

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service  
and World Agricultural Outlook Board

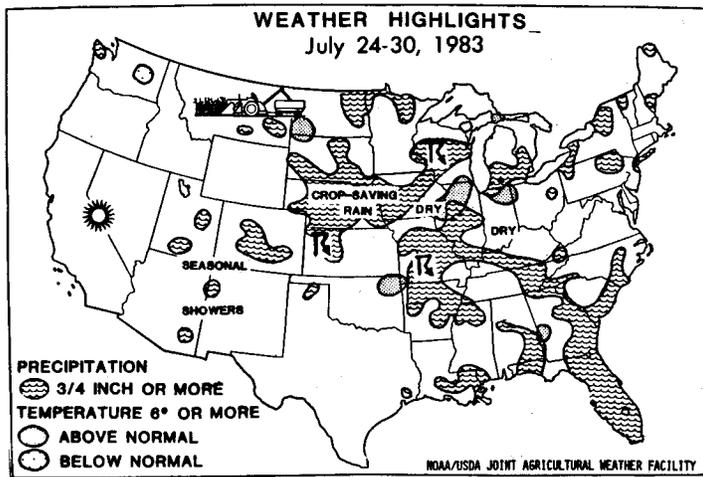
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Aug. 2, 1983

## National Weather Summary

July 24-30



Arkansas eastward through the Ohio and Tennessee Valleys to the Southeast coast. Showers along the Northwest coast pushed across the Rockies through Montana, and spread throughout the Rockies.

TUESDAY...Light, and a few moderate, showers fell throughout the Rockies and moved over the northern Plains. Showers and thunderstorms were moderate to heavy over most of Nebraska and into the western third of Iowa. Cooler weather continued to push into the East and over the Rockies but the Plains were warming. Light showers fell from Mississippi into Florida.

WEDNESDAY...Showers continued in the central and southern Rockies and spread into Nebraska. Light to moderate showers were scattered from southeastern Montana through Minnesota to Michigan. Some heavy thundershowers were scattered along the southeastern Gulf Coast. Warmer weather returned to parts of the Midwest as temperatures over 90° reached into Indiana, and 100° readings were seen in southeastern Iowa.

THURSDAY...Moisture sapping heat moved over much of the Midwest as high temperatures in excess of 100° reached from the southern Plains to southern Iowa, and across Illinois to northern Indiana. Late in the day, at the western edge of the warm air, a line of thunderstorms formed from central Wisconsin to the northern Texas Panhandle. Heavy rain fell through central Iowa but diminished as it moved eastward. Moderate showers fell over the southern Great Lakes.

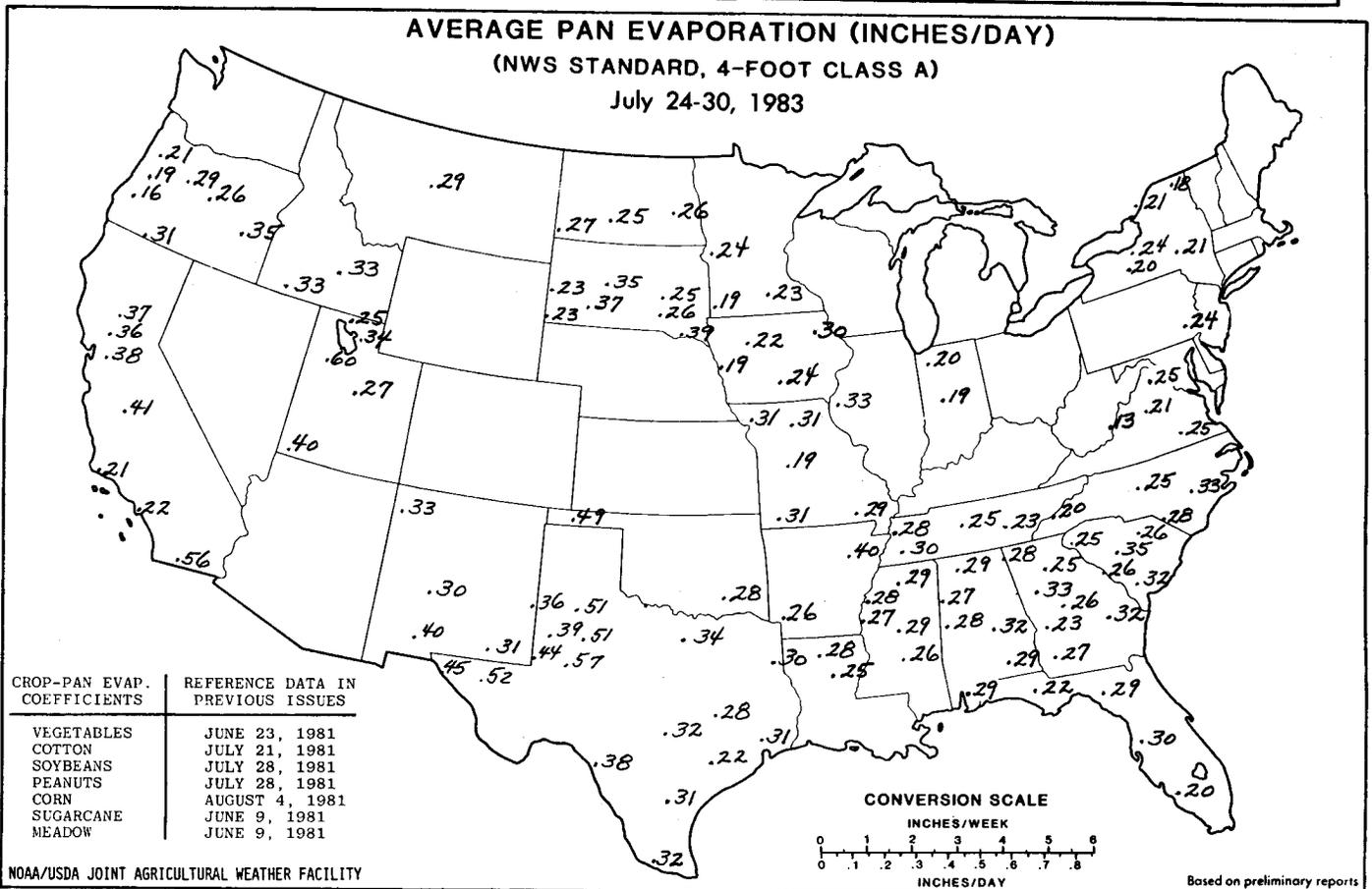
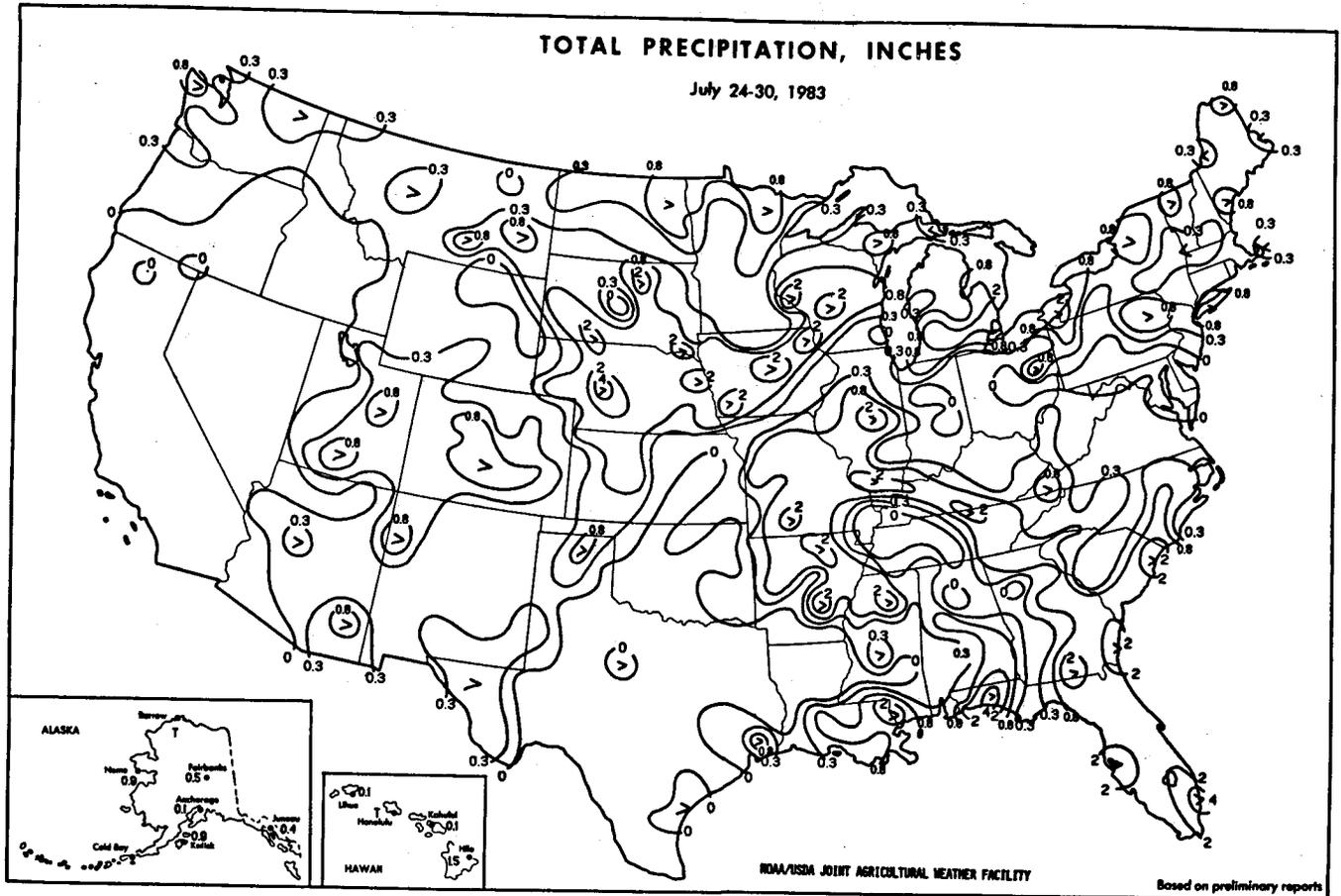
FRIDAY...Showers and thunderstorms were frequent throughout the southern Great Lakes region, and extended through New York and northern Pennsylvania (continued on p. 7)

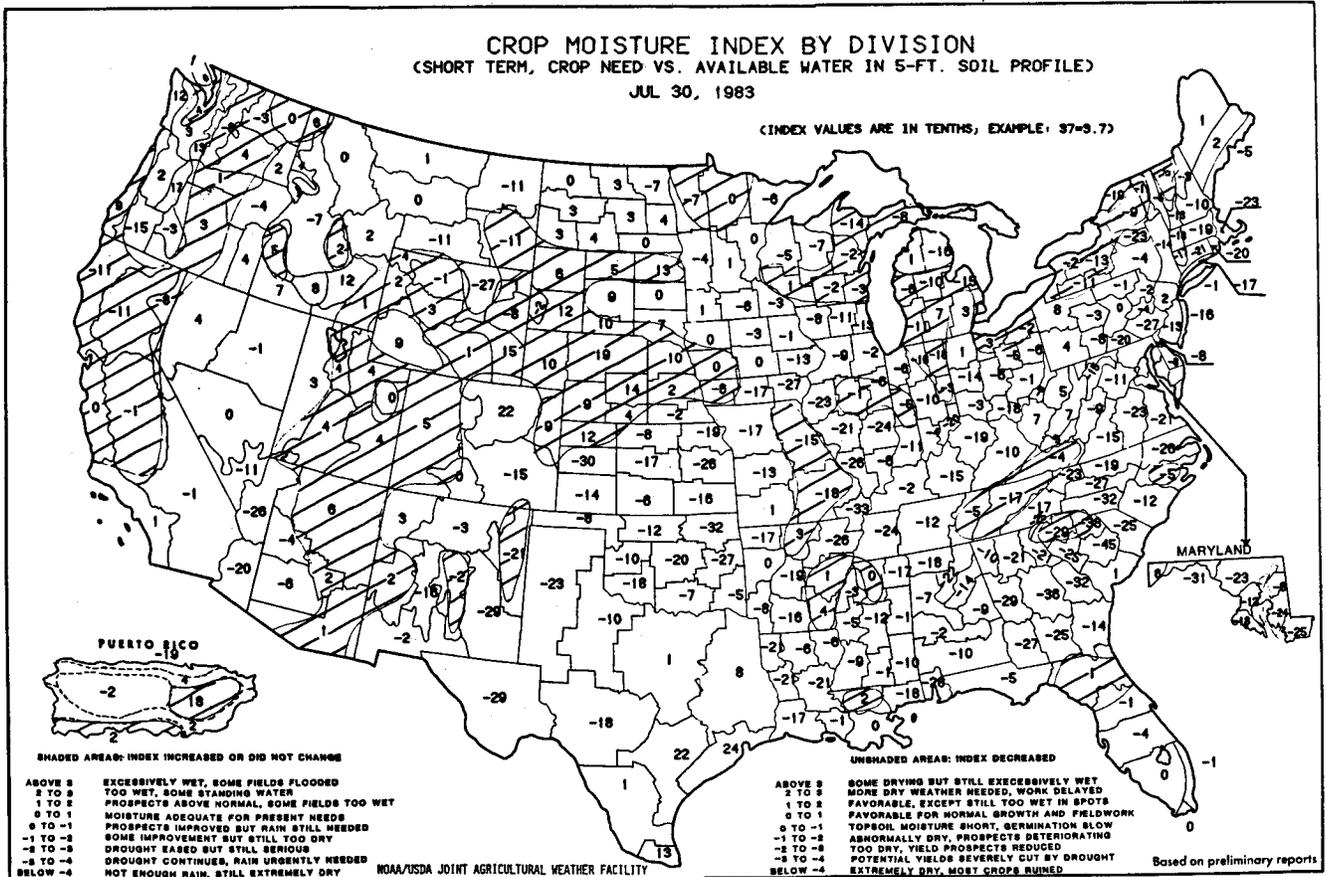
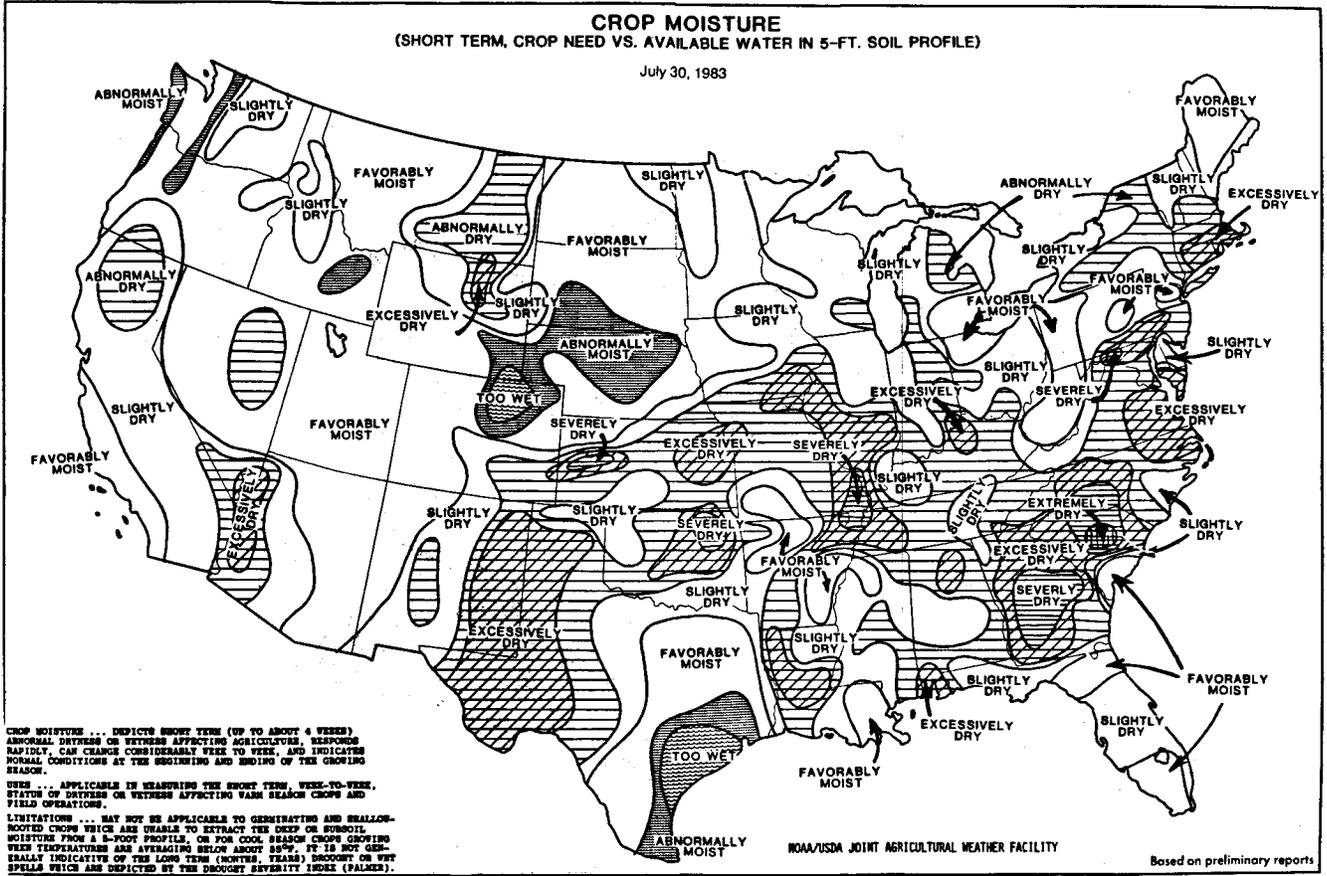
HIGHLIGHTS: Relatively cool weather early in the week and again late in the week across the Nation's Corn Belt was interspersed with unusually hot weather during midweek. High temperature readings were over 100° from Nebraska and Iowa to western Ohio and southwestward to the southern Plains. Showers and thunderstorms dumped moderate to heavy rain through most of Nebraska, western Iowa, northeastward to central Wisconsin, across the southern part of the Great Lakes, and into west central New York. Moderate showers fell in central and southern Illinois, most of Missouri, and into Arkansas and northern Mississippi. Showers and thunderstorms were welcome in the Southeast but they were spotty and left much of the area dry.

