

# 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

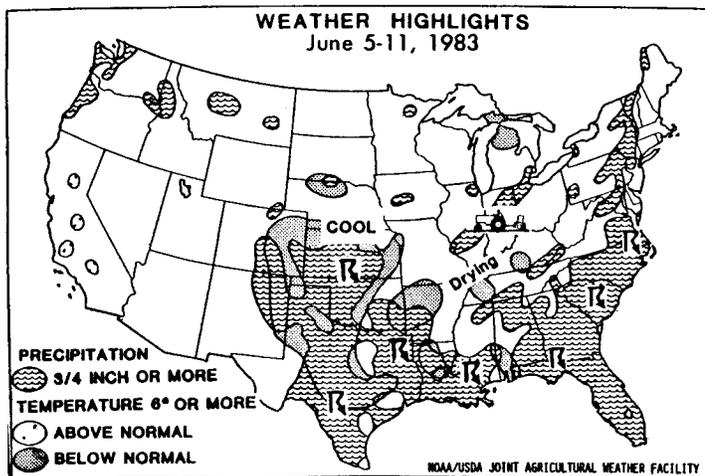
Volume 70, No. 24

WASHINGTON, D.C.

June 14, 1983

## National Weather Summary

June 5 to 11



**HIGHLIGHTS:** Little or no precipitation fell over much of the area in the central Mississippi Valley and lower Ohio Valley, giving the area a chance to dry after having been much too wet. Open weather for about 5 days across the Corn Belt allowed fieldwork to progress rapidly, and warm temperatures in the latter part of the week encouraged crop growth. Continued below-normal temperatures in the central and southern Plains slowed winter wheat development, but warm weather in the northern Plains spurred growth of spring grains. Thunderstorms triggered moderate to heavy showers and some hail through the central and southern Plains, across the gulf coast, and from the central Florida Panhandle through eastern North Carolina. Light to moderate thundershowers covered the Southeast and all of the East Coast States. Light, occasionally moderate showers covered the Pacific Northwest to northern California, the central Plateau, and through Colorado and Montana.

**SUNDAY...**Thunderstorms rumbled from the Carolinas through Florida, across the gulf coast, and northward through the Plains and west of the Mississippi River to Nebraska. Showers and thunderstorms also spread eastward through the lower Great Lakes to the St. Lawrence Valley. Showers fell throughout the eastern slopes of the Rockies. Thunderstorms produced heavy rain in eastern Texas, Louisiana, and parts of the central Plains.

**MONDAY...**Thunderstorms fell over all of the East Coast States, the Appalachians, the upper Ohio Valley, the eastern Great Lakes region, across the South through Texas, and along the eastern edge of the Rockies. Heavy rain accompanied thunderstorms

at scattered locations from southern Texas, across the South, and up the east coast. Morning temperatures were quite cool down the eastern slopes of the Rockies and in the northern Great Lakes but rose into the sixties during the day.

**TUESDAY...**Showers and thunderstorms covered the Southeast from Virginia to Florida and to central Mississippi. Hail and heavy rain fell along a line from the central Florida Panhandle to southeastern Virginia. Widely scattered but vigorous thunderstorms dotted the High Plains and central Plateau. Light showers covering the Canadian Prairie Provinces spread into the northern Plains. A few light showers fell along the southern California coast.

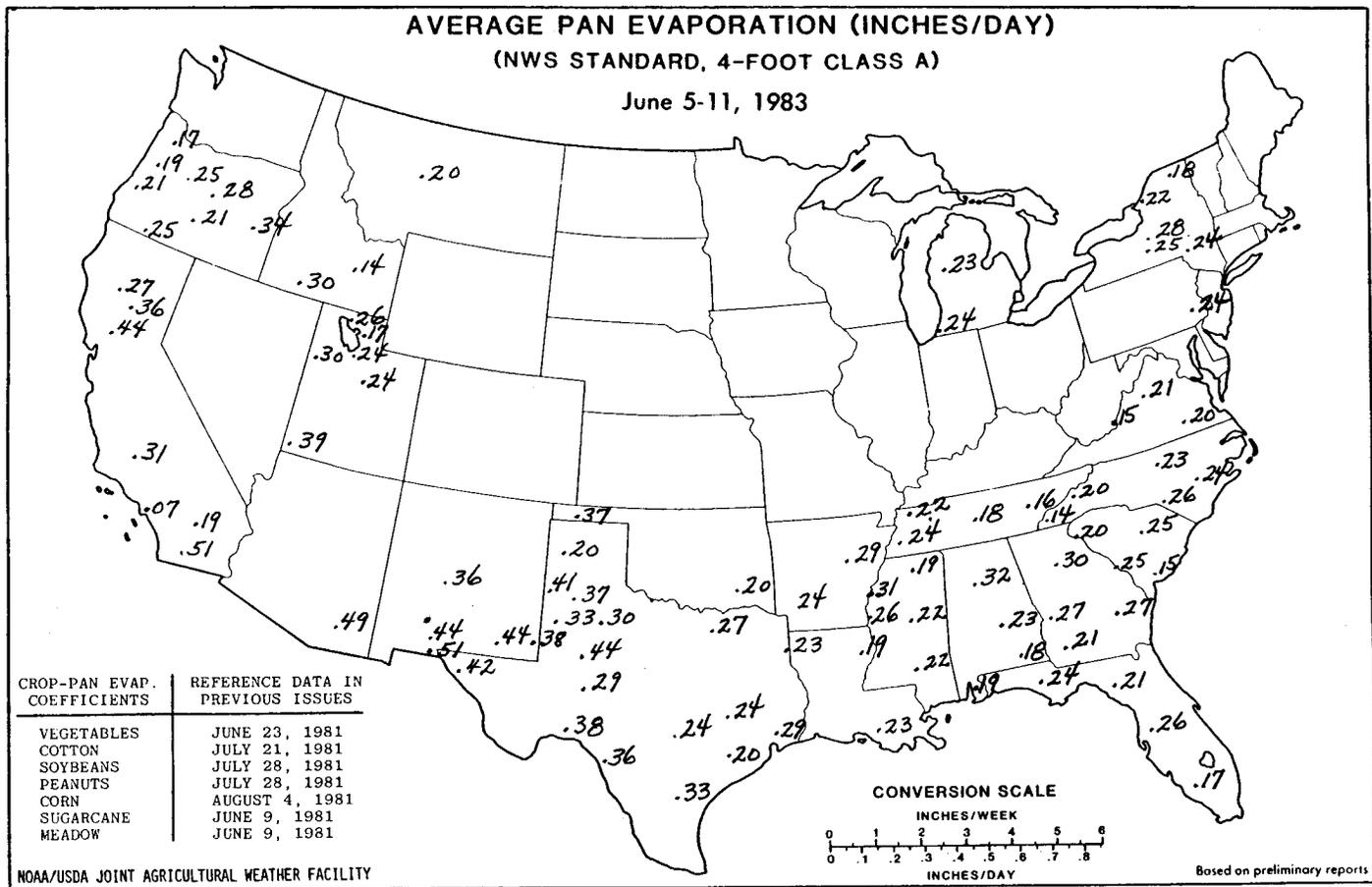
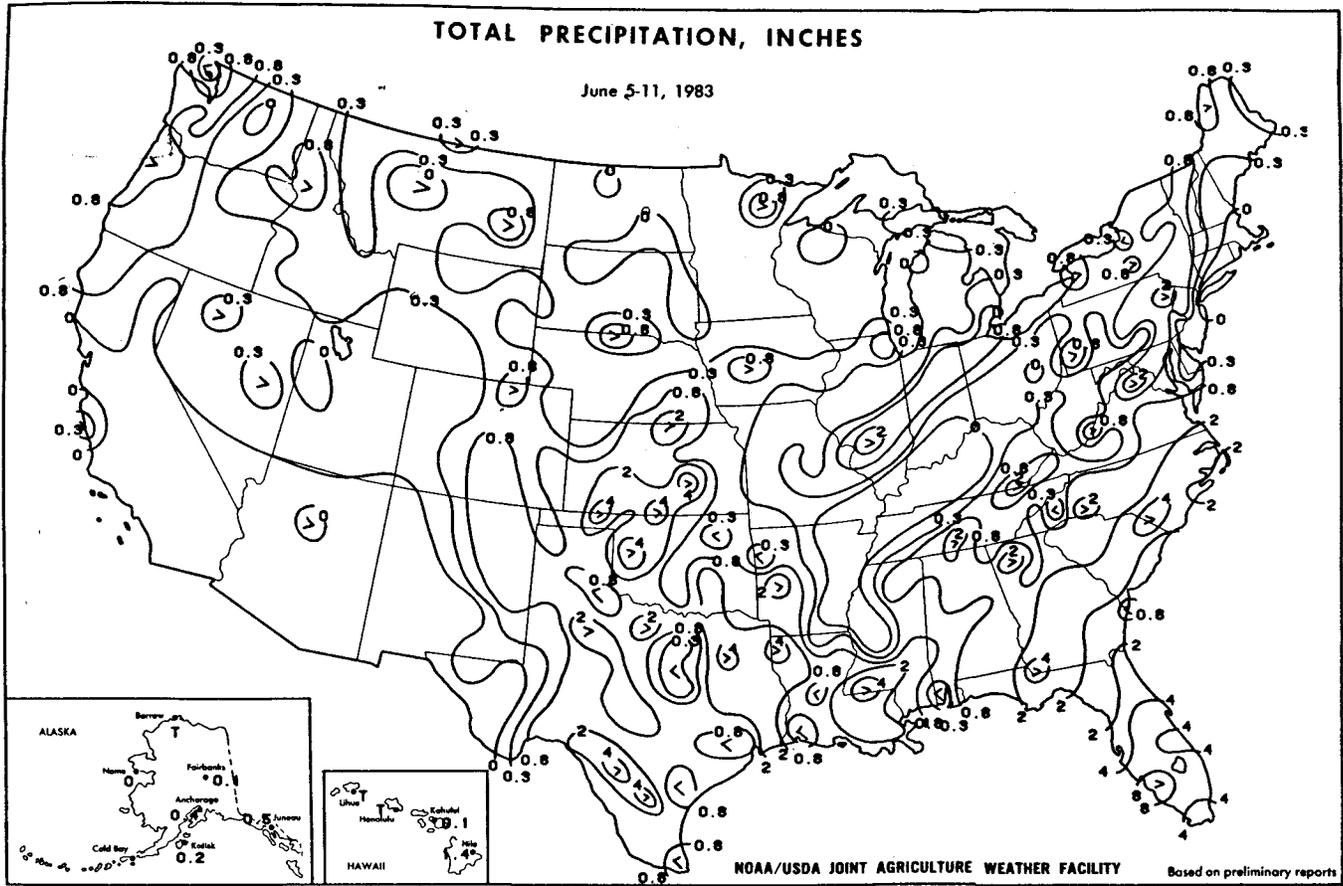
**WEDNESDAY...**Showers and thunderstorms in the East were mostly confined to Florida where severe thunderstorms produced tornadoes, hail, and heavy downpours. Showers and thunderstorms became more frequent from west-central Texas and the Panhandle, through the Rockies and Plateau, to the Pacific Northwest. A few showers fell near a minor disturbance in the upper Mississippi Valley, and cool weather enveloped the Great Lakes region and the St. Lawrence Valley.

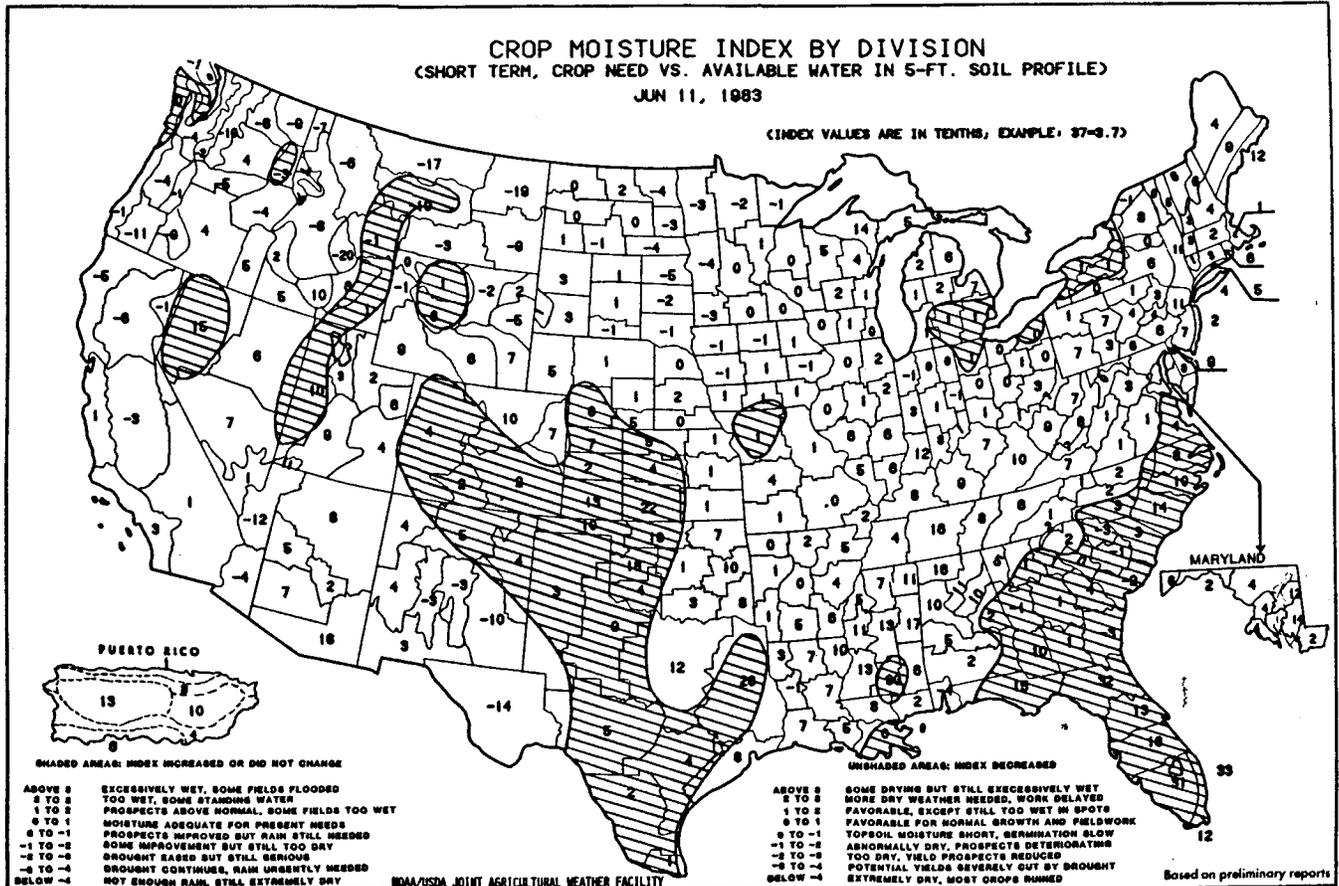
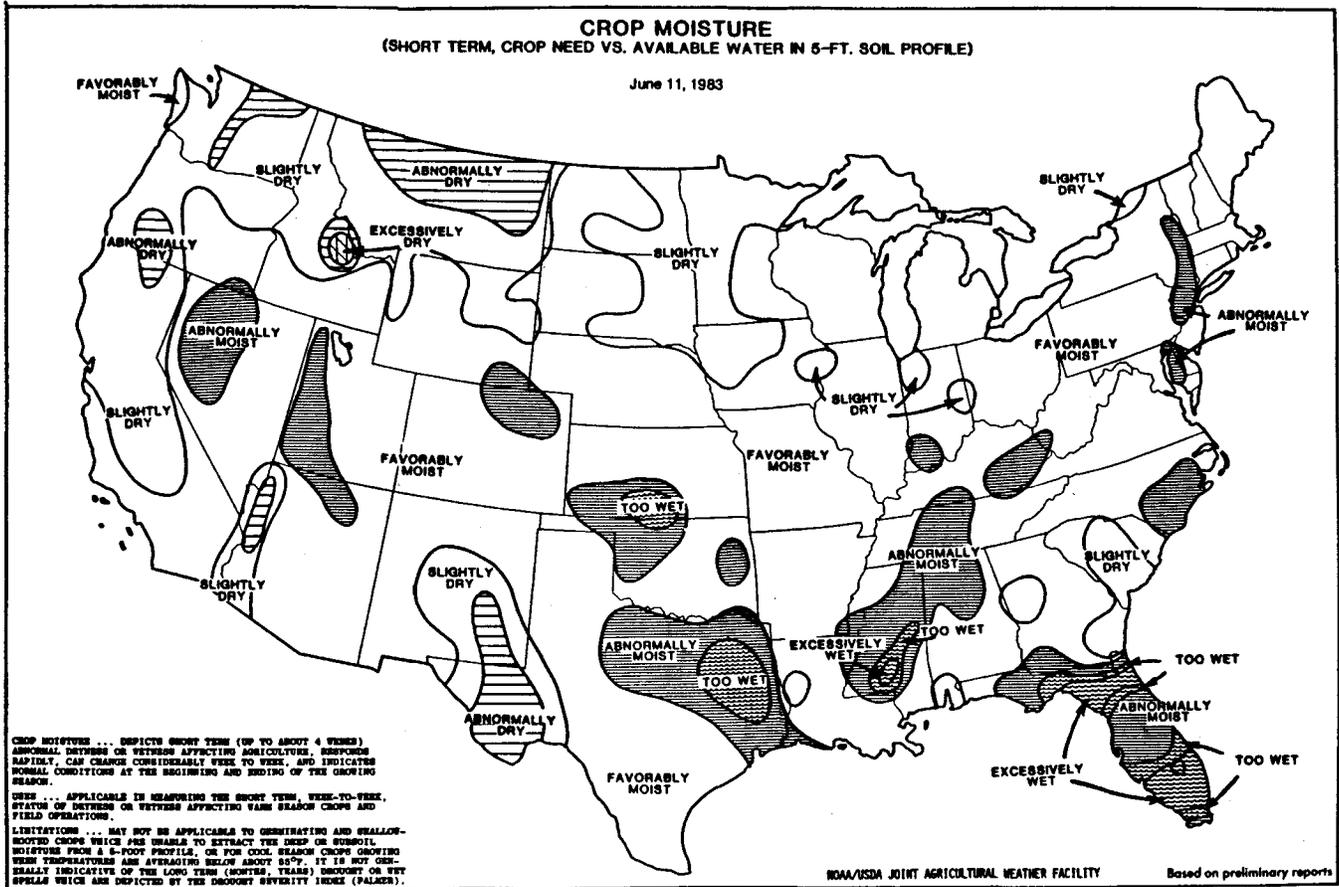
**THURSDAY...**Thunderstorms continued to dump heavy rains on parts of southern Florida. Strong thunderstorms developed in the central and southern High Plains and moved eastward. The heaviest storms reached from the Texas Panhandle to central Kansas. Showers and thunderstorms were more widely scattered in the central Rockies and Plateau and in the northern Plains. A new storm produced showers along the coasts of Washington and Oregon.

