

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service  
and World Agricultural Outlook Board

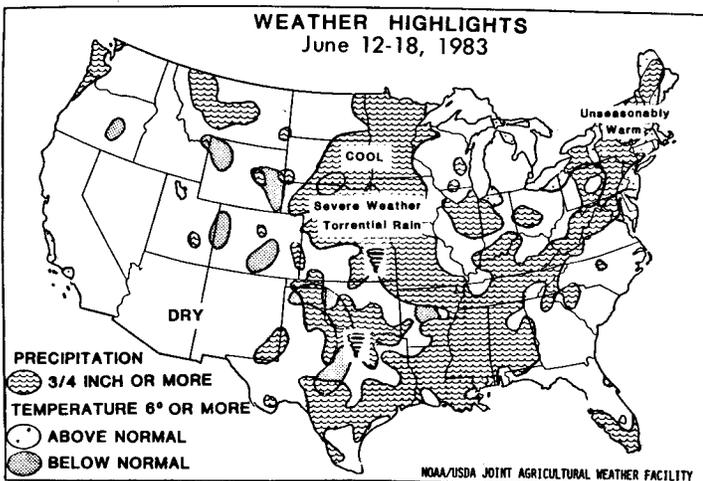
Volume 70, No. 25

WASHINGTON, D.C.

June 21, 1983

## National Weather Summary

June 12 to 18



**TUESDAY...** Showers and thunderstorms were less concentrated as the slow-moving front reached a line from Minnesota to Illinois and southward to eastern Texas. Occasionally heavy storms struck ahead of this line from Alabama into Indiana, and late afternoon thunderstorms were triggered in the very warm air from North Carolina into Virginia and in New England. The cooler air covered the central and northern Plains and Rockies, while both the East and the West warmed.

**WEDNESDAY...** The cooler weather spread into the Pacific Northwest but began to modify in the central Plains as the cold front weakened. Showers and thunderstorms were scattered from southeastern New Mexico, through Texas to southern Louisiana, and northeastward to Ohio. Showers were also scattered from eastern Nebraska through the Great Lakes and through the northern Rockies.

**THURSDAY...** Rains, triggered by three fronts, were widespread across most areas east of the Rockies. Very heavy downpours were reported in parts of south Texas to West Virginia. And nearly a dozen tornadoes touched down in seven States along with large hail. Abundant sunshine prevailed over the Southwest, allowing temperatures to exceed 100° in the deserts and to climb into the eighties and nineties elsewhere.

**FRIDAY...** Heavy rains ahead of a warm front drenched eastern parts of the central Plains. Four to 5 inches of rain fell in northeastern Kansas, while 2 to 3 inches was common in eastern Nebraska. Heavy rains again fell over parts of East Texas to Mississippi in association with a slow-moving cold front. Light showers were scattered across the Pacific Northwest, while dry, mostly hot weather continued over the Southwest.

**SATURDAY...** Heavy thunderstorms and severe weather continued over parts of the central and northern

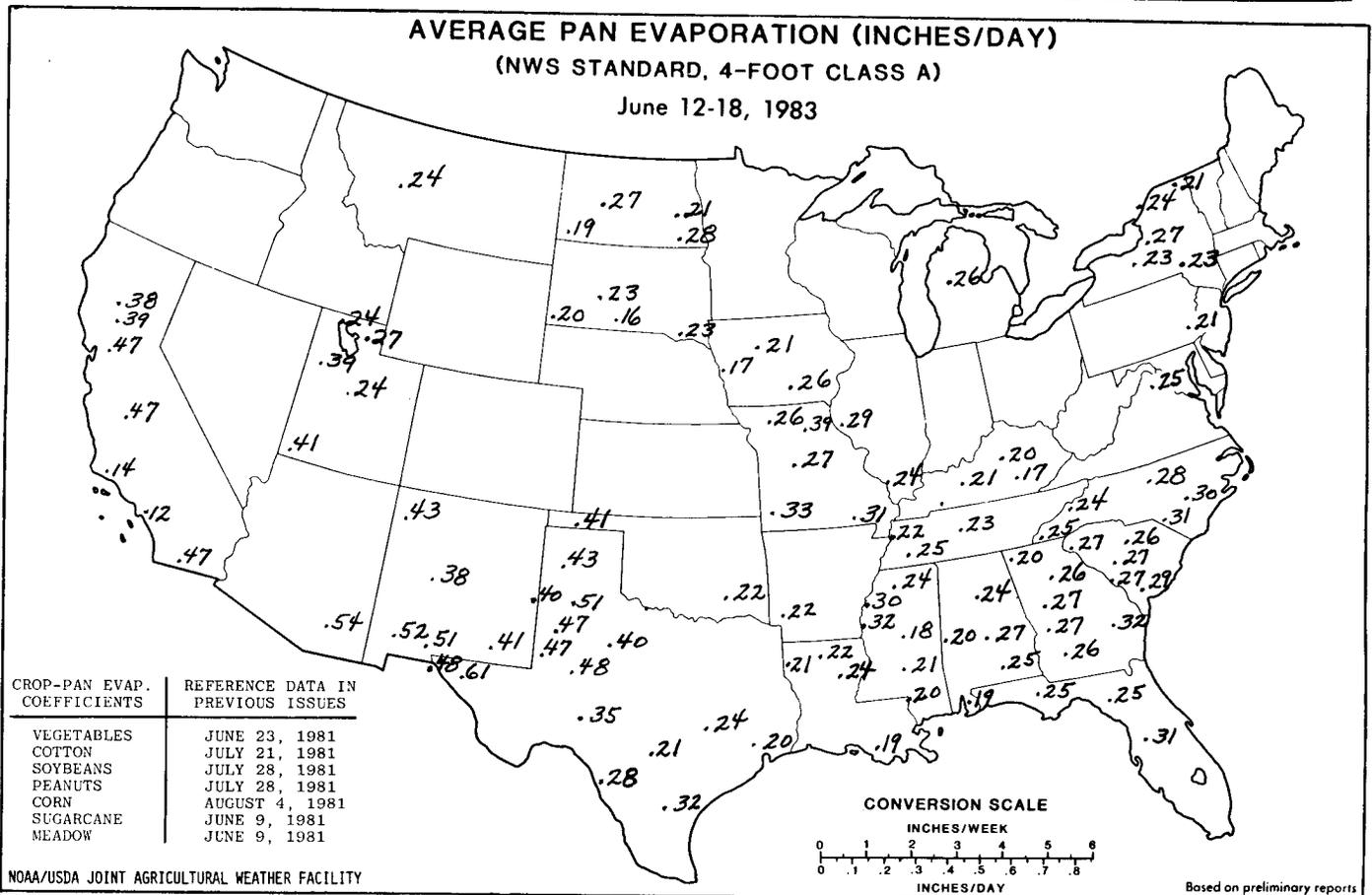
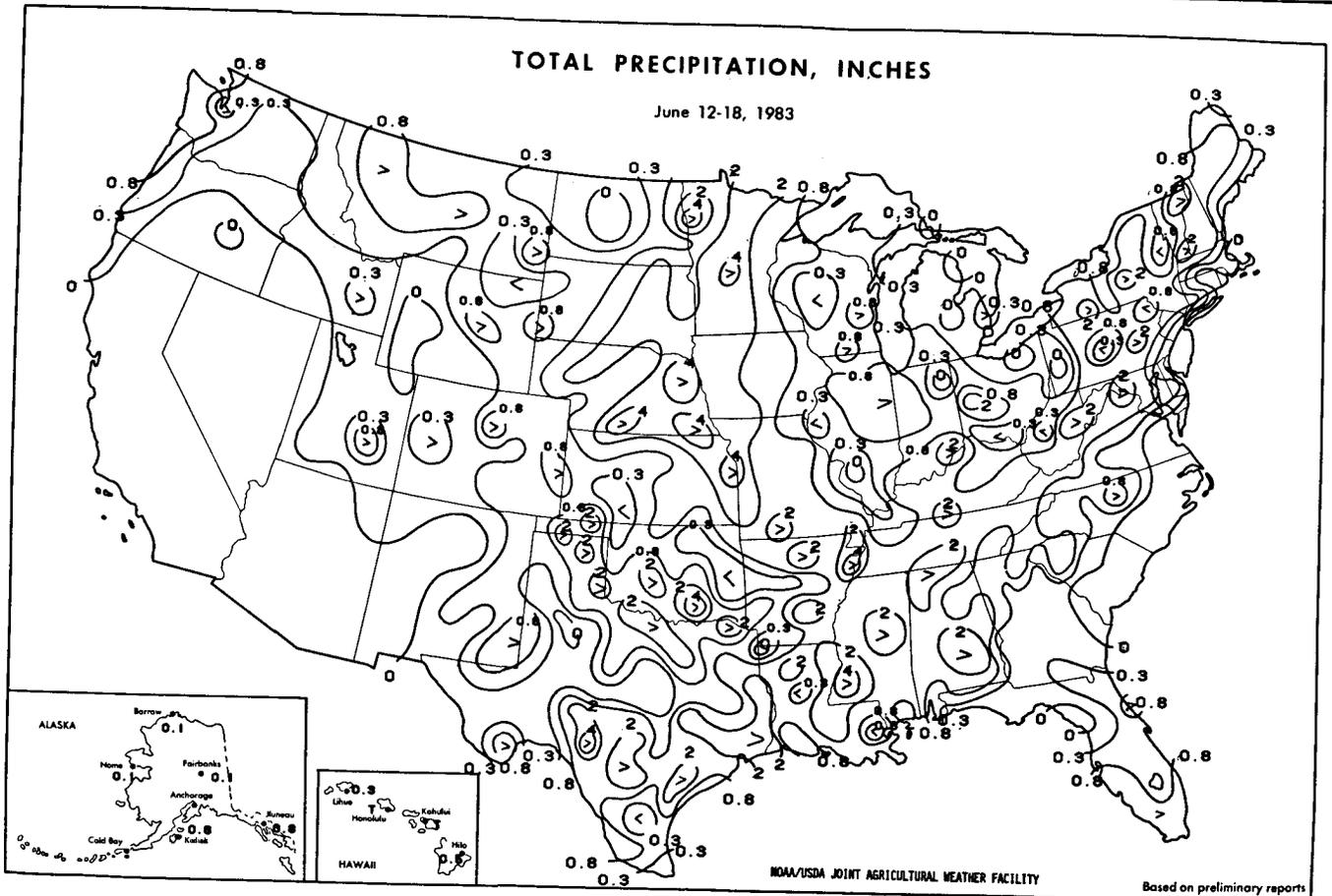
(continued on p. 17)

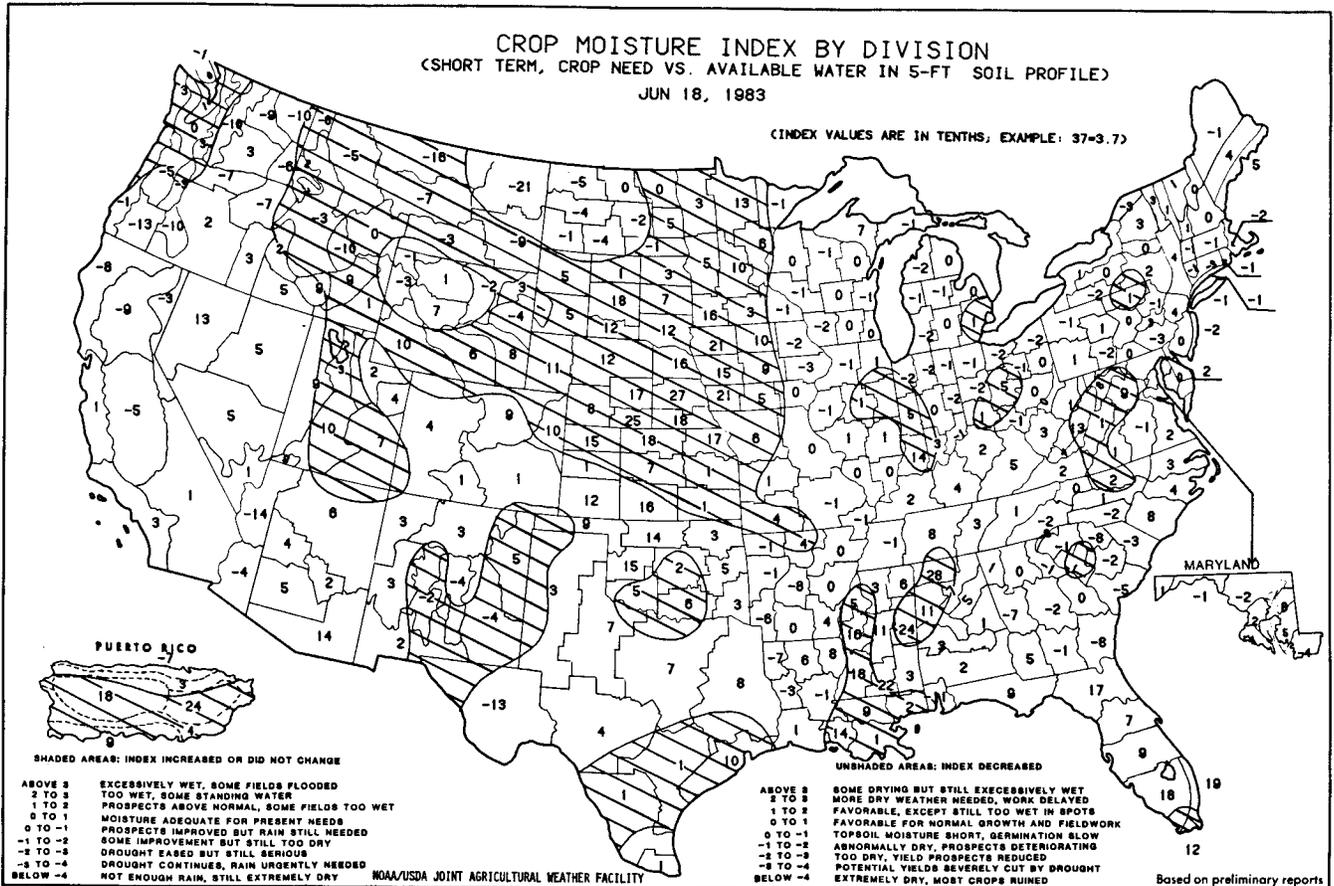
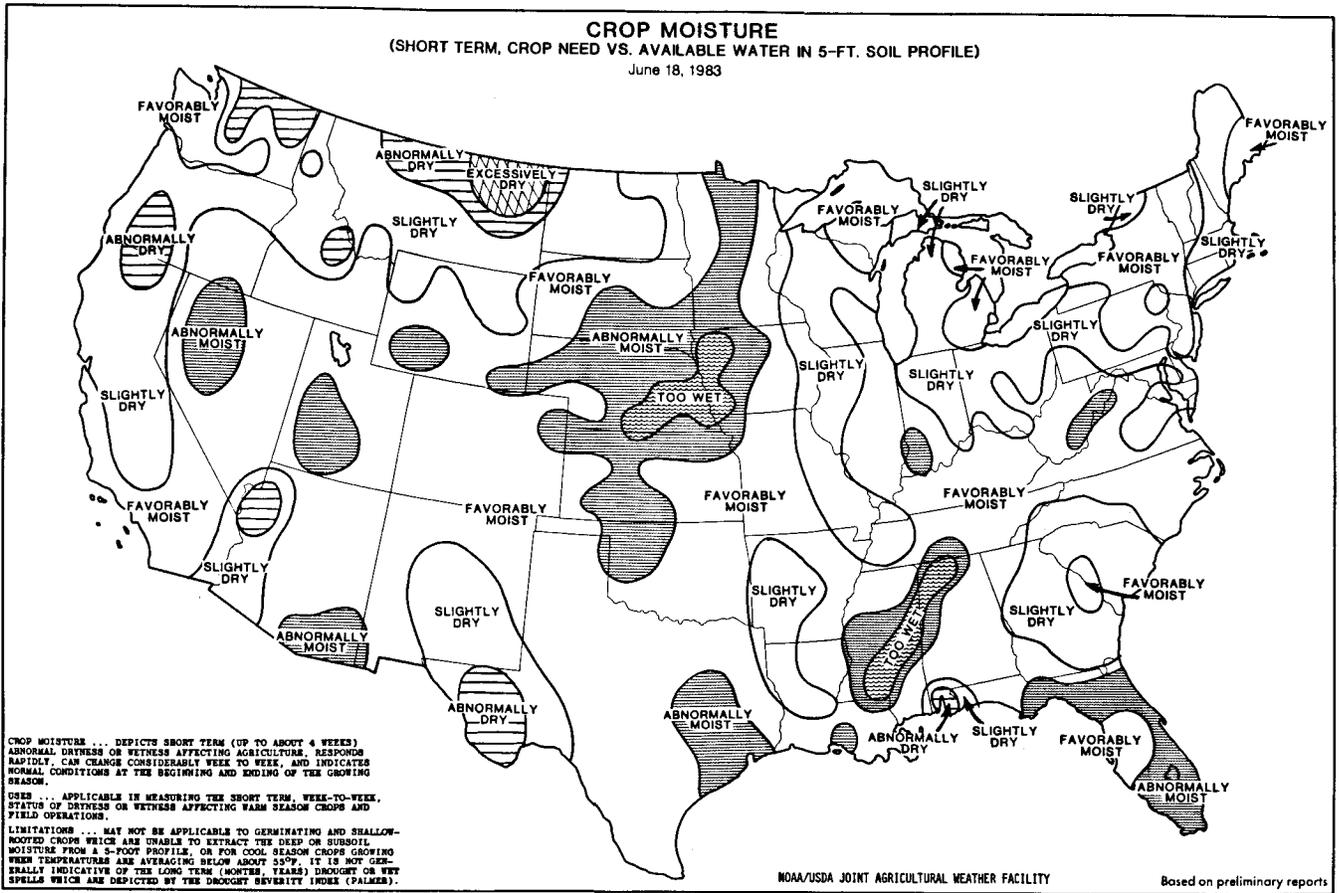
**HIGHLIGHTS...** Heavy rains drenched most of the eastern Great Plains and the area from the Delta States across the Appalachians into New England. Very heavy amounts in excess of 4 inches along with tornadoes, hail, and high winds hit eastern sections of Kansas and Nebraska. In contrast, the eastern seaboard and the southwestern part of the Nation were sunny and dry. Much of the country was cooler than normal, especially the Rockies, Great Plains, and parts of the South. Under the influence of a stagnant high-pressure cell, the Northeast was unseasonably sunny and warm, and temperatures averaged as much as 10 degrees above the usual in upper New England.

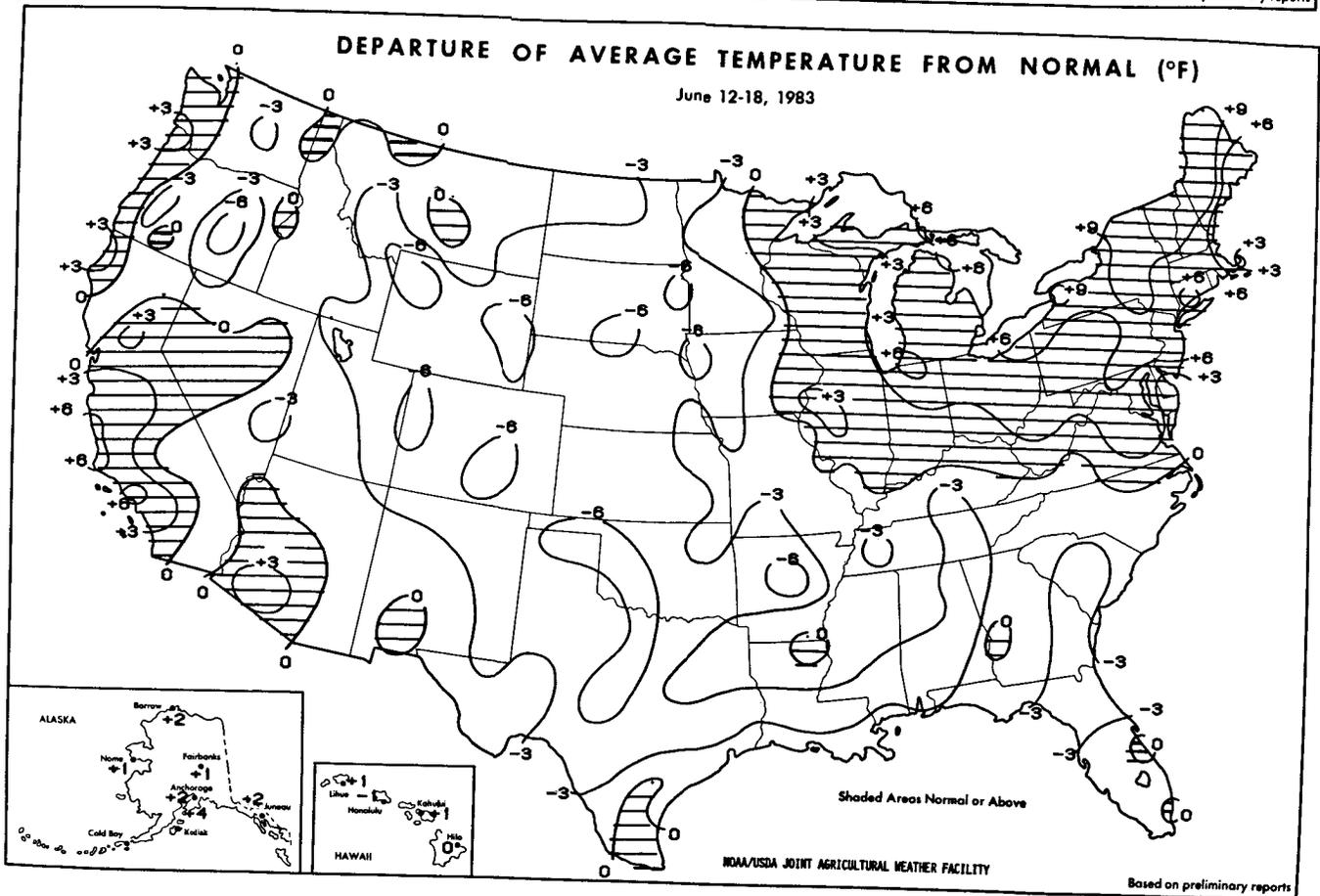
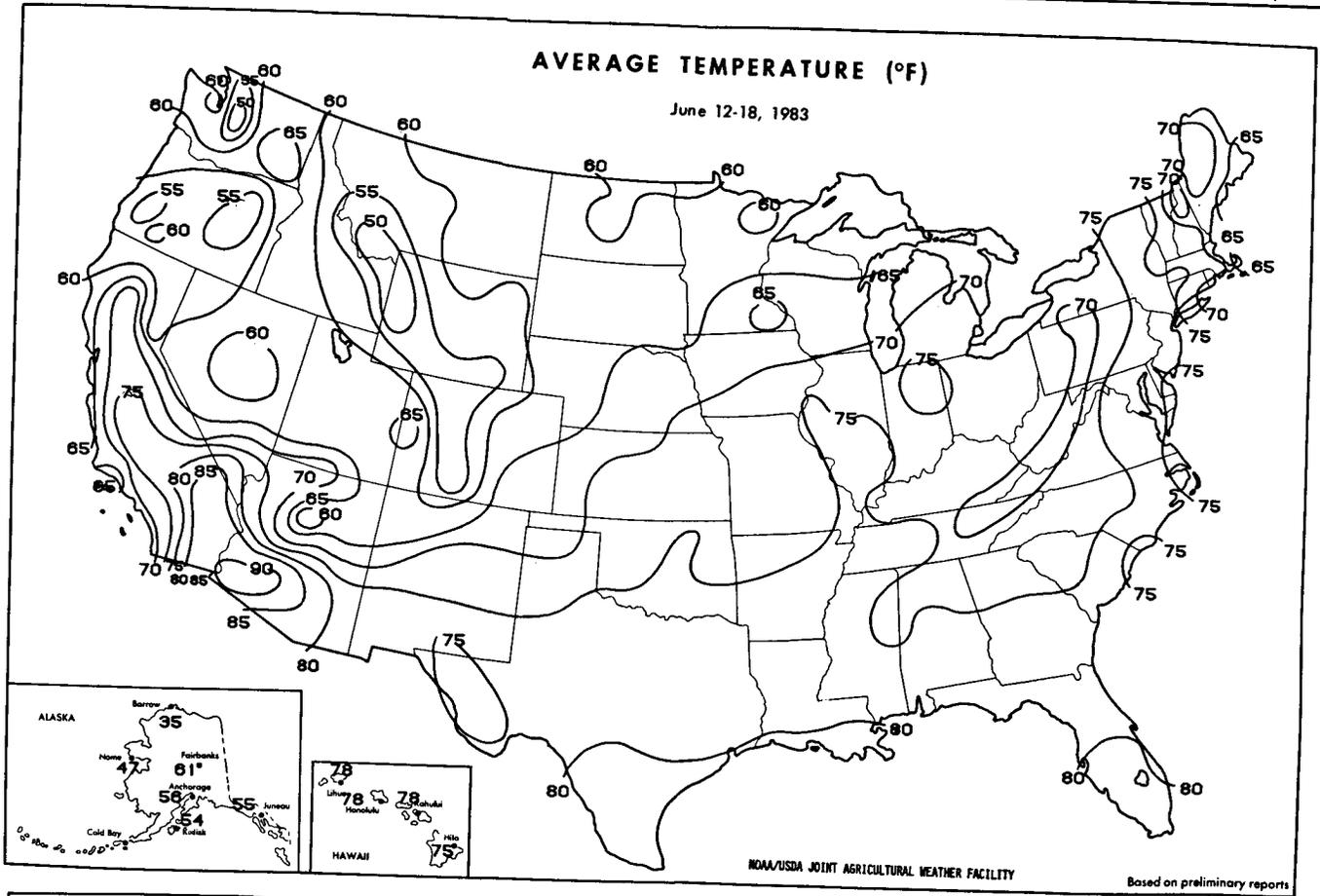
**SUNDAY...** Severe thunderstorms developed ahead of a slow-moving cold front from eastern Colorado to eastern North Dakota. High winds, hail, heavy rain, and tornadoes accompanied some of the storms. Hardest hit was Nebraska and parts of South Dakota where at least six tornadoes were reported. Lighter showers and thunderstorms reached into the upper Mississippi Valley, over the central Plateau, through the central and northern Rockies, and over the High Plains.

