

WEEKLY WEATHER AND CROP BULLETIN

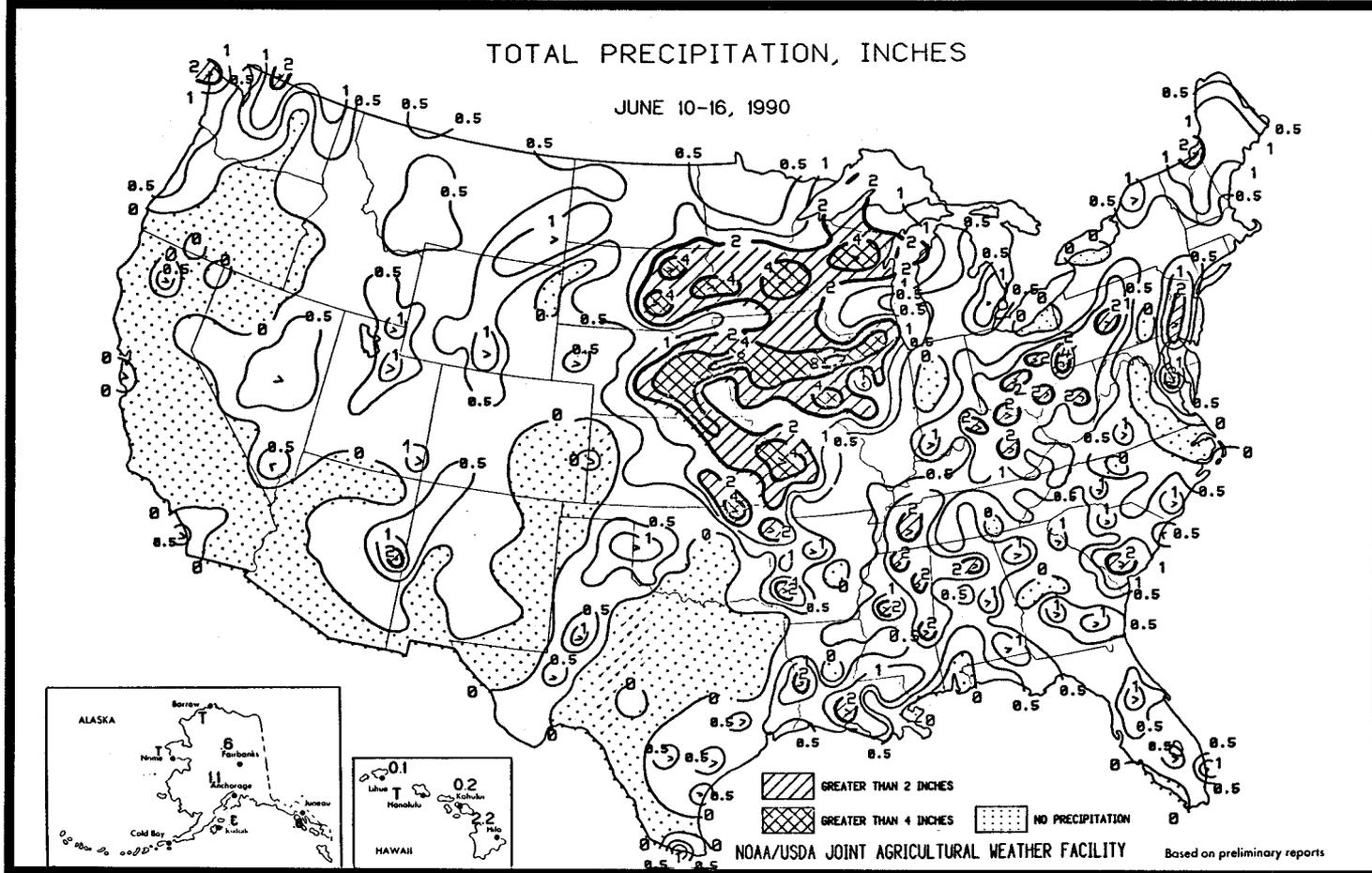
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

Volume 77, No. 24

Washington, D.C.

June 19, 1990



HIGHLIGHTS

June 10-16, 1990

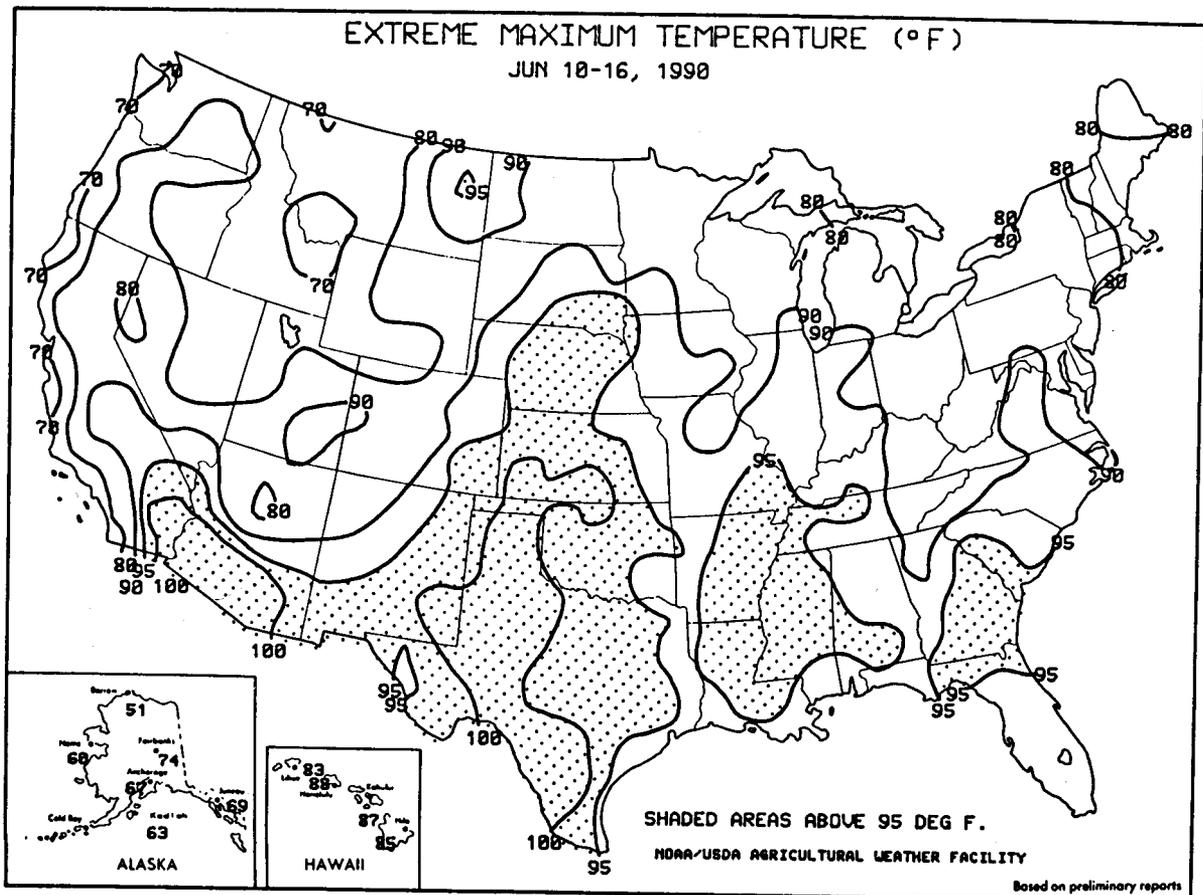
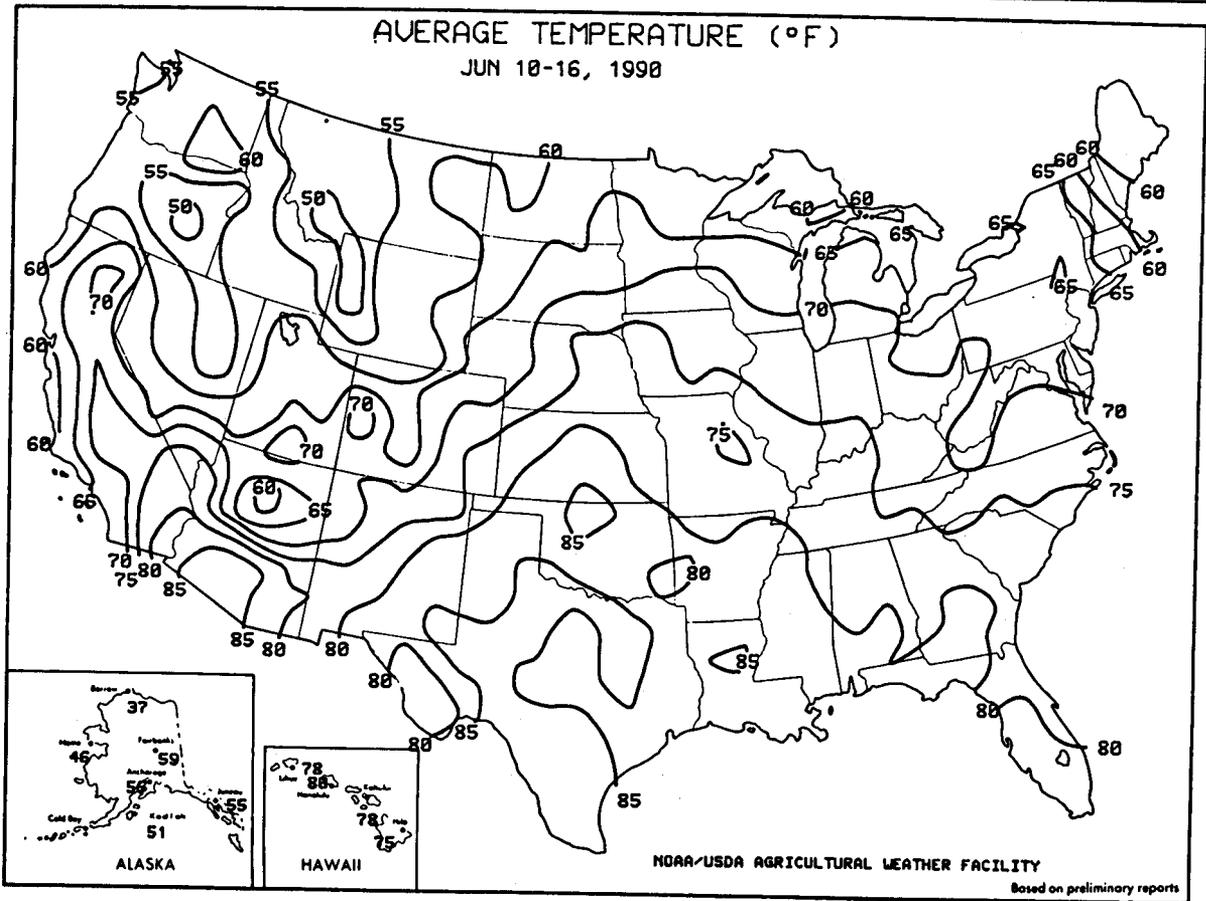
At the start of the week, widely scattered showers and thunderstorms continued to develop in the warm and humid air covering much of the country. Generally beneficial showers dampened portions of the drought stricken West, while a thunderstorm near Columbia, MS produced 3 inches of rain in 45 minutes and an early evening thunderstorm deluged Rogers, AR with 1 1/2 inches in 30 minutes. On Monday, severe thunderstorms developed in the upper Mississippi Valley ahead of a developing frontal system. The strong thunderstorms progressed southward and eastward through the week, spreading across the central Plains and Corn Belt. Heavy rains saturated the soils, swelled rivers, and caused flooding in Iowa, Missouri, Nebraska, Illinois, Indiana, Kentucky, Ohio, and West

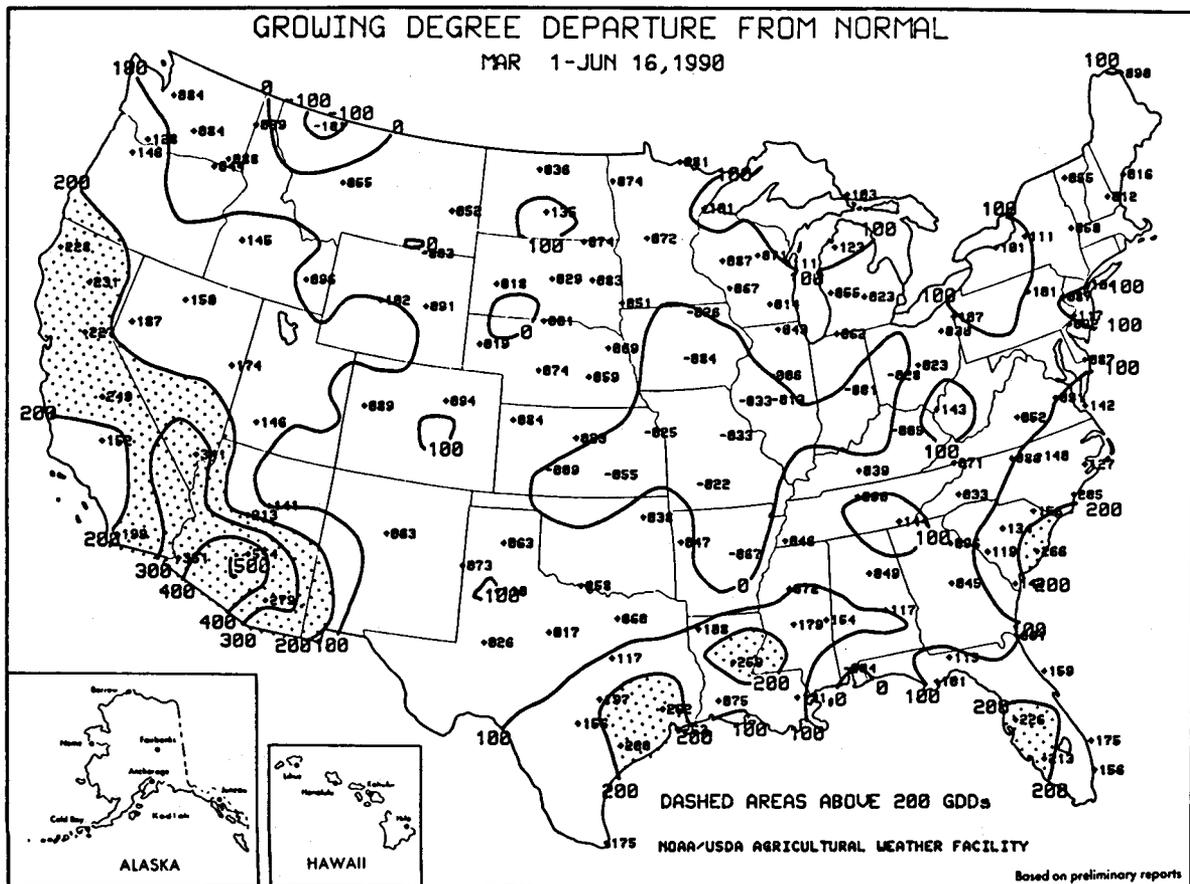
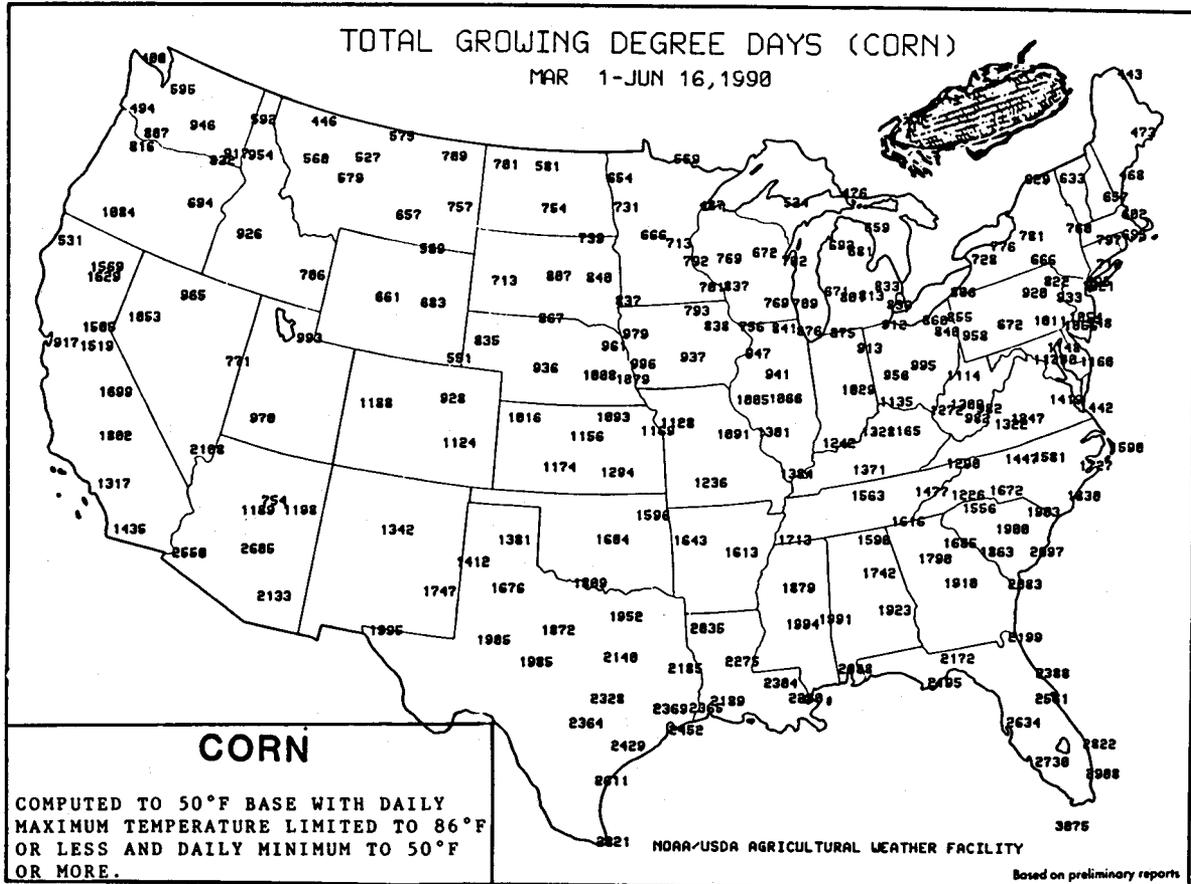
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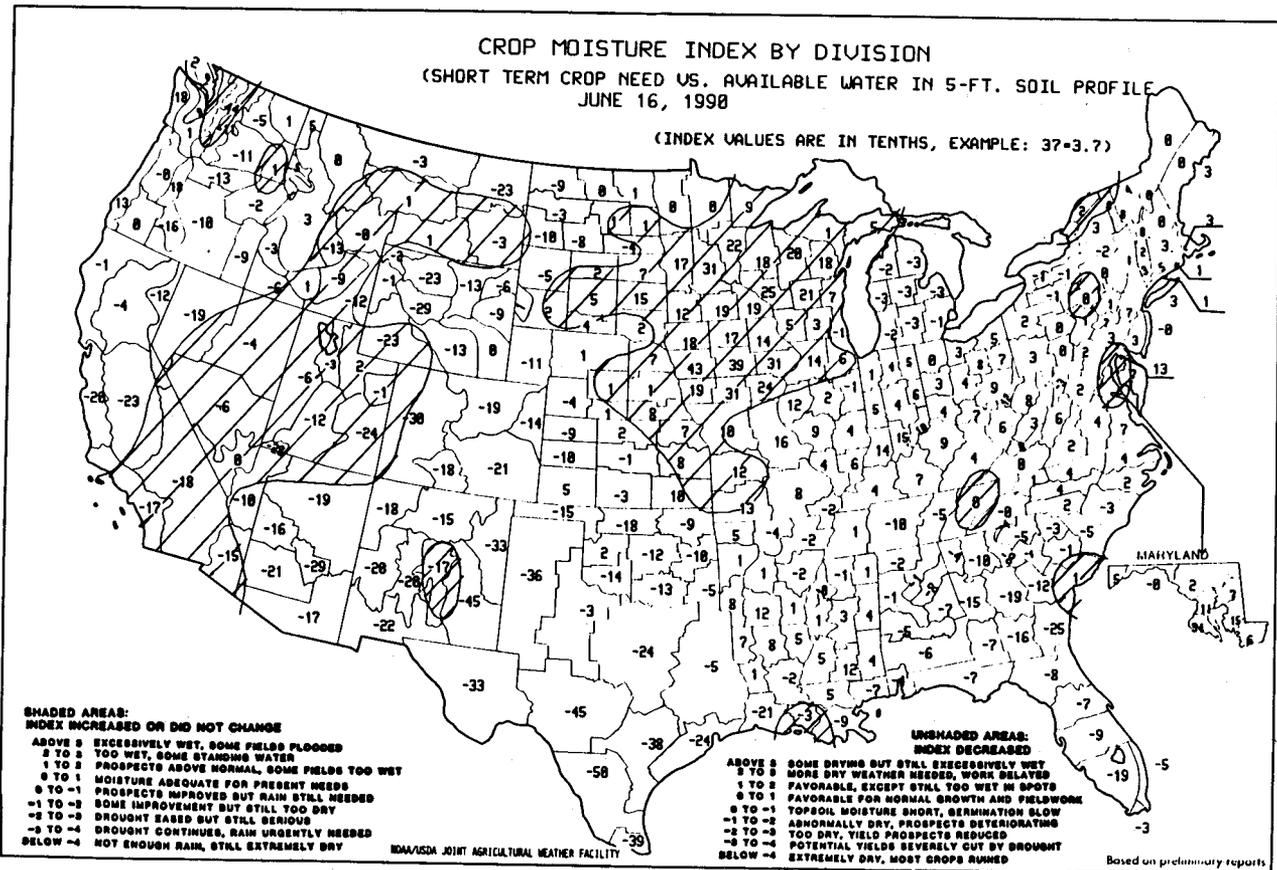
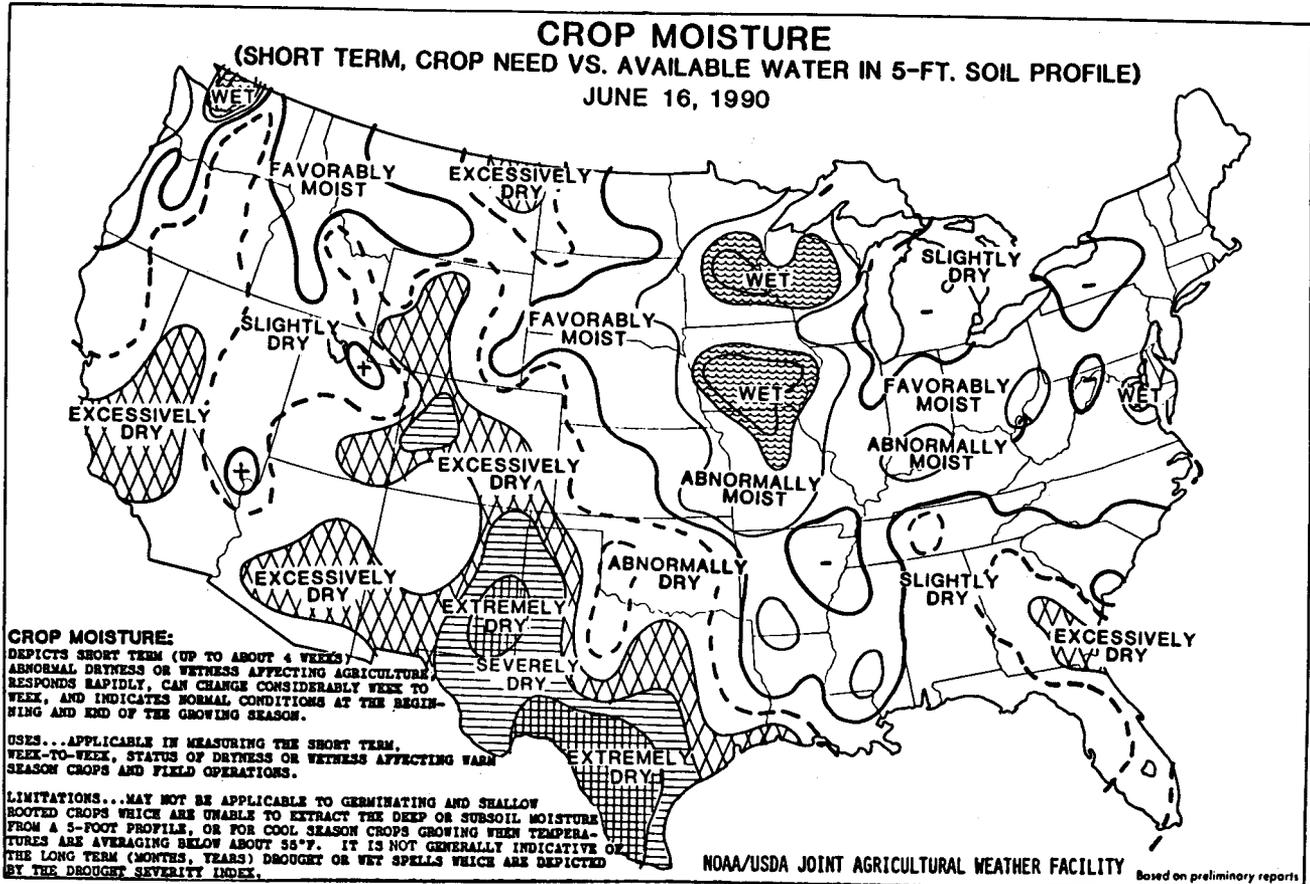
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National Weather Data for Selected Cities

