

# WEEKLY WEATHER AND CROP BULLETIN

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

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

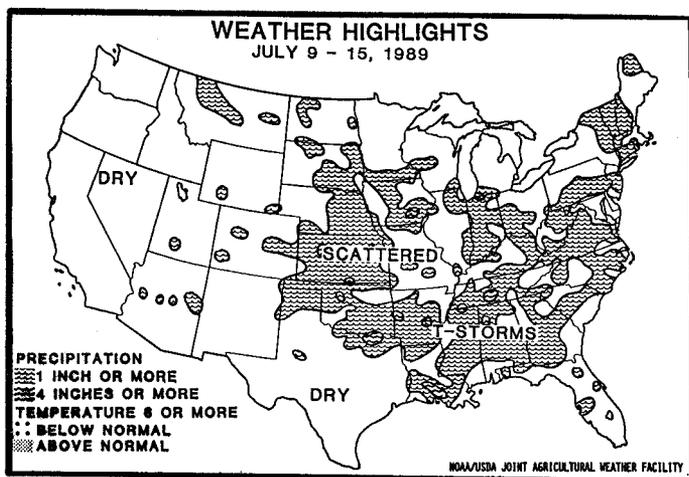
Volume 76, No. 28

Washington, D.C.

July 18, 1989

## National Weather Summary

July 9-15, 1989



## JUNE WORLD PRECIPITATION & TEMPERATURE MAPS

**HIGHLIGHTS:** Last week was a fairly typical July week, with temperatures near to slightly above normal and abundant thunderstorms throughout most of the country. Much needed rain fell across portions of the Rockies and western Corn Belt. The week started off hot and humid across the Nation, but by Wednesday, a high pressure system brought cool temperatures and clear skies to the northern sections. The cold front ahead of the high pressure system produced persistent thunderstorms across the central Plains, Gulf Coast, and Middle Atlantic States. The cold front reached the Gulf Coast States on Saturday. Portions of the Midwest and central Plains had temperatures near 100 degrees early in the week, but the Southwest remained the hottest with temperatures up to 115 degrees.

**SUNDAY:** An upper air high pressure system centered over the central High Plains continued to bring hot and hazy weather to much of the Nation. Isolated showers and thunderstorms developed across the Gulf and Atlantic Coast States and in the northern Rockies.

**MONDAY:** Severe thunderstorms spawned rare tornadoes and produced heavy rain in the Northeast. Showers and thunderstorms were scattered across the northern Rockies into the western Corn Belt, while thunderstorms were widely scattered in the hot, humid air over the central and southern Plains to the Atlantic coast.

**TUESDAY:** Strong thunderstorms produced tornadoes and large hail and spread rain across the northern and central Plains and Corn Belt. Showers brought welcome rain to the very dry tinder in the central and southern Rockies. Thunderstorms again dotted the Southeast.

**WEDNESDAY:** Rain was widespread in the very warm and humid air south of a slow moving cold front, extending from the central Plains to the mid-Atlantic coast. Locally heavy rain inundated portions of eastern Kansas. Showers again brought needed rain to the Rockies.

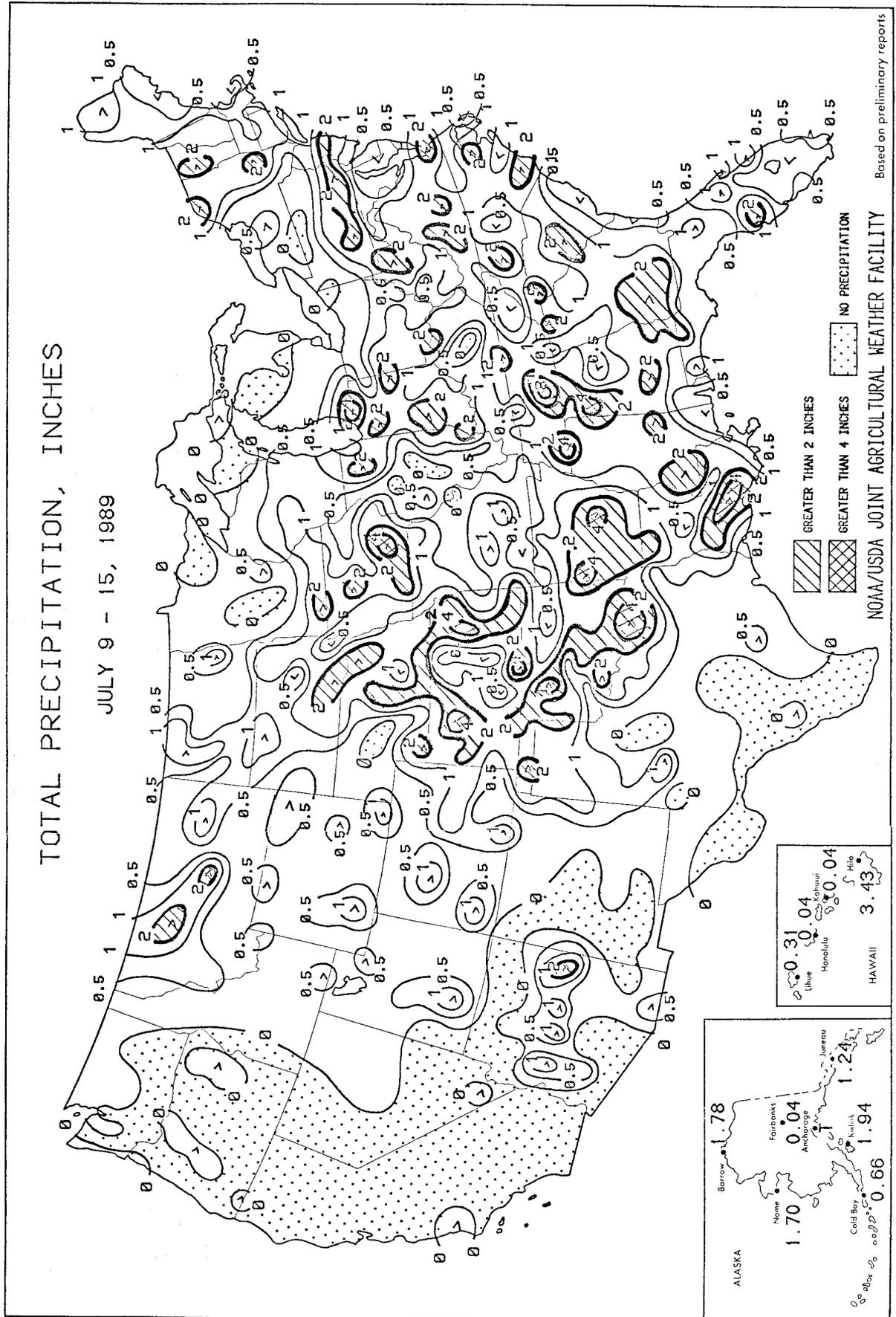
**THURSDAY:** Scattered thunderstorms spread across the central Plains, lower Mississippi Valley, and Atlantic coast due to a slow moving cold front. Parts of southern Pennsylvania, central Arkansas, and western Kansas received between 2 and 4 inches of rain.

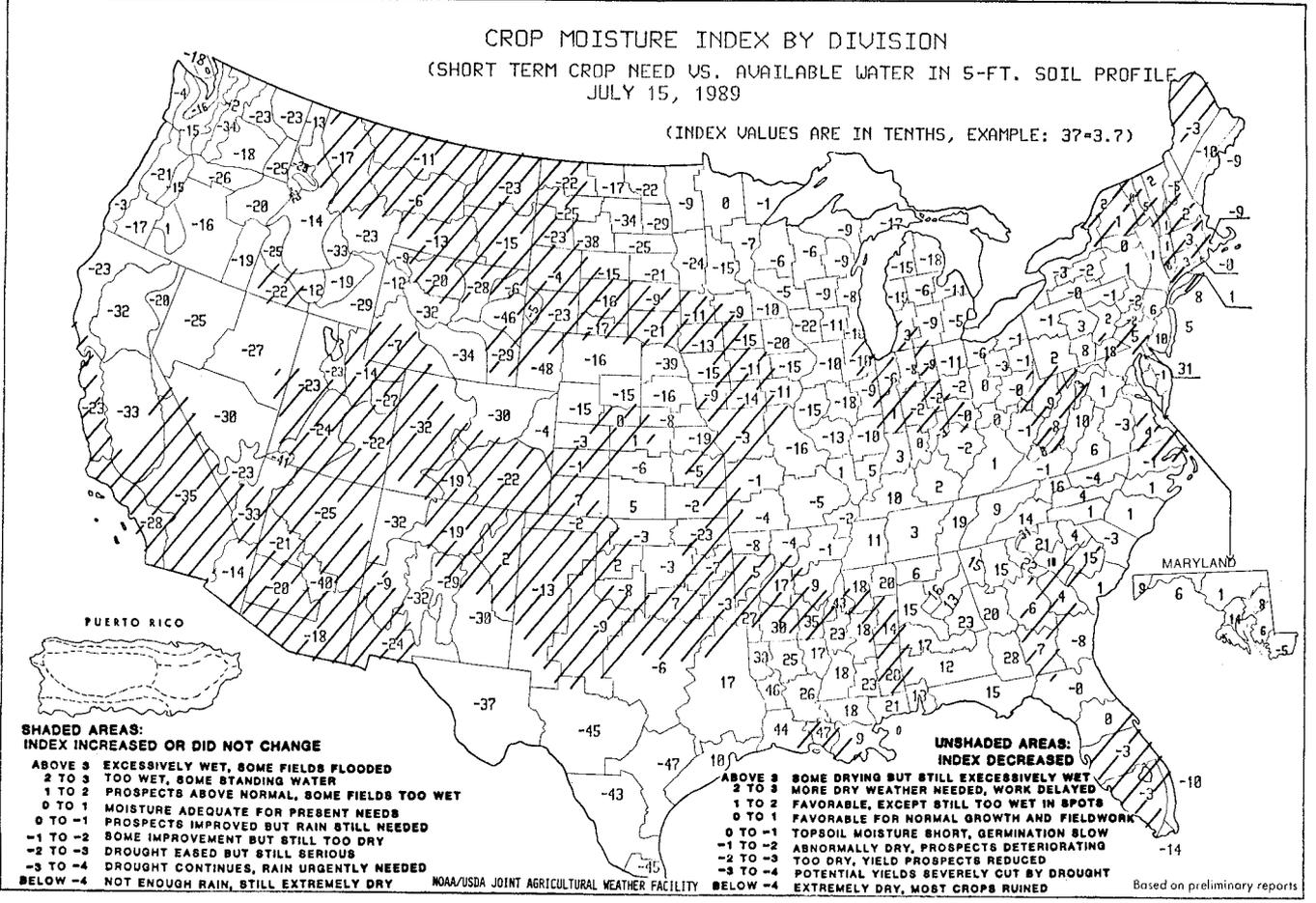
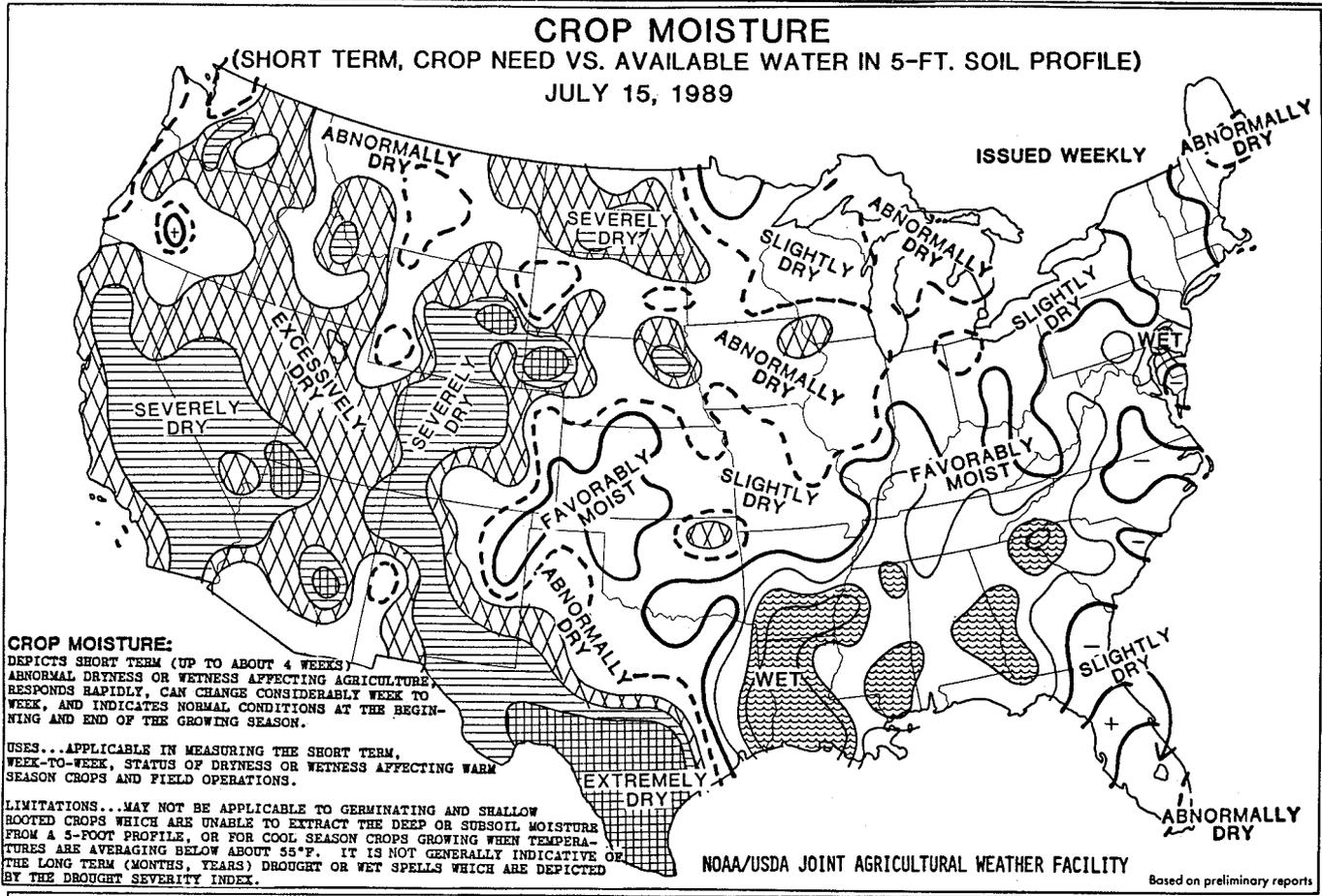
**FRIDAY:** A high pressure system brought clear skies to the Midwest and pushed the cold front farther south, triggering more scattered thunderstorms across the central Plains, Gulf coast and mid-Atlantic coast. Portions of central Oklahoma and southern Louisiana received the heaviest rains. Several cities in the Southwest reported record-high temperatures.

**SATURDAY:** Severe thunderstorms rumbled through the central Plains, bringing heavy rain to parts of Kansas, Nebraska, and Texas. Hail was reported in areas of eastern Colorado. Clear skies were prevalent across the Great Lakes and Northeast.

## Contents

	Page
National Weather Summary . . . . .	1
Total Precipitation . . . . .	2
Drought Moisture Maps . . . . .	3
Drought Severity Map . . . . .	4
Drought Severity Index & Precipitation Needed to End Drought . . . . .	5
Average Temperature & Departure . . . . .	6
Extreme Maximum Temperature Maps . . . . .	7
National Weather Data for Selected Cities . . . . .	8
National Agricultural Summary . . . . .	11
Crop Progress and Condition Tables . . . . .	12
State Summaries of Weather and Agriculture . . . . .	14
International Weather and Crop Summary & June Temperature and Precipitation Maps . . . . .	20
Subscription and Mailing Permit Information . . . . .	32

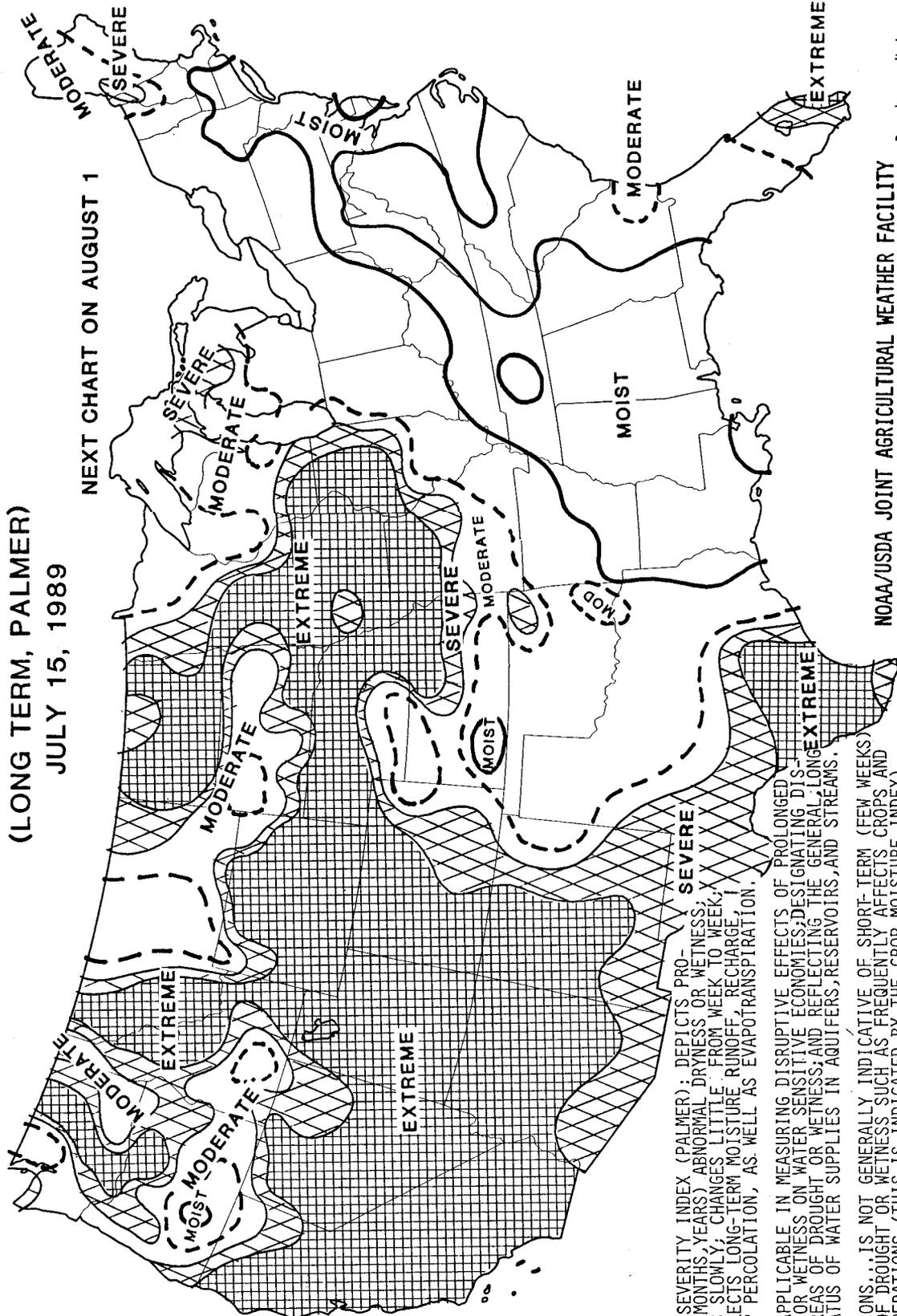




# DROUGHT SEVERITY (LONG TERM, PALMER)

JULY 15, 1989

NEXT CHART ON AUGUST 1



DROUGHT SEVERITY INDEX (PALMER); DEPICTS PRO-  
LONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS;  
RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK;  
AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE,  
AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED  
DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES; DESIGNATING DIS-  
ASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-  
TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS)  
STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND  
FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

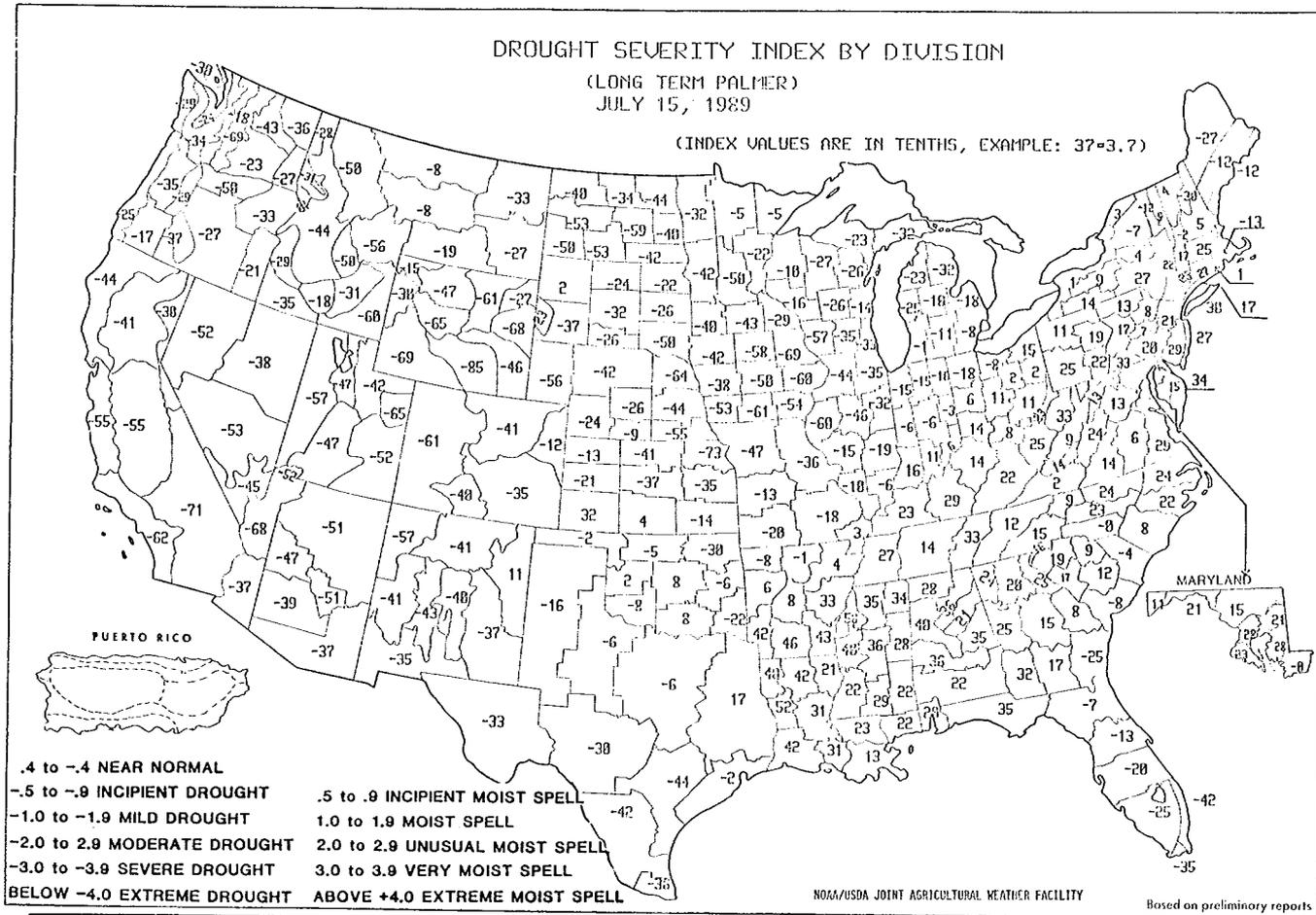
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

DROUGHT SEVERITY INDEX BY DIVISION

(LONG TERM PALMER)  
JULY 15, 1989

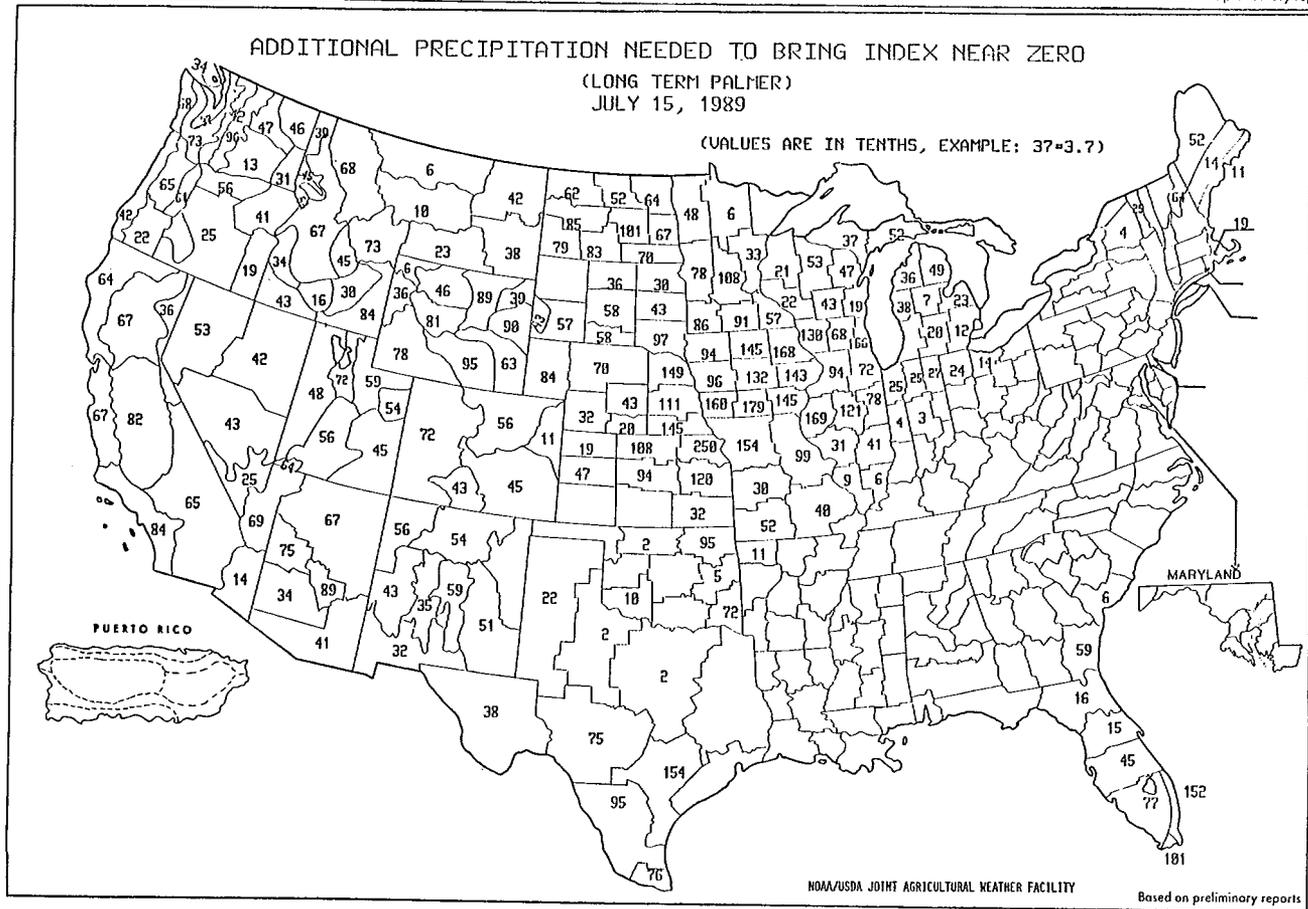
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)