**MONDAY...** The slow-moving cold front triggered numerous violent thunderstorms and spawned frequent tornadoes along a line from north-central Texas through central Minnesota into Canada. Heavy rain drenched many parts of this area, causing some lowland flooding. Light showers fell over the central and northern Rockies. Much cooler air enveloped the northern Rockies and pushed into the Plains, while unusually warm weather developed in the East.

Contents	Page
National Weather Summary . . . . .	1
Precipitation & Pan Evaporation . . . . .	2
Crop Moisture & Crop Moisture Index . . . . .	3
Average Temperature & Departure . . . . .	4
Weather Data for Selected Cities . . . . .	5
National Agricultural Summary . . . . .	8
Crop Progress & State Summaries of Weather & Agriculture . . . . .	9
International Weather & Crop Summary . . . . .	16
Growing Degree Days & Subscription & Mailing Permit Information . . . . .	28







Weather Data for the Week Ending June 18, 1983

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 May 29	PCT. NORMAL SINCE May 29	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	84	66	87	64	75	-2	.3	.4	.7	1.7	74	35.6	125	86	51	0	0	2	0
MOBILE	87	68	89	66	77	-3	.6	.5	.6	2.2	69	40.9	136	91	49	0	0	2	1
AK ANCHORAGE	65	47	76	45	56	2	0	0	0	1.7	2.8	122	40.4	162	87	46	3	0	3
BARROW	40	31	50	29	35	2	.1	0	.1	0	0	50	4	27	90	64	0	0	0
FAIRBANKS	72	50	78	45	61	1	.1	.2	.1	.3	38	1.1	37	67	28	0	0	1	0
JUNEAU	60	49	70	47	55	2	.8	.1	.7	2.0	95	15.8	82	97	55	0	0	4	1
KODIAK	59	48	68	46	54	4	.8	.1	.4	3.4	117	41.4	144	93	74	0	0	3	0
NOME	54	39	63	35	47	1	.1	.2	.1	.4	57	2.2	50	80	45	0	0	2	0
AZ PHOENIX	104	75	108	72	90	3	0	0	0	0	0	5.2	186	30	8	7	0	0	0
PRESCOTT	82	55	89	46	68	1	0	.1	0	0	0	4.9	89	50	16	0	0	0	0
TUCSON	99	68	104	62	84	0	0	0	0	0	0	4.2	150	31	9	7	0	0	0
YUMA	105	74	109	70	90	3	0	0	0	+100	1.3	144	45	11	7	0	0	0	0
AR FORT SMITH	85	62	87	55	73	-4	.2	.7	.2	1.3	46	14.2	69	91	45	0	0	1	0
LITTLE ROCK	88	66	91	62	77	-1	.1	.7	.3	1.2	22.2	86	84	44	0	0	0	0	0
CA BAKERSFIELD	94	62	105	56	78	0	0	0	0	+100	6.9	192	63	21	5	0	0	0	0
EUREKA	65	52	72	48	59	3	.1	.1	.1	.5	83	35.6	159	93	67	0	0	2	0
FRESNO	95	62	102	56	79	4	0	0	0	+100	16.3	243	60	18	5	0	0	0	0
LOS ANGELES	72	61	75	58	66	1	T	0	T	0	+100	20.6	261	84	59	0	0	0	0
RED BLUFF	92	59	97	53	75	-1	0	.1	0	.2	67	29.3	238	61	15	5	0	0	0
SACRAMENTO	89	55	99	49	72	1	0	.1	0	.4	400	23.7	230	80	70	3	0	0	0
SAN DIEGO	73	64	75	62	68	2	0	0	0	0	+100	14.2	233	86	64	0	0	0	0
SAN FRANCISCO	74	52	85	50	63	2	0	.1	0	0	0	25.4	213	86	44	0	0	0	0
CO DENVER	75	48	92	41	62	-5	.4	0	.2	2.0	154	11.9	153	79	31	1	0	2	0
GRAND JUNCTION	80	52	95	44	66	-6	.5	.4	.5	.9	225	6.1	156	81	27	1	0	2	0
PUEBLO	82	49	97	41	66	-6	.4	.2	.4	1.9	271	7.4	161	86	26	1	0	1	0
CT BRIDGEPORT	80	62	90	56	71	3	1.0	.3	1.0	2.8	133	32.5	179	95	64	1	0	1	1
HARTFORD	89	63	93	53	76	7	0	.8	0	2.0	87	30.9	155	82	47	4	0	0	0
DC WASHINGTON	90	70	93	66	80	6	1.3	.5	1.2	3.7	154	24.1	140	84	51	5	0	3	1
FL APALACHICOLA	85	70	89	67	78	-2	.1	-1.0	.1	3.1	103	30.2	152	88	60	0	0	1	0
DAYTONA BEACH	83	68	84	65	75	-4	.8	.8	.8	8.0	190	30.7	175	94	66	0	0	2	1
JACKSONVILLE	84	66	87	62	75	-4	T	-1.2	T	3.8	106	29.1	137	100	60	0	0	1	0
KEY WEST	86	76	87	73	81	-2	1.1	-.2	1.0	5.4	150	35.0	269	84	60	0	0	3	1
MIAMI	88	74	90	73	81	0	1.3	-.9	.5	8.5	133	26.7	125	95	56	2	0	5	1
ORLANDO	88	70	90	68	79	-2	.6	-1.2	.3	6.4	136	25.6	135	97	55	1	0	3	1
TALLAHASSEE	90	66	92	60	78	-2	T	-1.5	T	4.3	102	39.0	142	94	44	4	0	1	0
TAMPA	88	71	89	68	80	-1	.3	-.9	.2	6.2	188	25.3	148	91	52	0	0	2	0
WEST PALM BEACH	85	72	87	70	79	-2	1.9	0	1.4	11.2	200	38.8	175	95	68	0	0	2	1
CA ATLANTA	84	64	88	60	74	-2	T	-.7	T	1.2	52	21.9	88	79	34	0	0	2	0
AUGUSTA	89	59	91	55	74	-3	T	-.9	T	3.3	127	27.1	128	82	38	3	0	0	0
MACON	91	66	94	60	78	-1	T	-.4	T	3.6	144	28.3	123	82	34	5	0	1	0
SAVANNAH	89	65	93	62	77	-2	0	-1.3	0	.8	22	27.2	129	90	43	2	0	0	0
HI HILO	82	68	84	65	75	0	.5	-.9	.2	2.6	59	25.8	42	89	58	0	0	5	0
HONOLULU	87	70	88	69	78	-1	T	-.1	T	.1	25	1.6	13	84	47	0	0	2	0
KAHULUI	86	70	87	65	78	1	T	0	T	.1	50	2.9	27	80	54	0	0	1	0
LIHUE	83	74	84	72	78	1	.3	-.1	.2	.6	46	5.4	24	77	56	0	0	2	0
ID BOISE	77	48	92	38	63	-3	0	-.2	0	.1	14	10.2	148	70	21	1	0	0	0
LEWISTON	77	52	89	48	65	-1	.4	.1	.2	1.0	91	7.2	113	82	30	0	0	2	0
POCATELLO	72	44	85	41	58	-4	.7	.4	.4	1.0	111	8.5	130	80	29	0	0	2	0
IL CHICAGO	83	58	93	54	71	2	.7	-.2	.6	3.1	115	22.5	149	84	37	2	0	2	1
MOLINE	87	60	90	53	73	2	.8	-.2	.8	1.6	53	13.2	80	85	40	1	0	2	1
PEORIA	85	61	89	55	73	2	.9	0	.5	1.9	68	19.8	122	83	42	0	0	2	0
QUINCY	83	61	85	56	72	-1	.1	-.8	.1	1.1	41	15.4	91	86	47	0	0	2	0
ROCKFORD	83	59	89	53	71	2	.6	-.5	.5	1.1	35	14.3	85	83	40	0	0	2	1
SPRINGFIELD	87	64	90	56	76	2	.5	-.4	.5	1.2	48	15.7	99	87	43	1	0	1	1
IN EVANSVILLE	88	62	90	59	75	0	1.9	1.1	1.2	3.5	140	29.7	135	85	38	2	0	3	2
FORT WAYNE	87	63	90	58	75	5	T	-.9	T	2.0	77	14.3	85	86	39	1	0	0	0
INDIANAPOLIS	85	61	87	55	73	1	1.7	.8	1.7	2.5	96	16.6	90	87	39	0	0	1	1
SOUTH BEND	86	64	89	61	75	6	.6	-.3	.6	1.7	68	15.4	93	70	26	0	0	1	1
IA DES MOINES	80	62	88	57	71	0	1.3	.3	.6	2.1	70	16.6	115	84	51	0	0	5	1
SIOUX CITY	74	57	77	53	66	-6	2.9	2.0	1.8	3.1	115	15.7	139	83	56	0	0	4	2
WATERLOO	79	59	86	47	69	0	1.8	.8	1.0	2.0	67	15.8	110	91	51	0	0	2	2
KS CONCORDIA	78	59	82	52	69	-5	.5	-.5	.4	3.3	106	14.5	121	92	59	0	0	4	0
DODGE CITY	82	60	90	53	71	-3	T	-.7	T	5.2	236	15.3	165	77	44	1	0	1	0
GOODLAND	79	53	88	47	66	-4	.7	.1	.7	1.6	80	9.0	118	86	38	0	0	1	1
TOPEKA	83	63	86	58	73	-1	2.0	.8	1.2	3.1	89	20.1	141	91	49	0	0	2	2
WICHITA	83	61	89	55	72	-4	1.8	.8	1.7	3.7	123	18.6	151	91	48	0	0	3	1
KY BOWLING GREEN	82	62	86	58	72	-3	1.3	.3	.7	2.3	74	30.4	115	100	54	0	0	4	1
LEXINGTON	83	64	87	62	73	1	.5	-.4	.5	2.6	90	22.7	100	85	48	0	0	2	0
LOUISVILLE	84	64	88	61	74	0	1.6	.7	1.2	3.5	135	25.5	113	89	47	0	0	2	1
LA ALEXANDRIA	86	70	92	67	78	-3	.1	-.7	.1	1.3	45	29.7	103	78	51	1	0	1	0
BATON ROUGE	86	69	90	66	77	-3	1.8	1.2	1.6	5.2	260	40.2	154	94	58	1	0	3	1
BATON ROUGE	85																		

Weather Data for the Week Ending June 18, 1983

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 May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	87	70	89	67	78	-2								93	53	0	0	0	0
ME CARIBOU	79	58	82	50	68	8	T	T	.8					53	0	0	0	0	0
ME PORTLAND	76	55	87	52	65	3	T	T	.7					85	53	0	0	0	0
MD BALTIMORE	89	66	93	64	78	3	T	T	.6					109	32.2	164	07	65	0
MD SALISBURY	87	62	89	56	74	3	T	T	.9					92	27.6	151	92	44	3
MA BOSTON	81	61	90	57	71	3	T	T	.8					83	24.0	172	98	57	0
MA CHATHAM	71	56	82	54	63	3	T	T	.7					62	29.8	148	92	63	1
MI ALPENA	83	50	90	44	67	5	0	0	.6					52	31.9	147	96	79	0
MI DETROIT	84	60	88	55	72	4	0	0	.8					100	17.7	144	100	41	1
MI FLINT	82	60	87	56	71	5	0	0	.7					78	14.6	102	86	41	0
MI GRAND RAPIDS	83	57	89	49	70	3	0	0	.8					52	12.8	93	82	43	0
MI HOUGHTON LAKE	80	54	86	42	67	4	0	0	.7					63	16.6	111	94	38	0
MI LANSING	83	57	88	51	70	3	T	T	.8					62	12.7	111	89	36	0
MI MARQUETTE	74	52	85	36	63	3	T	T	.8					43	13.7	100	88	39	0
MI MUSKEGON	80	57	88	49	69	3	0	0	.4					179	21.6	133	91	49	0
MI SAULT STE. MARIE	78	50	88	41	64	6	0	0	.6					89	12.5	89	89	39	0
MN ALEXANDRIA	69	54	76	47	61	-4	2.3	1.4	.8					135	14.7	115	94	42	0
MN DULUTH	70	51	81	42	61	2	.8	1.1	1.5	2.7	96	6.7	66	93	51	0	0	0	0
MN INT'L FALLS	70	51	83	43	61	2	.8	1.1	.8	1.4	54	9.4	83	96	64	0	0	0	4
MN MINNEAPOLIS	75	57	86	46	66	-1	2.6	1.7	1.2	3.2	133	7.0	78	99	62	0	0	0	4
MN ROCHESTER	74	54	83	46	64	-2	1.2	1.2	.8	3.1	111	17.9	86	99	62	0	0	0	5
MS GREENWOOD	87	70	91	69	78	-1	2.4	1.7	1.3	3.8	158	11.2	97	94	56	0	0	0	2
MS JACKSON	87	67	90	63	77	-2	1.0	1.4	.6	1.5	71	46.9	171	96	54	2	0	0	5
MS MERIDIAN	85	65	88	62	75	-3	.9	2.2	.4	2.4	104	40.8	149	98	62	0	0	0	5
MO CAPE GIRARDEAU	87	65	90	56	76	-1	.1	.7	.1	1.0	38	24.6	110	89	41	2	0	0	1
MO COLUMBIA	83	61	85	55	72	-1	1.3	.5	.4	2.4	89	19.8	118	93	51	0	0	0	5
MO KANSAS CITY	81	61	86	54	71	-3	3.4	2.3	1.1	2.4	89	19.8	118	93	51	0	0	0	2
MO SAINT LOUIS	86	66	88	59	76	1	.1	1.1	2.4	4.2	131	19.8	128	94	50	0	0	0	2
MO SPRINGFIELD	83	60	86	53	71	-2	.5	.6	.1	3.4	131	22.1	136	85	41	0	0	0	2
MT BILLINGS	76	51	85	47	64	0	.2	.3	.5	1.6	50	19.6	107	86	42	0	0	0	1
MT GLASGOW	74	50	78	44	62	-1	.3	.4	.1	.7	41	4.7	57	83	29	0	0	0	3
MT GREAT FALLS	71	48	83	44	60	-2	.6	.1	.5	1.7	81	5.3	64	75	35	0	0	0	3
MT HAVRE	74	47	83	44	61	-2	.6	.1	.5	1.7	81	5.3	64	75	35	0	0	0	3
MT HELENA	70	45	83	42	57	-3	1.1	.6	.6	1.6	107	4.3	80	85	33	0	0	0	4
MT KALISPELL	67	42	76	38	55	-4	1.5	1.0	.6	1.9	119	8.5	112	90	44	0	0	0	4
MT MILES CITY	74	52	80	47	63	-3	.3	.4	.2	1.4	67	3.9	55	89	34	0	0	0	2
MT MISSOULA	68	45	82	39	57	-3	.8	.3	.3	1.1	79	7.2	113	94	40	0	0	0	5
NE GRAND ISLAND	76	59	79	53	67	-4	3.5	2.6	1.3	4.5	161	14.8	131	87	56	0	0	0	5
NE LINCOLN	78	61	81	57	70	-3	3.1	2.2	1.8	4.6	170	16.1	135	94	58	0	0	0	6
NE NORFOLK	76	59	80	56	67	-4	4.7	3.7	2.7	4.7	157	15.2	133	93	58	0	0	0	4
NE NORTH PLATTE	75	51	83	45	63	-6	.9	0	.8	2.0	74	9.3	98	88	49	0	0	0	4
NE OMAHA	75	60	79	56	67	-4	3.8	2.8	1.6	4.2	135	18.6	141	93	60	0	0	0	5
NE SCOTTSBLUFF	75	48	87	40	62	-5	.5	.3	1.2	1.2	55	9.7	129	88	38	0	0	0	6
NE VALENTINE	72	53	77	46	63	-5	2.1	1.4	1.7	3.0	143	10.7	129	84	51	0	0	0	4
NV ELY	77	39	87	30	58	-1	0	0	0	2.3	383	8.6	183	82	20	0	0	0	3
NV LAS VEGAS	97	69	106	64	83	0	0	0	0	0	0	2.4	133	22	8	5	0	0	0
NV RENO	83	41	89	38	62	0	0	0	0	0	0	2.4	133	22	8	5	0	0	0
NV WINNEMUCCA	80	41	92	33	61	-2	0	0	.5	1.67	6.7	172	70	15	0	0	0	0	0
NH CONCORD	86	58	93	49	72	7	1.2	.5	1.2	3.3	157	26.2	166	98	48	2	0	0	1
NJ ATLANTIC CITY	89	65	95	61	77	8	T	.6	1.5	79	24.8	128	87	45	4	0	0	0	1
NM ALBUQUERQUE	90	56	98	50	73	-2	0	.1	0	.1	33	2.8	117	80	9	5	0	0	0
NM CLOVIS	85	57	92	50	71	-3	T	.6	T	2.2	122	5.3	87	74	25	2	0	0	0
NM ROSWELL	92	61	101	54	76	-3	T	.2	T	.2	33	2.2	85	49	15	3	0	0	1
NY ALBANY	88	60	91	50	74	7	.1	.7	T	.2	33	2.2	85	49	15	3	0	0	1
NY BINGHAMTON	86	63	89	60	74	10	1.3	.5	.9	3.1	124	21.8	137	93	43	0	0	0	3
NY BUFFALO	85	64	89	61	75	9	.3	.3	1.8	100	13.1	81	83	39	0	0	0	1	
NY NEW YORK	86	68	91	64	77	6	0	.7	0	1.8	82	31.2	163	81	48	2	0	0	0
NY ROCHESTER	87	62	89	58	74	7	1.3	.6	.8	2.4	120	14.0	98	95	41	0	0	0	1
NY SYRACUSE	87	61	90	57	74	7	.4	.5	.4	1.4	58	15.6	92	97	51	1	0	0	2
NC ASHEVILLE	82	54	86	47	68	-2	.4	.6	.2	2.1	70	26.2	117	100	49	0	0	0	2
NC CHARLOTTE	87	62	89	56	74	-1	.4	.4	.2	2.0	83	20.9	101	80	36	0	0	0	2
NC GREENSBORO	85	60	86	53	72	-1	.6	.4	.5	3.2	114	22.7	116	89	43	0	0	0	2
NC HATTERAS	81	64	84	55	73	-1	0	1.0	0	2.9	100	34.1	155	91	56	0	0	0	2
NC NEW BERN	86	64	88	59	75	0	0	1.2	0	3.6	103	29.6	136	92	41	0	0	0	0
NC RALEIGH	87	60	88	53	74	0	0	.5	.4	2.0	77	27.0	141	94	43	0	0	0	1
NC WILMINGTON	86	64	91	58	75	-1	0	1.3	0	2.6	72	27.3	129	92	49	1	0	0	0
ND BISMARCK	73	46	76	34	60	-5	T	.8	T	.1	5	4.4	59	84	36	0	0	0	0
ND FARGO	72	54	81	44	63	-2	.7	0	.6	1.0	50	6.1	80	90	50	0	0	0	3
ND GRAND FORKS	71	52	80	43	61	-3	1.2	.5	.7	1.2	67	5.6	82	93	52	0	0	0	1
ND WILLISTON	76	48	78	37	62	-2	T	.6	T	.2	11	3.5	57	84	40	0	0	0	1
OH AKRON-CANTON	83	63	88	60	73	5	0	.7	0	.8	35	17.0	99	84	48	0	0	0	0
OH CINCINNATI	84	63	88	62	73	2	.1	.8	.1	1.0	37	19.4	96	87	43	0	0	0	

