

WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE
Economics and Statistics Service
World Food and Agricultural Outlook and Situation Board

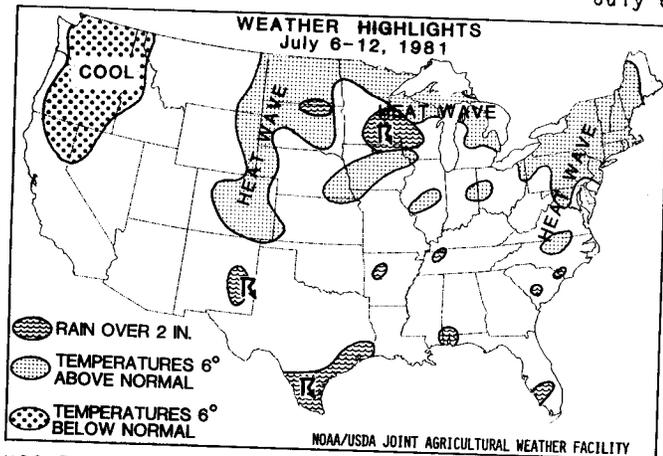
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July 14, 1981

National Weather Summary

July 6-12, 1981



HIGHLIGHTS: The heat wave over the central Rockies and the northern Plains at the first of the week shifted across the upper Great Lakes into the east coast by midweek. It also popped up in the central Plains as the weekend approached. Unusually cool weather settled over the Pacific Northwest as temperatures averaged up to 12° below normal in northeastern Oregon. Heavy downpours were dumped on south Texas and portions of the central and southern Rockies and the western Great Lakes region. Crop moisture decreased from the northern and central Plains into much of the Southeast under the hot and generally dry pattern.

MONDAY...A heat wave continued over the northern Plains as Williston, North Dakota baked under 108°. It was also unusually hot and humid over the Southeast. Cool, cloudy, and showery weather dominated the Northwest behind a front stretching from Montana to California. Another front was dissipating from the Mid-Atlantic Coast to the western Gulf Coast but not before triggering scattered showers and thunderstorms. Corpus Christi, Texas, had a 3 1/2-inch downpour in one of the heavier storms.

TUESDAY...The heat wave peaked on its third day in the northern Plains as Williston, N.D., hit 109°. The east coast also began to heat up with temperatures climbing into the mid nineties as far north as New England. In contrast, record cold settled over Oregon with lows dropping into the mid thirties. An unusually strong but slow moving front extended from eastern Montana to southern California and triggered precipitation, including some snow showers in the northern Rockies. A very moist tongue of tropical air blanketed an area from the western Gulf States into the Mid-Mississippi Valley, producing heavy rains over western Arkansas.

WEDNESDAY...Cool air swept through the northern Plains, lowering temperatures 15 to 25° from Tuesday's readings. Meanwhile, a new heat wave became entrenched along the east coast as Boston's temperature rose to 98°. On the other extreme, record cold intensified over the Northwest with minimum temperatures dropping into the mid thirties from eastern Oregon to western Montana; a few mountain sites had readings in the low twenties. Scattered thundershowers accompanied a cold front from the western Great Lakes to New Mexico. Very heavy tropical rains fell over parts of south Texas. Laredo, Texas, had a torrential downpour of over 5 inches that flooded streets and cropland.

THURSDAY...The humid heat wave continued over the east coast as readings soared into the upper nineties as far north as New England. A front triggered showers over the eastern Great Lakes while the southern portion of the front became stationary and produced rains over the southern Rockies. Some gully washer amounts fell over eastern New Mexico; Roswell had 2 1/2 inches. A tropical low pressure system began developing over the northeastern Gulf of Mexico, generating showers inland.

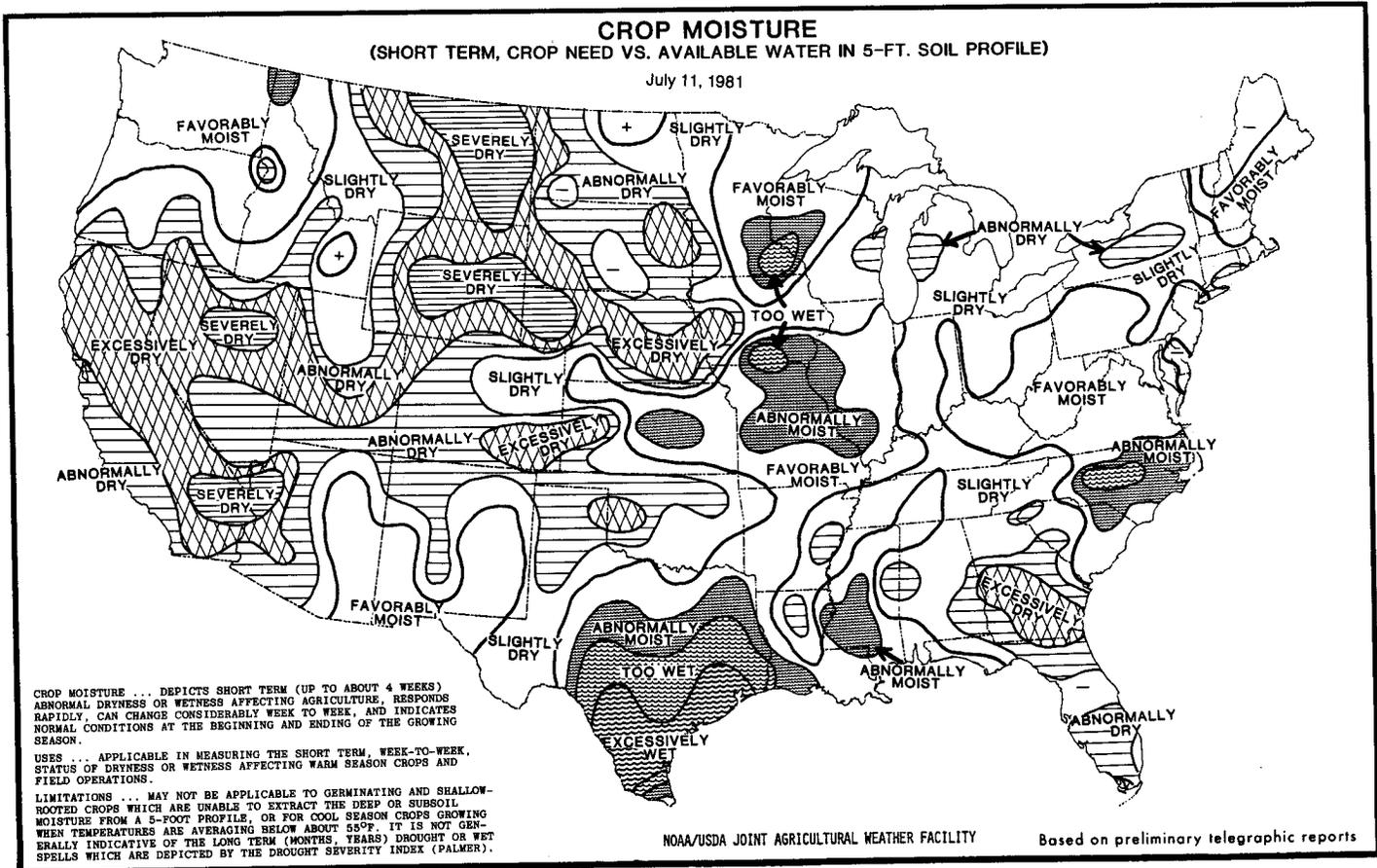
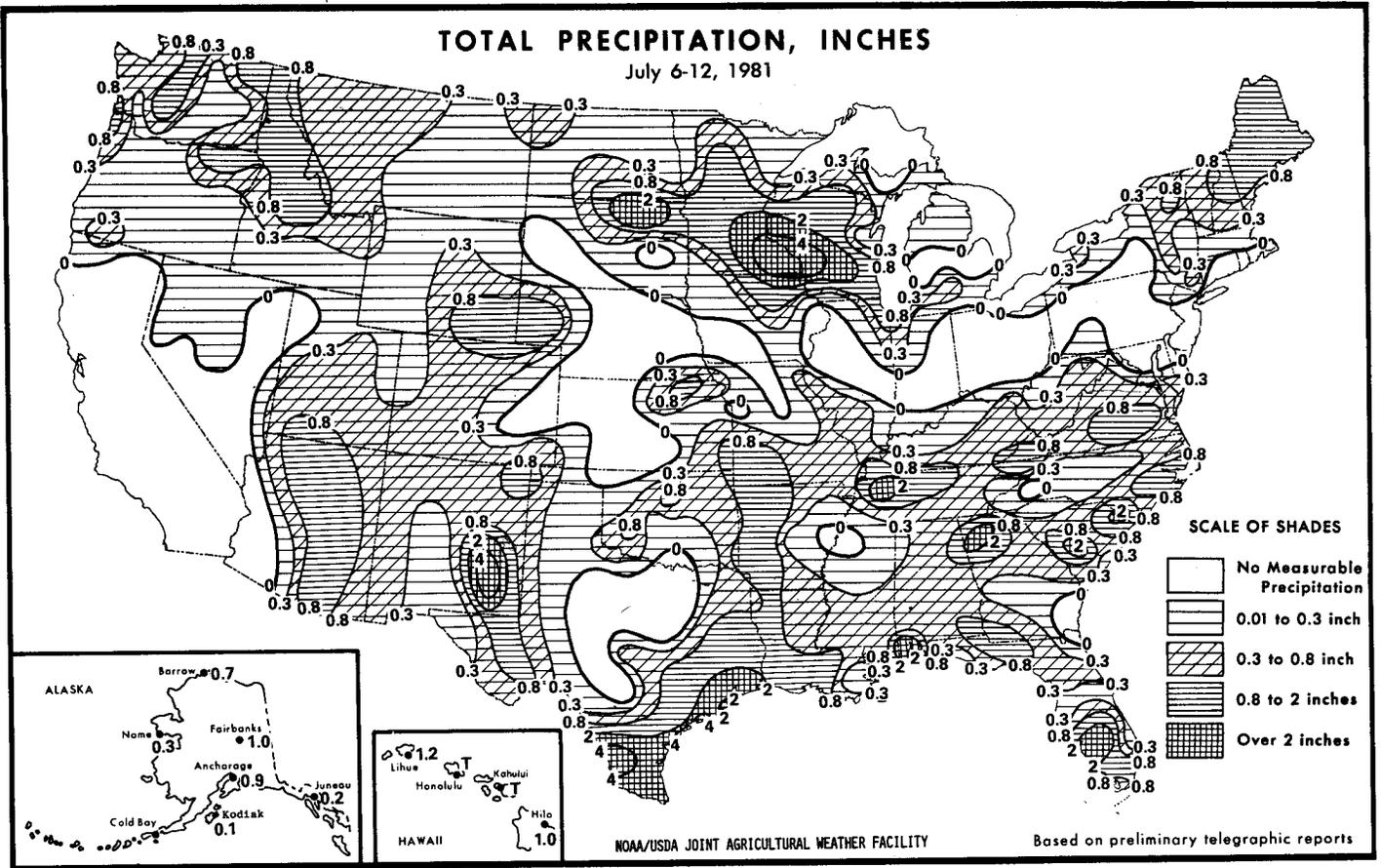
FRIDAY...The tropical low moved to the central gulf coast, producing thunderstorms inland, including high winds and a tornado. Another low with a cold front developed in the northern Rockies and triggered thunderstorms and severe weather eastward into the Dakotas. The heat wave continued over the Mid-Atlantic and the South Eastern Coasts but was relieved by cooler, drier air sweeping into New England behind a weakening front.

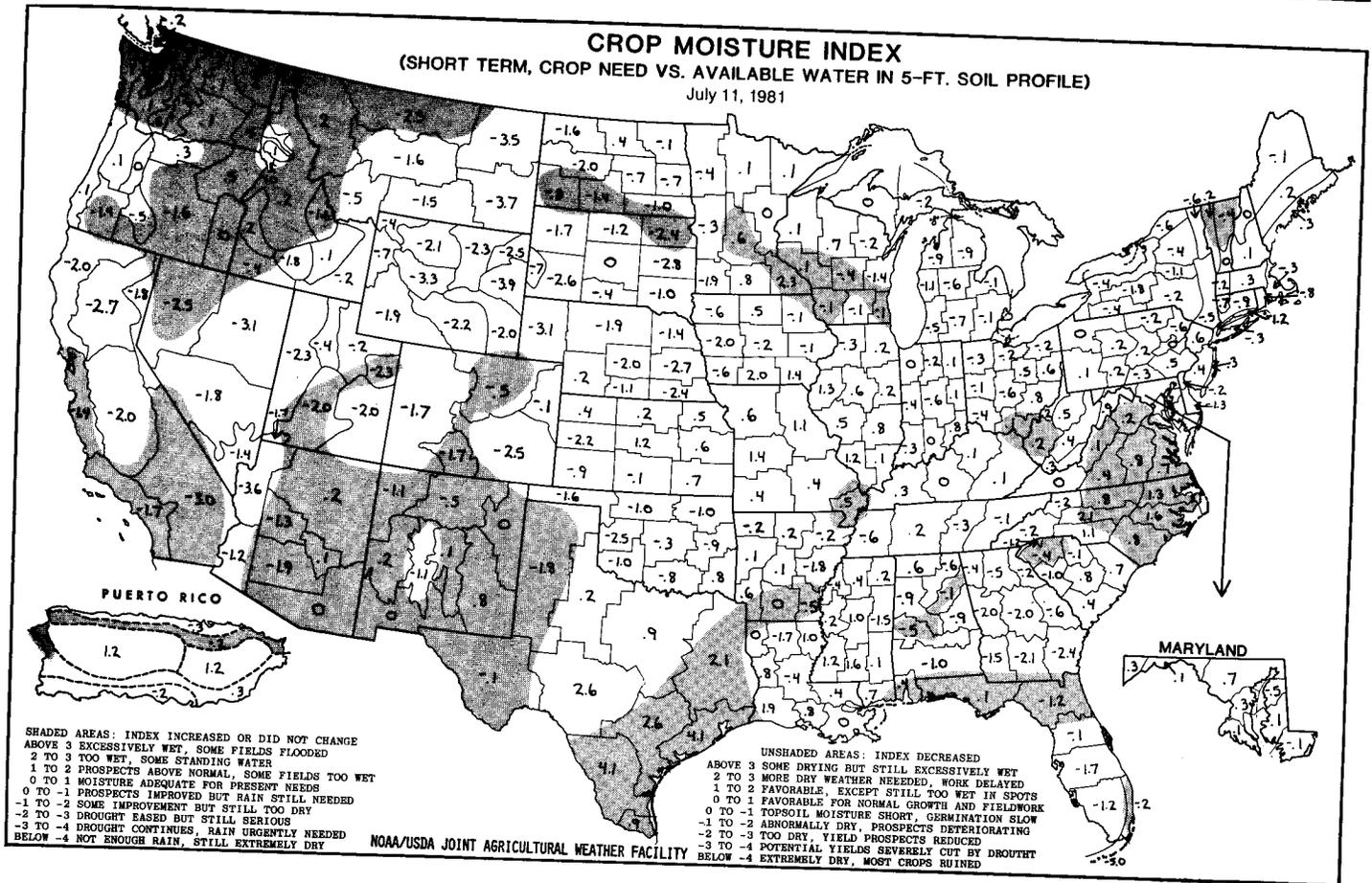
SATURDAY...A front became stationary from the central Rockies to the western Great Lakes sending heavy downpours into southeastern

(Continued on page 13.)

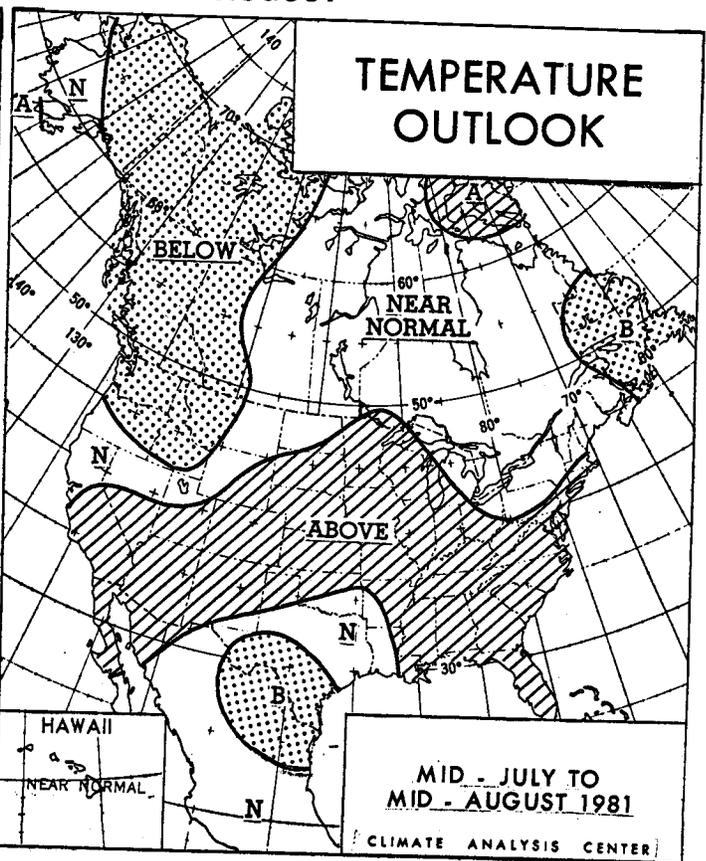
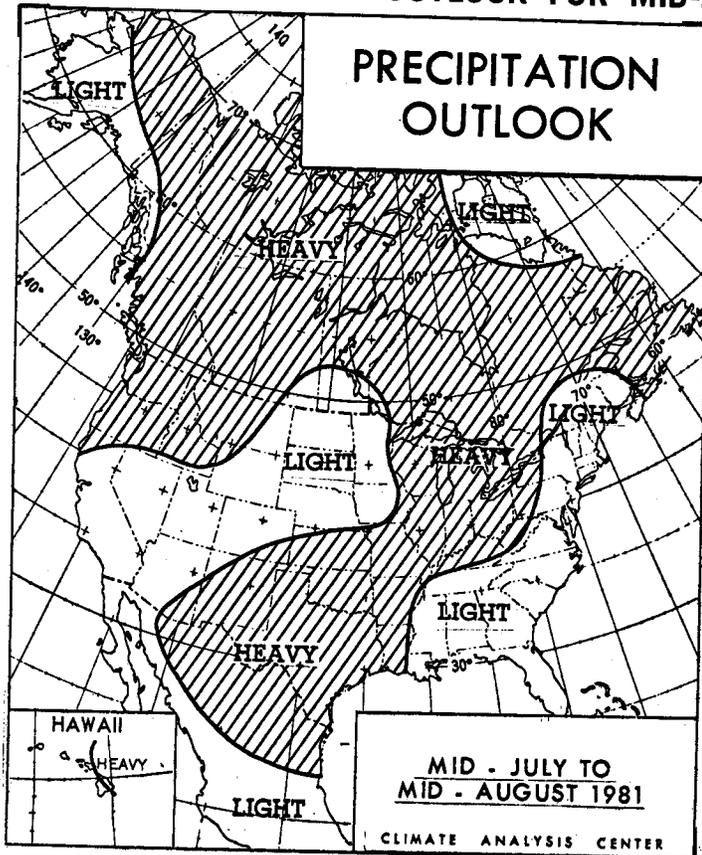
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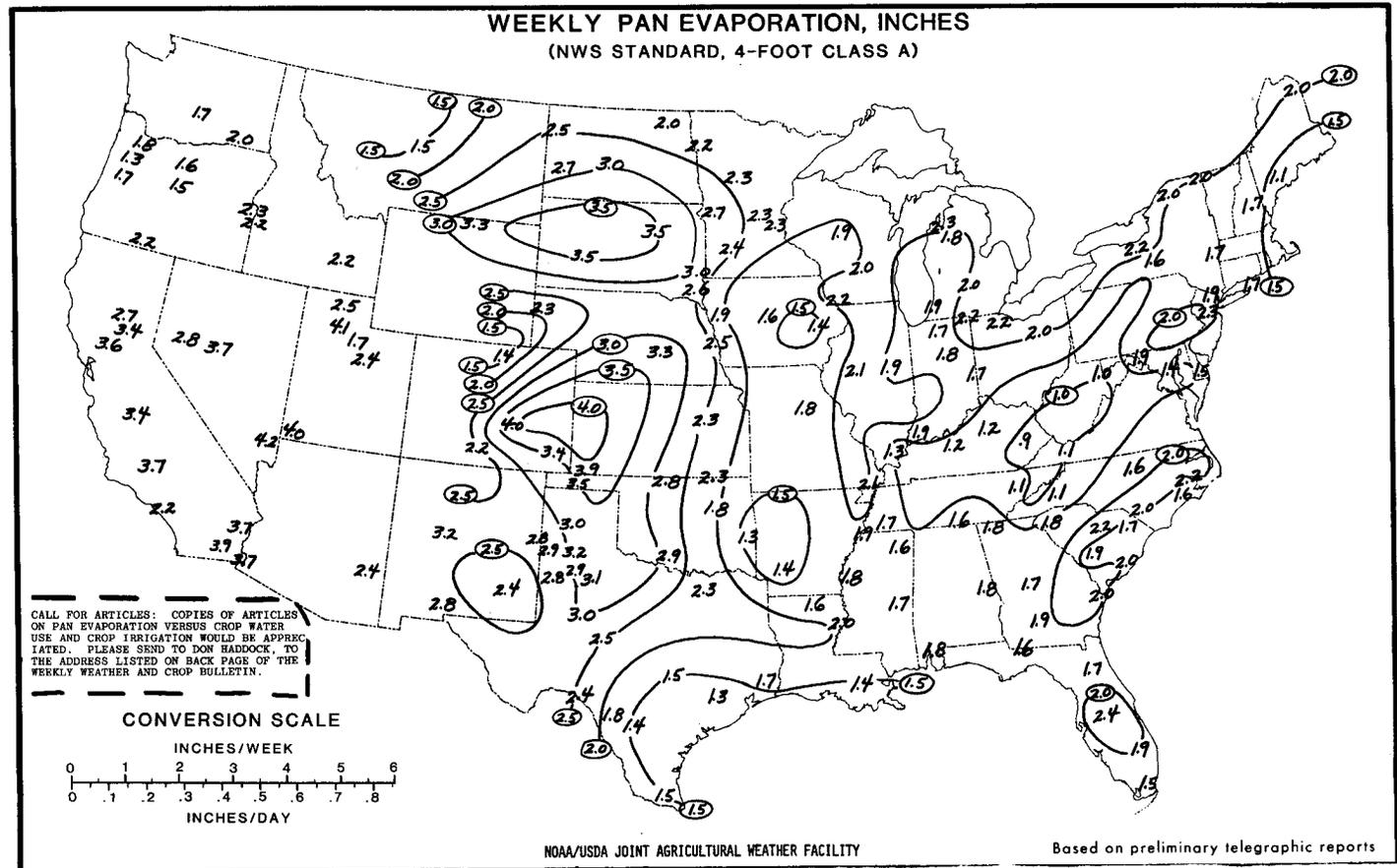
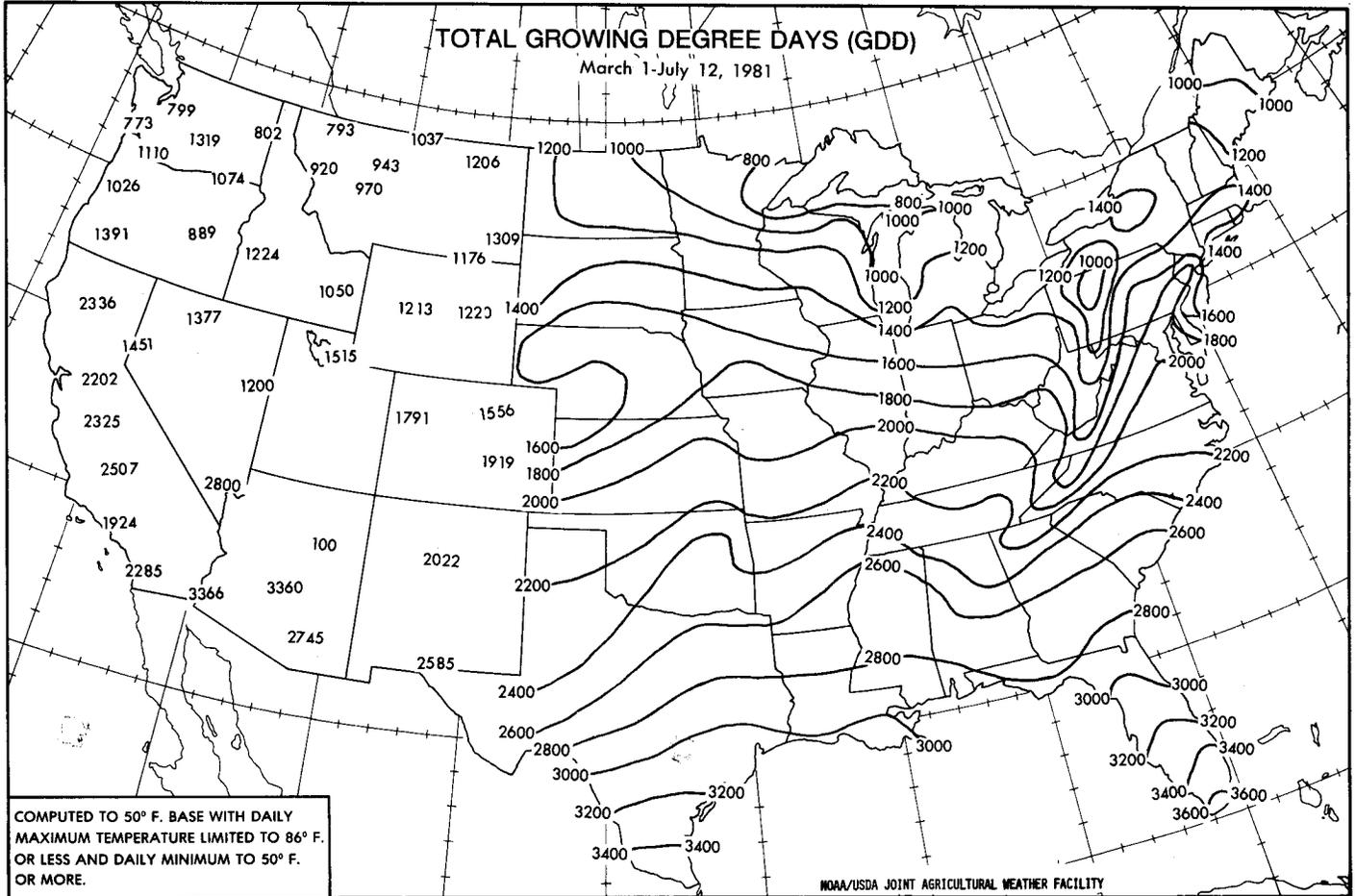
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OUTLOOK FOR MID-JULY TO MID-AUGUST





Do You Know When To Stop Irrigating Your Corn Crop?

