

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

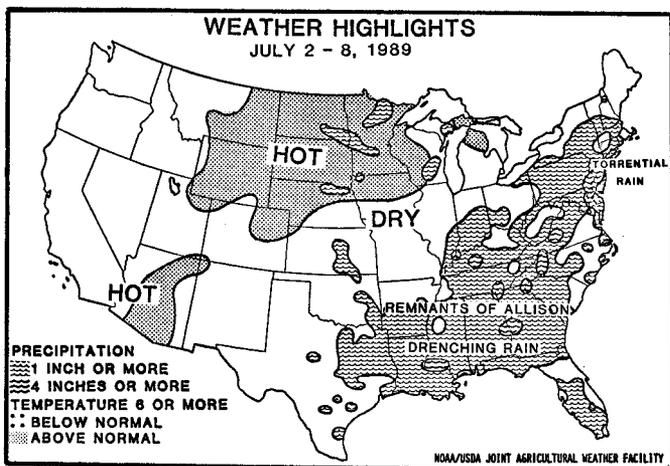
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July 11, 1989

National Weather Summary

July 2-8, 1989



The mercury soared up to 107 degrees in North Dakota. Hot weather also remained in the Southwest. Rain dampened the Fourth of July over the Eastern States, with locally heavy rain reaching from the lower Great Lakes to the mid-Atlantic coast.

WEDNESDAY: Showers and thunderstorms were in abundance down the Atlantic seaboard and across the Gulf Coast States, while the western half of the Nation remained hot. Torrential rain pounded southern Maryland to New Jersey as over 13 inches fell at Monroe, NJ. Temperatures again climbed into triple digits over the northern Plains.

THURSDAY: The soggy weather continued as thunderstorms were numerous along the east coast and across the Delta and Southeast. It was another hot day for the western two-thirds of the country. The temperature reached 126 degrees in California.

FRIDAY: The West continued to bake as numerous high temperature records for the date were broken. Rain showers and thunderstorms were scattered over the northern and middle Atlantic Coast States, upper and lower Mississippi Valley, and eastern Corn Belt.

SATURDAY: The stagnant upper level high pressure system continued to dominate as the heat spread into the East. Temperatures persisted above 100 degrees in the Southwest, central Rockies, and northern and central Plains. Thunderstorms were widely scattered across the Gulf Coast States, upper Great Lakes, and eastern Corn Belt.

HIGHLIGHTS: Hot, dry weather continued to plague parts of the western Corn Belt and northern Plains. A stagnant upper level ridge kept sizzling temperatures over the Southwest to the northern Plains. The heat covered much of the Nation at week's end. The remains of Tropical Storm Allison spread heavy rain from the central Gulf coast into the Southeast and eastern Corn Belt. Thunderstorms drenched the Atlantic Coast States and middle Missouri Valley with locally heavy rain. Torrents of rain deluged southern Maryland to central New Jersey with up to 13 inches.

SUNDAY: Thunderstorms associated with the low pressure system which once was Tropical Storm Allison brought heavy rain from the eastern Corn Belt to the eastern Gulf coast. Thunderstorms also produced severe weather and more drenching rain from Kansas to the saturated central Gulf coast. Torrential rain fell over eastern Puerto Rico and the Virgin Islands.

MONDAY: Rain continued from the eastern Corn Belt to the central and eastern Gulf coast. Heavy amounts fell across the Southeast. Bowling Green, KY, received over 5 inches, while Lake Greenwood, SC, was pelted with 1 1/2 inches in 30 minutes. A cold front produced intense thunderstorms in the middle Missouri Valley. Sunshine and warm temperatures dominated the West.

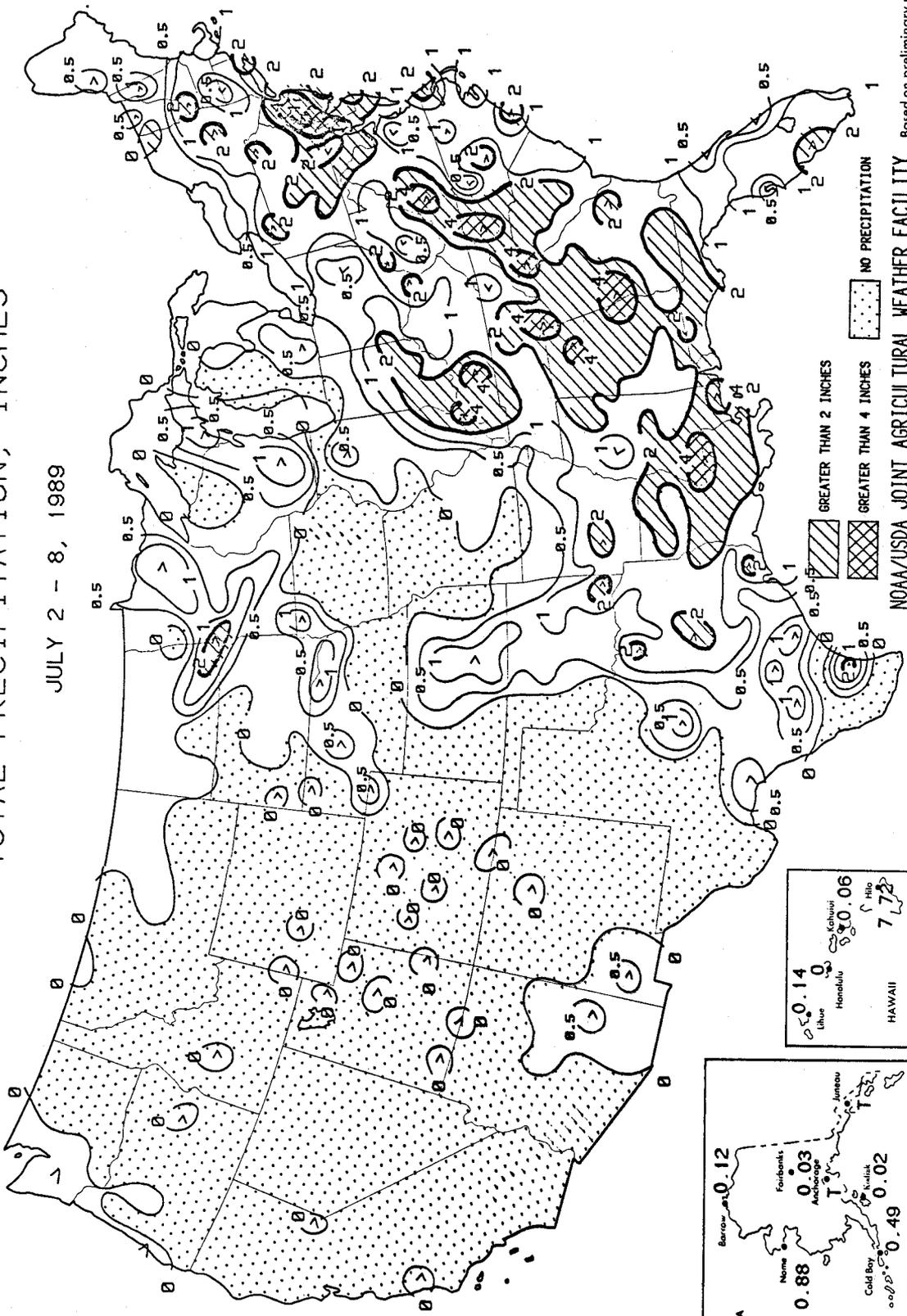
TUESDAY: A ridge of high pressure became firmly in place in the upper atmosphere and resulted in record-high temperatures in the northern Plains.

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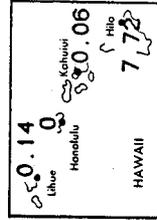
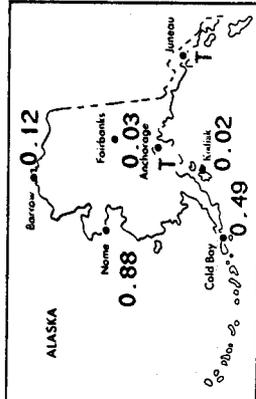
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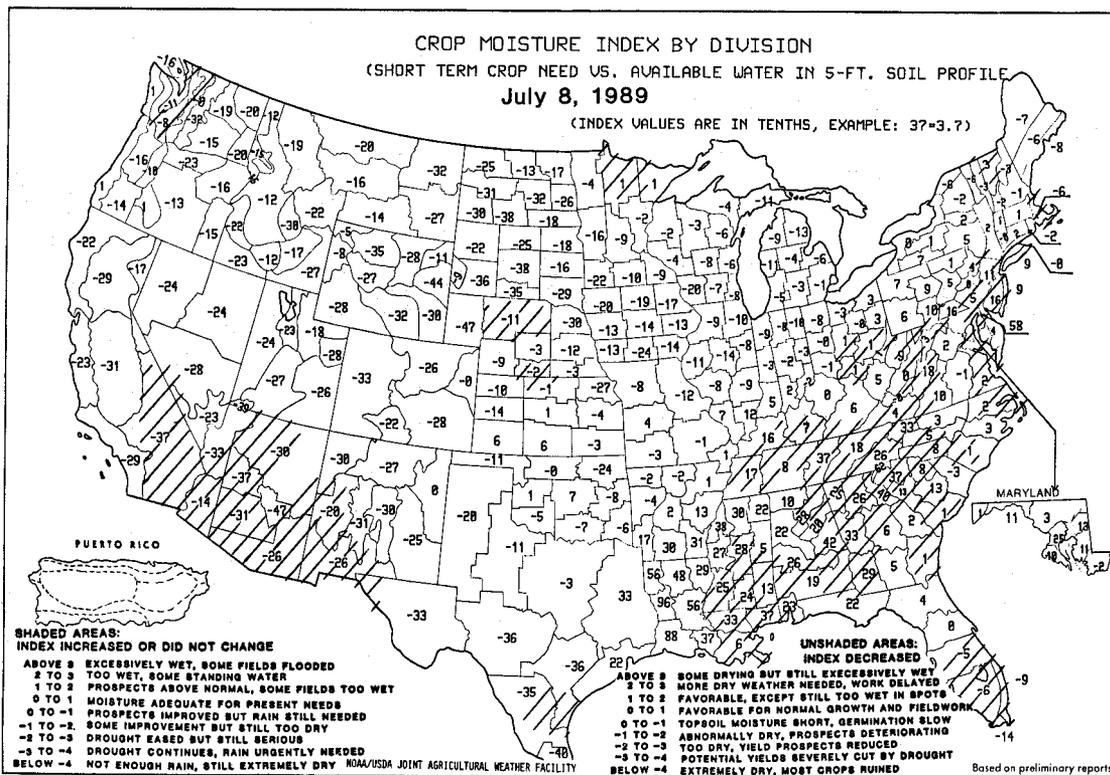
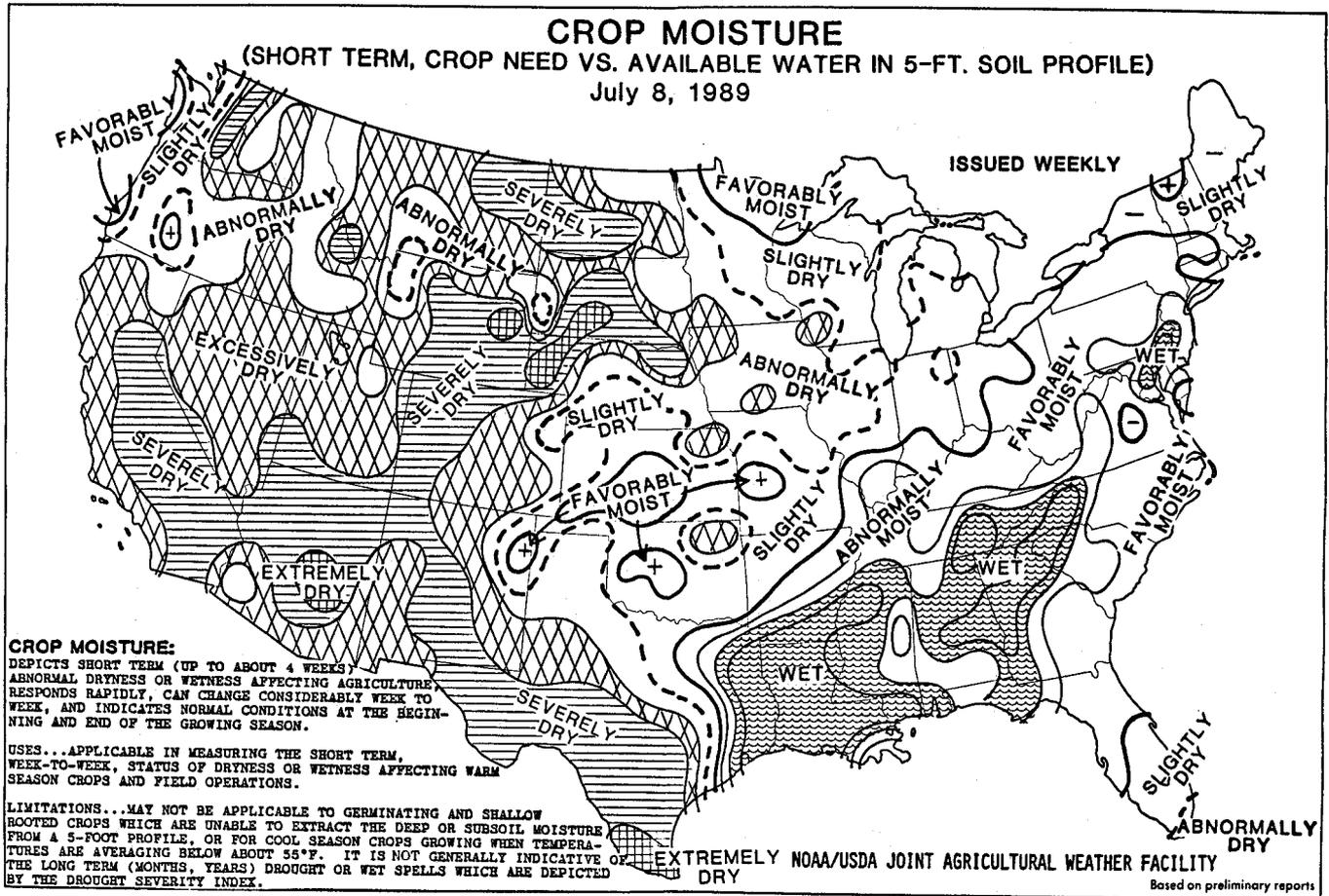
TOTAL PRECIPITATION, INCHES

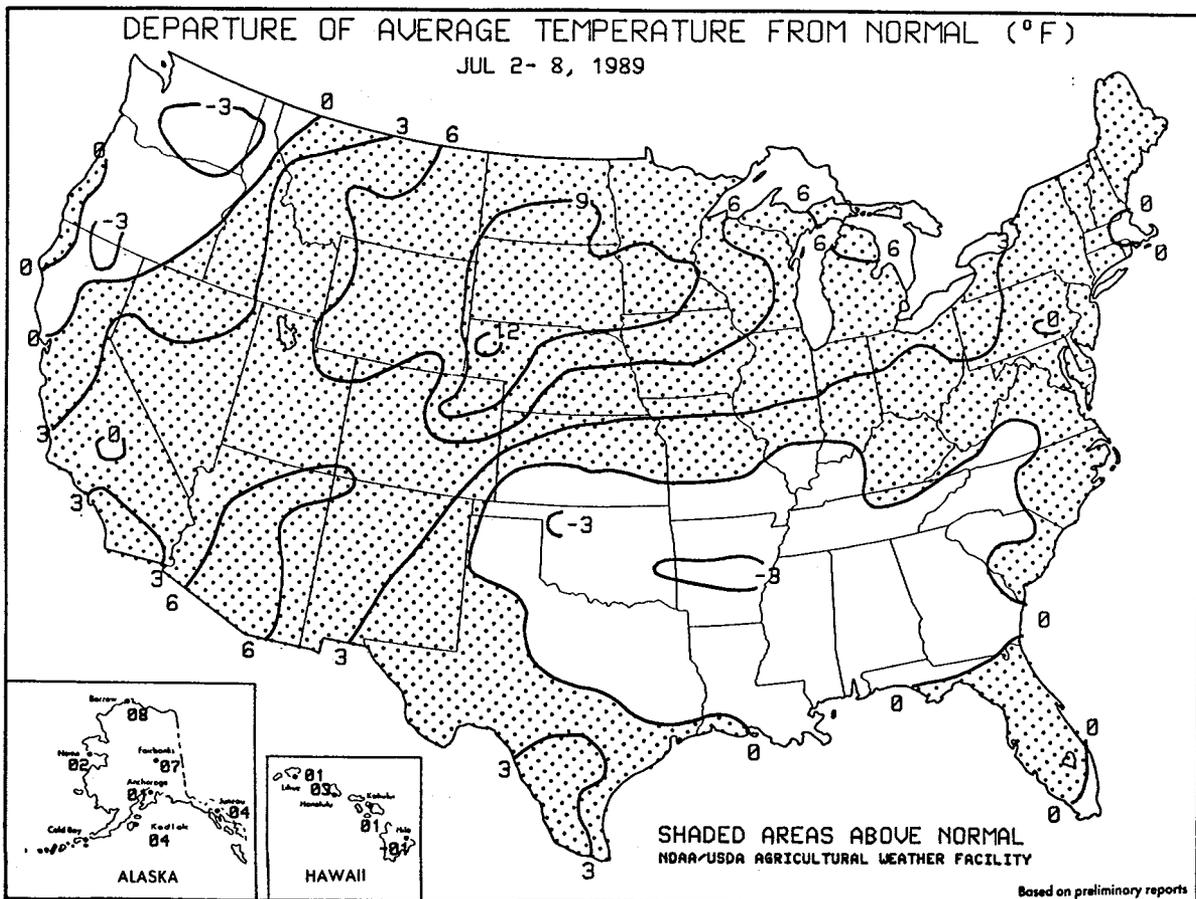
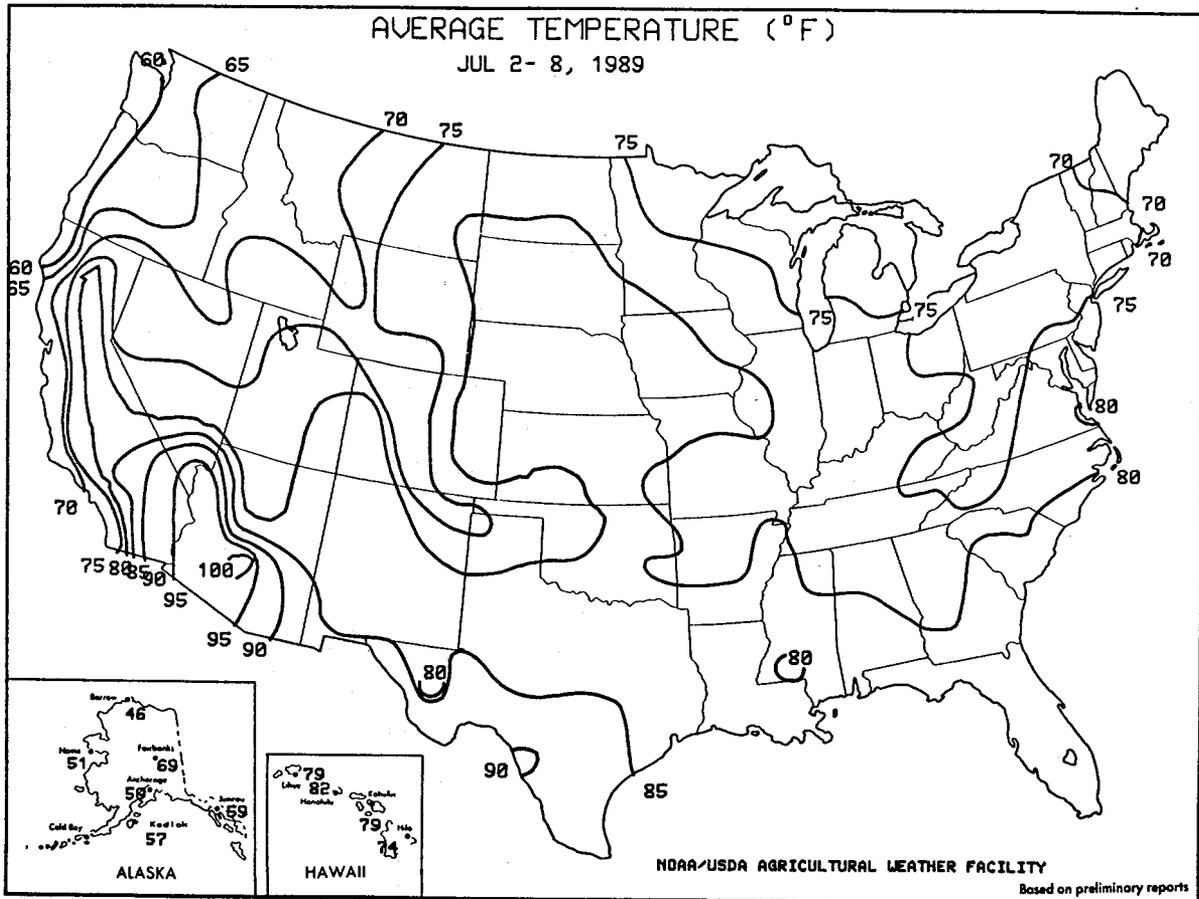
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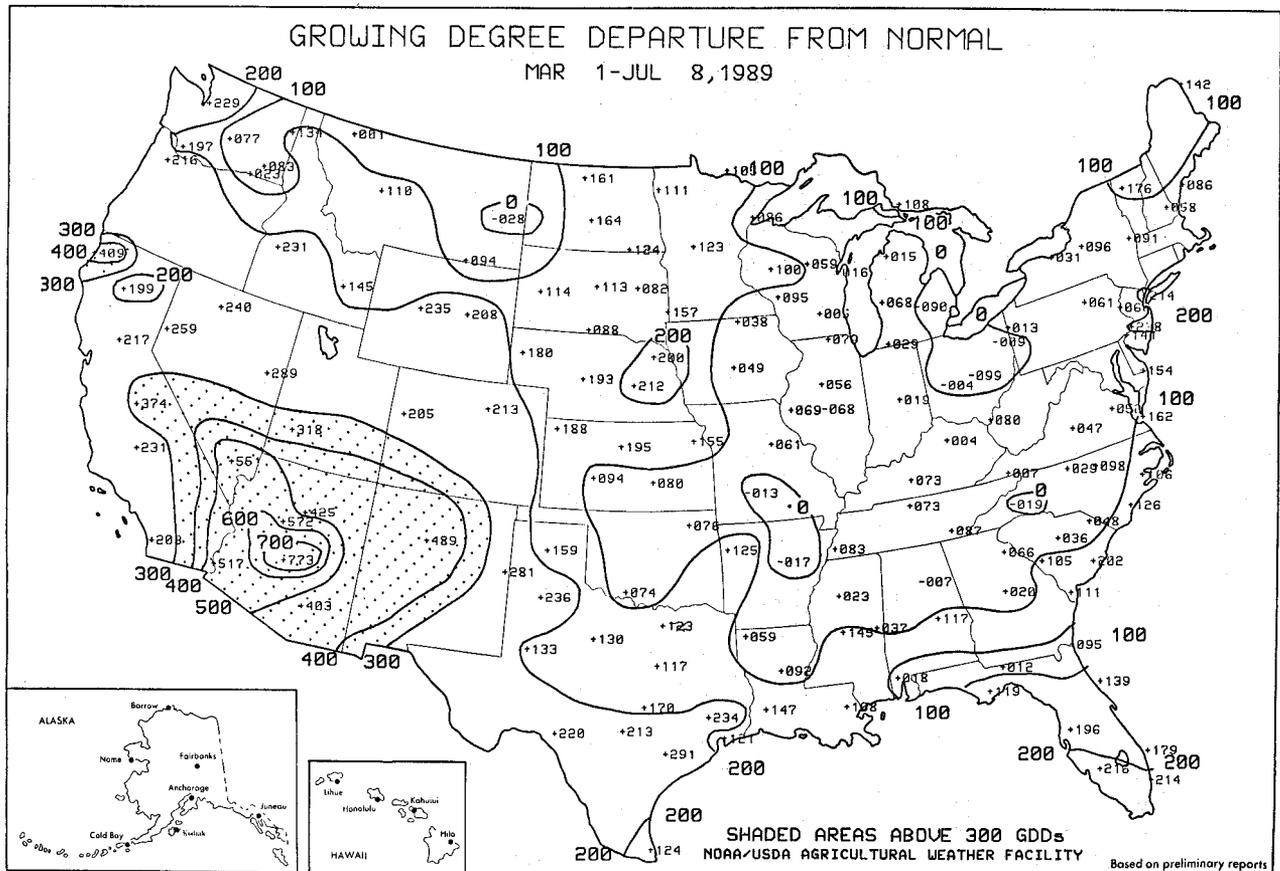
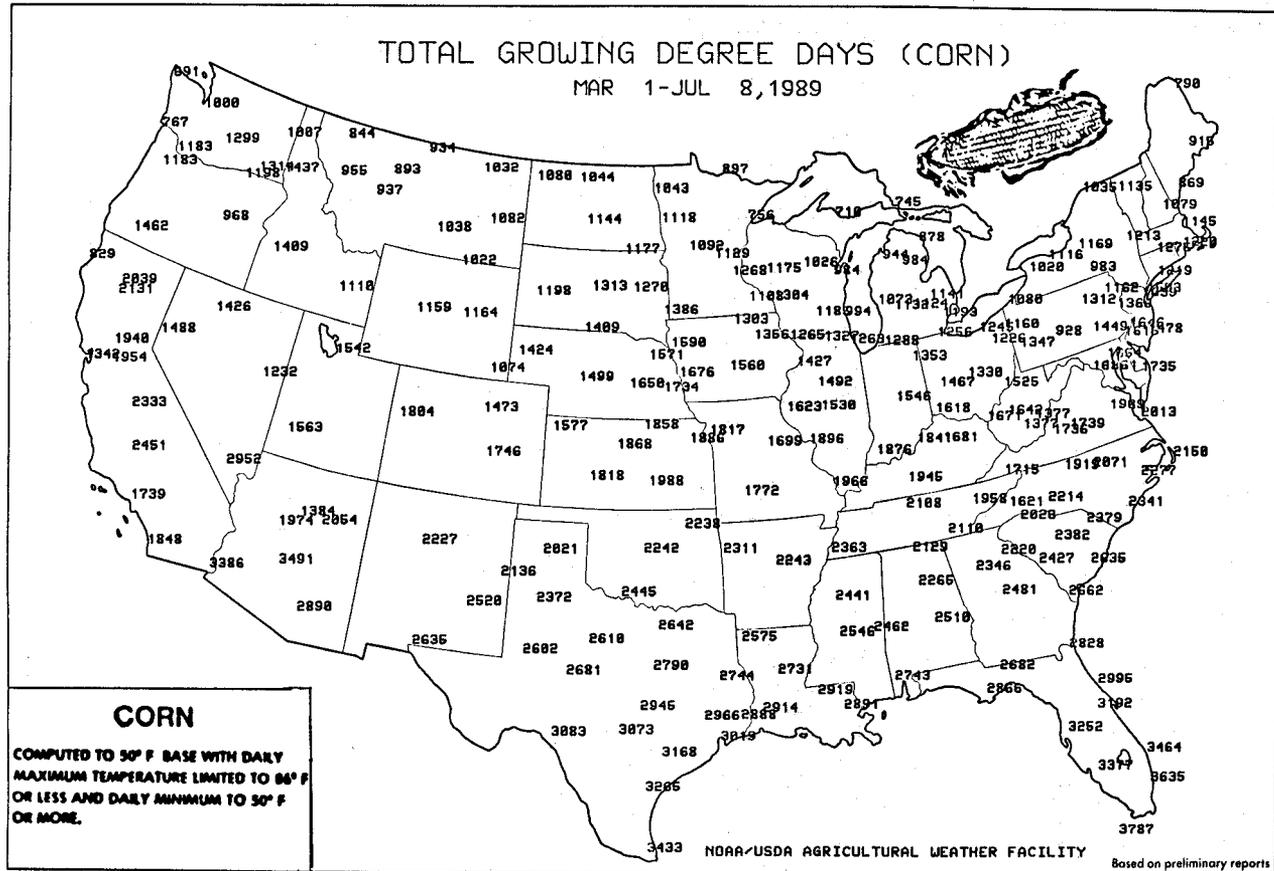


NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports









National Weather Data for Selected Cities

Weather Data for the Week Ending July 8, 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 JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	85	71	91	69	78	-2	3.5	2.4	2.4	18.4	374	41.4	134	97	66	1	0	7	2
MOBILE	87	73	90	71	80	-2	2.6	.9	2.1	12.4	180	31.6	94	99	66	1	0	5	1
MONTGOMERY	88	71	91	70	80	-2	3.4	2.4	1.8	18.1	389	41.3	150	98	64	3	0	5	2
AK ANCHORAGE	68	50	82	46	59	1	T	-4	T	1.4	90	5.0	100	92	55	0	0	0	0
BARRROW	55	37	65	32	46	8	.1	0	.1	.5	89	1.4	101	98	76	0	1	1	0
FAIRBANKS	83	54	87	47	69	7	T	-3	T	2.6	150	5.3	134	77	26	0	0	1	0
JUNEAU	66	52	72	49	59	4	T	-8	T	1.1	28	13.5	64	85	59	0	0	0	0
KODIAK	65	49	82	44	57	4	T	-8	T	7.3	146	20.7	73	96	64	0	0	1	0
NOME	56	47	62	41	52	2	.9	.5	.4	1.2	71	8.2	179	100	78	0	0	5	0
AZ PHOENIX	114	86	118	82	100	8	T	-1	T	0	0	2.3	84	30	10	7	7	0	0
PRESCOTT	100	60	103	50	80	8	T	-5	T	0	0	2.8	39	27	8	7	0	0	0
TUCSON	109	77	114	73	93	7	.4	-1	.3	.4	55	2.4	72	34	9	7	0	2	0
YUMA	111	81	114	77	96	4	T	0	T	0	0	.8	92	51	16	7	0	0	0
AR FORT SMITH	93	69	95	68	81	0	.4	-3	.3	5.9	132	32.7	151	100	48	7	0	2	0
LITTLE ROCK	86	70	88	67	78	-3	1.0	.2	.5	7.5	163	34.8	126	92	68	0	0	5	0
CA BAKERSFIELD	99	66	105	59	83	-1	0	0	0	0	0	2.3	59	55	17	7	0	0	0
EUREKA	64	53	68	51	59	3	0	0	0	.2	37	19.1	86	87	67	0	0	0	0
FRESNO	102	65	107	58	83	3	0	0	0	0	0	4.8	69	55	13	7	0	0	0
LOS ANGELES	78	63	82	61	70	2	0	0	0	T	0	3.2	39	94	60	0	0	0	0
REDDING	99	61	108	54	80	-2	0	0	-1	1.0	104	19.6	80	63	13	7	0	0	0
SACRAMENTO	98	57	109	54	78	3	0	0	0	.4	331	8.9	84	75	16	7	0	0	0
SAN DIEGO	75	63	83	61	69	0	0	0	0	0	0	2.0	31	93	64	0	0	0	0
SAN FRANCISCO	74	53	85	51	64	2	0	0	0	T	8	7.4	59	90	45	0	0	0	0
CO DENVER	100	63	103	58	81	9	0	-4	0	2.0	100	9.2	107	55	12	7	0	0	0
GRAND JUNCTION	102	64	104	57	83	5	0	-1	0	.2	46	3.7	97	25	14	7	0	0	0
PUEBLO	101	60	105	55	80	4	T	-4	T	1.3	83	4.1	79	57	12	7	0	0	0
CT BRIDGEPORT	78	65	86	62	72	-1	1.8	1.0	1.6	7.4	198	27.9	133	86	67	0	0	3	1
HARTFORD	84	62	92	58	73	0	.5	-2	.4	7.1	172	28.2	126	95	56	2	0	2	0
DC WASHINGTON	85	72	91	66	78	0	2.4	1.6	1.3	8.4	198	29.3	151	93	63	1	0	3	3
FL APALACHICOLA	89	75	91	70	82	1	1.3	-2	1.2	10.2	157	24.5	102	98	68	3	0	2	1
DAYTONA BEACH	91	72	93	69	82	1	.1	-2	.1	1.9	24	16.3	74	97	52	5	0	1	0
JACKSONVILLE	93	72	95	70	82	0	1.7	.3	1.3	6.5	88	16.4	67	97	52	6	0	4	1
KEY WEST	87	75	89	74	81	-3	2.9	2.0	1.1	4.7	77	10.8	68	92	67	0	0	7	3
MIAMI	87	74	92	73	81	-1	1.7	.2	.8	12.6	116	18.0	68	92	61	1	0	6	1
ORLANDO	93	73	96	71	83	1	1.2	-6	1.1	8.0	88	18.0	76	96	48	6	0	3	1
TALLAHASSEE	91	70	96	68	80	-1	2.7	.7	2.1	21.0	241	37.3	112	100	56	4	0	4	1
TAMPA	92	74	94	72	83	1	.5	-1.1	.4	8.0	114	12.7	61	94	50	6	0	2	0
WEST PALM BEACH	88	75	90	72	81	-1	.7	-9	.5	5.6	58	17.0	63	93	63	1	0	3	0
GA ATLANTA	85	72	89	70	79	1	3.4	2.4	2.1	12.8	280	35.1	125	95	63	0	0	6	2
AUGUSTA	90	70	93	63	80	0	1.5	.5	1.1	10.4	208	27.6	111	98	56	3	0	4	1
MACON	87	70	91	67	79	-2	1.7	.7	.6	6.7	138	28.0	107	98	61	3	0	5	2
SAVANNAH	92	72	96	68	82	1	1.5	-1	.9	8.8	117	17.9	70	98	52	5	0	3	2
HI HILO	81	68	83	66	74	-1	7.7	6.0	5.4	15.1	187	113.4	169	94	65	0	0	7	3
HONOLULU	89	75	89	74	82	3	0	-1	0	.2	41	13.0	98	75	46	0	0	0	0
KAHULUI	86	71	87	69	79	1	.1	0	.1	.5	158	26.6	230	86	51	0	0	1	0
LIHUE	84	74	84	71	79	0	.1	-3	.1	1.4	69	31.8	140	86	63	0	0	2	0
ID BOISE	95	56	108	48	75	2	0	-1	0	.1	8	6.5	92	54	13	5	0	0	0
LEWISTON	86	58	92	56	72	-1	0	-2	0	1.6	103	8.3	112	58	23	2	0	0	0
POCATELLO	93	49	97	43	71	1	0	-1	0	.6	52	6.6	103	64	12	6	0	0	0
IL CHICAGO	88	63	95	60	75	3	T	-8	T	2.0	39	8.2	47	86	38	1	0	0	0
MOLINE	94	65	97	58	79	5	0	-1.1	0	3.3	59	14.6	76	91	38	6	0	0	0
PEORIA	91	65	96	56	78	3	T	-9	T	1.3	26	11.2	61	88	43	5	0	1	0
QUINCY	93	66	100	61	80	3	0	-1.0	0	1.0	18	7.7	40	88	35	5	0	0	0
ROCKFORD	92	64	94	59	78	5	0	-1.1	0	2.5	43	10.2	54	92	34	6	0	0	0
SPRINGFIELD	89	63	96	55	76	0	T	-8	T	.9	20	14.4	79	97	47	4	0	0	0
IN EVANSVILLE	84	69	93	66	76	-1	3.0	2.1	2.9	7.1	156	31.7	135	99	68	3	0	3	1
FORT WAYNE	89	65	94	60	77	4	.1	-7	.1	5.9	129	18.5	100	95	47	5	0	1	0
INDIANAPOLIS	86	67	93	64	76	2	1.6	.6	.8	5.9	116	22.8	108	94	53	3	0	3	1
SOUTH BEND	88	65	91	62	77	5	0	-8	0	3.5	72	14.0	73	90	44	3	0	0	0
IA DES MOINES	94	68	97	65	81	6	0	-7	0	2.2	44	10.5	64	86	34	6	0	0	0
SIOUX CITY	95	70	98	67	82	7	.4	-4	.3	2.3	46	6.9	49	88	42	7	0	2	0
WATERLOO	96	63	99	57	79	7	0	-1.1	0	1.4	25	7.7	45	93	33	7	0	0	0
KS CONCORDIA	93	71	97	66	82	4	T	-8	T	5.8	113	11.9	81	81	39	6	0	1	0
DOUGIE CITY	91	65	93	63	78	-1	0	-7	0	6.7	176	11.9	105	89	34	6	0	0	0
GOODLAND	96	66	103	65	81	6	0	-6	0	8.2	243	12.5	136	73	23	7	0	0	0
TOPEKA	95	65	99	63	80	2	0	-1.0	0	4.8	76	14.6	84	96	38	6	0	0	0
WICHITA	91	68	93	66	80	-1	2.0	1.2	2.0	10.3	207	19.1	129	92	43	6	0	1	1
KY BOWLING GREEN	86	69	95	67	78	0	5.6	4.5	4.9	13.8	241	44.2	157	98	63	2	0	3	2
LEXINGTON	84	69	92	67	76	1	.7	-5	.4	5.0	90	33.1	130	95	61	2	0	4	0
LOUISVILLE	85	69	93	64	77	0	.9	0	.5	6.5	140	34.0	141	95	60	3	0	3	1
LA ALEXANDRIA	90	75	94	73	82	0	3.5	2.6	2.0	15.1	302	47.3	159	90	58	5	0	5	2
BATON ROUGE	88	73	93	72	81	-1	2.9	1.4	.9	26.0	549	53.2	182	100	66	1	0	5	3
LAKH CHARLES	90	74	93	71	82	0	1.8	.7	.8	27.8	518	47.7	184	97	63	4	0	5	1
NEW ORLEANS	88	73	92	71	81	-1	2.4	1.0	.8	10.7	171	27.1	89	100	67	2	0	6	2

Based on 1951-80 normals

Weather Data for the Week Ending July 8, 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 JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	90	70	93	69	80	-2	1.5	.6	1.0	20.0	453	47.2	188	100	59	4	0	4	1
ME CARIBOU	77	54	87	43	66	1	1.3	.6	1.2	2.6	63	13.7	83	96	54	0	0	2	0
PORTLAND	76	60	91	57	68	1	1.3	.4	1.2	4.9	128	22.2	100	96	63	1	0	3	0
MD BALTIMORE	84	68	90	62	76	0	0	1.7	1.2	7.6	163	30.1	143	97	62	1	0	3	2
SALISBURY	86	67	90	57	76	0	0	1.2	1.2	6.2	136	23.5	107	95	55	1	0	2	1
MA BOSTON	79	64	93	59	71	-1	1.0	.4	1.2	3.9	108	17.2	76	85	57	2	0	4	1
CHATHAM	71	60	79	56	66	-1	1.0	.5	1.2	4.4	128	24.2	103	92	79	0	0	2	0
MI ALPENA	86	56	92	52	71	6	T	T	T	2.7	68	11.5	81	99	43	1	0	1	0
DETROIT	85	66	89	61	75	4	T	T	T	3.8	90	14.4	89	91	53	0	0	0	0
FLINT	84	63	87	59	74	4	T	T	T	5.5	140	14.9	100	95	50	0	0	1	1
GRAND RAPIDS	87	63	89	59	75	4	T	T	T	5.0	113	15.6	92	97	44	0	0	1	0
HOUGHTON LAKE	87	59	90	50	73	6	0	0	0	2.9	76	11.8	86	92	39	2	0	0	0
LANSING	86	62	88	57	74	4	T	T	T	3.6	78	15.6	102	98	48	0	0	1	0
MARQUETTE	85	54	92	45	69	6	.1	0	0	5.6	117	15.5	81	89	37	1	0	2	0
MUSKEGON	87	63	92	58	75	5	.5	0	.4	1.4	46	11.4	75	89	41	1	0	2	0
SAULT ST. MARIE	85	52	90	46	68	6	T	T	T	2.6	65	13.1	87	97	40	1	0	0	0
MN ALEXANDRIA	91	67	98	61	79	9	.5	.2	.4	2.5	52	8.4	66	85	38	3	0	2	0
DULUTH	86	57	90	52	72	8	.2	.7	.1	4.0	81	13.2	94	91	40	1	0	2	0
INT'L FALLS	84	59	90	51	72	6	1.0	.1	1.0	7.6	162	12.6	111	97	43	1	0	2	1
MINNEAPOLIS	92	70	97	63	81	9	.4	.4	.4	3.9	79	13.7	101	74	35	5	0	1	0
ROCHESTER	89	61	92	59	75	5	.5	.4	.5	3.0	64	10.7	77	89	42	3	0	1	0
MS GREENWOOD	88	73	91	71	80	-1	.6	.4	.5	17.3	383	44.2	143	96	60	2	0	2	1
JACKSON	87	72	92	70	80	-2	2.7	1.7	1.5	10.9	259	32.4	110	100	66	1	0	4	3
MERIDIAN	88	71	93	69	80	-1	1.5	.3	1.0	10.8	223	37.9	124	97	63	3	0	5	1
MO CAPE GIRARDEAU	86	71	93	69	79	-	.2	.6	.2	12.3	276	36.2	147	97	57	3	0	2	0
COLUMBIA	90	67	94	65	78	1	0	0	0	3.3	73	15.9	80	93	44	4	0	0	0
KANSAS CITY	94	67	99	65	80	1	0	-1.0	0	3.5	61	13.3	71	86	37	6	0	0	0
SAINT LOUIS	90	71	97	65	80	2	T	T	T	2.7	58	17.5	93	87	46	5	0	1	0
SPRINGFIELD	89	64	91	63	76	-1	0	0	0	3.3	57	18.9	89	95	51	3	0	0	0
MT BILLINGS	94	60	101	55	77	6	0	0	0	1.2	51	9.4	102	58	17	4	0	0	0
GLASGOW	92	60	101	50	76	7	.1	.4	0	1.0	34	6.3	101	67	19	4	0	2	0
GREAT FALLS	89	53	97	45	71	3	T	T	T	1.7	54	10.0	103	69	16	4	0	0	0
HAVRE	88	55	99	46	71	3	0	0	0	1.7	64	6.4	91	55	18	4	0	0	0
HELENA	92	55	98	49	73	7	0	0	0	1.4	61	6.7	97	60	14	4	0	0	0
KALISPELL	83	47	93	40	65	1	T	T	T	1.5	59	9.5	108	78	21	1	0	0	0
MILES CITY	96	65	103	61	81	7	0	0	0	.8	26	8.5	98	36	14	6	0	0	0
MISSOULA	89	50	99	45	70	4	0	0	0	1.4	68	7.1	92	71	17	4	0	0	0
NE GRAND ISLAND	93	69	96	66	81	5	0	0	0	4.9	109	8.6	63	89	41	6	0	0	0
LINCOLN	95	69	99	67	82	5	0	0	0	4.7	100	8.1	54	91	38	7	0	0	0
NORFOLK	96	70	99	66	83	8	T	T	T	2.0	37	7.3	52	86	37	7	0	0	0
NORTH PLATTE	94	64	101	61	79	6	T	T	T	3.9	86	8.7	74	83	36	7	0	1	0
OMAHA	93	72	96	67	83	6	0	0	0	4.5	89	9.1	58	78	43	6	0	0	0
SCOTT'S BLUFF	105	64	109	60	85	12	0	0	0	1.2	32	5.5	58	68	12	7	0	0	0
VALENTINE	101	65	108	57	83	10	.2	.4	.2	1.6	44	4.8	49	67	18	7	0	1	0
NV ELY	94	46	98	43	70	4	0	0	0	1.0	106	3.9	75	31	9	7	0	0	0
LAS VEGAS	112	78	115	70	95	5	0	0	0	T	0	1.3	68	16	8	7	0	0	0
RENO	93	49	99	44	71	3	0	0	0	1.5	392	4.4	98	51	8	6	0	0	0
WINNEMUCCA	97	47	102	39	72	1	0	0	0	.3	34	2.7	58	29	7	7	0	0	0
NH CONCORD	80	60	89	53	70	1	.8	.1	.3	5.0	136	18.5	104	96	56	0	0	4	0
NJ ATLANTIC CITY	84	66	90	60	75	2	1.6	.8	.9	5.4	147	25.1	121	98	62	1	0	3	2
NM ALBUQUERQUE	98	68	102	62	83	4	T	T	T	3	1.4	50	38	10	7	0	0	0	0
CLOVIS	90	64	92	62	77	0	0	0	0	4.5	134	5.7	75	74	23	4	0	0	0
ROSWELL	98	68	109	65	83	2	0	0	0	.1	5	1.6	44	49	17	7	0	0	0
NY ALBANY	83	62	89	58	73	2	1.8	1.1	1.5	8.3	207	21.7	121	96	53	0	0	3	1
BINGHAMTON	79	60	85	56	70	1	2.0	1.2	.9	7.8	176	22.5	122	96	54	0	0	3	2
BUFFALO	83	63	87	56	73	3	.4	0	.2	8.2	242	24.8	141	92	45	0	0	2	0
NEW YORK	84	69	92	67	77	1	1.9	1.1	1.8	8.8	219	29.7	139	89	54	2	0	3	1
ROCHESTER	85	63	89	56	74	3	T	T	T	5.7	165	19.8	126	92	48	0	0	1	0
SYRACUSE	84	60	90	54	72	2	.4	0	.1	5.8	127	17.5	91	97	50	1	0	3	0
NC ASHEVILLE	78	64	86	61	71	-2	2.6	1.8	1.6	13.3	286	31.2	134	99	68	0	0	6	2
CHARLOTTE	87	70	92	65	79	1	3.6	2.7	2.6	6.8	149	26.0	109	85	52	1	0	4	1
GREENSBORO	85	68	92	59	76	0	.4	0	.2	7.5	150	28.2	127	95	59	1	0	2	0
HATTERAS	85	72	90	68	78	1	1.0	0	.7	5.1	92	37.4	146	97	67	1	0	5	1
NEW BERN	87	70	93	63	79	0	1.5	0	1.4	10.2	150	31.6	123	97	63	2	0	2	1
RALEIGH	86	69	93	60	78	1	1.0	0	.5	8.3	178	30.2	138	99	63	1	0	4	0
WILMINGTON	88	71	94	64	79	0	2.4	.8	1.9	10.0	133	32.1	124	97	58	2	0	2	2
ND BISMARCK	96	63	103	53	80	10	T	T	T	.7	19	5.6	63	79	23	6	0	0	0
FARGO	93	64	103	53	78	8	T	T	T	1.5	39	8.7	89	88	32	5	0	0	0
GRAND FORKS	89	61	97	54	75	7	.1	0	.1	1.5	42	6.6	74	88	37	3	0	2	0
WILLISTON	96	59	108	50	77	8	.1	0	.1	1.6	50	6.6	85	80	20	5	0	2	0
OH AKRON-CANTON	83	64	89	57	74	3	.2	0	.2	8.6	202	25.2	132	96	55	0	0	2	0
CINCINNATI	85	69	92	65	77	2	.9	0	.6	4.0	76	28.1	126	94	57	3	0	2	1
CLEVELAND	84	65	91	60	74	3	1.5	.8	1.2	6.8	155	26.9	145	96	57	1	0	2	1
COLUMBUS	83	66	90	62	74	1	.9	0	.6	7.2	144	24.5	121	97	56	1	0	2	1

