

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

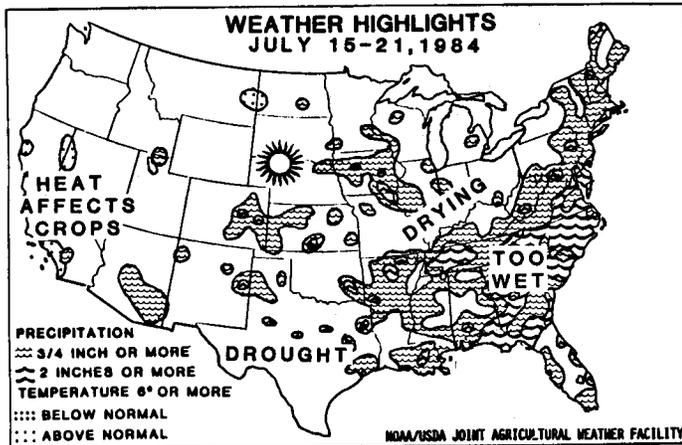
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July 24, 1984

National Weather Summary

July 15 to 21



WEDNESDAY...Heavy showers and thunderstorms fell along the east coast with scattered showers reaching back to the Appalachians and eastern Lakes region. Scattered showers fell along most of the gulf coast and into central Texas. Isolated showers produced local flooding in southern California and reached northward through the Great Basin to the northern Rockies. Unusually warm weather covered the West, the southern Plains, and into Montana.

THURSDAY...The area of showers moved off the coast in the Southeast, and showers were widely scattered along the gulf coast. Scattered showers continued in the Southwest, the Great Basin, and eastward to the western Corn Belt. Warm weather spread over the western Great Plains.

FRIDAY...Showers popped up again from the mid-Atlantic States through Florida and westward from the mid-Atlantic through the Corn Belt. Heavy rain fell in parts of Virginia and Maryland. Tropical moisture continued to trigger showers over the Southwest and northward to the northern Rockies. Very warm weather covered the Southwest and the Plains. High temperatures in parts of North Dakota and Montana exceeded 100 degrees.

SATURDAY...Moderate, occasionally heavy, showers fell along the east coast and were scattered along the gulf coast. Some heavy showers fell in parts of the Southwest and Great Basin, and light amounts reached into the northern Plains.

HIGHLIGHTS: Rain was widespread through the eastern United States. The heaviest amounts fell from southern New England to Georgia and from North Carolina to Arkansas and into eastern Colorado. Rain was very light from central Missouri along the northern side of the lower and middle Ohio River. Only isolated showers fell in the dry parts of central Texas, but tropical moisture fed showers that fell throughout the Southwest, the Great Basin, and the central and southern Rockies. Average temperatures were generally cool in the East and warm in the West.

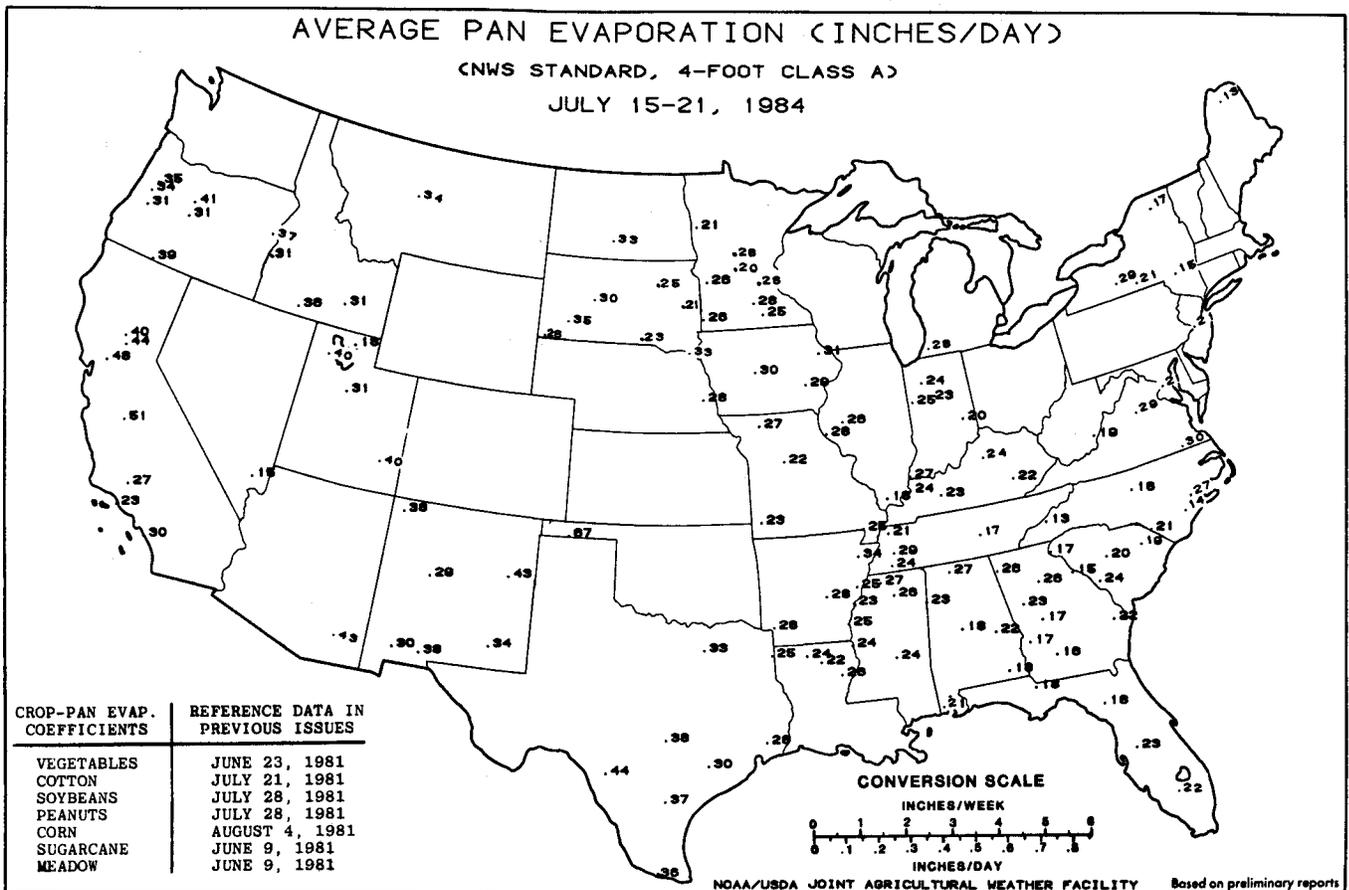
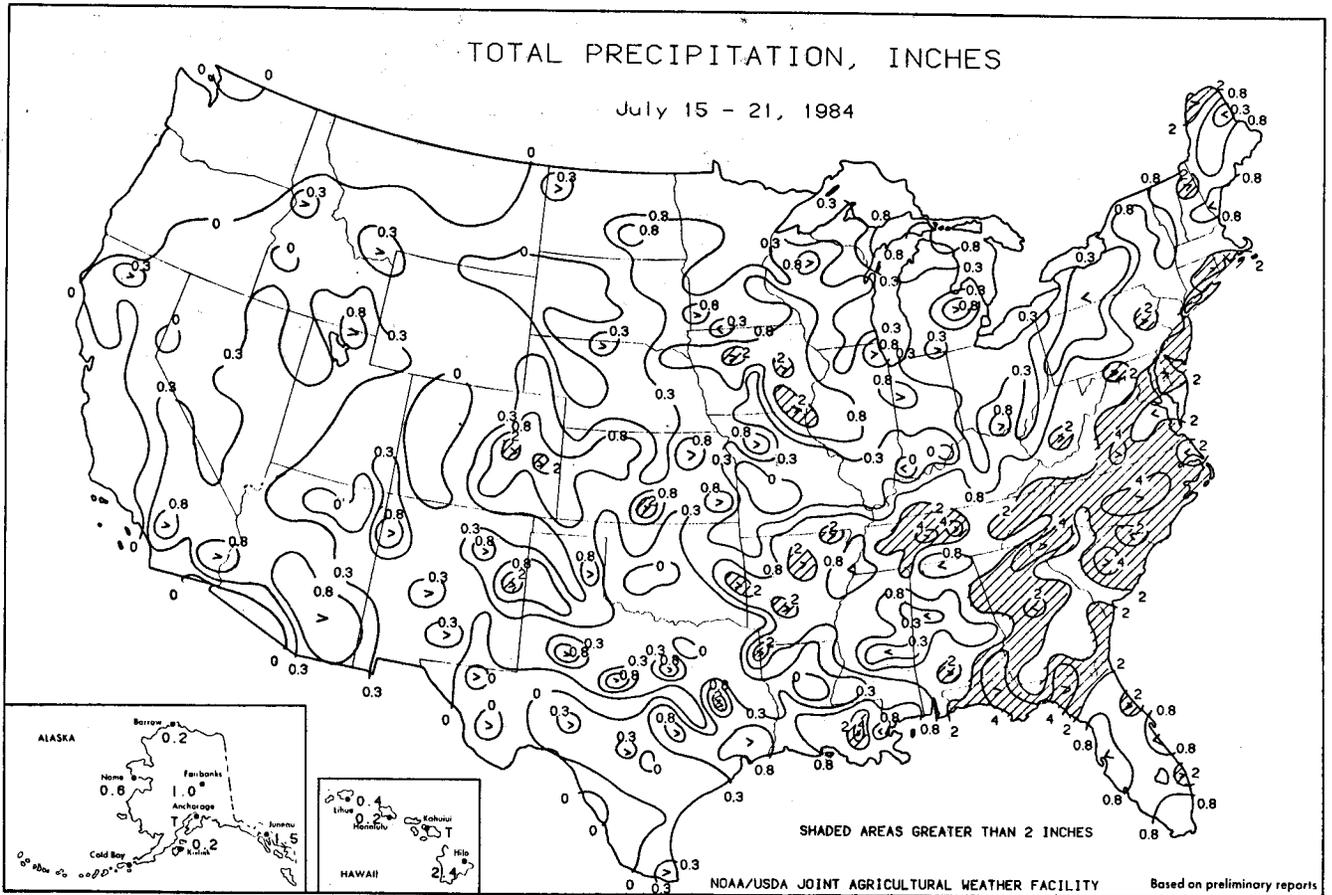
SUNDAY...Showers and thunderstorms were concentrated from the central Appalachians through northern Arkansas and southern Missouri to eastern Colorado. Scattered showers covered the East Coast States, the eastern Corn Belt, and the central gulf coast. Showers were scattered in the Southwest and the heat wave in California spread northward.

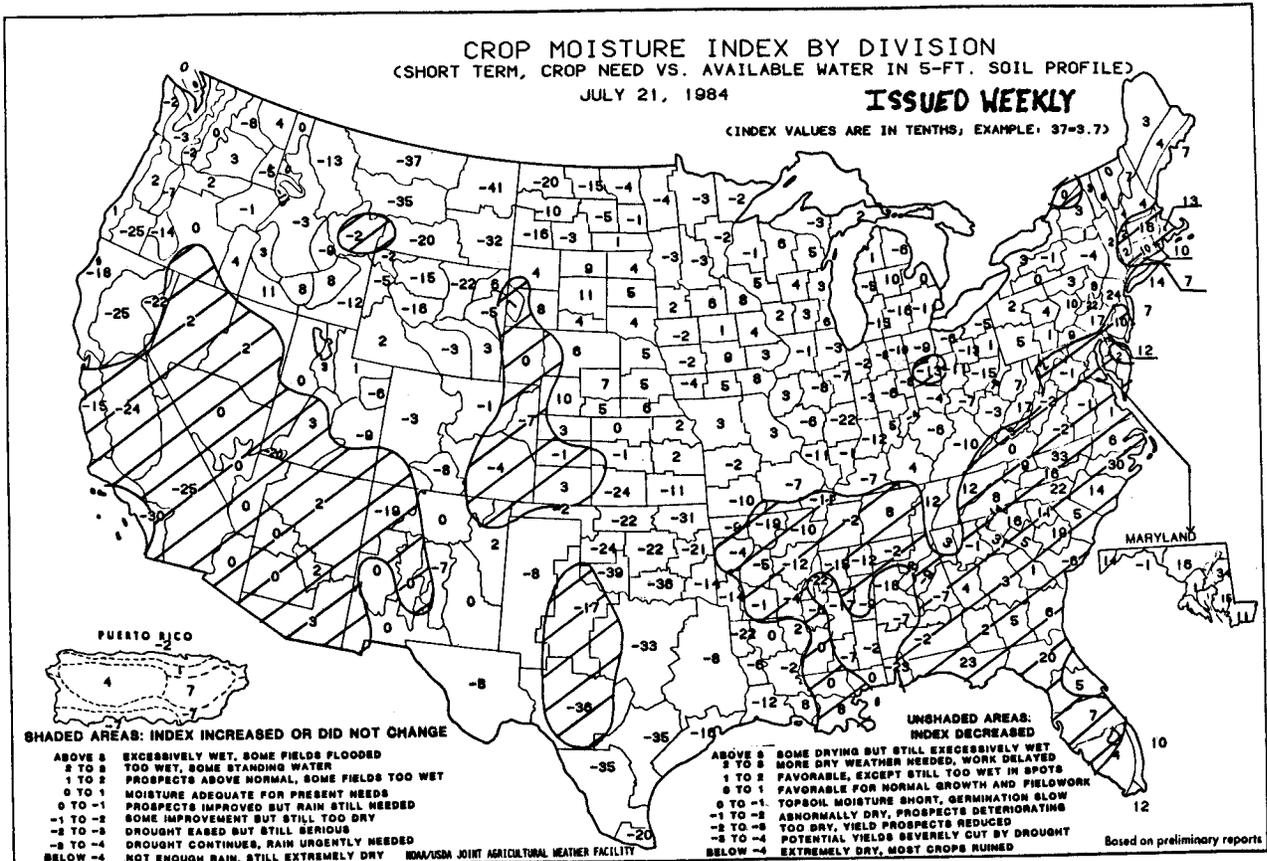
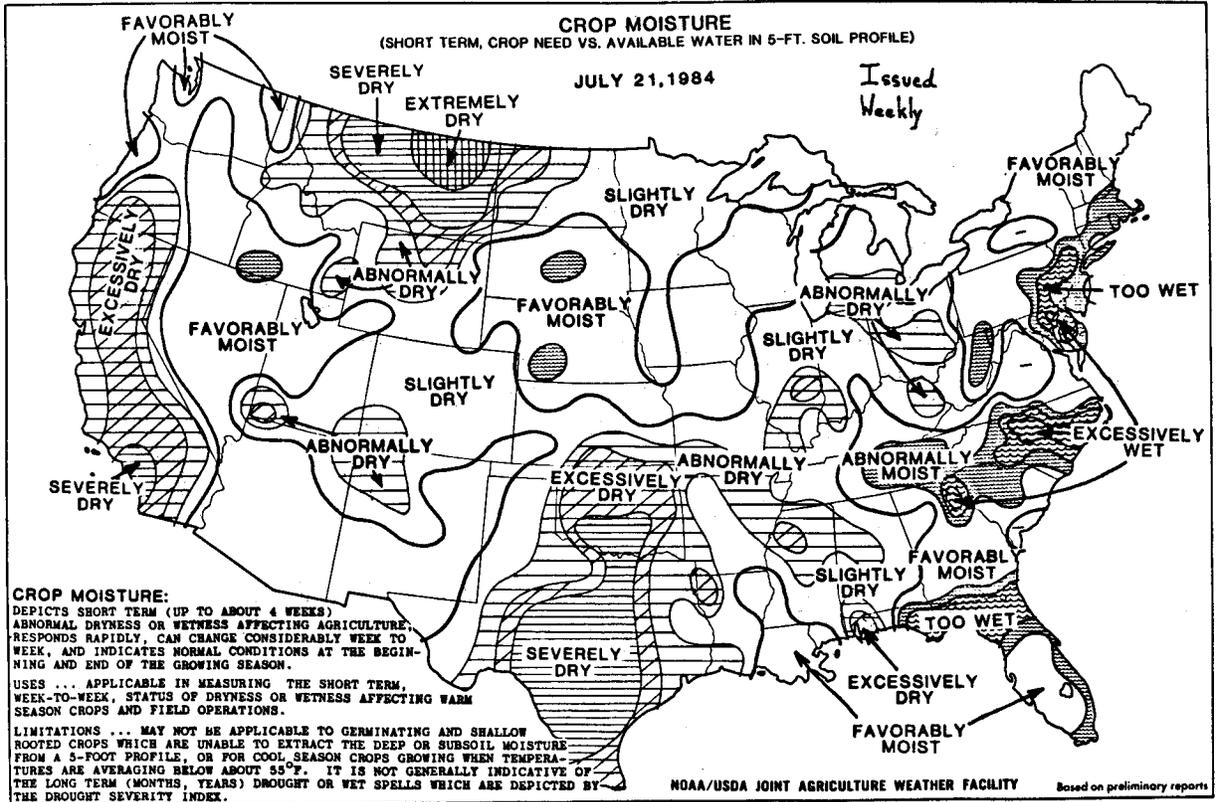
MONDAY...Showers covered the east coast and the Southeast; some areas recorded heavy amounts of rain. The line then reached from the mouth of the Mississippi River into the central Plains and western Corn Belt. Showers continued in the Southwest with some isolated heavy amounts. A warming trend began in the Plains and continued to spread northward along the west coast.

