WEEKLY WEATHER AND CROP BULLETIN

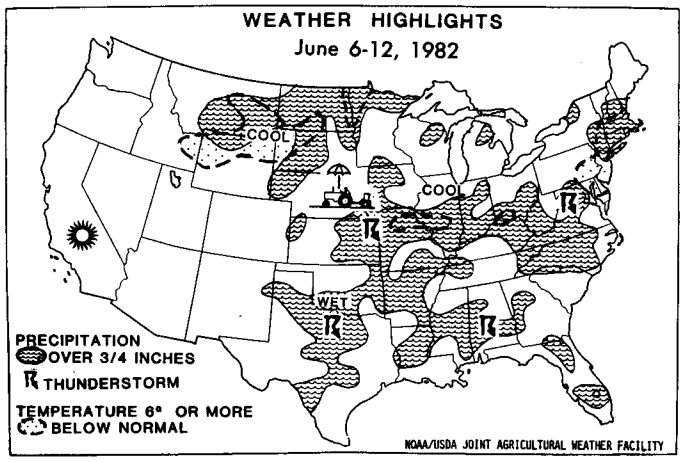
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

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

Volume 69, No. 24 | WASHINGTON, D.C. | June 15, 1982

National Weather Summary

June 6-12



HIGHLIGHTS: Cool, wet weather over the Corn Belt and through the central and northern Plains delayed crop development. Average temperatures were 3-6° cooler than normal. Only the gulf coast States and part of the Pacific Northwest were near or slightly above normal. Showers and thunderstorms covered the area east of the Rockies. The heaviest rains fell along a line from northeastern Kansas to the central Ohio Valley and across the Appalachians into western Virginia and North Carolina.

SUNDAY...The heavy rain over the Northeast tapered off, but flooding continued. Showers and thunderstorms continued through the night over the northern Plains and upper Mississippi Valley and became heavy during the day. Tornadoes, hail, and high winds appeared in parts of the Dakotas and northern Iowa. A few thunderstorms developed in eastern Kansas and Nebraska late in the day. Warmer weather pushed northward in the Plains and northeastward into Illinois.

MONDAY...Light showers fell through New England with a few moderate amounts along the coast. A cold front moving through the northern Plains triggered thunderstorms through Missouri and Illinois and then into the Ohio Valley. A wide area of showers developed over the northern Rockies and spread to the western Dakotas. Small hail fell in Montana. Temperatures warmed ahead of the front--into the eighties in parts of Wisconsin and Michigan--but were much cooler in the northern Plains behind the front.

TUESDAY...The showers over the northern Rockies tapered off but spread moderate to heavy amounts into the northern Plains. Thunderstorms were concentrated from northeastern Kansas and southeastern Nebraska across northern Missouri and southern Iowa into Illinois. Storms were less frequent but occasionally severe through the Ohio Valley and southern West Virginia to eastern North Carolina. There were a few thunderstorms in western Texas. Temperatures rose into the eighties from Kansas to southern Michigan and through Ohio.

WEDNESDAY...Thunderstorms spread from southern Texas to southeastern Missouri, throughout the northern Mississippi Valley and Great Lakes region, through the Ohio and Tennessee Valleys, and across the central Appalachians into Virginia and North Carolina. The most severe storms were concentrated in Arkansas and Missouri. The tongue of warm air moved eastward ahead of a cold front, and temperatures rose to the eighties through New England. Unseasonably cool air enveloped the northern Rockies

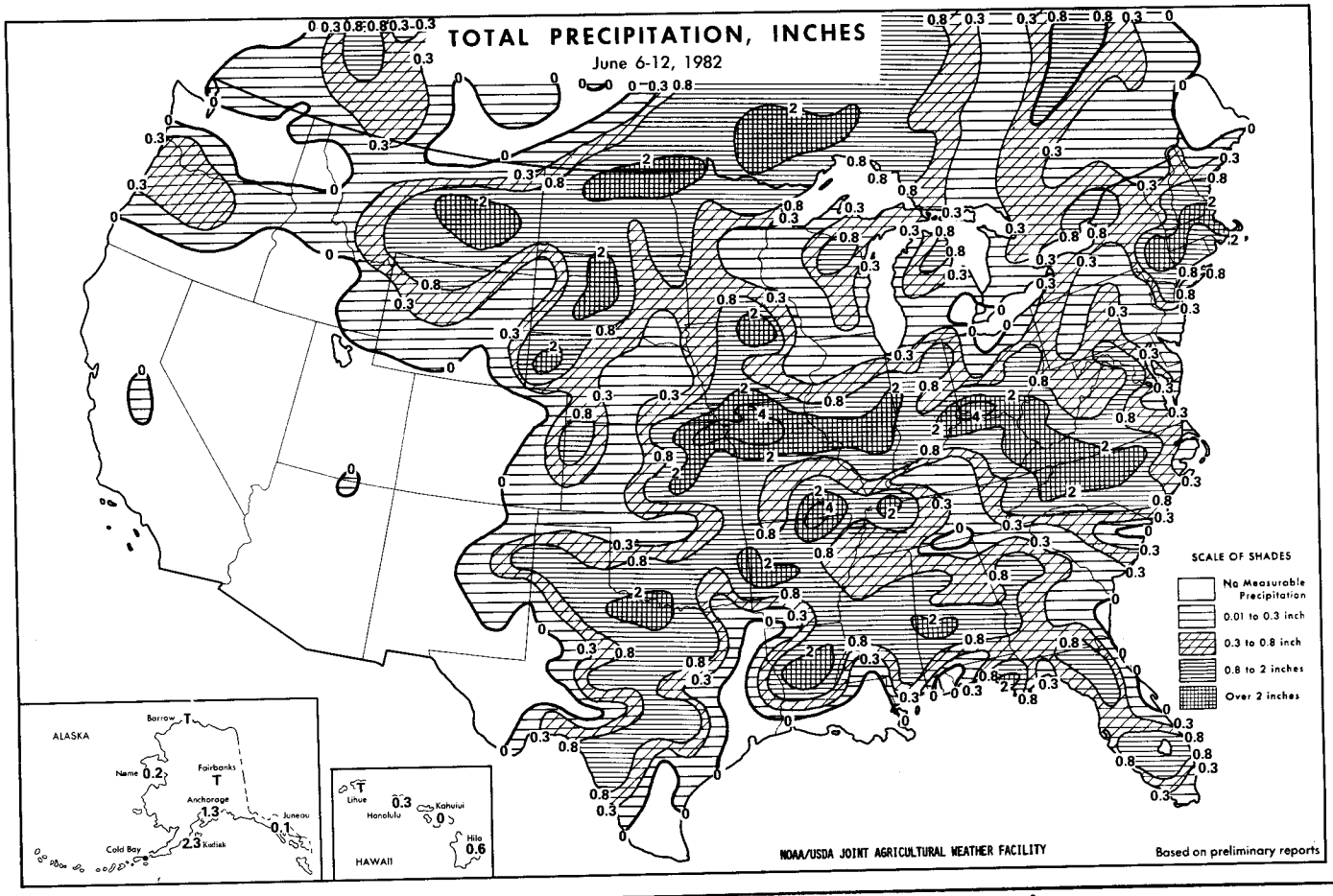
(cont. on p. 29)

