

WEEKLY WEATHER AND CROP BULLETIN

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

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

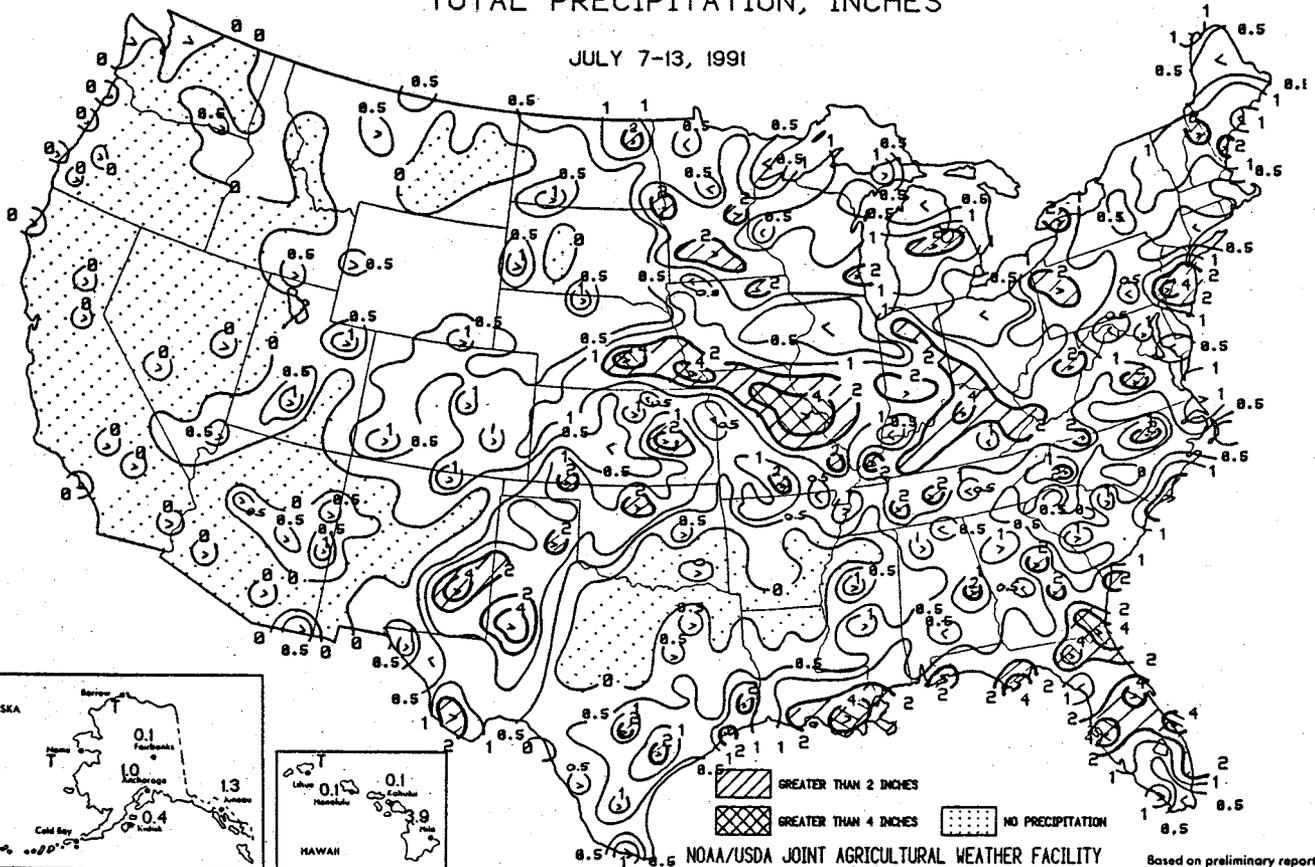
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July 16, 1991

TOTAL PRECIPITATION, INCHES

JULY 7-13, 1991



HIGHLIGHTS

July 7 - 13, 1991

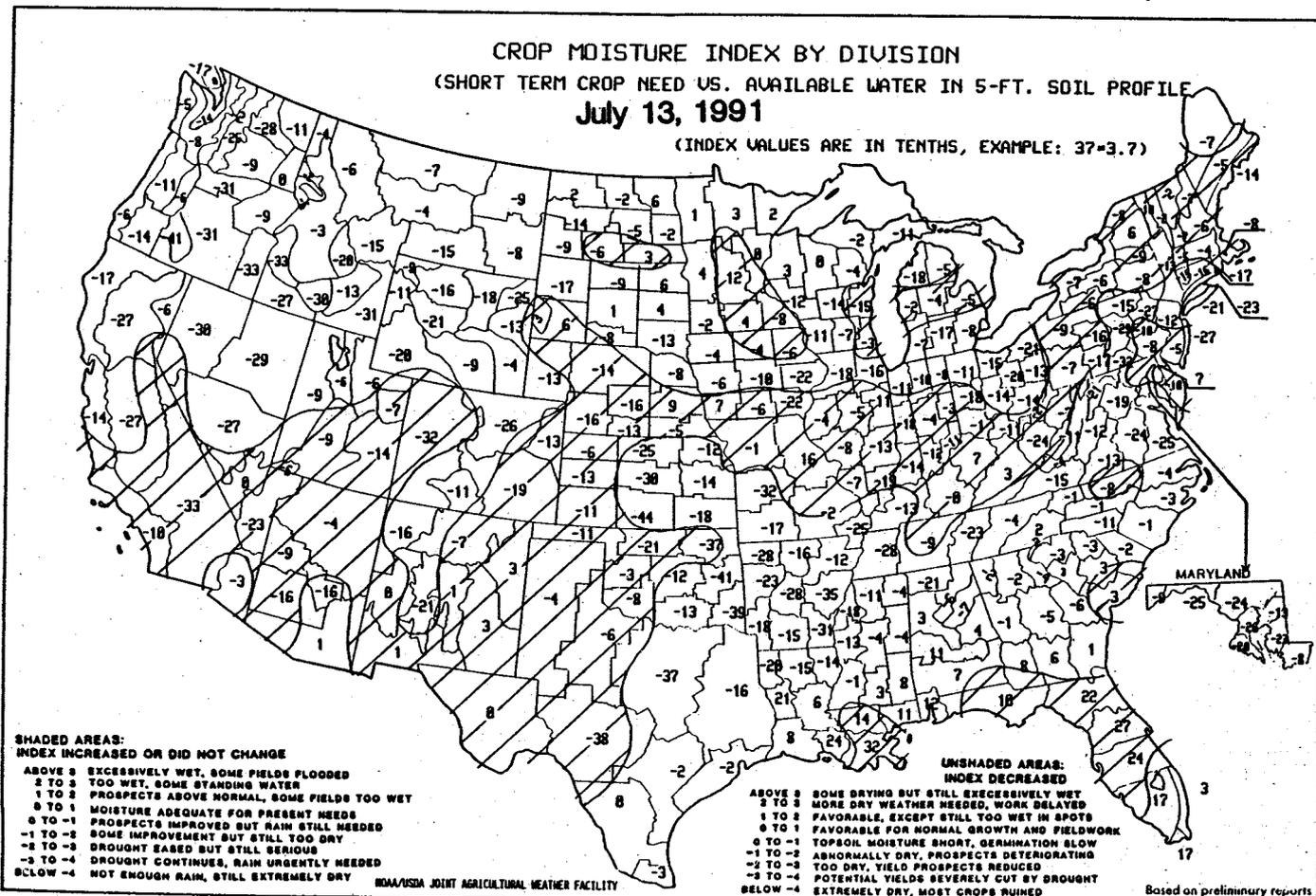
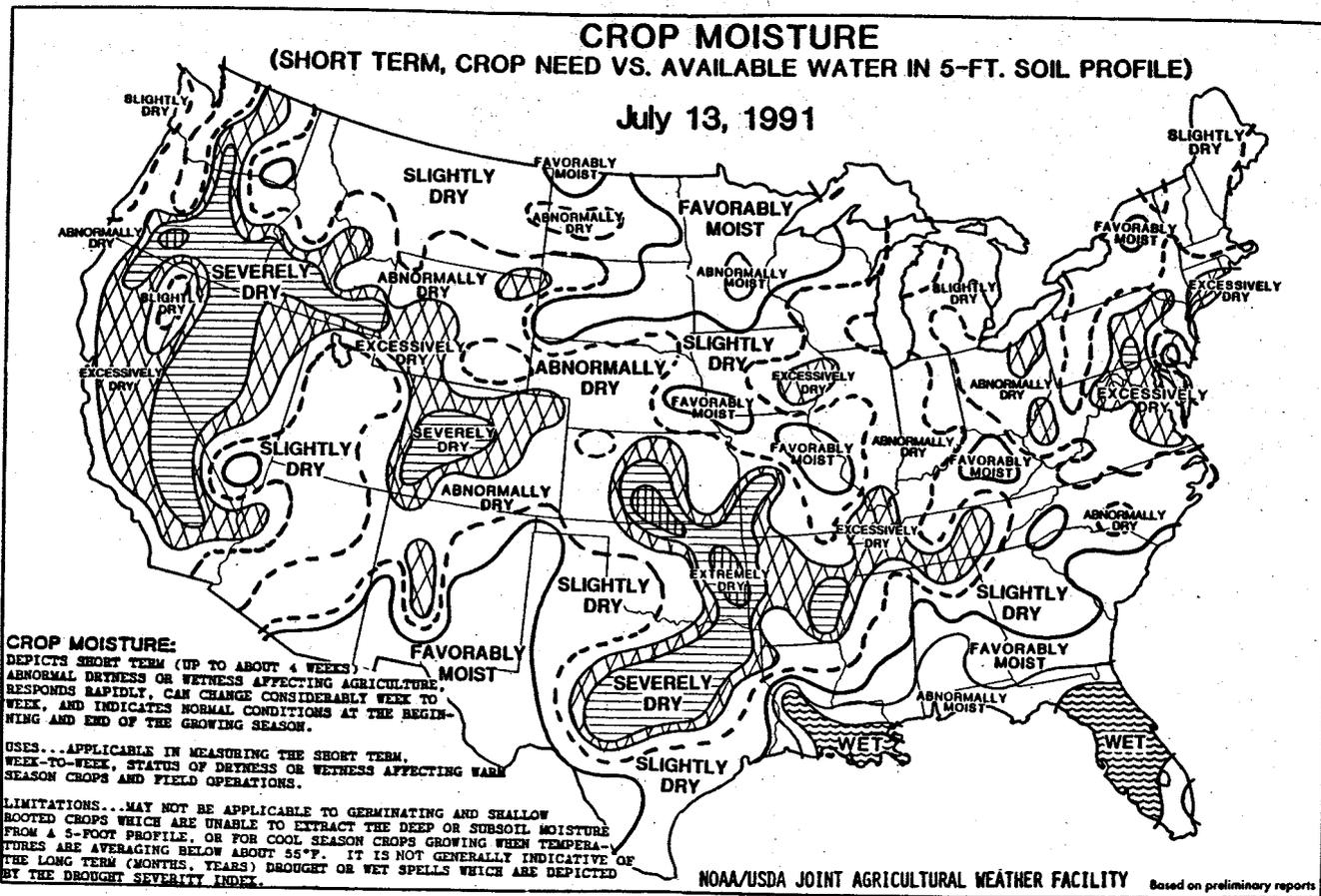
A cold front sagged southward through the **Corn Belt** and the **Northeast**, depositing beneficial moisture and tempering a sultry airmass. Early-week thunderstorms rimmed the **Gulf coast**, then shifted eastward to affect solely **Florida**. Strong late-week storms lashed the **Great Lakes States** and the **southern High Plains**. While **Kansas** simmered in 108° F heat at the week's onset, rainfall topped 4 inches in **New Orleans, LA**, exceeded 5 inches in **Grand Island, NE**, and approached 6 inches near **Frankfort, KY**. Thunderstorm winds reached 105 mph near **Indian River Inlet, DE**. Unusual rainfall dotted the **Southwest**. Flash flooding threatened **southern Nevada** and **central Utah**. In **Los Angeles, CA**, a 0.13-inch rainfall made July 1991 the wettest July since 1886 (0.24 inches). During the midweek period, rain dampened an area from the **central Plains** to the **North Carolina coast**. Nearly 8 inches of

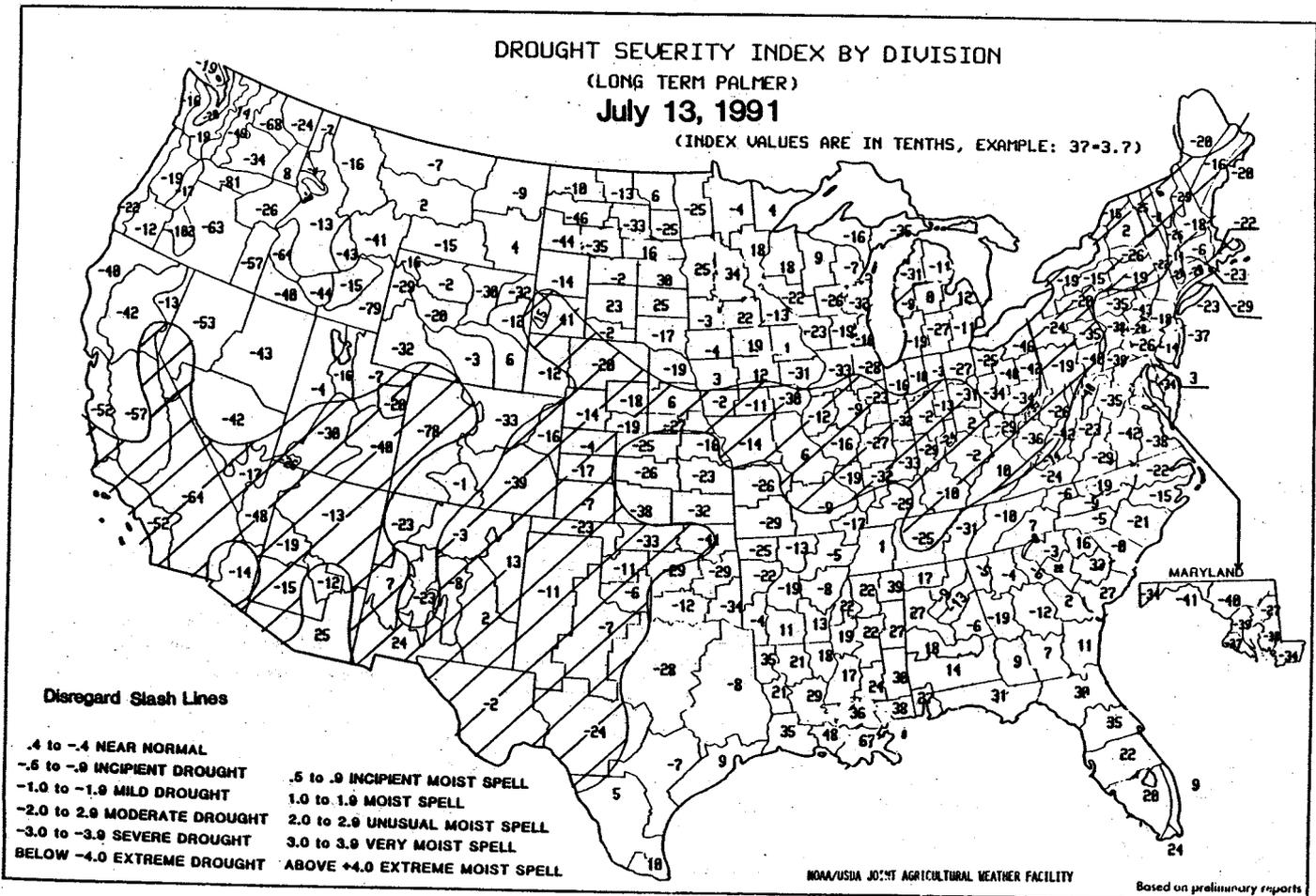
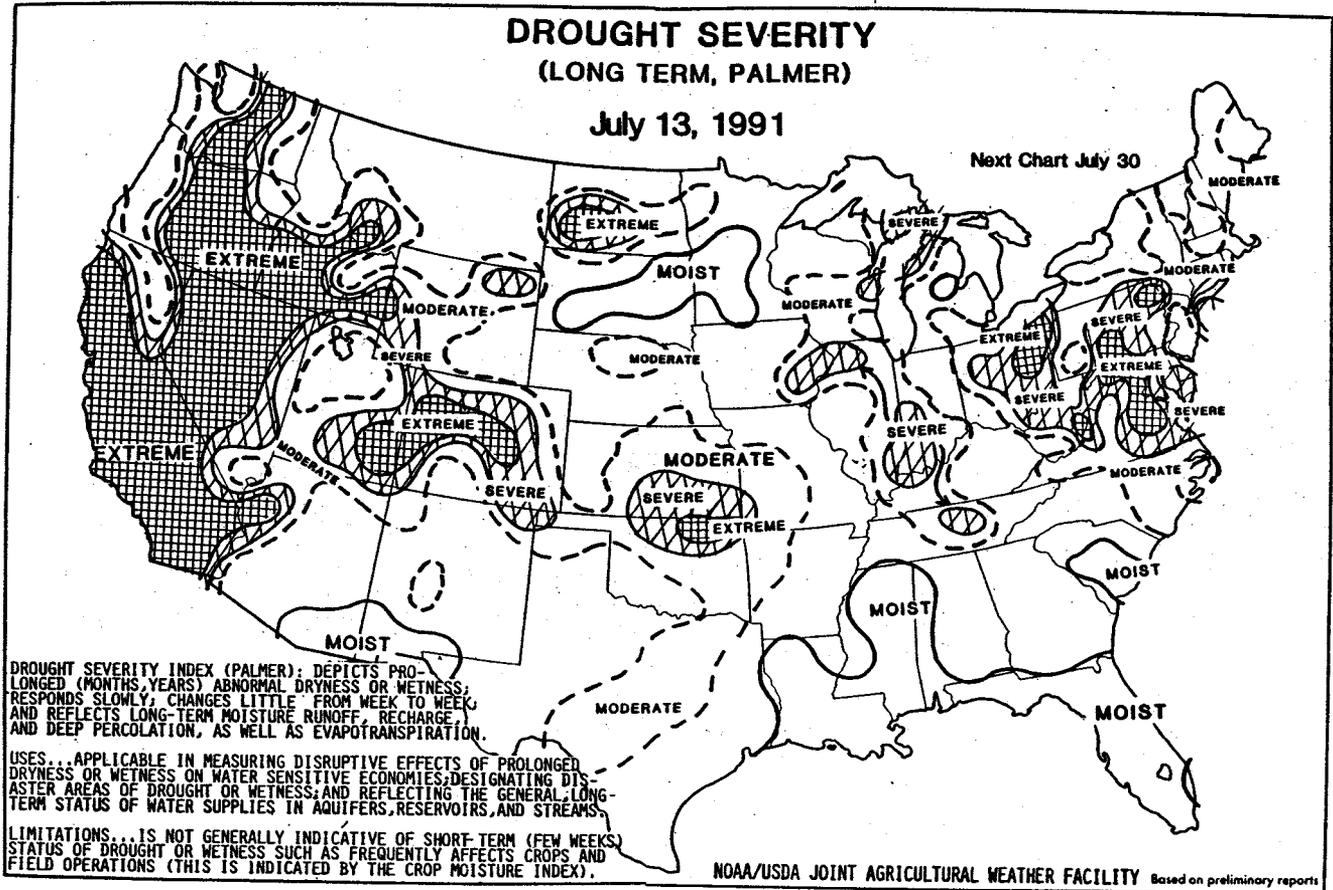
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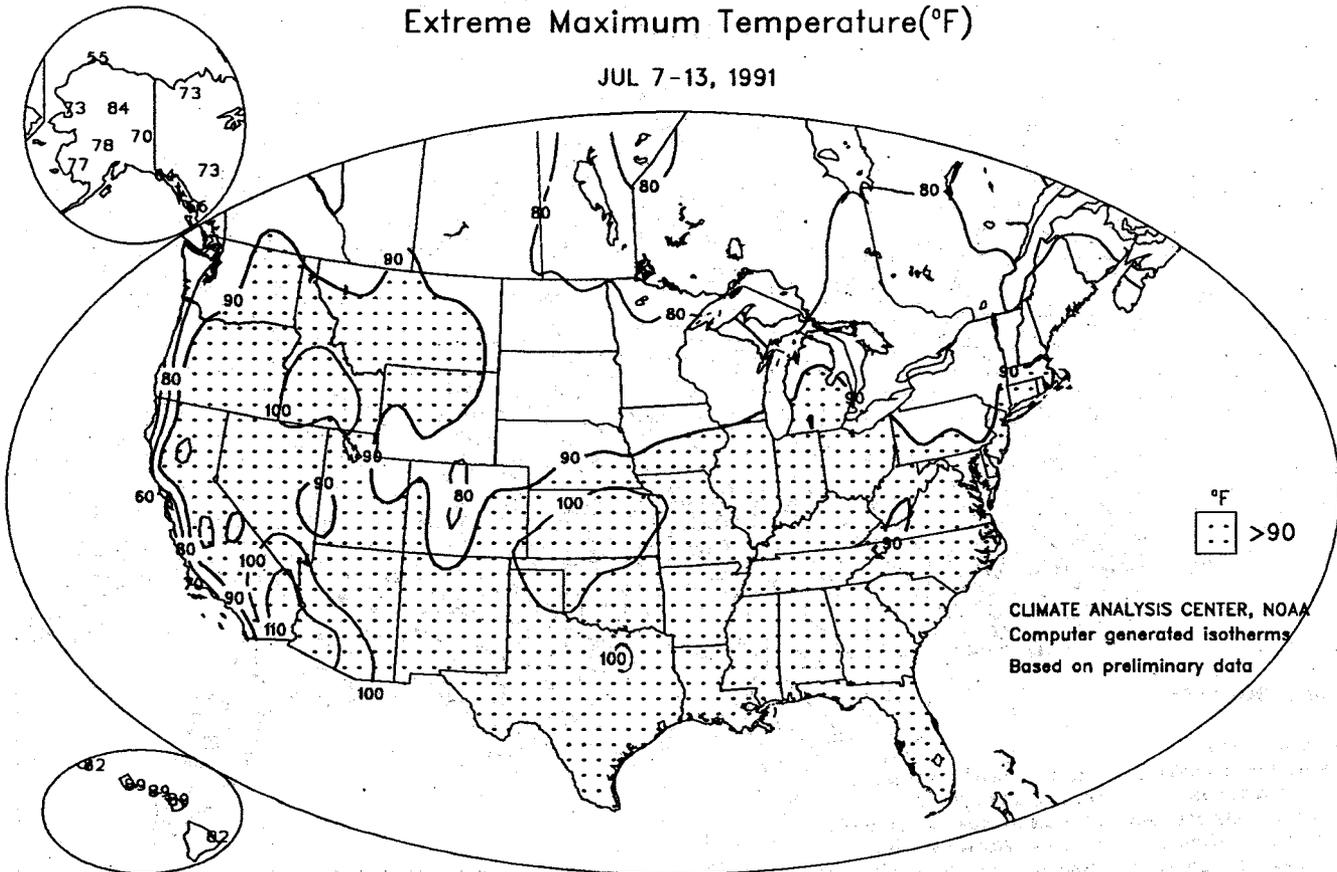
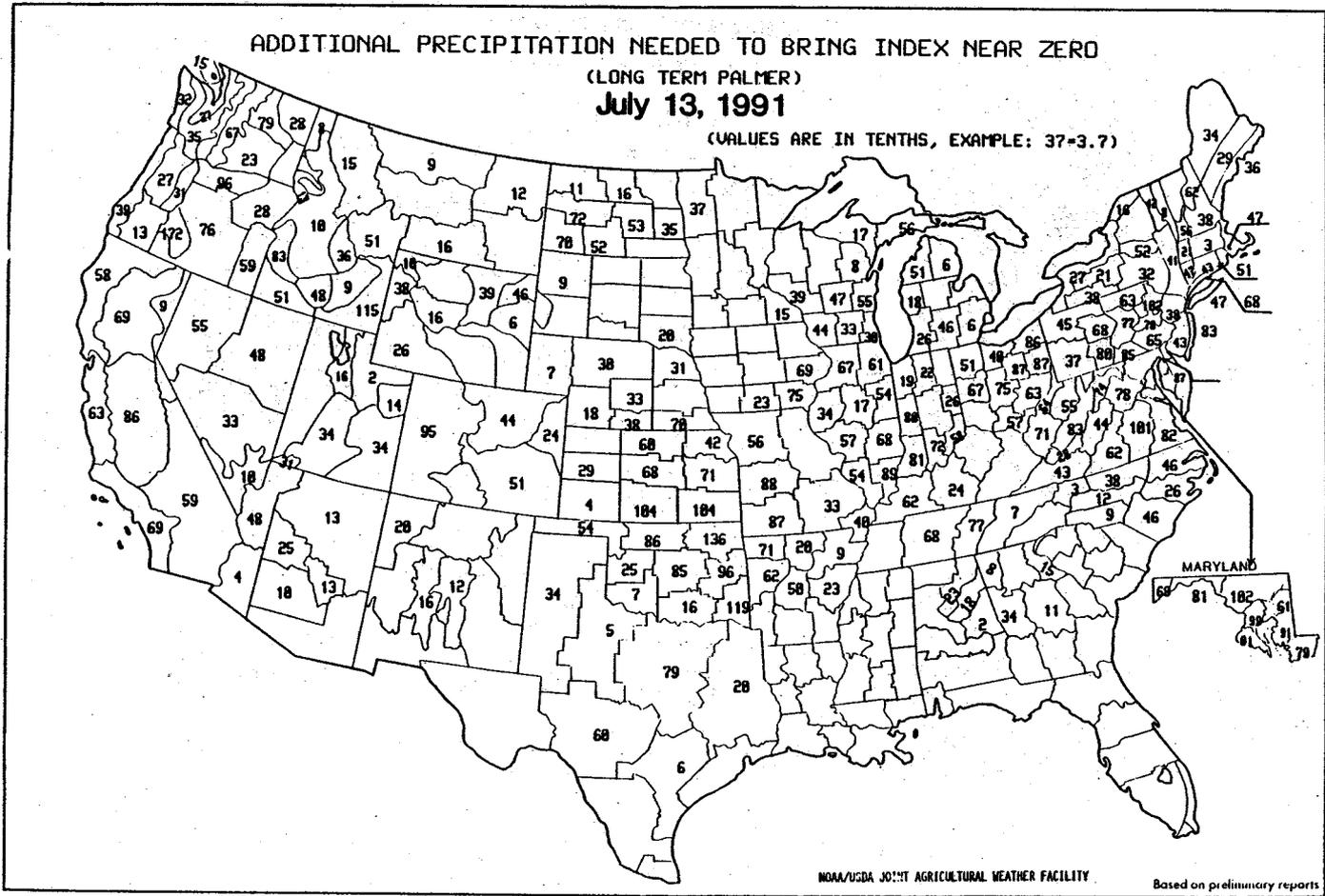
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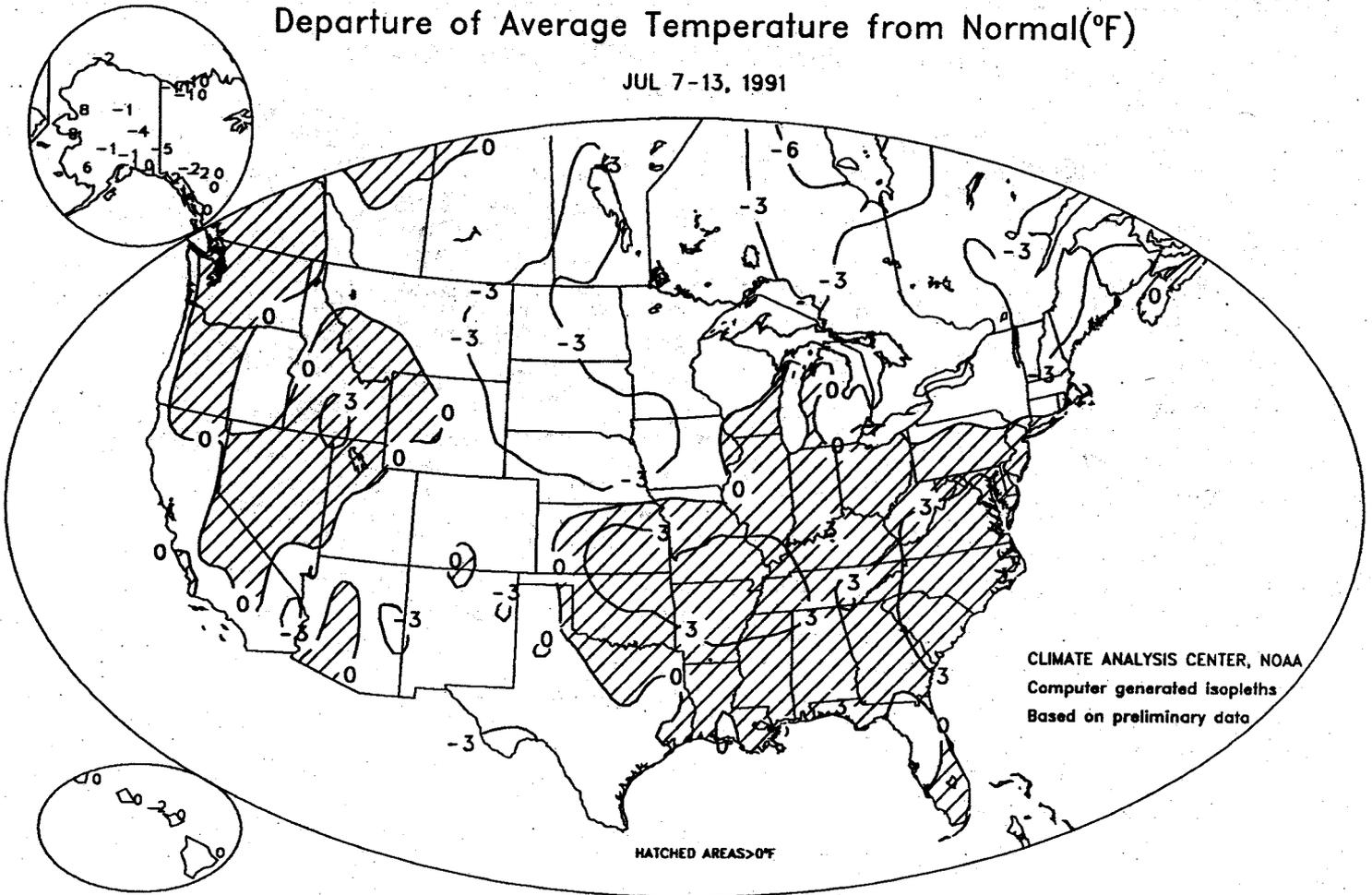