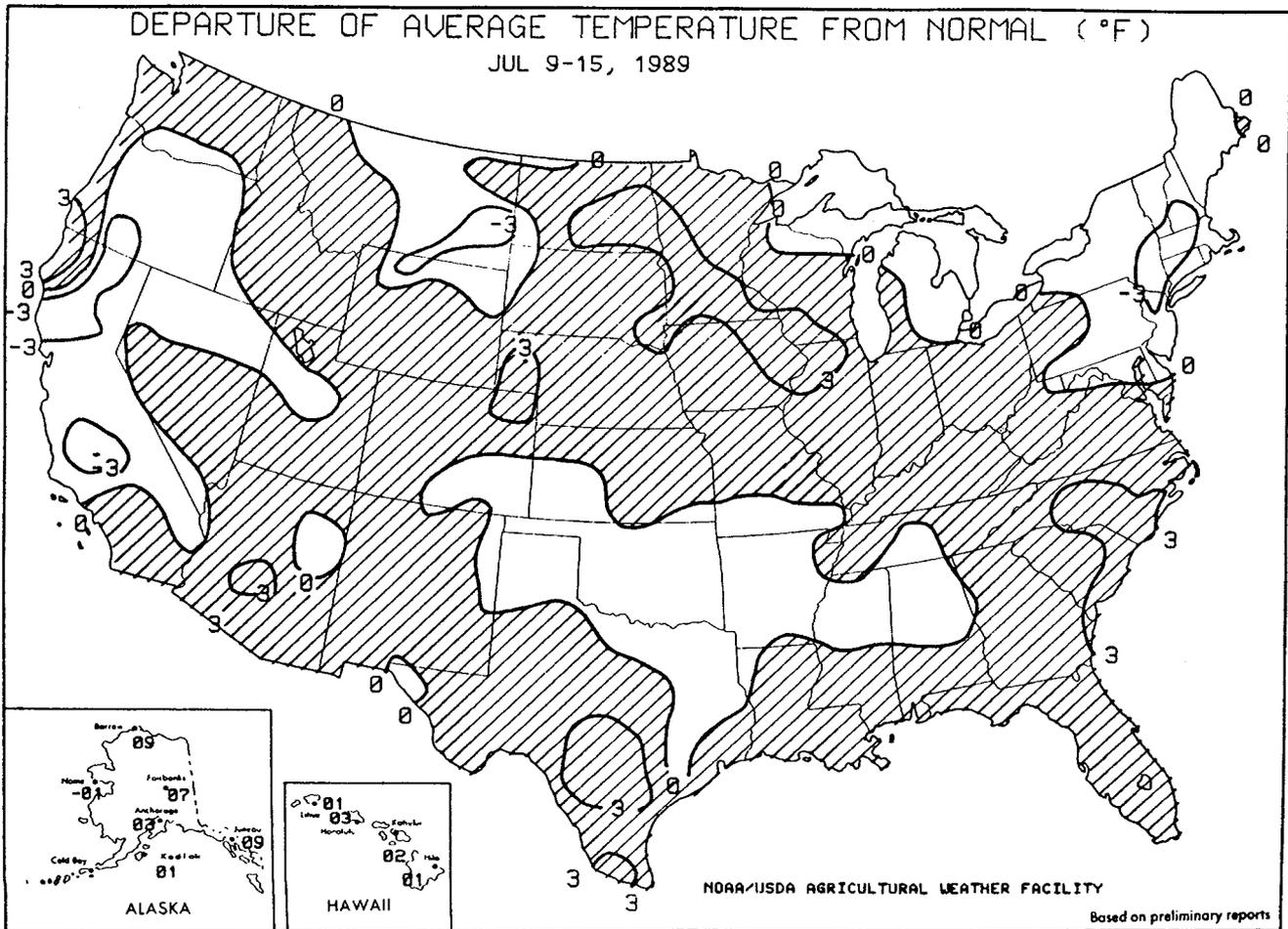
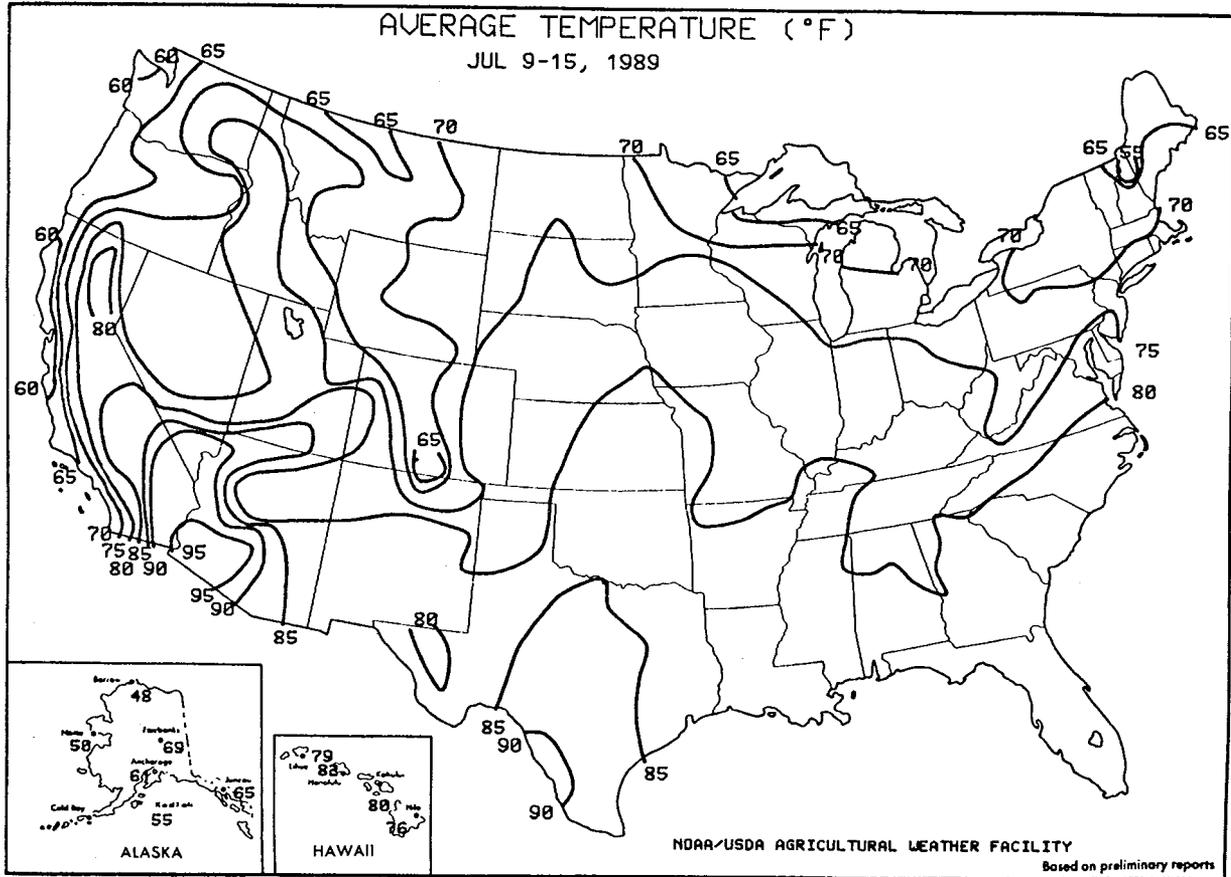


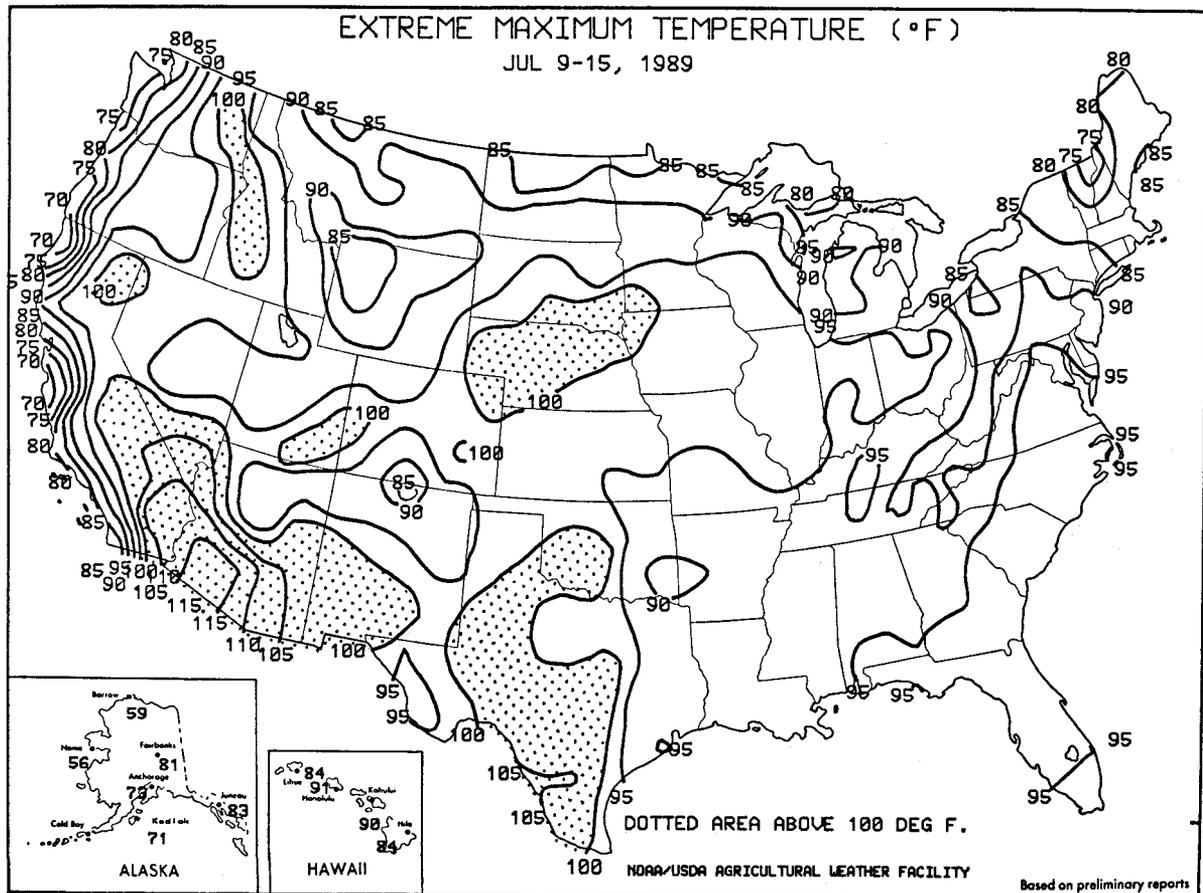
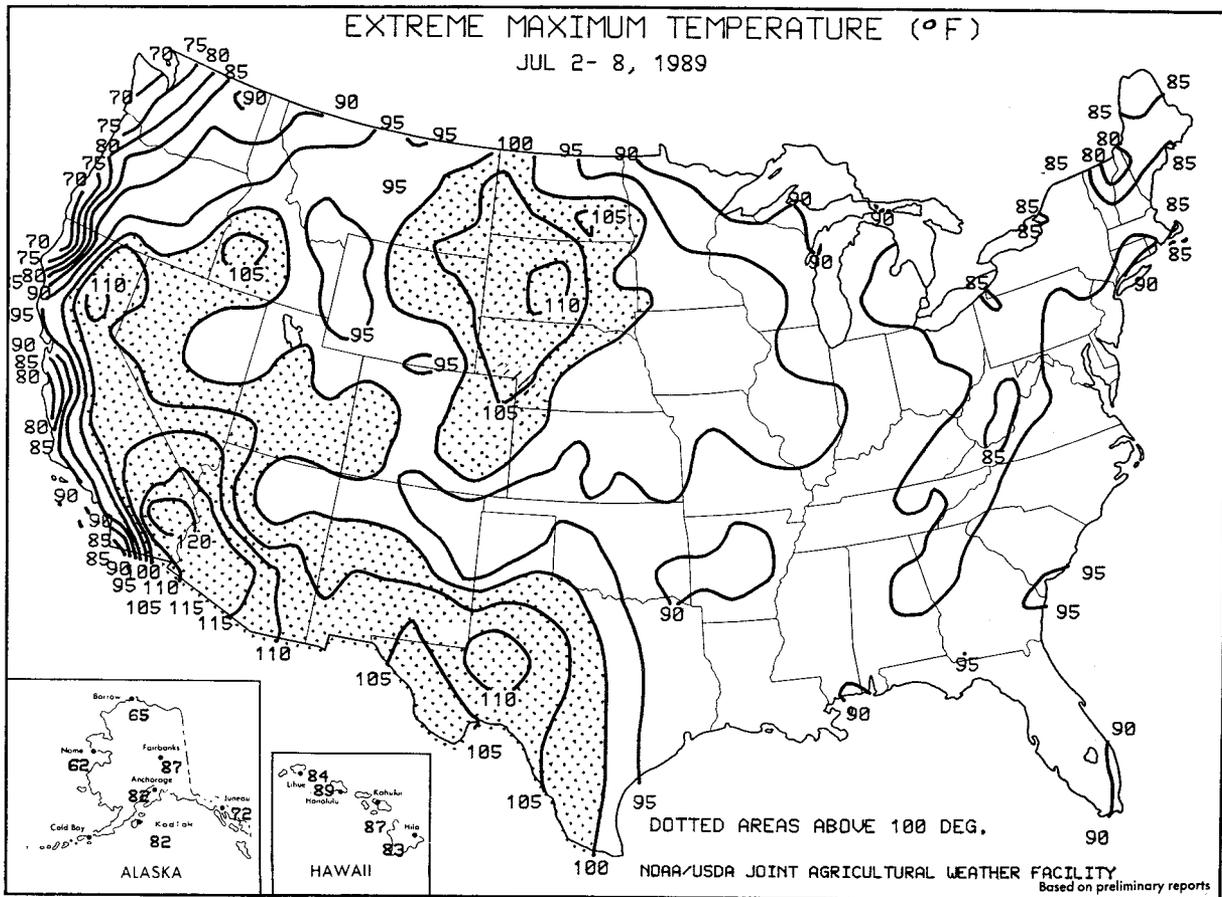
ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO

(LONG TERM PALMER)  
JULY 15, 1989

(VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)







# National Weather Data for Selected Cities

Weather Data for the Week Ending July 15, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT, NORMAL SINCE Jun 1	TOTAL, IN., SINCE JAN 1	PCT, NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	89	70	92	68	80	0	.2	-1.1	.2	18.6	302	41.6	129	94	56	2	0	3	0	
MOBILE	91	73	93	72	82	0	.3	-1.4	.3	12.7	147	31.9	90	96	55	4	0	3	0	
MONTGOMERY	92	72	95	70	82	0	1.5	.4	1.1	19.6	340	42.8	149	97	57	5	0	2	1	
AK ANCHORAGE	69	53	73	49	61	3	T	-4	T	1.4	70	5.0	92	89	56	0	0	0	0	
BARROW	55	40	59	36	48	9	1.8	1.6	1.0	2.3	314	3.2	203	100	79	0	0	6	1	
FAIRBANKS	79	60	81	55	69	7	T	-4	T	2.6	121	5.3	121	77	34	0	0	1	0	
JUNEAU	75	55	83	51	65	9	1.2	.3	.7	2.3	49	14.7	67	87	48	0	0	3	2	
KODIAK	62	49	71	47	55	2	1.9	1.2	1.4	9.2	160	22.7	77	98	76	0	0	5	1	
NOME	53	46	56	39	50	0	1.7	1.2	.5	2.9	136	9.9	196	97	80	0	0	6	0	
AZ PHOENIX	108	84	115	79	96	4	T	-2	T	0	0	2.3	80	43	17	7	0	0	0	
PRESCOTT	90	61	96	56	75	2	.4	-2	.4	24	3.2	41	62	21	4	0	0	0	0	
TUCSON	103	75	110	70	89	3	T	-5	T	.4	34	2.4	63	53	18	7	0	1	0	
YUMA	107	85	112	82	96	2	T	0	T	0	0	.8	90	54	18	7	0	0	0	
AR FORT SMITH	90	71	95	69	81	-1	1.8	1.1	1.4	7.7	148	34.4	154	98	56	5	0	2	1	
LITTLE ROCK	87	72	92	67	80	-2	2.4	1.6	1.7	9.9	182	37.2	131	92	64	3	0	3	2	
CA BAKERSFIELD	97	65	100	61	81	-4	0	0	0	0	0	2.3	59	59	19	7	0	0	0	
FRESNO	64	55	66	53	60	4	T	0	T	.2	35	19.1	86	85	71	0	0	0	0	
EUREKA	97	64	99	60	80	-1	0	0	0	0	0	4.8	69	59	15	7	0	0	0	
FRESNO	75	63	80	61	69	1	0	0	0	T	0	3.2	39	92	62	0	0	0	0	
REDDING	96	63	99	59	80	-4	0	0	0	0	0	1.0	101	19.6	79	57	14	7	0	0
SACRAMENTO	91	56	96	54	74	-2	0	0	0	0	0	4	84	84	25	4	0	0	0	
SAN DIEGO	74	65	80	62	70	0	0	0	0	0	0	2.0	31	88	62	0	0	0	0	
SAN FRANCISCO	72	53	76	51	62	0	T	0	T	T	8	7.4	59	89	49	0	0	0	0	
CO DENVER	89	61	98	57	75	2	.2	-3	.1	2.2	90	9.4	104	73	26	4	0	2	0	
GRAND JUNCTION	95	67	102	64	81	2	T	-1	T	.3	43	3.7	95	51	19	6	0	2	0	
PUEBLO	93	60	100	57	76	0	.5	.1	.5	1.8	91	4.6	83	71	22	3	0	3	0	
CT BRIDGEPORT	80	63	87	59	72	-2	1.1	.3	1.1	8.5	189	29.0	133	75	51	0	0	1	1	
HARTFORD	84	58	87	55	71	0	.8	1	.6	7.9	164	29.0	126	96	45	0	0	2	1	
DC WASHINGTON	87	70	96	65	79	0	.2	-6	.2	8.7	169	29.5	145	87	54	2	0	1	0	
FL APALACHICOLA	91	74	96	73	83	1	1.0	-6	.6	11.1	138	25.4	100	100	61	4	0	3	1	
DAYTONA BEACH	95	72	98	70	84	3	1.0	-3	1.0	2.9	31	17.3	74	95	43	7	0	1	1	
JACKSONVILLE	94	75	98	73	85	2	.1	-1.3	0	6.5	75	16.5	64	91	49	6	0	2	0	
KEY WEST	90	81	92	77	85	1	T	-8	T	4.7	69	10.8	65	83	64	5	0	2	0	
MIAMI	91	77	93	75	84	2	1	-1.2	.1	12.7	104	18.1	65	86	54	6	0	2	0	
ORLANDO	94	73	98	71	84	1	1.3	-6	.5	9.3	85	19.3	76	97	46	7	0	3	0	
TALLAHASSEE	94	70	97	68	82	1	.9	-1.1	.4	21.9	205	38.2	109	98	48	6	0	5	0	
TAMPA	92	76	96	71	84	2	2.0	.3	.8	10.0	115	14.7	65	90	56	7	0	3	2	
WEST PALM BEACH	92	75	96	73	84	1	T	-1.4	T	5.7	51	17.0	60	92	53	6	0	1	0	
GA ATLANTA	90	71	93	70	81	2	1.7	.6	1.5	14.5	257	36.8	126	93	55	3	0	2	1	
AUGUSTA	93	72	97	70	82	2	3.1	2.1	2.5	13.4	225	30.6	118	97	55	5	0	4	1	
MACON	91	72	93	70	81	0	1.4	.4	1.3	8.1	138	29.4	109	96	54	5	0	3	1	
SAVANNAH	95	75	97	72	85	4	.3	-1.3	.3	9.1	99	18.2	67	92	46	7	0	2	0	
HI HILO	82	71	84	69	76	1	3.4	1.6	1.3	17.6	177	115.9	169	96	67	0	0	7	3	
HONOLULU	89	75	91	71	82	3	T	-1	T	.2	23	12.9	97	81	49	3	0	1	0	
KAHULUI	87	72	90	70	80	2	T	0	T	.5	133	26.6	229	89	54	1	0	1	0	
LIIHUE	84	75	84	73	79	1	.3	-2	.3	1.8	68	32.1	138	86	67	0	0	1	0	
ID BOISE	92	61	103	50	77	2	T	-1	T	.1	7	6.5	91	52	15	4	0	0	0	
LEWISTON	89	62	100	54	75	1	T	-1	T	1.6	95	8.3	110	58	25	3	0	0	0	
POCATELLO	87	54	93	46	71	0	.1	0	.1	.7	56	6.7	103	80	20	3	0	1	0	
IL CHICAGO	86	65	101	56	75	2	.6	-2	.2	2.6	43	8.8	48	87	45	2	0	3	0	
MOLINE	89	67	100	57	78	3	1.7	.5	1.6	5.0	74	16.2	79	90	42	3	0	2	1	
PEORIA	88	67	97	57	77	2	T	-9	T	1.3	22	11.2	58	90	52	3	0	0	0	
QUINCY	90	68	97	60	79	2	.2	-8	.2	1.2	19	7.9	39	87	45	5	0	1	0	
ROCKFORD	88	67	100	56	77	4	1.0	0	1.0	3.5	51	11.3	57	85	47	3	0	1	1	
SPRINGFIELD	88	66	95	56	77	0	.2	-6	.2	1.1	20	14.6	77	93	49	3	0	1	0	
IN EVANSVILLE	89	69	95	63	79	1	1.1	.2	.9	8.2	151	32.9	134	96	55	4	0	2	1	
FORT WAYNE	88	66	97	58	77	3	T	-7	T	5.9	111	18.6	96	89	46	3	0	2	0	
INDIANAPOLIS	85	66	92	59	76	1	.8	-2	.5	6.7	111	23.6	107	93	53	2	0	2	0	
SOUTH BEND	84	64	95	56	74	2	4.1	3.2	3.6	7.6	133	18.0	90	95	52	3	0	3	1	
IA DES MOINES	88	69	99	61	78	2	1.0	.3	.5	3.2	56	11.5	67	87	44	3	0	2	1	
SIOUX CITY	89	67	102	59	78	3	.6	-2	.6	2.8	50	7.5	51	86	41	3	0	2	1	
WATERLOO	90	67	101	54	79	6	.2	-9	.2	1.6	24	7.8	43	89	40	2	0	2	0	
KS CONCORDIA	90	71	97	62	81	1	.4	-4	.3	6.2	104	12.3	79	87	46	5	0	2	0	
DODGE CITY	91	68	100	62	80	0	1.8	1.1	1.8	8.5	188	13.6	114	88	43	4	0	1	1	
GOODLAND	90	65	98	59	77	1	1.1	.5	1.0	9.2	236	13.5	139	85	37	4	0	2	1	
TOPEKA	91	70	97	66	81	2	3.0	2.1	1.7	7.8	108	17.6	96	92	50	5	0	4	2	
WICHITA	90	71	95	66	81	0	.3	-6	.2	10.6	181	19.3	123	90	52	4	0	2	0	
KY BOWLING GREEN	90	69	96	63	80	1	.6	-4	.6	14.3	213	44.8	154	96	55	4	0	2	1	
LEXINGTON	87	67	93	62	77	1	T	-1.1	T	5.0	75	33.1	125	95	50	3	0	0	0	
LOUISVILLE	88	70	94	63	79	2	.9	0	.5	7.4	133	34.9	139	91	50	3	0	2	1	
LA ALEXANDRIA	90	75	93	74	83	0	.1	-9	.1	15.2	252	47.4	154	94	60	6	0	2	0	
BATON ROUGE	92	75	95	73	83	1	.3	-1.3	.3	26.3	415	53.5	173	98	59	6	0	1	0	
LAKE CHARLES	90	76	92	73	83	1	.8	-4	.5	28.6	437	48.6	179	95	63	5	0	2	0	
NEW ORLEANS	91	74	94	72	82	0	1.4	-1	.7	12.1	155	28.5	89	100	63	6	0	5	2	

