

WEEKLY WEATHER AND CROP BULLETIN

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

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

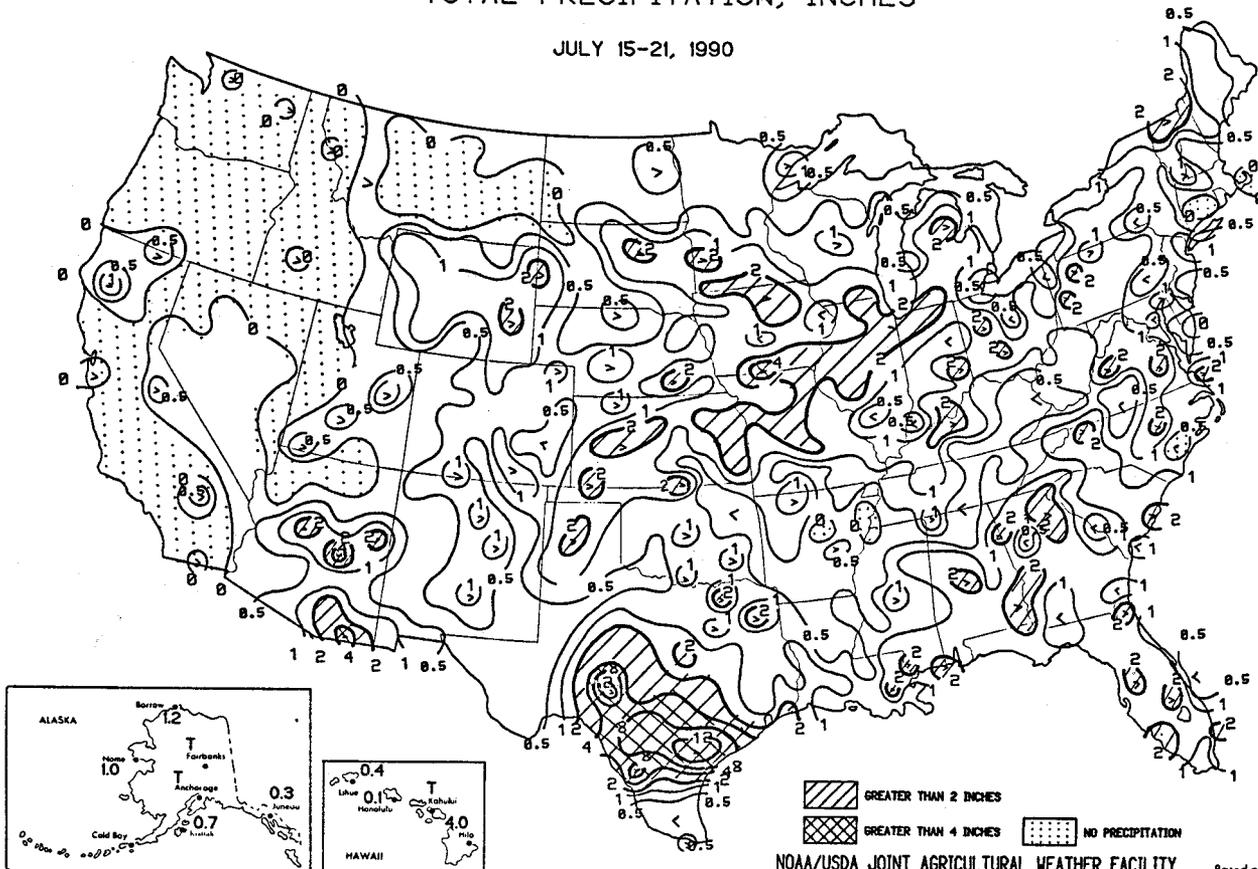
Volume 77, No. 29

Washington, D.C.

July 24, 1990

TOTAL PRECIPITATION, INCHES

JULY 15-21, 1990



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

HIGHLIGHTS

July 15-21, 1990

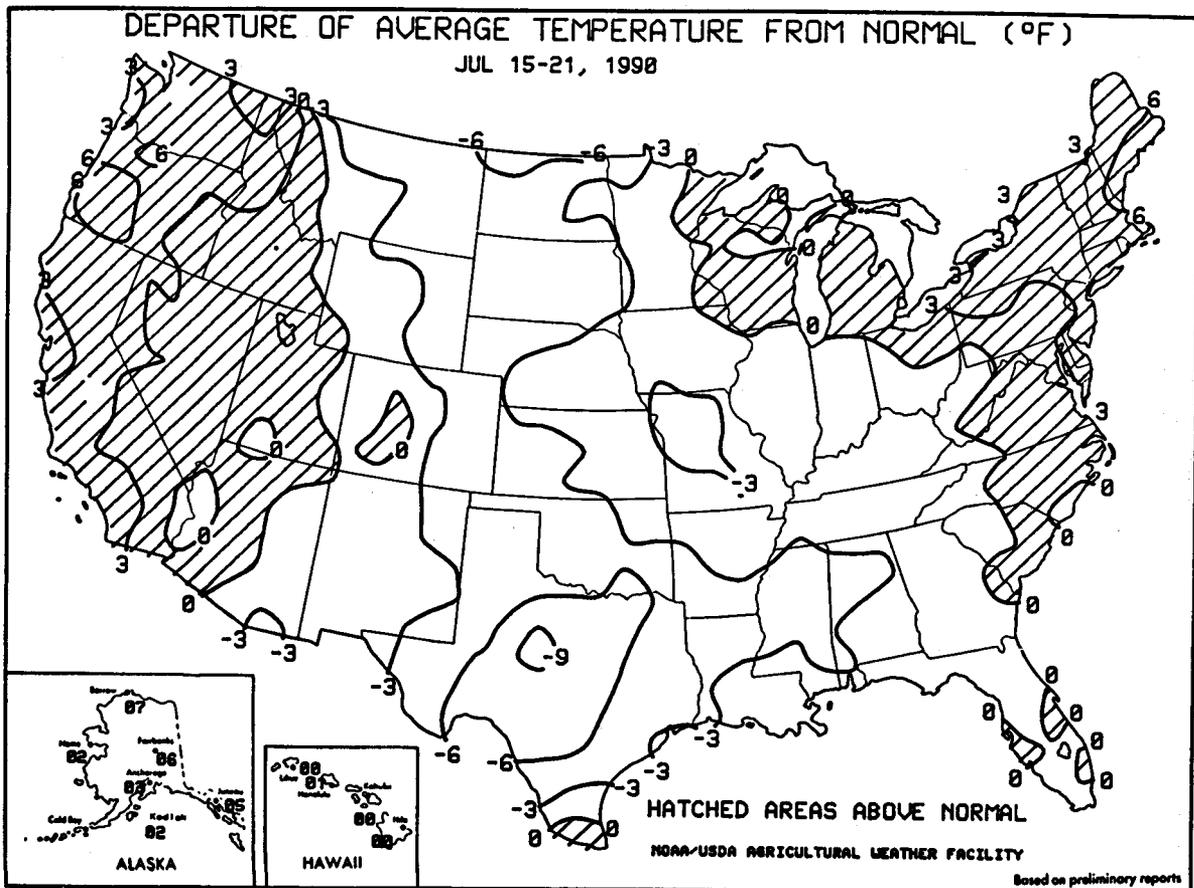
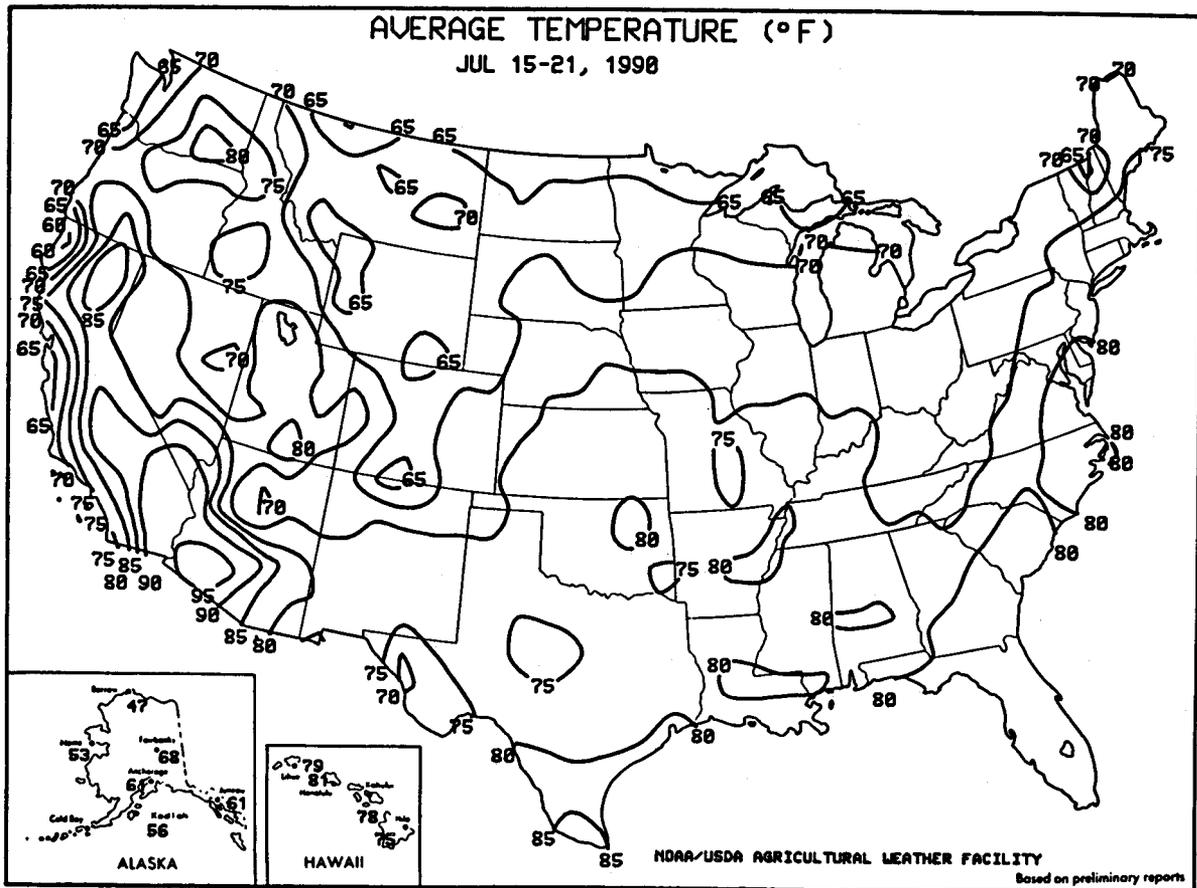
Showers and thunderstorms were again widespread over much of the Nation. At the first of the week, intense thunderstorms deluged **southern Texas** with torrential rain causing extensive flooding. **Bloomington, TX** was pounded with 15 inches of rain on Monday and Tuesday as a number of stations reported amounts of 10 inches or more. During the latter part of the week, thunderstorms developed around a southeastward drifting frontal system and soaked the **central and southern Plains to the northern and middle Atlantic coast** with widespread rain. These thunderstorms produced locally heavy rain, high wind, and large hail and spawned a number of tornadoes. Scattered thunderstorms alleviated dryness across the

