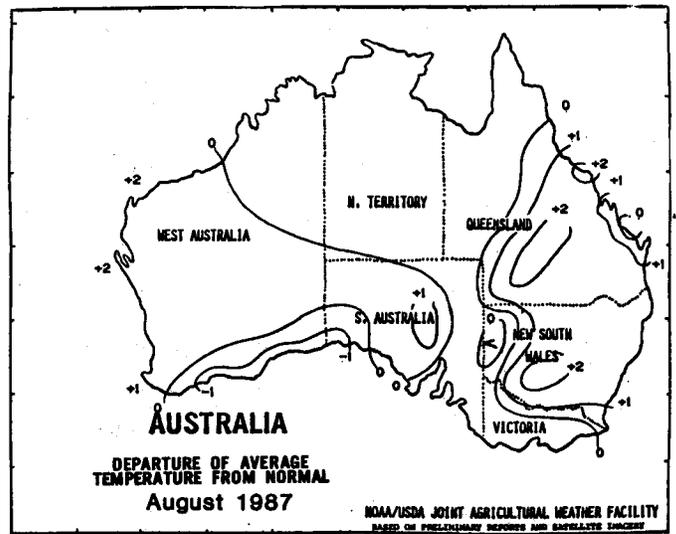
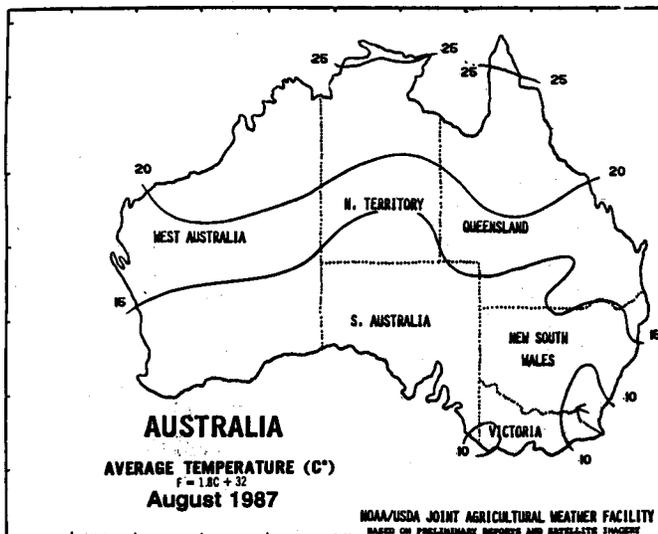
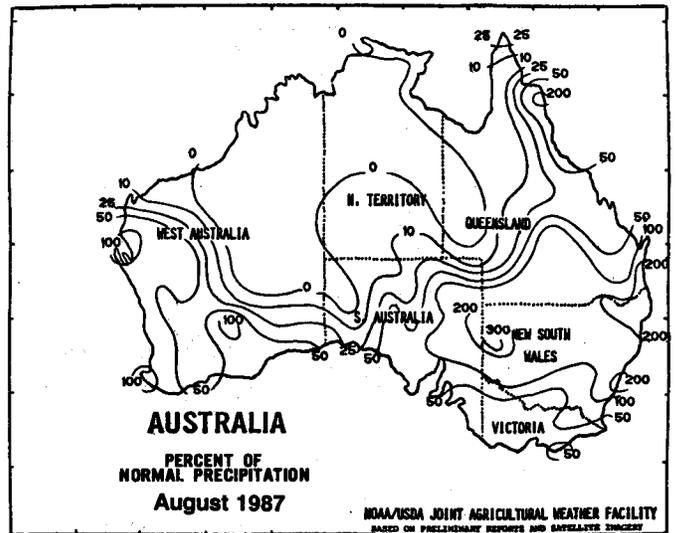
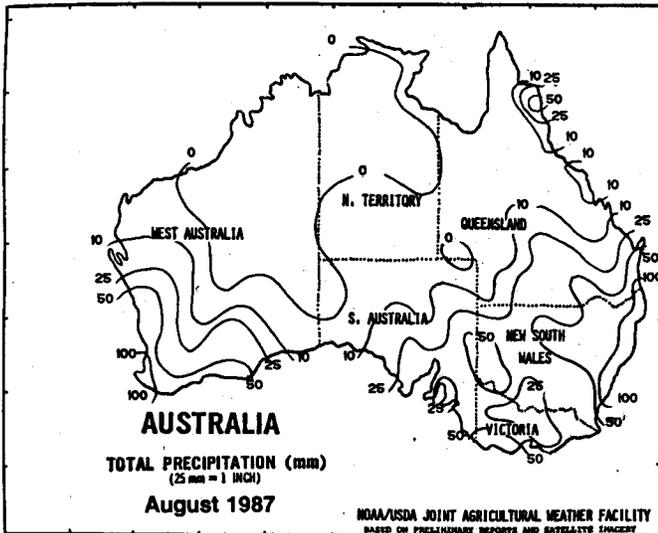
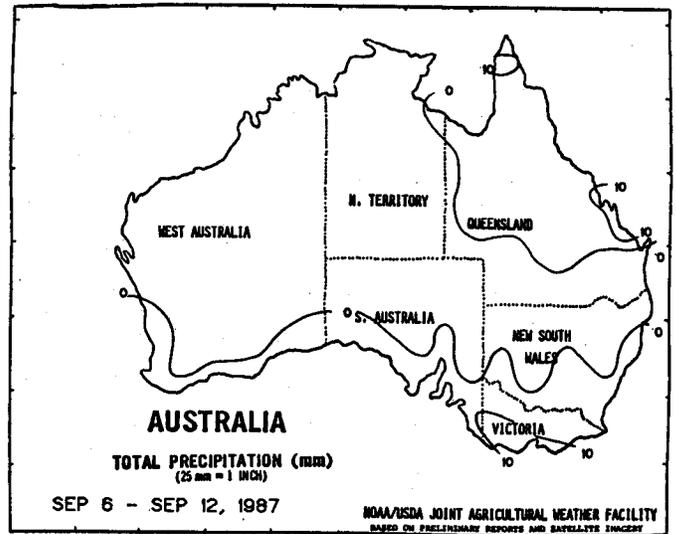
**EASTERN ASIA** ... Typhoon Gerald spread moderate to heavy rain over eastern Fujian, eastern Jiangsu, and Zhejiang. Rainfall amounts generally ranged from 50 to 100mm, with coastal locations receiving rainfall in excess of 150mm. Rain over Fujian and Jiangsu reversed August's below-normal precipitation pattern, benefiting late double-cropped rice in the filling stage. Dry weather over the North China Plain favored opening cotton bolls and benefited fieldwork activities, including harvesting and early planting of the 1988 winter wheat crop. In August, above-normal precipitation covered