WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE
Economics and Statistics Service
World Food and Agricultural Outlook and Situation Board

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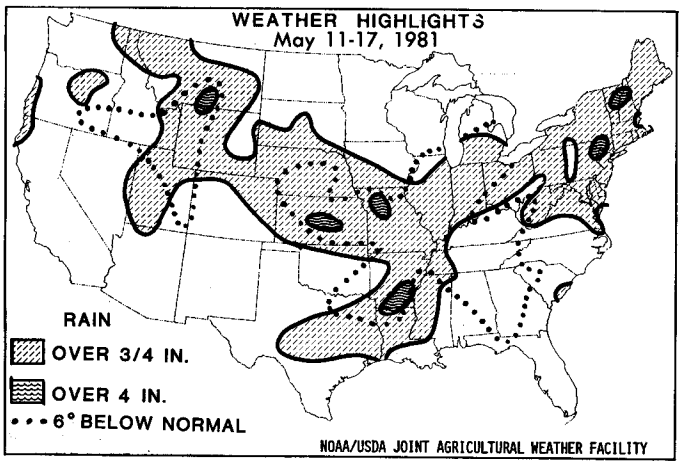
National Weather Summary

May 11-17, 1981



HIGHLIGHTS: Widespread precipitation over much of the United States eased drought conditions in many areas and caused temporary flooding to parts of the Ohio Valley and New England. Severe weather brought wind, hail, and heavy rain from the Great Basin in the West to New England. Unseasonably cold air spread over most of the Nation, bringing record cold temperatures to areas from the central Plains to northern Florida. Deep snow accumulated in the Rockies.

MONDAY...For the second day in a row, record-breaking cold temperatures were reported from Iowa to Texas and Louisiana. Temperatures reached freezing or lower over portions of Nebraska, Iowa, and Kansas--threatening the flowering winter wheat in parts of the area. Heavy thunderstorms continued from Ohio into Pennsylvania, New York, and the mid-Atlantic States. Other thunderstorms rumbled from eastern Colorado and western Kansas into southwestern South Dakota. Heavy snow whitened southern Montana and Wyoming.

TUESDAY...The cold weather moved eastward. Record-low temperatures were reported in Wisconsin, Illinois, Indiana, Alabama, and Florida. It was 24° in Madison, Wisc., and Appalachicola, Fla., recorded 47°--the lowest temperature ever so late in the spring. The approaching cold front triggered more showers and thunderstorms from the mid-Atlantic States through New England. Some heavy downpours caused local flooding. Scattered areas of rain reached over the northern and central High Plains and the middle Mississippi Valley.

WEDNESDAY...The cold front moved through New England, producing more heavy rain in the mountains. Over 4 inches fell in Vermont overnight. A low pressure system in eastern Oklahoma caused heavy rain, thunderstorms, hail, and tornadoes: thunderstorms reached from northeastern Texas into Missouri, but the twisters and hail occurred in Texas, Oklahoma, and Arkansas. Rainshowers extended into Indiana. Thundershowers produced some welcome but isolated rain in southern Florida.

THURSDAY...The low pressure system tracked northeastward, producing severe weather and heavy rain along the way. Showers and thunderstorms spread from Illinois and southern Michigan through the Ohio Valley to the western Appalachians. The stronger storms dumped walnut-sized hail in West Virginia. Showers and thundershowers in the western United States were scattered over the Great Basin and widely scattered across the Rockies. There was some light rain over the Pacific Northwest.

FRIDAY...Heavy rain in the Ohio Valley caused flooding. Later, intense thunderstorms developed over the mid-Atlantic States. The thunderstorms were severe from northeastern North Carolina into much of Pennsylvania, New York, and southern New England. An unseasonably cold spring storm developed in the Rockies. Heavy thunderstorms moved over the High Plains from northern Texas to eastern Colorado and western Kansas and lighter showers reached into North Dakota.

SATURDAY...The spring storm produced snow in the higher elevations of the Rockies and spread severe weather into the Plains and the lower Mississippi Valley. Tornadoes hit Texas, Oklahoma, and Arkansas and showers reached into northern Alabama. Light rain moved onshore along the Oregon coast and a few showers lingered in New England.

SUNDAY...Chaotic weather dominated the central Plains and middle Mississippi Valley. Thunderstorms produced at least nine tornadoes in Kansas, Oklahoma, and northern Texas. Locally heavy rains caused flash flooding in Missouri. Rainshowers extended into Illinois, northern Georgia, and South Carolina, as well as from northern California along the Pacific Northwest Coast.

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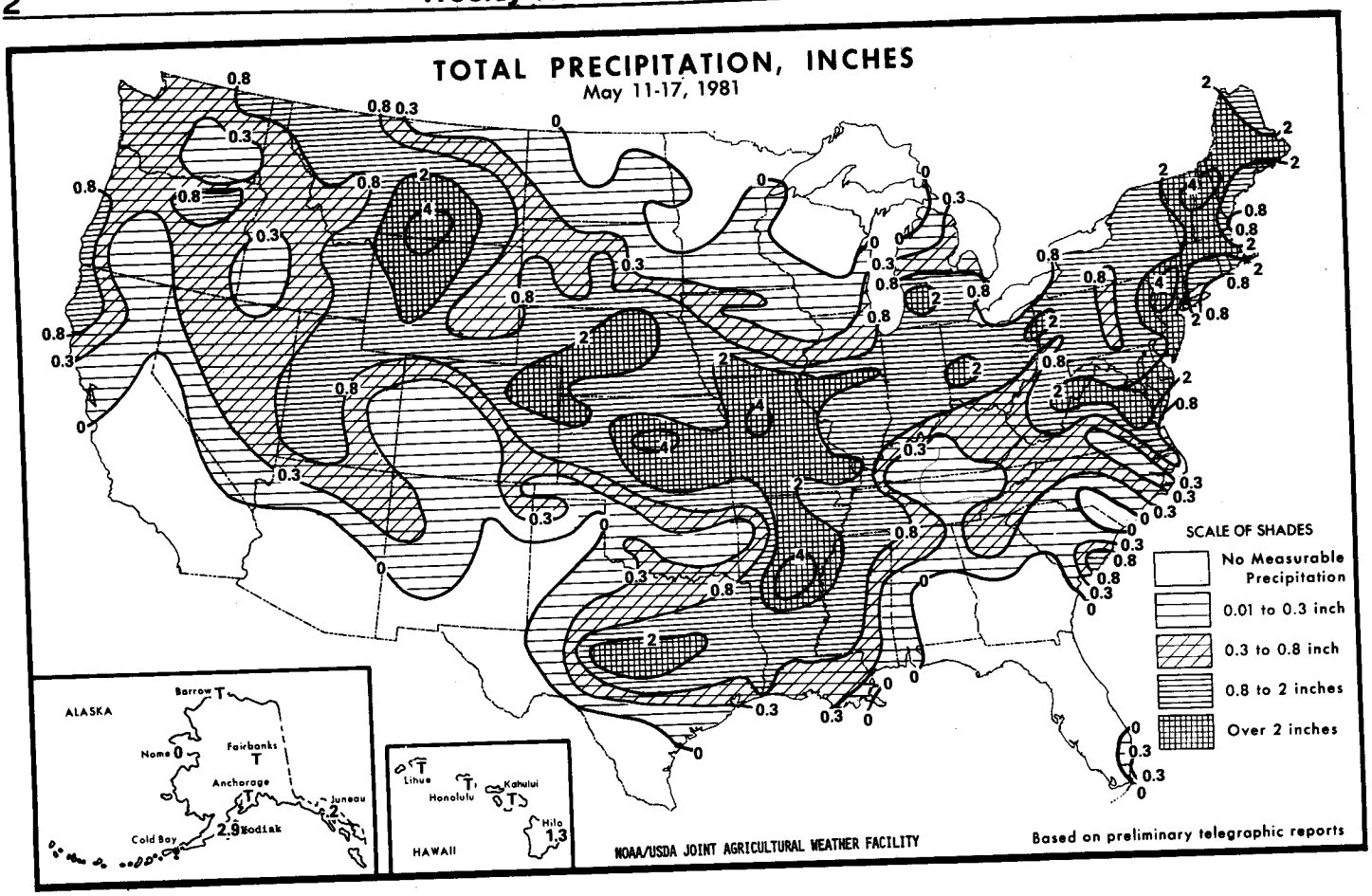

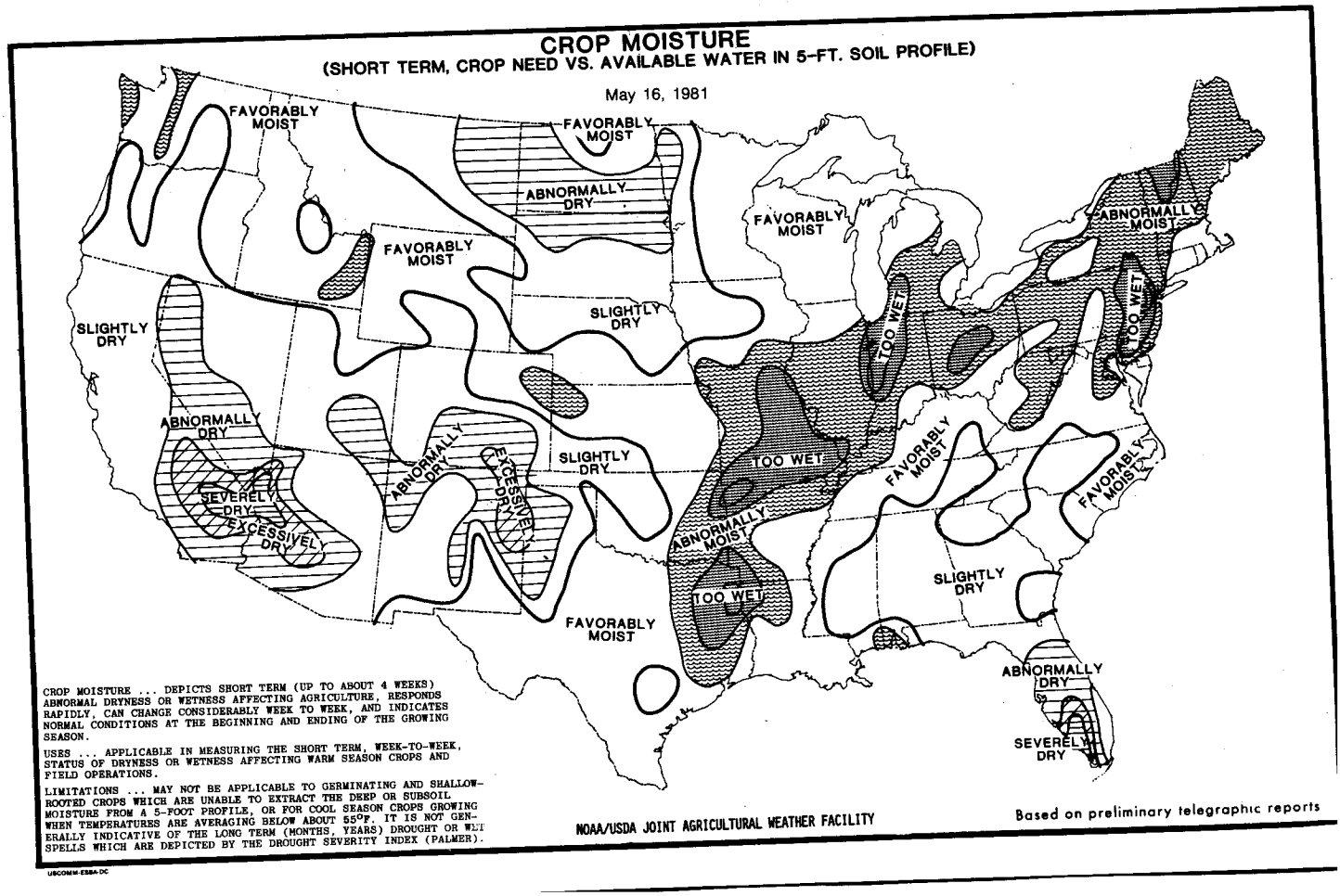

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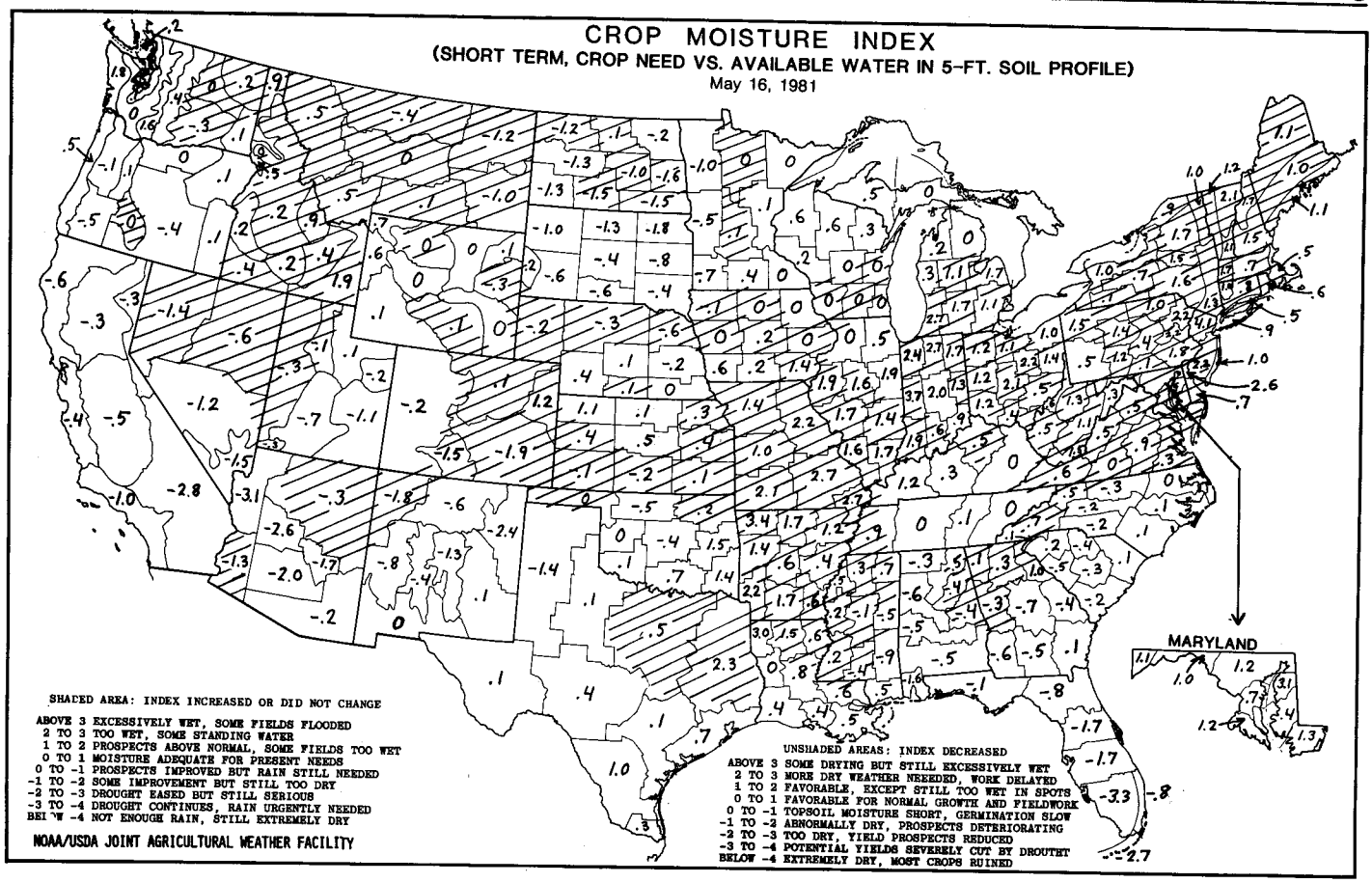
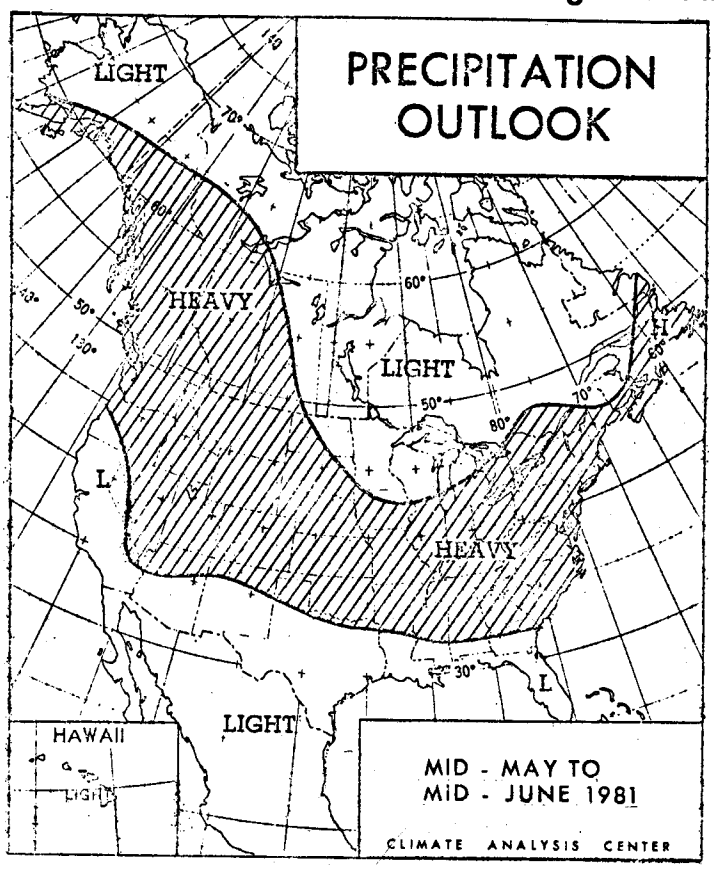
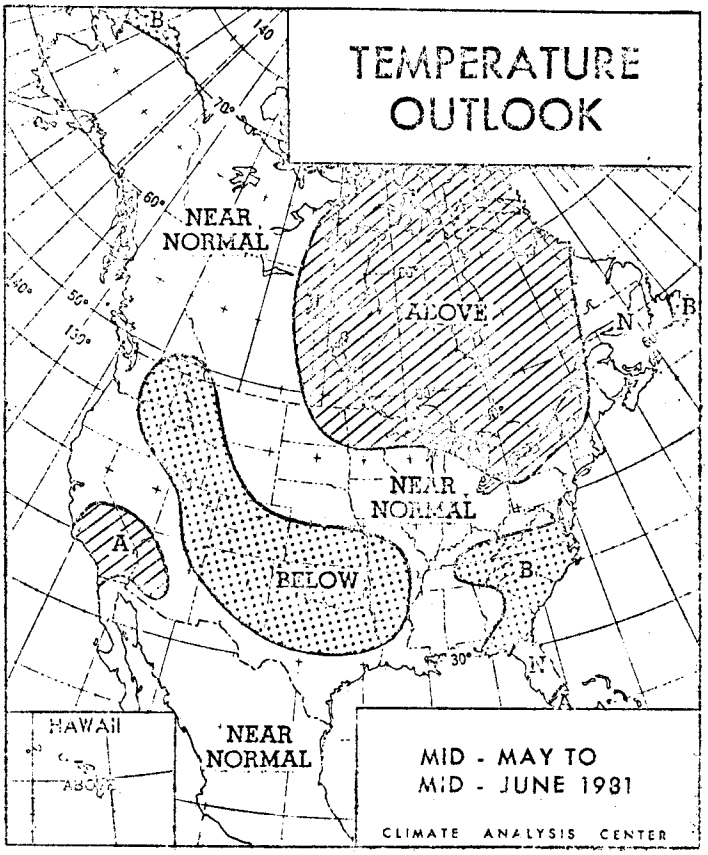
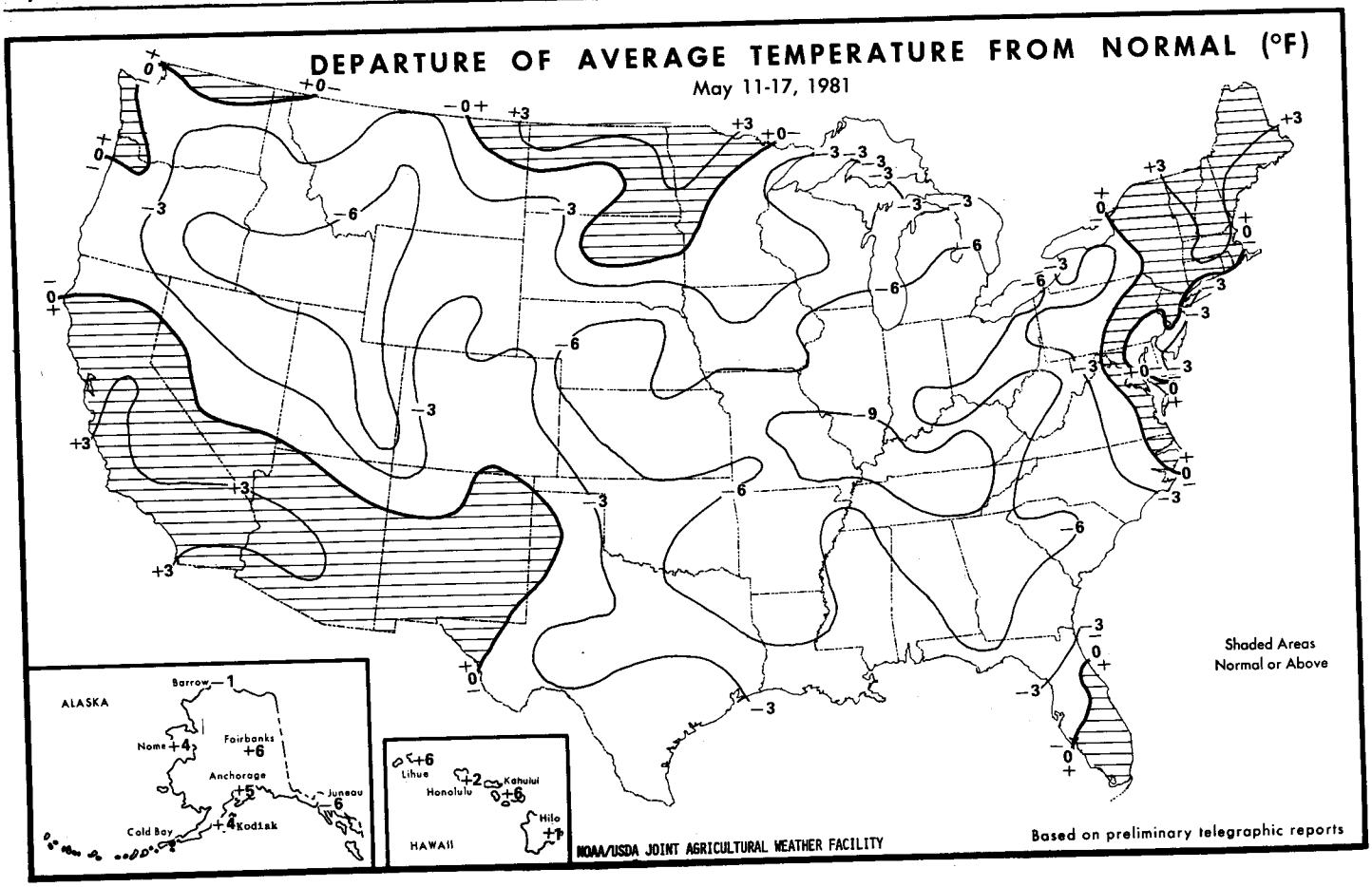
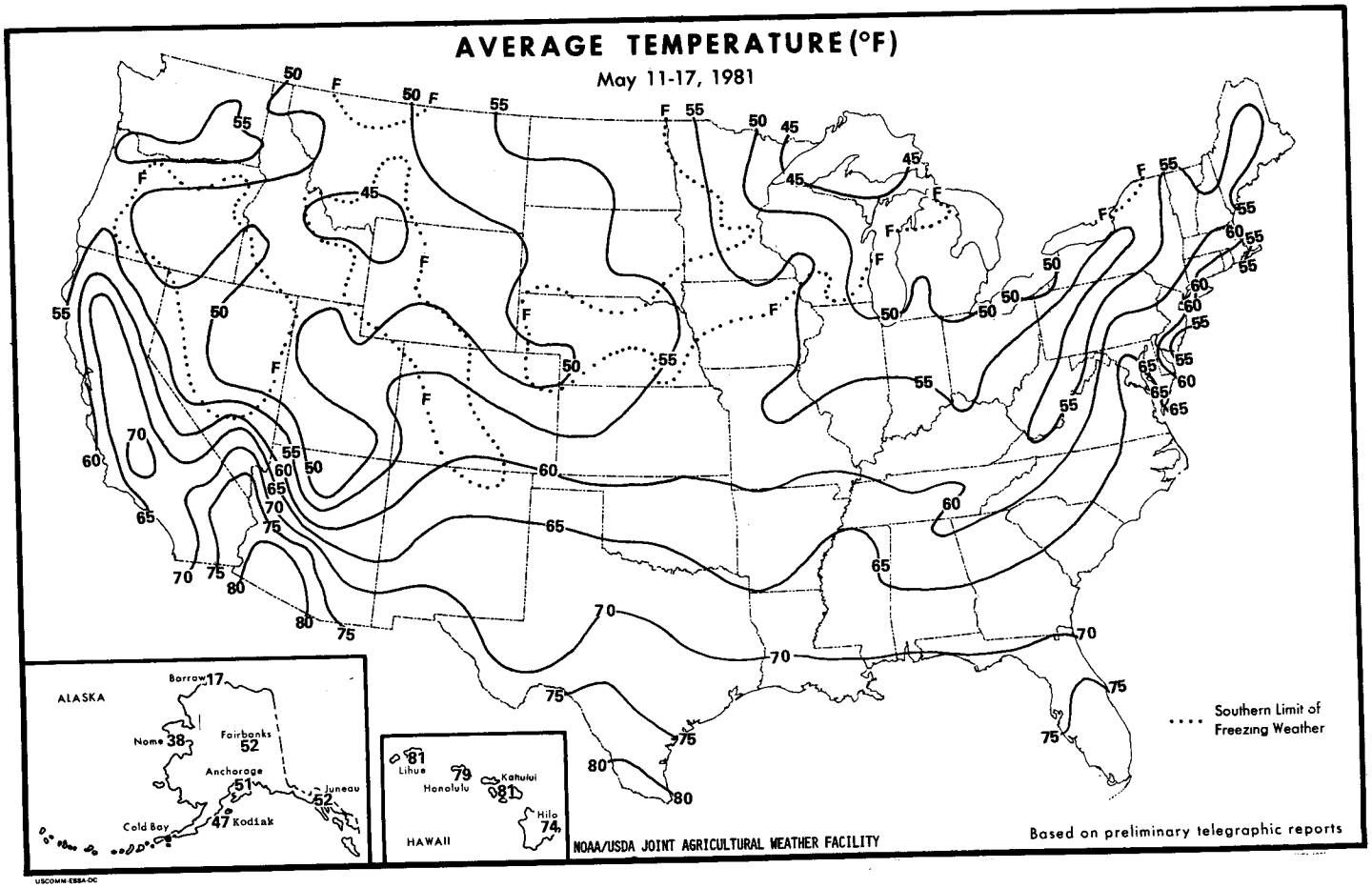