Weather Data for the Week Ending June 18, 1983

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 May 29	PCT. NORMAL SINCE May 29	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
IA LAYTON	83	62	88	61	73	2	2.2	1.3	2.1	3.1	111	16.8	95	90	43	0	0	2	1
IA TOLEDO	85	58	90	55	71	3	.1	.8	.1	1.4	56	12.5	87	92	42	1	0	1	0
IA YOUNGSTOWN	85	59	88	56	72	6	.1	.8	.1	.9	36	14.6	84	87	42	0	0	1	0
OK OKLAHOMA CITY	83	64	88	61	73	-4	.4	.5	.3	2.5	81	17.3	112	86	47	0	0	2	0
OK TULSA	88	66	92	62	77	-1	.1	1.0	.1	.6	18	18.6	103	89	44	1	0	1	0
OR ASTORIA	68	53	76	48	61	4	1.3	.7	.7	2.8	147	41.2	123	90	59	0	0	6	1
OR BURNS	70	37	78	30	54	-7	T	.2	T	.8	133	9.6	178	84	30	0	2	3	0
OR MEDFORD	80	50	88	43	65	0	T	.1	T	.6	120	12.3	123	81	29	0	0	0	0
OR PENDLETON	76	51	92	46	64	-2	T	.1	T	.4	80	7.0	115	71	26	1	0	0	0
OR PORTLAND	72	55	80	51	63	1	.2	.1	.1	1.0	91	25.0	132	86	44	0	0	5	0
OR SALEM	72	50	80	44	61	0	.4	.1	.3	1.7	170	31.1	147	85	43	0	0	3	0
PA ALLENTOWN	88	66	92	59	77	8	.9	.1	.5	2.7	113	25.3	131	84	42	4	0	2	1
PA ERIE	83	61	87	57	72	7	.5	.4	.5	1.6	62	14.1	86	80	44	0	0	1	0
PA HARRISBURG	86	64	89	60	75	3	.9	0	.7	2.2	85	25.6	145	87	42	0	2	1	0
PA PHILADELPHIA	90	66	96	62	78	6	0	.9	0	.7	26	28.5	156	92	42	3	0	0	0
PA PITTSBURGH	83	61	86	58	72	4	T	.8	T	1.8	75	17.2	97	82	38	0	0	0	0
PA SCRANTON	86	61	89	54	74	6	.7	.1	.5	3.3	138	21.5	144	85	47	0	0	2	0
RI PROVIDENCE	83	64	93	61	74	7	.1	.6	.1	3.2	152	36.3	175	85	52	2	0	1	0
SC CHARLESTON	85	66	87	62	76	-2	T	1.5	T	.9	21	27.7	128	96	48	0	0	0	0
SC COLUMBIA	88	58	90	51	73	-4	.2	.8	.2	2.1	70	24.9	114	95	35	3	0	1	0
SC FLORENCE	87	64	89	59	76	-1	0	1.1	0	4.3	143	28.4	152	95	43	0	0	0	0
SD GREENVILLE	85	60	87	55	73	-2	1.5	.4	1.0	1.9	58	26.6	105	91	44	0	0	3	1
SD ABERDEEN	71	52	75	42	62	-5	2.8	2.1	2.6	3.0	130	8.3	98	95	60	0	0	2	1
SD HURON	71	55	75	43	63	-5	2.0	1.2	1.6	2.2	92	7.2	82	97	62	0	0	4	1
SD RAPID CITY	71	49	80	42	60	-5	.3	.5	.2	.7	29	5.2	62	88	50	0	0	3	0
SD SIOUX FALLS	72	56	77	45	64	-4	2.8	1.9	1.6	2.9	107	12.8	114	99	65	0	0	5	2
TN CHATTANOOGA	84	60	88	53	72	-3	.2	.5	.2	1.4	61	24.9	93	87	42	0	0	3	0
TN KNOXVILLE	84	59	89	55	72	-3	1.2	.3	.9	2.5	96	20.4	83	100	46	0	0	2	1
TN MEMPHIS	87	69	90	67	78	-1	1.0	.2	.8	1.6	59	28.6	102	93	50	1	0	3	1
TN NASHVILLE	86	65	89	60	75	0	1.0	.2	.4	3.0	115	29.4	115	93	47	0	0	3	0
TX ABILENE	86	65	90	61	76	-5	.9	.3	.7	4.0	200	9.3	90	79	38	2	0	2	1
TX AMARILLO	84	56	92	47	70	-5	.3	.5	.2	2.1	84	9.4	121	90	32	2	0	2	0
TX AUSTIN	85	70	90	67	78	-4	.7	.1	.4	3.2	128	19.5	120	90	56	1	0	2	0
TX BEAUMONT	85	73	87	72	79	-2	3.6	2.7	2.1	6.0	222	31.8	144	96	68	0	0	2	2
TX BROWNSVILLE	93	73	95	71	83	0	.2	.5	.2	1.8	95	6.7	76	90	51	7	0	2	0
TX CORPUS CHRISTI	90	72	92	70	81	-2	.8	.1	.8	1.6	64	11.5	97	94	58	4	0	1	1
TX DEL RIO	88	70	96	63	79	-5	.2	.2	.2	.9	75	4.9	68	84	57	3	0	2	0
TX EL PASO	95	64	101	56	80	-2	.1	0	.1	.1	33	3.0	176	49	12	6	0	1	0
TX FORT WORTH	87	67	90	61	77	-5	1.2	.6	1.2	2.9	138	16.4	100	85	43	2	0	1	0
TX GALVESTON	85	75	86	70	80	-1	.6	.3	.5	1.8	72	14.2	88	89	69	0	0	2	0
TX HOUSTON	86	64	91	66	78	-3	2.4	1.4	1.3	3.9	126	21.1	98	95	28	1	0	3	3
TX LUBBOCK	89	60	98	54	75	-3	0	.6	0	1.3	65	6.9	93	82	59	3	0	0	0
TX MIDLAND	94	66	99	62	80	0	T	.3	T	.3	27	2.4	44	81	26	5	0	1	0
TX SAN ANGELO	85	66	90	62	76	-6	.4	.1	.3	3.2	213	7.9	96	91	52	1	0	2	0
TX SAN ANTONIO	87	69	92	63	78	-4	.1	.6	1	1.1	48	12.5	95	88	51	2	0	3	0
TX VICTORIA	90	71	93	69	81	-1	2.1	1.0	1.0	2.7	79	14.4	92	96	54	4	0	3	2
TX WACO	90	69	92	62	80	-2	.2	.4	.1	2.4	109	12.5	73	88	44	4	0	2	0
TX WICHITA FALLS	88	63	91	58	75	-5	2.1	1.5	2.1	3.4	148	13.3	99	91	41	2	0	2	1
UT BLANDING	79	47	91	40	63	-3	T	0	T	0	0	5.8	145	53	19	2	0	1	0
UT CEDAR CITY	81	47	91	36	64	-2	.2	.1	.2	.5	125	7.4	161	61	16	2	0	1	0
UT SALT LAKE CITY	78	51	91	43	65	-4	.1	.1	.1	1.0	125	11.6	138	75	23	1	0	2	0
VT BURLINGTON	88	62	92	54	75	10	.1	.7	.1	1.6	64	21.3	158	86	41	4	0	2	0
VA NORFOLK	86	64	89	55	75	0	0	.8	0	2.0	80	24.5	128	93	46	0	0	0	0
VA RICHMOND	91	67	93	59	79	6	0	.8	0	2.1	88	21.4	120	88	42	6	0	0	0
VA ROANOKE	85	58	88	54	71	0	.3	.5	.2	.9	39	23.8	131	98	45	0	0	2	0
WA COLVILLE	61	49	81	42	55	-6	.8	.4	.4	1.7	155	13.7	157	84	46	0	0	5	0
WA QUILLAYUTE	63	48	70	42	56	0	1.5	.8	.5	2.9	121	57.2	111	98	61	0	0	5	0
WA SEATTLE-TACOMA	67	53	74	51	60	0	.3	.1	.2	1.4	117	20.0	108	91	51	0	0	3	0
WA SPOKANE	74	52	85	47	63	2	.2	.1	.1	.7	78	8.4	92	83	36	0	0	4	0
WA YAKIMA	77	46	83	39	62	-3	.7	.1	T	.2	67	6.6	183	70	26	0	0	2	0
WV BECKLEY	80	57	82	53	68	2	1.4	.5	.8	2.4	96	13.3	65	90	51	0	0	5	1
WV CHARLESTON	88	61	91	59	75	3	.1	.6	.1	1.7	81	18.4	95	94	40	3	0	2	0
WV HUNTINGTON	85	62	88	60	73	2	.2	.6	.2	1.5	63	17.5	89	89	44	0	0	2	0
WV PARKERSBURG	84	65	88	62	75	4	.3	.7	.3	1.5	48	20.1	96	86	45	0	0	1	0
WI GREEN BAY	77	54	85	47	65	0	.4	.3	.3	1.1	52	10.9	95	88	47	0	0	2	0
WI LA CROSSE	79	58	87	45	69	0	.4	.6	.2	.6	21	10.2	78	92	45	0	0	3	0
WI MADISON	81	56	87	47	68	2	.4	.6	.2	1.1	39	12.5	95	86	47	0	0	3	0
WI MILWAUKEE	78	59	87	56	69	4	.4	.6	.3	1.1	48	18.2	139	81	44	0	0	2	0
WI WAUSAU	78	56	87	45	67	2	.2	.7	.1	.9	32	9.8	74	86	30	0	0	2	0
WY CASPER	70	45	82	39	57	-5	2.0	1.7	1.3	3.4	340	9.9	155	96	39	0	0	4	1
WY CHEYENNE	68	44	83	39	56	-6	.4	0	.4	2.8	187	11.9	183	92	43	0	0	2	0
WY LANDER	72	45	81	39	59	-3	T	.3	T	1.3	108	10.1	125	74	29	0	0	0	0
WY SHERIDAN	74	47	83	41	61	-1	.2	.3	.2	.4	24	3.9	46	79	36	0	0	1	0
PR SAN JUAN	93	78	96	77	86	4	.8	.2	.6	1.6	48	16.1	79	85	55	7	0	2	1

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

## National Agricultural Summary

June 13 to 19

**HIGHLIGHTS:** Widely scattered thunderstorms and high winds lodged some small grains and eroded some fields across the eastern half of the Nation. Warmer temperatures aided evaporation and reduced soil moisture in most regions. Generally, moisture supplies ranged from short to adequate across much of the Nation. Farmers had 5 to 6 days suitable for fieldwork except in the central Plains where rain limited fieldwork to 3 days. Winter wheat was in fair to mostly good condition with minimal lodging. Combining was 6% complete. Spring wheat was 2% headed, trailing the normal of 13%. Corn was in fair to good condition. The crop was silking across the South and reached the dough stage in early-planted fields. Soybean planting was 85% completed, equal the average for this date. Progress was well ahead of schedule in the Corn Belt. However, progress lagged normal elsewhere. Harvest of small grains moved slowly in the Southeast, which, in turn, delayed planting of double-cropped soybeans. Cotton planting neared completion except in Oklahoma and Texas. Sorghum was 80% planted, behind the average of 89%. Peach harvesting crept northward. Warmer weather stimulated vegetable growth across northern producing areas. Pastures and livestock continued in fair to good condition.

**SMALL GRAINS:** Winter wheat continued in fair to mostly good condition. Heading advanced to 93% completion, 1 point ahead of a year earlier but 1 point behind the average. Combining centered mainly in California and Texas. Six percent of the crop was harvested in the 15 major producing States compared with the 13% average. Locally heavy showers and high winds caused limited lodging in some areas.

Spring wheat seeding was virtually complete in the five major producing States. Showers brought spotty relief to dry conditions, and stands remained in fair to mostly good condition. The crop was 2% headed compared with the 13% average for this date. Heading was slower than normal in all States.

**CORN:** Corn planting neared completion in all major growing regions. Emerged fields were in fair to good condition in all areas as warm weather stimulated rapid growth. Silking was well advanced across the South. Early-planted fields reached the dough stage of development.

**SOYBEANS:** Soybean planting advanced to 85% completion, equal the average for this date. Progress was well ahead of the average across the Corn Belt but lagged the normal elsewhere. Kansas producers seeded 35% of their acreage during the week, while Michigan, Kentucky, and Tennessee producers planted 30, 26 and 24% of their acreages, respectively. Iowa growers finished planting the crop, and Nebraska farmers neared completion. Emerged plants were in fair to good condition and improving with the warm weather. Planting of double-cropped soybeans in the Southeast has begun. However, progress trails the normal because of the late harvest of small grains.

**COTTON:** Cotton planting in the 14 major producing States reached 92% completion, 6 points behind the average. Growers were finished or nearly finished planting in all States except Oklahoma and Texas. Producers in Oklahoma lagged the average by 30 points, while Texas growers were 8 points behind normal. Squaring reached 12% completion in the 14 major States, trailing the 25% average. The crop squared in all States except Missouri and Oklahoma. Only Arizona stands were ahead of the average for this date. Four percent of the crop

set bolls in Georgia and Texas, lagging their averages of 9% and 11%, respectively.

**SORGHUM:** Sorghum planting in the seven major States advanced to 80% finished, ahead of last year's 71% but behind the 89% average. Oklahoma farmers planted 30% of their acreage during the week, while growers in Colorado planted 22% and Kansas producers planted 20%. In Texas, 42% of the acreage headed and 14% turned color. One percent reached maturity compared with the 4% average.

**OTHER CROPS:** Rice seeding was virtually complete; plants had emerged on 94% of the acreage, 4 points less than average. Stands were in fair to good condition. Warm weather stimulated good growth in all areas. Three percent of the Texas crop headed compared with the average of 16%.

Peanut planting began in central Texas, and fields in South Texas established good stands. Planting for the State reached 68% completion, behind the average progress of 69%. In Georgia, 43% of the crop bloomed, trailing the average progress of 68%.

Tobacco transplanting advanced rapidly between locally heavy showers. North Carolina producers had set 94% of their burley crop, while Kentucky growers had transplanted 85%; both were only slightly behind the average for this date. Harvesting crept northward out of Florida. Georgia's acreage was 2% harvested compared with the 7% average.

**FRUITS AND NUTS:** The peach harvest moved northward. Picking was 35% finished in Georgia and 10% complete in South Carolina. The crop was in poor to fair condition across the Southeast due to earlier freeze damage. South Texas producers harvested a good yielding crop. Warm weather encouraged development of Michigan fruit, but most crops continue behind schedule. Prospects look good for apple, cherry, and peach crops in the Northeast. Apple thinning neared completion in this region. Cherry picking gained momentum in the Northwest. Apples and pears were sizing well.

Florida citrus growers used very little irrigation as soil moisture was adequate in all areas. New crop fruit progressed well. Valencia orange picking was active; however, supplies were dwindling. California's table grape harvest become more widespread. Early varieties of nectarines, Freestone peaches, and plums were picked in the southern San Joaquin Valley. Packing of Valencia oranges for export continued active. Farmers sprayed almond and walnut trees to control insects and scale. Pecans developed well in Texas. The nut set was good, and only light insect damage was reported.

**VEGETABLES:** Warm weather stimulated rapid vegetable crop development in most regions. However, growth lagged the normal across northern producing areas by up to 3 weeks. Planting and harvesting remained very active. Florida's vegetable harvest had a seasonal decline of 2% from the previous week. Watermelon harvesting moved northward; volume increased. Warm temperatures promoted development of all vegetable crops in Texas. Onion harvesting was more widespread with farmers reporting good size and yields. California's vegetable harvest remained active. Melons bloomed in the San Joaquin Valley.

**PASTURES AND LIVESTOCK:** Pastures and ranges were in mostly good condition across the Nation. However, dry conditions increase the danger of

(continued on p. 18)



trace precipitation which was only rainfall reported for week. Temperatures ranged 3° above normal to 3° below.

Valencia orange harvest continued steady scale, picking activity focused Maricopa County, limited harvest Yuma County. Grapefruit harvest continued even scale mostly Maricopa County. Yuma County grape harvest increasing, Perlette, Cardinal varieties picked. Flame variety harvest complete. Growers begin picking grapes Maricopa County 20th. Plum harvest underway Maricopa County. Spring lettuce season complete by 20th as growers Willcox wound down picking activities. Table potato harvest also nearing end, chipper potatoes dug through end June. Dry onion harvest, satisfactory progress. Cantaloups, watermelons, honeydew melons picked full volume Yuma, La Paz, Mohave Counties as they reached maturity. Cantaloup harvest getting underway Maricopa County. Melons not yet ready for harvest made good progress. Cotton made good progress, running little behind some areas. Cotton planting following small grain harvest occurred Yuma County. Approximately 65% acreage squaring, same as year ago, average 56%. Yuma county cotton most advanced, nearly all acreage squaring, quite a bit setting bolls. Pink bollworm activity apparent fields there. Central areas approximately half acreage squaring, southeastern counties no squaring noticeable. Water, herbicides, pesticides applied as needed. Wheat harvest western, central areas mostly at peak, barley harvest those areas winding down. Southeastern areas, barley being combined full swing, wheat harvest underway next week to ten days. Alfalfa continued to be cut, baled at increasing rate. Limited planting sorghum continued Pinal, Graham Counties. Both corn, sorghum fields with established stands made average progress. Safflower seeds continued maturing, crop made average progress.

ARKANSAS: Temperatures averaged 0 to -5° below normal. Highest 97°, lowest 50°. Precipitation 1.00 to 3.00 in. north and east, light elsewhere. Days favorable for fieldwork: 6.1. Crop progress moderate. Soil moisture mostly adequate, becoming dry central counties. Most crops slightly improved. Cotton fair; squaring below 5%, 41% 1982, 27% average. Rice good condition; emerged 92%, 98% 1982, 96% average. Soybeans good; planted 65%, 71% 1982, 66% average; emerged 50%, 63% 1982, 52% average. Wheat harvested 36%, 69% 1982, 74% average. Oats good, harvested 58%, 83% 1982 and average. Corn good. Sorghum good condition, planted 92%. 99% 1982, 93% average. Pastures average. Cattle good condition.

CALIFORNIA: High pressure aloft keep all crop districts above normal in temperatures throughout the period. Precipitation was scarce with only a few locations in the North Coast and Sacramento Valley recording measurable amounts. Temperatures varied from a low of 26° recorded at Huntington Lake to a high of 107° at Blythe.

Good weather assisting crop development field operations. Harvest small grains getting underway. Winter wheat harvest 30%, 35% last year, 40% average. Baling oat hay. Preparing harvested grain fields double cropping. Cotton progress good. Cotton squared 5%, none last year, 23% average. Treating for lygus and mites. Cultivation ongoing. Virtually all rice seeded with 90% emerged, 90% last year, and 90% average. Rice growing well. Corn, dry beans, and grain sorghum planting increasing. Cutting alfalfa hay. Variable weather has slowed development and harvest of some fruits. Apricot harvest began later than normal. Cherry harvest virtually complete. Black Mission figs

packed in Fresno area. Grapes sizing nicely. Some spraying for bunch rot, leafhopper, mildew. Desert harvest of Perlette variety at peak last week, expect sharp drop next week. Harvest of Cardinal Thompson and Flame seedless varieties increasing. Kiwi reported sizing well. Early varieties of nectarines, Freestone peaches, and plums harvested in southern San Joaquin Valley. Some peaches being thinned. Pear crop looks normal. Valencias continue to be packed mainly for export with good quality, small sizes. Almond treated for peach twig borer and mites. Walnuts sprayed to control scale. Harvest of artichokes, broccoli, cabbage, cauliflower, celery, lettuce, onions, strawberries, sweet corn, squash, green beans, and spring potatoes continued. Melons blooming in San Joaquin Valley. Planting fall potatoes continued San Joaquin Valley. Summer ranges providing good to excellent grazing. Foothill range grass becoming very dry increasing fire danger. Grasshopper populations building up Foothills San Joaquin Valley. Water supplies more than adequate.

COLORADO: Week began cool and wet; finishing warmer and drier. Precipitation slightly above normal. Snow fell in mountains. Average temperatures 5 to 6° below normal; warmest week thus far in east.

Winter wheat in very good condition; 100% jointed, about normal; 81% headed, 95% last year, 92% average. Corn in fair to good condition; 99% planted, about normal; 92% emerged, also normal; height 6 in., 8 in. last year, 7 in. average. Sorghum in good condition; 75% planted; 62% last year, 83% average. Barley, oats, and spring wheat in good condition. Barley 100% emerged, normal; 29% headed; 39% last year. Statewide 5.0 days suitable for fieldwork. Topsoil and subsoil moisture adequate. Range and pasture conditions very good.

FLORIDA: High pressure continued to dominate with no frontal system. Showers, thunderstorms remained widely scattered amid lots of sunshine with a general easterly flow.

Soil moisture variable. Short to adequate Panhandle, adequate most other areas. A little surplus along the upper East Coast and a few other scattered areas.

Corn good condition; silage being made. Tobacco harvest increasing, wheat harvest almost complete, yields better than expected haymaking continues. Peanuts, sugarcane good condition. Soybean planting active delayed Panhandle due to dry weather, almost complete some central areas. Pasture conditions fair to good, north, Panhandle; good to excellent elsewhere. Grass making excellent growth. Cattle mostly good condition. Citrus tree condition excellent. Soil moisture adequate all areas, very little irrigation. New crop fruit making good progress. Few remaining Valencias holding well; harvest active but slowing as supplies run out. Normal summer weather with hot days, warm nights continued in vegetable areas. Skies partly cloudy but with considerable sunshine. Rainfall mostly widely scattered showers, thunderstorms. Total shipments decreased 2% from previous week. Harvest gained watermelons. Volume about steady Chinese cabbage, eggplant, peppers, potatoes and Southern peas. Shipments declined all other vegetables. Season essentially complete escarole, lettuce, and radishes. Watermelon harvest very active. Volume increasing rapidly as harvest moves northward.

GEORGIA: Dry, isolated thundershowers mountains and extreme south. Amounts less than 0.25 in. Mild at beginning of period with warming trend. Temperatures averaged near normal extreme west central and 3 to 7° below normal remainder of State. Temperatures for 18th and 19th generally

1 to 3° below normal. Rainfall averaged 0.75 in. north and west central, 0.10 in. elsewhere.

Soil moisture variable: 12% very short, 68% short, 20% adequate. Average days suitable for fieldwork 5.9. Farm activities: planting, haying, spraying herbicides and insecticides, harvesting. Corn silked 33%, 81% last year, 73% average; dough 9%, 41% last year, 37% average; condition 4% poor, 52% fair, 43% good. Cotton planting completed; squaring 38%, 60% last year, 67% average; setting bolls 4%, 5% last year, 9% average; condition 58% fair, 38% good. Peanuts 43% blooming, 60% last year, 68% average; pegging 8%, 19% last year, 27% average; condition 4% poor, 40% fair, 54% good. Problems with thrips and leafspot. Soybeans 77% planted, 79% last year, 82% average; 2% blooming this year and last year, 3% average; condition 42% fair, 56% good. Tobacco 2% harvested, 10% last year, 7% average; condition 5% poor, 44% fair, 51% good. Grain sorghum 71% seeded this year and average, 74% last year; condition 3% poor, 53% fair, 41% good, 3% excellent. Wheat 73% harvested, 82% last year, 79% average; condition 5% very poor, 9% poor, 47% fair, 36% good, 3% excellent. Rye condition 3% very poor, 11% poor, 43% fair, 42% good. Other small grains condition 7% poor, 49% fair, 38% good, 4% excellent. Watermelons 2% harvested, 11% last year, 7% average; condition 4% poor, 52% fair, 40% good.