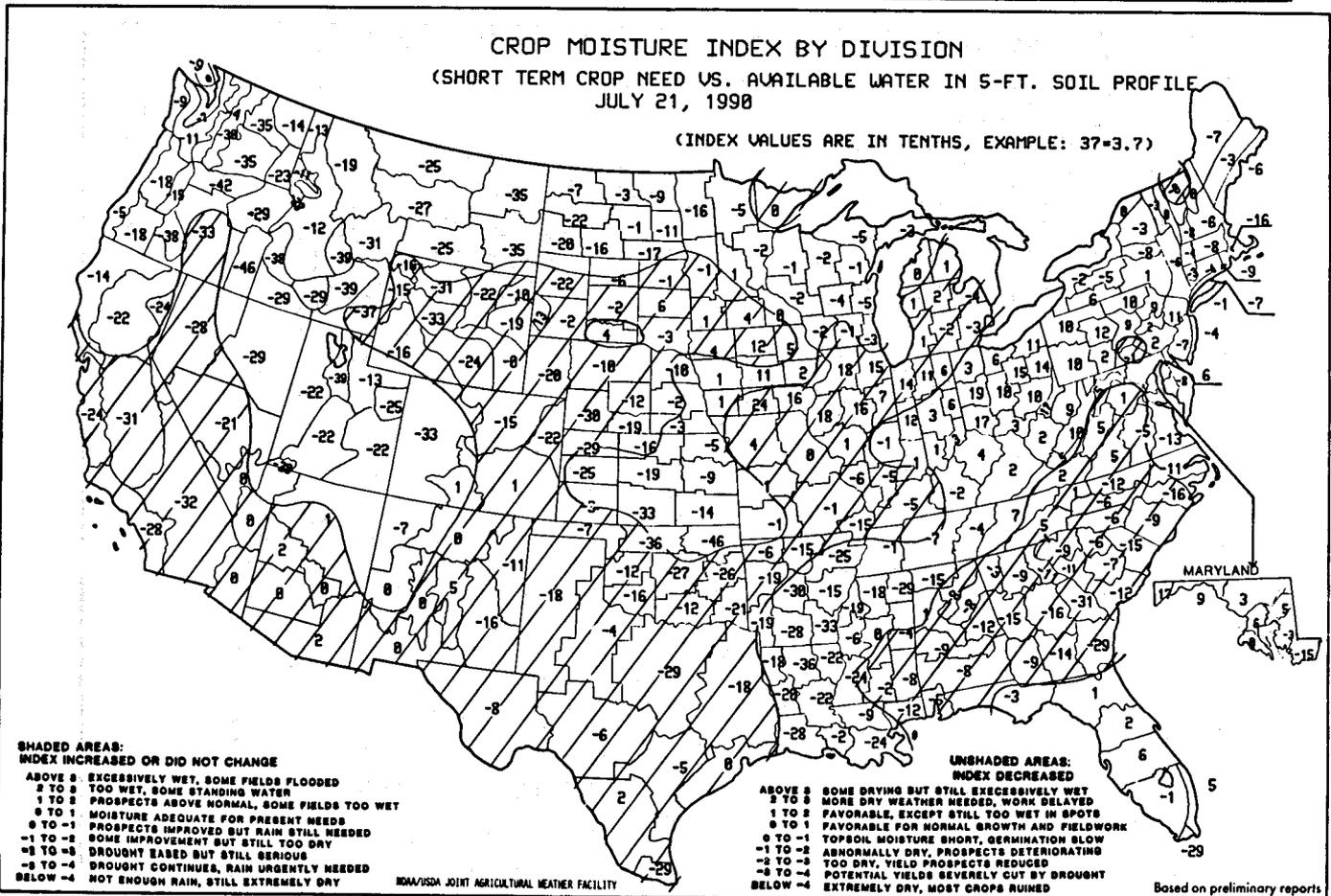
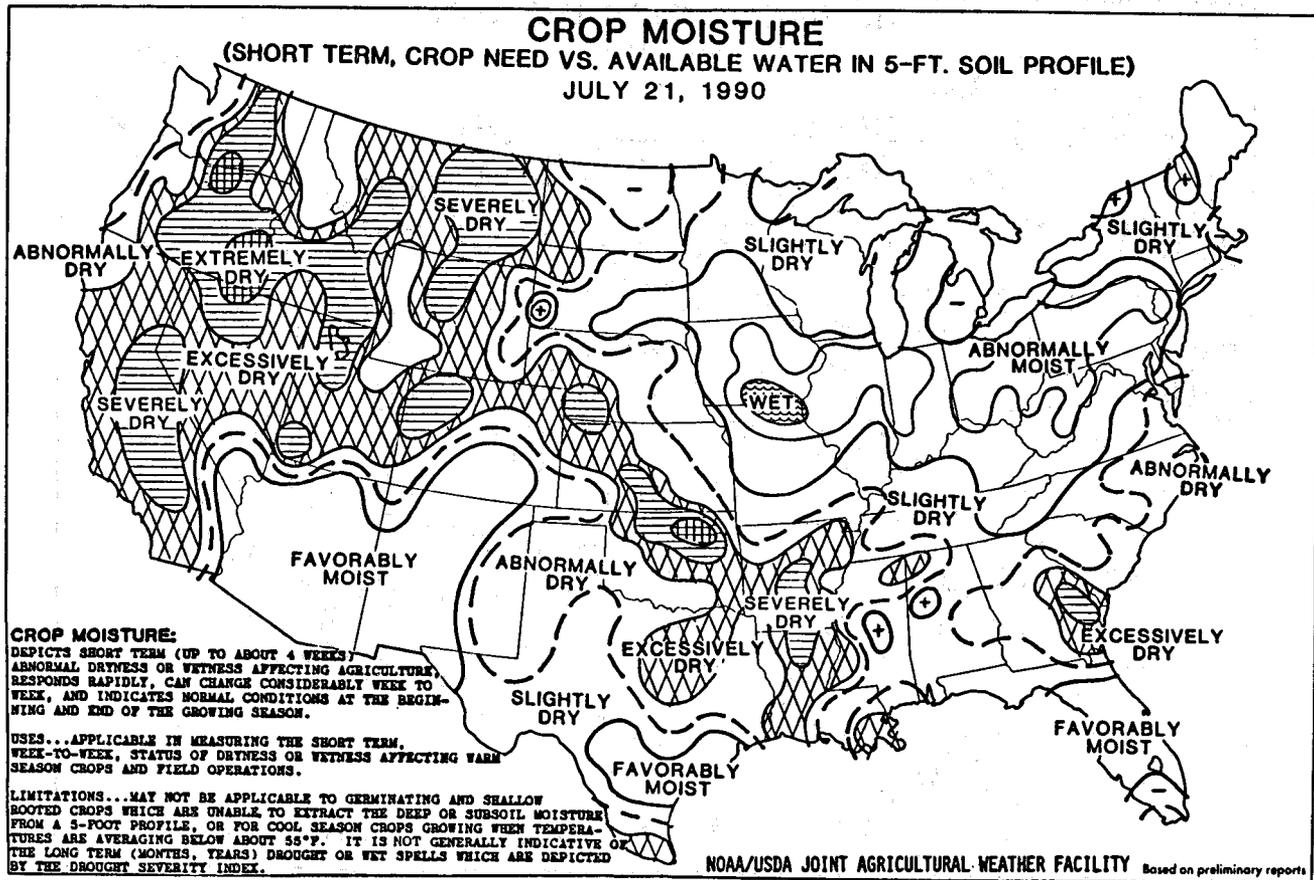
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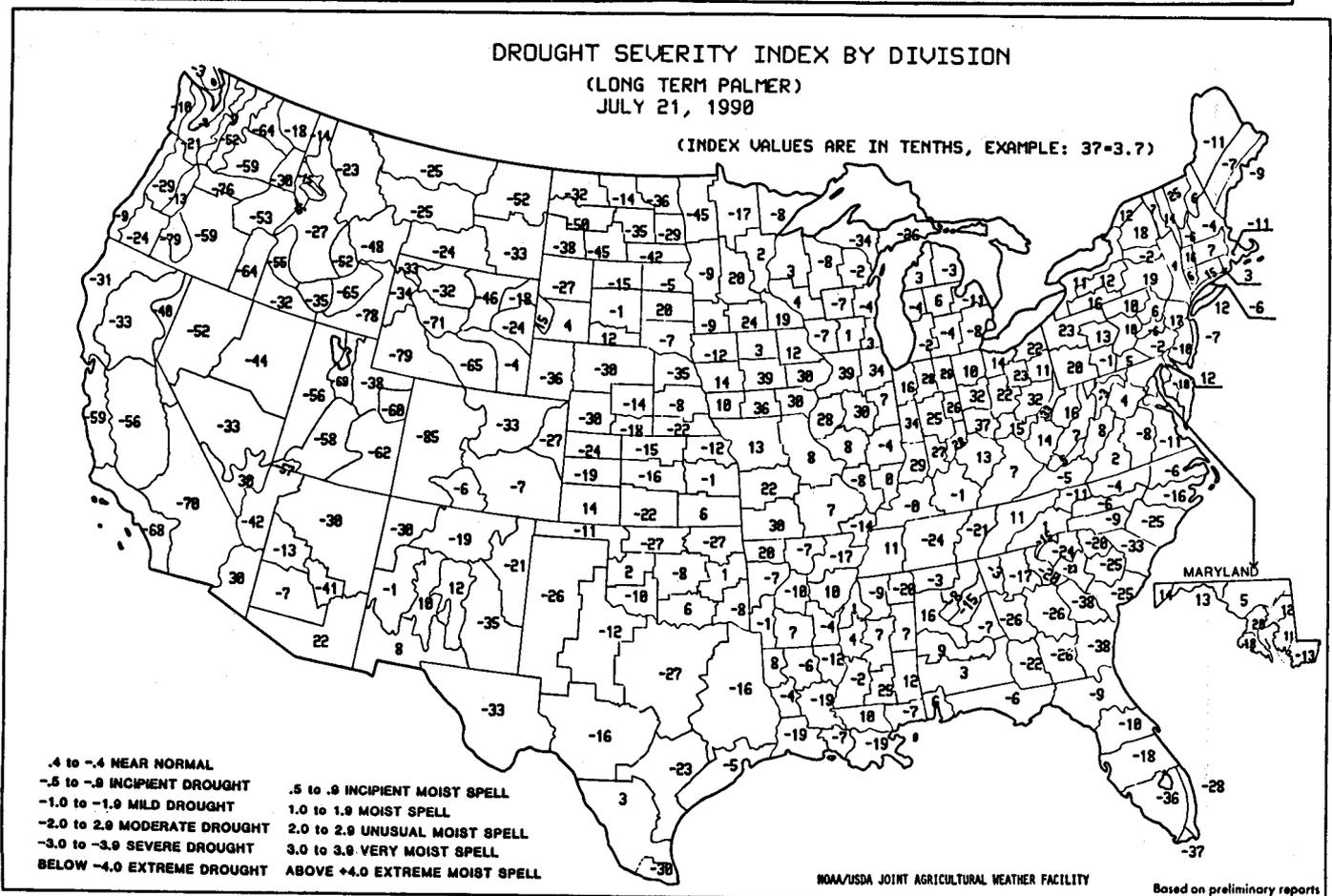
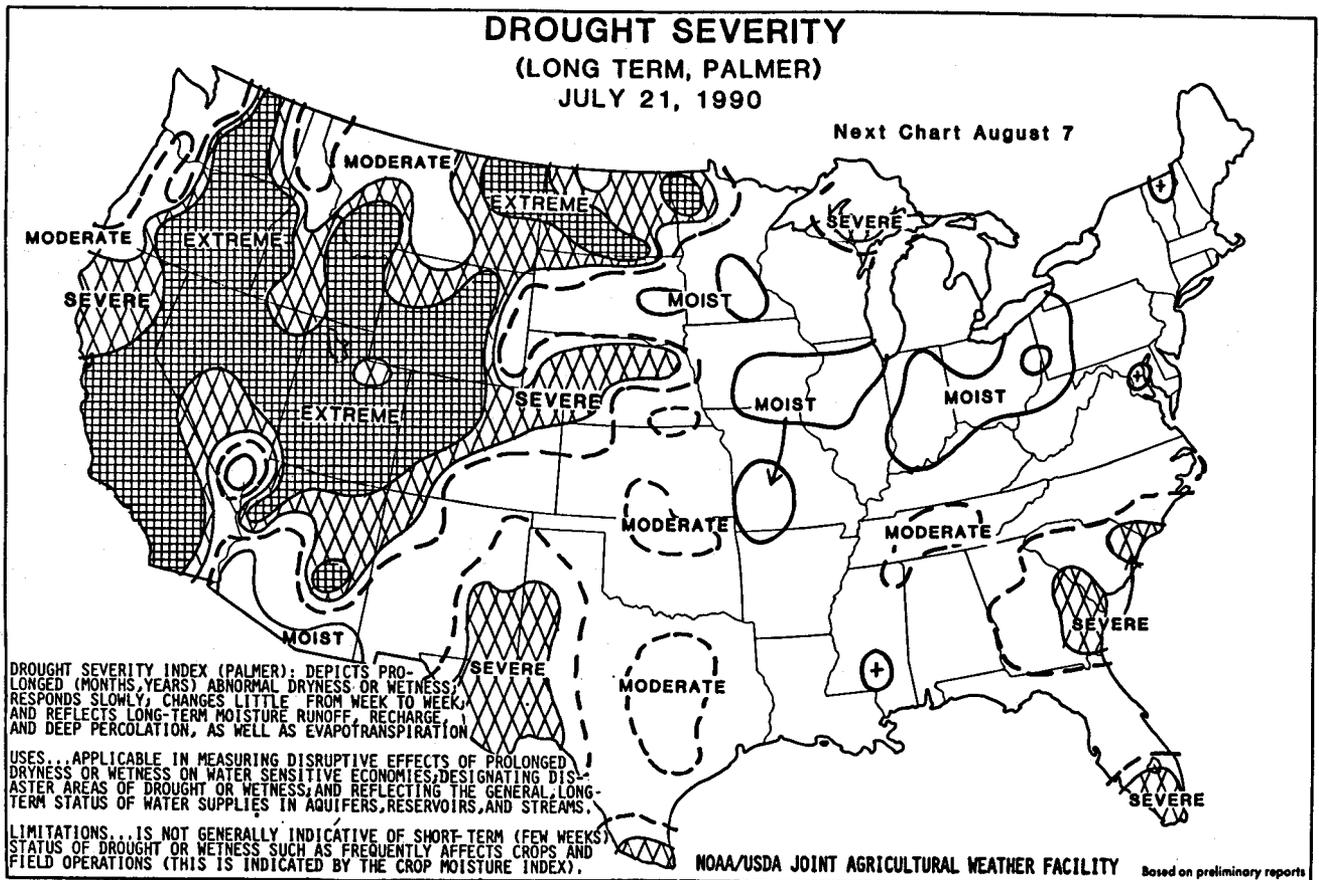
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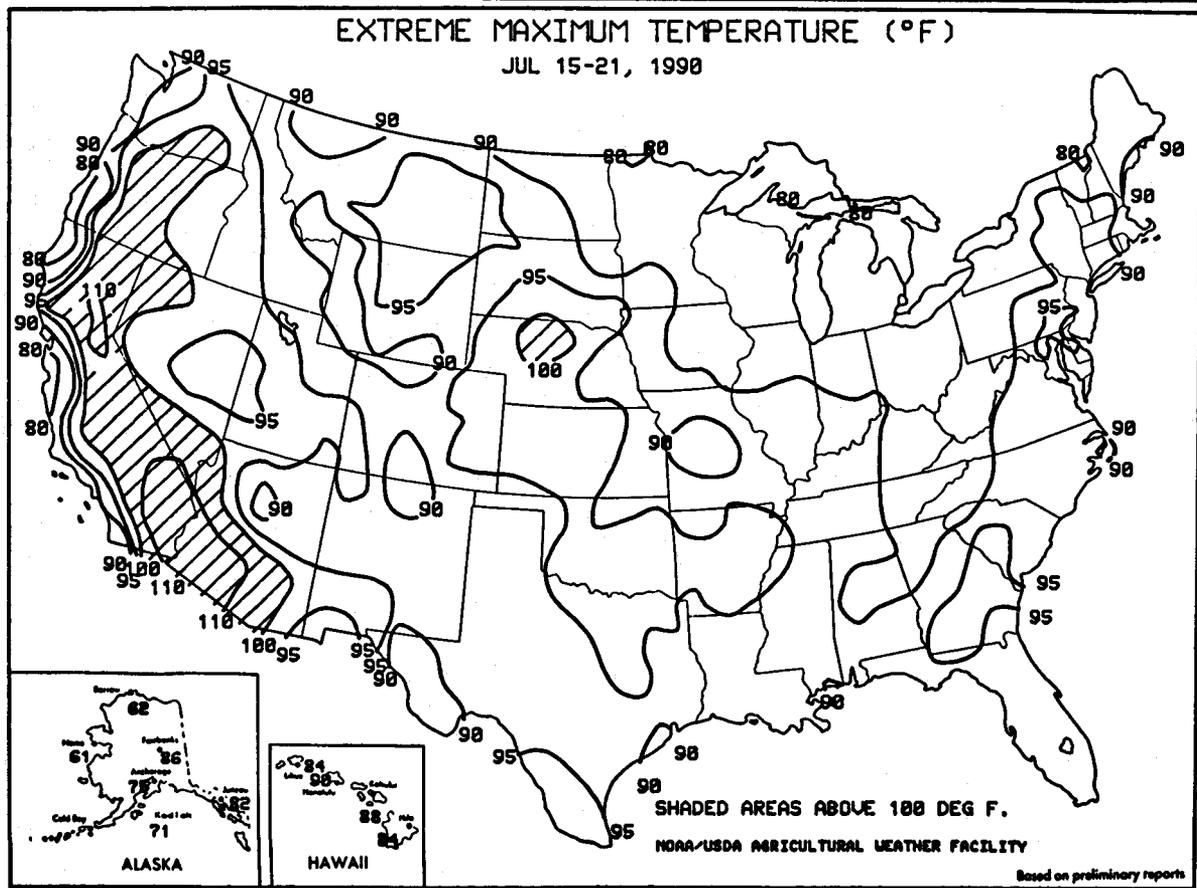
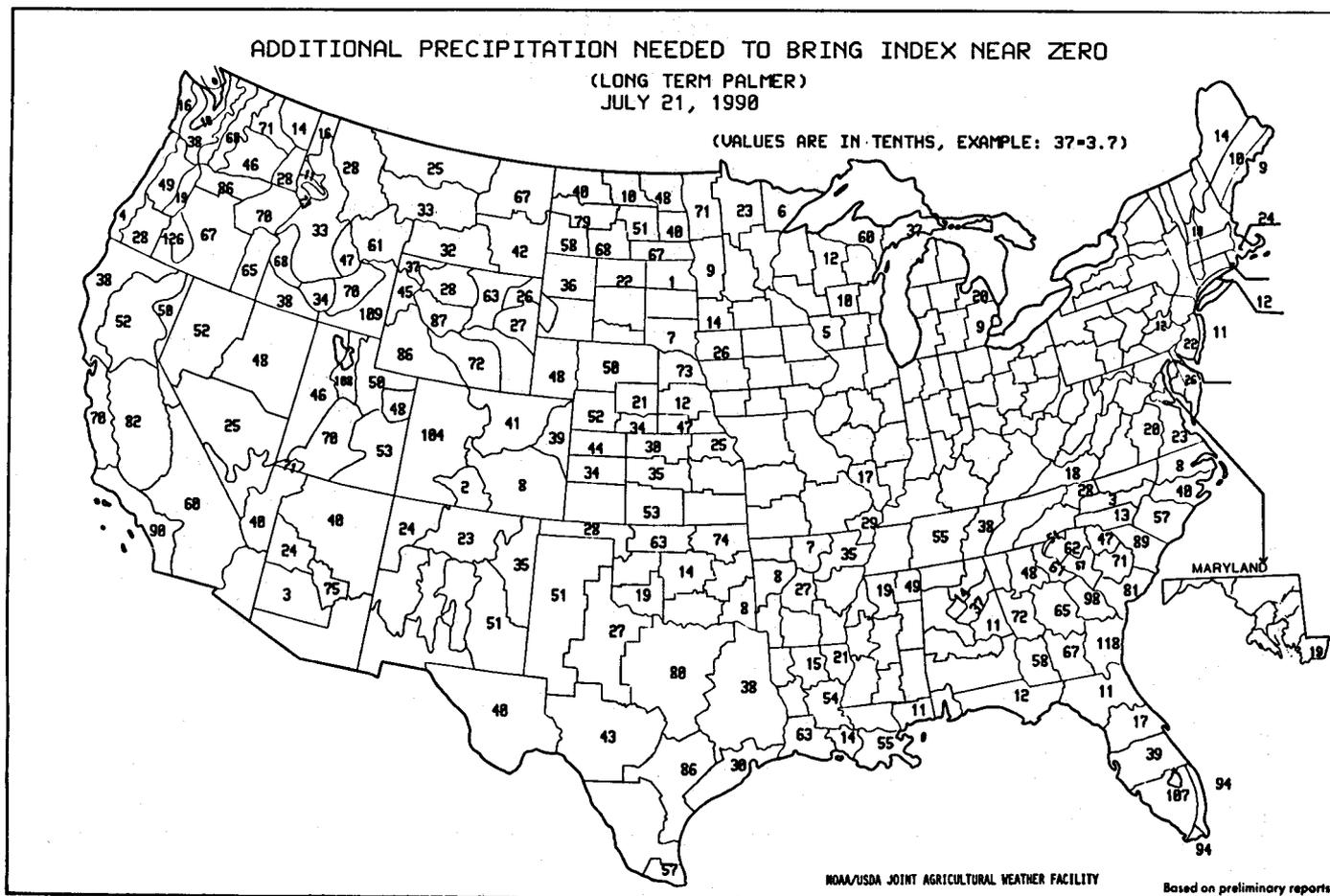
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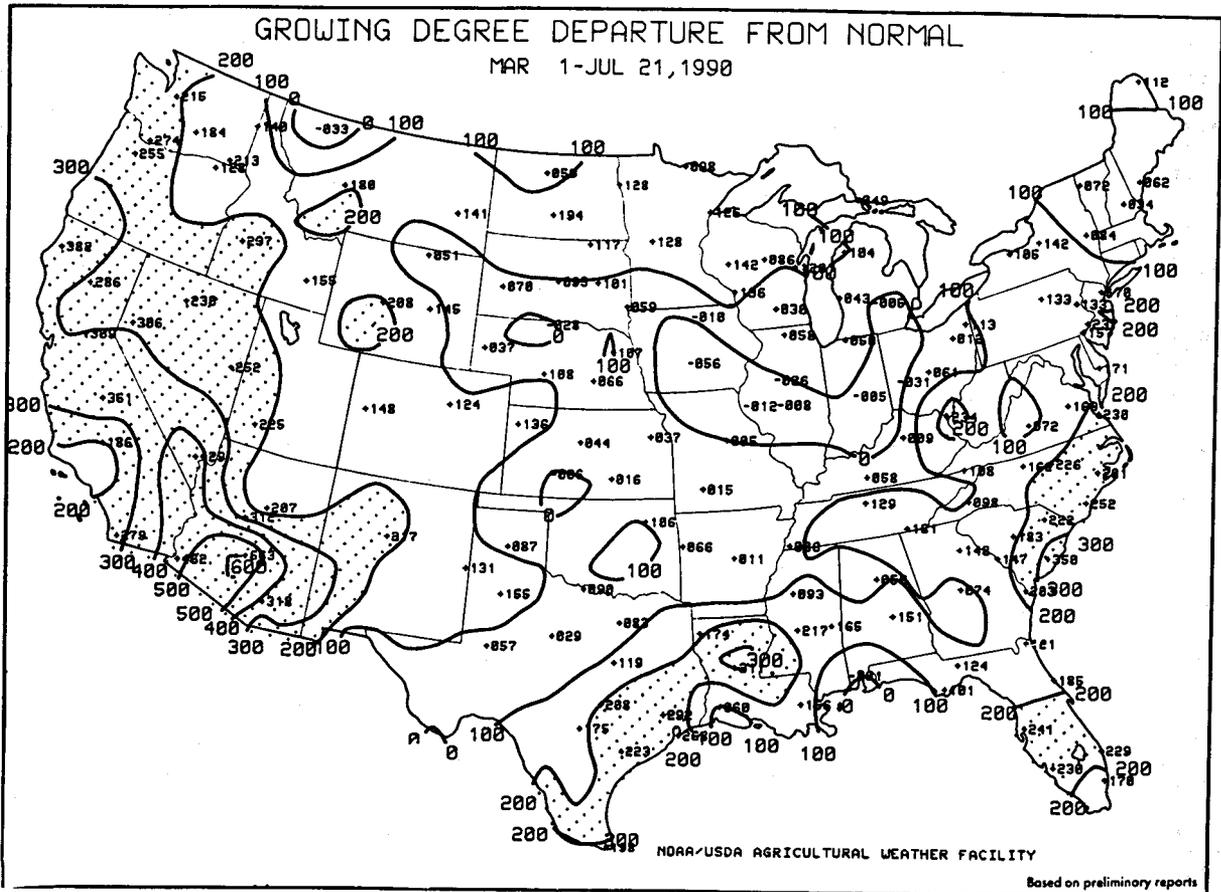
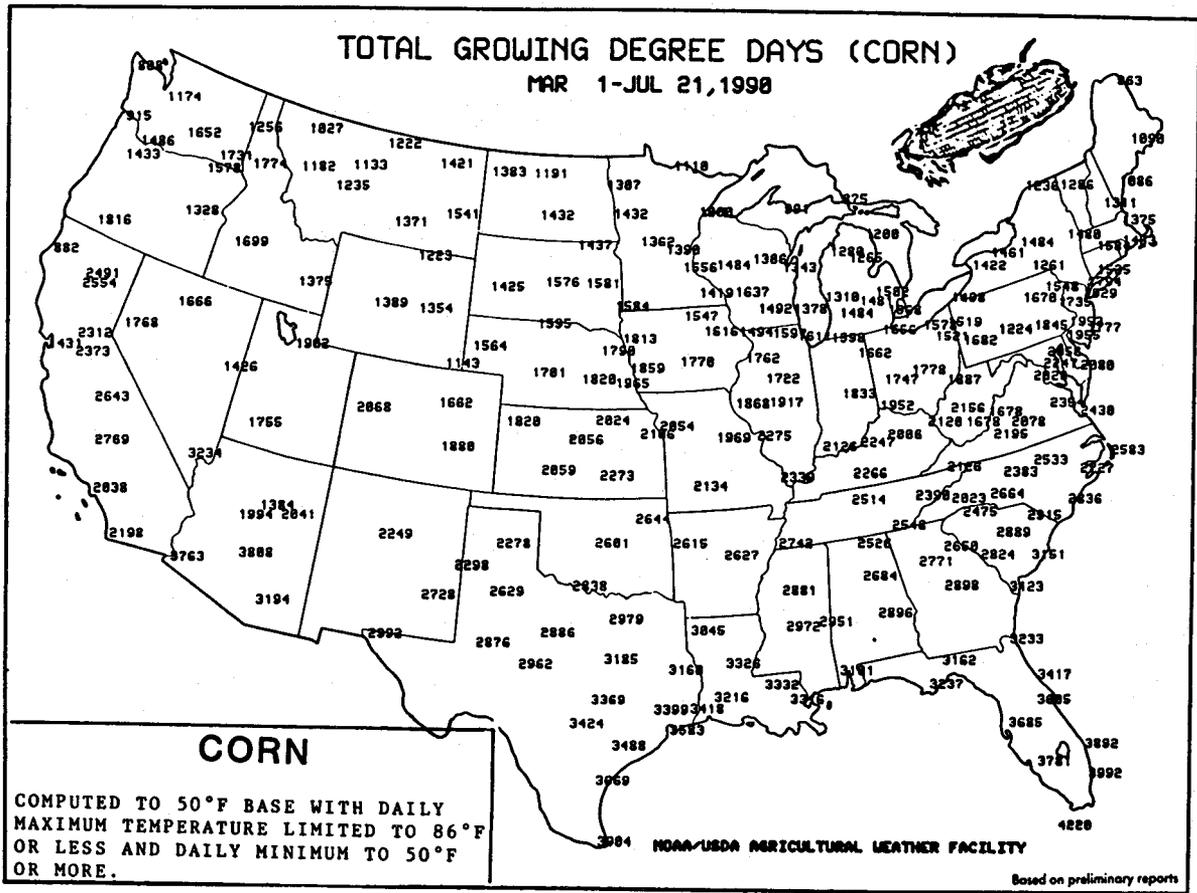
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National Weather Data for Selected Cities