the North China Plain which was mostly beneficial to cotton in the boll formation stage and corn and soybeans in the filling stage. However, pockets of heavy rain in central Shandong and eastern Jiangsu may have caused some crop damage. In Korea, welcomed dryness helped floodwaters to recede following frequent heavy rain in August. Light to moderate showers continued over the Manchurian Valley, and drier weather is needed for crop maturation.



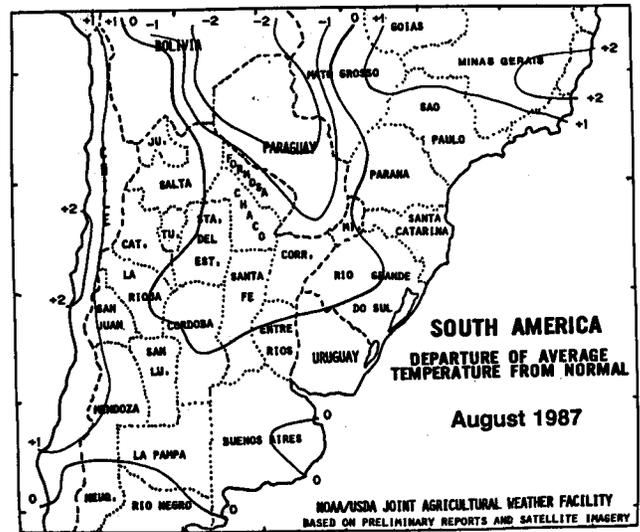
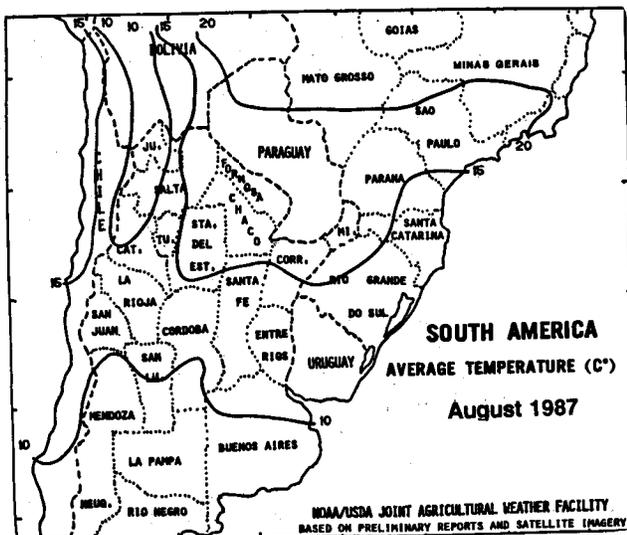
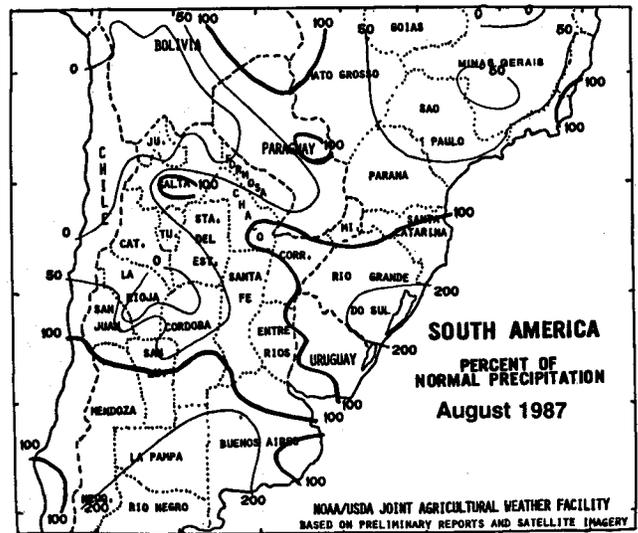
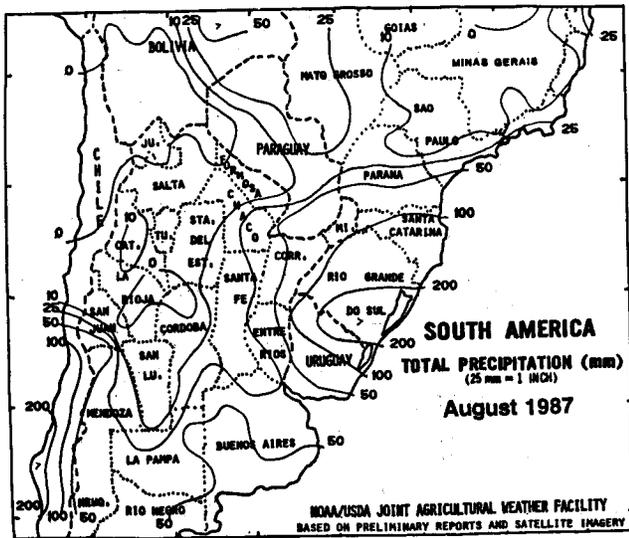
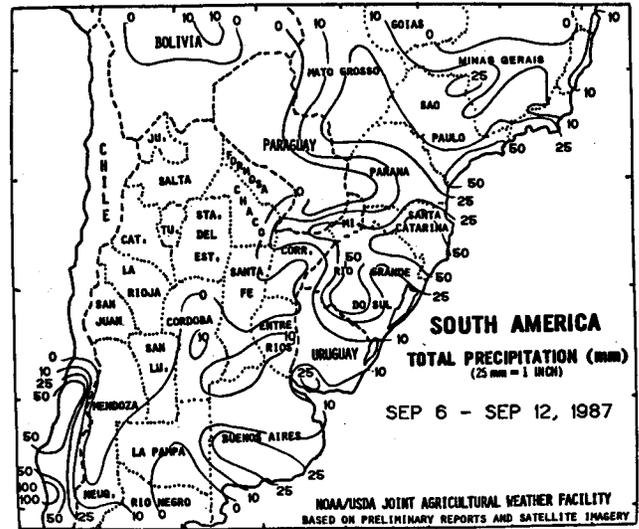
**SOUTHEAST ASIA** ... Heavy showers (100-200mm or more) caused local flooding in central and eastern Thailand and western Kampuchea. In August, an increase in tropical activity brought periodic heavy rain to most of drought stricken Southeast Asia and, as the remnants of Typhoon Betty and Gary moved into Indochina, flooding occurred in some major rice and corn regions. Moderate to heavy showers (19-100mm or more) continued in Malaysia, but dry weather returned to Indonesia, reflecting this season's dry weather pattern. In the Philippines, wet weather persisted along the west coast of Luzon and parts of the central islands. Mostly light rain fell elsewhere. In August, Typhoons Betty and Gary brought heavy rain and high winds to rice, copra, and sugarcane regions of the central and northern Philippines, causing flooding and some crop damage. A general increase in tropical activity brought above-normal rainfall to most other crop areas.