Average Monthly Weather Outlook









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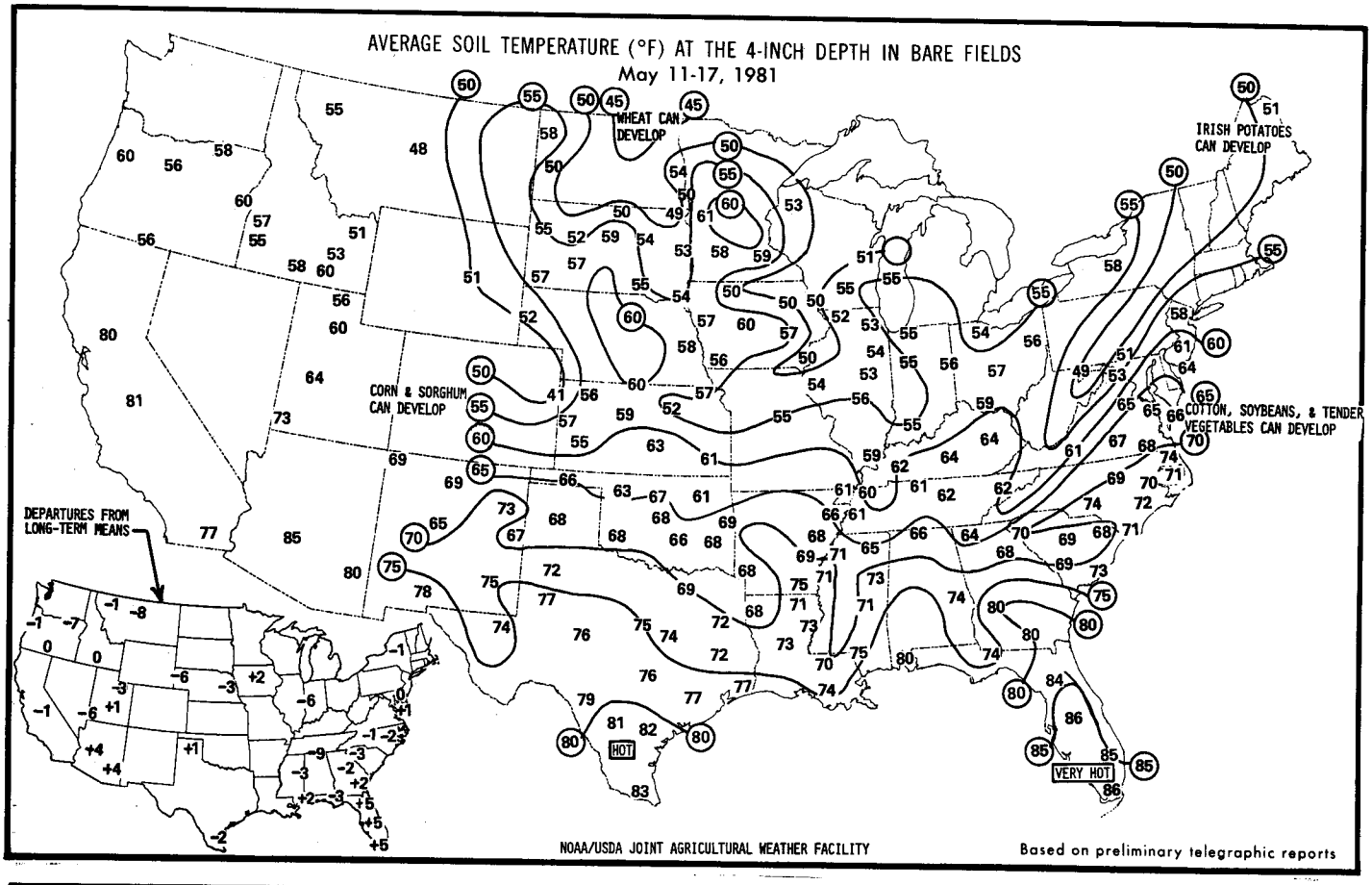
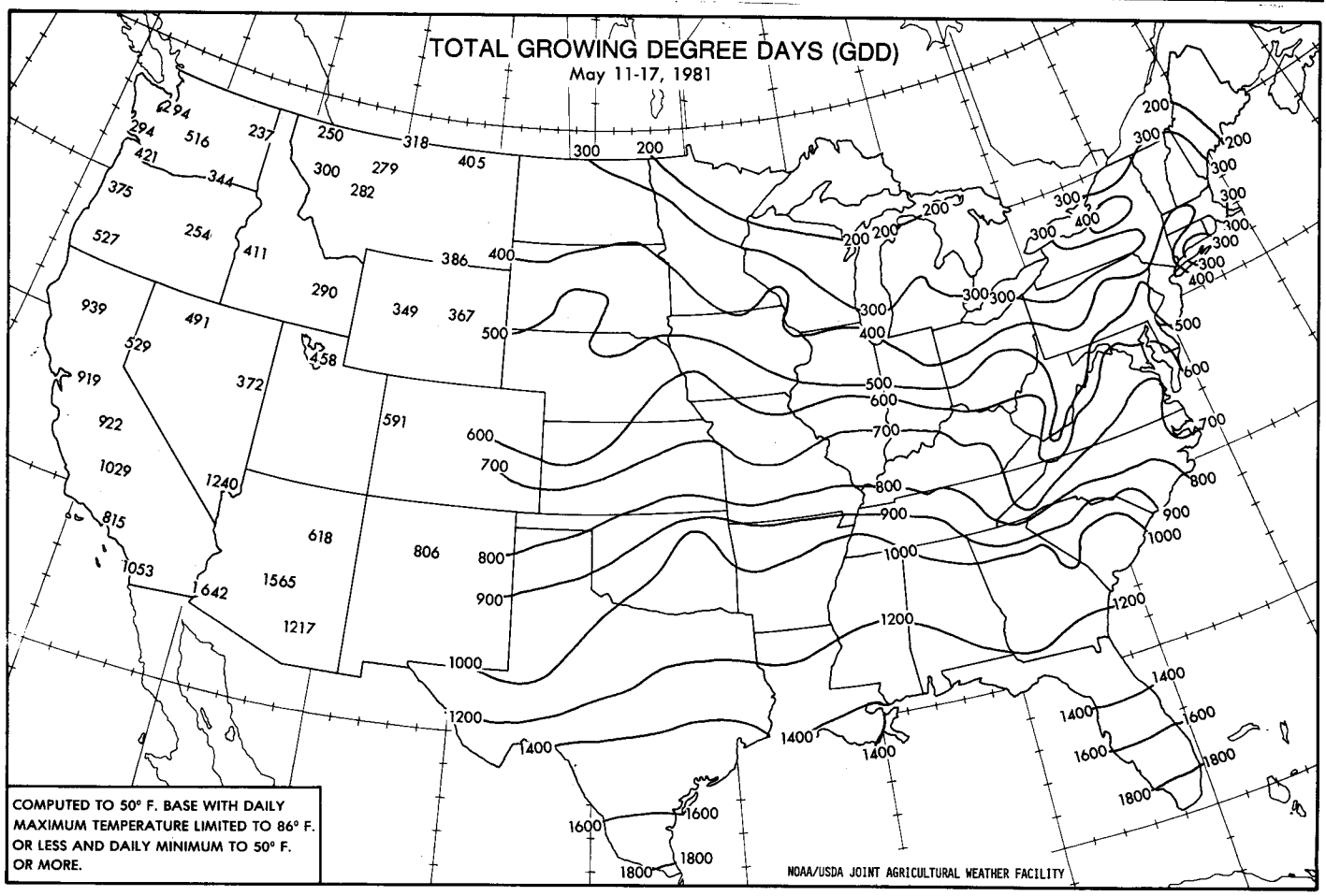

AVERAGE SOIL TEMPERATURE (°F) AT THE 4-INCH DEPTH IN BARE FIELDS
May 11-17, 1981
WHEAT CAN DEVELOP
IRISH POTATOES CAN DEVELOP
CORN & SORGHUM CAN DEVELOP
COTTON, SOYBEANS, & TENDER VEGETABLES CAN DEVELOP
DEPARTURES FROM LONG-TERM MEANS
HOT
VERY HOT
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


TOTAL GROWING DEGREE DAYS (GDD)
May 11-17, 1981
COMPUTED TO 50° F. BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F. OR LESS AND DAILY MINIMUM TO 50° F. OR MORE.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Weather Data for the Week Ending May 17, 1981

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 Mar. 2	PCT. NORMAL SINCE Mar. 2	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	76	50	87	41	63	-7	T	-.8	T	9.2	72	15.6	68	84	39	0	0	1	0
MOBILE	81	57	85	51	69	-5	T	-1.0	T	12.0	75	22.0	88	89	41	0	0	1	0
MONTGOMERY	79	53	90	49	66	-6	0	-.8	0	11.6	95	19.8	91	86	43	1	0	0	0
AK ANCHORAGE	60	43	64	40	51	5	T	-.1	T	.7	58	2.8	97	77	44	0	0	0	0
BARROW	25	11	31	1	18	-1	T	0	T	--	--	--	--	96	76	0	7	2	0
FAIRBANKS	62	41	66	32	52	6	T	-.1	T	.3	30	1.3	68	48	26	0	1	0	0
JUNEAU	59	44	62	40	52	-6	.2	-.6	.2	4.0	49	13.3	85	92	54	0	0	2	0
KODIAK	52	42	59	35	47	4	2.9	1.9	1.9	14.5	146	33.2	167	91	68	0	0	3	1
NOME	47	31	54	25	39	4	0	-.1	0	2.4	141	5.3	156	70	46	0	5	0	0
AZ FLAGSTAFF	64	39	72	30	52	1	T	-.1	T	5.5	153	8.0	111	67	27	0	1	0	0
PHOENIX	92	68	99	65	80	9	0	0	0	1.2	92	3.1	129	33	14	4	0	0	0
TUCSON	87	60	93	59	74	1	0	0	0	2.9	264	5.0	200	43	15	4	0	0	0
WINSLOW	77	49	86	30	63	1	T	-.1	T	.5	45	1.4	70	--	--	0	0	0	0
YUMA	94	64	101	55	79	1	0	0	0	.2	25	1.0	71	43	14	5	0	0	0
AR FORT SMITH	73	50	79	42	62	-7	.1	-1.2	.1	9.0	78	13.3	78	93	52	0	0	1	0
LITTLE ROCK	74	51	81	44	63	-7	3.8	2.6	2.8	11.4	86	17.6	80	100	55	0	0	3	3
CA BAKERSFIELD	84	59	91	50	71	2	0	-.1	0	2.4	126	4.3	105	52	20	3	0	0	0
EUREKA	58	46	64	42	52	0	1.1	.6	.5	6.4	70	17.6	81	92	72	0	0	4	1
FRESNO	85	54	92	49	69	2	0	-.1	0	3.2	91	7.5	109	64	20	3	0	0	0
LOS ANGELES	71	59	74	57	65	3	T	0	T	2.9	91	6.6	81	79	54	0	0	0	0
RED BLUFF	82	57	89	49	69	2	.1	-.1	.1	6.8	139	14.2	111	60	20	0	0	1	0
SAN DIEGO	70	63	73	57	66	3	T	-.1	T	3.0	115	8.5	142	82	62	0	0	0	0
SAN FRANCISCO	69	49	82	48	59	1	T	-.1	T	3.9	87	12.2	101	83	43	0	0	0	0
STOCKTON	85	52	93	46	69	3	0	-.1	0	4.0	105	9.1	101	74	24	3	0	0	0
CO DENVER	64	44	74	38	54	-2	1.6	1.0	1.1	5.7	124	6.4	112	75	38	0	0	5	1
GRAND JUNCTION	71	47	80	43	59	-3	.1	0	.1	2.8	156	3.1	107	63	22	0	0	2	0
PUEBLO	72	46	84	39	59	-2	.3	-.1	.1	1.5	54	2.0	53	79	30	0	0	2	0
CT BRIDGEPORT	64	50	66	45	57	-1	1.1	.3	.7	5.3	60	10.4	73	98	66	0	0	4	1
HARTFORD	71	50	77	42	61	4	1.5	.7	.8	4.8	52	12.4	78	88	51	0	0	4	1
DC WASHINGTON	75	56	84	47	66	0	1.6	.8	.9	6.5	81	9.7	73	88	53	0	0	3	2
FL APALACHICOLA	79	58	84	55	69	-7	0	-.6	0	3.8	38	8.4	49	92	41	0	0	0	0
DAYTONA BEACH	85	59	94	53	72	3	0	-.5	0	3.4	49	9.2	77	89	46	2	0	0	0
FORT MYERS	90	66	93	64	78	1	0	-.8	0	1.5	23	3.9	38	89	35	4	0	0	0
JACKSONVILLE	86	54	90	47	70	-4	T	-.6	T	6.4	78	12.0	82	97	38	1	0	0	0
KEY WEST	85	74	89	71	80	-1	0	-.5	0	1.3	26	4.0	46	86	65	0	0	0	0
MIAMI	90	68	91	62	79	1	.5	-.8	.4	4.8	59	10.1	80	90	47	5	0	3	0
ORLANDO	91	62	95	58	76	4	0	-.6	0	2.2	29	6.8	52	93	30	5	0	0	0
TALLAHASSEE	84	50	90	43	67	-6	0	-.9	0	11.2	94	21.4	104	97	32	1	0	0	0
TAMPA	85	62	91	54	73	-4	0	-.5	0	2.0	29	7.8	68	94	42	1	0	0	0
WEST PALM BEACH	88	69	90	64	78	1	.1	-1.0	T	4.7	52	9.3	65	82	43	3	0	2	0
GA ATLANTA	73	50	83	45	62	-7	.3	-.5	.3	7.1	58	14.7	69	86	44	0	0	1	0
AUGUSTA	80	50	86	45	65	-6	T	-.8	T	5.4	56	11.5	67	91	35	0	0	0	0
MACON	81	52	86	46	67	-6	T	-.8	T	7.9	74	17.8	94	83	35	0	0	0	0
SAVANNAH	82	55	86	50	69	-4	0	-.9	0	7.3	80	11.2	75	83	35	0	0	0	0
HI HILO	80	69	82	67	74	1	1.3	-1.1	.3	--	--	--	--	89	58	0	0	7	0
HONOLULU	86	73	87	70	80	2	T	-.2	T	2.5	48	4.3	35	79	50	0	0	1	0
KAHULUI	87	74	88	72	81	6	T	-.1	T	--	--	--	--	68	43	0	0	0	0
LIHUE	86	76	87	74	81	6	T	-.6	T	--	--	--	--	76	56	0	0	1	0
ID BOISE	65	38	71	28	51	-6	.2	-.1	.2	5.1	176	7.3	128	82	29	0	1	2	0
LEWISTON	65	45	73	41	55	-3	.4	0	.1	3.5	125	5.5	110	91	46	0	0	2	0
POCATELLO	55	35	67	29	45	-7	.8	.5	.5	4.2	162	5.6	127	96	49	0	1	5	0
IL CAIRO	67	51	73	46	59	-10	1.8	.6	--	--	--	--	--	--	--	0	0	0	0
CHICAGO	59	41	75	31	50	-8	1.1	.4	.6	8.6	112	10.9	101	87	40	0	1	2	2
MOLINE	62	42	75	34	52	-8	.6	-.2	.5	6.2	75	8.8	77	87	44	0	0	4	1
PEORIA	63	44	73	35	53	-8	1.9	1.0	1.2	11.1	116	13.9	107	90	55	0	0	4	1
ROCKFORD	63	40	75	30	52	-7	.3	-.5	.3	7.3	87	9.9	86	90	37	0	1	1	0
SPRINGFIELD	66	46	77	39	56	-7	1.2	.4	.4	11.0	125	13.5	109	92	53	0	0	4	0
IN EVANSVILLE	65	47	73	37	56	-9	1.4	.4	.7	7.8	71	11.2	63	98	63	0	0	3	2
FORT WAYNE	58	43	71	40	51	-8	1.6	.8	1.4	9.3	112	13.0	99	89	54	0	0	3	1
INDIANAPOLIS	65	45	72	38	55	-6	1.1	.2	.8	10.7	111	14.0	94	85	49	0	0	5	1
SOUTH BEND	58	42	71	34	50	-8	.9	.2	.8	10.1	115	12.8	96	92	51	0	0	3	1
IA BURLINGTON	63	46	73	39	54	-5	.6	-.2	T	8.0	96	9.8	87	87	49	0	0	0	0
DES MOINES	67	46	76	37	56	-4	.6	-.3	.3	3.2	45	4.6	49	77	33	0	0	5	0
DUBUQUE	65	44	77	36	54	-5	T	-1.1	T	6.4	67	9.2	73	74	41	0	0	2	0
SIOUX CITY	66	45	77	32	56	-5	1.1	.3	.7	4.1	76	4.9	70	81	36	0	1	2	1
KS CONCORDIA	66	45	74	34	56	-6	1.0	.1	.7	6.5	114	6.7	93	90	53	0	0	6	1
DODGE CITY	69	46	77	39	58	-6	1.1	.4	.7	6.0	140	6.4	119	95	50	0	0	4	1
GOODLAND	62	40	75	33	51	-7	3.1	2.5	1.6	12.6	360	13.6	309	91	52	0	0	4	2
TOPEKA	66	46	72	30	56	-8	1.8	1.0	1.0	6.9	88	7.4	76	93	59	0	1	5	2
WICHITA	68	48	73	36	58	-7	2.6	1.8	1.9	8.4	127	8.9	105	78	47	0	0	3	2
KY LEXINGTON	64	46	74	41	55	-9	.7	-.2	.5	8.0	75	12.9	71	94	57	0	0	3	0
LOUISVILLE	69	48	77	45	58	-6	.4	-.5	.2	6.8	64	10.4	57	88	52	0	0	4	0
LA BATON ROUGE	81	59	90	51	70	-4	.4	-.6	.4	8.7	67	17.1	77	98	49	1	0	1	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending May 17, 1981

