

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

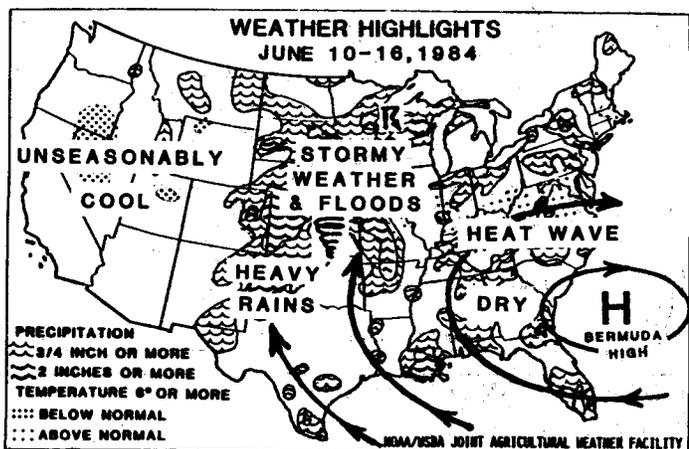
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June 19, 1984

National Weather Summary

June 10-16



HIGHLIGHTS: A near stationary ridge of high pressure in the southeastern United States caused warm, moist air to flow northward. A heat wave resulted along the east coast and from Missouri to Virginia for much of the week. The moist air encountered much colder air moving through the Rockies and into the northern Plains causing severe weather with heavy downpours. Parts of Nebraska, Iowa, and Missouri experienced widespread flooding. Thunderstorms produced severe weather over the High Plains from the Texas Panhandle to South Dakota. Hot weather sapped soil moisture in the Southeast and began to stress some crops.

SUNDAY...High pressure off the Southeast Coast continued to pump very warm air into the East. Moisture from the Gulf of Mexico flowed northward and triggered heavy thunderstorms and severe weather from the northern part of the Texas Panhandle into western Oklahoma. Showers and thunderstorms also reached from the northern Rockies into North Dakota and Nebraska.

MONDAY...Record hot temperatures continued along the east coast, and warm, moist air from the Gulf spread through the Plains and encountered much cooler air that had moved into the northern Plains. Severe thunderstorm activity resulted from southwestern Nebraska to the western Great Lakes. Lighter showers and thunderstorms covered the northern Plains and Rockies.

TUESDAY...There was some relief from the heat in the Northeast, but the heat wave continued in the mid-Atlantic States, the South, and pushed into the central Plains. Severe thunderstorms continued along the leading edge of the cooler air. Some

heavy downpours occurred from southeastern Nebraska through Iowa.

WEDNESDAY...High temperatures in the nineties returned to all of the East Coast States, pushed into the Midwest, and continued across the South. Showers and thunderstorms were scattered throughout the East, but were more concentrated from Indiana to southern New England. A weak tropical storm spread showers over southeastern Georgia and Florida before dissipating. Showers and thunderstorms were scattered over southern Texas with some moderate amounts of rain over the southern High Plains.

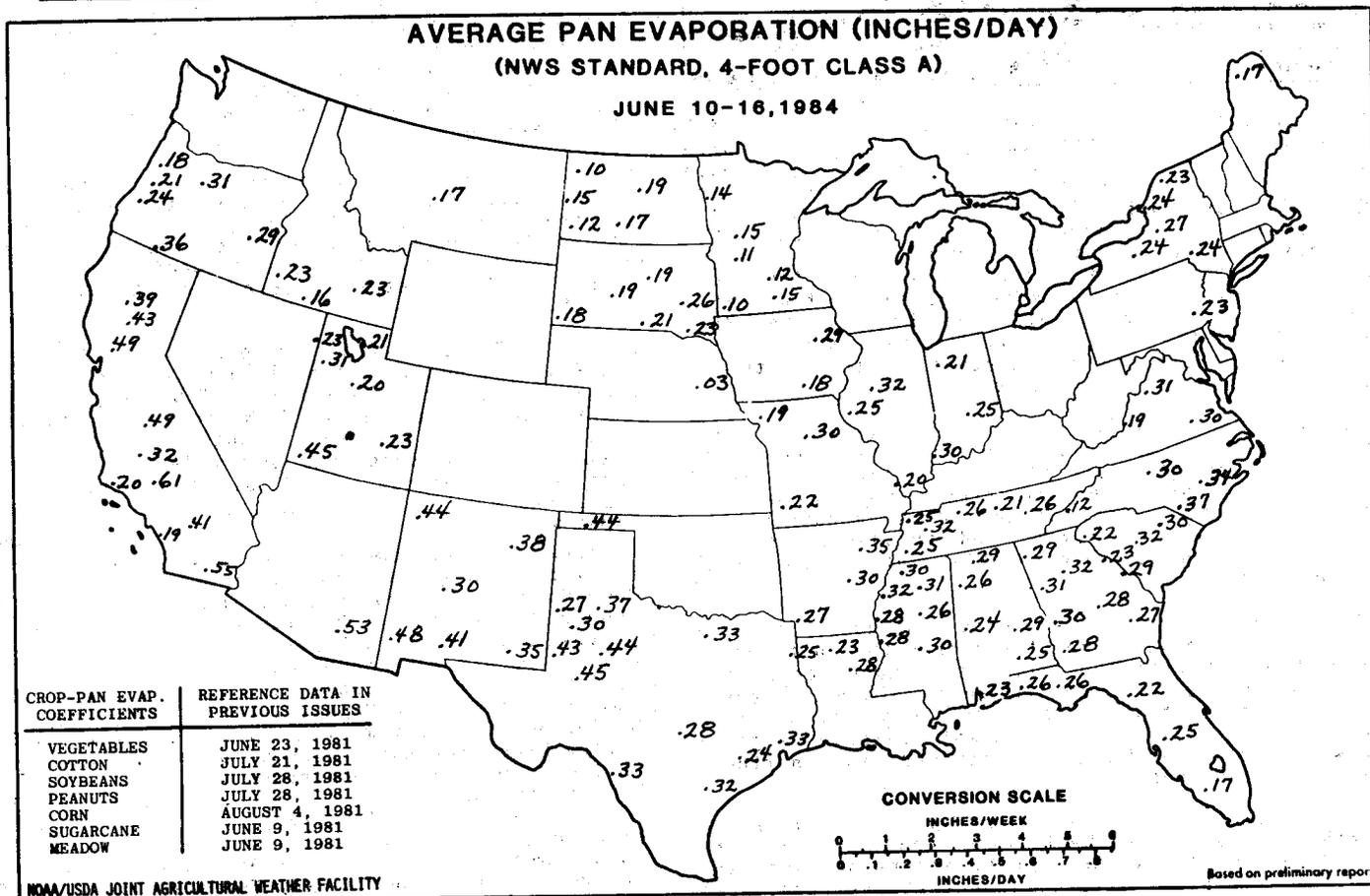
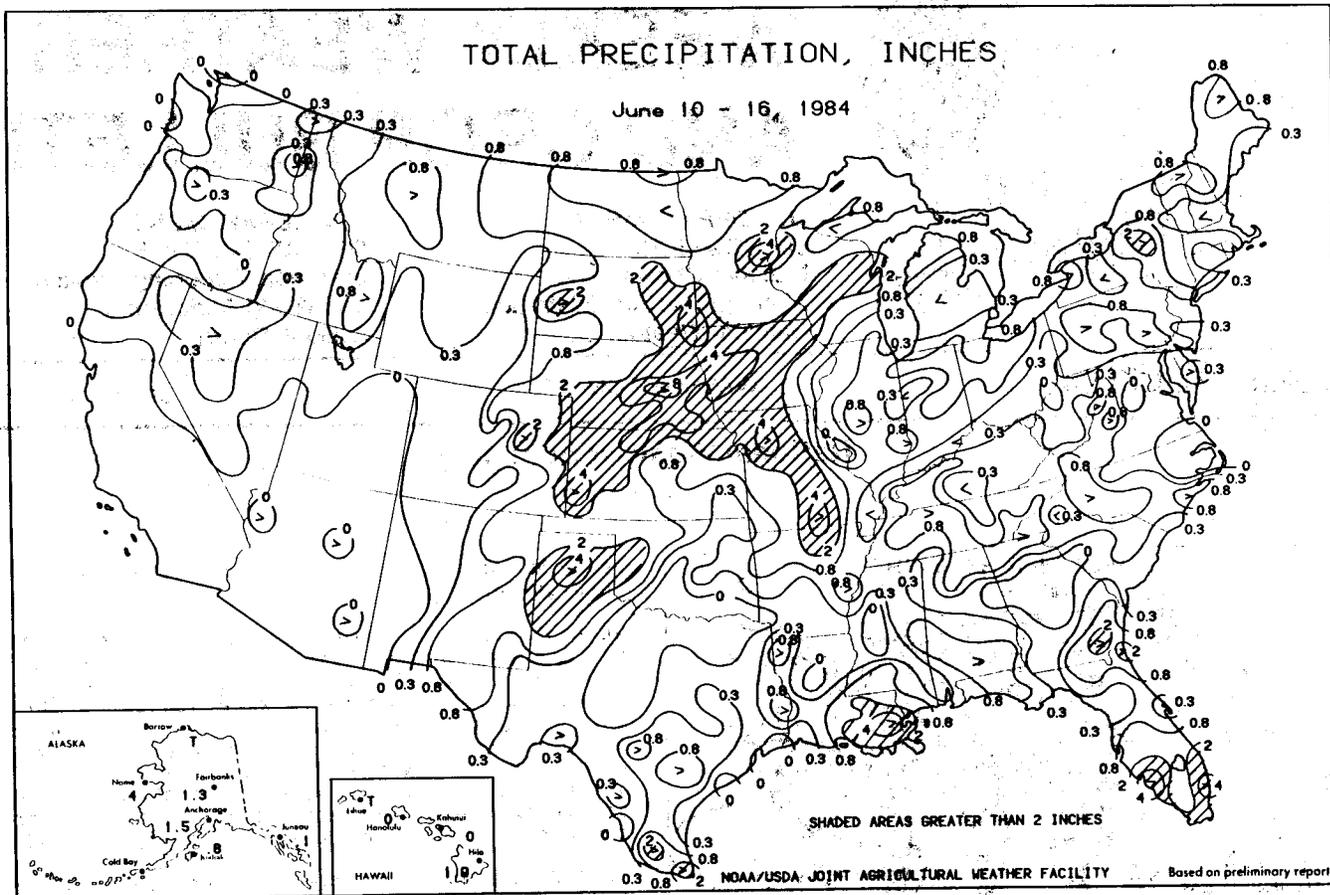
THURSDAY...After 1 day of respite, showers and thunderstorms returned to the western Corn Belt. Heavy rains caused flooding in Iowa, Nebraska, and Missouri. Showers were scattered from Florida to the northern Plains and from the southern High Plains into Iowa. Some relief from the heat wave began in the Northeast, but hot weather continued across the South.

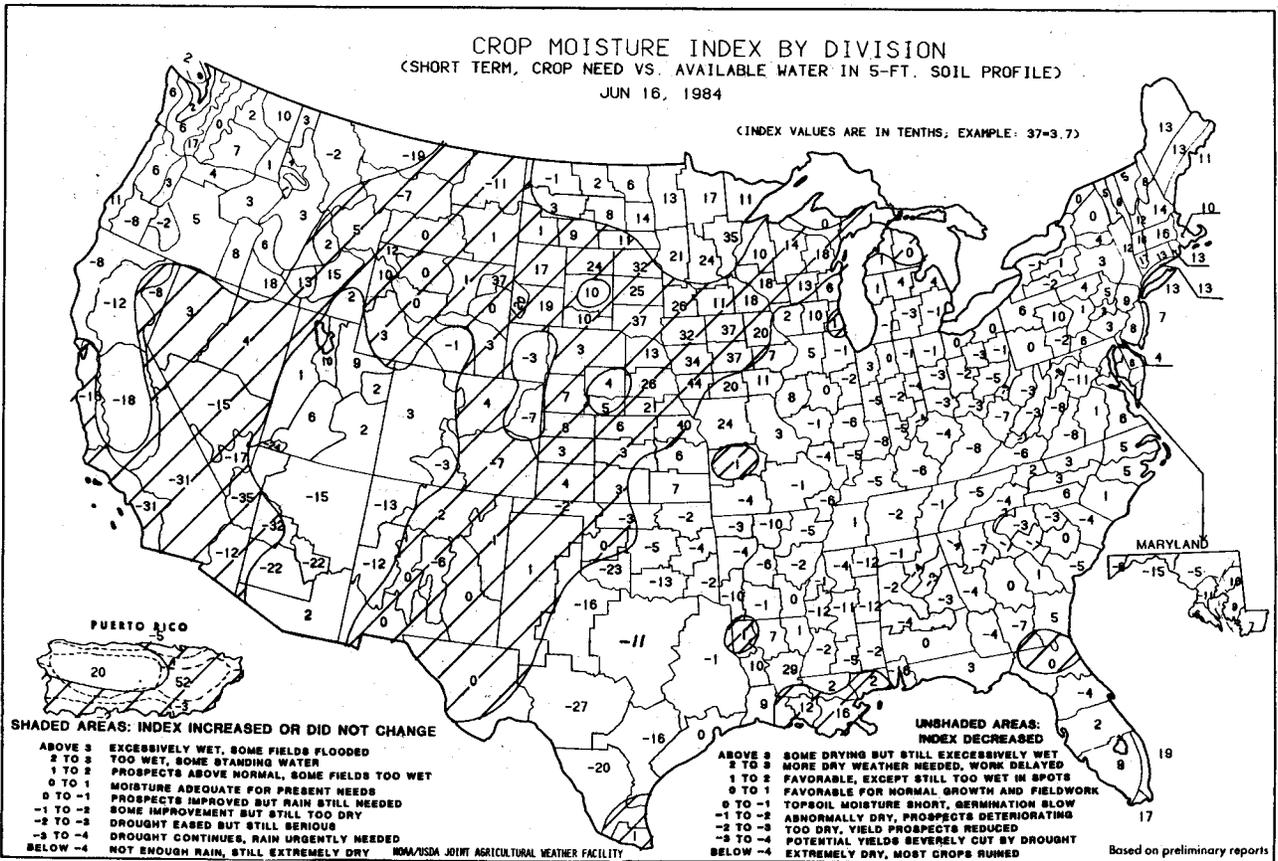
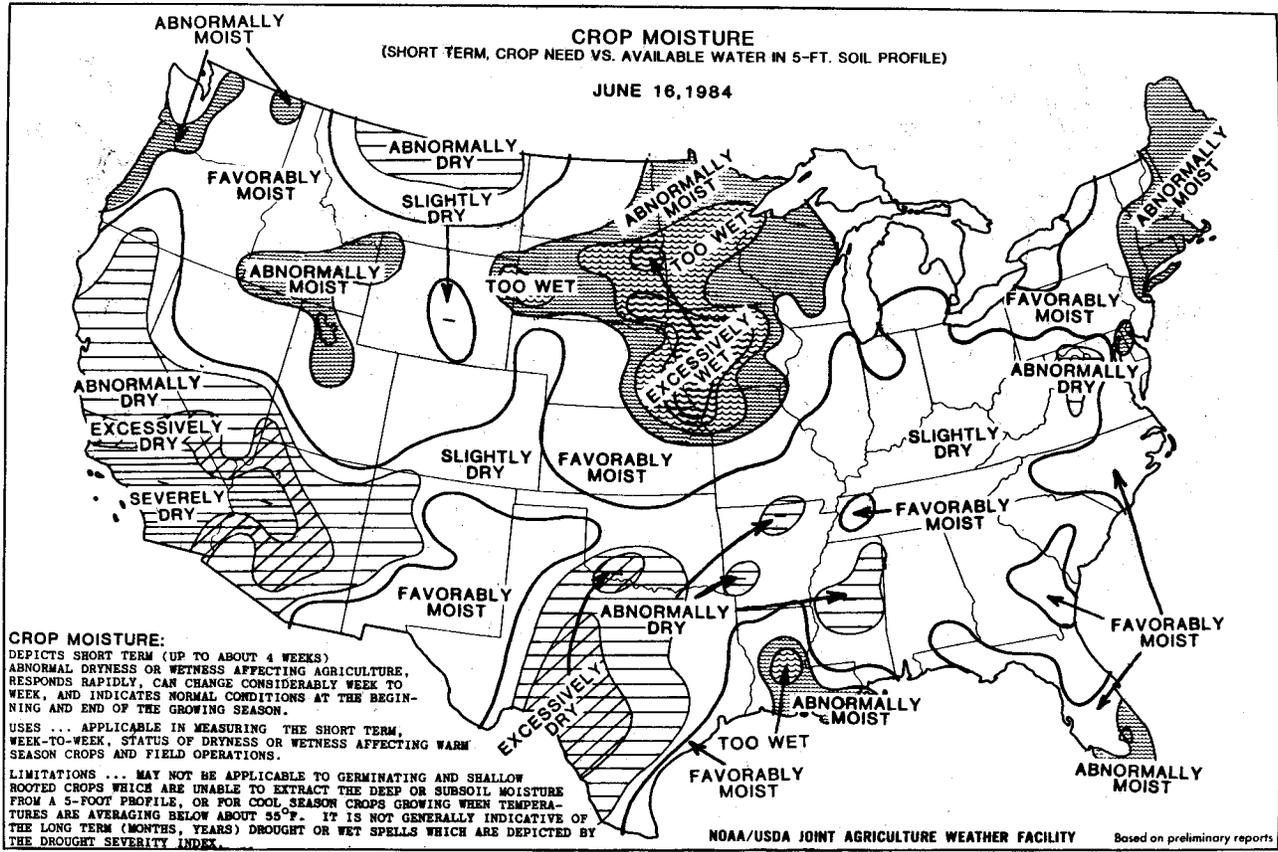
FRIDAY...Showers and thunderstorms developed over Florida, the Mississippi Valley, the central and northern Plains, and the Rocky Mountains. Severe weather with heavy downpours occurred in Nebraska and Missouri exacerbating flood conditions in those areas. Cooler weather covered the Northeast and Midwest.