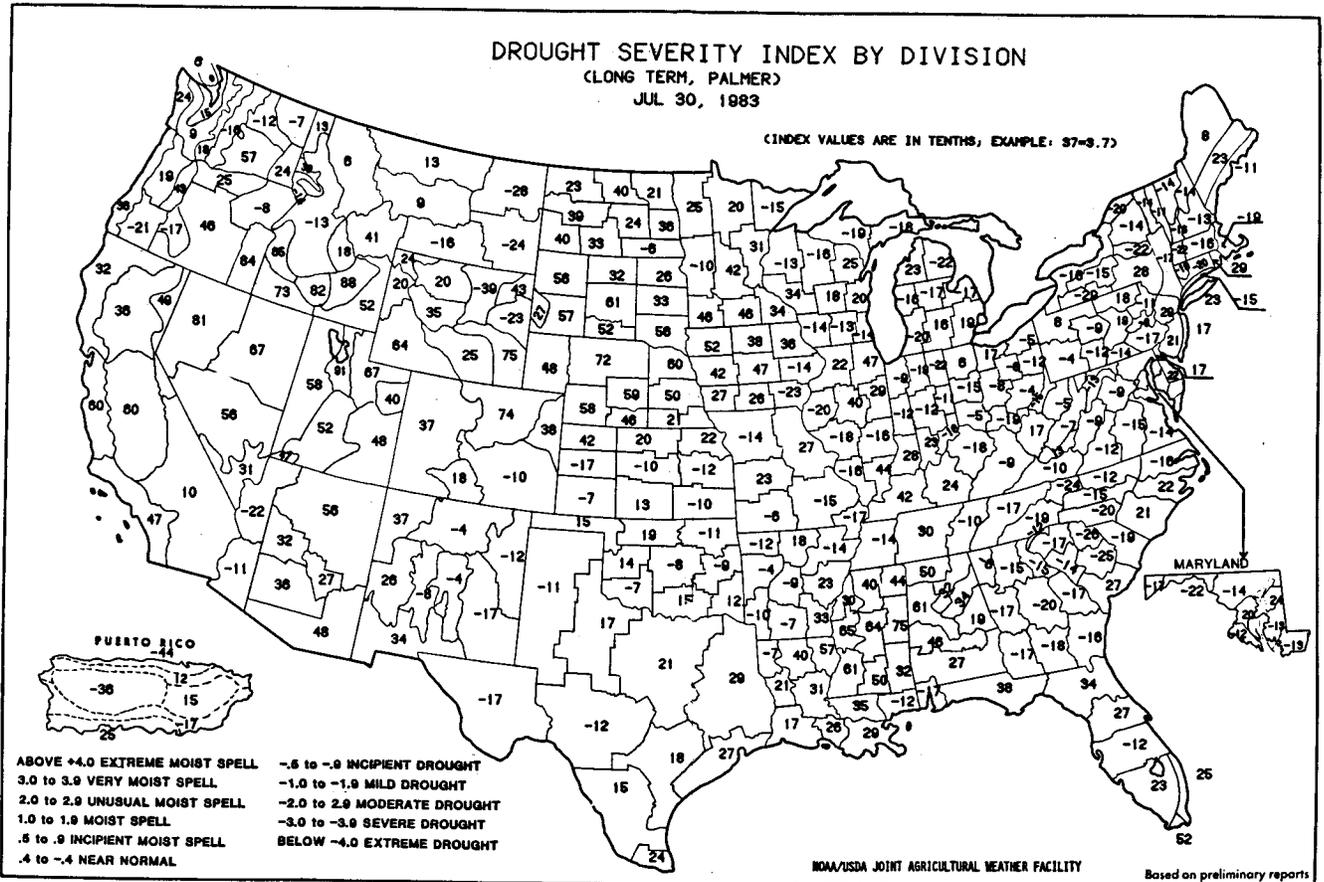
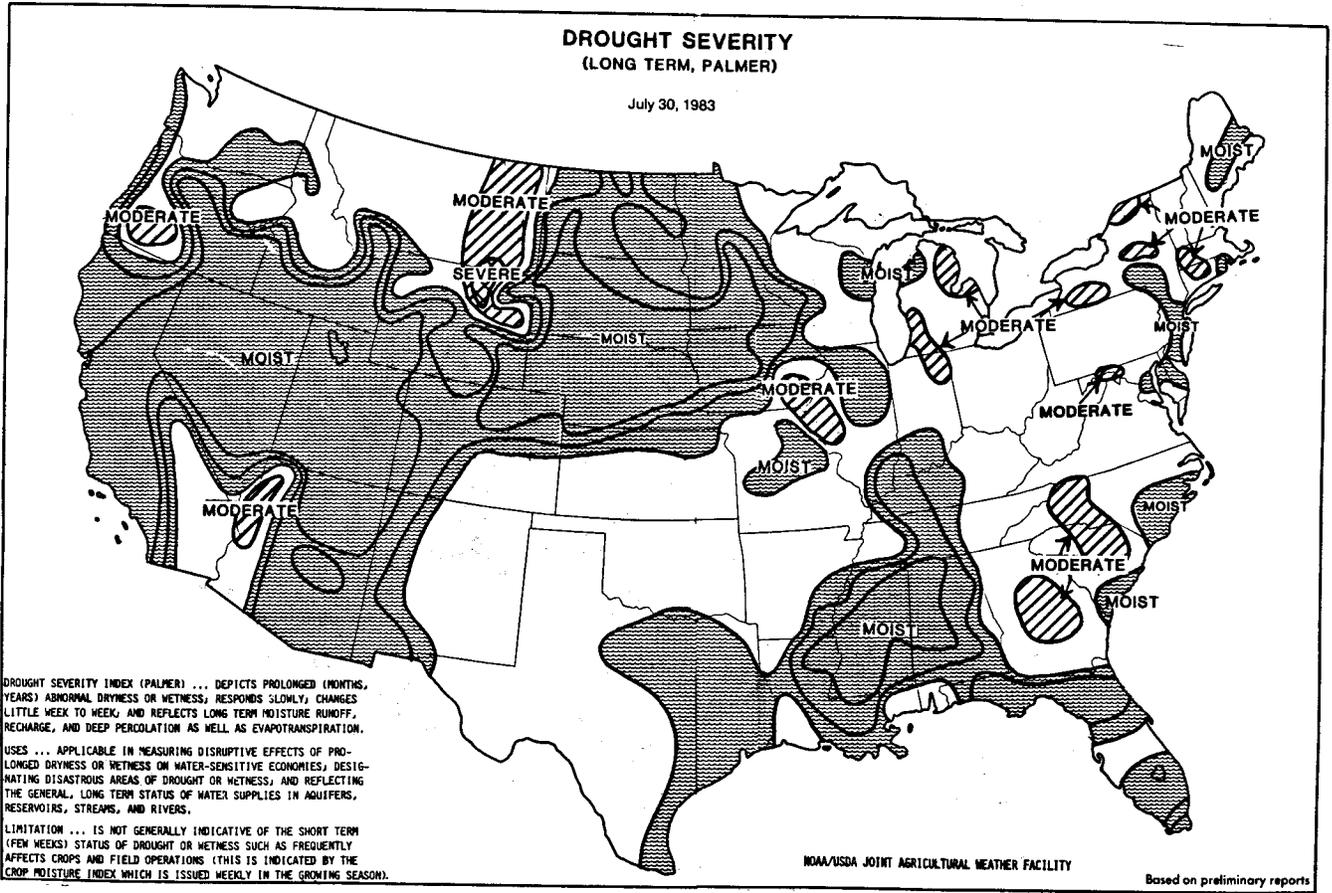
SUNDAY...Cooler weather was welcomed over the Corn Belt and light showers fell from Nebraska through Illinois and in the Ohio River Valley. Heavy showers extended from central Missouri to eastern Tennessee and northern Georgia. Light, occasionally moderate showers spread through most of the east coast States. Showers continued in the southern Rockies and Plateau. Excessively hot weather was confined to the South and to southern Kansas and Missouri.

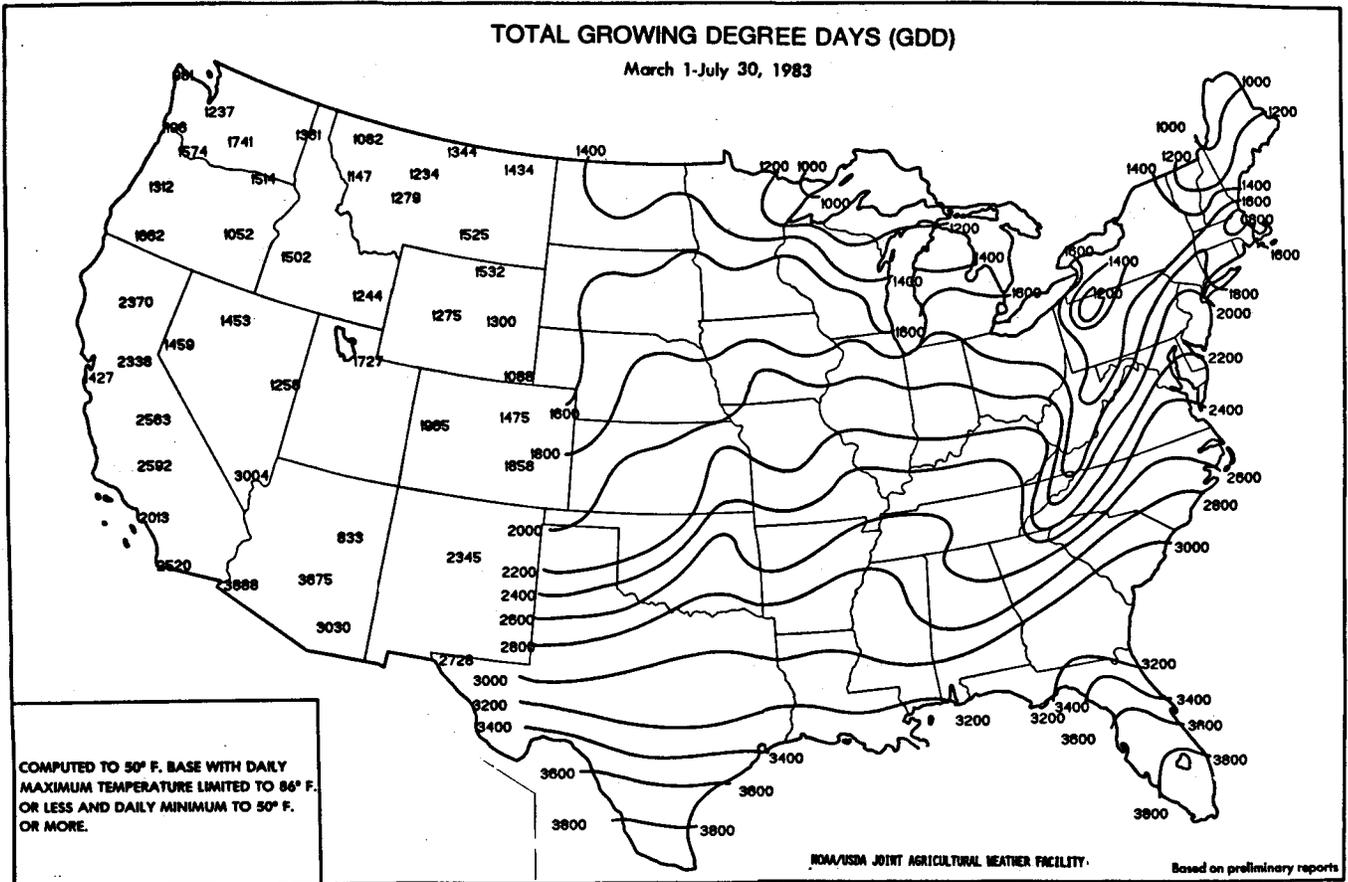
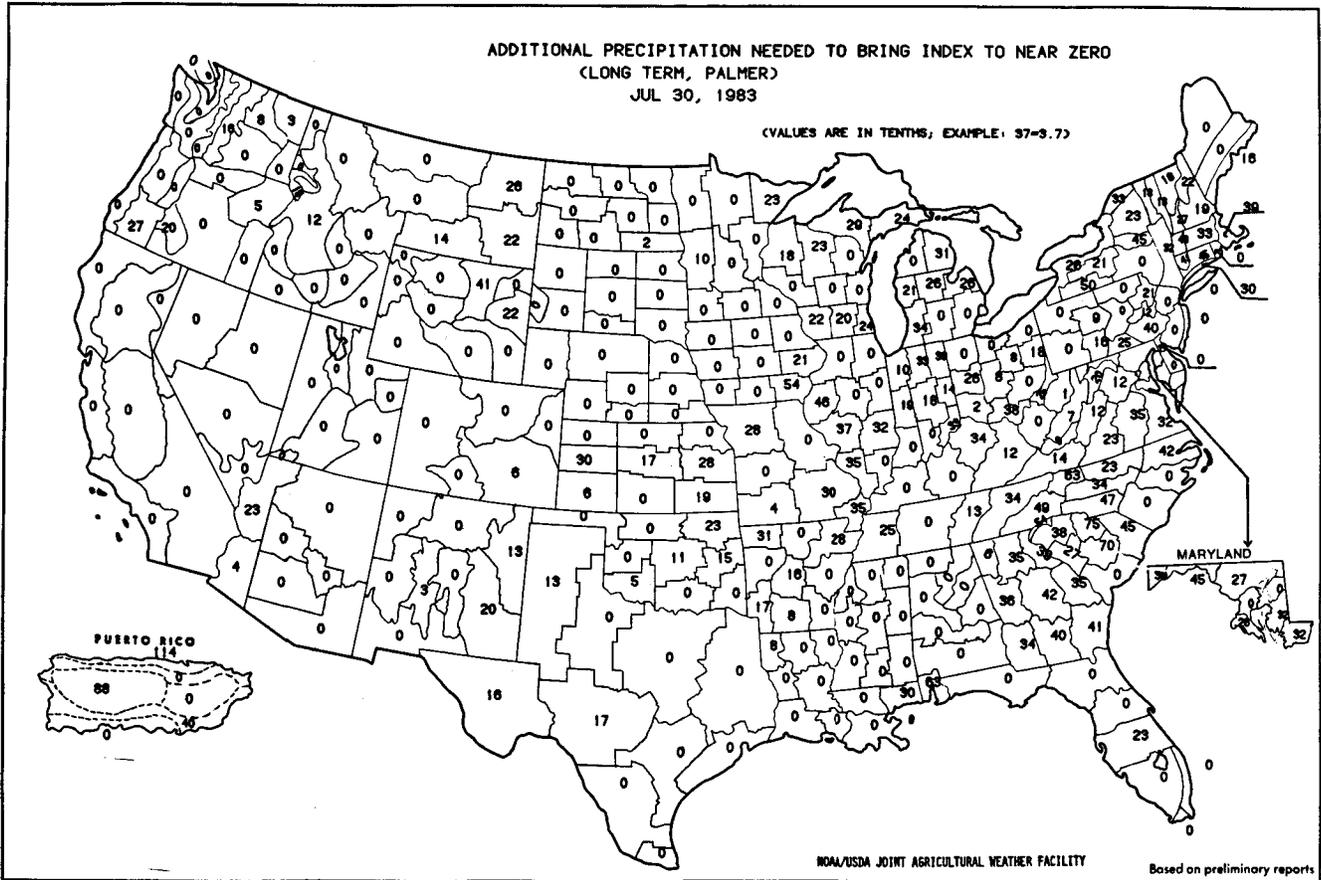
MONDAY...Cooler weather enveloped the northeastern quarter of the Nation and much of the West, but excessively hot weather was building again in the central Plains and the western part of the northern Plains. Light showers were occasionally moderate and widespread from southern Missouri and northern

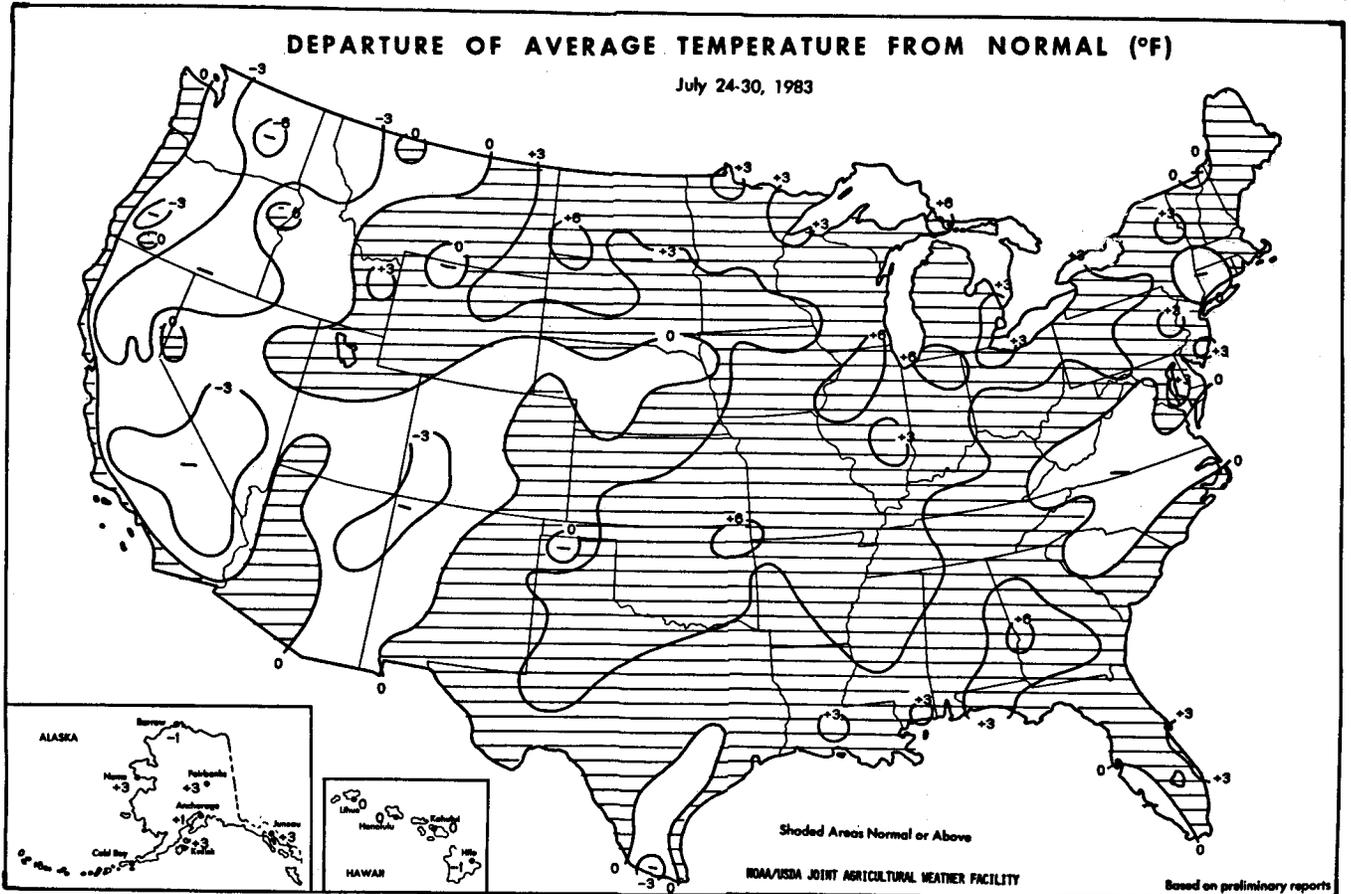
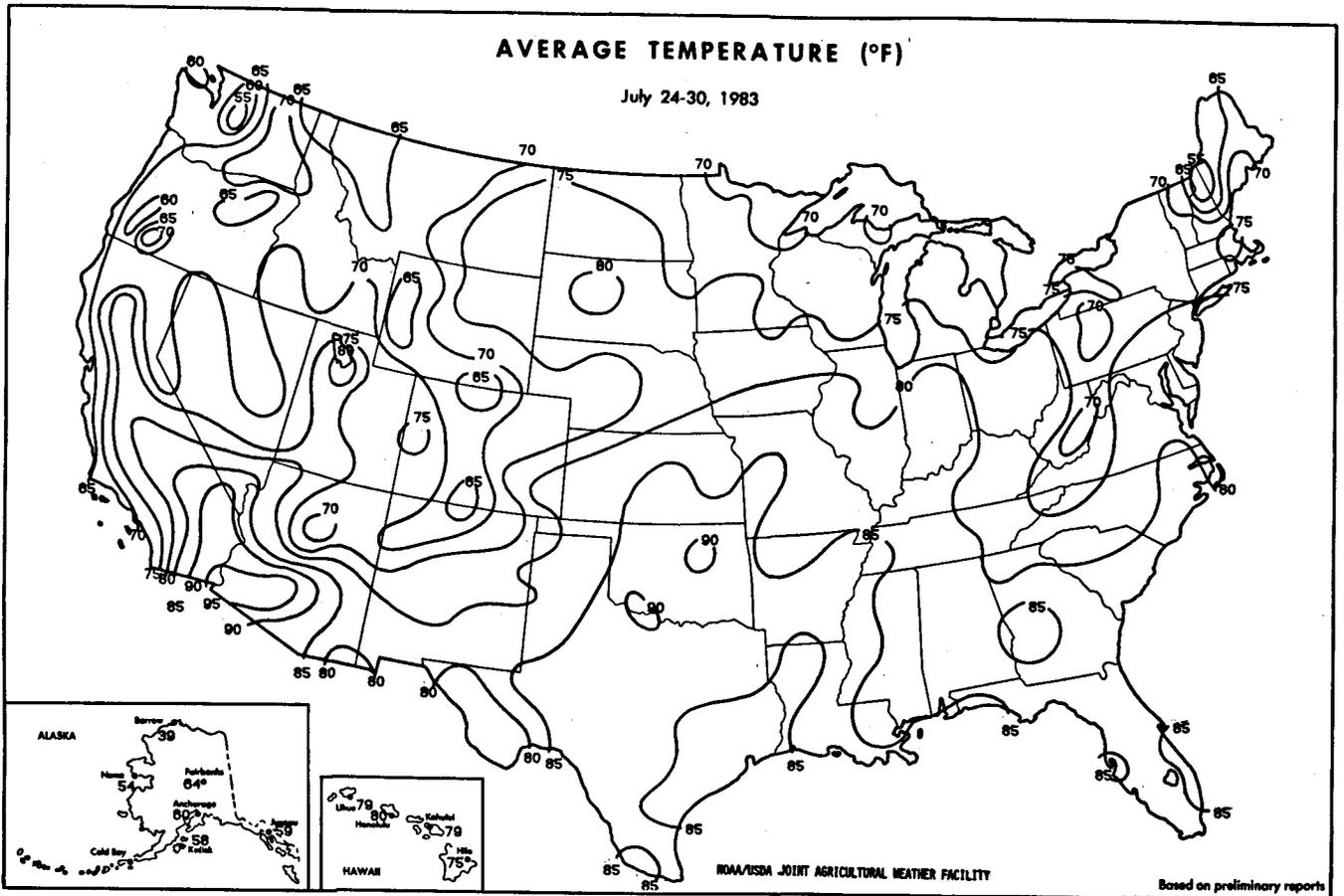
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Weather Data for the Week Ending July 30, 1983