By Larry M. Curtis
Alabama Extension Agricultural Engineer

Irrigated corn should not be neglected during the final stages of growth.

Although the most critical stage from a moisture standpoint for corn is during the silking-tasseling-pollination stage, a corn crop continues to require adequate moisture for filling and development of the grain until maturity is reached.

Peak Water Use

Peak water use occurs during the silking-tasseling-pollination stage and daily water use during this period may exceed three-tenths of an inch per day.

Under very severe conditions, one-half inch per day may be used. After the peak use stage is past, corn continues to use soil moisture to mature the crop but uses this moisture at a slower rate.

The amount of water used by the corn crop per day will vary depending on the weather. Obviously, under wet conditions soil moisture will not be depleted, but if hot, low humidity conditions exist corn will continue to use moisture at a fairly high rate until maturity.

Determine Maturity

The question that irrigators must answer is this: How do I know that corn is mature or how can maturity be determined?

Since typical irrigation operating costs are between \$3.00 per inch and \$8.00 per inch depending on the type system used, it probably will pay to continue to irrigate to obtain optimum yields but would certainly be a waste of money to irrigate beyond the time when added water is useful.

"Corn ceases to need moisture when the stage known as physiological maturity is reached."

Corn ceases to need moisture when the stage known as physiological maturity is reached. When physiological maturity is reached, the corn grain has reached its maximum dry weight and no additional weight will be added.

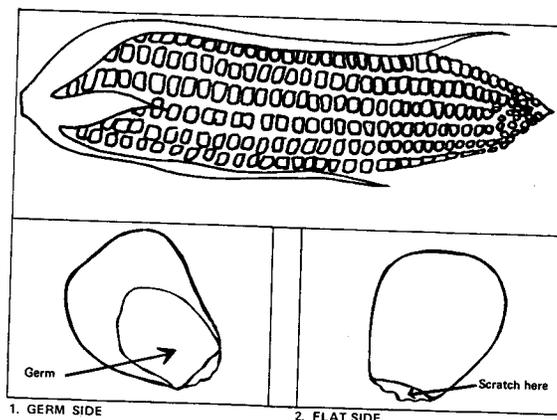
How to Estimate

There are several ways to estimate when corn has reached this maturity stage, but the best method for determining this is by evaluation of a black layer that forms in the tip of each corn kernel.

The location of the black layer is illustrated in the attached drawing. The black layer begins to form in the grains at the tip of the cob first and then spreads over the entire cob in three to five days. (If several varieties are mixed, check the different varieties.)

Seek Assistance

I would suggest that farmers interested in determining when to stop irrigating by the black layer method contact their county agent if they need assistance in determining how to recognize this black layer.



1. GERM SIDE 2. FLAT SIDE
BLACK LAYER LOCATION ON CORN KERNEL

However, generally speaking, the black layer can be determined as follows:

Scratch the surface layer off the base of the kernel on the flat side of the grain opposite the germ side of the grain. Scratch very gently and a black layer can be seen beneath the surface near the point where the kernel was attached to the cob (see drawing).

There are also other methods for evaluating when to stop irrigating corn. For example, the black layer begins to form shortly after dent occurs. Thus, dent stage is the first sign that maturity is rapidly approaching.

Third Method

A third method for determining maturity is when corn begins to naturally dry down even though adequate moisture exists. When corn naturally dries down to 35 percent the corn has reached maturity.

However, the rate of dry down can be influenced by a variety of weather conditions and you might tend to irrigate too long if this method is used.

General Tendency

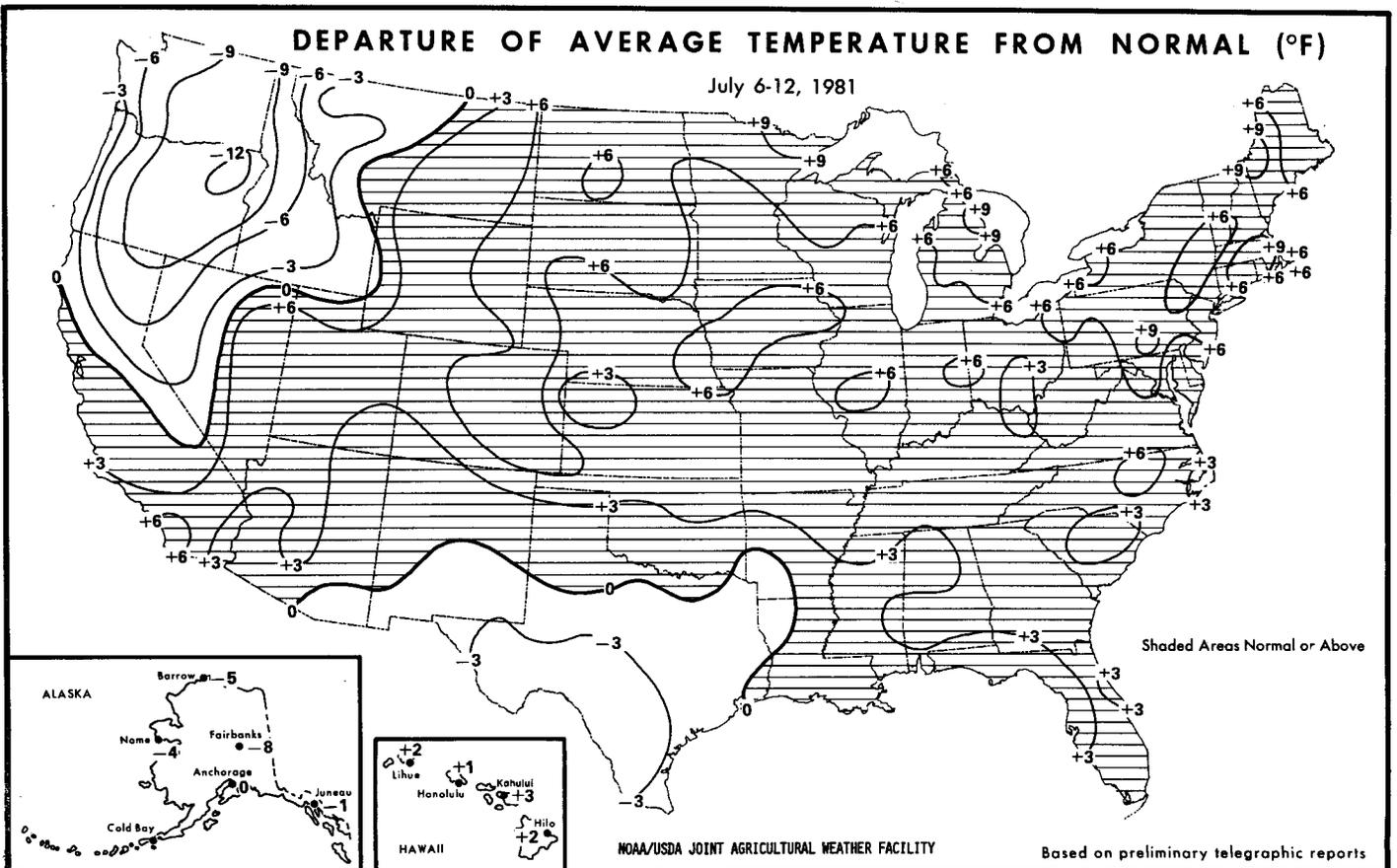
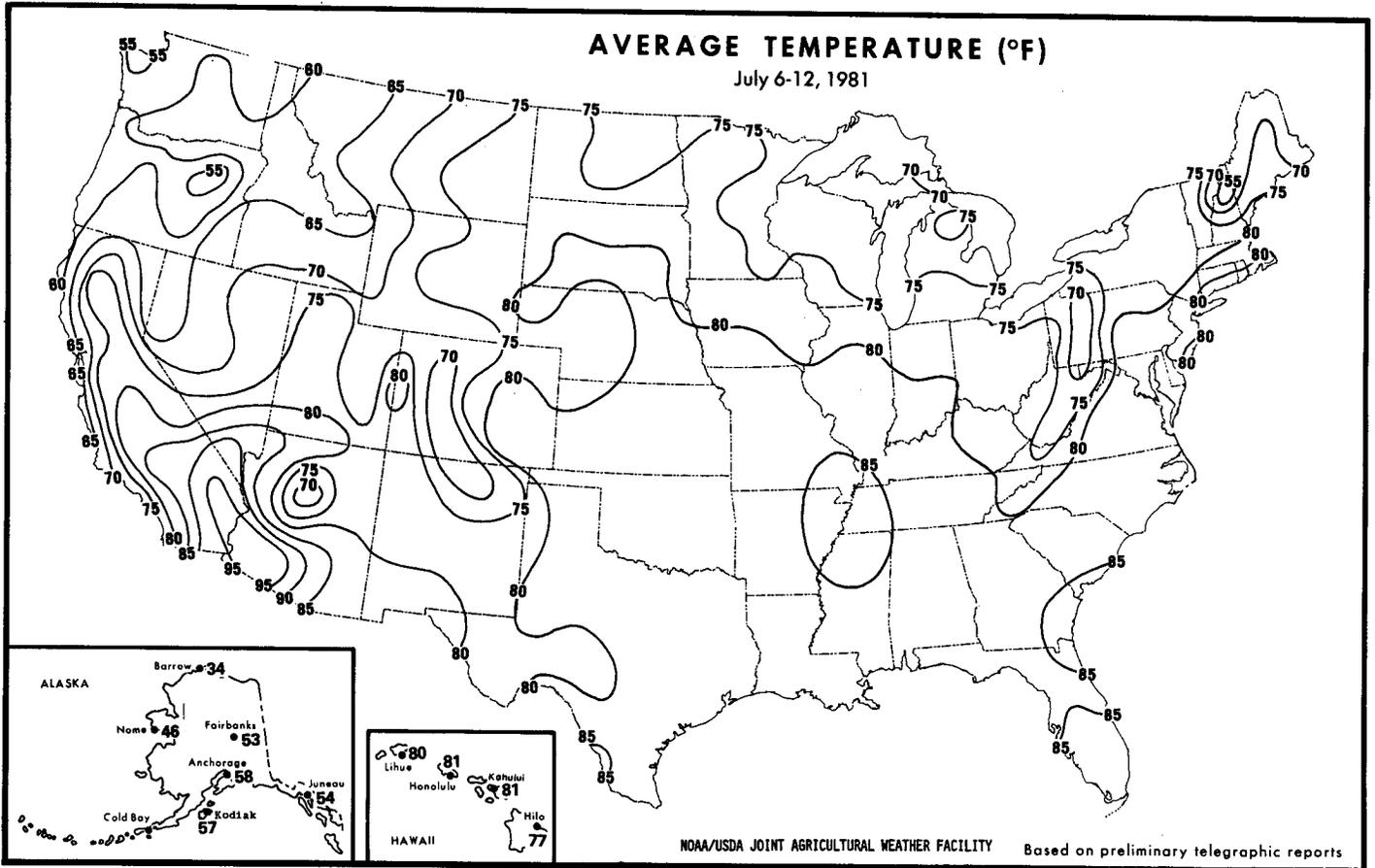
For most farmers who have not irrigated, the general tendency is to believe that maturity is reached sometime before the black layer forms.

Although corn moisture needs are decreasing during the latter stages of growth, moisture stress can adversely affect yield. Often conflicts for use of irrigation equipment develop in the latter stages of corn production.

This is particularly true with crops such as corn and peanuts where corn is irrigated in the early portion of the season and then the same irrigation system is used to irrigate peanuts.

The best way to minimize the possibility that the irrigation system will be needed on both corn and peanuts at the same time is to plant the corn as early as possible in the growing season and select a high yielding medium season variety.

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Weather Data for the Week Ending July 12, 1981

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 June 1	PCT. NORMAL SINCE June 1	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	93	71	94	67	82	2	.8	-.4	.7	4.9	80	23.3	76	91	49	7	0	0	1
MOBILE	93	73	96	72	83	2	3.2	1.1	1.2	11.3	116	37.8	104	90	53	7	0	6	3
MONTGOMERY	94	74	96	72	84	3	.7	-.5	.3	6.1	98	29.0	102	92	55	7	0	2	0
AK ANCHORAGE	63	53	66	51	58	0	.9	.5	.5	1.7	94	4.9	100	78	52	0	0	3	0
BARROW	39	30	48	29	34	-5	.7	.5	.5	1.5	214	---	---	99	84	0	7	5	0
FAIRBANKS	60	46	67	33	53	-8	1.0	.6	.2	3.1	141	4.6	100	98	61	0	1	5	1
JUNEAU	59	49	70	47	54	-1	.2	-.9	.1	4.2	89	20.6	94	95	68	0	0	4	0
KODIAK	64	50	67	44	57	3	.1	-.7	-.1	2.1	38	38.7	140	84	59	0	0	3	0
NOME	51	40	54	37	46	-4	.3	-.1	.2	1.1	69	6.5	120	79	59	0	0	3	0
AZ FLAGSTAFF	79	59	88	53	69	4	1.8	1.3	1.8	2.8	200	11.6	132	85	43	0	0	1	1
PHOENIX	105	85	108	79	95	4	T	-.1	T	T	0	3.1	115	51	22	7	0	1	1
TUCSON	97	72	103	68	85	-1	1.1	.7	.5	1.3	163	6.3	185	83	29	7	0	6	1
WINSLOW	92	65	100	62	79	1	.9	.7	.8	1.7	243	3.8	119	91	52	7	0	6	0
YUMA	104	84	111	82	94	1	0	0	0	0	0	1.1	79	52	24	7	0	1	1
AR FORT SMITH	91	73	96	70	82	0	.5	-.3	.3	4.7	89	20.6	83	94	55	5	0	3	0
LITTLE ROCK	92	73	96	71	83	2	T	-.7	T	6.2	135	28.8	100	92	58	6	0	3	0
CA BAKERSFIELD	98	70	104	65	84	0	0	0	0	0	0	4.4	110	51	16	7	0	2	0
EUREKA	60	49	62	47	55	-1	0	0	0	0	0	7.5	107	89	66	0	0	0	0
FRESNO	99	66	104	62	83	2	0	0	0	6	75	19.0	81	89	66	0	0	0	0
LOS ANGELES	79	66	85	65	72	4	0	0	0	0	0	7.5	107	89	66	0	0	0	0
RED BLUFF	94	64	98	60	79	-3	T	0	T	+100	6.6	84	85	59	0	0	0	0	0
SAN DIEGO	81	71	87	70	76	7	T	0	T	0	16.3	119	49	15	7	0	0	0	0
SAN FRANCISCO	72	51	85	50	62	0	0	0	+100	8.5	142	85	65	0	0	0	0	0	0
STOCKTON	95	59	102	51	77	1	0	0	0	0	0	12.2	99	83	43	0	0	0	0
CO DENVER	93	64	99	58	79	6	.4	-.1	.2	1.1	39	8.9	92	62	21	6	0	3	0
GRAND JUNCTION	96	67	102	64	81	3	.1	0	T	.3	50	4.2	117	60	19	6	0	3	0
PUEBLO	98	65	103	56	82	6	T	-.4	T	.7	33	3.0	45	64	21	7	0	4	0
CT BRIDGEPORT	90	69	95	63	79	6	0	0	0	4.8	123	15.8	81	86	43	4	0	0	0
HARTFORD	93	69	97	63	81	9	0	-.7	0	3.8	79	16.7	75	78	36	6	0	0	0
DC WASHINGTON	92	76	98	73	84	6	T	-.8	0	4.9	100	15.5	79	83	48	6	0	0	0
FL APALACHICOLA	91	73	94	71	82	1	.4	-.1.4	.4	4.9	59	13.7	51	91	62	5	0	2	0
DAYTONA BEACH	93	73	98	70	83	2	.4	-.1.1	.4	1.5	16	12.3	54	87	52	7	0	2	0
FORT MYERS	96	77	98	74	86	4	2.1	0	1.1	13.8	110	20.8	82	93	52	7	0	2	0
JACKSONVILLE	98	72	101	70	85	4	T	-.1.6	T	3.4	37	16.2	64	95	44	7	0	5	2
KEY WEST	91	81	92	78	86	2	.2	-.8	.2	1.1	18	5.5	34	91	68	7	0	1	0
MIAMI	93	78	95	75	85	3	.9	-.8	.4	7.2	60	18.9	67	91	53	7	0	3	0
ORLANDO	95	74	96	71	85	4	.1	-.1.9	.1	14.0	132	22.7	90	91	48	7	0	2	0
TALLAHASSEE	94	71	96	70	83	2	1.0	-.1.1	.8	8.7	85	30.4	93	100	49	7	0	2	0
TAMPA	93	74	97	72	83	1	.2	-.1.7	.1	9.6	99	18.8	80	97	54	7	0	3	0
WEST PALM BEACH	94	76	96	74	85	3	.1	-.1.4	.1	5.6	52	18.9	69	89	53	7	0	1	0
GA ATLANTA	93	74	97	68	84	5	1.0	-.1	1.0	4.5	80	21.9	77	85	49	6	0	1	0
AUGUSTA	95	72	97	70	83	3	.7	-.5	.4	8.2	146	24.4	99	99	48	7	0	2	0
MACON	95	72	98	69	84	3	.3	-.8	.3	8.2	144	26.7	102	89	44	7	0	2	0
SAVANNAH	96	74	100	73	85	4	T	-.1.8	T	3.2	36	15.0	58	96	47	6	0	1	0
HI HILO	84	70	85	66	77	2	1.0	-.1.0	.6	3.2	32	---	---	67	44	4	0	1	0
HONOLULU	88	74	90	73	81	1	T	-.1	T	.1	17	4.5	34	82	54	0	0	4	1
KAHULUI	90	73	92	66	81	3	T	-.1	T	0	0	---	---	81	51	1	0	2	0
LIHUE	88	73	89	70	80	2	1.2	-.8	.5	2.3	96	---	---	67	44	4	0	1	0
ID BOISE	85	51	92	40	68	-6	.2	.2	.2	.9	75	8.9	119	91	59	0	0	6	0
LEWISTON	77	50	85	44	64	-9	.9	.7	.9	2.8	117	8.9	109	67	17	3	0	1	0
POCATELLO	86	52	95	34	69	-2	.2	-.2	.1	.9	60	8.6	132	75	22	3	0	1	0
IL CAIRO	93	78	98	76	85	5	.1	-.7	.1	5.5	96	24.0	86	91	30	0	2	0	0
CHICAGO	91	63	94	56	77	5	1.8	.9	1.8	6.5	116	21.5	119	90	42	4	0	1	0
MOLINE	89	66	96	57	77	3	T	-.1.1	T	6.4	102	15.7	80	93	56	1	0	1	0
PEORIA	90	69	95	62	80	5	0	-.9	0	7.3	135	22.4	113	91	56	4	0	0	0
ROCKFORD	88	65	95	59	77	4	T	-.1.0	T	5.9	95	16.3	84	92	51	3	0	0	0
SPRINGFIELD	92	72	96	65	82	6	0	-.9	0	9.0	153	24.5	124	91	52	6	0	1	0
IN EVANSVILLE	92	71	95	66	81	3	T	-.9	T	4.9	100	25.4	102	88	54	6	0	1	0
FORT WAYNE	88	68	91	61	78	5	0	-.9	0	7.9	144	22.1	108	84	46	2	0	0	0
INDIANAPOLIS	91	69	94	63	80	5	T	-.9	T	3.4	60	23.0	102	86	44	4	0	0	0
SOUTH BEND	87	65	90	57	76	4	.1	-.7	.1	7.1	137	22.8	116	92	49	2	0	1	0
IA BURLINGTON	88	70	96	65	79	4	0	-.9	0	10.2	165	22.6	118	93	61	2	0	1	0
DES MOINES	90	72	97	67	81	6	0	-.8	0	8.0	125	14.4	80	84	51	4	0	0	0
DUBUQUE	86	70	93	65	78	7	0	-.1.0	0	6.6	93	16.6	76	89	51	1	0	0	0
SIoux CITY	90	67	98	57	78	3	T	-.8	T	5.5	92	10.4	69	80	46	3	0	1	0
KS CONCORDIA	94	70	100	65	82	4	.4	-.4	.4	6.7	105	17.1	108	87	41	6	0	3	0
DODGE CITY	96	71	102	68	83	5	T	-.7	T	3.4	74	12.1	103	69	30	7	0	3	0
GOODLAND	93	62	101	52	77	2	0	-.6	0	.9	22	17.6	181	71	24	7	0	0	0
TOPEKA	91	72	95	65	82	4	T	-.1.0	T	9.9	129	20.0	104	87	53	5	0	1	0
WICHITA	95	73	103	66	84	4	T	-.1.1	T	4.5	79	14.0	84	80	35	5	0	1	0
KY LEXINGTON	87	71	90	65	79	3	.2	-.9	.2	4.9	79	21.6	82	96	62	1	0	2	0
LOUISVILLE	91	74	94	71	82	5	.1	-.8	.1	4.9	88	19.0	73	88	53	6	0	2	0
LA BATON ROUGE	92	73	95	70	83	1	1.3	0	.9	8.9	140	26.6	88	98	61	7	0	4	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS.