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 Mar. 2	PCT. NORMAL SINCE Mar. 2	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
LA LAKE CHARLES	81	61	85	50	71	-4	.5	- .7	.3	4.4	41	9.6	49	90	53	0	0	2	0
NEW ORLEANS	82	62	88	55	72	-3	.3	- .6	.3	9.0	76	18.2	85	88	48	0	0	1	0
SHREVEPORT	77	55	88	45	66	-7	1.9	.7	1.0	12.2	100	18.6	93	95	54	0	0	3	2
ME CARIBOU	63	47	72	35	55	5	1.8	1.1	1.0	7.4	121	11.8	112	94	64	0	0	6	1
PORTLAND	63	46	72	38	54	2	1.5	.7	.5	6.4	73	14.4	91	98	61	0	0	4	1
MD BALTIMORE	73	50	83	42	61	-1	1.0	.2	.5	5.8	69	9.3	65	89	52	0	0	3	0
MA BOSTON	71	51	78	47	61	3	.8	0	.7	4.5	49	12.2	74	98	51	0	0	3	1
CHATHAM	59	48	62	45	53	--	2.3	--	1.5	7.7	--	15.5	--	93	75	0	0	2	2
MI ALPENA	56	39	64	33	47	-3	.4	- .2	.3	5.2	91	7.7	87	84	44	0	0	2	0
DETROIT	58	42	72	35	50	-7	.9	.2	.5	6.0	81	9.6	87	85	45	0	0	3	1
FLINT	56	39	70	37	48	-7	1.1	.4	.9	7.7	118	10.3	104	89	41	0	0	3	1
GRAND RAPIDS	61	39	75	27	50	-6	3.1	2.4	2.8	14.1	186	16.5	149	86	40	0	1	2	1
HOUGHTON LAKE	59	39	71	35	49	-5	.2	- .4	.1	5.9	107	9.0	107	80	29	0	0	1	0
LANSING	57	37	72	32	47	-8	1.7	.9	1.4	9.7	139	11.6	110	98	56	0	1	2	1
MARQUETTE	55	31	68	27	43	-4	0	- .8	0	7.1	101	11.4	109	84	31	0	5	0	0
MUSKEGON	59	39	70	34	49	-5	.9	.3	.9	6.7	93	10.4	90	83	39	0	0	3	1
SAULT STE. MARIE	59	34	70	29	46	-1	T	- .7	T	5.4	96	8.5	93	82	31	0	2	1	0
MN DULUTH	60	33	71	27	46	-3	T	- .7	T	6.4	110	8.1	103	79	23	0	4	1	0
INT'L FALLS	67	38	73	32	52	3	T	- .6	T	3.4	83	3.9	68	65	22	0	1	0	0
MINNEAPOLIS	67	41	76	34	54	-2	T	- .8	T	4.1	80	6.5	98	75	25	0	0	1	0
ROCHESTER	67	39	75	29	53	-2	.1	- .7	.1	4.7	81	6.9	100	80	30	0	1	1	0
SAINT CLOUD	67	38	75	28	53	-2	T	- .8	T	5.1	98	6.6	97	77	23	0	1	0	0
MS JACKSON	79	53	89	45	66	-6	1.1	.1	.5	8.4	66	13.8	62	92	45	0	0	2	2
MERIDIAN	81	52	91	46	67	-5	.3	- .6	.1	12.7	93	19.8	86	90	41	1	0	2	0
MO COLUMBIA	62	45	68	39	53	-11	2.7	1.6	1.9	11.7	129	13.6	108	94	59	0	0	3	2
KANSAS CITY	64	47	72	34	56	-7	2.6	1.7	1.1	8.1	101	8.9	83	88	56	0	0	5	2
SAINT LOUIS	65	48	73	40	56	-9	1.0	.2	.8	9.9	110	12.8	99	97	64	0	0	4	1
SPRINGFIELD	69	47	73	41	58	-6	2.6	1.5	2.5	9.9	101	12.5	89	89	54	0	0	2	1
MT BILLINGS	57	41	75	32	49	-5	4.2	3.8	2.1	7.7	220	8.0	167	89	66	0	1	5	2
GLASGOW	65	45	74	39	55	0	.6	.4	.6	2.0	133	2.1	62	74	37	0	0	4	1
GREAT FALLS	54	40	66	34	47	-6	1.3	.8	.7	5.2	163	6.0	122	85	57	0	0	5	1
HAVRE	57	42	67	33	50	-5	.2	- .1	.1	2.8	127	2.9	94	94	51	0	0	3	0
HELENA	54	40	65	37	47	-4	.7	.3	.5	3.6	164	3.8	123	89	53	0	0	6	1
KALISPELL	60	41	67	37	51	-1	1.0	.6	1.0	4.7	181	8.2	155	89	43	0	0	2	1
MILES CITY	61	45	77	39	53	-3	1.4	1.0	.9	2.2	79	2.4	65	87	47	0	0	3	1
MISSOULA	58	42	69	34	50	-2	.9	.5	.6	3.2	133	4.1	93	93	54	0	0	4	1
NE GRAND ISLAND	62	43	74	33	53	-7	2.1	1.3	1.0	7.1	134	7.5	115	90	55	0	0	6	2
LINCOLN	66	45	77	31	56	-5	1.2	.5	.5	6.6	116	7.0	99	92	50	0	1	4	1
NORFOLK	64	43	77	31	53	-6	1.5	.7	.7	4.9	96	5.4	84	90	40	0	1	4	1
NORTH PLATTE	61	41	72	31	51	-7	2.4	1.7	1.2	8.6	191	8.9	165	94	53	0	1	5	2
OMAHA	65	44	74	30	54	-4	1.0	.1	.6	5.9	92	6.3	78	92	44	0	1	4	1
VALENTINE	62	43	76	33	52	3	.7	.1	.5	3.5	92	3.7	79	72	42	0	0	4	1
NV ELY	62	32	74	25	47	-3	.7	.5	.3	3.2	139	4.2	127	74	26	0	4	3	0
LAS VEGAS	86	64	95	56	75	2	.1	.1	.1	1.0	111	1.9	106	33	15	3	0	1	0
RENO	71	41	79	36	56	2	T	.2	T	.9	69	1.9	54	59	20	0	0	0	0
WINNEMUCCA	66	34	77	28	50	-3	.4	.2	.3	1.6	84	2.6	72	74	21	0	3	2	0
NH CONCORD	69	43	78	33	56	3	2.3	1.6	1.3	6.4	85	14.6	119	83	40	0	0	5	2
NJ ATLANTIC CITY	66	46	70	38	56	-8	2.4	1.6	1.5	10.8	113	15.1	90	97	58	0	0	2	2
TRENTON	71	52	78	45	62	1	3.2	2.4	T	8.8	100	12.5	87	94	55	0	0	0	0
NM ALBUQUERQUE	79	50	85	45	65	0	.2	.1	.2	1.5	136	2.3	115	55	14	0	0	2	0
ROSWELL	83	55	89	49	69	1	0	- .2	0	4.3	307	4.8	209	59	17	0	0	0	0
NY ALBANY	68	45	76	33	57	0	1.8	1.0	.9	4.2	61	9.8	86	94	58	0	0	4	1
BINGHAMTON	62	44	73	38	53	-2	1.4	.5	.7	5.3	66	10.1	79	87	53	0	0	4	2
BUFFALO	59	43	65	38	51	-2	1.2	.5	.5	6.4	84	11.0	84	92	49	0	0	4	2
NEW YORK	69	56	72	51	63	2	2.5	1.7	1.2	6.8	74	12.8	84	86	54	0	0	4	2
ROCHESTER	61	42	71	36	52	-4	1.4	.8	.9	5.1	75	9.5	82	94	56	0	0	4	1
SYRACUSE	65	46	74	38	55	0	2.0	1.4	[illegible]	5.1	66	9.1	69	89	53	0	0	5	2
NC ASHEVILLE	69	46	79	39	57	-6	.7	0	.4	7.6	77	12.8	74	99	54	0	0	3	0
CHARLOTTE	76	51	82	46	63	-4	.1	- .5	.1	4.3	46	8.4	49	84	38	0	0	2	0
GREENSBORO	76	49	82	41	62	-4	.4	- .3	.4	4.2	51	8.5	57	84	40	0	0	1	0
HATTERAS	75	57	81	46	66	0	.8	.1	.7	6.5	76	10.3	60	93	58	0	0	2	1
RALEIGH	76	50	80	43	63	-3	.5	- .3	.4	4.6	55	8.6	57	95	40	0	0	1	0
WILMINGTON	78	56	84	53	67	-4	T	[illegible]	T	7.6	85	11.8	76	91	44	0	0	0	0
ND BISMARCK	66	40	72	29	53	-1	T	.4	T	.7	22	1.3	32	70	29	0	1	1	0
FARGO	71	44	77	33	57	3	T	.5	T	.3	31	1.9	37	53	23	0	0	1	0
WILLISTON	70	45	73	33	58	4	.1	- .2	.1	.3	36	1.3	38	69	25	0	0	2	0
OH AKRON-CANTON	64	45	70	40	55	-3	1.6	.7	.9	11.8	139	17.2	127	81	45	0	0	5	1
CINCINNATI	65	46	73	40	55	-7	1.2	.4	.8	9.5	103	14.0	88	98	59	0	0	4	1
CLEVELAND	59	43	65	36	51	-6	.7	- .1	.4	7.7	92	11.3	83	91	56	0	0	5	0
COLUMBUS	65	47	71	42	56	-4	1.6	.7	.8	10.6	119	16.0	111	94	60	0	0	3	2
DAYTON	63	44	72	39	53	-8	1.2	.4	.6	8.9	106	12.5	93	93	62	0	0	5	1
TOLEDO	58	42	69	39	50	-8	.9	.1	.6	5.4	76	9.3	85	95	58	0	0	2	1
YOUNGSTOWN	65	46	73	42	55	-2	2.1	1.2	.9	10.1	125	14.8	102	90	49	0	0	5	2
OK OKLAHOMA CITY	74	50	84	37	62	-6	.3	- .9	.2	7.7	96	9.0	84	85	52	0	0	3	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending May 17, 1981

STATES AND STATIONS	TEMPERATURE °F: AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	PRECIPITATION: WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar. 2	PCT. NORMAL SINCE Mar. 2	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	RELATIVE HUMIDITY, PERCENT: AVERAGE MAXIMUM	AVERAGE MINIMUM	NUMBER OF DAYS: TEMPERATURE °F: 90 AND ABOVE	32 AND BELOW	PRECIPITATION: .01 INCH OR MORE	.50 INCH OR MORE
TULSA	73	51	80	41	62	-6	1.0	-.1	.9	6.7	72	9.1	72	98	57	0	0	2	1
OR ASTORIA	60	47	68	37	53	1	.6	0	.2	15.3	118	26.4	86	88	60	0	0	4	0
BURNS	59	33	68	28	46	-7	.5	.3	.4	3.2	178	4.9	102	88	41	0	5	2	0
MEDFORD	68	41	76	35	55	-2	.2	-.2	.1	2.2	65	4.6	50	94	38	0	0	2	0
PENDLETON	64	45	74	40	55	-5	.3	0	T	3.3	118	5.6	98	75	39	0	0	1	0
PORTLAND	66	49	76	42	57	1	.7	.2	.5	5.5	81	10.9	65	90	52	0	0	3	0
SALEM	65	44	73	34	55	-1	.7	.2	.2	6.6	87	12.0	62	93	50	0	0	3	0
PA ALLENTOWN	70	50	79	43	60	1	3.1	2.3	1.9	7.7	82	13.0	85	91	52	0	0	3	2
ERIE	55	40	59	33	48	-6	.8	0	.4	9.2	114	15.3	120	94	64	0	0	5	0
HARRISBURG	70	50	78	43	60	2	.8	-.1	.2	5.0	63	11.3	86	88	48	0	0	2	0
PHILADELPHIA	71	52	80	43	62	-1	3.3	2.5	1.8	9.3	106	12.8	90	91	54	0	0	3	2
PITTSBURGH	66	45	78	41	56	-3	.6	-.2	.3	7.8	89	12.5	89	91	48	0	0	4	0
SCRANTON	67	48	79	42	57	0	2.6	1.8	1.4	6.8	91	15.5	134	84	54	0	0	3	2
RI PROVIDENCE	67	48	72	42	58	2	1.4	.6	.6	6.2	65	11.8	71	96	57	0	0	3	2
SC CHARLESTON	82	54	86	50	68	-4	1.4	.6	1.4	6.3	68	9.5	61	91	39	0	0	1	1
COLUMBIA	78	49	84	44	64	-8	.1	-.7	.1	5.1	51	10.0	57	97	40	0	0	1	0
GREENVILLE	75	52	83	48	64	-5	.2	-.4	.1	5.9	51	10.0	50	81	39	0	0	1	0
SD ABERDEEN	70	42	78	28	56	1	T	-.6	T	2.3	55	2.7	52	62	26	0	1	1	0
HURON	69	43	78	33	56	0	.2	-.4	.2	2.3	53	2.4	44	83	28	0	0	2	0
RAPID CITY	62	42	75	34	52	-5	1.1	.5	.7	2.7	60	3.0	55	90	51	0	0	5	1
SIOUX FALLS	68	42	77	28	55	-2	.4	-.3	.3	2.9	55	3.4	49	82	28	0	1	3	0
TN CHATTANOOGA	69	47	80	42	58	-10	.4	-.4	.3	9.0	74	16.2	74	89	53	0	0	3	0
KNOXVILLE	68	49	82	43	58	-9	.2	-.5	.1	8.6	84	13.4	67	98	57	0	0	2	0
MEMPHIS	74	55	85	50	65	-5	2.0	1.0	1.0	11.7	88	16.7	72	85	49	0	0	4	2
NASHVILLE	68	48	79	44	58	-10	.1	-.8	.1	8.8	78	14.3	69	96	52	0	0	1	0
TX ABILENE	83	57	93	45	70	-2	.4	-.5	.4	6.0	109	8.6	116	81	30	2	0	1	0
AMARILLO	80	49	89	43	65	0	T	-.6	T	3.1	107	3.4	89	75	22	0	0	0	0
AUSTIN	84	61	90	49	73	-2	1.6	.7	1.2	6.0	78	9.4	73	87	49	2	0	2	1
BEAUMONT	79	63	83	50	71	-4	.9	-.2	.9	7.6	77	14.4	78	93	54	0	0	1	1
BROWNSVILLE	89	72	93	57	81	2	T	-.6	T	4.9	158	7.5	123	90	53	4	0	0	0
CORPUS CHRISTI	85	69	89	56	77	-1	T	-.7	T	8.4	179	12.8	152	97	62	0	0	0	0
DEL RIO	87	67	97	54	77	-2	T	-.6	T	10.2	300	11.1	218	83	45	2	0	0	0
EL PASO	85	60	88	50	73	1	0	-.1	0	1.7	170	3.3	174	49	15	0	0	1	0
FORT WORTH	79	55	91	44	67	-5	.8	-.2	.6	9.9	108	12.3	91	88	47	1	0	1	1
GALVESTON	78	69	83	62	73	-2	.2	-.5	.2	1.7	25	5.2	42	84	62	0	0	1	0
HOUSTON	84	62	90	47	73	-2	.6	-.6	.5	12.7	148	17.3	109	90	49	1	0	2	1
LUBBOCK	80	53	91	46	67	-2	T	-.8	T	3.4	106	4.3	105	72	24	1	0	1	0
MIDLAND	84	54	90	43	69	-3	.1	-.4	.1	3.7	154	5.0	152	84	26	1	0	1	0
SAN ANGELO	83	56	92	40	70	-4	2.1	1.5	2.1	8.3	213	10.6	193	86	33	1	0	1	1
SAN ANTONIO	86	63	97	47	75	-1	T	-.7	T	5.2	91	9.0	93	94	52	2	0	1	0
VICTORIA	84	66	94	53	75	-2	.2	-.7	.2	6.8	105	10.2	95	94	58	1	0	2	0
WACO	83	56	93	37	70	-4	2.2	1.1	1.3	6.3	70	9.5	71	92	45	2	0	3	2
WICHITA FALLS	80	53	94	42	66	-6	.6	-.5	.3	6.6	89	10.1	103	91	44	2	0	2	0
UT BLANDING	59	42	68	33	49	-7	.2	.1	.2	4.0	190	4.4	105	61	34	0	0	1	0
SALT LAKE CITY	63	43	82	36	53	-5	1.1	.7	.7	4.9	102	6.4	86	84	36	0	0	4	1
VT BURLINGTON	66	47	78	39	57	3	2.8	2.1	1.8	7.4	123	13.3	141	95	56	0	0	5	1
VA LYNCHBURG	74	52	82	36	63	-3	.3	-.4	.1	4.7	61	9.0	68	84	38	0	0	2	0
NORFOLK	75	59	84	55	67	1	.6	-.2	.5	5.3	68	8.6	59	88	46	0	0	2	0
RICHMOND	75	53	82	42	64	1	3.8	3.0	3.1	9.0	115	12.4	90	88	47	0	0	3	2
ROANOKE	72	47	80	37	60	-4	.7	-.1	.4	5.3	67	8.1	58	92	43	0	0	2	0
WA COLVILLE	65	45	71	40	55	0	1.2	.8	.5	5.1	182	7.9	125	93	65	0	0	4	1
OMAK	68	62	73	59	65	8	0	-.2	0	.7	32	3.8	78	53	35	0	0	0	0
QUILLAYUTE	61	43	68	34	52	1	.4	-.7	.2	27.2	124	42.8	88	97	56	0	0	4	0
SEATTLE-TACOMA	63	46	69	42	54	-1	.4	0	.4	4.6	65	11.5	68	86	44	0	0	2	0
SPOKANE	60	41	68	38	51	-3	.7	.3	.5	3.9	108	6.3	80	96	51	0	0	3	1
WALLA-WALLA	66	46	74	43	56	-4	.6	.2	.7	5.3	136	9.5	125	82	44	0	0	1	1
YAKIMA	67	41	72	33	54	-4	.1	0	.1	.3	25	1.9	58	79	34	0	0	3	0
WV BECKLEY	64	42	79	34	53	-5	.9	.1	.5	6.4	69	9.1	56	95	48	0	0	2	0
CHARLESTON	68	45	83	38	57	-7	1.0	.2	.7	7.5	83	13.1	82	92	46	0	0	4	1
HUNTINGTON	68	47	78	44	57	-7	2.6	1.7	.4	10.3	112	15.2	99	98	54	0	0	4	0
PARKERSBURG	67	48	79	41	57	-6	.6	-.2	.4	6.2	70	10.2	69	84	46	0	0	3	0
WI GREEN BAY	62	37	71	30	50	-4	0	-.7	0	5.1	82	7.8	92	73	32	0	1	0	0
LA CROSSE	70	41	78	35	56	-3	T	-.8	T	5.1	80	7.4	90	89	27	0	0	1	0
MADISON	66	37	75	24	52	-3	T	-.7	T	4.0	63	6.5	74	80	27	0	1	1	0
MILWAUKEE	55	40	65	35	47	-6	.3	-.3	.3	7.4	117	10.6	115	75	44	0	0	2	0
WY CASPER	60	38	76	32	49	-3	.4	-.1	.3	3.6	103	4.3	98	88	29	0	1	2	0
CHEYENNE	56	38	71	33	47	-5	1.5	.9	.8	5.6	147	6.1	130	89	49	0	0	5	2
LANDER	58	37	72	33	48	-4	2.1	1.5	1.1	5.5	110	6.4	110	87	46	0	0	6	2
SHERIDAN	57	39	70	27	48		1.5	1.0	1.0	3.4	74	4.0	66	92	59	0	1	4	1
PR SAN JUAN	91	78	96	76	84		1.4	-.1	1.0	14.3	174	19.7	136	91	65	5	0	3	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

National Agricultural Summary

May 11-17, 1981

HIGHLIGHTS: Dry weather in the northern Plains continued to stress crops, while heavy rains in the Corn Belt once again delayed planting activities. Soil moisture supplies were adequate to surplus in the east north central region, parts of the north Atlantic region, and in Missouri, West Virginia, and Kentucky. Elsewhere, supplies were rated as mostly short to adequate. Farmers in Pennsylvania, Illinois, Indiana, Michigan, Ohio, Kansas, West Virginia, Kentucky, and Wyoming only had up to 3 days suitable for fieldwork. In other areas of the Nation 4 to 6 days were available. Corn planting reached 65% complete, 18 points behind last year and 3 points behind average. Emerging plants were in fair to good condition. Soybean planting was 18% finished, behind last year's 29% and the 26% average. Sorghum planting remained on schedule and was 35% finished. Cotton planting was 73% complete, ahead of last year's 55%. Winter wheat was in fair to good condition; 64% of the acreage was heading. Spring wheat seeding reached 93% complete, surpassing the 75% average; 76% was emerged. Pastures generally rated fair to good, except in the Southwest and the northern Plains where dry conditions limited growth.

CORN: Corn planting in the 17 major producing States advanced to 65% complete, 18 points behind last year and 3 points behind average. Planting progressed slowly during the week in Illinois, Indiana, Kansas, Kentucky, Missouri, Ohio, and Virginia due to heavy rains and wet field conditions. Elsewhere, planting progressed rapidly. Producers in Iowa planted 22% of their acreage during the week, while those in Minnesota planted 31%, Nebraska 25%, South Dakota 33%, and Wisconsin 40%. Planting progress was ahead of normal in all States except Illinois, Indiana, Kansas, Michigan, Ohio, and Pennsylvania. Wet weather has slowed planting in most of these areas during much of the season. Emerging plants were in fair to good condition. Planting in Georgia was complete, and North Carolina growers were 98% finished.

SOYBEANS: Soybean seeding in the 18 major producing States was 18% complete, behind 1980's 29% and the 26% average. Progress in all States except Arkansas, Kansas, Minnesota, Mississippi, and Tennessee lagged the average. Rain and wet fields slowed planting activities in most areas. Progress in Illinois was 24 points behind normal, Indiana 21 points behind, and Ohio was 31 points behind schedule.

SMALL GRAINS: Winter wheat rated fair to mostly good in all major producing areas. Heading was underway in all States except Idaho and Montana, which is normal for this time of year. In the 15 major producing States 64% of the acreage had headed, compared to only 29% last year. Fields across the South were ripening and a few fields in the extreme South were harvested.

Spring wheat seeding in the five major States reached 93% complete, surpassing last year's 90% and the 75% average. More rain is needed in the northern Plains. Spring wheat was 76% emerged, 12 points ahead of last year's progress.

COTTON: Cotton planting in the 14 major producing States advanced to 73% complete, ahead of last year's 55%. Cool temperatures slowed growth in Texas. Squaring was evident in many Arizona fields.

OTHER CROPS: Grain sorghum planting progress reached 35% in the seven major producing States, 1 point ahead of last year and 2 points ahead of average. Seeding in Texas was 81% finished and 16% of the acreage was heading. Some fields in the Blacklands of Texas were severely damaged by hail and replanting will be necessary.

Rice seeding reached 88% complete in the five major States, equal to a year earlier; 71% of the acreage had emerged, 4 points ahead of last year.

Peanut planting ranged from 24% in Texas to 80% in Alabama and Virginia and 83% in North Carolina. Some Texas producers were waiting for additional moisture before planting.

FRUITS AND NUTS: Deciduous fruit trees were blooming in northern production areas. Peach harvesting advanced across the South and reached into Georgia. Growers continued spraying and thinning fruit and nut trees.

Florida citrus groves continued to show signs of stress, since rain is needed in all growing areas. Irrigation remained very active. The Valencia orange harvest increased. Arizona's Valencia orange harvest moved into full swing, but the grapefruit harvest was seasonally slow. New crop prospects were generally good. In California, growers harvested avocados, nectarines, lemons, peaches, and Navel oranges.

VEGETABLES: Growers in northern production areas continued to plant a wide variety of vegetables and were harvesting early vegetables. Florida vegetable shipments increased 9% from the previous week, although shipments of snap beans, cabbage, celery, chinese cabbage, sweet corn, eggplant, escarole, lettuce, parsley, squash, and tomatoes declined. California growers harvested broccoli, carrots, celery, sweet corn, lettuce, dry onions, potatoes, and strawberries.

PASTURE AND LIVESTOCK: Pastures generally rated fair to good, except in the Southwest and the northern Plains where dry conditions deteriorated pastures and supplemental feeding was necessary. Livestock continued to be moved to summer pastures.

CROP PROGRESS
FOR WEEK ENDING MAY 17, 1981

CORN
% PLANTED

	1981	1980	AVG.
COLO	76	32	57
GA	100	100	100
ILL	64	94	73
IND	19	85	60
IOWA	86	94	82
KANS	60	65	60
KY	79	79	66
MICH	35	57	56
MINN	85	87	70
MO	73	84	58
NEBR	70	85	65
N C	98	100	96
OHIO	20	80	70
PA	47	43	49
S DAK	66	66	45
VA	85	69	75
WIS	60	70	42
17 STATES	65	83	68

THESE 17 STATES PRODUCED 93% OF THE 1980 CORN CROP.

SOYBEAN
% PLANTED

	1981	1980	AVG.
ALA	29	26	30
ARK	20	11	16
GA	29	26	35
ILL	8	51	31
IND	3	30	25
IOWA	21	29	32
KANS	10	10	10
KY	14	20	15
LA	19	16	27
MICH	5	12	13
MINN	39	49	37
MISS	26	19	23
MO	16	26	20
NEBR	10	20	15
N C	27	27	30
OHIO	4	40	35
S C	19	19	24
TENN	19	20	14
18 STATES	18	29	26

THESE 18 STATES PRODUCED 95% OF THE 1980 SOYBEAN CROP.

COTTON
% PLANTED

	1981	1980	AVG.
ALA	93	91	89
ARIZ	94	97	95
ARK	96	90	78
CALF	99	100	NA
GA	96	92	95
LA	80	64	76
MISS	95	83	82
MO	92	94	77
N MEX	80	90	93
N C	99	94	86
OKLA	20	10	20
S C	99	95	94
TENN	94	80	74
TEX	62	33	42
14 STATES	73	55	NA
EXCL. STATES WITH NA	70	50	55

THESE 14 STATES PRODUCED 99% OF THE 1980 COTTON CROP.

SPRING WHEAT
% EMERGED

	1981	1980	AVG.
IDA	76	91	62
MINN	88	76	62
MONT	65	60	NA
N D	67	51	38
S DAK	95	85	NA
5 STATES	76	64	NA
EXCL. STATES WITH NA	74	61	47

THESE 5 STATES PRODUCED 98% OF THE 1980 SPRING WHEAT CROP.

WINTER WHEAT
% HEADED

	1981	1980	AVG.
CALF	99	95	NA
COLO	20	0	0
IDA	0	0	0
ILL	82	22	45
IND	25	5	55
KANS	85	15	45
MO	87	31	57
MONT	0	0	0
NEBR	40	1	5
OHIO	2	0	10
OKLA	100	80	95
OREG	12	33	NA
S DAK	20	0	0
TEX	94	62	NA
WASH	5	1	4
15 STATES	64	29	NA
EXCL. STATES WITH NA	59	22	39

THESE 15 STATES PRODUCED 88% OF THE 1980 WINTER WHEAT CROP.

RICE
% PLANTED

	1981	1980	AVG.
ARK	90	85	84
CALF	65	82	NA
LA	93	89	94
MISS	96	87	85
TEX	97	100	99
5 STATES	88	88	NA
EXCL. STATES WITH NA	93	89	90

THESE 5 STATES PRODUCED 92% OF THE 1980 RICE CROP.