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 MAY 29	PCT. NORMAL SINCE MAY 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE		PRECIPI- TATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL LIPMINGHAM	94	73	97	69	84	3	0	-1.2	0	3.0	42	38.2	108	81	41	7	0	0	0
MOBILE	95	73	98	70	84	1	.2	-1.6	.1	9.4	72	48.1	121	87	44	7	0	2	0
AK ANCHORAGE	68	51	74	46	60	1	.1	.4	.1	1.3	46	3.8	62	83	50	0	0	1	0
BARROW	46	33	64	29	39	-1	T	.2	T	.2	15	.5	19	96	71	0	5	1	0
FAIRBANKS	74	54	78	50	64	3	.5	.1	.5	1.9	61	2.7	51	89	40	0	0	2	1
JUNEAU	65	52	72	50	59	3	.4	.6	.2	5.3	74	19.1	79	96	69	0	0	5	0
KODIAK	62	54	67	50	58	3	.9	.1	.6	11.6	153	49.6	148	98	81	0	0	5	1
NOME	62	46	68	37	54	3	.9	.3	.3	2.1	58	3.9	53	93	70	0	0	4	0
AZ PHOENIX	107	85	109	83	96	4	.1	.1	.1	.4	44	5.6	156	52	21	7	0	2	0
PRESCOTT	87	66	92	62	77	4	.3	.6	.2	.6	16	5.5	61	80	36	2	0	2	0
TUCSON	99	75	101	73	87	1	.6	.1	.3	2.0	77	6.2	115	64	25	7	0	3	0
YUMA	109	87	115	84	98	4	0	.1	0	0	0	1.3	118	42	15	7	0	0	0
AR FORT SMITH	96	74	98	71	85	2	.2	.5	.2	6.3	89	19.2	77	88	42	7	0	1	0
LITTLE ROCK	96	76	99	73	86	4	.1	.6	.1	3.6	53	25.5	84	87	48	7	0	2	0
CA BAKERSFIELD	96	65	99	60	80	-5	0	0	0	0	+100	6.9	192	65	23	7	0	0	0
EUREKA	67	56	70	54	62	5	T	0	T	1.6	200	36.7	162	94	75	0	0	0	0
FRESNO	95	64	102	60	80	-2	0	0	0	0	+100	16.3	243	68	21	6	0	0	0
LOS ANGELES	75	62	76	61	69	-1	0	0	0	0	+100	20.6	261	85	57	0	0	0	0
RED BLUFF	94	62	102	59	78	-4	0	0	0	.2	40	29.3	234	68	20	6	0	0	0
SACRAMENTO	88	57	94	55	73	-3	0	0	0	.4	400	23.7	230	85	29	4	0	0	0
SAN DIEGO	77	67	79	65	72	1	0	0	0	0	+100	14.2	233	77	57	0	0	0	0
SAN FRANCISCO	73	56	78	54	64	2	T	0	T	0	0	25.4	213	88	54	0	0	0	0
CO DENVER	86	61	91	59	74	0	.2	.2	.1	5.1	146	15.0	150	81	27	1	0	2	0
GRAND JUNCTION	88	64	96	59	76	-3	.3	.2	.2	3.7	463	8.9	207	79	35	4	0	2	0
PUEBLO	92	61	94	57	76	-1	1.0	.6	.8	3.8	123	9.3	133	90	27	6	0	4	1
CT BRIDGEPORT	80	64	85	60	72	-3	.4	.5	.3	5.8	87	35.5	156	94	60	0	0	2	0
HARTFORD	85	61	92	52	73	-1	.3	.4	.2	4.8	72	33.7	138	83	43	2	0	2	0
DC WASHINGTON	91	72	94	68	82	3	0	.9	0	9.7	131	30.1	136	77	39	6	0	0	0
FL APALACHICOLA	89	75	92	72	82	0	.2	.1	.2	9.8	81	36.9	127	88	64	4	0	2	0
DAYTONA BEACH	92	74	99	71	83	2	1.1	.1	.6	10.9	89	33.6	132	92	57	5	0	3	1
JACKSONVILLE	91	75	97	72	83	1	2.3	.7	1.4	13.4	110	38.7	218	81	59	3	0	4	1
KEY WEST	89	78	91	73	83	-2	.9	.1	.8	10.7	118	40.3	219	81	59	3	0	4	1
MIAMI	93	76	98	71	85	2	5.5	4.2	2.5	16.1	102	34.3	112	93	51	5	0	4	4
ORLANDO	92	75	95	71	84	1	1.6	.1	.7	15.2	99	34.4	116	92	53	6	0	4	2
TALLAHASSEE	95	74	99	70	84	3	.3	-1.6	.2	11.6	74	46.3	119	96	50	7	0	4	0
TAMPA	91	76	94	72	83	0	2.3	.6	1.3	17.1	134	36.2	136	96	61	6	0	5	2
WEST PALM BEACH	93	77	99	73	85	3	1.8	.6	1.1	17.3	117	45.5	145	87	53	5	0	4	2
CA ATLANTA	92	72	98	68	82	3	T	-1.0	T	2.5	30	23.2	76	84	38	7	0	0	0
AUGUSTA	95	68	101	63	82	1	.1	.9	.1	6.3	72	30.1	111	75	38	7	0	2	0
Macon	96	74	104	70	85	3	.2	.8	.2	8.2	96	32.9	113	87	40	7	0	2	0
SAVANNAH	91	75	103	71	83	1	1.6	.7	1.2	11.2	83	37.6	122	93	53	2	0	5	1
HI HILLO	81	68	82	67	75	-1	1.5	.7	.4	11.4	74	34.6	47	93	67	0	0	6	0
HONOLULU	87	73	88	72	80	0	T	.1	T	.5	71	3.3	29	78	51	0	0	2	0
KAHULUI	86	71	87	68	79	0	.1	.1	.1	2.4	63	7.8	31	77	54	0	0	1	0
LIRUE	84	73	85	69	79	0	.1	.4	.1	2.4	63	7.8	31	77	54	0	0	1	0
ID POISE	89	57	99	50	73	-2	0	0	0	1.4	117	11.5	155	69	21	4	0	0	0
LEWISTON	86	58	99	55	72	-3	T	.1	T	2.4	114	8.6	116	75	28	3	0	0	0
POCATELLO	90	54	98	48	72	0	.1	0	.1	2.2	122	9.7	139	78	21	4	0	1	0
IL CHICAGO	89	68	100	62	78	4	.3	.5	.3	8.9	113	28.3	139	90	46	3	0	3	0
MOLINE	91	70	102	60	81	6	.1	-1.0	T	8.3	88	19.9	89	89	44	4	0	2	0
PEORIA	93	70	102	64	82	6	1.3	.4	1.2	6.7	81	24.6	113	84	46	5	0	2	1
QUINCY	92	71	101	63	82	5	.5	.5	.3	1.9	22	16.2	71	84	44	4	0	2	0
ROCKFORD	89	68	96	61	79	5	T	.9	T	5.7	61	18.9	82	93	48	4	0	1	0
SPRINGFIELD	92	69	101	62	80	4	1.1	.3	.7	4.2	56	18.7	89	86	49	4	0	2	1
IN EVANSVILLE	92	70	96	67	81	3	.7	.2	.6	6.1	79	32.3	119	88	42	5	0	2	1
FORT WAYNE	92	68	96	62	80	7	.1	.7	.1	4.5	61	16.8	77	80	39	5	0	1	0
INDIANAPOLIS	91	69	96	60	80	5	T	.9	T	6.4	75	20.5	86	82	43	5	0	1	0
SOUTH BEND	91	69	100	63	80	7	1.2	.4	1.2	5.0	66	18.7	86	85	43	1	0	2	1
IA DES MOINES	92	70	103	62	81	4	.9	.1	.5	6.3	82	20.8	109	81	41	4	0	3	0
STOUC CITY	83	65	88	59	74	-1	.7	0	.4	5.9	78	18.5	114	82	54	0	0	3	1
WATERLOO	87	65	94	60	76	3	1.6	.6	1.4	9.3	99	23.1	111	94	54	0	0	1	0
KS CONCORDIA	96	68	108	60	87	2	.1	.6	.1	3.8	48	15.0	89	80	36	5	0	2	1
DODGE CITY	99	72	106	65	85	4	.6	.1	.5	6.2	97	16.3	121	69	27	7	0	2	0
GOODLAND	92	66	97	62	79	3	.2	.3	.1	6.4	116	13.8	124	78	37	5	0	3	0
TOPEKA	95	70	102	63	83	4	T	.8	T	6.6	71	23.6	117	82	43	5	0	0	0
WICHITA	99	73	106	70	86	4	T	.7	T	11.2	140	26.1	151	75	32	7	0	0	0
KY BOWLING GREEN	90	69	95	65	80	1	1.0	.1	1.0	7.4	80	35.5	109	95	51	4	0	1	1
LEXINGTON	89	69	92	62	79	3	T	.1	T	5.3	55	24.8	84	80	36	5	0	2	0
LOUISVILLE	91	71	95	66	81	3	.1	.8	.1	5.6	68	28.5	101	80	39	5	0	2	0
LA ALEXANDRIA	94	75	96	72	85	1	T	-1.0	T	4.3	47	32.7	94	90	45	7	0	0	0
BATON ROUGE	92	76	93	73	84	2	.5	-1.1	.4	12.9	124	49.0	142	89	51	7	0	2	0
LAKE CHARLES	94	77																	

Weather Data for the Week Ending July 30, 1983

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 MAY 29	PCT. NORMAL SINCE MAY 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	92 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	94	75	95	73	85	2	0	-.7	0	8.2	111	32.2	115	91	46	7	0	0	0
ME CARIBOU	76	57	85	44	67	1	.8	-.1	.4	7.9	108	25.0	130	91	48	0	0	4	0
ME PORTLAND	81	60	88	55	70	1	1.2	-.6	.9	7.0	113	36.8	156	89	53	0	0	4	0
MD BALTIMORE	92	67	96	63	79	2	0	-.9	0	7.2	94	32.4	138	84	32	6	0	0	0
MD SALISBURY	88	66	91	63	77	0	0	-.1	0	7.7	95	29.7	117	99	44	3	0	0	0
MA BOSTON	84	67	91	60	76	2	.4	-.3	.3	2.7	47	31.2	131	86	45	2	0	0	0
MA CHATHAM	76	64	81	57	70	1	.3	-.5	.3	4.6	78	35.4	139	90	71	0	0	0	0
MI ALPENA	85	59	90	51	72	5	.6	-.1	.6	4.6	70	20.1	120	92	46	1	0	2	1
MI DETROIT	84	63	86	56	74	1	1.3	-.6	1.1	9.0	134	21.8	117	86	50	0	0	3	1
MI FLINT	84	64	88	56	74	4	.6	-.1	.5	6.0	95	17.6	99	94	56	0	0	2	1
MI GRAND RAPIDS	86	65	90	60	76	4	2.3	-.7	1.4	7.1	99	22.0	113	92	49	1	0	2	0
MI HOUGHTON LAKE	84	59	87	48	72	4	.4	-.2	.3	3.4	55	14.8	95	94	48	0	0	2	0
MI LANSING	85	64	89	58	75	4	1.2	-.6	.6	6.4	102	19.1	108	91	52	0	0	1	2
MI MARQUETTE	83	55	91	45	69	4	.3	-.4	.3	6.7	89	23.3	111	94	40	1	0	1	0
MI MUSKEGON	85	67	87	59	76	5	.2	-.4	.2	4.3	81	15.1	86	91	50	0	0	1	0
MI SAULT STE. MARIE	85	57	90	50	71	7	0	-.7	0	5.1	77	16.7	98	94	43	2	0	1	0
MI ALEXANDRIA	85	65	92	60	75	4	.1	-.6	.1	8.0	111	12.0	82	93	47	1	0	1	0
MI DULUTH	79	57	91	49	68	2	1.5	-.9	.7	5.7	70	13.7	81	85	49	1	0	1	0
MI INT'L FALLS	80	58	83	52	69	2	1.5	-.7	.7	7.8	100	11.6	81	98	58	0	0	3	1
MI MINNEAPOLIS	86	67	95	63	77	3	.2	-.6	.2	8.6	109	23.4	149	85	48	2	0	2	0
MI ROCHESTER	84	63	90	58	73	2	0	-.8	0	7.9	95	18.1	107	97	56	2	0	1	0
MI GREENWOOD	95	76	96	72	86	4	.3	-.7	.3	8.8	106	43.6	128	93	52	7	0	1	0
MI JACKSON	95	74	97	70	85	3	.5	-.5	.3	4.9	64	50.3	152	95	50	7	0	2	0
MI MERIDIAN	93	71	95	66	82	0	.1	-.1	.1	9.0	100	47.4	139	100	51	7	0	1	0
MI CAPE GIRARDEAU	94	74	101	69	84	3	0	-.8	0	3.3	43	26.9	98	90	47	6	0	1	0
MI COLUMBIA	92	71	98	67	82	3	1.7	-.1	1.6	5.9	78	23.3	107	93	52	4	0	2	1
MI KANSAS CITY	95	71	104	64	83	4	.1	-.8	.1	5.2	56	20.8	96	89	42	6	0	2	0
MI SAINT LOUIS	93	75	101	69	84	5	1.1	-.4	.8	5.7	74	24.4	114	90	48	5	0	2	1
MI SPRINGFIELD	95	73	100	71	84	5	1.4	-.8	.7	8.1	95	26.1	110	88	46	5	0	2	2
MT BILLINGS	88	60	92	56	74	0	.9	-.7	.7	2.4	75	6.4	66	78	27	3	0	3	1
MT GLASGOW	88	60	95	56	74	2	0	-.3	0	3.4	79	5.9	74	70	25	1	0	0	0
MT GREAT FALLS	84	53	88	50	69	-2	.4	-.2	.3	6.6	161	10.2	99	81	27	0	0	2	0
MT HAVRE	84	53	88	46	69	-2	.2	-.1	.2	5.2	141	9.7	121	85	25	0	0	2	0
MT HELENA	84	55	89	53	69	0	.5	-.2	.3	5.7	173	8.4	117	78	30	0	0	2	0
MT KALISPELL	77	47	86	40	62	-4	.2	0	.1	5.3	156	11.9	127	96	43	0	0	2	0
MT MILES CITY	92	64	100	59	78	2	1.2	1.0	.6	3.1	69	5.6	59	85	24	5	0	4	1
MT MISSOULA	81	49	88	43	65	-3	0	-.1	0	4.5	155	10.6	134	95	35	0	0	1	0
NE GRAND ISLAND	88	67	96	58	78	1	1.1	-.6	.7	8.2	119	18.5	120	85	46	3	0	3	1
NE LINCOLN	93	68	106	57	81	2	.4	-.3	.3	8.1	109	19.6	118	92	41	5	0	3	0
NE NORFOLK	86	65	90	57	76	0	1.2	-.5	1.1	9.4	119	19.9	122	93	50	1	0	2	1
NE NORTH PLATTE	85	61	91	59	73	-2	2.1	1.6	2.1	7.1	101	14.4	104	88	47	2	0	2	1
NE OMAHA	88	67	101	62	78	2	1.2	-.4	.6	6.2	77	20.6	113	88	57	3	0	5	1
NE SCOTTSBLUFF	88	61	93	54	75	0	.1	-.2	.1	2.7	51	11.2	106	88	38	1	0	1	0
NE VALENTINE	87	63	92	60	75	0	1.7	1.1	.7	11.6	204	19.3	162	93	49	3	0	4	2
NV ELY	88	47	93	41	68	-1	0	-.1	0	2.4	160	8.7	155	49	15	2	0	0	0
NV LAS VEGAS	101	76	103	71	89	-3	0	-.1	0	1.7	17	2.5	104	23	10	7	0	0	0
NV RENO	92	48	101	43	70	0	0	-.1	0	.5	56	6.7	149	65	13	5	0	0	0
NV WINNEMUCCA	93	47	100	40	70	-3	0	0	0	1.2	109	6.0	118	41	11	5	0	0	0
NH CONCORD	84	57	90	48	70	0	.2	-.5	.2	6.0	97	28.9	145	94	43	2	0	1	0
NJ ATLANTIC CITY	90	65	95	59	78	3	0	-.1	0	4.0	57	27.3	112	91	38	6	0	1	0
NM ALBUQUERQUE	93	66	97	60	79	0	.1	-.2	.1	1.5	83	4.2	108	77	24	6	0	3	0
NM CLOVIS	91	67	95	65	79	1	.3	-.4	.1	3.0	52	6.1	60	75	29	5	0	3	0
NM ROSWELL	95	68	99	63	82	1	.1	-.3	.1	1.3	54	3.3	75	60	27	7	0	1	0
NY ALBANY	83	61	90	52	72	0	.2	-.5	.1	3.9	59	28.6	146	98	55	1	0	3	0
NY BINGHAMTON	82	63	87	57	73	4	.3	-.5	.1	7.2	97	75.9	125	83	47	0	0	3	0
NY BUFFALO	86	65	88	58	75	4	1.7	1.0	.9	5.5	96	16.8	84	87	40	0	0	3	2
NY NEW YORK	85	64	92	58	74	3	.4	-.2	.2	3.7	67	15.3	86	93	44	1	0	3	0
NY ROCHESTER	84	61	89	53	73	2	.7	-.2	.4	3.9	51	18.1	81	97	47	0	0	4	0
NY SYRACUSE	88	62	96	57	75	1	.4	-.7	.4	4.9	54	29.0	102	98	46	1	0	1	0
NC ASHEVILLE	91	66	100	61	78	-1	.4	-.5	.4	4.3	56	23.2	89	89	36	2	0	1	0
NC GREENSBORO	87	64	93	61	76	-2	.3	-.7	.2	8.8	102	28.3	111	88	40	1	0	2	0
NC HATTERAS	86	73	89	65	79	0	.1	-.1	.1	6.7	67	37.9	130	87	57	0	0	2	0
NC NEW BERN	91	69	94	64	80	0	.4	-.1	.2	8.3	68	34.3	113	88	45	5	0	2	0
NC RALEIGH	89	65	95	61	77	-1	.1	-.1	.1	4.2	49	29.2	116	93	47	2	0	2	0
NC WILMINGTON	91	73	98	68	82	1	.2	-.1	.2	12.1	90	36.8	119	87	50	4	0	2	0
ND BISMARCK	87	60	90	52	74	2	.3	-.1	.2	5.1	96	9.4	88	91	31	1	0	6	0
ND FARGO	85	63	89	56	74	2	.8	-.1	.8	6.8	103	11.9	98	93	51	0	0	2	1
ND GRAND FORKS	86	62	91	54	74	4	1.4	-.8	1.3	7.3	124	11.7	107	80	43	1	0	2	1
ND WILLISTON	92	61	98	55	77	5	.4	0	.4	3.1	67	6.4	72	79	27	5	0	1	0
OH AKRON-CANTON	86	65	90	59	75	3	.1	-.8	0	4.2	56	20.4	91	86	48	1	0	2	0
OH CINCINNATI	89	66	93																

