

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

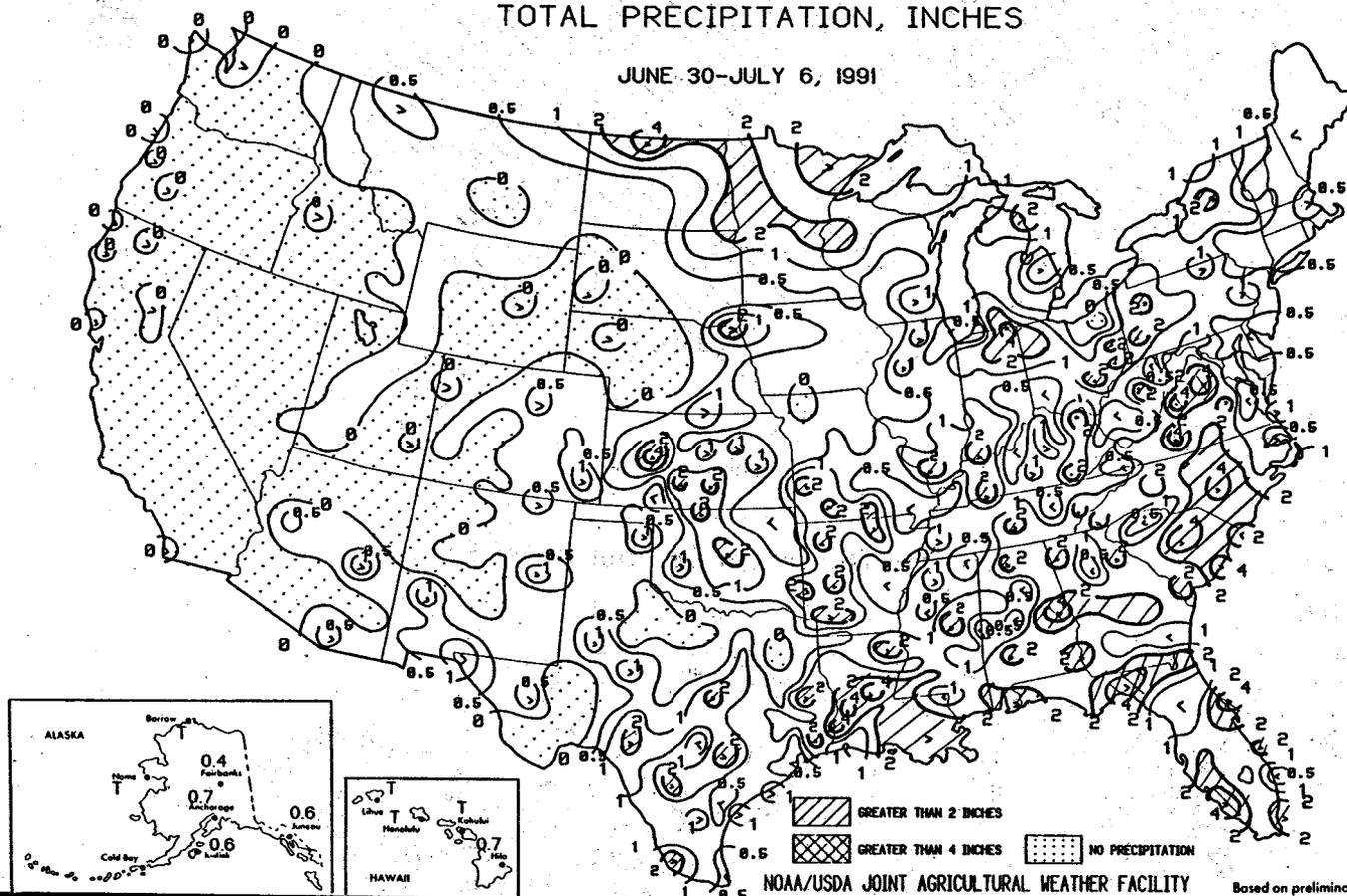
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July 9, 1991

TOTAL PRECIPITATION, INCHES

JUNE 30-JULY 6, 1991



HIGHLIGHTS

June 30 - July 6, 1991

A stationary front lingered from the **Great Lakes** to the **mid-Atlantic coast**, while an upper level disturbance drifted eastward along the **Canadian border**. In the warm, humid air south of the weather systems, thunderstorms brewed. Cooler-than-normal weather prevailed along and north of the storm track. Extreme heat developed during the week from the **West coast** to the **central Plains**, shattering more than 25 daily record highs. Early-week storms soaked portions of the **upper Mississippi and Ohio Valleys**, the **mid-Atlantic region**, and **Florida**, causing local flash flooding. Monday's maximum temperature reached 99° F in **Louisville, KY**, but struggled to only 55° F in **Duluth, MN**. Thunderstorms were commonplace at midweek in the **central and southern Plains**. Independence Day was rather cloudy and sometimes wet in most States **east of the Mississippi River**. But it was hot in the **West**: **Redding, CA**, reached 114° F. By week's end, rain was observed mainly in the **Northeast, Southeast**, and

northern Plains. Temperatures soared from the **Great Basin** to the **western Corn Belt**, reaching a maximum of 110° F at several **Kansas** locations.

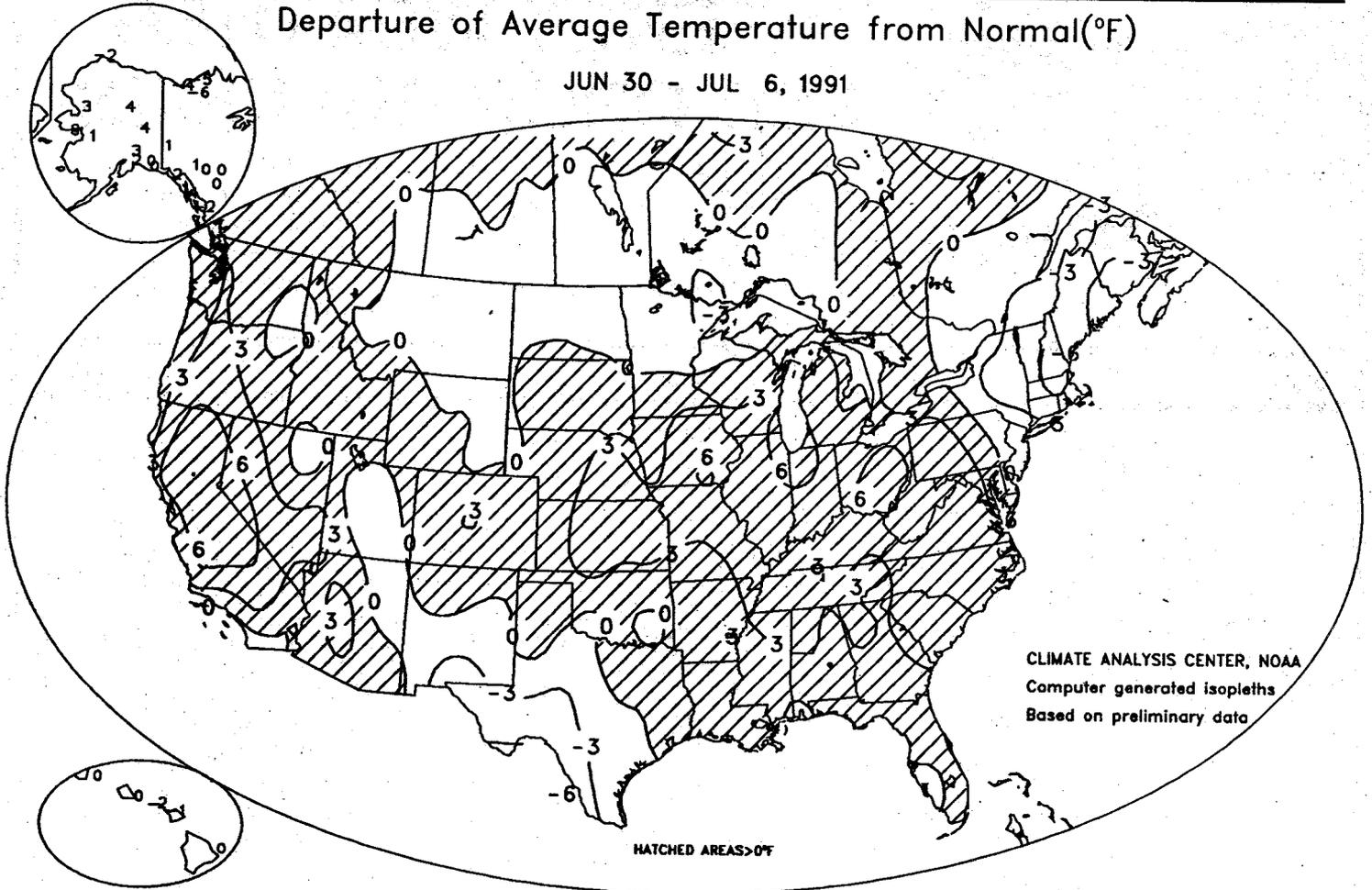
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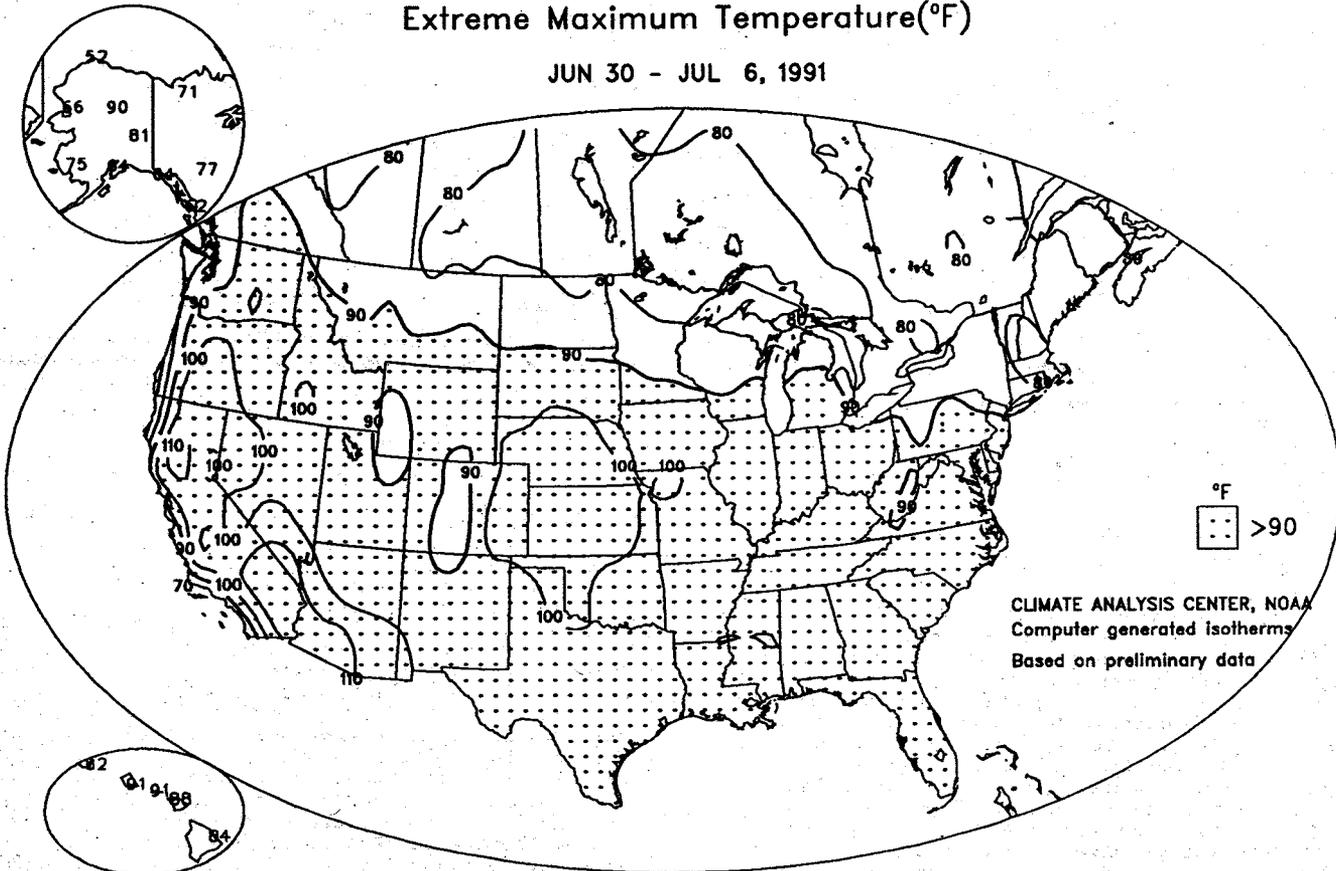
Departure of Average Temperature from Normal(°F)

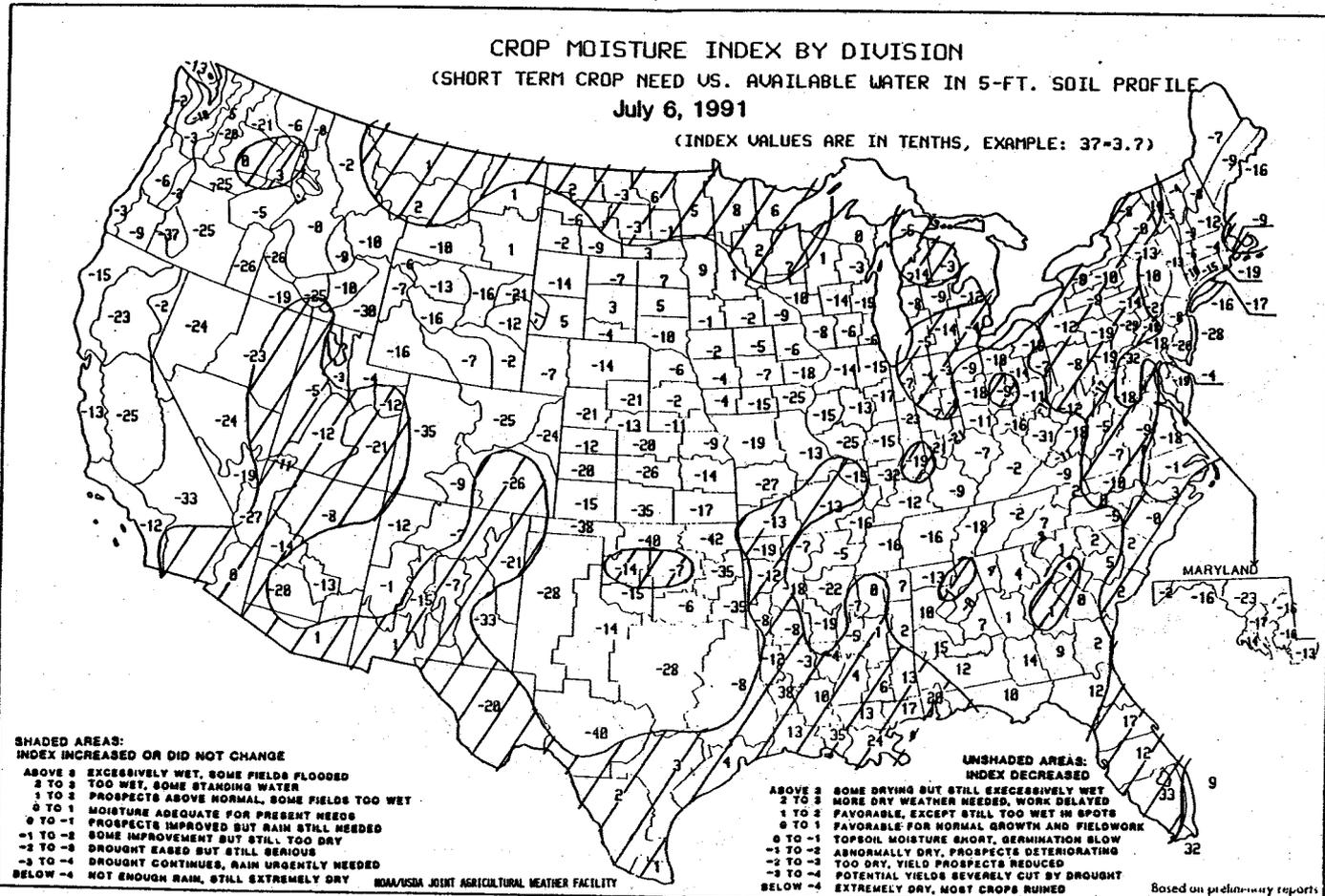
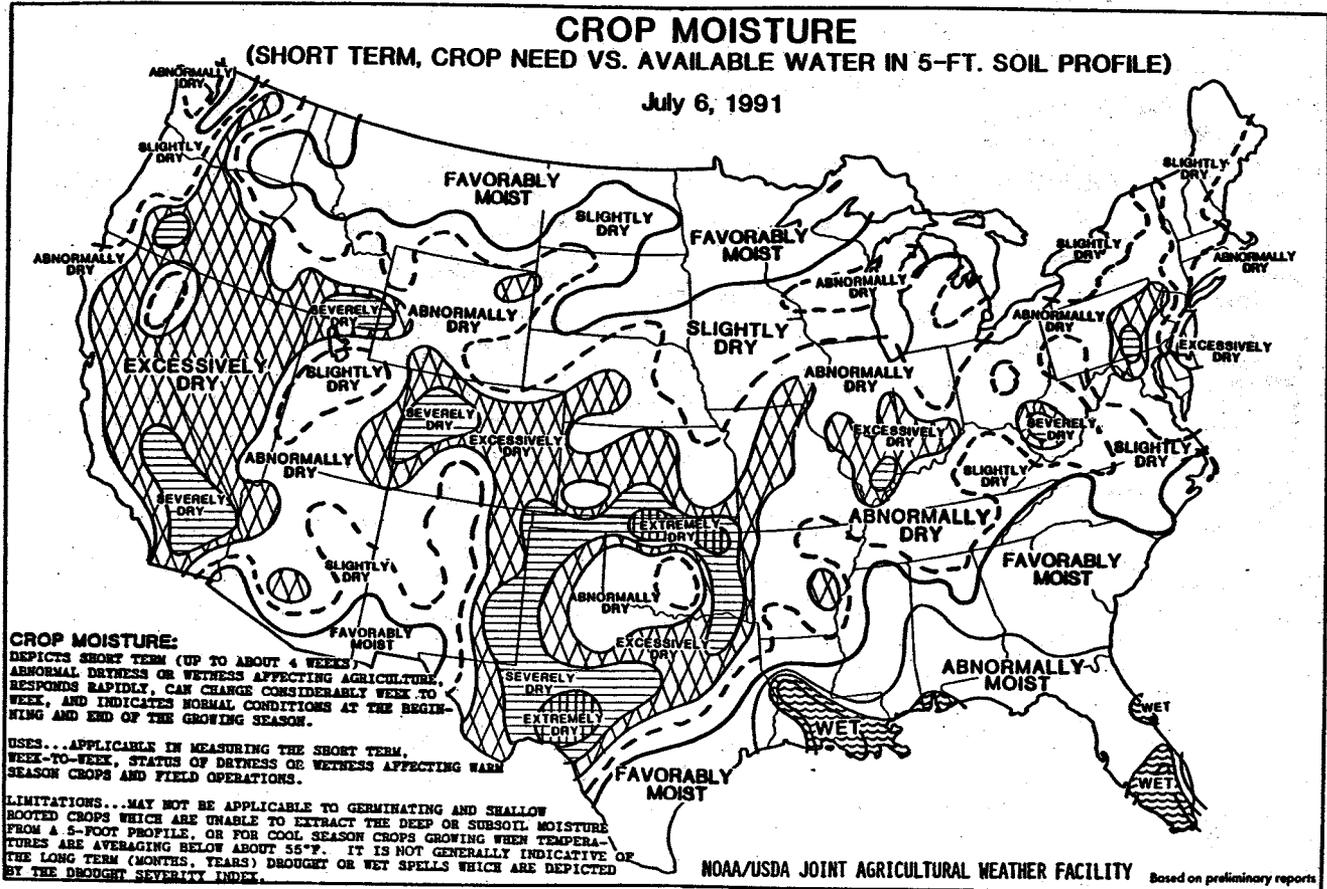
JUN 30 - JUL 6, 1991



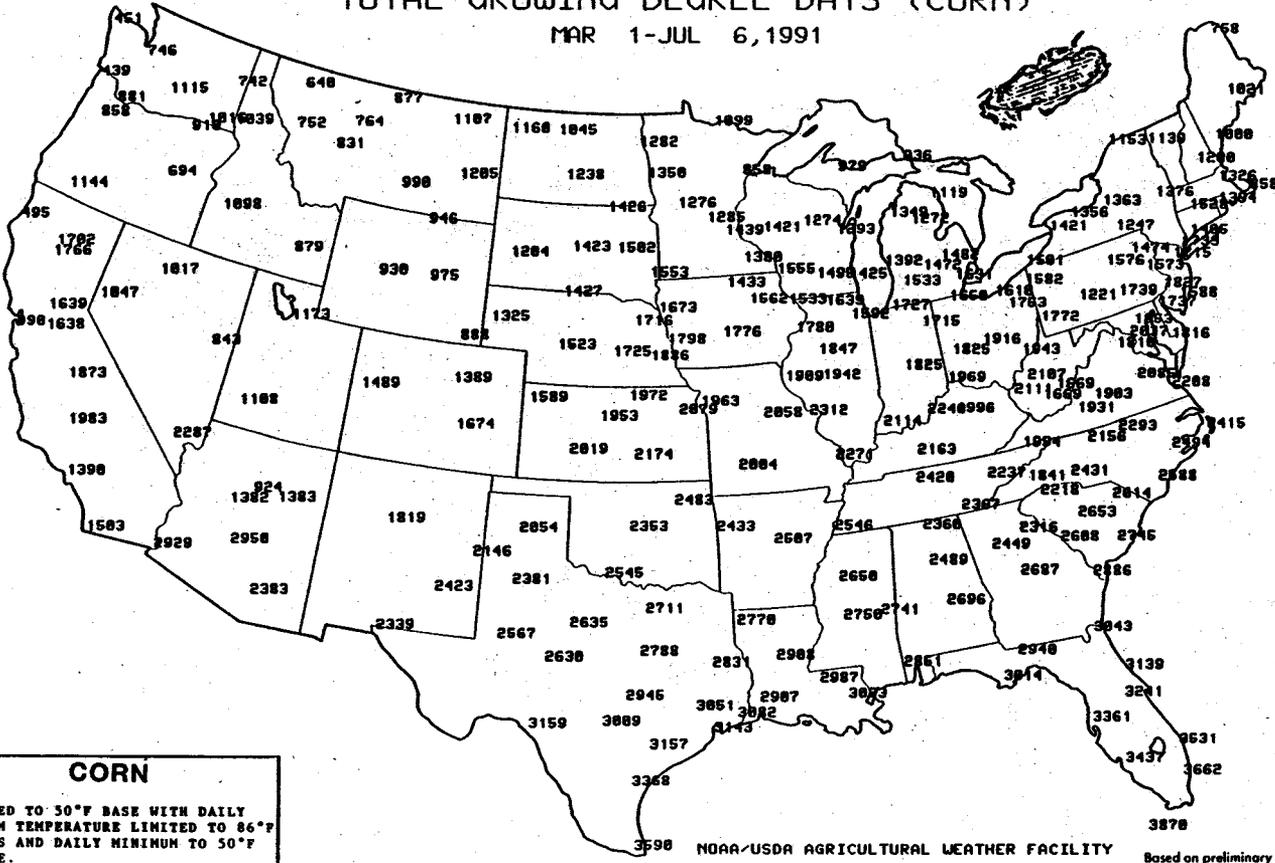
Extreme Maximum Temperature(°F)

JUN 30 - JUL 6, 1991





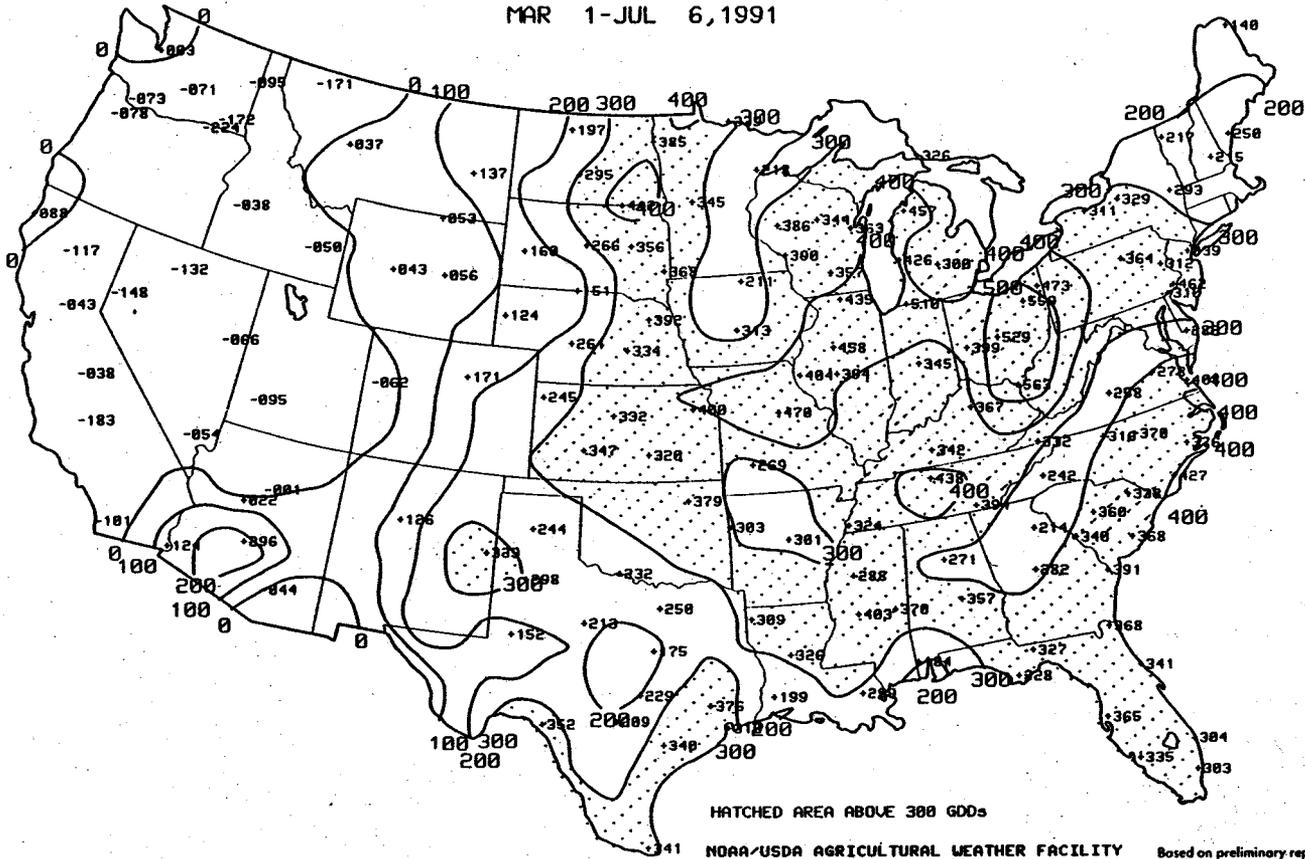
TOTAL GROWING DEGREE DAYS (CORN)
MAR 1-JUL 6, 1991



CORN
 COMPUTED TO 50°F BASE WITH DAILY
 MAXIMUM TEMPERATURE LIMITED TO 86°F
 OR LESS AND DAILY MINIMUM TO 50°F
 OR MORE.