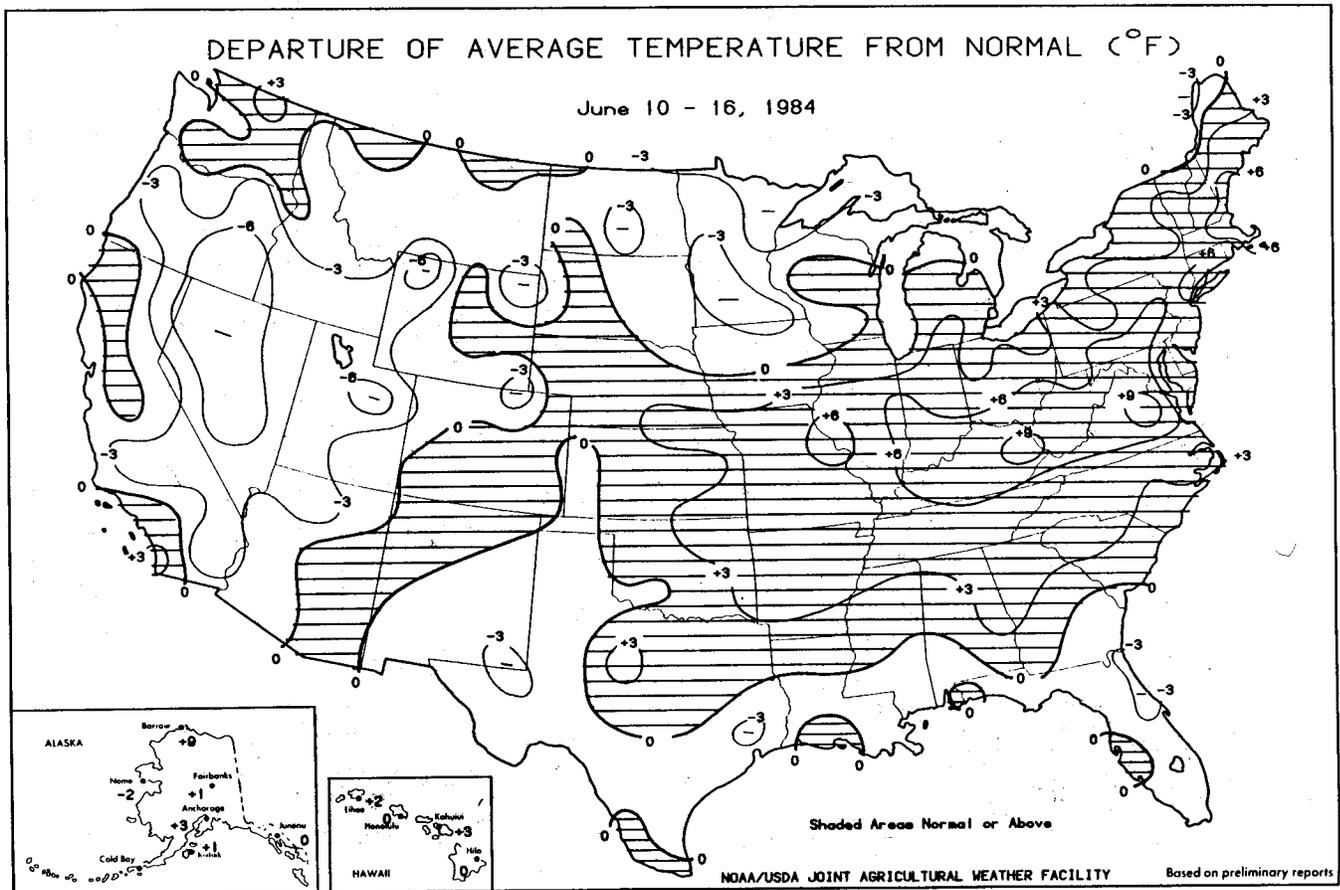
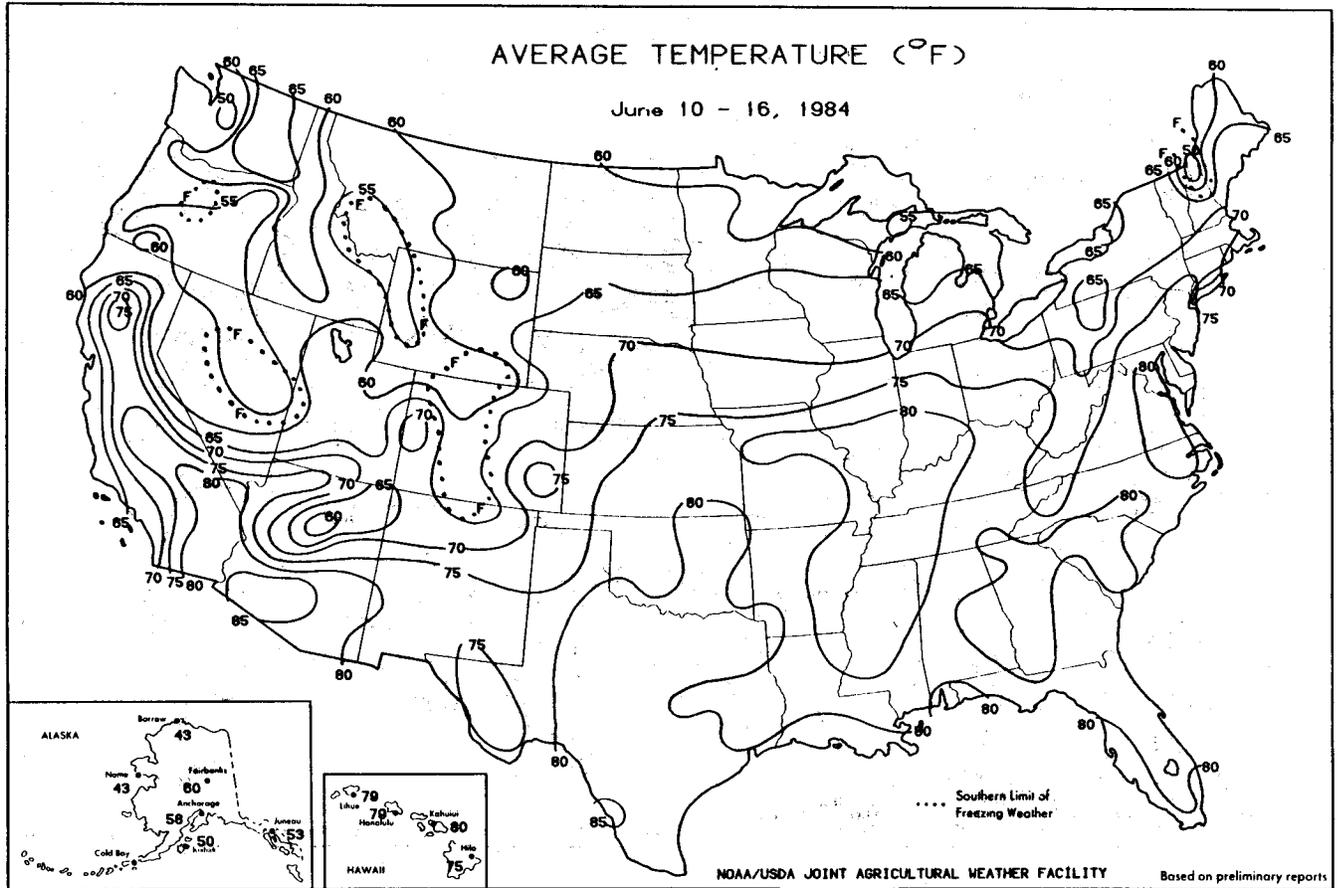
SATURDAY...Showers continued over the Rockies and High Plains. Heavy rain fell in southwestern Texas, from northeastern Colorado into Nebraska, and from central South Dakota into Wisconsin. Scattered showers over the Southeast brought needed moisture to parts of the Carolinas and mid-Atlantic States where hot weather had sapped soil moisture.

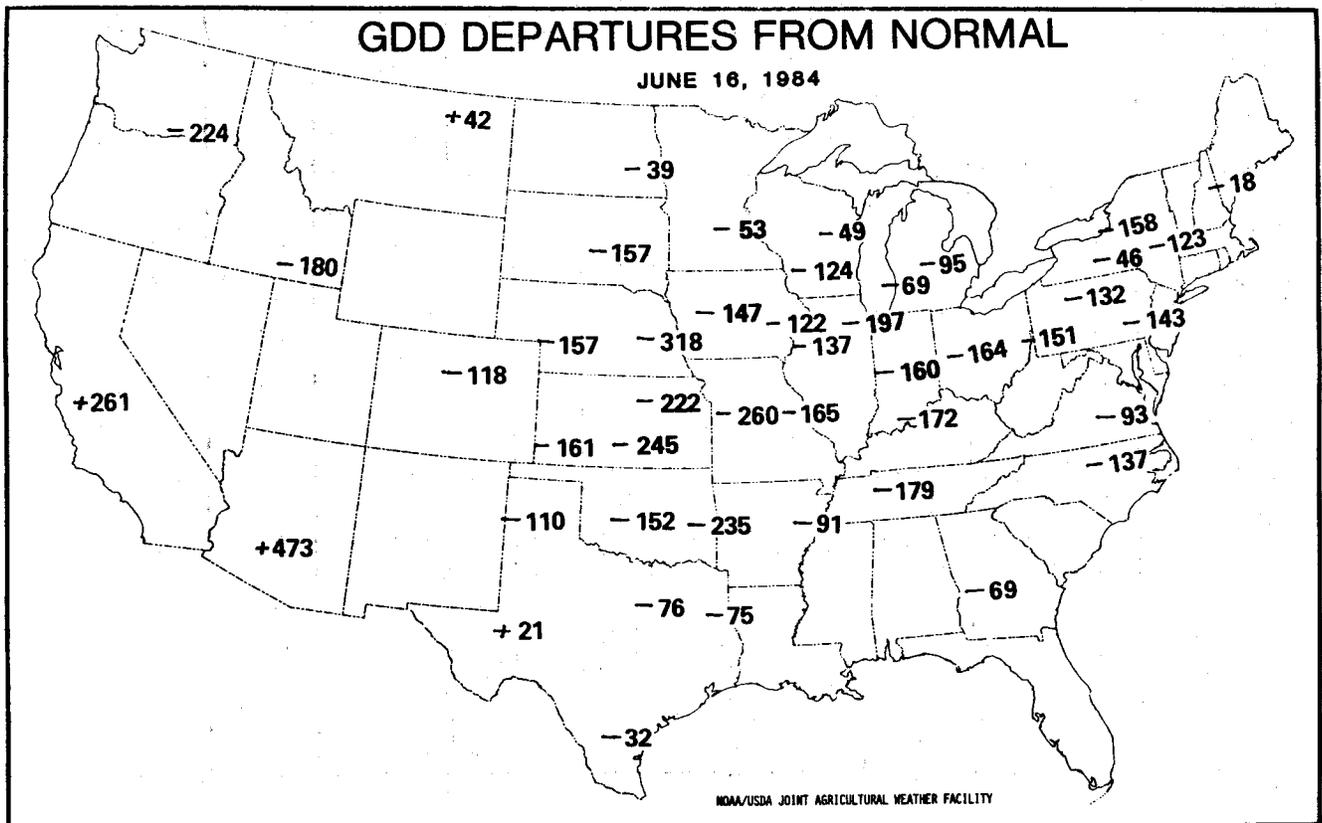
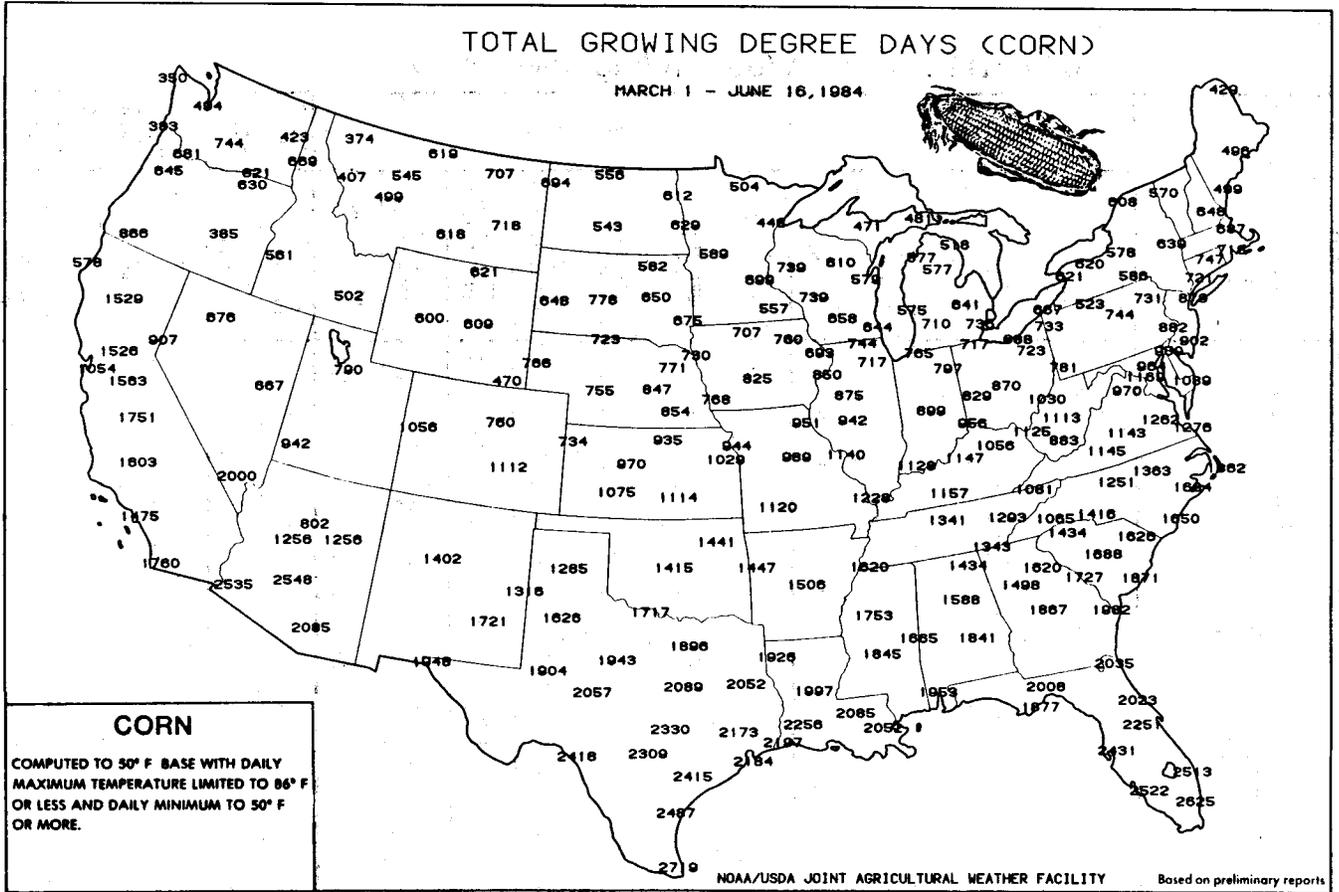
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Weather Data for the Week Ending JUNE 16, 1984

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 °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	91	67	93	63	79	2	.2	-.5	.2	.2	13	24.4	87	93	41	6	0	1	0
MOBILE	90	69	94	67	80	-1	.1	-1.0	.1	.1	5	23.6	80	87	43	5	0	2	0
MONTGOMERY	93	68	96	66	81	1	.7	-.1	.4	.7	44	23.1	93	94	41	7	0	2	0
AK ANCHORAGE	64	52	71	49	58	3	1.3	1.1	.8	1.5	375	5.6	156	65	45	0	0	2	2
BARROW	48	37	57	34	43	9	T	0	T	0	0	.8	67	97	70	0	0	1	1
FAIRBANKS	69	51	73	48	60	1	.1	-.2	.1	.1	17	3.5	113	94	54	0	0	3	3
JUNEAU	59	47	68	44	53	0	.8	-.2	.6	1.1	85	21.6	115	98	64	0	0	5	1
KODIAK	55	45	61	44	50	0	1.5	.8	.7	2.1	131	38.9	116	98	76	0	0	4	1
NOME	48	38	61	35	43	-2	.4	-.1	.2	.4	80	2.8	74	84	62	0	0	2	0
AZ PHOENIX	103	73	105	70	88	1	0	0	0	0	+100	1.4	61	25	10	7	0	0	0
PRESCOTT	83	52	85	47	67	1	0	0	0	0	0	.3	5	35	17	0	0	0	0
TUCSON	99	67	100	64	83	0	0	0	0	0	+100	1.0	43	29	7	7	0	0	0
YUMA	90	71	100	69	85	-2	0	0	0	0	+100	.9	69	44	15	7	0	0	0
AR FORT SMITH	90	70	93	68	80	3	1.1	.2	1.1	1.2	63	15.5	79	92	51	4	0	1	1
LITTLE ROCK	92	71	95	69	82	4	.3	-.5	.3	.3	19	22.4	91	84	48	6	0	2	0
CA BAKERSFIELD	87	56	94	50	71	-7	0	0	0	0	+100	1.2	29	53	23	3	0	0	0
EUREKA	60	50	61	45	55	0	0	0	0	0	.5	16.5	74	94	66	0	0	0	0
FRESNO	91	60	98	56	75	0	0	0	0	0	+100	2.0	29	63	21	4	0	0	0
LOS ANGELES	72	62	76	60	67	1	0	0	0	0	+100	1.7	20	80	54	0	0	0	0
RED BLUFF	91	62	101	57	77	1	0	0	0	0	.1	33	4.2	33	63	21	3	0	0
SACRAMENTO	87	54	96	52	71	0	0	0	0	0	1.0	3.0	28	76	28	1	0	0	0
SAN DIEGO	72	66	74	63	69	3	0	0	0	0	+100	1.2	19	81	63	0	0	0	0
SAN FRANCISCO	70	52	75	48	61	0	T	-.1	T	0	0	4.0	31	83	48	0	0	0	0
CO DENVER	80	53	87	41	66	0	.3	-.1	.2	.5	63	6.0	78	83	36	0	0	3	0
GRAND JUNCTION	85	57	93	49	71	-1	T	-.1	T	1.6	800	5.3	156	53	17	2	1	0	0
PUEBLO	89	56	94	51	72	1	T	-.2	T	0	0	3.7	82	75	22	3	0	1	0
CT BRIDGEPORT	84	64	93	54	74	6	.3	-.3	.3	.4	31	23.1	122	75	44	3	0	2	0
HARTFORD	87	57	97	43	72	4	.1	-.7	.1	.2	13	27.4	133	88	35	3	0	2	0
DC WASHINGTON	89	72	97	63	80	6	.1	-.7	.1	.1	6	18.8	111	81	42	5	0	2	0
FL APALACHICOLA	87	68	90	63	78	-2	.8	-.3	.5	.8	38	25.1	128	89	62	1	0	4	0
DAYTONA BEACH	84	66	85	63	75	-4	.3	-1.2	.2	.3	10	16.2	92	80	61	0	0	4	0
JACKSONVILLE	85	67	90	65	76	-3	1.7	.4	1.1	1.7	68	18.8	87	100	63	1	0	3	2
KEY WEST	84	77	86	74	80	-3	5.6	4.4	3.0	6.0	250	22.5	173	83	68	0	0	4	1
MIAMI	85	75	88	72	80	-1	4.1	1.9	2.9	4.2	95	26.9	129	86	58	0	0	4	3
ORLANDO	87	68	91	66	77	-4	.3	-1.4	.3	.3	9	16.4	90	98	60	2	0	2	0
TALLAHASSEE	92	68	95	64	80	0	.2	-1.3	.1	.2	7	30.8	110	95	48	6	0	4	0
TAMPA	89	73	91	70	81	0	.7	-.5	.5	.7	30	11.0	67	93	54	2	0	4	0
WEST PALM BEACH	84	73	86	68	79	-2	2.3	-.5	1.9	2.3	64	27.2	123	89	66	0	0	4	0
GA ATLANTA	90	69	92	67	80	4	0	0	0	0	0	28.4	129	91	40	7	0	1	0
AUGUSTA	92	66	94	64	79	2	T	-.9	T	0	0	22.9	97	99	45	6	0	0	0
MACON	92	69	95	67	80	1	0	0	0	0	0	28.4	129	91	40	7	0	1	0
SAVANNAH	88	69	90	65	78	0	.2	-1.1	.2	.2	8	26.6	127	89	52	2	0	1	0
HI HILO	81	68	83	68	75	0	1.9	.6	.6	2.4	89	44.4	71	80	60	0	0	6	2
HONOLULU	86	73	89	72	79	0	T	-.1	T	0	0	4.8	37	79	48	0	0	1	0
KAHULUI	87	73	89	68	80	3	T	-.1	T	0	0	5.4	44	69	48	0	0	0	0
LIHUE	84	75	84	74	79	2	.1	-.2	.1	.4	57	7.3	34	80	60	0	0	3	0
ID BOISE	72	48	84	43	60	-5	.2	0	.2	1.2	240	7.1	101	84	23	0	0	2	0
LEWISTON	78	51	86	44	65	-1	.4	0	.3	1.0	143	6.3	95	84	36	0	0	2	0
POCATELLO	70	44	79	35	57	-5	.8	.5	.7	1.3	217	7.4	125	89	43	0	0	3	1
IL CHICAGO	80	57	91	51	68	0	.3	-.7	.3	.6	32	14.7	99	84	48	1	0	2	0
MOLINE	83	64	89	57	73	3	.1	-.9	.1	3.0	150	17.5	107	82	48	0	0	2	0
PEORIA	84	65	90	57	74	3	.4	-.5	.4	2.1	117	19.0	119	87	51	1	0	2	0
QUINCY	88	67	94	59	78	5	.1	-.9	.1	3.5	184	19.6	119	88	47	6	0	1	0
ROCKFORD	81	58	90	50	69	0	.2	-.9	.1	1.9	90	12.9	82	85	50	1	0	2	0
SPRINGFIELD	88	67	93	59	77	4	1.5	-.6	1.1	1.9	112	20.3	128	94	50	4	0	3	1
IN EVANSVILLE	94	70	95	65	82	7	.2	-.6	.2	.2	13	19.6	93	85	39	7	0	2	0
FORT WAYNE	84	62	93	55	73	3	.9	0	.6	.9	53	15.1	94	85	48	2	0	3	1
INDIANAPOLIS	89	65	92	59	77	5	1.0	.1	.7	1.0	56	16.6	91	86	46	2	0	2	1
SOUTH BEND	81	60	90	54	71	2	.5	-.5	.3	1.3	68	14.0	83	75	43	1	0	2	0
IA DES MOINES	82	64	91	58	73	1	3.4	2.4	1.1	7.3	365	22.8	162	91	65	1	0	6	3
SIOUX CITY	78	62	84	55	70	-1	2.8	1.8	1.3	5.1	268	20.6	186	92	60	0	0	4	2
WATERLOO	77	59	81	52	68	-1	2.2	1.3	1.3	2.8	147	15.3	107	98	65	0	0	3	2
KS CONCORDIA	88	67	93	58	77	4	1.4	.4	.6	3.5	175	17.6	149	90	57	4	0	4	1
DODGE CITY	88	65	96	55	76	2	1.8	1.1	1.3	1.8	129	11.4	118	86	45	2	0	3	1
GOODLAND	80	57	86	41	68	-1	2.8	2.1	1.1	3.1	221	12.2	156	95	55	0	0	3	3
TOPEKA	85	67	90	57	76	2	1.0	-.3	.7	2.4	96	16.1	117	94	59	1	0	3	1
WICHITA	90	68	95	62	79	3	.4	-.6	.2	1.1	55	15.2	124	88	47	6	0	2	0
KY BOWLING GREEN	92	67	94	66	80	5	T	-.1	T	0	0	29.2	117	91	43	7	0	1	0
LEXINGTON	89	68	90	65	78	6	.4	-.6	.3	.4	21	20.0	88	96	52	2	0	2	0
LOUISVILLE	91	69	93	65	80	6	.1	-.7	.1	.2	12	19.1	88	79	45	6	0	2	0
LA ALEXANDRIA	88	71	92	69	79	-2	T	-.9	T	6.3	332	33.7	115	92	56	2	0	0	0
BATON ROUGE	90	69	93	66	79	-1	1.7	1.1	.9	2.2	183	18.3	70	94	46	5	0	3	2
LAFF CHARLFS	88	71	91	69	80	-1	.1	-.8	.1	2.1	111	24.0	105	98	59	1	0	3	0
NEW ORLEANS	87	69	90	67	78	-2	5.0	4.0	2.5	5.0	250	24.6	91	94	55	2	0	4	3

