

# WEEKLY WEATHER AND CROP BULLETIN

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

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

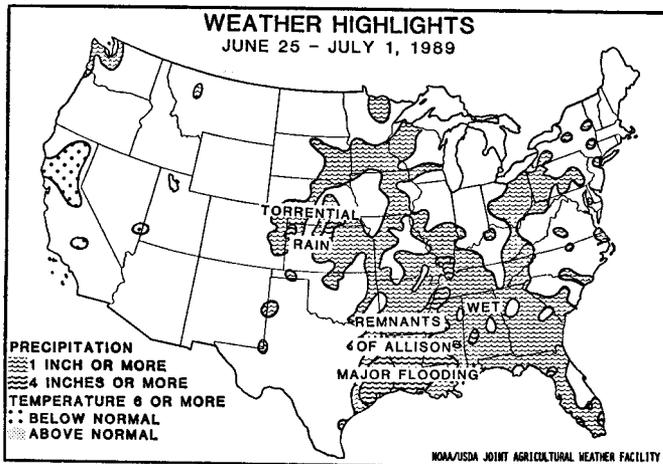
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## National Weather Summary

June 25 - July 1, 1989



**TUESDAY:** Tropical depression Allison continued to dump torrential rain over eastern Texas and the Delta, causing widespread flooding. Strong thunderstorms produced heavy rain from the eastern Ozarks, across the Ohio Valley, into the Northeast. Scattered thunderstorms brought beneficial rain to southern Florida.

**WEDNESDAY:** Heavy rains again drenched the lower Mississippi Valley as Allison remained stationary. Showers and thunderstorms spread over the Southeast as widespread rain soaked southern Florida. Thunderstorms produced hail and torrential rain in northwestern Kansas. Eight and a half inches flooded fields east of Goodland, KS. Rain showers preceded an approaching frontal system along the northern Pacific coast.

**THURSDAY:** Heavy rain from the remnants of Allison continued to deluge Louisiana and eastern Texas, flooding streams and bayous. Showers and thunderstorms kept much of the Southeast wet. A cold front brought more showers to the northern Pacific coast.

**FRIDAY:** The low pressure system which once was Tropical Storm Allison deluged the Delta with more heavy rain aggravating major flooding. Showers and thunderstorms again soaked the Southeast and drenched the central Plains. A thunderstorm produced 4.8 inches in 2 hours near Clay Center, NE. The Pacific front spread rain across the Northwest into the northern Rockies.

**SATURDAY:** The remnants of Allison moved eastward, spreading heavy rain from the lower Mississippi Valley into Alabama and the Tennessee and lower Ohio Valleys. Thunderstorms remained over the central Plains and Florida.

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

**SUNDAY:** Intense thunderstorms produced severe weather and heavy rain along and ahead of a frontal system, extending from the central High Plains to the upper Mississippi Valley. A tropical depression, which formed from the remnants of the Pacific Hurricane Cosme after crossing Mexico, brought more rain to the western Gulf coast. Thunderstorms were again scattered along the saturated mid-Atlantic coast.

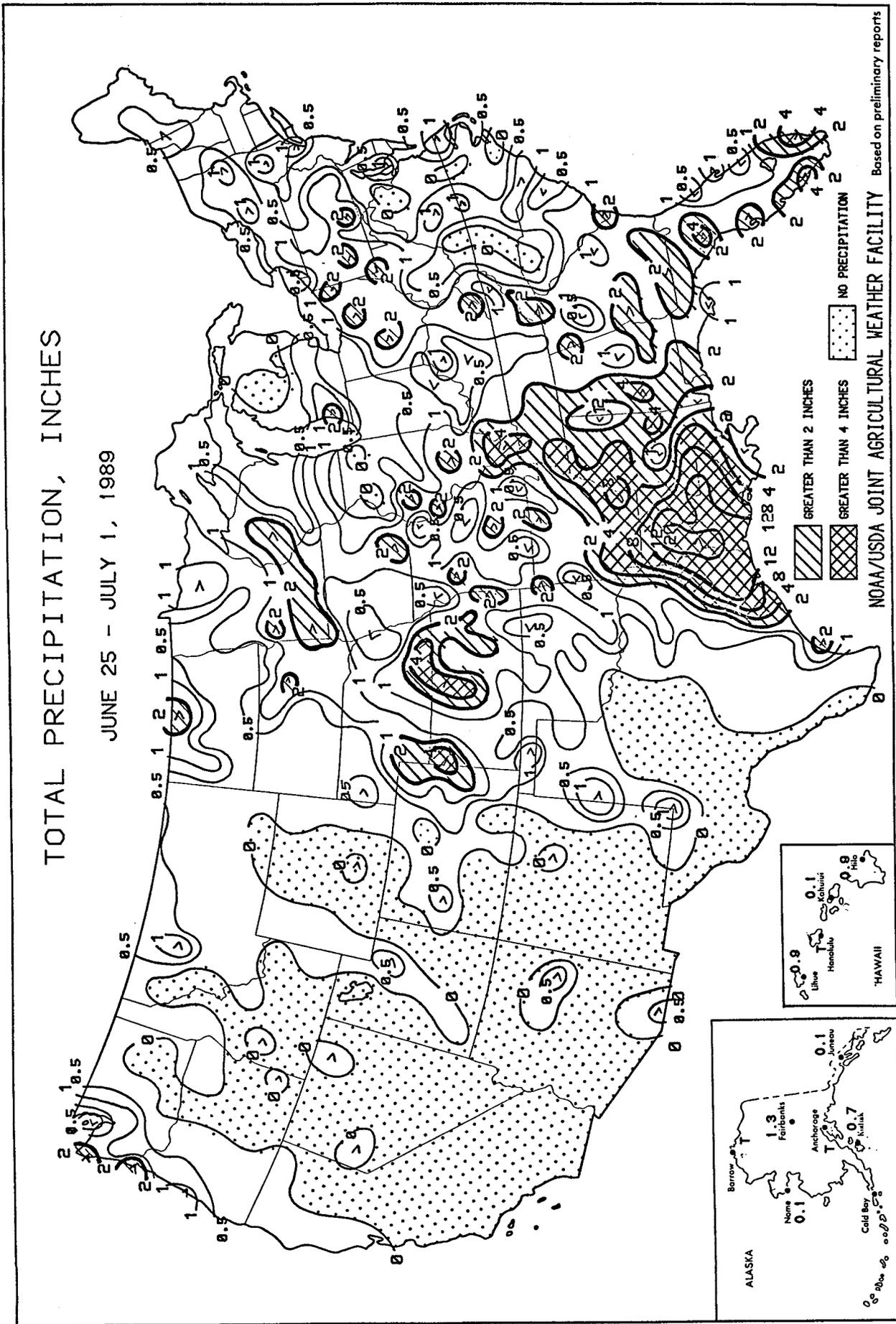
**MONDAY:** The tropical depression strengthened to Tropical Storm Allison and brought drenching rain to eastern Texas and Louisiana. Over 9 inches inundated Houston in a 12-hour period. A solid band of thunderstorms reached from the central Plains to the upper Great Lakes, producing heavy rain and severe weather. Thunderstorms were widely scattered down the Atlantic seaboard. Needed showers fell along the southeastern Florida coast.

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TOTAL PRECIPITATION, INCHES

JUNE 25 - JULY 1, 1989



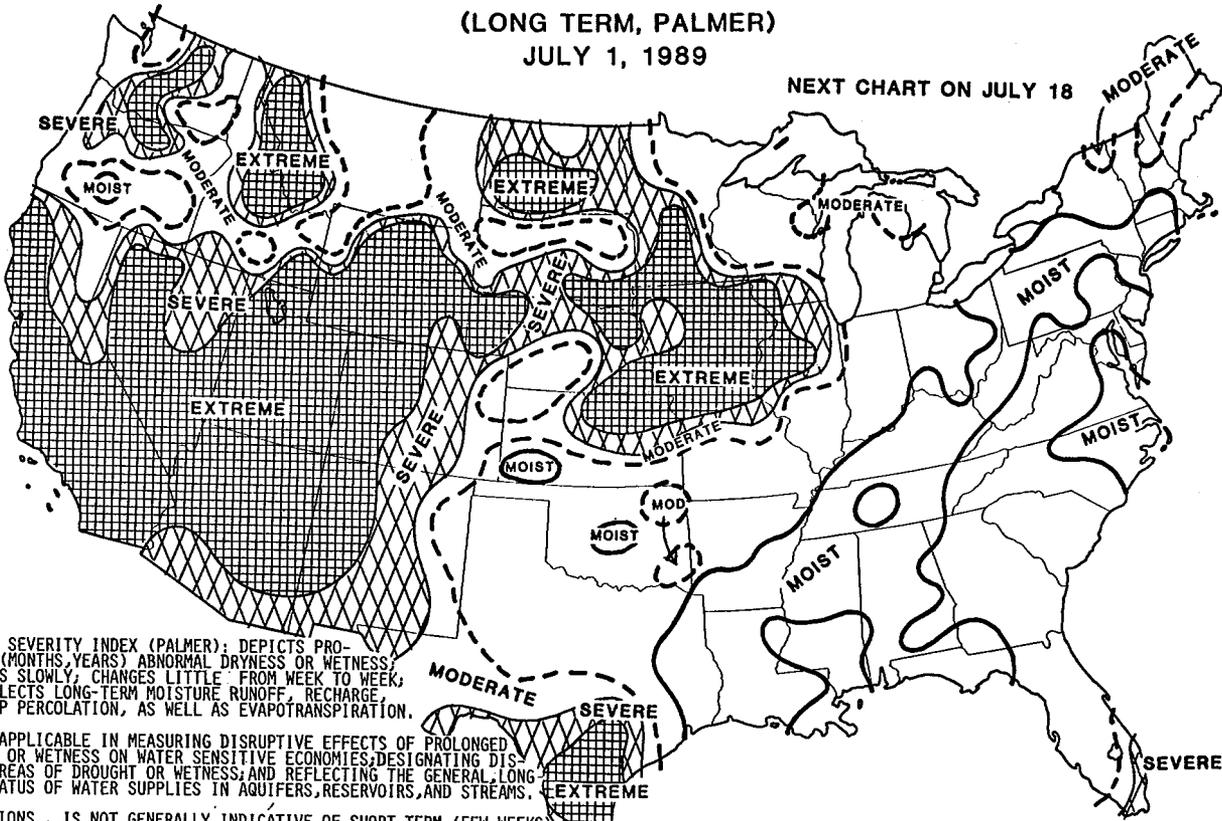
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

### DROUGHT SEVERITY

(LONG TERM, PALMER)

JULY 1, 1989

NEXT CHART ON JULY 18



DROUGHT SEVERITY INDEX (PALMER): DEPICTS PROLONGED (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 DISASTER 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).

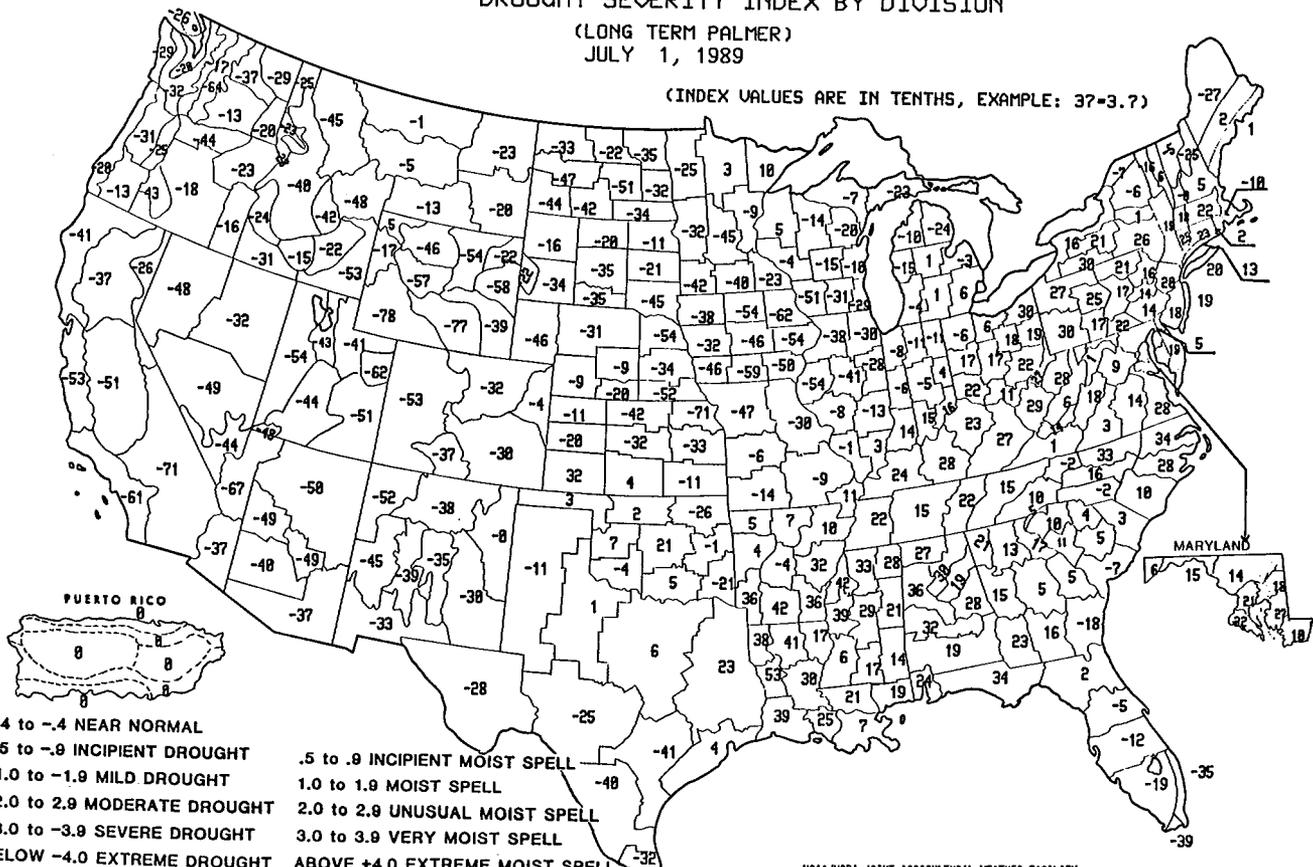
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

### DROUGHT SEVERITY INDEX BY DIVISION

(LONG TERM PALMER)

JULY 1, 1989

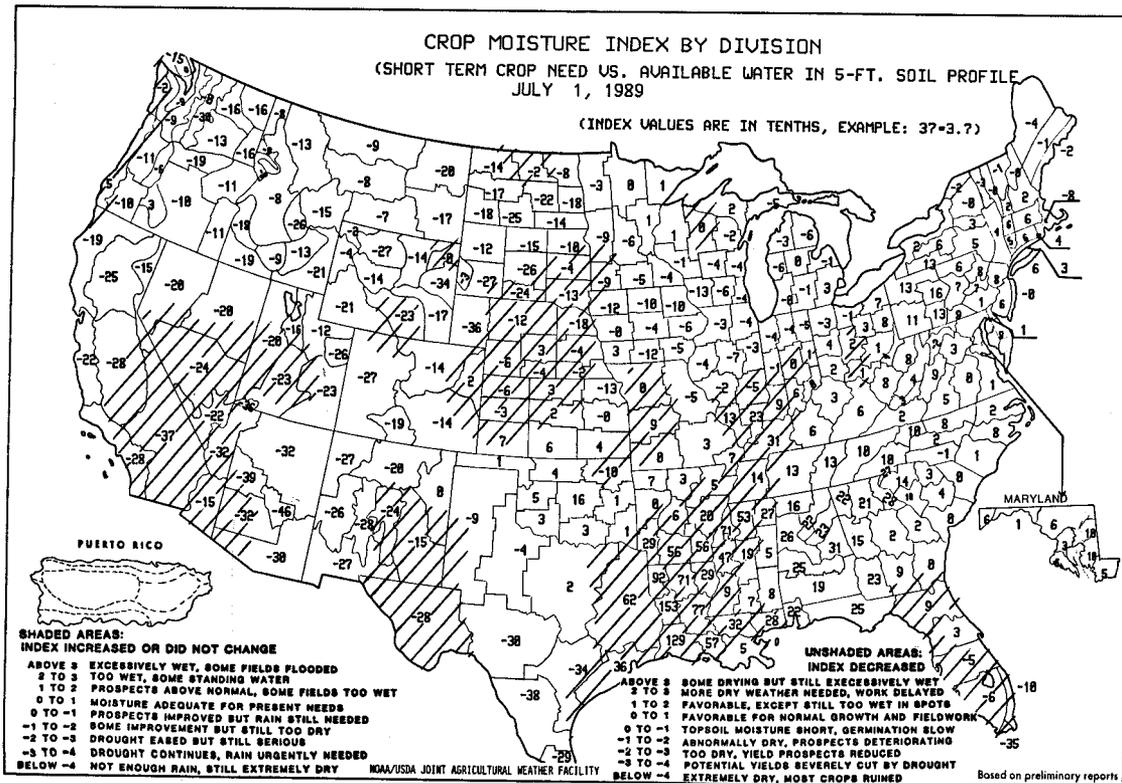
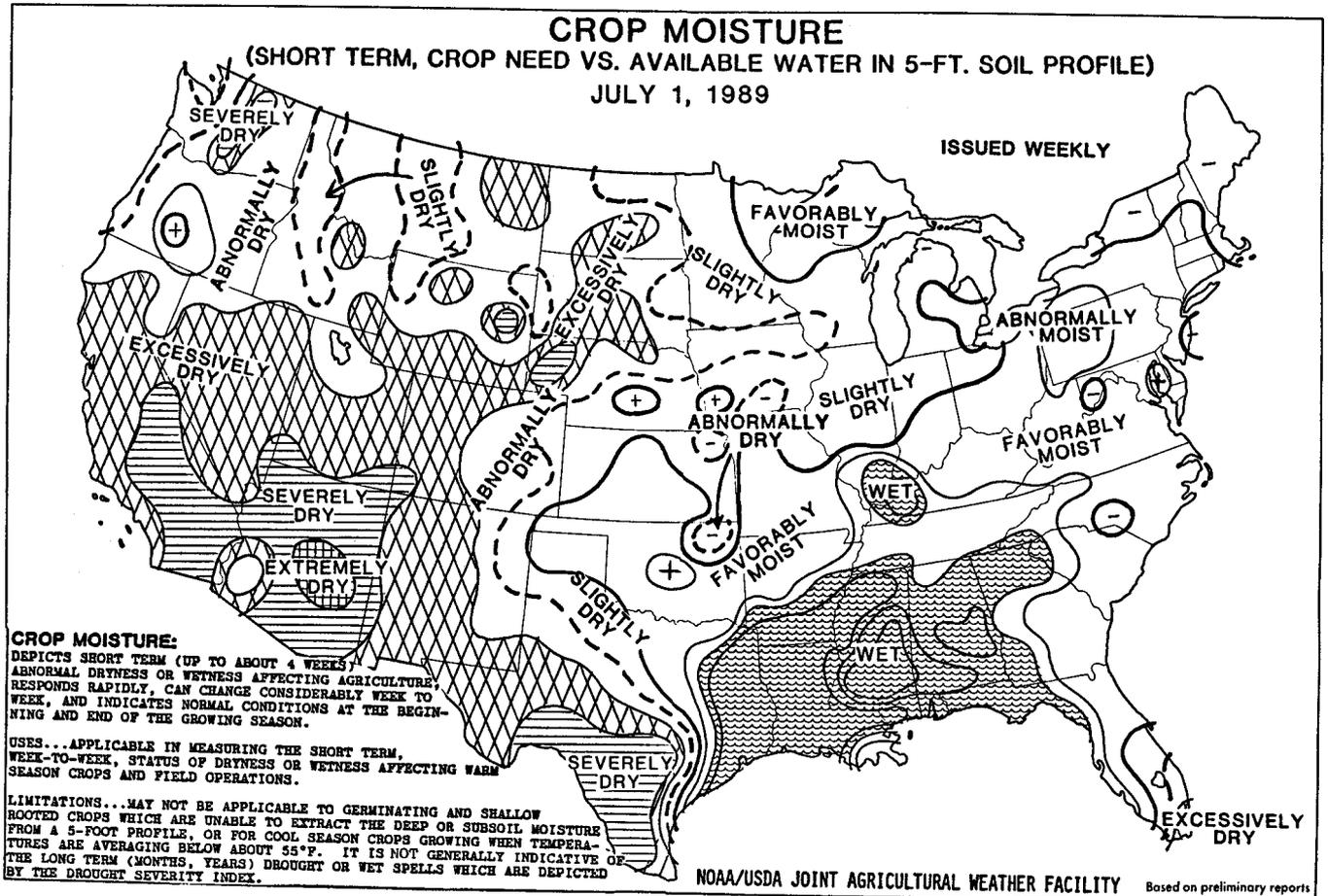
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37-3.7)