Peaches 35% picked, 49% last year, 38% average; condition 39% very poor, 16% poor, 18% fair, 27% good. Apple condition about the same as last week. Pasture condition 6% poor, 32% fair, 60% good.

HAWAII: Favorable weather continued throughout the Island Chain. Occasional showers fell over most of the Islands while irrigation was necessary in drier regions. Spray programs were necessary for insect control. Supplies of head lettuce, head cabbage, and Chinese cabbage continue to be moderate to heavy. Papaya production remains active and watermelon supplies will increase in the coming weeks.

IDAHO: Low pressure dominated conditions resulting in cool, moist weather. Most stations recorded below normal temperatures ranging from 7° below normal at Malad to 3° above normal at Moscow. Greater than normal amounts of precipitation fell in the north central mountains and southeast. The largest amount 2.15 in. fell in Grangeville which was 1.44 in. above normal. Southwest had below normal precipitation with Boise 0.14 in. below normal.

Crops continued to make good progress as farmers reported 5.9 days suitable for fieldwork. Winter wheat was 47% headed compared to last year's 37% and the average 48%. Spring wheat stood at 33% boot stage or higher while barley advanced to 32% boot or higher. Last year these two crops were 34% and 30% boot or higher, respectively. Potato emergence reached 75% versus 82% last year and 75% average. Almost 79% of the dry bean crop had emerged compared to 68% last year. The first cutting of alfalfa was 37% complete versus 24% at this time last year. Soil moisture was adequate across the State. Livestock remain in good condition.

ILLINOIS: Temperatures averaged 1° below normal to 3° above normal, coolest west. Precipitation light to moderate north and east, none to light west and southwest.

Soil moisture 20% short, 78% adequate, 2% surplus. Days suitable for fieldwork: 6.3. Corn 100% planted, 1982 100%, average 100%; average height 12 in., 1982 24 in., average 19 in.; height most advanced fields 20 in., 1982 37 in., average 31 in.; condition 5% excellent, 77% good, 18% fair. Soybeans 97% planted, 1982

94%, average 94%; 85% of full stand; condition 3% excellent, 70% good, 27% fair. Sorghum 75% planted, 1982 77%, average 80%. Winter wheat 100% headed, 1982 100%, average 100%; 92% filled, 1982 100%, average 99%; 60% turning yellow, 1982 86%, average 77%; less than 5% ripe, 1982 24%, average 24%; condition 7% excellent, 72% good, 16% fair, 4% poor. Oats 56% headed, 1982 77%, average 70%; 30% filled, 1982 46%, average 35%; condition 5% excellent, 66% good, 23% fair, 6% poor. Alfalfa hay first crop 84% cut, 1982 81%, average 87%; condition 12% excellent, 73% good, 15% fair. Clover hay 72% cut, 1982 64%, average 71%; condition 13% excellent, 78% good, 9% fair. Pasture condition 21% excellent, 70% good, 9% fair. Livestock condition good.

INDIANA: Temperatures above normal Statewide 2 to 5° north - 1 to 4° central and 1 to 2° south. Precipitation variable from little or none to over 3.00 in. Northern areas 0.20 to 0.70 in. central 0.60 to 0.80 in. and 0.70 to 0.90 in. in south. Soil temperatures in mid 70's to low 80's. Growing degree days for week above normal.

Fieldwork averaged 6.5 days. Topsoil moisture short to adequate. Subsoil moisture adequate. Corn 99% planted, 1982 100%, average 97%. Corn 95% emerged, 1982 100%. Corn height 8 in., 1982 25 in., average 15 in. Corn condition fair to mostly good. Soybeans 95% planted, 1982 96%, average 95%. Soybeans 80% emerged, 1982 93%. Soybean height 3 in., 1982 7 in., average 4 in. Soybean condition fair to mostly good. Wheat good condition. Wheat 30% turning color, 1982 55%. Wheat 70% in milk, 1982 85%. Wheat 100% headed, 1982 100%, average 100%. Oats 30% headed, 1982 65%. Oats 16 in. tall, 1982 21 in. Alfalfa hay 90% cut once, 1982 80%, average 80%. Clover hay 70% cut, 1982 65%, average 65%. Tobacco plants 70% set, 1982 70%, average 85%. Pastures good.

IOWA: Dry with seasonal temperatures east; cool and wet over western 2/3 of State. Precipitation fell on the 13th, 14th, and at the weekend.

Days suitable 5.0. Corn cultivated 1st time 45%; 37% last year; 51% normal. Soybeans emerged 90%; 62% last year; 90% normal. Alfalfa hay harvest 1st crop 65%; 61% last year; 78% normal. Clover hay harvested 1st crop 28%; 31% last year; 46% normal. Topsoil moisture 22% short; 66% adequate; 12% surplus. Subsoil moisture 1% short; 76% adequate; 23% surplus.

KANSAS: Precipitation averaged around 2.50 in. north central and northeast, over 1.50 in. northwest, 0.50 in. to 1.00 in. elsewhere. Several localities, especially north, received 3.00 in. to over 5.00 in. causing serious flooding. Temperatures averaged from 70° northwest to 74° east and south central - 1 to 3° below normal.

Wheat 30% turned, 70% last year, 75% average; 0% ripened, 4% last year, 25% average. Wheat condition continues good to excellent. Wind, rain caused lodging some areas. Localized hail damage scattered areas. Diseases light to moderate. Corn 99% planted, 95% last year, 100% average. Sorghum 55% planted, 40% last year, 80% average. Some sorghum washed out southwest, replanting. Soybeans 70% planted, 20% last year, 75% average. Alfalfa hay first cutting 80% complete, 75% last year, 97% average; second cutting 2% complete, 5% last year, 15% average. Soil moisture adequate to surplus central, northeast, east central, adequate elsewhere. Pastures and range continue good to excellent. Days suitable for fieldwork averaged 3.5.

**KENTUCKY:** Typical late spring, early summer week. Temperatures seasonably warm with highs mostly in 80's. Precipitation variable with scattered showers and thunderstorms. Louisville received heaviest precipitation with 1.85 in. while Hardinsburg, less than 70 miles to west, received no rainfall.

Days favorable for fieldwork averaged 5.7. Soil moisture 30% short, 69% adequate, 1% surplus. Corn 96% planted, last year 100%, average 99%. Average height emerged corn 10 in. Some replanting. Soybeans 50% planted, 72% last year, 68% average. Barley 85% set, 95% last year and 88% average. Wheat harvest just getting started compared to 22% completed a year ago and 18% for the average. Scab and other head diseases attacking wheat. Barley acreage nearly half harvested with crop poor to fair. Hay harvest very active. Pasture good, some need clipping and weed control.

**LOUISIANA:** Rainfall averaged no rain to around 2.00 in. in south and east central. Temperatures averaged 1 to 3° below normal. High 95°, low 63°.

Soil moisture adequate. Days suitable 5.0. Spring plowing 98%, 99% 1982. Corn silked 40%, 86% 1982, 72% average. Corn dough 9%, 42% 1982. Condition fair to good. Cotton planting complete. Cotton emerged 99%, 100% 1982, 99% average. Cotton squaring 10%, 40% 1982, 28% average. Condition fair. Rice planted 99%, 100% 1982 and average. Rice emerged 96%, 99% 1982, 100% average. Condition fair. Sorghum planted 94%, 95% 1982, 90% average. Sorghum emerged 90%, 91% 1982, 82% average. Condition fair to good. Soybeans planted 79%, 85% 1982, 86% average. Soybeans emerged 69%, 77% 1982 and average. Condition fair to good. Sweetpotatoes transplanted 77%, 94% 1982, 92% average. Condition fair to good. Sugarcane condition good. Wheat harvested 87%, 95% 1982, 93% average. Condition fair to good. Hay first cutting 70%, 89% 1982. Pecans rated fair. Peaches harvested 14%, 32% 1982. Condition good. Vegetables rated fair. Pastures and livestock rated good.

**MARYLAND AND DELAWARE:** Warm, sunny week with little precipitation. High temperature the high 80's to mid 90's. Lows in high 50's to low 60's. Temperatures 3 to 7° above normal.

**Delaware:** Continued progress made with 6.5 days suitable for fieldwork. Field corn 97% planted, last year and on average 100%. Soybeans 60% planted, last year 90%, average 75%. Barley turned 100%, rye turned 80%, last year both 100%. Barley 78% harvested, wheat turned 90%, last year 85%. Virtually all vegetables planted. Peas 35% harvested. First cutting of alfalfa 90%, last year 100%. Other hay 85% cut, last year 80%. Topsoil moisture short to adequate. Subsoil moisture supplies adequate.

**Maryland:** Field corn all planted the latest date since 1974. Last year, and average 100%. Soybeans 55% planted; last year 75%, average 65%. Tobacco 75% transplanted last year 75%, 80% average. Small grain in good condition. Barley 100% turned, last year 100%, 35% harvested both years. Rye 100% turned, 95% last year. Rye harvested 30%, 15% last year. Oats 15% turned; last year 75% had turned and no harvest. Wheat 80% turned, none harvested, last year 75% turned; zero harvested. First cutting of alfalfa hay was at 95%; 80% last year. Other hay 65% first cutting, last year 50% cut. Vegetables virtually all planted. Topsoil moisture short to adequate, subsoil moisture supplies adequate; days suitable for fieldwork 7.0.

**MICHIGAN:** Summerlike conditions finally came after nine consecutive weeks of below normal temperatures. Temperatures averaged 4° above

normal throughout the State. Precipitation was light with most areas averaging less than 0.40 in. The western portion of the upper Peninsula was the only exception with 0.70 in.

Fieldwork very active. Over 6.0 days suitable for fieldwork. Corn planting 98% complete, 100% last year and average. Soybeans 85% planted, 100% last year and 96% average. Dry beans 50% planted, 75% last year, 80% average. Winter wheat 70% headed, 95% last year, and 92% average. Oats started to head out during the week. Development of fruit crops benefitted by warm weather, but still behind normal.

**MINNESOTA:** Week started with heavy rainstorms followed by cool, cloudy weather in most areas. Temperatures averaged 1.0 to 4.5° below normal. High: 85°. Low: 35°. Precipitation averaged 0.54 in. below normal southeast, near normal northeast, 0.23 to 0.37 in. above normal for northwest, east central, and south central, and 0.92 to 2.07 in. above normal elsewhere. Greatest weekly total: 3.99 in.

Rains relieved dry topsoil conditions in west central portion of State. No remaining areas of topsoil moisture shortage. Topsoil moisture: 81% adequate, 19% surplus. Average number of days suitable for fieldwork: 3.3. Weed infestation quite serious; herbicides have worked poorly so far. Rain slowed progress on haying, but improved potential yield and quality of hay still to be cut. Planted: Soybeans 97%, 1982 96%, normal 98%; sunflowers 98%, 1982 96%, normal 98%. Emerged: Corn 96%, 1982 96%, normal 98%; soybeans 84%, 1982 80%, normal 91%. Height (in inches): Corn 7, 1982 7, normal 10; soybeans 2, 1983 3, normal 4; sunflowers 3, 1982 3, normal 5. Jointing: Spring wheat 50%, 1982 51%, normal 57%; oats 53%, 1982 56%, normal 60%; barley 47%, 1982 49%, normal 57%. Heading: Spring wheat 5%, 1982 3%, normal 17%; oats 3%, 1982 4%, normal 18%; barley 6%, 1982 4%, normal 21%.

**MISSISSIPPI:** Temperatures 2 to 6° below normal. Extremes 54 and 94°. Rainfall averaged 1.75 in. Range 0.19 to 4.40 in.

Soil moisture adequate to surplus. Fieldwork 4.1 days suitable, 3.9 last year, 5.1 average. Soybeans 70% planted, 84% last year, 82% average; condition fair to good. Cotton 100% planted, 100% last year and average; 20% squaring, 60% last year, 42% average; condition fair to poor. Rice 95% to stand, 99% both last year and average; condition fair. Sorghum 87% planted, 88% last year, 89% average. Corn 7% silking, 34% last year, 36% average; condition good to fair. Sweetpotatoes 77% planted. Winter wheat 91% ripe; 32% harvested, 85% last year, 78% average. Hay 42% harvested; peaches 10% harvested. Pasture condition good to fair.

**MISSOURI:** Near average temperatures covered the State. Rainfall averaged 1.50 in. in the west half and around 0.50 in. in the east half of the State.

Days suitable for fieldwork: 5.5. Grain sorghum 83% planted, 61% last year and 73% normal. Soybeans 84% planted, 52% last year and 68% normal. First cutting alfalfa hay 84% harvested, 58% last year and 79% normal. Second cutting alfalfa hay 6% harvested, 6% last year and 10% normal. Other hay 48% harvested, 26% last year. Winter wheat 67% turning color, 85% last year and 79% normal. Wheat 1% harvested, 12% last year and 14% normal. Pasture condition 5% excellent, 78% good, 15% fair and 2% poor. Topsoil moisture supplies 3% surplus, 74% adequate and 23% short.

**MONTANA:** Cool week. Temperatures averaged 3° below normal in southeast, near to 2° below

normal elsewhere. Very cool first of week, maximum temperatures over southwest in the 40's with snow in the mountains. Precipitation widespread with most areas receiving moderate to heavy amounts, mostly in two stormy periods, one at first of week and the other at end of week.

Topsoil moisture generally short. Rains helping--relief spotty. Subsoil moisture short to adequate. Days suitable for fieldwork: 5.0. Crops mostly in good condition. Wild hay short. Winter wheat 15% pre-boot, 55% boot, 30% headed. Spring wheat 80% pre-boot, 20% boot. Unsettled weather slowing hay harvest.

NEBRASKA: Precipitation heavy and widespread. Amounts averaged 1.00 in. southwest up to 3.50 in. in central. Temperatures 5° below normal.

Row crop planting virtually complete. Corn planted 100%, last year 100%, normal 100%. Emerged 99%, last year 90%, normal 100%. Sorghum planted 99%, last year 85%, normal 100%. Emerged 90%, last year 50%, normal 98%. Soybeans 98%, last year 80%, normal 100%. Emerged 90%, last year 50%, normal 95%. Winter wheat mostly good to fair. Headed 95%, 100% last year and normal. Turning color 10%, behind 20% previous year and 40% normal. First cutting alfalfa 85% harvested, 65% last year and 90% normal. Sugarbeet thinning underway. Topsoil and subsoil moisture supplies mostly adequate to surplus. Days suitable for fieldwork 3.2.

NEVADA: Light rain fell over extreme eastern and northern areas beginning and middle of week. No other precipitation reported. Light frost occurred over northern third of State early part of period elsewhere, temperatures close to seasonal normals.

Snowmelt continued to flood low lying agricultural lands along major rivers northern and central sections. Alfalfa hay harvest extending farther north. Mostly dry, sunny weather south and central benefited hay harvest. Livestock mostly good condition.

NEW ENGLAND: Temperatures ranged from 52° at Eastport, Maine, to 99° in parts of Massachusetts, Rhode Island and Connecticut. Very warm week with scattered thunderstorms. Largest precipitation of 3.15 in. at Pownal, Vermont.

Ideal growing and haymaking weather. Progress one week behind schedule. Potato planting complete, 60% emerged. Field corn 85% planted, 80% emerged. First cut hay 75% complete in southern areas. Apple set and drop average.

NEW JERSEY: Temperatures averaged 5 to 7° above normal. Extremes were 60° on the 18th and 98° on the 17th. Weekly rainfall averaged 1.11 in. north, 0.18 in. central and 0.75 in. south. The heaviest 24-hour total 2.95 in. on the 19th to 20th. Estimated soil moisture, in percent of field capacity, averaged 72% north, 48% central and 46% south. Four in. soil temperatures averaged 72° north, 75° central and 77° south.

Fieldwork: 7.0 days suitable. Virtually all corn and soybean planting complete. First cutting of hay very active. Harvest of vegetable and strawberry crops increasing. Apples and peaches in good condition. Pasture condition good.

NEW MEXICO: Average temperatures near normal. Thundershowers 1st half, north central mountains, eastern Plains. Minimum temperature 25°, northern mountains. Maximum temperature 103°, southeastern Plains. Rainfall: trace to 0.80 in.

Soil moisture short. Light hail and wind damage on eastside. Cotton in fair condition, 100% planted, 1% squared. Slow developing. Alfalfa fair to good, 1st cutting nearly complete, 2nd cutting 75% to 80% complete south,

still waiting east and north. Irrigated wheat, barley, good condition. Dry wheat fair to good. Harvest getting underway. Sorghum 90% planted, good condition. Corn good condition. Onion harvest continues. Chile fair to good. Pecan trees good. Peanut 95% planted. Potatoes good. Cattle, sheep good condition. Ranges fair to good. Continue good growth.

NEW YORK: Temperatures well above normal, rainfall mostly light. Best week yet for fieldwork, crop growth. Corn planting 91% done, 93% 1982, 94% average. Wheat heading. Good haying week. First cut alfalfa 48% done, 10% 1982, 16% average. Clover-timothy 34% done, 7% 1982, 9% average. Grass silage 48% cut, 16% 1982, 21% average. Dry bean planting progress variable, average 50% complete. Apple thinning complete, prospects good. Cherry development about a week late. Good peach set. Sweet corn planting on schedule, cabbage planting complete except for storage varieties. Orange County onions 3 weeks behind normal in development.

NORTH CAROLINA: Temperature: 1 to 3° below normal Statewide. Precipitation: light and spotty across the State.

Soil moisture: 34% short and 66% adequate. Days suitable for fieldwork: 6.0. Condition: Irish potatoes: 33% fair, 63% good; and 4% excellent. Peaches: 52% poor, 26% fair and 22% good. Tobacco in fields: 48% fair and 52% good. Corn 2% poor, 11% fair, 83% good and 4% excellent. Cotton: 56% fair and 44% good. Peanuts: 36% fair and 64% good. Soybeans: 2% poor, 24% fair, and 74% good. Apples: 25% poor, 44% fair, 25% good and 6% excellent. Planting progress: Sweetpotatoes 78%, 1982 82%, 88% average; sorghum 83%, 1982 81%, 81% average. Soybeans 76%, 1982 68%, 78% average. Burley tobacco 94%, 1982 98%, 95% average. Harvests: Irish potatoes 7%, 1982 12%, average 23%; wheat 31%, 1982 36%, average 42%; oats 45%, 1982 43%, average 53%; barley 55%, 1982 41%, average 57%; rye 49%, 1982 36%, average 52%. Major farm activities: Soybean planting, small grain and hay harvest and cultivation of tobacco and corn.

NORTH DAKOTA: Temperatures little cooler than normal and precipitation generally less than normal. Average temperatures about 2° below normal. Temperatures averaged 59° north central to 62° southeast. Extremes from 31° north central to 87° northwest. Precipitation across State was spotty. Average precipitation about 0.50 in. below normal. Averages ranged from trace northwest, west central and south central to 1.16 in. east central. Greatest amount was 1.34 in. southeast.

Crop growing conditions were much improved by weekend rains. Most small grains were mostly good to very good condition but a few days behind normal in development. Hard red spring wheat about 6 days behind normal with 1% heading or later, 1% last year and 7% average. Durum was 1%, 1%, 4% for same categories. Row crop development slightly ahead of normal and range from 87 to 95% emerged. Sunflower beetle and cutworm activity showing up with some replanting necessary. Wild oat spraying about 90% complete, broadleaf spraying about 70% completed. Moisture supplies improved to above average. Statewide topsoil moisture was 5% very short, 22% short and 73% adequate. Average 32% short or very short, 65% adequate and 3% surplus.

OHIO: Temperatures 1 to 5° above normal. Average highs low to mid 80's, average lows upper 50's to mid 60's. Precipitation light and scattered, totals from 0.25 to over 2.00 in. growing degree day accumulations above normal.

Soybeans some problems emerging through crusted soils. Wheat lodged isolated areas

from weekend rains, high winds. Most crop conditions rated fair to good. Corn planted 100%, 100% 1982, 100% average. Soybeans planted 95%, 100% 1982, 90% average. Wheat headed 97%, 100% 1982, 100% average. Oats headed 35%, 60% 1982, 45% average. Alfalfa hay cut 80%, 70% 1982, 65% average. Other hay cut 65%, 45% 1982, 45% average. Tobacco transplanted 65%, 65% 1982, 65% average. Days favorable 6.5. Pasture condition good. Soil moisture 43% short, 57% adequate.

OKLAHOMA: Temperatures ranged mostly 4 to 6° below normal with a range of 1° below northeast to 7° below Panhandle. Rainfall ranged from 0.10 in. southeast to 1.67 in. south central with most areas receiving less than 1.00 in.

Crop conditions continue to lag behind normal while livestock remain in good condition. Wheat headed: 100%; 100% 1982, 100% average. Wheat harvested: 5%; 10% 1982; 40% average. Sorghum planted: 70%; 50% 1982, 85% average. Cotton squaring: 0%; 0% 1982, 0% average.

OREGON: Showers left 0.60 in. of rain west of Casades; less than 0.50 in. in east. Temperatures 3° warmer than normal in west; 5° cooler in east. Some freezing in extreme eastern areas by end of week.

Winter wheat turning color; 97% headed; 95% last year and average. Some stress from hot weather. Rain helped in filling stage. Barley turning. Spring grains in boot and heading stages. Some hay damaged from rains; second cutting alfalfa to get underway. Tree fruits in good shape; thinning sprays being applied to pears and apples. Cherries being picked; size and quality good. Strawberry harvest continues; hampered by rains and picker shortages. Cranberries blooming. Filbert sprays going on. Potato fields in all regions look good and growing well. Onion stands in Malheur County mostly good, but some thin stands from hail damage. Green pea harvest underway. Vegetable crops look good. Asparagus harvest winding down. Livestock in good shape. Pastures in good to excellent shape. Ranges mostly good; some turning brown from heat and lack of moisture.

PENNSYLVANIA: Beginning of week hot, humid and dry. Scattered thunderstorms covered the State during the latter part of week. Temperature quite warm with the State average 6° above the normal. Extreme temperatures were 95 and 41°. Precipitation amounts varied considerably with amounts ranging from a trace to just over 1.50 in.

