

# WEEKLY WEATHER AND CROP BULLETIN

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

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

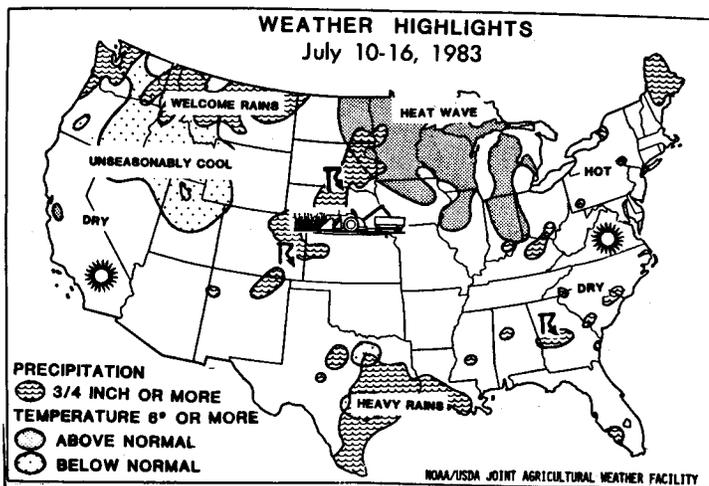
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WASHINGTON, D.C.

July 19, 1983

## National Weather Summary

July 10-16



northward into Washington. A few light showers fell from southwestern New Mexico to central Nebraska, in southern New England, and along the Washington coast.

**TUESDAY...**After early morning cool weather over the northern Plains and Rockies, and over much of the Northeast, hot weather dominated much of the northern High Plains, the Southwest, and much of the East. There were a few very light showers from Arizona to eastern Colorado, along the western slopes of the Appalachians, and in the Northwest. A disturbance in northeastern Mexico triggered showers and thunderstorms in southeastern Texas.

**WEDNESDAY...**It was another cool morning in much of the Rockies, the Northwest, and in the Great Lakes area. However, unusually hot weather dominated the northern Plains and most of the Southwest. Showers and thunderstorms produced heavy rain over the southern Texas coast and lesser storms reached into Louisiana, Arkansas, and Oklahoma. Light showers also fell in New Mexico, the Texas Panhandle, Florida, and Georgia. Some moderate showers and thunderstorms began in the Northwest.

**THURSDAY...**Heavy rain continued in southeastern Texas, while lighter showers and thunderstorms spread through all but southwestern Texas and northward into Missouri. Widely scattered thunderstorms spread through the Southeast to the Ohio Valley. Showers and thunderstorms were generally light in the Northwest and reached through Montana. High temperatures were 100° or more over parts of the central Rockies and the northern Plains, but cool weather pushed into the Northwest.

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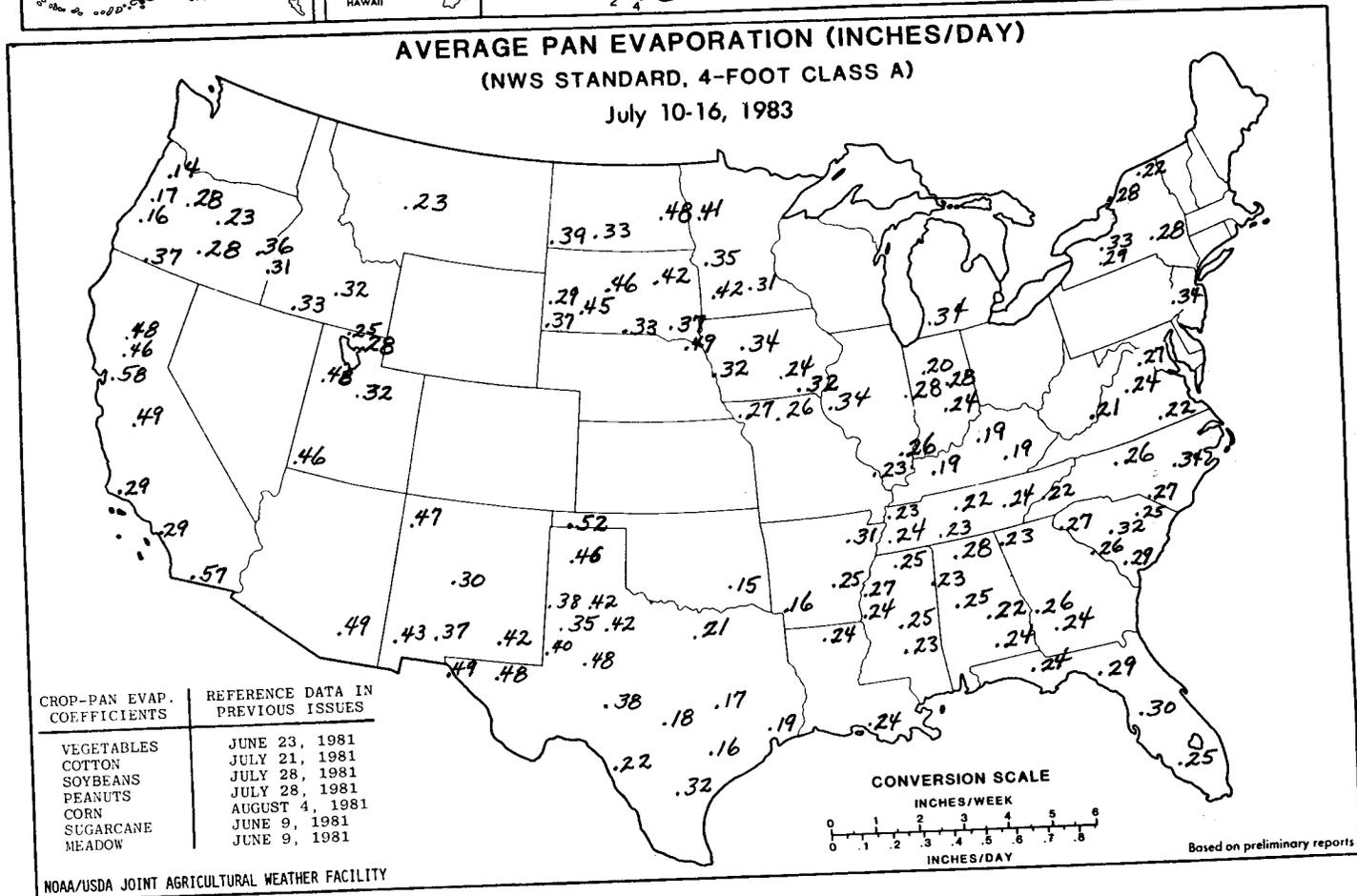
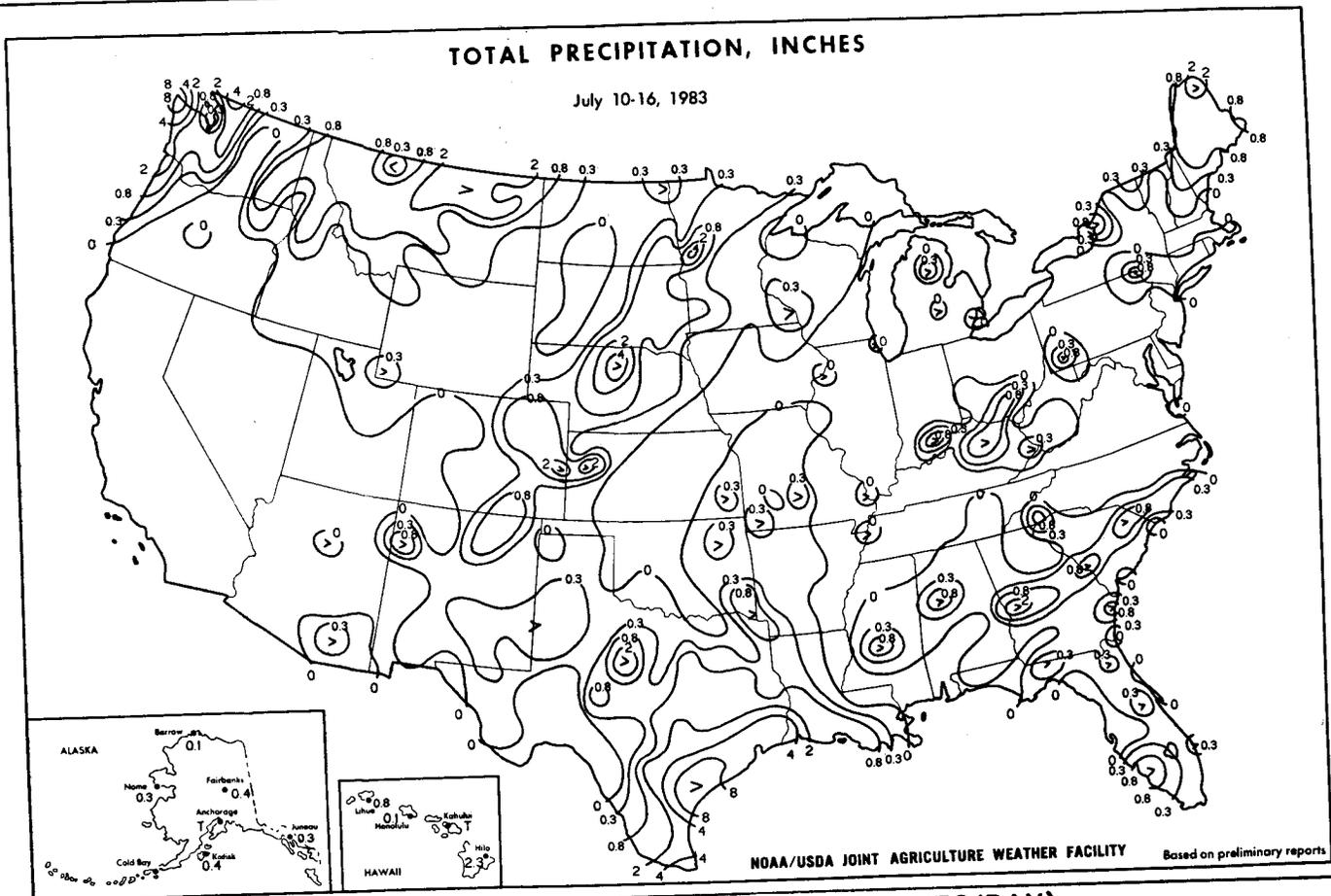
**HIGHLIGHTS:** Early in the week a cold front moved across the Northwest and dropped 1 to 2 inches of rain in northern Idaho and Montana. The rain was especially beneficial in the very dry northeastern section of Montana. Later, another system moved through the same area producing light rain, and as the week ended, triggered moderate to heavy rain along a line from west-central Minnesota to northeastern New Mexico. A tropical system in the western Gulf of Mexico triggered heavy downpours in southeastern Texas, and light to moderate showers northward into southern Missouri. A few light, isolated moderate, showers fell in the upper Ohio Valley but, in general, little rain fell in the Corn Belt. Average temperatures over the Corn Belt were near 80° which was 4-6° above-normal.

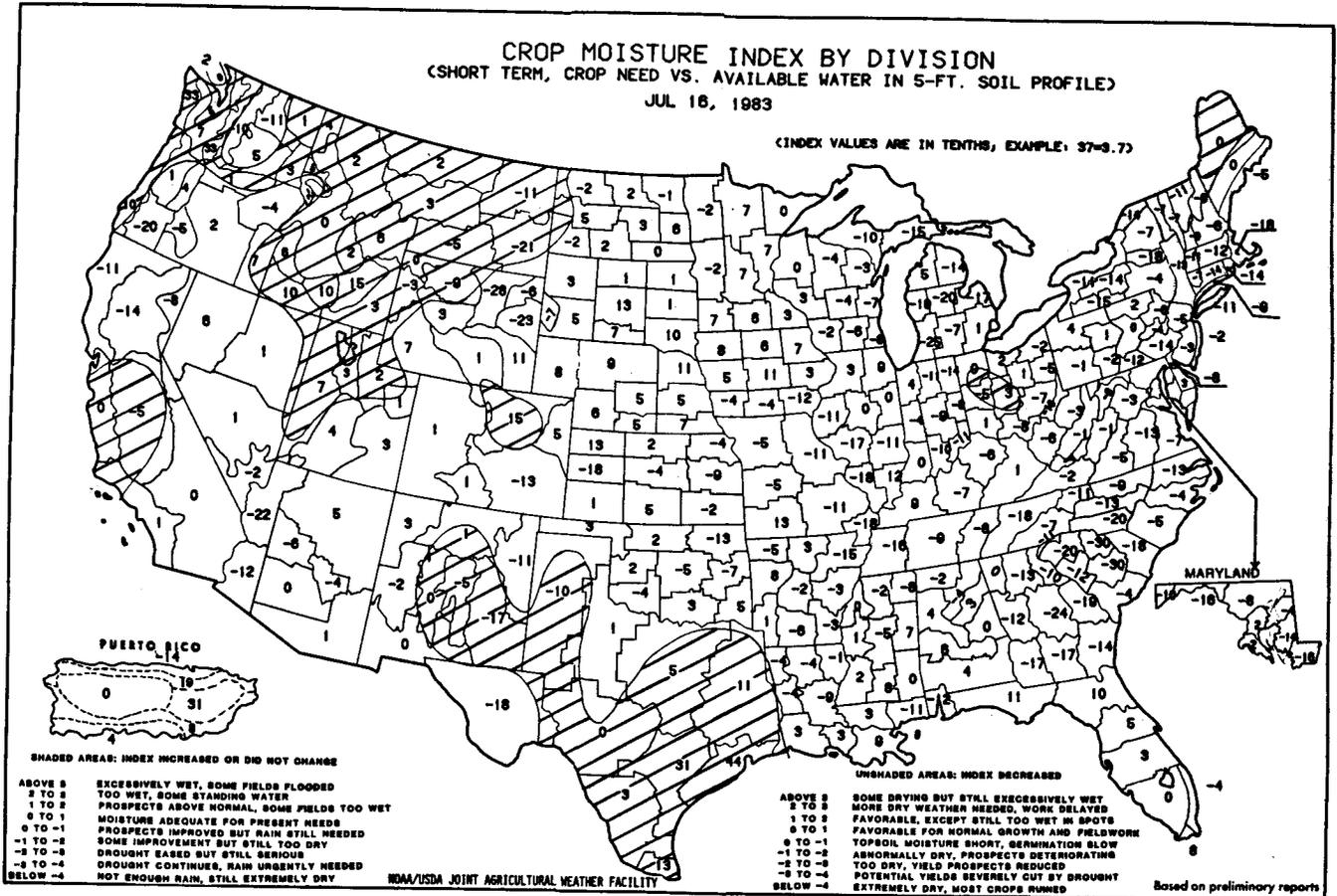
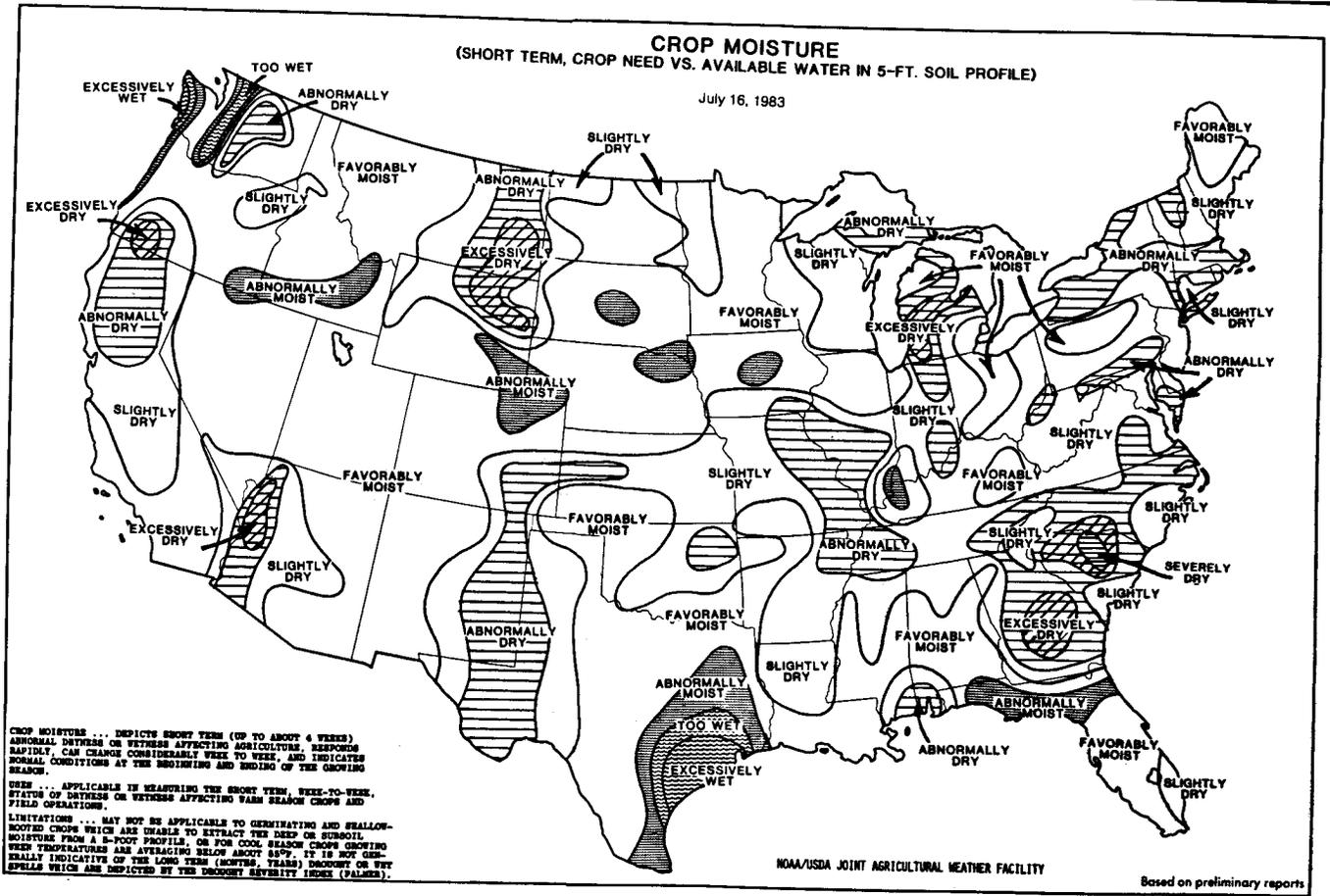
**SUNDAY...**A disturbance moving through Montana and southern Canada triggered severe weather through most of the State, including heavy rain in the northeast, which has been extremely dry. The Southeast had very little rain. Both the northeastern and northwestern parts of the Nation were unusually cool, but afternoon high temperatures in the central portion reached into the high nineties.

**MONDAY...**Unusually cool weather continued in the northeast and over the Plateau and the Rockies. The cool weather began moving over the northern Plains. Very warm weather pushed northward through the central Mississippi Valley and into Michigan. Hot weather was in central California and reached