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending JUNE 16, 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 °F				
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	91	69	94	66	80	0	1.3	.5	1.1	2.9	181	22.4	98	96	52	6	0	0	2	1
ME CARIBOU	71	50	86	40	61	1	.6	-.1	.5	.9	60	16.4	115	82	43	0	0	0	3	0
ME PORTLAND	79	56	93	44	68	6	.3	-.5	.3	.3	20	29.0	144	81	41	2	0	0	3	0
MD BALTIMORE	86	68	95	59	77	5	.5	.9	.1	.6	41	18.9	102	79	42	4	0	0	1	0
MD SALESBURY	87	68	94	59	77	5	.5	.9	.1	.6	41	18.9	102	79	42	4	0	0	1	0
MA BOSTON	86	65	98	55	76	8	.5	.7	.1	.7	7	31.9	153	79	39	3	0	0	1	0
MA CATHAM	86	50	73	58	68	7	.6	.7	.1	.7	8	24.8	113	81	47	0	0	0	1	0
MI ALPENA	75	46	87	39	60	-1	1.7	.9	1.6	1.7	113	10.6	85	95	44	0	0	0	2	1
MI DETROIT	82	58	92	51	70	2	.5	.3	.5	.5	31	12.5	87	84	43	2	0	0	2	0
MI FLINT	79	57	87	48	68	2	.1	.7	.1	.5	31	11.1	85	81	47	0	0	0	2	1
MI GRAND RAPIDS	80	56	90	51	68	1	.1	.9	.1	.1	5	11.8	80	92	47	1	0	0	2	0
MI HOUGHTON LAKE	75	51	84	44	63	0	.7	.7	.4	.4	29	8.5	73	89	43	0	0	0	1	0
MI LANSING	81	56	91	49	68	2	.7	.8	.2	.2	13	10.8	83	91	44	2	0	0	1	0
MI MARQUETTE	72	45	79	38	59	-1	.7	.2	.4	1.4	78	13.7	83	95	48	0	0	0	3	0
MI MUSKOGON	76	54	86	50	65	0	.1	.6	.1	.1	8	12.1	85	86	48	0	0	0	1	0
MI SAULT STE. MARIE	70	43	77	35	56	-2	.9	.1	.6	1.2	75	9.8	75	97	58	0	0	0	1	1
MN ALEXANDRIA	68	54	78	44	61	-4	1.3	.4	.5	4.4	232	12.4	119	98	73	0	0	0	5	1
MN DULUTH	65	46	80	42	56	-4	1.9	1.0	1.3	3.9	217	10.3	89	94	61	0	0	0	4	1
MN INT'L FALLS	68	49	71	37	58	-3	.6	.2	.6	5.4	338	9.2	107	96	60	0	0	0	3	1
MN MINNEAPOLIS	73	60	82	56	66	-2	1.7	.7	.5	7.1	374	17.0	157	97	70	0	0	0	5	1
MN ROCHESTER	71	53	77	45	62	-4	1.8	.9	.9	2.5	139	12.3	108	95	64	0	0	0	6	0
MS GREENWOOD	92	71	94	69	81	2	.7	.7	.2	.2	13	23.8	84	86	42	6	0	0	0	2
MS JACKSON	94	68	96	65	81	1	.7	.6	.1	.1	8	21.9	78	94	43	6	0	0	0	3
MS MERIDIAN	89	64	91	61	76	-2	1.1	.3	.5	1.1	73	23.4	84	94	45	4	0	0	3	2
MO CAPE GIRARDEAU	95	71	97	70	83	--	.1	.7	.1	.1	6	17.2	78	92	45	7	0	0	1	0
MO COLUMBIA	88	67	90	66	78	5	2.7	1.8	1.3	3.9	217	22.7	129	98	61	2	0	0	2	2
MO KANSAS CITY	85	67	89	59	76	3	2.0	.9	1.8	3.1	141	18.7	127	86	51	0	0	0	3	1
MO SAINT LOUIS	91	74	93	70	83	8	.7	.8	.2	.2	13	21.2	128	84	48	5	0	0	0	2
MO SPRINGFIELD	88	67	91	65	78	4	1.5	.4	.9	1.9	86	18.8	102	88	55	3	0	0	2	2
MT BILLINGS	73	50	82	43	62	-2	.6	.1	.3	1.2	120	5.8	71	82	40	0	0	0	4	0
MT CLASGOW	73	54	83	48	64	1	1.1	.5	.7	1.6	133	3.8	73	90	48	0	0	0	3	1
MT GREAT FALLS	70	48	82	43	59	-2	1.6	.9	1.5	1.9	136	6.7	79	83	45	0	0	0	3	1
MT HAVRE	73	50	86	47	61	-1	.4	.2	.3	.5	45	3.2	59	87	35	0	0	0	4	0
MT HELENA	69	49	78	45	59	-1	.9	.4	.8	1.2	120	4.5	79	83	40	0	0	0	2	1
MT KALISPELL	72	45	79	42	59	1	.7	.5	.8	.8	80	6.6	85	92	36	0	0	0	1	0
MT MILES CITY	76	53	90	48	64	-2	1.6	.9	1.0	2.6	186	4.8	70	93	43	1	0	0	5	1
MT MISSOULA	70	45	80	36	57	-2	.4	0	.2	.6	67	7.4	104	96	42	0	0	0	3	0
NE GRAND ISLAND	83	64	88	54	74	3	3.0	2.1	1.8	3.3	183	21.9	189	84	55	0	0	0	2	2
NE LINCOLN	83	65	88	58	74	2	3.0	2.1	1.5	4.1	228	24.4	192	99	70	0	0	0	6	2
NE NORFOLK	81	62	86	53	71	1	2.8	1.7	1.5	3.6	164	20.5	181	90	62	0	0	0	3	2
NE NORTH PLATTE	79	59	84	46	69	1	3.5	2.6	1.7	3.8	211	14.1	148	77	50	0	0	0	4	4
NE OMAHA	81	63	88	57	72	1	3.9	2.9	1.4	6.6	330	22.4	170	94	72	0	0	0	5	3
NE SCOTTSBLUFF	81	53	89	37	67	0	.5	.2	.3	1.1	79	8.7	113	83	33	0	0	0	2	0
NE VALENTINE	81	57	92	48	69	1	1.0	.3	.3	1.7	121	8.5	106	75	43	1	0	0	5	0
NV ELY	71	36	78	27	53	-5	.7	.2	.4	.4	100	3.6	73	80	23	0	0	0	2	0
NV LAS VEGAS	93	66	96	58	80	-3	0	0	0	0	+100	T	0	22	8	6	0	0	0	0
NV RENO	74	43	83	40	59	-3	.3	.2	.1	.4	200	1.6	36	81	25	0	0	0	4	0
NV WINNEMUCCA	70	40	82	33	55	-8	.4	.2	.2	1.3	260	6.4	145	92	33	0	0	0	5	0
NH CONCORD	83	53	93	37	68	4	.1	.6	.1	.7	50	24.9	159	85	36	3	0	0	1	0
NJ ATLANTIC CITY	89	65	99	50	77	8	.1	.5	.1	.1	8	23.8	127	84	40	3	0	0	1	0
NM ALBUQUERQUE	90	58	94	54	74	0	.7	.1	.7	.0	0	1.6	76	50	16	4	0	0	1	0
NM CLOVIS	84	62	90	59	73	-1	2.8	2.2	2.0	3.0	250	7.9	134	92	45	1	0	0	4	1
NM ROSWELL	89	66	97	60	77	-2	1.5	1.3	.8	1.7	425	4.7	188	87	33	3	0	0	3	1
NY ALBANY	82	54	92	41	68	2	.4	.3	.4	.9	60	20.5	131	96	47	3	0	0	1	0
NY BINGHAMTON	80	55	89	42	68	3	.4	.5	.2	.5	78	18.9	113	80	41	0	0	0	2	0
NY BUFFALO	78	56	87	45	67	1	.8	.2	.8	1.2	100	15.0	96	87	42	0	0	0	2	1
NY NEW YORK	86	67	96	56	77	6	.8	.1	.5	.8	57	26.2	136	82	46	3	0	0	2	1
NY ROCHESTER	78	55	90	44	67	0	.7	.7	.7	.0	0	15.4	111	93	44	1	0	0	1	0
NY SYRACUSE	79	52	89	43	65	-1	.8	0	.7	1.0	63	15.6	92	95	42	0	0	0	2	1
NC ASHEVILLE	86	59	87	54	72	3	.3	.7	.2	.3	15	24.2	107	100	53	0	0	0	3	0
NC CHARLOTTE	91	67	93	64	79	5	1.2	.4	1.1	1.2	75	26.2	124	80	38	6	0	0	2	1
NC GREENSBORO	88	67	90	65	78	4	.2	.7	.2	.2	11	23.3	118	83	47	4	0	0	1	0
NC HATTERAS	83	71	85	67	77	3	0	1.0	0	0	0	20.6	92	90	61	0	0	0	0	0
NC NEW BERN	91	70	93	65	81	5	.7	1.2	.7	.0	0	26.7	122	84	47	5	0	0	0	0
NC RALEIGH	89	67	91	64	78	4	.3	.6	.3	.3	18	26.2	134	91	50	4	0	0	1	0
NC WILMINGTON	88	67	93	62	78	1	.3	1.0	.3	.3	12	21.9	101	94	56	2	0	0	1	0
ND BISMARCK	71	51	81	43	61	-3	1.1	.3	.6	2.6	173	8.9	127	92	55	0	0	0	4	1
ND FARGO	71	55	78	44	63	-2	.4	.3	.2	5.0	357	10.3	134	89	55	0	0	0	4	0
ND GRAND FORKS	71	53	80	45	62	-7	.6	.1	.5	5.2	371	9.7	139	90	58	0	0	0	3	1
ND WILLISTON	73	50	87	44	61	-2	.7	.1	.4	1.2	92	4.8	77	92	46	0	0	0	4	0
OH AKRON-CANTON	82	57	91	49	69	2	.3	.4	.3	.5	33	16.0	96	85	43	1	0	0	1	0
OH CINCINNATI	89	65	93	62	77	6	1.1	.9	.1	.1	5	16.4	84	87	44	3	0	0	2	0
OH CLEVELAND	79	57	90	50	68	1	1.5	.6	1.5	2.0	118	19.1	116	79	45	1	0	0	1	1
OH COLUMBUS	86	62	93	54	74	4	.5	.5	.4	.5	76	15.3	86	82	41	3	0	0	2	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending JUNE 16, 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 °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	85	63	92	55	74	3	.5	-.4	.5	.5	28	15.9	92	79	40	2	0	1	1
TOLEDO	82	58	93	51	70	2	.4	-.4	.4	.4	25	14.6	100	86	44	3	0	1	0
YOUNGSTOWN	80	55	91	48	68	1	.3	-.5	.3	1.6	100	16.2	95	93	49	0	0	1	0
OK OKLAHOMA CITY	88	69	92	67	78	2	T	-.9	.3	1.9	100	11.5	77	79	46	3	0	0	0
TULSA	91	72	95	70	82	4	T	1.0	.1	.3	13	23.7	130	91	51	4	0	1	0
OR ASTORIA	61	51	63	48	56	0	T	-.6	T	1.6	133	32.9	93	88	65	0	0	0	0
BURNS	67	39	78	34	53	-7	T	-.2	T	.8	200	5.5	190	85	43	0	0	1	0
MEDFORD	81	47	87	35	64	-1	T	-.2	T	.5	125	6.6	65	86	30	0	0	0	0
PFNDLETON	74	51	82	45	63	-3	T	-.1	T	.8	267	7.8	172	78	35	0	0	1	0
PORTLAND	72	52	78	48	62	0	T	-.4	T	1.6	200	17.4	91	82	46	0	0	0	0
SALEM	71	43	78	36	57	-4	T	-.3	T	1.9	271	20.9	100	90	55	0	0	1	0
PA ALLENTOWN	87	63	94	49	75	6	.3	-.5	.3	.5	31	24.3	122	79	39	3	0	1	0
ERIE	79	58	90	51	68	4	.4	-.5	.4	.8	44	15.4	91	82	48	1	0	2	0
HARRISBURG	85	65	96	75	75	4	1.4	-.6	1.4	1.6	94	24.3	135	—	—	3	0	2	1
PHILADELPHIA	86	65	94	53	76	4	.3	-.6	.3	.4	22	22.8	121	83	44	3	0	2	0
PITTSBURGH	83	58	91	52	71	3	.1	-.7	-.1	-.1	6	15.1	85	76	36	1	0	1	0
SCRANTON	85	58	93	45	72	4	.3	-.5	.3	.4	25	18.0	118	81	30	3	0	2	0
RI PROVIDENCE	83	61	93	48	72	5	.6	-.1	.3	.6	43	30.3	141	83	44	3	0	2	0
SC CHARLESTON	88	70	90	63	79	2	T	1.5	T	0	0	27.0	125	93	54	9	0	1	0
COLUMBIA	94	68	96	65	81	3	.1	-1.0	.1	.1	5	22.7	96	89	39	7	0	1	0
FLORENCE	91	66	93	62	78	1	.5	-.6	.4	.5	24	22.8	116	92	41	6	0	2	0
GREENVILLE	93	70	94	69	82	7	.4	-.7	.4	.4	18	29.5	113	82	39	7	0	1	0
SD ABERDEEN	71	56	81	47	64	-2	2.0	1.3	.7	3.7	247	10.4	122	94	67	0	0	5	3
HURON	73	57	83	48	65	-2	3.3	2.4	1.8	6.7	394	15.5	172	99	64	0	0	5	3
RAPID CITY	74	52	81	46	63	-2	2.4	1.6	1.0	4.4	275	10.2	119	91	57	0	0	6	2
SIoux FALLS	76	57	83	47	66	-2	4.6	3.7	2.4	5.5	289	17.3	165	97	69	0	0	5	3
TN CHATTANOOGA	94	67	95	63	80	5	.4	-.4	.4	.4	27	24.7	93	90	38	7	0	1	0
KNOXVILLE	91	64	92	62	78	3	.7	-.2	.4	.8	44	24.8	103	98	46	7	0	3	0
MEMPHIS	92	73	94	71	83	4	.5	-.4	.5	1.0	56	27.5	100	84	44	6	0	1	0
NASHVILLE	92	68	95	65	80	4	1.4	-.6	1.4	1.4	82	28.5	113	90	38	7	0	1	0
TX ABILENE	93	73	95	71	83	2	0	-.6	0	.3	25	2.9	28	77	31	7	0	0	0
AMARILLO	87	61	92	56	74	0	5.0	4.1	4.9	5.0	294	8.1	105	89	40	2	0	3	1
AUSTIN	92	72	93	70	82	1	.4	-.4	.3	1.6	100	8.0	53	88	47	6	0	2	0
BEAUMONT	88	72	90	70	80	-1	T	-.9	T	.8	44	24.4	115	100	61	1	0	0	0
BROWNSVILLE	90	75	92	72	83	0	2.3	1.6	2.1	2.3	177	14.0	161	93	58	6	0	4	1
CORPUS CHRISTI	89	72	91	70	81	-2	T	-.8	T	.1	6	9.0	80	91	55	4	0	1	0
DEL RIO	92	74	94	72	83	-1	.1	-.3	.1	.4	50	4.7	70	83	37	7	0	1	0
EL PASO	94	65	98	61	79	-1	1.5	1.4	.7	1.5	750	2.7	142	71	27	7	0	4	1
FORT WORTH	92	71	96	68	82	0	0	-.6	0	1.6	123	14.8	97	88	44	6	0	0	0
GALVESTON	84	76	87	76	80	-1	T	-.8	T	.1	6	10.6	69	88	69	0	0	0	0
HOUSTON	88	68	90	65	78	-2	.1	-.9	T	1.6	80	15.9	77	88	50	1	0	2	0
LUBBOCK	87	65	94	62	76	-2	2.4	1.7	1.3	3.1	221	4.1	58	90	43	3	0	4	2
MIDLAND	87	70	90	67	78	-2	.1	-.3	.1	2.1	300	6.0	115	76	44	1	0	4	2
SAN ANGELO	92	73	94	71	82	1	0	-.5	0	.4	40	4.7	59	81	36	7	0	0	0
SAN ANTONIO	91	72	92	70	81	-1	.5	-.3	.5	1.0	63	9.1	69	89	45	6	0	0	0
VICTORIA	89	73	90	71	81	-1	1.0	-.2	1.0	1.8	78	12.2	78	88	53	3	0	1	0
WACO	91	73	93	71	82	0	.3	-.4	.3	1.3	93	10.7	67	88	46	6	0	1	0
WICHITA FALLS	93	69	96	68	81	1	T	-.7	T	.9	64	5.5	41	83	38	7	0	0	0
UT BLANDING	82	49	86	43	66	-1	T	-.1	T	.7	700	3.1	69	58	19	0	0	0	0
CEDAR CITY	82	44	89	35	63	-2	0	-.1	0	.4	200	4.9	104	50	12	0	0	0	0
SALT LAKE CITY	76	52	85	45	64	-4	-.1	-.1	.1	1.7	425	10.4	121	81	32	0	0	1	0
VT BURLINGTON	80	53	91	41	67	2	.9	0	.9	1.0	59	16.1	117	84	38	1	0	1	0
VA NORFOLK	88	70	94	66	79	5	T	-.8	T	.3	20	26.6	137	84	43	5	0	1	0
RICHMOND	93	70	99	67	82	8	.1	-.7	.1	.1	6	27.5	149	88	45	5	0	2	0
ROANOKE	88	65	92	63	77	5	.5	-.3	.5	.5	31	19.7	105	93	50	5	0	2	1
WA COLVILLE	75	49	80	41	62	1	.5	-.2	.5	3.3	471	13.7	165	86	50	0	0	0	0
QUILLAYUTE	61	47	64	40	54	-1	T	-.7	T	1.1	73	62.4	119	94	62	0	0	0	0
SEATTLE-TACOMA	68	51	73	50	59	-1	T	-.3	T	.7	100	18.3	99	88	55	0	0	0	0
SPOKANE	74	49	81	39	61	0	.3	0	.2	1.1	157	8.7	102	92	40	0	0	2	0
YAKIMA	78	51	84	46	65	0	.2	-.1	.2	.5	250	4.1	105	70	31	0	0	1	0
WV BECKLEY	83	62	85	60	72	6	T	-.9	T	.4	24	16.3	79	96	56	0	0	1	0
CHARLESTON	93	65	96	61	79	8	T	-.7	T	0	0	14.8	75	85	36	6	0	1	0
HUNTINGTON	89	67	93	63	78	7	.6	-.2	.6	.6	38	15.9	81	89	46	3	0	1	1
PARKERSBURG	88	66	92	62	77	7	0	-1.1	0	0	0	13.6	63	77	36	4	0	0	0
WI GREYN BAY	75	56	82	53	66	1	3.0	2.3	1.4	4.2	300	13.2	113	89	50	0	0	3	3
LA CROSSE	77	57	82	50	67	-2	3.9	2.9	3.7	5.9	311	15.1	119	91	50	0	0	3	1
MADISON	76	54	84	47	65	-1	.4	-.5	.3	4.6	256	14.4	112	92	55	0	0	3	0
MILWAUKEE	76	55	91	49	66	1	.2	-.7	.2	1.5	94	14.5	107	86	52	1	0	2	0
WAUSAU	73	55	80	51	64	0	2.6	1.6	1.4	4.7	235	13.8	109	93	55	0	0	4	2
WY CASPER	79	45	88	37	62	0	.3	0	.2	.9	150	7.9	120	97	25	0	0	3	0
CHEYENNE	72	46	80	33	59	-2	1.1	.6	.5	2.1	210	9.7	137	93	43	0	0	6	1
LANDER	74	48	85	40	61	-1	.4	-.1	.4	1.1	157	7.9	99	73	29	0	0	1	0
SHERIDAN	75	47	82	43	61	0	.6	0	.3	1.8	150	8.5	100	89	45	0	0	5	0
PR SAN JUAN	88	75	91	74	82	-1	2.2	1.1	1.7	5.7	259	15.2	78	90	60	2	0	5	1