RICE
% EMERGED

	1981	1980	AVG.
ARK	74	60	NA
CALF	21	35	NA
LA	87	82	88
MISS	80	64	64
TEX	93	96	NA
5 STATES	71	67	NA
EXCL. STATES WITH NA	85	77	81

THESE 5 STATES PRODUCED 98% OF THE 1980 RICE CROP.

SORGHUM
% PLANTED

	1981	1980	AVG.
COLO	14	5	7
KANS	5	10	10
MO	32	40	25
NEBR	15	20	20
OKLA	25	10	20
S DAK	16	6	9
TEX	81	71	70
STATES	35	34	33

THESE 7 STATES PRODUCED 92% OF THE 1980 SORGHUM CROP.

SPRING WHEAT
% PLANTED

	1981	1980	AVG.
IDA	96	100	90
MINN	99	99	84
MONT	90	90	75
N D	89	81	63
S DAK	100	100	92
5 STATES	93	90	75

THESE 5 STATES PRODUCED 92% OF THE 1980 SPRING WHEAT CROP.

NA - NOT AVAILABLE

State Summaries of Weather and Agriculture

ALABAMA: Temperatures 9° below normal. Scattered rains northern areas early. Heaviest 1.00 in. Winfield. Only 4 stations had rain.

Fieldwork: 5.8 days. Soil moisture short. Rains needed. Corn silking 8%. Soybeans 29% planted, 20% 1980, 30% average. Cotton 93% planted, 91% 1980, 89% average. Peanuts 80% planted, 84% 1980, 76% average. Sorghum 40% planted, 23% 1980. Wheat: headed 99%, 96% average; turning 68%, 39% 1980, 51% average. Conditions: corn, cotton, pastures fair; wheat fair to good. Planting some areas at halt until rains come.

ARKANSAS: Cool, wet week. Temperatures below normal. Rainfall above normal. Highest temperature 89°, lowest 35°. All departures from normal -5 to -11°. Most rainfall 4.52 in., least 0.09 in.

Wet, cool conditions delayed planting. Soybeans 20% planted, 11% 1980, 16% average; emergence 11%. Rice 90% planted, 85% 1980, 84% average; emergence 74%, 60% 1980. Cotton planting virtually complete week ahead of schedule; emergence 73%, 68% 1980. Soil moisture adequate. Four days available for fieldwork. Cattle condition good with adequate feed on pastures.

ARIZONA: Sunny; warm through midweek, by weekend cool, windy across State, lowered temperatures 10 to 20°. Precipitation confined north, east section State, snow after 7,000 feet. Precipitation traces to over 1.00 in. Grand Canyon, White Mountains. 9 in. snow fell 16th north central Arizona. Average temperatures 4° below to 3° above normal. Weather conditions ideal, field activities.

Cotton planting very good progress, 94% planted. Squaring, blooming, setting bolls advanced stub cotton. Planted cotton rapidly squaring. Alfalfa haying excellent progress. Small grains maturing rapid rate, harvest underway, limited. Sugarbeet harvest full swing, good yield reported. Safflower, corn, sorghum growing well. Lettuce harvest good progress Salt River Valley areas, harvest Cochise County began late week. Harvest mixed vegetable seasonal progress. Limited harvest cantaloups, watermelons Yuma area during week. Harvest potatoes, dry onions excellent progress. Valencia harvest full volume, grapefruit harvest seasonally slow. New crop prospects generally good. Soil moisture shortage caused continued deterioration range conditions. Mid-to-lower ranges very dry, mostly poor condition. Higher elevations mostly fair. Stock water short mid-to-lower elevations, both water hauling, supplemental feeding required.

CALIFORNIA: Average temperatures above seasonal normals generally close to 5° although isolated localities within divisional at normal or 1° below. Central Valley reached into the low nineties and the Southeastern Interior had temperature readings a few degrees above 100. High pressure at first of week brought warmest temperatures. After midweek low pressure and colder air spread south lowering temperatures. Rainfall spotty and mostly confined to counties near Oregon border.

Rice planting active but slowed by windy weather. Crop 65% planted, 82% last year. Sugarbeets being harvested, cultivated and treated for mildew, mites and aphids. Field corn planting active. Cotton crop 99% planted, doing well. Compares to 100% planted last year. Cultivation active. Small grains progressing well, wheat crop 99% headed, 54% turning color, compared to 95% headed, 65% turning color last year. Haas avocado supply strong. Bing cherries, apricots, and table grapes picked on small scale. Maybell nectarines packed. Spring Crest Freestone peaches moving. Tree ripe lemons to products. Navel orange movement very good. Almonds sprayed for Navel orange worm. Broccoli heavy supply Central Coast areas, quality good. Carrot harvest declining Imperial Valley, increasing Kern district. Celery harvest continues South Coast. Sweet corn harvest continues to increase Coachella Valley. Lettuce heavy supply Central Coast and South Bay areas, wide range, size, weight and quality. Dry onion harvest past peak Imperial Valley, increasing San Joaquin Valley. Spring potato harvest expanding Kern district, red rounds increasing, first centennial russets this week. Strawberry harvest near peak South Coast, increasing Central Coast. Processing tomatoes continue good growth all areas. Harvest beginning Imperial Valley for cantaloup, market tomatoes, watermelon. Range feed continues mature, dry out. Cattle, sheep being moved market, higher elevations for summer grazing.. Cattle good condition, making good gains.

COLORADO: Significant precipitation in northeast on 12th, 13th with most areas getting 0.33 to 0.66 in. Winter-like storm on weekend brought 0.50 to 0.75 in. of rain to northwest, 1.00 to 2.00 in. to northeast, up to 20 in. of new snow in the northern mountains and 0.25 to 0.50 in. rain across southern half of State. Temperatures 2 to 6° below normal.

Winter wheat jointed 85%, 50% 1980, 56% average; headed 20%, 0% 1980 and average. Corn seeded 76%, 32% 1980, 57% average; emerged 39%, 7% 1980, 18% average. Barley seeded 95%, 85% 1980, 88% average; emerged 92%, 69% 1980, 73% average. Spring wheat seeded 89%, 76% 1980. Sugarbeets seeded 99%, 75% 1980, 89% average. Oats seeded 98%, 65% 1980, 79% average. Onions seeded 98%, 80% 1980. Sorghum seeded 14%, 5% 1980, 7% average. Summer potatoes seeded 87%, 80% 1980, 81% average. Fall potatoes seeded 64%, 53% 1980, 27% average. Three and one-half days suitable for fieldwork. Livestock good condition.

FLORIDA: Mostly sunny and dry. A cold front on the 11th brought very little rain. High temperatures mostly in the 80's with a few low 90's central, south and 70's Panhandle. Lows averaged in 50's north, 60's south except low 70's southeast coast and some 40's Panhandle, mornings of 12th, 13th, 16th. A few heavy but widely scattered thunderstorms occurred over central area the 17th, mainly over Polk County.

Soil moisture short all areas. Water for irrigation also getting short. Corn, tobacco good where irrigated, poor otherwise. Peanut, soybean planting continues. Stands variable. Moisture needed for good seed germination. Sugarcane fair, needs rain. Harvest of small grains well underway. Hay cutting and baling started. Pasture condition declined. Poor to fair Panhandle, severe drought south central and southwest, very poor other areas. Supplemental feeding many areas. Cattle mostly fair, showing effects of reduced grazing and water. Citrus trees generally stressed from lack of rain. Growers with equipment irrigating in all areas. New crop fruit drop continues with some droppage excessive in stressed trees. Valencia harvest continued active. Mostly sunny, dry weather prevailed in vegetable areas. A cool front on the 11th brought lower temperatures but very spotty, light rain, with vegetable areas continuing dry. Warmer temperatures returned weekend with highs mainly mid-80's to mid-90's. Total shipments up 9% from previous week. Harvest gained cucumbers, okra, peppers, radishes and watermelons. Supplies about steady carrots, potatoes and southern peas. Volume declined snap beans, cabbage, celery, chinese cabbage,

sweet corn, eggplant, escarole, lettuce, parsley, squash and tomatoes. Strawberry season complete. Watermelon harvest very active. Volume heavy. Harvest mostly Wachula, Immokalee and south. Size, quality good.

GEORGIA: Rainfall in northern portion averaged near 0.75 in. with heavier local amounts over 1.00 in. mainly in mountains. Rainfall in south less than 0.10 in. Temperatures averaged 3 to 6° below normal. Blairsville coldest spot in State with 36° on the 13th. Afternoon highs of 89° recorded on 14th at Savannah and Dublin. Cool in northern third of State 16th and 17th with rainfall amounts of 0.33 in. or less. Remaining two-thirds of State had a warm and dry weekend.

Soil moisture very short to short. Five days were suitable for fieldwork. Corn 100% planted, 100% last year, condition fair to good. Cotton 96% planted, 92% last year, 95% average, condition fair to good. Active soybean and sorghum planting. Soybeans 29% planted, 26% last year, 35% average, condition mostly fair to good. Sorghum 40% planted, last year 30%. Wheat 3% harvested, none last year. Hay crops fair to good. Vegetables fair to mostly good, rain needed. Peaches 2% harvested, none last year, condition fair to good. Apples fair to mostly good. Fruit tree spraying active. Pastures and cattle fair to good. Hogs fair to mostly good.

HAWAII: Favorable weather for crop growth returned to Island chain. Cleaning debris, realigning fields were major activities in areas damaged by previous week's rainstorm. Overall effect of flood damage to vegetable supply minimal. Other sections, crop progress was fair to good. Showers were light. Some areas required heavy irrigation to maintain good crop growth. Vegetables: Supplies adequate. However, sweet peppers light. Bananas: Seasonal low supplies. Papayas: Supplies moderate to heavy. Showers were beneficial. Pineapples: Harvesting steady. Sugar: Steady harvesting on all sugar plantations. Pastures: Rains beneficial. Most sections fair to good.

IDAHO: Temperatures averaged well below normal with sub-freezing lows at many areas. Some record lows set. Precipitation was abundant throughout the State. All stations reporting measurable amounts. Porthill reported 1.82 in.

The cooler, wet conditions dominating the week, slowed planting. Spring wheat planted 96%, 100% in 1980, 90% average; spring barley 91%, 100% 1980, 86% average; potatoes planted 54%, 71% 1980, 70% average. Potatoes emerged 10%, 20% 1980, 14% average; dry peas 91%, 100% 1980, 86% average; lentils 86%, 100% 1980, 96% average; dry beans 10%, 10% 1980, 14% average. Snow and rainfall helped ranges. Sugarbeets thinned, apples sprayed. Four days suitable.

ILLINOIS: Temperatures 5 to 9° below normal. Precipitation 1.00 to 2.00 in.

Corn planting 64% complete, 94% 1980, 73% average. Soybean planting 8% complete, 51% 1980, 31% average. Winter wheat condition 40% excellent, 58% good, 2% fair; 82% headed, 22% 1980, 45% average. Oats 18% excellent, 74% good, 8% fair; 5% headed, 0% 1980, 1% average. Alfalfa condition 24% excellent, 72% good, 4% fair; first cutting 13% complete, 2% 1980, 6% average. Red clover condition 28% excellent, 68% good, 4% average; first cutting 5% complete, none 1980, 5% average. Pastures 24% excellent, 72% good, 4% fair. Soil moisture 3% short, 39% adequate, 58% surplus. Fieldwork: 1.0 day suitable.

INDIANA: Wet, cool, cloudy week. Temperatures averaged 8° below normal and ranged from 31 to 73°. Rains heaviest in west central which averaged 2.60 in., elsewhere 1.00 to 1.50 in. Some rivers out of banks. Sunshine only 33% of possible.

Fieldwork averaged 0 days. Topsoil moisture surplus, subsoil moisture adequate to surplus. Pastures good condition. Corn 19% planted, 1980 85%, average 60%. Soybeans 3% planted, 1980 30%, average 25%. Wheat condition good. Wheat 23 in. high, 1980 15 in. Wheat 25% headed, 1980 5%, average 55%. Wheat 70% in boot. Oats 9 in. high, 1980 4 in., average 6 in.

IOWA: A cloudy cool week with periods of light showers, moderate to heavy rains southmost and westernmost counties. Donnellson reported 1.92 in. the 14th and 2.11 in. the 18th. Temperatures moderated following light to moderate freeze the 11th over north and west and the 12th northeast.

Topsoil moisture: 24% short, 68% adequate, 8% surplus. Subsoil moisture: 38% short, 56% adequate, 6% surplus. Corn acreage planted: 86% complete, 1980 94%, normal 82%. Corn emerged: 28% emerged, 1980 44%, normal 40%. Soybeans planted: 21% complete, 1980 29%, normal 32%. Fieldwork: 5.1 days suitable. Crop conditions: pasture, winter wheat, alfalfa hay, clover hay, oats, all good. Livestock good to excellent condition.

KANSAS: General soaking rains averaging 1.00 to over 2.00 in. with local amounts of over 3.00 in. in the northwest and parts of southeast and east central. Temperatures averaged from 54 to 57° west and north central and 58 to 60° east and south central, or from 4 to 7° above normal.

Assessment frost damage to wheat began late last week, no accurate assessment available yet. Greatest potential for damage exists in western and northern counties. Cool, wet weather will aid grain development in undamaged wheat. Wheat in southeast and south central Kansas beginning to turn. Wheat heading 85%, last year 15%, average 45%. Corn planting reached 60%, last year 65%, average 60%. Soybeans planted 10%, last year and average 10%. Sorghum planted 5%, last year 10%, average 10%. Fieldwork: 2.5 days suitable.

KENTUCKY: Precipitation averaged from 0.60 to 1.00 in., with at least some rain each day of the period. Temperatures averaged 56 to 58°, from 5 to 10° below normal.

Farmers averaged only 2 days in field. Soil moisture 6% short, 69% adequate and 25% surplus. Corn planting started very early, but wet ground could also cause a lot of late planting. Corn 79% planted, comparable last year, 66% average. Corn needs sunshine. Soybean planting made minimal progress, 14% complete, 20% last year, average 15%. Burley acreage 5% set compared with little or no acreage set by this date last year. Plants plentiful. Some becoming too large. Barley maturing rapidly. Early wheat beginning to turn color. Lodging is occurring but overall, wheat prospects continue very favorable.

LOUISIANA: Rainfall Statewide. Soil moisture adequate. Temperatures 3 to 6° below normal. Extremes: 44 and 90°.

Fieldwork: 4.0 days suitable. Corn planted 98%, 93% 1980, 96% average; emerged 96%, 90% 1980, 93% average; condition good. Rice planted 93%, 89% 1980, 94% average; emerged 87%, 82% 1980, 88% average; condition good. Cotton planted 80%, 64% 1980, 76% average; emerged 74%, 42% 1980, 61% average; condition fair to good. Soybeans planted 19%, 16% 1980, 27% average; emerged 8%, 7% 1980, 15% average. Sorghum planted 70%, 36% 1980, 41% average; emerged 62%, 24% 1980, 32% average; condition fair to good. Sugarcane condition fair to good. Sweetpotatoes transplanted 70%, 42% 1980, 39% average; condition good. Vegetable condition fair to good. Wheat turned color 97%, 54% 1980. Hay first cutting 37%, 18% 1980. Pastures and livestock fair to good.

MARYLAND AND DELAWARE: Temperatures 2° below normal. Highs in 70's, lows 50's. Precipitation

from 0.82 to 3.40 in.

Topsoil moisture adequate. Subsoil moisture short to adequate. Days suitable for fieldwork: 4.5. Corn planted 85% Maryland, last year 55%; 80% Delaware, last year 76%. Small grains good to excellent. Rye 100% headed, barley 90, wheat 65. Tobacco transplanting 15% complete. Soybeans planted 10% Maryland, 80% Delaware. Vegetables planting slowed. Snap beans 75%, sweet corn 70%. Other vegetables 45 to 65%. Apple and peach set good. Hay cutting started.

MICHIGAN: Below normal temperatures Statewide. Temperatures averaged 2 to 4° below normal Upper and northern Lower, 5 to 8° below normal remainder. Precipitation minimal Upper, 0.15 to 0.75 in. northern Lower, 1.00 to 2.00 in. remainder.

Rains last weekend halted fieldwork most of week in southern Lower. About 2 days suitable for fieldwork. Soil moisture adequate to surplus. Acreage 80% plowed, 78% last year, 79% normal. Corn 35% planted, 57% last year, 56% normal. Oats 95% planted, 89% last year, 90% normal. Potatoes 70% planted, 62% last year and normal. Sugarbeets 98% planted, 97% last year, 95% normal. Soybeans 5% planted, 12% last year, 13% normal. Asparagus 20% harvested, 26% last year, 25% normal.

MINNESOTA: Temperatures averaged 3 to 5° above normal in the northwest district and locally in the north central district. Near normal elsewhere. Extremes: 82° at Browns Valley and 25° at Preston. Precipitation averaged 0.30 to 0.50 in. below normal in the western districts, 0.50 to 0.75 in. below normal elsewhere. Precipitation totals were very light with 19 stations in 7 districts reporting trace or less accumulations. Totals averaged 0.20 in. in the southwest district, 0.10 in. in the south central, zero's elsewhere.

Dry weather enabled farmers to make rapid planting progress. Soil temperatures remain cool so some farmers held off planting. Some crops not planted in west because soil moisture so short that seed would not germinate. Topsoil moisture rated 23% very short, 33% short, and 44% adequate. Freezing temperatures a week ago froze some emerged crops. Most recovering and appear to have sustained only minor damage. Planted: Spring wheat 99%, 1980 99%, normal 84%; oats 98%, 1980 99%, normal 86%; barley 98%, 1980 97%, normal 77%; flax 70%, 1980 65%, normal 49%; field corn 85%, 1980 87%, normal 70%; soybeans 39%, 1980 49%, normal 37%; sunflowers 55%, 1980 63%, normal 44%; potatoes 60%, 1980 70%, normal 53%; sweet corn for processing 50%, 1980 51%, normal 44%; green peas for processing 89%, 1980 76%, normal 75%. Emerged: Spring wheat 88%, 1980 76%, normal 62%; oats 87%, 1980 83%, normal 66%; barley 81%, 1980 74%, normal 55%; flax 22%, 1980 26%, normal 25%; field corn 13%, 1980 27%, normal 24%; soybeans 1%, 1980 3%, normal 4%. Jointing: Spring wheat 5%, 1980 0%, normal 0%; oats 5%, 1980 0%, normal 0%; barley 4%, 1980 0%, normal 0%; winter wheat 41%, 1980 11%, normal 9%; winter rye 45%, 1980 16%, normal 6%. Heading: Winter wheat 1%, 1980 0%, normal 0%; winter rye 2%, 1980 0%, normal 2%.

MISSISSIPPI: Temperatures 5 to 10° below normal. Lowest temperature 39°. Frontal system during week brought cool air along with much needed rain. Delta received about 2.00 in., central sections about 1.00 in. and southern counties about 0.50 in.

Soil moisture adequate north, short south. Fieldwork: 4.9 days suitable. Cotton 95% planted; 83% 1980, 82% average; 75% to stand, condition fair to good. Soybeans 26% planted; 19% 1980, 23% average; 7% to stand. Rice 96% planted, 87% 1980, 85% average; 80% to stand; condition fair. Corn 96% planted, 89% 1980, 88% average; 86% to stand; condition good to fair. Sorghum 44% planted, 31% 1980, 35% average. Wheat 21% ripe, 11% 1980; 1% harvested.

MISSOURI: Temperatures continued quite cool for the second consecutive week, averaging 10° below normal. Much needed precipitation fell across the State, averaging from 2.00 to 3.50 in.

Fieldwork: 1.4 days suitable. Corn 73% planted, last year 84%. Grain sorghum 32% planted, last year 40%. Soybeans 16% planted, last year 26%. Cotton 92% planted, last year 94%. Wheat 87% headed, last year 31%. Wheat 3% turning color. Alfalfa hay first cutting 29% harvested, last year 16%. Winter wheat in fair to good condition. Pasture in fair to good condition. Topsoil moisture supplies adequate to surplus.

MONTANA: Very wet week over all but extreme northeast corner. Two major storms brought up to 4.00 in. of rain to portions of central and south central areas. Some areas of north central also received heavy rain as did southwest and west. The dry northeast corner received little if any rain from either storm. It was very windy over much of northeast and southeast most days. The cloudy wet weather resulted in temperatures that averaged about 5° below normal over all except northeast where temperatures were near normal. Highest 77° at Miles City, lowest 22° at West Yellowstone.

Topsoil moisture short to adequate in eastern third, adequate to surplus elsewhere. Subsoil short in eastern third, adequate elsewhere. Fieldwork: 4.0 days suitable. Winter wheat condition generally fair to good, stands good, 10% in boot. Current percent spring crops planted compared with last year and average: Spring wheat 90, 90, 75; barley 85, 90, 75; oats 80, 85, 70; corn 60, 65, 55; potatoes 35, 45, 45; dry beans 50, 30, 50. Crops emerged this year compared with last year: spring wheat 65, 60; barley 60, 65. Range feed and stock water supplies adequate western third, short to adequate central third, short eastern third. Rate of growth hay and range grass slow to average. Livestock on summer ranges--cattle 50%, sheep 55%.

NEBRASKA: Weekend rains provided much needed moisture.

Extent of freeze damage to small grains and hay crops uncertain. Some damage to headed wheat evident in some south central and southwestern fields. Corn planting 70%, 85% last year and 65% normal; emergence 30%, 25% year ago. Only very limited replanting. Wheat mostly fair; heading 40%, 1% year ago and normal. Sorghum planting 15%, 20% last year and normal. Soybean planting 10%, 20% last year and normal. First cutting alfalfa 10% harvested, 1% last year and normal. Pasture and range feed supplies mostly short. Cold, wet, windy conditions stressed livestock. Topsoil moisture as of May 15, short to mostly adequate. Subsoil supplies short. Days suitable: 4.8.

NEVADA: Warm, dry spell interrupted late in week by strong Pacific storm. Precipitation widespread all areas. Temperatures averaged few degrees above normal northwest and extreme south but few degrees below normal northeast and south central areas.

Crops made good progress early in period. Ranges benefited from widespread rains end of week. Livestock good condition.

NEW ENGLAND: Temperatures near normal. Storms 13th and 16th dropped 1.50 to 2.50 in. of rain.

Fieldwork: 5.0 days suitable. Planting of early vegetables continues. Plant stands look good. About 25% of sweet corn crop planted. Apple trees in early bloom north, full bloom south. Peach trees in petal fall. Pear trees nearing full bloom. Cranberry buds swelling. Potato acreage 20% planted in northern Maine. Southern New England finishing potato planting. Early varieties starting to emerge. Oats 40% planted in Maine. Hay stands continue to look

good. Field corn about 20% planted. Work 4 to 5 days ahead of schedule. Pasture conditions and soil moisture adequate.

NEW JERSEY: Temperatures averaged near normal. Extremes: 36° at Newton on 18th and 82° at Pemberton and Hammonton on 14th. Rainfall averaged 4.61 in. north, 2.66 in. central and 2.45 in. south. Heaviest 24 hour total was 3.89 in. at Charlotteburg on 11th to 12th. Estimated soil moisture, in percent of field capacity, averaged: 98 north, 97 central and 95 south. Four inch soil temperature averaged: 59 north, 63 central and 64 south. Total sunshine at Trenton from May 11 to May 17 was 52% of possible hours.

Fieldwork: 4.3 days suitable. Most areas received good amounts of needed rain. Cool night temperatures continue to slow crop growth. Summer vegetable planting continues as soil conditions permit. Blueberries in bloom. Strawberry harvest to start next week. Rye and wheat heading. Field corn and soybean planting progressing as fields dry.

NEW MEXICO: Temperatures averaged within 1 to 2° of normal.

Open weather allowed planting operations to continue. Scattered showers and high winds slowed operations late in the week. Soil moisture continues in short supply. Planting and irrigating were the main farm activities. Cotton 80% planted. Planting nearing completion in the southern areas, but still active in the northeastern areas. Alfalfa in good condition with harvest of first cutting very active in the south. The more northern areas just getting underway. Planting corn nearing completion with most of the crop emerged and approaching an acceptable stand. Grain sorghum planting increasing in activity. Irrigated wheat and barley in good condition and the dryland crop in poor condition. Wheat and barley in the southern areas beginning to turn color. Chile and onions in good condition. Lettuce harvest starting to slow down. Pecans progressing in good condition. Ranges in poor to fair condition. Cattle and sheep in fair to good condition.