Weather Data for the Week Ending July 8, 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 JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	85	67	92	65	76	2	.6	-.2	.4	6.1	131	32.6	167	95	58	3	0	2	0	
TOLEDO	86	64	92	58	75	4	1.6	-.7	6.8	156	19.8	119	97	50	2	0	1	0		
YOUNGSTOWN	84	61	88	52	72	3	1.6	-.7	1.3	11.6	257	27.0	139	97	52	0	0	2	1	
OK OKLAHOMA CITY	90	70	93	66	80	-1	1.6	-.2	.5	15.2	325	25.5	148	88	42	3	0	1	1	
TULSA	92	71	95	67	81	-1	1.6	-.1	.7	5.9	106	18.5	88	92	48	0	0	1	1	
OR ASTORIA	88	49	69	44	57	-2	1.2	-.1	.2	3.3	114	33.5	93	95	63	6	0	2	0	
BURNS	85	43	95	37	64	-4	0	0	1.1	163	6.7	121	67	15	1	0	0	0	0	
MEDFORD	87	49	96	44	68	-3	0	0	.2	22	10.4	101	77	20	2	0	0	0	0	
PENDLETON	82	53	90	51	68	-5	0	0	.6	74	8.7	129	60	21	1	0	0	0	0	
PORTLAND	75	54	83	51	64	-2	0	0	0	0	17.9	91	90	53	0	0	0	0	0	
SALEM	78	49	86	44	64	-1	0	0	1.0	77	16.0	74	93	32	0	0	0	0	0	
PA ALLENTOWN	82	65	90	59	73	0	.6	-.3	.3	6.4	145	25.0	113	96	56	1	0	3	0	
ERIE	82	66	85	59	74	5	1.7	-.7	5.2	108	23.0	122	85	53	0	0	1	0	0	
HARRISBURG	83	65	90	60	74	0	1.7	-.9	1.7	7.7	171	26.3	128	96	59	1	0	2	1	
PHILADELPHIA	85	69	92	65	77	1	4.6	3.7	4.4	9.3	191	28.4	134	95	58	1	0	3	1	
PITTSBURGH	83	66	89	60	74	3	.6	-.3	.5	10.9	243	29.8	148	93	53	0	0	2	1	
SCRANTON	81	62	87	57	71	0	1.2	.5	.5	7.3	168	21.3	123	96	53	0	0	3	0	
RI PROVIDENCE	81	64	91	59	73	1	.7	.1	.6	6.5	188	25.8	113	95	61	1	0	3	1	
SC CHARLESTON	89	74	95	69	82	2	.5	-1.2	.4	7.7	92	20.8	79	96	59	3	0	3	0	
COLUMBIA	90	71	93	62	80	0	2.4	1.3	1.7	8.4	146	27.1	101	97	55	4	0	3	1	
FLORENCE	89	72	95	68	81	1	.4	-.8	.2	5.4	89	22.0	94	95	53	3	0	4	0	
GREENVILLE	83	69	92	65	76	-2	2.0	1.0	1.9	8.0	144	25.7	90	96	63	1	0	3	1	
SD ABERDEEN	94	65	102	58	80	8	T	-.6	T	2.1	53	9.0	86	87	33	5	0	1	0	
HURON	95	68	101	64	82	9	T	-.6	T	3.2	81	9.0	82	87	36	6	0	1	0	
RAPID CITY	100	64	110	58	82	11	T	-.6	T	1.0	27	5.2	50	63	18	6	0	0	0	
STIOUS FALLS	96	71	102	67	83	10	T	-.5	T	2.6	60	7.4	57	81	33	7	0	2	0	
TN CHATTANOOGA	84	71	91	70	78	-1	5.7	4.7	2.2	15.5	346	42.4	145	96	67	1	0	5	4	
KNOXVILLE	84	69	91	67	77	-1	.9	-.1	.4	9.1	180	33.0	123	99	64	1	0	5	0	
MEMPHIS	88	73	92	72	80	-1	.2	-.7	.1	9.6	211	38.2	129	95	62	2	0	2	1	
NASHVILLE	86	71	92	70	78	0	1.5	.7	.8	10.0	215	36.5	132	94	62	2	0	6	1	
TX ABILENE	94	70	106	67	82	-1	.9	.4	.8	10.4	340	19.5	167	77	33	6	0	2	1	
AMARILLO	91	61	93	59	76	-2	0	-.6	0	6.1	145	10.6	107	81	27	5	0	0	0	
AUSTIN	97	74	99	71	86	2	.1	-.4	.1	3.2	89	19.3	116	94	38	7	0	2	0	
BEAUMONT	90	75	93	73	82	0	1.4	.1	.9	21.7	345	47.5	177	96	62	3	0	4	1	
BROWNSVILLE	94	77	96	74	85	2	T	-.4	T	2.4	76	9.6	96	95	49	7	0	0	0	
CORPUS CHRISTI	94	74	99	73	84	0	.1	-.5	.1	3.3	71	10.1	74	99	51	6	0	1	0	
DEL RIO	99	77	106	74	88	2	.2	-.2	.2	.5	22	5.5	68	64	26	7	0	1	0	
EL PASO	100	70	108	64	85	2	0	-.3	0	0	0	2.1	87	42	13	7	0	0	0	
FORT WORTH	93	72	96	68	83	-2	1.5	1.0	1.5	10.2	352	31.7	184	93	47	6	0	2	1	
GALVESTON	88	77	91	74	83	0	.9	0	.4	13.2	293	25.4	142	97	69	1	0	5	0	
HOUSTON	91	73	94	72	82	-1	T	-.8	T	16.6	307	41.3	177	97	56	5	0	1	0	
LUBBOCK	97	67	106	64	82	2	0	-.6	0	5.0	146	7.6	86	71	22	7	0	0	0	
MIDLAND	98	70	112	67	84	2	0	0	0	.6	33	3.5	56	64	20	7	0	0	0	
SAN ANGELO	98	69	109	64	84	0	T	-.3	T	2.8	129	10.6	122	79	25	7	0	0	0	
SAN ANTONIO	99	76	102	72	88	3	.1	-.4	.1	4.1	115	11.4	78	87	30	7	0	1	0	
VICTORIA	94	76	97	74	85	1	1.9	1.3	1.3	6.3	119	14.2	80	96	51	7	0	2	2	
WACO	95	71	97	69	83	-2	1.6	1.1	.6	5.7	187	23.8	138	93	47	7	0	5	2	
WICHITA FALLS	96	69	99	67	83	-2	0	-.5	0	8.6	254	19.5	136	93	37	7	0	0	0	
UT CEDAR CITY	99	55	105	51	77	4	T	-.2	T	1.1	166	3.8	77	26	6	7	0	0	0	
SALT LAKE CITY	98	62	102	59	80	5	0	-.2	0	.2	19	6.3	69	41	10	7	0	0	0	
VT BURLINGTON	85	63	90	54	74	5	T	-.8	T	3.7	82	12.5	78	87	45	1	0	0	0	
VA NORFOLK	88	71	93	59	80	2	.6	-.5	.5	5.7	122	29.9	136	94	53	3	0	4	0	
RICHMOND	88	68	90	58	78	1	.5	-.6	.3	6.3	132	26.9	127	98	59	1	0	4	0	
ROANOKE	83	66	90	56	74	-1	5.5	4.7	2.4	13.2	316	28.5	140	97	64	1	0	3	3	
WA QUILLAYUTE	65	48	69	42	57	-1	.4	-.2	.2	6.1	174	47.1	87	98	62	0	0	4	0	
SEATTLE-TACOMA	71	53	78	49	62	-2	T	-.1	T	1.3	82	18.9	98	86	44	0	0	2	0	
SPOKANE	80	50	88	44	65	-3	0	0	.4	31	8.0	87	65	23	0	0	0	0	0	
YAKIMA	82	45	88	39	64	-6	0	0	.1	8	3.4	79	79	23	0	0	0	0	0	
WV BECKLEY	78	64	84	62	71	2	.4	-.6	.4	4.0	77	22.4	99	99	68	0	0	2	0	
CHARLESTON	84	67	89	65	76	2	.5	-.7	.3	8.0	175	33.7	151	99	57	0	0	4	0	
HUNTINGTON	84	68	90	65	76	1	1.3	.3	.6	6.8	148	32.6	148	100	61	1	0	3	1	
PARKERSBURG	84	68	90	65	76	2	.6	-.3	.6	5.8	118	29.1	140	98	63	1	0	2	1	
WI GREEN BAY	88	59	93	53	74	5	.7	-.1	.7	2.2	56	10.6	76	90	41	2	0	1	1	
LACROSSE	94	64	100	60	79	7	.3	-.6	.3	1.7	32	9.6	62	91	32	7	0	1	0	
MADISON	91	61	96	56	76	6	1.8	-.9	1.8	3.4	71	10.7	69	95	34	7	0	1	0	
MILWAUKEE	84	64	92	61	74	4	T	-.8	T	1.9	42	10.7	67	87	43	1	0	1	0	
WAUSAU	89	60	94	53	75	6	T	-.9	T	2.8	56	11.0	72	89	34	4	0	0	0	
WY CASPER	98	58	102	54	78	8	0	-.3	0	2.0	130	7.4	105	50	7	7	0	0	0	
CHEYENNE	95	57	97	53	76	8	0	0	0	2.5	100	6.4	81	58	12	6	0	0	0	
LANDER	96	60	99	55	78	9	0	0	0	2.7	164	10.3	118	36	9	7	0	0	0	
SHERIDAN	96	56	106	50	76	8	0	0	0	1.6	62	8.0	83	68	18	6	0	0	0	
PR SAN JUAN	-999	79	-999	75	-999	-	0	0	0	0	0	0	8.9	39	***	***	0	0	0	0

June Weather and Crop Summary

Weather

HIGHLIGHTS: During the last week, Tropical Storm Allison formed in the western Gulf from the remains of Pacific Hurricane Cosme after crossing Mexico. Allison and her remnants then spawned tornadoes and dumped torrents of rain over the central Gulf coast and across the Southeast, causing massive flooding. Several cities (Birmingham, AL, and Shreveport, LA) had their highest rainfall total ever for the month. Winnfield, LA, was pelted with over 30 inches, also a record. Severe thunderstorms produced torrential rain in the central Plains and down the Atlantic seaboard with several stations again reporting records for the month (Oklahoma City, OK, and Lynchburg, VA). In contrast, dry weather prevailed over much of the northern Plains and western Corn Belt. Temperatures were anomalously warm in the West and along the eastern seaboard, while cool air persisted over the central and southern Plains.

JUNE 1-3: Showers and severe thunderstorms with heavy rain were scattered across the eastern two-thirds of the country. Hot, humid air remained over the South and East.

JUNE 4-10: Numerous intense thunderstorms spread severe weather and drenching rain across the central and southern Plains, the lower Ohio Valley, and the Gulf and Atlantic Coast States. Dry weather prevailed over much of the northern Plains and portions of the Corn Belt. Cool air settled over the Central States, while warm weather dominated the Northwest, southern Texas, and along the mid-Atlantic coast.

JUNE 11-17: Showers and severe thunderstorms brought drenching rain, hail, damaging wind, and tornadoes across the southern Plains and Mississippi Valley to the Atlantic coast. High winds downed trees and caused massive power outages in the Washington, DC, area. Needed rains fell across parched southern Texas. Much of the northern Plains and portions of the western Corn Belt, however, again received only light amounts of rain. Unseasonably cool air settled into the central portions of the Nation and covered much of the East at week's end. Warm weather prevailed over the West, with record-breaking high temperatures in the Southwest.

JUNE 18-24: Showers and thunderstorms continued to develop in the warm, muggy air over the eastern third of the Nation. Rains saturated the soil, swelled rivers, and caused local flooding. During the latter part of the week, beneficial rains spread across the central Plains and middle Missouri Valley behind a slow moving weather system. Dry weather or light rain, however, covered much of the northern Plains and parts of the western Corn Belt. A tropical depression brought rain to the western Gulf coast at week's end.

JUNE 25-30: Tropical Storm Allison developed from the remnants of Pacific Hurricane Cosme early in the period and moved onshore near Galveston, TX. Allison diminished in strength, but its remnants became stationary and dumped torrential rain over eastern Texas and the lower Mississippi Valley. Over 20 inches resulted in Louisiana. Thunderstorms also drenched the central Plains and the Southeast. The heavy rains helped make up long-term precipitation deficits in Nebraska, Kansas, and Florida. Parts of the northern Plains and the western Corn Belt, however, again received little rainfall.

Crop Progress

Early in June, rain slowed fieldwork in the Corn Belt and improved soil moisture conditions in the central and southern Great Plains. Continued rains during the month slowed winter wheat harvest in the central and southern Great Plains, the Delta, and Southeast. Rain slowed corn and soybean planting in the eastern Corn Belt during the entire month. Planting lagged behind normal in the Delta and Southeast late in the month. By the end of June, soil moisture was surplus to adequate in the Delta and the East. Soil moisture was mostly adequate to short in the western Corn Belt, Great Plains, and the West.

At the beginning of June, corn planting was nearly complete except in the eastern Corn Belt. Rain continued to slow planting in Indiana, Ohio, and Pennsylvania. By mid-month, planting was still more than 30 percentage points behind normal in Ohio. During the third week of the month, light frost occurred in Nebraska but caused no serious damage. By the end of June, corn was mostly good to fair in the major producing States, and silking had begun in Georgia, North Carolina, and Texas.

Rain hampered soybean planting in the eastern Corn Belt during June. By mid-month, rain also slowed planting in the Delta and Southeast. Near the end of June, planting was behind normal in the eastern Corn Belt, Delta, and Southeast but was nearly complete in the western Corn Belt. Soybeans were mostly good to fair in the 19 major producing States.

At the beginning of June, cotton planting was nearly complete except in Oklahoma and Texas. Heavy rains forced producers to replant some acreage in Mississippi, Oklahoma, and Texas. In mid-June, the percentage of acreage in the squaring stage lagged behind normal in the Delta and Southeast. By the end of June, squaring was more than 30 points behind normal in Arkansas, Mississippi, North Carolina, and South Carolina. Cotton was mostly fair in the 14 major producing States.

By the end of June, sorghum planting was nearly complete except in Oklahoma and Kansas. By mid-month, harvest was underway in the Coastal Bend area of Texas. Heavy rains forced some replanting in Kansas. At the end of June, sorghum was mostly good to fair in the 11 major producing States.

Rice was mostly good to fair during June. By the end of the month, heading had begun in Louisiana and Texas.

Winter wheat was mostly fair to poor during June. At the beginning of the month, harvest was underway in California, Georgia, North Carolina, Oklahoma, and Texas. By mid-month, harvest was underway in 8 of the 20 major producing States. Rain delayed the start of harvest in Kansas. Rain hampered harvest during the month in the central and southern Great Plains, Delta, and the Southeast. Near the end of June, harvest began in the western Corn Belt. Spring wheat was mostly good to fair during June. By mid-month, heading had begun but lagged behind normal. At the end of June, heading was behind normal in the major producing States except in South Dakota.

June Weather in Historical Perspective

Temperature averaged across the United States for June was below the long-term mean and much cooler than the three previous Junes (fig. 1). The temperature and precipitation rankings for June for nine U.S. regions are shown in table 1. Notable wet rankings include the South (1st), Southeast (2nd), and Northeast (6th). A map of the regions is shown in the June 20, 1989, issue of the Weekly Weather and Crop Bulletin (Vol. 76, No. 24).

Although heavy rains fell over southern Nebraska towards the end of June, the precipitation total for Nebraska during the October 1988 - June 1989 period ranked as the second driest (behind 1934) since 1895. The total in Iowa for this same period was the fourth driest and was only slightly wetter than the previous year (fig. 3). In contrast, Ohio's total was the second wettest, following by just 1 year the second driest October - June period (fig. 4).

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

Region	Precipitation	Temperature
National	94	44
Northeast	90	65
East North Central	36	29
Central	77	23
Southeast	94	54
West North Central	16	44
South	95	8
Southwest	37	62
Northwest	13	81
West	77	68