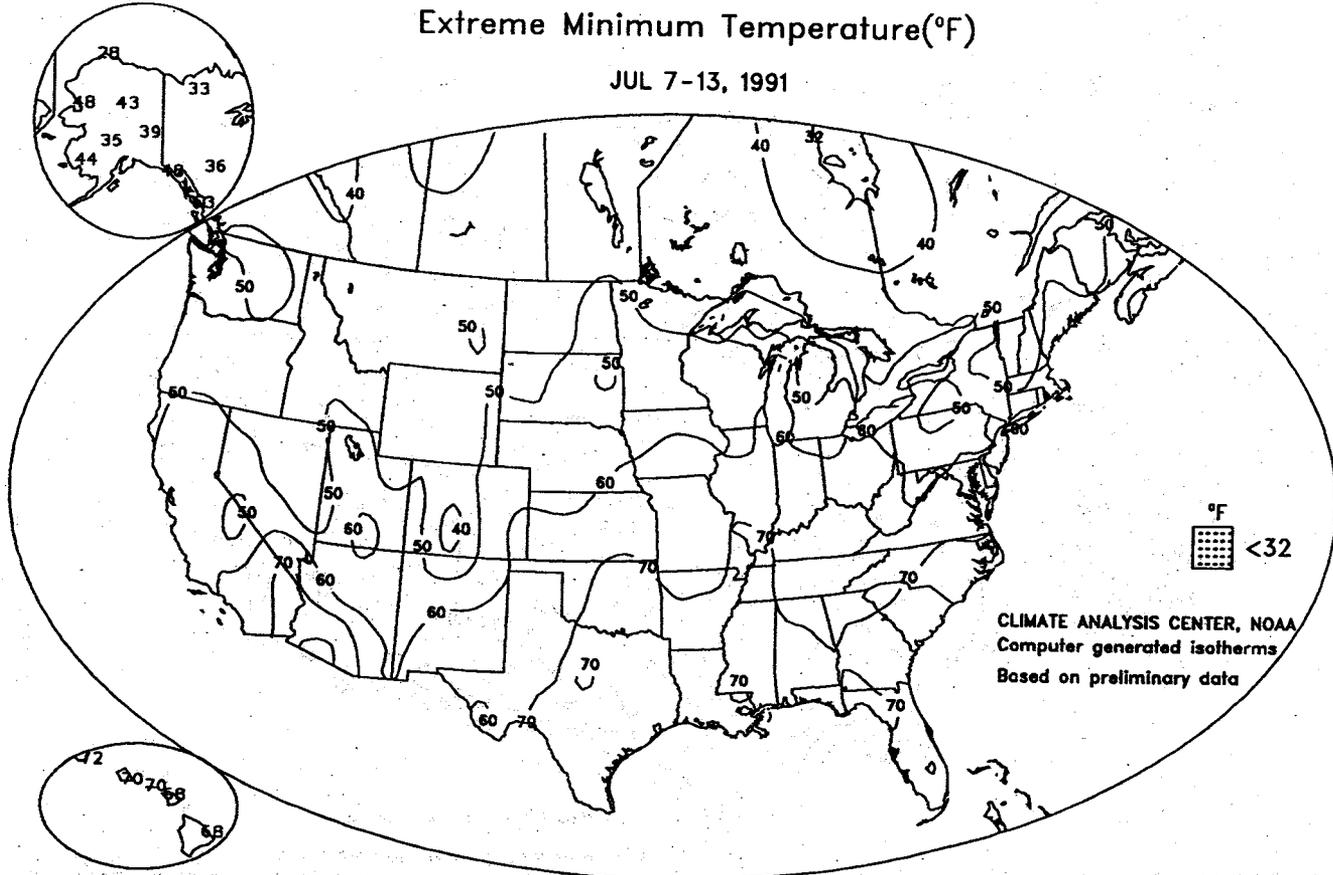
Departure of Average Temperature from Normal(°F)

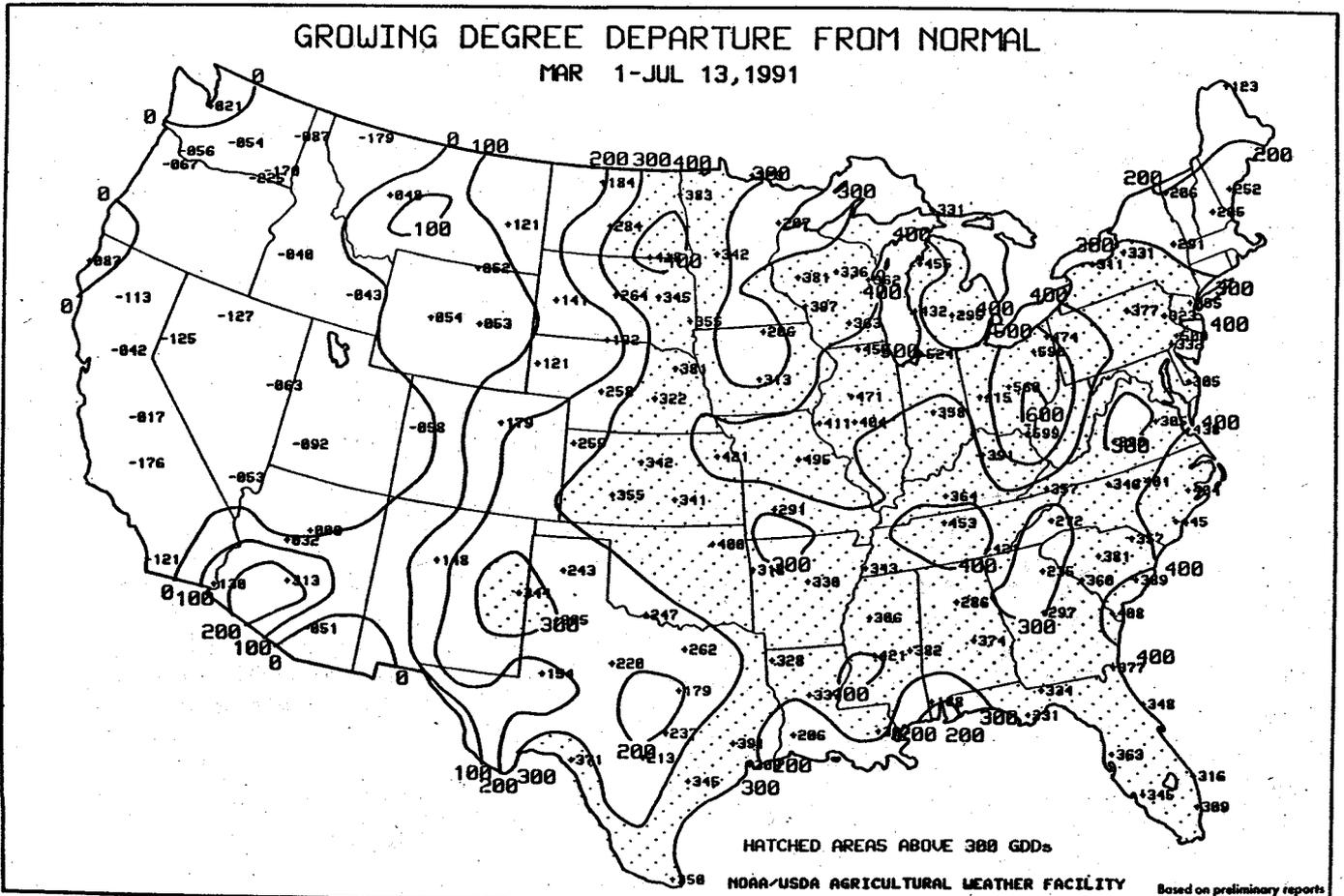
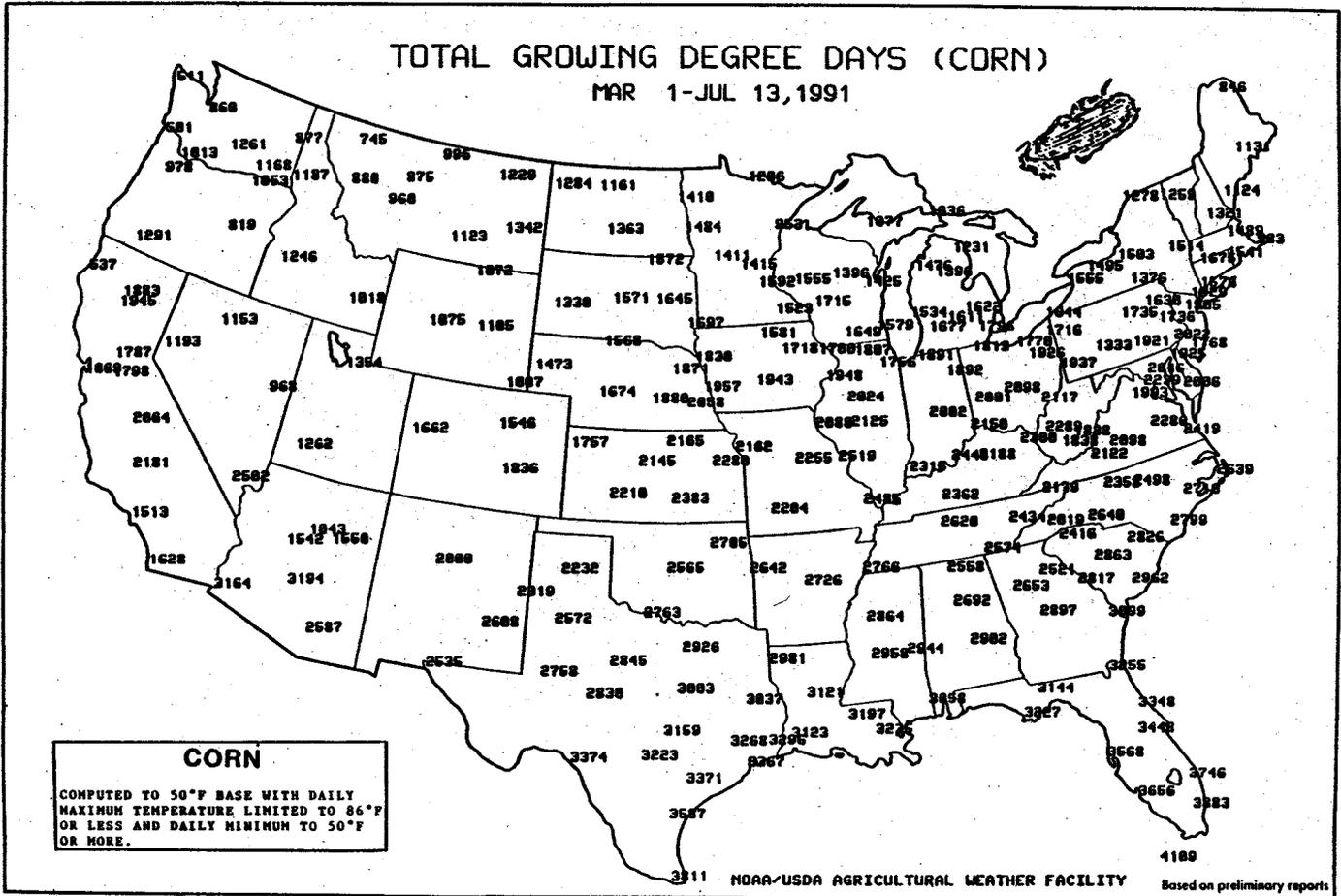
JUL 7-13, 1991



Extreme Minimum Temperature(°F)

JUL 7-13, 1991





National Weather Data for Selected Cities

Weather Data for the Week Ending July 13, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	91	72	94	71	81	1	.5	-.7	.4	8.3	143	34.5	108	96	54	5	5	0	0	2	0	
MOBILE	91	73	96	71	82	0	.7	-1.0	.7	10.5	130	60.3	173	95	55	6	6	0	1	1	1	
MONTGOMERY	91	73	95	71	82	0	1.7	-.6	1.3	10.3	190	48.0	169	97	58	5	5	0	1	1	1	
AK ANCHORAGE	61	52	64	48	57	-2	1.0	-.6	.6	1.9	104	4.0	75	97	69	0	0	0	3	3	1	
BARRON	42	30	56	28	36	-3	T	-.2	T	.1	12	.5	33	97	72	0	7	0	0	0	0	
FAIRBANKS	68	48	79	39	58	-4	.1	-.3	.0	.8	39	4.5	106	84	38	0	0	0	2	2	0	
JUNEAU	59	50	66	49	54	-1	1.4	-.6	.6	5.1	112	29.3	136	97	75	0	0	0	4	2	2	
KODIAK	59	49	67	47	54	0	.4	-.4	.2	9.7	175	48.9	168	99	79	0	0	0	2	4	0	
NOME	69	48	80	46	59	8	T	-.4	T	2.3	118	5.4	110	77	38	0	0	0	1	0	0	
AZ PHOENIX	106	83	110	81	95	2	T	-.1	T	T	0	3.2	113	38	16	7	0	0	0	0	0	
PRESCOTT	90	59	96	57	75	-2	T	-.6	T	.3	16	6.4	84	63	24	3	0	0	0	0	0	
TUCSON	100	72	104	69	86	-1	T	-.5	T	.5	40	3.9	107	56	18	7	0	0	1	0	0	
YUMA	106	80	112	79	93	0	.0	-.0	.0	T	0	1.8	197	48	16	7	0	0	0	0	0	
AR FORT SMITH	98	73	99	72	86	4	.0	-.7	.0	2.0	40	19.8	89	87	35	7	0	0	0	0	0	
LITTLE ROCK	95	76	98	74	86	4	.0	-.8	.0	3.8	73	29.1	103	81	50	7	0	0	0	0	0	
CA BAKERSFIELD	98	70	101	66	84	0	.0	-.0	.0	.0	0	4.6	118	53	22	7	0	0	0	0	0	
EUREKA	60	52	61	50	56	0	.1	-.0	.1	.3	54	16.4	73	94	79	0	0	0	1	0	0	
FRESNO	97	68	103	63	82	2	.0	-.0	.0	T	0	8.5	121	65	23	7	0	0	0	0	0	
LOS ANGELES	72	62	76	61	67	-1	.1	-.1	.1	.1	>1000	8.0	96	90	67	0	0	0	1	0	0	
REDDING	99	65	104	61	82	-1	.0	-.0	.0	.1	12	17.3	70	64	16	7	0	0	0	0	0	
SACRAMENTO	92	56	98	54	74	-1	.0	-.0	.0	.5	392	10.7	100	91	30	5	0	0	0	0	0	
SAN DIEGO	73	63	76	61	68	-1	.0	-.0	.0	T	>1000	10.5	163	88	64	0	0	0	0	0	0	
SAN FRANCISCO	68	54	71	51	61	-1	T	-.0	T	.1	92	11.0	89	92	59	0	0	0	0	0	0	
CO DENVER	85	60	88	53	73	-1	.4	-.1	.1	3.4	143	9.3	104	83	29	0	0	0	3	0	0	
GRAND JUNCTION	90	63	98	56	77	-2	.3	-.3	.2	.6	112	3.5	89	68	21	3	0	0	2	0	0	
PUEBLO	91	60	99	56	75	-2	.8	-.5	.6	3.1	168	5.5	100	87	27	3	0	0	3	1	0	
CT BRIDGEPORT	84	65	93	59	75	1	.2	-.6	.2	2.6	61	18.4	85	79	42	1	0	0	2	0	0	
HARTFORD	84	59	94	51	71	-2	.6	-.1	.6	3.1	67	20.6	90	93	43	1	0	0	1	1	1	
DC WASHINGTON	92	72	99	68	82	3	1.1	.2	1.0	2.8	57	13.9	69	86	39	5	0	0	3	1	1	
FL APALACHICOLA	92	74	95	71	83	2	4.1	2.6	2.5	11.0	145	67.0	268	99	63	7	0	0	3	2	2	
DAYTONA BEACH	90	73	92	72	82	1	1.1	-.1	.5	19.4	221	43.7	191	95	61	5	0	0	5	0	0	
JACKSONVILLE	92	74	96	71	83	1	7.7	6.3	4.0	21.3	257	56.1	220	97	59	5	0	0	5	3	3	
KEY WEST	92	82	93	79	87	2	T	-.8	T	8.4	127	23.4	143	81	60	7	0	0	0	0	0	
MIAMI	92	77	93	74	85	2	2.3	.9	.9	11.2	94	24.8	90	91	56	7	0	0	5	2	2	
ORLANDO	90	74	96	71	82	-1	5.3	3.5	4.1	13.7	130	40.9	163	97	60	4	0	0	5	2	2	
TALLAHASSEE	94	72	97	68	83	2	1.8	-.2	1.2	12.4	123	60.5	175	99	53	7	0	0	4	2	2	
TAMPA	89	73	95	70	81	-1	5.3	3.7	3.7	10.3	126	26.2	120	97	65	2	0	0	4	3	3	
WEST PALM BEACH	93	75	94	72	84	2	2.3	.9	1.2	9.9	93	47.1	169	96	55	7	0	0	6	1	1	
CA ATLANTA	90	72	93	71	81	3	.2	-.9	.2	10.5	198	37.9	131	96	60	4	0	0	1	0	0	
AUGUSTA	94	73	98	72	84	3	1.4	.4	1.0	8.7	154	35.7	140	97	50	7	0	0	2	1	1	
MACON	93	73	96	71	83	2	.2	-.9	.1	6.7	119	36.1	135	97	53	6	0	0	2	1	1	
SAVANNAH	95	74	98	72	85	4	1.0	-.7	.5	8.1	93	40.5	152	96	49	7	0	0	4	1	1	
HI HILO	81	69	83	68	75	0	3.9	2.1	2.3	14.4	154	84.6	124	95	65	0	0	0	7	2	2	
HONOLULU	88	73	89	70	80	1	.1	-.1	.1	.4	4	10.9	82	77	45	0	0	0	1	0	0	
KARULUI	86	70	89	68	78	0	.1	-.0	.1	.1	22	7.9	68	87	54	0	0	0	1	0	0	
LIHUE	83	74	83	72	78	0	T	-.4	T	3.8	156	19.3	84	82	60	0	0	0	1	0	0	
ID BOISE	94	55	103	47	75	0	T	-.1	T	.6	60	5.9	82	54	13	6	0	0	0	0	0	
LEWISTON	88	57	97	49	72	-1	.0	-.1	.0	1.9	112	8.0	106	63	22	2	0	0	0	0	0	
POCATELLO	90	53	102	46	72	1	T	-.1	T	.6	47	9.4	146	71	16	3	0	0	1	0	0	
IL CHICAGO	84	64	94	57	74	1	.4	-.4	.4	1.6	28	16.4	90	89	45	1	0	0	1	0	0	
MOLINE	84	65	94	59	75	0	.2	-1.0	.1	1.6	25	17.1	85	98	54	2	0	0	4	0	0	
PEORIA	84	68	94	63	76	1	.2	-.7	.1	1.7	31	16.1	84	93	57	2	0	0	3	0	0	
QUINCY	83	70	97	66	76	0	2.7	1.8	1.2	3.0	51	20.9	105	84	55	1	0	0	3	2	2	
ROCKFORD	85	64	92	58	74	1	.4	-.7	.4	4.0	62	15.2	78	93	48	1	0	0	2	0	0	
SPRINGFIELD	85	68	95	63	77	0	2.8	2.0	2.4	4.1	82	18.1	97	96	59	1	0	0	4	1	1	
IN EVANSVILLE	88	72	93	69	80	2	.5	-.4	.3	3.2	62	19.2	79	95	58	2	0	0	2	0	0	
FORT WAYNE	85	66	91	62	75	2	.3	-.4	.3	4.2	84	24.0	126	89	50	1	0	0	3	0	0	
INDIANAPOLIS	84	67	93	64	76	1	1.9	.9	1.5	3.1	53	22.0	101	95	57	1	0	0	3	1	1	
SOUTH BEND	84	64	96	57	74	2	.8	.0	.8	1.5	28	16.4	83	93	48	1	0	0	2	1	1	
IA DES MOINES	82	67	84	63	74	4	.5	-.2	.2	3.4	62	23.9	141	91	58	1	0	0	3	0	0	
SIOUX CITY	81	64	83	58	72	-3	.5	-.3	.4	5.9	109	16.1	112	98	62	0	0	0	3	0	0	
WATERLOO	83	62	89	58	72	0	.5	-.6	.5	2.8	44	24.1	135	96	54	0	0	0	1	0	0	
KS CONCORDIA	92	69	103	64	81	2	.1	-.7	.1	4.4	77	12.3	81	82	41	5	0	0	2	0	0	
DODGE CITY	96	69	106	66	82	2	.4	-.3	.2	1.3	31	5.9	50	77	30	5	0	0	3	0	0	
GOODLAND	87	63	92	60	75	-1	1.5	.9	.7	6.9	184	13.2	139	88	42	2	0	0	6	1	1	
TOPEKA	93	71	102	65	82	4	.3	-.7	.2	2.0	29	16.5	91	91	46	5	0	0	4	0	0	
WICHITA	100	73	104	67	87	5	T	-.9	T	2.2	40	9.9	64	76	27	7	0	0	0	0	0	
KY BOWLING GREEN	89	70	91	67	80	2	2.0	.9	1.4	5.1	79	28.5	99	96	61	2	0	0	5	1	1	
LEXINGTON	87	69	93	64	78	2	3.4	2.3	1.9	6.4	100	25.3	96	99	62	1	0	0	3	2	2	
LOUISVILLE	90	72	96	68	81	4	2.7	1.7	2.1	4.2	79	22.7	91	91	52	3	0	0	5	1	1	
LA ALEXANDRIA	91	74	94	73	83	0	.2	-.8	.2	6.4	111	53.5	176	94	56	5	0	0	1	0	0	
BATON ROUGE	92	74	96	70	83	1	1.5	-.1	1.5	9.5	161	50.0	165	95	54	6	0	0	1	1	1	
LAKE CHARLES	90	75	94	74	83	1	.6	-.6	.6	8.8	143	49.5	185	97	59	6	0	0	1	1	1	
NEW ORLEANS	92	75	98	72	84	2	4.7	3.2	3.3	17.9	245	78.4	247	97	56	5	0	0	3	2	2	