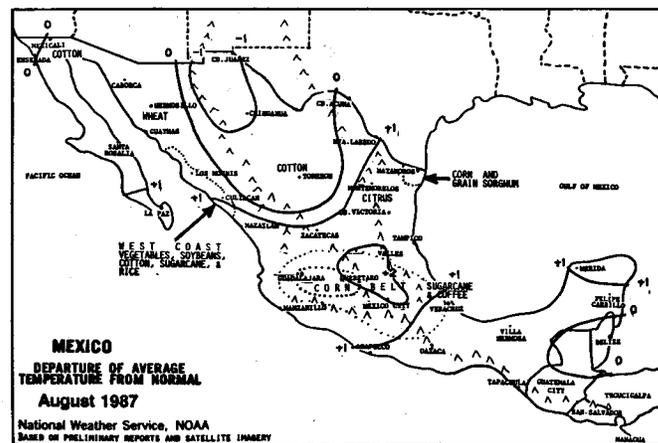
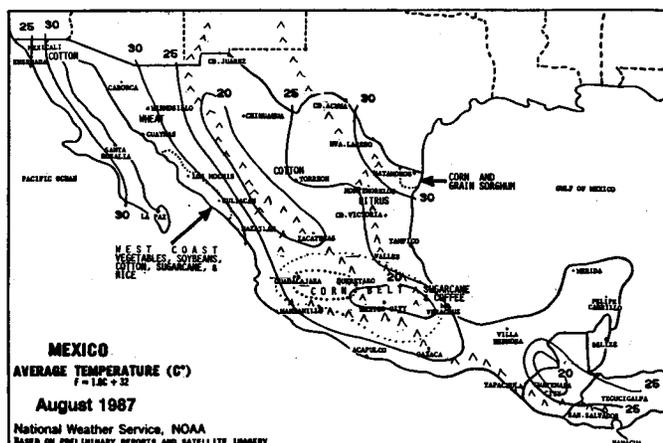
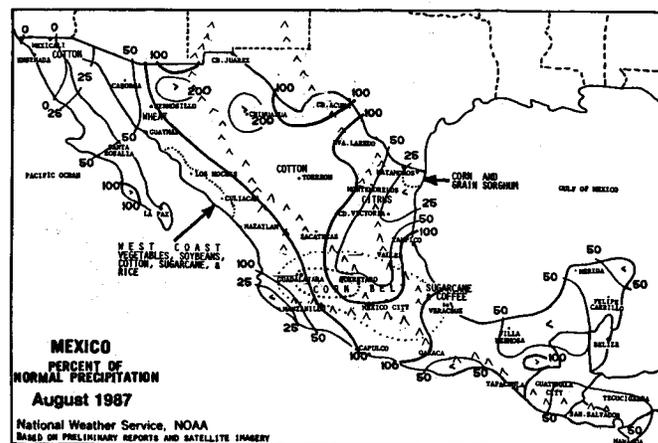
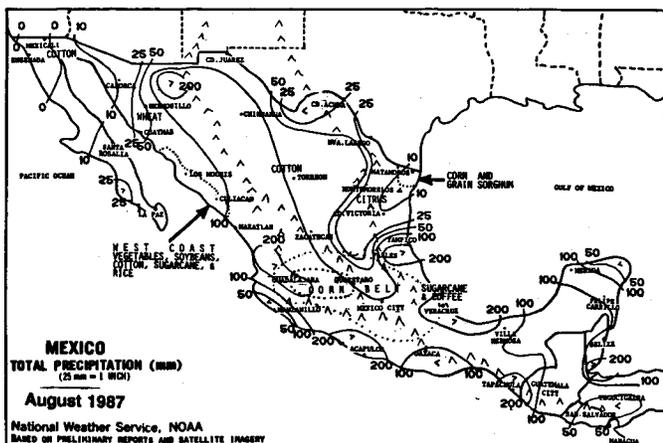
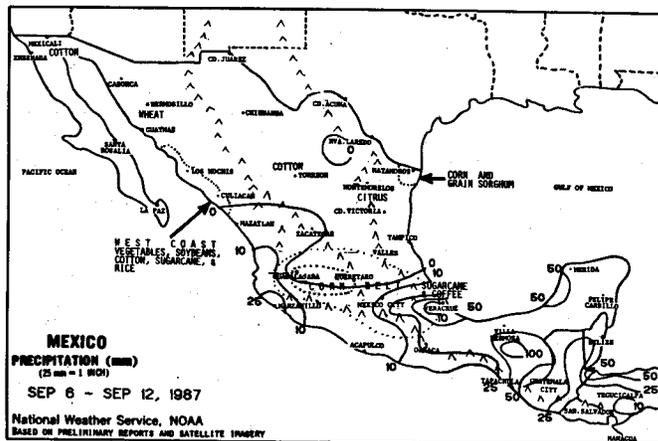
**AUSTRALIA** ... Light to moderate showers (10-25mm) fell over parts of Victoria and eastern New South Wales benefiting heading wheat, while other winter grain producing areas received little or no precipitation. Rain also fell over sugar producing areas of eastern Queensland, disrupting sugar harvesting activities. In August, near-normal temperatures favored wheat in the vegetative stage. Crops in southern Queensland, northern New South Wales, and eastern South Australia also benefited from above-normal rainfall. Except for some showers late in the month, Western Australia remained unfavorably dry, with below-normal rainfall acting to deplete soil moisture reserves. The problem there is further compounded since the upcoming summer months are normally the driest.