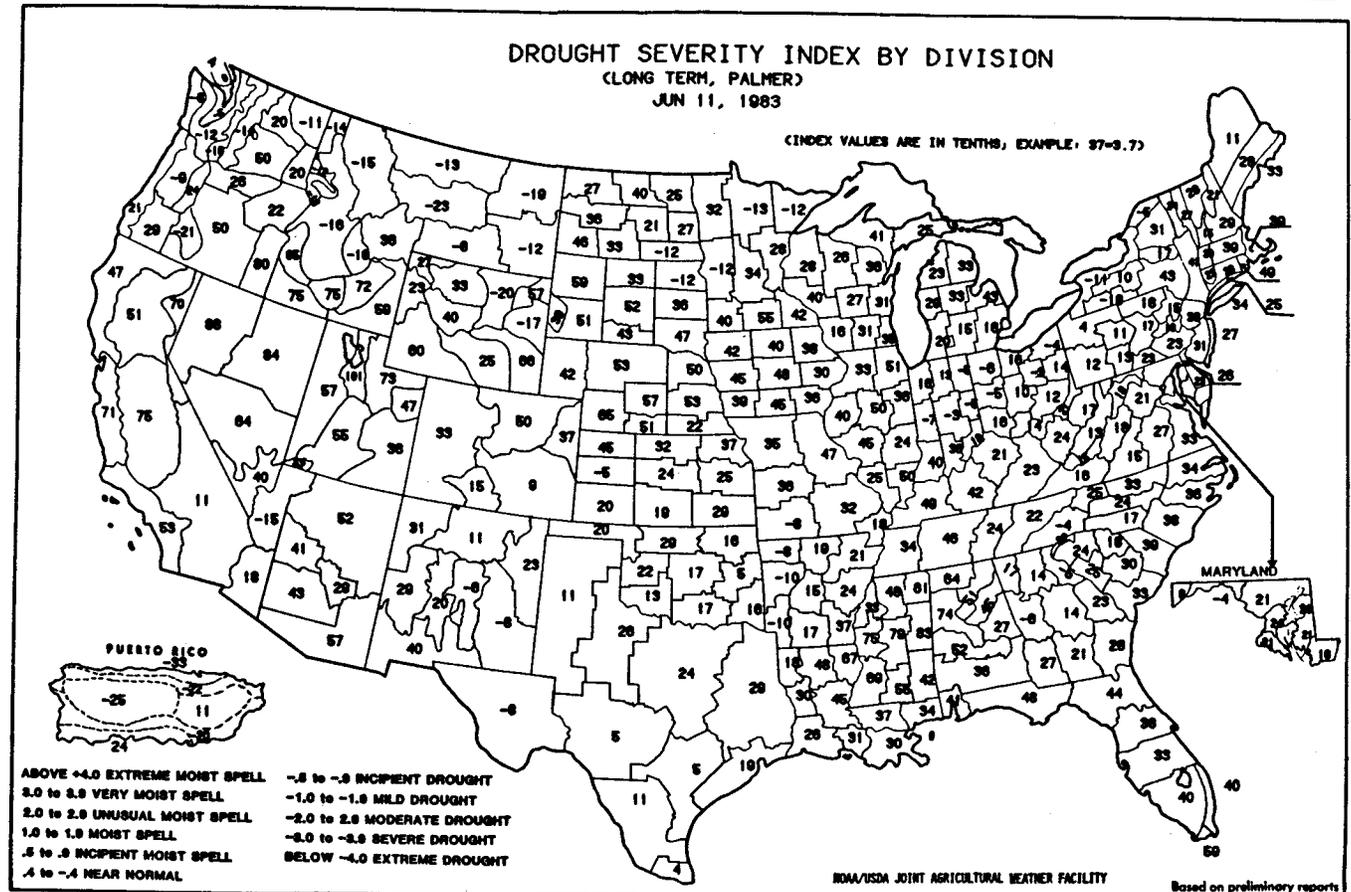
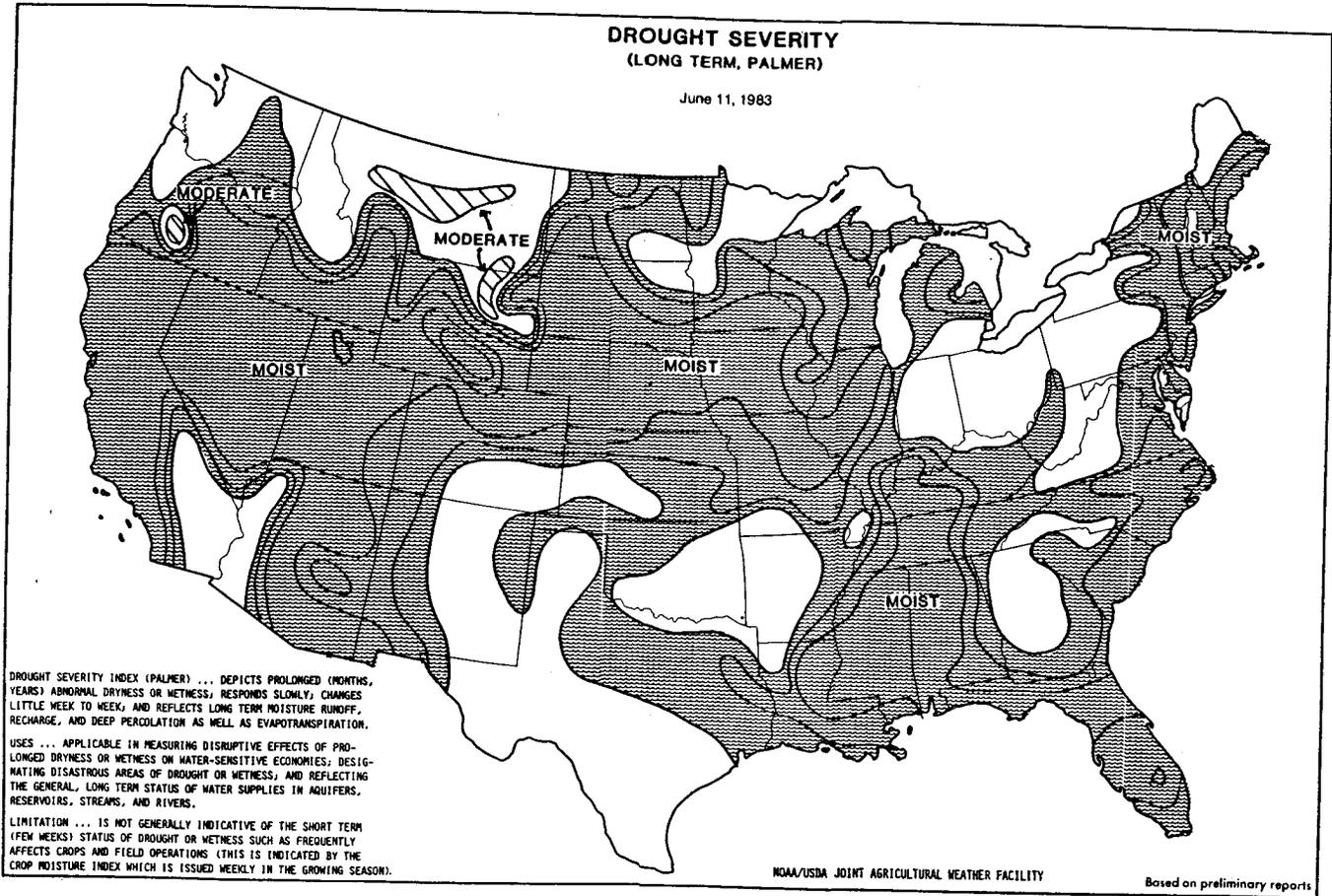
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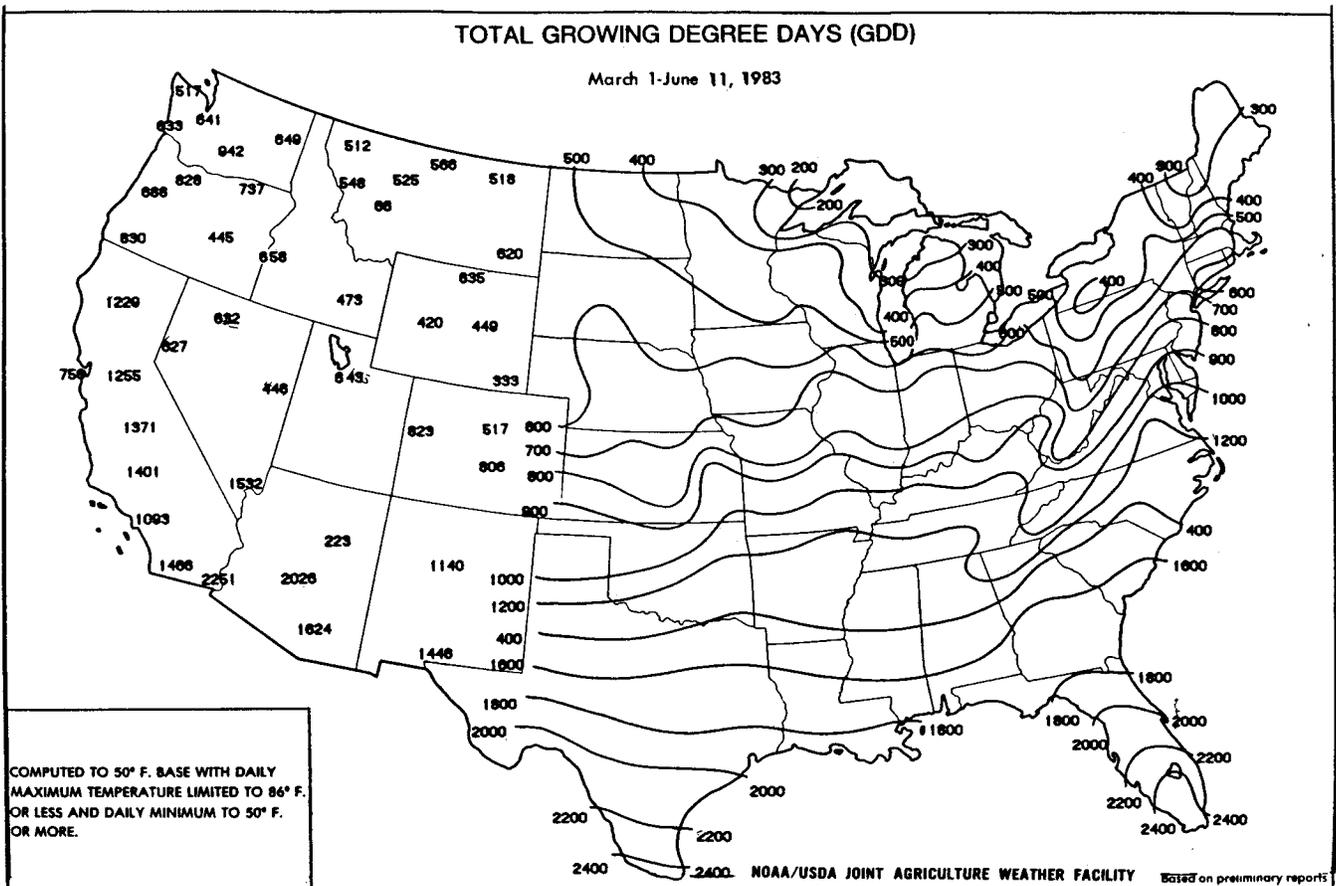
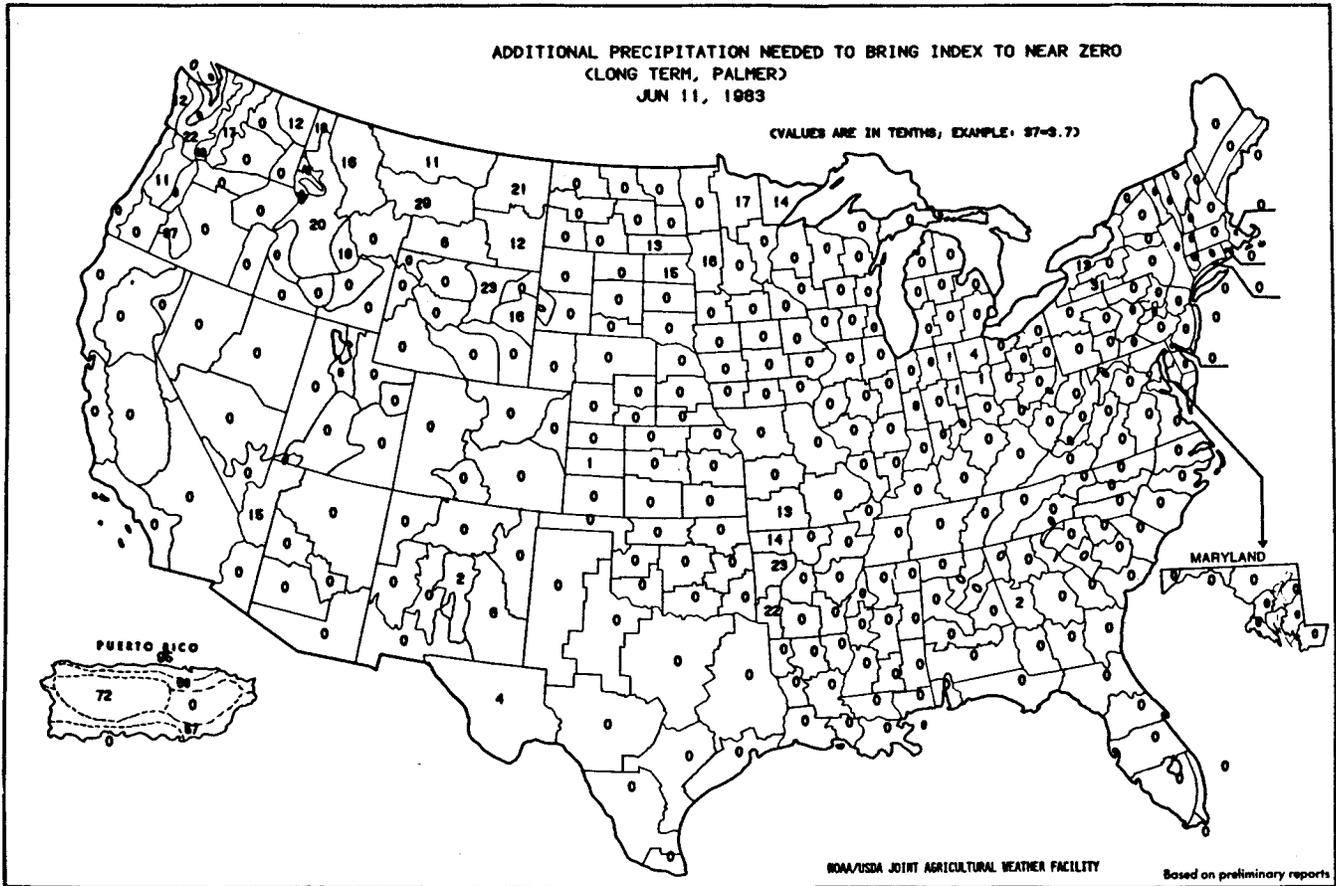
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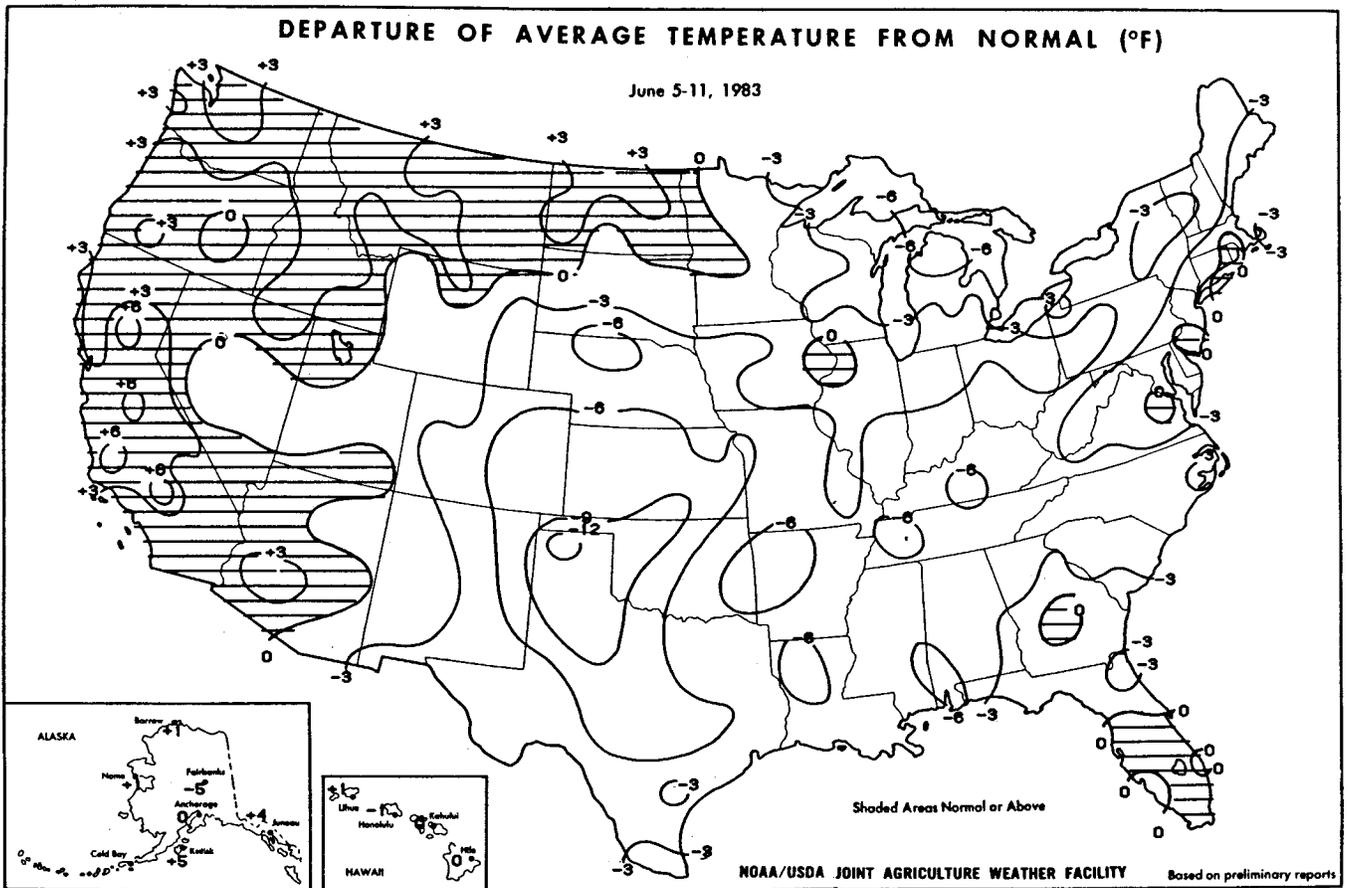
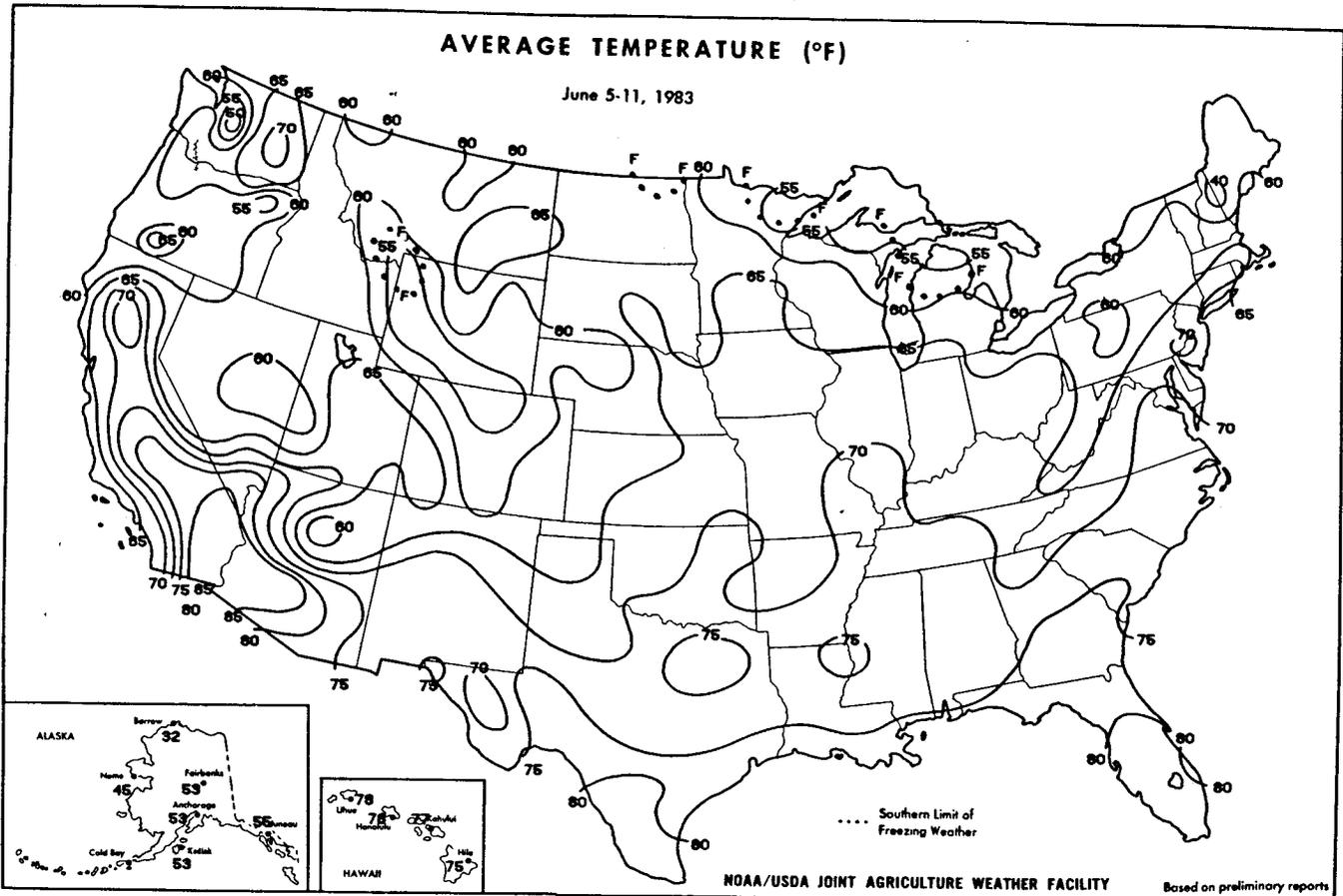
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Weather Data for the Week Ending June 11, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	82	61	84	55	71	-4	.9	-.7	.7	1.4	88	35.3	127	93	50	0	0	2	1
MOBILE	84	65	88	60	74	-5	-1.1	-.9	.1	1.6	76	40.3	139	88	49	0	0	3	0
MONTGOMERY	84	62	88	55	73	-5	-1.3	-.5	.3	.4	25	18.0	156	89	47	0	0	1	0
AK ANCHORAGE	63	42	71	36	53	0	.4	-.2	.3	.8	267	3.3	92	81	43	0	0	2	0
BARROW	35	29	40	27	32	1	T	0	T	0	.1	.1	21	92	75	0	0	2	0
FAIRBANKS	61	45	69	42	53	-5	-1.1	-.2	.1	.2	40	1.0	37	62	29	0	0	2	0
JUNEAU	64	46	71	42	55	4	-.5	-.2	.3	1.2	86	15.0	81	94	53	0	0	2	0
KODIAK	63	43	73	37	53	5	-.2	-.7	.2	2.6	118	40.6	144	84	48	0	0	1	0
NOME	54	36	61	32	45	1	0	-.2	0	.3	75	2.1	51	70	37	0	1	0	0
AZ PHOENIX	101	74	104	69	88	3	0	0	0	0	+100	5.2	193	33	10	7	0	0	0
FRESNCO	79	52	82	46	66	1	0	0	0	0	0	4.9	91	63	23	0	0	0	0
TUCSON	96	64	100	61	80	-1	0	0	0	0	+100	4.2	150	33	8	7	0	0	0
YUMA	100	75	104	72	87	3	0	0	0	0	+100	1.3	144	41	15	7	0	0	0
AR FORT SMITH	82	58	86	50	70	-6	-.3	-.6	.3	1.1	58	14.0	71	91	45	0	0	1	0
LITTLE ROCK	83	61	88	56	72	-4	-1.1	-.7	.1	.2	12	27.5	90	82	44	0	0	1	0
CA BAKERSFIELD	94	65	102	60	80	3	0	0	0	0	+100	6.9	192	64	23	6	0	0	0
EUREKA	63	50	65	47	57	3	-.4	-.2	.4	.4	100	15.5	160	91	68	0	0	1	0
FRESNO	93	64	99	59	79	5	0	0	0	0	+100	16.3	243	65	22	6	0	0	0
LOS ANGELES	67	59	69	58	63	-2	T	0	T	0	+100	20.6	261	88	67	0	0	2	0
RED BLUFF	89	64	96	56	76	2	-.2	-.1	-.2	.2	100	29.3	240	71	24	3	0	1	0
SACRAMENTO	89	57	97	51	73	3	T	0	T	.4	+100	23.7	232	82	30	3	0	0	0
SAN DIEGO	70	64	74	63	67	1	T	0	T	0	+100	14.2	233	87	70	0	0	0	0
SAN FRANCISCO	72	54	88	51	63	3	0	0	0	0	+100	25.9	219	81	50	0	0	0	0
CO DENVER	71	47	83	38	59	-5	-.6	-.2	.6	1.6	178	11.5	155	84	35	0	0	3	1
GRAND JUNCTION	82	52	90	50	67	-3	-.2	0	.1	.4	133	6.1	161	84	26	1	0	2	0
PUEBLO	77	47	88	41	62	-7	1.3	1.0	.9	1.5	300	7.0	159	93	36	0	0	3	1
CT BRIDGEPORT	74	55	81	47	65	-1	T	-.7	T	1.8	129	11.5	180	86	44	0	0	0	0
HARTFORD	78	52	87	43	65	-2	T	-.8	T	2.0	133	30.9	161	82	33	0	0	1	0
DC WASHINGTON	81	64	85	58	72	-1	1.0	-.2	1.0	7.4	150	27.8	139	85	49	0	0	2	1
FL APALACHICOLA	85	68	87	65	77	-2	2.3	1.3	1.7	3.0	158	30.1	160	89	65	0	0	2	2
DAYTONA BEACH	83	71	88	69	77	-2	3.5	2.1	2.1	7.2	277	29.9	188	95	72	0	0	5	2
JACKSONVILLE	82	67	90	64	75	-4	3.2	2.0	2.4	3.8	158	29.1	145	97	70	1	0	4	2
KEY WEST	86	77	87	73	81	-1	2.0	.8	1.7	4.3	187	33.9	290	87	70	0	0	4	2
MIAMI	89	74	93	72	82	1	5.3	3.1	2.6	7.2	171	25.4	133	93	59	3	0	5	2
ORLANDO	88	71	92	69	80	-1	4.1	2.5	1.7	5.8	200	25.0	165	97	61	2	0	5	2
TALLAHASSEE	87	66	90	63	77	-2	3.3	1.9	2.2	4.3	159	39.0	150	95	56	1	0	2	2
TAMPA	89	74	91	72	82	1	2.0	.9	1.1	5.9	281	25.0	157	92	59	3	0	3	2
WEST PALM BEACH	86	73	90	71	79	-1	4.2	2.3	1.6	9.3	251	36.9	182	97	76	2	0	7	4
GA ATLANTA	79	62	84	58	70	-4	-.7	-.1	.7	1.7	75	21.9	91	89	52	0	0	3	0
AUGUSTA	84	62	92	57	73	-3	2.4	1.5	1.9	3.3	194	27.1	134	84	48	1	0	3	1
MACON	87	68	94	65	78	0	3.2	2.4	2.4	3.6	275	28.6	129	81	43	2	0	1	2
SAVANNAH	85	68	92	64	76	-1	.7	-.5	.5	.8	33	27.2	137	88	51	1	0	3	0
HI HILO	81	68	82	67	75	0	1.4	1.1	.4	2.1	70	25.3	42	91	67	0	0	7	0
HONOLULU	86	70	88	68	78	-1	T	-.1	T	.1	33	1.6	13	84	46	0	0	0	0
KAHULUI	86	69	88	67	77	0	.1	0	T	.1	30	2.9	27	82	52	0	0	2	0
LIHUE	83	74	84	71	78	1	T	-.4	T	.3	53	5.1	23	75	55	0	0	0	0
ID BOISE	80	49	87	45	65	1	-1.1	-.2	T	.1	20	10.2	152	87	25	0	0	2	0
LEWISTON	81	52	93	46	67	3	-.6	-.2	.5	-.6	75	5.8	95	80	29	2	0	3	1
POCATELLO	74	49	83	44	61	1	-.3	0	.3	.3	50	7.8	134	86	37	0	0	3	0
IL CHICAGO	78	53	90	43	65	-2	1.3	.4	1.2	2.4	133	21.8	154	87	38	1	0	4	1
MOLINE	82	56	90	48	69	0	-.4	-.6	.3	.8	40	12.4	79	84	33	1	0	2	0
PEORIA	80	56	87	47	68	-1	-1.1	-.9	-1.1	1.0	53	18.9	124	83	38	0	0	1	0
QUINCY	78	56	83	49	67	-4	T	-.9	T	1.0	56	15.3	96	81	40	0	0	1	0
ROCKFORD	78	52	87	43	65	-2	-.2	-.9	.1	.5	25	12.5	80	88	37	0	0	2	0
SPRINGFIELD	82	56	88	48	69	-2	T	-.8	T	.7	44	15.2	101	87	39	0	0	1	0
IN EVANSVILLE	83	55	88	51	69	-4	0	-.8	0	1.6	94	27.8	131	85	34	0	0	0	0
FORT WAYNE	79	55	87	48	67	-1	1.1	-.5	.8	2.0	118	14.3	89	91	41	0	0	2	2
INDIANAPOLIS	79	53	84	45	66	-4	-.3	-.6	.3	.8	47	14.9	85	92	40	0	0	2	0
SOUTH BEND	77	56	86	49	66	0	-.2	-.7	-1.1	1.1	69	14.8	94	84	40	0	0	2	0
IA DES MOINES	81	57	92	44	69	-1	-.5	-.5	.4	.8	40	15.3	114	77	35	1	0	2	0
SIOUX CITY	77	51	86	39	64	-5	-1.1	-.8	-1.1	.2	11	13.1	126	70	19	0	0	1	0
WATERLOO	80	51	87	39	65	-2	-1.1	-.9	.1	.2	10	14.0	104	90	37	0	0	1	0
KS CONCORDIA	73	54	81	43	63	-8	2.3	1.3	2.3	2.8	133	14.0	127	90	56	0	0	2	1
DODGE CITY	76	56	84	51	66	-7	2.7	2.0	1.2	5.2	347	15.3	178	86	48	0	0	3	2
GOODLAND	73	50	85	40	62	-6	T	-.7	T	.9	64	8.3	119	88	42	0	0	1	0
TOPEKA	79	58	87	49	69	-3	-.5	-.7	.3	1.1	48	18.1	138	90	50	0	0	3	0
WICHITA	75	55	81	49	65	-9	1.4	.4	1.0	1.9	95	16.8	149	91	57	0	0	2	1
KY BOWLING GREEN	79	56	83	50	67	-6	0	-1.1	0	1.0	48	29.1	115	98	48	0	0	0	0
LEXINGTON	80	56	86	52	68	-3	0	-1.0	0	2.1	105	27.2	102	84	40	0	0	0	0
LOUISVILLE	81	56	86	53	68	-4	0	-.8	0	1.9	112	23.9	110	85	38	0	0	0	0
LA ALEXANDRIA	84	65	88	59	74	-6	-.8	-.2	.4	1.2	57	29.6	106	78	45	0	0	2	0
BATON ROUGE	85	64	89	60	75	-5	3.3	2.7	3.1	3.4	243	38.4	151	89	47	0	0	3	1
LAKE CHARLES	85	67	87	61	76	-3	-.5	-.5	.3	.5	25	25.4	111	94	49	0	0	2	0
NEW ORLEANS	83	67	88	61	75	-4	1.2	-.2	.6	1.5	71	40.6	157	89	53	0	0	3	2