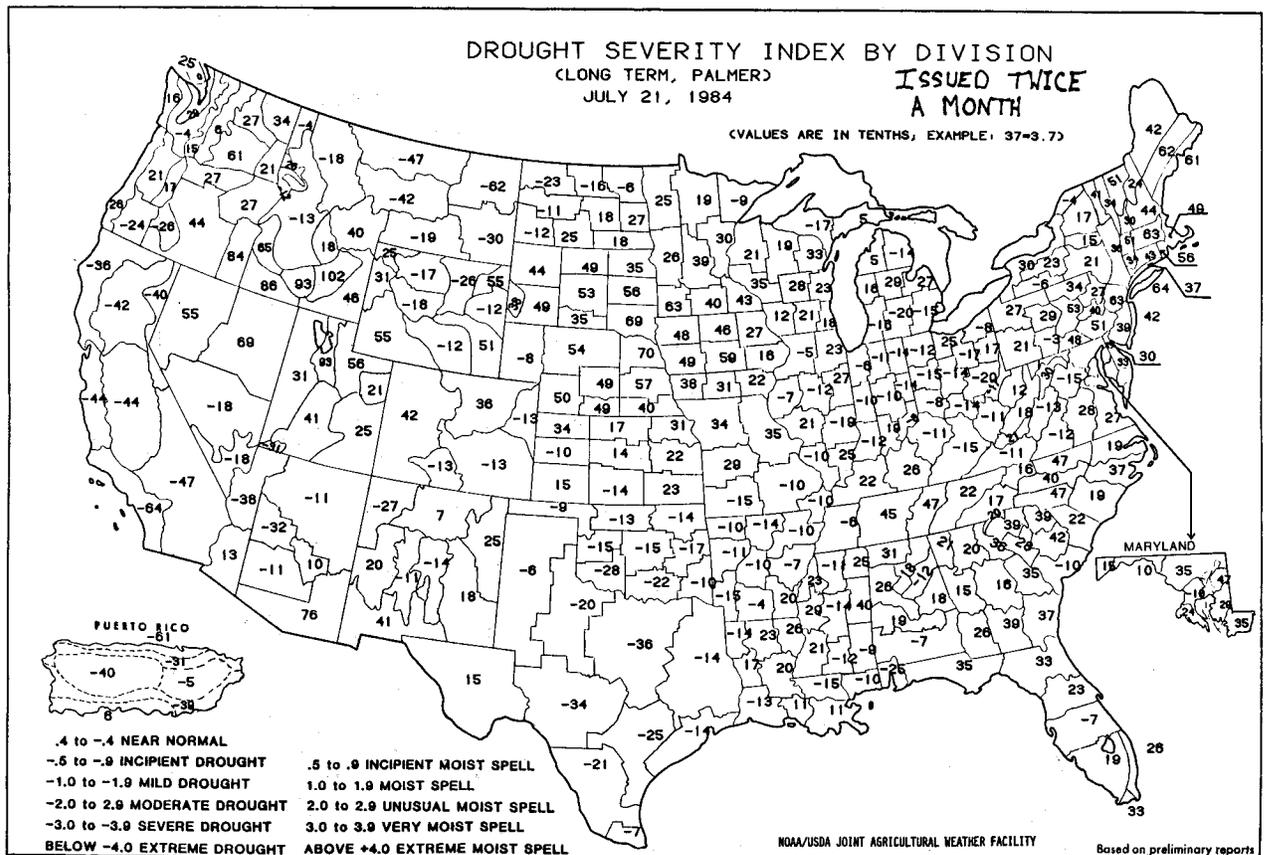
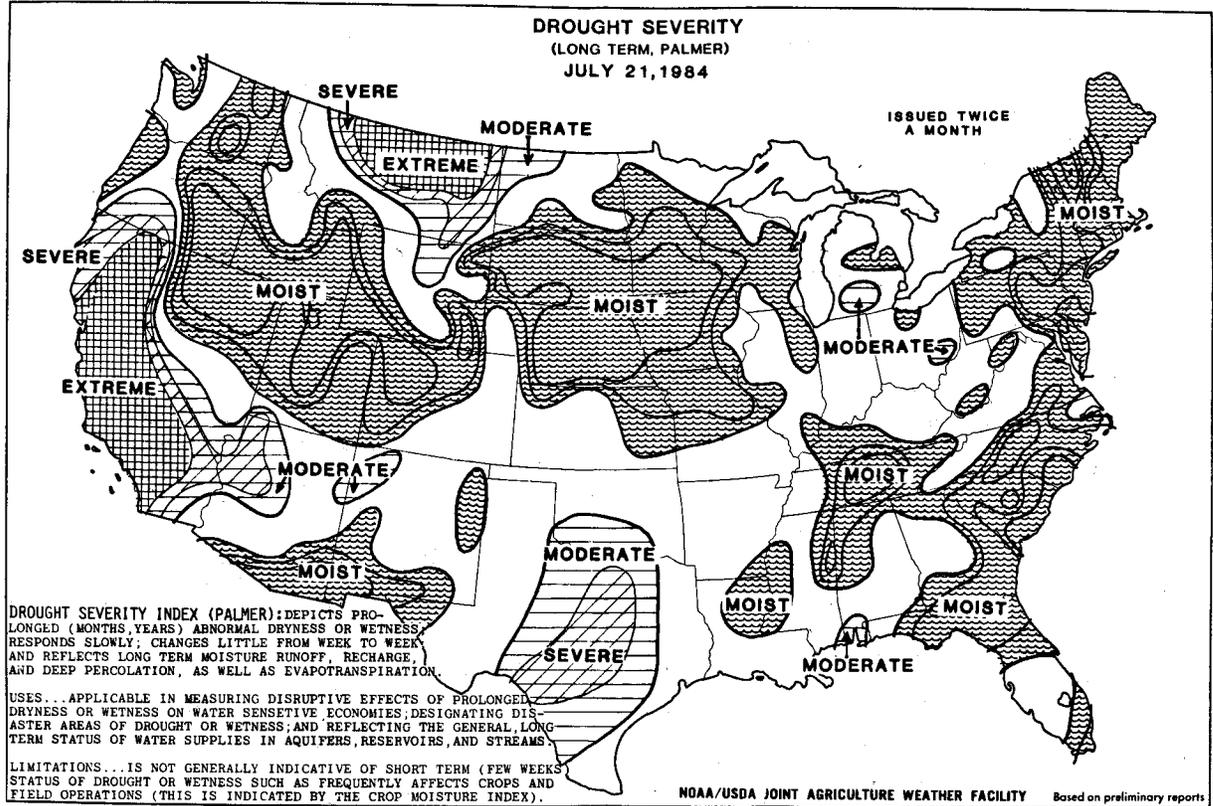
TUESDAY...Showers and thunderstorms again covered the area from the Southeast to the Great Lakes and to the Atlantic. Heavy amounts of rain fell from southeastern New York to the Carolinas and through Tennessee. Scattered showers extended westward into the Southwest.

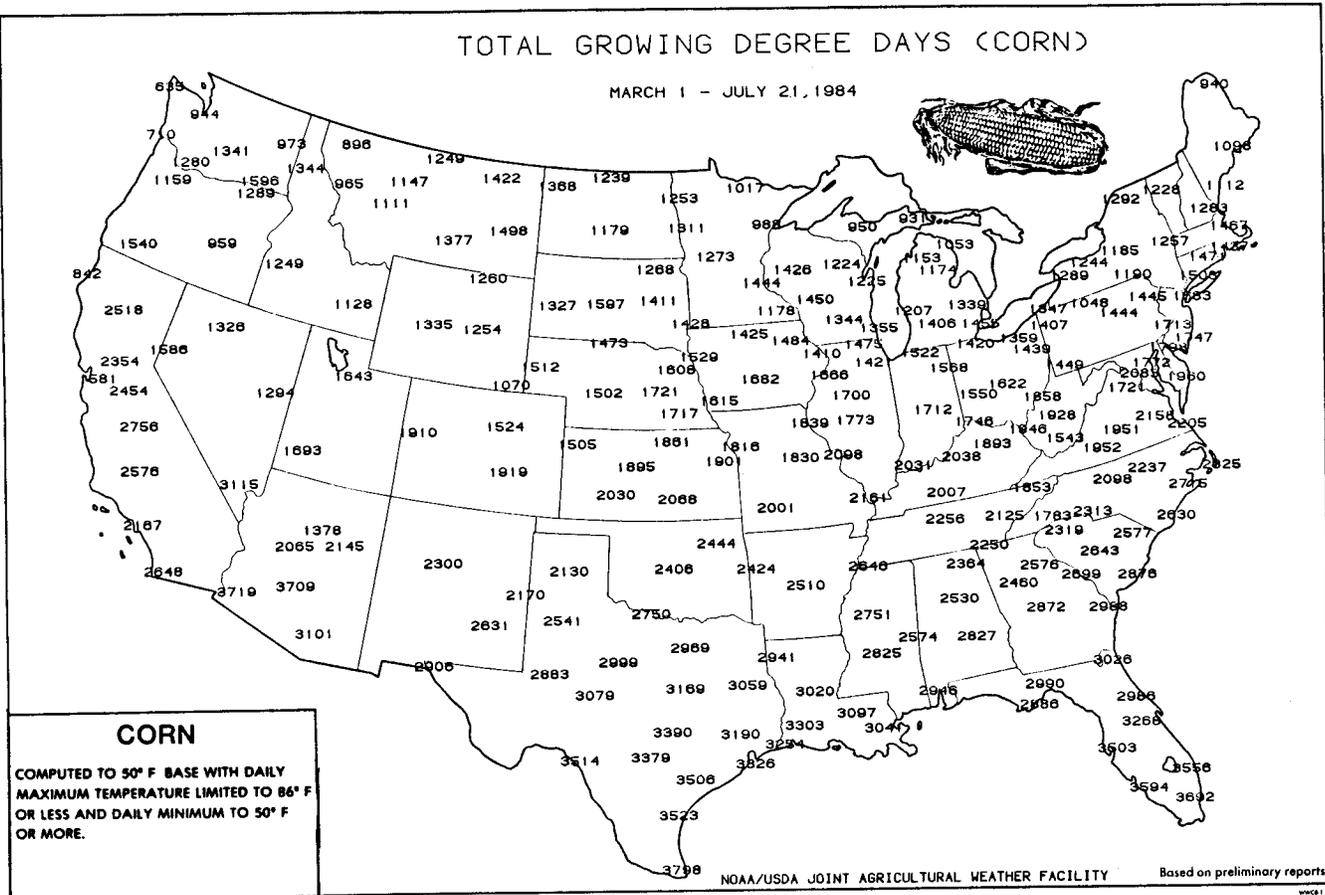
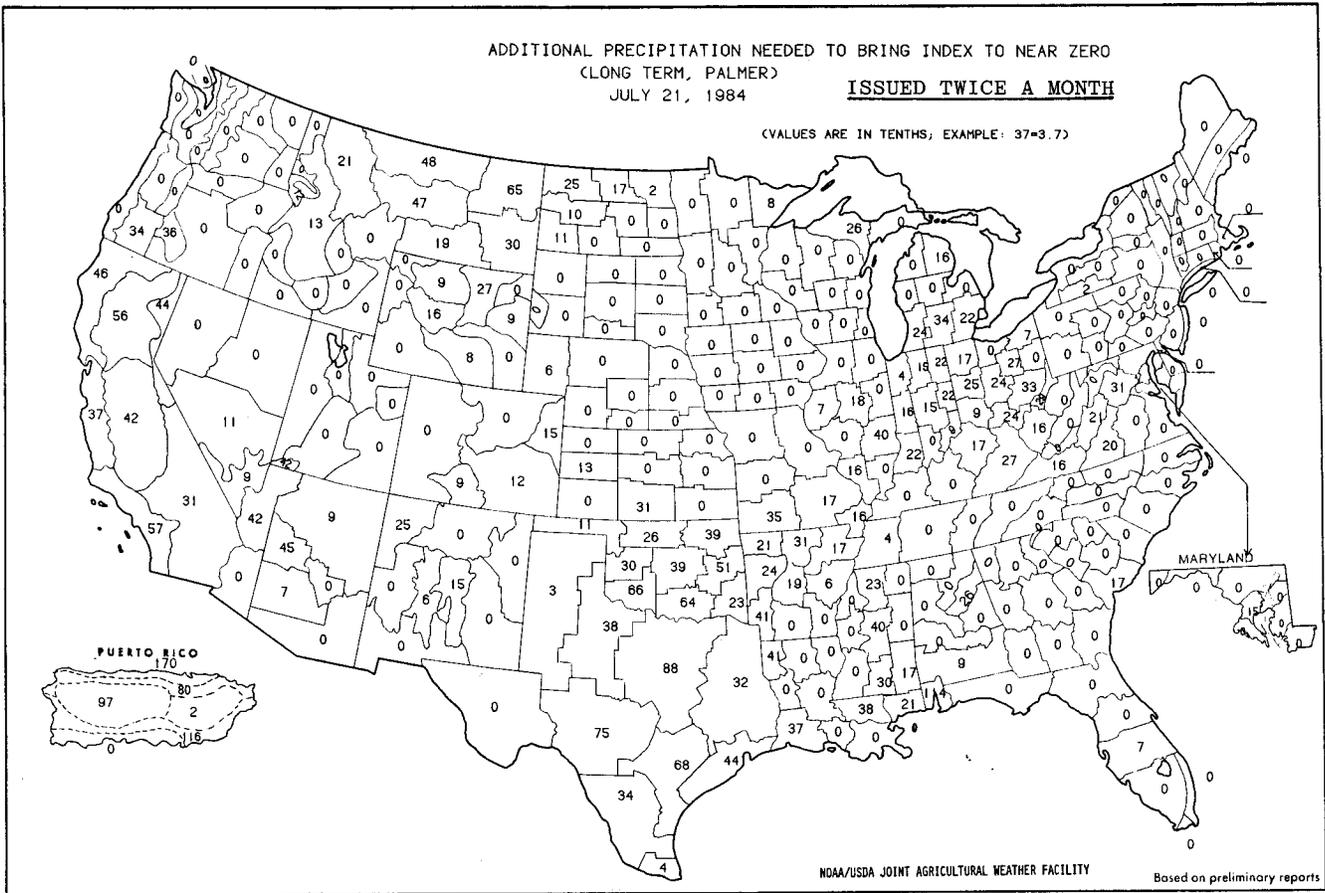
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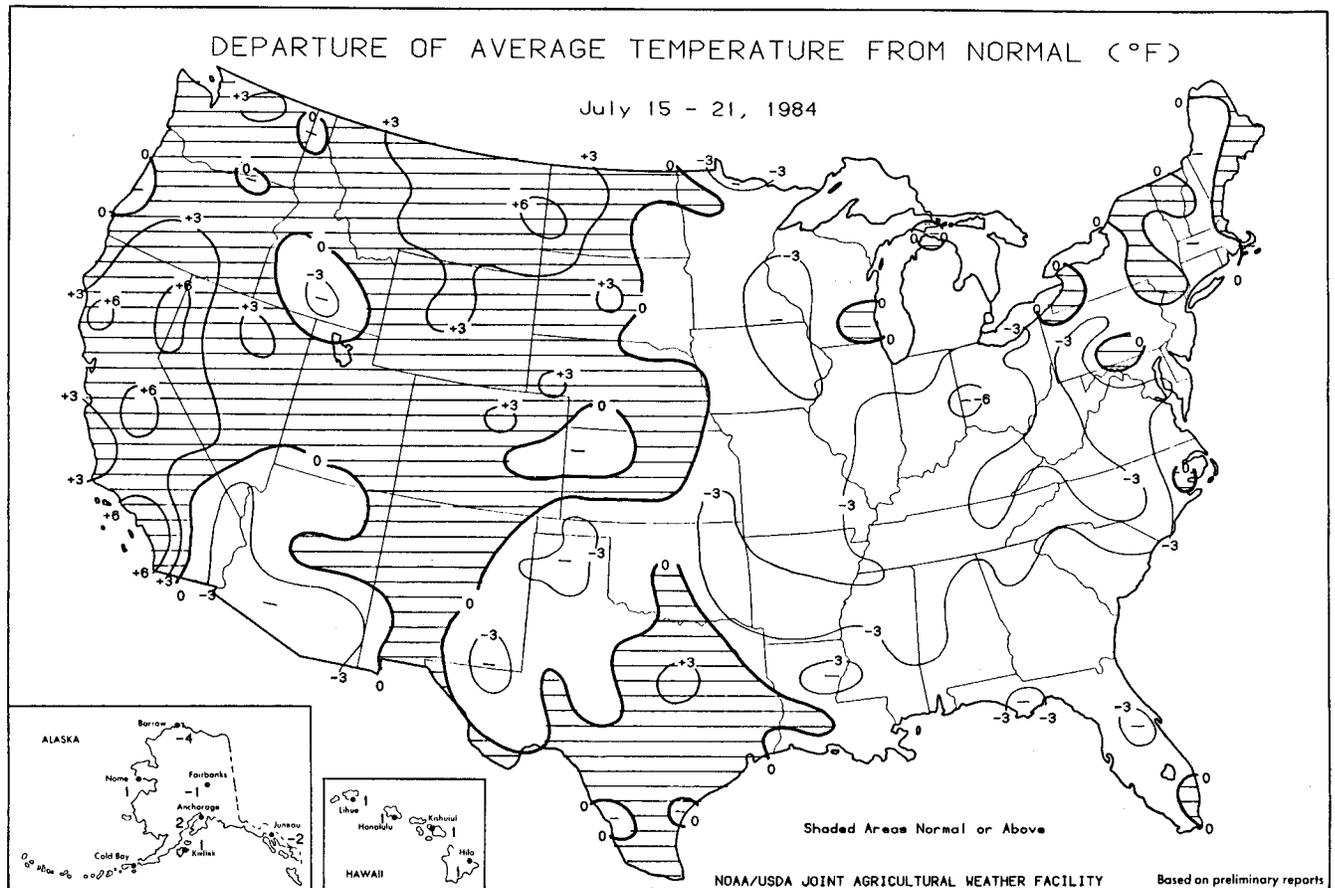
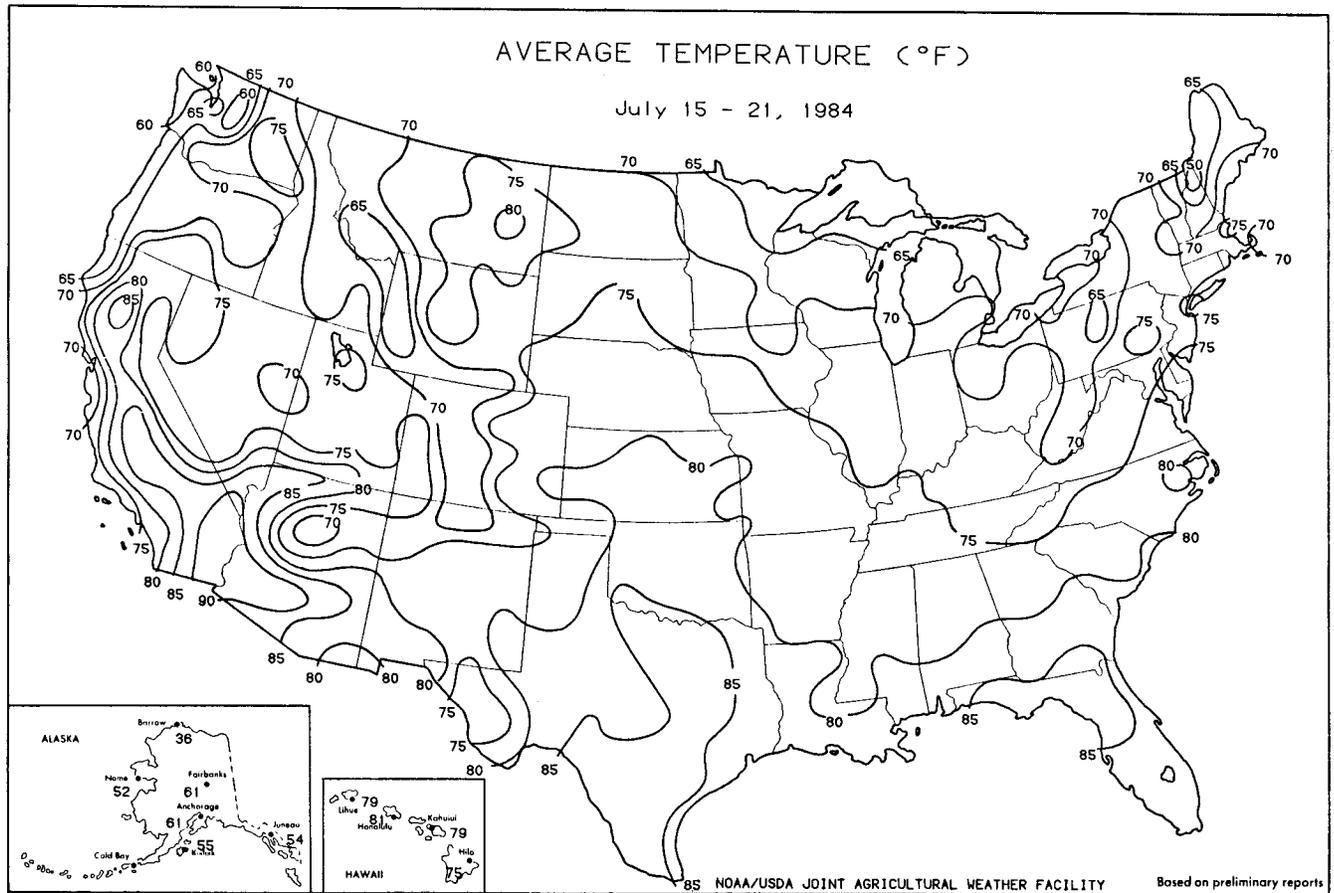
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Weather Data for the Week Ending JULY 21, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE June 3	PCT. NORMAL SINCE June 3	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	52 AND BELOW	PRECIPITATION	
																		.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	88	68	92	59	78	-2	.4	-.9	.4	4.7	68	28.9	89	93	46	1	0	2	0
MORILE	89	71	92	69	80	-2	.6	-1.2	.5	4.9	70	27.5	77	87	51	4	0	1	1
MONTGOMERY	90	71	92	68	80	-2	.6	-.5	.3	4.7	72	27.1	94	94	50	4	0	3	0
AK ANCHORAGE	65	56	71	50	61	2	.7	-.2	.7	2.4	104	6.5	127	70	50	0	0	1	0
BARROW	39	32	45	30	36	-4	.2	0	.2	.4	50	1.2	67	94	67	0	5	1	0
FAIRBANKS	68	54	78	49	61	-1	1.0	.6	.9	1.8	77	5.2	113	94	62	0	0	4	1
JUNEAU	58	49	61	46	54	-2	1.5	.6	.7	7.8	144	28.3	128	98	73	0	0	6	1
KODIAK	59	50	66	48	55	1	.2	-.8	.1	5.9	109	42.7	117	97	75	0	0	4	0
NOHE	57	47	65	43	52	1	.6	-.1	.3	2.5	100	4.9	91	95	74	0	0	4	0
AZ PHOENIX	101	78	106	69	89	-4	2.0	1.8	1.5	2.5	157	3.9	139	75	74	7	0	3	1
PRESCOTT	85	64	88	61	74	0	.7	-.1	.4	1.9	73	2.2	27	69	31	0	0	3	0
TUCSON	94	69	96	67	81	-5	1.5	-.8	.5	3.6	180	4.6	118	81	34	6	0	5	0
YUMA	99	81	103	79	90	-4	1.7	-.1	.7	.3	300	1.2	86	75	40	7	0	0	0
AR FORT SMITH	91	67	98	62	79	-3	.8	-.1	.7	5.2	92	19.5	87	95	30	5	0	2	1
LITTLE ROCK	89	68	98	64	79	-3	1.7	1.0	1.2	3.9	75	26.0	95	88	50	2	0	2	1
CA BAKERSFIELD	101	77	105	74	89	4	0	0	0	0	+100	1.2	29	50	23	7	0	0	0
EUREKA	64	52	72	46	58	2	0	0	0	.6	120	16.6	74	90	66	0	0	0	0
FRESNO	102	77	106	72	89	8	0	0	0	.2	+100	2.0	29	47	21	7	0	0	0
LOS ANGELES	80	68	86	67	74	5	0	0	0	0	+100	1.7	20	84	55	0	0	0	0
RED BLUFF	99	74	108	67	87	4	0	0	0	.1	20	4.2	32	62	26	6	0	0	0
SACRAMENTO	92	65	98	56	79	3	0	0	0	.1	100	3.0	28	72	28	5	0	0	0
SAN DIEGO	84	74	90	73	79	0	0	0	0	0	+100	1.2	19	87	55	1	0	1	0
SAN FRANCISCO	79	59	85	55	69	7	0	0	0	0	0	4.0	31	85	45	0	0	0	0
CO DENVER	92	61	97	58	77	1	.2	-.3	-.1	1.4	48	6.9	73	66	19	6	0	3	0
GRAND JUNCTION	96	64	98	60	80	0	0	0	0	1.1	257	5.5	145	54	19	7	0	0	0
PUEBLO	94	61	100	57	77	0	1.2	-.8	1.1	2.5	114	6.2	103	81	23	6	0	2	1
CT BRIDGEPORT	81	66	89	61	74	-1	2.6	1.9	.9	7.7	160	30.4	140	86	58	0	0	3	3
HARTFORD	83	62	93	55	72	-2	1.0	.3	.6	4.7	90	11.9	136	93	48	1	0	1	1
DC WASHINGTON	84	69	90	66	77	-2	1.9	1.0	1.2	5.9	100	24.6	121	86	58	1	0	3	2
FL APALACHICOLA	83	72	88	69	78	-4	7.4	5.7	2.0	12.4	129	36.7	143	89	73	0	0	4	2
DAYTONA BEACH	89	71	95	66	80	-1	3.0	1.8	1.5	8.4	87	25.9	112	87	56	3	0	4	2
JACKSONVILLE	87	71	92	69	79	-2	2.6	1.1	1.4	8.8	92	25.0	95	85	2	0	4	2	
KEY WEST	87	79	88	76	83	-2	.7	0	.5	9.3	127	25.8	153	80	63	0	0	4	1
MIAMI	89	75	90	73	82	-1	.6	-.7	.2	11.3	96	34.0	124	91	58	3	0	4	0
ORLANDO	89	72	90	70	81	-2	1.7	0	1.5	9.5	77	25.6	100	100	62	4	0	4	1
TALLAHASSEE	86	71	92	71	70	-2	1.9	-.2	.9	9.6	77	40.8	114	97	68	2	0	4	2
TAMPA	87	75	89	73	81	-1	.4	-1.3	.3	6.9	69	17.8	79	87	61	0	0	2	0
WEST PALM BEACH	88	74	91	71	81	-1	2.9	1.6	2.3	12.0	103	36.9	129	98	67	1	0	4	2
GA ATLANTA	84	69	86	66	77	-2	3.5	2.4	1.6	7.4	112	37.1	126	92	58	0	0	6	2
AUGUSTA	80	71	96	67	80	-1	1.5	.5	1.3	4.8	73	33.2	128	87	54	1	0	3	1
MACON	90	74	95	71	82	0	1.6	.5	1.2	6.0	90	28.9	105	90	59	4	0	3	1
SAVANNAH	87	72	92	70	80	-1	3.5	1.8	1.8	6.2	60	32.6	119	94	61	3	0	5	3
HI HILO	82	67	84	65	75	-1	2.4	.4	1.8	8.3	74	50.3	72	87	58	0	0	5	1
HONOLULU	89	73	90	71	81	1	.2	0	.1	.7	25	5.0	77	93	44	6	0	1	0
KAHULUI	89	69	94	64	79	1	0	0	0	0	0	5.4	43	70	22	0	0	1	0
LIHUE	85	75	85	73	80	1	.4	-.1	.2	1.9	70	9.8	62	82	59	0	0	4	0
ID BOISE	91	59	96	53	75	-1	0	0	0	1.4	140	7.3	99	58	18	4	0	0	0
LEWISTON	92	61	101	55	76	1	0	-.1	0	1.6	94	6.9	93	53	14	5	0	0	0
POCATELLO	88	53	98	46	71	-1	.2	-.2	.2	1.5	125	7.6	119	63	23	4	0	1	0
IL CHICAGO	83	59	89	54	71	-2	1.7	-.9	1.7	4.9	77	19.0	103	90	43	0	0	1	1
MOLINE	84	62	90	56	73	-2	.5	-.6	.3	6.9	92	21.4	103	96	47	1	0	3	0
PEORIA	83	63	88	57	73	-2	.9	0	.7	6.4	100	23.3	119	96	51	0	0	2	1
QUINCY	85	64	92	57	75	-2	2.0	1.1	1.7	7.2	107	23.3	115	85	45	1	0	2	1
ROCKFORD	82	59	88	52	71	-3	.2	-.8	.1	6.5	88	17.5	88	95	47	0	0	2	0
SPRINGFIELD	84	64	89	56	74	-3	1.1	-.4	1.1	5.2	88	23.6	123	90	47	0	0	2	1
IN EVANSVILLE	87	63	91	56	75	-4	0	-.9	0	4.7	81	24.1	99	86	41	2	0	0	0
FORT WAYNE	82	59	88	50	71	-3	.2	-.6	.1	2.5	43	16.7	86	91	47	0	0	3	0
INDIANAPOLIS	82	59	86	50	70	-5	.3	-.7	.2	3.5	51	19.1	86	90	52	0	0	3	0
SOUTH BEND	81	63	84	56	72	-1	.1	-.7	0	4.7	73	17.4	85	74	40	0	0	2	0
TA DES MOINES	87	64	93	57	76	-1	.2	-.5	.1	11.5	102	27.0	156	87	45	1	0	2	0
SIOUX CITY	88	63	94	56	75	-1	.9	-.1	.7	8.7	138	24.2	166	94	44	1	0	3	1
WATERLOO	83	58	88	50	70	-3	1.0	-.1	1.0	10.0	139	22.5	122	95	40	0	0	1	1
KS CONCORDIA	94	68	101	62	81	2	.1	-.7	.1	4.1	65	18.2	119	75	33	5	0	1	0
DONG CITY	96	70	101	68	83	3	.4	-.3	.3	2.5	51	12.1	97	72	28	7	0	3	0
GOODLAND	91	59	96	53	75	-2	.6	0	.3	5.1	113	14.2	138	90	30	4	0	3	0
TOPEKA	90	65	94	57	78	-1	.5	-.3	.5	11.2	149	24.9	140	86	43	4	0	1	1
WICHITA	95	68	100	62	81	-1	.3	-.5	.3	2.6	41	16.7	106	76	28	6	0	1	0
KY ROWLING GREEN	85	63	88	55	74	-4	1.6	-.6	1.5	6.3	88	35.5	122	90	40	0	0	2	1
LEXINGTON	83	62	85	53	73	-3	.3	-.9	.3	5.3	73	24.9	93	91	48	0	0	2	0
LOUISVILLE	85	64	88	59	75	-4	0	-.9	0	6.1	98	25.0	99	78	46	0	0	0	0
LA ALEXANDRIA	89	71	91	64	80	-3	0	-.1	0	8.8	126	36.2	108	90					