NOAA/USDA AGRICULTURAL WEATHER FACILITY
 Based on preliminary reports

GROWING DEGREE DEPARTURE FROM NORMAL
MAR 1-JUL 6, 1991



HATCHED AREA ABOVE 300 GDDs
 NOAA/USDA AGRICULTURAL WEATHER FACILITY
 Based on preliminary reports

National Weather Data for Selected Cities

Weather Data for the Week Ending July 6, 1991

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	MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	93	71	96	69	82	3	.3	-.9	.2	7.8	170	34.0	111	97	50	6	0	2	0	
MOBILE	89	73	94	72	81	1	3.0	1.4	1.3	9.8	153	59.5	180	97	62	4	0	6	2	
MONTGOMERY	93	73	96	72	83	2	3.0	2.0	2.0	8.6	198	46.3	170	97	52	6	0	4	2	
AK ANCHORAGE	65	54	70	49	60	2	.7	.4	.7	.9	65	3.0	61	95	63	0	0	5	1	
BARROW	41	29	52	28	35	-3	T	T	T	.1	16	.5	37	98	74	6	6	0	0	
FAIRBANKS	77	56	89	51	67	5	.4	.0	.2	.7	45	4.4	115	89	47	0	0	3	0	
JUNEAU	61	50	64	46	55	0	.7	.1	.5	3.7	100	27.9	135	94	60	0	0	3	0	
KODIAK	59	50	64	49	54	2	.6	.2	.4	9.3	196	48.5	171	100	84	0	0	2	0	
HOME	68	47	76	42	58	9	T	T	T	2.3	152	5.4	120	82	45	0	0	0	0	
AZ PHOENIX	108	83	112	78	96	4	.0	.0	.0	T	0	3.2	119	38	17	7	0	0	0	
PRESCOTT	95	58	99	49	77	5	T	T	T	.3	26	6.4	92	52	18	6	0	1	0	
TUCSON	104	73	109	67	89	3	.2	.1	.1	.4	70	3.9	123	58	17	6	6	2	0	
YUMA	107	79	112	73	93	1	T	T	T	T	0	1.8	203	53	20	7	0	0	0	
AR FORT SMITH	94	69	98	63	82	1	.1	-.7	.1	2.0	47	19.8	92	93	39	6	0	1	0	
LITTLE ROCK	94	73	96	70	83	2	.4	-.4	.4	3.8	86	29.1	106	82	50	6	0	3	0	
CA BAKERSFIELD	104	73	110	61	89	6	.0	.0	.0	.0	0	4.6	118	54	22	7	0	0	0	
EUREKA	63	52	66	50	57	2	T	T	T	.3	46	16.3	73	94	73	0	0	0	0	
FRESNO	105	71	112	62	88	8	.0	.0	.0	T	0	8.5	121	68	21	7	0	0	0	
LOS ANGELES	73	61	76	59	67	-1	.0	.0	.0	T	0	7.9	95	92	64	0	0	0	0	
REDDING	106	70	115	59	88	6	.0	-.1	.0	.1	12	17.3	70	59	13	7	0	0	0	
SACRAMENTO	102	64	111	56	83	8	.0	.0	.0	.5	392	10.7	100	80	22	7	0	0	0	
SAN DIEGO	72	62	75	60	67	-1	T	T	T	T	>1000	10.5	163	90	68	0	0	1	0	
SAN FRANCISCO	80	55	91	53	67	6	.0	.0	.0	.1	92	11.0	89	92	47	1	0	0	0	
CO DENVER	91	59	97	57	75	3	.8	.4	.6	3.0	156	9.0	105	66	19	4	0	3	1	
GRAND JUNCTION	95	62	101	56	78	0	.0	-.1	.0	.3	63	3.1	83	34	9	6	0	0	0	
PUEBLO	95	58	105	53	76	1	.3	-.1	.3	2.2	155	4.6	91	73	18	5	0	2	0	
CT BRIDGEPORT	75	64	81	59	70	-3	.1	-.6	.1	2.4	69	18.1	87	82	56	0	0	1	0	
HARTFORD	77	59	83	50	68	-5	.2	-.5	.2	2.5	64	20.0	90	90	49	0	0	2	0	
DC WASHINGTON	90	73	98	70	82	4	.4	-.4	.4	1.7	42	12.8	67	91	53	4	0	4	0	
FL APALACHICOLA	90	35	92	73	82	1	3.8	2.4	2.1	6.9	114	62.9	268	100	70	4	0	5	2	
DAYTONA BEACH	91	75	94	73	83	2	5.9	4.6	2.7	18.3	243	42.6	197	95	60	4	0	7	3	
JACKSONVILLE	93	75	96	73	84	3	2.1	.7	1.7	13.6	197	48.4	201	95	54	7	0	3	1	
KEY WEST	90	80	91	75	85	1	.7	-.2	.7	8.4	145	23.4	151	85	63	6	0	2	0	
MIAMI	90	76	92	74	83	1	2.9	1.3	1.5	8.9	85	22.5	86	95	61	6	0	5	2	
ORLANDO	90	74	93	74	82	0	2.4	.5	.8	8.4	97	35.6	154	97	59	5	0	5	2	
TALLAHASSEE	93	73	96	71	83	2	4.3	2.4	3.8	10.6	130	58.7	180	100	59	6	0	4	1	
TAMPA	90	76	92	71	83	1	1.4	-.2	.6	5.0	76	21.0	103	95	62	4	0	4	2	
WEST PALM BEACH	91	75	93	74	83	1	.4	-.2	.3	7.6	82	44.8	149	97	58	6	0	4	0	
GA ATLANTA	92	73	95	71	83	5	.4	-.6	.3	10.4	244	37.8	135	94	53	6	0	2	0	
AUGUSTA	94	73	97	71	84	4	1.8	.9	.9	7.4	158	34.3	140	97	54	7	0	5	2	
MACON	92	74	95	71	83	2	2.4	1.5	1.7	6.5	143	36.0	139	99	59	5	0	3	2	
SAVANNAH	93	75	96	72	84	3	2.0	.4	1.2	7.1	101	39.5	158	95	55	7	0	3	2	
HI HILO	83	69	85	66	76	1	.7	-1.0	.4	10.5	139	80.6	121	93	64	0	0	4	0	
HONOLULU	89	72	91	70	80	1	T	T	T	.3	52	10.8	82	83	44	1	0	4	0	
KAHULUI	86	66	88	63	76	0	T	T	T	T	0	7.9	68	91	55	0	0	1	0	
LIHUE	83	74	83	72	78	0	T	T	T	T	3.7	18.9	85	82	65	0	0	1	0	
ID BOISE	91	56	101	49	73	1	T	T	T	.6	64	5.9	83	67	19	5	0	0	0	
LEWISTON	85	57	95	52	71	-1	.0	-.2	.0	1.9	121	8.0	108	71	23	2	0	0	0	
POCATELLO	87	49	95	42	68	-1	T	T	T	.6	51	9.4	148	74	17	4	0	0	0	
IL CHICAGO	91	66	97	63	78	6	.3	-.5	.2	1.3	26	16.1	92	94	41	4	0	2	0	
MOLINE	91	67	95	62	79	5	.1	-1.0	.1	1.4	27	16.9	89	96	43	5	0	2	0	
PEORIA	90	67	94	61	79	4	.8	-.2	.7	1.6	33	15.9	87	98	48	4	0	2	1	
QUINCY	93	69	98	63	81	5	T	T	T	.2	5	18.2	96	79	36	6	0	1	0	
ROCKFORD	88	65	93	60	77	4	.5	-.6	.3	3.6	67	14.9	80	94	49	3	0	3	0	
SPRINGFIELD	91	67	95	61	79	3	T	T	T	1.3	30	15.2	85	98	49	4	0	0	0	
IN EVANSVILLE	91	71	96	67	81	4	2.1	1.2	1.8	2.7	64	18.7	80	93	51	5	0	2	1	
FORT WAYNE	90	67	97	64	78	6	3.0	2.2	1.3	3.9	91	23.7	129	94	49	3	0	4	2	
INDIANAPOLIS	93	68	96	63	80	6	.3	-.7	.2	1.2	25	20.1	97	97	40	5	0	3	0	
SOUTH BEND	92	69	97	65	81	9	.1	-.7	.1	.7	15	15.6	82	94	38	6	0	2	0	
IA DES MOINES	90	68	95	62	79	4	.1	-.7	.1	2.9	61	23.4	144	83	38	4	0	1	0	
SIOUX CITY	89	65	95	59	77	2	1.3	.5	1.2	5.4	116	15.6	114	94	44	2	0	2	1	
WATERLOO	89	66	96	58	78	5	.1	-1.0	.1	2.3	44	23.6	141	94	42	5	0	1	0	
KS CONCORDIA	98	70	108	63	84	6	.6	-.3	.6	4.3	88	12.2	84	74	23	7	0	1	1	
DODGE CITY	99	69	107	62	84	5	T	T	T	.9	25	5.4	49	67	21	7	0	0	0	
GOODLAND	94	61	105	56	77	3	.4	-.2	.3	5.4	170	11.8	131	79	21	4	0	2	0	
TOPEKA	95	70	102	63	82	4	.2	-.8	.2	1.7	29	16.2	94	85	36	7	0	1	0	
WICHITA	97	71	104	65	84	4	.9	.0	.9	2.2	47	9.9	68	83	30	5	0	2	1	
KY BOWLING GREEN	90	70	98	68	80	3	.4	-.7	.3	3.2	58	26.5	95	95	56	4	0	2	0	
LEXINGTON	90	69	94	66	80	4	.1	-1.0	.1	3.0	57	21.9	87	97	53	5	0	2	0	
LOUISVILLE	94	73	99	70	83	6	.3	-.6	.3	1.5	35	20.0	84	89	44	6	0	3	0	
LA ALEXANDRIA	91	74	96	73	83	0	4.1	3.1	3.7	6.2	131	53.3	181	95	56	5	0	2	1	
BATON ROUGE	92	74	97	73	83	1	2.8	1.5	1.0	8.0	187	48.6	169	94	58	6	0	6	2	
LAKE CHARLES	90	74	94	73	82	0	.6	-.5	.3	8.3	164	48.9	192	98	60	5	0	3	0	
NEW ORLEANS	90	75	95	73	83	1	2.5	1.1	.9	13.2	227	73.7	244	94	62	5	0	4	3	

Based on 1951-80 normals

Weather Data for the Week Ending July 6, 1991

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	TEMP. °F		PRECIP.		
													90 AND ABOVE		32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
SHREVEPORT	94	72	97	71	83	0	1.0	-.1	1.0	3.5	84	51.8	209	97	52	7	0	1	0
ME CARIBOU	71	51	83	47	61	0	1.1	-.8	.1	2.0	52	16.1	99	83	47	0	0	1	0
PORTLAND	74	53	82	47	63	0	1.1	-.6	.0	1.5	42	22.9	104	84	42	0	0	2	0
MD BALTIMORE	87	71	97	65	79	0	1.1	-.8	.0	1.1	24	13.9	67	90	56	2	0	1	0
SALISBURY	86	69	94	66	78	0	1.1	-.7	.0	1.1	24	13.9	67	90	56	2	0	1	0
MA BOSTON	73	60	80	58	66	0	1.1	-.7	.0	1.1	24	13.9	67	90	56	2	0	1	0
CRATHAM	70	59	77	58	65	0	1.1	-.7	.0	1.1	24	13.9	67	90	56	2	0	1	0
MI ALPENA	77	57	88	51	67	0	1.1	-.3	.2	2.0	62	17.3	74	92	66	0	0	2	0
DETROIT	87	66	93	62	76	0	2.8	2.0	1.0	3.0	79	16.3	117	97	53	0	0	6	2
FLINT	84	61	91	56	73	0	1.2	-.4	.2	2.3	57	15.0	94	87	46	1	0	3	0
GRAND RAPIDS	86	64	93	59	75	0	1.2	-.6	.5	4.1	110	16.5	113	92	52	1	0	4	1
HOUGHTON LAKE	80	60	87	51	70	0	1.2	-.7	.0	2.5	58	18.1	108	93	49	1	0	2	0
LANSING	85	61	93	58	73	0	1.2	-.7	.0	2.3	61	16.9	125	91	53	0	0	4	0
MARQUETTE	72	55	83	47	64	0	1.5	-.7	.5	4.5	99	17.1	91	96	71	0	0	2	0
MUSKEGON	74	56	88	58	74	0	1.5	-.4	.9	4.8	163	18.3	122	96	57	0	0	1	0
SAULT ST. MARIE	83	65	82	53	65	0	1.5	-.7	.0	2.2	48	12.7	85	92	67	0	0	1	0
MN ALEXANDRIA	76	51	87	59	68	0	1.2	-.4	1.2	6.3	134	16.1	129	96	62	0	0	2	0
DULUTH	72	51	80	45	59	0	1.7	-.8	.8	6.6	140	18.8	137	99	72	0	0	1	0
INT'L FALLS	72	57	77	52	64	0	2.8	1.9	1.2	6.9	157	16.4	148	97	68	0	0	5	2
MINNEAPOLIS	82	64	89	59	73	0	1.8	1.0	1.4	3.0	63	16.7	126	93	53	0	0	4	1
ROCHESTER	83	63	91	57	73	0	1.8	1.0	1.4	3.0	63	16.7	126	93	53	0	0	4	1
MS GREENWOOD	95	73	99	71	83	2	1.5	-.4	.4	2.7	61	15.8	115	94	52	1	0	2	0
JACKSON	94	72	99	71	83	2	1.5	-.4	.4	3.2	75	42.4	139	99	50	7	0	2	0
MERIDIAN	94	73	99	71	83	2	1.5	-.4	.4	3.2	75	42.4	139	99	50	7	0	2	0
MO CAFE CITRARDREAU	95	72	97	71	83	2	1.1	-.0	.8	4.7	105	45.2	149	96	50	6	0	3	1
COLUMBIA	93	73	99	69	84	2	1.0	-.2	.6	2.1	50	21.5	88	89	38	7	0	2	0
KANSAS CITY	93	69	96	61	81	4	1.0	-.3	.2	2.6	60	15.0	76	85	40	6	0	4	1
SAINT LOUIS	95	71	101	65	82	3	1.0	-.4	.3	3.4	62	16.1	88	86	39	6	0	2	0
SPRINGFIELD	92	67	96	59	79	2	1.0	-.4	.3	3.4	62	16.1	88	86	39	6	0	2	0
MT BILLINGS	82	57	93	52	70	0	1.3	-.4	1.3	1.5	28	17.4	83	91	42	7	0	1	0
GLASGOW	80	58	89	57	69	0	1.3	-.3	.3	5.6	249	13.7	148	73	27	1	0	1	0
GREAT FALLS	80	51	89	50	66	0	1.7	-.3	.3	4.6	161	8.4	137	91	42	0	0	0	0
HAVRE	78	54	87	51	66	0	1.7	-.3	.1	4.1	136	9.3	97	81	31	0	0	1	0
HELENA	83	53	93	48	68	2	1.7	-.4	.9	3.8	7.3	105	91	41	0	0	0	0	0
KALISPELL	76	47	86	43	62	0	1.1	-.2	.1	3.3	145	6.9	102	71	25	2	0	1	0
MILES CITY	81	60	93	58	71	0	1.6	-.3	.6	3.6	147	9.7	111	97	38	0	0	1	0
MISSOULA	82	48	93	44	65	0	1.2	-.2	.2	6.5	209	14.3	167	83	42	1	0	2	0
NE GRAND ISLAND	95	64	103	58	79	4	1.2	-.0	.2	2.9	143	7.6	99	86	25	2	0	1	0
LINCOLN	95	65	101	58	80	4	1.2	-.5	.2	5.1	113	14.3	97	88	31	6	0	2	0
NORFOLK	92	64	99	59	78	3	1.3	-.5	.3	6.5	130	20.1	147	85	32	5	0	1	0
NORTH PLATTE	92	58	101	51	75	2	1.3	-.8	.0	2.8	64	12.7	110	84	28	4	0	0	0
OMAHA	89	68	96	61	79	2	1.1	-.7	.1	6.6	136	21.4	137	80	43	3	0	3	0
SCOTTSBLUFF	90	54	102	50	72	0	1.1	-.7	.1	6.6	136	21.4	137	80	43	3	0	3	0
VALENTINE	92	55	103	49	73	0	1.1	-.6	.0	4.0	118	10.9	117	85	21	3	0	1	0
NV ELY	88	43	97	32	66	0	1.1	-.6	.0	5.0	145	15.0	154	83	25	4	0	0	0
LAS VEGAS	107	76	112	65	92	3	1.1	-.2	.0	.4	38	5.7	110	59	15	3	1	0	0
RENO	94	54	102	44	74	6	1.1	-.0	.0	2.2	167	2.0	109	27	13	7	0	0	0
WINNEMUCCA	94	52	101	42	73	3	1.1	-.0	.0	.4	108	3.0	68	65	12	6	0	0	0
NH CONCORD	74	50	80	43	62	0	1.1	-.3	.0	.5	56	4.5	96	63	13	5	0	0	0
NJ ATLANTIC CITY	82	66	98	63	74	1	1.1	-.4	.2	1.8	51	13.2	75	96	48	0	0	2	0
NM ALBUQUERQUE	95	64	98	59	79	1	1.1	-.4	.2	1.7	49	17.5	85	98	64	1	0	3	0
CLOVIS	89	65	95	63	77	0	1.1	-.2	.9	.7	97	2.6	94	60	18	7	0	1	0
ROSWELL	92	67	98	64	80	0	1.1	-.2	.9	2.6	83	4.5	61	74	28	1	0	1	0
NY ALBANY	76	57	83	47	67	0	1.1	-.2	.2	1.5	115	3.1	86	76	28	6	0	1	0
BINGHAMTON	74	59	86	54	67	0	1.1	-.4	.9	1.9	48	15.1	86	94	50	0	0	2	1
BUFFALO	82	61	88	52	72	0	1.1	-.3	.3	2.9	69	16.7	92	97	56	0	0	4	0
NEW YORK	80	67	89	66	74	0	1.0	-.4	.8	1.8	57	20.9	120	92	44	0	0	2	1
ROCHESTER	80	60	88	50	70	0	1.2	-.5	.2	3.6	94	18.2	86	89	53	0	0	2	0
SYRACUSE	78	59	87	52	69	0	1.4	-.6	.5	1.9	59	16.0	102	91	46	0	0	2	1
NC ASHEVILLE	87	64	90	59	76	3	1.4	-.6	1.0	2.7	62	18.5	97	96	55	0	0	3	1
CHARLOTTE	94	73	96	72	84	6	1.1	-.3	.9	6.4	145	25.3	109	100	50	2	0	5	1
GREENSBORO	92	71	95	70	81	5	1.1	-.3	.9	6.4	145	25.3	109	100	50	2	0	5	1
HATTERAS	87	76	89	74	82	4	1.1	-.0	.5	6.4	123	29.0	115	94	51	5	0	4	0
NEW BERN	93	74	95	73	84	5	1.2	-.2	.7	5.0	78	23.6	93	95	56	7	0	5	1
RALEIGH	92	71	95	70	82	5	1.2	-.2	.7	5.0	78	23.6	93	95	56	7	0	5	1
WILMINGTON	94	75	95	73	85	5	1.1	-.1	1.1	4.4	98	17.7	82	97	53	6	0	6	2
ND BISMARCK	83	56	89	47	70	1	1.1	-.4	.1	2.7	81	29.2	115	97	52	7	0	4	1
FARGO	77	61	85	57	69	0	1.1	-.4	.1	2.7	79	8.7	99	93	39	0	0	2	0
GRAND FORKS	75	60	84	57	68	0	2.6	1.8	2.3	6.5	176	14.6	153	92	59	0	0	4	1
WILLISTON	79	58	86	54	68	0	1.7	1.0	1.2	3.7	106	12.0	137	97	63	0	0	5	1
OH AKRON-CANTON	89	68	92	61	79	8	1.1	-.6	.5	6.8	221	12.0	157	94	48	0	0	6	0
CINCINNATI	82	69	97	66	81	6	1.1	-.6	.2	1.8	36	21.8	99	93	44	6	0	2	0
CLEVELAND	88	67	94	58	77	6	1.1	-.7	.1	1.5	35	17.0	93	91	46	2	0	1	0
COLUMBUS	91	71	95	69	81	7	1.4	-.5	.7	4.2	88	19.0	95	90	44	4	0	2	2