Weather Data for the Week Ending July 21, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F	
																		.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	85	68	89	61	77	-3	.4	-.8	.2	4.8	66	31.3	94	90	53	0	0	3	0
MOBILE	87	70	90	67	79	-4	1.3	-.5	.9	4.7	47	43.5	118	97	59	2	0	3	1
MONTGOMERY	88	70	92	66	79	-3	.7	-.4	.3	5.2	77	43.3	146	97	55	3	0	5	0
AK ANCHORAGE	71	51	75	49	61	3	T	-.4	T	1.7	72	6.1	104	94	50	0	0	1	0
BARROW	55	39	62	33	47	7	1.2	1.0	.3	1.7	198	2.2	125	100	71	0	0	6	0
FAIRBANKS	81	55	86	51	68	6	T	-.4	T	5.3	211	7.1	151	82	32	0	0	0	0
JUNEAU	71	50	82	48	61	5	1.3	.3	1.3	8.6	153	24.6	109	92	48	0	0	1	1
KODIAK	64	48	71	44	56	2	.7	-.2	.6	8.3	129	34.6	115	97	66	0	0	2	1
NOME	56	49	61	47	53	2	1.0	.5	.7	4.5	179	9.7	178	99	83	0	0	4	1
AZ PHOENIX	104	83	112	74	93	1	.3	.2	.3	.7	120	2.9	94	64	29	7	0	2	0
PRESCOTT	86	62	94	59	74	0	2.3	1.5	1.4	6.2	250	10.8	127	76	34	2	0	3	2
TUCSON	97	72	104	66	85	-2	2.2	1.6	1.1	4.4	247	6.6	153	86	32	6	0	3	2
YUMA	106	85	112	79	95	1	.3	.2	.3	.7	1.2	124	58	27	7	0	1	0	
AR FORT SMITH	94	63	99	53	79	-4	.5	-.2	.3	1.3	22	38.9	169	94	35	6	0	2	0
LITTLE ROCK	90	69	96	62	80	-3	T	-.8	T	1.8	30	37.1	127	81	47	4	0	0	0
CA BAKERSFIELD	102	74	108	71	88	3	0	0	0	T	0	2.6	69	65	24	7	0	0	0
EUREKA	65	54	73	53	60	3	T	0	0	.5	90	20.7	93	97	80	0	0	1	0
FRESNO	102	73	106	70	88	6	0	0	0	T	0	7.4	106	58	25	7	0	0	0
LOS ANGELES	79	68	80	67	73	4	0	0	0	T	0	5.1	61	87	63	0	0	0	0
REDDING	101	73	107	68	87	3	.5	.5	.5	1.3	135	20.3	82	72	24	7	0	1	0
SACRAMENTO	98	63	106	60	80	4	T	0	0	T	0	11.5	108	79	25	7	0	0	0
SAN DIEGO	79	69	81	68	74	4	0	0	0	.9	92	5.9	88	64	0	0	0	0	0
SAN FRANCISCO	73	58	78	56	65	3	T	0	0	T	8	7.9	64	91	59	0	0	1	0
CO DENVER	83	58	96	53	71	-3	.8	.3	.4	2.7	94	9.6	102	73	35	2	0	3	0
GRAND JUNCTION	92	64	95	59	78	-2	.1	0	.1	.9	133	3.9	97	54	17	6	0	1	0
PUEBLO	88	57	96	53	73	-4	.2	-.2	.2	3.0	129	9.3	157	87	31	4	0	1	0
CT BRIDGEPORT	87	69	90	65	78	4	.1	-.7	.1	3.9	76	23.6	105	92	52	1	0	2	0
HARTFORD	90	68	94	64	79	6	T	-.7	T	5.3	99	26.2	111	91	44	4	0	0	0
DC WASHINGTON	88	71	92	68	80	1	.4	-.5	.4	6.8	116	22.9	109	91	55	3	0	2	0
FL APALACHICOLA	87	73	89	71	80	-2	1.2	-.4	.8	11.9	126	25.2	94	95	64	0	0	3	1
DAYTONA BEACH	89	73	92	70	81	0	1.0	-.2	.9	7.7	75	19.6	81	97	64	2	0	3	1
JACKSONVILLE	91	73	94	71	82	-1	2.3	.8	1.8	6.7	67	15.6	58	95	56	4	0	5	1
KEY WEST	90	80	91	78	85	1	.1	-.7	.1	3.5	46	12.2	71	80	59	4	0	3	0
MIAMI	89	76	91	73	82	0	.9	-.4	.4	10.8	81	29.2	101	91	61	1	0	4	0
ORLANDO	90	73	94	71	82	-1	1.6	-.3	1.2	11.0	88	19.6	72	97	57	4	0	3	1
TALLAHASSEE	90	70	96	65	80	-1	.6	-1.4	.5	7.0	56	26.1	71	100	54	5	0	3	0
TAMPA	92	73	93	71	82	0	1.5	-.2	.8	13.0	128	23.1	97	97	56	6	0	4	2
WEST PALM BEACH	89	76	91	73	83	0	1.1	-.2	.6	15.6	128	29.6	101	92	63	3	0	6	1
GA ATLANTA	86	69	89	65	77	-1	.5	-.6	.4	3.6	55	38.2	127	94	55	0	0	3	0
AUGUSTA	93	69	97	65	81	0	.4	-.6	.2	2.1	31	12.5	47	98	46	6	0	4	0
MACON	88	70	93	68	79	-2	1.5	.5	1.1	4.5	67	21.5	77	97	54	3	0	4	1
SAVANNAH	90	73	95	72	82	0	1.1	-.6	1.0	2.2	21	16.8	59	95	54	5	0	4	1
HI HONOLOLU	82	69	84	66	75	0	4.0	1.9	1.8	17.0	146	84.4	120	96	72	0	0	6	3
KAHULUI	89	73	90	70	81	1	.1	0	.1	.4	44	10.2	76	79	49	1	0	1	0
LIHUE	86	71	88	67	78	0	T	-.1	T	.9	194	14.9	127	93	62	0	0	0	0
LIHUE	83	75	84	73	79	0	.4	0	.2	1.2	40	20.0	85	75	57	0	0	2	0
ID BOISE	95	61	99	56	78	3	0	0	0	1.3	23	8.9	124	48	14	7	0	0	0
LEWISTON	96	64	99	61	80	5	0	0	.8	45	7.0	92	39	13	7	0	0	0	0
POCATELLO	89	55	94	50	72	0	T	-.1	T	.9	65	6.8	103	67	20	4	0	0	0
IL CHICAGO	82	63	89	57	73	0	1.7	.9	.9	6.5	99	22.4	118	96	56	0	0	6	1
MOLINE	84	65	91	58	75	-1	1.4	.2	.8	12.8	167	34.3	160	95	62	1	0	4	1
PRORIA	81	64	87	60	73	-3	3.5	2.6	1.7	14.1	213	31.9	158	98	63	0	0	5	2
QUINCY	85	64	91	59	74	-3	1.7	.7	1.3	8.9	127	25.9	122	97	58	1	0	2	1
ROCKFORD	82	64	86	57	73	-1	2.9	1.9	2.7	13.4	174	26.9	130	94	60	0	0	4	1
SPRINGFIELD	85	66	90	60	76	-1	2.8	2.0	2.6	13.6	230	33.5	171	89	57	1	0	3	1
IN EVANSVILLE	89	63	93	52	76	-2	.3	-.7	.2	3.7	59	30.8	122	94	45	4	0	2	0
FORT WAYNE	83	64	88	57	73	0	.6	-.2	.6	8.3	139	28.3	142	97	56	0	0	2	1
INDIANAPOLIS	84	63	88	57	74	-1	1.0	.1	1.0	6.4	92	25.2	110	95	56	0	0	2	1
SOUTH BEND	82	64	88	58	73	0	3.5	2.7	1.2	8.8	137	27.2	131	96	59	0	0	6	3
IA DES MOINES	82	66	87	55	74	-2	.6	-.1	.4	15.3	242	31.2	176	91	58	0	0	4	0
STOUC CITY	85	63	92	54	74	-2	1.0	.2	.9	6.1	96	17.9	117	91	51	2	0	4	2
WATERLOO	81	63	86	56	72	-2	2.3	1.4	1.4	13.0	173	26.2	137	95	47	0	0	3	3
KS CONCORDIA	90	66	97	55	78	-4	1.9	1.2	1.5	5.8	89	18.1	112	80	43	5	0	2	1
DODGE CITY	90	63	96	58	76	-4	1.1	.4	.7	2.2	44	15.3	122	90	38	3	0	3	1
GOODLAND	86	60	97	52	73	-3	.8	.3	.7	3.7	84	11.4	112	84	36	4	0	3	1
TOPEKA	87	67	92	53	77	-2	2.3	1.4	2.3	8.1	101	20.8	109	88	49	2	0	1	1
WICHITA	91	68	97	55	80	-2	.4	-.4	.4	2.4	36	10.7	65	78	41	6	0	1	0
KY BOWLING GREEN	88	63	93	57	76	-3	.3	-.7	.3	4.1	55	25.3	84	97	49	2	0	1	0
LEXINGTON	84	63	88	58	73	-3	.5	-.6	.5	9.6	126	26.9	98	93	51	0	0	2	0
LOUISVILLE	88	65	94	57	77	-1	1.2	.3	.8	8.1	128	36.6	141	93	46	3	0	2	1
LA ALEXANDRIA	88	72	94	63	80	-3	T	-1.0	T	4.2	60	38.2	121	79	49	4	0	2	0
BATON ROUGE	89	71	93	64	80	-2	.4	-1.3	.4	12.6	161	44.1	136	97	54	5	0	3	0
LAKE CHARLES	87	71	92	64	79	-3	.5	-.8	.4	6.7	88	33.4	119	100	60	3	0	2	0
NEW ORLEANS	87	72	91	65	79	-3	.7	-.9	.5	2.9	32	41.7	125	97	60	2	0	3	1

Based on 1951-80 normals

Weather Data for the Week Ending July 21, 1990

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	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	89	69	95	60	79	-4	.9	.1	.9	3.9	66	40.6	152	95	49	4	0	1	1
MR CARIBOU	81	62	87	57	71	6	.1	-.9	0	5.2	89	17.4	96	90	52	0	0	3	1
PORTLAND	88	65	92	63	76	8	1.1	-.4	1.1	5.7	115	23.2	99	91	46	3	0	1	1
MD BALTIMORE	89	69	96	66	79	2	1.4	-.5	.8	8.2	130	25.0	110	95	50	2	2	3	1
SALISBURY	90	70	94	67	80	3	T	-1.0	T	3.7	58	23.3	98	97	50	4	0	0	1
MA BOSTON	91	70	93	65	81	7	.3	-.3	.3	2.0	44	23.6	100	88	45	5	0	0	0
CHATHAM	78	66	80	63	72	4	T	-.7	T	3.7	80	27.3	110	96	77	0	0	1	1
MI ALPENA	82	58	88	53	70	3	.3	-.4	-.2	6.5	124	18.1	117	97	50	0	0	0	0
DETROIT	84	64	91	59	74	1	1	-.5	.1	5.7	104	20.9	120	94	51	2	2	3	3
FLINT	84	62	89	58	73	2	1.2	-.6	.6	5.5	107	16.7	105	94	51	0	0	4	1
GRAND RAPIDS	82	63	88	58	72	1	1.3	-.6	.9	4.7	82	17.8	98	99	55	0	0	6	1
HOUGHTON LAKE	78	60	84	52	69	2	2.3	1.6	2.2	5.6	110	15.6	105	94	54	0	0	2	1
LANSING	83	63	88	59	73	2	1.9	1.4	.6	5.5	97	16.9	104	97	58	0	0	5	2
MARQUETTE	76	55	83	50	65	0	.4	-.3	.2	4.6	76	16.8	82	93	55	0	0	2	1
MUSKEGON	78	62	83	58	70	0	.3	-.3	.3	4.0	99	16.8	117	95	60	0	0	5	0
SAULT ST. MARIE	74	54	78	49	64	0	.4	-.3	.2	5.8	111	17.9	109	98	63	0	0	0	0
MN ALEXANDRIA	80	60	87	54	70	-1	.6	-.1	.4	5.8	94	15.3	110	91	41	0	0	4	0
DULUTH	79	55	85	47	67	1	.6	-.3	.5	6.1	93	15.8	101	95	41	0	0	3	0
INT'L FALLS	79	52	84	50	66	-1	.3	-.6	.2	7.3	115	12.2	94	96	41	0	0	2	0
MINNEAPOLIS	83	63	87	58	73	-1	.8	0	.4	12.1	188	23.8	159	89	45	0	0	3	0
ROCHESTER	81	62	86	55	72	1	.9	0	.6	12.9	204	28.8	185	91	49	0	0	6	1
MS GREENWOOD	89	69	93	60	79	-3	-.1	-1.0	.1	7.7	119	34.5	105	95	53	4	0	3	0
JACKSON	89	68	95	60	79	-3	.6	-.5	.3	2.7	44	36.7	116	100	53	4	0	1	0
MERIDIAN	88	68	92	61	78	-4	.5	-.7	.3	6.3	88	48.8	148	98	56	4	0	3	0
MO CAPE GIRARDEAU	91	67	93	59	79	-1	1.7	-.8	1.4	3.5	57	33.1	126	91	41	6	0	2	1
COLUMBIA	85	65	89	59	75	-4	1.8	1.2	1.8	11.3	193	37.8	178	94	55	0	0	2	1
KANSAS CITY	86	67	91	56	76	-4	2.1	1.2	1.7	9.7	129	26.8	132	87	54	1	0	2	1
SAINT LOUIS	91	69	95	61	80	0	1.7	.9	1.1	6.0	96	26.3	129	83	44	5	0	4	2
SPRINGFIELD	88	65	91	53	76	-2	.1	-.7	.1	7.4	103	42.2	185	90	43	3	0	1	0
MT BILLINGS	82	57	98	54	69	-4	T	-.2	T	1.0	37	8.3	87	67	29	2	0	0	0
GLASGOW	81	54	97	49	68	-3	T	-.4	T	1.3	35	3.7	53	69	24	1	0	1	0
GREAT FALLS	81	51	94	44	66	-4	T	-.2	T	1.9	52	8.8	87	80	25	1	0	1	0
HAVENA	80	52	94	46	66	-5	T	-.2	T	.8	27	3.9	52	74	28	1	0	1	0
HELENA	83	55	93	51	69	1	0	-.2	0	1.9	34	4.5	61	56	18	3	0	0	0
KALISPELL	84	52	88	45	68	-2	0	-.2	0	2.6	89	12.6	137	81	26	0	0	0	0
MILES CITY	84	59	98	52	71	-4	0	-.3	0	2.3	58	6.4	69	67	27	1	0	0	0
MISSOULA	87	52	93	46	70	2	0	-.2	0	.5	21	7.3	91	66	17	2	0	0	0
NE GRAND ISLAND	86	63	94	52	75	-2	.7	.1	.7	10.1	181	18.5	126	89	45	4	0	1	1
LINCOLN	88	65	93	51	77	-1	1.1	-.4	1.0	4.4	72	13.5	83	86	46	4	0	2	1
NORFOLK	86	63	97	49	74	-2	1.1	-.4	1.1	10.3	156	17.7	116	87	47	3	0	1	1
NORTH PLATTE	87	60	100	50	73	-1	1.6	1.0	.8	3.7	64	11.1	85	86	37	4	0	4	2
OMAHA	85	66	91	58	75	-3	1.1	.3	1.1	7.0	106	15.6	90	85	55	3	0	1	1
SCOTTSBLUFF	83	57	96	50	70	-5	.9	.4	.5	3.4	78	12.1	117	89	37	3	0	3	1
VALENTINE	83	58	102	48	71	-4	.8	-.2	.6	3.1	67	10.6	97	69	36	3	0	2	1
NV RLY	86	51	89	45	69	0	.1	0	.1	1.2	95	6.5	119	79	22	0	0	3	0
LAS VEGAS	103	78	109	71	91	0	.3	-.2	.2	1.6	473	3.3	162	61	22	7	0	2	0
RENO	93	58	97	54	75	5	.3	-.3	-.2	.9	186	4.1	90	77	20	6	0	4	0
WINNEMUCCA	95	56	100	48	76	3	.1	-.1	.1	.3	29	4.4	91	61	16	7	0	1	0
NH CONCORD	90	60	93	58	75	5	.3	-.1	0	2.7	55	17.9	94	96	40	3	0	2	0
NJ ATLANTIC CITY	89	68	92	64	78	3	.1	-.8	.1	3.8	71	19.3	86	96	53	3	0	1	0
NM ALBUQUERQUE	91	64	93	58	78	-1	1.2	-.2	.1	2.2	166	5.4	159	76	23	5	0	2	0
CLOVIS	86	63	90	59	75	-1	.1	-.6	.6	1.4	31	5.1	57	93	39	1	0	2	1
ROSWELL	91	67	93	64	79	-2	.2	-.2	.1	.9	45	3.3	76	84	31	5	0	2	0
NY ALBANY	88	65	93	60	76	.4	.4	-.3	.3	3.9	74	25.3	133	95	44	3	0	3	0
BINGHAMTON	80	64	83	62	72	.3	.4	-.4	.3	4.8	81	21.2	107	94	57	0	0	3	0
BUFFALO	80	68	85	64	74	.4	.8	-.1	.5	5.3	116	26.7	142	86	55	0	0	2	0
NEW YORK	89	74	93	66	82	.7	.7	-.1	.7	4.5	82	25.9	113	87	50	3	0	2	1
ROCHESTER	83	66	87	62	74	.4	1.1	-.5	.6	5.0	113	21.5	128	92	55	0	0	2	1
SYRACUSE	86	67	90	62	76	.5	1.3	-.5	1.0	4.6	75	24.1	115	93	51	1	0	4	1
NC ASHEVILLE	80	62	83	56	71	-.3	.8	0	.3	6.4	103	30.8	123	100	61	0	0	5	0
CHARLOTTE	88	70	91	68	79	1	1.1	-.3	.9	3.2	51	23.3	92	94	47	3	0	4	1
GREENSBORO	88	68	91	66	78	.4	.8	-.5	.4	1.5	22	21.7	90	95	50	1	0	1	0
HATTERAS	85	73	87	72	79	0	.7	-.8	.4	4.6	59	29.5	106	96	68	0	0	5	0
NEW BERN	88	72	91	70	80	0	.0	-.5	.2	1.5	39	27.5	96	97	62	2	0	4	0
RALEIGH	89	71	92	67	80	2	.7	-.3	.6	3.2	48	24.2	102	96	53	2	0	2	1
WILMINGTON	88	72	92	70	80	0	.6	-.1	-.2	7.1	67	27.1	93	97	62	2	0	5	0
ND BISMARCK	81	53	94	47	67	-.4	.1	-.3	.1	5.9	131	8.9	91	90	34	1	0	3	0
FARGO	80	56	86	52	68	-.3	.3	-.4	.2	6.8	128	12.2	109	88	41	0	0	2	0
GRAND FORKS	79	54	85	49	66	-.3	.5	-.1	.5	5.7	117	11.0	108	92	39	0	0	3	0
WILLISTON	81	50	95	47	65	-.5	.3	-.4	.2	5.7	117	11.0	108	92	39	0	0	3	0
OH AKRON-CANTON	82	63	87	58	73	1	.9	0	.5	9.6	161	30.4	147	96	56	0	0	3	0
CINCINNATI	84	63	89	55	74	-.1	.6	-.4	.5	8.5	121	32.3	134	94	54	0	0	2	1
CLEVELAND	83	65	87	60	74	1	1.9	1.2	1.6	6.0	104	24.6	123	93	51	0	0	5	1
COLUMBUS	84	65	89	60	74	0	.9	0	.6	11.9	176	30.6	140	95	51	0	0	2	1