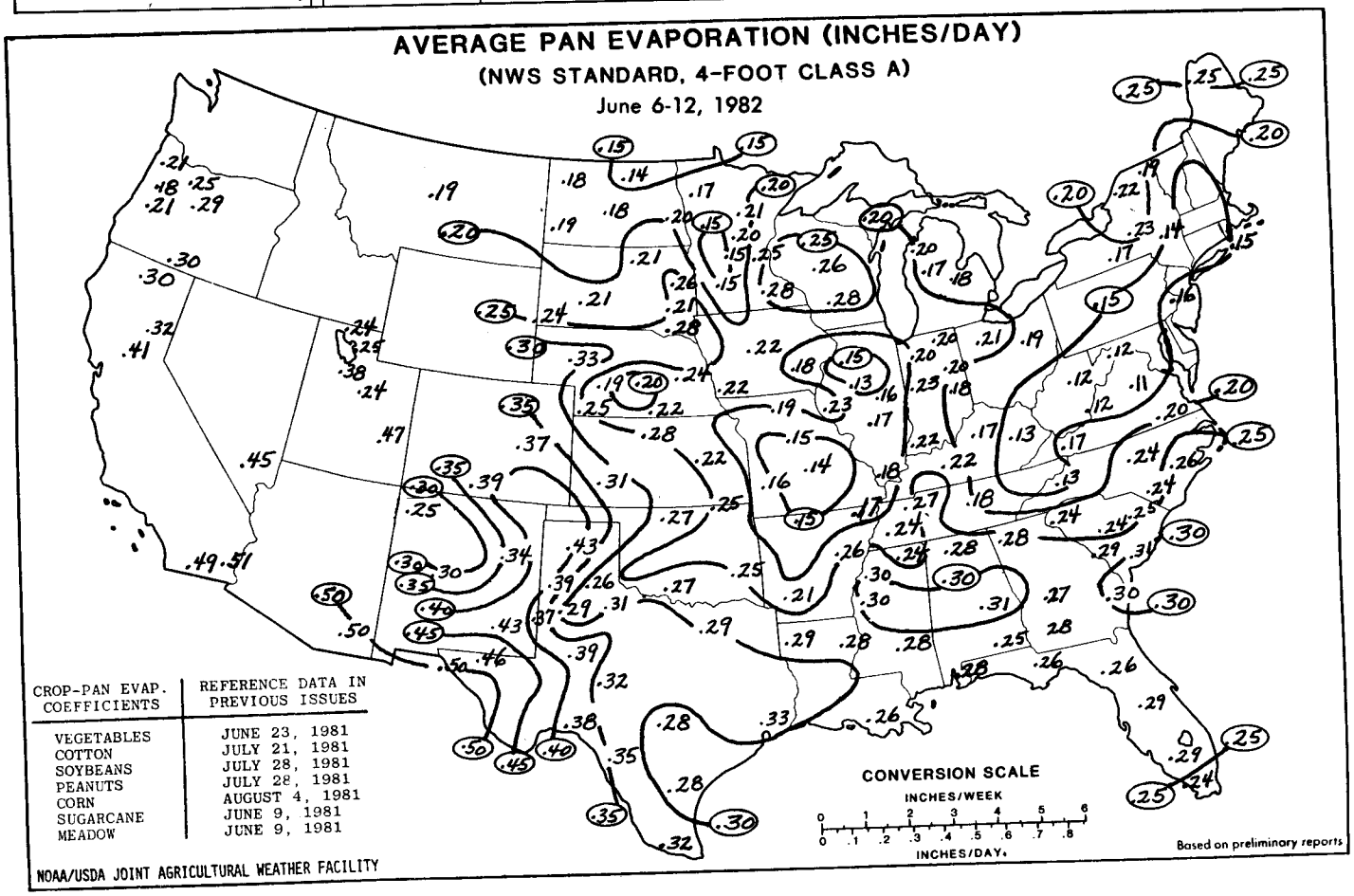
Contents

	Page
National Weather Summary	1
Precipitation & Pan Evaporation	2
Crop Moisture & Crop Moisture Index	3
Average Temperature & Departure	4
Growing Degree Days & 30-day Outlook	5
Weather Data for Selected Cities	6
Cooling Degree Days	9
May Stream Flow	10
National Agricultural Summary	11
Crop Progress Tables & June Crop Production Highlights	12
State Summaries of Weather & Agriculture	13
International Weather & Crop Summary	20
May Heating Degree Days & Subscription Information	32