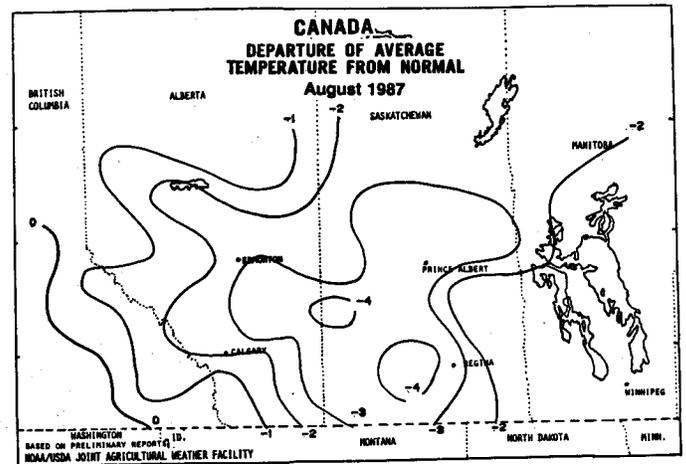
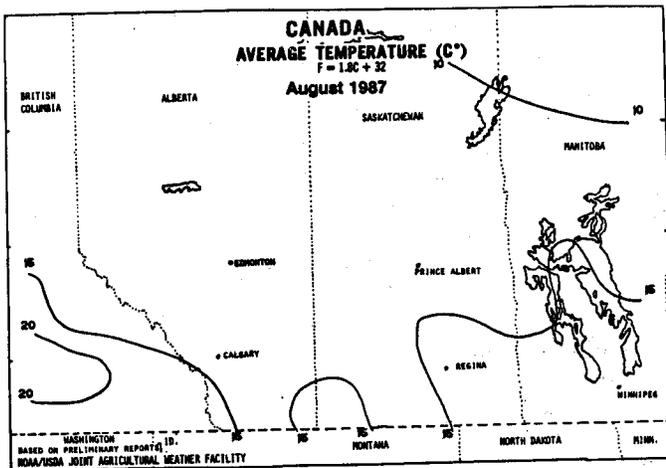
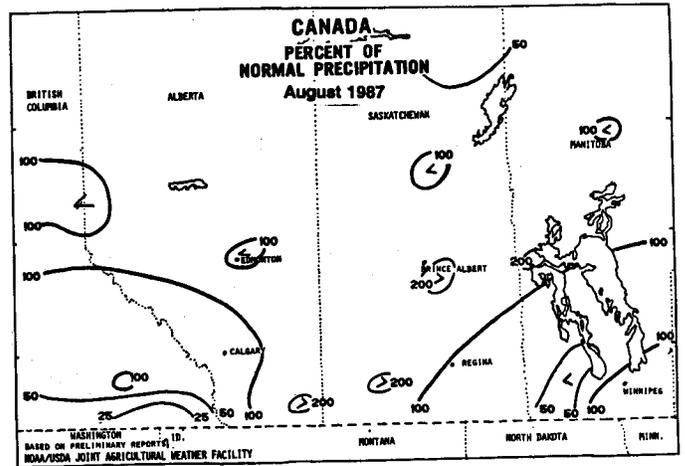
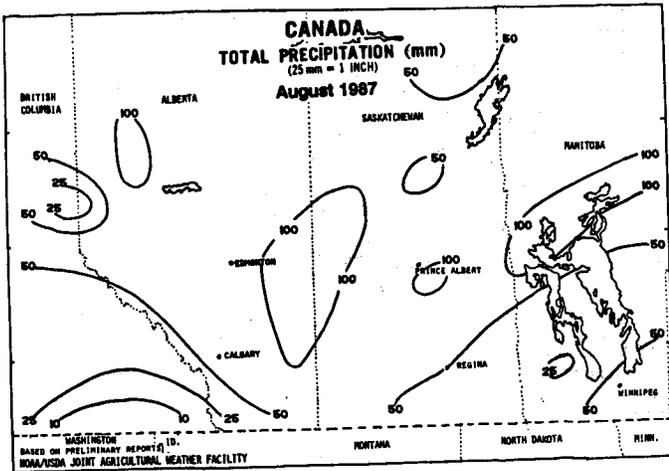
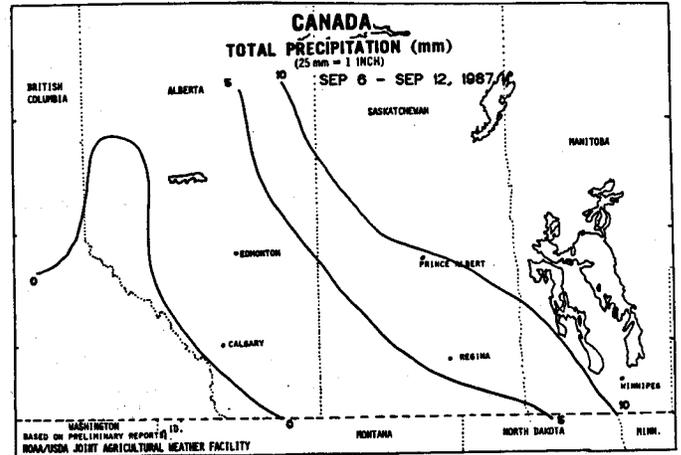
**SOUTH AMERICA** ... Scattered showers covered Argentina's wheat, maintaining adequate moisture for vegetative wheat growth. In the wheat areas, August rainfall was above average in the west, much above average in the southwest, and below average in the east. Planting season moisture was sufficient for crop establishment, and recent, periodic showers have moistened topsoils for preparation of summer crop planting. Weekly rainfall averaged about 10mm in the major corn and soybean areas. In south-central Brazil, widespread showers covered most crop areas, benefiting immature wheat in northern growing areas and favoring early summer crop planting. More rain fell in the south, keeping southern wheat wet. In Rio Grande do Sul, August rainfall was near normal in the northwest but much above average in the southeast. Below-average August rainfall prevailed over the remainder of south-central Brazil, where early wheat was maturing.