Based on 1951-80 normals

Weather Data for the Week Ending July 15, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	92	73	94	73	83	0	.3	-.5	.3	20.1	383	47.3	183	100	56	6	0	3	0
ME CARIBOU	74	52	82	46	63	-2	1.1	-.2	1.1	3.7	74	14.8	85	93	51	0	0	3	1
ME PORTLAND	80	58	86	53	69	1	.6	-.1	1.4	5.4	122	22.8	100	90	48	0	0	2	0
MD BALTIMORE	85	67	94	62	76	-1	.4	-.5	.4	8.0	145	30.5	139	91	53	2	0	1	0
MA SALISBURY	86	67	94	60	77	0	.4	-.6	.3	6.6	119	23.8	104	92	54	2	0	2	0
MA BOSTON	81	63	87	62	72	-1	.3	-.3	.3	4.2	100	17.5	76	77	42	0	0	3	0
MA CHATHAM	77	61	82	58	69	2	.5	-.2	.3	4.9	120	24.7	102	90	66	0	0	3	0
MI ALPENA	80	52	88	42	66	-1	T	-.7	T	2.7	58	11.5	77	96	40	0	0	0	0
MI DETROIT	82	62	92	54	72	0	.2	-.5	.2	4.0	81	14.6	87	89	49	1	0	1	0
MI FLINT	81	58	90	50	70	0	.1	-.5	.1	5.6	123	15.0	97	91	44	1	0	3	0
MI GRAND RAPIDS	81	61	89	53	71	-1	.3	-.4	.3	5.4	104	15.9	90	91	48	0	0	3	0
MI HOUGHTON LAKE	81	54	88	44	68	1	T	-.7	T	2.9	65	11.8	82	85	41	0	0	0	0
MI LANSING	82	59	90	51	70	0	.1	-.5	.1	3.7	71	15.7	99	92	49	1	0	2	0
MI MARQUETTE	74	48	90	32	61	-4	0	-.7	0	5.6	102	15.5	78	90	43	1	1	0	0
MI MUSKEGON	81	62	88	53	72	1	.3	-.2	.2	1.7	48	11.6	74	88	46	0	0	4	0
MI SAULT ST. MARIE	76	49	85	41	63	-1	.1	-.6	.1	2.7	57	13.2	84	96	43	0	0	2	0
MN ALEXANDRIA	84	63	89	59	74	3	T	-.7	T	2.5	46	8.4	62	88	43	0	0	0	0
MN DULUTH	78	53	91	44	66	1	.1	-.8	.1	4.1	71	13.4	90	89	41	1	0	2	0
MN INT'L FALLS	79	56	88	51	68	1	.3	-.6	.3	7.9	141	12.9	105	94	45	0	0	1	0
MN MINNEAPOLIS	86	67	96	57	76	3	.2	-.6	.1	4.2	73	14.0	98	85	43	2	0	2	0
MN ROCHESTER	83	63	92	54	73	2	1.1	-.3	1.1	4.2	74	11.9	80	95	49	2	0	1	1
MS GREENWOOD	90	73	94	73	82	0	1.2	-.1	.7	18.5	331	45.3	142	95	57	5	0	2	1
MS JACKSON	91	72	94	72	82	0	1.0	0	.8	12.0	227	33.5	109	100	59	5	0	3	1
MS MERIDIAN	92	72	94	69	82	1	3.5	2.3	2.7	14.3	235	41.4	130	97	55	6	0	3	2
MO CAPE GIRARDEAU	90	72	96	63	81	-1	.1	-.8	.1	12.4	233	36.3	142	94	50	4	0	1	0
MO COLUMBIA	88	70	95	63	79	1	.3	-.4	.3	3.6	69	16.2	79	92	49	4	0	1	0
MO KANSAS CITY	90	71	97	64	81	1	4.4	3.4	4.1	7.9	117	17.6	90	91	47	5	0	2	1
MO SAINT LOUIS	90	74	98	66	82	3	T	-.9	T	2.7	49	17.5	89	79	45	4	0	0	0
MO SPRINGFIELD	88	67	91	63	78	-1	.3	-.6	.1	3.5	54	19.1	87	96	51	4	0	2	0
MT BILLINGS	81	59	93	54	70	-2	.2	0	.1	1.4	54	9.6	101	85	38	1	0	5	0
MT GLASGOW	83	59	91	55	71	1	.1	-.4	0	1.1	32	6.4	96	80	32	2	0	2	0
MT GREAT FALLS	81	55	89	50	68	-2	2.4	2.1	1.2	4.4	130	12.7	128	88	36	0	0	3	2
MT HAVRE	79	56	90	50	68	-2	.5	-.1	.3	2.1	73	6.8	93	65	34	1	0	3	0
MT HELENA	85	58	93	53	71	3	.5	-.2	.4	1.9	73	7.2	100	75	27	1	0	3	0
MT KALISPELL	79	52	90	40	66	1	.8	-.6	.5	2.3	85	10.4	115	88	39	1	0	4	0
MT MILES CITY	79	61	92	57	70	-4	.2	-.1	.2	1.1	30	8.8	97	57	32	1	0	1	0
MT MISSOULA	86	54	93	46	70	3	.8	-.6	.3	2.2	95	7.9	99	85	29	2	0	4	0
NE GRAND ISLAND	89	68	99	62	78	2	1.0	-.3	.8	5.8	114	9.5	67	91	50	4	0	3	1
NE LINCOLN	90	70	100	62	80	2	1.3	-.6	.8	6.0	111	9.4	60	91	47	5	0	4	1
NE NORFOLK	89	66	101	55	77	2	2.1	1.4	1.8	4.1	68	9.3	64	90	43	5	0	2	1
NE NORTH PLATTE	89	63	102	58	76	1	T	-.7	T	3.9	75	8.7	70	91	41	3	0	0	0
NE OMAHA	87	70	99	60	79	1	.8	0	.4	5.3	90	9.9	60	85	50	4	0	2	0
NE SCOTTSBLUFF	93	62	103	58	78	3	.1	-.4	.1	1.3	31	5.6	56	76	24	5	0	1	0
NE VALENTINE	89	64	101	56	76	2	1.5	-.9	1.1	3.1	73	6.3	60	77	37	5	0	2	1
NV ELY	87	49	92	41	68	1	.1	0	-.1	1.1	103	4.0	75	59	16	2	0	3	0
NV LAS VEGAS	103	77	109	67	90	0	.1	0	-.1	.1	21	1.3	68	35	10	7	0	1	0
NV RENO	90	51	95	48	71	1	0	0	0	1.5	348	4.4	97	53	9	3	0	0	0
NV WINNEMUCCA	93	51	99	44	72	0	T	0	T	.3	30	2.7	57	34	8	5	0	0	0
NH CONCORD	80	53	83	50	67	-3	1.4	-.7	1.0	6.4	147	19.9	107	96	43	0	0	4	1
NJ ATLANTIC CITY	84	63	92	56	73	-1	1.1	-.2	1.1	6.5	143	26.2	122	96	51	2	0	1	1
NM ALBUQUERQUE	94	68	97	65	81	2	T	-.3	T	T	2	1.4	46	54	16	7	0	0	0
NM CLOVIS	88	64	94	62	76	-1	1.5	-.8	1.0	5.9	148	7.2	86	86	37	4	0	3	1
NM ROSWELL	97	69	99	68	83	2	1	-.3	0	.1	8	1.7	42	64	23	7	0	2	0
NY ALBANY	82	56	84	52	69	-3	2.0	1.3	1.6	10.3	220	23.6	128	94	45	0	0	2	1
NY BINGHAMTON	77	57	86	51	67	-2	T	-.8	T	7.9	151	22.5	117	94	50	0	0	1	0
NY BUFFALO	79	59	85	51	69	-2	T	-.6	T	8.2	205	24.8	136	86	39	0	0	1	0
NY NEW YORK	84	69	92	64	76	0	.6	-.2	.3	9.4	196	30.3	137	80	44	1	0	3	0
NY ROCHESTER	81	58	88	52	70	-2	.6	0	.5	6.2	157	20.4	125	93	42	0	0	2	0
NY SYRACUSE	81	56	88	52	69	-2	T	-.8	T	5.8	107	17.5	87	94	44	0	0	1	0
NC ASHEVILLE	85	64	89	62	75	1	.6	-.2	.6	14.0	254	31.9	132	98	53	0	0	2	1
NC CHARLOTTE	92	74	95	71	83	4	.8	-.1	.5	7.5	138	26.7	108	80	42	6	0	2	0
NC GREENSBORO	91	69	95	68	80	3	.3	-.7	.3	7.8	131	28.5	123	93	47	5	0	1	0
NC HATTERAS	87	73	93	66	80	2	T	-.1	T	5.1	76	37.4	140	95	61	2	0	1	0
NC NEW BERN	91	73	97	71	82	3	1.6	-.1	.9	11.8	142	33.2	122	97	53	3	0	3	2
NC RALEIGH	91	70	96	67	81	3	1.8	-.8	1.3	10.1	177	32.0	140	99	53	4	0	2	1
NC WILMINGTON	92	74	97	71	83	3	3.1	1.4	3.0	13.0	142	35.2	128	97	56	4	0	2	1
ND BISMARCK	88	61	93	49	75	4	.1	-.4	.1	.8	19	5.7	60	88	30	3	0	2	0
ND FARGO	86	61	93	52	74	3	T	-.7	T	1.5	33	8.7	83	93	35	1	0	2	0
ND GRAND FORKS	85	60	90	53	72	3	.1	-.6	0	1.6	36	6.7	69	93	36	1	0	3	0
ND WILLISTON	84	59	89	53	72	1	.5	-.1	.4	2.1	58	7.1	87	96	37	0	0	2	0
OH AKRON-CANTON	84	63	96	53	74	2	1.2	-.8	.1	8.8	169	25.3	127	94	47	2	0	2	0
OH CINCINNATI	87	68	95	61	78	2	1.5	-.5	1.0	5.5	88	29.6	127	89	44	3	0	2	2
OH CLEVELAND	81	65	96	55	73	1	T	-.7	T	6.8	133	26.9	140	91	53	1	0	2	0
OH COLUMBUS	84	65	94	54	75	1	.8	-.2	.5	8.0	135	25.2	119	92	49	2	0	3	1

Weather Data for the Week Ending July 15, 1989

STATES  AND  STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	86	67	95	58	76	2	1.2	.4	.9	7.3	134	33.7	166	91	49	2	0	2	1
TOLEDO	83	62	96	54	72	0	.3	-.4	.2	7.1	141	20.1	116	91	50	1	0	0	0
YOUNGSTOWN	82	61	91	50	71	1	T	-.9	T	11.6	214	26.9	133	94	49	1	0	0	0
OK OKLAHOMA CITY	92	72	99	70	82	0	.4	-.3	.3	15.7	292	26.1	145	92	49	5	0	2	0
TULSA	91	75	94	69	83	0	.3	-.5	.2	6.2	97	18.8	86	91	54	5	0	2	0
OR ASTORIA	87	55	71	47	61	1	T	-.2	T	3.3	105	33.5	92	91	65	0	0	1	0
BURNS	85	47	91	41	66	1	0	-.1	0	1.1	151	6.7	120	67	15	1	0	0	0
MEDFORD	86	54	94	50	70	0	-.3	-.1	0	.2	21	10.4	101	80	28	2	0	0	0
PENDLETON	87	57	92	48	72	-.2	0	-.1	0	.6	70	8.6	128	59	24	4	0	0	0
PORTLAND	76	57	87	51	66	-.1	T	-.1	T	0	0	17.9	91	86	47	0	0	0	0
SALEM	78	54	86	46	66	0	0	-.1	0	1.0	73	16.0	74	85	40	0	0	0	0
PA ALLENTOWN	83	62	91	57	73	-.1	-.8	-.2	.8	7.1	134	25.8	112	89	47	1	0	1	1
ERIE	79	62	88	52	71	1	.1	-.7	0	5.2	94	23.0	118	84	48	0	0	3	0
HARRISBURG	82	64	93	58	73	-.2	2.6	1.8	2.3	10.3	196	28.9	136	94	51	2	0	2	1
PHILADELPHIA	85	67	92	62	76	-.1	1.1	-.3	1.1	10.4	182	29.6	134	89	50	3	0	1	1
PITTSBURGH	84	65	91	53	74	2	.1	-.8	-.1	10.9	205	29.8	143	90	49	2	0	1	0
SCRANTON	79	58	87	51	68	-.3	T	-.7	T	7.3	144	21.3	118	93	50	0	0	1	0
RI PROVIDENCE	81	61	86	57	71	-.2	-.9	.3	.8	7.4	180	26.7	113	94	50	0	0	2	1
SC CHARLESTON	94	74	98	72	84	4	.4	-.3	.4	8.1	81	21.2	75	93	51	6	0	2	0
COLUMBIA	94	72	98	70	83	2	3.1	1.9	2.2	11.5	165	30.2	108	98	50	6	0	2	2
FLORENCE	94	74	99	73	84	3	1.1	-.2	1.0	6.5	88	23.1	94	97	49	6	0	2	1
GREENVILLE	91	69	95	67	80	1	.7	-.4	.6	8.7	132	26.4	89	94	50	4	0	2	1
SD ABERDEEN	84	62	93	56	73	1	1.0	.5	1.0	3.1	70	10.0	91	94	46	2	0	1	1
HURON	85	63	94	58	74	0	.4	-.1	.4	3.7	81	9.4	82	94	46	3	0	2	0
RAPID CITY	86	62	94	55	74	1	.6	-.1	.2	1.6	37	5.8	53	82	39	4	0	5	0
SIOUX FALLS	88	66	108	57	77	3	.2	-.4	-.1	2.8	56	7.6	56	92	44	3	0	3	0
TN CHATTANOOGA	90	71	94	64	80	2	.1	-1.0	.1	15.8	285	42.7	141	96	51	4	0	1	0
KNOXVILLE	89	67	93	64	78	0	.1	-1.0	.1	9.2	151	33.0	118	98	53	3	0	1	0
MEMPHIS	92	73	93	69	83	0	.9	-.1	.5	10.5	191	39.1	128	90	52	5	0	2	1
NASHVILLE	89	70	95	65	79	0	.7	-.2	.6	10.7	194	37.2	130	92	55	3	0	4	1
TX ABILENE	95	74	98	73	85	1	0	-.5	0	10.4	295	19.5	160	80	34	7	0	0	0
AMARILLO	91	66	98	64	78	-.1	1.5	-.9	.7	7.6	157	12.1	115	87	35	4	0	5	1
AUSTIN	98	76	102	75	87	2	T	-.4	T	3.2	79	19.3	113	93	35	7	0	0	0
BEAUMONT	92	76	93	74	84	1	.1	-1.3	.1	21.7	286	47.5	169	93	59	7	0	2	0
BROWNSVILLE	95	76	97	73	86	2	0	-.3	0	2.4	69	9.6	93	93	44	7	0	0	0
CORPUS CHRISTI	95	75	98	72	85	1	.1	-.5	.1	3.3	66	10.1	72	100	49	7	0	1	0
DEL RIO	99	77	103	76	88	2	0	-.4	0	.5	19	5.5	65	61	24	7	0	0	0
EL PASO	97	69	101	66	83	0	.1	-.3	0	.1	6	2.2	78	67	21	7	0	2	0
FORT WORTH	92	75	97	74	84	-.2	.8	-.3	.6	11.0	325	32.5	183	93	51	6	0	3	1
GALVESTON	89	81	96	79	85	2	T	-.9	T	13.3	248	25.5	136	85	65	1	0	0	0
HOUSTON	92	76	94	73	84	1	.1	-.8	.1	18.2	295	42.9	178	95	56	7	0	1	0
LUBBOCK	97	69	101	66	83	3	.1	-.4	.1	5.1	129	7.7	83	79	28	7	0	3	0
MIDLAND	99	70	100	66	84	3	T	-.4	T	.6	27	3.5	53	69	25	7	0	0	0
SAN ANGELO	99	71	102	67	85	1	T	-.3	T	2.8	116	10.6	119	79	24	7	0	1	0
SAN ANTONIO	100	78	102	77	89	4	T	-.4	T	4.1	103	11.4	76	83	29	7	0	0	0
VICTORIA	93	77	96	75	85	1	T	-.6	T	6.3	107	14.2	77	94	49	7	0	2	0
WACO	97	76	102	75	86	1	.1	-.3	.1	5.8	167	23.8	135	90	42	7	0	1	0
WICHITA FALLS	96	74	103	71	85	0	1.9	1.5	1.9	10.4	270	21.3	143	89	42	6	0	1	1
UT CEDAR CITY	90	62	93	55	76	2	T	-.2	T	1.1	122	3.8	73	52	16	5	0	0	0
SALT LAKE CITY	93	64	100	57	79	1	.4	.2	.3	.6	47	6.7	72	66	17	5	0	3	0
VT BURLINGTON	80	56	82	52	68	-.1	-2.0	1.3	2.0	5.7	108	14.4	87	90	37	0	0	2	1
VA NORFOLK	90	73	99	68	82	3	2.3	1.2	1.3	8.0	138	32.2	139	91	50	4	0	3	2
RICHMOND	88	69	96	63	79	1	1.2	.1	.7	7.6	127	28.1	126	96	56	2	0	3	1
ROANOKE	87	66	94	60	77	1	2.0	1.2	1.4	15.2	308	30.5	144	97	58	2	0	4	1
WA QUILLAYUTE	69	49	73	45	59	0	T	-.6	T	5.9	144	46.9	85	96	57	0	0	1	0
SEATTLE-TACOMA	75	56	84	54	66	1	T	-.2	T	1.3	73	18.9	97	84	47	0	0	0	0
SPOKANE	85	56	94	48	70	1	.1	0	.1	.5	35	8.1	87	77	27	2	0	2	0
YAKIMA	88	56	95	48	72	2	T	0	T	.1	8	3.4	79	71	26	3	0	0	0
WV BECKLEY	80	62	88	53	71	2	.7	-.3	.4	4.7	75	23.2	97	99	64	0	0	3	0
CHARLESTON	85	67	93	59	76	1	.4	-.9	.4	8.4	144	34.1	145	97	60	2	0	1	0
HUNTINGTON	85	67	92	60	76	0	.7	-.3	.7	7.5	132	33.3	144	94	58	2	0	1	1
PARKERSBURG	86	65	94	55	75	1	.3	-.7	-.1	6.0	103	29.4	136	100	62	2	0	3	0
WI GREEN BAY	81	60	92	51	70	1	.8	.1	.5	3.1	65	11.4	78	89	53	2	0	4	0
LACROSSE	87	66	98	57	76	3	.9	0	.9	2.5	42	10.5	64	94	42	2	0	1	1
MADISON	84	63	97	50	73	2	.6	-.2	.3	4.0	71	11.3	69	93	48	2	0	3	0
MILWAUKEE	80	63	95	57	71	1	1.4	.6	1.0	3.3	62	12.1	72	81	52	2	0	3	0
WAUSAU	82	60	95	53	71	2	.5	-.4	.5	3.3	57	11.6	71	84	45	2	0	2	0
WY CASPER	88	53	95	48	71	0	.1	-.1	.1	2.1	118	7.5	103	85	20	2	0	3	0
CHEYENNE	84	58	96	54	71	2	1.2	.8	.6	3.8	128	7.6	91	82	31	1	0	4	2
LANDER	85	56	89	53	70	0	.2	0	.1	2.9	158	10.5	117	81	25	0	0	4	0
SHERIDAN	83	58	88	50	71	1	.5	.3	.2	2.1	76	8.5	87	89	34	0	0	3	0
PR SAN JUAN	-999	79	-999	75	-999	-	0	-1.1	0	0	0	8.9	37	51	69	0	0	0	0

## National Agricultural Summary

JULY 10-16, 1989

**HIGHLIGHTS:** A generally wet week again dominated the Delta and much of the eastern United States, slowing crop progress and limiting fieldwork. The number of days suitable for fieldwork averaged less than three in Alabama, Louisiana, and Mississippi as well as Tennessee and West Virginia. Soil moisture was mostly short in the western Corn Belt and short to adequate in the North Central States and in the West.

Winter wheat was 71 percent (%) harvested, 6 percentage points behind the 5-year average. Harvest progressed substantially in several Corn Belt States, particularly Ohio, Indiana, Nebraska, South Dakota, and Kansas. Spring wheat condition continued to decline to mostly fair. Heading progressed to 93% complete, one point behind normal. Corn condition was again mostly good, with 27% silked or 14 points behind the average. Soybeans were mostly fair to good. Thirty-four percent of the crop was in the bloom stage, compared with the 42 average. The amount setting pods was 5%, 5 points behind normal. Cotton was rated mostly fair to good; Mississippi showed some improvement over the week before. Squaring progressed to 74%, 5 points behind normal. The percentage setting bolls was 25, lagging behind the average by 9 points. Sorghum condition was mostly fair to good, as heading progressed only slightly to 18%, or 3 points behind normal. Citrus groves in Florida were in excellent condition. Pasture and range condition was mostly good in the East and poor to fair in the West.

**SMALL GRAIN:** Winter wheat harvest was 71% complete, 6 points behind normal. Harvest advanced 30 or more points in Nebraska, Colorado, Indiana, and Ohio. Kansas, South Dakota, Illinois, and North Carolina also progressed substantially. Harvest progress lagged behind normal in virtually all of the 20 major producing States. Colorado, Michigan, and Ohio were more than 20 points behind normal. Harvest was complete in New Mexico and nearing completion in 6 other States. Many fields in Kansas and Oklahoma remained too wet to harvest.

Spring wheat was rated mostly fair, as conditions were less favorable in Minnesota, Montana, and North Dakota. Heading progressed to 93% complete, 1 point behind normal. In Montana, fields were 48% headed, a jump of 30 points in 1 week. Heading progress was ahead of normal in North Dakota and Minnesota, while progress was behind normal in Idaho and Montana. Virtually all fields were headed in South Dakota.

**CORN:** Corn was in mostly good condition with 27% in the silking stage, 14 points behind the average. Condition was essentially the same or slightly below the previous week's rating in the 17 major States. Silking progressed rapidly in Illinois, Iowa, Kansas, and Missouri. Kansas silking progress equalled the average, while Missouri was slightly ahead of the average. All remaining major States trailed the average. In Nebraska, conditions worsened in eastern dryland fields.

**SOYBEANS:** Soybeans were rated mostly fair to good, similar to the week before. Thirty-four percent was in the bloom stage, 8 points behind normal. Only 5% were setting pods, compared with the average of 10 percent. Illinois soybeans advanced 31 points to 61% in the bloom stage. Iowa progressed 30 points. Other major States that advanced substantially during the week included Minnesota, Missouri, and Nebraska. Replanting efforts in the

Delta region continued; however, time is running out to get wet fields replanted. Double crop planting is active in other areas.

**COTTON:** Cotton was rated mostly fair to good, with many States showing slight improvement over the previous week. Squaring progressed to 74% complete, 5-points behind normal. Twenty-five percent of the crop was setting bolls, 9 points behind the average. Most of the 14 major States were rated 90% fair or better. Mississippi, Arkansas, Louisiana, New Mexico, and Texas continue to rate at least 10% in the very poor to poor categories. Early planted cotton in California was showing above-average bottom boll set. Insect control activities were common in Arkansas, Arizona, California, Mississippi, and Texas. Harvest was beginning to pick up in Texas.

**SORGHUM:** Sorghum was rated mostly fair to good. In Kansas, conditions were slightly less favorable. Conditions in Texas and Oklahoma were essentially unchanged. Eighteen percent of the sorghum had headed, 3 points below normal and 3 points more than the week before. Planting in Kansas neared completion. Drought stress and chinch bug problems were evident in central and eastern Kansas counties. In Texas, harvest continued at a normal pace.

**OTHER FIELD CROPS:** Rice was mostly fair to good, with 22% of the acreage headed, 1 point ahead of normal. Three of the five major States were ahead of normal heading progress. Arkansas was slightly behind and California rice had not begun to head. Blast and sheath blight remain a problem in Arkansas and Louisiana. High temperatures and humidity caused some scalding in Kentucky tobacco fields. In North Carolina, tobacco is rated fair to good. Heavy rains have caused problems in many areas. Peanuts were rated good to excellent in Georgia, with some fields weedy.

**FRUIT AND NUTS:** Citrus groves in Florida neared excellent condition. Rains fell over most areas allowing less irrigation water to be used. Valencia orange harvest neared completion. Peach harvest continued in Georgia, North Carolina, South Carolina, and California. Pear and table grape harvests were active in California. Almond orchards were being treated for pests. In Oregon and Washington, cherry and caneberry harvesting continued, with the Oregon cherry harvest nearing completion. Apples were being thinned in Washington.

**VEGETABLES:** Field preparation for Florida's fall vegetable crops continued. Watermelon harvest was active in Georgia and South Carolina but was slowed by wet conditions. Idaho and North Dakota Irish potatoes were rated mostly good. Fruit and vegetable harvest neared completion in Arizona. Vegetable and melon harvests were active in California. In the Rio Grande Valley of Texas, land preparation for commercial vegetable fall planting continued. Onion and potato harvest continued in the High Plains. In Oregon, harvests of grass seed and vegetables to be processed progressed well.

**PASTURES AND LIVESTOCK:** Livestock was in good condition over most of the United States. Some Western States showed stress due to dry conditions. Pastures and ranges were good to excellent in the Eastern States and mostly fair elsewhere. Iowa and Nebraska continued to show drought stress on ranges.

Crop Progress

FOR WEEK ENDING JULY 16, 1989

GRAIN SORGHUM  
% HEADED

	1989	1988	AVG.
ARK	24	22	NA
ILL	5	6	NA
KANS	1	2	4
LA	41	52	71
MISS	35	38	45
MO	25	19	24
NEBR	1	4	4
OKLA	2	25	10
S DAK	2	2	0
TENN	22	58	44
TEX	60	60	62
11 STATES	18	20	NA
EXCL. STATES WITH NA	18	20	21
THESE 11 STATES PRODUCED 96% OF THE 1988 GRAIN SORGHUM CROP.			

NA - NOT AVAILABLE.

SOYBEANS  
% BLOOM

	1989	1988	AVG.
ALA	18	21	24
ARK	15	4	11
GA	20	22	28
ILL	61	72	64
IND	28	52	51
IOWA	55	80	57
KANS	20	35	25
KY	18	29	26
LA	25	18	26
MICH	5	20	20
MINN	46	78	47
MISS	15	14	20
MO	37	51	40
NEBR	30	64	52
N C	7	10	10
OHIO	8	45	45
S C	5	4	7
S DAK	26	62	34
TENN	10	29	17
19 STATES	34	51	42
THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.			

19 STATES 34 51 42

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

SOYBEANS  
% SETTING PODS

	1989	1988	AVG.
ALA	8	10	7
ARK	0	0	0
GA	3	5	7
ILL	14	12	21
IND	3	6	6
IOWA	10	26	16
KANS	5	10	5
KY	4	4	7
LA	0	3	6
MICH	0	0	0
MINN	0	24	10
MISS	3	2	4
MO	8	11	10
NEBR	1	12	7
N C	0	0	0
OHIO	0	2	8
S C	0	0	0
S DAK	0	0	0
TENN	2	7	4
19 STATES	5	11	10
THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.			