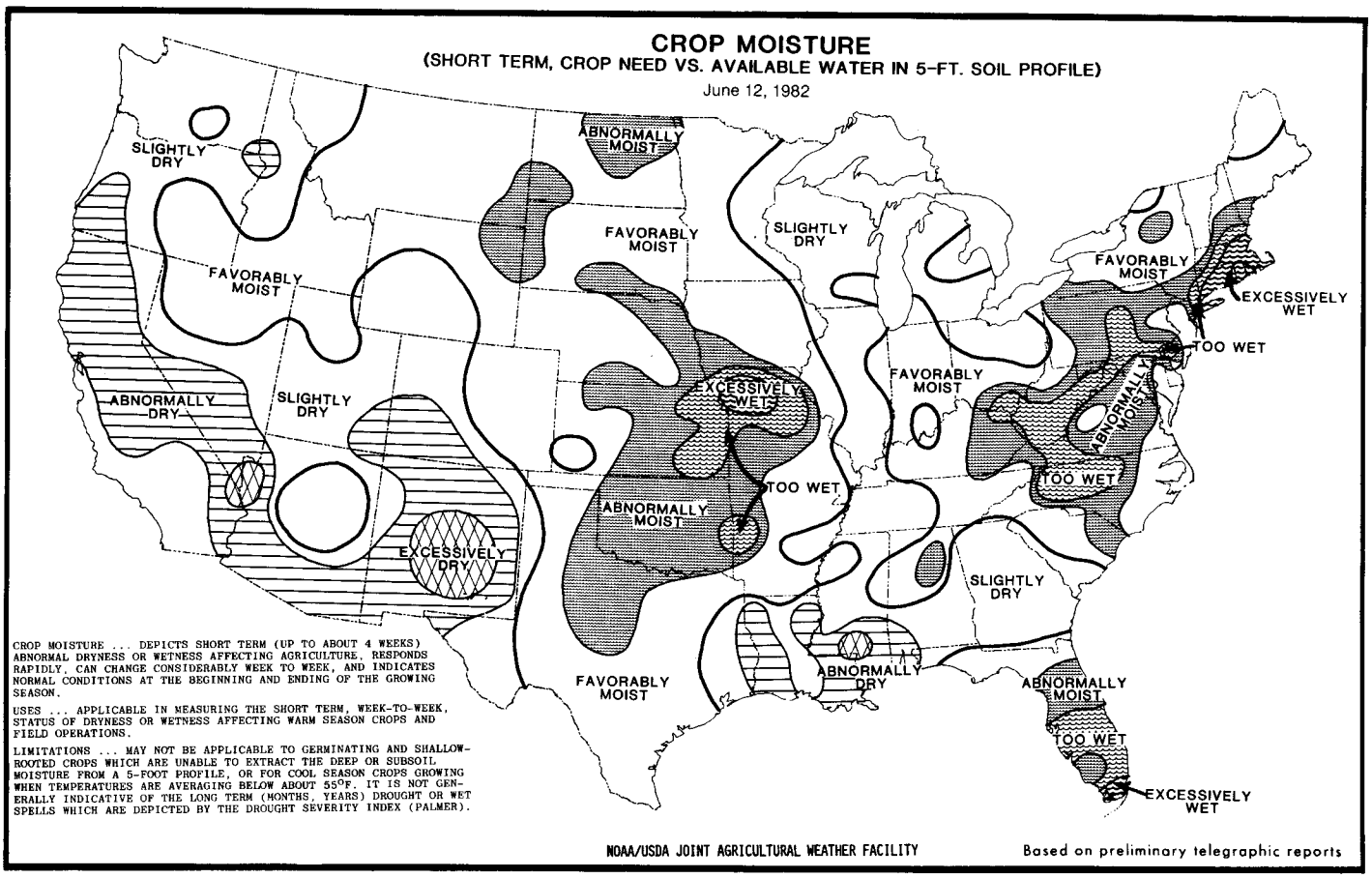
PRICE INCREASE

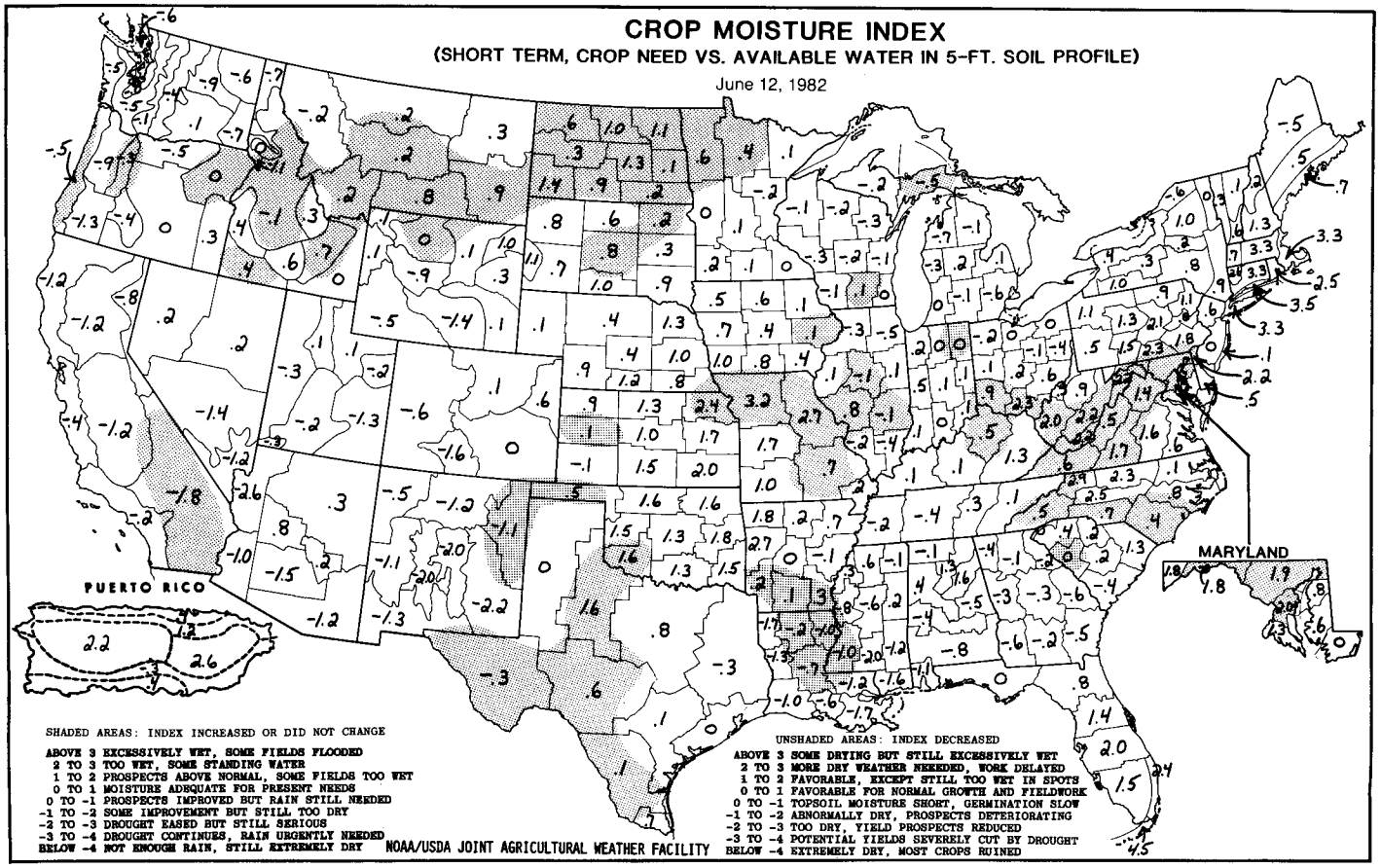
Due to increased printing costs and budgetary limitations, the price of the Weekly Weather and Crop Bulletin will be increased to $25 for domestic and $33 for foreign subscriptions on July 1, 1982.