Days suitable: 6.0. Moisture, adequate to short. Activities: Planting corn, soybeans, and potatoes; spraying; making hay and haylage; cultivating corn and potatoes; picking strawberries; and transplanting tobacco. Tobacco transplanting 70% complete, last year 83% complete. Soybeans 80% planted, same as last year. Corn planting virtually complete, same as last year and average. Barley 55% headed, 40% turning yellow, and 5% ripe, last year 35% headed, 58% turning yellow, and 6% ripe. Wheat 80% headed and 13% turning yellow, last year 77% headed and 16% turning yellow. Oats 15% headed and 5% turning yellow, last year 47% headed and less than 5% turning yellow. Average corn height 6 in., last year 12 in. First cutting alfalfa 64% complete, last year 40% complete. First cutting clo-tim 50% complete, last year 19% complete. Quality of hay made good to fair. Feed from pastures mostly average.

PUERTO RICO: Island average rainfall 1.68 or 0.13 in. above normal. Highest weekly total 8.01 in. Highest 24-hour total 4.16 in. Temperature averaged about 84 to 82° on Coasts and 78 to 76° Interior Divisions. Mean

station temperature ranged from 85.9 to 69.9°  
Extremes 96 and 59°

SOUTH CAROLINA: Showers scattered over west, heavier toward north, central. Cool returned to normal by midweek.

Days available for outside work: 6.0. Corn condition fair to good. Cotton fair condition, only 5% squaring, 69 year ago, 68 average. Soybean planting following small grain slowed by dry soils, 72% planted, 77% last year, 83% average. Tobacco blooming prematurely, conditions improved to fair to good. Wheat 88% ripe, behind 95% last year, 93 average; harvesting variable yields, some test weights low, 47% harvested, 72% year ago and average. Peach harvesting widening, 10% well back of 21% last year, 14% average; conditions poor to fair. Tomatoes fair condition with 2% harvested, much later than 37% last year, 28% average.

SOUTH DAKOTA: Average temperatures 1 to 5° below normal. Extremes: 33 and 84°. Rainfall 2.00 to 3.50 in. eastern half, less than 1.00 in. western half of State.

Days suitable for fieldwork: 4.0. Crop plantings nearing completion. Spraying small grains, working PIK acres, haying and cultivating were major activities. Winter wheat in good condition. Small grain development very slow. Winter wheat 71% headed, 1982 80%, average 92%. Spring wheat 4% headed, 1982 10%, average 39%. Corn planted 99%, 1982 96%, average 100%. Sorghum planted 91%, 1982 77%, average 91%.

TENNESSEE: Temperature averages mainly in 70's but ranged from 68° over Plateau to 77° in west. Temperatures deviated 1 to 4° below normal. Precipitation fell Statewide. Amounts averaged near 1.00 in. in west, middle and Plateau and near 0.50 in. in east.

Days available for fieldwork: 4.9. Soil moisture: short 17%, adequate 74%; surplus 9%. Corn tasseling 2%, 1982 5%, average 3%. Cotton planted 99%, 1982 100%, average 100%. Cotton squaring 4%, 1982 20%, average 15%. Soybeans planted 54%, 1982 77%, average 73%. Tobacco set 89%, 1982 95%, average 94%. Wheat ripe 40%, 1982 73%, average 93%. Wheat harvested 2%, 1982 41%, average 45%. Alfalfa hay 2nd cuttings 13%, 1982 47%, average 44%. Pastures and livestock good.

TEXAS: Active rain week. Early-week storms were quite strong west, north Texas, severe storms producing hail, tornados in northwest, and north central Texas. More rains followed 16th, 17th southeastern half of State. Throughout week most daytime temperatures ranged from 80's to 90's, though early-week readings 70's.

Crops: Scattered showers helpful in restoring much needed soil moisture. Rains cause some delays in wheat harvest, field crop planting. Warmer temperatures combined with recent showers promoted growth of field crops. Cotton planting met some rains deals, made good progress when weather permitted. Plains planting active. Additional moisture needed for planting of dryland fields. Cross Timbers, Blacklands, stands making good growth under warming temperatures. Insect infestation remains light, only scattered sightings of fleahoppers, bollweevils. Coast, South Texas, application of insecticides continues. Sorghum planting active. Some replanting necessary Plains. Early plantings making excellent growth. Infestations greenbugs, aphids continue, some midge problems. Central, South Texas, crop making good growth. Corn continues to develop well. Plains where hail, high winds caused some damage, fields recovering nicely. Insect problems continue to be light. Small grain harvest continued, some interruptions caused by rain. High Plains warmer temperatures

aided maturity, harvest which is behind previous years, should begin soon. Low Plains, harvest active. Central, South Texas harvest steady, some areas nearly complete. Currently wheat condition 84% of normal compared with 71% a year ago. By week's end 22% reported excellent; 48% good; 26% fair; 4% poor. Peanut planting continues. Central Texas, planting getting underway, South Texas fields emerging, establishing good stands. Rice is developing steadily. Producers busy with second application of fertilizer, initial applications of fungicides.

Cotton planted 88%, 95% 1982, 96% average; cotton squaring 9%, 15% 1982, 19% average; cotton setting bolls 4%, 8% 1982, 11% average. Rice headed 3%, 10% 1982, 16% average. Sorghum planted all purposes 90%, 91% 1982, 94% average; sorghum headed 42%, 53% 1982, 50% average; sorghum turning color 14%, 23% 1982, 23% average; sorghum mature 1%, 4% 1982, 4% average. Wheat headed 100%, 100% 1982, 100% average; wheat turning color 81%, 93% 1982, 93% average; wheat harvested for grain 33%, 34% 1982, 36% average. Oats harvested for grain 64%, 51% 1982, 67% average. Peanuts planted 68%, 53% 1982, 69% average. Soybeans planted 62%, 58% 1982, 69% average. Sunflowers planted 77%, 45% 1982, 61% average.

**Commercial vegetables:** Rio Grande Valley, harvest of watermelons continues, good volumes being shipped. Harvest of cantaloups, honeydew melons active, tapering off. San Antonio-Winter Garden area, harvest of onions continued, good size, quality. Tomatoes maturing rapidly. Irrigation active. East Texas, warmer temperatures promoted development of beans, peas, tomatoes. Watermelon planting continues. Coastal Bend, watermelons sizing well, good production expected. Cucumbers, tomatoes developing rapidly. Trans-Pecos region, cantaloups, cabbage, peppers making excellent growth. Onion harvest active, good yields being reported. Plains, onions, potatoes developing well. Knox City area, onion, potato harvest getting underway. Peach harvest continues South Texas, in full swing Hill Country. Warmer temperatures aiding maturity northern areas. Yields good, good crop expected. Pecans developing well. Case-bearer infestation light, little damage. Fruit set excellent.

**Range and livestock:** Range, pasture condition continued to improve. South Texas, Rio Grande Valley still experiencing droughtlike conditions, need more rain. Grazing improved considerably, remains limited many areas. Livestock condition good to excellent.

**UTAH:** Scattered areas precipitation most areas State forepart period. Accumulated amounts moisture generally light to moderate. Average temperatures ranging between normal and 8° below.

Soil moisture adequate but drying fast. Many irrigation systems damaged by spring flooding. Drought losses possible unless systems can be repaired quickly. Flooding continues in several agricultural areas. Fall seeded grain in good condition. Winter wheat 64% headed. Spring seeded grain behind normal but making good growth. Corn in only fair condition because of late planting. Livestock and range feed in good condition. Apples and cherries good to excellent.

**VIRGINIA:** Dry and humid in the east with scattered heavy thunderstorms in the west and north division. Isolated reports of heavy hail in the west along with over 2.00 in. of rainfall. On 19th thunderstorms produced generally less than 0.25 in. of rainfall over central areas and only a trace over the east division with over 1.00 in. in the north and portions of the west. Temperature highs were in the mid to upper 80's west and southwest and around 90° elsewhere. Lows were generally in the 50's and 60's.

Hot, dry weather produced good growing and harvesting conditions. Topsoil moisture was 57% short, 43% adequate. Days suitable for field-work averaged 5.9. Corn rated in excellent condition, 98% seeded, 99% 1982, 99% average. Cereal leaf beetles caused light damage eastern areas. Soybeans rated in excellent condition. Seeding 62% complete, 63% 1982, 65% average. Corn and soybean stands uneven. Peanuts rated in excellent condition. Haymaking, planting soybeans, harvesting small grains all active. Small grain yields near average, hay yields reduced. Pastures, livestock, apples and peaches good to excellent. Irrigating potatoes.

**WASHINGTON:** The flow around a large area of low pressure centered over the Gulf of Alaska brought partly cloudy skies and mild conditions to the State through the 13th. Weak high pressure along the coast forced most rain systems to the north of State. But, the high gave way to a vigorous frontal system on 15th. Although weekly average temperatures were near normal, unseasonably cold, moist, and unstable air followed the front into the State late in the week and produced above normal rainfall west of the Cascades.

Winter wheat nearly all headed out. Additional showers needed for many spring crops. Alfalfa hay cutting continues few early areas starting second cutting. Dry peas in full bloom. Strawberry harvest underway. Raspberry harvest beginning, crop looks good. Cherry harvest peaking but rain has been a concern. Swathing of fall turnips underway. Early broccoli forming heads. Pea harvest will begin soon. Most vegetables being irrigated. Livestock doing well in all areas. Showers and cool weather continued to help range and pasture conditions. Feed supplies adequate. Dairymen continue green chopping and putting up grass silage.

**WEST VIRGINIA:** Showers, sometimes heavy, each day central division, 14th through end of week rest of State. Maximum 24-hour rainfall 2.02 in. Green Bank 15th. Temperature range normal to 7.3° above in northeast division.

Principal activities: Haying, planting corn, filling silos, cultivating, spraying. Soil moisture mostly adequate to short. Days suitable 5.2. First cutting of hay 50%; last year 33%. Slight second cut. Tobacco set still 51%; last year 83%. Tobacco condition fair to poor. Corn 89% planted, 80% emerged; last year 97% and 92%; condition fair. Wheat 9% pre-headed, 79% in head, 6% ripe, 6% harvested; last year 6%, 90%, 4% and 2%, condition good to fair. Barley 2% pre-headed, 81% in head, 15% ripe, 2% harvested; last year 4%, 87%, 8% and 1%, condition good to fair. Oats 75% pre-headed, 17% in head, 7% ripe and 1% harvested, last year 44%, 53%, 3% with none harvested, condition fair to good. Peach and garden condition poor, apples fair. Pasture and hay condition good. Hay and feed supplies adequate.

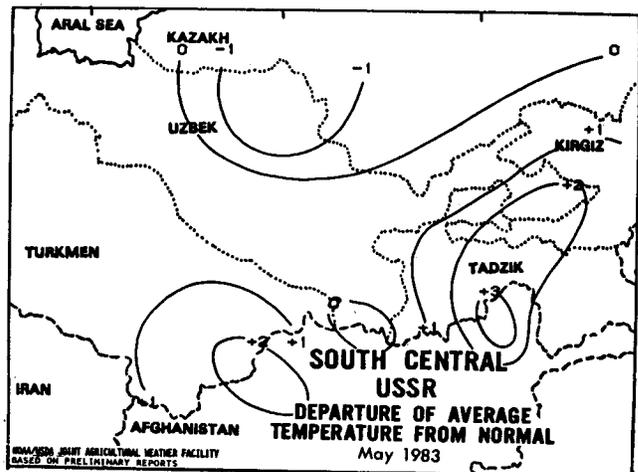
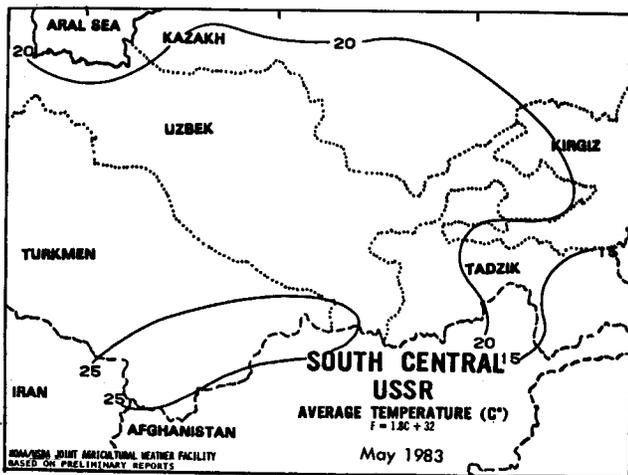
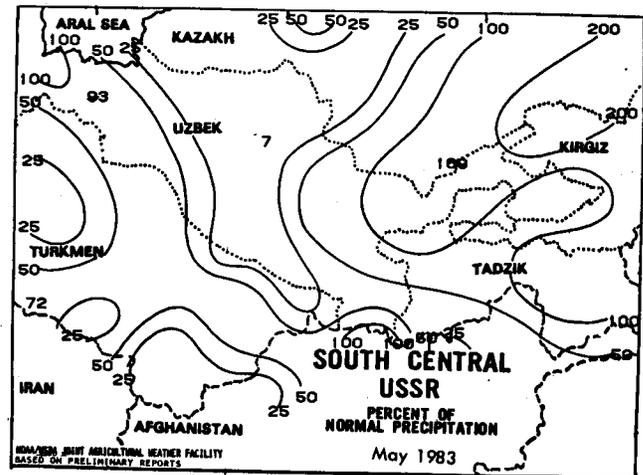
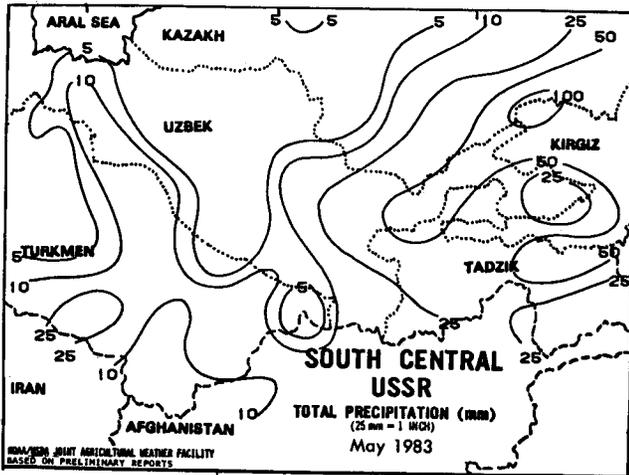
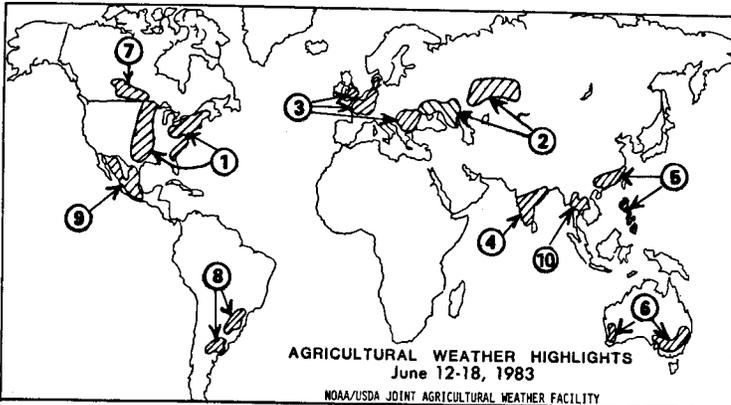
**WISCONSIN:** Very warm and somewhat humid weather early in the week. The daytime high's were in the upper 80's and low 90's. Scattered showers and thunderstorms spread into the west portions early 14th and moved across the rest of the State during the afternoon and evening hours. A few of these thunderstorms produced heavy rainfall, high winds and hail over the southeastern third of the State. Partly cloudy skies and pleasant temperatures were the rule during the latter part of the week and into the weekend. A few scattered showers were reported over west and central counties. The highest temperature was 91° at Neenah, Iola and Schofield. The low temperature was 40° at Park Falls, Phillips, Baldwin and Lake Thompson.

(continued on p. 25)

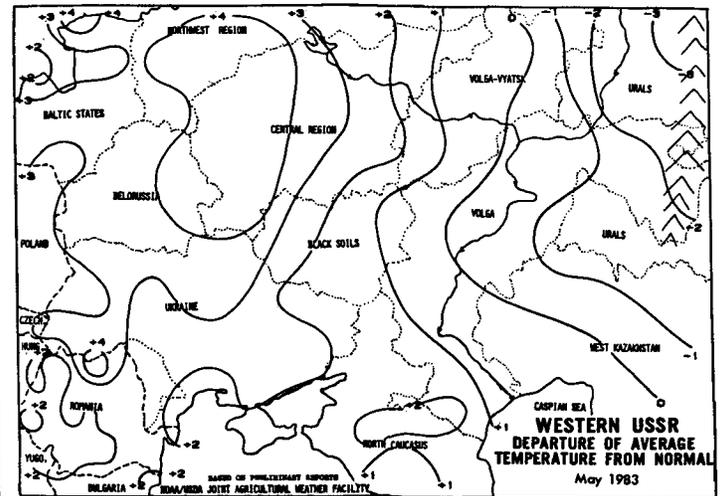
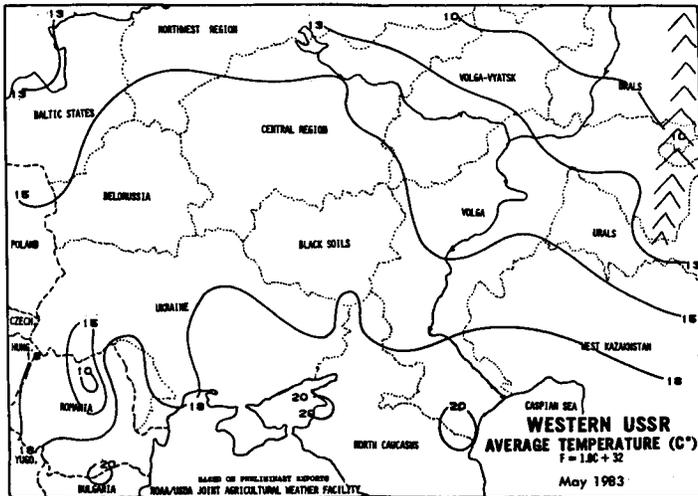
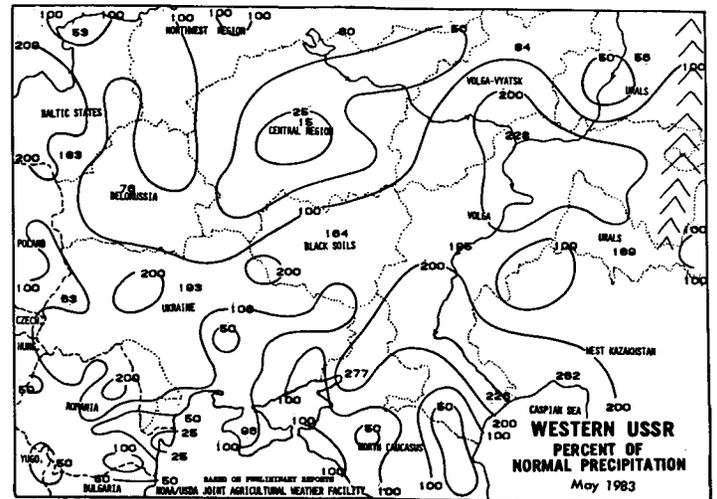
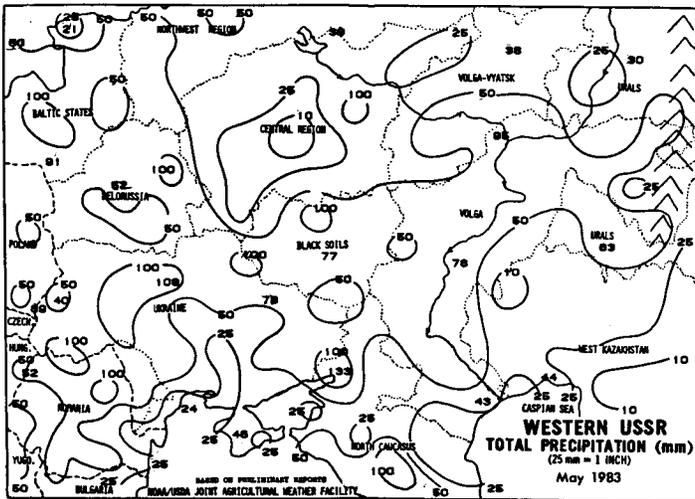
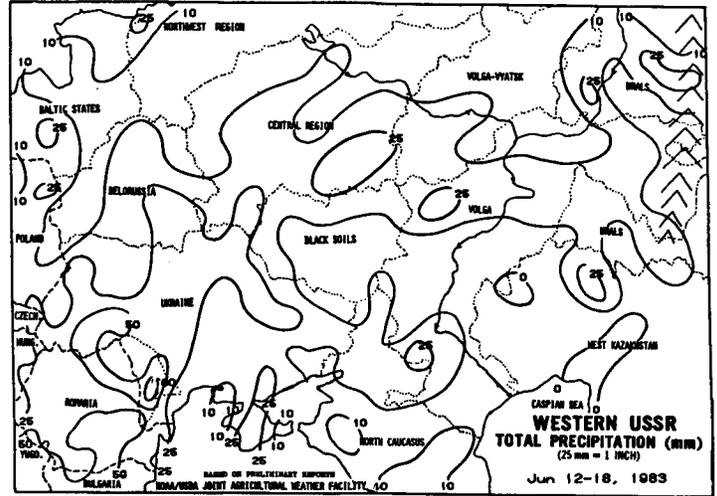
# International Weather and Crop Summary

June 12 to 18

1. UNITED STATES ... Widespread rains across the eastern Great Plains aids immature crops, but high winds cause some lodging. Unseasonable warmth over the Northeast advances vegetables and field crops. Drying over coastal Southeast causes concern about decreasing top soil moisture.
2. USSR ... Widespread showers in major grain producing areas of the south benefit winter grains and spring barley in the filling stages, as well as summer crops in the vegetative stage. In the New Lands, seasonably mild, wet conditions favor spring grains, with reports indicating that sowing is complete in many areas.
3. EUROPE ... Dry weather on some days benefits crops in the northwest, but unseasonably cool temperatures slow plant development. Heavy rains in the southeast likely delay winter grain harvest and cause localized crop damage.
4. SOUTH ASIA ... Showers continue to be below normal in most of peninsular India, delaying summer crop planting. Substantial rain fell on the southwestern coast for the first time this season.
5. EAST ASIA ... Persistent heavy rains in southern China slow early rice development and delay late rice planting. More precipitation would benefit crops in the North China Plain.
6. AUSTRALIA ... Showers improve wheat planting conditions in Western Australia, but rain in east may further delay planting due to excess moisture. Dry weather covers southern wheat area where crop planting is nearly completed.
7. CANADA ... Showers aid early crop growth in the previously dry western crop areas. Adequate moisture fell in most of the east as emerged grain crops are rated fair to good throughout the grain belt.
8. SOUTH AMERICA ... Drier weather aids coffee harvest, but heavy rain delays wheat planting in Brazil. Generally favorable wheat planting weather covers Argentina as only light showers fall.
9. MEXICO ... Tropical rains over the south aid crops and livestock, while dryness continues over the north.
10. SOUTHEAST ASIA ... Monsoon rains decrease in Thailand, but moisture conditions are still favorable. Below-normal precipitation continues in the Philippines.