Figure 1

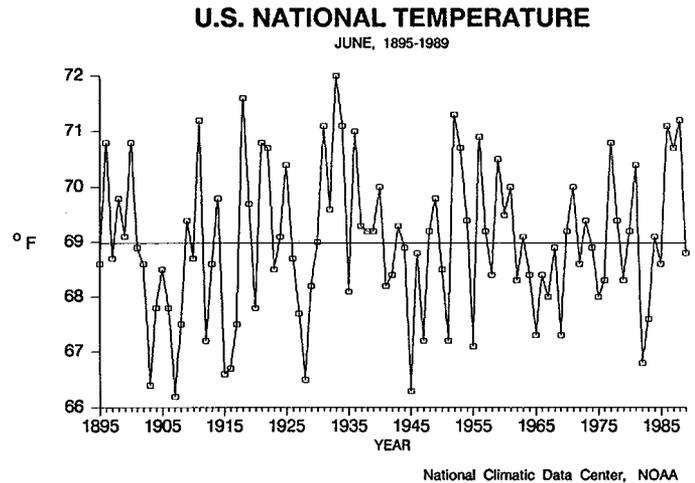


Figure 2

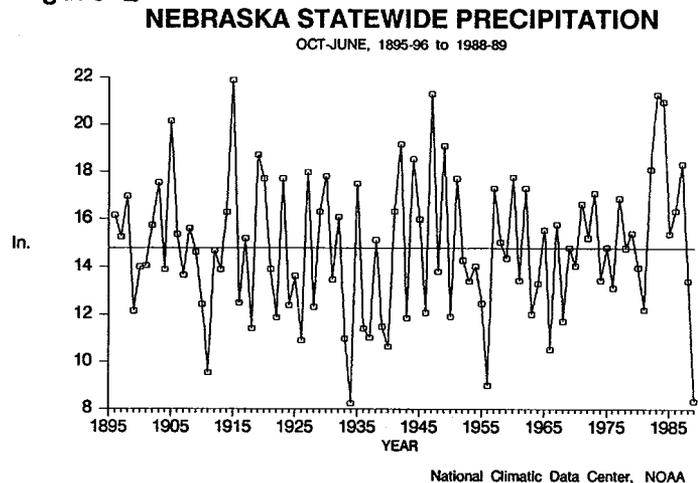


Figure 3

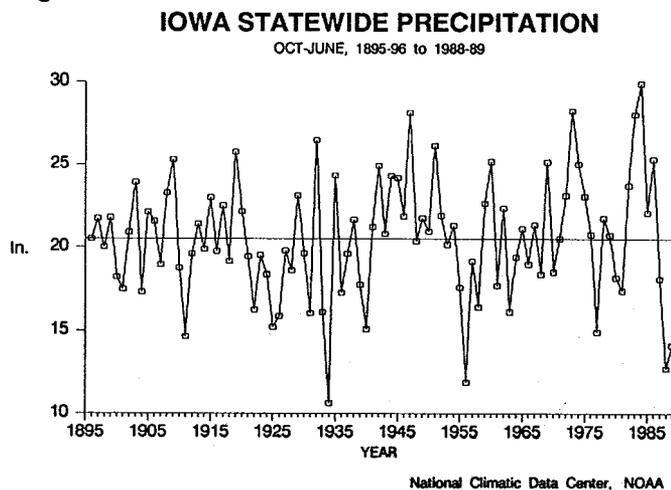
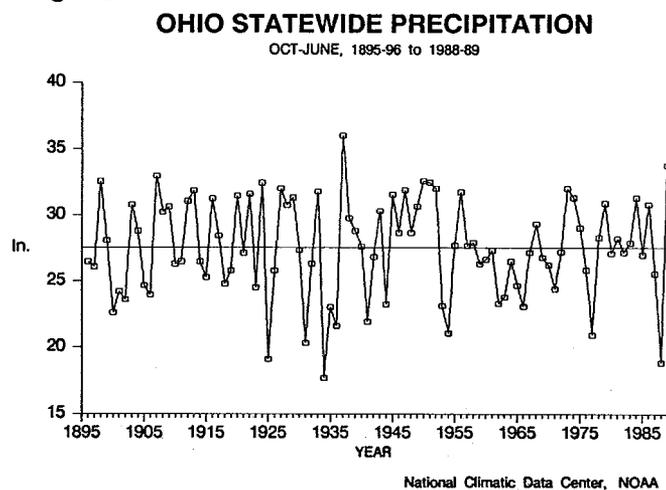
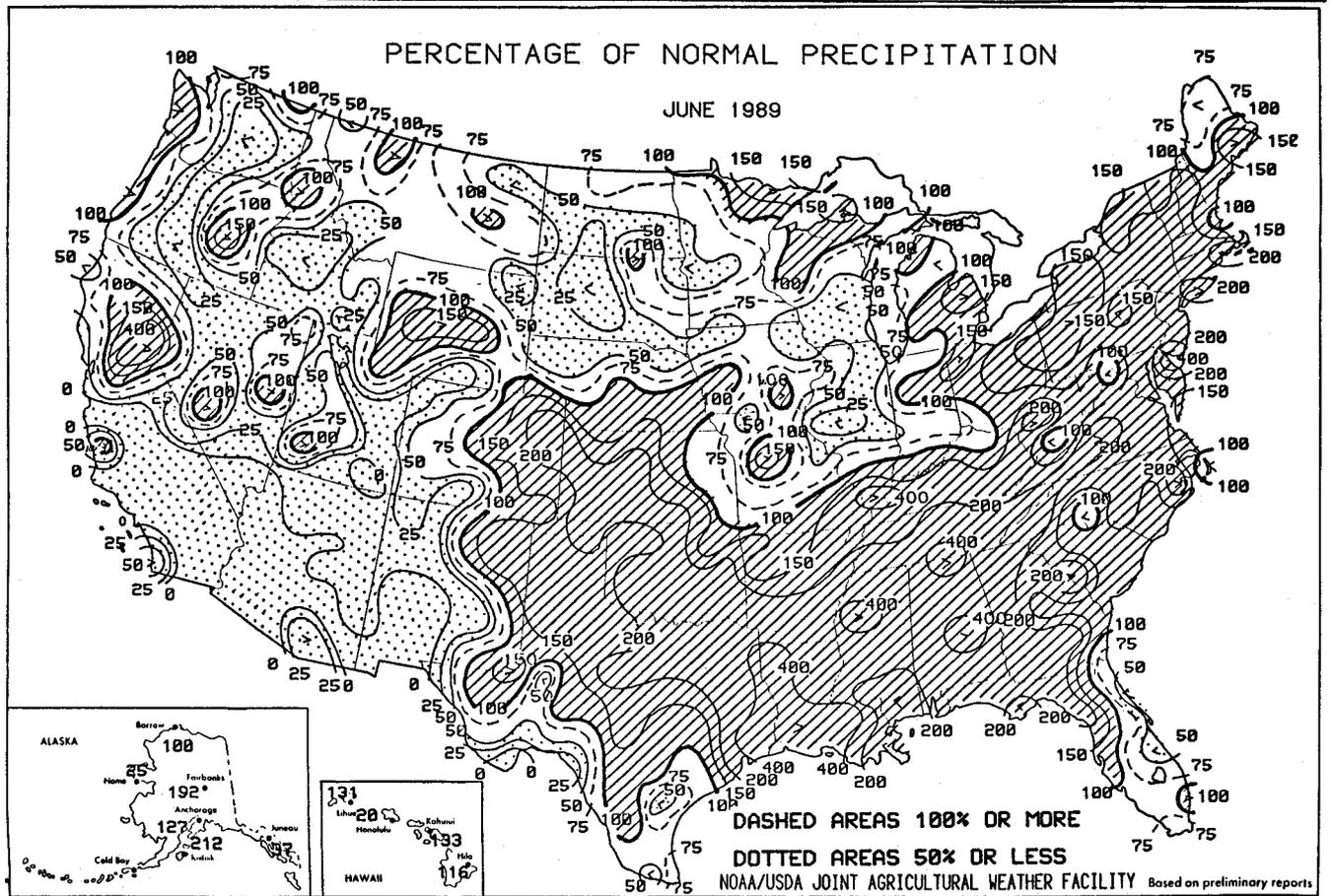
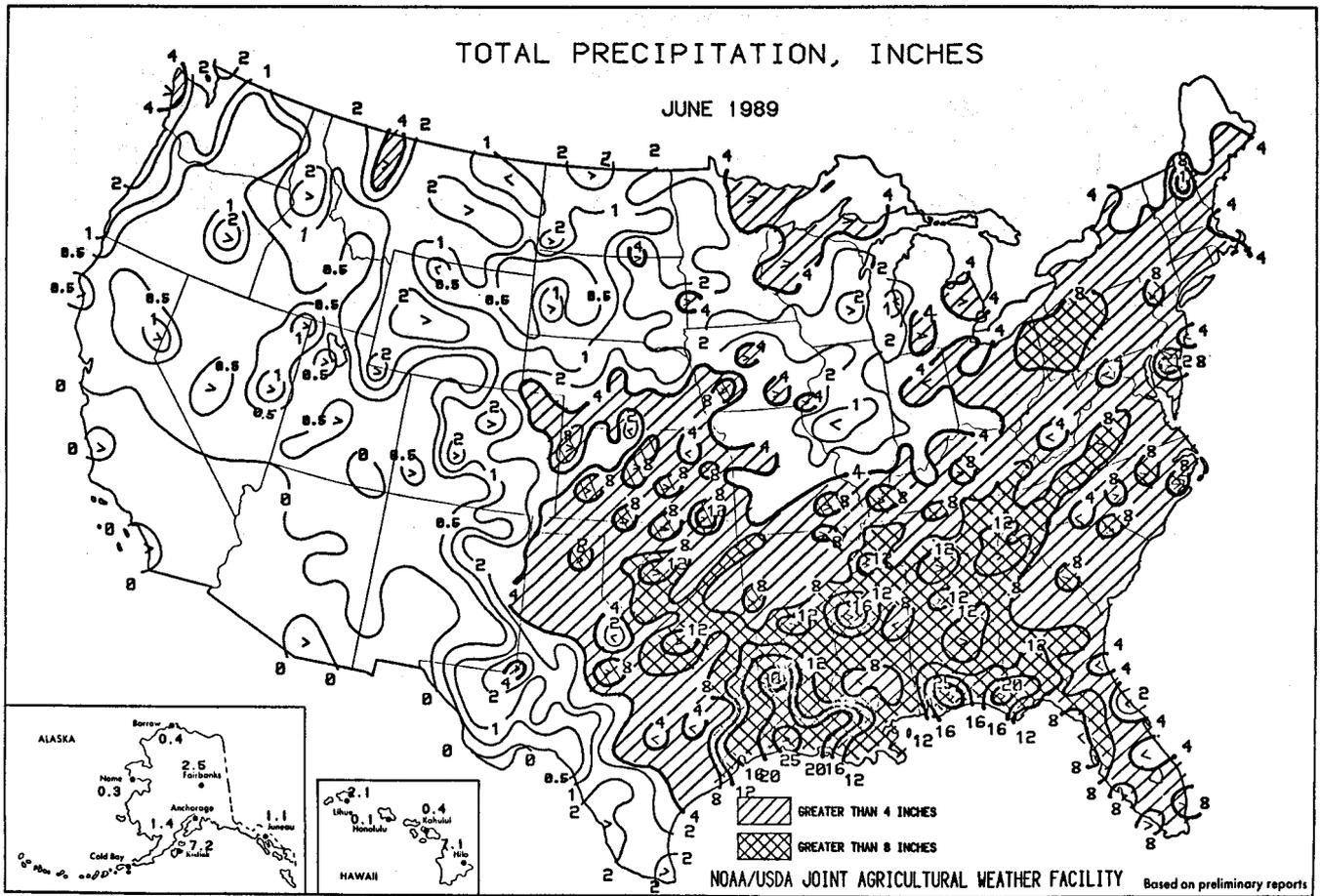
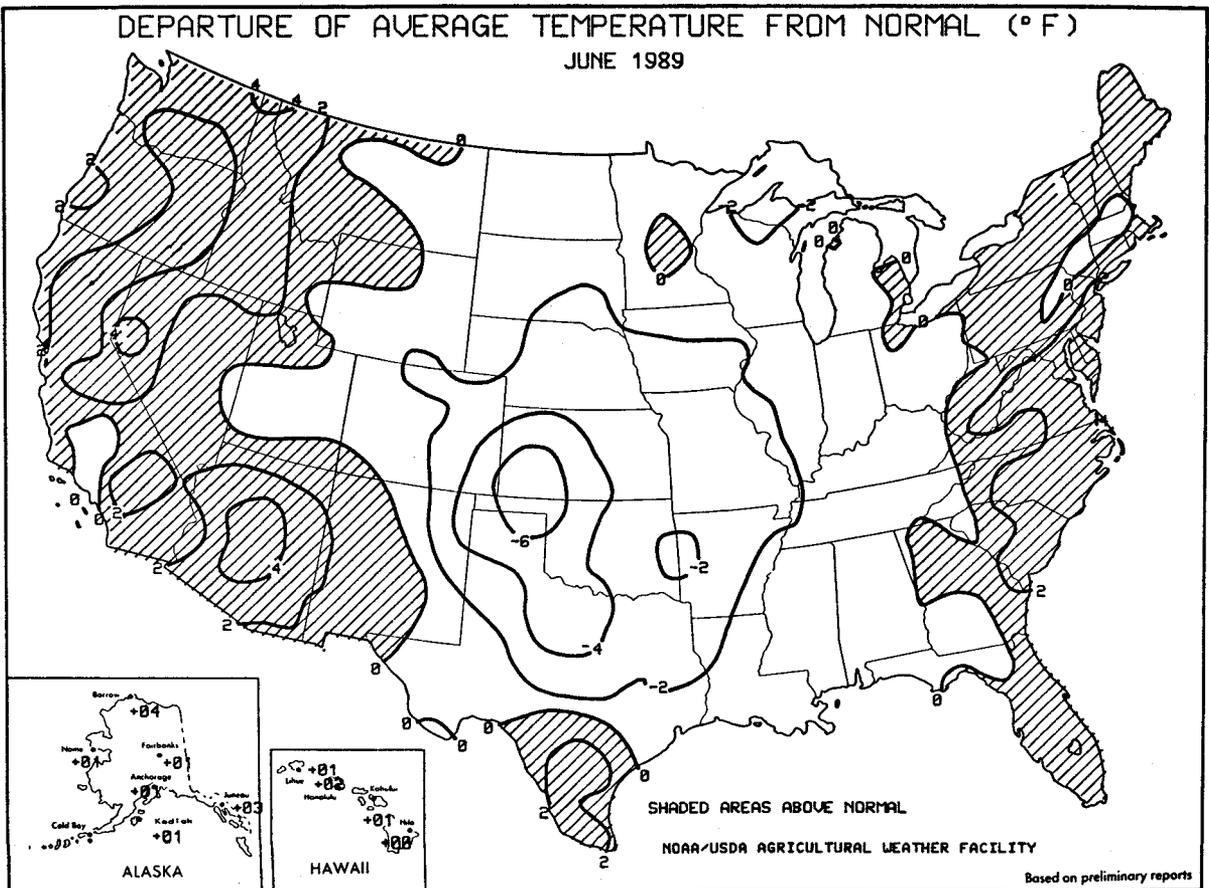
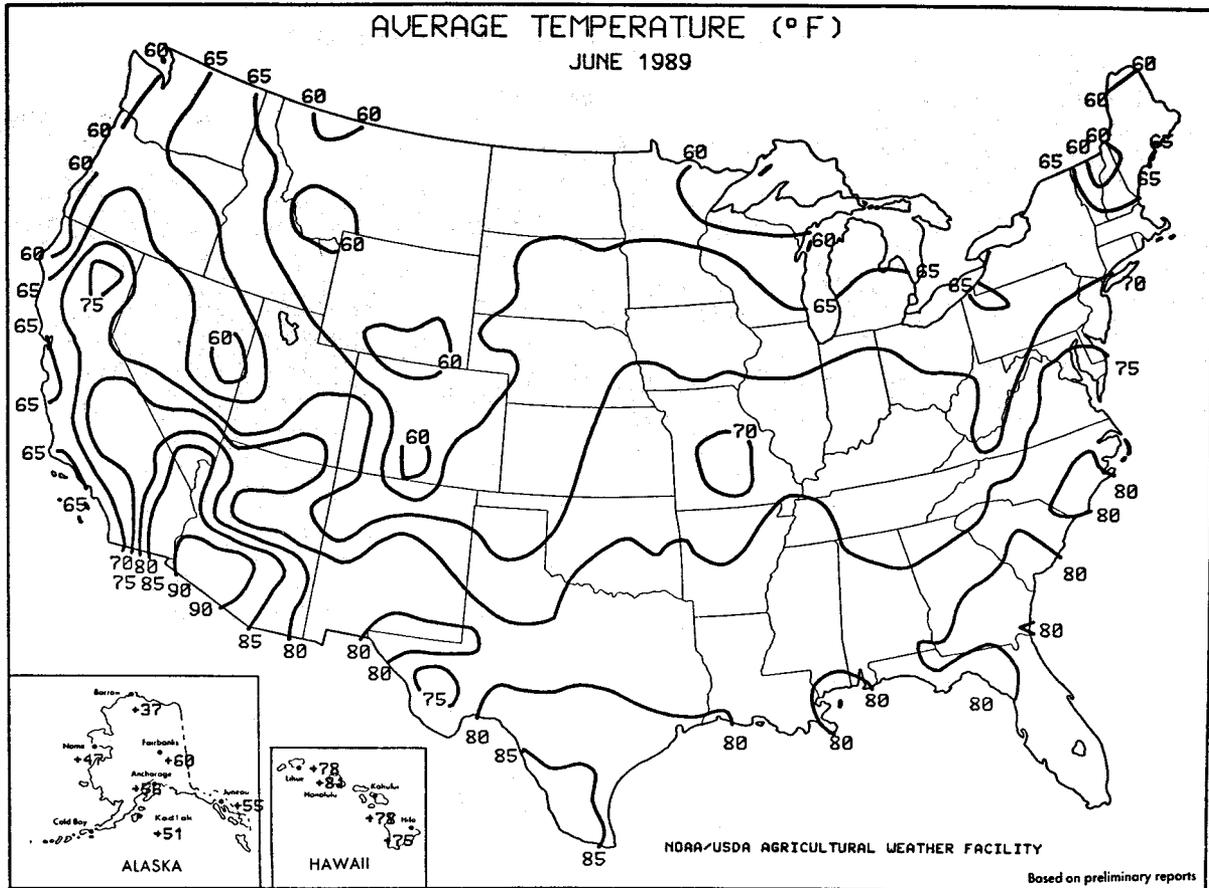


Figure 4







Temperature and Precipitation Data for June 1989

States and Stations	Temperature of		Precipitation Inches		States and Stations	Temperature of		Precipitation Inches		States and Stations	Temperature of		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
AL BIRMINGHAM	76	-1	13.1	9.5	LA PADUCAH	74	-1	9.2	5.1	OH CLEVELAND	68	0	5.2	1.8
HUNTSVILLE	75	-1	15.0	11.3	ALEXANDRIA	79	-1	10.6	6.7	COLUMBUS	69	-2	6.4	2.4
MOBILE	79	-1	9.8	4.8	BATON ROUGE	80	0	23.2	20.1	DAYTON	71	-1	4.8	1.0
MONTGOMERY	78	-1	14.4	11.0	LAKE CHARLES	80	0	25.3	21.2	TOLEDO	68	0	6.7	3.3
AK ANCHORAGE	56	1	1.4	0.3	NEW ORLEANS	79	-1	8.2	3.6	YOUNGSTOWN	66	-1	10.1	6.6
BARROW	37	4	0.4	0.0	SHREVEPORT	77	-3	17.1	13.6	OK OKLAHOMA CITY	74	-3	14.7	10.8
FAIRBANKS	60	1	2.5	1.1	ME CARIBOU	60	0	2.3	-0.9	TULSA	75	-3	5.2	0.6
JUNEAU	55	3	1.1	-1.9	PORTLAND	64	1	4.5	1.5	OR ASTORIA	59	2	2.6	0.1
KODIAK	51	1	7.2	3.2	MD BALTIMORE	74	2	6.0	2.2	MEDFORD	68	2	0.2	-0.5
NOME	47	1	0.3	-0.9	SALISBURY	76	4	5.0	1.4	PENDLETON	66	0	0.6	-0.1
AZ FLAGSTAFF	61	2	0.2	-0.4	MA BOSTON	68	0	2.8	-0.1	PORTLAND	64	2	0.8	-0.7
PHOENIX	92	6	0.0	-0.2	CHATHAM	63	1	3.8	1.1	SALEM	64	3	1.0	-0.2
PRESCOTT	72	5	0.0	-0.5	MI ALPENA	61	-1	2.7	-0.4	PA ALLENTOWN	70	1	5.8	2.4
TUCSON	85	2	0.1	-0.2	DETROIT	67	-1	3.8	0.4	ERIE	66	1	5.1	1.2
WINSLOW	73	1	T	-0.4	FLINT	66	0	4.9	1.7	HARRISBURG	71	-1	6.0	2.4
YUMA	90	2	0.0	0.0	GRAND RAPIDS	66	-2	5.0	1.4	PHILADELPHIA	75	3	4.7	0.8
AR FORT SMITH	76	-2	5.5	1.9	HOUGHTON LAKE	63	0	2.9	-0.2	PITTSBURGH	69	1	10.3	6.8
LITTLE ROCK	75	-3	5.8	2.1	LANSING	66	-1	3.6	-0.3	SCRANTON	67	0	6.1	2.6
CA BAKERSFIELD	77	-1	0.0	-0.1	MARQUETTE	58	-3	5.5	1.6	RI PROVIDENCE	69	2	5.8	3.1
EUREKA	58	3	0.2	-0.3	MUSKEGON	65	0	0.9	-1.6	SC CHARLESTON	80	3	7.3	0.7
FRESNO	77	2	0.0	-0.1	SAULT ST. MARIE	58	0	2.6	-0.6	COLUMBIA	80	2	6.0	1.6
LOS ANGELES	65	0	T	0.0	MN ALEXANDRIA	65	0	2.1	-2.0	FLORENCE	80	2	5.0	0.3
REDDING	77	0	1.0	0.1	DULUTH	58	-1	3.8	-0.1	GREENVILLE	76	0	6.0	1.6
SACRAMENTO	72	0	0.4	0.3	INT'L FALLS	60	-1	6.6	3.0	SD ABERDEEN	65	-1	2.1	1.1
SAN DIEGO	66	0	0.1	0.0	MINNEAPOLIS	68	0	3.5	-0.5	HURON	66	-2	3.2	-0.1
SAN FRANCISCO	63	2	T	-0.1	ROCHESTER	64	-2	2.4	-1.4	RAPID CITY	64	-1	1.0	-2.2
STOCKTON	72	-1	0.2	0.1	ST. CLOUD	65	0	2.2	-2.3	SIoux FALLS	67	-1	2.5	-1.2
CO DENVER	65	-1	2.0	0.5	MS GREENWOOD	78	-2	16.8	13.2	TN BRISTOL	72	0	7.0	3.5
GRAND JUNCTION	71	-1	0.2	-0.2	JACKSON	78	-1	8.2	5.1	CHATTAHOOGA	75	0	9.2	5.9
PUEBLO	68	-3	1.3	0.1	MERIDIAN	78	0	8.9	5.4	KNOXVILLE	73	-1	8.2	4.3
CT BRIDGEPORT	69	1	5.6	2.7	TUPELO	76	-1	11.1	7.4	MEMPHIS	78	-1	7.2	3.6
HARTFORD	68	0	6.7	3.3	MO COLUMBIA	70	-3	3.2	-0.5	NASHVILLE	75	-1	7.9	4.2
DC WASHINGTON	77	2	6.0	2.7	KANSAS CITY	71	-4	3.4	-1.2	TX ABILENE	76	-5	9.5	7.0
FL APALACHICOLA	80	0	8.9	4.1	SAINT LOUIS	75	0	2.3	-1.4	AMARILLO	69	-6	6.1	2.6
DAYTONA BEACH	80	1	1.8	-4.6	SPRINGFIELD	70	-4	2.7	-2.0	AUSTIN	81	0	3.1	0.1
FT. MYERS	82	1	8.5	-0.2	MT BILLINGS	64	0	1.2	-0.9	BEAUMONT	80	-1	18.9	14.9
JACKSONVILLE	81	1	3.7	-2.1	GLASGOW	64	0	1.0	-1.5	BROWNSVILLE	84	2	2.4	-0.3
KEY WEST	84	1	1.8	-3.3	GREAT FALLS	61	-1	1.7	-1.1	CORPUS CHRISTI	83	1	3.2	-0.7
MIAMI	83	2	10.8	1.7	HAVRE	63	0	1.7	-0.4	DEL RIO	84	1	0.3	-1.4
ORLANDO	82	1	6.8	-0.3	HELENA	62	2	1.4	-0.6	EL PASO	82	0	T	-0.5
TALLAHASSEE	79	0	17.4	10.9	KALISPELL	60	2	1.5	-0.7	PORT WORTH	78	-3	8.8	6.4
TAMPA	82	1	7.4	2.1	MILES CITY	64	-2	2.8	0.0	GALVESTON	81	0	12.4	8.9
WEST PALM BEACH	82	1	5.0	-3.0	MISSOULA	62	2	1.4	-0.4	HOUSTON	80	-1	16.3	12.2
GA ATHENS	77	1	6.2	2.2	NE GRAND ISLAND	69	-2	4.9	1.2	LAREDO	88	2	2.7	0.0
ATLANTA	77	1	9.3	6.0	LINCOLN	71	-2	4.7	0.9	LUBBOCK	74	-3	5.0	2.2
AUGUSTA	79	1	8.8	5.0	NORFOLK	68	-2	2.0	-2.4	MIDLAND	79	-1	0.6	-0.8
MACON	79	0	5.0	1.3	NORTH PLATTE	66	-3	3.5	-0.2	SAN ANGELO	78	-3	2.8	1.0
SAVANNAH	81	2	7.3	1.6	OMAHA	70	-3	4.4	0.3	SAN ANTONIO	83	1	4.0	1.0
HI HILO	75	0	7.1	1.0	SCOTTSBLUFF	66	-1	1.2	-1.8	VICTORIA	82	1	4.4	-0.2
HONOLULU	78	2	0.1	-0.4	VALENTINE	65	-3	1.3	-1.7	WACO	79	-3	4.2	1.6
KAHULUI	77	1	0.4	0.1	NV ELKO	62	1	0.5	-0.4	WICHITA FALLS	76	-5	8.6	5.7
LIHUE	78	0	2.1	0.5	ELY	59	0	1.0	0.2	UT CEDAR CITY	66	0	0.7	0.2
ID BOISE	69	3	0.1	-0.9	LAS VEGAS	85	2	T	-0.1	SALT LAKE CITY	69	1	0.2	-0.7
LEWISTON	69	3	1.6	0.2	RENO	66	4	1.5	1.2	VT BURLINGTON	67	2	3.7	0.1
POCATELLO	62	0	0.6	-0.4	WINNEMUCCA	66	2	0.3	-0.6	VA LYNCHBURG	74	2	10.0	6.5
IL CAIRO	—	-	6.3	1.9	NH CONCORD	65	0	4.3	1.3	NORFOLK	78	4	5.1	1.7
CHICAGO	67	-1	2.0	-2.3	NJ ATLANTIC CITY	72	3	3.7	1.0	RICHMOND	76	2	5.9	2.3
MOLINE	69	-2	3.3	-1.0	NM ALBUQUERQUE	76	1	T	-0.5	ROANOKE	74	2	7.7	4.4
PEORIA	70	-1	1.3	-2.6	OH CLOVIS	71	-3	4.5	1.9	WA COLVILLE	61	0	1.3	-0.2
QUINCY	71	-2	1.0	-3.1	ROSWELL	78	0	0.1	-0.8	QUILLAYUTE	58	2	4.5	1.4
ROCKFORD	68	0	2.5	-2.1	NY ALBANY	68	1	6.5	3.3	SEATTLE-TACOMA	63	3	1.1	-0.3
SPRINGFIELD	71	-2	0.9	-2.6	BINGHAMTON	65	1	5.9	2.3	SPOKANE	64	3	0.4	-0.8
IN EVANSVILLE	74	-1	4.0	0.5	BUFFALO	66	0	7.8	5.1	YAKIMA	66	2	0.1	-0.5
FORT WAYNE	70	0	5.8	2.2	NEW YORK	73	2	6.9	3.8	WALLA WALLA	68	0	0.3	-0.6
INDIANAPOLIS	71	0	3.8	-0.2	ROCHESTER	67	1	5.7	2.9	WV BECKLEY	68	2	3.6	-0.4
SOUTH BEND	68	-1	3.5	-0.4	SYRACUSE	67	1	5.4	1.8	CHARLESTON	72	1	7.5	4.2
IA DES MOINES	69	-3	2.2	-1.9	NC ASHVILLE	70	0	10.7	7.0	ELKINS	67	2	5.9	1.6
DUBUQUE	67	-1	1.9	-2.3	CHARLOTTE	78	3	3.2	-0.4	HUNTINGTON	71	-1	5.5	2.1
SIoux CITY	69	-2	1.8	-2.2	GREENSBORO	75	2	7.1	3.2	PARKERSBURG	71	0	5.2	1.3
WATERLOO	69	0	1.4	-2.9	HATTERAS	77	3	4.1	-0.2	WI GREEN BAY	63	-1	1.6	-1.6
KS CONCORDIA	71	-3	5.8	1.6	NEW BERN	79	4	8.7	3.6	LA CROSSE	68	-1	1.3	-2.8
LODGE CITY	68	-7	6.6	3.6	HALEIGH	77	3	7.3	3.7	MADISON	66	-1	1.7	-2.2
GOODLAND	66	-4	8.2	5.5	WILMINGTON	80	3	7.6	1.9	MILWAUKEE	64	-1	1.9	-1.7
TOPEKA	71	-2	4.8	-0.4	ND BISMARCK	64	-1	0.7	-2.3	WAUSAU	63	-2	2.8	-1.2
WICHITA	72	-4	8.0	4.0	PARGO	64	-1	1.5	-1.5	WY CASPER	61	-1	2.0	0.7
WY BOWLING GREEN	74	0	7.2	2.6	GRAND FORKS	63	-1	1.4	-1.5	CHEYENNE	60	-2	2.5	0.5
JACKSON	71	0	7.0	3.2	WILLISTON	63	-1	1.5	-1.2	LANDER	62	-1	2.7	1.3
LEXINGTON	72	-1	4.3	0.0	OH AKRON-CANTON	67	0	8.4	5.2	SHERIDAN	62	0	1.6	-0.6
LOUISVILLE	74	-1	5.3	1.7	CINCINNATI	71	0	3.0	-1.0	PR SAN JUAN	81	-1	3.0	-1.7

Based on 1951-80 normals.