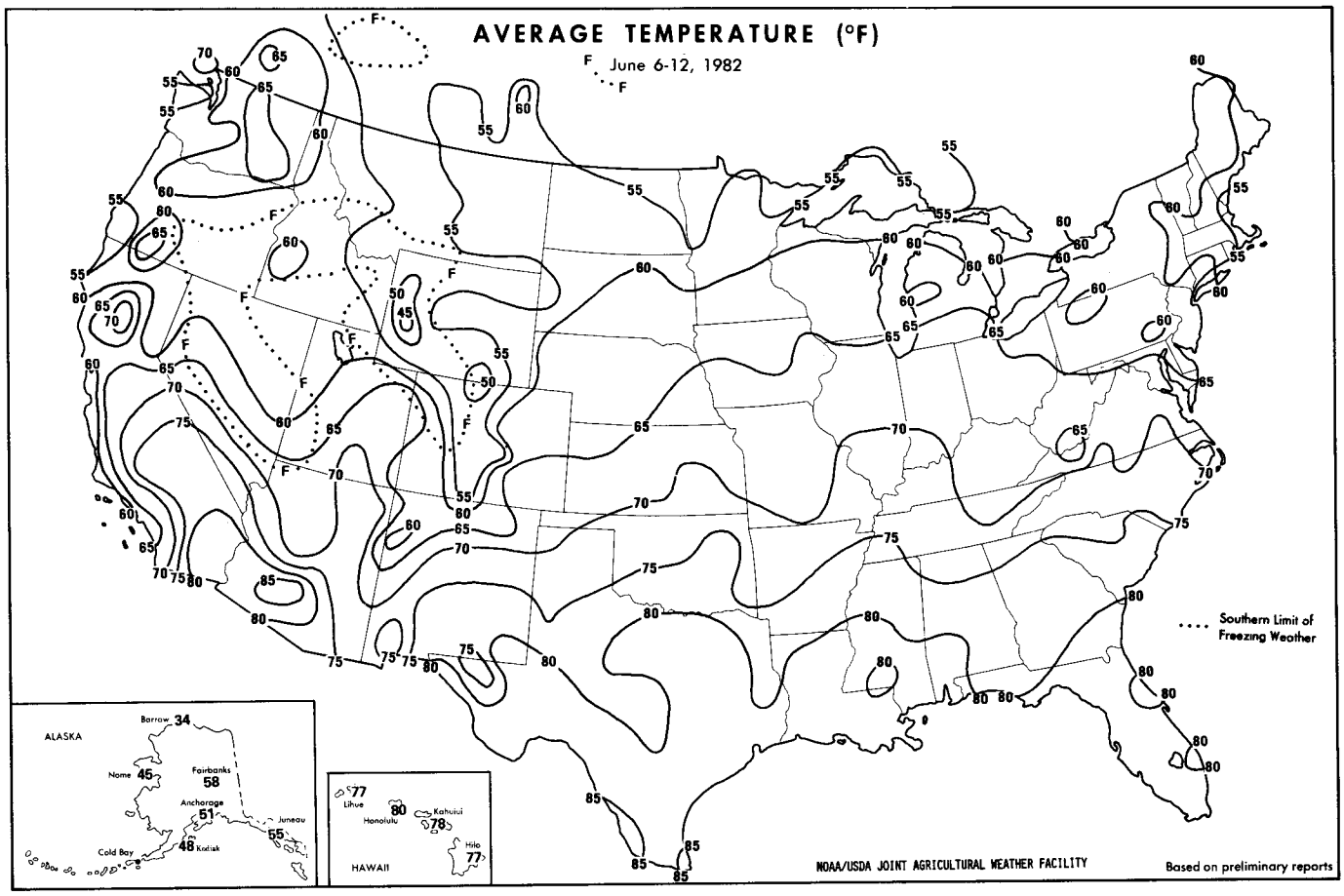


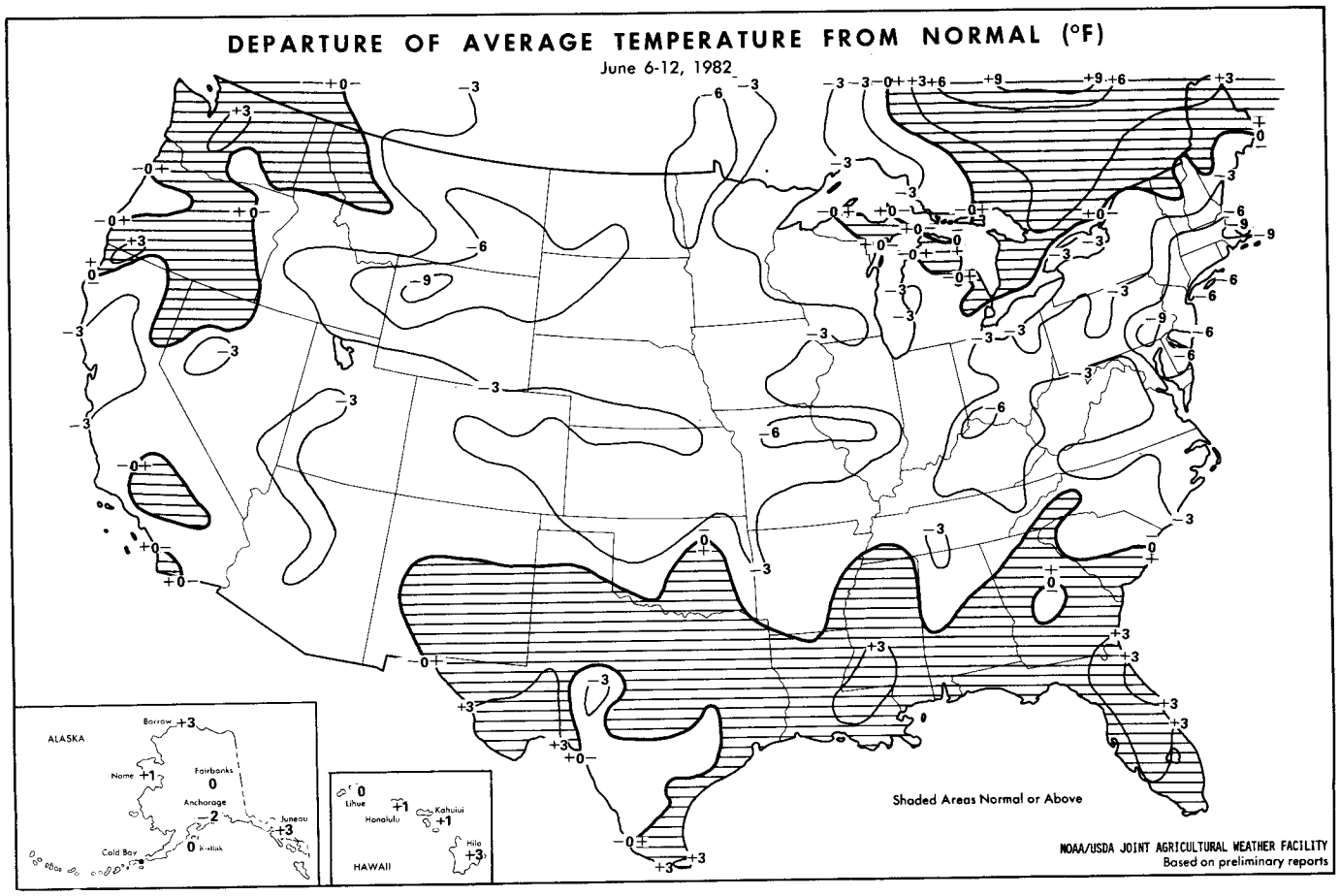


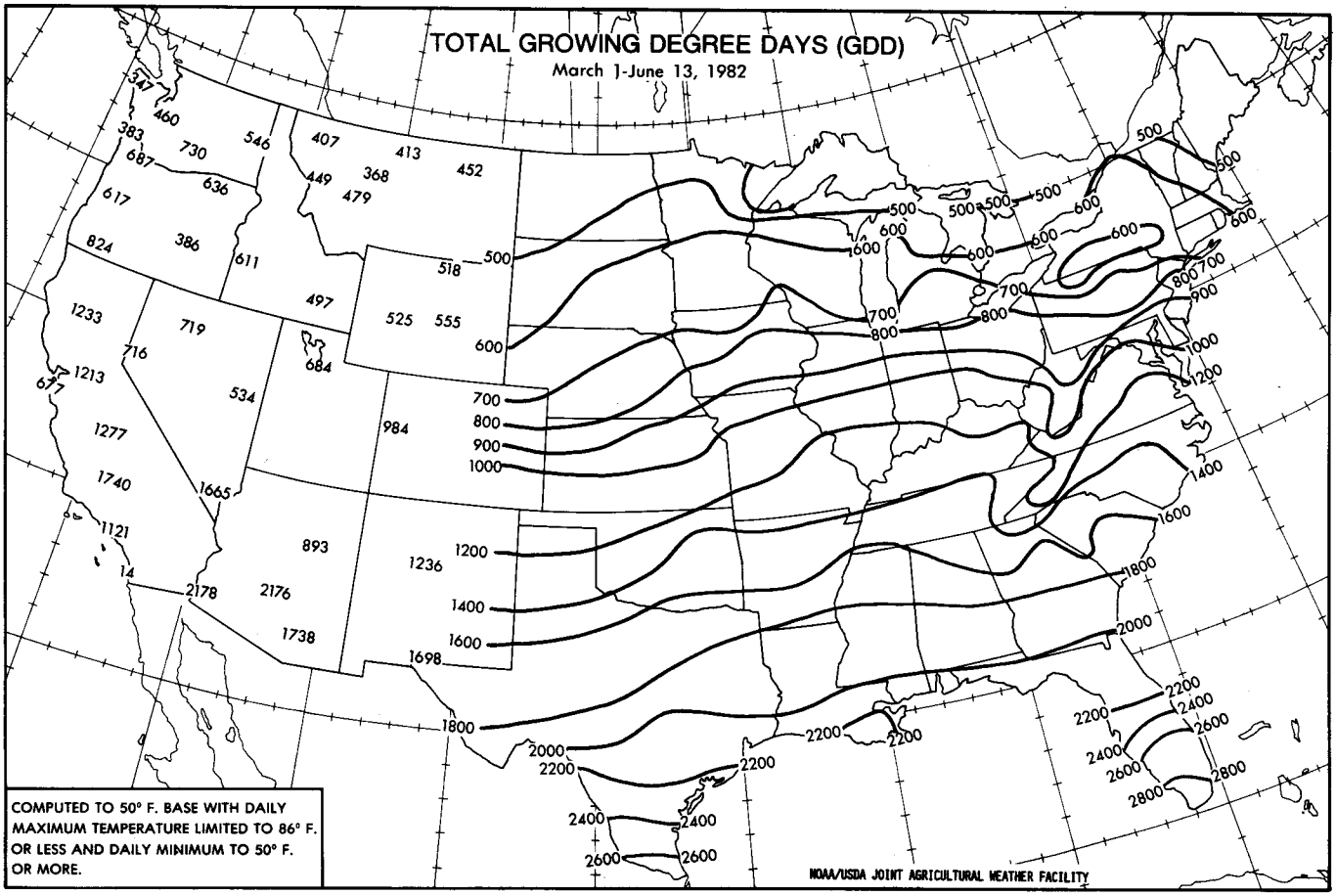
CROP-PAN EVAP. COEFFICIENTS	REFERENCE DATA IN PREVIOUS ISSUES
VEGETABLES	JUNE 23, 1981
COTTON	JULY 21, 1981
SOYBEANS	JULY 28, 1981
PEANUTS	JULY 28, 1981
CORN	AUGUST 4, 1981
SUGARCANE	JUNE 9, 1981
MEADOW	JUNE 9, 1981


CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
June 12, 1982
SLIGHTLY DRY
ABNORMALLY MOIST
FAVORABLY MOIST
SLIGHTLY DRY
FAVORABLY MOIST
FAVORABLY MOIST
EXCESSIVELY WET
TOO WET
ABNORMALLY DRY
SLIGHTLY DRY
EXCESSIVELY WET
FAVORABLY MOIST
ABNORMALLY MOIST
TOO WET
TOO WET
ABNORMALLY MOIST
EXCESSIVELY DRY
SLIGHTLY DRY
FAVORABLY MOIST
ABNORMALLY DRY
ABNORMALLY MOIST
TOO WET
EXCESSIVELY WET
CROP MOISTURE ... DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND ENDING OF THE GROWING SEASON.
USES ... APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS ... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW-ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX (PALMER).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

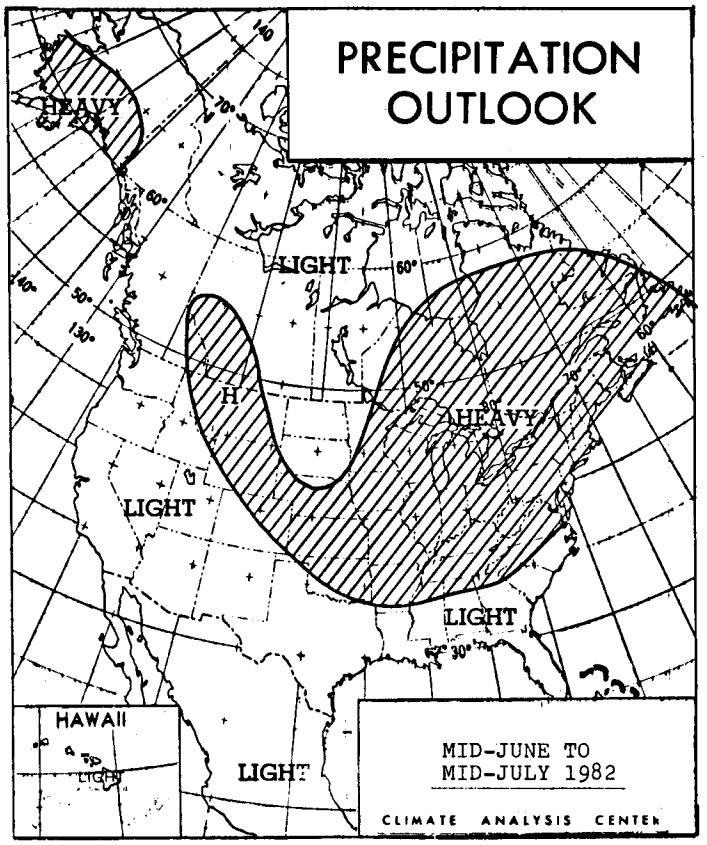

CROP MOISTURE INDEX
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
June 12, 1982
PUERTO RICO
MARYLAND
SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
UNSHADED AREAS: INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED

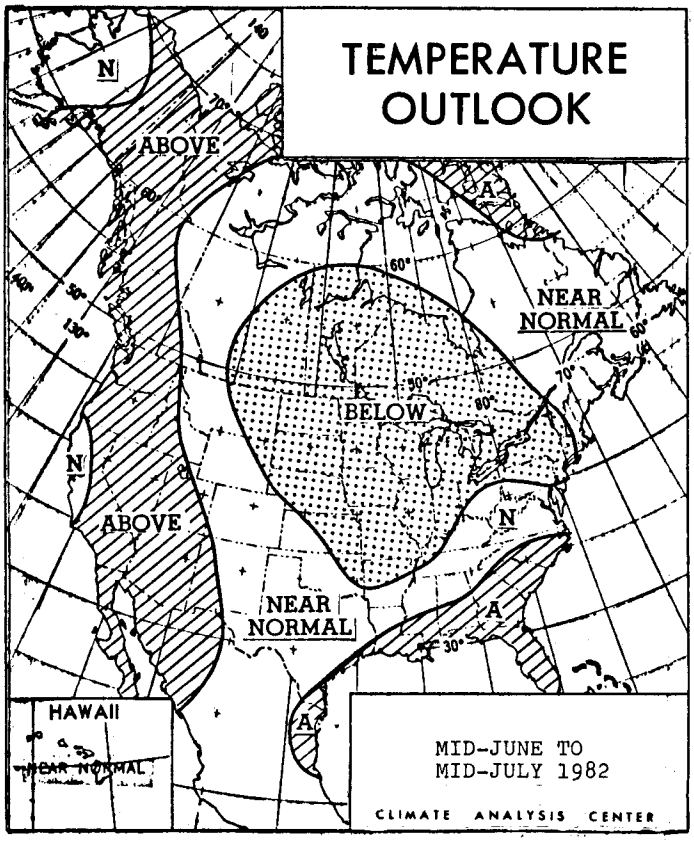

AVERAGE TEMPERATURE (°F)
June 6-12, 1982
Southern Limit of Freezing Weather
ALASKA
Barrow 34
Nome 45
Fairbanks 58
Anchorage 51
Juneau 55
Cold Bay 48
Kodiak
HAWAII
Lihue 77
Honolulu 80
Kahului 78
Hilo 77
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
June 6-12, 1982
Shaded Areas Normal or Above
ALASKA
Barrow +3
Nome +1
Fairbanks 0
Anchorage -2
Juneau +3
Cold Bay 0
Kodiak
HAWAII
Lihue 0
Honolulu +1
Kahului +1
Hilo +3
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports



Average Monthly Weather Outlook





Weather Data for the Week Ending June 12, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	90	62	95	56	76	-1	.7	- .1	.7	6.8	425	32.7	133	97	41	3	0	1	1
MOBILE	93	70	95	64	82	2	0	- 1.3	0	.6	25	25.4	95	79	39	7	0	0	0
MONTGOMERY	91	67	94	61	79	1	1.2	.3	1.2	2.5	147	32.5	146	81	37	5	0	1	1
AK ANCHORAGE	56	46	62	43	51	-2	1.3	1.1	.5	1.4	350	3.4	97	86	51	0	0	4	1
BARROW	38	30	43	27	34	3	T	- .1	T	0	0	1.7	142	100	83	0	5	0	0
FAIRBANKS	69	47	74	44	58	0	T	- .3	T	.4	67	3.4	113	80	35	0	0	0	0
JUNEAU	63	47	69	40	55	3	.1	- .5	.1	.1	8	18.2	105	80	55	0	0	2	0
KODIAK	51	46	55	45	48	0	2.3	1.3	1.1	2.6	124	25.2	111	98	84	0	0	6	2
NOME	52	37	66	23	45	1	.2	0	.1	1.5	500	7.1	173	80	53	0	1	5	0
AZ PHOENIX	101	70	105	66	85	3	0	0	0	0	+100	3.6	150	22	6	7	0	0	0
PRESCOTT	84	48	90	41	66	-2	0	0	0	0	+100	6.4	112	28	7	1	0	0	0
TUCSON	97	61	100	60	79	-2	0	0	0	0	+100	3.4	121	22	6	7	0	0	0
YUMA	98	67	104	64	83	-1	0	0	0	0	+100	1.6	160	37	11	7	0	0	0
AR FORT SMITH	84	65	91	60	75	-2	1.8	.8	1.3	3.1	148	22.9	111	94	56	2	0	2	2
LITTLE ROCK	86	64	93	59	75	-1	1.6	.8	1.0	2.1	124	26.8	112	91	54	3	0	3	2
CA BAKERSFIELD	90	63	95	58	77	1	0	0	0	0	+100	4.3	116	45	16	3	0	0	0
EUREKA	60	49	63	48	55	0	T	- .2	T	.2	40	23.8	109	92	68	0	0	0	0
FRESNO	87	55	92	49	71	-1	0	0	0	0	0	8.3	132	76	20	2	0	0	0
LOS ANGELES	69	57	70	55	63	-1	0	0	0	0	+100	8.6	115	81	58	0	0	0	0
RED BLUFF	85	56	95	50	71	-3	T	- .1	T	0	0	11.0	87	66	25	3	0	1	0
SACRAMENTO	79	50	89	47	65	-4	T	0	T	0	0	18.0	155	86	35	0	0	0	0
SAN DIEGO	70	62	72	62	66	1	T	0	T	0	+100	9.0	161	78	59	0	0	0	0
SAN FRANCISCO	62	50	68	47	56	-5	T	- .1	T	0	0	22.5	199	83	60	0	0	0	0
CO DENVER	75	49	81	41	62	-2	T	- .5	T	.6	60	3.7	51	69	21	0	0	0	0
GRAND JUNCTION	83	54	92	47	68	-1	0	- .1	0	0	0	2.4	67	34	10	1	0	0	0
PUEBLO	82	52	90	48	67	-2	0	- .3	0	.8	133	3.5	74	71	26	1	0	0	0
CT BRIDGEPORT	68	52	78	50	60	-6	.9	.3	.8	7.8	650	24.8	154	81	54	0	0	2	1
HARTFORD	71	49	85	46	60	-6	1.5	.7	1.5	9.6	600	26.7	151	86	48	0	0	2	1
DC WASHINGTON	75	62	83	60	68	-5	.6	- .2	.3	4.3	253	19.8	126	83	58	0	0	5	0
FL APALACHICOLA	91	69	94	65	80	0	.3	- .8	.3	.6	30	21.7	117	88	51	5	0	1	0
DAYTONA BEACH	88	70	93	66	79	0	T	- 1.4	T	2.5	100	21.3	143	92	53	2	0	0	0
JACKSONVILLE	94	70	99	65	82	3	0	- 1.4	0	1.9	73	16.7	94	96	45	6	0	0	0
KEY WEST	87	79	89	78	83	0	0	- 1.0	0	6.7	353	19.8	182	84	63	0	0	0	0
MIAMI	90	76	92	73	83	3	.1	- 2.0	.1	6.1	153	27.6	148	87	52	4	0	2	0
ORLANDO	93	73	95	69	83	3	.2	- 1.4	.1	3.2	114	20.2	127	95	48	7	0	2	0
TALLAHASSEE	94	66	97	60	80	1	T	- 1.4	T	.9	35	21.6	92	97	38	7	0	1	0
TAMPA	90	74	94	72	82	1	.3	- 1.0	.3	6.1	265	17.6	117	98	59	3	0	1	0
WEST PALM BEACH	88	73	90	70	81	0	1.2	- .7	.8	3.8	106	38.6	198	90	61	2	0	2	1
GA ATLANTA	88	64	93	57	76	2	1.0	.2	1.0	2.6	163	26.7	115	83	39	3	0	1	1
AUGUSTA	94	65	99	60	79	2	.3	- .5	.2	.6	38	16.9	88	89	37	6	0	2	0
MACON	92	64	98	59	78	0	.4	- .4	.4	1.7	100	24.7	120	92	42	5	0	1	0
SAVANNAH	91	70	97	66	80	2	.3	- 1.0	.3	4.3	172	20.1	107	87	42	3	0	1	0
HI HILO	83	71	85	68	77	3	.6	- 1.0	.5	1.8	55	84.1	145	90	67	0	0	4	0
HONOLULU	88	72	91	69	80	1	.3	.2	.3	.4	200	20.7	174	78	53	1	0	1	0
KAHULUI	87	70	92	68	78	1	0	- .1	0	.1	50	20.4	194	81	58	1	0	0	0
LIHUE	85	69	87	63	77	0	T	- .4	T	.2	25	38.2	190	93	64	0	0	1	0
ID BOISE	75	44	89	33	60	-3	0	- .3	0	0	0	5.5	83	68	21	0	0	0	0
LEWISTON	78	50	90	41	64	1	T	- .5	T	0	0	5.2	85	77	27	1	0	1	0
POCATELLO	72	40	85	34	56	-3	.1	- .3	.1	.2	25	6.7	110	81	24	0	0	1	0
IL CHICAGO	78	52	92	40	65	-2	T	- 1.0	T	.2	11	12.3	92	90	37	1	0	2	0
MOLINE	79	54	83	48	67	-3	.3	- .7	.2	.8	42	14.5	109	88	44	0	0	3	0
PEORIA	79	58	84	50	69	-1	.4	- .5	.2	.8	44	17.8	119	86	49	0	0	4	0
QUINCY	75	59	80	50	67	-6	1.8	.7	.9	3.0	136	18.0	—	97	65	0	0	4	2
ROCKFORD	80	53	85	43	67	-1	.1	- .9	.1	.4	21	13.3	94	85	40	0	0	2	0
SPRINGFIELD	79	60	84	54	69	-2	1.3	.4	.5	2.3	128	18.4	130	94	59	0	0	4	1
IN EVANSVILLE	81	61	87	55	71	-3	1.1	.2	1.0	2.2	122	24.7	122	94	51	0	0	3	1
FORT WAYNE	77	56	85	49	67	-1	1.5	.6	1.5	2.8	156	21.0	134	91	46	0	0	1	1
INDIANAPOLIS	79	60	83	53	70	-1	.5	- .5	.5	1.2	60	20.8	120	88	51	0	0	2	0
SOUTH BEND	77	56	86	48	66	-1	T	- .8	T	.6	38	16.0	111	89	47	0	0	1	0
IA DES MOINES	77	55	81	47	66	-3	.3	- .9	.2	.4	17	17.8	137	84	48	0	0	3	0
SIOUX CITY	76	54	89	46	65	-3	.3	- .9	.2	1.3	57	11.7	108	81	39	0	0	2	0
WATERLOO	75	52	80	47	63	-4	1.3	.2	1.1	1.4	64	15.1	121	95	51	0	0	4	1
KS CONCORDIA	80	58	88	50	69	-2	1.8	.5	1.1	2.5	100	15.4	136	86	46	0	0	2	2
DODGE CITY	81	57	92	50	69	-3	.2	- .6	.2	.9	60	6.5	83	85	38	2	0	1	0
GOODLAND	76	51	84	46	64	-4	1.7	1.0	1.1	3.3	254	9.8	153	89	38	0	0	3	2
TOPEKA	78	58	88	49	68	-4	1.8	.4	.8	3.4	126	16.9	124	88	54	0	0	4	2