Weather Data for the Week Ending JULY 21, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE June 3	PCT. NORMAL SINCE June 3	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	92	71	95	64	82	-1	.4	.4	.4	5.2	90	24.7	94	51	7	0	0	0	0
ME CARIBOU	76	58	80	53	67	1	.6	.3	.2	7.7	133	23.2	131	94	52	0	0	5	0
ME PORTLAND	81	61	87	58	71	2	.7	.0	.5	5.8	118	34.5	151	86	56	0	0	3	1
MD BALTIMORE	84	64	90	60	74	-3	1.5	.6	1.1	4.2	70	23.0	104	84	51	1	0	3	1
MD SALESBURY	84	69	89	63	76	-1	2.2	1.1	1.3	8.5	137	33.1	142	99	65	0	0	3	2
MA BOSTON	85	67	98	65	76	2	1.6	1.0	1.2	4.8	109	36.6	157	91	56	1	0	3	1
MA CHATHAM	76	61	81	57	68	0	1.3	.7	.7	8.2	184	32.9	135	—	—	0	0	3	1
MI ALPENA	78	52	82	49	65	-1	1.0	.0	.5	5.1	98	14.0	90	97	46	0	0	2	1
MI DETROIT	83	57	89	48	70	-2	.1	.3	.1	1.1	21	13.1	76	83	41	0	0	1	0
MI FLINT	82	59	87	50	71	0	1.3	.7	1.3	3.3	66	13.9	89	88	42	0	0	2	1
MI GRAND RAPIDS	81	60	85	50	70	-2	.1	.5	.1	2.6	45	14.3	80	93	49	0	0	1	0
MI HOUGHTON LAKE	77	59	83	52	68	1	.1	.5	.1	6.0	122	15.0	103	84	43	0	0	2	0
MI LANSING	81	59	86	50	70	-1	.8	.0	.8	3.0	58	13.6	86	91	45	0	0	1	0
MI MARQUETTE	75	51	83	44	63	-2	.3	.4	.2	4.2	72	16.5	83	92	48	0	0	2	0
MI MUSKOGON	78	61	84	54	69	-1	.1	.5	.7	3.8	90	15.8	96	88	52	0	0	2	0
MI SAULT STE. MARIE	75	50	84	45	63	-1	1.1	.4	.7	5.6	106	14.2	88	96	58	0	0	4	1
MN ALEXANDRIA	81	59	88	53	70	-1	.2	.4	.2	8.6	146	16.6	122	88	43	0	0	1	0
MN DULUTH	77	51	84	43	64	-2	.2	.7	.2	6.4	100	12.8	84	86	46	0	0	2	0
MN INT'L FALLS	76	51	82	42	63	-3	.2	.7	.2	8.7	138	12.5	102	94	48	0	0	2	0
MN MINNEAPOLIS	82	59	90	52	70	-3	1.1	.4	1.1	10.2	165	20.1	142	88	43	1	0	2	1
MN ROCHESTER	78	55	84	48	66	-5	.4	.4	.4	6.8	108	16.6	111	91	44	0	0	1	0
MS GREENWOOD	88	69	91	64	78	-4	1.0	.1	1.0	3.7	59	27.3	85	94	52	2	0	1	1
MS JACKSON	91	68	94	61	80	-2	.7	.0	.7	5.2	91	27.0	86	95	43	5	0	1	0
MS MERIDIAN	88	67	90	64	78	-4	.7	.0	.7	6.1	86	28.4	88	93	50	2	0	1	0
MO CAPT GIRARDEAU	89	66	93	56	78	—	.7	.6	.2	2.4	41	19.5	77	93	45	3	0	1	0
MO COLUMBIA	88	63	95	57	76	-2	.7	.8	.7	12.2	200	31.0	148	90	44	3	0	1	0
MO KANSAS CITY	88	66	93	58	77	-2	.2	.8	.2	8.4	114	24.0	127	71	34	2	0	1	0
MO SAINT LOUIS	89	67	93	59	78	-1	.1	.7	.1	3.4	57	24.4	121	89	37	3	0	1	0
MO SPRINGFIELD	90	63	96	53	76	-2	.7	.8	.7	5.6	81	22.5	101	87	41	4	0	0	0
MT BILLINGS	91	63	95	60	77	4	.7	.1	.7	1.7	71	6.3	68	61	19	6	0	1	0
MT GLASGOW	92	59	98	50	76	5	.7	.3	.7	1.9	56	4.1	50	46	13	6	0	0	0
MT GREAT FALLS	90	56	96	50	73	3	0	.2	0	2.5	78	7.3	73	51	15	3	0	0	0
MT HAVER	92	54	94	50	73	3	0	.3	0	.6	21	3.3	48	52	13	5	0	0	0
MT HELENA	87	55	94	49	71	2	.7	.2	.7	2.3	88	5.6	80	58	19	3	0	1	0
MT KALISPELL	86	45	91	42	66	0	.7	.1	.7	1.7	68	7.5	83	80	18	3	0	0	0
MT MILES CITY	96	64	100	56	80	4	.7	.3	.7	3.7	100	5.9	67	55	15	6	0	1	0
MT MISSOULA	88	50	94	45	69	1	0	.2	0	1.4	58	8.2	90	77	10	4	0	0	0
NE GRAND ISLAND	92	65	99	59	78	1	.7	.6	.7	5.7	108	24.3	169	79	37	4	0	1	0
NE LINCOLN	93	64	98	58	78	0	.3	.4	.3	6.4	114	26.7	160	82	31	6	0	1	0
NE NORFOLK	91	63	96	57	77	1	.6	.1	.6	6.7	105	23.6	162	90	39	4	0	1	1
NE NORTH PLATTE	91	59	96	55	75	0	.7	.6	.7	5.2	93	15.5	124	70	28	4	0	0	0
NE OMAHA	89	64	93	60	76	0	.4	.4	.2	7.7	122	23.5	141	90	39	4	0	3	0
NE SCOTTSBLUFF	91	60	96	55	76	1	.6	.2	.5	2.7	64	10.3	104	80	28	4	0	3	0
NE VALENTINE	90	60	99	52	75	0	.3	.2	.3	5.2	116	12.0	114	67	29	5	0	2	0
NV FLY	87	50	96	44	68	0	.8	.7	.5	1.6	123	4.8	86	82	12	4	0	4	0
NV LAS VEGAS	99	78	106	71	88	-3	.3	.2	.2	.6	200	.6	32	63	28	7	0	2	0
NV RENO	93	59	97	54	76	6	.7	.1	.7	.4	67	1.6	74	69	20	6	0	0	0
NV WINNEMUCA	93	56	100	50	75	2	.1	.1	.1	1.6	133	6.7	134	63	17	6	0	3	0
NH CONCORD	81	58	91	51	69	-1	.7	.0	.7	5.8	121	30.0	143	93	54	1	0	1	1
NJ ATLANTIC CITY	83	66	90	60	75	0	2.3	1.4	1.3	5.7	112	29.4	134	87	50	1	0	3	2
NM ALBUQUERQUE	93	65	97	60	79	0	.1	.2	.1	1.5	125	3.1	103	71	21	5	0	2	0
NM CLOVIS	88	67	91	64	77	-1	1.0	.4	.4	7.7	179	12.6	150	72	37	3	0	4	0
NM ROSWELL	91	69	96	64	80	-2	0	.3	0	4.0	235	7.0	194	66	27	5	0	0	0
NY ALBANY	80	59	88	52	69	-3	.2	.4	.2	4.8	94	24.4	131	98	59	0	0	2	0
NY BINGHAMTON	79	60	86	56	70	1	.2	.6	.1	6.4	108	24.8	125	88	47	0	0	2	0
NY BUFFALO	81	64	86	58	72	1	.5	.1	.4	8.0	186	21.8	121	79	40	0	0	2	0
NY NEW YORK	80	68	87	64	74	-3	1.2	.4	.6	11.2	211	36.6	163	92	52	0	0	3	2
NY ROCHESTER	81	61	88	57	71	-1	.3	.3	.2	3.0	71	18.4	113	91	48	0	0	3	0
NY SYRACUSE	80	59	87	56	69	-2	.3	.6	.3	4.9	82	19.5	95	95	53	0	0	1	0
NC ASHEVILLE	79	61	81	57	70	-3	2.0	1.0	1.4	7.0	100	30.9	116	100	69	0	0	3	1
NC CHARLOTTE	84	68	89	66	76	-3	2.0	1.1	1.2	6.9	117	31.9	130	87	52	0	0	4	1
NC GREENSBORO	83	66	89	60	75	-3	2.7	1.7	1.4	9.6	143	32.7	139	96	58	0	0	2	2
NC HATTERAS	83	72	86	68	77	-1	2.4	1.2	1.1	6.1	81	26.7	90	84	73	0	0	6	1
NC NEW BERN	87	74	92	72	81	1	2.4	.8	.7	9.5	100	36.2	131	86	64	2	0	5	2
NC RALEIGH	83	66	87	64	75	-3	3.4	2.4	1.9	9.8	148	35.7	153	99	65	0	0	7	2
NC WILMINGTON	84	72	89	68	78	-3	2.6	.9	1.3	5.6	53	27.2	97	97	68	0	0	5	2
ND BISMARCK	88	55	94	42	71	0	.1	.4	.1	3.4	82	9.9	105	81	28	3	0	1	0
ND FARGO	82	56	90	49	69	-2	.4	.4	.4	6.0	111	11.3	104	82	39	1	0	1	0
ND GRAND FORKS	82	57	87	52	70	1	.7	.6	.7	2.8	163	12.3	127	83	40	0	0	2	0
ND WILLISTON	91	58	100	47	74	4	.5	.1	.4	2.8	74	6.4	78	68	17	4	0	2	0
OH AKRON-CANTON	81	60	86	53	70	-2	.2	.7	.1	3.4	59	18.9	94	80	43	0	0	3	0
OH CINCINNATI	83	59	86	52	71	-5	.1	.9	.7	3.6	52	19.9	84	80	43	0	0	2	0
OH CLEVELAND	79	56	84	51	68	-4	.1	.7	.7	5.4	97	22.7	115	84	44	0	0	2	0
OH COLUMBUS	81	58	85	51	70	-4	.7	.9	.7	3.8	58	18.6	86	86	41	0	0	1	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending JULY 21, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUNE 3	PCT. NORMAL SINCE JUNE 3	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	79	59	83	54	69	-6	.2	-.6	.2	3.7	62	10.1	92	70	60	0	0	0	0	
TOLEDO	81	57	87	50	69	-3	.1	-.7	.1	2.2	40	16.4	93	92	47	0	0	0	0	
YOUNGSTOWN	81	58	86	53	69	-1	.5	-.4	.4	6.3	105	20.9	102	86	43	0	0	0	0	
OKLAHOMA CITY	94	70	103	64	82	0	T	-.7	T	3.7	65	13.3	74	65	31	6	0	0	0	
THIISA	93	70	102	64	81	-3	.4	-.4	.2	2.2	32	26.6	122	70	32	6	0	0	0	
OR ASTORIA	69	52	78	47	60	0	0	0	0	3.8	136	35.1	96	86	59	0	0	0	0	
BIJNS	86	57	92	48	69	-1	T	-.1	T	.9	90	5.6	165	71	1	1	1	0	0	
MEDFORD	94	57	103	52	76	3	T	0	T	.7	88	6.8	65	72	25	5	0	0	0	
PENDLETON	91	58	99	49	75	0	0	-.1	0	1.1	122	8.1	117	54	15	5	0	0	0	
PORTLAND	83	57	93	50	70	2	0	-.1	0	4.1	256	19.9	100	76	34	2	0	0	0	
SALEM	86	50	97	45	68	1	0	-.1	0	3.9	260	22.9	106	87	29	3	0	0	0	
PA ALLENTOWN	82	65	88	58	74	0	2.3	1.4	1.3	11.6	193	35.4	151	90	48	0	0	0	0	
ERTE	79	62	86	56	71	1	.2	-.5	.2	6.1	107	20.7	103	80	52	0	0	0	0	
HARRISBURG	87	66	94	60	77	1	.7	0	.5	9.8	175	32.5	154	11	1	3	0	0	0	
PHILADELPHIA	87	65	88	60	74	-4	2.0	1.2	.7	7.0	113	29.4	131	90	56	0	0	0	0	
PITTSBURGH	81	58	85	52	69	-3	.1	-.8	.1	4.3	75	19.3	92	88	43	0	0	0	0	
SCRANTON	87	63	89	58	73	1	1.2	.4	.8	8.8	160	26.4	163	83	49	0	0	0	0	
RT PROVIDENCE	80	65	92	61	77	-1	2.6	1.9	1.2	6.8	145	36.5	151	90	57	1	0	0	0	
SC CHARLESTON	86	77	91	70	79	-2	2.8	1.2	1.1	6.7	60	33.7	120	92	62	3	0	0	0	
COLUMBIA	87	70	92	68	78	-3	3.5	2.3	1.5	11.8	151	34.4	122	98	61	3	0	0	0	
FLORENCE	86	69	90	67	78	-1	1.9	.6	1.3	8.8	105	31.1	126	92	61	1	0	0	0	
GREENVILLE	84	70	88	67	77	-1	5.8	4.9	2.8	12.9	179	42.0	160	91	63	0	0	0	0	
SD ABERDEEN	82	59	89	51	71	-2	.3	-.2	.3	7.3	159	14.0	107	80	46	0	0	0	0	
HURON	86	61	93	53	73	-2	.3	-.2	.3	11.9	268	20.7	180	94	46	1	0	0	0	
RAPID CITY	87	60	93	52	73	0	T	-.4	T	6.1	133	11.9	108	77	33	4	0	0	0	
STOIX FALLS	86	60	93	52	73	-1	.4	-.1	.4	9.5	176	21.3	160	93	44	2	0	0	0	
TN CHATTANOOGA	87	66	92	58	76	-3	1.0	-.1	.6	6.8	106	31.1	102	94	53	1	0	0	0	
KNOXVILLE	83	63	86	56	73	-5	3.9	2.9	2.2	11.5	172	35.5	127	100	59	0	0	0	0	
MEMPHIS	88	71	95	65	80	-3	.8	-.2	.5	4.1	65	30.6	99	88	60	2	0	0	0	
NASHVILLE	84	67	91	60	76	-4	2.6	1.7	1.2	8.3	138	35.4	123	90	52	1	0	0	0	
TX ARTIFINE	96	73	100	65	85	1	T	-.4	T	2.0	56	4.6	38	64	25	7	0	0	0	
AMARILLO	90	62	94	56	76	-3	T	-.5	T	2.6	152	10.7	103	76	33	4	0	0	0	
AUSTIN	100	73	105	71	87	2	.4	0	.4	2.5	61	8.9	52	82	20	7	0	0	0	
BEAUMONT	89	74	91	71	82	-1	.9	-.4	.9	3.9	53	27.5	107	100	59	3	0	0	0	
BROWNSVILLE	94	75	96	73	84	0	.4	-.1	.4	3.3	94	15.0	163	92	47	7	0	0	0	
CORPUS CHRISTI	94	72	99	70	83	-2	T	-.4	T	.3	7	9.2	68	92	44	7	0	0	0	
DEL RIO	97	76	99	73	87	1	0	-.4	0	.4	14	4.7	57	62	26	7	0	0	0	
EL PASO	96	70	99	68	83	1	.1	-.3	.1	3.3	194	4.5	145	61	23	7	0	0	0	
FORT WORTH	99	75	104	71	87	0	0	-.4	0	3.1	82	16.3	96	61	27	7	0	0	0	
GALVESTON	90	77	92	71	84	1	.3	-.6	.3	1.4	24	11.9	64	85	63	4	0	0	0	
HOUSTON	94	73	97	70	84	1	1.0	-.2	1.0	4.2	68	18.5	77	90	60	7	0	0	0	
LUBBOCK	91	65	96	60	78	-2	.1	-.4	.1	4.8	112	5.8	62	76	33	5	0	0	0	
MIDLAND	94	69	98	66	82	0	0	-.4	0	2.9	116	6.8	103	63	25	7	0	0	0	
SAN ANGELO	96	70	99	67	83	-1	T	-.3	T	3.2	119	7.5	81	74	31	7	0	0	0	
SAN ANTONIO	98	75	101	73	87	2	T	-.4	T	1.5	34	9.6	63	75	28	7	0	0	0	
VICTORIA	98	77	104	74	87	2	.1	-.4	.1	2.3	38	12.7	68	87	39	7	0	0	0	
WACO	102	75	104	65	89	3	0	-.4	0	1.8	51	11.2	63	75	26	7	0	0	0	
WICHITA FALLS	99	72	103	63	86	-1	.1	-.3	.1	2.1	53	6.7	44	65	22	7	0	0	0	
UT RIAMDING	90	59	94	57	75	1	.7	.4	.5	1.6	145	4.0	75	72	31	4	0	0	0	
VEDAR CITY	91	59	98	56	75	0	.4	-.1	.3	1.1	100	5.6	104	81	25	4	0	0	0	
SALT LAKE CITY	94	67	100	60	80	2	.5	.4	.5	2.8	187	11.5	121	60	22	6	0	0	0	
VT BURLINGTON	81	63	88	56	72	2	1.3	.5	1.0	6.4	110	21.5	126	78	43	0	0	0	0	
VA NORFOLK	84	70	89	67	77	-2	2.0	.8	1.0	5.9	91	32.2	138	91	63	0	0	0	0	
RICHMOND	85	67	90	62	76	-2	.9	-.3	.5	4.0	59	31.4	139	94	63	1	0	0	0	
ROANOKE	83	63	81	54	73	-3	1.1	-.1	.3	4.4	80	23.6	108	95	53	1	0	0	0	
WA COLVILLE	86	52	92	47	69	1	0	0	0	6.0	333	16.4	178	69	25	3	0	0	0	
QUILLAYUT	70	47	83	47	59	0	0	-.5	0	3.3	75	64.6	118	95	68	0	0	0	0	
SEATTLE-TACOMA	77	55	87	51	66	1	0	-.1	0	2.8	156	20.4	106	76	36	0	0	0	0	
SPOKANE	87	54	95	47	70	0	0	-.1	0	2.4	150	10.0	109	66	18	3	0	0	0	
YAKIMA	90	54	98	42	72	1	0	0	0	1.4	280	5.0	122	67	19	4	0	0	0	
WV BECKLEY	77	58	83	50	68	-2	2.1	1.1	1.2	10.4	155	26.3	107	100	60	0	0	0	0	
CHARLESTON	85	62	90	54	73	-2	.4	-.9	.2	6.3	93	21.1	88	93	46	1	0	0	0	
HUNTINGTON	85	61	89	53	73	-3	.3	-.8	.2	4.1	64	19.4	83	95	47	0	0	0	0	
PARKERSBURG	85	62	90	55	73	-2	.3	-.8	.1	2.3	30	15.9	62	91	38	1	0	0	0	
WI CRRN BAY	79	57	83	54	68	-2	.3	-.4	.2	8.1	156	17.1	116	92	66	0	0	0	0	
LA CROSSE	82	58	89	50	70	-3	.8	-.1	.8	10.2	152	19.4	118	94	43	0	0	0	0	
MADISON	82	60	87	54	71	0	.1	-.7	.1	8.9	144	18.7	114	86	45	0	0	0	0	
MILWAUKEE	81	63	87	59	72	1	.2	-.6	.1	7.5	127	20.5	121	79	47	0	0	0	0	
WAUSAU	78	57	84	52	68	-2	.1	-.7	.1	2.4	191	21.5	132	94	66	0	0	0	0	
WY CASPER	90	56	94	52	73	1	T	-.2	T	2.7	142	9.7	128	76	19	3	0	0	0	
CHEYENNE	84	55	89	49	70	0	.1	-.3	.1	2.6	81	10.2	115	85	29	0	0	0	0	
LANDER	92	61	97	58	76	5	.1	0	.1	1.6	94	8.4	95	57	20	5	0	0	0	
SHERIDAN	91	56	94	50	73	2	T	-.2	T	2.6	90	9.3	94	71	19	6	0	0	0	
PR SAN JUAN	88	75	90	73	82	0	.1	-.1	T	8.3	109	17.8	74	80	57	1	0	0	0	