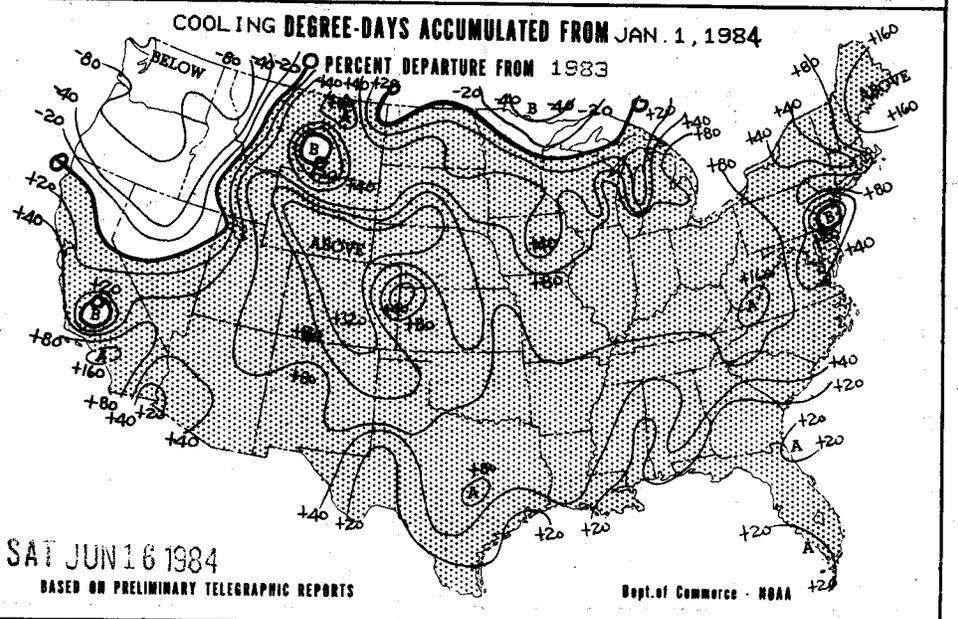
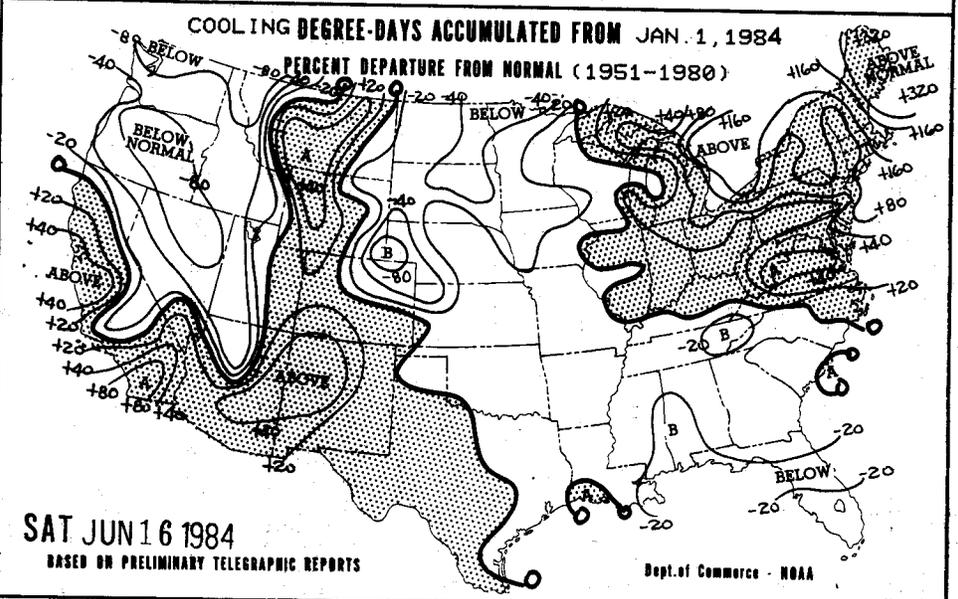
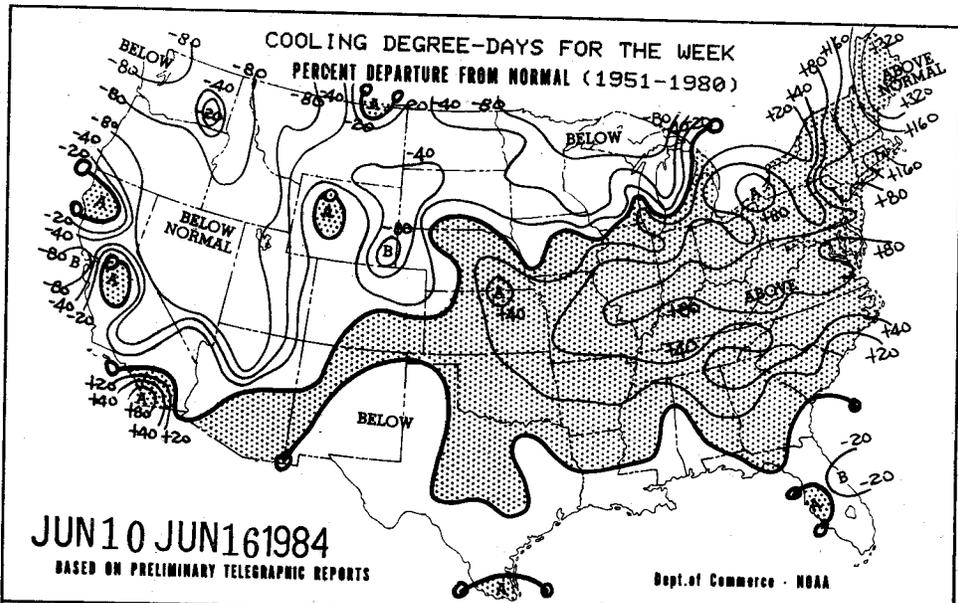
BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

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 6-16-1984
ACCUMULATIONS ARE FROM JANUARY 1

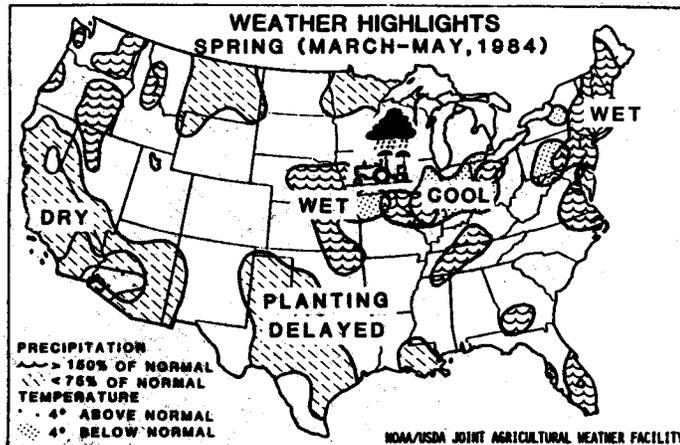
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK WEEK, CUM CUM CUM CUM CUM, FROM FROM FROM FROM FROM, L YR L YR L YR L YR L YR, PRCT PRCT PRCT PRCT PRCT. Lists 100+ cities with their respective cooling degree day data.



Spring Weather Review

March Through May 1984



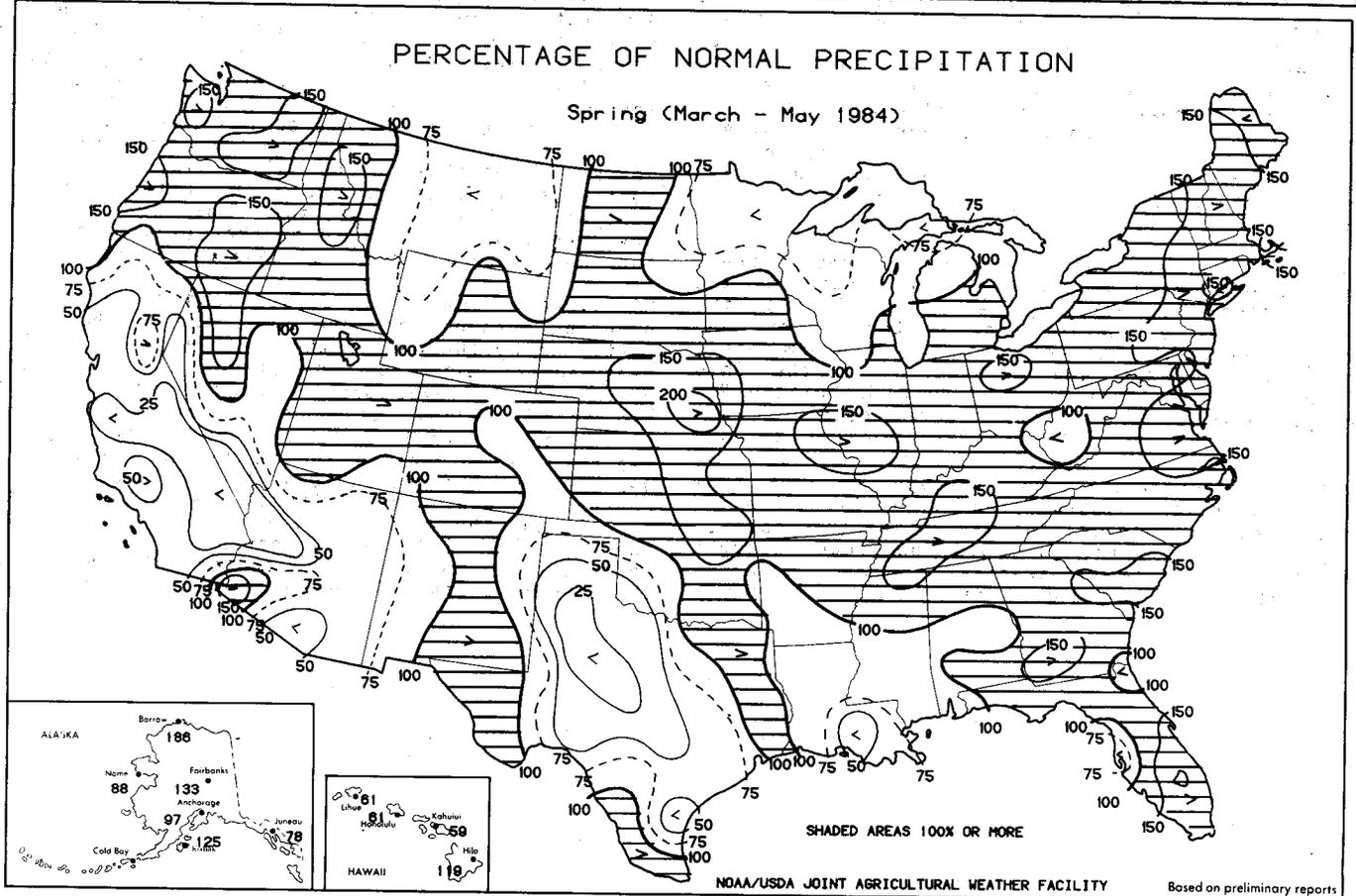
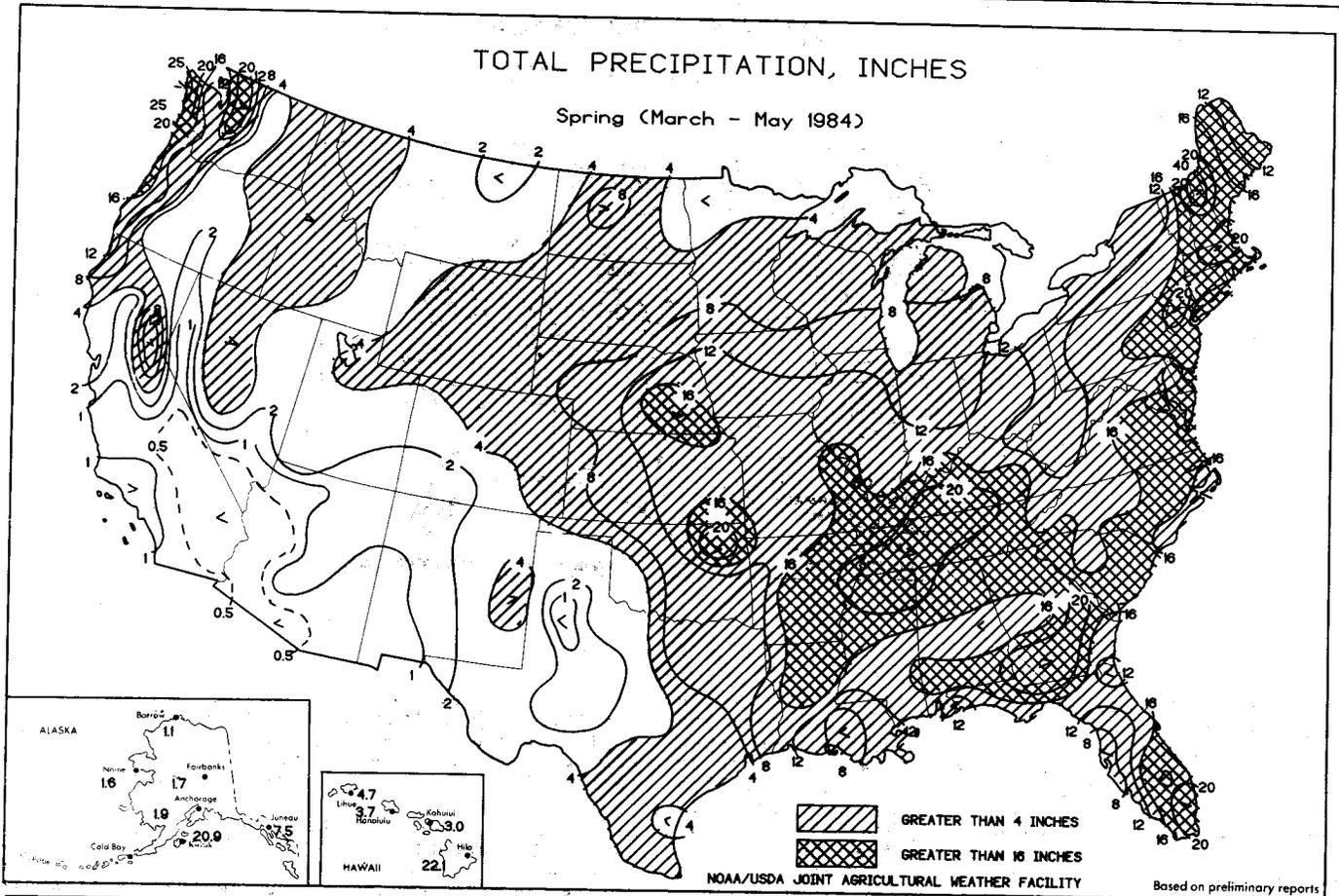
HIGHLIGHTS: It was a cool, wet spring across the Corn Belt and much of the East. Land preparation and planting was delayed in many areas, but open weather at the end of the season allowed planting to catch up to normal. Above-normal precipitation also fell in the Northwest and the central Rockies. Parts of eastern Nebraska had over twice the normal precipitation. It was much drier than normal from southeastern Texas to southeastern Colorado, in the Southwest, California, the upper Mississippi Valley, the Great Lakes, and throughout Montana. Very dry conditions prevailed throughout Texas for most of the period, but were partially relieved in the eastern part and the Rio Grande Valley at the end of the season. Temperatures were cooler than normal in most of the East, but warmer than normal in southern Texas, the extreme northern Plains, and most of the West. In March, freezing temperatures caught some early blooming peaches in the Southeast but the damage was minimal.

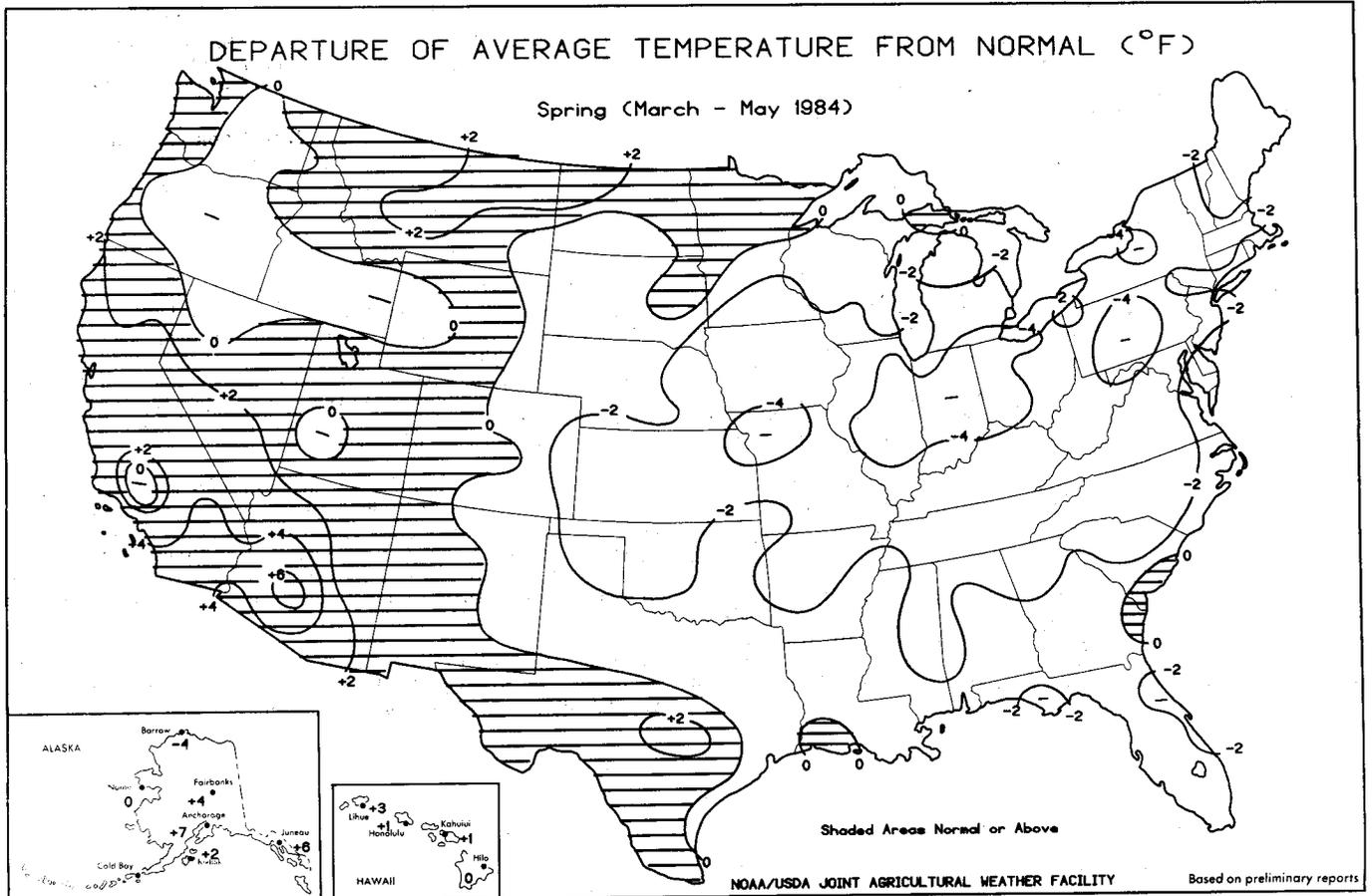
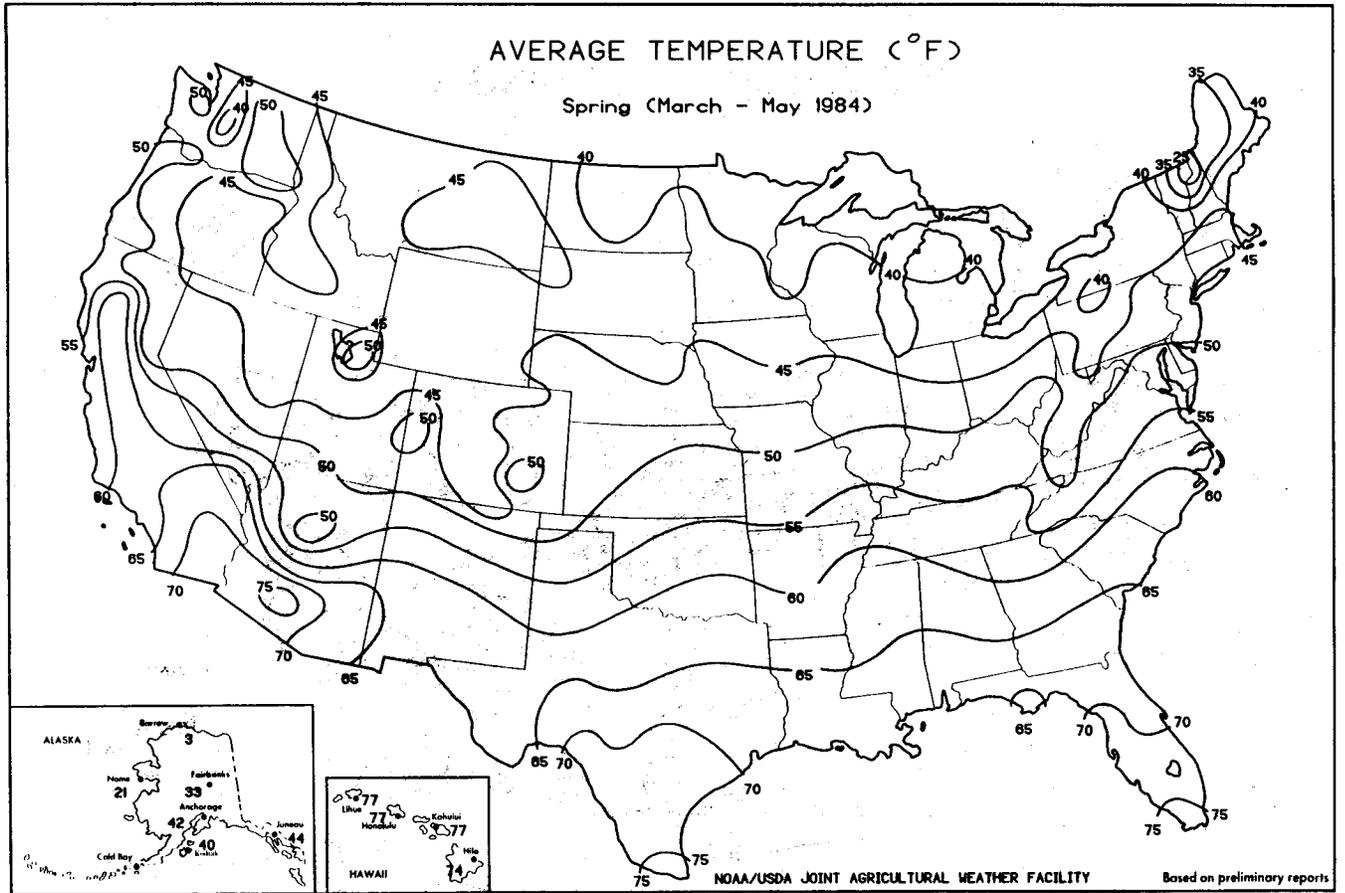
MARCH...A series of Pacific storms spread above-normal precipitation over the Northwest, the Plateau, and the Rockies. Heavy snow fell on the central Plains triggering snow in the central and northern Plains. Showers and thunderstorms fell from central Texas and Oklahoma into the Ohio Valley and along the east coast from Georgia to New Jersey. Some of the storms created near blizzard conditions as they moved from the Midwest through New England. Late in the month a line of devastating tornadoes swept through an area from northern Georgia to southeastern Virginia. Freezing temperatures reached all the way to the gulf coast. Early in the month, a cold outbreak brought temperatures in the mid-twenties to peach orchards in the Southeast and caused minor losses to early

blooms. Average temperatures for the month were significantly colder than normal from the central Plains through New England and as much as 10 degrees colder than normal in the eastern Corn Belt. The West was generally warmer than normal.