**MEXICO** ... Mostly dry weather prevailed over the northern half of Mexico, extending as far south as the Southern Plateau corn belt. Locally heavy tropical showers (50-140mm) covered southern Mexico from the extreme southeastern portion of the corn belt to the Yucatan peninsula. Dryness in the north favored summer crop harvesting and early wheat planting. Rain in the south provided beneficial moisture for immature corn development. Much-above average August rainfall covered the northwestern mountains, providing favorable irrigation water for the west coast farming region and the winter wheat areas. Below-average rainfall in the northeast favored maturing grains. Northeastern portions of the Southern Plateau corn belt were also quite dry, but earlier wetness provided adequate moisture for corn development. Near-average, monthly rainfall covered the remainder of the corn belt.



**CANADA** ... Mostly light rain (7mm or less) covered grain areas of Alberta and Saskatchewan, while some heavier showers (10-16mm) fell in Manitoba. The drier weather in Alberta improved harvesting, delayed by August and early September wetness. August rainfall averaged above normal in the west slowing early harvest progress. Below-normal, monthly temperatures also hampered fieldwork. Some quality deterioration has been in the west. In the largest grain producing province of Saskatchewan, harvesting made substantial progress, similar to the normal pace. August rainfall averaged mostly near normal in the west and below normal in the east, favoring crop maturation. Near-normal August rainfall also covered Manitoba's grain areas where cereal crop harvesting is nearing completion.



## August Weather Data for Selected Cities

### Temperature and Precipitation Data for August 1987

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
AL BIRMINGHAM	82	2	3.9	0.1	SHREVEPORT	85	3	3.5	1.0	DAYTON	73	0	0.7	-2.4
MOBILE	82	0	10.3	3.6	ME CARIBOU	62	-1	1.8	-2.1	TOLEDO	71	0	4.5	1.3
MONTGOMERY	84	2	4.7	1.5	PORTLAND	66	-1	2.5	-0.3	YOUNGSTOWN	68	-1	6.8	3.3
AK ANCHORAGE	57	1	0.4	-1.7	MD BALTIMORE	76	0	1.6	-3.0	OK OKLAHOMA CITY	82	1	1.8	-0.7
BARROW	39	1	1.0	0.0	MA BOSTON	75	0	0.6	-5.1	TULSA	83	1	3.7	0.7
FAIRBANKS	58	2	0.6	-1.3	MI ALPENA	70	-2	3.0	-0.7	OR ASTORIA	61	0	0.2	-1.4
JUNEAU	58	3	4.4	-0.6	DETROIT	66	1	4.9	1.7	MEDFORD	74	3	0.0	-0.4
KODIAK	57	2	0.7	-4.2	FLINT	69	0	5.0	1.6	PENDLETON	71	-1	0.1	-0.5