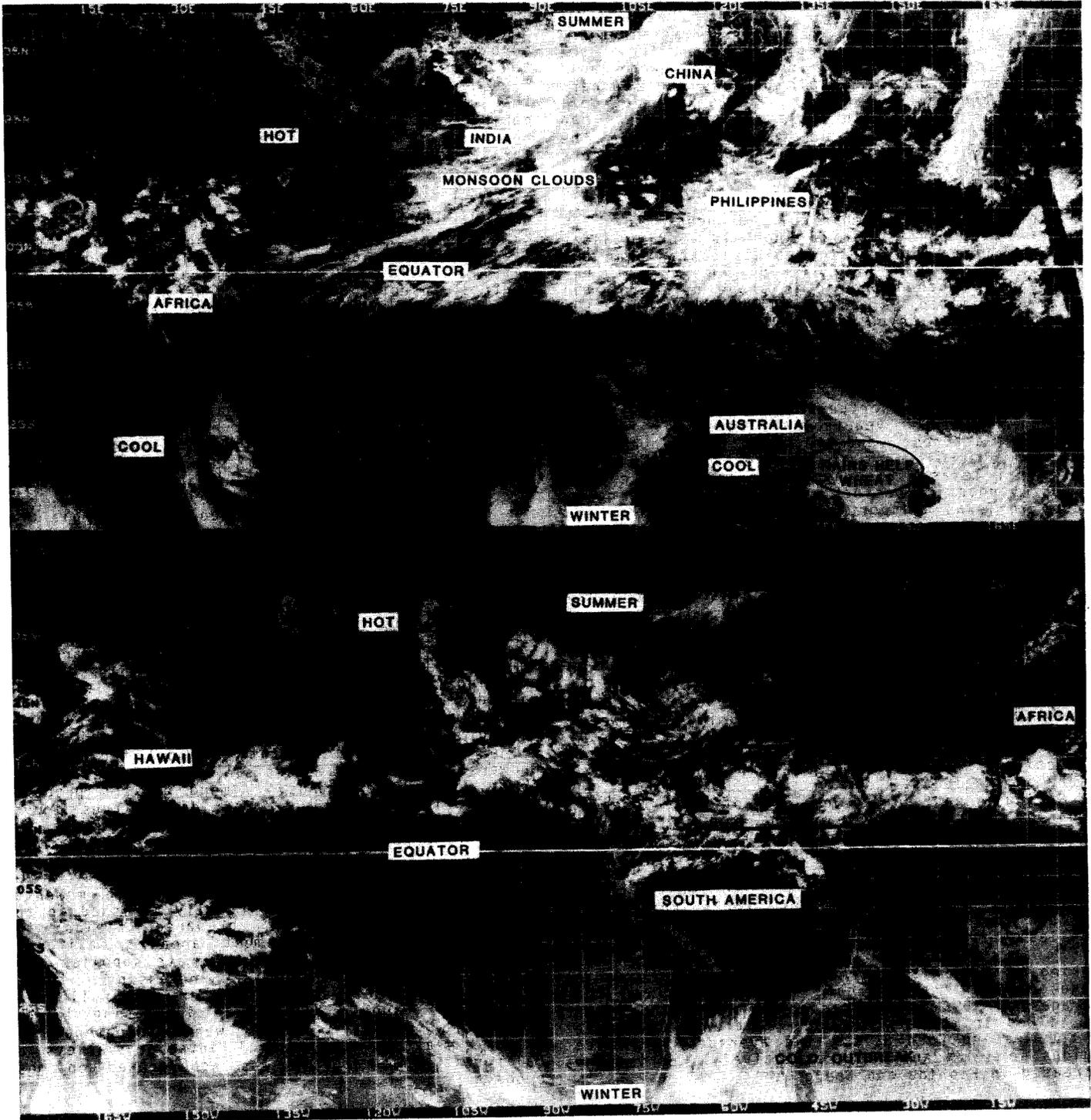
BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

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

LAST DATE OF DATA COLLECTION PERIOD IS 7-21-1984
ACCUMULATIONS ARE FROM JANUARY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK WEEK, WEEK WEEK, CUM CUM, CUM CUM, CUM CUM, CUM CUM, STATE CITY, CALL WEEK, WEEK WEEK, WEEK WEEK, CUM CUM, CUM CUM, CUM CUM, CUM CUM. Rows list various cities and their corresponding weather data points.

TROPICAL WEATHER



National Agricultural Summary

July 16 to 22

HIGHLIGHTS: Hot, dry weather continued stressing dryland crops and livestock across portions of the west, and caused some damage and accelerated maturity of most fruits and vegetables in California. Scattered showers replenished soil moisture across much of the East, but heavy rains slowed completion of small grain harvesting and planting of double-cropped soybeans from the Southeast northward. Open weather allowed rapid small grain and hay harvesting across the southern Corn Belt and central and northern Plains, but soil moisture was depleted in these areas. Farmers had less than 4 days suitable for fieldwork in the Southeast, while elsewhere in the Nation producers had 4 to 6 days available. Soil moisture supplies were short to mostly adequate, except adequate to surplus in States on the east coast.

Winter wheat combining advanced to 77% completion, 1 point ahead of normal. Spring wheat was 97% headed, 6 percentage points faster than the normal pace. Corn was silking on 28% of the acreage and reached the dough stage on 4% of the acreage. Limited harvesting got underway in the extreme South. Soybeans bloomed on 39% of the acreage and 7% of the fields were setting pods. Cotton squaring reached 82%, while 40% was setting bolls. Sorghum was 27% headed versus the 30% average. Harvesting of fruits and vegetables gained momentum in northern producing areas while planting of fall vegetables increased in the South. Pastures and ranges continued to deteriorate across most of the area from California to central Texas. Elsewhere, conditions were fair to mostly good. Livestock were rated fair to good, except in Texas and portions of the Southwest where hot, dry conditions continued to stress herds.

SMALL GRAINS: Warm, dry weather continued to advance small grain development across the Great Plains. Winter wheat combining in the 15 major producing States was 77% complete, 1 point ahead of average. However, South Dakota producers lagged their normal by 23 points. Other States trailing normal were Colorado, Illinois, Oregon, and Washington. Open weather permitted many hours of combining during the week. Producers in Ohio harvested 50% of their acreage during the week, while those in Nebraska combined 45%. In Colorado and Indiana, 44% and 35% was harvested this week, respectively. Harvesting was complete in Kansas, Oklahoma, and Texas.

Spring wheat headed on 97% of the acreage, compared with 95% last year, and the 91% average. Progress ranged from 94% headed in North Dakota to 100% in Montana and South Dakota.