Weather Data for the Week Ending June 16, 1990

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	91	65	94	57	78	1	.3							89	41	5	0	2	0		
MOBILE	91	70	94	67	81	0		-1.1	1.7				68	40.4	139	91	45	5	0		
MONTGOMERY	93	67	95	61	80	1	.2		.7				41	38.9	158	94	41	7	0		
AK ANCHORAGE	61	49	67	45	55	1	1.1	.9	1.2	244	5.5	140	93	57	0	0	0	5	1		
BARROW	43	30	51	27	37	4				36	.5	49	97	77	0	0	6	2	0		
FAIRBANKS	68	50	74	47	59	0	.7	.4	1.6	250	3.4	119	89	42	0	0	0	4	0		
JUNEAU	61	49	69	47	55	3	.8	.1	1.0	68	20.7	112	95	62	0	0	0	3	0		
KODIAK	58	45	63	39	52	2		-4.3	.7	31	27.0	104	94	65	0	0	0	6	0		
NOME	55	37	60	31	46	1	T			19	5.3	153	91	61	0	2	0	0	0		
AZ PHOENIX	100	75	105	69	88	2	0			100	2.2	88	37	13	7	0	0	0	0		
PRESCOTT	81	52	84	43	67	1	.1	0		100	4.7	77	52	16	0	0	1	0	0		
TUCSON	99	68	103	57	84	1	0			100	2.7	108	43	10	7	0	0	0	0		
YUMA	98	70	104	61	84	-3	0			0	.5	57	42	15	6	0	0	0	0		
AR FORT SMITH	95	72	98	68	83	6	.1	-8	.1	3	16	37.9	197	93	46	7	0	2	0		
LITTLE ROCK	91	72	94	69	82	4	0	-9		5	35.4	141	84	52	5	0	0	0	0		
CA BAKERSFIELD	86	59	91	52	73	-5	0			0	2.6	69	60	22	1	0	0	0	0		
EUREKA	62	52	65	51	57	3	T			82	20.5	93	90	68	0	0	0	0	0		
FRESNO	85	59	91	54	72	-2	0			0	7.4	106	62	24	1	0	0	0	0		
LOS ANGELES	72	60	78	56	66	1	T			0	5.1	61	83	57	0	0	0	0	0		
REDDING	86	57	89	53	72	-5	.8	.6	.7	159	19.8	82	66	19	0	0	2	1	0		
SACRAMENTO	83	54	88	52	69	-2	0			0	0	11.5	109	85	28	0	0	0	0		
SAN DIEGO	70	62	74	59	66	1	.5	.5	.9	0	5.9	92	83	62	0	0	1	0	0		
SAN FRANCISCO	66	53	70	49	60	-1	.5			0	7.9	64	86	53	0	0	0	0	0		
CO DENVER	86	57	92	49	72	5	T			5	7.0	93	69	22	2	0	1	0	0		
GRAND JUNCTION	84	57	90	51	71	-1	.2	.1	.2	100	3.2	90	57	15	1	0	2	0	0		
PUEBLO	91	54	95	48	72	2	T			9	6.4	152	73	15	5	0	0	0	0		
CT BRIDGEPORT	76	58	82	52	67	0	.3			50	20.4	109	86	50	0	0	1	0	0		
HARTFORD	79	54	86	47	66	-2	T			104	22.7	114	92	47	0	0	1	0	0		
DC WASHINGTON	81	61	89	57	71	-3	.2	-6	.2	2.5	141	18.6	110	87	47	0	0	1	0		
FL APALACHICOLA	90	72	95	68	81	1	1.0	-1	1.0	1.4	64	14.7	75	90	51	4	0	2	1		
DAYTONA BEACH	89	68	96	62	79	0	.2	-1.3	.1	1.2	37	13.1	75	90	48	4	0	3	0		
JACKSONVILLE	91	66	96	61	79	-1	.2	-1.2	.2	1.1	37	10.0	50	91	45	4	0	2	0		
KEY WEST	89	77	91	74	83	0	.1	-1.2	0	.7	25	9.4	76	77	50	2	0	2	0		
MIAMI	89	73	94	69	81	0	.1	-2.2	.1	.7	14	19.2	93	78	47	1	0	0	0		
ORLANDO	91	70	94	65	80	0	.1	-1.5	0	3.5	101	12.1	67	89	42	4	0	2	0		
TALLAHASSEE	95	66	98	62	81	1	.6	-9	.6	1.7	54	20.9	75	95	40	7	0	1	0		
TAMPA	91	72	95	65	81	0	.1	-1.1	.1	2.1	84	12.2	75	87	47	7	0	1	0		
WEST PALM BEACH	89	72	95	65	80	0	.1	-1.8	.1	1.1	25	15.1	71	83	45	3	0	0	0		
GA ATLANTA	88	68	90	64	78	2	.2	-6	.2	1.1	11	34.8	137	89	47	1	1	1	0		
AUGUSTA	92	65	99	57	79	2	.6	-3	.5	.9	43	11.2	51	93	39	3	0	0	0		
MACON	93	67	95	60	80	1	T			36	17.7	76	90	37	7	0	3	1	0		
SAVANNAH	91	68	97	62	79	1	.4	-9	.4	.9	32	15.5	75	89	38	3	0	2	0		
HI HILO	82	67	85	66	75	0	2.2	.8	1.2	3.1	94	70.5	113	92	62	0	0	6	0		
HONOLULU	87	73	88	72	80	2	T			0	9.9	77	74	46	0	0	2	1	0		
KAHULUI	85	70	87	68	78	1	.2	.1	.1	.3	192	14.2	125	91	58	0	0	0	0		
LIHUE	82	73	83	71	78	0	.1	-3	.1	.8	18.9	88	81	65	0	0	0	0	0		
ID BOISE	72	45	79	36	58	-7	T			19	8.7	132	79	27	0	0	1	0	0		
LEWISTON	73	51	80	47	62	-3	.2	-2	.1	.6	79	6.9	103	68	32	0	0	2	0		
POCATELLO	66	44	72	35	55	-6	.8	.5	.7	.8	123	6.6	114	87	36	0	0	3	1		
IL CHICAGO	84	60	92	50	72	4	.7	-3	.4	1.6	68	17.5	119	85	52	1	0	3	1		
MOLINE	84	65	90	54	74	4	2.7	1.7	1.6	4.0	180	25.5	160	91	52	1	0	2	0		
PEORIA	85	63	91	54	74	3	.7	-2	.4	1.4	68	19.2	123	90	54	1	0	2	0		
QUINCY	85	65	91	59	75	3	.9	0	.9	3.9	181	20.9	128	93	58	1	0	1	0		
ROCKFORD	84	62	91	51	73	5	4.4	3.4	2.1	5.0	211	18.5	120	90	48	1	0	3	1		
SPRINGFIELD	86	66	93	58	76	4	2.6	1.7	2.2	4.2	228	24.1	155	83	45	2	0	2	1		
IN EVANSVILLE	88	65	93	58	77	2	.5	-3	.5	2.1	113	29.3	140	94	47	4	0	1	1		
FORT WAYNE	83	60	89	52	72	2	.9	0	.9	1.7	87	21.7	136	85	44	0	0	1	1		
INDIANAPOLIS	85	62	89	54	73	2	T			.8	37	19.7	109	86	46	0	0	1	1		
SOUTH BEND	83	60	91	51	72	3	.1	-9	.1	1.1	53	19.5	119	84	43	1	0	1	0		
IA DES MOINES	83	66	90	58	75	4	4.3	3.3	3.9	4.8	208	20.7	151	90	57	1	0	4	0		
SIOUX CITY	88	65	96	62	77	6	3.0	2.1	1.4	3.4	159	15.3	138	87	45	3	0	5	2		
WATERLOO	82	63	89	54	72	4	3.3	2.3	1.7	4.8	213	18.0	130	95	57	0	0	5	2		
KS CONCORDIA	89	69	94	65	79	6	1.7	.7	.7	2.6	109	14.8	125	89	56	4	0	5	2		
DODGE CITY	93	68	97	62	81	7	.6	-1	.5	.6	36	13.6	150	83	37	7	0	3	0		
GOODLAND	92	59	95	52	76	6	T			24	8.0	110	79	24	5	0	0	0	0		
TOPEKA	85	71	91	64	78	4	2.5	1.3	1.7	3.4	123	16.1	116	90	62	1	0	4	1		
WICHITA	97	71	100	68	84	8	.4	-6	1.0	4.8	48	9.4	78	87	40	6	0	3	0		
KY BOWLING GREEN	90	64	97	56	77	3	.6	-5	.6	1.0	43	22.2	89	95	46	4	0	1	1		
LEXINGTON	83	63	87	56	73	1	1.4	.4	1.4	4.0	179	21.2	96	93	52	0	0	1	1		
LOUISVILLE	88	65	92	58	77	3	T			4.4	231	32.9	154	89	45	4	0	1	0		
LA ALEXANDRIA	96	76	97	71	86	6	T			.1	5	34.1	127	73	43	7	0	0	0		
BATON ROUGE	95	73	96	71	84	4	.2			.9	39	32.0	123	93	48	7	0	2	0		
LAKE CHARLES	91	74	92	70	82	2	.8	-1	.7	.6	41	27.6	121	98	56	6	0	3	1		
NEW ORLEANS	92	73	94	71	82	2	T			.4	17	39.3	147	96	54	7	0	0	0		

Based on 1951-80 normals

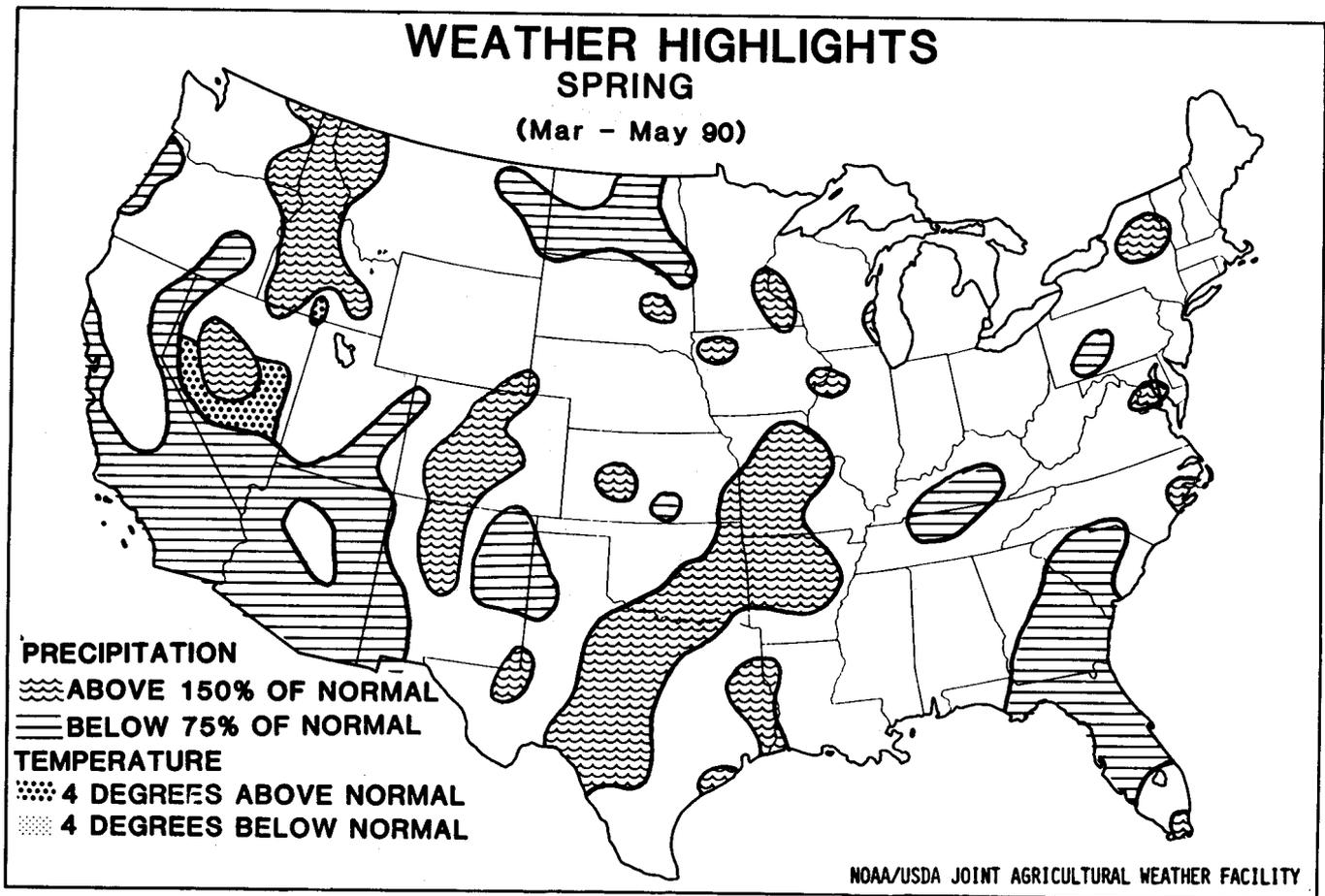
Weather Data for the Week Ending June 16, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	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			
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
ME SHREVEPORT	94	74	96	69	84	4	T	-1.8	T	.5	24	37.1	165	93	52	7	0	1	0	0	0		
ME CARIBOU	76	53	83	42	65	5	T	-1.6	T	1.2	73	13.4	96	81	40	0	0	1	1	0	0		
MD PORTLAND	67	49	77	43	58	3	T	-1.1	T	1.1	65	18.6	93	95	60	0	0	2	2	0	0		
MD BALTIMORE	81	58	86	53	70	3	T	-1.1	T	1.6	82	18.5	101	87	44	0	0	2	2	0	0		
MD SALISBURY	79	59	81	51	69	3	T	-1.1	T	1.2	67	20.9	109	95	39	0	0	2	2	0	0		
MA BOSTON	65	53	75	50	59	3	T	-1.4	T	.5	32	22.1	107	93	67	0	0	1	1	0	0		
MA CHATHAM	60	52	67	48	56	3	T	-1.6	T	1.0	62	23.5	108	95	77	0	0	1	1	0	0		
MI ALPENA	78	52	86	42	65	4	T	-1.4	T	.5	30	12.1	102	90	42	0	0	2	2	0	0		
MI DETROIT	80	60	90	56	70	4	T	-1.1	T	.9	175	18.4	134	81	41	1	0	1	1	0	0		
MI FLINT	81	58	90	51	69	3	T	-1.1	T	2.0	118	13.3	105	82	43	1	0	2	2	0	0		
MI GRAND RAPIDS	82	59	87	48	70	4	T	-1.1	T	.8	43	13.9	96	83	42	0	0	2	2	0	0		
MI HOUGHTON LAKE	78	56	84	45	67	4	T	0	T	.9	55	10.9	95	85	45	0	0	2	2	0	0		
MI LANSING	82	57	89	48	70	4	T	-1.1	T	1.0	49	12.4	98	87	44	0	0	1	1	0	0		
MI MARQUETTE	72	51	86	40	61	2	T	-1.1	T	2.1	97	14.2	87	92	59	0	0	3	3	0	0		
MI MUSKOGON	80	60	84	53	70	2	T	-1.1	T	1.8	136	16.8	125	83	46	0	0	3	3	0	0		
MI SAULT ST. MARIE	73	49	79	41	60	2	T	-1.1	T	1.6	91	13.6	106	97	48	0	0	3	3	0	0		
MN ALEXANDRIA	76	59	88	55	68	3	T	-1.1	T	1.4	134	12.4	124	89	53	0	0	3	3	0	0		
MN DULUTH	71	52	83	47	61	3	T	-1.1	T	2.7	131	12.3	111	96	58	0	0	4	4	0	0		
MN INT'L FALLS	75	53	86	48	64	4	T	-1.1	T	3.0	163	7.9	93	88	41	0	0	6	6	0	0		
MN MINNEAPOLIS	82	62	86	57	72	4	T	-1.1	T	5.8	269	17.5	164	91	51	0	0	2	2	0	0		
MN ROCHESTER	80	61	87	52	71	4	T	-1.1	T	3.8	189	19.6	175	90	55	0	0	4	4	0	0		
MS GREENWOOD	92	71	94	63	82	3	T	-1.1	T	3.0	305	32.2	115	90	50	6	0	4	4	0	0		
MS JACKSON	94	71	96	62	82	3	T	-1.1	T	.3	20	34.3	127	98	48	7	0	1	1	0	0		
MS MERIDIAN	93	67	97	59	80	2	T	-1.1	T	3.1	203	46.0	167	97	46	6	0	3	3	0	0		
MO CAPE GIRARDEAU	90	68	98	61	79	1	T	-1.1	T	.4	4	1.3	65	30.8	139	91	46	4	4	0	0		
MO COLUMBIA	84	65	90	60	75	2	T	-1.1	T	1.7	8	1.6	6.2	296	32.7	187	93	61	2	2	0	0	
MO KANSAS CITY	85	69	91	64	77	3	T	-1.1	T	1.5	4	1.0	4.0	158	21.1	137	88	60	2	2	0	0	
MO SAINT LOUIS	88	69	94	63	79	4	T	-1.1	T	1.5	4	1.0	4.0	158	21.1	137	88	60	2	2	0	0	
MO SPRINGFIELD	87	68	91	65	78	5	T	-1.1	T	2.3	117	22.6	140	80	47	2	0	0	0	0	0		
MT BILLINGS	68	49	87	43	58	5	T	-1.1	T	.2	1.0	40	35.7	198	90	52	3	3	0	0	0	0	
MT GLASGOW	71	52	96	46	62	2	T	-1.1	T	.2	1.0	40	35.7	198	90	52	3	3	0	0	0	0	
MT GREAT FALLS	63	43	77	37	53	8	T	-1.1	T	.3	1.0	40	35.7	198	90	52	3	3	0	0	0	0	
MT HAVRE	65	46	79	39	56	7	T	-1.1	T	.9	2	4	9	57	7.9	96	82	43	0	0	0	0	
MT HELENA	64	44	77	39	54	5	T	-1.1	T	.1	7	3.2	56	86	41	0	0	1	1	0	0		
MT KALISPELL	63	42	70	39	53	5	T	-1.1	T	.7	79	4.4	78	75	34	0	0	3	3	0	0		
MT MILES CITY	70	51	92	40	60	5	T	-1.1	T	.4	2	3	7	56	10.7	142	88	47	0	0	0	0	
MT MISSOULA	63	44	74	39	54	5	T	-1.1	T	.9	2	6	1.3	84	5.4	78	82	45	1	0	0	0	
NE GRAND ISLAND	63	44	74	39	54	5	T	-1.1	T	.1	3	1	4	37	7.2	109	85	42	0	0	0	0	
NE LINCOLN	87	65	96	60	76	5	T	-1.1	T	4.4	3.5	4.8	234	13.2	119	93	45	2	0	0	0	0	
NE NORFOLK	88	68	94	63	78	6	T	-1.1	T	.8	1.5	7.1	10.7	86	87	51	4	0	0	0	0	0	
NE NORTH PLATTE	88	63	97	59	75	5	T	-1.1	T	6.5	5.5	3.9	7.1	298	14.5	132	93	44	3	0	0	0	
NE OMAHA	84	57	96	53	71	3	T	-1.1	T	.3	1.5	7.3	8.9	96	87	39	1	0	0	0	0	0	
NE SCOTTSBLUFF	86	68	92	62	77	4	T	-1.1	T	2.3	1.3	3.7	163	12.4	95	84	51	2	2	0	0	0	
NE VALENTINE	81	56	93	52	69	2	T	-1.1	T	.4	1.3	3.3	1.0	58	9.6	128	78	30	2	2	0	0	
NV ELY	82	59	97	56	71	3	T	-1.1	T	.1	1.5	9.0	114	74	34	2	0	0	0	0	0	0	
NV LAS VEGAS	69	40	75	33	54	4	T	-1.1	T	.7	5	3	9	191	6.2	132	83	26	2	0	0	0	0
NV RENO	88	65	94	62	77	7	T	-1.1	T	.8	8	8	1.0	2.7	158	54	20	4	0	0	0	0	0
NV WINNEMUCCA	74	41	81	35	58	5	T	-1.1	T	0	0	0	0	19	3.2	76	63	16	4	0	0	0	0
NH CONCORD	76	50	84	41	63	1	T	-1.1	T	.5	2	3	.8	52	16.0	102	97	45	0	0	0	0	0
NJ ATLANTIC CITY	77	55	84	44	66	3	T	-1.1	T	.3	2	5	37	16.1	87	96	51	0	0	2	2	0	0
NM ALBUQUERQUE	89	61	93	58	75	0	T	-1.1	T	.2	1	2	120	3.5	151	55	17	4	0	0	0	0	0
NM CLOVIS	95	66	98	60	81	7	T	-1.1	T	0	0	3.7	65	72	17	4	0	0	2	2	0	0	0
NM ROSWELL	99	70	101	65	84	7	T	-1.1	T	0	0	2.4	87	55	15	7	0	0	0	0	0	0	0
NY ALBANY	76	55	86	41	66	1	T	-1.1	T	.1	4	25	21.9	140	91	49	0	0	1	1	0	0	0
NY BINGHAMTON	74	55	81	45	64	0	T	-1.1	T	.4	7	36	17.1	108	93	54	0	0	0	0	0	0	0
NY BUFFALO	79	60	90	52	69	4	T	-1.1	T	.2	2.0	137	23.4	149	93	55	1	0	0	0	0	0	0
NY NEW YORK	76	61	81	59	69	2	T	-1.1	T	.3	5	48	22.2	116	83	49	0	0	0	0	0	0	0
NY ROCHESTER	81	58	89	49	70	3	T	-1.1	T	.7	1.0	63	17.4	126	92	49	0	0	0	0	0	0	0
NY SYRACUSE	81	57	90	45	69	3	T	-1.1	T	.8	0	8	45	20.3	122	94	48	1	0	0	0	0	0
NC ASHEVILLE	81	59	86	51	70	1	T	-1.1	T	.1	1	1	45	25.2	122	95	52	0	0	0	0	0	0
NC CHARLOTTE	85	66	91	59	76	1	T	-1.1	T	.8	0	8	43	20.9	99	80	43	1	0	0	0	0	0
NC GREENSBORO	83	63	92	53	73	0	T	-1.1	T	0	0	8	43	20.9	99	80	43	1	0	0	0	0	0
NC HATTERAS	77	65	88	60	71	3	T	-1.1	T	.6	3	8	36	25.7	116	85	46	1	0	0	0	0	0
NC NEW BERN	84	64	90	55	74	1	T	-1.1	T	.1	4	23.8	110	89	43	1	0	0	0	0	0	0	0
NC RALEIGH	82	62	89	54	72	1	T	-1.1	T	.2	11	21.3	112	91	49	0	0	0	0	0	0	0	0
NC WILMINGTON	86	64	94	54	75	1	T	-1.1	T	.9	4	23.8	110	89	43	1	0	0	0	0	0	0	0
ND BISMARCK	76	52	90	45	64	0	T	-1.1	T	.9	2	5	2.0	121	5.0	72	92	45	2	0	0	0	0
ND FARGO	77	57	91	51	67	3	T	-1.1	T	.2	4	3.5	225	8.8	100	92	47	1	0	0	0	0	0
ND GRAND FORKS	76	54	86	48	65	1	T	-1.1	T	.1	1.5	102	6.8	100	93	51	0	0	0	0	0	0	0
ND WILLISTON	73	49	94	41	61	2	T	-1.1	T	.4	8	57	4.4	73	93	45	1	0	0	0	0	0	0
OH AKRON-CANTON	79	56	88	51	68	0	T	-1.1	T	.7	2.5	149	23.3	142	92	50	0	0	0	0	0	0	0
OH CINCINNATI	85	63	89	55	74	3	T	-1.1	T	.8	3.6	168	27.3	142	84	46	0	0	0	0	0	0	0
OH CLEVELAND	78	56	87	49	67	1	T	-1.1	T	.7	3	39	19.3	120	93	48	0	0	0				

Weather Data for the Week Ending June 16, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT	NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	.50 INCH OR MORE	01 INCH OR MORE	.50 INCH OR MORE
DAYTON	82	61	88	54	72	1	.9	0	.9	2.3	112	25.4	151	85	49	0	0	1	1		
TOLEDO	82	59	89	54	71	3	.4	.4	1.6	89	19.4	138	86	41	0	0	1	0			
YOUNGSTOWN	79	55	88	44	67	1	.4	.4	1.6	87	17.1	103	92	50	0	0	0	0			
OK OKLAHOMA CITY	94	75	96	71	84	8	0	0	1.0	43	22.8	153	85	45	7	0	0	0			
TULSA	94	75	96	70	84	7	0	0	.3	13	24.4	135	84	48	7	0	0	0			
OR ASTORIA	63	49	71	46	56	0	.9	.3	3.4	230	44.9	129	95	67	0	0	5	0			
BURNS	66	36	74	26	51	-9	0	0	.1	23	2.8	53	83	25	0	2	0	0			
MEDFORD	76	49	84	43	62	-2	T	T	.2	40	8.3	84	78	25	0	0	0	0			
PENDLETON	72	48	81	39	60	-6	.1	.1	.5	121	6.1	97	69	28	0	0	1	0			
PORTLAND	69	51	79	49	60	-2	.4	0	1.9	214	20.5	109	91	50	0	0	3	0			
SALEM	70	48	81	45	59	-1	.1	.3	0	1.1	140	20.8	99	94	50	0	0	3	0		
PA ALLENTOWN	77	57	84	49	67	-2	.4	.4	1.8	98	19.2	99	91	53	0	0	1	0			
ERIE	77	59	85	50	68	3	T	T	.5	24	19.0	119	90	53	0	0	1	0			
HARRISBURG	79	57	87	48	68	-2	0	0	3.1	157	21.3	118	92	49	0	0	0	0			
PHILADELPHIA	80	58	85	53	69	-2	1.6	.7	1.2	2.2	109	19.6	106	92	48	0	0	4	1		
PITTSBURGH	81	58	90	49	70	2	1.0	.2	1.0	2.7	146	20.4	117	91	46	1	0	3	1		
SCRANTON	77	55	87	42	66	-1	.1	.1	1.2	65	17.4	117	91	50	0	0	2	0			
RI PROVIDENCE	74	53	80	48	64	-2	.1	.1	.9	57	22.1	105	95	49	0	0	2	0			
SC CHARLESTON	89	68	95	62	79	2	1.0	.5	.8	1.3	39	17.1	81	91	40	3	0	4	1		
COLUMBIA	89	66	97	57	78	0	.1	.1	1.0	45	13.6	58	91	41	2	0	2	0			
FLORENCE	89	65	95	56	77	0	.5	.6	.5	23	10.1	52	88	36	3	0	1	1			
GREENVILLE	87	63	93	57	75	0	.1	.1	.3	15	22.3	89	86	43	2	0	2	0			
SD ABERDEEN	77	55	90	47	66	0	2.9	2.1	2.4	4.6	267	9.2	112	94	55	1	0	5	1		
HURON	81	58	91	49	69	2	3.5	2.7	2.3	4.6	255	14.8	167	86	46	1	0	4	2		
RAPID CITY	73	53	85	47	63	-2	.9	.1	.5	1.3	75	8.8	105	87	47	0	0	3	1		
SIOUX FALLS	87	60	97	50	74	6	.5	.3	.4	1.2	59	9.1	86	87	36	2	0	4	0		
TN CHATTANOOGA	89	67	93	59	78	3	T	T	.7	1.5	85	37.5	141	91	43	3	0	0	0		
KNOXVILLE	86	64	89	56	75	1	.3	.6	.3	.9	46	26.7	112	90	48	0	0	2	0		
MEMPHIS	92	72	95	66	82	3	.3	.6	.3	.6	29	30.6	113	83	44	5	0	1	0		
NASHVILLE	91	66	96	57	79	3	.3	.6	.3	.6	32	15.8	63	86	38	5	0	1	0		
TX ABILENE	96	74	99	69	85	5	T	T	.4	25	16.7	166	74	35	7	0	0	0	0		
AMARILLO	98	70	102	66	84	9	.1	.8	.1	.1	4	7.5	99	69	20	7	0	1	0		
AUSTIN	96	75	98	72	85	4	T	T	.7	1.6	86	15.3	103	96	43	7	0	1	0		
BEAUMONT	92	75	93	73	83	3	T	T	.1	.9	35	36.4	158	96	57	7	0	2	0		
BROWNSVILLE	93	77	95	73	85	3	.2	.5	.2	.2	12	6.4	76	91	52	7	0	1	0		
CORPUS CHRISTI	92	76	93	73	84	2	.9	.1	.6	.9	40	12.9	114	94	55	6	0	2	1		
DEL RIO	97	76	99	74	87	3	0	.4	0	0	0	12.0	176	65	31	7	0	0	0		
EL PASO	97	75	99	71	86	5	T	T	.1	T	0	1.2	70	41	19	7	0	0	0		
FORT WORTH	94	75	95	72	85	4	0	.6	0	1.6	116	30.8	196	87	47	7	0	0	0		
GALVESTON	89	80	91	76	85	3	.1	.8	.1	.1	3	18.7	122	79	61	5	0	1	0		
HOUSTON	95	75	98	71	85	4	T	T	.1	2	22.1	108	92	45	7	0	0	0	0		
LUBBOCK	99	71	102	64	85	8	T	T	.7	0	6.0	86	69	22	7	0	0	0	0		
MIDLAND	99	73	103	67	86	6	T	T	.3	1	4.5	90	74	24	7	0	0	1	0		
SAN ANGELO	96	73	100	65	85	4	0	.5	0	.1	5	12.3	163	78	34	7	0	0	0		
SAN ANTONIO	97	76	100	72	86	5	.1	.7	.1	.2	13	17.1	133	89	41	7	0	1	0		
VICTORIA	94	75	95	73	84	3	.6	.6	.6	.6	21	12.2	81	96	49	7	0	2	0		
WACO	98	75	100	70	87	5	0	.6	0	.8	50	20.6	131	87	39	7	0	0	0		
WICHITA FALLS	96	76	99	70	86	5	0	.7	0	2.7	161	26.9	212	79	42	7	0	0	0		
UT CEDAR CITY	77	50	81	45	64	-2	.2	.2	.3	.3	143	5.8	128	55	18	0	0	5	0		
SALT LAKE CITY	75	54	81	48	65	-2	.4	.2	.2	.7	129	6.6	77	78	25	0	0	0	0		
VT BURLINGTON	77	57	82	47	67	-2	.3	.6	.2	1.4	75	14.9	111	91	47	0	0	4	0		
VA NORFOLK	78	62	88	55	70	2	.9	.1	.8	2.7	154	19.8	103	90	51	0	0	2	1		
RICHMOND	84	60	89	52	72	-1	T	T	.8	T	2	17.5	96	85	39	0	0	0	0		
ROANOKE	81	60	91	51	71	-1	T	T	.8	T	7	18.1	100	91	48	1	0	4	0		
WA QUILLAYUTE	60	48	70	43	54	-1	2.1	1.4	1.6	5.8	349	57.5	109	98	70	0	0	4	1		
SEATTLE-TACOMA	66	50	76	46	58	-5	.5	.2	.3	3.0	380	23.3	126	97	56	0	0	4	0		
SPOKANE	68	45	75	40	56	-5	.6	.3	.6	1.9	264	10.6	124	85	36	0	0	2	1		
YAKIMA	73	45	82	41	59	-5	T	T	.2	.65	3.3	84	84	31	0	0	2	0			
WV BECKLEY	76	57	82	47	66	-1	.8	.1	.5	1.7	82	18.4	94	82	56	0	0	2	0		
CHARLESTON	83	61	88	52	72	1	0	.7	.5	2.7	165	19.0	98	96	50	0	0	2	1		
HUNTINGTON	83	61	87	54	72	0	1.4	.6	.8	3.6	206	24.1	125	95	52	0	0	2	2		
PARKERSBURG	82	59	88	52	71	0	1.2	.3	1.1	2.7	133	21.3	120	96	52	0	0	2	1		
WI GREEN BAY	79	58	87	50	68	4	2.9	2.1	1.9	4.2	246	13.9	121	95	50	0	0	4	2		
LACROSSE	80	62	86	52	71	3	2.5	1.5	1.5	3.5	158	14.5	116	96	55	0	0	4	1		
MADISON	82	58	90	48	70	4	.6	.3	.4	1.2	56	15.2	120	90	44	1	0	2	0		
MILWAUKEE	79	61	91	53	70	6	.3	.5	.3	.7	38	18.2	136	79	50	1	0	3	0		
WAUSAU	77	57	80	50	67	3	4.1	3.2	2.3	5.5	262	15.5	124	98	53	0	0	4	3		
WY CASPER	72	47	85	35	60	-2	.4	.1	.1	.6	78	5.1	81	79	32	0	0	5	0		
CHEYENNE	74	50	82	45	62	-1	.2	.3	.1	1.0	88	10.7	165	81	34	0	0	4	0		
LANDER	68	47	83	38	58	-4	.3	0	.2	.4	40	4.3	54	70	30	0	0	3	0		
SHERIDAN	65	46	83	41	56	-5	1.6	1.1	.9	1.9	144	8.5	102	91	50	0	0	4	1		

