

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

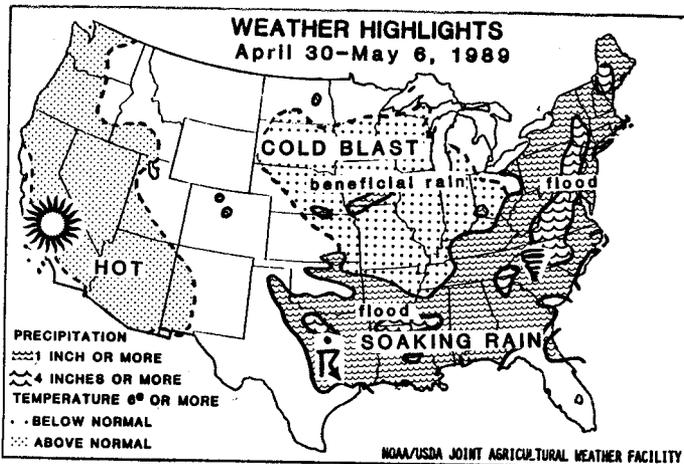
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May 9, 1989

National Weather Summary

April 30 - May 6, 1989



HIGHLIGHTS: Two slow moving weather systems brought heavy rain and severe weather across the Gulf and Atlantic Coast States. Intense thunderstorms spawned tornadoes from the southern Plains into the Southeast. Beneficial showers were scattered across the Corn Belt. A large, cold high pressure system moved into the central portions of the country at week's end and dropped temperatures below freezing in the North Central States. Hot, dry weather remained over the Southwest.

SUNDAY: Showers and thunderstorms associated with a slow moving frontal system soaked much of the East. Strong thunderstorms dropped large hail across north-central Texas. Snow was scattered in the central Rockies, while a Pacific front spread rain into northern California and Oregon. Cold air continued to push into the North Central United States.

MONDAY: May Day showers and thunderstorms drenched the Atlantic Coast States as the weather system shifted eastward. Needed rain showers moved across the western Corn Belt. Morning temperatures dipped into the teens in western Nebraska.

TUESDAY: Showers continued along the eastern seaboard as the weather system moved into the Atlantic. Heavy rain fell across New England. Strong thunderstorms rumbled through northeastern Texas as rain spread from the eastern portions of the central and southern Plains into the Mississippi Valley. Showers were scattered over the northern and central Rockies.

WEDNESDAY: A large high pressure system gave fair weather to the East, while pulling warm moist Gulf air into the central portions of the country. Widespread rain covered the Great Plains and western Mississippi Valley as severe thunderstorms continued

to strike the southern Plains and spread into the Delta.

THURSDAY: The large area of widespread rain moved eastward as Gulf moisture continued to flow into the Central United States. Intense thunderstorms persisted across the South Central States, producing heavy rain, hail, damaging winds, and tornadoes. Another hot day in the West resulted from an upper air high pressure area over the Pacific coast.

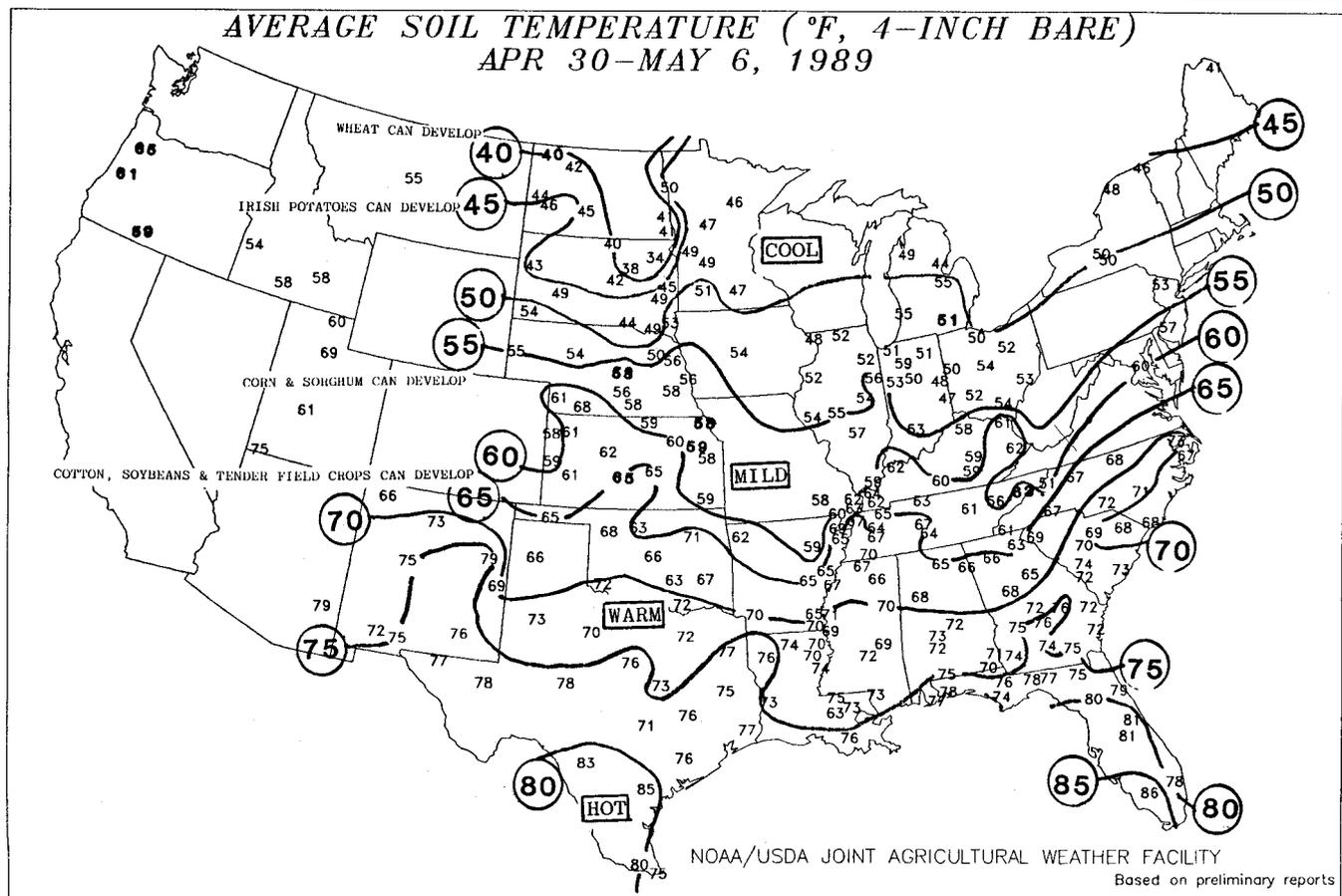
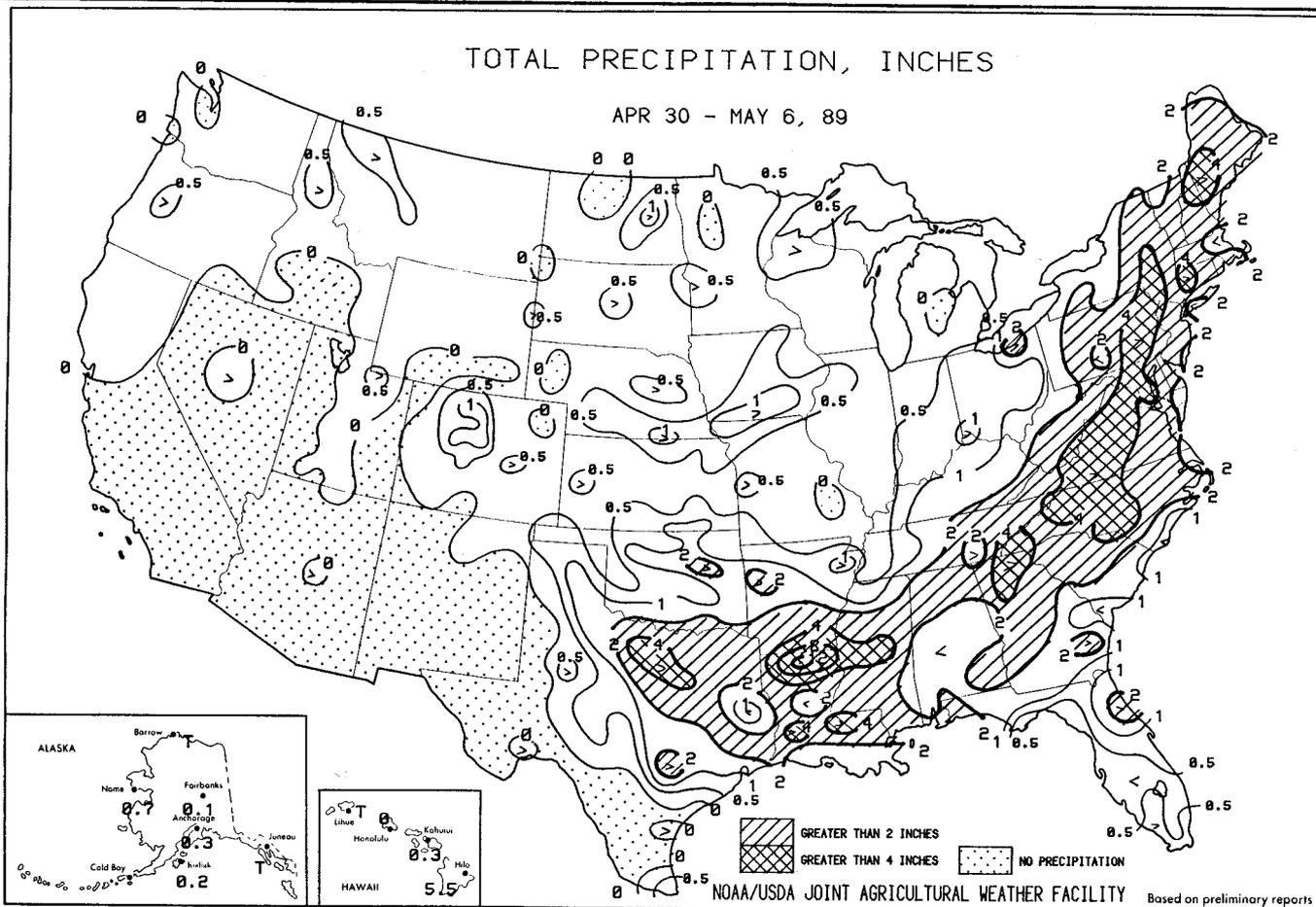
FRIDAY: Rain covered most of the eastern half of the Nation as the frontal system crossed the Mississippi Valley. Severe thunderstorms continued ahead of the system across the Southeast. During the evening, damaging tornadoes touched down over the Piedmont as torrential rain drenched the mid-Atlantic States. Unseasonably cold air poured into the North Central States.

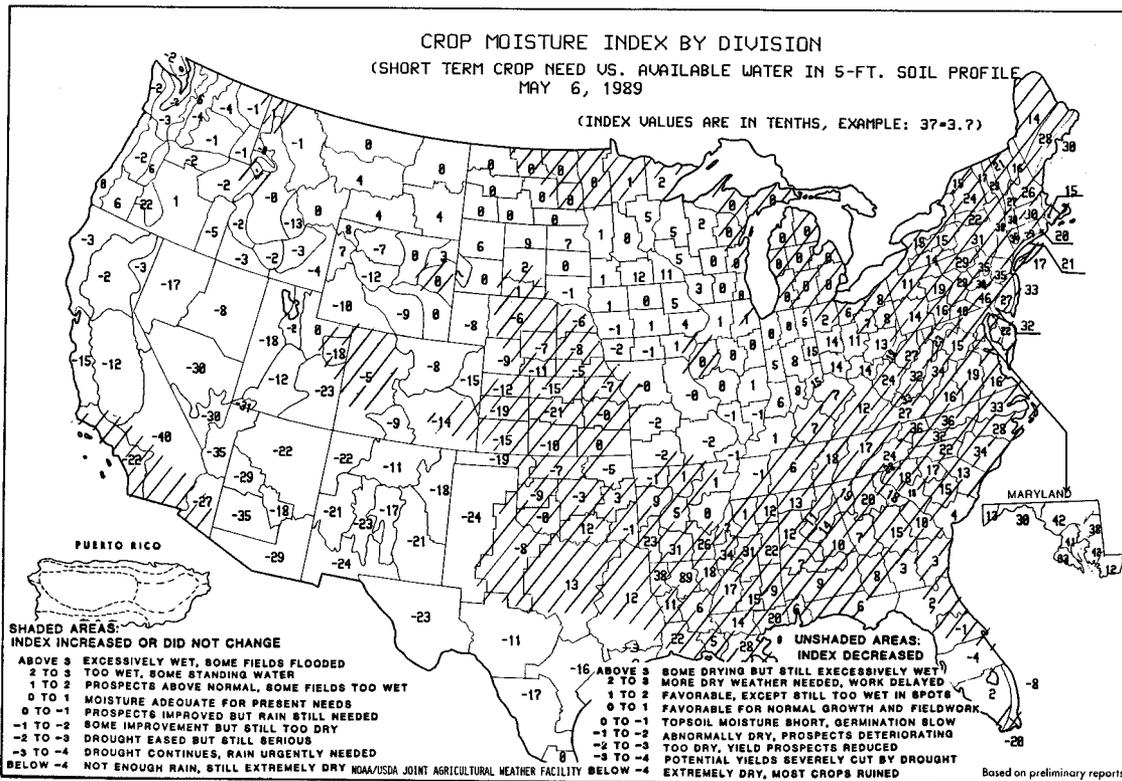
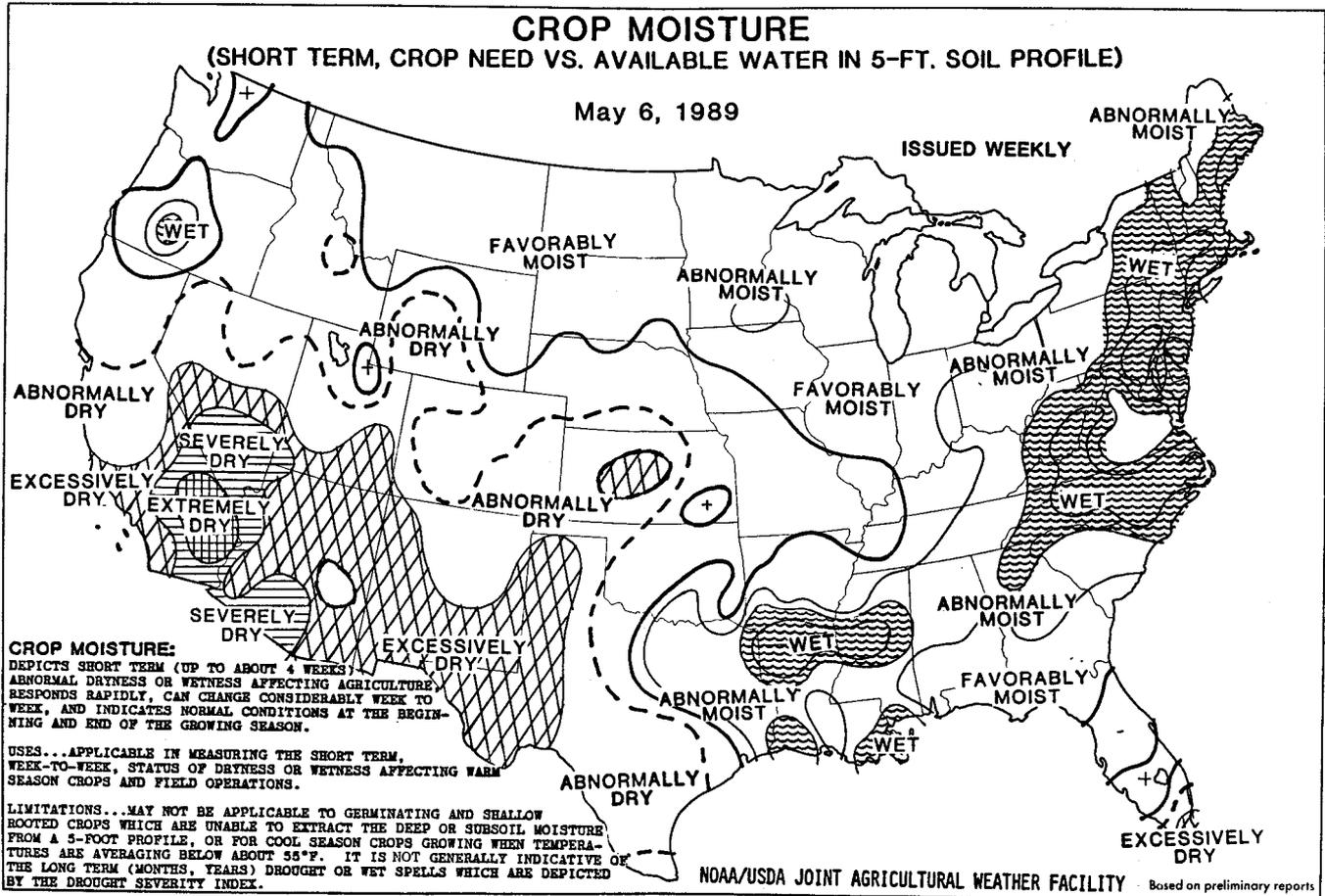
SATURDAY: The frontal system swept through the East as showers, thunderstorms, and locally heavy rain continued along the middle and northern Atlantic Coast States. Rain showers were scattered in the Ohio and Tennessee Valleys, and snow across the upper Great Lakes. A large, cold high pressure mass settled into the Central States as a number of record-low temperatures for the date were reported. Hot weather remained over the Southwest.