WICHITA	79	62	92	53	70	-4	1.9	.9	1.9	4.4	232	16.9	155	85	49	1	0	2	1
KY BOWLING GREEN	82	59	91	53	71	-4	T	- .9	T	.8	47	21.0	89	99	47	1	0	0	0
LEXINGTON	79	57	87	51	68	-3	1.0	0	.7	1.9	100	17.6	85	92	52	0	0	3	1
LOUISVILLE	79	59	87	54	69	-3	1.0	0	.7	2.0	100	20.1	95	94	53	0	0	4	1
LA ALEXANDRIA	93	70	96	69	82	2	2.7	1.7	1.5	2.7	129	20.2	—	78	41	6	0	2	2
BATON ROUGE	96	73	96	70	85	5	T	- .7	T	0	0	21.0	88	88	42	7	0	1	0
LAKE CHARLES	91	72	92	67	81	1	T	- 1.1	T	0	0	16.7	74	98	57	7	0	0	0
NEW ORLEANS	93	71	94	68	82	2	0	- 1.0	0	.5	25	20.6	87	92	48	7	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending June 12, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	91	68	93	65	80	0	.1	- .7	.1	.1	6	14.4	65	99	53	6	0	2	0
ME CARIBOU	76	50	82	46	63	5	T	- .8	T	.9	60	12.6	101	75	32	0	0	0	0
PORTLAND	64	46	76	42	55	-5	.8	.1	.5	4.1	273	21.8	123	87	51	0	0	2	0
MD BALTIMORE	72	57	82	53	64	-7	.1	- .7	.1	2.8	175	18.7	111	89	56	0	0	4	0
SALISBURY	74	55	82	53	65	-7	.3	- .5	.3	2.5	156	18.7	104	98	54	0	0	1	0
MA BOSTON	61	50	74	45	55	-11	2.9	2.1	2.3	9.1	569	24.5	130	85	61	0	0	3	2
CHATHAM	55	48	63	44	51	--	2.3	--	1.5	2.7	--	20.5	--	92	73	0	0	3	2
MI ALPENA	73	45	78	43	59	0	.9	.2	.8	2.0	154	9.7	93	98	49	0	0	2	1
DETROIT	77	52	85	46	64	-3	T	- .8	T	.3	19	12.5	93	94	48	0	0	0	0
FLINT	76	54	83	45	65	0	T	- .8	T	1.0	67	8.5	72	96	51	0	0	1	0
GRAND RAPIDS	78	52	84	43	65	-1	.1	- .7	.1	1.0	63	12.9	100	96	48	0	0	2	0
HOUGHTON LAKE	74	50	79	41	62	0	.9	.1	.4	1.6	107	12.0	117	88	47	0	0	3	0
LANSING	76	53	82	45	65	-1	.3	- .5	.3	1.3	81	9.3	72	97	51	0	0	1	0
MARQUETTE	72	42	81	36	57	0	.6	- .4	.4	.7	35	14.2	112	95	40	0	0	4	0
MUSKEGON	73	48	78	41	60	-4	.2	- .5	.2	.7	54	13.6	108	95	50	0	0	2	0
SAULT STE. MARIE	70	40	80	35	55	-2	.5	- .3	.2	.7	44	14.2	127	94	47	0	0	4	0
MN ALEXANDRIA	66	47	75	43	57	-5	.4	- .6	.4	.6	32	10.0	111	93	50	0	0	2	0
DULUTH	66	47	69	41	56	-1	.3	- .8	.2	.4	20	11.3	105	89	48	0	0	2	0
INT'L FALLS	64	47	72	41	56	-3	1.8	.9	1.2	2.1	124	9.6	116	95	58	0	0	4	1
MINNEAPOLIS	73	52	79	44	63	-3	.1	- .9	T	.4	21	11.5	122	83	42	0	0	2	0
ROCHESTER	72	50	76	46	61	-4	.2	- 1.0	.1	.9	41	15.0	144	91	44	0	0	3	0
MS GREENWOOD	91	70	97	63	80	1	.7	- .1	.7	1.7	106	26.2	--	84	44	5	0	1	1
JACKSON	94	67	98	61	81	2	1.1	.3	1.1	1.5	94	23.3	99	93	42	7	0	1	1
MERIDIAN	95	65	98	57	80	2	1.3	.6	1.3	1.6	107	25.1	105	89	38	7	0	2	1
MO CAPE GIRARDEAU	84	64	94	57	74	-1	.6	- .5	.4	3.4	162	26.4	132	97	51	1	0	3	0
COLUMBIA	77	60	83	52	68	-3	1.9	.8	.8	4.2	191	18.3	121	95	69	0	0	5	2
KANSAS CITY	77	58	86	49	67	-4	3.7	2.4	1.7	7.0	280	23.1	164	96	60	0	0	4	3
SAINT LOUIS	79	63	88	57	71	-2	2.3	1.3	1.7	4.5	225	20.3	131	99	58	0	0	4	1
SPRINGFIELD	79	62	88	54	70	-2	.3	- .8	.3	2.8	127	17.3	102	95	66	0	0	1	0
MT BILLINGS	67	45	79	40	56	-4	1.8	1.2	1.2	2.3	192	9.5	138	93	46	0	0	4	1
GLASGOW	68	44	78	36	56	-4	.3	- .3	.3	.5	42	6.3	162	80	37	0	0	1	0
GREAT FALLS	66	42	77	40	54	-5	.5	- .3	.2	.6	40	9.4	129	82	39	0	0	4	0
HAVRE	66	45	80	41	56	-5	T	- .6	T	0	0	5.9	120	75	32	0	0	0	0
HELENA	71	43	80	40	57	0	.6	0	.3	.7	58	6.1	122	79	30	0	0	3	0
KALISPELL	69	41	84	33	55	0	.1	- .5	.1	.4	33	7.7	113	90	41	0	0	2	0
MILES CITY	68	45	79	39	56	-6	2.7	1.9	1.4	3.2	213	7.8	132	93	49	0	0	5	2
MISSOULA	71	43	85	39	57	0	T	- .5	T	.2	20	8.4	147	90	34	0	0	1	0
NE GRAND ISLAND	76	54	85	46	65	-4	.3	- .8	.3	.7	33	16.0	158	88	37	0	0	1	0
LINCOLN	79	53	90	46	66	-4	.5	- .7	.4	1.0	43	12.4	113	89	41	1	0	2	0
NORFOLK	76	54	88	45	65	-3	.2	- 1.0	.2	.8	35	13.2	131	80	31	0	0	1	0
NORTH PLATTE	74	48	80	40	61	-5	.3	- .6	.2	1.3	76	9.8	124	95	44	0	0	2	0
OMAHA	76	56	87	48	66	-2	.7	- .5	.7	1.0	42	16.4	140	85	49	0	0	2	1
SCOTTSBLUFF	75	45	77	39	60	-5	1.9	1.2	1.9	2.8	200	6.9	101	90	28	0	0	1	1
VALENTINE	75	46	80	40	61	-4	.6	- .2	.3	1.2	75	8.5	120	82	34	0	0	2	0
NV ELY	74	34	79	22	54	-2	0	- .2	0	0	0	6.0	146	68	17	0	3	0	0
LAS VEGAS	93	63	100	57	78	-2	0	0	0	0	+100	1.8	113	22	8	5	0	0	0
RENO	78	41	86	33	60	0	0	- .1	0	0	0	3.2	80	66	17	0	0	0	0
WINNEMUCCA	79	39	89	28	59	-1	T	- .3	T	0	0	2.4	51	47	13	0	2	0	0
NH CONCORD	69	47	80	41	58	-5	1.2	.4	.7	4.7	313	19.1	134	85	40	0	0	2	1
NJ ATLANTIC CITY	74	55	84	52	64	-5	.1	- .7	.1	1.5	100	15.3	83	92	51	0	0	2	0
NM ALBUQUERQUE	90	56	92	50	73	0	0	- .1	0	0	0	1.9	83	40	9	3	0	0	0
CLOVIS	88	62	98	56	75	2	.1	- .5	.1	.1	8	3.0	--	79	27	3	0	1	0
ROSWELL	92	63	98	58	78	2	.1	- .2	.1	.1	17	1.7	45	70	24	4	0	1	0
NY ALBANY	72	49	83	45	61	-6	.5	- .2	.4	2.7	193	16.2	124	91	49	0	0	2	0
BINGHAMTON	69	52	79	47	61	-2	.1	- .7	.1	2.6	163	16.3	109	93	53	0	0	4	0
BUFFALO	71	54	80	52	63	-1	.5	0	.3	2.1	210	18.6	128	95	55	0	0	2	0
NEW YORK	69	56	79	53	62	-8	.9	.2	.9	1.7	121	17.2	101	83	55	0	0	2	1