Based on 1951-80 normals

Weather Data for the Week Ending July 6, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT	NUMBER OF DAYS											
	AVERAGE	MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1		TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW		.01 INCH OR MORE		.50 INCH OR MORE
													90 AND ABOVE						32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE				
DAYTON	91	70	95	67	80	6	.5	-.3	.3	3.0	67	22.4	116	90	44	4	0	4	0	2	0				
TOLEDO	89	66	94	62	77	5	1.1	-.4	1.0	1.6	40	15.0	91	99	54	2	0	2	0	1	1				
YOUNGSTOWN	87	62	92	54	75	5	1.4	-.6	1.6	2.4	55	13.1	69	96	48	0	0	0	3	3	1	1			
OK OKLAHOMA CITY	92	71	96	66	81	0	1.6	-.8	1.6	5.4	122	16.4	96	85	37	1	0	0	3	3	1	1			
TULSA	94	75	98	68	85	3	T	-.9	T	3.7	69	14.2	68	76	68	6	0	6	0	1	0	0			
OR ASTORIA	67	54	77	50	60	1	T	-.3	T	1.9	67	35.0	97	91	16	0	0	0	0	0	0	0			
BURNS	88	48	96	37	68	1	T	-.1	T	.6	89	4.1	71	71	63	0	0	0	0	0	0	0			
MEDFORD	95	57	105	47	76	5	.0	-.1	.0	.7	96	8.6	91	66	26	4	0	4	0	0	0	0			
PENDLETON	87	55	97	49	71	-1	.0	-.1	.0	2.1	284	20.6	129	68	20	0	0	0	0	0	0	0			
PORTLAND	82	57	95	52	69	3	.0	-.2	.0	2.3	147	20.6	105	89	38	1	0	0	0	0	0	0			
SALEM	83	51	95	46	67	3	.0	-.1	.0	1.1	117	21.2	99	91	34	1	0	0	0	0	0	0			
PA ALLENTOWN	80	65	91	63	72	0	1.5	-.6	.8	2.5	61	16.2	74	95	59	1	0	0	0	0	0	0			
ERIE	83	65	89	55	74	5	1.8	1.0	1.5	5.3	53	14.9	77	91	50	1	0	0	0	0	0	0			
HARRISBURG	84	70	97	66	77	2	.4	-.4	-.3	1.7	40	14.9	73	88	54	0	0	0	0	0	0	0			
PHILADELPHIA	84	68	97	67	76	0	.6	-.3	.5	3.4	79	17.0	81	91	56	2	0	0	0	0	0	0			
PITTSBURGH	87	67	91	64	77	6	3.1	2.3	2.2	4.9	113	18.0	91	92	50	1	0	0	0	0	0	0			
SCRANTON	79	62	88	54	71	6	.4	-.4	.3	2.1	51	13.4	78	92	54	0	0	0	0	0	0	0			
RI PROVIDENCE	75	59	82	53	67	-4	.3	-.4	.2	1.2	36	21.7	95	92	52	0	0	0	0	0	0	0			
SC CHARLESTON	92	74	94	72	83	3	4.4	2.7	2.7	8.9	112	32.3	124	98	61	7	0	0	0	0	0	0			
COLUMBIA	94	74	98	72	84	4	7.9	6.7	2.5	11.4	211	38.0	144	96	52	7	0	0	0	0	0	0			
FLORENCE	93	74	97	73	84	4	2.4	1.1	1.1	5.9	103	23.0	100	97	48	6	0	0	0	0	0	0			
GREENVILLE	93	70	94	68	82	4	.3	-.8	.2	2.0	38	26.8	95	97	47	7	0	0	0	0	0	0			
SD ABERDEEN	81	62	87	57	72	1	1.9	1.3	1.9	4.8	128	17.4	169	87	51	0	0	0	0	0	0	0			
RURON	85	62	96	58	74	1	.8	-.2	.8	5.7	150	16.7	154	91	44	2	0	0	0	0	0	0			
RAPID CITY	87	56	94	52	72	1	T	-.6	T	3.3	88	12.4	121	85	27	3	0	0	0	0	0	0			
STOCK FALLS	87	62	97	57	74	4	.1	-.6	.1	6.4	150	16.2	127	92	41	2	0	0	0	0	0	0			
TN CHATTANOOGA	92	70	96	69	81	4	1.5	.5	1.2	5.6	133	34.4	119	97	50	5	0	0	0	0	0	0			
KNOXVILLE	89	69	93	67	79	2	1.6	-.6	1.0	7.6	159	30.6	115	98	54	4	0	0	0	0	0	0			
MEMPHIS	95	75	98	71	85	3	T	-.8	T	1.5	34	38.7	132	89	44	7	0	0	0	0	0	0			
NASHVILLE	93	70	97	67	82	3	.9	-.0	.9	2.1	48	23.1	84	97	47	6	0	0	0	0	0	0			
TX ABILENE	93	70	95	66	81	-2	.2	-.3	.1	8.3	282	14.4	124	84	33	7	0	0	0	0	0	0			
AMARILLO	92	64	98	60	78	0	.1	-.6	.1	2.6	64	7.0	72	77	27	6	0	0	0	0	0	0			
AUSTIN	92	72	93	70	82	0	.3	-.2	.3	4.7	136	26.7	162	95	51	6	0	0	0	0	0	0			
BRAUNMONT	93	75	97	73	84	1	.9	-.3	.6	8.2	139	49.9	189	97	57	6	0	0	0	0	0	0			
BROWNSVILLE	89	74	92	72	81	-2	.3	-.1	.1	2.1	71	18.5	186	99	62	3	0	0	0	0	0	0			
CORPUS CHRISTI	92	75	94	74	83	0	.3	-.3	.2	7.1	161	22.6	168	99	60	6	0	0	0	0	0	0			
DEL RIO	90	71	95	69	81	-5	1.9	1.5	1.2	3.9	193	9.5	120	79	40	5	0	0	0	0	0	0			
EL PASO	92	66	99	62	79	-4	1.1	-.8	1.0	1.1	133	2.7	115	87	30	4	0	0	0	0	0	0			
FORT WORTH	96	74	99	70	85	0	.4	-.1	.4	4.7	170	22.0	129	92	39	7	0	0	0	0	0	0			
GALVESTON	89	79	91	78	84	1	.4	-.4	.2	4.8	113	36.4	206	85	59	3	0	0	0	0	0	0			
HOUSTON	93	74	94	72	84	1	.2	-.7	.1	7.9	153	37.3	161	96	51	7	0	0	0	0	0	0			
LUBBOCK	93	67	99	65	80	0	.2	-.4	.1	5.4	164	9.1	104	83	33	5	0	0	0	0	0	0			
MIDLAND	93	67	98	65	80	-2	T	-.4	T	3.5	202	6.1	101	83	31	5	0	0	0	0	0	0			
SAN ANGELO	94	67	96	64	80	-3	.3	.0	.2	4.4	207	9.0	105	95	33	6	0	0	0	0	0	0			
SAN ANTONIO	91	73	95	71	82	-2	.7	-.1	.3	2.6	75	21.3	147	99	56	5	0	0	0	0	0	0			
VICTORIA	92	75	95	74	84	0	.4	.0	.7	6.5	126	33.8	192	98	53	6	0	0	0	0	0	0			
WACO	98	72	100	69	85	0	1.2	-.8	1.2	4.4	149	18.5	108	95	38	7	0	0	0	0	0	0			
WICHITA FALLS	98	71	102	65	84	0	.1	-.4	.1	2.8	87	11.4	80	78	27	7	0	0	0	0	0	0			
UT CEDAR CITY	91	55	96	46	73	1	.2	.0	.2	.5	85	4.5	91	44	14	5	0	0	0	0	0	0			
SALT LAKE CITY	90	59	101	52	75	0	.0	-.2	.0	1.1	99	9.4	104	62	19	4	0	0	0	0	0	0			
VT BURLINGTON	78	54	84	46	66	-3	.9	.2	.7	2.2	51	13.5	86	93	41	0	0	0	0	0	0	0			
VA NORFOLK	90	75	97	73	82	5	1.8	.7	1.3	6.3	144	23.5	108	94	60	4	0	0	0	0	0	0			
RICHMOND	91	73	97	71	82	5	.4	-.6	.3	6.7	150	19.1	92	95	59	5	0	0	0	0	0	0			
ROANOKE	90	69	96	67	80	5	2.0	1.3	1.4	4.5	113	23.1	114	94	50	4	0	0	0	0	0	0			
WA QUILLAYUTE	68	52	79	46	60	2	T	-.6	T	2.3	69	50.7	94	97	60	0	0	0	0	0	0	0			
SEATTLE-TACOMA	79	55	89	49	67	4	T	-.2	T	1.3	85	23.0	119	87	39	0	0	0	0	0	0	0			
SPOKANE	82	52	93	45	67	0	.1	-.1	.1	1.1	86	8.9	98	80	25	1	0	0	0	0	0	0			
YAKIMA	89	50	100	43	69	0	.0	-.1	.0	2.5	416	5.1	118	86	29	3	0	0	0	0	0	0			
WV BECKLEY	85	66	89	63	75	7	.4	-.7	.2	2.1	42	20.0	89	98	55	0	0	0	0	0	0	0			
CHARLESTON	91	70	94	66	81	7	T	-.1	T	2.5	59	19.2	87	94	47	5	0	0	0	0	0	0			
HUNTINGTON	91	70	98	69	81	6	.2	-.8	.1	1.8	43	20.3	94	93	44	5	0	0	0	0	0	0			
PARKERSBURG	88	69	93	67	78	4	.9	.0	.4	4.8	104	21.1	103	96	55	2	0	0	0	0	0	0			
WI GREEN BAY	80	62	91	59	71	3	.6	-.1	.3	1.7	44	10.7	78	95	55	1	0	0	0	0	0	0			
LACROSSE	85	67	91	61	76	4	.1	-.8	.1	.8	17	17.3	114	92	49	2	0	0	0	0	0	0			
MADISON	86	64	93	62	75	5	1.8	1.0	1.8	5.6	122	18.5	122	94	52	3	0	0	0	0	0	0			
MILWAUKEE	87	66	93	62	77	7	.9	-.1	.7	3.0	70	17.0	107	91	47	2	0	0	0	0	0	0			
WAUSAU	77	61	85	58	69	0	.8	-.1	.4	5.7	122	19.3	128	96	58	0	0	0	0	0	0	0			
WY CASPER	88	50	97	44	69	0	T	-.2	T	1.7	118	9.2	132	68	15	3	0	0	0	0	0	0			
CHEYENNE	83	51	92	46	67	0	T	-.4	T	4.6	193	10.5	135	72	20	2	0	0	0	0	0	0			
LANDER	86	54	94	44	70	2	.0	-.2	.0	.8	47	9.6	110	55	15	3	0	0	0	0	0	0			
SHERIDAN	83	53	93	48	68	0	T	-.3	T	1.0	41	10.0	105	76	26	1	0	0	0	0	0	0			

Based on 1951-80 normals

June Weather and Crop Summary

Weather

Dry and warm weather became a concern for Corn Belt growers. An expansive region from Kansas to Pennsylvania received less than half of its normal rainfall in combination with temperature departures of +2 to +5° F. A mere 25 percent or less of the normal precipitation fell in June, roughly from Springfield, MO, to Toledo, OH. For a second month in a row, excessive dryness plagued eastern Ohio and western Pennsylvania. Elsewhere across the Nation, atypical wetness was the rule from the interior Northwest to the upper Great Lakes and in portions of the Southeast. A band from the central High Plains southward into Texas also noted above-normal rainfall.

June's temperature departure map resembles those of the previous 3 months. Generally warmer-than-normal weather prevailed east of the Rockies, although extensive cloud cover and wet ground held down maximum temperatures in parts of the Southeast. Significant negative departures (up to -6° F) were confined to the Northwest. Excessive heat episodes were mostly short lived. The month's most oppressive heat developed in the Plains on the 25th and quickly spread eastward.

Several rounds of strong storms pounded the Plains early in the month. The upper Midwest and the southern Plains were particularly hard hit. Isolated afternoon storms were almost a daily occurrence in the Southeast, causing widespread minor flooding. Enough rain collected in New Orleans, LA, to swell the half-year precipitation to 71.22 inches, far beyond the annual normal of 59.74 inches. New Orleans also endured a major flood on the 10th. Copious rain drenched the northern border States west of the Great Lakes after mid-month. The rain combined with snowmelt to produce heavy spring runoff and flooding in the northern Rockies. Farther east, however, raindrops were seldom seen. Springfield, MO, reported its driest June on record (0.23 inches). Rainfall in Quincy, IL, was a scant 5 percent of normal. Until the final day of the month, only 15 percent of normal precipitation had fallen in Toledo, OH. But the onset of a wetter pattern for the Corn Belt added an inch to Toledo's total. A late-month tropical disturbance fueled coastal downpours in Texas. On a climatological note, San Francisco, CA, set a record for its driest 5-year period ever. The 5-year rainfall ending June 30, 1991, totaled 77.43 inches (75 percent of normal), topping the former mark of 78.75 inches set from July 1, 1929, to June 30, 1934.

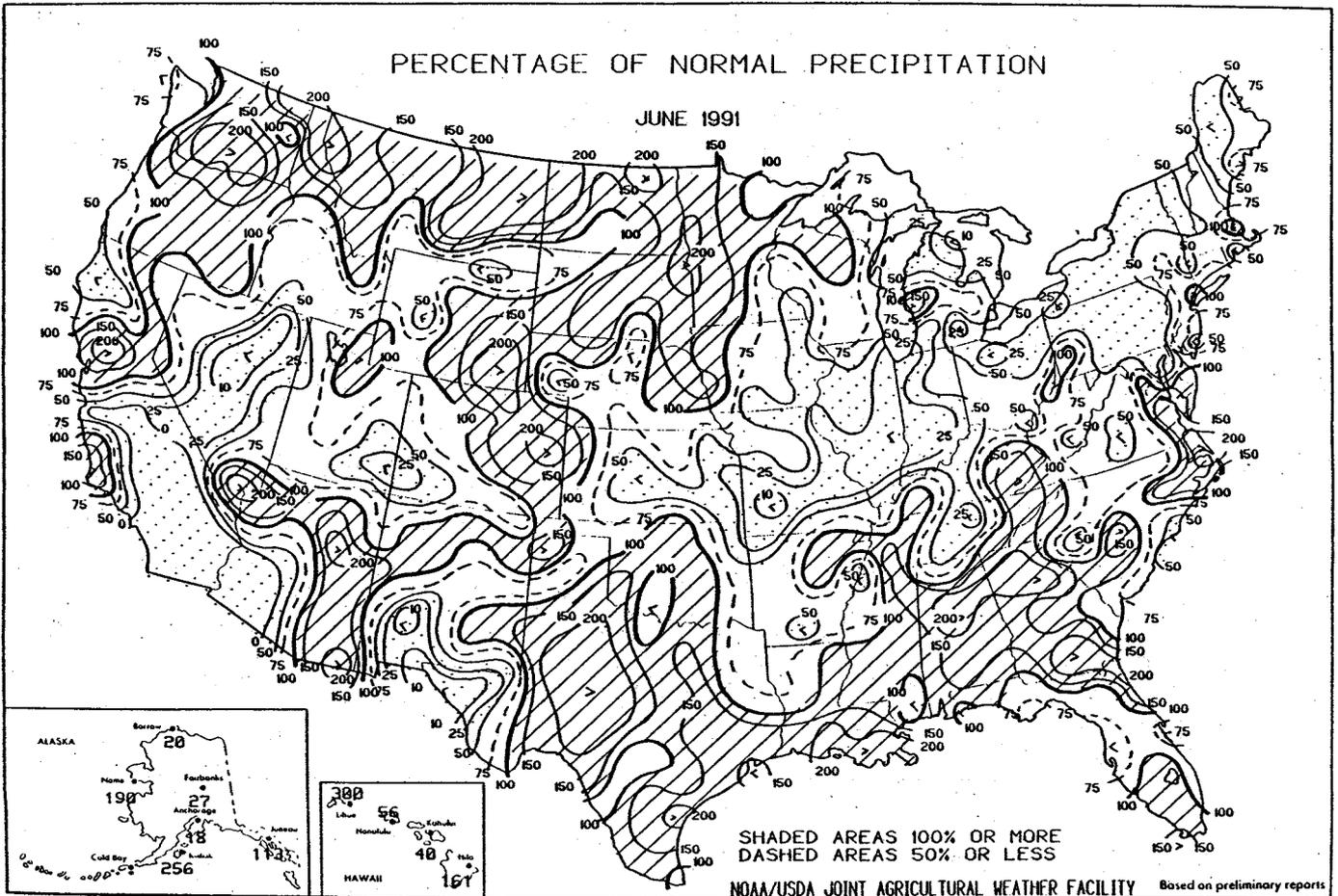
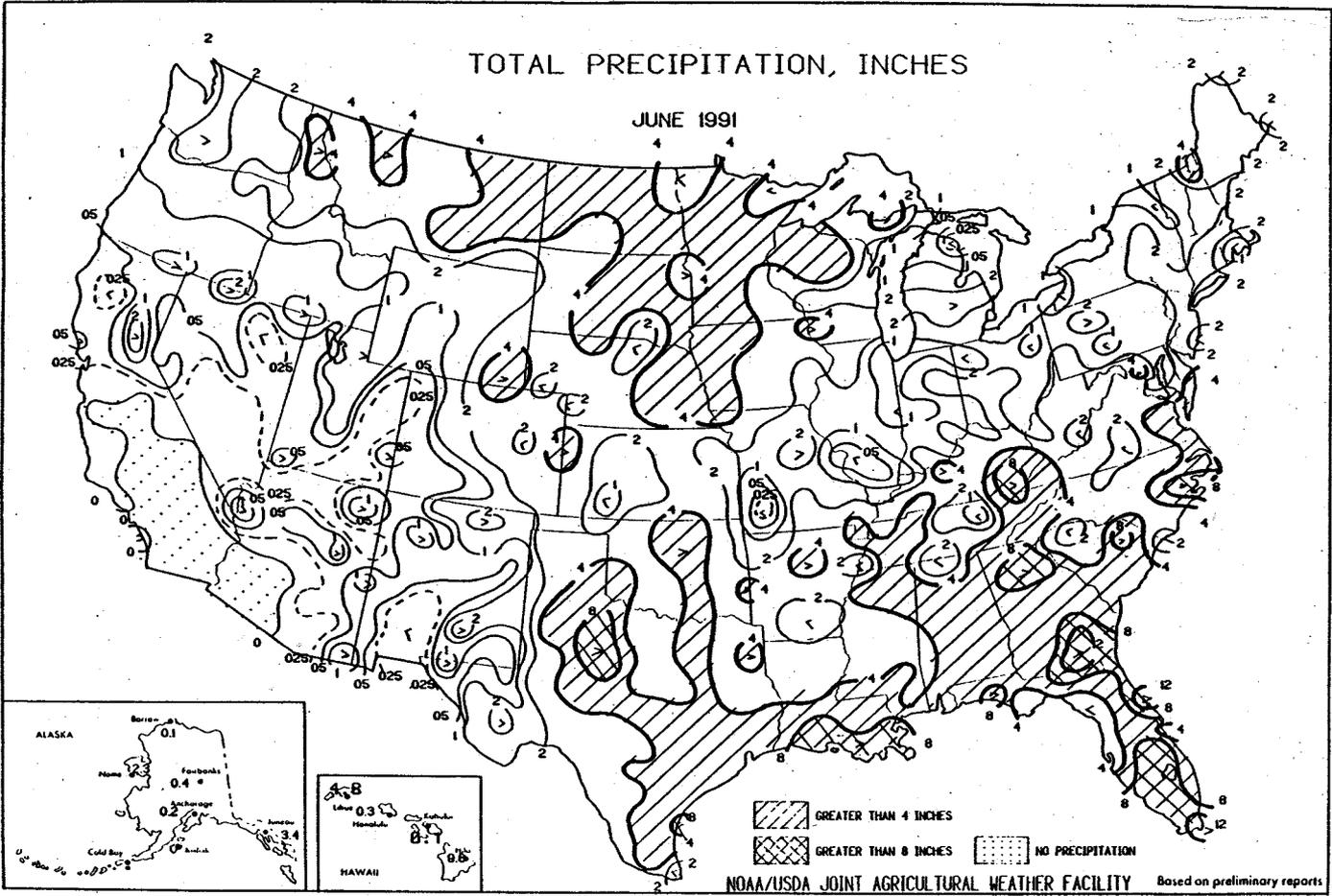
Cool weather held sway in the Northwest. Even as late as the 20th, subfreezing minimums dotted interior valleys. Spokane, WA, endured a record-cool June with an average temperature of 57° F (5° F below normal). A brief blast of heat scurried from the northern Plains to the East coast before mid-month. Temperatures topped 90° F into the southern prairies of Canada and approached 100° F in the mid-Atlantic region. A more intense hot spell originated in the Plains on the 25th and spread to the East coast by the 28th. Interior Alaska sweltered in 90° F heat for several days peaking on the 21st. By month's end, changing weather patterns brought warm, dry air to the West, and improved the chance of thunderstorms in the Corn Belt.

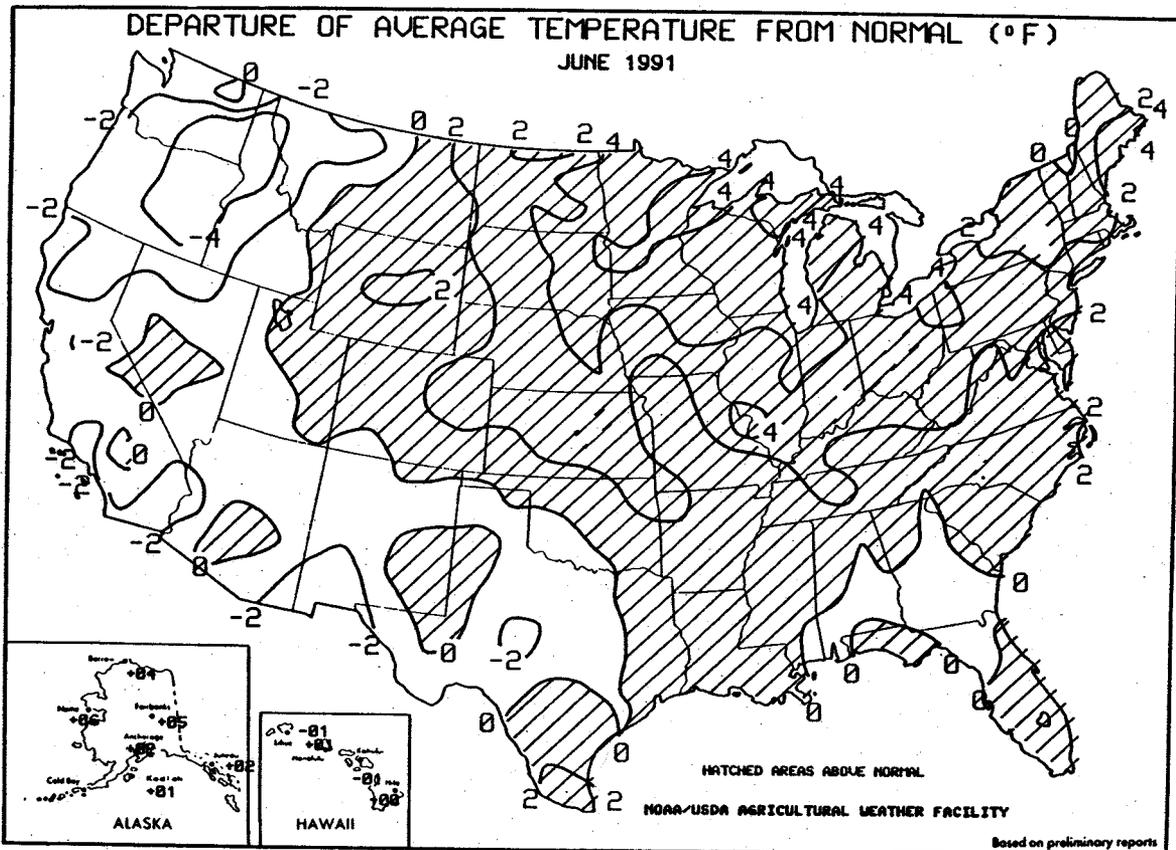
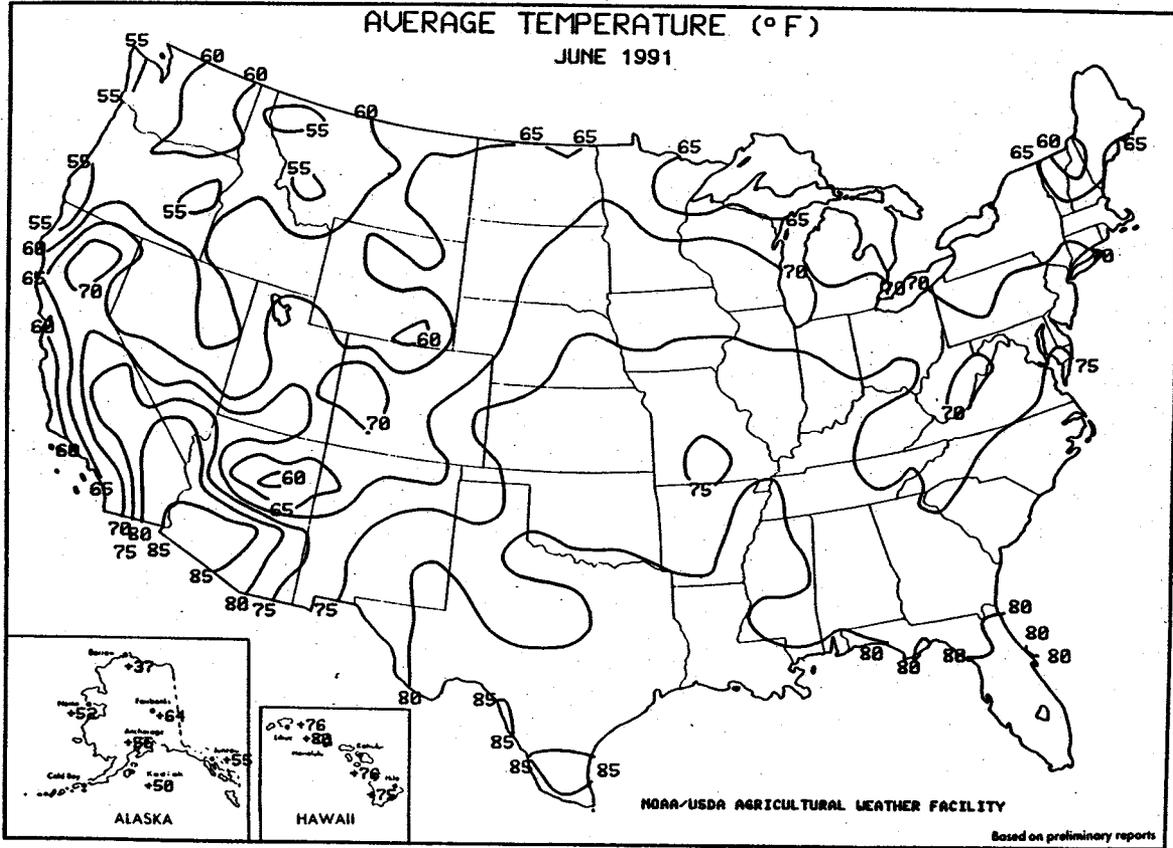
Crop Progress

Planting progress entering June was slightly behind normal for most crops, as spring rains had delayed fieldwork to varying degrees across the eastern half of the Nation. The most severe delays were experienced in the Delta, Tennessee, and Missouri where soybean, cotton, grain sorghum, and rice planting were all much later than normal.