Based on 1951-80 normals

Weather Data for the Week Ending July 13, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE	MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME BREVERT	94	74	96	73	84	1	.2	-.7	.2	3.7	73	52.0	202	96	51	7	0	0	0	0
ME CARIBOU	71	54	83	49	62	3	.2	-.7	.1	2.2	47	16.3	95	89	56	0	0	0	1	0
ME PORTLAND	78	57	85	52	68	3	1.2	-.5	.7	2.7	63	24.1	106	92	49	0	0	0	3	0
MD BALTIMORE	91	69	98	63	80	3	.7	-.2	.3	1.8	34	14.6	67	93	38	6	0	0	4	1
MD SALISBURY	88	68	93	64	78	2	.9	.0	.4	5.7	109	23.3	103	99	52	2	0	0	5	0
MA BOSTON	82	65	92	64	74	2	.6	.0	.5	3.5	98	18.4	80	82	41	1	0	0	2	1
MA CHATHAM	74	61	78	59	67	2	.1	.1	.0	2.1	53	17.4	72	92	68	0	0	0	3	0
MI ALPENA	78	52	87	46	65	1	.3	-.4	.2	3.3	74	16.6	113	96	44	0	0	0	3	0
MI DETROIT	83	65	93	61	74	2	.4	-.3	.3	2.7	57	15.4	92	87	41	1	0	0	3	0
MI FLINT	81	60	89	53	70	2	.7	-.1	.5	4.8	110	17.2	112	93	46	0	0	0	3	0
MI GRAND RAPIDS	82	60	91	50	71	1	.8	-.1	.5	3.3	67	18.9	108	95	45	1	0	0	3	0
MI HOUGHTON LAKE	79	55	89	45	67	1	.5	-.2	.3	2.8	64	17.4	122	90	41	0	0	0	2	0
MI LANSING	81	59	91	51	70	2	1.0	-.4	.8	3.9	77	15.9	101	99	51	1	0	0	3	1
MI MARQUETTE	74	52	81	47	63	1	.6	-.2	.4	5.1	96	17.6	90	89	47	0	0	0	3	0
MI MUSKEGON	80	60	88	52	70	1	1.0	-.5	.6	5.8	168	19.4	124	97	48	0	0	0	3	1
MI SAULT ST. MARIE	77	49	83	41	63	0	.1	-.5	.1	2.0	44	12.8	82	95	47	0	0	0	2	0
MN ALEXANDRIA	78	61	82	54	69	1	1.2	-.5	.6	7.4	138	17.3	131	95	50	0	0	0	4	1
MN DULUTH	73	53	81	50	63	2	.2	-.7	.2	6.8	122	19.1	130	95	57	0	0	0	2	0
MN INY' L FALLS	77	53	81	46	65	1	.9	.0	.6	7.8	147	17.2	144	96	47	0	0	0	4	1
MN MINNEAPOLIS	80	63	83	59	72	1	.7	-.1	.5	3.7	67	17.5	124	92	51	0	0	0	4	1
MN ROCHESTER	80	60	84	55	70	1	1.8	-.9	1.5	4.5	84	17.5	121	96	54	0	0	0	4	1
MS GREENWOOD	94	74	98	73	84	2	1.6	.5	1.6	4.8	91	44.0	139	95	49	7	0	0	1	1
MS JACKSON	93	73	96	72	83	1	1.5	.5	1.5	5.9	118	46.7	154	99	55	6	0	0	1	0
MS MERIDIAN	92	72	96	70	82	1	.1	-.2	.1	4.8	83	45.2	143	95	51	5	0	0	1	0
MO CAPE GIRARDEAU	93	75	97	73	84	1	1.0	.2	.5	3.1	62	22.5	89	89	48	6	0	0	2	2
MO COLUMBIA	90	70	97	67	80	2	2.5	1.8	1.9	5.1	101	17.5	86	89	50	4	0	0	3	2
MO KANSAS CITY	92	70	101	63	81	1	.2	-.7	.1	3.6	56	16.3	84	88	46	5	0	0	2	0
MO SAINT LOUIS	91	73	100	69	82	3	4.2	3.3	2.5	5.5	104	18.4	94	87	46	4	0	0	3	3
MO SPRINGFIELD	93	71	95	69	82	4	1.4	.6	1.4	3.0	47	18.8	86	90	42	6	0	0	3	1
MT BILLINGS	83	56	96	50	70	2	T	-.2	T	5.6	228	13.7	145	76	30	1	0	0	0	0
MT GLASGOW	80	55	91	50	68	3	.2	-.3	.2	4.8	145	8.5	131	88	35	1	0	0	1	0
MT GREAT FALLS	81	50	94	45	66	3	.6	-.3	.6	4.7	142	9.9	100	90	32	1	0	0	1	1
MT HAVRE	81	53	95	46	67	2	.6	-.3	.4	1.5	54	7.9	109	89	33	1	0	0	2	0
MT HELENA	86	52	95	49	69	2	.2	.0	.2	3.5	139	7.2	101	75	21	2	0	0	3	0
MT KALISPELL	79	46	88	41	63	2	.3	-.1	.3	3.9	147	10.0	112	96	35	0	0	0	1	0
MT MILES CITY	82	58	94	52	70	2	T	-.4	T	6.5	186	14.3	160	80	41	1	0	0	0	0
MT MISSOULA	86	51	96	46	68	2	T	-.2	T	2.9	130	7.6	97	80	23	2	0	0	0	0
NE GRAND ISLAND	83	62	91	54	72	4	5.5	4.8	3.1	10.7	218	22.1	158	94	53	1	0	0	3	2
NE LINCOLN	85	65	94	61	75	2	2.5	1.8	1.6	7.6	145	16.8	109	93	53	1	0	0	3	2
NE NORFOLK	82	62	90	54	72	3	2.7	-.1	.7	7.2	125	20.8	144	95	51	1	0	0	2	1
NE NORTH PLATTE	85	58	89	52	72	2	.2	-.5	.1	3.0	58	12.9	105	91	42	0	0	0	3	0
NE OMAHA	81	65	89	60	73	5	3.0	2.2	2.5	9.6	171	24.4	149	93	62	0	0	0	4	1
NE SCOTTSBLUFF	85	59	91	56	72	2	.4	-.2	.2	4.4	112	11.2	114	88	37	2	0	0	3	0
NE VALENTINE	82	58	87	49	70	4	1.6	1.1	.9	6.7	166	16.7	161	89	40	0	0	0	3	2
NV ELY	86	49	92	43	67	0	.1	.0	.1	.5	44	5.8	109	73	24	2	0	0	3	0
NV LAS VEGAS	102	75	110	71	88	2	.1	.0	.1	.3	145	2.1	109	43	16	7	0	0	0	0
NV RENO	93	55	98	52	74	5	.0	-.1	.0	.4	93	3.0	68	58	12	6	0	0	0	0
NV WINNEVOCCA	95	52	99	49	74	2	.0	-.1	.0	.5	53	4.5	95	43	9	7	0	0	0	0
NH CONCORD	79	54	89	45	67	2	.9	.2	.8	2.7	64	14.1	77	96	45	0	0	0	1	1
NJ ATLANTIC CITY	89	66	95	61	77	3	2.9	2.1	2.8	4.6	108	20.4	96	99	48	2	0	0	3	0
NM ALBUQUERQUE	91	66	99	59	79	0	T	-.2	T	.7	74	2.7	88	52	21	5	0	0	2	0
NM CLOVIS	85	67	95	64	76	0	3.1	2.4	1.7	5.7	149	7.6	94	81	39	4	0	0	4	2
NM ROSWELL	90	69	99	65	80	1	4.6	4.2	4.4	6.0	371	7.6	195	75	32	5	0	0	2	1
NY ALBANY	82	58	88	50	70	2	.7	.0	.5	2.6	57	15.8	86	95	44	0	0	0	3	0
NY BINGHAMTON	79	58	83	51	68	1	.5	-.4	.3	3.3	66	17.1	90	89	42	0	0	0	2	0
NY BUFFALO	79	59	85	56	69	2	1.8	1.2	1.3	3.6	95	22.7	125	94	48	0	0	0	3	2
NY NEW YORK	87	71	93	67	79	2	.5	-.3	.5	4.1	89	18.8	85	75	41	1	0	0	2	0
NY ROCHESTER	80	59	86	54	70	2	.7	.1	.5	2.6	68	16.7	103	92	45	0	0	0	3	1
NY STRACUSE	79	60	85	53	70	1	.9	-.4	.3	3.2	61	19.0	95	91	46	0	0	0	2	0
NC ASHEVILLE	87	65	89	62	76	3	.7	-.1	.5	7.1	135	24.0	108	99	51	0	0	0	2	0
NC CHARLOTTE	95	73	97	71	84	6	T	-.9	T	2.7	51	25.6	105	88	39	7	0	0	1	0
NC GREENSBORO	92	71	95	68	81	4	.2	-.8	.2	4.0	70	28.0	122	90	46	6	0	0	1	0
NC HATTERAS	89	78	92	74	84	6	T	-.2	T	6.4	100	29.0	109	92	61	2	0	0	0	0
NC NEW BERN	94	75	97	74	85	6	.2	-.3	.2	5.2	65	23.8	89	95	52	7	0	0	2	0
NC RALEIGH	92	72	95	71	82	4	2.7	1.7	2.7	7.0	130	20.4	90	96	49	5	0	0	2	1
NC WILMINGTON	94	74	97	72	84	4	2.7	1.0	2.6	8.4	96	31.9	118	98	53	7	0	0	3	1
ND BISMARCK	82	52	89	42	67	3	.5	.0	.4	3.2	81	9.2	99	95	35	0	0	0	3	0
ND FARGO	79	59	83	52	69	2	.9	.1	.4	7.4	165	15.4	150	94	53	0	0	0	3	0
ND GRAND FORKS	78	58	84	54	68	0	.6	.0	.3	4.3	104	12.6	134	95	53	0	0	0	3	0
ND WILLISTON	79	55	86	48	67	3	.1	-.4	.1	6.9	195	12.0	149	92	39	0	0	0	1	0
OH ABRON-CANTON	86	64	96	62	75	4	.1	-.9	.0	.9	18	12.5	63	92	45	1	0	0	2	0
OH CINCINNATI	86	68	95	65	77	1	2.0	1.0	.8	3.8	64	23.9	103	96	57	1	0	0	4	2
OH CLEVELAND	83	64	95	60	73	1	.5	-.2	.2	2.0	40	17.6	92	92	50	1	0	0	4	0
OH COLUMBUS	85	68	94	63	77	3	.5	-.5	.2	4.6	82	19.5	93	92	54	1	0	0	5	0

Based on 1951-80 normals

Weather Data for the Week Ending July 13, 1991

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT			NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW		
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	84	67	95	62	76	1	1.8	1.0	1.4	4.8	92	24.2	121	93	58	1	0	5	1		
TOLEDO	83	64	91	57	73	1	.3	-.4	-.2	1.9	40	15.3	89	95	53	1	0	2	0		
YOUNGSTOWN	83	56	94	51	70	0	2.3	1.4	1.7	4.6	89	15.4	77	97	49	1	0	2	0		
OK OKLAHOMA CITY	95	74	96	73	84	2	T	-.7	T	5.4	105	16.4	92	81	38	7	0	1	0		
TULSA	97	77	99	72	87	4	-.2	-.7	-.2	3.8	62	14.4	67	77	39	7	0	1	0		
OR ASTORIA	65	51	73	47	58	2	T	-.3	T	1.9	61	35.0	96	97	65	0	0	0	0		
BURNS	87	46	94	40	67	2	-.0	-.1	-.0	.6	81	4.1	74	54	13	2	0	0	0		
MEDFORD	92	56	97	49	74	2	-.0	-.1	-.0	.7	88	9.3	90	75	21	5	0	0	0		
PENDLETON	88	55	97	50	71	1	-.1	-.0	-.1	2.2	269	8.6	128	52	16	1	0	1	0		
PORTLAND	82	57	89	53	69	2	-.0	-.1	-.0	2.3	139	20.6	105	87	40	0	0	0	0		
SALEM	83	52	89	47	67	1	-.0	-.1	-.0	1.6	111	21.2	98	89	33	0	0	0	0		
PA ALLENTOWN	85	62	88	56	73	0	1.7	-.8	1.4	4.3	84	17.9	79	91	49	0	0	2	2		
ERIE	80	61	88	56	70	1	1.7	1.0	1.1	4.2	78	16.0	83	87	49	0	0	3	1		
HARRISBURG	89	66	91	59	77	2	2.4	-.3	-.3	2.1	42	15.3	73	98	36	3	0	4	4		
PHILADELPHIA	88	69	92	67	79	2	3.4	2.5	2.8	6.8	123	20.4	93	90	47	3	0	0	1		
PITTSBURGH	84	64	93	61	74	2	1.9	1.0	1.2	6.6	130	19.9	96	93	48	1	0	3	3		
SCRANTON	84	60	88	53	72	1	-.2	-.6	-.1	2.3	46	13.6	76	82	39	1	0	2	0		
RI PROVIDENCE	82	60	93	54	71	1	-.1	-.1	-.4	1.7	44	22.2	95	82	47	1	0	3	3		
SC CHARLESTON	93	76	97	73	84	4	.7	-.1	-.3	9.6	100	33.0	120	92	56	7	0	0	0		
COLUMBIA	95	74	98	72	85	4	-.0	-.2	-.0	11.4	173	38.0	138	94	45	7	0	4	0		
FLORENCE	94	74	97	71	84	3	-.1	-.2	-.1	6.0	85	23.1	95	96	48	7	0	1	0		
GREENVILLE	94	70	96	68	82	3	T	-.1	-.0	2.0	32	26.8	92	95	42	6	0	0	0		
SD ABERDEEN	80	61	85	51	71	1	-.3	-.3	-.2	5.1	118	17.7	163	92	50	0	0	2	0		
BURON	80	60	86	50	70	2	-.2	-.4	-.1	5.9	135	16.8	148	93	51	0	0	2	0		
RAPID CITY	81	54	85	50	68	2	-.9	-.4	-.5	4.2	98	13.3	123	94	40	0	0	3	3		
SIOUX FALLS	79	61	85	51	70	2	-.7	-.1	-.5	7.0	145	16.9	126	95	55	0	0	1	1		
TN CHATTANOOGA	92	72	95	70	82	4	.6	-.5	-.5	6.1	118	34.9	116	95	51	6	0	3	2		
KNOXVILLE	90	70	92	66	80	2	1.0	-.8	-.8	8.6	148	31.6	114	95	54	4	0	3	3		
MEMPHIS	95	76	97	73	86	4	T	-.9	T	1.5	28	38.7	128	86	43	7	0	1	0		
NASHVILLE	93	71	95	68	82	3	1.8	-.9	-.9	3.9	74	24.9	88	98	52	7	0	5	0		
TX ABILENE	93	73	94	72	83	3	-.0	-.5	-.0	8.3	243	14.4	119	79	34	7	0	0	1		
AMARILLO	90	67	99	63	79	0	1.7	1.1	-.8	4.3	93	8.7	84	82	38	5	0	4	0		
AUSTIN	92	74	93	73	83	3	-.2	-.4	-.8	5.5	142	27.5	163	96	50	6	0	2	1		
BEAUMONT	91	75	94	74	83	3	1.0	-.3	-.7	9.2	127	50.9	184	98	58	6	0	3	1		
BROWNSVILLE	90	77	93	76	83	3	-.3	-.0	-.3	2.4	73	18.8	183	96	61	5	0	1	0		
CORPUS CHRISTI	91	76	93	75	84	4	.4	-.1	-.1	7.5	152	23.0	164	97	60	6	0	2	0		
DEL RIO	93	75	96	73	84	2	-.2	-.4	T	3.9	162	9.5	115	70	37	7	0	0	0		
EL PASO	93	69	100	67	81	2	-.1	-.2	-.1	1.2	103	2.8	104	76	26	6	0	3	0		
FORT WORTH	96	75	99	74	86	0	-.0	-.5	-.0	4.7	144	22.0	125	92	39	7	0	0	0		
GALVESTON	88	78	89	74	83	3	2.1	1.2	1.5	6.9	134	38.4	207	85	63	0	0	3	1		
HOUSTON	94	75	96	73	85	1	-.1	-.7	-.1	7.9	133	37.4	156	95	45	7	0	2	0		
LUBBOCK	92	69	98	65	81	1	1.5	1.0	1.1	6.9	181	10.6	115	85	39	5	0	3	1		
MIDLAND	91	69	97	67	80	2	1.9	1.5	1.0	5.4	254	8.0	124	87	43	5	0	3	2		
SAN ANGELO	93	71	94	69	82	2	-.0	-.3	-.0	4.4	184	9.0	102	87	37	7	0	0	0		
SAN ANTONIO	92	75	94	72	84	1	1.0	-.5	1.0	3.5	91	22.2	149	95	49	6	0	1	1		
VICTORIA	90	75	93	73	83	1	2.1	1.5	1.2	8.6	149	35.9	197	99	58	5	0	2	2		
WACO	97	75	99	74	86	1	T	-.4	T	4.4	131	18.5	106	94	39	7	0	1	0		
WICHITA FALLS	100	76	101	72	88	3	-.0	-.5	-.0	2.8	76	11.4	78	76	28	7	0	0	0		
UT CEDAR CITY	89	58	93	55	73	0	-.2	-.1	-.1	.7	80	4.6	90	64	19	4	0	2	0		
SALT LAKE CITY	92	65	100	62	79	1	-.2	-.0	-.2	1.3	102	9.6	104	64	23	4	0	2	0		
VT BURLINGTON	77	57	83	50	67	2	-.6	-.2	-.3	2.8	55	14.0	85	97	49	0	0	3	0		
VA NORFOLK	90	74	98	70	82	4	1.5	-.4	1.3	7.7	141	25.0	109	94	54	3	0	2	1		
RICHMOND	93	71	99	66	82	4	1.2	-.1	1.0	7.9	141	20.3	93	96	45	6	0	4	1		
ROANOKE	89	68	93	64	79	3	-.4	-.4	-.4	4.8	102	23.4	112	90	46	2	0	2	0		
WA QUILLAYUTE	65	51	75	45	58	1	-.4	-.2	-.2	2.7	68	51.1	93	99	67	0	0	5	0		
SEATTLE-TACOMA	78	54	85	52	66	2	-.0	-.2	-.0	1.3	76	23.0	118	88	41	0	0	0	0		
SPOKANE	85	54	93	49	70	0	T	-.1	T	1.2	79	9.0	97	73	22	1	0	1	0		
YAKIMA	89	55	94	47	72	2	T	-.0	T	2.6	402	5.1	118	80	22	2	0	1	0		
WV BECKLEY	83	65	88	61	74	5	1.1	-.0	-.6	3.1	52	21.1	90	99	56	0	0	3	1		
CHARLESTON	86	68	97	65	77	3	1.2	-.0	-.8	3.7	67	20.4	88	96	51	2	0	4	1		
HUNTINGTON	87	69	97	66	78	3	-.8	-.2	-.5	2.7	50	21.2	93	96	53	3	0	3	0		
PARKERSBURG	83	68	94	65	75	1	-.6	-.3	-.4	5.4	97	21.7	101	96	59	1	0	2	0		
WI GREEN BAY	80	57	87	53	69	1	-.8	-.1	-.5	2.4	54	11.5	80	96	46	0	0	2	1		
LACROSSE	83	62	87	56	73	0	1.2	-.4	-.6	2.0	35	18.5	115	98	47	0	0	3	1		
MADISON	83	61	87	58	72	1	1.4	-.6	1.3	7.0	129	19.9	124	97	53	0	0	3	1		
MILWAUKEE	79	65	87	63	72	2	2.3	1.5	1.8	5.3	104	19.3	116	90	57	0	0	3	2		
WAUSAU	77	57	83	52	67	2	-.9	-.0	-.8	6.6	119	20.2	127	96	50	0	0	3	1		
WY CASPER	85	53	93	50	69	1	T	-.2	T	1.7	102	9.3	127	81	25	1	0	1	0		
CHEYENNE	78	55	83	50	67	1	1.0	-.6	-.7	5.6	198	11.5	140	87	36	0	0	4	1		
LANDER	86	57	94	52	71	1	-.1	-.1	-.1	.8	45	9.7	109	65	22	1	0	1	0		
SHERIDAN	84	52	94	45	68	1	-.1	-.1	-.1	1.1	41	10.1	104	87	33	1	0	2	0		

Based on 1951-80 normals

National Agricultural Summary

July 8 - 14, 1991

HIGHLIGHTS: Hot, dry conditions in the Great Plains depleted available soil moisture, heightening concerns over regional crop prospects. Much needed rains fell in southeastern New Mexico, western Texas, and much of the East, alleviating some crop stress caused by dryness.

SMALL GRAINS: Winter wheat harvest was completed in several States in the Southeast and south-central regions and progressed in the West. Harvest was nearly complete in the Ohio Valley and getting underway in the Pacific Northwest. Winter wheat was 79 percent (%) harvested in the 19 major producing States, compared with 74% last year and 76% for the 5-year average. Harvest advanced 35 points in Michigan to 60% complete, compared with 4% last year and 20% average. Colorado's harvest advanced 34 percentage points to 72% complete, slightly ahead of both last year and the average. Spring wheat development continued to progress at a normal pace with 94% of the crop headed, equal to last year and 1 point ahead of the average. Progress of Idaho's spring wheat was lagging with 71% headed, 22 points behind last year and 21 points behind the average. Condition ratings for spring wheat remained mostly good in each of the 5 major producing States. Durum wheat was beginning to turn color in North Dakota. Harvest of oats progressed in the North Central States, and the crop was beginning to turn color in Montana. Barley harvest got underway in Colorado.

CORN: Seasonally high temperatures, coupled with periodic thundershowers across the eastern half of the Nation, kept corn development ahead of normal. Forty-eight percent of the acreage was silking in the 17 major producing States, compared with 12% last year and 31% average. Progress was most advanced in the eastern Corn Belt, with silking progress 35 points or more ahead of normal in Illinois, Indiana, and Ohio. Crop condition was dropped only slightly from the previous week, with mostly fair condition reported in Pennsylvania, fair to good condition in Indiana, and mostly good condition elsewhere. Harvest was getting underway in Georgia and southern Texas.

SOYBEANS: Bloom advanced well ahead of normal in the Ohio Valley and continued to outpace normal for the 19 major producing States. Forty-four percent of the Nation's soybean acreage was in bloom, compared with 17% last year and 36% average. Bloom advancement was 57 points ahead of normal in Ohio, 27 points ahead in Indiana, and 24 points ahead in Illinois. Bloom was 19 points behind normal in Louisiana as abundant rains continued to fall in the southeastern part of the State. Crop condition rated mostly fair in the Delta and generally good elsewhere. Forty-two percent of Louisiana's crop was rated poor or very poor.

COTTON: Cotton progress remained behind normal; in the far West and Delta regions and ahead of normal in the Atlantic Coast States. Nationwide, 26% of the acreage was setting bolls, 6 points behind last year and 4 points behind the historic average. Seventy-two percent of the acreage was showing squares, 13

points behind last year and 7 points behind the average. Crop condition rated good in the Southwest and southern Atlantic regions, but mostly fair in between. Cotton growth improved with warmer weather in California and treatment for weeds, lygus, and mites continued.