19 STATES 5 11 10

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

SPRING WHEAT  
% HEADED

	1989	1988	AVG.
IDAHO	85	94	94
MINN	98	99	95
MONT	78	91	90
N DAK	94	98	93
S DAK	100	100	100
5 STATES	93	97	94
THESE 5 STATES PRODUCED 87% OF THE 1988 SPRING WHEAT CROP.			

WINTER WHEAT  
% HARVESTED

	1989	1988	AVG.
ARK	97	100	99
CALIF	95	95	96
COLO	47	65	72
GA	99	100	100
IDAHO	1	2	2
ILL	97	100	97
IND	75	98	90
KANS	90	100	96
MICH	2	75	35
MO	99	100	97
MONT	0	24	5
NEBR	75	92	77
N MEX	100	94	NA
N C	95	98	99
OHIO	50	94	74
OKLA	98	100	100
OREG	3	4	8
S DAK	36	76	30
TEX	96	99	98
WASH	2	1	4
20 STATES	72	83	NA
EXCL. STATES WITH NA	71	83	77
THESE 20 STATES PRODUCED 90% OF THE 1988 WINTER WHEAT CROP.			

20 STATES 72 83 NA

EXCL. STATES WITH NA 71 83 77

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

NA - NOT AVAILABLE.

CORN  
% SILKING

	1989	1988	AVG.
COLO	2	7	18
GA	96	97	98
ILL	55	67	63
IND	18	35	43
IOWA	20	48	38
KANS	40	55	40
KY	48	46	57
MICH	5	10	15
MINN	15	69	36
MO	67	71	61
NEBR	20	51	38
N C	68	81	81
OHIO	5	18	34
PA	3	1	8
S DAK	3	27	7
TEX	74	79	81
WIS	4	19	14
17 STATES	27	48	41
THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.			

17 STATES 27 48 41

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

RICE  
% HEADED

	1989	1988	AVG.
ARK	1	0	3
CALIF	0	0	0
LA	49	44	48
MISS	20	8	16
TEX	73	69	67
5 STATES	22	19	21
THESE 5 STATES PRODUCED 97% OF THE 1988 RICE CROP.			

5 STATES 22 19 21

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

COTTON  
% SQUARING

	1989	1988	AVG.
ALA	94	97	96
ARIZ	100	99	100
ARK	97	98	98
CALIF	97	95	96
GA	97	96	96
LA	86	90	92
MISS	85	93	95
MO	100	99	99
N MEX	95	78	88
N C	65	73	77
OKLA	35	70	30
S C	75	70	88
TENN	88	93	92
TEX	58	82	65

14 STATES 74 87 79

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

COTTON  
% SETTING BOLLS

	1989	1988	AVG.
ALA	36	57	52
ARIZ	95	75	86
ARK	33	53	60
CALIF	50	35	45
GA	42	62	62
LA	32	47	54
MISS	13	64	51
MO	40	47	52
N MEX	40	35	39
N C	28	37	45
OKLA	1	30	3
S C	24	24	56
TENN	20	54	26
TEX	14	15	17

14 STATES 25 34 34

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

Crop Condition

SORGHUM

STATE	VP	P	F	G	EX
ARK	0	3	43	51	3
ILL	0	1	19	69	11
KANS	7	3	21	45	24
LA	3	19	41	37	0
MISS	5	10	55	25	5
MO	0	6	41	50	3
NEBR	5	33	32	30	0
OKLA	0	0	5	95	0
S DAK	17	6	45	30	2
TENN	1	1	24	61	13
TEX	2	24	28	34	12
11 STATE	5	13	28	42	12
PREV YEAR	2	13	46	31	8

PERCENT FOR WEEK ENDING JULY 16, 1989

SPRING WHEAT

STATE	VP	P	F	G	EX
IDAHO	1	11	23	54	11
MINN	2	9	56	32	1
MONT	2	11	28	48	11
N DAK	12	15	68	5	0
S DAK	4	12	53	27	4
5 STATE	7	13	56	21	3
PREV YEAR	32	41	20	7	0

COTTON

STATE	VP	P	F	G	EX
ALA	0	1	76	23	0
ARIZ	0	0	0	60	40
ARK	0	14	67	19	0
CALIF	0	0	5	90	5
GA	1	1	9	83	6
LA	4	9	70	17	0
MISS	5	35	50	10	0
MO	0	0	57	43	0
N MEX	0	10	20	65	5
N C	0	0	33	60	7
OKLA	0	5	45	50	0
S C	0	0	28	72	0
TENN	0	0	38	62	0
TEX	0	17	54	28	1
14 STATE	1	13	45	38	3
PREV YEAR	2	5	34	43	16

SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	1	14	80	5
ARK	6	8	71	15	0
GA	0	1	6	80	13
ILL	0	1	32	64	3
IND	0	2	22	71	5
IOWA	0	2	37	58	3
KANS	0	7	12	52	29
KY	0	2	37	55	6
LA	5	50	34	9	2
MICH	3	7	20	50	20
MINN	1	12	35	47	5
MISS	15	30	50	5	0
MO	1	9	53	36	1
NEBR	0	23	51	26	0
N C	0	1	20	76	3
OHIO	1	11	40	43	5
S C	0	0	26	74	0
S DAK	2	0	32	57	9
TENN	0	3	42	53	2
19 STATE	2	8	37	48	5
PREV YEAR	6	24	50	18	2

RICE

STATE	VP	P	F	G	EX
ARK	0	0	29	71	0
CALIF	0	0	10	75	15
LA	0	4	54	42	0
MISS	0	0	60	40	0
TEX	0	0	11	76	13
5 STATE	0	1	31	64	4
PREV YEAR	0	4	31	62	3

CORN

STATE	VP	P	F	G	EX
COLO	1	3	17	70	9
GA	0	0	5	67	28
ILL	0	5	42	45	8
IND	0	1	17	75	7
IOWA	0	7	43	48	2
KANS	0	6	15	34	45
KY	0	0	8	65	27
MICH	0	5	20	50	25
MINN	1	9	32	49	9
MO	6	13	44	32	5
NEBR	3	20	38	39	0
N C	0	2	30	55	13
OHIO	3	12	38	41	6
PA	2	11	25	43	19
S DAK	2	7	37	44	10
TEX	5	14	15	42	24
WIS	0	3	23	58	16
17 STATE	1	8	33	49	9
PREV YEAR	18	32	32	16	2

## 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 in.; over 4.00 in. local areas. Temperatures 1 to 3° below normal northern half; near normal southern half.

Days suitable for fieldwork 2.5. Soil moisture 23% adequate, 77% surplus. Wet conditions continued to hamper plantings, small grain harvest, pest control. Corn 84% silked, 92% 1988, 93% avg.; 45% dented, 59% 1988, 49% avg.; 22% mature, 31% 1988, 23% avg.; 3% fair, 55% good, 43% excellent. Sorghum 88% planted, 98% 1988, 98% avg.; 3% fair, 78% good, 19% excellent. Cotton 94% squaring, 97% 1988, 96% avg.; 36% setting bolls, 57% 1988, 52% avg.; 1% poor, 76% fair, 23% good. Soybeans 85% planted, 98% 1988, 98% avg.; 18% blooming, 21% 1988, 24% avg.; 8% setting pods, 10% 1988, 7% avg.; 1% poor, 14% fair, 80% good, 5% excellent. Peanuts 85% pegging, 82% 1988, 72% avg.; 83% good, 17% excellent. Winter wheat 80% harvested, 100% 1988, 100% avg. Livestock, pastures good. Primary activities: Planting sorghum, soybeans, where fields would support equipment; aerial spraying for insects; applying fungicides to peanuts; harvesting, marketing fruit, vegetable crops; cutting hay, clipping pastures, as weather permitted; routine care of livestock, poultry, catfish.

**ALASKA:** Persistent high pressure over State allowed growers in Railbelt to continue harvest of first crop hay as 5 days available for baling. Highs 3° below normal to 9° above normal. Lows 2° below to 7° above normal. Rainfall 0.62 in. drier than normal at Homer to 1.44 in. wetter than normal at Fairbanks.

Topsoil 35% short, 65% adequate. Subsoil 31% short, 95% adequate. First crop hay harvest over 80% complete. Barley 25% in dough stage. Commercial potato heights 13 in., 10% in bloom. Harvest most vegetables continues plentiful.

**ARIZONA:** Thunderstorms 9th, 10th eastern two thirds, 1.00 in. at Winslow, Wickenburg, Lost Dutchman State Park. Decrease in monsoon activity 11th, drier air pushed in from southwest. Considerable warming, drying 12th. Sunny skies, high temperatures 13th, 14th. Widely scattered showers over southeast quarter 15th, sunny skies elsewhere; increased humidity kept temperatures 3° to 6° lower than previous day. Temperatures 2° below to 4° above normal.

Cotton squaring 100%, 99% 1988, 100% avg.; 95% setting bolls, 75% 1988, 86% avg.; 60% good, 40% excellent. Insect activity increased, controls applied for boll worms, beet army worms central; insect levels light elsewhere. Irrigation, cultivation, lay-by herbicide applications continued. Alfalfa excellent west; good elsewhere. Weed, insect infestations light. Harvest active; stacking of baled hay continued. Hay, roughage adequate. Fruit, vegetable season neared completion west; watermelons harvested, shipped; processing tomato harvest continued. Watermelon, cantaloupe, honeydews, mixed melons harvested shipped central; cabbage harvest continued east.

**ARKANSAS:** Temperatures slightly below normal. Rainfall was moderate to heavy across central, southern areas of State. Extremes 59°; 97°. Rainfall 0.05 to 4.74 in.

Days suitable for fieldwork 5.0. Soil moisture 8% short, 50% adequate, 42% surplus. Cotton 97%

squaring, 98% 1988, 98% avg. Soybeans 93% planted, 95% 1988, 98% avg.; 86% emerged, 87% 1988, 93% avg. Oats 100% harvested, 100% 1988, 100% avg. Wheat 97% harvested, 100% 1988, 99% avg. Corn 11% fair, 56% good, 33% excellent. Sorghum 99% emerged, 100% 1988. Main activities: Completing wheat harvest; soybean planting, replanting; cultivation of cotton, soybeans; applying post emergence herbicides; rice fertilization; applying rice fungicides; cotton insect control; pasture weed control; cutting, baling hay; fruit, vegetable harvest. Crops making moderate growth. Plant bug populations increasing in cotton. Blast, sheath blight remain a problem in rice. Acres of soybeans may go unplanted in southeastern sections of the State. Midge, chinch bugs, worms in sorghum. Downy mildew, June bugs grapes. Rainfall hampering hay harvest. Livestock good.

**CALIFORNIA:** Temperatures above normal start of week, returned to normal balance of week. Non coastal areas remained very dry.

Field activities good progress due to open weather. Harvest small grains almost complete except late season, high elevation. Seeding second crops Sudan grass, corn, grain sorghum, dry beans. Cotton continued bloom central area. Early planted cotton good bottom boll set. Treatments Lygus, mites, aphids continued. Safflower continued bloom, harvest beginning. Harvest alfalfa, other hay crops continued. Harvesting Flame Seedless, Perlette, Thompson Seedless table grapes San Joaquin Valley. Over 50% packed Freestone peaches, plums, nectarines. Clingstone peach harvest active. Asian, bartlett pear harvests continued. Picking grapefruit, non-desert areas. Valencia orange harvest slow. Navel oranges treated for red scale; sizing well. Almond orchards treated for pests; continue to mature, hull splits. Broccoli Salinas-Watsonville, Santa Maria areas fairly light supply, variable quality. Cauliflower remained moderate, generally good quality. Potato fields Tulelake-Butte Valley continued progress rapidly. Applications herbicides, fungicides, insecticides made. Potato yields Perris-Hemet remained good. Processing tomato harvest underway Sacramento Valley. Yields desert area remain good. Fields continued to be sprayed worms, Merced-Atwater. Celery, lettuce continued in moderate supply Salinas, Santa Maria, quality variable. Sweet corn harvest at peak Cutler-Orosi area. Melons, honeydew, cantaloupe, watermelons all progressing well. Cantaloupe, watermelon fields Cutler-Orosi being harvested. Desert cantaloupes, honeydews nearly finished. Watermelon harvest San Joaquin Valley continued. Strawberries Salinas fairly good supply, variable quality. Supplies Santa Maria remained moderate, varying quality. Other vegetables harvested were cucumbers, peppers, onions, eggplant, tomatillas, squash. Livestock good. Rangeland, pasture conditions normal, adequate water northern. Conditions valley continued poor. Water supplies low to adequate. Livestock movement active. Westside feedlots operating at or near capacity.

**COLORADO:** Very little rain beginning of week, heavy moisture over east, southeast later in the week. Precipitation none to 2.95 in. No significant moisture west of Continental Divide. Temperatures 2 to 4° above normal.

Days suitable for fieldwork, 5.8. Soil moisture 46% very short, 37% short, 15% adequate, 2% surplus. Alfalfa 93% 1st cutting, 19% 2nd cutting complete. Spring barley 64% turning color, 22% ripe, 7% harvested. Oats 86% headed, 49% turning color, 17% harvested. Dry beans 8% flowered. Spring wheat 88% headed, 29% turning color. Summer, fall potatoes fair to good. Sorghum 97% emerged fair to good. Livestock, pasture fair to good.

**FLORIDA:** Temperatures slightly above normal. Daytime highs upper 90s, nighttime lows lower 70s. Widely scattered rain, 1.00 to 2.00 in. Panhandle, under 0.50 in. elsewhere north. Many Peninsula areas 1.00 to 2.00 in., some less than 0.25 in.

Soil moisture Panhandle surplus, Peninsula short to adequate. Insect, weed control most urgent activities, Panhandle. Soybean planting virtually complete; tobacco harvest 75% complete. Panhandle cut first hay. Cotton, late soybean fair to poor. Early soybeans good. Peanuts, sugarcane made good progress. Pastures good to excellent, southern areas most improved. Cattle good to excellent; Peninsula more variable. Citrus groves excellent. Rain almost all areas, irrigation reduced. Abundant new foliage, scattered late bloom continues, valencia harvest almost complete, few grapefruit still being picked. Caretakers very active with normal summer care programs. Typical summertime weather over vegetable producing areas. Harvest Zellwood sweet corn complete. Summer vegetables available most areas for local markets. Field preparation active for fall crops.

**GEORGIA:** Wet week. All areas rain, heaviest southern two-thirds, several 2.00 to 5.00 in. Heaviest total 6.64 in. near Cedartown. Temperatures near normal. Southeast high 97°. Coolest temperature 56° at Blairsville.

Days suitable for fieldwork 4.4. Soil moisture 8% short, 66% adequate, 26% surplus. Corn development slightly behind normal, 87% dough stage, 53% dent, 6% mature. Sorghum grain 8% fair, 84% good, 8% excellent; planting near completion. Peanuts 6% fair, 79% good, 15% excellent; 98% blooming, 94% 1988, 96% avg.; 86% pegging, 81% 1988, 85% avg.; spraying for white mold, some fields weedy. Soybeans 96% planted, 98% 1988, 99% avg.; acreage will not be planted. Tobacco 16% fair, 74% good, 10% excellent; 35% harvested, 23% 1988, 29% avg. Watermelons 21% poor, 38% fair, 41% good; 70% harvested, 76% 1988, 81% avg.; harvest active, slowed by wet fields. Apples 64% fair, 36% good; 1% harvested, 1% 1988, 8% avg. Peaches 4% very poor, 29% fair, 67% good; 81% harvested, 79% 1988, 85% avg. Pastures, hay good. Cattle, hogs good to excellent.

**HAWAII:** Sunny skies, beneficial showers provided fair to good crop condition. Irrigation still necessary. Temperatures low 70s to upper 80s with variable winds 5-30 mph. Rainfall none to 5.20 in.

Days suitable for fieldwork 7.0. First record of "Bunchy Top" virus on banana in State. Papaya production decreasing. Sugar, pineapple harvesting continuous. Watermelon harvest full swing.

**IDAHO:** Temperatures near normal. Precipitation above normal Northern Panhandle, Southeast highlands, remainder below normal.

Days suitable for fieldwork 7.0. Soil moisture 11% very short, 17% short, 70% adequate, 2% surplus. Winter wheat fair, good; 1% harvested, 2% 1988, 2% avg.; 50% turning color. Spring wheat fair, good; 85% headed, 94% 1988, 94% avg.; 11%

turning color. Spring barley 77% headed, 93% 1988, 90% avg.; 17% turning color. First cutting alfalfa 96% harvested, second cutting alfalfa 14% harvested, 19% 1988, 10% avg. Potatoes good, 90% 12" high, beyond; 48% closed middles. Mint harvest underway. Moisture, heat stress on dryland grains. Aphid populations rising, as well as rusts, dwarf bunt. Field activities include aphid, weed spraying, detasseling sweet corn, irrigating. Midweek showers helped rangeland. Livestock good.

**ILLINOIS:** Temperatures near normal. Precipitation spotty below 0.20 in. few scattered heavy thunderstorms.

Days suitable for fieldwork 6.0. Soil moisture 72% short, 23% adequate, 5% surplus. Corn doughed 3%, 2% 1988, 6% avg. Alfalfa 2nd crop cut 75%, 79% 1988, 71% avg.; 3% very poor, 10% poor, 49% fair, 35% good, 3% excellent. Oats turning yellow 94%, 96% 1988, 94% avg.; ripe 55%, 77% 1988, 71% avg.; harvested 25%, 47% 1988, 39% avg. 26% fair, 68% good, 6% excellent. Pasture 10% very poor, 24% poor, 34% fair, 26% good, 6% excellent.

**INDIANA:** Temperatures normal. Lows low to mid 60s, highs low to upper 80s. Precipitation 11th, 12th, 1.00 to 3.00 in.

Days suitable for fieldwork 4.3. Topsoil 11% short, 72% adequate, 17% surplus. Subsoil moisture 10% short, 84% adequate, 6% surplus. Corn, soybean slightly improved. Corn 57 in. high, 54 in. 1988, 64 in. avg. Soybean 14 in. high, 16 in. 1988, 19 in. avg. Alfalfa hay 56% cut twice, 80% 1988, 65% avg. Pasture 1% poor, 29% fair, 53% good, 17% excellent. Wheat 75% combined, 98% 1988, 90% avg. Summer harvest apple varieties underway.

**IOWA:** Temperatures near normal. Extremes 48°; 100°. Rainfall 0.06 to 4.13 in., average 1.00 in.

Days suitable for fieldwork 5.9. Topsoil 81% short, 19% adequate. Subsoil 100% short. Winter wheat 85% harvested, 95% 1988, 67% avg. Hay 5% very poor, 28% poor, 53% fair, 14% good. Second crop alfalfa 60% harvested, 64% 1988, 54% avg. Corn 40% tasseled, 70% 1988, 59% avg. Rain reduced stress on soybeans. Oats 99% turning color, 100% 1988, 95% avg. Oats 15% harvested, 63% 1988, 36% avg. Livestock good. Pasture 23% very poor, 46% poor, 27% fair, 4% good.

**KANSAS:** Temperatures near normal, 2° below southwest, south central to 1° above central, northwest. Thunderstorms covered most of State, brought rainfall to most areas. Lowest 0.36 in. central, highest 1.84 in. west central.

Days suitable for fieldwork 5.5. Topsoil 31% short, 63% adequate, 6% surplus. Subsoil 39% short, 61% adequate. Wheat harvest aided by mostly hot, dry weather made rapid progress, nearing completion. Corn good growth but surface moisture needed soon as crop enters critical stage. No disease, few insects problems. Sorghum planting near completion, some stands heading. Drought stress noted central, eastern counties along with moderate to severe chinch bug problems. Soybean planting nearing completion on schedule. Stands blooming most areas, some pod setting southern, eastern counties. Range, pastures improving slowly, pastures over-grazed last year show weed problems, slowest to recover this year. Hay, forage adequate, adequate shortages.

**KENTUCKY:** Early hot, humid afternoon temperatures 90s. Midweek cold front spread showers across State. Heaviest precipitation 12th, excess 1.00 in. Rainfall 13th less than 0.50 in. Late week temperatures at or below normal. High temperatures 80s.

Days suitable fieldwork 4.6. Soil moisture 1% very short, 14% short, 57% adequate, 28% surplus. High moisture continues to affect crop development southern, western areas. Wheat harvest nearing completion. Corn good. Double crop soybean planting active. High temperatures humidity levels caused some scalding of tobacco. Growth, development very uneven, fair to good. Hay good. Pastures 1% very poor, 4% fair, 55% good, 40% excellent.

**LOUISIANA:** Temperatures near normal. Extremes 69°; 95°. Rainfall 0.53 to 4.16 in.

Days suitable for fieldwork 2.7. Soil moisture 25% adequate, 75% surplus. Corn silked 98%, 100% 1988, 99% avg.; dough stage 82%, 83% 1988, 87% avg.; mature 13%, 17% 1988, 21% avg.; 3% poor, 23% fair, 63% good, 11% excellent. Cotton squaring 86%, 90% 1988, 92% avg.; setting bolls 32%, 47% 1988, 54% avg.; 4% very poor, 9% poor, 70% fair, 17% good. Hay first cutting 81%, 91% 1988, 97% avg. Peaches harvested 48%, 73% 1988, 77% avg.; 13% very poor, 13% poor, 47% fair, 27% good. Rice headed 49%, 44% 1988, 48% avg.; ripe 2%, 4% 1988, 4% avg.; 4% poor, 54% fair, 42% good. Sorghum headed 41%, 52% 1988, 71% avg.; turning color 2%, 7% 1988, 19% avg.; 3% very poor, 19% poor, 41% fair, 37% good. Soybeans planted 96%, 98% 1988, 99% avg.; emerged 90%, 92% 1988, 97% avg.; blooming 25%, 18% 1988, 26% avg.; 5% very poor, 50% poor, 34% fair, 9% good, 2% excellent. Replanting efforts continue, nearly exhausted. Sugarcane 6% poor, 6% fair, 82% good, 6% excellent. Many fields being sprayed for bores. Sweet potatoes planted 89%, 98% 1988, 100% avg.; 11% poor, 45% fair, 44% good. Wheat harvested 99%, 100% 1988, 100% avg. Vegetables 9% very poor, 34% poor, 36% fair, 21% good. Harvesting continues. Pasture 2% poor, 17% fair, 76% good, 5% excellent. Livestock 18% fair, 77% good, 5% excellent.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.52 in, Temperature 78°, normal 75°. Extremes 97°; 55°.

Days suitable for fieldwork 4.5. Topsoil 50% adequate, 50% surplus. Subsoil 63% adequate, 37% surplus. Field corn good; silked 15%, 41% 1988, 37% avg. Soybeans good; planted 89%, 89% 1988, 97% avg. Tobacco good. Wheat, barley fair. Oats good. Rye fair to good. Wheat harvested 74%, 93% 1988, 89% avg. Barley harvested 94%, 99% 1988, 100% avg. Pasture good to excellent.

**DELAWARE:** Precipitation 0.59 in. Temperature 78°, normal 77°. Extremes 97°; 60°.

Days suitable for fieldwork 6.2. Topsoil 28% adequate, 72% surplus. Subsoil 28% adequate, 72% surplus. Soybeans good. Single and double crop soybeans planted 91%, 78% 1988, 94% avg. Wheat fair; harvested 90%, 98% 1988, 95% avg. Barley fair; harvested 98%, 100% 1988, 100% avg. Field corn good; silked 46%, 20% 1988, 50% avg.

**MICHIGAN:** Temperatures 1° below to 1° above normal. Extremes 36°; 97°. Precipitation none to 0.98 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 40% short, 60% adequate. Corn 5% silked, 10% 1988, 15% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Soybeans 5% blooming, 20% 1988, 20% avg.; 3% very poor, 7% poor, 20% fair, 50% good, 20% excellent. Wheat 2% harvested, 75% 1988, 35% avg. Major activities: Hay harvest, spraying, irrigating, cultivation, limited wheat harvest. Tart, sweet cherry harvest continued. Blueberries being picked; strawberry picking nearing completion. Vegetables being harvested included cucumbers, celery, snap beans, cabbage, squash, turnips.

**MINNESOTA:** Temperatures 2 to 3° above normal. Extremes 44°; 103°. Precipitation -0.50 to -1.00 in. Greatest weekly total 6.22 in.

Days suitable for fieldwork 5.6. Topsoil 43% very short, 33% short 19% adequate, 5% surplus. Spring wheat 98% heading, 99% 1988, 95% avg.; 26% turning ripe, 71% 1988, 38% avg.; 2% cut, 21% 1988, 6% avg.; 2% combined, 9% 1988, 2% avg. Oats 99% heading, 99% 1988, 96% avg.; 61% turning ripe, 96% 1988, 63% avg.; 8% cut, 43% 1988, 19% avg.; 4% combined, 35% 1988, 10% avg. Barley 99% heading, 99% 1988, 96% avg.; 44% turning ripe, 85% 1988, 52% avg.; 4% cut, 19% 1988, 8% avg.; 2% combined, 14% 1988, 4% avg. Corn 55 in. height, 57 in. 1988, 55 in. avg.; 15% tasseling, 69% 1988, 36% avg. Soybeans 19 in. height, 21 in. 1988, 18 in. avg.; 46% blooming, 78% 1988, 47% avg. Winter Wheat 7% harvested, 66% 1988, 20% avg. Rye 7% harvested, 62% 1988, 18% avg. Soybean 1% very poor, 12% poor, 35% fair, 47% good, 5% excellent. Corn 1% very poor, 9% poor, 32% fair, 49% good, 9% excellent. Spring Wheat 2% very poor, 9% poor, 56% fair, 32% good, 1% excellent.