Heating Degree Days (Base 65°) For June 1989

States and Stations	TOTAL	Depart	States and Stations	TOTAL	Depart	States and Stations	TOTAL	Depart
AL. Birmingham . . .	0	0	MD. Baltimore . . .	0	0	OK. Okla. City . . .	0	0
Mobile . . .	0	0	MA. Boston . . .	51	26	Tulsa . . .	0	0
Montgomery . . .	0	0	Chatham . . .	78	-39	OR. Astoria . . .	199	-53
AK. Anchorage . . .	284	-319	MI. Alpena . . .	147	10	Burns . . .	149	-28
Barrow . . .	850	-101	Detroit . . .	33	-3	Medford . . .	24	-61
Fairbanks . . .	149	-49	Flint . . .	49	-18	Pendleton . . .	42	-33
Nome . . .	539	-49	Grand Rapids . . .	51	-3	Portland . . .	77	-41
AZ. Flagstaff . . .	139	-55	Houghton Lake . . .	127	-2	Salem . . .	90	-62
Phoenix . . .	0	0	Lansing . . .	53	-5	PA. Allentown . . .	12	0
Tucson . . .	0	0	Marquette . . .	245	66	Erie . . .	45	-35
Winslow . . .	1	-9	S. Ste. Marie . . .	211	1	Harrisburg . . .	9	-3
Yuma . . .	0	0	MN. Duluth . . .	206	27	Philadelphia . . .	0	0
AR. Fort Smith . . .	0	-5	Internatl Falls . . .	170	15	Pittsburg . . .	25	-3
Little Rock . . .	0	0	Minneapolis . . .	44	3	Scranton . . .	39	5
CA. Bakersfield . . .	0	-6	Rochester . . .	99	40	RI. Providence . . .	22	-9
Eureka . . .	214	-95	St. Cloud . . .	88	10	SC. Charleston . . .	0	0
Fresno . . .	0	-8	MS. Jackson . . .	0	0	Columbia . . .	0	0
Los Angeles . . .	25	-29	Meridian . . .	0	0	Greenville . . .	0	0
Redding . . .	4	-6	MO. Columbia . . .	14	1	SD. Aberdeen . . .	81	8
Stockton . . .	2	-6	Kansas City . . .	7	-5	Huron . . .	83	21
San Diego . . .	14	-26	St. Louis . . .	4	-8	Rapid City . . .	116	15
San Francisco . . .	94	-45	Springfield . . .	22	8	Sioux Falls . . .	61	9
CO. Denver . . .	76	2	MT. Billings . . .	97	-14	TN. Chattanooga . . .	0	-6
Pueblo . . .	35	12	Glasgow . . .	99	-14	Knoxville . . .	1	1
CO. Bridgeport . . .	19	-1	Great Falls . . .	150	9	Memphis . . .	0	0
Hartford . . .	31	11	Havre . . .	112	-19	Nashville . . .	0	0
DC. Washington . . .	0	0	Helena . . .	107	-72	TX. Abilene . . .	0	0
FL. Apalachicola . . .	0	0	Kalispell . . .	139	-79	Amarillo . . .	27	21
Jacksonville . . .	0	0	Miles City . . .	92	6	Austin . . .	0	0
Key West . . .	0	0	Missoula . . .	124	-56	Beaumont . . .	0	0
Miami . . .	0	0	NE. Grand Island . . .	22	-5	Brownsville . . .	0	0
Orlando . . .	0	0	Lincoln . . .	15	-1	Corpus Christi . . .	0	0
W. Palm Beach . . .	0	0	Norfolk . . .	45	18	Del Rio . . .	0	0
Tallahassee . . .	0	0	North Platte . . .	67	8	El Paso . . .	0	0
Tampa . . .	0	0	Omaha . . .	25	0	Fort Worth . . .	0	0
GA. Atlanta . . .	0	-5	Valentine . . .	91	29	Galveston . . .	0	0
Augusta . . .	0	0	NV. Ely . . .	189	-7	Houston . . .	0	0
Macon . . .	0	0	Las Vegas . . .	0	0	Lubbock . . .	1	1
Savannah . . .	0	0	Reno . . .	21	-103	Midland . . .	0	0
ID. Boise . . .	30	-53	Winnemucca . . .	37	-89	San Angelo . . .	0	0
Lewiston . . .	18	-56	NH. Concord . . .	80	13	San Antonio . . .	0	0
Pocatello . . .	113	-15	NJ. Atlantic City . . .	3	-23	Victoria . . .	0	0
IL. Chicago . . .	43	5	NM. Albuquerque . . .	0	0	Waco . . .	0	0
Moline . . .	28	8	NY. Albany . . .	35	-3	Wichita Falls . . .	0	0
Peoria . . .	25	3	Binghamton . . .	69	-10	UT. Salt Lake City . . .	35	-18
Rockford . . .	36	2	Buffalo . . .	60	7	VT. Burlington . . .	45	-19
Springfield . . .	19	6	New York . . .	9	1	VA. Lynchburg . . .	0	-7
Fort Wayne . . .	19	-8	Rochester . . .	33	-8	Norfolk . . .	0	0
Indianapolis . . .	11	-4	Syracuse . . .	38	-9	Richmond . . .	0	0
South Bend . . .	40	5	NC. Asheville . . .	4	-19	Roanoke . . .	0	-12
IA. Des Moines . . .	31	14	Charlotte . . .	0	0	WA. Quillayute . . .	245	-56
Dubuque . . .	41	-1	Greensboro . . .	0	0	Seattle-Tacoma . . .	93	-76
Souix City . . .	35	11	Hatteras . . .	0	0	Spokane . . .	65	-75
KS. Concordia . . .	19	3	Raleigh . . .	0	0	Walla Walla . . .	19	-35
Dodge City . . .	50	36	Wilmington . . .	0	0	Yakima . . .	52	-49
Goodland . . .	70	27	ND. Bismark . . .	110	10	WV Beckley . . .	16	-41
Topeka . . .	5	-9	Fargo . . .	96	10	Charleston . . .	2	-14
Wichita . . .	8	1	Williston . . .	115	7	Huntington . . .	4	-13
KY. Lexington . . .	8	-2	OH. Akron-Canton . . .	38	1	WI. Green Bay . . .	98	7
Louisville . . .	4	-1	Cinncinnati . . .	14	2	La Crosse . . .	52	15
LA. Baton Rouge . . .	0	0	Cleveland . . .	33	0	Madison . . .	68	10
Lake Charles . . .	0	0	Columbus . . .	28	9	Milwaukee . . .	85	1
New Orleans . . .	0	0	Dayton . . .	14	-1	WY. Casper . . .	162	31
Shreveport . . .	0	0	Toledo . . .	29	-10	Cheyenne . . .	180	41
ME. Caribou . . .	181	31	Youngstown . . .	48	-9	Lander . . .	342	200
Portland . . .	91	-16				Sheridan . . .	142	-7

Based on 1951-80 normals.

National Agricultural Summary

JULY 3 - 9, 1989

HIGHLIGHTS: Hot, dry weather in the Plains States caused a sharp decline in the condition of the spring wheat crop. Rain continued to slow fieldwork and crop development in the Delta where soil moisture was mostly surplus. The number of days suitable for fieldwork averaged less than one in most of the Delta. Soil moisture was mostly short to adequate in the western Corn Belt and northern Great Plains.

Winter wheat was mostly fair to poor. Harvest was 57 percent (%) complete, 10 percentage points behind the 5-year average. Harvest progressed well in the central and southern Great Plains and western Corn Belt. Spring wheat condition declined and was mostly fair to good, though the percentage of wheat in poor to very poor condition increased from 5 to 21 percent. Seventy-seven percent of the acreage was heading, 4 points behind normal. Corn was mostly good to fair with 8% of the acreage in the silking stage, 10 points behind normal. Soybeans were mostly good to fair with planting 96% complete, 3 points behind normal. Fourteen percent of the acreage was blooming, 11 points behind normal. Cotton condition improved and was mostly fair to good with 66% of the acreage in the squaring stage, 1 point behind normal. Fifteen percent of the acreage was setting bolls, 7 points behind normal. Sorghum was mostly good to fair with 15% of the acreage heading, 3 points behind normal. Florida citrus groves were in good to excellent condition. Pastures were good to excellent in the East and mostly fair in the Great Plains and the West.

SMALL GRAIN: Winter wheat was mostly fair to poor. Harvest was 57% complete, 10 points behind normal. Harvest advanced 30 or more points in Illinois, Kansas, and Nebraska. Harvest also progressed well in Indiana, Missouri, North Carolina, and Texas. Harvest lagged behind normal in most of the 20 major producing States. Harvest was more than 25 points behind normal in Colorado, Indiana, and Ohio. Harvest was nearly complete in Arkansas, Georgia, Missouri, New Mexico, Oklahoma, and Texas.

Spring wheat condition declined and was mostly fair to good. Seventy-seven percent of the acreage was heading, 4 points behind normal. Lack of moisture lowered crop condition in Montana, North Dakota, and South Dakota. Spring wheat was mostly fair in North and South Dakota and good to fair in Montana. Heading lagged 22 points behind normal in Montana but was near normal in the other four major producing States.

CORN: Corn was mostly good to fair with 8% of the acreage in the silking stage, 10 points behind normal. Nearly all of the acreage was silking in Georgia. Percentage of acreage silking lagged behind normal in most States. In Illinois, corn was mostly good to fair with 10% of the acreage silking, 27 points behind normal. Silking was 20 points behind normal in North Carolina. Silking began in Indiana.

SOYBEANS: Soybeans were mostly good to fair with planting 96% complete, 3 points behind normal. Fourteen percent of the acreage was blooming, 11 points behind normal. Planting was complete or nearly complete in 10 of the 19 major producing States. Rain slowed planting progress in the Delta. Planting was more than 10 points behind normal in Alabama, Kentucky, Louisiana, and Mississippi. Flooding damaged soybeans in Louisiana. In Mississippi, soybeans were mostly poor to fair. Planting lagged 13 and 19 points behind normal in Louisiana and Mississippi, respectively.

COTTON: Cotton improved and was mostly fair to good. Sixty-six percent of the acreage was in the squaring stage, slightly behind the 67% average. Fifteen percent of the acreage was setting bolls, 7 points behind normal. Crop development lagged behind normal in the Delta and Southeast. In Mississippi, cotton was mostly poor to fair. In Texas, cotton was mostly fair to good. Defoliating operations continued in the Rio Grande Valley and Coastal Bend area. In California, cotton was mostly good.

SORGHUM: Sorghum was mostly good to fair with 15% of the acreage heading, 3 points behind normal. Heading had begun in 6 of the 11 major producing States. In Kansas, producers replanted some acreage lost due to earlier heavy rains and hail. Sorghum was mostly fair to good in Nebraska. Cinch bugs were a problem in eastern Nebraska. Some replanting was necessary. In Texas, sorghum was mostly fair to good. Harvest continued in the south-central and Coastal Bend areas. Fields were turning color in the Blacklands and central areas. Planting was nearly complete in the Plains area.

OTHER FIELD CROPS: Rice was mostly good to fair with 16% of the acreage headed, slightly ahead of the 15% average. None of the acreage was heading in Arkansas and California. Heading was ahead of normal in the other three major producing States. Sheath blight was a continuing problem in Louisiana. Peanuts were good to excellent in Alabama and Georgia and good to fair in North Carolina. Peanut planting continued in Oklahoma and Texas. In Kentucky, tobacco was mostly fair to good. Above-normal moisture caused disease problems and forced some resetting of tobacco plants. In North Carolina, tobacco was mostly good to fair.

FRUIT AND NUTS: In Florida, citrus groves were in good to excellent condition with abundant new growth. The new crop of fruit continued to size well. Peaches were fair to good in Georgia and South Carolina. Harvest lagged behind normal in South Carolina. In North Carolina, peaches were good to fair and harvest was 47% complete, 2 points behind normal. Peach harvest was nearly complete in Texas. Grape harvest continued in Arizona. Harvest of early variety apples began in Tulare County, California. Table grape harvest continued in the San Joaquin Valley. Freestone peach, plum, and nectarine harvests were approximately 50% complete. Cherry harvest continued in Oregon and Washington and was nearly complete in Idaho. In Michigan, tart cherry harvest began.

VEGETABLES: In Florida, growers continued to prepare fields for fall crops. Tomato transplanting was expected to begin soon in the southern areas. Watermelons were fair to good in Georgia and South Carolina. Harvest lagged behind normal in Georgia. Irish potatoes were good to fair in North Carolina. Harvest was 58% complete, 16 points behind normal. In Texas, onion and potato harvests continued in the High Plains. In the Rio Grande Valley, vegetable harvests were nearly complete. Melon harvests continued in Arizona. Chipper potato harvest was nearly complete in central Arizona. In California, strawberry harvest was complete in the Sacramento Valley. High temperatures accelerated processing tomato harvest in the desert area. Potato crop development continued to lag behind normal due to earlier cold temperatures in the Tulelake-Butte Valley. Early onion harvest was finished in eastern Oregon.

PASTURES AND LIVESTOCK: Livestock was mostly good. Pastures were mostly good to excellent in the East and mostly fair in the Great Plains and the West. High temperatures stressed livestock in Nebraska.

Crop Progress

FOR WEEK ENDING JULY 9, 1989

SPRING WHEAT
% HEADED

	1989	1988	AVG.
IDAHO	76	87	76
MINN	90	99	90
MONT	48	88	70
N DAK	77	93	78
S DAK	95	100	92
5 STATES	77	94	81
THESE 5 STATES PRODUCED	87%		
OF THE 1988 SPRING WHEAT CROP.			

GRAIN SORGHUM
% HEADED

	1989	1988	AVG.
ARK	12	11	NA
ILL	0	2	NA
KANS	0	0	2
LA	25	32	56
MISS	13	24	33
MO	6	7	8
NEBR	0	0	0
OKLA	0	10	5
S DAK	0	0	0
TENN	8	38	18
TEX	57	59	59
11 STATES	15	16	NA
EXCL. STATES WITH NA	15	17	18
THESE 11 STATES PRODUCED	96%		
OF THE 1988 GRAIN SORGHUM CROP.			

RICE
% HEADED

	1989	1988	AVG.
ARK	0	0	0
CALIF	0	0	0
LA	38	34	35
MISS	15	4	8
TEX	56	46	52
5 STATES	16	13	15
THESE 5 STATES PRODUCED	97%		
OF THE 1988 RICE CROP.			

WINTER WHEAT
% HARVESTED

	1989	1988	AVG.
ARK	93	100	98
CALIF	90	75	88
COLO	6	48	47
GA	95	100	100
IDAHO	0	0	0
ILL	86	98	88
IND	41	90	67
KANS	70	99	85
MICH	0	45	10
MO	93	99	91
MONT	0	7	1
NEBR	40	70	52
N MEX	95	92	NA
N C	83	92	96
OHIO	7	73	43
OKLA	95	100	97
OREG	0	1	3
S DAK	7	45	11
TEX	93	96	95
WASH	0	0	0
20 STATES	57	76	NA
EXCL. STATES WITH NA	57	76	67
THESE 20 STATES PRODUCED	90%		
OF THE 1988 WINTER WHEAT CROP.			

NA - NOT AVAILABLE.

COTTON
% SQUARING

	1989	1988	AVG.
ALA	90	94	91
ARIZ	100	96	99
ARK	86	93	93
CALIF	95	75	87
GA	85	87	91
LA	65	77	83
MISS	79	90	91
MO	94	94	87
N MEX	75	70	70
N C	53	49	68
OKLA	30	45	15
S C	62	58	83
TENN	78	85	82
TEX	48	67	48
14 STATES	66	75	67
THESE 14 STATES PRODUCED	99%		
OF THE 1988 COTTON CROP.			

COTTON
% SETTING BOLLS

	1989	1988	AVG.
ALA	22	31	27
ARIZ	89	60	80
ARK	6	25	36
CALIF	20	10	28
GA	28	29	45
LA	11	28	32
MISS	10	32	26
MO	12	13	24
N MEX	30	20	24
N C	6	5	23
OKLA	1	15	1
S C	9	14	42
TENN	8	22	8
TEX	12	14	13
14 STATES	15	20	22
THESE 14 STATES PRODUCED	99%		
OF THE 1988 COTTON CROP.			

CORN
% SILKING

	1989	1988	AVG.
COLO	0	0	0
GA	95	91	96
ILL	10	32	37
IND	8	7	18
IOWA	0	10	8
KANS	20	25	20
KY	30	27	38
MICH	0	3	3
MINN	0	4	2
MO	31	41	40
NEBR	5	20	14
N C	49	63	69
OHIO	0	6	14
PA	0	0	0
S DAK	0	4	1
TEX	70	68	74
WIS	0	0	0
17 STATES	8	17	18
THESE 17 STATES PRODUCED	94%		
OF THE 1988 CORN CROP.			

SOYBEANS
% PLANTED

	1989	1988	AVG.
ALA	82	94	96
ARK	88	92	96
GA	92	92	97
ILL	100	100	100
IND	99	100	100
IOWA	100	100	100
KANS	97	97	96
KY	80	90	95
LA	85	95	98
MICH	98	100	100
MINN	100	100	100
MISS	75	89	94
MO	98	98	97
NEBR	100	100	100
N C	88	91	94
OHIO	98	100	100
S C	92	96	96
S DAK	100	100	100
TENN	86	89	94
19 STATES	96	98	99
THESE 19 STATES PRODUCED	95%		
OF THE 1988 SOYBEANS CROP.			

SOYBEANS
% BLOOM

	1989	1988	AVG.
ALA	12	15	15
ARK	14	3	6
GA	9	9	17
ILL	30	50	44
IND	15	25	27
IOWA	25	58	33
KANS	10	15	15
KY	10	17	15
LA	9	6	13
MICH	0	5	5
MINN	0	68	28
MISS	2	9	9
MO	19	33	25
NEBR	15	40	25
N C	2	4	2
OHIO	0	26	28
S C	2	1	3
S DAK	17	39	18
TENN	6	9	6
19 STATES	14	34	25
THESE 19 STATES PRODUCED	95%		
OF THE 1988 SOYBEANS CROP.			