Weather Data for the Week Ending July 12, 1981

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 June 1	PCT. NORMAL SINCE June 1	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
LAKE CHARLES	92	74	94	71	83	1	1.5	0	1.3	17.9	232	32.1	108	95	62	6	0	4	1
NEW ORLEANS	93	75	96	73	84	2	.1	-1.4	.1	9.5	130	29.2	95	99	61	6	0	3	0
SHREVEPORT	92	72	95	69	82	-1	.8	.1	.6	8.3	180	28.7	107	100	57	5	0	3	1
ME CARIBOU	79	58	86	54	69	4	1.5	.5	.7	5.7	116	18.8	111	95	48	0	0	3	1
PORTLAND	86	63	93	58	75	7	.3	.3	.2	5.8	138	21.0	97	94	42	1	0	4	0
MD BALTIMORE	92	71	95	67	81	5	0	.9	0	8.0	154	18.3	87	82	42	6	0	0	0
MA BOSTON	92	73	99	70	83	10	T	.6	T	2.5	60	14.9	67	73	33	4	0	1	0
CHATHAM	82	68	88	65	75	1	T	T	T	5.5	--	21.5	--	85	59	0	0	0	0
MI ALPENA	92	59	98	47	75	10	T	.5	T	2.4	63	10.4	74	88	32	4	0	0	0
DETROIT	90	65	94	57	78	6	.1	.6	.1	3.4	74	13.9	80	88	39	4	0	1	0
FLINT	87	63	92	54	75	6	0	.7	0	4.4	96	15.2	94	87	39	1	0	0	0
GRAND RAPIDS	90	63	92	54	77	6	T	.8	T	4.3	88	22.4	129	92	42	4	0	0	0
HOUGHTON LAKE	85	60	89	48	72	6	.1	.7	.1	4.2	89	13.9	94	88	42	0	0	1	0
LANSING	90	63	93	50	76	5	.4	.2	.4	3.7	82	16.6	98	94	45	4	0	2	0
MARQUETTE	87	59	90	54	73	7	T	.9	T	6.6	115	18.7	106	89	38	2	0	0	0
MUSKEGON	85	61	87	51	73	3	T	.5	T	3.8	109	14.9	92	92	47	0	0	1	0
SAULT STE. MARIE	81	54	88	47	68	5	T	.6	T	5.6	124	14.4	96	89	50	0	0	1	0
MN DULUTH	84	63	88	57	73	8	.2	.7	.1	6.1	100	14.5	92	85	50	0	0	3	0
INT'L FALLS	89	61	97	54	75	9	T	.9	T	3.9	72	9.6	76	77	35	3	0	1	0
MINNEAPOLIS	86	63	91	52	75	4	2.4	1.5	2.4	6.8	126	14.2	101	87	46	1	0	1	1
ROCHESTER	86	62	90	53	74	4	7.6	6.7	7.5	11.0	175	19.0	127	90	54	1	0	2	2
SAINT CLOUD	87	59	90	41	73	3	1.7	.9	.9	8.6	143	16.0	107	75	48	2	0	2	1
MS JACKSON	93	74	96	72	83	2	.4	.6	.3	10.2	196	28.6	98	93	52	6	0	2	0
MERIDIAN	96	72	100	70	84	3	.6	.6	.3	4.2	72	27.0	90	93	49	7	0	2	0
MO COLUMBIA	91	72	94	69	82	5	T	.9	T	9.0	145	25.5	121	93	55	4	0	0	0
KANSAS CITY	91	73	96	66	82	5	T	1.1	T	7.9	108	21.5	106	93	54	4	0	0	0
SAINT LOUIS	91	74	95	69	82	4	.6	.3	.6	7.5	121	23.5	113	96	58	5	0	2	1
SPRINGFIELD	92	72	96	70	82	4	1.0	.1	.7	9.5	151	23.7	104	94	56	5	0	2	1
MT BILLINGS	91	58	95	49	75	4	.1	.2	.1	1.8	58	11.7	129	54	22	5	0	2	0
GLASGOW	89	59	93	49	74	4	.1	.3	.1	2.0	59	4.8	72	57	20	5	0	3	0
GREAT FALLS	80	51	88	45	65	-3	.6	.2	.4	1.9	48	10.4	103	73	28	0	0	4	0
HAVRE	83	52	91	40	68	-2	.3	.1	.2	1.7	52	5.2	70	77	24	1	0	3	0
HELENA	82	52	89	42	67	0	.3	0	.1	1.4	47	9.6	137	73	26	0	0	4	0
KALISPELL	75	48	87	37	61	-2	.4	.1	.3	4.1	137	13.4	140	84	33	0	0	2	0
MILES CITY	92	64	101	50	78	5	.1	.4	T	2.7	64	6.2	67	55	23	5	0	2	0
MISSOULA	77	47	87	37	62	-4	.7	.4	.5	3.5	130	10.6	131	89	37	0	0	3	0
NE GRAND ISLAND	94	68	103	61	81	5	0	.7	0	1.7	29	10.8	74	86	37	4	0	0	0
LINCOLN	98	71	104	60	84	8	T	.8	T	1.0	16	8.1	53	83	37	7	0	1	0
NORFOLK	94	67	103	55	80	5	0	.8	0	3.9	61	9.4	64	81	35	5	0	0	0
NORTH PLATTE	92	62	102	53	77	3	0	.7	0	2.4	47	13.3	110	85	33	6	0	0	0
OMAHA	95	72	103	66	83	8	T	.9	T	2.1	32	9.1	55	77	44	5	0	0	0
VALENTINE	94	62	104	46	78	4	T	.6	T	4.0	83	8.2	74	75	27	6	0	0	0
NV ELY	89	54	90	46	72	5	T	.1	T	.2	17	5.7	119	41	13	2	0	0	0
LAS VEGAS	105	83	107	79	94	5	0	.1	0	T	0	2.2	105	28	12	7	0	0	0
RENO	85	43	89	40	64	-5	T	.1	T	T	0	2.5	56	63	14	0	0	1	0
WINNEMUCCA	88	47	95	40	67	-3	T	.1	T	T	0	4.1	79	47	8	2	0	1	0
NH CONCORD	90	62	93	58	76	6	.5	.3	.4	5.2	111	20.6	112	95	37	2	0	3	0
NJ ATLANTIC CITY	91	68	93	64	79	5	0	.9	0	5.7	114	20.8	89	89	43	5	0	0	0
TRENTON	93	74	96	69	83	8	0	1.0	0	6.3	129	19.2	92	89	46	6	0	0	0
NM ALBUQUERQUE	93	65	99	60	79	0	.1	.2	.1	1.0	100	3.4	103	71	25	6	0	2	0
ROSWELL	90	65	95	61	78	-1	4.9	4.5	4.2	9.6	505	14.5	302	81	32	5	0	2	2
NY ALBANY	88	62	91	57	75	3	.1	.6	.1	3.9	93	14.2	83	91	42	2	0	1	0
BINGHAMTON	86	64	89	60	75	6	0	.8	0	3.6	75	14.3	74	83	42	0	0	0	0
BUFFALO	84	66	87	62	75	5	.4	.2	.4	4.4	138	16.3	93	88	53	0	0	1	0
NEW YORK	93	75	96	70	84	8	0	.8	0	5.5	125	18.8	88	73	39	7	0	0	0
ROCHESTER	89	64	92	58	77	6	.2	.4	.2	3.9	108	13.7	84	90	46	4	0	1	0
SYRACUSE	91	67	95	61	79	8	0	.7	0	2.0	48	11.7	62	82	36	5	0	0	0
NC ASHEVILLE	88	67	91	65	77	4	T	1.1	T	4.6	81	22.7	92	97	57	3	0	0	0
CHARLOTTE	91	71	94	69	81	3	T	1.0	T	3.6	64	15.6	66	90	49	5	0	1	0
GREENSBORO	92	73	97	70	82	5	.1	.9	.1	5.3	95	16.0	73	86	53	6	0	1	0
HATTERAS	87	72	92	66	80	2	1.5	.2	.8	7.3	103	20.4	78	96	64	2	0	2	2
RALEIGH	93	75	96	73	84	7	T	1.1	T	5.1	93	16.8	76	94	52	6	0	1	0
WILMINGTON	93	74	96	71	84	3	.4	1.5	.4	3.6	41	17.2	65	97	47	6	0	1	0
ND BISMARCK	90	59	101	39	74	4	.6	0	.6	2.4	51	4.6	46	84	32	3	0	3	1
FARGO	89	63	94	49	76	6	.1	.6	.1	3.3	72	8.6	80	81	41	4	0	1	0
WILLISTON	94	58	108	41	76	7	.4	.1	.4	4.0	95	6.3	73	74	25	5	0	2	0
OH AKRON-CANTON	87	64	90	56	75	4	0	.9	0	8.0	157	27.7	136	85	42	1	0	0	0
CINCINNATI	89	68	93	57	78	3	0	1.0	0	4.7	85	21.3	92	95	53	3	0	0	0
CLEVELAND	87	62	93	55	74	3	.1	.7	.1	5.2	108	17.2	86	87	40	2	0	1	0
COLUMBUS	88	63	93	53	75	2	T	1.0	T	6.3	107	24.8	112	89	47	2	0	0	0
DAYTON	91	68	94	60	80	6	T	.8	T	8.2	155	23.2	112	88	45	5	0	0	0
TOLEDO	89	64	93	56	76	4	0	.8	0	9.1	190	19.1	110	86	40	3	0	0	0
YOUNGSTOWN	89	66	94	63	78	7	T	.9	T	4.2	82	19.9	94	82	42	4	0	0	0
OK OKLAHOMA CITY	93	71	98	68	82	1	T	.6	T	8.0	148	17.8	95	89	44	5	0	2	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

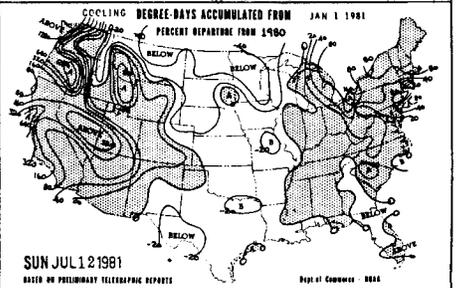
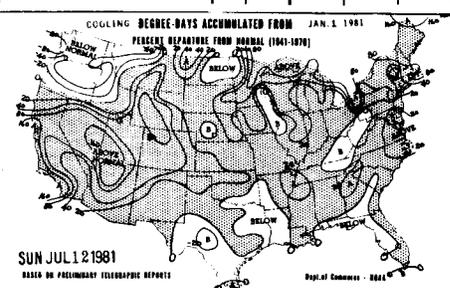
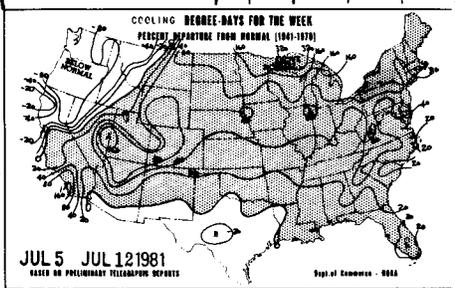
Weather Data for the Week Ending July 12, 1981

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 June 1	PCT. NORMAL SINCE June 1	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OR TULSA	95	75	100	72	85	4	.5	-.3	.5	3.9	64	16.6	78	100	54	5	0	1	1
OR ASTORIA	65	49	68	45	57	-2	.9	-.6	.5	6.6	213	33.9	97	84	52	0	0	4	0
OR BURNS	77	37	86	28	57	-11	.2	-.2	.2	.7	64	7.1	109	80	32	0	1	1	0
OR MEDFORD	78	47	87	42	63	-8	.4	-.3	.4	.9	82	6.3	58	84	29	0	0	1	0
OR PENDLETON	75	51	80	45	63	-10	.9	-.8	.5	2.4	218	9.0	122	68	30	0	0	1	0
OR PORTLAND	71	52	79	45	62	-5	.2	-.1	.1	3.5	194	15.4	79	89	44	0	0	1	1
OR SALEM	71	46	77	41	59	-7	.2	-.1	.2	3.6	212	16.7	76	93	44	0	0	3	0
PA ALLENTOWN	94	70	98	66	82	8	T	1.0	T	6.7	131	21.0	95	80	38	6	0	0	0
PA ERIE	84	64	89	57	74	6	T	-.8	T	5.1	109	21.0	109	82	48	0	0	1	0
PA HARRISBURG	90	69	95	65	80	4	T	-.8	T	6.0	133	18.0	92	84	43	6	0	0	0
PA PHILADELPHIA	91	71	95	67	81	4	T	-.9	T	7.0	135	20.3	97	88	45	6	0	0	0
PA PITTSBURGH	87	62	91	52	75	3	T	-.9	T	8.7	174	22.3	108	89	41	2	0	0	0
PA SCRANTON	89	66	92	60	77	5	T	-.8	T	4.6	90	20.5	112	82	42	4	0	0	0
RI PROVIDENCE	93	68	99	65	80	9	0	-.6	0	4.0	108	16.2	75	89	36	5	0	0	0
SC CHARLESTON	94	76	96	73	85	5	.2	-1.7	.2	13.4	141	25.0	92	95	49	7	0	1	0
SC COLUMBIA	93	71	96	70	82	1	.3	-.9	.2	8.1	137	20.5	83	96	50	6	0	1	0
SC GREENVILLE	93	73	96	72	83	5	.2	-.8	.2	3.8	67	16.3	61	92	52	5	0	2	0
SD ABERDEEN	92	64	98	42	78	7	2.3	1.6	1.4	4.7	94	8.9	78	82	33	5	0	3	2
SD HURON	96	66	105	47	81	8	0	-.6	0	2.1	44	5.0	42	77	28	5	0	0	0
SD RAPID CITY	94	62	106	52	78	6	T	-.6	T	2.6	54	6.1	51	62	23	5	0	0	0
SD SIOUX FALLS	91	67	98	52	79	7	.1	-.6	.1	6.1	105	9.5	65	75	42	4	0	1	0
TN CHATTANOOGA	94	72	97	70	83	4	.8	-.4	.6	6.3	111	24.8	86	90	46	6	0	2	1
TN KNOXVILLE	92	73	95	72	82	4	T	-.8	T	6.6	120	22.0	82	96	58	5	0	1	0
TN MEMPHIS	94	78	98	77	86	5	0	-.8	0	3.8	79	24.5	83	80	47	6	0	0	0
TN NASHVILLE	92	72	96	71	82	3	1.0	-.1	1.0	9.6	196	26.3	96	92	48	6	0	1	1
TX ABILENE	93	72	96	70	82	-1	0	-.6	0	4.4	113	13.9	105	86	34	7	0	0	0
TX AMARILLO	93	67	98	63	80	2	T	-.7	T	1.1	24	6.4	64	70	28	7	0	1	0
TX AUSTIN	91	73	95	69	82	-2	.8	.3	.3	17.9	448	33.8	182	91	54	5	0	3	2
TX BEAUMONT	91	75	95	71	83	0	2.2	.8	1.1	16.2	225	30.9	112	98	66	6	0	4	2
TX BROWNSVILLE	91	76	93	74	83	-1	2.3	2.0	2.1	4.6	139	17.0	157	94	61	5	0	3	0
TX CORPUS CHRISTI	88	75	92	68	81	-3	4.0	3.5	3.5	8.2	228	24.6	182	96	64	4	0	5	1
TX DEL RIO	93	72	96	68	83	-4	.1	-.2	.1	5.7	228	17.6	196	88	48	5	0	2	0
TX EL PASO	94	70	101	65	82	-1	.1	-.3	.1	.7	58	4.0	125	72	28	6	0	2	0
TX FORT WORTH	95	74	98	71	84	0	0	-.4	0	9.7	249	24.1	124	92	46	7	0	1	1
TX GALVESTON	88	78	92	74	83	0	.5	-.6	.5	14.7	245	23.1	116	91	70	2	0	2	1
TX HOUSTON	91	74	95	72	82	-1	2.0	1.0	1.2	13.4	213	31.3	126	94	57	4	0	4	1
TX LUBBOCK	91	69	96	64	80	1	.1	-.5	.1	1.9	49	7.3	74	79	32	5	0	2	0
TX MIDLAND	95	67	98	65	81	-1	.2	-.2	.2	.7	32	6.8	105	87	29	7	0	2	0
TX SAN ANGELO	91	67	94	65	79	-5	0	-.3	0	4.7	196	17.4	189	91	40	5	0	0	0
TX SAN ANTONIO	89	71	93	59	80	-4	T	-.4	T	8.9	247	23.5	160	97	58	4	0	0	0
TX VICTORIA	89	74	94	72	82	-2	1.6	1.0	1.1	12.3	273	26.7	156	98	64	4	0	4	1
TX WACO	95	74	99	68	84	-1	T	-.4	T	7.3	209	18.0	96	92	49	7	0	0	0
TX WICHITA FALLS	96	73	99	69	85	0	T	-.5	T	5.7	133	18.6	114	81	36	7	0	1	0
UT BLANDING	91	59	98	56	75	2	.7	.5	.4	1.4	175	6.0	120	72	28	4	0	4	0
UT SALT LAKE CITY	92	67	97	53	79	3	.2	0	.1	1.3	76	9.1	96	55	21	5	0	2	0
VT BURLINGTON	88	65	95	60	77	7	.4	.4	.4	4.2	88	18.4	119	86	38	2	0	1	0
VA LYNCHBURG	91	69	95	68	80	4	1.1	-.2	.8	8.7	174	18.9	95	91	52	3	0	2	1
VA NORFOLK	91	73	96	70	82	4	.4	-.8	.3	9.4	168	19.5	90	93	48	5	0	2	0
VA RICHMOND	93	72	96	69	82	4	1.0	-.2	1.0	6.9	125	21.7	104	96	51	6	0	2	1
VA ROANOKE	90	69	93	65	79	4	.3	-.5	.3	3.8	78	15.6	76	90	47	4	0	1	0
WA COLVILLE	70	48	85	40	59	-9	1.1	1.0	1.0	4.6	256	13.6	151	89	59	0	0	3	1
WA OMAK	78	51	83	40	64	-	.1	-.1	.1	1.1	--	6.2	89	--	--	0	0	1	0
WA QUILLAYUTE	65	45	68	43	55	-4	.7	-.1	.4	9.1	202	53.9	99	98	58	0	0	5	0
WA SEATTLE-TACOMA	67	50	72	47	59	-6	.5	.3	.4	2.8	156	15.0	77	83	43	0	0	2	0
WA SPOKANE	72	45	85	37	58	-11	.3	.2	.2	2.3	144	9.3	89	90	36	0	0	2	0
WA WALLA-WALLA	78	54	85	47	64	-11	.7	-.6	.6	3.4	227	14.0	141	71	31	0	0	2	1
WA YAKIMA	76	46	84	39	61	-9	T	-.1	T	.7	70	3.2	74	82	28	0	0	1	0
WV BECKLEY	81	65	84	59	73	3	.7	-.4	.6	7.3	117	20.4	83	98	66	0	0	0	0
WV CHARLESTON	88	67	91	62	78	3	.3	-.9	.2	7.7	145	23.1	100	94	54	3	0	2	1
WV HUNTINGTON	88	67	93	62	77	2	.7	-.3	.7	8.0	160	27.1	121	99	56	3	0	1	1
WV PARKERSBURG	97	67	89	57	78	3	0	-1.0	0	6.9	118	19.6	88	93	49	0	0	0	0
WI GREEN BAY	86	62	91	55	74	5	.1	-.6	.1	2.7	57	10.7	74	91	44	3	0	1	0
WI LA CROSSE	89	67	95	59	78	6	4.3	3.5	3.1	6.9	117	16.0	99	100	53	4	0	3	2
WI MADISON	88	61	94	50	75	5	1.5	-.6	1.0	6.6	112	13.5	83	87	43	4	0	2	2
WI MILWAUKEE	85	62	91	58	73	4	1.3	-.5	1.3	3.5	70	15.0	97	86	42	2	0	1	1
WY CASPER	92	60	101	45	76	6	.5	-.3	.3	.9	50	7.6	107	53	19	5	0	1	0
WY CHEYENNE	87	58	95	52	73	4	1.7	1.2	1.7	3.6	109	11.0	117	68	27	4	0	1	0
WY LANDER	90	60	95	47	75	5	T	-.1	T	T	-0	7.2	78	54	21	4	0	2	0
WY SHERIDAN	90	55	97	39	73	3	.2	-.1	.1	2.2	59	8.2	75	64	25	4	0	1	0
PR SAN JUAN	92	80	95	78	86	5	1.2	-.3	1.0	7.1	88	30.8	117	87	64	4	0	3	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JUL. 12, 1981.
BASED ON 1941-70 NORMALS. + ACCUMULATION FROM Jan 1, 1981.

Table with columns for STATES AND STATIONS, WEEKLY DEPARTURE, SEASONAL ACCUMULATION, and DEPARTURE FROM 1980. Rows list various states and cities such as ALA. BIRMINGHAM, ARIZ. FLAGSTAFF, ARK. FORT SMITH, CALIF. BAKERSFIELD, etc.



National Agricultural Summary

July 6-12, 1981

HIGHLIGHTS: Hot weather and little, if any, rainfall in the northern Plains stressed small grains and pushed these crops toward maturity. The heat wave continued over the northern Plains until about mid-week. Above-normal temperatures were recorded in all areas of the Nation except the Northwest and parts of Texas. Soils dried in parts of the Corn Belt and the corn crop will be under stress in some areas if it doesn't rain soon. Later in the week, the heat wave moved to the east coast, increasing irrigation requirements for the growing crops. Soil moisture supplies were adequate to surplus in Illinois, Missouri, and Kentucky and short in parts of the Southeast and Southwest. Elsewhere, supplies were short to adequate. Farmers in nearly all areas of the Nation except in Missouri, Virginia, Kentucky, and Louisiana had more than 4 days suitable for fieldwork. In much of the West and in parts of the North Central States, farmers had 6 or more days favorable for fieldwork. Corn rated fair to mostly good; 13% of the crop was silking. Soybean seeding was active on double-cropped land. Soybeans were blooming on 14% of the acreage. In Illinois and across the South, the crop began setting pods. Cotton was in fair to good condition; squaring was evident on 65% of the acreage and 30% was setting bolls. Winter wheat harvesting spread throughout all but the northernmost producing areas. Combining was 68% finished. Harvesting neared completion in the southern Plains. Spring wheat heading reached 84%. Grain sorghum planting neared completion and, in southern areas, the crop was heading. Limited harvesting started in Texas. Rice was in good condition; harvesting began in Louisiana. Tart and sweet cherry, apple, and peach harvest spread throughout northern production areas. Pastures and ranges were in fair to good condition except in the Southwest and parts of the Southeast where hot, dry weather has limited growth.

CORN: Corn was in fair to mostly good condition in most areas. In the 17 major producing States, 13% of the crop was silking, compared to 20% a year earlier. Silking was underway in all major States except Michigan, Pennsylvania, and Wisconsin, which is normal for this date. In the Southeast, over three-fourths of the acreage was in or past the dough stage and about half was in the dent stage. In the eastern Corn Belt, growth continued behind last year and average. The average height of plants in Indiana was 36 inches, compared to 54 inches last year and average. After an unusually wet spring in Ohio, soils are becoming dry and the crop will be under stress if rain is not received soon.

SOYBEANS: Soybean seeding neared completion on single-cropped land. Nearly all of the acreage remaining for planting is on double-cropped land. Farmers are seeding these acreages as rapidly as small grains are harvested. The crop was in fair to good condition, although emergence of double-cropped soybeans was spotty in parts of the Southeast due to dry fields. In the 18 major producing States, 14% of the soybeans were blooming, behind last year's 25%. Blooming was underway in all States except Indiana and Ohio where late planting set crop progress behind normal. In Illinois, 5% of the crop was setting pods and in the South, pod set

ranged from 2% in Georgia and Tennessee to 9% in Alabama and Louisiana.

COTTON: Cotton rated fair to good, although some poor stands were reported in Missouri. Squaring advanced rapidly toward completion except in the southern Plains where the crop was planted late. In the 14 major producing States, 65% of the acreage was squaring and 30% was setting bolls. Scattered hail storms in the Texas Panhandle damaged several fields. Development in Arizona continued excellent with progress nearly 2 weeks ahead of normal.