NEW YORK: Above average rainfall in all areas alleviated dry conditions. Wettest week since February. Temperatures near normal.

Corn 32% planted, 27% 1980, 37% average. Early corn emerging. Oats 76% in, 65% 1980, 75% average. Long Island potatoes emerged. Pears, cherries, Hudson Valley apples in petal fall stage. Lake Ontario apples in full bloom. Apple set variable in Hudson Valley.

NORTH CAROLINA: Temperatures: 3 to 6° below normal. Precipitation: 0.01 in. Wilmington to 1.49 at Asheville.

Fieldwork: 5.3 days suitable. Soil moisture: 13% very short, 54% short, 33% adequate. Conditions: wheat, oats, barley, and rye mostly fair; pasture mostly fair; tobacco plant beds fair to mostly good; field tobacco mostly fair to good; corn fair to good; cotton mostly fair to good; irish potatoes mostly good; peaches mostly fair to good; truck crops fair to good. Supplies: feed grains mostly adequate; fuel supplies mostly adequate. Plantings: corn 98%, 1980 100%, 96% average; cotton 99%, 1980 94%, 86% average; peanuts 83%, 1980 79%, 61% average; sweetpotatoes 12%, 1980 6%, 25% average; sorghum 49%, 1980 28%, 32% average; soybeans 27%, 1980 27%, 30% average; flue-cured tobacco 92%, 1980 78%, 73% average; burley tobacco 9%, 1980 10%, 13% average.

NORTH DAKOTA: Temperatures averaged 1 to 3° above normal. Averages from 57° east central to 52° central. Extremes: 84° east central to 26° central. Precipitation averaged 0.26 to 0.54 in. below normal. Averages from 0.25 southwest to zero in the north central, northeast and central portions. Precipitation since April 1 ranged from 1.13 in. below normal northeast to 2.19 in. below normal southeast.

Dry weather allowed rapid progress of spring planting. Small grain seeding nearing completion most areas, about 12 days ahead of average. Row crop planting underway. Average of 6.9 days suitable for fieldwork. Soil moisture conditions deteriorated. Short of topsoil moisture in 75% of State. Compares to 63 last week, 100 last year, and 44 average. Crop stands to date look good but additional rain needed to prevent drought damage. Small grains recovering from earlier frost damage. Will need additional moisture in dry areas for full recovery. About 20% of sugarbeet crop replanted. Percents planted with last year and average: Hard red spring wheat 89, 81, 63; durum 79, 77, 56; barley 84, 78, 63; oats 90, 81, 58; flax 27, 28, 26; potatoes 71, 63, 47; soybeans 26, 49, 32; corn 39, 44, 29; sunflower 19, 20, 22; dry beans 14, 27, 23.

OHIO: The week was cool and damp. Highest temperatures were in the upper 60's north to the mid 70's south. Average highs were from 5 to 10° below normal at most stations. Average lows were in the 40's, from 3 to 6° below normal in most areas. Precipitation totals were small, but the low temperatures and cloudiness kept drying rates low. Heaviest rains fell before the fair weekend. Totals ranged from about 0.25 to over 2.00 in.

Planting of corn, soybeans and potatoes far behind normal, and concern is growing. Many producers trying to exchange seed corn for shorter season hybrids, and some considering switching acreage from corn to soybeans. The corn that has emerged generally yellow. Excess moisture has hindered nitrogen uptake. Winter wheat still rated good although some problems from surplus moisture were reported. These include lodging, yellowing from nitrogen shortages, and outbreaks of septora leaf blight. Drier weather needed to curtail the fungus. Some alfalfa ready to cut in the southern part of the State, but farmers unable to enter fields with machinery. Corn acreage planted 20%, 80% 1980, 70% average. Corn acreage emerged 5%, 30% 1980. Soybean acreage planted 4%, 40% 1980, 35% average. Sugarbeets planted 90%, 99% 1980, 98% average. Potatoes planted 35%, 75% 1980, 70% average. Wheat jointed 75%, 45% 1980. Oats emerged 85%, 75% average. Days favorable 1.0. Pasture condition good. Soil moisture 4% adequate, 96% surplus.

OKLAHOMA: Temperatures averaged 3° below normal in the southwest divisiton to 6° below normal across the northeast third of the State. Precipitation averages ranged from 0.07 in. in the Panhandle division to 1.28 in. in the east central division.

Unsettled spring weather throughout State. Moisture generally beneficial although some hail and wind damage reported. Wheat heading: 100%, 80% 1980, 95% average. Wheat soft dough: 55%, 5% 1980, 20% average. Sorghum planted: 25%, 10% 1980, 20% average. Sorghum up to stand: 15%, 0% 1980, 10% average. Cotton planted: 20%, 10% 1980, 20% average. Cotton up to stand: 5%, 0% 1980, 5% average. Days suitable for fieldwork: 4.3.

OREGON: Temperatures 2 to 4° lower than normal in central and eastern sections, while slightly above normal in coastal and western valleys. Coastal stations averaged 0.80 in., south central 0.20 in., northern Cascades 0.50 in. and northeastern 0.40 in. rainfall.

Soil moisture mostly adequate to short. Winter wheat condition rated good; 92% booted; 12% headed; yellow dwarf virus, lack of moisture and insects all of concern. Spring planting virtually complete. Hay cutting starting. Mint fields being flamed and sprayed. Problem with rust and weeds in grass seed crops. Strawberries in full bloom. Raspberries, blueberries, loganberries, blooming.

Cranberries beginning bloom. Cherries, peaches and pear prospects good. Potato planting nearly complete to being cultivated. Asparagus harvest continuing. Peas blooming, vegetables for fresh and processing being planted. Livestock condition good. Pasture condition fair to excellent. Good growth.

PENNSYLVANIA: A cooler and wetter than normal week. Temperatures 1 to 10° below normal and slightly cooler than previous week. Extremes: 83 and 26°. Heavy showers and thunderstorms 11th and again 15th produced 0.80 to over 3.00 in. rainfall most sections for wettest week Statewide since early August 1980. Heaviest amounts eastern half and north central mountains to further alleviate water shortages in drought stricken areas. Only extreme western areas measured less than 0.50 in. rainfall.

Three days suitable. Moisture adequate to surplus. Activities: Plowing; discing; spreading lime and manure; cutting rye and barley for green chop and silage; spraying and trimming fruit trees; fixing fences and machinery; and planting corn, potatoes, soybeans, and oats. Plowing 86%, last year 82%, average 87%. Soybeans 15% planted, last year 18%. Oats 91% planted, last year 89%. Potatoes 65% planted compared with 60% last year. Corn 47% planted compared with 43% last year and average of 49%. Barley 39% in boot stage and 18% headed, last year 42% in boot and 17% headed. Wheat 33% in boot stage, last year 30%. Feed from pastures mostly average. Hay condition good to fair. All peaches and cherries in full bloom or past. Apples 15% pink and 84% in full bloom or past.

PUERTO RICO: Island average rainfall 1.59 in. or 0.06 in. below normal. Temperatures averaged about 81° on Coasts and 78 to 76° Interior Divisions. Extremes: 95 and 58°.

SOUTH CAROLINA: Temperatures slightly below normal. Rainfall light and scattered. Extreme temperatures: 88 and 36°.

Soil moisture mostly short. Six days available for fieldwork. Corn condition fair to good. Cotton condition poor to fair; growth slowed due to cool, dry weather. Poor stands, some of the crop had to be replanted; planted 99%, 95% year ago, 94% average. Tobacco good condition. Peaches good condition, light harvesting begins. All vegetables fair to good condition. Some harvesting getting underway. Small grain condition fair. Wheat turning color, 61%, 42% year ago. Oats turning color, 67%, 56% year ago.

SOUTH DAKOTA: Precipitation over most of State except northern parts East River. West central received between 2.00 and 4.00 in. From 0.75 to 1.20 in. in southern parts of State. Temperatures 1 to 5° below normal. Extremes: 25 and 79°.

Five days suitable for fieldwork. Small grains 95% emerged, flax 58%. Topsoil moisture critically short in north central, most of northeast and parts of east central, central and northwest. Adequate in part of west central, short elsewhere. Freeze caused moderate damage to alfalfa and small grains. Severity of damage quite variable by areas and within fields. Ranges mostly poor. Stock water supplies very short in northeast, north central and southwest, short elsewhere. Corn planted 66%, 1980 66%, average 45%. Sorghum planted 16%, 1980 9%, average 6%. Soybeans planted 25%, 1980 22%, average 6%. Sunflower planted 19%, 1980 10%, average 4%. Flax planted 80%, 1980 70%, average 53%. Oats planted 100%, 1980 100%, average 92%. Barley planted 100%, 1980 100%, average 90%. Spring wheat planted 100%, 1980 100%, average 92%. Winter wheat 20% headed. Winter rye 15% headed.

TENNESSEE: Two cold fronts and a warm front caused a cool and wet week. Temperatures averaged between 5 and 10° below normal. Rainfall about 3.00 in. in the west and 0.50 to 1.00 in. in middle and east.

Spring plowing 91% completed, 1980 87%, average 83%. Corn 87% planted, 1980 83%, average 71%. Cotton 94% planted, 1980 80%, average 74%. Soybeans 19% planted, 1980 20%, average 14%. Tobacco 25% transplanted, 1980 12%, average 14%. Small grains good. Wheat 96% headed, 1980 and average 88%. Oats 90% headed, 1980 81%, average 71%. Barley 95% headed, 1980 86% and average 88%. Pastures and cattle good. Outbreak of armyworms in west, slight cutworm and armyworm damage on cotton, corn and gardens.

TEXAS: Weather: Couple cold fronts scattered thunderstorms portions North, South Texas 13th, 17th. Widespread showers, thunderstorms 15th association upper air system southwestern United States. Rainfall about 0.25 to 0.50 in. below normal Plains, extreme South Texas, near normal Trans-Pecos, Edwards Plateau; rainfall 0.50 in. above normal North Central; 1.00 in. above normal East Texas. Temperatures within couple degrees normal; 3° below normal Lower Valley.

Range and livestock: Range, pasture land remained good. Grasses, weeds grown steadily, providing excellent grazing. Weeds becoming problem. Cattle, other livestock in good condition.

Commercial vegetables: Rio Grande Valley, harvest of carrots, potatoes, onions continued. Watermelons progressing well, first cutting expected soon. Coastal Bend, moisture conditions good, watermelons, cucumbers developing well. East Texas, watermelons, tomatoes continue to do well. Sweetpotatoes progressed well. San Antonio-Winter Garden area, carrot harvest continued. Harvest of other vegetables underway. North Texas, tomatoes, onions progressing well. Knox-Haskell area, potatoes progressing well, excellent stands, yields expected to be good. Trans-Pecos region, tomatoes, onions in fair condition. Insects, disease light. Plains, onions, potatoes making good growth. Pepper planting active. Cold temperature causes some damage. Harvest of early peaches underway. Fruit set heavy, much thinning necessary. Pecan producers spraying as casebearers began egg lay.

Crops: Spring plantings, wheat harvest good progress early week. Midweek scattered showers, thunderstorms interrupted field operations. Some locally severe hail damaged, destroyed wheat, corn, sorghum, oat fields Blacklands. Unseasonably cool temperatures High Plains, Central Texas delayed some seeding activities. Cotton planting gaining momentum southern High Plains. Scattered showers, unseasonable cool temperatures interrupted some seeding operations High Plains. Cool temperatures slowed plant growth Blacklands, Central Texas. Southern half of State, crop trying to recover from excessive moisture; many fields off-colored, stressed by too much water. Some stands lost because drownout, seedling diseases. Some sorghum Blacklands severely damaged, destroyed by hail; replanting necessary. Cross-Timbers stands minor damage following light frost. Northern High Plains, freeze burned some stands young corn, but damage not expected serious. Fields tassel South Central Texas; turning yellow along Coast. Wheat harvest underway Blacklands southward. Northern High Plains, strong winds caused lodging. Dryland wheat moisture stressed many areas; some fields not expected to be harvested. Rust, armyworms problems Cross-Timbers, Low Plains. Reported wheat condition Statewide 12% excellent, 47% good, 33% fair, and 8% poor. Peanut stands making good growth South Texas. Seeding operations continued Cross-Timbers; some producers waiting additional moisture before planting. Cotton planted 62%, 33% 1980, 42% average. Cotton squaring 3%, 8% 1980. Rice planted 97%, 100% 1980, 99% average. Rice emerged 93%, 96% 1980. Sorghum planted 81%, 71% 1980, 70% average. Sorghum headed 16%, 11% 1980. Wheat headed 94%, 62% 1980. Wheat turning color

32%, 13% 1980. Wheat harvested for grain 2%. Oats harvested 4%, 0% 1980, 3% average. Corn planted 99%, 94% 1980, 97% average. Peanuts planted 24%, 14% 1980, 20% average. Soybeans planted 5%, 5% 1980, 9% average. Sugarbeets planted 99%, 100% 1980, 100% average. Sunflowers planted 36%, 20% 1980, 12% average.

UTAH: Recurring periods precipitation most sections. Accumulated amounts moisture locally moderate to heavy. Improved soil moisture conditions dryland fields and ranges in upper levels but conditions remain critical lower soil depth with little or no moisture available to roots. Average temperatures ranged from 2° above normal to 7° below.

Surface soil moisture rated short to adequate prior to weekend storm. Rains helped rangelands and dryland wheat. Frost damage reported in several parts of State. Fruit and alfalfa hardest hit. Fruit crop still rated good overall. In many areas, first crop hay being cut early to remove frost damaged growth. Some damage reported to grain crops but not extensive. Corn planting major activity. Planting two-thirds complete. About one-third corn emerged. Some winter grains heading. Range feeds rated good most areas as livestock move to summer ranges. Deep moisture lacking much of State and feed could dry quickly if weather turns hot.

VIRGINIA: Rain and thunderstorms scattered over the State. Amounts ranged from 0.50 to 4.00 in. at Richmond. Temperatures averaged in 60's with extremes of 31 and 85°.

Topsoil moisture: 46% adequate, 53% short. Days suitable for fieldwork: 4.6. Corn 85% planted, compared to 69% 1980, 75% average. Fields rated in excellent condition. Soybeans 15% planted, 11% 1980, 13% average. Peanuts 80% planted, 74% 1980, 54% average. Flue-cured tobacco 15% transplanted, 11% 1980, 24% average. Fire-cured 10% transplanted, 5% 1980, 11% average. Burley 2% transplanted, less than 1% last year. Tobacco plant beds rated in excellent condition. Pastures and hayfields rated in good condition. First cutting hay crop short due to reduced moisture levels. Fruit prospects continue good.

WASHINGTON: West: Near normal temperatures were common. Precipitation below normal averaging between 0.25 to 0.50 in. Field activities were progressing early in the week but rains, late in the week, slowed farmwork down. Wet weather has placed spring planting farther behind normal. Peas, carrots, seed crops, strawberries and corn were seeded when weather permitted. Cabbage and strawberry fields were in bloom while raspberries were just beginning to. Green peas were up with weed spraying underway. Rhubarb harvest continued. Despite the cool, wet weather, grass growth has been good. Dairymen continued to green chop.

East: Temperatures averaged 2 to 4° above normal. Precipitation was also above normal ranging from 0.25 to 0.75 in. Earlier frost damage to fruit was still being assessed. Fruit set was generally good to excellent in spite of the cool temperatures. The planting of corn, potatoes and dry beans continued. Potatoes have been slow in emerging. Hop tying continued. Asparagus harvest continued. Wheat and barley in average to above average condition. There were reports of foot rot and yellow dwarf surfacing as well as stripe rust. The first cutting of alfalfa got underway. Fieldwork was progressing with an adequate labor supply.

WEST VIRGINIA: Temperatures averaged 3° below normal. High 86°, low 27°. Precipitation above normal, ranging from 0.46 to 2.45 in.

Soil moisture adequate to surplus. Days worked averaged 2.7. Major activities: Fencing, corn, gardens, general maintenance. Wheat good to fair condition, 54% pre-jointed, 43% jointed, 3% heading, 65%, 34% and 1% respectively in 1980. Barley fair to good, 38% pre-jointed, 35% jointed, 27% heading, 43%, 36% and 21% respectively in 1980. Oats fair to good, 87% planted, 70% emerged, 88% and 52% respectively in 1980. Corn fair to good, 46% planted, 16% emerged, 55% and 12% respectively in 1980. Tobacco 100% planted, 92% emerged, 91% and 72% respectively in 1980. Hay and pasture fair to good. Fruit fair. Potatoes good to fair. Gardens fair to good.

WISCONSIN: Temperatures averaged 4° below normal. Highs were in the 50's and 60's until 15th and 16th when they reached 70's. Low readings ranged from 20's to 40's. Extremes 79° New London 16th and 19° Pence 11th. No measurable rain except southeast early 11th and again 14th but less than 0.50 in. total.

Planting of crops rapid in dry weather. Fieldwork: 6.0 days suitable. Oats 95% planted, 1980 99%, average 85%. Early oats doing well but needs moisture. Winter wheat looks good. Corn 60% planted, 1980 70%, average 42%. Most farmers done planting corn southern half, northern half has good start. Early corn up, needs warmer temperatures for development. Spring plowing 85% done, 1980 88%, average 72%. Soybeans 2% planted, 1980 20%, average 10%. Hay fields need warmer weather and rain. Winterkill severe in some hay fields. Pastures good but slower growth in north. Planting continuing for potatoes, peas, sweet corn, snap beans, and other vegetables. Most tobacco beds seeded. Fruit trees in bloom except for cherries in northeast. Some strawberries hurt by frost. Soil moisture 9% short, 83% adequate, 8% surplus. Sandy and light soils most in need of rain.

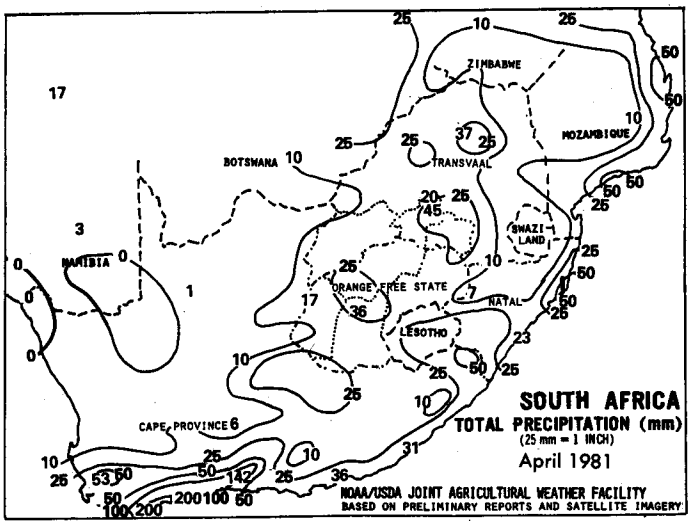
WYOMING: Temperatures below normal, cold spot being 10° below normal. Overall State was 5° below normal. Although all stations received precipitation, the State received less than normal by an average of 0.13 in. Big Horn and Snake Drainages received largest totals and were consistently above normal.

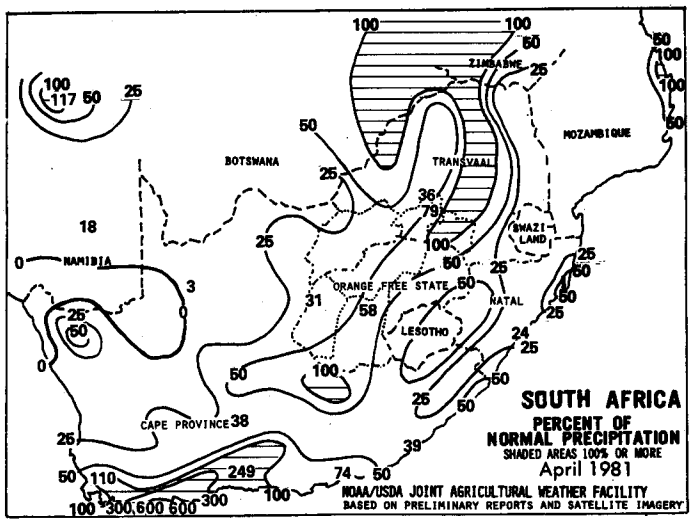
Topsoil moisture adequate 83% State. Rain, wet fields slowed fieldwork, average 3.0 days suitable. Spring wheat planting 80%, 76% year ago, 77% normal. Spring wheat emerged 45%, 58% year ago, 55% normal. Oats planting 75%, 72% last year, normal 81%. Oats emerged 45%, 61% last year, normal 71%. Barley planting 90%, 83% last year and normal. Barley emerged 65%, 69% last year, 65% normal. Corn planting 55%, 41% last year, 65% normal. Corn 10% emerged. Potatoes 20% planted. Dry beans 10% planted. Sugarbeets 80% emerged. Ranges and pastures fair to mostly good condition. Range ewes 70% lambed. Range sheep 80% shorn. Stock water mostly adequate although some areas short.

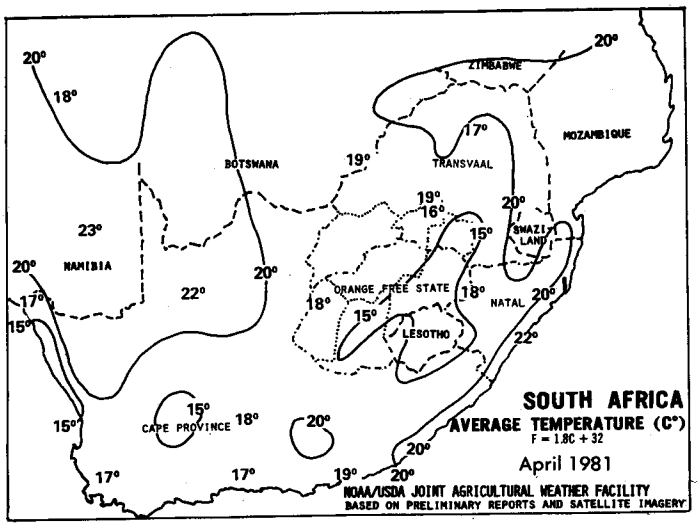
International Weather and Crop Summary

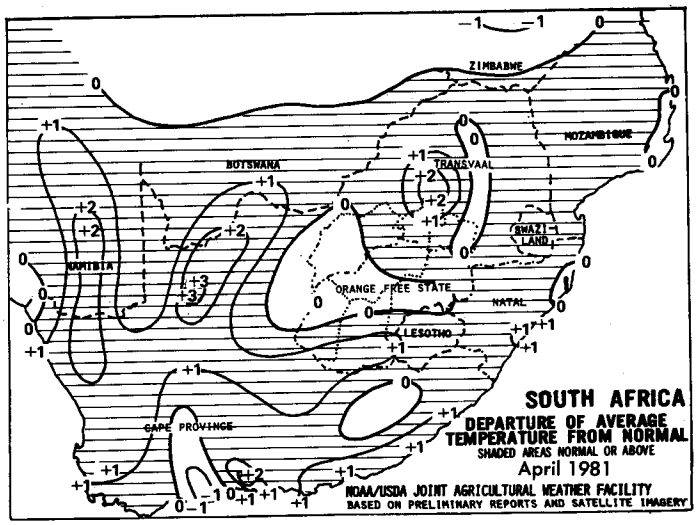
May 11-17, 1981 HIGHLIGHTS

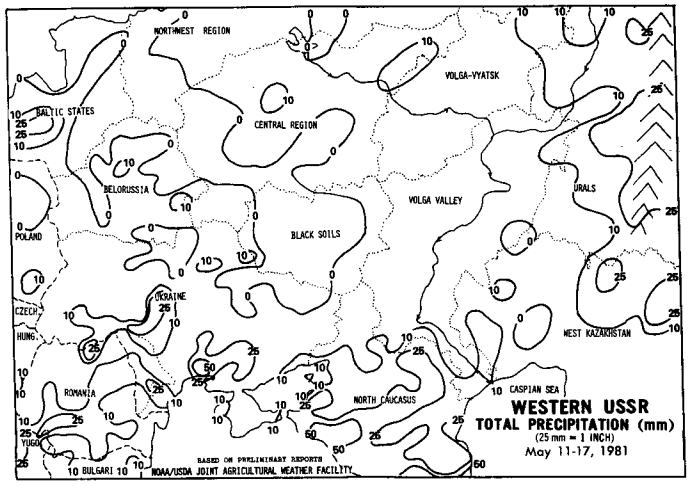
USSR:	Drier weather allowed more fieldwork, but lower temperatures slowed crop growth. Beneficial rains fell in the New Lands.
EUROPE:	Wet weather prevailed in West Germany and France. Temperatures held above normal across the north, but were below normal in the south.
NORTHWESTERN AFRICA:	Good harvest weather prevailed.
CHINA:	Rainfall was near normal. Winter grains are nearing maturity and rice crop prospects are good.
SOUTH ASIA:	Abundant premonsoon rains fell in Bangladesh and eastern India.
CANADA:	A weekend storm brought beneficial moisture to southern Alberta but south central Saskatchewan needs additional moisture for wheat growth.
SOUTH AMERICA:	Locally heavy showers continued harvest delays in much of the corn/soybean area of Argentina. Weather favored crop harvests in Brazil.
AUSTRALIA:	Light showers provided minimal relief from the prolonged dryness in much of the wheat belt. Moisture is needed for wheat sowing.
SOUTHEAST ASIA:	Beneficial moisture fell again this week, providing good soil conditions for early growth of maize and rice.
MEXICO:	Abundant sunshine kept most crops progressing well after generally adequate April rains.

