

# 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

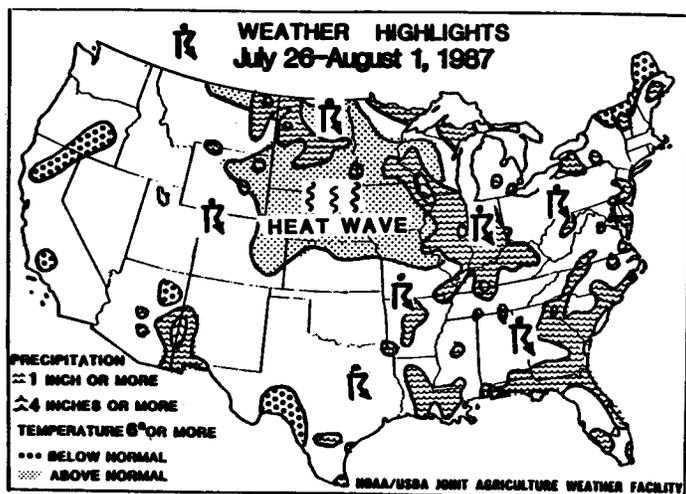
Volume 74, No. 31

Washington, D.C.

Aug. 4, 1987

## National Weather Summary

July 26 to August 1, 1987



and in the central and northern Plains. Heavy thunderstorms occurred in isolated areas from Wisconsin to western Kentucky, along the southern Atlantic and eastern gulf coast, and from Arizona and New Mexico through the Rockies.

**WEDNESDAY...** Unusually hot weather continued to sap moisture from flora and fauna across the South, through the Plains, and in the western part of the Midwest. Afternoon thunderstorms spread from Wisconsin to New York, down the Mississippi Valley, and over the Southeast. Showers were more widespread from New Mexico through the Rockies and the northern Plains.

**THURSDAY...** Record-high temperatures were reported in parts of the South and the northern Plains as the heat wave spread through the Plains and into the western Midwest. Cooler, Canadian air moved into parts of Montana. Widely scattered thunderstorms developed through the Mississippi Valley, the East Coast States, through the Rockies, and into Canada.

**FRIDAY...** The heat wave pushed back into the mid-Atlantic region, continued in the Plains, and began to push back into Montana. Thunderstorms were closer together from the central Great Lakes region to the gulf coast and from the mid-Atlantic States to Florida, and more scattered from the Southwest through the Rockies.

**SATURDAY...** Intense, solid areas of thunderstorms reached from Lake Superior to lower Michigan and more scattered areas of storms covered the East. Only a few storms dotted the Southwest and central Rockies. Cooler weather moved over the mid-Atlantic region, but intense heat covered the Plains and the western Midwest into central Illinois.

**HIGHLIGHTS:** An intense heat wave covered the central and northern Great Plains and most of the South all week. Toward week's end the heat covered most of the Plains and pushed over the western Midwest. Showers and thunderstorms were widespread through most of the Mississippi Valley and eastward, but little or no rain fell in the central and southern Plains. Thunderstorms also reached from the Southwest, through the Rockies, to the northern Plains, and into Canada. Some violent storms occurred in the Canadian Prairies and an unprecedented tornado struck Edmonton in the Province of Alberta. Severe storms dropped heavy rain from western Wisconsin to east-central Illinois. Heavy downpours also fell in the Southwest.

**SUNDAY...** Unusually hot weather persisted from the mid-Atlantic States southward, across much of the South, and in parts of the central and northern Great Plains, where the hot weather spread eastward into Illinois. Showers and thunderstorms produced scattered, moderate rain in much of the East and in the Southwest.

**MONDAY...** The heat wave continued and spread further northward through the Plains to southern Canada but did not spread further eastward. Showers and thunderstorms were most prevalent from Wisconsin through Illinois and Indiana to Alabama and Georgia. Elsewhere, thundershowers spread from the Southwest, through the central Rockies, to the northern Plains.

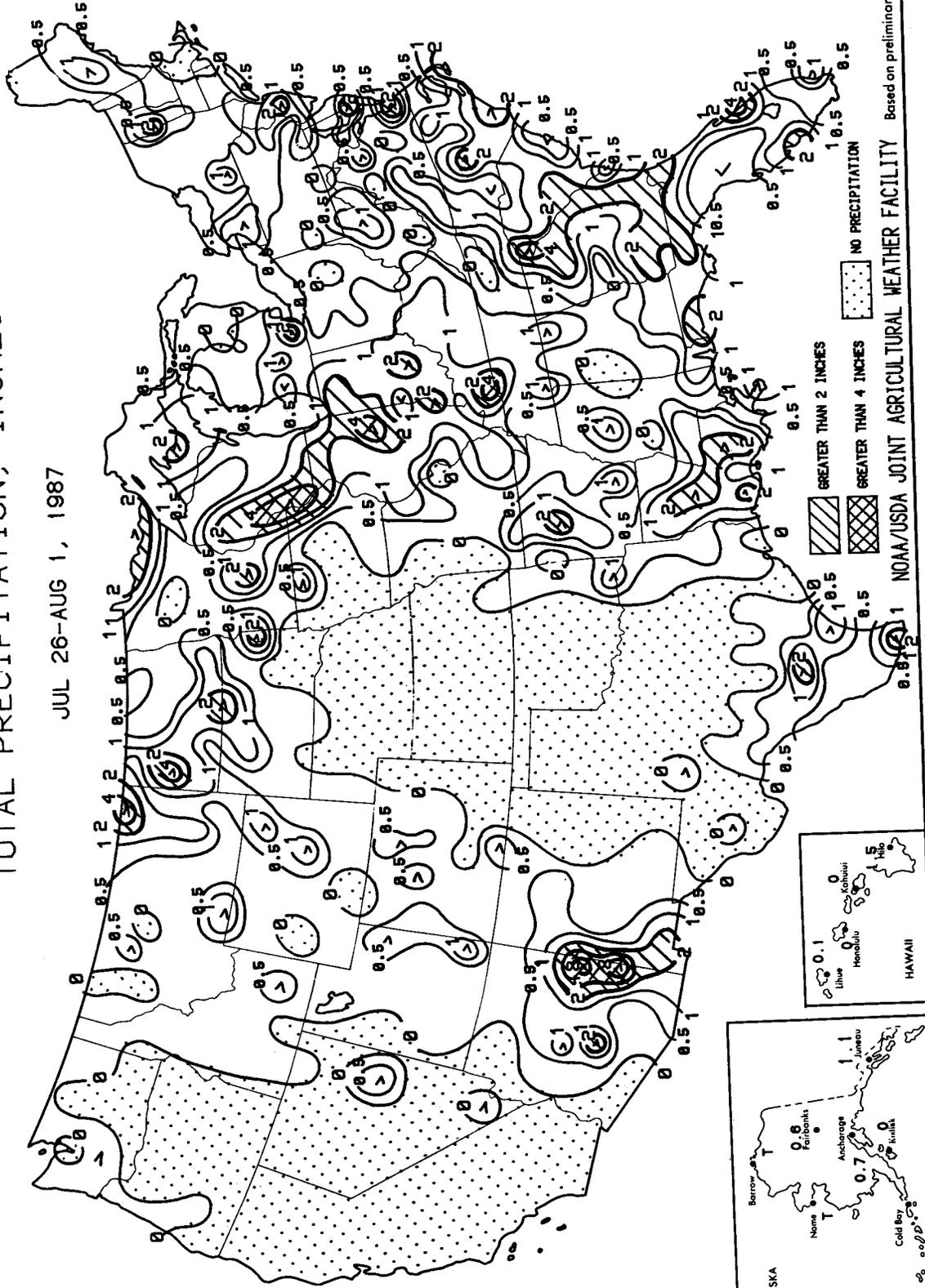
**TUESDAY...** Hot weather was relieved somewhat in the mid-Atlantic area but continued across the South

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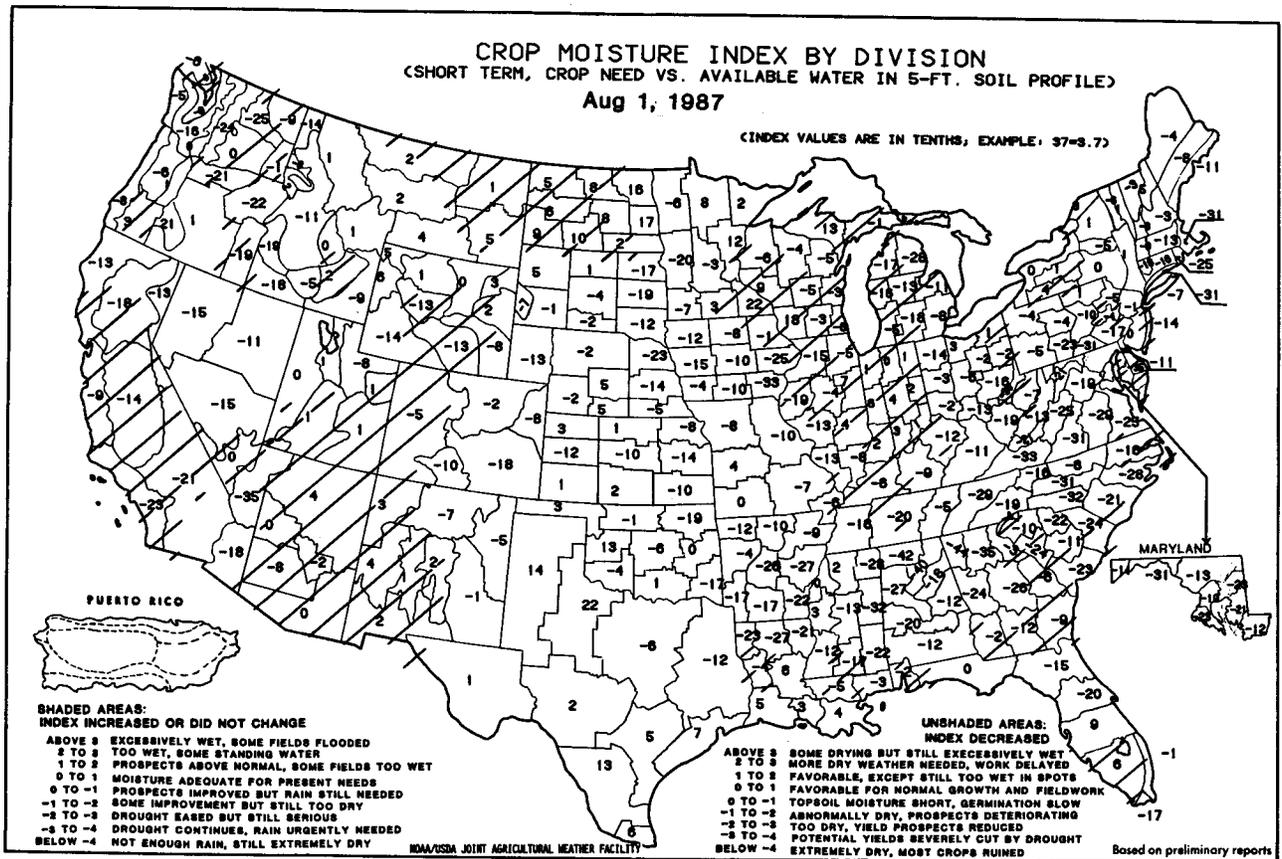
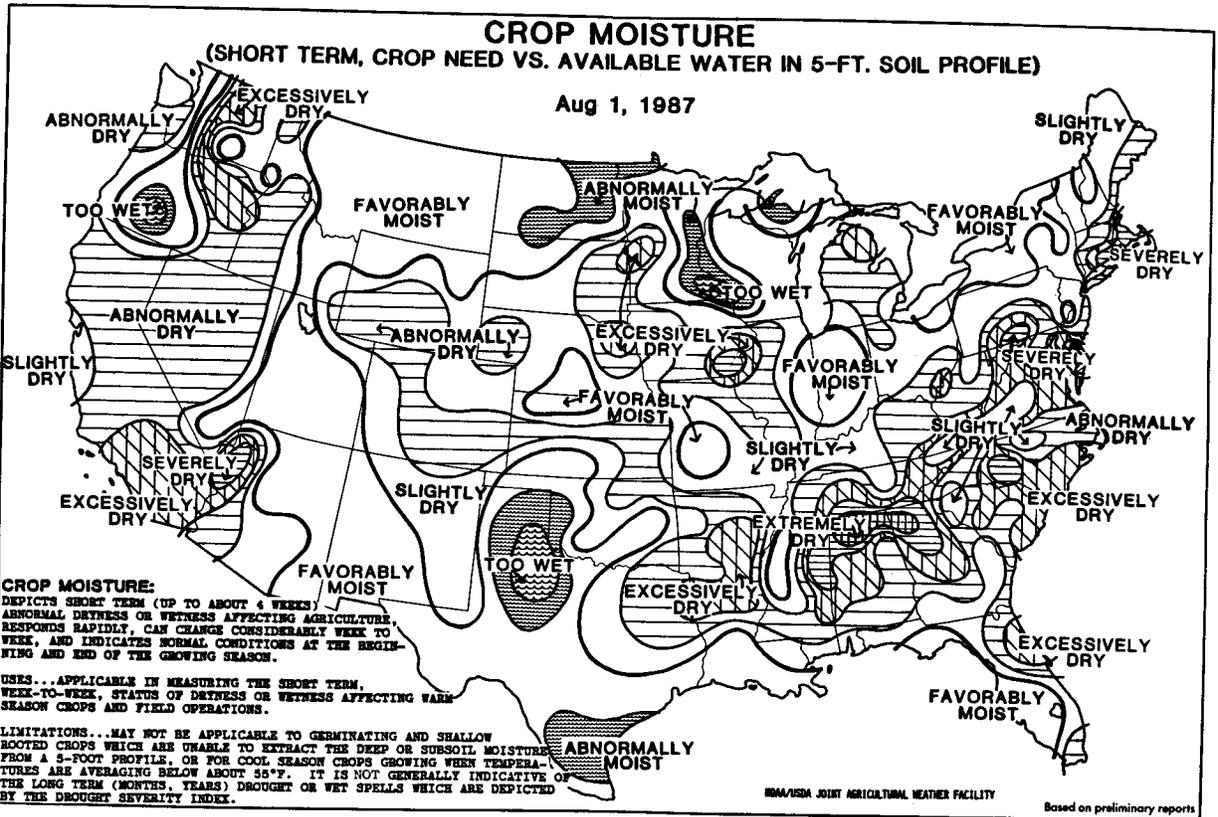
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TOTAL PRECIPITATION, INCHES

JUL 26-AUG 1, 1987



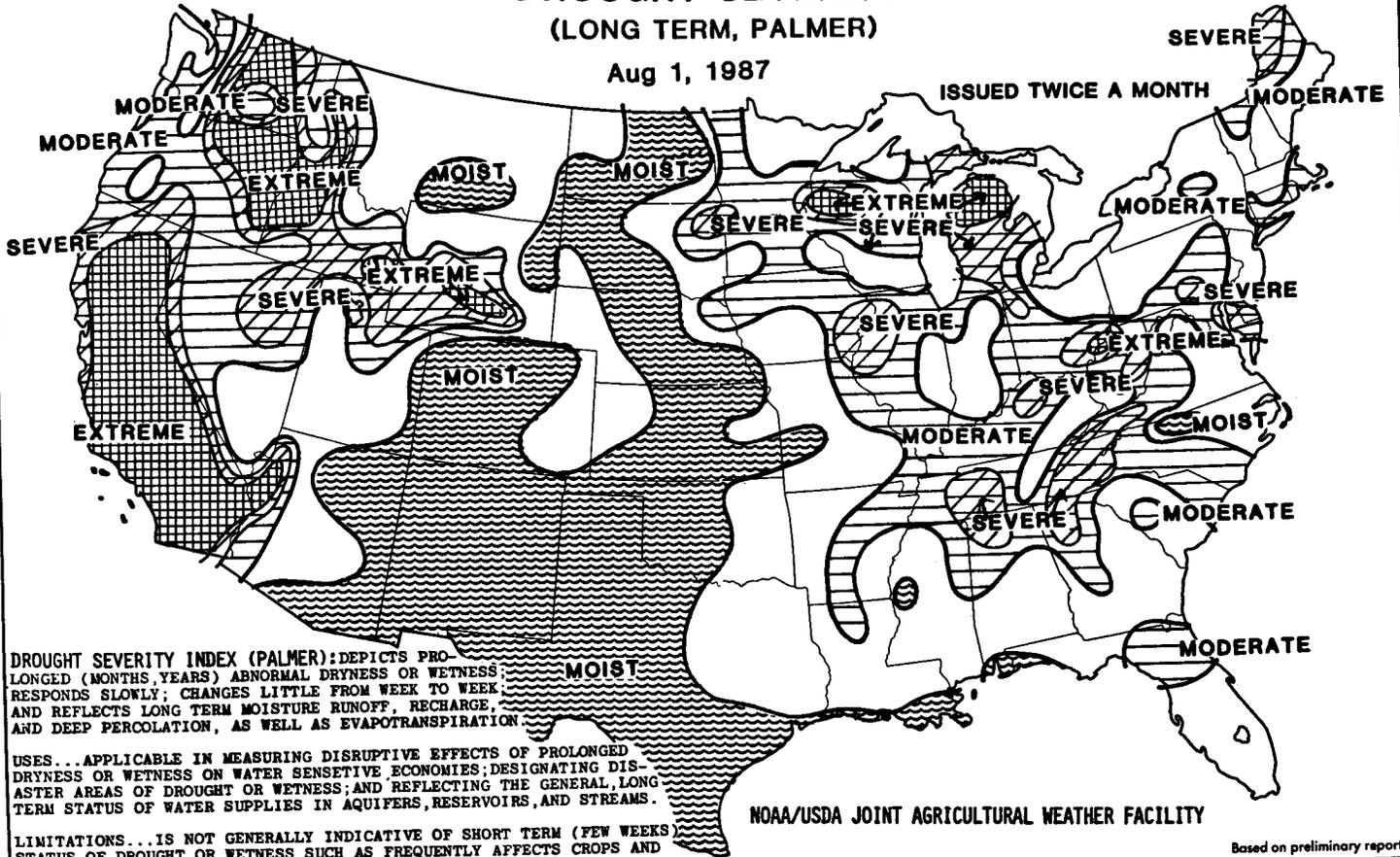
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports



### DROUGHT SEVERITY

(LONG TERM, PALMER)

Aug 1, 1987



DROUGHT SEVERITY INDEX (PALMER): DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES; DESIGNATING DISTASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

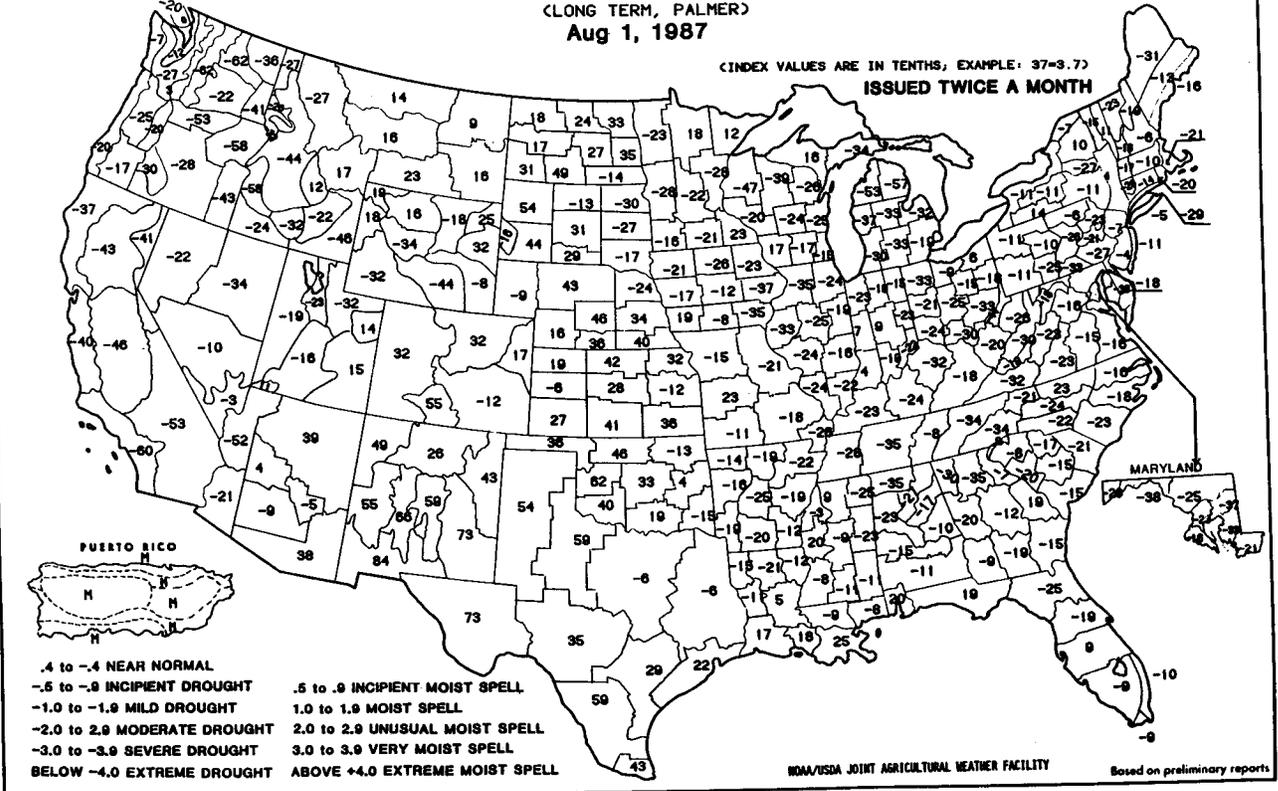
Based on preliminary reports

### DROUGHT SEVERITY INDEX BY DIVISION

(LONG TERM, PALMER)

Aug 1, 1987

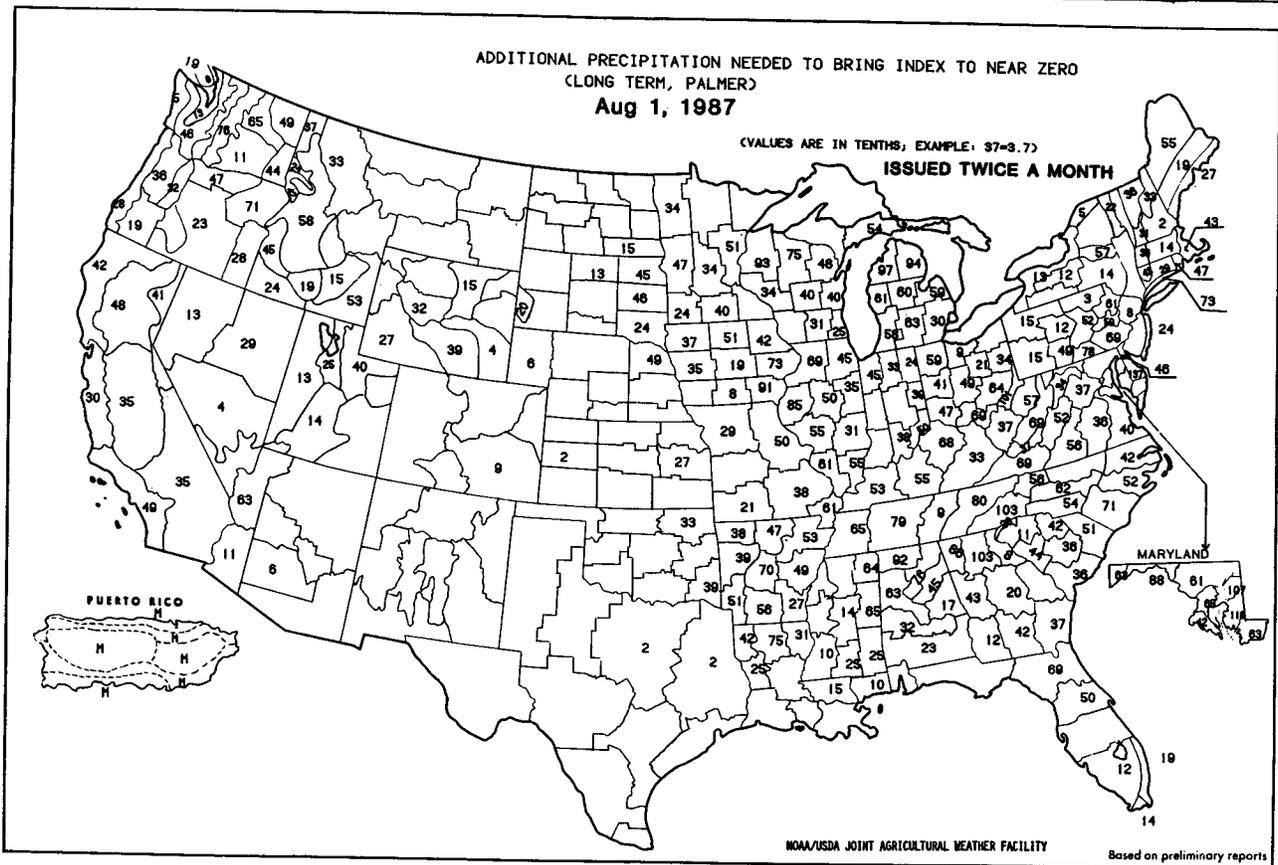
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7) ISSUED TWICE A MONTH