Based on 1951-80 normals



Spring Weather Review

March-May 1990

HIGHLIGHTS: Spring 1990 was marked by severe weather with tornadoes, heavy rains, and floods from the central and southern Plains to the northern and middle Atlantic coast. The abundant precipitation provided favorable moisture for the hard red winter wheat in the Great Plains but caused soggy fields and local flooding which delayed planting across the Corn Belt and South Central States. During the first part of May, continuing torrential rains caused some of the worst flooding in a century in Oklahoma, Texas, and Arkansas. Late-season rains eased long-term drought conditions in parts of the West, while dry weather prevailed over portions of the northern Plains, Tennessee Valley, and southern Atlantic coast. However, above-normal rainfall relieved extreme drought in southern Florida.

MARCH: Storm systems spread abundant precipitation across the Great Plains into parts of the Mississippi Valley and the Southeast. These systems continued to provide beneficial moisture for much of the winter wheat and alleviated long-term dryness in the North Central States but again brought severe weather with tornadoes and local flooding from eastern Texas to the Carolina coast. During the middle of the month, torrential rains of over 10 inches caused severe flooding in Alabama and Georgia. Thunderstorms eased extreme drought in southern Florida, but warm dry weather aggravated persistent dryness in the west and portions of the spring wheat regions in the northern Plains. Unseasonably warm weather dominated the Nation for the third month in a row.

During the latter part of the month, however, a blast of arctic air plunged across the hard red winter wheat in the central and southern Plains and over blooming peach trees in the East.

APRIL: A series of storm systems developed over the country's midsection, then rapidly intensified as they moved eastward. These storms gave abundant rainfall to the southern Plains and across the northern Delta. Toward the end of the month, a stagnant weather pattern dampened the Plains and Mississippi Valley with beneficial rain, but locally torrential amounts inundated portions of north-central Texas with amounts of over 16 inches. Parts of the central and northern Plains and Pacific coast remained dry. Most of the Corn Belt and Southeast also received less than their normal rainfall for the month. Above-normal rainfalls, however, did relieve extreme drought in southern Florida. Unseasonably warm conditions continued to prevail over the western third of the Nation, but much of the Ohio and middle Mississippi Valleys and central and southern Plains experienced cool weather.

MAY: Extensive storm systems raked much of the eastern two-thirds of the Nation with severe weather and heavy rains throughout the month. The drenching rains caused widespread flooding and soggy fields which delayed planting in the Corn Belt and South Central States. Heavy rains, however, due in part to the Atlantic Ocean's first tropical depression, did ease long-term drought conditions in southeastern Florida.

Spring Weather in Historical Perspective

Temperatures for spring 1990 averaged over the Nation were above the long-term mean and ranked as the 15th warmest on record (fig. 1). The dark smooth line, showing the long-term variations, has reached unprecedented high values, due to the unusual springtime warmth of the last 6 years. The national precipitation index ranks spring 1990 as the 10th wettest spring on record (fig. 2). This chart depicts the persistent spring wetness of the mid-1970's to mid-1980's and the spring dryness of the last half of the 1980's.

Regional rankings (table 1) for the nine climatically homogeneous regions (fig. 3) show the unusual warmth in the western regions, with the Southwest having the seventh warmest spring on record. Spring 1990 was very wet in the South (fifth wettest) and East North Central (ninth wettest). The heavy rains in the South have ended a 6-year streak of below-normal precipitation (fig. 4).

Arkansas, Idaho, Iowa, Massachusetts, Missouri, Oklahoma, and South Dakota had the 10th wettest, or wetter, spring on record in 1990, with Massachusetts ranking as the wettest (table 2). Nevada and Utah had the 10th warmest, or warmer, spring (table 3). High precipitation rankings were manifested in the upper Mississippi, Texas gulf coast, and Arkansas-White-Red river basins (table 4). Each of these basins have had the sixth wettest, or wetter spring on record.

TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR MARCH-MAY 1990, BASED ON THE PERIOD 1895-1990. 1 = DRIEST/COLDEST, 96 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	75	66
EAST NORTH CENTRAL	88	71
CENTRAL	78	53
SOUTHEAST	50	74
WEST NORTH CENTRAL	65	76
SOUTH	92	56
SOUTHWEST	49	90
NORTHWEST	66	80
WEST	44	84

Figure 1

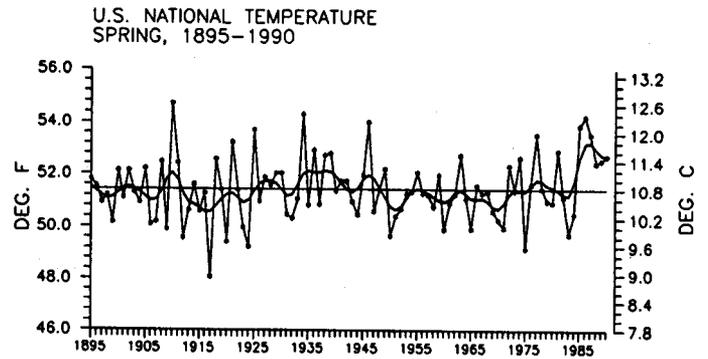


Figure 2

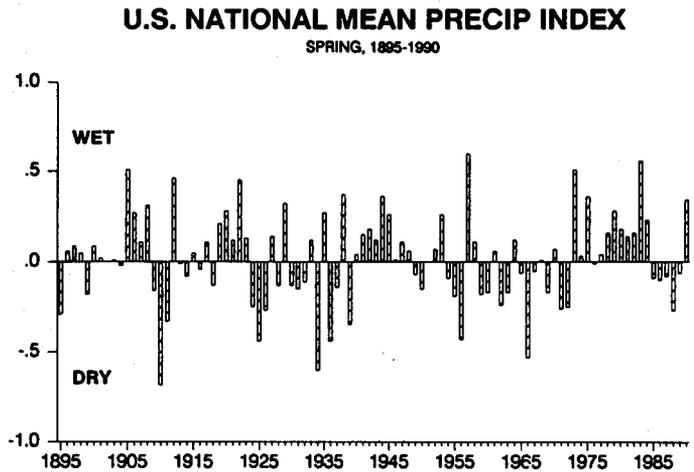


Figure 3

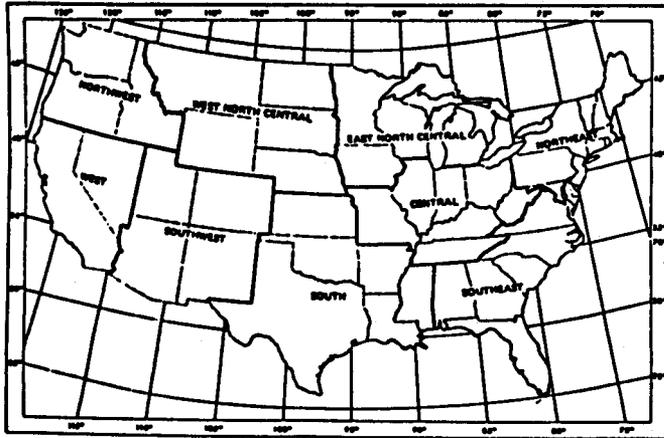


Figure 4

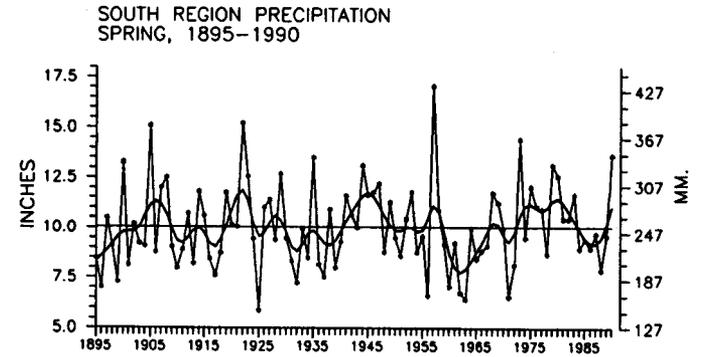


TABLE 2. PRECIPITATION RANKINGS FOR MARCH-MAY 1990, BASED ON THE PERIOD 1895 TO 1990. 1 = DRIEST, 96 = WETTEST.

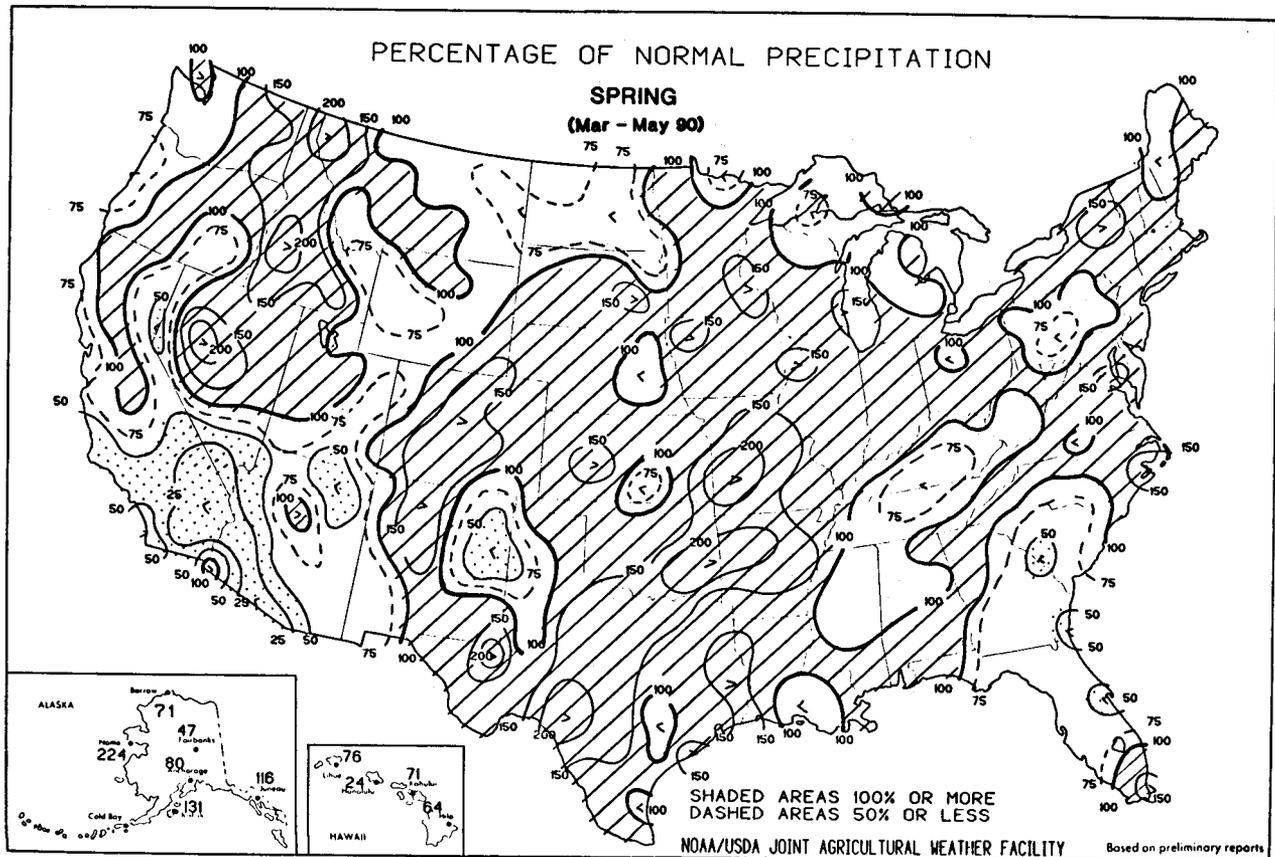
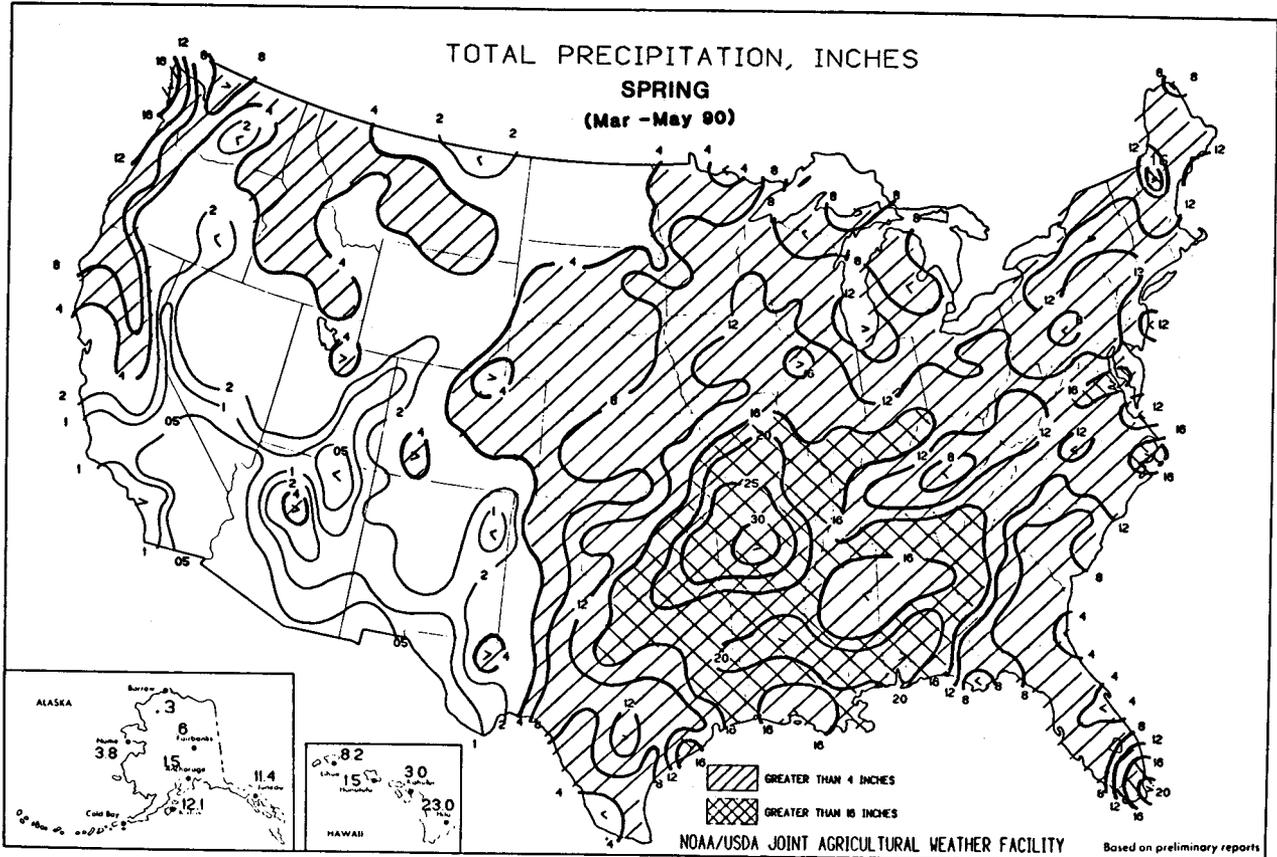
STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	76	IA	91	NE	66	RI	78
AZ	39	KS	85	NV	61	SC	26
AR	93	KY	44	NH	50	SD	88
CA	43	LA	72	NJ	74	TN	35
CO	58	ME	52	NM	57	TX	86
CT	81	MD	81	NY	80	UT	37
DE	75	MA	96	NC	81	VT	76
FL	21	MI	39	ND	27	VA	69
GA	26	MN	76	OH	66	WA	64
ID	93	MS	48	OK	95	WV	50
IL	84	MO	92	OR	45	WI	83
IN	77	MT	61	PA	56	WY	39

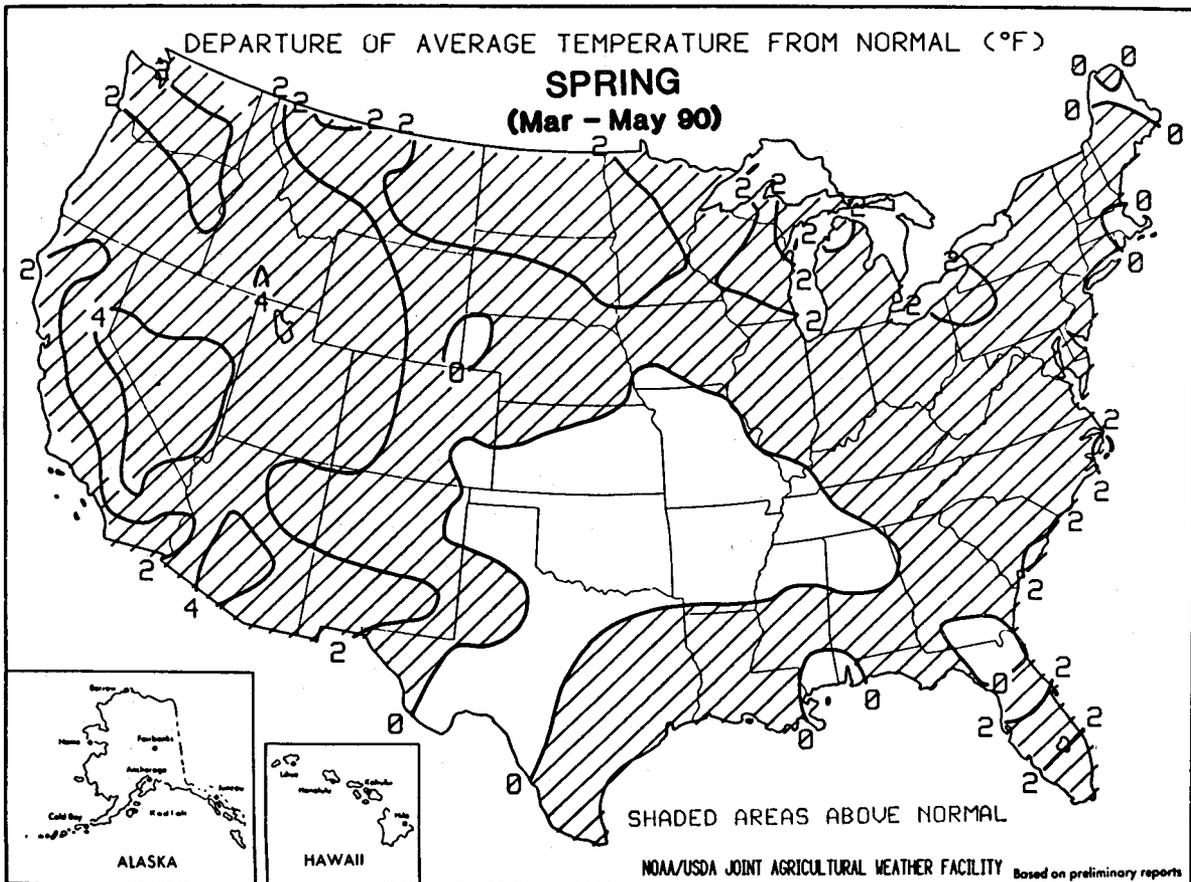
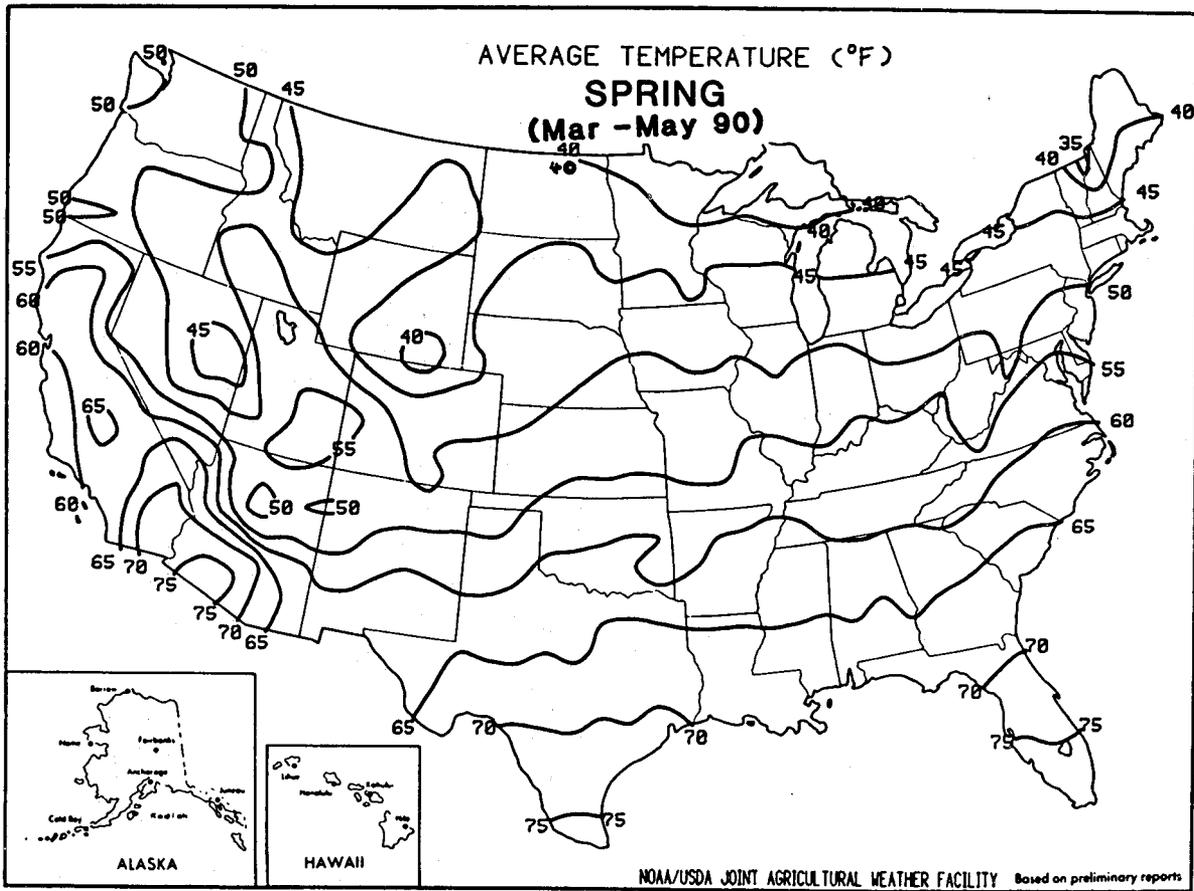
TABLE 3. TEMPERATURE RANKINGS FOR MARCH-MAY 1990, BASED ON THE PERIOD 1895 TO 1990. 1 = COLDEST, 96 = WARMEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	44	IA	63	NE	58	RI	64
AZ	86	KS	41	NV	89	SC	75
AR	38	KY	55	NH	65	SD	68
CA	78	LA	67	NJ	64	TN	57
CO	80	ME	50	NM	81	TX	57
CT	53	MD	71	NY	67	UT	91
DE	55	MA	55	NC	79	VT	73
FL	82	MI	70	ND	79	VA	75
GA	66	MN	66	OH	68	WA	73
ID	79	MS	62	OK	59	WV	62
IL	55	MO	40	OR	85	WI	78
IN	61	MT	73	PA	74	WY	81

TABLE 4. PRECIPITATION RANKING FOR SELECTED RIVER BASINS FOR MARCH-MAY 1990, WHERE RANK OF 1 = DRIEST, 96 = WETTEST, BASED ON THE PERIOD 1895 TO 1990. RIVER BASIN REGIONS AS DEFINED BY THE U.S. WATER RESOURCES COUNCIL.