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

National Weather Summary (continued from front cover)

FRIDAY...Showers and thunderstorms were widely scattered in much of Texas but were concentrated and heavy from west-central Oklahoma to southeastern Nebraska. The widely scattered showers and thunderstorms extended through the rest of Kansas into Colorado and though the Plains to the upper Mississippi Valley. The new storm spread light to moderate showers over the Pacific Northwest from central California to the northern Rockies. Warm

temperatures in much of the Rockies encouraged snowmelt and many streams overflowed their banks.

SATURDAY...Thunderstorms in the Plains moved eastward to a line from eastern Oklahoma into Iowa, becoming less intense. The Pacific storm spread scattered showers into the central Plateau, over the central and northern Rockies, and into the Plains. Some moderate showers fell in the dry parts of Montana and Wyoming. Cooler weather spread over the northern Rockies, slowing snowmelt.

Weather Data for the Week Ending June 11, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	83	64	88	58	74	-5	4.3	3.5	4.0	4.7	261	28.7	129	90	51	0	0	2	1
ME CARIBOU	67	44	72	37	56	-3	.1	.6	.1	1.6	114	17.6	132	84	39	0	0	1	0
ME PORTLAND	69	47	79	38	58	-3	T	.7	T	2.2	157	32.0	170	94	46	0	0	1	0
MD BALTIMORE	80	59	87	53	69	-1	1.4	.6	1.4	2.4	141	27.6	159	90	45	0	0	2	1
MD SALISBURY	78	58	81	52	68	-2	.3	.6	.3	2.0	125	24.0	128	100	62	0	0	1	0
MA BOSTON	72	58	87	53	65	-1	T	.7	T	1.3	93	29.8	154	84	46	0	0	0	0
MA CHATHAM	62	51	68	49	56	-3	0	.7	0	1.1	73	31.9	151	91	73	0	0	0	0
MI ALPENA	67	39	83	30	53	-6	.3	.4	.3	2.2	157	17.7	154	98	50	1	1	0	0
MI DETROIT	76	50	86	43	63	-3	.9	.1	.8	1.7	113	14.5	107	86	47	0	0	1	1
MI FLINT	74	51	85	38	62	-2	.4	.4	.2	1.2	80	12.8	99	86	45	0	0	3	0
MI GRAND RAPIDS	76	51	87	40	64	-2	.1	.8	.1	1.4	82	16.7	119	93	41	0	0	2	0
MI HOUGHTON LAKE	69	46	84	35	57	-4	.1	.6	T	1.3	93	12.7	119	92	42	0	0	2	0
MI LANSING	74	50	84	39	62	-3	.1	.7	.1	1.0	67	13.7	106	91	46	0	0	3	0
MI MARQUETTE	67	40	86	34	53	-4	.1	.8	.1	4.4	244	21.0	137	91	39	0	0	4	0
MI MUSKEGON	72	50	84	40	61	-3	.2	.4	.1	1.6	133	12.4	93	92	49	0	0	3	0
MI SAULT STE. MARIE	65	36	85	28	51	-6	.4	.4	.2	3.1	207	14.7	123	98	47	0	3	3	0
MN ALEXANDRIA	78	52	89	43	65	2	.3	.7	.2	.4	21	4.4	47	78	30	0	0	3	0
MN DULUTH	67	42	82	36	55	-3	.1	.8	.1	.6	35	8.6	83	86	43	0	0	3	0
MN INT'L FALLS	71	42	87	31	57	-3	T	.8	T	.6	40	4.4	54	93	36	0	1	1	0
MN MINNEAPOLIS	78	53	89	42	66	-1	.1	.8	.1	1.9	106	16.7	174	86	40	0	0	0	0
MN ROCHESTER	77	49	88	39	63	-2	T	1.0	T	.5	26	10.7	102	82	37	0	0	1	0
MS GREENWOOD	85	64	90	57	75	-4	T	.8	T	1.4	82	36.2	132	90	47	1	0	0	0
MS JACKSON	84	61	90	54	73	-6	T	.7	T	.5	33	45.9	171	95	48	1	0	0	0
MS MERIDIAN	83	60	87	53	71	-6	.9	.1	.5	1.5	94	39.9	150	99	54	0	0	2	1
MO CAPE GIRARDEAU	83	57	87	52	70	--	0	.9	0	.9	50	24.5	114	92	40	0	0	0	0
MO COLUMBIA	78	56	83	53	67	-4	.3	.6	.3	1.1	58	18.8	118	92	47	0	0	1	0
MO KANSAS CITY	76	55	82	44	66	-6	.3	.4	.3	.8	38	16.7	116	93	49	0	0	2	0
MO SAINT LOUIS	81	60	86	52	71	-2	.4	.4	.4	3.3	194	22.0	143	85	38	0	0	1	0
MO SPRINGFIELD	79	54	82	45	67	-5	T	1.1	T	1.1	57	19.1	110	88	41	0	0	1	0
MT BILLINGS	79	50	90	43	65	3	.2	.4	.1	.5	42	4.5	58	86	29	1	0	2	0
MT GLASGOW	79	47	90	41	63	2	.3	.3	.3	.3	27	7.8	58	70	27	1	0	1	0
MT GREAT FALLS	75	48	87	41	62	2	1.0	.3	.6	1.1	79	4.7	62	81	31	0	0	3	1
MT HAVRE	76	48	89	42	62	2	.7	.3	.2	.3	30	4.8	91	81	37	0	0	1	0
MT HELENA	75	48	85	45	62	4	.4	.1	.3	.5	50	3.2	65	80	29	0	0	3	0
MT KALISPELL	74	45	82	39	60	3	.1	.4	.1	.4	36	7.0	99	90	35	0	0	1	0
MT MILES CITY	81	50	92	40	66	2	1.0	.3	1.0	1.1	79	3.6	56	80	26	1	0	3	1
MT MISSOULA	74	48	80	44	61	4	.1	.4	.1	.3	33	6.4	108	86	32	0	0	3	0
NE GRAND ISLAND	77	53	88	43	65	-4	.7	.2	.5	1.0	53	11.3	109	84	39	0	0	3	1
NE LINCOLN	77	54	87	44	66	-5	1.4	.5	.9	1.5	83	13.0	118	92	47	0	0	4	1
NE NORFOLK	79	53	90	41	66	-3	T	1.0	T	0	0	10.5	101	83	34	1	0	2	0
NE NORTH PLATTE	75	47	83	39	61	-5	.1	.8	.1	1.1	61	8.4	98	80	38	0	0	1	0
NE OMAHA	76	55	87	44	66	-4	.3	.7	.3	.4	19	14.8	121	82	45	0	0	2	0
NE SCOTTSBLUFF	75	46	88	41	61	-5	.2	.5	.2	.7	50	9.7	137	88	39	0	0	1	0
NE VALENTINE	74	44	79	38	59	-7	.9	.2	.9	.9	64	8.6	113	75	31	0	0	1	1
NV ELY	71	40	79	35	56	-1	.3	.1	.2	2.3	575	8.6	191	93	37	0	0	3	0
NV LAS VEGAS	95	71	100	68	83	2	T	0	T	0	+100	2.4	133	27	12	7	0	0	0
NV RENO	81	46	85	43	63	3	T	.1	T	.5	250	6.7	176	81	22	0	0	1	0
NV WINNEMUCCA	78	46	83	40	62	1	.5	.2	.2	1.2	240	6.0	133	83	23	0	0	4	0
NH CONCORD	75	46	84	35	60	-2	.1	.6	.1	2.1	150	25.0	166	94	38	0	0	2	0
NJ ATLANTIC CITY	78	57	85	49	68	0	.2	.5	.2	1.5	115	24.8	133	94	51	0	0	1	0
NM ALBUQUERQUE	88	56	93	49	72	-1	T	.1	T	.1	50	2.8	122	55	14	2	0	0	0
NM CLOVIS	78	53	90	47	66	-7	1.6	1.0	.6	2.2	183	5.3	96	92	39	1	0	4	1
NM ROSWELL	87	59	98	55	73	-5	T	.2	T	.2	50	2.2	92	47	20	3	0	0	0
NY ALBANY	75	50	84	40	63	-2	.5	.2	.5	1.6	107	26.3	181	92	39	0	0	1	1
NY BINGHAMTON	74	49	80	36	61	-1	.5	.4	.4	1.8	106	20.5	136	86	33	0	0	2	0
NY BUFFALO	71	50	82	40	61	-4	.9	.3	.6	1.5	125	12.8	83	88	44	0	0	2	1
NY NEW YORK	77	59	86	53	68	-1	T	.7	T	1.8	120	31.2	170	84	42	0	0	0	0
NY ROCHESTER	72	48	81	39	60	-5	.5	.1	.5	1.1	85	12.7	93	97	43	0	0	2	0
NY SYRACUSE	74	47	81	37	61	-4	.2	.6	.2	1.0	67	15.2	94	93	44	0	0	2	0
NC ASHEVILLE	78	54	80	48	66	-3	1.1	.1	1.0	1.7	85	25.8	121	100	58	0	0	2	1
NC CHARLOTTE	80	60	86	55	70	-3	1.4	.6	1.2	1.6	100	21.8	110	86	44	0	0	3	1
NC GREENSBORO	79	57	82	53	68	-4	1.4	.5	.7	2.6	144	21.5	116	94	47	0	0	3	2
NC HATTERAS	73	66	79	61	70	-3	1.5	.6	.6	2.9	153	35.6	170	93	73	0	0	5	1
NC NEW BERN	79	65	81	60	72	-2	2.8	1.6	1.2	3.6	157	29.6	144	90	60	0	0	5	3
NC RALEIGH	80	59	84	52	70	-3	1.5	.7	.7	1.6	94	23.6	129	94	49	0	0	3	2
NC WILMINGTON	78	62	83	55	70	-5	2.3	1.1	1.0	2.6	113	27.3	137	100	71	0	0	4	2
ND BISMARCK	76	46	88	32	61	-1	.1	.6	.1	.1	8	4.4	66	81	37	0	1	1	0
ND FARGO	79	50	89	41	64	1	.1	.6	T	.3	23	5.4	78	78	29	0	0	2	0
ND GRAND FORKS	79	48	88	35	63	1	T	.6	T	0	0	4.4	72	73	27	0	0	1	0
ND WILLISTON	83	45	92	33	64	2	T	.6	T	.2	17	3.5	64	82	28	2	0	1	0
OH AKRON-CANTON	77	53	85	48	65	-2	.1	.7	.1	.8	50	17.0	104	82	42	0	0	1	0
OH CINCINNATI	79	52	85	47	66	-4	T	.9	T	.9	50	19.3	100	87	38	0	0	1	0
OH CLEVELAND	75	51	85	46	63	-3	.5	.3	.3	1.1	69	14.5	91	87	44	0	0	2	0
OH COLUMBUS	79	51	85	46	63	-4	.1	.9	.1	1.0	53	14.7	85	91	37	0	0	1	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