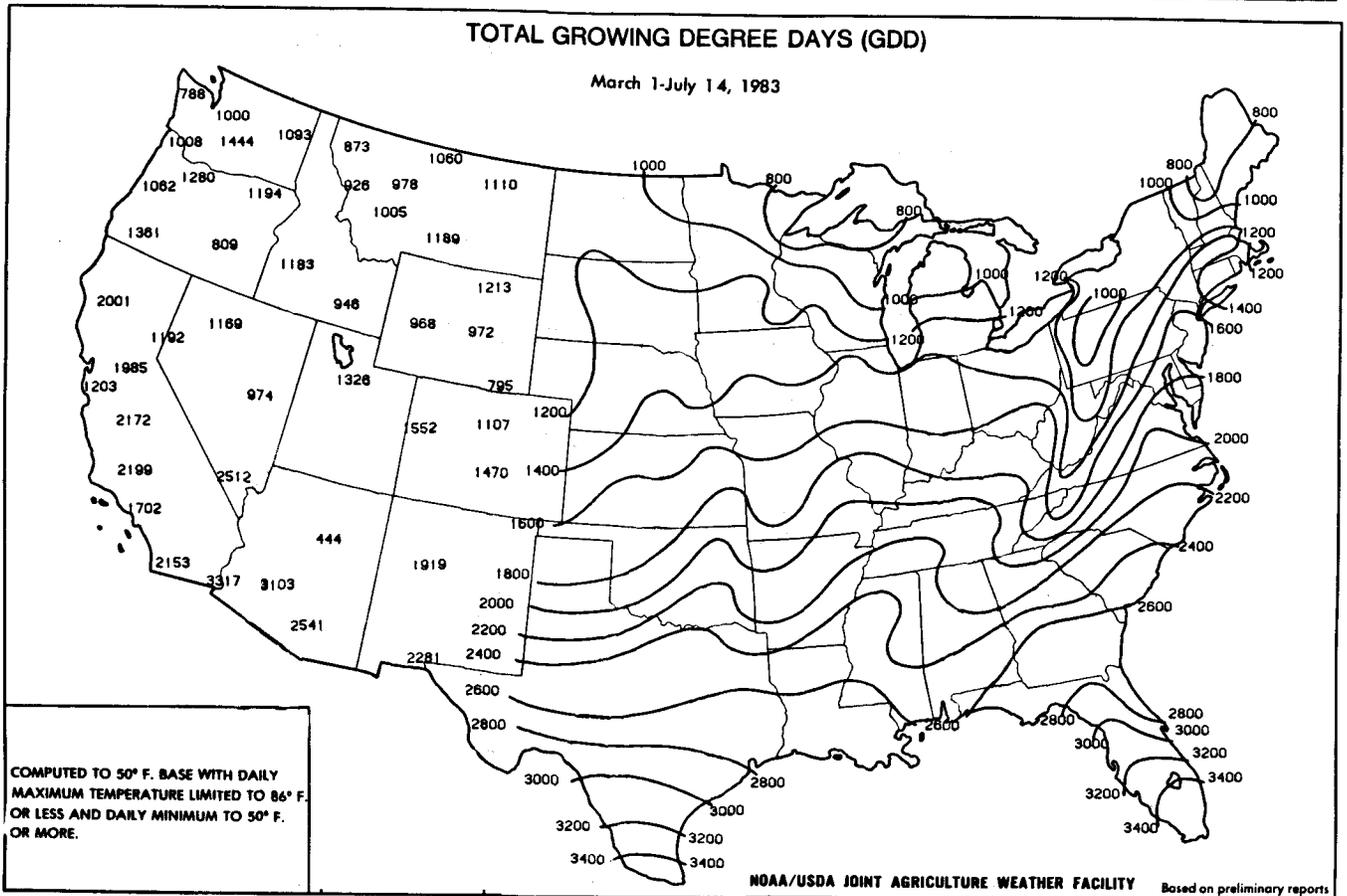
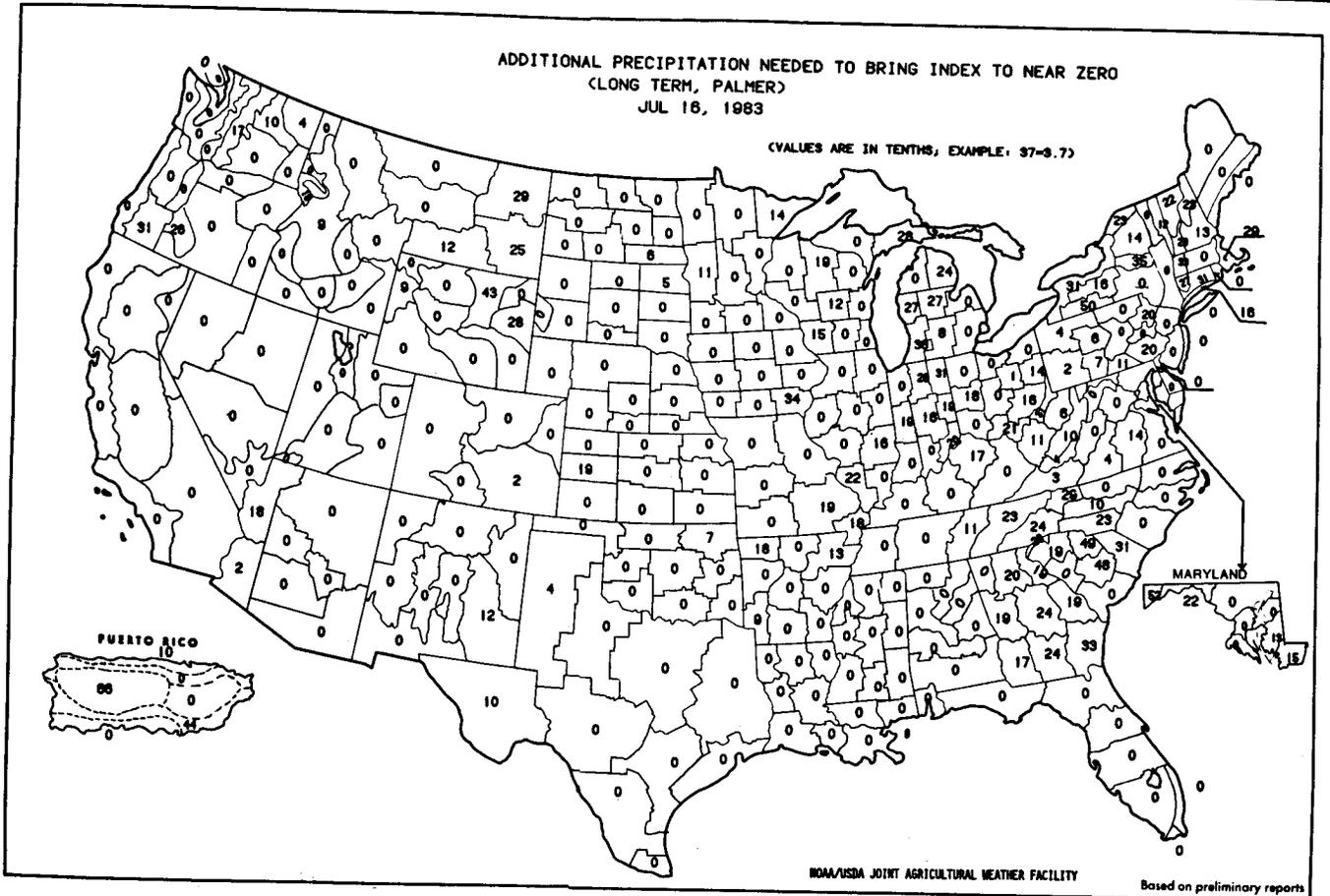
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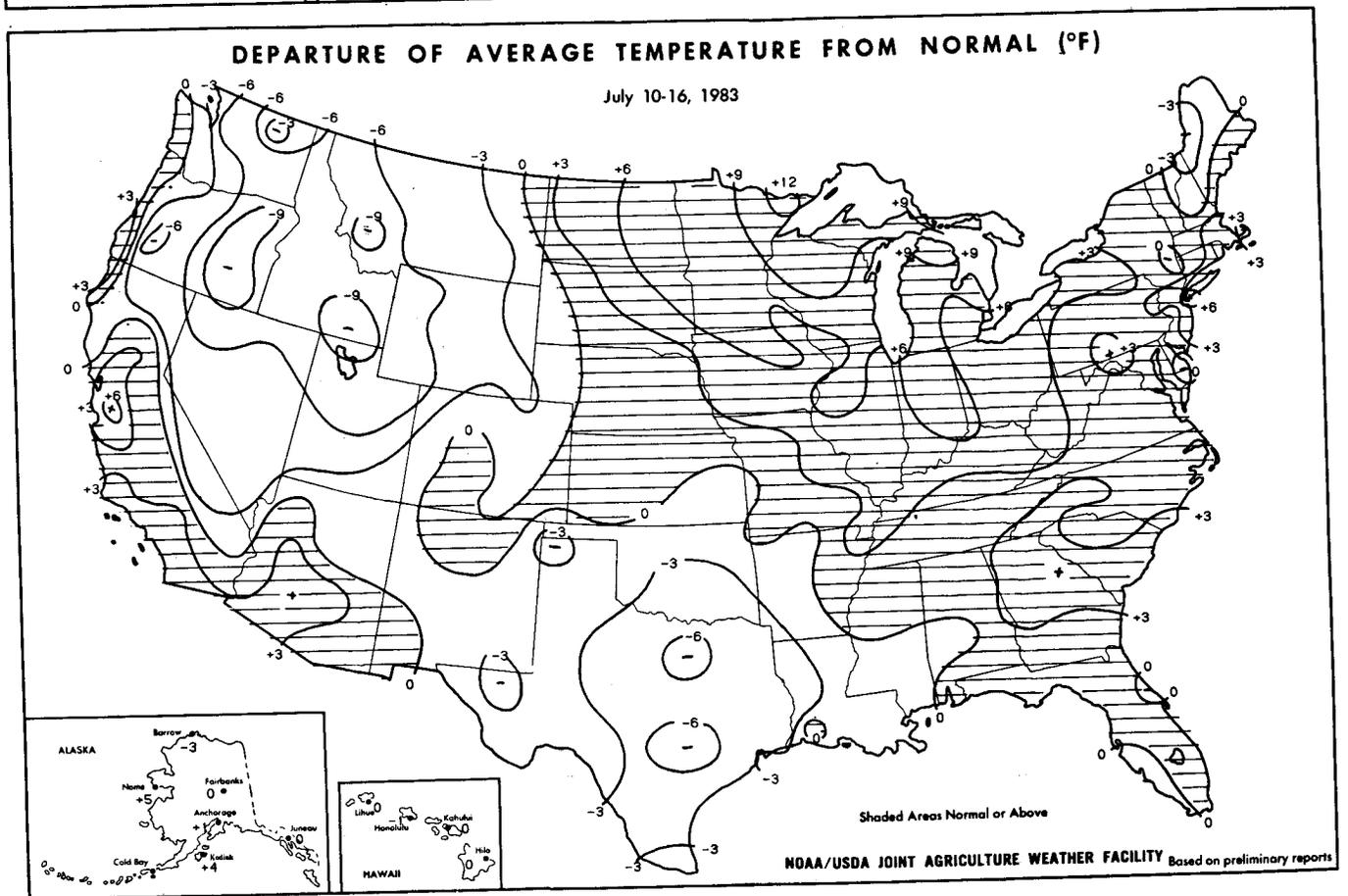
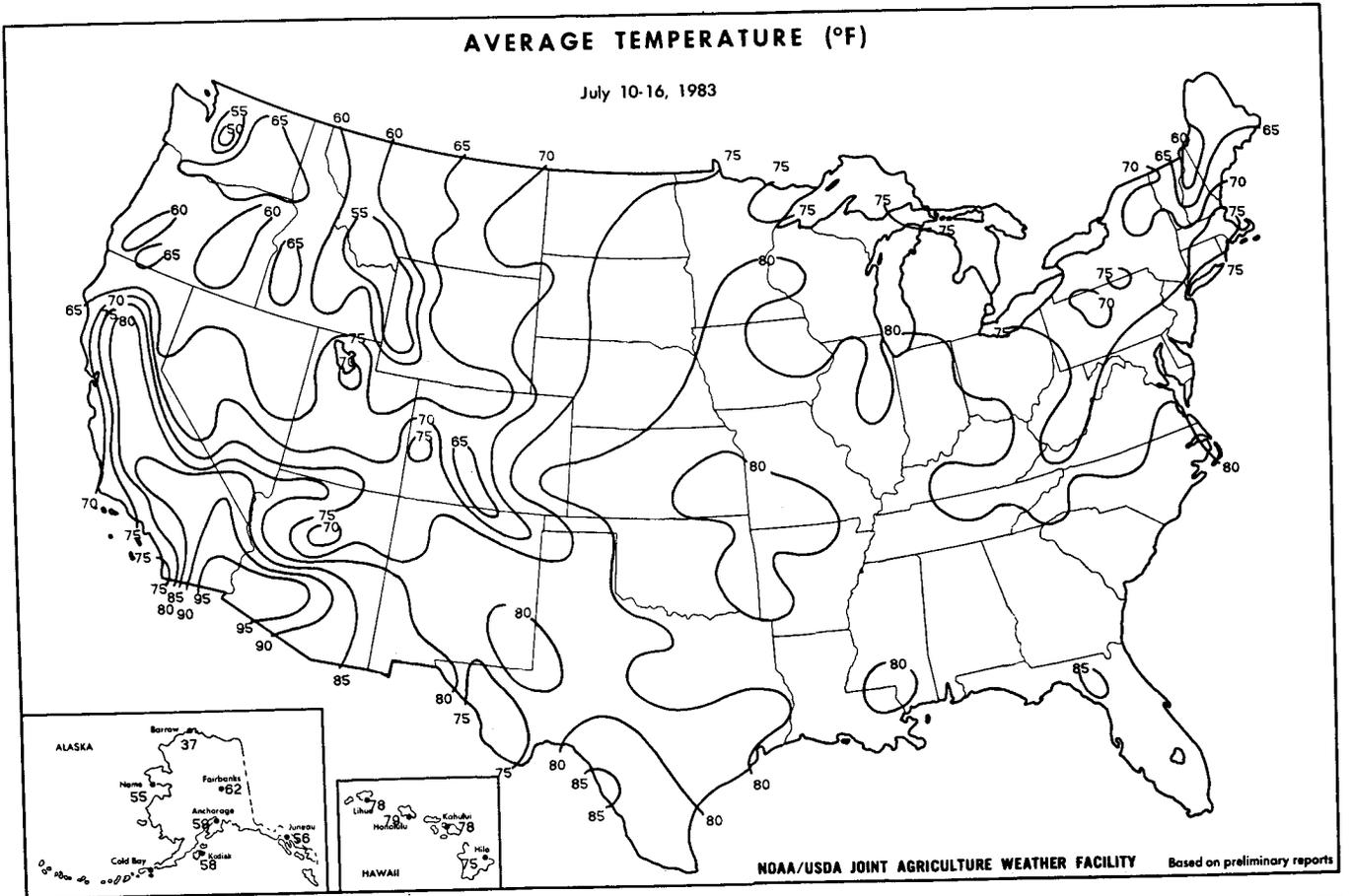
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Weather Data for the Week Ending July 16, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAY 29	PCT. NORMAL SINCE MAY 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	93	69	94	63	81	1	.3	-1.0	.2	3.6	54	37.9	115	92	46	7	0	2	0
MOBILE	91	70	93	65	81	-1	T	-1.8	T	9.0	96	47.7	131	87	46	7	0	0	0
MONTGOMERY	94	69	97	65	82	0	0	-1.2	0	7.2	113	44.8	154	92	44	7	0	0	0
AK ANCHORAGE	65	52	72	49	59	1	T	-.4	T	1.2	63	3.7	71	84	55	0	0	1	0
BARROW	40	33	45	31	37	-3	.1	-.2	T	.2	22	.5	23	96	78	0	0	1	2
FAIRBANKS	70	54	75	49	62	0	.4	0	.2	1.2	55	2.0	45	76	37	0	0	4	0
JUNEAU	64	48	78	44	56	0	.3	-.6	.3	3.2	60	17.0	76	95	60	0	0	2	0
KODIAK	63	53	70	51	58	4	.4	-.5	.3	10.7	188	48.7	154	93	75	0	0	2	0
NOME	63	48	69	39	55	5	.3	-.2	.1	1.2	48	3.0	48	86	51	0	0	2	0
AZ PHOENIX	109	85	111	83	97	4	0	-.1	0	.3	60	5.5	172	43	14	7	0	0	0
PRESCOTT	91	63	95	57	77	4	0	-.7	0	.2	10	5.1	70	63	21	5	0	0	0
TUCSON	102	74	104	71	88	1	.4	0	.3	.5	38	4.7	115	60	18	7	0	3	0
YUMA	111	84	115	82	98	4	0	-.2	0	0	0	0	100	47	12	7	0	0	0
AR FORT SMITH	89	71	92	68	80	-2	.1	-.6	T	6.1	107	19.0	81	90	51	4	0	2	0
LITTLE ROCK	91	72	94	69	82	0	T	-.7	T	3.4	63	25.3	88	82	50	4	0	1	0
CA BAKERSFIELD	102	69	109	63	85	1	0	0	0	0	0	0	100	48	16	7	0	0	0
EUREKA	66	54	69	49	60	4	T	0	T	1.6	200	36.7	162	94	71	0	0	0	0
FRESNO	102	65	110	57	83	2	0	0	0	0	0	0	100	16.3	243	57	15	7	0
LOS ANGELES	78	65	83	62	72	3	0	0	0	0	0	0	100	20.6	261	82	49	0	0
RED BLUFF	99	69	107	64	84	-1	0	0	0	-.2	40	29.3	234	46	16	7	0	0	0
SACRAMENTO	96	61	104	57	78	3	0	0	0	.4	400	23.7	230	68	22	6	0	0	0
SAN DIEGO	81	68	86	65	74	4	0	0	0	0	0	0	100	14.2	233	82	50	0	0
SAN FRANCISCO	82	58	93	52	69	7	0	0	0	0	0	0	25.4	213	76	36	2	0	0
CO DENVER	86	53	92	55	72	-1	.4	0	.3	3.8	141	13.7	149	77	27	1	0	2	0
GRAND JUNCTION	94	63	98	58	78	-1	0	0	0	1.9	317	7.1	173	53	16	5	0	0	0
PUEBLO	92	60	100	54	76	-1	.1	-.4	.1	2.6	118	8.1	133	70	25	5	0	2	0
CT BRIDGEPORT	85	67	94	54	76	2	.1	-.7	T	4.8	96	34.5	164	79	42	1	0	1	0
HARTFORD	88	61	96	52	75	2	0	-.7	T	4.5	85	33.4	145	70	36	4	0	0	0
DC WASHINGTON	92	72	96	64	82	3	0	-.8	0	8.5	152	28.9	142	72	36	5	0	0	0
FL APALACHICOLA	90	72	92	68	81	0	T	-1.6	T	9.0	102	36.1	140	88	54	3	0	1	0
DAYTONA BEACH	91	69	97	63	80	-1	T	-1.2	T	9.8	100	32.5	141	92	49	4	0	0	0
JACKSONVILLE	93	73	95	66	83	2	T	-1.5	T	9.7	107	35.0	131	91	51	7	0	0	0
KEY WEST	86	77	87	75	82	-2	.2	-.6	-2	9.6	128	39.2	232	89	65	0	0	0	0
MIAMI	90	78	92	76	84	2	T	-1.3	T	10.6	80	28.8	102	86	54	5	0	2	0
ORLANDO	91	73	93	72	82	0	.7	-1.1	-7	12.1	101	31.3	119	87	45	7	0	1	0
TALLAHASSEE	94	69	96	61	82	1	.8	-1.3	.8	11.1	94	45.8	130	99	46	7	0	1	1
TAMPA	90	74	92	71	82	0	0	-1.7	0	12.6	134	31.7	137	95	54	3	0	0	0
WEST PALM BEACH	89	75	90	72	82	0	.4	-1.0	-2	15.4	125	43.0	149	88	56	3	0	3	0
CA ATLANTA	94	71	96	66	83	4	T	-1.1	T	2.4	39	23.1	81	86	37	7	0	0	0
AUGUSTA	98	70	100	63	84	3	.4	-.7	.4	6.0	90	29.8	118	79	39	7	0	1	0
MACON	96	72	99	67	84	3	1.0	0	.6	8.0	123	32.7	121	89	43	7	0	2	1
SAVANNAH	95	75	99	70	85	4	T	-1.7	T	6.3	62	32.7	119	87	44	7	0	1	0
HI HILO	81	69	83	68	75	0	2.3	.4	.7	9.3	83	32.5	47	92	65	0	0	7	2
HONOLULU	85	73	87	71	79	-1	.1	-.1	T	.3	33	1.8	14	86	51	0	0	2	0
KAHULUI	85	71	88	68	78	0	T	-.1	T	.2	50	3.0	27	78	54	0	0	0	0
LIHUE	82	73	83	72	78	0	.8	.3	.3	2.0	71	6.8	29	80	59	0	0	6	0
ID BOISE	84	51	98	43	67	-7	.2	-.1	-2	1.4	117	11.5	155	80	21	2	0	1	0
LEWISTON	80	56	92	48	68	-6	.2	-.1	-2	1.9	100	8.1	113	76	30	1	0	2	0
POCATELLO	79	46	90	38	62	-9	.1	0	.1	2.1	131	9.6	141	84	30	1	0	2	0
IL CHICAGO	90	65	95	56	78	5	0	-.8	0	7.2	114	26.6	142	93	50	4	0	0	0
MOLINE	92	68	95	63	80	5	.2	-.9	.2	8.2	114	19.8	95	90	48	6	0	1	0
PEORIA	91	70	93	65	81	6	0	0	0	5.4	83	23.3	117	86	46	7	0	0	0
QUINCY	93	71	95	67	82	5	T	-1.0	T	1.4	22	15.7	76	81	42	7	0	1	0
ROCKFORD	91	69	94	63	80	7	0	0	0	4.5	60	17.7	83	92	49	5	0	0	0
SPRINGFIELD	93	70	95	64	81	4	T	-.8	T	3.1	53	17.6	91	87	47	7	0	0	0
IN EVANSVILLE	95	68	96	61	82	3	0	-.9	0	5.4	92	31.6	124	90	37	7	0	0	0
FORT WAYNE	92	67	95	60	80	6	0	-.8	0	4.3	74	16.6	83	80	37	6	0	0	0
INDIANAPOLIS	92	71	94	68	82	6	T	-1.0	T	6.0	91	20.1	89	87	45	6	0	0	0
IA DES MOINES	91	70	95	61	80	8	0	-.8	0	3.6	60	17.3	86	82	43	5	0	0	0
SIoux CITY	92	70	96	66	81	5	T	-.7	T	5.4	87	19.9	113	78	42	6	0	0	0
WATERLOO	90	67	96	57	78	2	T	-.8	T	4.6	75	17.2	117	73	41	4	0	1	0
KS CONCORDIA	91	67	94	60	79	6	T	-1.1	T	7.5	101	21.3	113	85	44	6	0	1	0
DODGE CITY	92	68	97	64	80	1	0	-.8	0	3.7	56	14.4	96	80	40	4	0	0	0
GOODLAND	95	70	98	63	82	2	0	-.7	0	5.6	112	15.7	130	67	30	7	0	0	0
TOPEKA	92	63	101	59	78	2	.3	-.3	.2	3.0	68	10.4	104	81	28	6	0	3	0
WICHITA	90	69	94	64	79	1	0	-.9	0	6.6	86	23.6	128	84	50	3	0	0	0
WY BOWLING GREEN	91	67	94	61	79	1	0	-.8	T	11.2	172	26.1	165	87	45	5	0	0	0
LXINGTON	92	70	95	66	81	5	1.6	-.4	1.6	5.3	72	25.4	93	88	43	5	0	1	1
LOUISVILLE	92	72	94	66	82	4	T	-1.0	T	4.8	76	26.8	102	86	44	7	0	0	0
LA ALEXANDRIA	90	70	93	66	80	-3	.2	-1.0	.2	3.1	44	31.5	96	91	48	4	0	1	0
BATON ROUGE	91	72	91	70	81	-1	0	-1.7	0	11.5	164	46.5	150	89	46	6	0	0	0
LAKE CHARLES	89	74	93	73	82														