- .4 to -.4 NEAR NORMAL
- .5 to -.9 INCIPENT DROUGHT
- 1.0 to -1.9 MILD DROUGHT
- 2.0 to 2.9 MODERATE DROUGHT
- 3.0 to -3.9 SEVERE DROUGHT
- BELOW -4.0 EXTREME DROUGHT
- .5 to .9 INCIPENT MOIST SPELL
- 1.0 to 1.9 MOIST SPELL
- 2.0 to 2.9 UNUSUAL MOIST SPELL
- 3.0 to 3.9 VERY MOIST SPELL
- ABOVE +4.0 EXTREME MOIST SPELL

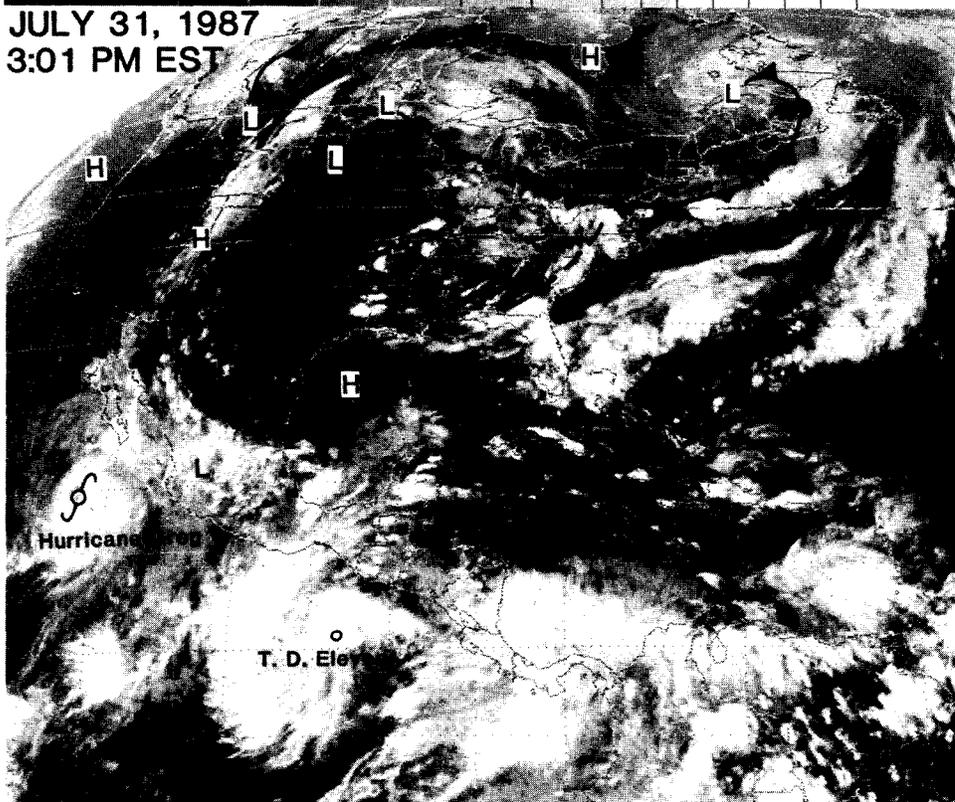
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports



2001 31JL87 19E-4ZA 00901 15691 EC1

JULY 31, 1987  
3:01 PM EST



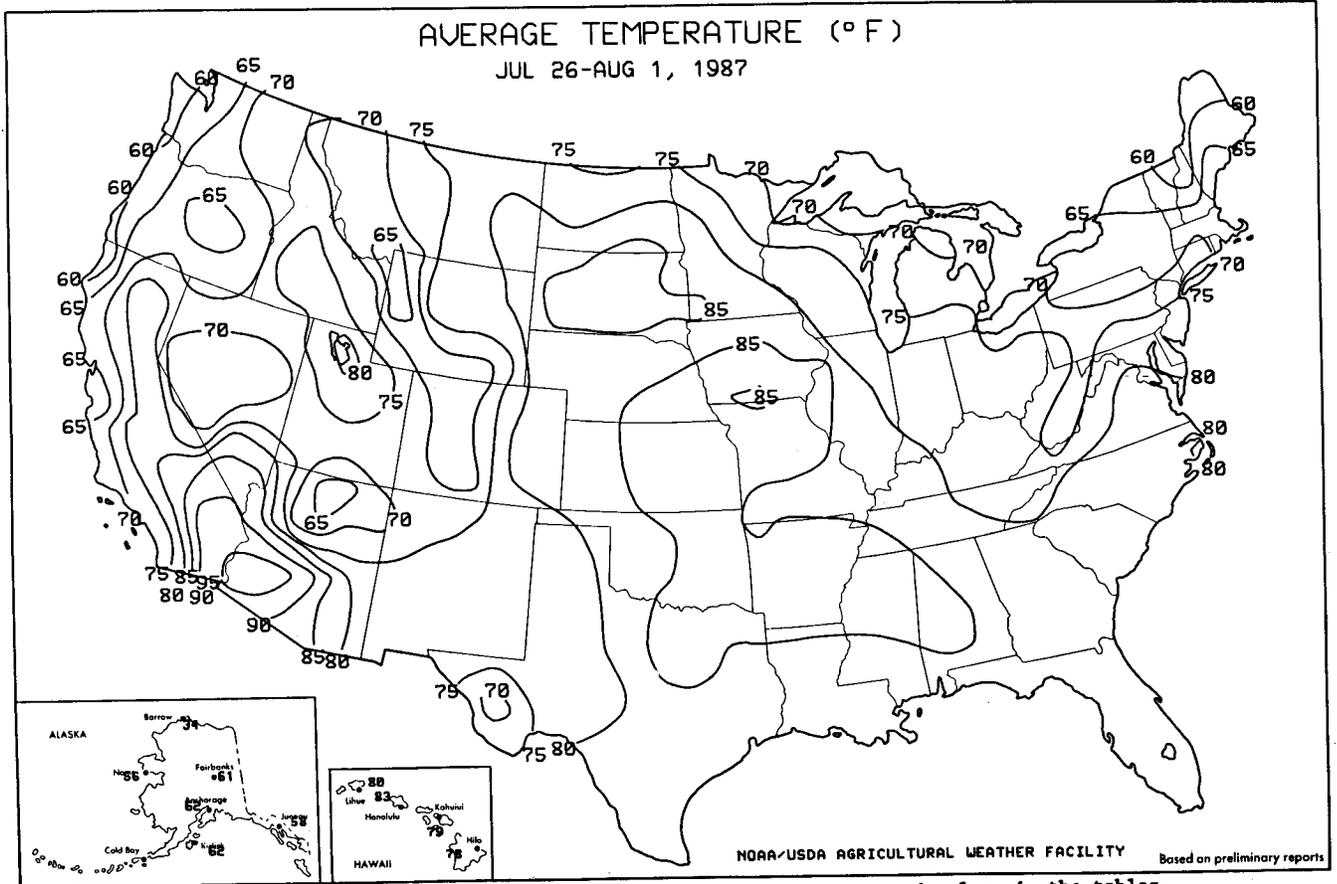
HURRICANE GREG MOVES WESTWARD INTO THE PACIFIC, FOLLOWED BY TROPICAL DEPRESSION ELEVEN, WHICH DEVELOPS INTO HURRICANE HILLARY.

MOISTURE FLOWS NORTHWARD FROM THE PACIFIC ACROSS THE ROCKIES.

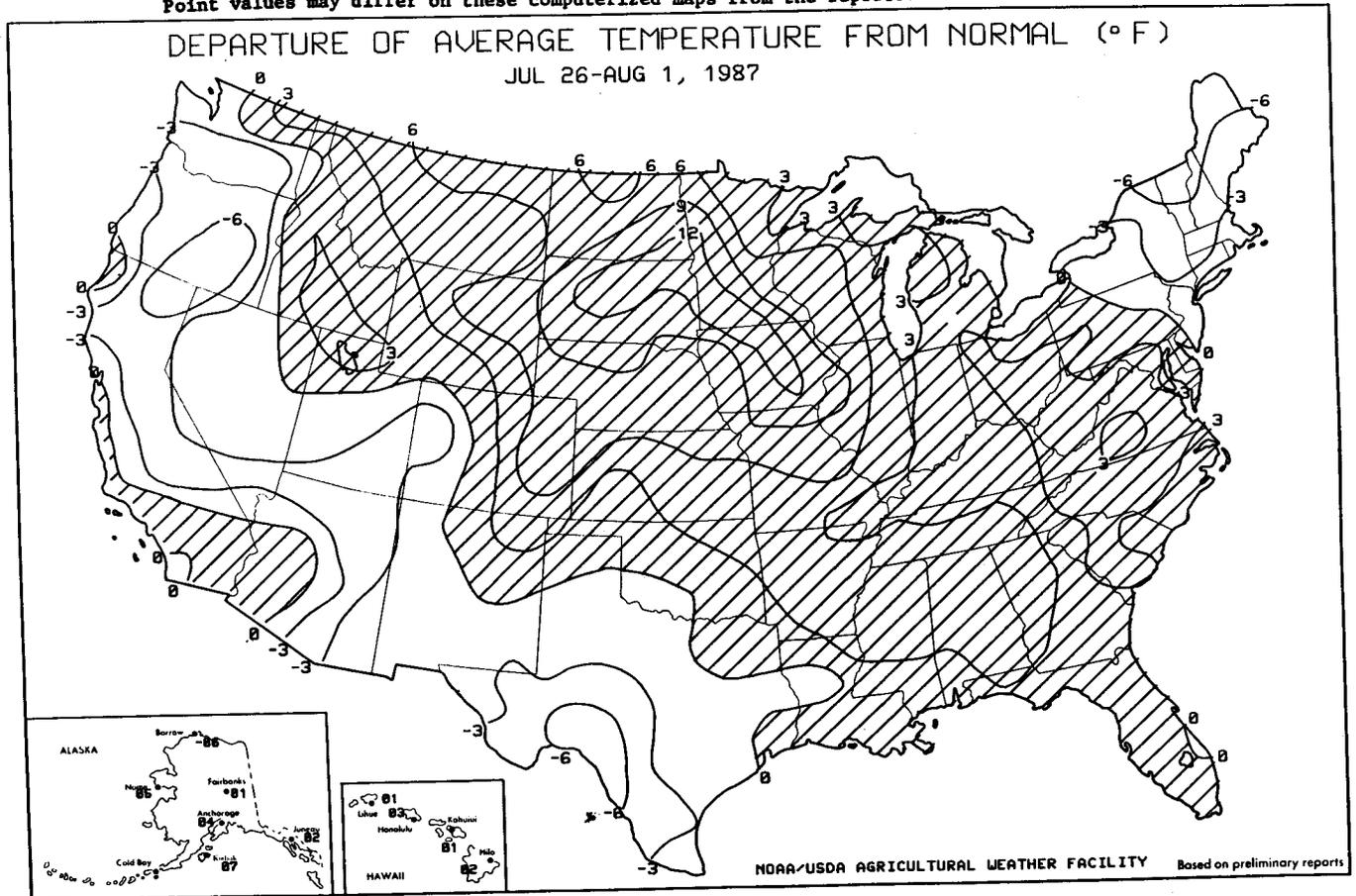
A LARGE BAND OF THUNDERSTORMS COVERS THE EASTERN SEABOARD FROM DELAWARE SOUTHWARD TO FLORIDA.

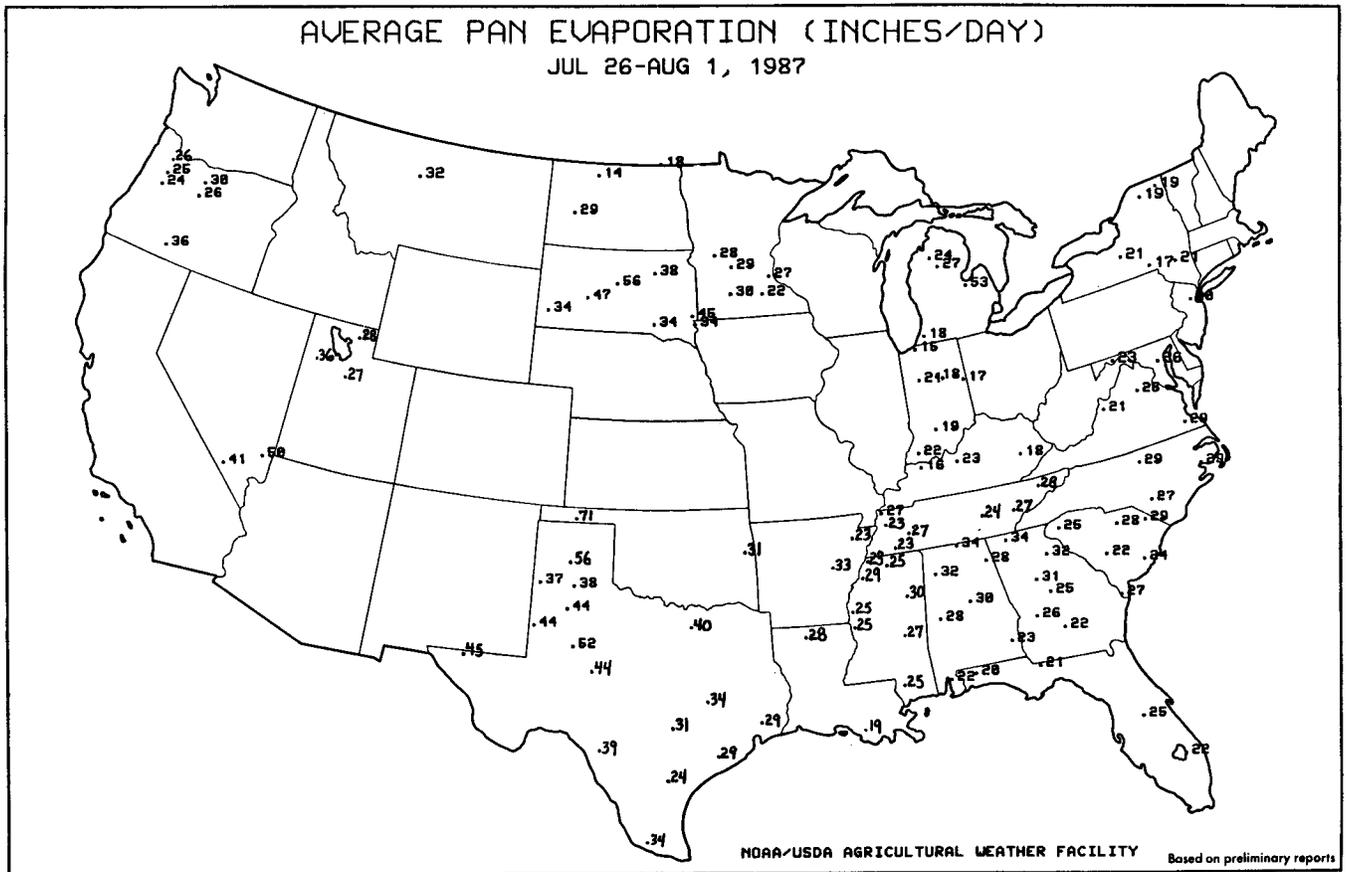
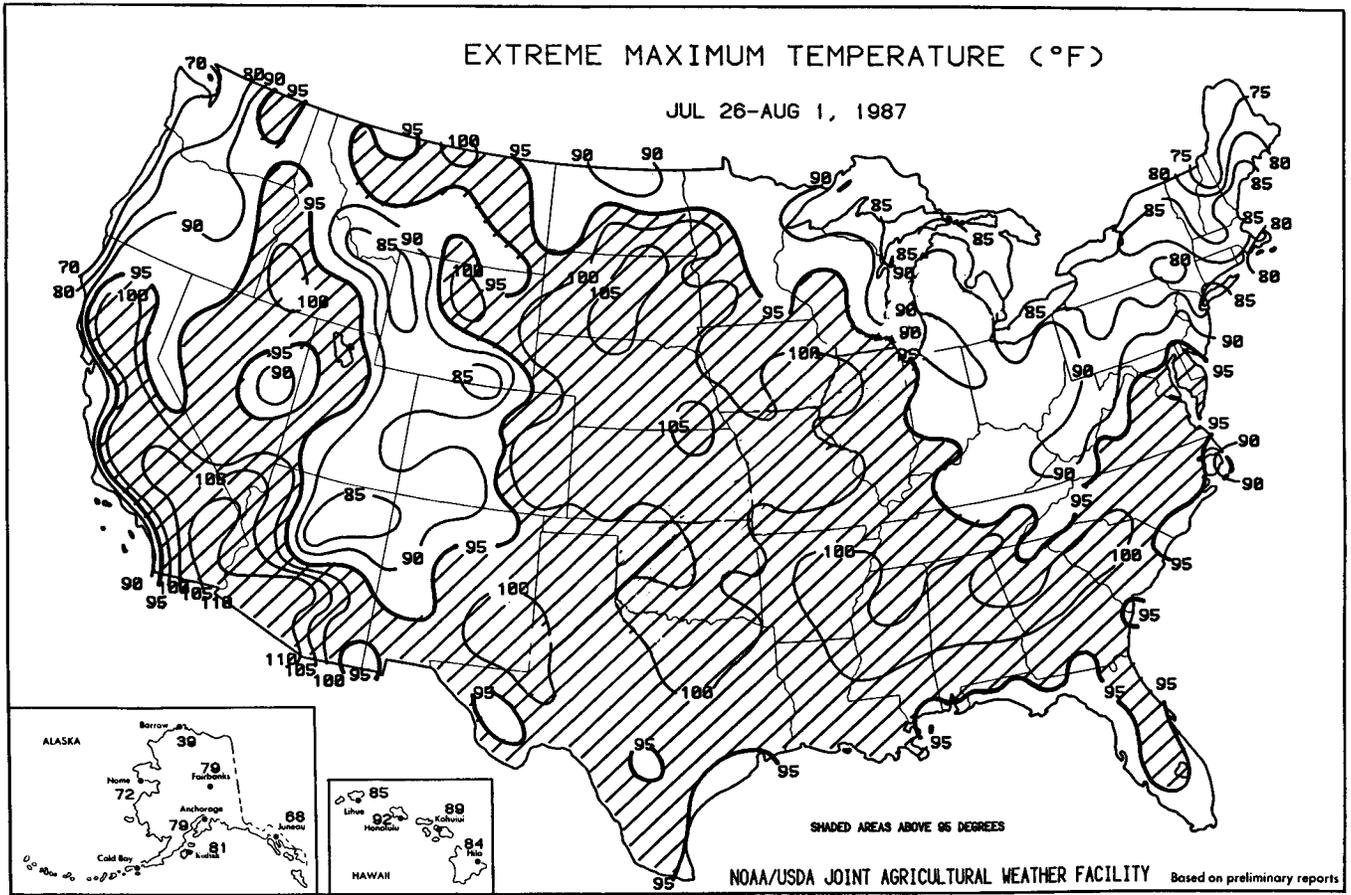
AFTERNOON CONVECTION RESULTS IN SCATTERED THUNDERSTORMS IN THE CENTRAL AND LOWER MISSISSIPPI VALLEY.

SEVERE THUNDERSTORMS, SOME WITH TORNADOES, MOVE THROUGH CENTRAL ALBERTA, CANADA.

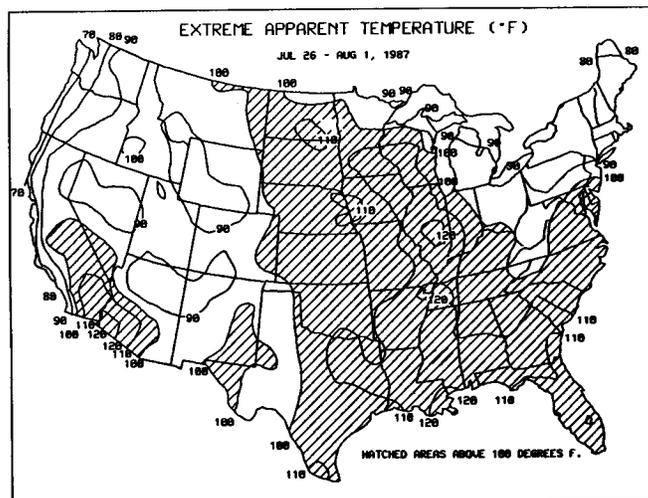
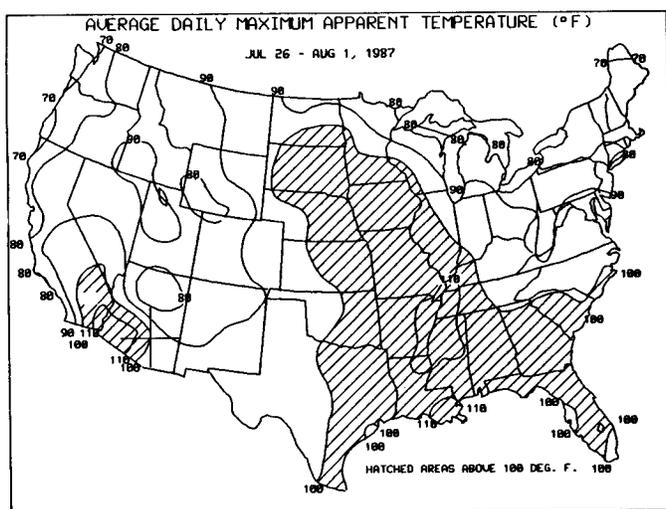


Point values may differ on these computerized maps from the reported values in the tables.





## APPARENT TEMPERATURES INDICATE STRESS



The apparent temperature is a measure of human discomfort due to combined heat and high humidity. It was developed by R.G. Steadman (1979) and is based on studies of human physiology and clothing science. The apparent temperature scale is designed so that apparent temperature exceeds the actual air temperature when humidity is relatively high. The apparent temperature then measures the increased physiological heat stress and discomfort associated with higher than comfortable humidities. On the other hand, the apparent temperature is less than the actual air temperature when humidity is relatively low. In that case, the apparent temperature indicates the reduced stress and increased comfort associated with a higher rate of evaporative cooling of the skin.