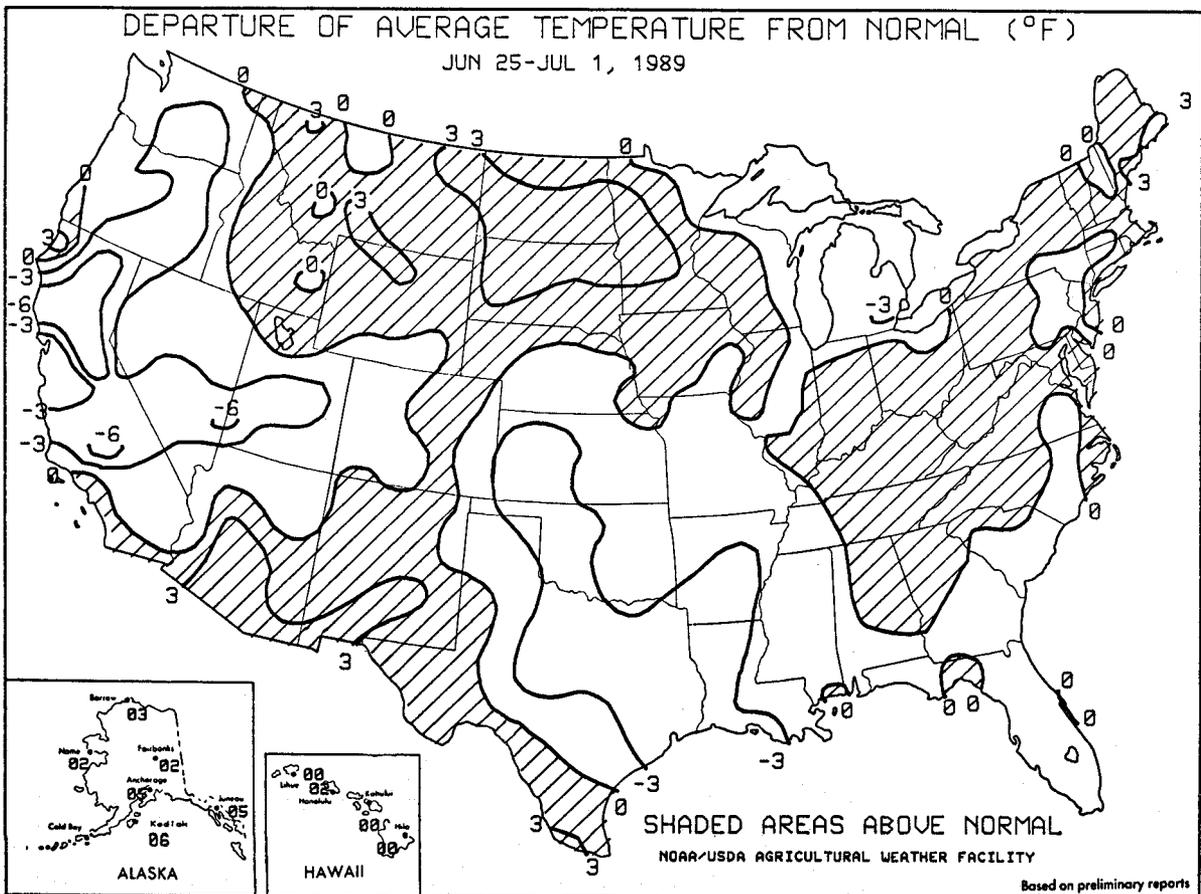
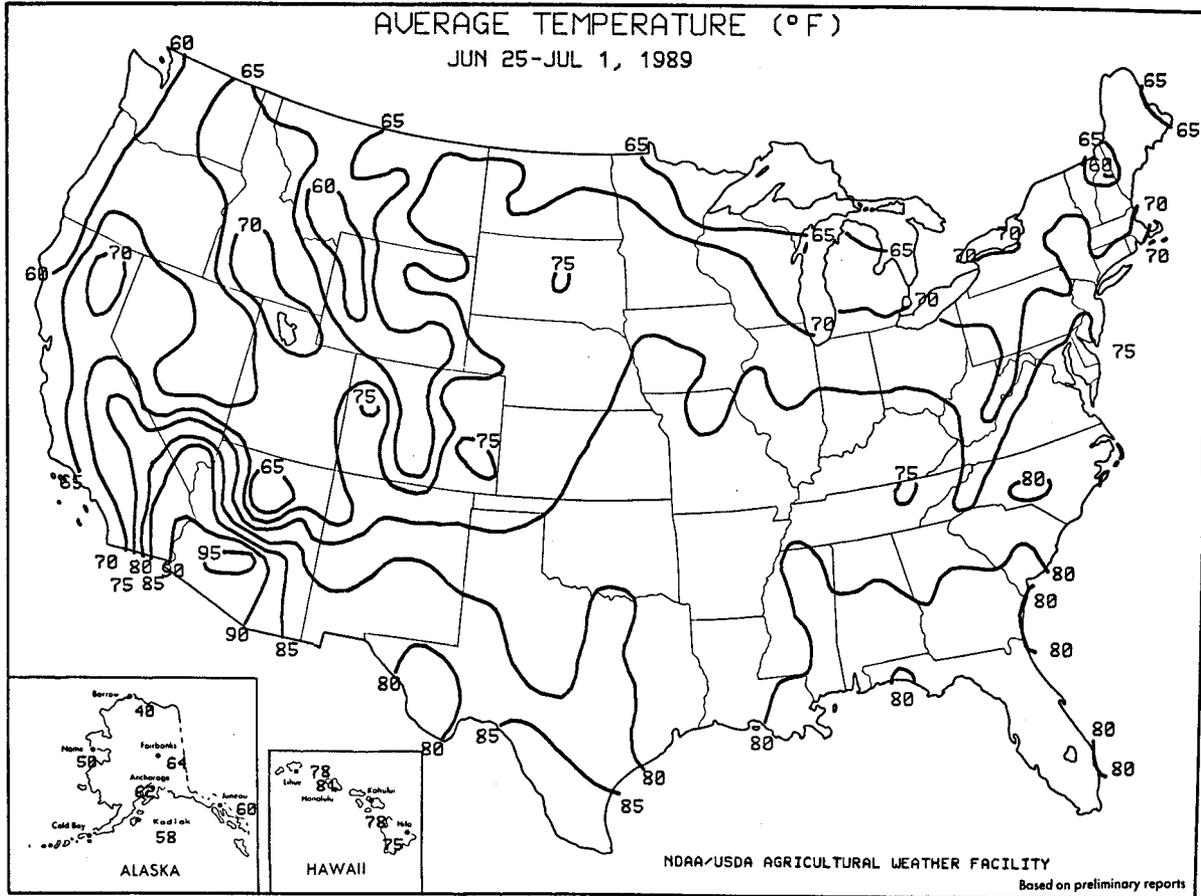


- .4 to -.4 NEAR NORMAL
- .5 to -.9 INCIPIENT DROUGHT
- 1.0 to -1.9 MILD DROUGHT
- 2.0 to 2.9 MODERATE DROUGHT
- 3.0 to -3.9 SEVERE DROUGHT
- BELOW -4.0 EXTREME DROUGHT
- .5 to .9 INCIPIENT MOIST SPELL
- 1.0 to 1.9 MOIST SPELL
- 2.0 to 2.9 UNUSUAL MOIST SPELL
- 3.0 to 3.9 VERY MOIST SPELL
- ABOVE +4.0 EXTREME MOIST SPELL

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports







# National Weather Data for Selected Cities

## Weather Data for the Week Ending July 1, 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 JAN 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
AL BIRMINGHAM	88	71	91	70	80	1	2.0	1.0	1.8	9.1	242	32.1	108	94	57	2	0	3	1
MOBILE	89	73	91	70	81	-1	1.2	-2	1.1	9.8	187	29.0	91	98	59	2	0	2	1
MONTGOMERY	92	70	94	69	81	0	.9	0	.3	14.7	409	37.9	143	100	55	6	0	4	0
AK ANCHORAGE	73	50	77	47	62	5	0	0	-3	1.1	99	4.8	104	87	43	0	0	0	0
BARROW	47	33	59	30	40	0	0	0	-1	.4	95	1.3	104	96	68	0	2	0	0
FAIRBANKS	73	54	83	50	64	0	1.3	1.0	.8	2.5	185	5.2	146	92	42	0	0	5	1
JUNEAU	70	49	77	44	60	0	.1	-7	1.1	1.1	36	13.5	67	87	46	0	0	1	0
KODIAK	68	48	78	42	58	7	.7	-1	.4	7.2	174	20.7	75	90	52	0	0	2	0
NOME	58	41	75	34	50	0	.1	-3	1.1	.3	24	7.3	175	93	63	0	0	2	0
AZ PHOENIX	109	81	113	77	95	0	0	0	0	0	0	2.3	88	30	10	7	0	0	0
PRESCOTT	90	57	93	53	73	3	0	0	-3	0	0	2.8	42	37	12	4	0	0	0
TUCSON	106	71	112	68	88	3	.1	-2	1.1	18	2.0	70	36	9	4	0	1	0	0
YUMA	107	77	111	74	92	2	0	0	0	0	0	.8	93	38	13	7	0	0	0
AR FORT SMITH	88	70	93	68	79	0	.4	-4	.3	5.5	147	32.3	154	98	58	2	0	3	0
LITTLE ROCK	83	70	91	69	76	-1	1.5	.7	.7	6.5	172	33.9	126	94	73	1	0	7	1
CA BAKERSFIELD	89	60	95	54	74	0	0	0	0	0	0	2.3	59	76	30	2	0	0	0
EUREKA	63	54	68	51	59	0	.1	1	1	.2	38	19.1	86	87	65	0	0	2	0
FRESNO	89	61	93	57	75	0	.3	0	0	0	0	4.8	69	74	26	3	0	0	0
LOS ANGELES	72	61	78	58	66	-1	0	0	0	0	0	3.2	39	90	61	0	0	0	0
REDDING	82	60	91	54	71	-9	0	0	-1	1.0	112	19.6	80	77	32	1	0	0	0
SACRAMENTO	81	55	88	51	68	-6	0	0	0	.6	483	9.1	85	89	37	0	0	0	0
SAN DIEGO	73	63	74	61	68	1	0	0	0	0	0	2.0	31	89	61	0	0	0	0
SAN FRANCISCO	69	55	77	53	62	2	1	0	0	0	8	7.4	59	88	54	0	0	1	0
CO DENVER	88	56	98	53	72	2	2	0	-4	2.0	126	9.2	112	80	21	2	0	0	0
GRAND JUNCTION	91	59	97	53	75	-1	0	0	-1	2	56	3.7	99	38	14	5	0	1	0
PUEBLO	94	56	102	50	75	0	0	0	-3	1.3	108	4.1	85	82	16	5	0	0	0
CT BRIDGEPORT	79	63	87	58	71	0	.2	-5	.2	5.6	188	26.2	129	75	51	0	0	1	0
HARTFORD	84	58	92	51	71	-1	1	0	-7	6.7	192	27.8	128	94	41	1	0	1	0
DC WASHINGTON	87	69	95	60	78	0	0	0	-8	6.0	174	26.9	144	88	47	2	0	0	0
FL APALACHICOLA	89	73	91	71	81	0	.9	-5	.6	8.9	177	23.2	103	100	68	3	0	2	1
DAYTONA BEACH	89	70	93	66	80	-1	0	-1.5	0	1.9	28	16.3	79	97	57	4	0	2	0
JACKSONVILLE	90	70	95	68	80	0	1.6	.2	1.2	4.8	81	14.8	64	98	54	5	0	3	1
KEY WEST	89	78	91	76	84	-1	.3	-8	.2	1.8	35	7.9	53	88	61	3	0	3	0
MIAMI	89	73	92	71	81	-1	5.7	3.7	1.9	10.9	116	16.3	65	94	60	3	0	7	4
ORLANDO	91	72	95	68	82	0	.7	-1.2	.3	6.8	93	16.8	77	97	51	6	0	4	0
TALLAHASSEE	93	71	95	68	82	1	3.5	1.8	1.9	18.3	269	34.6	111	93	52	6	0	5	2
TAMPA	89	74	92	71	82	0	2.9	1.4	1.2	7.6	138	12.2	64	95	59	5	0	5	3
WEST PALM BEACH	89	72	91	70	80	-1	3.3	1.5	1.7	5.0	61	16.3	64	96	57	4	0	4	3
GA ATLANTA	88	72	92	71	80	3	.4	-5	.4	9.3	265	31.7	117	90	50	4	0	2	0
AUGUSTA	90	68	94	65	79	0	1.3	.3	1.3	8.8	221	26.0	109	98	49	4	0	1	1
MACON	90	71	93	68	80	-1	1.3	.4	.8	5.0	130	26.3	105	96	51	5	0	3	1
SAVANNAH	89	71	94	69	80	0	3.0	1.5	2.7	7.3	123	16.4	69	96	52	4	0	2	1
HI HILO	82	68	83	65	75	0	.9	-6	.4	6.5	102	104.8	161	91	59	0	0	3	0
HONOLULU	89	73	90	70	81	2	0	0	-1	2	50	13.0	99	78	45	2	0	1	0
KAHULUI	86	70	88	64	78	0	.1	0	.1	.1	54	26.2	228	86	53	0	0	1	0
LIHUE	83	73	85	69	78	0	0	0	0	1.3	78	31.7	142	86	62	0	0	0	0
ID BOISE	89	56	98	48	72	2	0	-4	0	1.1	9	6.5	93	57	16	2	0	1	0
LEWISTON	81	57	88	53	69	-1	0	0	-3	1.4	100	8.2	112	61	28	0	0	0	0
POCATELLO	94	47	90	41	66	-1	0	0	0	.6	58	6.6	105	70	16	1	0	0	0
IL CHICAGO	83	55	92	48	69	-2	0	0	-2	2.0	46	8.2	49	92	45	2	0	0	0
MOLINE	88	61	93	54	75	1	0	0	-1	3.3	74	14.6	80	92	45	3	0	0	0
PEORIA	86	62	92	51	74	0	.3	-6	.3	1.3	32	11.2	64	89	45	2	0	2	0
QUINCY	88	64	94	57	76	1	.1	-8	1	1.0	23	7.7	42	90	39	2	0	2	0
ROCKFORD	86	60	91	50	73	1	.2	-9	.2	2.5	52	10.2	57	91	45	2	0	1	0
SPRINGFIELD	86	63	93	53	75	-1	.3	-5	.2	.9	25	14.4	83	89	45	2	0	2	0
IN EVANSVILLE	88	68	95	60	78	1	.4	-4	.4	4.0	111	28.7	127	95	50	2	0	3	0
FORT WAYNE	86	60	93	50	73	1	.2	-7	.2	5.8	154	18.5	104	92	41	2	0	1	0
INDIANAPOLIS	86	65	94	56	75	1	.5	-4	.5	4.3	105	21.2	106	89	46	1	0	2	1
SOUTH BEND	83	58	92	50	71	-1	.7	-3	.6	3.5	86	14.0	76	93	43	2	0	2	1
IA DES MOINES	86	65	87	60	76	2	.9	0	.9	2.2	52	10.5	67	89	45	0	0	3	1
SIOUX CITY	86	65	90	60	76	2	.1	-8	1	1.8	45	6.4	49	90	48	1	0	2	0
WATERLOO	86	60	90	56	73	1	.7	-4	.3	1.4	32	7.7	48	95	44	1	0	2	0
KS CONCORDIA	87	65	88	61	76	-1	1.6	.7	1.0	5.8	133	11.9	85	94	51	0	0	3	1
DODGE CITY	85	63	89	58	74	-4	.8	.1	.5	6.7	217	11.9	112	96	52	0	0	3	1
GOOPLAND	86	57	92	55	71	-2	4.3	3.7	4.2	8.2	294	12.5	145	99	47	1	0	4	1
TOPEKA	88	66	91	64	77	0	1.4	.2	1.0	4.8	90	14.6	89	96	54	2	0	3	1
WICHITA	88	67	91	64	78	-2	1.5	.6	.9	8.3	202	17.1	122	94	49	2	0	3	1
KY BOWLING GREEN	87	68	95	61	77	1	1.2	.2	1.0	8.2	175	38.6	142	97	61	2	0	3	1
LEXINGTON	86	66	92	58	76	1	.3	-8	.2	4.3	98	32.5	134	93	54	2	0	3	0
LOUISVILLE	88	68	93	60	78	2	.3	-5	.3	5.6	150	33.1	142	91	47	2	0	2	0
LA ALEXANDRIA	83	75	90	74	79	-2	9.2	8.3	3.6	11.6	287	43.8	152	100	82	1	0	6	4
BATON ROUGE	89	74	91	71	81	-1	10.3	9.3	4.9	23.2	705	50.4	181	100	67	3	0	4	3
LAKE CHARLES	83	74	86	73	79	-3	14.9	13.9	6.9	26.0	611	45.9	185	96	79	0	0	7	5
NEW ORLEANS	88	74	89	70	81	-1	3.7	2.5	1.3	8.2	171	24.7	85	98	67	0	0	7	3