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	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAY 29	PCT. NORMAL SINCE MAY 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	88	72	93	68	80	-3	.4	-.4	.4	8.0	136	32.0	121	92	60	3	0	2	0
ME CARIBOU	73	53	80	46	63	-2	2.1	1.1	1.6	5.6	102	21.6	124	93	50	0	0	4	1
ME PORTLAND	80	57	87	48	69	1	.1	-.6	.1	5.2	104	35.0	156	88	45	0	0	1	0
MD BALTIMORE	91	66	98	59	79	2	0	-.8	0	7.0	119	32.2	149	80	33	0	0	0	0
MD SALISBURY	89	64	98	54	76	0	0	-.9	0	5.4	90	27.4	118	98	40	4	0	0	0
MA BOSTON	88	69	99	60	78	5	T	-.6	T	2.0	44	30.5	136	76	40	3	0	0	0
MA CHATHAM	79	61	87	60	70	2	T	-.6	T	3.9	89	34.7	145	86	56	0	0	1	0
MI ALPENA	93	59	102	45	76	10	0	-.7	0	3.4	65	18.9	124	91	34	5	0	0	0
MI DETROIT	89	62	94	56	76	4	T	-.7	T	5.9	111	18.7	108	84	41	4	0	0	0
MI FLINT	88	61	92	49	75	5	0	-.6	0	4.3	86	15.9	97	92	44	3	0	0	0
MI GRAND RAPIDS	90	63	93	54	77	6	T	-.7	T	2.7	46	17.6	97	91	42	5	0	0	0
MI HOUGHTON LAKE	87	62	92	48	75	8	.4	-.3	.4	2.7	54	14.1	99	85	44	3	0	1	0
MI LANSING	89	62	94	54	76	4	.1	-.5	.1	4.8	92	17.5	105	89	41	4	0	1	0
MI MARQUETTE	90	61	95	47	75	10	T	-.7	T	6.3	105	22.9	117	90	40	4	0	2	0
MI MUSKOGON	87	65	89	55	76	6	T	-.5	T	2.8	68	13.6	83	89	48	0	0	0	0
MI SAULT STE. MARIE	87	57	92	46	72	9	0	-.7	0	5.1	96	16.7	106	90	47	3	0	0	0
MN ALEXANDRIA	90	68	96	60	79	8	.2	-.4	.2	5.5	93	9.5	71	80	38	4	0	1	0
MN DULUTH	85	65	93	51	75	10	T	-.9	T	5.5	87	13.5	90	77	47	3	0	0	0
MN INT'L FALLS	88	65	96	58	76	10	.3	-.6	.3	6.1	100	9.9	78	91	48	4	0	2	0
MN MINNEAPOLIS	90	69	96	60	80	7	.3	-.5	.3	7.5	119	22.3	158	79	45	4	0	0	0
MN ROCHESTER	87	64	91	57	76	4	.3	-.5	.3	7.6	113	17.8	116	91	50	1	0	1	0
MS GREENWOOD	95	72	97	69	84	1	.1	-.1	.1	8.1	129	42.9	134	97	47	7	0	1	0
MS JACKSON	93	71	95	65	82	0	.9	-.2	.9	4.1	73	49.5	160	95	47	6	0	1	1
MS MERIDIAN	91	68	93	63	80	-1	.2	-.1	.2	8.1	123	46.5	147	100	55	7	0	1	0
MO CAPE GIRARDEAU	93	71	96	68	82	-1	.1	-.8	.1	3.3	55	26.9	105	93	45	7	0	1	0
MO COLUMBIA	90	69	93	66	80	2	T	-.8	T	4.2	69	21.6	107	94	50	5	0	1	0
MO KANSAS CITY	92	70	95	64	81	2	T	-.1	T	5.1	69	20.7	105	89	46	6	0	1	0
MO SAINT LOUIS	94	75	97	68	84	5	0	-.8	0	4.6	74	23.3	111	90	49	5	0	0	0
MO SPRINGFIELD	90	68	92	66	79	1	0	-.9	0	6.7	94	24.7	111	90	49	5	0	0	0
MT BILLINGS	83	54	102	46	68	-4	.4	-.2	.3	1.5	52	5.5	59	77	23	3	0	2	1
MT GLASGOW	81	55	96	48	68	-2	1.3	1.0	1.3	2.4	67	4.9	67	81	36	3	0	2	1
MT GREAT FALLS	75	52	86	46	64	-6	1.9	1.7	1.8	6.0	162	9.6	97	74	40	0	0	2	1
MT HAVRE	75	53	88	49	64	-5	2.5	2.2	2.4	5.0	161	9.5	128	86	40	0	0	3	1
MT HELENA	74	49	87	44	62	-6	1.2	1.0	1.1	5.0	179	7.7	115	77	35	0	0	5	0
MT KALISPELL	68	50	80	42	59	-6	1.1	-.9	.4	4.8	160	11.4	127	95	52	0	0	1	0
MT MILES CITY	88	56	108	47	72	-3	.1	-.2	.1	1.9	48	4.4	49	72	21	3	0	1	1
MT MISSOULA	72	47	85	42	60	-8	1.1	-.9	1.0	4.0	148	10.1	131	93	44	0	0	3	1
NE GRAND ISLAND	92	66	101	60	79	2	.3	-.3	.3	6.8	117	17.1	120	76	35	5	0	1	0
NE LINCOLN	91	70	97	63	80	3	0	-.7	0	7.7	128	19.2	126	82	42	5	0	0	0
NE NORFOLK	89	67	96	55	78	2	.4	-.3	.4	7.6	117	18.1	121	76	41	4	0	1	0
NE NORTH PLATTE	88	62	94	54	75	1	1.1	-.4	1.1	4.4	76	11.7	93	77	38	4	0	3	1
NE OMAHA	89	70	95	67	80	4	T	-.8	T	5.0	77	19.4	117	76	46	3	0	0	0
NE SCOTTSSBLUFF	88	57	99	50	73	-1	.3	-.2	.3	2.4	52	10.9	110	79	29	3	0	1	0
NE VALENTINE	88	64	98	54	76	1	3.1	-.2	3.1	9.7	211	17.4	161	70	34	4	0	1	1
NV ELY	84	42	93	30	63	-5	0	-.1	0	2.3	192	8.6	162	63	15	3	1	0	0
NV LAS VEGAS	102	74	109	66	88	-2	0	-.1	0	0	0	2.4	114	19	7	0	0	0	0
NV RENO	90	44	100	37	67	-3	0	-.1	0	.5	71	6.7	156	64	12	4	0	0	0
NV WINNEMUCCA	87	43	100	29	65	-7	T	0	T	1.2	109	6.0	118	52	11	2	1	2	0
NH CONCORD	84	53	92	42	69	-1	.1	-.6	T	5.4	113	28.3	153	93	38	2	0	0	0
NJ ATLANTIC CITY	93	63	100	54	78	4	0	-.9	0	3.8	76	27.1	121	82	29	5	0	2	0
NM ALBUQUERQUE	94	63	98	60	79	0	T	-.3	T	1.3	108	4.0	121	61	19	6	0	0	0
NM CLOVIS	89	63	92	59	76	-1	.3	-.4	.3	2.7	61	5.8	67	77	30	4	0	2	0
NM ROSWELL	93	68	99	66	81	-1	.3	0	.2	1.2	71	3.2	86	56	25	6	0	3	0
NY ALBANY	85	58	92	48	72	0	0	-.7	0	2.8	53	27.5	150	92	47	2	0	0	0
NY BINGHAMTON	86	61	96	51	73	4	.1	-.7	.1	5.1	88	23.8	124	69	35	3	0	1	0
NY BUFFALO	85	64	90	52	75	3	0	-.6	0	3.7	86	15.0	81	80	41	1	0	0	0
NY NEW YORK	89	72	97	63	81	4	.1	-.7	.1	3.5	66	32.9	148	70	34	4	0	1	0
NY ROCHESTER	88	61	96	50	74	3	0	-.5	0	3.0	70	14.6	88	84	35	4	0	0	0
NY SYRACUSE	85	59	93	47	72	1	0	-.8	0	2.6	44	16.8	82	85	41	3	0	0	0
NC ASHEVILLE	89	63	92	59	76	3	0	-.1	0	4.5	64	28.6	109	100	46	4	0	0	0
NC CHARLOTTE	94	71	99	66	83	4	0	-.9	0	3.8	64	22.7	94	84	37	6	0	0	0
NC GREENSBORO	90	69	95	64	79	2	0	-.1	0	7.2	109	26.7	114	83	44	4	0	0	0
NC HATTERAS	87	68	94	58	78	-1	0	-.1	0	5.2	70	36.4	137	91	51	2	0	0	0
NC NEW BERN	90	71	98	65	81	2	0	-.5	0	7.2	79	33.2	122	89	47	4	0	0	0
NC RALEIGH	91	68	98	62	79	1	0	-.1	0	3.4	53	28.4	123	89	44	5	0	0	0
NC WILMINGTON	91	74	98	69	83	2	.5	-.1	.4	9.8	99	34.5	125	87	52	5	0	2	0
ND BISMARCK	89	57	100	48	73	3	T	-.5	T	3.8	86	8.1	83	80	28	3	0	0	0
ND FARCO	90	65	98	55	78	7	.3	-.5	.2	4.4	85	9.5	88	83	41	5	0	2	0
ND GRAND FORKS	89	63	95	56	76	7	.2	-.5	.2	5.5	120	9.9	103	90	47	4	0	1	0
ND WILLISTON	89	58	107	52	73	3	.6	-.2	.5	2.4	62	5.7	70	78	30	3	0	2	1
OH AKRON-CANTON	89	64	96	55	76	5	0	-.9	0	2.9	51	19.1	93	83	38	4	0	0	0
OH CINCINNATI	92	69	94	67	81	5	0	-.1	0	3.2	48	21.6	89	88	45	5	0	0	0
OH CLEVELAND	88	63	93	53	75	4	0	-.8	0	6.0	105	19.4	97	86	42	4	0	0	0
OH COLUMBUS	90	65	94	57	78	4	0	-.9	0	5.7	88	19.4	89	88	38	4	0	0	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending July 16, 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	
DAYTON	90	66	93	62	78	3	0	.8	0	6.5	107	20.2	96	76	39	5	0	0	0	
TOLEDO	89	64	94	57	77	5	0	.8	0	5.2	91	16.3	93	85	42	4	0	0	0	
YOUNGSTOWN	88	60	98	45	74	4	0	.9	0	6.2	102	19.9	95	87	39	4	0	0	0	
OK OKLAHOMA CITY	89	68	93	65	79	-4	0	.7	0	4.6	74	19.4	104	88	48	4	0	0	0	
TULSA	93	73	96	65	83	0	.5	.3	0	2.5	35	20.0	92	91	47	6	0	1	1	
OR ASTORIA	66	56	70	53	61	1	2.6	2.4	1.6	8.5	250	46.9	134	96	69	0	0	4	2	
BURNS	76	42	88	35	59	-10	0	.1	0	1.8	150	10.6	177	82	30	0	0	0	0	
MEDFORD	86	51	97	44	69	-4	0	.1	0	.9	100	12.6	121	83	28	3	0	0	0	
FENDLETON	79	54	92	46	67	-7	0	.1	0	1.6	178	8.2	126	72	27	1	0	0	0	
FORTLAND	74	58	85	53	66	-2	0	.1	0	3.2	178	27.2	139	86	52	0	0	4	0	
SALEM	76	52	87	46	64	-2	0	.1	0	3.7	231	33.1	153	86	46	0	0	2	0	
PA ALLENTOWN	89	64	97	54	77	3	0	.9	0	5.5	93	28.1	123	76	34	4	0	0	0	
ERIE	84	62	89	53	73	4	0	.7	0	4.7	80	17.2	87	81	45	0	0	0	0	
HARRISBURG	89	62	97	53	76	0	0	.8	0	3.3	56	26.7	128	77	31	4	0	0	0	
PHILADELPHIA	92	65	99	57	79	2	0	.8	0	2.6	41	30.4	139	77	31	5	0	0	0	
PITTSBURGH	86	61	92	50	74	2	0	.9	0	6.9	121	22.3	106	70	35	2	0	1	0	
SCRANTON	86	58	94	47	72	0	0	.7	0	5.6	100	23.8	131	78	39	3	0	1	0	
RI PROVIDENCE	87	66	97	57	76	4	0	.4	0	2.2	50	111	38.1	165	74	35	4	0	2	0
SC CHARLESTON	92	75	100	70	84	4	0	1.7	0	7.6	70	34.4	122	92	52	4	0	1	0	
COLUMBIA	98	71	103	62	84	3	0	1.1	0	3.4	45	26.2	99	92	38	7	0	1	0	
FLORENCE	93	72	101	67	83	2	1.3	0	1.3	9.3	116	33.4	141	99	52	6	0	1	1	
GREENVILLE	93	68	97	61	81	2	0	.8	0	5.2	68	29.9	101	95	45	6	0	1	0	
SD ABERDEEN	90	65	98	53	78	6	1.7	1.1	1.3	6.8	136	12.1	108	85	41	5	0	2	1	
HURON	89	65	95	54	77	3	1.4	.9	1.3	6.3	129	11.3	100	89	46	4	0	2	1	
RAPID CITY	88	55	98	47	72	-1	0	.5	0	3.1	62	7.6	69	76	25	3	0	1	0	
STIOUX FALLS	90	67	97	55	79	5	0	.5	0	7.0	125	16.9	120	86	42	4	0	1	0	
TN CHATTANOOGA	93	69	96	62	81	2	0	1.1	0	5.1	82	28.6	93	87	40	7	0	1	0	
KNOXVILLE	93	66	95	58	80	2	0	1.0	0	4.2	65	22.1	77	96	42	7	0	0	0	
MEMPHIS	93	76	95	74	84	2	0	.9	0	4.2	69	31.2	99	89	50	7	0	0	0	
NASHVILLE	91	68	94	62	80	1	0	.9	0	4.3	70	30.7	106	99	46	6	0	0	0	
TX ABILENE	90	70	93	67	80	-4	2.3	1.8	2.3	7.3	178	12.6	102	80	38	4	0	1	1	
AMARILLO	92	65	95	62	78	-1	0	.5	0	2.3	43	9.6	90	76	32	6	0	2	0	
AUSTIN	86	73	94	72	79	-6	2.7	2.2	1.1	6.8	148	23.1	126	89	57	2	0	4	3	
BEAUMONT	84	75	90	74	80	-3	5.8	4.6	3.7	14.8	211	40.6	154	99	76	1	0	3	3	
BROWNSVILLE	89	76	93	72	82	-2	5.6	5.2	2.5	8.5	224	13.4	125	91	61	4	0	4	4	
CORPUS CHRISTI	86	74	93	73	80	-5	8.5	8.1	2.9	11.2	238	21.1	150	91	68	1	0	6	5	
DEL RIO	95	74	98	70	84	-2	0	.4	0	1.4	47	5.4	60	78	34	7	0	0	0	
EL PASO	97	67	102	63	82	-1	0	.4	0	.2	13	3.1	107	56	19	7	0	0	0	
FORT WORTH	88	73	94	70	80	-6	0	.2	0	5.0	119	18.5	100	83	50	4	0	3	0	
GALVESTON	86	76	91	72	81	-2	5.5	4.7	2.4	10.0	172	22.4	115	88	65	2	0	6	3	
HOUSTON	84	72	93	71	78	-5	4.9	4.1	2.7	10.7	165	27.9	112	94	69	2	0	4	3	
LUBBOCK	91	66	94	63	78	-2	0	.2	0	4	2.2	50	7.8	80	83	35	5	0	2	0
MIDLAND	94	68	98	65	81	-1	0	.4	0	.5	19	2.6	37	79	27	7	0	0	0	
SAN ANGELO	91	68	93	62	79	-5	0	.2	0	4	5.2	186	9.9	104	85	37	5	0	2	0
SAN ANTONIO	86	72	93	71	79	-6	1.2	.8	0	3.7	82	15.1	99	87	58	2	0	4	0	
VICTORIA	85	73	93	71	79	-5	9.1	8.5	3.3	12.6	185	24.3	127	98	71	2	0	5	4	
WACO	91	73	96	70	82	-4	1.6	1.2	0	5.2	130	15.3	81	85	49	4	0	4	2	
WICHITA FALLS	93	69	97	64	81	-5	0	.5	0	5.6	124	15.5	99	89	42	5	0	1	0	
UT BLANDING	89	55	92	53	72	-2	0	.2	0	1.2	133	7.0	149	59	20	3	0	0	0	
CEDAR CITY	90	51	96	42	70	-4	0	.3	0	.5	45	7.4	140	44	12	3	0	0	0	
SALT LAKE CITY	85	56	101	48	71	-7	0	.1	0	1.8	129	12.4	138	73	22	2	0	1	0	
VT BURLINGTON	83	58	90	46	70	0	0	.6	0	3.4	61	23.1	139	83	40	1	0	2	0	
VA NORFOLK	90	70	99	60	80	2	0	1.1	0	4.5	70	27.0	117	82	37	4	0	1	0	
RICHMOND	91	66	96	58	79	1	0	1.2	0	5.6	86	24.9	114	92	38	5	0	0	0	
ROANOKE	92	64	96	57	78	2	0	.8	0	3.3	60	26.2	123	90	35	5	0	0	0	
WA COLVILLE	72	54	77	46	63	-5	0	.3	0	3.8	190	15.8	165	85	54	0	0	4	0	
QUILLAYUTE	65	53	72	50	59	0	8.1	7.6	5.3	14.2	302	68.5	128	98	70	0	0	6	3	
SEATTLE-TACOMA	69	56	76	53	62	-3	1.2	1.0	0	3.6	171	22.2	114	90	60	0	0	4	0	
SPOKANE	73	55	86	48	64	-6	1.0	.9	0	3.4	227	11.1	114	76	38	0	0	2	1	
YAKIMA	80	52	92	46	66	-4	0	0	0	.9	129	7.3	183	66	33	1	0	0	0	
WV BECKLEY	82	60	84	51	71	1	0	1.0	0	8.1	127	19.0	78	90	51	0	0	1	0	
CHARLESTON	92	65	96	56	79	4	0	1.2	0	3.9	63	20.6	88	93	41	5	0	1	0	
HUNTINGTON	90	67	93	58	78	3	0	1.1	0	4.6	74	20.6	88	89	42	5	0	0	0	
PARKERSBURG	89	66	91	59	78	3	0	1.1	0	3.0	41	21.6	86	82	36	5	0	0	0	
WI GREEN BAY	88	64	92	57	76	7	0	.8	0	2.6	49	12.4	84	91	46	3	0	0	0	
LA CROSSE	91	68	94	59	79	6	0	.2	0	3.3	51	12.9	77	95	44	5	0	1	1	
MADISON	90	65	92	55	77	6	0	.8	0	3.2	51	14.6	87	91	46	3	0	0	0	
MILWAUKEE	90	68	96	63	79	9	0	.8	0	2.7	47	19.8	119	81	46	4	0	0	0	
WAUSAU	90	67	93	58	78	9	0	.8	0	2.3	35	11.2	66	88	39	4	0	1	0	
WY CASPER	87	50	101	39	68	-3	0	.1	0	3.9	195	10.4	141	68	14	3	0	1	0	
CHEYENNE	80	51	88	45	65	-3	0	.8	0	4.2	131	13.3	162	92	36	0	0	2	1	
LANDER	84	50	96	39	67	-4	0	.1	0	1.5	71	10.3	114	59	19	3	0	1	0	
SHERIDAN	87	48	100	40	68	-2	0	.2	0	.6	19	4.1	41	71	20	3	0	1	0	
PR SAN JUAN	92	80	93	79	86	4	0	1.0	0	1	6.3	85	20.8	85	81	60	7	0	1	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

## National Agricultural Summary

July 11 to 17

**HIGHLIGHTS:** Hot, dry weather in many regions of the Nation caused stress to crops and livestock. With the warm, dry trend, days suitable for field activities ranged from 4 to 7. The only area of the Nation reporting some rain was the Pacific Northwest, where some crop harvest delays and hay damage were reported. Soil moisture in most areas was reported as short to adequate. The winter wheat harvest continued to gain momentum with ideal weather for harvesting reported in most regions. Combining was 72% complete, just slightly less than the average. Corn continued to make good progress, although moisture stress was reported in some areas; 10% of the acreage was silking. Soybean planting was virtually complete, with some late seeded beans rated poor to fair. Twenty-two percent of the fields were blooming. Sorghum planting was virtually complete. A few areas reported replanting of crops because of dryness. Harvest in Texas was interrupted by intermittent showers throughout the week. Cotton was rated in fair to good condition; 63% was squaring and 17% was setting bolls. Pastures and ranges continued mostly in fair to good condition, but a few areas needed rain. In some of these areas livestock were showing stress. Fire danger continued to increase in the West with several brush or grass fires reported. Texas livestock generally remained in good condition.

**SMALL GRAINS:** Harvesting of winter wheat continued to advance under almost ideal weather. Combining advanced to 72% in the 15 major producing States, 8 points ahead of last year, and only 3 points below average. Although harvest made good progress in most areas, it was still behind schedule in Nebraska and South Dakota. A few areas reported yield loss as maturity was pushed by the heat.

Spring wheat was 89% headed, still ahead of the 79% average. Progress ranged from 80% headed in Montana to 98% in South Dakota.

**CORN:** Corn continued in fair to good condition across the Nation, although some areas reported crop stress from a lack of moisture. Kentucky reported rolling and twisting of stalks from too much heat and too little moisture. In the 17 major producing States, 10% of the acreage was silking. Reports of corn borer infestations were reported in Michigan, Nebraska, and South Dakota. Virginia indicated that the condition of corn was good, but declining due to lack of moisture.

**SOYBEANS:** Planting of soybeans is virtually complete in the 18 major producing States, with 22% of the acreage in bloom, 4 points behind last year, and 8 points less than the average. Kentucky indicated that some double-crop beans were in dry soil, while other areas reported late-seeded soybeans in poor to fair condition. Florida indicated some loss of blooms due to dryness.

**SORGHUM:** In the 7 major producing States, sorghum was 29% headed, slightly behind last year. Replanting in Oklahoma was reported due to dry conditions. Harvest in the Coast Valley area of Texas was interrupted briefly by showers.

**COTTON:** In the 14 major producing States, 63% of the cotton acreage was squaring and 17% was setting bolls, compared to the averages of 78% and 32%. The crop continued in mostly fair to good condition. Crop development is behind previous years in Texas and harvest continued in the Rio Grande Valley.

**OTHER CROPS:** Topping and suckering were active in the southeastern tobacco areas. Kentucky reported tobacco growth slower than normal due to dryness. Harvest gained momentum in many areas with Georgia reporting 30% cut, compared with the 38% average.

In the 5 major producing rice areas, 17% of the rice had headed, compared to the 28% average. In Texas 72% was headed, while in Louisiana only 33% was headed.

Harvest of alfalfa, grass seed, and cherries was delayed by rain in Oregon and Washington.

**FRUITS AND NUTS:** Peach picking continued in full swing in most areas. Harvest in Georgia again was well ahead of normal, reaching 83% completion. Apples and pears appear to be sizing well, although reported only in fair condition in many areas. Cherry harvest in Michigan is making good progress, but behind normal. In Florida, citrus groves were hot and dry. Many growers started irrigation systems to avoid wilt of lush new growth. Harvest of the new fruit crop was progressing well, while old fruit crop harvest virtually complete. Cantaloupe, watermelon, and grapes were harvested in Arizona, although harvest is nearing completion. Very little activity took place in the citrus industry. Citrus groves continued in good condition. Growers in California harvested apricots, avocados, Desert area table grapes, stonefruit, grapefruit, and Valencia oranges.

**VEGETABLES:** Summer vegetable harvest continued to gain momentum in northern producing areas. Vegetable harvest in California was nearing completion in the Desert area, while picking up in other areas. Sweet corn, summer potatoes, market and processing tomatoes harvest were active in the San Joaquin Valley. In the Sacramento Valley, crops are developing well, but harvest is still off by several weeks. Harvest in the Rio Grande Valley continued to decline. Irrigation and grove care continued in citrus groves. In the Trans-Pecos area, cabbage harvest is nearing completion.

**PASTURES AND LIVESTOCK:** Most regions reported pasture and ranges in fair to good condition. In California, lower elevation ranges and pastures are extremely dry. Fire danger continued to increase with several brush and grass fires reported. Higher elevation pastures, however, are providing excellent grazing. Some scattered showers in Texas gave relief to pastures. Livestock continued to do well, in most areas, although some heat stress to livestock was reported in other regions of the Nation.

**CROP PROGRESS**

FOR WEEK ENDING JULY 17, 1983

	WINTER WHEAT % HARVESTED		
	1983	1982	AVG.
CALIF	95	82	90
COLO	14	9	40
IDAHO	2	0	0
ILL	96	92	93
IND	80	65	85
KANS	96	80	95
MO	94	82	83
MONT	0	0	0
NEBR	50	35	75
OHIO	75	65	55
OKLA	97	95	99
OREG	4	4	3
S DAK	1	4	37
TEX	99	97	99
WASH	3	2	2
15 STATES	72	64	75

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

	SOYBEANS % BLOOMING		
	1983	1982	AVG.
ALA	23	15	26
ARK	3	9	14
GA	19	30	27
ILL	47	56	48
IND	25	45	35
IOWA	35	13	40
KANS	10	5	20
KY	6	31	15
LA	17	28	32
MICH	10	20	15
MINN	22	17	37
MISS	6	25	30
MO	19	22	22
NEBR	25	10	35
N C	6	12	12
OHIO	20	45	25
S C	3	8	9
TENN	6	19	24

18 STATES 22 26 30

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

	CORN % SILKING		
	1983	1982	AVG.
COLO	1	1	2
GA	95	100	100
ILL	20	65	49
IND	10	40	25
IOWA	3	6	20
KANS	5	20	30
KY	16	66	48
MICH	1	11	8
MINN	1	0	6
MO	10	36	37
NEBR	5	3	30
N C	74	91	84
OHIO	5	45	30
PA	0	0	0
S DAK	0	1	7
VA	55	64	51
WIS	0	0	9
17 STATES	10	26	27

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

	COTTON % SQUARING		
	1983	1982	AVG.
ALA	75	96	90
ARIZ	98	97	98
ARK	91	100	100
CALIF	80	80	92
GA	95	97	96
LA	69	96	92
MISS	92	99	96
MO	58	99	84
N MEX	79	90	93
N C	60	95	86
OKLA	15	3	30
S C	92	100	94
TENN	70	96	85
TEX	49	59	69
14 STATES	63	72	78

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

	COTTON % SETTING BOLLS		
	1983	1982	AVG.
ALA	14	39	45
ARIZ	80	83	81
ARK	16	65	46
CALIF	25	30	28
GA	57	73	84
LA	13	47	50
MISS	11	47	36
MO	40	66	49
N MEX	5	35	32
N C	11	41	45
OKLA	0	0	5
S C	75	88	74
TENN	2	23	23
TEX	10	15	24
14 STATES	17	29	32

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

	SORGHUM % HEADED		
	1983	1982	AVG.
COLO	0	2	NA
KANS	0	1	5
MO	12	28	23
NEBR	0	0	5
OKLA	10	10	15
S DAK	0	0	1
TEX	66	71	68
7 STATES	29	32	NA
EXCL. STATES WITH NA	30	34	34

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

	RICE % HEADED		
	1983	1982	AVG.
ARK	0	6	5
CALIF	0	0	4
LA	33	50	58
MISS	2	12	10
TEX	72	98	93
5 STATES	17	27	28

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

	SPRING WHEAT % HEADED		
	1983	1982	AVG.
IDAHO	94	94	93
MINN	96	84	90
MONT	80	30	55
N D	87	66	77
S DAK	98	100	100
5 STATES	89	69	79

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

**July Crop Production Highlights**

**WINTER WHEAT** production forecast at 1.94 billion bushels, down 8 percent from last year, 3 percent above June 1, 1983. The 90 percent confidence interval for this production forecast is 1.83 to 2.05 billion bushels.

**BARLEY** production forecast at record high 560 million bushels, up 7 percent from the previous record high set in 1982.

**OATS** production is forecast at 519 million bushels, 16 percent less than last year but 2 percent above 1981.

**APPLE** production forecast at 8.40 billion pounds, 4 percent above last year, 8 percent above 1981.

**PEACH** production estimated at 2.13 billion pounds, down 1 percent from June 1 and 7 percent from 1982.

**PEAR** production forecast at 848 thousand tons, 5 percent more than 1982, 6 percent below 1981.

**ORANGE** production forecast, 219 million boxes, down 1 percent from last month, 23 percent higher than last season. Harvest is 90 percent complete.

**POTATO** area for harvest in 1983 for all seasonal groups estimated at 1.23 million acres, down 3 percent from last year, fractionally below 1981. Fall potatoes will be harvested from 1.05 million acres, a drop of 3 percent from 1982, virtually the same as 1981.

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall 0.00 to 1.50 in. Air temperatures above normal.