Apparent temperatures greater than 80 F (27 C) are likely to produce some discomfort. Values in excess of about 105 F (41 C) may be dangerous and even life-threatening, with severe heat exhaustion or heat stroke possible if exposure is prolonged or physical activity is high. The degree of stress may vary with age, health, and body characteristics.

The apparent temperature as used here does not consider the effects of air movement or exposure to sunshine on the degree of discomfort or stress.

Reference: Steadman, R.G., 1979: The assessment of sultriness. Part I: A temperature-humidity index based on human physiology and clothing science. (Journal of Applied Meteorology, vol. 18, pp. 861-873.)

# National Weather Data for Selected Cities

Weather Data for the Week Ending August 1, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUNE 6	PCT. NORMAL SINCE JUNE 6	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	98	69	101	68	84	3	0	-1.2	0	5.5	61	26.1	74	98	32	7	0	0	0
MOBILE	94	72	96	71	83	1	1.4	-4	.6	12.6	97	44.9	113	97	55	6	0	0	1
MONTGOMERY	100	71	101	68	86	4	.3	-7	.3	9.9	119	37.2	119	94	38	7	0	2	0
AK ANCHORAGE	70	55	79	51	62	4	.7	-2	.4	3.0	97	6.7	102	86	52	0	0	2	0
BARROW	36	31	39	30	34	6	.6	-2	T	2.0	164	2.4	115	99	90	0	6	1	0
FAIRBANKS	71	50	79	45	61	0	.6	-2	T	2.8	89	3.8	71	92	44	0	0	3	1
JUNEAU	65	52	68	51	59	2	.6	-2	T	7.4	103	21.9	91	94	69	0	0	0	0
KODIAK	69	55	81	51	62	2	T	-9	T	18.0	231	47.2	150	85	58	0	0	0	0
NOME	64	48	72	43	56	5	T	-6	T	1.6	45	4.0	62	92	54	0	0	1	0
AZ PHOENIX	104	81	111	75	92	0	1.1	-9	.9	1.1	120	4.3	126	69	26	1	0	3	1
PRESCOTT	86	61	90	57	74	0	.6	-3	.3	2.2	57	6.7	69	78	31	1	0	0	0
TUCSON	98	74	101	70	86	0	.2	-4	.2	.5	19	5.1	97	78	29	7	0	3	0
YUMA	108	85	112	83	96	2	T	-1	T	.4	0	.4	42	56	25	7	0	0	0
AR FORT SMITH	99	73	102	70	86	4	0	-7	0	5.7	83	23.1	96	97	39	7	0	0	0
LITTLE ROCK	98	76	101	72	87	4	.1	-7	.1	4.3	59	21.6	71	78	51	7	0	1	0
CA BAKERSFIELD	96	62	105	59	79	6	0	0	0	.3	517	4.0	103	71	22	7	0	0	0
EUREKA	67	53	69	50	60	4	0	0	0	.5	71	17.9	80	85	63	0	0	0	0
FRESNO	96	60	104	59	78	0	0	0	0	T	14	6.6	95	62	18	7	0	0	0
LOS ANGELES	76	62	79	60	69	0	-1	-1	0	.2	31	3.0	36	95	61	0	0	0	0
REDDING	94	60	102	55	77	0	-1	-7	0	.2	21	19.3	78	56	13	6	0	0	0
SACRAMENTO	93	55	102	53	74	0	0	0	0	T	0	8.8	82	84	18	6	0	0	0
SAN DIEGO	75	64	81	61	69	0	-2	-2	0	0	75	5.1	83	89	63	0	0	0	0
SAN FRANCISCO	74	56	88	52	65	0	0	0	0	T	0	8.5	69	86	49	0	0	0	0
CO DENVER	95	65	97	62	80	0	T	-4	T	4.2	120	13.2	130	75	23	4	0	2	0
GRAND JUNCTION	85	62	92	58	74	0	.9	.8	.3	1.7	193	7.1	169	92	41	7	0	5	0
PUEBLO	100	66	103	62	83	0	T	-4	T	1.6	51	6.4	96	61	17	7	0	1	0
CT BRIDGEPORT	80	65	83	61	73	0	.5	-3	.4	3.1	49	19.1	80	84	48	0	0	2	0
HARTFORD	83	57	86	51	70	0	.1	-7	.1	5.8	89	24.4	99	92	36	0	0	1	0
DC WASHINGTON	92	73	96	68	83	3	.4	-5	.4	6.5	88	19.9	88	87	40	6	0	2	0
FL APALACHICOLA	92	74	93	73	83	1	.5	-1.2	.2	7.5	62	30.5	103	96	61	7	0	4	0
DAYTONA BEACH	93	73	96	71	83	2	1.1	-1	.5	7.0	58	26.7	102	97	56	7	0	5	0
JACKSONVILLE	94	72	96	70	83	1	2.2	.6	1.3	8.6	70	26.4	89	98	52	7	0	6	1
KEY WEST	90	80	91	77	85	0	.3	-5	.2	7.6	87	21.3	115	82	62	6	0	2	0
MIAMI	91	77	93	73	84	1	.3	-1.0	.2	10.7	70	23.4	76	91	57	5	0	4	0
ORLANDO	94	75	96	74	84	2	.4	-1.3	.3	11.7	77	28.0	94	92	49	7	0	4	0
TALLAHASSEE	94	72	97	69	83	2	1.8	-2	1.2	18.9	122	47.5	119	100	52	6	0	4	2
TAMPA	91	76	93	74	83	1	.4	-1.3	.4	9.9	77	29.9	112	89	56	6	0	2	0
WEST PALM BEACH	91	75	92	73	83	0	0	-8	0	11.0	78	29.4	94	95	58	5	0	2	0
GA ATLANTA	95	72	97	70	83	4	2.0	1.0	1.6	13.6	165	34.6	109	88	41	7	0	3	1
AUGUSTA	97	71	100	69	84	3	2.1	1.1	2.1	8.8	105	31.6	112	96	44	7	0	2	1
MACON	97	72	100	71	85	3	T	-1.0	T	6.5	78	28.1	95	97	43	7	0	0	0
SAVANNAH	95	74	98	73	85	3	.2	-1.5	.1	12.5	94	35.1	112	92	49	7	0	2	0
HI HILO	84	72	84	70	78	2	1.5	-7	.4	28.1	186	71.2	96	96	66	0	0	6	0
HONOLULU	91	75	92	72	83	3	T	-1	T	.7	69	3.3	24	81	46	5	0	0	0
KAHULUI	87	70	89	66	79	0	T	-1	T	.1	18	12.4	104	85	51	0	0	0	0
LIHUE	84	75	85	74	80	1	.1	-4	.1	3.1	83	13.8	57	89	65	0	0	1	0
ID BOISE	94	60	104	44	77	1	.3	-.3	.3	1.3	111	6.4	89	59	17	5	0	1	0
LEWISTON	88	62	98	52	75	0	0	-1	0	3.6	186	7.2	92	52	22	3	0	0	0
POCATELLO	89	59	96	52	74	2	.5	.4	.5	2.6	173	7.7	114	78	26	3	0	3	0
IL CHICAGO	88	69	97	63	79	5	1.6	-.9	.7	6.4	83	15.2	75	94	57	4	0	3	2
MOLINE	98	72	103	67	85	10	.6	-4	.4	3.5	38	12.8	55	93	44	7	0	2	0
PEORIA	96	73	100	70	84	9	2.0	1.1	1.6	6.2	78	14.0	65	95	45	7	0	3	1
QUINCY	96	74	97	71	85	0	1.2	-.3	1.0	6.0	71	14.7	65	91	45	7	0	4	1
ROCKFORD	89	69	96	65	79	6	3.6	2.6	1.7	8.1	88	17.4	78	99	63	4	0	5	3
SPRINGFIELD	95	73	99	70	84	8	.6	-2	.2	8.4	117	15.8	76	98	55	7	0	4	0
IN EVANSVILLE	93	70	96	66	81	3	1.1	-.3	.8	9.2	121	21.8	82	100	60	6	0	4	1
FORT WAYNE	86	64	89	57	75	2	.5	-2	.3	8.5	118	18.0	85	97	57	0	0	3	0
INDIANAPOLIS	87	68	91	64	77	2	1.7	-.7	.6	13.3	158	22.4	92	92	60	1	0	5	2
SOUTH BEND	86	66	89	61	76	4	1.7	-.8	.7	7.6	98	18.6	84	95	57	0	0	4	1
IA DES MOINES	98	75	101	74	86	10	0	-8	0	7.2	96	18.6	99	86	39	7	0	0	0
SIOUX CITY	95	72	97	71	83	7	0	-7	0	6.2	83	17.5	107	92	48	7	0	0	0
WATERLOO	95	73	99	67	84	11	0	-1.0	0	7.8	86	16.2	78	93	51	6	0	0	0
KS CONCORDIA	101	76	105	74	88	8	0	-7	0	7.0	90	25.8	149	66	27	7	0	0	0
DODGE CITY	97	68	102	66	82	2	0	-7	0	7.9	128	17.7	130	74	26	7	0	0	0
GOODLAND	98	67	102	64	82	6	0	-5	0	8.4	162	16.2	148	63	23	7	0	0	0
TOPEKA	96	71	100	68	84	5	0	-8	0	7.6	82	23.7	115	87	39	7	0	0	0
WICHITA	100	72	103	71	86	4	0	-7	0	6.6	86	24.1	138	80	26	7	0	0	0
KY BOWLING GREEN	90	68	91	63	79	0	.9	0	.8	11.4	127	27.3	87	99	56	3	0	2	1
LEXINGTON	90	68	93	64	79	2	1.8	.7	1.5	11.6	124	23.7	81	96	49	4	0	3	1
LOUISVILLE	90	71	95	68	81	2	1.1	-.2	.7	8.9	115	21.2	78	98	57	5	0	3	1
LA ALEXANDRIA	94	71	97	68	83	-1	2.1	1.1	2.1	7.1	83	33.7	101	96	56	7	0	2	1
BATON ROUGE	94	73	95	70	84	2	3.5	1.9	1.5	10.9	105	37.5	107	97	53	7	0	4	3
LAKE CHARLES	94	75	96	71	84	2	.6	-7	.5	19.5	204	40.4	134	96	51	7	0	2	0
NEW ORLEANS	95	74	96	72	84	2	.2	-1.4	.1	21.4	185	47.7	133	98	56	7	0	2	0

Based on 1951-80 normals.

Weather Data for the Week Ending August 1, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUNE 8	PCT. NORMAL SINCE JUNE 8	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	98	73	101	69	86	2	.4	-.3	.4	6.6	93	25.2	91	95	41	7	0	2	0
ME CARIBOU	68	48	75	43	58	-7	.8	-.2	.3	7.0	95	15.8	80	96	59	0	0	2	0
PORTLAND	78	54	86	47	66	-3	.2	-.4	.2	6.8	114	25.3	104	90	40	0	0	2	0
MD BALTIMORE	90	70	93	64	80	2	2.2	-.8	.2	7.9	102	22.9	95	94	44	4	0	1	0
SALISBURY	88	68	96	63	78	1	2.6	1.5	1.4	6.2	77	24.5	96	98	52	3	0	3	2
MA BOSTON	80	63	88	58	71	-3	T	-.7	T	3.4	60	26.9	109	85	35	0	0	0	0
CHATHAM	74	62	77	60	68	0	T	-.8	T	2.8	48	29.1	112	86	68	0	0	0	0
MI ALPENA	80	55	87	49	68	1	1	-.7	T	4.5	72	10.2	62	92	47	1	0	4	1
DETROIT	86	66	92	62	76	4	1.0	-.3	.8	10.0	152	19.7	106	92	48	1	0	1	0
FLINT	87	63	92	55	75	4	.1	-.6	.1	3.8	62	11.0	65	99	48	1	0	0	0
GRAND RAPIDS	86	62	91	54	74	2	.5	-.2	.2	6.5	98	12.1	63	97	49	2	2	4	0
HOUGHTON LAKE	85	56	91	44	71	3	.4	-.2	.4	2.6	43	7.6	48	91	39	1	0	0	0
LANSING	87	62	92	53	75	4	1.1	-.6	.7	6.8	104	12.0	70	95	44	2	0	3	1
MARQUETTE	78	54	89	43	66	-1	2.4	1.8	2.3	9.1	148	20.4	120	95	55	0	0	2	1
MUSKOGON	86	62	90	55	74	3	.7	-.1	.6	3.0	60	12.1	71	96	52	1	0	3	1
SAULT ST. MARIE	77	55	83	50	66	2	.3	-.4	.3	6.3	100	13.3	76	97	52	0	0	1	0
MN ALEXANDRIA	89	70	100	67	80	9	.3	-.4	.3	4.8	66	11.5	76	93	57	3	0	1	0
DULUTH	79	58	90	49	68	3	1	-.8	0	6.3	79	12.0	70	96	57	1	0	3	0
INT'L FALLS	84	60	92	55	72	6	3.0	2.2	2.8	8.4	111	13.4	94	94	50	1	0	3	1
MINNEAPOLIS	90	72	94	68	81	8	1.1	.3	.6	19.3	252	22.8	141	91	60	5	0	2	1
ROCHESTER	90	70	94	65	80	10	.9	.1	.9	10.9	143	16.2	96	99	62	4	0	1	1
MS GREENWOOD	97	75	99	72	86	4	1.1	.1	.9	7.5	94	30.0	88	97	47	7	0	2	1
JACKSON	99	73	101	70	86	4	T	-1.0	T	7.2	92	33.8	102	96	37	7	0	1	0
MERIDIAN	99	71	100	69	85	4	.1	-1.0	.1	8.9	99	39.5	114	96	37	7	0	2	2
MO CAPE GIRARDEAU	93	72	97	70	82	-	2.0	1.1	1.4	13.0	176	25.0	91	97	57	6	0	1	1
COLUMBIA	98	73	101	69	86	7	.5	-.2	.5	7.5	108	16.9	76	90	38	7	0	1	1
KANSAS CITY	98	75	102	73	87	6	0	-.9	0	7.6	85	20.4	94	80	36	7	0	0	0
SAINT LOUIS	97	77	100	74	87	8	T	-.7	T	8.6	116	17.9	83	88	47	7	0	0	0
SPRINGFIELD	97	71	101	68	84	6	0	-.7	0	8.4	101	27.3	114	96	43	7	0	0	0
MT BILLINGS	92	66	95	61	79	5	T	-.1	T	3.3	113	9.4	95	79	27	6	0	1	0
GLASGOW	90	68	96	60	79	8	1.2	.9	1.2	4.0	94	7.6	102	86	43	4	0	2	1
GREAT FALLS	91	59	97	47	75	4	0	-.2	0	4.4	113	9.7	93	73	22	5	0	0	0
HAVRE	92	63	100	51	78	7	T	-.2	T	3.3	93	6.0	75	86	30	4	0	1	0
HELENA	90	57	97	51	74	5	T	-.2	T	4.9	154	11.1	117	92	31	3	0	0	0
KALISPELL	86	53	96	39	69	3	T	-.2	T	4.9	93	9.2	95	84	35	5	0	3	2
MILES CITY	92	69	99	65	81	5	1.7	1.5	1.0	4.0	93	7.6	92	90	26	5	0	0	0
MISSOULA	88	52	95	41	70	2	T	-.2	T	4.0	148	7.6	92	90	26	5	0	0	0
NE GRAND ISLAND	100	70	104	67	85	8	0	-.6	0	2.7	41	16.4	105	75	27	7	0	0	0
LINCOLN	101	71	105	70	86	8	0	-.7	0	6.0	84	19.4	111	79	30	7	0	0	0
NORFOLK	97	71	100	68	84	8	0	-.6	0	4.5	59	19.1	117	83	37	7	0	0	0
NORTH PLATTE	98	67	103	64	83	8	T	-.6	T	6.7	99	14.3	103	74	26	7	0	0	0
OMAHA	97	75	99	74	86	8	0	-.8	0	6.8	86	20.2	109	72	43	7	0	0	0
SCOTTSSBLUFF	100	64	101	60	82	7	.2	-.1	.2	5.3	106	16.8	155	82	21	7	0	1	0
VALENTINE	101	69	106	67	85	10	.2	-.4	.2	6.1	111	14.4	122	71	24	7	0	1	0
NV ELY	86	49	89	43	68	-1	.7	-.6	.6	2.2	154	7.2	126	74	22	0	0	2	1
LAS VEGAS	102	73	107	69	88	-3	.1	0	.1	.3	49	3.4	154	42	17	7	0	1	0
RENO	92	48	95	45	70	0	0	0	0	6	59	6.9	143	30	11	7	0	0	0
WINNEMUCCA	95	48	97	39	72	-1	0	0	0	.6	59	6.9	143	30	11	7	0	0	0
NH CONCORD	80	50	86	41	65	-5	.3	-.4	.3	9.5	159	21.8	108	98	36	0	0	2	0
NJ ATLANTIC CITY	85	62	94	56	74	-1	.2	-.8	.2	7.3	105	27.2	114	98	51	1	0	1	0
NM ALBUQUERQUE	92	66	96	65	79	0	.7	.3	.5	1.0	57	3.9	100	74	23	7	0	2	0
CLOVIS	91	64	96	62	78	0	0	-.6	0	4.7	85	10.0	101	81	29	5	0	0	0
ROSWELL	93	65	101	61	79	-1	T	-.4	T	4.2	153	8.5	167	84	30	5	0	0	0
NY ALBANY	81	53	86	47	67	-5	.5	-.2	.3	6.0	95	18.3	91	98	37	0	0	3	0
BINGHAMTON	77	56	80	49	66	-3	.3	-.5	.2	8.2	115	19.3	91	95	43	0	0	2	0
BUFFALO	81	59	85	56	70	-1	1.1	-.3	.8	11.4	198	23.6	118	90	45	0	0	2	0
NEW YORK	84	68	87	63	76	-1	.1	-.8	.1	10.8	156	27.4	113	86	47	0	0	2	0
ROCHESTER	80	56	83	52	68	-3	.2	-.4	.1	9.7	181	19.1	107	97	44	0	0	2	0
SYRACUSE	82	55	86	49	69	-3	.1	-.8	.0	7.2	96	17.4	78	90	35	0	0	2	0
NC ASHEVILLE	90	64	92	61	77	3	.1	-.9	.1	10.9	142	29.0	110	96	42	4	0	1	0
CHARLOTTE	94	72	98	71	83	4	.4	-.5	.3	4.4	58	21.5	80	91	43	6	0	2	0
GREENSBORO	91	71	96	69	81	3	T	-.9	T	7.0	84	29.3	115	91	45	5	0	1	0
HATTERAS	87	70	89	65	79	0	3.1	1.8	2.5	8.3	84	38.5	129	96	61	0	0	3	2
NEW BERN	92	71	96	67	82	2	.6	-.1	.3	11.4	94	32.3	104	93	49	5	0	4	0
RALEIGH	92	71	97	67	82	3	.4	-.6	.2	3.9	47	24.7	98	92	42	5	0	2	0
WILMINGTON	90	72	94	69	81	0	3.8	2.1	2.7	11.3	85	28.9	91	98	56	5	0	3	2
ND BISMARCK	92	71	102	67	81	10	1.1	.7	.8	6.2	122	13.7	131	97	51	4	0	4	1
FARGO	93	72	101	68	83	11	.5	-.2	.4	3.9	61	9.1	74	90	49	5	0	3	0
GRAND FORKS	90	68	94	61	79	10	.2	-.4	.2	6.6	112	12.4	111	96	49	5	0	2	0
WILLISTON	88	69	93	62	78	7	.2	-.2	.1	5.6	124	10.1	111	89	52	2	0	0	0
OH AKRON-CANTON	86	64	91	55	75	3	T	-.9	T	6.0	82	17.8	80	95	41	1	0	0	1
CINCINNATI	87	68	92	65	77	2	1.0	.2	.5	9.8	116	22.6	88	95	55	2	0	0	0
CLEVELAND	85	64	89	57	75	2	.4	-.3	.3	11.7	169	23.4	111.	96	48	0	0	2	0
COLUMBUS	89	67	92	59	78	3	.6	-.2	.6	7.1	88	15.8	68	94	43	3	0	1	1

Based on 1951-80 normals.