Significant rains were common from the Rocky Mountains eastward, except in the mid-Atlantic region, during the first half of the month. Above-normal temperatures during the period were recorded across the central United States, which pushed small grains toward maturity much earlier than normal. Winter wheat in Arkansas, Illinois, and Missouri suffered due to excessive moisture and consequential diseases caused by the wet conditions that prevailed since early spring. Harvest of winter wheat was well along in the Southeast by mid-June and was underway as far north as Indiana. Planting of cotton, grain sorghum, rice, and soybean acreage was well along by mid-month, with progress lagging only slightly behind normal. Soils were excessively dry in a band extending from southeastern Oregon through western Nevada into southeastern California. Dry conditions were also evident in Virginia and Maryland.

The second half of June saw general rains from the Pacific Northwest to the Great Lakes, and thundershowers eased moisture stress in the mid-Atlantic region. Pennsylvania, however, received little rain, and corn acreage began to show stress. Severely dry conditions developed in southeastern California and a region encompassing southeastern New Mexico and much of west Texas. Cotton and grain sorghum condition in New Mexico and Texas began to deteriorate in late June due to the dryness. Planting of principal field crops was virtually completed during the month. Hot weather continued in the eastern half of the Nation, advancing crop development ahead of normal. Winter wheat was harvested much earlier than normal in the Ohio Valley and got underway earlier than usual in Michigan. Corn was developing faster than normal, with 11% of the Nation's acreage silking by June 30, compared with 4% last year and 5% normal. Nearly half of Illinois' soybean acreage was in bloom, as was 40% of the Ohio acreage--both well ahead of normal. Spring wheat was over two-thirds headed by the end of the month, while grain sorghum and rice heading was advancing in Southern States. Cotton development continued to track behind normal due to late planting in the Delta and Mississippi Valley and cooler-than-normal weather in the West. Forty-four percent of the cotton acreage was squaring by June 30, compared with 61% last year and 53% average.





TEMPERATURE AND PRECIPITATION SUMMARY

June 1991

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	77	0	7.2	-3.9	LA ALEXANDRIA	81	1	2.1	-1.8	TOLEDO	73	4	1.5	-2.0
HUNTSVILLE	77	2	1.7	-2.0	BATON ROUGE	82	1	5.2	2.1	YOUNGSTOWN	69	3	1.5	-2.0
MOBILE	80	-1	7.0	2.0	LAKE CHARLES	80	0	7.6	3.6	OK OKLAHOMA CITY	78	1	3.8	0.0
AK ANCHORAGE	56	1	0.2	-0.9	NEW ORLEANS	81	1	10.7	6.1	TULSA	80	2	3.6	-0.9
BARROW	37	3	0.1	-0.3	SHREVEPORT	81	1	2.5	-0.9	OR ASTORIA	55	-2	1.9	-0.6
FAIRBANKS	64	4	0.4	-1.0	MR CARIBOU	61	1	2.0	-1.2	BURNS	65	-2	0.7	0.1
JUNEAU	55	2	3.4	0.4	PORTLAND	65	3	1.5	-1.6	MEDFORD	63	-2	0.7	0.0
KODIAK	50	6	8.7	4.6	MD BALTIMORE	75	2	1.1	-2.7	PENDLETON	60	-2	2.1	1.5
ROME	52	0	2.3	1.1	MA BOSTON	70	2	4.1	0.0	PORTLAND	60	-2	2.3	0.9
AZ FLAGSTAFF	57	-4	0.6	0.0	SALISBURY	72	1	2.9	0.0	SALEM	58	-2	1.6	0.3
PHOENIX	88	1	T	-0.2	MI ALPENA	66	4	1.9	-0.8	PA ALLENTOWN	72	2	1.1	-2.4
FRESCOTT	67	0	0.2	-0.3	DETROIT	72	4	0.2	-2.9	ERIE	70	5	0.7	-3.2
TUCSON	82	-1	0.2	0.0	FLINT	70	4	1.9	-1.5	HARRISBURG	74	3	1.1	-2.5
WINSLOW	67	-6	0.9	0.5	GRAND RAPIDS	71	4	1.8	-1.9	PHILADELPHIA	76	4	3.4	-0.5
YUMA	87	-1	0.0	0.0	HOUGHTON LAKE	68	5	1.5	-1.6	PITTSBURGH	73	4	3.8	0.3
AR FORT SMITH	79	1	2.0	-1.7	LANSING	69	3	2.6	-1.3	SCRANTON	69	2	1.7	-1.8
LITTLE ROCK	79	1	3.4	-0.3	MARQUETTE	63	3	3.1	-0.8	WILLIAMSPORT	72	3	1.4	-2.5
CA BAKERSFIELD	76	-2	0.0	-0.1	MUSKOGEE	69	4	3.8	1.3	RI PROVIDENCE	69	2	0.9	-1.8
BISHOP	69	-2	T	-0.1	SAULT ST. MARIE	63	4	1.1	-2.2	SC CHARLESTON	79	1	4.5	-2.0
EUREKA	54	-1	0.3	-0.3	MN ALEXANDRIA	70	4	6.2	2.2	COLUMBIA	79	1	3.6	-0.9
FRESNO	75	0	T	-0.1	DULUTH	62	3	5.6	1.7	FLORENCE	78	1	3.5	-1.1
LOS ANGELES	64	-2	T	0.0	INT'L FALLS	66	5	4.6	0.9	GREENVILLE	75	0	1.7	-2.6
REDDING	73	-3	0.1	-0.7	MINNEAPOLIS	73	5	2.6	-1.5	ABERDEEN	71	5	4.8	1.6
SACRAMENTO	70	-1	0.5	0.4	ROCHESTER	72	5	2.2	-1.5	HURON	73	6	5.7	2.4
SAN FRANCISCO	60	-1	0.1	0.0	ST. CLOUD	68	3	5.6	1.1	RAPID CITY	67	2	3.3	0.0
SAN DIEGO	64	-2	T	0.0	MS GREENWOOD	80	1	2.8	-0.6	SIoux FALLS	74	5	6.4	2.7
STOCKTON	70	0	0.1	0.0	JACKSON	80	1	3.4	0.2	TN BRISTOL	70	0	4.5	1.0
CO ALAMOSA	59	0	0.3	-0.3	MERIDIAN	79	1	3.6	0.1	CHATTANOOGA	77	2	4.1	0.8
CO. SPRINGS	67	5	3.1	1.1	TUPELO	79	1	6.2	2.5	KNOXVILLE	75	0	6.0	2.1
DENVER	69	2	2.2	0.6	MO CAPE GIRARDEAU	--	--	1.0	-2.5	MEMPHIS	79	2	1.4	-2.2
GRAND JUNCTION	73	0	0.3	-0.1	COLUMBIA	76	2	2.4	-1.3	NASHVILLE	78	2	1.2	-2.4
PUEBLO	73	1	1.9	0.8	KANSAS CITY	76	1	3.1	-1.6	TX ABILENE	78	-2	8.0	5.5
CT BRIDGEPORT	71	3	2.3	-0.6	SAINT LOUIS	80	5	0.4	-3.3	AMARILLO	75	0	2.5	-1.0
HARTFORD	70	2	2.4	-1.0	SPRINGFIELD	75	2	0.2	-4.4	AUSTIN	82	0	4.4	1.4
DC WASHINGTON	77	2	1.3	-2.1	MT BILLINGS	64	0	5.6	3.6	BEAUMONT	82	1	7.3	2.5
FL APALACHICOLA	80	0	3.1	-1.7	GLASGOW	65	2	4.1	1.7	BROWNSVILLE	85	2	1.9	-0.8
DAYTONA BEACH	80	1	12.7	6.3	GREAT FALLS	58	-3	4.2	1.4	CORPUS CHRISTI	83	1	7.0	3.1
FT. MYERS	83	1	11.4	2.2	HAVRE	61	-2	2.8	0.7	DEL RIO	83	0	2.7	1.0
JACKSONVILLE	80	0	11.7	5.9	HELENA	60	-1	3.3	1.3	EL PASO	79	-2	T	-0.5
KEY WEST	84	1	8.4	3.4	KALISPELL	55	-3	3.6	1.4	FORT WORTH	81	0	4.3	1.9
MIAMI	83	2	7.5	-1.6	MILES CITY	68	1	6.4	3.7	GALVESTON	82	1	4.4	0.8
ORLANDO	81	0	6.0	-1.1	MISSOULA	57	-2	2.9	1.1	HOUSTON	82	1	7.7	3.3
TALLAHASSEE	80	0	6.4	-0.1	NE GRAND ISLAND	75	4	5.2	1.6	LAREDO	87	-1	3.3	0.5
TAMPA	81	0	3.8	-1.5	LINCOLN	77	4	5.0	1.2	LUBBOCK	78	0	5.2	2.4
WEST PALM BEACH	82	1	7.4	-0.6	NORFOLK	75	4	6.5	2.2	MIDLAND	80	0	3.5	2.1
GA ATHENS	75	-2	10.9	5.9	NORTH PLATTE	71	3	2.8	-0.9	SAN ANGELO	78	-3	4.2	2.4
ATLANTA	77	1	10.0	6.6	OMAHA	75	2	6.5	2.4	SAN ANTONIO	83	1	2.3	-0.7
AUGUSTA	78	1	5.6	1.7	SCOTTSBLUFF	68	1	4.0	1.1	VICTORIA	82	1	5.8	1.2
MACON	78	-1	4.1	0.3	VALENTINE	71	3	5.0	2.1	WACO	81	-1	3.2	0.6
SAVANNAH	79	1	5.1	-0.6	NV ELKO	59	-3	0.1	-0.8	WICHITA FALLS	80	-1	2.8	-0.1
HI HILO	75	0	9.8	3.7	ELY	59	0	0.4	-0.4	UT BLANDING	--	--	0.1	-0.3
HONOLULU	79	1	0.3	-0.2	LAS VEGAS	82	-2	0.2	0.1	CEDAR CITY	65	-1	0.3	-0.1
KAHULUI	76	-1	0.1	-0.2	RENO	62	0	0.4	0.1	SALT LAKE CITY	68	0	1.1	0.1
LIHUE	76	-1	4.8	3.2	WINNEMUCCA	61	-2	0.5	-0.4	VT BURLINGTON	66	1	1.3	-2.3
ID BOISE	63	-3	0.6	-0.3	NH CONCORD	66	1	1.7	-1.2	VA LYNCHBURG	74	0	1.1	-2.4
LEWISTON	60	-6	1.9	0.5	NJ ATLANTIC CITY	71	2	1.4	-1.3	NORFOLK	76	2	4.5	1.1
POCATELLO	61	-1	0.6	-0.4	NM ALBUQUERQUE	73	-2	0.6	0.2	RICHMOND	75	2	6.2	2.7
IL CHICAGO	72	4	2.9	-1.5	CLOVIS	76	2	1.8	-0.8	ROANOKE	74	2	2.4	-0.9
MOLINE	75	4	1.3	-3.0	ROSWELL	80	2	1.2	0.3	WA COLVILLE	55	-6	3.3	1.8
PEORIA	75	3	1.5	-2.4	NY ALBANY	69	2	1.7	-1.6	OMAK	63	-7	1.0	0.1
QUINCY	73	3	0.2	-3.8	BINGHAMTON	67	2	2.4	-1.2	QUILLAYUTE	54	-1	2.3	-0.5
ROCKFORD	73	4	3.3	-1.3	BUFFALO	69	3	0.9	-1.8	SEATTLE-TACOMA	59	-1	1.3	-0.1
SPRINGFIELD	76	3	1.3	-2.3	NEW YORK	75	4	3.3	0.2	SPOKANE	57	-5	1.1	-0.1
EVANSVILLE	77	2	0.6	-2.8	ROCHESTER	68	2	1.2	-1.6	WALLA WALLA	--	--	2.7	1.8
FORT WAYNE	74	4	2.1	-1.5	SYRACUSE	68	2	1.7	-1.9	YAKIMA	60	-4	2.5	2.0
INDIANAPOLIS	74	3	0.9	-3.1	NC ASHEVILLE	70	0	5.3	1.6	BECKLEY	69	3	1.6	-2.3
SOUTH BEND	74	5	0.6	-3.3	CHARLOTTE	78	3	2.4	-1.2	CHARLESTON	74	3	2.5	-0.8
IA DES MOINES	75	3	2.9	-1.3	GREENSBORO	75	2	2.0	-2.0	ELKINS	67	0	2.6	-1.8
DUBUQUE	72	5	3.3	0.9	HATTERAS	77	2	5.3	1.0	HUNTINGTON	75	3	1.6	-1.8
SIoux CITY	74	3	5.3	1.3	NEW BERN	77	2	3.9	-1.2	PARKERSBURG	74	2	3.9	0.1
WATERLOO	74	5	2.2	-2.1	RALEIGH	76	2	2.0	-1.6	WI GREEN BAY	69	4	1.1	-2.1
KS CONCORDIA	78	4	3.8	-0.5	WILMINGTON	78	1	2.6	-3.1	LA CROSSE	74	5	1.7	-2.5
DODGE CITY	77	3	0.9	-2.1	ND BISMARCK	69	4	2.6	-0.4	MADISON	71	4	3.8	-0.1
GOODLAND	73	3	5.4	2.7	FARGO	70	5	6.3	3.2	MILWAUKEE	71	6	2.1	-1.4
TOPEKA	77	3	1.5	-3.6	GRAND FORKS	69	5	3.2	0.3	WAUSAU	69	4	4.9	1.0
WICHITA	79	3	1.3	-2.7	WILLISTON	66	2	6.2	3.5	CASPER	65	2	1.7	0.5
KY BOWLING GREEN	76	1	2.8	-1.8	OH AKRON-CANTON	73	5	0.8	-2.4	CHRYSTENNE	62	1	4.6	2.6
JACKSON	73	2	7.0	3.2	CINCINNATI	75	4	1.4	-2.7	LANDER	64	2	0.7	-0.7
LEXINGTON	74	2	2.9	-1.4	CLEVELAND	71	3	1.4	-2.1	SHERIDAN	63	1	1.0	-1.2
LOUISVILLE	78	4	1.2	-2.4	COLUMBUS	75	5	2.8	-1.2	PR SAN JUAN	83	2	2.8	-2.1
PADUCAH	78	3	1.5	-3.0	DAYTON	74	3	2.5	-1.3					
					MANSFIELD	71	4	1.0	-1.4					

Based on 1951-80 normals

June Weather in Historical Perspective

June 1991 was warm and slightly drier than normal nationwide (table 1). It ranked as the 28th warmest June on record, continuing a recent trend of warm Junes (fig. 1). Areally averaged (table 1) and areally weighted standardized precipitation data (fig. 2) were similar, showing June to be the 41st and 42nd driest June, respectively. June 1991 was the fifth consecutive warmer-than-normal month for the Nation, but a string of 3 wetter-than-normal months was snapped.

Only the West and Northwest regions experienced much below-normal temperatures for the month. (See the Weekly Weather and Crop Bulletin, Vol. 78, No. 23, June 11, 1991, page 14, for a map of the regions.) It was the fifth coldest June in the Northwest. Temperatures were well above normal from the West North Central region eastward to the Northeast. The East North Central region had its fifth warmest June.

Precipitation was substantially below normal in the Central and Northeast regions, ranking as the fourth and fifth driest June on record. This June was the 26th wettest on the books in the Northwest and the 9th wettest in the West North Central region. Elsewhere, rainfall ranked near the middle of the June historical distribution.

The first 6 months of 1991 have proven to be warm and wet nationwide, ranking as the 7th warmest and 36th wettest (areally weighted standardized precipitation) January to June period. Twenty States have had one of their three warmest first halves of a year. For six East Coast States, it was the warmest such period (table 2). Four States (AL, FL, LA, and MS) had a record wet January to June (table 3). Three States (MD, NH, and PA) had one of their 15 driest starts to a year.

Figure 1

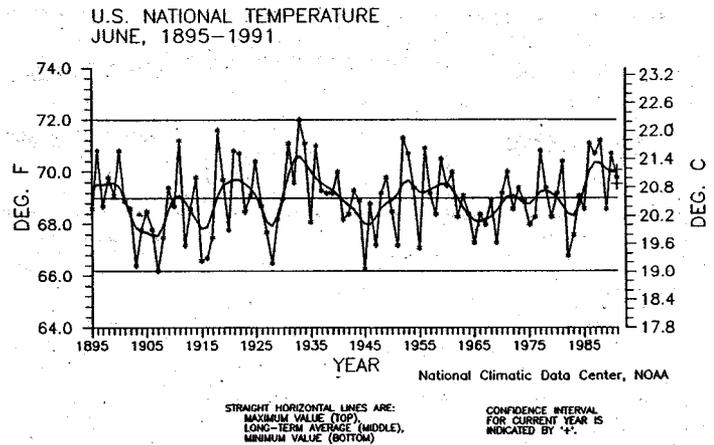


Figure 2

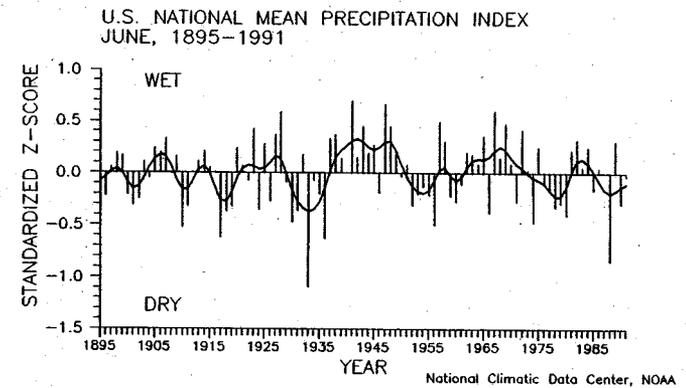


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR JUNE 1991, BASED ON THE PERIOD 1895-1991. 1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	5	83
EAST NORTH CENTRAL	37	93
CENTRAL	4	84
SOUTHEAST	64	46
WEST NORTH CENTRAL	89	75
SOUTH	54	69
SOUTHWEST	63	48
NORTHWEST	72	5
WEST	55	23
NATIONAL	41	70

TABLE 2. TEMPERATURE RANKINGS FOR JAN-JUN 1991, BASED ON THE PERIOD 1895 TO 1991. 1 = COLDEST, 97 = WARMEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	74	IA	90	NE	90	RI	97
AZ	50	KS	94	NV	40	SC	88
AR	86	KY	96	NH	95	SD	90
CA	39	LA	72	NJ	97	TN	89
CO	77	ME	78	NM	64	TX	73
CT	97	MD	97	NY	95	UT	30
DE	95	MA	95	NC	95	VT	95
FL	97	MI	95	ND	95	VA	97
GA	79	MN	94	OH	96	WA	46
ID	61	MS	78	OK	93	WV	95
IL	95	MO	91	OR	36	WI	94
IN	96	MT	79	PA	96	WY	81

TABLE 3. PRECIPITATION RANKINGS FOR JAN-JUN 1991, BASED ON THE PERIOD 1895 TO 1991. 1 = DRIEST, 97 = WETTEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	97	IA	91	NE	77	RI	49
AZ	72	KS	29	NV	47	SC	74
AR	79	KY	54	NH	15	SD	95
CA	54	LA	97	NJ	42	TN	64
CO	19	ME	29	NM	42	TX	75
CT	55	MD	9	NY	22	UT	40
DE	39	MA	42	NC	44	VT	14
FL	97	MI	58	ND	89	WA	36
GA	94	MN	90	OH	16	WA	79
ID	54	MS	97	OK	39	WV	27
IL	38	MO	25	OR	44	WI	73
IN	22	MT	87	PA	13	WY	67

National Agricultural Summary

July 1 - 7, 1991

HIGHLIGHTS: Continued hot weather in the eastern half of the Nation and recent warming in the West promoted rapid crop development. Dry weather in the West and intermittent thundershowers in the East permitted small grain harvests to stay well ahead of normal progress. Diminishing soil moisture in the Ohio Valley and Northeast caused some crop stress.

SMALL GRAINS: Nationally, 73 percent (%) of the crop was harvested, 6 percentage points ahead of last year and 8 points ahead of the 5-year average. Winter wheat harvest continued to progress ahead of schedule and was nearly complete in the eastern half of the Nation from the Ohio Valley southward. Harvest continued to race through the Ohio Valley as above-normal temperatures pushed wheat to early maturity. Indiana's winter wheat was 93% harvested, compared with 45% last year and 58% average, and the Ohio crop was 91% harvested, compared with 20% last year and 30% average. Warmer weather in the West ripened wheat and harvest progressed unhindered by rain. Producers in California and Colorado were catching up with normal harvest progress, reaching 75% complete in California and 38% complete in Colorado. Condition ratings for winter wheat were dismal in the middle and lower Mississippi Valley, with 82% of the Arkansas crop, 71% of the Missouri crop, and 66% of the Illinois crop rating poor or very poor. Spring wheat was 85% headed, 3 points ahead of last year and 6 points ahead of normal. Spring wheat rated mostly good in each of the five major producing States. Harvest of oats was complete in the Southeast and progressed in the Ohio Valley. Spring barley was 50% headed in Montana and 49% headed in Idaho.

CORN: Continued warm weather in the central and eastern United States kept corn development ahead of normal. Twenty-four percent of the acreage was silking in the 17 major producing States, compared with 5% last year and 14% average. Crop condition continued to drop in the Northeast as high temperatures and limited rainfall stressed many fields. The worst conditions were in Pennsylvania, with 32% of the acreage rating poor or very poor. Corn condition rated mostly fair in Indiana and Missouri and generally good in other major producing States.

SOYBEANS: Planting was 98% complete in the 19 major producing States, matching last year and the historic average. Bloom development advanced to 30%, outpacing last year by 23 points and the average by 10 points. Progress was most advanced in the eastern half of the Cornbelt, with bloom development ahead of normal by 58 points in Ohio, 31 points in Illinois, 27 points in Michigan, and 25 points in Indiana. Aggregate crop condition slipped a bit from last week as high temperatures affected areas lacking rainfall, but remained mostly in the good category. Condition ratings were generally fair, however, in Missouri and the Delta States.