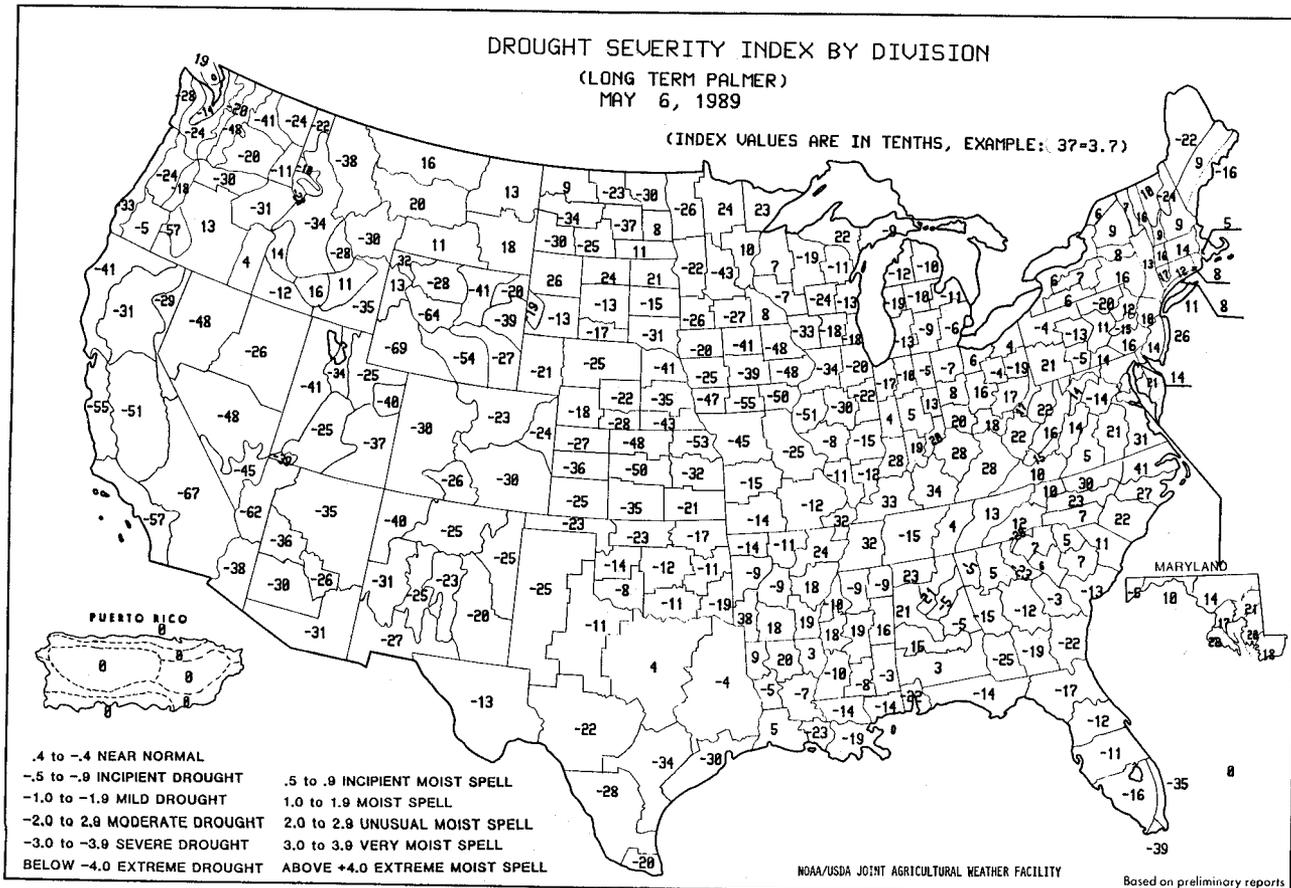
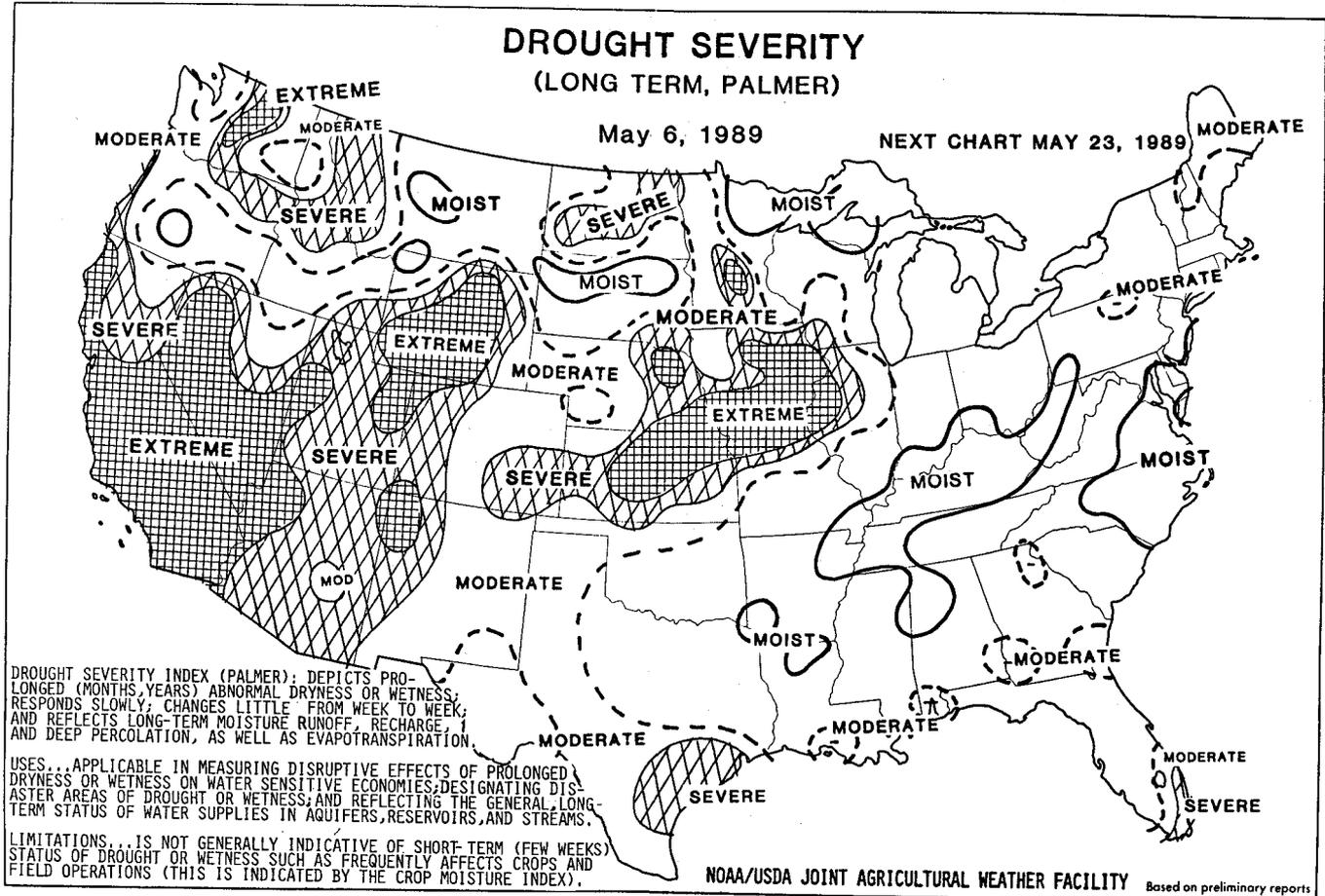
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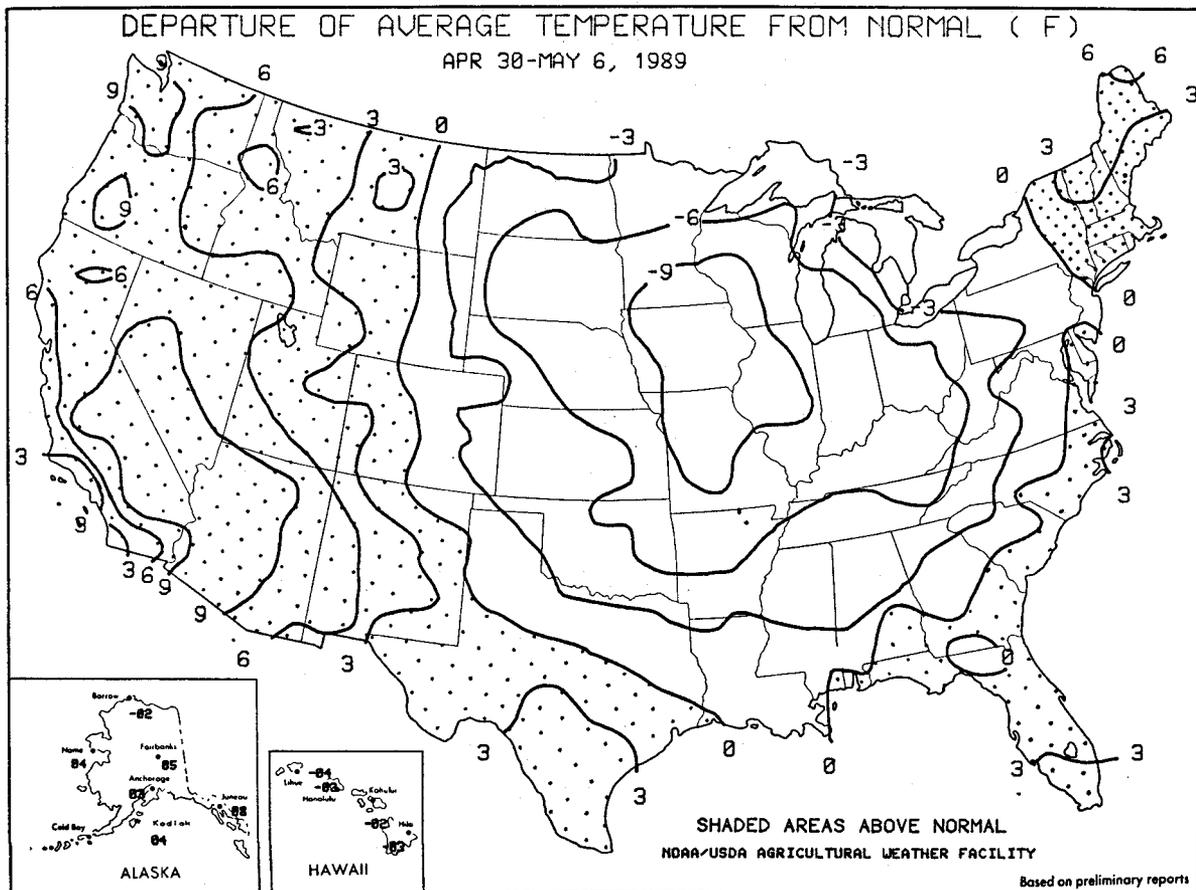
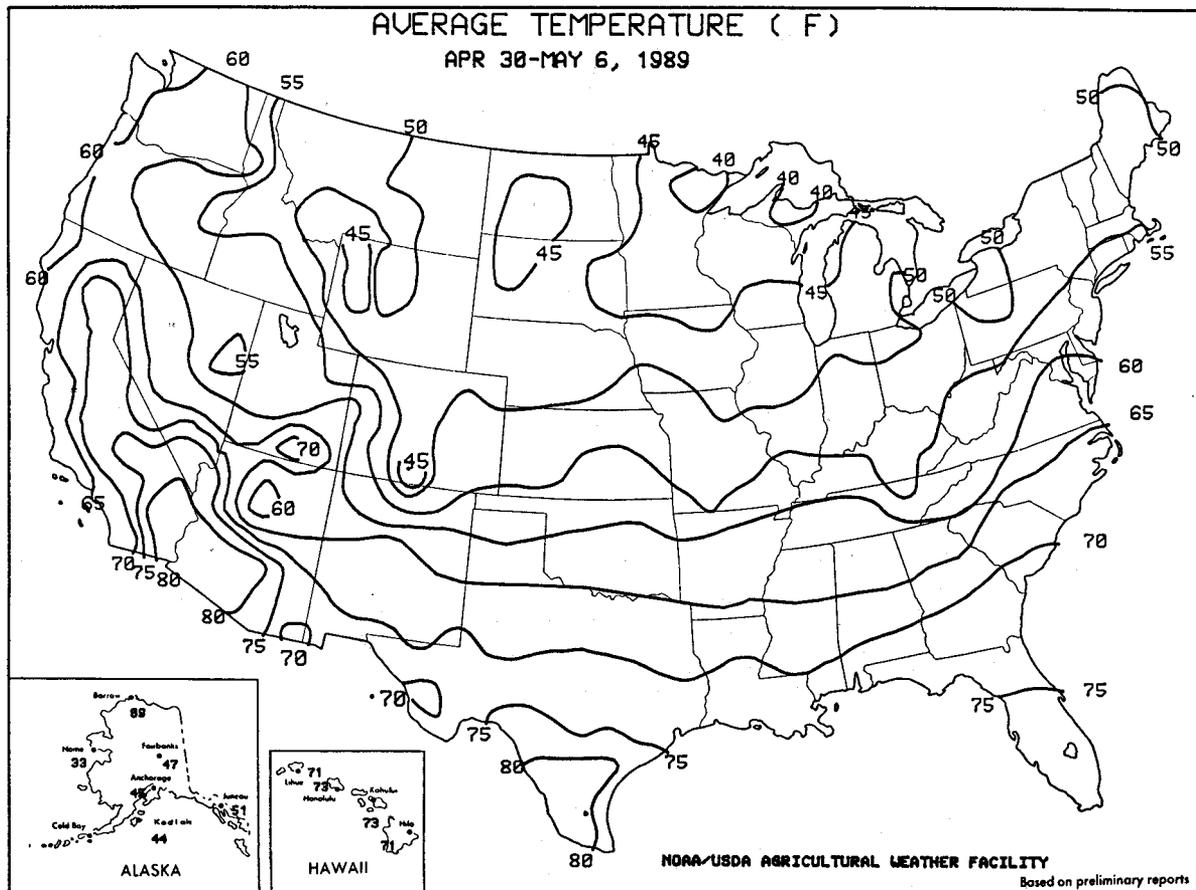
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National Weather Data for Selected Cities

Weather Data for the Week Ending May 6, 1989

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	72	54	82	47	63	-4	1.9	.9	.9	12.4	99	20.6	92	97	50	0	0	5	1
MOBILE	82	61	86	56	72	-1	1.8	.5	1.5	10.8	84	14.4	64	94	44	0	0	4	1
MONTGOMERY	80	57	85	50	69	-1	1.1	.2	1.1	15.6	141	20.5	104	95	44	0	0	3	1
AK ANCHORAGE	53	37	57	33	45	3	.3	.2	.3	1.6	114	2.0	67	78	44	0	0	1	0
BARROW	18	0	23	-5	9	-2	T	0	T	.6	165	.9	120	90	73	0	7	0	0
FAIRBANKS	57	36	63	29	47	5	.1	.1	.1	.3	43	1.8	106	85	37	0	2	2	0
JUNEAU	60	42	71	39	51	8	.4	.4	.4	2.5	36	9.3	65	93	46	0	0	1	0
KODIAK	51	37	56	30	44	4	.2	.2	.2	7.7	90	11.6	60	96	62	0	1	2	0
NOME	36	31	39	28	33	4	.7	.6	.3	2.7	215	5.6	224	98	81	0	5	6	0
AZ PHOENIX	98	68	105	63	83	10	0	0	0	1.1	104	2.3	98	28	11	7	0	0	0
PRESCOTT	83	48	89	41	66	12	0	0	0	.6	24	2.2	40	41	10	0	0	0	0
TUCSON	97	59	104	53	78	8	0	0	0	.6	61	1.8	74	24	7	6	0	0	0
YUMA	100	68	104	65	84	9	0	0	0	.1	45	.7	81	36	12	7	0	0	0
AR FORT SMITH	71	48	77	37	60	-7	2.1	1.0	1.1	8.6	96	18.6	140	94	41	0	0	5	2
LITTLE ROCK	69	52	79	45	61	-7	1.7	.5	.8	11.1	99	22.9	121	81	46	0	0	4	2
CA BAKERSFIELD	90	59	100	51	75	7	0	0	0	.9	53	1.8	50	71	29	3	0	0	0
EUREKA	65	52	73	47	59	8	.4	0	.4	9.7	116	17.3	84	89	73	0	0	1	0
FRESNO	89	59	96	53	74	9	0	0	0	2.3	81	4.0	59	75	26	4	0	0	0
LOS ANGELES	70	57	72	54	63	2	0	0	0	.9	32	3.2	39	95	65	0	0	0	0
REDDING	83	56	93	51	69	4	.2	.2	.2	14.7	181	18.0	79	89	34	3	0	1	0
SACRAMENTO	86	53	94	46	70	8	.1	0	.1	6.3	184	8.3	81	94	34	3	0	1	0
SAN DIEGO	70	58	73	57	64	1	0	0	0	.8	31	1.9	30	90	61	0	0	0	0
SAN FRANCISCO	73	53	78	50	63	7	T	T	T	4.8	112	7.3	61	93	48	0	0	0	0
CO DENVER	65	36	79	27	51	-2	.4	0	.4	1.6	47	3.4	74	87	29	0	2	3	0
GRAND JUNCTION	74	46	86	39	60	3	T	T	T	.8	49	3.1	113	52	17	0	0	2	0
PUEBLO	70	37	81	32	53	-4	T	T	T	.3	15	1.4	57	90	28	0	1	1	0
CT BRIDGEPORT	63	49	72	44	56	2	1.0	.2	.4	8.2	99	12.1	83	85	54	0	0	4	0
HARTFORD	66	46	76	41	56	1	2.9	2.1	1.6	9.3	105	12.0	77	94	50	0	0	4	3
DC WASHINGTON	70	53	79	46	62	-1	3.4	2.6	1.6	11.2	160	16.5	133	90	53	0	0	4	2
FL APALACHICOLA	83	65	87	59	74	2	.3	.3	.3	7.2	92	10.4	69	94	53	0	0	1	0
DAYTONA BEACH	84	64	89	59	74	1	2.6	2.1	1.8	5.8	102	13.3	119	95	48	0	0	2	2
JACKSONVILLE	85	61	89	52	73	0	1.2	.4	.9	5.8	82	9.3	68	93	44	0	0	3	1
KEY WEST	86	74	88	70	80	1	.7	.2	.7	3.2	99	3.9	57	85	63	0	0	2	1
MIAMI	86	74	90	69	80	3	.6	0	0	3.1	50	4.4	44	87	54	1	0	2	1
ORLANDO	87	66	89	61	76	1	.9	.3	.7	3.8	63	7.8	69	93	41	0	0	2	1
TALLAHASSEE	84	58	88	49	71	0	1.8	.7	1.4	9.7	91	13.1	65	97	46	0	0	3	1
TAMPA	87	67	89	58	77	2	.2	0	0	2.7	47	4.6	43	91	46	0	0	1	0
WEST PALM BEACH	85	71	89	66	78	2	.2	0	0	8.6	127	10.6	88	88	56	0	0	2	0
GA ATLANTA	74	56	82	47	65	-1	4.1	3.1	2.9	12.4	112	19.3	94	92	48	0	0	5	2
AUGUSTA	80	55	86	46	67	0	1.8	1.0	1.7	11.4	128	16.1	96	96	42	0	0	2	1
MACON	79	57	84	48	68	-2	2.3	1.4	1.7	12.8	136	19.2	106	97	45	0	0	3	1
SAVANNAH	81	61	86	52	71	1	.9	0	0	5.8	75	7.0	49	96	46	0	0	1	1
HI HILO	76	66	78	64	71	-2	5.5	3.0	5.2	44.8	156	78.8	153	96	65	0	0	4	1
HONOLULU	82	64	85	60	73	-3	0	0	0	3.8	73	12.4	106	80	46	0	0	0	0
KAHULUI	79	66	83	60	72	-2	.3	.1	.2	18.6	471	25.5	234	83	51	0	0	3	0
LIHUE	77	64	78	59	71	-4	T	T	T	10.8	128	29.2	160	82	55	0	0	1	0
ID BOISE	74	43	91	38	59	5	T	T	T	3.9	163	6.2	122	76	21	1	0	0	0
LEWISTON	75	50	84	43	62	7	.1	0	0	2.5	103	4.3	91	70	30	0	0	2	0
POCATELLO	70	36	84	29	53	3	T	T	T	3.2	141	5.2	124	75	19	0	1	0	0
IL CHICAGO	57	39	67	31	48	-7	.3	0	0	3.3	47	4.9	50	89	38	0	1	5	0
MOLINE	56	38	66	32	47	-10	.7	0	0	6.1	82	8.5	82	88	50	0	1	2	1
PEORIA	57	38	65	32	48	-10	.2	0	0	5.7	77	7.9	76	91	42	0	1	2	0
QUINCY	60	39	70	32	50	-10	.1	0	0	3.3	42	4.6	43	93	42	0	1	2	0
ROCKFORD	56	38	65	29	47	-8	.3	0	0	3.7	49	5.2	51	92	43	0	1	3	0
SPRINGFIELD	59	40	66	35	49	-10	.3	0	0	7.5	97	9.6	87	94	41	0	0	2	0
IN EVANSVILLE	64	44	73	37	54	-8	.8	0	0	11.4	120	21.8	140	91	41	0	0	4	1
FORT WAYNE	58	38	65	32	48	-7	.5	0	0	8.8	74	8.4	75	90	41	0	1	4	0
INDIANAPOLIS	59	41	65	35	50	-8	.8	0	0	5.3	111	11.9	92	93	44	0	0	4	1
SOUTH BEND	59	39	66	32	49	-6	.1	0	0	5.2	69	7.9	65	89	38	0	1	2	0
IA DES MOINES	59	37	69	31	48	-9	.9	0	0	3.1	51	5.5	67	89	42	0	1	4	1
STOUC CITY	60	37	71	32	48	-9	.2	0	0	1.9	42	3.3	53	86	34	0	1	2	0
WATERLOO	56	34	66	28	45	-10	.3	0	0	3.6	55	5.0	60	93	43	0	5	1	0
KS CONCORDIA	65	40	74	32	52	-7	.6	0	0	1.4	29	2.5	40	89	32	0	1	5	0
DODGE CITY	69	40	77	32	54	-6	.4	0	0	1.7	43	2.2	46	91	29	0	1	1	0
GOODLAND	67	35	76	24	51	-4	.1	0	0	1.2	43	1.5	45	85	26	0	3	1	0
TOPEKA	65	41	76	36	53	-8	.6	0	0	2.4	72	6.4	81	92	36	0	0	6	0
WICHITA	69	44	78	37	56	-5	.2	0	0	1.1	54	3.9	59	86	32	0	0	3	0
KY BOWLING GREEN	65	47	76	41	56	-7	1.6	.7	.9	9.4	89	26.5	139	97	50	0	0	3	2
LEXINGTON	62	44	72	34	53	-7	.8	0	0	5.9	98	23.6	143	97	51	0	0	4	1
LOUISVILLE	63	45	70	38	54	-8	.8	0	0	11.2	116	23.9	147	90	44	0	0	3	0
LA ALEXANDRIA	79	63	84	58	71	0	2.0	.7	1.2	10.2	88	24.4	118	85	54	0	0	3	2
BATON ROUGE	81	61	85	58	71	-1	3.9	2.7	3.9	10.9	97	16.4	79	90	51	0	0	3	1
LAKE CHARLES	82	62	87	58	72	0	2.0	.8	1.0	9.0	112	14.2	89	96	57	0	0	4	1
NEW ORLEANS	82	61	86	58	71	-1	1.7	.6	1.2	10.9	108	13.6	67	99	53	0	0	4	1

Based on 1951-80 normals

Weather Data for the Week Ending May 6, 1989

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
SHREVEPORT	77	58	82	55	67	-3	3.8	2.6	2.8	8.6	91	19.9	118	92	47	0	0	3	2	
ME CARIBOU	61	40	71	33	51	6	1.1	.5	.7	4.7	86	8.1	81	92	43	0	0	3	1	
PORTLAND	56	43	70	38	50	1	3.3	2.5	1.7	8.3	98	11.9	75	96	67	0	0	5	2	
MD BALTIMORE	68	50	77	40	59	0	3.5	2.7	1.6	10.8	141	17.3	127	93	56	0	0	4	2	
SALISBURY	70	51	75	46	60	0	1.2	.4	.4	11.7	148	16.2	111	93	62	0	0	5	0	
MA BOSTON	62	46	72	44	54	0	1.4	.5	.8	7.8	91	10.9	67	87	54	0	0	5	1	
CHATHAM	56	45	64	43	50	1	1.6	.7	.7	11.1	127	16.3	94	93	75	0	0	5	1	
MI ALPENA	59	35	71	30	47	0	.1	-.5	-.1	4.9	99	6.9	87	91	38	0	1	4	0	
DETROIT	59	40	67	36	50	-4	.2	-.4	-.1	4.6	74	6.7	69	93	45	0	0	4	0	
FLINT	61	38	68	32	50	-2	.1	-.6	-.1	3.7	65	5.5	64	89	43	0	1	2	0	
GRAND RAPIDS	56	36	67	29	46	-7	-.1	-.6	-.1	4.3	64	6.3	61	90	41	0	1	1	0	
HOUGHTON LAKE	56	39	67	29	47	-2	-.1	-.6	-.1	4.0	80	5.7	73	74	38	0	1	1	0	
LANSING	58	36	66	29	47	-5	-.1	-.5	-.1	3.6	63	5.4	62	87	43	0	1	0	0	
MARQUETTE	48	28	63	20	38	-7	.1	-.8	-.1	4.5	62	7.9	71	93	52	0	6	3	0	
MUSKOGON	54	36	66	32	45	-7	.1	-.5	-.1	2.8	45	5.4	53	92	43	0	1	3	0	
SAULT ST. MARIE	55	32	68	29	44	-1	.2	-.4	-.2	4.5	92	8.6	98	91	42	0	4	2	0	
MN ALEXANDRIA	54	32	68	25	43	-8	.3	-.3	-.3	2.9	75	3.8	71	90	43	0	3	2	0	
DULUTH	53	29	68	19	41	-5	.7	-.1	-.6	4.2	95	6.4	99	88	42	0	5	4	1	
INT'L FALLS	54	28	70	19	41	-5	.2	-.2	-.1	1.6	51	3.3	71	90	37	0	6	3	0	
MINNEAPOLIS	54	34	67	25	44	-9	.3	-.3	-.3	5.1	121	6.7	114	86	40	0	4	2	0	
ROCHESTER	52	33	65	22	43	-9	.3	-.5	-.2	5.4	110	6.2	97	89	47	0	3	2	0	
MS GREENWOOD	72	56	80	50	64	-5	1.9	.7	1.1	8.8	69	22.5	100	90	54	0	0	4	2	
JACKSON	76	56	82	51	66	-3	3.7	2.5	3.2	10.4	84	17.3	80	97	48	0	0	2	2	
MERIDIAN	75	55	82	49	65	-4	1.7	.6	1.4	14.5	112	21.5	95	96	49	0	0	5	1	
MO CAPE GIRARDEAU	66	48	72	39	57	-1	.2	-.9	-.2	8.3	79	22.2	135	83	41	0	0	1	0	
COLUMBIA	63	38	72	34	51	-10	.2	-.8	-.2	5.1	63	8.0	68	90	41	0	0	1	0	
KANSAS CITY	63	41	74	34	52	-10	.5	-.5	-.3	4.1	60	5.7	62	88	40	0	0	4	0	
SAINT LOUIS	64	44	71	38	54	-8	.1	-.7	-.1	6.8	91	10.8	95	84	36	0	0	2	0	
SPRINGFIELD	63	40	70	32	52	-10	.3	-.7	-.2	5.4	65	8.9	74	92	44	0	1	3	0	
MT BILLINGS	64	39	82	28	52	1	.2	-.3	-.1	4.6	136	6.4	128	86	29	0	2	3	0	
GLASGOW	63	35	81	26	49	-2	.3	0	-.2	2.2	177	3.5	182	85	28	0	3	2	0	
GREAT FALLS	65	39	79	25	52	2	.5	0	.4	4.3	153	6.4	143	81	32	0	1	2	0	
HAVRE	64	38	80	27	51	0	-.3	0	-.3	2.1	107	2.9	96	75	36	0	2	1	0	
HELENA	66	38	81	28	52	4	.2	-.2	.1	2.2	112	4.5	144	80	30	0	2	3	0	
KALISPELL	65	37	76	29	51	3	.9	.5	.8	3.6	164	6.2	129	91	39	0	2	3	1	
MILES CITY	59	35	78	23	47	-5	.1	-.4	-.1	5.0	214	6.3	180	78	38	0	2	1	0	
MISSOULA	69	38	83	29	54	5	.1	-.2	0	3.2	153	4.4	103	83	29	0	2	3	0	
NE GRAND ISLAND	62	35	73	28	49	-8	.3	-.5	-.2	.8	16	2.1	35	89	32	0	2	3	0	
LINCOLN	63	38	73	31	50	-8	.3	-.5	-.2	.8	15	2.8	39	90	37	0	1	5	0	
NORFOLK	61	35	71	30	48	-8	.4	-.3	-.2	2.2	52	4.0	72	91	33	0	2	3	0	
NORTH PLATTE	65	30	73	19	48	-6	.8	-.2	.7	1.3	36	2.6	59	89	25	0	4	2	1	
OMAHA	60	39	70	33	50	-9	.3	-.6	-.1	2.9	52	4.4	61	86	43	0	0	3	0	
SCOTT'SBLUFF	65	30	80	22	48	-5	-.1	-.5	-.1	1.5	51	2.5	68	82	24	0	4	1	0	
VALENTINE	62	29	70	15	45	-8	.2	-.4	-.1	1.4	44	2.1	56	80	29	0	5	2	0	
NV ELY	74	33	82	21	53	7	-.1	-.2	-.1	.6	29	1.5	45	62	20	0	3	0	0	
LAS VEGAS	95	64	100	55	79	10	0	-.1	0	.1	8	.6	40	26	14	5	0	0	0	
RENO	79	46	87	40	62	11	0	-.2	0	.5	38	1.5	43	65	17	0	0	0	0	
WINNEMUCCA	78	41	89	31	60	9	0	-.2	0	1.1	70	2.0	65	63	17	0	1	0	0	
NH CONCORD	63	42	74	32	52	2	3.0	2.4	1.8	8.6	131	11.4	97	95	51	0	1	5	2	
NJ ATLANTIC CITY	66	48	74	41	57	1	1.3	.6	.5	10.5	135	16.4	112	95	58	0	0	4	1	
NM ALBUQUERQUE	82	48	88	42	65	5	0	-.1	0	.5	49	1.4	82	38	9	0	0	0	0	
CLOVIS	78	46	90	42	62	0	-.1	-.4	-.1	.3	18	1.0	39	87	29	1	0	0	0	
ROSWELL	85	51	95	46	68	3	0	-.1	0	.3	34	1.1	65	58	17	3	0	0	0	
NY ALBANY	64	47	74	40	56	3	2.6	1.9	.8	7.9	122	10.0	90	92	48	0	0	4	4	
BINGHAMTON	57	42	72	35	49	-2	2.5	1.8	1.1	7.9	120	11.4	100	95	58	0	0	5	3	
BUFFALO	55	42	65	37	49	-3	1.7	1.0	.7	6.7	102	11.1	93	94	55	0	0	5	2	
NEW YORK	65	50	73	47	58	0	1.9	1.1	.8	9.2	108	14.5	99	86	50	0	0	5	2	
ROCHESTER	58	43	67	38	51	-2	1.7	1.1	.8	7.0	125	9.7	95	95	57	0	0	4	2	
SYRACUSE	60	43	70	39	52	-1	1.7	.9	.7	6.3	90	9.1	74	96	58	0	0	5	2	
NC ASHEVILLE	66	45	77	33	56	-5	3.4	2.5	1.9	9.4	104	15.6	101	96	51	0	0	5	2	
CHARLOTTE	75	56	86	50	65	0	3.4	2.6	1.8	10.7	122	17.0	104	88	45	0	0	4	2	
GREENSBORO	72	50	81	39	61	-2	5.0	4.3	3.3	13.9	183	19.4	134	93	48	0	0	3	2	
HATTERAS	75	61	81	50	68	4	2.0	1.2	1.6	22.7	289	29.2	174	91	58	0	0	4	1	
NEW BERN	79	58	86	48	69	2	2.3	1.4	1.0	12.7	172	19.3	126	96	48	0	0	5	2	
RALEIGH	75	52	84	41	63	-1	2.9	2.1	1.3	13.0	180	20.8	146	97	50	0	0	5	2	
WILMINGTON	79	59	84	45	69	1	.7	-.1	-.3	15.0	194	19.2	130	95	50	0	0	3	0	
ND BISMARCK	59	28	67	17	44	-7	-.1	-.4	-.1	2.2	88	3.0	88	91	29	0	5	2	0	
FARGO	58	33	70	25	46	-5	-.1	-.5	-.1	2.5	82	4.6	114	90	28	0	2	1	0	
GRAND FORKS	58	32	70	23	45	-4	.1	-.3	-.1	1.5	63	3.3	89	78	27	0	4	2	0	
WILLISTON	61	31	78	26	46	-4	-.1	-.3	-.1	2.0	94	3.4	110	97	32	0	5	1	0	
OH AKRON-CANTON	68	42	68	36	50	-4	.9	.1	.3	7.2	99	11.5	96	96	54	0	0	6	0	
CINCINNATI	60	41	68	34	51	-9	1.0	.2	.5	12.6	154	20.5	146	96	49	0	0	5	0	
CLEVELAND	59	43	66	37	51	-3	2.3	1.6	.7	8.9	128	12.7	110	98	53	0	0	7	3	
COLUMBUS	60	41	69	35	51	-7	.9	.1	.3	8.4	115	13.4	110	97	47	0	0	5	0	