CORN: Corn remained in fair to mostly good condition. Scattered showers replenished soil moisture in most major producing areas, but supplies were depleted across the southern Corn Belt. In the 17 major producing States, corn was silking on 28% of the acreage and reached the dough stage on 4% of the acreage. This compares with the averages of 39% and 6%, respectively. Stands were 34% silked in the eastern Corn Belt and 18% silked in the western Corn Belt. The averages for these regions were 45% and 31%, respectively. Harvesting increased in Florida and Georgia.

SOYBEANS: Moderate rainfall slowed the planting of double-cropped soybeans in the Delta States and Southeast. The crop continued in fair to mostly good condition with generally adequate moisture available for development. In the 18 major producing States, 39% of the acreage was blooming and 7% of the acreage showed evidence of pod set.

The average for this date is 42% blooming and 10% setting pods. Blooming ranged from 7% in South Carolina to 56% in Illinois. Thirteen percent of the acreage in Illinois, Iowa, and Louisiana has set pods.

SORGHUM: Sorghum was in fair to mostly good condition. However, some areas in South Dakota and the southern Plains showed signs of moisture stress. In the 7 major producing States, 27% of the acreage headed, equal to last year but 3 points behind normal. Heading was 64% finished in Texas, but had not begun in Nebraska and South Dakota. In Texas, harvesting began in the Blacklands. Statewide combining was 36% finished, 8 points ahead of schedule.

COTTON: In the 14 major cotton producing States, 82% of the crop was squaring and 40% was setting bolls. A year ago, 76% was squaring and 28% was setting bolls. Producers increased spraying to control insect populations. Harvesting began in the Coastal Bend and Rio Grande Valley of Texas. The crop was rated in fair to mostly good condition.

OTHER CROPS: Rice was in mostly good condition. In the 5 major producing States, 26% of the acreage had headed, compared with the 31% average. Progress ranged from none headed in California to 88% headed in Texas.

Texas dryland peanuts were stressed by dry conditions but irrigated stands showed good growth. Fields were blooming and pegging across the Southeast. The crop was rated mostly good.

Tobacco harvesting increased. The Georgia crop was 34% harvested, and the South Carolina crop was 30% harvested. The North Carolina flue-cured harvest was 11% finished, while the Virginia harvest was just beginning. Topping and sucker control continued active.

FRUITS AND NUTS: The peach harvest advanced to 85% completion in Georgia and 62% in South Carolina. Apple picking reached 14% completion, in Georgia, equaling the average. Sweet cherries were 40% picked in Michigan and tart cherry harvesting was 30% complete. California producers sprayed to control insects. Hot temperatures caused some damage and advanced maturity of most fruit crops. Growers harvested avocado's, table grapes, stone fruits, and some citrus. Almond growers prepared orchards for harvesting. Florida's citrus groves received abundant rain. The new crop fruit was sizing very well and healthy trees showed a lot of new growth.

VEGETABLES: Vegetable harvesting gained momentum in northern areas and was virtually finished in the extreme South. Farmers prepared fields for planting fall crops in most areas. California growers continued harvesting moderate supplies of a variety of vegetables. Processing tomato harvesting was active in the desert, in full swing in the San Jauquin Valley, and increasing in the Sacramento Valley. Crops were threatened by extreme heat in the central interior valleys of California and maturity was accelerated on most crops.

PASTURES AND LIVESTOCK: Pastures and ranges were in fair to mostly good condition, except in portions of California, Arizona, and Texas where conditions were poor to fair. Livestock were also rated fair to poor in these areas, and fair to good elsewhere across in Nation.

CROP PROGRESS

FOR WEEK ENDING JULY 22

CORN % SILKING			CORN % DOUGH			SOYBEANS % BLOOMING			SOYBEANS % SETTING PODS						
	1984	1983	AVG.		1984	1983	AVG.		1984	1983	AVG.				
COLO	14	5	5	COLO	0	0	0	ALA	26	30	31	ALA	6	4	10
GA	96	98	98	GA	83	83	92	ARK	21	9	18	ARK	5	3	7
ILL	55	47	66	ILL	4	3	12	GA	27	31	39	GA	8	8	13
IND	30	25	40	IND	0	0	0	ILL	56	61	64	ILL	13	15	21
IOWA	20	24	39	IOWA	0	0	0	IND	50	50	50	IND	5	3	7
KANS	45	20	30	KANS	3	1	5	IOWA	50	63	57	IOWA	13	13	16
KY	50	27	58	KY	0	0	4	KANS	35	20	20	KANS	4	4	5
MICH	15	8	11	MICH	0	0	0	KY	18	10	23	KY	0	0	2
MINN	11	4	16	MINN	0	0	0	LA	31	23	36	LA	13	8	13
MO	41	31	47	MO	0	0	4	MICH	35	30	32	MICH	2	1	2
NEBR	15	20	35	NEBR	0	0	1	MINN	51	49	51	MINN	2	1	4
N C	87	80	86	N C	48	53	60	MISS	35	11	34	MISS	5	0	10
OHIO	20	20	45	OHIO	0	0	0	MO	34	34	32	MO	5	6	6
PA	0	0	0	PA	0	0	0	NEBR	50	65	45	NEBR	8	5	10
S DAK	6	4	17	S DAK	0	0	0	N C	16	11	16	N C	0	0	0
VA	57	61	71	VA	21	18	24	OHIO	40	45	50	OHIO	5	2	10
WIS	10	10	21	WIS	0	0	0	S C	7	10	18	S C	1	0	0
								TENN	23	19	25	TENN	3	2	5
17 STATES	28	25	39	17 STATES	4	4	6	18 STATES	39	40	42	18 STATES	7	6	10

THESE 17 STATES PRODUCED 90% OF THE 1983 CORN CROP.

THESE 17 STATES PRODUCED 90% OF THE 1983 CORN CROP.

THESE 18 STATES PRODUCED 93% OF THE 1983 SOYBEAN CROP.

THESE 18 STATES PRODUCED 93% OF THE 1983 SOYBEAN CROP.

RICE % HEADED			
	1984	1983	AVG.
ARK	2	7	9
CALIF	0	0	7
LA	59	45	57
MISS	17	3	15
TEX	88	87	95
5 STATES	26	25	31

THESE 5 STATES PRODUCED 98% OF THE 1983 RICE CROP.

SORGHUM % HEADED			
	1984	1983	AVG.
COLO	2	1	2
KANS	5	1	5
MO	33	26	24
NEBR	0	3	10
OKLA	10	10	15
S DAK	0	0	4
TEX	64	68	70
7 STATES	27	27	30

THESE 7 STATES PRODUCED 85% OF THE 1983 SORGHUM CROP.

SPRING WHEAT % HEADED			
	1984	1983	AVG.
IDAHO	98	100	97
MINN	98	98	94
MONT	100	85	85
N D	94	95	88
S DAK	100	100	100
5 STATES	97	95	91

THESE 5 STATES PRODUCED 94% OF THE 1983 SPRING WHEAT CROP.

COTTON % SQUARING			
	1984	1983	AVG.
ALA	98	85	90
ARIZ	100	99	99
ARK	99	96	98
CALIF	96	85	94
GA	94	99	99
LA	95	76	92
MISS	99	95	97
MO	99	65	89
N MEX	98	79	90
N C	60	64	82
OKLA	25	25	40
S C	100	100	100
TENN	97	87	90
TEX	74	69	77
14 STATES	82	76	83

THESE 14 STATES PRODUCED 99% OF THE 1983 COTTON CROP.

COTTON % SETTING BOLLS			
	1984	1983	AVG.
ALA	53	30	52
ARIZ	80	90	92
ARK	66	56	71
CALIF	70	40	41
GA	62	76	88
LA	61	32	58
MISS	48	28	78
MO	46	5	45
N MEX	45	27	43
N C	43	30	51
OKLA	0	0	0
S C	80	88	88
TENN	25	10	30
TEX	26	19	31
14 STATES	40	28	43

THESE 14 STATES PRODUCED 99% OF THE 1983 COTTON CROP.

WINTER WHEAT % HARVESTED			
	1984	1983	AVG.
CALIF	99	97	95
COLO	62	46	66
IDAHO	2	2	2
ILL	98	96	100
IND	95	95	90
KANS	100	98	96
MO	98	99	96
MONT	0	0	0
NEBR	85	70	80
OHIO	85	90	85
OKLA	100	100	100
OREG	7	20	10
S DAK	27	28	50
TEX	100	100	100
WASH	2	8	8
15 STATES	77	75	76

THESE 15 STATES PRODUCED 84% OF THE 1983 WINTER 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: Temperatures 3 to 5° below normal. Rainfall 0.10 to 3.97 in.

Soil moisture adequate. Fieldwork: 4.7 days. Corn silked 94%, 86% 1983. Corn dented 51%, 37% 1983, 54% average. Soybeans blooming 26%, 30% 1983, 31% average. Soybeans setting pods 6%, 4% 1983, 10% average. Cotton squaring 98%, 85% 1983, 90% average. Cotton setting bolls 53%, 30% 1983, 52% average. Peanuts pegging 82%, 81% 1983, 79% average. Activities: Cultivating cotton and soybeans, controlling insects on vegetables and field crops; disease control on peanuts; harvesting vegetables and peaches; and routine care of livestock and poultry. Conditions: Soybeans, cotton, and sorghum fair to mostly good; corn, pasture, and livestock fair to good; peanuts good.

ALASKA: Skies mostly cloudy, periods of rain throughout week, all areas of Railbelt. Temperatures in 60's, colder than normal, rainfall average 0.25 in. or better.

Rain, cloudy with little sunshine limited haying. Zero to 5 days available. Crop growth mostly moderate to rapid. Hay harvest ranged from 75% to complete. Some lodging to small grains by light winds and rain. Barley good condition. Barley for grain, virtually all headed, some fields soft dough stage. Potato hilling virtually complete, some fields blooming. Soil moisture adequate to surplus. Commercial vegetables available, local markets.

ARIZONA: Numerous very heavy thunderstorms caused local flash flooding, amounts of 1.00 to 2.00 in. On 21st Yuma drenched with 1.64 in., well over half normal annual supply. Bullhead City received 2.30 in. in 2 hours, Phoenix 1.54 in. in 4 hours. Greatest weekly amount, 3.52 in. McMary. Maximum temperatures down 2 to 8° from previous week. Average temperatures mostly 1 to 6° below seasonal normals.

Cotton 100% squaring, 99% both last year and average. Bolls setting 80%, 90% last year, 92% average. Crop progress above average west, average other areas. Alfalfa hay harvest active except some delays by rain. Many growers stacked hay as supplies increased, demand weakened. Corn, sorghum silage cutting full swing. Corn, sorghum condition average to below average. Watermelon harvest practically complete. Cantaloupe picking expected to be complete by July 28. Cannery tomato harvest underway. Harvested fields rapidly prepared for next crops. Citrus groves good condition, new crop fruit developing normally.

ARKANSAS: Weather was cool, temperatures dipping to 8° below normal. High 99°, lowest 51°. Rain showers early in week, moderate to heavy totals in some areas. Most rainfall 3.71 in. Northwest least amounts.

Soil moisture short, adequate central. Days favorable for fieldwork: 5.7. Crop progress moderate. Cotton condition good; squaring 99%, 96% 1983, 98% average; setting bolls 66%, 56% 1983, 71% average. Rice good condition, headed less than 5%, 7% 1983, 9% average. Soybeans good to fair condition, blooming 21%, 9% 1983, 18% average; setting pods 5%, below 5% 1983, 7% average. Corn good condition. Sorghum good to fair condition. Good pasture regrowth. Cattle gaining weight.

CALIFORNIA: Above normal weekly mean temperatures continued statewide except in the southeast interior. The lower desert averaged 3° cooler than normal. Elsewhere, the weekly means continued several degrees above normal for the fourth week in a row. The tropical air also produced widely scattered rain showers over the High Sierra and the northern mountains.

Weather conditions prompted excellent rice growth, no heading. Insecticide applications, rice fields, army worm control. Winter wheat harvest near complete, 99% harvested, 97% last year, 95% average. Alfalfa baled, cubed, San Joaquin. Seed alfalfa drying. Sprinkle irrigation San Joaquin blackeye beans. Bean fields blooming Sacramento Valley. Cotton development ahead of normal, 96% squared, 85% last year, 94% average; irrigation continued. Sugarbeets dusted, mildew control; some thinning. Milo cultivated, irrigated fertilized, San Joaquin. Some heat stress. Mite, worm control corn fields. Ears filled. Sunflower fields blooming, heads developing. Safflower maturing, Sacramento Valley. Safflower harvest shortly, Fresno County. More frequent irrigations have been required due to hot weather. Weed control continues many orchards. Hass, Reed avocados harvest continues with good quality prevailing. Field operations date orchards include bagging, tying down bunches for protection. Figs treated for mites, scale insects. Table grape harvest still gaining momentum. Flame Seedless, Cardinal varieties packed with quality generally good. Thompson Seedless harvest increasing with more growers breaking vineyards as sugar rises, acid drops. About 10% Clingstone peaches harvested, more than normal. With about 65% of the stone fruits harvested, the market is weak and prices lower. Prunes sizing, showing color with harvest 3 to 4 weeks away. Mite, red hump caterpillar problems reported. Some harvest citrus fruits continues. Heat hasn't caused any problems so far. Many almond growers preparing orchards for harvest. Navel orange worm sprays continue as hulls split. Pistachios sprayed for grasshopper control. Broccoli moderate supply, cauliflower fairly light supply central coast. Cantaloupe harvest ended desert, full swing San Joaquin Valley. Carrot harvest active Salinas Valley, Kern district. Celery harvest moderate central coast, winding down south coast. Lettuce moderate supply central coast. Pepper harvest active San Joaquin Valley, started central coast. Spring potato harvest decreasing. Market tomato harvest active south coast, central and northern San Joaquin Valley, finished Cutler-Orosi. Processing tomato harvest active desert, full swing San Joaquin Valley, increasing Sacramento Valley. Crop threatened by thundershowers desert, extreme heat central interior valleys. Ranges extremely dry, volatile, evidenced by increased foothill fires. High temperatures continued reduce milk production. Livestock generally good condition. Stock water supplies starting down, but supplies adequate this time.

COLORADO: Typical weather with scattered afternoon and evening thundershowers occurred in most areas. Arkansas Valley received nearly an inch of rain on 16th and 18th. Temperatures within 1 to 2° of normal.

Winter wheat harvest in full swing with 62% harvested; 1983 46%; average 66%; 95% has turned color; 1983 94%; normal 95%. Ripening at 83%; 1983, 74%; average 84%. Corn height at 58 inches; 1983 49 inches; average 51 inches. Silking at 14%; 1983 and average, 5%. Sorghum 2% headed; 1983, 1% normal; 2%. Barley 52% turned color; 1983 36%; average 42%; 23% ripe; 1983 11%; average 24%. Harvest just started with 4% in. Spring wheat harvest 6% complete. Dry bean flowering at 23%; 1983 9%; average 19%.

FLORIDA: Scattered mainly afternoon, evening showers, thunderstorms predominated during the week. Daily rainfall amounts varied greatly from place to place but generally ranged from 0.25 to 0.50 in. However, local downpours of 1.00 to 3.00 in. occurred some locations. Temperatures averaged near normal or slightly below.

Soil moisture adequate to surplus most areas. Corn maturing rapidly; harvest for grain underway. Armyworms causing damages in few localities. Soybeans making good progress, insect count increasing some areas, pesticides being applied. Peanut, cotton good condition. Tobacco harvest active some fields, nearly complete in others. Hay making curtailed by frequent rain. Sugarcane making good growth. Pasture conditions improved; mostly good to excellent, except a few northern, Panhandle localities which remained fair. Cattle good to excellent condition. Abundance of rain most citrus groves. Much new growth on healthy trees. New crop fruit sizing very well. Caretakers very busy all areas. Frequent showers continue most vegetable areas. Season complete for spring vegetables. Limited supplies summer vegetables, watermelons continue to move through local markets. Land preparation active, fall vegetable crops.

GEORGIA: Temperatures for week in mid to upper 70's most locations, or about 3 to 5° below normal. Highest readings in upper 80's north and mid 90's central and south. Lowest readings in 60's except low 50's in mountains. Most locations had at least an inch of rain over week with local totals 2.00 and 3.00 in. range. Over 4.00 in. fell in northeast. Rain fell on about 3 days in north and 5 days central and south. Greatest 24-hour rainfall 4.00 in. at Cornelia ending morning of 18th.

Soil moisture 22% surplus, 70% adequate, 7% short. Average days suitable for fieldwork: 3.4. Rain slowed field activity. Main activities spraying for insects, disease and weeds. Corn 95% silked, 98% last year and average; dough 83% this year and last, 92% average; dent 57%, 59% last year, 74% average; mature 26%, 25% last year, 44% average; harvest 2%, 1% last year, 5% average; condition 7% excellent, 51% good, 30% fair, 11% poor. Cotton squaring 94%, 99% last year and average; setting bolls 62%, 76% last year, 88% average; condition 6% excellent, 66% good, 26% fair. Sorghum 97% planted this year and average, 96% last year; condition 6% excellent, 69% good, 24% fair. Peanuts blooming 97%, 98% last year, 99% average; pegging 90%, 93% last year, 94% average; condition 14% excellent, 69% good and 14% fair. Soybeans planted 99% this year, last and average; blooming 27%, 31% last year, 39% average; setting pods 8% this year and last, 13% average; condition 10% excellent, 69% good and 18% fair. Tobacco 34% harvested, 42% last year, 40% average; condition 10% excellent, 69% good, 19% fair. Watermelons 73% harvested, 67% last year, 79% average; condition 48% good, 45% fair, 7% poor. Apples 14% picked this year and

average; 9% last year; condition 10% excellent, 56% good, 34% fair. Peaches 85% picked, 91% last year, 87% average; condition 4% excellent, 67% good, 28% fair. Vegetable condition poor to good, mostly good. Hay condition 11% excellent, 60% good, 29% fair. Pastures 11% excellent, 64% good, 23% fair. Cattle 77% good and 19% fair. Hogs 82% good and 15% fair.

HAWAII: Weather for the Island Chain generally warm and dry. Light showers in the windward sectors and at the higher elevations were beneficial.

Heavy irrigation necessary to insure normal crop development. Several record high temperatures set during the week. Most crops making fair to good progress. Head cabbage, head lettuce supplies expected heavy. Production of Chinese cabbage moderate to heavy. Banana harvesting light to moderate with good fruit development. Papaya output expected steady. Watermelon production anticipated increase.

IDAHO: Warm, dry weather prevailed for most of the week. A low pressure system moved in near the end of the week bringing light and scattered rainfall. Temperatures averaged near normal in most areas of the State. Statewide precipitation averaged 0.10 in. below normal.

Crop development progressed well as 6.0 days were suitable for fieldwork. Winter wheat advanced to 78% turning color versus 88% last year. Winter wheat harvest stood at 2% completed compared to 2% in 1983 and average. Spring wheat development was similar to last year with 98% of the crop headed compared to 100% in 1983 and 97% average. Spring barley progressed to 95% headed and 36% turning color. The first cutting of alfalfa was nearly complete with 12% of the second cutting harvested compared to 9% last year. Potatoes advanced to 57% of the crop closing rows versus 66% in 1983.