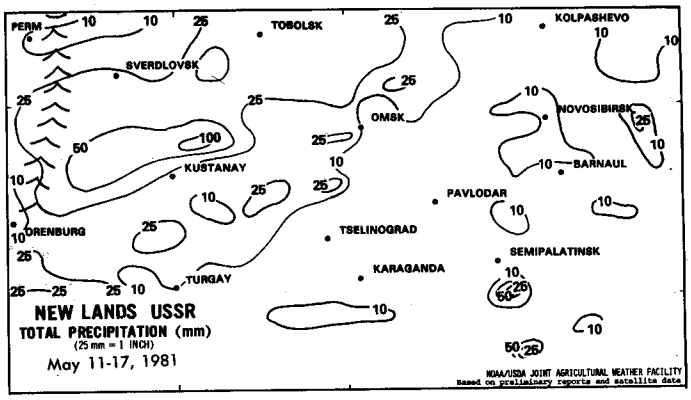




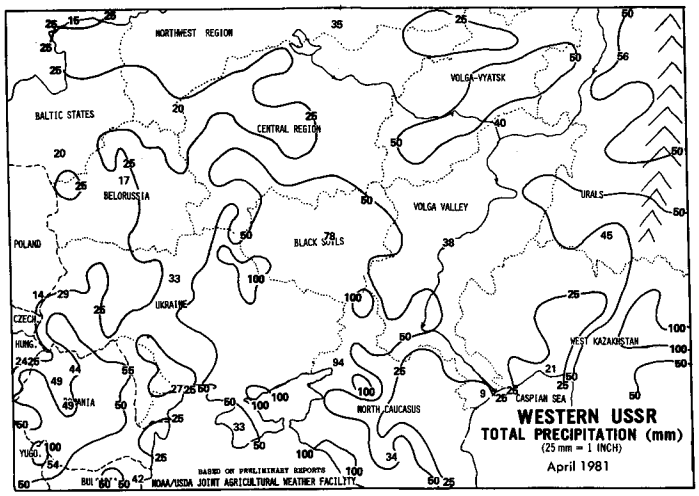


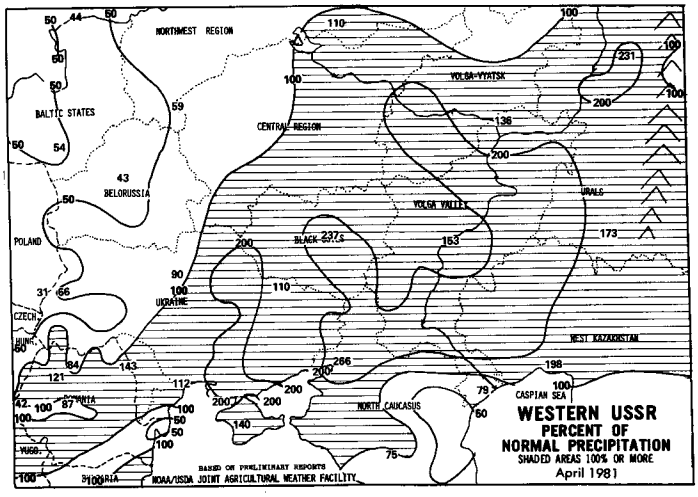


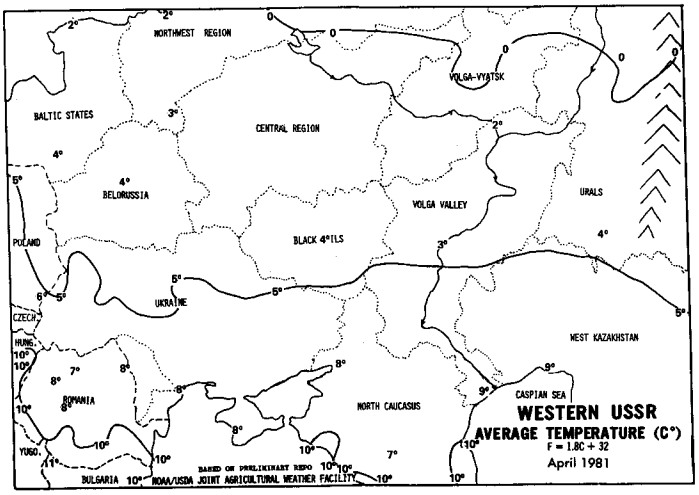


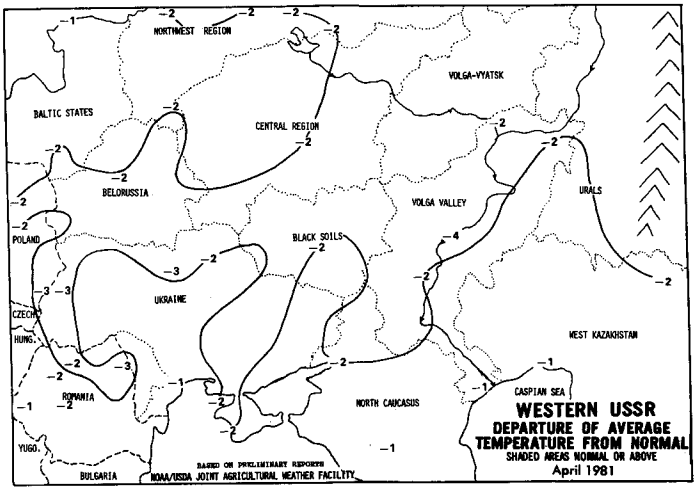


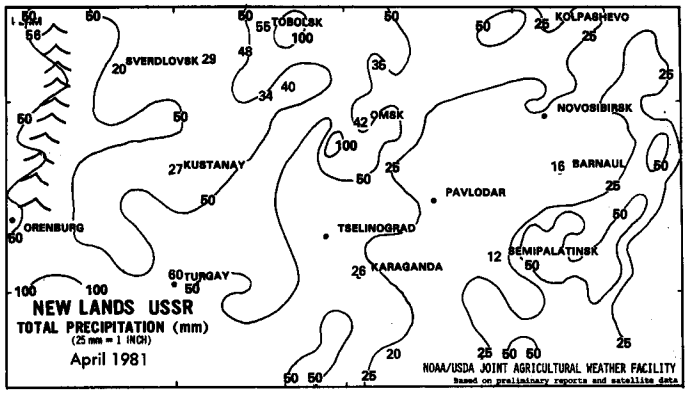
USSR: A high pressure system dominated European USSR for much of the week, and kept precipitation mostly to the south. Only parts of the Ukraine and North Caucasus received above-normal rains. The drier weather permitted fieldwork to continue at a rapid rate in most areas where earlier delays had been encountered. Much of eastern European USSR received more than twice-normal rainfall during April. Crop development in the eastern half of the winter grain belt was slowed again by below-normal temperatures. Greatest lags exist in the eastern Ukraine, where crop growth should be about a week behind normal. These developed in April when average temperatures were below normal throughout the region. The western Ukraine experienced normal temperatures, while in the northwest, temperatures ranged above normal. In the New Lands, abundant rains fell in the west, maintaining excellent conditions as spring sowing got underway. Both March and April precipitation was above normal in this area. Rainfall in the eastern portion increased somewhat during the week, improving the outlook for spring grains. Above-normal temperatures in April had caused unfavorable drying of surface soils.

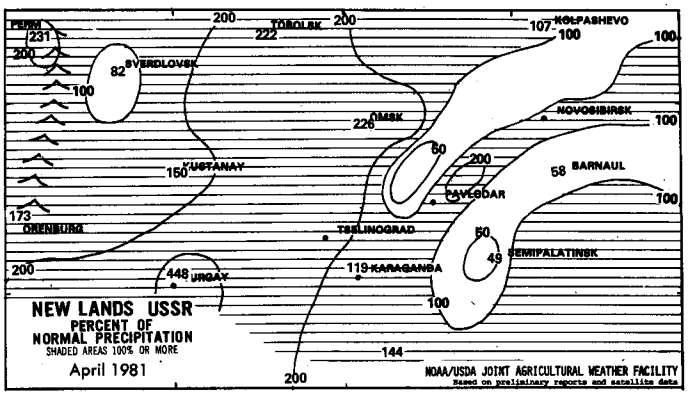


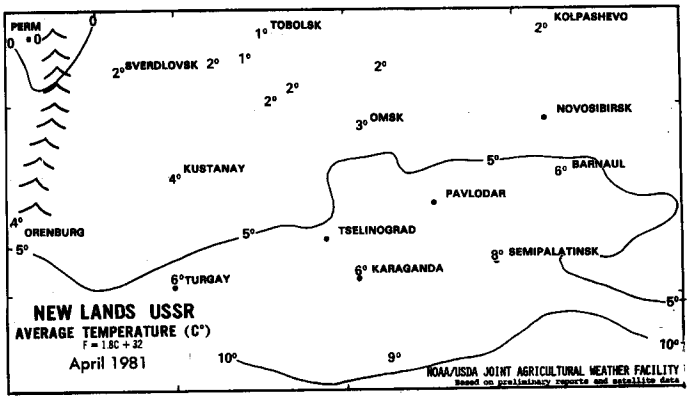







NEW LANDS USSR
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
based on preliminary reports and satellite data
TOBOLSK
KOLPASHEVO
SVERDLOVSK
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY


NEW LANDS USSR
PERCENT OF
NORMAL PRECIPITATION
SHADED AREAS 100% OR MORE
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
based on preliminary reports and satellite data
PERM
TOBOLSK
KOLPASHEVO
SVERDLOVSK
OMSK
NOVOSIBIRSK
KUSTANAY
BARNAUL
PAVLODAR
ORENBURG
TSELINOGRAD
SEMIPALATINSK
KARAGANDA
TURGAY


NEW LANDS USSR
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
based on preliminary reports and satellite data
PERM
TOBOLSK
KOLPASHEVO
SVERDLOVSK
OMSK
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KUSTANAY
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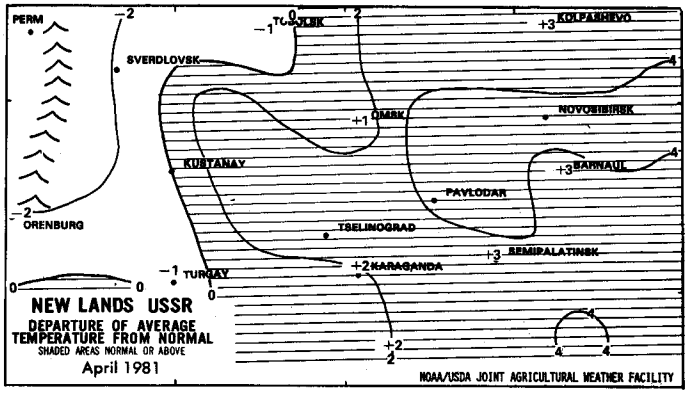
NEW LANDS USSR
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
SHADED AREAS NORMAL OR ABOVE
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
PERM
TOBOLSK
KOLPASHEVO
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OMSK
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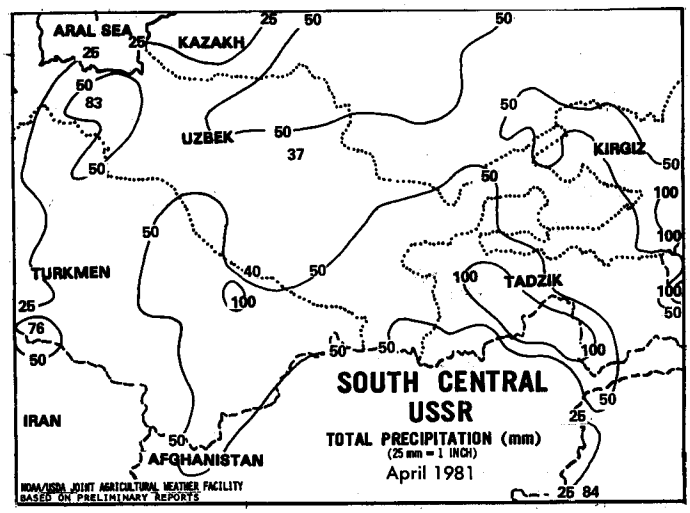
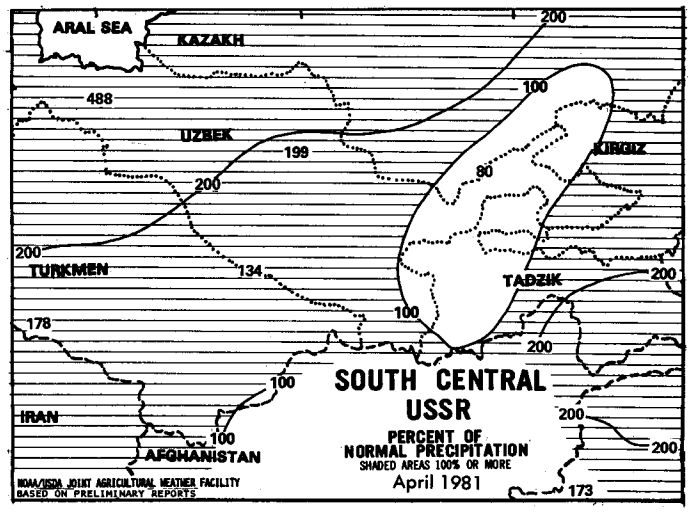

SOUTH CENTRAL
USSR
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS
ARAL SEA
KAZAKH
UZBEK
KIRGIZ
TURKMEN
TADZIK
IRAN
AFGHANISTAN


SOUTH CENTRAL
USSR
PERCENT OF
NORMAL PRECIPITATION
SHADED AREAS 100% OR MORE
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
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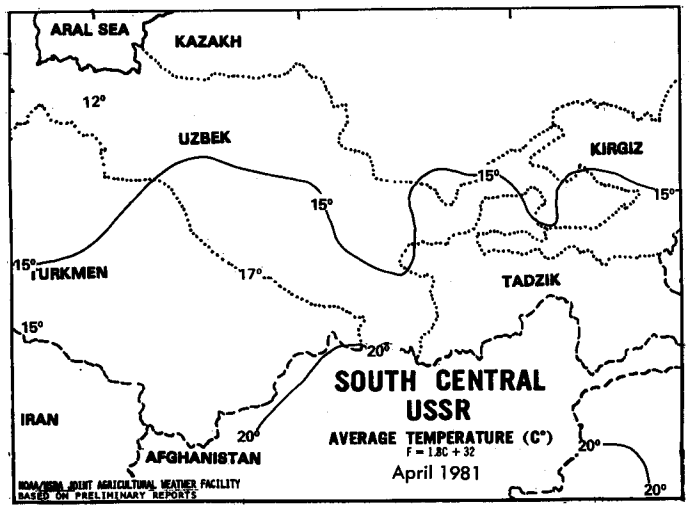
SOUTH CENTRAL
USSR
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS
ARAL SEA
KAZAKH
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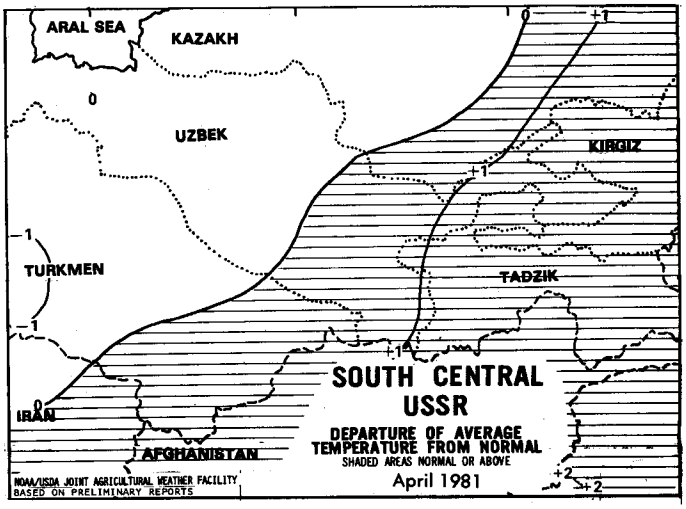
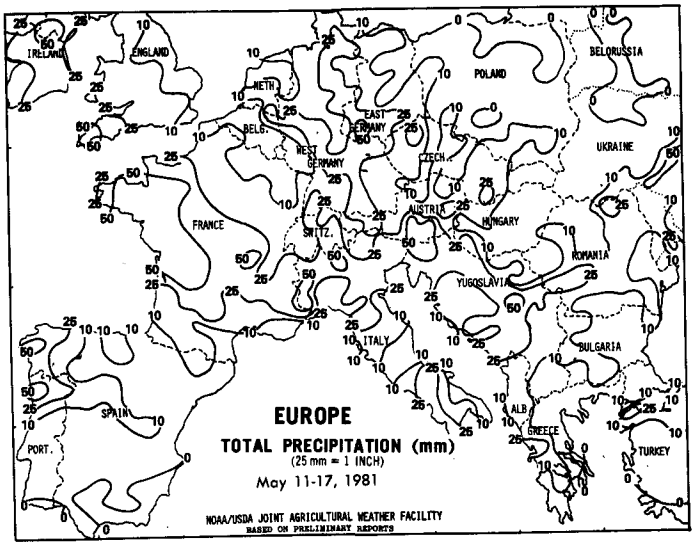
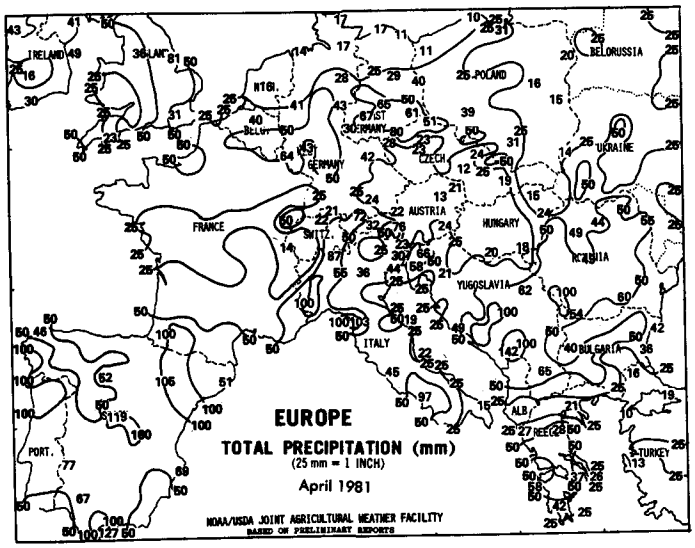
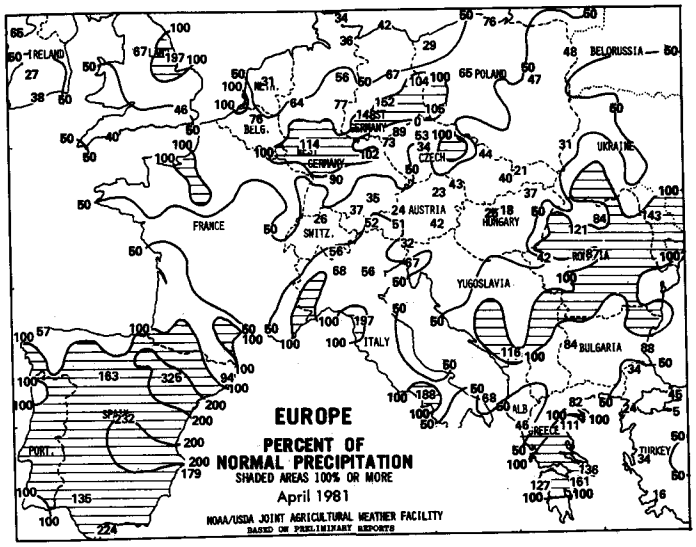
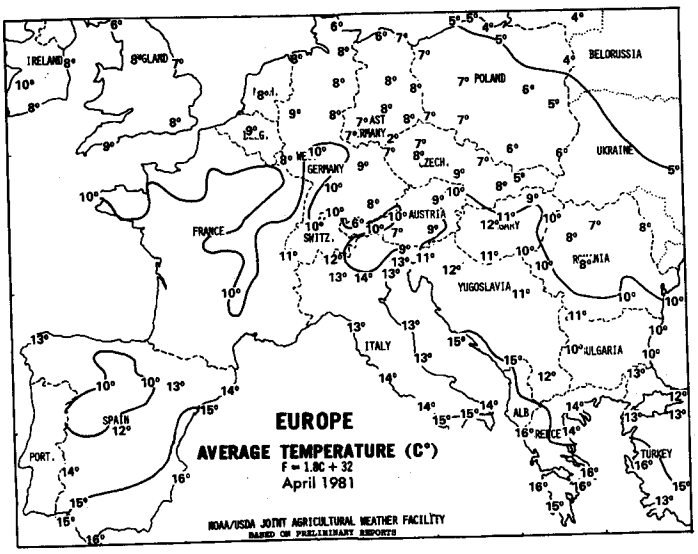

SOUTH CENTRAL
USSR
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
SHADED AREAS NORMAL OR ABOVE
April 1981
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS
ARAL SEA
KAZAKH
UZBEK
KIRGIZ
TURKMEN
TADZIK
IRAN
AFGHANISTAN

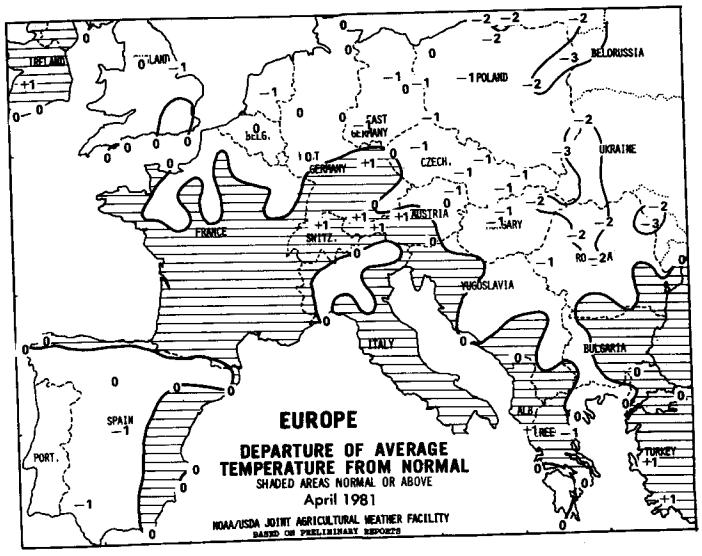
EUROPE: A persistant low pressure system dumped above-normal rainfall in a broad band extending from the United Kingdom to Yugoslavia. Conditions in parts of France and West Germany may have become unfavorably wet, but for the most part, the moisture was beneficial. Much of the region had below-normal precipitation in April. The generous rains in northern Italy were especially welcome for summer crops; winter grains should be nearing maturity. The lightest rainfall areas of Poland and southern Spain still had adequate soil moisture. All of the Iberian Peninsula received above-normal rainfall in April. Above-normal temperatures kept crops advancing rapidly in the north, while southerly portions of the region had cooler-than-normal weather, reversing the pattern which prevailed during April.