Weather Data for the Week Ending May 6, 1989

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 Mar 1	PCT. NORMAL SINCE Mar 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
DAYTON	59	42	67	34	50	-7	1.0	.2	.4	13.5	189	18.9	160	91	48	0	0	5	0
TOLEDO	60	38	69	32	49	-5	.7	0	.3	6.2	101	8.8	88	91	40	0	1	3	1
YOUNGSTOWN	59	42	69	36	50	-3	1.1	.4	.6	6.3	86	10.2	83	96	46	0	0	6	0
OK OKLAHOMA CITY	72	51	78	46	61	-4	.4	-.7	.4	3.2	53	6.5	80	80	36	0	0	2	0
TULSA	70	50	76	45	60	-6	.5	-.6	.4	4.0	49	9.2	82	85	37	0	0	2	0
OR ASTORIA	68	48	73	39	58	8	T	-.8	T	12.4	98	27.2	88	94	60	0	0	0	0
BURNS	68	38	80	30	53	5	T	-.1	T	4.1	237	4.7	109	83	33	0	2	1	0
MEDFORD	76	52	85	46	64	9	.4	.1	.4	6.4	205	9.3	108	90	38	0	0	1	0
PENDLETON	73	49	79	42	61	6	.2	0	.1	3.5	159	6.8	135	78	41	0	0	2	0
PORTLAND	76	52	81	45	64	10	.1	-.4	0	8.9	141	15.0	92	91	43	0	0	3	0
SALEM	73	46	81	39	60	7	.1	-.4	1	7.6	107	13.9	75	96	47	0	0	3	0
PA ALLENTOWN	66	45	77	37	56	0	3.7	2.9	1.5	8.8	104	12.8	86	95	50	0	0	5	3
ERIE	66	44	66	38	50	-2	.8	.1	.4	7.5	107	12.4	108	91	54	0	0	4	0
HARRISBURG	66	47	79	39	57	-1	4.2	3.4	2.2	8.9	120	13.1	100	94	52	0	0	4	2
PHILADELPHIA	68	48	74	41	58	-1	3.7	3.0	2.5	10.4	132	16.1	116	92	55	0	0	4	2
PITTSBURGH	61	44	75	36	53	-3	1.7	.9	1.1	8.7	115	14.1	110	97	49	0	0	6	1
SCRANTON	62	45	75	37	54	-1	4.4	3.8	1.7	7.6	122	10.4	99	94	49	0	0	4	3
RI PROVIDENCE	63	47	68	43	55	1	3.0	2.1	1.3	11.3	128	15.0	90	92	59	0	0	5	2
SC CHARLESTON	81	62	87	55	72	3	1.3	.5	.6	9.0	119	12.2	86	93	47	0	0	3	2
COLUMBIA	79	56	88	47	68	-1	2.8	2.0	2.1	12.0	126	17.1	96	99	42	0	0	4	2
FLORENCE	79	58	86	48	69	0	2.2	1.5	1.5	11.3	147	15.8	108	95	42	0	0	2	2
GREENVILLE	73	50	82	42	62	-4	2.2	1.4	.9	9.5	85	15.9	80	97	50	0	0	4	2
SD ABERDEEN	58	35	69	26	46	-6	.1	-.4	.1	4.9	147	5.8	131	86	36	0	3	1	0
HURON	57	31	68	25	44	-9	.2	-.3	.2	4.0	109	5.0	105	95	38	0	5	3	0
RAPID CITY	59	30	72	24	44	-7	.1	-.4	0	2.5	73	2.9	65	88	38	0	5	4	0
SIOUX FALLS	57	32	68	28	45	-9	.2	-.4	.2	2.9	64	3.6	61	89	37	0	5	2	0
TN CHATTANOOGA	69	52	84	42	61	-4	1.8	.9	1.2	11.6	99	24.1	111	96	50	0	0	5	1
KNOXVILLE	67	48	84	40	58	-7	2.4	1.6	1.3	9.5	94	20.7	110	98	55	0	0	5	2
MEMPHIS	71	55	80	46	63	-3	.1	-.2	0	8.0	65	26.4	125	86	45	0	0	2	0
NASHVILLE	68	52	80	46	60	-5	1.5	.5	.5	9.1	83	23.0	119	92	46	0	0	5	0
TX ABILENE	82	56	90	48	69	0	.1	-.6	.1	2.5	61	6.1	101	84	37	1	0	2	0
AMARILLO	73	46	80	40	60	-2	.8	.3	.6	1.9	81	2.6	78	91	36	0	0	3	1
AUSTIN	84	65	89	61	75	2	1.5	.6	1.4	6.0	108	10.7	111	94	52	0	0	3	1
BEAUMONT	82	62	88	57	72	-1	2.2	1.1	1.1	7.2	89	14.2	86	98	55	0	0	3	2
BROWNSVILLE	86	71	89	65	78	1	.5	.1	.5	4.0	167	6.0	117	96	58	0	0	1	1
CORPUS CHRISTI	87	70	91	64	78	2	.1	-.5	.1	3.8	119	6.7	108	99	57	1	0	1	0
DEL RIO	88	67	98	58	78	3	0	0	0	1.1	38	3.1	72	75	34	3	0	0	0
EL PASO	89	52	96	42	71	2	0	0	0	.6	124	1.5	111	40	9	4	0	0	0
FORT WORTH	78	57	81	55	68	-2	3.9	2.8	1.9	9.3	127	15.6	143	91	48	0	0	5	2
GALVESTON	80	68	84	64	74	1	.7	0	.6	3.7	69	10.1	94	93	60	0	0	3	1
HOUSTON	83	62	88	56	73	0	2.6	1.6	.9	7.1	98	12.8	91	95	49	0	0	4	3
LUBBOCK	81	49	91	43	65	6	T	-.5	T	.7	32	2.3	70	81	31	1	0	0	0
MIDLAND	87	52	94	43	69	-1	T	-.4	0	.4	23	1.9	72	84	25	3	0	0	0
SAN ANGELO	86	57	93	45	71	0	.7	.2	.6	3.6	122	7.3	164	88	36	3	0	2	1
SAN ANTONIO	87	64	95	59	76	2	T	-.8	T	3.8	81	7.0	87	93	46	2	0	2	0
VICTORIA	87	67	92	63	77	3	T	-.9	T	2.8	60	7.2	82	92	48	2	0	1	0
WACO	82	59	87	57	71	0	3.6	2.5	1.4	7.6	114	12.3	119	94	50	0	0	4	3
WICHITA FALLS	77	52	81	48	65	-4	2.4	1.5	1.6	4.3	76	8.8	118	86	43	0	0	2	2
UT CEDAR CITY	78	41	87	31	60	7	0	-.2	0	.8	37	2.1	57	56	15	0	1	0	0
SALT LAKE CITY	72	46	84	37	59	5	.1	-.3	.1	2.3	54	4.3	63	73	21	0	0	1	0
VT BURLINGTON	64	45	70	40	55	4	1.7	1.1	.8	6.2	113	7.3	80	87	45	0	0	6	2
VA NORFOLK	74	55	80	48	65	1	1.1	.3	.4	13.2	180	22.3	156	91	51	0	0	5	0
RICHMOND	73	52	78	40	63	0	3.7	3.0	1.9	12.7	179	19.0	141	96	54	0	0	5	2
ROANOKE	68	47	82	35	58	-4	4.4	3.7	2.0	9.7	131	13.1	98	96	54	0	0	5	3
WA QUILLAYUTE	68	47	82	40	58	9	.1	-.1	.1	16.0	78	37.8	81	94	53	0	0	2	0
SEATTLE-TACOMA	73	51	81	45	62	9	T	-.4	T	8.6	136	14.8	90	84	43	0	0	0	0
SPOKANE	69	43	80	37	56	5	.1	-.2	.1	3.7	138	5.8	87	87	34	0	0	2	0
YAKIMA	77	44	83	35	60	6	T	-.1	T	1.9	166	2.8	85	87	30	0	0	1	0
WV BECKLEY	62	42	77	33	52	-5	2.6	1.8	1.3	10.2	126	16.4	112	92	57	0	0	5	2
CHARLESTON	64	45	77	37	55	-6	2.9	2.1	1.2	12.8	157	21.8	148	99	58	0	0	5	2
HUNTINGTON	64	45	77	37	55	-7	1.2	.3	.5	10.7	130	23.0	160	93	51	0	0	6	0
PARKERSBURG	64	45	76	37	55	-5	1.0	.3	.5	11.5	152	19.7	151	99	52	0	0	5	0
WI GREEN BAY	54	33	68	26	44	-7	.3	-.4	.2	3.7	71	4.5	61	91	42	0	4	4	0
LACROSSE	54	36	68	26	45	-9	.3	-.4	.3	4.5	81	5.3	72	85	41	0	2	1	0
MADISON	55	36	66	29	45	-8	.3	-.5	.1	3.6	62	4.7	60	89	41	0	2	4	0
MILWAUKEE	53	37	66	30	45	-5	.3	-.3	.2	4.7	73	6.2	67	88	46	0	1	4	0
WAUSAU	53	32	68	23	43	-8	.2	-.6	.2	2.9	54	4.2	57	95	48	0	3	2	0
WY CASPER	62	32	79	21	47	-1	.2	-.2	.2	1.4	49	2.9	76	86	25	0	2	3	0
CHEYENNE	60	33	77	24	46	-1	T	-.5	T	1.0	38	2.5	74	89	28	0	2	2	0
LANDER	65	36	80	29	51	2	.1	-.6	.1	1.5	38	2.3	46	72	21	0	2	1	0
SHERIDAN	62	34	78	22	48	-1	.1	-.5	0	3.9	112	4.8	95	88	34	0	2	2	0
PR SAN JUAN	86	75	86	72	80	0	.7	-.5	.7	4.6	67	8.9	75	90	57	0	0	2	1

April Weather and Crop Summary

HIGHLIGHTS: A stalled frontal system during the latter part of the month was responsible for severe weather but brought much needed rain over the spring wheat regions of the northern Plains, across the Corn Belt, and to the mid-Atlantic coast. At the same time, hot, dry conditions prevailed over the hard red winter wheat in the central and southern Plains. Showers and thunderstorms brought soaking rains into the Southeast and along the Atlantic seaboard throughout the month, while dry weather dominated much of the remainder of the Nation. The West remained abnormally warm.

APRIL 1-8: Slow moving frontal systems brought widespread rain to the eastern half of the Nation. Severe thunderstorms produced heavy rain from the central Gulf coast into the lower Ohio Valley. The flow of moisture off the Pacific kept the Northwest wet during the first half of the period, while showers brought beneficial rain into the western Corn Belt toward the end of the period. The West remained warm as several record-high temperatures for the month were broken in California. Cool weather prevailed over the middle Mississippi Valley and much of the Southeast.

APRIL 9-15: Unseasonably cold air spread over the eastern two-thirds of the Nation early in the week. Temperatures dropped below freezing across the Carolinas and northern Georgia, threatening blooming fruit trees and tender vegetables. Unusual late-season snow fell in North Carolina and southern Virginia. Showers and thunderstorms drenched the Gulf Coast States. A low pressure system moving up the Atlantic coast and an eastward-moving cold front combined to bring soaking rain to the eastern seaboard at week's end. Dry conditions prevailed over the remainder of the Nation, and abnormally warm weather persisted in the West.

APRIL 16-22: The unseasonable hot weather in the West spread into the central portions of the Nation toward the end of the week. Showers and thunderstorms brought scattered rain across the southern Plains, Gulf and Atlantic Coast States, eastern Corn Belt, and Pacific Northwest. Dry conditions again prevailed in the northern and central Plains and western Corn Belt, although beneficial rains fell over eastern Iowa and northwestern Illinois at week's end.

APRIL 23-30: A frontal system remained stationary during much of the period and separated hot, humid air in the central and southern Plains across to the southern Atlantic coast from cool air to the north. Rain showers and thunderstorms developed around the stationary front, bringing severe weather but generally very beneficial rain from the northern Plains, across the Corn Belt, and to the North Carolina Coast. Excessive rain caused severe flooding in central West Virginia, and heavy snow blanketed the northern Rockies and northern High Plains. Showers and thunderstorms soaked much of the East at the end of the period. Cool weather replaced the persistent heat in the Southwest and Great Basin.

Fieldwork

Rain slowed fieldwork in the eastern Corn Belt, Delta, and Southeast during most of April. During the last week of April, needed rain improved soil moisture conditions in the western Corn Belt and northern Great Plains. The central and southern Great Plains remained dry.

Corn planting lagged slightly behind normal during April. By the third week of April, planting was underway in all of the 17 major producing States except Michigan and South Dakota. Rain slowed planting in the Delta and Southeast in early April. Planting progress was slow in the eastern Corn Belt and Southeast late in the month. By month's end, planting was 25 percent (%) complete, 3 percentage points behind the 5-year average. During the last week of April, producers planted over one-third of their acreage in Illinois, Kansas, and Missouri. Planting progress was 13 points and 22 points behind normal in Indiana and Ohio, respectively. In North Carolina, planting advanced 25 points during the last week of the month but was still 29 points behind normal.

Cotton planting progressed at a near normal pace during April. Lack of moisture slowed growth in the Rio Grande Valley of Texas. Rain slowed planting in the Delta and Southeast. At mid-month, planting was more than 10 points behind normal in Alabama, Georgia, North Carolina, and South Carolina. By April 30, planting was 33% complete, 2 points ahead of normal. Rain continued to slow planting in the Southeast but was near or ahead of normal elsewhere. Planting was 24 points and 36 points behind normal in North Carolina and South Carolina, respectively.

By the end of April, sorghum planting was 20% complete, 1 point ahead of normal. Planting was underway in all major producing States except Kansas and South Dakota.

Rice planting was 57% complete, 5 points ahead of normal by the end of April. Twenty-six percent of the crop was emerged, slightly behind normal. Planting progress was normal or ahead of normal except in Louisiana, where planting was 8 points behind normal.

Soybean planting was just getting started as the month ended.

Spring wheat planting advanced slowly during April. By mid-month, planting was more than 10 points behind normal in four of the five major producing States. By the end of April, planting was 26% complete, 22 points behind normal. Planting progress was more than 20 points behind normal in Minnesota, Montana, and North Dakota. Planting progress was near normal in Idaho and South Dakota.

April Weather in Historical Perspective

April 1989 ranks as the third driest April in the modern climatic record, according to preliminary rainfall data averaged across the contiguous United States (fig. 1). This was the fifth consecutive April with rainfall below the long-term mean. The driest of record occurred in 1987. Areally-averaged temperature for the Nation was above the long-term mean and resulted in the 15th warmest April (fig. 2). This was the fifth consecutive April with above-normal temperatures.

Regionally, April had sharp contrasts. Record or near-record temperatures occurred in the West, while the East was generally

cooler than normal. The Southwest region experienced both the hottest and driest April on record (table 1). While April 1989 ranked the third driest for the Nation, it was the wettest April on record in parts of the Northwest and Southeast.

With April rainfall less than 25 percent of normal in Kansas, the cumulative precipitation rankings changed considerably in that State. The October-April total is the second driest on record in this principal wheat-producing State (fig. 3). Only the 1955-56 drought was worse. In Nebraska (not shown in figure 3), the October-April period ranked as the driest since at least 1895.