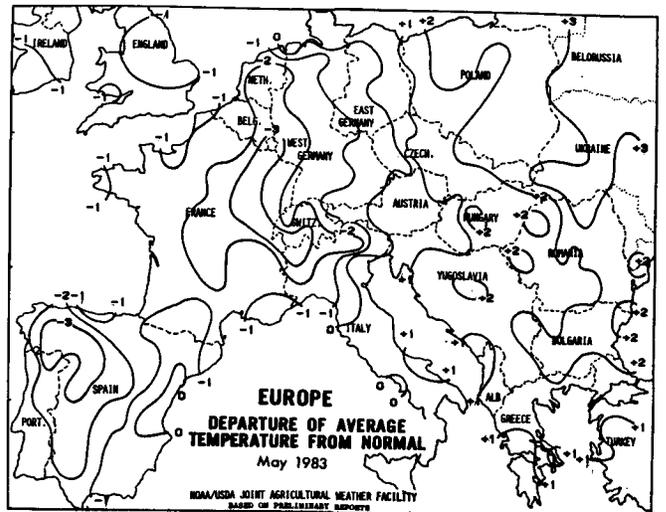
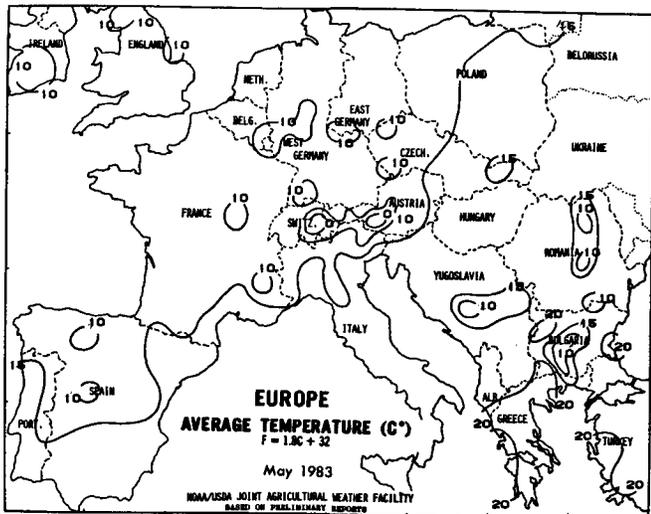
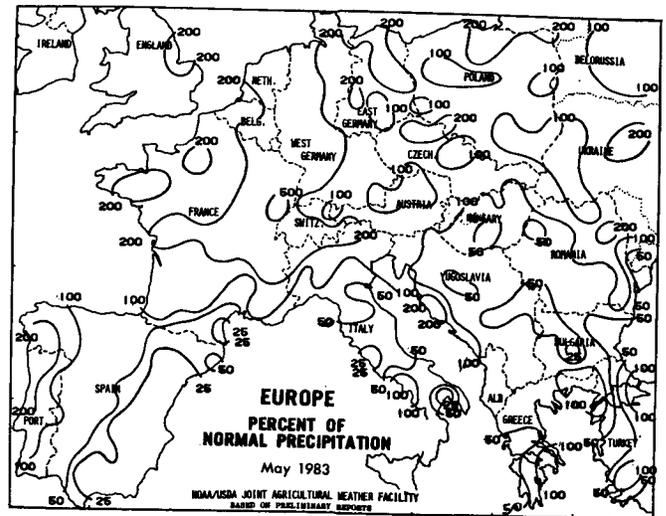
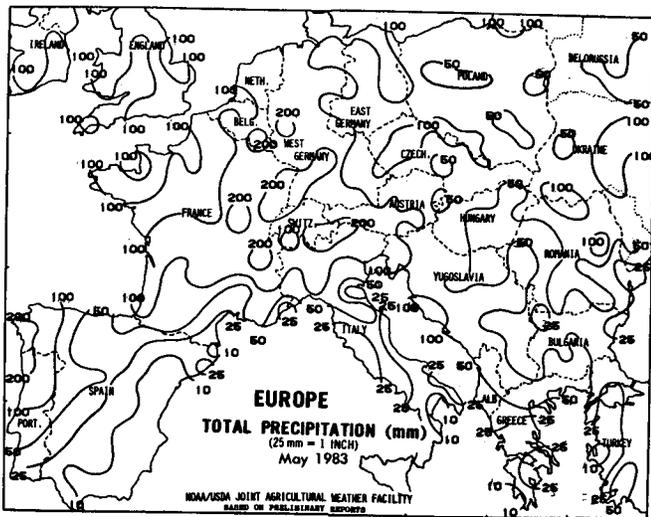
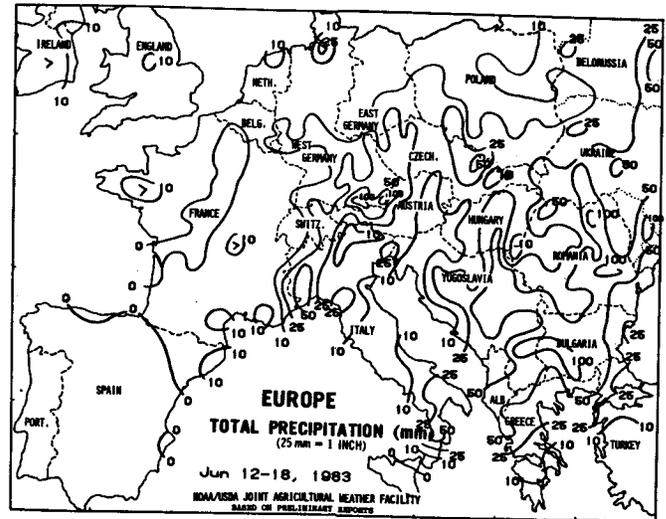
**WESTERN USSR...** Showers covered major grain producing areas in Moldavia, the south-central Ukraine, the eastern Ukraine, the North Caucasus, and the southern Volga Valley. The moisture benefited winter grains and spring barley in the filling stage as well as corn and sunflowers in the vegetative stage. In addition, above-normal rains in early May benefited crops in these same areas. However, a hot, dry spell followed, continuing into early June when showers and cooler weather returned. The dry, warm weather stressed winter grains and spring barley in the heading stage, reducing yield prospects somewhat. Grain producing areas of the Baltics, Belorussia, and the western Ukraine continued May's beneficial precipitation pattern, but heavy downpours in late May in Latvia likely caused localized flooding. Elsewhere, showers this past week in the Central Region improved growing conditions for crops stressed by dryness in May.



**National Weather Summary (continued from front cover)**

Plains. More than a half dozen tornadoes touched down over Kansas and South Dakota. The heaviest rainfall, 1 to 2 inches, shifted into northern Missouri and southern parts of Mississippi and Alabama. Widespread rains also continued over the Pacific Northwest, while the Southwest, southern Plains, and coastal Southeast were sunny and dry. Warm temperatures in the Plateau and Rockies continued to melt snow, causing rises in some rivers and streams.

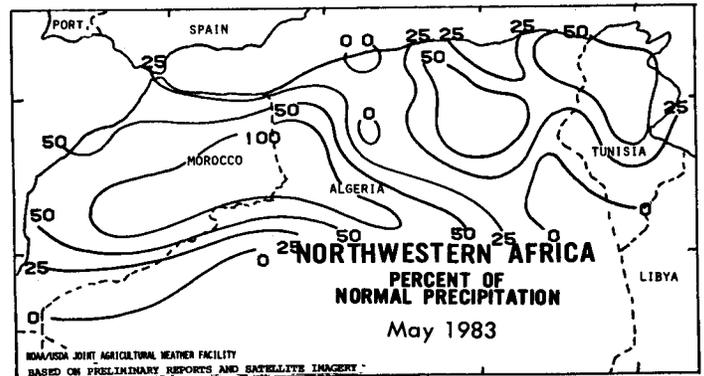
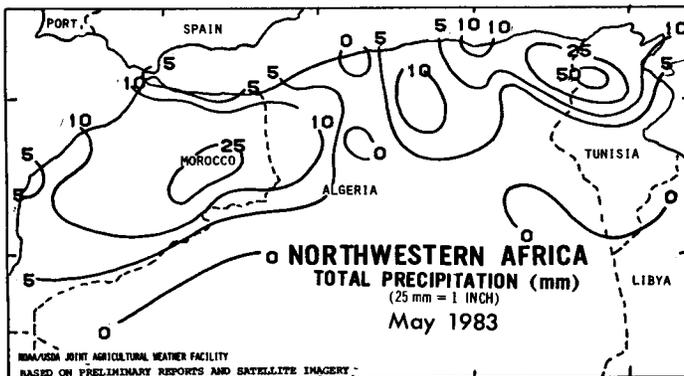
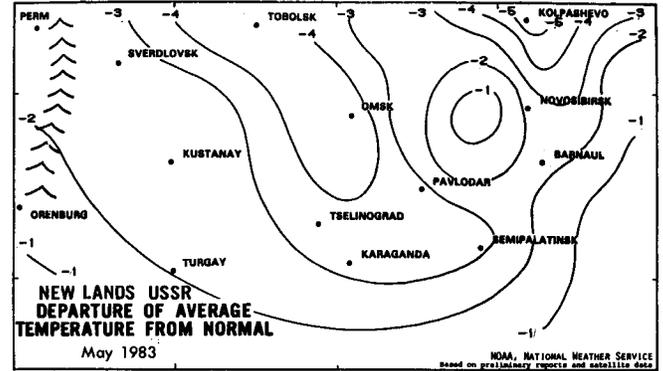
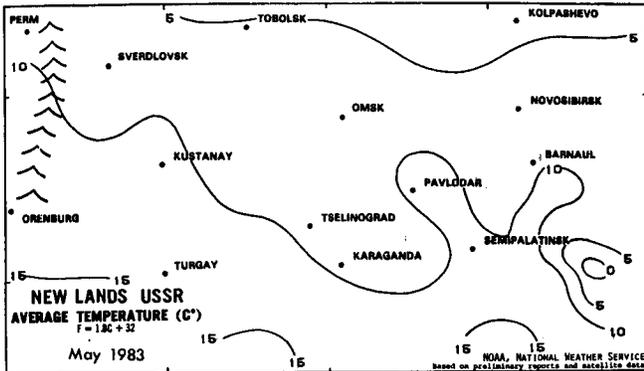
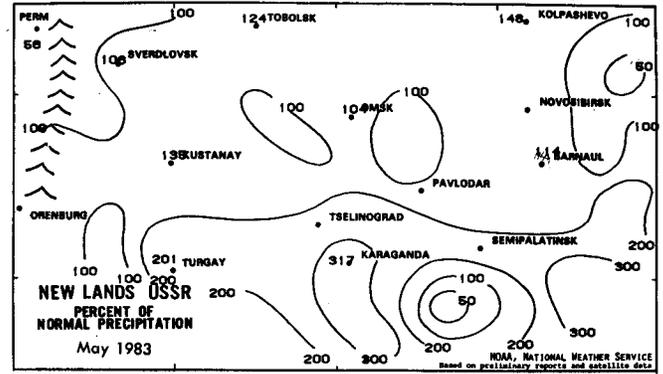
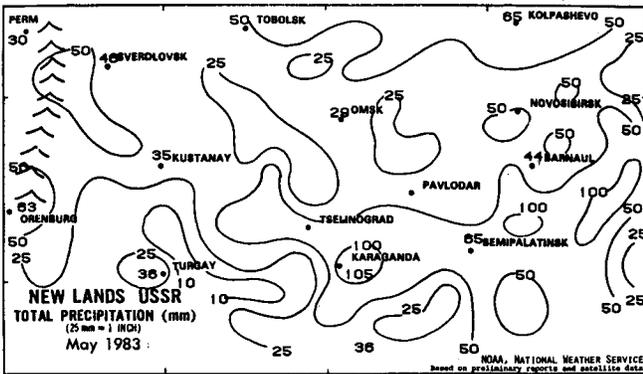
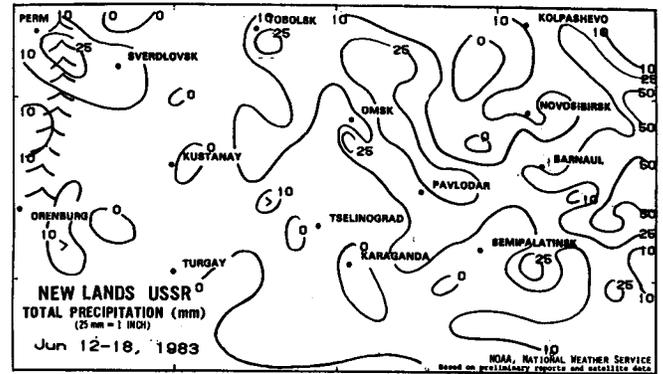
EUROPE...Light, scattered precipitation covered grain areas in England, France, the Netherlands, and northern West Germany. In May, persistent showers in these areas waterlogged fields, delaying spring seeding, particularly in West Germany. Further east, moisture supplies should be adequate for crops in East Germany and Poland, which received above-normal rains in May and light scattered showers this past week. In the southeast, thunderstorms produced heavy rains over winter grain areas in eastern Romania, parts of eastern Yugoslavia, and Bulgaria. In addition, gusty winds and localized hail accompanied the thunderstorms, likely causing localized crop damage and lodging. The winter grain harvest may have also been delayed. The heavy rains reversed May's unfavorably hot, dry weather pattern which likely reduced yield prospects in these same areas. Further west, below-normal precipitation continued May's unfavorably dry pattern in the Iberian peninsula, except Portugal, which received above-normal rains in May.

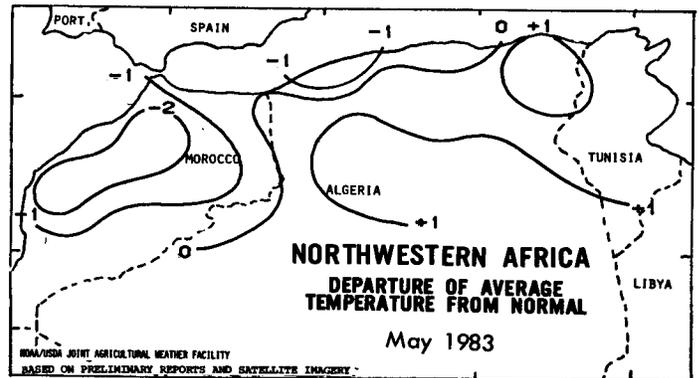
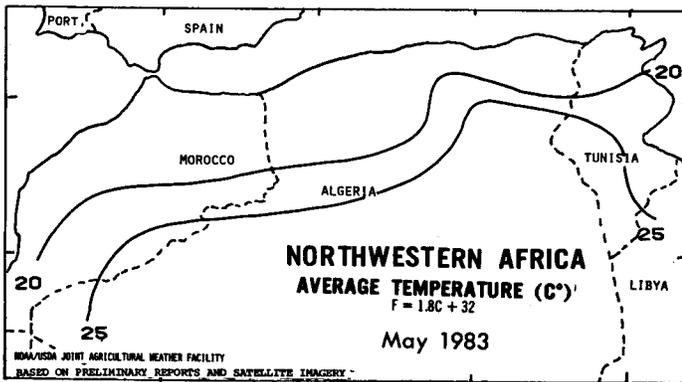
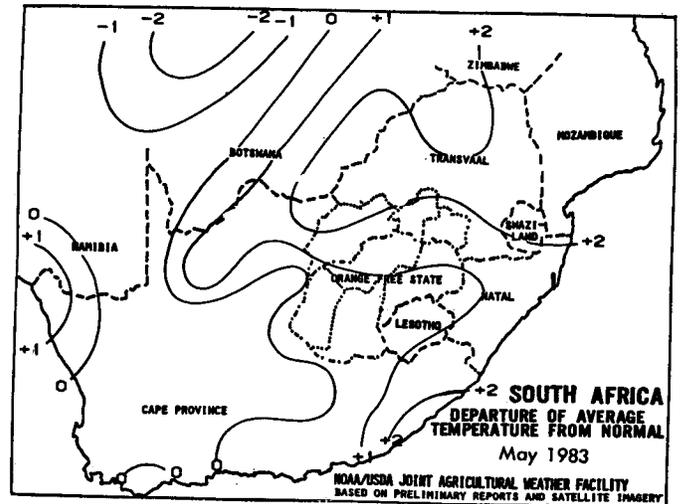
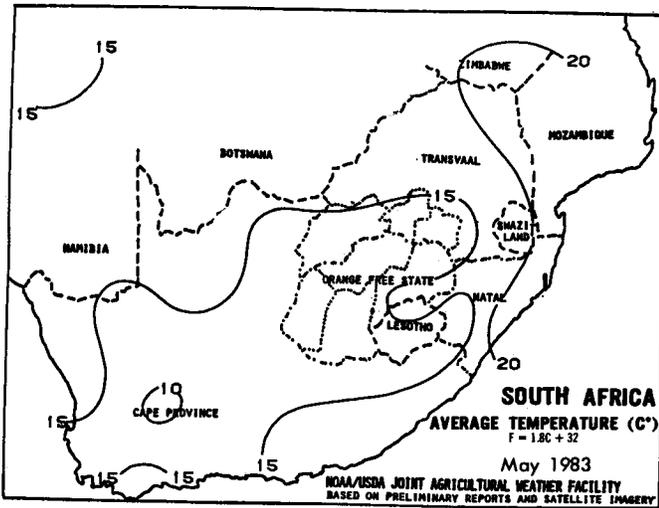
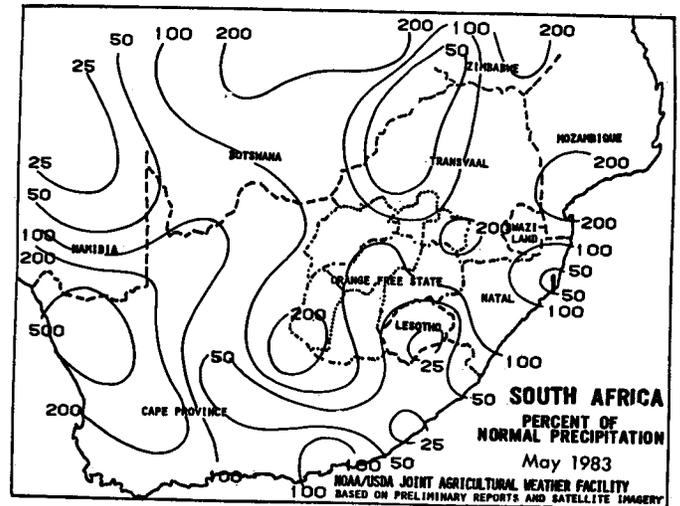
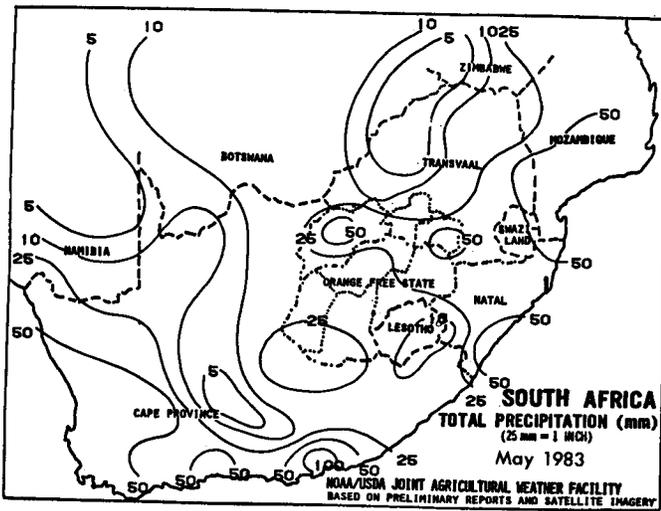


National Agricultural Summary (continued from p. 8)

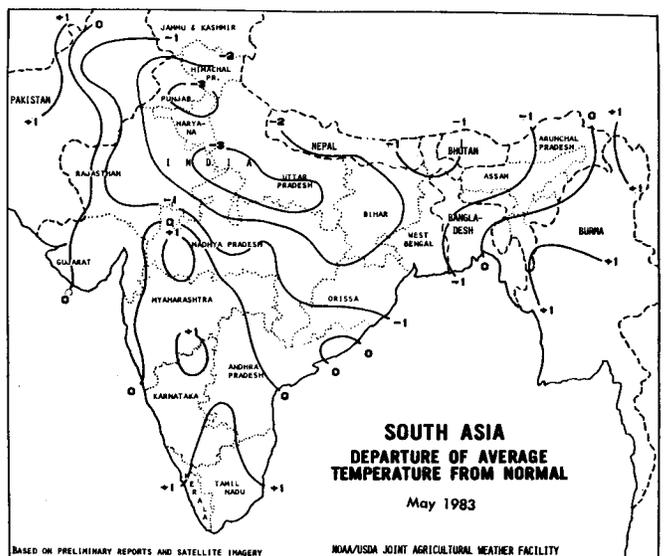
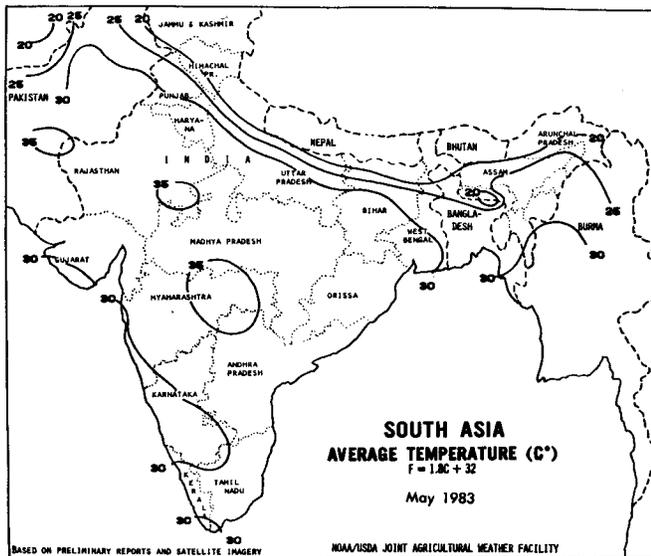
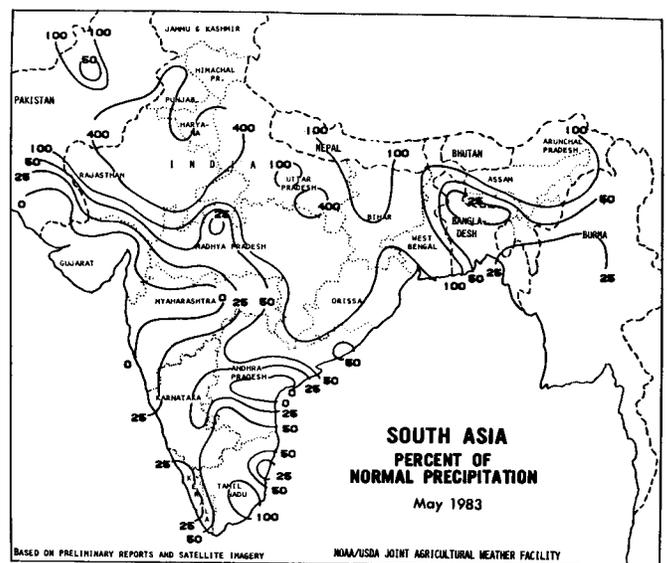
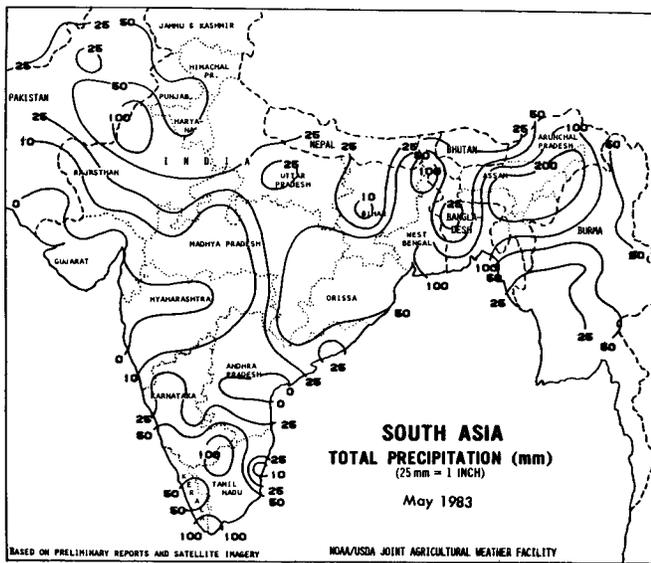
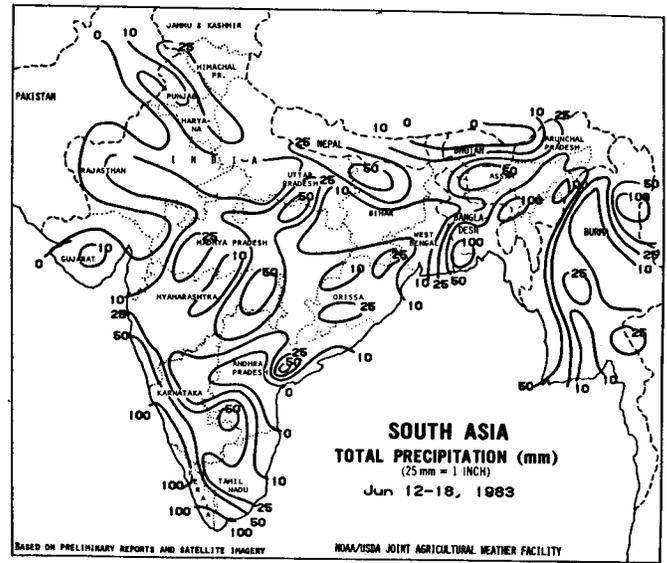
fire in California. Additional moisture improved conditions in Texas, but South Texas and the Rio Grande Valley continued experiencing droughtlike conditions. Livestock were in mostly good condition. Movement of herds to summer ranges continued.