Weather Data for the Week Ending July 30, 1983

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 MAY 29	PCT. NORMAL SINCE MAY 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	85	66	90	59	75	0	.1	-.6	.1	9.7	129	23.4	104	77	45	3	0	1	0
TOLEDO	84	63	89	53	74	2	.2	-.5	-.1	6.7	94	17.8	94	91	52	0	0	2	0
YOUNGSTOWN	86	66	91	56	76	5	.7	-.9	.7	7.0	88	20.7	90	84	45	2	0	0	0
OK OKLAHOMA CITY	100	75	103	72	87	4	T	-.6	T	4.6	61	19.4	97	74	28	7	0	0	0
TULSA	102	78	104	75	90	6	T	-.7	T	2.5	29	20.0	86	87	36	7	0	0	0
OR ASTORIA	69	54	76	47	62	1	.4	-.2	.3	9.5	250	47.9	135	97	67	0	0	3	0
BURNS	83	49	96	45	66	-4	0	-.1	0	1.8	129	10.6	171	66	35	1	0	0	0
MEDFORD	88	58	101	49	73	0	0	-.1	0	1.3	130	13.0	124	83	34	2	0	0	0
PENDLETON	84	58	98	52	71	-4	0	-.1	T	1.6	145	8.2	172	69	27	2	0	0	0
PORTLAND	78	60	93	57	69	0	.6	.4	.4	4.7	224	28.7	144	85	50	1	0	3	0
SALEM	79	57	93	45	68	1	T	0	T	5.0	294	34.4	158	87	48	1	0	1	0
PA ALLENTOWN	88	65	94	60	77	3	.9	0	.7	7.5	97	30.1	122	87	43	3	0	2	1
ERIE	82	65	88	59	73	3	2.1	1.4	1.9	9.4	129	21.9	104	87	57	0	0	2	1
HARRISBURG	89	65	95	60	77	1	.1	-.6	T	4.3	59	27.7	124	85	35	3	0	2	0
PHILADELPHIA	90	67	93	63	79	2	T	-.9	T	3.2	40	31.0	131	90	39	4	0	1	0
PITTSBURGH	84	64	89	58	74	2	T	-.8	T	8.6	116	24.0	105	85	47	0	0	1	0
SCRANTON	83	63	88	55	73	1	1.0	-.2	-.9	8.3	115	26.5	135	85	46	0	0	2	1
RI PROVIDENCE	84	65	91	58	75	2	.6	-.2	.6	6.4	107	39.5	161	74	38	1	0	1	1
SC CHARLESTON	90	73	100	70	82	1	1.7	.1	1.5	11.3	80	38.1	121	91	55	2	0	2	1
COLUMBIA	95	68	106	62	81	0	.1	-.2	-.1	3.7	36	26.5	91	93	35	7	0	1	0
FLORENCE	91	70	98	67	81	0	.3	-.9	.3	11.1	106	35.2	134	97	50	5	0	1	0
GREENVILLE	89	67	99	62	78	-1	.7	-.1	.7	5.9	63	30.6	97	93	44	2	0	1	1
SD ABERDEEN	85	65	89	59	75	2	.7	-.2	.6	10.9	185	16.2	134	95	53	0	0	3	1
HURON	87	65	92	61	76	1	.4	0	.3	6.8	117	11.8	97	98	54	1	0	2	0
RAPID CITY	88	63	94	58	76	2	1.7	1.3	1.2	4.9	84	9.4	80	88	41	2	0	3	2
SIoux FALLS	86	66	91	59	76	1	.4	-.2	.4	8.6	128	18.5	122	98	58	1	0	2	0
TN CHATTANOOGA	92	70	97	65	81	2	1.0	0	1.0	6.1	74	29.6	91	91	44	6	0	2	1
KNOXVILLE	89	68	94	64	79	1	.8	-.1	.6	6.3	75	24.2	79	95	50	5	0	2	1
MEMPHIS	93	78	96	73	85	3	1.8	.9	1.8	7.3	92	34.3	103	94	55	7	0	1	1
NASHVILLE	92	71	98	68	82	2	T	-.8	T	5.9	76	32.3	105	92	43	5	0	0	0
TX ABILENE	98	76	100	74	87	2	T	-.5	T	7.3	146	12.6	95	74	24	7	0	1	0
AMARILLO	97	67	100	64	82	3	.6	0	.3	2.9	44	10.2	86	73	25	7	0	3	0
AUSTIN	95	75	95	73	85	0	0	-.4	0	6.9	175	23.2	120	87	41	7	0	0	0
BEAUMONT	92	76	94	74	84	1	.1	-.2	.1	15.0	156	40.8	141	98	62	7	0	1	0
BROWNSVILLE	93	77	94	76	85	1	0	-.3	0	8.8	200	13.7	121	91	56	7	0	0	0
CORPUS CHRISTI	92	75	93	73	83	-2	.1	-.3	.1	11.3	205	21.2	142	83	50	7	0	1	0
DEL RIO	100	77	101	75	88	2	0	-.4	0	1.5	39	5.5	56	73	28	7	0	0	0
EL PASO	96	70	99	67	83	1	.2	-.2	.2	.7	29	3.6	95	72	23	7	0	3	0
FORT WORTH	99	76	100	74	87	0	0	-.4	0	5.0	100	18.5	96	79	33	7	0	0	0
GALVESTON	90	80	92	77	85	2	.2	-.6	.2	10.2	136	24.1	114	85	64	5	0	1	0
HOUSTON	94	74	95	73	84	1	.3	-.4	.2	11.1	141	28.3	107	93	51	7	0	2	0
LUBBOCK	97	71	99	67	84	4	0	-.5	0	2.2	41	7.8	72	58	26	7	0	0	0
MIDLAND	100	72	102	71	86	4	0	-.4	0	.5	15	2.6	33	59	21	7	0	0	0
SAN ANGELO	98	74	101	68	86	1	0	-.3	0	5.3	156	10.0	99	79	24	7	0	0	0
SAN ANTONIO	96	76	97	75	86	1	0	-.4	0	3.9	72	15.3	94	83	36	7	0	0	0
VICTORIA	93	75	94	74	84	-1	.1	-.4	.1	13.3	171	25.0	124	97	55	7	0	1	0
WACO	99	76	99	74	87	0	0	-.4	0	5.9	123	16.0	81	86	37	7	0	0	0
WICHITA FALLS	106	75	107	73	90	4	0	-.4	0	5.6	106	15.5	95	71	24	7	0	0	0
UT BLANDING	85	60	91	57	72	-2	.4	-.1	.3	3.0	200	8.8	166	84	35	2	0	2	0
CEDAR CITY	89	62	94	59	76	1	.7	-.5	.7	1.2	75	8.1	140	61	20	2	0	1	1
SALT LAKE CITY	95	68	98	62	81	2	T	-.2	T	1.8	106	12.4	133	57	20	7	0	0	0
VT BURLINGTON	83	62	88	55	72	2	1.4	.6	.7	4.9	68	24.6	135	84	41	0	0	4	1
VA NORFOLK	88	68	92	63	78	-1	T	-.2	T	4.8	55	27.3	107	90	41	3	0	1	0
RICHMOND	90	65	95	62	78	0	T	-.2	T	6.1	69	25.4	105	96	37	5	0	1	0
ROANOKE	88	60	92	58	74	-2	T	-.8	T	3.9	55	26.8	117	94	37	2	0	1	0
WA COLVILLE	78	51	90	46	64	-5	.5	.3	.4	4.5	196	16.5	167	88	44	1	0	3	0
QUILLAYUTE	70	52	81	44	61	1	1.0	.5	.5	15.4	270	69.7	177	97	58	0	0	4	0
SEATTLE-TACOMA	73	57	85	54	65	-1	.7	.6	.4	4.3	187	22.9	116	89	53	0	0	2	0
SPOKANE	79	54	91	51	67	-4	.1	0	.1	3.9	229	12.3	174	79	37	1	0	3	0
YAKIMA	83	54	94	48	69	-3	.1	-.1	.1	1.0	143	7.4	185	77	31	1	0	2	0
WV BECKLEY	79	60	81	57	69	-1	.1	-.9	.1	11.0	131	21.9	83	92	53	0	0	1	0
CHARLESTON	88	64	92	63	76	1	.3	-.9	.3	7.5	86	24.2	93	97	47	3	0	2	0
HUNTINGTON	90	66	95	61	78	2	.1	-.9	.1	5.1	61	21.1	83	94	47	5	0	1	0
PARKERSBURG	86	66	92	62	76	1	.3	-.7	.3	6.5	70	25.1	93	93	45	1	0	1	0
WI GREEN BAY	84	62	91	55	73	3	1.5	.8	1.7	5.7	85	15.5	96	93	48	1	0	3	1
LA CROSSE	87	65	91	61	76	2	.7	-.2	.5	4.8	59	14.4	78	97	50	1	0	2	1
MADISON	85	63	91	53	74	3	T	-.8	T	4.3	54	15.7	85	94	48	1	0	1	0
MILWAUKEE	85	69	95	64	77	6	0	-.8	0	3.3	45	20.4	112	81	52	1	0	0	0
WAUSAU	84	62	89	56	73	3	1.4	.5	1.4	5.2	63	14.1	75	97	47	0	0	2	1
WY CASPER	90	57	94	55	73	1	.3	-.1	.2	6.3	263	12.8	164	88	24	4	0	2	0
CHEYENNE	81	56	85	53	68	-1	.2	-.3	.2	5.5	134	14.6	160	97	47	0	0	1	0
LANDER	90	56	94	52	73	1	T	-.1	T	1.6	67	10.4	112	64	19	5	0	1	0
SHERIDAN	95	56	98	54	76	5	T	-.1	T	.6	17	4.7	66	72	21	7	0	0	0
PR SAN JUAN	90	78	92	76	84	2	.5	-.7	.2	8.4	87	22.9	85	88	64	6	0	4	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

\* COOLING DEGREE DAY DATA WEEKLY SUMMARY  
CLIMATE ANALYSIS CENTER-NMC-NKC-NCAA  
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NCAA

\* LAST DATE OF DATA COLLECTION PERIOD IS 7-30-1983  
ACCUMULATIONS ARE FROM JANUARY 1  
\*\*\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE	CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NCFM	CUM DEV FROM PRCT
AL	BIRMINGHAM	BHM	132	27	13	938	-183	-196	-16	-17
AL	MOBILE	MOB	135	16	21	1125	-366	-393	-24	-25
AL	MONTEGOMERY	YGM	131	19	10	1050	-231	-358	-18	-25
AZ	FLAGSTAFF	FLG	8	-9	7	33	-50	13	****	****
AZ	PHOENIX	PHX	219	32	15	2281	372	-47	19	-2
AZ	TUCSON	TUS	154	7	21	1503	-49	93	-3	6
AZ	WINNEMUCON	TNW	80	-19	5	623	-45	153	-6	31
AZ	YUMA	YUM	232	-22	24	2404	176	186	7	8
AP	FOOT SMITH	FTM	145	19	46	873	-270	-92	-23	-9
AP	LITTLE ROCK	LIT	148	29	47	988	-119	-155	-10	-13
CA	LAKE PRESFIEL	LPL	109	-26	-78	973	-204	-573	-17	-37
CA	FRESNO	FKA	0	0	0	0	0	-3	****	****
CA	FAIRFAX	FAT	104	-8	-39	969	59	66	6	7
CA	LOS ANGELES	LAX	26	-9	-22	222	-1	58	6	35
CA	FEDERAL BLUFF	FBL	96	-29	-35	872	-162	21	-15	2
CA	SAN DIEGO	SAN	51	10	-14	414	151	57	57	15
CA	SAN FRANCISCO	SFO	3	0	3	64	23	38	****	****
CA	STOCKTON	SCK	75	-9	-13	670	5	82	0	13
CO	DENVER	DNV	60	-3	11	333	-16	45	-4	15
CO	GRAND JUNCTION	GJT	80	-18	-28	629	-38	-62	-5	-8
CO	PUEBLO	PUB	79	-5	9	517	-69	3	-11	0
CT	BRIDGEPORT	BDP	53	-15	-10	409	17	99	4	31
CT	HARTFORD	RDL	59	3	-3	451	134	117	37	31
DC	WASHINGTON	DCA	119	21	5	893	78	29	5	3
FL	APALACHICOLA	ACH	123	4	19	1151	-278	-209	-18	-14
FL	DAYTONA BEACH	DAB	129	17	23	1209	-353	-307	-22	-20
FL	FORT MEYER	FMY	118	-8	-17	1636	-372	-796	-18	-32
FL	JACKSONVILLE	JAX	129	17	2	1175	-260	-423	-18	-26
FL	KEY WEST	EYW	139	-10	-22	2158	-577	-877	-21	-28
FL	MIAMI	MIA	139	-13	4	2088	-91	-532	-4	-20
FL	ORLANDO	MCO	132	14	11	1610	-152	-393	-8	-19
FL	TALLAHASSEE	TTH	137	23	30	1252	-211	-210	-14	-14
FL	TAMPA	TPA	129	10	12	1628	-224	-219	-12	-11
FL	WEST PALM BEACH	PBT	145	26	19	1934	-88	-212	-4	-17
GA	ATLANTA	ATL	120	29	11	907	1	-151	6	-14
GA	AUGUSTA	AGS	119	6	-7	1063	-105	-138	-8	-11
GA	Macon	MGN	130	20	16	1301	-49	-26	-3	-7
GA	SAVANNAH	SAV	127	13	6	1298	-40	-102	-2	-7
GA	ROSEBUD	ROB	59	-13	-38	279	-114	-27	-29	-8
GA	LEWISTON	LWT	53	-15	-65	308	-49	-121	-13	-28
GA	POCAHONTAS	POH	52	-4	11	155	-99	-19	-38	-10
IL	CHICAGO	MDW	95	39	23	562	176	158	45	39
IL	MELROSE	MEL	112	42	42	710	165	208	30	41
IL	PEORIA	PIA	117	42	48	726	141	156	24	27
IL	ROCKFORD	RFD	97	37	35	614	186	168	43	37
IL	SPRINGFIELD	SPT	108	31	31	771	101	93	15	13
IN	EVANSVILLE	EVV	115	24	12	851	21	10	2	1
IN	FORT WAYNE	FWA	105	48	43	672	223	227	49	51
IN	INDIANAPOLIS	IND	107	37	27	685	95	90	16	15
IN	SOUTH BEND	SBN	107	51	44	668	261	238	64	55
IN	DECATUR	DSM	113	36	38	782	226	244	40	45
IA	DUBUQUE	DBQ	81	25	31	493	128	115	35	31
IA	ST LOUIS CITY	SLC	67	-10	-22	535	-38	64	-6	13
KS	CONCORDIA	CNK	122	24	-25	15	-20	6	-2	0
KS	DODGE CITY	DDC	144	39	43	863	58	128	7	17
KS	GARDNER	GDR	103	19	37	565	34	183	6	47
KS	TOPEKA	TOP	127	29	56	818	20	178	2	27
KS	WICHITA	ICT	150	35	44	756	-201	-18	-21	-2
KY	LEXINGTON	LEX	101	20	18	726	14	65	7	11
KY	LOUISVILLE	LOF	112	28	18	796	53	79	1	11
LA	RATON	BTR	135	16	10	1189	-304	-570	-20	-32
LA	LAKE CHARLES	LCH	145	19	25	1308	-252	-255	-16	-16
LA	NEW ORLEANS	MSY	125	6	5	1260	-278	-512	-18	-28
LA	SHREVEPORT	SHV	140	7	10	1119	-302	-343	-21	-23
ME	CAIRO	CAP	23	4	22	139	52	-2	****	****
ME	PORTLAND	PMH	42	14	15	228	90	61	65	36
MD	BALTIMORE	BWI	102	18	11	703	60	77	9	12
MA	BOSTON	BOS	76	13	8	619	230	77	59	59
MA	ALPENA	APN	50	27	24	304	183	179	151	143
MI	DETROIT	DTW	60	4	3	452	63	114	16	33
MI	FLINT	FNT	66	25	27	431	166	111	62	34
MI	GRAND RAPIDS	GFR	75	26	14	456	112	74	32	19
MI	HOUGHTON	HTL	50	27	21	315	164	151	108	92
MI	LANSING	LAN	68	19	32	432	110	132	34	43
MI	MARQUETTE	MOT	35	19	26	243	166	168	****	****
MI	MUSKEGON	MKG	28	35	28	426	162	144	61	51
MI	SAN JACINTO	SJM	43	27	42	213	146	177	****	****
MN	DULUTH	DLH	31	10	14	217	120	161	****	****
MN	MINNEAPOLIS	MSP	84	28	9	243	158	142	107	140
MN	PACHES	PST	60	18	1	404	104	108	43	26
MN	SAINTE CLOUIS	STC	52	10	9	371	105	138	39	33
MO	JACKSON	JAN	139	20	21	1144	-204	-373	-15	-24
MO	MEMPHIS	MEM	119	2	-3	947	-359	-477	-27	-33
MO	COLUMBIA	COU	117	26	27	691	-59	55	-7	8
MO	KANSAS CITY	MCI	125	34	34	734	-7	57	0	8
MO	SANITARIUM	STL	134	36	32	926	47	92	-5	11
MO	SPRINGFIELD	SGF	135	37	37	736	-48	-59	-6	-7
MT	BILLINGS	BIL	65	9	12	323	44	97	15	42
MT	GLASSBORO	GBW	65	16	30	288	40	88	16	43
MT	GREAT FALLS	GTF	26	-16	-12	101	-81	-16	-44	-13
MT	HAVRE	HVR	29	-13	9	129	-90	9	-39	6
MT	HELENA	HLN	33	1	-24	124	-15	-41	-10	-24
MT	KALISPELL	KCA	4	-10	-18	21	-37	-27	****	****
MT	MILES CITY	MTC	95	18	36	466	43	122	10	35
MT	MONTICELLO	MTC	10	-11	-18	40	-64	-60	-61	-59