SMALL GRAINS: Winter wheat harvest spread throughout all areas except the extreme northern producing States. Combining reached 68% complete in the 15 major producing States, 1 point behind last year. Progress was generally about the same as average in all States except Missouri, where wet fields delayed planting. Harvesting was 99% finished in Oklahoma, 98% in Texas, and 90% complete in Kansas.

Spring wheat heading reached 84% complete, compared with 82% last year and the 77% average. Small grains were pushed to maturity in northern producing areas by the hot weather. Progress was about a week ahead of normal in North Dakota where hot, dry weather stressed crops.

OTHER CROPS: Grain sorghum planting neared completion. The crop was heading in southern areas. In Texas, 68% was headed, 29% was mature, and 12% had been harvested. Harvesting was confined to south central Texas where showers delayed progress. The crop was maturing rapidly in the Blacklands. Some fields in the Panhandle received severe hail damage.

Rice rated good in the Delta region. Heading ranged from 18% in Mississippi to 55% in Louisiana and 86% in Texas. Limited harvesting started in Louisiana.

Peanuts were in good to excellent condition. Planting in Texas made good progress with 95% of the crop planted. In Alabama, 65% of the crop was pegging and, in Georgia, pegging reached the 82% mark.

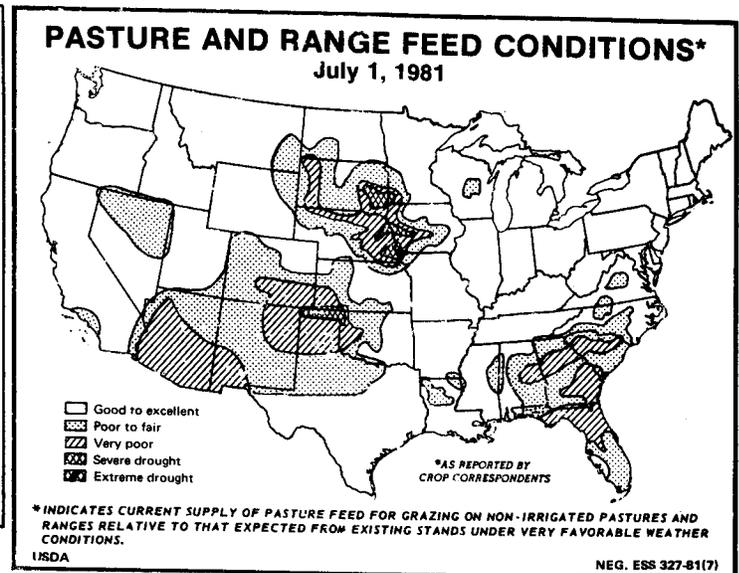
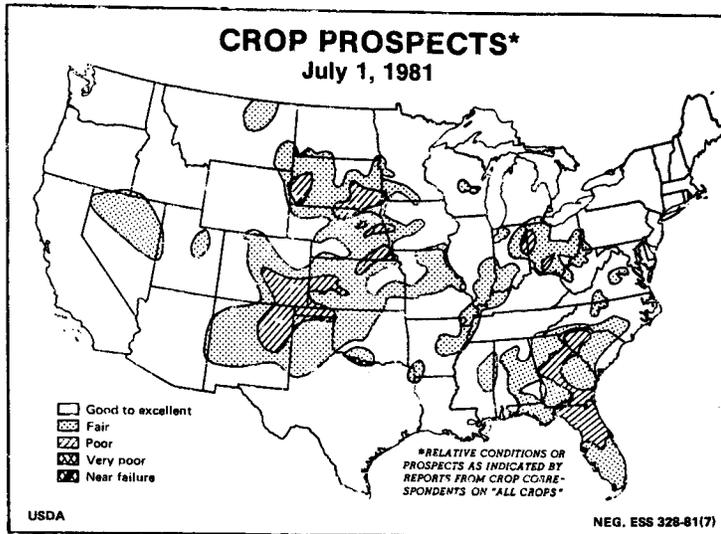
FRUITS AND NUTS: Deciduous fruit harvests continued to advance northward as tart and sweet cherry, apple, and peach picking spread throughout the northern States. The Michigan sweet cherry harvest was 20% finished and the tart cherry harvest was 15% complete, behind the average by 19 and 8 points, respectively. In the Southeast, irrigation helped size peaches.

Florida citrus groves needed rain. Irrigation continued heavy; some growers were drilling deeper wells. The Valencia orange harvest was virtually complete.

California's fresh peach, plum, and nectarine harvests were at peak volume. Picking of clingstone peaches was getting underway.

VEGETABLES: Vegetable production increased in northern areas; growers harvested tomatoes, sweet corn, peas, peppers, and snap beans. Southern growers prepared land for planting fall and winter crops. California producers harvested artichokes, broccoli, carrots, cauliflower, celery, lettuce, sweet corn, and summer onions.

PASTURE AND LIVESTOCK: Pastures and ranges were in fair to good condition except in the Southwest and parts of the Southeast where dry weather resulted in poor to fair conditions. In California, lower egg production and some poultry loss was caused by the hot weather. Livestock continued in fair to good condition.



JULY CROP PRODUCTION HIGHLIGHTS

ALL WHEAT production is forecast at a record high 2.81 billion bushels (76.5 million metric tons), up 19 percent from the 1980 production. The 90 percent confidence interval for this production is 2.64 to 2.98 billion bushels.

WINTER WHEAT production is forecast a record high 2.09 billion bushels (57.0 million metric tons), up 11 percent from the 1980 crop.

DURUM WHEAT production, forecast at a record high 191 million bushels (5.20 million metric tons), is 76 percent more than last year's production.

SPRING WHEAT OTHER THAN DURUM is forecast at a record high 526 million bushels (14.3 million metric tons), up 42 percent from 1980.

CORN production is forecast at 7.12 billion bushels (181 million metric tons), up 7 percent from last year's crop. This will be the third largest crop of record, exceeded only by the 1978 and 1979 crops. The 90 percent confidence interval for this production is 6.00 to 8.23 billion bushels.

OATS production is forecast at 528 million bushels (7.67 million metric tons), 15 percent above the 1980 production.

BARLEY production is forecast at 478 million bushels (10.4 million metric tons), up 33 percent from last year's production.

APPLE production is forecast at 8.06 billion pounds (3.65 million metric tons), 9 percent below last year's record high crop and 1 percent below 1979.

POTATO acreage for harvest (all seasonal groups) is estimated at 1.23 million acres (497 thousand hectares), up 6 percent from 1980 but 3 percent below 1979. The fall crop acreage for harvest is estimated at 1.04 million acres (422 thousand hectares), also up 6 percent from last year.

Indiana Crop Season Summary

Heavy rainfall that plagued planting operations during May and most of June began letting up the last week of June, too late for one of the most drawn out corn and soybean planting seasons on Indiana records. As of July 5, 5 percent of the soybeans still remained to be planted, lagging average by 3 weeks. Planting was completed the end of June in 1980, the normal end of the planting season. Some corn planting continued beyond the last safe planting date, but as of June 28, 95 percent of the corn was planted with some doubts the tail

end plantings would make a grain crop before first frost.

Areas with the heaviest rainfall were the Southwest in May and the Northwest in June, with all areas seriously affected sometime during the period. Soil types were also a big factor as to when planting could be complete. The result is an unusual variation in growth and development from one area to the next and even from one field to the next. Corn height as of July 5 varied from a few inches to silking in some southernmost counties. As of July 5, corn averaged 23 inches in height, 18 inches less than in 1980 and 19 less than normal.

Soybeans, on July 5, were 6 inches high, 5 less than both last year and average with 85 percent of the crop emerged.

The major activity that week was wheat harvest which had advanced to 25 percent complete, ahead of the 15 percent in the previous year, but lagging the normal 35 percent. Progress varied from 80 percent complete in the Southwest to not yet starting in the Northeast. Sixty percent of the wheat was ripe compared with 55 percent last year and 70 percent for average.

Oat harvest was just starting July 5 in Southern counties with the Southwest well ahead of other areas. Three percent of the oats were combined, ahead of the 1 percent last year, but 6 percent is normal. Twenty percent of the rye was harvested compared with 15 percent in 1980 and 35 percent for average.

Second cutting of alfalfa hay was 30 percent complete, the same as both last year and average.

Dry weather the last few days of June and the first few days of July had caused some stress to crops, particularly to corn on high spots, largely because of shallow root systems as a result of the previous ample moisture situations. Week-end rains July 4 and 5 temporarily relieved this problem.

Ohio Crop Season Summary

The 1981 crop season began with below normal precipitation and above normal temperatures. Weather patterns brought increased rainfall and lower temperatures to Ohio during April. Corn planting began on schedule but almost immediately fell behind usual progress. By the beginning of May, corn planting at 10 percent, was less than half the average progress of 25 percent. Rains continued to keep soils

saturated through most of May. Around the Memorial Day weekend, the weather appeared to be more cooperative and farmers planted 25 percent of the corn in one week. Soybeans took a back seat to the more pressing job of corn planting and by May 25 only 7 percent of the beans were in the ground compared to 55 percent last year and average. Rains again took the spotlight as May ended; farmers were only able to plant in parts of the State spared from the shower activity. May precipitation totals ranged from near normal across the North and up to 69 percent above normal in the southern two-thirds of Ohio. On June 1 only 60 percent of the corn was planted--usually virtually all of the crop is in by this time. Most of Ohio corn was

planted after the optimum date this year. Soybean planting, at 20 percent complete, lagged previous years by 50 points. At the end of June weather patterns brought dry weather and farmers were able to plant as rapidly as fields dried. Ohio has received very little rain since the beginning of July. Topsoils are becoming quite dry and crusted. Soybean planting advanced rapidly in early July under the clear weather; farmers also stopped planting corn as the season became too short to mature the crop. Wheat which showed excellent stands early in the season became a victim of disease and lodging as rains continued in June. Harvest began early in July and a large percentage of the crop was combined by July 13--mostly from July 7-13.

CROP PROGRESS

FOR WEEK ENDING JULY 12, 1981

	WINTER WHEAT % HARVESTED		
	1981	1980	AVG.
CALIF	88	81	NA
COLO	41	46	59
IDAHO	0	0	0
ILL	87	84	84
IND	60	55	60
KANS	90	95	85
MO	56	90	80
MONT	0	0	0
NEBR	65	60	55
OHIO	50	15	35
OKLA	99	95	99
OREG	1	1	NA
S DAK	26	33	15
TEX	98	96	98
WASH	0	0	0
15 STATES	68	69	NA
EXCL. STATES WITH NA	69	70	69

THESE 15 STATES PRODUCED 88% OF THE 1980 WINTER WHEAT CROP.

	CORN % SILKING		
	1981	1980	AVG.
COLO	2	2	0
GA	100	100	NA
ILL	22	41	31
IND	2	15	20
IOWA	7	13	16
KANS	20	25	NA
KY	40	33	38
MICH	0	0	0
MINN	6	12	25
MO	24	29	35
NEBR	5	15	10
N C	87	64	NA
OHIO	4	10	10
PA	0	0	0
S DAK	1	1	2
VA	46	26	NA
WIS	0	0	0
17 STATES	13	20	NA
EXCL. STATES WITH NA	9	17	17

THESE 17 STATES PRODUCED 93% OF THE 1980 CORN CROP.

	SOYBEANS % BLOOMING		
	1981	1980	AVG.
ALA	18	19	17
ARK	5	20	NA
GA	14	16	NA
ILL	25	49	36
IND	0	30	25
IOWA	24	34	34
KANS	5	15	10
KY	5	10	8
LA	24	13	27
MICH	10	5	10
MINN	17	39	37
MISS	17	18	13
MO	8	20	13
NEBR	10	30	NA
N C	9	3	NA
OHIO	0	10	15
S C	4	3	6
TENN	13	15	15
18 STATES	14	25	NA
EXCL. STATES WITH NA	15	27	24

THESE 18 STATES PRODUCED 95% OF THE 1980 SOYBEAN CROP.

	COTTON % SQUARING		
	1981	1980	AVG.
ALA	84	82	76
ARIZ	97	95	96
ARK	96	97	NA
CALIF	60	35	NA
GA	94	94	98
LA	89	84	83
MISS	97	95	89
MO	79	87	58
N MEX	90	85	NA
N C	79	63	NA
OKLA	20	15	25
S C	99	95	91
TENN	90	87	65
TEX	54	69	NA
14 STATES	65	70	NA
EXCL. STATES WITH NA	81	78	75

THESE 14 STATES PRODUCED 99% OF THE 1980 COTTON CROP.

NA - NOT AVAILABLE

THESE 17 STATES PRODUCED 93% OF THE 1980 CORN CROP.

THESE 18 STATES PRODUCED 95% OF THE 1980 SOYBEAN CROP.

NA - NOT AVAILABLE

	COTTON % SETTING BOLLS		
	1981	1980	AVG.
ALA	35	32	21
ARIZ	85	67	76
ARK	27	56	41
CALIF	35	5	NA
GA	76	76	81
LA	53	35	32
MISS	34	23	22
MO	6	45	19
N MEX	12	5	5
N C	36	20	NA
OKLA	3	1	1
S C	76	63	50
TENN	6	9	9
TEX	25	20	NA
14 STATES	30	24	NA
EXCL. STATES WITH NA	36	34	31

THESE 14 STATES PRODUCED 99% OF THE 1980 COTTON CROP.

NA - NOT AVAILABLE

NA - NOT AVAILABLE

	SPRING WHEAT % HEADED		
	1981	1980	AVG.
IDAHO	86	86	78
MINN	98	96	87
MONT	60	65	60
N D	82	76	71
S DAK	100	100	97
5 STATES	84	82	77

THESE 5 STATES PRODUCED 92% OF THE 1980 SPRING WHEAT CROP.

NATIONAL WEATHER SUMMARY
(Continued from page 1.)

Minnesota. Up to 6 inches of rain locally flooded streets and cropland. Showers also dampened parts of the Southeast and from the southwestern mountains to the northern Plains. A little cooler air drifting into the Northeast brought relief from the heat wave of the past 3 days; but hot, humid weather lingered over the Southeast. Unusual heat returned to the central Plains with a blistering 105°.

SUNDAY...Strong thunderstorms formed along portions of the stationary front, causing wind damage in Wisconsin and locally heavy rains in Colorado. The central Plains remained very hot, up to 104°, while the unusual heat hung on across the south Atlantic States. In contrast, pleasant mild weather persisted over the Pacific Northwest. Moist tropical air in conjunction with strong afternoon heating supported thundershowers across western New Mexico into eastern Arizona. A few showers fell in parts of New England, the Southeast, and Northwest.

NA - NOT AVAILABLE

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 ESS State Offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 3° above normal. Scattered rain, some areas no rain, other areas up to 3.00 in.

Fieldwork: 5.2 days. Activities: planting sorghum, row crop cultivation, and spraying cotton for insects. Corn: silked 95%; 73% 1980; 77% average; dented 51%; 21% 1980; 30% average; mature 16%. Soybeans: planted 99%, blooming 18%; 19% 1980; 17% average; setting pods 9%; 9% 1980. Sorghum planted 92%; 91% 1980. Cotton: squaring 84%; 92% 1980; 76% average; setting bolls 35%; 32% 1980; 21% average. Peanuts pegging, 65%; 44% 1980; 58% average. Conditions: corn, soybeans, cotton, sorghum good, peanuts good to excellent; pasture fair.

ALASKA: Rainy days slowed all farming activity throughout Railbelt. Growers in the Tanana and Matanuska Valleys rainfall halted haying activity. Wind and rain damage to grain mostly light.

Grain fields good growth increased acreages of oats and barley headed out ranging from 20 to 100%. Over 75% of barley crop headed. Hilling potatoe plants underway, averaging near 40%. Few fields starting to bloom. More localities opened fresh produce markets of radishes, leaf and head lettuce, and other greens available. Soil moisture supplies adequate to surplus. Sunshine and warm temperatures would be welcome throughout Railbelt.

Tanana Valley, cool and wet weather continued. Matanuska Valley, heavy precipitation and cool temperatures prevailed.

Kenai Peninsula, seasonal temperatures with minimums 4 to 6° below normal.

Kodiak Island, cool and damp weather by week's end put daytime highs 6° below normal and nighttime lows just below normal.

ARIZONA: Humid weather continued with scattered daily thundershowers over eastern two-thirds of State. Amounts mostly between 1.00 to 2.00 in. Average temperatures from 2° below to 7° above normal.

Cotton continued excellent progress, 2 weeks ahead normal; 97% fields squaring, 95% last year; boll setting occurred 85% of fields, well ahead of last year's 67%. Insecticide applications for pink bollworm picking up in stub cotton. Regular planted cotton predator insect population good. Few wheat, barley fields remained. Harvest corn for silage Central Valley winding down. Corn for grain making seasonal progress Cochise County area. Sorghum crop all stages of development. Safflower ready for harvest. Sugarbeet harvest 75% complete. Hot temperatures lowered sugar level but normal this time of year. Alfalfa haying ahead of normal. Harvest cantaloups, finished. Limited harvest honeydews Mohave Valley. Second picking watermelons in progress Salt River Valley, Eloy, Casa Grande areas. Grape harvest finished except for few Thompson seedles, Exotics. Green onion harvest in progress Salt River Valley. Digging of potatoes for chippers completed. Harvest of citrus virtually complete. Groves looked good, new crop set excellent. Range conditions fair mid-to-higher elevations, very poor to poor south-western deserts. Livestock poor-to-fair, supplemental feeding required. Soil moisture and stock water, short to adequate.

ARKANSAS: Warm, humid week. Highest temperature 99°, lowest 63°. All departures -3 to +3°. Most rainfall 2.28 in., least zero.

Soybean planting virtually complete. Soybean emergence 93%, 95% 1980; blooming 5%, 20% 1980.

Cotton 96% squared, 97% 1980; setting bolls 27%, 56% 1980. Five days suitable for fieldwork. Soil moisture supplies adequate. Forage cover on pastures slightly above average. Livestock conditions good.

CALIFORNIA: Temperatures were below normal in the north end of the State while the rest of the State achieved above normal temperatures. Another dry week with only a trace of rain at Willows and none in the mountains or anywhere else in the State.

Barley, wheat harvest almost complete. Wheat 88% harvested compared to 81% 1980. Stubble baled, burned or disced under to milo and dry beans. Rice progressing. Excellent cotton conditions. Squaring 60% complete, 35% 1980. Bolls 35%, 5% 1980. Field corn doing well. Alfalfa cut, baled, irrigated. Sunflowers growing well. Dry beans, sugarbeets showing satisfactory growth. Apples heavy Sebastopol, Gravenstein begin mid-July. Apricots nearly complete except Hollister. Table grapes nearly complete Desert, heavy volume Arvin. Fresh peaches, plums, nectarines near peak volume. Clingstone peaches getting underway, some small size, split pits. Prunes show some sun damage. Valencias packed for export. Almond hull split begins, walnuts propped. Melons, market tomatoes, processing tomatoes, and green pepper volume increasing. Harvest continues for artichokes, broccoli, carrots, cauliflower, celery, lettuce, sweet corn, and summer onions. Harvest almost complete for spring potatoes and spring onions. Range grass dry, however, nutritive value still good. Fire danger high with range fires continuing problem most areas. Some poultry loss lower egg production reported due to hot weather.

COLORADO: Daily afternoon and evening showers and thunderstorms 7th through end of week. Storms were spotty and few areas received significant precipitation. Temperatures for the period were 2 to 4° above normal over most of the State.

Winter wheat turned color 93%, 96% 1980, 97% average; ripe 74%, 79% 1980, 84% average; harvested 41%, 46% 1980, 59% average. Barley headed 89%, 85% 1980; turned color 47%, 49% 1980; ripe 13%, 0% 1980. Corn average height 40.0 in., 41 in. 1980, 46 in. average; silked 2%, 2% 1980. Sorghum emerged 93%, 94% 1980, 99% average. Dry beans emerged 98%, 99% 1980, 97% average. Alfalfa 1st cutting 87%, 87% 1980, 93% average. Second cutting 18%, 24% 1980, 26% average. Ranges and pastures fair condition. Livestock good condition. Six days suitable for fieldwork.

FLORIDA: Hot, sunny and fairly dry most all areas through the 8th. By the 9th, showers and thundershowers began to build and through the 12th, many locations received 0.25 to 0.50 in. with amounts of 1.00 to 1.50 in. not uncommon. Winds away from the showers and thunderstorms continued light and variable under sunny skies.

Soil moisture mostly short; only a few isolated areas and the southern tip have adequate moisture. Dryland corn mostly poor, some acreage lost, some cut for silage. Irrigated corn fair condition. Early corn about ready for harvest. Tobacco harvest full swing. Markets open this week. Peanuts fair condition overall. Soybean planting about complete, early beans blooming, setting pods. Hay harvest continues, yields low. Sugarcane fair condition, needs more rain. Some Panhandle and extreme southern pastures good condition. Others poor to fair with local areas in very poor condition. Cattle fair condition. Citrus groves need rain. Irrigation continues.

Current rains only scattered. Some growers drilling deeper wells. Valencia harvest all but over. The vegetable season over for most crops. Very light volume of watermelons moving from north and Panhandle. Zellwood sweet corn harvest, Gadsden County tomato harvest complete. Very light supply celery, cucumbers, eggplant, peppers, other vegetables available.

GEORGIA: Temperatures near normal; mid 70's mountains to low 80's south. Rainfall variable, ranging from none to over 1.00 in.

Soil moisture short to adequate. Main activities harvesting, spraying herbicides and fungicides, haying. Five days suitable for fieldwork. Corn fair to good; 83% dough, 63% dent, 22% mature, last year 65% dough, 39% dent, 21% mature. Soybeans fair to good; 14% blooming, 2% setting pods, last year 16% blooming, 1% setting pods. Peanuts fair to mostly good, 97% blooming, last year and average 98%; pegging 82%, last year 85%, average 88%. Cotton fair to good, 94% squaring this year and last, 98% average; 76% setting bolls this year and last, 81% average. Tobacco fair to good; 25% harvested, 27% last year, 39% average. Pastures and hay crops fair to good. Cattle fair to good. Hogs fair to mostly good. Peaches fair to good; 69% harvested, same last year, 81% average. Apples fair to mostly good with 1% harvested, none last year. Watermelons fair to good; 67% harvested, 54% last year, 69% average.

IDAHO: Temperatures ranged from 7° below normal to 3° above. Freezing temperatures were recorded in several stations with the low being 21°. Precipitation was variable. Northern Panhandle reported up to 1.04 in.

Winter wheat headed: 98%, 100% 1980, 98% average. Near one-third turning color. Spring wheat headed: 86%, 86%, 78%. Spring barley headed: 65%, 70%, 77%. First cutting of alfalfa: 88%, 94%, 85%. Cherries harvested: 75%. Potatoes: 35% closed rows. Frost damage in spring grains, potatoes, beans. Problems with rust, aphids, and lodging in small grains. Six days suitable.

ILLINOIS: Temperatures 3 to 7° above normal. Precipitation 2.00 in. northeast section, 0 to 0.10 in. remainder of State.

Corn condition 22% excellent, 65% good, and 13% fair; average height 58 in., most advanced 75 in.; 22% silked, 41% 1980, and 31% average. Soybeans 25% blooming, 49% 1980, 36% average; 5% setting pods, 10% 1980, 7% average; condition 8% excellent, 69% good, 21% fair, 2% poor. Winter wheat harvest 87% complete, 84% 1980, 84% average. Oats 15% excellent, 80% good, 5% fair; 85% turning yellow, 66% 1980, 73% average; 35% ripe, 23% 1980, 38% average; 15% combined, 7% 1980, 15% average. Alfalfa condition 12% excellent, 83% good, 5% fair; second cutting 65% complete, 50% 1980, 55% average. Pastures 23% excellent, 69% good, 8% fair. Soil moisture 8% short, 64% adequate, 28% surplus. Fieldwork: 4.8 days suitable.

INDIANA: Hot and dry. Temperatures averaged near 80, 5° above normal, and ranged from 54 to 95°. Rainfall zero to 0.20 in. Half of stations reported none. Four week totals 0.20 to 2.10 in. below normal.