COTTON: Cotton progress continued to lag behind normal due to late planting in many States, although recent high temperatures encouraged development. Fifty-nine percent of the Nation's acreage was squaring, compared with 73% last

year and 67% average. Fourteen percent of the acreage was setting bolls, 5 points behind both last year and the average. Crop condition improved slightly compared with last week, despite lower ratings from the Mississippi Valley. Conditions rated good in the Southwest and Southeast and fair in Missouri, Oklahoma, and the Delta States. Insect control was increasing on many Blacklands, coastal, and south Texas fields as fleahopper, bollworm, and whitefly populations continued to migrate.

GRAIN SORGHUM: Grain sorghum was 20% headed in the 12 major producing States, 5 points ahead of last year. Crop condition rated generally good in the Plains and fair in the Delta. Scattered showers interrupted sorghum harvest in Texas.

RICE: The Nation's rice crop was 15% headed, 3 points ahead of both last year and the average. Texas led the Nation with 51% of the crop headed, compared with 36% last year and 44% average. Thirty-five percent of Louisiana's acreage had headed, compared with 32% last year and 31% average. Very little acreage had headed in the other Delta States, and heading had yet to begin in California. Rice condition remained fair in Mississippi and good elsewhere. California rice growth was aided by higher temperatures and harvest had begun on some early-planted fields in Texas.

OTHER FIELD CROPS: Second cutting of alfalfa progressed in the East and Midwest, while first cutting advanced in the Northwest. Peanut acreage was pegging in the Southeast, with 65% pegged in Georgia and 50% in Alabama. Potato harvest was underway in Maryland. Sunflower acreage was 86% planted in Texas. North Dakota sunflower plants averaged 22 inches high, 4 inches taller than normal. South Dakota sunflowers were reported in good condition. Harvest of over-wintered sugar-beets continued in California, and the Montana crop was in good condition.

FRUIT AND NUTS: High temperatures stressed fruit trees and vines and increased maturity rate in California. Some California table grapes were sunburned, and apricots matured quickly, making harvest difficult. Freestone peach, nectarine, and plum harvests continued. Valencia orange, lemon, and grapefruit packing also proceeded. California walnuts were sizing well. Florida's new crop fruit continued to size well, while Valencia orange harvest neared completion. Blueberry harvest was at its peak in New Jersey, and clingstone peach harvest was underway. Dryness in the Hudson Valley area of New York slowed fruit development. New York grapes showed excellent set, and harvests of sweet and tart cherries remained active. Sweet cherries,

(Continued to back cover)

CROP PROGRESS
FOR WEEK ENDING JULY 7, 1991

**SOYBEANS
% PLANTED**

	1991	1990	AVG.
AL	92	99	93
AR	93	95	93
GA	97	95	95
IL	100	98	100
IN	100	100	100
IA	100	100	100
KS	99	95	95
KY	97	96	97
LA	95	95	93
MI	100	100	99
MN	99	100	100
MS	89	95	89
MO	98	89	96
NE	100	100	100
NC	99	96	91
OH	100	100	99
SC	97	96	94
SD	100	100	100
TN	90	97	95

19 STATES 98 98 98

THESE 19 STATES PRODUCED 95% OF THE 1990 SOYBEANS CROP.

**SOYBEANS
% BLOOM**

	1991	1990	AVG.
AL	6	17	13
AR	2	0	5
GA	11	15	13
IL	68	8	37
IN	48	5	23
IA	20	8	27
KS	25	15	15
KY	10	2	12
LA	1	12	10
MI	30	0	3
MN	17	21	25
MS	9	12	8
MO	17	0	20
NE	24	1	17
NC	10	3	3
OH	70	4	12
SC	5	6	3
SD	34	7	13
TN	3	3	8

19 STATES 30 7 20

THESE 19 STATES PRODUCED 95% OF THE 1990 SOYBEANS CROP.

**WINTER WHEAT
% HARVESTED**

	1991	1990	AVG.
AR	100	99	97
CA	75	80	86
CO	38	53	41
GA	99	100	99
ID	0	0	0
IL	98	75	87
IN	93	45	58
KS	99	95	85
MI	25	0	5
MO	99	71	89
MT	0	0	1
NE	55	47	45
NC	99	100	91
OH	91	20	30
OK	99	99	98
OR	0	1	1
SD	11	2	7
TX	92	93	92
WA	0	0	0

19 STATES 73 67 65

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

**RICE
% HEADED**

	1991	1990	AVG.
AR	2	0	0
CA	0	0	0
LA	35	32	31
MS	4	12	8
TX	51	36	44

5 STATES 15 12 12

THESE 5 STATES PRODUCED 98% OF THE 1990 RICE CROP.

**CORN
% SILKING**

	1991	1990	AVG.
CO	2	0	0
GA	95	95	95
IL	66	2	26
IN	37	0	16
IA	0	0	4
KS	40	20	25
KY	55	6	30
MI	18	1	2
MN	1	0	1
MO	43	3	33
NE	8	1	9
NC	80	70	59
OH	22	0	5
PA	4	0	0
SD	0	0	0
TX	76	69	69
WI	2	0	2

17 STATES 24 5 14

THESE 17 STATES PRODUCED 95% OF THE 1990 CORN CROP.

**SPRING WHEAT
% HEADED**

	1991	1990	AVG.
ID	52	80	77
MN	99	93	89
MT	61	63	68
ND	86	80	76
SD	100	99	92

5 STATES 85 82 79

THESE 5 STATES PRODUCED 97% OF THE 1990 SPRING WHEAT CROP.

**GRAIN SORGHUM
% HEADED**

	1991	1990	AVG.
AR	18	0	20
CO	0	0	0
IL	15	0	8
KS	3	1	1
LA	53	50	42
MS	16	35	26
MO	8	0	5
NE	0	0	0
NM	0	0	NA
OK	12	0	5
SD	0	0	0
TX	57	49	55

12 STATES 20 15 NA

EXCL. STATES WITH NA 20 16 18

THESE 12 STATES PRODUCED 98% OF THE 1990 GRAIN SORGHUM CROP.

**COTTON
% SQUARING**

	1991	1990	AVG.
AL	84	93	90
AZ	94	99	98
AR	89	83	89
CA	75	85	90
GA	85	91	89
LA	77	90	80
MS	70	84	86
MO	74	73	86
NM	74	78	69
NC	79	75	64
OK	40	31	24
SC	88	73	70
TN	55	64	81
TX	40	63	48

14 STATES 59 73 67

THESE 14 STATES PRODUCED 99% OF THE 1990 COTTON CROP.

**COTTON
% SETTING BOLLS**

	1991	1990	AVG.
AL	19	22	23
AZ	44	78	72
AR	13	9	23
CA	0	5	11
GA	33	46	35
LA	8	39	27
MS	20	33	25
MO	10	1	18
NM	17	5	5
NC	25	19	17
OK	3	0	4
SC	40	28	22
TN	5	2	14
TX	13	13	13

14 STATES 14 19 19

THESE 14 STATES PRODUCED 99% OF THE 1990 COTTON CROP.

NA - NOT AVAILABLE.

CROP CONDITION
PERCENT
FOR WEEK ENDING JULY 7, 1991

SOYBEANS

STATE	VP	P	F	G	EX
AL	0	0	19	76	5
AR	0	0	50	50	0
GA	0	0	15	83	2
IL	1	2	23	63	11
IN	0	8	43	45	4
IA	0	4	33	53	10
KS	0	3	16	45	36
KY	0	0	28	65	7
LA	20	20	57	3	0
MI	0	8	25	45	22
MN	1	8	30	54	7
MS	0	4	62	32	2
MO	0	11	56	33	0
NE	0	1	19	75	5
NC	0	3	22	70	5
OH	2	8	27	49	14
SC	0	0	24	76	0
SD	0	0	15	65	20
TN	1	1	26	69	3
19 STATE	1	5	33	53	8
PREV WEEK	1	3	28	60	8
PREV YEAR	1	5	40	50	4

SPRING WHEAT

STATE	VP	P	F	G	EX
ID	0	4	19	65	12
MN	1	12	28	53	6
MT	1	2	14	58	25
ND	0	0	7	78	15
SD	0	2	11	56	31
5 STATE	0	3	13	67	17
PREV WEEK	0	3	13	67	17
PREV YEAR	2	6	18	57	17

WINTER WHEAT

STATE	VP	P	F	G	EX
AR	53	29	17	1	0
CA	0	0	10	85	5
CO	2	7	26	50	15
GA	13	35	36	16	0
ID	1	6	39	40	14
IL	37	29	29	5	0
IN	21	19	42	18	0
KS	0	2	42	48	8
MI	0	7	25	53	15
MO	33	38	23	6	0
MT	1	5	25	52	17
NE	0	4	53	43	0
NC	0	1	38	58	3
OH	3	9	28	53	7
OK	0	22	60	17	1
OR	3	5	32	46	14
SD	0	1	12	75	12
TX	5	26	51	14	4
WA	0	0	76	24	0
19 STATE	6	13	41	34	6
PREV WEEK	6	13	42	33	6
PREV YEAR	2	5	27	52	14

RICE

STATE	VP	P	F	G	EX
AR	0	0	39	52	9
CA	0	0	10	85	5
LA	0	0	41	59	0
MS	9	0	61	29	1
TX	0	0	8	85	7
5 STATE	1	0	33	60	6
PREV WEEK	1	0	28	67	4
PREV YEAR	0	0	29	68	3

COTTON

STATE	VP	P	F	G	EX
AL	0	0	33	67	0
AZ	0	0	22	67	11
AR	0	0	66	27	7
CA	0	0	10	85	5
GA	0	0	5	74	21
LA	0	5	90	5	0
MS	0	1	56	42	1
MO	0	11	56	33	0
NM	0	0	17	83	0
NC	0	0	9	82	9
OK	0	0	74	26	0
SC	0	22	38	40	0
TN	3	0	60	31	6
TX	4	5	40	45	6
14 STATE	2	3	43	47	5
PREV WEEK	1	5	46	45	3
PREV YEAR	3	7	40	47	3

SORGHUM

STATE	VP	P	F	G	EX
AR	0	3	73	24	0
CO	0	3	26	59	12
IL	0	0	22	67	11
KS	0	7	26	50	17
LA	0	20	80	0	0
MS	0	9	57	34	0
MO	0	11	54	35	0
NE	0	3	23	73	1
NM	0	14	62	24	0
OK	0	0	25	75	0
SD	0	0	25	65	10
TX	0	0	21	66	13
12 STATE	0	4	28	58	10
PREV WEEK	0	1	22	62	15
PREV YEAR	2	8	43	43	4

CORN

STATE	VP	P	F	G	EX
CO	0	3	26	57	14
GA	0	0	6	59	35
IL	3	5	18	62	12
IN	8	9	50	33	0
IA	0	3	31	56	10
KS	0	3	11	63	23
KY	1	1	13	63	22
MI	1	4	25	45	25
MN	1	6	23	57	13
MO	0	6	54	40	0
NE	0	1	20	64	15
NC	0	2	26	69	3
OH	2	8	27	49	14
PA	9	23	37	25	6
SD	0	2	13	51	34
TX	0	1	27	53	19
WI	1	2	12	61	24
17 STATE	2	4	26	54	14
PREV WEEK	0	4	21	57	18
PREV YEAR	1	4	27	59	9

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 1.00 to 3.00 in. south, near 4.00 in. isolated areas; 1.00 in. or less north, isolated near 2.00 in. Temperatures 1 to 3° above normal north; near normal elsewhere.

Days suitable for fieldwork 5.4. Soil moisture 8% short, 83% adequate, 9% surplus. Scattered showers continued to boost crop, pasture conditions; prevented needed pest control. Corn 77% silked, 88% 1990, 83% avg.; 26% dented, 33% 1990, 30% avg.; 4% mature, 5% 1990, 9% avg.; 5% poor, 22% fair, 55% good, 18% excellent. Sorghum 97% planted, 99% 1990, 93% avg.; 7% fair, 88% good, 5% excellent. Cotton 84% squaring, 93% 1990, 90% avg.; 19% setting bolls, 22% 1990, 23% avg.; 33% fair, 67% good. Peanuts 50% pegging, 66% 1990, 60% avg.; 1% fair, 98% good, 1% excellent. Soybeans 92% planted, 99% 1990, 93% avg.; 6% blooming, 17% 1990, 13% avg.; 19% fair, 76% good, 5% excellent. Winter wheat 98% harvested, 99% 1990, 93% avg.; First hay 98% harvested, 99% 1990, 95% avg. Pastures 5% fair, 55% good, 40% excellent. Livestock 5% fair, 72% good, 23% excellent.

ALASKA: Rain general in varying amounts throughout the Railbelt. Highs 3° below normal to 4° above normal. Lows 1 to 7° above normal. Seasonal precipitation 0.71 in. to 1.70 in. drier than normal. Homer continued 1.15 in. wetter than normal.

Days suitable for haymaking 2.0. Topsoil 2% short, 98% adequate. Subsoil 12% short, 88% adequate. Small grains in boot, 15% oats, 40% barley headed. Heights avg. 15 in. Crop growth; 20% slow, 65% moderate, 15% rapid. First crop hay harvest 35% complete, at a standstill due to rain in central, lower regions. Barley 15% fair, 75% good, 10% excellent. Pastures, ranges 20% poor, 40% fair, 40% good. Commercial potato heights avg. 8 in.

ARIZONA: Mostly sunny skies, warm with thunderstorms over the southeast 1st to 3rd. Scattered thunderstorms over most of the State 4th, clearing on the 5th. Temperatures 2° below normal to 5° above. Extremes 35°; 103° higher elevations, 64°; 117° desert.

Cotton squaring or further advanced 94%, 99% 1990, 98% avg.; setting bolls 44%, 78% 1990, 72% avg.; cotton 22% fair, 67% good, 11% excellent. Small grains harvested 96%, 100% 1990, 98% avg. Alfalfa harvest moderate to active; alfalfa good to excellent. Cattle, calves good; stockwater supplies short to adequate, soil moisture short, feed supplies average statewide; stockwater short to adequate, soil moisture short, feed supplies average north. Stockwater short to adequate, soil moisture short, feed supplies average central. Stockwater adequate; soil moisture short to adequate, feed supplies average to above average southeast; statewide, range, pasture conditions 79% of normal.

ARKANSAS: Temperatures normal with scattered showers. Temperature 59°; 101°. Rainfall none to 4.22 in.

Days suitable for fieldwork 7. Soil moisture 54% short, 46% adequate. Oats harvested 100%,

99% 1990, 98% avg. Corn planted 100%, 100% 1990, 100% avg. Pasture 7% poor, 22% fair, 61% good, 10% excellent. Livestock good.

CALIFORNIA: Strong high pressure built into the State with near record high temperatures in many portions of central, northern areas. Sub tropical moisture began creeping into the southern portion of the State with a few thunderstorms reported over the southern Sierra southward.

Open weather permitted good progress field activities. Small grain harvest continued; stubble burning, land preparations second crop. Planting silage corn gained momentum. Seeded fields fertilized, irrigated, treated weeds, mites, worms. Rice growth aided, warmer temperatures. Broadleaf weed controls continued. Cotton growth improved, three fourths squared. Cultivation, irrigation, herbicide applications ongoing. Some spraying mites, aphids. Over wintered sugarbeet harvest continued; new crop fields thinned, treated mildew, aphids. Alfalfa harvest seasonally normal. Hot temperatures stressed trees, vines; increased maturity rate. Some table grapes, Thompson Seedless sunburned. Apricots matured quickly, harvest difficult. Irrigation, weed control measures continued. Picking figs, dates bagged. Grapes treated for pests, mildew. Desert table grapes harvested. Freestone peaches 39%, nectarines 28% completed. Clingstone peaches sprayed, peach twig borer, mold; Asian pears treated codling moth. Plum harvest active. Citrus June drop continued. Pruning, replacing freeze damaged citrus trees continued; sprayed for pests. Valencia orange, grapefruit packing proceeded. Coastal lemons picked. Almonds irrigated, hull split spraying for pests. Walnuts sizing well, sprayed codling moth. Fresh market tomato harvest increased San Joaquin Valley. Tulelake area potato field growth continued below normal, cold temperatures. Fresh market strawberries moderate supply. Pasture poor to excellent north, north coast. Conditions poor to good south, higher elevations best. Water supplies adequate.

COLORADO: Scattered thunder storms in the east on the 2nd, 3rd along with gusty wind, small hail. Warm dry weather prevailed over the State on the 4th, 5th. Severe weather returned to the north east on the 6th with a tornado Phillips County. A front passed through the east on the 7th with scattered showers, cooler temperatures. West warm, dry. Temperatures mostly 1 to 3° above normal, 1 to 3° above normal statewide.

Days suitable for fieldwork 6.3. Soil moisture 16% very short, 43% short, 38% adequate, 3% surplus. First cutting alfalfa 87% complete, 80% 1990, 90% avg.; second cutting 16% complete, 13% 1990, 14 avg. Final maturity of spring grains being hastened by hot, dry weather. Winter wheat 38% harvested, 53% 1990, 41% avg. Winter wheat 2% very poor, 7% poor, 26% fair, 50% good, 15% excellent; corn 3% poor, 26% fair, 57% good, 14% excellent; barley 9% poor, 23% fair, 62% good, 6% excellent. Summer, fall potatoes mostly good. Livestock good. Pasture, range feed fair.

FLORIDA: Panhandle temperatures 1° below normal, central, south areas mostly 1 to 2° above normal. Most of State 2.00 to 3.00 in., rain several locations 5.00 to 7.00 in., few less than 0.50 in.

Soil moisture adequate to surplus. Soybean planting virtually complete. Tobacco, hay harvest active. Corn, cotton, peanuts, sugarcane making good progress. Pastures mostly good to excellent. Pasture ratings, 40% good, 60% excellent. States herds mostly good to excellent. Citrus grove good to excellent. Moisture adequate with surplus water standing in some low areas; thunderstorms refilling lakes, ponds, and streams. New crop fruit progressing well, good fruit sizes. Valencia harvest almost complete, some grapefruit going for fresh, processing. Caretakers cutting cover crops, spraying, fertilizing, pruning productive trees. Summer like weather prevailed over vegetable producing areas. Harvest almost complete.

GEORGIA: Temperatures 1 to 3° above normal. Extreme highs 90° northeast mountains middle 90s central, south. Lows 60° northeast mountains 70° elsewhere. Most locations at least 0.33 in. of rain, many locations 1.00 in., isolated locations 2.00 in.

Days suitable for fieldwork 4.9. Soil moisture 13% short, 72% adequate, 15% surplus. Corn 86% dough, 84% 1990, 77% avg.; 62% dent, 57% 1990, 46% avg.; 17% mature, 11% 1990, 9% avg. Cotton insect pressure building. Sorghum good, planting nearing completion. Peanuts 10% fair, 79% good, 11% excellent; 91% blooming, 91% 1990, 91% avg.; 65% pegging, 69% 1990, 66% avg.; spraying active. Soybeans 2% setting pods, 3% 1990, 2% avg. Tobacco 65% fair, 33% good, 2% excellent; 35% harvested, 29% 1990, 21% avg. Watermelons 27% poor, 51% fair, 22% good; 71% harvested, 78% 1990, 65% avg. Wheat harvest nearing completion. Hay, pastures good. Cattle, hogs good.

HAWAII: Typical summer sunshine with some passing showers in higher elevations, windward areas. Crops on Maui continued to receive heavy irrigation due to dry weather conditions. This places a strain on water usage, raises concerns on water restrictions. Winds 5 to 15 mph. Temperatures high 60s to low 90s. Rainfall none to 1.40 in.

Days suitable for fieldwork 7.0. Most crops made good progress aided by sunshine, showers. Irrigation was essential in several major crop areas. Watermelon harvesting continued to be heavy. Sugar harvesting, planting normal.

IDAHO: Temperatures 2° below normal to 3° above normal. Scattered locations across the State received precipitation with Rexburg reporting the highest precipitation at 0.93 inches.

Days suitable for fieldwork 7.0. Soil moisture 4% very short, 17% short, 71% adequate, 8% surplus. Irrigation water good. Winter wheat fair to good; 5% turning color. Spring wheat good; 2% turning color. Spring barley 49% headed, 85% 1990, 75% avg.; 6% turning color. Alfalfa first cutting 85% harvested, 90% 1990, 89% avg. Livestock good to excellent. Range, pasture 89% of normal.

ILLINOIS: Temperatures 3 to 7° above normal across State. Precipitation generally less than 0.50 in., isolated areas more than 1.00 in.

Days suitable for fieldwork 6.00. Soil moisture 75% short, 25% adequate. Corn dough

10%, 0% 1990, 1% avg. Soybeans setting pods 27%, 1% 1990, avg. 7%. Oats 1% very poor, 6% poor, 27% fair, 62% good, 4% excellent. Oats turning yellow 88%, 35% 1990, 72% avg. ripe 60%, 11% 1990, 35% avg., harvested 40%, 3% 1990, 13% avg. Pasture condition as a % of normal, where 100% = normal, was 77%. Alfalfa second cutting 70%, 33% 1990, 50% avg. Alfalfa 5% poor, 31% fair, 57% good, 7% excellent. Red clover cut 94%, 77% 1990, 90% avg.

INDIANA: Temperatures 4 to 7° above normal. Lows mid 60s to low 70s, highs upper 80s to low 90s. Precipitation none to 2.00 in., isolated thunderstorms.

Days suitable for fieldwork 5.6. Topsoil 66% short, 34% adequate. Subsoil 69% short, 31% adequate. Corn 64 in. high, 34 in. 1990, 48 in. avg. Soybeans 18 in. high, 9 in. 1990, 13 in. avg.; podding 6%, 0% 1990, 0% avg. Oats harvested 32%, 3% 1990, 8% avg. Rye harvested 82%, 26% 1990, 39% avg. Alfalfa hay 2nd cutting 44%, 18% 1990, 36% avg. Other hay 2nd cutting 31%, 20% 1990, 18% avg. Pasture 63% of normal.

IOWA: Temperatures 1 to 6° above normal. Extremes 54°; 98°. Precipitation none to 1.40 in.; average 0.19 in.

Days suitable for fieldwork 6.9. Topsoil 79% short, 21% adequate. Subsoil 15% short, 79% adequate, 6% surplus. Winter wheat mostly fair to good. Hay 9% poor, 38% fair, 45% good, 8% excellent. Pasture 82% of normal. Oats 90% turning color, 58% 1990, 73% avg. Oats 10% harvested, 0% 1990, 9% avg. Oat 3% very poor, 11% poor, 42% fair, 40% good, 4% excellent. Corn 99% cultivated first time, 89% 1990, 97% avg.; 20% tasseled, 1% 1990, 15% avg. Soybeans 76% cultivated first time, 61% 1990, 87% avg. Second cutting alfalfa 25% harvested, 11% 1990, 23% avg. First cutting clover hay 98% harvested, 69% 1990, 89% avg. Winter wheat 50% harvested, 10% 1990, 31% avg. Livestock mostly good.

KANSAS: Temperatures 3 to 5° above normal across State. Rainfall all areas; 0.06 in. east central to 0.68 in. south central.

Days suitable for fieldwork 6.0. Surface moisture 76% short, 22% adequate, 2% surplus. Subsurface moisture 62% short, 38% adequate. Wheat harvest virtually complete. Row crop planting virtually complete. Corn, sorghum, soybeans all being stressed by dry weather. Some corn borers causing light damage in corn; chinchbugs, grasshoppers causing light to moderate damage in some areas to sorghum. Range, pastures being stressed by dry weather, still good. Forage adequate except in southwest. Stockwater short in the central one third of the State. Second cutting of alfalfa approximate two thirds complete.

KENTUCKY: High temperatures early, mid to upper 90s. Middle week, highs mid 80s to 90°. Temperatures lower 80s, 5 to 7° above normal. Rain varied, no rain southeast to over 2.00 in. west.

Days suitable for fieldwork 5. Soil moisture 12% very short, 48% short, 38% adequate, 2% surplus. Early planted soybeans blooming. Corn developing ahead of average, lack of moisture stressing crop in some areas. Earliest tobacco being topped. Disease, insects prevalent, especially black shank, red aphids. Condition 1% very poor, 4% poor, 38% fair, 55% good, 2% excellent. Wheat 94% harvested, 95% 1990, 97% avg.

LOUISIANA: Temperatures 0.3° below normal to 1.3° above normal. Extremes 67°; 100°. Rainfall 0.75 in., northwest, to 4.95 in., west central.