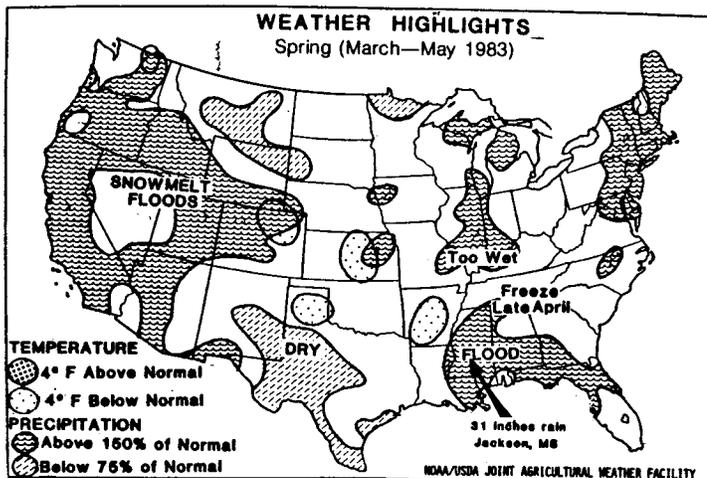
Weather Data for the Week Ending June 11, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	TEMPERATURE		PRECIPITATION			
														AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	78	53	85	49	65	-4	.1	-.9	.1	.9	47	14.6	87	82	37	0	0	1	0
TOLEDO	76	50	87	43	63	-3	.8	-.3	.7	1.3	81	12.4	81	94	45	0	0	3	1
YOUNGSTOWN	73	47	83	38	60	-4	.2	-.6	.1	.8	50	14.5	88	88	44	0	0	2	0
OK OKLAHOMA CITY	79	58	83	51	69	-7	.7	-.3	.3	2.1	95	16.9	116	85	45	0	0	3	0
TULSA	82	61	87	54	72	-4	.1	-1.0	.1	.5	22	18.5	109	88	47	0	0	2	0
OR ASTORIA	67	52	74	47	60	4	.8	-.1	.7	1.5	115	39.9	121	92	64	0	0	4	1
BURNS	70	43	78	33	57	-1	.1	-.1	.1	.8	200	9.6	185	87	50	0	0	2	0
MEDFORD	83	51	95	43	67	4	.6	-.4	.5	.6	150	12.3	124	88	31	1	0	2	0
PENDLETON	77	53	88	49	65	1	.4	-.2	.4	.4	100	7.0	117	71	32	0	0	1	0
PORTLAND	74	55	88	50	65	4	.7	-.3	.5	.8	100	24.8	133	83	47	0	0	3	1
SALEM	75	48	87	44	61	2	1.0	-.7	.9	1.3	186	30.7	148	87	47	0	0	2	1
PA ALLENTOWN	78	54	85	47	66	-1	.4	-.4	.4	1.8	113	24.4	132	83	41	0	0	1	0
ERIE	73	50	84	45	62	-1	.6	-.2	.4	1.1	65	13.6	88	82	44	0	0	2	0
HARRISBURG	78	55	85	48	66	-3	.1	-.8	.1	1.3	76	24.7	148	81	42	0	0	1	0
PHILADELPHIA	81	61	85	55	71	1	T	-.9	T	.7	39	29.6	170	86	39	0	0	1	0
PITTSBURGH	78	52	84	44	65	-2	.9	-.1	.6	1.8	113	17.2	101	81	35	0	0	2	1
SCRANTON	76	51	82	39	63	-2	.9	-.1	.9	2.6	163	20.8	148	83	40	0	0	2	1
RI PROVIDENCE	75	55	85	46	65	0	T	-.7	T	3.1	221	36.2	181	86	44	0	0	0	0
SC CHARLESTON	82	67	90	62	75	-2	.9	-.5	.5	.9	33	27.7	138	93	61	1	0	3	2
COLUMBIA	85	63	90	52	74	-3	1.8	-.8	.8	1.9	95	24.7	118	92	45	1	0	3	2
FLORENCE	83	64	88	58	73	-3	4.0	3.0	2.6	4.3	276	28.4	161	97	53	0	0	3	1
GREENVILLE	80	60	85	54	70	-3	.2	-.9	.2	.4	18	25.1	103	97	50	0	0	1	0
SD ABERDEEN	78	51	88	43	64	0	.1	-.7	.1	.2	13	5.5	71	81	34	0	0	2	0
MURON	78	49	88	38	64	-2	.1	-.7	.1	.2	13	5.2	65	89	36	0	0	2	0
RAPID CITY	76	48	85	42	62	-1	.3	-.5	.2	.4	25	4.9	64	85	37	0	0	2	0
STOIX FALLS	78	50	88	44	64	-2	0	-.9	0	.1	6	10.0	97	88	40	0	0	0	0
TN CHATTANOOGA	81	58	85	51	70	-4	.4	-.4	.3	1.2	75	24.7	95	88	44	0	0	2	0
MEMPHIS	80	57	85	53	69	-4	.1	-.8	.1	1.3	76	19.2	81	98	49	0	0	1	0
NASHVILLE	82	63	87	56	73	-5	0	-.9	0	.6	32	27.6	101	83	41	0	0	0	0
TX ABILENE	84	59	87	52	71	-3	0	-.9	0	2.0	111	28.4	115	88	40	0	0	0	0
AMARILLO	81	62	88	52	71	-8	1.9	1.2	1.4	3.1	221	8.4	87	81	45	0	0	2	2
AUSTIN	74	52	81	44	63	-10	.9	0	.6	1.8	106	9.1	130	96	56	0	0	5	1
BEAUMONT	84	65	88	61	74	-6	.9	-.1	.6	2.5	147	18.8	121	88	54	0	0	2	1
BROWNSVILLE	83	70	85	65	77	-3	2.0	1.1	2.0	2.4	133	27.7	131	94	58	0	0	1	1
CORPUS CHRISTI	90	71	93	66	81	-1	.7	.1	.7	1.6	133	6.5	80	91	52	4	0	1	1
DEL RIO	88	68	90	64	78	-4	.8	0	.5	.8	50	10.7	97	96	55	2	0	2	1
EL PASO	90	68	95	60	79	-3	.7	-.3	.6	.7	88	4.7	69	80	44	5	0	2	1
FORT WORTH	93	57	98	51	75	-5	T	-.1	T	0	0	2.9	181	53	10	6	0	0	0
GALVESTON	82	64	90	57	73	-7	.2	-.5	.2	1.7	113	15.2	96	80	43	1	0	1	0
HOUSTON	85	74	85	71	79	-1	1.2	-.4	1.2	1.2	75	13.6	89	86	63	0	0	1	1
LUBBOCK	84	67	87	64	76	-4	.7	-.3	.7	1.5	71	18.7	91	92	53	0	0	1	1
MIDLAND	79	55	90	47	67	-9	.4	-.3	.3	1.3	93	6.9	101	98	51	1	0	4	0
SAN ANGELO	88	61	96	48	75	-4	T	-.3	T	.3	38	2.4	46	83	33	4	0	2	0
SAN ANTONIO	83	63	91	52	73	-7	1.1	-.6	1.0	2.8	280	7.5	97	96	51	1	0	3	1
VICTORIA	85	64	89	58	75	-6	.9	-.1	.7	1.0	63	12.1	98	87	47	0	0	1	1
WACO	87	67	89	62	77	-4	.6	-.6	.3	.6	26	12.3	84	94	51	0	0	2	0
WICHITA FALLS	86	65	90	58	75	-5	.2	-.5	.2	2.2	138	12.3	75	89	49	1	0	2	0
UT BLANDING	83	59	88	51	71	-8	1.0	-.2	.6	1.3	76	11.2	88	88	43	0	0	2	1
CEDAR CITY	80	48	83	48	64	-1	T	-.1	T	0	0	5.8	145	60	25	0	0	1	0
SALT LAKE CITY	80	46	84	41	63	-1	.2	-.1	.1	.3	100	7.2	160	68	18	0	0	2	0
VT BURLINGTON	79	54	86	50	66	1	.4	-.1	.3	.9	150	11.5	140	80	31	0	0	2	0
VA NORFOLK	73	48	78	37	60	-3	.6	-.3	.5	1.5	88	21.2	167	85	38	0	0	2	1
RICHMOND	78	62	84	56	70	-3	1.4	-.6	.9	2.0	118	24.5	133	92	50	0	0	2	1
ROANOKE	83	61	85	57	72	0	1.3	.5	1.2	2.1	131	21.4	126	98	50	0	0	3	1
WA COLVILLE	79	56	84	53	68	-3	T	-.7	T	.6	40	23.5	136	97	45	0	0	1	0
QUILLAYUTE	76	51	87	46	64	4	.4	-.1	.4	.9	129	12.9	155	82	39	0	0	2	0
SEATTLE-TACOMA	64	49	74	46	57	3	1.0	-.2	.6	1.4	82	55.7	110	98	61	0	0	5	1
SPOKANE	70	53	79	51	61	3	1.0	-.6	.9	1.1	138	19.7	108	86	49	0	0	3	1
YAKIMA	76	52	87	45	64	5	.4	-.1	.4	.5	83	8.5	97	77	31	0	0	2	0
WV BECKLEY	81	51	91	42	66	3	.2	-.1	.2	.2	100	6.6	189	67	30	1	0	1	0
HUNTINGTON	74	52	80	46	63	-2	T	-.8	T	1.0	63	11.9	61	92	46	0	0	1	0
PARKERSBURG	82	53	88	47	68	-2	T	-.7	T	1.6	114	18.3	98	93	38	0	0	1	0
WI GREEN BAY	80	56	86	52	68	-1	.1	-1.0	.1	1.2	57	19.8	99	89	39	0	0	1	0
LA CROSSE	71	46	83	40	59	-4	.1	-.6	.1	.7	50	10.5	97	90	40	0	0	2	0
MADISON	79	49	89	40	64	-3	T	-.9	T	.2	11	9.8	81	91	35	0	0	2	0
MILWAUKEE	77	49	86	43	63	-1	.1	-.8	.1	.7	39	12.1	96	92	40	0	0	2	0
WAUSAU	71	50	85	42	60	-2	.2	-.6	.1	.7	47	17.8	145	83	46	0	0	2	0
CASPER	74	48	84	43	61	-2	.1	-.9	.1	.7	37	9.6	77	91	36	0	0	1	0
CHEYENNE	73	46	82	39	59	-1	.7	-.3	.4	1.4	200	7.9	130	92	36	0	0	5	0
SHERIDAN	66	44	77	37	55	-5	1.1	-.6	.5	2.4	218	11.5	189	93	49	0	0	6	1
LANDER	73	47	80	42	60	0	T	-.3	T	1.3	144	10.1	129	77	36	0	0	4	0
PR SAN JUAN	79	46	89	39	62	3	T	-.6	T	.2	17	3.0	38	82	30	0	0	0	0
	90	78	91	75	84	3	.6	-.5	.3	.8	35	15.3	79	84	59	6	0	3	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

## Spring Weather Review

March to May



**HIGHLIGHTS:** The spring season was cool and wet over a large portion of the Nation. Temperatures averaged near normal along the west coast, above normal in the Pacific Northwest, near normal in the extreme northern Plains, and above normal in New England. Most of the rest of the Nation was cooler than normal. Cold outbreaks from Canada pushed much further southward and with greater frequency than normal. A cold outbreak in late April spread freezing temperatures to northern Alabama, Georgia, and the Carolinas, severely damaging fruits and vegetables. Most of the Nation was wetter than normal. Only southwestern Texas, central New Mexico, and most of the northern Plains had below-normal precipitation. Parts of western Texas was quite dry at the end of the season, but most of the northern Plains had adequate soil moisture. Heavy downpours of rain in the Mississippi Delta, the Tennessee Valley, and the lower Ohio Valley caused extensive flooding of agricultural lands during the last month of the season. Cool, wet weather in the Southeast early in the season and in the Corn Belt late in the season slowed planting and crop development. A much heavier than normal snowpack in the western mountains began rapidly melting late in the season, filling reservoirs, swelling rivers, and causing serious mudslides and floods.

**MARCH...**Above-normal precipitation covered most of the Nation. Less-than-normal precipitation fell over parts of southwestern Texas, southern Montana, and the area from Arkansas to northern Alabama and northward into the central Ohio Valley. The rainy season, which should have been tapering off in the West, continued unabated, and precipitation was 2-4 times the normal amount. High winds and heavy rain in California caused flooding, erosion, and washouts, damaging many crops. Snow piled much higher than normal in all of the western mountains. Heavy rain across the South and Southeast delayed fieldwork, while cool temperatures in that area slowed development of early crops. Most other areas of the Nation were warmer than normal. Along the northern tier of States, temperatures averaged 4-7° warmer than normal for the month.

**APRIL...**Precipitation on the west coast appeared to have returned to normal in the first half of the month, but moderate, occasionally heavy rain returned to the California coast during the latter half of the month. Rain over the central Plateau was about twice what is normally expected, and more

snow fell in the Sierras, the Cascades, and other mountains, building the snowpack even higher. Above-normal rain and snow fell in nearly all areas east of the Mississippi River, saturating soils and delaying fieldwork. The South and Southeast were hardest hit, where heavy rains and cold weather continued to delay planting and early growth of crops. The month was drier than normal in the southern and northern Plains and parts of the Southwest. A cold outbreak pushed freezing temperatures into Alabama, Georgia, and the Carolinas in the third week of the month, seriously damaging fruits and vegetables. Most of the Nation was cooler than normal, but again, the northern tier of States averaged near normal. Average temperatures were 6-8° cooler than normal from the central Rockies to the Tennessee Valley.

**MAY...**Precipitation was above normal from the eastern portion of the southern Plains to the lower Mississippi Valley and northeastward to New England. Heavy downpours accompanied thunderstorms from eastern Texas to northern Alabama and northward to the central Ohio Valley in both the first and third week. The heavy rain falling on ground already saturated from April rains caused widespread flooding over agricultural lands. Rain was below normal and temperatures near normal in the Southeast, allowing fieldwork and crop growth to progress. Cool, wet weather caused corn planting to start slowly in the Corn Belt, but the western portion made some progress. Most of the West Coast States had little rain, allowing the area to begin drying out. Rain early in the month in the northern and central Plateau and unusually warm weather in the last week of the month, which began a rapid snowmelt in the mountains, caused serious floods and mudslides in many parts of the central Plateau and Rockies. Runoff swelled streams flowing into the High Plains. Average temperatures for the month were cooler than normal through the Rockies and most of the East. Most of the Corn Belt and the central and northern Plains were 4-6° cooler than normal.