Fieldwork averaged 5 days. Topsoil moisture short to mostly adequate. Subsoil moisture mostly adequate. Wheat 60% combined, 1980 55%, average 60%. Wheat 100% ripe, 1980 95%, average 95%. Oats 10% combined, 1980 5%, average 15%. Rye 45% harvested, 1980 30%, average 55%. Corn 2% silking, 1980 15%, average 20%. Soybeans 95% emerged. Soybeans 9 in. high, 1980 14 in., average 14 in. Soybeans 0% blooming, 1980 30%, average 25%. Corn and soybean condition fair to good. Corn 36 in. high, 1980 54 in., average 54 in.

Alfalfa 40% cut second time, 1980 40%, average 45%.

IOWA: A hot, dry week. Temperatures averaged about 5° above normal and precipitation was negligible excepting spotty showers primarily over the northeast and southwest.

Topsoil moisture: 18% short, 75% adequate, 7% surplus. Subsoil moisture: 30% short, 64% adequate, 6% surplus. Corn tasseled: 1981 17%, 1980 35%, normal 32%. Corn silked: 1981 7%, 1980 13%, normal 16%. Soybeans bloomed: 1981 24%, 1980 34%, normal 34%. Oats harvested: 29% complete, 1980 17%, normal 25%. Second cut alfalfa hay harvested: 51% complete, 1980 47%, normal 39%. First crop clover hay harvested: 98% complete, 1980 100%, normal 97%. Fieldwork: 5.5 days suitable. Crop conditions: pasture, winter wheat, alfalfa hay, clover, oats, corn and soybeans mostly good. Livestock mostly good.

KANSAS: Temperatures ranged 3 to 6° above normal, warmest northeast, central, and south central sections. Precipitation averaged 0.25 in. to 0.50 in. all but northwest where no precipitation fell. Locally heavier amounts 1.00 in. to 3.00 in. northeast, central, and southwest.

Wheat harvest fair progress 90% combined, last year 95%, average 85%. Corn silked 20%, last year 25%. Soybeans blooming 5%, last year 15%, average 10%. Sorghum planting virtually complete at 96%. Eighty percent of second cutting alfalfa completed. Chinch bug infestation severe north central and central areas, moderate in east central, south central and southeast. Grasshoppers moderate to heavy some areas.

KENTUCKY: Temperatures little above normal with highs reaching into 90's and lows in low 70's. Rainfall averaging around 1.00 in. fell over eastern quarter and at some western stations; other areas received only 0.50 in. or less.

Fieldwork: 3.6 days suitable. Soil moisture 3% short, 76% adequate, 21% surplus. Surplus primarily in west along Ohio, Mississippi and Green Rivers and several east central counties. Corn making rapid growth, 40% of acreage silking or beyond compared with 33% last year and 38% average. Soybean development highly variable, some still being planted while others beginning to bloom. Tobacco fair, some fields on low areas look poor. Crop growing rapidly with 30%, 2 feet or more in height and another 45% between 1 and 2 feet. Black shank most serious disease at this date, but much concern over blue mold. Pastures good. Hay good but quality hurt by rank growth and rain on cut hay. Peach harvest active.

LOUISIANA: Showers Statewide. Temperatures normal to 2° above.

Soil moisture adequate. Days suitable: 3.6. Corn dough stage 83%, 54% 1980, 68% average; mature 42%, 14% 1980; condition good. Rice headed 55%, 49% 1980, 56% average; ripe 6%, 6% 1980. Harvest began in a few fields; condition good. Cotton squaring 89%, 84% 1980, 83% average; setting bolls 53%, 35% 1980, 32% average; condition fair to good. Soybeans blooming 24%, 13% 1980, 27% average; setting pods 9%, 6% 1980; condition fair to good. Sorghum headed 66%, 25% 1980, 42% average; turning color 30%, condition good. Sugarcane condition good. Sweetpotato condition good to excellent. Vegetables fair to good. Peach harvest 80%, 77% 1980; condition good. Pastures, livestock good condition.

MARYLAND AND DELAWARE: Temperatures 4° above normal. Highs upper 80's to low 90's. Lows high 60's to low 70's. Precipitation average 1.28 in.

Corn tasseled, 40% Maryland; 25% Delaware. Barley harvest completed. Wheat 80% cut Maryland, 70% Delaware; last year 90% Maryland and

Delaware. Oats in Maryland 60% harvested. Rye in Maryland 75% cut, Delaware 50%. Alfalfa hay 2nd cut 70% Maryland and Delaware. Other hay 2nd cutting 80% Maryland, 25% Delaware. Tobacco, blue mold moderate. Cucumber harvest 40% both States. Snap beans 85% Maryland, 40% Delaware. Potato and tomatoes harvest started. Apples and peaches good condition in southern Maryland and Eastern Shore. Five days for fieldwork. Soil moisture short to adequate.

MICHIGAN: A very warm and dry week. Temperatures averaged 4 to 10° above normal with greatest departures in northern Lower and western Upper. Hot early in week and warm end of week through weekend. Precipitation mostly less than 0.10 in. in scattered showers 8th and again 12th. Isolated amounts of 0.10 to 0.30 were reported western Upper and south central Lower Peninsula.

Conditions were good for crop growth and fieldwork, although soils getting dry. Wheat harvest begun in south. Other activities included haying, cultivating, and irrigating. About 6 days were suitable for fieldwork. First cutting of hay 90% complete. Corn 34 in., 36 in. last year, 41 in. normal. Apple size average for most varieties. Sweet cherry harvest 20% complete, 15% last year, 39% normal. Tart cherry harvest 15% complete, 5% above last year and 8% below normal. Vegetable crops progressing normal. Pasture supplies average.

MINNESOTA: Temperatures averaged 7° above normal. Extremes ranged from 101° at Browns Valley to 43° at Pipestone. Precipitation averaged 0.50 to 0.75 in. below normal over northern areas to 4.00 in. above normal over southeast. West central, central, east central and south central areas ranged from 0.50 to 1.50 in. above normal; southwest was 0.50 in. below normal. Most of the heavy rainfall in southeast occurred on 11th. Extremes ranged from 8.07 in. in Preston to a trace at Grand Marais.

Continued hot dry weather. Crops made rapid growth and development. Hail-damaged crops in south central beginning to make some recovery. Topsoil moisture 7% very short, 44% short, and 49% adequate. Rain over weekend will be very beneficial. Tasseling: field corn 6%, 1980 12%, normal 25%. Blooming: soybeans 17%, 1980 39%, normal 37%. Turnign ripe: spring wheat 30%, 1980 28%, normal 26%; oats 41%, 1980 34%, normal 37%; barley 36%, 1980 43%, normal 35%; winter wheat 76%, 1980 85%, normal 77%; rye 86%, 1980 87%, normal 81%. Cut or swathed: spring wheat 0%, 1980 0%, normal 3%; oats 2%, 1980 0%, normal 7%; barley 0%, 1980 1%, normal 4%; winter wheat 3%, 1980 4%, normal 11%; rye 5%, 1980 5%, normal 13%.

MISSISSIPPI: Near normal to slightly above normal temperatures. Extremes: 65 and 100°. Rainfall 2 days many locations. Greatest 24-hour precipitation 2.62 in.

Soil moisture adequate. Fieldwork: 4.1 days suitable. Cotton 97% squaring, 95% last year, 89% average; 72% blooming, 58% last year, 52% average; 34% setting bolls, 23% last year, 22% average; condition good. Soybeans 17% blooming, 18% last year, 13% average; condition good to fair. Corn 90% silking, 75% last year, 77% average; 55% dough stage, 33% last year; condition good. Sorghum 96% planted, 24% headed. Rice 18% headed; condition good. Hay 67% harvested; peaches 50%; watermelons 54% harvested.

MISSOURI: Temperatures climbed into the 90's with most areas averaging 2° above normal. Precipitation was spotty with amounts averaging from 0.50 to 1.50 in.

Fieldwork: 3.7 days suitable. Corn 36% tasselled, last year 51%. Corn 24% silking, last year 29%. Grain sorghum 81% planted, last year 100%,

normal 100%. Single crop soybeans 85% planted, last year 100%, normal 100%. Double-crop soybeans 55% planted, last year 84%. Soybeans 8% blooming, last year 20%. Wheat 56% harvested, last year 90%, normal 80%. Oats 32% harvested, last year 66%, normal 52%. Alfalfa hay 2nd cutting 61% harvested, last year 71%, normal 57%. Other hay 70% harvested, last year 89%. Cotton 79% squaring, last year 87% normal 58%. Cotton 6% setting bolls, last year 45%. Condition of corn and pasture good to excellent. Condition of soybeans fair to good. Condition of cotton poor to fair. Topsoil moisture supply adequate to surplus.

MONTANA: Flow of air mostly from the southwest bringing moist, unstable air and thunderstorms into much of State. Although northeastern and south central divisions continued to have hot, dry weather rest of State picked up 0.20 to 0.30 in. of moisture. Temperatures were generally above normal. The warmest reading was 106° in Broadus. The coolest was 26° in West Yellowstone.

Topsoil and subsoil moisture deteriorating to short eastern third of State, short to adequate elsewhere. Fieldwork: 6 days suitable. Winter wheat condition good to excellent. Harvest will begin this week localized areas, Statewide last week of July. Spring crops good to excellent condition in south central and northwest, fair to good eastern third, mostly good elsewhere. Hot weather and winds impacting on spring planted small grains. Sugarbeet condition good to excellent main growing areas. Crop progress compared with last year and average: winter wheat turning, 55, 60, 60; spring wheat headed 60, 65, 60; barley headed 60, 65, 60; oats headed 60, 60, 60. First cutting alfalfa hay harvested, 80, 70, 75; wild hay harvested 50, 40, 40. Grasshopper activity light eastern third of State and other localized areas.

NEBRASKA: Precipitation: Only widely scattered showers in Panhandle and eastern portions of State. Temperatures: 3 to 8° above normal.

Winter wheat mostly fair to good; harvested 65%, 60% last year and 55% normal; mature 95%, 99% last year and 75% normal. Corn fair to mostly good; silking 5%, 15% last year and 10% normal. Soybeans fair to good; blooming 10%, 30% last year. Sorghum fair to good; reading just underway in a few fields. Dry beans and sugarbeets good. Second cutting of alfalfa 65% cut, 60% last year and 50% normal. Alfalfa mostly fair. Pasture and range feed supplies mostly short to adequate. Days suitable: 6.7. Topsoil moisture mostly short to adequate. Subsoil moisture mostly short to adequate.

NEVADA: Mostly hot, dry, and windy. Temperatures averaged only slightly above normal as night temperatures refreshingly cool. No rain.

Dry weather aiding hay harvests. First cuttings alfalfa hay complete except high elevations. Garlic harvest starting main producing areas. Warm daytime temperatures pushing growth small grains, potatoes and other row crops.

NEW ENGLAND: High pressure south and central areas. Temperatures above normal; northeast 3 to 8°, elsewhere 2 to 4°. Humid throughout the week.

Fieldwork: 4.8 days favorable. First crop hay cut, 81%. Potatoes: some blooming, hilling, cultivating and applying insecticides. Oats growing well, heading. Apples: scab, sizing. Vegetables growing well, many insects, some gypsy moth. Cranberries: heavy bloom, fruitworm treatment. Strawberries: harvest declining, renovation occurring. Good condition: corn, potato, oats, vegetables, cranberries, raspberries. Fair condition: apples, blueberries. Soil moisture mostly adequate, grazing adequate.

NEW JERSEY: Temperatures averaged 4 to 7° above normal. Extremes: 55° at Newton and Toms River

on 11th and 98° at Long Branch on 9th. There was no measurable rainfall.

Estimated soil moisture, in percent of field capacity, averaged: 78 north, 64 central and 57 south. Four inch soil temperature averaged: 77 north, 79 central and 79 south. Total sunshine Trenton July 6 to July 12 was 93% of possible hours. Fieldwork: 6.0 days suitable. Hot weather advancing crop maturity. Harvest of summer vegetable increasing. Potato digging continues light. Blueberry volume heavy. Peach harvest becoming general. Light harvest of summer apples underway. Wheat combining active, soybean planting continues after grain harvest. Hay making active. Numerous insect problems, spraying active.

NEW MEXICO: Soil moisture continued short to adequate. Major farm activities included irrigating, hay cutting, cultivation, and harvest of barley, wheat and onions. Cotton in good condition and growing well. Alfalfa fields in good condition. Third cutting underway in the south and second cutting continues to progress in the north. Wheat and barley harvest nearly complete. Corn and grain sorghum in good condition. Chile and onions in good condition. Harvest of mid-season onions underway. Beans, potatoes and peanuts in good condition and growing well. Pecan progressing well. Cotton squaring 90%, 1980 85%. Cotton setting bolls 12%, 1980 5%, average 5%.

NEW YORK: Temperatures well above normal, rainfall light all areas.

First cutting alfalfa for dry hay 86% in, 95% 1980, 89% average. Clover-Timothy hay 76% done, 85% 1980, 78% average. Grass silage 92% cut, 96% 1980, 93% average. Regrowth good, second cut started. Corn growth excellent. Wheat combining started. Early oats turning. Long Island sweet corn, cabbage harvests underway. Upstate vegetable crops made good growth under very good conditions. Apples, peaches, pears showing good size. Early peach harvest underway.

NORTH CAROLINA: Temperatures: above normal. Precipitation: near 0 in the northern counties to almost 2.00 in. in the south.

Fieldwork: 5.2 days suitable. Soil moisture: 1% very short, 31% short, 66% adequate, 2% surplus. Conditions: pasture mostly fair to good; field tobacco mostly good; corn fair to mostly good; cotton, peanuts, soybeans, hay mostly good; Irish potatoes fair to mostly good; sweet-potatoes, apples, peaches, truck crops mostly good. Harvest: Irish potatoes 84%, 1980 73%, 82% average; wheat 99%, 1980 100%, 96% average; oats 100%, 1980 100%, 98% average; barley 100%, 1980 100%, 98% average; rye 100%, 1980 100%, 96% average; flue-cured tobacco 9%, 1980 5%, 8% average; peaches 44%, 1980 65%, 52% average; hay 68%, 1980 67%, 68% average. Phenological stages: cotton squared 79%, 1980 63%, cotton setting bolls 36%, 1980 20%; corn silked 87%, 1980 64%; corn dough stage 52%, 1980 29%; corn dent stage 20%, 1980 8%; soybeans blooming 9%, 1980 3%. Supplies: fuel supplies adequate.

NORTH DAKOTA: Hot, dry weather continued into the second week. Many stations west and central reaching 100°. Average temperatures 5 to 8° above normal. Extremes: 109 southwest to 39° central. Scattered thunderstorms brought spotty precipitation over weekend. Heaviest rainfall southwest, up to 2.47 in. Precipitation very light.

The continued hot weather put small grains under stress. Moisture supplies diminishing. Heat during heading to flowering stages reducing yield potential. Scattered wind and hail damage. On 12th, 53% of State was short of topsoil moisture, last year 95%, average 47%. Small grains pushed to maturity. Average about a week ahead of normal

pace. Some winter wheat and barley swathing expected to begin within the week. Percentages milk to dough or beyond with last year and average: Hard red spring wheat 43, 40, 32; durum 25, 34, 23; barley 61, 45, 46; oats 49, 42, 35. Good weather for row crop development although additional moisture would now be welcomed. Average height all fields with last year and average: Sunflower 20, 20, 26; corn 22, 27, 31. Percent bloom or beyond, last year and average: Potatoes 35, 39, 45; flax 26, 24, 27.

OHIO: Hot; maximums averaged mid to upper 80's, lows averaged low 60's to near 70. Warmest afternoon readings low to mid-90's at least 3 to 4 days. Several very humid days when humidity dropped only to 60's. Temperatures averaged 2 to 7° above normal. Precipitation well below normal averaging well under 0.50 in. Amounts ranged from zero to 1.80 in. Dryness developed rapidly under high heat. Evaporation totals around 1.50 in. Growing degree days accumulations rapid and ranged from 160 in cooler northeast to over 180 in warmer southwest, west central.

Hot, dry weather permitted rapid wheat combining progress. Grain moisture running 14 to 16%. Yields and test weights have been cut by lodging and disease. Soybeans rated fair. The crop behind normal progress, but the hot weather speeding development. Mexican bean beetles, which are entering the innocuous pupae stage, didn't do much damage in larvae stage. Corn rated fair. The crop will be under moisture stress if precipitation not received soon. European corn borer has reached moderate infestation in some localities. Wheat harvested 50%, 15% 1980, 35% average. Soybeans bloomed 0%, 10% 1980, 15% average. Corn silked 4%, 10% 1980, 10% average. Oats ripe 30%, 20% 1980, 30% average. Oats harvested 5%, 5% 1980, 5% average. Alfalfa harvested (2nd cut) 30%, 30% 1980, 30% average. Other hay harvested (1st cut) 90%, 95% 1980, 100% average. Days favorable: 6. Pasture condition fair to good. Soil moisture 25% short, 68% adequate, 7% surplus.

OKLAHOMA: Rainfall received Statewide, averaging from 0.06 in. north central to 1.49 in. southeast. Temperatures averaged near normal southern areas, elsewhere above normal temperatures; northeast averaged 3° above normal.

Wheat harvest essentially complete. Soil moisture supplies shortest Panhandle and northwest areas. Wheat harvested 99%, 95% 1980, 99% average. Sorghum grain up to stand 93%, 100% 1980, 98% average. Cotton squaring 20%, 15% 1980, 25% average. Days suitable fieldwork: 5.5.

OREGON: Temperatures near to slightly below normal. Highs reaching 90's to 100's first of week down to lows of freezing by week's end. Precipitation mainly received in northeast and coastal areas.

Soil moisture mostly adequate. Winter wheat fair to mostly good in west; mostly good to excellent in east; 89% turning; 1% harvested. Barley harvest resumed midweek. Grass seed swathing and harvesting begun. First crop alfalfa cutting complete in east; second beginning in west. Mint good growth some rust problems. Sweet cherry harvest complete in Wasco County; beginning in Willamette Valley, Union County and Hood River County. Strawberry harvest nearly complete. Raspberry, boysenberry, marion, and blueberry harvest underway. Cranberries treated for girdler and fireworm. Spraying for filbert worm. Harvesting early fresh vegetables. Killing vines on early potatoes, digging to start next week. Livestock, range and pasture conditions mostly good to excellent, some drying. Pinkeye problem in some areas.

PENNSYLVANIA: Temperatures were 2 to 4° above normal. Temperatures of 90° and above several days. Precipitation nearly nil except a few iso-

lated amounts of 0.25 in. or less in the central mountains and northeast. Dryest week since latter part of January 1981.

Five days suitable. Soil moisture adequate to short. Activities: Making hay; spraying alfalfa, potatoes, vegetables, and fruit trees; harvesting barley and wheat; clipping pasture. Average height of corn 41 in.; last year 31 in. Barley 13% turning yellow, 38% ripe, and 45% harvested; last year 15% turning yellow, 25% ripe and 59% harvested. Wheat 37% turning yellow, 42% ripe, and 14% harvested; last year 46% turning yellow, 39% ripe, and 14% harvested. Oats 57% headed, 33% turning yellow and 5% ripe; last year 55% headed, 35% turning yellow and 5% ripe. First cutting alfalfa virtually complete. Second cutting alfalfa 42%; last year 30%. Clo-Tim 89% harvested; last year 94%. Quality of hay made good to fair. Feed from pasture average to above average.

PUERTO RICO: Island average rainfall 1.22 in. Highest weekly total 4.44 in. Temperatures averaged 83 to 82° on Coasts and 79 to 78° Interior Divisions. Extremes: 95 and 63°.

SOUTH CAROLINA: Slightly below normal temperatures first of week climbed to well above normal. Near 100° at several locations 11th. Scattered thundershowers first and end of period.

Soil moisture short to adequate. Five days available for outdoor work. Corn fair condition, 79% dough stage, 47 year ago, 62 average; 13% mature, 4 year ago, 12 average. Cotton condition good, 99% squared, 95 year ago, 91 average; 76 setting bolls, 63 last year, 50 average; first generation boll weevil problem one area, other insect control occasional. Late planted soybean stands skippy due to dry soils, general condition fair to good, 4% blooming, 3 last year, 6 average. Peaches fair to good, irrigation helping size, quality; 42% harvested compared to 43 last year, 53 average. Tomatoes virtually harvested, 96% complete, ahead of year ago 93. Watermelons fair to good condition, 49% harvested, 48 last year, 54 average.

SOUTH DAKOTA: High temperatures throughout week. Five to 8° above normal. Extremes: 115 and 42°. Precipitation north central and northeast over weekend. As much as 2.36 in. Mostly 0.25 to 0.75 in.

Topsoil moisture adequate in southeast and parts of south central and central, short or critically short elsewhere. Six days suitable. Row crops condition 85 to 89% of normal. Average corn height 33 in., 4% tasseled, 1% silked. Winter grain harvesting in full swing. Spring grains condition 66% to 73% of normal. Livestock in good condition. Ranges and pasture conditions 57% of normal. Second crop alfalfa 15% cut. Winter wheat turning color 100%, 1980 100%, average 94%. Winter rye turning color 97%, 1980 100%, average 89%. Oats turning color 85%, 1980 81%, average 60%. Spring wheat turning color 70%, 1980 73%, average 45%. Barley turning color 76%, 1980 82%, average 63%. Winter wheat harvested 26%, 1980 33%, average 15%. Winter rye harvested 14%, 1980 12%, average 9%.

TENNESSEE: Two weak cold fronts brought scattered thundershowers on 6th and 10th. Showers were distributed evenly across the State. Temperatures averaged 3 to 6° above normal.

Fieldwork: 4.4 days suitable. Soil moisture adequate. Soybean blooming 13%, 1980 15%, average 15%. Soybeans setting pods 2%, 1980 2%, average 1%. Cotton 90% squaring, 87% 1980, 65% average. Cotton setting bolls 6%, 1980 9%, average 9%. Corn 55% silking, 1980 41%, average 45%. Corn in dough stage 10%, 1980 2%, average 7%. Wheat 97% harvested, 1980 94%, average 90%. Oats 95% harvested, 1980 94%, average 89%. Barley 98%

harvested, 1980 96%, average 91%. Tobacco blooming and some topping was reported. First observation of blue mold was reported in several east counties. Japanese beetle spreading and causing damage on fruits and vegetables. Livestock and pastures in good condition. Pinkeye spreading as a result of the increase face flies population. Haymaking progressing well. Second cutting of alfalfa 84% completed, 1980 87%, average 79%. Garden vegetable harvest in full swing. Cultivation and weed spraying continue.

TEXAS: Weather: High pressure situated southeastern U.S. extending into Texas producing very warm temperatures, couple weak low pressure troughs produce showers coastal sections. Temperatures within 1 or 2° normal except South Texas where average temperature 4° below normal. Rainfall 1.00 in. above normal East, South Texas; about 2.00 in. above normal Upper Coast. Rainfall near normal elsewhere.

Range and livestock: Shower activity continued and benefitted ranges, pastures. With adequate forage, livestock good to excellent condition. Spraying necessary for grasshopper control. Drenching of sheep and goats necessary. Rainfall hampered hay harvest.

Commercial vegetables: Rio Grande Valley remaining melons, peppers, tomatoes harvested. Some fall peppers planted. Citrus trees sprayed for insects and with fungicide. In San Antonio-Winter Garden area, daily showers hampered vegetable harvest. In North and East Texas, vegetable harvest active. Most vegetables in good shape. Sweet potatoes look good but weeds are problem. In Trans-Pecos area remaining onions continue to be harvested. On High Plains, supplies of onions, potatoes, cabbage were available. Peach harvest continues. An excellent crop expected. Pecans continued to develop well.