**MISSISSIPPI:** Temperatures normal. Extremes 62°; 95°. Rain 2.05 in., 0.89 in. above normal.

Days suitable for fieldwork 2.3, 4.8 1988, 5.4 avg. Soil moisture 15% adequate, 55% surplus, 30% excessive. Corn good; 77% silked, 84% 1988, 88% avg. Cotton fair; 85% squaring, 93% 1988, 95% avg.; 13% setting bolls, 64% 1988, 51% avg. Hay 36% harvested, 55% 1988, 53% avg. Rice fair; 20% heading, 8% 1988, 16% avg. Sorghum fair; 35% heading, 38% 1988, 45% avg. Soybeans fair to poor; 77% planted, 93% 1988, 97% avg. Sweet potatoes 91% planted, 100% 1988, 100% avg. Wheat 94% harvested, 100% 1988, 100% avg. Pastures, livestock good. Activities: Applying chemicals, limited cultivating, soybean planting, wheat harvesting.

**MISSOURI:** Temperatures 3° above normal northwest to 1° below normal southwest. Precipitation less than 0.25 in. eastern half, more than 1.00 in. west. Kansas City 4.30 in., Joplin, Lamar over 2.00 in.

Days suitable for fieldwork 6.0. Topsoil 79% short, 20% adequate, 1% surplus. Subsoil 75% short, 23% adequate, 2% surplus. Condition of crops generally declining except southeast. Drought stress corn extreme northwestern counties. Oats harvested 81%, 99% 1988, 85% avg. Alfalfa Hay 2nd cutting 86%, 88% 1988, 83% avg. Other hay harvested 85%, 95% 1988, 87% avg. Pasture 9% very poor, 27% poor, 47% fair, 17% good. Livestock water supply 23% critically short, 25% short, 52% adequate.

**MONTANA:** Thunderstorms brought heavy rain to parts of north central, central, northeast, southeast. Rainfall 0.10 in. to over 2.00 in., mountain areas 3.00 to 4.00 in. Large hail in parts north central. Temperatures near normal 3° above west, southwest to 3° below north central, southeast.

Days suitable for fieldwork 5.6. Topsoil 48% short, 48% adequate, 4% surplus. Subsoil 49% short, 50% adequate, 1% surplus. Winter wheat 1% very poor, 6% poor, 23% fair, 53% good, 17% excellent; 3% ripe, 61% 1988, 17% avg. Barley 1% very poor, 8% poor, 22% fair, 50% good, 19% excellent; 13% turning, 36% 1988, 25% avg. Oats 1% very poor, 9% poor, 28% fair, 50% good, 12% excellent; 8% turning, 43% 1988, 23% avg. Pasture, range feed 2% very poor, 7% poor, 23% fair, 53% good, 15% excellent. First cutting alfalfa 80% harvested, 90% 1988, 89% avg. Other hay cut 59%, 61% 1988, 60% avg.

**NEBRASKA:** Temperatures near normal. Extremes 51°; 101°. Precipitation occurred latter

half of week, traces southwest to over 2.00 in. northeast.

Days suitable for fieldwork 6.5. Topsoil 75% short, 25% adequate. Subsoil 90% short, 10% adequate. Winter wheat 98% ripe, 100% 1988, 91% avg. Corn entering dough stage southeast. Dryland crop turning brown, some lost northeast, some irrigated fields stressed as irrigation systems can't keep up. Dryland fields in east will be cut for silage. Oats 55% harvested, 79% 1988, 49% avg. Alfalfa hay 4% very poor, 28% poor, 49% fair, 19% good. Second cutting 55%, 80% 1988, 65% avg. Clover weevils northeast. Chinch bugs causing heavy damage southeast. Concern about irrigation water supply in Panhandle. Pasture, range feed 19% very short, 71% short, 10% adequate. Hay, roughage 18% very short, 68% short, 14% adequate. Heat, dust, flies slowed weight gains in feedlots. Main activities: Harvesting wheat, oats; cutting hay; irrigating; weed control.

**NEVADA:** Typical summer weather, hot, dry. Scattered thunderstorms eastern, southern area, precipitation spotty to little or none. Extremes 32°; 119°.

Hot, dry weather ideal for small grain, hay harvests. Ranges, pastures showing deterioration.

**NEW ENGLAND:** Precipitation less than 0.50 in. except areas which received 2.50 to 3.00 in. Temperatures lower 60s Vermont, New Hampshire to mid 70s coastal Connecticut. Temperatures near normal south, slightly above normal Maine, slightly below normal Vermont, New Hampshire.

Days suitable for fieldwork 5.5. Fieldwork progress 4.0 days behind. Soil moisture 10% short, 75% adequate, 15% surplus. Grazing availability 19% short, 72% adequate, 9% surplus. Maine potato good to excellent. Connecticut River Valley potato fair. Rhode Island potato good. Maine oats good to excellent. Field corn good. Sweet corn good. Shade tobacco fair to good. Outdoor tobacco fair to good. First crop hay 90% cut, 96% 1988, 86% avg.; fair to good. Second crop hay 13% cut, 14% 1988, 16% avg.; good to excellent. Apple set light to average; fruit drop light to average; scab infection average to heavy. Strawberries 97% harvested. Blueberry set light to average. Major farm activities: Haying, harvesting early vegetables, spraying fungicides, herbicide, cultivating.

**NEW JERSEY:** Temperatures below normal. Extremes 49°; 94°. Rainfall 1.09 in. north, 2.62 in. central, 3.26 in. south. Heaviest 24-hour total 2.80 in. on 16th, 17th. Estimated soil moisture percent field capacity 87% north, 84% central, 78% south. Four inch soil temperatures 70° north, 73° central, 75° south.

Poor weather continued to cause problems. Rain on 16th halted grain combining, hay, straw baling. Late harvest of fall sown grain continued to delay soybean planting. Summer vegetable harvest increased. Freestone peach harvest started. Apples continued to size well. Fruit spraying continued to be a problem. Blueberry harvest at peak. Field corn, soybean extremely mixed. Pasture growth good except low areas.

**NEW MEXICO:** Rain fell over most areas; exception Four Corners area. Largest fell over northeastern plains, southwestern mountains.

Days suitable for fieldwork 6.8. Soil moisture 80% short, 20% adequate. Wheat harvest estimated 100% complete. Cotton 95% squaring, 40% setting bolls; 10% poor, 20% fair, 65% good, 5% excellent. Cattle 18% poor, 73% fair, 9% good. Sheep 89% fair, 11% good. Ranges, pastures 9% very poor, 64% poor, 18% fair, 9% good.

**NEW YORK:** Severe thunderstorms on 10th. Tornado damaged property in Montgomery, Schoharie, Greene counties. Central, western areas dry, many areas received less than 0.25 in. Eastern areas received more than 1.00 in. of rain. Temperatures close to normal early in week, unseasonably cool at the end. On the 15th many spots in 40s. Newcomb dipped to 38°.

Days suitable for fieldwork 6.1. Soil moisture adequate. Pasture good. Hay fair to good. First cutting alfalfa 85% cut, 84% average. Clo-tim harvest 68% complete, 86% 1988, 76% avg. Corn still being planted. Wheat harvest getting underway. Lake Ontario region apples, pears good. Sweet cherry harvest in final stages. Tart cherry harvest to get started this week. Dry weather eased brown rot pressure. Raspberry, blueberry harvest active. Early sweet corn harvesting underway. Orange County lettuce harvest started. Onion condition improved.

**NORTH CAROLINA:** Temperatures near normal mountains, 2 to 4° above normal. Extremes 54°; 99°. Precipitation none to 4.01 in.

Days suitable for fieldwork 5.3. Soil moisture 20% short 63% adequate, 17% surplus. Pasture 1% poor, 19% fair, 71% good, 9% excellent. Livestock feed from pasture 85%. Crop conditions: tobacco 1% very poor, 4% poor, 45% fair, 50% good; irish potatoes 7% poor, 37% fair, 56% good; Sweet potatoes 2% poor, 31% fair, 64% good, 3% excellent; peaches 3% very poor, 15% poor, 35% fair, 44% good, 3% excellent; apples 4% very poor, 4% poor, 50% fair, 38% good, 4% excellent; truck crops 2% poor, 31% fair, 63% good, 4% excellent; peanuts 28% fair, 69% good, 3% excellent; hay 2% poor, 24% fair, 70% good, 4% excellent. Hay first cutting 94% complete, second cutting 42% complete. Hay, roughage 81% adequate, 19% surplus. Plantings completed: Sorghum 94%, 100% 1988; sweet potatoes 99%, 100% 1988, 100% avg. Harvesting completed: Peaches 56%, 47% 1988, 55% avg.; wheat 95%, 98% 1988, 99% avg.; oats 93%, 99% 1988, 98% avg.; barley 94%, 98% 1988, 99% avg.; rye 90%, 95% 1988, 97% avg.; irish potatoes 72%, 84% 1988, 83% avg. Major activities: Planting soybeans; cultivating crops; topping tobacco, sucker control; cutting hay. Other activities: Spraying crops; planting sweet potatoes, vegetables, sorghum; harvesting peaches, tobacco, truck crops, small grains; pruning Christmas trees; tending livestock; general farm maintenance. Heavy rains delaying fieldwork, increasing incidence of disease, insects, drowning out crops, producing heavy weeds. Wind damage in Bertie County. Rhizoctonia leaf spot in tobacco fields.

**NORTH DAKOTA:** Temperatures 1 to 4° above normal. Extremes 45° southwest; 102° northwest. Precipitation 0.23 in. to 0.83 in. All areas of State below average for growing season, -1.30 in. northeast to -3.27 in. east central.

Days suitable for fieldwork 6.6. Topsoil well below average, 46% very short, 45% short, 8% adequate this week; 5-year average 15% very short, 41% short, 41% adequate, 3% surplus; subsoil well below average, 63% very short, 33% short, 4% adequate this week; 5-year average 17% very short, 28% short, 54% adequate, 1% surplus. Small grains fair. Hot, dry weather forcing crop to maturity. Spring wheat 12% very poor, 15% poor, 68% fair, 5% good; durum 10%, 12%, 69%, 9%; oats 16%, 18%, 59%, 7%; barley 8%, 18%, 64%, 10%; flax 8%, 16%, 57%, 19%; corn 13% poor, 39% fair, 48% good; dry edible beans 5%, 45%, 50%; soybeans 10%, 26%, 64%; sunflower 10%, 46%, 44%; potatoes 26% fair, 74% good. Spring wheat 51% milk to dough, 11% turning

and beyond; durum 35%, 6%; oats 44%, 23%; barley 46%, 31%. Row crop height: dry edible beans 14 in. this week, 16 in. 1988, 14 in. avg.; corn 38 in., 42 in., 40 in.; flax 11 in., 12 in., 13 in.; potatoes 16 in., 19 in., 18 in.; soybeans 17 in., 18 in., 16 in.; sunflower 26 in., 31 in., 28 in. Pasture 13% very poor, 42% poor, 39% fair, 6% good.

**OHIO:** High temperatures low to mid 80s, near normal. Low temperatures low to mid 60s, up to 3° above normal. Precipitation none to 2.39 in. Rainfall 0.10 to 0.30 in., 0.40 to 0.90 in. below normal. Base 50 growing degree days accumulated 150 to 175 in most areas.

Days suitable for fieldwork 5.5. Soil moisture 10% short, 67% adequate, 23% surplus. Corn, soybeans, winter wheat, pasture, hay, oats fair to good. Corn damaged by wind, hail, root worm beetles, chinch bugs, Japanese beetles. Statewide infestation of potato leaf hoppers threatened second-cut hay. Winter wheat harvest progressing; test weights 51 to 56, moisture content 11 to 18%. Peppers, sweet corn, carrots, fresh market tomatoes good. Blue mold in southern tobacco.

**OKLAHOMA:** Temperatures 2° below normal Panhandle to normal southwest. Precipitation 0.23 in. central to 3.04 in. south central.

Days suitable for fieldwork 5.7. Topsoil 10% short, 80% adequate, 10% surplus. Subsoil 100% adequate. Wheat 98% harvested, 100% 1988, 100% avg.; 75% ground plowed, 80% 1988, 75% avg. Wet, weedy fields remained unharvested. Preparation for fall seeding began southwest. Cotton 5% poor, 45% fair, 50% good; 35% squaring, 70% 1988, 30% avg; 1% setting bolls, 30% 1988, 3% avg. Sorghum 5% fair, 95% good; 2% heading, 25% 1988, 10% avg. Soybeans 5% flowering, 5% 1988, 15% avg. Peanuts 45% pegging, 30% 1988, 45% avg. Corn 20% milk-to-soft, 30% 1988, 30% avg. Pastures good. Cattle good; marketings stable, prices up slightly.

**OREGON:** Temperatures 3° of normal, except Klamath Falls 6° below normal. Dry Statewide, except three areas of precipitation trace Portland airport, 0.01 in. Astoria, 0.02 in. Enterprise.

Soil moisture 61% short, 39% adequate. Barley 11% harvested, 15% 1988, 19% avg. Second cutting alfalfa, other hay underway most high elevation eastern counties, Willamette Valley; Lake, Harney counties finishing first cutting. Grass seed harvest progressed under favorable weather west, central areas. Mint cut Malheur County; also put sulphur on sugarbeets. Harvesting snap beans, green beans, squash, broccoli; planting late sweet corn, cauliflower transplants Willamette Valley. Fewer cabbage maggots or other insect problems central coast. Seed potatoes doing well northeast. Heavy potato tuber settings, could result in smaller than normal potatoes south central. Onions, potatoes still growing Malheur County. Apples look good most areas. Cherry harvest neared finish, cracking north central. Strawberry harvest nearly complete, raspberries, blueberries being harvested Willamette Valley. Cranberry fruit set looks good southwest. Livestock good to excellent. Range, pasture fair to good; lower elevations drying rapidly east.

**PENNSYLVANIA:** Hot, humid ended cool. Temperature 71°, 2° above normal. Extremes 44°; 93°. Precipitation 0.73 in., 0.15 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 61% adequate, 39% surplus. Corn 3% silk, 1% 1988, 8% avg.; height 29 in., 22 in. 1988, 39 in. avg.; 2% very poor, 11% poor, 25% fair, 43% good, 19% excellent. Soybeans 93% planted, 98% 1988, 99%

avg.; 1% very poor, 7% poor, 27% fair, 51% good, 14% excellent. Barley 5% heading or headed, 8% 1988; 15% turning yellow, 15% 1988; 26% ripe, 12% 1988; 54% harvested, 65% 1988. Wheat 10% heading or headed, 3% 1988; 26% turning yellow, 23% 1988; 45% ripe, 38% 1988; 19% harvested, 36% 1988; 3% very poor, 9% poor, 28% fair, 40% good, 20% excellent. Oats 59% heading or headed, 32% 1988; 35% turning yellow, 41% 1988; 6% ripe, 22% 1988; none harvested, 5% 1988; 1% very poor, 6% poor, 25% fair, 47% good, 21% excellent. First cutting alfalfa 89% complete, 100% 1988. Second cutting alfalfa 27% complete, 57% 1988. First cutting clover-timothy 80% complete, 98% 1988. Hay quality fair. Feed from pastures average. Fruit tree average. Activities: Planting soybeans, harvesting hay, haylage, barley, wheat, vegetables; weed control; fence work; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

**PUERTO RICO:** DATA NOT AVAILABLE

**SOUTH CAROLINA:** Rainfall less than 0.10 to 3.00 in. across State. Temperatures 1 to 4° above normal.

Days suitable for fieldwork 5.2. Soil moisture 30% short, 68% adequate, 2% surplus. Cotton 28% fair, 72% good; 75% squaring, 70% 1988, 88% avg.; 24% setting bolls, 24% 1988, 56% avg. Soybeans 26% fair, 74% good; 96% planted, 99% 1988, 99% avg.; 5% blooming, 4% 1988, 7% avg. Corn good; 88% silked, 92% 1988, 94% avg.; 45% dough stage, 45% 1988, 59% avg.; 2% matured, 1% 1988, 12% avg. Watermelons fair to good; 57% harvested, 73% 1988, 64% avg. Tomatoes fair to good; 94% harvested, 91% 1988, 94% avg. Peaches fair to good; 45% harvested, 48% 1988, 58% avg. Wheat fair to good; 95% harvested, 100% 1988, 100% avg. Oats fair to good; 95% harvested, 100% 1988, 99% avg. Barley fair to good; 100% ripe, 100% 1988, 100% avg.; 90% harvested, 98% 1988, 99% avg. Pastures good.

**SOUTH DAKOTA:** Temperatures none to 5° above normal. Extremes 50°; 109°. Rainfall 1.00 to 3.00 in.; less northeast, southeast, maximum 5.45 in. Growing season precipitation 5.76 in. below normal to 3.93 in. above normal.

Days suitable for fieldwork 5.3. Topsoil 35% critically short, 34% short, 31% adequate. Subsoil 45% critically short, 48% short, 7% adequate. Small grain fair to good. Row crop conditions good to fair. Livestock good. Major activities: Cultivating, haying, spraying, swathing, combining.

**TENNESSEE:** Warm, humid week. Temperatures slightly above normal west, slightly below normal middle, east. Precipitation normal to 1.00 in. below normal. Southern Middle experienced torrential downpours 7.00 in.

Days suitable for fieldwork 2.2. Soil moisture 35% adequate, 65% surplus. Corn 68% tasseling, 64% 1988, 70% avg.; 12% dough, 20% 1988, 25% avg.; 4% dent, 9% 1988, 4% avg.; 1% poor, 9% fair, 61% good, 29% excellent. Wheat 92% harvested, 100% 1988, 100% avg.; 2% very poor, 11% poor, 40% fair, 47% good. Tobacco 4% topped, 8% 1988, 4% avg. Alfalfa 68% 2nd cutting, 86% 1988, 93% avg. Hay 8% poor, 19% fair, 62% good, 11% excellent. Some areas beginning to dry enough to allow fieldwork. Heavy pest infestation. Pastures showing excellent growth, nutritious. Cattle good.

**TEXAS:** Hot weather the rule later part week, temperatures at century mark. Most showers light, some isolated, heavy downpours east. Coastal Plains, east scattered showers most afternoons. Showers western part pushed weekly totals above normal High Plains, Rolling Plains,

turned color, 87% 1988, 72% avg.; 30% ripe, 23% 1988, 20% avg. Spring wheat 69% turned color, 77% 1988, 65% avg.; 10% ripe, 14% 1988, 13% avg. Oats 99% headed, 78% 1988, 84% avg. Corn 48 in. high, 50 in. 1988, 41 in. avg. Alfalfa 2nd cutting 42% completed; 27% 1988, 19% avg. Range, pasture 21% very poor, 59% poor, 20% fair. Irrigation water short to adequate. Stockwater short to adequate. Hay, roughage 16% very short, 45% short, 39% adequate. Tart cherry, apricot harvests near midpoint. Major farm activities: Hay harvest, cultivating row crops, irrigating, harvesting winter wheat, barley.

**VIRGINIA:** Temperature 3° above normal. Extremes 51°; 99°. Precipitation 0.10 to 2.80 in. Days suitable for fieldwork 4.7. Topsoil 13% short, 70% adequate, 17% surplus. Soybeans 93% planted, 93% 1988, 89% avg. Corn 36% silked, 21% 1988, 33% avg. Wheat 88% harvested, 94% 1988, 97% avg. Oats 70% harvested, 88% 1988, 80% avg. Barley 96% harvested, 99% 1988, 98% avg. Potato harvest underway. Corn 3% poor, 20% fair, 66% good, 11% excellent. Soybeans 58% fair, 40% good, 2% excellent. Pastures 2% fair, 64% good, 34% excellent. Tobacco 7% poor, 50% fair, 43% good. Apples 6% poor, 19% fair, 75% good. Peaches 13% very poor, 13% poor, 40% fair, 34% good. Livestock 12% fair, 73% good, 15% excellent. Alfalfa 10% fair, 46% good, 44% excellent. Other hay 7% fair, 56% good, 37% excellent.

**WASHINGTON:** Temperatures 2° above normal to 3° below normal, east; 4° above normal to 3° below normal, west. Precipitation none to 0.43 in., east; none to 0.07 in., west. Days suitable for fieldwork, 6.8. Soil moisture 40% short, 60% adequate. Range, pasture 10% short, 90% adequate. Hay, other roughage 5% short, 90% adequate, 5% surplus. Harvest of winter wheat underway; 2% complete, 1% 1988, 4% avg. Second cutting of alfalfa hay 50% complete. Major activities: Harvest of cherries, raspberries, blueberries, green peas, fresh market potatoes, sweet corn, green onions, Walla Walla sweet onions, cauliflower, carrots, turnip seed, winter wheat, bluegrass, mint, hay; thinning apples; application of cover sprays.

**WEST VIRGINIA:** Temperature 73°, 1 to 3° above normal. Extremes 52° Greenbank; 98° Creston. Precipitation 1.29 in., above normal. Days suitable for fieldwork 2.7. Soil moisture 48% adequate, 52% surplus. Corn fair to excellent. Wheat, barley fair to good. Oats good. Wheat 98% ripe, 29% harvested. Barley 98% ripe, 74% harvested. Oats 91% jointed, 88% headed. Tobacco good to fair, 94% set. Hay good to fair, 1st cut 70% complete, 2nd cut 12% complete. Apples fair, peaches poor; Red Haven harvest started. Farm activities: cutting hay, combining wheat, barley, general farm maintenance.

**WISCONSIN:** Temperature 69°, 2° below normal. Extremes: 41°; 104°. Precipitation 0.10 to 0.90. Days suitable for fieldwork 5.8. Soil moisture 55% short, 45% adequate. Pasture 58% of normal, 21% 1988, 64% 5-year avg. General condition of crops 5% poor, 26% fair, 61% good, 8% excellent. Soybean 1% very poor, 2% poor, 35% fair, 52% good, 10% excellent. Corn 3% poor, 23% fair, 58% good, 16% excellent; height 50 in., 48 in. 1988, 53 in. avg.; 4% silked, 19% 1988, 14% avg. Second cut hay 18% completed, 43% 1988, 28% avg. Winter wheat harvest 6% completed, 47% 1988, 22% 3-year avg.

**WYOMING:** Temperatures above normal. Precipitation slightly above normal. Days suitable for fieldwork 6.0. Topsoil 79% short, 21% adequate. Winter wheat 15% headed, 5%

north central. Coastal Plains, south below normal. Temperatures above normal all areas, except Rolling Plains, below normal.

**Crops:** Small grain harvest winding down Plains with open weather. Yields very low later fields. Only few fields remained Northern Blacklands. Corn harvest gained momentum southern areas, hot temperatures dried down fields. Reported dryland yields low Coastal Bend, south. Valley irrigated yields holding up fair to good. Many dryland fields plowed up. Harvest beginning central. Fields rapidly maturing Upper Coast. Progress good Plains. Blackland fields denting. Corn 63% doughing, 67% 1988, 64% avg.; 52% dented, 52% 1988, 53% avg.; 25% mature, 15% 1988, 15% avg.; 8% harvest, 5% 1988, 2% avg. Grain sorghum harvest increased into Blacklands under hot, open weather. Yields not good so far Valley, Coastal Bend. Yields fair central, producers reporting good yields. Fields rapidly turning color Low Plains. Harvest activities increasing Upper Coast. Some later fields Plains beginning stressed for moisture. Grain sorghum planted 100%, 100% 1988, 100% avg.; 51% turning color, 39% 1988, 47% avg.; 26% mature, 20% 1988, 29% avg.; 17% harvested, 12% 1988, 16% avg. Cotton bolls rapidly opening Valley, Coastal Bend under hot temperatures. Defoliating activities increased, harvest beginning pick up. Fields set bolls throughout central, into Blacklands. Spraying for insects increasing Low Plains. Later crop Plains needs moisture. Fields squaring. Cotton open bolls 8%, 5% 1988, 3% avg.; 1% harvested 1%, 1% 1988, none avg. Rice producers continued spraying activities as fields heading. Continued rain isolated areas beginning to cause problems some fields. Peanut planting winding down central, south. Stands average to good. Irrigation steady Cross Timbers, Hill Country. Dryland fields could use rain. Some replanting still occurring. Soybean planting virtually complete High Plains. Stands look good. Upper Coast some fields received damage isolated heavy rains. Fields northeast loading up with pods. Good crop expected. Other field crops: Oats 93% harvested, 95% 1988, 93% avg. Peanuts 99% planted, 100% 1988, 98% avg. Soybeans 98% planted, 100% 1988, 99% avg. Sunflowers 94% planted, 80% 1988, 95% avg.

**Commercial Vegetables:** Rio Grande Valley, land preparations continued with some bell pepper planting underway. Fruit development citrus trees slowed because hot, dry conditions. Insect controls continued. Most harvest activity over San Antonio-Winter Garden. Land preparations beginning next season. Most activities continued east. Production good most vegetables. Excessive water damage still showing up. Onion, potato harvest continued High Plains with good yields. Some cantaloupe, onion harvest continued Trans-Pecos. Late season peaches still being harvested. Smaller sizes later crop. Pecan producers continued insect spraying most areas. Aphid populations increasing some areas. Rain would help the crop. Irrigation active Trans-Pecos.

**Range and Livestock:** Range, pasture grasses beginning show signs summer heating many areas. Growth slowed. Haying activities remained active. Pastures good east. Producers working sheep, lambs Hill Country. Cattle conditions vary across State. Insect problems increasing some areas.

**UTAH:** Precipitation light to moderate, heavy northeast. Temperatures 3 to 6° above normal.

Days suitable for fieldwork 6.9. Soil moisture 87% short, 13% adequate. Winter wheat 86% turned

# International Weather and Crop Summary

July 9-15, 1989

## HIGHLIGHTS

**USSR** ... In Western USSR, unseasonably warm, dry weather in central and eastern areas helps winter grain maturation and harvesting. In the New Lands, cooler weather and scattered showers lower stress on spring grains in or nearing the heading stage.

**EUROPE** ... Moderate to heavy rain delays winter grains harvest across the east. Scattered rain favors reproductive summer crops in the north.

**SOUTH ASIA** ... Rain brings some relief to previously dry areas of southern India. Highly variable showers continue elsewhere.

**EASTERN ASIA** ... Heavy rain and flooding persist in western and northern sections of the Yangtze Valley. Moderate to heavy rain favors summer crops in sections of the north.