* STATE	CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NORM PRCT	CUM DEV FROM L YR PFCT
NE	GRAND ISLAND	GFI	90	6	14	651	42	184	6	39
NE	LINCOLN	LNK	110	19	24	754	68	172	6	29
NE	NORFOLK	NFK	76	-1	5	617	65	190	11	44
NE	NORTH PLATE	NBF	60	-10	-15	432	-47	47	-9	12
NE	OMAHA	OMA	90	-1	8	663	-34	149	-4	28
NE	VALENTINE	VTN	73	3	9	477	5	79	1	22
NV	ELY	ELY	23	-4	9	177	-32	-13	-30	-14
NV	LAS VEGAS	LAS	166	-10	7	1538	-107	-14	-6	0
NV	PENDLETON	PND	37	5	-22	133	-60	-103	-31	-43
NV	WINNEVOCCA	VMC	34	-15	-44	138	-108	-125	-43	-47
NJ	ATLANTIC CITY	ACY	38	-1	18	266	52	74	24	38
NJ	ATLANTIC CITY	ACY	91	18	6	647	151	68	30	11
NM	ALBUQUERQUE	ABQ	103	5	11	808	33	28	4	3
NM	POSWELL	POW	117	14	1	962	23	-48	2	-4
NY	ALBANY	ALB	51	-1	22	358	-2	137	0	61
NY	BINGHAMTON	BGM	54	10	23	354	129	143	57	67
NY	BUFFALO	BUF	74	32	36	443	186	183	72	70
NY	NEW YORK	LGA	84	0	-2	641	45	159	7	32
NY	ROCHESTER	ROC	68	19	24	415	95	124	29	42
NY	SYRACUSE	SYR	55	6	27	352	26	135	7	62
NC	ASHEVILLE	AVL	70	7	-3	487	-16	-137	-3	-21
NC	CAPE HATTERAS	HAT	102	6	1	800	1	-51	0	-5
NC	CHARLOTTE	CLT	94	-4	-8	864	-59	-106	-6	-10
NC	GREENSBORO	GSO	76	-13	-18	672	-133	-98	-16	-12
NC	PALESTINE	PDJ	84	-7	-22	774	-41	-186	-5	-19
NC	WILMINGTON	ILM	121	9	9	983	-129	-24	-11	-2
ND	BISMARCK	BYS	62	13	30	295	7	118	2	66
ND	FARGO	FAR	64	15	33	400	118	187	41	87
ND	WILLISTON	WLN	83	41	39	381	134	97	54	34
OH	AKRON-CANTON	CAK	74	25	16	471	93	61	24	14
OH	CLEVELAND	CLE	76	27	16	511	146	101	39	24
OH	COLUMBUS	CMH	82	19	16	544	56	78	11	16
OH	CINCINNATI	CVS	92	15	11	678	48	77	7	12
OH	DAYTON	DAY	75	5	2	537	-19	33	-3	6
OH	TOLEDO	TOI	61	5	2	449	40	87	0	24
OH	YOUNGSTOWN	YNG	79	37	36	420	110	122	35	40
OK	OKLAHOMA CITY	CKC	159	38	42	883	-156	-6	-15	0
OK	TULSA	TUL	178	52	60	1113	27	-106	2	-8
OR	ASTORIA	AST	0	-3	0	1	-9	-5	***	***
OR	BURNS	BNO	19	-16	-40	56	-109	-86	-66	-60
OR	MEDEFOUR	MFR	57	1	-43	266	-29	-98	-9	-26
OR	PENDELTON	PDJ	46	-10	-68	233	-133	-152	-36	-39
OR	PORTLAND	PDX	29	1	-9	144	-11	-72	-7	-33
OR	SALEM	SLE	23	-3	0	75	-50	-94	-39	-55
PA	ALLENTOWN	ABE	83	20	20	549	82	178	17	47
PA	EFIE	ERT	59	24	16	383	168	129	78	50
PA	HARRISBURG	CXY	86	9	9	504	-112	93	-18	22
PA	PHILADELPHIA	PHI	97	13	-1	671	27	78	4	13
PA	PITTSBURGH	PIT	62	12	8	385	-9	38	-2	10
PA	SCRANTON	AVP	57	3	18	364	-4	81	-1	28
PA	PROVIDENCE	PVD	69	13	6	532	229	192	75	56
RI	CHARLESTON	CHS	117	6	-8	1155	-37	-69	-3	-5
RI	COLUMBIA	CAE	115	-1	-2	1074	-146	-64	-11	-5
SC	GREENVILLE	GCB	95	-3	4	788	-134	-80	-14	-9
SC	ABERDEEN	ABR	71	15	14	426	91	75	27	21
SC	HUNTER	HUN	77	7	15	463	65	110	15	28
SC	PAPID CITY	PAP	76	13	44	353	-10	148	-2	71
SC	STOIX FALL	FSD	75	12	14	509	-76	163	-17	47
VA	CHARLOTTE	CHA	114	16	3	817	-140	-129	-14	-13
VA	KNOXVILLE	TYM	98	1	-1	725	-192	-66	-20	-8
TN	MEMPHIS	MEM	145	26	7	1109	-81	-263	-6	-19
TN	NASHVILLE	BNA	118	13	9	882	-108	-68	-10	-7
TX	ARLINGTON	ART	156	18	7	1219	-185	-187	-13	-13
TX	AMARILLO	AMA	120	22	33	692	-136	-19	-16	-2
TX	AUSTIN	AUT	139	-1	-25	1294	-349	-536	-21	-29
TX	BROWNSVILLE	BEV	142	2	-15	2043	-170	-539	-7	-20
TX	CORPUS CHR	CRP	130	-11	-17	1628	-324	-341	-16	-17
TX	DEL RIO	DRT	164	10	-4	1786	-197	-158	-9	-8
TX	EL PASO	ELP	129	10	-6	1108	-155	-225	-12	-16
TX	FORT WORTH	DFW	157	6	9	1179	-354	-251	-23	-17
TX	GALVESTON	GLS	143	12	-1	1432	-192	-231	-11	-13
TX	HOUSTON	IAH	135	2	-16	1311	-309	-550	-19	-29
TX	LUBBOCK	LBR	134	29	23	897	-94	-28	-9	-3
TX	MIDLAND	MAF	150	24	13	1305	16	36	1	2
TX	SAN ANGELO	SJT	148	6	8	1251	-317	7	-20	0
TX	SAN ANTONIO	SAI	147	7	-8	1385	-333	-321	-19	-18
TX	VICTORIA	VCT	136	-4	-25	1509	-248	-403	-14	-21
TX	WACO	ACT	157	9	-14	1306	-282	-339	-17	-20
TX	WICHITA FALLS	SFS	179	26	60	1112	-352	-101	-24	-8
UT	SALT LAKE CITY	SLC	115	24	33	518	14	16	2	3
VA	RICHMOND	BYV	51	9	32	329	81	126	32	62
VA	RYCHMOND	LYH	75	-2	-5	628	-27	10	-1	0
VA	NORFOLK	NRF	94	0	-15	832	11	-8	6	2
VA	PORTSMOUTH	PTC	90	-1	-15	881	76	22	0	7
VA	ROANOKE	ROA	64	-12	-15	584	-20	-44	-3	-7
WA	QUILCYTE	UIL	0	0	0	4	-4	-6	***	***
WA	SEATTLE-TACOMA	SEA	0	-5	-13	47	-27	-37	***	***
WA	SPokane	SEG	21	-21	-55	150	-62	-125	-29	-45
WA	WALLA WALLA	ALW	68	-16	-74	368	-109	-183	-22	-33
WA	YAKIMA	YKM	29	-20	-60	213	-76	-84	-26	-28
WV	BECKLEY	BKW	33	-4	-14	283	-10	11	-3	4
WV	CHARLESTON	CPW	78	8	-8	632	-17	11	-2	1
WV	HUNTINGTON	HKS	91	17	20	669	-4	158	0	30
WV	PARKERSBURG	PKB	77	5	-6	588	-33	-56	-5	-8
WV	GREENSBAY	GPB	58	21	13	353	119	122	50	52
WV	LACROSSE	LCE	77	14	10	537	112	146	26	37
WI	MADISON	MSN	65	23	23	454	174	219	62	93
WI	MILWAUKEE	MKE	84	42	41	475	226	240	90	102
WY	CASPER	CDR	59	4	26	239	-12	15	-4	6
WY	CHEYENNE	CYS	25	-10	1	123	-66	0	-34	0
WY	LANDER	LND	61	-12	25	214	3	-20	1	-3
WY	SHELDON	SHR	79	29	24	306	60	114	24	59

## National Agricultural Summary

July 25 to 31

**HIGHLIGHTS:** Hot weather continued to deplete soil moisture and stress crops from the Rocky Mountains through the Eastern half of the Nation. Livestock weight gains were reduced because of the heat and poultry losses increased. Thunderstorms brought beneficial rainfall to many areas. However, more precipitation is needed in nearly all regions. Soil moisture supplies were mostly short to adequate in nearly all areas, except portions of the Southwest and Southeast where very short conditions were reported. Farmers had 5 to 7 days suitable for fieldwork in all areas of the Nation. Winter wheat combining advanced to 84%, 3 points behind average. Spring wheat was nearly all headed and harvesting was 4% finished. Corn was silking on 62% of the acreage and 9% was in the dough stage. Soybeans bloomed on 59% of the acreage; 20% of the crop had set pods. Cotton squaring reached 90% and boll set was 46% complete. Sorghum heading was 39% complete, while rice heading was 29% finished. Pastures and ranges were in mostly fair condition as hot, dry conditions halted growth in many areas.

**SMALL GRAINS:** Winter wheat combining in the 15 major producing States was 84% complete, behind last year's 85% and the 87% average. Progress ranged from 7% complete in Idaho to complete in Illinois, Indiana, Kansas, Missouri, Oklahoma, and Texas. Clear weather permitted South Dakota producers to harvest 35% of their acreage during the week, and Colorado farmers to combine 24%. In the Corn Belt, growers began plowing the harvested fields. Indiana producers had plowed 5% of the winter wheat land, the same as last year and the average.

Spring wheat headed on virtually all of the acreage in the 5 major producing States. Harvesting gained momentum, reaching 4%, behind the 9% average. Progress ranged from none harvested in Montana to 18% finished in South Dakota.

**CORN:** Corn was in generally fair to good condition. However, poor to fair conditions began appearing in portions of States from Missouri to Virginia because of dry conditions. Corn was silking on 62% of the acreage in the 17 major producing States, 11 points behind average. Nine percent of the acreage was in the dough stage of development, half last year's progress. Crop development was behind average in all producing areas. Most fields in the South were in the dent stage and many were mature. Harvesting was 4% finished in Georgia, and 8% completed in Louisiana. South Carolina growers harvested their poorest early corn for silage as dry conditions persisted.

**SOYBEANS:** Soybeans continued in fair to good condition. Reduced moisture levels in some areas limited the growth of double-cropped soybeans. In the 18 major producing States, 59% of the crop was blooming, trailing the average 62%. Twenty percent of the fields were setting pods, compared to the 27% average for this date. Crop development lagged normal in all producing regions. Pod setting was 20 points behind normal in Ohio, 18 points behind in Mississippi, and 15 points behind average in Louisiana. North Carolina and South Carolina were the only States ahead of normal.

**SORGHUM:** Sorghum continued in fair to good condition. However, the lack of precipitation from Texas into eastern Kansas stressed fields, causing some deterioration. In the 7 major producing States, 39% of the acreage was headed, 10 points behind the average. Harvesting in Texas was 35% complete, compared with 44% for both last year and the average. Harvesting gained momentum in Central Texas and neared completion in South Texas.

**COTTON:** Cotton had squared on 90% of the acreage in the 14 major producing States, trailing the 94% average. Squaring was finished in Arizona, Arkansas, and South Carolina. The crop was setting bolls on 46% of the acreage, compared with the 63% average. Progress ranged from 10% set in Oklahoma to 98% set in South Carolina. Only 36% of the cotton in Texas was setting bolls, well behind the normal pace of 53%. Harvesting in Texas had not begun; normally 2% is picked by this date.

**OTHER CROPS:** Peanuts made normal progress in Texas, despite short soil moisture supplies. Stands were in fair to good condition. Pegging was underway in the Southeast.

Rice was in fair to good condition. Hot weather aided maturity of late developing stands in Texas, but cool nights slowed development in California. Twenty-nine percent of the crop was headed in the 5 major producing States, 14 points behind normal. Harvesting was less than 1% complete in Louisiana, trailing the 14% average. Texas producers were preparing for harvest; normally 33% is harvested by this date.

The Georgia tobacco harvest was 52% complete, while South Carolina growers were 28% finished. The flue-cured harvest was 20% completed in North Carolina and 6% completed in Virginia. The Virginia fire-cured tobacco crop was 1% cut. Kentucky fields were blooming but growth was slowed by dry conditions. Some non-irrigated fields were beginning to deteriorate.

**VEGETABLES:** Vegetable picking gained momentum across northern producing areas. Many producers continued irrigating fields to relieve dry conditions. Land preparation and planting of fall vegetable crops was active in all regions. Harvesting of early potatoes advanced northward into New Jersey. California producers continued planting and harvesting a variety of crops for both fresh market and processing.

**FRUITS AND NUTS:** Peach picking advanced into the Northeast. Georgia producers were 98% finished and South Carolina growers were 72% complete. The New York tart cherry harvest was nearly 85% finished, while the Michigan harvest reached 75%. Sweet cherry picking was complete in New York and 90% complete in Michigan. Florida's citrus groves were in good condition and showed new growth on all trees. Producers irrigated groves and sprayed to control insects and disease. California producers picked large volumes of various fruits. Spraying remained active.

**PASTURES AND LIVESTOCK:** Dry conditions halted the growth of native grasses across the southern Plains. Producers began some supplemental feeding and moved some livestock to market. Pastures and ranges were rated in fair condition in most other regions. Hot weather reduced livestock weight gains and caused increased poultry losses.

**CROP PROGRESS**

FOR WEEK ENDING JULY 31

	SOYBEANS % BLOOMING			SOYBEANS % SETTING PODS			
	1983	1982	AVG.	1983	1982	AVG.	
	ALA	49	53	50	ALA	14	18
ARK	16	30	28	ARK	8	10	14
GA	50	60	56	GA	18	24	24
ILL	78	83	77	ILL	33	52	40
IND	75	85	70	IND	10	30	20
IOWA	85	57	80	IOWA	40	22	44
KANS	35	25	45	KANS	15	5	20
KY	26	58	43	KY	4	19	18
LA	42	57	59	LA	18	28	33
MICH	60	70	64	MICH	10	20	14
MINN	83	74	83	MINN	15	9	23
MISS	37	65	62	MISS	4	25	22
MO	56	38	45	MO	20	17	20
NEBR	85	45	75	NEBR	30	7	40
N C	26	34	38	N C	5	6	4
OHIO	70	90	75	OHIO	20	60	40
S C	24	32	37	S C	5	7	4
TENN	35	54	56	TENN	6	15	17
18 STATES	59	60	62	18 STATES	20	25	27

THESE 18 STATES PRODUCED 94% OF THE 1982 SOYBEAN CROP.

THESE 18 STATES PRODUCED 94% OF THE 1982 SOYBEAN CROP.

	CORN % SILKING			CORN % DOUGH			
	1983	1982	AVG.	1983	1982	AVG.	
	COLO	19	20	26	COLO	0	0
GA	100	100	100	GA	89	97	97
ILL	84	96	89	ILL	20	47	34
IND	60	90	70	IND	5	30	20
IOWA	75	61	78	IOWA	1	0	4
KANS	45	60	75	KANS	5	15	20
KY	48	88	76	KY	4	22	20
MICH	40	80	66	MICH	1	10	4
MINN	56	50	66	MINN	0	0	0
MO	69	73	68	MO	24	33	38
NEBR	50	40	80	NEBR	2	3	15
N C	95	96	95	N C	74	78	77
OHIO	60	95	70	OHIO	10	25	10
PA	45	65	53	PA	0	6	0
S DAK	33	25	49	S DAK	0	0	0
VA	78	84	84	VA	40	50	45
WIS	38	41	51	WIS	0	0	0
17 STATES	62	68	73	17 STATES	9	18	16

THESE 17 STATES PRODUCED 93% OF THE 1982 CORN CROP.

THESE 17 STATES PRODUCED 93% OF THE 1982 CORN CROP.

	SORGHUM % HEADED		
	1983	1982	AVG.
COLO	7	15	12
KANS	10	5	20
MO	42	51	42
NEBR	15	3	50
OKLA	20	25	35
S DAK	16	7	20
TEX	70	78	76
7 STATES	39	40	49

THESE 7 STATES PRODUCED 90% OF THE 1982 SORGHUM CROP.

	RICE % HEADED		
	1983	1982	AVG.
ARK	6	19	20
CALIF	2	5	19
LA	57	66	74
MISS	20	35	34
TEX	94	100	100
5 STATES	29	39	43

THESE 5 STATES PRODUCED 98% OF THE 1982 RICE CROP.

	COTTON % SQUARING			COTTON % SETTING BOLLS			
	1983	1982	AVG.	1983	1982	AVG.	
	ALA	95	100	100	ALA	56	80
ARIZ	100	99	99	ARIZ	97	95	96
ARK	100	100	100	ARK	75	93	89
CALIF	95	98	99	CALIF	50	60	62
GA	99	100	100	GA	85	91	95
LA	94	99	99	LA	60	93	90
MISS	98	100	100	MISS	50	82	75
MO	88	100	100	MO	70	96	74
N MEX	98	99	100	N MEX	62	60	68
N C	89	99	96	N C	61	73	76
OKLA	50	35	80	OKLA	10	2	25
S C	100	100	100	S C	98	97	92
TENN	99	100	97	TENN	26	91	65
TEX	88	83	90	TEX	36	24	53
14 STATES	90	88	94	14 STATES	46	49	63

THESE 14 STATES PRODUCED 99% OF THE 1982 COTTON CROP.

THESE 14 STATES PRODUCED 99% OF THE 1982 COTTON CROP.

	WINTER WHEAT % HARVESTED		
	1983	1982	AVG.
	CALIF	99	95
COLO	70	79	90
IDAHO	7	7	7
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MO	100	96	95
MONT	10	0	5
NEBR	80	90	97
OHIO	99	100	95
OKLA	100	100	100
OREG	20	41	34
S DAK	69	38	80
TEX	100	100	100
WASH	22	37	28
15 STATES	84	85	87

THESE 15 STATES PRODUCED 80% OF THE 1982 WINTER WHEAT CROP.

	SPRING WHEAT % HARVESTED		
	1983	1982	AVG.
IDAHO	1	3	2
MINN	4	4	6
MONT	0	0	0
N D	1	1	3
S DAK	18	8	42
5 STATES	4	3	9

THESE 5 STATES PRODUCED 96% OF THE 1982 SPRING WHEAT CROP.

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall widely scattered 0 to 2.00 in. Temperatures normal.

Fieldwork: 6.3 days. Soybeans blooming 49%, 1982 53%, average 50%; setting pods 14%, 1982 18%, average 27%. Corn dented 59%, 1982 80%, average 69%. Cotton squaring 95%, 1982 100%, average 100%; setting bolls 56%, 1982 30%, average 75%. Activities: Cultivation of row crops; harvesting of hay, vegetables and fruits; weed and pest control on vegetables and crops; and routine care of livestock and poultry. Conditions: peanuts, mostly good; corn, soybeans, cotton, sorghum, pasture and livestock fair to good.

**ALASKA:** No Report Available

**ARIZONA:** Scattered shower, thunderstorms prevailed except extreme western areas. Amounts mostly between 0.25 and 1.50 in. except locally over 2.00 in. White Mountains, southeast. Average temperatures 4° below normal to 4° above.

Summer rains began to fall most areas toward end July. Warm temperatures during July caused feed supplies to dry up, recent rains begun to alleviate the problem. Mid to high elevation ranges fairing better than desert areas, more rains needed to rejuvenate some summer grasses. Range, pasture conditions normal. Livestock good condition. Tank water supplies, soil moisture mostly short to adequate. No significant insect damage reported. Weather conditions near ideal for cotton crop in most producing areas. Only exception rain all week southeastern counties, end of week rest of State, no adverse effect on cotton. Warm weather allowed fruit set progress rapid rate. Approximately 97% cotton setting bolls compared 95% last year, average 96%. All cotton squaring compared 99% both last year, average. Growers Statewide spraying for pink bollworm although not on large scale. Cochise County growers spraying for rust before rain. Growers expecting weed problems with substantial rainfall they received. Rains caused some damage cut hay Statewide, delayed further cuttings until fields dry out. Sorghum, corn average progress. Corn tasseling most areas. Stands established many sorghum fields, some Yuma County reached heading stage. Safflower harvest complete Yuma County. Vegetable harvesting activities halted by rain. Muddy fields Cochise County brought dry onion harvest complete standstill. Few watermelons picked Hyder, Phoenix areas but mostly just final clean-up progress. Some cantaloups harvested Aguila. Growers Cochise County will begin watermelon harvest around August 15. Very little activity citrus industry. Growers in Yuma making final preparations for 1983-84 lemon harvest. Citrus groves good condition. Commercial grape harvest complete, growers opening orchards to public on "pick your own" basis. Peaches being picked Cochise County, apple harvest start next few days.

**ARKANSAS:** Warm and dry week. All temperatures above normal, mostly high 90's. Highest 105°. Lowest 66°. Most rainfall 4.49 in., least 0.

Fieldwork averaged 6.7 days. Soil moisture short. Non-irrigated crops suffering most. Cotton fair condition; squaring 100%, same as 1982 and average; setting bolls 75%, 93% 1982, 89% average. Rice good condition; headed 6%, 19% 1982, 20% average. Soybeans fair condition. Late beans

suffering in northeast; blooming 16%, 30% 1982, 28% average; setting pods 8%, 10% 1982, 14% average. Corn good to fair. Sorghum fair to good condition. Pastures below average. Cattle generally good condition, but losing appetite.

**CALIFORNIA:** The usual summertime drought continued. San Francisco only reporting station with any precipitation and that was just a trace. Weekly mean temperatures, Statewide, a few degrees below normal, even in Desert regions with 100 plus maximum readings. Isolated locations along the coast at odds with trend with weekly means a few degrees above normal.

Cotton 1 to 2 weeks behind normal. About 95% squaring compared to 98% last year. Boll set at 50% is below last year's 60%. Cool nights slow rice development as rice begins to head. Winter wheat harvest virtually complete. Harvesting of safflower should begin shortly. Corn fields tasseling. Sugarbeets and dry beans being irrigated and continue to do well. Apple harvest has begun in Central Valley and North Coast. Scab a problem. Hass and Reed avocado quality mostly good. Fig growers spraying for mites. Coachella Valley's record table grape harvest has ended. In southern San Joaquin Valley table grape harvest winding down. Maturity and quality generally good. Thompson seedless growers started to pick in limited volume. Some problems with maturity. Grapes sprayed for bunch rot and mildew. Nectarine harvest continues. Cling and Freestone peach quality affected by brown rot, shot hole, and smaller sizes. Pear harvest underway, smaller sizes and russeting. Plum harvest continues. Prunes showing color. Summer grapefruit harvest continues. Good size and quality. Small sizes in Valencia oranges resulting in low demand. Almond hulls splitting. Snap bean harvest active coastal areas. Broccoli, cauliflower harvests Central Coast, more diversion to processing. Cantaloup harvest full swing central San Joaquin Valley, ending Desert. Carrot harvest slowing Kern district, active Central Coast. Sweetcorn, cucumber harvests active coastal, San Joaquin Valley areas. Lettuce harvest active Central Coast, planting San Joaquin Valley. Spring potato harvest decreasing Kern district. Digging summer potatoes Perris-Hemet areas. Market tomato harvest slowing south San Joaquin Valley. Harvest active South Coast, Northern San Joaquin Valley. Processing tomato harvest increasing San Joaquin Valley. Range grasses, water supplies good. Grasshoppers continued problem. Fire danger remains high.