Crop Condition

PERCENT

SORGHUM

STATE	VP	P	F	G	EX
ARK	0	2	47	51	0
ILL	0	0	6	72	22
KANS	2	3	22	54	19
LA	0	22	44	30	4
MISS	0	30	50	20	0
MO	0	2	40	55	3
NEBR	0	5	58	37	0
OKLA	0	0	4	95	1
S DAK	9	24	32	34	1
TENN	1	6	28	55	10
TEX	3	23	30	33	11
11 STATE	2	10	32	46	10
PREV YEAR	4	14	39	38	5

CORN

STATE	VP	P	F	G	EX
COLO	1	4	25	55	15
GA	0	0	1	58	41
ILL	0	1	30	59	10
IND	0	3	20	65	12
IOWA	0	5	41	48	6
KANS	0	4	17	43	36
KY	0	0	9	59	32
MICH	0	5	20	50	25
MINN	0	4	44	43	9
MO	3	6	36	51	4
NEBR	0	12	49	39	0
N C	0	4	20	66	10
OHIO	3	16	40	37	4
PA	3	8	27	41	21
S DAK	1	1	31	61	6
TEX	7	13	13	44	23
WIS	0	2	27	62	9
17 STATE	1	5	33	51	10
PREV YEAR	18	32	36	13	1

SPRING WHEAT

STATE	VP	P	F	G	EX
IDAHO	0	6	27	51	16
MINN	2	8	25	56	9
MONT	1	8	21	56	14
N DAK	14	16	49	21	0
S DAK	4	16	51	26	3
5 STATE	8	13	39	35	5
PREV YEAR	31	45	18	5	1

RICE

STATE	VP	P	F	G	EX
ARK	0	0	33	67	0
CALIF	0	0	10	75	15
LA	0	4	38	50	8
MISS	0	0	50	50	0
TEX	0	0	0	87	13
5 STATE	0	1	28	65	6
PREV YEAR	0	5	35	59	1

SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	1	10	82	7
ARK	2	12	60	26	0
GA	0	1	4	63	32
ILL	0	0	27	69	4
IND	0	1	30	65	4
IOWA	0	4	36	57	3
KANS	0	4	18	44	34
KY	0	6	29	60	5
LA	12	30	40	16	2
MICH	3	7	20	50	20
MINN	2	3	51	42	2
MISS	15	45	35	5	0
MO	0	2	47	51	0
NEBR	0	7	54	37	2
N C	0	3	27	63	7
OHIO	3	13	40	40	4
S C	0	0	17	83	0
S DAK	0	2	26	63	9
TENN	6	9	45	39	1
19 STATE	2	7	36	50	5
PREV YEAR	8	29	47	15	1

COTTON

STATE	VP	P	F	G	EX
ALA	0	10	63	27	0
ARIZ	0	0	0	40	60
ARK	0	21	64	15	0
CALIF	0	0	5	90	5
GA	0	0	8	64	28
LA	0	19	57	24	0
MISS	15	40	45	0	0
MO	0	10	50	40	0
N MEX	0	15	15	60	10
N C	0	5	27	60	8
OKLA	0	5	60	35	0
S C	0	0	7	93	0
TENN	4	6	57	33	0
TEX	0	12	55	32	1
14 STATE	2	13	45	36	4
PREV YEAR	2	7	34	42	15

WINTER WHEAT

STATE	VP	P	F	G	EX
ARK	0	17	60	23	0
CALIF	0	0	5	75	20
COLO	10	12	49	27	2
GA	5	37	40	18	0
IDAHO	0	6	23	61	10
ILL	0	0	3	64	33
IND	0	0	22	63	15
KANS	51	29	16	3	1
MICH	0	5	20	50	25
MO	0	5	45	49	1
MONT	1	8	22	49	20
NEB	7	42	43	8	0
N MEX	70	25	5	0	0
N C	5	24	47	23	1
OHIO	2	9	34	48	7
OKLA	15	5	50	29	1
OREG	0	0	43	42	15
S DAK	5	23	57	15	0
TEX	26	42	27	5	0
WASH	0	0	70	30	0
20 STATE	20	20	33	23	4
PREV YEAR	4	16	34	39	7

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall under 0.75 in.; 1.00 to 3.00 in. isolated areas. Temperatures 1 to 2° below normal.

Days suitable for fieldwork 1.0. Soil moisture 4% adequate, 96% surplus. Wet conditions continued to hamper plantings, small grain harvest, pest control. Corn 80% silked, 82% 1988, 86% avg.; 30% dented, 48% 1988, 31% avg.; 8% mature, 19% 1988, 11% avg.; 1% poor, 10% fair, 53% good, 36% excellent. Sorghum 83% planted, 96% 1988, 95% avg.; 3% fair, 82% good, 15% excellent. Cotton 90% squaring, 94% 1988, 91% avg.; 22% setting bolls, 31% 1988, 27% avg.; 2% poor, 63% fair, 35% good. Soybeans 82% planted, 94% 1988, 96% avg.; 12% blooming, 15% 1988, 15% avg.; 5% setting pods, 5% 1988, 3% avg.; 1% poor, 10% fair, 82% good, 7% excellent. Peanuts 67% pegging, 69% 1988, 58% avg.; 1% fair, 63% good, 36% excellent. Winter wheat 76% harvested, 100% 1988, 98% avg. Livestock mostly good; pastures excellent. Primary activities: Aerial spraying insects, disease; maintaining equipment, machinery; harvesting, marketing fruit, vegetable crops, as weather permitted; clipping pastures; general care of livestock, poultry, catfish.

ALASKA: Seasonal high temperatures combined with sunshine and little precipitation boosted crop maturity, provided a full week of hay making. Highs 2° below normal to 11° above normal. Lows 3° below normal to 7° above normal. Seasonal precipitation 0.77 in. drier than normal at Homer to 1.69 in. wetter than normal at Fairbanks.

Days suitable for fieldwork 7.0. Topsoil 65% short, 35% adequate. Subsoil 14% short, 85% adequate, 1% surplus. First crop hay harvest 70% complete. Barley 75% headed stage; good; height 15 in. Commercial potatoes heights 10 in., compared with 12 in. 1988. Head lettuce, radishes, other greens being harvested.

ARIZONA: Upper level high pressure, sunny skies, intense heat wave 4th; afternoon readings 90s high country, 110 to 120° lower western deserts. Isolated afternoon, night thunderstorms, very light. Scattered thunderstorms, 6th, northeast plateau to Mexican border. Sharp increase in thunderstorms 8th, mostly light, except 0.08 in. Nogales, 0.50 in. Globe, 0.33 in. Tucson. Temperatures 1 to 9° above normal.

Cotton 60% excellent, 40% good; squaring 100%, 96% 1988, 99% avg.; 89% setting bolls, 60% 1988, 80% avg. Insect levels below normal. Alfalfa hay harvest continued; excellent. Weed, insect infestations light; harvest progress moderate west, southwest, active east. Hay, roughage 50% adequate, 50% surplus. Watermelon, cantaloupe, honeydews, mixed melons harvested, shipped central. Chipper potato, mixed vegetable harvest nearly completed central. Grape harvest continued Harquahala area, completed Salt River Valley; citrus shipments limited. Processing tomato harvest continued Yuma, Parker areas; watermelon harvest, shipping continued Yuma; completed Parker. Cabbage harvest continued, dry onion harvest completed east.

ARKANSAS: Temperatures slightly below normal. Rainfall moderate to heavy across southern part of State. Extremes 63°; 96°. Rainfall none to 1.99 in.

Days suitable for fieldwork 5.0. Soil moisture 4% short, 52% adequate, 44% surplus. Cotton 86% squaring, 93% 1988, 93% avg. Rice 100% emerged. Soybeans 88% planted, 92% 1988, 96% avg.; 80% emerged, 78% 1988, 89% avg. Oats 98% harvested, 100% 1988, 98% avg. Wheat 93% harvested, 100% 1988, 97% avg. Corn 15% fair, 44% good, 41% excellent. Sorghum 99% emerged, 100% 1988. Main activities: Wheat harvest; soybean planting, replanting; cultivation of cotton, soybeans, applying post emergence herbicides, applying insecticides to cotton, rice fertilization, insect, disease control, cutting, baling hay, fruit, vegetable harvest. Crops making moderate growth. Cotton shedding squares. Blast, sheath blight continue to appear in rice fields. Levees washing out. Soybean fields yellowing from excess water. Downy mildew in sorghum. Wheat harvest continues with reports of seeds sprouting in the heads in some fields. Tomato volume increased with prices decreasing. Hay being cut between rains. Livestock good.

CALIFORNIA: Fair skies, dry weather continued across State. Midweek, strong high pressure brought record to near record high temperatures to parts of central, northern area.

Field activities good progress, clear warm weather entire week. Small grain harvest tapered off, approached completion all but late, high elevation fields. Stubble burned, sheep grazed or tilled under. Seeding second crops Sudan grass, corn, grain sorghum, dry beans active. Cotton bloom, boll set increased. Pink boll worm treatments southern areas increased. Harvest alfalfa, other hay continued normal pace. Picking earliest apple varieties began Tulare County, mainly local market. Apricot harvesting Contra Costa, Fresno, Merced, Riverside counties, some heat damage experienced Riverside area. Avocado bloom poor set Ventura County. Date bagging active Riverside County. Harvesting Flame Seedless, Perlette table grapes San Joaquin Valley. Approximately 50% packed Freestone peaches, plums, nectarines. Clingstone peach harvest begins late July, Marysville-Yuba City area. Picking grapefruit Riverside County. San Joaquin Valley valencia orange harvest slow. Navel oranges treated for red scale, Fresno County. Almond orchards treated for pests. Broccoli remained in moderate supply, Salinas-Watsonville, Santa Maria, quality variable. Cauliflower continued moderate supply, varying quality. Potatoes Tulelake-Butte Valley developing well, progress remained behind due to cold weather experienced earlier. Herbicide applications being applied. Potato harvest Perris-Hemet area with good demand, yields, quality. Sweet corn harvest both Cutler-Orosi, Delta areas. Lettuce, celery moderate supplies, variable quality Salinas, Santa Maria areas. Processing tomato harvest desert area moving rapidly due to heat. Fresh market, processing tomatoes harvested Kingsburg-Dinuba area. Fresh market tomato harvest Merced-Atwater area, fields sprayed for worms. Cantaloupe harvest gained momentum Kingsburg area. Honeydew, mixed melon harvests begun. Cantaloupe, honeydew harvests desert area winding down. Strawberry harvest complete Sacramento Valley; supplies moderate Salinas area, variable quality. Harvest Santa Maria area nearly finished, varying quality.

Other vegetables harvested included cucumbers, cherry tomatoes, peppers, red onions, tomatillas, squash, etc. Livestock fair to good. Range, pasture water supplies poor most of valley areas due to hot, dry weather. Feeding areas, water supply levels foothills, northern counties fair to good. Supplemental feeding continued.

COLORADO: Hot, dry continued across State setting record high temperatures almost daily. Little or no rainfall, except few thunderstorms in eastern plains on 3rd. Temperatures 3 to 9° above normal.

Days suitable for fieldwork 6.4. Soil moisture 34% very short, 54% short, 12% adequate. Alfalfa 82,5 1st cutting, 11% 2nd cutting complete. Barley 49% turning color, 11% ripe, 3% harvested. Corn, onions good. Oats 82% headed, 23% turning color, 1% harvested. Dry beans 3% flowered. Sugarbeets, potatoes good. Sorghum 85% emerged. Spring wheat 83% headed, 20% turning color. Winter wheat 83% turning color, 22% ripe, 6% harvested. Livestock good while range, pasture fair to good.

FLORIDA: Wet week across State. Rain occurred on 4 days; mostly 1.00 to 2.00 in. Greatest weekly total 5.05 in., Crestview with 4.02 in. Immokalee, 3.41 in. Lake Alfred. Temperatures near normal. Extremes 64° Archbold; 98° Lakeland.

Panhandle soil moisture adequate to surplus; Peninsula, short to adequate. Weed control, planting late soybeans most urgent activities, Panhandle. Tobacco harvest at mid-stalk stage. Hay harvest active. Row crops, sugarcane good progress. Summer rains decreased over much of State, particularly after midweek. Panhandle began drying out from record setting June rainfall, some locations. Pastures good to excellent most of Panhandle. Peninsula pastures continued to recover from earlier dry soils with some areas mostly central, north only fair; elsewhere good to excellent. Cattle remain good to excellent. Peninsula more variable with some herds rated only fair. Citrus groves, trees very good to excellent. Moisture adequate, low volume irrigation continued. Much new growth. New crop fruit good progress. Valencia harvest almost complete; grapefruit movement very low. Caretakers active all areas with normal summer programs. Warm temperatures, scattered daily showers vegetable producing areas. Watermelon, sweet corn, pepper, tomato shipments light. Growers continued fall crop land preparation. Fall crop tomato transplanting to start over next 2 weeks, southern areas.

GEORGIA: Wet week, 1.00 to 3.00 in., few locations northwest, western border 4.00 to 7.00 in. Temperatures near normal. Extreme highs mid 90s, coolest lows low to mid 60s northeast, upper, low 70s elsewhere.

Days suitable for fieldwork 2.2. Soil moisture 1% short, 33% adequate, 66% surplus. Corn 37% dent, 40% 1988, 49% avg. Cotton insects increasing, spraying interrupted. Sorghum Grain 16% fair, 60% good, 24% excellent; 94% planted, 91% 1988, 96% avg. Peanuts 4% fair, 66% good, 30% excellent; 95% blooming, 88% 1988, 92% avg.; 75% pegging, 57% 1988, 71% avg. Tobacco 14% fair, 72% good, 14% excellent; 26% harvested, 16% 1988, 20% avg. Watermelons 53% fair, 46% good, 1% excellent; 53% harvested, 54% 1988, 67% avg.; Wet fields slowing harvest. Wheat harvest delayed again, wet fields. Apples 58% fair, 38% good, 4% excellent. Peaches 2% poor, 52% fair, 46% good; 78% harvested, 73% 1988, 80% avg. Pasture 3% fair, 71% good, 26% excellent. Hay 1% very poor, 2% poor, 15% fair, 58% good, 24% excellent; harvest delayed. Cattle, hogs good.

HAWAII: Hot, sunny, light to moderate showers, combined with active spraying, irrigation provided fair growing conditions. Temperatures high 60s to upper 80s with variable winds 5-25 mph. Rainfall none to 7.80 in.

Days suitable for fieldwork 7.0. Papaya production heavy. Sugar, pineapple harvesting normal.

IDAHO: Temperatures 5° above normal, several locations 100°, higher. Minimal precipitation, all well below normal.

Days suitable for fieldwork 7.0. Soil moisture 7% very short, 19% short, 73% adequate, 1% surplus. Crops stressed by heat. Most doing well; recovering from frost damage. Nearly all winter wheat headed, 99% 1988, 99% avg.; 33% turning color. Winter wheat fair, good. Spring wheat fair, good; 76% headed, 87% 1988, 76% avg.; 8% turning color. Spring barley 90% headed, 93% 1988, 87% avg.; 10% turning color. Potatoes 67% 12 inches high, 25% closing middles. Cherries nearly all harvested. First cut alfalfa 90% harvested, 93% 1988, 87% avg.; Second cutting 5% harvested. Low elevation rangeland drying out rapidly central, east. Northern pastures good, excellent.

ILLINOIS: Temperatures 5 to 8° above normal north, near normal south. Precipitation generally under 0.30 in., heavier scattered showers east, east southeastern areas.

Days suitable for fieldwork 5.75. Soil moisture 67% short, 20% adequate, 13% surplus. Soybeans setting pods 4%, 5% 1988, 10% avg. Alfalfa 2nd crop cut 54%, 68% 1988, 57% avg.; 7% poor, 44% fair, 44% good, 5% excellent. Oats turning yellow 75%, 88% 1988, 82% avg.; ripe 18%, 63% 1988, 48% avg.; 18% fair, 73% good, 9% excellent. Pasture 4% very poor, 16% poor, 37% fair, 30% good, 13% excellent.

INDIANA: Temperatures 2 to 6° above normal. Lows mid 60s to around 70°, highs mid 80s to 90°. Precipitation spotty, 0.25 to 3.50 in.

Days suitable for fieldwork 5.3. Topsoil 40% short, 54% adequate, 6% surplus. Subsoil 16% short, 80% adequate, 4% surplus. Corn, soybean condition unchanged. Corn 45 in. high, 45 in. 1988, 54 in. avg. Soybean 11 in. high, 12 in. 1988, 14 in. avg. Alfalfa hay 36% cut twice, 66% 1988, 44% avg. Pasture 5% poor, 35% fair, 46% good, 14% excellent. Wheat 41% combined, 90% 1988, 67% avg. Cultivation, spraying corn, soybeans continued. Double cropping soybeans underway.

IOWA: Temperatures 7 to 9° above normal. Extremes 102 to 52°. Rainfall none to 2.03 in., 0.06 in.

Days suitable for fieldwork 6.9. Topsoil 93% short, 7% adequate; subsoil 99% short, 1% adequate. Oats 6% poor, 38% fair, 50% good, 6% excellent. Winter wheat good to fair; 50% harvested, 64% 1988, 38% avg. Hay 34% poor, 50% fair, 15% good, 1% excellent. Second crop alfalfa 26% harvested, 41% 1988, 33% avg. Corn 10% tasseled, 28% 1988, 23% avg. Soybeans 99% cultivated first time, 100% 1988, 90% avg. Oats 85% turning color, 97% 1988, 78% avg.; 5% harvested, 36% 1988, 13% avg. Livestock good to excellent. Pasture 22% very poor, 42% poor, 32% fair, 4% good.

KANSAS: Temperatures near normal southern third, 4° above central third, 7° above northwest, 5° above north central, 2° above northeast.

Days suitable for fieldwork 5.5, consisting of harvesting wheat, planting sorghum, soybeans. Topsoil 24% short, 72% adequate, 4% surplus. Subsoil moisture 49% short, 51% adequate. Wheat harvest 70% complete, delayed end week some areas due wet fields. High humidity caused late starts. Shattering problems short stands, reduced yields. Corn making good growth. Districts have light green bug infestation. Sorghum fields replanted due earlier thunderstorms washing stands, hail damage. Drier northeast quarter counties light to severe chinch bug infestations. Ranges, pastures providing more feed. Second alfalfa cutting 70% complete, yields below normal.

KENTUCKY: Week began with cloudy skies above normal rainfall, remnants of tropical storm Allison brought abundant precipitation to State. Several locations over 4.00 in. rain in 24 hours. Last half of week more summer-like, temperatures in 90s. Weekly temperatures 2° above normal.

Days suitable fieldwork 2.8. Soil moisture 2% short, 42% adequate, 56% surplus. Continued crop damage in wheat, soybeans, tobacco from high moisture. Corn crop beginning pollination. Corn good. Soybean planting progressing slowly. High moisture in tobacco causing increase in diseases, restricting normal crop management practices. Fields being reset, fair to good. Wheat harvest 85% complete, 94% 1988, 92% avg. Hay 4% poor, 19% fair, 60% good, 17% excellent, second cutting hay lost to water damage. Pasture good to excellent.

LOUISIANA: Temperatures 3° below normal north; 1 to 2° below normal south. Extremes 67°; 94°. Rainfall 1.76 to 2.92 in.

Days suitable for fieldwork 0.3. Soil moisture 4% adequate, 96% surplus. Corn silked 95%, 97% 1988, 97% avg.; dough stage 70%, 63% 1988, 75% avg.; mature 8%, 9% 1988, 11% avg.; 3% poor, 30% fair, 50% good, 17% excellent. Stressed from excess moisture. Cotton squaring 65%, 77% 1988, 83% avg.; setting bolls 11%, 28% 1988, 32% avg.; 19% poor, 57% fair, 24% good. Hay first cutting 72%, 87% 1988, 95% avg. Peaches harvested 36%, 62% 1988, 66% avg.; 13% very poor, 7% poor, 60% fair, 20% good. Rice headed 38%, 34% 1988, 35% avg.; 4% poor, 38% fair, 50% good, 8% excellent. Sheath blight developing into severe problem. Sorghum planted 100%, 100% 1988, 100% avg.; emerged 100%, 100% 1988, 100% avg.; headed 25%, 32% 1988, 56% avg.; 22% poor, 44% fair, 30% good, 4% excellent. Soybeans planted 85%, 95% 1988, 98% avg.; emerged 84%, 84% 1988, 93% avg.; blooming 9%, 6% 1988, 13% avg.; 12% very poor, 30% poor, 40% fair, 16% good, 2% excellent. Sugarcane 25% fair, 69% good, 6% excellent. Sugarcane growth was 1 to 1 1/2 feet above last year at this time. Sweet potatoes planted 85%, 91% 1988, 98% avg.; 17% poor, 33% fair, 50% good. Wheat harvested 94%, 100% 1988, 100% avg. Vegetable 9% very poor, 31% poor, 36% fair, 24% good. Pasture 1% poor, 21% fair, 69% good, 9% excellent. Livestock 2% poor, 18% fair, 75% good, 5% excellent. Flooding, saturated fields have caused drastic stand losses in rice, soybeans, grain sorghum, cotton, will prevent all of the intended acres of soybeans from being planted.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.61 in. Temperature 75°, normal 74°. Extremes 50°; 92°.

Days suitable for fieldwork 2.9. Topsoil 10% short, 40% adequate, 50% surplus. Subsoil 55% adequate, 45% surplus. Field corn good. Soybeans fair to good. Soybeans 75% planted, 84% 1988, 96% avg. Tobacco fair; 95% transplanted, 100% 1988, 99% avg. Wheat, barley fair. Oats, rye good. Wheat 50% harvested, 77% 1988, 74% avg. Barley 87% harvested, 97% 1988, 98% avg. Pasture good to excellent.

DELAWARE: Precipitation 2.05 in. Temperature 75°, normal 75°. Extremes 55°; 91°.

Days suitable for fieldwork 4.5. Topsoil 60% adequate, 40% surplus. Subsoil 80% adequate, 20% surplus. Soybeans good; single and double crop soybeans planted 81%, 70% 1988, 87% avg. Wheat fair to good. Wheat 72% harvested, 85% 1988, 80% avg. Barley fair to good. Barley 91% harvested, 100% 1988, 100% avg. Field corn good.

MICHIGAN: Temperatures 3 to 6° above normal. Extremes 45°; 96°. Precipitation none to 0.88 in. across State.

Days suitable for fieldwork 6.5. Soil moisture 30% short, 70% adequate. Corn 0% silking, 3% 1988, 3% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Soybeans 0% blooming, 5% 1988, 5% avg.; 3% very poor, 7% poor, 20% fair, 50% good, 20% excellent. Wheat 80% turning, 95% 1988, 90% avg.; 0% harvested, 45% 1988, 10% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Major activities: Hay, strawberry harvest, dry bean planting, anhydrous application, spraying, cultivating, preparing for wheat harvest. Tart cherry harvest began weekend, expected to full swing by midweek in southwest. Vegetables being harvested include cabbage, zucchini, cucumbers for slicing.

MINNESOTA: Temperatures 5 to 11° above normal. Extremes 46°; 103°. Precipitation 0.19 to 1.03 in. Greatest weekly total 3.58 in.

Days suitable for fieldwork 5.9. Topsoil 35% very short, 48% short 14% adequate, 3% surplus. Spring wheat 90% heading, 99% 1988, 90% avg.; 7% turning ripe, 61% 1988, 24% avg. Oats 95% heading, 99% 1988, 94% avg.; 20% turning ripe, 84% 1988, 41% avg. Barley 89% heading, 99% 1988, 91% avg.; 3% turning ripe, 67% 1988, 31% avg. Corn 40 in. height, 50 in. 1988, 44 in. avg. Soybeans 92% cultivated, 99% 1988, 91% avg.; 14 in. height, 18 in. 1988, 14 in. avg.; 2% very poor, 3% poor, 51% fair, 42% good, 2% excellent. Corn 4% poor, 44% fair, 43% good, 9% excellent. Spring Wheat 2% very poor, 8% poor, 25% fair, 56% good, 9% excellent.

MISSISSIPPI: Cool, wet. Temperatures 2° below normal. Extremes 62°; 95°. Rainfall 2.18 in., 1.09 in. above normal. Flooding in northwestern counties.

Days suitable for fieldwork 0.6, 4.9 1988, 5.4 avg. Soil moisture 5% adequate, 40% surplus, 55% excessive. Corn good; 65% silked, 77% 1988, 79% avg. Cotton fair to poor; 79% squaring, 90% 1988, 91% avg.; 10% setting bolls, 32% 1988, 26% avg. Rice fair to good; 15% heading, 4% 1988, 8% avg. Sorghum fair; 13% heading, 24% 1988, 33% avg. Soybeans poor; 75% planted, 89% 1988, 94% avg. Sweet potatoes 90% planted, 99% 1988, 99% avg. Wheat 90% harvested, 100% 1988, 99% avg. Peaches 67% harvested, 54% 1988, 60% avg. Pastures, livestock good. Activities: Limited fieldwork, rebuilding rice levees.