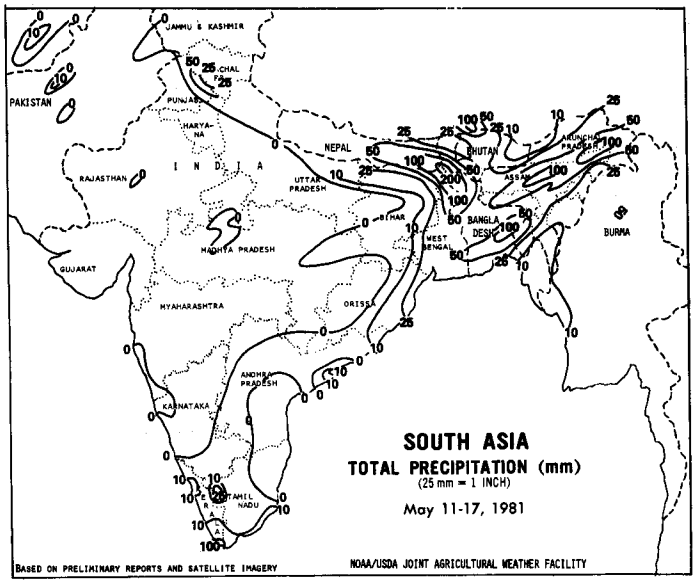


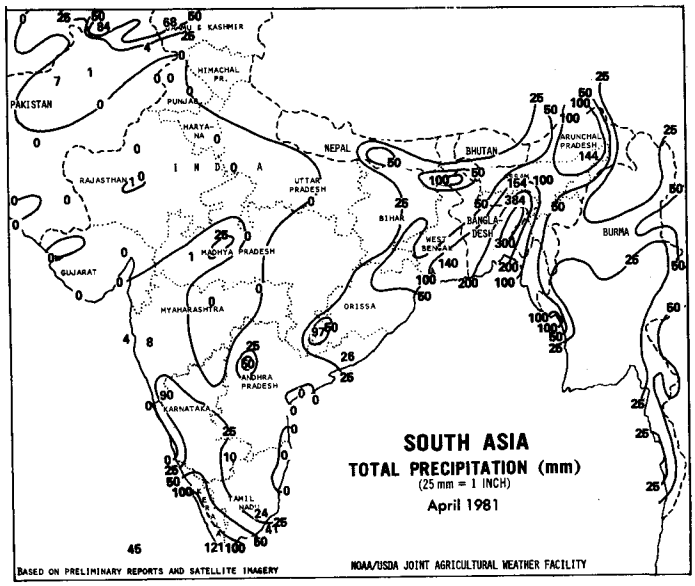


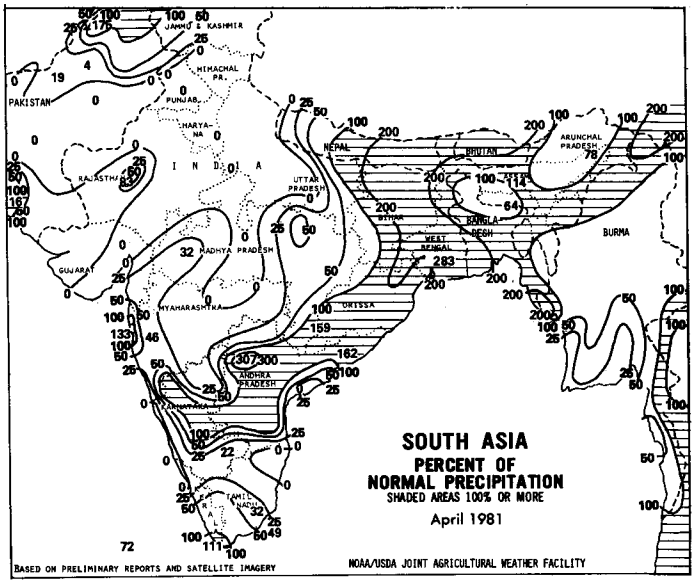


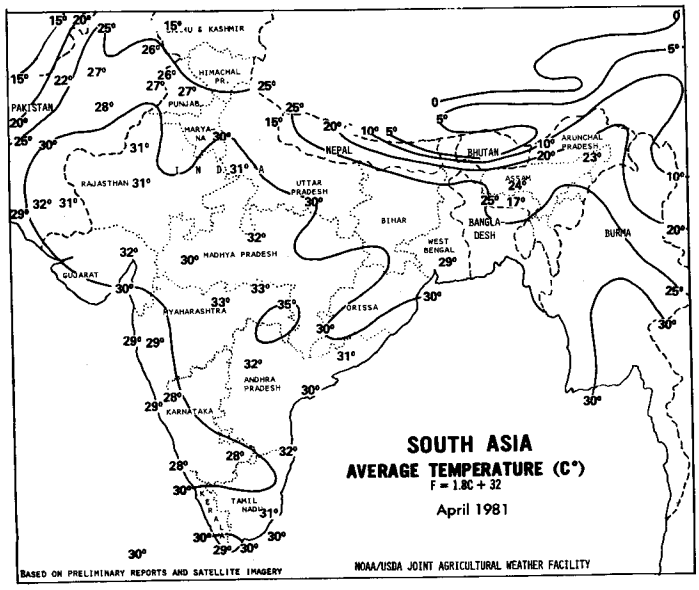


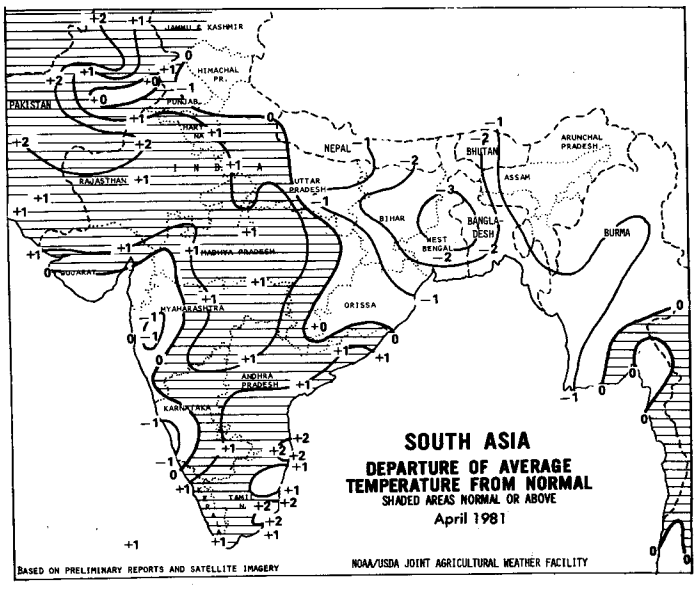
SOUTH ASIA: Rainfall increased again in Bangladesh and eastern India in a pattern similar to that which persisted in April. Some localized flooding may have again occurred, but the moisture was mostly beneficial. With the expected onset of the monsoon still some weeks off, light showers continued along the southeastern coast of India. Increased rainfall was also reported from the foothill regions of the Himalayas. Hot and dry April weather in the winter grain belt permitted uninterrupted harvesting in nearly all areas.



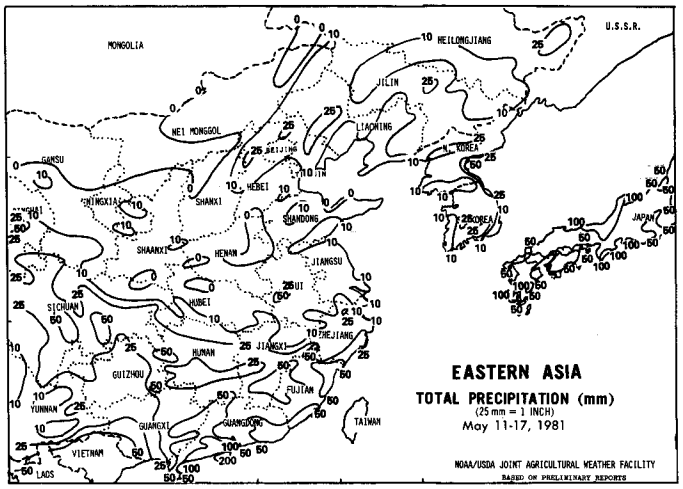


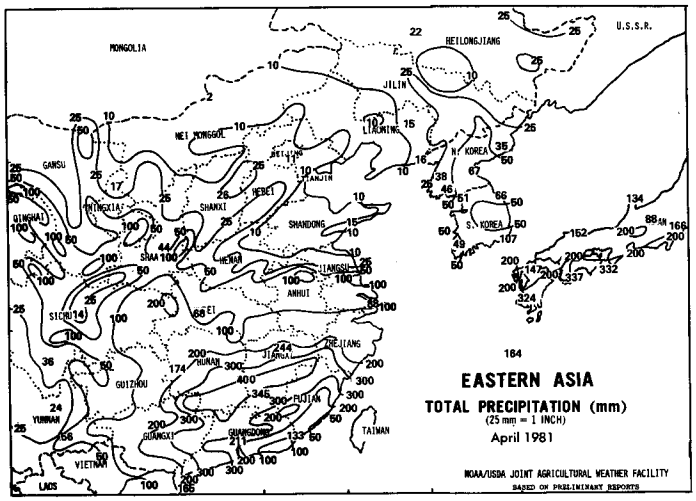


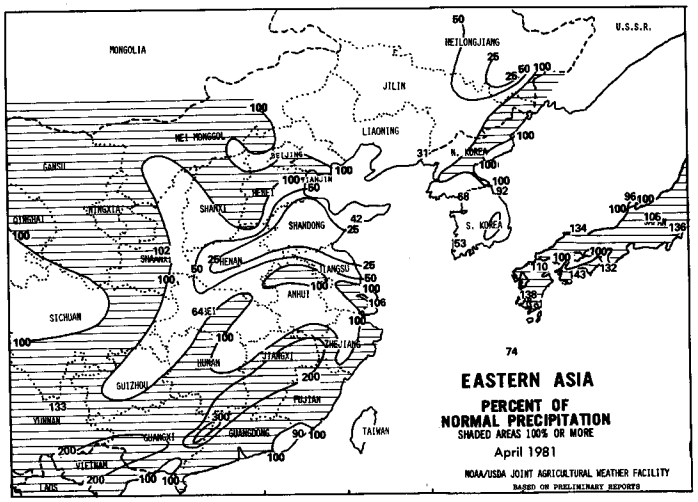


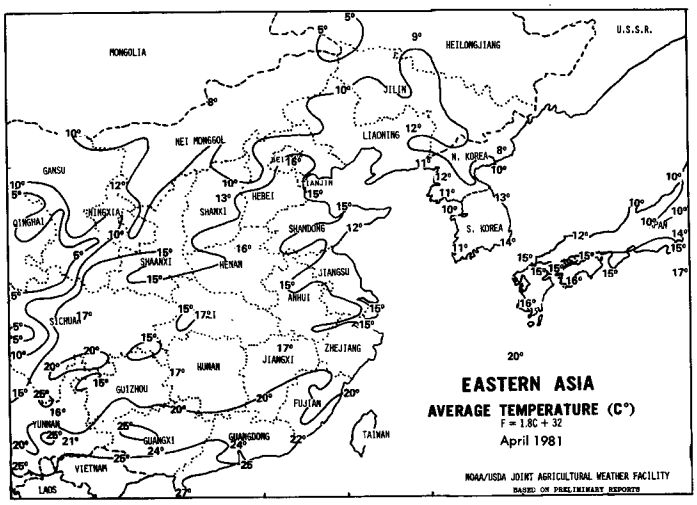


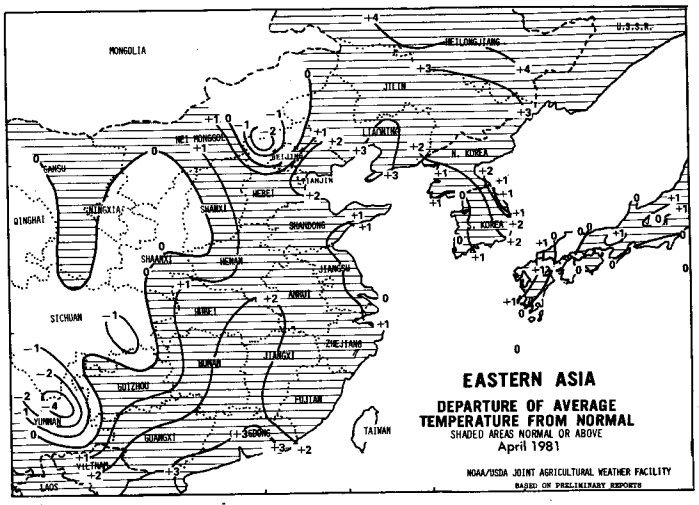
EASTERN ASIA: Light-to-moderate rainfall occurred over most of China's winter wheat belt. With the crop nearly mature in the south, the moisture was not of much benefit; however, grain filling in northern areas was aided. Much-drier-than-normal weather in Shandong and Henan during April had substantially increased irrigation needs. Abundant rainfall continued in areas south of the Yangtze River, but amounts were much less than in April, when flooding of newly planted fields occurred. Only in western Guangdong and eastern Guangxi are conditions now too wet. In general, rice crop prospects are good. The Manchurian Valley received above-normal rainfall. This kept eastern portions too wet, but benefited dry fields in the west. In South Korea, increased rainfall improved growing conditions for rice. Temperatures dipped below normal, but impacts should be neglible, for weather has been warmer than normal since early April.

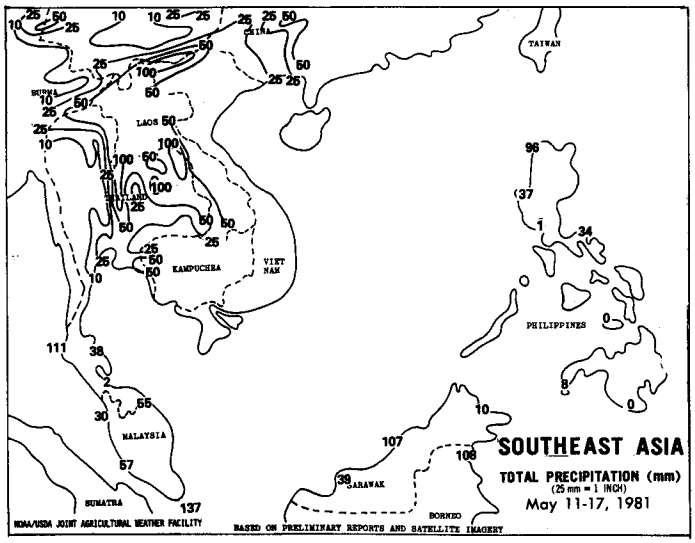




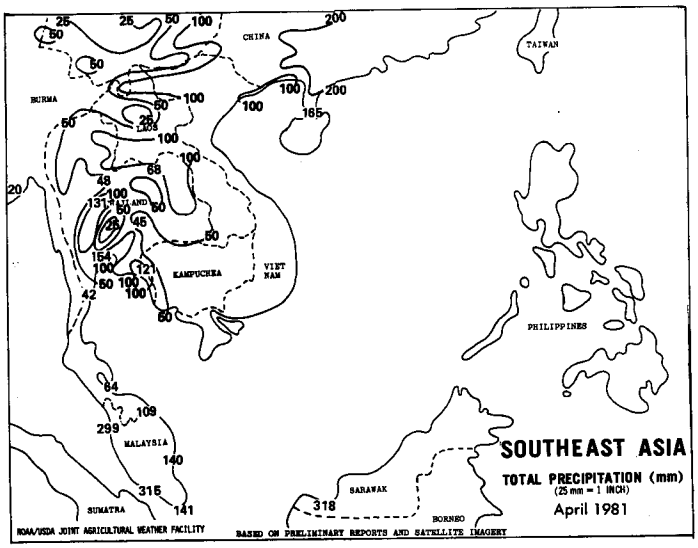


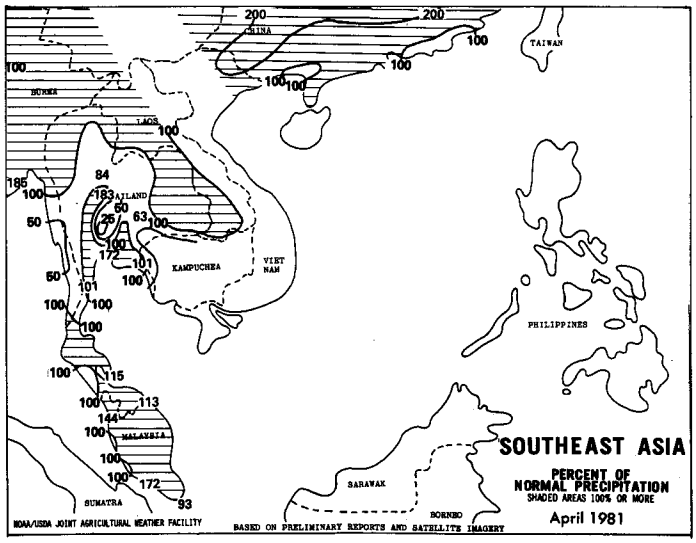


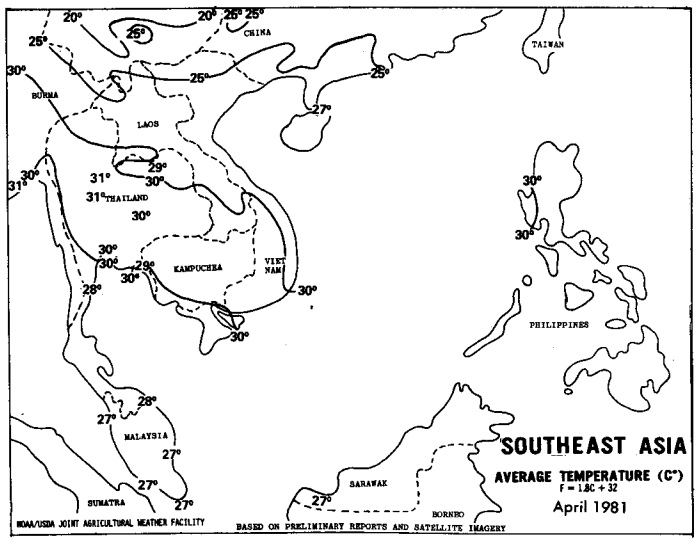


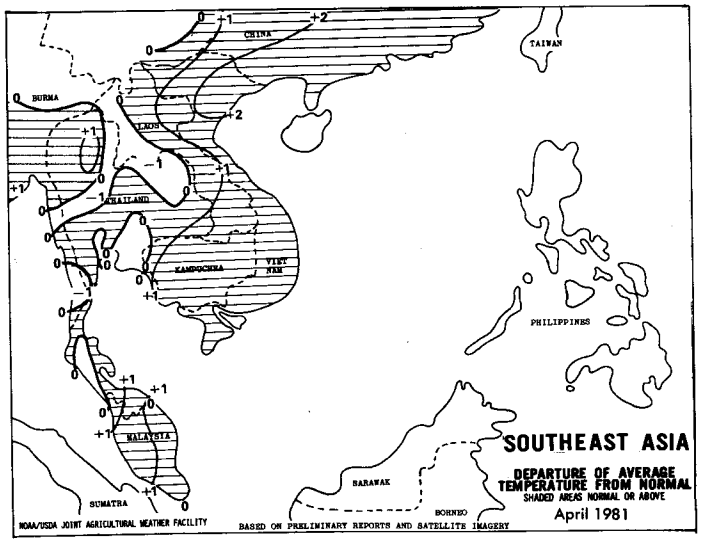


SOUTHEAST ASIA: Widespread showers produced significant weekly rainfall (25 to 100 mm) over much of Thailand. The center of activity shifted to eastern Thailand this week where locally heavy showers brought 100 to 125 mm to higher elevations. The extreme northern portion of Thailand also benefited from 10 to 60 mm of rainfall. Less than 10 mm of rain fell in western Thailand. The rainfall pattern of the past three weeks has brought abundant early-season moisture to nearly all of Thailand. In April, above-average rainfall occurred in much of the Central Plains. The premonsoon rains have provided favorable conditions for early growth of corn and rice.

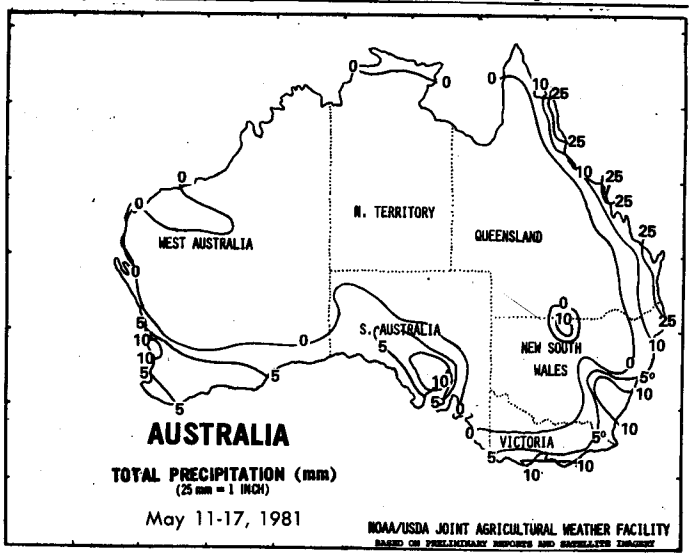


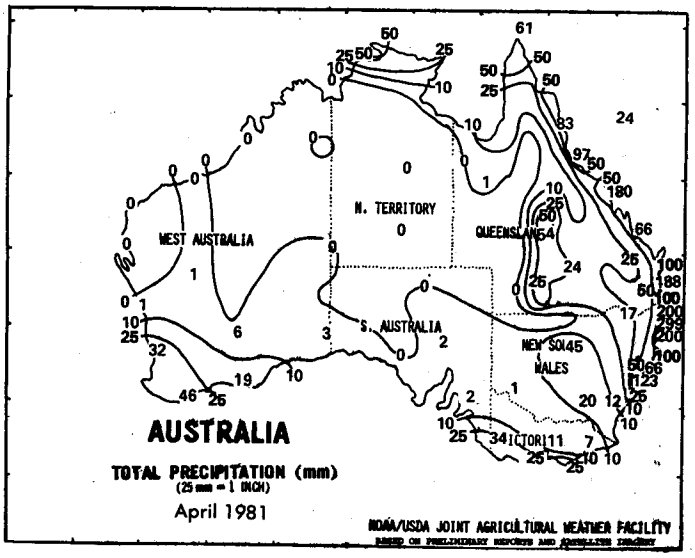


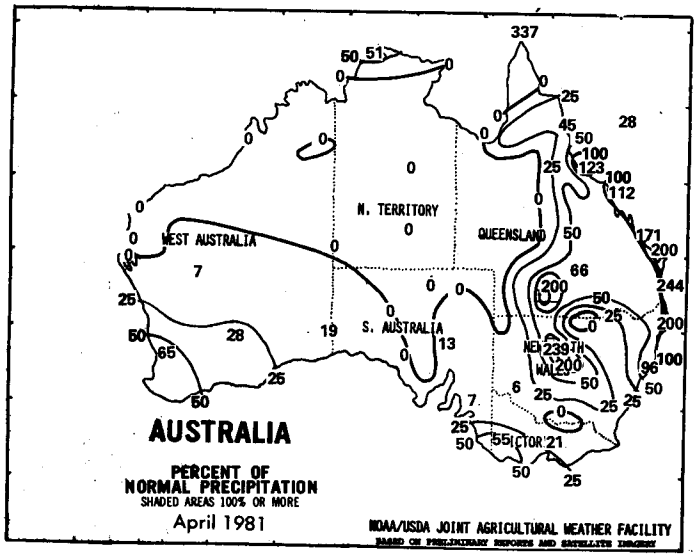


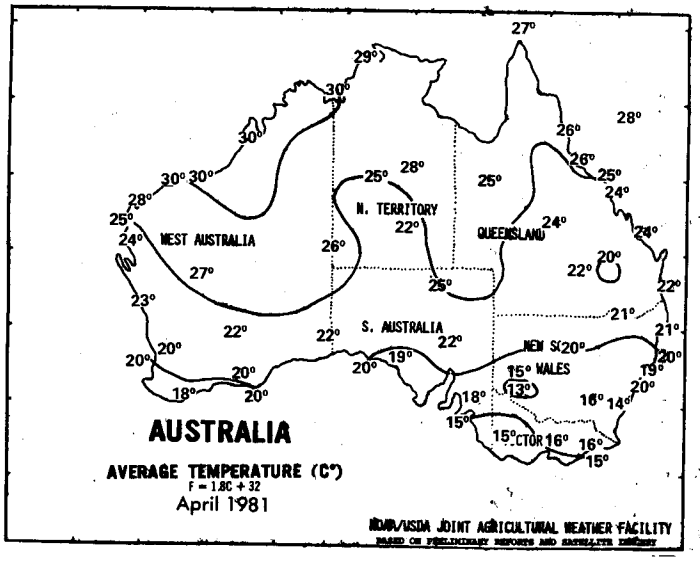


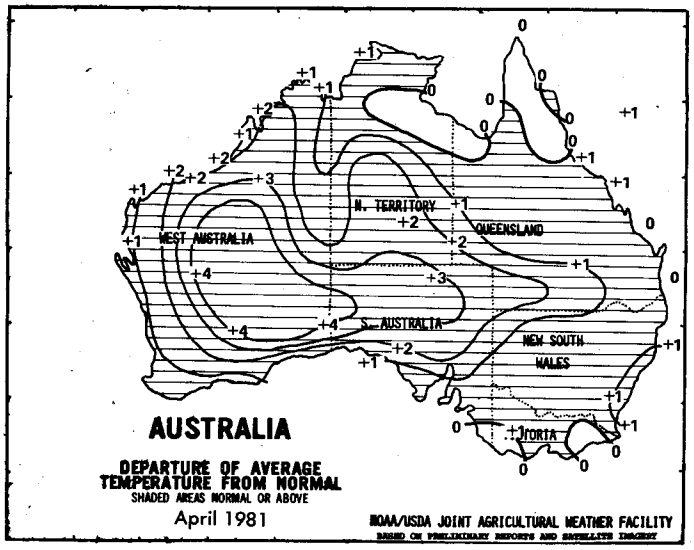
AUSTRALIA: Shower activity occurred in portions of Australia's wheat belt as a frontal system moved across the southern half of the continent. Satellite photos showed a broad band of clouds associated with the front; however, rainfall amounts were disappointing for wheat growers. The wheat growing areas of West Australia and South Australia generally received less than 10 mm of weekly rainfall while minimal amounts fell in most of the eastern wheat belt. Significant rainfall of 10 to 35 mm was confined mostly to coastal areas of Victoria, New South Wales, and Queensland. Scattered showers did produce up to 15 mm of rain in peripheral crop areas of both northwestern and southeastern New South Wales. Rainfall was well below average in April throughout much of Australia's wheat belt. Significant rainfall is needed during the next several weeks to provide adequate moisture for wheat sowing which usually reaches a peak by mid-June. Although farmers can delay planting until August, the late start of the growing season caused by insufficient moisture would not only retard crop emergence and shorten the growth cycle but also reduce potential crop yields.