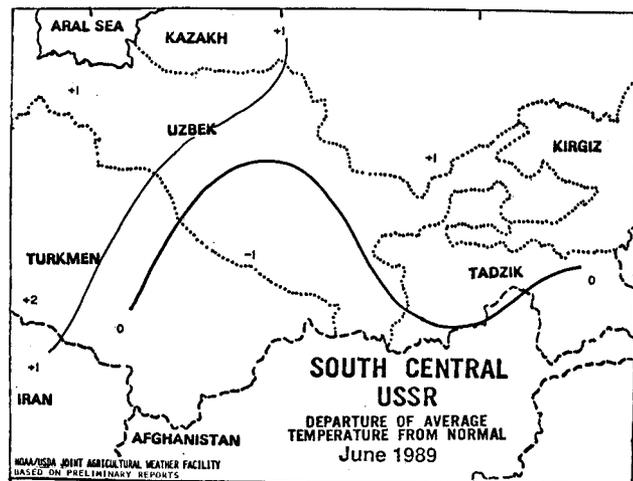
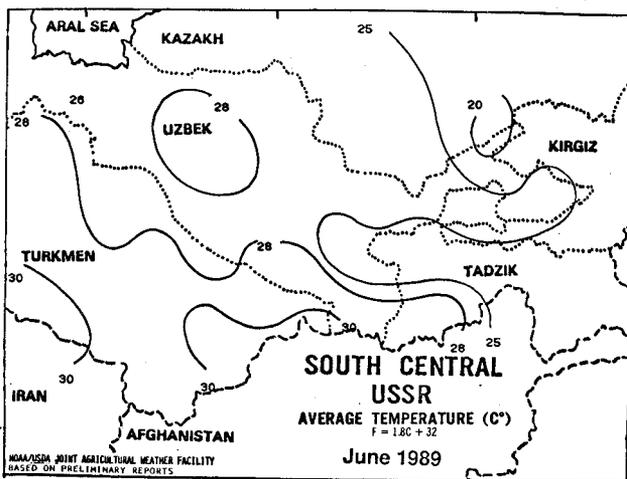
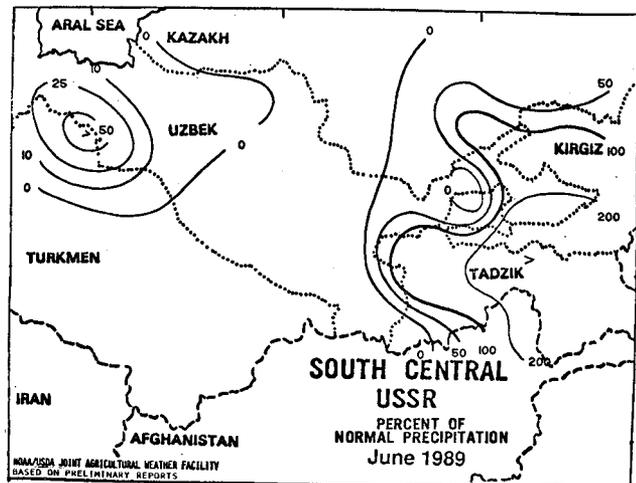
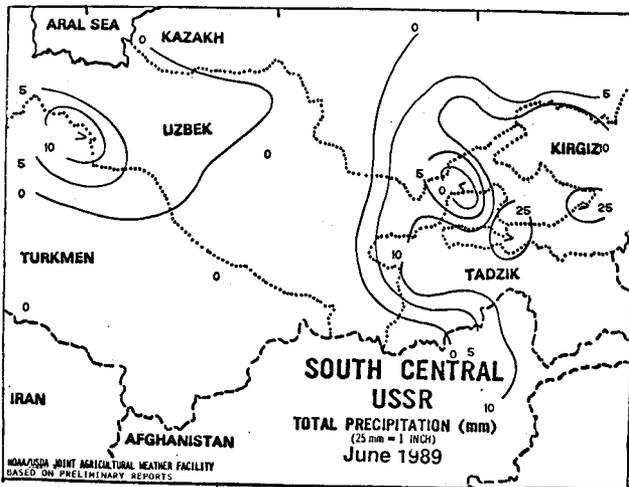
**SOUTHEAST ASIA** ... Typhoon Gordon hits the northern Philippines. Widespread showers continue across Thailand, but temperatures are warmer than normal.

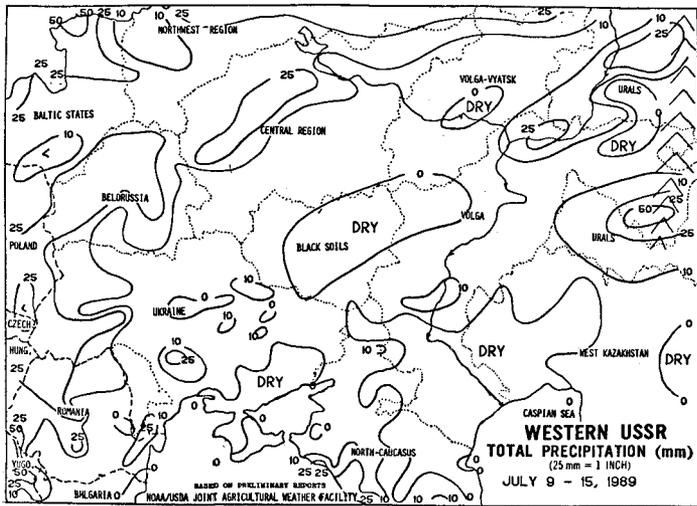
**SOUTH AMERICA** ... Dry weather promotes wheat planting in Argentina and citrus harvesting in south-central Brazil.

**AUSTRALIA** ... Rain covers most crop areas. Below-normal temperatures cause southern winter grains to become semidormant.

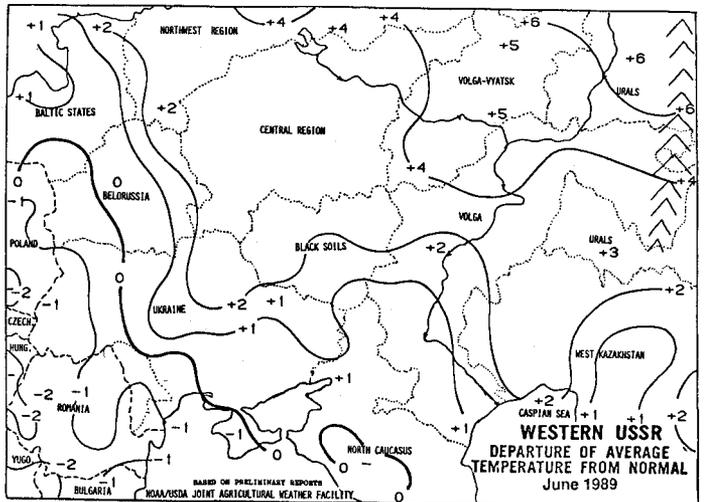
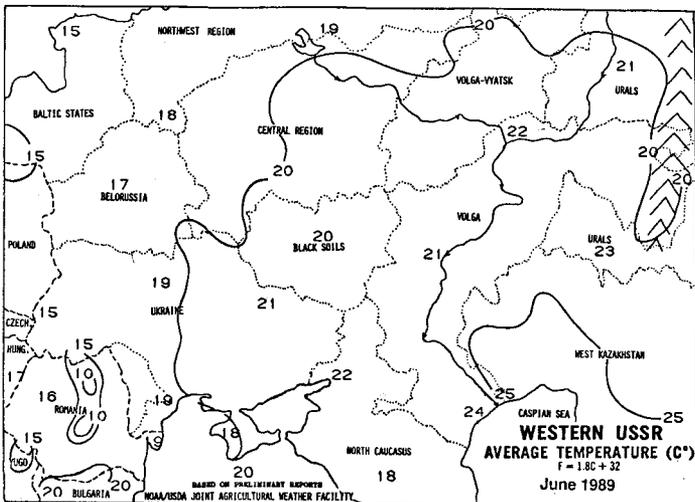
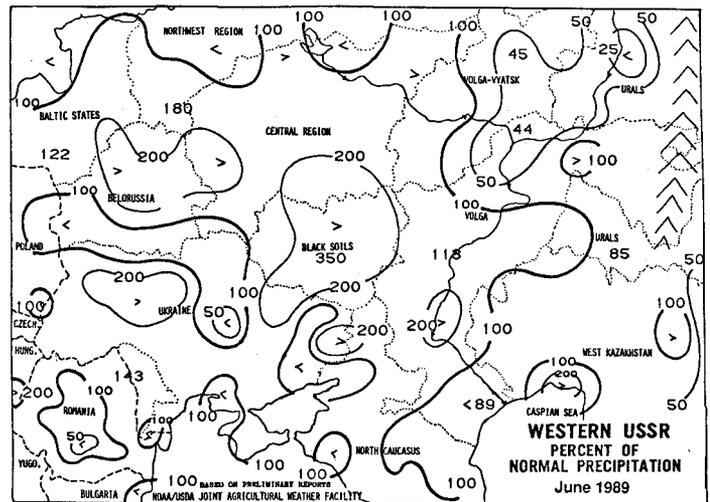
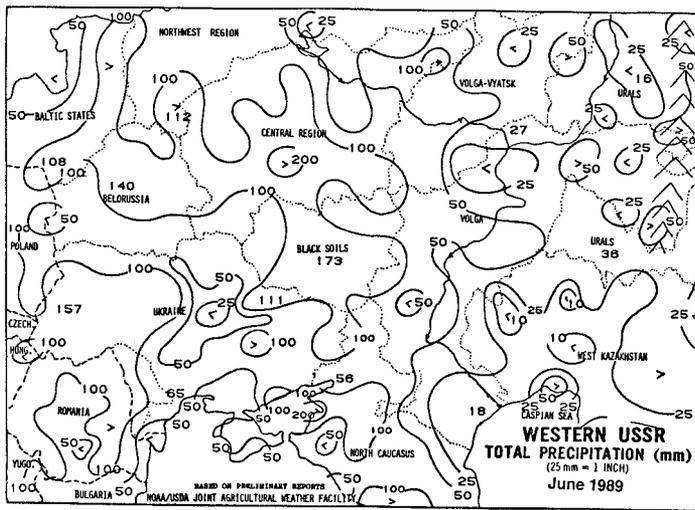
**CANADA** ... Showers maintain generally favorable conditions for reproductive crops but miss much of southeastern Saskatchewan.

**MEXICO** ... Showers benefit corn growth in the Southern Plateau, but hot weather persists in the northwest.

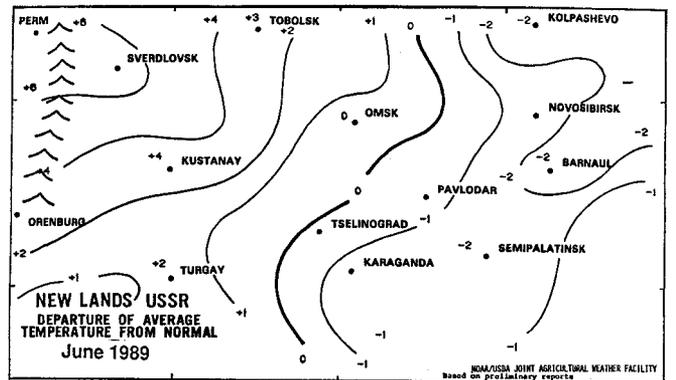
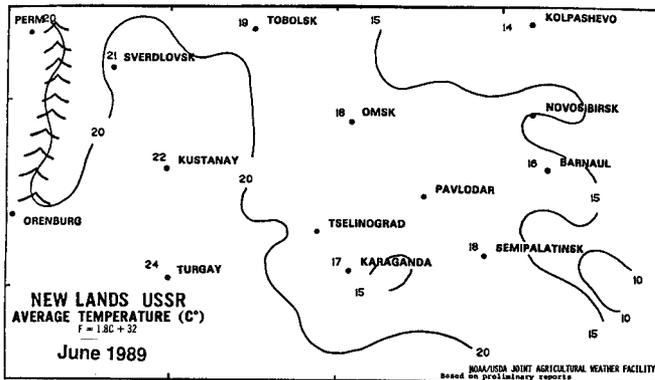
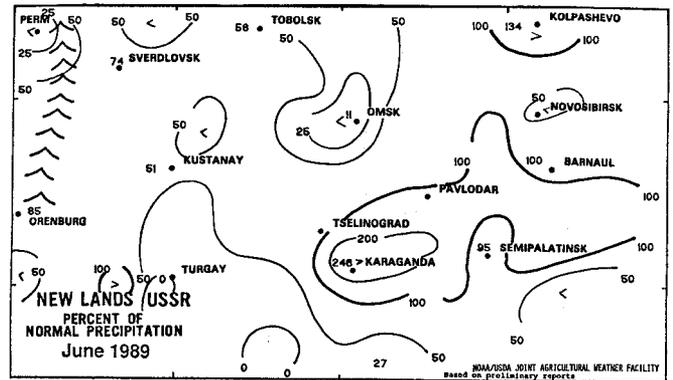
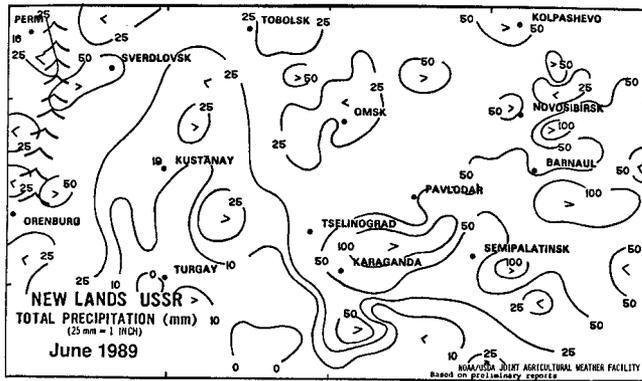
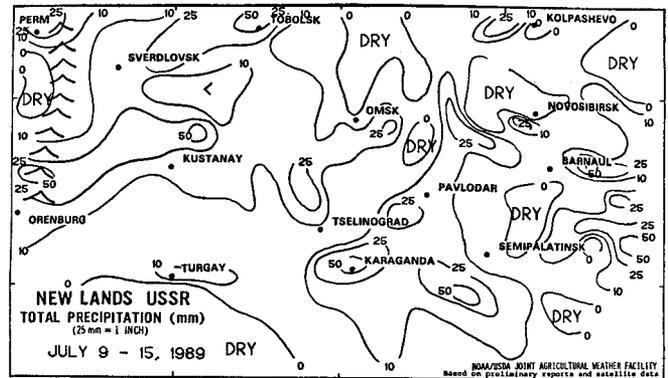


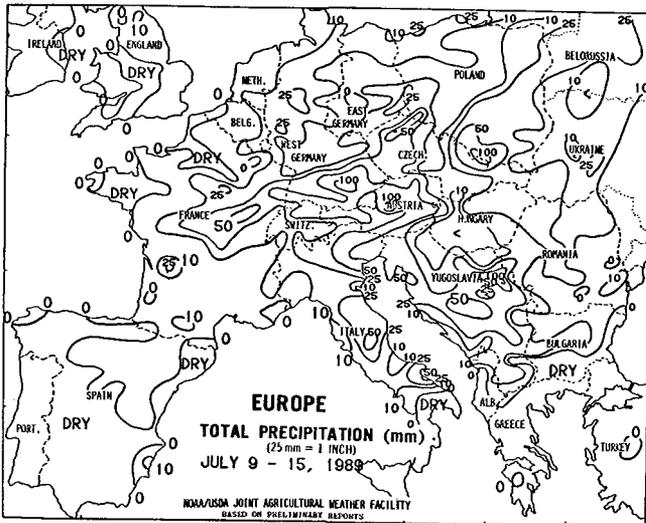


USSR ... Unseasonably warm and mostly dry weather over the eastern two-thirds of the Ukraine, the Black Soils Region, North Caucasus, and the lower Volga helped winter grain maturation and harvesting. Although wet weather (15-48mm) over the Baltic States, Belorussia, and the western Ukraine benefited spring grains in the filling stage, it slowed winter grain maturation. Highest weekly temperatures ranged from 31 to 34 degrees Celsius (C) over most of the region. In June, unfavorably hot, dry weather early in the month covered the eastern Ukraine, the North Caucasus, the Black Soils Region, and the lower Volga, stressing winter grains in the reproductive to filling stages. By mid-June, cooler weather with widespread showers and thunderstorms alleviated crop stress. The rain which covered the southern Ukraine reversed dry conditions which had persisted for several months. Precipitation in June was above normal over most of the region, with twice the normal amount of rainfall covering Belorussia, the southern portion of the Central Region, the western Ukraine, and the Black Soils Region. Although June's precipitation was mostly beneficial, locally heavy downpours with gusty winds caused some crop lodging in the Black Soils Region, the western Ukraine, and the southern half of the North Caucasus.

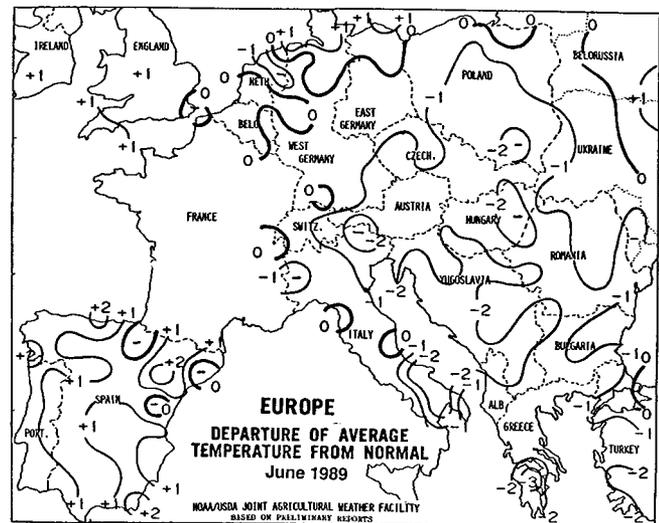
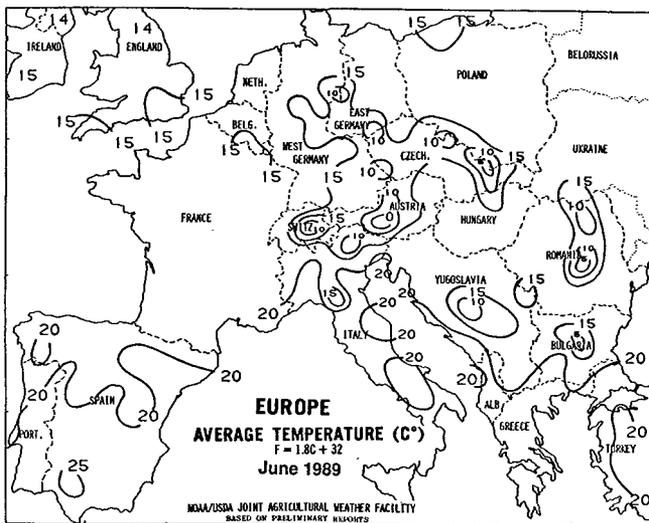
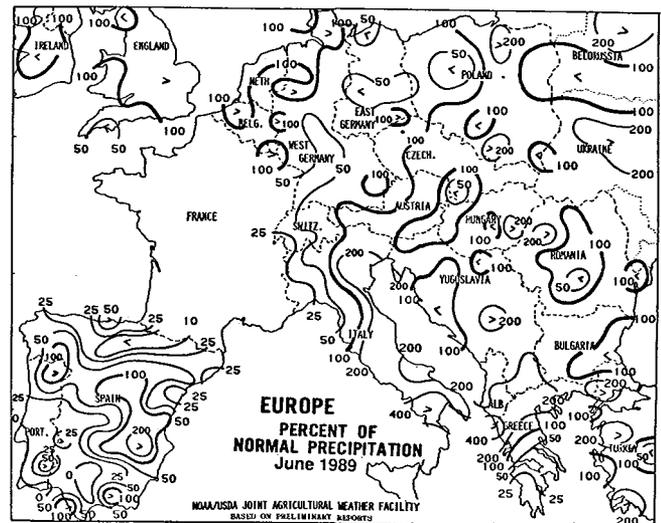
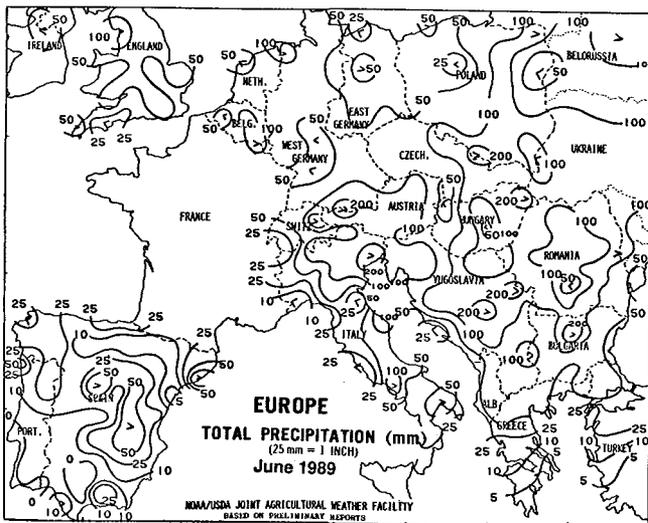


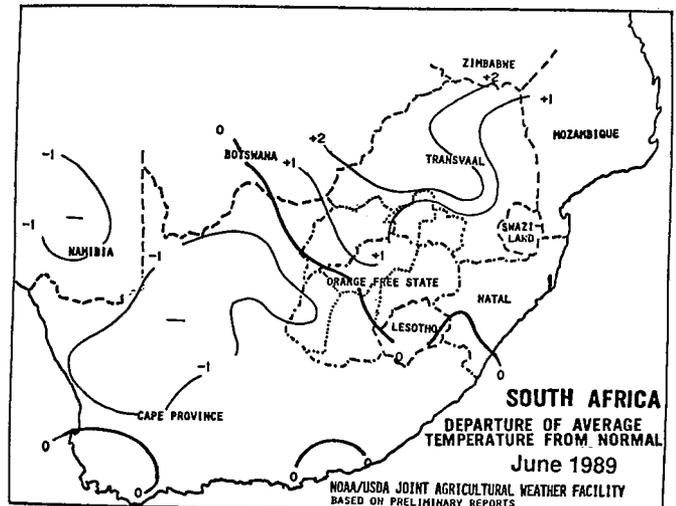
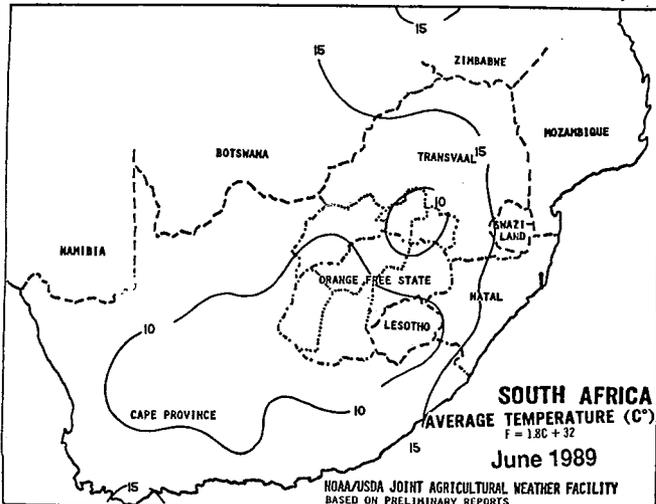
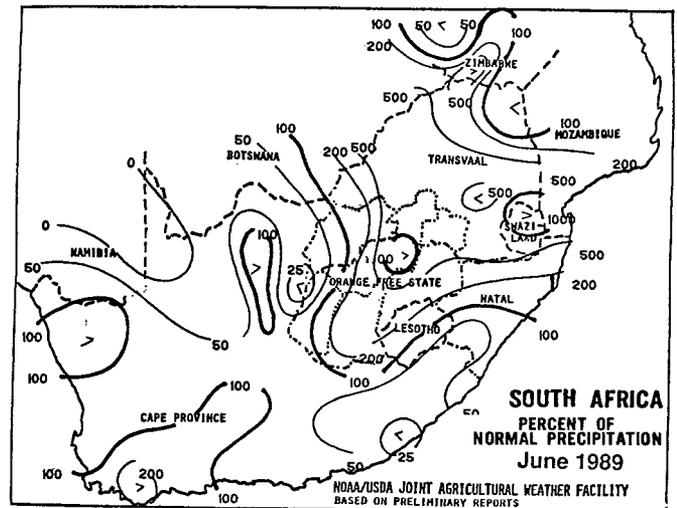
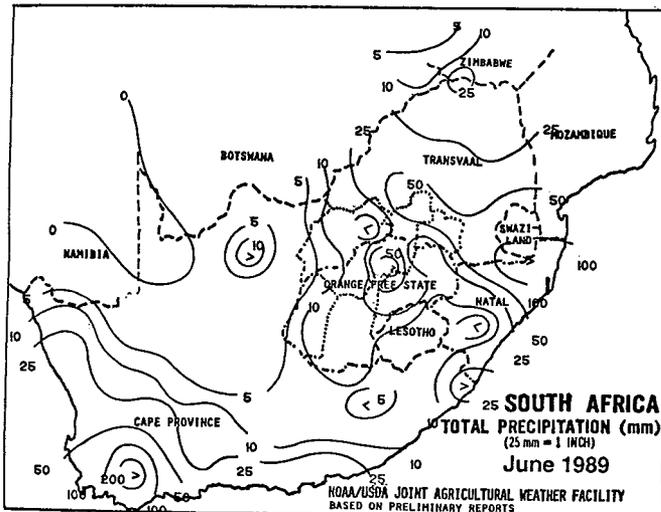
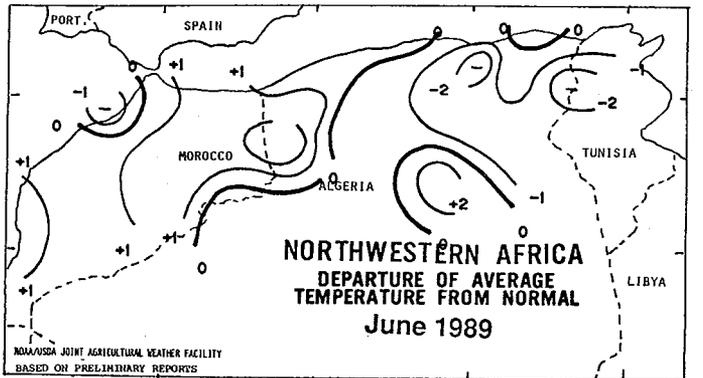
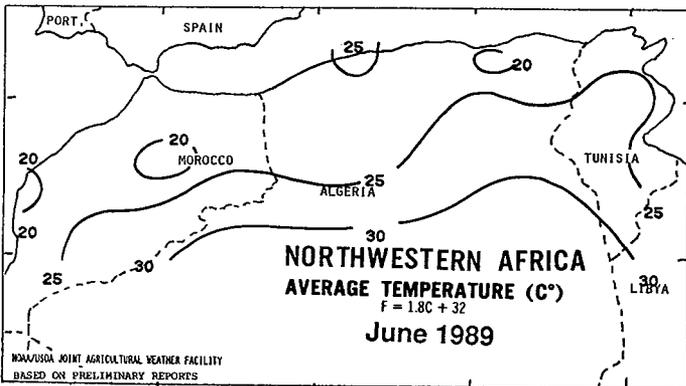
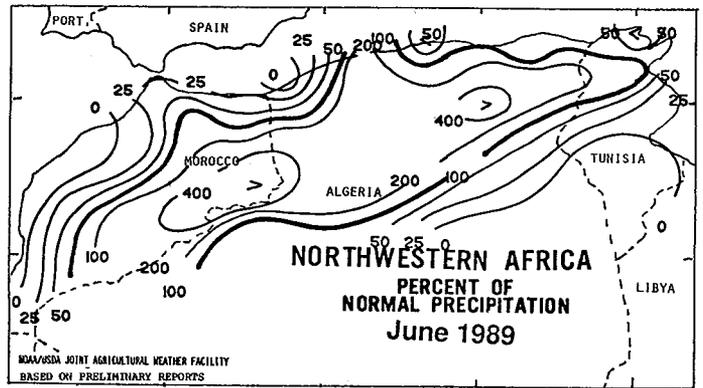
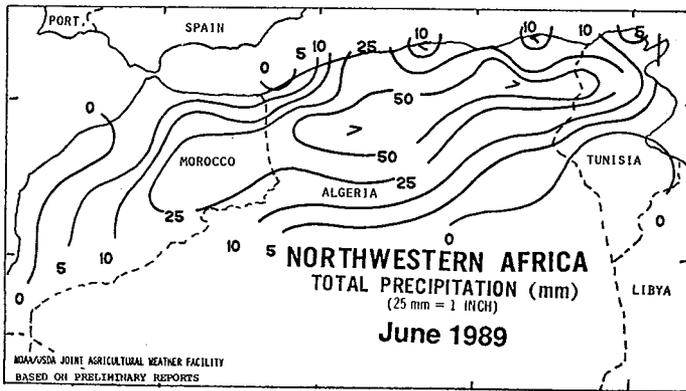
**NEW LANDS** ... A cold front progressed slowly eastward during the week, bringing welcomed cooler weather and scattered precipitation. Behind the front, maximum temperatures dropped to around 25 degrees C, while ahead of the front, hot weather (maximum temperatures ranging from 31 to 37 degrees C) continued to stress spring grains in or nearing the heading stage. Weekly precipitation amounts were highly variable, with a majority of spring grain areas receiving rainfall amounts less than 10mm. Although this past week's cooling trend helped to lower crop stress, significant rain and continued cool weather is needed to prevent substantial declines in crop prospects. In June, below-normal precipitation covered spring grains in the vegetative stage. While minor spring wheat areas received above-normal precipitation, the central crop areas received generally less than 50 percent of normal rainfall. June's dryness in the Urals, central Kazakhstan, and the western portion of West Siberia accompanied much-above-normal temperatures, which accelerated crop development and reduced soil moisture reserves.