MISSOURI: Temperatures 3° below normal southeast to 3° above normal north. First 100° readings of year. Precipitation minor except southeast 0.50 in.

Days suitable for fieldwork 6.1. Topsoil 65% short, 31% adequate, 4% surplus. Subsoil 70% short, 30% adequate. Northern, southwest areas very dry. Double-crop soybeans planted 86%, 84% 1988, 86% avg. Small grain harvest progressing rapidly. Wheat harvest nearing completion all areas. Oats harvested 40%, 89% 1988, 64% avg. Alfalfa Hay 2nd cutting 75%, 78% 1988, 71% avg. Other hay cut 81%, 91% 1988, 82% avg. Pasture 5% very poor, 19% poor, 49% fair, 25% good, 2% excellent.

MONTANA: Temperatures 1 to 2° below normal west to near normal east. Areas had 90 to 100° at least once. Rainfall near zero.

Days suitable for fieldwork 6.7. Topsoil 54% short, 46% adequate. Subsoil 44% short, 54% adequate, 2% surplus. Winter wheat headed 90%, 100% 1988, 98% avg.; turning 10%, 71% 1988, 41% avg. Barley 5% poor, 21% fair, 47% good, 27% excellent; headed 46%, 86% 1988, 67% avg.; turning 1%, 23% 1988, 7% avg. Oats 1% very poor, 6% poor, 22% fair, 54% good, 17% excellent; headed 49%, 86% 1988, 63% avg.; turning 1%, 26% 1988, 8% avg. Pasture, range feed 1% very poor, 7% poor, 25% fair, 45% good, 22% excellent. First cutting alfalfa 59% harvested, 84% 1988, 77% avg. Other hay 46% cut, 59% 1988, 45% avg.

NEBRASKA: Temperatures 6 to 12° above normal. Extremes 57°; 110°. Only local rainfall in north, northeast 0.20 to 0.43 in.

Days suitable for fieldwork 6.4. Topsoil 66% short, 34% adequate. Subsoil 85% short, 15% adequate. Winter wheat 100% turning color; 75% ripe, 90% 1988, 74% avg. Harvest underway all areas. Oats 25% harvested, 55% 1988, 24% avg. Fields cut for hay, silage. Alfalfa hay 32% poor, 34% fair, 34% good. Second cutting 35% complete, 56% 1988, 41% avg. Pasture, range feed supplies 65% short, 35% adequate. Chinch bugs active in east, southeast causing some sorghum to be replanted. Spraying grasshoppers in east central. Dryland crops still under severe stress. Growers began irrigating again about midweek. Heat reducing weight gains, causing stress in feedlots. Main activities: Harvesting wheat, oats; cutting hay; weed control.

NEVADA: Hot, dry, temperatures 4 to 7° above normal most areas. New record high daytime temperatures established. No rain. Thunderstorms south, east produced VIRGAS (rain evaporates before it reaches the ground) no meaningful precipitation. Gusty afternoon winds common most areas.

Hot, dry weather ideal hay, small grain harvests. Ranges, pastures deteriorated from searing temperatures. Stockwater ponds drying.

NEW ENGLAND: Precipitation 1.00 to 2.00 in. Vermont, 0.50 in. remainder north, 1.00 to 1.50 in. Connecticut, 0.50 to 1.00 in. remainder south. Temperatures mid 60s northern Maine, upper 60s to lower 70s remainder. Temperatures at or slightly below normal.

Days suitable for fieldwork 6.0. Soil moisture 25% short, 75% adequate. Grazing availability 6% short, 94% adequate. Fieldwork progress 4.0 days behind. Maine potato good to excellent. Connecticut River Valley potato good. Maine oats good to excellent. Field corn fair to good. Sweet corn good. First crop hay 80% cut, 95% 1988, 80% avg.; fair to good. Second crop hay harvest 3% cut, 8% 1988, 9% avg.; good. Shade, outdoor tobacco good. Apple set average; fruit drop average, scab infection average to heavy. Strawberries 87% harvested. Blueberry set light to average. Major farm activities: Haying, cultivating, spraying, harvesting early vegetables.

NEW JERSEY: Temperatures near normal. Extremes 47°; 93°. Rainfall 2.15 in. north, 3.93 in. central, 1.96 in. south. Heaviest 24-hour total 3.67 in. on 5th, 6th. Estimated soil moisture percent field capacity averaged 91% north, 85% central, 80% south. Four inch soil temperatures 76° north, central, south.

Downpours on the 5th caused erosion, local flooding. Crop loss resulted. Frequent rain together with high temperatures, humidity

continued to reduce crop quality, hindered planting, harvesting, spraying. Marketing of summer vegetables remained active. Clingstone peach, blueberry, raspberry, blackberry picking continued. Barley, wheat combining, hay baling progressed as weather conditions permitted. Soybean planting following grain harvest.

NEW MEXICO: Temperatures above normal most locations; precipitation some areas.

Days suitable for fieldwork 6.7. Soil moisture 70% short, 30% adequate. Wheat harvest estimated 95% complete; 70% very poor, 25% poor, 5% fair. Cotton squaring 75%, 30% setting bolls; 15% poor, 15% fair, 60% good, 10% excellent. Cattle 20% poor, 40% fair, 40% good. Sheep 20% poor, 50% fair, 30% good. Ranges, pastures 10% very poor, 60% poor, 20% fair, 10% good.

NEW YORK: Rainfall again heavy into southeastern third of State, about 150% of normal. Totals in excess of 1.50 in. were common. Averages 40 to 60% of normal. Temperatures above normal. Surpluses 1.5 to 4°. Extremes 42° at Newcomb; 92° at La Guardia Airport.

Days suitable for fieldwork 5.1. Soil moisture adequate to surplus. Pastures good. Hay fair to good. First cutting alfalfa 74% complete, 76% avg. Clo-tim 63% harvested, 83% 1988, 66% avg. Corn 95% seeded. Seeding for silage continued active. Lake Ontario region apples good. Sweet cherry harvest started. Brown rot widespread. Hudson valley apples doing well. Sweet corn planting continued. Strawberry harvest winding down. Orange County onions fair.

NORTH CAROLINA: Temperatures 3° below normal in mountains, near normal rest of State. Extremes 51°; 94°. Precipitation 0.09 to 9.15 in.

Days suitable for fieldwork 3.9. Soil moisture 3% short 65% adequate, 32% surplus. Pasture 1% poor, 9% fair, 76% good, 14% excellent. Livestock feed from pasture 83%. Crop conditions: field tobacco 1% very poor, 1% poor, 43% fair, 55% good; irish potatoes 3% poor, 32% fair, 72% good, 3% excellent; sweet potatoes 21% fair, 74% good, 5% excellent; peaches 6% very poor, 18% poor, 32% fair, 44% good; apples 4% very poor, 11% poor, 29% fair, 52% good, 4% excellent; truck crops 3% poor, 35% fair, 61% good, 1% excellent; peanuts 21% fair, 73% good, 6% excellent; hay 4% poor, 20% fair, 70% good, 6% excellent. Hay first cutting 90% complete, second cutting 29% complete. Hay, roughage 2% short, 86% adequate, and 12% surplus. Plantings completed: Sorghum 87%, 99% 1988, 94% avg.; sweet potatoes 97%, 99% 1988, 99% avg. Harvesting completed: peaches 47%, 40% 1988, 49% avg.; wheat 83%, 92% 1988, 96% avg.; oats 88%, 95% 1988, 96% avg.; barley 87%, 96% 1988, 97% avg.; rye 84%, 90% 1988, 94% avg.; irish potatoes 58%, 82% 1988, 74% avg. Major activities: Planting soybeans, cultivating tobacco, harvesting small grains, cutting hay. Other activities: Spraying crops; planting sweet potatoes, vegetables, sorghum; harvesting peaches; tending livestock; general farm maintenance. Heavy rains delaying fieldwork, increasing incidence of disease, insects, drowning out some crops.

NORTH DAKOTA: Hot, dry. Temperatures 8 to 11° above average. Extremes 49° southwest, central; 108° central, northwest. Precipitation 0.70 in. southeast, all other sections 0.01 to 0.22 in. All sections of State below average for growing season, -0.90 in. northeast to -2.77 in. east central.

Days suitable for fieldwork 6.9. Topsoil current, 44% very short, 46% short, 10% adequate; 5 year average, 13% very short, 38% short, 48% adequate, 1% surplus; subsoil current, 56% very

short, 34% short, 10% adequate; 5 year average, 14% very short, 28% short, 57% adequate, 1% surplus. Small grains deteriorated last week. Hot dry weather forcing crop to maturity. Spring wheat 14% very poor, 16% poor, 49% fair, 21% good; durum 5%, 10%, 42%, 43%; oats 16%, 14%, 54%, 16%; barley 11%, 12%, 37%, 40%; corn 2%, 9%, 54%, 35%; flax 5%, 12%, 43%, 40%; dry edible beans 1%, 5%, 38%, 56%; soybeans 9% poor, 39% fair, 52% good; sunflower 6%, 39%, 55%; potatoes 20% fair, 80% good. Spring wheat 49% heading to flowering, 28% milk to dough and beyond; durum 48%, 17%; oats 42%, 31%; barley 45%, 37%. Row crop progress behind avg. Crop height: dry edible beans 10 in. this week, 13 in. 1988, 11 in. avg.; corn 23 in., 37 in., 31 in.; flax 9 in., 10 in., 11 in.; potatoes 13 in., 16 in., 16 in.; soybeans 11 in., 14 in., 13 in.; sunflower 15 in., 24 in., 20 in. Pasture 19% very poor, 42% poor, 31% fair, 8% good.

OHIO: High temperatures 70s to 80s, some low 90s. Low temperatures in 60s. Temperatures 2 to 5° above normal. Rainfall none southwest to 3.92 in. extreme south; most areas between none to 1.00 in. Base 50° growing days totalled 175 to 185°, 190 to 195° in south.

Days suitable for fieldwork 4.9. Soil moisture 6% short, 59% adequate, 35% surplus. Corn, soybeans, winter wheat, pasture, hay, oats fair to good. Wheat, canola harvest continued. First, second cuttings of hay progressed. Emergency forage crops, including sorghum, sudangrass, planted northeast. First planting of northwest potatoes flowered, dropped; digging to begin soon. Southern tobacco scalded. Cucumbers in north ready for harvest.

OKLAHOMA: Temperatures 4° below normal southeast to 1° below normal northeast. Precipitation none southwest to 1.11 in. northeast.

Days suitable for fieldwork 5.3. Topsoil 5% short, 65% adequate, 30% surplus. Subsoil 3% short, 97% adequate. Wheat 15% very poor, 5% poor, 50% fair, 29% good, 1% excellent; 85% harvested, 99% 1988, 85% avg. Cotton 7% poor, 90% fair, 3% good; 25% squaring, 35% 1988, 5% avg.; none setting bolls, none 1988, none avg. Boll weevil infestations southwest. Sorghum 20% fair, 79% good, 1% excellent; 80% planted, 85% 1988, 90% avg. Soybeans 95% planted, 85% 1988, 95% avg. Peanuts 95% planted, 97% 1988, 97% avg. Corn 40% tasseling, 25% 1988, 40% avg. Pastures good. Cattle good; marketings, prices stable.

OREGON: Temperatures 1° above normal along central, south coast, 1 to 4° below normal elsewhere. Rainfall 0.75 to 1.00 in. fell over northeast areas; 0.10 to 0.25 in. fell along the coast. Other areas dry with only trace amounts.

Soil moisture 54% short, 46% adequate. Barley 2% harvested, 3% 1988, 7% avg. Russian wheat aphid populations continued to build in spring grain fields Columbia Basin, fields sprayed. Hail damage to grains north Willamette County. Grass seed harvested Willamette Valley, central area. Haying continued all areas; third cutting Hermiston; second cutting Malheur County, central areas, west; first cutting Klamath County. Sulphur applied to sugarbeets Malheur County. Cherry harvest continued Wasco, Hood River, Willamette Valley counties. In Willamette Valley, finishing strawberry harvest, raspberry harvest about half completed, began harvest of blueberries, Marionberries, Boysenberries; cool weather benefited ripening berries. Cranberry bloom completed, early fruit set good southern coast. Vegetables look good west. Green peas, broccoli, snap beans being harvested Willamette Valley.

Ideal weather for green pea harvest, Walla Walla sweet onion harvest continued northeast. Early onion harvest finished east. Seed potatoes six inches high, fresh-market potato harvest expected in two weeks northeast. Cantaloupe being harvested, watermelon harvest expected in one week northeast. Livestock good to excellent west, fair to excellent east. Range, pasture fair to excellent west with pasture growth near zero due to lack of moisture south Willamette Valley. Range, pasture fair north central, good other areas, hot weather drying up lower elevation ranges and pastures southeast. Range, pasture good central area, June rains improved conditions; excellent south central, best condition in years.

PENNSYLVANIA: Warm, wet. Cold front moved into the region by the weekend, producing scattered showers. Temperature 73°, 4° above normal. Extremes 51°; 92°. Precipitation 1.23 in., 0.33 in. above normal.

Days suitable for fieldwork 4.0. Soil moisture none short, 32% adequate, 68% surplus. Corn height 21 in., 20 in. 1988, 31 in. avg.; 3% very poor, 8% poor, 27% fair, 41% good, 21% excellent. Tobacco 94% transplanted, 99% 1988, 100% avg. Soybeans 85% planted, 97% 1988, 98% avg.; 1% very poor, 5% poor, 26% fair, 52% good, 16% excellent. Barley 10% heading or headed, 11% 1988; 19% turning yellow, 16% 1988; 34% ripe, 17% 1988; 37% harvested, 56% 1988. Wheat 16% heading or headed, 7% 1988; 52% turning yellow, 36% 1988; 28% ripe, 43% 1988; 4% harvested, 14% 1988; 1% very poor, 5% poor, 25% fair, 45% good, 24% excellent. Oats 77% heading or headed, 49% 1988; 20% turning yellow, 43% 1988; 3% ripe, 8% 1988; 1% very poor, 5% poor, 24% fair, 48% good, 22% excellent. First cutting alfalfa 73% complete, 99% 1988. Second cutting alfalfa 18% complete, 47% 1988. First cutting clover-timothy 60% complete, 95% 1988. Hay quality fair. Feed from pastures average. Fruit tree mostly average. Activities: Planting corn, soybeans, vegetables; transplanting tobacco; harvesting hay, haylage, barley, wheat, vegetables; weed control; fence work; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: No Data Available.

SOUTH CAROLINA: Rainfall varied less than 1.00 to 6.00 in. Temperatures near normal.

Days suitable for fieldwork 4.4. Soil moisture 17% short, 76% adequate, 7% surplus. Cotton 7% fair, 93% good; 62% squaring, 58% 1988, 83% avg.; 9% setting bolls, 14% 1988, 42% avg. Soybeans 17% fair, 83% good; 92% planted, 96% 1988, 96% avg.; 2% blooming, 1% 1988, 3% avg. Corn good; 77% silked, 83% 1988, 87% avg.; 27% dough stage, 28% 1988, 41% avg. Watermelons fair to good; 44% harvested, 58% 1988, 47% avg. Tomatoes fair to good; 67% harvested, 76% 1988, 83% avg. Peaches fair to good; 30% harvested, 38% 1988, 48% avg. Wheat fair to good; 90% harvested, 100% 1988, 99% avg. Oats fair to good; 87% harvested, 98% 1988, 97% avg. Barley fair to good; 91% ripe, 100% 1988, 100% avg.; 74% harvested, 94% 1988, 96% avg. Pastures good.

SOUTH DAKOTA: Temperatures 7 to 14° above normal. Extremes 50°; 113°. Rainfall 0.25 in. or less most of State, 1.32 in. maximum. Growing season precipitation 0.76 in. to 5.61 in. below normal.

Days suitable 6.0. Topsoil 53% critically short, 40% short, 6% adequate, 1% surplus. Subsoil 8% critically short, 35% short, 7% adequate. Small grains fair to good. Row crop good to fair. Livestock good. Major activities, cultivating, haying.

TENNESSEE: Remnants of Allison produced heavy rainfall. Heaviest rains 3rd, 5th east, Plateau. Dry weather 8th, 9th. Temperatures near normal. Precipitation 3.00 in. above normal east, near normal west, slight below normal middle.

Days suitable for fieldwork 0.7. Soil moisture 8% adequate, 92% surplus. Corn 42% tasseling, 40% 1988, 51% avg.; 5% dough, 5% 1988, 10% avg.; 1% very poor, 2% poor, 15% fair, 60% good, 22% excellent. Wheat 80% harvested, 98% 1988, 96% avg.; 2% very poor, 15% poor, 59% fair, 24% good. Alfalfa 50% 2nd cutting, 78% 1988, 84% avg. Hay 1% very poor 7% poor, 27% fair, 57% good, 8% excellent. Heavy rains leeching nutrients from soil. Moisture related diseases prevalent. Pastures excellent. Cattle good.

TEXAS: Remains upper level low pressure system touched off scattered showers, thunderstorms east. Enough moisture, instability remained so daytime heating managed to touch off isolated, widely scattered afternoon, evening thunderstorms, coastal areas, south. Temperatures below normal northern half of the State. Near or above normal temperatures elsewhere. Precipitation below normal all State, except parts south, Coastal Bend.

Crops: Small grain producers continue harvest activities Plains. Many producers winding down activities. Rain delayed harvest some areas northern Blacklands. Harvest complete most parts State. Corn harvest gaining momentum south central, Upper Coast. Harvest continued minimal delays Coastal Bend, Valley. Acreage losses parts central, south. Rapid growth Plains under continued irrigation. Insect problems Blacklands, fields dough stage. Corn 60% doughing, 64% 1988, 62% avg.; 41% dented, 40% 1988, 42% avg.; 13% mature, 10% 1988, 9% avg.; 3% harvest, 0% 1988, 0% avg. Grain sorghum harvest increased south central, Coastal Bend. Below normal yields Valley. Fields rapidly turning color central, Blacklands under hot temperatures. Headworm problems. Additional moisture could help fill heads. Planting progress good Plains, beginning to wind down. Early fields coming up to good stands. Fields Low Plains, Cross Timbers heading. Grain sorghum planted 99%, 99% 1988, 99% avg.; 45% turning color, 30% 1988, 42% avg.; 19% mature 19%, 19% 1988, 23% avg.; 3% harvested, 5% 1988, 10% avg. Cotton was beginning show improved progress Plains with warmer, open weather. Irrigation resumed where available. Early fields squaring. Cultivating occurred. Fields setting bolls Blacklands, spraying active. Boll worms problem Trans-Pecos. Defoliating operations increasing Coastal Bend, Valley. Plants Upper Coast, central setting bolls. Cotton 100% planted, 99% 1988, 100% avg.; 3% open bolls, 4% 1988, 2% avg. Rice fields continued to head, show good progress Upper Coast. Peanut planting continued central under marginal soil moisture conditions. Early stands look good. Irrigation necessary. Planting continued Cross Timbers; available moisture decreasing. Early fields look good, minor disease problems. Soybean planting winding down High Plains. Early fields up to good stands. Fields Upper Coast maturing, look good. Northeast crop delayed because weather problems. Other field crops: Oats 89% harvested, 83% 1988, 87% avg. Peanuts 95% planted, 98% 1988, 94% avg. Soybeans 97% planted, 96% 1988, 96% avg. Sunflowers 92% planted, 71% 1988, 91% avg.

Commercial Vegetables: Rio Grande Valley, harvest light, most producers planning for fall. San Antonio-Winter Garden, onion, cantaloupe harvest about over. Watermelon supplies short. East Texas, scattered rain damaged additional acreage. Limited harvest occurred. High Plains, onion, potato harvest increased with good yields.

Trans-Pecos, tomatoes ripening. Onion harvest beginning wind down. Cantaloupe harvest continued. Good crop peaches harvested Hill Country. Many other areas about over. Pecans continued set average crop across State. Spraying casebearers, aphids continued. Shedding drier areas.

Range and Livestock: Ranges, pastures showing improvement all areas except south. Haying operations continued active with good yields. Additional losses to hay on ground east. Livestock decreasing south. Additional head reduction because lack of forage.

UTAH: Precipitation none. Temperatures 2 to 5° above normal.

Days suitable for fieldwork 6.9. Soil moisture 94% short, 6% adequate. Winter wheat 71% turned color, 76% 1988, 64% avg.; 27% ripe, 21% 1988, 23% avg.; 4% harvested, 4% 1988, 4% avg. Barley 70% turned color, 75% 1988, 58% avg.; 14% ripe, 12% 1988, 7% avg. Spring wheat 49% turned color, 70% 1988, 51% avg.; 5% ripe, 4% 1988, 2% avg. Oats 87% headed, 69% 1988, 71% avg.; 23% turned color, 36% 1988, 24% avg.; 3% ripe, 3% 1988, 1% avg. Corn 34 in. high, 43 in. 1988, 33 in. avg. Alfalfa 2nd cutting 23% complete, 17% 1988, 8% avg. Range, pasture 14% very poor, 68% poor, 18% fair. Irrigation water supply 6% very short, 94% short. Stockwater generally short. Hay, roughage 6% very short, 58% short, 36% adequate. Sweet cherry harvest near completion. Tart cherry, apricot harvests continued. Major farm activities: Hay harvest, cultivating row crops, irrigation, spraying noxious weeds, alfalfa aphids.

VIRGINIA: Cool, dry then warm, wet. Temperatures near normal with above normal rainfall 1.50 in.

Days suitable for fieldwork 3.4. Topsoil 60% adequate, 40% surplus. Soybeans 83% planted, 88% 1988, 83% avg. Corn 14% silked, 18% 1988, 21% avg. Wheat 79% harvested, 87% 1988, 88% avg. Oats 55% harvested, 65% 1988, 67% avg. Barley 95% harvested, 93% 1988, 93% avg. Corn 6% poor, 17% fair, 63% good, 14% excellent. Soybeans 7% poor, 22% fair, 62% good, 9% excellent. Tobacco 4% poor, 29% fair, 67% good. Pastures 3% fair, 51% good, 46% excellent. Alfalfa 6% fair, 78% good, 16% excellent. Other hay 13% fair, 60% good, 27% excellent. Apples 5% poor, 33% fair, 57% good, 5% excellent. Livestock 4% fair, 68% good, 28% excellent.

WASHINGTON: Temperatures 2° above normal to 7° below normal, east; none to 4° above normal, west. Precipitation none to 0.01 in., east; 0.08 to 1.30 in., west.