Days suitable for fieldwork 3.8. Soil moisture 8% short, 44% adequate, 48% surplus. Spring plowing 97%, 100% 1990, 100% avg. Corn 10% very poor, 13% poor, 56% fair, 21% good; 100% silked, 100% 1990, 96% avg.; 73% dough stage, 78% 1990, 71% avg.; 9% mature, 8% 1990, 8% avg. Hay 64% first cutting, 94% 1990, 88% avg. Rice 100% emerged, 100% 1990, 100% avg.; 1% ripe, 1% 1990, 1% avg. Sorghum 99% planted, 100% 1990, 100% avg.; 96% emerged, 100% 1990, 100% avg.; 0% turning color, 1% 1990, 3% avg. Soybeans 87% emerged, 91% 1990, 88% avg. Sweet potatoes 1% very poor, 22% poor, 77% fair; 92% planted, 92% 1990, 93% avg. Sugarcane 3% poor, 50% fair, 47% good. Wheat 100% harvested, 99% 1990, 99% avg. Vegetables 4% very poor, 36% poor, 44% fair, 16% good. Pastures 1% very poor, 3% poor, 22% fair, 11% good, 63% excellent. Livestock 24% fair, 73% good, 3% excellent.

MARYLAND & DELAWARE: MARYLAND: Precipitation .58 in. Temperature 79.2°, normal 77.5°. Extremes 56°; 98°.

Days suitable for fieldwork 5.6. Topsoil 11% very short, 50% short, 39% adequate. Subsoil 11% very short, 67% short, 22% adequate. Barley good, wheat, rye fair to good, oats fair. Wheat 89% harvested, 75% 1990, 67% avg. Rye 75% harvested, 57% 1990, 54% avg. Oats 70% turning, 100% 1990, N/A avg; 17% harvested, 17% 1990, 12% avg. Field corn 29% silked, 9% 1990, 13% avg. Soybeans 92% planted, 90% 1990, 84% avg.; 8% bloomed, 7% 1990, N/A avg. Potatoes 35% harvested, 2% 1990, 4% avg. Snap Beans 47% harvested, 40% 1990, 33% avg. Lima beans 11% harvested, 0% 1990, 2% avg. Other hay second cut 27% complete, 17% 1990, 23% avg. Alfalfa hay second cut 74% complete, 60% 1990, 60% avg. Hay supplies adequate. Pasture very poor.

DELAWARE: Precipitation .39 in. Temperature 77.7°, normal 75.3°. Extremes 63°; 97°.

Days suitable for fieldwork 5.5. Topsoil 17% very short, 33% short, 50% adequate. Subsoil 33% short, 67% adequate. Wheat, oats fair, rye fair to good. Wheat 94% harvested, 84% 1990, 76% avg. Rye 76% harvested, 51% 1990, 57% avg. Field corn 32% silked, 19% 1990, 5% avg. Potatoes 5% harvested, 4 1990, N/A avg. Snap beans 33% harvested, 34% 1990, 16% avg. Sweet corn 10% harvested, 5% 1990, 8% avg. Lima beans 92% planted, 100% 1990, N/A % avg. Green peas 90% harvested, 99% 1990, 94% avg. Other hay second cut 29% complete, 14% 1990, 24% avg. Alfalfa hay second cut 94% complete, 52% 1990, 71% avg. Hay supplies adequate. Pasture good.

MICHIGAN: Temperatures 0 to 8° above normal. Extremes 52°; 97°. Precipitation 0.04 to 2.05 in. across State.

Days suitable for fieldwork 5.5. Soil moisture 50% short, 45% adequate, 5% surplus. Corn 18% silked, 1% 1990, 2% avg.; 1% very poor, 4% poor, 25% fair, 45% good, 25% excellent. Soybeans 100% planted, 100% 1990, 99% avg.; 30% blooming, 0% 1990, 3% avg.; 8% poor, 25% fair, 45% good, 22% excellent. Winter wheat 25% harvested, 0% 1990, 5% avg.; 7% poor, 25% fair, 53% good, 15% excellent. Pasture 80% of normal.

MINNESOTA: Temperatures 4.0 to 3.0° above normal. Extremes 42°; 97°. Precipitation 0.21 to 2.12 in. Greatest weekly total 4.50.

Days suitable for fieldwork 3.3. Topsoil 3% very short, 4% short, 54% adequate, 39% surplus. Spring wheat 99% heading, 93% 1990, 89% avg.; 6% turning ripe, 4% 1990, 20% avg. Oats 95% heading, 89% 1990, 93% avg.; 22% turning ripe,

12% 1990, 34% avg. Barley 100% heading, 95% 1990, 89% avg.; 15% turning ripe, 1% 1990, 21% avg. Field corn 82% cultivated once, 92% 1990, 96% avg.; 43in. height, 34 in. 1990, 42 in. avg.; 6% tasseling, 1% 1990, 7% avg. Soybeans 64% cultivated once, 86% 1990, 91% avg.; 12in. height, 11 in. 1990, 131 n. avg.; 17% blooming, 21% 1990, 25% avg. Alfalfa Hay 95% cut, 93% 1990, 96% avg. Field corn 1% very poor, 6% poor, 23% fair, 57% good, 13% excellent. Soybeans 1% very poor, 8% poor, 30% fair, 54% good, 7% excellent. Spring Wheat 1% very poor, 12% poor, 28% fair, 53% good, 6% excellent. Oats 4% poor, 17% very poor, 35% fair, 38% good, 6% excellent. Barley 5% very poor, 10% poor, 37% fair, 43% good, 5% excellent.

MISSISSIPPI: Temperature 82°, 1.4° above normal. Extreme 66°; 102°. Mostly dry statewide with scattered showers. Rain 0.91 in., 0.15 in. below normal. Soil temperature 89°.

Days suitable for fieldwork 4.4, 6.1 1990, 4.5 avg. Soil moisture 1% very short, 24% short, 61% adequate, 8% surplus, 6% excessive. Corn 97% emerged, 100% 1990, 100% avg.; silking 63%, 74% 1990, 74% avg.; 24% dough, 36% 1990, 38% 5 avg.; 5% silage harvested, 6% 1990, 15% poor, 50% poor, 35% good. Cotton 70% squaring, 84% 1990, 86% avg.; 20% setting bolls, 33% 1990, 25% avg.; 1% poor, 56% fair, 42% good, 1% excellent. Peanuts 97% planted, 100% 1990, 100% avg. Rice 99% planted, 100% 1990, 100% avg.; 98% emerged, 100% 1990, 100% avg.; 4% heading, 12% 1990, 8% avg.; 9% very poor, 61% fair, 29% good, 1% excellent. Sorghum 96% planted, 100% 1990, 100% avg.; 93% emerged, 100% 1990, 100% avg.; 16% heading, 35% 1990, 26% avg.; 9% poor, 57% fair, 34% good. Soybeans 89% planted, 95% 1990, 89% avg.; 76% emerged, 90% 1990, 79% avg.; 9% blooming, 12% 1990, 8% avg.; 4% poor, 62% fair, 32% good, 2% excellent. Sweet potatoes 95% planted, 100% 1990, 100% avg. Watermelons 13% harvested. Wheat 97% harvested, 100% 1990, 97% avg.; 35% very poor, 30% poor, 30% fair, 5% good. Hay harvested 50%, 52% 1990, 47% avg. Peaches harvested 61%; 75% 1990, 64% 5 yr avg.; 12% very poor, 1% poor, 57% fair, 20% good, 10% excellent. Livestock 12% fair, 56% good, 32% excellent. Pasture 86% of normal.

MISSOURI: Temperatures 1° above normal southwest to 6° above normal northeast. Rainfall spotty, averaging 0.50 in., heaviest southwest at 1.50 in., minor most areas.

Days suitable for fieldwork 6.4. Topsoil 83% short, 17% adequate. Rain, cooler weather needed to maintain crop growth, development. Double crop soybean planting 95%, 63% 1990, 79% avg. Wheat harvest ranges 96% central to complete in west central, southwest, southeast. Oat harvest 59%, 33% 1990, 59% avg. Alfalfa hay second cutting 64%, 33% 1990, 64% avg. Other hay cut 84%, 68% 1990, 80% avg. Pasture 14% poor, 61% fair, 25% good.

MONTANA: Temperatures near normal. Strong storms northeast, northcentral. Damaging winds, hail.

Days suitable for fieldwork 5.0. Topsoil 15% short, 70% adequate, 15% surplus. Subsoil 19% short, 79% adequate, 2% surplus. Winter wheat turning 38%, 43% 1990, 42% avg. Barley headed 50%, 54% 1990, 57% avg.; 2% poor, 16% fair, 58% good, 24% excellent. Oats headed 53%, 56% 1990, 57% avg.; 1% very poor, 2% poor, 10% fair, 67% good, 20% excellent. Sugarbeets 1% very poor, 2% poor, 15% fair, 70% good, 12% excellent. First cutting alfalfa 55%, 60% 1990, 73% avg. Other hay cut 35%, 43% 1990, 49% avg. Pasture, range feed 97%.

NEBRASKA: Temperatures near normal. Little to no precipitation.

Days suitable for fieldwork 6.6. Topsoil 66% short, 33% adequate, 1% surplus. Subsoil 32% short, 66% adequate, 2% surplus. Wheat 4% poor, 53% fair, 43% good; 74% ripe, 70% 1990, 75% avg.; 55% harvested, 47% 1990, 45% avg. Corn condition 1% poor, 20% fair, 64% good, 15% excellent; 8% silked, 1% 1990, 9% avg. Sorghum 3% poor, 23% fair, 73% good, 1% excellent. Soybean 1% poor, 19% fair, 75% good, 5% excellent; 24% blooming, 1% 1990, 17% avg. Alfalfa 5% poor, 36% fair, 51% good, 8% excellent; 22% second cutting, 25% 1990, 33% avg. Pasture, range 89% normal.

NEVADA: Temperatures 2 to 9° above normal. Extremes 32°; 116°. Precipitation none to 0.04. Record high temperatures reported statewide mid week.

Irrigation water supplies 20% very short, 40% short, 40% adequate. Most crops 2 or more weeks behind normal development. Corn cultivated 60%, 100% 1990, 95% avg. Potatoes cultivated 90%, 70% 1990, 95% avg. Onions cultivated 20%, 100% 1990, 100% avg. Garlic cultivated 30%, 100% 1990, 100% avg. Alfalfa first cutting 80%, 80% 1990, 90% avg.; second cutting 5%, 10% 1990, 10% avg. Winter wheat headed 95%, 100% 1990, 90% avg.; milk 45%, 80% 1990, 70% avg. Spring wheat 90% jointed, 100% 1990, 95% avg.; 50% headed, 80% 1990, 75% avg. Oats 90% jointed, 90% 1990, 95% avg.; 70% headed, 65% 1990, 65% avg. Barley 95% jointed, 100% 1990, 95% avg.; 55% headed, 80% 1990, 70% avg. Some insect, moisture damage to alfalfa. Livestock mostly good. Pasture, range poor to fair west, south; good to excellent northeast.

NEW ENGLAND: Precipitation none to 0.50 in. south; most of region, up to 0.90 in. scattered areas. Temperatures low to mid 60s north, low 60s to low 70s south; 2 to 6° below normal. Maximum temperatures high 70s to mid 80s; minimum temperatures low 40s to high 50s.

Days suitable for fieldwork 5.8. Soil moisture 14% very short, 77% short, 6% adequate, 3% surplus. Grazing availability 10% very short, 62% short, 26% adequate, 3% surplus. Fieldwork 6.9 days ahead of schedule. Main potatoes 100% emerged, 100% 1990, 100% avg.; good. Rhode Island, Connecticut Valley potatoes good. Main oats good. Field corn 100% emerged, 100% 1990, 100% avg.; good. Sweet corn 100% planted, 100% 1990, 100% avg.; 100% emerged, 100% 1990, 100% avg.; good. First cut hay 14% complete, 78% 1990, 82% avg.; fair to good. Second cut hay 14% complete, 10% 1990, 9% avg. Connecticut Valley shade tobacco harvest beginning. Apples fruit heavy fruit set. Cranberry plants almost out of bloom with some small berries; good.

NEW JERSEY: Temperatures near normal. Extremes 50°; 96°. Rainfall 0.68 in. north, 0.59 central, 0.57 south. Heaviest 24 hour total 0.65 in. on 2nd, 3rd. Estimated soil moisture percent field capacity, averaged 60% north, 42% central, 33% south. Four inch soil temperature 71° north, 73° central, 75° south.

Varying amounts of precipitation received. Soil moisture short to excessive. Summer vegetable supplies increased. Barley harvest neared completion. Wheat, rye combining active as weather conditions permitted. Field corn, soybean prospect improved by the rain. Hay, pasture growth also benefited.

NEW MEXICO: Precipitation hit and miss, most sections received some rain except the northwest Plateau, central valleys. Temperatures 2° above normal for State. Extremes 41°; 101°.

Days suitable for fieldwork 6.6. Soil moisture 79% short, 21% adequate. Crop conditions: Alfalfa, 5% poor, 27% fair, 63% good, 5% excellent. Corn, 21% fair, 79% good. Irrigated wheat 25% fair, 75% good. Dryland wheat 34% poor, 33% fair, 33% good. Pecans 14% poor, 14% fair, 72% good. Apples 20% very poor, 20% poor, 40% fair, 20% good. Chile 33% fair, 67% good. Onions 13% fair, 74% good, 13% excellent. Wheat harvest 94% complete. Reports of some hail damage to cotton in the Mesilla Valley, mostly spotted, not widespread. Onion harvest still active with quality good. Cattle, sheep poor to good. Range 62% of normal, low of 25, high of 115.

NEW YORK: Temperatures below normal, especially in the eastern third of the State. Extremes 35°; 89°. Rainfall east, west. Eastern areas drier than usual. The Hudson Valley area received only 30% of normal. Western areas were wetter than usual. Rainfall 0.18 in. at Albany to 3.30 in. at Jamestown.

Days suitable for fieldwork 5.5. Soil moisture very short to short. Pasture 61% of normal. Hay fair to good, wheat good. Alfalfa hay harvest near completion. Clo tim harvest 94% finished, 56% 1990, 53% avg. Excellent conditions for outside work, but dryness is limiting hay regrowth, stressing crops. Dryness in the Hudson Valley area has slowed fruit development. Grapes show an excellent set. Sweet cherry harvest neared completion. Tart cherry harvesting continued active. Vegetable harvest picking up momentum. Irrigation active where available. Late season vegetable planting continued. Sweet corn harvest underway.

NORTH CAROLINA: Temperatures above normal across the State. Extremes 56°; 97°. Precipitation none to 4.07 in.

Days suitable for fieldwork 5.4. Soil moisture 2% very short, 30% short, 60% adequate, 8% surplus. Crop condition: Tobacco 17% fair, 71% good, 12% excellent; corn 2% poor, 26% fair, 69% good, 3% excellent; cotton 9% fair, 82% good, 9% excellent; peanuts 17% fair, 80% good, 3% excellent; soybeans 3% poor, 22% fair, 70% good, 5% excellent; hay 5% poor, 25% fair, 68% good, 2% excellent; Sweet potatoes 13% fair, 78% good, 9% excellent, 8% fair, 75% good, 13% excellent; pasture 4% poor, 35% fair, 58% good, 3% excellent. Harvested: Peaches 45%; Irish potatoes 77%, flue cured tobacco 8%; Hay second cutting 46%. Cotton squared 79%; setting bolls 25%. Corn silked 80%; corn soft dough 40%.

NORTH DAKOTA: Temperatures 1° below normal north central, northeast to 2° above normal south central. Extremes 47° south central; 90° southwest. Precipitation 0.46 in. southwest, south central to 2.46 in. north central.

Days suitable for fieldwork 4.8. Topsoil 4% short, 92% adequate, 4% surplus. Subsoil 4% very short, 33% short, 63% adequate. Crop condition mostly good to excellent. Spring wheat 43% milk to dough and beyond, 30% 1990, 35% avg.; durum wheat 21% milk to dough and beyond, 15% 1990, 25% avg.; oats 42% milk to dough and beyond, 35% 1990, 41% avg.; barley 58% milk to dough and beyond, 40% 1990, 46% avg.; winter wheat 49% turning and beyond, 30% 1990, 50% avg. Corn 41 in. avg. height, 24 in. 1990, 29 in. avg.; sunflower 22 in. avg. height, 18 in. 1990, 18 in. avg. Flax 12 in. avg. height, 10 in. 1990, 10 in. avg.; 37% bloom or beyond, 25% 1990, 24% avg. Potatoes 14 in. avg.

height, 14 in. 1990, 15 in. avg.; 74% bloom or beyond, 25% 1990, 39% avg. Soybeans 16 in. avg. height, 11 in. 1990, 12 in. avg.; 27% bloom or beyond, 9% 1990, 13% avg. Dry edible beans 14 in. avg. height, 11 in. avg. 1990, 11 in. avg.; 24% bloom or beyond, 10% 1990, 14% avg. Sugarbeets 13 in. avg. height. Pasture 92% of normal. Alfalfa hay first cutting 72% complete, other hay 45%. Stockwater supplies 4% very short, 22% short, 73% adequate, 1% surplus.

OHIO: Temperatures 4 to 10° warmer than normal with average highs in the mid to high 80s. Scattered showers unevenly distributed across the State. Rainfall 0.75 to 1.75 in.; most areas less than 0.10 inches.

Days suitable for fieldwork 5.6. Soil moisture 61% short, 35% adequate, 4% surplus. Corn was good. Corn borer infestations reported. Corn development averaged 14 leaves emerged with brace roots developing. Twenty two percent of the crop silking compared to 0% 1990, 5% avg. Soybeans good; 70% blooming with 17% setting pods. Earliest that pods have set in the past five years. Winter wheat good; 91% harvested 20% 1990, 30% avg. Oats 22% harvested; good. Second cutting of alfalfa 63%, 19% 1990, 30% avg. Second cuttings of other hay 33%, 5% 1990, 9% avg.

OKLAHOMA: Temperatures 1° above normal south central to 5° above normal northeast. Precipitation 0.02 in. Panhandle to 1.79 in. central.

Days suitable for fieldwork 6.2. Topsoil 64% short, 34% adequate, 2% surplus. Subsoil 22% short, 78% adequate. Wheat 99% harvested, 99% 1990, 98% avg.; 74% ground plowed, 72% 1990, 59% avg. Cotton 99% up to stand, 90% 1990, 91% avg.; 40% squaring, 31% 1990, 24% avg.; 3% setting bolls, 0% 1990, 4% avg. Sorghum 89% emerged, 91% 1990, 87% avg.; 12% headed, 0% 1990, 5% avg. Soybeans 4% flowering, 0% 1990, 6% avg. Peanuts 34% pegging, 13% 1990, 26% avg. Corn 49% tasseling, 21% 1990, 55% avg. Pasture 97%. Cattle good.

OREGON: Temperature above normal; 2 to 4° above normal Willamette Vly., 5 to 8° above normal eastern areas. Precipitation light; some drizzle at coast, thundershowers dropped 0.25 in. in Heppner, Ontario.

Soil moisture 60% adequate, 40% short. Wheat turning in Willamette Vly., approaching maturity in Columbia Basin. Haying in progress. Grass seed being cut. Green pea harvest in Willamette Vly. Harvest early potatoes soon in Umatilla & Marrow. Livestock good to excellent. Pasture good, expected to dry with heat. Raspberries, sweet cherries, blueberries being harvested.

PENNSYLVANIA: Above normal temperatures, precipitation. Temperature 73°, 5° above normal. Extremes 48°; 97°. Precipitation 1.29 in., 0.36 in. below normal.

Days suitable for fieldwork 6. Soil moisture 90% short, 9% adequate, 1% surplus. Corn 4% silk, 0% 1990, 0% avg.; height 35 in., 24 in. 1990, 27 in. avg.; 9% very poor, 23% poor, 37% fair, 25% good, 6% excellent. Tobacco 100% transplanted, 99% 1990, 98% avg. Soybeans 98% planted, 95% 1990, 93% avg.; 8% very poor, 20% poor, 43% fair, 27% good, 2% excellent. Barley 1% heading or headed, 14% 1990; 6% turning yellow, 24% 1990; 15% ripe, 21% 1990; 78% harvested, 41% 1990. Wheat 0% heading or headed, 19% 1990; 14% turning yellow, 50% 1990; 36% ripe, 26% 1990; 50% harvested, 5% 1990; 6%

very poor, 9% poor, 28% fair, 49% good, 8% excellent. Oats 32% heading or headed, 77% 1990; 50% turning yellow, 21% 1990; 16% ripe, 2% 1990; 2% harvested, 0% 1990; 9% very poor, 25% poor, 35% fair, 27% good, 4% excellent. Alfalfa first cutting 100% complete, 93% 1990; second cutting 51% complete, 21% 1990. First cutting clover timothy 98% complete, 80% 1990. Feed from pastures 80% very poor, 18% poor, 2% fair, 0% good. Peach condition 19% below avg., 62% avg., 19% above avg. Apple condition 16% below avg., 64% avg., 20% above avg.

PUERTO RICO: Rainfall 1.91 in. was 0.71 in. above normal. Highest rainfall was 8.56 in. Pico Del Este Luquillo, 5.17 in. Coloso, 5.00 in. Patillas. Highest 24 hour rainfall 4.00 in. Pico Del Este Luquillo. Divisional temperatures 81° on Coasts, 75 to 78° Interior with mean station temperatures 66.8° Pico Del Este Luquillo to 83° at Guayama. Extremes 56°; 94°.

SOUTH CAROLINA: Temperatures 3 to 4° above normal. Rainfall 0.50 in. northwest to 1.90 in. northeast.

Days suitable for fieldwork 5.5. Soil moisture 2% very short, 50% short, 48% adequate. Cotton 22% poor, 39% fair, 40% good; 88% squaring, 73% 1990, 70% avg.; 40% setting bolls, 28% 1990, 22% avg. Sweet potatoes fair to good; 95% planted, 97% 1990, 90% avg. Watermelons fair to good; 70% harvested, 58% 1990, 46% avg. Cantaloupes fair to good; 69% harvested, 59% 1990, 46% avg. Peaches fair to good; 38% harvested, 52% 1990, 42% avg. Cucumbers fair to good; 78% harvested, N/A 1990, N/A avg. Snap beans fair to good; 95% planted, 100% 1990, 100% avg.; 41% harvested, N/A 1990, N/A avg. Tomatoes fair to good; 95% harvested; 66% 1990, 68% avg. Sorghum fair to good; 84% planted, 91% 1990, 81% avg. Soybeans 24% fair, 76% good; 97% planted, 96% 1990, 94% avg.; 5% blooming, 6% 1990, 3% avg. Barley good; 92% harvested, 96% 1990, 90% avg. Rye fair to good; 88% harvested, 96% 1990, 92% avg. Tobacco fair to good; 85% topped, 79% 1990, 66% avg.; 19% harvested, 13% 1990, 5% avg. Corn 93% silked, 89% 1990, 82% avg.; 70% dough stage, 57% 1990, 35% avg.; 16% matured, 11% 1990, 7% avg. Fall hay 24% harvested, 9% 1990, 4% avg. Pastures fair to good.

SOUTH DAKOTA: Temperatures near normal. Extremes 37°; 106°. Precipitation spotty, light. Much of southwest, south central no rainfall. Yearly precipitation remain well above normal.

Days suitable for fieldwork 5.4. Topsoil 3% very short, 36% short, 52% adequate, 9% surplus. Subsoil 2% very short, 27% short, 63% adequate, 8% surplus. Rye 3% poor, 9% fair, 54% good, 34% excellent. Oats 2% poor, 10% fair, 61% good, 27% excellent. Barley 1% poor, 11% fair, 54% good, 34% excellent. Flax 12% fair, 63% good, 25% excellent. Sunflowers 1% poor, 20% fair, 64% good, 15% excellent. Livestock 5% fair, 57% good, 38% excellent. Pasture 102% of normal.

TENNESSEE: Scattered thunderstorms statewide. Totals subnormal. Temperatures normal east, above normal elsewhere.

Days suitable for fieldwork 4.5. Soil moisture 15% short, 76% adequate, 9% surplus. Corn 50% tasseling, 28% 1990, 51% avg.; 26% fair, 66% good, 8% excellent. Cotton 55% squaring, 64% 1990, 81% avg.; 3% very poor, 60% fair, 31% good, 6% excellent. Sorghum 2% very poor, 2% poor, 24% fair, 67% good, 5% excellent. Soybeans 90% planted, 97% 1990, 95% avg.; 1% very poor, 1% poor, 26% fair, 69% good, 3% excellent. Tobacco 1% very poor, 32% fair, 67% good. Wheat 97%

harvested, 97% 1990, 94% avg. Alfalfa 70% 2nd cutting, 90% 1990, 77% avg.; hay 2% poor, 11% fair, 79% good, 8% excellent. Pastures 5% fair, 67% good, 28% excellent. Cattle 1% poor, 2% fair, 77% good, 20% excellent.