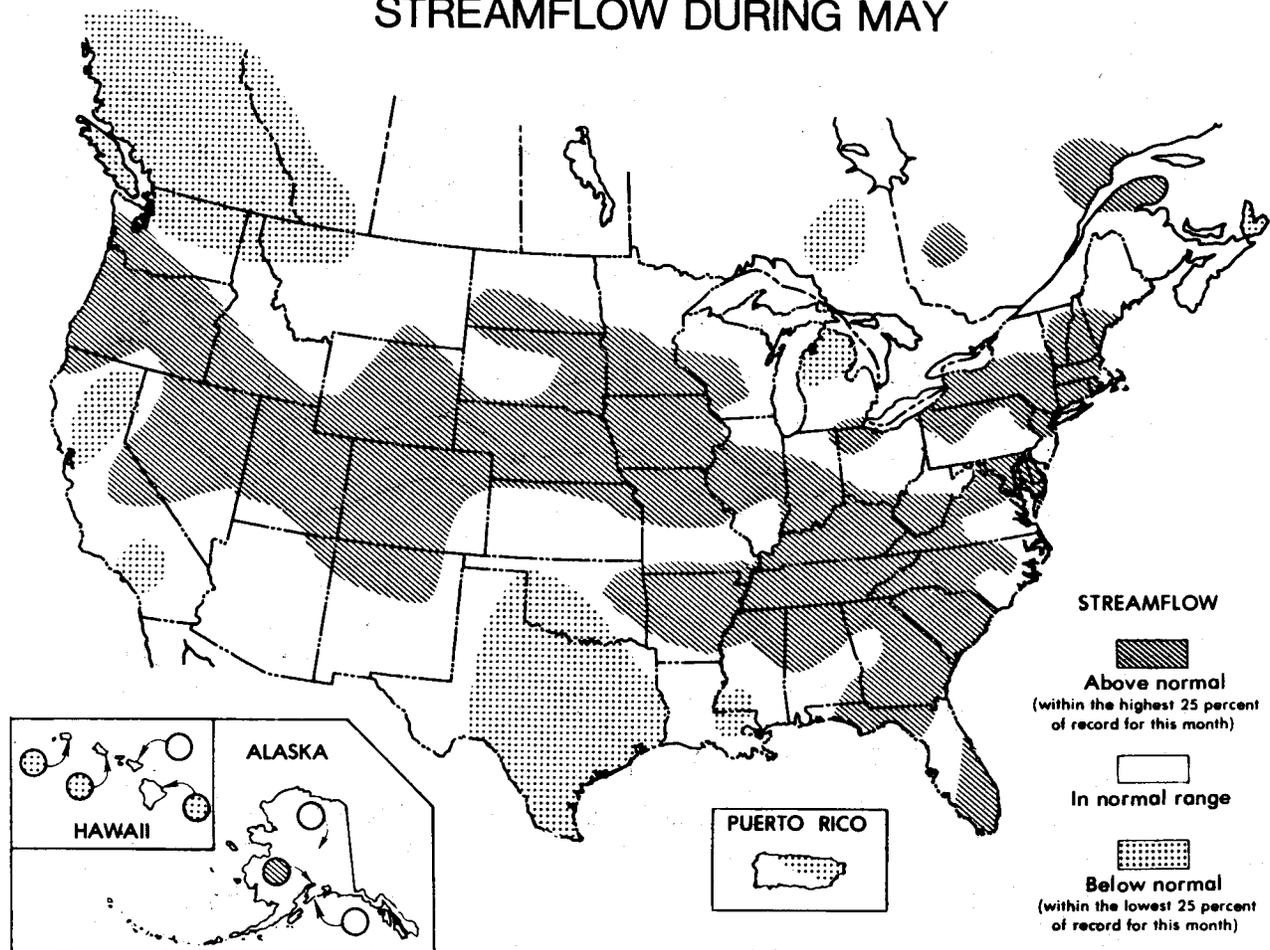
APRIL...Cool, wet weather dominated most of the Nation throughout the month. Average temperatures were 4-8 degrees colder than normal from the central Plains to the southern and central Appalachians. Temperatures were warmer than normal through the northern tier of States, in southern Texas, and along the west coast. Precipitation was twice the normal amount in the central Rockies and Plains and the northern part of the northern Plains. Above-normal precipitation covered most of the East and the Northwest. It was a very dry month for most of Texas, the Southwest, and California. Southern and southwestern Texas had no rain, but the northern part of the Panhandle had some showers. It remained dry from south-central to northeastern Montana, but the southeastern corner had some heavy snow.

MAY...Above-normal rain slowed land preparation and planting through the Corn Belt, the South, and the East, but by the end of the month most planting was near normal after a short break in the weather. Heavy rain relieved drought conditions through the Rio Grande Valley, but much of the high and low Plains and central Texas remained very dry. Dry weather also prevailed in the northern Plains, the western Great Lakes, parts of the Southwest, and the central Plateau. The Southwest was much warmer than normal, and the warm area spread northeastward over the central Plateau and northern Rockies. The Northwest and the East were cooler than normal, and the Corn Belt was 3-5 degrees cooler than normal.





STREAMFLOW DURING MAY



Rapid snowmelt and heavy rains caused one of the wettest Mays on record last month, although signs of a drier season were present in a few scattered areas, according to the U.S. Geological Survey (USGS), Department of the Interior.

Reflecting overall conditions, the combined average daily flow of the Nation's three major rivers was 36 percent above the long-term average for May, the USGS said in its regular monthly report on the Nation's water resources. These rivers--the Mississippi, St. Lawrence, and Columbia--drain more than half of the 48 conterminous States, and their flows provide a useful check on the general status of U.S. water resources.

Of 172 USGS index streamflow stations surveyed in May, flows at 94 (55 percent) were well-above average (in the upper 25 percent of long-term record). Streamflows at 61 stations (35 percent) were in the average range, while 17 stations (10 percent) were well-below average (in the lowest 25 percent of long-term record).

Record-high streamflows for the month of May occurred in 15 States: Colorado, Connecticut, Idaho, Iowa, Maine, New Jersey, New York, Kentucky, Nebraska, Nevada, North Carolina, Tennessee, Utah, Virginia, and Wyoming. Near-record high flows--one of the three highest flows for the period of record at each index station--occurred in eight States: Alabama, Florida, Georgia, Kansas, Mississippi, Minnesota, Oregon, and South Carolina.

Record-low or near-record low streamflows were recorded only in Texas, Montana, and Puerto Rico. At scattered points, however, streamflows declined into the well-below average range: in northern and southern California, in northern Washington and Idaho, in northern Michigan, in a small area of the lower Mississippi River basin above New Orleans, and in Hawaii.

Floods occurred in 14 States: as a result of snowmelt in Colorado, Idaho, Oregon, Utah, Wyoming, and Nevada, and as a result of heavy rains in Connecticut, Kentucky, New Jersey,

New York, Oklahoma, Virginia, West Virginia, and Tennessee. Flood-related losses were greatest in Oklahoma when 12 inches of rain fell at Tulsa May 26 and 27. Flash floods occurred on two creeks in residential areas, causing 13 deaths and \$250 million in damage.

Hydrologist Hai Tang at the USGS National Center in Reston, Va., said groundwater levels tended to decline seasonally toward the end of May. Nevertheless, levels were generally higher than long-term averages for the month.

Tang said surface-water storage was at or above average at most reservoirs. The New York City water-supply reservoirs on the Delaware River were at 100 percent of capacity, as were Connecticut reservoirs at Bridgeport, Hartford, Stamford, and Waterbury. In Arizona, the combined contents of lakes Mead and Mohave were 32 percent above average; the Salt-Verde Reservoir System was 55 percent above average; and the San Carlos Reservoir measured 253 percent above average. In California, combined contents of 10 index reservoirs were 5 percent above average. In Oklahoma, contents of five of eight major lakes were above average for May.

In cooperation with nearly 800 Federal, State, and local agencies, the USGS routinely gathers data on the quantity and quality of the Nation's surface- and ground-water resources at more than 45,000 stations across the country.

Following are additional details of the USGS check of the Nation's water resources in May:

FIVE LARGE RIVERS--Average flows of the so-called "Big Five" rivers were: Columbia River at The Dalles, Ore., 223 billion gallons per day (bgd), up 30 percent from April and 19 percent below the long-term May average; Mississippi River at Vicksburg, Miss., 934 bgd, 72 percent above average and 10 percent greater than the flow in April; St. Lawrence River near Massena, N.Y., 198 bgd, a rise of 9 percent over April and 10 percent more than the monthly average; Ohio River at Louisville, Ky., 144 bgd, 69 percent greater than the long-term monthly average and a 25 percent decline from the

previous month; and Missouri River at Hermann, Mo., 133 bgd, 123 percent above the usual May flow and down 21 percent from April.

CONNECTICUT--Above-average streamflows occurred across the State, with major floods on the Connecticut and Housitonic Rivers with recurrence intervals of 50 to 60 years (likely to occur only twice a century on the long-term average.) Near historic highs were set on Burlington Brook and the Pomerag River.

NEW YORK--Flows of all streams monitored by the USGS ranged from above average into the upper 25 percent of record throughout the State. Flows of many small streams were two to three times larger than average. Heavy rains May 28-31 caused floods responsible for four deaths and \$1.5 million in damage.

IDAHO--Flow of the Snake River at Weiser was in the upper 25 percent of normal for the 23rd consecutive month. The average flow of 39.6 bgd was a new high since records began at the index station in 1910. Runoff from the record snowpack caused reservoirs to fill rapidly and irrigation storage increased 11 to 15 percent to nearly average for the month.

UTAH--Floods and flood threats declined toward the end of the month. They had come about as a result of significant increases of streamflows within the well-above average range. The seven index stations recorded streamflows 2.5 times larger than the 30-year average. The Colorado River at Cisco, Utah, reached 44.2 bgd May 27, the highest flow since 1917. The record-high average flow for the entire month was 27 bgd, which was more than three times greater than usual for May.

The Great Salt Lake rose more than 8 inches during the month, to an elevation of 4,208.8 feet above sea level--about 2 feet 10 inches below the recorded maximum elevation of 4,211.6 feet in 1873. Flow of the Surplus Canal at Salt Lake City reached a record-high of 2.66 bgd June 1, the highest since records began at the streamflow station 41 years ago.

National Agricultural Summary

June 11 to 17

HIGHLIGHTS: Warm temperatures depleted soil moisture from the Delta States through the mid-Atlantic States. Planting of double-cropped soybeans was delayed by increasing dry conditions across much of the South. Heavy rains persisted from the Texas High Plains into the western Corn Belt lodging small grains, eroding newly planted fields, and flooding low-lying areas. Generally, moisture supplies ranged from short to adequate across the Nation. However, some surplus supplies were reported in the western Corn Belt, very short supplies appeared in portions the South, and extremely short supplies persisted in portions of California, Arizona, and Texas. Farmers had 5 to 7 days suitable for fieldwork, except in the central Plains through the western Corn Belt where rain limited fieldwork to under 3 days.

Winter wheat was in fair to mostly good condition. Combining was 10% complete and 90% of the crop was headed. Spring wheat was 8% headed, trailing the normal of 10%. Corn was in fair to mostly good condition. The crop was silking across the South and early planted fields reached the dough stage. Soybean planting was 83% completed, equaling both last year and the average. Progress lagged in the western Corn Belt because of wet conditions, while dry conditions delayed planting of double-cropped soybeans in the Southeast. Cotton planting neared completion, except in Oklahoma and Texas; 15% of the stands were squaring. Sorghum was 78% planted, behind the average of 81%. Peach harvesting moved northward on schedule. Warm temperatures stimulated vegetable growth across northern regions. Pastures were rated mostly good, however, dry conditions limited regrowth in some areas. Livestock continued in fair to good condition.

SMALL GRAINS: Winter wheat continued in fair to mostly good condition. Heading advanced to 90% completion, 2 points behind a year earlier and 3 points behind the average. Combining centered in California, Oklahoma, and Texas. Ten percent of the crop was harvested in the 15 major producing States, compared with the 8% average. Heavy rains caused some lodging in the central Plains and western Corn Belt.

Spring wheat was nearly all emerged. Eight percent of the crop was headed in the five major producing States, 2 points behind the average. Heading was slower than normal in all States except North Dakota. Soil moisture was generally adequate, except in portions of Montana where supplies were short.

CORN: Corn planting neared completion in the major producing areas. Emerged fields were in fair to mostly good condition. However, many stands in the western Corn Belt were yellowing because of excessive rains. Warm weather stimulated rapid growth across the East and advanced silking in the South. Early planted stands reached the dough stage of development.

SOYBEANS: Soybean planting advanced to 83% completion, equaling both last year and the average. Progress was ahead of schedule, except in the western Corn Belt where wet weather slowed planting, and in the Southeast where dry conditions delayed planting of double-cropped soybeans. Michigan and Ohio producers seeded 20% of their acreage during the week, while Kentucky growers planted 19% of their acreage. Emerged plants were in fair to good condition despite the increased dryness across the South.

COTTON: Cotton planting in the 14 major producing States reached 93% completion, 3 points behind the average. Producers were finished or nearly finished in all States except Oklahoma and Texas. Growers in Oklahoma lagged the average by 20 points, while Texas producers were 4 points behind normal. Squaring reached 15% completion, trailing the 20% average. The crop reached the squaring stage in all States except Missouri and Oklahoma. Only Arizona and New Mexico were ahead of the average for this date. Stands were setting bolls in Arizona and Texas. The crop was rated fair to good.

SORGHUM: Sorghum planting in the seven major States advanced to 78% finished, ahead of last year's 74%, but behind the 81% average. Torrential rains halted seeding from the central Plains into the western Corn Belt and eroded some previously seeded fields. In Texas, 49% of the acreage headed and 28% turned color. Six percent reached maturity, twice the average for this date.

OTHER CROPS: Rice seeding was virtually complete; plants had emerged on 98% of the acreage, 1 point ahead of normal. Stands were in mostly good condition. One percent of the Texas crop was headed, compared with the average of 10%.

Peanut planting gained momentum after increased shower activity in Texas. Planting for the State reached 63% completion, equal to the average. In Georgia, 54% of the crop bloomed, trailing the average progress of 65%. Pegging reached 14% completion.

Tobacco transplanting advanced rapidly. North Carolina producers had set 81% of their burley crop, while Kentucky growers transplanted 88%. Georgia producers harvested 2% of the acreage, compared with the 7% average.

Hay harvesting continued active with near ideal weather conditions, except in portions of the Great Plains and western Corn Belt where heavy rains delayed activities.

FRUITS AND NUTS: The peach harvest advanced northward. Picking was 40% finished in Georgia, 15% complete in North Carolina, and 12% finished in South Carolina. The crop was rated mostly good to fair. Harvesting of early varieties in Texas was slow and later varieties showed small sizes. Warm temperatures encouraged development of fruit in the Lake States, crops continued on schedule. Strawberry picking began in northern producing areas. Apples were sizing well in the Northeast but the set appears lighter than last year.

Florida's new citrus crop was progressing well and groves showed abundant new growth in southern areas. Orange and grapefruit supplies were dwindling. Texas pecans showed heavy droppage in some areas because of scab and casebearers. The crop was in various stages of development. California producers actively picked apricots, Hass avocados, Coachella Valley table grapes, nectarines, Freestone peaches, plums, and summer grapefruit. Cherry picking was complete. Valencia orange harvesting slowed.

VEGETABLES: Warm temperatures stimulated rapid vegetable crop development in most regions. Planting and harvesting continued very active. Florida's vegetable harvests declined seasonally 7% from the previous week. The volume of watermelons increased as the harvest moved northward. Harvesting of cantaloups, cucumbers, peppers,

(continued on back cover)

CROP PROGRESS

FOR WEEK ENDING JUNE 17

COTTON % PLANTED			COTTON % SQUARING			WINTER WHEAT % HEADED			WINTER WHEAT % HARVESTED						
	1984	1983	AVG.		1984	1983	AVG.		1984	1983	AVG.				
ALA	100	100	100	ALA	10	2	23	CALIF	100	100	100	CALIF	40	30	38
ARIZ	100	100	99	ARIZ	70	65	58	COLO	82	81	90	COLO	0	0	0
ARK	100	100	100	ARK	10	2	14	IDAHO	28	44	44	IDAHO	0	0	0
CALIF	100	100	100	CALIF	20	9	20	ILL	100	100	100	ILL	0	0	0
GA	98	99	99	GA	43	41	66	IND	100	99	100	IND	0	0	0
LA	100	99	100	LA	6	8	21	KANS	100	99	100	KANS	0	0	2
MISS	100	100	100	MISS	12	15	31	MO	98	100	100	MO	0	0	0
MO	100	100	100	MO	0	0	10	MONT	25	30	30	MONT	0	0	0
N MEX	100	98	100	N MEX	5	0	2	NEBR	100	90	100	NEBR	0	0	0
N C	100	100	100	N C	10	17	13	OHIO	95	95	98	OHIO	0	0	0
OKLA	60	60	80	OKLA	0	0	0	OKLA	100	100	100	OKLA	30	5	25
S C	100	100	100	S C	14	61	61	OREG	92	97	92	OREG	0	0	0
TENN	100	100	100	TENN	1	3	10	S DAK	58	68	87	S DAK	0	0	0
TEX	89	85	93	TEX	14	9	16	TEX	100	100	100	TEX	49	29	30
								WASH	60	98	87	WASH	0	0	0
14 STATES	93	91	96	14 STATES	15	12	20	15 STATES	90	92	93	15 STATES	10	4	8

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

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THESE 15 STATES PRODUCED 84% OF THE 1983 WINTER WHEAT CROP.

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SOYBEANS % PLANTED			SPRING WHEAT % HEADED			RICE % EMERGED			SORGHUM % PLANTED						
	1984	1983	AVG.		1984	1983	AVG.		1984	1983	AVG.				
ALA	70	71	80	IDAHO	5	7	14	ARK	96	92	95	COLO	81	75	77
ARK	73	65	63	MINN	3	4	13	CALIF	98	90	96	KANS	65	50	65
GA	75	78	80	MONT	0	0	0	LA	99	95	98	MO	84	78	73
ILL	92	93	93	N D	14	1	6	MISS	99	92	98	NEBR	75	98	100
IND	95	90	85	S DAK	7	4	30	TEX	100	100	100	OKLA	85	60	75
IOWA	90	97	96	5 STATES	8	2	10	5 STATES	98	93	97	S DAK	54	88	88
KANS	70	65	60	THESE 5 STATES PRODUCED 94% OF THE 1983 SPRING WHEAT CROP.				THESE 5 STATES PRODUCED 98% OF THE 1983 RICE CROP.				TEX	92	88	92
KY	62	43	61					THESE 7 STATES PRODUCED 85% OF THE 1983 SORGHUM CROP.							
LA	90	74	81												
MICH	90	85	92												
MINN	96	96	98												
MISS	78	66	74												
MO	65	79	73												
NEBR	80	98	100												
N C	74	79	75												
OHIO	95	90	85												
S C	70	72	78												
TENN	66	52	69												
18 STATES	83	83	83												

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

June Crop Production Highlights

WINTER WHEAT production forecast, at 1.97 billion bushels, as of June 1, is 1 percent less than 1983's production of 1.99 billion bushels. The 90 percent confidence interval for this production forecast is 1.78 to 2.17 billion bushels.

ORANGE production is forecast, at 172 million boxes, down 1 percent from last month and 23 percent less than last season. Harvest is 89 percent complete.

PEACH production is forecast at 2.53 billion pounds, 41 percent more than last season, and 10 percent more than 1982. The California Clingstone crop, at

950 million pounds, is 53 percent above last year but 14 percent less than 1982.

BARTLETT PEARS in the Pacific Coast States are forecast at 420 thousand tons, down 9 percent from 1983 and off 20 percent from 1982.

SWEET CHERRY production in the Western States is forecast at 153 thousand tons, down 3 percent from a year ago but 27 percent more than the 1982 crop.

SPRING POTATO production is forecast at 23.2 million cwt, up 27 percent from last year and 13 percent above two years ago.

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall less than 0.50 in. in most areas. Temperatures averaged 2° above normal.

Soil moisture very short to short. Fieldwork: 6.4 days. Corn silked 30%, 23% 1983, 40% average. Soybeans planted 70%, 71% 1983, 80% average. Sorghum planted 76%, 66% 1983, 71% average. Wheat harvested 64%, 30% 1983, 61% average. Cotton planted 100%, 100% 1983, 100% average. Cotton squaring 10%, 2% 1983, 23% average. Peanuts pegging 8%, 4% 1983. Hay first cutting 64%. Activities: Planting soybeans and sorghum harvesting wheat, hay, fruits and vegetables; cultivating field crops; and poultry routine care of livestock and poultry. Conditions: Corn fair; cotton, soybeans and pasture mostly fair; peanuts, sorghum and livestock fair to good; wheat mostly good.

ALASKA: Cloudy and wet weather kept temperatures cooler than normal. Rainfall amounts of 1.00 to 2.00 in. put seasonal totals from near normal to wetter than normal.

Generally, cloudy skies and rains prevailed throughout railbelt averaging 5.0 days fieldwork. Small grain fields showed mostly moderate to rapid growth with heights ranging from 3 to 8 in. and averaged nearly 6 in. Harvest first crop hay underway, should become general this week, weather permitting. Potato heights ranged from emerging to 3 in. Harvest of radishes and greens began midweek. Soil moistures were generally adequate.

ARIZONA: Sunny, warm days, clear cool nights dominated weather pattern. Some clouds over eastern part 15th and 16th with isolated sprinkles. Maximum temperatures mostly in 70's at 7,000 ft., 80's at 5,000 ft., 95 to 105 in lower desert. Average temperatures ranged from 3° below to 2° above seasonal normals.