Crops: Most field crops make good progress during week. Scattered showers South Texas and along Coast interrupted sorghum harvest. Scattered hail storms in Panhandle damaged several fields of cotton, corn and sorghum. Cotton making good progress in the Panhandle, and in some areas fields received rain to aid squaring. Several fields in High Plains received hail damage, early fields Low Plains beginning to set bolls. Reported condition Statewide is 11% excellent; 67% good; and 22% fair. Sorghum harvest underway in South Central Texas, although scattered showers interrupted most operations. Most producers in southern part of State need hot, dry weather for harvest to resume. The crop maturing rapidly in Blacklands, some fields in Panhandle received severe hail damage. Reported condition Statewide is 28% excellent; 59% good; 12% fair and 1% poor. Corn continues to tassel and silk in the Panhandle, and some early stands have almost completed grain fill. Severe hail storms damaged, scattered fields in Northern High Plains. Corn maturing rapidly in the Blacklands. Most areas southern part of State need hot, dry weather for the grain to dry before harvest can start. Statewide reported condition 23% excellent; 60% good; and 17% fair. Wheat harvest almost complete in the High Plains. Oat harvest winding down across State. Reported wheat condition Statewide 11% excellent; 43% good; 38% fair; and 8% poor. Soybeans being replanted in flood damaged areas along Upper Coast. Peanut planting making good progress across State; rice making good progress along Coast. Cotton squaring 64%, 69% 1980. Cotton setting bolls 25%, 20% 1980. Cotton open bolls 3%, 7% 1980. Rice headed 86%, 84% 1980. Rice turning color 34%, 44% 1980. Sorghum headed 68%, 64% 1980. Sorghum turning color 54%, 51% 1980. Sorghum mature 29%, 34% 1980. Sorghum harvested for grain 12%, 27% 1980, 18% average. Wheat harvested for grain 98%, 96% 1980, 98% average. Oats harvested 97%, 99% 1980, 100% average. Peanuts plant-

ed 95%, 100% 1980, 99% average. Soybeans planted 87%, 100% 1980, 99% average. Sunflowers planted 92%, 100% 1980, 98% average.

UTAH: Recurring periods scattered shower and thunderstorm activity. Accumulated amounts moisture generally light to moderate but locally heavy with some flooding few localities. Average temperatures continued well above normal ranging from 1 to 9° above. Pan evaporation ranged from 1.65 in. to over 4 in. at the reporting stations. Soil moisture short. Risk of range and forest fires increasing. Irrigation and weed control major activities. Grain and second crop hay harvest beginning. Sweet cherry harvest winding down, as tart cherry and apricot harvest beginning. Cattle and sheep in good condition on high mountain ranges. Irrigation water running short some areas.

VIRGINIA: Moderate to heavy amounts rainfall most areas 6th, light amounts central and southeastern areas 10th. A warming trend through 10th, slightly cooler 11th and 12th. Highs mainly in 90's and lows in 60's and 70's.

Crops responded well to rains the previous weekend, and prospects bright. Wells, ponds, and streams still below normal levels but much improved. Topsoil moisture rated 5% short, 85% adequate, 10% surplus. There were 3.9 days suitable for fieldwork. Corn in excellent condition, 46% silking, 26% 1980. Soybeans in excellent condition, some very early plantings beginning to bloom. Double crop plantings responding well to rain and sun. Tobacco in excellent condition, 1% of flue-cured crop harvested, topping very active. Peanuts in excellent condition, leaf spot appearing due to high humidity and high night temperatures. Rain slowed wheat harvest, now 92% complete, 85% 1980, 81% average. Apple and peach crops look good. Vegetable and watermelon crops benefitted from rain. Japanese beetles becoming a problem. Eastern Shore potato harvest slowed by rain. Livestock mostly in good condition with lambs and calves growing well. High heat and humidity have contributed to some sows being lost at farrowing. Pastures and hayfields in good to excellent condition. Alfalfa growing well.

WASHINGTON: West: Temperatures were mostly 2 to 5° below normal. Precipitation was 0.10 in. below normal in the San Juans, but other areas were mostly 0.10 in. above normal. Strawberry harvest was winding down while raspberries were approaching peak harvest. Blueberry harvest was underway in early areas. Harvest of lettuce, cole, broccoli and cauliflower crops continued. Cucumber fields were progressing slow due to the cool, wet weather. Dairy operators were green chopping where and when able. There was also some baling of hay last week.

East: Temperatures were 4 to 8° below normal. Precipitation was 0.20 to 0.40 in. above normal except for Walla Walla with 0.80 in. above and Colville with 1.10 in. above normal. Cherry harvest was near completion or completed in early areas while higher areas were beginning harvest. Development of tree fruit crop have been slowed by the unseasonably cool, wet weather. Apple and pear growers will soon be spraying the second brood of codling moths in the Yakima Valley. Apricot and peach harvest began in the early areas. Dry peas and lentils were reported in good condition last week. Walla Walla sweet onion harvest continued active. Wheat and barley were generally reported

in average or above average condition. Reports of disease and aphids continue to surface. Both, wheat and barley, are expected to be harvested on a limited basis this week. The first cutting of alfalfa hay was near completion throughout the eastside with some areas into the second cutting.

WEST VIRGINIA: Temperatures above normal. High 96, low 38°. Precipitation near normal except in north where it was below normal. Range of 2.10 in. to trace.

Soil moisture adequate. Major activities: Hay harvesting and gardening. Wheat good to fair condition, 31% headed, 45% ripe, 24% harvested; 36% headed, 44% ripe, 20% harvested in 1980. Barley good to fair condition, 12% headed, 39% ripe, 49% harvested; 18%, 31%, 51% in 1980. Oats good to fair condition, 12% pre-headed, 65% headed, 15% ripe, 8% harvested; 12%, 73%, 9%, 6% in 1980. Corn good to fair condition. Tobacco fair to good condition. Hay good to fair condition, 1st cutting 69% complete, 75% of normal; 84% and 78% in 1980; 2nd cutting 15% complete, 63% of normal; 18% and 74% in 1980. Fruit fair to poor condition. Pastures good to fair condition. Potatoes good to fair condition. Gardens fair to good condition.

WISCONSIN: Temperatures averaged 4° above normal as the State experienced a very warm week. Highs all in the 90's and lows were mostly 50's. Extremes: 96 and 47°. Rainfall was heaviest in the west central area which averaged 1.60 in., other regions ranged from 1.40 in. to 0.40 in. with the least amount of precipitation being reported in the east central area.

Fieldwork: 6 days suitable. Corn height averaged 48 in., 1980 46 in., average 38 in. Corn crop made excellent growth with the hot, humid conditions. Late week rains helped ease concerns about inadequate moisture. Soybeans look good. Herbicide damage to soybeans has been reported in some areas. First crop hay harvest virtually complete and second crop harvest begun. Second crop 15% harvested, 10% 1980, 10% average. Small grains turning color rapidly and winter wheat begun in the southern areas. Pea harvest continuing and sweet corn tasseling. Seed potato crop being reported as excellent. Topsoil moisture supplies 66% short and 34% adequate. East central area of State in most need of rain.

WYOMING: Rainfall light, nearly all stations reporting below normal. Largest amount 0.37 in. Temperatures well above normal all locations. Warmest in northeast with many locations about 10° above normal.

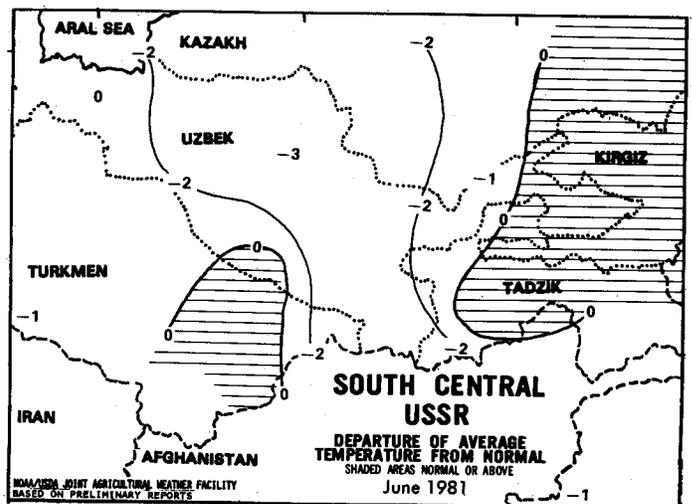
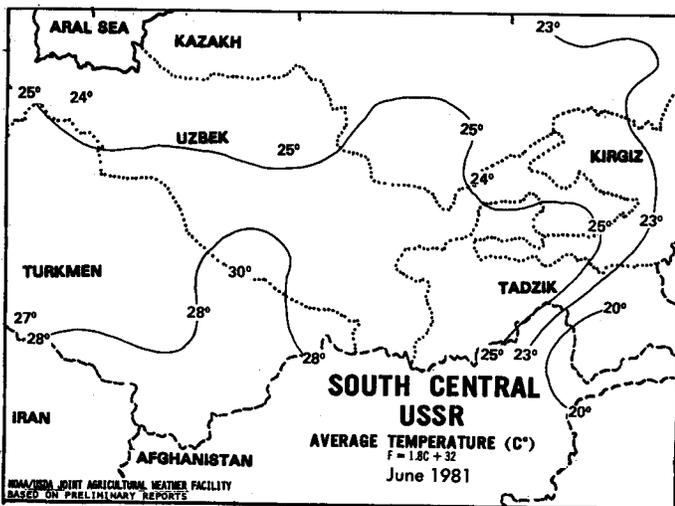
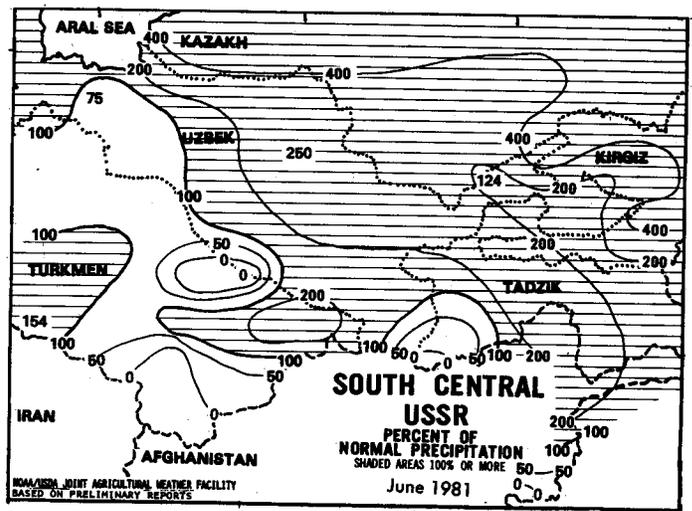
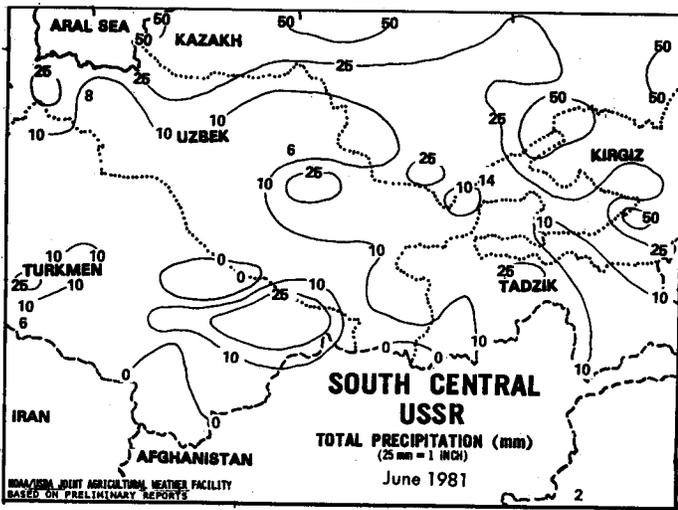
Topsoil moisture supplies rated 12% adequate; 88% short or very short, year ago 24% adequate; 76% short or very short. Days suitable for fieldwork: 6.9. Winter wheat: 95% turning color; year ago 89%; normal 77%. Spring wheat headed 65%; year ago 71%; normal 81%. Oats headed 70%; year ago 60%; normal 76%. Barley headed 80%; last year 86%; normal 86%. First cutting alfalfa 75%; year ago 67%; normal 75%. Other hay 30% cut; year ago 19%; normal 31%. Corn less than 5% tasseled; year ago 3%; normal 4%. Beans 15% in bloom; year ago 5%; normal 13%. Contracted for fall delivery: Cattle 4%; calves 6%; lambs 7%; year ago: Cattle 5%; calves 7%; lambs 8%. Stock water supplies 49% short; 51% adequate; year ago 26% short; 74% adequate.

International Weather and Crop Summary

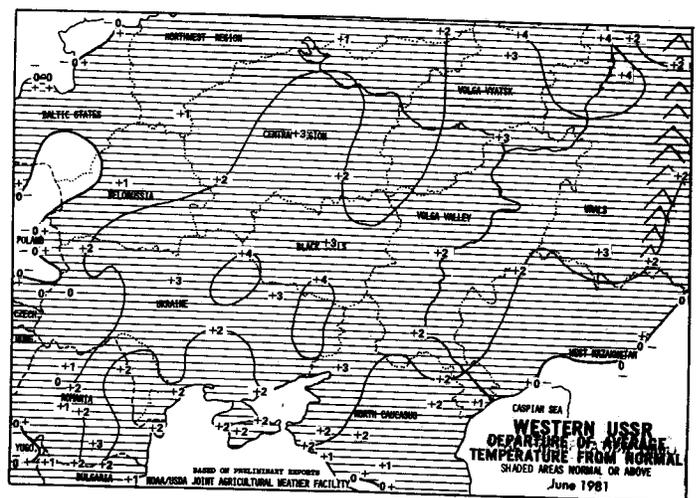
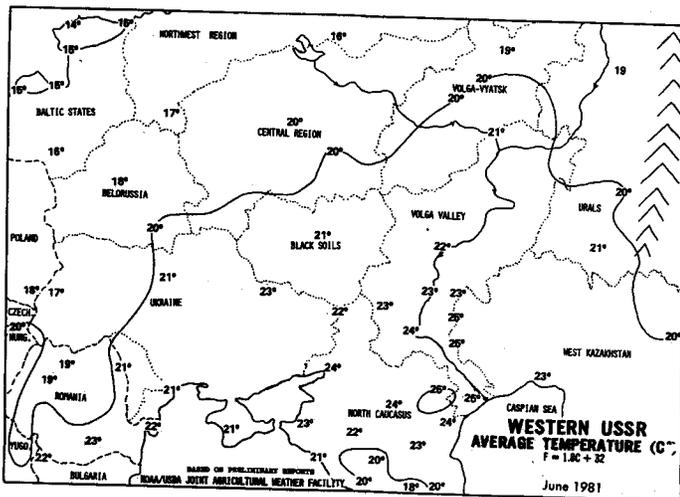
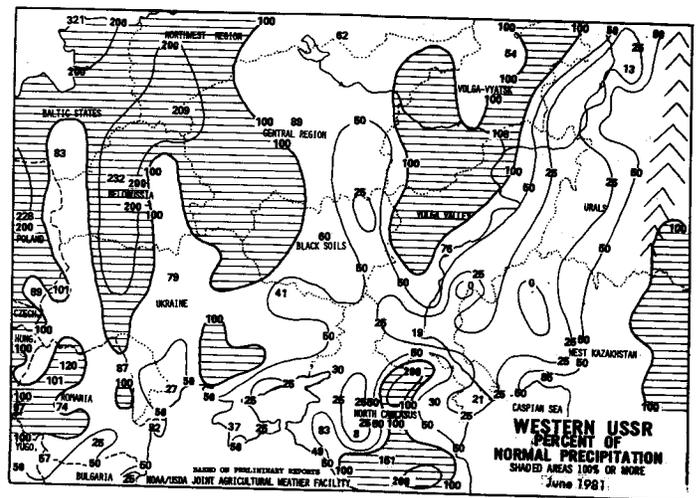
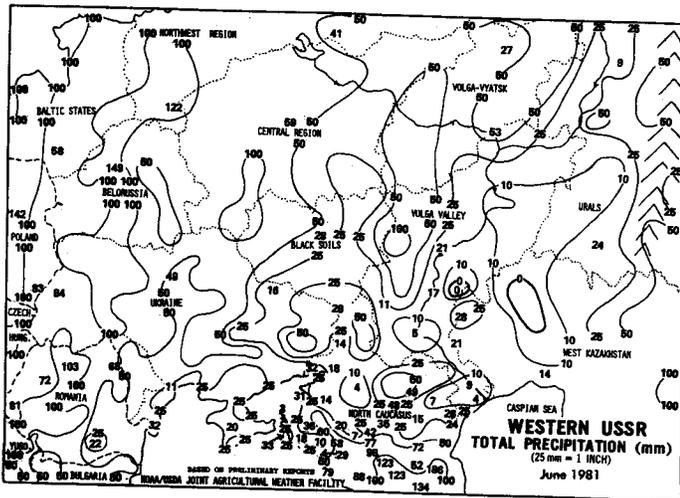
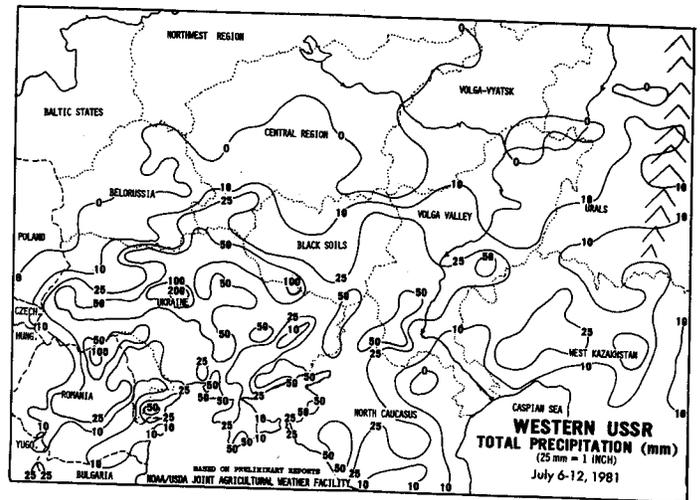
July 6-12, 1981

HIGHLIGHTS

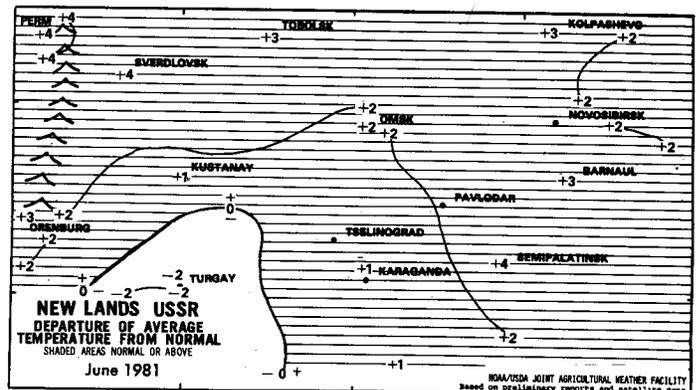
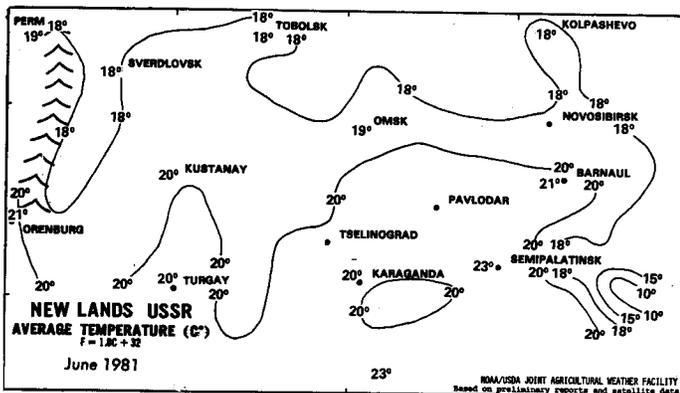
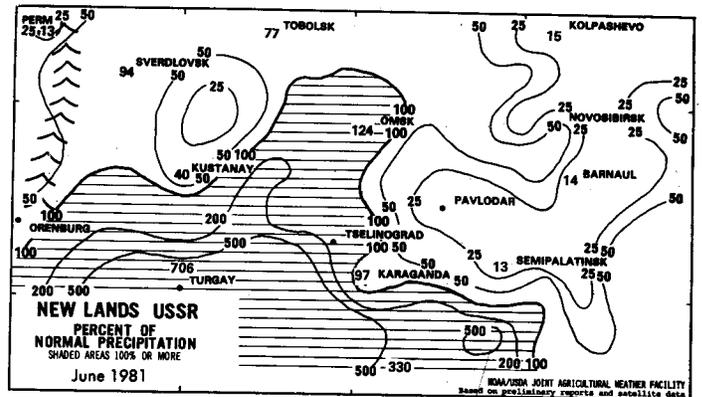
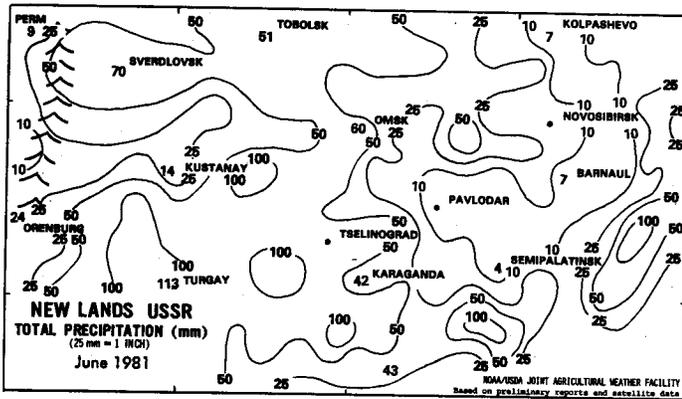
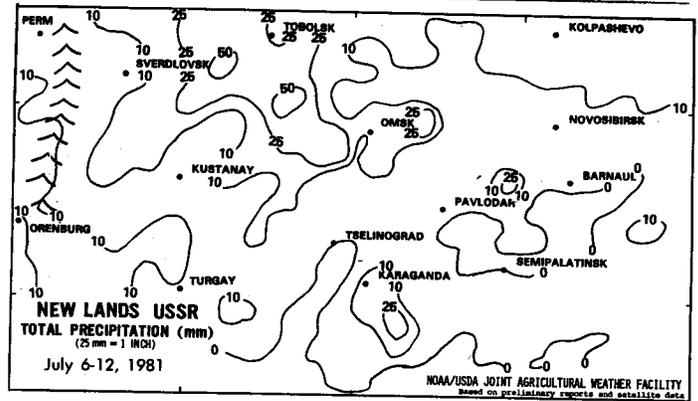
- EUROPE:** Wet weather continued in the northwest, but most of West Germany had drier weather.
- USSR:** Widespread rainfall in southern European USSR improved growing conditions for spring crops in the east, but made conditions too wet for maturing winter grains in the west. Continued dry weather in the eastern New Lands began to hurt potential yields of spring grains.
- CHINA:** Abundant rainfall continued across much of China, further improving conditions in the north, but making conditions too wet along the lower Yangtze River and to the west of Canton.
- INDIA:** Abundant rains benefited nearly all areas. Conditions remained unfavorably dry in parts of the south.
- SOUTH AMERICA:** Adequate soil moisture for slow-growth period for wheat in Brazil and Argentina.
- CANADA:** Warm, dry weather increased crops' demand for moisture in Prairies.
- SOUTHEAST ASIA:** Variable rainfall pattern continues with crops in generally good conditions.
- AUSTRALIA:** Conditions are mostly favorable for early wheat growth.
- MEXICO:** Heavy rains benefited corn in the southern Plateau, increased irrigation supplies over northwestern watersheds, but hampered grain harvest in the Northeast. Most cotton and citrus areas were hot and dry.