ILLINOIS: Temperatures 1 to 6° below normal. Precipitation 0.0 to 1.79 in.

Soil moisture 45% adequate, 55% short. Days suitable for fieldwork: 6.0. Corn silked 55%, last year 47%, average 66%; dough 4%, last year 3%, average 12%. Corn condition 28% excellent, 56% good, 15% fair, 1% poor. Soybeans blooming 56%, last year 61%, average 64%; setting pods 13%, last year 15%, average 21%. Soybean condition 12% excellent, 62% good, 22% fair, 4% poor. Winter wheat harvested 98%, last year 96%, average 100%. Oats ripe 75%, last year 74%, average 73%; harvested 45%, last year 44%, average 40%. Alfalfa condition 25% excellent, 61% good, 12% fair, 2% poor; second crop cut 78%, last year 81%, average 75%. Pasture condition 7% excellent, 56% good, 27% fair, 10% poor.

INDIANA: Temperatures averaged 1 to 5° below normal. Highest temperatures in upper 80's to low 90's. Lowest readings in mid and upper 40's. Precipitation totaled 0.10 to 0.60 in. north, 0.20 to 0.90 in. central, and 0.00 to near 0.10 in. south. Sunshine averaged 73% for State. Evaporation was above normal.

Fieldwork averaged 6.3 days. Topsoil moisture mostly short to adequate, subsoil moisture short to adequate. Wheat 95% combined, 1983 95%, average 90%. Oats 20% combined, 1983 30%, average 35%. Corn condition fair to mostly good. Corn 30% silked, 1983 25%, average 40%. Corn 0% dough, 1983 0%, average 0%. Corn 65 in. tall, 1983 60 in., average 65 in. Soybeans 50% blooming, 1983 50%, average 50%. Soybeans 5%

podding, 1983 3%, average 7%. Alfalfa 75% cut twice, 1983 75%, average 65%. Pastures fair.

IOWA: Warm week. Moderate rainfall.

Days suitable for fieldwork: 5.1. Corn 45% beginning to tassel; 50% last year. Corn crop 26% excellent, 57% good, 14% fair, 3% poor to very poor. Corn acreage showing 75% or more silking, 20% complete, 24% last year, 39% normal. Soybean crop condition 14% excellent, 58% good, 26% fair, 2% poor to very poor. Soybean acreage bloomed 50% complete; 63% last year; 57% normal. Soybean acreage setting pods 13%; last year 13%, normal 16%. Oat crop condition 18% excellent, 61% good, 18% fair, 3% poor. Oat crop turning color 96% complete; 90% last year. Oat acreage harvested 18% complete. Harvesting winter wheat crop 79% complete, 65% last year, 73% normal. Second crop of alfalfa 44% complete, 63% last year, 65% normal. First crop of clover harvested 99% complete, 98% last year, 99% normal. Second crop clover hay harvested 14%, last year 24%, normal 32%. Hay crop condition, 29% excellent, 61% good, 9% fair, 1% poor to very poor. Topsoil moisture conditions 5% surplus, 85% adequate, 10% short. Subsoil moisture conditions 9% surplus, 90% adequate, 1% short. Livestock generally good to excellent condition. Pasture conditions 26% excellent, 55% good, 15% fair and 4% poor to very poor.

KANSAS: Temperatures ranged 2 to 40 above normal northwest half State, and within 10 normal south central, southeast, and east central. Average temperatures ranged 790 northwest, east central and southeast to 830 south central and southwest. Rainfall averaged 0.13 in. southeast to 1.18 in. southwest. Locally heavy amounts of 2.00 in. southwest and central sections.

Wheat 100% harvested, 98% last year, 96% average. Sorghum 5% headed, 1% last year, 5% average. Light to moderate greenbug and chinch bug infestation. Corn 45% silked, 20% last year, 30% average. Corn 3% dough, 1% last year, 5% average. Light to moderate levels European and Southwestern corn borer infestations. Soybeans 35% blooming, 20% last year, 20% average. Approximately 4% setting pods, 4% last year, 5% average. Topsoil moisture mostly short. Subsoil moisture adequate. Pasture and rangeland good to excellent. Days suitable for fieldwork: 6.0.

KENTUCKY: Temperatures averaged 780, 30 below normal. Record setting low temperatures recorded in many areas on 17th with many readings in low to mid 50's. Only scattered showers and thunderstorms reported during week. Precipitation totals for period well below normal ranging from 0.40 to 0.10 in. northeast.

Soil moisture 57% adequate, 43% short. Days suitable 5.5. Dry conditions stressing some crops particularly north. Corn mostly good condition, 50% silked or silking, 27% last year, 58% average, 10% milk stage. None in dough stage, average 4%. Insect problems with grasshoppers, armyworms, corn borers, rootworms some fields. Soybeans 18% bloomed, 10% last year, 23% average. No plants setting pods, average 2%. Mostly good condition. Grasshoppers severe some fields. Tobacco condition good, 18% 3 ft. or taller, 6% blooming, 3% last year, 20% average. Begin topping early fields this week. Disease and insects normal. Hay and pasture regrowth slow. Need rain for fall hay cutting and current grazing.

LOUISIANA: Rainfall amounts ranged from none to 3.52 in. Temperatures averaged from 1 to 40 below normal. High 970; low 580.

Soil moisture adequate. Days suitable for fieldwork: 4.6. Activities included vegetable and peach harvesting and applying pesticides. Rice headed 59% 1984, 45% 1983, 57% average; ripe 9% 1984, 2% 1983, 8% average; harvested 4% 1984, 0% 1983, 4% average; condition good. Corn silked 99% 1984, 97% 1983, 98% average; dough stage 89% 1984, 67% 1983, 83% average; mature 3% 1984, 3% 1983, 11% average; harvested 3% 1984, 11% average; condition good to excellent. Cotton squaring 95% 1984, 76% 1983, 92% average; setting bolls 61% 1984, 32% 1983, 58% average; condition good. Soybeans blooming 31% 1983, 23% 1983, 36% average; setting pods 13% 1984, 8% 1983, 13% average; condition good. Sorghum headed 82% 1984, 68% 1983, 65% average; turning color 34% 1984, 9% 1983, 24% average; ripe 1% 1984, condition good. Sweetpotatoes harvested 1% 1984, condition good. Sugarcane condition fair to good. Vegetable condition fair to good. Peaches harvested 77% 1984, 75% 1983, 85% average. Pasture condition fair to good. Livestock condition good.

MARYLAND AND DELAWARE: Maryland: General rains the 18th and 19th left an average 1.02 in. of rain over the State.

The 4.9 days suitable for fieldwork slowed harvest but was adequate to surplus. Small grain harvest continues at a normal pace. Wheat harvest 90%, last year and average 95%. Rye 95% combined, 90% last year and average 95%. Oats 65% harvested, 1983 100%, average 70%. Field corn silked 50%; 1983 45%, average 65%. Field corn in dough stage 10%, equal to 1983 and average. Soybeans 20% bloomed, 15% bloomed 1983 and average. Soybeans podded 5%, just beginning 1983, average 5%. Tobacco bloom 15%. Alfalfa hay 75% cut twice, 80% 1983, 85% average. Other hay 45% cut twice, 75% 1983, average 65%. Vegetable harvest slowed by rain. Snap beans 75% harvested; 1983 90%. Sweet corn 20% picked; 15% 1983. Potatoes 15% dug, 20% last year. Watermelon 5% harvested, not started yet in 1983. Tomatoes 15% picked; 35% picked 1983. Cucumbers 40% picked; 30% 1983. Peach harvest 10%; not yet started 1983.

Delaware: Temperatures were near normal and rainfall averaged 0.92 in.

Farmers worked 4.5 days in their fields. Small grain in good condition. Wheat 93% harvested; 1983 95%; average 97%. Rye harvested 85%; last year 98%. Corn silked 48%, 1983 69%. Soybean bloom 20% complete, 1983 5%. Second cutting alfalfa hay complete, 90% 1983, 95% average. Third cutting alfalfa hay 15%, less than 5% 1983. Second cutting other hay 67%, 85% 1983. Vegetable harvest was slowed during the week by rains.

MICHIGAN: Dry and mild weather was the rule across the State. Most of the State received only light amounts of precipitation. The exceptions were the upper Peninsula and the northern portion of the lower Peninsula where moderate amounts of precipitation fell. Temperatures averaged 10 below normal after being above normal for several weeks.

Baling up hay and straw active with cultivation field crops, and combining wheat. Dry conditions continue throughout southern counties. Crops showing signs of moisture stress. Statewide 6.0 days suitable for fieldwork. Winter wheat 20% harvested, 25% last year, 30% average. Oats 45% yellowing, 45% last year, 64% average. Corn 15% silked, 10% last

year, 11% average. Soybeans 35% blooming, 30% last year, 32% average. Dry beans 15% blooming, 30% last year, 35% average. Sweet cherries 40% harvested, 50% last year, 58% average. Tart cherries 30% harvested, 30% last year, 41% average. All hay, 2nd cut 25% complete, 30% last year, 29% average. Freetable crops processing well with the aid of irrigation.

MINNESOTA: A series of Canadian high pressure systems crossed the State during the week, moderating the temperatures. Between high pressure systems, thunderstorms developed and produced localized rainfall. Temperatures averaged near normal to 3° below normal for the State. High: 96°, low: 41°. Precipitation averaged 0.07 to 0.64 in. below normal. Greatest weekly total: 1.48 in.

Small grain harvest got underway. Armyworm infestations were locally severe. Row crops very uneven in height, but condition improved with less moisture stress, except in some dry areas in northwest, timely rains plus cool nights and moderate daytime temperatures have kept moisture conditions favorable for plant growth. Days suitable for fieldwork: 5.4. Topsoil moisture: 5% very short, 20% short, 72% adequate, 3% surplus. Field corn condition: 41% poor to fair, 59% good to excellent. Soybean condition: 46% poor to fair, 54% good to excellent. Turning ripe: Spring wheat 53%, 1983 50%, normal 45%; oats 74%, 1983 60%, normal 57%; barley 84%, 1983 66%, normal 58%. Cut or swathed: Spring wheat 0%, 1983 0%, normal 2%; oats 3%, 1983 1%, normal 7%; barley 8%, 1983 4%, normal 10%. Tasseling: Field corn 29%, 1983 23%, normal 38%. Blooming: Soybeans 51%, 1983 49%, normal 51%.

MISSISSIPPI: Cold front midweek, temperatures 4° below normal. Extremes 58 and 93°. Rainfall varied 0 to 2.67 in.

Soil moisture adequate to short. Fieldwork 5.1 days, 5.8 1983, 4.4 average. Weed and insect control measures main activity. Hay harvest 51%, watermelons 51%, peaches 68%, corn silage 12%, sorghum silage 2%. Cotton good condition; 99% squaring, 95% last year, 97% average; 48% setting bolls, 28% last year, 48% average. Rice condition good; 17% headed, 3% 1983, 15% average. Corn fair; 67% dough stage, 10% mature. Soybeans good to fair; 99% planted; 35% blooming, 11% last year, 34% average; 5% podding, 0% 1983, 10% average. Sorghum 43% headed, 29% last year; condition good to fair. Pasture condition fair.

MISSOURI: Temperatures averaged 2 to 3° below normal. A few isolated storms dumped an inch of rain, but most places received less than 0.25 in. The heaviest rainfall was over the Bootheel.

Days suitable for fieldwork: 5.8. Double crop soybeans planted 98% this year, 96% last year. All soybeans blooming 34% this year, 34% last year, 32% normal. Soybeans setting pods 5% this year, 6% last year, 6% normal. Corn tasseling 58% this year, 51% last year. Corn silking 41% this year, 31% last year, 47% normal. Corn in dough stage 0% this year, 0% last year, 4% normal. Sorghum heading 33% this year, 26% last year, 24% normal. Winter wheat harvested 98% this year, 99% last year, 96% normal. Oats harvested 82% this year, 76% last year, 74% normal. Cotton squaring 99% this year, 65% last year, 89% normal. Cotton setting bolls 46% this year, 5% last year, 45% normal. Alfalfa second cutting 76% this year, 85% last year, 79% normal. Third cutting alfalfa 16% this year, 13% last year, 13% normal. Other hay harvested

87% this year, 89% last year. Condition of corn 6% excellent, 71% good, 23% fair. Condition of soybeans 3% excellent, 59% good, 37% fair, 1% poor. Condition of grain sorghum 5% excellent, 75% good, 20% fair. Cotton condition 64% good, 36% fair. Pasture condition 5% excellent, 55% good, 34% fair, 6% poor. Topsoil moisture supply 62% adequate, 38% short.

MONTANA: Another hot, for most of State, dry week. Temperatures averaged about 1° above normal in west and southwest, near 5° above normal in eastern sections. Precipitation confined to southwest, south central, scattered areas of southeast. Few areas in southwest and south central had 0.50 in. while remainder of area received less than 0.02 in.

Topsoil moisture short over entire State. Subsoil moisture short except in southwest. Fieldwork, days suitable: 6.8. Small grains good condition west and southeast, fair elsewhere. Sugarbeets good to excellent condition. Percent heading or beyond compared with last year and average: Winter wheat headed 10, 15, 25; winter wheat turning 75, 70, 65; winter wheat ripe 15, 15, 10; spring wheat headed 55, 60, 65; spring wheat turning 45, 25, 20; barley headed 50, 65, 65; barley turning 45, 25, 20; oats headed 60, 50, 65; oats turning 35, 40, 20; alfalfa hay cut 95, 85, 85. Range feed and stock water supplies short in north central, central and east.

NEBRASKA: Temperatures averaged 2° above normal. Scattered thundershowers north and west. Precipitation averaged 0.50 in. north and west, less than 0.10 in. south central and southeast.

Winter wheat harvest 85%, 70% last year, 80% average. Wheat ripe 95%, 85% last year, 93% average. Soybean condition rated 36% fair, 63% good, 1% excellent. Blooming 50%, 65% last year, 45% average; 8% podding, 5% last year, 10% average. Corn condition rated 8% fair, 84% good, 8% excellent. Corn silking 15%, 20% last year, 35% average. Sorghum condition rated 22% fair, 77% good, 1% excellent. Sorghum headed less than 1%, 3% last year, 10% average. Alfalfa harvested 55%, 60% last year, 70% average.

NEVADA: Subtropical moisture combined with generally above normal temperatures to produce widespread thundershower activity at times. Flash flooding occurred midweek central areas and again end of period extreme south. Temperatures averaged above normal for the third consecutive week in July.

Alfalfa hay harvest slowed by afternoon showers scattered localities. Small grain harvest moving northward, slowed by rains also. Ranges and pastures furnishing good grazing.

NEW ENGLAND: Precipitation averaged from 0.50 to 0.75 in. across northern sections and from 1.00 to 2.50 in. across the South. Temperatures were near normal, ranging from near 90° in the south on the 17th and the 22nd to the upper 40's in Maine on the 17th.

Soil moisture and available grazing adequate. Days available for fieldwork: 5.0. Progress of field crops 4.5 days behind normal. Field corn height variable from a few inches to several feet due to spring flooding. Potatoes, oats, and sweet corn all in good condition. First cut hay 95% complete, on schedule with normal. Second cut hay 25% complete, 35% last year, 30% normal. Raspberry and blueberry harvest has begun in the south.

NEW JERSEY: Temperatures averaged 2° below normal. Extremes were 47° on the 20th and 92° on the 21st. Weekly rainfall averaged 1.98 in. north, 1.90 in. central and 2.18 in. south. The heaviest 24-hour total was 1.76 in. on the 16th and 17th. Estimated soil moisture, in percent of field capacity, averaged 94% north, 80% central and 77% south. Four inch soil temperatures averaged 73° north, 77° central and 76° south.

Fieldwork: 6.0 days suitable. Summer vegetable harvest continues active. Irish potatoes digging underway. Blueberry and summer apple harvest continues. Peach harvest of Red Haven variety increasing. Combining of wheat virtually complete. Planting of fall vegetable crops underway. Baling the 2nd cutting of alfalfa hay active.

NEW MEXICO: Average temperatures near slightly below normal most locations. Minimum temperature: 42°; northern mountain and central highlands. Maximum temperature: 99°, southern desert. Thundershowers more general first half of week; confined to western half of State by week's end. Rainfall totals ranged from 0.01 to 1.38 in.

Soil moisture supplies short to adequate. Small grain harvest virtually complete. Corn good to excellent: tasseling. Irrigated, dryland grain sorghum good to excellent: some heading. Cotton rated good. Second cutting alfalfa complete south and central regions. Third cutting started in south. Potato harvest to start soon. Onion harvest winding down. Chile rated good. Some heat stress on ranges. Cattle, sheep rated good; gaining well on grass. Cotton squaring 98%, last year 79%, average 90%; setting bolls 45%, last year 27%, average 43%.

NEW YORK: Rainfall was heavy from the Adirondacks and Champlain Valley through the Hudson Valley to Long Island. Heavy thunderstorms at the beginning of the week brought weekly totals above 1.00 in. Rainfall was heavy on Long Island at week's end. In contrast, rainfall was light from Syracuse and Binghamton to the Great Lakes. Weekly amounts were under 0.50 in. Weekly temperatures were near seasonal normals.

Favorable weather has improved crop prospects. The corn crop growing rapidly, the earliest fields starting to tassel. Hay fields and silage harvesting in second cutting. First cut alfalfa 93% complete, compared with 92% average. Clover-timothy at 83% done equals average. Grass silage harvesting at 95% complete slightly ahead of historic 94%. Oats heading out and starting to turn. An average of 5.5 days were suitable for fieldwork.

NORTH CAROLINA: Temperatures averaged near 4° below normal for mountain region, 2 to 3° below normal for Piedmont Region and near normal for the Coastal Plain Region. Precipitation ranged from 1.04 to 7.88 in.

Soil moisture: 2% short, 42% adequate, 56% surplus. Days suitable for fieldwork: 3.2. Condition: Corn 15% fair, 68% good, 17% excellent. Cotton 7% fair, 85% good, 8% excellent. Peanuts 14% fair, 79% good, 7% excellent. Soybeans 8% fair, 84% good, 8% excellent. Tobacco 25% fair, 66% good, 9% excellent. Apples 9% fair, 82% good, 9% excellent. Peaches 9% fair, 76% good, 15% excellent. Harvested: Flue-cured tobacco 11%, 9% 1983, 17% average. Peaches 64%, 1983 67%, average 83%. Major farm activities: Harvesting, topping, spraying and suckering tobacco,

applying herbicides and pesticides, cultivating crops, harvesting peaches, vegetables and apples, and general farm maintenance.

NORTH DAKOTA: Week continued warm. Temperatures were from 5° above normal southwest to 3° below normal southeast. Extremes ranged from 102 to 40°. Moisture was below normal except for the northeast and southeast.