Figure 1

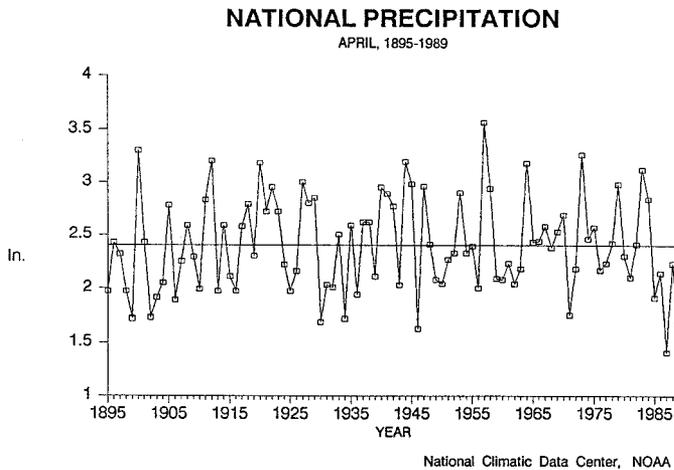


Figure 2

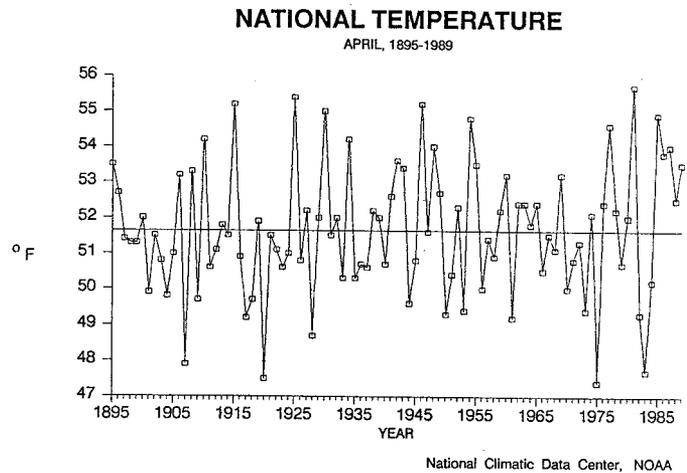
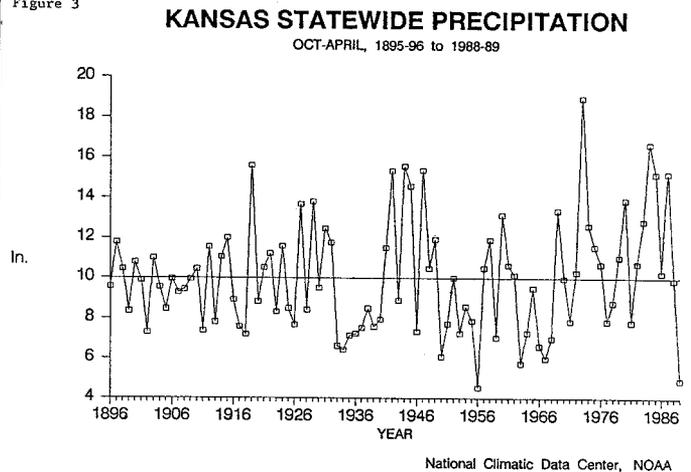
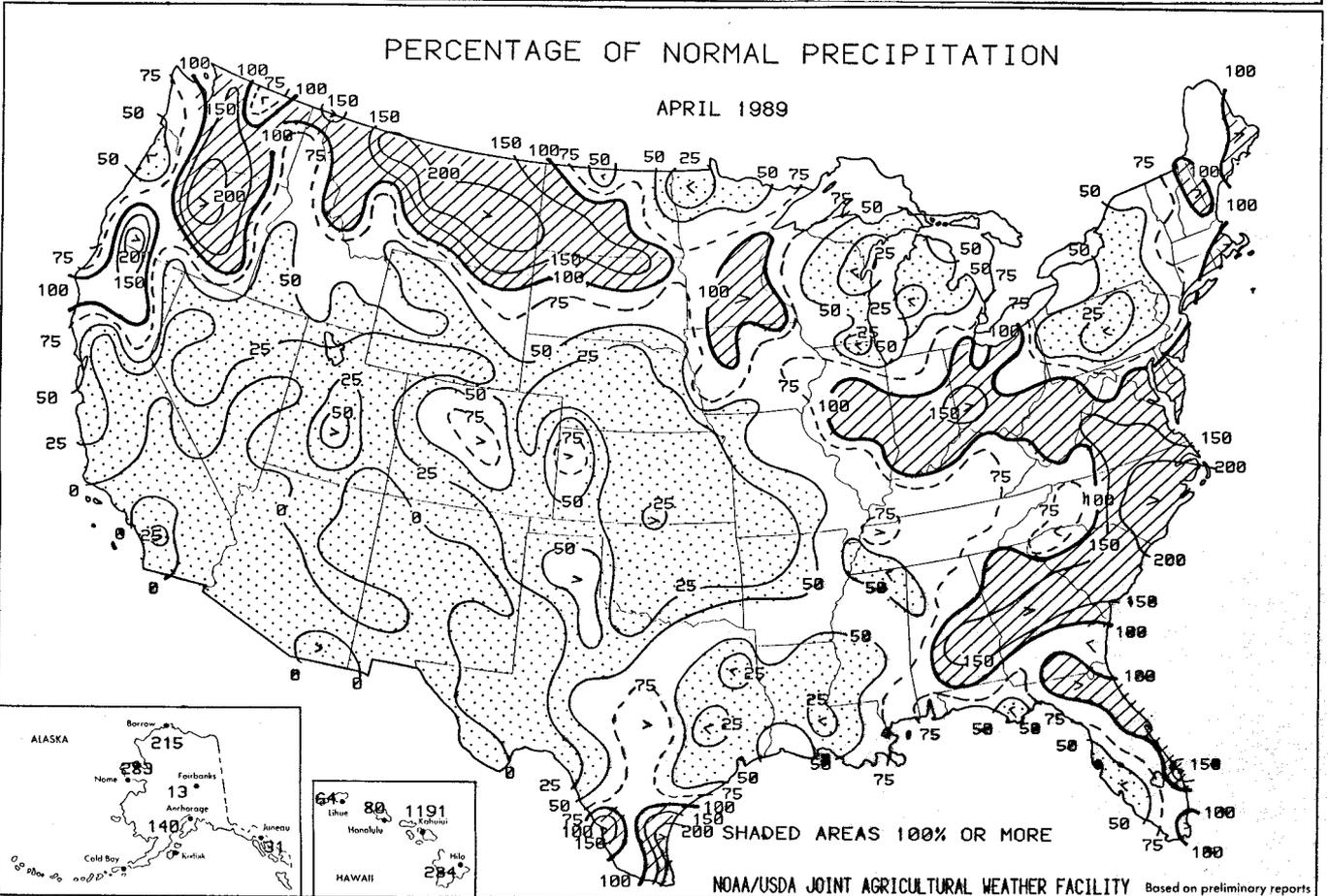
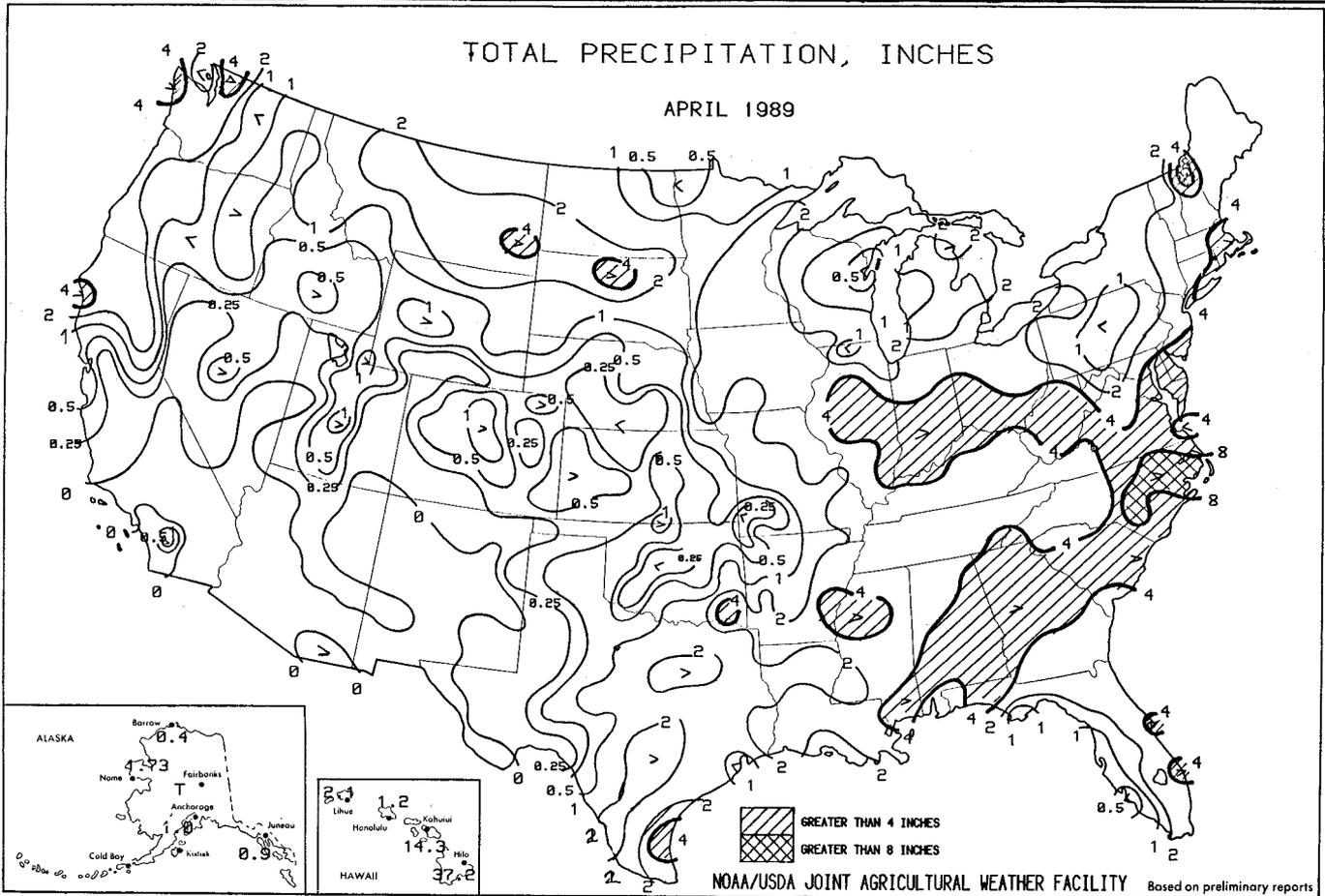


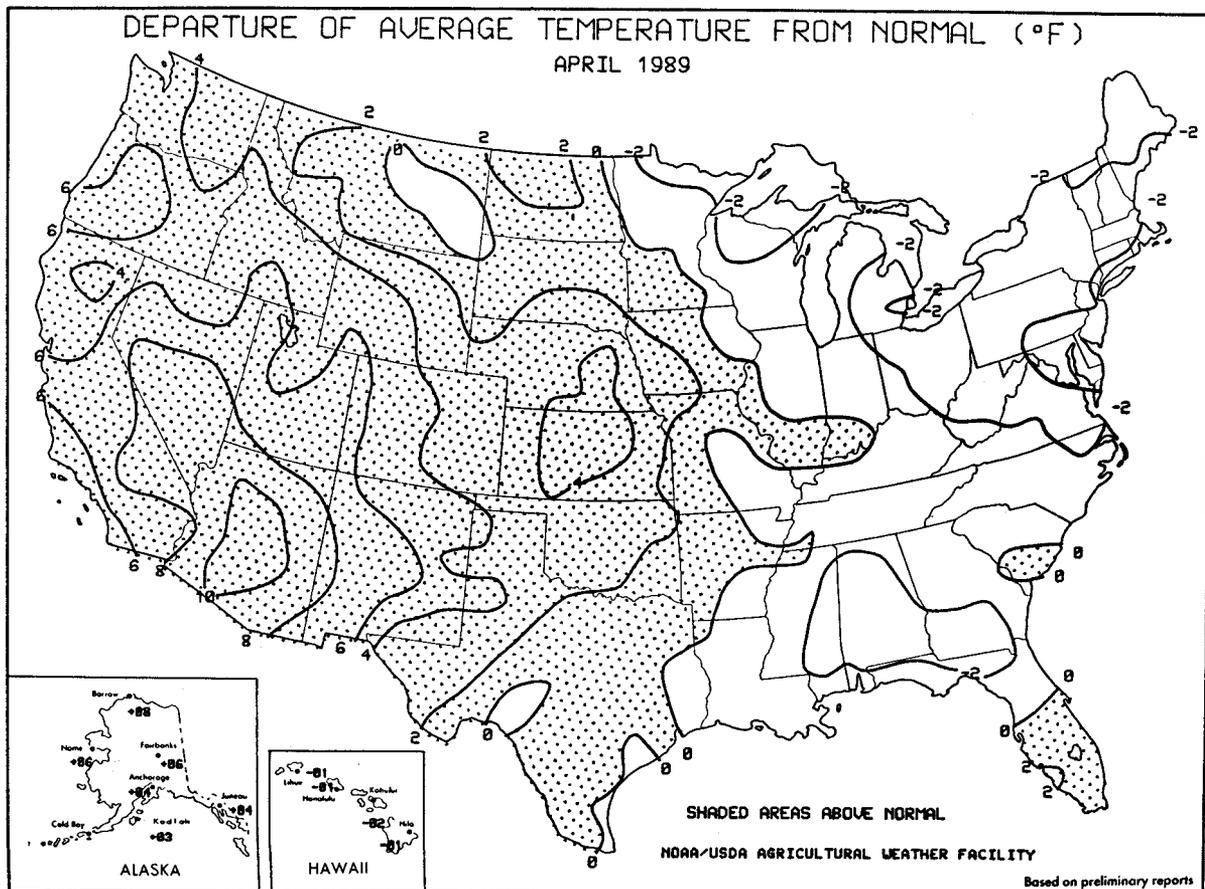
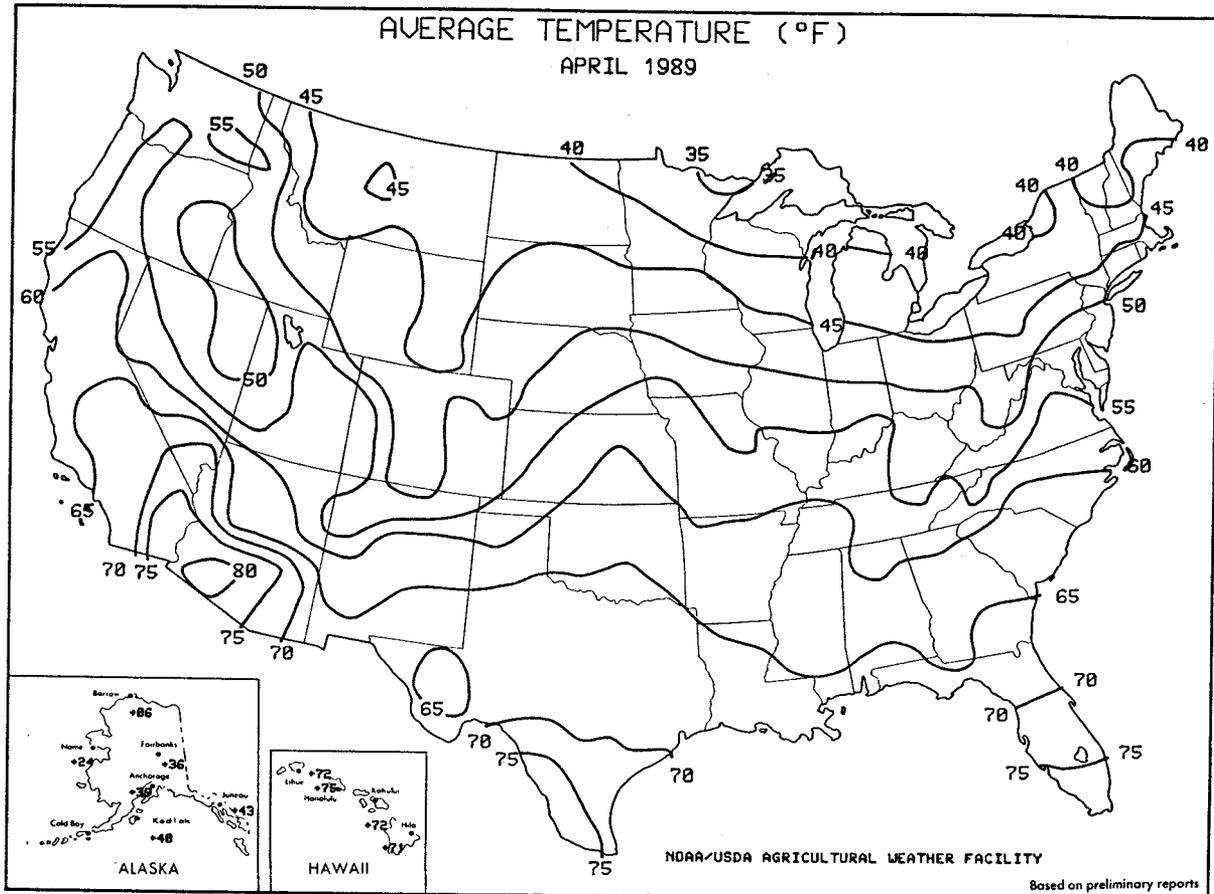
Table 1. Temperature and Precipitation Rankings for April 1989, based on the period 1895-1989. 1 = driest/hottest, 95 = wettest/coldest.

Region	Precipitation	Temperature
National	3	15
Northeast	16	70
East North Central	12	61
Central	25	50
Southeast	62	64
West North Central	32	29
South	2	22
Southwest	1	1
Northwest	83	7
West	6	2

Figure 3







Temperature and Precipitation Data for April 1989

States and Stations				States and Stations				States and Stations						
Temperature °F		Precipitation Inches		Temperature °F		Precipitation Inches		Temperature °F		Precipitation Inches				
Average	Departure	Total	Departure	Average	Departure	Total	Departure	Average	Departure	Total	Departure			
AL BIRMINGHAM	60	-3	3.8	-2.2	BATON ROUGE	67	-1	2.3	-3.3	DAYTON	50	-2	6.5	3.1
MOBILE	66	-2	3.6	-1.8	LAKE CHARLES	67	-1	2.2	-1.6	TOLDO	45	-3	3.5	0.5
MONTGOMERY	63	-2	7.3	2.9	NEW ORLEANS	67	-2	3.2	-1.3	YOUNGSTOWN	44	-3	1.6	-1.9
AK ANCHORAGE	39	4	1.0	0.4	SHREVEPORT	66	0	2.4	-2.3	OK OKLAHOMA CITY	63	3	0.2	-2.7
BARROW	7	8	0.4	0.2	ME CARIBOU	37	0	2.1	-0.5	TULSA	63	2	0.3	-3.8
FAIRBANKS	36	6	T	0.3	PORTLAND	41	-2	2.8	-1.1	OR ASTORIA	52	4	2.3	-2.5
JUNEAU	43	4	0.9	-2.0	MD BALTIMORE	52	-2	3.2	-0.2	MEDFORD	57	7	2.5	1.4
KODIAK	40	3	4.2	0.5	MA BOSTON	53	-2	3.9	0.8	PRNDLETON	53	3	1.6	0.7
NOME	25	7	1.7	1.1	MA BOSTON	46	-3	3.7	0.0	PORTLAND	56	6	2.1	-0.2
AZ FLAGSTAFF	50	7	T	-1.4	MI CHATHAM	45	0	5.7	1.8	PA SALEM	55	6	1.1	-1.3
PHOENIX	80	12	0.0	-0.3	MI ALPENA	39	-2	2.1	-0.4	PA ALLENTOWN	48	-2	1.3	-2.6
PRESCOTT	60	11	0.0	-0.8	MI DETROIT	45	-3	2.2	-0.9	PA ERIE	43	-3	2.0	-1.5
TUCSON	74	9	0.0	-0.3	MI FLINT	44	-2	1.5	-1.5	PA HARRISBURG	50	-2	1.1	-2.1
WINSLOW	61	8	0.0	-0.3	MI GRAND RAPIDS	44	-3	1.8	-1.8	PA PHILADELPHIA	52	-1	2.3	-1.2
YUMA	80	9	0.0	-0.1	MI HOUGHTON LAKE	41	-1	1.0	-1.6	PA PITTSBURGH	47	-3	1.4	-1.9
AR FORT SMITH	63	2	0.6	-3.6	MI LANSING	43	-2	1.4	-1.4	PA SCRANTON	46	-3	1.0	-2.1
LITTLE ROCK	63	1	1.5	-3.9	MI MARQUETTE	34	-4	1.5	-2.2	RI PROVIDENCE	46	-2	5.3	1.3
CA BAKERSFIELD	69	6	T	-0.7	MI MUSKEGON	44	-2	0.7	-2.4	RI CHARLESTON	65	1	4.8	2.3
EUREKA	55	5	2.0	-0.9	MI SAULT ST. MARIE	37	-1	2.0	-0.4	SC COLUMBIA	62	-2	4.3	0.7
FRESNO	67	7	0.1	-1.1	MN ALEXANDRIA	41	-1	1.7	-0.5	SC FLORENCE	62	-2	4.5	1.5
LOS ANGELES	65	5	T	-0.9	MN DULUTH	37	-2	2.1	0.0	SC GREENVILLE	59	-2	3.3	-1.1
REDDING	63	3	3.8	1.0	MN INT'L FALLS	36	-2	0.6	-1.0	SD ABERDEEN	45	0	3.4	1.5
SACRAMENTO	63	5	0.1	-1.2	MINNEAPOLIS	45	-1	2.7	0.6	SD HURON	47	2	1.6	-0.4
SAN DIEGO	66	5	0.1	-0.7	ROCHESTER	44	-1	3.5	1.0	SD RAPID CITY	46	1	1.5	-0.5
SAN FRANCISCO	61	6	0.8	-0.7	ST. CLOUD	43	0	2.3	0.0	SD SIOUX FALLS	48	1	1.6	-0.8
STOCKTON	63	4	0.1	-1.3	MS GREENWOOD	63	-1	5.1	-0.4	TN CHATTANOOGA	60	-1	4.0	-0.6
CO DENVER	51	4	1.0	-0.8	JACKSON	63	-2	2.1	-3.5	TN BRISTAL	55	-1	3.0	-0.5
GRAND JUNCTION	57	6	0.2	-0.5	MERIDIAN	62	-2	3.0	-2.4	TN KNOXVILLE	58	-2	3.5	-0.4
PUEBLO	53	2	0.6	-0.4	MO TUPELO	61	-2	2.3	-2.4	TN MEMPHIS	63	0	2.2	-3.5
CT BRIDGEPORT	48	0	3.1	-0.6	MO COLUMBIA	55	-1	2.0	-1.9	TX NASHVILLE	59	0	2.7	-1.8
HARTFORD	46	-3	3.4	-0.6	MO KANSAS CITY	57	1	1.5	-1.8	TX ABILENE	67	1	0.7	-1.6
DC WASHINGTON	55	-1	3.5	0.6	MO SAINT LOUIS	58	2	2.1	-1.4	TX AMARILLO	60	3	0.8	-0.3
FL APALACHICOLA	67	0	0.9	-2.4	MO SPRINGFIELD	57	1	0.2	-3.9	TX AUSTIN	69	0	2.4	-0.7
DAYTONA BEACH	69	0	2.9	0.7	MT BILLINGS	45	0	2.3	0.4	TX BEAUMONT	67	-1	2.7	-1.5
FT. MYERS	75	2	0.4	-1.1	MT GLASGOW	44	1	1.6	0.9	TX BROWNSVILLE	74	-1	3.9	2.3
JACKSONVILLE	67	-2	2.8	-0.2	GREAT FALLS	44	1	2.4	0.9	TX CORPUS CHRISTI	72	-1	3.6	1.7
KEY WEST	78	0	1.4	-0.1	HAVRE	43	0	1.7	0.5	TX DEL RIO	71	-1	0.2	-1.7
MIAMI	77	2	2.0	-1.3	HELENA	45	2	0.7	-0.3	TX EL PASO	68	4	T	-0.2
ORLANDO	72	0	2.3	0.0	KALISPELL	45	2	1.3	0.2	TX FORT WORTH	66	1	1.9	-2.2
TALLAHASSEE	65	-2	3.6	-0.5	MILES CITY	44	-1	3.8	2.4	TX GALVESTON	69	0	0.7	-2.0
TAMPA	72	0	0.7	-1.1	MISSOULA	45	1	1.0	0.0	TX HOUSTON	69	0	1.5	-2.3
WEST PALM BEACH	75	1	6.0	2.8	NE GRAND ISLAND	54	4	0.1	-2.5	TX LAREDO	76	1	2.3	1.3
GA ATHENS	61	-1	4.2	0.2	LINCOLN	55	4	0.3	-2.6	TX LUBBOCK	65	4	T	-1.0
ATLANTA	63	1	5.2	0.8	NORFOLK	53	4	0.9	-1.3	TX MIDLAND	67	3	0.1	-0.8
AUGUSTA	63	0	5.2	1.9	NORTH PLATTE	51	3	0.1	-1.7	TX SAN ANGELO	67	0	1.0	-0.7
MACON	63	-2	5.6	2.1	OMAHA	54	2	2.3	-0.7	TX SAN ANTONIO	70	1	2.6	-0.2
SAVANNAH	66	-1	3.6	0.4	SCOTT'SBLUFF	48	2	0.6	-0.8	TX VICTORIA	71	0	1.1	-1.5
HI HILO	71	-1	37.2	24.1	NV VALENTINE	48	3	0.5	-1.3	TX WACO	68	1	1.6	-2.2
HONOLULU	75	-1	1.3	-0.2	NV ELKO	49	6	0.3	-0.5	TX WICHITA FALLS	65	2	0.3	-2.6
KAHULUI	72	-2	14.3	13.1	ELY	49	8	T	-0.9	UT CEDAR CITY	54	7	0.1	-0.9
LIHUE	72	-1	2.0	-1.3	LAS VEGAS	73	9	T	-0.2	UT MILFORD	53	7	0.2	-0.8
ID BOISE	53	5	0.5	-0.7	RENO	54	8	T	-0.4	UT SALT LAKE CITY	55	6	0.5	-1.7
LEWISTON	56	6	0.7	-0.4	WINNEMUCCA	51	6	0.2	-0.6	VT BURLINGTON	41	-1	1.9	-0.8
POCATELLO	49	5	0.3	-0.8	NH CONCORD	41	-3	3.4	0.4	VA LYNCHBURG	55	-1	5.0	2.1
IL CAIRO	—	—	2.5	-1.9	NJ ATLANTIC CITY	49	-2	4.6	1.4	VA NORFOLK	56	-2	3.6	0.8
CHICAGO	47	-2	1.3	-2.6	NM ALBUQUERQUE	62	6	0.0	-0.4	VA RICHMOND	56	-2	4.3	1.4
MOLINE	50	0	3.7	-0.3	CLOVIS	61	4	0.1	-0.7	VA ROANOKE	54	-2	2.6	-0.5
PEORIA	51	-1	4.5	0.7	ROSWELL	66	6	0.1	-0.3	WA COLEVILLE	46	0	1.6	0.5
QUINCY	54	1	2.0	-1.8	NY ALBANY	44	-2	2.7	-0.2	WA QUILLAYUTE	51	5	5.7	-1.6
ROCKFORD	47	-1	0.9	-3.3	NY BINGHAMTON	41	-3	1.4	-1.7	WA SEATTLE-TACOMA	53	5	2.8	0.4
SPRINGFIELD	52	-2	5.5	1.5	BUFFALO	42	-4	1.9	-1.2	WA SPOKANE	49	3	0.7	-0.4
IN EVANSVILLE	57	0	4.2	0.1	NEW YORK	51	-1	3.1	-0.7	WA YAKIMA	52	3	0.9	0.4
FORT WAYNE	47	-2	3.4	-0.2	ROCHESTER	42	-4	1.5	-1.1	WA WALLA WALLA	54	2	1.8	0.4
INDIANAPOLIS	51	-1	4.3	0.6	SYRACUSE	43	-3	1.5	-1.8	WV BECKLEY	50	-1	4.4	1.0
SOUTH BEND	47	-1	2.8	-1.2	NC ASHVILLE	54	-2	3.2	-0.3	WV CHARLESTON	53	-3	4.1	0.6
IA DES MOINES	52	2	1.9	-1.3	CHARLOTTE	61	0	2.6	-0.6	WV ELKINS	46	-3	4.1	0.4
DUBUQUE	47	0	2.3	-1.9	GREENSBORO	57	-2	3.2	0.1	WV HUNTINGTON	54	-2	3.7	0.2
SIOUX CITY	52	3	0.9	-1.4	HATTERAS	59	0	9.6	6.4	WV PARKERSBURG	50	-4	5.0	1.6
WATERLOO	47	0	2.4	-1.1	NEW BERN	50	-1	5.5	2.5	WI GREEN BAY	42	-2	0.5	-2.2
KS CONCORDIA	58	5	0.4	-1.9	RALEIGH	58	-1	4.9	2.0	WI LACROSSE	46	-1	1.8	-1.3
DODGE CITY	59	5	0.5	-1.3	WILMINGTON	61	-2	7.6	4.6	WI MADISON	45	-1	1.7	-1.4
GOODLAND	52	3	0.9	-0.3	ND BISMARCK	44	2	1.9	0.4	WI MILWAUKEE	43	-2	1.3	-2.0
TOPEKA	58	3	0.6	-2.5	FARGO	42	0	1.1	-0.8	WI WAUSAU	42	-2	0.8	-2.1
WICHITA	60	3	0.2	-2.2	GRAND FORKS	39	-2	0.3	-1.0	WY CASPER	45	3	0.7	-0.8
KY BOWLING GREEN	57	-1	2.5	-1.7	WILLISTON	44	2	1.4	0.2	WY CHEYENNE	44	3	0.5	-0.8
JACKSON	56	3	3.2	-0.8	OH AKRON-CANTON	45	-3	2.5	-0.8	WY LANDER	47	5	1.1	-1.1
LEXINGTON	54	-1	2.6	-1.4	CINCINNATI	53	-1	5.2	1.6	WY SHERIDAN	44	1	2.2	0.2
LOUISVILLE	57	0	4.9	0.8	CLEVELAND	45	-3	3.7	0.4	PR SAN JUAN	78	-1	2.6	-1.0
LA ALEXANDRIA	66	-1	2.2	-3.4	COLUMBUS	48	-3	3.3	0.1					

Based on 1951-80 normals.