Based on 1951-80 normals

Weather Data for the Week Ending July 1, 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
SHREVEPORT	81	72	91	70	77	-5	9.2	8.4	3.7	18.4	515	45.6	188	99	80	1	0	7	4
ME CARIBOU	79	53	87	41	66	2	.1	-.7	.1	2.3	71	13.5	86	90	48	0	0	2	0
PORTLAND	80	57	89	52	69	3	.1	-.6	.1	4.6	146	21.9	102	89	44	0	0	2	0
MD BALTIMORE	84	65	93	57	75	0	T	-.8	T	6.0	155	28.5	141	91	49	2	0	1	0
SALISBURY	86	64	92	56	75	1	.1	-.7	.1	5.0	136	22.3	106	96	49	2	0	2	0
MA BOSTON	80	65	93	60	72	1	.1	-.5	.1	2.8	95	16.1	73	76	43	1	0	0	0
CHATHAM	73	60	76	51	66	1	T	-.6	T	3.8	135	23.6	103	84	56	0	0	1	0
MI ALPENA	78	48	86	38	63	-2	0	-.7	0	2.7	83	11.5	85	97	47	0	0	0	0
DETROIT	81	58	90	48	69	-2	.2	-.6	.2	3.8	109	14.4	94	89	48	1	0	1	0
FLINT	81	55	89	46	68	-1	.8	.1	.8	4.9	148	14.3	101	90	47	0	0	2	1
GRAND RAPIDS	81	56	89	47	69	-2	.6	-.2	.6	5.0	133	15.6	96	97	46	0	0	2	1
HOUGHTON LAKE	80	53	88	41	67	1	0	-.7	0	2.7	86	11.6	89	91	38	0	0	0	0
LANSING	82	55	91	44	68	-1	1.3	.5	1.3	3.6	90	15.6	106	94	48	1	0	2	1
MARQUETTE	76	48	85	33	62	0	.3	-.5	.2	5.5	138	15.5	85	89	45	0	0	2	0
MUSKOGON	81	56	86	46	68	0	.1	-.5	.1	.9	35	10.8	74	92	41	0	0	1	0
SAULT ST. MARIE	76	47	84	37	62	0	T	-.7	T	2.6	78	13.1	91	96	45	0	0	1	0
MN ALEXANDRIA	83	61	90	52	72	4	1.0	.5	2.1	49	7.9	66	91	45	2	0	3	1	
DULUTH	71	50	77	46	61	-2	.9	0	.6	3.8	94	13.1	99	95	60	0	0	3	1
INT'L FALLS	75	54	82	50	65	0	1.6	.7	.7	6.6	175	11.6	111	97	57	0	0	3	2
MINNEAPOLIS	84	63	92	56	74	3	1.7	.8	1.0	3.5	84	13.3	104	91	47	1	0	3	1
ROCHESTER	81	60	85	55	71	1	1.4	.5	.6	2.6	66	10.3	79	94	52	0	0	4	1
MS GREENWOOD	89	72	92	71	80	-1	4.6	3.7	2.6	16.7	478	43.6	146	97	57	4	0	6	2
JACKSON	89	72	93	70	80	-1	.9	.1	.4	8.3	255	29.7	104	100	66	2	0	4	0
MERIDIAN	89	70	93	67	80	-1	2.8	1.8	.9	9.3	254	36.4	124	99	61	4	0	6	2
MO CAPE GIRARDEAU	87	71	95	68	79	-1	4.7	3.9	3.6	12.0	331	36.0	151	95	57	2	0	4	2
COLUMBIA	86	65	90	58	76	-1	.1	-.7	1.1	3.3	87	15.9	83	94	54	2	0	1	0
KANSAS CITY	88	67	93	64	78	0	.3	-.8	.2	3.5	73	13.3	75	91	50	2	0	2	0
SAINT LOUIS	89	69	95	65	79	2	1.1	-.2	.4	2.7	70	17.4	97	86	43	3	0	2	0
SPRINGFIELD	86	66	91	63	76	0	.6	-.4	.6	3.3	68	18.9	93	97	54	2	0	2	1
MT BILLINGS	88	52	99	41	70	2	.1	-.3	.1	1.2	56	9.4	104	78	20	3	0	2	0
GLASGOW	87	55	100	41	71	4	.1	-.5	.1	1.0	37	6.2	108	81	27	3	0	2	0
GREAT FALLS	81	49	94	41	65	-1	.4	-.1	.3	2.0	71	10.3	110	85	30	2	0	3	0
HAVRE	81	52	95	39	67	0	.6	.1	.4	1.7	74	6.4	96	69	31	2	0	2	0
HELENA	81	48	95	40	65	1	.1	-.3	.1	1.4	70	6.7	102	77	25	2	0	3	0
KALISPELL	78	50	86	43	64	3	T	-.4	T	1.5	65	9.5	112	78	25	0	0	1	0
MILES CITY	88	58	98	43	73	2	.1	-.4	.1	.8	30	8.5	103	55	19	3	0	2	0
MISSOULA	82	48	90	44	65	2	T	-.4	T	1.4	77	7.1	95	76	23	1	0	0	0
NE GRAND ISLAND	83	62	87	61	73	-2	1.6	.8	.7	4.9	128	8.6	67	97	56	0	0	3	2
LINCOLN	87	66	91	63	77	1	.5	-.4	.4	4.7	119	8.1	57	93	49	2	0	2	0
NORFOLK	85	63	90	57	74	0	.5	-.5	.3	2.0	44	7.3	55	95	50	1	0	2	0
NORTH PLATTE	83	58	86	53	71	-1	2.0	1.2	.7	3.9	102	8.7	79	97	53	0	0	5	2
OMAHA	84	67	88	64	76	0	.5	-.4	.3	4.5	106	9.1	61	84	54	0	0	3	0
SCOTTSSBLUFF	91	56	101	50	73	2	1.0	.4	.9	1.2	38	5.5	62	88	26	5	0	3	1
VALENTINE	86	59	92	54	73	1	.6	0	.5	.8	28	4.0	44	82	37	2	0	3	1
NV ELY	81	42	86	38	61	-2	T	-.2	T	1.0	125	3.9	77	49	13	0	0	0	0
LAS VEGAS	99	72	104	68	86	-2	0	0	0	T	0	1.3	71	25	12	7	0	0	0
RENO	84	51	87	44	67	1	.5	.4	.5	1.5	464	4.4	100	59	15	0	0	1	0
WINNEMUCCA	87	45	94	39	66	-2	0	-.2	0	.3	36	2.7	59	50	11	2	0	0	0
NH CONCORD	82	53	92	44	68	0	.3	-.4	.3	4.3	140	17.7	103	96	37	1	0	1	0
NJ ATLANTIC CITY	83	61	93	52	72	0	T	-.7	T	3.7	130	23.5	118	98	53	1	0	1	0
NM ALBUQUERQUE	95	64	100	58	80	2	0	-.2	0	T	4	1.4	54	36	9	7	0	0	0
CLOVIS	90	62	100	60	76	0	2.0	1.3	1.5	4.5	167	5.7	82	90	34	3	0	2	1
ROSWELL	99	68	106	65	83	3	0	-.3	0	T	2	1.6	47	66	18	7	0	0	0
NY ALBANY	84	59	89	48	71	2	.2	-.5	.1	6.5	195	19.8	116	92	41	0	0	2	0
BINGHAMTON	78	56	85	47	67	0	.1	-.7	.1	5.9	162	20.5	116	94	47	0	0	1	0
BUFFALO	79	59	86	50	69	0	.8	.2	.8	7.8	280	24.4	143	91	39	0	0	2	1
NEW YORK	84	68	92	63	76	2	.7	-.1	.6	6.9	213	27.8	135	80	42	2	0	2	1
ROCHESTER	81	59	87	51	70	1	.3	-.3	.2	5.7	196	19.8	130	94	47	0	0	2	0
SYRACUSE	82	57	87	50	70	0	1.1	.3	.8	5.4	145	17.1	93	95	45	0	0	2	1
NC ASHEVILLE	82	64	86	62	73	1	.7	-.1	.7	10.7	280	28.6	127	99	57	0	0	1	1
CHARLOTTE	89	71	91	65	80	3	T	-.9	T	3.2	87	22.4	98	78	44	4	0	0	0
GREENSBORO	86	67	91	58	77	1	T	-1.0	T	7.1	175	27.8	131	94	50	1	0	0	0
HATTERAS	83	71	89	68	77	1	.5	-.5	.5	4.1	92	36.4	149	92	60	0	0	1	1
NEW BERN	88	69	92	63	79	1	.7	-.7	.7	8.7	163	30.2	124	96	54	3	0	1	1
RALEIGH	87	67	92	61	77	1	.8	-.1	.8	7.3	194	29.3	140	98	52	3	0	1	1
WILMINGTON	88	69	94	63	79	0	.6	-.9	.6	7.6	129	29.7	123	96	50	3	0	1	1
ND BISMARCK	90	54	98	41	72	4	.1	-.5	.1	.7	23	5.6	67	94	29	5	0	2	0
FARGO	84	59	91	49	71	3	.8	0	.8	1.5	48	8.7	97	92	43	1	0	3	1
GRAND FORKS	82	57	92	48	70	3	T	-.7	T	1.4	48	6.5	79	92	41	2	0	1	0
WILLISTON	88	54	96	45	71	4	.1	-.5	.1	1.5	54	6.5	89	91	29	4	0	1	0
OH AKRON-CANTON	83	58	90	48	71	0	1.1	.3	1.0	8.4	249	25.0	138	96	44	2	0	2	1
CINCINNATI	86	65	91	57	75	1	.2	-.8	.1	3.1	74	27.2	128	94	47	2	0	3	0
CLEVELAND	82	59	92	49	70	0	1.4	.6	1.4	5.2	146	25.4	143	96	49	1	0	1	1
COLUMBUS	84	61	91	54	73	0	1.7	.7	1.7	6.4	154	23.6	122	94	45	2	0	1	1

Weather Data for the Week Ending July 1, 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. NOR-MAL SINCE Jun 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE OF		PRECIPI- TATION	
																90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	85	64	92	55	75	1	1.2	.3	.8	5.6	143	32.0	171	91	45	2	0	2	1
TOLEDO	83	58	91	47	70	0	T	.8	T	6.7	188	19.7	124	95	47	1	0	1	0
YOUNGSTOWN	83	55	89	45	69	0	0	T	T	6.7	188	19.7	124	95	47	1	0	1	0
OK OKLAHOMA CITY	87	68	89	63	78	0	2.0	1.2	2.0	10.1	278	25.4	137	97	46	0	0	1	1
TULSA	88	71	93	68	80	0	.2	.6	.2	14.8	376	25.2	152	95	50	0	0	1	0
OR ASTORIA	61	53	63	51	57	-1	.4	.5	.4	5.2	110	17.8	88	93	54	3	0	1	0
BURNS	78	43	84	37	61	-4	2.1	1.6	1.0	3.0	119	33.3	93	92	73	0	0	5	0
MEDFORD	80	52	95	47	66	-4	T	T	0	1.0	161	6.6	120	66	20	0	0	0	1
PENDLETON	77	54	91	48	66	-4	T	T	T	.2	24	10.4	102	80	26	1	0	1	0
PORTLAND	69	55	89	50	62	-4	.3	.2	.3	.6	83	8.6	131	64	28	1	0	1	0
SALEM	70	52	89	49	61	-4	.6	.4	.6	T	0	17.9	92	90	52	0	0	1	0
PA ALLENTOWN	84	61	91	50	72	0	.3	.6	.6	1.0	84	16.0	75	89	49	0	0	2	1
ERIE	78	59	87	50	69	-1	.2	.7	.2	5.8	164	24.4	115	93	48	1	0	2	0
HARRISBURG	85	62	93	52	73	1	.6	.2	.6	5.1	127	22.9	127	91	50	0	0	3	0
PHILADELPHIA	85	65	94	58	75	1	.1	.8	.1	6.0	160	24.6	124	94	46	2	0	2	0
PITTSBURGH	84	61	90	53	73	1	.1	.8	.1	4.7	118	23.9	117	92	47	2	0	1	0
SCHANTON	80	56	87	47	68	-2	1.8	1.0	1.7	10.3	284	29.2	152	91	44	1	0	3	1
RI PROVIDENCE	83	62	90	57	72	2	.5	.4	.4	6.1	170	20.1	121	94	50	0	0	2	0
SC CHARLESTON	89	70	94	67	79	2	T	T	T	5.8	203	25.1	113	87	42	1	0	1	0
COLUMBIA	91	69	95	63	80	0	.2	.2	.2	7.3	107	20.3	82	96	49	3	0	1	0
FLORENCE	90	69	93	63	79	0	.4	.4	.4	6.0	130	24.7	97	98	46	4	0	1	0
GREENVILLE	87	68	90	66	78	0	.4	.4	.4	5.0	103	21.6	98	95	48	5	0	1	0
SD ABERDEEN	85	59	91	46	72	3	T	T	T	6.0	133	23.7	86	91	51	1	0	0	0
HURON	86	62	91	54	74	3	1.5	.8	1.5	2.1	62	9.0	91	95	45	2	0	2	0
RAPID CITY	91	55	98	48	73	3	.1	.6	.1	3.2	94	9.0	86	93	41	2	0	2	1
STOUX FALLS	85	62	90	49	73	2	1.2	.4	1.2	1.0	31	5.2	53	84	23	5	0	1	0
TN CHATTANOOGA	87	71	93	69	79	2	.8	.1	.6	2.5	66	7.3	59	92	45	2	0	2	1
KNOXVILLE	85	68	91	66	77	0	1.0	.1	.6	10.0	288	36.9	131	96	56	3	0	3	1
MEMPHIS	87	75	93	72	81	0	4.1	3.3	2.2	8.2	203	32.1	124	99	60	3	0	2	1
NASHVILLE	87	70	94	66	79	1	1.9	1.0	.9	9.4	256	38.1	132	94	65	2	0	5	3
TX ABILENE	90	67	98	65	78	-4	0	.5	0	8.5	224	35.0	130	93	56	2	0	4	2
AMARILLO	88	63	98	62	76	-2	.2	.6	.2	9.5	368	18.7	166	90	41	1	0	0	0
AUSTIN	90	74	97	73	82	-1	.2	.2	.2	6.1	170	10.6	114	91	42	1	0	1	0
BEAUMONT	81	72	85	69	77	-5	.1	.5	.1	3.1	99	19.2	119	91	54	5	0	1	0
BROWNSVILLE	94	77	97	76	86	2	15.9	14.7	4.4	40.2	45.9	180	98	81	0	0	7	7	
CORPUS CHRISTI	91	75	100	73	83	0	.5	.1	.4	2.4	86	9.6	99	96	52	7	0	2	0
DEL RIO	99	74	103	71	86	1	1.2	.4	.8	3.2	80	10.0	76	98	58	4	0	2	1
EL PASO	102	68	107	62	85	2	T	T	T	.3	18	5.3	70	67	26	7	0	0	0
FORT WORTH	90	72	96	71	81	-3	.1	.4	.1	0	0	2.1	100	46	12	7	0	0	0
GALVESTON	83	75	85	73	79	-4	.1	.4	.1	8.8	365	30.2	180	92	52	2	0	2	0
HOUSTON	81	74	89	73	77	-4	6.6	5.8	4.2	12.4	338	24.6	144	97	77	0	0	5	3
LUBBOCK	94	66	103	62	80	0	13.4	12.4	10.3	18.2	399	42.9	190	97	79	0	0	7	5
MIDLAND	97	67	105	65	82	0	0	.6	0	5.0	174	7.6	92	84	31	6	0	0	0
SAN ANGELO	94	64	103	60	79	-4	0	.3	0	.6	41	3.5	60	78	27	7	0	0	0
SAN ANTONIO	92	72	99	68	82	-2	.2	.4	.1	4.0	129	11.3	80	92	33	6	0	0	0
VICTORIA	87	74	91	73	81	-2	.4	.5	.4	4.4	94	12.3	72	95	63	5	0	2	0
WACO	88	72	99	71	80	-4	.2	.2	.2	4.2	158	22.2	132	94	58	2	0	3	0
WICHITA FALLS	92	68	96	65	80	-4	0	.5	.1	4.2	158	22.2	132	94	58	2	0	3	0
UT CEDAR CITY	85	50	90	41	68	-3	.4	.3	.4	8.5	292	19.4	140	96	43	7	0	0	0
SALT LAKE CITY	90	59	97	51	75	2	.3	.6	.2	1.1	236	3.8	80	42	12	1	0	1	0
VT BURLINGTON	81	57	88	46	69	1	.3	.6	.2	.2	22	6.3	70	53	16	5	0	0	0
VA NORFOLK	86	69	93	61	77	0	.7	.2	.5	3.7	99	12.5	82	89	42	0	0	2	0
RICHMOND	87	64	94	56	76	-1	T	T	T	5.1	142	29.3	140	94	48	3	0	3	1
ROANOKE	87	64	92	56	75	1	T	T	T	5.9	157	26.4	132	98	53	2	0	1	0
WA QUILLAYUTE	61	49	63	46	55	-2	0	.8	0	7.7	226	23.0	117	96	49	3	0	0	0
SEATTLE-TACOMA	69	54	82	52	62	-1	2.9	2.4	1.2	5.5	191	46.5	87	98	68	0	0	6	2
SPOKANE	76	54	84	49	65	0	.6	.4	.3	1.2	88	18.8	98	88	51	0	0	4	0
YAKIMA	77	52	92	42	64	-3	T	T	T	.4	34	8.0	88	66	27	0	0	1	0
WV BECKLEY	81	59	86	53	70	3	.1	.9	.1	5	3.4	80	69	29	1	0	1	0	0
CHARLESTON	87	62	91	53	74	1	.1	.9	.1	3.6	87	22.0	101	99	59	0	0	2	0
HUNTINGTON	86	63	91	55	75	0	.7	.2	.7	7.5	219	33.3	157	99	51	3	0	2	0
PARKERSBURG	86	62	93	52	74	1	1.3	.4	1.0	5.5	155	31.3	149	99	50	2	0	2	1
WI GREEN BAY	78	54	85	44	66	-2	.1	.7	0	5.2	130	28.5	144	99	50	3	0	2	1
LACROSSE	84	61	90	56	73	1	.1	.7	0	1.6	48	9.9	76	90	49	0	0	2	0
MADISON	84	55	88	43	69	0	.5	.5	.2	1.3	31	9.3	64	93	45	1	0	2	0
MILWAUKEE	76	57	83	50	66	-2	.7	.2	.6	1.7	42	8.9	61	94	42	0	0	2	0
WAUSAU	78	57	85	45	68	0	.1	.9	.1	1.9	51	10.7	70	91	52	0	0	2	1
WY CASPER	86	49	93	42	67	0	.1	.9	.1	2.8	69	11.0	76	92	44	0	0	1	0
CHEYENNE	82	50	91	46	66	1	T	T	T	2.0	156	7.4	109	70	15	2	0	0	0
LANDER	85	53	90	45	69	2	.2	.3	.2	2.5	122	6.4	86	93	25	1	0	2	0
SHERIDAN	86	48	94	40	67	2	T	T	T	2.7	185	10.3	120	59	14	1	0	0	0
PR SAN JUAN	999	81	999	77	999	-	0	-1.1	0	1.6	70	8.0	86	83	24	2	0	0	0
										0	0	8.9	41	87	66	0	0	0	0

## National Agricultural Summary

JUNE 26 - JULY 2, 1989

**HIGHLIGHTS:** Rain benefited crops in the western Corn Belt and portions of the central and northern Great Plains. Rain continued to slow fieldwork in the Delta, where soil moisture was mostly surplus to adequate. The number of days suitable for fieldwork averaged 2-3 in the Delta. Soil moisture was mostly short to adequate in portions of the western Corn Belt and northern Great Plains.