Cotton acreage 70% squaring, 65% last year, 58% average. Crop above average in Yuma, La Paz Counties, about 95% of acreage squaring, many fields setting bolls. Plants mostly average central, southeast. Some weed, insect control measures applied. Wheat, barley harvest active, 75% combined. Harvest progress ranged 85 to 90% complete west, 75% Central Valley, 50% southeast. Barley harvest peak in southeast, practically complete central, west. Alfalfa harvest active, supplies increasing. Quality good. Table potato harvest winding down, will be complete by June 23. Chipper potato harvest active. Dry onions, green onions, carrot harvests steadily drawing to close. Lettuce harvest complete Cochise area. Cauliflower seeding complete, bell peppers developing good Cochise area. Watermelon harvest underway Casa Grande, increasing Salt River Valley, picking expected to be full swing by June 23. Cantaloup, honeydew melon harvest good progress Parker-Poston areas, just started Gila area. Perlite grape harvest winding down, seedless started Maricopa area. Citrus groves good.

ARKANSAS: Temperatures above normal with partly cloudy skies and scattered late afternoon and evening thundershowers. Departures normal to 6° above. Most rain 1.27 in., least 0 or trace at several locations.

Soil moisture mostly short. Days favorable for fieldwork: 6.7. Crop progress moderate to slow due to dry weather and heat. Rice condition good to fair; virtually all planted, same as

1983 and average; virtually all emerged, 92% 1983, 95% average. Cotton fair condition; all emerged, same as 1983 and average; squaring 10%, 2% 1983, 14% average. Soybeans good condition; planted 73%, 65% 1983, 63% average; emerged 65%, 50% 1983, 51% average. Corn good condition, virtually planted, same as 1983 and normal. Sorghum good to fair; planted 93%, 92% 1983 and average. Wheat harvest 44%, 36% 1983, 47% average. Oats harvested 55%, 58% 1983, 63% average. Farmers haying. Pastures adequate but little regrowth. Cattle good condition.

CALIFORNIA: A few showers over the northern mountains and the northern half of the Sierra Nevada produced mostly light amounts of precipitation at reporting stations. Radar detected isolated thunderstorms over the coast range, the Sacramento Valley and adjacent foothills. Hail was reported from several Sierra foothill locations. The cooling trend continued; only the south coast was warmer than normal and the north coast was right at normal weekly mean temperatures. Still a freezing temperature morning or two reported from the northeast corner of the State.

Wind, cool temperatures slowed cotton; 20% squared, 9% last year, 20% average; 100% planted, 100% average. Mite control continued. Field corn tasseling, fertilizer San Joaquin; planting as second crop. Ground preparation second crop dry beans. Sugarbeets progressing, mildew treated. Rice fields weed-treated, 98% emerged, 90% last year, 96% average. Small grains doing well, north; extra water required. Winter wheat 40% harvested, 30% last year, 38% average. Good yields San Joaquin wheat, barley. Second cutting alfalfa, central valleys. Harvest active, apricots, Hass avacodos, Coachella Valley table grapes, May Grande nectarines, Freestone peaches, plums, summer grapefruit. Cherry harvest complete. Valencia orange harvest slowed. Normal cultural activities in grapes. Artichokes, asparagus harvests seasonally very light. Broccoli harvest moderate, good quality. Cantaloup harvest active desert. Carrot harvest decreasing desert, increasing San Joaquin Valley. Cauliflower supplies moderate. Celery harvest moderate south coast, starting central coast. Sweet corn harvest slowing desert, increasing other districts. Lettuce moderate supply. Onion harvest increasing San Joaquin Valley. Spring potato harvest very active. Strawberry harvest active for market, processing. Market tomato harvest ending desert, increasing south coast, San Joaquin Valley. Processing tomato harvest continued desert. Watermelon harvest slowing Imperial Valley, increasing Palo Verde Valley. Summer ranges good. Grasshopper populations build foothill districts. Fire danger high lower elevation ranges. Stock water adequate.

COLORADO: There were active periods of showers and thunderstorms in the eastern foothills and adjacent plains, and lighter amounts of rainfall from showers and/or thunderstorms were noted from the mountains to the west. Temperatures were below normal across the eastern Plains and slightly below normal from the mountains to the west.

Adequate moisture levels in all regions, except the southeast, have improved crop conditions. Southeast farmers show concern for low moisture levels. Alfalfa first cutting at

35%, 1983 30%, average 38%. Barley 30% headed and has 1% turning color; 1983 29% headed, 1% turning color, and normal 34% headed and 3% turning color. Corn 100% planted and 98% emerged, the same as average of 100% planted but ahead of 95% emerged; 1983 99% planted, 92% emerged. All potatoes planted. Sorghum 81% planted, ahead of 1983 75% and average 77%; emergence 58%, ahead of 1983 51% and average 51%. Sugarbeet thinning 65% complete, 1983 28% and average 59%. Winter wheat 82% headed; 1983 81%. Dry bean planted acreages at 75%, up from 1983 at 74% and down from average at 78%.

FLORIDA: Scattered showers and thunderstorms predominated. Showers, thundershowers were most numerous in southern areas and west coast. Daily showers widespread, but on the 16th, 1.00 to 3.00 in. amounts were common along southeast coast and immediate west central coast, with locally heavier amounts west central, 17th. Temperatures averaged mostly near to slightly below normal.

Scattered rainfall helped relieve dry conditions but soil moisture remained short in most areas. Corn condition variable, hurting in dry areas, excellent where irrigated. Early corn in silk stage. Tobacco fair to good, growth speeding up with warmer nights. Soybean planting at standstill in north and northwest waiting for more soil moisture. Planting nearly completed, Central. Peanut, cotton plantings complete, making good progress. Sugarcane good condition. Small grain harvest complete. Hay producers harvesting grass hay and preparing to plant summer hay crops. Pasture condition poor to fair, Panhandle; fair to good north, central; good to excellent, south. Cattle condition declined to mostly fair, Panhandle but remained generally good elsewhere. Citrus groves hot first of last week with rain late week. Much new growth in southern areas, new crop fruit progressing well. Orange harvest slowing as supplies run low. A few east coast grapefruit remain for harvest. Scattered showers, thunderstorms prevailed most vegetable areas. Rainfall heaviest south and west coast. Amounts ranged mostly from 1.00 to 3.00 in. Locally heavy thundershowers reached nearly 6.00 in. Total vegetable shipments declined 7% from previous week. Crops declining seasonally were snap beans, cabbage, carrots, celery, Chinese cabbage, sweet corn, cucumbers, potatoes, tomatoes, Eggplant, peppers continued at steady volume. Watermelon cutting continues to gain as heavy producing northern area comes into production. Harvest underway west area. Sweet corn harvest active Zellwood area. Quality good. Supplies most vegetables showing normal seasonal decline.

GEORGIA: Temperatures averaged 72 to 77° in mountains and 78 to 82° elsewhere. Extremes ranged from 98 to 57°. Most afternoon readings in 90's. Temperatures 3 to 6° above normal north, 10° below normal southeast and 1 to 3° above normal elsewhere. Rain 2 to 5 days in extreme north and 1 to 3 days in extreme south and southeast. Total rain was an inch or less in extreme north and 1.00 to 1.90 in. in southeast and extreme south.

Soil moisture 12% adequate, 55% short, 32% very short. Average days suitable for fieldwork 6.1. Main activities. Haying, planting, harvesting and spraying for insects and weeds. Corn 57% silked, 36% last year, average 63%, dough 21%, 7% last year, average 29%; condition 34% good, 42% fair, 14% poor, 4% very poor. Nonirrigated corn suffering heat and drought stress. Cotton 98% planted, 99% last year and average; squaring 43%, 41% last year, average

66%; condition 48% good, 43% fair, 8% poor. Grain sorghum 74% seeded, 72% last year, average 71%; condition 53% good, 43% fair. Grain sorghum 74% seeded, 72% last year, average 71%; condition 33% good, 43% fair, 4% poor. Peanuts 54% blooming. 47% last year, average 65%; 14% pegging, 8% last year, average 24%; condition 3% excellent, 55% good, 41% fair. Soybeans 75% planted, 78% last year, average 80%; condition 55% good, 41% fair, 3% poor. Dry weather causing delays in double crop planting. Tobacco 2% harvested, 1% last year, average 7%; condition 61% good, 35% fair, 2% poor, 2% very poor. Watermelons 4% harvested, average 7%; condition 40% good, 51% fair, 7% poor, 2% very poor. Wheat 73% harvested, 74% last year, average 81%; condition 2% excellent, 51% good, 41% fair, 6% poor. Other small grains 2% excellent, 53% good, 41% fair, 2% poor. Rye 60% good, 37% fair, 3% poor. Peaches 40% picked this year and average, 38% last year; condition 6% excellent, 67% good, 30% fair, 2% poor. Apples 3% excellent, 56% good, 32% fair, 7% poor. Cattle 66% good, 31% fair. Hogs 74% good, 23% fair, 2% poor. Pastures 3% excellent, 35% good, 47% fair, 14% poor.

HAWAII: Favorable weather conditions continued to prevail over the Island Chain. Rainfall was very light and mainly restricted to the higher elevations. Most vegetable crops in good condition with increased irrigation promoting normal growth. Papaya and banana orchards also in good condition. Chinese cabbage production will continue moderate. Head cabbage and head lettuce output will be heavy with an increase expected next week. Overall papaya production will be steady for the next few weeks. Banana production seasonally light.

IDAHO: A stationary low pressure system, centered over the State, caused varied amounts of precipitation. Rainfall ranged from 0.25 to 1.50 in. above normal in the south central and east. Precipitation in the north and southwest ranged from 0.50 in. below normal to 0.50 in. above normal. Temperatures ranged from 1 to 80° below normal.

Crop, growth and development continued to be slow as 5.0 days were suitable for fieldwork. Winter wheat advanced to 28% headed compared to last year and the average of 44%. Spring wheat heading rose to 5% versus 7% in 1983 and 14% average. Spring barley was 4% headed compared to 5% last year. Potato emergence reached 64% versus 72% for last year and the average. Dry bean planting advanced to 86% complete compared to 98% in 1983 and 92% average. Sugarbeet thinning was 71% complete versus 93% last year. The first cutting of alfalfa was 21% complete compared to 34% last year. Corn emergence advanced to 91%.

ILLINOIS: Temperatures 3° below normal to 9° above normal. Precipitation 0 to 1.61 in.

Soil moisture 59% adequate, 9% surplus, 32% short. Days suitable for fieldwork: 5.8. Corn planting virtually complete. Average height of all corn 14 in., last year 10 in., average 16 in. Average height of most advanced fields 21 in., last year 17 in., average 27 in. Corn condition 8% excellent, 73% good, 18% fair, 1% poor. Soybeans planted 92%, last year 93%, average 93%. Soybeans 78% of full stand, last year 85%. Soybean condition 2% excellent, 57% good, 36% fair, 5% poor. Wheat condition 13% excellent, 55% good, 25% fair, 7% poor. Winter wheat 86% filled, last year 88%, average 97%; turning yellow 45%, last year 52%, average 72%. Oats headed 50%, last year 49%, average 63%, filled 22%, last year 24%, average 30%. Oat

condition 10% excellent, 69% good, 18% fair, 3% poor. Sorghum grain planted 85%, last year 70%, average 73%. Alfalfa condition 30% excellent, 65% good, 5% fair; first crop cut 85%, last year 78%, average 82%. Red clover condition 20% excellent, 74% good, 6% fair; crop cut 75%, last year 66%, average 65%. Pasture condition 20% excellent, 70% good, 10% fair.

INDIANA : Temperatures averaged 3 to 5° above normal north and 5 to 8° above normal south. Highs in the mid 90's. Soil temperatures average mid 70's to low 80's with maximums upper 80's and lower 90's. Precipitation totals between 0.50 to 1.00 in. across northeast half and 0.20 to 0.40 in. over southwest half of State. Accumulated growing degree days generally 20 to 40 above normal.

Fieldwork averaged 6.0 days. Topsoil moisture short to adequate, subsoil moisture adequate. Soybeans 95% planted, 1983 90%, average 85%. Soybeans 80% emerged, 1983 80%, average 80%. Corn 100% planted 1983 99%, average 96%. Corn 100% emerged, corn 11 in. tall, 1983 7 in., average 13 in. Corn fair to mostly good condition. Wheat 100% headed, 1983 99%, average 100%. Wheat 0% combined, 1983 0%, average 0%. Wheat condition fair to mostly good. Alfalfa hay 85% cut first time, 1983 80%, average 70%. Clover hay 63% cut, 1983 60%, average 55%. Tobacco 60% set, 1983 60%, average 70%. Oats 25% headed, 1983 20%, average 50%.

IOWA: A warm and humid week with excessive precipitation in all but the southeast corner of the State.

Days suitable for fieldwork: 1.6. Corn crop condition 14% excellent, 51% good, 28% fair, 7% poor to very poor. Slow growing and yellowing corn not uncommon. Corn cultivated 1st time 20%, complete. Soybean acreage planted, 90% complete; 97% last year; 96% normal. Soybeans emerged, 82% complete; 86% last year; 86% normal. Soybean crop condition 7% excellent 50% good, 34% fair, and 9% poor to very poor. Oats headed, 20% complete; 25% last year; 43% normal. Oat condition 9% excellent, 54% good, 29% fair, 8% poor to very poor. Winter wheat condition 10% excellent, 64% good, 21% fair, 5% poor to very poor. First crop alfalfa hay cut 35% complete; 58% last year; 70% normal. Alfalfa and other hay condition 29% excellent, 50% good, 16% fair, and 5% poor to very poor. Pasture conditions 40% excellent, 51% good, 6% fair, 3% poor to very poor. Topsoil moisture conditions 80% surplus; 20% adequate. Subsoil moisture conditions 71% surplus; 29% adequate. Livestock mostly good condition.

KANSAS: Precipitation averaged 3.40 in. northeast and 0.75 to 1.25 in. elsewhere. Major flooding northeast. Temperatures averaged 74° northwest and 77 to 80° elsewhere, 6 to 9° above normal.

Wheat condition good to excellent except northwest. Some moisture stress southern and western counties, surplus east. Wheat 100% headed, 99% last year, 100% average; 35% turning, 25% last year, 65% average. Light to moderate levels greenbugs and army cutworms. Harvesting started southernmost counties. Corn 100% planted, 99% last year, 98% average. Sorghum 65% planted, 50% last year, 65% average. Alfalfa first cutting virtually complete, second cutting beginning. Alfalfa weevil remains a problem. Pasture and rangeland good to excellent. Days suitable for fieldwork: 3.5.

KENTUCKY: Hot days and warm nights. Precipitation scattered across State with amounts generally light. Mean temperatures

averaged 78 to 81° or 5 to 10° above seasonable normals.

Days suitable for fieldwork averaged 5.9. Soil moisture 82% short, 18% adequate. Crops need rain, especially newly set tobacco. Corn planting virtually complete. Condition good. Average height 12 in. Some damage by cutworms, armyworms and corn borers. Soybeans 62% planted, 43% year ago, 61% average. Condition good. Double crop planting will continue as small grain harvested. Barley tobacco 88% set, 74% last year, 85% average. Tobacco condition fair to good. Farmers resetting as needed. Dairy tobacco 82% set. Wheat harvest just starting. Barley harvest half complete. Pastures good but regrowth slowing. Good hay quality.

LOUISIANA: Rainfall amounts ranged from none to 5.03 in. Weekly temperatures averaged from 1° above normal to 3° below normal. High 97°, low 60°.

Soil moisture short to adequate. Days suitable for fieldwork: 5.5. Activities included planting of crops; harvesting hay, vegetables, and peaches; and chemical applications. Rice emerged 99% 1984, 95% 1983, 98% average; headed 4% 1984, 0% 1983; condition good. Corn silked 62% 1984, 35% 1983, 61% average; dough stage 16% 1984, 7% 1983, 9% average; condition good. Cotton emerged 99% 1984, 97% 1983, 99% average; squared 6% 1984, 8% 1983, 21% average; condition fair to good. Soybeans planted 90% 1984, 74% 1983, 81% average; emerged 81% 1984, 64% 1983, 71% average; condition fair to good. Sorghum planted 99% 1984, 92% 1983, 86% average; emerged 98% 1984, 88% 1983, 79% average; condition fair to good. Sweetpotatoes planted 82% 1984, 74% 1983, 87% average; condition fair to good. Sugarcane condition fair. Wheat harvested 88% 1984, 77% 1983, 87% average. Vegetable condition fair to good. Peach harvest 15% 1984, 12% 1983, 26% average. Hay first cutting 86% 1984, 67% 1983, 79% average. Pasture and livestock condition fair to good.

MARYLAND AND DELAWARE: Maryland: Unseasonably hot and humid. Highs 80° extremes west, mid to upper 90's elsewhere. Lows mid 50's west and mostly mid to upper 60's remainder of State. Precipitation, light scattered showers averaging 0.03 in.

Days suitable for fieldwork 6.5. Subsoil moisture mostly adequate. Topsoil moisture short to adequate. Small grain good condition. Barley 30% harvested, slightly behind last year and the average. Soybean planting 70% last year 50%; average 65%. Tobacco planting 80%, last year 75%; average 80%. Vegetable planting complete. Hay cutting and curing good for second week in a row. Alfalfa 95% cut first time, 93% 1983. Other hay 70% cut once, 1983, 65%.

Delaware: Unseasonably hot and humid. High temperatures were near 100° and lows were in the low to mid 60's.

Days suitable for fieldwork 6.2. Small grains remain in mostly good condition. Hot humid weather with little precipitation promoted small grain turning. Barley turned 95%; last year 100%. Wheat 85% turned; 1983 90%. Rye 50% turned; last year 80% turned. Barley harvested 50%, 1983 80% harvested. Soybeans planted 65%; last year 60%; averaged 70%. Alfalfa 1st cutting 85%; last year 90%. Other hay 1st cutting 55%, 1983 85%. Major vegetable planting complete except for snap beans and lima beans. Snap beans 85% planted, 95% 1983. Lima beans 35% planted, 80% planted 1983. Green pea harvest 35%, equal to 1983's progress.

MICHIGAN: Temperatures averaged near normal. This is deceiving since temperatures averaged

²⁰ below normal over the upper Peninsula and the northern portion of the lower Peninsula. The rest of the lower Peninsula had temperatures averaging 2.5⁰ above normal. Precipitation was light over the southern lower Peninsula while the rest of the State received moderate amounts.

Statewide 5.5 days suitable for fieldwork. Soybeans 90% planted, 85% last year, 92% average. Dry beans 45% planted, 50% last year, 69% average. Winter wheat 85% headed, 70% last year, 86% average. Oats 5% headed, 10% last year, 11% average. Hay 30% cut, 30% last year, 38% average. Strawberry harvest underway. Asparagus harvest winding down. Fruit crops progressing well.

MINNESOTA: Another week of heavy rainfall in the southern 2/3 of the State. Temperatures averaged near normal to ³⁰ below normal. High: 84⁰, low: 37⁰. Precipitation near normal to 0.31 in. below normal for northwest, north central, and north east and 0.61 to 2.11 in above normal elsewhere. Greatest reported weekly total: 4.92 in.

Extreme wet conditions threatened crops and delayed field operations. Some replanting to be done if weather permits. Heavy weed growth and disease potential were major concerns. Hay making fell about a week behind. Days suitable for fieldwork: 1.3. Topsoil moisture: 23% adequate, 77% surplus. Emerged: Soybeans 91%, 1983 77%, normal 84%. Jointing: Spring wheat 60%, 1983 43%, normal 50%; oats 50%, 1983 45%, normal 54%; barley 63%, 1983 41%, normal 50%. Heading: Spring wheat 3%, 1983 4%, normal 13%; oats 4%, 1983 2%, normal 13%; barley 4%, 1983 4%, normal 15%. Height: Corn 8 in., 1983 6 in., normal 8 in.; soybeans 3 in., 1983 2 in., normal 3 in.

MISSISSIPPI: Temperatures near normal. extremes 59 and 97⁰. Greatest 24-hour rainfall 1.62 in.

Soil moisture short to very short. Crops stressed in some areas. Planting of remaining soybean acreage delayed because of dryness. Main activities; Wheat harvest, insect control. Fieldwork 6.1 days suitable, 4.1 1983, 5.0 average. Wheat good; 98% ripe, 83% 1983; 64% harvested, 26% 1983, 59% average. Hay harvest 34% completed, 41% 1983, 37% average. Peaches good; 26% harvested, 7% 1983, 15% average. Cotton good; 12% squaring, 15% 1983, 31% average; 0% blooming. Soybeans fair; 78% planted, 66% 1983, 74% average; 60% emerged, 47% 1983. Rice good; 99% emerged, 92% 1983, 98% average. Sorghum fair to good; 95% planted, 84% 1983, 80% average. Corn fair; 28% silking, 28% average; 6% dough stage. Peanuts 96% planted; watermelons 97%. Sweetpotatoes 78% planted, 73% 1983, 83% average.

MISSOURI: Temperatures ranged from 2 to 9⁰ above normal. Two in. rains fell across north and west. The Missouri River and many of its tributaries remain above flood level.

Days suitable for fieldwork: 3.4. Cotton 100% planted, 100% last year, 100% normal. Cotton squaring, 9%, 0% last year, 10% normal. Corn planted 96%, 100% last year, 97% normal. Grain sorghum planted 84%, 78% last year, 73% normal. Winter wheat headed 98% this year, 100% last year and normal. Winter wheat turning color 54%, 56% last year, 71% normal; wheat harvested 0%, 0% last year and normal. First cutting alfalfa, 75% this year, 79% last year, 79% normal.