GRAIN SORGHUM: Grain sorghum was 27% headed in the 12 major producing States, 6 points ahead of last year. Over half of the acreage in Louisiana and Texas was headed, while heads were just beginning to form in South Dakota. Crop condition rated generally good in the northern Plains, Illinois, and Texas, fair to good in Kansas, and fair in New Mexico, Oklahoma, and the Mississippi Valley. Chinch bugs and grasshoppers were causing light to moderate damage to sorghum in north-central and eastern Kansas. Sorghum harvest resumed full stride in central, coastal, and southern Texas, with better-than-average yields reported.

RICE: Twenty-two percent of the Nation's rice was headed, 4 points ahead of last year and 3 points ahead of the average. Heading progress advanced to 61% in Texas, 4 points behind the average, and 55% in Louisiana, 12 points ahead of the average. Crop condition rated mostly good in all States except Mississippi, where condition was rated mostly fair with 11% of the acreage rating very poor. Water weevil damage was evident in some California fields. Harvest was beginning in Louisiana and expanded in Texas.

OTHER FIELD CROPS: Potato harvest was well along in North Carolina and getting underway in Oregon. Idaho, Maine, and Washington potatoes were all reported in good condition. First cutting of alfalfa was well along in Idaho, while the third cutting was getting underway in Kansas and Ohio. Peanuts were pegging in 83% of the Georgia acreage, 67% of the Alabama acreage, and 34% of the Oklahoma acreage. Idaho's mint harvest was begun. Sweetpotato planting neared completion in Mississippi. Montana sugarbeets were in mostly good condition. Sunflowers averaged 33 inches high in North Dakota, 6 inches taller than normal for the date, and bloom was beginning. South Dakota sunflower condition rated mostly good. Over half of North Dakota's flax acreage was in bloom. Washington's dry beans were in good condition.

FRUIT AND NUTS: High temperatures in California the first week in July caused sunburn damage to some apple, pear, walnut, and prune orchards. Some grape vineyards also showed signs of bunch drying and sunburn. Apricot, plum, freestone peach, and nectarine harvests progressed in California. Table grape harvest began in the Southern San Joaquin Valley. This season's citrus harvest was complete in Florida and caretakers were cutting cover crops and deep

(Continued to back cover)

CROP PROGRESS

For Week Ending July 14, 1991

	Soybeans % Bloom		
	1991	1990	Avg.
AL	10	22	21
AR	13	2	9
GA	25	29	24
IL	81	19	57
IN	67	21	40
IA	36	24	50
KS	40	25	25
KY	26	8	22
LA	4	23	23
MI	37	4	15
MN	36	26	46
MS	15	18	17
MO	30	6	34
NE	41	11	39
NC	12	12	9
OH	87	18	30
SC	13	10	6
SD	49	14	25
TN	8	8	14

19 States 44 17 36

These 19 States produced 95% of the 1990 soybeans crop.

	Corn % Silking		
	1991	1990	Avg.
CO	19	3	10
GA	98	98	98
IL	90	16	55
IN	69	12	34
IA	29	0	25
KS	70	40	45
KY	64	25	49
MI	30	2	10
MN	7	1	7
MO	68	17	58
NE	47	9	29
NC	89	83	76
OH	60	10	24
PA	18	2	5
SD	14	0	5
TX	81	82	78
WI	25	2	9

17 States 48 12 31

These 17 States produced 95% of the 1990 corn crop.

	Winter Wheat % Harvested		
	1991	1990	Avg.
AR	100	100	99
CA	85	90	95
CO	72	67	65
GA	100	100	100
ID	0	0	0
IL	99	92	97
IN	99	70	79
KS	100	100	97
MI	60	4	20
MO	100	90	97
MT	0	0	5
NE	75	68	71
NC	100	100	97
OH	99	45	60
OK	100	100	100
OR	2	4	3
SD	33	12	28
TX	97	99	98
WA	0	1	3

19 States 79 74 76

These 19 states produced 91% of the 1990 winter wheat crop.

	Rice % Headed		
	1991	1990	Avg.
AR	6	0	2
CA	0	0	0
LA	55	46	43
MS	5	15	14
TX	61	59	65

5 States 22 18 19

These 5 States produced 98% of the 1990 rice crop.

	Spring Wheat % Headed		
	1991	1990	Avg.
ID	71	93	92
MN	100	96	95
MT	83	82	87
ND	96	95	93
SD	100	100	98

5 States 94 94 93

These 5 States produced 97% of the 1990 spring wheat crop.

	Grain Sorghum % Headed		
	1991	1990	Avg.
AR	27	11	34
CO	8	0	0
IL	26	0	16
KS	5	3	3
LA	55	64	58
MS	30	37	39
MO	20	3	21
NE	6	0	3
NM	0	0	NA
OK	12	2	14
SD	2	0	0
TX	69	61	60

12 States 27 20 NA

Excl. States With NA 27 21 23

These 12 States produced 98% of the 1990 grain sorghum crop.

NA - Not Available.

	Cotton % Squaring		
	1991	1990	Avg.
AL	88	94	95
AZ	97	100	99
AR	97	96	97
CA	85	90	96
GA	94	100	97
LA	91	93	90
MS	80	90	92
MO	86	81	95
NM	81	83	87
NC	94	88	76
OK	44	66	42
SC	96	82	79
TN	70	82	88
TX	56	80	65

14 States 72 85 79

These 14 States produced 99% of the 1990 cotton crop.

	Cotton % Setting Bolls		
	1991	1990	Avg.
AL	26	38	41
AZ	68	88	84
AR	35	40	50
CA	5	15	22
GA	51	70	56
LA	35	74	50
MS	30	60	50
MO	16	10	43
NM	39	34	22
NC	55	46	37
OK	6	7	9
SC	63	39	37
TN	14	8	24
TX	23	19	16

14 States 26 32 30

These 14 States produced 99% of the 1990 cotton crop.

CROP CONDITION

PERCENT

For Week Ending July 14, 1991

Soybeans

State	VP	P	F	G	EX
AL	0	0	39	54	7
AR	5	0	52	43	0
GA	0	0	12	85	3
IL	0	1	25	68	6
IN	0	7	30	62	1
IA	0	3	35	56	6
KS	0	5	17	69	9
KY	0	0	26	60	14
LA	12	30	43	15	0
MI	1	4	20	50	25
MN	0	6	34	49	11
MS	0	4	72	22	2
MO	0	12	47	41	0
NE	0	2	14	75	9
NC	0	1	21	75	3
OH	2	8	28	49	13
SC	0	0	26	74	0
SD	0	0	20	56	24
TN	0	4	43	52	1
19 State	1	5	33	55	6
Prev Week	1	5	33	53	8
Prev Year	1	6	35	52	6

Cotton

State	VP	P	F	G	EX
AL	0	2	47	50	1
AZ	0	0	11	78	11
AR	0	0	61	32	7
CA	0	0	10	85	5
GA	0	0	8	60	32
LA	0	0	80	13	7
MS	1	6	53	27	13
MO	0	8	61	31	0
MN	0	0	40	60	0
NC	0	0	11	80	9
OK	0	0	65	35	0
SC	0	22	8	70	0
TN	4	4	55	37	0
TX	3	0	48	47	2
14 State	2	1	45	47	5
Prev Week	2	3	43	47	5
Prev Year	1	7	43	46	3

Spring Wheat

State	VP	P	F	G	EX
ID	0	3	16	56	25
MN	1	11	38	47	3
MT	3	4	14	44	35
ND	0	0	7	84	9
SD	0	0	12	64	24
5 State	1	3	14	67	15
Prev Week	0	3	13	67	17
Prev Year	2	6	24	53	15

Rice

State	VP	P	F	G	EX
AR	0	0	27	67	6
CA	0	0	10	85	5
LA	0	0	48	52	0
MS	11	1	44	42	2
TX	0	0	21	72	7
5 State	1	0	30	65	4
Prev Week	1	0	33	60	6
Prev Year	0	1	32	64	3

Sorghum

State	VP	P	F	G	EX
AR	12	0	69	19	0
CO	2	3	21	68	6
IL	0	0	14	76	10
KS	0	5	44	43	8
LA	0	33	66	1	0
MS	1	13	72	14	0
MO	1	12	56	31	0
NE	0	1	30	62	7
NM	0	0	77	23	0
OK	0	0	75	25	0
SD	0	0	21	68	11
TX	0	0	24	64	12
12 State	0	3	37	52	8
Prev Week	0	4	28	58	10
Prev Year	2	8	43	44	3

Corn

State	VP	P	F	G	EX
CO	0	4	22	54	20
GA	0	0	6	70	24
IL	5	4	30	54	7
IN	1	12	44	41	2
IA	0	3	35	53	9
KS	0	4	27	48	21
KY	0	0	20	56	24
MI	1	6	20	48	25
MN	0	2	33	50	15
MO	1	8	43	46	2
NE	0	2	15	68	15
NC	0	3	32	61	4
OH	2	8	29	47	14
PA	11	22	34	26	7
SD	0	3	17	47	33
TX	0	0	21	59	20
WI	1	3	16	58	22
17 State	1	4	29	53	13
Prev Week	2	4	26	54	14
Prev Year	1	4	20	63	12

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. central, south; little to none north. Temperatures 1 to 4° above normal.

Days suitable for fieldwork 5.6. Soil moisture 4% short, 93% adequate, 3% surplus. Corn 84% silked, 92% 1990, 90% avg.; 41% dented, 49% 1990, 46% avg.; 16% mature, 18% 1990, 22% avg.; 27% fair, 46% good, 27% excellent. Sorghum 99% planted, 100% 1990, 96% avg.; 3% fair, 65% good, 32% excellent. Cotton 88% squaring, 94% 1990, 95% avg.; 26% setting bolls, 38% 1990, 41% avg.; 2% poor, 47% fair, 50% good, 1% excellent. Peanuts 67% pegging, 83% 1990, 73% avg.; 98% good, 2% excellent. Soybeans 97% planted, 100% 1990, 95% avg.; 10% blooming, 22% 1990, 21% avg.; few fields setting pods, 12% 1990, 9% avg.; 39% fair, 54% good, 7% excellent. Pastures 7% fair, 65% good, 28% excellent. Livestock 7% fair, 70% good, 23% excellent.

ALASKA: Rainfall brought relief to drought areas of the Matanuska Valley, varied throughout the Railbelt. Highs 1 to 7° below normal. Lows 7° below normal to 4° above normal. Seasonal precipitation 1.87 in. drier than normal at Fairbanks to 1.06 in. wetter than normal at Homer.

Days suitable for fieldwork 1.0. Topsoil 7% short, 91% adequate, 2% surplus. Subsoil 7% short, 89% adequate, 4% surplus. Small grains heading out; barley 70%, oats 60%, heights averaged 20 in. Barley 20% fair, 70% good, 10% excellent. Crop prospects mostly avg. Crop growth; 18% slow, 73% moderate, 9% rapid. First crop hay harvest 40% complete. Commercial potato heights avg. 13 in.

ARIZONA: Cloudy, humid, warm throughout period. Thunderstorms north, east. South central, southwestern parts of State partly cloudy to sunny with occasional thunderstorms. Precipitation trace to 1.00 in. north, south central. Temperatures 5° below to 3° above normal. Extremes 45°; 95° higher elevations, 63°; 112° desert.

Small grains harvested 99%, 100% 1990, 99% avg. Cotton squaring, further advanced 97%, 100% 1990, 99% avg.; setting bolls 68%, 88% 1990, 84% avg. Cotton 11% fair, 78% good, 11% excellent. Alfalfa harvest moderate to active; good to excellent.

ARKANSAS: Temperatures normal with scattered showers, mainly in northern areas. Temperature 63°; 102°. Rainfall none to 1.64 in.

Days suitable for fieldwork 7. Soil moisture 84% short, 16% adequate. Oats harvested 100%, 100% 1990, 100% avg. Corn planted 100%, 100% 1990, 100% avg. Pasture 4% very poor, 1% poor, 44% fair, 49% good, 2% excellent. Livestock good.

CALIFORNIA: High pressure, hot temperatures gave way to return of low pressure trough off north coast, producing cooling trend. Early week, tropical moisture crept in causing sprinkles south. Fair mild conditions prevailed most of week.

Field activities progressed, open weather. Small grain harvest continued; straw baling, occasional stubble burning followed. Second crop ground preparation active. Rice good growth, behind normal; water weevil damage evident some fields. Cotton growth improved, warmer temperatures. Blooming underway most fields. Fertilization, irrigation, treatment for weeds, lygus, mites ongoing. Dry edible beans growing well; some heat stress. Thinning new crop sugarbeets progressed. Sudan, bermudagrass harvests underway Imperial Valley. Alfalfa harvest seasonally normal. High temperatures, first week July, caused sunburn damage, some apple, pear, walnut, prune orchards. Some grape vineyards showed signs bunch drying, sunburn; younger grape plantings, cane, leaf burn. Irrigation, weed control continued. Almond orchard spraying continued. Table grape harvest began, Southern San Joaquin Valley, Flame Seedless variety. Grape vineyards, treated, mildew, mites, leaf hoppers. Lemon, Valencia orange harvest light, Southern areas coastal regions. Tree removal, replanting continued, freeze damaged citrus orchards. Some early cling peaches harvested, Fresno, Sacramento Valley. Celery heavy supply, variable quality. Iceberg lettuce supply heavy, variable quality. Processing tomato harvest active, westside. Fresh market tomato harvest active. Pasture conditions good higher elevations, poor lower. Water inadequate northern Sacramento Valley grazing areas.

COLORADO: Heavy storms on the 9th left up to 1.00 in. of rain in some sections of the east, over 1.00 in. in Arkansas, Kansas Basins on the 10th. On the 12th, a severe outbreak produced hail, rainfall amounts over 2.00 in. in the Denver area before moving out into the eastern plains. A few thunderstorms lingered on the 13th; 14th was dry, warm statewide. Temperatures for the period within a couple degrees of normal throughout the State.

Days suitable for fieldwork 5.4. Soil moisture 13% very short, 38% short, 46% adequate, 3% surplus. First cutting alfalfa nearly complete, second cutting 17% complete, 14% 1990, 20% avg. Barley 10% harvested, 19% 1990, 17% avg. Winter wheat 72% harvested, 67% 1990, 65% avg. Barley 4% poor, 24% fair, 65% good, 7% excellent; corn 4% poor, 22% fair, 54% good, 20% excellent. Livestock good. Pasture, range feed mostly good.

FLORIDA: Temperatures 2 to 4° above normal western Panhandle, near normal elsewhere. Highs, mid to upper 90s, lows, near 70°. Rainfall heavy some areas, over 7.00 in. Lakeland, Jacksonville; many over 4.00 in. north, central; generally under 2.00 in. elsewhere.

Soil moisture in Panhandle adequate; in Peninsula, adequate to surplus. Tobacco, hay harvest active. Tobacco crop drying slowly. Farmers preparing to harvest corn for grain. Corn, cotton, peanuts, soybeans progressing well. Sugarcane growing rapidly. Pastures mostly good to excellent. Pasture ratings, 10% fair, 30% good, 60% excellent. Cattle mostly good to excellent.

GEORGIA: Scattered thunderstorms most numerous across southern areas. Over 1.00 in., local 2.00 to 4.00 in. Elsewhere rain mostly 0.50 in. or less, local totals near 1.00 in. Temperatures 1 to 3° hotter than normal. Hottest near 90° mountains to upper 90s east central, southern areas. Coolest upper 50s to mid 60s mtns, to mostly upper 60s, low 70s elsewhere.

Days suitable for fieldwork 4.6. Soil moisture 7% short, 73% adequate, 20% surplus. Corn 91% dough, 93% 1990, 88% avg.; 72% dent, 99% 1990, 63% avg.; 25% mature, 29% 1990, 20% avg. Harvest underway. Sorghum 12% fair, 77% good, 11% excellent; 98% planted, 98% 1990, 97% avg. Peanuts 7% fair, 82% good, 11% excellent; 98% blooming, 99% 1990, 97% avg.; 83% pegging, 80% 1990, 81% avg. Soybeans 99% planted, 98% 1990, 98% avg.; 5% setting pods, 8% 1990, 5% avg. Tobacco 52% fair, 48% good; 45% harvested, 38% 1990, 30% avg.; markets open 15th. Hay 2% poor, 10% fair, 78% good, 10% excellent. Pasture 2% fair, 73% good, 25% excellent. Cattle, hogs mostly good.

HAWAII: Warm summer days with light rainfall in the higher elevations, windward areas. Major crops on most islands received irrigation due to dry weather conditions. Winds 5 to 25 mph. Temperatures high 60s to high 80s. Rainfall none to 5.40 in.

Days suitable for fieldwork 7.0. Most crops made good progress with favorable weather. Papaya production remained at low levels.

IDAHO: Temperatures 3° below normal to 4° above normal. Scattered locations north, south central, east received precipitation with Malta receiving most with 0.69 in.

Days suitable for fieldwork 7.0. Soil moisture 3% very short, 23% short, 70% adequate, 4% surplus. Winter wheat good; 23% turning color. Spring wheat good; 2% turning color. Spring barley 10% turning color. Potato good to excellent; 81% over 12" high, 32% closing middles. Alfalfa first cutting 94% harvested, 97% 1990, 95% avg. Livestock good to excellent. Range, pasture 91% of normal.

ILLINOIS: Temperatures normal to 3° below normal across the State. Precipitation generally less than 0.20 in. north, 1.00 to 4.00 in. central, south.

Days suitable for fieldwork 5.00. Soil moisture 61% short, 35% adequate. Corn dough 25%, 1% 1990, 6% avg. Soybeans setting pods 41%, 2% 1990, avg. 17%. Oats 10% poor, 40% fair, 47% good, 3% excellent; ripe 95%, 26% 1990, 60% avg.; harvested 77%, 8% 1990, 28% avg. Pasture as a % of normal, where 100% = normal, was 71%. Alfalfa second cutting 78%, 43% 1990, 64% avg.; third cutting 10%, 0 1990, less than 1% avg.; 1% very poor, 11% poor, 37% fair, 48% good, 3% excellent.

INDIANA: Temperatures within 2° of normal. Lows near 60 to upper 60s, highs 80 to low 87°. Precipitation none to 0.70 in. north, 0.75 to 2.00 in. other areas. Some localized flooding up to 3.66 in.

Days suitable for fieldwork 4.9. Topsoil 53% short, 39% adequate, 8% surplus. Subsoil 51% short, 49% adequate. Corn 70 in. high, 45 in. 1990, 58 in. avg.; dough 6%, 0% 1990, 2% avg. Soybeans 23 in. high, 12 in. 1990, 17 in. avg.; podding 13%, 1% 1990, 5% avg. Oats harvested 63%, 18% 1990, 34% avg. Rye harvested 96%, 47% 1990, 60% avg. Alfalfa hay 2nd cutting 67%, 37% 1990, 51% avg. Other hay 2nd cutting 69%, 37% 1990, 35% avg. Pasture 67% of normal.

IOWA: Temperatures 1 to 3° below normal. Extremes 49°; 91°. Precipitation trace to 6.10 in.; 0.87 avg.

Days suitable for fieldwork 5.6. Topsoil 62% short, 36% adequate, 2% surplus. Subsoil 17% short, 79% adequate, 4% surplus. Winter wheat mostly fair to poor. Hay 14% poor, 38% fair, 43% good, 5% excellent. Pasture 80% of normal. Oats 90% turning color, 87% 1990, 95% avg.; 30% harvested, 4% 1990, 24% avg.; 5% very poor, 20% poor, 44% fair, 31% good. Corn 50% tasseled, 8% 1990, 47% avg. Soybeans 89% cultivated first time, 80% 1990, 94% avg.; 12% setting pods, 0% 1990, 11% avg. Second cutting alfalfa 45% harvested, 27% 1990, 46% avg. Second cutting clover hay 19% harvested, 4% 1990, 14% avg. Winter wheat 86% harvested, 47% 1990, 59% avg. Livestock mostly good.

KANSAS: Temperatures 4 to 6° above normal across State. Rainfall recorded all areas; 0.42 in. south central to 1.24 in. northwest.

Days suitable for fieldwork 6.0. Surface moisture 79% short, 21% adequate. Subsurface moisture 78% short, 22% adequate. Wheat harvest, row crop planting complete. Corn, sorghum, soybeans being stressed by hot, dry weather. Some corn borers, spider mites damaging corn in south central, southwest. Chinch bugs, grasshoppers causing light to moderate damage to sorghum mostly north central, eastern parts of State. Range, pastures have declined; fair statewide. Stockwater, forage adequate except in southwest, central third of State rated short. Second cutting alfalfa about 85% complete; third cutting approximately 10% done.

KENTUCKY: Afternoon highs upper 80s, lower 90s. Overnight lows 60s, lower 70s. Temperatures upper 70s, lower 80s, 2 to 3° above normal. Precipitation between 1.00 to 3.00 in. Dix Dam over 4.50 in.

Days suitable for fieldwork 3.0. Soil moisture 1% very short, 19% short, 56% adequate, 24% surplus. Corn mostly good, growth several weeks ahead of normal. Double crop soybeans received much needed moisture. Some tobacco being topped, 1% very poor, 3% poor, 42% fair, 50% good, 4% excellent. Pastures good to excellent.

LOUISIANA: Temperatures 0.7° below normal to 1.6° above normal. Extremes 68°, 98°. Rainfall 0.01 in., north central, to 3.42 in., southeast.

Days suitable for fieldwork 3.9. Soil moisture 14% short, 51% adequate, 35% surplus. Spring plowing 99%, 100% 1990, 100% avg. Corn 26% poor, 65% fair, 2% good, 7% excellent; 78% dough stage, 88% 1990, 84% avg.; 16% mature, 23% 1990, 16% avg. Hot, dry weather improved cotton. Hay 70% first cutting, 96% 1990, 92% avg. Peaches 61% fair, 39% good; 79% harvested, 76% 1990, 72% avg. Rice 6% ripe, 5% 1990, 3% avg.; 1% harvested, 0% 1990, 0% avg. Sorghum 100% planted, 100% 1990, 100% avg.; 98% emerged, 100% 1990, 100% avg.; 12% turning color, 7% 1990, 10% avg. Soybeans 97% planted, 97% 1990, 97% avg.; 90% emerged, 94% 1990, 93% avg. Sweet potatoes 30% poor, 57% fair, 13% good; 97% planted, 94% 1990, 96% avg.; 0% harvested, 1% 1990, 0% avg. Sugarcane 35% fair, 50% good, 15% excellent. Pastures 6% poor, 8% fair, 20% good, 66% excellent. Livestock 20% fair, 74% good, 6% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation .69 in. Temperature 78°, normal 75.6°. Extremes 51°; 98°.

Days suitable for fieldwork 5.4. Topsoil 16% very short, 42% short, 42% adequate. Subsoil 16% very short, 53% short, 31% adequate. Wheat, rye good, barley fair to good, oats fair. Oats 90% turning, 100% 1990, N/A avg.; 28% harvested, 19% 1990, 18% avg. Field corn 56% silked, 25% 1990, 30% avg.; 8% dough, 6% 1990, 6% avg. Soybeans 31% bloomed, 13% 1990, 11% avg. Sorghum 5% headed, N/A 1990, N/A avg. Potatoes 36% harvested, 5% 1990, 11% avg. Snap Beans 52% harvested, 55% 1990, 47% avg. Other hay second cut 34% complete, 24% 1990, 37% avg. Alfalfa hay second cut 93% complete, 74% 1990, 73% avg.; third cutting 6% complete, 0% 1990, 9% avg. Hay supplies adequate. Pasture very poor.

DELAWARE: Precipitation 1.56 in. Temperature 77.8°, normal 76.3°. Extremes 60°; 93°.

Days suitable for fieldwork 5.8. Topsoil 20% short, 80% adequate. Subsoil 100% adequate. Wheat good condition. Field corn 57% silked, 46% 1990, 42% avg. Potatoes 5% harvested, 10% 1990, 6% avg. Snap Beans 42% harvested, 45% 1990, 32% avg. Other hay second cut 46% complete, 24% 1990, 40% avg. Hay supplies adequate. Pasture excellent.

MICHIGAN: Temperatures 0 to 6° above normal. Extremes 41°; 88°. Precipitation none to 2.48 in. across State.

Days suitable for fieldwork 6. Soil moisture 50% short, 47% adequate, 3% surplus. Corn 30% silked, 2% 1990, 10% avg.; 1% very poor, 6% poor, 20% fair, 48% good, 25% excellent. Soybeans 37% blooming, 4% 1990, 15% avg.; 1% very poor, 4% poor, 20% fair, 50% good, 25% excellent. Winter wheat 60% harvested, 4% 1990, 20% avg. Pasture 75% of normal.

MINNESOTA: Temperatures 2 to 4° below normal. Extremes 40°; 88°. Precipitation 0.50 to 3.00 in. Greatest weekly total 4.32.

Days suitable for fieldwork 4.7. Topsoil 11% short, 65% adequate, 24% surplus. Spring wheat 37% turning ripe, 30% 1990, 37% avg.; 1% swathed, 0% 1990, 5% avg. Oats 67% turning ripe, 40% 1990, 54% avg.; 10% swathed, 2% 1990, 12% avg. Barley 62% turning ripe, 36% 1990, 51% avg.; 2% swathed, 1% 1990, 5% avg. Field corn 56 in. height, 45 in. 1990, 53 in. avg.; 26% tasselling, 3% 1990, 25% avg. Soybeans 16 in. height, 14 in. 1990, 18 in. avg.; 36% blooming, 26% 1990, 46% avg. Winter wheat 4% harvested, 1% 1990, 14% avg. Rye 2% harvested, 1% 1990, 15% avg. Spring wheat 1% very poor, 11% poor, 38% fair, 47% good, 3% excellent. Field corn 2% poor, 33% fair, 50% good, 15% excellent. Soybeans 6% poor, 34% fair, 49% good, 11% excellent. Barley 1% very poor, 10% poor, 34% fair, 49% good, 6% excellent.