Winter Wheat Condition

The condition of the Kansas wheat crop "dropped a few more notches again this week," according to the State summary. The most recent survey shows that 63 percent of the crop is in very poor condition. This is an increase of 6 percentage points over April 24-30. An additional 26 percent is reported to be in poor condition, giving a total of 89 percent listed in poor or very poor condition. Kansas normally accounts for 15-20 percent of the country's entire wheat crop, including both winter and spring wheat. Nationally, 41 percent of the winter wheat crop is reported to be in poor to very poor condition. This is a 4 percentage point improvement over April 24-30. Two key States, Oklahoma and Washington, reported significant improvement in wheat condition.

Figure 1

Crop Condition Kansas Winter Wheat

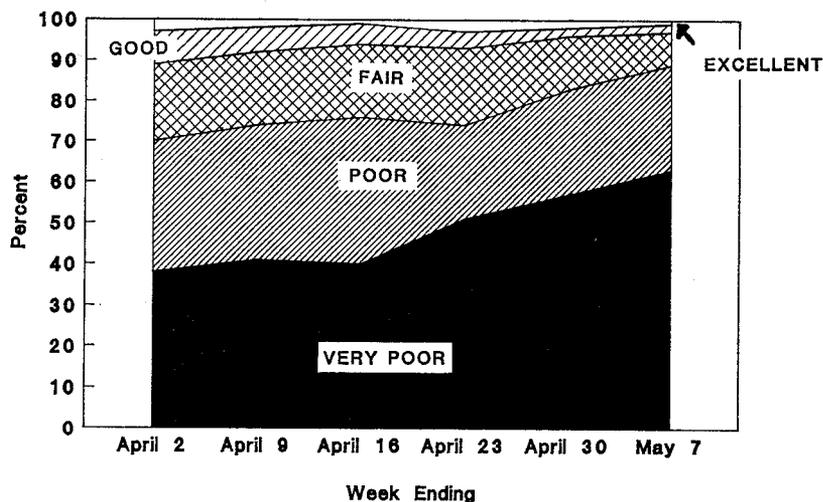
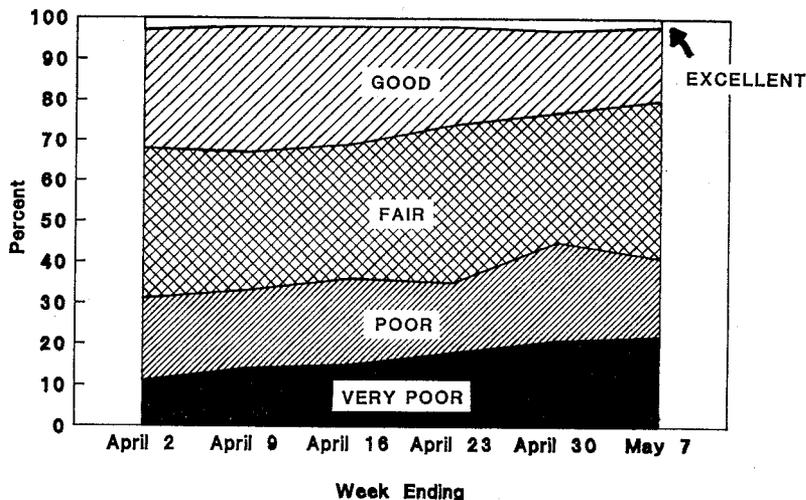


Figure 2

Crop Conditions Total US Winter Wheat



National Agricultural Summary

MAY 1-7, 1989

HIGHLIGHTS: Rain continued to slow fieldwork in the eastern Corn Belt and portions of the Southeast. A portion of the western Corn Belt received needed rain. Soil moisture was mostly adequate to short in the West, northern Great Plains, and western Corn Belt. Soil moisture was mostly short to adequate in the central and southern Great Plains. In the Delta and the East, soil moisture was mostly adequate. Soil moisture was adequate to surplus in the eastern Corn Belt. Days suitable for fieldwork averaged 2-4 in the Delta and the East and 4-6 elsewhere.

Winter wheat was mostly fair to poor. Thirty-seven percent (%) of the acreage was headed, 7 percentage points ahead of the 5-year average. Spring wheat planting was 49% complete, 17 points behind normal. Emergence was 16% complete, 16 points behind normal. Corn planting was 43% complete, 8 points behind normal. Rain continued to slow planting in the eastern Corn Belt and Southeast. Soybean planting was 5% complete, 4 points behind normal. Cotton planting was 42% complete, 1 point behind normal. Sorghum planting was 23% complete, 1 point ahead of normal. Planting was underway in all 11 major producing States. Florida's citrus and vegetable producing areas needed rain. Freezing temperatures damaged fruit crops in Michigan, and the extent of the damage was still unknown.

SMALL GRAINS: Winter wheat was mostly fair to poor, with thirty-seven percent of the acreage headed, 7 points ahead of normal. In the Great Plains, winter wheat was mostly fair to poor. In the Pacific Northwest, Corn Belt, and Southeast, winter wheat was mostly good to fair. Winter wheat was mostly fair to good in the Delta.

In Kansas, winter wheat condition was mostly very poor to poor and continued to deteriorate due to lack of moisture. Cool, wet weather reduced crop stress in Oklahoma, where condition was mostly fair. Rain benefited winter wheat in the Blacklands and central areas of Texas. Insufficient moisture continued to stress fields in the Plains area. Harvest was beginning in southern Texas. Lack of moisture continued to stress winter wheat in Colorado and Nebraska. In Montana, winter freeze damage was heavy to moderate. Crop condition was mostly fair to poor despite adequate soil moisture. Wheat producers were spraying for septoria in western Oregon. In Ohio, powdery mildew and septoria were problems in some fields.

Spring wheat planting was 49% finished, 17 points behind normal. Sixteen percent of the crop was emerged, 16 points behind normal. Planting and emergence were behind normal in four of the five major producing States. In Montana, planting was 35 points behind normal. In North Dakota, planting was 44% finished, 14 points behind normal.

CORN: Corn planting was 43% complete, 8 points behind normal. Producers planted over one-third of their acreage in Colorado and Nebraska. Lack of moisture has slowed germination and emergence in Kansas. Rain continued to slow planting in the eastern Corn Belt and the Southeast. Planting was 42 points and 25 points behind normal in Ohio and Indiana, respectively.

Planting was 34 points behind normal in North Carolina. Planting was 45% complete, 11 points behind normal in Iowa, and 61% complete, 6 points behind normal in Illinois.

SOYBEANS: Soybean planting was 5% complete, 4 points behind normal. Planting was underway in all 19 major producing States except Minnesota and North Carolina.

COTTON: Cotton planting was 42% complete, 1 point behind normal. Rain slowed planting in the Southeast. Planting was 33 points and 44 points behind normal in North and South Carolina, respectively. In Texas, planting was 18% complete, 4 points behind normal. Dryland producers were waiting for rain before planting in the Plains area. Fields were squaring in the Coastal Bend area and Rio Grande Valley. Cotton was in good to excellent condition in Arizona.

SORGHUM: Sorghum planting was 23% complete, 1 point ahead of normal. Planting was underway in all 11 major producing States. Rain promoted growth in the Blacklands area of Texas.

OTHER FIELD CROPS: Rice planting was 71% complete, 6 points ahead of normal. Planting was ahead of normal in all five major producing States except Louisiana. Thirty-nine percent of the acreage was emerged, slightly behind the 41% average. In Arkansas, planting was 71% complete, 11 points ahead of normal. Crop condition was mostly fair to good. Cool temperatures stressed emerged fields. Peanut planting lagged behind normal.

In Georgia, planting was 46% complete, 10 points behind normal. Crop condition was mostly good. In Kentucky, tobacco was in mostly good to fair condition. Transplanting continued in Tennessee. In North Carolina, tobacco was mostly fair to good. Transplanting was 26% complete, 23 points behind normal.

FRUIT AND NUTS: In Florida, valencia orange harvest was at its peak. Grapefruit harvest slowed. Honey tangerine harvest was complete. Irrigation was necessary in all areas. In Georgia, peaches were mostly good to fair. Harvest was expected to begin soon. Peaches were mostly fair to good in South Carolina. Scattered hail and high winds thinned peaches in the Hill Country of Texas. No serious damage occurred. High winds damaged pecans in isolated areas. Nut set was good in the central and southern areas. Grapefruit and valencia orange harvest continued in central and western Arizona. Peach, apricot, and nectarine harvests were active in the central area. Apricot harvest began in the San Joaquin Valley of California. Navel orange harvest was nearly complete. Late variety apples were in full bloom in Chelan and Okanogan Counties of Washington. Freezing temperatures damaged fruit crops in Michigan. The extent of the damage was still unknown. The sweet and tart cherry crops suffered the most damage.

VEGETABLES: Vegetable harvests declined seasonally in southern Florida. Harvest was active in the central area. High winds caused some damage. Potato digging was active in the Hastings area. Watermelons were fair to good in Georgia, with planting nearly complete. In South Carolina, watermelon planting was 88% complete, slightly ahead of normal. Irish potatoes were mostly good to fair in North Carolina. Wind and hail damaged melon vines in the San Antonio-Winter Garden area of Texas. Onion harvest continued in the Rio Grande Valley and began in the Presidio area. Red potato harvest was complete in western Arizona. Spring lettuce harvest was complete in the central area. Head lettuce harvest began in eastern Arizona. Favorable weather promoted vegetable growth in the Central Valley of California. Asparagus harvest was nearly complete in the Sacramento Valley. Potato planting began in the Tulalake area. In Idaho, potato planting was 58% complete, 17 points ahead of normal. Onion planting was virtually complete.

PASTURES AND LIVESTOCK: Livestock was in mostly good condition. Pastures were mostly good to fair except in the western Corn Belt, where they were mostly fair to poor. Supplemental feed supplies were becoming short in Nebraska.

GRAIN SORGHUM
% PLANTED

	1989	1988	AVG.
ARK	66	60	57
ILL	6	9	7
KANS	5	3	3
LA	55	61	67
MISS	46	62	48
MO	26	22	18
NEBR	6	5	4
OKLA	5	5	5
S DAK	1	1	2
TENN	12	36	32
TEX	63	60	63

11 STATES 23 22 22

THESE 11 STATES PRODUCED 96%
OF THE 1988 GRAIN SORGHUM CROP.

CORN
% PLANTED

	1989	1988	AVG.
COLO	65	48	56
GA	97	97	96
ILL	61	90	67
IND	25	75	50
IOWA	45	78	56
KANS	65	65	40
KY	53	63	53
MICH	30	45	35
MINN	16	65	42
MO	81	84	65
NEBR	61	46	42
N C	48	85	82
OHIO	12	71	54
PA	15	22	24
S DAK	16	25	15
TEX	95	92	94
WIS	14	39	27

17 STATES 43 67 51

THESE 17 STATES PRODUCED 94%
OF THE 1988 CORN CROP.

Crop Progress

FOR WEEK ENDING MAY 7, 1989

RICE
% PLANTED

	1989	1988	AVG.
ARK	71	64	60
CALIF	40	40	26
LA	74	79	82
MISS	76	70	71
TEX	96	99	94

5 STATES 71 69 65

THESE 5 STATES PRODUCED 97%
OF THE 1988 RICE CROP.

COTTON
% PLANTED

	1989	1988	AVG.
ALA	80	86	69
ARIZ	92	89	93
ARK	40	49	41
CALIF	96	85	94
GA	37	41	47
LA	66	59	58
MISS	55	64	51
MO	44	58	42
N MEX	93	80	71
N C	17	33	50
OKLA	20	15	10
S C	21	51	65
TENN	54	64	49
TEX	18	21	22

14 STATES 42 44 43

THESE 14 STATES PRODUCED 99%
OF THE 1988 COTTON CROP.

RICE
% EMERGED

	1989	1988	AVG.
ARK	25	16	29
CALIF	2	4	3
LA	66	58	69
MISS	35	35	45
TEX	88	72	76

5 STATES 39 32 41

THESE 5 STATES PRODUCED 97%
OF THE 1988 RICE CROP.

SOYBEANS
% PLANTED

	1989	1988	AVG.
ALA	11	12	8
ARK	5	5	5
GA	6	6	10
ILL	9	22	17
IND	4	20	12
IOWA	4	8	7
KANS	5	4	3
KY	5	7	6
LA	2	4	7
MICH	1	5	1
MINN	0	14	9
MISS	8	6	5
MO	10	12	10
NEBR	3	5	2
N C	0	0	0
OHIO	2	25	14
S C	1	0	2
S DAK	1	3	3
TENN	6	6	6

19 STATES 5 12 9

THESE 19 STATES PRODUCED 95%
OF THE 1988 SOYBEANS CROP.

SPRING WHEAT
% PLANTED

	1989	1988	AVG.
IDAHO	91	85	79
MINN	46	96	71
MONT	36	86	71
N DAK	44	77	58
S DAK	73	98	80

5 STATES 49 85 66

THESE 5 STATES PRODUCED 87%
OF THE 1988 SPRING WHEAT CROP.

SPRING WHEAT
% EMERGED

	1989	1988	AVG.
IDAHO	58	60	52
MINN	17	50	36
MONT	3	38	30
N DAK	8	31	24
S DAK	45	80	53

5 STATES 16 44 32

THESE 5 STATES PRODUCED 87%
OF THE 1988 SPRING WHEAT CROP.

WINTER WHEAT
% HEADED

	1989	1988	AVG.
ARK	88	84	NA
CALIF	95	95	93
COLO	1	0	6
GA	100	99	97
IDAHO	0	0	0
ILL	8	11	18
IND	1	2	2
KANS	35	10	25
MICH	0	0	0
MO	19	24	31
MONT	0	0	0
NEBR	0	1	4
N MEX	80	55	NA
N C	86	65	NA
OHIO	0	0	0
OKLA	90	45	55
OREG	0	0	0
S DAK	0	0	NA
TEX	61	41	61
WASH	0	0	0

20 STATES 38 22 NA

EXCL. STATES
WITH NA 37 21 30

THESE 20 STATES PRODUCED 90%
OF THE 1988 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

Crop Condition Percent

FOR WEEK ENDING MAY 7, 1989

WINTER WHEAT

STATE	VP	P	F	G	EX
ARK	0	0	52	48	0
CALIF	0	0	5	75	20
COLO	10	22	40	26	2
GA	6	17	48	29	0
IDAHO	6	13	32	44	5
ILL	0	0	9	77	14
IND	0	1	27	64	8
KANS	63	26	8	2	1
MICH	2	8	30	40	20
MO	2	9	57	29	3
MONT	25	16	25	29	5
NEB	23	29	41	7	0
N MEX	40	45	10	5	0
N C	0	2	33	60	5
OHIO	2	8	29	52	9
OKLA	10	13	75	2	0
OREG	0	0	34	66	0
S DAK	3	12	50	31	4
TEX	15	34	45	6	0
WASH	0	0	85	15	0
20 STATE	22	19	39	18	2
PREV YEAR	1	11	29	49	10

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 1.00 to 2.00 in. Temperatures 5 to 7° below normal.

Days suitable for fieldwork 4.1. Soil moisture 16% short, 65% adequate, 19% surplus. Fieldwork progress 49% behind schedule, 49% on schedule, 2% ahead of schedule. Spring planting 85% prepared, 91% 1988, 88% avg. Corn 85% planted, 95% 1988, 89% avg.; 10% fair, 84% good, 6% excellent. Sorghum 35% planted, 27% 1988, 26% avg. Cotton 80% planted, 86% 1988, 69% avg.; 20% fair, 80% good. Soybeans 11% planted, 12% 1988, 8% avg. Peanuts 41% planted, 54% 1988, 46% avg.; 1% fair, 99% good. Winter wheat 92% headed, 89% 1988, 87% avg.; 48% turning color, 29% 1988, 25% avg.; 1% very poor, 12% poor, 45% fair, 41% good, 1% excellent. Livestock, pastures mostly good to fair. Primary activities: Land preparation; planting row crops, vegetables; applying fertilizer, lime to cropland, pastures; cutting, baling hay; controlling pests on pecans, fruits, vegetables; general care of livestock, poultry.

ALASKA: Cool nights, day time warm temperatures, light rainfall, Railbelt. Lows 1 to 9° above normal, highs 3 to 7° above normal. Precipitation 0.34 in. drier than normal, Anchorage, 0.03 in. wetter than normal, Fairbanks.

Days suitable for fieldwork 4.0. Topsoil moisture 72% adequate, 28% surplus. Subsoil moisture 68% adequate, 32% surplus. Hay overall, surplus. Small grain seeding underway. Farm work progress on schedule. Commercial potato planting begin mid to late May. Seeding lettuce, cabbage mid to late April; emergence good on early seeded lettuce. Spring livestock good.

ARIZONA: Sunshine, variable high cloudiness 30th, 6th. Rising temperature trend through 6th. Tucson 104°, Winslow 91°, 6th. No rain statewide. Temperatures 5 to 10° above normal.

Cotton 92% planted, 89% 1988; good to excellent; some squaring. Weeds, insects minimal. Small grains 99% heading; 60% turning color. Alfalfa cutting active statewide; good to excellent. Artichoke, peach harvest, shipping continued west. Honeydew harvest began west. Red potato harvest complete west. Red, Chipper potatoes harvested, shipped central. Peaches, apricots, nectarines picked central. Spring lettuce harvest complete. Vegetables shipped central included broccoli, cabbage, parsley, turnips, summer squash, carrots. Head lettuce harvest begun east. Valencia orange, grapefruit harvest continued west, central.

ARKANSAS: Cold front brought heavy rains midweek, southern areas. Temperatures well below normal, some lows. Extremes 30°; 82°. Rainfall 0.36 to 4.04 in. Soil moisture 22% short, 48% adequate, 30% surplus.

Days suitable for fieldwork 4.0. Main farming activities: Rice, corn, cotton, sorghum, soybean planting; fertilizer, herbicide applications, Bermuda sprigging; hay harvest; pasture weed control; draining flooded fields. Cotton 18% emerged, 10% 1988, 15% avg. Cotton fields may be replanted. Rice 25% emerged, 16% 1988, 29% avg. Rice 7% poor, 54% fair, 32% good, 7% excellent. Cool weather added more stress to emerged fields. Sorghum 40% emerged, 31% 1988. Sorghum 57% fair, 43% good. Corn 96% planted, 95% 1988, 87% avg. Corn 50% fair, 50% good. Cooler weather helping wheat situation, slowing disease development.

Fruits, vegetables growing normally. Strawberry harvest underway. Pastures revived, heavy rains. Livestock good, lightning damage contributed to livestock deaths.

CALIFORNIA: High pressure brought above normal temperatures to State. Daytime heating combined with available moisture brought only isolated afternoon, evening thunderstorms to parts State.

Open weather, rapid progress field activities. Small grain seeding high elevations neared completion. Elsewhere, most grain headed, maturing. Some lodging Sacramento Valley. Grain harvest hay, greenchop, silage continued active. Rice seeding full swing. Early cotton, good stands. Thinning, cultivating active. Bees moved to seed alfalfa, bloom began. Overwintered sugarbeet harvest continued; spring fields irrigated, weeded. Alfalfa harvest active. Weevil, aphid controls applied. Scattered hail damage, earlier storms being assessed, Sacramento Valley. Apricot harvest began, southern San Joaquin Valley. Early San Joaquin Valley cherry shipments continued. Grape growers removed suckers, applied gibberellic acid, table, raisin grapes. Desert grapefruit picked, Coachella Valley. Navel orange harvest 95% complete. Valencia harvest continued, San Joaquin Valley. Almonds sizing, light set, Sacramento Valley. Walnut set normal. Favorable weather, Central Valley, beneficial to growth, quality spring vegetables. Artichokes heavy, good quality, Salinas. Asparagus harvest Sacramento Valley winding down. Broccoli moderate, good quality Salinas, Santa Maria areas. Cauliflower heavy, variable quality Salinas, Santa Maria areas. Sweet corn planting continued, Kern-Tulare district. Lettuce heavy, variable quality, Salinas; lettuce, Santa Maria, fairly heavy, variable quality. Iceberg lettuce harvest continued, Firebaugh district. Planting dehydrating onions nearly completed, Tulelake. Insect controls applied, processing onions, Westside. Freezer pea harvest near completion, Merced-Atwater district. Potato planting began, Tulelake district. Strawberries heavy Salinas, Santa Maria areas. Livestock generally good, Statewide. Range, pasture fair to good. Sacramento Valley, northern counties due to March rains. Grasses dry, drying rapidly, San Joaquin, southern California areas which received less rainfall. Livestock movement moderate, livestock on summer ranges. Supplemental feeding light, northern districts. Water adequate most areas.

COLORADO: Dry, windy considerable blowing dust, dry soils. Cooler temperatures early week kept temperatures 4 to 7° below normal. Precipitation eastern plains limited to scattered showers with less than 0.25 in. of moisture. Some heavier amounts along Front Range, mountains.

Days suitable for fieldwork 5.5. Soil moisture 47% very short, 40% short, 13% adequate. Winter wheat 10% very poor, 22% poor, 40% fair, 26% good, 2% excellent; 50% jointed; 1% headed. Improvement in areas which received moisture, further deterioration overall. Barley 93% seeded, 66% emerged. Corn 65% planted; 5% emerged. Oats 90% seeded; 63% emerged. Onions 92% planted. Sugarbeets 98% planted. Summer potatoes 67% planted; 10% emerged. Fall potatoes 28% planted. Spring wheat 80% seeded; 52% emerged. Livestock

mostly good. Range, pasture mostly fair to poor. Cows calved 90%, ewes lambled 95%.