Weather Data for the Week Ending August 1, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUNE 6	PCT. NORMAL SINCE JUNE 6	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		°F	°F	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	87	65	90	59	76	1	.2	-.5	.1	7.6	104	17.8	81	96	51	1	0	4	0		
TOLEDO	88	64	91	56	76	3	.4	-.7	.1	7.2	105	15.4	81	100	51	2	0	1	0		
YOUNGSTOWN	86	61	91	52	73	3	.4	-.7	.1	9.8	129	21.0	93	97	46	1	1	1	0		
OK OKLAHOMA CITY	94	73	97	70	84	1	.4	-.6	.0	9.5	137	30.7	157	90	38	0	0	0	0		
TULSA	98	77	100	75	88	4	.4	-.7	.0	6.5	80	26.5	112	76	34	7	7	0	0		
OR ASTORIA	67	49	69	43	58	-3	.1	-.1	.1	1.7	47	32.5	88	99	65	0	0	2	2		
BURNS	85	43	89	37	64	-6	.0	-.1	.0	1.8	70	6.9	105	***	***	0	0	0	0		
MEDFORD	84	54	93	50	69	-4	.0	-.1	.0	1.5	159	9.4	90	78	26	1	0	0	0		
PENDLETON	84	56	91	46	70	-5	.0	-.1	.0	.7	75	5.6	81	56	23	1	0	0	0		
PORTLAND	76	55	80	52	66	-3	.0	-.1	.0	1.0	54	19.0	96	84	39	0	0	0	0		
SALEM	77	52	81	48	64	-3	.0	-.1	.0	2.8	178	21.7	100	88	38	0	0	0	0		
PA ALLENTOWN	83	63	88	59	73	-1	.9	-.1	.7	8.8	115	22.6	89	93	45	0	0	2	2		
ERIE	81	65	84	61	73	3	.1	-.7	.1	9.2	123	20.2	95	88	47	0	0	1	0		
HARRISBURG	88	66	91	59	77	1	.1	-.7	.1	5.4	76	18.7	81	89	39	2	0	1	0		
PHILADELPHIA	89	69	93	65	79	2	.2	-.9	.1	6.9	87	20.6	85	91	45	2	0	0	0		
PITTSBURGH	87	66	91	62	77	5	.5	-.8	.1	8.7	118	21.9	95	85	38	1	0	0	0		
SCRANTON	81	60	82	52	70	-2	.4	-.3	.4	10.2	147	21.2	106	92	48	0	0	1	0		
RI PROVIDENCE	82	60	86	56	71	-2	.1	-.8	.1	3.2	54	22.6	89	93	40	0	0	0	0		
SC CHARLESTON	93	74	97	73	84	3	.4	-1.2	.4	8.6	61	29.6	92	96	53	6	0	3	0		
COLUMBIA	98	71	101	69	85	3	1.8	.5	1.6	10.5	105	31.1	100	95	42	7	0	3	1		
FLORENCE	94	72	98	70	83	2	.8	-.5	.4	5.9	56	22.7	82	95	48	6	0	2	0		
GREENVILLE	93	69	99	67	81	2	.7	-.3	.6	10.3	114	30.9	97	97	48	6	0	2	1		
SD ABERDEEN	102	72	106	68	87	14	.4	-.1	.4	3.0	54	8.3	68	90	30	7	0	2	0		
HURON	98	71	101	69	85	10	.0	-.5	.0	3.7	66	12.6	100	88	34	7	0	0	0		
RAPID CITY	102	70	104	68	86	12	.3	-.1	.3	2.2	41	8.5	71	67	20	7	0	1	0		
SIOUX FALLS	98	74	101	70	86	12	.0	-.6	.0	4.9	76	11.8	79	83	37	7	0	0	0		
TN CHATTANOOGA	98	71	100	68	84	5	.3	-.7	.3	7.0	88	32.3	99	91	33	7	0	2	0		
KNOXVILLE	94	68	96	64	81	3	.1	-.9	.1	7.3	88	26.4	87	95	37	7	0	0	0		
MEMPHIS	96	77	100	73	87	4	.3	-.7	.2	5.2	67	22.8	69	90	49	7	0	2	0		
NASHVILLE	93	73	97	70	83	3	1.0	-.1	1.0	5.2	69	18.3	60	96	49	7	0	1	1		
TX ABILENE	94	71	97	67	82	-2	.0	-.5	.0	3.8	80	14.8	111	75	32	7	0	0	0		
AMARILLO	92	65	96	62	79	0	.0	-.6	.0	4.1	66	12.0	101	75	27	7	0	0	0		
AUSTIN	94	73	96	71	84	-2	.0	-.4	.0	14.3	288	26.7	148	94	42	7	0	0	0		
BEAUMONT	95	74	97	73	85	1	.1	-1.4	.1	15.7	144	37.1	118	98	49	7	0	0	0		
BROWNSVILLE	91	74	94	72	82	-2	1.5	1.1	.8	6.4	152	14.6	131	99	59	5	0	2	2		
CORPUS CHRISTI	91	72	95	70	82	-3	2.0	1.4	1.4	8.1	128	22.1	143	98	56	5	0	2	2		
DEL RIO	90	71	94	69	80	-6	.9	.6	.8	7.7	224	18.1	195	87	42	4	0	2	1		
EL PASO	92	68	99	64	80	-2	.4	.0	.4	2.9	133	4.5	121	82	30	5	0	2	0		
FORT WORTH	98	74	100	73	86	0	.0	-.5	.0	5.1	112	17.8	94	81	34	7	0	0	0		
GALVESTON	91	79	93	78	85	1	.1	-.9	.1	12.8	172	26.0	125	81	55	5	0	0	0		
HOUSTON	95	73	97	71	84	0	.1	-.8	.1	14.2	175	27.6	106	93	43	7	0	1	0		
LUBBOCK	91	67	95	64	79	0	.0	-.5	.0	6.8	131	12.6	119	84	37	4	0	0	0		
MIDLAND	93	64	99	62	79	-3	.1	-.4	.1	3.4	106	11.4	153	87	31	7	0	1	0		
SAN ANGELO	93	65	97	61	79	-5	.0	-.3	.0	3.5	113	22.9	240	91	36	7	0	0	0		
SAN ANTONIO	93	73	95	69	83	-2	.1	-.4	.1	8.9	179	30.2	188	93	44	7	0	0	0		
VICTORIA	93	74	95	73	84	-1	.1	-.4	.1	16.7	232	28.7	146	97	50	7	0	2	0		
WACO	100	73	102	70	86	0	.0	-.4	.0	7.3	166	19.7	106	89	32	7	0	0	0		
WICHITA FALLS	98	72	101	67	85	-1	.0	-.4	.0	5.2	106	23.5	148	75	32	7	0	0	0		
UT BLANDING	84	60	90	55	72	-2	1.0	.7	.7	2.6	174	7.5	129	89	52	2	0	5	1		
CEDAR CITY	88	60	94	57	74	-1	.1	-.2	.0	1.2	78	6.0	102	81	28	3	0	4	0		
SALT LAKE CITY	93	70	98	67	81	3	.1	-.2	.1	1.0	57	8.6	89	62	22	6	0	1	0		
VT BURLINGTON	78	49	85	38	63	-6	.1	-.8	.1	7.2	101	15.0	81	95	38	0	0	2	0		
VA NORFOLK	92	74	99	69	83	4	1.4	.1	1.1	6.4	73	28.3	108	90	44	4	0	3	1		
RICHMOND	94	70	99	64	82	4	.1	-1.2	.1	7.5	85	27.5	109	86	37	6	0	0	0		
ROANOKE	92	69	98	66	80	4	.6	-.3	.4	3.9	57	31.2	135	91	41	5	0	2	0		
WA COLVILLE	85	55	93	43	70	2	.3	-.1	.2	2.8	121	11.1	113	73	43	2	0	2	0		
QUILLAYUTE	68	49	70	44	58	-1	.2	-.4	.1	3.1	56	54.3	96	97	55	0	0	2	0		
SEATTLE-TACOMA	75	54	77	52	64	-1	.1	-.2	.1	.5	25	19.1	96	92	38	0	0	0	0		
SPOKANE	83	56	92	44	70	-1	.2	.1	.1	2.8	164	9.3	98	70	26	1	0	2	0		
YAKIMA	84	52	90	40	68	-3	.0	.0	.0	.5	63	4.3	97	74	25	1	0	0	0		
WV BECKLEY	86	63	88	58	75	5	.0	-1.0	.0	5.9	67	24.7	94	88	39	0	0	0	0		
CHARLESTON	91	66	94	63	79	4	.2	-1.0	.2	7.6	87	22.0	83	93	39	6	0	2	0		
HUNTINGTON	91	68	94	64	79	3	.1	-1.1	.1	5.7	68	22.3	87	99	47	5	0	1	0		
PARKERSBURG	91	66	94	64	79	3	.1	-.8	.1	3.5	43	14.0	58	96	39	6	0	1	0		
WI GREEN BAY	85	63	90	55	74	5	.5	-.2	.5	4.5	70	11.8	72	95	57	1	0	2	1		
LACROSSE	90	71	97	67	81	8	4.9	4.1	3.6	10.8	135	21.3	117	97	62	4	0	5	2		
MADISON	86	68	95	63	77	6	1.0	.2	.4	4.4	57	14.0	77	97	61	3	0	4	0		
MILWAUKEE	82	67	88	61	75	3	.9	-.2	.4	6.5	90	18.7	100	94	67	0	0	4	0		
WAUSAU	87	67	95	62	77	7	.4	-.5	.4	7.4	93	13.4	73	95	52	2	0	1	0		
WY CASPER	94	63	96	59	78	6	1.2	1.0	1.1	2.7	120	8.8	111	75	21	6	0	4	1		
CHEYENNE	90	61	92	60	76	6	.4	.0	.2	3.8	96	11.1	119	77	25	4	0	4	0		
LANDER	91	62	93	53	76	5	.3	-.2	.2	1.9	89	10.5	113	66	22	6	0	0	0		
SHERIDAN	88	62	90	57	75	4	.1	-.2	.1	3.5	108	9.2	90	90	40	4	0	2	0		
PR SAN JUAN	89	77	89	76	83	1	1.4	.2	.9	10.5	104	39.8	149	95	78	0	0	6	1		

Based on 1951-80 normals.

Cooling Degree Days Summary

CLIMATE ANALYSIS CENTER-NHC-NWS-NOAA  
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 8-1-1987  
ACCUMULATIONS ARE FROM JANUARY 1  
\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK	WEEK	CUM	CUM	CUM	CUM	CUM	STATE CITY	CALL	WEEK	WEEK	CUM	CUM	CUM	CUM	CUM	
		TOTAL	DEV	TOTAL	DEV	DEV	DEV	DEV			TOTAL	DEV	TOTAL	DEV	DEV	DEV	DEV	
			FROM		FROM	FROM	FROM	FROM				FROM		FROM	FROM	FROM	FROM	
			NORM		NORM	NORM	NORM	NORM				NORM		NORM	NORM	NORM	NORM	
			L YR		L YR	L YR	L YR	L YR				L YR		L YR	L YR	L YR	L YR	
						PRCT	PRCT	PRCT										
AL BIRMINGHAM	BHM	134	22	-4	1194	87	-71	8	MT KALISPELL	FCA	45	24	44	130	50	16	**	**
AL MOBILE	MOB	129	6	-16	1433	-90	-66	-6	MT MILES CITY	MLS	110	33	50	568	183	26	22	5
AL MONTGOMERY	MMH	146	27	5	1370	43	-95	3	MT MISSOULA	MSO	45	17	42	156	33	-4	27	-3
AK ANCHORAGE	ANC	2	2	2	2	2	-2	**	NE GRAND ISLAND	GRI	141	57	57	866	220	112	34	15
AK BARROW	BRW	0	0	0	0	0	0	**	NE LINCOLN	LIN	146	55	48	900	272	168	38	20
AK FAIRBANKS	FBI	1	-5	1	90	42	-31	**	NE NORFOLK	NFK	134	57	58	837	242	179	41	27
AK JUNEAU	JAI	0	0	0	0	0	0	**	NE NORTH PLATTE	NLP	125	55	46	686	120	53	25	10
AK KODIAK	KOD	0	0	0	0	0	0	**	NE OMAHA	OMA	147	56	61	941	192	182	26	24
AK NOME	OME	0	0	0	2	2	-2	**	NE SCOTTSDALE	BFF	118	48	68	500	42	78	9	18
AZ FLAGSTAFF	FLG	2	-12	-10	32	-58	-11	**	NE VALENTINE	VIN	140	70	67	646	172	133	36	26
AZ PHOENIX	PHX	192	2	-25	2788	680	-36	32	NV ELI	ELY	20	-4	13	61	-47	-38	-44	-38
AZ PRESCOTT	PRC	62	6	-6	486	103	-38	27	NV LAS VEGAS	LAS	159	-21	-4	1818	75	-188	4	-9
AZ TUCSON	TUS	145	-1	-26	1863	269	-106	17	NV RENO	RNO	36	1	3	305	90	-27	42	-8
AZ WINSLOW	IWN	55	-43	-34	718	1	48	0	NV WINDHEMCCA	WNC	47	-6	4	312	-14	-6	-4	-16
AR YUMA	YUM	221	18	11	2646	320	-116	14	NH CONCORD	CON	12	-23	-22	305	75	189	33	56
AR PORT SMITH	FSM	151	25	-25	1295	149	-15	13	NJ ATLANTIC CITY	ACY	62	-8	-17	662	186	25	39	4
AR LITTLE ROCK	LRL	153	30	-29	1427	219	15	18	NM ALBUQUERQUE	ABQ	100	4	8	691	-92	65	-12	10
CA BAKERSFIELD	BKA	98	-41	-10	1286	-109	69	-8	NM CLOVIS	CVS	90	6	-45	839	185	-26	14	-3
CA BUREKA	BKA	0	0	0	3	3	3	**	NM ROSWELL	ROW	99	-13	-25	954	-212	-90	-18	-9
CA FRESNO	FAT	95	-18	-23	1163	168	-115	17	NY ALBANY	ALB	17	-29	-44	468	148	127	46	37
CA LOS ANGELES	LAX	27	-8	19	149	-125	-104	-46	NY BINGHAMTON	BGM	15	-13	-18	353	149	129	73	58
CA SACRAMENTO	SAC	65	-12	-5	676	25	29	4	NY BUFFALO	BUF	39	-9	-12	531	235	226	79	74
CA SAN DIEGO	SAN	32	-15	2	178	-141	-137	-44	NY NEW YORK	LGA	80	-4	9	756	156	75	26	11
CA SAN FRANCISCO	SFO	18	7	9	65	40	45	-8	NY ROCHESTER	ROC	23	-23	-15	467	141	201	43	76
CA STOCKTON	SKR	58	-34	-17	719	-66	20	-8	NY SYRACUSE	SYR	28	-15	-24	496	187	179	61	56
CO DENVER	DNV	186	43	48	493	78	14	19	NC ASHEVILLE	AVL	87	24	10	615	124	-2	25	0
CO GRAND JUNCTION	GJN	62	-35	-15	635	-106	-57	-14	NC CAPE HATTERAS	HAT	97	-1	-8	948	134	-67	16	-7
CO PUEBLO	PUB	120	44	48	644	12	54	2	NC CHARLOTTE	CLT	127	29	0	1201	280	-178	30	-13
CT BRIDGEPORT	BDR	54	-16	-7	515	102	77	25	NC GREENSBORO	GSO	115	24	16	991	190	-65	24	-6
CT HARTFORD	HDL	35	-26	-32	506	86	72	20	NC NEW BERN	BNN	119	14	-3	1235	222	12	22	1
DE WILMINGTON	ILG	94	14	5	818	231	65	39	NC RALEIGH DURHAM	ROU	116	25	10	1045	216	-97	26	-8
DC WASHINGTON	DCA	125	27	10	1065	228	17	27	NC WILMINGTON	ILM	113	1	-7	1213	114	-188	18	-13
FL APALACHICOLA	AQC	128	9	-9	1483	34	3	2	ND BISMARCK	BIS	114	65	82	436	153	14	54	52
FL DAYTONA BEACH	DOB	126	14	0	1461	-118	-25	-7	ND FARGO	FAR	125	78	85	574	266	199	86	53
FL FORT MEYER	FMK	135	9	1	2082	42	-23	2	ND GRAND FORKS	GFK	101	61	62	426	145	55	52	15
FL JACKSONVILLE	JAK	128	12	-9	1408	0	-142	0	ND WILLISTON	ISN	94	52	74	394	126	177	47	82
FL KEY WEST	BKW	143	3	-6	2526	-133	-15	-5	OH AKRON-CANTON	CAN	73	24	28	508	208	141	56	32
FL MIAMI	MIA	132	6	-1	2354	86	271	4	OH CLEVELAND	CLE	69	20	14	625	260	181	71	41
FL ORLANDO	MCO	139	13	14	1796	-104	14	-5	OH COLUMBUS	CMH	89	26	17	776	256	128	49	20
FL TALLAHASSEE	TLH	128	9	-9	1392	-30	-41	-2	OH CINCINNATI	CVG	87	10	-2	829	206	58	33	8
FL TAMPA	TPA	129	6	6	1794	-69	-46	-4	OH DAYTON	DAY	79	9	12	738	152	68	26	10
FL WEST PALM BEACH	PBI	127	8	-3	2078	34	55	2	OH TOLEDO	TOL	77	20	25	638	253	194	66	44
GA ATLANTA	ATL	129	31	-5	1232	253	-127	26	OH YOUNGSTOWN	YNG	62	23	21	556	261	210	88	61
GA AUGUSTA	AUG	136	24	-7	1315	177	-184	16	OK OKLAHOMA CITY	OKC	132	6	-51	1197	90	-137	8	-10
GA MCON	MCN	139	20	-15	1384	75	-226	6	OK TULSA	TUL	159	26	-27	1370	181	-10	15	-1
GA SAVANNAH	SNV	137	18	-6	1472	143	-233	11	OR ASTORIA	AST	0	-3	0	8	-4	6	**	**
HI HILO-HAWAII	HLO	89	13	-6	1775	84	-340	5	OR BURNS	BBW	2	-35	-3	82	-127	-86	-61	-51
HI HONOLULU-OAHU	HNL	127	18	7	2433	69	-221	3	OR MEDFORD	MFR	31	-25	-23	477	123	-6	35	-1
HI KAHULUI-HAUI	HOG	99	1	-5	1866	-182	-263	-9	OR PENDELTON	PDT	37	-30	13	354	-61	-56	-15	-14
HI LIHUE-KAUAI	LHI	105	7	-5	1824	-159	-397	-8	OR PORTLAND	POX	8	-27	-13	241	71	48	42	25
ID BOISE	BOI	84	12	48	512	80	-22	19	OR SALEM	SLE	1	-20	-17	153	33	19	14	14
ID LEWISTON	DWS	72	2	43	407	73	8	18	PA ALLENTOWN	ABE	68	3	-14	628	175	79	39	14
ID POCAHELLO	PCH	14	14	50	223	4	-15	-16	PA ERIE	ERI	58	23	-1	568	335	190	149	51
IL CHICAGO	MDW	97	35	32	762	315	258	70	PA HARRISBURG	HAR	85	8	-3	767	166	145	28	23
IL MOKINE	MKI	141	71	58	960	381	247	66	PA PHILADELPHIA	PHL	99	15	5	869	240	37	38	4
IL PEORIA	PIA	137	67	55	927	324	183	54	PA PITTSBURGH	PIT	85	34	37	653	268	157	70	32
IL QUINCY	UIN	139	55	61	977	276	137	39	PA SCRANTON	AVP	41	-8	-17	474	123	89	35	23
IL ROCKFORD	ROF	99	42	31	750	294	207	64	RI PROVIDENCE	PVD	44	-12	1	416	80	53	24	15
IL SPRINGFIELD	SPI	135	58	47	1013	278	111	38	SC CHARLESTON	CHS	134	22	1	1397	205	-224	17	-14
IN EVANSVILLE	EVV	115	24	8	1033	173	-8	20	SC COLUMBIA	CAB	139	26	-2	1304	169	-157	14	-10
IN FORT WAYNE	FWA	71	15	8	688	281	146	41	SC FLORENCE	FLO	127	15	-5	1331	146	-206	12	-13
IN INDIANAPOLIS	IND	89	19	9	777	161	30	26	SC GREENVILLE	GSP	116	18	-3	1108	201	-118	22	-10
IN SOUTH BEND	SBN	88	20	24	749	306	235	69	SD ABERDEEN	ABR	155	99	105	594	218	198	50	50
IA DES MOINES	DSM	150	69	65	910	264	184	41	SD HURON	HON	138	68	75	681	215	244	46	56
IA DUBUQUE	DBQ	106	57	44	631	244	190	63	SD RAPID CITY	RAP	149	86	97	533	153	193	40	57
IA SIOUX CITY	SUX	129	52	49	854	257	199	43	SD SIOUX FALLS	PSD	149	79	93	739	253	234	52	46
IA WATERLOO	ALO	133	77	66	785	346	240	79	TN CHATTANOOGA	CHA	137	39	6	1184	257	-23	28	-2
KS CONCORDIA	CNR	164	59	56	1035	227	189	28	TN KNOXVILLE	TYS	111	20	-7	990	131	-87	15	-8
KS DODGE CITY	DDC	123	13	-14	775	-113	-167	-13	TN MEMPHIS	MEM	153	34	-13	1485	245	-28	-3	-3
KS GOODLAND	GLD	122	42	-34	655	79	18	14	TN NASHVILLE	BNA	129	24	-5	1184	204	39	21	3
KS TOPEKA	TOP	132	34	19	1030	183	20	22	TX ARLING	ARI	123	-17	-48	1255	-199	-314	-14	-20
KS WICHITA	WIC	147	28	-1	1055	4	-103	4	TX AMARILLO	AMA	90	0	-37	716	-153	-182	-10	-20
KY BOWLING GREEN	BWG	98	4	-13	936	70	-11	8	TX AUSTIN	AUS	132	-8	-34	1592	-88	-210	-5	-12
KY LEXINGTON	LXK	97	19	6	917	213	56	30	TX BROWNSVILLE	BRO	122	-15	-32	1948	-236	-381	-11	-16
KY LOUISVILLE	LDF	110	19	0	1042	231	47	28	TX CORPUS CHRISTI	CRP	118	-22	-32	1730	-306	-244	-15	-12
LA ALEXANDRIA	AEX	125	-1	-31	1354	-126	-168	-9	TX DEL RIO	DRT	110	-37	-57	1461	-503	-518	-26	-26
LA BATON ROUGE	BTR	133	14	-20	1530	8	-167	1	TX EL PASO	ELP	100	-11	-27	1092	-221	-158	-17	-12
LA LAKE CHARLES	LCH	138	15	-16	1546	9	-89	1	TX FORT WORTH	FRT	147	-7	-31	1478	-179	-67	-11	-4
LA NEW ORLEANS																		

## National Agricultural Summary

July 27 to August 2, 1987

**HIGHLIGHTS:** Extreme heat diminished soil moisture and stressed crops in the Great Plains, Corn Belt, Delta, and Southeast. Crop condition remained mostly good in the Corn Belt and central and northern Great Plains. The affect of the heat became more evident in the Southeast as crop condition declined. Soil moisture was short in most of the eastern half of the Nation, despite scattered showers. Soil moisture was critically short in the Southeast and some Delta States. Fieldwork averaged 5 to 6 days in most areas of the Nation.

Eighty-nine percent (%) of the winter wheat was harvested, equaling 1986 but 2 percentage points above the 5-year average. Harvest was restricted mostly to the Pacific Northwest, but a few fields remained to be harvested in California, Colorado, Michigan, Nebraska, Ohio, and South Dakota. Spring wheat was 19% harvested, 10 points above normal. Harvest was underway in all States. Corn continued its rapid development to maturity. Fourteen percent of the acreage reached the dent stage, compared with 6% normally. Corn acres reaching the dough stage was 27 points above the 22% average. Soybeans setting pods surged 16 points ahead of the previous week and was 24 points above the 34% average. Eighty-three percent of the acreage was blooming, 12 points above normal. Sorghum was 59% headed, and 21% was turning color. Cotton set bolls 10 points faster than the 62% average. Bolls were opening on 4% of the acreage but was restricted mostly to the Southeast and Texas. Rice was 56% headed, compared with 42% normally. Livestock was mostly good but suffered from heat stress in most areas.

**SMALL GRAINS:** Winter harvest advanced 4 points to 89% completion. Harvest equaled 1986 but was 2 points ahead of the 87% average. Harvest was mostly concentrated in the Pacific Northwest, but a few fields remained to be harvested in California, Nebraska, South Dakota, and the Corn Belt. In Oregon, harvest jumped 10 points above the previous week reaching 53% completion, 12 points above normal. Forty-two percent of Washington's acreage was combined, compared with 37% normally. Harvest lagged 7 points behind the 28% average in Montana. Wheat seedbed preparation began in southwest Oklahoma and preplant fertilizer was applied.

Spring wheat was 19% harvested, compared with 7% in 1986 and 9% normally. Harvest more than doubled the previous week in South Dakota at 69% completion. Normally, 35% would be harvested in South Dakota by this date. Minnesota's harvest was 32% finished more than 4 times greater than the previous week and the 5-year average. Harvest was just beginning in Montana but lagged 3 points behind normal.

**CORN:** Corn was mostly good in the central and northern Great Plains and Corn Belt. Crop condition declined a little in the Southeast but remained mostly fair as the hot, dry weather continued taking its toll, especially on late planted corn. The excess heat stressed corn in the central Plains and Corn Belt but caused little damage otherwise. Crop development and maturity continued surging ahead of normal, especially in the Corn Belt and central Great Plains. In the 17 major producing States, 96% of the acreage reached the silking stage. On forty-nine percent of the acreage, corn ears reached the dough stage, more than doubling the average. Corn acreage with ears in the dent stage reached 14%, compared with 6% normally. Corn harvest spread across central and

south-central Texas. Harvest gained momentum in the Southeast and Delta.

**SOYBEANS:** Inadequate moisture and heat stressed soybeans in the central Plains, Corn Belt, Delta, and Southeast. Condition remained mostly good except in the Southeast, where condition was mostly fair to good. In the 19 major producing States, 83% of the acres had blooms and 58% was setting pods. Normally, 79% would be blooming and 34% would be setting pods. Blooming increased 7 points from the previous week, but setting pods surged 16 points above the previous week. Soil moisture was critically short as soybeans headed into the pod setting and filling stage in the Southeast.

**SORGHUM:** Sorghum was 59% headed, and 21% turned color. Normally, 44% would be heading, but coloring equaled the average. Crop condition was mostly good to fair. Sorghum harvest expanded into the Blacklands area of Texas. Rain delayed harvest at Coastal Bend, but it was in full swing in southern areas. Moisture stress showed at Cross-Timbers.