Moisture supplies dwindling to well below average. Moisture stress indicated for crops in several areas. Condition of most crops down slightly from previous week, but still rate mostly good. Percent heading or beyond compared to last year and average for hard red spring wheat 94, 95, 88; durum 90, 90, 82; barley 98, 96, 91; oats 94, 94, 88. Row crop development moving ahead of average pace. Harvest began on winter wheat, rye and barley.

OHIO: Temperatures 2 to 4° below normal. Highs from upper 70's to mid 80's, low in the 50's. Precipitation from 0.00 to 0.50 in., most locations receiving 0.10 in. or less. Base 50 growing degree days totals from 120 to 150. Four-inch soil temperatures 70's.

Soil moisture 70% short, 30% adequate, 0% surplus; 6.5 days suitable for fieldwork. Main activities: Harvesting wheat, cutting hay and straw, spraying weeds. Corn silked 20% 1982, 20% 1983, 45% average; dough 0% 1984, 1983, average; condition fair to good; European corn borer significant levels northeast. Soybeans blooming 40% 1984, 45% 1983, 50% average; setting pods 5% 1984, 2% 1983, 10% average; condition fair. Winter wheat harvested 85% 1984, 90% 1983, 85% average. Pasture condition fair.

OKLAHOMA: Temperatures averaged within 1° normal across most of State. Cool nights east central and southeast lowered average temperatures 2 to 3° below normal in those areas. Precipitation ranged zero west central, east central, and south central to 0.47 in. Panhandle.

Crops severely stressed from prolonged hot, dry weather in most areas. Rain needed to revive stagnant crops. Sorghum in dire need of rain for adequate growth and development. Insect activity increasing. Sorghum good to fair, cotton and pastures fair condition. Wheat harvested: 100%; 100% 1983; 100% average. Sorghum headed: 10%; 10% 1983; 15% average. Cotton squaring: 25%; 25% 1983; 40% average.

OREGON: The State experienced a third straight dry week. Only exception was south central region where precipitation averaged less than 0.10 in. and temperatures were 6° above normal. Remainder of State averaged 1 to 3° above normal. Temperatures ranged from mid-30's at night in far east areas to 104° in north central and southwestern areas.

Winter wheat conditions good statewide; 7% harvested, 20% last year, 10% average. Spring wheat 3 weeks away. Willamette Valley grass seed an crimson clover harvest in full swing, yields appear good. Haying continues, nearly complete in dryland areas. Second crop of alfalfa being cut and baled in western regions. Hermiston area third cutting underway. Soil moisture ranges from short to adequate. Strawberry harvest virtually over, lower yields. Raspberry harvest winding down, normal yields. Marionberry, boysenberry and blueberry harvests in full swing. Hood River apple thinning still in progress. Cherry harvest in

full swing. Wasco County cherries almost over. Early peach harvest to begin first of next week for mid-Willamette Valley. Early varieties showing short crop, later varieties generally good. Tart cherry harvest to begin next week; crop looks light. Western growers harvesting snap beans, green peas and cole crops. Sweet corn and onions in this region growing well. Hermiston-Boardman area asparagus harvest over, early potatoes just ready for digging. Southern area potatoes look good. Onion and sugarbeets look good in eastern region. Livestock conditions good throughout State. Range and pasture conditions mostly good west of Cascades. Pastures at lower elevations drying out. Eastern area rangeland in good condition but drying out rapidly. Higher elevation rangelands in best condition. Morrow County reports serious Knapweed problems.

PENNSYLVANIA: Statewide average precipitation of 0.75 in. was 0.11 in. below normal. This was the second consecutive week of less than normal precipitation. Temperatures were near normal (-10 on average) with higher readings occurring early in the week. Extremes of 94 and 46°.

Days suitable: 5.0. Moisture adequate to surplus. Activities: Making hay, combining barley and wheat; baling straw; spraying fruits and vegetables; harvesting tart cherries, early peaches and apples, snap beans, green peas and blueberries. Barley 22% ripe, 68% harvested, last year 6% ripe, 82% harvested. Wheat 31% turning yellow, 44% ripe, 25% harvested, last year 19% turning yellow, 28% ripe, 49% harvested. Oats 47% headed, 33% turning yellow, 13% ripe, last year 36% headed, 42% turning yellow, 18% ripe. Average corn height 43 in., last year 45 in. First cut alfalfa 94% complete, last year virtually complete. Second cut alfalfa 34% complete, last year 58% complete. First cut clo-tim 85% complete, last year virtually complete. Quality of hay made mostly fair to good. Feed from pastures average to above average.

PUERTO RICO: Island average rainfall 0.55 in. or 0.80 in. below normal. Highest weekly total 2.47 in. Highest 24-hour total 1.80 in. Temperature averaged about 81° on coasts and 75 to 76° interior divisions. Mean station temperature ranged from 67.1 to 82.8°. Extremes 95 and 54°.

SOUTH CAROLINA: Low pressure across State caused heavier than usual rains. West received rain majority of week. Precipitation tapered off over weekend. Temperatures were lower than usual.

Soil moisture adequate to surplus. Days available for fieldwork: 2.8. Corn condition fair to good; 95% silked, 93% last year, 96% average; 63% dough stage, 53% last year, 75% average; 17% maturing, 9% last year, 25% average. Cotton condition good; 80% setting bolls, 88% last year, 88% average. Soybean condition good; planting complete, 7% blooming, 10% last year, 18% average. Tobacco condition good, 30% harvested, 14% last year, 33% average. Peach condition excellent; 62% harvested, 61% last year, 68% average. Melon harvest continues, condition and quality fair to good. Tomato harvesting winding down, condition good.

SOUTH DAKOTA: Average temperatures were from 3 below to 40 above normal. Extremes: 106 and 35°. Outside the Black Hills, the low was 40°. Precipitation was light.

Days suitable for fieldwork: 6.0. Topsoil moisture was adequate over most of the east and central and in the extreme southwest. A shortage was reported throughout most of the west and a narrow north/south band through the east and south central with other scattered areas in the east. Critically short areas were reported in the extreme west and northwest central. Grasshoppers reported as heavy in the west. Corn borers, armyworms and greenbugs hurting crops in the east. Corn silked 6%, 1983 4%, average 17%. Corn dough 0%, 1983 0%, average 0%. Spring wheat headed 100%, 1983 100%, average 100%. Sorghum headed 0%, 1983 0%, average 4%. Winter wheat harvested 27%, 1982 28%, average 50%.

TENNESSEE: Rain and thunderstorms occurred over most of the State during the first half of the week in association with a cold front. The primary weather feature during the latter half of the week was a high pressure system. Temperatures averaged near normal in the west and 5° below normal in the mid and eastern sections. Average temperatures ranged from 72° near the Cumberland Plateau to 79° in the west. Precipitation amounts averaged near 2.00 in. statewide. Some locales received more than 3.00 in.

Soil moisture levels: 13% surplus, 76% adequate, 10% short, 1% very short. Farmers averaged 4.0 days of fieldwork. Corn tasseling: 66%, 1983 56%, average 68%; dough 14%, 1983 8%, average 19%; dent 1%, 1983 5%, average 3%. Cotton squaring 97%, 1983 87%, average 90%; setting bolls 25%, 1983 10%, average 30%. Soybeans blooming 23%, 1983 19%, average 25%; setting pods 3%, 1983 2%, average 5%. Pasture conditions 43% good, 50% adequate, 7% poor. Livestock reported in good condition.

TEXAS: Weak intrusion cool air moved south Red River into northern portions State, triggering scattered showers, thunderstorms from northern High Plains eastward Northeast Texas. Near middle week, cool front becoming nearly stationary. Showers, thunderstorms, some very heavy portions South Plains, Hill Country, Upper Texas Coast. End of week, afternoon heating combined with slightly moist airmass produce showers, thunderstorms parts Trans-Pecos, South and Southeast Texas, with typical sea breeze thunderstorms along Coastal Plains. Otherwise, high pressure dominated State's weather pattern. Temperatures averaged near normal, except 3° below normal East Texas. Rainfall averaged near normal Low Plains, Edwards Plateau, Lower Valley. Rainfall below normal rest of State.

Crops: Near record high temperatures much of State accompanied scattered showers throughout week. Higher temperatures increased insect populations grain sorghum, cotton many areas. Irrigated crops make good progress Plains. Yields grain sorghum fields valley, Upper Coast good. Irrigation sorghum fields High Plains continued much week even though scattered showers present. Above average growth occurring. Much of crop being baled Cross Timbers due lack of moisture. Recent showers picked up borderline fields. Harvesting begun Blacklands, yields slightly lower than normal. Harvest activities picked up Central Texas, average yields reported. Coastal Bend, harvest nearing completion, yields better than expected. Good field conditions allowed harvesting activities advance rapidly Lower Valley, good yields. Statewide condition 71% of normal, unchanged from a year ago. Current reported conditions, 4% excellent, 49% good, 34%

fair, 11% poor and 3% failure. Corn harvesting begun Blacklands small scale. Yields down significantly from last year. Some fields cut for silage. Central Texas harvest begin within two weeks. Harvest winding down Coastal Bend yields varying fair to good. Irrigation continues Plains, crop enters tassel stage. Spider mites increased this area. Corn condition 70% of normal. Current reported conditions 6% excellent, 45% good, 33% fair, 15% poor and 1% failure. Wheat harvest advanced rapidly, week's end virtually complete, few fields remaining for harvest southern High Plains. Plowing wheat stubble. Cotton progressed rapidly Plains. Boilworm infestations increasing. Cultivation, insect spraying main activities as crop enters blooming stage. Heavy insect populations Blacklands. Crop maturing rapidly. Harvest beginning Coastal Bend, Rio Grande Valley; barring delays, should be full swing within next week. Later fields maturing rapidly, should follow early fields for harvesting. Cotton condition 73% of normal compared with 82% a year ago. Current reported conditions 3% excellent, 61% good, 21% fair, 13% poor and 2% failure. Dryland peanuts continue stressed for moisture. Some scattered showers temporary relief; hot temperatures quickly absorbed limited moisture. Irrigated fields up good stands, progressing well, showing good growth. Soybeans looking fair Plains; fields need moisture badly. Some fields irrigated Upper Coast lack rainfall. Few early fields harvested. Rice harvest begun small scale. Crop making good progress, harvest pick up soon.

Cotton squaring 74%, 69% 1983, 77% average; setting bolls 26%, 19% 1983, 31% average; open bolls 4%, 2% 1983, 5% average. Rice headed 88%, 87% 1983, 95% average; turning color 31%, 43% 1983, 61% average; harvested 5%, 0% 1983, 9% average. Sorghum headed 64%, 68% 1983, 70% average; turning color 55%, 58% 1983, 57% average; mature 41%, 32% 1983, 40% average; harvested for grain 36%, 13% 1983, 28% average. Wheat harvested for grain 100%, 100% 1983, 100% average. Corn harvested for grain 13%, 1% 1983, 3% average. Oats harvested for grain 98%, 99% 1983, 100% average. Peanuts planted 100%, 100% 1983, 100% average. Sunflowers planted 100%, 100% 1983, 98% average.

Commercial vegetables: Rio Grande Valley, land preparation fall vegetables continues. Pre-plant irrigation. San Antonio-Winter Garden, limited harvesting melons, cucumbers continues. Other summer vegetables harvest complete. Trans-Pecos, onion harvest continues. Cabbage, cantaloupe harvest picking up with open weather. East Texas, harvest continues excellent supply peas, beans, tomatoes, squash, sweet corn and melons. Sweetpotatoes two week behind due dry conditions at planting. High Plains, potato digging full swing, good yields reported. Onion harvest continues. Irrigation carrots continues. Peach harvest continues Plains, excellent crop reported. Elsewhere, harvest winds down, fair sizes picked. Pecans some damage black aphids. Webworms also some problems. Fair set across most State, High Plains reporting good set.

Range and livestock: Second cutting hay began many areas. Lack rainfall caused yield be down. Many acres wheat, sorghum straw baled to supplement lack of hay. Culling livestock continues. Cattle fair condition considering lack moisture. Shearing goats Edwards Plateau continues.

UTAH: Recurring period thunderstorm and shower activity deposited light to moderate precipitation with some locally heavy showers. Mean temperatures near normal, ranging 40 below to 50 above.

Only local showers interrupted fieldwork last week. Hot temperatures accelerated crop maturity. Winter wheat 22% ripe, some harvesting. Barley headed out 65%, turning color. A few early fields ripe. Harvest to begin soon. Spring wheat also in head, 61%, beginning to ripen. Oats 86% headed, 45% turning color. Field corn in fair condition, average height 4 ft. Potato vines growing rapidly, fair to good condition. Sweet cherry harvest virtually complete.

VIRGINIA: Considerable cloudiness brought heavy showers and thunderstorms across State with precipitation averaging well above normal. One location in central region recorded over 6.25 in. for the period. Amounts statewide averaged 1.00 to 2.75 in. Temperatures during the period averaged 1 to 30 below normal, highs in the 70's and 80's, lows in the 50's and 60's.

Most crops benefitted from ample statewide rain. Topsoil moisture ratings were 11% short, 76% adequate, 13% surplus. Days suitable for fieldwork was down at 4.4 days. Corn condition improved and rated good to excellent. Yield prospects appear much better with rain. Corn development uneven and behind normal, 57% in silk, 61% last year, 71% average. Corn 21% in dough, 18% last year, 24% average. Soybean planting complete, crop in good to excellent condition and progressing normally. Soybeans 6% in bloom, 10% last year. Tobacco harvest beginning. Rainfall very beneficial with tobacco in good to excellent condition. Mosaic virus reported widespread in flue tobacco this year. Peanuts in good to excellent condition. Normal spraying and cultivation activities in progress. Wheat harvest almost complete. Yields average or better. Oat harvest 85% complete. Pastures in good condition generally, with poor conditions in a few areas. Hay rated in good to excellent condition but 2nd cutting yields below average. Fruit in good to excellent condition. Peach harvest active, expect a good crop.

WASHINGTON: Winter wheat conditions remain good for most of the State, 2% harvested, 8% last year, 8% 5 year average. Stripe rust affecting Whitman County, and northern Grant County. Barley harvest started in southeast. Corn fields are growing well. Second cutting of hay first mid point in east. Hay quality looks good statewide. First cutting of timothy hay nearly complete. Cherry harvest essentially complete. Apricots being picked. Apples developing well. Pears doing well in areas not affected by the cold winter. Strawberry harvest essentially complete. Raspberries past peak. Blueberries being picked. Broccoli and cauliflower harvest continues. Green pea harvest near completion, however a few areas are 2 weeks away. Early Norgold potatoes starting to be harvested. Some pastures drying up fast, others remain in good condition. Green chopping and silage making continues.

WEST VIRGINIA: Temperatures averaged near normal. High 94° in Parkersburg, Spencer and Martinsburg. Low 41° at Canaan Valley. Precipitation well above normal over eastern areas. Western portion of State had below normal rainfall. Most precipitation in Green Bank, 2.05 in., Wheeling received the least 0.07 in.

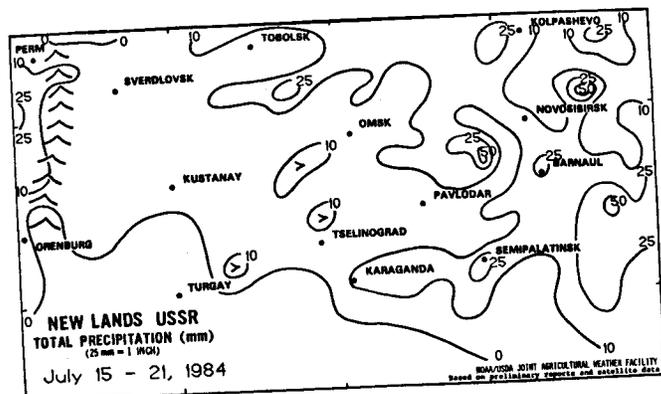
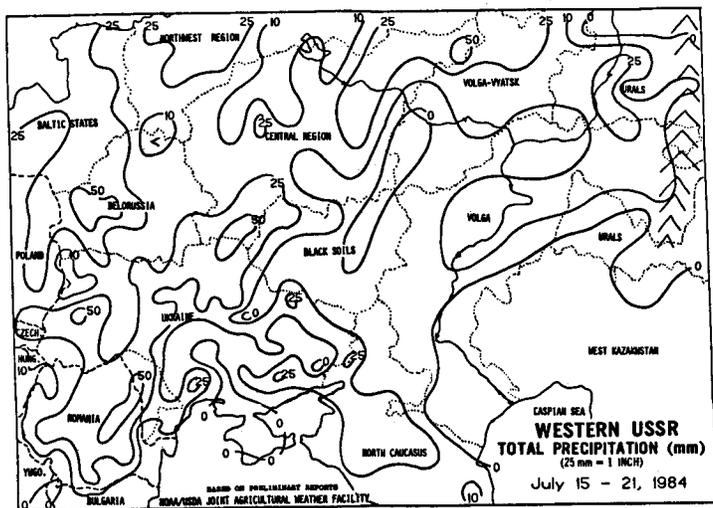
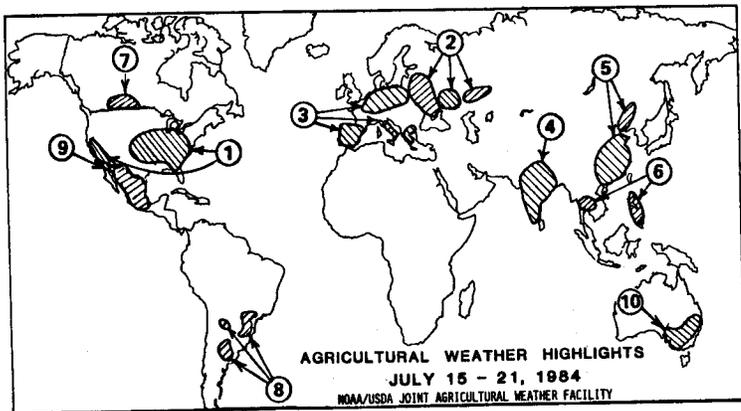
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International Weather and Crop Summary

July 15 to 21

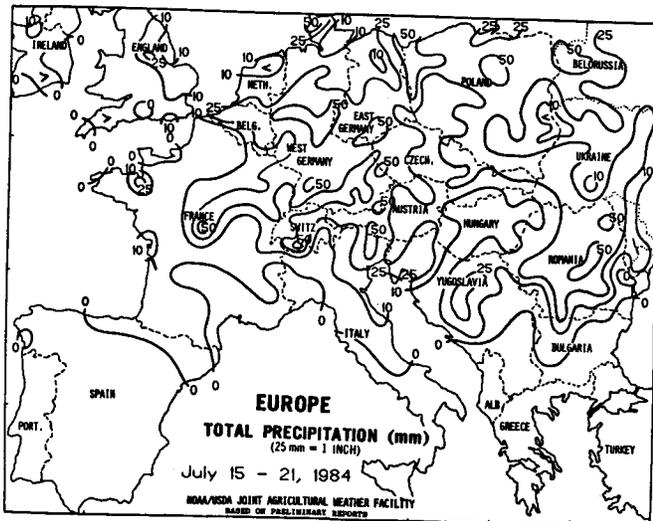
HIGHLIGHTS:

1. UNITED STATES ... A prolonged heat wave in California accelerates crop maturity and causes some damage. Dry weather allows rapid harvest of small grains but depletes soil moisture across the central Plains and parts of the Corn Belt. Heavy rains slow soybean planting over the Delta States and the Southeast.
2. USSR ... Wet weather in west European winter grain areas further delays harvesting. Hot, dry weather stresses corn in the eastern Ukraine and North Caucasus, and spring wheat in the southwestern New Lands.
3. EUROPE ... Favorable harvest weather covers Mediterranean crop areas. Showers in the north benefit spring grains but are unfavorable for maturing winter grains.
4. SOUTH ASIA ... Increased rains benefit cotton and groundnut planting. Seasonal temperatures benefit crop growth.
5. EASTERN ASIA ... Moderate rain benefits late rice. Localized heavy rain is unfavorable for cotton. More rain is needed in parts of the northeast for corn and soybeans.
6. SOUTHEAST ASIA ... Rain decreases but soil moisture is adequate for corn and rice in Thailand and the Philippines. Additional rains will benefit most areas.
7. CANADA ... Unfavorably dry conditions continue in the south as wheat begins to flower. Showers provide additional moisture in the north.
8. SOUTH AMERICA ... Wet weather continues to hamper wheat establishment in Rio Grande Do Sul and Santa Catarina. Showers are needed for wheat planting in southern Sante Fe and eastern Cordoba in Argentina.
9. MEXICO ... Rains decrease across the Southern Plateau corn belt, but increase over the northwestern mountain watersheds.
10. AUSTRALIA ... Moderate showers improve conditions in the southeast. Wheat planting is resumed but yield potential is lowered by earlier dryness.