FLORIDA: Scattered rain, 0.50 to 2.00 in. north. Peninsula rain 0.50 in. or less, several areas under 0.25 in. Rain fell 1 or 2 days. Temperatures 2 to 4° below normal north, near normal central, 1 to 3° above normal south. Low, mid 40s north, low, mid 90s Peninsula.

Soil moisture short to adequate. Corn, sugarcane, tobacco good progress. Cotton, peanut planting active. Winter wheat ripening. Growers prepared land for planting soybeans. Rains, mostly over previous weekend, early week helped maintain pasture growth, progress. Conditions varied locally depending upon moisture, mostly fair to good. Cattle drier areas continued to show some stress. Most herds, remained fair to good some improvement where forage supplies increasing. Few scattered rains citrus areas, irrigation continued. New crop fruit setting. Abundance of new foliage. Some fruit softening due to dry conditions. Valencia harvest at peak. Grapefruit movement slowed; supplies limited. Honey tangerine harvest over. Temperatures around normal over major vegetable producing areas. Gusty winds inflicted limited damage. Precipitation limited. Harvest active central, declining southern areas. Volume leaders: Potatoes, tomatoes, cucumbers, watermelons, peppers, sweet corn, celery. Also available good volume: Squash, cabbage, snap beans, lettuce, radishes, carrots, eggplant. Digging active, hastings potatoes.

GEORGIA: Rain 1.00 to 2.00 in., 3 days. Temperatures 7° below normal north, 5° below central, 3° below south. Extremes 88° several areas to 29° Blairsville. Temperatures 50s 6th, mid 30s mountains, upper 50s south, 7th. Maximums 6th mid 60s mountains, upper 80s south. Maximums 7th, 60s north, 70s elsewhere.

Days suitable for fieldwork 4.0. Soil moisture 10% short, 79% adequate, 11% surplus. Corn 7% poor, 12% fair, 79% good, 2% excellent. Applying nitrogen, cultivating south. Cotton 3% poor, 16% fair, 81% good. Planting delayed early by wet soils, good progress late. Sorghum 20% planted, 22% 1988, 31% avg. Peanuts 19% fair, 74% good, 7% excellent; 46% planted, 56% 1988, 56% avg. Planting active. Soybean planting slowed, wet soils. Tobacco 19% fair, 78% good, 3% excellent. Tomato spotted wilt virus many fields. Watermelons fair to good, planting nearly complete. Hessian fly, mildew, cold damage hurting wheat yield prospects. Rye, other small grains fair to good. Apples fair. Peaches fair to mostly good, harvest expected to begin next week. Pastures 7% fair, 83% good, 10% excellent. Cattle, hogs good.

HAWAII: Kauai, Oahu, Maui islands experienced low nighttime temperatures. Other islands warmer, skies generally overcast, some sunny periods. Variable winds 10-20 mph. Temperatures high 50s to low 80s. Daily rainfall none to 2.10 in.

Days suitable for fieldwork 7.0. Crop mostly fair to good. Soil moisture ample. Papaya production steady. Regular scheduled spraying still needed to control insects, diseases. Sugar, pineapple harvesting steady.

IDAHO: Temperatures above normal most areas; eastern areas slightly below normal. Precipitation generally below normal, isolated thunderstorms some areas.

Days suitable for fieldwork 6.0. Soil moisture 2% very short, 21% short, 73% adequate, 4% surplus. Spring wheat 91% planted, 85% 1988, 79% avg.; 58% emerged. Spring barley 90% seeded, 81% 1988, 69% avg.; 53% emerged. Oats 73% planted, 71% 1988, 66% avg.; 34% emerged. Potatoes 58% planted, 45% 1988,

41% avg. Virtually all sugarbeets, onions planted. Sugarbeets 42% emerged, onions 78% emerged. Field corn 26% planted, 47% 1988, 44% avg. Lentils 71% planted. Dry peas 75% planted. Pea leaf weevils found. Fruit trees in various bloom stages. Winter wheat fair, good; 15% joint or beyond. Branding in progress, ranchers continue livestock movement to ranges. Ranges need rain, warmer nights for good development. Hay, roughage mostly adequate. Some very short, short supplies.

ILLINOIS: Temperatures 7 to 14° below normal, minimum low 20s northwest to mid 30s elsewhere. Precipitation less than 0.50 in., snow flurries accompanied cold air early weekend.

Days suitable for fieldwork 4.5. Soil moisture 49% short, 45% adequate, 6% surplus. Alfalfa 5% 1st cut, 5% 1988, 4% avg.; 3% poor, 17% fair, 70% good, 10% excellent. Oats 15% fair, 80% good, 5% excellent. Pasture 22% fair, 72% good, 6% excellent; livestock roughage requirements 75%, 71% 1988, 73% avg.

INDIANA: Temperatures below normal. Highs mid 60s to low 70s, lows mid, upper 20s north to low, mid 30s elsewhere. Precipitation below normal, 0.10 to 0.90 in. most areas.

Days suitable for fieldwork 2.4. Topsoil moisture 7% short, 46% adequate, 47% surplus. Subsoil moisture 10% short, 70% adequate, 20% surplus. Spring cropland 87% tilled, 95% 1988, 89% avg. Wheat 14 in., 14 in. 1988, 14 in. avg. Wheat 67% jointed, 72% 1988, 65% avg.; 1% headed, 2% 1988, 2% avg. Oats 4 in., 4 in. 1988, 5 in. avg. Pastures 35% fair, 54% good, 11% excellent.

IOWA: Temperatures 7 to 11° below normal. Widespread frost 6th, 7th. Extremes 25°; 75°. Precipitation moderate east one third; light elsewhere. Rain 0.10 to 0.99 in., 0.37 in. avg.

Days suitable for fieldwork 3.0. Topsoil moisture 32% short, 66% adequate 2% surplus. Subsoil moisture 90% short, 10% adequate. Winter wheat 3% very poor, 16% poor, 42% fair, 38% good, 1% excellent. Hay 5% very poor, 26% poor, 47% fair, 21% good, 1% excellent. Pasture 12% very poor, 32% poor, 43% fair, 13% good. Oats 1% very poor, 7% poor, 39% fair, 44% good, 9% excellent; 90% emerged, 85% 1988, 75% avg. Seedbed preparation 96%, fertilizer application 96%, 94% 1988, 85% avg. Livestock good to excellent. Muddy feedlots, variable temperatures, stressed cattle. Herd liquidation southern area.

KANSAS: Temperatures 6 to 7° below normal southeast, east central; all other areas down 3 to 4° below normal, except northwest, north central near normal. Precipitation 0.47 in. northeast, southwest, north central; central 0.22 in.; northwest, north central 0.28 in.; all other areas 0.35 to 0.38 in.

Days suitable for fieldwork 6.0. Topsoil moisture 93% short, 7% adequate. Subsoil moisture 97% short, 3% adequate. Wheat dropped few more notches; 63% very poor, 26% poor, 8% fair, 2% good, 1% excellent. Wheat jointing on schedule, some stands central, western heading out 8 to 14 in. Corn planting progressed 65%. Little moisture available to germinate dryland corn. Feed grains adequate. Range, pastures short to adequate.

LOUISIANA: Temperatures 1 to 2° below normal. Extremes 49°; 87°. Rainfall 1.57 to 9.88 in.

Days suitable for fieldwork 4.3. Soil moisture 5% short, 42% adequate, 53% surplus. Spring plowing 92%, 95% 1988, 94% avg. Corn 99% planted, 97% 1988, 96% avg.; 96% emerged, 89% 1988, 91% avg.; 3% poor, 38% fair, 59% good. Recent rains improved corn. Cotton 66% planted, 59% 1988, 58% avg.; 46%

emerged, 31% 1988, 38% avg.; 6% very poor, 6% poor, 44% fair, 44% good. Hay 13% first cutting, 21% 1988, 17% avg. Rice 74% planted, 79% 1988, 82% avg.; 66% emerged, 58% 1988, 69% avg.; 6% poor, 39% fair, 55% good. Sorghum 55% planted, 61% 1988, 67% avg.; 45% emerged, 39% 1988, 51% avg.; 63% fair, 37% good. Soybeans 2% planted, 4% 1988, 7% avg. 1% emerged, 1% 1988, 2% avg. Sugarcane 31% fair, 69% good. Sweetpotatoes 11% planted, 16% 1988, 22% avg.; 33% fair, 67% good. Wheat 100% headed, 99% 1988, 96% avg.; 47% turning color, 46% 1988, 50% avg.; 2% very poor, 8% poor, 39% fair, 51% good. Wheat lodged due to high winds with recent storms. Vegetable 2% very poor, 5% poor, 44% fair, 49% good. Pasture 25% fair, 75% good. Livestock 15% fair, 85% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 2.92 in. Temperature 59°, normal 59°. Extremes 28°; 82°.

Days suitable for fieldwork 2.0. Topsoil moisture none short, 10% adequate, 90% surplus. Subsoil moisture 67% adequate, 33% surplus. Corn 21% planted, 40% 1988, 50% avg. Sweet corn 22%, 30% 1988, 58% avg. Wheat, barley, rye good. Barley 71% headed, 60% 1988, 71% avg.

DELAWARE: Precipitation 2.67 in. Temperature 59°, normal 58°. Extremes 40°; 75°.

Days suitable for fieldwork 1.5. Topsoil moisture 43% adequate, 57% surplus. Subsoil moisture 86% adequate, 14% surplus. Corn 24% planted, 45% 1988, 57% avg. Sweet corn 24% planted, 50% 1988, 51% avg. Wheat, barley, rye good. Barley 92% headed, 40% 1988, 57% avg.

MICHIGAN: Temperatures 1 to 6° below normal. Temperature extremes 22°; 71°. Precipitation none to 0.68 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 38% short, 60% adequate, 2% surplus. Corn 30% planted, 45% 1988, 35% avg. Oats 85% planted, 85% 1988, 80% avg. Potatoes 15% planted, 45% 1988, 30% avg. Soybeans 1% planted, 5% 1988, 1% avg. Wheat 2% very poor, 8% poor, 30% fair, 40% good, 20% excellent. Activities: Spring tillage, corn, oats, barley, potato, sugarbeet, soybean planting, asparagus harvest. Fruit crops hurt by weekend freezes, full extent of damage unknown. Most damage suffered by sweet, tart cherries.

MINNESOTA: Temperatures 4 to 11° below normal. Temperature extremes 19°; 75°. Precipitation 0.18 to 0.49 in. Rain 0.66 in.

Days suitable for fieldwork 3.4. Topsoil moisture 1% very short, 22% short, 75% adequate, 2% surplus. Subsoil moisture 34% very short, 45% short, 20% adequate, 1% surplus. Spring wheat 46% planted, 96% 1988, 71% avg.; 17% emerged, 50% 1988, 36% avg. Oats 68% planted, 98% 1988, 79% avg.; 37% emerged, 70% 1988, 50% avg. Barley 39% planted, 95% 1988, 67% avg.; 4% emerged, 43% 1988, 30% avg. Corn 50% land prepared, 86% 1988, 62% avg.; 16% planted, 65% 1988, 42% avg. Soybeans 19% land prepared, 47% 1988, 32% avg.; none planted, 14% 1988, 9% avg. Sunflowers 2% planted, 20% 1988, 11% avg. Flax 2% planted, 21% 1988, 15% avg. Sugarbeets 74% planted, 99% 1988, 68% avg. Potatoes 22% planted, 40% 1988, 29% avg. Green peas 54% planted, 75% 1988, 58% avg. Sweet Corn 15% planted, 31% 1988 19% avg.

MISSISSIPPI: Temperatures 5 to 6° below normal. Extremes 44°; 87°. Precipitation normal north; 2.00 to 3.00 in. above normal central; 1.00 in. above normal south.

Days suitable for fieldwork 3.1, 6.4 1988, 4.6 avg. Soil moisture 8% short, 29% adequate, 34% surplus, 29% excessive. Corn 76% planted, 84% 1988, 85% avg.; 60% emerged, 69% 1988, 69% avg. Corn fair to good. Cotton 55% planted, 64% 1988, 51% avg.; 29% emerged, 22% 1988, 26% avg. Rice 76%

planted, 70% 1988, 71% avg.; 35% emerged, 35% 1988, 45% avg. Sorghum 46% planted, 62% 1988, 48% avg.; 35% emerged, 37% 1988, 35% avg. Soybeans 8% planted, 6% 1988, 5% avg.; 3% emerged. Wheat 91% heading, 92% 1988, 90% avg. Mature 6%, 1% 1988, 4% avg. Wheat fair to good. Peanuts 27% planted, 39% 1988, 32% avg. Hay harvest 5%, 9% avg. Sweetpotatoes 22% planted, 45% 1988, 27% avg. Watermelons 76% planted, 71% 1988, 64% avg. Livestock poor to fair. Pasture good to fair. Activities: Planting crops.

MISSOURI: Temperatures 8° below normal, some frost. Precipitation 0.33 in. or less except northwest 0.50 in.

Days suitable for fieldwork 5.3. Topsoil moisture 80% short, 20% adequate. Subsoil moisture 72% short, 28% adequate. Tillage for spring crops 90%, 90% 1988, 78% avg. Corn planting virtually complete southeast, 74% other major areas. First crop alfalfa hay 5%, 3% 1988, 3% avg. Pasture 10% very poor, 31% poor, 46% fair, 13% good, poorest northwest, north central areas. Hay 23% very short, 39% short, 38% adequate. Livestock water 24% critically short, 26% short, 50% adequate.

MONTANA: Temperatures 1 to 6° below normal east, other areas 1 to 5° above. North central dry. Other areas 0.20 to 0.30 in.

Days suitable for fieldwork 2.1. Topsoil moisture 3% short, 83% adequate, 14% surplus. Subsoil moisture 28% short, 71% adequate, 1% surplus. Winter freeze damage to winter wheat 25% none, 21% light, 18% moderate, 36% heavy. Barley 33% planted, 85% 1988, 71% avg. Corn 40% planted. Dry beans 22% planted. Oats 23% planted, 79% 1988, 62% avg. Potatoes 2% planted. Sugarbeets 51% planted, 95% 1988, 75% avg. Cattle, sheep moved to summer ranges 25%, 40% 1985, 30% avg.

NEBRASKA: State fell below freezing sometime during week. Temperatures 2 to 7° below normal. Extremes 17°; 90°. Spotty rain across State, dry southwest. Rain below 0.50 in.

Days suitable for fieldwork 6.0. Topsoil moisture 88% short, 12% adequate. Subsoil moisture 88% short, 12% adequate. Winter wheat 54% jointed, 50% 1988, 48% avg. Corn 13% emerged, many growers irrigating. Alfalfa hay 4% very poor, 28% poor, 53% fair, 15% good. Wild hay 6% very poor, 35% poor, 51% fair, 8% good. Pasture, range 76% short, 24% adequate. Hay fed to supplement pastures. Operators selling cattle, others considering selling, due to low feed supplies. Few cases of lung pneumonia in feed lots. Alfalfa, emerged corn tipped by freezing temperatures. Replanting some sugarbeets due to freeze damage. Operators irrigating. Main activities: Planting corn, soybeans, sorghum; applying fertilizer, herbicides, working summer fallow, reseeding some hay acreage.

NEVADA: Warm high pressure over State. Trace rainfall, few thunderstorm dotted northern, central areas. Temperatures 5 to 10° above normal. Extremes 19°; 103°.

Irrigated crops ahead of normal. First crop alfalfa hay being cut southern areas, aphids causing a few problems. Garlic crop good, onions planted. Cattle being moved to summer ranges.

NEW ENGLAND: Precipitation 1.50 to 2.00 in. eastern Massachusetts, 2.00 to 3.00 in. remainder north, northern Maine, western Vermont, 3.00 to 4.50 in. remainder north, central Connecticut, 3.50 to 4.00 in. northwest Connecticut. Temperatures low 50s near Canadian border to upper 50s south east. Temperatures near normal.

Days suitable for fieldwork 4.5. Soil moisture 9% short, 50% adequate, 31% surplus. Grazing 48% very short, 24% short, 28% adequate. Fieldwork 4.0

days behind. Maine potatoes planted less than 5%, 4% 1988, 3% avg. Rhode Island potatoes 40% planted, 27% 1988, 42% avg.; fair. Connecticut River Valley potatoes 30% planted, 35% 1988, 33% avg. Field corn planted less than 5%, 15% 1988, 10% avg. Sweet corn 10% planted, 15% 1988, 17% avg.; fair. Fruit trees in bud stage. Blueberries, strawberries bud stage. Cranberries still dormant stage. Major farm activities: Spreading manure, lime, planting corn, early vegetables, field preparation.

NEW JERSEY: Temperatures below normal. Extremes 32°; 78°. Rainfall 4.11 in. north, 2.97 in. central, 2.54 in. south. Heaviest 24-hour 3.06 in. 5th, 6th. Soil moisture 99% north, central, 98% south. Four inch soil temperatures 54° north, 56° central, 57° south.

Soil moisture adequate to excessive. Fieldwork progressed as conditions permitted between rains. Cabbage, snap bean, sweet corn, pepper, eggplant, cucumber, tomato planting advanced. Irish potato remained to be planted. Soil preparation progressed sweet potato transplanting. Fruit spraying active. Field corn planting general. Soybean soil preparations started. Hay, pasture growth good.

NEW MEXICO: Scattered precipitation northeast; remainder of area dry, hot.

Days suitable for fieldwork 6.9. Soil moisture 95% short, 5% adequate. Wind damage light to moderate. Wheat 40% very poor, 45% poor, 10% fair, 5% good. Cotton planting complete; 57% fair, 43% good. Cattle 12% poor, 70% fair, 18% good. Sheep 67% fair, 33% good. Range 79% poor, 21% fair.

NEW YORK: Very wet week. Rain 5 of 7 days. Areas received over 3.00 in. Slide Mountain in Catskills 5.86 in. Temperatures dipped to upper 20s to upper 30s night 26th. Temperatures several degrees below normal central, western areas 2° above normal eastern areas.

Days suitable for fieldwork 4.5. Soil moisture adequate. Pasture, hay fair to good, wheat mostly good. Corn 10% planted, 10% 1988, 10% avg. Oats 61% seeded, 54% 1988, 50% avg. Rain needed, delayed fieldwork.

NORTH CAROLINA: Temperatures 4 below to 2° above normal across State. Temperature extremes 30°; 88°. Precipitation 0.54 to 7.84 in.

Days suitable for fieldwork 2.5. Soil moisture 31% adequate, 69% surplus. Pasture 2% poor, 13% fair, 76% good, 9% excellent. Oat 1% poor, 28% fair, 69% good, 2% excellent. Barley 3% poor, 24% fair, 71% good, 2% excellent. Rye 21% fair, 75% good, 4% excellent. Tobacco plantbeds 13% poor, 45% fair, 42% good. Supply 32% very short, 67% short, 1% adequate. Transplanted 26%, 51% 1988, 49% avg. Irish potato 2% very poor, 7% poor, 34% fair, 57% good. Peach 18% poor, 38% adequate, 44% good. Truck crops 11% poor, 27% fair, 62% good. Sorghum 11% planted, 32% 1988, 27% avg. Peanuts 5% planted, 5% 1988, 28% avg. Major activities: Planting corn; transplanting tobacco. Other activities: Spraying crops; tobacco plantbed maintenance; harvesting small grain silage; planting truck crops, cotton, peanut; tending livestock; general farm maintenance. Weather, insect damage to tobacco plantbeds. Cereal leaf beetle problem small grain fields. Lincoln, Cleveland counties sustained tornado damage, small grain blow down, destruction farm buildings, hail damage, possible fruit loss.

NORTH DAKOTA: Warm midweek, cool late week. Temperatures 2° below normal northwest to 6° below normal southwest, south central. Extremes 12°

northeast, 6th; 78° northwest, 6th. Precipitation 0.04 in. north central to 0.35 in. central, east central, northeast.

Days suitable for fieldwork 6.2. Topsoil 4% very short, 28% short, 68% adequate, none surplus. Subsoil 15% very short, 76% short, 9% adequate, none surplus. Planting hard red spring wheat 44% complete, durum wheat 26%, barley 43%, oats 37%, sugarbeets 70%, corn 7%, flax 2%. Soybeans, dry beans, sunflower not started. Winter wheat 1% very poor, 23% poor, 62% fair, 14% good, none excellent; 92% emerged, stooling or earlier, 8% jointing. Range, pasture 23% very poor, 29% poor, 36% fair, 12% good; furnished 34% roughage requirement.

OHIO: Temperatures 5 to 10° subnormal. Lows mid 30s to lows 40s; highs mid 50s. Precipitation 0.50 in. to 1.25 in. Snow on 7th. Soil temperatures subnormal 40s to 60s.

Days suitable for fieldwork 1.8. Soil moisture 45% adequate, 55% surplus. Cold wet conditions persisted, fieldwork progress slow. Most crops improved. Winter wheat, pasture, hay stands, oats, mostly good. Winter wheat 24% jointed, 1988 28%. Some powdery mildew, septoria leaf blight wheat. Alfalfa weevil at economic level some fields; sprays applied.

OKLAHOMA: Temperatures 6° below normal north central to normal Panhandle. Precipitation 0.21 in. Panhandle to 2.25 in. South Central.

Days suitable for fieldwork 5.5. Topsoil moisture 60% short, 40% adequate. Subsoil moisture 55% short, 45% adequate. Wheat 10% very poor, 13% poor, 75% fair, 2% good; 90% heading, 45% 1988, 55% avg. Heading nearly 2 weeks ahead of normal. Definite signs of February freeze damage appearing. Cool, rainy weather reduced crop stress. Sorghum 5% planted, 5% 1988, 5% avg. Cotton 20% planted, 15% 1988, 10% avg. Soybeans 15% planted, 10% 1988, 10% avg. Peanuts 5% planted, 5% 1988, 10% avg. Corn 75% up to stand, 45% 1988, 45% avg. Pasture good to fair. Cattle good; marketings, prices up slightly.

OREGON: Temperatures above normal across State, except Union 1° below normal, 4° above, Baker to 12° above, Roseburg. Light rainfall across State, 0.20 to 0.30 in. fell along coast, 0.10 to 0.40 in. southwest, northeast, elsewhere less than 0.10 in.

Soil moisture 32% short, 68% adequate. Barley 87% seeded, 97% 1988, 97% avg. Russian wheat aphids spring barley Umatilla County, not enough to spray. Some field spraying, Russian wheat aphid Morrow County. Spring grain planting, field preparations progressed rapidly high elevations northeast, central, southeast. Irrigation started some areas. Western growers spraying wheat septoria. Early fungicides applied to grass seeds Willamette Valley; Crimson clover blooming. Early hay harvest neared Hermiston area, Malheur County. Alfalfa one week ahead of normal central area; peppermint at full cover. Sugarbeets all emerged Malheur County, good stands. Strawberries required irrigation Willamette Valley, near full bloom, early fruit free of malformations. Cherry spraying started The Dalles district. Apple bloom finished Hermiston area. Frost protection was required on 6th Medford district; first spraying for codling moth, pear psylla, spider mites started. Cranberries roughneck stage, good south coast; some lackheaded fireworm larvae infesting cranberry tips; frost protection 27th, 28th. Potatoes all planted Hermiston-Boardman, early plantings cultivated; 70% planted Malheur County. Onions all merged, good stands Malheur; mostly planted Willamette Valley; nearly all emerged Jackson County. Asparagus harvest continued with good weather Umatilla County. Snap beans, sweet corn planted Malheur County, Willamette Valley. Melons

emerged, growing well Hermiston area. Willamette Valley growers also sowing green peas, broccoli, zucchini. Livestock, range, pasture good to excellent. Recent rains followed by warm weather have improved forage growth most areas. Seasonal movement of cattle began Klamath Basin, some north sloping federal permits not open yet due to wet soils. In northeastern mountains, most cattle finally on grass, although snowpack remains at highest elevations.