**NEW LANDS...**Light showers covered most spring grain areas, with the heaviest amounts (greater than 25 mm) falling on central locations. Wet, cold weather during mid-May, including snow, delayed spring grain sowing, particularly in the east. However, soil moisture in many areas increased, especially in marginal growing areas to the south. Recently, reports indicate that spring grain sowing is complete over the entire region, and mild, wet conditions are favoring seed emergence and early growth. In South Central USSR, showers this past week, as well as in May, covered cotton areas in eastern Uzbekistan, western Tadzikistan, and western Kirgizia. Although localized heavy showers may have caused some crop washouts, overall, the moisture aided emergence and benefited early plant growth.

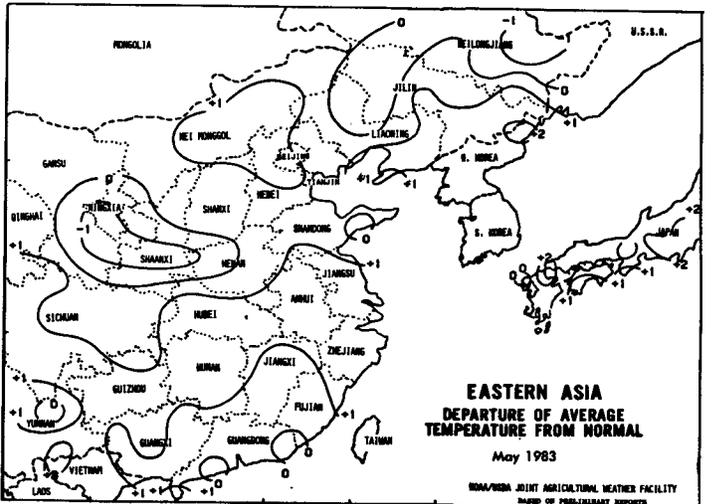
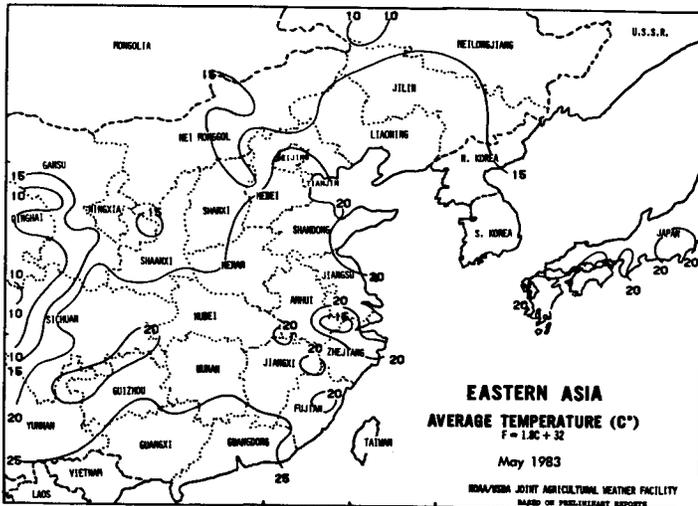
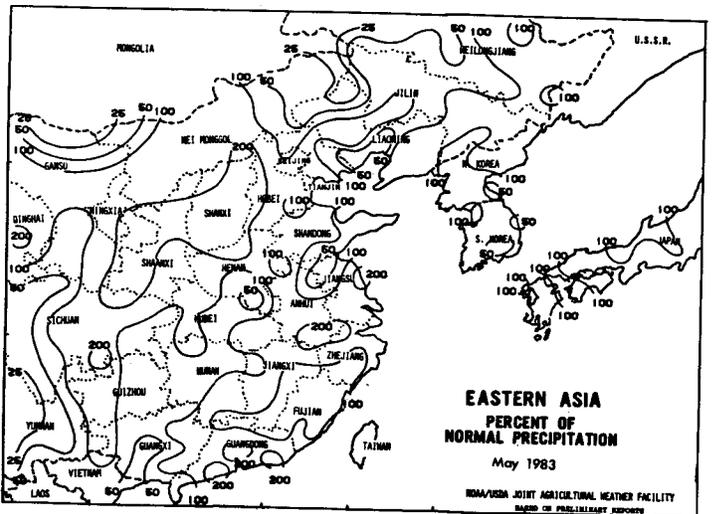
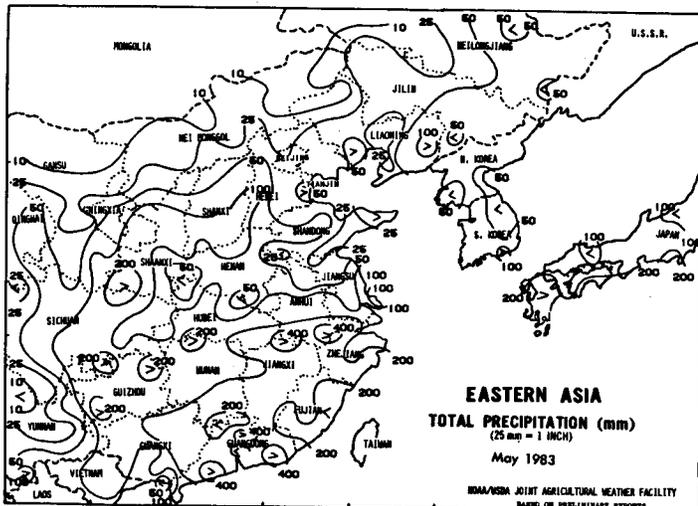
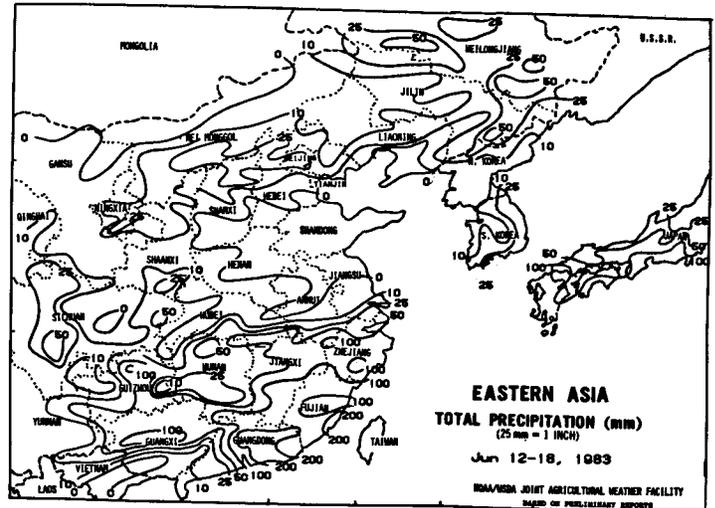




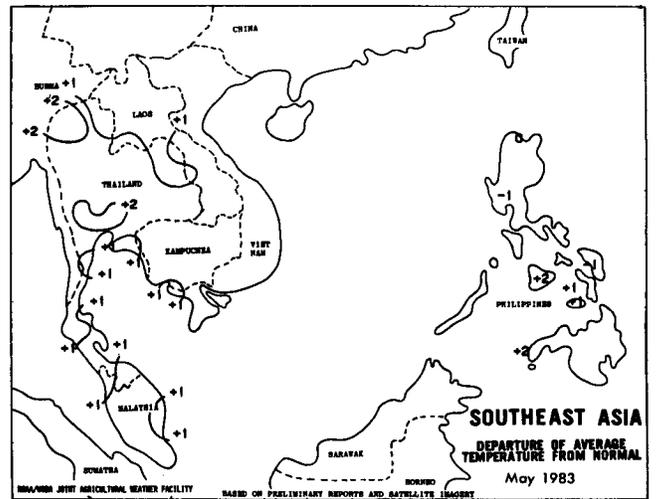
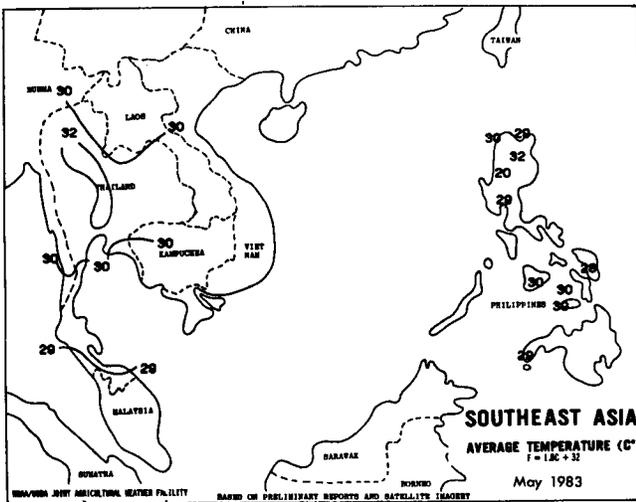
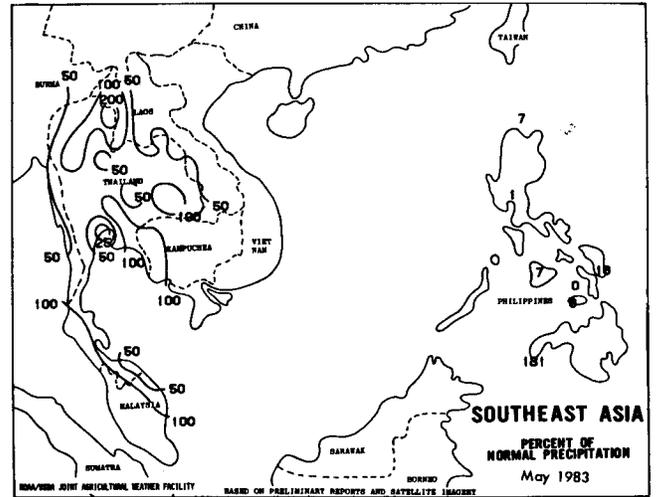
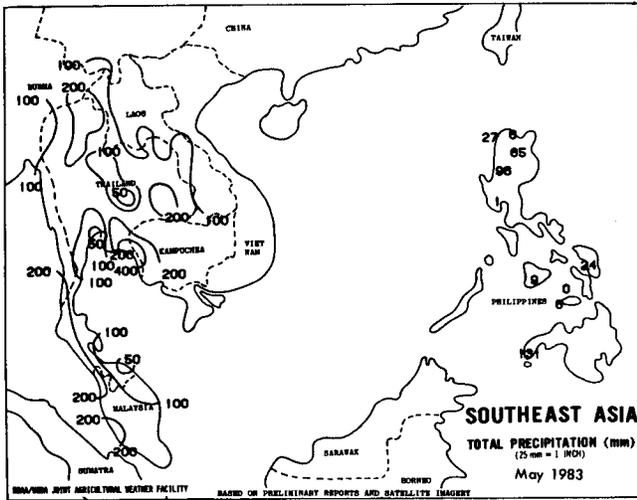
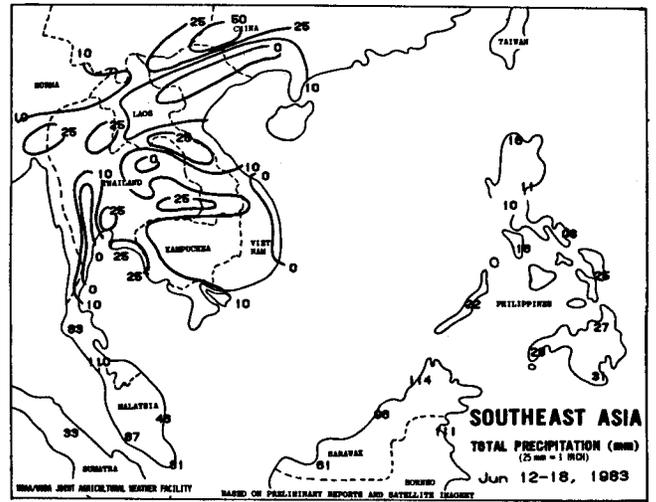
**SOUTH ASIA...** Scattered showers fell over most of India during the week; however, the pattern could not be characterized as that of monsoon rains. Heavy rains fell on the southwestern coast which had received much-below-normal precipitation until now. Monsoon rains have usually developed as far north as Madhya Pradesh and Bihar by this time, however, most of peninsular India remains in a below-normal precipitation pattern. The combination of below-normal rains and above-normal temperatures during May have rapidly depleted the limited soil moisture supply. The relatively dry conditions are delaying summer crop planting, which normally begins in June in the southern provinces. Moderate to heavy rain fell in eastern India and Bangladesh, creating favorable planting conditions for summer crops.



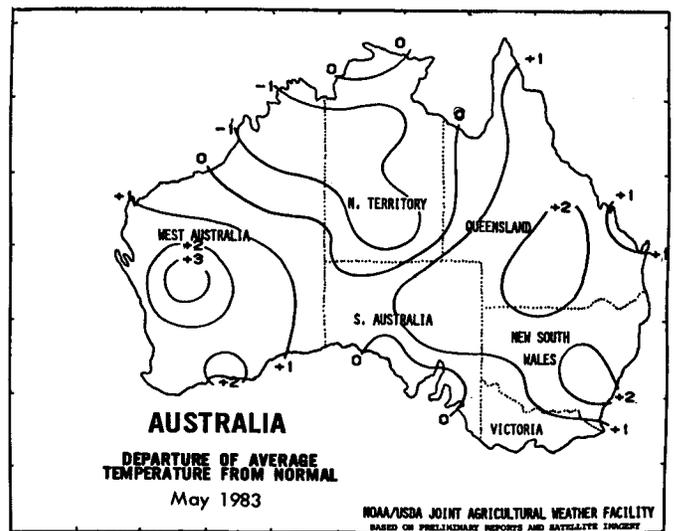
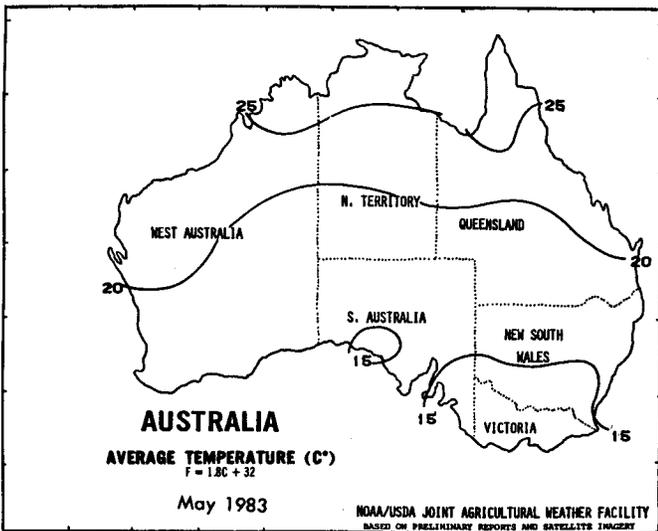
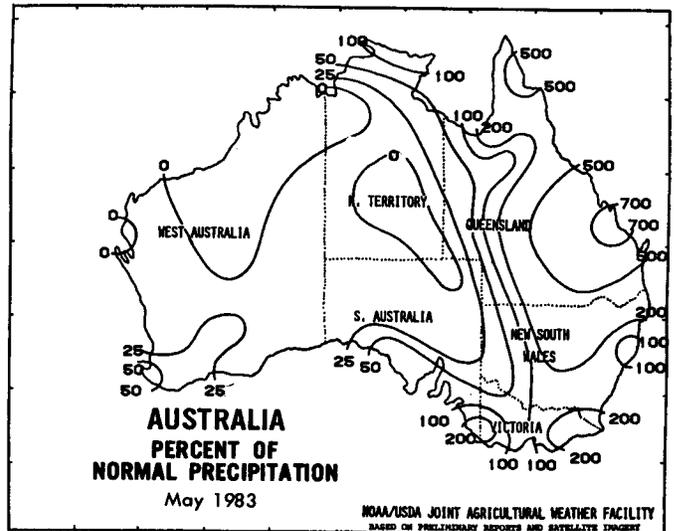
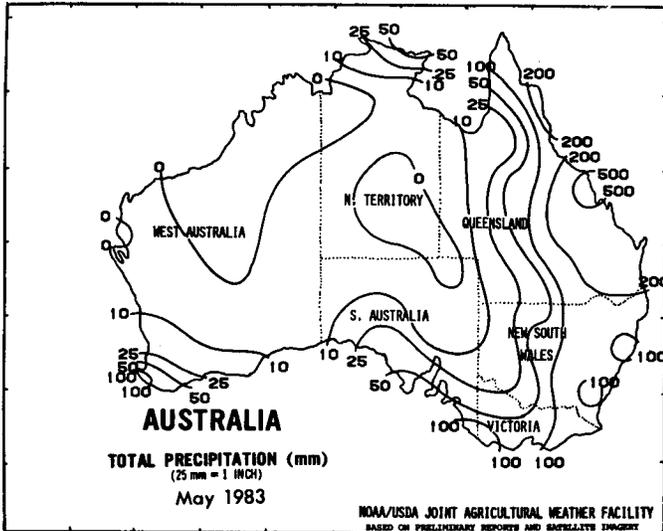
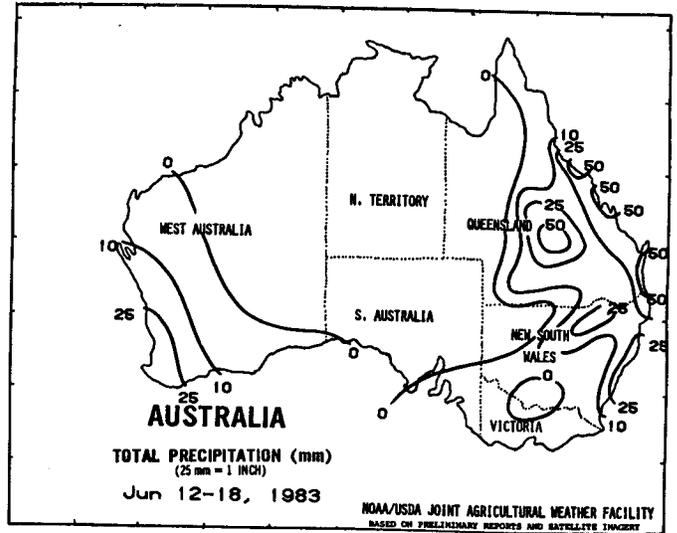
**EASTERN ASIA...** Heavy rains inundated crop areas south of the Yangtze River, maintaining the above-normal precipitation pattern existing since early this year. The excessive wetness disrupted both early and intermediate rice planting and is now threatening to shorten the late rice crop growing season. Light showers in the southernmost portion of the North China Plain benefited cotton, corn, and soybeans nearing the moisture sensitive reproductive stage, while unfavorably dry weather covered the rest of the region. Light to moderate showers fell in northern and northeastern China, aiding corn and soybeans in the midvegetative stage and spring wheat in the late vegetative stage.