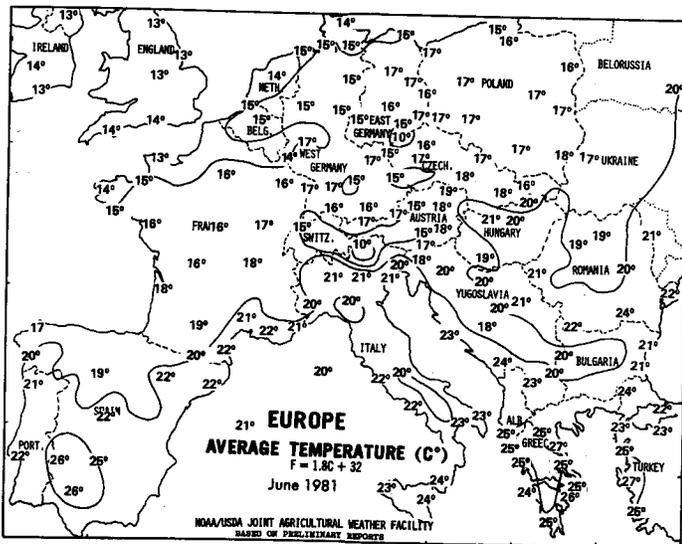
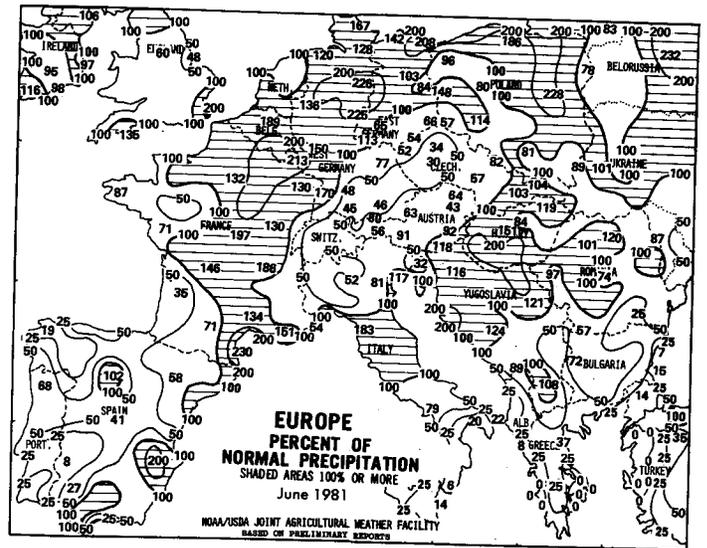
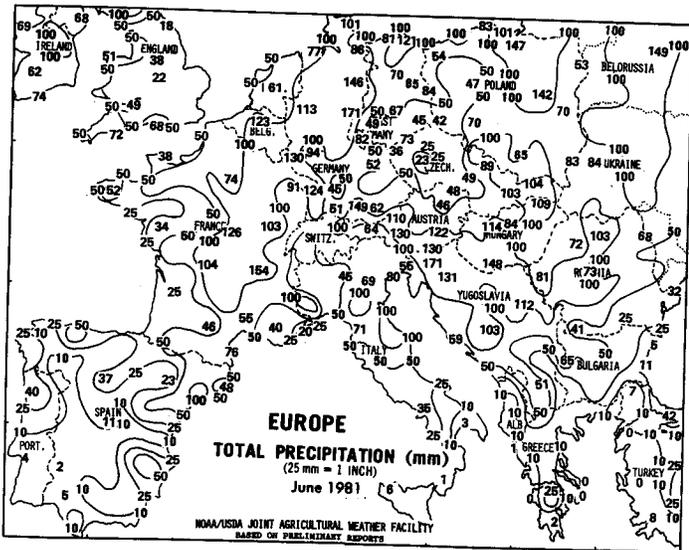
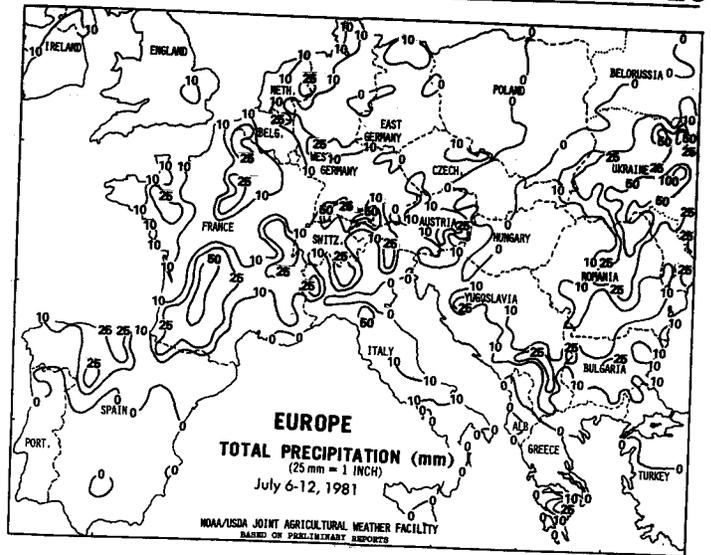
WESTERN USSR: An almost stationary low-pressure system over the Black Sea brought numerous showers to the southern parts of European USSR during the weekend. Above-normal rains covered the Ukraine, North Caucasus, southern Chernozem Region, Lower Volga Valley, Western Kazakhstan, and southern Urals, giving widespread relief from the dryness. Much of that region had suffered from hot and dry weather throughout June. This moisture will benefit spring-sown crops, including the late filling of spring wheat and barley; however, the net effect is only to prevent further yield losses. Row crops will perhaps benefit the most. Winter grain harvesting was disrupted by the moisture, but only in the central and western Ukraine should persistent dampness be causing substantial problems. Temperatures stayed near normal in southeastern European USSR crop areas, dropped below normal in the western Ukraine, and stayed above normal in the middle and upper Volga Valley. Little rain fell in the upper Volga Valley, and spring grains in parts of that area should still be under some stress.

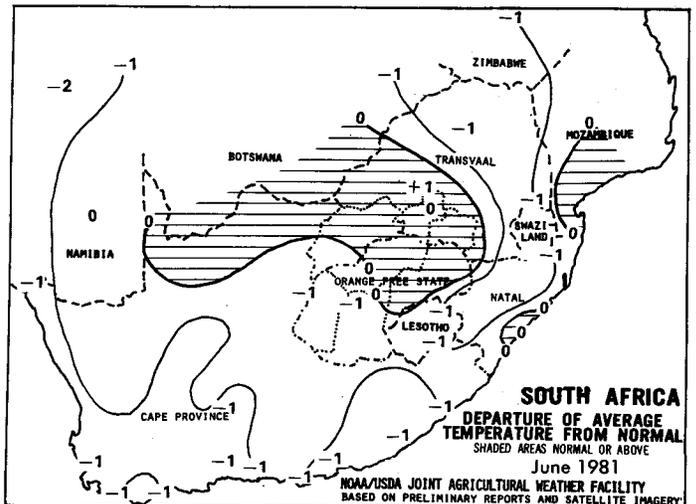
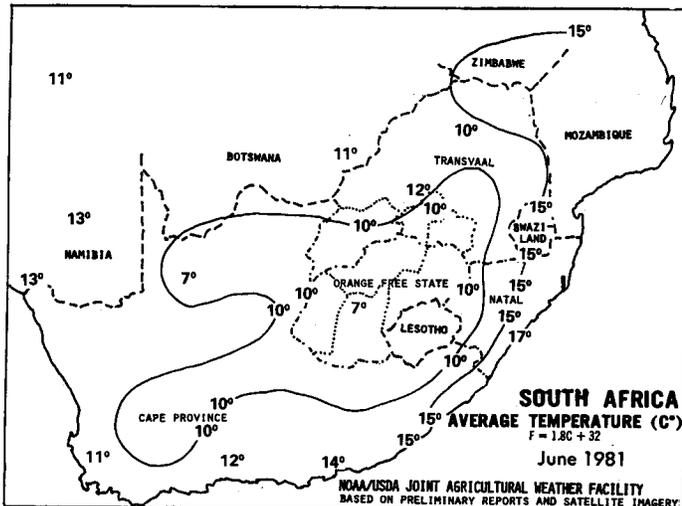
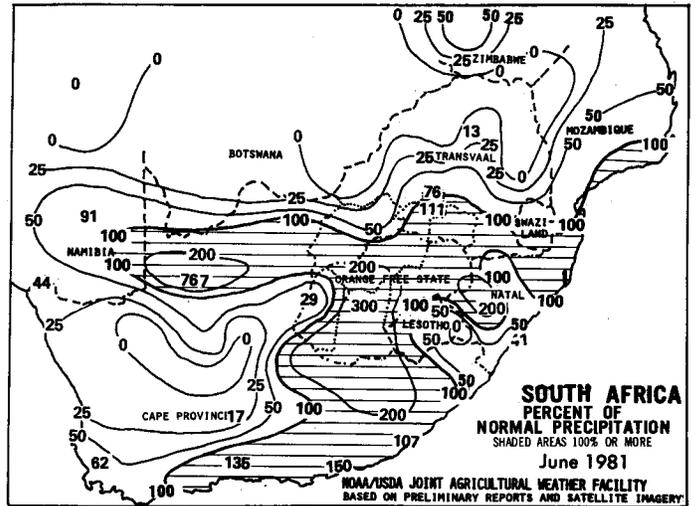
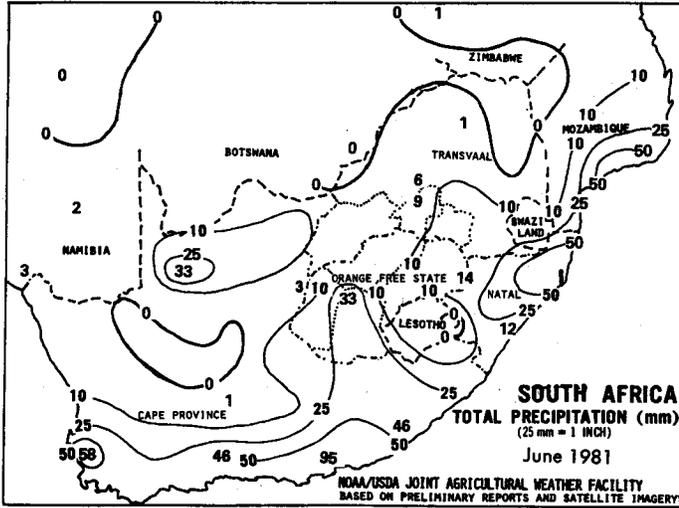
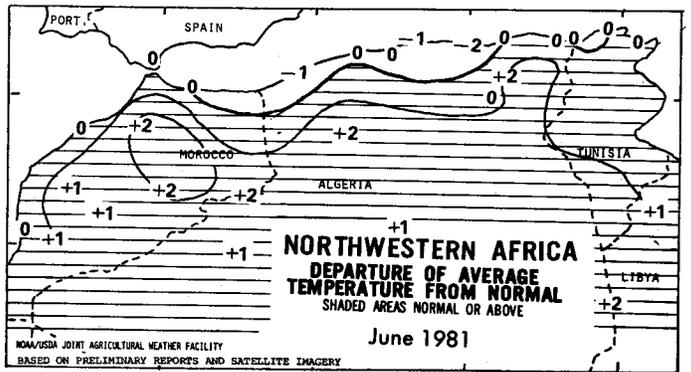
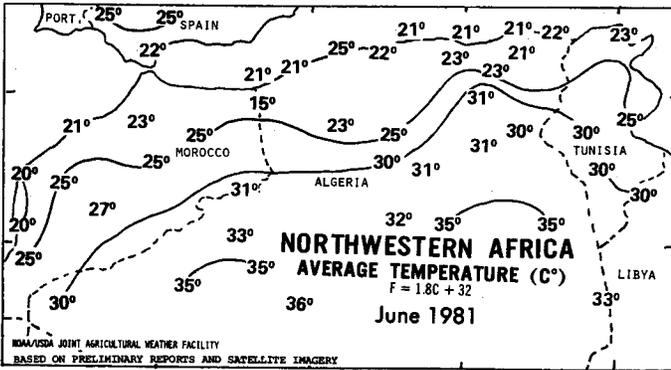
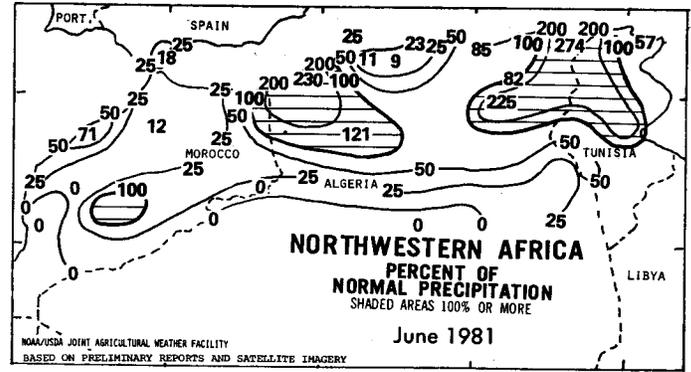
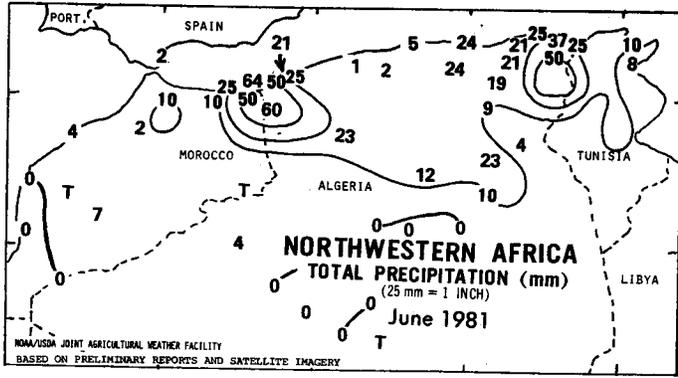


NEW LANDS: Little or no rain fell over most of the eastern New Lands. June weather in this area was substantially hotter and drier than normal, putting spring grains under much stress as they went through the vegetative stage of development. Temperatures have dropped closer to normal, but with the crop now entering the heading stage, potential yields will begin to decline until substantial rainfall occurs. Above-normal rainfall benefited some northwestern parts of the New Lands. Hot and dry June weather in parts of this northwestern area had stressed spring grains somewhat, despite good soil moisture at the beginning of the month. Crop prospects in central portions of the New Lands remain good. In cotton-growing areas to the south, light to moderate rainfall in June was above normal. Temperatures persisted below normal in eastern Uzbekistan in June, but have warmed again in July. In recent days, it has become extremely hot in western Uzbekistan, with daytime temperatures of 45 degrees Celsius being near record highs for July. Cotton may have been stressed unless careful attention was given to irrigating.

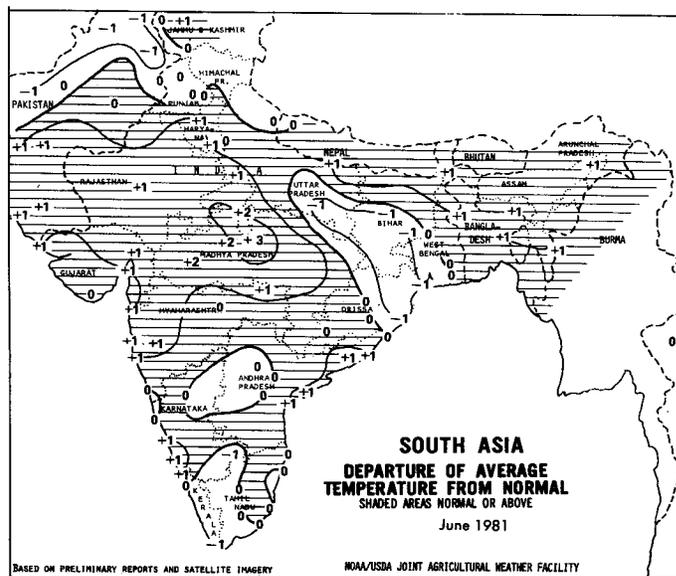
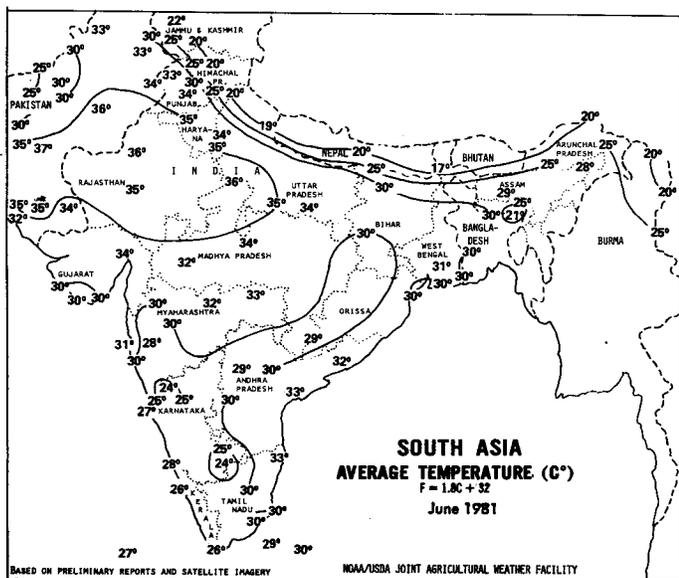
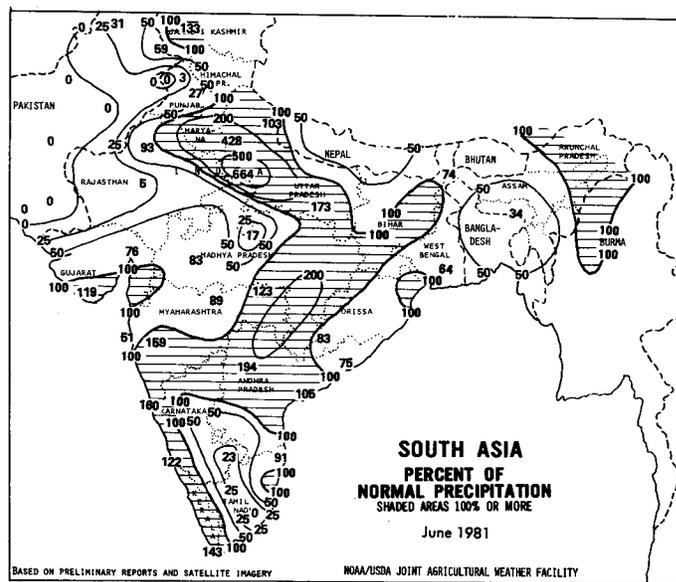
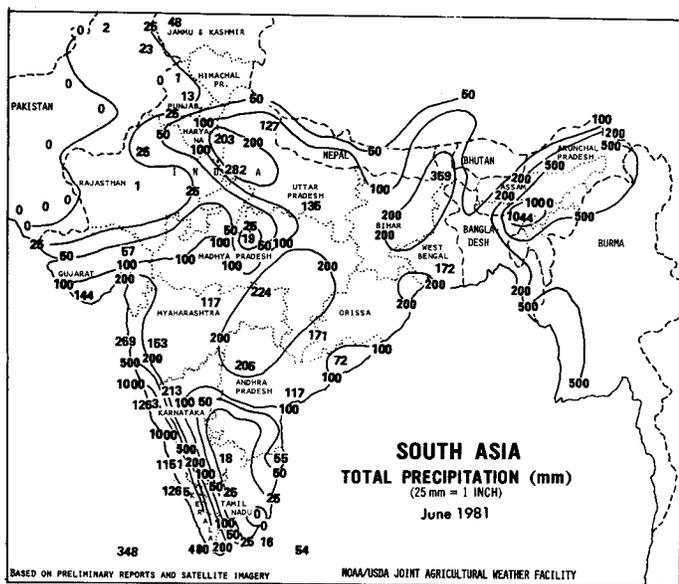
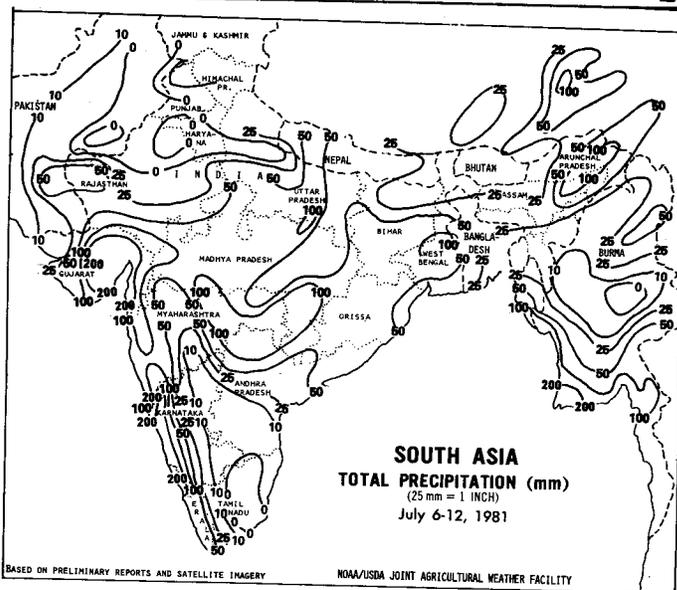


EUROPE: A weak front brought above-normal rainfall to northwestern Spain, much of France, and parts of Benelux late in the week. The moisture kept conditions a little too wet for developing spring grains, since the wet weather had persisted during most of June. Most of West Germany escaped with only light rain, a relief from the dampness of June. Other above-normal amounts were mostly limited to nonagricultural areas. Most of the east appeared to be in a drying trend, but soil moisture should still be adequate for crop needs in nearly all areas. June rainfall was mostly above normal. The only areas that might need more moisture are just to the north of Alps (W. Germany, Austria, and Czechoslovakia) and a pocket in southern Romania. Temperatures stayed near normal over most of the region, but surged above normal in East and West Germany, and dipped below normal in the south-eastern countries. This contrasted somewhat with June conditions, when temperatures stayed below normal with the wet weather in the northwest, and edged above normal in the southeast.