Soil moisture short to adequate. Fieldwork: 6.2 days. Soybeans blooming 23%, 1982 15%, average 26%. Corn silked 79%, 1982 94%, average 87%. Corn dented 28%, 1982 38%, average 44%. Cotton squaring 75%, 1982 96%, average 90%. Cotton setting bolls 14%, 1982 39%, average 45%. Peanuts pegging 64%, 1982 75%, average 66%. Activities: Planting sorghum and soybeans; cultivating field crops; controlling pests on fruits, vegetables, and crops; harvesting vegetables, peaches and summer potatoes; and routine care of livestock and poultry. Conditions: Peanuts good; corn, cotton, soybeans, sorghum, pasture and livestock fair to good.

**ALASKA:** Clouds and rain across northern valleys with mixture sun and clouds across southern valleys. Temperatures near normal. Precipitation heavy across northern areas and light across southern areas. Seasonal rainfall remained 1.00 to 2.00 in. dryer than normal.

Cloudy skies, scattered showers prevailed throughout Railbelt allowing farmers 2 to 3 days suitable making hay and other fieldwork. Crop growth moderate to rapid. Hay harvesting ranged 70% to complete most areas. 1982 barley 80% headed, 10% dough stage compared last year's 60% headed. Potato heights ranged up to 24 in.: hilling virtually complete most areas. Harvest head lettuce underway. Soil moisture ranged short to surplus, most areas adequate.

**ARIZONA:** Strong Pacific low front resulted dry southwesterly winds. Thunderstorms activity confined mountains, southeast areas. Precipitation amounts generally less than 0.30 in. except White Mountains where approximately 1.00 in. received. Temperatures near to slightly above normal ranging from 4° above to 5° below.

Wheat, barley harvest mostly complete. Few growers had limited acreage harvest southeastern counties. Alfalfa haying activities seasonally active, farmers irrigating, cutting, baling fields as reached various stages maturity. Corn, sorghum made average progress, some below average corn development Santa Cruz county. Stands established most areas, insecticides, pesticides applied as needed. Safflower harvest winding down Yuma County. Cotton development ranged from average to below average. Progress cotton squaring, boll setting very close past historic trends. Approximately 98% cotton squaring, slightly ahead 97% squaring this time last year, same as the average 98%. At same time approximately 80% cotton setting bolls, slightly behind 83% last year, average 81%. Insect activity somewhat increasing. Growers applying insecticides, herbicides where needed. Most vegetable harvest activity centered Maricopa County. Cantaloups, watermelons, grapes picked although harvest winding down. Honeydew melons picked limited scale Parker-Poston area. Dry onions harvested peak capacity Cochise County. Chipper potato harvest complete Statewide. Very little activity took place citrus industry. Few growers Maricopa County picking grapefruit, Valencia oranges on very limited scale. Citrus groves remained good condition.

**ARKANSAS:** Cooler than normal west. Warmer than normal east. Highest 97°, lowest 61°. Scattered showers with heavier rainfall south-east. Most rainfall 2.16 in. least 0.00 in.

Fieldwork averaged 6.6 days. Soil moisture short. Crops need rain. Cotton condition fair to good; squaring 91%, 100% 1982 and average; setting bolls 16%, 65% 1982, 46% average. Rice crop good condition, less than 5% headed, 6% 1982, 5% average. Soybeans fair to good; emerged 97%, 97% 1982, and average; blooming 3%, 9% 1982, 14% average. Corn and sorghum good. Pastures need rain. Cattle gaining slow due to hot weather.

**CALIFORNIA:** Another dry week with variable temperatures. The Central Coast was 6° above normal and the South Coast was 7° above normal. Conversely, the Sierra Nevada was 5° below normal. Temperatures were warm early in the week, cooling greatly late in the week. Excellent warm weather benefited all crops.

Cotton 80% squaring. Crop 1 to 2 weeks behind normal. Harvest of small grains nearly complete. Wheat harvest 95%. Rice progress normal. Herbicide applications continue. Field corn beginning to tassel. Safflower beginning to dry. Weeding and thinning of sugarbeet fields is active. Alfalfa cut and baled under ideal conditions. Apricots, avocados, Desert area table grapes, stonefruits, grapefruit, Valencia oranges harvested. Insect control on almonds, walnuts. Artichokes light supply Central Coast. Green bean harvest active coastal interior valley. Harvest broccoli, cauliflower continued active Central Coast. Cantaloup harvest decreasing Desert, active Palo Verde Valley. Initial harvest in San Joaquin. Melons Kern District continue with good quality. Carrot harvest complete Desert moderate harvest San Joaquin Salinas Valleys. Sweet corn increasing San Joaquin. Lettuce remained active. Dry market onions continued active. Harvest spring potatoes slowing Kern County. Fall potatoes growing rapidly Tulare. Summer potato harvest approaching San Joaquin, defoliation in progress. Strawberry harvest active. Harvest market tomatoes active South Coast, Southern San Joaquin Valley. Harvest processing tomatoes increasing San Joaquin Valley, Desert winding down. Crop developing well Sacramento Valley, harvest several weeks off. Lower elevation ranges, pastures extremely dry. Fire danger continued increase with several brush, grass fires reported. Higher elevation pastures providing excellent grazing. Stock water supplies adequate.

**COLORADO:** Average precipitation was 0.50 in. South Platte Basin; 0.10 in. or less for rest of State. Temperatures for week within 2° of normal for most State.

Winter wheat in very good condition; 91% turning color, 92% last year, 94% average; 42% ripe, 47% last year, 72% average; 14% harvested, 9% last year, 40% average. Corn in good to very good condition; height 32 in., 34 in. last year, 39 in. average. Sorghum in good condition; 97% emerged, 88% last year, 93% average. Barley, oats, and spring wheat in good to excellent condition. Barley 78% headed, 84% last year; 34% turning color, 45% last year; 9% ripe, 8% last year. Statewide, 6.0 days suitable for fieldwork. Topsoil moisture short to adequate with subsoil mostly adequate. Range and pasture conditions very good.

FLORIDA: Plentiful sunshine, warm temperatures. Very little precipitation along with light and variable winds under high pressure.

Soil moisture adequate south, short to adequate central, west; mostly short, north. Corn good condition, early corn maturing, late corn silking. Soybeans rapid growth, some early beans losing blooms caused by dry conditions. Peanuts, cotton good condition. Sugarcane rapid growth. Tobacco harvest active, nearing completion some early fields. Haymaking active. Pasture remains mostly good to excellent. A few north central Peninsula, Panhandle areas are short of rainfall. Cattle mostly good condition. Conditions hot, dry in citrus groves. Many growers started irrigation systems to avoid wilt of flush new growth. New crop fruit making good progress. Harvest of old crop fruit virtually complete. Season essentially over for most spring vegetable crops. Limited supplies watermelons, sweet corn remain for harvest. Land preparation underway for fall vegetables.

GEORGIA: Hot, humid and hazy Statewide with isolated afternoon and evening thundershowers mostly south. Rainfall totaled 0.10 to 0.50 in. Temperatures mostly 1 to 2° above normal. Weather continued hot, hazy and humid over the 16th and 17th. Average temperatures 1 to 2° above normal. Rainfall averaged less than 0.25 in. north to 0.50 in. south.

Soil moisture variable: 33% very short, 56% short, 11% adequate. Average days suitable for fieldwork 5.9. Haying, spraying for weeds, insects and disease are main activities. Corn suffering from dry soils and high temperatures: 95% silked, 100% last year and average: dough 73%, 85% last year and average: dent 35%, 64% last year, 65% average: mature 13%, 30% last year, 35% average: condition 14% poor, 54% fair, 27% good, 3% excellent. Cotton 95% squaring, 97% last year, 96% average: 57% setting bolls, 73% last year, 84% average: condition 10% poor, 45% fair, 43% good. Peanuts 96% blooming, 97% last year and average; 83% pegging, 90% last year and average: condition 3% poor, 33% fair, 57% good, 5% excellent; applying fungicides and herbicides. Soybeans planted 98%, 97% last year and average: 19% blooming, 30% last year, 27% average: 4% setting pods, 7% last year, 6% average: condition 6% poor, 42% fair, 50% good; postemerge herbicides applied. Tobacco harvested 30%, 51% last year, 38% average: condition 3% poor, 52% fair, 45% good. Grain sorghum 94% planted, 92% last year and average: condition 8% poor, 59% fair, 30% good, 3% excellent. Wheat harvest almost complete. Watermelons 43% harvested, 78% last year, 71% average: condition 14% poor, 47% fair, 37% good. Peaches 83% picked, 81% last year, 76% average: condition 19% very poor, 17% poor, 34% fair, 30% good. Apple condition 11% very poor, 39% poor, 33% fair, 17% good. Hay condition 12% poor, 38% fair, 47% good. Pastures 13% poor, 46% fair, 39% good.

HAWAII: Island weather was generally favorable for crop growth during the week. Most areas received light showers which provided crops with much needed moisture. In other growing areas, irrigation was necessary to insure crop progress. Supplies of most vegetables remain moderate to heavy with production running ahead of year ago levels. Watermelon production is in full swing while papaya supplies will decrease slightly.

IDAHO: The entire State had below normal temperatures and above normal precipitation last week. Temperatures ranged from 4° below

normal at Moscow and Porthill to 10° below normal at Burley. It was extremely wet across the State with some stations receiving over 10 times their normal precipitation. The greatest amounts fell in the north and east with 1.97 in. at Rexburg, the highest for the State. Departures ranged from 0.07 in. above normal at Caldwell to 1.49 in. above normal at Salmon.

Farmers reported 5.4 days suitable for fieldwork. Almost 62% of the winter wheat crop had changed color compared to 44% last year. Winter wheat harvest was just underway with 2% of the crop in. Some winter barley fields had been harvested as 21% of the barley acreage had changed color versus 1982's 16%. Nearly 15% of the spring wheat had turned color compared with 19% last year. The potato crop had closed rows on 55% of the acres versus 56% the previous year. The first cutting of alfalfa was 87% complete slightly ahead of last year's 85%. The grass seed and mint harvests were starting up while the cherry harvest was being wrapped up. Ranges and pastures remained in good condition. Livestock were doing well.

ILLINOIS: Temperatures 6 to 12° above normal north, 2 to 8° above normal central, south. Precipitation 0.00 to 0.36 in.

Soil moisture 75% short, 25% adequate. Days suitable fieldwork: 7.0. Corn silking 20%, 1982 65%, average 49%; condition 10% excellent, 66% good, 24% fair. Soybeans 47% blooming, 1982 56%, average 48%; 8% setting pods, 1982 19%, average 12%; condition 7% excellent, 62% good, 31% fair. Winter wheat 96% harvested, 1982 92%, average 93%. Oats 80% turning yellow, 1982 86%, average 85%; 40% ripe, 1982 41%, average 49%; 20% harvested, 1982 23%, average 24%; condition 4% excellent, 69% good, 26% fair, 1% poor. Alfalfa hay 2nd crop 67% cut, 1982 56%, average 63%; condition 3% excellent, 61% good, 34% fair, 2% poor. Pasture condition 2% excellent, 45% good, 46% fair, 7% poor. Livestock condition fair.

INDIANA: Hot and dry week with only scattered thunderstorms on the weekend. Temperatures averaged 6 to 8° above normal in the North and Central sections and 4 to 6° above in the south. Highs mostly in the lower 90's. Lows upper 60's and lower 70's. Isolated precipitation from 0.00 to 1.00 in. Average rain totals less than 0.20 in. except northeast where the average was 0.30 in. Growing degree days from 175 to 200 exceeding normal by 20 South and 50 North.

Fieldwork averaged 6.8 days. Topsoil moisture short, subsoil moisture short to adequate. Wheat 80% combined, 1982 65%, average 85%. Wheat 100% ripe, 1982 100%, average 100%. Oats 7% combined, 1982 10%, average 20%. Rye 50% combined, 1982 45%, average 55%. Corn 10% silked, 1982 40%, average 25%. Corn 50 in. tall, 1982 72 in., average 60 in. Soybeans 25% in bloom, 1982 45%, average 35%. Soybeans 14 in. tall, 1982 19 in., average 15 in. Alfalfa hay 60% cut twice, 1982 45%, average 60%. Pastures fair.

IOWA: A hot, humid, hazy week with only a few widely scattered showers. Temperatures averaged about 5° above normal. Days with temperatures 90° or higher averaged 3 in the northern districts to 6 or 7 in most southern localities. Most localities recorded their last measurable rain on July 3rd. Evaporation averaged about 0.33 in. per day.

Days suitable 7.0. Corn tasseled 8%; 16% last year; 42% normal. Corn silked 3%; 6% last year; 20% normal. Soybeans cultivated 1st

time 97%; 81% last year; normal. Soybeans bloomed 35%; 13% last year; 40% normal. Second crop alfalfa hay harvested 40%; 31% last year; 51% normal. First crop clover hay harvested 95%; 93% last year; 99% normal. Oats headed 98%; 100% last year; 100% normal. Oats turning color 60%; last year; normal. Oats harvested 5%; 5% last year; 31% normal. Winter wheat harvested 40%; 26% last year; 55% normal. Topsoil moisture 72% short; 27% adequate; 1% surplus. Subsoil moisture 7% short; 82% adequate; 11% surplus.

**KANSAS:** Precipitation averaged about 0.10 in. west central and southwest, 0.20 in. southeast, 0.40 in. northwest, little to no rain elsewhere. Temperatures averaged 78 to 83° - 1 to 2° above normal.

Wheat 96% harvested, 80% last year, 95% average. Corn 5% silking, 20% last year, 30% average; 0% dough, 4% last year, 5% average. Sorghum 99% planted, 95% last year, 100% average; 0% heading, 1% last year, 5% average. Soybeans 98% planted, 90% last year, 100% average; 10% blooming, 5% last year, 20% average; 2% podding, 1% last year, 4% average. Row crops good to excellent, except scattered southern counties where fair. Planting sorghum, soybeans behind wheat winding up. Alfalfa hay second cutting 70% complete, 65% last year, 85% average. Third cutting 5% complete, 5% last year, 15% average. Subsoil moisture generally adequate. Surface moisture adequate northwest, short to adequate west central, southwest, south central, short elsewhere. Pasture and range good to excellent. Days suitable for fieldwork: 6.5.

**KENTUCKY:** Hottest week of year with afternoon temperatures in 90's. Temperatures averaged 1 to 7° above normal. Precipitation non-existent most locations. Isolated thundershowers produced 1.00 to 2.00 in.

Hot, dry conditions caused stress to crops and livestock. Soil moisture 83% short, 17% adequate. All days suitable for fieldwork. Corn development later than usual with 16% silking compared with 66% last year and 48% average. Corn in many fields rolling, twisting from too much heat and too little moisture. Soybean planting nearly finished, some double crop plantings lying in dry dirt. Soybeans 6% blooming compared with 37% in 1982 and 15% average. Tobacco also behind normal growth with 2/3's under 2 ft. tall compared with 25% last year. Burley prospects are considered below average by 2 out of 3 reporters. Wheat harvest finished many areas. Pastures fair to good but have declined in quality.

**LOUISIANA:** Rainfall ranged from none to 2.62 in. Temperatures averaged 2° below normal to normal. High 99°, low 65°.

Soil moisture short to adequate. Days suitable 5.8. Corn silked 94%, 96% 1982, 96% average. Corn dough 61%, 92% 1982, 81% average. Corn mature 14%, 46% 1982, 39% average. Corn harvested 2%, 10% 1982, condition fair to good. Cotton squaring 69%, 96% 1982, 92% average. Cotton setting bolls 13%, 47% 1982, 50% average, condition fair. Rice headed 33%, 50% 1982, 58% average. Rice ripe 1%, 1% 1982, 8% average. Condition fair to good. Sorghum headed 54%, 66% 1982, 57% average. Condition fair to good. Soybean planting nearly complete. Soybeans emerged 94%, 98% 1982, 96% average. Soybeans blooming 17%, 28% 1982, 32% average. Soybeans setting pod 5%, 7% 1982, condition fair. Sweetpotatoes transplanting virtually complete. Condition fair to good. Sugarcane condition good. Hay first cutting

98%; 97% 1982. Pecans rated fair to good. Peaches harvested 73%, 79% 1982. Condition good. Vegetables rated fair to good. Pastures and livestock rated good.

**MARYLAND AND DELAWARE:** A hot week with no precipitation. Days suitable for fieldwork: 7.0 days. High temperatures in the low to upper 90's. Minimums were in the low to mid 50's.

**Maryland:** Soybeans planted 100%, last year. Oats 50% harvested, 40% last year. Barley harvested 99%, last year 100%. Rye 82% harvested, 73% last year. Wheat 83% harvested, 1982 80%. Tomatoes harvested 5% this year and 1982. Peas 100% harvested this year and 1982. Snap beans 51% harvested, last year 75%. Cucumbers 21% picked, last year 33%. Sweet corn 4% harvested, last year 25%. Alfalfa hay 2nd crop 60%, last year 65%. Other hays 60%, last year 67%. Alfalfa 3rd crop 2%, last year 12%. Corn silked 25%. Topsoil moisture short Statewide. Subsoil moisture short to adequate.

**Delaware:** Soybeans 97% planted, 100% last year. Corn silked 27% last year 43%. Barley 100% harvested, last year 100%. Rye 79% harvested, 73% 1982. Wheat harvested 95%, last year 88%. Tomatoes 4% harvested, 1982 10%. Peas 95% harvested, last year 100%. Snap beans 25% harvested, 1982 75%. Cucumbers 35% harvested, last year 75%. Sweet corn 8% picked, last year 10%. Alfalfa hay 2nd crop 66%, last year 97%. Other hays 72%, last year 33%. Topsoil moisture short throughout State. Subsoil moisture short to adequate.

**MICHIGAN:** A very hot week prevailed over the State. Average temperatures were 8° above normal. Maximum temperatures went as high as 102° and minimum temperatures as low as 46°. Near the end of the week light precipitation fell over most of the State.

Haying led fieldwork activity accompanied by cultivating, combining wheat, and working summer fallow fields. Statewide 6.5 days were suitable for fieldwork. Soil moisture supplies are short for the entire State. Winter wheat is 25% ripe, 35% last year, 29% average. Oats 15% yellowing, 25% last year, 43% average. First cutting hay is nearly complete. Second cutting is 20% complete, 15% last year, 19% average. Corn is 1% silked, 15% last year, 8% average. Soybeans 10% blooming, 20% last year, 15% average. Dry beans 5% blooming, 6% last year, 18% average. Cherry harvest is progressing well, but behind normal. Sweet cherries 10% harvested, 40% last year, 40% average. Tart cherries 15% harvested, 40% last year, 33% average. Vegetable crops are growing well with the aid of irrigation.

**MINNESOTA:** A hot and sunny week. Late in week, showers across middle of State in east west band. Temperatures averaged 6 to 9° above normal. High: 108°, low 45°. Precipitation averaged near normal west central and 0.22 to 0.83 in. below normal elsewhere. Greatest reported weekly total: 1.68 in.

Extreme heat reduced topsoil moisture supplies, but subsoil reserves still good. Stress to plants was mainly from heat, not dryness. Row crops were still lagging behind normal, but catching up. Corn borer infestations widely reported. Small grains being pushed by heat. Wheat scab reported. Limited barley swathing begun, but start of main small grain harvest still a week off. Height in inches: Field corn 39, 1982 43, normal 51; soybeans 14, 1982 15, normal 17; sunflowers 25, 1982 18, normal 31. Tasseling: Field corn 4%, 1982 2%, normal 23%. Blooming:

Soybeans 22%, 1982 17%, normal 37%; sunflowers 1%, 1982 1%, normal 8%. Heading: Spring wheat 96%, 1982 84%, normal 90%; oats 94%, 1982 93%, normal 94%; barley 98%, 1982 87%, normal 92%. Turning ripe: Spring wheat 26%, 1982 6%, normal 28%; oats 28%, 1982 14%, normal 39%; barley 45%, 1982 22%, normal 40%.

MISSISSIPPI: Temperatures near normal. Extremes 62 and 97°. Greatest 24-hour rainfall 1.30 in.

Soil moisture adequate to short. Fieldwork 6.2 days suitable, 4.8 last year, 5.1 average. Soybeans 97% planted, 100% last year and average; 6% blooming, 25% last year, 30% average; condition fair. Cotton 92% squaring, 99% last year, 96% average; 11% setting bolls, 47% last year, 36% average; condition fair. Sorghum 20% headed, 34% last year. Corn 68% silked, 88% last year, 87% average; 30% in dough stage, 56% last year; condition fair to good. Rice 2% headed, 12% last year, 10% average; condition fair. Winter wheat 97% harvested, 100% last year and average. Hay 60% harvested, 62% last year, 58% average. Peaches 51% harvested, 62% last year, 53% average. Watermelons 16% harvested, 50% last year, 44% average. Pasture condition good.

MISSOURI: Temperatures averaged 3° above normal with the coolest readings in the west. Rainfall was almost nonexistent with the average being less than 0.25 in. for the State.

Days suitable for fieldwork: 6.4. Corn 22% tasseled, 49% last year. Corn 10% silking, 36% last year and 37% normal. Grain sorghum 12% headed, 28% last year and 23% normal. Double-crop soybeans 89% planted, 91% last year. Soybeans 19% blooming, 22% last year and 22% normal. Wheat 94% harvested, 82% last year and 83% normal. Oats 51% harvested, 52% last year and 57% normal. Alfalfa hay, 2nd cutting, 73% harvested, 64% last year, and 67% normal. Third cutting alfalfa hay 7% harvested, 10% last year and 9% normal. Other hay 86% harvested, 76% last year. Cotton 58% squared, 99% last year and 84% normal. Cotton condition 73% fair and 27% poor. Corn condition 5% excellent, 59% good, 33% fair and 3% poor. Soybean condition 2% excellent, 48% good, 41% fair and 9% poor. Grain sorghum condition 1% excellent, 43% good, 49% fair and 7% poor. Pasture condition 35% good, 57% fair and 8% poor. Topsoil moisture supplies 16% adequate and 84% short.

MONTANA: Moderate to heavy precipitation, 2.00 to 3.50 in., fell over wide area early in week. Scattered showers again late in week with heaviest, 1.00 to 2.50 in., over area west of the Divide. Temperatures for week were 3 to 8° below normal in western half and near to 3° below in eastern half. Cool beginning and end of week. Hot during midweek with 110° at Glendive and Poplar.

Topsoil moisture adequate except eastern third. Crops fair to good condition. Fieldwork, days suitable 4.8. Winter wheat harvest to start August 2, nearly 4 days ahead of last year. Percent headed compared with last year and average: Winter wheat 40, 85, 55; spring wheat 75, 30, 50; barley and oats 70, 30, 50. Percent turning color: Winter wheat 50, 5, 40; spring wheat and barley 10, 0, 5; oats 10, 0, 10. About 70% alfalfa cut, 40% last year, 70% average. Wild hay 45% cut. Range and feed and stock water mostly adequate.

NEBRASKA: Precipitation occurred only in the northwest half of the State. Some locally heavy thunderstorms occurred. Temperatures averaged up to 3° above normal.

Winter wheat harvest progressed rapidly with 50% complete, 35% last year and 75% normal. Ripe 75%, same as last year, 95% normal. Corn 5% silked, 3% last year, 30% normal. Corn borer infestations widespread. Dryland corn starting to show stress from extended period of hot dry weather. Irrigators active. Sorghum and soybeans good condition. Blooming occurring on 25% of soybean acreage, 10% last year, 35% normal. Second cutting alfalfa 50% completed, 40% last year, 65% normal. Topsoil moisture mainly short to adequate. Subsoil supplies mostly adequate to short. Days suitable for fieldwork 6.9.

NEVADA: Near record high temperatures first half of week across north and near normal highs extreme south. Passage of cold front after midperiod produced gusty winds most areas. Temperatures dropped 18° to bring highs 5 to 18° below normal end of week. Average temperatures for entire week cooler than normal with north about 5° below average and remainder of State slightly below seasonal averages. Rainfall during period slight as cold front was relatively dry.

Dry weather ideal for alfalfa hay and small grain harvesting. Low night temperatures hampering row crops.

NEW ENGLAND: Dry week with rainfall averaging 0.25 in. or less in all areas except Maine. Heaviest precipitation fell in Northern and Central Maine, averaging 1.00 in. to 2.00 in. Cool temperatures early in the week, normal by midweek, and 90° or higher over the weekend.