PENNSYLVANIA: Much needed rain fell across State, heaviest eastern sections. Snow fell northwest, 7th. Temperature 52°; normal 52°. Temperature extremes 29°; 81°. Precipitation 3.00 in., 2.18 in. above normal.

Days suitable for fieldwork 3.0. Soil moisture 19% short, 69% adequate, 12% surplus. Plowing 68% complete, 78% 1988, 71% avg. Corn 15% planted, 22% 1988, 24% avg. Soybeans none planted, 2% 1988, 8% avg. Oats 77% planted, 84% 1988, 80% avg. Potatoes 46% planted, 62% 1988, 55% avg. Barley 70% pre-boot, 85% 1988, 73% avg.; 19% boot, 13% 1988, 18% avg; 11% heading or headed, 2% 1988, 9% avg. Wheat 88% pre-boot, 95% 1988, 90% avg.; 12% boot, 5% 1988, 10% avg. Wheat crop none very poor, 4% poor, 23% fair, 57% good, 16% excellent. Oats crop none very poor, 2% poor, 29% fair, 57% good, 12% excellent. Hay stands mostly fair to good. Feed pastures mostly average. Peaches 21% pre-pink, 24% 1988, 15% avg.; 16% pink, 17% 1988, 17% avg.; 63% full bloom or past, 59% 1988, 68% avg. Cherries 13% pre-pink, 18% 1988, 10% avg.; 21% pink, 26% 1988, 18% avg.; 61% full bloom or past, 56% 1988, 72% avg. Apples 35% pre-pink, 36% 1988, 25% avg.; 27% pink, 36% 1988, 24% avg.; 38% full bloom or past, 28% 1988, 51% avg. Activities: Spring plowing; planting corn, oats, potatoes, hay, tobacco, vegetables, fruit trees, Christmas trees; harvesting rye silage; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

SOUTH CAROLINA: Temperatures 8° below normal northwestern area, 2° cooler than usual along south coast. Precipitation 1.00 to 2.00 in. across State.

Days available for fieldwork 4.2. Soil moisture 2% very short, 9% short, 87% adequate, 2% surplus. Corn good; 91% planted, 100% 1988, 96% avg. Tobacco fair to good; 79% planted, 96% 1988, 92% avg. Watermelons fair to good; 88% planted, 85% 1988, 87% avg. Tomatoes good; 94% planted, 95% 1988, 98% avg. Peaches fair to good. Wheat good, 93% headed, 92% 1988, 88% avg.; 14% turning color 6% 1988, 16% avg. Oats good, 17% turning color, 9% 1988, 17% avg.

SOUTH DAKOTA: Temperatures 4 to 9° below normal. Extremes 8°; 76°. Below normal precipitation most areas.

Winter wheat mostly good to fair; 17% Winterkill. Barley, oats, spring wheat, winter rye mostly good. Small grains mostly seeded. Ground preparation, row crop planting, fencing, applying chemicals major activities. Calving, lambing mostly complete.

TENNESSEE: Two cold fronts brought heavy rain east 4th, 5th; cold east 7th. Mixture rain, sleet, snow east 7th. Temperatures 10 to 15° below normal. Coldest northeast. Warmest 80° Memphis 5th. Coldest 32° Bristol 7th. Precipitation below normal west, less than 1.00 in. Rainfall over 2.00 in. East.

Days suitable for fieldwork 3.8. Soil moisture 1% very short, 14% short, 74% adequate, 11% surplus. Corn 62% planted, 73% 1988, 64% avg. Tobacco 2% transplanted, 6% 1988, 4% avg. Wheat

70% headed, 76% 1988, 67% avg. Strawberries fair to good, some frost damage. Pastures, livestock good.

TEXAS: Weak front High Plains early week, cooling temperatures producing little rain. Midweek heavy thunderstorms north central, northeast, central, southeastern. Severe weather, including hail, common. Except few showers north central, late week dry. For week, temperatures above normal Trans-Pecos, west central, far southern areas, near to slightly below normal elsewhere. Rainfall much above normal north central, north eastern areas, below normal most Plains, far southern sections, close to normal elsewhere.

Crops: Small grains Blacklands, central benefited recent rain; isolated hail caused some damage. Harvest beginning small scale parts south. Fields remained short Plains, heading occurring. Scattered rain area benefit dryland fields; many fields continued plowed up. Producers continued irrigate. Corn planting continued wind down Plains. Only minor weather delays. Good growth planted fields. Some hail damage Blacklands. Rain slowed cultivating activities Blacklands, central. Corn growth improving. Fields Coastal Bend improving with recent rain. Fields Valley various stages of growth. Corn none silked, 1% 1988, 2% avg. Grain sorghum planting little progress Plains last week. Producers Blacklands, central trying to cultivate; wet conditions kept many producers out of fields. Growth good following beneficial rains. Progress improved Coastal Bend, parts south. Good progress east. Grain sorghum none headed, none 1988, 3% avg. Cotton planting irrigated land continued Plains, dryland producers awaiting rain. Early fields emerging. Land preparations about complete Cross Timbers, moisture needed to begin planting. Planting continued Trans-Pecos. Rain slowed planting Blacklands, central. Fields continued square Coastal Bend, Valley. Condition varied these areas. Cotton 2% squaring, 1% 1988, 2% avg. Rice planting continued. Flushing, weed control active. Emergence slow some fields. Peanut planting increased south with recent moisture. Producers Cross Timbers begin soon. Soybeans look good Upper Coast; more rain needed. Early fields blooming. Planting continued northeast. Sugarbeets good progress High Plains. Sugarcane good progress Valley. Other field crops: Oats none harvested, 1% 1988, 1% avg. Peanuts 4% planted, 7% 1988, 9% avg. Soybeans 19% planted, 7% 1988, 13% avg. Sugarbeets 99% planted, 100% 1988, 98% avg. Sunflowers none planted, 1% 1988, 6% avg.

Commercial Vegetables: Rio Grande Valley, melons good progress. Onion harvest continued. Citrus continued size, recent rain helped. More rain needed. San Antonio-Winter Garden, melon vines showing some wind, hail damage. Summer vegetables slow progress. Onion harvest increasing. East Texas, isolated heavy rains caused some damage. High Plains, irrigation remained steady. Some planting also continued. Normal progress reported potato, onions. Trans-Pecos, melon planting complete. Good progress onions, cabbage, chiles. Some onion harvest underway Presidio area. Scattered hail, high winds caused some natural thinning peaches Hill Country. No major problems. East crop remains light. Pecans good progress most areas. Isolated high wind damage. Nut sets good central, south.

Range and Livestock: Ranges, pastures showing some improvement. West, Plains remained dry, parts Valley. Haying operations continued as weather permitted. Shearing operations beginning wind down Hill Country. Livestock improving slightly.

UTAH: Precipitation none to light. Temperatures normal.

Days suitable fieldwork 6.7. Soil moisture 88% short, 12% adequate. Spring wheat 90% emerged, 93% 1988, 59% avg. Barley 85% emerged, 91% 1988, 66% avg. Oats 59% emerged, 69% 1988, 44% avg. Corn 48% planted, 48% 1988, 29% avg.; 9% emerged, 35% 1988, 11% avg. Potatoes 27% planted, 16% 1988, 23% avg. Winter wheat 9 in., alfalfa 14 in. First cutting alfalfa began extreme south. Apples mostly good. Apricots poor to fair, sweet cherries poor to fair, tart cherries mostly good. Peaches poor to fair, pears fair to good. Range pastures dry. Scattered supplemental feeding. Livestock good. Calf death losses light to normal. Lamb death losses light to normal. Major farm activities: Corn planting, irrigating, weed spraying, seedbed preparation, fertilizing, preparing to move livestock to spring ranges, repairing equipment.

VIRGINIA: Normal temperatures, heavy rainfall. Temperatures 30 to 84°. Precipitation 1.00 to 3.80 in.

Days suitable for fieldwork 1.7. Topsoil moisture was 33% adequate, 67% surplus. Corn 36% planted, 43% 1988, 44% avg. Peanuts 3% planted, 6% 1988, 10% avg. Soybean planting started, 2% 1988, 3% avg. Cotton planting started. Flue-cured tobacco transplanting started, 1% 1988, 5% avg. Fieldwork delayed due to wet weather. Corn 17% poor, 64% fair, 19% good. Wheat 2% poor, 56% fair, 36% good, 6% excellent. Barley 1% poor, 51% fair, 41% good, 7% excellent. Some lodging, powdery mildew, cereal leaf beetle damage wheat, barley. Alfalfa 4% poor, 28% fair, 55% good, 13% excellent, some spraying weevils, some hay cutting. Pastures 4% fair, 68% good, 28% excellent. Other hay 26% fair, 60% good, 14% excellent. Peaches 29% very poor, 30% poor, 35% fair, 6% good. Apples 18% poor, 41% fair, 41% good. Some sheep shearing, placing cattle on pasture. Some fruit, vegetable planting.

WASHINGTON: Temperatures 8 to 11° above normal, west; 1 to 6° above normal, east. Precipitation none to 0.06 in., west; none to 0.63 in., east.

Days suitable for fieldwork, 7.0. Soil moisture 20% short, 80% adequate. Range, pasture 15% short, 85% adequate. Hay, other roughage 10% very short, 30% short, 60% adequate. Major activities: Spring seeding, fertilizing, herbicide application.

Spring wheat 99% seeding complete. Russian wheat aphids low numbers, Walla Walla County, due to winter weather. Seeding of potatoes 80% complete. First cutting of alfalfa hay began in Walla Walla County. Green chopping underway in many areas, west. Late apples reached full bloom, Chelan, Okanogan Counties. Apples in or approaching full bloom, west. Cranberry damage, Pacific county. Early strawberries, blueberries began bloom, West.

WEST VIRGINIA: Temperature 51°, 2 to 8° below normal. Extremes 27° Terra Alta; 76° Creston. Precipitation 2.36 in., 0.52 to 2.18 in. above normal.

Days suitable for fieldwork 1.7. Soil moisture 3% short, 53% adequate, 44% surplus. Wheat good to fair. Barley fair to good. Oats fair to good, 79% planted; 23% emerged. Corn 12% planted. Tobacco beds good; 92% emerged. Hay good to fair. Apples fair. Peaches poor. Feed adequate. Cattle, sheep good to fair. Calving, lambing complete. Farm activities: Fixing fence, fertilizing, pasturing cattle, corn planting.

WISCONSIN: Temperatures 44 to 10° below normal. Extremes 15°; 73°. Precipitation 0.30 to 0.50 in. Light snow 6th.

Days suitable for fieldwork 5.4. Soil moisture 50% short, 49% adequate, 1% surplus. Spring plowing 57% complete, 81% 1988, 65% avg. Oats 72% seeded, 92% 1988, 78% avg. Corn 14% planted, 39% 1988, 27% avg. Potato planting nearly complete central. Hay, pastures slow growing.

WYOMING: Temperatures below normal. Precipitation below normal.

Days suitable for fieldwork 6.0. Topsoil moisture 63% short, 37% adequate. Spring wheat 70% planted, 65% 1988, 75% avg.; 25% emerged, 40% 1988, 40% avg. Oats 65% planted, 65% 1988, 65% avg.; 25% emerged, 25% 1988, 35% avg. Barley 85% planted, 85% 1988, 80% avg.; 45% emerged, 60% 1988, 55% avg. Sugarbeets 90% planted, 95% 1988, 95% avg.; 15% emerged, 35% 1988, 40% avg. Corn 25% planted, 35% 1988, 40% avg.; none emerged. Potatoes 25% planted, 15% 1988, 30% avg.; 5% emerged. Dry beans few planted, none 1988, 10% avg. Winter wheat fair to good. Livestock mostly good. Spring calves born 90%, 95% 1988, 90% avg. Death losses light to normal. Farm flock: Ewes lambed 95%, 90% 1988, 95% avg.; shorn 90% 85% 1988, 85% avg. Range flock: Ewes lambed 60%, 60% 1988, 65% avg.; shorn 75%, 80% 1988, 75% avg. Death losses light to normal. Range, pasture poor to fair.

International Weather and Crop Summary

April 1989

April 30 - May 6, 1989

WESTERN USSR ... Widespread rain reverses a drying trend in the North Caucasus, benefiting winter grains approaching the heading stage.

EUROPE ... Dry weather helps spring fieldwork in the west. Continued widespread rain in eastern Europe boosts moisture reserves.

SOUTH ASIA ... Light to moderate rain covers eastern rice areas, but hot weather stresses immature crops. Wheat harvesting progresses.

EASTERN ASIA ... Rainfall tapers off over the Yangtze Valley, but fields are too wet for fieldwork. Dry, warm weather covers the North China Plain.

SOUTHEAST ASIA ... Widespread showers improve preplanting conditions over Thailand's main season rice regions.

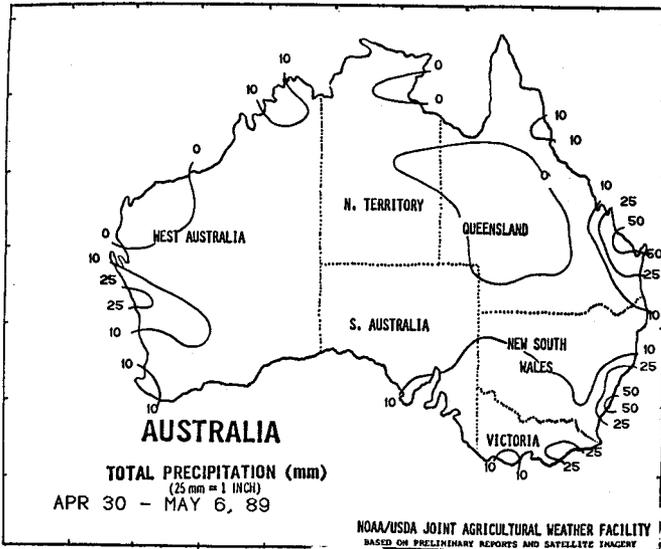
SOUTH AMERICA ... Dry weather generally allows rapid summer crop harvesting in Argentina. Early-week showers slow Brazil's soybean harvest.

AUSTRALIA ... Rainfall over the southeast improves moisture conditions for wheat planting.

SOUTH AFRICA ... Cool, wet weather persists across the Maize Triangle, maintaining unfavorably wet conditions for maturing crops.

NORTHWESTERN AFRICA ... Unseasonably cool, dry weather covers maturing winter grains.

CANADA ... Drier-than-normal weather persists across the Prairies.

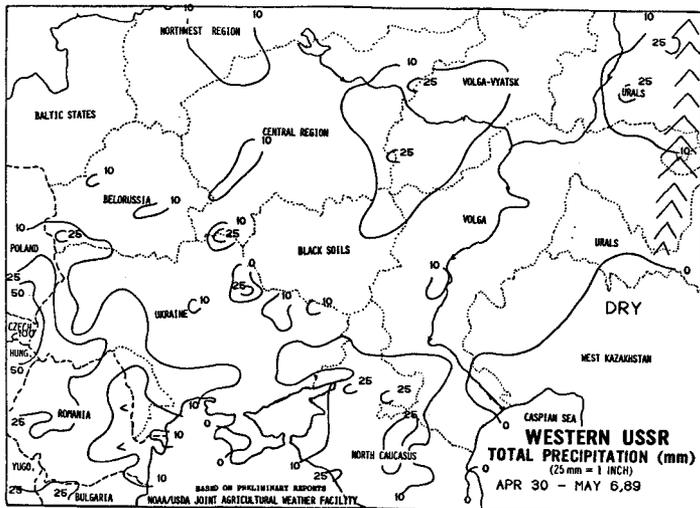


AUSTRALIA ... Moderate showers (10-24mm) fell over winter grain areas of southern New South Wales, Victoria, and southeastern South Australia, improving preplanting moisture levels. Moderate to heavy rain (21-63mm) continued over coastal regions of New South Wales and southeastern Queensland, but rainfall averaged less than 25mm over areas flooded by last week's excessive rains. Light rain (12mm or less) covered Queensland's sugarcane regions. In Western Australia, light rain (1-14mm) covered most winter wheat areas following last week's beneficial preplanting moisture.

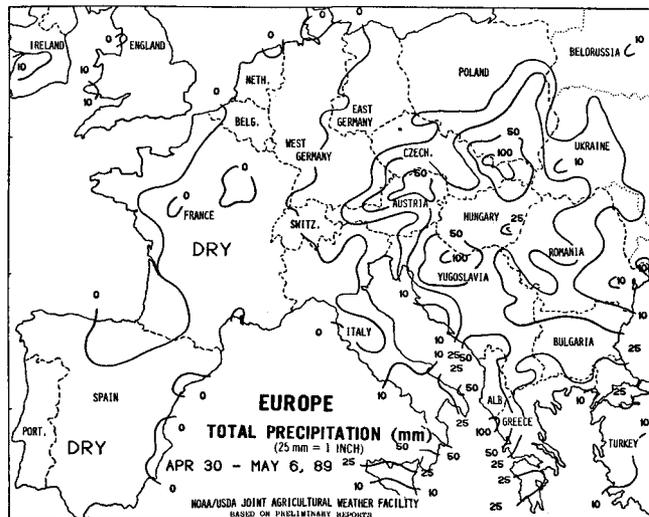
MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
*** = DATA NOT AVAILABLE

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG	AVG	HI	LO	DPART	F/NRM	DPART	
	MAX	MIN	MAX	MIN	AVG	F/NRM	TOTAL	
NORWAY OSLO	8	0	21	-8	4	0.9	83.6	35.0
SWEDEN STOCKHOLM	10	1	18	-9	5	1.1	29.2	-2.6
FINLND HELSINKI	10	2	19	-9	6	3.2	41.0	0.1
U KING GLASGOW	10	2	15	-3	6	-2.0	52.6	-10.4
EDINBURGH	10	3	14	-3	6	-1.0	35.0	-3.5
BIRMINGHAM	10	2	15	-3	6	-1.3	87.3	43.7
LONDON	11	3	14	-2	7	-0.8	70.9	14.8
IRELND DUBLIN	11	3	16	-2	7	-1.1	81.2	34.1
ICELND REYKJAVIK	4	-1	10	-6	2	-1.8	97.2	39.9
DENMRK COPENHAGEN	10	3	22	-2	7	0.0	27.7	-10.4
LUXEMB LUXEMBOURG	10	4	16	0	7	-1.5	173.6	124.9
SWITZL ZURICH	11	5	18	2	8	0.1	118.7	27.3
GENEVA	12	5	19	0	8	-0.8	89.9	31.5
FRANCE PARIS	13	4	20	-1	9	-1.1	98.0	62.3
STRASBOURG	12	6	20	1	9	-0.5	142.2	99.3
BOURGES	13	5	20	-1	9	-1.2	88.9	42.3
BORDEAUX	15	7	20	0	11	-0.4	168.8	109.4
TOULOUSE	14	6	20	1	10	-0.8	141.3	85.4
MARSEILLE	17	10	23	5	13	0.5	59.5	17.1
SPAIN VALLADOLID	14	4	20	-1	9	-0.8	57.7	22.0
MADRID	16	5	22	-1	11	-1.7	41.7	-1.6
SEVILLE	22	9	27	5	16	-0.6	93.1	40.8
E GRMY LEIPZIG	12	4	23	-3	8	0.2	56.0	15.2
DRESDEN	12	5	23	-3	9	0.7	69.4	23.4
W GRMY HAMBURG	11	4	23	-3	8	0.4	67.6	20.6
BERLIN	13	5	25	-3	9	0.4	40.4	0.1
DUSSELDORF	11	5	18	-1	8	-1.6	81.8	30.7
STUTTGART	11	4	20	-1	8	-0.9	139.6	85.1
NURNBERG	12	4	24	-1	8	0.3	72.7	29.1
MUNICH	12	4	23	-1	8	0.4	119.2	46.7
AUSTRI VIENNA	16	6	24	-1	11	1.1	42.4	-0.5
INNSBRUCK	14	5	19	0	9	0.6	94.2	28.5
CZECH PRAGUE	13	4	23	-2	8	0.6	36.3	-1.7
POLAND WARSAW	14	5	23	-5	9	1.7	45.2	10.9
LODZ	14	5	23	-8	10	2.3	58.9	8.9
KATOWICE	15	5	24	-7	10	2.4	65.5	11.4
PRZEMYSL	15	6	24	-4	10	2.4	64.1	16.4
HUNGAR BUDAPEST	18	8	24	2	13	2.2	42.6	3.5
YUGOSL SARAJEVO	18	7	24	-1	12	3.0	79.8	3.9
ROMANI BUCHAREST	21	8	27	1	14	3.0	67.9	23.3
BULGAR SOFIA	20	9	30	3	14	3.8	28.9	-18.2
ITALY MILAN	16	8	22	2	12	-0.2	239.0	161.4
VERONA	18	7	24	1	12	0.4	180.4	119.8
VENICE	17	9	22	4	13	1.1	117.8	46.0
GENOA	17	12	22	9	14	-0.3	282.3	196.7
ROME	18	10	23	5	14	0.6	83.0	33.7
NAPLES	20	9	27	3	15	1.6	98.8	24.7
GREECE THESSALONIKA	22	9	25	7	16	1.5	20.8	-15.3
LARISSA	23	7	28	3	15	1.2	10.9	-17.5
ATHENS	22	13	27	10	17	0.7	8.4	-8.7
TURKEY ISTANBUL	21	11	28	8	16	5.2	12.3	-25.7
ANKARA	23	5	29	-1	14	2.0	6.3	-19.7
CYPRUS LARNACA	26	13	32	9	19	2.4	0.1	-20.0
USSR TALLINN	11	3	27	-8	7	4.4	27.7	-7.7
LENINGRAD	12	5	24	-4	8	4.7	25.6	-9.7
KAUNAS	12	4	22	-7	8	2.3	68.5	29.0
MINSK	12	4	23	-7	8	2.4	62.8	22.4
KAZAN	6	-1	19	-10	3	-1.6	31.6	0.0
MOSCOW	12	3	24	-5	8	2.3	41.8	3.9
SVERDLOVSK	5	-3	15	-16	1	-3.1	31.4	5.9
OMSK	5	-3	14	-9	1	-1.7	28.9	9.2
KUSTANAY	5	-3	16	-16	1	-3.6	34.2	12.6
KRASNOYARSK	5	-4	21	-16	1	-0.5	70.9	45.1
NOVOSIBIRSK	5	-2	16	-10	1	2.2	29.5	16.8
BARNAUL	6	-2	19	-8	2	-0.3	44.8	17.3
KHABAROVSK	11	0	21	-5	6	2.1	54.1	16.7
VLADIVOSTOK	12	3	23	-1	8	3.6	25.8	-36.6
KIEV	15	6	22	-2	10	2.0	28.3	-11.6
LVOV	14	5	22	-4	10	2.4	47.2	-0.8
KIROVOGRAD	16	6	24	-2	11	2.6	25.6	-5.7