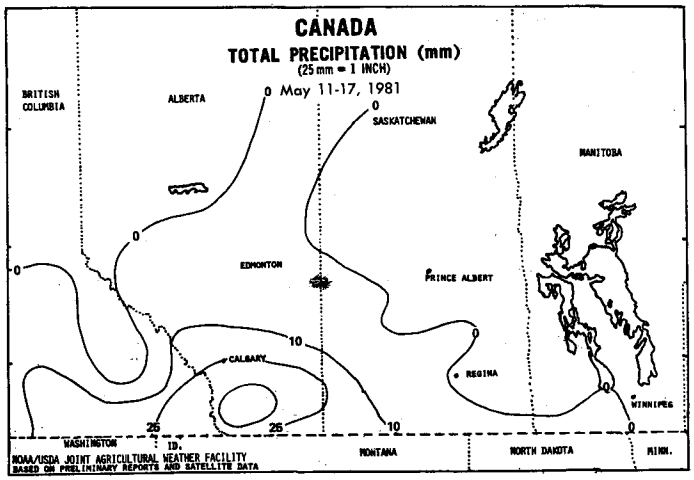




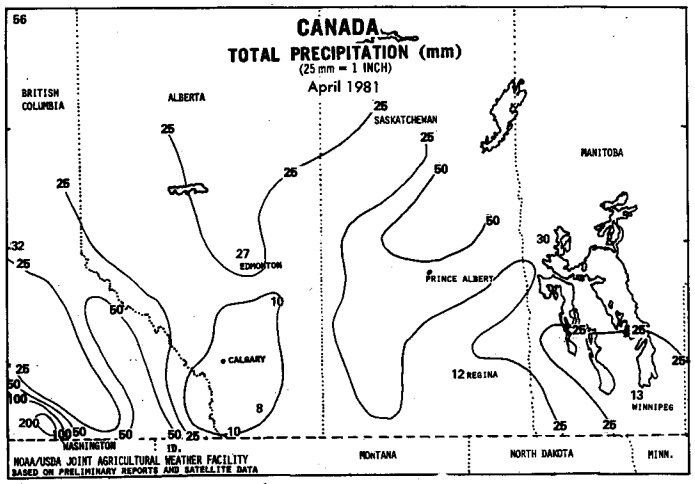


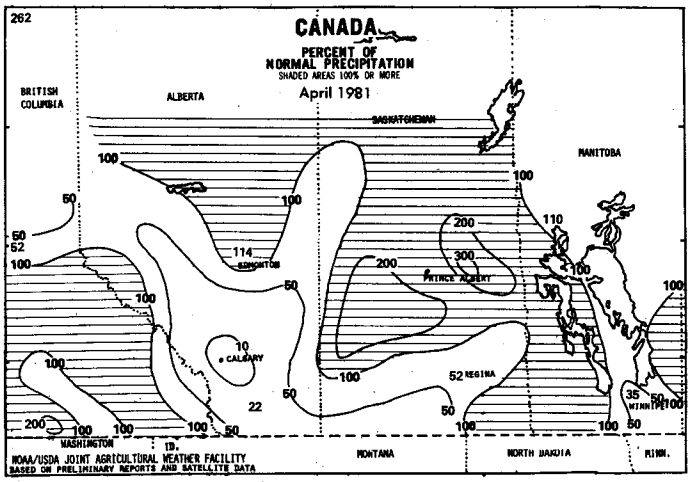


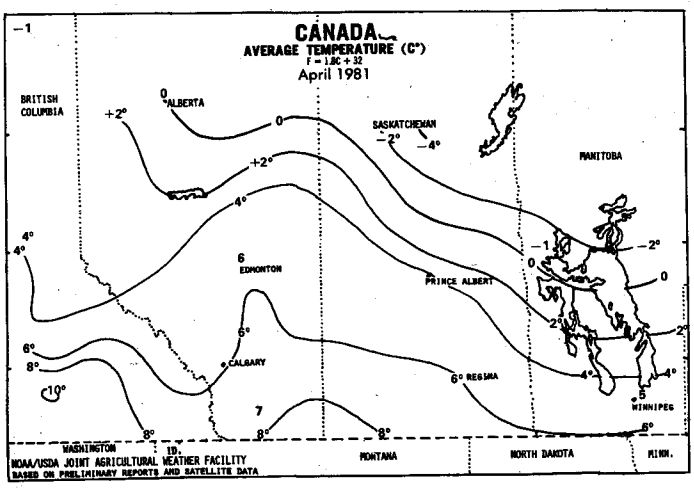


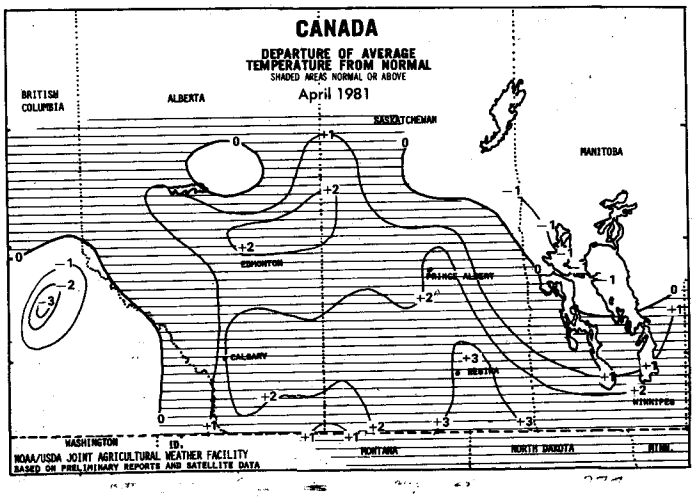


CANADA: A storm system produced 25 to 50 mm of rainfall in southern Alberta late in the week. This timely moisture has improved soil conditions for emergence and early growth of spring wheat in the western Prairies where April rainfall was below average. About 10 mm of weekly rainfall occurred in southwestern Saskatchewan where spring planting is about 85 to 90 percent complete. Elsewhere in Saskatchewan and Manitoba, weekly rainfall was minimal. Spring plantings were over 50 percent complete in the province of Saskatchewan which usually produces over 60 percent of the spring wheat crop. Spring seeding is over 30 percent complete in Manitoba. The south-central portion of Saskatchewan remained too dry. Soil moisture reserves are low in this area which also received below-average April rainfall. Low topsoil moisture is causing some concern for crop germination and emergence. Elsewhere in the eastern wheat belt, above-average April rains have provided a more favorable start to the wheat growing season.

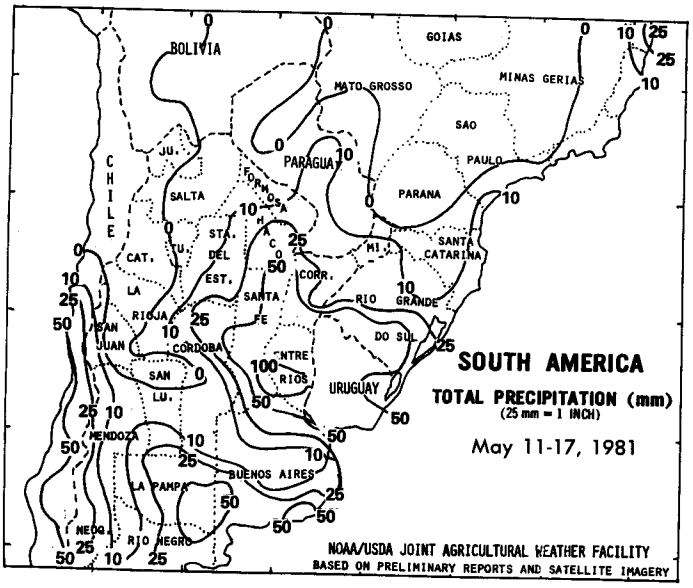


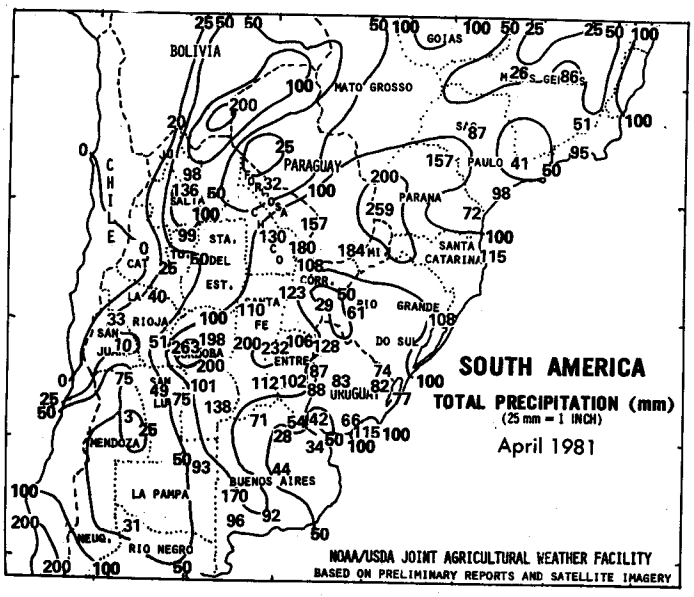


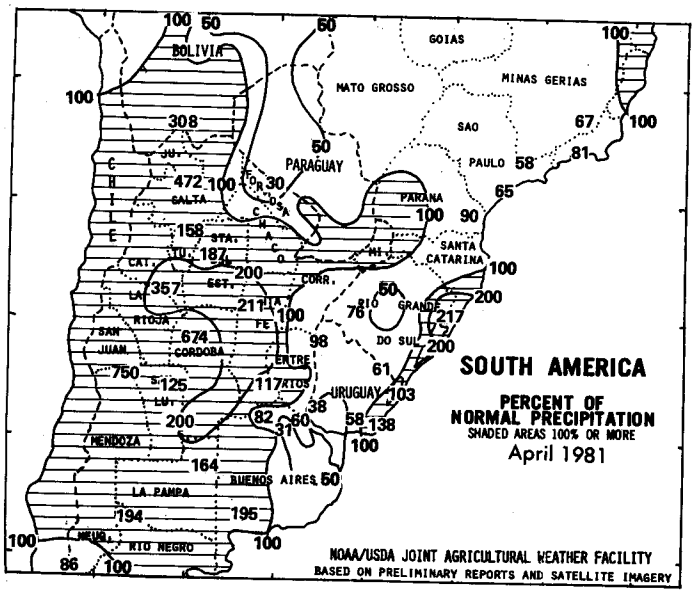


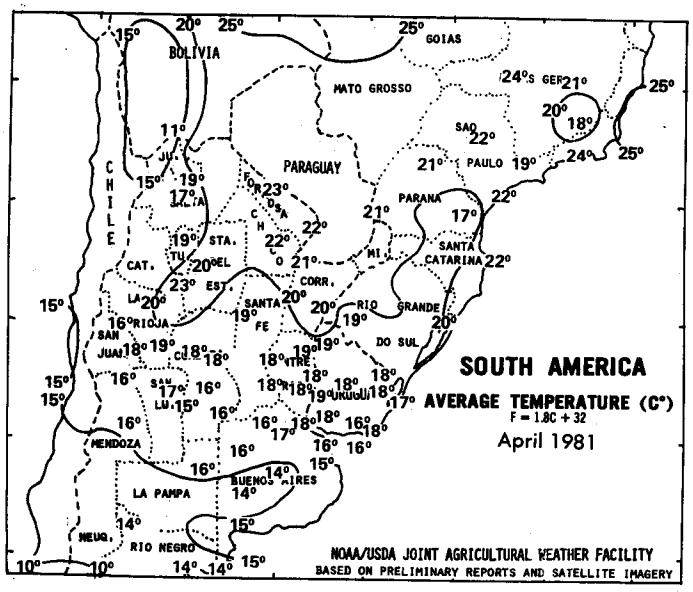


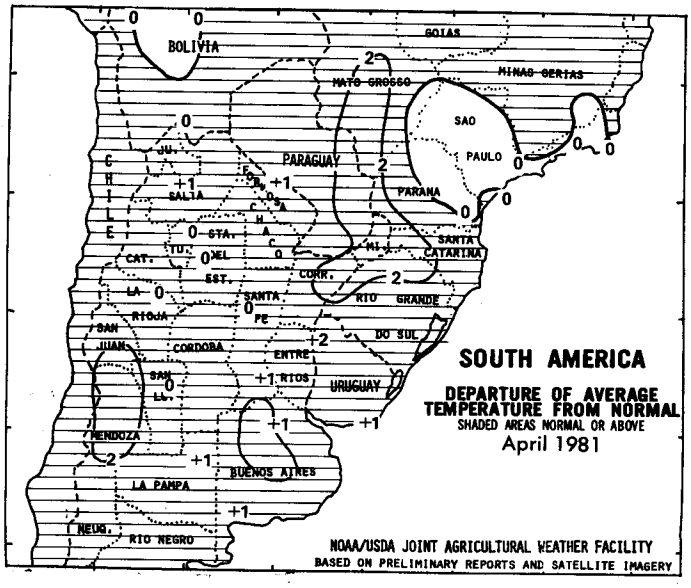
SOUTH AMERICA: Locally heavy rain fell in crop areas of Entre Rios and Santa Fe. Weekly amounts of 50 to 125 mm caused further crop harvest delays and reduced the quality of yields by increasing the moisture content of grain. The excessive rainfall may also have caused some standing water in saturated fields. Corn and sorghum harvests were over 50 percent complete, but wet weather during April has slowed harvest progress. The soybean harvest which began in early May has been hampered by continued wet weather. However, beneficial moisture (25 to 60 mm) fell this week in the wheat area of La Pampa and southern Buenos Aires. In Brazil, relatively dry weather during April and early May has favored late corn and soybean harvest. Significant weekly rainfall of 20 to 60 mm provided favorable soil moisture for early growth of winter wheat in Rio Grande do Sul.



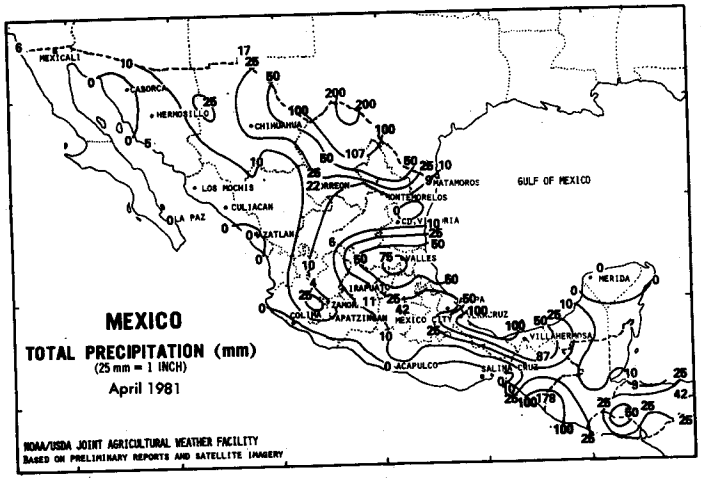


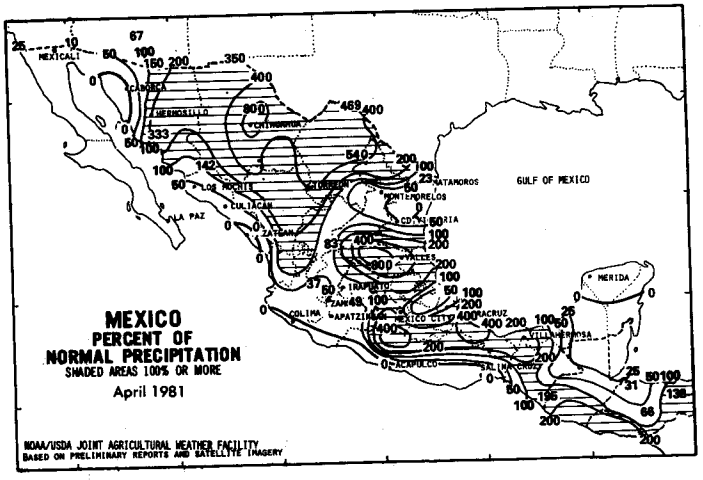






MEXICO: Mostly sunny, dry weather the first half of May favored field activities and crop development. Unseasonably heavy rains in April over the upper northcentral and northeastern portions, as well as parts of the east, improved soil moisture and helped replenish reservoirs. This will benefit cotton, corn, grain sorghum, pastures, and some citrus. Some non-irrigated citrus orchards from Montemorelos to Cd. Victoria are under moisture stress because of lack of rain. Southern Plateau corn had light rains, about half of normal, in the western districts during April and early May while moisture has been adequate in the eastern portion. Crop prospects should be generally bright over the northwest as reservoir levels have finally climbed back to their long-term average after a severe drought which peaked last summer.





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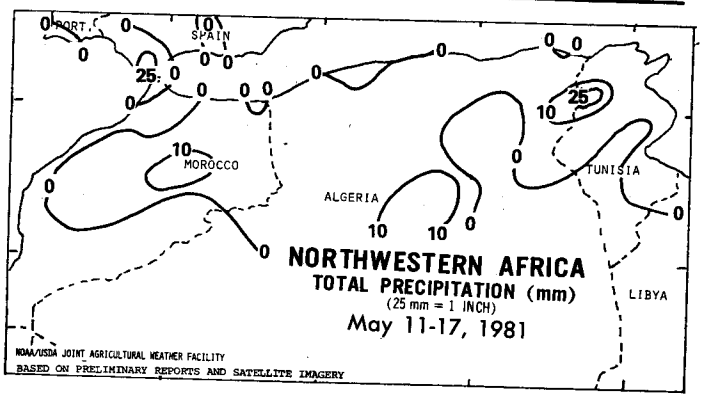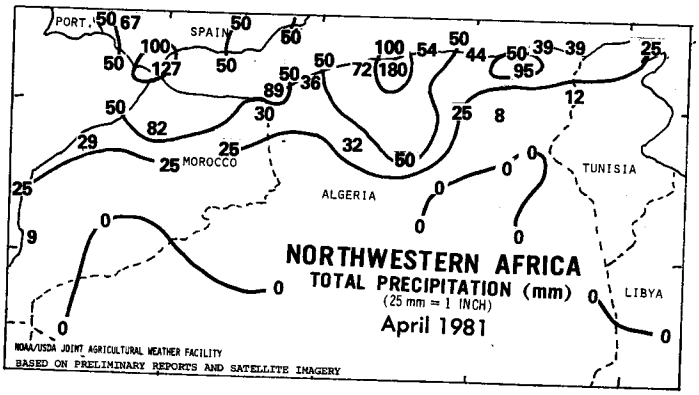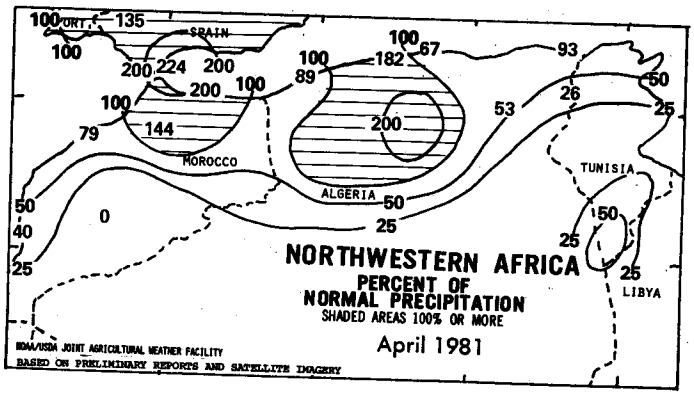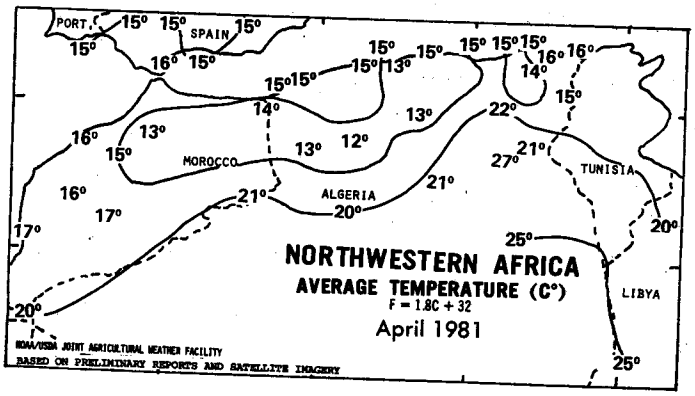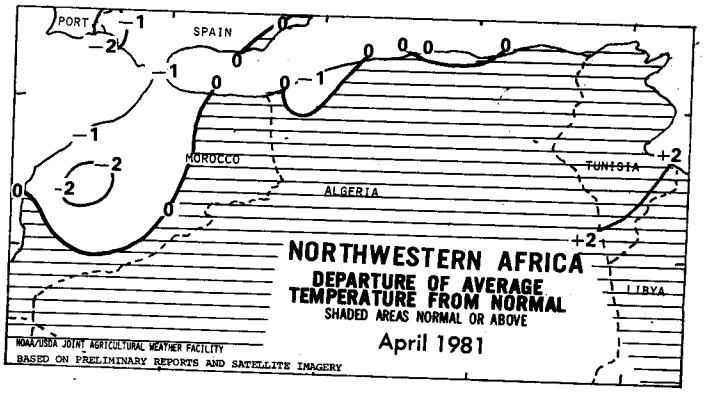
NORTHWESTERN AFRICA: With winter grain harvesting well underway, little rain fell across the region. Moderate rain in the east fell on nonagricultural lands. This represents a slackening of rain since April; however, the rains in April didn't change winter grain yield prospects either way. The dry summers in this mediterranean climate have little impact on agriculture, and coverage of this region will be discontinued until next autumn.