Soil moisture supplies short to adequate, and 6.7 days suitable for fieldwork. Potato crop in blossom stage, rated fair to good condition. First cut hay 95% complete, second cut 15% cut. Shade tobacco harvest in full swing.

NEW JERSEY: Temperatures averaged 4° above normal. Extremes 48° on the 12th, 100° on the 16th and 17th. Weekly rainfall averaged 0.06 in. north, 0.03 in. central and 0.03 south. The heaviest 24-hour total was 0.68 in. on the 17th to 18th. Estimated soil moisture, in percent of field capacity, averaged 52% north, 41% central and 27% south. Four in. soil temperatures today averaged 75° north, 84° central and 82° south.

Fieldwork: 7.0 days suitable. Main farm activities combining barley, wheat and rye. Balind 2nd cutting alfalfa hay. Harvesting of summer vegetables and planting of soybeans following small grains. Topsoil moisture in short supply throughout the State. Corn and soybeans making good growth with hot, humid weather. However, all crops would benefit from rain.

NEW MEXICO: Average temperatures near normal. Scattered thundershowers first half of week and 17th. Minimum temperature 34°, western mountains, maximum temperature 103°, southern Desert. Rainfall range in all areas: trace 1.42 in.

Cotton rates good most areas. Fields setting squares 79%, 90% last year, 93% average. Fields setting bolls 5%, 35% last year, 32% average. Alfalfa rated good. Second cutting 75% complete. Irrigated, dryland wheat 99% harvested. Irrigated, dryland sorghum fair to good. Corn rated good. Peanuts, Irish potatoes, good condition. Mesilla Valley chile fair. Apples fair. Cattle, sheep good. Some heat stress. Range condition variable, poor to good.

**NEW YORK:** Very dry week with warm temperatures. Good for fieldwork but bad for growth. All areas need rain, growth slow. Corn curling most areas. Wheat harvest starting. Hay re-growth very slow. First cutting alfalfa nearly done, 82% 1982, 76% average. Clover-timothy hay 81% done, 69% 1982, 60% average. Grass silage 95% cut, 85% 1982, 89% average. Second cutting haying underway. Hudson Valley sweet cherry harvest complete, progressing in west. Tart cherry harvest underway in eastern areas, will begin soon in west. Apples, pears sizing well. Some western peach orchards being irrigated. Lettuce harvest underway. Early snap beans ready for harvest. Strawberry harvest about done. Sweet corn tasseling. Most potatoes in full bloom, rows touching.

**NORTH CAROLINA:** Temperature: 1 to 3° above normal Statewide. Precipitation: Spotty and mostly nonexistent for the week.

Soil moisture: 37% very short, 56% short, 7% adequate. Days suitable for fieldwork: 6.2. Condition: Tobacco: 4% poor, 68% fair, 28% good. Corn: 15% poor, 64% fair, 21% good. Cotton: 6% poor, 38% fair, 50% good, 6% excellent. Peanuts: 5% poor, 43% fair, 48% good, 4% excellent. Soybeans: 3% poor, 57% fair, 38% good, 2% excellent. Irish potatoes: 8% poor, 42% fair, 50% good. Apples: 12% poor, 47% fair, 41% good. Peaches: 55% poor, 20% fair, 25% good. Cotton squared: 60%, 1982 95%, 86% average. Cotton setting bolls: 11%, 1982 41%, 45% average. Corn silked: 74%, 1982 91%, 84% average. Corn soft-dough: 42%, 1982 59%, 52% average. Corn dent: 9%, 23% 1982, 25% average. Soybeans blooming: 6%, 12% 1982, 12% average. Harvests: Irish potatoes 76%, 84% 1982, 86% average. Flue-tobacco: 7%, 18% 1982, 12% average. Major farm activities: Topping and suckering tobacco, hay harvest, irrigating crops, cultivating and spraying for weed control on soybeans, tobacco and peanuts and truck crops harvesting.

**NORTH DAKOTA:** Very hot temperatures last week. Most of State experienced high temperatures around 100° during midweek. Extremes from 107 to 41°. Temperatures averaged 3 to 9° above normal. A cold front moved across State late 15th and 16th bringing some relief from the heat. Rain over most of State on weekend.

Crops mostly good to excellent condition. Hot, dry weather pushed small grain maturity too fast causing some stress and potential yield loss. Development of corn, sunflower, soybeans and potatoes was near normal while flax development was well ahead of last year and average. Percent heading or beyond compared to last year and average for hard red spring wheat 87, 66, 77; durum 77, 57, 68; and barley 91, 76, 79. Average height of sunflower 28 in., last year 22, normal 27. Topsoil moisture near average at 6% very short, 45% short, 45% adequate and 4% surplus. Normally 47% short to very short and 53% adequate. Infestation by the sunflower beetle is a major concern in north central, northeast and central districts, spraying for control is general.

**OHIO:** Hot and dry. Temperatures 4 to 10° above normal. Average maximums upper 80's to mid 90's. Highest of summer. No rainfall until late 17th. Coverage 30% with 0.33 to 2.00 in.

Wheat harvest advanced 60%. Crops stressed from hot, dry weather. Soybeans and corn fair to good condition. Wheat harvest 75%, 1982 65%, average 55%. Soybeans blooming 20%, 1982

45%, average 25%. Corn silked 5%, 1982 45%, average 30%. Alfalfa 2nd cut 45%, 1982 50%, average 40%. Other hay, 2nd cut 25%, 1982 30%, average 20%. Oats ripe 20%, 1982 20%, average 40%. Oats harvested 5%, 1982 5%, average 5%. Days favorable 7. Pasture condition fair to good. Soil moisture 80% short, 20% adequate.

**OKLAHOMA:** Temperatures ranged from 4° below normal south central and southeast to 2° above normal north central. Rainfall varied from 0.00 north central to 0.70 in. southeast.

Moisture is needed across the State. Hot dry weather has caused crops to begin to suffer from moisture stress. Dry weather continues to frustrate farmers in the Panhandle district. Some sorghum farmers have already planted this year's crop four times. Cotton in the western portion of the State continued to improve in condition. Wheat farmers in west central and north central area have been burning wheat stubble in an effort to reduce the cheat problem in next year's crop. Insects have caused few problems in crops so far this year. Pastures continued to be in good condition, but hot dry weather has greatly reduced forage growth. Cattle continue to make good gains and the livestock insect problem has leveled off. Wheat harvested: 97%; 96% 1982; 99% average. Sorghum headed: 10%; 10% 1982; 15% average. Cotton squaring: 15%; 3% 1982; 30% average. Cotton bolls setting: 0%; 0% 1982; 5% average.

**OREGON:** Rainfall during the week was heaviest along the northern coast where 3.20 in. accumulated; up to 0.50 in. was received in Willamette Valley; up to 0.40 in. in other northern areas; less 0.10 in. elsewhere. Temperatures average 4° below normal in the north; up to 7° below normal in the south.

Winter wheat 4% harvested, 4% 1983; 3% average. Barley harvest continuing with above average yields reported in several areas. Harvesting of grass seed was hampered by cool, damp weather; some sprouting is occurring in the windrow. Haying continues between showers in all areas of the State. Harvesting of late cherries has been delayed by rains in the Hood River Valley. Red raspberry harvest is complete in most areas. Harvest of blueberries near peak. Blackberry and loganberry harvest is beginning. Early peach harvest has started in the Willamette Valley, 10 days ahead of normal. Harvest of early potatoes in Hermiston-Boardman area expected to start by July 25; good yields are expected. Green pea harvest two-thirds complete in Umatilla County. Harvesting of snap beans and broccoli underway in Willamette Valley. Livestock, pasture and range condition good to excellent.

**PENNSYLVANIA:** The week began cool and dry. Continued dry but temperatures and humidity increased. Warmest week of the year. Very light precipitation occurred in the northeast with none reported elsewhere in the State.

Days suitable: 6.0. Moisture, mostly short. Activities: making hay and haylage; combining barley and wheat; baling straw; top-dressing hay fields; spraying fruits and vegetables; potato hilling; and trimming Christmas trees. Barley 14% ripe and 67% harvested, last year 17% ripe and 69% harvested. Wheat 28% turning yellow, 34% ripe and 32% harvested, last year 19% turning yellow, 43% ripe and 30% harvested. Oats 52% headed, 38% turning yellow and 6% ripe, last year 45% headed, 49% turning yellow and 5% ripe. Average corn height 38 in., last year 48 in. Second cutting alfalfa 45% completed, last year 30% complete. First cutting clo-tim 94% complete, last year 92% complete. Quality of hay made good to fair. Feed from pastures below average to average.

**PUERTO RICO:** Island average rainfall 0.32 in. or 0.90 in. below normal. Highest weekly total 3.16 in. Highest 24-hour total 1.66 in. Temperature averaged about 85 to 82° on coasts and 78 to 75° Interior divisions. Mean station temperature ranged from 86° to 70°. Extremes 96 and 59.

**SOUTH CAROLINA:** Large stagnant high pressure area holding intense heat, humidity. Isolated thunderstorms, daily highs upper 90's to above 100°.

Fieldwork in 6.0 days suitable. Soil moisture averaged short. Corn in silking stage badly in need of rain, yields threatened. Condition fair; 87% silked, 99% last year, 93% average; 3% mature, behind 22% last year, 21% average. Cotton insects mere threats according to scouts. Condition fair to good; squaring at 92%, 100% year ago, 94% average; 75% setting bolls, 88% year ago, 74% average. Soybean stands fair to good, later plantings poor where dry. Crop condition fair to good; blooming row 3%, 8% year ago, 9% average. Peach condition fair, some coastal producers winding up harvest. Major coastal tomato producers finishing harvest, 93% harvested overall, 97% last year, 96% average.

**SOUTH DAKOTA:** Average temperatures 1 to 8° above normal. Extremes: 106 and 33°. Crop stress from heat evident in western quarter of State and throughout northeast.

Some concern about yield reductions in spring small grains in northeast. Many areas in northwest and along western border suffering through drought condition. Some reported crop loss in these areas. Crop conditions mostly good in remainder of State. Early harvest winter wheat indicates above normal yields. Corn borer infestations widespread throughout State. Days suitable for fieldwork: 6.0. Late week precipitation 0.50 to 2.00 in. parts of southwest, central and northeast; light and scattered elsewhere. Winter wheat ripe 35%, 1982 40%, average 72%. Winter wheat harvested 1%, 1982 4%, average 37%. Spring wheat headed 98%, 1982 100%, average 100%. Corn height 32 in., 1982 33 in., average 37 in.

**TENNESSEE:** High pressure prevailed over the State last week, became stagnant and caused widespread haziness. Spotty thundershowers occurred. Temperatures were normal to 4° above normal.

Days suitable for fieldwork: 6.1. Soil moisture 82% short, 18% adequate. Pastures fair. Corn tasseling 41%, 1982 74%, average 65%. Dough 3%, 1982 10%, average 13%. Cotton squaring 70%, 1982 96%, average 85%. Setting bolls 2%, 1982 23%, average 23%. Soybeans planted 99%, 1982 99%, average 98%. Blooming 6%, 1982 19%, average 24%. Wheat harvested 97%, 1982 98%, average 97%. Alfalfa hay 2nd cutting 86%, 96%, average 91%. Tobacco 32% poor, 62% fair, 6% good. Blue mold and black shank occurring in some fields.

**TEXAS:** Cooler temperatures, wet conditions dominated weather this week. An upper level disturbance caused moderate to heavy showers during the week. Temperatures under dense cloud cover averaged below normal Statewide.

Crops: Showers, ranging from light to heavy, fell during week. Plains, northern part of State received only scattered showers, east, south central received rains which halted most fieldwork. Harvest of small grains continued, most areas reporting excellent yields. Cotton continued to make good growth. Insect populations

continue to build, producers actively spraying. Crop development remains behind previous years. Harvest continued in Rio Grande Valley. Sorghum planting virtually complete. Crop making good progress throughout State. Planting High Plains, completed during week. Harvest continued along Coast, Valley, but interrupted by showers throughout week. Corn crop continues to develop rapidly. Warmer temperatures helped accelerate maturity. Yields expected to be good in both dryland, irrigated fields. Wheat harvest continued, most areas reporting excellent yields. Despite some rain delays, harvest should be completed soon. Rice development continued to lag behind previous years. Crop is about two to three weeks behind in development. Soybeans continue to make good growth. Additional moisture needed in all production areas.

Cotton squaring 49%, 59% 1982, 69% average; cotton setting bolls 10%, 15% 1982, 24% average; cotton open bolls 0%, 2% 1982, 4% average. Rice headed 72%, 98% 1982, 93% average; rice turning color 15%, 60% 1982, 52% average; rice harvested 0%, 1% 1982, 2% average. Sorghum planted all purposes 100%, 100% 1982, 100% average; sorghum headed 66%, 71% 1982, 68% average; sorghum turning color 50%, 57% 1982, 55% average; sorghum mature 32%, 39% 1982, 37% average; sorghum harvested for grain 10%, 27% 1982, 26% average. Wheat harvest for grain 99%, 97% 1982, 99% average. Oats harvested for grain 95%, 94% 1982, 98% average. Peanuts planted 100%, 100% 1982, 100% average. Soybeans planted 100%, 94% 1982, 97% average. Sunflowers 99%, 93% 1982, 97% average.

Commercial vegetables: Rio Grande Valley harvest activity continued to wind down. Cantaloup, watermelon volumes light as harvest nears completion. Irrigation, grove care operations continued in citrus groves. San Antonio-Winter Garden area, harvest of vegetables, melons delayed by wet conditions. Cucumbers, tomatoes, watermelons continue to be available. Trans-Pecos, cabbage harvest is winding down. Harvest of early cantaloups and melons continued with light volumes being shipped. Plains, onions, potatoes nearing maturity. Pecans developing well good crop expected. Spraying for second generation casebearers underway.

Range and livestock: Range, pasture condition fair, portions of Plains, north area extremely dry. Showers in east, central, south central portions revived pastures. Livestock remain in generally good condition. Hay cutting, baling continues.

**UTAH:** Scattered showers most of State first of week. Accumulations light to heavy. Temperatures below normal ranging 6° below to 1° above.

Fieldwork possible 6.5 days. Soil moisture short to adequate on unirrigated land. Irrigation water plentiful, but some delivery systems operating at reduced levels because of flood damage. Major farm activities included irrigation, weed control, sweet cherry picking, and livestock movement. Small grains mostly headed and turning color. Harvest of early winter wheat fields could begin this week. Corn averages only 29 in. high well behind normal.

**VIRGINIA:** Hazy, hot and generally dry through the week. Isolated thundershowers occurred about midweek but amounts were less than 0.01 in. Temperatures were mainly in the upper 80's to upper 90's the entire week with overnight lows in the 60's in some mountain areas to around 80's elsewhere.

Hot temperatures, high humidity and no rain reduced topsoil moisture to 100% short and days suitable for fieldwork up to 6.0. Corn still in good condition but declining with continued dry conditions. Several reports indicate reduced yields. Corn 55% silked compared to last year's 64% and 51% average. Dough is 4% compared to 1982's 18% and the 16% average. Soybean condition is still good but falling as moisture continues short. Seeding of double cropped no-till acres slowed. Germination and growth of late seedings poor to fair. Weed control is active. Tobacco in good condition with irrigation active. Topping of flue and sun-cured gaining momentum. Harvest of flue 1% complete compared to last year's 2% and the 3% average. Peanuts in excellent condition although growth has been slowed.

WASHINGTON: Cool and moist air covered Washington during week but Cascades limited most of rainfall to west of mountains and to extreme eastern part of State. Coastal area reported rainfall amounts in excess of 2.50 in. with Forks area measuring over 8.00 in. for week. Reports for central area mostly less than 0.10 in. compared to nearly 1.00 in. over southeast part of State.

East and west: Rains hampered winter wheat and barley harvest in some areas. Hay farmers suffer from rain damage. Cutting alfalfa hay underway but delayed due to weather. Other field crops look good and benefiting from moisture. Strawberry harvest near completion. Some areas renewing fields. Raspberry harvest continues. Blueberry harvest in full swing. Green pea harvest continues. Vegetables doing well with rainfall. Harvest of bush bean begun. Harvest of leafy vegetables continues. Fresh market broccoli, carrot and cauliflower harvest continues. Downy mildew in onions reported in Walla Walla County. Rainfall kept ranges and pastures in excellent condition. Dairymen continue green chopping. Winter wheat harvested: 3%, 1982 2%, average 2%.

WEST VIRGINIA: Temperatures averaged 2 to 5° above normal across the State. Low 36°, high 100°. No precipitation reported at most stations. Range trace to 0.17 in.

Soil moisture short to very short across the entire State. Days suitable for fieldwork 5.7. Main activities: Hay harvesting, gardening, maintenance, and small grain combining. Wheat, barley, and oats reported in good to fair condition. Wheat: 27% headed, 48% ripe and 25% harvested; 9%, 53%, and 38% in 1982. Barley: 9% headed, 30% ripe, and 61% harvested; 3%, 38%, and 59% in 1982. Oats: 8% pre-headed, 76% headed, 7% ripe, and 9% harvested; 5%, 60%, 16%, and 19% in 1982. Corn was reported in fair to good condition. Pasture was reported in fair to good condition. Hay was reported in good to fair condition. First cutting 89% completed, 91% of normal, 86% and 71% in 1982. Second cutting was 23% completed, 79% of normal, 23% and 68% in 1982. Tobacco was in fair to good condition. Fruit was reported in fair to good condition. Peach harvest at 7% and 74% of normal; 15% and 38% in 1982. Gardens were reported in fair to good condition. Hot dry conditions continue to stress crops and livestock Statewide.

WISCONSIN: Hot humid week, with highs in 80's and 90's and low in 60's and 70's. No rain until the 16th and 17th. Up to 1.50 in. in localities with nearby areas receiving nothing. Heaviest was 1.80 in. at Cambridge,

17th. High temperature was 100° 14th at Iola and Spooner. Low 49° the 11th at Harrison. Corn silked: zero this year and last year, 9% average. Seven days suitable. Soil moisture 76% short, 24% adequate.

WYOMING: Warm to hot afternoons and mild to cool nights. High temperatures over 100 to 108° in extreme northeast. Most stations above normal except one station dipped to freezing mark and snow in Yellowstone Park. Precipitation mostly from thundershowers. Most rain fell in northwest and Big Horn Basin. Elsewhere below normal except isolated locations in southeast.

Topsoil moisture short 51% State. Subsoil moisture adequate 73% State. Seven days suitable for fieldwork. Small grain maturity behind normal. Winter wheat 51% turning color, small amount mature. Normally 17% harvested by this time. Barley turning color 15%, normally 12% mature. Spring wheat turning color 10%, normally 46% turning color. Oats turning color 5%, normally 24% turning color. Alfalfa 75% first cutting complete. Normally, 78% completed. Other hay harvested 25%, normally 37% harvested. All crops mostly good condition. Stock water adequate most areas.

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#### National Weather Summary (continued from front cover)

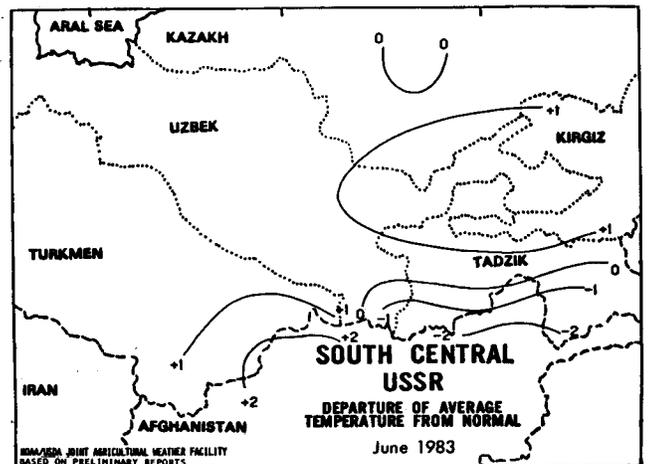
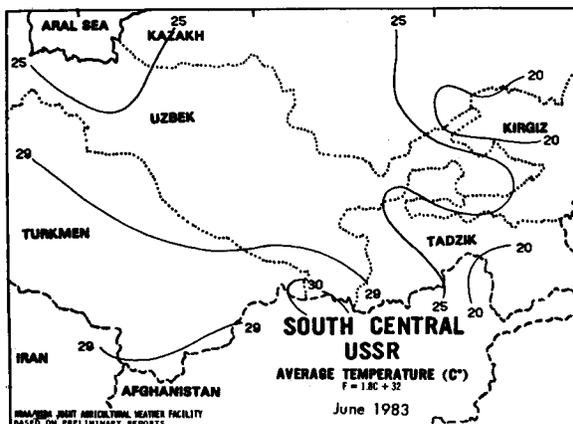
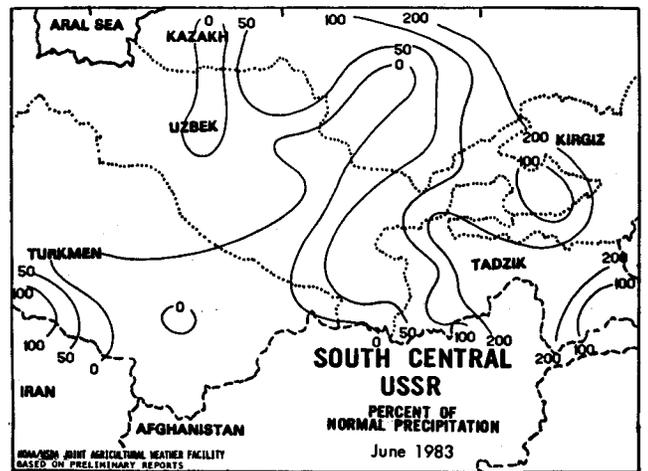
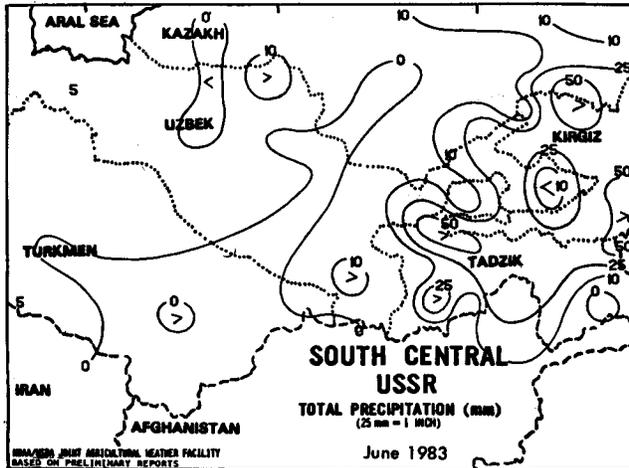
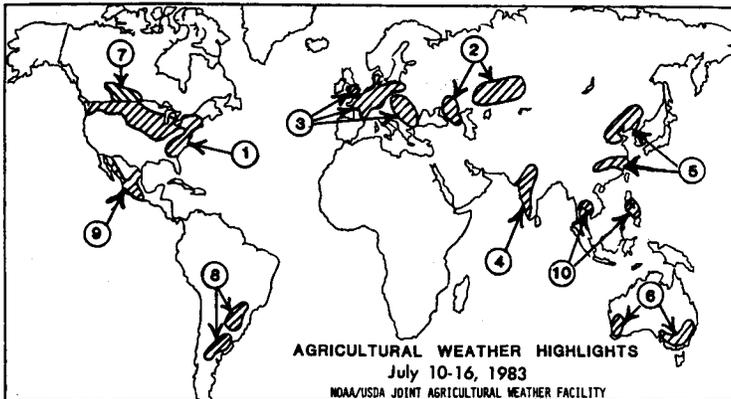
FRIDAY...Thunderstorms brought very heavy downpours to southeastern Texas with some heavy rain reaching into central Texas. Showers and thunderstorms spread into Missouri and were widely scattered in the Southeast and Northeast. A cold front spread showers and thunderstorms throughout the northern Plains, from Nebraska northward through Minnesota. Hot weather covered most of the East. High temperatures were in the low nineties across the Corn Belt.

SATURDAY...Showers and thunderstorms occurred from central Texas eastward into Alabama with light, widely scattered showers spreading northward into the Plains. A few thundershowers fell in southwestern Texas. Showers were widely scattered in the Northwest, light in the eastern portion of the northern Plains, and occasionally moderate in the upper Mississippi Valley. Hot weather continued east of the Mississippi River.