**COLORADO:** Precipitation 1.00 to 3.00 in. in most of the State, drier in the southeast. Temperature 2 to 5° below normal in west, slightly above normal in rest of State.

Winter wheat in very good condition: 90% ripe, 87% last year, 94% average; 70% harvested, 78% last year, 87% average. Corn in good to very good condition; 19% silked, 20% last year, 26% average. Height 62 in., slightly below normal. Sorghum in good condition; 7% headed, 15% last year, 12% normal. Barley, oats, and spring wheat in good to excellent condition. Barley 55% turning color, 69% last year; 29% ripe, 39% last year, 14% harvested, 28% last year and average. Statewide, 5.0 days suitable for fieldwork. Topsoil and subsoil moisture adequate in most areas. Range and pasture conditions fair in southeast, very good elsewhere.

FLORIDA: Hot and generally dry first of week with only isolated thundershowers starting in Peninsula early week. Rainfall generally under 0.25 in. Temperatures much above normal early week several stations reported maximums around 100°. By midweek moisture began to increase over Peninsula with scattered thunderstorms more common. Daytime temperatures began to drop to more normal levels. By late week showers, thunderstorms were more numerous, producing scattered rains of 1.00 to 2.00 in. most areas. Lower southeast coast received 3.00 to 4.00 in. rains from Pompano to Homestead. More typical summer weather settled into State over the weekend with seasonal temperatures and rainfall. Rainfall of 0.25 to 0.50 in. occurred with a few areas in the Peninsula receiving 1.00 in. at weekend.

Soil moisture improved most of State, some areas, especially Panhandle, need more rain. Harvest early corn underway. Late corn maturing rapidly. Soybeans making good progress. Peanuts, cotton continue good condition. Tobacco harvest nearing completion some areas. Hay harvest continues. Sugarcane continues good progress. Pasture condition good except Panhandle, fair due to lack of soil moisture. Cattle condition mostly good. Citrus groves dry, early week, rains active last half of week. Moisture adequate, rain reduced temperatures. New growth showing on trees of all ages. Summertime insects and diseases active as usual. Caretakers very busy all areas. Land preparation for fall vegetables continues active; some light plantings getting underway. Limited movement summer vegetables to local markets continues.

GEORGIA: Hot, hazy and humid early in the week; cooler and less humid after 26th. Temperatures averaged 2 to 5° above normal. Scattered thundershowers produced rainfall averages of 2.00 to 3.50 in. extreme south and southeast, and 0.25 to 0.50 in. central and north. Temperatures during 30th and 31st 2 to 4° below normal north and near normal south. Rainfall from scattered showers and quite variable, but averaged about 0.50 in. northwest and 0.25 in. elsewhere.

Soil moisture 57% very short, 37% short, 6% adequate. Average days suitable for fieldwork 5.7. Stress conditions on crops and livestock. Some areas receiving relief. Main activities: Spraying for insects and disease, caring for livestock and poultry, irrigating where available. Corn condition 9% very poor, 30% poor, 45% fair and 15% good; 89% dough stage, last year and average 97%; 71% dent, last year 85%, average 87%; 41% mature, last year 60%, average 65%; 4% harvested, last year 10%, average 12%. Cotton 9% very poor, 18% poor, 51% fair, 21% good; 85% setting bolls, last year 91%, average 95%; none reported open, last year 1%, average 2%. Peanut condition 7% very poor, 15% poor, 55% fair, 22% good; 96% pegging, last year 99%, average 98%. Soybeans weaker, condition 5% very poor, 27% poor, 57% fair, 11% good; 50% blooming, last year 60%, average 56%; 18% setting pods, last year and average 24%. Tobacco condition 11% poor, 66% fair, 20% good; 52% harvested; last year 75%, average 61%. Grain sorghum condition 4% very poor, 20% poor; 62% fair, 14% good. Watermelon condition 9% very poor, 15% poor, 60% fair, 16% good; 79% harvested; last year 90%, average 87%. Peach condition 38% very poor, 16% poor, 32% fair, 14% good; 98% harvested, last year 95%, average 90%. Apple condition 20% very poor, 31% poor, 40% fair, 9% good; 15% harvested, last year 31%, average 20%. Hay crops condition 6% very

poor, 26% poor, 48% fair, 20% good. Pastures 6% very poor, 31% poor, 45% fair, 18% good; some feeding hay.

HAWAII: Weather generally favorable throughout the State. Light showers fell on major growing areas. Frequent irrigation was necessary to insure good crop development. Heavy spray programs continued to control insects. Vegetable supplies light to moderate for most commodities. Cabbages heavy production. Bananas light supply. Papayas decline in production. Sugarcane and pineapple harvest active.

IDAHO: Temperature were quite warm at the beginning of the week but cooled to below normal by midweek. Scattered showers and thundershowers brought precipitation to the entire State with some locally heavy amounts for the week. Temperatures were at or below normal with the exceptions of Salmon and Ashton which were 1 and 2° above normal, respectively. The greatest departures were in the north where most temperatures were 2 to 6° below normal. Precipitation varied greatly across the State. Amounts in the north and east were generally over 0.10 in. while amounts were light in south west and south central areas. Sandpoint and Hamer received the greatest amounts with 1.00 and 0.71 in, respectively.

Crop prospects remained good as 6.3 days were reported as suitable for fieldwork. The winter wheat harvest was completed on 7% of the acres compared with 7% for both last year and average. Spring wheat was 1% harvested versus 3% for 1982 and 2% average. Barley was harvested on 2% of the acres compared to 4% last year. Potatoes had closed middles on 83% of the acreage versus 1982's 89%. The second cutting of alfalfa was finished on 15% of the acres trailing last year's 22%. The dry pea harvest was underway with 5% of the crop harvested compared to 15% last year. Ranges and pastures were dry in some areas.

ILLINOIS: Temperatures north 12 to 15° above normal. South and central 7 to 13° above normal. Precipitation none to 1.63. Soil moisture 95% short, 5% adequate. Days suitable fieldwork: 6.5. Corn silking 84, 1982 96%, average 89%; dough 20%, 1982 47%, average 34%. Condition 2% excellent, 27% good, 51% fair, 20% poor. Soybeans 78% blooming, 1982 83%, average 77%; 33% setting pods, 1982 52%, average 40%; condition 1% excellent, 35% good, 57% fair, 7% poor. Winter wheat 100% harvested, 1982 100%, average 100%. Oats 95% ripe, 1982 94%, average 97%; 75% harvested, 1982 63%, average 70%. Alfalfa hay 2nd crop 92% cut, 1982 85%, average 85%; 3rd crop 15% cut, 1982 6%, average 10%; condition 17% good, 63% fair, 20% poor. Pasture condition 4% good, 43% fair, 50% poor, 3% failure. Livestock condition fair.

INDIANA: Temperatures averaged well above seasonal levels again. Readings in the north were 5 to 7° warmer than usual, while readings in more southern sections of the State were 3 to 5° above normal. Precipitation was widespread across the State, but incoming totals were highly variable. Most of the northern half of the State received 0.33 to 0.50 in of moisture. Growing degree day totals averaged 175 to 190, about 20 to 35 above normal.

Fieldwork averaged 6.7 days. Topsoil and subsoil moisture short. Wheat 100% combined, 1982 100%, average 100%. Oats 75% harvested, 1982 70%, average 75%. Rye 90% combined, 1982 95%, average 95%. Corn 60% in silk, 1982 90%,

average 70%. Corn 5% in dough 30%, average 20%. Soybeans 75% in bloom, 1982 85%, average 70%. Soybean 10% setting pods, 1982 30%, average 20%. Alfalfa hay 90% cut twice, 1982 85%, average 80%. Wheat land 5% plowed, 1982 5%, average 5%. Pastures mostly poor to fair.

IOWA: A hot dry week, except for moderate to locally heavy showers from the southwest and west central northeastward into northeast the 28th and 29th. Few other spotty light showers mostly midweek northwest.

Days suitable 6.0. Corn tasseled 90%; 82% last year; 93% normal; silked 75%; 61% last year; 78% normal. Soybeans bloomed 85%; 57% last year; 80% normal; setting pods 40%; 22% last year; 44% normal. Second crop alfalfa hay harvested 82%; 77% last year; 83% normal. Second crop clover hay harvested 55%; 48% last year; 56% normal. Oats harvested 60%; 67% last year; 79% normal. Winter wheat harvested 95%; 90% last year, 95% normal. Topsoil moisture 64% short, 34% adequate, 2% surplus. Subsoil moisture 31% short; 66% adequate; 3% surplus.

KANSAS: Temperatures averaged 81° northwest, 84 to 86° elsewhere--4 to 5° above normal. Precipitation variable, averaged less than 0.10 in. southeast, 0.90 in. northwest, 0.10 in. to 0.30 in. elsewhere.

Wheat 100% harvested, 100% last year and average. Corn 45% silked, 60% last year, 75% average; 5% dough, 15% last year, 20% average. Sorghum 10% headed, 5% last year, 20% average. Soybeans 35% bloomed, 25% last year, 45% average; 15% podded, 5% last year, 20% average. Row crop conditions deteriorating most areas due to hot, dry weather; poor to fair central and northeast, fair to good south and east central, good to excellent elsewhere. Scattered light to moderate greenbug infestations, european and southwestern corn borer light to moderate scattered counties west central, southwest, south central. Alfalfa hay second cutting 96% complete, 90% last year, 96% average; third cutting 25% complete, 20% last year, 40% average. Surface moisture short to adequate northwest, short elsewhere. Subsoil moisture short to adequate statewide. Pasture and range very dry, but good to excellent except scattered counties southeast half. Extreme heat causing poor livestock gains. Entire week suitable for fieldwork.

KENTUCKY: Hot, humid. Highs 85 to 90° southeast, to mid-90's rest. Lows 65 to 75°. Precipitation spotty from 0.90 in. southwest to 0.10 in. north central and east.

Dry conditions continued to stress crops. Soil moisture 51% critically short, 37% short, 12% adequate. Corn poor to mostly fair; 48% silked, 88% last year, average 76%. Dough or beyond 4%, 22% last year, 20% average. Early fields worst shape. Soybeans fair; 26% blooming, 58% last year, 43% average. Pods setting 4%, 19% last year, 18% average. Tobacco deteriorating if not irrigated. Growth slow. Burley 18% blooming, 43% year ago. Dark tobacco one-fourth blooming. Pastures poor to good. Some hay already fed.

LOUISIANA: Rainfall ranged none to 4.80 in. Temperatures averaged 1 to 3° above normal. High 101°, low 67°.

Soil moisture short. Days suitable 6.4. Corn dough 86%, 99% 1982, 95% average. Corn mature 36%, 69% 1982, 65% average. Corn harvest 8%, 25% 1982 and 16% average. Condition good. Cotton

squaring 94%, 99% 1982 and average. Cotton setting bolls 30%, 93% 1982, 90% average. Condition fair. Rice headed 57%, 66% 1982, 74% average. Rice ripe 5%, 19% 1982, 25% average. Rice harvest less than 1%, 12% 1982 and 14% average. Condition fair to good. Sorghum headed 81%, 90% 1982, 85% average. Sorghum turning color 34%, 54% 1982, 45% average. Condition good. Soybeans emerged 100%, 100% 1982. Soybeans blooming 42%, 57% 1982, 59% average. Soybeans setting pods 18%, 28% 1982, 33% average. Condition fair. Sweetpotato harvest just beginning, 9% 1982. Condition fair to good. Sugarcane condition good. Pecans fair to good. Peaches harvested 83%, 93% 1982, Condition good. Vegetables fair. Pastures fair to good. Livestock good.

MARYLAND and DELAWARE: Continued hot and dry. Temperatures averaged 1 to 2° above normal. Very little rainfall reported. Days suitable for fieldwork: 7.0.

Maryland: Corn silked 60%, last year 75%. Dough stage 40%, 1982, 30%. Dented 5%. Soybeans blooming 30%, last year 35%. Podding 5%, last year 10%. Tobacco blooming 25% and topped 10%. Oats harvested 98%, 60% last year. Rye 100% harvested, last year 100%. Lima beans harvested 40%. Snap beans harvested 95%, 1982 90%. Sweet corn harvested 40%, last year 35%. Potatoes harvested 40%, last year 45%. Cantaloupes 40% and watermelons 25% harvested. Tomatoes 40% picked, last year 20%. Cucumbers 65% harvested, last year 45%. Peaches 25% harvested. Alfalfa second cutting 100% completed, 1982, 90%, other hay second crop 90%, 1982 90%. Alfalfa third crop 15%, 1982 35%, other hays 5% cut, last year 10%.

Delaware: Corn 75% silked, 90% last year. Dough stage 15%, 35% last year. Soybeans blooming 15%, last year 25%. Rye 100% harvested. Lima beans 25% harvested. Snap beans 50% harvested, 90% last year. Sweet corn 35% picked, 1982, 95%. Potatoes harvested 40%, last year 40%. Watermelons 10% and cantaloupes 15% harvested. Tomatoes 15% harvested, 1982, 30%. Cucumbers 60% harvested, 95% last year. Peaches 40% harvested. Second crop alfalfa 98%, 1982 100%, other hays second crop 95%, last year 65%. Alfalfa third crop 15%, last year 20%.

MICHIGAN: Well above normal temperatures persisted across State. Temperatures averaged 5° above normal over the State. Moderate amounts of precipitation fell over the State. The heaviest amounts fell over the central and southern sections.

Rains benefitted crops. However, soil moisture supplies remain short in most parts of the State. Fieldwork was active between rain showers with 5.5 days suitable. Winter wheat harvest made favorable progress and was 75% complete, 60% last year, 72% average. Corn 40% silked, 80% last year, 66% average; 1% in dough, 10% last year, 4% average. Oats 3% harvested, 5% last year, 10% average. Soybeans 60% blooming, 70% last year, 64% average; 10% setting pods, 20% last year, 14% average.

Dry beans 10% setting pods, 20% last year, 23% average. Second cutting hay 50% complete, 50% last year, 47% average. Sweet and tart cherry harvest virtually complete in southwest and in full swing in the northwest. Statewide, sweet cherry harvest 90% complete, 95% last year, 90% average. Tart cherries 75% harvested, 80% last year, 76% average. Vegetable crops benefiting from the rains and harvest of sweet corn and celery continues.

MINNESOTA: Cool dry air early in week was replaced by warm, humid air at midweek; drier conditions resumed after passage of a storm front on 30th. Temperatures averaged 3 to 4° above normal. High: 99°. Low: 47°. Precipitation averaged near normal for east central, 0.17 to 0.36 in. above normal for northwest and north central and 0.33 to 0.79 in. below normal elsewhere. Greatest weekly total: 1.56 in.

Good growing weather for row crops; humid and hot but not too hot. Rainfall light and spotty in major growing areas. Days suitable for fieldwork: 5.8. A large portion of south central and southeast has missed most rains for a month. With much of corn crop pollinating and setting ears, additional moisture and slightly lower temperatures would help assure yields in normal range. Small grain harvest very active in west central, picking up quickly elsewhere. Low test weights reported for oats and barley, reflecting heat stress of recent weeks. Topsoil moisture: 6% very short; 40% short; 54% adequate.

Tasseling: Field corn 77%, 1982 73%, normal 83%. In milk: Field corn 4%, 1982 5%, normal 9%. Blooming: Soybeans 83%, 1982 74%, normal 83%; sunflowers 27%, 1982 16%, normal 45%. Setting Pods: Soybeans 15%, 1982 9%, normal 23%. Turning Ripe: Spring wheat 84%, 1982 63%, normal 70%; Oats 93%, 1982 83%, normal 83%; barley 96%, 1982 77%, normal 83%. Combined: Spring wheat 4%, 1982 4%, normal 6%; oats 9%, 1982 12%, normal 16%; barley 15%, 1982 16%, normal 21%.

MISSISSIPPI: Temperatures 3° above normal. Extremes 64 and 100°. Hot and humid with only a few afternoon thundershowers.

Soil moisture short. Fieldwork 5.9 days suitable, 4.8 last year, 5.1 average. Soybeans 37% blooming, 65% last year, 62% average; 4% podding, 25% last year, 22% average; condition fair. Cotton 98% squaring, 100% last year and average; 50% setting bolls, 82% last year, 75% average; condition fair. Rice 20% headed, 35% last year, 34% average; condition fair to good. Sorghum 48% headed, 71% last year, 64% average. Corn 90% silked, 57% dough stage, 25% dented; condition fair to good. Hay harvest 70%, 72% last year, 66% average. Peaches 70% harvested and watermelons 40%. Pasture condition fair to good.

MISSOURI: Temperatures remained hot, averaging 5° above normal. Daytime highs were mostly in the 90's. Precipitation was light, averaging less than 0.50 in.

Days suitable for fieldwork: 6.2. Corn 84% tasseled, 85% last year. Corn 69% silking, 73% last year and 68% normal. Corn 24% in dough stage, 33% last year and 38% normal. Grain sorghum 42% headed, 51% last year and 42% normal. Soybeans 56% blooming, 38% last year and 45% normal. Beans 20% setting pods, 17% last year and 20% normal. Oats 97% harvested, 90% last year and 86% normal. Alfalfa hay, 2nd cutting, 95% harvested, 86% last year and 86% normal. Third cutting alfalfa hay 28% harvested, 28% last year and 20% normal. Other hay 93% harvested, 85% last year. Cotton 88% squared, 100% last year and 100% normal. Cotton condition 7% good, 36% fair and 57% poor. Corn condition 5% good, 60% fair and 35% poor. Soybean condition 15% good, 66% fair and 19% poor. Grain sorghum condition 1% excellent, 17% good, 52% fair and 30% poor. Pasture condition 3% good, 39% fair and 58% poor. Topsoil moisture supply 2% adequate and 98% short.

MONTANA: Cool week west of Divide as temperatures averaged 4° below normal. Very warm in extreme east as temperatures averaged 3° above normal. Scattered thundershowers, mostly light to moderate, but with a few heavy showers in south central and southeast. Some hail damage in the heavy thundershowers.

Topsoil moisture short to adequate. Hot weather speeding crop maturity. Crop progress this year, last year and average: Winter wheat harvested 10, 0, 5; ripe 25, 5, 20; turning 60, 55, 60; headed and still green 5, 40, 15; spring wheat ripe 5, 0, 5; turning 55, 5, 30; headed and still green 40, 80, 60; boot 0, 15, 5; barley ripe 5, 0, 5; turning 50, 10, 35; headed and still green 45, 75, 55; boot 0, 15, 5; oats ripe 5, 0, 5; turning 50, 10, 35; headed and still green 45, 75, 55; boot 0, 15, 5. First cutting alfalfa hay harvest complete, second cutting 15%. Wild hay harvest 60%. Days suitable for fieldwork, 6.0.

NEBRASKA: Precipitation averaged 0.50 to 1.50 in. with heaviest amounts in northeast. Temperatures normal north, 2 to 4° above normal south.

Corn mostly good to fair. Silking 50%, 40% last year, 80% normal. Dough 2%, 3% last year and 15% normal. Second brood European corn borer just appearing. Wheat harvest 80%, 90% previous year and 97% normal. Soybeans mostly good to fair. Blooming 85%, 45% previous year and 75% normal. Podding 30%, 7% last year and 40% normal. Sorghum mostly fair to good. Heading 15%, 3% a year ago, and 50% normal. Alfalfa mostly good to fair. Second cutting 85% complete, same as last year and 90% normal. Pasture and range feed supplies mostly adequate to short. Both topsoil and subsoil moisture adequate to short. Days suitable for fieldwork 5.5.

NEVADA: Dry weather and near normal temperatures prevailed first part of week. Strong afternoon winds common. Remainder of period dominated by high pressure system daytime temperatures started climbing midweek and approached century mark across entire State by week's end. No measureable precipitation observed anywhere.

Hot, dry winds speeded maturity all grain crops. Hot days, cool nights slowed growth alfalfa. First cutting alfalfa hay about completed, second crop well along. Dry weather ideal for haying operations and combining small grains. Hot weather favored growth 1983 potato crop.