Winter wheat was mostly fair to poor. Harvest was 39 percent (%) complete, 10 percentage points behind the 5-year average. Rain continued to slow harvest in the central Great Plains. Spring wheat was mostly good to fair. Heading was 45% complete, 15 points behind normal. Corn was mostly good to fair with 3% of the acreage in the silking stage, 4 points behind normal. Soybeans were mostly good to fair. Planting was 93% complete, 4 points behind normal. Five percent of the acreage was blooming, 5 points behind normal. Cotton was mostly fair with 50% of the acreage in the squaring stage, 4 points behind normal. Eleven percent of the acreage was setting bolls, 2 points behind normal. Sorghum was mostly good to fair. Planting was 94% complete, 3 points behind normal. Rain benefited Florida citrus and vegetable producing areas.

**SMALL GRAINS:** Winter wheat was mostly fair to poor. Harvest was 39% complete, 10 points behind normal. Harvest was underway in 14 of the 20 major producing States and lagged behind normal except in California and Oklahoma. Rain slowed harvest in the central Great Plains. Harvest was 20 or more points behind normal in Indiana, Kansas, Nebraska, and North Carolina. Harvest advanced more than 45 points in Illinois and Missouri but still was behind normal. Harvest progressed well in Arkansas, New Mexico, Oklahoma, and Texas, advancing 20 or more points during the week. Harvest was beginning in Ohio and South Dakota.

Spring wheat was mostly good to fair with 45% of the acreage heading, 15 points behind normal. Heading lagged behind normal in 4 of the 5 major producing States. In South Dakota, 85% of the acreage was heading, 5 points ahead of normal. Spring wheat was mostly good to fair in North Dakota with 37% of the acreage headed, 17 points behind normal.

**CORN:** Corn was mostly good to fair with 3% of the acreage in the silking stage, 4 points behind normal. Silking had begun in 7 of the 17 major producing States. Percentage of acreage silking lagged behind normal except in Georgia. Hail and high winds damaged corn in portions of Nebraska. In Illinois, corn was mostly good with 1% of the acreage in the silking stage, 13 points behind normal. Silking was 29 points behind normal in North Carolina.

**SOYBEANS:** Soybeans were mostly good to fair with planting 93% complete, 4 points behind normal. Planting was complete or nearly complete in 8 of the 19 major producing States. Planting was nearly complete in the western Corn Belt but lagged behind normal in the eastern Corn Belt, Delta, and Southeast. Planting was 21 points behind normal in Mississippi. Five percent of the acreage was blooming, 5 points behind normal in the 19 major producing States. Blooming had begun in 12 of the 19 States. Blooming lagged behind normal in most areas. In Illinois, 13% of the acreage was blooming, 12 points behind normal.

**COTTON:** Cotton was mostly fair with 50% of the acreage in the squaring stage, 4 points behind normal. The percentage of the acreage squaring lagged more than 10 points behind normal in the Delta and most of the Southeast. Squaring was 28 points behind normal in Mississippi, 43 points behind in North Carolina, and 28 points behind in South Carolina. Eleven percent of the acreage was setting bolls, 2 points behind normal in the 14 major producing States. Cotton was mostly fair in the Delta and good to fair in the Southeast. Cotton was mostly fair to good in Texas and mostly good in California. Harvest began in the Rio Grande Valley of Texas.

**SORGHUM:** Sorghum was mostly good to fair. Planting was 94% complete, 3 points behind normal. Planting was complete or nearly complete in 9 of the 11 major producing States. In Oklahoma, planting was 80% complete, 10 points behind normal. Sorghum was mostly fair to good in Nebraska and Texas and good to fair in Kansas. Harvest continued in southern Texas.

**OTHER FIELD CROPS:** Rice was mostly good to fair with 9% of the acreage headed, slightly behind the 10% average. Heading just began in Mississippi. Blast and sheath blight were problems in some areas of Arkansas and Louisiana. Peanuts were good in Georgia, where 40% of the acreage was in the bloom stage, 45 points behind normal. Peanuts were good to excellent in Alabama and good to fair in North Carolina. Tobacco was mostly good to fair in North Carolina. In Georgia, tobacco was mostly good and harvest was 12% complete, 2 points behind normal. Flooding damaged some tobacco fields in Kentucky, where crop condition was mostly fair to good.

**FRUIT AND NUTS:** Rain benefited Florida citrus groves. New growth was abundant and the fruit was sizing well. Valencia orange harvest was almost complete. Peaches were good to fair in Georgia and North Carolina. In South Carolina, peaches were fair to good and harvest was 26% complete, 11 points behind normal. Grape harvest continued in central Arizona. In California, grape harvest was virtually complete in the Coachella Valley. In the San Joaquin Valley, table grape harvest began. Asian pear harvest was underway in Fresno County. Cherry harvest continued in Idaho and Oregon. In Michigan, early variety sweet cherry harvest began. Tart cherry harvest was expected to begin soon.

**VEGETABLES:** Vegetable harvest was nearly complete in Florida. Growers were preparing fields for fall crops. In Georgia, watermelons were mostly good to fair and harvest was 27% complete, 17 points behind normal. Watermelons were fair to good in South Carolina. Irish potatoes were good to fair in North Carolina. In Texas, onion and potato harvests were expected to begin soon in the High Plains. Watermelon, cantaloupe, honeydew, and other melon harvests continued in central Arizona. In California, cantaloupe harvest began in the Westside area. Processing tomato harvest was underway in the San Joaquin Valley.

**PASTURES AND LIVESTOCK:** Livestock was mostly good. Pastures were mostly good in the East and fair to good in the Great Plains and the West.

Crop Progress

FOR WEEK ENDING JULY 2, 1989

COTTON  
% SQUARING

	1989	1988	AVG.
ALA	70	83	82
ARIZ	100	95	98
ARK	72	80	81
CALIF	85	65	78
GA	83	73	82
LA	56	59	70
MISS	54	83	82
MO	72	81	76
N MEX	65	60	60
N C	15	43	58
OKLA	25	35	5
S C	44	40	72
TENN	52	73	69
TEX	31	46	30

14 STATES 50 60 54

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

RICE  
% HEADED

	1989	1988	AVG.
ARK	0	0	0
CALIF	0	0	0
LA	23	22	24
MISS	1	0	3
TEX	31	23	34

5 STATES 9 7 10

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

WINTER WHEAT  
% HARVESTED

	1989	1988	AVG.
ARK	87	99	96
CALIF	75	60	72
COLO	0	6	13
GA	95	98	98
IDAHO	0	0	0
ILL	55	91	69
IND	20	63	40
KANS	35	95	55
MICH	0	1	0
MO	65	92	72
MONT	0	0	0
NEBR	10	50	32
N MEX	89	84	NA
N C	56	78	88
OHIO	5	34	16
OKLA	85	99	85
OREG	0	0	1
S DAK	1	14	2
TEX	74	82	85
WASH	0	0	0

20 STATES 39 65 NA

EXCL. STATES WITH NA 39 65 49

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

NA - NOT AVAILABLE.

COTTON  
% SETTING BOLLS

	1989	1988	AVG.
ALA	20	15	14
ARIZ	85	40	65
ARK	2	0	13
CALIF	10	5	13
GA	8	20	29
LA	8	9	17
MISS	1	3	8
MO	4	5	9
N MEX	0	10	11
N C	0	2	10
OKLA	0	0	0
S C	2	4	25
TENN	0	0	0
TEX	11	13	11

14 STATES 11 10 13

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

SPRING WHEAT  
% HEADED

	1989	1988	AVG.
IDAHO	45	65	55
MINN	53	98	72
MONT	20	72	44
N DAK	37	83	54
S DAK	85	100	80

5 STATES 45 86 60

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

SOYBEANS  
% PLANTED

	1989	1988	AVG.
ALA	80	87	92
ARK	81	85	92
GA	87	85	93
ILL	99	100	100
IND	98	100	99
IOWA	100	100	100
KANS	90	95	90
KY	77	86	87
LA	85	88	95
MICH	95	100	100
MINN	100	100	100
MISS	69	80	90
MO	95	95	93
NEBR	100	100	100
N C	75	86	89
OHIO	90	100	100
S C	84	91	91
S DAK	100	100	97
TENN	82	86	90

19 STATES 93 96 97

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

CORN  
% SILKING

	1989	1988	AVG.
COLO	0	0	0
GA	94	85	92
ILL	1	6	14
IND	0	1	2
IOWA	0	0	0
KANS	5	10	10
KY	2	10	20
MICH	0	0	0
MINN	0	0	0
MO	5	12	15
NEBR	0	5	3
N C	19	40	48
OHIO	0	2	2
PA	0	0	0
S DAK	0	0	0
TEX	66	64	68
WIS	0	0	0

17 STATES 3 6 7

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

GRAIN SORGHUM  
% PLANTED

	1989	1988	AVG.
ARK	99	99	99
ILL	96	100	97
KANS	90	95	95
LA	99	100	100
MISS	96	99	99
MO	99	100	99
NEBR	100	100	100
OKLA	80	85	90
S DAK	95	100	97
TENN	100	100	100
TEX	96	97	97

11 STATES 94 97 97

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

SOYBEANS  
% BLOOM

	1989	1988	AVG.
ALA	5	8	7
ARK	9	0	0
GA	5	4	9
ILL	13	23	25
IND	0	8	7
IOWA	5	34	14
KANS	5	5	5
KY	3	7	5
LA	6	2	6
MICH	0	0	0
MINN	0	30	5
MISS	1	5	4
MO	9	15	11
NEBR	0	17	7
N C	0	0	0
OHIO	0	14	5
S C	0	0	0
S DAK	7	27	7
TENN	2	2	2

19 STATES 5 16 10

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

Crop Condition

PERCENT  
FOR WEEK ENDING JULY 2, 1989

SORGHUM

STATE	VP	P	F	G	EX
ARK	0	2	54	44	0
ILL	0	0	9	76	15
KANS	1	8	18	52	21
LA	0	8	48	40	4
MISS	0	10	50	35	5
MO	0	6	38	53	3
NEBR	0	5	57	38	0
OKLA	0	0	20	79	1
S DAK	7	19	40	33	1
TENN	1	3	27	59	10
TEX	3	26	30	32	9
11 STATE	1	12	32	44	11
PREV YEAR	4	19	39	35	3

COTTON

STATE	VP	P	F	G	EX
ALA	0	25	48	25	2
ARIZ	0	0	0	33	67
ARK	0	24	52	24	0
CALIF	0	0	5	90	5
GA	0	2	19	68	11
LA	0	27	50	23	0
MISS	0	30	50	20	0
MO	0	25	42	33	0
N MEX	0	20	10	60	10
N C	0	0	43	53	4
OKLA	0	7	90	3	0
S C	0	0	40	60	0
TENN	4	0	49	47	0
TEX	0	21	49	29	1
14 STATE	0	17	43	36	4
PREV YEAR	4	15	32	38	11

RICE

STATE	VP	P	F	G	EX
ARK	0	2	30	68	0
CALIF	0	0	10	75	15
LA	0	0	48	45	7
MISS	0	0	30	70	0
TEX	0	0	11	65	24
5 STATE	0	1	28	64	7
PREV YEAR	0	7	36	56	1

SPRING WHEAT

STATE	VP	P	F	G	EX
IDAHO	2	10	20	53	15
MINN	0	1	35	39	25
MONT	0	4	17	58	21
N DAK	0	3	26	69	2
S DAK	4	11	37	43	5
5 STATE	1	4	28	57	10
PREV YEAR	34	35	24	6	1

SOYBEANS

CORN						WINTER WHEAT						STATE					
STATE	VP	P	F	G	EX	STATE	VP	P	F	G	EX	STATE	VP	P	F	G	EX
COLO	1	2	28	55	14	ARK	0	7	63	30	0	ALA	0	2	21	66	11
GA	0	0	10	73	17	CALIF	0	0	5	75	20	ARK	0	4	61	35	0
ILL	0	0	9	78	13	COLO	12	16	42	27	3	GA	0	0	9	80	11
IND	0	2	22	62	14	IDAHO	2	8	28	56	6	ILL	0	0	17	75	8
IOWA	0	1	18	71	10	ILL	0	0	3	64	33	IND	0	2	31	60	7
KANS	0	6	11	49	34	IND	0	0	23	66	11	IOWA	0	2	28	63	7
KY	0	2	11	57	30	KANS	51	29	16	3	1	KANS	0	7	15	48	30
MICH	2	8	15	50	25	MICH	0	5	20	50	25	KY	0	2	23	71	4
MINN	0	0	31	65	4	MO	0	5	45	49	1	LA	5	26	38	28	3
MO	0	7	27	63	3	MONT	1	4	21	50	24	MICH	5	10	25	45	15
NEBR	0	1	56	43	0	NEB	7	57	22	14	0	MINN	0	2	55	41	2
N C	0	0	15	78	7	N MEX	70	23	7	0	0	MISS	0	35	45	20	0
OHIO	3	15	40	39	3	N C	3	13	52	32	0	MO	0	6	39	55	0
PA	1	9	27	44	19	OHIO	1	8	32	51	8	NEBR	0	5	44	49	2
S DAK	0	2	30	59	9	OKLA	15	5	50	29	1	N C	0	0	24	74	2
TEX	5	14	11	49	21	OREG	0	0	56	31	13	OHIO	2	11	42	42	3
WIS	0	0	11	73	16	S DAK	9	23	48	19	1	S C	0	0	16	84	0
17 STATE	0	3	24	62	11	TEX	26	42	27	5	0	S DAK	0	3	22	62	13
PREV YEAR	6	23	48	21	2	WASH	0	0	60	40	0	TENN	2	7	35	54	2
						20 STATE	20	20	32	24	4	19 STATE	0	6	33	55	6
						PREV YEAR	4	16	34	39	7	PREV YEAR	7	24	51	17	1

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

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall 1.00 to 2.00 in. Locally heavier 6.96 in. Albertville, 6.78 in. Centreville, 4.00 to 6.00 in. Jefferson County. Temperatures near seasonal normal, high humidity.

Days suitable for fieldwork 2.4. Soil moisture 16% adequate, 84% surplus. Corn 78% silked, 73% 1988, 78% avg.; 2% fair, 43% good, 55% excellent. Sorghum 82% planted, 89% 1988, 92% avg.; 8% fair, 74% good, 18% excellent. Cotton 70% squaring, 83% 1988, 82% avg.; 20% setting bolls, 15% 1988, 14% avg.; 25% poor, 48% fair, 25% good, 2% excellent. Soybeans 80% planted, 87% 1988, 92% avg.; 5% blooming, 8% 1988, 7% avg.; 2% poor, 21% fair, 66% good, 11% excellent. Peanuts 40% pegging, 42% 1988, 43% avg.; 3% fair, 60% good, 37% excellent. Winter wheat 72% harvested, 99% 1988, 95% avg. First hay 88% harvested, 100% 1988, 96% avg. Livestock, pastures good to excellent. Primary activities: Planting late variety soybeans, spraying for insects, disease, cultivating row crops, as weather permitted, maintaining equipment, machinery; harvesting, marketing fruit, vegetable crops; general care of livestock, poultry, catfish.

**ALASKA:** Railbelt, warmer than normal temperatures, scattered thundershowers. Drier conditions permitted a resumption of hay harvest most areas. South central area had record setting high temperatures weekend. Lows normal to 5° above normal, highs 2 to 10° above normal. Precipitation 0.46 in. drier than normal to Homer to 2.10 in. wetter than normal at Kenny Lake.

Days suitable for fieldwork 5.0. Topsoil 16% short, 74% adequate, 10% surplus. Subsoil 6% short, 88% adequate, 6% surplus. First crop hay harvest 35% complete. Barley boot stage or earlier, very small percentage headed; condition good; 10 in. height. Commercial potato 7 in. height compared with 9 in. 1988. Head lettuce, leaf lettuce, radishes, other greens being harvested.

**ARIZONA:** Seasonably high temperatures, low humidity, sunny skies prevailed 25th, 26th; wind gusts 35 to 52 mph north, 25 to 35 mph south. Partly cloudy skies gave increased moisture 27th. Small area of thunderstorms developed south central deserts early 28th, rainfall light, spotty. Scattered showers, thunderstorms southeast during afternoon 28th. Skies cleared 29th with winds shifting southwest. Sunny, hotter conditions with record, near record temperatures prevailing 30th, July 1. Temperatures 2° below to 5° above normal.

Cotton 67% excellent, 33% good; squaring 100%, 95% 1988, 98% avg.; setting bolls 85%, 40% 1988, 65% avg.; activities included irrigating, cultivating, monitoring, spraying for pink boll worms, white flies. Alfalfa harvest continued, crop good. Small grain harvests essentially completed, 95% 1988, 96% avg. Watermelon, cantaloupe, honeydew, mixed melon harvest continued central; grape harvest continued central; watermelon harvest continued northwest; harvest of processing tomatoes continued west. Dry onion, cabbage harvest continued east. Ranges very poor, below average feed supplies; game animals competing with domestic livestock for feed. Soil moisture short; stockwater being depleted; high temperatures, below normal

rainfall. Grasshopper infestation northern upper elevations. Cattle fair to good; sheep, lambs fair. Range 54% normal, 80% 1988.

**ARKANSAS:** Temperatures slightly below normal. Rainfall heavy especially across the southern part of State. Extremes 63°; 94°. Rainfall 0.35 to 10.77 in.

Days suitable for fieldwork 4.0. Soil moisture 53% adequate, 47% surplus. Cotton 72% squaring, 80% 1988, 81% avg. Rice 100% emerged. Soybeans 72% emerged, 69% 1988, 83% avg. Oats 93% harvested, 100% 1988, 93% avg. Wheat 87% harvested, 99% 1988, 96% avg. Corn 18% fair, 39% good, 43% excellent. Sorghum 98% emerged, 98% 1988. Main activities: Wheat harvest; soybean planting, replanting; applying fertilizers, herbicides; applying insecticides to cotton; rice fertilization, flooding; hay cutting; fruit harvest. Crops making rapid growth. Spraying for boll weevils continued in eastern counties. Rice water weevils continue to increase, blast and sheath blight appearing in rice in a few eastern counties. Spot replanting soybeans. Wheat harvest continued with some farmers experiencing lower test weights. Watermelons continued to bloom. Second cutting of hay providing good yields. Pastures above average. Livestock good.