MISSISSIPPI: Temperatures 83°, 1.7° above normal. Extremes 66°; 99°. Mostly dry statewide, 0.29 in., 0.85 below normal. Soil temperatures 89°.

Days suitable for fieldwork 5.5, 5.7 1990, 4.3 avg. Soil moisture 3% very short, 45% short, 46% adequate, 3% surplus, 3% excessive. Corn 85% silking, 89% 1990, 86% avg.; 55% dough, 54% 1990, 51% avg.; 33% denting, silage harvest 30%, 8% 1990, 9% avg.; 2% very poor, 10% poor, 55% fair, 33% good. Cotton 80% squaring, 90% 1990, 92% avg.; 30% setting bolls, 60% 1990, 50% avg.; 1% very poor, 6% poor, 53% fair, 27% good, 13% excellent. Rice 5% heading, 15% 1990, 14% avg.; 11% very poor, 1% poor, 44% fair, 42% good, 2% excellent. Sorghum 100% planted, 100% 1990,

100% avg.; 95% emerged, 100% 1990, 100% avg.; 30% heading, 37% 1990, 39% avg.; 1% very poor, 13% poor, 72% fair, 14% good. Soybeans 94% planted, 97% 1990, 98% avg.; 86% emerged, 92% 1990, 84% avg.; 15% blooming, 18% 1990, 17% avg.; 6% podding, 4% poor, 72% fair, 22% good, 2% excellent. Sweet potatoes 96% planted, 100% 1990, 98% avg.; wheat 100% harvested, 100% 1990, 98% avg.; 79% very poor, 8% poor, 7% fair, 6% good. Hay 59% harvested, 54% 1990, 50% avg. Livestock 8% fair, 59% good, 33% excellent. Pasture 90% of normal.

MISSOURI: Temperatures 3° above normal. Rainfall 2.16 in.; varied from 0.50 in. or less in west central, south central, southeastern districts to 2.37 in. northwest, 3.99 in. north central, 5.19 in. northeast, 3.64 in. east central. Some northeastern counties over 7.00 in., some flooding in lowlands.

Days suitable for fieldwork 4.5. Topsoil 47% short, 38% adequate, 15% surplus. Subsoil 44% short, 55% adequate, 1% surplus. Crops, pastures in most of northern half received substantial benefit from rain, southern half needs rain. Corn development 5 days ahead of average, 3 weeks ahead of last year. Corn condition best in northern, east central districts, poorest west central. Double crop soybeans planted 98%, 87% 1990, 95% avg. Sorghum about 30% heading southern districts, 5 to 10% northern districts. Oats harvested 85%, 45% 1990, 82% avg. Alfalfa second crop 76% cut, 54% 1990, 77% avg. Other hay cut 87%, 76% 1990, 85% avg. Pasture 6% very poor, 29% poor, 46% fair, 19% good.

MONTANA: Temperatures 2° above normal southwest to 4° below normal east. Precipitation scattered with some hail. Amounts mostly under 0.50 in.

Days suitable for fieldwork 6.1. Topsoil 28% short, 69% adequate, 3% surplus. Subsoil 24% short, 72% adequate, 4% surplus. Winter wheat ripe 2%, 3% 1990, 12% avg. Winter wheat 2% very poor, 5% poor, 19% fair, 55% good, 19% excellent. Date winter harvest expected to start August 1. Barley turning 10%, 18% 1991, 22% avg. Barley 2% very poor, 4% poor, 11% fair, 48% good, 35% excellent. Oats turning 10%, 13% 1990, 19% avg.; 1% very poor, 3% poor, 15% fair, 60% good, 21% excellent. Sugarbeets 3% very poor, 9% poor, 26% fair, 46% good, 16% excellent. First cutting alfalfa harvested 72%, 86% 1990, 88% avg. Other hay harvested 59%, 72% 1990, 64% avg. Pasture, range feed condition 95%.

NEBRASKA: Temperatures 1° below normals Panhandle to 3 to 5° below normals remainder of the State. Precipitation mid week 0.18 in. southwest to 5.45 in. at Grand Island.

Days suitable for fieldwork 5.5. Topsoil 51% short, 43% adequate, 6% surplus. Subsoil 33% short, 65% adequate, 2% surplus. Wheat 84% ripe, 83% 1990, 90% avg.; 75% harvested, 68% 1990, 71% avg. Corn 2% poor, 15% fair, 68% good, 15% excellent; 47% silked, 9% 1990, 29% avg. Sorghum 1% poor, 30% fair, 62% good, 7% excellent; 6% headed, 0% 1990, 3% avg. Soybean 2% poor, 14% fair, 75% good, 9% excellent; 41% blooming, 11% 1990, 39% avg. Alfalfa 1% very poor, 7% poor, 24% fair, 57% good, 11% excellent; 45% second cutting, 53% 1990, 59% avg. Pasture, range 88% of normal.

NEVADA: Temperatures 2 to 8° above normal. Extremes 36°; 110°. Precipitation none to 0.49. Scattered showers northeast, south interrupted alfalfa harvest temporarily. Second week of above normal temperatures straining already tight irrigation water supplies.

NEW ENGLAND: Precipitation 0.50 to 2.20 in. northern 4 states; 0.10 to 0.60 Connecticut, Rhode Island. Temperatures low to high 60s north, mid 60s to mid 70s south; 1 to 4° below normal. Maximum temperatures mid 70s to mid 90s; minimum temperatures low 40s to high 50s.

Days suitable for fieldwork 6.0. Soil moisture 27% very short, 56% short, 15% adequate, 2% surplus. Grazing availability 21% very short, 51% short, 26% adequate, 2% surplus. Fieldwork 5.5 days ahead of schedule. Maine potatoes good. Rhode Island, Connecticut Valley potatoes good. Maine oats good. Field corn good. Sweet corn good. First cut hay 96% complete, 85% 1990, 89% avg.; fair to good. Second cut hay 24% complete, 14% 1990, 15% avg.; fair to good. Connecticut Valley shade tobacco harvest underway.

NEW JERSEY: Temperatures near normal. Extremes 49°; 95°. Rainfall 0.33 in. north, 2.50 in. central, 2.10 in. south. Heaviest 24 hour total 5.22 in. on 13th, 14th. Estimated soil moisture percent field capacity, 55% north, 56% central, 45% south. Four inch soil temperature 70° north, 74° central, 76° south.

Rainfall extremely varied. Topsoil adequate. Summer vegetables in good supply. Blueberry harvest just past peak. Some soybean fields being planted. Wheat combining active as conditions permit. Early field corn in tassel. Oats well colored. Pasture, hay growth improved.

NEW MEXICO: Wet, low pressure system became stationary over southeastern section of State. System produced rain over most of the eastern half of State, with heavy amounts, flash flooding in the southeast. Some locations more rain than the first 6 months of the year. Temperatures 2 to 3° below normal in the Plains.

Days suitable for fieldwork 6. Soil moisture 50% short, 42% adequate, 8% surplus. Crop conditions: Alfalfa 28% fair, 72% good. Corn 14% fair, 86% good. Irrigated wheat 11% fair, 78% good, 11% excellent. Dryland wheat 20% poor, 40% fair, 40% good. Wheat harvest 96% harvested. Cattle 17% poor, 50% fair, 33% good. Sheep, 20% poor, 45% fair, 35% good. Range, 63% of normal low of 20%, high of 115%

NEW YORK: Rainfall variable. Heaviest in Adirondack Mountains where 1.75 in. fell. Elsewhere between 0.50 to 0.75 in. fell. Temperatures below normal. Extremes 40°; 94°.

Days suitable for fieldwork 5.3. Soil moisture very short to adequate. Welcomed rain fell, most areas needed more to relieve dryness. Pasture 61% of normal. Hay fair to good, wheat mostly good. Second cutting of hay short due to dryness. Clo tim harvest 91% finished, 87% 1990, 78% avg. Early planted corn tasselling. Sweet corn harvest continued.

NORTH CAROLINA: Temperatures above normal across the State. Extremes 56°; 97°. Precipitation none to 2.68 in.

Days suitable for fieldwork 5.8. Soil moisture 2% very short, 31% short, 62% adequate, 5% surplus. Crop condition: Tobacco 1% poor, 13% fair, 80% good, 6% excellent; corn 3% poor, 32% fair, 61% good, 4% excellent; cotton 11% fair, 80% good, 9% excellent; peanuts 19% fair, 75% good, 6% excellent; soybeans 1% poor, 21% fair, 75% good, 3% excellent; hay 2% poor, 27% fair, 69% good, 2% excellent; sweet potatoes 5% fair, 86% good, 9% excellent; pasture 4% poor, 32% fair, 62% good, 2% excellent. Harvested: Irish potatoes 90%, flue cured tobacco 10%; hay second cutting 50%. Cotton squared 94%; setting bolls

55%; Corn silked 89%; soft dough 56%; soybeans blooming 12%; tobacco topped 68%.

NORTH DAKOTA: Temperatures 2° below normal west central, southwest, south central to normal northwest, northeast. Extremes 42° southwest; 89° south central. Precipitation 0.36 in. west central to 1.89 in. northeast.

Days suitable for fieldwork 5.8. Soil moisture above 1990 and avg. Topsoil 3% very short, 23% short, 67% adequate, 7% surplus. Subsoil 2% very short, 40% short, 58% adequate. Spring wheat 19% turning and beyond, 11% 1990, 17% avg.; durum wheat 6% turning and beyond, 5% 1990, 10% avg.; oats 20% turning and beyond, 15% 1990, 24% avg.; barley 33% turning and beyond, 27% 1990, 32% avg.; winter wheat 72% turning and beyond, 64% 1990, 76% avg. Corn 48 in. avg. height, 37 in. 1990, 40 in. avg. Sunflower 33 in. avg. height, 27 in. 1990, 27 in. avg.; 4% bloom or beyond, none 1990, 2% avg. Flax 15 in. avg. height, 14 in. 1990, 12 in. avg.; 56% bloom or beyond, 57% 1990, 46% avg. Potatoes 17 in. avg. height, 17 in. 1990, 17 in. avg.; 85% bloom or beyond, 65% 1990, 67% avg. Soybeans 18 in. avg. height, 16 in. 1990, 16 in. avg.; 76% bloom or beyond, 43% 1990, 39% avg. Dry edible beans 16 in. avg. height, 13 in. 1990, 14 in. avg.; 72% bloom or beyond, 27% 1990, 36% avg. Sugarbeets 15 in. avg. height. Pasture 92% of normal. Alfalfa hay first cutting 85% complete, other hay 56%. Stockwater 4% very short, 33% short, 63% adequate.

OHIO: Temperatures about normal with warmer than average nights compensating for slightly cooler than average days. Cooler temperatures accompanied by scattered rainfall across the State. Southwestern areas were the major beneficiary of thunderstorms which were present on occasion throughout week. Many areas to the north remained rather dry. Precipitation 0.10 in. or less to an inch or more.

Days suitable for fieldwork 5.1. Soil moisture 54% short, 42% adequate, 4% surplus. Corn good. Corn borer, Japanese beetle infestations reported. Corn development 16 leaves fully emerged. Sixty percent of the crop silking compared to 10%, 1990, 24% avg. Winter wheat good; 99% harvested, 45% 1990, 60% avg. Soybeans good; 87% blooming; 32% setting pods. Oats fair; 44% harvested, 0% 1990, 12% avg. Second cutting of alfalfa was 78% complete compared to 30% 1990, 42% avg. Third cutting of alfalfa 7% complete. Earliest third cuttings have started in five years. Second cuttings other hay 34% complete, 10% 1990, 20% avg.

OKLAHOMA: Temperatures 2° below normal Panhandle to 4° above normal northeast. Rainfall none southeast to 1.50 in. west central.

Days suitable for fieldwork 6.5. Topsoil 51% short, 49% adequate. Subsoil 51% short, 49% adequate. Wheat 89% ground plowed, 82% 1990, 75% avg. Cotton 99% up to stand, 90% 1990, 97% avg.; 44% squaring, 66% 1990, 42% avg.; 6% setting bolls, 7% 1990, 9% avg. Sorghum 94% up to stand, 97% 1990, 97% avg.; 12% headed, 2% 1990, 14% avg.

Soybeans 11% flowering, 7% 1990, 11% avg.; 5% setting pods, 0% 1990, 1% avg. Peanuts 34% pegging, 36% 1990, 38% avg.; 5% setting pods, 3% 1990, 5% avg. Corn 73% tasseling, 34% 1990, 71% avg.; 21% milk to soft dough, 14% 1990, 29% avg.; 2% mature, 0% 1990, 2% avg. Cattle good; marketings average, prices mixed.

OREGON: Temperatures within normal range; plus to minus 5° statewide. Cooler coastal locations, warmer east of Cascades. Precipitation minimal except 0.20 to 0.60 in. rain, hail, some

flooding, north central areas. Rest of State very dry.

Soil moisture 33% short, 66% adequate, 1% surplus. Hay cutting continued across State; Crimson clover, tall fescue harvest underway, Marion, Polk, Yamhill County. Early spring barley headed complete, latest plantings in pre boot stage. Russian wheat aphid damaged barley hay fields, Wheeler County. Fruit set fair to good, late berries may not reach market size. Early potato harvest underway, Umatilla County; earliest potato plantings now closing rows, Klamath County. Green pea harvest continued Willamette Valley. Livestock good to excellent; calves gaining well, cows look good, Baker County; Wool Pool shipping went well, Jackson County. Statewide, range, pasture 3% poor, 21% fair, 49% good, 27% excellent.

PENNSYLVANIA: Above normal rainfall for most areas; northeast, Susquehanna Valley got little. Temperature 72°, 3° above normal. Extremes 46°; 93°. Precipitation 1.03 in., 0.13 in. above normal.

Days suitable for fieldwork 6. Soil moisture 85% short, 15% adequate. Corn 18% milk, 2% 1990, 5% avg.; height 44 in., 33 in. 1990, 36 in. avg.; 11% very poor, 22% poor, 34% fair, 26% good, 7% excellent. Soybeans 100% planted, 98% 1990, 97% avg.; 8% very poor, 22% poor, 39% fair, 26% good, 5% excellent. Barley 0% heading or headed, 11% 1990; 2% turning yellow, 18% 1990; 13% ripe, 21% 1990; 85% harvested, 50% 1990. Wheat 0% heading or headed, 15% 1990; 9% turning yellow, 32% 1990; 32% ripe, 40% 1990; 59% harvested, 13% 1990; 8% poor, 36% fair, 43% good, 13% excellent. Oats 19% heading or headed, 51% 1990; 45% turning yellow, 43% 1990; 23% ripe, 5% 1990; 13% harvested, 1% 1990; 11% very poor, 23% poor, 40% fair, 23% good, 3% excellent. Second cutting alfalfa 60% complete, 34% 1990. First cutting clover timothy 100% complete, 89% 1990. Feed from pastures 75% very poor, 24% poor, 1% fair, 0% good. Peach 24% below avg., 60% avg., 16% above avg. Apple 22% below avg., 62% avg., 16% above avg.

PUERTO RICO: Rainfall 0.57 in. was 0.63 in. below normal. Highest 4.07 in. San Sebastian, 2.14 in. at Adjuntas Aes, 1.80 in. at Lares. Highest 24 hour total 2.20 in. at San Sebastian. Divisional temperatures about 81° on the Coast, 76 to 77° in the Interior with mean station temperatures 66.9° at Pico Del Este Luquillo, 83.4° at WSFO San Juan. Extremes 58°; 96°.

SOUTH CAROLINA: Temperatures 4 to 6° above normal. Rainfall 0.20 in. northwest to 1.60 in. south.

Days suitable for fieldwork 6.1. Soil moisture 7% very short, 51% short, 42% adequate. Cotton 22% poor, 8% fair, 70% good; 96% squaring, 82% 1990, 79% avg.; 63% setting bolls, 39% 1990, 37% avg. Snap beans fair to good; 43% harvested, N/A 1990, N/A avg. Sorghum fair to good; 87% planted, 93% 1990, 89% avg. Soybeans 26% fair, 74% good; 13% blooming, 10% 1990, 6% avg.; 1% setting pods, 1% 1990, 0% avg. Barley fair; 94% harvested, 98% 1990, 95% avg. Rye fair to good; 93% harvested, 98% 1990, 96% avg. Tobacco fair to good; 94% topped, 87% 1990, 82% avg.; 30% harvested, 20% 1990, 11% avg. Corn fair to good; 96% silked, 96% 1990, 91% avg.; 80% dough stage, 76% 1990, 54% avg.; 25% matured, 37% 1990, 16% avg. Fall hay fair to good; 26% harvested, 14% 1990, 8% avg. Pastures fair to good.

SOUTH DAKOTA: Temperatures 0 to 5° below normal. Extremes 35°; 100°. Precipitation

widespread, light. Northwest, south central remain drier than normal.

Days suitable for fieldwork 5.4. Topsoil 4% very short, 41% short, 50% adequate, 5% surplus. Subsoil 3% very short, 35% short, 57% adequate, 5% surplus. Rye 12% fair, 59% good, 29% excellent. Oats 3% poor, 14% fair, 62% good, 21% excellent. Barley 2% poor, 16% fair, 60% good, 22% excellent. Sunflowers 13% fair, 67% good, 20% excellent. Livestock 3% fair, 62% good, 35% excellent. Pasture 99% of normal.

TENNESSEE: Temperatures well above normal most sections. Rainfall above normal Middle, below normal elsewhere.

Days suitable for fieldwork 5.1. Soil moisture 23% short, 72% adequate, 5% surplus. Corn 64% tasseling, 46% 1990, 65% avg.; 18% dough stage, 8% 1990, 18% avg.; 4% dent stage, 1% 1990, 4% avg.; 2% very poor, 2% poor, 36% fair, 56% good, 4% excellent. Cotton 70% squaring, 82% 1990, 88% avg., 14% setting bolls, 8% 1990, 24% avg.; 4% very poor, 4% poor, 55% fair, 37% good. Sorghum 12% headed, 8% 1990, 27% avg.; 2% very poor, 2% poor, 30% fair, 63% good, 3% excellent. Soybeans 98% planted, 100% 1990, 98% avg.; 8% blooming, 8% 1990, 14% avg.; 1% setting pods, 1% 1990, 3% avg.; 4% poor, 43% fair, 52% good, 1% excellent. Tobacco 10% topped, 4% 1990, 3% avg.; 2% poor, 35% fair, 62% good, 1% excellent. Alfalfa 84% 2nd cutting; 98% 1990, 86% avg.; hay 9% fair, 81% good, 10% excellent. Pastures 3% fair, 71% good, 26% excellent. Cattle 2% fair, 85% good, 13% excellent.

TEXAS: Weather pattern over State almost stagnant, with high pressure anchored over East Texas, rain making low pressure area parked over West Texas. Weak surface front moved into North, West Texas late in week, helping to increase, focus storms in west. Temperatures reflected rainfall pattern with hot weather over east, not as warm weather in west. Rainfall amounts above normal over High Plains, Trans Pecos region, mostly below normal elsewhere. Driest region was north central, Northeast Texas where almost no rain fell during week. Temperatures below normal over West, South Texas, near normal in Central, East Texas.

Crops: Small grain harvest rapidly winding down last week. Some producers continued wait for slow, soaking rain to replot fields a second time. Corn fields allowed another full week of maturity. Harvest activities beginning to gear up South Texas, some earlier planted fields in coastal regions. Blacklands' fields approaching pre harvest stage. Corn 60% doughed, 59% 1990, 63% avg.; 43% dented, 49% 1990, 48% avg.; 16% mature, 25% 1990, 18% avg.; 4% harvested, 3% 1990, 4% avg. Sorghum harvest resumed full stride for central, coastal, southern producers with better than average yields reported. Blacklands' fields beginning to dry down as pre harvest stage approached; however, yields may be affected by earlier midge infestations. Plains' producers need more rain for dryland fields. Sorghum 56% turning color, 49% 1990, 47% avg.; 36% mature, 28% 1990, 25% avg.; 14% harvested for grain, 12% 1990, 12% avg. Cotton fields across State generally looked good. Many producers continued insect control activities. Plains' producers need more rain, as late dryland planted fields suffered another week heat stress. Defoliation expected to increase in Coastal Bend soon. South Texas producers slowly began harvest as field conditions allowed. Cotton 5% open bolls, 3% 1990, 4% avg. Late planted rice fields continued another week of maturing, most fields began to head. Harvest continued to expand with

good yields reported. Soybean stands along Upper Coast looked excellent, potentially good yields. Producers began spraying for stink bug control. Stands on Blacklands also continued another week of steady progress, some fields began to dry down. Peanut planting winding down in Central, South Texas. Low Plains' producers continued irrigating, cultivating. Later planted fields bloomed, began to peg. Other Field Crops: Oats 84% harvested, 96% 1990, 91% avg. Peanuts 95% planted, 100% 1990, 97% avg. Soybeans 98% planted, 100% 1990, 98% avg. Sunflowers 95% planted, 100% 1990, 94% avg.

Commercial Vegetables: Rio Grande Valley, recent heavy rains allowed fall planting, preplanting operations to continue on limited basis. San Antonio Winter Garden, watermelon harvest virtually complete. Tomato, pepper harvest continued full swing. Preparation for fall planting underway. East Texas, okra, field pea, watermelon, tomato harvest continued, fair yields reported. Stink bugs, red spiders remained a problem to most crops. Land preparations for fall planting continued. High Plains, potato harvest continued full swing, some onion producers began harvesting earlier varieties. Trans Pecos, onion, cabbage harvest basically complete. Cantaloupe harvested began. Pepper plants beginning to fruit. Peach harvest beginning to slow down some areas, yields continued good. Pecan trees continued setting potentially good crop of nuts.

Range and Livestock: Range, pasture conditions for much of State remained fair, excellent shape. However, more moisture needed to stimulate growth, activate recent fertilizer applications. Livestock continued another week good progress. Both cattle, calves continued weight gains from adequate forage supply. Haying operations continued full swing, post harvest fertilizer being applied. Range, pastures 8% poor, 35% fair, 41% good, 16% excellent.

UTAH: Temperature maximums about 2° above normal, minimums about 4° above normal. Precipitation was reported in all divisions of the State, heavy in the southern half to moderate in the northern half.

Days suitable for fieldwork 6.5. Soil moisture 32% short, 68% adequate. Winter wheat 67% turned color, 91% 1990, 87% avg.; 23% ripe, 49% 1990, 49% avg.; 5% harvested, 15% 1990, 15% avg. Spring wheat 49% turned color, 65% 1990, 73% avg.; 15% ripe, 31% 1990, 19% avg. Barley 54% turned, 71% 1990, 78% avg.; 17% ripe, 25% 1990, 31% avg. Oats 67% headed, 82% 1990, 88% avg.; 17% turned, 32% 1990, 35% avg. Corn 24 in. high, 36 in. 1990, 44 in. avg. Alfalfa second cutting 12% complete, 42% 1990, 30% avg. Other hay harvest continued at normal pace. Pasture, range mostly fair to good. Stockwater supply 51% short, 49% adequate. Hay, roughage supplies 19% short, 66% adequate, 15% surplus.

VIRGINIA: Temperatures about 4° above normal. Extremes 58°; 100°. Scattered thunderstorms brought an average of 0.8 in. north to 0.1 in. central areas.

Days suitable for fieldwork 5.5. Topsoil 16% very short, 51% short, 28% adequate, 5% surplus. Corn silked 41%, 34% 1990, 31% avg.; dough 16%, 12% 1990, 6% avg.; 8% very poor, 15% poor, 42% fair, 28% good, 7% excellent. Soybeans 99% planted, 96% 1990, 90% avg.; bloomed 9%, 12% 1990, 12% avg.; 7% very poor, 33% poor, 44% fair, 15% good, 1% excellent. Wheat harvested 97%, 94% 1990, 89% avg. Oats 94% harvested, 95% 1990, 81% avg. Flue tobacco harvested 2%, 3%

1990, 3% avg. All tobacco 36% fair, 50% good, 14% excellent. Peanuts 40% fair, 60% good. Pasture 7% very poor, 28% poor, 41% fair, 14% good, 10% excellent. Alfalfa 9% very poor, 4% poor, 31% fair, 43% good, 13% excellent. Other hay 9% very poor, 15% poor, 36% fair, 27% good, 13% excellent. Livestock mostly good.

WASHINGTON: Temperatures 3° above normal to 4° below normal east; 4° above normal to 3° below normal west. Precipitation none to 0.05 in. east; none west.

Days suitable for fieldwork 7.0. Soil moisture 51% short, 30% adequate, 19% surplus. Hay, other roughage 12% short, 70% adequate, 18% surplus. Range, pasture 42% poor, 6% fair, 28% good, 24% excellent. Winter wheat 77% fair, 20% good, 3% excellent. Spring wheat 70% fair, 24% good, 6% excellent. Barley 45% fair, 44% good, 11% excellent. Potato 100% good. Dry bean 100% good. Corn 100% good. Alfalfa hay, 1st cutting 98%. Alfalfa hay, 2nd cutting 41%. Cool spring has delayed harvest on wheat, barley. Crops maturing rapidly. Hay operations picking up on second cutting alfalfa. Livestock good summer range, pastures.

WEST VIRGINIA: Temperature 74°. Extremes 54°; 93°. Precipitation 1.12 in.