MONTANA: Beneficial rains came to most areas east of Divide, 1.00 or 2.00 in. were common. Some showers late in week were accompanied by hail and strong winds which did some damage.

Rain was light to moderate west of Divide. Temperatures mostly normal except in southwest they were 2 to 4⁰ below normal.

Soil moisture short north central, surplus, southwest, short to adequate elsewhere. Fieldwork: Days suitable 4.3. Small grains in good condition west, central and south central, mostly fair elsewhere. Sugarbeet condition ranges fair to good. Winter wheat 20% pre-boot, 55% boot and 25% headed, last year and average 30% headed; spring wheat and barley 85% in pre-boot, 5% in boot. First cutting alfalfa hay just starting. Stockwater generally adequate, except mostly short north central and northwest.

NEBRASKA: Heavy rainfall continued across the State causing flooding in much of central and eastern areas. Precipitation ranged from 0.50 in. Panhandle to 1.00 in. to 5.00 in. rest of State. Some areas south central and northeast 6.00 to 8.00 in. Temperatures were 1 to 5⁰ above normal with warm, humid conditions.

Corn 100% emerged, 98% last year, 100% average. Winter wheat condition rated mostly fair and was 100% headed, 90% last year, 100% average. Wheat turning color 4%, 10% last year, 30% average. No wheat harvested this year, last year or average. Soybeans planted 80%, 98% last year, 100% average. Soybeans emerged 55%, 85% last year, 85% average. Sorghum planted 75%, 98% last year, 100% average. Sorghum emerged 60%, 85% last year, 85% average. Alfalfa condition was mostly good to fair. First cutting was 55% harvested, 75% last year, 80% average. Topsoil moisture was mostly surplus to adequate. Subsoil moisture was mostly adequate to surplus. Days suitable for fieldwork numbered 2.9.

NEVADA: Low pressure system over northern area dominated the weather pattern in north and central sections, producing widespread rainfall in that area. Large hail and damaging winds were reported. Southern areas remained dry and cool. Temperatures averaged 5⁰ below normal in the north to 2⁰ below normal in south. Alfalfa hay harvest extending northward.

Calving near completion. Lambing 90 to 95% complete. Shearing about 50% complete.

NEW ENGLAND: Average temperatures well above normal through the 14th then slightly below normal through the 17th. Some frost occurred in the normally colder valleys across the north. Precipitation for the week was in the form of scattered showers and thunderstorms.

Hot, humid weather speeded recovery from recent floods. Fieldwork: 7.0 days behind schedule. Soil moisture adequate to surplus. Maine potatoes 100% planted, 50% emerged; field corn 80% planted, 65% emerged; condition fair to good. First cut hay stands at 40% cut, conditions good. Cranberry crop potential excellent. Strawberry harvest started in the south.

NEW JERSEY: Temperatures averaged 2⁰ above normal. Extremes were 40⁰ on the 16th and 98⁰ on the 14th. Weekly rainfall averaged 0.63 in. north, 0.65 in. central and 1.31 in. south. The heaviest 24-hour total was 1.26 in. on the 17th to 18th. Estimated soil moisture, in percent of field capacity, averaged 63% north, 49% central and 47% south. Four inch soil temperatures averaged 68⁰ north, 71⁰ south.

Fieldwork: 7.0 days suitable. Corn and soybean planting nearly completed. First cutting of hay very active. Harvest of vegetable and strawberry crops increasing. Peach orchards which have fruit set are in good

condition. Apples in good condition. Pasture condition good.

NEW MEXICO: Widespread thundershowers fell across the State.

Some first and second cutting alfalfa damaged. Wheat, barley harvests began. Cotton planting complete. Grain sorghum planting continues. Potatoes, peanuts good to excellent condition. Onion digging continues; yields excellent. Cattle, sheep continue moving to high country. Plains greening. Cotton planted: 100%, last year 98%, average 100%. Cotton squaring: 5%, last year 0%, average 2%.

NEW YORK: Hot and humid first half of week, temperatures 80's to 90's, cool, drier late in week.

First cut alfalfa 25% complete, 48% 1983, 20% average clover-timothy hay 16% cut, 34% 1983, 12% average. Grass silage 30% complete, 48% 1983, 24% average. Hay good to excellent. Wheat condition good. Apples past fruit set but set appears lighter than 1983. Grapes in full bloom. Soil moistures adequate

NORTH CAROLINA: Temperatures averaged 2 to 4° above normal in the mountains and 4 to 6° above in the east. Precipitation mostly non-existent except for widely scattered thundershowers.

Soil moisture: 11% very short, 75% short, 13% adequate, 1% surplus. Days suitable for fieldwork: 6.4. Condition: Corn 6% poor, 57% fair, 34% good, 3% excellent. Cotton 42% fair, 58% good. Peanuts 57% fair, 43% good. Soybeans 2% poor, 54% fair, 41% good, 3% excellent. Tobacco 5% poor, 64% fair, 31% good. Irish potatoes 32% fair, 68% good. Peaches 4% fair, 79% good, 17% excellent. **Plantings:** Burley tobacco 81%, 1983 77%, average 90%. Sorghum 79%, 1983 79%, average 80%. Soybeans 74%, 1983 79%, average 75%. Sweetpotatoes 75%, average 85%. **Harvested:** Wheat 45%, 1983 26%, average 35%; oats 57%, 1983 40%; average 46%; barley 70%, 1983 50%, average 50%. Rye 46%, 1983 43%, average 44%. Peaches 15%, 1983 24%, average 14%. Major farm activities: Harvesting small grains, planting soybeans, transplanting sweetpotatoes, cutting hay, cultivating tobacco and other crops, applying herbicides, and general farm maintenance.

NORTH DAKOTA: Cool, wet weather continued over most of State past week. Cool first part of week, begin warming 14th and 15th. Temperatures averaged 1 to 3.5° below normal. Extremes ranged 89° northwest to 38° central. Precipitation above normal south and below normal north. Moisture ranged 0.24 in. north central to 2.01 in. south central.

Cool wet conditions maintained moisture supplies but delayed spraying for weed and insect control and start of haying. Topsoil moisture above normal, 85% adequate to surplus versus average of 61% adequate to surplus. Development of small grain ahead of average pace. Percent of crop at joint stage or beyond compared to last year and average: Spring wheat 50, 40, 47; durum 33, 30, 36; oats 48, 45, 47; barley 62, 47, 51. Row crop planting nearing completion. Planting this year compared to last year and average: Flax 95, 100, 92; sunflower 94, 100, 95; dry beans 96, 100, 99. Average height in inches compared to last year and average: Corn 5, 3, 1; potatoes 5, 3; NA; soybeans 4, 4, 1.

OHIO: Temperatures 2 to 8° above normal. Precipitation below normal. Totals under 0.50

in. Base 50 growing degree day accumulations 20 to 30 above normal.

Soil moisture 60% short, 35% adequate, 5% surplus; 6.0 days suitable for fieldwork. Main activities finishing planting corn and soybeans, making hay, spraying and cultivating fields. Corn planted 99% 1984, 100% 1983, 95% average; emerged 90%, average development 4 leaves fully emerged; condition fair to good. Soybeans planted 95% 1984, 90% 1983, 85% average; emerged 70% 1984, 75% 1983; condition fair. Winter wheat headed 95% 1984, 95% 1983, 98% average; harvested 0%; condition fair to good. Pastures good condition.

OKLAHOMA: Temperatures averaged 77° Panhandle to over 80° southwest, central, and northeast. Precipitation ranged zero southeast to 1.73 in. west central.

Warm weather prompted wheat to mature rapidly north. Harvest advance considerable as favorable weather permitted 6.0 days fieldwork. Wheat harvest approaching 90% complete extreme southwest. Heavy rains northwest caused lodging. Southwest producers report good yields considering dry spring weather. Cotton needs rain. Some growers dusting in seed while others may not plant unless soil moisture conditions improve. Wheat good, cotton fair, pastures and ranges good to fair condition. Wheat harvested; 30%, 5% 1983, 25% average. Sorghum planted; 85%, 60% 1983, 75% average. Cotton planted; 60%; 60% 1983, 80% average. Cotton squaring: 0%, 0% 1983, 0% average.

OREGON: Temperatures were near normal except in east, where they were slightly below normal. The west was dry. Some afternoon thunderstorms left precipitation of 0.25 to 0.75 in. in the east.

Winter wheat in good to excellent condition; 92% headed, last year 97%, 92% on average. West of Cascades 100% headed, 90% in east. Disease problems; foot rot and stripe rust; spraying continues. First hay cutting well underway in Willamette Valley. First cut nearly complete in east; around Hermiston-Boardman second cutting underway. Summer fallow work continues in east. Some frost damage to grains and alfalfa in Klamath County. Malheur County sugarbeets in good condition. Soil moisture supplies adequate. Willamette Valley strawberry harvest underway. The cherry crop is about two weeks from harvest. Italian prunes have a light set. Brooks have a good set. Filbert and walnut orchards in good condition. Jackson County; peach thinning nearly complete, pears under irrigation. Cherry picking to begin this week in Wasco County. Around Hermiston, cherries ripening and strawberries being picked. Norgold potatoes in this area in full bloom. Russet potatoes have been cultivated. In central areas, potato planting complete. Willamette Valley vegetable growers planting rapidly with the dry, warm weather. Malheur County onion growers spraying for thrips. Livestock, range and pasture in mostly good condition.

PENNSYLVANIA: The stationary Bermuda high caused continued hot and humid weather throughout State in the beginning of the week, with record high temperatures of 96 to 93° at several locations. Midweek frontal activity brought heavy thunderstorms to the central section, with small hail reported. June 14 through June 16 were cooler, with cloudiness and scattered showers in the southern section. The week's mean temperature of 70° was 3° above normal. The statewide average rainfall was 0.58 in., 0.36 in. below normal.

Days suitable: 6.0. Moisture short to adequate. Activities: Plowing; disk;

spraying; hay making; final planting of corn, soybeans, potatoes, tobacco; harvesting green peas, strawberries. Tobacco transplanting 77% complete, last year 52%. Soybeans 76% planted, last year 70%. Corn 95% planted, last year 90%, average 95%. Barley 39% headed, 44% turning yellow, last year 57% headed, 37% turning yellow. Wheat 77% headed, 6% turning yellow, last year 76% headed, 10% turning yellow. First cut alfalfa 60% complete, last year 52%. First cut clo-tim 42% complete, last year 37%. Quality of hay mostly fair to good. Feed from pastures average to above average.

PUERTO RICO: Island average rainfall 1.72 in. or 0.17 in. above normal. Highest weekly total 6.76 in. Highest 24-hour total 4.95 in. Temperature average about 80° on coasts and 74° interior divisions. Mean station temperatures ranged from 82.0 to 66.9°. Extremes 93 and 57°.

SOUTH CAROLINA: Hot dry week. Temperatures averaging 2 to 8° above normal. Daily highs in 90's except immediate coast. Nightly lows 60's to lows 70's. Little day to day change. Rainfall lighter than usual. Scattered thunderstorms across northern and northwest. Rainfall highly localized.

Soil moisture mostly short. Days available for fieldwork: 6.0. Corn condition fair. Cotton condition fair; 14% squaring, 61% last year, 61% average. Soybean planting continues: 70% planted, 72% last year, 78% average. Wheat condition good; 74% harvested, 47% last year; 63% average; 97% ripe; 88% last year, 100% average. Tobacco condition fair. Peach harvest progressing smoothly 12% harvested; 10% last year; 13% average.

SOUTH DAKOTA: Average temperatures were 6° above to 4° below normal. Extremes: 92 and 28°. Outside the Black Hills the low was 40°. Up to 4.57 in. of rain fell over the State during the week.

Days suitable for fieldwork: 1.0. Range and pastures in good to excellent condition. Topsoil moisture was surplus over most of the east and portions of the west, with the remainder of the west and the extreme northeast reporting adequate. Flooding a major problem in the southeast. Spring wheat headed 7%, 1983 4%, average 30%. Winter wheat headed 58%, 1983 68%, average 87%. Winter wheat harvested 0%, 1983 0%, average 0%. Sorghum planted 54%, 1983 88%, average 88%.

TENNESSEE: A high pressure system dominated the State's weather though two weak cold fronts entered the north portion of the State midweek. Precipitation occurred mostly as spotty afternoon showers beginning midweek and affecting all sections of the State. Much of the State received less than 0.50 in. though some amounts over 1.00 in. were reported in the middle and west sections. Temperatures averaged 5° above normal. Extremes ranged from 97 to 62°.

Farmers averaged 6.0 days of fieldwork. Soil moisture: 92% short, 8% adequate. Cotton squaring: 1%, 1983 3%, average 10%. Soybeans planted: 66%, 1983 52%, average 69%. Sorghum planted: 67%. Tobacco set: 85%, 1983 85%, average 90%. Wheat ripe: 53%, 1983 36%, average 68%. Wheat harvested: 10%, 1983 2%, average 20%. Alfalfa hay - 2nd cutting: 28%, 1983 11%, average 41%. Pastures and livestock in good condition.

TEXAS: Moist, unstable airmass over State first part week. Afternoon heating combined warm

airmass produce scattered showers, thunderstorms across State. Later week, high pressure over north Gulf and eastern United States create warm, moist flow Texas. End of week, moisture already in West Texas, weak upper level disturbance moved into area triggering widespread heavy rainfall over Panhandle, South Plains and Trans-Pecos. Temperatures past week normal over State, 4° below normal Trans-Pecos. Normal temperatures range 70's over High Plains, middle 80's over South Texas. Rainfall 0.75 in. below normal north central Texas, Upper Coast, 0.25 in. over Edwards Plateau, south central Texas. Near normal fell South Texas, Lower Valley. Above normal averaged 0.75 in. over High Plains to 0.25 of in. Trans-Pecos. Normal precipitation usually range from 0.25 in. over Trans-Pecos to little more than 1.00 in. Upper Coast.

Crops: Scattered showers continued improved planting, growing conditions. Plains, showers temporarily slowed field operations; soil moisture improving. Central Texas received light rain, helped growing conditions. Blacklands beginning to see increase insect populations. South Texas continues drought stresses, more acres being grazed, baled. Sorghum planting Plains, minor delays due scattered showers. Planted fields showing good growth under moist conditions. Minor hail damage in scattered areas. Some replanting may be necessary. Planting nearing completion Low Plains, Cross-Timbers. Less acreage expected due to extremely dry conditions planting time. Central Texas fields blooming stage in fair condition. First fields harvested Rio Grande Valley. Harvest pick up crop continues rapidly mature. Sorghum condition rated 64% normal compared with 73% year ago. Corn fields High Plains rapid growth under recent rainy conditions. Irrigation remained steady. Fair, poor stands Low Plains, Cross-Timbers. Blacklands, conditions range fair, excellent. South Texas fields stress lack moisture. Statewide corn condition rated 68% normal compared with 78% year ago. Wheat fields Plains maturing rapidly. Harvest should spread into northern High Plains dryland fields. Irrigated fields follow dryland harvest. Harvest continued southern High Plains, Low Plains. Harvest nearing completion Cross-Timbers. Statewide condition rated 59% normal compared with 84% year ago. Reported conditions 6% excellent; 18% good; 52% fair and 24% poor. Cotton planting continued Plains between showers. Some planted fields received minor hail damage. Other areas good growth. Low Plains, dry weather resulted slow germination, most fields up to stands. Cultivation, boll setting continues Blacklands, Upper Coast. Bollworm infestations increased. Rio Grande Valley cotton not opened yet; growth, maturing steady. Rice fields benefitted recent showers, warmer temperatures. Heading continues. Peanut planting gain momentum with advent showers. Emerging begun Plains good stands reported. Irrigation remains steady.

Cotton planted 89% 1984, 85% 1983, 93% average; cotton squaring 14% 1984, 9% 1983, 16% average; cotton setting bolls 8% 1984, 4% 1983, 9% average. Rice headed 1% 1984, 3% 1983, 10% average. Sorghum planted all purposes 92% 1984, 88% 1983, 92% average; sorghum headed 49% 1984, 42% 1983, 46% average; sorghum turning color 28% 1984, 14% 1983, 20% average; sorghum mature 6% 1984, 1% 1983, 3% average. Wheat turning color 95% 1984, 81% 1983, 90% average; wheat harvested for grain 49% 1984, 29% 1983, 30% average. Oats harvested for grain 65% 1984, 60% 1983, 59% average. Peanuts planted 63% 1984, 64% 1983, 63% average. Soybeans planted 84% 1984, 60% 1983,

64% average. Sunflowers planted 84% 1984, 74% 1983, 65% average.

Commercial vegetables: Rio Grande Valley cantaloup harvest winding down. Harvest continues peppers, tomatoes good volumes. San Antonio-Winter Garden, harvest irrigated watermelons continues. Harvest continues cucumbers, squash, onions. Trans-Pecos, onion harvest continues. Cantaloup fields good growth. High Plains, producers still irrigating onions, potatoes, carrots. Thrip damage noticed onion fields. Potato harvest begun Knox-Haskell areas. Some early varieties peaches harvested; pace slowed. Later peaches showing smaller sizes. Additional rain would help sizing. Pecan development continues. Crop in various stages. Heavy damage casebearers continues untreated groves. Heavy June droppage occurred some areas due scab, casebearers.

Range and livestock: Ranges across State greening up, growth remains short. Overall condition increasing slowly. First cuttings hay begun many areas. Additional rain needed help make second cutting. Feeding both sheep, cattle continues.

UTAH: Recurring thunderstorm activity deposited moderate to heavy precipitation over north half of State but zero to light amounts in south half. Maximum temperatures averaged 10° below normal north half and 4° below south half, ranging 1° below to 17° below. Minimums averaged 5° below normal except Dixie division 1° below, ranging normal to 10° below.

Days suitable for fieldwork: 5.7. Winter wheat condition fair to good, nearly half in head. Spring wheat and barley condition fair to good, 22% headed out. Corn 84% emerged but cool temperatures slowed growth. Potato planting continued, 86% complete except in local areas. Apricots rated about 50% full crop. Cherries and peaches rated 70 to 75% full crop. Excellent crops of apples and pears expected. First cutting alfalfa 20% complete.

VIRGINIA: Clear, hot weather until cold front arrived mid-period causing thunderstorms and cooling. Dry conditions continue. Average temperature departures plus 8° falling to plus 2° in cool air. Scattered showers and thunderstorms produced spotty, light rainfall.

Continued hot, dry weather decreased topsoil moisture conditions to 80% short, 14% adequate, 6% surplus. Clear days allowed 5.8 days suitable for fieldwork. Most crops remain in good condition although rain would be beneficial. Corn planting 98% complete, 97% last year and 98% average. Corn crop in good condition. No silk yet. Soybean planting 58% complete, 61% last year, 63% average. Condition good. Peanut stands in good condition overall, although poor stands reported in some areas. Flue-cured tobacco transplanting 99% complete, 99% last year, 98% average. Fire-cured tobacco 98% complete, 96% last year, 96% average. Burley tobacco 76% complete, 86% last year, 85% average. Sun-cured tobacco 92% planted, 94% last year, 93% average. Tobacco in good condition. Apple and peaches in good condition. Hay yields still above normal. Oat harvesting 26% complete, 21% last year, 16% average. Barley harvesting 16% complete, 30% last year, 25% average. Wheat harvest 10% complete, 10% last year, 15% average. Small grain harvest appears normal. Hot weather affecting heavily grazed pastures.

WASHINGTON: Weak front crossed State 9th but produced little rainfall, most being associated with isolated showers. Large high pressure

system, centered southern Gulf of Alaska intensified and pushed into British Columbia. Pattern controlled weather over State 10th through 15th.

Warmer weather across State during week accelerated growth and development of grain and hay crops. Stripe and leaf rusts continue to develop in wheat although not major problems at this time. Corn cultivation and side dressing in progress. Cover spray application continues apples and cherries. Cherry harvest underway Grant County. Strawberry harvest begun and raspberries beginning to ripen. Field preparation and planting of vegetable fields western counties progressing rapidly as growers attempt to make up for lost time. Broccoli and cauliflower harvest will begin in two weeks. Harvest of radishes, spinach and other leafy vegetables continues. Harvest of head lettuce now underway. Eastern counties, asparagus harvest winding down. Sweet onion harvest will begin during last week of June Walla Walla County. Pastures and ranges most areas in good to excellent condition. Western counties, green chopping and grass silage making continue. Winter wheat headed 60% 1984, 98% 1983, 87% average. Winter wheat harvested 0% 1984, 0% 1983, 0% average.

WEST VIRGINIA: Temperatures averaged 4 to 7° above normal except for southern areas where temperatures averaged nearly 9° above normal. High of 98° reported in Franklin and Burlington, low of 50° in Canaan Valley. Precipitation was spare with some areas receiving no rainfall. Petersburg had the most precipitation 1.45 in. High humidity was present during the week.

Soil moisture very short to short. Days suitable for fieldwork 5.7. Main activities: Harvesting hay, working tobacco and gardening. Feed supplies adequate to short.

WISCONSIN: The week continued warm and muggy with scattered thundershowers and locally heavy downpours. Weekly rainfall totals averaged 2.00 to 3.00 in. but many areas reported totals of 3.00 to 5.00 in. Flash flooding was reported in western areas on the night of the 16th, and on the 11th in the northwest. Highs generally averaged in the 80's, the lows in the 50's and 60's except for the 11th when lows were in the 40's and 50's.

Soil moisture estimated at 0% short, 56% adequate, and 44% surplus. There were 3.2 days suitable for fieldwork. Soybeans were 95% planted compared to an average of 95% and last year of 86%. The first cutting of hay was 28% complete, work and drying has been slowed due to wet weather. Corn height was reported at 8.0 in., corn condition as good.