NOME	53	3	1.9	-1.2	GRAND RAPIDS	69	-1	8.5	5.3	PORTLAND	71	3	0.4	-0.8
AZ PHOENIX	92	2	0.4	-0.6	HOUGHTON LAKE	66	1	6.7	3.7	SALEM	68	2	0.2	-0.6
PRESOTT	72	1	2.6	-0.8	LANSING	69	1	5.7	2.6	PA ALLENTOWN	70	-2	7.1	2.7
TUCSON	85	1	2.8	0.7	MARQUETTE	62	-3	3.6	0.7	ERIE	70	1	7.8	3.8
YUMA	93	1	0.7	0.3	MUSKEGON	69	0	8.1	5.0	PHILADELPHIA	75	0	3.7	-0.4
AR FORT SMITH	83	2	2.9	-0.1	SAULT ST. MARIE	63	0	4.5	1.1	PITTSBURGH	72	1	7.9	4.6
LITTLE ROCK	83	-2	2.7	-0.4	MN ALEXANDRIA	68	-1	1.0	-2.7	SCRANTON	68	-2	4.2	0.7
CA BAKERSFIELD	81	-2	0.1	0.1	DULUTH	63	0	1.9	-2.3	RI PROVIDENCE	70	-2	2.7	-1.3
EUREKA	59	1	0.1	-0.3	INT'L FALLS	62	-1	2.5	-0.4	SC CHARLESTON	84	3	6.3	-0.2
FRESNO	80	1	T	0.0	MINNEAPOLIS	69	-2	3.7	0.1	COLUMBIA	83	3	10.9	5.3
LOS ANGELES	68	-3	T	-0.1	ROCHESTER	67	-1	3.9	0.3	FLORENCE	82	2	5.2	0.5
REDDING	81	0	0.0	-0.5	MS GREENWOOD	83	2	0.5	-2.3	GREENVILLE	80	2	2.8	-1.2
SACRAMENTO	75	0	0.0	-0.1	JACKSON	83	2	4.0	0.4	SD HURON	69	-3	3.0	1.0
SAN DIEGO	70	-2	T	-0.1	MERIDIAN	82	1	2.7	-0.7	RAPID CITY	68	-3	2.4	1.0
SAN FRANCISCO	65	2	T	0.0	MO CAPE GIRARDEAU	80	-	0.4	-3.1	SIoux FALLS	69	-3	1.4	-1.7
CO DENVER	71	-1	2.0	0.5	COLUMBIA	77	0	3.2	0.0	TN CHATTANOOGA	80	2	3.6	0.2
GRAND JUNCTION	73	-3	0.8	-0.1	KANSAS CITY	76	-2	4.7	0.9	KNOXVILLE	80	2	1.1	-1.9
CT BRIDGEPORT	71	-2	3.9	0.2	SAINT LOUIS	79	2	5.6	3.0	MEMPHIS	84	3	4.1	0.4
HARTFORD	69	-2	4.3	0.3	SPRINGFIELD	79	2	4.4	1.5	NASHVILLE	81	3	0.8	-2.6
DC WASHINGTON	79	1	2.1	-2.3	MT BILLINGS	66	-4	1.8	0.7	TX ABILENE	84	0	4.2	1.7
FL APALACHICOLA	83	2	5.7	-1.8	GLASGOW	65	-4	0.9	-0.5	AMARILLO	75	-2	3.3	0.4
DAYTONA BEACH	82	1	4.9	-1.5	GREAT FALLS	62	-6	2.5	1.2	AUSTIN	85	1	0.3	-1.9
JACKSONVILLE	84	2	4.5	-3.3	HAVRE	62	-6	0.9	-0.3	BEAUMONT	84	1	3.4	-2.3
KEY WEST	85	1	3.9	-0.8	HELENA	63	-3	0.4	-0.8	BROWNSVILLE	86	2	0.8	-2.1
MIAMI	85	3	3.2	-3.8	KALISPELL	61	-3	1.4	-0.1	CORPUS CHRISTI	84	0	3.5	-0.2
ORLANDO	85	3	6.1	-0.5	MILES CITY	67	-5	1.8	0.6	DEL RIO	85	0	2.1	0.5
TALLAHASSEE	83	1	9.0	1.7	MISSOULA	62	-3	1.1	0.2	EL PASO	79	-2	2.2	1.0
TAMPA	84	1	8.5	0.9	NE GRAND ISLAND	71	-4	5.5	2.9	FORT WORTH	87	2	0.8	-1.2
WEST PALM BEACH	85	2	1.7	-4.0	LINCOLN	73	-3	6.4	2.9	GALVESTON	85	2	2.8	-1.6
GA ATLANTA	82	4	1.2	-2.2	NORFOLK	70	-3	3.4	0.8	HOUSTON	86	3	1.5	-2.5
AUGUSTA	84	4	4.0	0.0	NORTH PLATTE	70	-2	1.2	-0.8	LUBBOCK	79	2	1.7	-0.5
MACON	84	3	3.2	-0.4	OMAHA	71	-4	7.5	3.4	MIDLAND	81	1	0.5	-1.1