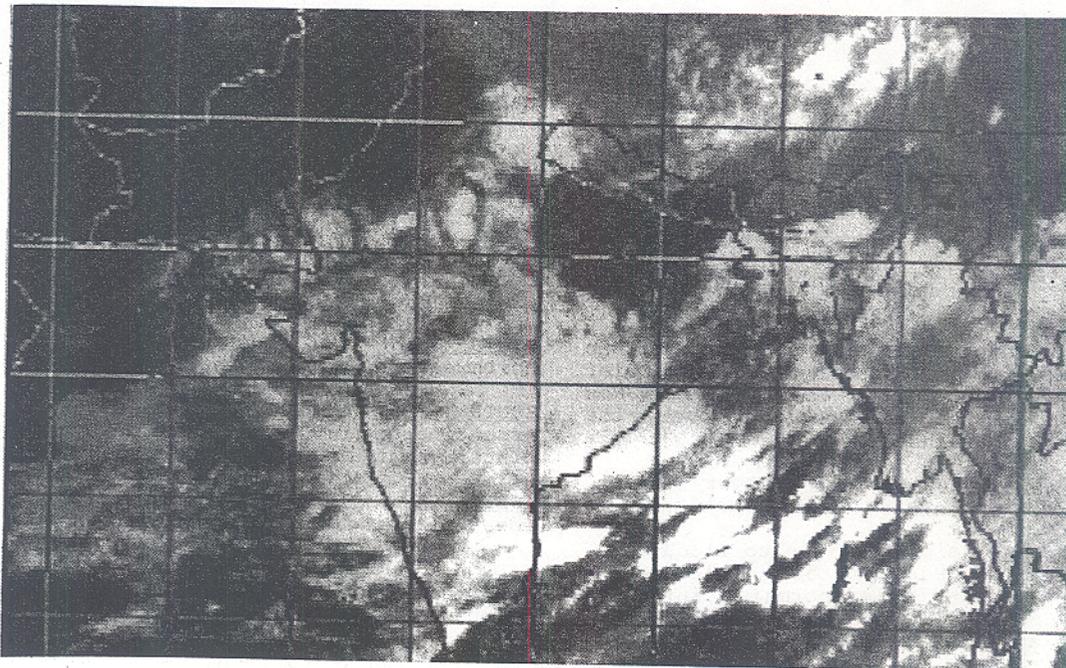
Days suitable for fieldwork 5.0. Soil moisture 30% very short, 53% short, 17% adequate. Wheat good; 81% harvested. Corn 4% very poor, 4% poor, 51% fair, 41% good. Oats good; 97% jointed, 88% headed. Tobacco, fair. Hay, 10% very poor, 15% poor, 68% fair, 7% good; 93% first cutting, 15% second cutting. Pastures, 26% very poor, 23% poor, 32% fair, 19% good; 65% of normal. Cattle, good. Sheep, good.

WISCONSIN: Temperature 68°, 3° above normal. Extremes 40°; 93°. Precipitation 0.50 to 1.50 in.

Days suitable for fieldwork 6.3. Soil moisture 47% short, 48% adequate, 5% surplus. Pasture 75% of normal, 86% 1990, 63% avg. General condition of crops 1% very poor, 1% poor, 19% fair, 67% good, 12% excellent. Winter wheat 5% very poor, 7% poor, 24% fair, 55% good, 9% excellent. Corn 1% very poor, 3% poor, 16% fair, 58% good, 22% excellent; height 60 in., 38 in. 1990, 49 in. avg.; silked 25%, 2% 1990, 9% avg. Soybean 2% very poor, 16% fair, 67% good, 15% excellent. Second crop hay 32% harvested, 22% 1990, 23% avg. Winter wheat harvested for grain 20%, 1% 1990, 12% avg.

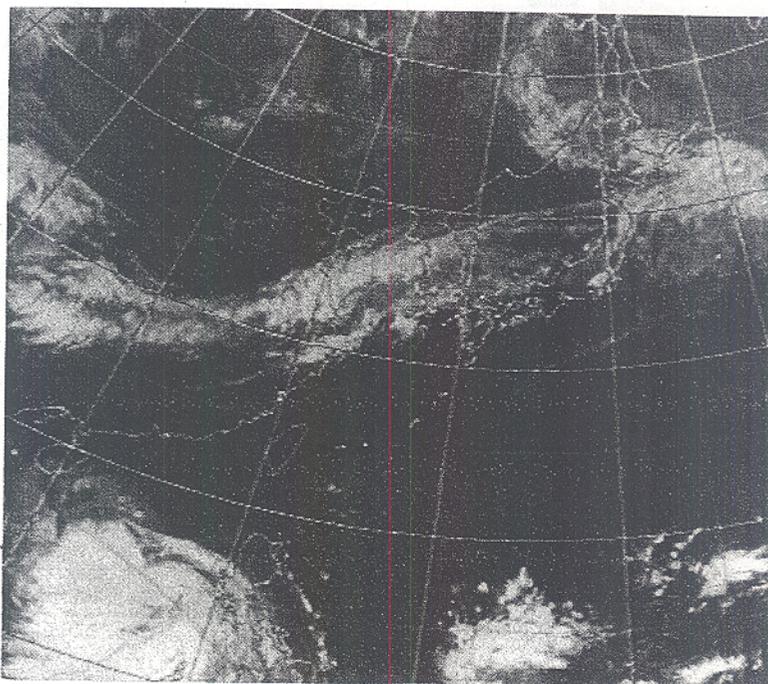
WYOMING: Temperatures mostly above normal. Precipitation mostly below normal.

Days suitable for fieldwork 6.0. Topsoil 33% short, 67% adequate. Winter wheat 35% headed, 20% 1990, 15% avg.; 50% turning color, 55% 1990, 55% avg.; 15% mature, 25% 1990, 30% avg.; 0% harvested, 0% 1990, 0% avg. Barley 10% jointed; 15% boot, 10% 1990, 10% avg.; 60% headed, 40% 1990, 45% avg.; 15% turning color, 40% 1990, 35% avg.; 0% mature, 10% 1990, 10% avg. Spring wheat 5% jointed; 2% boot, 0% 1990, 10% avg.; 55% headed, 70% 1990, 55% avg.; 20% turning color, 25% 1990, 25% avg.; 0% mature, 5% 1990, 10% avg. Oats 5% jointed; 25% boot, 15% 1990, 20% avg.; 60% headed, 65% 1990, 60% avg.; 10% turning color, 15% 1990, 15% avg.; 0% mature, 5% 1990, 5% avg. First cutting alfalfa 80% complete, 75% 1990, 85% avg. Other hay 40% harvested, 30% 1990, 40% avg. Dry beans 20% in bloom, 20% 1990, 20% avg. Potatoes 30% in bloom, 75% 1990, 30% avg. Corn 0% tasseled, 10% 1990. Range, pasture good to excellent. Stockwater 13% short, 87% adequate.



MONSOON FINALLY SPREADS NORTHWARD

After stalling for several weeks, the southwest monsoon finally moved northward during mid-July, reaching northern India and approaching Pakistan. This NOAA-11 satellite image shows scattered thunderstorms across northern India on July 15. The image also depicts widespread rains over the Indian peninsula and northern Bangladesh.



FLOODS IN CHINA

During the first half of July, a stationary front produced torrential rains along China's Yangtze River Valley, resulting in massive flooding. This GMS (Japanese geostationary) infrared image shows the line of showers with the front across China on July 11. The image also shows Typhoon Zeke in the South China Sea shortly after crossing the Philippines. The storm later hit China's Hainan island before crashing into Vietnam.

International Weather and Crop Summary

HIGHLIGHTS

July 7-13, 1991

USSR ... In Western USSR, a cooling trend in eastern areas ends a prolonged heat wave. Drier weather benefits crops in the west. In the New Lands, drought conditions continue over the southern Urals and Kazakhstan.

EUROPE ... Warm and generally drier weather favors summer crop growth and winter grain harvesting.

EASTERN ASIA ... Heavy rains continue to flood the lower Yangtze Valley. Portions of southeastern China are still receiving below-normal rainfall. Scattered showers delay winter wheat harvesting in the North China Plain.

SOUTHEAST ASIA ... Unseasonable dryness persists over Thailand and the northern Philippines.

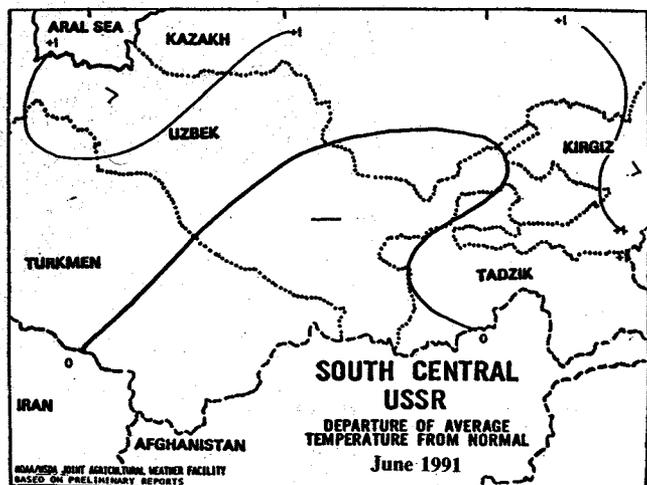
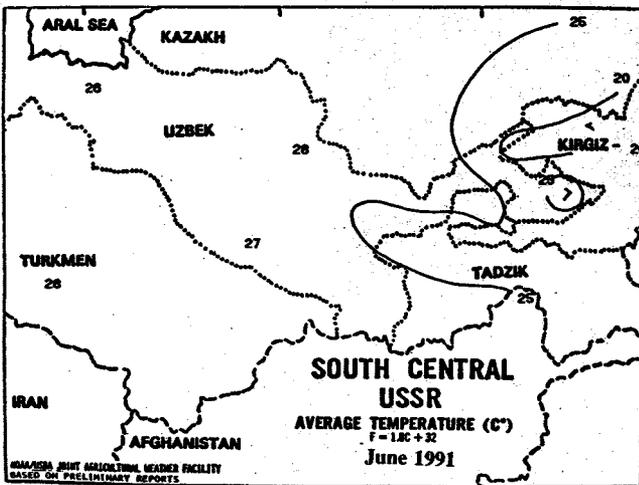
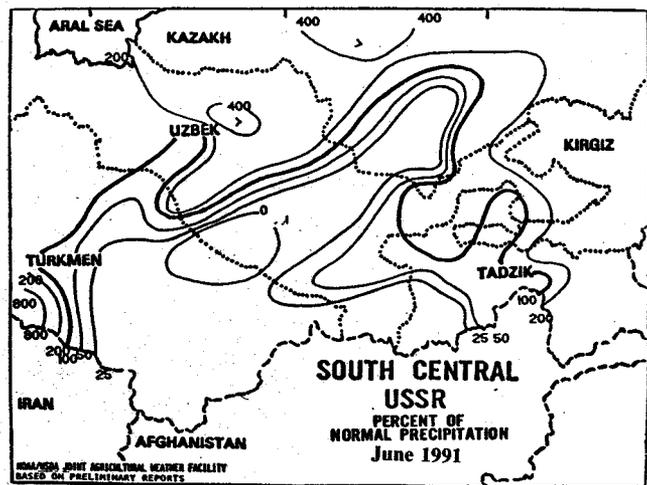
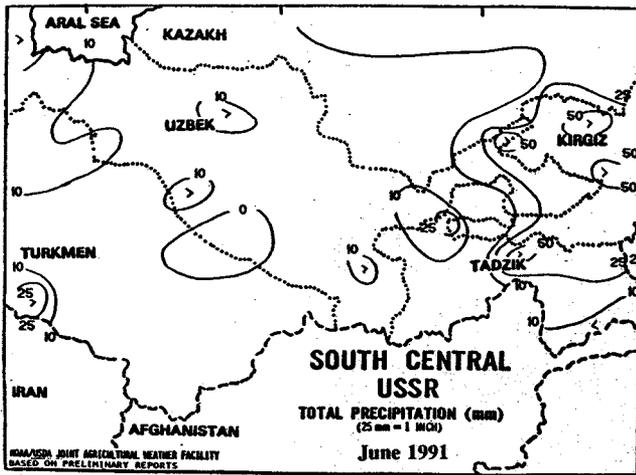
SOUTH ASIA ... Much needed rain falls in northwestern India and northern Pakistan.

SOUTH AMERICA ... Rains delay soybean harvesting in Argentina again. Favorable moisture exists for winter wheat in Argentina and southern Brazil.

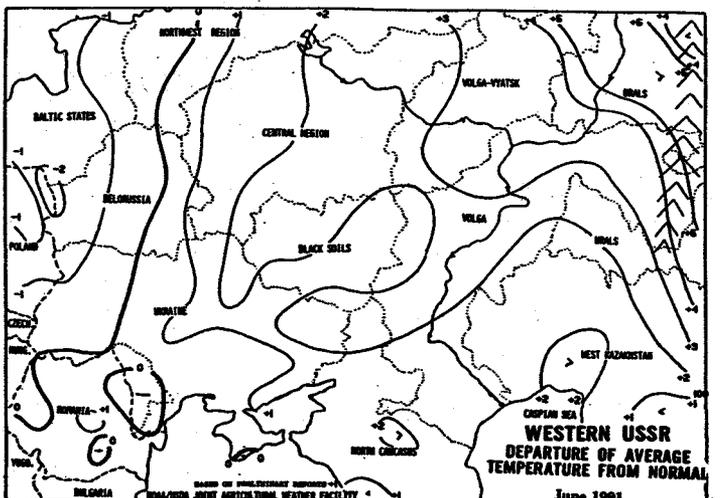
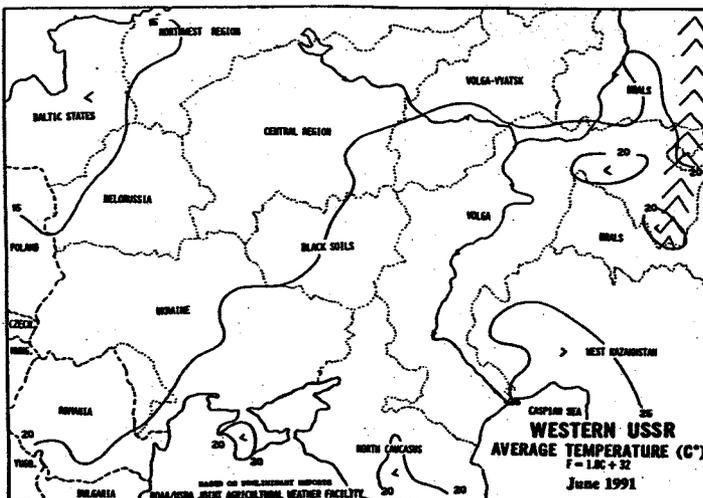
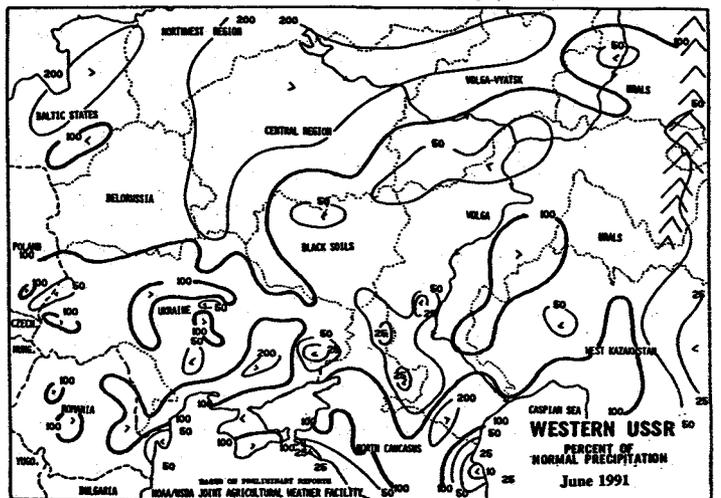
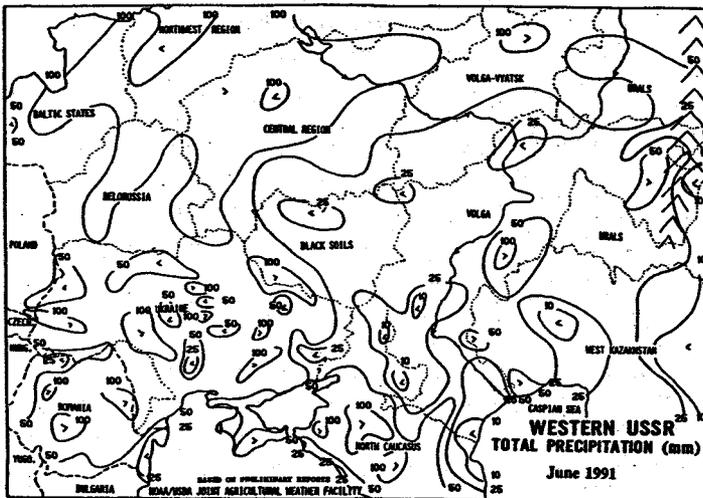
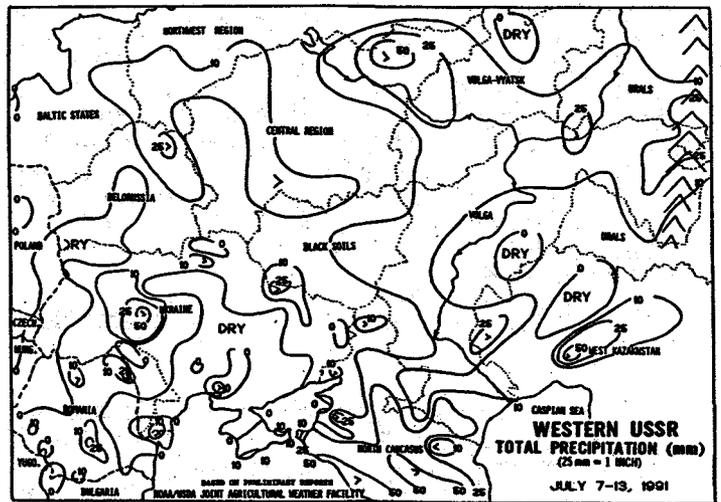
AUSTRALIA ... Beneficial rains in Queensland aid wheat planting and germination.

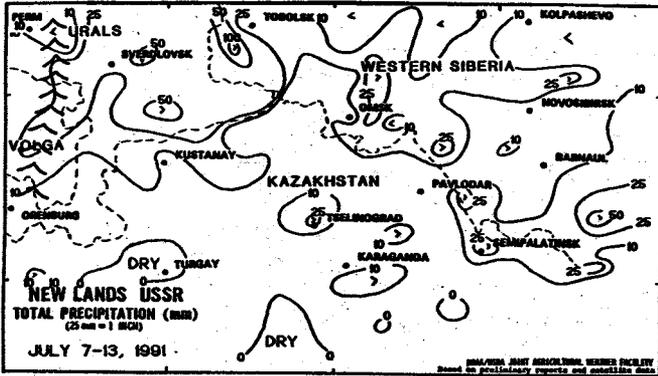
CANADA ... Wetness persists in the southeastern Prairies. Warmer weather favors spring grains and oilseeds.

MEXICO ... Continued rains help southern corn and northeastern grain areas.

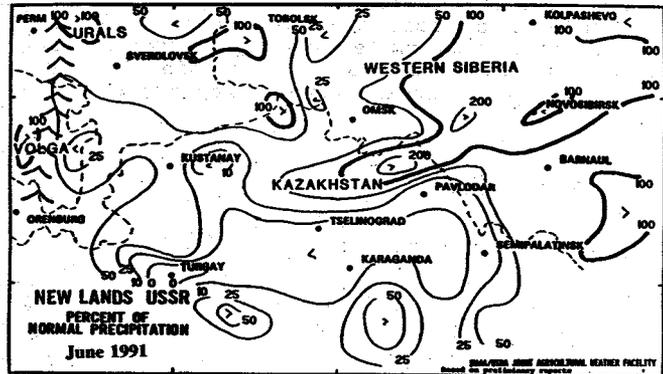
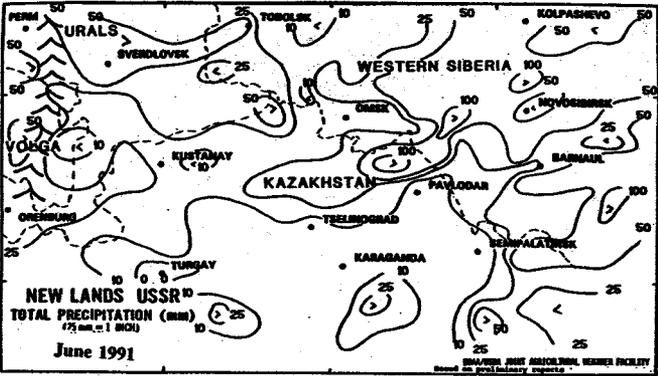


USSR ... Cooler weather covered crop areas in the northern North Caucasus, eastern Black Soils Region, Volga, Volga Vyatsk Region, and the Urals, ending a heat wave which had persisted over these areas since mid-June. While the cooling trend brought light to moderate rain (6-23mm) to these areas, it came too late to help spring and winter grains approaching maturity. Further west, a warming trend was accompanied by favorable drier weather over the Baltic States, Belorussia, and the western Ukraine. In June, above-normal precipitation covered crop areas in the Baltic States, Belorussia, the Central Region, and parts of the Ukraine. More than twice the normal amount of rain fell over some of these areas, lodging some crops. Below-normal precipitation in June over the Volga, the Black Soils Region, the northern North Caucasus, and the extreme eastern tip of the Ukraine was accompanied by a heat wave which began around June 20 and lasted until July 5. Maximum temperatures on most days in these areas ranged from 32 to 40 degrees Celsius (C), hastening winter grain ripening and placing increased stress on spring grains advancing through reproduction.