**CALIFORNIA:** Light rainfall northern areas late in week. Southern half remained warm, dry.

Weather good for field activities. Small grain harvest continued full-swing, approached completion southern. Stubble burned, sheeped-off, tilled for second crops. Seeding second crop Sudan grass, corn, grain sorghum, dry beans active. More bloom central cotton, early fields set bolls. Treated for Lugs, mites. Cool weather slowed rice somewhat. Controls for rice weevil. Safflower, early sunflowers bloom. Harvested wild rice San Joaquin Valley. Alfalfa, other hay harvests normal. San Joaquin Valley apricot harvest continued. Date bagging progressed, Riverside County. Coachella Valley grape harvest virtually complete. San Joaquin Valley perlette table grape harvest began. San Joaquin Valley grape growers treated vineyards, pests, mildew. Freestone peaches, plums, nectarines harvests progressed. Sacramento Valley Clingstone peach orchards sprayed, oriental fruit moth. Asian pear harvest began, Fresno County. Bartlett pear harvest set to begin, mid-July. Grapefruit picking active, Riverside County. Valencia orange harvest continued, San Joaquin Valley. Almond, walnut orchards treated for mite control. Broccoli moderate, variable quality. Cauliflower fairly heavy, Salinas-Watsonville area. Celery light, Salinas; moderate, Santa Maria; good quality. Desert sweet corn harvested. Lettuce moderate, variable quality. Cantaloupe harvest began greater westside. Market tomato harvest ongoing. Processing tomato harvest beginning San Joaquin Valley. Strawberry picking continued light, central coast. Raspberries light supply. Livestock fair to good. Range, pasture conditions continued decline Sacramento Valley, San Joaquin Valley, southern California areas due to dry, hot weather. Rain, unusually cool weather kept ranges northern counties fair to good. Livestock still being moved to summer feeding areas. Supplemental feeding continued. Water supplies low, valley areas.

**COLORADO:** Dry weather continued over the western half of State while scattered moisture fell over the Eastern plains. Scattered hail damage various areas. Temperatures 1° to 2° above normal. Precipitation 0.05 in to 3.68 in.

Days suitable for fieldwork, 5.7. Soil moisture 13% very short, 54% short, 31% adequate, 2% surplus. Alfalfa 79% 1st cutting complete. Spring barley 87% headed, 28% turning color. Oats 74% headed, 18% turning color. Oats 74% headed, 18% turning color. Sorghum 96% planted, 78% emerged. Spring wheat 71% headed, 12% turning color. Dry beans 96% emerged, 1% flowered. Livestock good. Range, pasture fair to good.

**FLORIDA:** Wet week; almost all rain 1.00 to 2.00 in. with local areas receiving over 4.00 in.; 3.00 to 5.00 in. more common, south, with local amounts over 8.00 in. Temperatures around normal except south 1 to 2° below normal. Extreme highs for week, low to mid 90s with extreme lows around 70s.

Soil moisture Panhandle surplus; Peninsula short to adequate. Little fieldwork accomplished Panhandle, because of wet conditions. Soybean planting delayed; wet conditions damaged planted crops, Panhandle. Peninsula hay, tobacco harvests active; Row crops, sugarcane good progress. With increased summer rains, grazing good to excellent. Pasture excessively wet some heavier soils, low-lying areas, Panhandle. Few pastures, upper, central Peninsula, only fair; need more time to recover from earlier dry soils. Cattle continued to improve as pastures revived. Many herds good to excellent; however, Peninsula more variable, with some upper areas only fair. Marketing calves active. Rain all citrus areas. Abundant new growth, some late bloom. New crop fruit progressing well; sizes vary. Valencia orange harvest almost complete; grapefruit movement virtually over. Caretakers active cultivating, spraying, fertilizing, cleaning drainage ditches. Summertime temperatures, frequent showers vegetable producing areas. Harvest nearly complete most crops. Watermelons, sweet corn, peppers, tomato shipments continued. Growers prepared fields for fall crops.

**GEORGIA:** Temperatures near normal, rain 3 to 5 days. Extreme 61° Blairsville, Toccoa; 96° Albany. Rainfall 1.00 to 2.00 in. Greatest 4.12 in. Hawkinsville.

Days suitable for fieldwork 4.1. Soil moisture 3% short, 68% adequate, 29% surplus. Corn 61% dough, 47% 1988, 65% avg.; 21% dent, 16% 1988, 30% avg. Sorghum grain 12% fair, 82% good, 6% excellent; 93% planted, 90% 1988, 94% avg. Peanuts 8% fair, 80% good, 12% excellent; 40% blooming, 78% 1988, 85% avg. Soybean planting slowed by showers and slow wheat harvest. Tobacco 14% fair, 72% good, 14% excellent; 12% harvested, 12% 1988, 14% avg. Watermelons 18% fair, 75% good, 7% excellent; 27% harvested, 29% 1988, 44% avg. Unharvested wheat declining rapidly. Apples fair to good. Peaches 9% poor, 25% fair, 66% good; 69% harvested, 61% 1988, 70% avg. Hay harvest slowed by frequent showers. Hay, pasture good. Cattle, hogs good.

**HAWAII:** Warm, sunny days, light showers, active irrigation combined aided crop development. Temperatures low 60s to low 90s, variable winds up to 25 mph. Rainfall none to 2.00 in.

Days suitable for fieldwork 7.0. Papaya production heavy, increasing. Sugar, pineapple harvesting active. Early season light coffee, macadamia harvesting.

**IDAHO:** Temperatures 5° below to 4° above normal. Precipitation light, well below normal.

Days suitable for fieldwork 7.0. Soil moisture 3% very short, 16% short, 81% adequate. Potatoes 67% 12 in. high, beyond; 11% closing middles. Winter wheat fair, good; 85% headed, 96% 1988, 92% avg.; 11% turning color. Spring wheat fair, good; 45% headed, 65% 1988, 55% avg. Spring barley 56% headed, 62% 1988, 47% avg. First cut alfalfa 84% harvested, 82% 1988, 77% avg. Second cutting underway. Cherries 48% harvested, 78% 1988. Low elevation rangeland drying out rapidly. Higher elevation rangeland good. Sheep, lambs shipped. Livestock good, excellent.

**ILLINOIS:** Temperatures 1 to 2° below normal. Precipitation 0.02 to 1.00 in., 2.00 in. plus isolated areas.

Days suitable for fieldwork 5.8. Soil moisture 58% short, 37% adequate, 5% surplus. Corn height 45 in., 50 in. 1988, 52 in. avg.; most advanced 61 in., 65 in. 1988, 69 in. avg. Soybeans setting pods 1%, 2% 1988, 2% avg. Winter wheat ripe 90%, 100% 1988, 91% avg. Alfalfa 2nd crop cut 38%, 54% 1988, 41% avg.; 2% poor, 34% fair, 58% good, 6% excellent. Red clover 1st crop cut 80%, 94% 1988, 91% avg.; 1% poor, 23% fair, 68% good, 8% excellent. Oats filled 84%, 95% 1988, 94% avg.; turning yellow 26%, 73% 1988, 62% avg.; ripe 3%, 29% 1988, 22% avg.; 8% fair, 74% good, 18% excellent. Pasture 4% poor, 34% fair, 54% good, 8% excellent.

**INDIANA:** Temperatures 1 to 2° below normal. Lows upper 40s to lower 50s, highs lower 90s. Precipitation highly variable, 0.20 to 3.00 in.

Days suitable for fieldwork 6.2. Topsoil 25% short, 73% adequate, 2% surplus. Subsoil 5% short, 93% adequate, 2% surplus. Corn, soybean improved. Corn 34 in. high, 36 in. 1988, 42 in. avg. Soybeans 94% emerged, 100% 1988, 97% avg.; 8 in. high, 10 in. 1988, 11 in. avg. Alfalfa hay 98% cut once, 100% 1988, 100% avg. Pasture 4% poor, 9% fair, 66% good, 21% excellent. Wheat 55% ripe, 100% 1988, 78% avg. Wheat harvest continued. Ideal conditions for planting soybeans during week.

**IOWA:** Temperatures none to 3° below normal; extremes 50°; 93°. Rainfall none to 1.93 in., 0.35 in.

Days suitable for fieldwork 4.6. Topsoil 60% short, 40% adequate. Subsoil 96% short, 4% adequate. Oats 2% poor, 37% fair, 49% good, 12% excellent. Winter wheat fair to good; 2% harvested, 27% 1988, 16% avg. Hay 11% poor, 48% fair, 40% good, 1% excellent. Second crop alfalfa 10% harvested, 19% 1988, 16% avg. First crop clover hay 95% harvested, 94% 1988, 86% avg. Corn 2% tasseled, 3% 1988, 3% avg.; 38 in. height. Tallest corn 50 in. Soybeans 92% cultivated first time, 94% 1988, 78% avg. Oats 20% turning color, 80% 1988, 53% avg. Livestock good to excellent. Pasture 8% very poor, 20% poor, 48% fair, 22% good, 2% excellent.

**KANSAS:** Temperatures 1° above normal southeast, 2° above central to 3° above normal southwest. Northwest 1° above normal, northeast 1° below normal. Thunderstorms affected most of State; rainfall 0.52 southeast, 0.89 east central, 1.00 in. to 3.51 in. elsewhere.

Days suitable for fieldwork 3.5. Topsoil 11% short, 70% adequate, 19% surplus. Subsoil 42% short, 56% adequate, 2% surplus. Wheat ripening 80%. Harvest 35%, delayed by wet fields. Corn planting complete, silking 5% complete; 83% good to excellent, 17% fair to poor. Sorghum 90% planting; 73% good to excellent, 26% fair to poor, 1% very poor. Soybean 90% planting; 78% good to excellent, 22% fair to poor. First cutting alfalfa 100% complete; second cutting 40% complete.

**KENTUCKY:** Seasonably temperatures variable rainfall. Highs mid 80s, slightly below normal; lows mid to upper 60s, slightly above normal. Rainfall 3.00 to 6.00 in. above normal in west, 0.25 to 0.50 in. below normal in east.

Days suitable 4.3. Soil moisture 1% short, 67% adequate, 32% surplus. Water damage to corn, soybeans, tobacco in low lying fields. Active planting of double crop beans following small grain harvest as moisture conditions allowed. Wheat 65% harvested. Good yields, variable test weights. Some lodging. Tobacco fair to good. Water damage to some fields. Disease problems limited, black shank, root rot, angular leaf spot. Hay cutting, baling active. Pasture good or better.

**LOUISIANA:** Temperatures near normal southeast 3 to 6° below normal over State. Rainfall 10.00 to 15.00 in. across State except extreme southeast area 1.00 to 3.00 in.

Days suitable for fieldwork 1.2. Soil moisture 10% adequate, 90% surplus. Early summer rains continued to deluge State as tropical storm Allison came inland. Fieldwork stopped or severely limited due to wet soils. Flooding was common in low areas. Corn 89% silked, 86% 1988, 91% avg.; 55% dough stage, 40% 1988, 61% avg.; 5% mature, 6% 1988, 5% avg.; 28% fair, 58% good, 14% excellent. Cotton 56% squaring, 59% 1988, 70% avg.; 8% setting bolls, 9% 1988, 17% avg.; 27% poor, 50% fair, 23% good. Hay 72% first cutting, 84% 1988, 92% avg. Peaches 30% harvested, 51% 1988, 53% avg.; 17% very poor, 11% poor, 44% fair, 28% good. Rice 23% headed, 22% 1988, 24% avg.; 48% fair, 45% good, 7% excellent. Blasts in some fields, sheath blight is increasing in incidence, severity. Sorghum 99% planted, 100% 1988, 100% avg.; 97% emerged, 98% 1988, 100% avg.; 14% headed, 14% 1988, 40% avg.; 8% poor, 48% fair, 40% good, 4% excellent. Soybeans 85% planted, 88% 1988, 95% avg.; 78% emerged, 71% 1988, 88% avg.; 6% blooming, 2% 1988, 6% avg.; 5% very poor, 26% poor, 38% fair, 28% good, 3% excellent. Sugarcane 31% fair, 63% good, 6% excellent. Sweet potatoes 85% planted, 87% 1988, 95% avg.; 13% poor, 31% fair, 56% good. Wheat 94% harvested, 100% 1988, 100% avg. Vegetable 17% poor, 55% fair, 28% good. Pasture 18% fair, 73% good, 9% excellent. Livestock 2% poor, 13% fair, 78% good, 7% excellent.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.77 in. Temperature 76°, normal 73°. Extremes 44°; 95°.

Days suitable for fieldwork 4.9. Topsoil 7% short, 93% adequate. Subsoil 81% adequate, 19% surplus. Field corn, soybeans good. Soybeans 68% planted, 77% 1988, 88% avg. Tobacco fair to good. Tobacco 93% transplanted, 98% 1988, 95% avg. Wheat, barley fair. Oats, rye good. Wheat 44% harvested, 48% 1988, 52% avg. Barley harvested 82%, 90% 1988, 90% avg. Pasture good to excellent.

**DELAWARE:** Precipitation 0.68 in. Temperature 77°, normal 75°. Extremes 57°; 96°.

Days suitable for fieldwork 6.1. Topsoil 17% short, 83% adequate. Subsoil 16% short, 68% adequate, 16% surplus. Single, double crop soybeans 66% planted, 66% 1988, 75% avg. Wheat fair to good; 29% harvested, 55% 1988, 55% avg. Barley fair. Barley 76% harvested, 95% 1988, 95% avg. Field corn good.

**MICHIGAN:** Temperatures normal to 2° below normal. Extremes 35°; 92°. Precipitation none to 2.28 in. across State.

Days suitable for fieldwork 5.0. Soil moisture 65% adequate, 35% surplus. Corn 2% very poor, 8% poor, 15% fair, 50% good, 25% excellent. Soybeans

95% planted, 100% 1988, 100% avg. Soybeans 5% very poor, 10% poor, 25% fair, 45% good, 15% excellent. Wheat 35% turning, 70% last year, 60% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Major activities: Hay, strawberry harvest, dry bean planting, fertilizer, pesticide application, cultivation, replanting soybeans. Tart cherry harvest expected to begin the week of July 10th. Harvest of early varieties of sweet cherries started. Early season vegetables arriving in markets.

**MINNESOTA:** Temperatures 2° below to 6° above normal. Extremes 40°; 98°. Precipitation 0.15 to 1.27 in. Greatest weekly total 2.32 in.

Days suitable for fieldwork 4.7. Topsoil 3% very short, 37% short, 56% adequate, 4% surplus. Spring Wheat 91% jointing, 99% 1988, 94% avg.; 53% heading, 98% 1988, 72% avg.; Oats 98% jointing, 99% 1988, 97% avg.; 79% heading, 98% 1988, 83% avg. Barley 87% jointing, 99% 1988, 95% avg.; 46% heading, 99% 1988, 75% avg. Corn 91% cultivated, 99% 1988, 90% avg.; 26 in. height, 41 in. 1988, 33 in. avg. Soybeans 72% cultivated, 98% 1988, 78% avg.; 9 in. height, 15 in. 1988, 10 in. avg. Alfalfa Hay 89% cut, 99% 1988, 92% avg. Soybeans 2% poor, 55% fair, 41% good, 2% excellent. Corn 31% fair, 65% good, 4% excellent. Spring Wheat 1% poor, 35% fair, 39% good, 25% excellent.

**MISSISSIPPI:** Cool, wet. Temperatures 1 to 2° below normal. Extremes 65°; 96°. Rainfall 3.62 in., 2.65 in. above normal.

Days suitable for fieldwork 2.4, 6.3 1988, 5.2 avg. Soil moisture 20% adequate, 55% surplus, 25% excessive. Corn good; 55% silking, 52% 1988, 64% avg. Cotton fair; 54% squaring 83% 1988, 82% avg. Rice good; 98% emerged, 100% 1988, 100% avg. Sorghum fair; 93% emerged, 95% 1988, 97% avg. Soybeans fair, 69% planted, 80% 1988, 90% avg. Sweet potatoes 90% planted, 95% 1988, 96% avg. Wheat fair; 80% harvested, 99% 1988, 97% avg. Peaches fair; 45% harvested, 43% 1988, 46% avg. Pastures, livestock good. Activities: Wheat harvesting, soybean planting, weed, insect control in crops.

**MISSOURI:** Temperatures near normal. Rainfall variable, less than 1.00 in. common, up to 4.50 in. Cape Girardeau, 4.00 in. Nevada. Central counties remain dry.

Days suitable for fieldwork 4.8. Topsoil 41% short, 54% adequate, 5% surplus. Subsoil 66% short, 31% adequate, 3% surplus. Northwest areas still very dry, southeast adequate to surplus moisture. Double-crop soybeans 63% planted, 47% 1988, 63% avg. Small grain harvest progressing well. Wheat 35% harvested, northwest 100% southeast. Oats harvested 14%, 57% 1988, 38% avg. Alfalfa Hay 43% 2nd cutting, 70% 1988, 53% avg. Other hay 77% cut, 87% 1988, 76% avg. Pasture 2% very poor, 11% poor, 42% fair, 43% good, 2% excellent. Stockwater 15% critically short, 26% short, 59% adequate.

**MONTANA:** Temperatures near normal. Cool early in week. Temperatures up to 100° parts of northeast, north central, south central. Rainfall 0.04 in. to 1.00 in. north central, central. Driest was southeast.

Days suitable for fieldwork 5.8. Topsoil 21% short, 78% adequate, 1% surplus. Subsoil 29% short, 70% adequate, 1% surplus. Barley 3% poor, 15% fair, 53% good, 30% excellent; 22% headed, 57% 1988, 40% avg. Oats 2% poor, 19% fair, 61% good, 18% excellent; 16% headed, 58% 1988, 41% avg. Pasture, range 3% poor, 17% fair, 56% good, 24% excellent. Alfalfa 39% first cutting, 81% 1988, 63% avg. Other hay 30% cut, 53% 1988, 29% avg.

**NEBRASKA:** Temperatures 1 to 3° above normal east, normal in Panhandle, central. Thunderstorms provided widespread, spotty rain, 3 to 5 in. south central to less than 0.01 in. west, east.