TEXAS: Almost daily showers occurred over Coastal, South Texas; daily heating, weak tropical disturbances worked on moist, unstable air over region. Early in week, upper air disturbance, weak front triggered thunderstorms over West Texas. Temperatures climbed in west over weekend. Rainfall ran above normal in east, along coast, below normal in central, western areas. Temperatures near to below normal except for above normal readings on Northern High Plains, parts of North Texas.

Crops: Small grain harvest moved ahead last week. Most producers continued to plow up harvested fields, prepare land for new crop year. Corn fields remained in excellent shape last week. Few South Texas fields sustained minor lodging problems from last weeks rain. Yields on some Blacklands' fields may be lower than expected because poor pollination, for most part, normal maturity continued. Corn 58% doughed, 54% 1990, 58% avg.; 37% dented, 35% 1990, 36% avg.; 7% mature, 14% 1990, 10% avg.; 2% harvested, 2% 1990, 1% avg. Sorghum 43% turning color, 41% 1990, 40% avg.; 23% mature, 19% 1990, 18% avg.; 6% harvested, 7% 1990, 5% avg. Cotton conditions mixed across State. Cotton 3% open bolls, 2% 1990, 2% avg. Rice fields made another week normal progress with usual insect, disease problems.. Harvest on some early planted fields begun. Soybean planting remained slow along Upper Coast due wet conditions. Blacklands' fields making good growth, more moisture needed to fill out pods. Peanut fields remained in good shape. Producers across State would like to see more moisture. Low Plains' producers continued irrigation. Minimal insect, disease problems remained, no major problems exist. Other Field Crops: Oats 81% harvested, 90% 1990, 84% avg. Peanuts 86% planted, 93% 1990, 90% avg. Soybeans 95% planted, 98% 1990, 95% avg. Sunflowers 86% planted, 95% 1990, 87% avg.

Commercial Vegetables: Rio Grande Valley, heavy rains last week delayed planting, preplanting operations. San Antonio Winter Garden, watermelon harvest winding down. Tomato harvest in full swing. East Texas, watermelon, cantaloupe harvest continued. Land preparations for fall planting in full swing. Potato harvest in full swing. Trans Pecos, onion, cabbage harvest winding down. Melon, pepper crops continued good progress. Peach harvest active most areas with good yields. Nut development on pecan trees showing signs of a potentially good crop.

Range and Livestock: Range, pasture conditions remained good to excellent shape. Recent rains continued to help forage production. Livestock continued to gain weight. Haying operations made another week good progress. Range, pasture 6% poor, 29% fair, 46% good, 19% excellent.

UTAH: Temperatures 2° below normal to normal. Precipitation none to light.

Days suitable fieldwork 6.8. Soil moisture 70% short, 30% adequate. Winter wheat 42% turned, 79% 1990, 81% avg.; 8% ripe, 24% 1990, 22% avg. Spring wheat 19% turned color, 47% 1990, 56% avg.; 9% ripe, 13% 1990, 8% avg. Barley 21% turned, 60% 1990, 67% avg; 8% ripe, 11% 1990, 12% avg. Oats 50% headed, 72% 1990, 73% avg.; 9% turned, 22% 1990, 24% avg. Corn 20

in. high, 27 in. 1990, 33 in. avg. Sweet cherry harvest underway. Alfalfa 1st cutting near completion. Second cutting 4% complete, 25% 1990, 22% avg. Other hay harvest continued at normal pace. Pasture, range mostly fair to good.

VIRGINIA: Temperatures above normal. Extremes 50°; 100°. Precipitation was above normal statewide except southwest. Rainfall 0.14 to 1.18 in.

Days suitable for fieldwork 5.4. Topsoil 23% very short, 30% short, 47% adequate. Corn 7% very poor, 23% poor, 47% fair, 16% good, 7% excellent. Corn silked 25%, 19% 1990, 17% avg.; doughed 3%, 2% 1990, 2% avg. Soybeans 90% planted, 91% 1990, 84% avg. Wheat 91% harvested, 91% 1990, 73% avg. Barley 99% harvested, 98% 1990, 93% avg. Oats 85% harvested, 92% 1990, 72% avg. Soybean 36% poor, 39% fair, 25% good. Tobacco 2% poor, 6% fair, 92% good. Peanut 25% fair, 75% good. Other hay 28% poor, 30% fair, 31% good, 11% excellent. Alfalfa hay 18% poor, 39% fair, 38% good, 5% excellent. Livestock fair to good. Pasture 11% very poor, 27% poor, 36% fair, 14% good, 12% excellent. Potato harvest 59% complete. Harvesting cucumbers, tomatoes, snap beans.

WASHINGTON: Temperatures 1 to 3° above normal east; 5° above normal to 1° below normal west. Precipitation none to 0.15 in. east; 0.02 to 1.13 in. west.

Days suitable for fieldwork 6.6. Soil moisture 45% short, 55% adequate. Hay, other roughage 10% short, 84% adequate, 6% surplus. Range, pasture 32% poor, 30% fair, 32% good, 6% excellent. Winter wheat 76% fair, 24% good. Spring wheat 10% poor, 68% fair, 20% good, 2% excellent. Barley 29% fair, 58% good, 13% excellent. Potato 100% good. Dry bean 100% good. Corn 100% good. Spring wheat headed 100%. Barley headed 98%. Alfalfa hay, 1st cutting 97%. Alfalfa hay, 2nd cutting 20%. Hot weather began to turn winter wheat in eastern areas. Heat stress occurred in western Whitman, Garfield Counties. Winter wheat on higher elevations in southeastern areas looks rather good, although Russian wheat aphids appeared in some areas. Green pea harvest is in progress in Walla Walla County. Strawberry harvest is in full swing in western areas. Apples and pears are developing well. Hay cutting is in full swing throughout the State. Alfalfa weevil was a problem in northeastern portion of the State. Excellent pastures, range.

WEST VIRGINIA: Temperature 78°. Extremes 56°; 98°. Precipitation 0.73 in.

Days suitable for fieldwork 5.8. Soil moisture 39% very short, 56% short, 5% adequate. Wheat good; 99% ripe, 50% harvested. Corn good. Oats fair; 97% jointed, 80% headed. Gardens, 31% poor, 44% fair, 25% good; 90% emerged. Tobacco, good. Hay, 5% very poor, 47% poor, 39% fair, 9% good; 90% first cutting, 14% second cutting. Apples, peaches good. Pastures, 38% very poor, 25% poor, 35% fair, 2% good; 59% of normal. Cattle, good. Sheep, fair.

WISCONSIN: Temperature 71°, 1° above normal. Extremes 44°; 97°. Precipitation 0.30 to 1.70 in. Severe weather Sunday night caused wind damage to some crops from west of Madison to Milwaukee.

Days suitable for fieldwork 5.2. Soil moisture 35% short, 56% adequate, 9% surplus. Pasture condition 77% of normal, 89% 1990, 65% avg. General condition of crops 2% poor, 10% fair, 76% good and 12% excellent. Winter wheat 2% very poor, 2% poor, 13% fair, 74% good, 9% excellent.

(Continued to back cover)

June 1991

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

International Weather and Crop Summary
HIGHLIGHTS

June 30 - July 6, 1991

USSR ... In Western USSR, an unfavorable heat wave continues in eastern areas. Moderate to heavy rains cause local flooding in Moldova and the western Ukraine. In the New Lands, although drought conditions continue over the southern Urals and Kazakhstan, cooler weather eases heat stress.

EUROPE ... Mostly favorable weather prevails for agriculture, except in the southeast where inundating rains halt fieldwork.

EASTERN ASIA ... Torrential rains fall across the Yangtze Valley, causing widespread flooding. Scattered showers delay winter wheat harvesting in portions of the North China Plain. Beneficial rains aid spring wheat, soybeans, and corn in Manchuria.

SOUTHEAST ASIA ... Widespread showers cover Thailand and the Philippines but dry pockets persist over primary rice and corn areas.

SOUTH ASIA ... The monsoon continues to be weak in the north, resulting in some planting delays. Elsewhere, beneficial showers continue in many summer crop areas.

SOUTH AMERICA ... Favorable drying and harvesting conditions occur in Argentina with planting progress in southern Brazil.

AUSTRALIA ... Southern Queensland remains dry, but favorable growing conditions persist elsewhere.

CANADA ... Moderate to heavy rain benefits vegetative to reproductive grains and oilseeds but causes some local flooding.

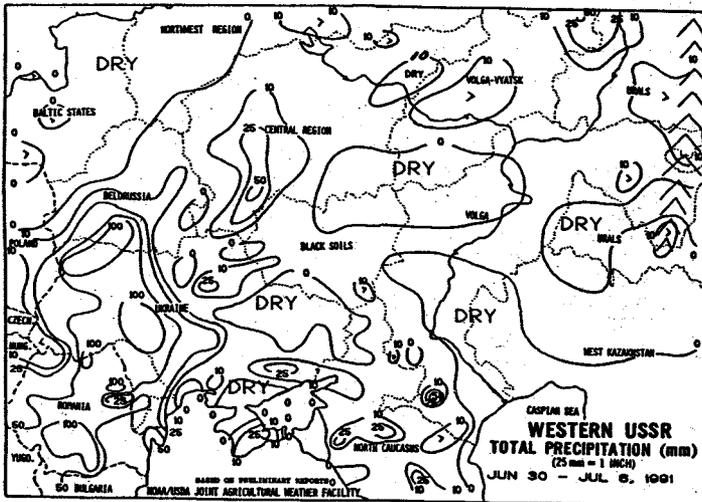
MEXICO ... Widespread rains benefit southern and northeastern grain areas and increase reservoir levels for the northwest irrigated regions.

COUNTRY	CITY	TEMPERATURE					PRECIPITATION		
		AVG MAX	AVG MIN	HI	LO	DPART F/NRM	TOTAL MM	DPART F/NRM	
NORWAY	OSLO	16	6	20	1	11	-3.4	135	62
SWEDEN	STOCKHOLM	16	9	20	2	12	-3.4	94	48
FINLAND	HELSINKI	17	9	20	1	13	-2.2	73	31
U KING	GLASGOW	16	7	21	0	12	-2.5	96	31
	EDINBURGH	16	7	21	1	12	-1.4	63	18
	BIRMINGHAM	16	8	22	-1	12	-1.9	75	22
	LONDON	17	9	20	-1	13	-1.6	100	41
IRELAND	DUBLIN	16	9	20	3	12	-1.1	68	15
ICELAND	REYKJAVIK	12	7	16	3	9	0.2	14	-34
DENMARK	COPENHAGEN	16	9	21	4	13	-3.0	66	19
LUXEMB	LUXEMBOURG	17	9	22	2	13	-2.6	65	3
SWITZL	ZURICH	20	11	28	7	15	-0.1	202	69
	GENEVA	22	12	29	7	17	0.1	108	18
FRANCE	PARIS	19	10	26	1	15	-1.7	39	-18
	STRASBOURG	21	12	28	5	16	-0.7	34	-41
	BOURGES	20	11	26	6	15	-1.5	57	-4
	BORDEAUX	22	13	29	8	17	-0.2	57	-7
	TOULOUSE	23	13	32	8	18	-0.2	19	-46
	MARSEILLE	25	16	33	12	21	-0.2	14	-18
SPAIN	VALLADOLID	27	12	35	5	20	1.9	1	-38
	MADRID	31	14	38	10	23	1.8	2	-24
	SEVILLE	33	17	41	14	25	2.1	9	-6
GERMANY	LEIPZIG	19	10	27	4	15	-1.8	69	2
	DRESDEN	20	11	28	3	16	-1.0	80	12
	HAMBURG	17	10	23	4	13	-2.3	125	55
	BERLIN	20	11	27	4	15	-2.3	75	-2
	DUSSELDORF	19	11	24	4	15	-2.0	83	17
	STUTTGART	20	10	28	4	15	-1.3	79	-15
	NURNBERG	20	11	28	2	15	-1.2	119	45
	MUNICH	20	10	29	5	15	-0.3	169	34
AUSTRIA	VIENNA	23	12	30	5	17	-1.0	66	4
	INNSBRUCK	22	10	29	4	16	-0.5	203	91
CZECH	PRAGUE	20	10	27	3	15	-1.2	82	4
POLAND	WARSAW	21	11	28	4	16	-1.1	99	35
	LODZ	20	10	28	3	15	-0.8	86	17
	KATOWICE	21	9	28	3	15	-0.8	100	12
	PRZEMYSL	21	11	32	6	16	-0.4	39	-60
HUNGARY	BUDAPEST	25	14	34	7	19	-0.3	48	-21
YUGOSL	SARAJEVO	26	12	34	4	19	2.1	66	-40
ROMANIA	BUCHAREST	26	14	32	8	20	-0.2	71	-17
BULGARIA	SOFIA	25	14	31	6	20	2.0	99	22
ITALY	MILAN	25	14	33	8	19	-1.3	26	-61
	VERONA	25	14	33	9	20	-0.9	82	3
	VENICE	24	16	31	12	20	-0.5	113	36
	GENOA	23	18	29	15	20	-1.6	58	9
	ROME	25	16	30	11	20	-1.0	12	-9
	NAPLES	26	17	29	13	22	0.8	13	-21
GREECE	THESSALONIKA	30	17	35	10	24	-0.9	16	-14
	LARISSA	32	16	37	10	24	-1.4	10	-16
	ATHENS	29	20	33	13	24	-1.1	0	-8
TURKEY	ISTANBUL	25	17	31	13	21	0.5	4	-20
	ANKARA	25	9	32	1	17	-3.0	27	-11
CYPRUS	LARNACA	30	19	34	13	24	-0.3	0	-5
USSR	TALLINN	17	9	22	2	13	-1.7	68	22
	LENINGRAD	19	12	27	6	15	0.0	79	28
	KAUNAS	20	9	28	1	15	-1.5	84	-4
	MINSK	21	11	30	3	16	-0.6	119	52
	KAZAN	26	15	35	10	20	3.1	31	-30
	MOSCOW	24	14	33	5	19	2.2	129	61
	SVERDLOVSK	26	13	35	6	20	4.6	56	-13
	OMSK	28	14	34	5	21	3.2	20	-37
	KUSTANAY	30	17	37	10	23	4.6	13	-24
	KRASNOYARSK	23	10	30	1	16	-0.1	58	1
	NOVOSIBIRSK	24	13	32	4	18	2.2	44	-9
	BARNAUL	24	13	33	8	19	0.5	38	-9
	KHABAROVSK	22	13	29	6	17	-0.3	146	68
VLADIVOSTOK	19	13	27	9	16	3.3	108	6	
KIEV	23	15	32	8	19	0.4	95	32	
LVOV	21	11	32	5	16	-0.4	68	-21	
KIROVOGRAD	25	14	32	7	20	0.5	86	34	

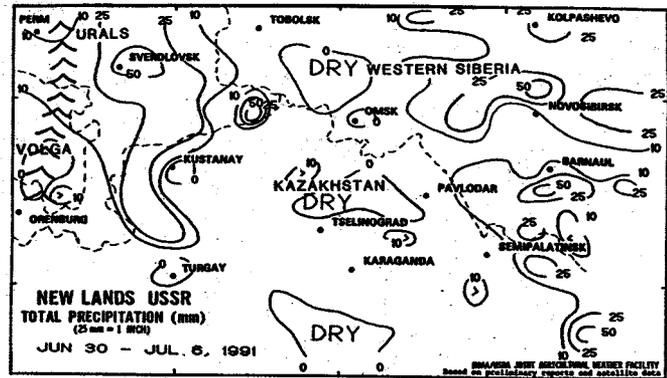
Based on Preliminary Reports

June 1991

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			DPART F/NRM
		AVG MAX	AVG MIN	HI	LO	AVG	DPART F/NRM	TOTAL		
USSR	ODESSA	24	17	30	9	20	0.6	44	3	
	YALTA	24	17	29	11	20	-0.5	62	19	
	VORONEZH	27	14	35	6	20	1.9	33	-17	
	SARATOV	27	18	37	10	22	3.3	35	-2	
	KHARKOV	26	16	31	7	21	1.5	43	-7	
	VOLGOGRAD	29	17	39	7	23	1.8	25	-2	
	ROSTOV	27	17	33	9	22	1.1	88	28	
	ASTRAKHAN	31	19	41	12	25	2.0	10	-10	
	KRASNODAR	28	16	32	10	22	1.0	58	-19	
	ORENBURG	28	15	38	10	21	2.1	27	-16	
	TSELINOGRAD	29	16	37	9	23	4.5	3	-29	
	KARAGANDA	28	14	35	6	21	3.0	3	-37	
	TBILISI	28	17	36	11	23	1.2	75	8	
	TASHKENT	32	17	38	4	25	-0.6	18	8	
	ASHKHABAD	35	20	41	15	28	-0.4	5	0	
SYRIA	DAMASCUS	34	14	40	6	24	-0.8	0	0	
ISRAEL	JERUSALEM	28	16	33	9	22	-0.5	0	0	
PAKIST	KARACHI	35	28	41	22	32	0.2	0	-8	
INDIA	AMRITSAR	39	26	44	20	32	-0.2	37	-20	
	NEW DELHI	39	28	42	22	33	-0.4	53	-4	
	AHMEDABAD	41	28	48	23	34	1.5	22	-83	
	INDORE	36	25	46	22	31	0.5	212	78	
	CALCUTTA	34	26	38	22	30	0.0	493	243	
	VERAVAL	32	25	33	24	28	-1.2	4	-156	
	BOMBAY	32	27	34	23	30	0.9	928	281	
	POONA	31	23	41	21	27	-0.6	529	411	
	BEGAMPET	32	24	38	20	28	-0.9	190	90	
	MADRAS	35	27	38	23	31	-1.4	220	158	
	MANGALORE	29	25	34	22	27	0.1	1326	344	
H KONG	HONG KONG	31	27	34	23	29	1.0	372	-60	
N KREA	PYONGYANG	25	17	28	12	21	1.8	82	-75	
S KREA	SEOUL	28	19	32	15	23	2.3	82	-87	
JAPAN	SAPPORO	24	16	30	12	20	3.8	12	-64	
	NAGOYA	28	21	36	16	24	2.5	293	83	
	TOKYO	27	21	34	17	24	2.4	150	-31	
	YOKOHAMA	26	20	33	15	23	2.3	172	-44	
	KYOTO	28	21	36	13	25	2.9	259	26	
	OSAKA	28	22	34	16	25	2.5	255	42	
THAILN	PHEITCHABUN	33	25	37	24	29	0.2	142	-8	
	BANGKOK	33	26	36	23	30	0.6	108	-50	
MALAYS	KUALA LUMPUR	33	25	38	24	29	1.8	49	-83	
VIETNM	HANOI	33	27	36	24	30	0.2	407	168	
CHINA	HARBIN	25	14	31	9	20	0.0	105	27	
	HAMI	33	17	39	9	25	-0.1	5	0	
	LANCHOW	27	16	33	12	21	0.8	25	-8	
	BEIJING	29	19	34	14	24	0.1	239	161	
	TIENTSIN	29	20	35	17	25	0.5	90	20	
	LHASA	22	10	25	4	16	0.0	89	19	
	KUNMING	24	17	29	15	21	1.4	168	-12	
	CHENGCHOW	30	20	36	15	25	-1.2	62	-6	
	YEHCANG	29	22	37	18	26	0.1	120	-39	
	HANKOW	30	23	35	19	27	1.0	232	23	
	CHIHKIANG	29	22	33	18	25	1.0	181	-2	
	SHANGHAI	27	21	35	16	24	1.1	208	49	
	NANCHANG	30	24	35	21	27	1.6	178	-114	
	TAIPEI	33	26	35	21	29	2.7	624	308	
	CANTON	32	26	36	24	29	1.7	449	162	
	NANNING	33	25	37	16	29	1.4	300	68	
CNRY I	LAS PALMAS	25	19	30	17	22	0.7	2	2	
MOROCC	CASABLANCA	24	18	29	14	21	0.6	5	-1	
	MARRAKECH	34	17	41	13	26	2.5	1	-6	
ALGERI	ALGER	28	16	37	11	22	0.5	8	-14	
	BATNA	31	14	36	8	22	1.2	3	-20	
TUNISI	TUNIS	29	17	36	13	23	0.0	1	-14	
NIGER	NIAMEY	36	26	40	22	31	0.3	72	-2	
MALI	TIMBUKTU	42	30	46	24	36	2.0	17	-1	
	BAMAKO	36	25	41	21	31	1.9	53	-84	
MAURIT	NOUAKCHOTT	33	20	46	12	27	-0.7	0	-1	
SENEGL	DAKAR	27	22	29	20	24	-1.3	0	-13	
CHAG A	DIEGO GARCIA	30	26	31	24	28	1.3	151	-6	
LIBYA	TRIPOLI	32	19	40	14	26	-0.3	15	13	
	BENGHAZI	30	20	41	12	25	-0.8	0	0	
EGYPT	CAIRO	35	21	39	13	28	0.3	0	0	
	ASWAN	40	26	43	20	33	0.0	0	0	
ETHIOP	ADDIS ABABA	25	12	40	9	18	0.8	67	-51	
KENYA	NAIROBI	24	13	28	7	19	1.0	32	1	
TANZAN	DAR ES SALAAM	30	19	37	17	25	0.4	4	-29	
GABON	LIBREVILLE	**	**	**	**	**	**	0	-18	
TOGO	LOME	31	25	32	22	28	1.8	45	-234	
B FASO	OUAGADOUGOU	34	25	37	21	30	0.6	165	44	
IVRY C	ABIDJAN	30	25	33	22	28	1.8	307	-323	
MOZAMB	MAPUTO	25	14	29	11	19	0.7	41	25	
ZAMBIA	KABWE	24	9	28	6	17	0.9	0	0	
ZIMBAB	HARARE	22	9	27	5	15	2.0	0	-4	
S AFRI	PRETORIA	19	6	24	1	13	2.1	22	16	
	KROONSTAD	17	1	24	-5	9	0.2	22	16	
	JOHANNESBURG	17	3	23	-2	10	0.7	8	2	
	BETHAL	17	0	23	-6	8	-0.1	21	14	
	DURBAN	22	12	29	8	17	1.1	34	8	
	CAPE TOWN	18	8	26	2	13	0.4	138	46	
CANADA	TORONTO	27	14	34	6	20	2.5	24	-43	
	MONTREAL	25	13	33	7	19	0.9	35	-48	
	WINNIPEG	24	14	30	7	19	2.3	131	51	
	REGINA	24	12	31	7	18	2.0	194	114	
	SASKATOON	22	11	29	5	17	1.0	136	78	
	LEATHERIDGE	20	9	29	4	15	-0.7	120	41	
	CALGARY	19	7	26	3	13	-0.4	113	24	
	EDMONTON	19	10	26	5	15	-0.5	104	27	
	VANCOUVER	18	11	26	7	15	-0.4	54	9	
MEXICO	GUADALAJARA	30	19	36	14	24	1.8	204	52	
	MEXICO CITY	24	15	30	13	19	1.5	269	165	
	ACAPULCO	33	25	36	22	29	0.5	116	-163	
BERMUD	ST. GEORGES	28	23	30	20	26	1.0	102	-35	
BAHAMA	NASSAU	31	23	33	21	27	0.6	115	-110	
CUBA	HAVANA	31	25	31	25	28	1.1	11	-151	
JAMAIC	KINGSTON	33	26	34	22	29	1.2	3	-75	
P RICO	SAN JUAN	32	25	34	23	29	1.1	71	-52	
GUADEL	RAIZET	32	25	33	22	28	1.3	38	-42	
MARTINQ	LAMENTIN	31	26	32	23	28	2.6	37	-129	
BARBAD	BRIDGETOWN	31	25	32	19	28	0.8	30	-61	
TRINID	PORT OF SPAIN	32	24	33	22	28	1.5	63	-191	
COLOMB	BOGOTA	19	9	21	6	14	0.9	26	-42	
VENEZU	CARACAS	31	24	35	20	28	1.0	7	-46	
F GUIA	CAYENNE	30	24	31	23	26	1.0	129	-335	
BRAZIL	FORTALEZA	30	24	31	22	27	0.2	56	-96	
	RECIFE	28	22	29	20	25	0.4	148	-205	
	BELO HORIZONTE	25	16	28	13	20	1.8	0	-11	
	CAMPO GRANDE	27	17	31	9	22	2.3	85	35	
	FRANCA	25	16	29	11	20	3.0	0	-22	
	RIO DE JANEIRO	25	21	32	18	23	1.4	55	11	
	LONDRINA	24	14	28	10	19	2.2	152	60	
	SANTA MARIA	18	11	28	1	14	-0.4	182	18	
	PORTO ALEGRE	19	9	29	0	14	-1.0	174	34	
PERU	LIMA	21	16	25	12	19	1.4	1	-1	
BOLIVI	LA PAZ	13	-3	16	-6	5	-2.5	26	23	
CHILE	SANTIAGO	16	5	24	-2	11	2.4	21	-49	
ARGENT	IGUAZU	23	13	28	4	18	**	329	**	
	FORMOSA	23	14	30	4	18	0.7	63	-15	
	CERES	18	9	26	1	13	0.7	47	22	
	CORDOBA	17	6	24	-5	11	0.9	5	-9	
	RIO CUARTO	15	6	19	-2	10	0.9	26	3	
	ROSARIO	16	7	22	-4	11	0.9	82	36	
	BUENOS AIRES	15	6	18	-4	10	0.2	39	-21	
	SANTA ROSA	14	3	21	-4	8	0.6	43	18	
	TRES ARROYOS	11	3	15	-4	7	-0.7	142	97	
MIDW I	MIDWAY ISLAND	27	23	28	21	25	1.1	37	-36	
N CALD	NOUMEA	24	18	25	16	21	0.1	90	-24	
FLJI	NAUSORI	26	20	30	15	23	-0.6	31	-136	
SAMOA	PAGO PAGO	29	25	32						