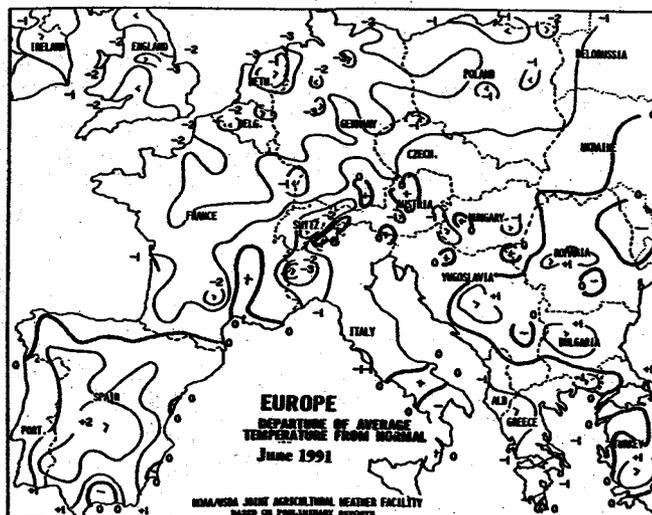
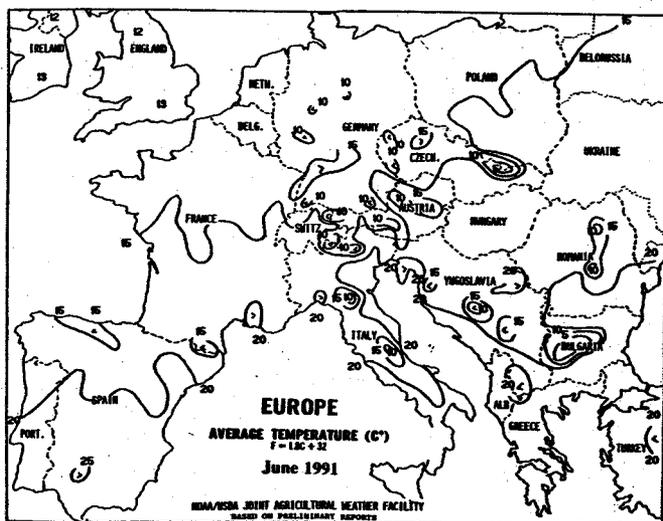
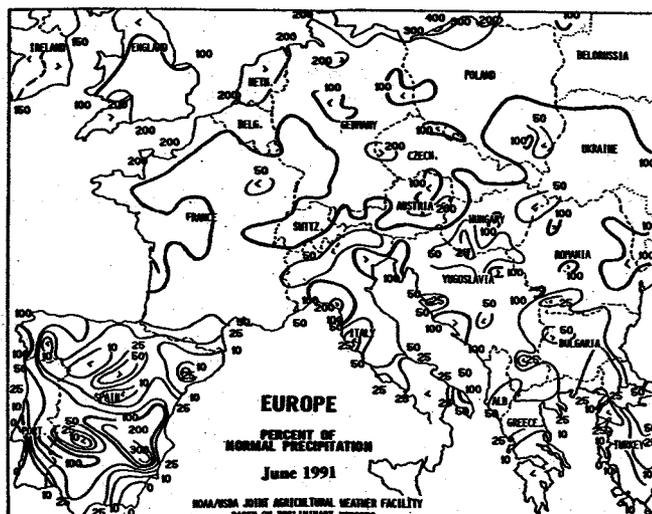
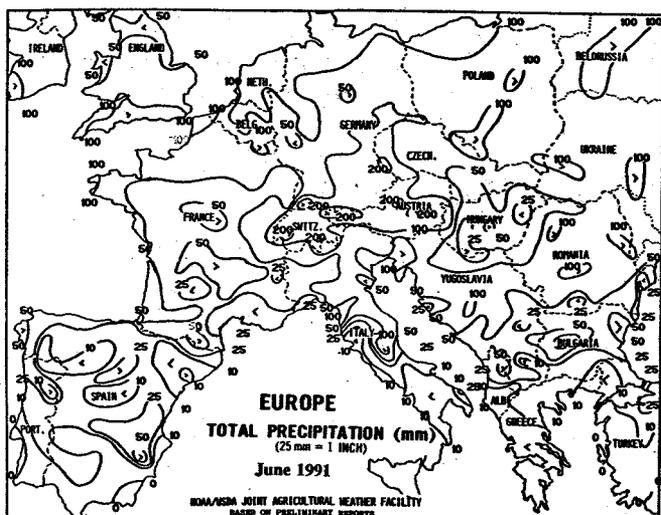
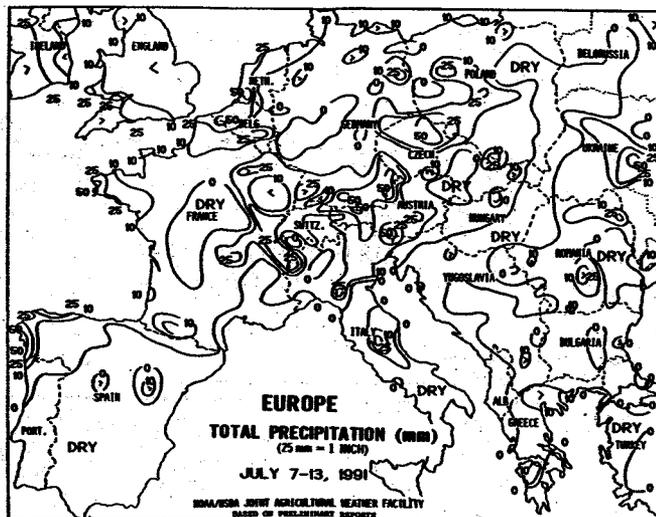


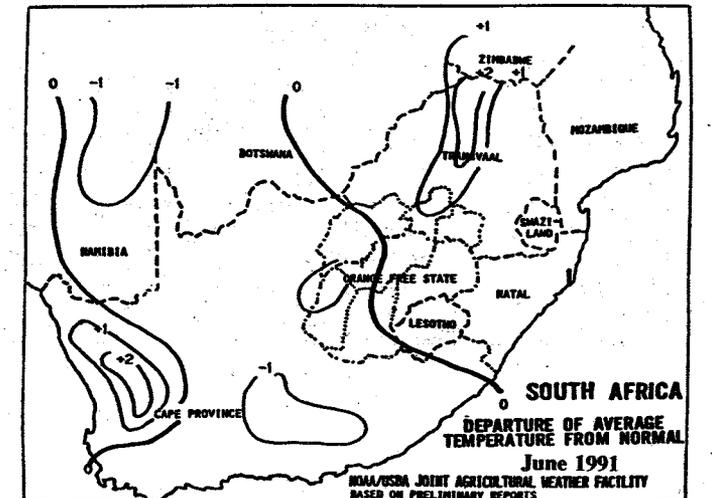
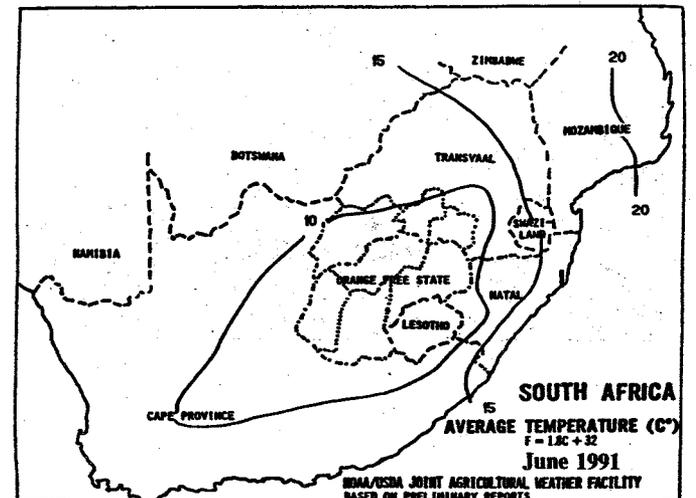
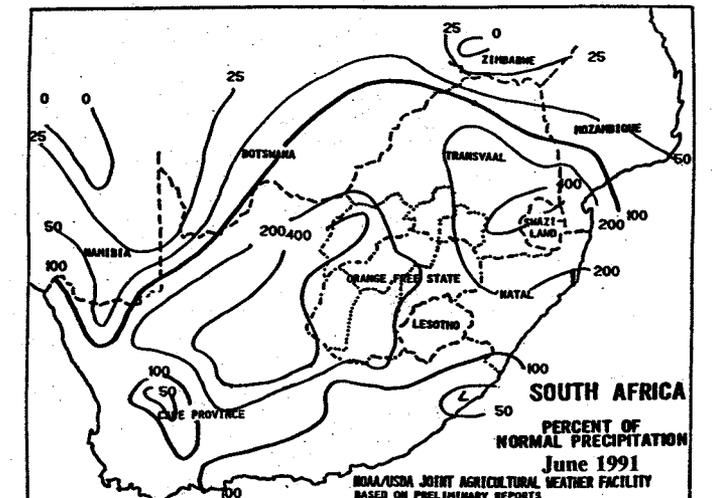
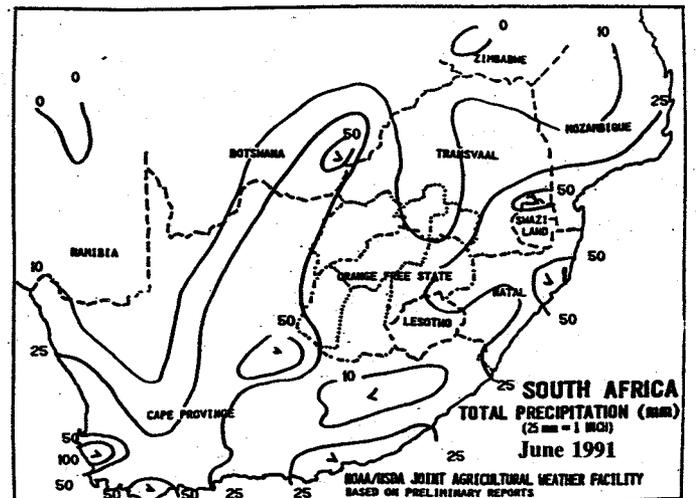
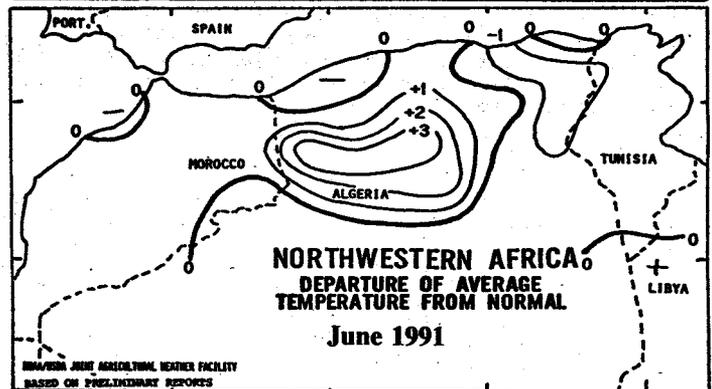
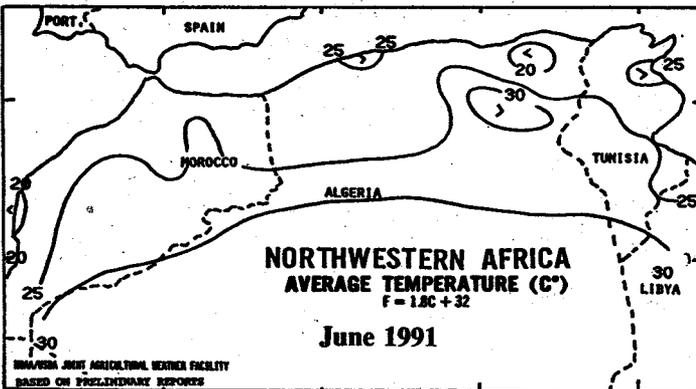
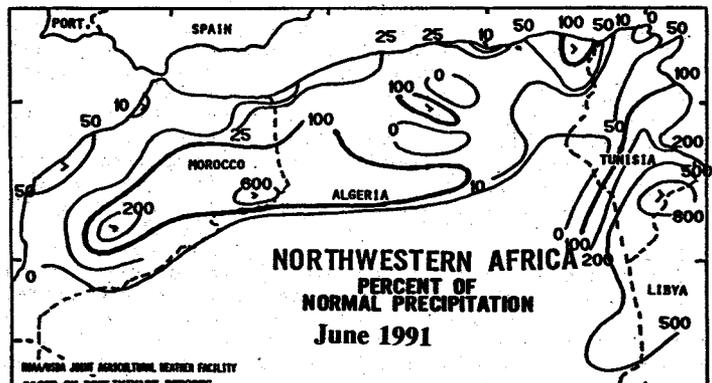
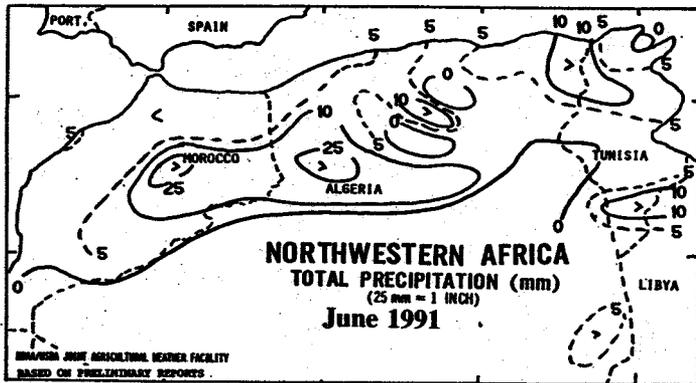


NEW LANDS ... Unseasonable cool weather over western crop areas contrasted with a warming trend in the east. While beneficial rain (25-50mm) continued to alleviate dryness in spring grain areas in the northern Urals, little, if any, precipitation covered drought stressed crops in the southern Urals, Kazakhstan, and parts of West Siberia, where crop progress ranged from reproduction to grain-fill. In June, drought conditions continued over the Urals, Kazakhstan, and the western portion of Western Siberia. Driest areas included crop areas in Kazakhstan, where June precipitation was less than 50 percent of normal. June's adverse dryness was accompanied by unfavorably hot weather, especially in the southern Urals and Kazakhstan, placing increased stress on crops approaching reproduction.

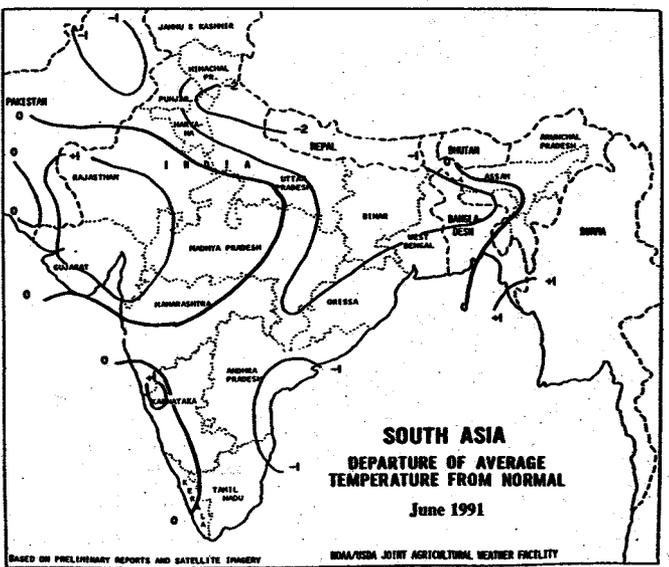
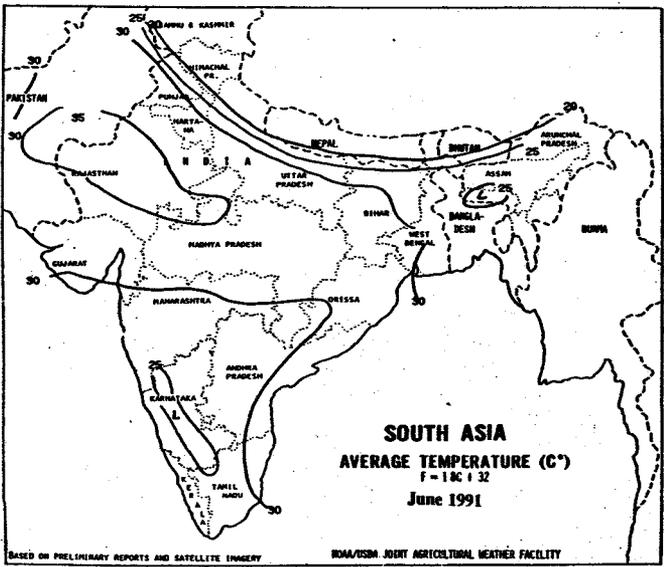
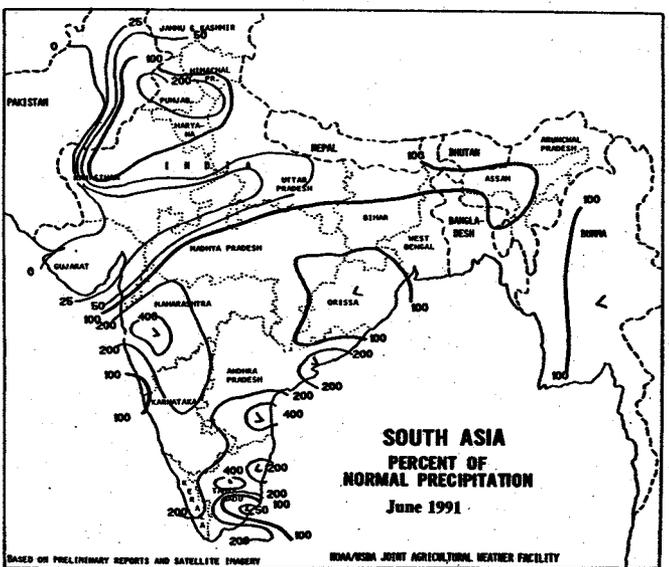
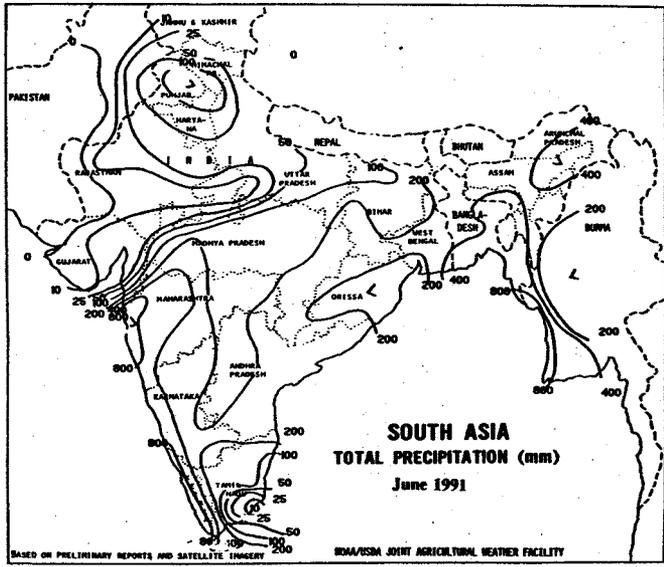
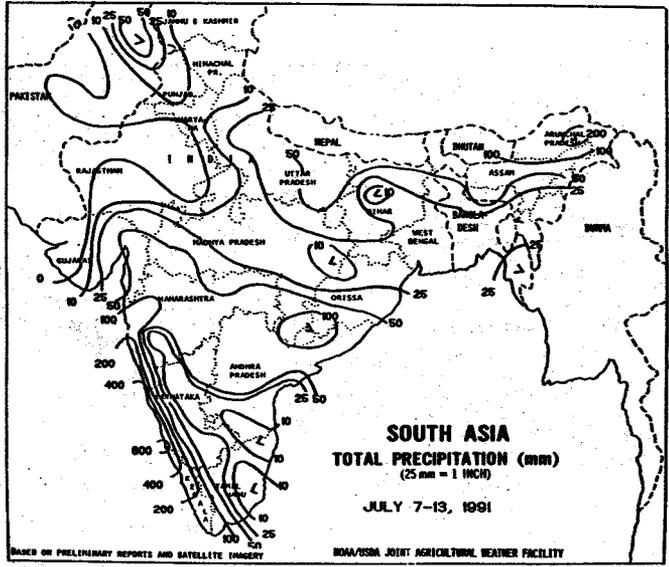


EUROPE ... Warm and generally drier weather promoted summer crop development and winter grain harvesting across the region. Significant shower activity (25-77mm) was confined mostly to central Europe, from extreme eastern France to Czechoslovakia, and the Benelux countries. Near-to above-average weekly temperatures and sunny skies were favorable in northern crop areas, following earlier unseasonably cool, wet weather that caused crop development to lag at least a week behind schedule. The seasonably hot, dry weather increased irrigation demands and stress conditions in Spain, however. In June, much above-normal rainfall and below-normal temperatures extended from England across north-central Europe to Poland, providing ample moisture for crop development but slowing growth. Near to slightly below-average June rainfall covered southeastern Europe, but below-average rain fell across the Mediterranean region from Greece to the Iberian peninsula. The dryness in the south during June hastened winter grain maturation.

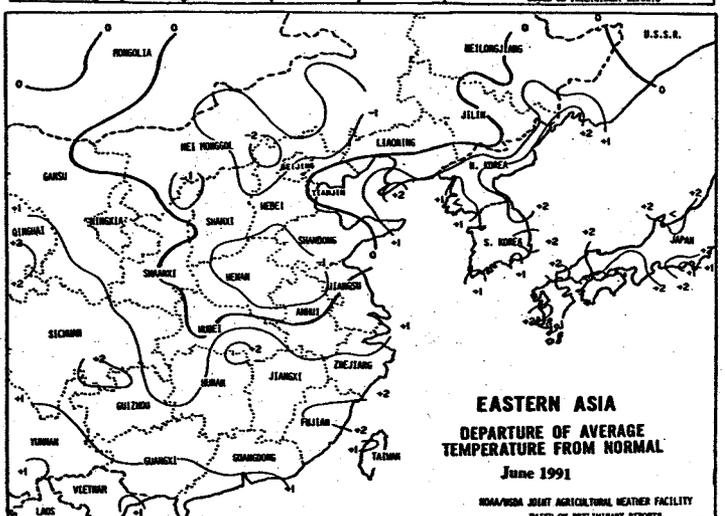
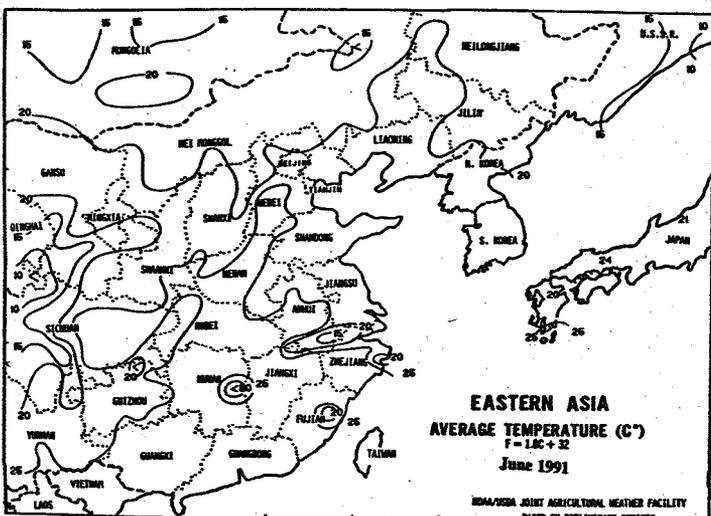
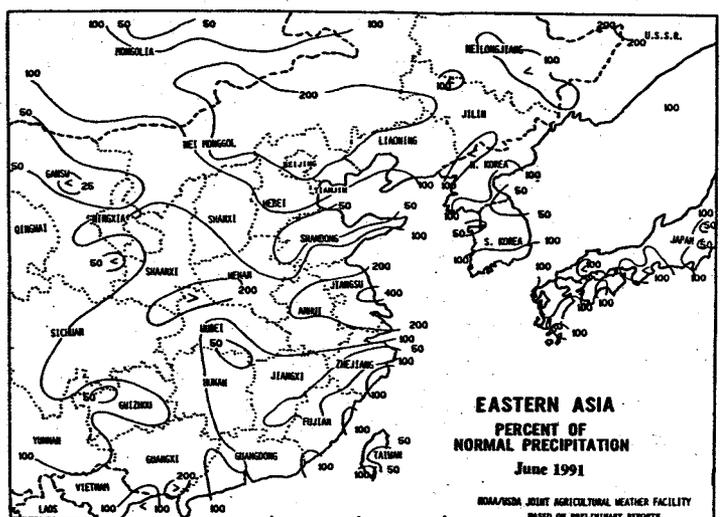
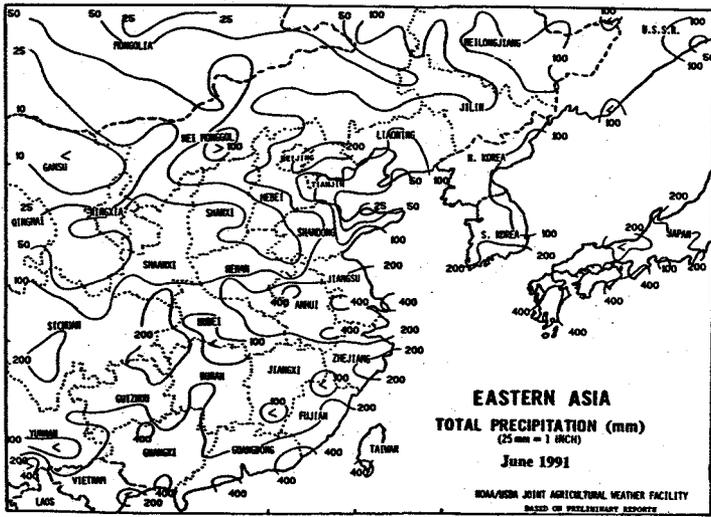
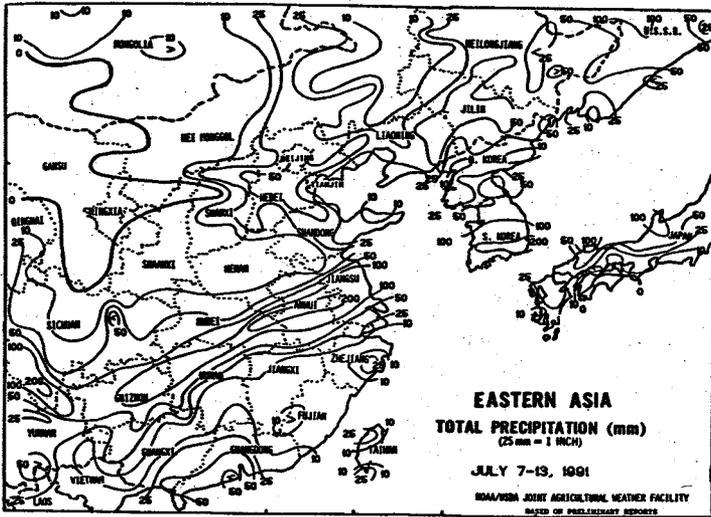