NEW ENGLAND: Hot, normal to dry week. Temperatures were below normal at start of week, but warmed throughout the week, with weekend temperatures above normal. Rainfall averaged between 1.25 in. to 1.00 in. northern New England received the larger amounts.

Soil moisture supplies short, and 6.1 days suitable for fieldwork. Harvest of hay, summer vegetables, blueberries, early apples and peaches active. Condition of potatoes, sweet corn and cranberries good.

NEW JERSEY: Temperatures averaged 2° above normal. Extremes 51° on the 27th and 100° on the 31st. Weekly rainfall averaged 0.46 in. north, 0.61 in. central and 0.0 in. south. The heaviest 24-hour total was 1.04 in. on the

30th to 31st. Estimated soil moisture in percent of field capacity, averaged 68% north, 34% central and 15% south. Four inch soil temperatures averaged 77° north, 81° central and 83° south.

Fieldwork: 6.6 days suitable. Main farm activities harvesting summer vegetable crops, potatoes, and melons and planting fall vegetable crops. Irrigations has been substantial. Topsoil moisture supply is short. All crops would benefit from rain.

NEW MEXICO: Average temperatures above normal south and east, below normal northwest. High temperature - 101°, southeastern Plains and southern Desert. Low - 42°, northern mountains. Precipitation over most areas, heaviest occurred in central and western sections.

Soil moisture short. Cotton crop good. Fields squared 98%, 99% last year, 100% average. Fields setting bolls 62%, 60% last year, 68% average. Alfalfa good condition. Second cutting complete. Third cutting winding down. Fourth cutting started south. Wheat, barley harvested. Irrigated grain sorghum good to excellent, limited heading activity. Dryland crop good condition. Corn good to excellent, 45% tasselled. Peanuts good. Potato harvest continues. Pecans good. Cattle, sheep good. Some heat stress. Ranges varied, very poor to good. Average, fair to poor. All areas need rain.

NEW YORK: Temperatures slightly above normal, rainfall below normal in most areas. Drought conditions in many areas. Many corn fields curling badly, tasseling short. Excellent wheat harvesting progress, 85% done, 60% 1982, 45% average. Good test weight. Oats for grain harvest beginning. Second cutting alfalfa 46% done, 36% 1982, 38% average. Dry beans blossoming. Western sweet cherry harvest finished. Tart cherry harvest 80 to 90% done. Chautauqua Erie grape condition improved with rain. Orange county celery condition good. Some snap beans, sweet corn uneven due to dryness. Sweet corn harvest underway. Long Island potato condition good.

NORTH CAROLINA: Temperature near normal State-wide. Precipitation varied due to scattered storms.

Soil moisture: 37% very short, 55% short, 8% adequate. Days suitable for fieldwork: 6.1. Condition: Tobacco 11% poor, 59% fair, 30% good. Corn: 41% poor, 47% fair, 12% good. Cotton: 17% poor, 39% fair, 44% good. Peanuts: 14% poor, 38% fair, 48% good. Soybeans: 13% poor, 59% fair, 28% good. Irish potatoes: 13% poor, 50% fair, 37% good. Apples: 11% poor, 61% fair, 28% good. Peaches: 47% poor, 37% fair, 16% good. Phenological stages: Cotton squared: 89%, 1982 99%, 96% average. Cotton setting bolls: 61%, 1982 73%, 76% average. Corn silked: 95%, 1982 96%, 95% average. Corn soft-dough: 74%, 1982 78%, 77% average. Corn dent: 46%, 49% 1982, 51% average. Soybeans blooming: 26%, 34% 1982, 38% average. Setting pods: 5%, 1982 6%, 4% average. Harvests: Irish potatoes 94%, 95% 1982, 98% average. Flue-tobacco: 20%, 37% 1982, 29% average. Major farm activities: Topping and suckering tobacco, hay harvest, irrigating crops, cultivating and spraying for weed control on soybeans, tobacco and peanuts and truck crop harvesting.

NORTH DAKOTA: A warm week with above normal temperatures. Average ranged from 2 to 5° above normal. Nighttime temperatures were mild and lows seldom dropped below the mid-50's. Extremes from 49° northwest and north central to 98° northwest. Precipitation was light in the north and west and near normal in the southeast. Maximum precipitation was 1.44 in. southeast.

Beginning of small grain harvest spread throughout the State. Activity generally limited to winter wheat, rye, barley, and oats. Some spring wheat combining southeast. Crops in mostly good condition. Row crops need moisture in some areas. Topsoil moisture supplies slipped below normal with 57% very short or short. Early small grain yields and quality varied. Low test weights in barley common. The percent combined with last year and the average was: Hard red spring wheat 1, 1, 3; durum less than one-half, less than one-half, 1; barley 1, 9, 11; oats 3, 3, 6; winter wheat 22, 12, 22; and rye 27, 15, 24. Flax and row crop development ahead of normal except sunflower. The percent in bloom or beyond with last year and average was: Sunflower 14, 7, 21; flax 86, 65, 73; and potatoes 83, 58, 79.

OHIO: Temperatures averaged 2 to 5° above normal. Most stations reported 90° or higher. Precipitation below normal, nearly all rain at end of period. Totals generally under 0.25 in. Growing degree days from 20 to 30 above normal.

Corn and soybeans fair to good. Heat and dryness causing stress to plants and animals. Blackshank spreading in burley tobacco. Winter wheat harvested 99%, 1982 100%, 95% average. Soybeans blooming 70%, 1982 90%, 75% average; soybeans setting pods 20%, 1982 60%, 40% average. Corn silking 60%, 1982 95%, 70% average; corn dough 10%, 1982 25%, 10% average. Oats harvested 50%, 1982 70%, 50% average. Alfalfa 2nd cut 85%, 1982 90%, 75% average. Other hay, 2nd cut 60%, 1982 60%, 45% average. Days favorable: 6.0. Pasture condition fair. Soil moisture 61% short, 39% adequate.

OKLAHOMA: Temperatures averaged from 3° above normal Panhandle and southeast to 7° above normal northeast. Rainfall ranged from 0.10 in. Panhandle and north central to none west central and south central.

Dry weather continues to be the major problem currently facing States agriculture. The light amount of rainfall during July has stressed all summer crops and has begun to affect live-stock and ranges. Heat stress has delayed crops and will reduce yields if relief does not come soon. Greenbugs have been a minor problem to sorghum producers in the Panhandle district and cotton farmers in the southwestern districts have begun to spray their fields for insects. Native ranges have stopped growing. Producers in some areas have had to decide whether to begin supplemental feeding or to market some of their cattle. Wheat harvested: 100%; 100% 1982; 100% average. Sorghum headed: 20%; 25% 1982; 35% average. Cotton squaring: 50%; 35% 1982; 80% average. Cotton setting bolls: 10%; 2% 1982; 25% average.

OREGON: Temperatures were 3° above normal along the coast; 1 to 2° above normal in southern portions; normal to 1° above normal in other areas. Rainfall left 0.20 in. along the coast, Willamette Valley, and high plateau regions; 0.50 in. in north Cascades; and 0.10 in. in north central and eastern regions.

Soil moisture supply generally adequate. Winter wheat 20% harvested, 41% 1982; 34% average most reports indicate that wheat yields are running well above average in eastern portions. Harvest just beginning in Willamette Valley; some sprout damage has been reported. Grass seed harvest in full swing; quality and yields in early ryegrass varieties reduced due to adverse weather conditions, second crop of alfalfa hay being harvested in most areas east of the Cascades. Peppermint harvest expected to start in two weeks. Early red-haven peaches being harvested. Bartlett pear harvest expected to begin in a week. Some losses on sour cherries due to damp weather. Picking of marion and boysenberries in final stages; blueberry harvest continue. Strawberry fields being mowed and worked. Harvesting of early potatoes underway in Morrow-Umatilla County area; yields and quality above average. Harvest of snap beans and broccoli progressing in the Willamette Valley. Sweet corn developing slowly due to cool weather. Green pea harvest essentially finished. Livestock, range and pasture good to excellent. Fall turnips being seeded for pasture in Umatilla County.

PENNSYLVANIA: Average temperature 73°. This is 2° above the normal. Extremes 96 and 42°. Average rainfall 0.43 in. Nearly 0.40 in. below normal. Largest amounts of precipitation occurred in northern half of State.

Days suitable: 6.0. Moisture, mostly short. Activities: Making hay and haylage; harvesting: wheat, oats, rye, snap beans, peaches, potatoes, sweet corn and melons; soil testing: topping tobacco; baling straw and hauling manure. Barley 92% harvested, last year virtually complete. Wheat 18% ripe and 77% harvested, last year 93% harvested. Oats 41% turning yellow, 35% ripe and 13% harvested, last year 30% harvested. Corn 45% silked with less than 5% in dough; last year 65% silked with 6% in dough. Second cutting alfalfa 70% complete, last year 59% complete. Quality of hay made good to fair. Feed from pastures below average to average.

PUERTO RICO: Island average rainfall 1.17 in. or 0.28 in. below normal. Highest weekly total 5.05 in. Highest 24-hour total 3.40 in. Temperature averaged about 81 to 83° on Coasts and 74 to 77° Interior Divisions. Mean station temperature ranged from 68.2 to 84.1°. Extremes 97 and 55°.

SOUTH CAROLINA: Extremely hot weather relieved early in the week, midweek below normal then edged upwards. Weekly rainfall light to none except locally heavy at some coastal points.

Soil moisture short. Days available for fieldwork: 5.9. Some corn drought-stricken, some weed problems, driest early corn salvaged for silage; condition fair with 3% harvested, 5% last year, 2% average. Cotton fair to good despite drought, although, some shedding squares; insects under control; 98% setting bolls, 97% year ago, 92% average; no open bolls this year, average, 3% last year. Soybeans fair to good with 24% blooming, 32% year ago, 37% average - some not developing due to drought; 5% setting pods, 7% last year, 4% average. Tobacco fair to good, 28% harvested, well behind 62% last year, 50% average. Apples 1% harvested ahead of last year and equalling average. Peaches 72% harvested, back of 95% last year, 79 average. Pecan conditions poor to fair.

SOUTH DAKOTA: Average temperatures 1 to 6° above normal. Extremes: 101 and 49°. Small grain harvest continued in full swing. Mostly average to above average yields indicated. Spring grains maturing rapidly. Extremely dry conditions per-

sist throughout northwest, west central and southwest corner. No second cut alfalfa in many of these areas. Moisture conditions better elsewhere, though becoming dry again in northeastern and east central districts. Row crop development advancing quickly, but in need of good rain throughout important northeast and east central districts. Thunderstorms reported throughout State. Rainfall varied from trace to 2.69 in. Days suitable for fieldwork; 4.7. Winter wheat harvested 69%, 1982 38%, average 80%. Rye harvested 41%, 1982 43%, average 71%. Spring wheat harvested 18%, 1982 8%, average 42%. Oats harvested 24%, 1982 21%, average 58%. Barley harvested 31%, 1982 33%, average 62%. Sorghum headed 16%, 1982 7%, average 20%. Corn silked 33%, 1982 25%, average 49%. Corn dough 0%, 1982 0%, average 0%.

TENNESSEE: Rainfall averaged near 1.00 in. in the east and less than 0.25 in. in the west. Temperatures averaged 5° above normal in the west and near normal in the east.

Days suitable for fieldwork: 5.7. Soil moisture 83% short, 17% adequate. Corn silked 70%; 1982 91%, average 86%; dough 24%, 1982 51%, average 51%; dent 4%, 1982 13%, average 13%. Cotton squaring 99%, 1982 100%, average 97%; setting bolls 26%, 1982 91%, average 65%. Soybeans blooming 35%, 1982 54%, average 56%; setting pods 6%, 1982 15%, average 17%. Pastures poor to fair. Livestock fair. Rain badly needed to improve crop growth and pastures.

TEXAS: Early portions of week were dominated by surface high pressure in western Gulf of Mexico. Fair to partly cloudy skies were rule as temperatures climbed into the 90's to near 100. Afternoon showers and thunderstorms were isolated over West Texas. Rains were meager. Latter half of week an upper air ridge moved west and allowed tropical moisture to increase shower activity in East and Southeast Texas. Rains were very isolated and minimal. Temperatures in the more humid airmass dropped a couple of degrees from early-week figure.

Crops: Hot, dry weather is beginning to affect most summer crops acreage State. Irrigation continues to be very active where available. In southern half of State, hot weather has aided maturity of crops. Harvest of grain sorghum gaining momentum. Corn drying down quickly. Cotton harvest beginning to expand in the Rio Grande Valley. Cotton made rapid development under extremely hot conditions. Bolls opening fast in Rio Grande Valley and South Texas, High and Low Plains, irrigation active, trying to provide needed moisture. Rain needed in all areas of North and West Texas. Sorghum harvest gaining momentum in Central Texas and nearing completion in South Texas. On High Plains, sorghum mostly in the boot stage and needing rain on dryland acreage. Corn continues to mature and dry rapidly under hot temperatures. Limited harvest has begun. On the Plains, corn tasseling, but with irrigation, most fields developing normal. Dryland acreage in North Texas needs rain to maintain good prospects. Peanuts making normal progress. Rice harvest has begun as hot temperatures have promoted maturity of late developing crops. Soybeans benefitted from recent rain and are blooming along the Upper Coast some early beans beginning to mature. Sugarcane making good growth in Rio Grande Valley.

Cotton squaring 88%, 1982 63%, 90% average; setting bolls 36%, 1982 24%, 53% average; open bolls 2%, 1982 8%, 10% average; harvested 0%, 1982 1%, 2% average. Rice headed 94%, 1982 100%, 100% average; turning color 67%, 1982 91%, 85% average; harvested 0%, 1982 42%, 33% average. Sorghum headed 70%, 1982 78%, 76% average; turning color 62%, 1982 62%, 62% average; mature 48%, 1982 51%, 52% average; harvested for grains 35%, 1982 44%, 44% average.

**Commercial vegetables:** In Rio Grande Valley vegetable harvest remained slow. Limited supplies of melons available. Citrus groves sprayed and irrigated. Fruit development normal. In San Antonio Winter - Garden areas, most harvest activity ended. In East Texas, supplies of tomatoes, peas, peppers, okra, squash, greens and melons plentiful. Moisture needed. Weeds being controlled in sweetpotatoes. In Trans-Pecos, movement of cantaloup continue. Watermelons, carrots and cabbage also available. In North Texas supplies of most summer vegetables remain available. Moisture needed to promote continued production. On Plains, harvest of onions, potatoes and cabbage continued with good volume and quality. Peach harvest nearing completion in South Texas and volume slowing on Central Texas. Supplies plentiful in North Texas and Plains. Pecans in water stage in most areas and enlarging rapidly. Some pecan scab beginning to appear.

**Range and Livestock:** Ranges and pastures showing some deterioration from long days of hot temperatures. Parts of West Texas very short of moisture and conditions extremely poor. In most other areas, available moisture has been depleted and pastures are beginning to turn brown. Most livestock holding up well under the hot weather, although some movement of older calves off pastures has been necessary.

**UTAH:** Scattered thunderstorm activity throughout State. Accumulations light western division, moderate to heavy rest of State. Temperatures well below normal southern part, somewhat above rest of State, except northern mountains slightly below normal.

Most of week suitable for fieldwork with only scattered showers in key agricultural areas. Major farm activities included irrigation, hay harvest, and cherry picking. Harvest of fall seeded grain in early stages. Winter wheat 6% cut. Barley 31% ripe and spring wheat 5% ripe. Corn making good growth in warm weather, but continues behind normal. Sweet cherries 94% picked, tart cherries 10% and apricots 21%.

**VIRGINIA:** Continued hot and humid with little relief from dry conditions. Temperatures averaged in mid to upper 70's, near normal for this time of year. Precipitation was very light, with amounts generally less than 0.25 in. except in the southwest mountains where 0.75 in. fell.

Hot, humid weather with light, scattered showers kept topsoil moisture at 96% short and 4% surplus. The 4% was in southwest. Crop growth poor except where irrigated. Days suitable for fieldwork averaged 6.0. Corn condition rated poor because of low moisture. Yields reported down by county agents. Percent crop in or past silk, 78%, 84% last year and average. Percent in or past dough 40%, 50% last year and 45% average. Soybeans were in fair condition. Full season doing much better than double-cropped. Blooming reached 19% compared to 33% last year; 5% were setting pods compared to last year's 11%. Tobacco was also in fair condition. Irrigation active. Flue-cured 6% harvested, 16% 1982, 11% average. Fire-cured 1% harvested, 10% 1982, 4% average. Peanuts were in good condition, 5 to 10 days before critical period. Some problems with weeds, some cultivating, and some application of fungicides.

**WASHINGTON:** On shore flow of cool marine air begin 24th and persisted through 27th. Moderate summer-time front brought rain or rainshowers to west and rainshowers to areas east of Cascades over middle three days of week. High pressure over southern British Columbia produced easterly air flow on 28th bringing warm to hot, dry weather to State 29th.

Wheat and barley harvesting slowed by rain, but crops average to above average condition. Leafrust in Spokane County, but not enough to affect yield. Hail caused some damage to spring barley fields Douglas County. Norgold potato harvest picking up. Poor weather prevented much haying. Peach harvest continues. Early Bartlett pear harvesting about to start. Localized hail damage some orchards Yakima County. Apple and grape yield good. Raspberry harvesting complete, blueberry harvesting continues, blackberry harvest started. Cutting back and fertilizing strawberries underway. Broccoli and cauliflower harvesting continues. Carrot and bean harvest underway. Threshing early spinach fields and cucumber harvesting started. Pea harvest well underway with some root-rot due to heavy rains. East of Cascades, sweet corn harvest started. Tomato and early pepper harvesting starting soon. Zucchini, cucumbers, and other vegetable harvesting continues. Vegetable seed for seed being planted, radish seed harvest started, turnip seed harvest nearly complete. Livestock in good condition. Ranges and pastures in excellent condition due to wet weather. Green chopping continues. Winter wheat harvested 22%, 1982 37%, 28% average.

**WEST VIRGINIA:** Temperatures averaged slightly above normal in most areas. Slightly below normal in southern and central areas. Range: 48 to 100°. Precipitation averaged well below normal across the State. Some local thunderstorms early in the week accounted for most of the rainfall. Range none to 1.50 in.

Soil moisture short to adequate. Days worked averaged 5.2. Main activities: Hay harvesting, pasture clipping, gardening and general maintenance. Small grains were in fair to good condition. Wheat: 10% headed, 24% ripe, 66% harvested trails the 2%, 16% and 82% in 1982. Barley: 13% ripe and 87% harvested; 3% headed, 6% ripe and 91% harvested in 1982. Oats: 48% headed, 26% ripe, 26% harvested; well behind the 24%, 23% and 53% in 1982. Corn fair to good condition. Tobacco fair to good condition. Pastures fair to good condition. Hay in fair to good condition. First cutting 96% completed and 87% of normal; 93% and 78% in 1982. Second cutting: 40% completed and 74% of normal; 27% and 68% in 1982. Fruit in fair condition. Peaches: 30% harvested and 85% of normal. Gardens in fair to good condition. Limited rainfall continues to stress most crops, especially 2nd hay.

**WISCONSIN:** Temperatures averaged above normal, ranging from 48° in Rhineland on 25th to 100° in Iola on 28th. Numerous showers fell on 27th through 31st. Southeast reported less than 0.25 in. while central areas received 1.00 in. or more.

Days suitable for fieldwork: 6.0. Soil moisture 50% short. 50% adequate.