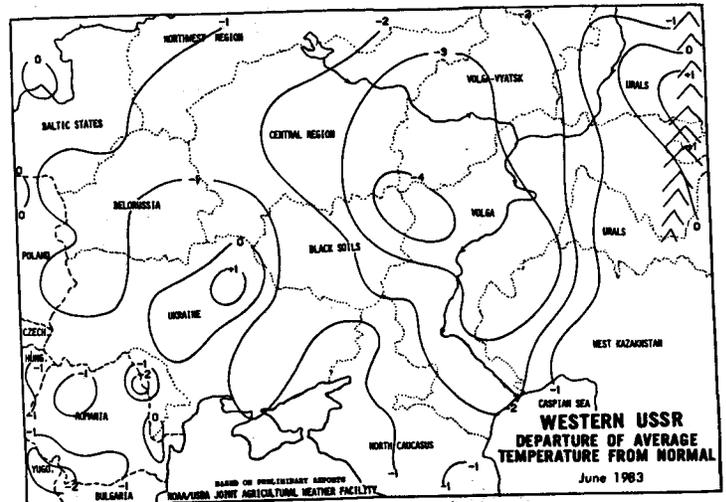
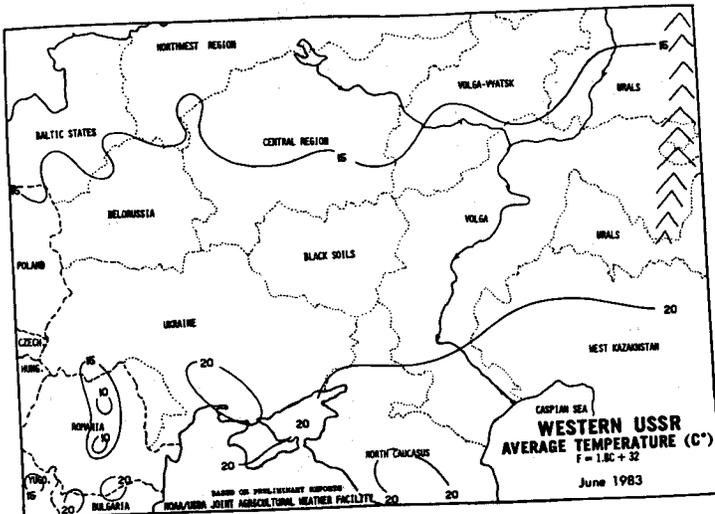
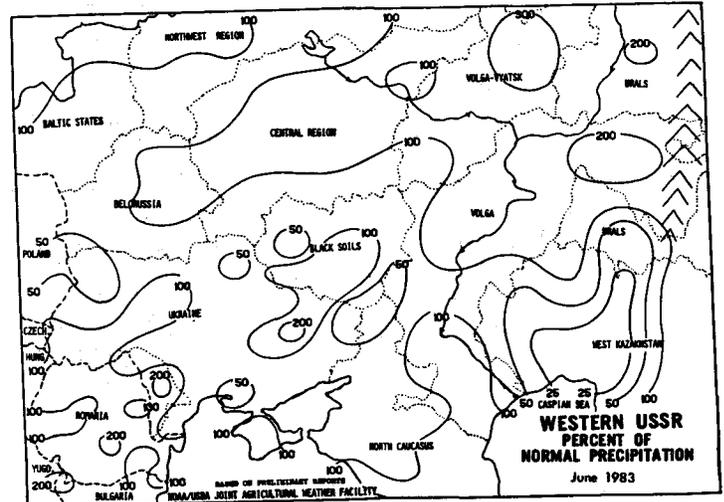
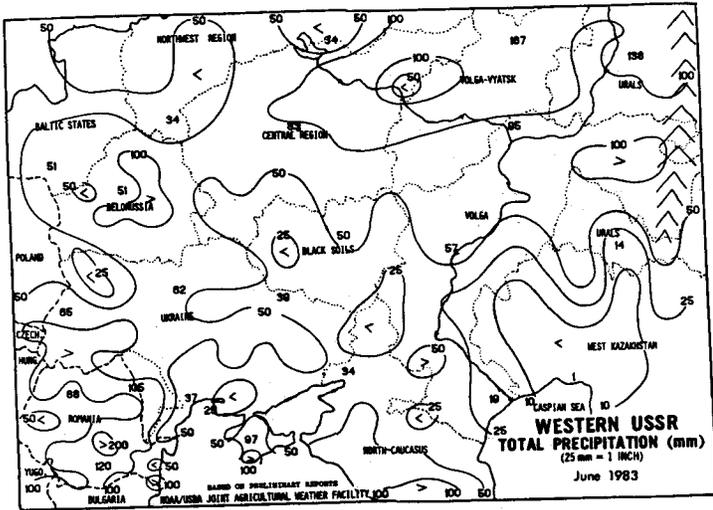
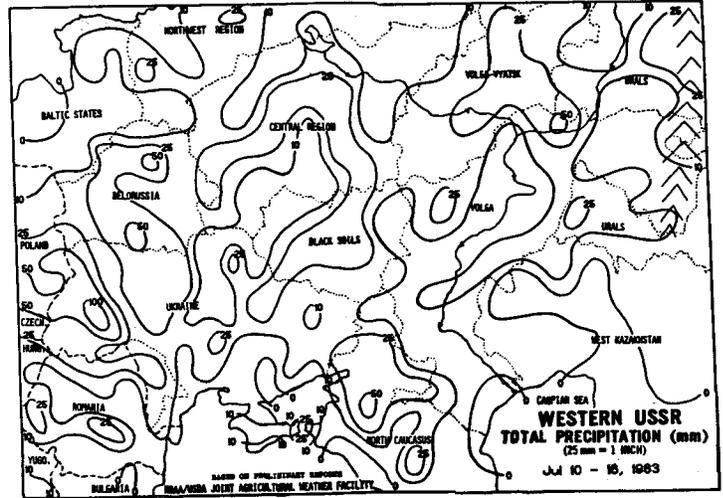
# International Weather and Crop Summary

July 10 to 16

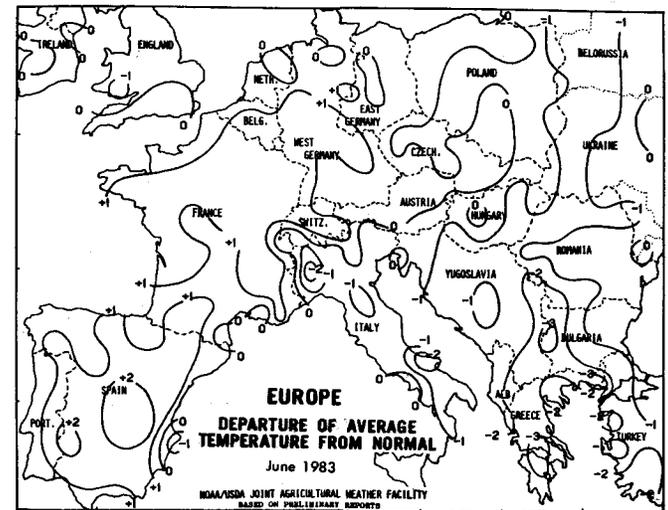
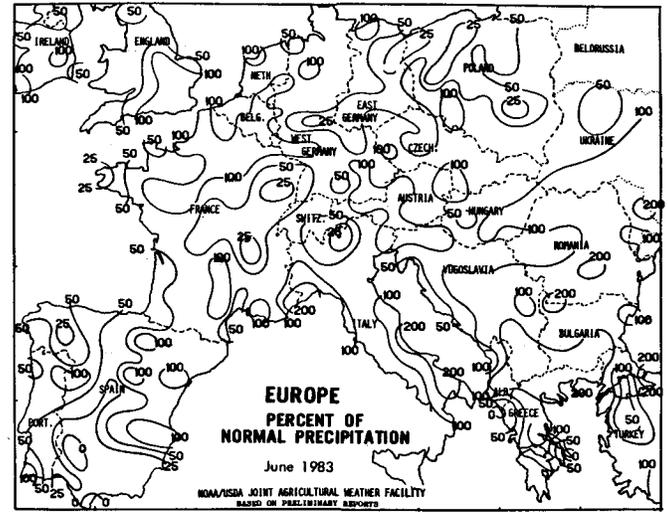
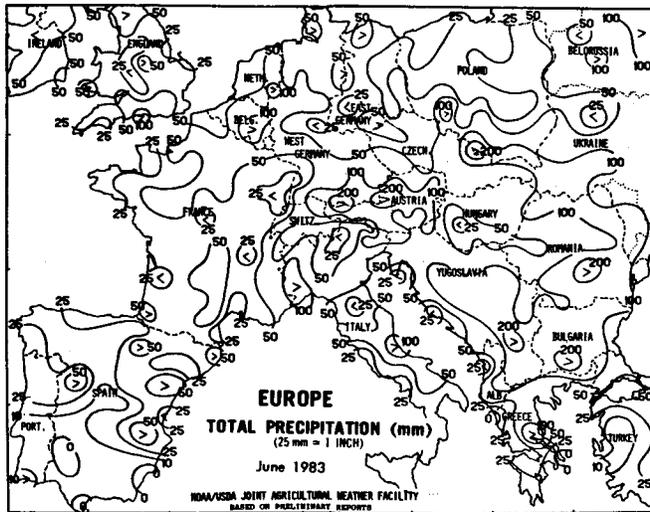
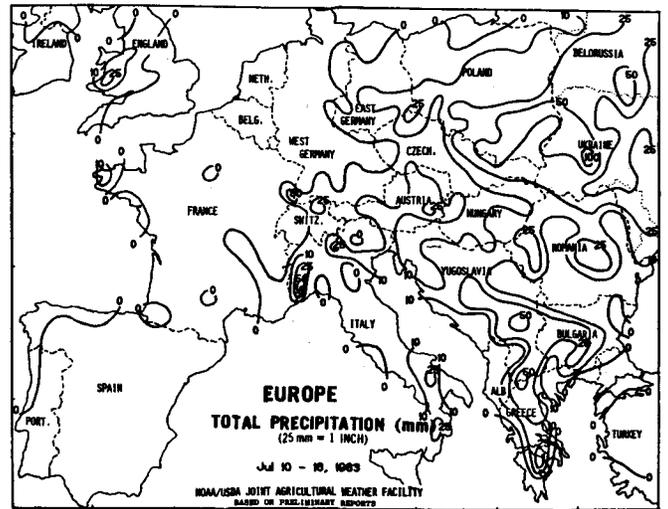
1. UNITED STATES ... Hot, dry weather in the Corn Belt and eastern states is causing some soil moisture shortages and localized crop stress, as the critical reproductive stage begins. Rains over the Northwest are finally relieving dryness in eastern Montana. Abundant sunshine favors wheat harvest in the central and northern Plains.
2. USSR ... In European USSR, showers are benefiting crops in many areas, but more rain is needed in the southeast for corn in the reproductive stage. In the New Lands, scattered precipitation and unseasonably warm temperatures are stressing spring grains in the heading stage.
3. EUROPE ... The weather is becoming too dry for summer crops in the west and north. Beneficial rains fell on summer crop areas in southern Poland and the southeast, but probably delayed the winter grain harvest.
4. SOUTH ASIA ... Moderate to heavy rain fell in western India and along the southwestern coast, greatly benefiting summer crops. Unfavorably dry weather continues in the south.
5. EASTERN ASIA ... Persistent heavy rain in the Yangtze Valley continues to be unfavorable for summer crops. Widespread rain in the northeast covered corn and soybeans in the reproductive stage.
6. AUSTRALIA ... Dry weather in wheat areas was unfavorable for crops in the southeast. However, temperatures remained slightly cool, decreasing the moisture demand.
7. CANADA ... Beneficial rain in southern grain areas helped relieve earlier dry conditions. Light rain in the north continues to bring above-normal moisture.
8. SOUTH AMERICA ... More heavy rain fell in Brazil's southern wheat areas. Dry, cool weather continues to be unfavorable for emerging wheat in Argentina.
9. MEXICO ... Beneficial rains continue across the southern Plateau corn belt. Showers finally bring slight, temporary relief to upper northeastern orchards, crops, and livestock as the rest of the north remains mostly dry.
10. SOUTHEAST ASIA ... Moderate rain benefited the south-central rice area of Thailand. Two tropical storms, bringing needed moisture to the Philippines, also caused some crop damage.



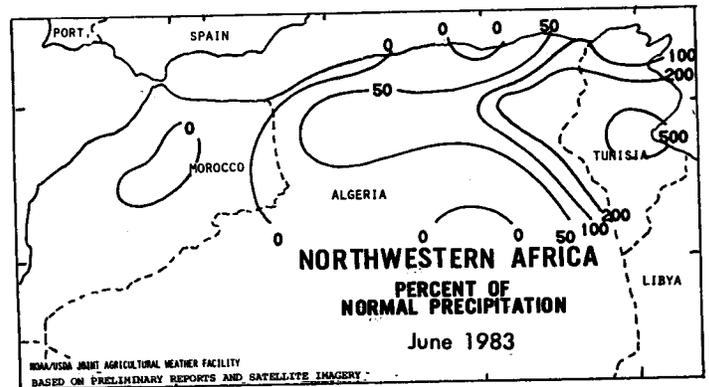
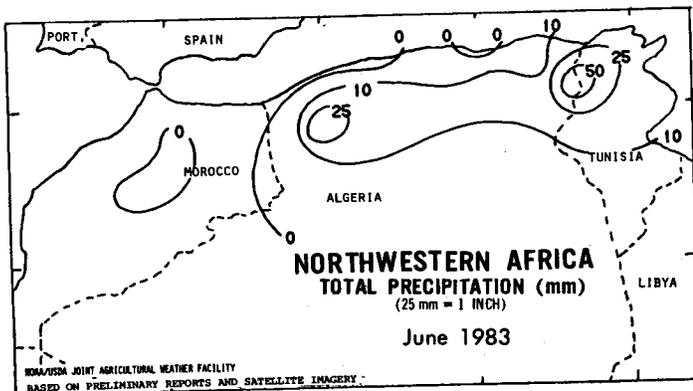
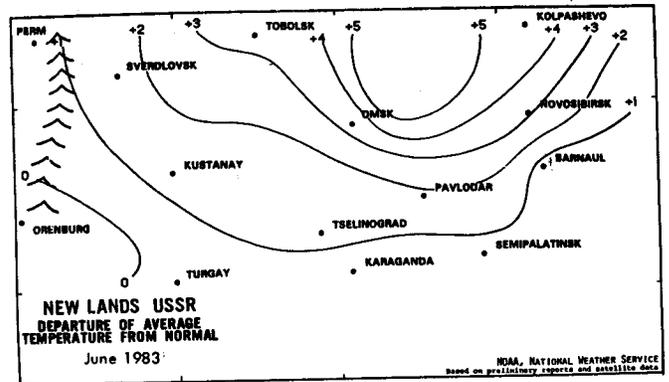
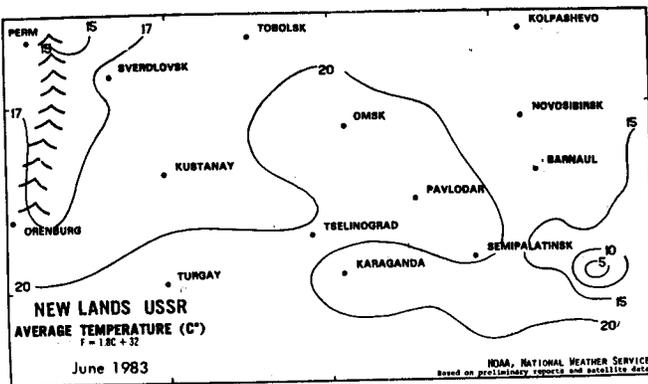
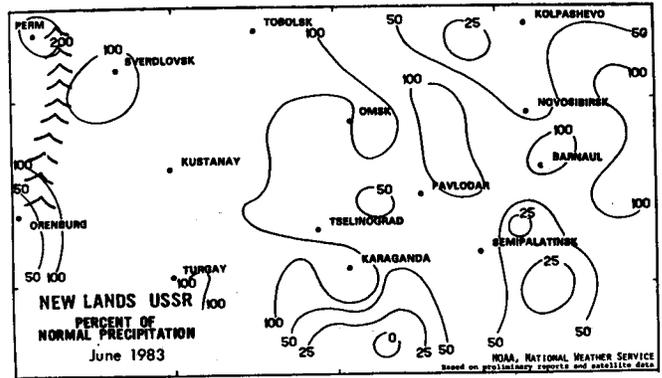
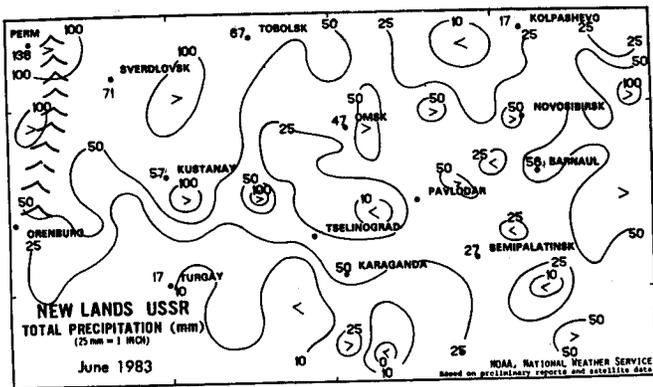
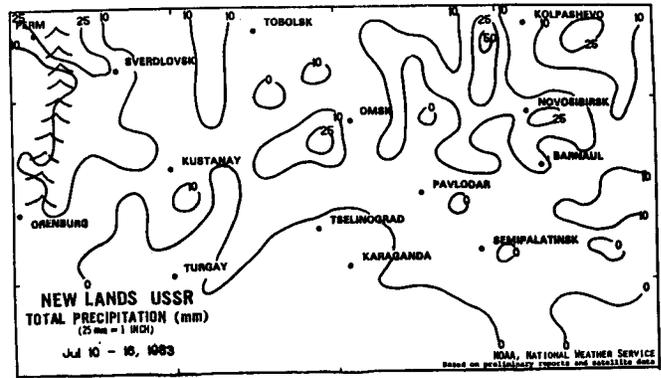
**WESTERN USSR...** Wet weather continued to favor crops in Belorussia, the western Ukraine, and the Black Soils, reversing June's below-normal rainfall pattern. The moisture benefited summer crop growth, as well as small grains in the filling stage. In the north, light showers continued to maintain ideal growing conditions for spring grains in the heading stage. During mid-June, northern localities experienced unusual, cold weather. Minimum temperatures, near 0°C, occurred along with patchy frost. Overall, the grain crop suffered minor damage. By late June, hot, dry weather covered major grain producing areas of the eastern Ukraine and North Caucasus. While good for small grain harvesting, the dry weather was bad for corn, which had to rely on limited soil moisture for continued growth. Scattered showers during the past week improved conditions in these areas somewhat, but temperatures remained high and more rain is needed.

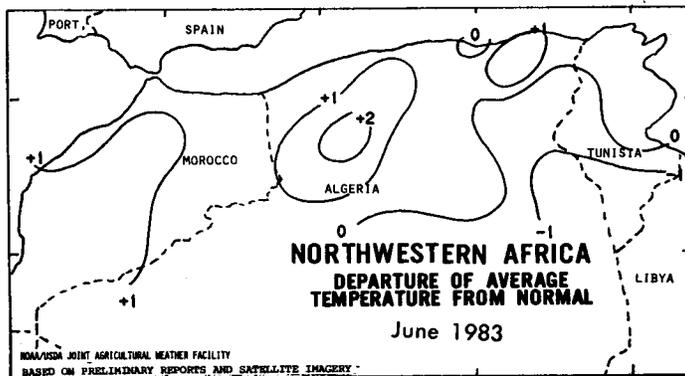
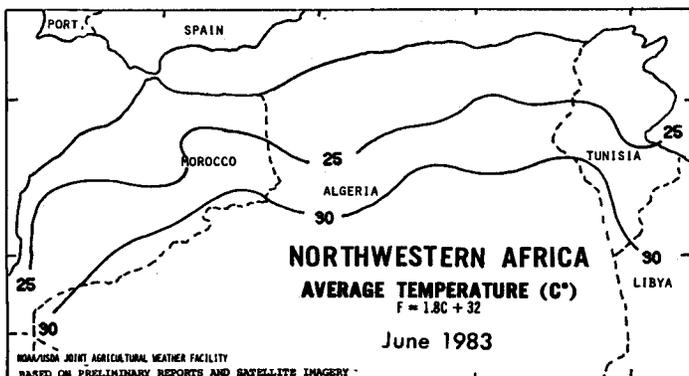
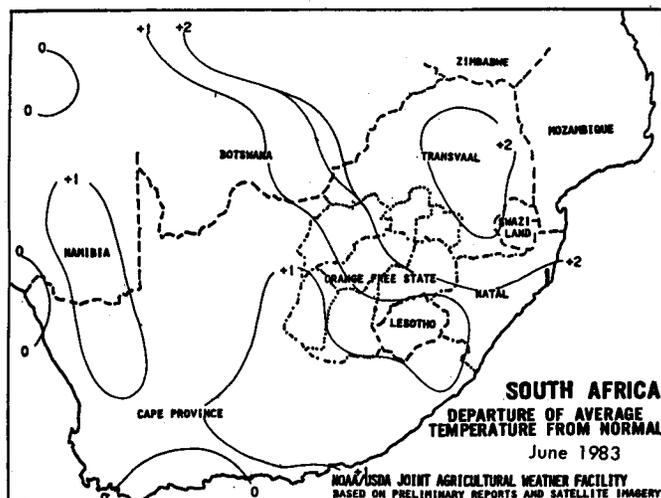
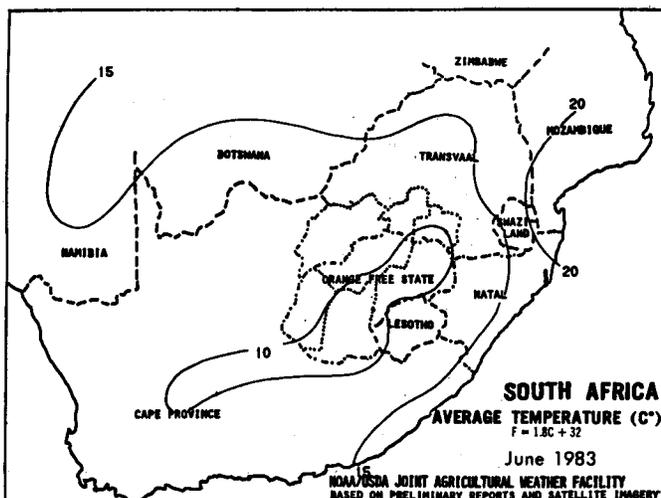
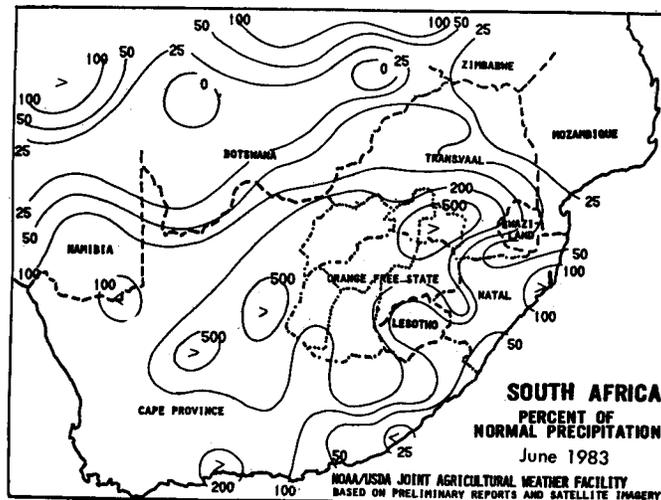
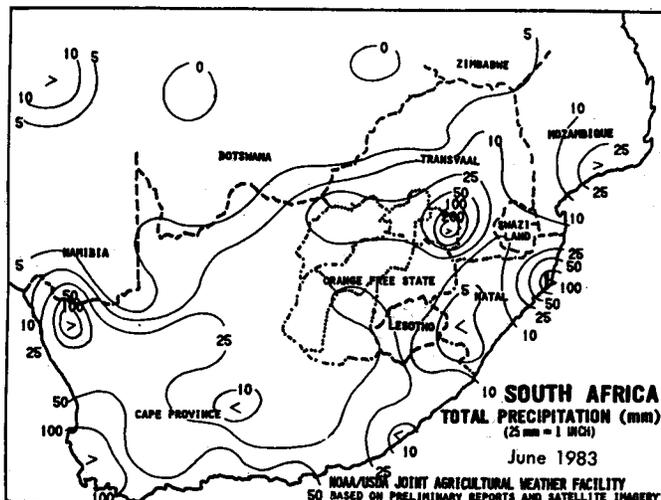


**EUROPE**...Mostly dry weather from England and France spread eastward through the crop areas of West Germany and northern Poland. The generally dry weather in these areas continued June's unseasonably low rainfall, reversing the persistent rainy pattern of previous months. In addition, temperatures in these areas continued to be above-normal, increasing evaporation rates. This unfavorable weather stressed corn and sugarbeets, but favored maturing crops such as winter wheat and spring barley, improving their grain quality. In southern Poland, wet weather reversed June's unfavorably low rainfall pattern, improving growing conditions. Further south, generous rains continued to benefit summer crops in Yugoslavia, Romania, and Bulgaria, but probably caused further delays in the winter wheat harvest. Elsewhere, seasonably dry weather covered crop areas adjacent to the Mediterranean Sea.