**COTTON:** Cotton was mostly good to fair. The hot weather was ideal for development, but insufficient moisture slowed growth and caused stress in the Delta and Southeast. Nonirrigated cotton wilted in Arkansas. The heat caused square droppage in the Tennessee Valley area of Alabama. Cotton setting bolls was 10 points above the 62% average in the 14 major producing States. Bolls were opening but mostly in the Southeast, Delta, and Texas. Cool temperatures hindered crop development in California. Bolls opened rapidly at Coastal Bend and southern areas of Texas. Harvest increased in the Rio Grande Valley, but scattered rain damaged some open bolls.

**OTHER CROPS:** Rice was 56% headed, compared with 63% in 1986 and 42% normally. Heading was ahead of normal in all States except Texas. Rice harvest was 5% finished in Texas, 14 points behind normal. Harvest increased along the Upper Coast, but weedy fields caused some problems. Louisiana's rice was 5% harvested, compared with 19% in 1986 and the 13% average.

Peanuts were good to fair in Georgia and Alabama. Most acreage was pegging in both States but lagged a little behind normal. Crop condition was fair to good in the Carolinas. Peanut growth was good in Texas. Fields showed some moisture stress in central areas.

Tobacco was mostly fair to good. Harvest was active throughout the Southeast. Topping was the major activity in most burley States.

**FRUIT AND NUTS:** Peach harvest neared completion in Mississippi and Georgia and was finished in Louisiana. Seasonal peach harvest continued in the northern producing States. New crop citrus fruit progressed well in Florida. Trees were good to excellent, and soil moisture was adequate. Irrigation continued in Texas citrus producing areas. New crop citrus looked good, but growers began seeing signs of rust mites. Freestone peach harvest neared completion in California. Orange growers sprayed to control scale and thrips, and walnut growers sprayed for codling moth. Valencia orange harvest was active.

**VEGETABLES:** Fall vegetable planting was underway in Florida. Land preparation was active. Light

(Continued to back cover)

### Crop Progress

FOR WEEK ENDING AUGUST 2, 1987

**WINTER WHEAT  
% HARVESTED**

	1987	1986	AVG.
ARK	100	100	100
CALIF	99	99	98
COLO	94	92	89
GA	100	100	100
IDAHO	17	29	14
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MICH	99	95	80
MO	100	100	100
MONT	21	33	28
NEBR	99	100	94
N MEX	100	100	NA
N C	100	100	100
OHIO	99	98	99
OKLA	100	100	100
OREG	53	58	41
S DAK	97	88	79
TEX	100	100	100
WASH	42	40	37

20 STATES 89 90 NA

EXCL. STATES WITH NA 89 89 87

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

NA - NOT AVAILABLE.

**SPRING WHEAT  
% HARVESTED**

	1987	1986	AVG.
IDAHO	5	5	5
MINN	32	5	7
MONT	2	3	5
N DAK	7	3	4
S DAK	69	27	35

5 STATES 19 7 9

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

**GRAIN SORGHUM  
% HEADED**

	1987	1986	AVG.
ARK	88	83	NA
ILL	80	72	NA
KANS	30	40	15
LA	91	98	92
MISS	90	89	75
MO	82	72	58
NEBR	70	64	31
OKLA	45	40	35
S DAK	48	22	24
TENN	80	80	80
TEX	79	74	74

11 STATES 61 60 NA

EXCL. STATES WITH NA 59 58 44

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

NA - NOT AVAILABLE.

**SOYBEANS  
% BLOOM**

	1987	1986	AVG.
ALA	55	57	55
ARK	52	44	35
GA	61	45	57
ILL	98	94	87
IND	99	87	78
IOWA	96	88	83
KANS	75	75	45
KY	70	62	51
LA	64	75	62
MICH	90	65	70
MINN	97	92	87
MISS	57	51	58
MO	86	77	60
NEBR	92	93	80
N C	33	33	33
OHIO	93	89	85
S C	39	35	35
S DAK	93	66	76
TENN	55	50	55

19 STATES 83 77 71

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

**SOYBEANS  
% SETTING PODS**

	1987	1986	AVG.
ALA	26	26	27
ARK	23	25	16
GA	27	13	23
ILL	87	64	53
IND	70	34	26
IOWA	80	58	50
KANS	40	35	20
KY	28	24	16
LA	37	48	35
MICH	45	20	20
MINN	73	36	27
MISS	23	22	21
MO	62	50	32
NEBR	50	59	35
N C	10	9	11
OHIO	57	56	44
S C	18	15	11
S DAK	52	40	27
TENN	30	20	15

19 STATES 58 44 34

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

**COTTON  
% SETTING BOLLS**

	1987	1986	AVG.
ALA	95	93	84
ARIZ	96	96	96
ARK	99	99	92
CALIF	95	90	72
GA	96	81	86
LA	93	95	87
MISS	99	98	81
MO	100	89	85
N MEX	69	55	77
N C	83	76	74
OKLA	40	40	30
S C	82	87	93
TENN	93	80	70
TEX	51	47	45

14 STATES 72 68 62

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

**COTTON  
% BOLLS OPENING**

	1987	1986	AVG.
ALA	2	1	5
ARIZ	0	NA	NA
ARK	0	0	0
CALIF	0	0	0
GA	2	7	2
LA	0	20	4
MISS	0	6	NA
MO	0	0	0
N MEX	0	0	0
N C	0	0	0
OKLA	0	0	0
S C	0	0	0
TENN	1	0	0
TEX	7	9	7

14 STATES 4 NA NA

EXCL. STATES WITH NA 4 7 4

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

NA - NOT AVAILABLE.

**GRAIN SORGHUM  
% COLORING**

	1987	1986	AVG.
ARK	49	47	NA
ILL	0	0	NA
KANS	0	3	0
LA	38	75	59
MISS	48	48	NA
MO	26	16	2
NEBR	0	0	0
OKLA	10	15	10
S DAK	1	0	0
TENN	25	35	20
TEX	55	62	62

11 STATES 22 25 NA

EXCL. STATES WITH NA 21 24 21

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

NA - NOT AVAILABLE.

	CORN % SILKING		
	1987	1986	AVG.
COLO	74	70	67
GA	100	100	100
ILL	100	100	95
IND	100	93	78
IOWA	100	94	83
KANS	96	95	75
KY	96	93	79
MICH	95	75	70
MINN	92	84	70
MO	100	100	84
NEBR	94	93	74
N C	94	99	97
OHIO	96	93	82
PA	78	72	57
S DAK	90	58	53
TEX	98	99	98
WIS	91	81	60
17 STATES	96	90	79

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

	CORN % DOUGH		
	1987	1986	AVG.
COLO	8	15	12
GA	99	99	96
ILL	82	67	46
IND	75	34	22
IOWA	36	18	7
KANS	60	45	20
KY	50	48	20
MICH	40	5	5
MINN	14	2	1
MO	81	78	48
NEBR	35	23	10
N C	67	82	79
OHIO	46	42	29
PA	0	0	0
S DAK	17	NA	NA
TEX	83	84	80
WIS	20	10	8
17 STATES	47	NA	NA

EXCL. STATES WITH NA 49 34 22

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

NA - NOT AVAILABLE.

	CORN % DENT		
	1987	1986	AVG.
COLO	0	0	0
GA	93	95	84
ILL	30	19	9
IND	15	5	0
IOWA	10	4	1
KANS	0	10	3
KY	0	0	0
MICH	0	0	0
MINN	2	0	0
MO	47	49	22
NEBR	0	0	0
N C	33	62	53
OHIO	5	NA	NA
PA	0	0	0
S DAK	0	0	0
TEX	65	69	65
WIS	0	0	0
17 STATES	13	NA	NA

EXCL. STATES WITH NA 14 11 6

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

NA - NOT AVAILABLE.

### Crop Condition

FOR WEEK ENDING AUGUST 2, 1987

#### GRAIN SORGHUM

STATE	VP	P	F	G	EX
ARK	0	0	27	52	21
ILL	0	0	4	88	8
KANS	0	2	7	43	48
LA	0	3	39	58	0
MISS	4	6	25	65	0
MO	0	2	31	61	6
NEBR	0	0	24	68	8
OKLA	0	0	15	80	5
S DAK	0	2	30	55	13
TENN	0	1	36	60	3
TEX	0	0	17	63	20

#### SPRING WHEAT

STATE	VP	P	F	G	EX
IDAHO	0	2	18	63	17
MINN	1	10	38	48	3
MONT	0	3	20	63	14
N DAK	0	1	31	62	6
S DAK	3	4	38	53	2

#### RICE

STATE	VP	P	F	G	EX
ARK	0	0	32	68	0
CALIF	0	0	0	75	25
LA	0	0	15	71	14
MISS	0	0	20	78	2
TEX	0	0	14	76	10

#### COTTON

STATE	VP	P	F	G	EX
ALA	0	2	42	56	0
ARIZ	0	0	0	85	15
ARK	0	4	0	75	21
CALIF	0	0	0	40	60
GA	0	16	27	47	10
LA	0	0	33	51	16
MISS	0	7	10	78	5
MO	0	0	13	62	25
N MEX	0	0	29	71	0
N C	8	4	69	19	0
OKLA	0	0	50	35	15
S C	14	15	64	7	0
TENN	0	0	20	54	26
TEX	0	2	37	54	7

#### SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	5	60	33	2
ARK	0	6	22	72	0
GA	0	10	50	39	1
ILL	0	3	18	75	4
IND	0	1	10	72	17
IOWA	0	3	21	63	13
KANS	0	0	4	39	57
KY	0	1	38	58	4
LA	0	12	28	60	0
MICH	2	13	35	35	15
MINN	2	1	25	57	15
MISS	6	7	52	35	0
MO	0	3	49	46	2
NEBR	0	8	36	50	6
N C	1	19	62	17	1
OHIO	1	4	18	61	16
S C	7	2	76	15	0
S DAK	0	1	6	66	27
TENN	0	5	40	49	6

#### CORN

STATE	VP	P	F	G	EX
COLO	0	1	15	68	16
GA	0	2	29	60	9
ILL	0	4	22	57	17
IND	0	1	8	56	35
IOWA	0	2	19	58	21
KANS	0	6	5	32	57
KY	0	0	18	66	15
MICH	5	20	30	35	10
MINN	1	1	24	53	21
MO	1	0	24	69	6
NEBR	0	0	28	65	7
N C	10	28	42	17	3
OHIO	1	2	14	59	24
PA	1	5	18	40	36
S DAK	0	4	15	59	22
TEX	0	3	15	59	24
WISC	0	0	14	50	36

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 ranged under 0.10 to 2.00 in.; 1.00 in. totals common. Temperatures averaged 5° above normal.

Days suitable for fieldwork 6.5. Soil moisture 96% short, 4% adequate. Continued hot, dry weather stressed crops, pastures, livestock. Corn 83% dented, 87% 1986, 78% avg.; 60% mature, 67% 1986, 50% avg.; 21% harvested, 19% 1986, 8% avg.; 2% poor, 39% fair, 57% good, 2% excellent. Cotton 95% setting bolls, 93% 1986, 84% avg.; 2% bolls opened, 1% 1986, 1% avg.; 2% poor, 42% fair, 56% good. Heat caused square droppage Tennessee Valley. Peanuts 92% pegging, 92% 1986, 97% avg.; 31% fair, 69% good. Soybeans 55% blooming, 57% 1986, 55% avg.; 26% setting pods, 26% 1986, 27% avg.; 5% poor, 60% fair, 33% good, 2% excellent. Sorghum 8% poor, 65% fair, 27% good. Pastures mostly fair; livestock mostly good. Primary activities: Harvesting corn, hay, vegetables and fruits; spraying insects on cotton, vegetables, pecans; fertilizing fish ponds; applying fungicides to peanuts; repairing harvest equipment; general care livestock, poultry.

**ALASKA:** Sunny, warm periods mixed with shower activity promoted crop growth throughout Railbelt. Temperature highs 6° above normal to 3° below normal, lows from 7° above to 1° below normal. Seasonal precipitation totals from 1.10 in. drier than normal to 2.70 in. wetter than normal.

Days suitable for fieldwork 4.0. Topsoil moisture 5% short, 92% adequate, 3% surplus. Subsoil moisture 8% short, 92% adequate. Barley for grain 40% poor, 35% fair, 25% good, 5% excellent. Oats, barley all headed; 30% oats, 73% barley in dough stage. Early fields turning. Last year 90% dough stage. Potato growth excellent, 57% in bloom. Harvest commercial vegetables in full swing.

**ARIZONA:** Monsoon well established; warm, humid conditions; numerous afternoon, evening showers, thunderstorms east. Intensity, amount of rainfall varied greatly. Precipitation mostly 0.50 to 2.00 in., locally 3.00 to 5.00 in.; except very little west. Average temperatures 3° below normal to 1° above.

Soil moisture 83% short, 17% adequate. High wind, rainfall no adverse effect on cotton. Good boll set. Irrigation continued. Pink bollworms, white fly, mite populations monitored; treatment applied as needed. Texas root rot west, central; preventative treatment cotton rust southeast. Alfalfa hay harvested; irrigated as needed. Summer-type hay stacked, prices weak. Sudan grass harvest limited. Corn silage harvest winding down. Sorghum jointing, heading. Apple deal expected this week Willcox; limited amount picked, held in storage. Fruit set heavy. Carrots dug. Green chili harvested. Land preparations fall vegetables west. Field preparation, planting fall lettuce Willcox slowed by heavy rain. Winter squash planted. Watermelon movement light central. Harvest expected southeast 20th, movement increased by 1st. Honeydews, cantaloups harvested Aguila; honeydews shipped central valley. Citrus sizing, developed well west. Dry conditions reported rangeland areas. Rains end of month helped; moisture still needed. Feed supplied ranges, pastures average to below average. Cattle, calves 4% very poor, 1% poor, 47% fair, 43% good, 5% excellent. Sheep, lambs 7% poor, 39% fair, 44% good, 10% excellent. Stock water 42% short, 58%

adequate north; 62% short, 38% adequate east, southeast.

**ARKANSAS:** Very hot, humid. Temperatures above normal. Daily scattered afternoon thundershowers. Temperature extremes 65°; 108°. Rainfall none to 1.19 in.

Days suitable for fieldwork 7.0. Soil moisture 87% short, 13% adequate. Rice maturing rapidly. Applying fungicides, insecticides. Irrigated soybean growth moderate. Most non-irrigated beans heat stress. Harvesting early variety beans. Irrigated cotton fruiting normally. Dry land cotton wilting. Applying insecticides to cotton. Midge pressure, sorghum fields, being treated. Corn 8% fair, 58% good, 34% excellent. Harvesting watermelons, cantaloupes, apples, peaches, grapes and squash. Alfalfa 6% poor, 35% fair, 59% good. Other hay 6% poor, 56% fair, 38% good. Livestock fair.

**CALIFORNIA:** Low pressure area off coast brought below normal temperatures to State most of week. As low weakened, high pressure area replaced it preventing precipitation. Temperatures rose toward normal end of week.

Cool temperatures hindered crop progress. Small grain harvest completed. Rice good. Rice armyworm treatments applied. Wild rice harvested. Corn appeared all stages of growth. Cotton pesticide applications. Safflower harvest. Blackeyes matured. Alfalfa harvested. Golden supreme apples being picked. Harvesting grape varieties active with good volume, quality. Grapes treated for hoppers, mildew, bunch rot. Clingstone peach, plum, prune harvests continued. Freestone peach, nectarine harvest neared completion some areas. Asian pear, bartlett pear harvest full swing. Valencia orange harvest continued. Orange growers sprayed for scale, thrips. Almond growers prepared for harvest. Walnut growers sprayed for codling moth. Pistachios matured normally. Artichokes light, good quality Salinas. Snap bean packing, normal volume south coast. Broccoli moderate Salinas, Santa Maria good quality. Planting fall crop started, Dos Palos. Carrots moderate Salinas, good quality. Production started decline Kern-Tulare, as pulling started Cuyama Valley good quality. Cauliflower moderate both Salinas, Santa Maria good quality. Fields Patterson-Newman being transplanted. Celery moderate both Salinas-Watsonville, Santa Maria-Oceano, good quality. Normal production south coast. Sweet corn good supply, statewide. Cucumber packing active, south coast. Lettuce both Salinas, Santa Maria, moderate, variable quality. Watermelon, cantaloup, honeydew, mixed melon harvests active statewide. Low prices caused watermelon harvest to taper off, some areas, except seedless variety. Pepper picking light Salinas; very light Santa Maria, good and variable quality respectively. Production active central valley, south coast, good quality. Summer potato digging continued Hemet-San Jacinto. Fall fields Tulalake-Butte Valley continued to grow well, frost damage still a concern. Tomatoes for processing fresh market continued full production, good quality, statewide. Few areas central valley reached end of harvest, but continued to pack large volumes. Range condition continued to deteriorate except northern areas where recent rains improved food. Fire danger remained critical most areas. Range fires increased. Supplemental feeding increased as feed became short. Livestock movement light.

**COLORADO:** Temperatures 2 to 4° above normal. Hot, dry weather throughout eastern plains; shower activity in mountain areas. Grand Junction 0.91 in.; Greeley 0.49 in. Most of State little to no rain.

Days suitable for fieldwork 6.5. Soil moisture short. Majority of winter wheat yet to be harvested on west slope. Other small grains good. Corn heat stressed some areas. Adequate irrigation water. Dry beans 61% flowered. Spring wheat 6% harvested. Livestock good; range, pastures fair due to seasonal drying.

**FLORIDA:** Scattered showers, thunderstorms throughout State. Mixture of sunshine, cloudiness, light rains throughout week due to slightly lower surface pressure.

Topsoil moisture generally adequate Panhandle, upper Peninsula. Lower half Peninsula mostly surplus. Haymaking, tobacco harvest very active. Corn for grain harvest just starting. Peanuts, soybeans made good progress. Cotton making good progress with only normal insect problems. Sugarcane continued good. Cattle generally good statewide. Pastures mostly good, some upper Peninsula excellent. Trees very good to excellent, soil moisture adequate, some fertilizing with irrigation systems. New crop fruit progressed very well, caretakers cultivating, spraying, fertilizing, working on water movement. Normal summertime weather dominated vegetable producing areas. Land preparation very active, fall crops. Some planting underway. Very light supplies summer vegetables available north, Panhandle areas.

**GEORGIA:** Rainfall varied, some locations under 0.10 in., others more than 4.00 in. Highest 5.79 in. Siloam, Greene County. Temperatures mostly mid 80s, 3 to 5° above normal. Maximums 100° or higher over northern two-thirds of State. Lowest 62° Clayton. Highest 101° Marietta, Watkinsonville.

Days suitable for fieldwork 5.8. Soil moisture 34% very short, 50% short, 15% adequate, 1% surplus. Corn 58% mature, 81% 1986, 60% avg.; 5% harvested, 16% 1986, 11% avg. Sorghum grain 8% poor, 50% fair, 42% good. Peanuts 8% poor, 25% fair, 65% good; 100% blooming, 99% 1986, 100% avg.; 94% pegging, 89% 1986, 97% avg. Tobacco 37% fair, 51% good, 12% excellent; 48% harvested, 51% 1986, 57% avg. Watermelons 10% poor, 51% fair, 39% good; 93% harvested, 95% 1986, 89% avg. Apples 24% fair, 76% good; 7% harvested, 20% 1986, 21% avg. Peaches 94% harvested, 97% 1986, 96% avg. Pecans 2% poor, 31% fair, 66% good, 1% excellent. Pasture 3% very poor, 10% poor, 48% fair, 37% good, 2% excellent; hay 2% very poor, 14% poor, 46% fair, 37% good, 1% excellent. Cattle 25% fair, 72% good, 3% excellent. Hogs: 15% fair, 80% good, 5% excellent. Main activities: Hot, dry weather caused crop stress; spraying insecticides, fungicides; irrigating where available.

**HAWAII:** Mostly sunny with light to moderate showers eastern end of State. Record high temperatures early week. Irrigation, pesticide spraying heavy. Crops fair to good. Trade winds 5 to 20 mph. Temperatures low 70s to low 90s. Rainfall ranged none to 3.40 in.

Days suitable for fieldwork 7.0. Banana, papaya production moderate to heavy. Chinese cabbage output moderate, increased disease due to weather. Head cabbage production moderate. Watermelon supplies heavy.

**IDAHO:** Temperatures near normal. Precipitation below normal overall, above normal east. Showers north, east throughout week, isolated thundershowers remainder of State midweek.

Days suitable for fieldwork 6.0. Harvest of small grains gained momentum, winter wheat 17% harvested, 29% 1986, 14% avg. Spring wheat 5%

harvested, 5% 1986, 5% avg. Potatoes developed well began to turn some areas. Sugarbeets, dry beans progressed well. Mint harvest active. Overall crops good. Range, pastures good; grazing adequate. Second cutting alfalfa 48%. Livestock good.

**ILLINOIS:** Temperatures averaged 2 to 10° above normal, reaching 100° mark many locations. Precipitation highly variable with concentration of above normal rains mainly central.

Days suitable for fieldwork 5.5. Soil moisture 59% short, 39% adequate, 2% surplus. Oats 99% harvested, 96% 1986, 81% avg. Alfalfa hay 3rd crop 43% cut, 18% 1986, 19% avg.; 1% very poor, 5% poor, 52% fair, 38% good, 4% excellent. Pasture 9% very poor, 17% poor, 29% fair, 38% good, 7% excellent.

**INDIANA:** Temperatures 3 to 6° above normal. Lows mid 60s to low 70s. Highs mid 80s to low 90s. Rainfall totaled 1.00 in. or more most areas.

Days suitable for fieldwork 4.3. Topsoil moisture 22% short, 68% adequate, 10% surplus. Subsoil moisture 26% short, 69% adequate, 5% surplus. Corn, soybeans mostly good to excellent. Alfalfa 95% cut twice, 81% 1986, 85% avg. Pastures 11% poor, 36% fair, 46% good, 7% excellent. Scattered showers improved crop conditions.

**IOWA:** Hot, dry. Temperatures 10° above normal. Spotty precipitation east, north central.

Days suitable for fieldwork 6.8. Topsoil moisture 70% short, 29% adequate, 1% surplus; subsoil moisture 32% short, 67% adequate, 1% surplus. Hay 3% very poor, 13% poor, 37% fair, 42% good, 5% excellent. Second crop alfalfa 90% harvested, 88% 1986, 86% avg. Third crop alfalfa 10% harvested, 1% 1986, 1% avg. Second crop clover 72% harvested, 67% 1986, 64% avg. Oats 99% harvested, 96% 1986, 83% avg. Corn 80% milk stage, 53% 1986, 32% avg. Livestock under considerable stress from hot weather. Numerous reports of low weight gains, lower milk production due to high temperatures, humidity. Pastures 27% poor, 45% fair, 27% good, 1% excellent.

**KANSAS:** Temperatures averaged 84° southwest to 90° northeast; 8 to 11° above normal northern third, 7 to 8° above normal central third, 3 to 5° above normal southern third. No precipitation data available.

Days suitable for fieldwork 6.5. Soil moisture 90% short, 10% adequate. Rapid depletion soil moisture; surface, subsurface. Hot weather pushed corn development ahead of normal. Most irrigated, little stress so far. Corn borer treatments, checking spider mite levels. Sorghum progressed ahead of normal, some stress dryland. Leaves firing isolated areas. Greenbug treatment necessary northwest. Chinch bugs isolated spots, may cause significant damage late planted crop. Soybeans developed ahead of schedule. Noticeable condition decreased. Bacterial blight active central, north central. Alfalfa 3rd cutting about 50%. Some areas lack regrowth for 3rd cutting. Range, pastures remained good to excellent, although condition held or decreased all areas.

**KENTUCKY:** Hot, humid days; muggy nights. Lows mid 60s to low 70s. Highs upper 80s to mid 90s. Scattered thundershowers with rainfall averaged 0.50 to 1.00 in.