RIVER BASIN	PRECIPITATION RANK
MISSOURI BASIN	75
PACIFIC NORTHWEST BASIN	70
CALIFORNIA RIVER BASIN	43
GREAT BASIN	57
UPPER COLORADO BASIN	23
LOWER COLORADO BASIN	43
RIO GRANDE BASIN	79
ARKANSAS-WHITE-RED BASIN	94
TEXAS GULF COAST BASIN	91
SOURIS-RED-RAINY BASIN	46
UPPER MISSISSIPPI BASIN	92
LOWER MISSISSIPPI BASIN	74
GREAT LAKES BASIN	55
OHIO RIVER BASIN	66
TENNESSEE RIVER BASIN	31
NEW ENGLAND BASIN	77
MID-ATLANTIC BASIN	77
SOUTH ATLANTIC-GULF BASIN	44





National Agricultural Summary

June 11-17, 1990

HIGHLIGHTS: Favorable weather conditions allowed winter wheat harvest to progress well in the southern Great Plains. Row crop plantings made some progress in Illinois, Indiana, and Missouri and progressed well in Arkansas, Kentucky, and Tennessee. The number of days suitable for fieldwork ranged from 3 in Missouri to 7 in Arkansas. Beneficial rains added to soil moisture supplies in the western Corn Belt and northern Great Plains. Rain was needed in the Southeast, where soil moisture was short to adequate.

SMALL GRAINS: Winter wheat was mostly good to fair with 94 percent (%) of the acreage headed, 1 percentage point behind the 5-year average. Harvest was 18% complete, 2 points behind normal. Heading lagged behind normal in Montana but was near or ahead of normal in the other major producing States. Harvest was underway in 8 of the 19 major producing States. Harvest advanced rapidly in Arkansas, California, North Carolina, Oklahoma, and Texas. In Texas, harvest was nearly complete in the Blacklands and was well underway in the Plains area. Oklahoma producers harvested 45% of their crop, reaching 55% completion, 10 points ahead of normal. Crop condition was fair to good in Texas and mostly good in Oklahoma. Kansas' winter wheat was in good to excellent condition with harvest 3% complete, 12 points behind normal. Winter wheat was fair to poor in Arkansas and Missouri. Wheat scab, blight, and rust stressed the crop in Missouri. Russian wheat aphids were problems in portions of Nebraska and South Dakota. In the Panhandle area of Nebraska, some of the heavier damaged fields were being harvested for hay. Crop condition was fair in Illinois and good to fair in Indiana and Ohio.

Spring wheat was mostly good to fair with 6% of the acreage headed, 9 points behind normal. North Dakota's crop was mostly good with 2% of the acreage headed, 9 points behind normal.

CORN: Corn planting was 97% complete, 2 points behind normal. Crop condition was good to fair. Cutworms were causing some damage in portions of Nebraska and South Dakota. Planting was complete or nearly complete except in Kentucky and Missouri. Crop condition was good in Nebraska and good to fair in Illinois and Iowa. Hot, dry winds stressed corn in central and southern Texas and caused some lodging in the Rio Grande Valley.

SOYBEANS: Soybean planting was 79% complete, 9 points behind normal. Crop condition was mostly good to fair. Planting made some progress but still lagged behind normal in Arkansas, Illinois, Kentucky, and Missouri. Planting was 43% complete, 39 points behind normal in Missouri. Condition of the emerged crop was good to fair in Illinois and Iowa and fair to good in Indiana and Ohio. Dry soil conditions delayed the finish of planting in Louisiana and Georgia.

COTTON: Cotton planting was 98% complete, 4 points ahead of normal. Crop condition was good to fair with 23% of the crop squaring, 4 points behind normal. Planting was complete except in Oklahoma and Texas. In Texas, crop condition was good to fair but some fields were shedding bolls in the Coastal Bend area due to lack of moisture. Mississippi's crop was good to fair. Crop condition was fair to good in Arkansas, Louisiana, and Tennessee. Cotton was in good condition in Arizona and California.

SORGHUM: Sorghum planting was 87% complete, 3 points ahead of normal. Crop condition was good to fair. Planting lagged more than 35 points behind normal in Illinois and Missouri. In Texas, planting was 95% complete, 7 points ahead of normal. Texas' crop was good to fair with harvest beginning in the Rio Grande Valley and Coastal Bend area. Planting continued in the Plains area. In Kansas, planting was 85% complete, 10 points ahead of normal. Kansas' crop was in mostly good condition.

OTHER FIELD CROPS: Rice was in mostly good to fair condition with 93% of the crop emerged, 6 points behind normal. Arkansas' rice was mostly fair to good. Peanuts were good to fair in Georgia and North Carolina and good to excellent in Alabama. Dry soil conditions slowed peanut planting in Texas. Tobacco was good to fair in Kentucky and Tennessee. Georgia's tobacco was good to fair and harvest was underway.

FRUIT AND NUTS: Hot days with limited rainfall dominated Florida's citrus producing areas. The new crop fruit was sizing well. Peach harvest continued in the Delta and Southeast. High winds damaged some fruit trees in Tennessee. Peach harvest continued in Texas with good quality and yields. Valencia orange and grapefruit harvests continued in central and western Arizona. In California, apricot harvest was active. Grapefruit and Valencia orange harvests continued. Cherry harvest was underway in Idaho and continued in Oregon and Washington. Splitting damage from earlier heavy rains was evident in Oregon and Washington.

VEGETABLES: Warm days and cool nights with limited rainfall prevailed in Florida's vegetable producing areas. Harvest was active in the northern areas. Watermelon harvest was underway in Georgia and South Carolina. Irish potato harvest was 18% complete in North Carolina. Vegetables were in good to fair condition in Louisiana. In Texas, watermelon harvest was active in the Rio Grande Valley. Onion and cucumber harvests continued in the San Antonio-Winter Garden area. Lettuce harvest was complete in central Arizona. Processing tomato harvest began in the Imperial Valley, California. Sweet corn harvest was underway in the Fresno area. Potatoes were in good condition in North Dakota. In New York, vegetable planting was virtually complete and lettuce harvest began in Orange County.

PASTURES AND LIVESTOCK: Pasture condition was mostly good except in North Dakota and portions of the West, where additional moisture was needed. Hot, dry weather stressed pastures in Texas. Cool, wet weather stressed livestock in Washington.

Crop Progress

FOR WEEK ENDING JUNE 17, 1990

	CORN % PLANTED		
	1990	1989	AVG.
CO	100	100	100
GA	100	100	100
IL	95	100	100
IN	94	94	99
IA	99	100	100
KS	100	100	100
KY	90	100	100
MI	100	100	100
MN	99	99	99
MO	85	100	99
NE	100	100	100
NC	100	100	100
OH	99	71	95
PA	92	81	94
SD	99	100	97
TX	100	100	100
WI	98	100	100
17 STATES	97	98	99

THESE 17 STATES PRODUCED 95%
OF THE 1989 CORN CROP.

	RICE % EMERGED		
	1990	1989	AVG.
AR	90	98	98
CA	95	95	98
LA	98	99	100
MS	90	95	98
TX	98	100	100
5 STATES	93	98	99

THESE 5 STATES PRODUCED 97%
OF THE 1989 RICE CROP.

	GRAIN SORGHUM % PLANTED		
	1990	1989	AVG.
AR	90	97	97
CO	81	65	82
IL	40	86	88
KS	85	70	75
LA	97	93	97
MS	97	90	95
MO	56	91	92
NE	96	97	98
NM	73	NA	NA
OK	80	50	65
SD	71	85	81
TX	95	87	88
12 STATES	87	NA	NA

EXCL. STATES WITH NA 87 81 84

THESE 12 STATES PRODUCED 98%
OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	SPRING WHEAT % HEADED		
	1990	1989	AVG.
ID	16	9	13
MN	6	6	23
MT	4	0	7
ND	2	1	11
SD	23	30	35
5 STATES	6	6	15

THESE 5 STATES PRODUCED 89%
OF THE 1989 SPRING WHEAT CROP.

	WINTER WHEAT % HEADED		
	1990	1989	AVG.
AR	100	100	100
CA	99	99	100
CO	97	96	96
GA	100	100	100
ID	45	55	46
IL	100	100	100
IN	100	100	100
KS	100	100	100
MI	90	95	95
MO	100	100	100
MT	24	18	46
NE	99	99	99
NC	100	100	NA
OH	99	97	99
OK	100	100	100
OR	97	89	93
SD	87	87	86
TX	100	100	100
WA	84	93	86
19 STATES	94	94	NA

EXCL. STATES WITH NA 94 94 95

THESE 19 STATES PRODUCED 88%
OF THE 1989 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

	WINTER WHEAT % HARVESTED		
	1990	1989	AVG.
AR	64	11	55
CA	40	45	46
CO	0	0	0
GA	91	81	90
ID	0	0	0
IL	0	0	0
IN	0	0	0
KS	3	2	15
MI	0	0	0
MO	8	1	19
MT	0	0	0
NE	0	0	0
NC	65	20	45
OH	0	0	0
OK	55	20	45
OR	0	0	0
SD	0	0	0
TX	41	38	45
WA	0	0	0
19 STATES	18	10	20

THESE 19 STATES PRODUCED 88%
OF THE 1989 WINTER WHEAT CROP.

	SOYBEANS % PLANTED		
	1990	1989	AVG.
AL	81	68	75
AR	52	57	71
GA	82	75	81
IL	78	96	98
IN	83	77	91
IA	97	100	99
KS	70	70	75
KY	46	69	68
LA	87	68	80
MI	98	85	95
MN	92	99	98
MS	64	49	70
MO	43	77	82
NE	96	99	99
NC	75	54	68
OH	83	40	86
SC	78	64	70
SD	94	100	91
TN	58	68	72
19 STATES	79	80	88

THESE 19 STATES PRODUCED 95%
OF THE 1989 SOYBEANS CROP.

COTTON
% PLANTED

	1990	1989	AVG.
AL	100	100	100
AZ	100	100	100
AR	100	100	100
CA	100	100	100
GA	100	98	99
LA	100	100	100
MS	100	100	100
MO	100	100	100
NM	100	100	100
NC	100	100	100
OK	95	80	70
SC	100	98	99
TN	100	100	100
TX	97	91	88

14 STATES 98 95 94

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

COTTON
% SQUARING

	1990	1989	AVG.
AL	34	28	39
AZ	58	96	81
AR	4	11	33
CA	40	50	42
GA	52	34	50
LA	55	31	40
MS	33	21	41
MO	0	10	18
NM	18	50	32
NC	15	6	21
OK	0	1	2
SC	15	9	30
TN	4	10	21
TX	14	13	14

14 STATES 23 23 27

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

Crop Condition

PERCENT

FOR WEEK ENDING JUNE 17, 1990

SORGHUM

STATE	VP	P	F	G	EX
AR	0	0	68	32	0
CO	3	4	22	55	16
IL	NA				
KS	1	2	18	52	27
LA	0	0	31	69	0
MS	0	1	30	69	0
MO	1	18	53	28	0
NE	0	0	17	80	3
NM	34	0	41	25	0
OK	0	0	5	90	5
SD	0	13	4	80	3
TX	4	6	35	53	2
12 STATE	2	4	26	57	11
PREV WEEK	NA				
PREV YEAR	1	10	36	42	11

SPRING WHEAT

STATE	VP	P	F	G	EX
ID	0	4	17	59	20
MN	0	2	16	60	22
MT	4	12	23	44	17
ND	0	2	23	56	19
SD	0	0	13	63	24
5 STATE	1	4	20	55	20
PREV WEEK	1	4	18	64	13
PREV YEAR	0	2	16	71	11

RICE

STATE	VP	P	F	G	EX
AR	0	6	54	33	7
CA	0	0	15	75	10
LA	0	0	20	73	7
MS	0	1	50	47	2
TX	1	0	8	78	13
5 STATE	0	3	35	54	8
PREV WEEK	0	4	39	49	8
PREV YEAR	0	4	34	57	5

CORN

STATE	VP	P	F	G	EX
CO	0	3	18	64	15
GA	0	12	40	48	0
IL	1	4	27	64	4
IN	3	9	50	37	1
IA	0	1	26	67	6
KS	0	2	29	50	19
KY	3	8	39	43	7
MI	0	5	30	45	20
MN	0	7	54	36	3
MO	3	22	58	17	0
NE	0	2	8	75	15
NC	0	1	16	76	7
OH	3	12	39	41	5
PA	0	7	27	49	17
SD	0	1	12	75	12
TX	6	9	30	47	8
WI	1	9	39	48	3
17 STATE	1	5	31	56	7
PREV WEEK	1	7	40	47	5
PREV YEAR	1	4	32	55	8

COTTON

STATE	VP	P	F	G	EX
AL	0	1	42	57	0
AZ	0	0	13	74	13
AR	1	5	59	35	0
CA	0	0	10	85	5
GA	0	0	38	62	0
LA	0	0	50	50	0
MS	1	7	29	50	13
MO	9	46	27	18	0
NM	0	0	29	66	5
NC	0	0	19	81	0
OK	0	0	25	71	4
SC	0	0	59	41	0
TN	4	13	36	43	4
TX	1	7	38	53	1
14 STATE	1	6	34	56	3
PREV WEEK	1	4	39	52	4
PREV YEAR	1	16	50	30	3

SOYBEANS

STATE	VP	P	F	G	EX
AL	0	0	25	70	5
AR	0	6	55	39	0
GA	0	0	55	45	0
IL	1	4	36	58	1
IN	1	6	47	45	1
IA	0	3	24	66	7
KS	6	4	26	52	12
KY	0	12	41	44	3
LA	0	0	35	65	0
MI	0	5	30	45	20
MN	0	4	48	46	2
MS	0	3	37	56	4
MO	3	18	53	26	0
NE	0	0	9	71	20
NC	0	0	16	81	3
OH	3	11	41	40	5
SC	0	0	47	53	0
SD	0	1	6	81	12
TN	NA				
19 STATE	1	5	36	54	4
PREV WEEK	NA				
PREV YEAR	1	7	37	51	4

WINTER WHEAT

STATE	VP	P	F	G	EX
AR	7	16	66	11	0
CA	0	0	15	75	10
CO	1	3	28	54	14
GA	4	1	50	45	0
ID	0	3	17	60	20
IL	4	28	43	23	2
IN	2	8	25	56	9
KS	1	1	11	53	34
MI	0	5	15	50	30
MO	9	30	48	13	0
MT	1	6	14	46	33
NE	0	0	50	40	10
NC	0	0	19	80	1
OH	1	4	24	58	13
OK	0	0	10	85	5
OR	0	0	52	44	4
SD	1	0	16	73	10
TX	2	9	41	43	5
WA	0	0	33	44	23
19 STATE	1	5	25	53	16
PREV WEEK	1	6	24	52	17
PREV YEAR	17	23	37	20	3

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall under 0.50 in.; over 2.00 in. isolated areas. Temperatures 1 to 3° above normal.

Days suitable for fieldwork 6.5. Soil moisture 71% short, 29% adequate. Hot, dry weather stressed crops, livestock; all crop conditions, except peanuts, declined from previous week. Corn 76% silked, 75% 1989, 58% avg.; 1% poor, 23% fair, 61% good, 15% excellent. Sorghum 92% planted, 79% 1989, 79% avg.; 14% fair, 83% good, 3% excellent. Cotton 34% squaring, 28% 1989, 39% avg.; 6% setting bolls, 2% 1989, 3% avg.; 1% poor, 42% fair, 57% good. Peanuts 27% pegging, 15% 1989, 14% avg.; 68% good, 32% excellent. Soybeans 81% planted, 68% 1989, 75% avg.; 25% fair, 70% good, 5% excellent. Winter wheat 74% harvested, 66% 1989, 68% avg.; 1% very poor, 4% poor, 47% fair, 48% good. First hay 88% harvested, 77% 1989, 80% avg. Pastures 8% poor, 28% fair, 64% good. Livestock 15% fair, 85% good. Primary activities: Controlling weeds, insects in row crops; cutting, baling hay; planting soybeans, sorghum; combining small grains; harvesting fruit crops, early vegetables; mowing pastures; applying fungicides to peanuts; monitoring fish ponds; general care of livestock, poultry.

ALASKA: Seasonal warm temperatures, scattered showers promoted mod. To rapid crop growth. Highs 3° below normal to 1° above normal. Lows 1 to 5° above normal. Seasonal precipitation 0.44 in. below normal at Clearwater to 1.13 in. above normal at Kenai.

Days suitable for fieldwork 4.0. Topsoil 18% short, 82% adequate. Subsoil 6% short, 94% adequate. Small grain stage: 90% oats, 40% barley in boot stage of development, ahead of last year when primarily all were in the pre boot stage. Heights of small grains, 6 to 24 in. Depending on locality. Commercial potato heights: avg. 2 in. Hardy vegetable seeding, transplanting continues.

ARIZONA: Mostly sunny, dry; winds gusted to 45 mph in north, 30 mph in south; avg. temperatures 4° below to 2° above normal.

Cotton squaring 58%, 96% 1989, 85% avg.; setting bolls 19%, 65% 1989; light spraying beet army worm west, central; crop 74% good, 13% fair, 13% excellent. Small grain harvest 80%, 86% 1989, 85% avg.; good. Alfalfa hay harvest mostly active, 71% good, 14% excellent, 15% fair. Light rain damage central. Grape, mixed melon harvests continued west, central; potato, dry onion harvest tapering off, sweet corn harvest continued central; lettuce harvest completed, cabbage harvest continued east. Valencia orange, grapefruit harvest continued west, central.

ARKANSAS: Warm, relatively dry. Temperatures slightly above normal. Widely scattered showers northwest, east. Extremes 56°; 99°. Rainfall none to 2.22 in.

Days suitable for fieldwork 7.0. Soil moisture supplies 23% short, 77% adequate. Main activities: Cotton, rice, soybeans, sorghum, planting; wheat, oat harvest; cultivating cotton; flooding rice fields; applying fertilizer, herbicides, insecticides; cutting, baling hay; sprigging Bermuda grass. Corn 99% planted, 100% 1989, 100% avg.; 1% poor, 49% fair, 50% good. Oats 63% harvested, 12% 1989, 50% avg.; 8% poor, 58% fair, 34% good. Cotton 98% emerged, 99% 1989, 99% avg.; 1% very poor, 5% poor, 59% fair, 35% good. Soybeans 32% emerged, 50% 1989, 58% avg.; 6%

poor, 55% fair, 39% good. Sorghum 82% emerged, 95% 1989, 94% avg.; 68% fair, 32% good. Hail destroyed a few fields, some cotton still struggling to overcome seedling diseases. Late planted rice fields being flushed to secure a stand, other fields being flooded. Few good wheat yields, test weights running very light. Corn tasselling, irrigation required. Blueberry yields good. Peach quality good. Tomatoes quality good. Pastures 13% poor, 74% fair, 13% good. Livestock good, high humidity causing stress.

CALIFORNIA: High pressure early in the week allowed temperatures to climb to above normal over most of the State. Weekend a weak system moved across the north, down the northern Sierra Nevada, producing some widely scattered showers. Most of the State remained dry with seasonal temperatures.

Weather clear except showers interrupted field activities 1 to 2 days southern parts. Small grain harvest active. Quality reductions earlier storms minimal. Rice seeding virtually completed. Crop mostly emerged, good stands. Cool weather expected increase tillering, offset earlier wind damage some. Herbicide application ongoing. Cotton some bloom central areas. Sugarbeet harvest progressed. Seeding dry beans, corn active after small grain harvest. Late Sudan hay seeded. Hay crop harvest normal. Orchard floor work active. Apples thinned. Apricot harvest continued; some damage from past rains. Avocado harvest light. Leaf drop in feijoas from past rains. Grapes irrigated; treated for pests, mildew. Desert valley table grape harvest continued. Peaches 29%; 20% nectarines; 13% plums packed. Peaches thinned, sprayed for pests. Pomegranates sprayed for thrips. Grapefruit, Valencia orange harvests advanced. Some oranges, lemons sprayed for red scale. Almonds irrigated, treated for worms. Walnuts sprayed for pests. Broccoli heavy supply central coast, generally good quality. Bushberry harvest underway central valley. Cantaloupe harvest underway desert area. Cauliflower moderate supply, variable quality. Celery moderate supply Santa Maria area, seasonally increasing Salinas area. Iceberg head lettuce heavy supply central coast, variable quality. Dehydrator onion harvest desert nearing completion. Processing tomato harvest began Imperial Valley. Harvest market tomatoes underway San Joaquin Valley. Sweet corn harvest active desert beginning Fresno area. Livestock generally good, most animals summer feed areas. Feed supplies mostly adequate north, diminish in central, southern areas. Cool temperatures slowed grass growth in northern half, dry conditions hinder growth in southern areas. Water supplies adequate northern third, limited supplies continued to be a concern elsewhere.

COLORADO: Mostly dry weather prevailed across State with occasional severe thunderstorms producing extensive hail, tornadoes in the northeast. Precipitation a trace to 0.79 in. Temperatures 2 to 4° above normal except in San Luis Valley where they were within 1 to 2° of normal.

Days suitable for fieldwork 6.0. Soil moisture supplies 8% very short, 43% short, 48% adequate, 1% surplus. Winter wheat nearing harvest mostly good. Alfalfa, 1st cutting 49%, 2nd cutting 4% complete. Barley, 43% headed 8% turning color. Oats, 30% headed, 3% turning color. Spring wheat,

25% headed. Dry beans, 81% planted, 53% emerged. Sorghum, 81% planted, 54% emerged. Summer potatoes, 91% emerged. Fall potatoes, 47% emerged. Range, pasture mostly fair to good. Livestock mostly good.

FLORIDA: Rainfall 0.50 in. or less with local amounts of 1.00 to 2.00 in. mainly over northwest. Temperatures 1 to 3° below normal, much of State, except 2° above normal, Panhandle. Some record low temperatures established, Peninsula, late week, with 50s, few interior locations. Otherwise, coolest temperatures mostly in 60s. Hot weather returned, 15th through weekend; maximum temperatures high as upper 90s across northern areas, interior areas of Peninsula.

Soil moisture varied short to adequate. Scattered showers very helpful. Tobacco, hay harvests active. Winter wheat harvest, soybean planting virtually complete. Corn, cotton, peanuts, sugarcane good progress. Showers kept grass growing well few areas. Rain only light, spotty, however, many areas. Most Panhandle pastures fair to good; Big Bend, extreme northern Peninsula, some east coast areas only poor to fair; elsewhere, generally good to excellent. Cattle predominantly good, varied from only fair some of driest localities to excellent, areas having sufficient topsoil moisture. Citrus areas hot days, limited rain. Abundant new foliage growth. New crop fruit sizing well; some June bloom. Valencia harvest almost complete. Caretakers cutting cover crops, removing freeze damaged trees, limbs. Fertilizing, spraying continued. Cool nights, warm days prevailed, vegetable producing areas. Rainfall limited, most localities. Central, southern Peninsula harvest virtually completed. Northern Peninsula, Panhandle harvest continued active. Volume leaders: Watermelons, potatoes, sweet corn, tomatoes, peppers, celery, cucumbers, eggplant. Very limited supplies, other vegetables. Palmetto Ruskin commercial tomato harvest for fresh market finished.

GEORGIA: Temperatures 1 to 2° above normal. Extreme highs upper 80s northeast mountains, 90 elsewhere north, mid to upper 90s central, south. Coolest lows around 50 northeast mountains, mid to upper 50s elsewhere north, around 60 central, low 60s extreme south. Showers very widely scattered. Many areas no rain, most totals under 0.50 in. Isolated areas greater amounts.

Days suitable for fieldwork 6.4. Soil moisture 20% very short, 65% short, 15% adequate. Corn 80% silked, 70% 1989, 73% avg.; 36% dough, 24% 1989, 32% avg.; 10% dent, 2% 1989, 6% avg.; Rain needed. Cotton 4% setting bolls, 0% 1989, 5% avg. Sorghum 9% poor, 33% fair, 58% good; 91% planted, 84% 1989, 85% avg. Peanuts 22% fair, 72% good, 6% excellent; 74% blooming, 52% 1989, 56% avg.; 29% pegging, 19% 1989, 19% avg. Development ahead of last year and average. Soybean planting slowed, dry soils. Tobacco 23% fair, 74% good, 3% excellent; 4% harvested, 2% 1989, 3% avg. Watermelons 22% fair, 78% good; 5% harvested, 1% 1989, 7% avg. Rye 4% poor, 40% fair, 56% good. Other small grains 6% poor, 28% fair, 66% good. Apples 1% very poor, 14% poor, 69% fair, 16% good. Peaches 11% very poor, 5% poor, 37% fair, 47% good; 66% harvested, 52% 1989, 50% avg. Hay 2% very poor, 10% poor, 42% fair, 45% good, 1% excellent. Pasture 1% very poor, 8% poor, 40% fair, 50% good, 1% excellent. Cattle 17% fair, 83% good. Hogs 13% fair, 86% good, 1% excellent.

HAWAII: Variable weather, gusty trade winds continued over the Islands. Hot, sunny days with scattered, passing showers made heavy irrigation necessary. Trade winds gusty to 30 mph with

temperatures upper 60s to high 80s. Rainfall none to 4.00 in.

Days suitable for farm work 7.0. Papaya harvest continues seasonal decline. Sugar, pineapple harvest steady.

IDAHO: Temperatures slightly below normal. Precipitation mostly below average.

Days suitable for fieldwork 5.0. Soil moisture 1% very poor, 17% poor, 67% adequate, 15% surplus. Winter wheat headed 45%, 55% 1989, 46% avg.; good. Spring wheat headed 16%, 9% 1989, 13% avg.; good. Spring barley headed 15%, 9% 1989, 14% avg. Potatoes emerged 72%, 84% 1989, 80% avg.; 9% 12 in. high. Sugarbeets thinned 92%, 86% 1989, 85% avg. Alfalfa 1st cutting 32%, 49% 1989, 48% avg. Dry beans planted 93%, 95% 1989, 91% avg.; emerged 48%, 68% 1989, 73% avg. Field corn planted virtually complete; emerged 89%, 98% 1989, 96% avg. Cherries harvested just underway, south west. Fruit crops progressing well. Farmers cultivating, spraying, cutting hay when weather permits. Disease symptoms, insect problems from wet weather increased north, south central. Slight frost damage alfalfa south central, east; potatoes, east. Alfalfa weevils, southern areas. Range improved south central. Range, pasture 1% very poor, 5% poor, 27% fair, 53% good, 14% excellent. Irrigating pasture, east. Livestock good to excellent.

ILLINOIS: Temperatures 3 to 6° above normal across State. Precipitation generally less than 1.00 in., isolated areas central, north 1.50 to 4.50 in.

Days suitable for fieldwork 4.75. Soil moisture 2% short, 62% adequate, 36% surplus. Corn avg. height 12 in., 20 in. 1989, 28 in. avg. Corn avg. height most advanced 19 in., 32 in. 1989, 43 in. avg. Soybeans emerged percent full stand 79%, 88% 1989. Wheat filled 95%, 95% 1989, 99% avg.; turning yellow 73%, 79% 1989, 88% avg.; wheat ripe 10%, 15% 1989, 44% avg. Oats 15% fair, 69% good, 16% excellent; headed 47%, 74% 1989, 86% avg.; filled 20%, 33% 1989, 52% avg.; turning color 1%, 3% 1989, 11% avg. Alfalfa 1% poor, 16% fair, 75% good, 8% excellent; hay first cutting 70%, 94% 1989, 95% avg. Red clover 20% fair, 76% good, 4% excellent. Clover hay cut 45%, 69% 1989, 76% avg. Pasture 2% fair, 67% good, 31% excellent.