Days suitable for fieldwork, 6.8. Soil moisture 50% short, 50% adequate. Range, pasture 25% short, 75% adequate. Hay, other roughage 95% adequate, 5% surplus. Small grains were progressing nicely with harvest beginning in a few areas. In many areas of the State, harvest is about 2 weeks away. Most of the grains were headed out, turning color. Second cutting of alfalfa hay 35% complete. Major activities: Harvest of cherries, strawberries, raspberries, broccoli, green peas, lettuce, Walla Walla sweet onions, sweet corn; cutting hay; thinning fruit; weeding. Drought stress is evident in crops, pastures. Potato, soft fruit harvests are approaching.

WEST VIRGINIA: Temperature 74°, 1 to 3° above normal. Extremes 52° Greenbank; 52° Creston. Precipitation 1.27 in., above normal.

(Continued to back cover)

International Weather and Crop Summary

July 2-8, 1989

HIGHLIGHTS

USSR ... In Western USSR, unseasonably cool, wet weather favors spring grains in the filling stage. In the New Lands, hot, dry weather intensifies, stressing spring grains in the reproductive stages.

EUROPE ... Widespread rain continues across the northwest. Torrential rains cause flooding in sections of Italy, Austria, and Yugoslavia.

SOUTH ASIA ... Dry pockets persist in the south, limiting moisture for crops in or nearing reproduction.

EASTERN ASIA ... Heavy rain and flooding continue over sections of the Yangtze Valley.

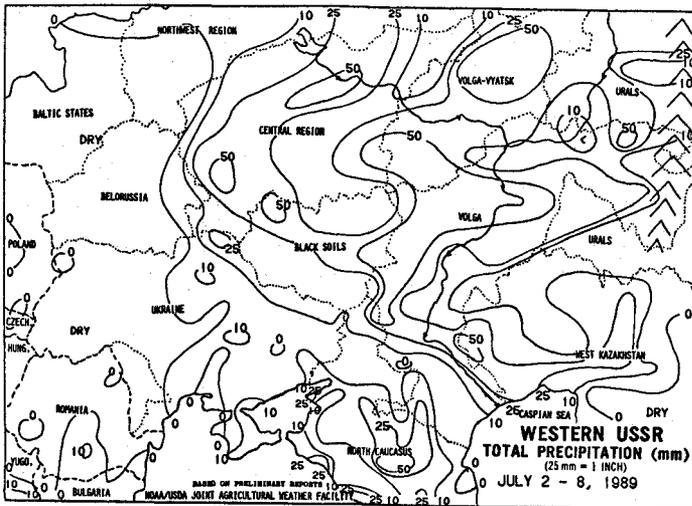
SOUTHEAST ASIA ... Scattered showers cover Thailand, but dry pockets continue over some corn producing regions.

SOUTH AMERICA ... In Argentina, dry, cold weather favors wheat planting but slows crop emergence. In south-central Brazil, showers help wheat growth in the south, while dry weather favors citrus harvesting in Sao Paulo.

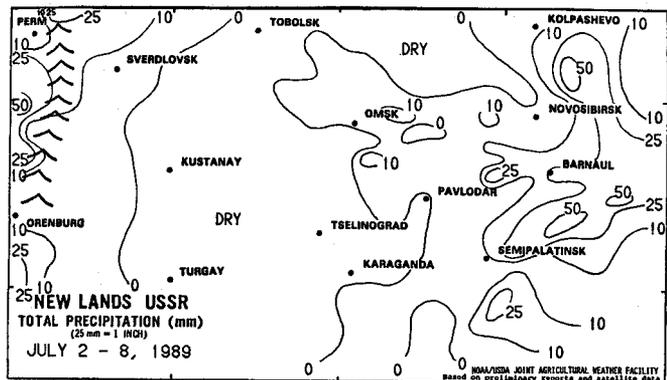
AUSTRALIA ... Moderate to heavy rain favors late vegetative growth of winter grains in Western and South Australia.

CANADA ... Beneficial rain falls in the northwest and southeast, but dry, warm weather dominates the remainder of the Prairies.

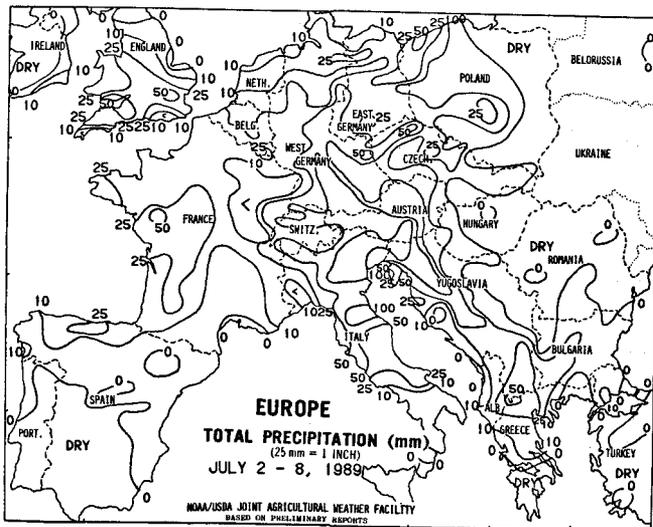
MEXICO ... Beneficial rain falls in the Southern Plateau and in the northwest, where oppressive heat continues.



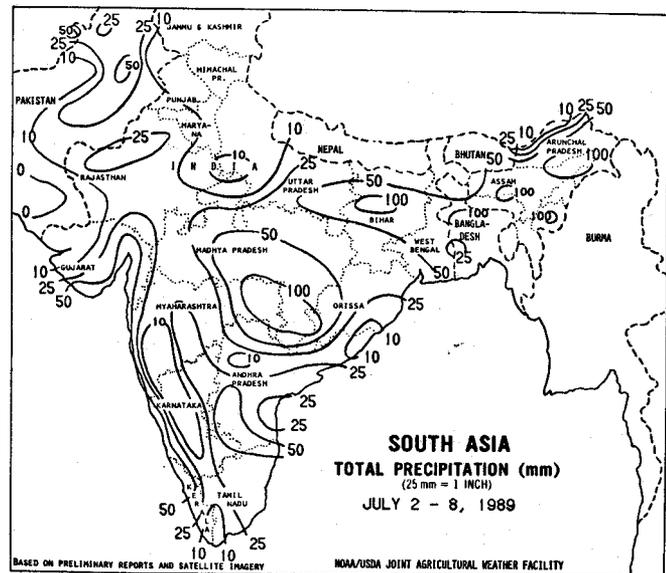
USSR ... In Western USSR, winter grains were maturing over much of the region, with harvest likely occurring in the Ukraine and the North Caucasus. Spring grains were maturing in the southern Ukraine and the North Caucasus and were filling over the remainder of the region. Corn was entering the reproductive phase of development. Mostly dry weather covered the Ukraine, helping winter grain harvesting. Substantial rain covered the Central Region, parts of the Black Soils Region, the Volga, and the Volga Vyatsk, benefiting spring grains in the filling stage. Precipitation amounts in the areas generally ranged from 25 to 50mm, with locations in the western Volga and the Volga Vyatsk receiving rainfall ranging from 50 to 99mm. Weekly average temperatures were 1-2 degrees Celsius (C) above normal in the extreme west and 1-3 degrees C below normal over the remainder of the region.



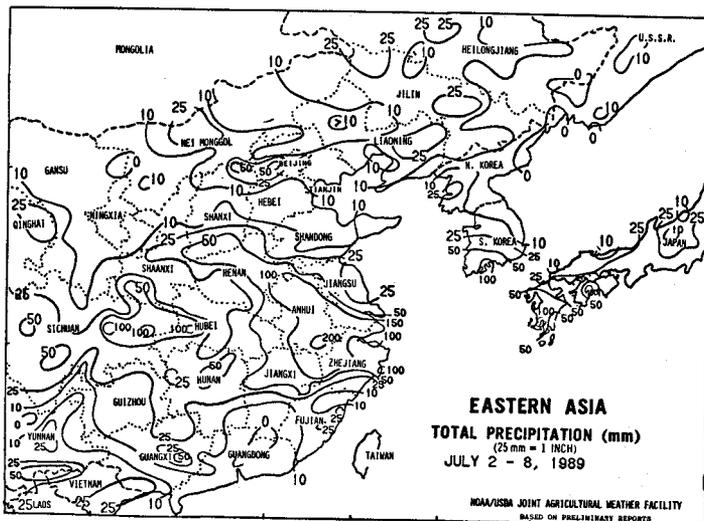
In the New Lands, hot, dry weather intensified during the week, stressing spring grains entering the highly weather sensitive reproductive phase. Highest weekly temperatures ranged from 32 to 36 degrees C in the Urals, 36 to 39 degrees C in central Kazakhstan and the western portion of West Siberia, and 25 to 33 degrees C in eastern areas. In addition, steady winds ranging from 10 to 15 knots over central Kazakhstan and West Siberia late in the week further increased stress on crops. By week's end, an eastward moving cold front from Western USSR edged into the eastern Volga and the western Urals, producing light rain (10-25mm) and cooler weather.



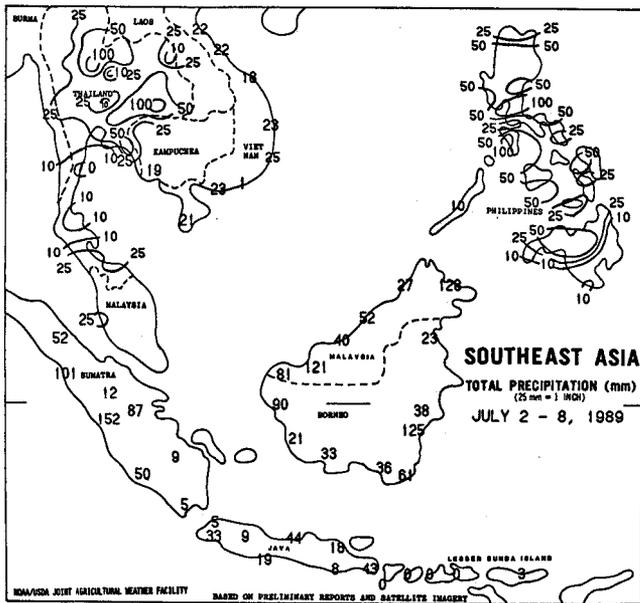
EUROPE ... Widespread rain (5-30mm, with isolated amounts in excess of 30mm) continued across much of the United Kingdom, France, Benelux, West and East Germany, and western Poland, benefiting reproductive spring planted crops but causing delays in early winter grains harvest. Unseasonably warm temperatures (daytime maximum temperatures of 30-35 degrees C) also persisted over the region, however, increasing crop evapotranspiration losses. In the east, mostly dry and warmer-than-normal weather favored drydown and harvest of winter grains across eastern sections of Poland, Czechoslovakia, Hungary, and nearly all of Romania, while scattered showers (5-40mm) covered the southern Balkans. Torrential rains (100-174mm) in northeastern Italy, southern Austria, and northwestern Yugoslavia caused widespread flooding and localized crop and property damage. In the southwest, scattered mostly light showers (5-15mm) fell over northern Spain, while much of the remainder of the region remained seasonably dry.



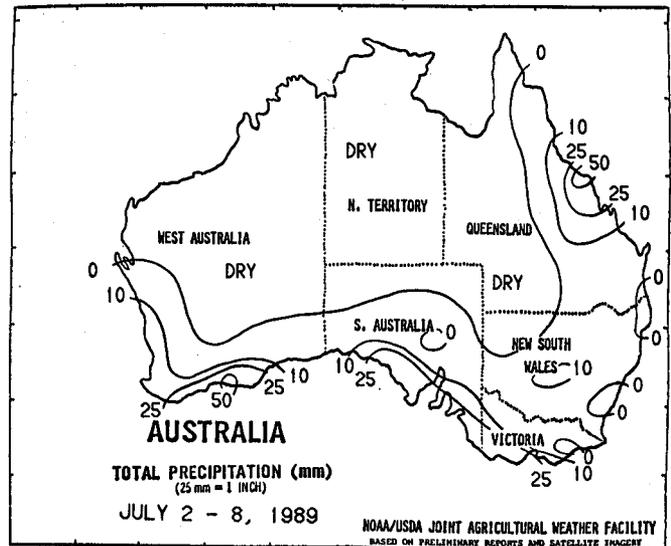
SOUTH ASIA ... Drier-than-normal weather persisted over portions of India's southern interior, continuing the drying trend that has lasted since early June and reducing moisture reserves for summer crops in or approaching reproduction. Rainfall continued to average less than 10mm from western Maharashtra to southern Karnataka, but the dry area diminished from the previous week, with scattered showers (25-50mm or more) bringing relief to vegetative crops in southern Andhra Pradesh and Tamil Nadu. Moderate to heavy rain (40-100mm or more) covered the east from northern Bihar and West Bengal eastward. Rainfall was generally below normal in central and northern India but pockets of moderate to heavy rain (25-50mm or more) dotted the region, favoring emerging and establishing crops, and temperatures averaged near to below normal, reducing evaporation rates. Scattered showers (21-74mm) improved irrigation levels in Pakistan, but temperatures continued hot, stressing vegetative crops.



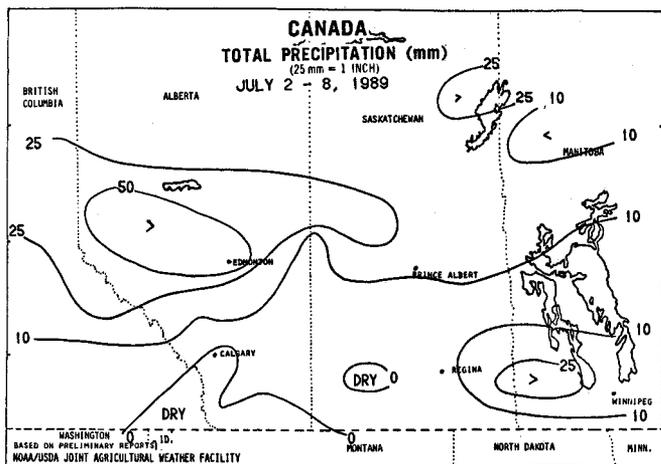
EASTERN ASIA ... Heavy rain (25-75mm, with scattered amounts in excess of 75mm) continued over middle and lower sections of the Yangtze Valley, keeping soil moisture at excessive levels. Very heavy rain (100-219mm) in sections of southern Jiangsu, southern Hubei, and Anhui likely caused flooding. In the south, scattered showers (5-20mm) caused only minor delays in early rice harvest across Guangdong, Fujian, and southern Jiangxi. In the north, scattered rains (5-30mm, with isolated totals in excess of 50mm) benefited vegetative to filling spring grains from Nei Mongol eastward to Heilongjiang. Widespread rain (10-40mm) also covered crop areas of the Korean peninsula and Honshu in Japan. Weekly mean temperatures cooled to below normal over all crop areas except the extreme south, where they remained normal to above normal.



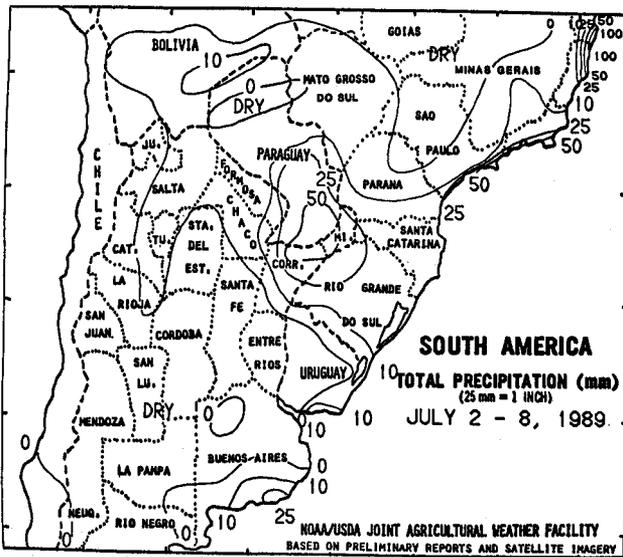
SOUTHEAST ASIA ... Scattered showers continued across Thailand's primary grain regions with most areas receiving 25-50mm or more of rain, favoring vegetative to reproductive crops. Pockets of drier-than-normal weather continued, however, over sections of the north and portions of the primary corn producing regions, with some local accumulations of less than 10mm. Temperatures were near normal with maximum temperatures in the low to middle 30's C, stimulating crop growth. Conditions across Thailand are generally favorable for crop growth, although more rain will be needed in upcoming weeks in the driest parts of the corn belt as crops advance through reproduction. In the Philippines, moderate to heavy showers (25-50mm or more) covered most crop regions, including grain regions of Luzon. The rain on Luzon was due partly to Tropical Storm Faye, which passed over central Luzon on the 8th, possibly causing local crop damage.



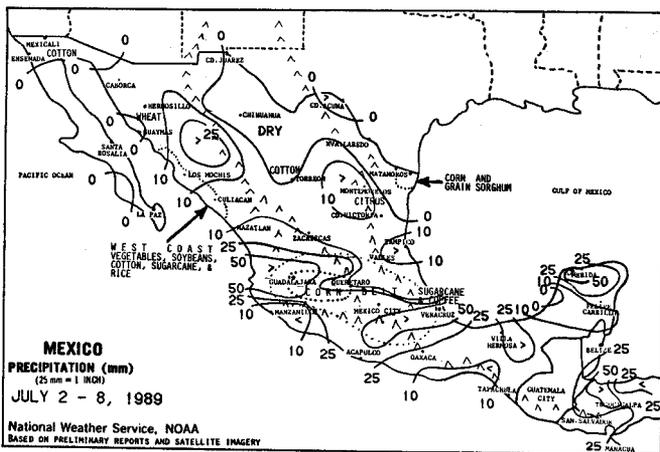
AUSTRALIA ... Moderate to heavy rain (15-40mm, with isolated rainfall in excess of 50mm) fell across crop areas of Western Australia and South Australia, favoring late season vegetative growth of winter grains. Light to moderate rain (5-14mm) covered crop areas of New South Wales and Victoria, while southern Queensland was mostly dry. Seasonably cool temperatures over the past 1-2 weeks have caused some southern winter grains to become semidormant. In the northeast, scattered showers (25-57mm) caused delays in sugarcane harvest across northern growing areas of Queensland, while southern crop areas remained favorably dry. Weekly mean temperatures were near normal to below normal across much of the continent.



CANADA ... Beneficial rain (10-29) covered east-central Saskatchewan and most Manitoban crop areas, improving conditions for vegetative to reproductive grains and oilseeds in areas that had been trending dry since late June. Moderate to heavy rain (10-25mm or more) also covered Alberta's northern crop areas although elsewhere, light rain (1-6mm) and warmer-than-normal weather stimulated crop growth but reduced topsoil moisture reserves. In the southeast, a brief outbreak of hot weather on the 5th brought high temperatures in the middle to upper 30's C to southeastern Saskatchewan and much of Manitoba, stressing crops approaching reproduction.



SOUTH AMERICA ... In Argentina, dry weather favored wheat planting throughout the wheat growing areas. Crop emergence and establishment, however, were slowed by unseasonably cold weather. Weekly temperatures generally averaged 3-6 degrees below normal, with minimum temperatures falling several degrees below freezing. Moisture is generally adequate in Argentina's wheat areas for early crop growth. In south-central Brazil, showers fell over southern wheat areas; however, weekly rainfall amounts were unavailable due to missing data reports. Mostly dry weather prevailed in northern areas, favoring citrus harvesting in Sao Paulo. Cool weather pushed into southern Brazil, Uruguay, and Paraguay. Temperatures, however, remained above freezing in Brazil's coffee areas.



MEXICO ... Significant rain fell over most of the Southern Plateau corn belt, providing beneficial moisture for the second consecutive week in central and western portions of the major corn growing region. In the Southern Plateau, weekly rainfall averaged 50-90mm in the west and southeast, and 25-50mm elsewhere, except in the northeast, where rainfall diminished to less than 10mm. In northwestern Mexico, showers penetrated into the dry farming region along the west coast, helping irrigation reservoirs cope with high water demands caused by persistent heat. Extreme high temperatures reached the low middle 40's C, causing severe heat stress in the northwest. Dry weather prevailed in the extreme north, while widespread, variable rain fell in the south.

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(Continued from p. 23)

Days suitable for fieldwork 2.6. Soil moisture 57% adequate, 43% surplus. Wheat, barley, oats, corn good to fair. Wheat 91% ripe; 16% harvested. Barley 97% ripe; 14% harvested. Oats 88% jointed; 86% headed. Tobacco good to fair, 90% set. Hay good to fair, 1st cut 54% complete. Apples fair, peaches poor. Farm activities: Making hay, combining wheat, cultivating tobacco, clipping pastures.

WISCONSIN: Temperature 74^o, 3^o above normal. Extremes: 41^o; 102^o. Precipitation 0.10 to 1.60.

Days suitable for fieldwork 6.6. Soil moisture 65% short, 34% adequate, 1% surplus. Pasture 64% of normal, 22% 1988, 65% avg. General condition of crops 1% very poor, 3% poor, 29% fair, 62% good, 5% excellent. Soybean 3% poor, 34% fair, 57% good, 6% excellent. Corn 2% poor, 27% fair, 62% good, 9% excellent; height 37 in., 39 in. 1988, 42 in. avg. Oats 88% headed, 96% 1988, 89% avg. First cut hay 93% completed, 99% 1988, 96% avg. Second cut hay 4% completed, 27% 1988, 16% avg. Potato leafhoppers problems in alfalfa.

WYOMING: Temperatures above normal. Precipitation nearly non-existent.

Days suitable for fieldwork 7.0. Topsoil 85% short, 15% adequate. Subsoil 81% short, 19% adequate. Winter wheat fair to good, 50% headed, 10% 1988, 25% avg.; 45% turning color, 55% 1988, 50% avg.; 5% mature, 35% 1988, 25% avg. Barley, fair to good, 5% jointed, 5% 1988; 25% boot, 10% 1988, 15% avg.; 60% headed, 50% 1988, 50% avg.; 10% turning color, 30% 1988, 30% avg.; 0% mature, 5% 1988, 5% avg. Spring wheat, fair to good, 5% jointed, 5% avg.; 25% boot, 5% 1988, 15% avg.; 55% headed, 45% 1988, 55% avg.; 15% turning color, 35% 1988, 20% avg.; 0% mature, 15% 1988, 5% avg.; Oats, fair to good, 10% jointed, 5% 1988, 5% avg.; 30% boot, 20% 1988, 20% avg.; 55% headed, 45% 1988, 60% avg.; 5% turning color, 20% 1988, 10% avg.; 0% mature, 10% 1988, 5% avg. Dry beans 10% bloom, 25% 1988. Potatoes 20% bloom, 20% 1988. Corn, sugarbeets, fair to good. Alfalfa fair to good, first cutting 75% complete, 90% 1988, 80% avg. Other hay 30% harvested, 50% 1988, 40% avg. Livestock feed obtained from pastures 90%. Hay, roughage supplies remainder of season 10% very short, 50% short, 35% adequate, 5% surplus.

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