Based on 1951-80 normals

Weather Data for the Week Ending July 21, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	.50 INCH OR MORE		
DAYTON	83	65	88	58	74	-1	1.4	.6	1.1	11.5	188	34.6	166	92	52	0	0	2	1		
TOLEDO	84	65	91	59	74	.2	.2	-.5	.2	4.3	75	22.0	123	95	51	1	0	3	0		
YOUNGSTOWN	82	63	85	57	72	.2	.2	-.7	.1	7.5	120	23.0	109	94	55	0	2	0	0		
OK OKLAHOMA CITY	89	68	93	60	78	-1.4	1.8	1.1	1.4	3.1	52	24.9	134	90	45	3	0	2	1		
TULSA	93	71	97	64	82	.2	.2	-.6	.2	1.2	17	25.3	112	75	36	7	0	1	0		
OR ASTORIA	72	52	82	47	62	.2	0	-.2	0	3.9	119	45.5	124	93	56	0	0	0	0		
BURNS	91	54	96	48	73	.3	0	-.1	0	.1	16	3.3	59	51	13	5	0	0	0		
MEDFORD	100	61	105	54	80	.7	T	-.1	T	.3	34	8.5	81	71	18	7	0	0	0		
PENDLETON	94	61	98	58	78	.3	0	-.1	0	.6	74	6.2	92	38	12	7	0	0	0		
PORTLAND	91	58	99	54	75	.7	0	-.1	0	2.3	128	20.9	106	84	28	4	0	0	0		
SALEM	93	52	100	47	72	.6	0	-.1	0	1.6	107	21.3	98	87	22	5	0	0	0		
PA ALLENTOWN	87	66	91	61	76	.2	.1	-.9	.1	6.0	97	23.4	98	96	48	2	0	2	0		
ERIE	81	67	86	62	74	.4	.7	0	.4	4.8	77	23.3	116	93	61	0	0	2	0		
HARRISBURG	88	66	91	63	77	.1	.2	-.6	.2	4.5	76	23.0	105	95	50	3	0	2	0		
PHILADELPHIA	89	71	92	67	80	.3	.6	-.3	.4	5.5	85	22.8	100	96	52	4	0	2	0		
PITTSBURGH	82	63	86	58	72	0	2.0	1.2	1.1	10.2	168	27.9	129	98	59	0	0	3	2		
SCRANTON	84	66	88	61	75	.3	1.0	-.3	.6	8.9	155	25.1	134	92	48	0	0	3	1		
RI PROVIDENCE	89	69	91	65	79	.6	T	-.7	T	3.3	69	24.5	101	91	51	3	0	1	0		
SC CHARLESTON	89	74	92	72	81	0	2.5	-.8	1.3	7.8	68	24.8	84	97	60	5	0	3	3		
COLUMBIA	91	71	95	69	81	0	1.5	-.2	1.3	5.9	74	18.5	64	98	48	6	0	2	1		
FLORENCE	92	73	94	72	82	.1	.9	-.4	.5	2.6	30	12.1	47	97	48	6	0	3	1		
GREENVILLE	86	67	89	63	77	-.2	.9	-.1	.5	4.2	57	26.2	86	96	53	0	0	5	0		
SD ABERDEEN	81	54	89	48	67	-.6	.2	-.4	.1	9.2	186	13.8	120	96	41	0	0	2	0		
HURON	82	57	92	51	69	-.5	1.7	1.2	1.6	8.6	177	18.8	158	89	45	2	0	3	1		
RAPID CITY	81	58	97	53	70	-.4	1.1	-.7	.7	3.3	70	10.8	95	84	43	2	0	5	1		
SIOUX FALLS	83	59	96	49	71	-.3	1.0	-.4	.9	6.5	118	14.4	103	90	48	2	0	2	1		
TN CHATTANOOGA	87	67	91	61	77	-.2	.6	-.5	.5	7.5	117	43.5	139	96	49	2	0	2	0		
KNOXVILLE	85	66	89	60	75	-.3	.5	-.5	.5	8.9	129	34.7	121	96	52	0	0	2	0		
MEMPHIS	89	69	95	60	79	-.3	0	-.9	0	4.2	68	34.2	109	89	47	3	0	0	0		
NASHVILLE	88	66	91	58	77	-.2	.8	-.1	.7	6.2	99	21.4	73	90	46	3	0	3	1		
TX ABILENE	82	67	91	60	75	-1.0	1.6	1.2	1.0	2.4	61	18.7	149	93	52	1	0	4	1		
AMARILLO	88	63	91	61	76	-.4	2.1	1.5	1.3	2.2	42	9.6	87	89	37	2	0	2	2		
AUSTIN	86	70	93	67	78	-.7	2.2	1.8	1.8	4.0	91	17.7	102	100	56	3	0	5	1		
BEAUMONT	88	72	94	65	80	-.3	2.7	1.3	2.5	8.5	97	44.0	150	96	57	3	0	4	1		
BROWNSVILLE	93	77	95	75	85	.1	.2	-.1	.1	2.6	71	8.9	83	91	53	7	0	4	0		
CORPUS CHRISTI	89	75	93	72	82	-.2	.8	-.3	.5	2.2	40	14.2	97	95	64	3	0	4	1		
DEL RIO	86	71	92	68	78	-.8	2.7	2.4	.9	2.8	98	14.8	169	86	53	1	0	6	2		
EL PASO	94	68	99	63	81	-.2	.3	-.1	.2	.5	28	1.7	53	85	29	6	0	3	0		
FORT WORTH	89	68	96	63	79	-.7	.8	-.3	.5	3.3	87	32.5	179	92	46	3	0	3	2		
GALVESTON	86	77	88	73	81	-.2	3.0	2.2	1.6	7.0	116	25.7	132	82	59	0	0	3	2		
HOUSTON	88	71	94	64	80	-.2	.2	-.6	.1	5.3	77	27.4	110	93	55	3	0	4	0		
LUBBOCK	87	65	92	64	76	.7	.7	-.2	.7	.9	19	6.8	70	94	43	3	0	1	0		
MIDLAND	86	67	92	63	76	-.3	.3	-.1	.2	.5	19	5.1	74	94	48	2	0	2	1		
SAN ANGELO	83	67	91	63	75	-.9	2.3	2.1	2.3	2.4	90	14.6	161	92	55	2	0	1	3		
SAN ANTONIO	85	70	92	64	77	-.7	7.5	7.1	4.0	9.3	215	26.1	170	94	60	2	0	5	3		
VICTORIA	87	73	92	72	80	-.4	12.4	11.8	7.6	13.9	218	25.5	135	98	68	2	0	6	3		
WACO	90	69	99	65	80	-.6	.6	-.2	.3	1.5	40	21.3	119	95	45	4	0	5	0		
WICHITA FALLS	91	70	98	64	80	-.6	.6	-.4	.3	3.5	83	27.7	182	89	41	3	0	1	0		
UT CEDAR CITY	90	58	94	55	74	.5	T	-.4	T	.8	55	6.7	71	58	19	5	0	1	0		
SALT LAKE CITY	91	66	97	60	79	0	T	-.2	T	.7	58	6.1	113	72	20	5	0	1	0		
VT BURLINGTON	85	65	91	61	75	.5	2.6	1.8	1.7	6.3	107	19.7	114	92	47	1	0	3	2		
VA NORFOLK	89	73	93	70	81	.2	.1	-.1	.1	7.1	104	24.1	100	97	62	3	0	3	0		
RICHMOND	91	69	94	67	80	.2	2.3	1.2	2.0	6.8	98	24.3	104	96	51	4	0	4	1		
ROANOKE	87	67	91	64	77	.1	.1	-.7	.1	4.4	78	22.4	102	96	52	1	0	1	0		
WA QUILLAYUTE	77	48	87	44	63	.3	0	-.6	0	7.4	160	59.1	107	97	43	0	0	0	0		
SEATTLE-TACOMA	85	57	94	51	71	.6	0	-.1	0	3.6	196	24.0	122	86	32	2	0	0	0		
SPOKANE	89	57	95	53	73	.3	0	-.1	0	2.0	126	10.7	114	54	15	1	0	0	0		
YAKIMA	95	57	100	50	76	0	0	0	0	.3	46	3.5	79	70	16	7	0	0	0		
WV BECKLEY	80	60	83	55	70	.5	.6	-.4	.5	6.2	86	23.0	93	97	54	0	0	2	0		
CHARLESTON	86	65	90	60	76	.1	.5	-.7	.3	6.5	95	22.8	93	99	50	1	0	2	0		
HUNTINGTON	86	63	90	59	74	.1	.1	-.1	.1	6.1	92	26.5	110	95	48	1	0	1	0		
PARKERSBURG	84	62	88	59	73	-.2	.9	0	.5	7.0	106	25.7	114	99	51	0	0	3	1		
WI GREEN BAY	81	61	86	57	71	.1	.6	-.2	.3	11.6	218	21.4	141	96	51	0	0	3	0		
LACROSSE	84	66	90	60	75	.2	.5	-.3	.3	9.9	148	21.0	123	94	47	1	0	3	0		
MADISON	81	63	86	58	72	0	2.0	1.1	.8	7.1	111	21.1	124	96	58	0	0	4	2		
MILWAUKEE	80	64	87	58	72	.1	1.4	-.6	.9	7.1	118	24.5	140	93	59	0	0	5	1		
WAUSAU	79	60	85	53	70	0	.7	-.2	.6	8.1	124	18.2	107	96	48	0	0	3	1		
WY CASPER	83	54	94	49	68	-.3	1.4	1.1	.8	2.6	135	7.2	95	83	29	3	0	6	1		
CHEYENNE	76	53	91	45	65	-.5	1.2	-.8	1.0	3.5	105	13.2	152	82	43	1	0	3	1		
LANDER	84	55	95	49	70	-.2	1.5	1.4	.9	1.9	95	5.8	64	74	29	4	0	3	1		
SHERIDAN	80	52	95	50	66	-.4	.6	.4	.5	2.8	95	9.4	95	86	36	2	0	3	1		

Based on 1951-80 normals

National Agricultural Summary

July 16 - 22, 1990

HIGHLIGHTS: Rain improved soil moisture and crop conditions in the **East** and **Southeast**, but more was needed. Soil moisture was still short to adequate in the **Southeast**. Rain added to soil moisture supplies in the **Corn Belt**, where soil moisture was mostly adequate. Row crop development continued to lag behind normal in the **Corn Belt**. Winter wheat harvest progressed well in the **northern Great Plains** and **Corn Belt**. Some rain fell in the **central and southern Great Plains**, but soil moisture was still mostly short to adequate. Soil moisture was short to adequate in the **West**.

SMALL GRAINS: Winter wheat harvest was 83 percent (%) complete, 2 percentage points behind the 5-year average. Harvest was complete or nearly complete in the central and southern Great Plains. Harvest progressed rapidly in Nebraska and South Dakota, advancing 22 and 40 points, respectively. Harvest was nearly complete in most of the Corn Belt. Ohio producers harvested 30% of their crop, reaching 80% completion. Harvest lagged 45 points behind normal in Michigan. Harvest was underway in the Pacific Northwest, where the crop condition was mostly good to fair. Harvest lagged behind normal in Colorado and Montana. Montana's harvest was 2% complete, 12 points behind normal.

Spring wheat was mostly good to fair with harvest 1% complete, 4 points behind normal. Harvest was underway in Minnesota and South Dakota. Lodging was a problem in some areas of South Dakota.

CORN: Corn was in mostly good to fair condition with 28% of the acreage in the silking stage or beyond, 34 points behind normal. Crop development lagged behind normal in most of the 17 major producing States, especially in Illinois, Indiana, Iowa, and Missouri. In Illinois, 48% of the crop was silked, 39 points behind normal. Silking lagged 53 points behind the 68% average in Iowa. Crop condition was good to fair in the Corn Belt. Corn borer damage was a problem in eastern Nebraska. Rain improved crop condition in Georgia and North Carolina, but it was still mostly fair to poor. Harvest continued in Georgia and Texas.

SOYBEANS: Soybeans were in mostly good to fair condition with 36% of the acreage blooming, 21 points behind normal. Six percent of the acreage was setting pods, 14 points behind normal. Crop development lagged behind normal in Illinois, Iowa, Missouri, and Nebraska. In Illinois, 7% of the acreage was setting pods, 32 points behind normal. Crop condition was good to fair in most of the Corn Belt. Rain improved crop condition in the Delta and Southeast. Georgia's crop condition improved but was still mostly fair to poor. Crop condition was good to fair in Alabama and North Carolina and fair to good in South Carolina. Dry soil conditions slowed emergence for late-planted soybeans in Arkansas.

COTTON: Cotton was good to fair with 93% of the acreage squaring, 7 points ahead of normal. Fifty-six percent of the acreage was setting bolls, 7 points ahead of normal. Crop development lagged behind normal in Missouri and Tennessee but was near or ahead of normal in the other major producing States. Rain improved crop condition in the Southeast. South Carolina's crop condition

improved but was still mostly fair to poor. Crop condition was good to fair in North Carolina and Alabama and fair to good in Georgia. In Texas, rain relieved some crop stress but additional moisture was needed. Texas' crop was mostly fair to good.

SORGHUM: Sorghum was in mostly fair to good condition with 25% of the acreage headed, 5 points behind normal. Crop development lagged behind normal in Missouri, Nebraska, and Oklahoma. Crop condition was good to fair in Kansas and Nebraska. Crop condition was fair to poor in Oklahoma due to lack of moisture. Texas' crop was mostly fair. Rain improved the crop in the Plains but more was needed. Rain slowed harvest in the Blacklands and portions of southern Texas.

OTHER FIELD CROPS: Rice was mostly good to fair with 25% of the acreage headed, 4 points behind normal. Harvest continued in Louisiana and was underway in Texas. Peanuts were fair to good in Georgia and good to fair in North Carolina. In Alabama, peanuts were in good to excellent condition. Rain improved peanut condition in the Cross Timbers and Plains areas of Texas. Tobacco was mostly fair to good in Kentucky and Tennessee and good to fair in North Carolina and Georgia. Tobacco harvest was nearly half finished in Georgia. Tobacco harvest continued in North and South Carolina. Sugarcane was fair to good in Louisiana.

FRUIT AND NUTS: Rain fell in Florida's citrus producing areas. New growth was abundant and the new crop fruit was sizing well. Peach harvest continued ahead of normal in the Delta and Southeast and was nearly complete in Georgia. Rain improved the pecan crop condition in southern Texas. Grape harvest continued in central Arizona. In California, cling peach and bartlett pear harvests were underway. Cherry harvest continued in Oregon and Idaho and was nearly complete in Washington. In Michigan, early peach harvest was underway and cherry harvest continued. Cherry harvest was nearly complete in New York.

VEGETABLES: Land preparation for fall plantings was active in Florida. Planting was underway in some areas. Watermelon harvest continued in Georgia and South Carolina. Irish potato harvest was 94% complete in North Carolina. Sweetpotato harvest continued in Louisiana. Louisiana's vegetables were in fair to good condition. In Texas, honeydew and watermelon harvests were nearly complete in the San Antonio-Winter Garden area. Potato and onion harvests continued in the High Plains. Melon and carrot harvests continued in central Arizona. In California, winter potato planting began in the Hemet area. Potato harvest was underway in Oregon and Washington. In North Dakota, potatoes were in good to fair condition.

PASTURES AND LIVESTOCK: Cool weather eased livestock stress in many areas. Rain improved pasture conditions in the Southeast. Pastures were mostly fair to good in the Delta and Southeast. Pastures were in mostly good condition in the Corn Belt and fair or fair to good in the Great Plains. In Texas, rain improved pasture conditions, but supplemental feeding continued in some areas. Some supplemental feeding was required in portions of Nebraska.

Crop Progress

FOR WEEK ENDING JULY 22, 1990

	CORN % SILKING		
	1990	1989	AVG.
CO	22	14	36
GA	99	98	99
IL	48	77	87
IN	30	43	68
IA	15	50	68
KS	65	60	65
KY	46	70	75
MI	5	15	30
MN	0	11	32
MO	42	78	83
NE	35	48	67
NC	92	79	88
OH	22	15	55
PA	6	6	21
SD	7	17	20
TX	89	85	89
WI	4	11	33

17 STATES 28 45 62

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

	GRAIN SORGHUM % HEADED		
	1990	1989	AVG.
AR	27	51	NA
CO	3	1	4
IL	5	20	NA
KS	5	5	10
IA	80	63	76
MS	61	46	60
MO	13	45	41
NE	0	6	15
NM	6	NA	NA
OK	5	35	20
SD	3	4	6
TX	69	64	66

12 STATES 24 NA NA

EXCL. STATES WITH NA 25 27 30

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	SPRING WHEAT % HARVESTED		
	1990	1989	AVG.
ID	0	0	0
MN	2	1	5
MT	0	0	3
ND	0	0	3
SD	8	14	17

5 STATES 1 2 5

THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.