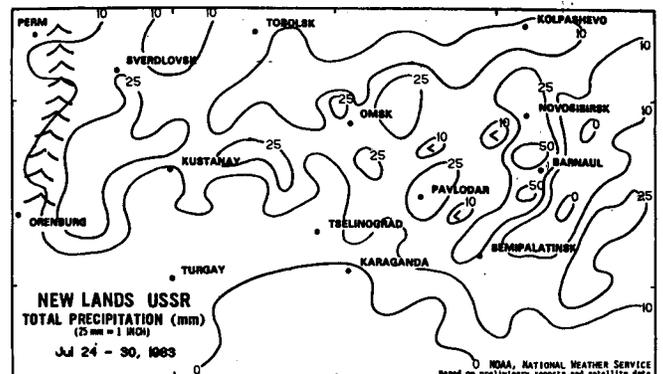
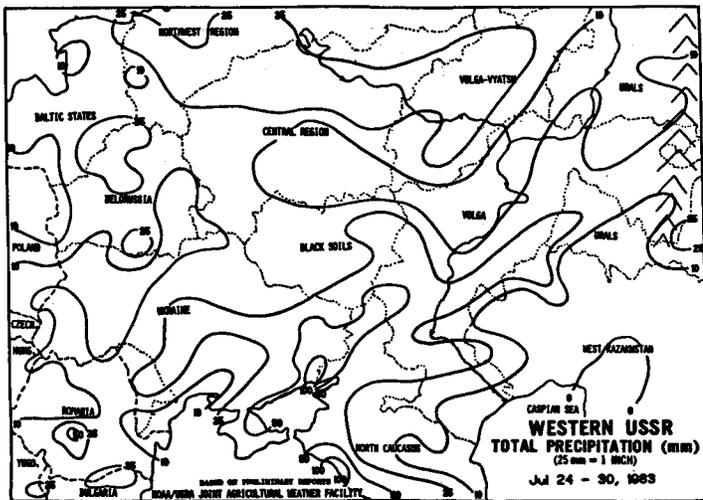
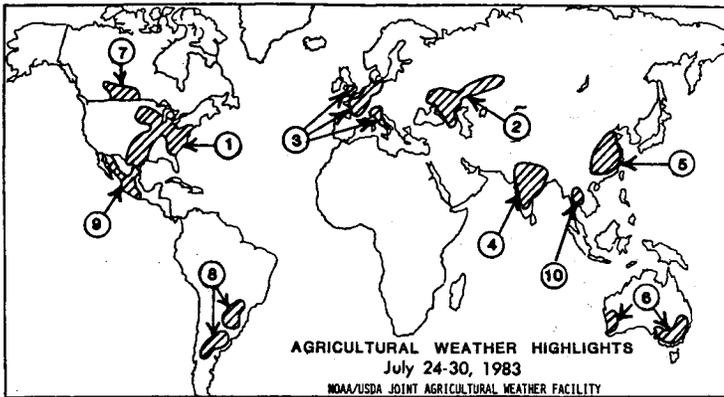
**WYOMING:** Temperatures well above normal north-east quarter and slightly below southeast. Elsewhere near normal. Precipitation above normal except north central portion.

Topsoil moisture adequate 70% State. Days suitable for fieldwork: 6.0. Small grains maturity continues behind normal. Winter wheat: 40% mature; 5% harvested. Normally 51% harvested. Barley: 40% turning color, 25% mature; small amount harvested. Normally 11% harvested. Spring wheat: 35% turning color; 5% mature. Normally 14% harvested. Oats: 30% turning color; 5% mature. Normally 22% mature. Corn 30% tasseled, normally 44% tasseled. Corn 20% silked; normal 21%. Dry beans 75% bloom. Potatoes 65% bloom. Alfalfa 95% first cutting complete, second cutting 5% complete. Other hay harvested, 45%, normally 53% harvested. Livestock, ranges and pastures mostly good condition. Fall, winter grazing prospects mostly good.

# International Weather and Crop Summary

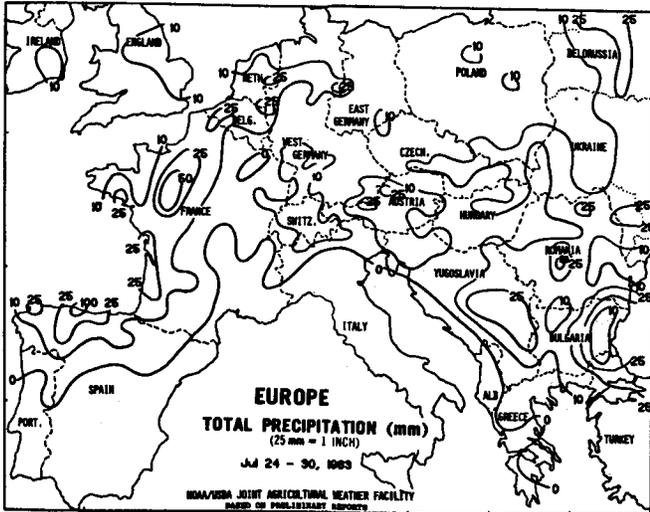
July 24 to 30

1. UNITED STATES ... Crop-saving rains douse parts of the Corn Belt; some areas continue to be critically dry with unusually hot weather. Prolonged dryness stresses mid-Atlantic crops and southern Plains livestock.
2. USSR ... Showers are relieving unfavorable dryness in the major corn producing areas of southeast European USSR, and are benefiting spring grains in the central New Lands.
3. EUROPE ... Light rain benefits chronically dry crop areas in the northwest, but more rain is still needed. Hot, dry weather is stressing crops in Italy.
4. SOUTH ASIA ... Monsoon rains cover most of India's rice crops. Unfavorably dry warm weather continues in the cotton and groundnut region.
5. EASTERN ASIA ... Favorably dry weather covers most of the South China Plain. Precipitation in the North China Plain benefits cotton and soybeans in the reproductive stage.
6. AUSTRALIA ... Showers improve moisture conditions for the winter-hardened wheat crop in the south; generally favorable conditions prevail throughout the wheat belt.
7. CANADA ... Some rain in the Prairie grain belt aids crops stressed by warm weather in the east and favors crop development in the central regions, but maintains wet conditions in the northwest.
8. SOUTH AMERICA ... Heavy rain in Santa Catarina and northern Rio Grande do Sul further aggravates agriculture; favorable harvest weather for coffee and citrus in Sao Paulo and vicinity; becoming too dry in Argentina - rain will be needed in upcoming weeks for emerging wheat crop.
9. MEXICO ... Frequent rains continue over the southern Plateau corn belt, favoring crops. Northeastern orchards and ranges are becoming dry again, similar to the rest of the north.
10. SOUTHEAST ASIA ... Moderate to heavy rain benefits northern and south-central rice areas of Thailand. The return of relatively dry weather is unfavorable for some corn areas.

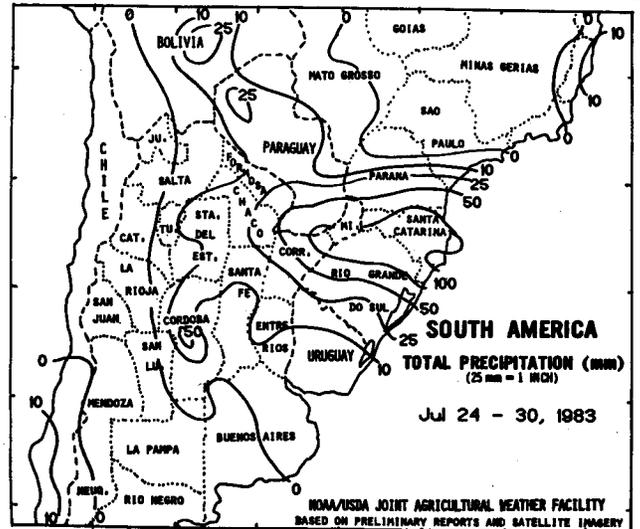


USSR...Widespread showers relieved dryness in major corn producing areas of the eastern Ukraine, North Caucasus, and the southern Volga Valley. Precipitation amounts, ranging from 25 to 50 mm, covered most of these areas with the heaviest amounts, around 100 mm, reported at locations adjacent to the Black Sea coast. The rain will halt further deterioration of corn yields in these areas. Elsewhere, showers continued to maintain favorable moisture conditions in western and northern European USSR crop areas. Weekly temperatures were above normal in the Baltic states, below normal in the north, and much below normal in the southeast.

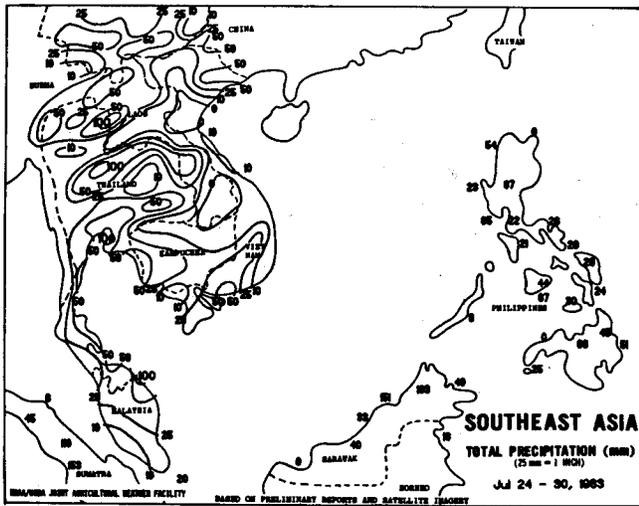
In the New Lands, widespread showers covered the northern half of the region. Precipitation amounts in these areas generally ranged from 10 to 25 mm, benefiting crops in the filling stage. Further east, grain areas around Barnaul and Novosibirsk were generally dry. In the south, light showers fell at some locations, but rainfall was insufficient to meet crop moisture needs. As a result, spring grains in the south had to further rely on limited soil moisture for growth. Weekly temperatures continued above normal over the region, increasing evaporation rates.



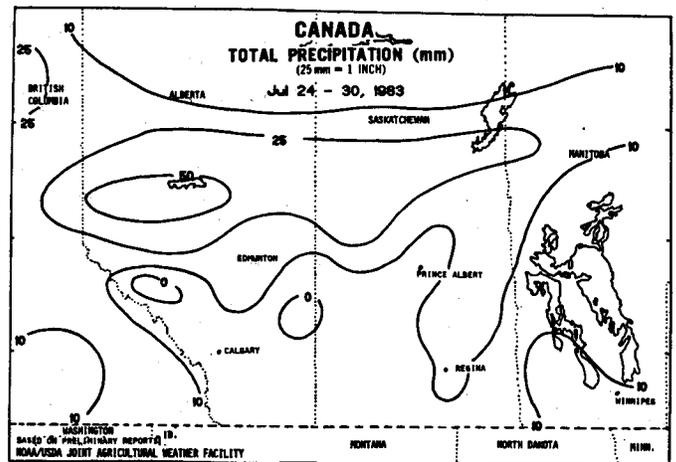
**EUROPE**...Light rain covered crop areas in northwestern Europe late in the week, except western France which experienced wet weather. Although the moisture in these areas brought limited relief from the continued dry weather of past weeks, more rain is still needed for corn and sugarbeets in the filling stage. In East Germany and Poland light showers in the southern growing areas maintained adequate moisture conditions for summer crops. Wet weather continued to benefit summer crops in the southeast, but some delays in small grain harvesting may have occurred. Elsewhere, unfavorably dry weather continued to stress crops in northern Italy. Temperatures in Italy rose to unseasonably high levels, with daytime highs in central Italy climbing to around 40°C. Weekly temperatures over the remainder of the region also were generally above normal.



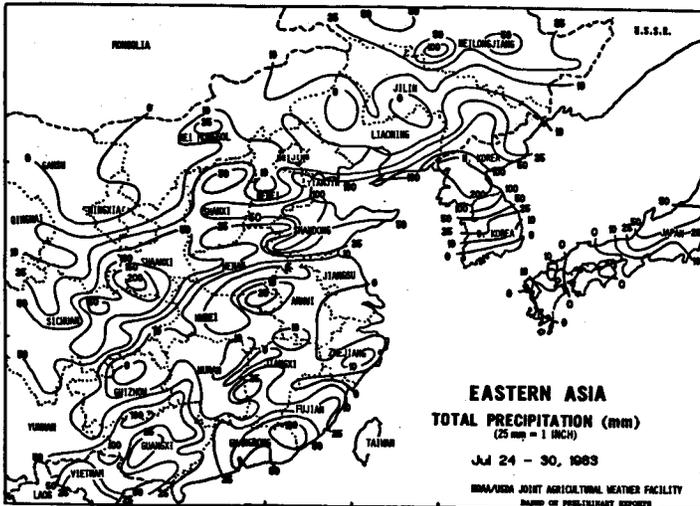
**SOUTH AMERICA**...Recurring heavy rains continued to aggravate agricultural activity in southern Brazil. Late crop harvesting and wheat planting have been seriously affected by the unrelenting rains. Recent storms dumped over 100 mm of rain on Santa Catarina and northern Rio Grande do Sul. Dry weather favored the harvest of coffee and citrus north of Parana. While floodwaters are still a problem along Argentina's river system due to the persistently heavy rains in southern Brazil, dry and seasonably cool weather has prevailed over most of Argentina's wheat areas. Scattered showers fell over Cordoba, Santa Fe, and eastern Buenos Aires, but amounts were generally light. Rain will be needed soon to establish better moisture conditions for the soon-to-emerge wheat crop.



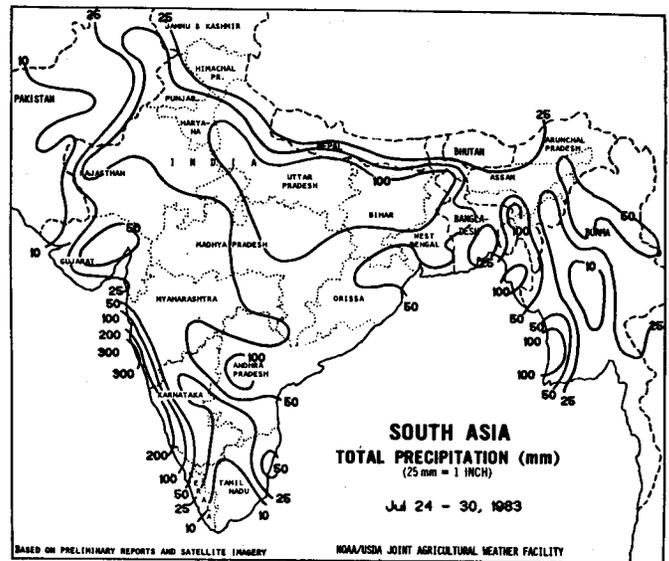
**SOUTHEAST ASIA**...Scattered monsoon rains brought moderate to heavy precipitation to parts of Thailand this week. Northern and south-central areas received the heaviest amounts, benefiting rice in the heading stage. A relatively dry band across central Thailand returned this week. Corn in this area benefited from moderate rain last week, but more precipitation is needed as the crop progresses through the moisture sensitive reproductive stage. Temperatures were slightly above normal this week over much of Thailand, increasing the moisture demand; however, near-normal rains have kept most soil moisture levels adequate. Scattered showers fell in the Philippines, benefiting the rice planting season, which had been delayed by earlier drought conditions.



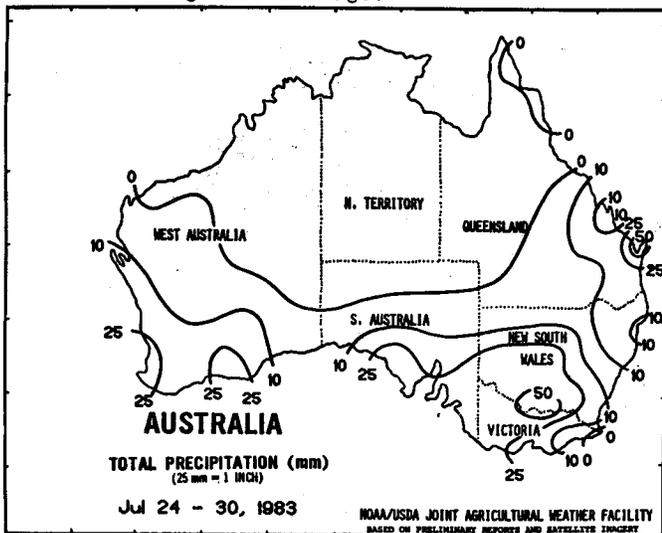
**CANADA**...Generally light showers covered the spring grain areas as crops advanced into the filling stages of development. Substantial rainfall (greater than 10 mm) in Manitoba benefited crops which had been stressed by hot, dry weather. More rain is needed to alleviate stress conditions in the east, where some grains are well into the dough stage. Other areas of significant rainfall included a narrow band extending north from Regina, in eastern Saskatchewan, and also in the extreme northern portions of Alberta's crop area. Excessive moisture in northern Alberta has affected crop development, but further south crops are generally in good condition. In Saskatchewan crops are mostly in good to excellent condition. Grains are mostly in the filling stage in the west, but the late crop is still heading in the east.



**EASTERN ASIA...**Moderate to heavy precipitation from tropical storm Wayne benefited most southern coastal rice areas. The early rice harvest is normally completed by now, and late rice is in the vegetative stage. Mostly dry, warm weather benefited the remainder of the rice area and the southern cotton region. Earlier, excessive rains had saturated the soils and caused some flood damage to crops. A band of moderate to heavy precipitation extended from Sichuan, through Shaanxi and Shanxi, to Shandong. The moisture was especially beneficial to crops in the reproductive stage in Shandong, which had received very little precipitation until last week. Light to moderate rain in northeastern China continued a persistent wet pattern. Soils are favorably moist, and clear weather would benefit corn and soybeans in the reproductive stage. Excessive rain in North Korea likely caused flooding with minimal damage to rice in the late vegetative stage.



**SOUTH ASIA...**Moderate to heavy monsoon rains covered a large portion of northern India, from Rajasthan to Bihar, and southward from Bihar to northern Andhra Pradesh. The heaviest precipitation amounts continued to fall farther north as the season progresses. Until 2 weeks ago, the northern rice area had received much-below-normal precipitation. The recent moisture has been very beneficial for the autumn rice, which normally enters the heading stage in August. Near-normal rains along the southwest coast continued to aid autumn rice. Relatively dry, warm weather this week was unfavorable for the cotton and groundnut region. Precipitation in this area has generally been below normal during most of July, stressing developing crops. Timely rains are needed as southern groundnuts normally enter the flowering stage in August.



**AUSTRALIA...**Timely rains covered the entire wheat belt of Australia improving moisture supplies during this slow growth period. Temperatures averaged somewhat above normal in the east and near normal in the west, but moisture demand was low for the winter-hardened crop. While southern and western crop areas benefited from moderate showers, eastern crop areas benefited from a drying trend. The drier weather in southern Queensland and northern New South Wales has aided late planting and early crop establishment. Thus, present conditions are generally favorable for early crop growth, but seasonal rains are needed during the next few months to sustain good crop development.



**MEXICO...**Rains continued to help crops in the southern Plateau corn belt. Most districts had moderate amounts of moisture which should benefit corn approaching the reproductive period. The northern half of the country was dry, except for the upper mountainous watersheds where light showers fell. Dryness returned to the northeast and again stressed orchards, field crops, ranges and livestock. Rains continued over the south and extended into Central America.

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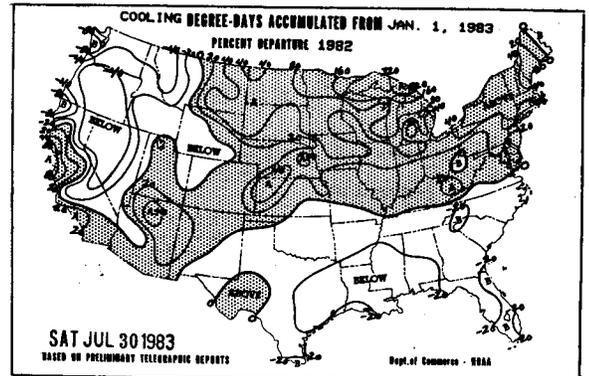
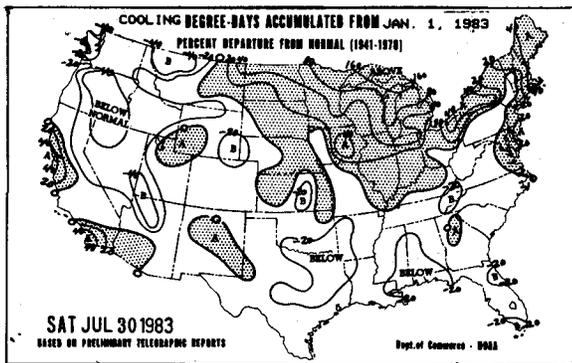
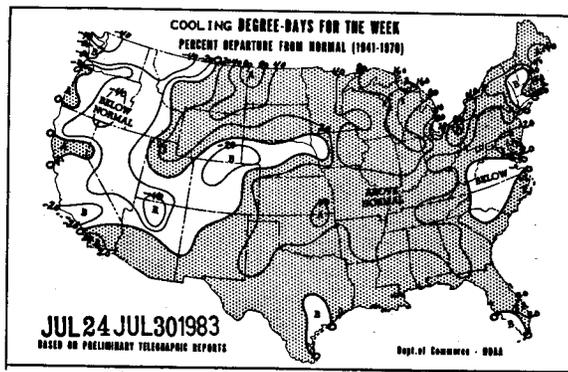
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