SAVANNAH	84	4	9.5	2.8	SCOTTSBLUFF	69	-3	3.4	2.5	SAN ANGELO	82	0	1.9	0.1
HI HILO	78	2	3.7	-6.3	VALENTINE	69	-3	3.4	1.1	SAN ANTONIO	86	2	0.3	-2.4
HONOLULU	83	2	0.2	-0.4	NV ELY	65	0	1.2	0.6	VICTORIA	86	2	3.1	-0.3
KAHULUI	79	0	0.6	0.3	LAS VEGAS	88	0	0.0	-0.5	WACO	87	2	0.8	-1.2
LIHUE	81	2	1.6	-0.2	RENO	71	4	T	-0.3	WICHITA FALLS	85	1	2.5	0.3
ID BOISE	70	-2	0.1	-0.3	WINNEMUCCA	70	2	0.0	-0.4	UT BLANDING	69	-2	5.9	4.5
LEWISTON	72	0	0.3	-0.5	NH CONCORD	65	-2	2.8	-0.4	CEDAR CITY	72	0	1.5	0.3
POCATELLO	67	-2	0.7	0.1	NJ ATLANTIC CITY	72	-2	2.7	-2.1	SALT LAKE CITY	75	0	0.4	-0.5
IL CHICAGO	72	0	17.1	136	NM ALBUQUERQUE	75	-2	3.0	1.5	VT BURLINGTON	66	-1	2.1	-1.8
MOLINE	73	0	15.3	115	CLOVIS	76	0	8.8	6.3	VA NORFOLK	80	2	2.1	-3.2
PEORIA	74	1	4.0	0.6	ROSWELL	79	0	4.8	2.7	RICHMOND	78	1	1.1	-3.9
QUINCY	75	1	5.7	1.8	ALBANY	67	-2	3.6	0.3	ROANOKE	78	3	1.1	-2.8
ROCKFORD	71	0	13.6	9.9	BINGHAMTON	66	-1	4.2	0.8	COLVILLE	67	0	0.7	-0.5
SPRINGFIELD	75	1	3.2	-0.2	BUFFALO	69	0	3.4	-0.8	QUILLAYUTE	60	1	0.6	-2.4
IN EVANSVILLE	78	2	0.5	-2.6	NEW YORK	74	-1	4.4	0.1	SEATTLE-TACOMA	66	2	0.3	-1.0
FORT WAYNE	72	0	6.1	2.8	ROCHESTER	67	-2	3.3	0.1	SPOKANE	66	-2	1.8	1.1
INDIANAPOLIS	74	0	0.9	-2.6	SYRACUSE	68	-1	2.1	-1.6	YAKIMA	69	0	0.3	-0.1
SOUTH BEND	72	1	3.4	-0.6	NC ASHEVILLE	75	2	1.8	-2.6	WV BECKLEY	73	4	3.8	0.1
IA DES MOINES	72	-2	10.1	6.0	CHARLOTTE	81	3	2.8	-1.0	CHARLESTON	77	3	3.6	-0.6
SIOUX CITY	70	-3	4.0	0.8	GREENSBORO	79	3	3.6	-0.6	HUNTINGTON	77	3	1.2	-2.7
WATERLOO	70	-1	8.5	4.8	HATTERAS	80	2	6.9	0.8	PARKERSBURG	76	2	3.7	0.1
KS CONCORDIA	76	-1	3.4	0.1	NEW BERN	82	3	9.7	3.3	WI GREEN BAY	68	0	3.4	0.3
DODGE CITY	76	-2	2.8	0.3	RALEIGH	79	2	5.8	1.4	LACROSSE	70	-1	3.7	0.0
GOODLAND	73	-1	0.5	-1.4	WILMINGTON	81	2	9.4	2.7	MADISON	69	0	7.2	3.4
TOPEKA	75	-2	5.9	2.2	BISMARCK	65	-4	3.1	1.4	MILWAUKEE	67	0	9.1	6.0
WICHITA	79	-1	7.7	4.9	FARGO	67	-2	3.2	0.6	WAUSAU	67	0	3.2	-1.0
KY BOWLING GREEN	78	1	1.9	-1.4	GRAND FORKS	65	-2	3.6	1.0	WY CASPER	66	-3	1.8	1.2
LEXINGTON	78	3	4.2	0.2	WILLISTON	64	-5	0.5	-0.9	CHEYENNE	65	-2	1.2	-0.2
LOUISVILLE	78	2	2.7	-0.6	OH AKRON-CANTON	70	0	4.0	0.7	LANDER	67	-2	1.5	1.1
LA ALEXANDRIA	83	0	4.7	0.4	CINCINNATI	75	1	2.3	-0.7	SHRIDAN	65	-3	1.2	0.2
BATON ROUGE	83	2	14.5	9.4	CLEVELAND	71	0	5.5	2.2	PR SAN JUAN	84	2	2.1	-3.7
LAKE CHARLES	84	3	3.1	-2.3	COLUMBUS	74	1	3.0	-0.7					
NEW ORLEANS	84	2	5.1	-1.0										

Based on 1951-80 normals

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