	RICE % HEADED		
	1990	1989	AVG.
AR	3	5	10
CA	1	1	2
LA	58	55	59
MS	38	24	29
TX	68	84	79

5 STATES 25 26 29

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

	WINTER WHEAT % HARVESTED		
	1990	1989	AVG.
AR	100	99	100
CA	97	98	98
CO	78	76	87
GA	100	100	100
ID	4	3	6
IL	97	99	100
IN	93	93	99
KS	100	98	100
MI	10	20	55
MO	97	100	100
MT	2	0	14
NE	92	89	92
NC	100	98	99
OH	80	84	89
OK	100	100	100
OR	25	10	20
SD	52	56	52
TX	100	99	100
WA	13	7	12

19 STATES 83 82 85

THESE 19 STATES PRODUCED 88% OF THE 1989 WINTER WHEAT CROP.

	SOYBEANS % BLOOM		
	1990	1989	AVG.
AL	37	30	34
AR	7	19	15
GA	43	38	43
IL	40	74	81
IN	43	51	67
IA	50	84	80
KS	30	35	45
KY	25	30	39
LA	42	38	40
MI	20	20	35
MN	58	62	69
MS	26	21	32
MO	19	43	58
NE	35	56	71
NC	17	15	16
OH	38	20	42
SC	21	13	14
SD	33	40	49
TN	18	22	28

19 STATES 36 50 57

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

	SOYBEANS % SETTING PODS		
	1990	1989	AVG.
AL	18	11	14
AR	0	0	3
GA	17	9	14
IL	7	32	39
IN	8	8	16
IA	10	24	32
KS	5	10	15
KY	4	5	11
LA	17	11	15
MI	0	0	5
MN	10	8	22
MS	13	7	9
MO	0	12	25
NE	1	8	18
NC	0	0	0
OH	3	0	0
SC	3	1	3
SD	5	6	9
TN	2	4	8

19 STATES 6 13 20

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

COTTON
% SETTING BOLLS

	1990	1989	AVG.
AL	74	53	72
AZ	97	98	90
AR	75	39	74
CA	75	80	76
GA	87	58	77
LA	86	57	73
MS	86	35	69
MO	53	78	84
NM	57	60	53
NC	70	54	63
OK	12	3	15
SC	68	41	61
TN	28	44	55
TX	36	26	25

14 STATES 56 42 49

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

COTTON
% SQUARING

	1990	1989	AVG.
AL	98	97	99
AZ	100	100	99
AR	100	98	99
CA	100	100	100
GA	100	98	98
LA	96	94	96
MS	98	87	96
MO	99	100	100
NM	94	98	95
NC	92	78	87
OK	72	40	55
SC	94	84	90
TN	94	98	96
TX	88	71	75

14 STATES 93 82 86

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

Crop Condition
PERCENT

CORN

STATE	VP	P	F	G	EX
CO	1	3	23	62	11
GA	11	27	44	18	0
IL	0	2	13	71	14
IN	0	3	18	67	12
LA	0	2	15	70	13
KS	0	7	28	49	16
KY	3	26	41	29	1
MI	0	5	15	45	35
MN	0	0	28	61	11
MO	0	12	54	31	3
NE	0	2	24	64	10
NC	7	26	42	25	0
OH	3	9	31	46	11
PA	0	6	20	48	26
SD	0	0	12	76	12
TX	8	20	35	32	5
WI	0	1	13	80	6
17 STATE	1	4	21	62	12
PREV WEEK	1	4	20	63	12
PREV YEAR	1	3	26	58	12

SORGHUM

STATE	VP	P	F	G	EX
AR	1	3	59	37	0
CO	0	9	32	57	2
IL	0	4	57	39	0
KS	0	4	48	45	3
LA	0	5	37	58	0
MS	0	2	60	38	0
MO	6	26	46	22	0
NE	0	3	45	46	6
NM	5	15	48	24	8
OK	0	35	50	15	0
SD	0	0	31	68	1
TX	4	22	45	28	1
12 STATE	2	11	46	39	2
PREV WEEK	2	8	43	44	3
PREV YEAR	2	4	29	48	17

SPRING WHEAT

STATE	VP	P	F	G	EX
ID	2	4	17	64	13
MN	0	1	24	60	15
MT	9	22	38	26	5
ND	3	0	31	55	11
SD	6	4	18	58	14
5 STATE	4	6	29	50	11
PREV WEEK	2	6	24	53	15
PREV YEAR	5	17	47	28	3

RICE

STATE	VP	P	F	G	EX
AR	0	0	40	60	0
CA	0	0	15	75	10
LA	0	0	24	76	0
MS	0	0	63	31	6
TX	1	0	18	75	6
5 STATE	0	0	32	65	3
PREV WEEK	0	1	32	64	3
PREV YEAR	0	2	36	55	7

COTTON

STATE	VP	P	F	G	EX
AL	0	0	24	67	9
AZ	0	0	0	100	0
AR	0	0	23	77	0
CA	0	0	10	85	5
GA	0	5	62	32	1
LA	0	0	47	53	0
MS	5	5	35	46	9
MO	14	29	43	14	0
NM	0	0	55	36	9
NC	0	2	23	70	5
OK	0	0	50	50	0
SC	0	26	60	14	0
TN	7	6	16	71	0
TX	5	2	61	30	2
14 STATE	3	3	43	48	3
PREV WEEK	1	7	43	46	3
PREV YEAR	1	15	45	34	5

SOYBEANS

STATE	VP	P	F	G	EX
AL	0	0	24	76	0
AR	2	3	55	40	0
GA	9	19	57	15	0
IL	0	3	32	59	6
IN	0	2	22	68	8
IA	0	3	22	63	12
KS	0	2	36	43	19
KY	3	25	45	20	7
LA	0	3	47	47	3
MI	0	0	20	50	30
MN	0	0	25	69	6
MS	8	7	60	22	3
MO	6	12	55	25	2
NE	0	0	25	65	10
NC	0	5	44	50	1
OH	2	8	31	48	11
SC	4	4	70	22	0
SD	0	2	9	80	9
TN	0	2	46	52	0
19 STATE	1	4	35	53	7
PREV WEEK	1	6	35	52	6
PREV YEAR	1	6	31	55	7

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 0.50 to 1.00 in.; near 3.00 in. local areas. Temperatures 1 to 3° below normal.

Days suitable for fieldwork 4.9. Soil moisture 32% short, 68% adequate. Scattered showers, cooler temperatures benefitted all crops, livestock, poultry. Corn 98% silked, 93% 1989, 97% avg.; 60% dented, 52% 1989, 63% avg.; 34% mature, 31% 1989, 37% avg.; 10% harvested, 6% 1989, 6% avg.; 3% poor, 52% fair, 33% good, 12% excellent. Cotton 98% squaring, 97% 1989, 99% avg.; 74% setting bolls, 53% 1989, 72% avg.; 24% fair, 67% good, 9% excellent. Peanuts 96% pegging, 94% 1989, 88% avg.; 1% fair, 64% good, 35% excellent. Soybeans 37% blooming, 30% 1989, 34% avg.; 18% setting pods, 11% 1989, 14% avg.; 24% fair, 76% good. Pastures 20% poor, 49% fair, 31% good. Livestock 20% fair, 80% good. Primary activities: Controlling weeds, insects in row crops; applying fungicides to peanuts; harvesting hay, corn, fruits, vegetables; mowing pastures; routine care of livestock, poultry, catfish.

ALASKA: Hot, arid weather continuing in much of the Railbelt was causing concern for already stressed crops. Highs 9° below normal at Clearwater to 13° above normal at Kenny Lake. Lows 4° below normal at PMC Butte to 9° above normal at Kenai. Precipitation 2.09 in. drier than normal at Clearwater to 1.75 in. wetter than normal at Fairbanks.

Days suitable for baling hay 7.0. First crop hay harvest over 95% complete. Rate of crop growth varied from slow on dry soils to rapid on irrigated acreage. Oats 35% headed or earlier, 65% dough. Barley 20% headed or earlier, 70% dough, 10% turning color. Potato bloom 70% commercial vegetable harvest continues.

ARIZONA: Heavy thunderstorms 15th central, unusually cold statewide; moist, unstable air 16th, heavy downpours. Constant thunderstorms 19th, 20th southeast; thunderstorms 21st from north central to southeast; 69 mph damaging winds central. Rainfall 0.02 in. northwest to 2.25 in. central. Temperatures 4° below to 2° above normal.

Cotton 100% good; 100% squaring, 100% 1989, 99% avg.; 97% setting bolls, 98% 1989, 90% avg. Insects moderate, weeds light. Alfalfa 78% good, 22% excellent; harvest progress moderate to active; rain damage moderate. Corn silage harvest active central. Corn for grain excellent southeast. Grapes, melons, carrots harvested central; cabbage harvested east; dry onion harvest completed.

ARKANSAS: Mild week, temperatures slightly below normal. Scattered showers last half of week, heaviest northwest. Extremes 50°; 99°. Rainfall none to 2.43 in.

Days suitable for fieldwork 7.0. Soil moisture 89% short, 11% adequate. Main activities: Irrigation, cultivation, applying herbicides, insecticides, fertilizer; cutting, baling hay; scouting cotton, rice fields for insects. Corn 32% fair, 68% good. Soybeans 99% planted, 94% 1989, 98% avg.; 96% emerged, 88% 1989, 94% avg.; 2% very poor, 3% poor, 55% fair, 40% good. Sorghum 100% emerged, 100% 1989, 100% avg.; 1% very poor, 3% poor, 59% fair, 27% good. Cotton fruiting well, spraying for boll worms. Blast confirmed on Newbonnet, Gulfmont varieties. Hot,

dry conditions hampering soybean emergence; sprayed for armyworms, webworms. Apples ripening. Tomato market closed, prices good. Peach harvest nearly 50% complete. Water ponds getting low. Selling calves due to dry conditions. Anthrax killed 15 head of cattle.

CALIFORNIA: Seasonably warm temperatures. Thundershowers evident mountains, Foothills.

Field activities progressed well, open weather. Small grain harvest winding down, only higher elevation fields standing. Cotton boll set good. Lygus, mite, weed treatments continued. Late dry beans blooming. Sugarbeet harvest continued Central Valley. Safflower blooming north, near harvest south. Alfalfa, other hay harvest continued normal. Apples sprayed for codling, oriental fruit moths. Late varieties apricots harvested. Dusting, bagging dates, Riverside County. Grapes irrigated; treated for pests, mildew. Picking table grapes gained momentum. Freestone peaches 65%, 54% nectarines, 58% plums packed. Peaches sprayed for pests. Cling peach early variety harvest begun. Bartlett pear harvest begun. Avocado harvest slow. Summer grapefruit progressed, Valencia orange harvest slowed. Oranges sprayed for red scale. Planting citrus trees, Tulare County. Almonds irrigated, treated for navel orangeworm; hullsplit nearing. Broccoli light supply generally good quality. Melon active San Joaquin Valley. Cauliflower moderate supply variable quality. Celery heavy supply generally good quality. Desert melon harvest completed. Planting winter crop potatoes began Hemet area. Potato growth Tullake area week behind normal. Processing, fresh market tomatoes being harvested. Livestock good. Pasture, range mostly good northern third. Only fair to very poor elsewhere. Few cattle producers feeding mineral supplements to compensate poor quality feed. Water supplies parallel pasture, range conditions.

COLORADO: Conditions were seasonal 16th to 18th. Cooled below seasonal levels in the eastern half of the State on 19th to 21st, rainfall became widespread in these areas. Precipitation trace to 1.73 in. at Rocky Ford. Temperatures 2 to 5° below normal in east, 1 to 3° above in west.

Days suitable for fieldwork 6.1. Soil moisture 11% very short, 45% short, 44% adequate. Alfalfa second cutting 38%. Spring barley 60% turning color, 26% harvested. Oats 95% headed, 58% turning color, 27% harvested. Spring wheat 41% turning color, 11% harvested. Winter wheat 78% harvested. Dry beans 30% flowered, corn 22% silked. Sorghum 3% headed, summer potatoes 1% harvested. Range, pasture 2% very poor, 12% poor, 33% fair, 49% good, 4% excellent. Livestock good to excellent.

FLORIDA: Temperatures 1 to 2° of normal. Extremes 64°; 96°. Rain 1.00 to 2.00 in. most locations. Rain fell 3 to 6 days. Greatest weekly total 3.80 in., Plant City.

Soil moisture northern Peninsula short to adequate; other areas mostly adequate. Tobacco harvest about 75% complete. Corn for silage, hay harvests active. Corn for grain harvest started. Cotton, soybeans, sugarcane good progress. Peanuts needed relief from warm temperatures. Tobacco markets open. Pastures 28% excellent, 44% good, 28% fair. Cattle, fair to good, northern

Peninsula; elsewhere good to excellent. Citrus areas received several hard rains; lakes, ponds refilling. Ideal growing weather producing new foliage, good sizes on new crop fruit. Minimal droppage most groves. Caretakers very active cutting cover crops, major pruning. Summer weather hot; frequent showers prevailed, vegetable producing areas. Summer vegetables available mostly for local markets. Field preparation very active, fall crops. Light planting underway some areas.

GEORGIA: Rainfall several areas over 1.00 in., others less than 0.50 in. Local areas 3.00 to 5.00 in. northern areas. Heaviest 7.88 in. near Watkinsville. Temperatures 1 to 3° cooler than normal north, 1° above normal south.

Days suitable for fieldwork 4.4. Soil moisture 6% very short, 32% short, 55% adequate, 7% surplus. Corn 97% dough, 91% 1989, 94% avg.; 88% dent, 70% 1989, 80% avg.; 41% mature, 13% 1989, 37% avg.; 3% harvested for grain, 1% 1989, 4% avg. Cotton 0% bolls open, 0% 1989, 1% avg.; insects building in cotton. Sorghum 18% poor, 52% fair, 30% good; 99% planted, 96% 1989, 98% avg. Peanuts 7% poor, 45% fair, 48% good; 100% blooming, 100% 1989, 99% avg.; 94% pegging, 90% 1989, 90% avg.; irrigation continues; disease control. Soybean planting completed. Tobacco 43% fair, 57% good; 49% harvested, 50% 1989, 40% avg. Watermelons 12% poor, 83% fair, 5% good; 88% harvested, 85% 1989, 89% avg. Apples 10% poor, 61% fair, 29% good; 11% harvested, 1% 1989, 8% avg. Peaches 13% very poor, 19% poor, 15% fair, 53% good; 95% harvested, 90% 1989, 92% avg. Hay, pastures slowly improving. Cattle, hogs fair to mostly good.

HAWAII: Weakening high pressure system maintained variable weather. Days mostly sunny with scattered evening, early morning showers. Variable winds 10 to 20 mph with temperatures low 60s

to upper 80s. Rainfall none to 4.70 in. Days suitable for farm work 7.0. Papaya production continued low level; watermelon harvest active. Sugar, pineapple harvest continuous.

IDAHO: Temperatures above normal, precipitation below normal statewide.

Days suitable for fieldwork 7.0. Soil moisture 15% very short, 21% short, 63% adequate, 1% surplus. Winter wheat 4% harvested, 3% 1989, 6% avg.; 87% turning color. Spring wheat good; 98% headed; 96% 1989, 98% avg.; 55% turning color. Spring barley 98% headed, 93% 1989, 97% avg.; nearly half turning color. Potato good; nearly all over 12.0 in. high; 60% closing middles. Few acres oats, spring wheat harvested. Peas, lentils finished blooming. Bluegrass seed harvest nearly complete. Cherry harvest continued north. Peach harvest underway, apricot harvest full swing southwest. Mint harvest 15% complete. Irrigation water supplies good to fair. Low soil moisture stressed dryland cereals east. Lambs coming off ranges because high temperatures, feed matured too rapidly. Range, pasture 1% very poor, 8% poor, 40% fair, 48% good, 3% excellent.

ILLINOIS: Temperatures 2° below normal to normal across State. Precipitation generally 0.50 to 3.00 in. across State.

Days suitable for fieldwork 5.00. Soil moisture 27% short, 44% adequate, 29% surplus. Corn dough stage 5%, 12% 1989, 24% avg. Oats 11% fair, 73% good, 16% excellent; turning color 92%, 99% 1989, 100% avg.; ripe 60%, 88% 1989, 92% avg.; harvested 19%, 51% 1989, 64% avg. Alfalfa 4% poor, 17% fair, 64% good, 15% excellent. Alfalfa hay second cutting 64%, 86% 1989, 83% avg. Pasture 3% very poor, 5% poor, 16% fair, 57% good, 19% excellent.

INDIANA: Temperatures near normal. Lows mid 60s, highs low to mid 80s. Precipitation 1.00 to 3.00 in.

Days suitable for fieldwork 4.6. Topsoil 11% short, 75% adequate, 14% surplus. Subsoil 4% short, 87% adequate, 9% surplus. Corn 58 in. high, 67 in. 1989, 69 in. avg. Soybeans 18 in. high, 18 in. 1989, 22 in. avg. Oats 44% harvested, 43% 1989, 60% avg. Rye 67% harvested, 82% 1989, 86% avg. Alfalfa hay 59% cut twice, 64% 1989, 76% avg. Pasture 2% poor, 25% fair, 69% good, 4% excellent. Symptoms ranging from sudden wilting to slight stunting, yellowing evident in soybean plants.

IOWA: Temperatures 1 to 3° below normal. Extremes 51°; 93°. Precipitation 0.03 to 5.50 in; average 1.74 in.

Days suitable for fieldwork 4.3. Topsoil 62% adequate, 38% surplus. Subsoil 3% short, 73% adequate, 24% surplus. Winter wheat 80% harvested, 95% 1989, 90% avg. Hay 6% poor, 10% fair, 69% good, 15% excellent. Pasture 4% poor, 10% fair, 57% good, 29% excellent. Oats 99% turning color, 100% 1989, 100% avg.; 25% harvested, 62% 1989, 70% avg.; 2% poor, 10% fair, 71% good, 17% excellent. Second crop alfalfa hay 53% harvested, 80% 1989, 76% avg. Corn 35% tasseled, 82% 1989, 88% avg. Soybeans 98% cultivated first time, 100% 1989, 100% avg. Livestock good. Cooler weather brought relief to States livestock herds.

KANSAS: Weather generally cool, dry. Temperatures near 80° southeast, south central; mid 70s elsewhere. Precipitation generally light; heaviest 0.62 in., 0.68 in. north central, northeast respectively.

Days suitable for fieldwork 6.5. Topsoil 92% short, 8% adequate. Subsoil 61% short, 39% adequate. Corn, sorghum, soybeans good progress, short moisture causing stress most areas except southwest where most crops are irrigated. Corn generally looking good; progressing on schedule. Corn borers, spider mites, grasshoppers increasing. Sorghum heading behind schedule. Soybean planting reached completion; blooming, pod setting underway, behind schedule. Range, pasture good for time of year, short moisture reducing available grazing. Ranchers culling herds. Weather ideal for haying, rain needed for regrowth.