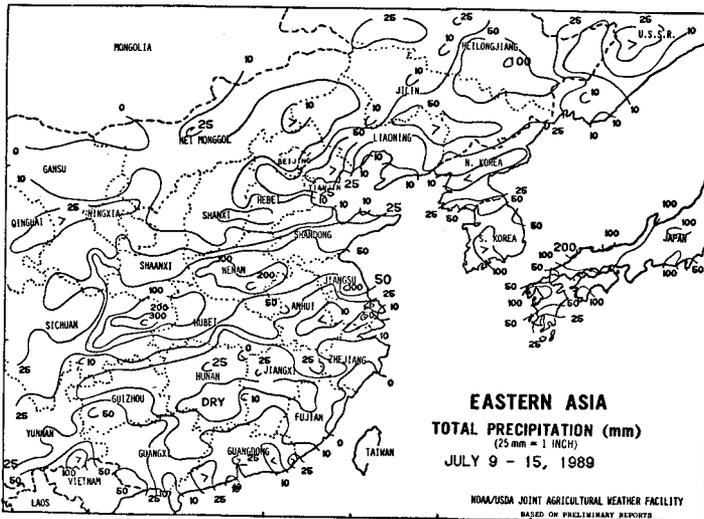




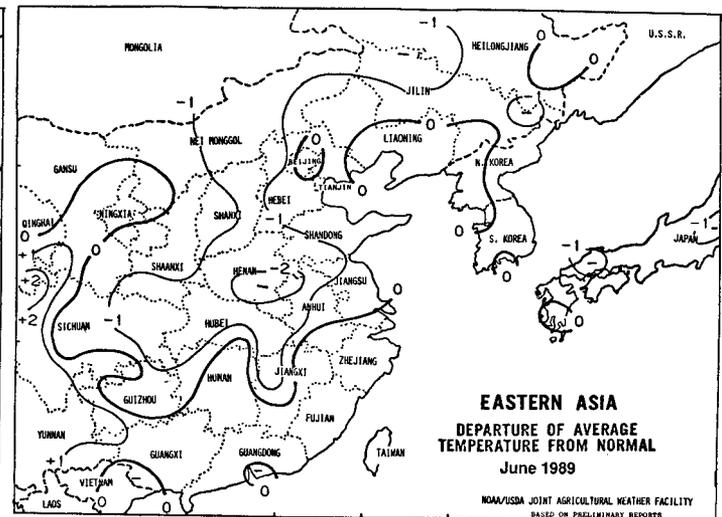
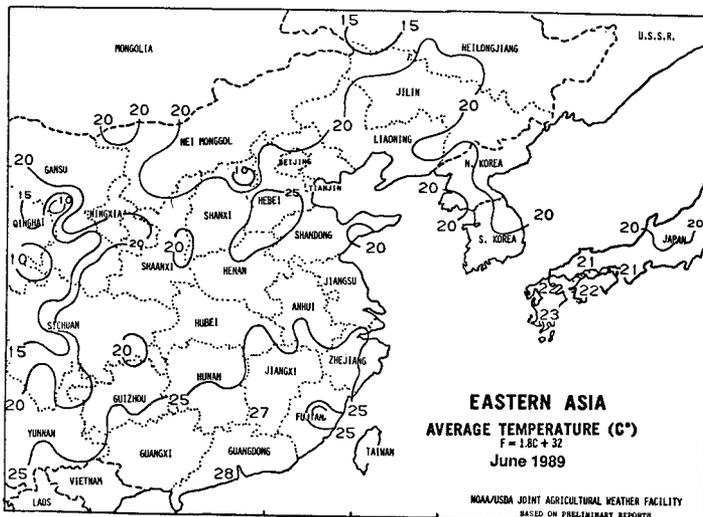
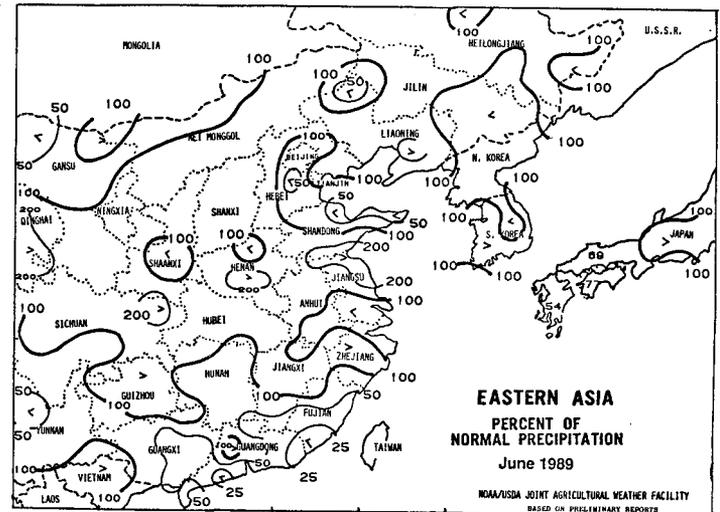
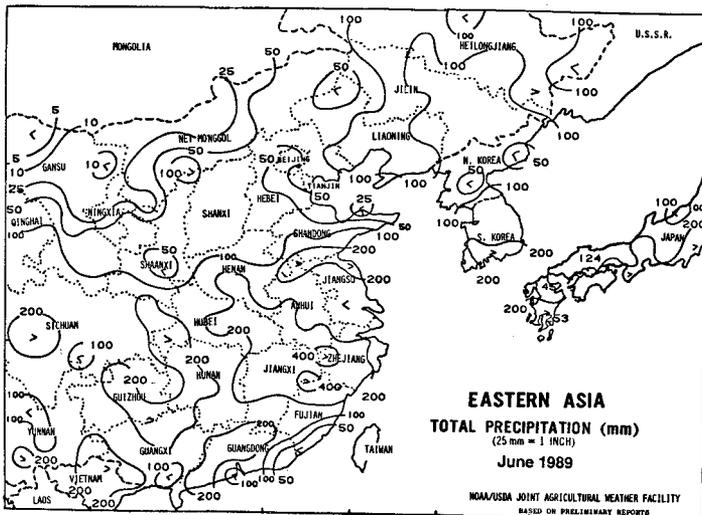
**EUROPE** ... Moderate to heavy rain (15-50mm, with isolated amounts in excess of 75mm) fell across much of eastern Europe except for the southern Balkans, causing delays in winter grains harvest but benefiting reproductive summer crops. Heavy rain (25-70mm, with isolated amounts up to 131mm) also fell in sections of southern West Germany, eastern France, and Italy. In the north, scattered light to moderate rain (5-20mm) favored reproductive spring planted crops, although some growing areas remain too dry, especially in Denmark and southern Sweden. Normal- to below-normal rainfall and periods of unseasonably warm weather stressed both winter and summer crops across northwestern Europe during June, while above-normal rainfall and below-normal temperatures favored those in the east. June rainfall in the south was highly variable, ranging from much above normal in southern Italy to much below normal in northern Spain.

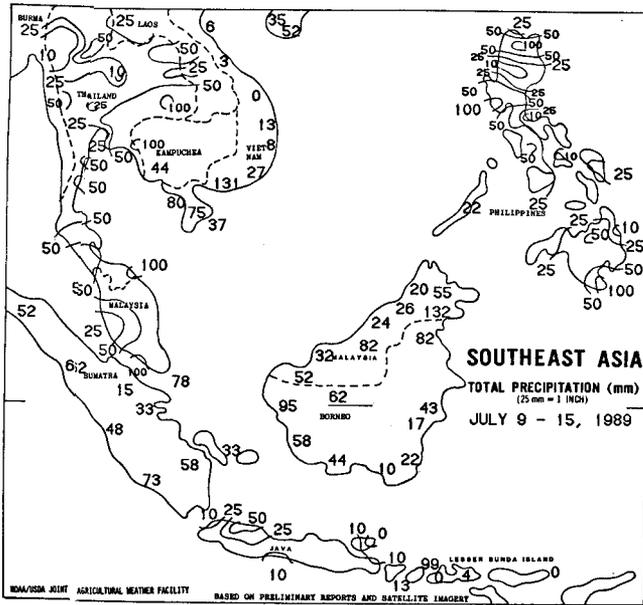




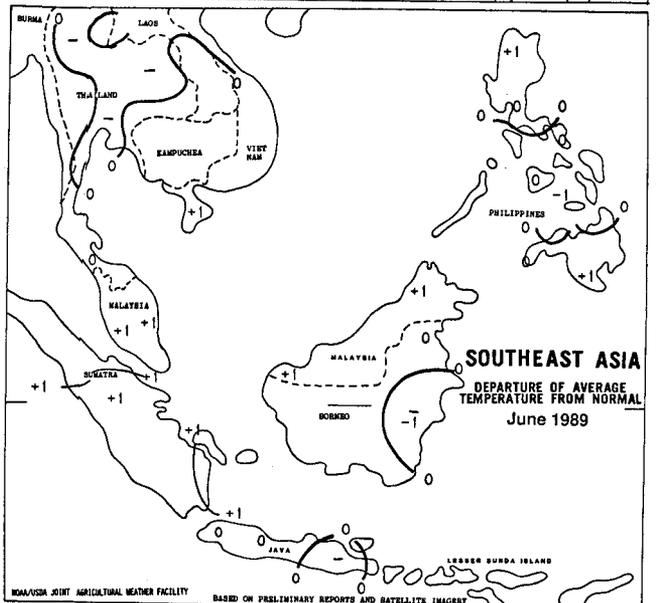
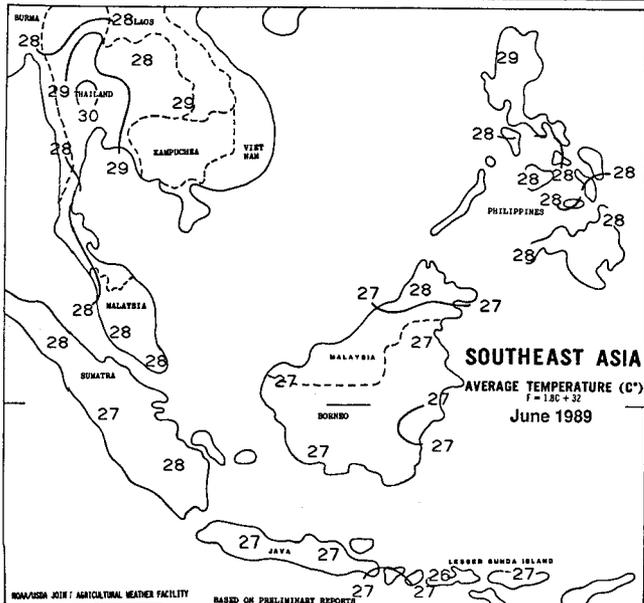
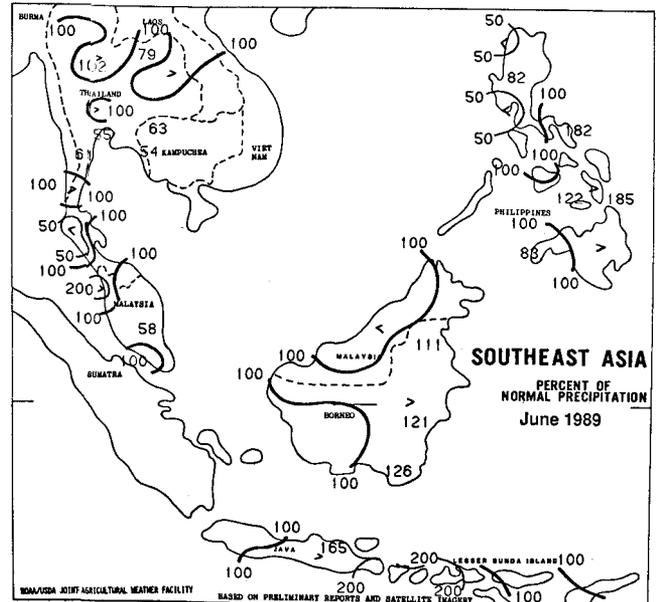
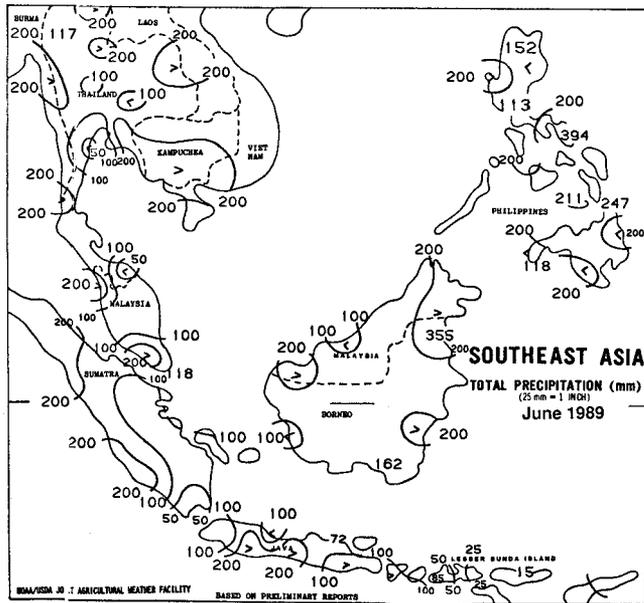


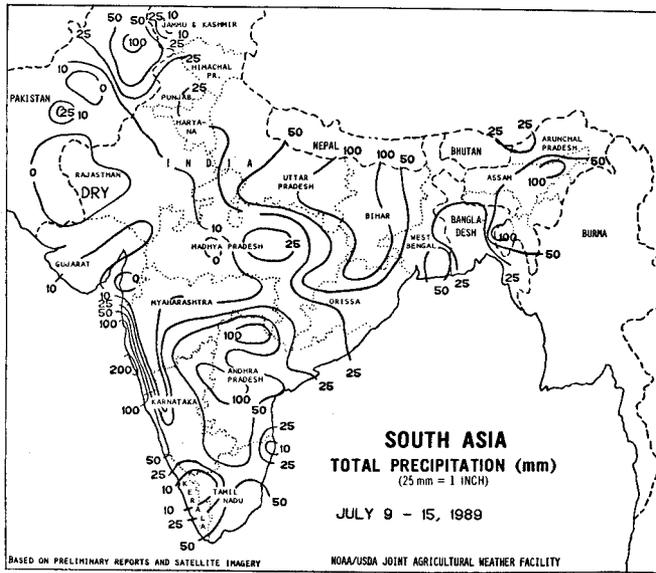
**EASTERN ASIA** ... Heavy rain (25-100mm, with scattered amounts up to 359mm) persisted over western and northern sections of the Yangtze Valley, causing continued flooding and fieldwork delays. Unusually heavy seasonal rains in much of the Yangtze Valley since June have left soils excessively wet and caused localized crop damage due to flooding. In the north, moderate to heavy rain (20-80mm, with scattered amounts in excess of 80mm) favored vegetative to filling summer crops in much of Manchuria, South Korea, and Honshu in Japan. In contrast, scattered light to moderate showers (5-20mm) offered only limited relief to sections of southeastern China, where below-normal rainfall since early June and recent hot weather have increased moisture stress for sugarcane and summer crops. Weekly mean temperatures were below normal in all but southern crop areas, which were above normal.



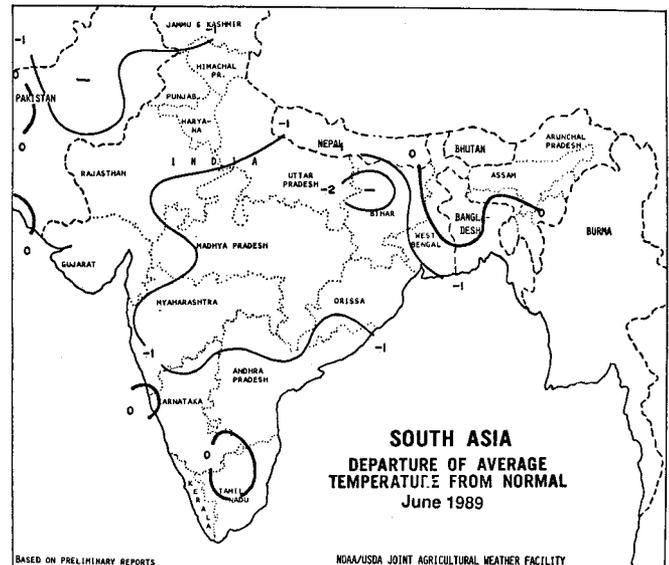
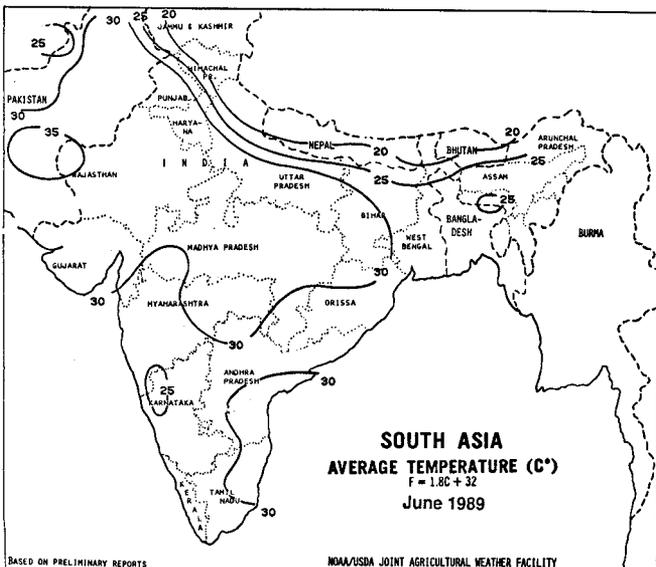
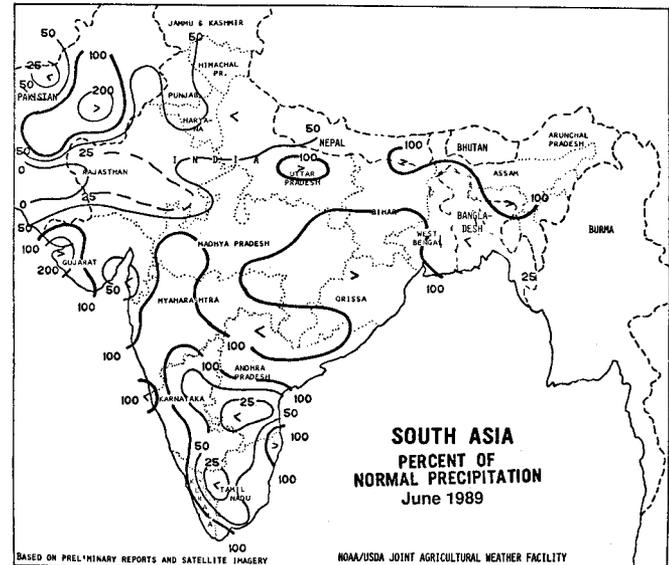
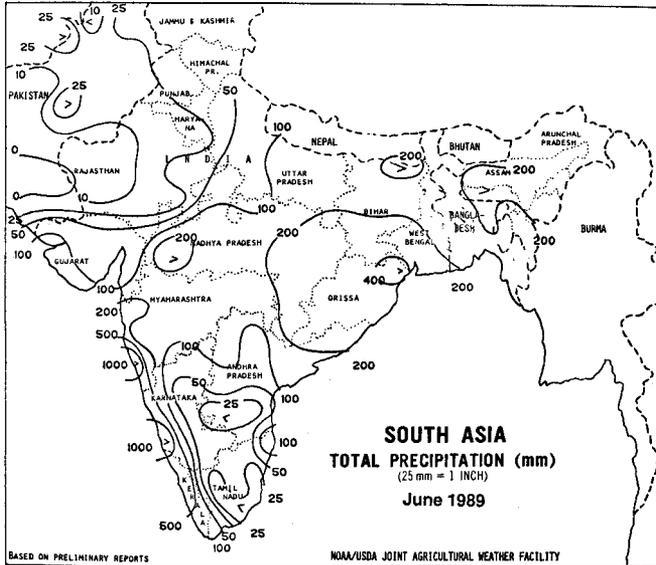


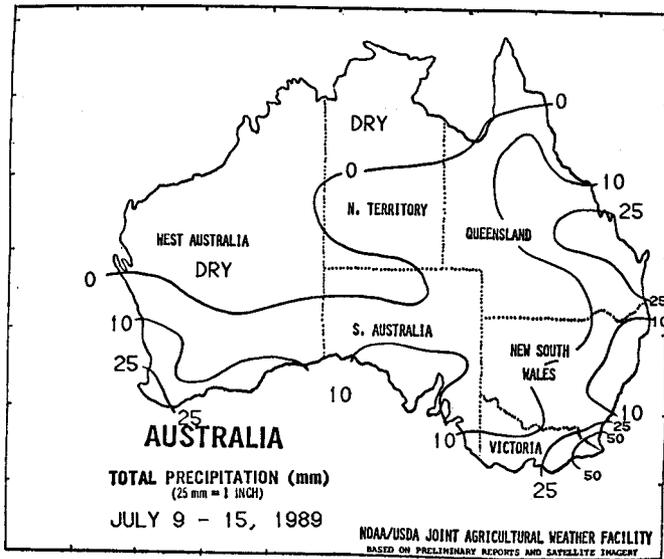
**SOUTHEAST ASIA** ... Typhoon Gordon struck the northern Philippine Island of Luzon on the 15th, bringing locally heavy showers and causing local flooding and crop damage. The path of the storm was similar to that of Tropical Storm Faye, but sustained winds were much stronger, reaching 135 knots before striking the island. In Thailand, widespread variable showers (25-50mm or more) continued across the primary grain regions, but local dry pockets (10mm or less) persisted in the central corn region, reducing moisture reserves for reproduction and filling. Temperatures averaged 1-2 degrees C above normal in the western half of the country with highs averaging in the middle 30's C. In June, rainfall was near to above normal across most of Thailand's primary grain areas, maintaining favorable growing conditions for vegetative crops. Rainfall was below normal in the south near Bangkok, but irrigation reserves were adequate for rice growth. Temperatures averaged near normal. In the Philippines, rainfall was frequent during June with near- to above-normal accumulations in most regions, the exception being northern and western Luzon. June temperatures averaged near normal.