Days suitable for fieldwork 5.3. Soil moisture 20% very short, 57% short, 23% adequate. Short moisture, high temperatures stressed crops. Tobacco irrigation common. Tobacco 2% poor, 50% fair, 48% good. Burley 50% topped, 32% 1986, 25% avg. Corn developed well. Soybeans stressed due to hot, dry conditions. Pastures 4% very poor, 18% poor, 39% fair, 34% good, 5% excellent.

**LOUISIANA:** Temperature 1 to 3° above normal. Temperature extremes 67°, 102°. Rainfall averaged 0.16 to 1.35 in.

Days suitable for fieldwork 5.2. Soil moisture 35% short, 46% adequate, 19% surplus. Corn good; 97% dough stage, 100% 1986, 96% avg.; 41% mature, 75% 1986, 64% avg.; 3% harvested, 19% 1986, 16% avg. Cotton 100% squaring, 100% 1986, 98% avg.; 93% setting bolls, 95% 1986, 87% avg. Rice 75% headed, 90% 1986, 73% avg.; 13% ripe, 28% 1986, 21% avg.; 5% harvested, 19% 1986, 13% avg. Sorghum 91% headed, 98% 1986, 92% avg.; 38% turning color, 75% 1986, 59% avg.; 3% ripe, 28% 1986, 15% avg. Soybeans 64% blooming, 75% 1986, 62% avg.; 37% setting pods, 48% 1986, 35% avg. Peaches 100% harvested, 100% 1986, 92% avg. Hay final cutting 8%, 16% 1986, 3% avg. Sweetpotatoes good; 3% harvested, 7% 1986, 6% avg. Sugarcane, pasture, livestock good; vegetables fair. Main activities: Harvesting rice, vegetables; cutting hay; weed, insect control.

**MARYLAND & DELAWARE:** Maryland: Temperatures averaged 80°, 76° normal. Precipitation averaged 0.52 in., ranging from none to 2.11 in. Salisbury.

Days suitable for fieldwork 7.0. Topsoil moisture very short to short. Subsoil moisture mostly short to very short. Corn fair. Corn 90% silked, 80% avg. Corn 50% dough, 40% avg. Corn 25% dent, 30% 1986. Soybeans fair. Soybeans 50% bloomed, 40% avg. Soybeans 20% set pods, 15% avg. Tobacco poor to fair. Pasture poor to fair. Apples, peaches good. Peaches 35% harvested. Sweet corn 60% harvested, 50% avg.

Delaware: Temperatures averaged 80°, 77° normal. Precipitation averaged 0.51 in.

Days suitable for fieldwork 6.5. Topsoil, subsoil moisture very short to short. Soybeans fair to good. Soybeans 35% bloomed, 40% avg. Soybeans 15% set pods, 15% avg. Corn fair. Corn 100% silked, 85% avg. Corn 25% dough, 40% avg. Sweet corn 60% harvested, 60% avg.

**MICHIGAN:** Temperatures ranged 3 to 5° above normal. Temperature extremes 44°, 94°. Precipitation ranged from none to 2.40 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 85% short, 15% adequate. Corn 95% silked, 75% 1986, 70% avg.; 40% dough, 5% 1986, 5% avg.; 5% very poor, 20% poor, 30% fair, 35% good, 10% excellent. Soybeans 90% bloomed, 65% 1986, 70% avg.; 45% setting pods, 20% 1986, 20% avg.; 2% very poor, 13% poor, 35% fair, 35% good, 15% excellent. Wheat 99% harvested, 95% 1986, 80% avg. Dry beans 90% bloomed, 60% 1986, 65% avg. Oats 65% harvested, 25% 1986, 15% avg. Field activities: Oat harvesting, hay cutting; spraying, harvesting fruit; harvesting vegetables.

**MINNESOTA:** Temperatures averaged 5 to 11° above normal for State. Temperature extremes 49°, 105°. Precipitation averaged 1.96 in. above normal southeast, 0.40 to 0.67 in. below normal western third and east central, near normal to 0.32 in. above elsewhere. Precipitation totals averaged 2.80 in. southeast, none to 1.10 in. elsewhere. Greatest weekly total 5.34 in.

Days suitable for fieldwork 5.5. Topsoil moisture 5% very short, 21% short, 66% adequate, 8% surplus. Spring wheat 94% turning ripe, 66% 1986, 77% avg.; 54% cut, 13% 1986, 17% avg.; 32% combined, 5% 1986, 7% avg. Oats 99% turning ripe, 88% 1986, 92% avg.; 90% cut, 50% 1986, 49% avg.; 75% combined, 22% 1986, 25% avg. Barley 99% turning ripe, 81% 1986, 90% avg.; 84% cut, 33% 1986, 45% avg.; 59% combined, 12% 1986, 22% avg. Field corn 99% tasseling, 94% 1986, 86% avg.; 77% in milk, 24% 1986, 17% avg.; 14% in dough, 2% 1986, 1% avg. Soybeans 97% blooming, 92% 1986, 87% avg.

73% setting pods, 36% 1986, 27% avg. Sweet corn 22% harvested, 10% 1986, 4% avg. Field corn 1% very poor, 1% poor, 24% fair, 53% good, 21% excellent. Soybeans 2% very poor, 1% poor, 25% fair, 57% good, 15% excellent. Spring wheat 1% very poor, 10% poor, 38% fair, 48% good, 3% excellent. Winter wheat 89% harvested, 47% 1986, 44% avg. Rye 86% harvested, 40% 1986, 40% avg.

**MISSISSIPPI:** Temperatures 2° below to 5° above normal; extremes 65°, 102°. High pressure centered over Oklahoma resulted in very hot, humid weather. Rainfall averaged 0.10 in. southeast, 1.20 in. south central. Greatest 24-hour total rainfall 1.38 in. Greatest weekly total 1.89 in.

Days suitable for fieldwork 6.5, 6.2 1986, 5.1 avg. Soil moisture 24% very short, 58% short, 18% adequate. Corn 100% silking, 100% 1986; 96% dough stage, 95% 1986, 85% avg.; 83% dented, 81% 1986; 25% mature, 29% 1986, 29% avg.; 2% very poor, 6% poor, 16% fair, 63% good, 13% excellent. Hay 70% harvested, 70% 1986, 68% avg. Sorghum silage 16% harvested, 35% 1986, 27% avg. Watermelons 75% harvested, 73% 1986, 65% avg. Corn silage 37% harvested, 45% 1986, 32% avg. Peaches 98% harvested, 90% 1986, 82% avg. Peanuts 5% harvested, 2% 1986. Rice 72% headed, 93% 1986, 50% avg.; 20% fair, 78% good, 2% excellent. Sorghum 90% headed, 89% 1986, 75% avg.; 48% coloring, 48% 1986; 4% mature, 7% 1986, 11% avg.; 4% very poor, 6% poor, 25% fair, 65% good. Cotton 100% set bolls, 98% 1986, 81% avg.; 7% poor, 10% fair, 78% good, 5% excellent. Soybeans 57% blooming, 51% 1986, 58% avg.; 23% set pod, 22% 1986, 21% avg.; 6% very poor, 7% poor, 52% fair, 35% good.

**MISSOURI:** Temperatures averaged 7° above normal. Precipitation 1.00 in. southeast, 0.25 in. northeast, elsewhere none.

Days suitable for fieldwork 6.3. Topsoil moisture 75% short, 23% adequate, 2% surplus. Alfalfa hay 3rd cutting 65%, 57% 1986, 37% avg. Other hay 96% harvested, 95% 1986, 92% avg. Pasture 5% very poor, 21% poor, 58% fair, 16% good.

**MONTANA:** All stations above normal temperatures, up to 7° above east. Thunderstorms east 1.00 in.; west 0.10 in.

Days suitable for fieldwork 4.0. Topsoil moisture 11% short, 71% adequate, 18% surplus. Subsoil moisture 14% short, 82% adequate, 4% surplus. Barley 1% very poor, 4% poor, 20% fair, 56% good, 19% excellent. Barley 19% ripe or beyond, 27% 1986, 33% avg.; 2% harvested, 7% 1986, 9% avg. Oats 25% ripe or beyond, 30% 1986, 33% avg.; 4% harvested, 11% 1986, 10% avg. Second cutting alfalfa hay 32% harvested, 35% 1986, 33% avg. Wild hay 76% harvested, 74% 1986, 78% avg. Grasshopper infestation 19% light, 68% moderate, 13% heavy. Range feed supplies 20% short, 78% adequate, 2% surplus.

**NEBRASKA:** Hot, humid weather across State. Little or no precipitation. Temperatures ranged 7 to 10° above normal. Extremes 57°, 106°.

Days suitable for fieldwork 6.8. Topsoil moisture 89% short, 11% adequate. Subsoil moisture 66% short, 34% adequate. Winter wheat harvest virtually complete. Oats 98% harvested, 96% 1986, 86% avg. Row crops continued experiencing drought stress along with minor spider mite, army worm, greenbug insect problems. Alfalfa hay fair to good. Second cutting 99%, 92% 1986, 88% avg. Third cutting 15%, 8% 1986, 4% avg. Pastures, range supplies mostly adequate to short. Livestock stressed by heat, high humidity.

**NEVADA:** High pressure dominated resulting in generally dry, warm conditions across State. Temperatures near to slightly above normal. Warm spot Logandale 112°, coolest Mountain City 32°.

Precipitation generally limited southern, eastern portions, greatest amounts Pahrump 0.87 in., Ely 0.72 in.

Very windy, main activities baling 2nd crop alfalfa hay, irrigating. Small grain harvest moving northward. Garlic harvest well underway. Earlier cool weather affected pollination alfalfa seed crop Lovelock area. Cattle on summer ranges good. Some water sources drying up.

**NEW ENGLAND:** Precipitation averaged 0.25 to 0.50 in. most locations. Isolated thunderstorms north central Vermont producing 2.75 in., 1.00 to 1.50 in. south central Maine. Temperatures averaged 5° below normal, near 60° north, mid 60s central. Temperatures normal south lower 70s.

Days suitable for fieldwork 7.0. Soil moisture 28% very short, 33% short, 39% adequate. Grazing availability 14% very short, 29% short, 50% adequate, 7% surplus. Fieldwork 2 days ahead. Maine potatoes good to excellent. Southern area potatoes fair to good; 10% harvested Massachusetts. Field corn good. Sweet corn good; 15% harvested, 11% 1986, 17% avg. First crop hay 100% harvested. Second crop hay 35% cut, 37% 1986, 44% avg.; good north, fair south. Third crop hay harvest began south, fair. Shade tobacco good; 40% picked. Outdoor tobacco 20% picked; fair to good. Apples good, size medium, harvest just began. Major farm activities: Haying, harvesting vegetables and fruits, irrigating, applying fungicides and insecticides.

**NEW JERSEY:** Temperatures averaged below normal north, central, near normal south. Extremes 49°; 93°. Rainfall averaged 0.19 in. north, 0.50 in. central, 0.04 in. south. Heaviest 24-hour total 0.80 in. on 30th, 31st. Estimated soil moisture percent field capacity averaged 69% north, 66% central, 30% south. Four inch soil temperatures averaged 71° north, 74° central, 77° south.

Severe thunderstorms again delivered erratic amounts of rain. Some wind, hail damage occurred. Soil moisture levels varied. Summer vegetable harvest active but production off some crops due to earlier heat. Fall vegetable planting well advanced. Blueberry harvest nearly completed. Peach harvest midseason varieties active. Summer variety apple picking active, fall apples sizing well. Showers continued to disrupt wheat, oat, hay harvest. Field corn prospects generally excellent. Soybean prospects mixed. Pasture growth continued seasonally good.

**NEW MEXICO:** Temperatures over State above normal. Low temperature 45° Chama, Carrizozo. High temperature 102° Hobbs. Showers western mountains, no rainfall eastern border areas.

Days suitable for fieldwork 7.0. Soil moisture 70% short, 30% adequate. Alfalfa 43% fair, 57% good. Third cutting underway some areas. Cotton 29% fair, 71% good. Squaring reported in 98% of fields, 69% setting bolls. Irrigated grain sorghum 29% fair, 71% good. Dryland sorghum 60% fair, 40% good. Onion harvest continued Mesilla, Hatch Valleys, high plains. Price decrease reported; quality still above average, harvest conditions still very good. Potato harvest began. Pecans 50% fair, 50% good. Chile 100% good; some wilt reported. Range 87% fair, 13% good; rains needed to maintain condition. Cattle, sheep reported fair to good.

**NEW YORK:** Cool, several nights close to or equaled record lows. Sharp contrast to hot, humid weather previous week. Temperatures averaged generally below normal, few areas normal. Rainfall averaged below normal most areas. Most rain 27th, 30th from showers, thunderstorms.

Days suitable for fieldwork 6.5. Soil moisture mostly adequate, few northern areas short. Corn

excellent, fully silked. Wheat 81% harvested. Oats 21% harvested, 9% 1986. Second cut alfalfa 45% complete. Clo-tim harvest 92% complete. Dry beans excellent, in bloom. Potatoes good. Pastures good.

**NORTH CAROLINA:** Temperatures averaged 2 to 4° above normal. Temperature extremes 57°; 100°. Precipitation ranged from 0.04 to 1.27 in. across State. Storms scattered.

Days suitable for fieldwork 6.4. Soil moisture 41% very short, 52% short, 7% adequate. Irish potatoes 95% harvested, 99% 1986, 98% avg. Pasture 6% very poor, 42% poor, 41% fair, 11% good. Tobacco 10% poor, 66% fair, 24% good. Peanuts 11% poor, 54% fair, 35% good. Hay 4% very poor, 28% poor, 52% fair, 15% good, 1% excellent. Sweetpotatoes 7% poor, 69% fair, 24% good. Fruit crops fair to mostly good. Truck crops mostly fair. Peaches 74% harvested, 80% 1986, 79% avg. Major farm activities: Tobacco related topping, spraying for sucker control, irrigation, harvesting; cutting and baling hay; cultivating tobacco, soybeans, peanuts, cotton; harvesting Irish potatoes, hay, vegetables, peaches; shearing Christmas trees; tending livestock; general farm maintenance.

**NORTH DAKOTA:** Hot, humid. Temperatures averaged 6 to 11° above normal. Extremes 55° northeast; 104° southeast. Thunderstorms statewide. Precipitation averaged 0.28 in. east central to 1.28 in. north central.

Days suitable for fieldwork 4.9. Topsoil moisture well above normal; 6% short, 94% adequate. Subsoil moisture above normal; 11% short, 89% adequate. Small grains mostly ahead of average. Spring wheat 7% combined, 3% 1986, 4% avg.; durum 2%, 1% 1986, 1% avg.; oats 9%, 6% 1986, 9% avg.; barley 22%, 10% 1986, 16% avg.; winter wheat 58%, 40% 1986, 35% avg. Row crop development ahead of normal pace. Corn 30% milk or dough, 14% 1986, 11% avg. Sunflowers 49% bloom or beyond, 42% 1986, 24% avg.; potatoes 100%, 89% 1986, 85% avg.; dry beans 86%, 92% 1986, 79% avg.; soybeans 94%, 95% 1986, 89% avg. Flax 20% turning or beyond, 14% 1986, 15% avg. Pastures fair to good. Second cutting alfalfa 50% complete, 1st cutting other hay 93% complete. White mold appeared dry edible beans. Moisture, high humidity caused harvest delays.

**OHIO:** Temperatures 2 to 5° warmer than usual. Extremes ranged from some pleasantly nippy morning lows in upper 40s to sweltering afternoon highs in upper 90s. Precipitation widespread but incoming totals highly variable ranging from 0.25 to 1.50 in.

Days suitable for fieldwork 6.6. Soil moisture 58% short, 41% adequate, 1% surplus. Corn, soybeans good to excellent. Tobacco topping active. Potato harvest continued in volume. Peach sizing, yields smaller than expected do to dry soils.

**OKLAHOMA:** Temperatures averaged normal north central to 5° above normal northeast. No precipitation recorded across State.

Days suitable for fieldwork 6.7. Topsoil moisture 50% short, 50% adequate. Subsoil moisture 15% short, 85% adequate. Wheat seedbed preparation began southwest. Pre-plant fertilizer applied. Sorghum 15% fair, 80% good, 5% excellent; 45% heading, 40% 1986, 35% avg.; 10% turning color, 15% 1986, 10% avg. Dryland Panhandle acreage needs moisture. Cotton 50% fair, 35% good, 15% excellent; 85% squaring, 80% 1986, 70% avg.; 40% setting bolls, 40% 1986, 30% avg.; none open bolls, none 1986, none avg. Regular boll weevil, boll worm monitoring needed. Pasture, livestock good. Cattle marketings average, prices up slightly.

**OREGON:** Much drier, warmer than previous week. Temperatures below normal throughout State, except coast south of Newport. Only measurable rainfall north coast, northeast mountains.

Soil moisture 48% short, 52% adequate. Barley 60% harvested, 66% 1986, 65% 1985. Grain, grass seed harvest resumed throughout State with drier weather. Winter wheat yielding well; some hail damage east. Grass seed harvest nearly complete; mint, sugarbeet seed harvest started mid-Willamette Valley. Field burning continued. Some flower seed harvested Malheur County. Evergreen blackberry harvest started, other berry crops finished west. Peach harvest continued, early apple picking continued Willamette Valley. Apple crop looks large Columbia Basin. Bartlett harvest started Jackson County. Cherry harvest completed Union County. Prune crop good west. Cranberry fruit set fair to good, berry size good to excellent south coast. Early potato harvest continued Hermiston-Boardman. Started killing potato vines Klamath Basin. Seed potato crop excellent Wallowa County. Snap bean harvest midway point, broccoli harvest continued Willamette Valley. Sweet corn harvest continued west. Cucumbers harvested, yields good. Other vegetables growing nicely, much irrigation needed. Livestock mostly good statewide. Range, pasture poor to good. Recent rains helped forage growth in some areas, non-irrigated pastures still very dry Washington County.

**PENNSYLVANIA:** Near normal temperatures, abnormally dry conditions. Widely scattered showers, thunderstorms associated with weak frontal system. Average temperature 72°, 1° above normal. Temperature extremes 46°, 94°. Average precipitation 0.31 in., 0.55 in. below normal.

Days suitable for fieldwork 6.0. Soil moisture 79% short, 21% adequate. Corn 78% silked, 72% 1986, 57% avg. Corn 1% very poor, 5% poor, 18% fair, 40% good, 36% excellent. Average corn height 75 in., 69 in. 1986, 67 in. avg. Soybeans 6% poor, 24% fair, 44% good, 26% excellent. Barley 2% ripe, 5% 1986; 98% harvested, 95% 1986. Wheat 4% turning yellow, none 1986; 14% ripe, 20% 1986; 82% harvested, 80% 1986. Wheat 2% poor, 20% fair, 42% good, 36% excellent. Oats 19% turning yellow, 17% 1986; 33% ripe, 39% 1986; 48% harvested, 44% 1986. Oats 4% poor, 15% fair, 47% good, 34% excellent. Second cutting alfalfa 72% complete, 78% 1986. Hay stands mostly good. Feed from pastures below average to average. Activities: Harvesting small grains, hay, haylage, fruit, vegetables; spraying corn, soybeans; machinery maintenance; caring for livestock.

**PUERTO RICO:** NO DATA AVAILABLE.

**SOUTH CAROLINA:** Scattered showers brought 0.10 to 5.00 in. rainfall. Temperatures remained above average with humidity 55 to 65%.

Days suitable for fieldwork 5.9. Soil moisture 38% very short, 53% short, 9% adequate. Cotton 82% setting bolls, 87% 1986, 93% avg.; 29% very poor, 64% fair, 7% good. Soybeans 39% blooming, 35% 1986, 35% avg.; 18% setting pods, 15% 1986, 11% avg.; 7% very poor, 2% poor, 76% fair, 15% good. Tobacco fair to good; 37% harvested, 33% 1986, 42% avg. Corn fair to good; 92% dough stage, 93% 1986, 88% avg.; 2% harvested, 13% 1986, 7% avg. Pastures, hay fair. Peaches fair to good; 75% harvested, 85% 1986, 83% avg. Peanuts fair to good.

**SOUTH DAKOTA:** Average temperatures 7 to 14° above normal. Extremes 61°; 110°. Black Hills low 47°.

Days suitable for fieldwork 6.1. Topsoil moisture 24% critically short, 54% short, 22% adequate. Small grain harvest underway. Crop progress ahead of normal. Heat stress hurt row crops some areas. Most crops doing well despite

heat. Crops, pastures, could use additional moisture. Livestock coping with hot weather, no major problems reported.

**TENNESSEE:** Precipitation below normal. Temperatures above normal.

Days suitable for fieldwork 5.8. Soil moisture 39% very short, 42% short, 18% adequate, 1% surplus. Corn 75% dough, 65% 1986, 50% avg. Corn 40% dent, 35% 1986, 20% avg. Corn 1% very poor, 4% poor, 34% fair, 47% good, 14% excellent. Tobacco topped 45%, 35% 1986. Tobacco 1% very poor, 13% poor, 52% fair, 31% good, 3% excellent. Cattle, pastures mostly fair. Tobacco topping, harvesting; weed control; haying; silage harvest main activities.

**TEXAS:** High pressure central United States resulted in dry weather north area High Plains; Gulf moisture swinging around center triggered almost daily widely scattered thunderstorms western Trans-Pecos. Early week, easterly wave triggered thunderstorms south. Rainfall near normal south, slightly above normal Lower Valley, below normal elsewhere. No rain Plains, north central. Temperatures below normal Plains, south, south central; above normal Blacklands, east.

**Crops:** Corn harvest spreading south central, central. Some harvesting east. Fields most other areas progressed rapidly some moisture stress began showing Plains, irrigation steady. Most fields denting. Corn 39% mature, 62% 1986, 51% avg.; 6% harvested, 33% 1986, 19% avg. Grain sorghum harvest expanded into Blacklands under warm, open weather. Yields central, southern areas continued good harvest full swing. Some minor rain delays Coastal Bend. Fields rapidly maturing Plains, Cross-Timbers. Some moisture stress began. Sorghum 40% mature, 57% 1986, 50% avg.; 23% harvested, 43% 1986, 40% avg. Cotton also continued good progress under hot, open weather. Bollworms increased Plains treatment underway. Plants loading up bolls. Early fields began to open Blacklands. Bolls opening rapidly southern areas, Coastal Bend. Harvest increased Valley. Some rain scattered areas south caused some problems to open bolls. Cotton 95% squaring, 88% 1986, 90% avg.; 1% harvested, 4% 1986, 2% avg. Rice harvest increased Upper Coast. Fields very weedy caused some harvest problems. Other fields being drained preparation for harvest. Rice 59% turning color, 83% 1986, 72% avg.; 5% harvested, 20% 1986, 19% avg. Soybeans missed by hail High Plains look good so far. Early fields blooming. Fields Upper Coast setting pods, look good. Stinkbug controls continued. Peanuts look good. Irrigation steady Plains, Cross-Timbers. Some fields central showed some moisture stress. Growth good statewide.

**Commercial Vegetables:** Rio Grande Valley land preparation, irrigation continued fall crops. Pepper stands progressed well. Citrus growers began to see signs rust mites. Irrigation continued. New citrus looks good. East harvest watermelons, tomatoes, peas, okra, squash continued. High Plains harvest potatoes, onions continued. Carrot harvest got underway. Cabbage harvest to begin soon. Trans-Pecos cantaloupe harvest increased average yields. Onion harvest winding down. Pecans began to suffer from lack of moisture some areas, heavier than normal drop. Most groves showed good crop, good development.