Days suitable for fieldwork 3.5. Topsoil 31% short, 49% adequate, 20% surplus. Subsoil 85% short, 15% adequate. Winter wheat 96% turning color; 30% ripe 78% 1988, 55% avg.. Harvest slowed by rain, high humidity. Corn beginning to silk in southeast. Corn borer activity lower than normal, some rootworm larva problems in east. Soybeans just beginning to bloom in southeast. Oats 10% harvested, 22% 1988, 6% avg. Farmers cutting oats for hay, silage. Alfalfa hay 3% very poor, 8% poor, 77% fair, 12% good; 5% second cutting, 35% 1988, 22% avg. Pasture range feed 84% short, 16% adequate. Heavy rainfall caused soil erosion central, eastern counties. High winds, hail caused severe damage in north, central, southwest districts. Hail, high winds in Panhandle Friday. Operators in north, northeast planting summer forage crops to compensate for short pastures, short hay crop. Rain slowed chinch bug damage, but still present in east, southeast, along with small grasshoppers in east. Main activities harvesting wheat, oats; cutting hay; cultivating; irrigating.

**NEVADA:** Scattered precipitation most areas early, little or none remainder. Daytime temperatures warm, near normal. Gusty winds common weekend, some cloudiness. Hottest readings extreme south where 100° or better common.

Warm weather, strong gusty winds increased irrigation requirements. Water supply again relatively limited. Hay rained on early. Ranges, pastures showed some deterioration.

**NEW ENGLAND:** Precipitation 0.50 to 0.75 in. northern New Hampshire, 0.25 to 0.50 in. remainder north, less than 0.25 in. south. Temperatures mid 60s northern Maine, northern New Hampshire, parts of Vermont to mid 70s Rhode Island coast. Temperatures near or slightly above normal.

Days suitable for fieldwork 6.5. Soil moisture 5% short, 85% adequate, 10% surplus. Grazing availability 85% adequate, 15% surplus. Fieldwork progress 5.5 days behind. Maine potato good. Connecticut River Valley potato fair. Maine oats good. Field corn fair to good. Sweet corn fair to good. First crop hay 65% cut, 90% 1988, 75% avg.; fair to good. Second crop hay harvest beginning in Connecticut; fair. Shade tobacco fair to good. Outdoor tobacco poor to fair. Apple set average; fruit drop avg.; scab infection light to average. Strawberries 50% harvested; light to average set. Blueberry set light to average. Major farm activities: Haying, spraying, cultivating, picking strawberries.

**NEW JERSEY:** Temperatures near normal. Extremes 47°; 96°. Rainfall 0.33 in. north, 0.13 in. central, 0.01 in. south. Heaviest 24-hour total 0.56 in. on 28th, 29th. Estimated soil moisture percent field capacity average 96% north, 55% central, 59% south. Four inch soil temperatures 69° north, 72° central, 74° south.

Planting, spraying, harvesting very active. Soil moisture adequate; temperatures favorable. Summer vegetable movement increased. Blueberry picking general. Clingstone peach harvest began. Barley combining increased. Wheat harvest began. Hay making active. Soybean planting continued active. Field corn, early planted soybean growth improved. Pasture growth continued excellent.

**NEW MEXICO:** Temperatures below normal extreme east, near normal west, 4 or 5° above normal central mountains. Measurable precipitation east.

Days suitable for fieldwork 6.3. Soil moisture 77% short, 23% adequate. Wheat harvest underway,

estimated 69% complete; 60% very poor, 30% poor, 5% fair, 5% good. Cotton squaring 57%, well ahead of 5 year avg. 37%, 20% poor, 30% fair, 50% good. Cattle 8% poor, 69% fair, 15% good, 8% excellent. Sheep 10% poor, 60% fair, 20% good, 10% excellent. Ranges, pastures 8% very poor, 59% poor, 25% fair, 8% good.

**NEW YORK:** Temperatures near normal. Early week very warm, humid. Unseasonably chilly Canadian airmass arrived 28th bringing highs 60s, lows 30s northern, western areas. Weekend, temperatures moderated to more seasonable levels. Rainfall amounts varied widely. Rain came from scattered thunderstorms which occasionally produced heavy rain early in week while the State was in a warm humid airmass. Little rain occurred after 28th.

Days suitable for fieldwork 5.1. Soil moisture surplus. Pastures, wheat good. Hay fair to good, quality declining. Alfalfa hay 40% harvested, 71% avg. Clo-tim 30% harvested, 77% 1988, 56% avg. Grass silage 40% harvested, 85% 1988, 74% avg. Corn 82% planted. Many growers may not plant intended acreage due to late date. Fruit crop good. Brown rot on sweet cherries has been a problem. Finger Lakes grape crop continues to be plagued by downy mildew, black rot. Muckland vegetables, onions, lettuce, cabbage, potatoes, damaged by heavy rains.

**NORTH CAROLINA:** Temperatures very close to normal. Extremes 50°; 95°. Precipitation none to 2.33 in.

Days suitable for fieldwork 4.8. Soil moisture 3% short 74% adequate, 23% surplus. Pasture 14% fair, 78% good, 8% excellent. Livestock feed 82%. Crop conditions: field tobacco 1% very poor, 38% fair, 60% good, 1% excellent; Irish potatoes 28% fair, 72% good; sweet potatoes 17% fair, 83% good; peaches 7% poor, 41% fair, 52% good; apples 5% very poor, 37% fair, 53% good, 5% excellent; truck crops 39% fair, 61% good; peanuts 23% fair, 77% good; hay 15% fair, 81% good, 4% excellent. Hay first cutting 86% complete, second cutting 25% complete. Hay, roughage 1% short, 88% adequate, 11% surplus. Plantings completed: Sorghum 80%, 96% 1988, 91% avg.; sweet potatoes 85%, 97% 1988, 97% avg. Harvesting completed: peaches 40%, 36% 1988, 41% avg.; wheat 56%, 78% 1988, 88% avg.; oats 68%, 87% 1988, 91% avg.; barley 68%, 93% 1988, 93% avg.; rye 67%, 84% 1988, 86% avg.; Irish potatoes 39%, 75% 1988, 57% avg. Major activities: planting soybeans, cultivating tobacco, harvesting small grains, cutting hay. Other activities: Spraying crops; planting sweet potatoes, vegetables, sorghum; harvesting peaches; tending livestock; general farm maintenance.

**NORTH DAKOTA:** Temperatures 2 to 5° above normal. Extremes 38° north central, central; 98° south central. Precipitation 1.25 in. north central, all other sections 0.18 to 0.69 in. with majority less than 0.50 in. State below average for growing season, -0.34 in. northeast to -2.23 in. central.

Days suitable for fieldwork 6.6. Topsoil 13% very short, 36% short, 51% adequate. Small grains deteriorated last week, fair to good, development well behind average. Crop may suffer greatly some areas without rain in 10 days. Spring wheat 3% poor, 26% fair, 69% good, 2% excellent; durum 1%, 24%, 69%, 6%; oats 3%, 39%, 56%, 2%; barley 27% fair, 70% good, 3% excellent; corn 31% fair, 69% good; flax 40%, 60%; sunflower 30%, 70%; soybeans 25%, 75%; dry edible beans 1% poor, 17% fair, 82% good; potatoes 100% good. Spring wheat 39% boot, 37% heading and beyond; durum 38%, 18%; oats 36%, 28%; barley 37%, 43%.

Row crop progress behind average. Crop height: dry edible beans 7 in., 11 in. 1988, 9 in. avg.; corn 13 in., 29 in. 1988, 22 in. avg.; flax 6 in., 9 in. 1988, 9 in. avg.; potatoes 11 in., 14 in. 1988, 12 in. avg.; soybeans 8 in., 11 in. 1988, 9 in. avg.; sunflower 9 in., 18 in. 1988, 13 in. avg. Pasture 4% very poor, 2% poor, 59% fair, 35% good. First cutting alfalfa hay yield below average.

**OHIO:** High temperatures low to mid 80s, near normal. Low temperatures upper 50s to lower 60s. Rainfall 0.02 to 2.52 in., less than 0.50 in. northwest. Base 50° growing days totalled 145 to 160, near normal.

Days suitable for fieldwork 5.0. Soil moisture 2% short, 50% adequate, 48% surplus. Corn fair to good, with some slugs, worms. Soybeans fair to good. Wheat harvest began; fair to good. Hay fair to good central, west poor to fair in east. Hay yields are high, but quality is low, due to insects, disease, damp weather. Tomato planting, strawberry harvest almost complete. Vegetables two to three weeks behind schedule, progressing. Canola harvest began.

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

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

**OREGON:** Temperatures 3 to 4° below normal Statewide. Temperatures above normal, highs 80s to 90s extreme east. Rainfall 1.40 in. along coast, 0.10 in. fell southwest valley, 0.30 to 0.40 in. fell rest of west, 0.10 to 0.20 in. fell east, dry extreme east.

Soil moisture 30% short, 70% adequate. Winter wheat 56% fair, 31% good, 13% excellent. Winter wheat, other grains, grass seeds fair to good all area. Wheat aphids multiplying quickly causing problems in spring grains north central, few Russian wheat aphid problems other areas. Harvest to begin soon with good weather north central. Harvest of grass hay started with average to above average crop expected except lower yield, high quality south central. Second crop hay down southeast. Fescue, orchard grass swathed, rained on; some crimson being harvested, some Tall Fescue already combined, rains have stopped hay making and crimson clover seed harvest Willamette Valley. Strawberry harvest finished or nearly finished. Raspberry, Marionberry harvest continued. Blueberry, blackberry harvest in early stages, bird damage, sun scald north Willamette Valley. Cherry harvest continued north central, expected this week northeast. Bartletts sizing well, pear psylla populations heavy, hard to control from cool temperatures southwest. Green pea harvest continued. Snap bean harvest expected soon west. Extreme weather changes caused erratic, slower growth Willamette Valley. Walla sweet onion harvest continued. Onion seed crop down from hail damage Malheur. Seed potatoes emerged northeast. Livestock, range, pasture good to excellent east, fair to excellent west. Range, pasture need rain soon northeast.

**PENNSYLVANIA:** Rainfall for the first time in 9 weeks. Temperature 70°, 2° above normal. Extremes 41°; 94°. Precipitation 0.68 in., 0.25 in. below normal.

Days suitable for fieldwork 4.0. Soil moisture 22% adequate, 78% surplus. Corn 92% planted, 100% 1988, 100% avg.; 13 in. height, 16 in. 1988, 23 in. avg.; 1% very poor, 9% poor, 27% fair, 44% good, 19% excellent. Tobacco 88% transplanted, 91% 1988, 96% avg. Soybeans 72% planted, 93% 1988, 95% avg.; 1% very poor, 4% poor, 33% fair, 43% good, 19% excellent. Barley 15% heading or headed, 20% 1988; 33% turning yellow, 21% 1988; 42% ripe, 17% 1988; 10% harvested, 42% 1988. Wheat 34% heading or headed, 24% 1988; 61% turning yellow, 58% 1988; 5% ripe, 14% 1988; none harvested, 4% 1988; 1% very poor, 3% poor, 19% fair, 50% good, 27% excellent. Oats 95% heading or headed, 76% 1988; 5% turning yellow, 24% 1988; 1% very poor, 7% poor, 23% fair, 43% good, 26% excellent. First cutting alfalfa 55% complete, 96% 1988. Second cutting alfalfa 10% complete, 29% 1988. First cutting clover-timothy 39% complete, 90% 1988. Hay quality poor to fair. Feed from pastures above average to average. Fruit tree average. Activities: Planting corn, soybeans, vegetables; transplanting tobacco; harvesting hay, haylage, barley, strawberries, vegetables; weed control; fence work; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

**PUERTO RICO:** Rainfall 0.60 in., 0.62 in. below normal. Highest rainfall 3.92 in. San Sebastian; 2.45 in. Arecibo Ionospheric Observatory, 2.02 in. Isabela Aes. Temperatures 77 to 82° on coast; 75 to 78° interior, 68° Pico Del Este-Luquillo to 83° Roosevelt roads N.S. Extremes 56° Arecibo Ionospheric Observatory; 94° San Sebastian.

**SOUTH CAROLINA:** Rainfall spotty, varied less than 0.01 to 2.00 in. Temperatures near normal.

Days suitable for fieldwork 5.3. Soil moisture 22% short, 73% adequate, 5% surplus. Cotton 40% fair, 60% good; 44% squaring, 40% 1988, 72% avg.; 2% setting bolls, 4% 1988, 25% avg. Soybeans 16% fair, 84% good; 84% planted, 91% 1988, 91% avg. Corn good; 59% silked, 69% 1988, 74% avg.; 11% dough stage, 12% 1988, 24% avg. Watermelons fair to good; 30% harvested, 29% 1988, 27% avg. Tomatoes fair to good; 60% harvested, 41% 1988, 60% avg. Peaches fair to good; 26% harvested, 34% 1988, 37% avg. Wheat fair to good; 82% harvested, 96% 1988, 96% avg. Oats fair to good; 77% harvested, 92% 1988, 93% avg. Barley fair to good; 90% ripe, 96% 1988, 98% avg.; 63% harvested, 90% 1988, 93% avg. Pastures good.

**SOUTH DAKOTA:** Temperatures normal to 5° above normal. Extremes 34°; 104°. Rainfall above normal southeast, below normal rest of State. Growing season precipitation 0.45 to 5.14 in. below normal.

Days suitable 5.1. Topsoil 35% critically short, 32% short, 33% adequate. Subsoil 47% critically short, 42% short, 11% adequate. Small grain fair to good. Row crop good. Livestock good. Major activities haying, cultivating, spraying, fencing, moving livestock.

**TENNESSEE:** Rainy, below normal temperatures Statewide. Rainfall scattered early week, widespread by midweek through weekend. Precipitation 3.00 in. above normal west, 0.10 in. below normal Plateau.

Days suitable for fieldwork 2.3. Soil moisture 31% adequate, 69% surplus. Corn 20% tasseling, 27% 1988, 40% avg.; 3% poor, 14% fair, 65% good, 18% excellent. Tobacco 100% transplanted, 100% 1988, 100% avg. Wheat 100% ripe, 96% 1988, 99%

avg., 54% harvested, 94% 1988, 89% avg.; 2% very poor, 2% poor, 52% fair, 40% good, 4% excellent  
 Hay 1% very poor 3% poor, 20% fair, 69% good, 7% excellent  
 Showers limited fieldwork, crop development. Pastures excellent. Cattle good.

**TEXAS:** Tropical storm Allison dominant weather feature. Storm, remains triggered rain, thunderstorms all week over southeastern counties. Several one day totals over 10.00 in. Storm also produced rain over south central, eastern counties. Late week, remains of Allison moved into Ohio Valley, unstable air still caused showers southeast. July upper air disturbance triggered heavy thunderstorms northeast, north central. Rainfall much above normal Upper Coast, east, near normal north central, below normal elsewhere. Temperatures below normal Upper Coast, east, north central, close to normal rest of State.

**Crops:** Small grain harvest good progress Cross Timbers, Plains; yields still low. Harvest winding down Blacklands. Corn harvest slowed early week Valley, Coastal regions. Good drying conditions midweek allowed activities resume. East heavy rains caused some lodging, washed out some fields. Progress good most other areas. Dryland fields central still poor. Progress High Plains excellent under constant irrigation. Corn 57% doughing, 60% 1988, 57% avg. Corn 24% dented, 30% 1988, 32% avg. Corn 7% mature, 5% 1988, 5% avg. Grain sorghum harvest resumed southern areas midweek, good drying conditions after early week rains. Yields below average. Hot days causing fields many areas central, Blacklands turn color rapidly. Planting operations continued Cross Timbers, Plains. Most stands look good; more rain needed soon. Continued rainfall Upper Coast caused some sprouting. Heavy rains parts east caused some damage. Grain sorghum 53% headed, 56% 1988, 56% avg.; 42% turning color, 27% 1988, 37% avg.; 16% mature, 13% 1988, 16% avg.; none harvested, 1% 1988, 4% avg. Cotton planting winding down Plains. Farmers gone back alternative crops after being hailed, rained out several times. Early fields beginning to square. Irrigation steady. Producers cultivating, spraying Blacklands, central. Bolls opening Coastal Bend, Rio Grande Valley. First bale 1989 U.S. cotton crop ginned Rio Grande Valley June 20. Cotton 99% planted, 97% 1988, 98% avg.; 1% open bolls, 2% 1988, 1% avg. Rice fields continued head Upper Coast. Heavy rains east caused only minor damage. Peanut planting slowed central because rain; additional soil moisture should help planting conditions. Stands look good, progress good so far Cross Timbers. Wet conditions Blacklands caused some leaf spot. Some fields becoming weedy. Soybean planting continued Plains, some producers replanting damaged cotton fields to beans. Early stands look good. Upper Coast rainfall should benefit crop. Excessive rain east caused some losses. Other field crops: Oats 82% harvested, 78% 1988, 81% avg. Peanuts 86% planted, 92% 1988, 86% avg. Soybeans 94% planted, 92% 1988, 90% avg. Sunflowers 75% planted, 55% 1988, 83% avg.

**Commercial Vegetables:** Rio Grande Valley, some tomatoes, cantaloupes remain for harvest. Land preparations increased after rain. Citrus continued size. Insecticides applied as needed. San Antonio-Winter Garden, few cucumbers, carrots, watermelons remained for harvest. Onion harvest wind down. East Texas, heavy rains caused isolated losses. Disease problems continued; production good other areas not hit by flooding. High Plains, onion, potato harvest begin soon. Some lodging onion fields. Other vegetables good progress. Trans-Pecos, onion harvest continued. Chiles look good, harvest nears. Cantaloupe

harvest continued. Late season peaches good quality, quantity Hill Country. Pecans continued good progress most areas fair to good sets. Shuck split some southern groves.

**Range and Livestock:** Rain southern, Coastal regions benefit very dry situation. Forage supplies increased many areas. Haying operations active as weather allowed. Livestock conditions good most areas. Markets good.

**UTAH:** Precipitation none to light. Temperatures 5° below normal.

Days suitable for fieldwork 6.7. Soil moisture 93% short, 7% adequate. Winter wheat 67% turning, 64% 1988, 64% avg.; 19% ripe, 8% 1988, 7% avg. Spring wheat 78% headed, 83% 1988, 80% avg.; 23% turning, 27% 1988, 30% avg. Barley 81% headed, 81% 1988, 80% avg.; 22% turning, 31% 1988, 38% avg. Oats 77% headed, 65% 1988, 53% avg.; 10% turning, 7% 1988, 7% avg. Alfalfa 1st cutting 97%, 87% 1988, 90% avg.; 2nd cutting underway in south. Other hay 52% complete. Winter wheat 18% poor, 41% fair, 41% good; spring wheat 5% poor, 35% fair, 60% good; barley 1% poor, 28% fair, 71% good; oats 3% poor, 44% fair, 53% good; corn 19% fair, 70% good, 11% excellent. Lower elevation range, pasture dry. Major farm activities: Irrigation, hay harvest, preparation wheat harvest, sweet cherry harvest, cultivating corn, spraying alfalfa weevil.

**VIRGINIA:** Hot, humid, then cool, dry. Temperatures above normal, variable precipitation. Extremes 49°; 96°. Rainfall none to 2.30 in.