KENTUCKY: Typical summer like weather. Highs 80s, near seasonal normals; lows 60s, near seasonal normals. Precipitation scattered, west half 1.00 to 2.00 in., 1.00 in. above mean; east 0.50 in., 0.50 in. deficit.

Days suitable for fieldwork 5.1. Soil moisture 16% very short, 41% short, 43% adequate. Many corn, soybean acres have been under stress, weekend showers gave some relief. A few intended double crop soybean acres not planted, some late planted beans had poor, slow germination. Burley tobacco 6% topped. Insect, weed, disease problems continue. Tobacco 9% poor, 59% fair, 31% good, 1% excellent. Pastures, hay crops benefitted from showers. Pasture 3% very poor, 9% poor, 44% fair, 37% good, 7% excellent.

LOUISIANA: Temperatures 3 to 5° below normal. Extremes 55°; 96°. Rainfall 0.18 to 0.89 in.

Days suitable for fieldwork 5.6. Soil moisture 5% very short, 46% short, 46% adequate, 3% surplus. Corn dough stage 96%, 88% 1989, 93% avg.; mature 46%, 26% 1989, 32% avg.; harvested 1%, 1% 1989, 3% avg.; 24% fair, 72% good, 4% excellent. Cotton squaring 96%, 94% 1989, 96% avg.; setting bolls 86%, 57% 1989, 73% avg.; 47% fair, 53% good. Irrigation continued in dry areas of north. Hay first cutting 98%, 82% 1989, 95% avg. Peaches harvested 84%, 56% 1989, 80% avg.

Rice headed 58%, 55% 1989, 59% avg.; ripe 10%, 5% 1989, 7% avg.; harvested 4%, 0% 1989, 2% avg.; 24% fair, 76% good. Sorghum headed 80%, 63% 1989, 76% avg.; turning color 31%, 11% 1989, 26% avg.; ripe 3%, 1% 1989, 2% avg.; 5% poor, 37% fair, 58% good. Headworms in central area. Soybeans planted 100%, 96% 1989, 99% avg.; emerged 96%, 94% 1989, 98% avg.; blooming 42%, 38% 1989, 40% avg.; setting pods 17%, 11% 1989, 15% avg.; 3% poor, 47% fair, 47% good, 3% excellent. Sweet potatoes planted 97%, 91% 1989, 98% avg.; harvested 2%, 1% 1989, 1% avg.; 50% fair, 42% good, 8% excellent. Initial yields somewhat low due to extensive dry conditions. Sugarcane 10% poor, 45% fair, 45% good. Sporadic spraying for borers took place. Livestock 24% fair, 73% good, 3% excellent. Pasture 7% poor, 49% fair, 44% good. Vegetable 6% poor, 64% fair, 27% good, 3% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.93 in. Temperature 77°, normal 76°. Extremes 52°; 97°.

Days suitable for fieldwork 5.4. Topsoil 35% short, 50% adequate, 15% surplus. Subsoil 25% short, 55% adequate, 20% surplus. Corn good; 52% silked, 28% 1989, 54% avg.; 18% dough, 6% 1989, 14% avg. Soybeans good; 99% planted, 91% 1989, 95% avg.; 21% bloomed, 21% 1989, 23% avg.; 6% setting pods, 3% 1989, 5% avg. Small grains fair to good. Wheat 98% harvested, 81% 1989, 94% avg. Oats 39% harvested, 30% 1989, 52% avg. Rye 94% harvested, 82% 1989, 88% avg. Potatoes 13% harvested, 27% 1989, 27% avg. Snap beans 66% harvested, 55% 1989, 61% avg. Tomatoes 21% harvested, 23% 1989, 23% avg. Sweet corn 33% harvested, 29% 1989, 38% avg. Cucumbers 69% harvested, 78% 1989, 71% avg. Lima beans 2% harvested, 13% 1989, 16% avg. Cantaloupes 29% harvested, 37% 1989, 40% avg. Watermelons 20% harvested, 17% 1989, 20% avg. Hay supplies adequate. Alfalfa hay second cut 85% complete, 58% 1989, 87% avg. Other hay second cut 37% complete, 26% 1989, 62% avg. Apples fair to good. Peaches fair to good. Peaches 25% harvested, 14% 1989, 19% avg. Pasture good.

DELAWARE: Precipitation 0.29 in. Temperature 78°, normal 77°. Extremes 63°; 92°.

Days suitable for fieldwork 6.4. Topsoil 100% adequate. Subsoil 100% adequate. Corn good; 80% silked, 73% 1989, 72% avg.; 9% dough, 17% 1989, 15% avg. Soybeans good; 99% planted, 96% 1989, 96% avg.; 11% bloomed, 18% 1989, 21% avg. Wheat 100% harvested, 98% 1989, 99% avg. Rye 100% harvested, 98% 1989, 98% avg. Potatoes 16% harvested, 6% 1989, 14% avg. Snap beans 54% harvested, 65% 1989, 49% avg. Tomatoes 18% harvested, 11% 1989, 9% avg. Sweet corn 24% harvested, 38% 1989, 28% avg. Cucumbers 30% harvested, 58% 1989, 49% avg. Cantaloupes 35% harvested, 15% 1989, 24% avg. Watermelons 5% harvested, 10% 1989, 11% avg. Hay supplies adequate. Alfalfa hay second cut 78% complete, 80% 1989, 95% avg. Other hay second cut 37% complete, 76% 1989, 73% avg. Apples fair to good. Peaches 56% harvested, 31% 1989, 21% avg. Pasture fair to good.

MICHIGAN: Temperatures 1° below to 2° above normal. Extremes 46°; 91°. Precipitation 0.12 to 4.20 in. across State.

Days suitable for fieldwork 4.0. Soil moisture 15% short, 75% adequate, 15% surplus. Corn 5% silked, 15% 1989, 30% avg.; 0% very poor, 5% poor, 15% fair, 45% good, 35% excellent. Soybeans 20% blooming, 20% 1989, 35% avg.; 0% setting pods, 0% 1989, 5% avg.; 20% fair, 50% good, 30% excellent. Wheat 10% harvested, 20% 1989, 55% avg.; good. Pasture 5% poor, 25% fair, 43% good, 27% excellent. Major activities: Hand hoeing, cultivating, side dressing corn, baling hay. Tart cherry harvest winding down southwest, beginning northwest. Early peaches, summer apples being picked. Volume of vegetable harvest increasing.

MINNESOTA: Temperature 2° above normal to 3° below normal. Extremes 46°; 93°. Precipitation 0.29 to 1.46 in., greatest weekly total 2.79 in.

Days suitable for fieldwork 5.3. Topsoil 4% very short, 25% short, 65% adequate, 6% surplus. Spring wheat 62% turning ripe, 59% 1989, 62% avg.; 3% cut, 4% 1989, 11% avg.; 2% combined 1% 1989, 5% avg. Oats 71% turning ripe, 83% 1989, 84% avg.; 9% cut 19% 1989, 34% avg.; 7% combined, 7% 1989, 22% avg. Barley 75% turning ripe, 90% 1989, 78% avg.; 9% cut, 10% 1989, 19% avg.; 2% combined, 2% 1989, 8% avg. Corn 19% tasseling, 41% 1989, 65% avg.; 3% in milk, 1% 1989, 7% avg. Soybeans 58% blooming, 62% 1989, 69% avg.; 10% setting pods, 8% 1989, 22% avg. Winter wheat 11% harvested, 20% 1989, 35% avg. Rye 13% harvested, 26% 1989, 38% avg. Field corn 28% fair, 61% good, 11% excellent. Soybeans 25% fair, 69% good, 6% excellent. Spring wheat 1% poor, 24% fair, 60% good, 15% excellent.

MISSISSIPPI: Temperatures 4° below normal. Extremes 53°; 95°. Mostly dry statewide with scattered showers. Rainfall 0.61 in., 0.53 in. below normal. Soil temperatures 84°.

Days suitable for fieldwork 5.4, 2.4 1989, 4.6 avg. Soil moisture 10% very short, 44% short, 46% adequate. Cotton 98% squaring, 87% 1989, 96% avg.; boll setting 86%, 35% 1989, 69% avg.; 5% very poor, 5% poor, 35% fair, 46% good, 9% excellent. Corn 91% silking, 89% 1989, 93% avg.; dough 73%, 47% 1989, 65% avg.; dent 34%, 26% 1989, 40% avg., 19% mature; silage harvested 15%, 7% 1989, 17% avg.; 5% very poor, 9% poor, 32% fair, 53% good, 1% excellent. Rice 38% heading, 24% 1989, 29% avg.; 63% fair, 31% good, 6% excellent. Soybeans 99% planted, 88% 1989, 94% emerged, 76% 1989; 26% blooming, 21% 1989, 32% avg.; 13% podding, 7% 1989, 9% avg.; 8% very poor, 7% poor, 60% fair, 22% good, 3% excellent. Sorghum 61% heading, 46% 1989, 60% avg.; 13% coloring, 10% 1989, 17% avg.; 2% poor, 60% fair, 38% good. Peaches 88% harvested, 83% 1989, 80% avg.; 44% very poor, 15% poor, 13% fair, 28% good. Hay 57% harvested, 37% 1989, 56% avg. Pasture, livestock fair to good. Activities: Cultivating row crops, cutting hay, spraying pesticides, irrigating cotton, trimming pastures.

MISSOURI: Temperatures 2 to 4° below normal. Rainfall 1.00 to 2.00 in.

Days suitable for fieldwork 5.8. Topsoil 32% short, 65% adequate, 3% surplus, southwest district extremely short. Double crop soybeans 97% planted, 100% 1989, normal. Corn silking 19% northeast to 84% southeast. Soybeans blooming 10% west central to 30% northwest, south central. Second cutting alfalfa 75%, 91% 1989, 93% normal. Oat harvest 74%, 96% 1989, 98% normal. Other hay cut 83%, 88% 1989, 91% normal. Pasture 2% very poor, 4% poor, 36% fair, 55% good, 3% excellent.

MONTANA: Hot, temperatures 5 to 6° above normal west, southwest, near normal east. Most of State dry. Widely scattered thunderstorms mainly in east.

Days suitable for fieldwork 6.6. Topsoil 68% short, 32% adequate. Subsoil 59% short, 41% adequate. Winter wheat 3% very poor, 11% poor, 26% fair, 49% good, 11% excellent; ripe 3%, 3% 1989, 13% avg. Barley 6% very poor, 21% poor, 29% fair, 38% good, 6% excellent; 1% ripe, 0% 1989, 2% avg. Oats 9% very poor, 25% poor, 32% fair, 30% good, 4% excellent; ripe 0%, 0% 1989, 2% avg. Pasture, range feed 9% very poor, 14% poor, 30% fair, 41% good, 6% excellent. First cutting alfalfa 86% done, 80% 1989, 89% avg. Other hay harvested 72%, 59% 1989, 62% avg.

NEBRASKA: Temperatures 7° below normal. Extremes 41°; 100°. Precipitation 0.75 to 1.60 in.

Days suitable for fieldwork 5.7. Topsoil 66% short, 32% adequate, 2% surplus. Subsoil 58% short, 42% adequate. Oats 65% harvested, 69% 1989, 76% avg. Alfalfa 1% very poor, 13% poor, 46% fair, 36% good, 4% excellent; 80% second cutting, 75% 1989, 83% avg.; 4% third cutting, 2% 1989, 2% avg. Reduced winter wheat yields, lower test weights in Panhandle due to hot dry weather, Russian wheat aphids. Corn crop entering dough stage east, southeast. Corn borers causing damage eastern half of State. Chinch bugs causing considerable damage to sorghum, corn in east, southeast. Grasshoppers becoming problem southern half of State. Dryland crops, pastures showing stress. Concerns in western half of State about short supplies, possible shut off of surface irrigation water. Pasture, range 9% very poor, 17% poor, 38% fair, 33% good, 3% excellent. Some cattle being moved, others on supplement feed. Some liquidation southwest, poor range conditions. Flies a problem to cattle many areas, some pinkeye problems northeast. Main activities: Harvest small grains, cutting hay, weed control, irrigation, insect control, preparing ground for planting fall small grains.

NEVADA: Afternoon, evening thunderstorms widespread early. Dry, unseasonably hot remainder. Precipitation all areas, mostly light. Temperatures generally 1 to 4° above normal. Extremes 35°; 114°.

Alfalfa hay harvest slowed by scattered afternoon, evening thunderstorms early, good progress remainder of week. Marketing 1989 crop potatoes finished for season. Ranges continue to deteriorate from above normal temperatures. Cattle, however, mostly good.

NEW ENGLAND: Precipitation 0.50 to 2.50 in. Vermont; none to 0.20 in. Connecticut, Rhode Island; 0.05 to 0.75 elsewhere. Temperatures low to mid 70s north, mid to high 70s south; 4 to 8° above normal. Maximum temperatures high 80s to low 90s north, to mid 90s south; minimums high 40s to low 60s north, high 50s to mid 60s south.

Days suitable for fieldwork 6.0. Soil moisture north 60% short, 40% adequate, south 5% very short, 34% short, 61% adequate. Grazing availability 4% very short, 15% short, 77% adequate, 4% surplus. Pasture 7% poor, 39% fair, 54% good. Maine, Rhode Island, Connecticut River Valley potato good. Maine oat good. Field corn good. Sweet corn good. First cut hay 94% harvested, 93% 1989, 92% avg.; good. Second cut hay 26% harvested, 20% 1989, 24% avg.; good. Outdoor, shade tobacco good. Apple set average; fruit drop average, scab infection average. Strawberries 100% harvested. Blueberries 10% harvested; good. Cranberries almost through blossom stage, entering small berry stage. Major farm activities: Cutting hay, harvesting vegetables, shade tobacco, blueberries, cultivating vegetables, spraying for insects, irrigating.

NEW JERSEY: Temperatures above normal. Extremes 60°; 95°. Rainfall 0.59 in. north, 0.38 in. central, 0.11 in. south. Heaviest 24 hour total 0.96 in. on 22nd, 23rd. Estimated soil moisture percent field capacity average 82% north, 61% central, 47% south. Four inch soil temperatures 74° north, 75° central, 76° south.

Showers received, many areas need rain. Grain combining, straw baling, hay making active. Summer vegetable harvest active. Scattered, light, white potato digging began for local markets. Blueberry picking declining. Peach harvest increased. Harvest of Redhaven peaches began. Oat combining began. Second cutting of hay very good. Field corn, soybean prospects good to excellent. Pasture growth slowed.

NEW MEXICO: Temperatures above normal extreme west, below normal elsewhere. Precipitation everywhere except extreme northwest, heaviest amounts plains, south central mountains.

Days suitable for fieldwork 5.7. Soil moisture 68% short, 32% adequate. Dryland milo acreage dropped considerably from last year. No moisture received during planting, what little acreage was planted is in very poor condition, will probably not be harvested. Precipitation being received will not help milo situation; farmers will plant other crops such as haygrazer. Cattle, sheep both poor to fair, supplemental feeding has slowed. Range conditions continued to improve with rains statewide. Range 11% very poor, 62% poor, 16% fair, 11% good.

NEW YORK: Above normal temperatures, below normal rainfall. Extremes 48°; 94°. Rainfall above average in western Plateau, Great Lakes, Champlain Valley regions, below average elsewhere.

Days suitable for fieldwork 5.6. Soil moisture adequate. Pasture 27% fair, 73% good. Hay fair to mostly good. Wheat good. First cutting alfalfa 95% complete, 90% 1989, 91% avg. Clo tim 91% harvested, 77% 1989, 83% avg. Grass silage 96% cut, 92% 1989, 96% avg. All varieties of local fresh vegetables were moving to market. Strawberry harvest was nearly over. Champlain Valley apples continue to size well. Hudson Valley apple size excellent. Sweet cherry harvest complete. Tart cherry harvest winding down.

NORTH CAROLINA: Temperatures 1 to 3° below normal in Mountains, 1 to 3° above normal across rest of State. Precipitation 0.03 to 3.23 in.

Days suitable for fieldwork 5.2. Soil moisture 6% very short, 37% short, 55% adequate, 2% surplus. Pasture 1% very poor, 15% poor, 55% fair, 29% good. Livestock feed from pasture 70%. Hay second cutting 46%. Irish potatoes harvested 94%; peaches harvested 76%; flue cured tobacco harvested 18%. Corn silked 92%; cotton squared 92%; cotton setting bolls 70%; tobacco topped 80%. Crop condition: Corn 7% very poor, 26% poor, 42% fair, 25% good; cotton 2% poor, 23% fair, 70% good, 5% excellent; soybeans 5% poor, 44% fair, 50% good, 1% excellent; peanuts 26% fair, 74% good; tobacco 2% poor, 37% fair, 58% good, 3% excellent; irish potatoes 9% poor, 26% fair, 56% good, 9% excellent; peaches 17% very poor, 11% poor, 60% fair, 12% good; apples 12% poor, 47% fair, 38% good, 3% excellent; truck crops 12% poor, 41% fair, 47% good; hay 12% poor, 55% fair, 32% good, 1% excellent. Major activities: Spraying, harvesting, topping, irrigating flue cured tobacco; hay harvesting; cultivating, spraying field crops; harvesting vegetables. Other activities included: Tending livestock; planting sorghum, soybeans; harvesting irish potatoes; harvesting peaches; general farm maintenance.

NORTH DAKOTA: Temperatures 3 to 5° below normal. Precipitation 0.19 in. west central to 0.74 in. central. West central, south central, southwest still below normal for growing season rainfall.

Days suitable for fieldwork 6.6. Topsoil 10% very short, 64% short, 26% adequate. Subsoil 26% very short, 52% short, 22% adequate. Spring wheat 3% very poor, 31% fair, 55% good, 11% excellent; 33% turning to ripe and beyond, 40% 1989, 42% avg. Durum 28% fair, 61% good, 11% excellent; 21% turning to ripe and beyond, 25% 1989, 26% avg. Oats 6% very poor, 44% fair, 44% good, 6% excellent; 39% turning to ripe and beyond, 50% 1989, 51% avg. Barley 2% very poor, 28% fair, 60% good, 10% excellent; 63% turning to ripe and beyond, 69% 1989, 62% avg. Winter wheat 5% poor, 41% fair, 49% good, 5% excellent; 89% turning to

ripe and beyond, 91% 1989, 95% avg. Late season crops: Corn 23% fair, 65% good, 12% excellent; 13% tasseling to silking, 29% 1989, 46% avg.; 48 in. height, 43 in. 1989, 48 in. avg. Flax 3% very poor, 23% fair, 58% good, 16% excellent; 79% bloom or beyond, 57% 1989, 67% avg.; 19 in. height, 13 in. 1989, NA avg. Potatoes 46% fair, 54% good; 87% bloom and beyond, 100% 1989, 78% avg.; 18 in. height, 19 in. 1989, NA avg. Soybeans 1% fair, 98% good, 1% excellent; 73% bloom or beyond, 60% 1989, 66% avg.; 22 in height, 16 in. 1989, NA avg. Dry beans 1% poor, 8% fair, 79% good, 12% excellent; 54% bloom or beyond, 60% 1989, 60% avg.; 17 in. height, 16 in. 1989, NA avg. Sunflower 8% fair, 70% good, 22% excellent; 3% bloom or beyond, 1% 1989, 8% avg.; 38 in. height, 32 in. 1989, 37 in. avg. Sugarbeets 90% good, 10% excellent. Pastures 9% very poor, 12% poor, 50% fair, 27% good, 2% excellent. Stockwater 3% very short, 23% short, 74% adequate. Hay crop: 1st cutting alfalfa 96% complete, other hay 73% complete.