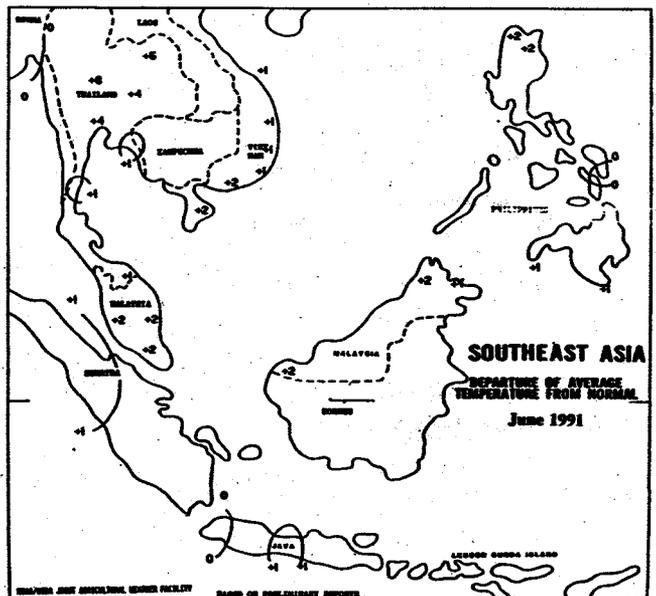
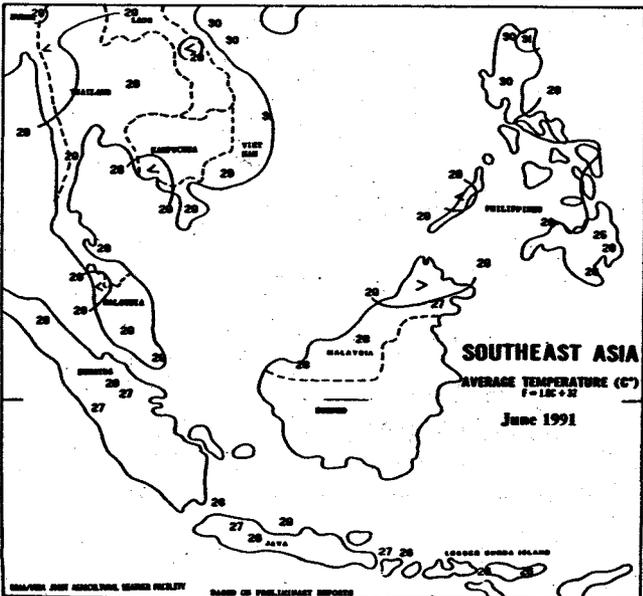
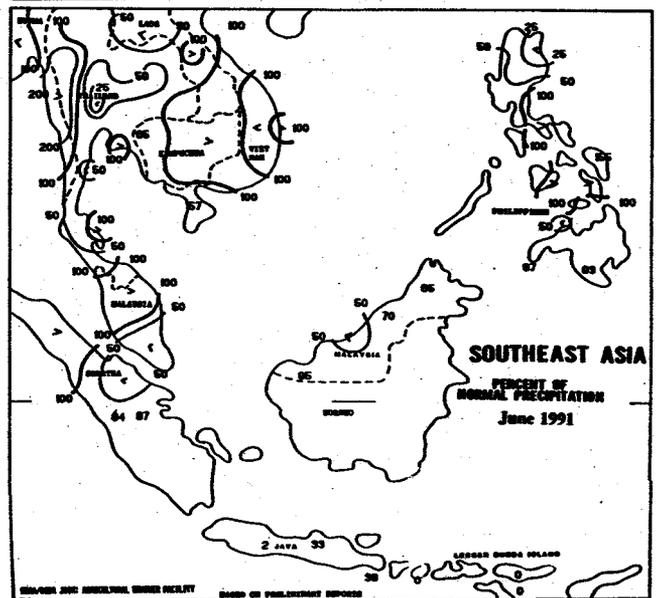
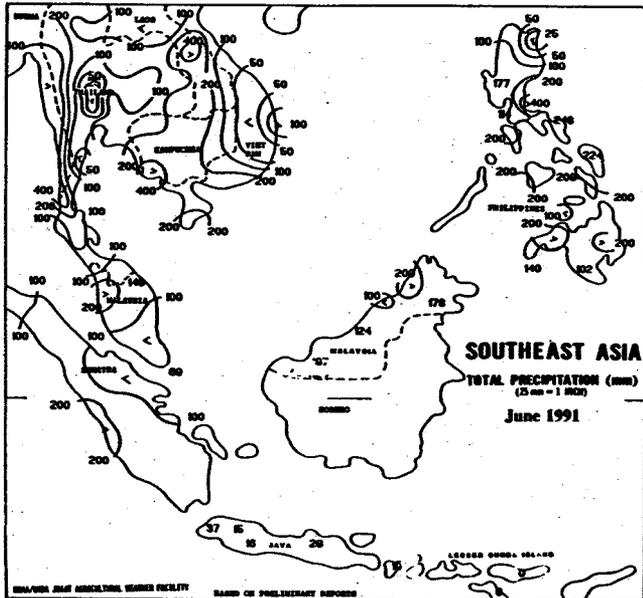
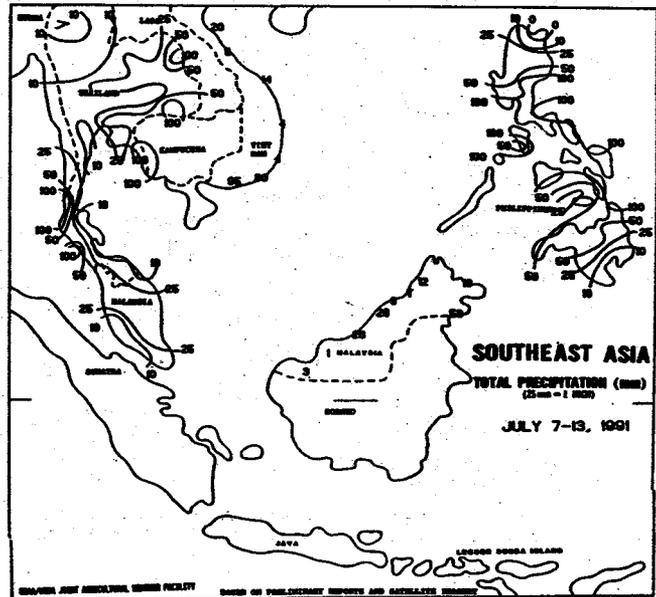
SOUTH ASIA ... The monsoon continued weak across most of northwestern India until late-week showers (10-50mm) brought much needed rain to crop areas from eastern Gujarat to Uttar Pradesh, and further north from Punjab to northern Pakistan. Additional rain and cooler weather are needed soon across India's northern rainfed oilseed and cotton areas to sustain crop development. Beneficial rain continued over most southern and eastern crop regions, although dry pockets (less than 10mm) occurred over India's southeast coast and excessive rain (200-600mm) inundated the southwest coast. June rainfall was near to above normal over many summer crop regions of southern, central, eastern India, and Bangladesh, as the southwest monsoon progressed well during the first half of the month. Unseasonable showers (25-100mm or more) also fell in northern India and northeastern Pakistan. However, the monsoon weakened during the latter half of the month, resulting in drier- and warmer-than-normal weather over central and northwestern summer crop regions, hindering planting progress.

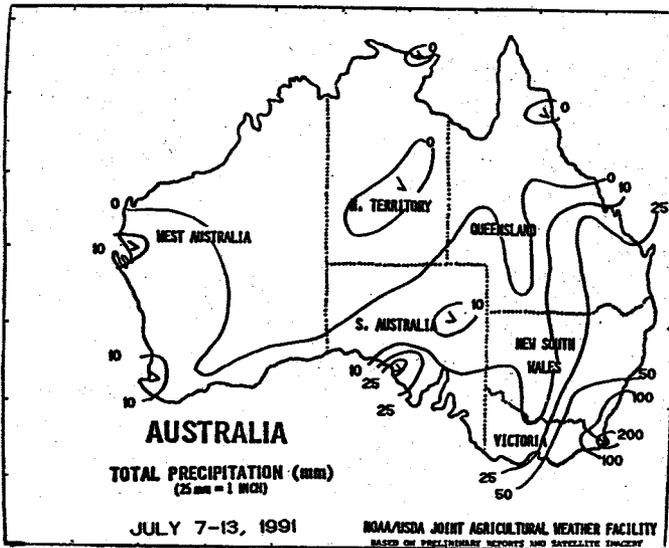


EASTERN ASIA ... Very heavy rains (103-373mm) again fell across portions of southern Jiangsu, central Anhui, and eastern Hubei, aggravating already flooded rivers and fields. Significant impacts from the flooding will probably be on early double-crop rice, typically harvested from mid-June to August, and cotton in the flowering stage. Elsewhere throughout the Yangtze Valley, moderate to heavy rains (55-144mm) fell over eastern Sichuan, most of Guizhou and northern Hunan, aiding vegetative single-crop rice, but also contributing to flooding in the Yangtze River. Further south, most of Jiangxi, western Fujian, and southeastern Hunan received only light rains (2-23mm), favoring harvesting of early double-crop rice, but depleting reservoir levels for single- and late double-crop rice. Typhoon Zeke hit Hainan on the 13th, with sustained winds of 130-148 kph (80-92 mph), bringing heavy rains (112-163mm). In Hebei, scattered thunderstorms brought 39-82mm, delaying winter wheat harvesting and possibly causing some lodging. Moisture conditions remained adequate for most crops in Manchuria, which received light to moderate rains (13-52mm), with temperatures ranging from 1 to 3 degrees C below normal. June was a month of contrasts. Above-normal rain fell across most of the North China Plain and Manchuria, with favorably dry conditions in Shandong for winter wheat harvesting. Much heavier-than-normal-rain fell in Jiangsu and Anhui, while portions of Jiangxi and Fujian received less than half of normal rains. Temperatures for June ranged from 1 to 2 degrees C below normal in the north to 1-2 degrees C above normal south of the Yangtze Valley.

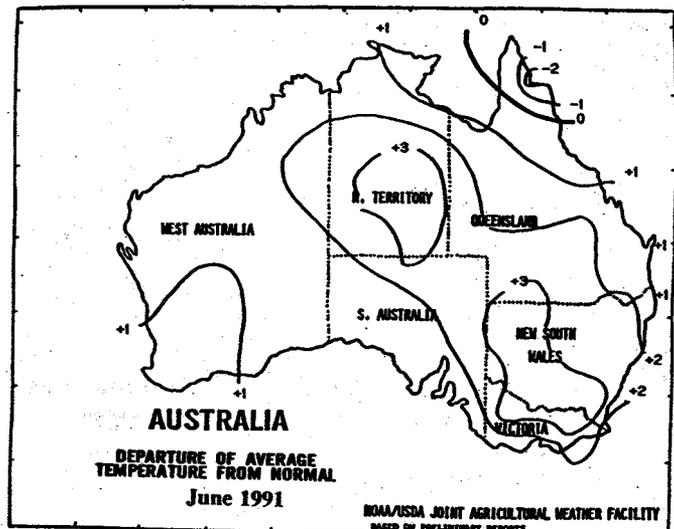
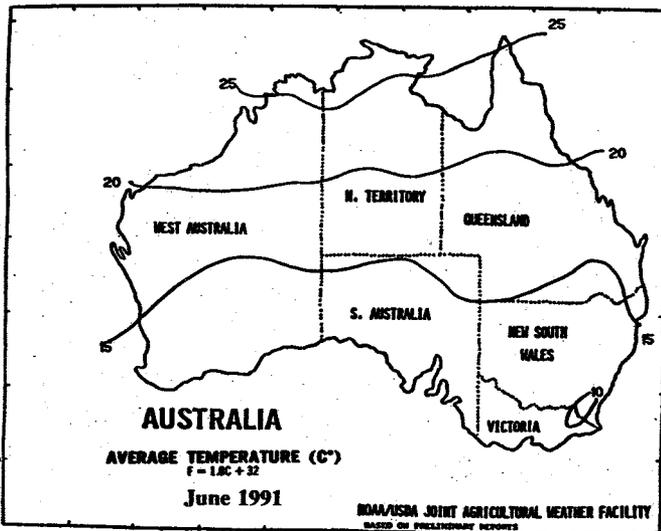
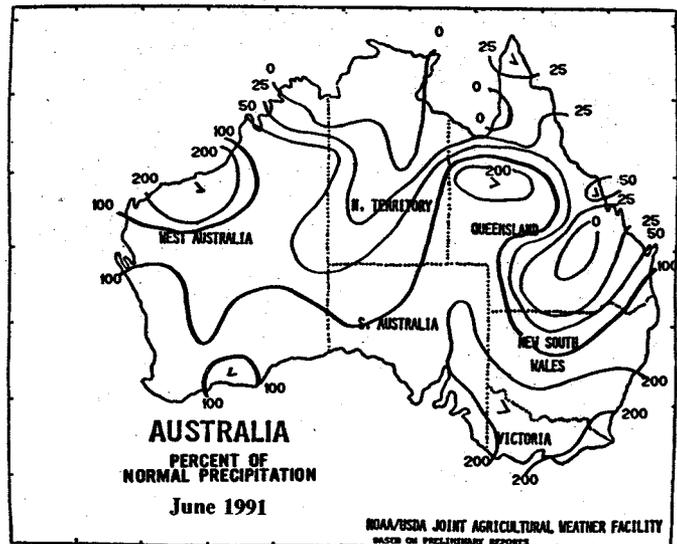
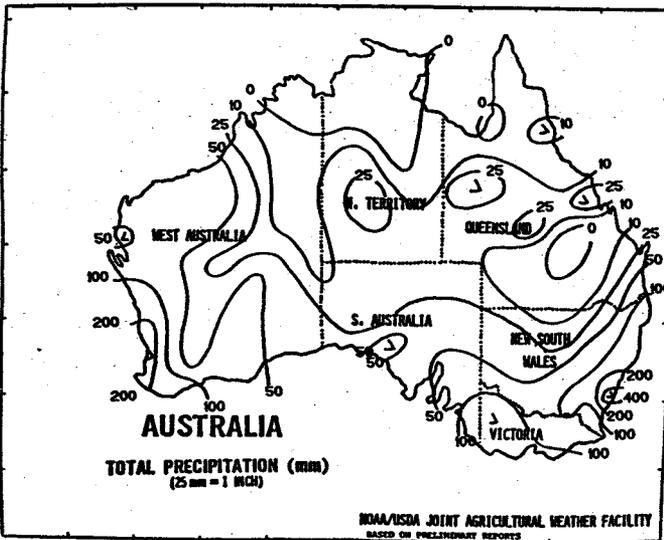


SOUTHEAST ASIA ... Highly variable showers covered Thailand's primary grain regions, but pockets of well-below-normal rainfall (25mm or less) persisted over northern rice areas and the central corn belt. Continued unseasonably warm weather caused unfavorably high evapotranspiration rates. June rainfall was 25-75 percent of normal in this region, creating unfavorable conditions for grains currently advancing through reproduction. In the Philippines, moderate to heavy showers (50-200mm), caused partly by tropical storm activity, fell throughout the islands, except for Luzon's northern rice and corn areas, where amounts ranged from less than 10 to 35mm. Increased rainfall since mid-June in the Philippines has improved growing conditions in all but the northernmost grain regions. Typhoon Zeke approached northern Vietnam at week's end.

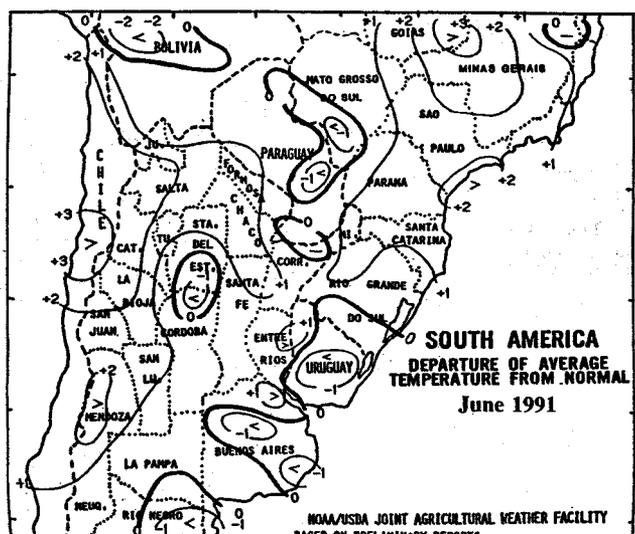
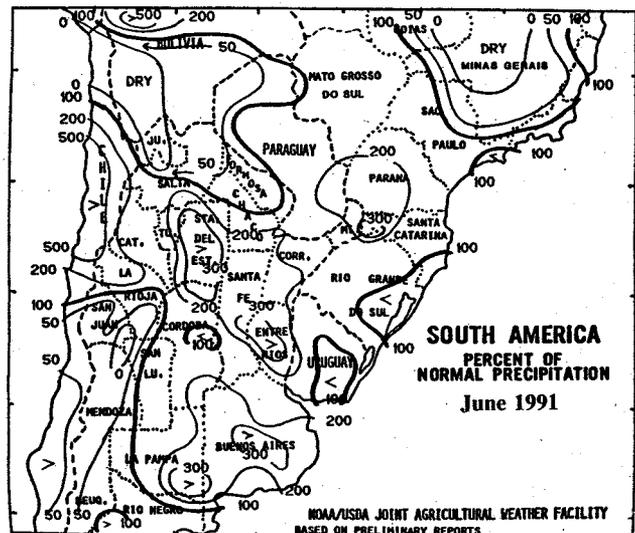
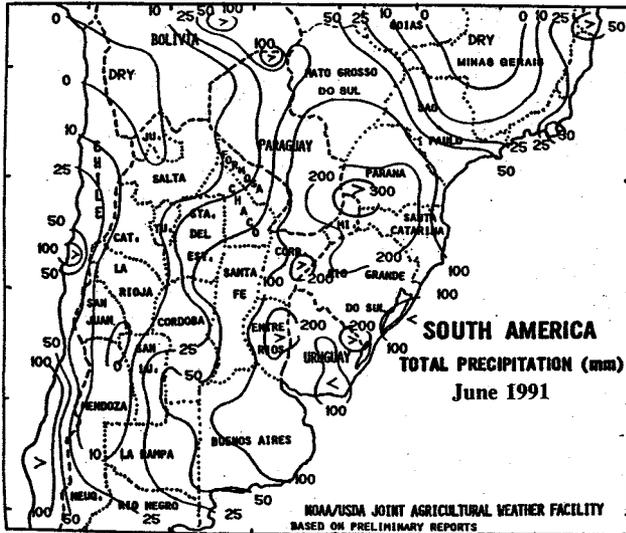
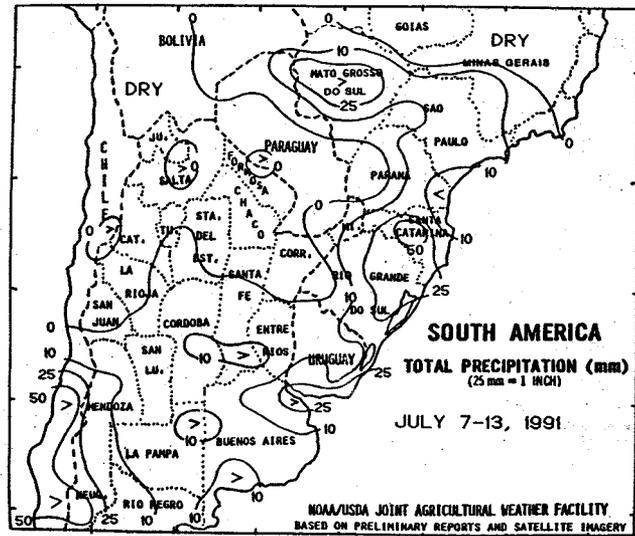


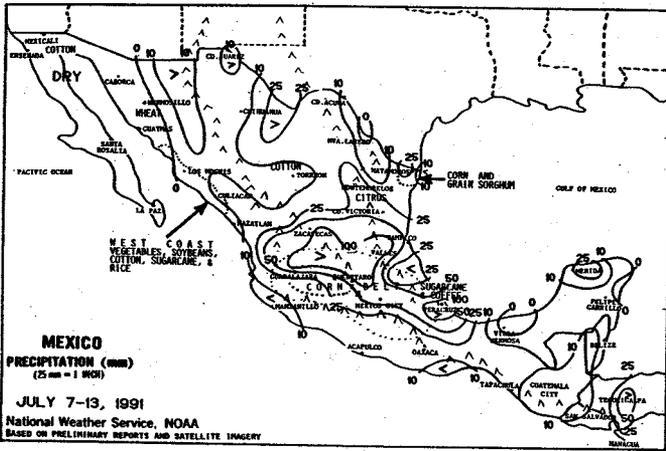


AUSTRALIA ... Beneficial rains (12-42mm) fell across the winter grain areas of Queensland, the first significant rains in about a month, prompting planting and germination. Moderate rains (32-55mm) fell in New South Wales, easing a recent drying trend. Western Australia received only light rains (1-8mm), but moisture levels remain adequate. For June, the winter grain regions of Queensland received below-normal rainfall, delaying planting, while areas further south and in Western Australia received above- to much above-normal rainfall. Monthly temperatures were 2-3 degrees C above normal in the east and near normal in the west.

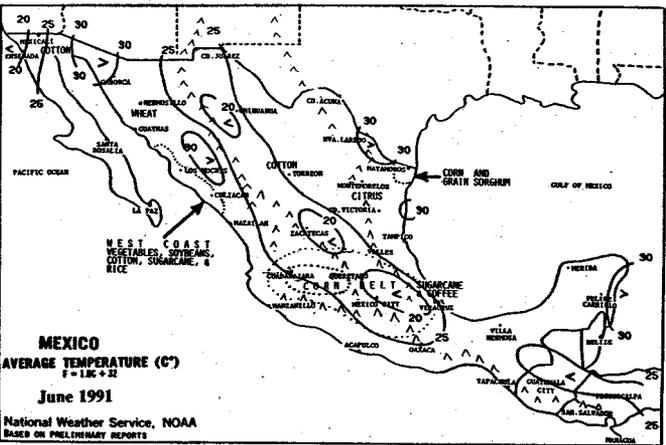
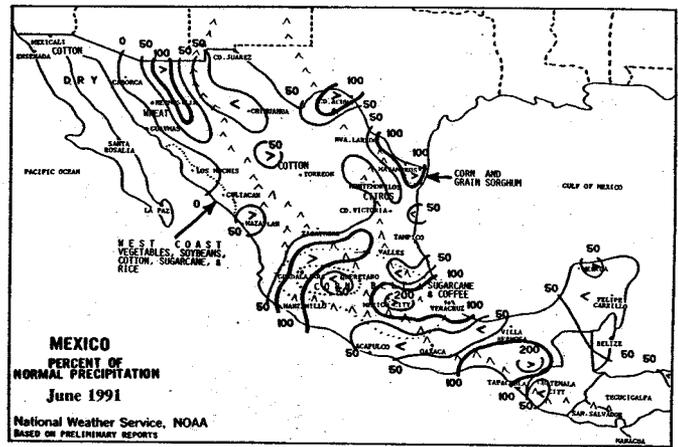
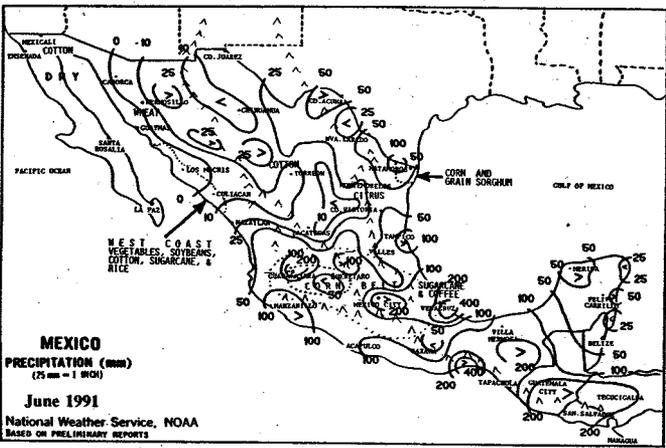


SOUTH AMERICA ... In Argentina, light to moderate rains (14-24mm) fell across southern Santa Fe and northern Buenos Aires, delaying soybean harvesting and winter wheat planting. About a quarter of the expected winter wheat has been planted, compared with almost 50 percent last year. In southern Brazil, moderate rains (22-53mm) provided favorable moisture for germination and establishment for winter wheat in Parana, Santa Catarina, and Rio Grande do Sul. Temperatures ranged from 1 to 2 degrees C below normal in central Argentina and near normal in southern Brazil. In June, heavier-than-normal rains continued in the soybean regions of Argentina, which contributed to harvest delays, but soil moisture levels for winter wheat are favorable. Above-normal rains also fell in southern Brazil, except in Minas Gerais and Sao Paulo, where drier- and warmer-than-normal conditions favored citrus and coffee harvesting.





MEXICO ... Moderate to heavy rains (27-139mm) covered most of the Southern Plateau Corn Belt, aiding vegetative corn. While the rainy season was delayed, widespread rains during the last several weeks have improved moisture conditions in most crop areas. For the month of June, most areas of the country received below-normal rainfall, except for the southern Corn Belt and isolated pockets in the north. Temperatures for the month ranged from 1 to 2 degrees C below normal in the extreme north to 1-2 degrees C above normal in the central and southern regions.



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(Continued from front cover)

rain inundated **Kirkwood, MO**, on Wednesday morning. The 3-day rainfall reached 9.51 inches in **Shelbina, MO**. In **Florida**, daily thunderstorms produced flooding and weekly rainfall totals of up to 8 inches. Toward week's end, clusters of thunderstorms raced from the **upper Mississippi Valley** to the **Northeast**, causing local flooding. The **New Jersey coast** north of **Atlantic City** was saturated with more than 12 inches of rain in only 6 hours. Three successive days of evening thunderstorms soaked areas from **eastern New Mexico** to **western Oklahoma**. Almost 5 inches of rain deluged **Roswell, NM**. At week's end, rain diminished in the **Northeast**, but continued in **Florida** and the **southern High Plains**.

(Continued from p. 10)

plowing for excess water control. Peach harvest was well along in Georgia. Apples in New York's Lake Champlain region were sizing well as rains brought needed moisture. Washington's apple and pear crops were developing well. Cherry harvest continued in Oregon, Utah, and Washington. Cranberries were out of bloom in New England and fruit set was good. Cranberry bloom was late in Oregon; fruit set was fair to good, but growers were concerned that late berries may not reach market size.

VEGETABLES: Arizona harvests of melons, sweet corn, onions, and cabbage remained active. California broccoli and cauliflower remained in heavy supply, and a few cauliflower fields were disked under due to poor market conditions. Melon, celery, lettuce, and tomato harvests were also active in California. Florida's watermelon harvest was nearing completion, and commercial harvests of tomatoes and sweet corn were complete. Summer vegetable harvests were in full swing in Maryland and Delaware. New Jersey summer vegetables were also in good supply. Rains slowed fieldwork and onion harvest in New Mexico. Green pea harvest continued in Oregon's Willamette Valley. Tomato and pepper harvests continued in full swing in the San Antonio-Winter Garden region of Texas.

PASTURES AND LIVESTOCK: Mostly dry weather in the Great Plains reduced forage growth, while pastures and ranges in the Southeast remained in very good condition. Livestock water supplies were inadequate in the northern Sacramento Valley grazing areas of California.

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