INDIANA: Temperatures 4 to 7° above normal. Lows low to mid 60s, highs mid to upper 80s. Precipitation up to 1.00 in.

Days suitable for fieldwork 5.4. Topsoil 6% short, 82% adequate, 12% surplus. Subsoil 78% adequate, 22% surplus. Corn 85% emerged, 91% 1989, 97% avg.; 11 in. high, 14 in. 1989, 23 in. avg. Soybeans 69% emerged, 67% 1989, 86% avg.; 3 in. high, 4 in. 1989, 6 in. avg. Oats 16 in. high, 18 in. 1989, 20 in. avg. Alfalfa hay 67% cut, 72% 1989, 85% avg. Pasture 21% fair, 66% good, 13% excellent. Wheat 8% ripe, 10% 1989, 20% avg. Tobacco 65% set, 64% 1989, 78% avg. Best week so far this season for field activities. Favorable weather for corn, soybean growth, development.

IOWA: Temperatures 5 to 6° above normal. Extremes 56°; 96°. Wettest week in over 30 years. Precipitation 1.57 to 8.79 in.; average 4.02 in.

Days suitable for fieldwork 3.9. Topsoil 2% short 54% adequate, 44% surplus. Subsoil 8% short, 74% adequate, 18% surplus. Winter wheat mostly good to excellent. Hay 2% poor, 12% fair, 54% good, 32% excellent. Pasture 2% poor, 7% fair, 53% good, 38% excellent. Oats 42% headed, 78% 1989, 78% avg.; 2% poor, 13% fair, 64% good, 21% excellent. First crop alfalfa hay 53% harvested, 87% 1989, 86% avg. Corn 98% emerged, 100% 1989, 100% avg.; 34% cultivated first time, 81% 1989,

78% avg. Soybeans 79% emerged, 100% 1989, 97% avg. Livestock mostly good to excellent. Muddy feedlots continue causing stress.

KANSAS: Temperatures 5 to 6° above normal south, east; 7 to 8° central, northwest. Precipitation all areas, 0.12 in. west central to 2.27 in. northeast.

Days suitable for fieldwork 5.0. Topsoil 26% short, 65% adequate, 9% surplus. Subsoil 1% very short, 11% short, 85% adequate, 3% surplus. Wheat ripening rapidly with aid of hot dry weather. Harvest underway most southern counties; activity ranges from test cutting to full swing. Corn generally good growth except southeast where wet fields causing problems. Sorghum planting rapid progress, currently well ahead of schedule. Chinch bug build up northeast, north central bears watching, especially as wheat reaches maturity. Soybean planting good progress except southeast where wet fields delay progress, growth. Range, pasture good growth; furnishing good to excellent grazing. Very few livestock problems noted. Haying operations good progress; first cutting alfalfa essentially complete; second cutting underway.

KENTUCKY: Hot, humid. Highs 80s, lows 60s. Precipitation 14th to 15th, 0.25 to 1.50 in. scattered. Soil temperatures 70s.

Days suitable for fieldwork 4.8. Soil moisture 3% short, 76% adequate, 21% surplus. Planting, hay cutting made good progress. Corn for grain planting nearly complete, silage planting still active. Single crop soybean planting active, double crop will begin as wheat harvest progresses. Burley 89% set, 95% 1989, 95% avg. Large transplants aided by ample moisture. Condition mostly good to fair. Dark tobacco 85% set. Wheat harvest just beginning, disease restricted by drier conditions. Barley harvest one third complete. Hay quantity high, quality lowered by over maturity some areas. Pasture 1% poor, 5% fair, 53% good, 41% excellent.

LOUISIANA: Temperatures 2 to 4° above normal. Extremes 64°; 97°. Rainfall 0.10 to 2.24 in.

Days suitable for fieldwork 6.1. Soil moisture 4% very short, 25% short, 71% adequate. Spring plowing 97%, 100% 1989, 100% avg. Corn silked 90%, 56% 1989, 68% avg.; dough stage 17%, 14% 1989, 26% avg.; 16% fair, 74% good, 10% excellent. Cotton squaring 55%, 31% 1989, 40% avg.; 50% fair, 50% good. Hay first cutting 80%, 64% 1989, 78% avg. Peaches harvested 34%, 17% 1989, 27% avg.; 23% fair, 69% good, 8% excellent. Rice emerged 98%, 99% 1989, 100% avg.; headed 3%, 6% 1989, 7% avg.; 20% fair, 73% good, 7% excellent. Water weevil control southwest continued. Sorghum planted 97%, 93% 1989, 97% avg.; emerged 96%, 91% 1989, 95% avg.; 31% fair, 69% good. Soybeans planted 87%, 68% 1989, 80% avg.; emerged 80%, 61% 1989, 70% avg.; 35% fair, 65% good. Moisture needed south to complete planting. Sweet potatoes planted 71%, 62% 1989, 77% avg. Sugarcane 70% fair, 30% good. Wheat harvested 94%, 80% 1989, 89% avg. Livestock 8% fair, 79% good, 13% excellent. Pasture 3% poor, 24% fair, 60% good, 13% excellent. Vegetable 29% fair, 65% good, 6% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.32 in. Temperature 71°, normal 71°. Extremes 45°; 95°.

Days suitable for fieldwork 5.5. Topsoil 5% short, 78% adequate, 17% surplus. Subsoil 89% adequate, 11% surplus. Field corn 99% planted, 95% 1989, 98% avg. Soybeans 66% planted, 54% 1989, 65% avg. Sweet corn 92% planted, 77% 1989, 93% avg. Snap beans planted 83%, 80% 1989, 90% avg.; 23% harvested, 28% 1989, 17% avg. Green peas 64%

harvested, 42% 1989, 71% avg. Small grains fair to good. Wheat 55% turning, 80% 1989, 79% avg. Oats 70% headed, 35% 1989, 69% avg.; 11% turning, 7% 1989, 31% avg. Barley 90% turning, 100% 1989, 98% avg. Rye 75% turning, 75% 1989, 86% avg. Alfalfa hay first cut 83% complete, 86% 1989, 94% avg. Other hay first cut 80% complete, 75% 1989, 83% avg. Strawberries 91% harvested, 89% 1989, 90% avg.

DELAWARE: Precipitation 1.10 in. Temperature 70°, normal 71°. Extremes 51°; 94°.

Days suitable for fieldwork 6.7. Topsoil 75% adequate, 25% surplus. Subsoil 100% adequate. Field corn 100% planted; 99% 1989, 99% avg. Soybeans 90% planted; 68% 1989; 73% avg. Sweet corn 96% planted, 89% 1989, 97% avg. Small grains good. Wheat 77% turning, 94% 1989, 90% avg. Barley 100% turning, 98% 1989, 100% avg. Lima beans 60% planted, 37% 1989, 73% avg. Alfalfa hay first cut 99% complete, 100% 1989, 100% avg. Other hay first cut 85% complete, 72% 1989, 87% avg. Green peas 50% harvested, 30% 1989, 62% avg.

MICHIGAN: Temperatures 2 to 5° above normal. Extremes 41°; 91°. Precipitation 0.06 to 2.40 in. across State.

Days suitable for fieldwork 5.5. Soil moisture 25% short, 70% adequate, 5% surplus. Corn 5% poor, 30% fair, 45% good, 20% excellent. Soybeans 98% planted, 85% 1989, 95% avg. Wheat 90% headed, 95% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Dry beans 75% planted, 25% 1989, 55% avg. Pasture 5% poor, 25% fair, 50% good, 20% excellent. Major activities: Harvesting of first cutting hay, weed spraying, completing grain, vegetable planting, cultivating, rotary hoeing, side dressing, fertilizing, pruning, watering young trees, spraying trees, harvesting early vegetables.

MINNESOTA: Temperatures 4 to 6° above normal. Extremes 42°; 97°. Precipitation 2.00 to 3.00 in.; greatest weekly total 6.47 in.

Days suitable for fieldwork 3.5. Topsoil 1% very short, 5% short, 62% adequate, 32% surplus. Spring wheat 73% jointing, 65% 1989, 71% avg.; 6% heading, 6% 1989, 23% avg. Oats 77% jointing, 70% 1989, 80% avg.; 11% heading, 15% 1989, 39% avg. Barley 77% jointing, 55% 1989, 68% avg.; 7% heading, 2% 1989, 23% avg. Corn 96% emerged, 98% 1989, 98% avg.; 51% cultivated once, 62% 1989, 67% avg.; 7 in. average unextended height, 9 in. 1989, 14 in. avg. Soybeans 92% planted, 99% 1989, 98% avg.; 83% emerged, 90% 1989, 92% avg.; 18% cultivated once, 36% 1989, 43% avg.; 4 in. average unextended height, 4 in. 1989, 5 in. avg. Sweet corn 88% planted, 96% 1989, 95% avg. Alfalfa 24% first crop cut, 62% 1989, 73% avg. Field corn 7% poor, 54% fair, 36% good, 3% excellent. Soybeans 4% poor, 48% fair, 46% good, 2% excellent. Spring wheat 2% poor, 16% fair, 60% good, 22% excellent.

MISSISSIPPI: Temperatures 2° above normal. Extremes 55°; 99°. Wet south, dry north, central. Rainfall 0.46 in., 0.36 in. below normal. Soil temperatures 87°.

Days suitable for fieldwork 6.0, 1.0 1989, 3.9 avg. Soil moisture 3% very short, 27% short, 70% adequate. Wheat 97% mature, 93% 1989, 96% avg.; 66% harvested, 26% 1989, 64% avg.; 15% very poor, 17% poor, 55% fair, 10% good, 3% excellent. Cotton 100% planted, 100% 1989, 100% avg.; 98% emerged, 97% 1989, 98% avg.; 33% squaring, 21% 1989; 41% avg.; 1% very poor, 7% poor, 29% fair, 50% good, 13% excellent. Corn 100% planted, 99% 1989, 100% avg.; 99% emerged, 97% 1989, 99% avg.; 30% silking, 15% 1989, 32% avg.; 7% fair, 87% good, 6% excellent. Rice 99% planted, 98% 1989, 100% avg.; 90% emerged, 95% 1989, 98% avg.; 1% poor, 50%

fair, 47% good, 2% excellent. Soybeans 64% planted, 49% 1989, 70% avg.; 46% emerged, 34% 1989, 56% avg. Sorghum 97% planted, 90% 1989, 95% avg.; 95% emerged, 87% 1989, 92% avg.; 1% poor, 30% fair, 69% good. Peanuts 87% planted, 93% 1989, 94% avg. Sweet potatoes 86% planted, 84% 1989, 87% avg. Watermelons 100% planted, 98% 1989, 97% avg. Peaches 50% harvested, 27% 1989, 23% avg.; 20% very poor, 23% poor, 48% fair, 9% good. Hay 35% harvested, 26% 1989, 36% avg. Pasture, Livestock fair to good. Activities: Planting soybeans, cultivating row crops, cutting hay.

MISSOURI: Temperatures about normal. Rainfall less than 0.25 in. southeast, up to 4.00 in. central areas. Localized flooding along major streams northern half.

Days suitable for fieldwork 3.0, northern two thirds 1.6 to 2.4 days, southern areas 5.3 to 6.1 days. Topsoil 5% short, 27% adequate, 68% surplus. Corn planting 5 weeks behind 1989 and avg. Corn planting furthest behind central, east central at two thirds complete, over 80% elsewhere. Single crop soybean planting ranges 64% northwest, southeast, less than 45% other major cropping areas. Sorghum planting 62% northwest to 18% east central. Alfalfa first cutting 60%, 93% 1989, 94% avg. Other hay 32% cut, 55% 1989, 61% avg. Pastures 8% fair, 67% good, 25% excellent. Wheat scab, blight, rust hurting wheat.

MONTANA: Temperature below normal 2 to 7° All areas had rain, 0.10 to over 1.00 in. Most areas had about 0.50 in.

Days suitable for fieldwork 5.1 Topsoil 29% short, 66% adequate, 5% surplus. Subsoil 36% short, 61% adequate, 3% surplus. Eastern third of State 70% short topsoil moisture, 80% short subsoil moisture. Barley 2% very poor, 6% poor, 19% fair, 53% good, 20% excellent; headed 4%, 1% 1989, 5% avg. Oats 4% very poor, 12% poor, 27% fair, 45% good, 12% excellent; headed 4%, 0% 1989, 8% avg. Alfalfa harvested 8%, 8% 1989, 15% avg. Other hay harvested 4%, 6% 1989, 8% avg. Pasture, range feed 6% very poor, 11% poor, 18% fair, 47% good, 18% excellent.

NEBRASKA: Temperatures near normal west to 5° above normal remainder of State. Extremes 44°; 97°. Precipitation traces west up to over 6.00 in. northeast.

Days suitable for fieldwork 5.2. Topsoil 22% short, 54% adequate, 24% surplus. Subsoil 30% short, 68% adequate, 2% surplus. Winter wheat 45% turning color, 43% 1989, 53% avg. Hail damage, wheat destroyed by Russian wheat aphids being salvaged for hay. Russian wheat aphids still active in west. Some southern fields showing damage from tan spot, leaf rust. Chinch bugs stressing sorghum, corn, wheat southeast, where many sorghum, corn fields have already been damaged or lost. Some corn replanting necessary; northeast due to cutworm damage, southwest due to storm damage. North eastern producers treating for cutworms. Sorghum 90% emerged, 89% 1989, 92% avg. Soybeans 80% emerged, 96% 1989, 93% avg. Barley yellow dwarf disease becoming apparent in oat fields, north, northeast. Alfalfa hay 2% poor, 21% fair, 68% good, 9% excellent; 70% first cutting, 78% 1989, 87% avg. Clover leaf alfalfa weevils at high numbers east, preventing regrowth in some cases. Cutworms damaged first cutting west. Wild hay 51% fair, 48% good, 17% excellent. Hail damage crops north, southwest, central, east. Strong winds, heavy rains caused additional damage east. Heavy rains caused lowland flooding northeast, some replanting necessary. Hot dry winds stressed small plantings southwest. Pasture, range feed supplies 37% fair, 59% good, 4% excellent. Pastures looking good, although

many lacking subsoil moisture. Timely rains necessary for normal growth. Cattle good. Main activities: Planting, cutting alfalfa, cultivating corn, spraying weeds, working summer fallow in west.

NEVADA: Moisture from dissipated hurricane produced heavy rain showers south early. West remained dry. Cooler, dry airmass followed. Remainder of week had scattered afternoon showers, snowstorms. Temperatures 2 to 6° below normal. Extremes 27°; 103°.

Alfalfa hay harvest delayed by scattered showers, gusty winds. Combining barley, oats underway extreme southern valleys. 1990 potato crop emerging late due to below normal night temperature, earlier vegetative killing frosts. Calving, lambing, shearing operations about finished. Ranges continue to improve from additional moisture.

NEW ENGLAND: Precipitation 0.10 to 0.40 in. northern Maine; 0.60 to 1.00 in. southern Maine, northern New Hampshire, northeastern Vermont; 0.05 to 0.50 in. elsewhere. Temperatures low to mid 60s Maine; mid 60s elsewhere.

Days suitable for fieldwork 6.0. Soil moisture north 74% adequate, 26% surplus; south 80% adequate, 20% surplus. Grazing availability 77% adequate, 23% surplus. Pasture 7% fair, 74% good, 19% excellent. Maine potatoes 100% planted, 97% 1989, 99% avg.; 68% emerged, 56% 1989, 58% avg.; good. Rhode Island potatoes 100% planted, 100% 1989, 100% avg.; 93% emerged, 100% 1989, 100% avg.; good. Connecticut River Valley potatoes 100% planted, 100% 1989, 100% avg.; 85% emerged, 97% 1989, 96% avg.; good. Maine oats 100% sown, 100% 1989, 100% avg.; good. Field corn 95% planted, 85% 1989, 94% avg.; 79% emerged, 73% 1989, 85% avg.; good. Sweet corn 85% planted, 88% 1989, 89% avg.; 74% emerged, 77% 1989, 80% avg.; good. First cut hay 43% complete, 15% 1989, 47% avg.; good. Apples average fruit set. Cranberries scattered bloom stage. Major farm activities: Cutting hay, picking strawberries, finishing planting corn.

NEW JERSEY: Temperatures below normal. Extremes 43°; 88°. Rainfall 1.07 in. north, 0.32 in. central, 0.31 in. south. Heaviest 24 hour total 2.05 in. on 14th, 15th. Estimated soil moisture percent field capacity averaged 86% north, 72% central, 55% south. Four inch soil temperatures averaged 67° north, 68° central; 69° south.

Fieldwork very active as result of favorable weather conditions. Soil moisture adequate. Spring vegetable harvest well advanced. Summer vegetable movement underway. Strawberry picking well advanced. Apples, peaches, blueberries continued to size well. Barley combining began. Wheat, rye continued to mature. Hay, straw baling active. Field corn, early planted soybeans made good germination, early growth. Pasture growth excellent.

NEW MEXICO: Temperatures for the week above normal across the State. High precipitation amounts for the week confined to the mountains.

Days suitable for fieldwork 7.0. Soil moisture 100% short. Cotton planted 100%, 18% squaring; 29% fair, 66% good, 5% excellent. Milo planted 73%; still too dry for planting. Cattle poor to good; sheep poor to good; very poor to fair.

NEW YORK: Temperatures above normal. Week started cool, by weekend warm, humid air settled in. Extremes 38° at Ray Brook; 94° at Jamestown. Rainfall was well below normal except where isolated thunderstorms brought intense rainfall.

Days suitable for fieldwork 5.3. Soil moisture adequate. Pasture 20% fair, 80% good. Hay, wheat good. Corn planting 92% finished, 76% 1989, 95% avg. Early planted fields emerged, crop good. Alfalfa harvest in full swing. Good regrowth on early cut fields. Dry beans planting progressed rapidly. Chemical thinning of apple crop underway in Lake Ontario region. Peaches exhibit good crop potential. Bartlett pears variable. Vegetable planting virtually finished. Most crops look good. Strawberry picking active. Lettuce harvest underway in Orange County.

NORTH CAROLINA: Temperatures 2 to 4° below normal across the State. Precipitation none to 1.52 in.

Days suitable for fieldwork 6.3. Soil moisture 1% very short, 51% short, 48% adequate. Pasture 1% poor, 17% fair, 77% good, 5% excellent. Livestock feed from pasture 84%. Hay first cutting 81%. Hay second cutting 30%. Sorghum planted 70%; soybeans planted 75%. Sweet potatoes transplanted 90%. Burley tobacco transplanted 98%. Irish potatoes harvested 18%; wheat harvested 65%; oats harvested 66%; barley harvested 70%; rye harvested 55%; peaches harvested 35%. Corn silked 10%; cotton squared 15%. Crop condition: Wheat, 19% fair, 80% good, 1% excellent; corn 1% poor, 16% fair, 76% good, 7% excellent; cotton 19% fair, 81% good; soybeans 16% fair, 81% good, 3% excellent; peanuts 21% fair, 79% good; flue cured tobacco 1% poor, 22% fair, 72% good, 5% excellent; irish potatoes 15% fair, 85% good; sweet potatoes 15% fair, 85% good; peaches 11% very poor, 11% poor, 41% fair, 37% good; apples 7% poor, 41% fair, 52% good; truck crops 18% fair, 80% good, 2% excellent; hay 3% poor, 10% fair, 82% good, 5% excellent. Major activities: Planting soybeans; cultivating, spraying flue cured tobacco; hay harvesting; transplanting burley tobacco; harvesting small grains; cultivating, spraying field crops; harvesting vegetables. Other activities included: Planting truck crops; tending livestock; planting sorghum; harvesting irish potatoes; transplanting sweet potatoes; harvesting peaches; general farm maintenance.

NORTH DAKOTA: Typical late spring weather patterns produced temperatures 2° above normal to 2° below normal. Extremes 36° west central; 94° northwest. Precipitation 0.16 in. north central to 1.20 in. east central.

Days suitable for fieldwork 4.7. Topsoil 20% short, 80% adequate. Subsoil 26% very short, 53% short, 21% adequate. Spring wheat 2% poor, 23% fair, 56% good, 19% excellent; 61% jointing and beyond, 49% 1989, 70% avg. Durum wheat 19% poor, 18% fair, 53% good, 28% excellent; 46% jointing and beyond, 34% 1989, 56% avg. Oats 2% poor, 41% fair, 49% good, 8% excellent; 59% jointing and beyond, 46% 1989, 72% avg. Barley 1% poor, 16% fair, 56% good, 27% excellent; 68% jointing and beyond, 55% 1989, 76% avg. Winter wheat 13% poor, 56% fair, 23% good, 8% excellent; 85% boot and beyond, 77% 1989, 92% avg. Late season crop emergence near complete. Flax 27% fair, 66% good, 7% excellent; 3 in. avg. height, 3 in. 1989, 4 in. avg. Corn 40% fair, 59% good, 1% excellent; 6 in. avg. height, 6 in. 1989, 8 in. avg. Dry edible beans 12% fair, 88% good; 4 in. avg. height, 4 in. 1989, 5 in. avg. Soybeans 20% fair, 80% good, none excellent; 4 in. avg. height, 4 in. 1989, 5 in. avg. Sunflowers 19% fair, 78% good, 3% excellent; 4 in. avg. height, 4 in. 1989, 5 in. avg. Potatoes 100% good; 5 in. avg. height, 5 in. 1989, 6 in. avg. Pastures 9% very poor, 25% poor, 48% fair, 18% good; furnished 91% roughage requirements. Stockwater supplies 7% very short, 39% short, 53% adequate, 19% surplus. Grasshopper infestations observed in eastern, central counties.

OHIO: High temperatures low to mid 80s. Low temperatures low to mid 60s. Overall readings 3 to 5° above normal. Precipitation very little to over 3.00 in. Growing degree days totalled 150 to 180; 15 to 30 above normal.

Days suitable for fieldwork 4.5. Soil moisture 2% short, 54% adequate, 44% surplus. Flooding in river bottoms south, southeast. Farm activities: Cultivating, fertilizing, rotary hoeing, spraying, haying, planting. Corn fair to good; some planting. Herbicide, compaction damage, crusting, slugs problems in corn. Soybeans fair to good; breaking crusts, cultivating. Winter wheat mostly good; powdery mildew subsided, head scab, glume blotch developed. Oats good; heading 44% complete. Pasture 4% poor, 31% fair, 54% good, 11% excellent. Hay regrowth good. Many hay stands harvested for haylage or green chop.

OKLAHOMA: Temperatures 6° above normal south central to 9° above normal northeast. Precipitation none central, south central, southeast; none to 0.67 in. northeast.

Days suitable for fieldwork 6.0. Topsoil 20% short, 70% adequate, 10% surplus. Subsoil 4% short, 96% adequate. Wheat 10% fair, 85% good, 5% excellent; 100% heading, 100% 1989, 100% avg.; 55% harvested, 20% 1989, 45% avg.; 15% ground plowed, 5% 1989, 10% avg. Harvesting statewide. Cotton 25% fair, 71% good, 4% excellent; 95% planted, 80% 1989, 70% avg.; 70% up to stand, 70% 1989, 45% avg.; 0% squaring, 1% 1989, 2% avg. High winds caused some replantings. Sorghum 80% planted, 50% 1989, 65% avg.; 60% up to stand, 30% 1989, 35% avg. Soybeans 55% planted, 65% 1989, 70% avg. Peanuts 70% planted, 70% 1989, 85% avg. Corn 5% tasselling, 5% 1989, 10% avg. Alfalfa 30% second cutting, 35% 1989, 35% avg. Pastures 15% fair, 75% good, 10% excellent. Hot temperatures reported harming pastures in northwest. Cattle good; marketings average, prices up from preceding week.

OREGON: Coastal temperatures near normal, above normal precipitation. Eastern areas 8° below normal. Precipitation heaviest in north Cascades at 1.40 in.; nearly normal in south central region.

Soil moisture 11% short, 88% adequate, 1% surplus. Continued cool weather with some rain limited fieldwork many areas. Russian wheat aphid in some spring grain fields east. Hay cutting as weather permitted. Cherries harvested Milton Freewater. Some rain cracking in cherries The Dalles, 90% still good. Badly split cherries in Washington County. Other areas in Willamette Valley had pollenizers with rain cracking damage; Royal Annes nearly ready to harvest. Thinning Bartlett pears, apples Hood River. Hand thinning apples Milton Freewater. Strawberries about half harvested, good yields, some mold losses due to rain. Earliest Red raspberries ready for harvest. Cranberry bloom was good to excellent south coast. Green peas harvested for processing Umatilla County. Snap beans, sweet corn, cucumbers growing slowly west. Livestock excellent. Stockwater in short supply central, southeast areas. Pastures good to excellent west; Josephine County driest. Ranges, pastures poor to excellent east; Klamath County, northeast are best; Columbia Basin, central area, southeast poorest.

PENNSYLVANIA: Cool, dry at beginning of week with rising temperatures, humidity towards weekend. Temperature 68°, 2° above normal. Extremes 40°; 91°. Precipitation 0.48 in., 0.42 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 3% short, 89% adequate, 8% surplus. Corn 92% planted, 81% 1989, 94% avg. Avg. corn height 7 in., 6 in. 1989, 10 in. avg.; 7% poor, 26% fair,

48% good, 19% excellent. Tobacco 70% transplanted, 36% 1989, 72% avg. Soybeans 75% planted, 47% 1989, 76% avg.; 2% very poor, 3% poor, 28% fair, 52% good, 15% excellent. Barley 0% boot, 0% 1989; 44% heading or headed, 45% 1989; 50% turning yellow, 53% 1989; 6% ripe, 2% 1989; 0% harvested, 0% 1989. Wheat 0% boot, 1% 1989; 86% heading or headed, 91% 1989; 14% turning yellow, 8% 1989; 0% ripe, 0% 1989; 0% harvested, 0% 1989; 2% very poor, 2% poor, 19% fair, 54% good, 23% excellent. Oats 5% boot, 3% 1989; 95% heading or headed, 97% 1989; 0% turning yellow, 0% 1989. 0% ripe, 0% 1989; 0% harvested, 0% 1989; 3% poor, 18% fair, 55% good, 24% excellent. First cutting alfalfa 59% complete, 37% 1989. Second cutting alfalfa 1% complete, 0% 1989. First cutting clover timothy 43% complete, 21% 1989. Hay stands mostly good to fair. Feed from pastures average. Peach 30% below average, 70% average, 0% above avg. Apples 15% below average, 85% average, 0% above avg. Activities: Planting corn, soybeans, potatoes, vegetables; harvesting hay, haylage, strawberries; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 2.48 in. was 1.16 in. above normal. Rainfall 6.35 in. at Lajas Acs, 5.24 in. Dos Bocas, 4.17 in. Lares. Highest 24 hour total 6.25 in. at Lajas Acs. Temperatures 82° on coast, 75 to 76° in Interior with mean station 65° at Cerro Maravilla to 84° at Trujillo Alto. Extremes 62°; 95°.