WYOMING: Temperatures below normal, from upper 80's to near freezing. Precipitation above normal except Upper Platte Drainage.

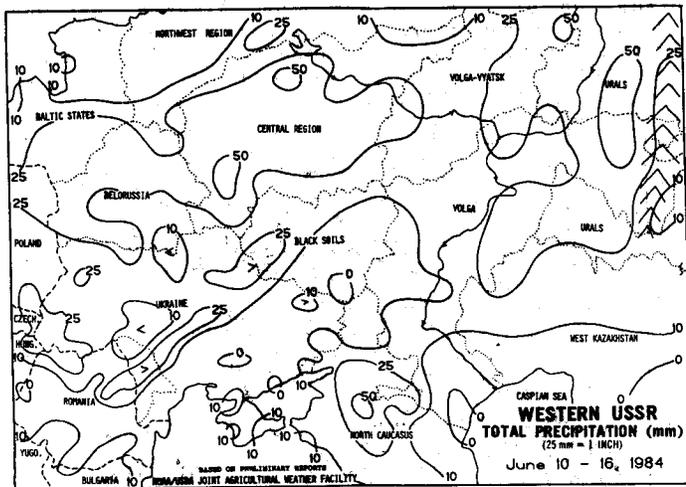
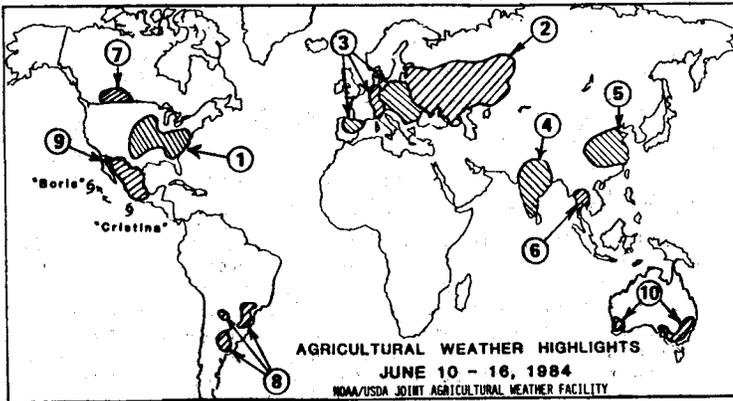
Topsoil moisture adequate 79% State. Days suitable for fieldwork: 6.0. Spring wheat, oats, emerged, 95%. Corn emerged: 90%, last year, 95%, normal, 75%. Potatoes emerged: 65%, last year, 95% normal, 55%. Dry beans emerged: 60%, last year, 70%, normal, 40%. Winter wheat mostly fair to good condition. Some damage to hay and pastures along Greeks and rivers in southwest corner. Some hail damage southern Goshen County to wheat, barley, hay. Livestock mostly fair to good. Calf and lamb losses to light to normal. Livestock moved to summer ranges: Cattle and calves, 75%; sheep and lambs, 75%. Ranges and pastures responded well to precipitation.

International Weather and Crop Summary

June 10 to 16

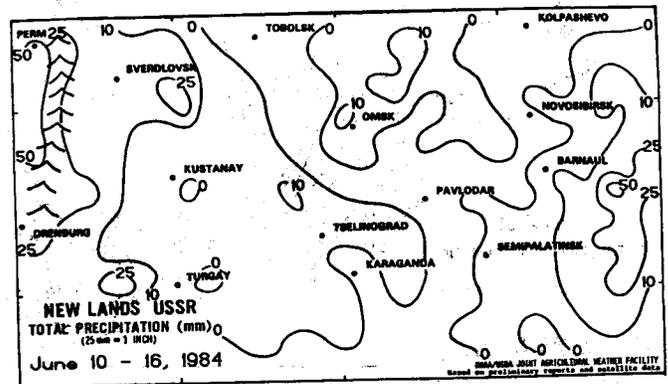
HIGHLIGHTS:

1. UNITED STATES ... Stormy weather erodes and floods fields and lodges crops in parts of the western Corn Belt, but improves soil moisture in the Texas High Plains. Unusually hot, dry conditions delay soybean planting and stress some corn in the Southeast.
2. USSR ... Showers continue to benefit crops in east European USSR. Unseasonably cool weather slows crop growth in west European USSR where moisture supplies are abundant. In the New Lands, wet weather relieves dryness in crop areas around Orenburg. Mostly dry weather covers spring wheat in central and eastern crop areas.
3. EUROPE ... Warm, dry weather aids grain maturation in Spain and relieves excessive wetness in West Germany and northern Italy. Showers continue to maintain favorable conditions for crops in the southeast and improve moisture conditions in Poland.
4. SOUTH ASIA ... Monsoon rains continue a near-normal pace, accelerating planting of summer crops.
5. EASTERN ASIA ... Inundative rains in the Yangtze Valley likely damage some summer crops. Additional rain would benefit summer crops in the North China Plain.
6. SOUTHEAST ASIA ... Moderate rain late in the week maintains adequate moisture supplies for Thai corn and rice.
7. CANADA ... Additional showers improve growing conditions over the southeastern Prairie grain belt, but rain in northwestern crop areas further hampers fieldwork in persistently wet areas.
8. SOUTH AMERICA ... Inundative rains fall in Santa Catarina and southern Parana, but welcome, drier weather covers Rio Grande do Sul. Dry weather aids Brazil's coffee harvest and Argentina's cotton and soybean harvest. Winter wheat planting is underway in Argentina with generally adequate moisture.
9. MEXICO ... The rainy season finally arrives over the western part of the southern Plateau corn belt, benefiting the germination and growth of young corn and beans.
10. AUSTRALIA ... Rain improves conditions for planting and emergence of wheat in Queensland and South Australia, but mostly dry weather in Victoria and New South Wales continues to hamper early wheat development. Showers continue to moisten emerging wheat in the west.

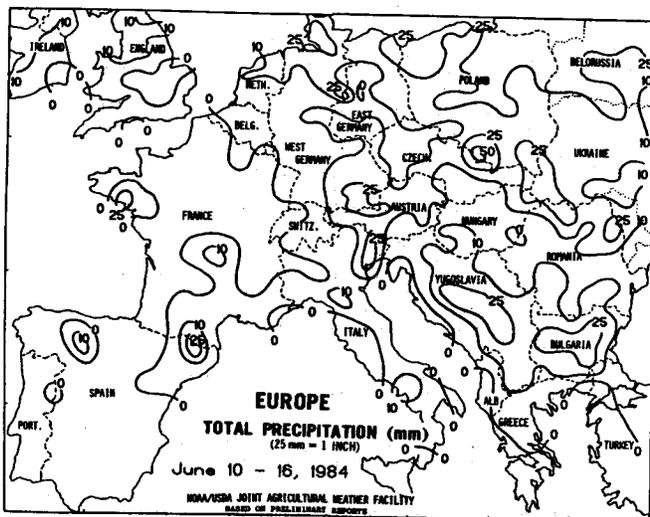


USSR...Shower activity became more widespread in western USSR crop areas, particularly in the east. Significant precipitation, 10-25 mm, covered the Volga Vyatsk Region, the Volga Valley, western Urals, and the North Caucasus. The showers benefited winter wheat in the early grain filling stage in the north and spring grains in the heading stage across the south. Only crop areas in a narrow band northeastward from the eastern Ukraine through the eastern Black Soils did not receive significant showers. Crops in these areas were likely stressed by unfavorably dry weather. Beneficially cool weather settled over European crop areas reducing evaporation rates. Nighttime lows on June 12 and 13 dropped to around 4°C at most locations in the Baltics, Northwest Region, Central Region, Belorussia, and western Ukraine.

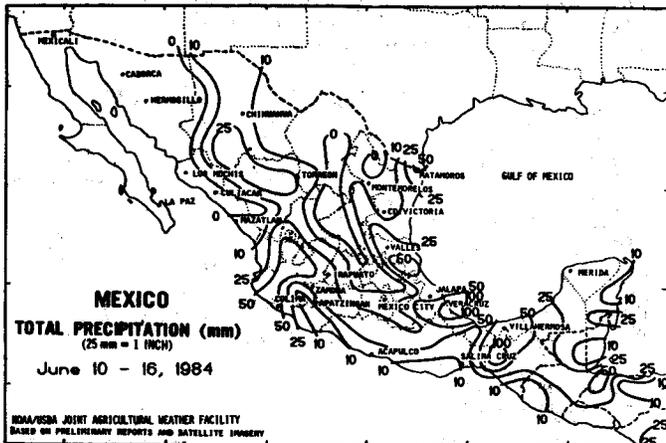
Patchy frost was possible in low-lying fields, but overall damage to crops is believed minimal as frost was localized and did not cover crops for an extended period. The unseasonably cool weather will likely slow crop growth.



In the New Lands, wet weather benefited crops in the southern Urals which had been stressed by unfavorable dryness for the past several weeks. Hot, dry weather early in the week in western Kazakhstan was replaced by cooler weather and light precipitation by the end of the week. Generally dry weather covered spring grains in central and eastern crop areas. Spring wheat is in the vegetative stage across much of the region. Normally, spring wheat enters the early heading stage in late June. Thus far, soil moisture has been adequate for vegetative growth, but timely showers will be required during reproduction and grain filling.

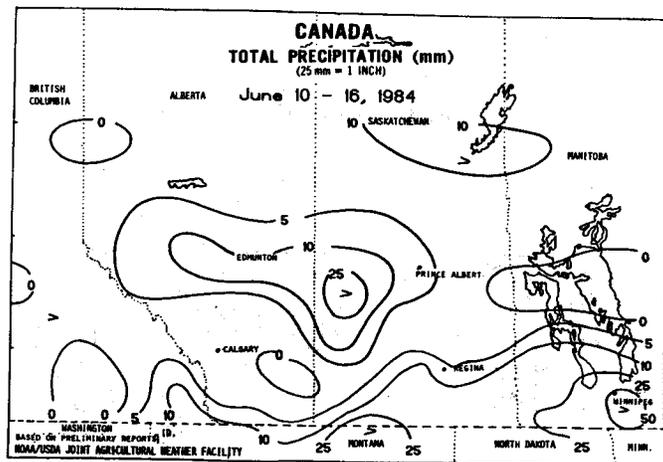


EUROPE... Dry weather benefited most western crop areas. The dry weather in Spain aided winter grain maturation and harvest activity. Drier weather brought relief from excessive rains which had plagued crop areas in West Germany and northern Italy during the past few weeks. In Poland, soaking rains, around 25 mm, benefited crops over much of the area. Additional showers are needed in Poland to increase soil moisture supplies and boost extremely low reservoir levels. In the southeast, showers continued to fall on crops in Yugoslavia, Bulgaria, and Romania. Winter wheat is maturing and corn is in the vegetative stage in these areas. Reports indicate crops are in good condition in Romania, but weeds are a problem in many fields. Weekly temperatures over the region were above normal in the west and below normal in the east. Scattered frost may have occurred in low-lying fields in the northeast.

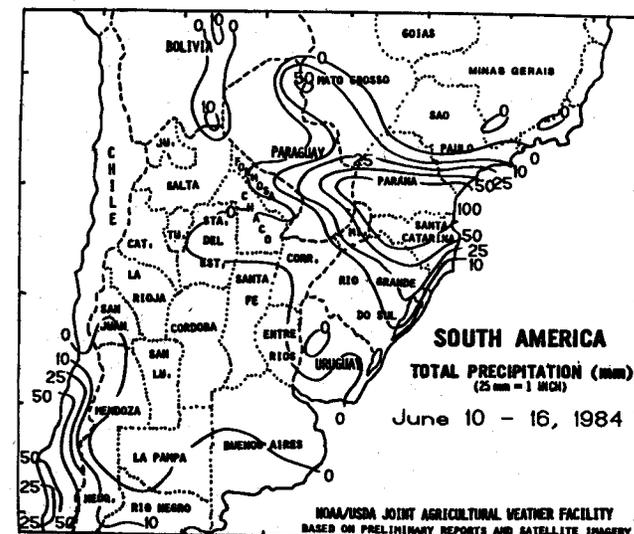


MEXICO... Beneficial rains finally fell over the western part of the southern Plateau corn belt. Up to 60 mm moistened the major corn and bean areas around Guadalajara, which were relatively dry this spring. The rainy season appears to be well established and should help germination of late crops and maintain growth of earlier ones. Showers extended into the northwestern mountain watersheds which supply irrigation water to west coast farming areas. Heavy rains doused the central east coast to the western Yucatan Peninsula, favoring development of sugarcane, coffee, and other tropical crops. Dry weather dominated most of the north, allowing harvesting of sorghum and corn in the northeast and wheat in northwest, but stressing rangeland vegetation.

Moderate to heavy showers were scattered across Central America. The intertropical convergence zone offshore of the southern Mexico coast was very active with two tropical storms, Boris and Christina, moving toward the west, but not threatening any land areas.



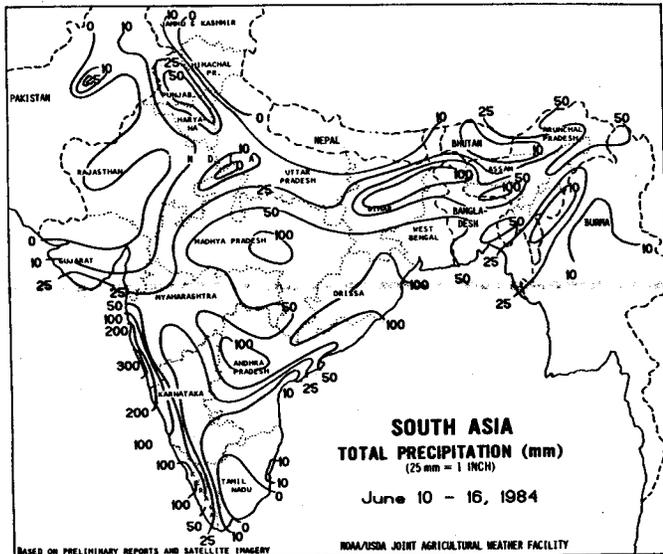
CANADA... Substantial showers, producing over 10 mm of rainfall for the second consecutive week, fell over grain areas of southern Manitoba and southeastern Saskatchewan. The moisture greatly benefited newly emerging crops because earlier dryness limited moisture supplies. Mostly dry weather returned to the remainder of the southern Prairies grain belt following last week's beneficial rain. Most of Saskatchewan's crops have emerged in fair to generally good condition. Crop planting is complete in all areas of Alberta, except the north where persistent wetness has delayed fieldwork. More showers fell this week from the vicinity of Edmonton, Alberta, eastward through northwestern crop areas of Saskatchewan. Wet conditions further hampered fieldwork across northwestern portions of the Prairie grain belt.



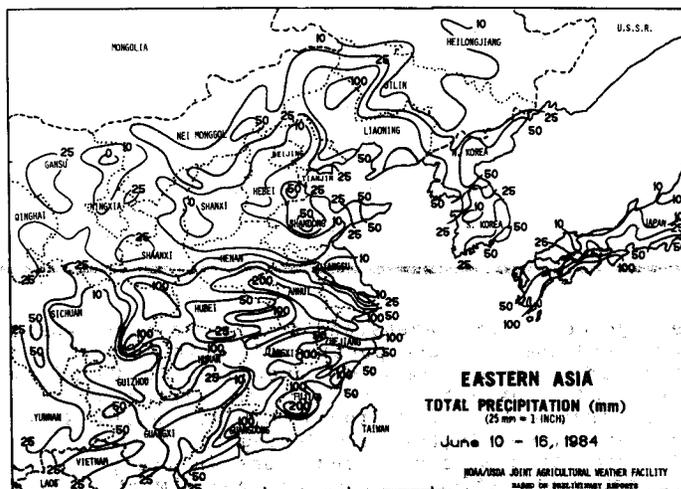
SOUTH AMERICA... Heavy showers continued over southern Brazil, but the area of inundating rain (greater than 100 mm) shifted northward, encompassing Santa Catarina and southern Parana. Drier weather covered most of Rio Grande do Sul where excessive rains fell in recent weeks. Dry weather aided Brazil's coffee harvest north of Parana. In Argentina, mostly dry weather allowed some late cotton harvesting in the north, and aided soybean harvesting in the prime growing areas of Santa Fe and northern Buenos Aires. The

soybean harvest should be completed by late June if favorable weather continues. Some very light showers fell in southern Buenos Aires where winter wheat is being planted. Early planted wheat is in generally good condition throughout the Argentine wheat belt. Sub-freezing minimum temperatures in Buenos Aires early in the week were followed by warmer temperatures late in the week.

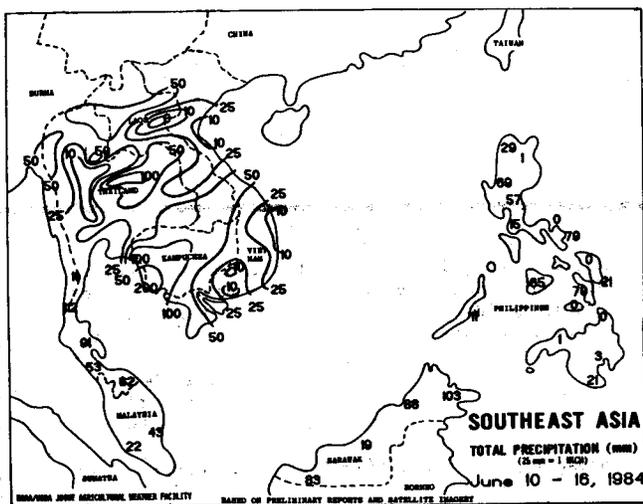
rainfall. Generous rain, greater than 25 mm, covered eastern and northern Thailand, benefiting corn and rice in the vegetative stage. A dry pocket stretched northward through western Thailand. More rain is needed in this region for corn nearing the reproductive stage. Moderate rain fell over much of the Philippines. Moisture conditions for rice are adequate in central Luzon, but more rain is needed in southern Luzon.



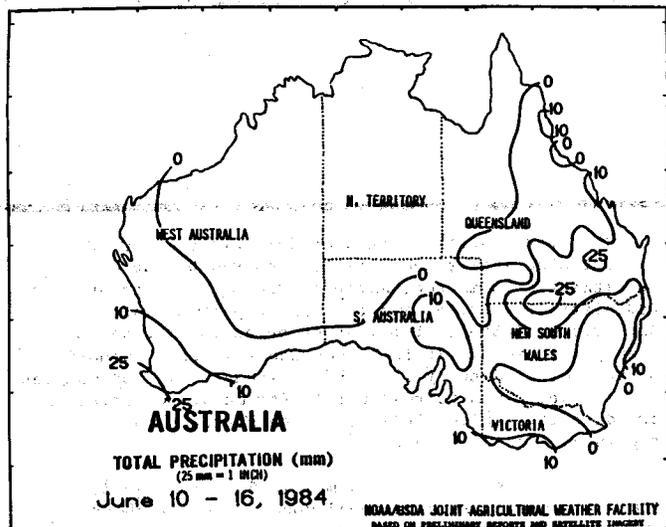
SOUTH ASIA...The monsoon continued its northwestward progression this week with significant rain falling as far north as Punjab. The wet season has begun with timely and ample rains. Moderate rain in southern West Bengal aggravated the flooding from last week's heavy rains. Most of central India received 50-100 mm of rain, raising soil moisture levels and improving summer crop planting conditions. Heavy rain along the west coast continued to supply moisture for early growth of rice. More rain in the inland areas of Gujarat, Myaharashtra, and Karnataka would benefit planting conditions for groundnuts and cotton. Temperatures have cooled during the past few weeks with the arrival of the rains, favoring early growth of recently planted crops.



EASTERN ASIA...Moderate to heavy rain (50-130 mm) covered much of the southeastern rice region favoring early and intermediate rice in the grain filling and heading stages, respectively. Lighter showers fell in the southwest where moisture conditions are mostly adequate. At midweek, extremely heavy rain (as much as 300 mm) inundated the lower Yangtze Valley. Flooding likely damaged some cotton, corn, and soybeans nearing the reproductive stage in Anhui. Relatively dry weather benefited winter wheat harvesting from northern Jiangsu through Shanxi. A few showers fell in northern Shandong and eastern Hebei, but more moisture is needed for summer crops in the North China Plain. Temperatures in the upper thirties (C), upper nineties (F) stressed crops in the North China Plain early in the week. Moderate to heavy precipitation in the southern Manchurian Valley benefited corn and soybeans nearing the reproductive stage.



SOUTHEAST ASIA...Relatively weak monsoon activity during much of the week gave way to moderate to heavy precipitation by week's end. Much of Vietnam and Laos were drier than normal, while Thailand and Kampuchea accumulated substantial



AUSTRALIA...Significant showers fell over portions of southern and eastern grain areas where deficient rainfall during the past 2 months reduced topsoil moisture needed for winter wheat

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emergence. In Queensland's southeastern wheat area and the northern portion of South Australia's crop area, weekly rainfall averaging 10 to 25 mm provided substantial relief for winter grains. Most crop areas of Victoria and New South Wales missed any meaningful rain during the period. The deteriorating moisture conditions in these states is adversely affecting crop establishment. Rain is needed immediately to halt further declines in crop prospects. Showers in western wheat areas maintained moist conditions for the emerging crop. Overall, conditions improved during the week in about 20 percent of the wheat areas leaving another 50 percent deficient of crop moisture.

(continued from p. 16)

squash, tomatoes, and watermelons continued in Texas. California's vegetable harvest continued very active.

PASTURES AND LIVESTOCK: Ranges continued mostly dry in the Southwest, while pastures were mostly good in the East. Pastures showed limited regrowth in many areas of the South because of increasing dry conditions. Livestock were in fair to good condition. Herds continued moving to summer ranges.

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