OHIO: Mean highs in low to mid 80s, lows in low to mid 60s. Temperatures near normal levels with departures 2° above normal in north, east to 10° below normal in the western portions of the State. Rainfall 1.00 to 3.00 in.

Days suitable for fieldwork 4.2. Soil moisture 1% short, 79% adequate, 20% surplus. Activities include: Spraying, harvesting wheat, baling hay, straw, picking sweet corn, packing pickles, cultivating. Over 20% corn crop is silking, 38% of soybeans blooming. Potato leafhopper infestations in alfalfa, soybeans. Winter wheat harvest is drawing to a close, heavy rainfall encouraged pre harvest sprouting which translates to lost revenue at the local elevator. Oat harvest 8% complete. Pastures remain lush around the State, 1% very poor, 4% poor, 30% fair, 56% good, 9% excellent. Harvesting of fresh market vegetables, including sweet corn, peppers, carrots, green beans, tomatoes, is now in full swing. Bramble bush crops good. Summer apples harvest is just beginning.

OKLAHOMA: Temperatures 2° below normal southeast, northeast to 6° below normal in the southwest, south central. Precipitation 0.07 in northeast to 1.82 in. west central.

Days suitable for fieldwork 6.7. Topsoil 96% short, 4% adequate. Subsoil 60% short, 40% adequate. Wheat 100% harvested, 100% 1989, 100% avg.; 90% ground plowed, 75% 1989, 85% avg.; 5% seedbed prepared, 2% 1989, 3% avg. Cotton 50% fair, 50% good; 100% up to stand, 100% 1989, 100% avg.; 72% squaring, 40% 1989, 55% avg.; 12% setting bolls, 3% 1989, 15% avg. Sorghum 35% poor, 50% fair, 15% good; 100% up to stand, 100% 1989, 100% avg.; 5% heading, 35% 1989, 20% avg.; 1% milk to soft, 5% 1989, 5% avg. Soybeans 95% up to stand, 100% 1989, 95% avg.; 10% flowering, 15% 1989, 20% avg.; 0% setting pods, 2% 1989, 3% avg. Peanuts 95% up to stand, 95% 1989, 95% avg.; 40% pegging, 65% 1989, 55% avg.; 5% setting pods, 15% 1989, 10% avg. Corn 70% tasselling, 70% 1989, 90% avg.; 20% milk to soft, 25% 1989, 45% avg. Alfalfa 65% third cutting, 55% 1989, 45% avg.; 4% fourth cutting, 0% 1989, 2% avg. Pastures 4% very poor, 9% poor, 72% fair, 15% good. Cattle good; marketings average. Scattered rainfall, below normal temperatures statewide.

OREGON: Temperatures 3 to 8° above normal except coast near normal. Precipitation nearly non-existent except south central areas with nearly 0.50 in.

Soil moisture 76% short, 24% adequate. Barley 14% harvested, 13% 1989, 30% avg. Wheat harvest on in east, just started west. Grass seed harvest continued. Warm, dry weather promoted field

activity. Tart cherry, peach harvest progressed. Berry harvest season underway. Cranberry fruit set good to excellent. Green bean, frozen pea harvest continues, harvesting early potatoes north east. Livestock good to excellent. Lake, Malheur counties low on stockwater. Range, pasture 1% very poor, 6% poor, 31% fair, 45% good, 17% excellent.

PENNSYLVANIA: Wet across State, slightly above temperatures. Temperature 73°, 3° above normal. Extremes 51°; 93°. Precipitation 1.03 in., 0.14 in. above normal.

Days suitable for fieldwork 4.0. Soil moisture 3% short, 74% adequate, 23% surplus. Corn 100% planted, 100% 1989, 100% avg.; 6% silk, 6% 1989, 21% avg.; height 45 in., 39 in. 1989, 48 in. avg.; 6% poor, 20% fair, 48% good, 26% excellent. Tobacco 100% transplanted, 100% 1989, 100% avg. Soybeans 100% planted, 96% 1989, 99% avg.; 1% very poor, 4% poor, 22% fair, 51% good, 22% excellent. Barley 9% heading or headed, 2% 1989; 12% turning yellow, 8% 1989; 24% ripe, 26% 1989; 55% harvested, 64% 1989. Wheat 7% heading or headed, 5% 1989; 17% turning yellow, 14% 1989; 51% ripe, 46% 1989; 25% harvested, 35% 1989; 3% poor, 19% fair, 56% good, 22% excellent. Oats 30% heading or headed, 33% 1989; 46% turning yellow, 57% 1989; 21% ripe, 10% 1989, 3% harvested, 0% 1989; 4% poor, 17% fair, 54% good, 25% excellent. First cutting alfalfa 98% complete, 92% 1989. Second cutting alfalfa 41% complete, 34% 1989. First cutting clover timothy 92% complete, 85% 1989. Hay stands mostly fair to good. Pasture 1% very poor, 8% poor, 72% good, 19% excellent. Peach 40% below avg., 60% avg. Apple 18% below avg., 82% avg. Activities: Planting vegetables; harvesting hay, haylage, barley, oats, wheat, vegetables; repairing fences; weed control; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: No Data Available.

SOUTH CAROLINA: Temperatures 1° below normal to 2° above normal. Rainfall 1.30 in. in the Pee Dee area to 1.80 in. in the southern part of the State.

Days suitable for fieldwork 5.2. Soil moisture 14% very short, 65% short, 21% adequate. Cotton 26% poor, 60% fair, 14% good; 94% squaring, 84% 1989, 90% avg.; 68% setting bolls, 41% 1989, 61% avg. Soybeans 4% very poor, 4% poor, 70% fair, 22% good; 21% blooming, 13% 1989, 14% avg.; 3% setting pods, 1% 1989, 3% avg. Corn poor to fair, 86% dough stage, 59% 1989, 71% avg.; 53% matured, 15% 1989, 21% avg.; 3% harvested, 0% 1989, 0% avg. Sorghum fair, 95% planted, 91% 1989, 94% avg.; 3% harvested, 2% 1989, 3% avg. Tobacco fair, 91% topped, 90% 1989, 93% avg.; 26% harvested, 16% 1989, 18% avg. Peanuts fair. Watermelons fair, 83% harvested, 63% 1989, 72% avg. Cantaloupes fair, 77% harvested, 68% 1989, 67% avg. Peaches fair, 69% harvested, 51% 1989, 63% avg. Pastures 5% very poor, 51% poor, 40% fair, 4% good.

SOUTH DAKOTA: Temperatures 0 to 6° below normal. Extremes 38°; 102°. Precipitation above normal most of State, maximum 3.45 in. Growing season precipitation above normal east, south central, below normal elsewhere, 7.59 in. above to 4.08 in. below normal. Growing degree days 210 units above to 145 units below normal.

Days suitable for fieldwork 4.9. Topsoil 16% critically short, 29% short, 54% adequate, 1% surplus. Subsoil 19% critically short, 34% short, 46% adequate, 1% surplus. Range, pasture 11% poor, 36% fair, 36% good, 17% excellent. Other crop conditions mostly good. Damp conditions, cool temperatures. Northwest still dry. Corn borer, army worm, grasshopper problems. Rust, scab,

barley yellow dwarf, lodging problems in small grains. Major activities: Combining, haying, cultivating, fallow work.

TENNESSEE: High pressure kept State generally dry except for scattered afternoon thundershowers most of week. Cold front 22nd brought widespread thundershowers, significant rainfall. Temperatures below normal east, slightly above normal west. Rainfall slightly above normal east, below normal west.

Days suitable for fieldwork 5.0. Soil moisture 1% very short, 27% short, 71% adequate, 1% surplus. Corn 60% tasseling, 80% 1989, 83% avg.; 14% dough, 19% 1989, 37% avg. 4% dent, 5% 1989, 13% avg.; 3% poor, 49% fair, 48% good. Cotton 94% squaring, 98% 1989, 96% avg., 28% setting bolls, 44% 1989, 55% avg.; 7% very poor, 6% poor, 16% fair, 71% good. Sorghum 20% headed, 44% 1989, 53% avg.; 3% poor, 36% fair, 61% good. Soybeans 18% blooming, 22% 1989, 28% avg., 2% setting pods, 4% 1989, 8% avg.; 2% poor, 46% fair, 52% good. Tobacco 12% topped, 13% 1989, 15% avg.; 4% poor, 50% fair, 46% good. Pastures 5% poor, 58% fair, 36% good, 1% excellent. Rainfall continues to benefit crops. Farmers busy with vegetable harvest.

TEXAS: Persistent upper level low pressure area produced very heavy rains south mid week, low assisted in generating lesser amounts of rain over much of State. Weak cool front northern half State weekend, producing slightly cooler temperatures, spotty heavy rains Panhandle, south Plains. All areas State above normal rainfall. Rainfall, cloud cover cooled temperatures across State.

Crops: Small grain harvest virtually complete, good yields. Cooler temperatures helped corn crop Plains. Irrigation demands remained steady to heavy. Rain caused harvest delays south, central. Corn doughing 68%, 69% 1989, 68% avg.; dented 53%, 56% 1989, 58% avg.; mature 47%, 37% 1989, 29% avg.; harvested 18%, 15% 1989, 8% avg. Rain improved grain sorghum condition Plains. Dryland crop good improvement, rainfall eased irrigation demand. More moisture needed. Rains caused harvest delays Blacklands, south, central. Some areas wet conditions caused heads to sprout, some to fall over. Sorghum turning color 55%, 57% 1989, 53% avg.; mature 41%, 30% 1989, 34% avg.; harvested 26%, 28% 1989, 22% avg. Cotton benefitted from cooler temperatures, moisture. Irrigated cotton Plains good progress. Dryland fields fair shape, more moisture needed. Producers Plains light insect problems. Rain beneficial to fields central, caused defoliation to stop Coastal Bend. Cotton 6% open bolls, 9% 1989, 6% avg.; harvested 1%, 2% 1989, 1% avg. Soybeans making good progress. Early stands Plains doing well. Fields Plains, Coastal Bend, central benefitted from moisture. Rice fields good progress, remained behind normal. Harvest just beginning some fields. Rice harvested 1%, 3% 1989, 2% avg. Peanut fields Plains, Cross Timbers doing well. Irrigated fields good progress, dryland peanuts responded well to recent moisture. Other Field Crops: Oats harvested 100%, 95% 1989, 96% avg.

Commercial Vegetables: San Antonio Winter Garden, peppers making good progress. Recent rains help. Onion harvest about complete before rains came. Honeydew, watermelon harvest nearing completion. Eastern State, watermelon harvest full swing. Harvesting tomatoes, okra winding down. Land preparation fall crops increasing. High Plains, melons showing good progress. Potato, onion harvest continued, onion harvest nearing completion. Producers beginning to plant peppers, broccoli, cauliflower. Trans Pecos, cantaloupe, onion harvest continued. Wet weather caused

slight mildew problem some cantaloupe fields. Chile crop progressing. Peach harvest continued, fair to good yields. Only slight insect problems exist. Pecans wide range of conditions throughout State. Insect, caterpillar damage problem some areas, as well as nut drop. Timely rains significantly improved conditions south.

Range and Livestock: Range, pasture conditions benefitted most from recent rains. Pastures still trying to recover from drought like conditions. Supplemental feeding, herd reduction continued some areas. Range, pasture 4% very poor, 24% poor, 51% fair, 19% good, 2% excellent. **UTAH:** Variable showers from thunderstorm activity. Three quarters of stations light to moderately heavy. Temperatures 2° above normal.

Days suitable for fieldwork 6.7. Soil moisture 93% short, 7% adequate. Irrigation, weather contributed to very good growing conditions for crops. Cutting second crop hay delayed by light rains. Winter wheat 74% ripened, 77% 1989, 79% avg.; harvest 34% completed, 28% 1989, 33% avg. Barley 20% harvested, 15% 1989, 21% avg. Spring wheat 48% ripened, 38% 1989, 44% avg. Oats 48% turned color, 50% 1989, 56% avg. Field corn avg. height 48 in. Alfalfa hay second cutting 54% completed, 60% 1989, 45% avg. Irrigation water 15% very short, 83% short, 2% adequate. Tart cherry harvest full swing. Apricot harvest winding down. Summer apples being picked. Non irrigated range, pasture 3% very poor, 21% poor, 68% fair, 8% good. Range feed reduction occurring rapidly because of dry conditions. Hay, roughage feed supplies 1% very short, 22% short, 77% adequate.

VIRGINIA: Scattered thunderstorms produced some very heavy rains. Temperatures near normal. Extremes 53°; 98°.

Days suitable for fieldwork 4.2. Topsoil 2% very short, 13% short, 75% adequate, 10% surplus. Corn 47% silked, 46% 1989, 47% avg.; dough stage 20%, 25% 1989, 17% avg.; 9% poor, 41% fair, 45% good, 5% excellent. Soybeans practically all planted, 94% 1989, 92% avg.; 13% bloomed, 26% 1989, 10% avg.; in pods 3%, 16% 1989, 5% avg.; 4% poor, 31% fair, 57% good, 8% excellent. Wheat harvest completed, 95% 1989, 97% avg. Potato harvest near 75% complete. Flue tobacco 6% harvested, 2% 1989, 2% avg. All tobacco 5% poor, 28% fair, 67% good. Peanut 14% fair, 43% good, 43% excellent. Pasture 14% poor, 41% fair, 31% good, 14% excellent. Peaches mostly very poor. Apples very poor to fair. Alfalfa 3% poor, 43% fair, 46% good, 8% excellent. Other hay 10% poor, 41% fair, 35% good, 14% excellent. Livestock mostly good. Leaf hoppers present in alfalfa. Topping, spraying tobacco. Sweet corn, cantaloupe, tomato, snap bean, cucumbers, squash, pepper harvest continued. Spraying peanuts for leafspot.

WASHINGTON: Temperatures 1 to 7° above normal, east; 1 to 7° above normal, west. No precipitation.

Days suitable for fieldwork 7.0. Soil moisture 52% short, 48% adequate. Range, pasture 23% poor, 42% fair, 35% good. Hay, other roughage 23% short, 75% adequate, 2% surplus. Winter wheat 43% fair, 52% good, 5% excellent; harvested 13%, 7% 1989, 12% avg. Spring wheat harvested 3%, 4% 1989, 4% avg. Barley harvested 12%, 5% 1989, 11% avg. Alfalfa hay 2nd cutting 62%, 67% 1989, 61% avg. Small grain harvest was beginning in many areas, will be in full swing in the next couple of weeks. Hay harvest continued. Potato harvest has begun. Cherry harvest was nearing completion. Raspberries, blueberries, nectarines, apricots, peaches continue to be harvested. Hot weather was good for vegetable crops, damaging to small grains.

WEST VIRGINIA: Temperature 73°. Extremes 53°; 94°. Precipitation 0.89 in., 0.66 in. below to 0.47 in. above normal.

Days suitable for fieldwork 4.9. Soil moisture 17% short, 70% adequate, 13% surplus. Pasture 3% fair, 85% good, 12% excellent. Cattle, sheep good. Wheat, barley good. Wheat 91% ripe, 51% harvested. Barley 100% ripe, 94% harvested. Oats good; 85% headed, 57% ripe. Corn good, 23% silked. Hay good; first cutting 90% complete, second cutting 23% complete. Apples, peaches poor. Tobacco fair, premature blooming. Farm activities: Making hay, clipping pastures, small grain harvesting, farm maintenance, caring for livestock.

WISCONSIN: Temperature 71° at normal. Extremes 43°; 92°. Precipitation 0.20 to 1.20 in.

Days suitable for fieldwork 4.7. Soil moisture 18% short, 77% adequate, 5% surplus. Pasture 1% poor, 14% fair, 67% good, 18% excellent. General condition of crops 10% fair, 84% good, 6% excellent. Soybean 86% of normal. Corn 1% poor, 13% fair, 80% good, 6% excellent; height 53 in., 57 in. 1989, 61 in. avg.; 4% silked, 11% 1989, 33% avg. Second cut hay 40% completed, 30% 1989, 43% avg. Oats 1% harvested, 3% 1989, 13% avg. Winter wheat 4% harvested, 21% 1989, 37% 4 year avg.

WYOMING: Temperatures above normal. Above normal precipitation.

Days suitable for fieldwork 6.0. Topsoil 44% short, 56% adequate. Winter wheat 5% headed, 5% 1989, 5% avg.; 35% turning color, 45% 1989, 35% avg.; 45% mature, 40% 1989, 45% avg.; 15% harvested, 10% 1989, 15% avg. Barley 20% headed, 35% 1989, 35% avg.; 45% turning color, 45% 1989, 45% avg.; 30% mature, 20% 1989, 20% avg.; 5% harvested, small amount 1989, 0% avg. Spring wheat 35% headed, 40% 1989, 45% avg.; 45% turning color, 40% 1989, 40% avg.; 20% mature, 15% 1989, 15% avg.; small amount harvested, small amount 1989, 0% avg. Oats 55% headed, 40% 1989; 35% turning color, 50% 1989; 10% mature, 10% 1989; small amount harvested, small amount 1989. Dry beans 30% in bloom, 45% 1989, 35% avg. Potatoes 75% in bloom, 40% 1989, 40% avg. Corn 15% tasseled, 15% 1989, 15% avg.; small amount silked, 0% 1989, 0% avg. Alfalfa hay first cutting 90% complete, 95% 1989, 90% avg.; second cutting 5% complete, 5% 1989, 0% avg. Other hay 45% harvested, 50% 1989, 50% avg. Livestock mostly good. Ranges, pastures 25% poor, 65% good, 10% excellent. Stockwater 50% short, 50% adequate.

International Weather and Crop Summary

HIGHLIGHTS

July 15-21, 1990

USSR ... In Western USSR, dry weather in the south helps winter grain harvesting. Persistent rain saturates soils in the northwest. In the New Lands, widespread rain continues to improve conditions for spring grains in the heading to filling stages of development.

EUROPE ... Scattered rain eases moisture stress for summer crops in sections of the Balkans. Warm and dry weather favors maturation and harvest of winter grains in the northwest.

SOUTH ASIA ... Widespread showers continue in northern, central, and eastern crop areas. Continued unseasonably dry weather in the south reduces moisture for vegetative crops.

EASTERN ASIA ... Unseasonable heat covers southeastern China and Japan. Torrential rain causes continued flooding in sections of central China and the Korean Peninsula.