Days suitable for fieldwork 4.3. Topsoil 85% adequate, 15% surplus. Soybeans 79% planted, 75% 1988, 73% avg. Corn 5% silked, 4% 1988, 8% avg. Wheat 50% harvested, 60% 1988, 72% avg. Barley 74% harvested, 77% 1988, 87% avg. Oats 22% harvested, 26% 1988, 50% avg. Corn 6% poor, 28% fair, 52% good, 14% excellent. Soybeans 37% fair, 56% good, 7% excellent. Tobacco 34% poor, 28% fair, 38% good. Pastures 53% good, 47% excellent. Alfalfa 22% fair, 48% good, 30% excellent. Other hay 22% fair, 53% good, 25% excellent. Hay cutting delayed but active.

**WASHINGTON:** Temperatures 3° above normal to 5° below normal, east; none to 4° above normal, west. Precipitation none to 0.17 in., east; 0.17 to 0.57 in., west.

Days suitable for fieldwork, 6.4. Soil moisture 30% short, 70% adequate. Range, pasture 25% short, 75% adequate. Hay, other roughage 95% adequate, 5% surplus. Cereal grains heading out, turning color. Winter wheat 100% headed, 100% 1988, 96% avg. Spring wheat 90% headed, 92% 1988, 85% avg. Barley 95% headed, 96% 1988, 89% avg. Second cutting of alfalfa hay 25% complete. Major activities: Harvest of cherries, strawberries, raspberries, leafy vegetables, green peas, Walla Walla sweet onions; swathing hay, grass seed fields; thinning fruit; weeding. Pastures green due to recent cool, rainy weather.

**WEST VIRGINIA:** Temperature 72° normal, north central; 1 to 2° above normal elsewhere. Extreme 42° Terra Alta; 98° Creston. Precipitation 0.63 in.; 0.17 in. above to 0.75 in. below normal.

Days suitable for fieldwork 3.8. Soil moisture 73% adequate, 27% surplus. Wheat, barley, oats good to fair. Wheat 85% ripe; 9% harvested. Barley 94% ripe; 12% harvested. Oats 85% jointed, 81% headed. Corn good to fair, planting complete. Tobacco fair, 88% set. Hay good to fair, 1st cut 47% complete. Apples fair, peaches poor. Farm activities: Making hay, gardening, general farm maintenance.

**WISCONSIN:** Temperature 68°, 2° below normal. Extremes 34°; 96°. Precipitation 0.20 to 1.20 in.

Days suitable for fieldwork 5.9. Soil moisture 28% short, 71% adequate, 1% surplus. Pasture 76% of normal, 26% 1988, 68% avg. General condition crops 12% fair, 77% good, 11% excellent. Soybean 21% fair, 67% good, 12% excellent. Corn 11% fair, 73% good, 16% excellent. Corn 24 in., 31 in. 1988, 31 in. avg. Oats 75% headed, 92% 1988, 80% avg. First cut hay 86% completed, 96% 1988, 91% avg.

**WYOMING:** Temperatures generally below normal. Precipitation below normal except northeast.

Days suitable for fieldwork 6.0. Topsoil 64% short, 36% adequate. Winter wheat 5% booted, 5% 1988, 5% avg.; 70% headed, 45% 1988, 50% avg.; 25% turning color, 40% 1988; none mature, 10% 1988.

Barley 10% not jointed, none 1988, 5% avg.; 15% jointed, 10% 1988, 10% avg.; 15% booted, 20% 1988, 25% avg.; 55% headed, 45% 1988, 45% avg.; small amount turning color, 25% 1988; none mature, 5% 1988. Spring wheat 20% jointed, 5% 1988, 15% avg.; 40% booted, 30% 1988, 30% avg.; 35% headed, 45% 1988, 45% avg.; 5% turning color, 15% 1988. Oats 5% not jointed, 5% 1988, 5% avg.; 30% jointed, 15% 1988, 15% avg.; 40% boot, 30% 1988, 35% avg.; 25% headed, 35% 1988, 40% avg.; none turning color, 10% 1988; none mature, 5% 1988. Sugarbeets 90% thinned, 100% 1988, 95% avg. Alfalfa first cutting 55% complete, 80% 1988, 65% avg. Other hay 15% harvested, 30% 1988, 25% avg. Livestock good. Ranges, pastures fair to good. Stockwater 75% short, 25% adequate.

HIGHLIGHT

International Weather and Crop Summary

June 25 - July 1, 1989

**USSR** ... In Western USSR, widespread showers benefit most crops. In the New Lands, showers benefit spring grains in the southern Urals, but unseasonably warm, dry weather in parts of West Siberia and central Kazakhstan increases stress on spring grains approaching the heading stage.

**EUROPE** ... Much needed rain helps reduce dryness for crops in the northwest.

**SOUTH ASIA** ... Dry pockets persist over southern India, stressing vegetative crops. Beneficial rain continues in central and eastern areas.

**EASTERN ASIA** ... Heavy rain and flooding continue in sections of the Yangtze Valley. Heat stresses crops in sections of the North China Plain.

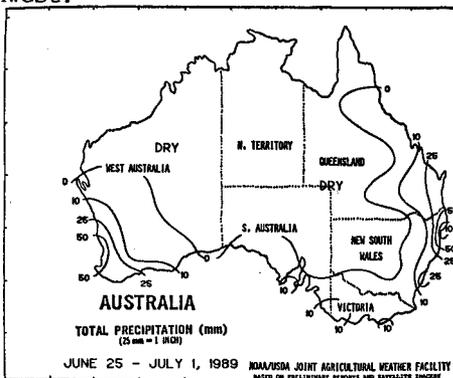
**SOUTHEAST ASIA** ... Widespread showers return to Thailand, bringing relief to crops advancing into reproduction.

**SOUTH AMERICA** ... In south-central Brazil, light showers benefit vegetative wheat. In Argentina, dry weather helps final summer crop harvests and accelerates the pace of wheat planting.

**AUSTRALIA** ... Widespread rain favors winter grains in Western Australia. Freezing temperatures slow growth of winter grains in New South Wales and Victoria.

**CANADA** ... Beneficial rain covers all but southern Alberta and parts of the southeast.

**MEXICO** ... Much needed rain covers the western half of the Corn Belt. Heat stress continues in the northwest.



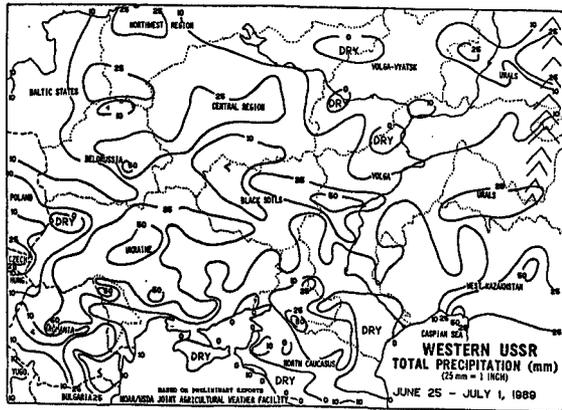
**AUSTRALIA** ... Widespread moderate to heavy rain (15-50mm) covered winter grain areas of Western Australia, maintaining high levels of soil moisture for most crops. Scattered light to moderate rain (5-15mm) fell over growing areas of South Australia, Victoria, and southern Queensland, while New South Wales remained mostly dry. Drier weather in Victoria and southern New South Wales ended four consecutive weeks of above-normal rainfall and persistent planting delays, although some soils still remain too wet for fieldwork. Near or slightly below freezing minimum temperatures in New South Wales and northern Victoria slowed growth of establishing winter grains. In the northeast, mostly dry weather continued to favor sugarcane harvest in central coastal Queensland, while heavy showers (25-100mm) caused delays in southeastern Queensland and extreme northeastern New South Wales. Mean weekly temperatures were normal to below normal across most growing areas.

June 1989

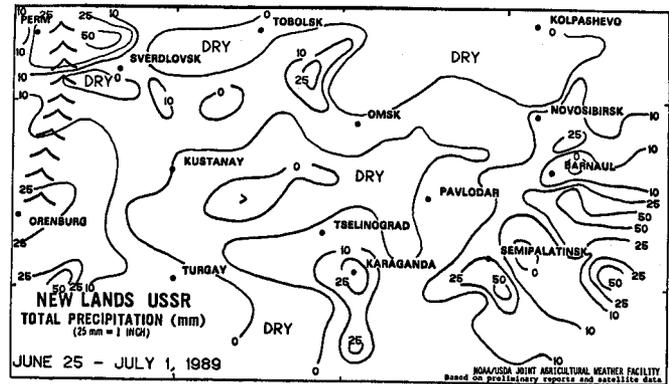
MONTHLY DATA FROM SELECTED FOREIGN CITIES  
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA  
\*\*\* = DATA NOT AVAILABLE

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG MAX	AVG MIN	HI	LO	AVG	F/NRM	DPART	
NORWAY OSLO	20	10	28	2	15	0.8	59.3	-14.1
SWEDEN STOCKHOLM	21	10	28	5	15	-0.3	38.8	-7.7
FINLND HELSINKI	21	10	27	3	16	0.6	22.1	-20.1
U KING GLASGOW	18	8	28	-1	13	-1.0	73.1	7.8
EDINBURGH	18	8	26	0	13	0.2	58.8	12.9
BIRMINGHAM	21	9	30	-1	15	0.6	69.4	16.5
LONDON	21	10	29	2	15	1.0	74.2	15.3
IRELND DUBLIN	18	10	25	3	14	0.4	67.8	15.0
ICELND REYKJAVIK	11	6	16	4	9	-0.5	38.5	-9.0
DENMRK COPENHAGEN	21	11	29	5	16	0.3	40.3	-6.7
LUXEMB LUXEMBOURG	20	11	28	4	15	-0.3	96.3	34.5
SWITZL ZURICH	21	11	28	5	16	0.3	79.1	-54.6
GENEVA	24	11	32	3	18	0.7	9.0	-81.6
FRANCE PARIS	17	7	18	3	12	-4.8	101.8	45.5
STRASBOURG	17	9	20	6	13	-3.9	11.4	-63.3
BOURGES	17	6	22	4	12	-5.2	26.4	-34.8
BORDEAUX	20	10	26	6	15	-2.7	15.9	-48.6
TOULOUSE	19	10	20	8	14	-3.8	6.8	-57.6
MARSEILLE	23	14	24	12	18	-2.3	0.1	-31.5
SPAIN VALLADOLID	27	12	34	6	19	1.8	33.5	-5.8
MADRID	30	13	37	7	21	0.7	10.4	-15.7
SEVILLE	34	17	40	12	26	2.5	0.1	-15.2
E GRMY LEIPZIG	22	11	30	6	16	-0.2	28.4	-38.7
DRESDEN	22	11	29	5	16	-0.2	97.0	29.0
W GRMY HAMBURG	21	11	30	4	16	0.5	65.8	-4.1
BERLIN	23	12	31	8	17	-0.2	34.9	-41.3
DUSSELDORF	22	11	30	6	17	-0.2	97.5	31.5
STUTTGART	21	10	27	5	15	-1.0	63.1	-30.7
NURNBERG	21	10	29	3	16	-0.9	47.6	-26.1
MUNICH	20	9	27	4	15	-1.0	103.9	-31.1
AUSTRI VIENNA	21	12	26	6	16	-1.9	73.5	11.5
INNSBRUCK	20	9	26	4	15	-1.8	160.3	48.3
CZECH PRAGUE	21	9	28	4	15	-1.2	68.7	-9.8
POLAND WARSAW	21	11	27	3	16	-1.2	113.8	49.6
LODZ	20	11	27	4	15	-0.7	82.0	12.9
KATOWICE	19	10	26	3	15	-1.2	73.2	-14.7
PRZEMYSL	19	12	26	6	16	-1.2	89.7	-9.2
HUNGAR BUDAPEST	23	13	27	9	18	-1.6	71.7	3.3
YUGOSL SARAJEVO	21	10	27	5	15	-1.8	102.9	-3.0
ROMANI BUCHAREST	25	14	30	11	20	-0.9	145.6	57.8
BULGAR SOFIA	21	12	26	9	17	-1.0	97.1	20.1
ITALY MILAN	26	15	31	8	21	0.0	38.5	-49.0
VERONA	27	14	31	7	21	-0.1	148.8	70.2
VENICE	24	15	28	10	20	-1.0	216.8	140.1
GENOA	24	19	27	15	21	-0.4	5.6	-43.4
ROME	25	15	31	11	20	-1.1	46.2	24.8
NAPLES	27	16	30	12	21	0.4	107.9	73.9
GREECE THESSALONIKA	27	17	32	13	22	-2.4	88.1	58.3
LARISSA	29	15	34	10	22	-2.8	24.4	-2.1
ATHENS	27	19	30	15	23	-2.4	2.7	-5.5
TURKEY ISTANBUL	25	16	30	7	21	0.3	28.2	4.2
ANKARA	25	9	32	3	17	-3.1	71.4	33.4
CYPRUS LARNACA	29	18	32	15	24	-1.0	0.1	-5.0
USSR TALLINN	21	11	30	4	16	1.4	31.9	-14.1
LENINGRAD	23	14	31	7	19	3.2	37.1	-13.8
KAUNAS	21	12	27	4	16	0.0	110.8	22.6
MINSK	21	13	28	9	17	0.6	144.0	76.9
KAZAN	27	15	30	12	21	3.7	48.6	-12.7
MOSCOW	26	15	30	12	21	3.9	103.1	35.2
SVERDLOVSK	27	13	31	8	20	4.6	47.0	-21.9
OMSK	24	12	32	6	18	0.2	3.3	-53.1
KUSTANAY	29	15	33	8	22	3.1	18.0	-19.1
KRASNOYARSK	19	9	28	1	14	-2.3	39.5	-17.8
NOVOSIBIRSK	20	10	28	1	15	-0.9	19.7	-33.6
BARNAUL	21	11	30	2	16	-2.2	41.5	-5.6
KHABAROVSK	25	14	31	8	20	2.0	82.2	4.5
VLADIVOSTOK	16	10	21	3	13	0.1	180.6	78.4
KIEV	25	15	30	11	20	1.7	223.9	161.0
LVOV	20	12	27	7	16	-0.8	154.8	65.8
KIROVOGRAD	25	14	32	6	20	0.3	67.5	16.0