SOUTH CAROLINA: Temperatures 1 to 2° above normal. Rainfall 0.10 in. mountains to 1.60 in. southern part of State.

Days suitable for fieldwork 6.1. Soil moisture 19% very short, 60% short, 21% adequate. Cotton 59% fair, 41% good, 15% squaring, 9% 1989, 30% avg. Soybeans 47% fair, 53% good; 78% planted, 64% 1989, 70% avg. Corn fair to good; 39% silked, 13% 1989, 32% avg.; 7% dough stage, 0% 1989, 0% avg. Sorghum fair to good; 76% planted, 41% 1989, 65% avg. Tobacco fair to good; 34% topped, 8% 1989, 11% avg. Peanuts good, growing well. Watermelons fair to good; 3% harvested, 0% 1989, 3% avg. Cantaloupes fair to good; 95% planted, 89% 1989, 98% avg.; 10% harvested, 0% 1989, 3% avg. Peaches fair, 27% harvested, 17% 1989, 19% avg. Oats fair to good; 97% ripe, 92% 1989, 93% avg.; 81% harvested, 50% 1989, 65% avg. Wheat fair to good; 82% harvested, 62% 1989, 68% avg.

SOUTH DAKOTA: Temperatures 8° above to 4° below normal. Extremes 42°; 101°. Precipitation generally around 0.50 in. Maximum 4.98 in. Growing season precipitation generally above normal. Range 2.15 in. below to 5.79 in. above normal. Growing degree days 111 units above to 136 units below normal.

Days suitable for fieldwork 5. Subsoil 6% critically short, 42% short, 51% adequate, 1% surplus. Topsoil 3% critically short, 19% short, 73% adequate, 5% surplus. Range, pasture condition 8% poor, 25% fair, 58% good, 9% excellent. Corn planted, cutworm damage. Hail central, south central, northeast. Crop conditions mostly good. Russian wheat aphids, green bugs reported. Major activities: Cultivating, spraying, fallow, planting annual forages, fencing.

TENNESSEE: High pressure brought mild, dry weather to State early week. Hot, humid air returned by mid week. Scattered thunderstorms weekend, mostly west half. Temperatures slightly above normal west half, slightly below normal east half. Precipitation 0.50 in. below normal statewide.

Days suitable for fieldwork 4.8. Soil moisture 4% short, 86% adequate, 10% surplus. Corn 100% planted, 100% 1989, 100% avg., 4% tasseling, 2% 1989, 5% avg.; 7% poor, 28% fair, 60% good, 5% excellent. Cotton 100% planted, 100% 1989, 100% avg.; 5% very poor, 23% poor, 44% fair, 28% good. Sorghum 68% planted, 90% 1989, 87% avg.; 1% very poor, 3% poor, 35% fair, 61% good. Soybeans 38% planted, 60% 1989, 62% avg. Tobacco 88% transplanted, 78% 1989, 84% avg.; 30% fair, 70% good. Wheat 94% turning color, 94% 1989, 99% avg.; 28% ripe, 18% 1989, 55% avg.; 4% harvested, 2% 1989, 10% avg.; 17% poor, 59% fair, 23% good, 1% excellent. Alfalfa 98% 1st cutting, 100% 1989, 98% avg.; 12% 2nd cutting, 10% 1989, 17% avg. Wind damage to fruit trees Middle. Pastures, cattle good.

TEXAS: Strong upper level area high pressure dominated State weather. System prevented much rainfall, while allowing afternoon temperatures to soar west, south. Reading well into 100s few spots. Disturbances crossed Mexico brushing moisture across Panhandle, far western areas, few isolated storms. Gulf moisture continued to flow into rest of State, pushed up heat stress levels. Temperatures well above normal High, Low Plains, Rolling Plains. Elsewhere, temperatures slightly above normal. Rainfall below normal all parts.

Crops: Small grain harvest advanced rapidly, nearing end Blacklands. Harvest well underway Plains. Yields, test weights above average. Few hail, water damaged fields smaller yields. Corn crop central, south further stressed by hot, drying conditions. Some fields Valley heavy lodging from dry, windy conditions. Fields beginning to stress Cross Timbers. Irrigation steady High Plains. Corn 48% silked, 60% 1989, 59% avg. Doughing 32%, 32% 1989, 34% avg. Grain sorghum planting progressed Plains without much delay. Many producers finished, need rain to establish stands. Fields Blacklands, central started turning color under hot temperatures. Signs of stress increasing. Green bugs hurting some Blackland fields. Harvest beginning some areas Coastal Bend, Valley. Fields turning color Upper Coast. Sorghum 39% headed, 41% 1989, 46% avg. Cotton planting continued Plains; some dryland planting slowed until rain comes. Most early planted fields holding up with little growth. Some replanting later fields necessary. Producers Blacklands, central busy spraying, cultivating. Some fields Coastal Bend shedding bolls because dry conditions. Fields blooming central. Soybeans look good most areas; rain would help. Planting continued Plains, Upper Coast. Fields behind wheat Blacklands coming up to good stands. Almost all rice fields emerged. Flooding older fields continued. Most stands good. Rice 0% headed, 4% 1989, 7% avg. Peanut planting continued irrigated fields; dryland planting slowed by lack of moisture. Some producers dusted in, hoping for rain. Irrigated fields look good. Irrigation must some areas. Other Field Crops: Peanuts planted 56%, 61% 1989, 61% avg. Soybeans planted 86%, 75% 1989, 69% avg. Sunflowers 72% planted, 53% 1989, 53% avg. Oats harvested 64%, 54% 1989, 58% avg.

Commercial Vegetables: Rio Grande Valley, watermelon harvest continued. Land preparation continued. San Antonio Winter Garden, watermelons need rain. Onion, cucumber harvest continued. Eastern areas, sweet potatoes planted. Harvest other vegetables increased with drier weather. High Plains, onion, potatoes look good Irrigation all vegetables steady. Trans Pecos, onion harvest continued. Cantaloupe harvest begin soon. Peach picking continued across much State. Yields, quality remained good. Pecan producers central, south spraying second generation casebearers. Crop most areas continued to look good; hot,

drying conditions accelerated June drop some areas.

Range and Livestock: Hot, drying conditions further stress ranges, pastures many parts State. Haying operations continued; yields only fair. Livestock remained steady.

UTAH: Temperatures about normal in northern half, 2° above normal in southern half. Precipitation light to very heavy throughout State.

Days suitable for fieldwork 5.4. Soil moisture 35% short, 62% adequate, 3% surplus. Rains interrupted cutting of first crop hay, some damage sustained. Corn growth slowed by cool, wet weather. Sweet cherry, apricot harvest continued southern State growing areas, northern areas fruit harvest preparation underway. Field crops progress continued. Winter wheat 92% headed, 86% 1989, 89% avg.; turning color in early areas. Spring wheat 52% headed, 34% 1989, 51% avg. Barley 60% headed, 50% 1989, 55% avg. Oat acreage mostly joint to boot stage. Corn height 10.0 in. Alfalfa hay cutting underway Grand, Washington counties. Range, pasture 3% very poor, 40% poor, 43% fair, 14% good. Ranges northern areas benefitted from soaking rains. Livestock grazing summer ranges.

VIRGINIA: Near normal temperatures, below normal rainfall. Cool nights, warm days typical. Highs 80s to 90s, lows 50s to 60s. Extremes 40°; 98°. Rainfall trace to 2.40 in.

Days suitable for fieldwork 5.8. Topsoil 21% short, 77% adequate, 2% surplus. Corn 99% planted, 95% 1989, 96% avg.; 24% fair, 69% good, 7% excellent. Soybeans 67% planted, 49% 1989, 57% avg. Burley tobacco 90% set, 90% 1989, 81% avg. All tobacco 37% fair, 50% good, 13% excellent. Side dressing, cultivation active. Wheat harvested 23%, 6% 1989, 10% avg. Barley harvested 50%, 24% 1989, 29% avg. Apple 18% very poor, 18% poor, 55% fair, 9% good. Potato mostly good. Alfalfa, other hay mostly good to excellent. Cultivating, side dressing row crops. Harvest of snap beans, cucumbers beginning.

WASHINGTON: Temperatures 1 to 9° below normal, east; normal to 2° below normal, west. Precipitation none to 0.68 in. east; 0.63 to 1.12 in. west.

Days suitable for fieldwork 2.9. Soil moisture 31% short, 64% adequate, 5% surplus. Range, pasture 35% short, 63% adequate, 2% surplus. Hay, other roughage 5% very short, 28% short, 65% adequate, 2% surplus. Winter wheat headed, 84%, 93% 1989, 86% avg. Spring wheat headed 58%, 64% 1989, 56% avg. Barley headed 82%, 74% 1989, 59% avg. Potatoes emerged 99%, 100% 1989, 100% avg. Alfalfa hay, 1st cutting, 65%, 88% 1989, 76% avg.

Rain, cool weather halted field activity. Plant development, progress has slowed with the cooler than normal temperatures. Small grains mostly good to excellent. Russian wheat aphids, rust, disease concerns continued with cool, wet weather. Cherry harvest continued with damage from cracking, softening. Orchards will not be harvested. Strawberry harvest will begin this week. Livestock was lost in Kittitas County to pneumonia caused by recent cool, wet weather.

WEST VIRGINIA: Temperature 70°. Extremes 40°; 94°.

Days suitable for fieldwork 4.7. Soil moisture 13% short, 73% adequate, 14% surplus. Pasture 74% good, 26% excellent. Cattle, sheep good to excellent. Wheat, barley mostly fair to good; 33% and 40% ripe. Oats good, 89% emerged. Corn mostly good; 95% planted, 94% emerged. Hay mostly good to excellent; first cutting 32% complete. Apples, peaches poor. Tobacco good, 84% set. Farm activities: Hay harvesting, planting soybeans, corn, livestock care.

WISCONSIN: Temperature 69°, 2° above normal. Extremes 44°; 95°. Precipitation 0.90 to 3.70 in.

Days suitable for fieldwork 2.1. Soil moisture 4% short, 64% adequate, 32% surplus. Pasture 85% of normal, 81% 1989, 71% avg. General condition of crops 2% poor, 22% fair, 70% good, 6% excellent. Winter wheat 12% fair, 78% good, 10% excellent. Corn 1% very poor, 9% poor, 39% fair, 48% good, 3% excellent; height 6 in., 8 in. 1989, 12 in. avg. Soybeans planted 89%, 94% 1989, 95% avg. First cut hay 38% completed, 40% 1989, 66% avg. Oats 4% headed, 15% 1989, 33% avg.

WYOMING: Temperatures below normal. Precipitation below normal.

Days suitable for fieldwork 6.0. Topsoil 50% short, 50% adequate. Subsoil 41% short, 59% adequate. Irrigation water limited some areas. Winter wheat not jointed 20%, 15% 1989, 5% avg.; jointed 25%, 15% 1989, 10% avg.; boot 35%, 35% 1989, 35% avg.; headed 20%, 35% 1989, 50% avg. Barley not jointed 20%, 25% 1989; jointed 15%, 20% 1989; boot 35%, 35% 1989; headed 30%, 20% 1989. Spring wheat not jointed 55%, 35% 1989; jointed 25%, 35% 1989; boot 10%, 25% 1989; headed 10%, 5% 1989. Oats not jointed 65%, 40% 1989; jointed 20%, 40% 1989; boot 10%, 20% 1989; headed 5%, small amount 1989. Potatoes 80% emerged, 80% 1989, 75% avg. Dry beans 60% emerged, 70% 1989, 65% avg. Sugarbeets 75% thinned, 65% 1989, 65% avg. Alfalfa first cutting 5% complete, 10% 1989. Other hay small amount harvested, 5% 1989. Livestock moved to summer ranges; cattle 85%, sheep 80%. Stockwater 30% short, 70% adequate.

International Weather and Crop Summary

HIGHLIGHTS

June 10-16, 1990

USSR ... In Western USSR, continued unseasonably cool weather and widespread precipitation benefit crops. In the New Lands, rising temperatures and dryness over southern crop areas increase stress on spring grains in the jointing stage.

EUROPE ... Moderate to heavy rain benefits winter and spring crops across central growing areas. Dryness continues to favor early winter grain harvest in the south.

SOUTH ASIA ... Showers continue in the east and portions of the south, benefiting emerging summer crops.

EASTERN ASIA ... Heavy rain continues across much of southern China. Early-week dry weather favors winter wheat harvest in the North China Plain.

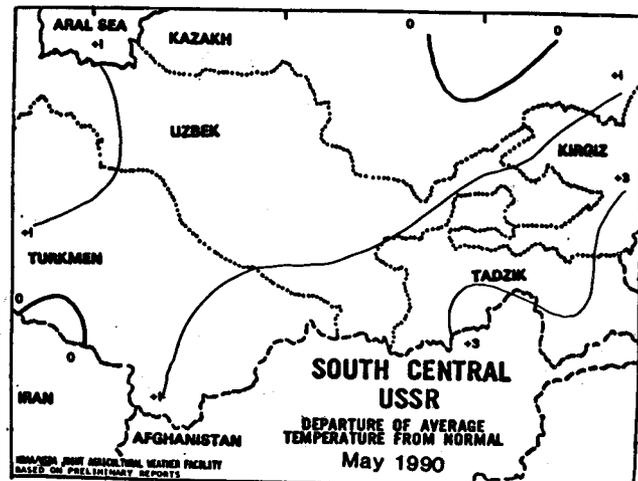
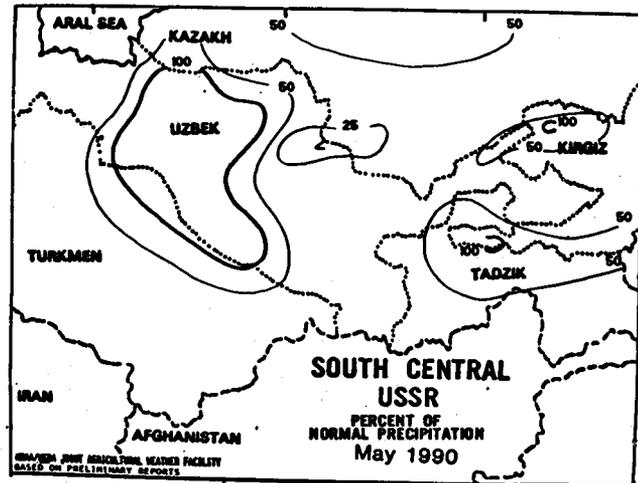
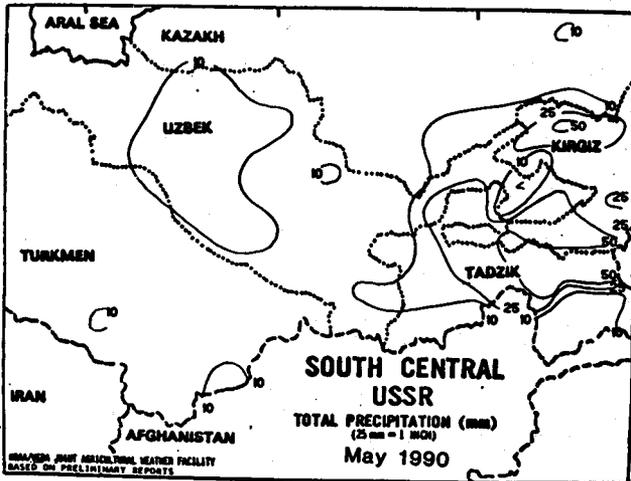
SOUTHEAST ASIA ... Rainfall tapers off over Thailand's western grain areas. Heavier rain returns to the Philippines.

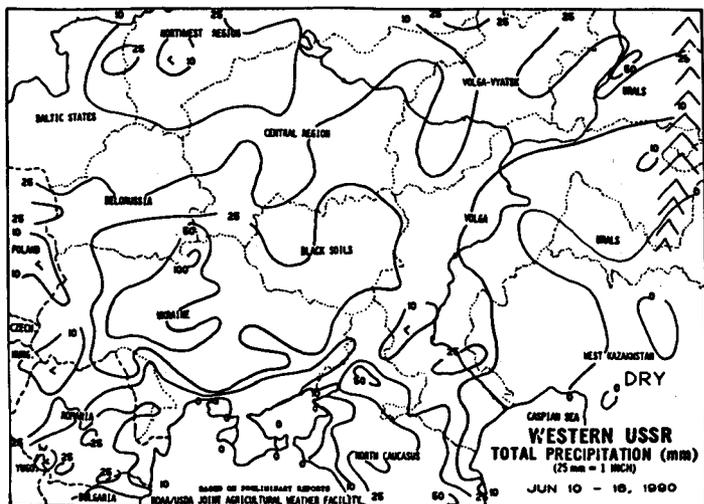
SOUTH AMERICA ... In south-central Brazil, showers keep southern wheat areas wet. Dry weather favors fieldwork in Argentina.

AUSTRALIA ... Rain benefits winter grains in Western Australia and portions of the east.

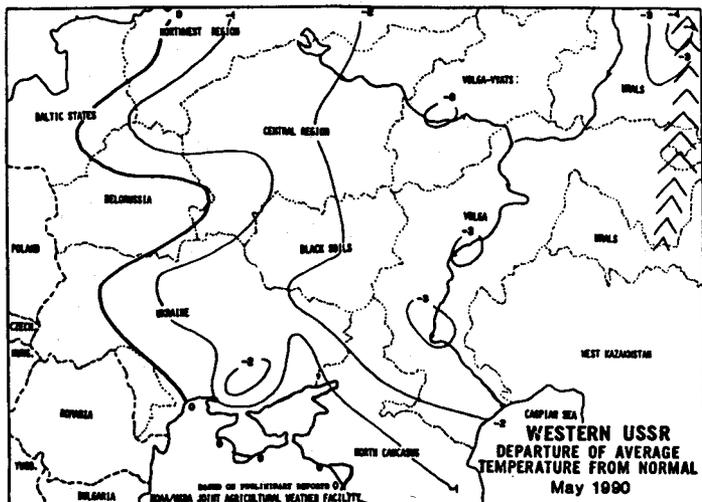
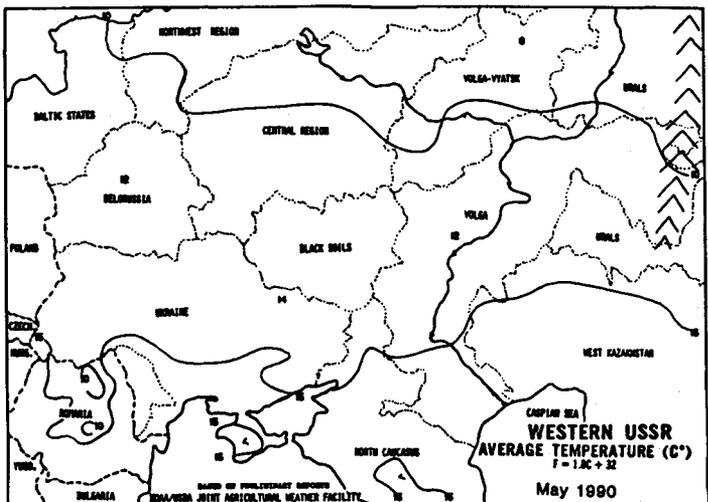
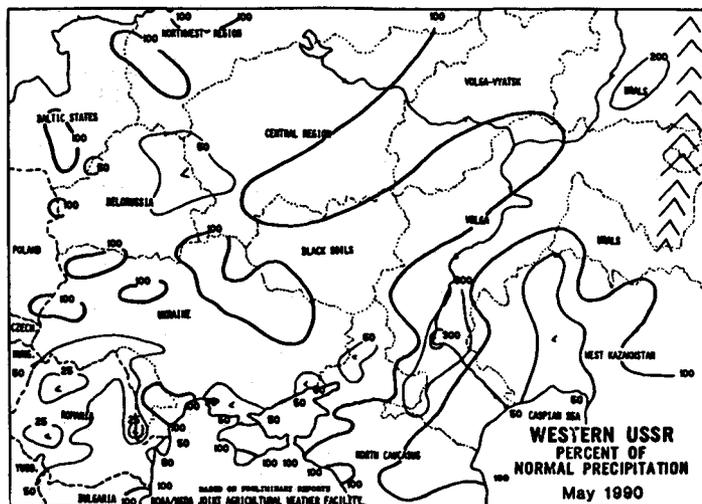
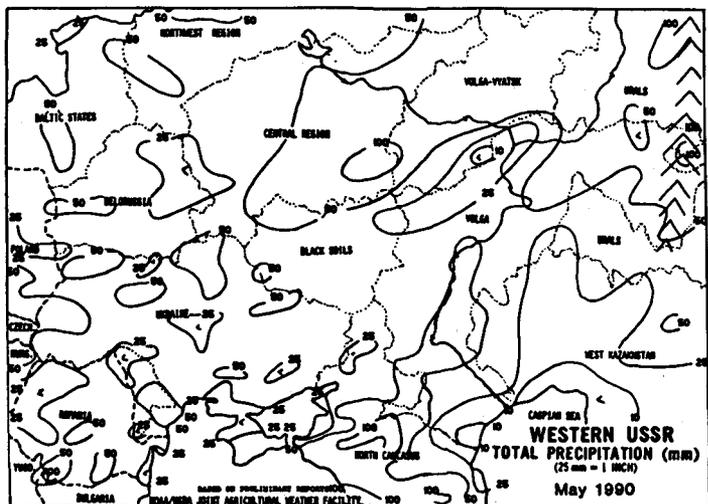
MEXICO ... Hot weather persists in the north. Showers favor corn growth in the Southern Plateau.

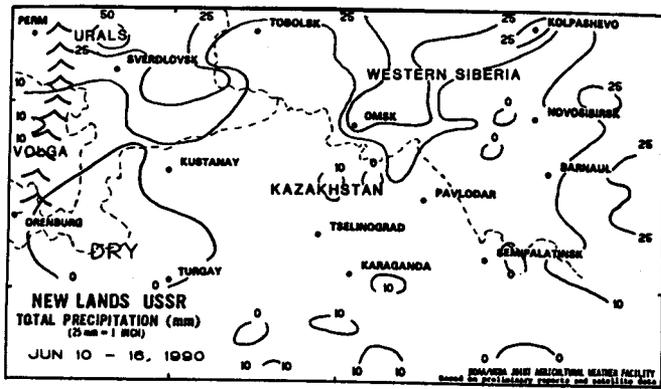
CANADA ... Rain maintains favorable moisture levels for emerging crops. Local frost again hits northeastern Saskatchewan.



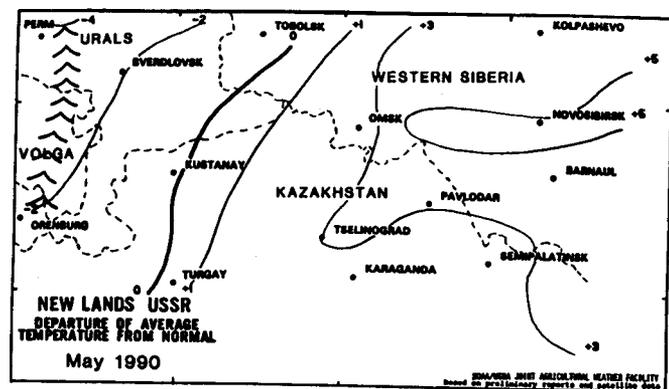
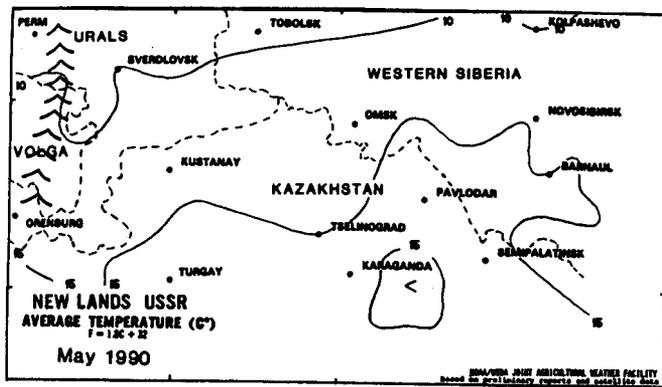
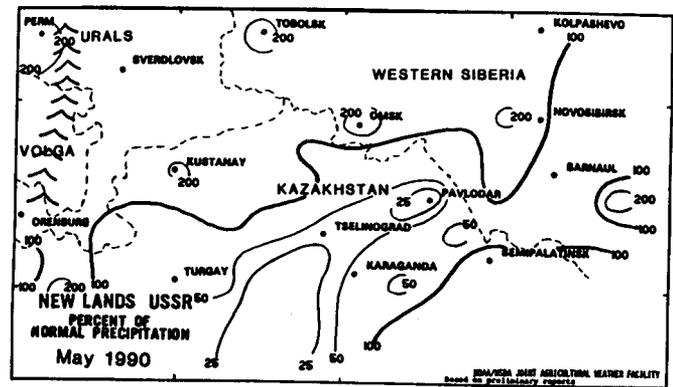


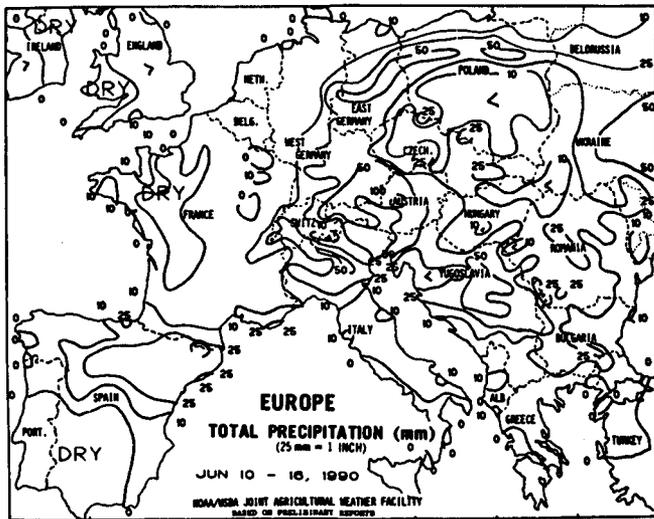
WESTERN USSR ... Continued unseasonably cool weather covered the region and was accompanied by widespread precipitation. Greatest amounts of rain (25 to 50mm, with local amounts in excess of 60mm) covered southern Belorussia, the central and northern Ukraine, the Black Soils Region, and the central North Caucasus. Precipitation over remaining areas generally ranged from 5 to 20mm. Weekly average temperatures ranging from 2 to 4 degrees Celsius (C) below normal were favorable for wheat in the reproductive to filling stages and spring grains in or nearing reproduction in the south. Warmer weather is needed to promote the development of summer crops. In May, weather conditions continued mostly favorable for crops. Above-normal precipitation covered the western North Caucasus and the Volga Valley, benefiting winter grains in or nearing the reproductive phase. Although May's precipitation was below normal in the Baltic States, Belorussia, and the Black Soils Region, adequate soil moisture reserves met increasing crop moisture demands. Soil moisture reserves were limited in the southern Ukraine and the Crimea, where precipitation in May was below normal.