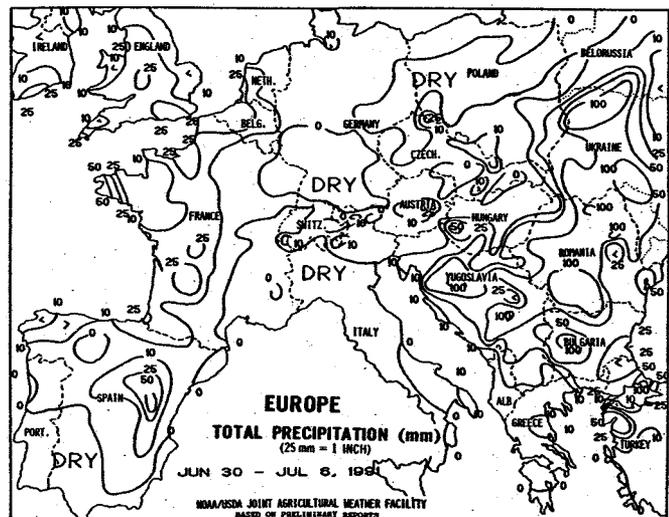


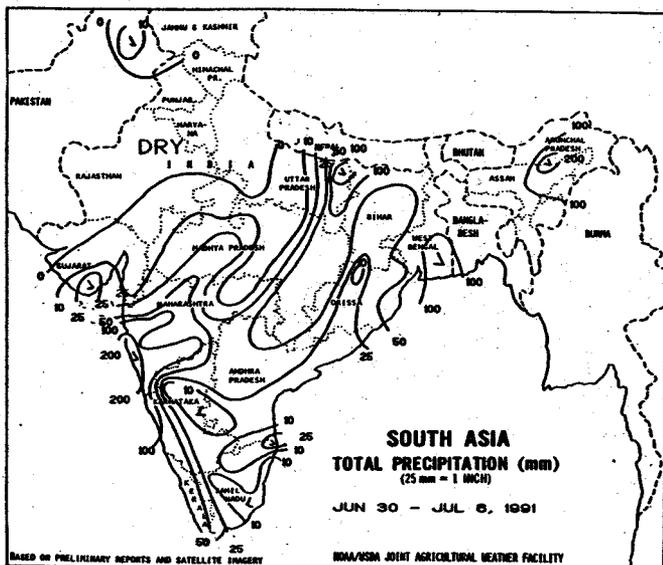
USSR ... In Western USSR, unseasonably hot, dry weather continued over the northern North Caucasus, the eastern Black Soils Region, Volga, Volga Vyatsk Region, and the Urals. Maximum temperatures on several days during the week in these areas ranged from 32 to 40 degrees Celsius (C), placing further stress on crops. Furthermore, the continued hot, dry weather has hastened winter grain ripening and reduced yield prospects for spring grains in the reproductive to filling stages. By week's end, the heat wave, which had persisted over these areas since mid-June, finally ended. The cooler weather, however, was accompanied by little, if any precipitation. Further west, beneficial drier weather covered the Baltic States and Belorussia. However, moderate to heavy rain (50-158mm) over Moldova and the western Ukraine likely caused local flooding and some crop lodging.



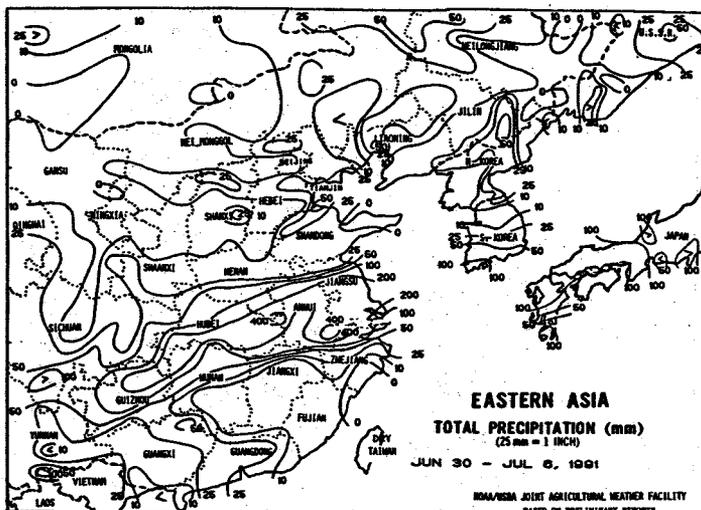
In the New Lands, while drought conditions continued to cover crop areas in the southern Urals, Kazakhstan, and the western portion of West Siberia, a cooling trend lowered heat stress on spring grains advancing through reproduction. Significant rain (15-50mm) eased drought conditions in the northern Urals and maintained favorable moisture conditions for spring grains over the eastern portion of the region. Weekly average temperatures were 2-4 degrees C above normal in the west and 2-4 degrees C below normal in the east.

EUROPE ... Mostly favorable weather prevailed during the week, although excessive wetness (75-213mm) in the Balkan Region inundated widespread areas of Yugoslavia, Romania, and Bulgaria. Beneficial rain (10-38mm) fell across western France, favoring corn and other summer crops. Significant showers (10-50mm) covered much of northern and east-central Spain, the United Kingdom, and Belgium. Warmer weather, with weekly average temperatures 1-5 degrees C above normal, promoted crop growth. Corn typically advances through reproduction during July. Thus, the warm, showery weather was especially helpful in France for summer crop development, but wetness slowed early winter wheat harvesting. Light showers and mild weather benefited immature grains and sugarbeets across northern Europe, where moisture has been abundant, but temperatures have been persistently below average. Cloudy, wet weather in southeastern Europe kept weekly average temperatures below normal and halted winter grain harvesting.

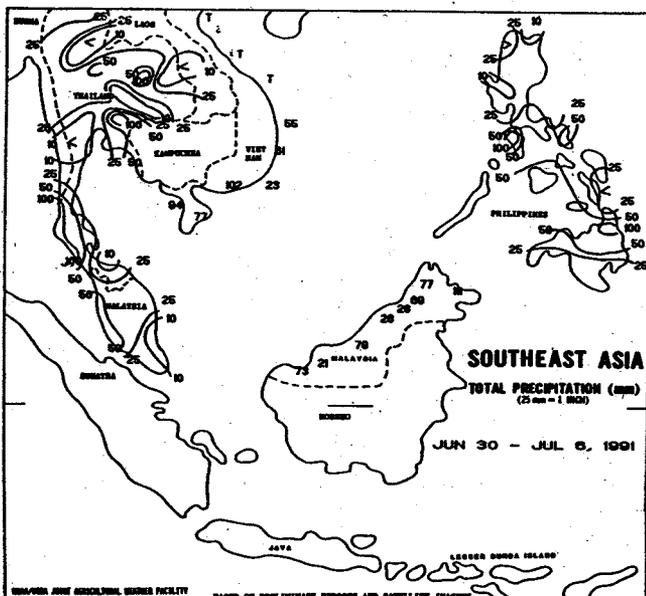




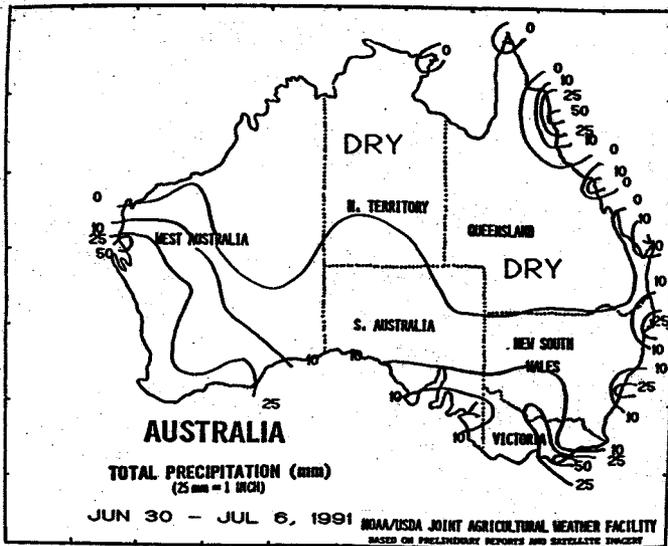
SOUTH ASIA ... Unfavorable dryness persisted in eastern Maharashtra, western and central Madhya Pradesh, Uttar Pradesh, most of northwestern India including Gujarat, and Pakistan. The monsoon should be established over northwest India by now, but the pattern to date has been erratic, resulting in drier- and warmer-than-normal weather from Madhya Pradesh northwestward. Planting delays are occurring over primary rainfed oilseed and cotton areas, and rain is urgently needed to prevent declines in yield potential. In contrast, scattered, moderate to heavy showers (25-100mm or more) covered many primary crop regions of southern, central, and eastern India, benefiting mostly vegetative crops.



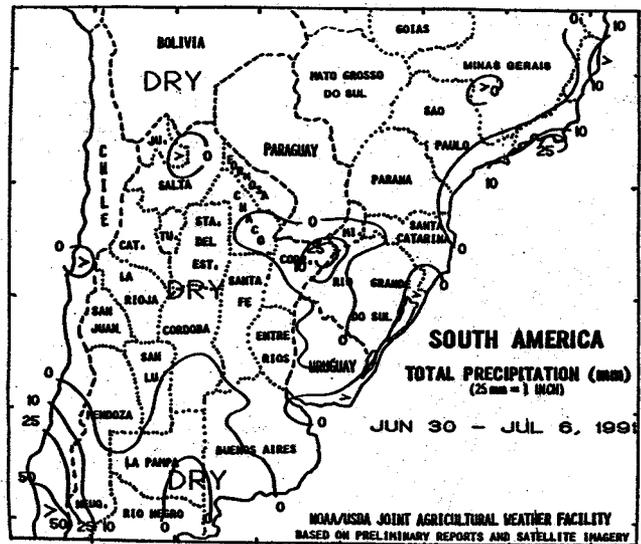
EASTERN ASIA ... Moderate rains (16-52mm) fell across the western portions of Heilongjiang, Jilin, and most of Liaoning, which benefited vegetative spring wheat, soybeans, and corn. Portions of Hebei, northern Shandong, and northern Shanxi received moderate rains (26-60mm), delaying winter wheat harvesting. Moderate to heavy rains (38-148mm) fell across most of the Yangtze Valley, aiding vegetative single-crop rice. However, a large area from southern Jiangsu, across southern Anhui and Hubei, and into northern Guangxi received torrential rains (210-531mm). Some locations received over 100mm in 3 consecutive days, probably causing widespread flooding and overflowed rice paddies. Light to moderate rains (17-50mm) fell across Guangxi and Guangdong, with only light rains falling across portions of Hunan, Jiangxi, and Fujian. While the dry spell across southern China has generally ended, Jiangxi has not received significant rainfall in several weeks. Seasonal heavy rains (55-254mm) fell across southern Japan.



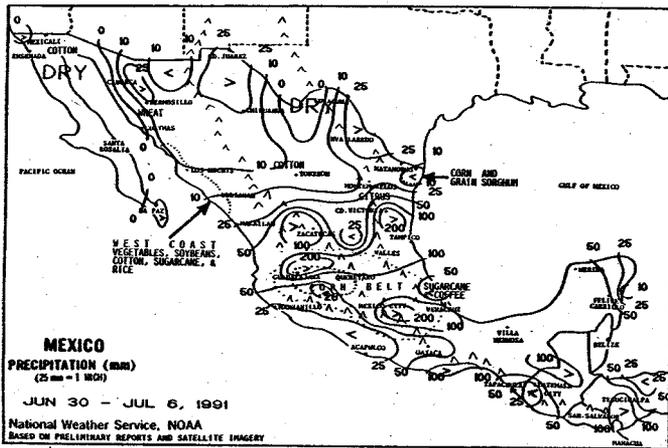
SOUTHEAST ASIA ... Scattered showers covered Thailand's primary grain regions, but amounts continued to be highly variable, with pockets of light rain (2-15mm) persisting in northern rice and central corn areas. Rainfall to date has been below normal over most primary grain areas and temperatures have averaged near to above normal, reducing moisture for normal development of vegetative to reproductive crops. In the Philippines, moderate to heavy showers (25-100mm or more) continued for the second week over primary crop regions from southern Luzon southward. However, only light showers (15mm or less) and warm weather persisted over rice and corn areas of central and northern Luzon, further stressing vegetative to reproductive crops.



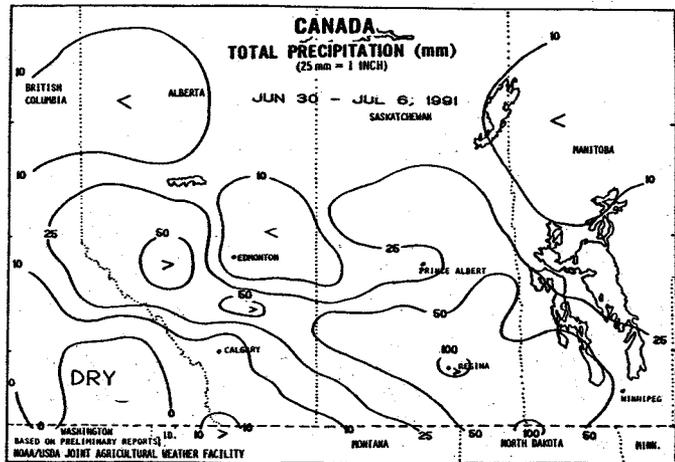
AUSTRALIA ... Little or no rain fell in the winter grain region of southern Queensland, continuing the below-normal rainfall trend of previous weeks. Rain is needed for adequate germination and establishment. The winter wheat areas of South Australia, Victoria, and southern New South Wales received 8-30mm of rain, favoring germination and pre-planting moisture. Western Australia received light to moderate rains (13-35mm), aiding vegetative winter grains.



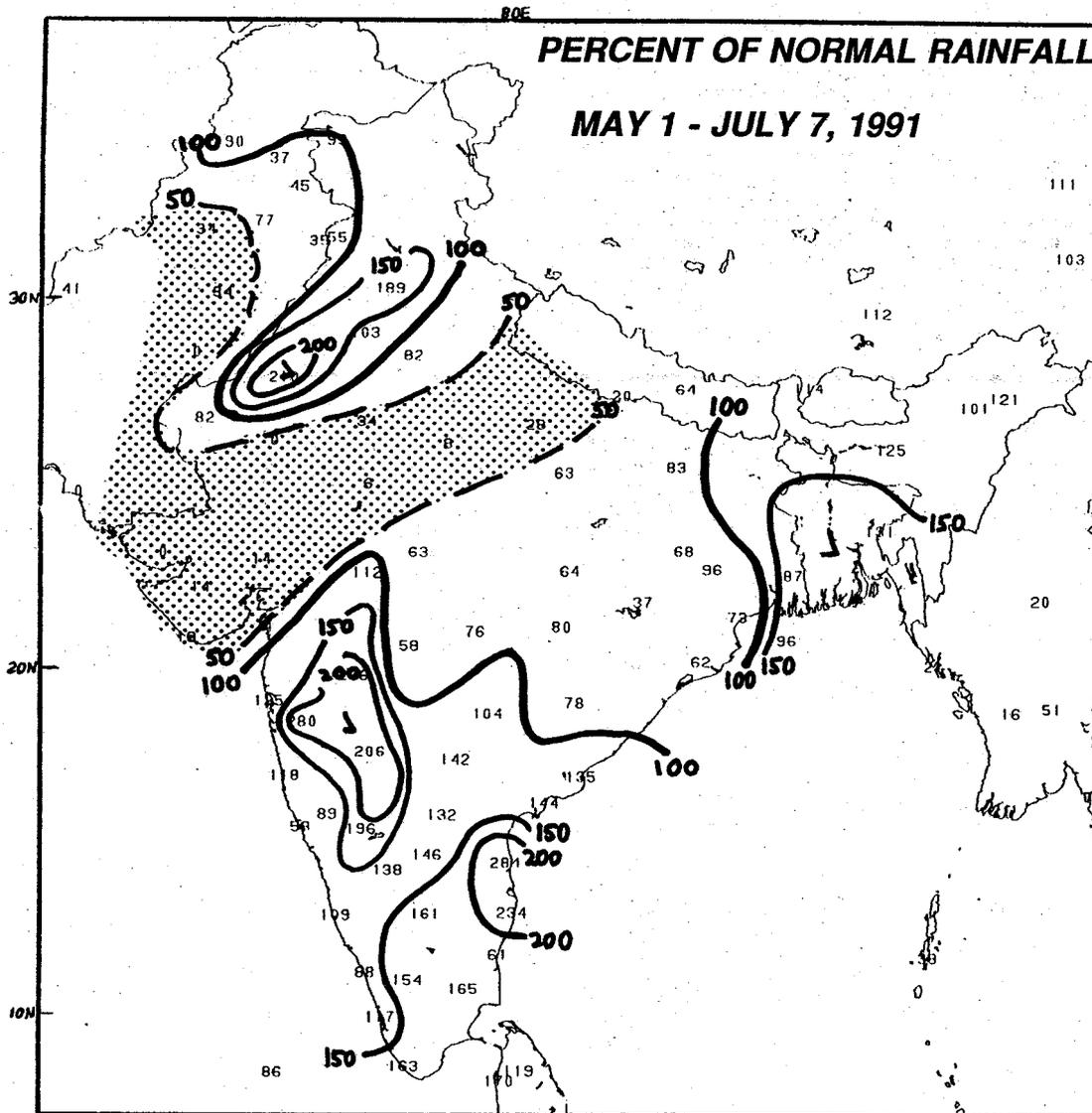
SOUTH AMERICA ... In Argentina, little or no rain, with near-normal temperatures, improved field conditions for wheat planting. Wheat planting should be progressing on schedule except for areas planted after soybeans, where harvesting is still continuing. In southern Brazil, mostly dry weather favored wheat planting. Citrus and coffee harvesting progressed in Sao Paulo, Minas Gerais, and Rio de Janeiro, with only slight delays along coastal regions due to light rains.



MEXICO ... Widespread moderate to heavy rains (25-74mm) fell across the Southern Plateau Corn Belt, favoring vegetative corn, with several areas receiving very heavy rains (171-278mm), causing local flooding. A weak tropical depression (sustained winds less than 35 knots) made landfall along the eastern coast (north of Tampico), producing heavy rains (97-230mm). Pacific moisture streamed into portions of the northwest, bringing light to moderate rains (17-47mm), which increased reservoir levels for irrigation.



CANADA ... Moderate to heavy showers (25-103mm) continued for the second week over Saskatchewan and Manitoba, greatly increasing moisture reserves for vegetative to reproductive spring grains and oilseeds. However, local areas are experiencing some flooding following 2 weeks of heavy rain. Regina, Saskatchewan received about 200mm during the 2-week period, which exceeds the combined June and July normal rainfall by nearly 70mm. In contrast, rainfall tapered off over most Albertan crop areas, helping to dry fields following weeks of chronic wetness. Except for a narrow band across central Alberta, rainfall totaled 5-25mm over the province and temperatures averaged near normal, with periodic warm weather (highs exceeding 28 degrees C) enhancing vegetative growth.



Southwest Monsoon Stalls

Though the southwest monsoon began on schedule across southern India in late May and early June, its progress northward has stalled in recent weeks, leaving large areas of northern India hot and dry. Cumulative rainfall has been less than 50 percent of normal from Gujarat northeastward to Uttar Pradesh. As a result, planting delays are occurring over primary rainfed oilseed and cotton areas.

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(Continued from p. 13)

raspberries, and blueberries were being harvested in Oregon. Peach harvest was active in most Texas production areas with good yields reported. Nut development on Texas pecan trees was showing signs of a potentially good crop. Sweet cherry harvest was underway in Utah, and Washington apples and pears were developing well.

VEGETABLES: Melons, sweet corn, cucumbers, cabbage, and dry onions were being harvested in Arizona. Hot weather during most of the week reduced quality of some California vegetables. Broccoli, cauliflower, celery, and iceberg lettuce harvests were active. Harvest of spring crop dry onions was nearing completion. Fresh market tomato harvest increased in the San Joaquin Valley. Summer-like weather prevailed over vegetable producing areas in Florida, and vegetable harvests were almost complete. Decreasing supplies of watermelons and sweet corn were available. Snap beans, tomatoes, sweet corn, cucumbers, lima beans, and melons were being picked in Maryland. Summer vegetable supplies also increased in New Jersey. New Mexico onion harvest was still active with good quality. Vegetable harvest was picking up momentum in New York. Green pea harvest was underway in Oregon's Willamette Valley. Several summer vegetables were being picked in South Carolina. Tomato harvest was in full swing in Texas, while melon harvests continued.

PASTURES AND LIVESTOCK: Periodic showers improved prospects for continued summer forage in the Southeast, while continued dryness in the West has begun to limit stock water supplies. Hay harvests made good progress during the week.

(Continued from p. 21)

Corn 1% very poor, 2% poor, 12% fair, 61% good, 24% excellent; height 50 in., 28 in. 1990, 37 in. avg.; silked 2%, 0% 1990, 1% avg. Soybean 13% fair, 72% good, 15% excellent. First crop hay 92% harvested, 86% 1990, 92% avg.; second crop 12% harvested, 7% 1990, 10% avg. Oats 85% headed, 83% 1990, 89% avg.

WYOMING: Temperatures near normal. Precipitation below normal statewide.

Days suitable for fieldwork 7.0. Topsoil 40% short, 60% adequate. Subsoil 19% short, 81% adequate. Warm, dry weather speeds small grain maturity. Winter wheat 5% boot, small amount 1990, small amount avg.; 65% headed, 60% 1990, 50% avg.; 30% turning color, 40% 1990, 45% avg.; small amount mature, small amount 1990, 5% avg. Barley 10% jointed, 5% 1990, 5% avg.; 20% boot, 15% 1990, 20% avg.; 65% headed, 70% 1990, 55% avg.; 5% turning color, 10% 1990, 20% avg. Spring wheat 10% jointed, 5% 1990, 10% avg.; 30% boot, 15% 1990, 25% avg.; 55% headed, 70% 1990, 55% avg.; 5% turning color; 10% 1990, 10% avg. Oats 10% jointed, 5% 1990, 10% avg.; 35% booted, 40% 1990, 35% avg.; 50% headed, 55% 1990, 50% avg.; 5% turning color, 0% 1990, 5% avg.; 0% mature, 0% 1990, small amount avg. Dry beans 5% in bloom, 5% 1990, 15% in bloom, 75% 1990. Alfalfa hay first cutting 65% complete, 70% 1990, 70% avg. Other hay 25% harvested, 25% 1990, 25% avg. Small grains, row crops, alfalfa mostly good. Ranges, pastures good to excellent.

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