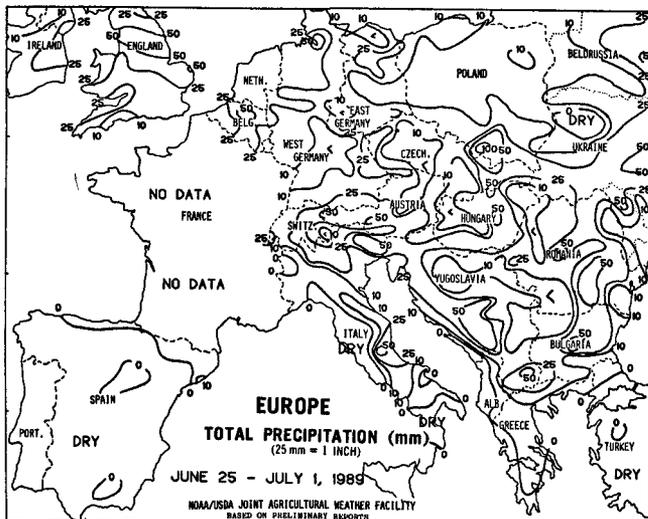
COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)			
	AVG MAX	AVG MIN	HI MAX	LO MIN	DPART AVG	F/NRM	TOTAL		DPART F/NRM	AVG MAX	AVG MIN	HI MAX	LO MIN	DPART AVG	F/NRM	TOTAL	DPART F/NRM
<b>June 1989</b>								<b>June 1989</b>									
USSR	23	16	30	12	19	-0.3	72.6	31.1	TANZAN	28	19	30	17	24	-0.5	30.8	-2.1
	23	16	28	12	20	-1.2	39.0	-3.9	GABON	28	23	30	21	26	0.4	12.6	-5.8
	27	15	32	11	21	2.1	125.5	76.1	TOGO	30	24	34	22	27	1.5	226.7	-52.1
	27	18	32	14	22	3.2	73.9	37.5	B FASO	36	25	41	21	30	1.5	71.1	-53.3
	26	16	32	10	21	1.7	83.3	33.8	IVRY C	30	24	32	20	27	1.0	266.3	-364.3
	27	17	33	11	22	0.6	55.5	28.7	MOZAMB	26	14	26	14	**	**	6.1	-9.9
	27	17	34	9	22	0.6	62.4	1.9	ZAMBIA	23	9	29	5	16	0.4	0.1	0.1
	31	19	36	14	25	2.1	14.8	-5.4	ZIMBAB	21	9	25	5	15	1.6	0.4	-3.6
	26	16	31	11	21	-0.2	44.2	-32.9	S AFRI	19	7	24	3	13	2.6	56.0	50.0
	30	16	33	9	23	3.4	33.4	-9.0		18	1	25	-4	10	0.9	8.1	2.1
	25	12	30	4	18	0.3	28.5	-3.5		17	3	21	-2	10	0.5	51.5	45.3
	24	11	31	5	17	-1.3	97.1	56.9		17	2	23	-4	9	0.9	62.6	55.6
	29	17	33	13	23	1.6	93.9	26.8		23	13	27	10	18	1.3	4.1	-22.1
	33	18	40	12	26	0.4	7.3	-3.2		18	8	28	3	13	0.4	105.7	14.5
	37	22	42	15	29	1.1	0.1	-4.7	CANADA	24	13	31	7	18	0.7	95.1	28.0
SYRIA	34	14	41	8	24	-0.9	0.1	0.1		24	14	33	6	19	0.6	85.0	2.5
ISRAEL	27	16	35	11	21	-1.0	0.1	0.1		22	10	30	-1	16	-0.6	105.1	24.9
PAKIST	35	28	39	24	32	0.2	0.1	-7.6		23	10	36	4	17	0.6	79.8	0.1
INDIA	38	24	43	20	31	-2.1	32.6	-24.6		23	10	34	4	16	0.7	61.8	3.3
	39	28	48	23	33	-0.7	21.4	-35.3		23	10	31	6	16	0.9	77.6	-0.6
	37	28	41	24	33	-0.3	86.2	-19.2		21	8	28	3	14	1.0	79.3	-10.2
	35	23	40	21	29	-1.0	192.6	58.5		21	10	29	6	16	0.4	83.4	6.0
	33	26	39	23	30	-0.3	276.2	25.9		21	12	26	8	16	1.2	49.7	4.4
	32	28	34	23	30	0.2	188.9	29.0	MEXICO	30	16	36	13	23	0.6	90.6	-61.4
	32	26	36	24	29	0.2	439.0	-208.5		23	14	30	10	19	0.9	88.4	-15.7
	30	22	35	20	26	-1.6	167.0	49.3		33	25	36	20	29	0.2	204.8	-74.0
	33	24	39	21	29	-0.5	121.9	21.9		29	24	30	20	27	2.1	36.0	-100.9
	37	26	39	22	32	-0.5	109.9	47.7		32	24	33	20	28	1.2	19.8	-204.9
	29	23	34	22	26	-0.5	****	113.6		31	24	33	21	27	0.9	109.6	-52.3
H KONG	30	26	32	22	28	0.2	139.0	-292.9		33	25	34	23	29	1.0	11.4	-67.0
N KREA	24	14	30	9	19	-0.3	103.1	-53.9		**	26	**	22	**	***	0.0	-122.9
S KREA	26	17	32	13	22	1.0	177.8	8.9		31	24	32	23	28	0.8	7.6	-72.7
JAPAN	20	11	27	6	16	-0.2	120.7	44.1		30	25	31	23	28	1.9	31.6	-134.8
	26	18	32	14	22	0.2	290.5	80.6		31	25	31	24	28	0.3	15.2	-75.5
	24	18	31	12	21	-0.5	209.0	28.3		32	24	33	22	28	1.5	64.9	-189.4
	23	18	29	12	20	-0.6	272.8	56.9		18	8	20	4	13	0.1	53.0	-18.3
	26	18	31	11	22	0.6	189.0	-43.8		29	24	31	22	27	-0.1	9.9	-43.4
	27	19	31	13	23	0.6	169.5	-43.3		29	23	32	21	26	0.7	515.2	51.3
	32	24	34	23	28	-0.4	167.2	17.9		29	24	30	23	26	-0.1	219.7	67.3
	33	26	36	23	29	0.3	85.6	-72.5		28	22	29	21	25	0.3	273.4	-79.5
	32	24	34	22	28	1.0	96.3	-35.6		24	15	29	9	20	1.1	45.0	34.0
	32	26	40	24	29	-0.2	397.0	158.2		26	16	30	10	21	1.7	51.2	1.2
	25	15	33	10	20	0.3	85.0	7.0		23	13	26	8	18	1.1	31.1	9.0
	32	16	36	12	24	-1.3	7.1	2.4		24	19	29	16	22	0.1	225.3	181.5
	27	16	32	10	21	0.9	44.2	11.6		23	13	27	8	18	1.2	60.0	-31.6
	30	20	36	16	25	0.6	34.0	-43.9		18	8	24	2	13	-1.4	5.7	-158.4
	30	20	37	16	25	0.4	109.8	40.5		19	12	23	3	15	0.1	58.3	-81.7
	25	10	29	5	18	1.3	56.7	-13.6		21	16	29	13	18	0.9	0.3	-0.6
	25	17	27	14	21	1.5	108.9	-71.5		13	-2	15	-5	6	-1.4	21.0	17.6
	31	20	37	16	25	-1.3	50.6	-17.5		16	2	24	-2	9	0.7	9.2	-61.4
	28	21	34	18	24	-1.2	186.8	28.0		20	12	25	7	16	***	199.9	****
	29	21	35	12	25	-0.5	356.5	146.9		22	13	27	6	17	0.0	44.9	-32.1
	28	21	33	17	25	0.1	178.4	-4.3		20	9	25	3	15	1.9	58.0	32.7
	28	21	35	16	24	0.9	123.5	-35.5		18	8	26	2	13	2.8	52.3	38.7
	29	23	34	16	26	0.6	310.0	18.9		17	7	24	2	12	2.9	14.1	-9.5
	32	25	37	21	29	1.9	32.6	-283.4		18	6	21	-1	12	1.3	22.0	-23.2
	32	25	35	21	28	1.1	191.3	-96.2		17	6	21	-1	11	1.4	63.1	3.2
	32	25	35	20	29	1.4	112.2	-119.8		17	5	22	0	11	2.9	10.9	-14.2
CNRY I	26	20	29	17	23	1.6	0.1	0.1		14	5	20	-2	9	1.4	25.3	-19.0
MOROCC	24	18	30	13	21	0.8	0.1	-5.7		28	23	29	19	25	1.1	17.6	-54.5
	31	18	41	13	23	0.4	2.0	-4.2		25	19	31	16	22	1.2	161.8	47.6
ALGERI	28	16	35	11	22	0.7	7.6	-14.4		27	21	29	18	24	0.7	74.1	-92.5
	27	12	33	6	19	-1.8	44.0	20.9		29	25	31	23	27	0.5	78.3	-139.3
TUNISI	29	17	34	13	23	0.1	5.4	-9.2		30	22	31	19	26	1.0	70.1	8.6
NIGER	40	28	44	23	34	2.7	21.6	-53.5		16	9	19	2	12	0.5	109.3	-22.4
MALI	41	29	46	25	35	0.7	0.1	-16.7		29	23	31	21	26	0.3	25.4	-22.3
	35	24	40	20	30	0.8	124.8	-12.3		29	20	31	14	25	-0.7	1.6	-0.2
MAURIT	37	24	44	19	31	3.0	6.4	5.6		16	6	21	0	11	-0.7	47.2	20.3
SENEGL	29	24	32	22	26	0.7	27.6	17.6		20	11	24	6	16	-0.7	39.2	-35.2
CHAG A	28	24	29	22	26	-0.3	113.3	-44.5		18	8	22	3	13	-1.1	74.0	-102.5
LIBYA	33	19	40	13	26	0.2	1.3	-0.4		15	7	20	0	11	-1.7	37.8	1.0
	30	21	41	15	26	-0.2	1.3	1.3		14	7	20	1	10	-1.6	66.3	12.2
EGYPT	35	21	42	19	28	0.4	0.1	0.1		13	5	19	-1	9	-0.8	58.4	19.7
	41	25	46	14	33	-0.2	0.1	0.1		13	4	16	-1	8	-0.1	63.0	22.2
ETHIOP	22	10	27	8	16	-0.9	87.7	-30.3		11	3	14	-2	7	0.7	23.6	-15.1
KENYA	23	12	25	5	17	-0.3	0.9	-30.0		32	24	35	21	28	-0.1	108.7	-144.4



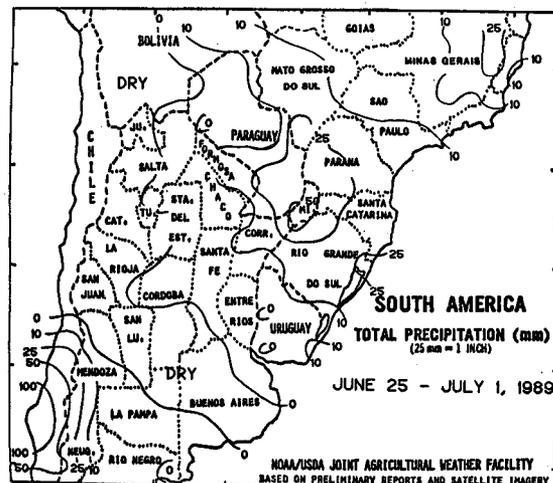
**USSR** ... In Western USSR, showers and thunderstorms continued over most of the region, producing variable amounts of precipitation. Greatest amounts of rainfall (25-50mm) covered crop areas in the eastern Baltic States, central Belorussia, the middle portion of the Central Region, the central Ukraine, and the western portion of the middle Volga, benefiting spring grains in the reproductive to filling stages and winter grains in the filling stage. Mostly dry weather covered the Volga Vyatsk Region and the Crimea. Weekly average temperatures ranging from 3 to 5 degrees Celsius (C) above normal over the Central Region, the western Black Soils Region, the upper Volga Valley, and the Volga Vyatsk Region accelerated crop growth and development. Weekly average temperatures over the remainder of the region were 1-3 degrees C above normal.



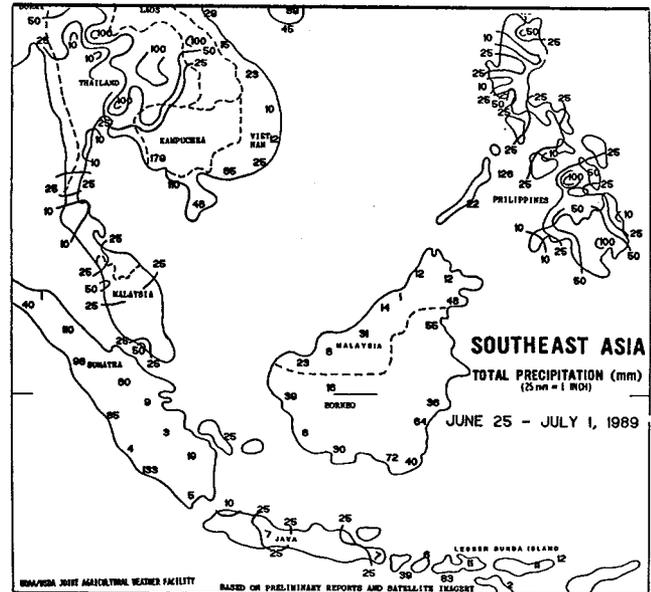
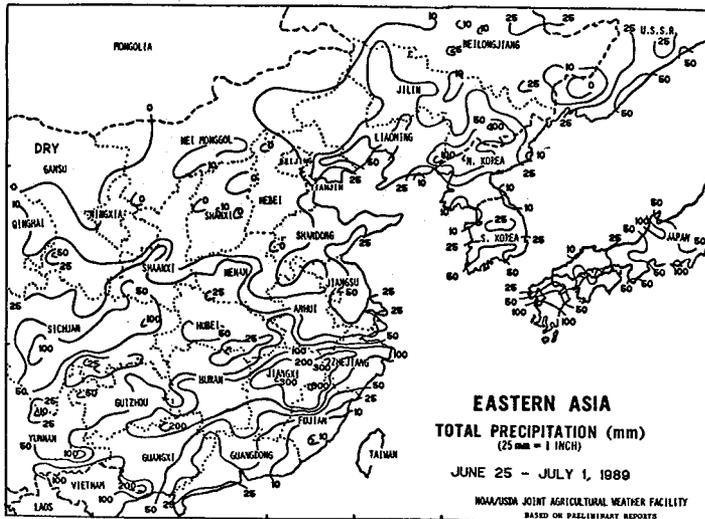
In the New Lands, spring grains began entering the heading stage in the southern Urals and western Kazakhstan and were jointing over remaining crop areas. Following persistent dry weather since early June, beneficial showers (10-43mm) covered spring grains in westernmost crop areas of the northern Urals, the southern Urals, and western Kazakhstan, bringing temporary relief. Minimal rain and unseasonably warm weather has covered major spring grain producing areas in central Kazakhstan, the eastern portion of the northern Urals, and western crop areas in West Siberia since June, reducing soil moisture reserves to unfavorably low levels. Highest weekly temperatures in these areas ranged from 30 to 35 degrees C, placing increased stress on spring grains approaching the highly weather sensitive reproductive phase. Further east, widespread showers over the eastern portion of West Siberia and eastern Kazakhstan benefited spring grains in the jointing stage.



**EUROPE** ... Early week dryness and unseasonably warm weather (maximum temperatures in the 25-30 degrees C range) across northwestern Europe were followed by widespread moderate to heavy rain (15-40mm, with isolated rainfall in excess of 50mm) and cooler temperatures by the 27th. The rain helped reduce moisture stress for maturing winter and vegetative spring planted crops. In the east, scattered heavy rain (20-70mm, with isolated amounts in excess of 70mm) continued to benefit summer crops from southern Poland southward to Yugoslavia. Scattered, mostly light rain (5-20mm, with isolated amounts greater than 20mm) also fell across Italy. Mostly dry and hot weather favored winter wheat harvest across the Iberian Peninsula. Weekly mean temperatures were below normal in the northwest and southeast and above normal in the southwest and northeast.

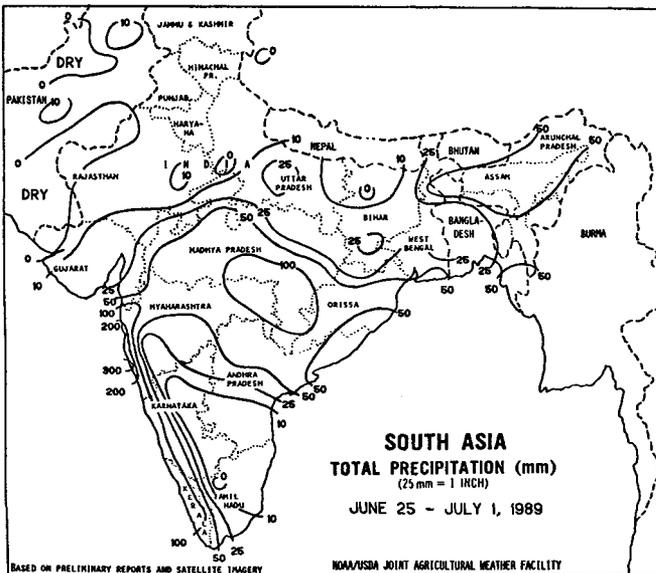


**SOUTH AMERICA** ... In south-central Brazil, weather data were not available for most locations in Parana, Santa Catarina, and Rio Grande do Sul but based on satellite imagery, precipitation in these areas was light and widespread, with rainfall amounts likely averaging less than 25mm. Although the showers benefited vegetative wheat, more rain is needed, particularly in Rio Grande do Sul where moisture reserves are limited. Further north, light showers (around 10mm) in Sao Paulo caused only minor delays in citrus and coffee harvesting. In Argentina, unseasonably warm, dry weather allowed completion of the soybean harvest and accelerated wheat planting. Sufficient topsoil moisture favored germination in most areas except La Pampa where topsoil moisture was limited.



**EASTERN ASIA** ... A near stationary frontal system, stretching from south-central China to Japan, brought widespread heavy rain (25-75mm, with scattered amounts in excess of 75mm) to much of the Yangtze Valley and Honshu and Hokkaido in Japan. Torrential rainfall (100-362mm) likely caused flooding in sections of Guangxi, Hunan, Jiangxi, and Fujian. Moderate to heavy rain (15-50mm, with isolated amounts in excess of 50mm) also fell across Heilongjiang, Jilin, Liaoning, northern Hebei, and the Korean Peninsula, benefiting vegetative to reproductive spring planted crops. In contrast, hot (maximum temperatures from 34-38 degrees C) and mostly dry weather stressed vegetative to reproductive spring planted and recently planted secondary crops across southern Hebei, Henan, and western Shangdong. Scattered, mostly light showers (5-15mm) across the North China Plain offered limited relief by week's end.

**SOUTHEAST ASIA** ... Widespread showers returned to most Thai grain regions with amounts ranging from 25 to 50mm or more over most northern, central, and eastern corn and rice areas. Rainfall averaged less than 25mm over most areas near Bangkok, but irrigation reserves should be adequate for vegetative rice. Local dry pockets continued over the central corn region, but in general, conditions were favorable for vegetative to reproductive crops. Temperatures across Thailand averaged near normal with high temperatures averaging in the low to midthirties C. In the Philippines, light to moderate showers (25-50mm or more) covered most crop regions, but pockets of drier weather (1-14mm) returned to Luzon's western and central rice areas.



**SOUTH ASIA** ... Pockets of drier-than-normal weather persisted over southern India's summer crop regions, with amounts averaging less than 10mm over large areas of Karnataka, Tamil Nadu, and southern Andhra Pradesh. Maximum temperatures averaged 35 degrees C or more in the driest parts of Tamil Nadu and Andhra Pradesh, stressing vegetative crops. Rainfall increased from the previous week over most of central India, with moderate to heavy showers (25-50mm or more) covering large areas of northern Andhra Pradesh, southern and western Madhya Pradesh, and Maharashtra, improving conditions for early crop growth. Variable showers (10-50mm or more) continued in the east from southern Bihar and Orissa eastward, maintaining irrigation reserves for rice planting and growth. In the north, scattered, light rain (1-23mm) fell over crop regions of northern Pakistan and north-central India, but temperatures continued hot, maintaining high evaporation rates and stressing early planted, irrigated crops. Cotton in north-central India is likely in or nearing reproduction in local areas.

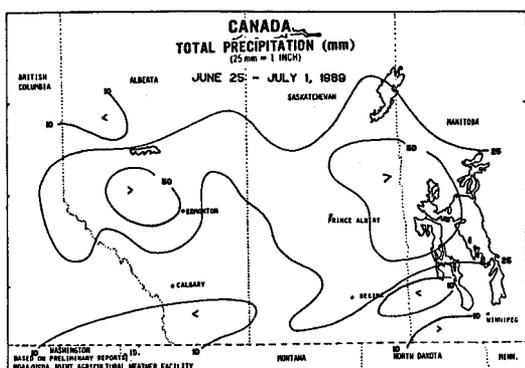
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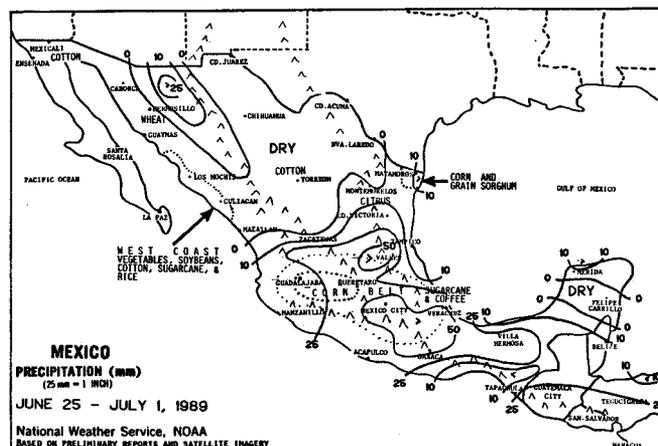
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**CANADA** ... Beneficial rain (13-53mm) covered summer crop regions of central and northern Alberta, most of Saskatchewan, and all but central Manitoba, maintaining generally favorable conditions for vegetative grains and oilseeds. Rainfall averaged less than 10mm in southern Alberta, Alberta's Peace River Valley, portions of east-central Saskatchewan, and central Manitoba. Drier-than-normal weather has persisted in the Peace River Valley, which historically produces about 2 percent of Canada's spring wheat, since early June, reducing moisture reserves for normal crop development. The drying trend in southern Alberta and central Manitoba has lasted since late June, but this season's below normal winter precipitation accumulations necessitate more frequent rainfall as the crop progresses. Temperatures averaged below normal in northern Alberta but near to slightly above normal elsewhere, increasing crop growth rates and moisture demands.



**MEXICO** ... Beneficial rain (18-57mm) covered western and central sections of the Southern Plateau Corn Belt, slowing fieldwork but providing much needed moisture for germination and establishment. Moderate to heavy rain (28-96mm) continued in the eastern half of the Corn Belt, with amounts exceeding 50mm over most of the area, maintaining favorable moisture conditions. Variable, mostly light to moderate rain (10-25mm or more) continued elsewhere in southern Mexico and in the northeast growing regions. In the northwest, scattered showers (1-35mm) boosted irrigation reserves, but hot, dry weather persisted over the west coast farming areas, stressing livestock and increasing irrigation demands.

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