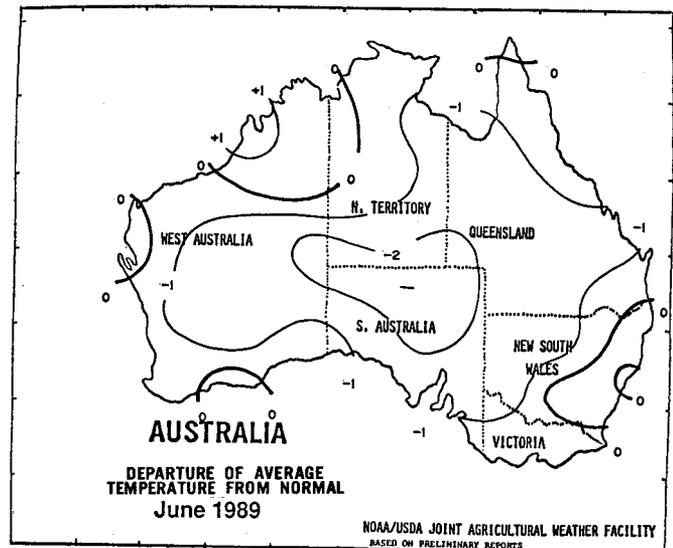
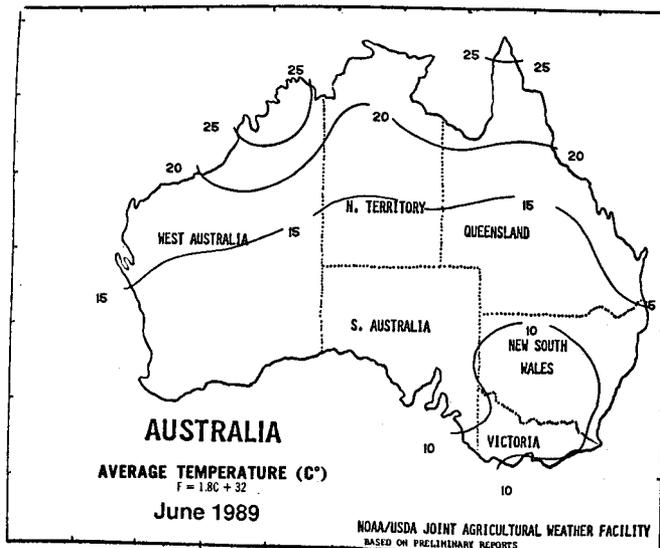
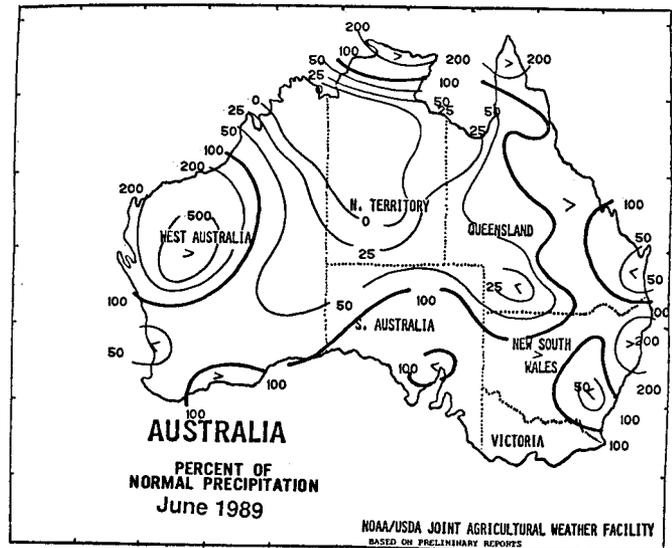
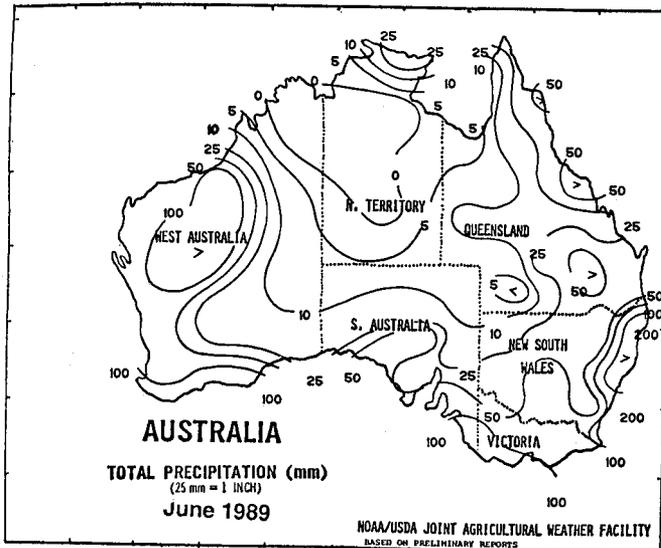


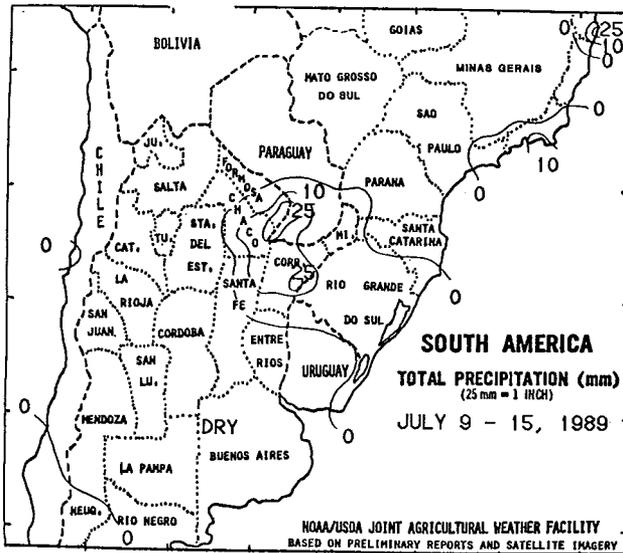
**SOUTH ASIA ...** Beneficial showers (25-50mm or more) covered most of southern and eastern India, although amounts were below normal along the eastern coast. Dry pockets persisted in western Maharashtra and developed elsewhere in the state, but needed rain (25-82mm) covered Karnataka, bringing some relief to reproductive crops experiencing recent dryness. In central India, only light rain (1-15mm) covered recently planted crops in western Madhya Pradesh, Rajasthan, and Gujarat. In the north, variable, scattered showers (10-50mm or more) extended from northern Pakistan through Uttar Pradesh, improving irrigation reserves but likely causing local flooding. In June, rainfall was below normal in the south from Karnataka and southern Andhra Pradesh southward, slowing planting and limiting moisture for crop growth. Rainfall was near to above normal elsewhere in the south and in central and eastern regions, favoring planting and establishment. Only scattered showers dotted the north, but the monsoon usually does not set in until July. June temperatures averaged near to below normal across the region.



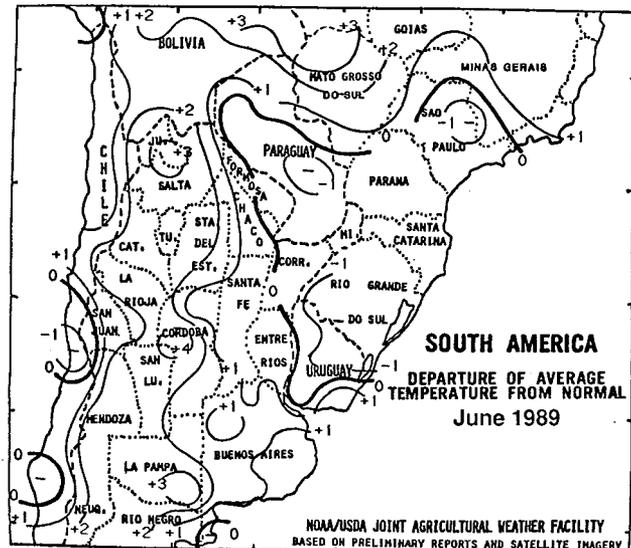
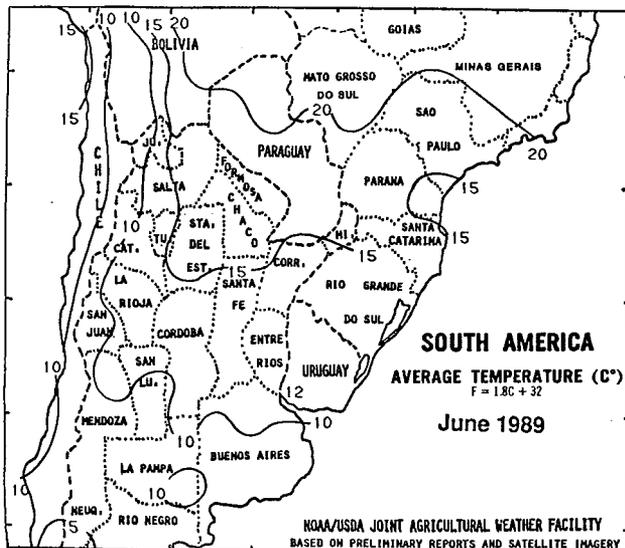
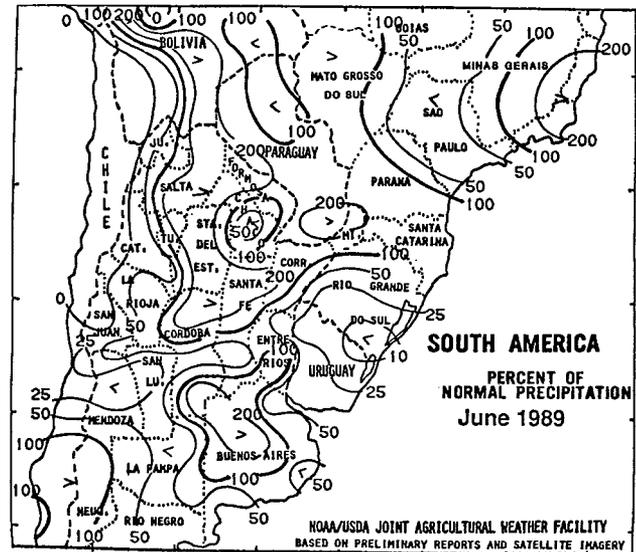
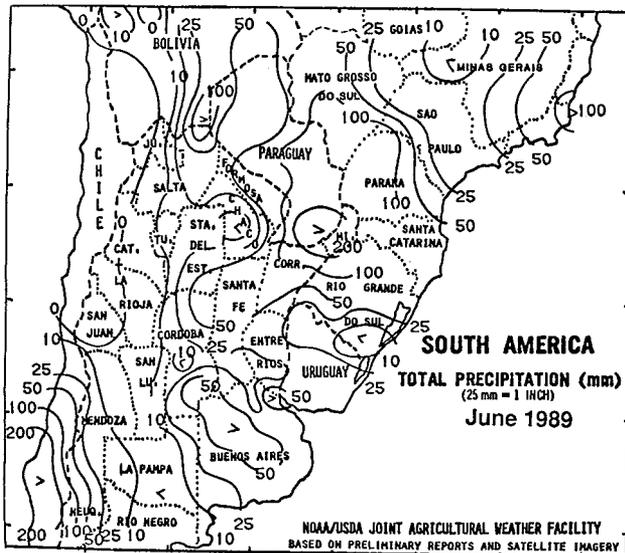


**AUSTRALIA** ... Widespread rain (5-36mm) fell over crop areas of Queensland, favoring late season growth of forages and winter grains in the south but delaying sugarcane harvest in the east. Mostly light to moderate rain (5-20mm, with isolated amounts in excess of 20mm) covered winter grains in New South Wales, Victoria, South Australia, and Western Australia, which have become or are becoming semidormant due to continuing below-normal weekly mean temperatures. Above-normal rainfall during June caused extensive delays in winter grain planting across sections of Victoria and southern New South Wales, likely causing some switch over from wheat to barley planting intentions. June rainfall was also above normal in crop areas of Queensland and South Australia, but normal to below normal in growing areas of Western Australia. Mean temperatures for the month were mostly normal to below normal.

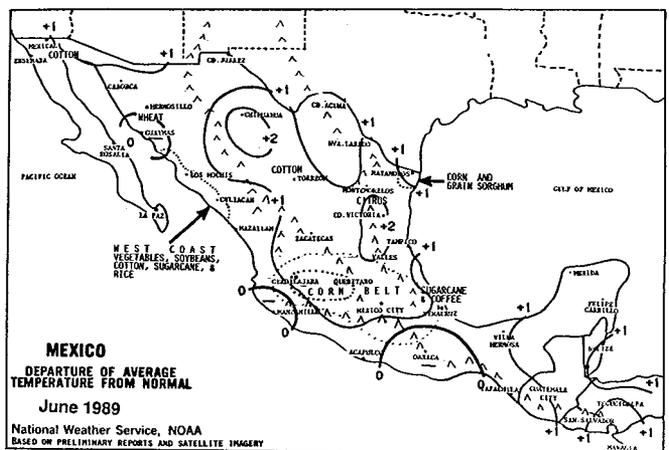
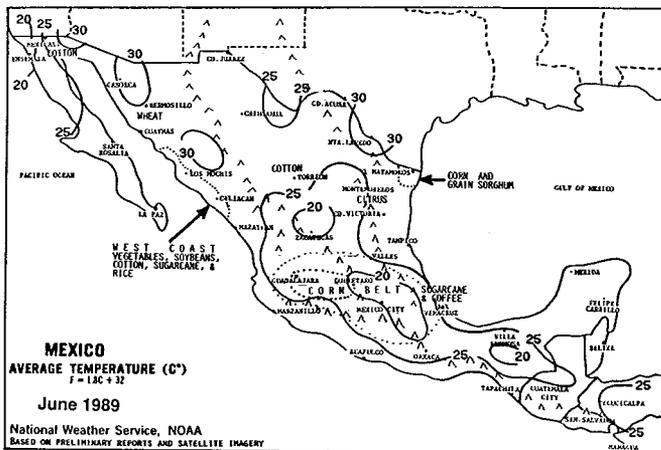
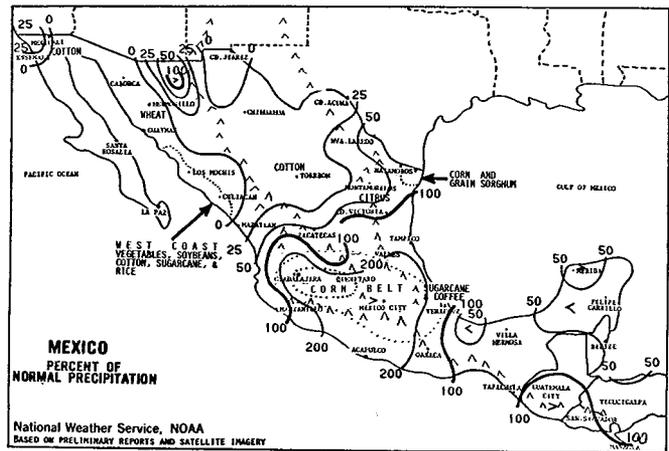
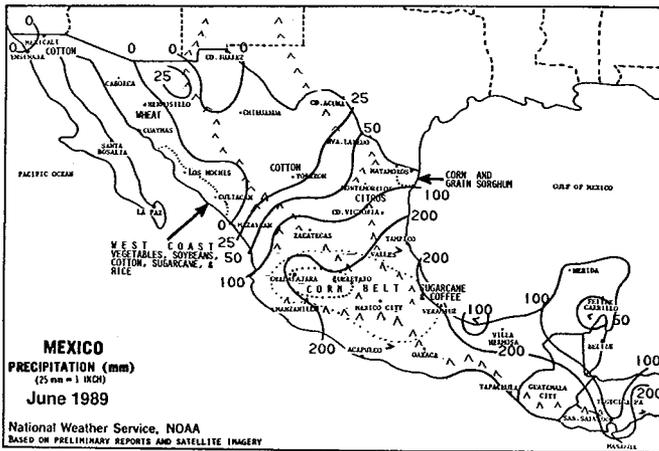
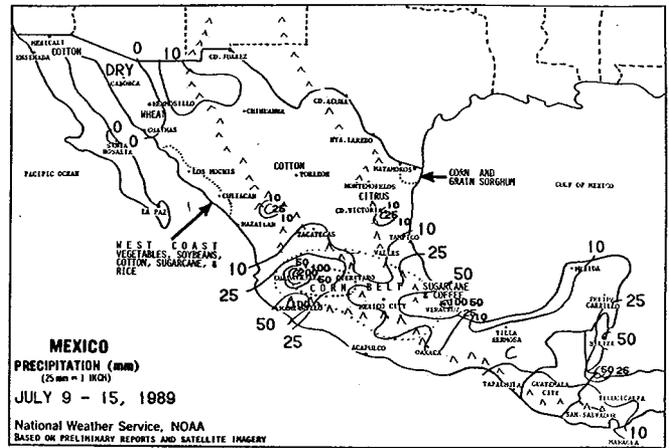


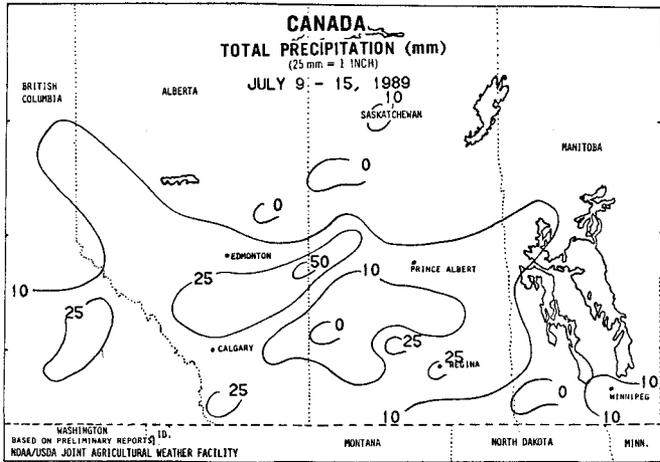


**SOUTH AMERICA** ... Dry weather prevailed over Argentina's wheat areas, favoring wheat planting which is reportedly over 60 percent complete and ahead of last year's pace. Although dry weather has prevailed during the past 2 weeks, periodic June rainfall provided mostly favorable topsoil moisture for crop emergence. In fact, June rainfall averaged over 200 percent of normal in northwestern Buenos Aires and southeastern Cordoba. Below-normal June rainfall was mostly confined to coastal portions of Buenos Aires and western fringes of the wheat area. In south-central Brazil, light showers fell in Rio Grande do Sul, while seasonably dry weather prevailed in Parana and northern coffee areas. Weather station reports have resumed in southern Brazil. June rainfall, based on incomplete data and satellite imagery, was below average in Rio Grande do Sul, Sao Paulo, and southern Minas Gerais and near normal in Parana and Mato Grosso do Sul.

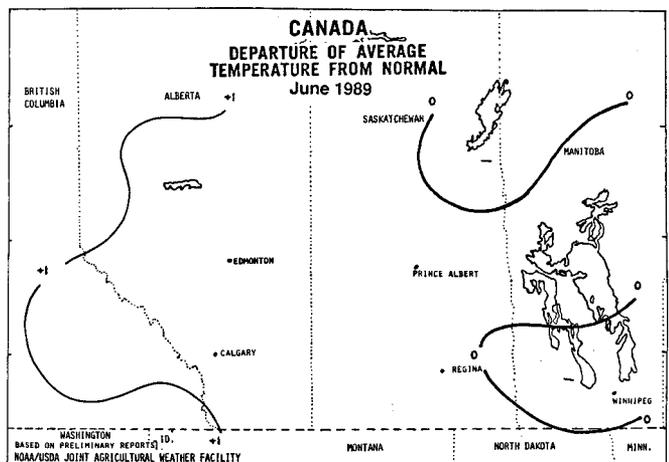
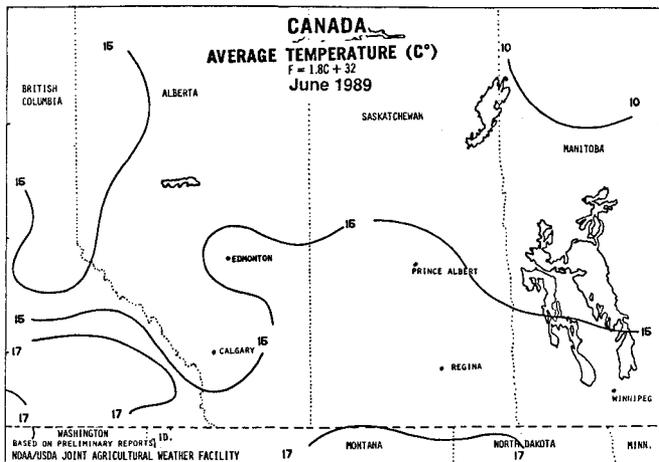
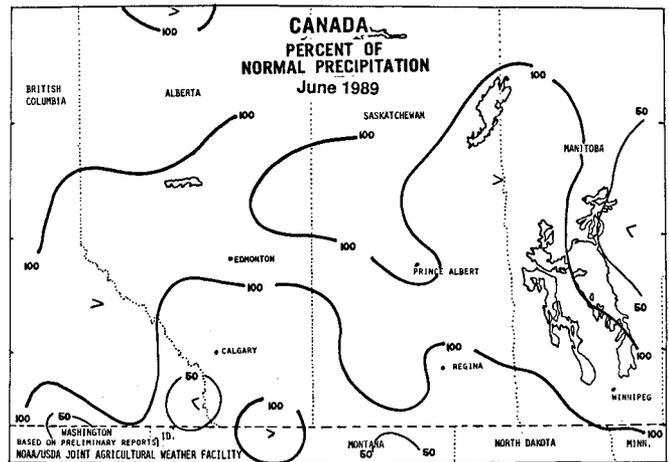
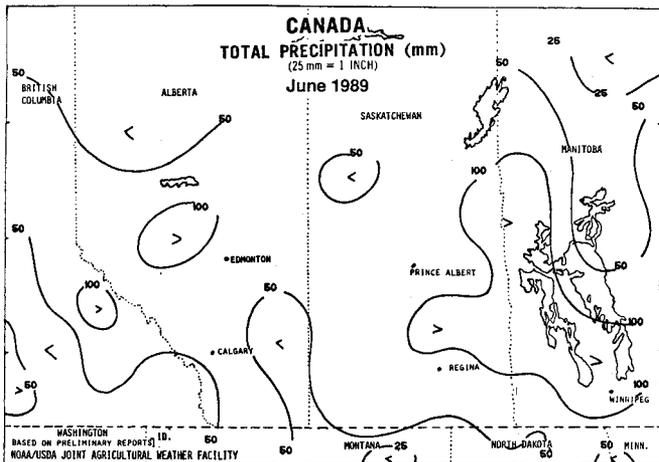


**MEXICO** ... Showers continued to benefit corn development in much of the Southern Plateau. Weekly rainfall generally averaged 25-50mm, with scattered heavier amounts of 50-181mm, in both the eastern half and western third of the major corn growing region. Rainfall tended below 25mm in the south-central Plateau and diminished to less than 10mm in north-central portions. June rainfall varied across the Plateau, but near seasonable amounts over most areas promoted early corn growth. Light showers (less than 10mm) fell along the west coast farming region with locally heavier showers in the northwestern mountains. The moisture is needed as persistent hot weather continues to impose high moisture demand and crop stress throughout the northwest. Extreme maximum temperatures ranged 38-40 degrees C along the west coast and 40-45 degrees in the far northwest. Scattered showers fell in the northeast.





**CANADA** ... Variable, scattered showers covered the Canadian Prairies, maintaining generally favorable conditions for crops advancing through reproduction. Rainfall ranged from 10 to 25mm over Alberta and eastern and northwestern Manitoba, and from southwestern to northeastern Saskatchewan. The rain brought needed relief to areas of southern Alberta that had been trending dry since mid-June but showers missed much of southeastern Saskatchewan, another area receiving only limited rainfall in recent weeks. In June, rainfall was near to above normal across the Prairies, the exception being Alberta's Peace River Valley, southeastern Alberta, and much of southeastern Saskatchewan, all receiving less than 70 percent of normal rainfall. Temperatures in June were near normal. Seasonal warming during the month stimulated vegetative growth but increased crop moisture demands.



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

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

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service/Climate Analysis Center  
Managing Editor . . . . . Douglas Le Conte  
Meteorologists . . . . . Tom Heddinghaus  
Vilhelm Bjerknes, Bob Stefanski, Wes Byrd,  
and Jeffrey Savadel

Subscriptions (202) 447-7917 . . Jeanette Hill

U.S. DEPARTMENT OF AGRICULTURE  
Economics Management Staff  
Editor . . . . . Sharon Lee  
National Agricultural Statistics Service  
Agricultural Statistician . . . Tom Kurtz (202) 447-2157  
World Agricultural Outlook Board  
Agricultural Weather Analysts. . Ray Motha,  
Tom Puterbaugh, Mark Brusberg, and Jeff Andresen

(Continued from p. 19)

color, 91% 1988, 93% avg.; 47% ripe, 47% 1988, 50% avg.; 8% harvested, 22% 1988, 21% avg. Barley 74% 1988, 5% avg.; 60% turning color, 25% 1988, 40% avg.; 25% mature, 55% 1988, 45% avg; 0% harvested, 15% 1988, 10% avg. Barley 10% boot, 5% 1988; 55% headed, 35% 1988, 35% avg.; 30% turning color, 40% 1988, 40% avg.; 5% mature, 20% 1988, 15% avg. Spring wheat 10% boot, 5% 1988; 60% headed, 35% 1988, 45% avg.; 20% turning color, 40% 1988, 35% avg.; 10% mature, 20% 1988, 15% avg. Oats 20% boot, 10% 1988; 60% headed, 50% 1988, 55% avg.; 15% turning color, 25% 1988, 25% avg.; 5% mature, 15% 1988, 10% avg. Dry beans 25% bloom, 30% 1988, 30% avg. Potatoes 30% bloom, 60% 1988, 40% avg. Corn 15% tasseled, 15% 1988, 10% avg. Alfalfa first-cutting 85% complete, 95% 1988, 90% avg. Other hay 45% harvested, 60% 1988, 50% avg. Ranges, pastures 20% poor, 50% fair, 30% good. Livestock feed obtained from pastures 90%. Hay, roughage 10% very short, 25% short, 60% adequate, 5% surplus. Stockwater 55% short, 45% adequate.

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

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

**WEEKLY NEWS BULLETIN**  
**SECOND CLASS**

SECOND CLASS MAIL  
POSTAGE AND FEES PAID  
NOAA PERMIT NO.

ISSN 0043 1974