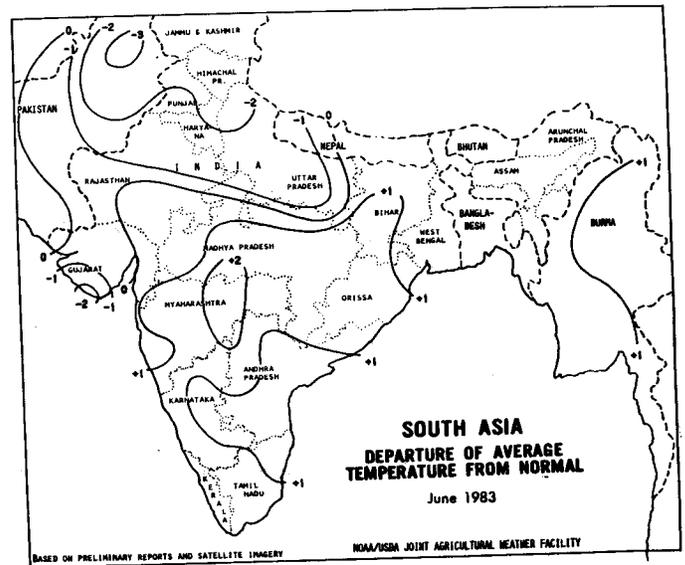
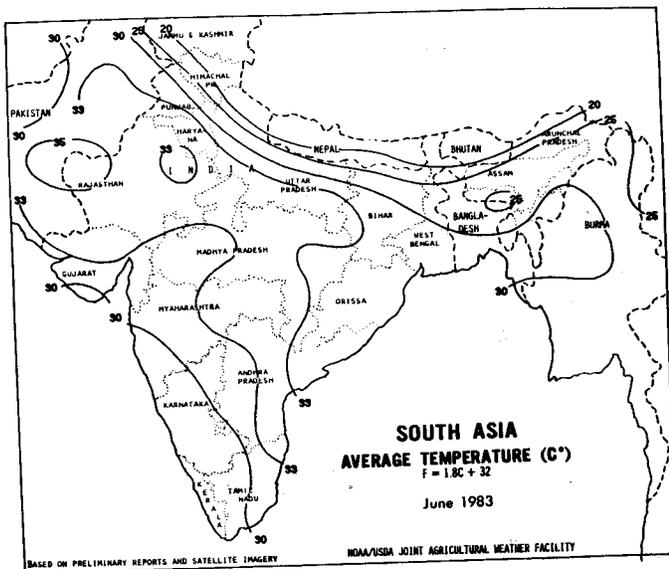
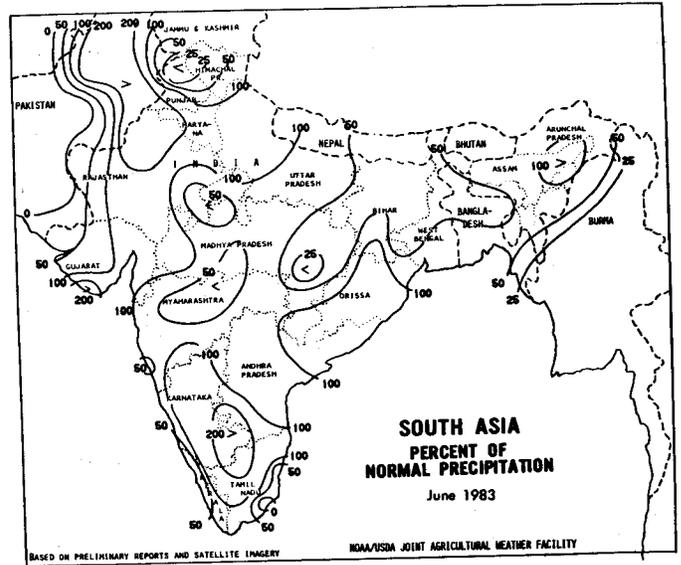
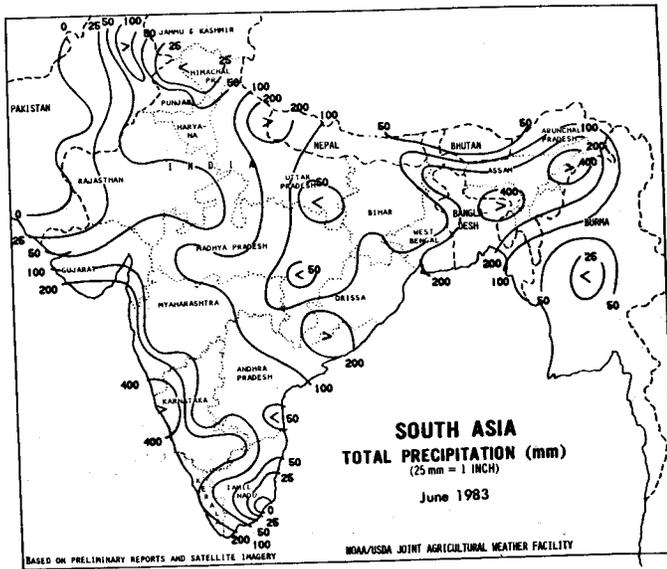
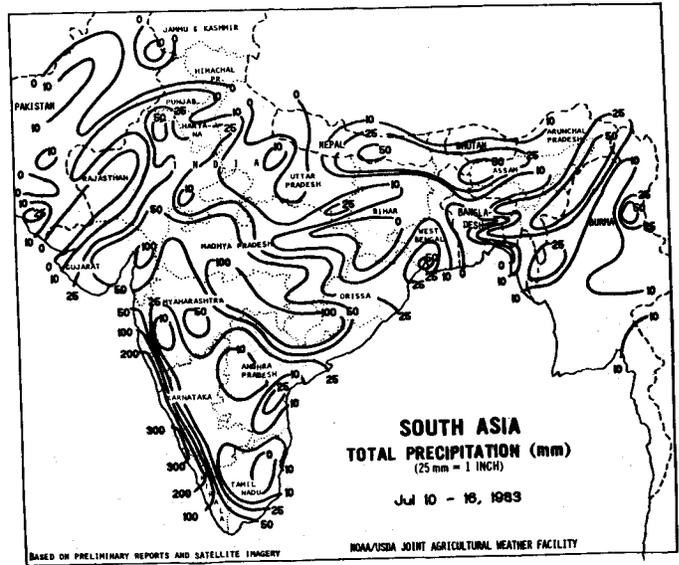


**NEW LANDS...** Mostly light, spotty showers covered spring grains early in the week. In June, crops in the western portion of the region benefited from above-normal precipitation, while those further east experienced below-normal rainfall. By late June, localities in central northern Kazakhstan and Western Siberia had 3-7 consecutive days with maximum temperatures as high as 35° to 36° C. Precipitation tapered off by early July, with most of the crop relying on soil moisture for continued growth. Hot, dry conditions returned to the southern portion of the region this past week, stressing spring wheat in the heading stage. Rain and cooler weather is needed soon, especially in southern and central crop areas, to ensure favorable yield prospects.

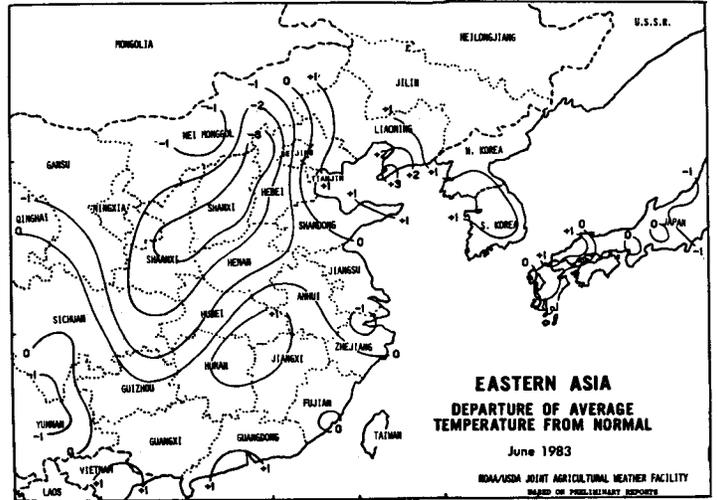
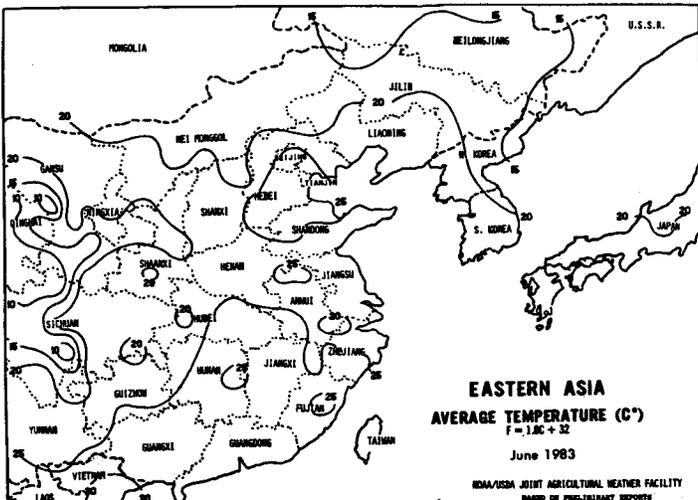
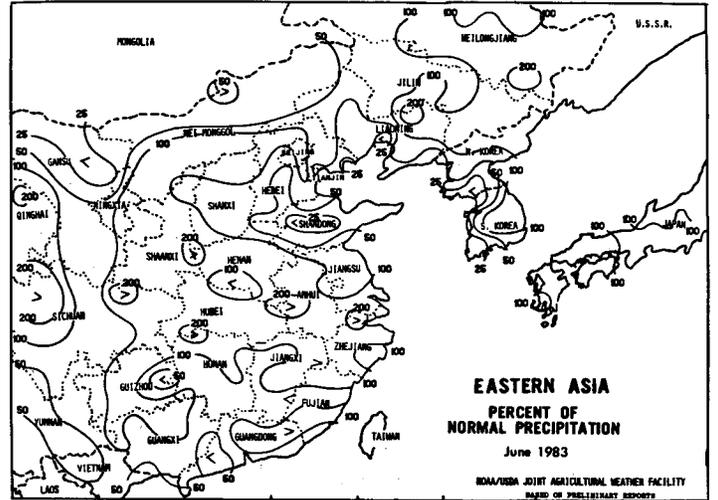
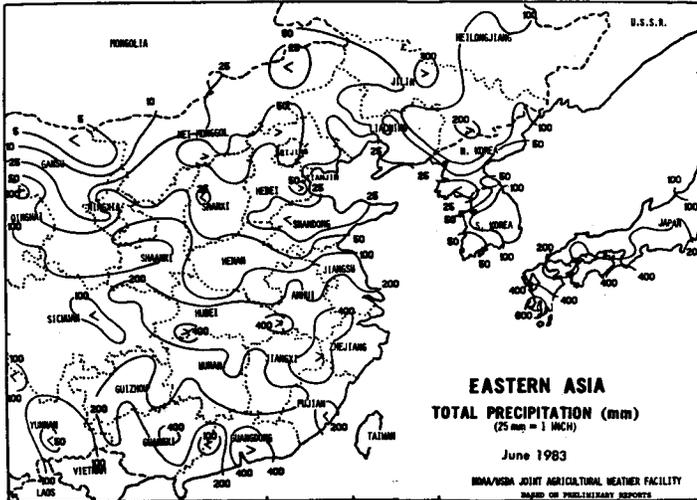
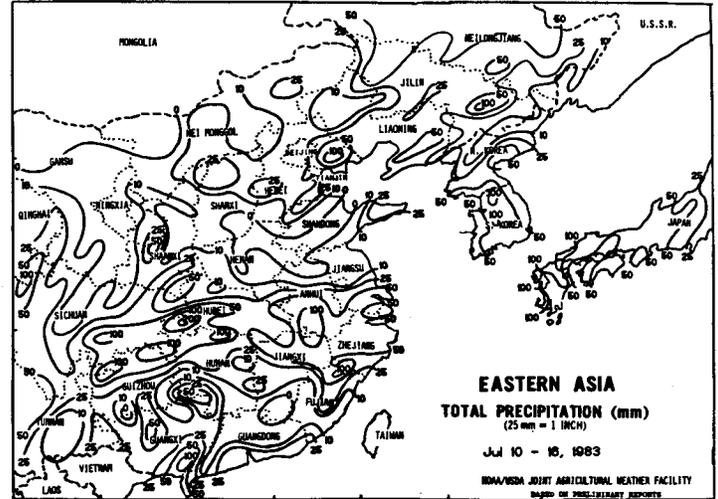




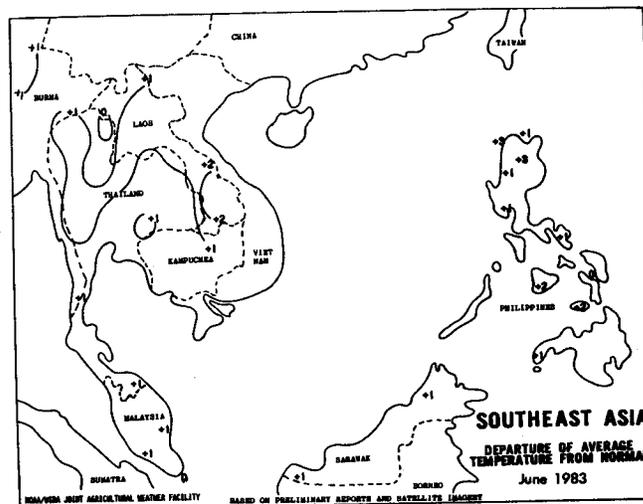
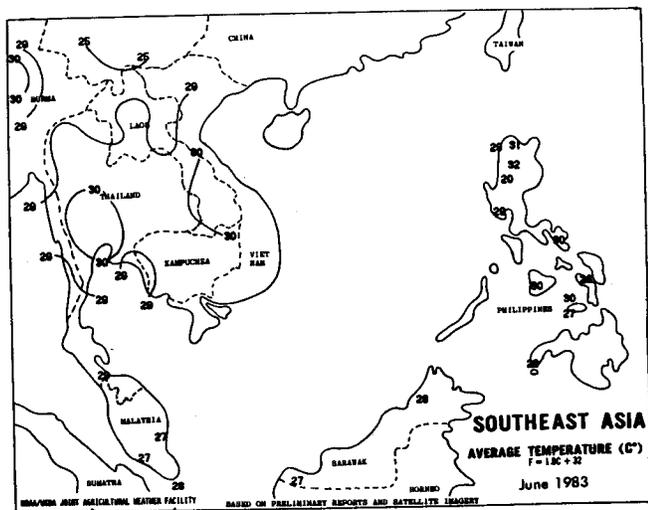
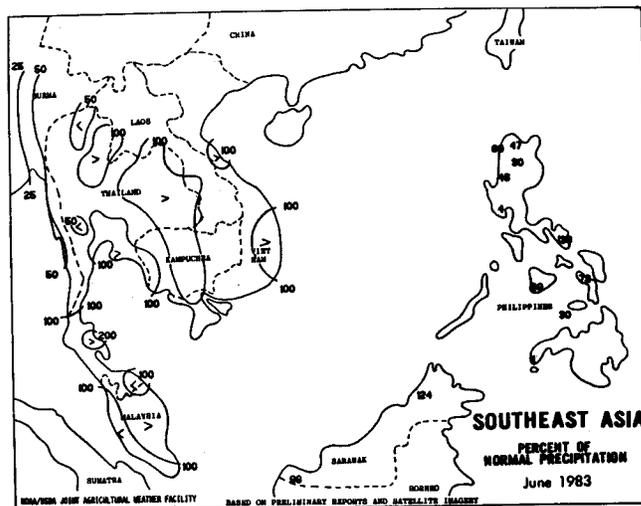
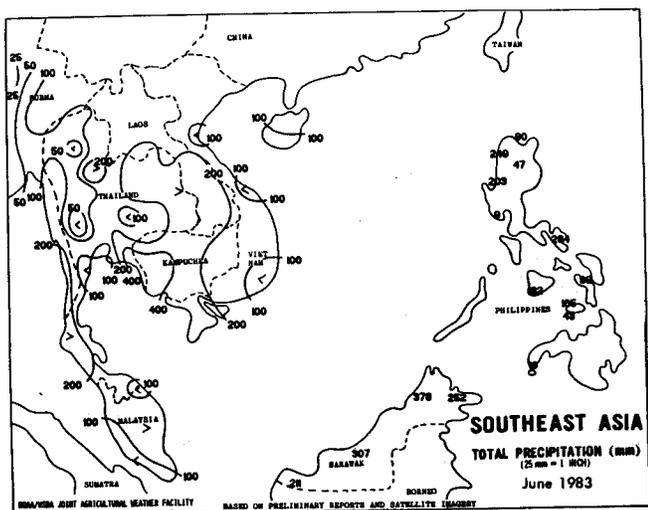
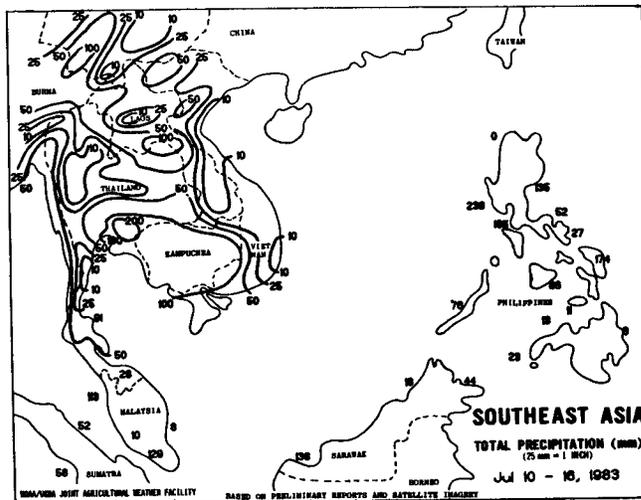
**SOUTH ASIA...** Moderate to heavy rain fell on the eastern half of India, mostly early in the week. The rain was very beneficial for cotton and groundnuts, which are normally planted in July. The recent rain also helped relieve the dryness caused by below-normal June precipitation. Precipitation increased substantially on the southwest coast this week. Autumn rice planting was delayed in this area because of below-normal June rains. Relatively dry weather in the east covered the winter rice area this week, following heavy rain last week. Temperatures last month were above-normal in peninsular and eastern India, increasing the moisture demand. More rain is needed in Karnakata, Andhra Pradesh, and Tamil Madu to compensate for dry weather which has persisted for the past two weeks.



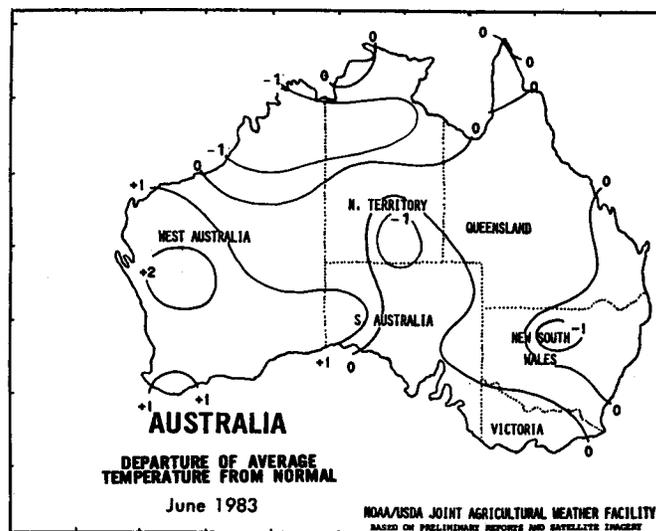
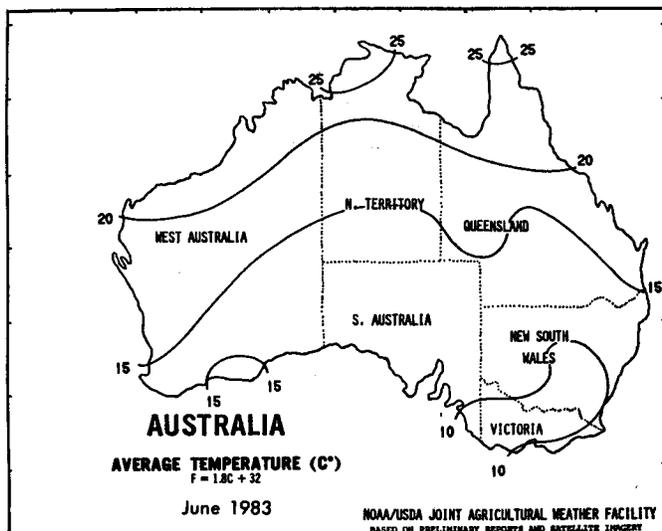
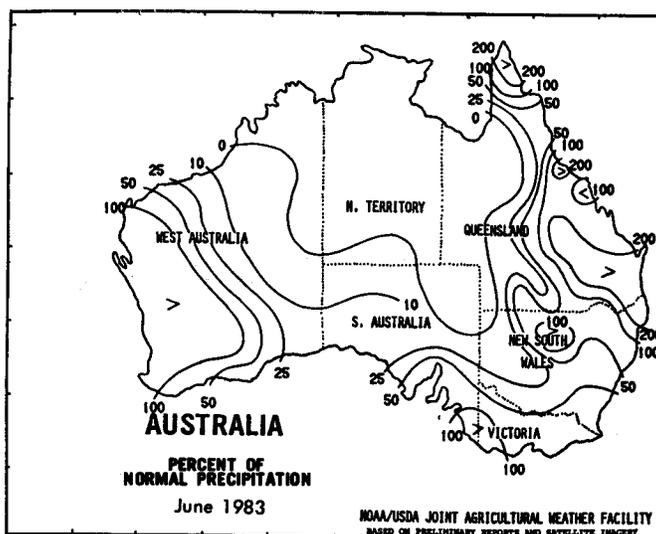
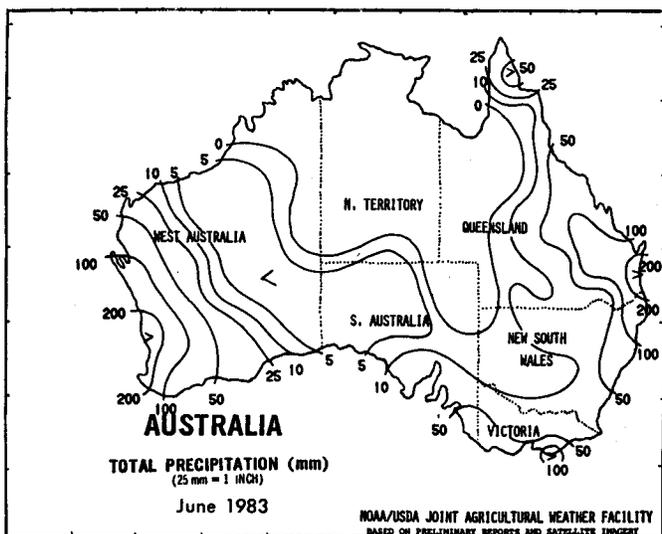
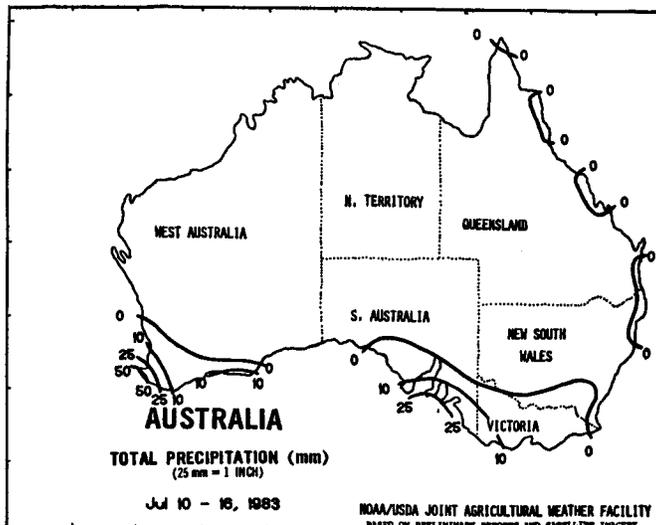
**EASTERN ASIA...** Relatively light rain fell in southern China's rice areas with some locally heavy amounts in Guangxi and Guangdong. June weather was mostly favorable for early rice, which is normally harvested in July. Heavy rain continues in the Yangtze Valley. Above-normal precipitation and below-normal temperatures during June were unfavorable for cotton and intermediate rice, both entering the reproductive stage. Drier conditions returned to the North China Plain, while moderate rains last week helped relieve June's below-normal precipitation. Widespread soaking rain covered Manchuria, benefiting corn and soybeans in the reproductive stage.