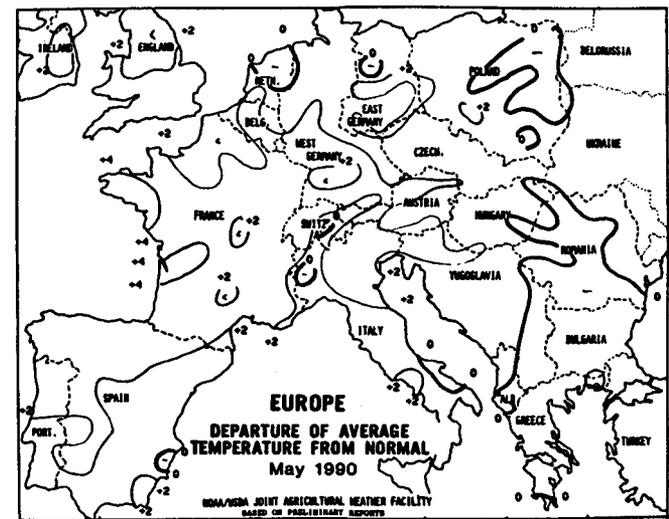
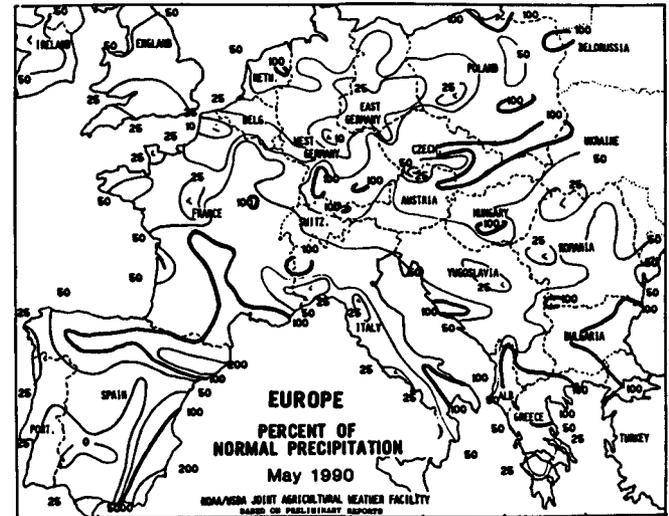
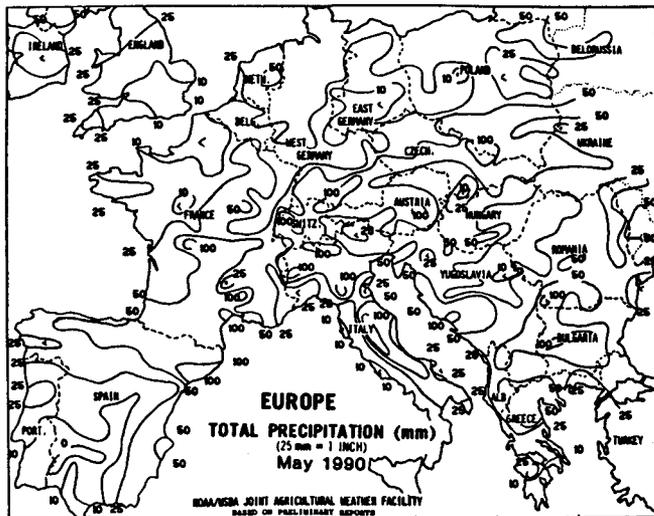


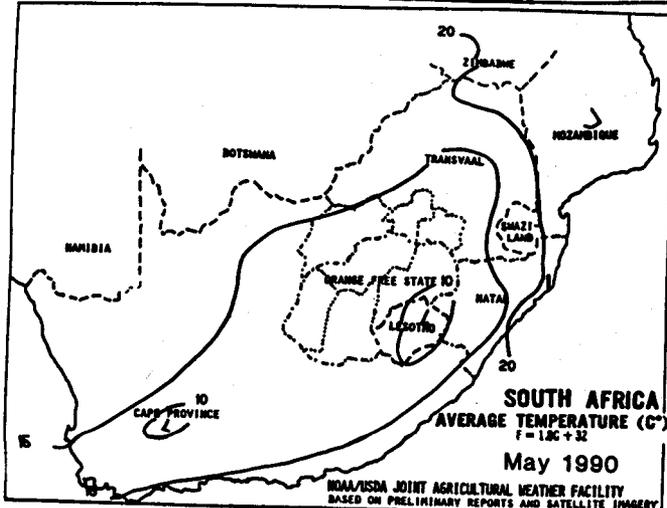
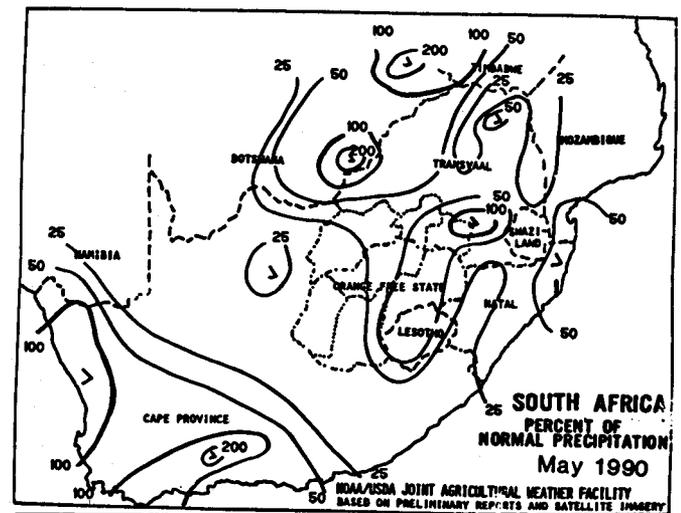
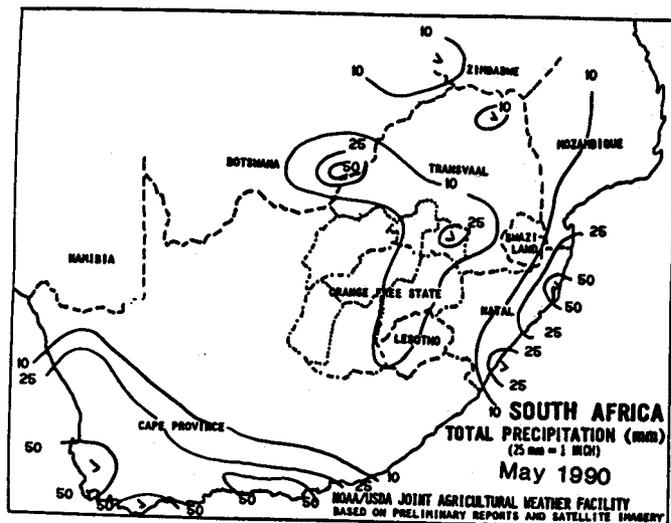
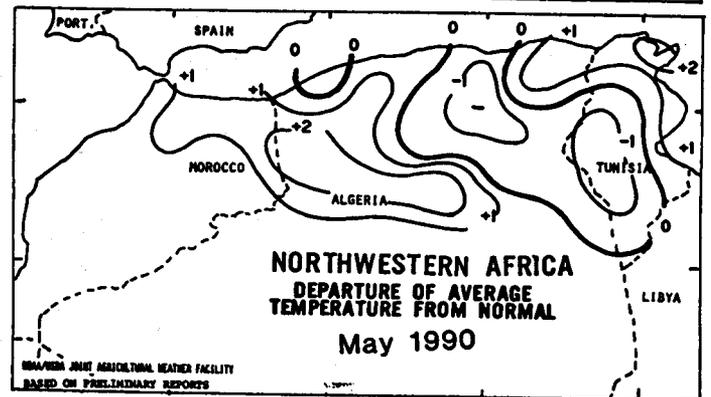
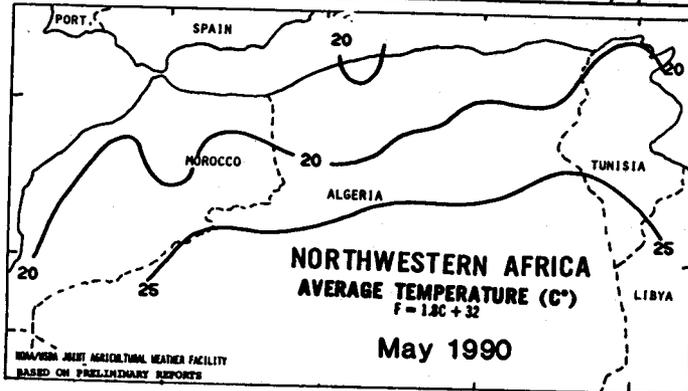
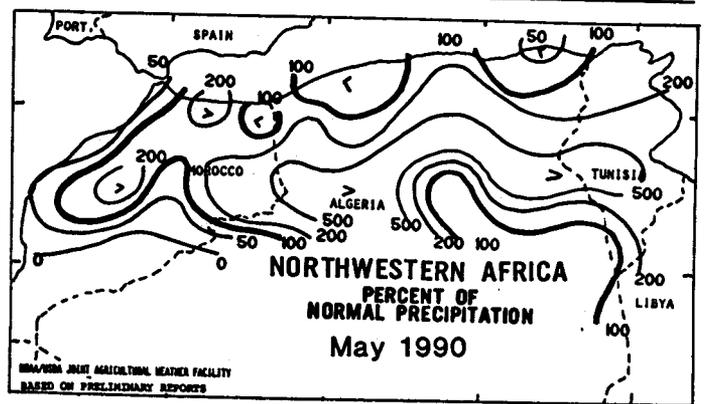
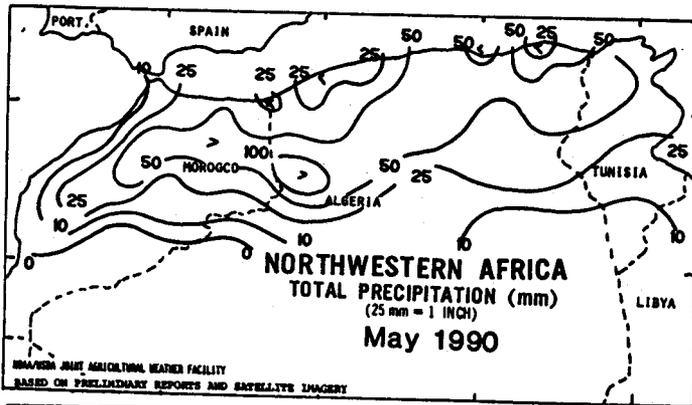
NEW LANDS ... Early-week cool, showery weather was followed by rising temperatures and dryness by week's end. Early-week maximum temperatures of around 20 degrees in the southern Urals and Kazakhstan rose to around 35 degrees C by week's end, increasing stress on spring grains in the jointing stage. In addition, the fifth consecutive week of minimal rain (precipitation amounts generally less than 5mm) covered these areas, and crops continued to rely on moisture reserves to meet increasing crop moisture demands. Elsewhere, widespread rain (15-40mm) in the northern Urals benefited early spring growth. In May, spring grains are usually planted across the region. The combination of well-above-normal precipitation in May and melting snow in the Urals produced local flooding. Although this wet weather provided abundant moisture for spring grain planting, it likely caused some planting delays. Below-normal precipitation over southern Kazakhstan and eastern areas of Western Siberia allowed spring grain planting to progress without delay.

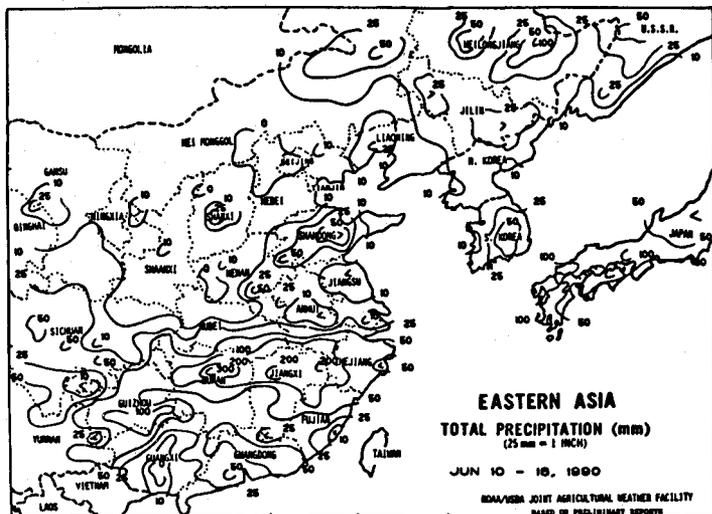




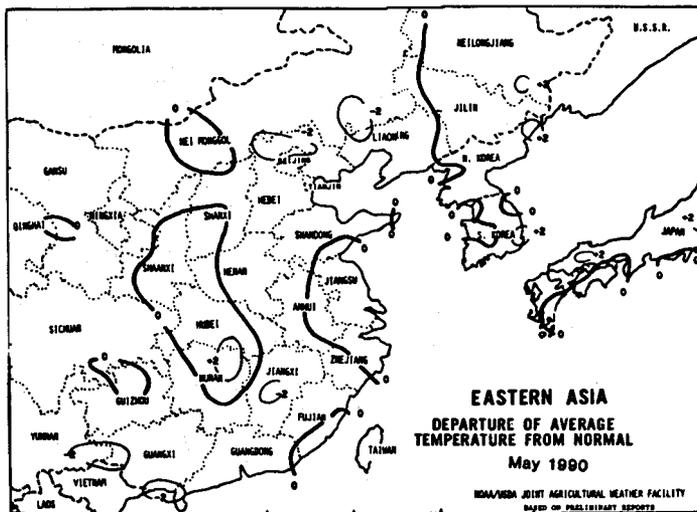
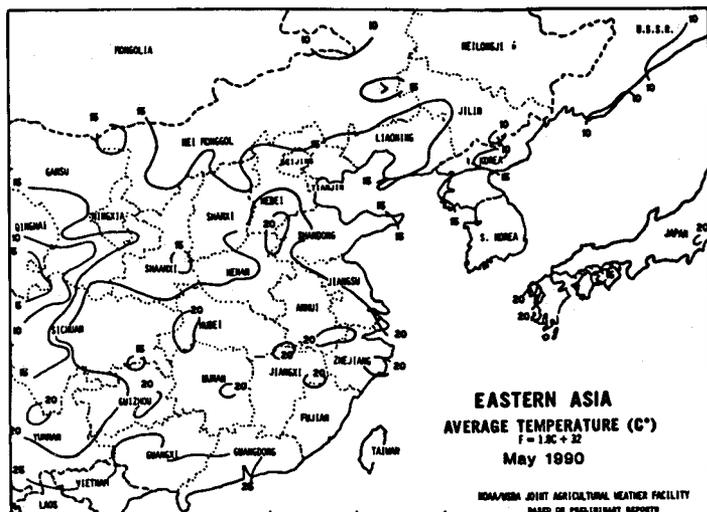
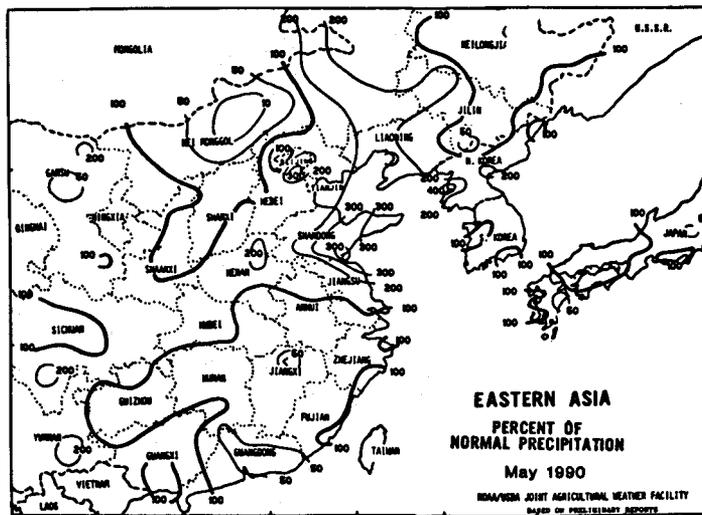
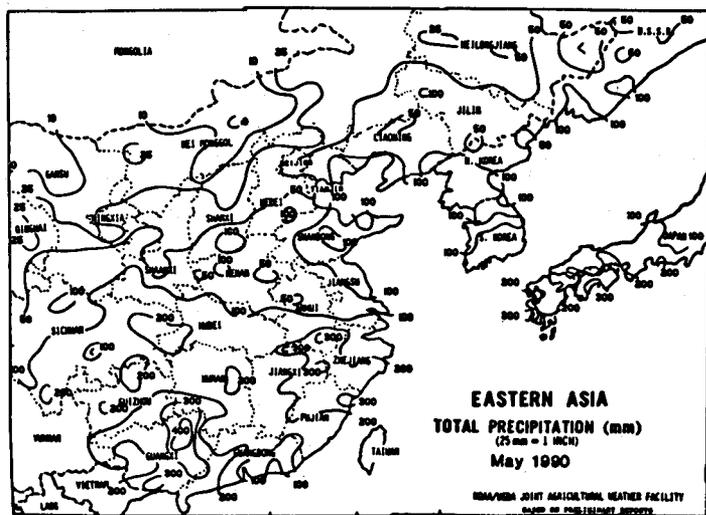
EUROPE ... Moderate to heavy rain (30-84mm) fell over sections of East Germany, southern West Germany, western Poland, parts of Czechoslovakia and Austria, benefiting summer and winter crops. Mostly dry weather returned to crop areas of Great Britain and France, although evaporation losses were lessened by below-normal temperatures. In the south, widespread rain (25-55mm) favored summer crops in sections of northern Spain, northern Italy, and parts of the Balkans. Mostly dry weather in Greece and southern Italy allowed rapid progress of early winter grain harvest. Precipitation during May was below normal in nearly all of Europe except for eastern sections of Spain and scattered areas of the Balkans. Persistent dryness during much of the spring thus far in some northwestern and southern crop areas has depleted moisture reserves to unfavorably low levels, increasing stress on both winter grains and spring planted crops.



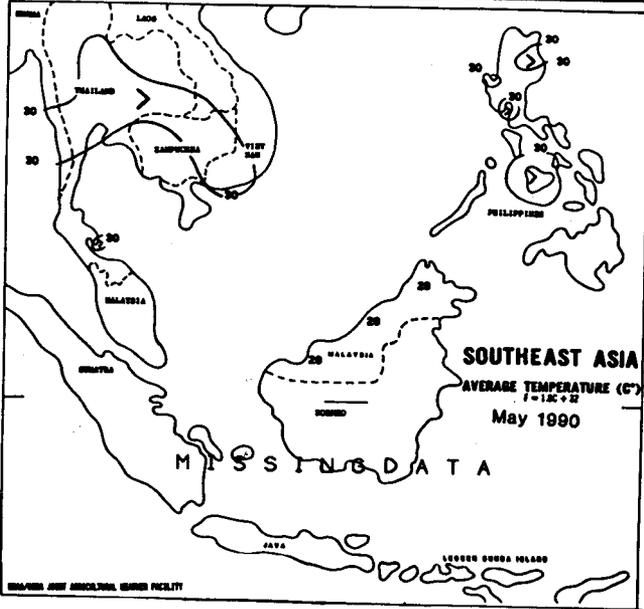
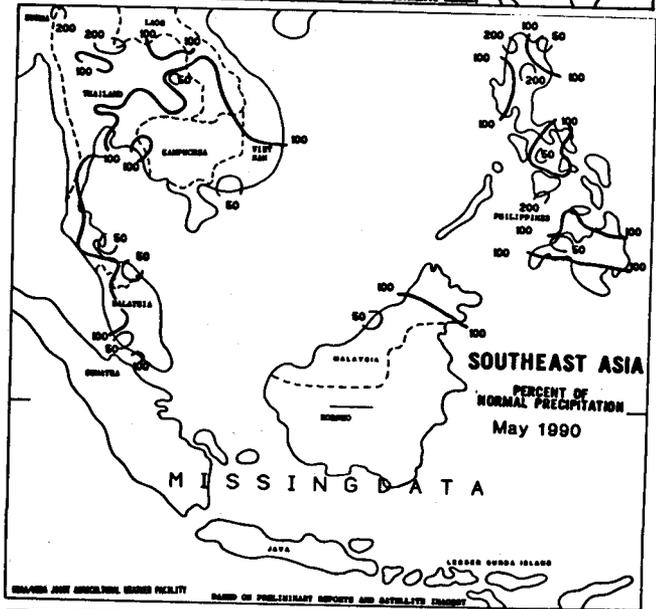
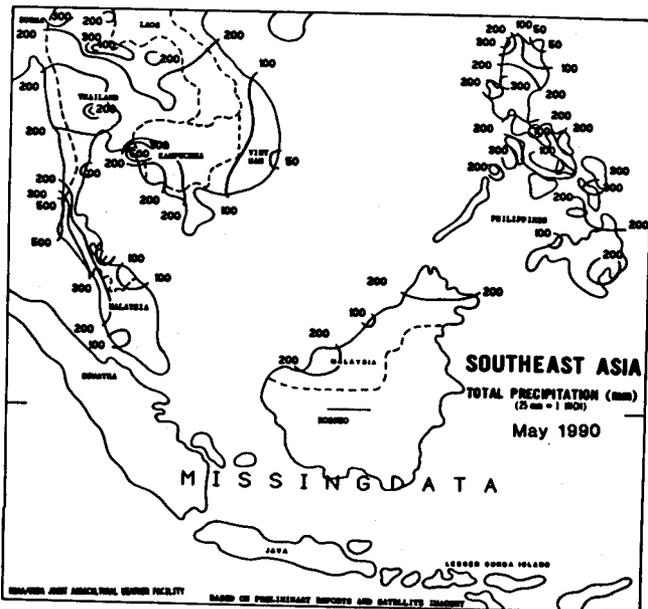
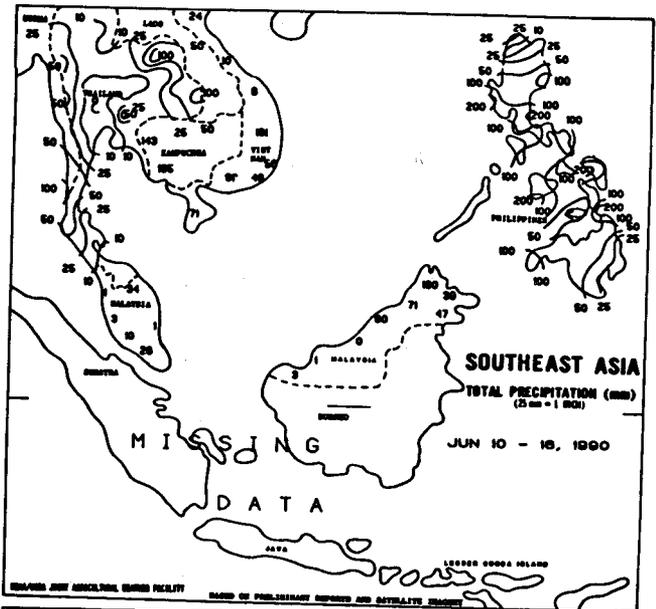


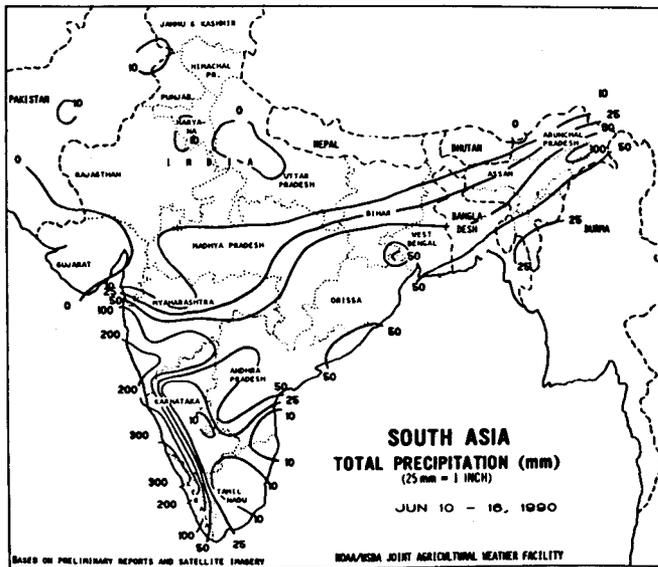


EASTERN ASIA ... Heavy seasonal rains (50-100mm or more) continued across much of southern China, favoring most spring planted crops. However, torrential rain (100-300mm or more) in sections of the middle Yangtze Valley caused flooding and crop damage. In the North China Plain, mostly dry and hot weather (daytime maximum temperatures 34-38 degrees C) allowed rapid harvest of winter wheat early in the week. However, a frontal system brought rain (10-50mm or more) and cooler temperatures to much of the region by week's end, halting fieldwork. In Manchuria, widespread rain (10-25mm or more, with local areas of Heilongjiang receiving 50-101mm) continued to increase soil moisture for spring wheat, corn, and rice following drier-than-normal weather during much of May. In contrast, May precipitation was much above normal in southern China, the Yangtze Valley, and southern Japan.