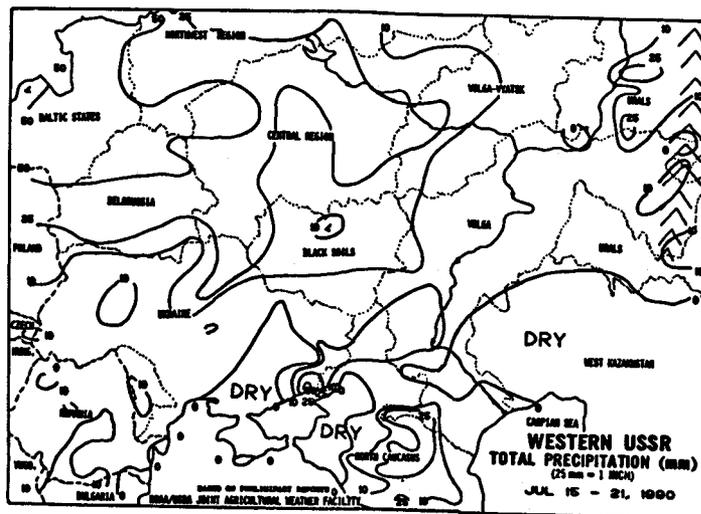
SOUTHEAST ASIA ... Beneficial rain returns to Thailand but misses the western half of the corn belt.

SOUTH AMERICA ... In Argentina, showers help eastern wheat areas but only light rain falls in the drier western growing areas. Locally heavy rain returns to southern Brazil.

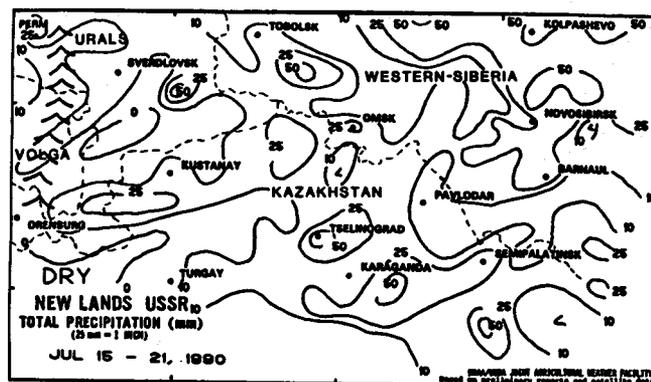
AUSTRALIA ... Widespread rain and warmer-than-normal temperatures cover southeastern winter grain areas. Dryness favors sugarcane harvest in the northeast.

CANADA ... Beneficial rain reaches reproductive spring wheat in the southwest. Cool temperatures slow crop growth.

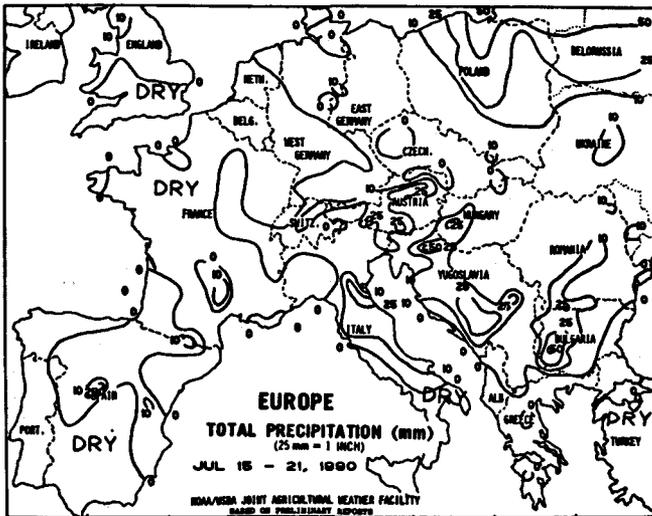
MEXICO ... Widespread showers continue to provide favorable growing season moisture.



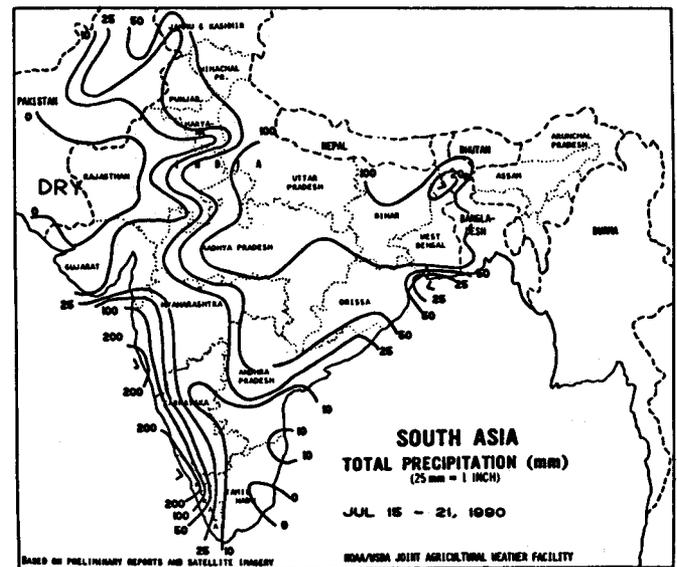
USSR ... In Western USSR, generally dry weather (rainfall less than 10mm) over the Ukraine and the western portion of the North Caucasus helped winter and spring grain harvesting. A band of moderate rain (25-46mm) that fell late in the week over the central North Caucasus interrupted harvesting. Rain is needed in the southern and eastern Ukraine for reproducing corn. Further north, wet weather continued over crop areas in the Baltic States, Belorussia, and the western portion of the Central Region, with rainfall ranging from 25 to 78mm. This rainy weather pattern has continued since July 1, saturating soils. Conditions are becoming too wet for root crops as well as for maturing winter grains. Light precipitation in the Black Soils Region, the Volga Valley, and the Volga Vyatsk maintained adequate moisture conditions for crop growth. Weekly average temperatures over the region were 1-3 degrees Celsius (C) below normal except for the North Caucasus, where temperatures were near normal.



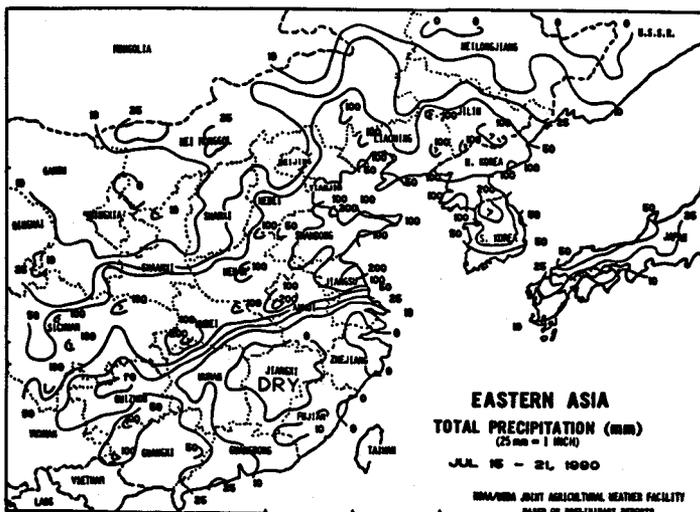
In the New Lands, crop progress for spring grains ranged from grain-filling in the south to heading in the extreme north. Widespread precipitation covered the region. Precipitation amounts generally ranged from 10 to 40mm, with a few locations receiving rainfall in excess of 50mm. Although widespread rain improved moisture conditions for most spring grains in West Siberia, unfavorable dryness continued to cover crop areas just north of Omsk. Weekly average temperatures were near normal in the Urals and Kazakhstan and 1-3 degrees Celsius above normal in West Siberia.



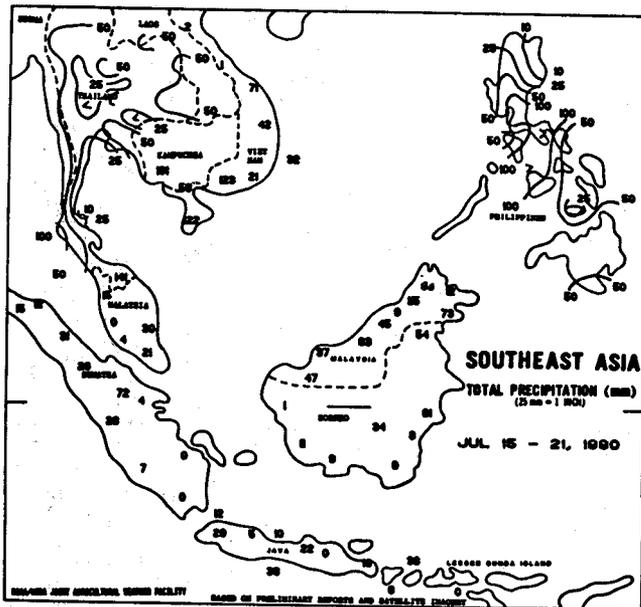
EUROPE ... Scattered moderate to heavy rain (15-30mm, with isolated amounts greater than 30mm) and cooler-than-normal temperatures (weekly average temperatures 1-4 degrees C below normal) eased stress on unirrigated summer crops in sections of Yugoslavia, Romania, and Bulgaria. However, long-term soil moisture deficits persist in many Balkans crop areas. Widespread rain (5-45mm, isolated rainfall greater than 45mm) continued in Poland, benefiting summer crops but slowing maturation and drydown of winter grains. In France and England, mostly dry and warm (weekly average temperatures 1-4 degrees C above normal) weather continued for the second consecutive week, accelerating maturation and early harvest of winter grains. Elsewhere, scattered light to moderate rain (5-20mm) benefitted summer crops in sections of central Italy and northern France, while extreme southern crop areas remained seasonably dry.



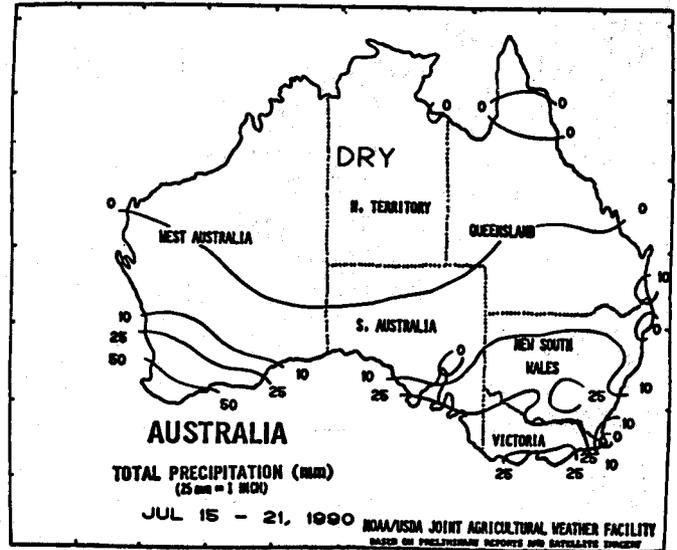
SOUTH ASIA ... Moderate to heavy rain (25-50mm or more) covered a large area of northern Pakistan, as well as most crop areas of northern, central, and eastern India and Bangladesh. The showers in the north improved conditions for planting and establishment, especially in Pakistan, which received its best coverage of the season. Rainfall exceeded 100mm over a large area from western Madhya Pradesh to West Bengal, maintaining ample moisture for vegetative growth but causing some more flooding, especially from southern Bihar eastward. However, rainfall tapered off over flooded regions of the east, with many accumulations below 50mm. In the south, moderate to heavy rain (25-96mm) boosted moisture reserves in eastern Maharashtra and northern Andhra Pradesh but except for southwest coastal areas, rainfall elsewhere ranged from 1 to 22mm, including Gujarat, which continues to receive below-normal rainfall. The areas in the south affected by this season's early drying trend are primary cotton, groundnut, and sorghum areas and need a return to normal rainfall soon to prevent losses in yield potential.



EASTERN ASIA ... Unseasonably hot (daily maximum temperatures 35-40 degrees C and average weekly temperatures 2-4 degrees C above normal) and dry weather covered southeastern China and much of Japan, increasing stress levels for summer crops and livestock. In southeastern China, the dryness continued to allow rapid progress of early rice harvest. In contrast, a slow-moving frontal system brought widespread heavy rain (25-30mm, with scattered amounts greater than 80mm) from the upper Yangtze Valley northeastward to the North China Plain and Korean Peninsula. Torrential rains (100-230mm) likely caused continued flooding in sections of eastern Sichuan, Hubei, Shandong, northern South Korea, and southern North Korea. The rain kept soil moisture at adequate to surplus levels for most summer crops. In Manchuria, scattered rain (10-60mm, with isolated amounts greater than 60mm) and near-normal temperatures favored reproductive to filling corn, in single season rice, and soybean crops.

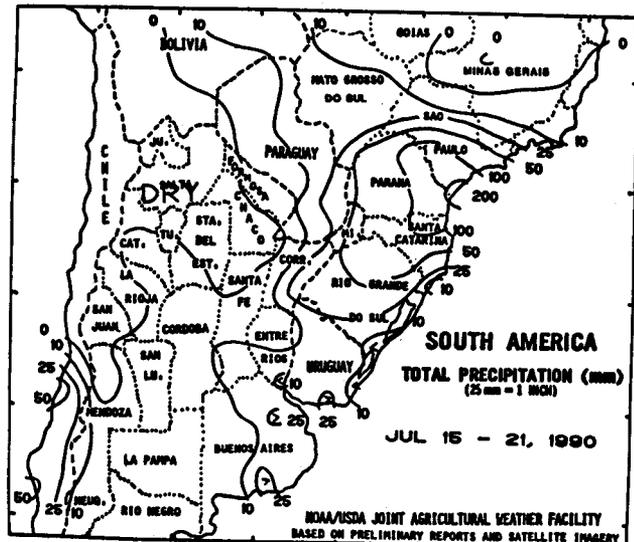


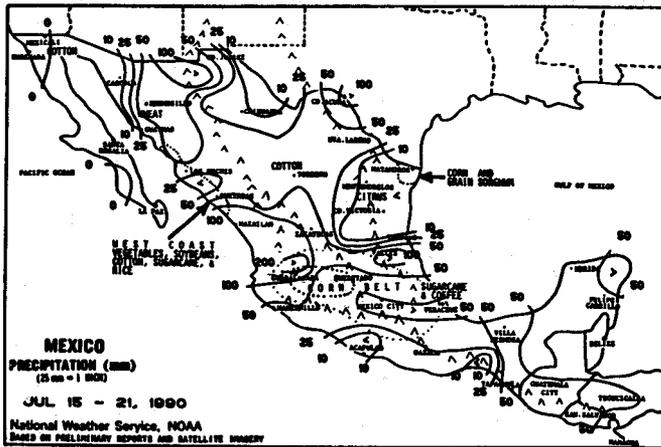
SOUTHEAST ASIA ... Widespread showers (25-50mm or more) returned to most primary Thai grain regions, including the eastern half of the corn belt. Persistent light rain (5-12mm), however, brought little relief to immature crops in the western half of the corn belt following weeks of below-normal rainfall. Weekly temperatures averaged near normal, with daily high temperatures in the middle 30's C maintaining high evaporation rates and hastening crop maturity. In the Philippines, light to moderate showers (25-50mm or more) covered nearly all crop areas, with accumulations of 100mm or more concentrated over southern Luzon and the west-central islands. However, rainfall averaged less than 25mm for the second week over primary grain areas of northern Luzon.



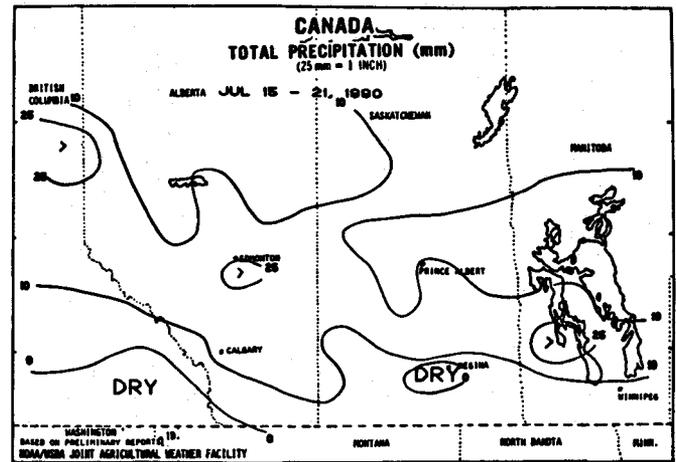
AUSTRALIA ... An area of low pressure brought widespread seasonal rain (10-50mm, with isolated amounts greater than 50mm) to crop areas of Western Australia on the 15th and 16th, spreading to South Australia, Victoria, and southern and central New South Wales on the 17th and 18th. The rainfall combined with above-normal temperatures (1-4 degrees C above normal) to promote off season development of winter grains in Victoria, South Australia, and southern New South Wales. Scattered mostly light rain (less than 10mm) fell over crop areas of southern Queensland. In northeastern Queensland, mostly dry weather favored sugarcane harvest.

SOUTH AMERICA ... In Argentina, showers in eastern Buenos Aires and southern Santa Fe helped wheat planting and establishment, with weekly rainfall ranging from 10 to 42mm. However, light rainfall (less than 10mm) in western Buenos Aires, eastern La Pampa, and Cordoba provided minimal topsoil moisture in the drier western crop areas. Wheat planting is reportedly over 50 percent complete. Seasonally cool weather limited moisture losses, but soil moisture is low in the west. In south-central Brazil, locally heavy rain returned to the south, with weekly rainfall ranging from 50 to 165mm or more in northern Rio Grande do Sul, Santa Catarina, Parana, and southeastern Sao Paulo. Moisture is abundant to excessive for vegetative growth of wheat. Showers diminished further north, with dry weather favoring the coffee harvest in Minas Gerais.





MEXICO ... Substantial rain continued to fall over most crop areas. In the northwest, locally heavy rain (50-138mm) boosted irrigation reservoirs. Widespread showers (25-42mm) in the north-central rangelands improved grazing conditions. Soaking rain (100-226mm) fell along much of the west coast into the northwestern portion of the Southern Plateau corn belt. Widespread showers produced 15-50mm elsewhere in the corn belt, except locally heavier amounts (50-107mm) over scattered areas in the east. Numerous tropical showers covered southern Mexico. The northeast remained the only areas where little or no rain fell. The wet season continues to bring favorable moisture for summer crop development.



CANADA ... Light to moderate showers (4-30mm) fell across the Prairie Provinces, maintaining generally favorable moisture conditions for spring wheat and oilseeds in or nearing reproduction. Rainfall exceeded 10mm over most crop areas of Alberta, as well as portions of northern Saskatchewan and northern Manitoba. Rainfall in the southwest, which totaled 3-23mm, was timely for spring wheat advancing through reproduction, although amounts continued to be lightest in southernmost areas. Weekly temperatures averaged 2-5 degrees C below normal across the region, slowing crop growth.

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

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

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(Continued from front cover)

Southeast throughout the week, while rain showers dotted the **West**.

Numerous low-temperature records for the date were broken early in the week **from the central Plains to Florida** as unseasonably cool air remained **over the Plains and middle and lower Mississippi Valley**. Hot weather continued along the **Pacific Coast States** as temperatures again soared into the hundreds. Temperatures were also abnormally high in the **Northeast**.

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

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

WEEKLY NEWS BULLETIN
SECOND CLASS

SECOND CLASS MAIL
POSTAGE AND FEES PAID
NOAA PERMIT NO.
ISSN 0043 1974