**Range and Pasture:** Continued dry, hot weather further dried out many ranges. Forage availability remained good; supplies decreased without rain. Haying operations full swing. Livestock remained good body condition. Goat shearing underway Hill Country.

**UTAH:** Precipitation moderate to heavy. Temperatures normal to 1° below normal.

Days suitable fieldwork 6.3. Soil moisture 60% short, 40% adequate. Winter wheat 67% harvested, 38% 1986, 24% avg. Barley 79% ripe, 78% 1986, 56% avg.; 51% harvested, 33% 1986, 25% avg. Spring wheat 45% harvested, 17% 1986, 10% avg. Oats harvested for hay or silage well along, harvested for grain started. Corn 76% tasseled, 45% 1986, 40% avg. Alfalfa 2nd cutting 63% complete, 45% 1986, 48% avg.

**VIRGINIA:** Hot, dry. Most areas no rain, 0.17 in. average. Mid 90s most days.

Days suitable for fieldwork 5.8. Topsoil moisture 100% short. Dry weather severely affecting crop conditions. Corn poor to fair. Corn 76% in or beyond silk stage, 81% 1986, 84% avg.; 45% in or beyond dough stage, 48% 1986, 50% avg.; 16% in or beyond dent stage, 22% 1986, 23% avg. Soybeans poor to fair. Potential for late soybeans good if rains come. Soybeans 37% in or beyond bloom stage, 41% 1986, 44% avg.; 13% set pods, 11% 1986, 13% avg. Peanuts good but rain needed. Tobacco fair to good, rain needed. Flue-cured irrigated, topped, suckers controlled. Flue-cured harvest 4% complete, 4% 1986, 10% avg. Peaches, summer apples being harvested. Pastures fair, some poor. Hay feeding some areas. Second cutting active, yields reduced. Some premature cattle marketing. Potato harvest 96% complete, 96% 1986, 88% avg.

**WASHINGTON:** Hot, dry weather prevailed. Temperature extremes 44° Goldendale, 96° Rosalia. Precipitation below normal west, central; normal east.

Days suitable for fieldwork 6.8. Soil moisture 40% short, 60% adequate. Winter wheat 42% harvested, 40% 1986, 37% avg. Winter wheat harvest most advanced Benton, Franklin, Walla Walla Counties; least advanced Adams, Lincoln, Spokane, Whitman Counties. Spring wheat, barley respectively 23%, 30% harvested. Irrigated grain good, excellent. Dryland grain fair, good. Some winter wheat damaged by hail storms, southeast area. Harvest of red potatoes, early norgolds continued Benton, Franklin, Yakima Counties. Rapeseed yield in Adams, Lincoln Counties lower as result of May frosts, wind shatter. Fruit crops sizing well. Many growers worried about labor supply. Pear harvest started Benton County, peach harvest continued. Blueberry, blackberry harvest continued. Carrot growers in Grant, Franklin Counties began harvest of potentially larger than average crop. Sweet corn harvest for processing started in Benton, Yakima, Grant Counties. Walla Walla sweet onion harvest winding down. Squash, watermelon, peppers being picked, Franklin County. Ranges, pastures 40% short, 60% adequate. Dairy farmers northeast area, pastures particularly dry.

Alternating hot, cold temperatures caused some southeast cattle to catch respiratory disease.

**WEST VIRGINIA:** Average temperature 75°, 4 to 6° above normal. Extremes 50° Greenbank; 100° Creston. Precipitation averaged 0.45 in., well below normal.

Days suitable for fieldwork 5.7. Soil moisture 78% very short, 22% short. Feed supplies adequate. Farm activities: Harvesting hay, clipping pastures, combining grain, harvesting peaches, topping tobacco, farm maintenance, gardening. Wheat, barley, oats, tobacco fair to good. Corn mostly fair, Apples good to fair. Peaches fair to good, harvest continued. First cut hay 97% complete, 97% 1986. Second cut hay 43% complete, 32% 1986.

**WISCONSIN:** Temperatures averaged 77°, 6° above normal. Extremes 46°; 97°. Rainfall 0.50 to 5.30 in. Heavy rain, thunderstorms southwest, west central. Extremely hot, humid.

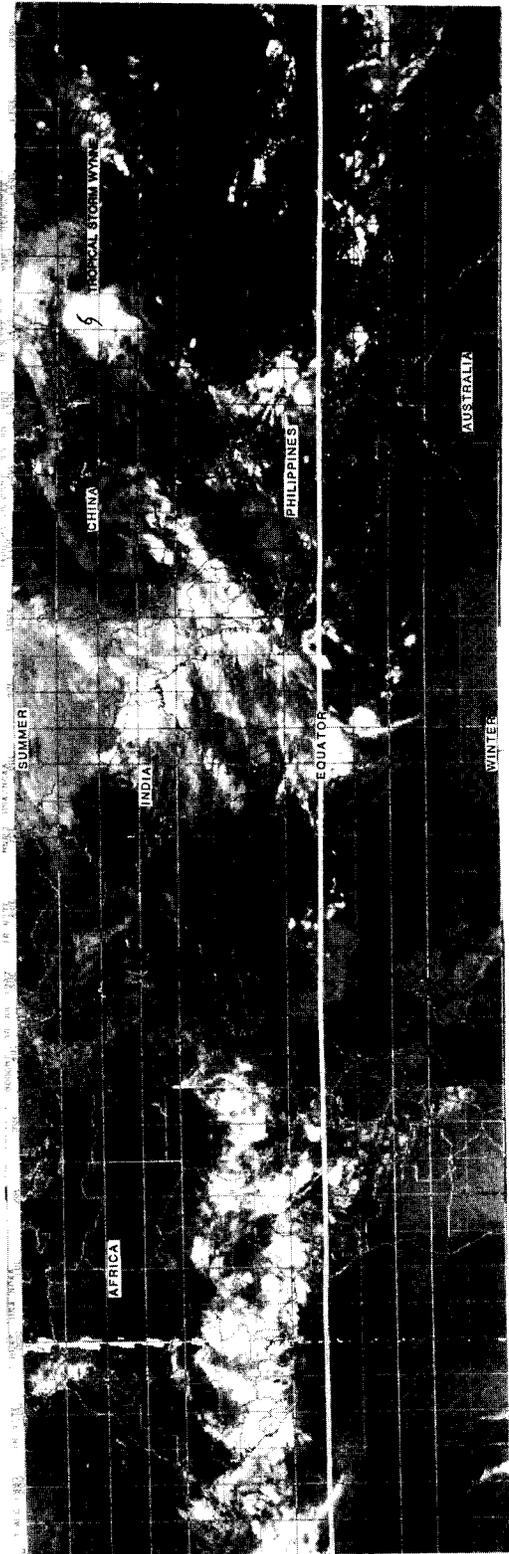
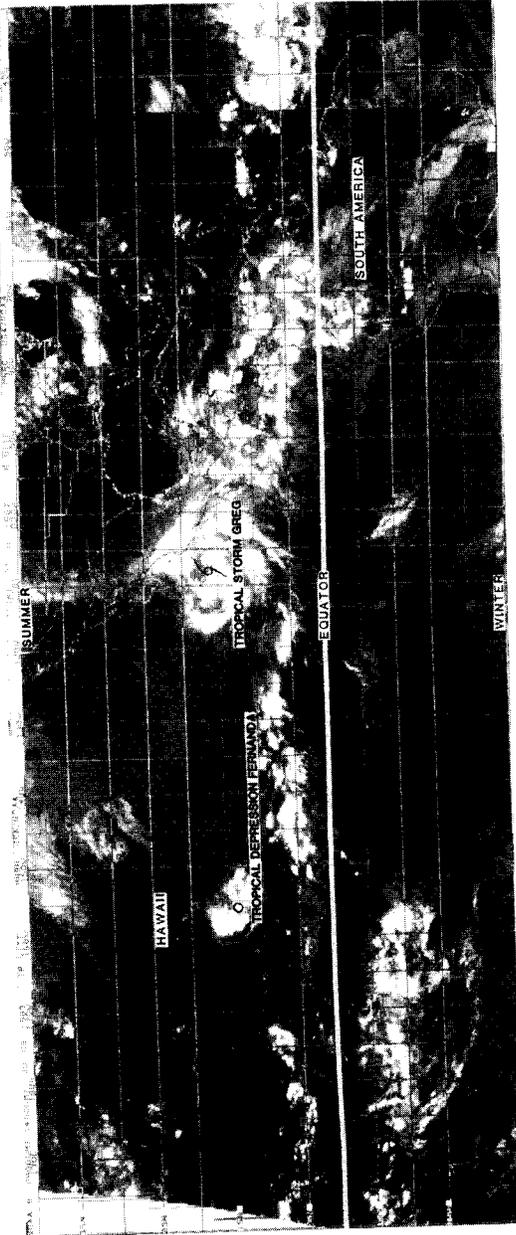
Days suitable for fieldwork 3.8. Soil moisture 33% short, 52% adequate, 15% surplus. Crops 1% very poor, 3% poor, 31% fair, 58% good, 7% excellent. Corn better; 91% in silk, 81% 1986, 60% avg. Corn 20% in dough, 10% 1986, 8% avg. Corn ahead of normal, especially north. Oats 56% harvested, 29% 1986, 22% avg. Yields mostly below average. Winter wheat 87% harvested, 69% 1986, 52% avg. Second crop hay 67% cut, 64% 1986, 60% avg. Humidity, rain slowed haying. Third crop cutting began 5%, 3% 1986, 1% avg. South, 3rd crop taller than 2nd. Soybeans very good. Tobacco being topped. Sweet corn varies fair to excellent quality. Snap bean harvest active.

**WYOMING:** Temperatures above normal statewide. Dry east, west. Central locations slightly above normal.

Days suitable for fieldwork 6.0. Topsoil moisture 60% short, 40% adequate. Winter wheat small amount turning color, 5% 1986; 30% mature, 30% 1986; 70% harvested, 65% 1986, 45% avg. Barley 10% headed, 10% 1986; 30% turning color, 25% 1986; 40% mature, 40% 1986; 20% harvested, 25% 1986, 10% avg. Spring wheat 5% headed, 10% 1986; 35% turning color, 35% 1986; 40% mature, 30% 1986; 20% harvested, 25% 1986, 15% avg. Oats 15% headed, 10% 1986; 45% turning color, 45% 1986, 45% avg.; 30% mature, 30% 1986, 25% avg.; 10% harvested, 15% 1986, 10% avg. Potatoes 95% bloom, 80% 1986, 90% avg. Dry beans 80% bloom, 70% 1986, 80% avg.; 45% setting pods, 55% 1986, 50% avg. Corn 75% tasseled, 70% 1986, 65% avg.; 40% silked, 30% 1986. Row crops mostly good. Alfalfa hay 1st cutting windup stage; 2nd cutting 30% complete, 25% 1986, 15% avg. Other hay 80% harvested, 70% 1986, 60% avg. Livestock mostly good. Fall, winter grazing prospects fair to good.

# Global Weather Satellite Image

July 30, 1987



# International Weather and Crop Summary

## July 1987

MONTHLY DATA FROM SELECTED FOREIGN CITIES  
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA  
\*\*\* = DATA NOT AVAILABLE

July 26 - August 1, 1987

**HIGHLIGHTS:**

**UNITED STATES** ... Extreme heat diminishes soil moisture and stresses crops in the Great Plains, Corn Belt, Delta, and Southeast. Crop condition remains mostly good in the Corn Belt and central and northern Great Plains, but the effect of the heat becomes more evident in the Southeast as crop condition declines.

**U.S.S.R.** ... In Western U.S.S.R., showers benefit reproductive corn in the Ukraine. In the New Lands, unseasonably warm, dry weather accelerates grain ripening in the west. Cool, wet weather covers filling wheat in the east.

**EUROPE** ... Showers and milder weather relieve reproductive summer crops in the southeast. Cool, wet weather continues throughout the west and north, slowing crop growth.

**SOUTH ASIA** ... Mostly dry, warm weather persists in western and southern India's summer crop areas, where moisture is limited for normal crop development.

**SOUTHEAST ASIA** ... Showers bring relief to filling grains in Thailand. Temperatures, however, continue above normal.

**EASTERN ASIA** ... Typhoon Alex spreads moderate to heavy rain over Zhejiang, Jiangsu, and the Korean peninsula.

**CANADA** ... Widespread rain and mild weather prevail over maturing grains in the Prairie Provinces.

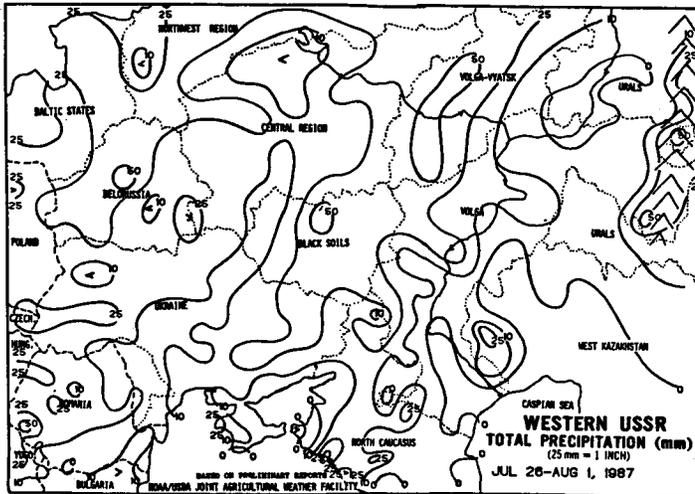
**SOUTH AMERICA** ... Wheat planting progresses rapidly in Argentina's major growing areas. Locally heavy rain soaks Brazil's southern wheat.

**AUSTRALIA** ... Moderate to heavy showers increase moisture levels for Australia's vegetative wheat.

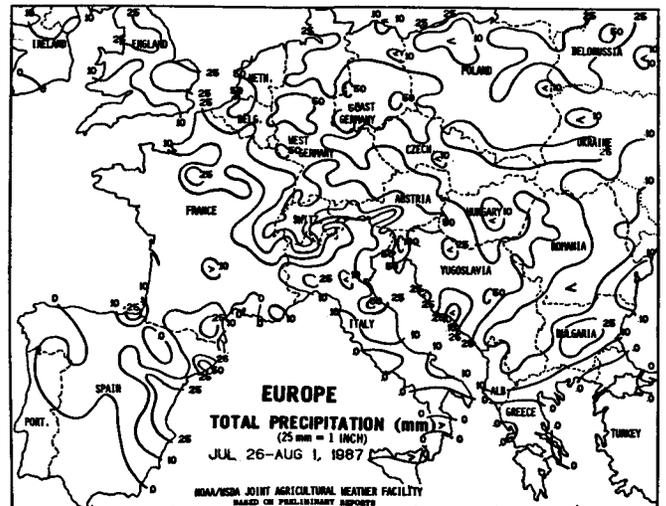
**MEXICO** ... Widespread rain favors immature crops but slows early harvesting in the northeast.

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)	
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	F/NRM	DPART
NORWAY OSLO	21	9	30	1	15	-0.2	45.3
SWEDEN STOCKHOLM	21	11	28	7	16	-1.0	64.3
FINLND HELSINKI	20	10	28	1	15	-1.7	44.5
U KING GLASGOW	19	11	25	7	15	-0.5	59.2
EDINBURGH	19	11	24	5	15	0.2	64.2
BIRMINGHAM	20	11	27	6	16	0.0	30.6
LONDON	21	12	28	7	17	0.6	73.2
IRELND DUBLIN	20	12	25	8	16	0.8	32.6
ICELND REYKJAVIK	13	9	16	6	11	0.4	58.1
DENMRK COPENHAGEN	19	12	23	10	15	-2.4	90.8
LUXEMB LUXEMBOURG	21	13	27	6	17	-0.6	151.2
SWITZL ZURICH	23	15	29	10	19	1.2	122.1
GENEVA	25	15	32	6	20	0.9	91.3
FRANCE PARIS	23	13	30	7	18	-0.2	94.2
STRASBOURG	24	14	29	9	19	0.5	128.6
BOURGES	24	14	31	10	19	0.2	103.9
BORDEAUX	25	16	34	11	21	1.2	82.0
TOULOUSE	26	16	34	10	21	0.6	69.5
MARSEILLE	29	19	34	15	24	0.7	77.1
SPAIN VALLADOLID	29	14	36	8	22	0.6	22.5
MADRID	32	17	37	11	24	-0.6	50.8
SEVILLE	34	20	39	15	27	0.0	29.5
E GRMY LEIPZIG	23	13	29	7	18	0.1	56.2
DRESDEN	23	14	29	10	18	0.1	159.8
W GRMY HAMBURG	21	13	29	9	17	0.4	91.7
BERLIN	23	14	30	10	19	-0.2	107.8
DUSSELDORF	23	14	31	9	18	0.0	94.4
STUTTGART	23	13	29	9	18	0.3	66.4
NURNBERG	24	14	30	10	19	0.6	138.6
MUNICH	23	13	29	8	18	0.8	138.9
AUSTRI VIENNA	26	15	32	9	21	0.3	44.1
INNSBRUCK	24	14	31	7	19	1.5	196.2
CZECH PRAGUE	23	13	30	7	18	0.2	112.7
POLAND WARSAW	23	13	31	7	18	0.0	62.3
LODZ	23	13	31	7	18	0.1	45.9
KATOWICE	23	13	30	7	18	0.7	71.2
PRZEMYSL	25	15	31	10	20	1.7	30.4
HUNGAR BUDAPEST	28	17	35	11	23	1.9	22.5
YUGOSL SARAJEVO	30	14	36	6	22	2.9	7.8
ROMANI BUCHAREST	31	17	39	10	24	1.4	53.0
BULGAR SOFIA	30	17	38	11	23	3.7	27.2
ITALY MILAN	29	20	33	15	25	1.6	16.7
VERONA	29	19	33	15	24	0.9	62.2
VENICE	29	19	34	13	24	1.0	61.8
GENOA	28	22	34	19	25	0.6	98.5
ROME	30	21	37	18	25	1.5	3.5
NAPLES	32	20	39	11	26	3.0	18.5
GREECE THESSALONIKA	33	20	40	15	26	-0.4	12.8
LARISSA	34	19	43	12	27	-0.8	2.0
ATHENS	33	23	42	16	28	-0.1	0.1
TURKEY ISTANBUL	29	20	36	14	25	1.2	34.4
ANKARA	29	13	34	7	21	-2.6	29.9
CYPRUS LARNACA	32	22	37	19	27	-0.2	0.2
USSR TALLINN	20	10	26	5	15	-1.6	32.2
LENINGRAD	20	12	28	6	16	-1.7	47.2
KAUNAS	21	12	29	8	17	-0.7	60.2
MINSK	21	12	27	7	17	-0.9	137.3
KAZAN	23	14	31	5	18	-1.1	104.5
MOSCOW	21	12	28	1	17	-1.5	37.6
SVERDLOVSK	25	14	32	3	19	1.0	97.6
OMSK	27	15	30	7	21	1.3	11.7
KUSTANAY	26	16	32	12	21	0.6	133.5
KRASNOYARSK	24	11	32	0	18	-1.0	43.5
NOVOSIBIRSK	25	15	31	8	20	1.0	90.6
BARNAUL	26	15	32	8	21	0.7	23.2
KHABAROVSK	23	15	28	11	19	-1.7	107.2
VLADIVOSTOK	21	16	31	13	19	1.5	209.7
KIEV	25	14	32	8	20	-0.1	62.5
LVOV	25	13	33	6	19	1.5	46.0
KIROVOGRAD	28	15	34	6	21	0.1	55.2