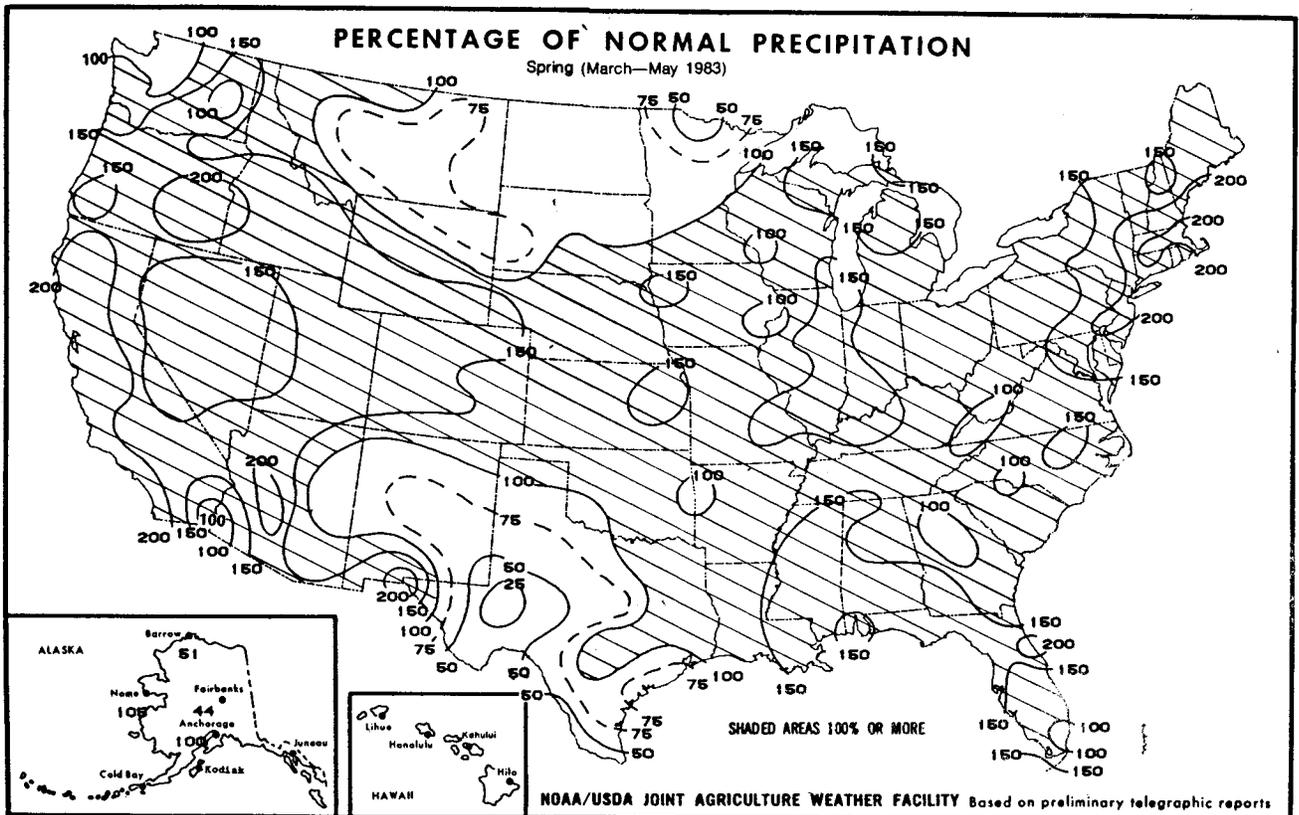
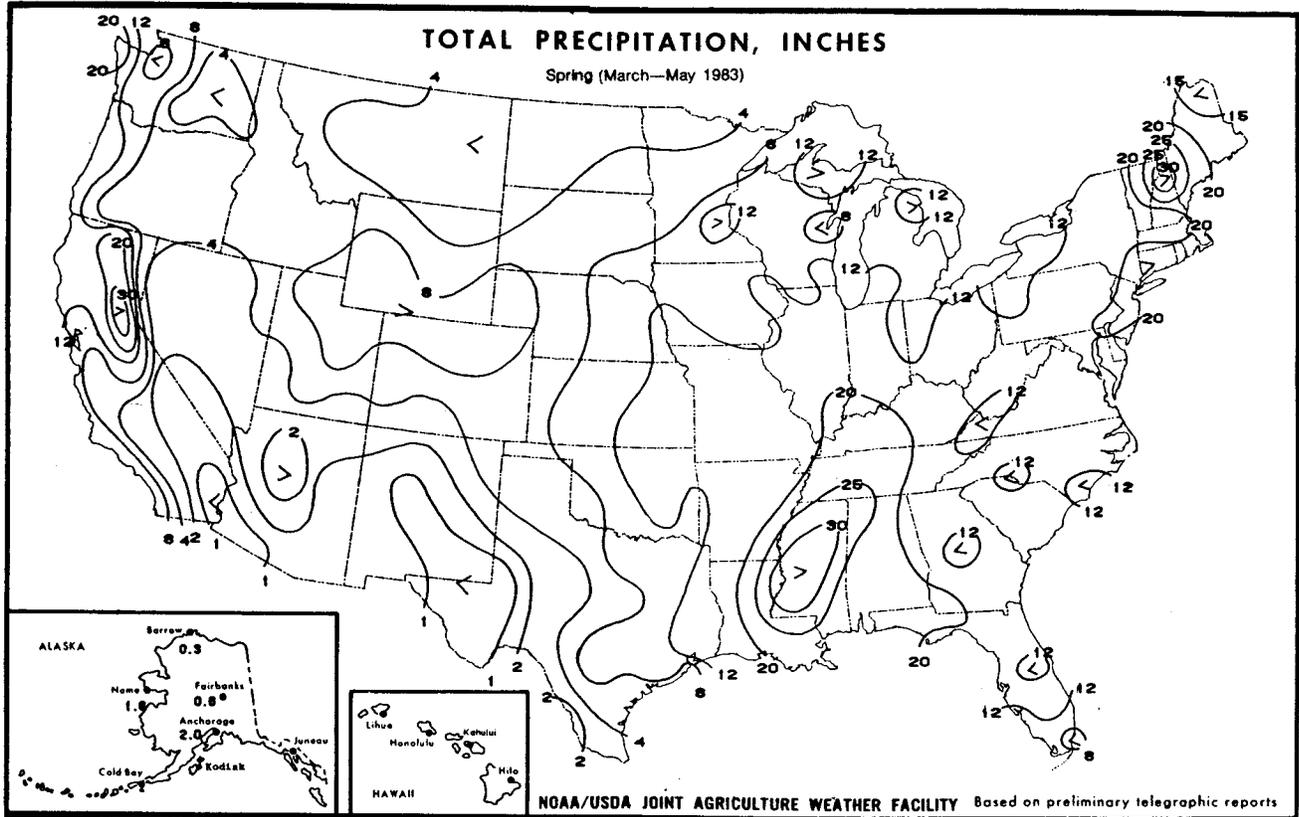
#### National Agricultural Summary (continued from p. 13)

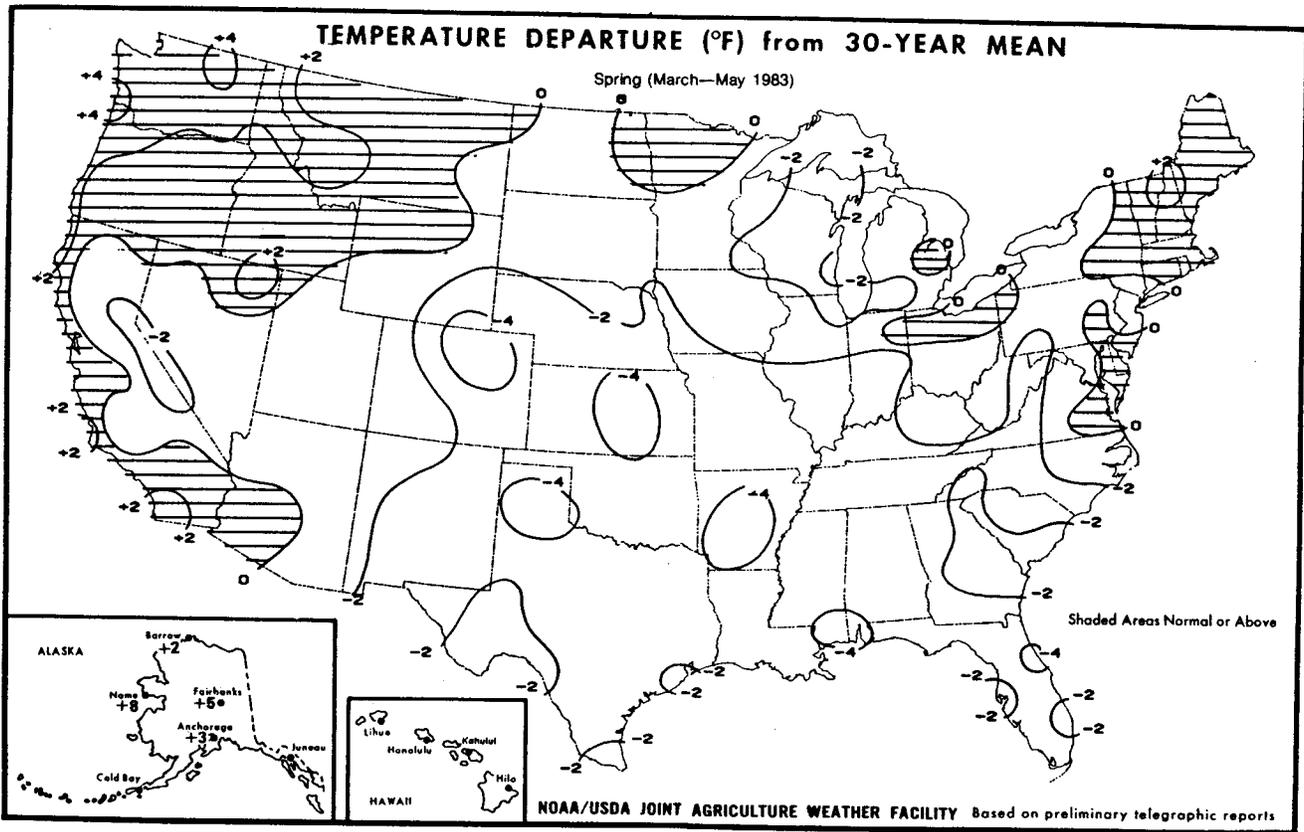
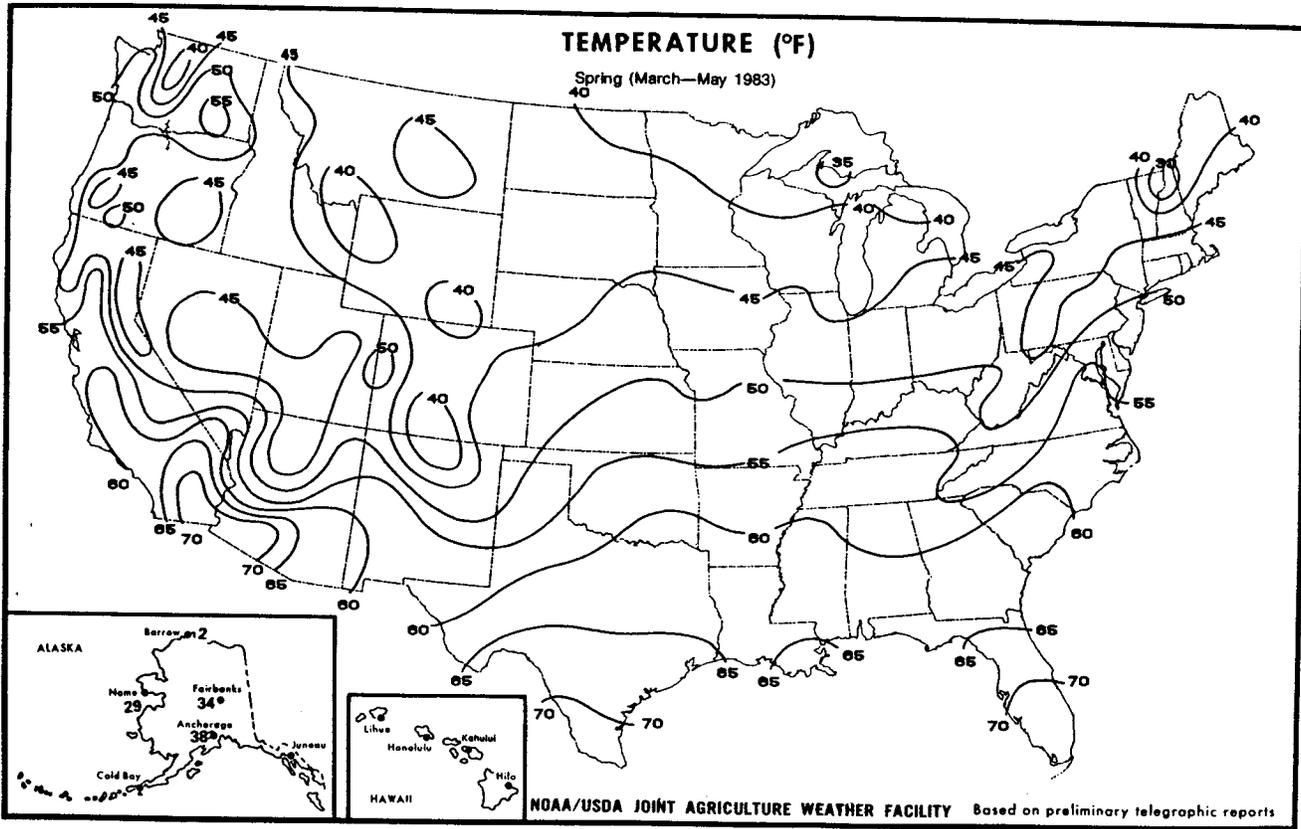
Florida's vegetable shipments decreased 3% from the previous week. Crops registering increases were carrots, chinese cabbage, okra, parsley, and watermelons. Watermelon harvesting moved northward; volume of harvest was increasing.

Arizona producers harvested vegetables and melons. Melons matured rapidly. Heavy rain and high winds caused some damage in portions of Texas. Most crops developed well; however, warmer weather is needed in East Texas.

Warm weather promoted vegetable development in California. Growers planted and harvested a wide variety of crops. Strawberry picking was heavy and diversion to processors increased.

**PASTURES AND LIVESTOCK:** Pastures and ranges were in fair to good condition. However, portions of the northern Plains and Texas need additional moisture to sustain growth. The Trans-Pecos region and portions of South Texas remained droughtlike. Supplemental feeding continued in these dry areas. Livestock were in fair to good condition. Herds continued to move to summer ranges in the West.





## National Agricultural Summary

June 6 to 12

**HIGHLIGHTS:** Rainfall replenished soil moisture in portions of the central and southern Plains and the Southeast. Generally, farmers had 3 to 4 days available for fieldwork in these areas. Elsewhere, sunny, warm weather promoted planting and early crop development; 4 to 6 days were suitable for fieldwork in most areas. Farmers across the northern Plains were concerned that dry weather was delaying germination of late seeded crops. Soil moisture was adequate to surplus in all other regions except portions of South Texas where droughtlike conditions were experienced. Corn planting was 96% complete, only slightly behind last year's 97% and the 98% average. Soybean seeding was 71% finished, compared with the 77% average. Rain slowed progress in the Southeast; wet fields continued to stall planting in Kentucky and Tennessee. Growers began planting double-cropped soybeans as small grain harvesting gained momentum in the Southeast. Winter wheat continued in fair to mostly good condition; 87% of the acreage headed. Fields from the central Plains to Pennsylvania turned color. Harvesting became more widespread in the South. Spring wheat fields were nearly all emerged, but heading had just started in Idaho and Minnesota. Farmers planted 87% of the cotton crops; plants squared on 7% of the acreage. Sorghum was 67% planted, behind normal in all States except Missouri. Rice seeding reached 97% completion; plants had emerged on 86% of the acreage. Rain delayed fruit and vegetable harvesting in portions of the South, while warm, sunny weather enhanced development elsewhere.

**SMALL GRAINS:** Winter wheat continued in fair to mostly good condition. Warmer weather advanced winter wheat heading in the 15 major producing States to 87% completion, 3 percentage points behind both last year and the average. Heading was average or lagging average in all States except Washington where it was well ahead of average. Nebraska stands were 26 points behind normal, and the Colorado crop trailed the normal by 22 points. Heading was complete in California and Oklahoma and nearly finished in Texas. The crop started turning color as far north as Pennsylvania. Harvesting gained momentum across the South, reaching 50% completion in Georgia.

Spring wheat was 98% emerged in the five major producing States, ahead of last year and the average. Warm weather enhanced development; however, soil moisture was becoming short in portions of all major States except Idaho. The crop started to head in Idaho and Minnesota.

**CORN:** Corn planting advanced to 96% completion in the 17 major producing States compared with the 98% average for this date. Producers in Iowa and Nebraska finished planting during the week. Planting was 86% finished in Pennsylvania and 88% finished in Kentucky. Emerged fields were in fair to good condition in all areas. Silking became more widespread in the South, reaching 19% silked in Georgia. Early-planted fields moved into the dough stage across the extreme South.

**SOYBEANS:** Soybean seeding in the 18 major producing States was 71% complete, behind last year's 71% and the 77% average. Progress in all States except Arkansas, Indiana, Iowa, Missouri, and Nebraska was slower than normal. Showers slowed planting progress in the Southeast, and wet field conditions limited planting in Kentucky and Tennessee. Michigan growers were 33 percentage points behind average; Kentucky and Tennessee producers were 34 points slower than normal. Emerged plants were in fair to good condition in

most areas. Seeding of double-cropped soybeans began as small grain harvesting increased in the Southeast.

**SORGHUM:** Sorghum planting was 67% finished, ahead of the 60% planted last year but behind the 79% average. Missouri was the only State ahead of average. Progress was 30 points behind average in Oklahoma; Kansas producers were 25 points behind and Colorado farmers trailed the average by 14 percentage points. Showers delayed seeding from Kansas to Texas. Thirty-two percent of the crop was headed in Texas, compared with the 42% average.

**COTTON:** Cotton planting in the 14 major producing States advanced to the 87% completion mark 6 points less than average. Growers neared completion or were finished in all States except Oklahoma and Texas. Planting was 20 points behind average in Oklahoma and 11 points behind average in Texas. Squaring ranged up to 45% completion in Arizona. Seven percent of the crop had squared in the 14 major producing States, trailing the 16% reported for both a year earlier and the average. In Texas, 3% of the acreage was setting bolls. Rain and cool soil temperatures slowed planting on the Texas Plains. However, the crops development was good across the rest of the State.

**OTHER CROPS:** Rice seeding was 97% complete in the five major States, slightly behind both last year and the average. Plants had emerged on 86% of the acreage and were in fair to good condition. Growers sprayed for watergrass and shrimp in California. The Texas crop developed slowly, and growers flooded first crop fields.

Peanut planting was finished in the Southeast. The Texas crop was 39% planted, behind the average of 52% due to delays caused by rain. The crop bloomed on 32% of the acreage in Georgia; 6% of the fields pegged.

Tobacco transplanting was active in most areas. However, wet soil conditions further delayed progress in Kentucky and Tennessee. Harvesting was 1% complete in Georgia, compared with the 4% average.

Drier conditions from the northern Plains through the Corn Belt allowed producers to cut hay. Showers in other regions slowed harvesting and caused some deterioration of quality in cut hay.

**FRUITS AND NUTS:** Peach picking was slow in the South, reaching only 6% completion in South Carolina and 24% completion in Georgia. Rain delayed picking across the Southeast and in Texas.

Florida's citrus groves were in good condition after rains eliminated the need for irrigation. Rain and dwindling supplies slowed orange and grapefruit picking. Arizona producers continued harvesting Valencia oranges; groves continued in good condition.

California producers picked apricots, cherries, table grapes, nectarines, peaches, plums, avocados, lemons, and Valencia oranges. Sweet cherry harvesting was just beginning in the Northwest, and the strawberry harvest was in full swing.

Warm weather accelerated fruit crop development in Michigan, but progress remains 2 weeks behind normal. Apples in the Northeast appear to have a good fruit set.

**VEGETABLES:** Rain delayed harvesting in Texas and the Southeast. However, warm, sunny weather stimulated vegetable growth in most other regions. Potato planting was 90% finished in Maine and was nearly completed in Idaho.

(continued on p. 10)



Precipitation for the season remains much above normal.

Cloudy skies with shower activity throughout much of the Railbelt. Up to 7.0 days fieldwork. Small grain emergence good on barley fields. Rate of growth moderate to rapid in Matanuska Valley. Tanana Valley had moderate growth. Commercial vegetable planting nearing completion. Soil moisture short to mostly adequate. Livestock condition good. Cattle pastured in all areas.

**ARIZONA:** Weather influenced by minor disturbances in north, east mountain areas where light, scattered areas of precipitation developed early in week and at midweek. Otherwise, dry weather, seasonal temperatures prevailed. Average weekly temperatures ranged 4° below normal Douglas to 4° above normal Phoenix.

Harvest of wheat, barley 50 to 60% complete in Maricopa, Pima, Santa Cruz, Yuma Counties. Other counties reporting good progress, except Cochise County where harvest has yet to begin. Most wheat, barley fields in average condition. Alfalfa haying activities progressing rapidly Statewide. Quality has been good. Corn, safflower, sorghum in average condition. Irrigation, application of herbicides, insecticides took place as needed. Cotton still one to two weeks behind normal with condition quite varied, generally poorer in central and southeast areas. First crop cotton is 100% planted, but seedbed preparation, planting following small grain harvest is beginning in many areas. Irrigation, weed and insect control also took place. Vegetable, melon harvest continued active. Potatoes for fresh market were two to three weeks from completion, while potatoes for processing were approaching the halfway point. Harvest of dry onions about 50% complete with good quality reported. Spring lettuce cutting in Willcox continued strong and harvest should be complete by about midmonth. Cantaloup, watermelon, honeydew picking gaining momentum in Yuma-Parker area, as melons matured very rapidly. Citrus groves were in good condition as harvest of grapefruit, Valencias continued. Apricot, nectarine, peach harvests have been virtually completed. Plums, grapes being picked on limited scale.

**ARKANSAS:** Temperatures averaged 3 to 7° below normal, highest 95°, lowest 42°. Rainfall very light, ranging from a trace to 0.50 in.

Days favorable for fieldwork: 6.5. Crop progress continued moderate. Soil moisture adequate, but many areas needed a shower. Cotton fair condition; virtually all emerged, same as 1982 and average; squaring just beginning, 15% 1982, 13% average. Rice good to fair, planting virtually finished, same as 1982 and average; emerged 84%, 95% 1982, 94% average. Soybeans good to fair condition, planted 52%, 59% 1982, 47% average. Wheat harvested 10%, 49% 1982, 46% average. Oats harvested 27%, 60% 1982 and average. First cut of hay nearly ended. Pasture and livestock good condition.