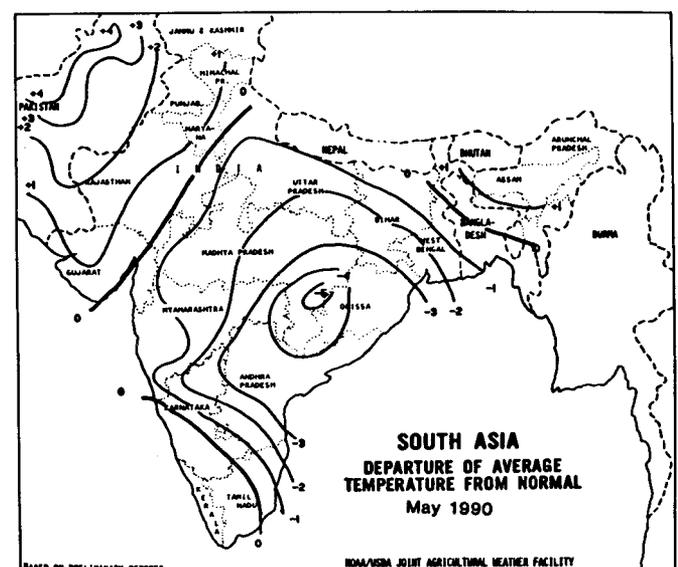
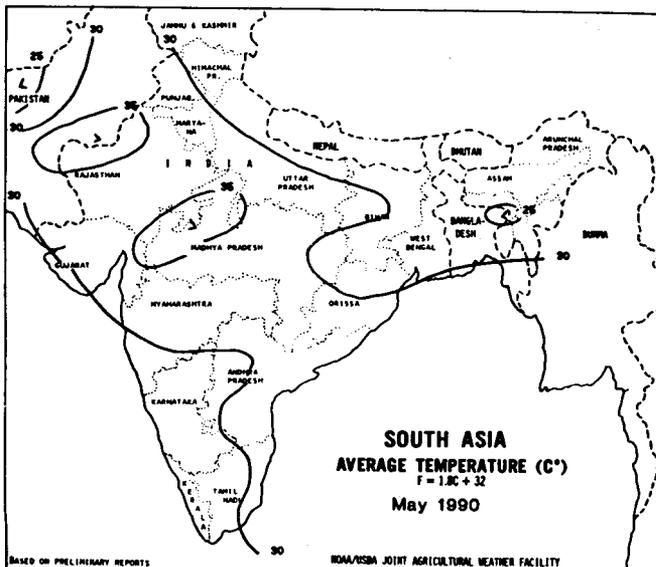
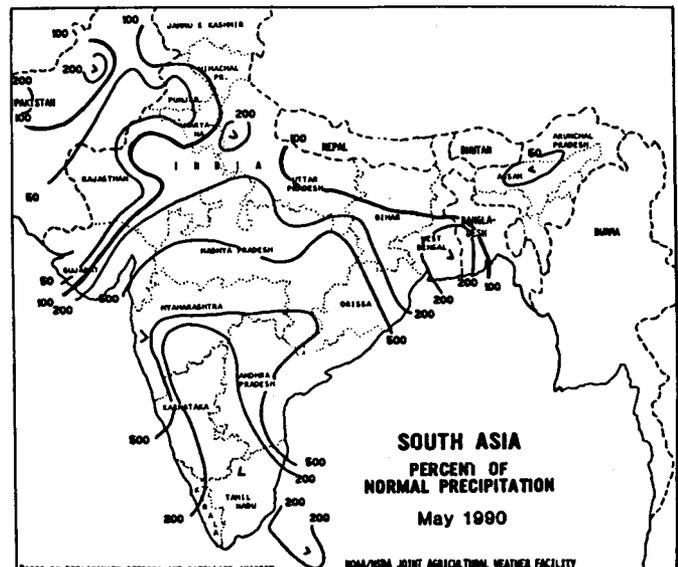
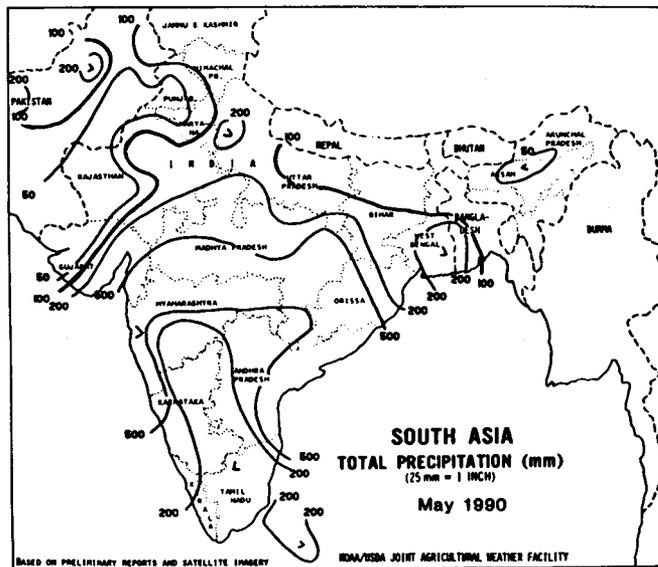


SOUTHEAST ASIA ... Rainfall tapered off across Thailand's primary grain regions, with amounts averaging less than 25mm from the northern hills through the central corn region to Bangkok. Moderate to heavy rain (25-50mm or more) continued in the east. Despite the dryness, temperatures averaged near normal across the region. In the Philippines, moderate to heavy showers returned, with most areas, northern Luzon and southern Mindanao excluded, reporting 50-100mm or more. Locally excessive rain (100-200mm or more) caused some flooding in southern Luzon and the central islands. In May, frequent, near- to above-normal rainfall across Thailand provided timely moisture for main season planting but caused local flooding, especially in the north and the western coast of the Thai peninsula. Temperatures, although periodically hot, averaged near normal. In the Philippines, near- to above-normal May rainfall brought much needed relief following months of chronically dry weather which delayed main season grain planting. However, temperatures averaged above normal, with hot weather persisting in Luzon until month's end when the rains finally arrived.

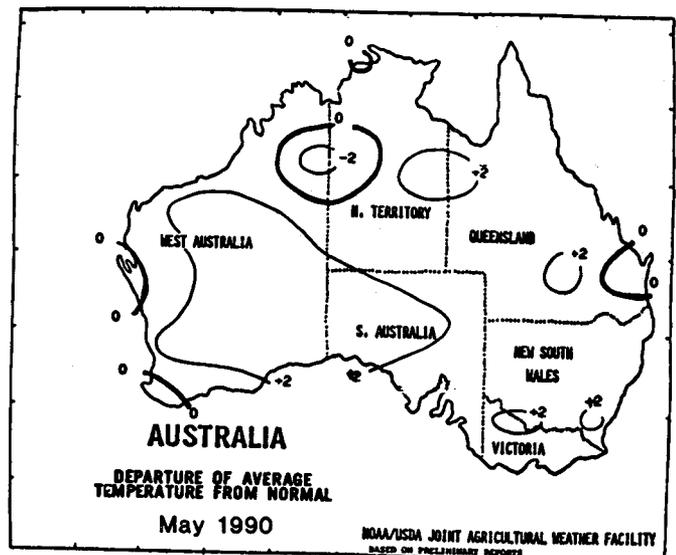
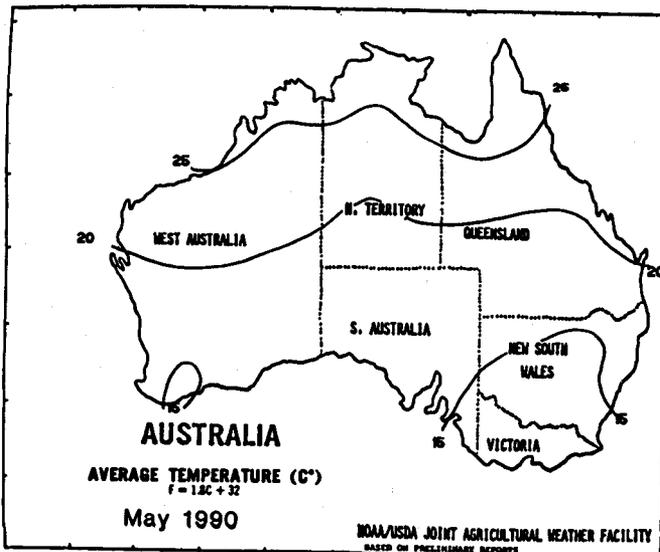
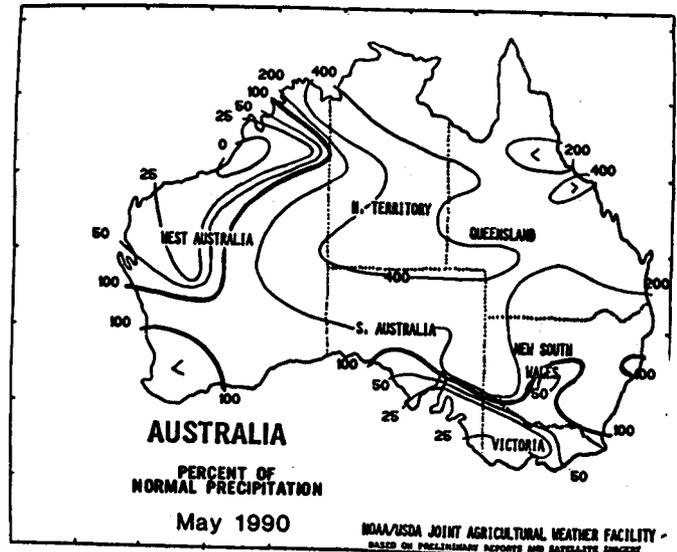
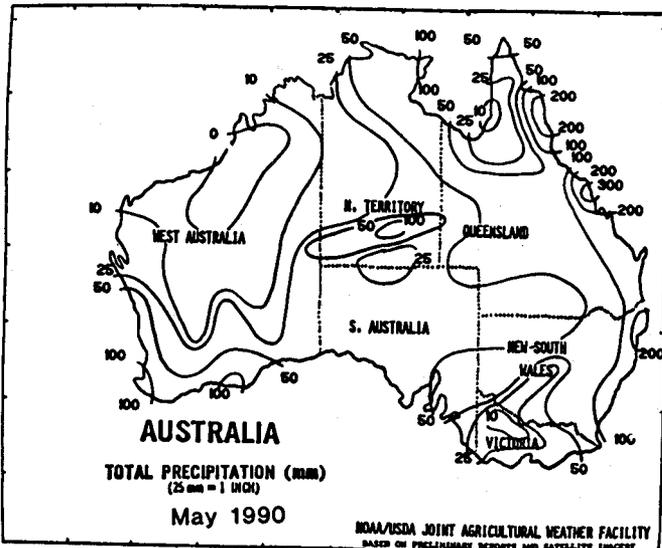
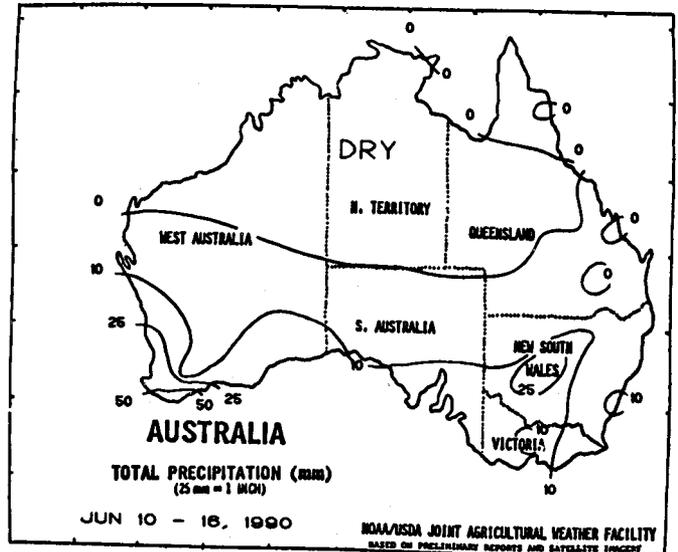


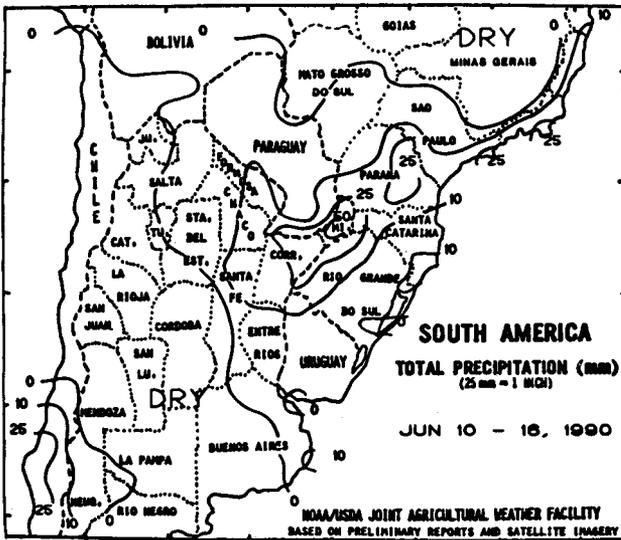


SOUTH ASIA ... Moderate showers (25-50mm or more) continued over eastern and much of southern India, benefiting summer crop emergence and establishment. Very heavy rain (100-300mm or more) fell along the southwest coast. However, rainfall continued to average less than 25mm over the southern interior from Karnataka and southeastern Andhra Pradesh southward, limiting moisture for emerging crops. Weekly temperatures averaged near to below normal across the region, but daily high temperatures of 35-40 degrees C were common in the north and along the southeast coast. In May, above-normal rainfall, due mainly to a tropical cyclone that hit Andhra Pradesh early in the month, provided beneficial preplanting moisture to India's southern half. The storm caused some local damage to unharvested rice and plantation crops. Continuing rain in the east benefited newly planted crops but caused some flooding. Temperatures averaged above normal in the northwest but near to below normal elsewhere.

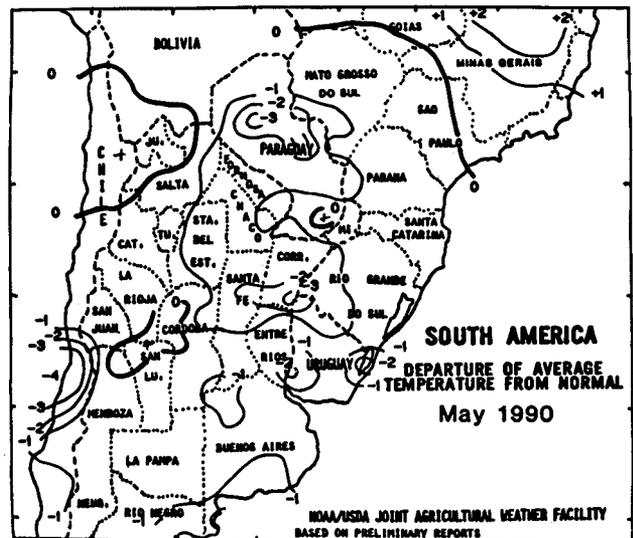
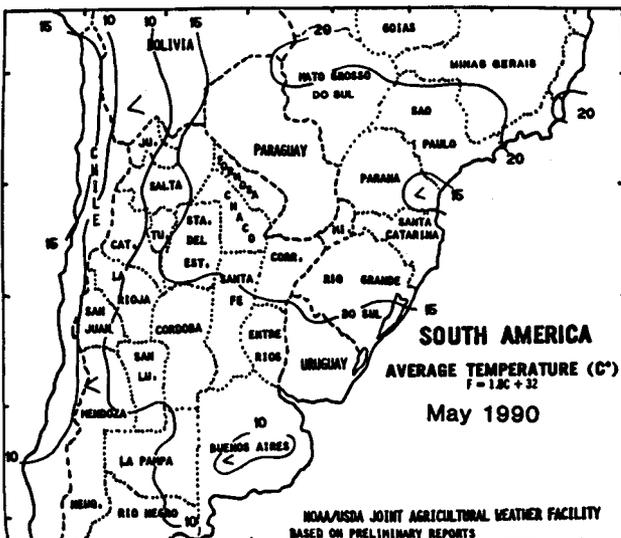
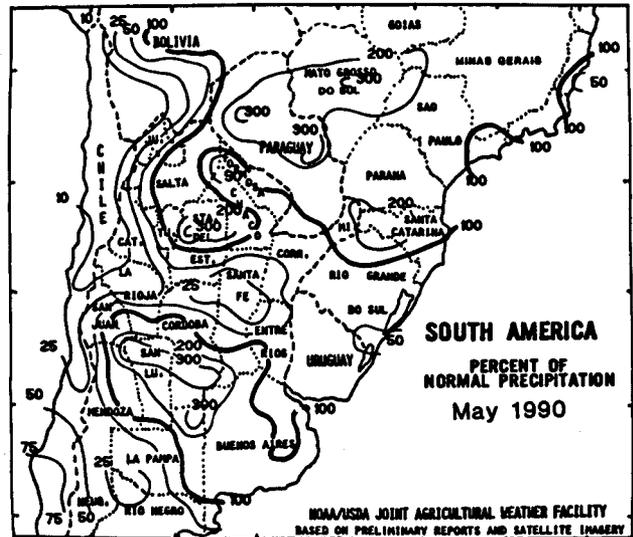


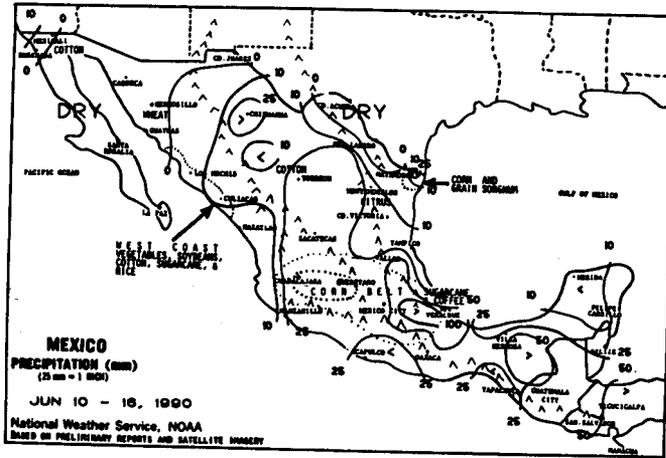
AUSTRALIA ... A pair of frontal systems continued seasonal showers (10-25mm or more) over most crop areas of Western Australia, favoring germination and establishment of winter grains. Light to moderate rain (10-22mm) also fell over abnormally dry areas of southern South Australia and Victoria. In the east, late-week, unseasonably heavy rain (35-39mm) covered central New South Wales, but rainfall elsewhere over primary winter grain areas totaled less than 10mm. Seasonably dry weather in northeastern coastal Queensland allowed soils to dry following up to 3 consecutive weeks of heavy rain. During May, above-normal rainfall allowed rapid progress in winter grains planting across most growing areas in Queensland and New South Wales. In contrast, below-normal May rainfall in South Australia and portions of Victoria left some soils too dry for fall planting.



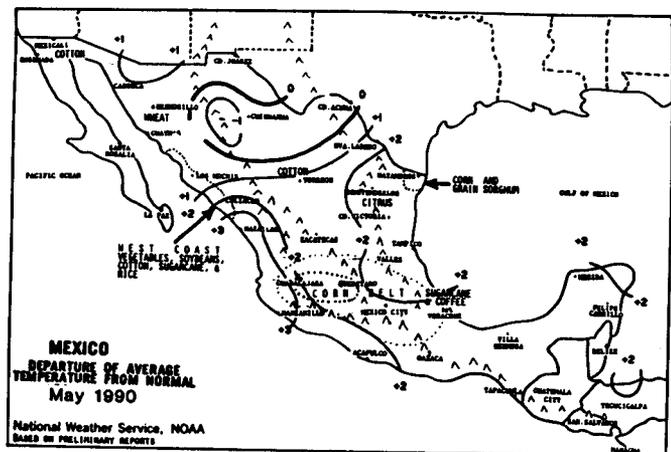
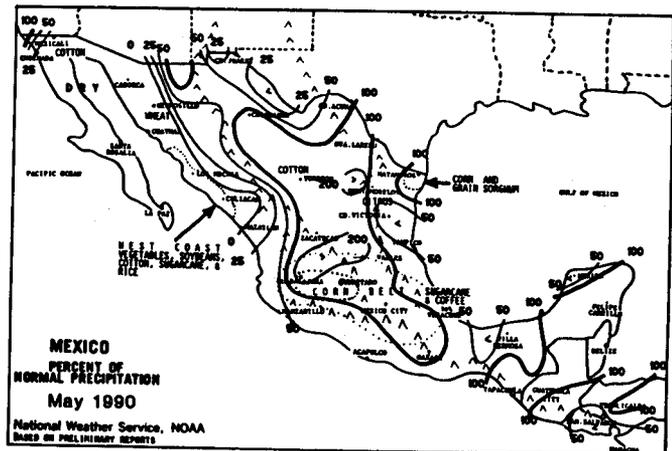
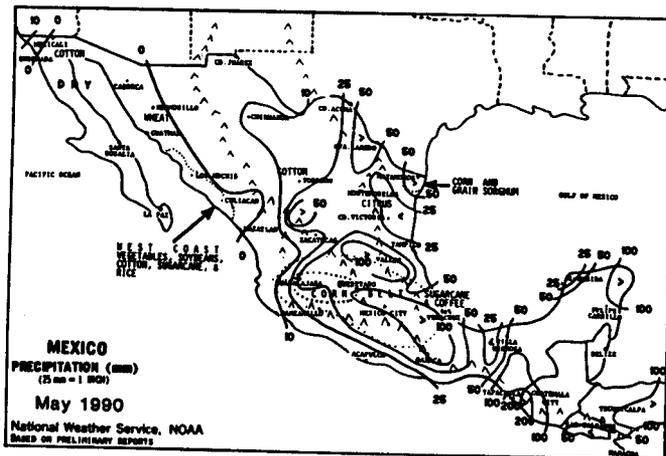


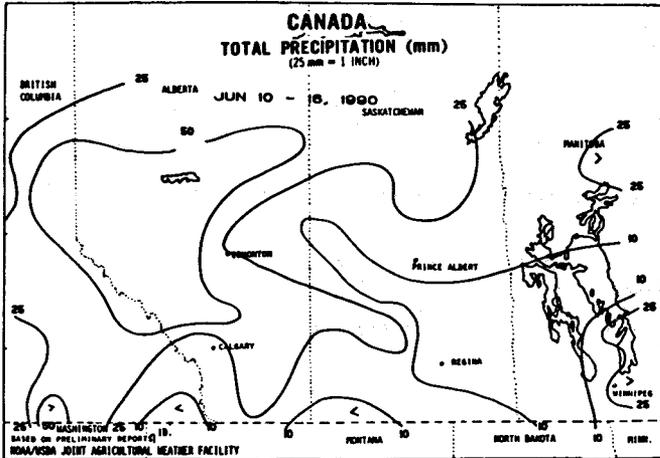
SOUTH AMERICA ... In south-central Brazil, lingering showers continued in Rio Grande do Sul and Santa Catarina, maintaining wet field conditions following the early June soaking and May's above-average rainfall. Rainfall averaged 10mm for this past week. Persistent wetness increased the potential for fungal diseases to develop in the wheat crop. May rainfall was above normal in citrus and coffee areas of Sao Paulo and Minas Gerais. However, June dryness favors harvesting of these crops. In Argentina, mostly dry weather in the major summer crops promoted rapid harvesting and winter wheat planting. May rainfall averaged above normal in the major wheat areas of southern and northwestern Buenos Aires, eastern LaPampa, southern Córdoba, and extreme southern Santa Fe, providing favorable preseason topsoil moisture. Wheat planting is well underway throughout the region and is usually completed by early July.



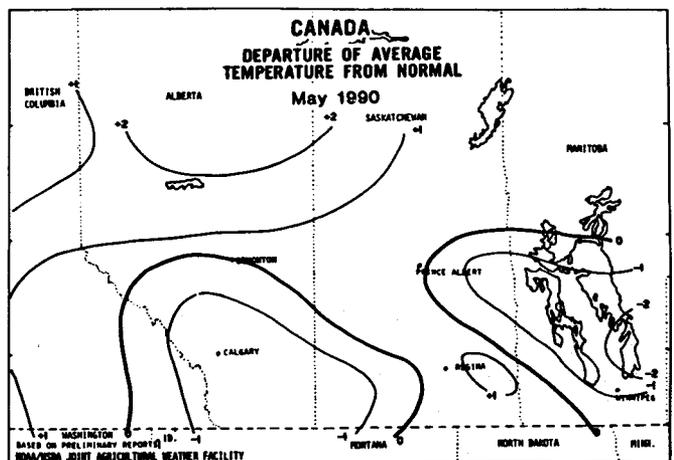
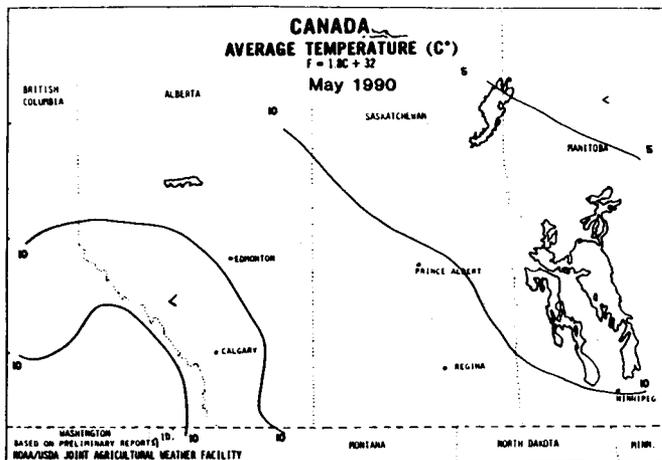
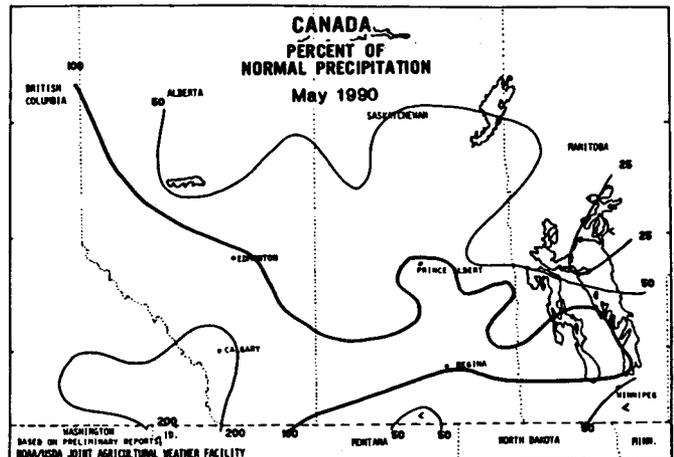
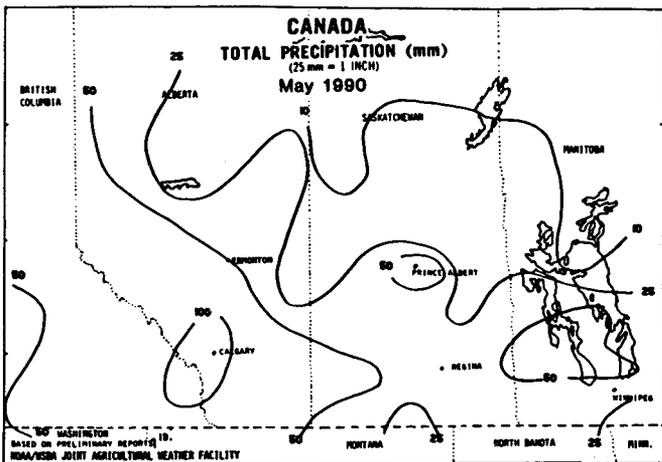


MEXICO ... Periodic showers over central Mexico maintained favorable moisture for corn growth in the Southern Plateau. Scattered showers in the north brought some much needed moisture for pastures and crops but unrelenting heat continued to impose severe stress on crops and livestock. Daily high temperatures persistently reached the mid to upper 30's C throughout northern portions of the country, with 40-41 degrees C common in the northwest. The heat will further aggravate low reservoir levels in that region. Near- to above-normal May rainfall throughout the Southern Plateau corn belt and north-central Mexico provided a favorable start of the wet season for emerging crops. The west coast farming areas, relying heavily on irrigation reserves, need rain to sustain summer crop development.





CANADA ... Light to moderate rain (10-25mm or more) over crop regions of Alberta, western and southern Saskatchewan, and eastern Manitoba maintained favorable moisture levels for emerging crops but kept fields too wet for replanting near Winnipeg. Heavy rain (46-96mm) in Alberta's Peace River Valley possibly caused local flooding and damage to newly planted crops. Weekly temperatures averaged near to below normal, with local frost again hitting northeastern Saskatchewan. Planting was nearly complete across the Prairies, but crops planted or replanted due to frost or washout this late in the season run a greater risk of frost damage in the fall. In May, precipitation was below normal over many northern and southernmost growing areas and near to above normal elsewhere. However, most of the rain fell the latter half of the month and, in conjunction with persistent below-normal temperatures, resulted in planting delays across the region.



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

Annual subscriptions: domestic \$35, foreign \$50 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

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(Continued from front cover)
Virginia. Thirty tornadoes produced damage in the upper **Mississippi Valley** and **northern** and **central Plains.** **Warrensburg, MO** was drenched with 4.5 inches on Thursday morning, while **Shadyside, OH** was inundated with 5.5 inches in 3 hours on Thursday night, causing a flash flood and at least 21 deaths. At week's end, torrential rains brought more flooding across **central Iowa.**

NOAA/USDA Joint Agricultural
Weather Facility
Room 5844 USDA South Building
Washington, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

WEEKLY NEWS BULLETIN
SECOND CLASS

SECOND CLASS MAIL
POSTAGE AND FEES PAID
NOAA PERMIT NO.
ISSN 0043 1974