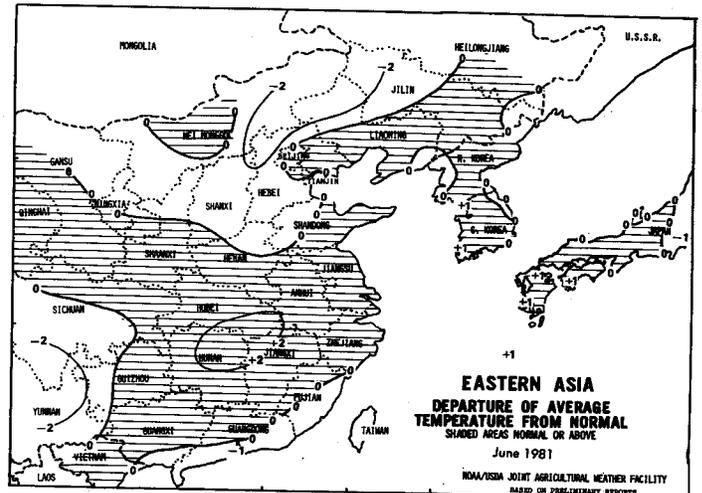
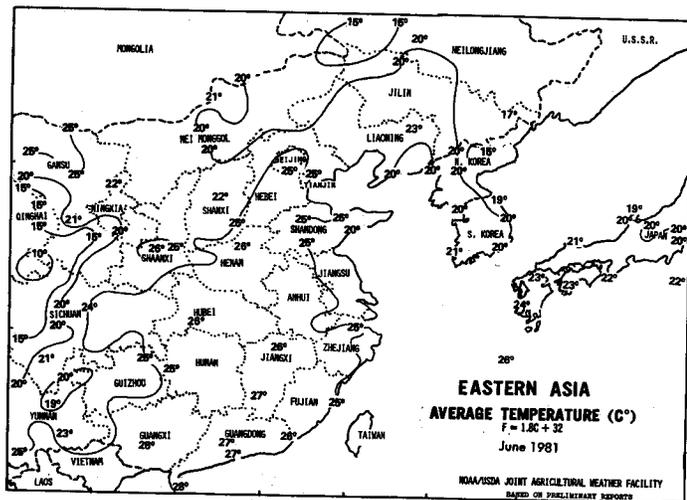
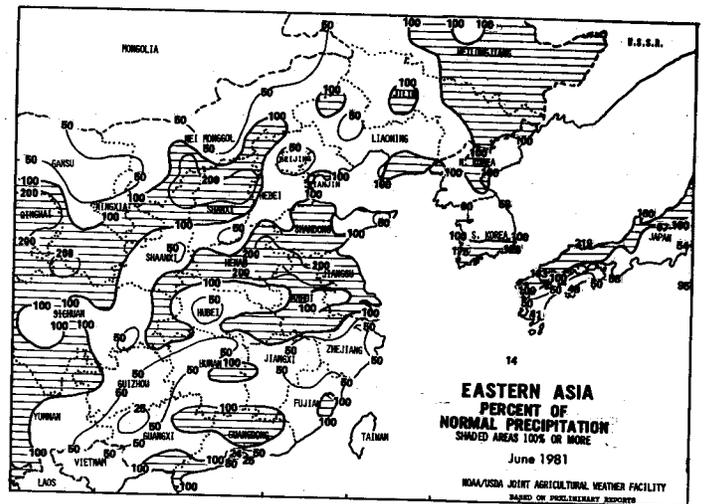
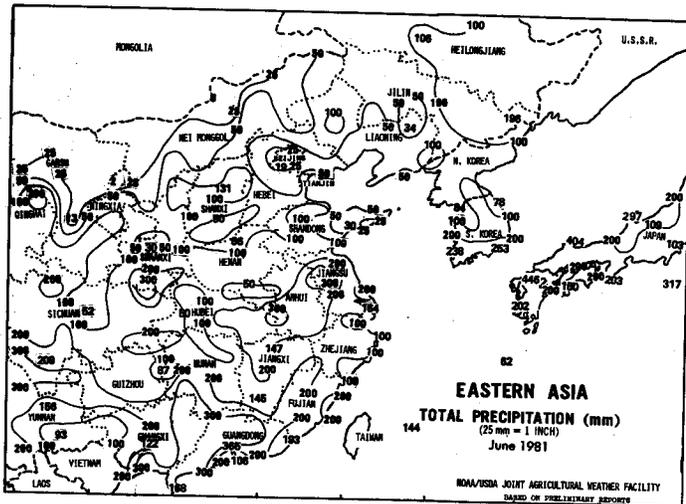
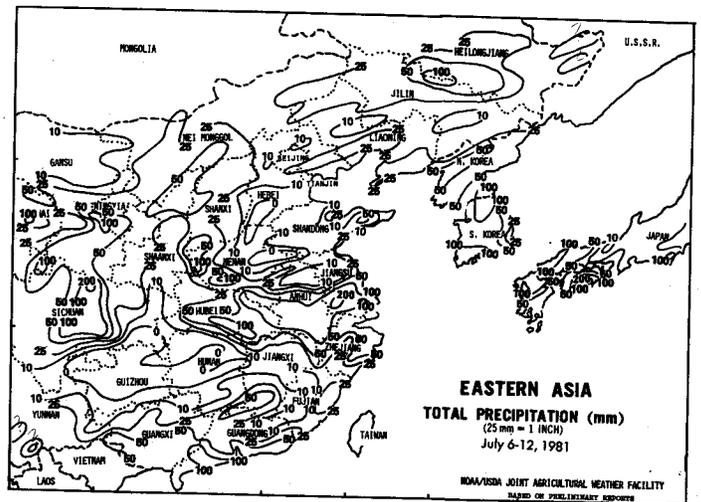


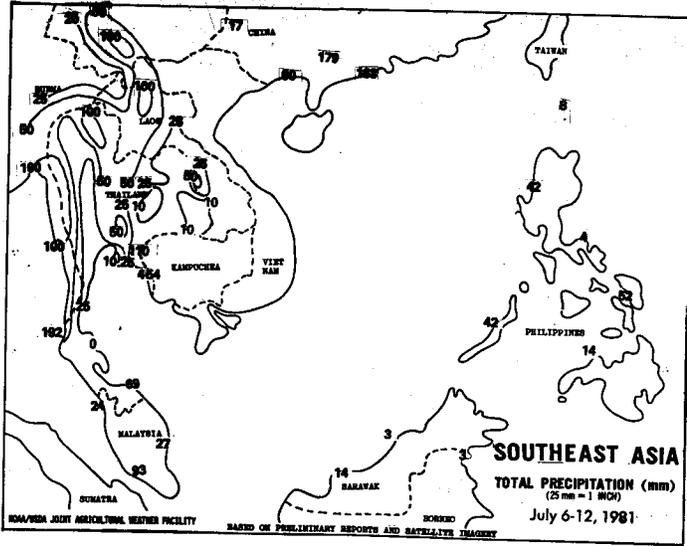


SOUTH ASIA: Monsoon rains spread into Pakistan, with about 15 mm of rainfall occurring in central parts of the country, while many eastern parts stayed dry. The moisture will probably not be enough to permit planting yet in central and northern parts of Pakistan, but generous rains in the southeast got the rainy season off to a good start. In India, nearly all of the country received abundant rainfall. Those northern areas which were dry probably needed a break from the heavy rains. Crop prospects have become quite good. Drier than normal weather in parts of Tamil Nadu, southwestern Andhra Pradesh, and eastern Karnataka continued to stress crops in that area, where June rainfall was also much less than normal. In Bangladesh, June rainfall was below normal, but amounts were sufficient to maintain favorable growing conditions, which have continued to the present.

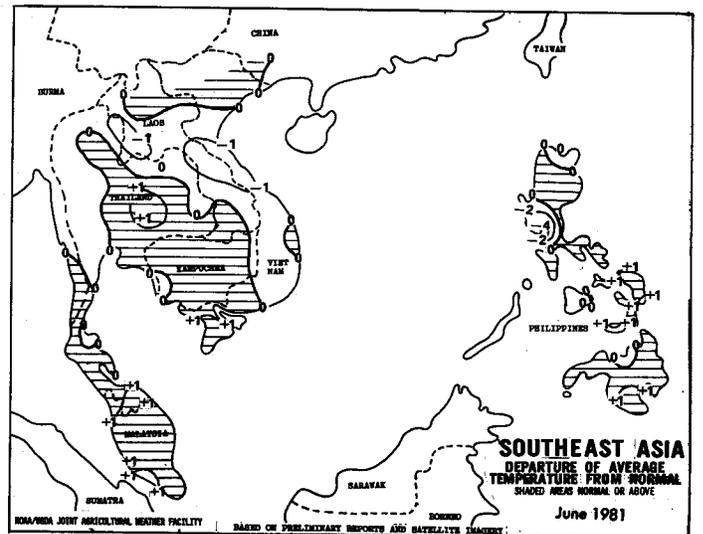
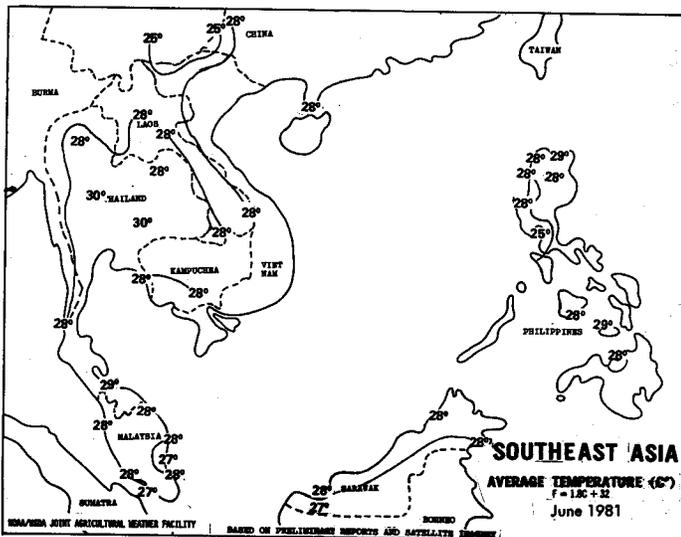
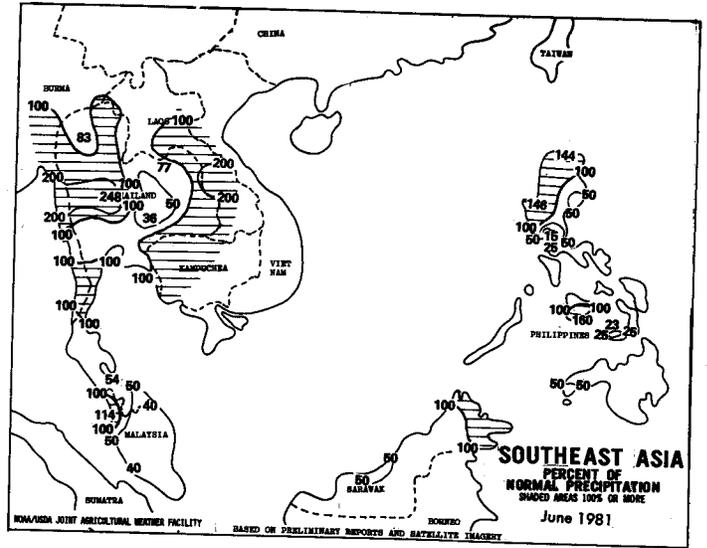
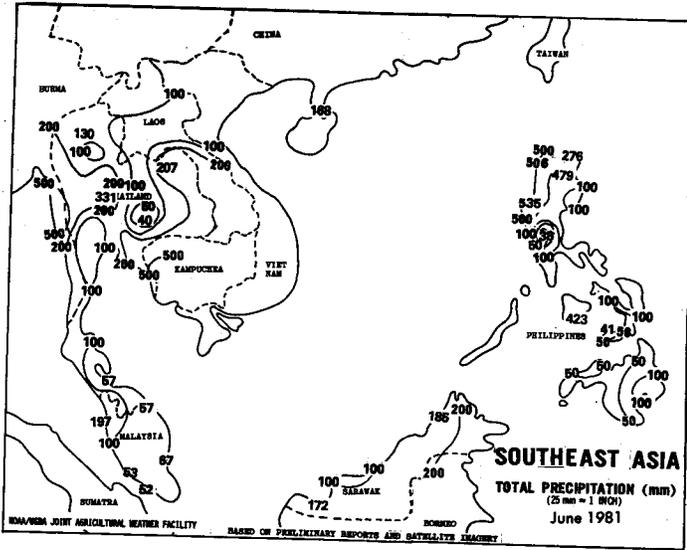


EASTERN ASIA: Beneficial rainfall continued over most of northern China. June rainfall was above normal over much of the north, and nearly all remaining dry areas have received good rains in July. Furthermore, another frontal system was moving across the north at the week's end. To the south, a front stalled in the Yangtze Valley and dumped much-above-normal rainfall on eastern Hubei, southern Anhui, and southern Jiangsu. This marks the third consecutive week of heavy rain in southern Anhui, creating unfavorable conditions for many spring crops. Some localized flooding should be occurring, but wet conditions have not yet become widespread enough to cause much concern yet. Drier weather in some areas to the south favored harvesting of early rice, but heavy rains from Typhoon Lynn maintained unfavorably wet conditions in Guangxi and western Guangdong. In South Korea, beneficial rainfall continued over all crop areas. The rainy season got off to a slow start in June, but the abundant rains of recent weeks have alleviated dry conditions in all areas. Temperatures were near normal.

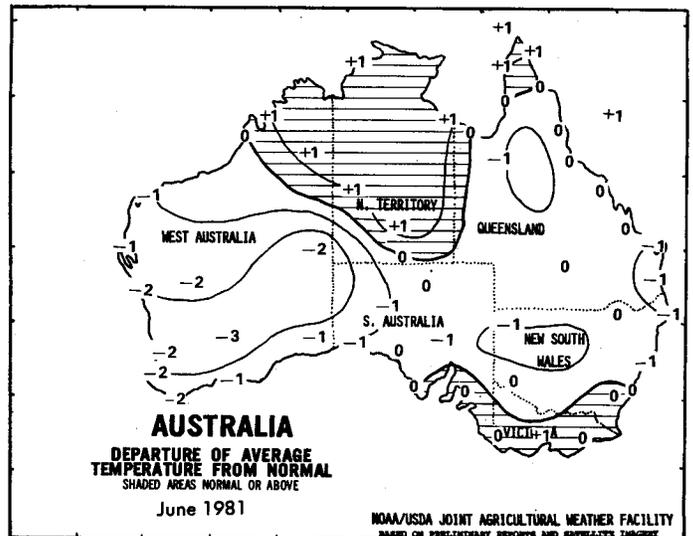
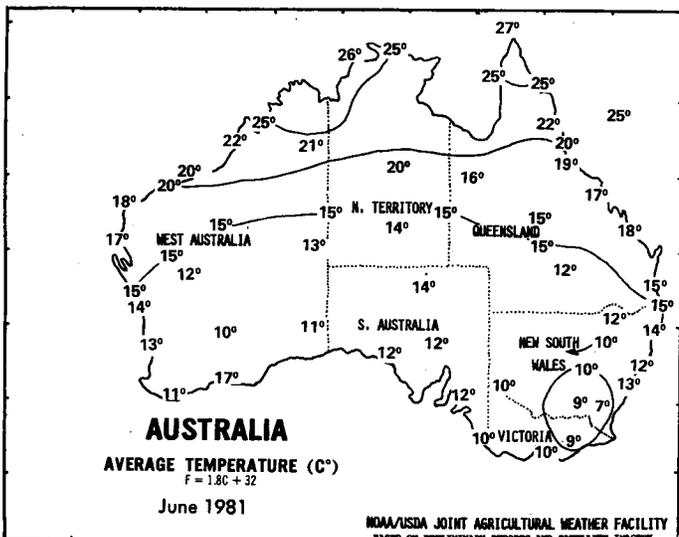
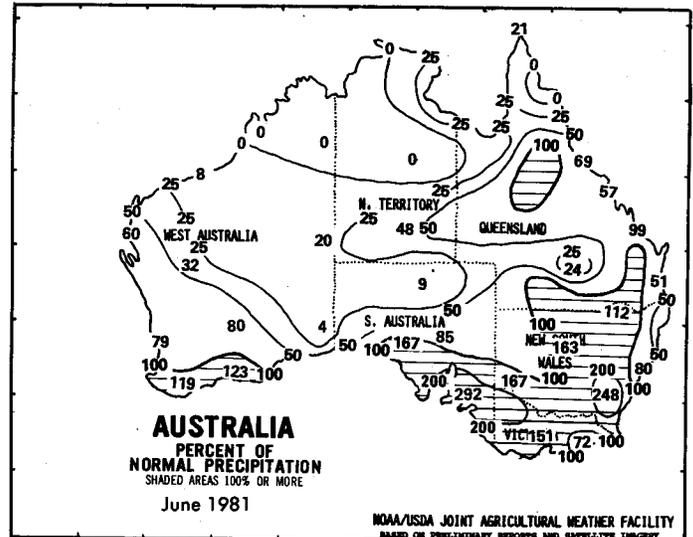
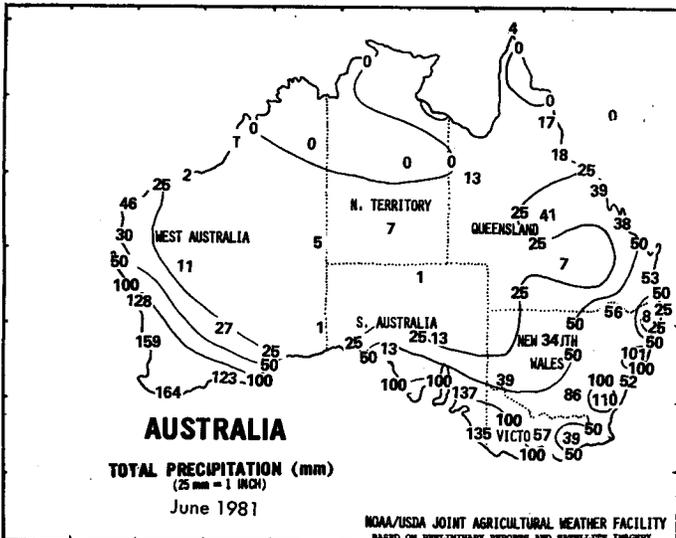
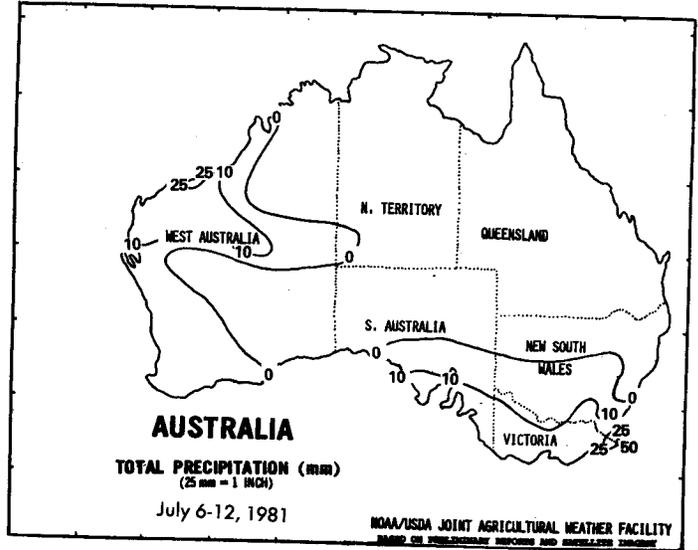




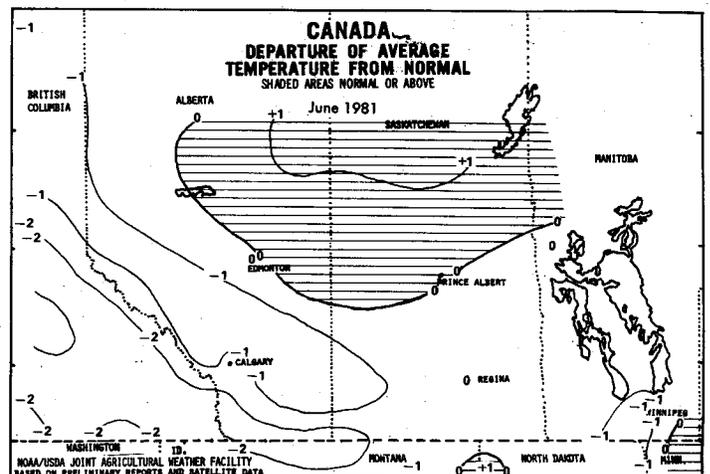
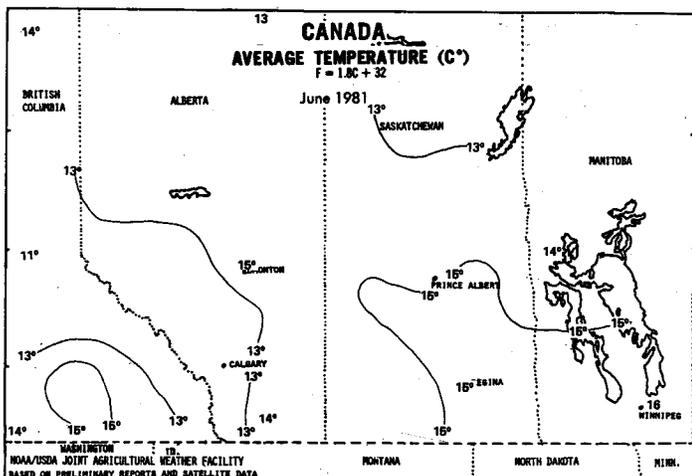
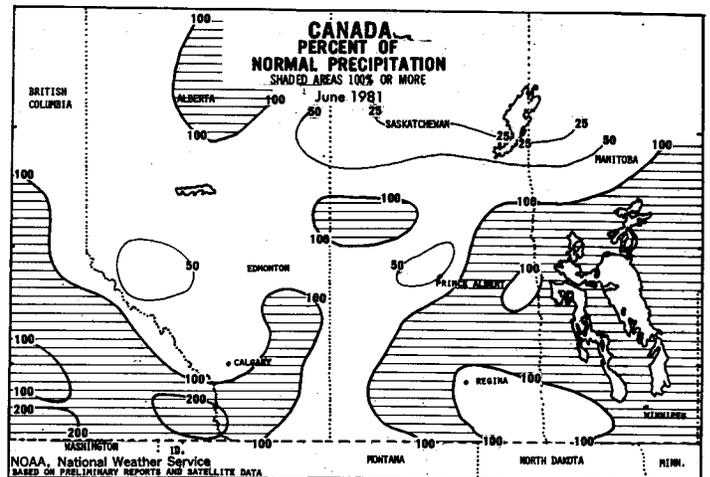
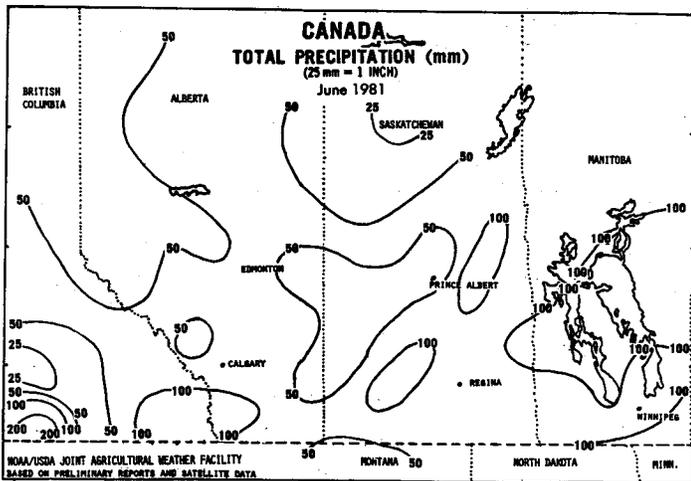
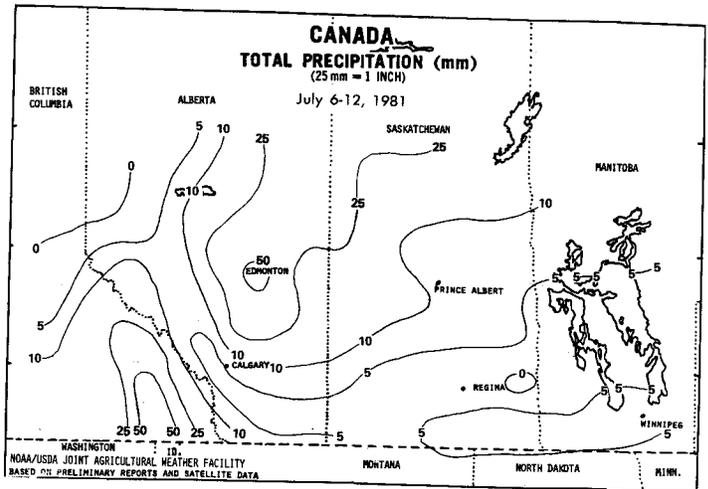
SOUTHEAST ASIA: Widespread monsoon activity occurred throughout Thailand but the intensity of rainfall appeared to be less than normal in some areas. A pattern of below-average rainfall, which may be causing some local crop moisture stress, became evident during June in northeastern portions of the country. Near-normal amounts of rain have fallen in much of the agriculturally productive Central Plains and northern highlands. The wet season has provided sufficient moisture for corn and rice growth in most areas. The harvest season for corn should begin in late July while the rice crop advances through vegetative development.



AUSTRALIA: Significant rainfall was confined mostly to southeastern Australia where 10-20 mm fell in crop areas of Victoria and South Australia. Less than 5 mm of rain also fell in the wheat area of West Australia. Conditions are generally good for emergence and early growth of wheat and barley. Late May and June rainfall replenished soil moisture reserves considerably in nearly all crop areas. In June, above-average rainfall occurred in crop areas of southern Queensland, New South Wales, Victoria and South Australia. June rainfall was somewhat below normal in West Australia. June temperatures were slightly below normal. Crop moisture demands are relatively low during this portion of the growth cycle.



CANADA: Light rainfall and relatively high temperatures dominated the weather in the wheat growing area of the Prairie Provinces. Weekly rainfall totals were generally less than 10 mm in most areas. However, the northwestern crop area of Saskatchewan received 10-25 mm of rain and northern areas of Alberta benefited from 25-50 mm. Hot, humid weather prevailed early in the week, but the passage of a frontal system during midweek brought somewhat cooler weather to the region. Soil moisture reserves were diminished, especially in southern Saskatchewan, due to limited rainfall for the past few weeks and the recent hot weather which increased the crop's demand for moisture. Cereal crops should be mostly in the heading stage of development.



MEXICO: The rainy season is well established as heavy rains fell over many agricultural regions. Over 50 mm fell in the southern Plateau cornbelt, the grain area around Matamoros, and some of the northwestern watersheds. The rains were beneficial to crops except in the extreme northeast where sorghum and corn are being harvested. In contrast, most cotton and citrus areas were hot and dry. However, scattered showers dampened some cotton and other field crops at Hermosillo and Culicán.