**CALIFORNIA:** Again some precipitation late in the week. Amounts were light and scattered over northern half of the State. Mountains generally with 0.25 to 0.50 in. Sacramento Valley 0.02 to 0.20 in. Weekly mean temperatures again a few degrees above normal Statewide, but isolated spots South Coast and Desert Interior down 1°.

Warm weather trend assisting in good field crop development. Rice planting 95%, 97% last year, 99% average. Rice emerged 75%, 79% last year, and 91% average. Spraying for watergrass and shrimp active. Cotton growing well, 2% squared, 0 last year and 9% average. Weeding, thinning, and irrigation active in cotton. Small grain harvest beginning to get underway

as fields continue to mature. Planting of sugarbeets, dry beans, and field corn continues. Cutting of grain and alfalfa for hay active. Apricot, cherry, Coachella Valley Table grape, nectarine, Freestone peach, plum, avocado, lemon, Valencia orange harvest active. Asparagus volume declining seasonally. Snap bean harvest continued South Coast, San Joaquin Valley. Broccoli, cauliflower harvests active Central Coast. Planting brussels sprouts Central Coast. Bushberry harvest increasing. Cantaloup harvest below normal in Desert. Carrot harvest active Desert, San Joaquin and Salinas Valley. Celery harvest decreasing South Coast, increasing Central Coast. Sweet corn harvest heavy Desert. Lettuce harvest active Central Coast. Harvest market onions continued Desert, San Joaquin Valley. Harvest spring potatoes active Kern District. Strawberry harvest heavy, diversion to processing increasing. Market tomato harvest active Desert, South Coast. Processing tomato harvest increased Imperial Valley. Summer grass good to excellent, abundant water. Substantial increase grasshopper population Foothills major concern.

**COLORADO:** Cool and wet in east; warmer in west and south. Many isolated storms occurring in afternoons accompanied by hail. Average temperatures 2 to 8° below normal. One to 2.00 in. of precipitation received in the east.

Winter wheat in good condition; 93% jointed, about normal; 62% headed, 91% last year, 84% average. Corn in fair to good condition: 97% planted, about normal; 86% emerged, also normal. Sorghum in good condition: 53% planted; 55% last year, 67% average. Barley, oats, and spring wheat in good condition. Barley 99% emerged, 97% last year; 16% headed, 19% last year. Oats seeding complete; 93% last year. Statewide 2.5 days suitable for fieldwork. Topsoil and subsoil moisture adequate. Range and pasture condition good.

**FLORIDA:** Sunny skies with widely scattered thundershowers and storms prevailed mainly over Interior Peninsula, except for a cold front moving into central area, on the 8th. Skies clouded with showers, thunderstorms south into the 9th and over south on the 10th. The next night, an upper air feature brought heavy rains over west central coastal sections only. Otherwise, sunny skies returned Statewide on the 12th.

Soil moisture mostly adequate, however, a few wet areas and a few scattered dry areas still exist. Corn all stages of growth, early plantings tasseling. Peanut planting practically complete. Insects a problem in early plantings. Soybean planting full swing, early seedings up to good stands; weeds a problem. Tobacco fair to good condition, scattered harvest continues. Wheat, hay harvest slowed by rain. Sugarcane good growth. Pastures in mostly good condition Statewide due to recent rainfall. Cattle in mostly good to excellent condition across the State. Citrus grove condition improved. Several hard rains, some areas up to 5.00 in. Irrigation discontinued. Orange harvest slowed by rain and dwindling supplies. Grapefruit harvest all but finished for the year. Hot days, warm nights continued in vegetable areas. Skies mostly partly cloudy to cloudy with afternoon showers. A cold front at midweek brought widespread showers and thunderstorms, rainfall locally heavy. Some light flooding reported southwest area. Season complete or nearing completion for many vegetables in central and south Peninsula. Total shipments decreased 3% from previous week. Harvest gained carrots, Chinese cabbage, okra, parsley and watermelons. Shipments about steady sweet corn, eggplant and peppers. Volume declined snap beans, cabbage, celery, cucumbers, escarole, lettuce, potatoes,

radishes, Southern peas, squash and tomatoes. Strawberry harvest complete. Watermelon harvest very active. Volume increasing rapidly as harvest moves northward.

GEORGIA: Cloudy, moist, and mild. Average temperatures were 2 to 5° below normal except for central portion which was about normal. Rainfall amounts from 2.00 to 4.00 in. in southern portion and from 0.75 to 1.50 in. in northern portion. The 11th and 12th rainfall averaged less than 0.10 in. southeast; dry elsewhere. Temperatures near normal southwest, 3 to 7° below normal elsewhere.

Soil moisture variable: 8% short, 74% adequate, 18% surplus. Average days suitable for fieldwork 3.4. Farm activities: Planting, haying, spraying. Corn silked 19%, 65% last year, 56% average; dough 5%, 24% last year, 20% average; condition 5% poor, 37% fair, 54% good, 3% excellent. Cotton 98% planted this year, last year and average; squaring 24%, 36% last year, 44% average; setting bolls 1% this year and average, 2% last year; condition 9% poor, 34% fair, 55% good. Peanuts 99% planted, 100% last year and average; blooming 32%, 40% last year, 45% average; pegging 6%, 9% last year, 13% average, condition 2% very poor, 2% poor, 43% fair, 53% good. Heavy thrip infestation in some areas. Soybeans 63% planted, 70% last year, 75% average; condition 2% poor, 34% fair, 63% good. Tobacco 1% harvested, 5% last year, 4% average; condition 8% poor, 50% fair, 42% good. Insect control on tobacco. Watermelons 1% harvested, 4% last year, 3% average; condition 2% very poor, 10% poor, 43% fair, 45% good. Peaches 24% picked, 38% last year, 28% average; condition 37% very poor, 17% poor, 17% fair, 26% good, 3% excellent. Apple condition down from last week. Wheat 50% harvested, 64% last year, 61% average; condition 5% very poor, 10% poor, 44% fair, 38% good, 3% excellent. Grain sorghum 61% planted, 68% last year, 63% average; condition 2% poor, 35% fair, 63% good. Rye condition 4% very poor, 8% poor, 47% fair, 39% good, 2% excellent. Other small grains condition 10% poor, 44% fair, 42% good, 4% excellent. Pastures 3% poor, 27% fair, 65% good, 4% excellent.

HAWAII: Weather in the major growing areas remained favorable. Days were mostly sunny with only occasional showers falling in areas on the eastern Coastline of the Islands. Regular irrigation maintaining good crop development, and along with the sunny days, is producing high yields. Cabbage and lettuce supplies expected to remain high. Papaya production will drop slightly but will remain above year ago levels. Watermelon production will become heavy by mid-month.

IDAHO: High pressure continued its domination as conditions remained warm and dry. Temperatures varied from normal at Aberdeen to 8° above normal at Moscow. Most locations recorded below normal rainfall. Areas in the north received from 0.33 to 0.76 in. less than normal. Malad which received 0.07 in. more than average was the only station to record an amount greater than normal.

Farmers had 6.6 days suitable for fieldwork. Winter wheat was 26% headed versus 14% last year and 28% average. Spring wheat was 55% joint or higher compared to last year's 57%. Barley at 47% joint or higher trailed 1982's 49%. Dry bean planting was 85% complete versus 82% last year and 83% average. Sugarbeet thinning was 83% complete compared to 73% last year. The first cutting of alfalfa was 20% complete, 6 points ahead of 1982. Over 90% of the corn crop was emerged, the same level as last year.

ILLINOIS: Temperatures averaged normal to 6° below normal, coolest temperatures southwest. Precipitation none to light central and south, light to moderate north.

Soil moisture 3% short, 70% adequate, 27% surplus. Days suitable for fieldwork: 5.3. Corn 97% planted, 1982 100%, average 100%; average height 9 in., height most advanced fields 14 in., both less than 1982 and average; condition 2% excellent, 55% good, 43% fair. Soybeans 81% planted, 1982 89%, average 86%. Sorghum 40% planted, 1982 70%, average 63%. Winter wheat 97% headed, 1982 100%, average 99%; 80% filled, 1982 96%, average 90%, 15% turning yellow, 1982 59%, average 49%; condition 5% excellent, 70% good, 18% fair, 7% poor. Oats 30% headed, 1982 44%, average 44%, 5% filled, 1982 15%, average 15%; condition 5% excellent, 56% good, 35% fair, 4% poor. Alfalfa hay first crop 57% cut, 1982 63%, average 69%; condition 8% excellent, 71% good, 19% fair, 2% poor. Clover hay 40% cut, 1982 43%, average 50%; condition 15% excellent, 76% good, 9% fair. Pasture condition 29% excellent, 62% good, 9% fair. Livestock condition good.

INDIANA: Temperatures below normal through mid-week. Weekly averages 1 to 2° above normal north to 2 to 5° below normal south. Precipitation spotty with only a few areas reporting measurable amounts.

Fieldwork averaged 4.5 days. Both topsoil and subsoil moisture adequate. Corn 97% planted, 1982 100%, average 93%. Corn 85% emerged, 1982 100%, average 90%. Corn 6 in. tall, 1982 18 in., average 10 in. Soybeans 80% planted, 1982 90%, average 80%. Soybeans 50% emerged, 1982 85%, average 70%. Wheat good condition. Wheat 95% headed, 1982 100%, average 100%. Wheat 30% in milk, 1982 60%. Wheat 5% turning color, 1982 30%. Oats 12 in. high, 1982 17 in., average 15 in. Alfalfa hay 50% cut once, 1982 60%, average 65%, clover hay 35% cut, 1982 40%, average 45%. Tobacco plants 45% set, 1982 45%, average 60%. Pastures good condition.

IOWA: A warm dry week with temperatures averaging above normal for the first time in six weeks. Precipitation for the second consecutive week was generally far below normal with most areas receiving less than 0.25 in. Extremes: 35° at Elkader and 92° at Des Moines.

Days suitable 6.3. Corn emerged 95%; 77% last year; 94% normal; cultivated 1st time 20%; 17% last year. Soybeans planted 95%; 71% last year; 91% normal; emerged 60%; 32% last year; 74% normal. First crop alfalfa hay harvested 35%; 32% last year; 55% normal. Topsoil moisture 43% short; 54% adequate; 3% surplus. Subsoil moisture 77% adequate; 23% surplus.

KANSAS: Precipitation averaged 0.33 to 0.50 in. east, 2.00 to 2.50 in. southwest and south central, 0.75 to 1.00 in. elsewhere. Local heavy rains southwest late 9th and central late 10th. Temperatures averaged from 66° northwest to 71° east central from 2° below normal northwest and east central to 7° below normal south central.

Wheat 96% headed, 100% last year, 99% average; 10% turned color, 45% last year, 50% average. Wheat continues good to excellent Statewide. Slight freeze damage beginning to show extreme west. Wind and rain causing some lodging south central and southeast. Corn 98% planted, 90% last year, 97% average. Sorghum 35% planted, 25% last year, 60% average. Soybeans 45% planted, 15% last year, 60% average. First cut alfalfa hay 60% complete, 55% last year, 90% average. Alfalfa weevil under control most areas. Soil moisture adequate to surplus east central, adequate elsewhere. Pasture and range continue

good to excellent Statewide. Cattle on native pasture. Days suitable for fieldwork: 4.0.

**KENTUCKY:** Little or no rainfall. Few showers east half of State. Temperatures continued cool early, warming to above normal by weekend.

Days suitable for fieldwork: 5.0. Soil moisture 85% adequate, 15% surplus. Ten to fifteen percent of cropland still too wet to till. Corn 88% planted, 99% last year, average 94%. Fair condition. Average height 5 in. Some shift to soybeans or sorghum. Burley tobacco 47% set, 83% last year, average 72%. Dark types one third set. Plant supply generally adequate. Soybeans 24% planted, 68% last year, average 58%. Wheat condition variable. Barley harvest underway.

**LOUISIANA:** Rainfall averaged none to 1.50 in. Temperatures averaged 3 to 4° below normal. High 95°, low 53°.

Soil moisture adequate. Days suitable 4.2. Spring plowing 97%, 98% 1982. Corn silked 21%, 76% 1982, 58% average. Corn in dough 1%, 25% 1982. Condition fair to good. Cotton planted 99%, 100% 1982, 99% average. Cotton emerged 94%, 99% 1982, 97% average. Cotton squaring 1%, 17% 1982, 10% average. Condition fair. Rice planted 97%, 100% 1982, and average. Rice emerged 93%, 97% 1982, 98% average. Condition fair. Sorghum planted 87%, 92% 1982, 81% average. Sorghum emerged 83%, 88% 1982, 75% average. Condition fair to good. Soybeans planted 62%, 77% 1982, 77% average. Soybeans emerged 52%, 68% 1982, 67% average. Condition fair to good. Wheat turning color 100%, 100% 1982. Harvested 46%, 91% 1982, 81% average. Condition fair. Hay first cutting 58%, 82% 1982. Sugarcane and sweetpotatoes rated good. Transplanting sweetpotatoes 67%, 89% 1982, 87% average. Vegetables rated fair. Peach harvest 4%, 23% 1982, condition good. Pasture and livestock rated good.

**MARYLAND AND DELAWARE:** Light rainfall except in the southern counties west of the Bay enabled farmers to work 5.0 to 5.7 day. Temperatures averaged near normal to 2° below. Temperatures were cooler in the west. Precipitation was light. Heaviest amounts fell in the southern counties west of the Bay.

**Delaware:** Field progress made in 6.0 days. Corn planted 95%, last year an average 100%. Soybeans 45% planted, last year 80%, average 60%. Sweet corn planted 100%, year ago 100%. Tomatoes 80% planted, year ago 100%. Cucumbers, watermelons and cantaloupes, 95% planted. Snap beans 75% planted, 100% last year. Lima beans 70% planted, 95% last year. Barley and rye 100% headed, wheat 95%. Rye and wheat 20% turned, barley 98%. First cutting alfalfa 50%, last year 85%. Other hay 25% first cutting, last year 53%. Topsoil and subsoil moisture adequate to surplus.

**Maryland:** Field corn planting 95%; 100% last year; average 95%. Soybeans 30% planted, last year and average 55%. Tobacco 45% in fields, last year and average 60%. Small grains good condition. Wheat turned 20% this year and last. Oats 35% headed, 5% turned, last year 90% headed, 40% turned. Barley 95% turned, rye 65% turned, last year 85% of barley and rye were turned. Alfalfa hay 1st cutting, 60% cut, last year 65%. Other hay 40% cut one time, last year 30% cut one time. Topsoil and subsoil supplies decreased during the week to adequate in western Maryland and adequate to surplus elsewhere. Days suitable for fieldwork: 5.0.

**MICHIGAN:** Average temperatures were again below normal. Temperatures averaged 2 to 3° below normal in Lower Peninsula and 4 to 5° below upper. Rainfall was very low for the week with no area reporting more than 0.40 in.

Planting and fieldwork active during week. Warm weather benefitted crop growth and development. Statewide 5.0 days suitable for fieldwork. Corn planting 90% complete, 100% last year, 98% average. Soybeans 55% planted, 95% last year, 85% average. Dry beans 15% planted, 55% last year, 56% average. Winter wheat 20% headed, 80% last year, 75% average. Development of fruit crops benefitted by warm weather but still about two weeks behind normal. Vegetable growth and development enhanced by favorable weather.

**MINNESOTA:** Cool nights early in week with some frosts in north. Warm and sunny with thunderstorms end of week. High: 94°. Low: 31°. Precipitation averaged 0.39 to 0.99 in. below normal. Greatest total: 1.62 in.

Row crop growth boosted by high temperatures, but small grains in west central district under stress from dryness. Rain also needed to soften crusted and dry topsoil so late-planted row crops can emerge in southwest and south central districts. Days suitable for fieldwork: 6.0. Topsoil moisture: 19% very short, 34% short, 47% adequate. Planted: corn 97%, 1982 98%, normal 99%; soybeans 92%, 1982 89%, normal 95%; sunflowers 94%, 1982 88%, normal 94%; potatoes 94%, 1982 94%, normal 94%. Emerged: corn 86%, 1982 89%, normal 94%; soybeans 58%, 1982 56%, normal 76%; spring wheat 99%, 1982 93%, normal 95%; oats 98%, 1982 97%, normal 97%; barley 98%, 1982 92%, normal 94%. Jointing: spring wheat 24%, 1982 29%, normal 34%; oats 26%, 1982 29%, normal 37%; barley 26%, 1982 23%, normal 34%. Heading: spring wheat 1%, 1982 0%, normal 5%; oats 1%, 1982 0%, normal 5%; barley 0%, 1982 1%, normal 6%.

**MISSISSIPPI:** Temperatures 4 to 9° below normal. Extremes 45 and 91°. Rainfall near normal most areas, heaviest in south. Greatest 24-hour rain 4.84 in.

Soil moisture adequate. Fieldwork 5.2 days suitable, 6.0 last year, 5.3 average. Rice 95% planted, 100% last year and average; 83% to stand, 97% last year and average; condition fair. Cotton 100% planted, 100% last year and average; 2% squaring, 32% last year, 15% average; condition fair to poor. Soybeans 60% planted, 74% last year, 67% average. Sorghum 77% planted, 85% last year, 73% average. Corn 97% planted, 100% last year, 99% average, condition fair. Peanuts 88% planted, sweetpotatoes 64%. Winter wheat 63% ripe, 12% harvested; condition fair to good. Hay 38% harvested. Peach condition fair to good; pasture condition good to fair.

**MISSOURI:** Temperatures remained on the cool side averaging 4° below normal. Rainfall was almost nonexistent across the State.

Days suitable for fieldwork: 5.2. Corn 96% planted, 89% last year and 89% normal. Soybeans 66% planted, 47% last year and 61% normal. Grain sorghum 67% planted, 59% last year and 63% normal. Alfalfa hay, 1st cutting, 67% harvested, 42% last year and 66% normal. Winter wheat 97% headed, 100% last year and 97% normal; 29% turning color, 57% last year and 59% normal. Wheat 1% excellent, 31% good, 60% fair and 8% poor. Pasture condition 10% excellent, 74% good and 16% fair. Topsoil moisture supplies 18% surplus, 80% adequate and 2% short.

**MONTANA:** Moderate to heavy rain over all but northeast and western portions of north central and central division. Areas in southwest received as much as 2.00 in. during weekend storm. Temperatures mild, 2 to 4° above normal, warmed to 80s and 90s toward end of week. Eastern third, temperatures in upper 90s on 4th, while western third cooled 10 to 30° from 3rd's highs.

Topsoil moisture short. Weekend rains helped. Subsoil moisture less than adequate. Crops remain good condition. About 50% winter wheat in boot; 10% headed. All spring grains emerged. Days suitable fieldwork: 6.5. Only 1% hay cut. About 90% sheep and cattle moved to summer range. Stock water less than adequate.

NEBRASKA: Showers and thunderstorms throughout week. Heavy weekend thunderstorms produced torrential rains in all but southeast. Average rainfall 1.00 to 3.00 in. Unofficial reports of 5.00 to 8.00 in. parts of south central. Temperatures 1 to 4° below normal.

Corn emergence 90% completed, 60% last year and 97% normal; warmer temperatures improved color; cultivation just started. Soybean planting 96%, 65% last year and 95% normal; emerged 65%, 15% a year ago and 80% normal. Sorghum planting 93%, 55% last year and 95% normal; emerged 65%, 15% last year and 80% normal. Winter wheat condition mostly good to fair; heading 70%, over one week behind 99% previous year and 96% normal. Alfalfa first cutting 50% harvested, 40% last year and 70% normal. Topsoil moisture supplies mostly short to adequate. Subsoil supplies adequate. Days suitable for fieldwork 6.2.