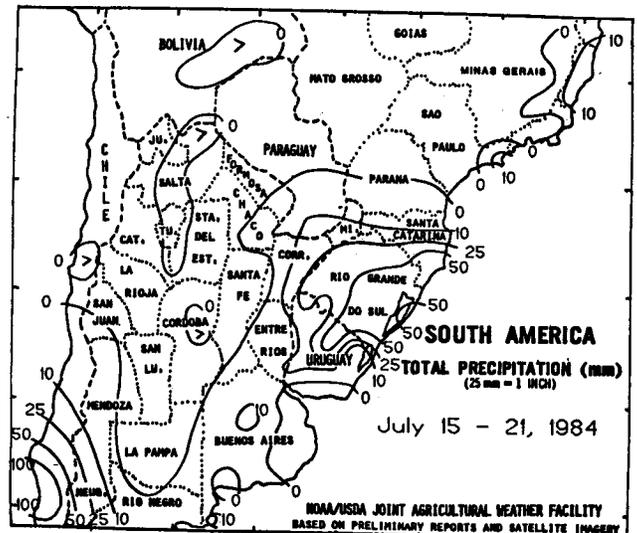


USSR... Showers and thunderstorms covered the western half of the Ukraine, the Baltic States, Belorussia, and the western half of the Central Region during mid-week. Rainfall amounts ranged from 25 to 50 mm, likely creating further delays in the winter grain harvest. In addition, localized hail and heavy downpours were reported over the north-central Ukraine. Further east, unfavorably high temperatures for 4 consecutive days accompanied mostly dry weather in crop areas which extended eastward from the eastern Ukraine, through the North Caucasus, into the eastern Black Soils and middle Volga Valley. Although the unseasonably warm, dry conditions aided the wheat harvest, maximum temperatures were around 35° C, above the optimum for corn, which is in the critical reproductive stage. By week's end, cooler weather and scattered showers brought some relief to major corn producing areas in the eastern Ukraine and North Caucasus.

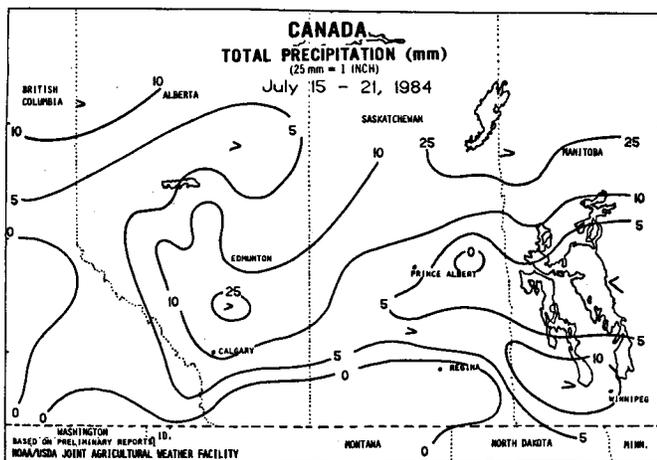
In the New Lands, a ridge of high pressure kept most of the southwestern grain areas, which extend eastward from the central Volga Valley through the southern Urals and central Kazakhstan, unseasonably warm and dry. In contrast, storm systems which developed on the eastern side of the high-pressure area produced widespread beneficial rains (10 to 25 mm), over eastern spring wheat areas. The unfavorably warm, dry weather which has covered southwestern spring grain areas since early July has likely accelerated crop growth ahead of normal dates and reduced yield prospects. Spring grains in this area probably are in the filling stage, while those further north and east should be in the flowering to grain-formation stages.



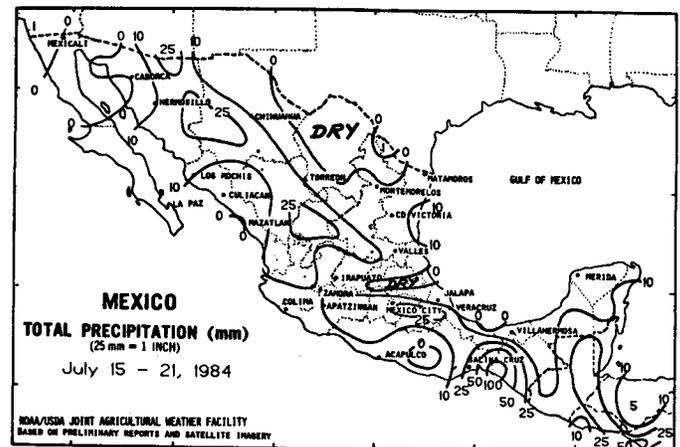
EUROPE...Mostly dry weather aided harvest activity in Mediterranean crop areas. Corn areas in southern France were generally dry and more rain is needed for the crop which is in the reproductive stage. Widespread showers (25 to 50 mm) covered central France and most of northern Europe, benefiting spring grains, normally in the heading stage. The wet weather in these areas was unfavorable for maturing winter grains. In the southeast, showers benefited corn in the reproductive stage, but some delays in the winter wheat harvest may have occurred. Reports indicate Romania's wheat harvest is about 20-percent complete. Further south, harvest activity in Bulgaria was aided by mostly dry weather.



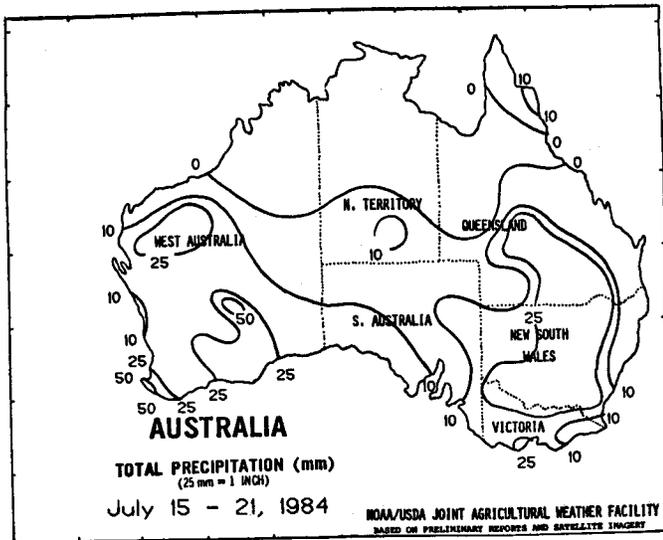
SOUTH AMERICA...Wet weather continued over Rio Grande do Sul and Santa Catarina, with most of the precipitation falling late in the week. Rainfall amounts around 50 mm continued to waterlog fields, hampering early wheat establishment in these areas. Further north, dry weather accompanied by above-normal temperatures aided harvest activity in Brazil's coffee belt. In Argentina, dry weather in southern Santa Fe and eastern Cordoba aided the final soybean harvest. However, rain is now needed for wheat planting in these areas. Wheat areas across Buenos Aires were generally dry, but topsoil moisture should be adequate for wheat planting in most areas.



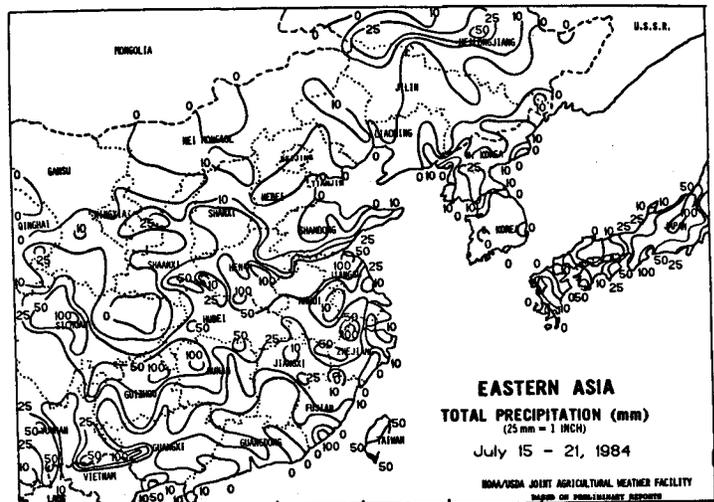
CANADA...Light to moderate showers fell across the northern wheat belt this week. The heaviest amounts of rain (15-30 mm) fell in Alberta. Dry weather favored northern grain areas in Saskatchewan following moderate showers last week. Light rain fell in the area by the weekend. The persistent wet pattern across the north has provided above-normal moisture for wheat entering the heading stage. Drier weather would be beneficial in northern grain areas of Alberta. Dry weather continued across southern Alberta and Saskatchewan. Maximum daily temperatures reached 30-35° C, further reducing the limited soil moisture for wheat in the late heading and early flowering stages. A frontal passage late in the week lowered temperatures, but did not produce any rain.



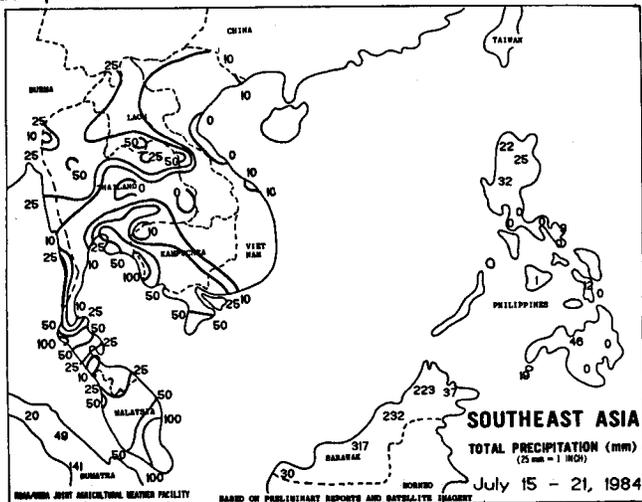
MEXICO...Rains were widespread across most of the nation, but very light over the southern Plateau corn belt. Rainfall averaged 6 to 10 mm from Guadalajara to Mexico City, but soil moisture should generally be adequate from the frequent showers of the past several weeks. Abundant rains drenched most of the northwestern mountain watersheds that supply irrigation water for west coast summer field crops and winter vegetables. Mostly dry, sunny weather continued over the droughty north-central and upper northeastern regions, stressing rangeland vegetation and nonirrigated orchards but helping the grain harvest. Showers decreased slightly throughout the intertropical convergence zone off the southern Mexico coast, and for the first time in several weeks no organized weather systems were evident from the satellite photos. Rains were scattered across Central America, but only about half of the area had significant or beneficial amounts. Dryness continues to plague some areas.



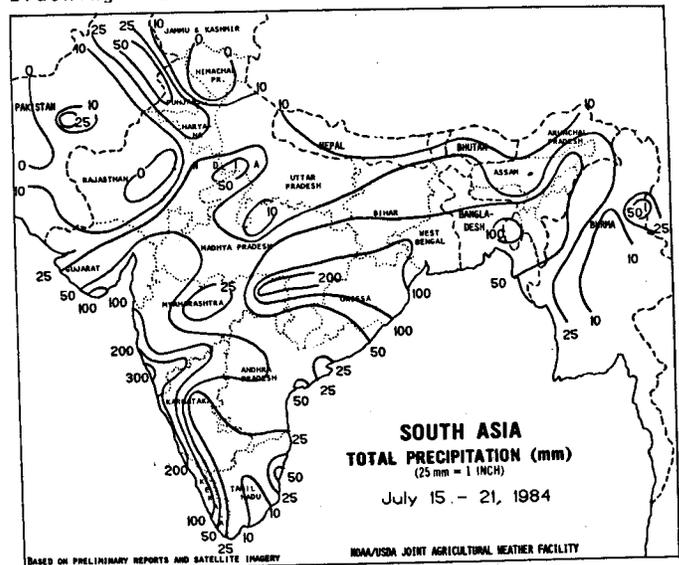
AUSTRALIA...Precipitation in the southeast significantly improved the wheat crop prospects. Rainfall (greater than 25 mm) covered wheat areas in Queensland, New South Wales, and most of Victoria. Most of the rain fell on Sunday with amounts generally less than 20 mm. However, lingering showers throughout the week brought accumulations to 35 mm in grain areas of New South Wales. The moisture was very beneficial for resumption of wheat planting in New South Wales and Victoria. However, late plantings (1 month past the optimal date) have a lower yield potential. Seasonably cool temperatures in the southeast could limit establishment. Additional rain will be needed to replenish soil moisture. Light to moderate rain in the west maintained adequate moisture.



EASTERN ASIA...Moderate to heavy rain fell throughout central crop areas. The rainfall pattern extended further south benefiting vegetative growth of late double-cropped rice in northern areas of Hunan, Jiangxi, and Zhejiang. These areas had been in a drying trend. Mostly dry weather occurred in Guangdong and Guangxi, but soil moisture is adequate. Heavy rain (greater than 100 mm) in the North China Plain was unfavorable for cotton which is entering the boll formation stage. Little or no rain fell in Hebei and Shandong, but moisture is available following moderate rains during the last 2 weeks. Early in the week, hot and dry air in Hebei stressed cotton, corn, and soybeans. Moderate rain in Heilongjiang benefited corn and soybeans in the silking and pod-forming stages, respectively. More rain is needed for corn and soybeans in Liaoning and Jilin.



SOUTHEAST ASIA...Monsoon rains decreased this week producing mostly dry conditions in Vietnam and Laos. Moderate rain (25-50 mm) fell across northern and south-central Thailand, while a dry band stretched through central Thailand. Moisture conditions are generally good in Thailand following 2 weeks of moderate to heavy rainfall. Seasonably warm temperatures maintained high evaporation rates and additional rains will be needed. Early planted corn and rice are maturing and some harvesting has begun. However, with the long planting season in Thailand most of the crops are in the reproductive and filling stages. Rainfall has also tapered off in the Philippines during the past 2 weeks. Moisture conditions remain generally adequate, but precipitation would benefit rice and corn in the reproductive stage.



SOUTH ASIA...Precipitation increased in most areas of India this week. Heavy rain (greater than 200 mm) likely caused flooding along the west coast and in western Maharashtra and Madhya Pradesh. Beneficial rain (25-75 mm) fell in cotton and groundnut areas of Gujarat, southern Rajasthan, and western Madhya Pradesh. Persistent dryness delayed planting in these areas. Rains continue in the winter rice area benefiting early growth. Drier weather returned to Tamil Nadu, Karnataka, and southern Andhra Pradesh where all crops would benefit from more rain. Temperatures averaged below normal in most of India, favoring crop growth.



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

**WEEKLY NEWS BULLETIN
SECOND CLASS**

(continued from p. 20)

Soil moisture adequate to short. Days suitable for fieldwork: 4.4. Main activities: Harvesting hay, clipping pasture and small grain harvest.

WISCONSIN: The week started off with near normal temperatures, cooled rapidly by midweek, then a warming trend began which brought hot heavy weather for the weekend. Most of the weeks light rainfall fell the 16th and 17th, although isolated thunderstorms occurred the 19th and 22nd.

There were 5.8 days suitable for the week. Soil moisture was rated 16% short, 80% adequate and 4% surplus. Second crop haying was 26% complete compared to 23% last year and an average of 27%. Corn was 10% silked compared to 10% last year and a 16% average. Corn height was 59 in., 49 in. last year, 60 in. average. Oats were 95% headed, 95% last year and a 95% average. A few farmers had just begun swathng oats. Winter wheat harvest had also begun.

WYOMING: Temperatures 1 to 50 above normal. Weekly highs mainly 90's northeast and 80's southwest. Rainfall below normal most stations. Topsoil moisture short 67% State. Days suitable for fieldwork: 7.0. Winter wheat: 60% turning color, 35% mature. Last year, 55% turning color, 25% mature. Barley: 40% turning color, 10% mature. Last year, 32% turning color, 1% mature. Spring wheat: 40% turning color, 10% mature. Last year, 18% turning color, 4% mature. Oats: 70% headed, 25% turning color. Last year, 63% headed, 17% turning color. Alfalfa: First cutting 85% complete. Other hay harvest 45% complete. Dry beans 30% in bloom. Potatoes 40% in bloom. Corn 5% tasseled.

California Heat-Damage Report

The fourth consecutive week of very hot temperatures, with most days above 100 degrees in the interior valleys, has caused heat damage to California's fruit and vegetable crops and accelerated harvests, with many crops about 2 weeks ahead of last year. Advanced maturity is increasing current supplies of deciduous fruits and vegetables, but could disrupt normal flows to market later this season, particularly during late August and into September. The canning tomato harvest has increased very rapidly with weekly deliveries now in the 600,000 ton range, and many growers on delivery quotas. Yields on later maturing fields will likely be reduced. Growers are concerned about sunburn damage on prunes and internal heat damage in plums. Sunburn damage was also reported on the walnut crop. Growth of Bartlett pears and Clingstone peaches has slowed, and grape growers report reduced growth because of the prolonged high temperatures. Milk production is also declining as a result of the heat. Details for individual crops are available from the California Crop Reporting Service, Sacramento, California, (916) 445-6076.

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