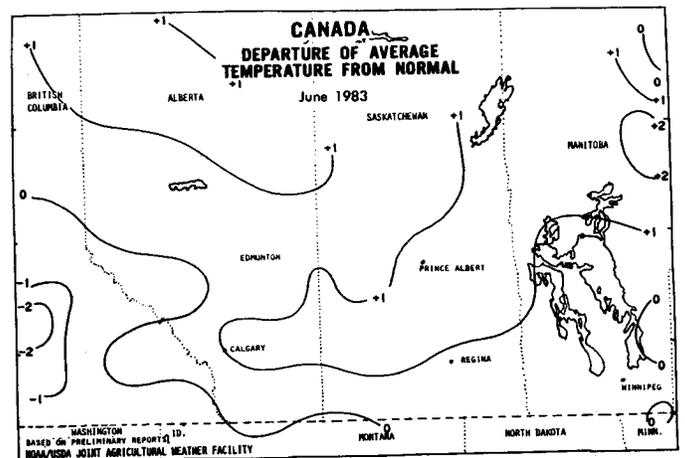
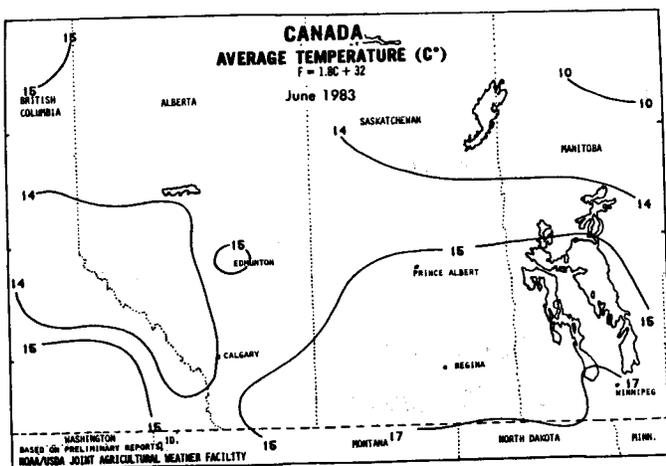
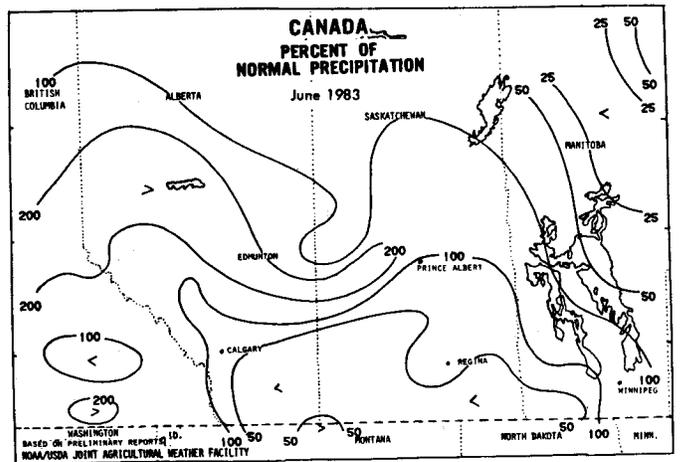
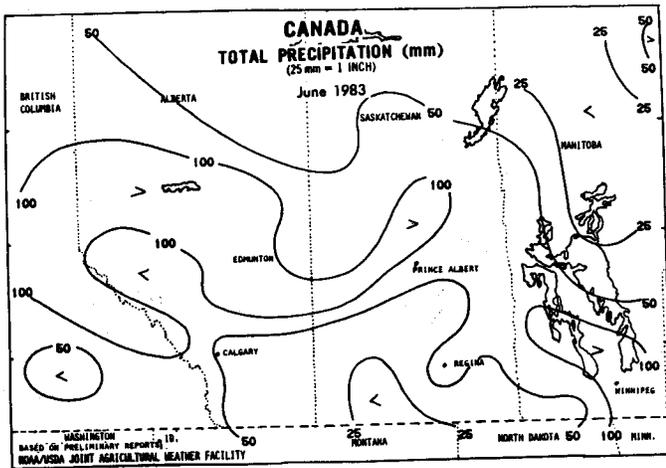
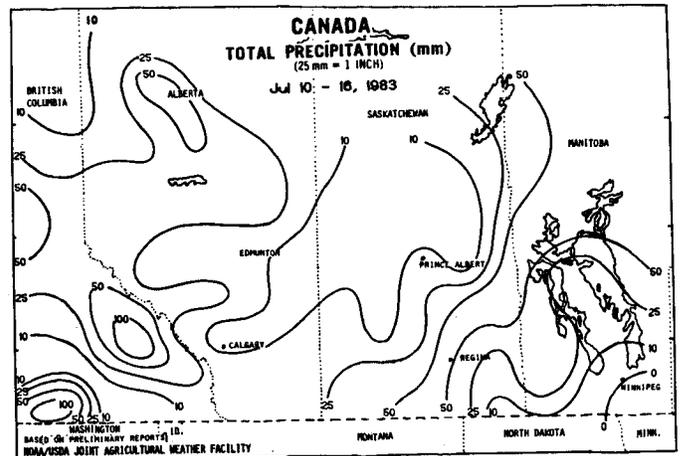
**SOUTHEAST ASIA...** Heavy rain fell in south central Thailand and western Kampuchea this week, while moderate showers covered the northeast. Moisture conditions for corn and rice areas were generally favorable, following near-normal precipitation during June. Below-normal rain in western Thailand and in the central corn area has been unfavorable for crops. Thai corn is now entering the tasseling stage and timely rains are needed. Two tropical storms, Tip and Vera, moved through the Philippines this week bringing moderate to heavy rain. At mid-week, heavy rain and high winds possibly damaged sugarcane in the central islands, while moderate rain fell elsewhere. Late in the week, heavy rain, accompanied by high winds, in central Luzon caused flood damage to recently planted crops, following a prolonged drought.



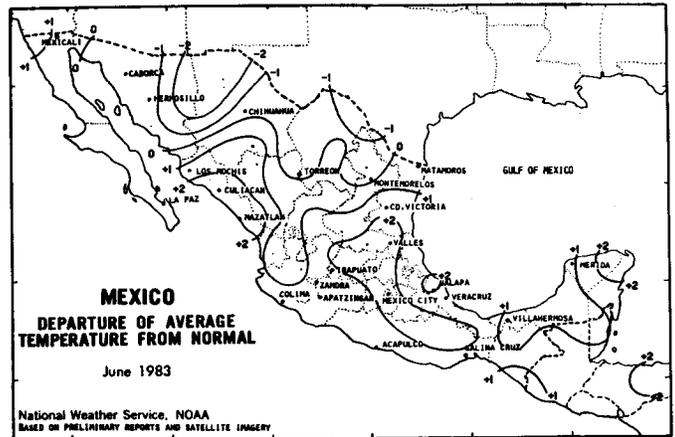
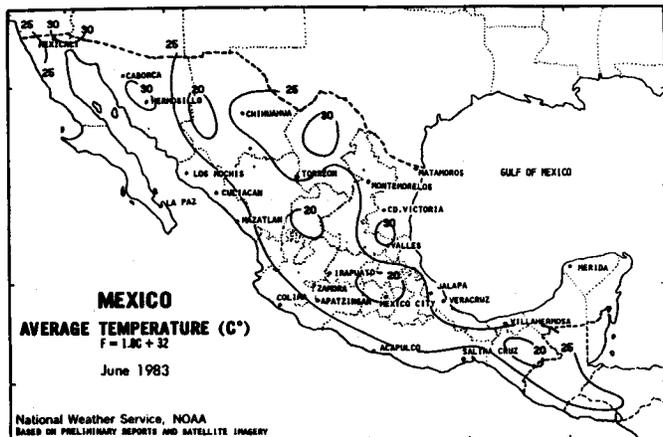
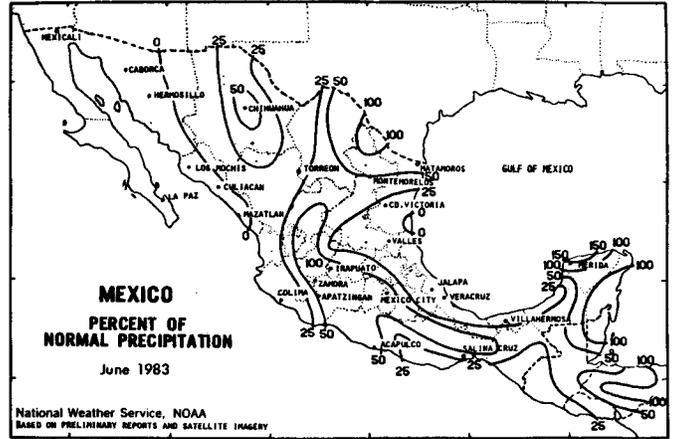
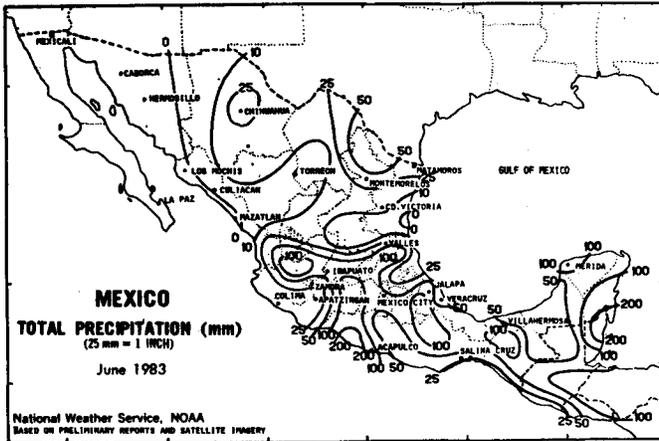
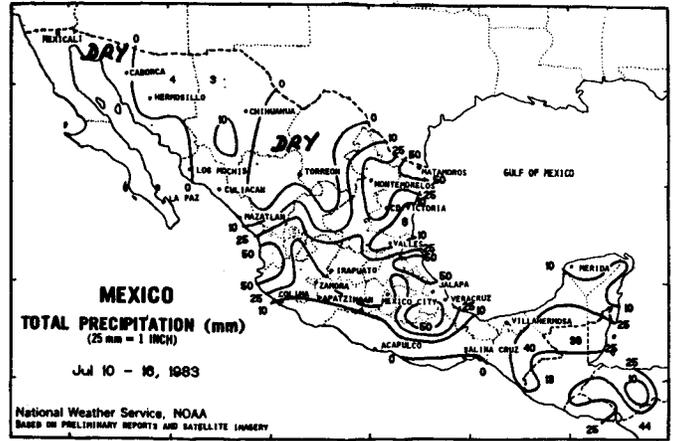
**AUSTRALIA**...Mostly dry weather covered grain areas in Australia this week, while temperatures were slightly below-normal. June precipitation in West Australia was near-normal, providing favorable planting conditions for wheat. In the east, conditions have been variable, as excessive rain in Queensland, and insufficient rain further south, delayed June planting. Dry soils in South Australia and New South Wales continue to be unfavorable for emerging crops. Rain is needed in these areas to provide sufficient moisture for crop growth and development.



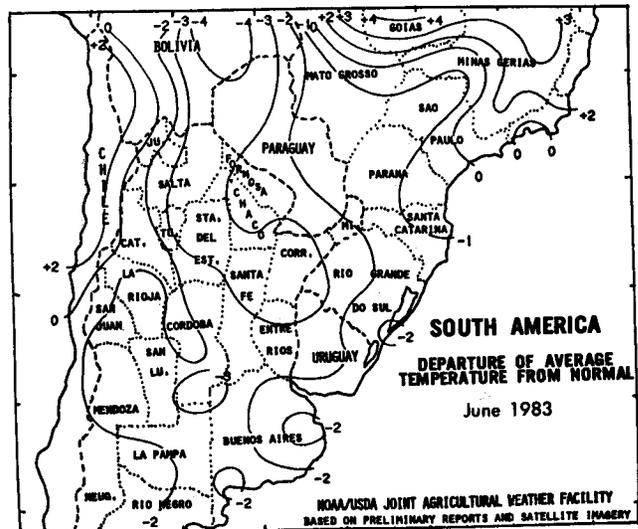
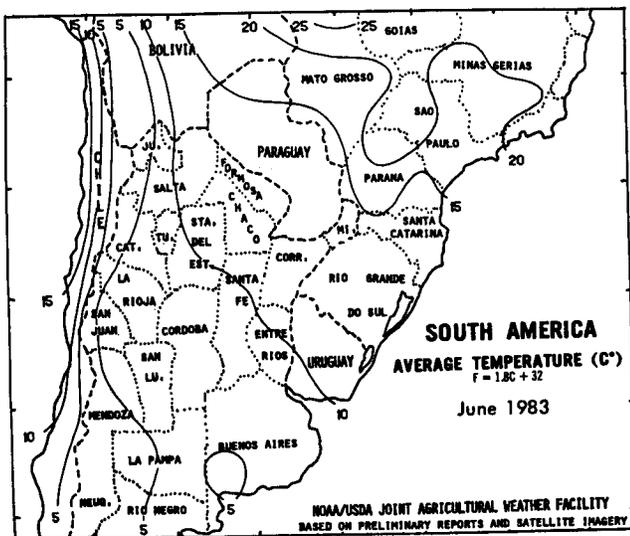
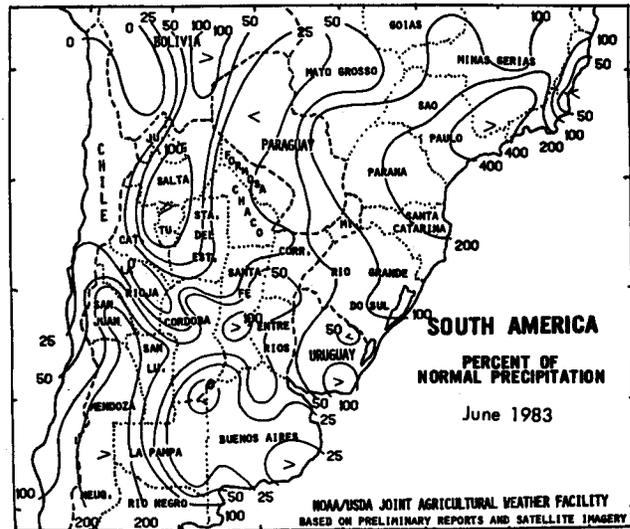
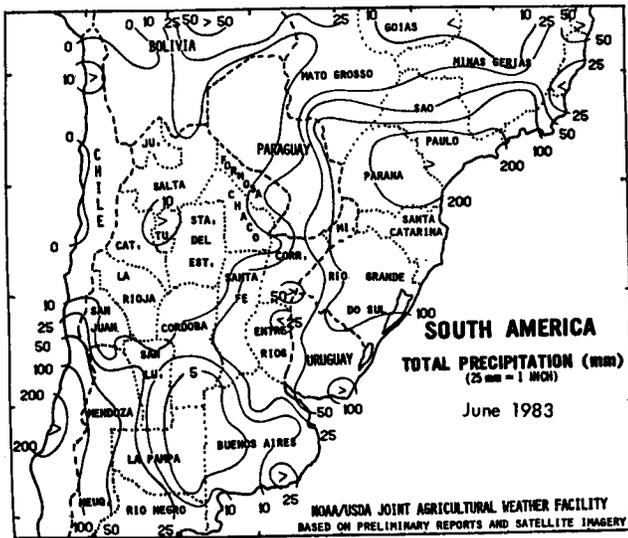
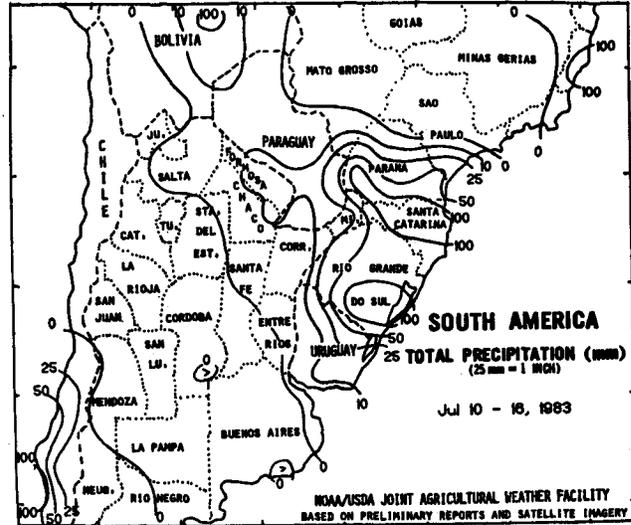
CANADA...Light to moderate rain covered the Canadian Prairie grainbelt this week, with the heaviest amounts falling on the crop areas of southern Saskatchewan. The moisture was very beneficial for southern crops, now entering the heading stage, which had been stressed during June by below-normal precipitation. Generally light precipitation across northern crop areas added to excessively wet conditions. Temperatures in Canada during June were slightly above-normal, helping to dry fields in the north, and advancing crops through the vegetative stage. Continued rains are needed in the south to replenish the depleted soil moisture profile.

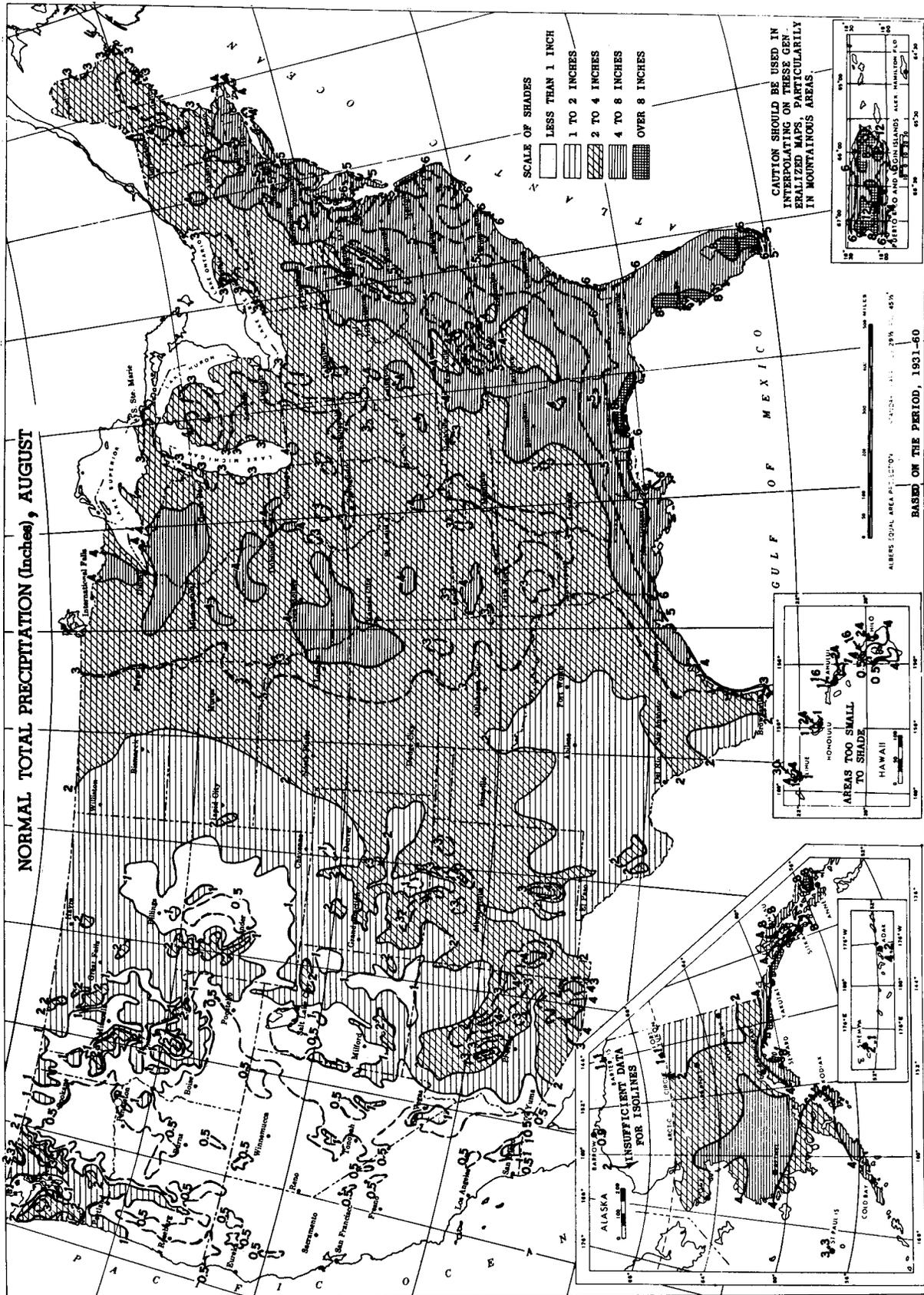


**MEXICO**...Moderate rains fell across most of the southern Plateau corn belt, benefiting crops. Crops got off to a late start because the rainy season was unusually tardy; however, rains have been timely since late June. Significant showers finally drenched the upper northwestern region as a tropical low-pressure trough developed along the upper coast. The cloudiness and rain brought temporary relief from the heat and prolonged dryness to immature crops, orchards, and livestock. However, much more moisture is still needed. The remainder of the north continued to be dry, except for isolated sections of the northwestern mountains. Rains have been unusually light in these mountainous watersheds since spring. Seasonal rains continued to fall over most of the Yucatan Peninsula and extended into Central America.



**SOUTH AMERICA...** Heavy rain fell in southern Brazil again this week. Precipitation in excess of 50 mm fell in Rio Grande Do Sul, Santa Catarina, and southern Parana causing flood damage to the winter wheat crop. Dry weather to the north, in Sao Paulo and Minas Gerais, aided the coffee harvest, following above-normal precipitation during June. Unfavorably dry and cool weather remained in the wheat areas of Argentina this week, while the planting season continues. Last month, much below-normal precipitation and cool temperatures covered the area with unfavorable weather. More rain is needed to provide adequate soil moisture, however cool temperatures have decreased the moisture demand.





This map depicts the normal precipitation pattern for the United States in August. It is based upon 1931-60 data, but a more recent map would tend to show a similar pattern as the long-term average values are conservative.

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