NEVADA: Week started sunny with temperature slightly above normal. Scattered thundershowers occurred midweek, mainly over northern areas and to a lesser extent central sections. The far south remained dry. The period ended with additional precipitation northwest.

Most spring planted crops emerged except at high elevations and areas delayed by wet condition. Second cuttings alfalfa hay and green-hop alfalfa well along extreme south, none rest of State. As result of lush grazing, cattle and sheep moved to spring and summer ranges much earlier than usual.

NEW ENGLAND: Temperatures averaged slightly below normal through much of the week. A warming trend began the 10th and temperatures reached 90° in some areas. A dry week, precipitation 0.25 to 0.50 in.

A week of warm, dry weather brought planting progress close to completion. Maine potatoes 90% planted, 100% last year and normal. Field corn planting 75% complete, 50% emerged compared with last year's 95% planted, 85% emerged. Fruit set on apples average. Cranberry bogs in very early bloom.

NEW JERSEY: Fieldwork: 5.7 days suitable. Dry weather conditions permitted increased field activity. Corn, soybean planting nearing completion. Harvest of early vegetables increasing. Strawberry harvest increasing. Apple and peach sets varied. Hay cutting underway. Pasture growth good.

NEW MEXICO: Average temperatures 4 to 8° below normal, eastern Plains; 1 to 2° below normal elsewhere. Minimum temperature 32°, western mountains. Maximum temperature 98°, southern Desert and southeastern Plains. Scattered thundershowers north and east. Rainfall range: trace to 2.88 in.

Cotton 98% planted, 100% last year and average, no squaring. Alfalfa fair to good, 70% 1st cut complete. Irrigated wheat good to excellent. Dry wheat, barley good condition. Small grain harvest underway this week. Sorghum planting 87%. Corn 100%. Onion harvest, Mesilla Valley, lettuce cut. Chile growing well, behind normal progress. Peanut 90% planted. Potatoes good condition, blooming.

NEW YORK: Late week weather warm and dry, best conditions yet.

Corn planting 75% done, 87% 1982, 86% average. Oat planting nearly finished. Wheat condition fair to good. Dry bean planting active. First cutting alfalfa 8% complete, 4% 1982, 4% average. Clover-Timothy 6% done, 4% 1982, 5% average. Grass silage 10% cut, 8% 1982, 6% average. Potato planting complete. Warm, sunny weather stimulated vegetable crop growth Statewide. Suffolk County onions in 3 to 4 leaf stage. Good set on Lake Ontario apples. Leaf curl on peach trees in most areas.

NORTH CAROLINA: Temperature 3 to 5° below normal Statewide. Precipitation heavy in southeastern area.

Soil moisture: 2% short, 73% adequate and 25% surplus. Days suitable for fieldwork: 4.3 Condition: Irish potatoes: 8% poor, 31% fair and 61% good; peaches 47% poor, 47% fair and 6% good. Tobacco in fields: 24% fair, 59% good and 17% excellent. Corn: 20% fair, 78% good and 2% excellent. Cotton: 10% poor, 50% fair and 40% good. Peanuts: 43% fair and 57% good. Soybeans: 22% fair, 73% good and 5% excellent. Apples: 19% poor, 36% fair, 36% good and 9% excellent. Planting progress: Sweetpotatoes 69%, 1982 75%, 78% average; sorghum 69%, 1982 78%, 72% average. Soybeans 63%, 1982 65%, 70% average. Burley tobacco 80%, 1982 93%, 83% average. Harvests: Irish potatoes 7%, 1982 9%, average 9%; wheat 10%, 1982 18%, average 19%; oats 15%, 1982 22%, average 27%, barley 16%, 1982 33%, average 32%; rye 18%, 1982 15%, average 25%. Major farm activities: Soybean planting, sweetpotato transplanting, small grain and hay harvest and cultivation of tobacco and corn.

NORTH DAKOTA: Warm, windy weather with weekend showers. Temperatures averaged close to normal. Some areas reported night temperatures in the low to mid 30's. Extremes from 92° in several locations throughout the State to 30° northeast. Precipitation averaged well below normal. Most areas received less than 0.10 in. Largest total was 0.40 in. southeast.

Good planting progress made both small grain and late season crops virtually done -- ahead of average. Average of 6.8 days suitable for fieldwork. Percent planted with last year and average: Sunflower 97, 82, 86; corn 99, 85, 89; flax 96, 81, 81; and dry beans 99, 96, 96. Crops mostly good to very good condition with weed control the major activity. Cutworms starting to show up in row crops, mostly sunflower and corn. Spring wheat 95% emerged compared to 85% the previous year and a average of 88%. A gentle rain is needed in many areas of the State to prevent crop stress. Topsoil moisture considerably below normal. Statewide 6% very short and 58% short. Average is 28% very short or short.

OHIO: Temperatures 1 to 3° below normal. Weekend highs to mid-80's and 90's. Rainfall less than 0.10 in. most areas.

Warmer, dryer weather improving crop conditions. Planting around the clock. Insects reported in corn and hay. Strawberry harvest 10% complete. Corn planted 95%, 100% 1982, 95% average. Soybeans planted 75%, 100% 1982, 80% average. Wheat headed or beyond 90%, 98% 1982, 90% average. Alfalfa, first cut 50%, 55% 1982, 45% average. Other hay, first cut 35%, 30% 1982, 30% average. Tobacco transplanted 35%, 50% 1982, 40% average. Days favorable 5.0. Pasture condition good. Soil moisture 2% short, 77% adequate, 21% surplus.

OKLAHOMA: Temperatures ranged from 9° below normal north central to 5° below north northeast. Rainfall ranged from 0.27 in. northeast to 2.41 in. north central.

Little progress made on wheat harvest with only 1% harvested. Wheat headed: 100%, 100% 1982, 100% average. Sorghum planted: 40%, 45% 1982, 70% average. Cotton planted: 50%, 30% 1982, 70% average; squaring 0%, 0% 1982, 0% average.

OREGON: Temperatures cooled from previous week, but still stayed 3 to 6° above normal. All areas were dry up until the end of the week when rainfall at the Coast and the northern Cascades totaled 0.60 in. The Willamette Valley recorded 0.40 in. and the rest of the State less than 0.10 in.

Winter wheat 90% headed; 88% last year; 92% average. Condition fair to good. Some showing effects of insufficient moisture in east. Cheat-grass also present. Spraying for septoria continues in west. Haying underway under mostly favorable weather. Barley maturing rapidly. Harvest nearing. Strawberry harvest in full swing. Prospects look good. Blackberries blooming. Sweet cherry harvest just getting started with good crop in prospect. Cranberries in bloom. Early vegetable harvest in full swing. Broccoli harvest 3 weeks away. Sweet corn and beans emerging. Cauliflower being planted. Potatoes progressing very well. Pastures and ranges good to excellent. Moisture needed in east. Livestock condition good. Flies bothersome.

PENNSYLVANIA: Much drier but only slightly cooler than normal. Average temperature of 64 was just 2° below normal. The coolest weather occurred in the middle of the week with frost happening on the 9th at a few places in the north central mountains. Extremes were 26 and 90°. Precipitation was 0.27 in. or 0.63 in. below normal.

Days suitable: 5.0. Moisture, surplus to adequate. Activities: Planting corn, soybeans, tobacco, and potatoes; spraying; making hay and haying; green chopping and fixing fence. Tobacco transplanting 28% complete, last year 70% complete. Soybeans 55% planted, last year 77%. Corn 86% planted, last year and average virtually complete. Barley 62% headed and 33% turning yellow, last year 65% headed and 29% turning yellow. Wheat 71% headed and 5% turning yellow, last year 83% headed and less than 5% turning yellow. Oats 8% headed, last year 19% headed. First cut alfalfa 35% complete, last year 27% complete. First cut clo-tim 19% complete, last year 10% cut. Quality of hay fair to good. Feed from pastures mostly average.

PUERTO RICO: No report received.

SOUTH CAROLINA: Rain 1.00 to 3.00 in. over eastern and southern part, light precipitation northwest 0.50 in. Temperatures near or above normal early week; mild days, cooler than usual nights remainder of week.

Corn condition fair to good. Cotton condition fair. Soybeans 59% planted, 68% last year, 74% average; condition fair to good. Tobacco condition fair to good. Wheat 59% ripe, 91% last year, 96% average; harvested 9%, 46% last year, 47% average; condition fair. Peaches, apples condition poor to fair. Peach harvest 6%, 13% last year, 9% average. Melons fair condition. Vegetables fair to good condition.

SOUTH DAKOTA: Average temperatures 1 to 2° below normal. Extremes: 24 and 90°. Rainfall mostly light. Greatest precipitation 0.77 in. south central.

Days suitable for fieldwork: 6.0. Topsoil moisture supplies mostly short to critically short. Dry weather has allowed good planting progress, but some concerned about seed germination in dry soil for late planted crops. Lack of rain has slowed crop and pasture growth. Winter wheat in mostly good condition. Spring wheat emerged 100%, 1982 100%, average 100%. Spring wheat headed 0%, 1982 0%, average 20%. Corn planted 96%, 1982 86%, average 98%. Sorghum planted 75%, 1982 47%, average 78%. Winter wheat 57% headed, 1982 58%, average 74%.

TENNESSEE: Weather was generally fair, cool and dry. Eastern areas received rain on 7th. Temperatures averaged 4 to 6° below normal. Averages ranged 65° along the Cumberland Plateau to 72° in the west.

Days suitable for fieldwork: 3.9. Soil moisture levels: 75% adequate, 25% surplus. Corn planted 88%, 1982 100%, average 100%. Cotton planted 98%, 1982 100%, average 100%. Soybeans planted 30%, 1982 64%, average 64%. Tobacco set 65%, 1982 91%, average 87%. Tobacco and wheat in fair condition. Wheat turning yellow 83%, 1982 97%, average 97%. Wheat ripe 4%, 1982 51%, average 65%. Wheat harvested 1%, 1982 10%, average 10%. Alfalfa hay - 1st cutting 85%, 1982 98%, average 88%. Pastures and livestock good.

TEXAS: Cold front produced heavy rains Hill Country, Southeast Texas. Latter part of week, moist, unstable air resulted in widely scattered showers, thunderstorms. Some severe with large hail, some tornadoes over Panhandle. Scattered showers, thunderstorms continued throughout week. Temperatures below normal over all but Upper Coast. Precipitation was 0.25 to 0.50 in. above normal Panhandle, Edwards Plateau, Lower Valley. Elsewhere, precipitation 0.25 to 0.75 in. below normal.

Crops: Soil moisture conditions continued improve. However, conditions remain dry West, South Texas. Planting of field crops continued as weather permitted. Growth of field crops sided by additional moisture, more needed to insure proper development. Some damage caused by high winds, hail Panhandle, Lower Rio Grande Valley. Cotton planting continued, rain, cool temperatures slowed fieldwork. Plains, rain, cool soil temperatures delayed planting. Replanting caused by poor weather Plains active. East Texas, cotton squaring, making good growth. Coast, South Texas insecticide application active. Trans-Pecos region, cotton continued good growth. Sorghum planting continues to gain momentum plains. Cool temperatures hampered growth Blacklands, Cross-Timbers, Central Texas, Coast sorghum developing well, in need of additional moisture. South Texas sorghum still showing signs of moisture stress. Corn developing well despite hail, wind damage. Fields continue to tassel, silk. Insect, disease problems light. Cross-Timbers, East Texas, cool temperatures have put development behind schedule. Small grain harvest continued, progress slowed by wet conditions. Harvest active Low Plains, yields better than expected. Some acreage Plains lost to hail. Reported wheat condition is 83% of normal, 73% a year ago. By week's end, 19% excellent; 49% good; 28% fair; 4% poor. Peanut planting again slowed by rain. Preplant activity Central Texas continued, planting shortly. Rice developing slowly. Flooding of 1st crop rice underway.

Cotton planted 79%, 89% 1982, 90% average; cotton squaring 8%, 14%, 17% average; cotton setting bolls 3%, 6% 1982, 10% average. Sorghum planted all purposes 84%, 87% 1982, 90% average; sorghum headed 32%, 47% 1982, 42% average; sorghum turning color 8%, 10% 1982, 15% average; soghum

mature 0%, 0% 1982, 2% average. Wheat headed 99%, 99% 1982, 100% average; wheat turning color 67%, 85% 1982, 86% average; wheat harvested for grain 17%, 23% 1982, 20% average. Oats harvested for grain 45%, 41% 1982, 50% average. Peanuts planted 39%, 36% 1982, 52% average. Soybeans planted 54%, 47% 1982, 54% average. Sunflowers planted 68%, 42% 1982, 50% average.

**Commercial vegetables:** Rio Grande Valley, harvest of watermelons, cantaloups, tomatoes active, good volumes being moved. Heavy rain, high winds caused some damage, some delays due to fields being inaccessible. San Antonio-Winter Garden area, onion, cabbage harvest continued. Irrigation continues. Tomatoes nearing maturity, harvest expected soon. Coastal Bend, cucumbers, tomatoes making good growth. Spraying for insects active. Watermelons developing well, harvest gaining momentum. East Texas, watermelon planting continued. Tomatoes developing slowly. Sweetpotatoes in need of warmer weather. Trans-Pecos region, onion harvest active. Cantaloups setting fruit, bell peppers emerging. Tomatoes blooming, making good growth. Plains, onions, potatoes made good progress. Recent rainfall helpful, harvest expected soon. Some onions damaged by hail. Peach tree continue to set fruit. Harvest met some rain delays. Pecan trees in good condition, nuts forming. Casebearers, scab problems light.

**Range and pasture:** Showers provided some relief from moisture stress. Condition of ranges, pastures showed some improvement, Trans-Pecos region, portions of South Texas remained drought like. Grazing improved slightly, remains limited. Statewide, livestock remains good to excellent condition. Supplemental feeding continued dry areas.

**UTAH:** Recurring periods precipitation many areas of State. Accumulated amounts moisture locally moderate to heavy. Average temperatures generally slightly below normal, ranging from 5° below to 3° above. Serious flooding continues many areas of State.

All phases of farm activity behind normal. Crop development slow because of late planting and cool temperatures. Flood waters receding in parts of State, but rising in other counties. Damage to crops will be in millions. Fall planted grains making good progress. Winter wheat 36% headed, winter barley 21%. First crop hay harvest well along. Crop rates poor to fair because of weeds and rain damage during cutting. Corn 83% planted, 56% emerged. Some stands poor due to wet fields. Fruit crops rated good.

**VIRGINIA:** Scattered showers over the south until mid period. Rainfall averaged about 1.00 in. with most over extreme southeast-slightly over 2.00 in. Temperatures were about 2° below normal but warming over the weekend. Temperatures ranged from upper 80's central and south over the weekend to lows in mid 40's in north and west at beginning of period.

Warmer, drier weather enabled plant growth and fieldwork progress to approach normal levels. Topsoil moisture was 2% short, 86% adequate, 12% surplus. Days suitable for fieldwork averaged 4.4. Corn rated in good condition with 96% seeded, 96% last year, 98% average. Some replanting was necessary. Insect infestations becoming noticeable. Soybeans rated in good to excellent condition. Seeding 52% complete, 60% 1982, 56% average. Peanuts rated in excellent condition. Tobacco rated in fair to good condition. Setting progress very near normal. Small grain harvests underway. Barley yields reported good, wheat fair. Hay yields reported good but frequent showers have hurt quality.

**WASHINGTON:** High pressure centered to the southwest of State and over southern British Columbia caused the air flow to vary between weak offshore and weak onshore during the first four days of the week. But a frontal system reached Vancouver Island by 8th and changed the flow to onshore. The front caused significant precipitation on 9th and 10th with the greater amounts falling along the coast and over the Blue Mountains.

Strawberry picking underway. Raspberry picking will start June 18 to 20. Both crops look excellent. Green pea planting complete. Early peas at peak bloom. Early broccoli forming heads. Turnip fields being swathed. Livestock, range, and pastures in good condition. Dairymen green-chopping. Wheat and barley average to above average condition. Cool weather benefited spring seeded grains in Whitman County. Lots of cheatgrass and some rust in fields. Cherry harvest beginning. Apples and pears sizing well. Peas and lentils look good. Yakima area asparagus harvest 70% complete. Winter wheat headed 96%, last year 71%, average 67%.

**WEST VIRGINIA:** Temperatures averaged 2° below normal. High 91°, low 37°. Precipitation well below normal. Range none to 0.45 in.

Soil moisture adequate. Days worked averaged 4.4. Main activities: Haying, corn planting, gardening. Wheat good to fair condition: 36% pre-headed, 56% headed, 5% ripe and 3% harvested; 16% pre-headed, 81% headed and 3% ripe in 1982. Barley good to fair condition; 8% pre-headed, 79% headed, 11% ripe and 2% harvested; 16% pre-headed, 73% headed, 11% ripe in 1982. Oats good to fair condition; 87% pre-headed, 11% headed, 2% ripe; 85%, 13% and 2% in 1982. Corn fair to good condition; 85% planted, 68% emerged; 92% and 87% in 1982. Tobacco fair to good condition; 51% set, 56% in 1982. Pasture reported good to fair. Hay reported good to fair, 1st cutting 26% complete, 22% in 1982. Peaches poor, apples fair. Gardens reported in fair to good condition. Seasonal temperatures and limited rainfall for the first time in several weeks.

**WISCONSIN:** The week started on a cool note, but a warming trend brought readings to seasonal normals by midweek, to well above normal by the end of the week. Rainfall was light and fell in the form of scattered showers on five of the seven days. Total rainfall varied from trace amounts to 0.50 in. Most stations recorded between 0.10 and 0.30 in. of rain.

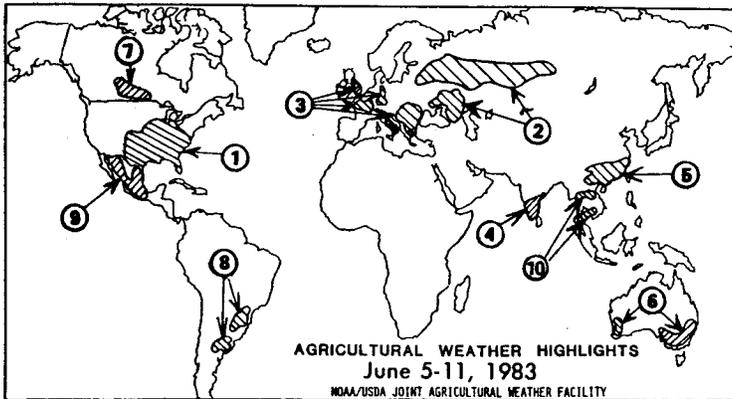
Soil moisture 5% short, 66% adequate, 29% surplus. Days suitable for fieldwork: 4.0. Pasture condition 86% of normal.

**WYOMING:** Temperature averages below normal except few locations in extreme north and north-west. Highs in 70's and 80's but lows mostly in 30's or near 40. Wet week all stations reporting some precipitation many well above normal.