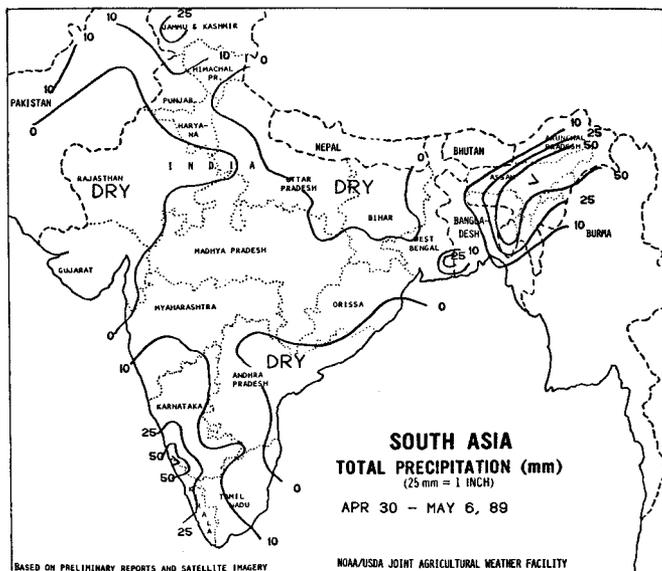
COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)						
	AVG MAX	AVG MIN	HI	LO	DPART	F/NRM	TOTAL		AVG MAX	AVG MIN	HI	LO	DPART	F/NRM	TOTAL	F/NRM				
April 1989								April 1989												
USSR	ODESSA	15	9	24	3	12	2.9	14.1	-17.0	TANZAN	DAR ES SALAAM	30	23	32	21	26	-0.4	247.3	-23.1	
	YALTA	16	9	26	7	13	2.4	9.2	-22.8	GABON	LIBREVILLE	31	23	33	21	27	0.1	317.4	-29.2	
	VORONEZH	15	3	25	-6	9	1.6	35.4	-0.1	TOGO	LOME	32	26	34	21	29	1.2	117.0	17.4	
	SARATOV	13	4	23	-6	9	2.0	23.7	-3.4	B FASO	OUAGADOUGOU	41	27	43	22	34	1.4	0.1	-23.6	
	KHARKOV	15	5	24	-2	10	1.4	59.4	29.9	IVRY C	ABIDJAN	32	25	33	22	28	0.7	70.0	-93.0	
	VOLGOGRAD	16	5	25	-5	10	1.4	16.7	-6.6	MOZAMB	MAPUTO	28	19	35	15	24	0.4	23.7	-35.5	
	ROSTOV	17	7	24	-2	12	1.8	45.4	7.1	ZAMBIA	KABWE	25	14	29	11	20	-0.2	5.1	-18.3	
	ASTRAKHAN	18	6	26	-6	12	1.5	21.3	5.8	ZIMBAB	HARARE	25	14	27	11	19	0.8	8.9	-37.4	
	KRASNODAR	21	9	28	3	15	3.5	15.0	-37.9	S AFRI	PRETORIA	23	13	28	9	18	0.5	36.5	-21.6	
	ORENBURG	10	-1	21	-11	5	-2.4	17.8	-5.6		KROONSTAD	22	9	28	1	15	-0.9	32.4	-20.6	
	TSELINOGRAD	6	-2	15	-11	2	-1.2	59.0	44.9		JOHANNESBURG	20	10	25	6	15	-0.1	41.2	-16.3	
	KARAGANDA	7	-2	17	-11	3	-2.1	37.8	14.1		BETHAL	21	7	26	1	14	-1.2	7.6	-38.4	
	TBILISI	23	10	29	2	17	4.0	27.8	-23.3		DURBAN	26	18	29	14	22	0.9	163.1	76.5	
	TASHKENT	20	6	27	-2	13	-2.6	37.7	-21.6		CAPE TOWN	23	12	34	5	18	0.9	60.0	15.4	
	ASHKHABAD	25	10	33	4	18	1.0	2.0	-41.3	CANADA	TORONTO	10	0	19	-7	5	-1.2	41.3	-28.7	
SYRIA	DAMASCUS	29	7	36	1	18	2.2	7.6	-5.4		MONTREAL	10	0	19	-5	5	-0.8	52.5	-21.7	
ISRAEL	JERUSALEM	26	12	35	6	19	3.1	0.1	-28.1		WINNIPEG	8	-3	23	-12	3	-0.9	15.8	-22.7	
PAKIST	KARACHI	35	23	39	16	29	0.3	0.1	-1.5		REGINA	12	-2	29	-13	5	1.7	9.8	-14.0	
INDIA	AMRITSAR	32	13	37	7	23	-2.4	4.1	-8.0		SASKATOON	12	-3	28	-12	5	1.2	5.1	-15.7	
	NEW DELHI	35	20	39	14	27	-1.5	0.1	-6.5		LETHBRIDGE	13	-1	27	-10	6	1.1	28.7	-14.0	
	AHMEDABAD	40	24	43	18	32	0.6	0.1	0.1		CALGARY	11	-2	22	-11	5	1.3	22.0	-10.6	
	INDORE	39	20	41	14	29	-0.3	0.1	-1.9		EDMONTON	12	-1	22	-13	6	1.5	12.6	-9.1	
	CALCUTTA	37	25	41	21	31	0.5	27.0	-7.8		VANCOUVER	15	6	22	2	10	1.6	41.4	-18.2	
	VERAVAL	32	20	41	16	26	-0.7	0.1	0.1	MEXICO	GUADALAJARA	31	11	34	6	21	-0.8	2.3	-6.1	
	BOMBAY	33	23	40	18	28	-0.1	0.1	-0.3		MEXICO CITY	26	10	29	8	18	0.2	10.7	-2.3	
	POONA	38	20	39	15	29	-0.9	24.7	8.3		ACAPULCO	31	20	33	18	25	-2.0	0.1	-5.1	
	BEGAMPET	39	25	40	19	32	1.0	1.0	-20.5		BERMUD	ST. GEORGES	24	19	28	16	22	2.8	99.1	18.5
	MADRAS	36	26	41	20	31	0.2	0.1	-15.4		BAHAMA	NASSAU	29	21	30	17	25	1.4	50.4	-4.3
	MANGALORE	34	25	38	23	30	0.5	33.0	-6.9		CUBA	HAVANA	29	21	32	17	25	0.5	5.6	-44.7
H KONG	HONG KONG	24	21	29	19	22	0.3	197.2	57.7		JAMAIC	KINGSTON	32	23	35	21	28	0.7	3.8	-35.0
N KREA	PYONGYANG	18	3	27	-2	11	2.3	8.5	-53.5		P RICO	SAN JUAN	29	24	30	21	26	-0.4	29.0	-62.0
S KREA	SEOUL	21	9	29	4	15	4.2	14.1	-54.0		GUADQL	RAIZET	29	22	30	20	25	0.3	44.6	-13.5
JAPAN	SAPPORO	12	4	20	0	8	1.9	58.7	-7.4		MARTNQ	LAMENTIN	29	23	30	20	26	0.8	52.8	-25.3
	NAGOYA	21	10	27	6	16	2.0	141.1	-13.5		BARBAD	BRIDGETOWN	29	24	30	22	26	-0.3	15.4	-31.0
	TOKYO	20	12	23	6	16	1.9	196.4	70.2		TRINID	PORT OF SPAIN	31	22	32	20	27	0.5	11.1	-39.1
	YOKOHAMA	19	11	22	7	15	1.7	285.9	143.2		COLOMB	BOGOTA	20	7	22	1	13	-0.5	49.3	-38.9
	KYOTO	21	10	28	4	15	2.9	107.9	-32.9		VENEZU	CARACAS	30	23	32	21	26	0.6	10.1	-12.7
	OSAKA	20	11	27	7	16	1.5	71.1	-77.2		F GUIA	CAYENNE	29	24	31	22	27	0.6	289.9	-139.5
THAILN	PHETCHABUN	38	25	40	20	31	0.6	65.0	-3.0		BRAZIL	FORTALEZA	29	24	31	22	26	-0.5	314.1	-43.5
	BANGKOK	36	27	38	25	32	1.2	2.1	-62.1		RECIFE		29	23	31	21	26	-0.2	559.3	278.0
MALAYS	KUALA LUMPUR	31	24	34	23	28	0.9	143.6	-134.8		BELO HORIZONTE	29	20	32	16	24	2.8	5.1	-60.0	
VIETNM	HANOI	27	22	32	19	24	0.5	102.4	21.1		CAMPO GRANDE	29	20	34	14	25	2.5	83.3	-17.8	
CHINA	HARBIN	15	1	25	-6	8	2.1	7.3	-16.5		FRANCA		27	17	30	13	22	1.9	23.0	-58.0
	HAMI	20	5	28	0	13	-0.3	1.4	-0.7		RIO DE JANEIRO	29	23	36	20	26	1.8	107.2	-7.0	
	LANCHOW	17	6	25	2	12	0.1	32.8	15.3		LONDRINA	29	18	32	13	23	2.2	53.8	-46.5	
	BELJING	22	10	27	5	16	2.6	35.4	16.0		SANTA MARIA	25	16	35	11	21	1.6	140.0	-2.0	
	TIENTSIN	22	11	27	5	16	2.7	8.3	-12.7	PERU	LIMA	23	17	28	16	20	-0.1	0.1	0.1	
	LHASA	17	2	21	-2	9	1.3	6.5	2.5		BOLIVI	LA PAZ	13	2	17	-1	7	-1.5	56.8	26.9
	KUNMING	24	10	30	5	17	1.2	2.8	-18.4		CHILE	SANTIAGO	24	6	30	2	15	1.3	16.0	2.6
	CHENGCHOW	22	10	29	5	16	1.2	9.1	-44.6		ARGENT	IGUAZU	27	17	32	10	22	***	86.2	***
	YEHCHANG	21	14	26	10	17	0.6	125.0	20.5		FORMOSA		27	18	34	12	22	0.8	173.8	36.8
	HANKOW	21	13	26	8	17	1.2	168.1	28.0		CERES		26	14	33	8	20	1.2	219.9	147.6
	CHIHKIANG	20	13	30	9	17	0.4	149.6	-18.6		CORDOBA		24	11	31	2	18	0.8	33.9	-12.7
	SHANGHAI	18	11	24	8	15	0.8	199.1	95.7		RIO CUARTO	24	12	29	-1	18	1.9	29.0	-21.9	
	NANCHANG	20	14	26	6	17	-0.3	283.6	58.2		ROSARIO		24	13	29	2	18	1.5	20.7	-64.3
	TAIPEI	25	20	32	8	23	1.9	218.2	50.3		BUENOS AIRES		23	12	28	0	17	1.6	75.0	-11.1
	CANTON	25	20	30	15	22	0.4	199.3	20.6		SANTA ROSA		24	9	30	-7	17	1.7	0.1	-51.5
	NANNING	26	20	34	10	23	0.7	53.5	-36.4		TRES ARROYOS		23	9	29	0	16	2.4	4.7	-59.3
CNRY I	LAS PALMAS	22	16	24	12	19	0.1	1.2	-4.9	MIDW I	MIDWAY ISLAND	23	19	26	17	21	1.7	27.1	-34.5	
MOROCC	CASABLANCA	18	11	22	7	15	-1.0	69.4	31.1	N CALD	NOUMEA	27	22	29	20	24	0.7	161.3	46.6	
	MARRAKECH	21	10	30	5	16	-1.1	40.1	5.5	FIJI	NAUSORI	28	23	30	20	25	-0.2	304.4	-34.9	
ALGERI	ALGER	21	10	29	4	15	0.6	100.4	18.8	SAMOA	PAGO PAGO	30	25	31	22	27	0.3	324.5	31.9	
	BATNA	18	5	26	-3	11	-0.6	16.5	-11.4	TAHITI	PAPEETE	32	24	33	23	28	1.1	23.4	-90.4	
TUNISI	TUNIS	22	11	31	7	17	1.5	76.3	28.4	N ZEAL	AUCKLAND	20	14	23	8	17	0.4	276.9	166.1	
NIGER	NIAMEY	42	25	45	20	34	0.2	0.9	-3.2	PA N G	PORT MORESBY	30	23	32	22	27	-0.2	209.6	91.5	
MALI	TIMBUKTU	39	23	42	20	31	0.1	0.1	-1.3	AUSTRL	DARWIN	31	25	34	23	28	-0.6	173.6	75.8	
	BAMAKO	39	26	41	16	33	1.1	2.0	-14.4		MOREE		24	15	28	11	20	-0.3	86.7	62.5
MAURIT	NOUAKCHOTT	34	17	40	14	25	0.2	0.1	0.1		BRISBANE		25	19	27	16	22	0.0	476.9	404.8
SENEGL	DAKAR																			



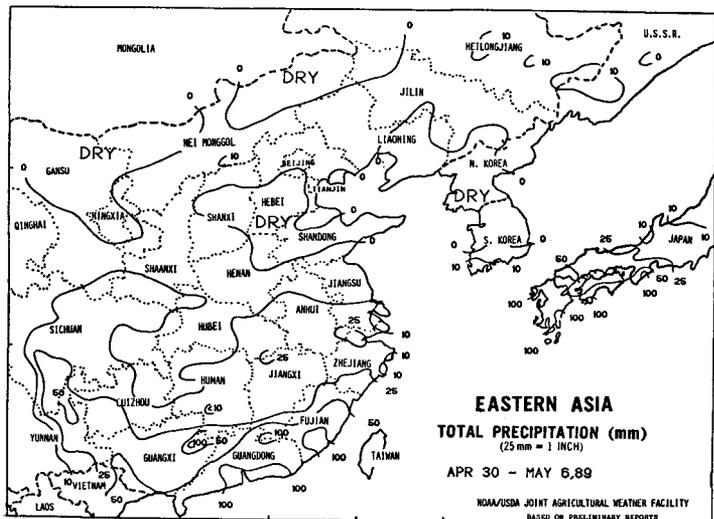
WESTERN USSR ... Winter grains were jointing over most of the region except for crop areas in the Volga Vyatsk Region where the crop was tillering. Widespread beneficial precipitation covered the North Caucasus, reversing a drying trend which began in mid-January. Precipitation amounts ranged from 10 to 37mm, benefiting winter grains approaching the heading stage and spring grains in the early vegetative stage. Dry weather continued over the south-central Ukraine and the Crimea, where crops had to rely on limited soil moisture reserves to meet increasing crop moisture requirements. Light precipitation (mostly less than 10mm) covered crop areas north of the central Ukraine and the northern North Caucasus, where adequate moisture reserves continued to favor crop growth. In south-central USSR cotton areas, locally heavy rain and some snow accompanied unseasonable cold weather. Reports indicated local flooding in eastern areas. Some replanting will be necessary in areas which were washed out by heavy downpours since cotton planting was underway.



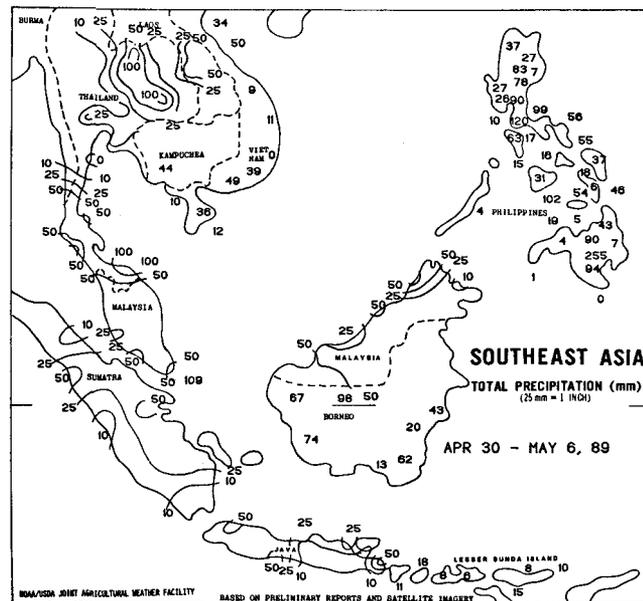
EUROPE ... Mostly dry weather covered Spain, northern Italy, France, England, the Netherlands, Belgium, West Germany, East Germany, and northern Poland. In addition, weekly average temperatures ranged from 1 to 3 degrees Celsius (C) above normal in these areas. Adequate moisture reserves from France through most of northern Europe favored winter grains, mostly in the jointing stage, and spring grain establishment. The dry weather in southwestern France helped corn planting. Widespread showers continued over eastern Europe. Rainfall generally ranged from 25 to 50mm with heavier rainfall (50-100mm) covering extreme southern Poland, eastern Czechoslovakia, northern Austria, northern Yugoslavia, and Albania where local flooding likely occurred. Light precipitation (less than 10mm) covered crop areas in extreme eastern Romania. The rain that has covered southeastern Europe in recent weeks has helped to boost limited moisture reserves.



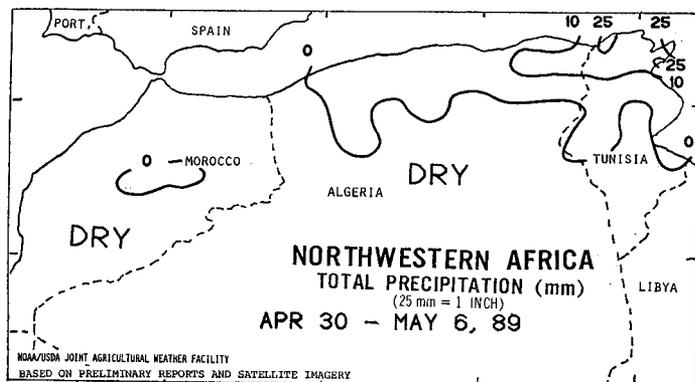
SOUTH ASIA ... Scattered, light to moderate rain (2-25mm) fell from eastern Orissa to central Bangladesh as seasonably hot weather continued, stressing immature crops. Further east, moderate showers (37-74mm) improved irrigation levels. Scattered showers lingered over northernmost wheat regions of Pakistan and India, helping irrigation reserves, but dry, warm weather over the major wheat regions favored harvesting. Showers (1-22mm) continued from Karnataka to Kerala as dry, hot weather continued over rice areas of the southeastern coast, promoting harvesting.



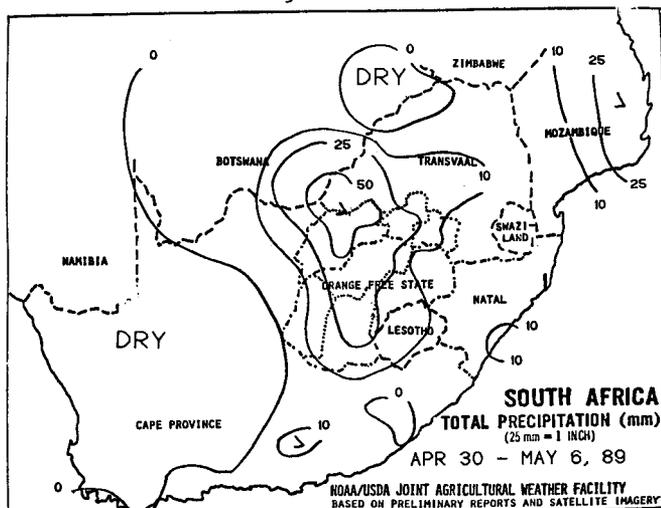
EASTERN ASIA ... Rainfall tapered off over the Yangtze Valley, with amounts ranging from 10 to 25mm from eastern Hubei and northern Jiangxi to southern Jiangsu and Zhejiang, and 1-15mm from western Hubei and northern Hunan westward through Sichuan. Spring planting delays continued, however, resulting from the recent weeks of heavy rain which left fields saturated. Moderate to heavy rain (25-50mm or more) fell over southern crop areas from Guangxi to southern Zhejiang, benefiting vegetative early crop rice but possibly causing local flooding. To the north, mostly dry, warmer-than-normal weather covered the North China Plain with maximum temperatures reaching the low 30's C from northern Shandong northward, increasing evaporative losses and accelerating crop growth. In the northeast, dry weather covered eastern Liaoning, western North Korea, and northern South Korea as light rain (less than 15mm) covered most other areas. Heavy rain (50-100mm or more) fell over Japan's southern coastal areas, possibly causing local flooding.



SOUTHEAST ASIA ... Widespread, variable showers (10-109mm) continued over Thailand's main season rice areas, improving moisture conditions for pre-planting activities. Temperatures, however, continued seasonably warm and averaged 1-3 degrees C above normal over all but the northeastern region, maintaining high evaporation rates. Rainfall increased over peninsular Thailand, ranging from 25 to 50mm or more over most regions, although local areas to the south received excessive amounts (100-222mm). Light to moderate showers (10-50mm or more) continued over Indonesia and Malaysia, maintaining generally favorable conditions for immature crops. In the Philippines, showers (20-50mm or more) improved moisture reserves over most main season crop areas but likely caused local flooding.



NORTHWESTERN AFRICA ... Winter grains development ranged from late filling to maturing over most of the region. Dry weather covered Morocco, and western and central Algeria, favoring grain maturation. Light showers (10-25mm) over winter grain areas in northeastern Algeria and northern Tunisia benefited immature crops. Winter grain harvesting usually begins in May and extends through July. Weekly average temperatures were 1-3 degrees C above normal in Morocco but were 2-7 degrees C below normal in Algeria and Tunisia. The unseasonably cool weather in Algeria and Tunisia slowed crop maturation.



SOUTH AFRICA ... Cool, wet weather persisted across the Maize Triangle, hampering early harvesting and maintaining unfavorably wet conditions for maturing corn. Rainfall across the western half of the Triangle was heavier than in recent weeks, ranging from 25 to 76mm over a large portion of the central Orange Free State and southwestern Transvaal. Warmer, drier weather is needed in most areas to avoid reduction in quality. Drier weather (1-13mm) covered crop regions from the southwestern Cape Province to Natal, favoring winter wheat planting activities.

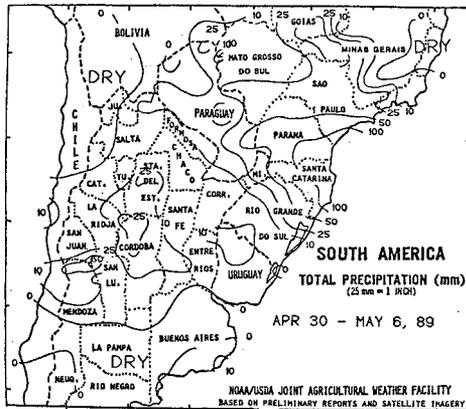
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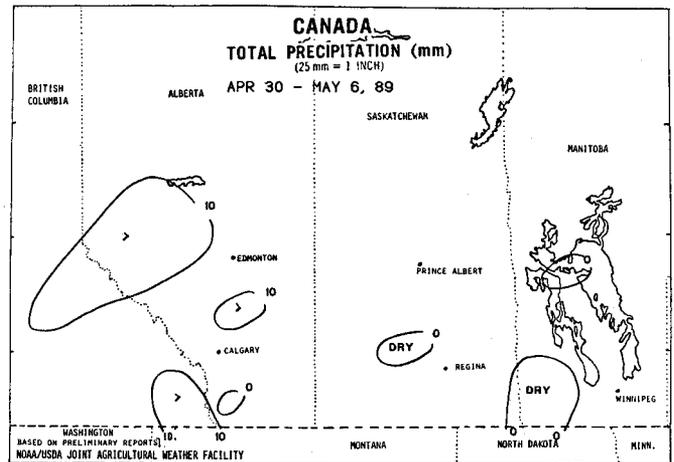
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SOUTH AMERICA ... Dry weather continued over Buenos Aires, La Pampa, and extreme southern Santa Fe, allowing rapid corn and soybean harvesting. Light, widespread showers (10-26mm) on May 4 in Cordoba and south-central Santa Fe caused only brief harvest delays. Further north, mostly dry weather in Chaco helped cotton harvesting, while light showers (around 10mm) over Formosa caused only minor delays. Reports indicate wheat sowing has begun in northern producing areas. Rain is needed in southern Buenos Aires, where topsoil moisture is limited. In south-central Brazil, early-week wet weather (40-70mm) in soybean areas of southern Mato Grosso do Sul, Parana, and Santa Catarina caused harvest delays. Dry weather in these areas by week's end allowed a resumption in harvest activities. Brazil's soybean harvest reached 75 percent completion, still lagging the average pace by about 10 percentage points.



CANADA ... Precipitation continued light (1-4mm) over the primary spring wheat areas of the Canadian Prairies, continuing the recent trend of drier-than-normal weather that has reduced preplanting moisture reserves. Since last fall, precipitation accumulation in most areas has been below normal but, except for eastern Saskatchewan, above the previous year's totals. Warmer soil temperatures and increased topsoil moisture are needed before planting can occur. May to early June is the primary planting period for spring wheat and rapeseed.

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