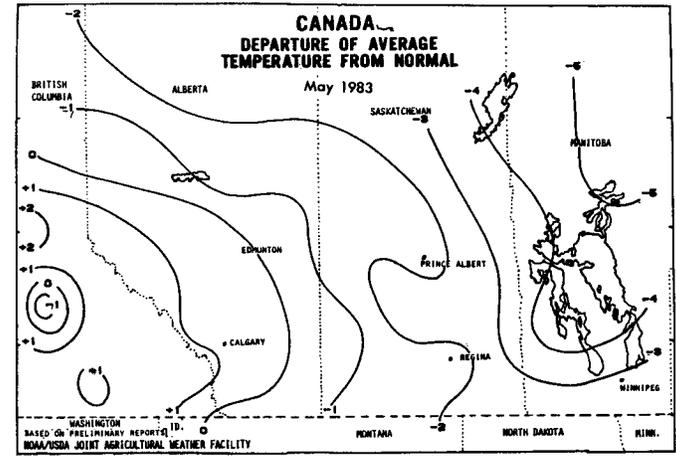
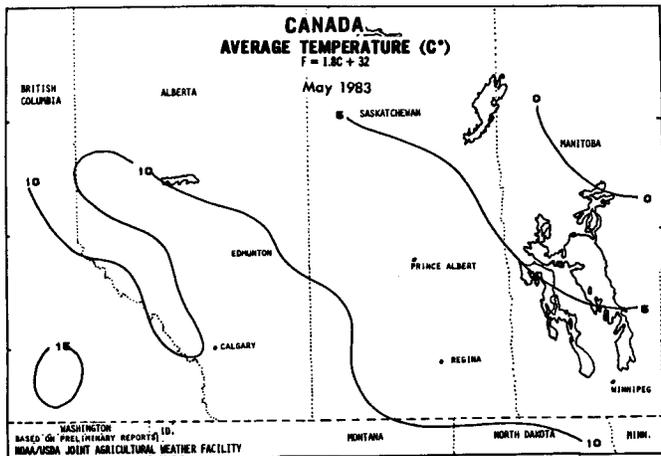
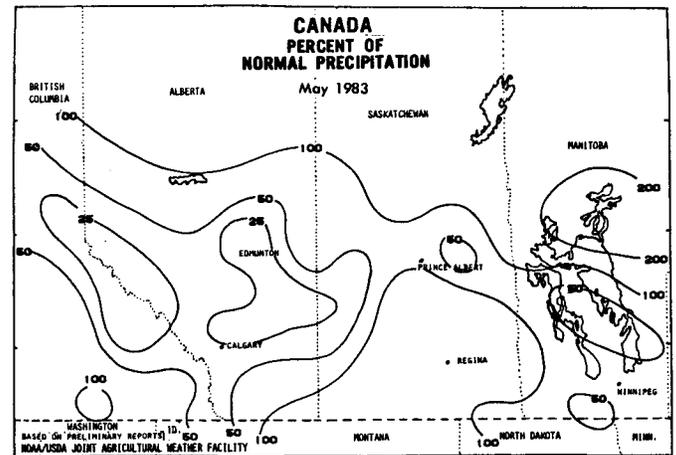
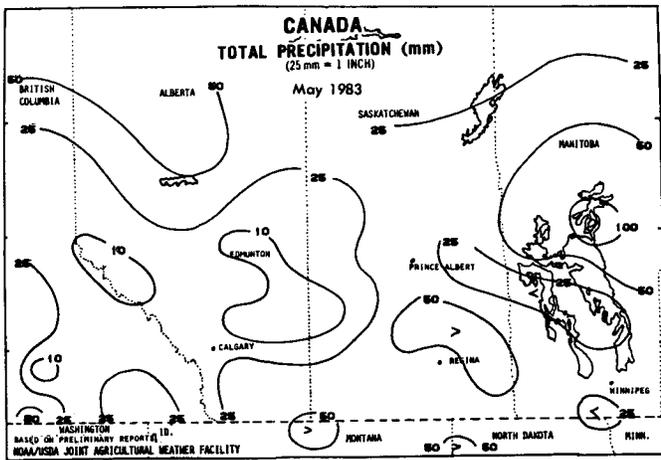
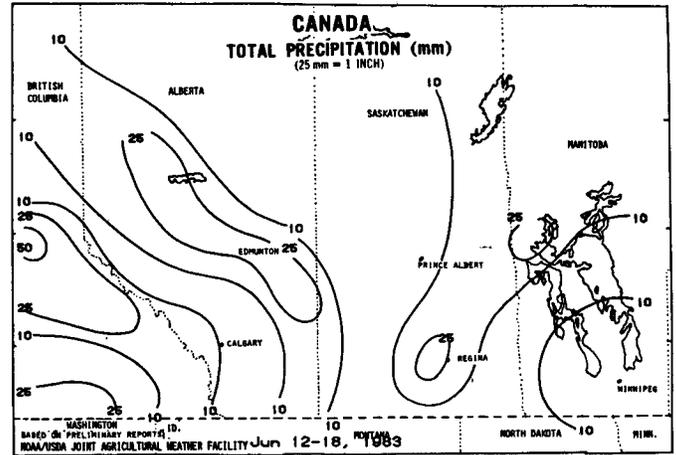
**SOUTHEAST ASIA...** Monsoon activity decreased significantly over most of Indochina this week. Light to moderate rain in Thailand benefited corn and rice in the vegetative stage. Precipitation during May was near normal in Northern Thailand, while below-normal amounts in other areas delayed corn and rice planting. Light to moderate showers fell in the Philippines, with heaviest amounts on the southern islands. Dry weather during May benefited the dry season rice harvest, but more moisture is needed for the upland rice crop which is normally planted in May and June. Significant rain fell on the west coast of Malaysia this week, following 2 weeks of below-normal precipitation.



AUSTRALIA...Showers returned to Queensland and northern New South Wales late this past week after 2 weeks of beneficially dry weather which alleviated flooding. Torrential rains in eastern crop areas during May caused substantial crop and livestock losses. Excessive moisture has delayed wheat planting in the east. Showers in Western Australia (with amounts in excess of 10 mm) broke the long dry spell and moistened topsoils for wheat planting. Additional followup rains are needed to improve moisture conditions for germination and emergence since May rainfall was well below normal in the west. The planting season may be later than normal this year due to the wetness in the east and the dryness in the west. Planting in southern crop areas is almost completed due to generally dry weather during the week. May rainfall was less than normal in South Australia with some areas becoming too dry in the west. Victoria had favorable moisture in May.



CANADA...Two frontal systems pushed across the Canadian Prairies during the week, producing bands of significant rainfall (with amounts greater than 10 mm) in grain areas of Alberta, central Saskatchewan, and Manitoba. The moisture benefited early crop development in western areas, since May rainfall was well-below normal, especially in northern Alberta and northwestern Saskatchewan. Rains will be needed in these crop areas during the next several weeks to sustain sufficient soil moisture through the crucial reproductive phase of development. Further east, below-average monthly temperatures delayed crop emergence and early growth from eastern Saskatchewan through crop areas of Manitoba. Grain crop planting was just recently completed in eastern crop areas. Grain crops were generally rated in fair to good condition throughout the Prairies, but rapeseed emergence was slow and spotty in the drier western crop areas.



**State Summaries** (continued from p. 15)

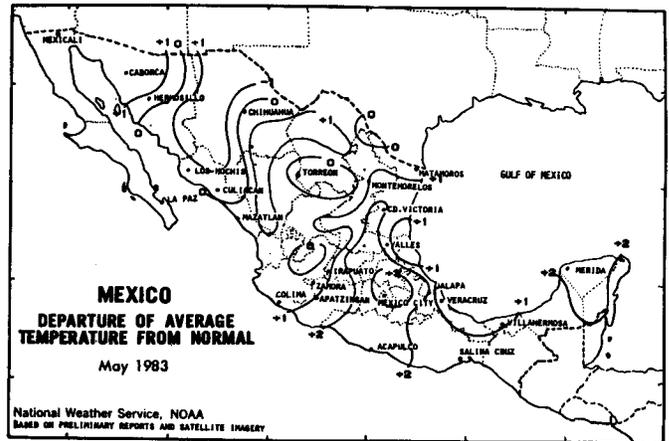
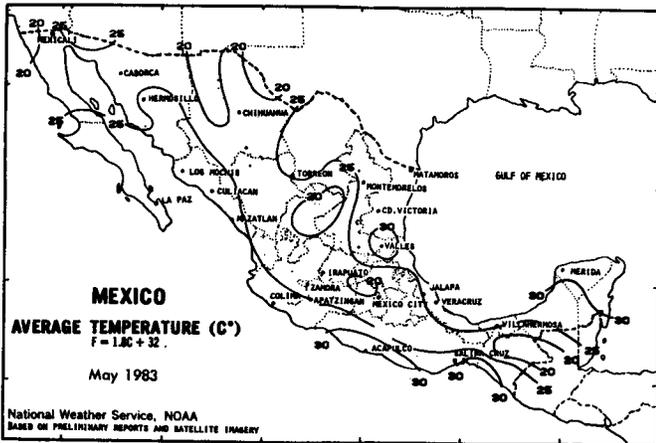
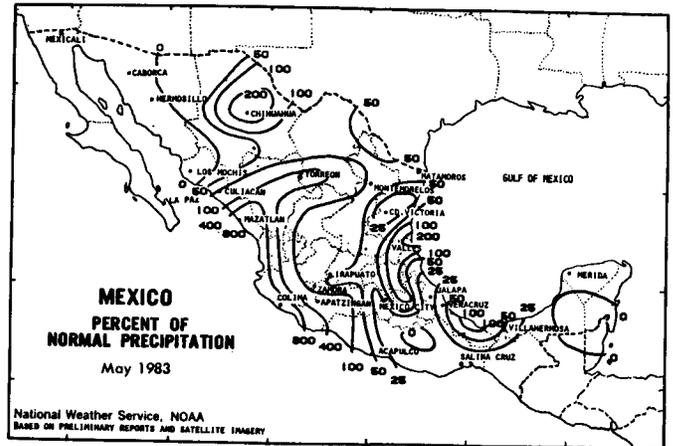
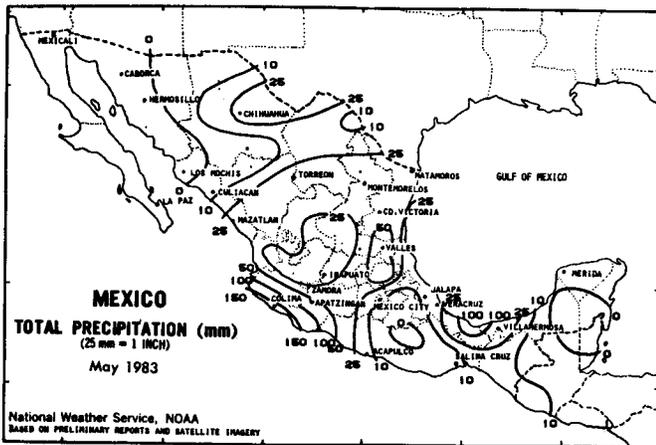
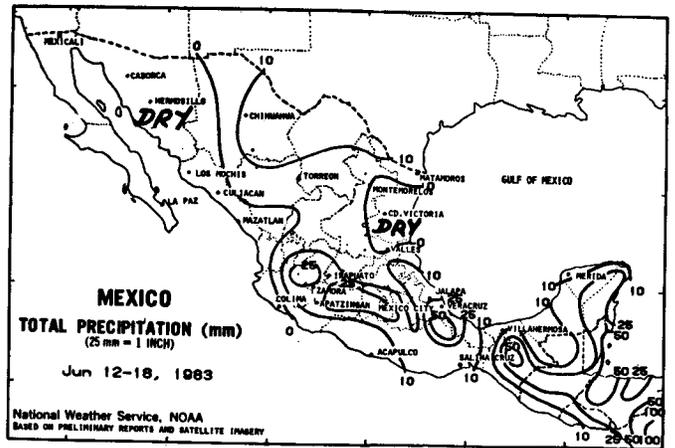
Precipitation amounts averaged between 0.40 and 0.60 in.

Soil moisture condition 11% short, 80% adequate and 9% surplus. Days were suitable for fieldwork: 5.0. Pasture condition was rated as 90% of normal.

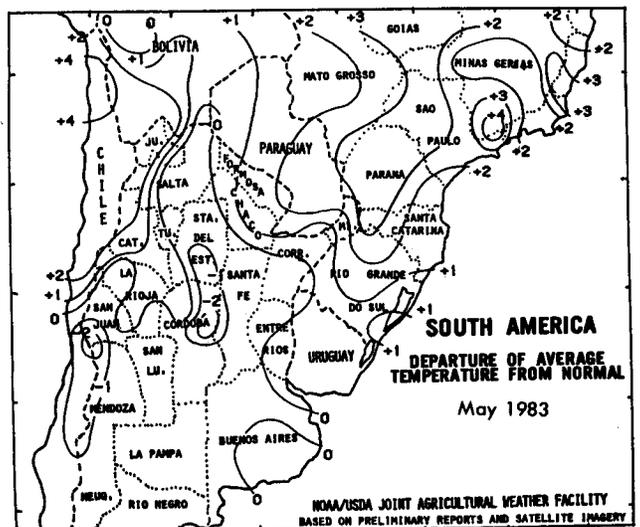
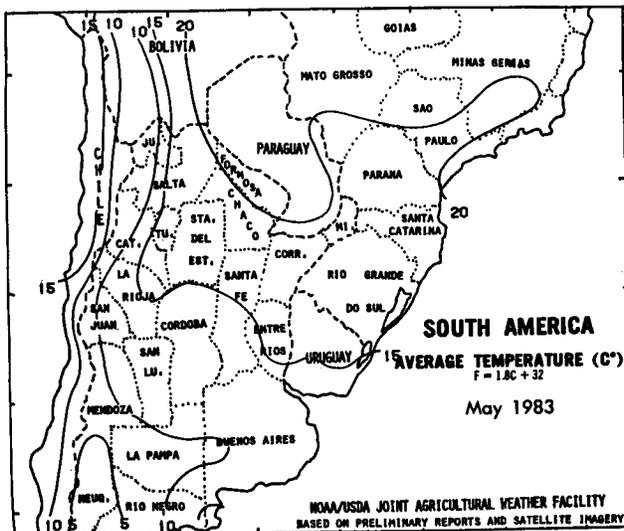
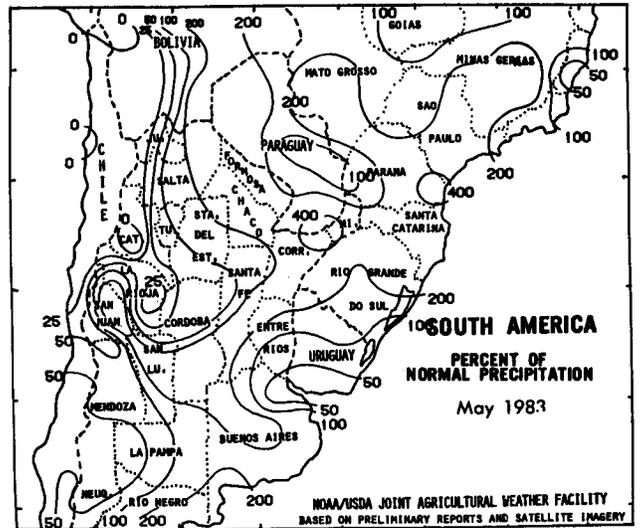
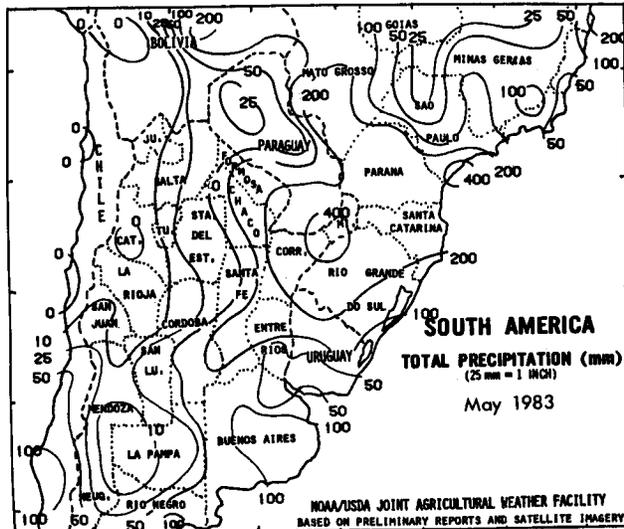
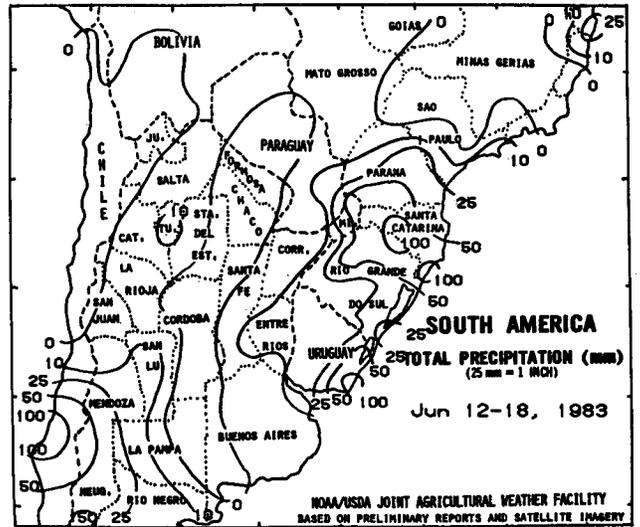
WYOMING: Cool week; all temperatures averaging below normal. Precipitation in eastern 2/3 above normal while western 1/3 below normal. Most substantial precipitation in southeast.

Topsoil moisture adequate 86% State. Days suitable for fieldwork: 5.0. Cool, wet weather has slowed development of some crops. Dry beans planted 90%, emerged 65%. Potatoes planted 90%, emerged 90%. Sugarbeets emerged 95%. Corn emerged 90%. Light to moderate water damage throughout State; none reported in northeast. Livestock good to excellent condition. Cattle and calves moved to summer ranges, 70%; sheep and lambs moved, 65%. Ranges, pastures good to excellent condition.

MEXICO...Tropical rain showers and thunderstorms drenched the southern Plateau corn and bean belt and extended into Central America. Dryness continued over the west and most of the northeast, stressing immature crops, rangeland vegetation, and livestock. The beneficial moisture falling in the southern Plateau should improve crops which were generally planted late this year because of prolonged dryness. Sunny, dry weather persisting over the northeast heavily stressed sorghum in the earlier, peak moisture-need period, but is favoring current harvesting and storing activities.



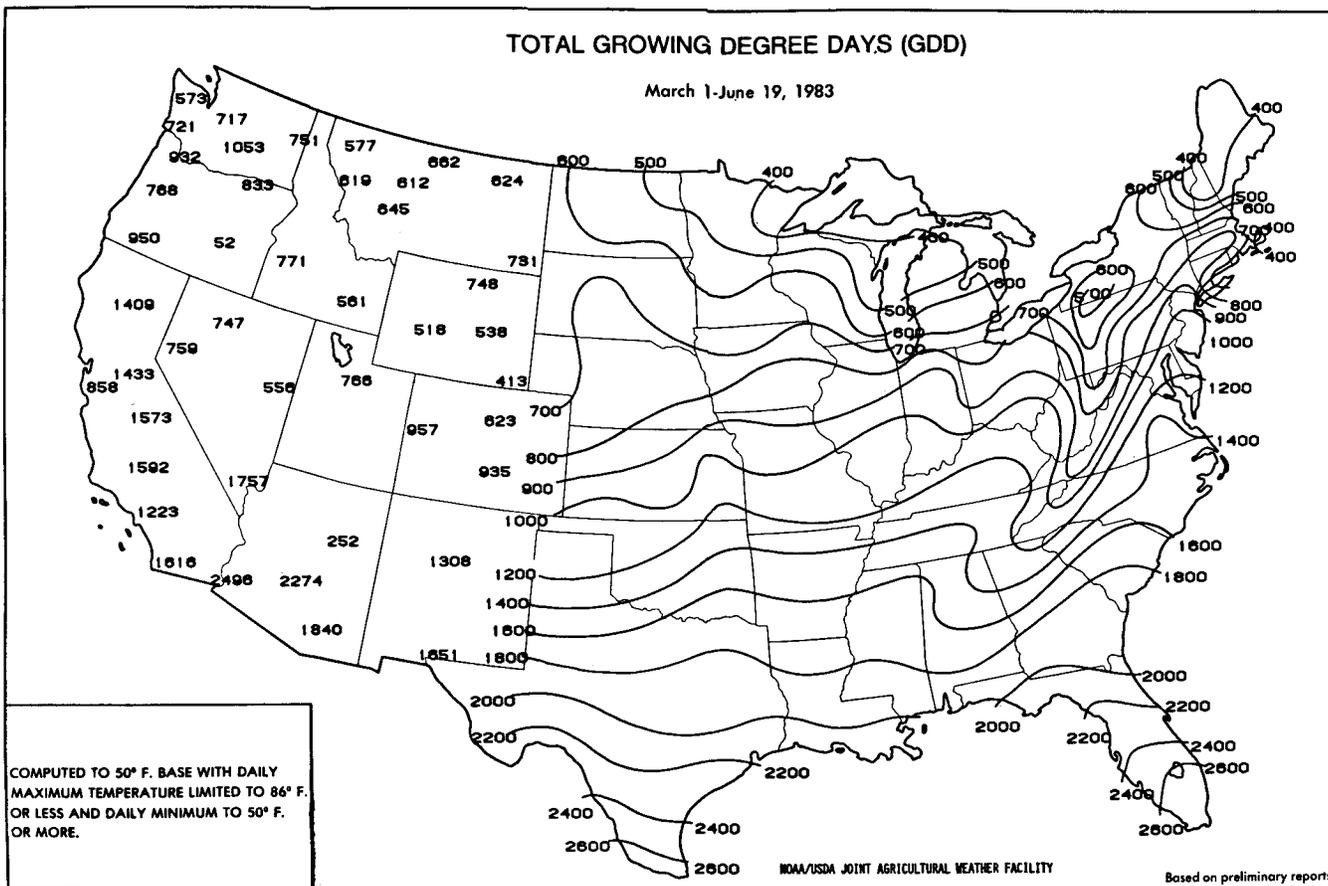
**SOUTH AMERICA...**Drier weather during the week over most of the coffee/citrus areas of Sao Paulo and northern Parana brought relief from the recent heavy rains. Above-average rains in May and early June throughout Brazil's crop areas had damaged mature summer crops, had affected the coffee and orange harvest adversely, and had hampered wheat planting in Rio Grande do Sul and Parana. Heavy rain fell again this past week in Brazil's wheat areas. Light showers fell over eastern Argentina during the week, but harvesting of second-crop soybeans and planting of winter wheat should have progressed without much difficulty. May rainfall was above average throughout Argentina's crop areas, causing severe flooding in the north but providing adequate moisture for recent wheat planting in the south. Monthly temperatures were warmer than average in Brazil and slightly cooler than average in Argentina. The cold wave of early June slowly moderated during the past week.





OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

**WEEKLY NEWS BULLETIN  
SECOND CLASS**



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

Annual subscription: domestic \$25, foreign \$33 (in U.S. funds by international money order or check drawn on U.S. bank), payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to NOAA/USDA Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service/Climate Analysis Center  
Managing Editor . . . . . Don Haddock  
Meteorologists . . . . . Jim Williams  
Ray McInturff  
Tom Tasselmyer  
Karen Brown  
Lyle Denny  
Wes Byrd

Subscriptions (202) 447-7917. . Cheryl Caleco

U.S. DEPARTMENT OF AGRICULTURE  
Economic Management Service  
Editor . . . . . Linda Hatcher  
Statistical Reporting Service  
Agricultural Statistician . . . Bill Brannen  
World Agricultural Outlook Board  
Agricultural Weather Analysts . Ray Motha  
Tom Puterbaugh Ron Lundine