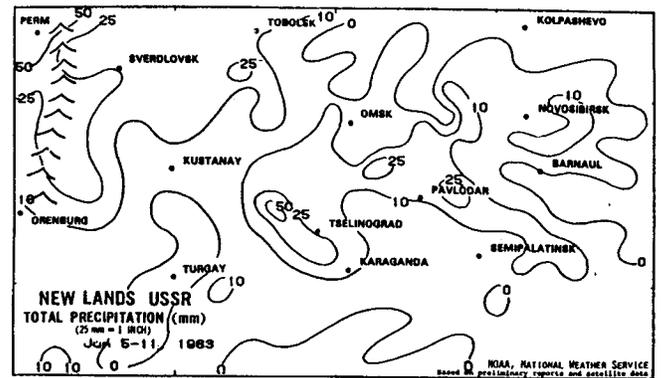
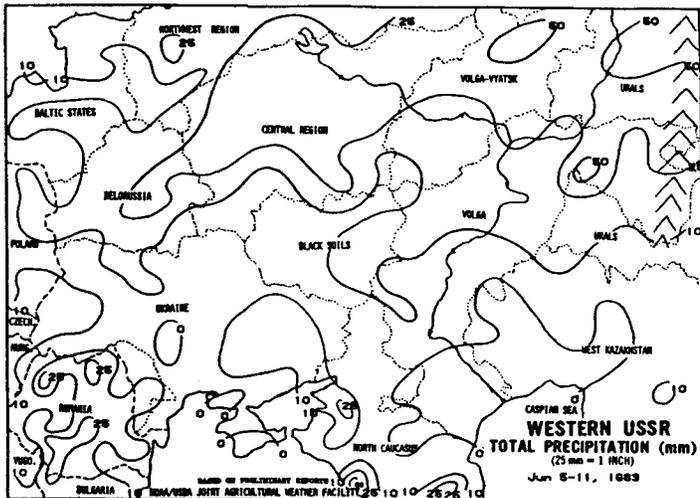
Topsoil moisture adequate 87% State. Days suitable for fieldwork: 5.0. Most spring wheat, oats, barley planted. Spring wheat emerged, 90%. Oats emerged, 80%. Barley emerged, 85%. Sugarbeets planted 95%, emerged 90%, thinning underway in northern areas. Corn: Planted, 90%; emerged 75%. Potatoes: Planted 90%; emerged 85%. Dry beans planted 60%. Winter wheat mostly good condition. Some water damage to crops. Livestock mostly good condition. Death loss calves, lambs, light to normal. Ranges, pastures mostly good condition, cool weather slowing growth. Fifty percent cattle, calves and sheep, lambs moved to summer ranges.

### International Weather and Crop Summary

June 5 to 11



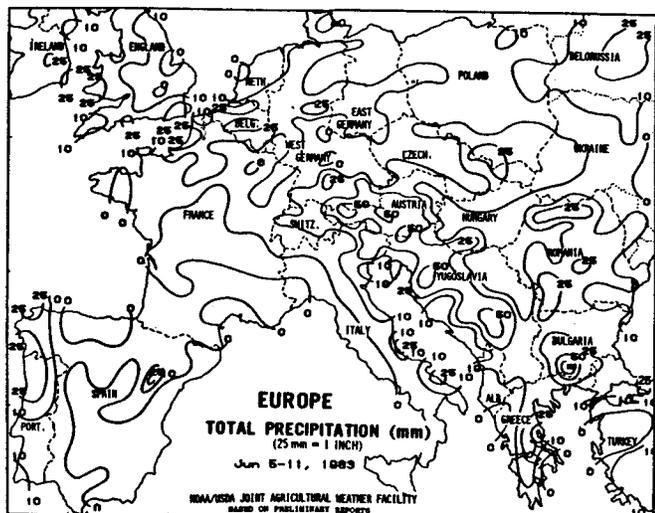
1. UNITED STATES ... Sunny conditions allow rapid planting of soybeans in the Corn Belt, while rains over the Southeast and central and southern Plains improve soil moisture. Coolness over the central Plains delays crop development.
2. USSR ... Significant widespread rains in western USSR, mainly in the north, benefit crops. Light showers bring limited relief to dry conditions in the southeast. In the New Lands, showers benefit emergence and early plant growth in the Urals and northern Kazakhstan, while drier weather allows some spring seeding in Western Siberia.
3. EUROPE ... Relatively dry weather relieves wet conditions in England, northern France, and parts of West Germany. Widespread rains continue to improve soil moisture conditions in the southeast.
4. SOUTH ASIA ... The monsoon increases over the Indian Ocean. Rainfall accumulations are below normal in peninsular India and could delay summer crop planting.
5. EASTERN ASIA ... Heavy rain and cloudy weather continue to be unfavorable for rice. Dry weather in the North aids the wheat harvest.
6. AUSTRALIA ... Dry weather alleviates excessive moisture which has delayed wheat planting in the east. Rain is needed in the west for wheat planting. Favorable conditions prevail in the south.
7. CANADA ... Light showers and mild weather cover wheat areas as the crop emerges in the east and advances into tillering in the west. More rain is needed in the west, and sunshine is needed in east.
8. SOUTH AMERICA ... Heavy rains delay the coffee harvest in Parana and Sao Paulo. Dry weather aids the soybean harvest and wheat planting in southern Brazil. Dry weather aids wheat planting in Argentina, but widespread frost occurs.
9. MEXICO ... Light rain brings some relief to crops and livestock in the east. Dryness elsewhere further reduces soil moisture and irrigation supplies.
10. SOUTHEAST ASIA ... Showers increase as the monsoon season develops. Moisture conditions are favorable for corn and rice in Thailand.



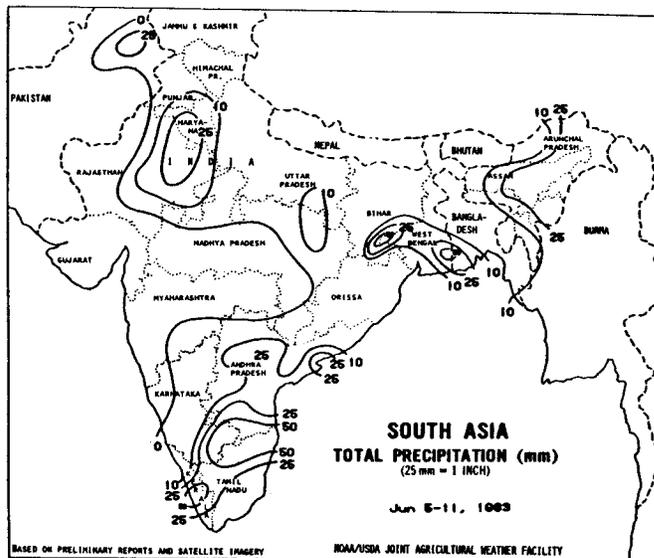
USSR...Two storm systems traversed Western USSR during the week, with the heaviest amounts of precipitation (10-25 mm) falling over minor grain-producing areas in the north. However, some significant showers were able to penetrate southward, benefiting crops in the western Ukraine, eastern Ukraine, and eastern Black Soils. Light, scattered showers covered crop areas in the south-central Ukraine, the North Caucasus, and southern Volga Valley, reversing a continued dry pattern. Temperatures over the region were below normal, reducing evaporation rates. Additional showers would benefit winter grains normally in the filling stage in the south and heading in the north. In addition, widespread rains are needed

in the south for summer crops such as corn and sunflowers, which normally enter the critical reproductive stage in late June.

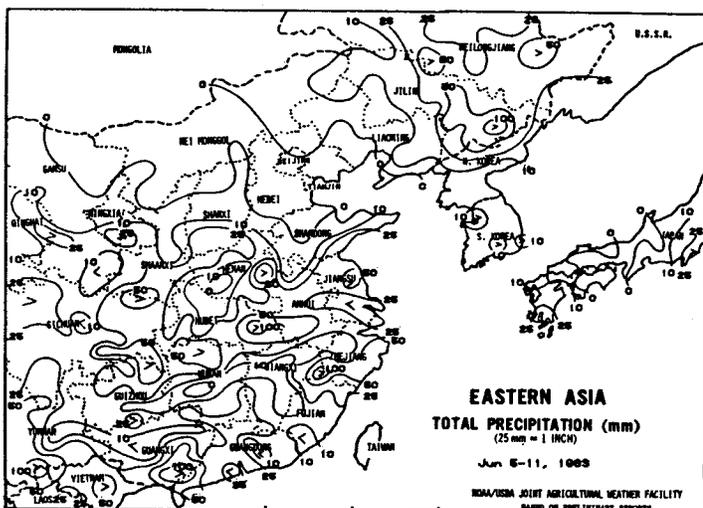
In the New Lands, widespread showers covered major spring grain areas in the Urals and northern Kazakhstan. The moisture benefited emergence and early plant growth. Elsewhere, drier weather covered spring grain areas of Western Siberia, allowing fieldwork for seeding to take place on some days. In addition, soil moisture conditions in Western Siberia are highly favorable for seed emergence. Temperatures were above normal over the entire region. In south-central USSR cotton areas, scattered showers continued to benefit cotton in eastern Uzbekistan.



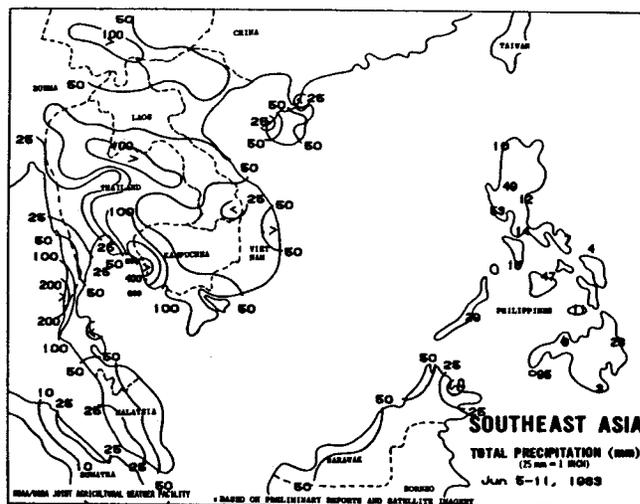
**EUROPE...**Relatively dry weather relieved persistent wet conditions in eastern England, northern France, and part of West Germany, allowing access to fields. Crops grown in these areas should have abundant soil moisture for growth. Further east, showers continued to provide favorable growing conditions for winter and summer crops in East Germany and Poland. In the southeast, wet weather returned to crop areas in Yugoslavia, while widespread rains continued to improve soil moisture conditions in Hungary, Romania, Bulgaria, Greece, and southern Italy. Further west, generally dry weather covered Spain, aiding the winter and spring grain harvests. Weekly temperatures were above normal everywhere except the southeast, where they were near normal.



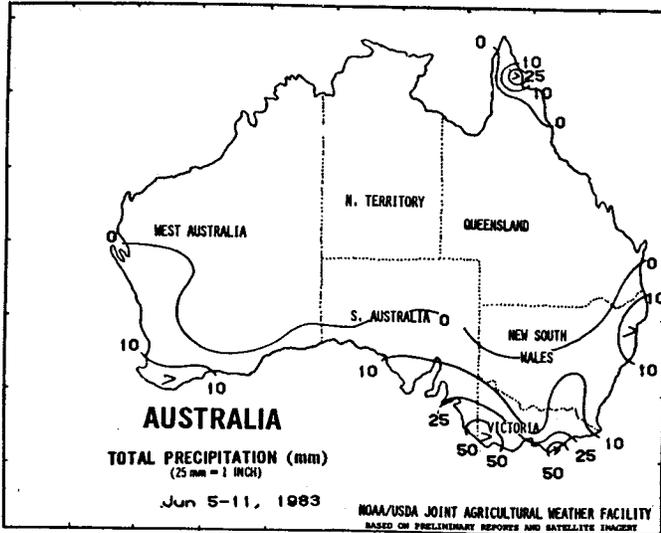
**SOUTH ASIA...**The monsoon continued to develop in the Indian Ocean. Showers continue in southern peninsular India with some localized heavy amounts, but accumulations are below normal in Karnataka and Andhra Pradesh. Cotton and groundnut planting usually begins in early June, but more widespread rains are still needed. Unfavorable, localized heavy rain fell in Bihar and West Bengal where the summer rice crop is maturing. Temperatures were slightly cooler this week in India, bringing a little relief to the heat wave; however, they still reached 40-45°C in the central region.



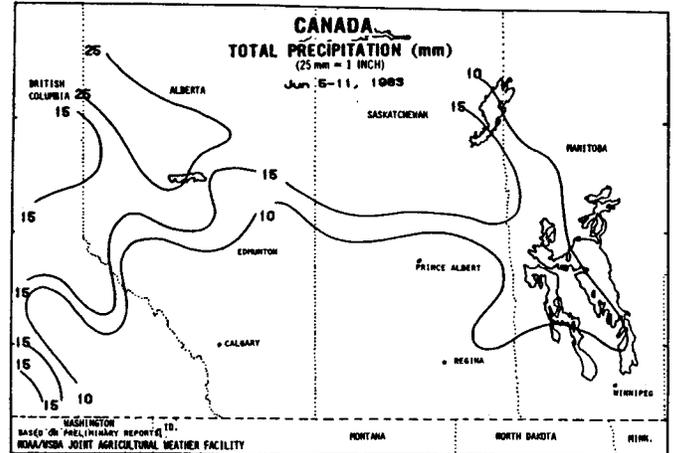
**EASTERN ASIA...**Partly sunny skies covered the southeastern China rice area early in the week, but by the end of the week, moderate to heavy rain fell along the Yangtze Valley and in southern Guangxi. The persistent rains this season have delayed planting and slowed development of rice in the vegetative stage. Further delays in the early and intermediate rice development will push the late rice crop to the end of the growing season. Dry weather in the North China Plain benefited the wheat harvest. Soil moisture should still be favorable for cotton, corn, and soybeans nearing the reproductive stage. Light to moderate rain in China's corn/soybean area, heaviest in Jilin, benefited crops in the vegetative stage.



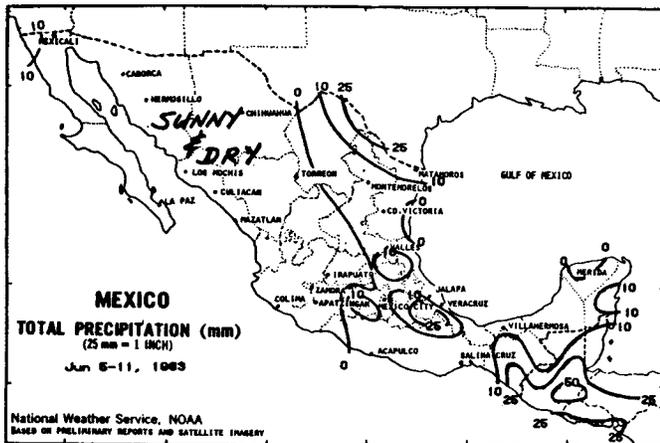
**SOUTHEAST ASIA...**Moderate to heavy rain, 50-100 mm, fell across northern areas of Thailand, adding to soil moisture and reservoir levels. Very heavy rain fell in southern Thailand and western Kampuchea, with lighter amounts spreading into the important south-central rice area of Thailand. Moisture conditions have been favorable after planting delays, and the monsoon has strengthened over southeast Asia this week. Below-normal precipitation fell on the southwestern coast of Malaysia while substantial rain fell on the east coast. Light, scattered showers fell in the Philippines as an area of high pressure dominated the region; however significant precipitation fell in central Luzon.



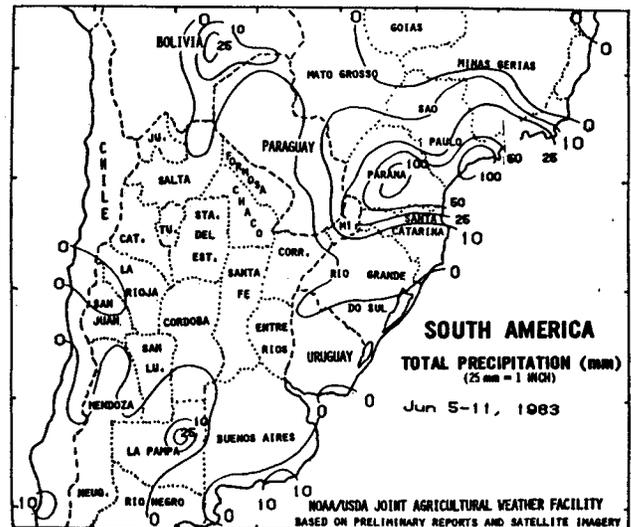
**AUSTRALIA**...Significant amounts of rain (greater than 10 mm) fell in southern wheat areas of South Australia and Victoria where planting is nearly completed with mostly favorable moisture supplies. Generally dry weather for the second consecutive week in crop areas of northern New South Wales and Queensland alleviated excessive moisture conditions which have delayed wheat planting. More dry weather is needed in this area to allow late planting of wheat. Australia's wheat crop is generally planted by late June under normal conditions which have not been the rule in recent years. Light showers in Western Australia offered only minimal moisture for wheat as unseasonably dry weather hampers planting in western crop areas. Substantial rains are needed for planting and early growth in the west.



**CANADA**...Light rain and slightly above-average temperatures covered most of the Canadian Prairies. Rainfall amounts were generally less than 5 mm, except in northern crop areas which were on the fringe of heavier showers to the north. The western half of the grain belt is becoming too dry; thus, the northern showers aided emerging crops in that area. Additional rainfall is needed in Alberta and western Saskatchewan for spring wheat and other grains which are advancing through the tillering stage. The eastern crop areas have adequate moisture for vegetative growth, but crop development lags behind western areas due to the cooler, wetter weather during the early season. Generally mild weather this week promoted crop growth throughout the Prairie Provinces. In contrast to the west, eastern crops would greatly benefit from lots of sunshine and less frequent showers for the next few weeks.



**MEXICO**...Light showers continued over the eastern third of the country, bringing some relief to crops and livestock. A few heavy showers fell outside the major producing areas. Sunny, dry weather elsewhere benefited field activities but further reduced soil moisture and irrigation supplies. Frequent tropical showers fell over the middle part of Central America, some spots measuring over 50 mm. Hurricane Barbara formed well south of Mexico and moved west northwestward, not triggering any showers inland.

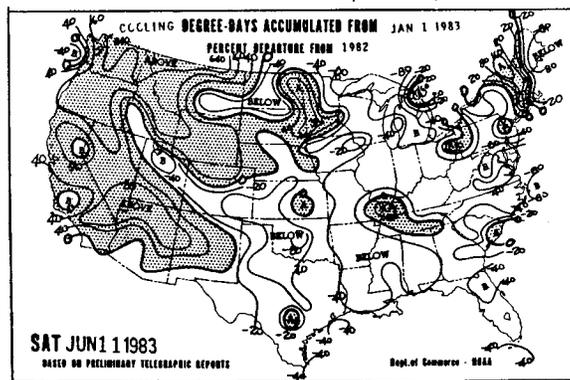
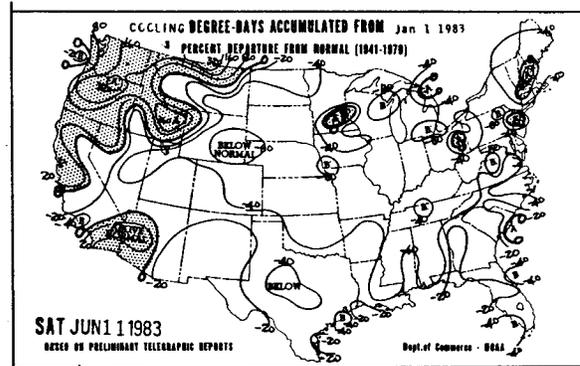
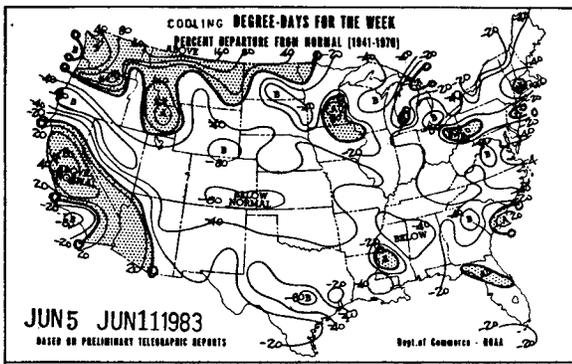


**SOUTH AMERICA**...Heavy rain delayed coffee harvesting in northern Parana and Sao Paulo as weekly totals exceeded 100 mm in some areas. The heavy rains, which shifted northward into the coffee areas during recent weeks, may adversely affect the quality of the harvest. Dry weather in Rio Grande do Sul aided wheat planting. Temperatures were well below average in southern Brazil, south of the rain-soaked coffee areas, and in Argentina where dry weather also prevailed. Moisture conditions are generally favorable for wheat planting which usually occurs during June and July in Argentina. Subfreezing temperatures and frost covered the wheat areas, and mean weekly temperatures lingered only slightly above the minimum threshold temperature for wheat growth.



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

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