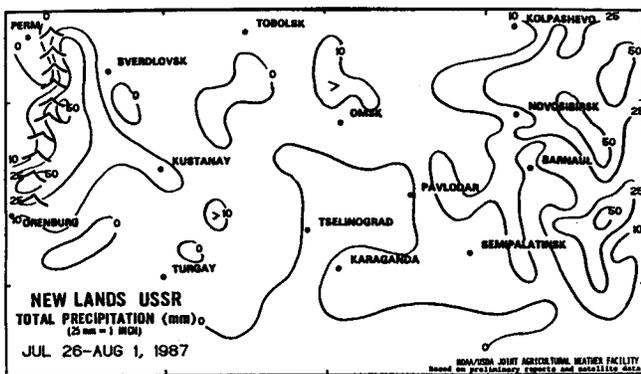
COUNTRY CITY		TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY CITY		TEMPERATURE (C)					PRECIPITATION (MM)			
July 1987		AVG	AVG	HI	LO	DPART	DPART		TOTAL	July 1987		AVG	AVG	HI	LO	DPART	DPART		TOTAL	F/NRM
MAX	MIN	MAX	MIN	AVG	F/NRM	F/NRM	F/NRM	MAX		MIN	MAX	MIN	AVG	F/NRM	F/NRM	F/NRM	F/NRM	F/NRM		
USSR	ODESSA	29	18	36	10	23	1.5	22.3	-25.3	TANZAN	DAR ES SALAAM	30	18	32	16	24	0.4	14.4	-16.3	
	YALTA	28	20	32	17	24	0.0	14.2	-33.8	GABON	LIBREVILLE	28	23	29	20	25	1.1	3.4	2.2	
	VORONEZH	24	13	32	6	19	-1.3	31.8	-36.1	TOGO	LOME	30	24	34	22	27	2.1	46.3	-54.2	
	SARATOV	26	17	32	9	21	0.4	79.8	33.6	B FASO	OUAGADOUGOU	34	24	36	20	29	1.8	144.4	-45.6	
	KHARKOV	25	15	31	11	20	-0.9	38.0	-20.8	IVRY C	ABIDJAN	28	23	30	22	26	0.8	109.4	-202.7	
	VOLGOGRAD	29	17	38	11	23	-1.0	26.8	-0.4	MOZAMB	MAPUTO	25	13	31	9	19	0.9	1.3	-17.8	
	ROSTOV	28	18	34	12	23	-0.1	11.6	-42.0	ZAMBIA	KABWE	23	9	27	6	16	0.5	0.0	0.0	
	ASTRAKHAN	31	18	39	14	25	-0.4	9.5	-12.3	ZIMBAB	HARARE	22	8	26	4	15	1.3	0.0	-1.4	
	KRASNODAR	29	18	35	12	23	-0.2	85.7	39.9	S AFRI	PRETORIA	19	5	23	1	12	1.0	0.0	-5.9	
	ORENBURG	27	15	34	10	21	-0.4	53.2	13.2		KROONSTAD	18	-2	22	-6	8	-0.7	3.0	-5.9	
	TSELINOGRAD	28	17	36	11	22	2.3	36.3	-14.1		JOHANNESBURG	17	4	21	-2	11	0.9	0.0	-6.9	
	KARAGANDA	29	16	36	12	23	2.2	20.2	-23.0		BETHAL	17	1	21	-6	9	0.5	1.0	-6.9	
	TBILISI	31	20	36	9	26	1.1	4.4	-40.7		DURBAN	22	12	26	8	17	0.6	6.9	-27.2	
	TASHKENT	34	19	40	15	26	-0.8	16.7	12.7		CAPE TOWN	18	8	28	2	13	1.2	142.8	69.8	
	ASHKhabAD	37	23	42	17	30	-0.7	3.0	2.0	CANADA	TORONTO	28	17	33	11	23	2.0	104.0	32.6	
SYRIA	DAMASCUS	37	18	42	13	27	0.2	0.0	0.0		MONTREAL	27	16	33	8	22	0.7	131.0	41.0	
ISRAEL	JERUSALEM	29	18	34	15	24	0.3	0.0	0.0		WINNIPEG	26	14	33	9	20	0.4	126.6	50.6	
PAKIST	KARACHI	34	28	36	20	31	0.5	0.0	-99.8		REGINA	24	12	34	7	18	-0.7	89.9	36.6	
INDIA	AMRITSAR	38	25	44	18	32	0.9	74.1	-110.3		SASKATOON	25	12	35	4	19	0.0	37.1	-16.5	
	NEW DELHI	40	30	44	25	35	3.7	40.0	-194.8		LETHBRIDGE	24	11	34	4	18	-1.1	90.5	46.9	
	AHMEDABAD	38	28	40	23	33	3.1	38.0	-228.8		CALGARY	22	10	31	4	16	-0.5	130.4	65.0	
	INDORE	33	24	36	21	28	2.1	128.4	-156.6		EDMONTON	23	12	31	7	17	0.0	121.2	32.4	
	CALCUTTA	33	26	36	21	30	0.5	476.8	155.2		VANCOUVER	22	14	26	11	18	0.2	36.3	4.2	
	VERAVAL	32	28	38	25	30	2.0	40.9	-259.6	EXICO	GUADALAJARA	27	17	30	15	22	0.8	338.6	81.5	
	BOMBAY	31	25	37	23	28	1.0	638.4	-307.0		MEXICO CITY	24	13	27	11	19	1.9	260.5	135.3	
	POONA	29	23	31	21	26	0.9	54.8	-138.5		ACAPULCO	33	26	37	23	29	0.6	141.6	-92.9	
	BEGAMPET	31	23	35	20	27	0.3	164.9	1.7	BERMUD	ST. GEORGES	29	25	31	23	27	0.5	281.5	173.2	
	MADRAS	37	28	40	23	32	1.5	53.7	-66.0	BAHAMA	NASSAU	32	25	34	22	28	0.6	74.3	-82.3	
	MANGALORE	30	24	31	19	27	1.1	327.2	-731.7	CUBA	HAVANA	32	25	34	22	28	1.1	95.7	-9.3	
H KONG	HONG KONG	31	27	34	24	29	0.6	623.6	307.1	JAMAIC	KINGSTON	34	26	36	20	30	1.6	6.2	-35.4	
N KREA	PYONGYANG	26	19	30	14	22	-1.2	552.4	155.4	P RICO	SAN JUAN	31	25	33	24	28	0.6	85.8	-41.3	
S KREA	SEOUL	27	21	31	18	24	-0.3	425.2	67.3	GUADEL	RAIZET	32	25	37	22	29	1.6	35.8	-69.3	
JAPAN	SAPPORO	25	18	30	14	21	1.0	110.5	30.2	MARTINQ	LAMENTIN	31	25	32	22	28	2.3	278.4	57.3	
	NAGOYA	31	24	36	20	28	1.9	164.0	-54.4	BARBAD	BRIDGETOWN	30	25	30	20	28	0.6	36.2	-93.7	
	TOKYO	31	24	37	19	28	2.3	149.0	24.3	TRINID	PORT OF SPAIN	31	24	33	24	28	1.5	114.0	-145.5	
	YOKOHAMA	30	24	34	19	27	2.1	107.2	-33.7	COLOMB	BOGOTA	19	9	22	4	14	1.0	104.9	67.6	
	KYOTO	32	24	36	20	28	1.9	381.7	165.7	VENEZU	CARACAS	30	24	32	23	27	0.8	108.0	57.5	
	OSAKA	32	25	35	21	28	1.3	137.5	-55.1	F GUIA	CAYENNE	31	23	33	22	27	1.6	255.3	-4.9	
THAILN	PHETCHABUN	34	25	38	22	29	1.6	88.0	-110.1	BRAZIL	FORTALEZA	30	23	31	22	26	0.2	69.0	-38.3	
	BANGKOK	34	27	36	24	30	1.5	30.8	-142.1		RECIFE	28	22	29	21	25	0.9	404.8	100.6	
MALAYS	KUALA LUMPUR	32	24	36	23	28	1.2	130.2	0.3	BELO HORIZONTE	26	15	30	11	20	2.2	4.0	-47.9		
VIETNM	HANOI	33	27	36	22	30	1.2	151.3	-171.3	CAMPO GRANDE	30	18	33	11	24	4.5	11.1	-25.0		
CHINA	HARBIN	27	17	31	13	22	-1.4	157.1	-3.6	FRANCA	25	15	29	6	20	2.7	19.8	3.8		
	HAMI	35	20	40	15	28	1.0	1.7	-4.8	RIO DE JANEIRO	28	20	32	16	24	2.6	25.4	-21.8		
	LANCHOW	30	16	35	11	23	0.9	27.1	-36.8	LONDRINA	26	14	29	9	20	3.5	53.7	-22.8		
	BEIJING	32	22	36	19	27	1.0	95.6	-97.3	SANTA MARIA	21	13	32	4	17	3.2	314.5	171.5		
	TIENJINSIN	31	23	36	20	27	0.6	54.0	-135.9	PORTO ALEGRE	22	14	34	5	18	3.2	198.9	70.9		
	LHASA	23	11	28	8	17	0.9	102.0	-35.8	PERU	LIMA	21	17	29	13	19	2.6	3.2	2.0	
	KUNMING	24	17	26	10	20	0.5	90.2	-122.1	BOLIVI	LA PAZ	12	-2	15	-6	5	-2.1	16.4	7.5	
	CHENGCHOW	32	23	37	20	28	0.0	58.7	-95.7	CHILE	SANTIAGO	14	4	25	-3	9	1.1	328.0	261.1	
	YEHCHANG	30	24	36	21	27	-1.3	166.0	-54.7	ARGENT	IGUAZU	23	15	32	5	19	**	105.2	****	
	HANKOW	31	24	35	20	28	-1.2	177.5	21.4	FORMOSA	25	17	33	8	21	3.8	121.9	73.9		
	CHIHKIANG	31	23	34	19	27	-0.6	104.0	-43.8	CERES	19	9	28	1	13	0.9	14.7	-3.2		
	SHANGHAI	31	25	36	20	28	-0.3	362.9	228.6	CORDOBA	19	7	27	-1	13	2.2	3.5	-4.2		
	NANCHANG	33	26	38	20	29	-0.6	84.1	-41.9	RIO CUARTO	16	7	27	-1	11	2.0	3.5	-6.3		
	TAIPEI	33	26	36	25	30	1.5	244.8	10.9	ROSARIO	18	8	26	-2	13	2.4	50.8	11.2		
	CANTON	32	26	37	24	29	0.6	420.7	207.6	BUENOS AIRES	17	8	25	-1	12	2.6	90.7	25.3		
	NANNING	33	26	36	16	29	1.0	153.4	-41.8	SANTA ROSA	15	5	24	-3	10	2.3	30.3	12.5		
CNRY I	LAS PALMAS	26	21	31	12	23	0.2	0.0	0.0	TRES ARROYOS	14	5	20	-3	9	1.6	38.5	-13.4		
MOROCC	CASABLANCA	26	20	31	17	23	0.9	7.0	7.0	MIDW I	MIDWAY ISLAND	30	25	32	21	27	1.9	56.9	-76.2	
	MARRAKECH	34	20	45	17	27	-0.9	0.0	-0.7	N CALD	NOUMEA	23	17	27	15	20	0.2	95.6	12.5	
ALGERI	ALGER	30	21	35	12	25	1.2	4.1	2.3	FIJI	NAUSORI	24	19	29	14	22	-1.1	34.1	-89.9	
	BATNA	33	19	37	14	26	1.4	90.2	83.1	SAMOA	PAGO PAGO	28	24	31	22	26	-0.2	100.0	-65.3	
TUNISI	TUNIS	34	21	45	18	28	1.8	8.0	4.2	TAHITI	PAPEETE	29	22	31	18	25	0.6	34.3	-21.4	
NIGER	NIAMEY	37	26	41	21	31	2.9	133.8	-33.1	N ZEAL	AUCKLAND	14	8	15	2	11	0.3	89.4	-42.5	
MALI	TIMBUKTU	40	28	44	21	34	2.1	54.0	-4.5		WELLINGTON	12	6	15	1	9	0.4	82.1	-60.5	
	BAMAKO	34	24	38	20	29	2.5	187.7	-53.4	PA N G	PORT MORESBY	28	23	30	21	26	-0.2	3.4	-18.7	
MAURIT	NOUAKCHOTT	34	25	45	22	30	2.0	2.6	-12.8	AUSTRL	DARWIN	29	21	33	20	25	0.7	1.0	-0.6	
SENEGL	DAKAR	30	25	35	23	28	0.8	57.0	-26.4		MOREE	17	5	22	1	11	0.4	19.5	-17.4	
CHAG A	DIEGO GARCIA	30	25	31	23	28	1.4	687.1	546.3		BRISBANE	20	9	25	4	14	-0.6	48.3	-12.2	
LIBYA	TRIPOLI	38	22	45	17	30	3.3	0.0	0.0		PERTH	18	8	23	4	13	0.0	95.6	-71.9	
	BENHAZI	32	22	39	18	27	0.9	0.0	0.0		CEDUNA	17	7	24	3	12	0.6	30.9	-8.9	
EGYPT	CAIRO	36	22	40	21	29	1.0	0.0	0.0		ADELAIDE	13	8	19	2	11	-0.5	110.9	47.1	
	ASWAN	41	27	45	15	34	0.4	0.0	0.0		MELBOURNE	13	5	16	1	9	-0.4	81.2	38.9	
ETHIOP	ADDIS ABABA	22	11	24	10	16	1.2	170.7	-80.1		WAGGA	12	3	16	-2	7	0.0	67.7	18.9	
KENYA	NAIROBI	24	11	27	6	18	0.7	1.4	-12.1		CANBERRA	10	-1							



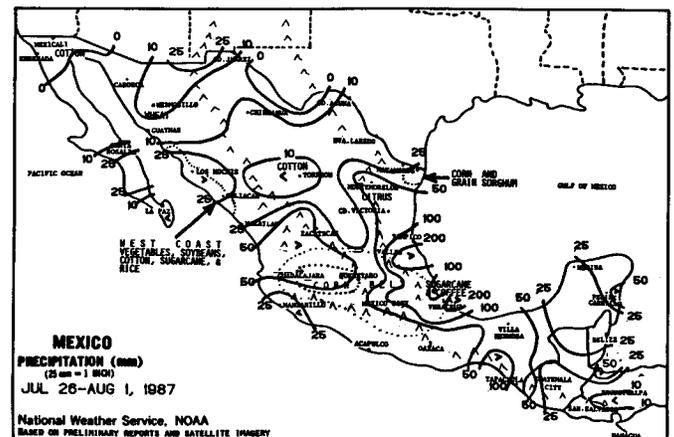
**U.S.S.R.** ... In Western U.S.S.R., numerous showers and thunderstorms produced variable amounts of precipitation. A band of significant rainfall stretched northeastward from the southern and eastern Ukraine, through the eastern Black Soils Region, into the Volga Vyatsk Region. Rainfall amounts generally ranged from 20-40mm with some locations reporting precipitation in excess of 50mm. The rain which covered the southern and eastern Ukraine reversed a drying trend, benefiting corn in the tasseling and silking stages. However, some delays in winter wheat harvesting may have occurred. Widespread showers, over spring grain areas in the Baltic States and Belorussia, continued a favorable moisture pattern for crops in the filling stage. Weekly temperatures were below normal in the northwest and near normal over the remainder of the region.



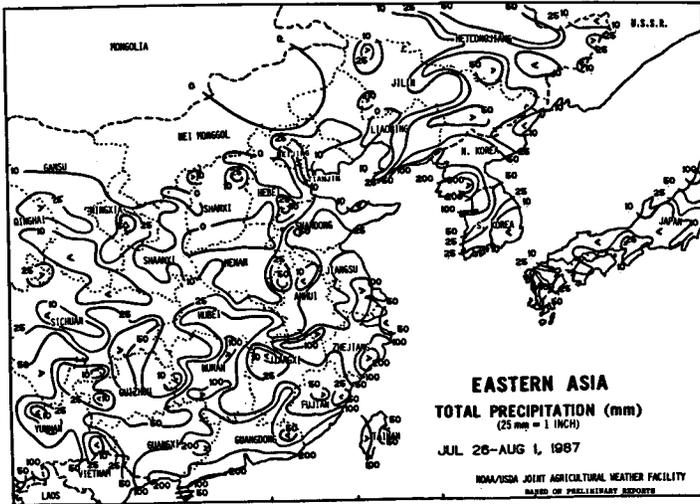
**EUROPE** ... Variable showers (10-90mm) and cooler weather in eastern Europe brought relief to reproductive summer crops recently stressed by hot, dry weather. Light rain (less than 10mm) persisted in eastern Romania, northern Bulgaria, and southern Yugoslavia. Mostly dry weather in southwestern England and western France benefited maturing winter wheat. Cool, wet weather, however, continued elsewhere in England, France, and northern Europe from Belgium and the Netherlands to Poland. This season's persistent cool, wet weather has delayed crop development, with recent excessive rain in the west and north causing damage to maturing grains.



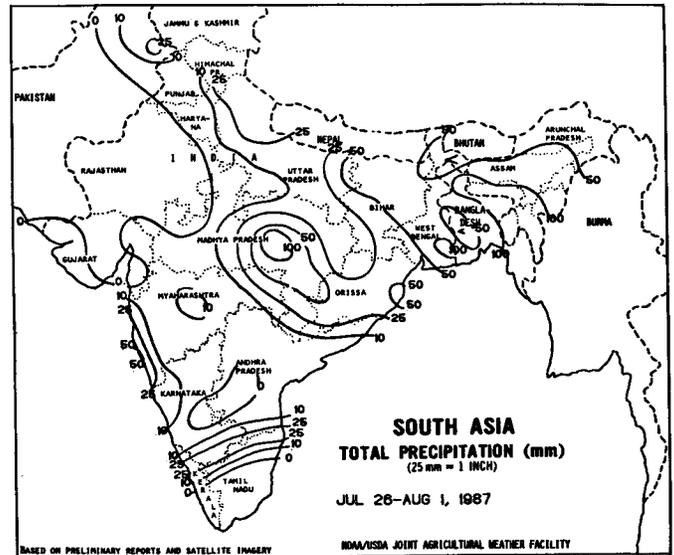
In the New Lands, high pressure kept most of the region dry throughout the week. The only areas that received significant showers were those adjacent to the Ural mountains and in the extreme east. A warming trend occurred in western crop areas with maximum temperatures in the southern Urals and western Kazakhstan, rising to around 32 degrees C by week's end. The unseasonably warm, dry weather in these areas likely accelerated the ripening of spring grains nearing maturity. Below-normal temperatures covered eastern crop areas, where spring grains entered the filling stage.



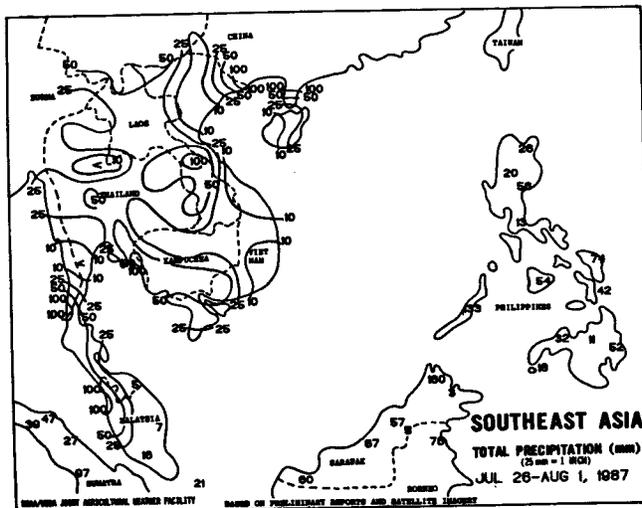
**MEXICO** ... Substantial rain fell again throughout Mexico. In the Southern Plateau corn belt, weekly rainfall averaged 25-100mm in the west and center while heavier rain (100 to more than 200mm) covered the east from Tampico southward to Veracruz. In the northeast, showers produced 19-88mm benefiting immature crops but slowing early harvesting of corn and cotton. Tropical shower activity increased along the west coast farming region and continued in the northwestern mountains. The moisture was beneficial not only for crop development but also for irrigation supplies from the mountain watersheds. Widespread showers also covered southern Mexico extending into Yucatan peninsula.



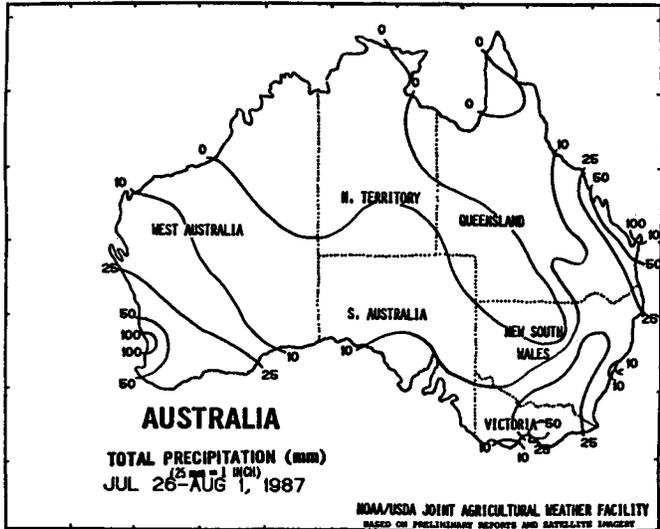
**EASTERN ASIA** ... Typhoon Alex brushed the coastline of Zhejiang and southern Jiangsu on July 27 and 28 and moved northeastward, crossing the Korean peninsula on July 29. Alex produced moderate to heavy rain in these areas with coastal flooding likely in Zhejiang and North Korea where rainfall was in excess of 200mm. Crop areas in Shandong received beneficial rain (10-50mm), while Hebei and northern Henan remained dry for the third consecutive week. Tropical showers in Guangxi and Guangdong covered late double-cropped rice approaching the heading stage. In the Manchurian Valley, wet weather covered corn and soybeans entering the filling stage.



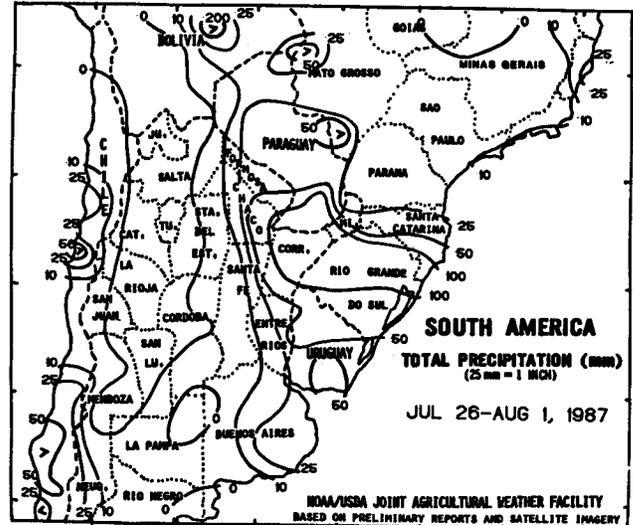
**SOUTH ASIA** ... Dry, warm weather persisted in most summer crop areas of western and southern India. Rain (up to 50mm) fell in some areas, but the showers were infrequent and temperatures returned to levels 1-4 degrees C above normal. Soil moisture was low in most areas for the normal vegetative growth of cotton and groundnuts, and crop stress increased. Moderate to heavy showers (10 to more than 50mm) covered rice areas in eastern India and Bangladesh, maintaining adequate moisture levels for jointing to heading rice but causing localized flooding in areas already too wet. Scattered, variable showers (2-54mm) improved irrigation reserves in northern India and northern Pakistan, where cotton is normally flowering to boll forming.



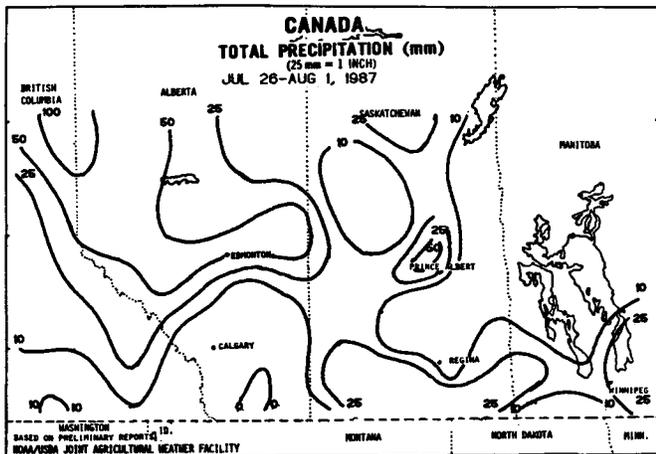
**SOUTHEAST ASIA** ... Moderate showers (10-55mm) covered Thailand's rainfed grain areas, bringing relief to filling corn and rice. Temperatures continued above normal, however, increasing the crops' moisture demand. Most crops experienced stress during the normal reproductive cycle. Highly variable rain (6-111mm) fell elsewhere in Indochina, with heaviest rain in central Laos and southern Kampuchea. Mostly light rain covered Malaysia and Indonesia. In the Philippines, light to moderate rain (10-52mm) benefited grains and sugarcane throughout the islands.



**AUSTRALIA** ... Moderate to heavy showers (10-63mm) soaked fields throughout Australia's winter grain belt. The rain in northern New South Wales and southeastern Queensland (14-30mm) was the heaviest in 5 weeks, improving conditions somewhat for vegetative wheat. Persistent dry weather early in the growing season, however, disrupted planting and hampered early growth. Moisture reserves continue favorable in Western Australia, South Australia, Victoria, and southern New South Wales. Temperatures averaged 9-15 degrees C throughout the major grain areas.



**SOUTH AMERICA** ... In Argentina, mostly dry weather covered the wheat areas, except in eastern Buenos Aires where 10-55mm of weekly rainfall slowed late planting. The moisture favored early wheat growth. Wheat planting has progressed rapidly in recent weeks throughout the major crop areas. Planting is over 75 percent complete, slightly ahead of last year's pace. Weekly rainfall ranged 4mm or less throughout the remainder of the wheat belt. Locally heavy rain (75-190mm) covered extreme northeastern Argentina, northern Uruguay, southern Paraguay, and Rio Grande do Sul, soaking Brazil's southern wheat area. Rainfall diminished further north, averaging 25-50mm in Santa Catarina, 5-10mm in Parana, and 5mm or less in the coffee areas. A high incidence of fungal disease has been reported in Parana's wheat crop.



**CANADA** ... Showery, mild weather prevailed over the Prairie grain belt with the harvest season soon to begin. Weekly rainfall averaged 25-50mm across southern Saskatchewan where grains are maturing rapidly. Locally heavy rain (50-70mm) accompanied unusually severe thunderstorms in northern crop areas of Alberta. Light showers (1-9mm) fell in southern Alberta and northeastern portions of the Prairie grain belt. Crop development in most areas was 1-2 weeks ahead of normal with the majority of spring grains filling to maturing. With the growing season nearing an end, the weather's effect begins to focus more on harvest progress and crop quality.

The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic \$25, foreign \$33 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

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(Continued from p. 13)

summer vegetable supplies were available from northern and Panhandle areas. Land preparation continued in Texas. Artichokes, snap beans, broccoli, carrots, cauliflower, celery, lettuce, cucumbers, sweet corn, and other mixed vegetables were harvested in California. Heavy rain slowed lettuce planting and field preparation in the Wilcox area of Arizona.

PASTURES AND LIVESTOCK: Pastures continued declining as heat depleted soil moisture in most areas. Livestock was mostly good. Heat caused stress in most areas. The high and low temperature fluctuations caused respiratory problems in some areas.

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Weather Facility  
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**WEEKLY NEWS BULLETIN**  
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**ISSN 0043 1974**