ROCHESTER	72	54	80	51	63	-2	.5	- .1	.3	2.2	169	12.4	94	89	54	0	0	3	0
SYRACUSE	74	53	81	47	64	-2	.3	- .4	.3	2.1	150	14.1	93	91	48	0	0	2	0
NC ASHEVILLE	83	60	89	55	71	2	2.1	1.2	1.1	2.9	161	24.3	127	100	56	0	0	2	2
CHARLOTTE	85	64	90	59	74	-1	1.2	.4	1.2	2.2	138	21.3	115	91	46	1	0	2	1
GREENSBORO	80	61	85	56	70	-3	3.0	2.1	2.4	7.2	424	26.2	154	97	67	0	0	3	2
HATTERAS	75	64	81	58	69	-4	T	- 1.1	T	.6	29	26.3	136	88	58	0	0	1	0
NEW BERN	79	62	83	60	71	-5	.1	- 1.0	.1	1.0	45	18.9	93	91	51	0	0	3	0
RALEIGH	81	62	86	56	72	-2	3.3	2.5	2.8	6.4	400	26.6	156	89	55	0	0	2	1
WILMINGTON	81	63	85	59	72	-4	.8	- .3	.7	1.3	59	21.2	113	92	51	0	0	2	1
ND BISMARCK	67	45	72	39	56	-6	1.5	.7	.7	1.6	100	8.3	132	92	48	0	0	3	2
FARGO	66	45	72	39	55	-8	1.1	.3	.6	1.3	87	6.6	93	91	47	0	0	3	1
GRAND FORKS	65	44	75	39	55	-7	1.7	.9	1.1	1.7	113	7.6	112	97	57	0	0	5	1
WILLISTON	70	47	81	39	59	-2	.9	.1	.6	1.2	86	7.1	120	95	49	0	0	2	1
OH AKRON-CANTON	75	56	82	49	65	-2	.1	- .8	T	.7	39	15.3	98	85	51	0	0	2	0
CINCINNATI	75	56	83	48	65	-5	2.0	1.1	1.6	2.7	159	22.0	118	90	53	0	0	4	1
CLEVELAND	75	55	84	50	65	-1	T	- .7	T	1.2	80	14.5	95	87	48	0	0	1	0
COLUMBUS	76	56	82	48	66	-3	.7	- .3	.6	1.1	58	18.3	106	95	59	0	0	2	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending June 12, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	78	58	83	52	68	-2	.2	- .7	.1	.8	42	20.7	126	90	54	0	0	3	0
TOLEDO	77	53	85	43	65	-3	.1	- .8	.1	.4	24	12.7	96	97	52	0	0	1	0
YOUNGSTOWN	72	52	81	46	62	-4	.6	- .2	.6	2.1	131	16.1	98	97	62	0	0	1	1
OK OKLAHOMA CITY	83	66	89	60	75	-1	.7	- .4	.7	2.2	96	22.6	159	89	59	0	0	1	1
TULSA	85	67	91	60	76	0	.8	- .4	.6	3.7	154	18.9	117	84	58	2	0	2	1
OR ASTORIA	62	49	71	44	56	0	.4	- .2	.3	.5	42	39.5	128	89	66	0	0	2	0
BURNS	70	38	80	28	54	-3	T	- .2	T	.7	175	5.7	97	--	--	0	1	3	0
MEDFORD	81	49	93	39	65	2	T	- .3	T	.1	17	8.3	83	78	27	2	0	0	0
PENDLETON	77	51	89	43	64	1	.1	- .2	.1	.1	17	5.0	81	65	22	0	0	1	0
PORTLAND	75	51	90	47	63	2	.5	.1	.5	1.3	144	20.0	112	86	38	1	0	2	1
SALEM	75	48	92	41	62	2	.5	.1	.5	.7	88	20.2	100	89	43	2	0	2	0
PA ALLENTOWN	70	53	80	51	62	-6	.2	- .6	.1	2.0	125	18.2	104	98	58	0	0	4	0
ERIE	68	53	73	50	61	-2	.2	- .6	.2	2.9	181	16.2	111	85	60	0	0	1	0
HARRISBURG	67	54	80	52	61	-9	2.1	- .9	1.5	6.4	164	22.9	125	99	65	0	0	4	1
PHILADELPHIA	72	55	82	53	64	-7	.2	- .7	.1	2.0	118	22.1	139	90	51	0	0	4	0
PITTSBURGH	71	54	81	49	63	-4	.2	- .6	.2	1.6	94	16.8	105	96	64	0	0	3	0
SCRANTON	69	53	80	50	61	-5	.1	- .7	T	3.9	244	18.4	136	96	68	0	0	5	0
RI PROVIDENCE	67	49	79	46	58	-7	1.2	.6	1.2	8.4	646	26.5	148	94	54	0	0	2	1
SC CHARLESTON	89	67	96	63	78	1	.6	- .7	.6	1.3	52	17.2	93	89	42	3	0	1	1
COLUMBIA	89	63	94	57	76	-2	.4	- .5	.3	3.0	176	21.3	110	99	44	3	0	2	0
FLORENCE	87	65	93	61	76	-1	.6	- .4	.6	4.3	239	21.7	127	99	52	2	0	1	1
GREENVILLE	85	63	89	58	74	-1	.8	- .1	.7	2.9	171	27.0	124	87	48	0	0	2	1
SD ABERDEEN	69	52	76	45	60	-3	--	--	--	--	--	--	--	89	51	0	0	0	0
HURON	72	51	78	47	62	-4	.5	- .4	.3	1.4	78	9.5	119	94	48	0	0	3	0
RAPID CITY	68	43	71	38	56	-6	.9	0	.5	1.5	88	11.0	136	90	48	0	0	3	1
SIOUX FALLS	73	49	83	46	61	-5	.5	- .6	.5	1.6	76	9.2	90	89	44	0	0	1	0
TN CHATTANOOGA	88	60	93	53	74	-1	.1	- .7	.1	.4	27	25.2	104	90	35	2	0	1	0
KNOXVILLE	82	61	88	53	72	-3	1.1	.3	.6	1.4	88	27.5	128	97	59	0	0	2	1
MEMPHIS	88	69	95	63	79	1	.5	- .4	.2	2.1	124	29.2	119	83	48	3	0	3	0
NASHVILLE	85	61	92	56	73	-3	.7	- .1	.7	1.7	106	24.0	108	93	48	2	0	1	1
TX ABILENE	91	71	94	65	81	2	.5	- .2	.4	.5	33	10.5	102	83	46	6	0	2	0
AMARILLO	88	58	102	50	73	0	.7	- .1	.5	.7	47	4.1	61	81	31	3	0	2	1
AUSTIN	92	71	97	66	82	1	1.1	.3	1.1	1.1	69	13.9	95	90	47	6	0	1	1
BEAUMONT	91	73	93	69	82	2	T	- 1.1	T	0	0	25.6	120	94	53	7	0	0	0
BROWNSVILLE	93	77	94	73	85	3	0	- .7	0	0	0	13.7	169	86	54	7	0	0	0
CORPUS CHRISTI	91	73	92	69	82	0	.1	- .6	.1	.1	7	13.9	130	100	60	7	0	1	0
DEL RIO	94	72	96	66	83	0	1.1	.6	1.1	1.1	100	5.9	81	82	46	6	0	1	1
EL PASO	98	64	100	61	81	2	T	- .1	T	0	0	1.0	53	44	12	7	0	0	0
FORT WORTH	91	71	94	66	81	1	.9	.2	.9	1.2	75	23.4	148	91	52	6	0	3	1
GALVESTON	86	78	87	77	82	1	0	- .9	0	0	0	12.3	84	83	64	0	0	0	0
HOUSTON	94	72	95	68	83	2	0	- 1.1	0	0	0	14.0	72	89	42	7	0	0	0
LUBBOCK	88	64	101	58	76	0	.8	.1	.5	.8	53	8.7	119	89	43	3	0	2	0
MIDLAND	94	69	99	62	81	3	.1	- .3	.1	.1	13	5.3	104	82	29	6	0	1	0
SAN ANGELO	87	67	90	60	77	-3	1.0	.5	.6	1.0	91	9.0	118	92	50	1	0	2	1
SAN ANTONIO	91	71	94	64	81	0	1.0	.3	1.0	1.0	71	11.3	100	92	49	5	0	1	1
VICTORIA	92	71	94	69	81	0	.1	- .8	.1	.1	6	16.1	119	91	54	6	0	1	0
WACO	92	71	95	65	82	1	.5	- .2	.4	.5	31	15.6	99	88	48	6	0	2	0
WICHITA FALLS	91	69	97	64	80	0	2.2	1.3	2.2	2.7	142	24.1	196	88	52	5	0	2	1
UT BLANDING	81	49	86	42	65	1	0	- .1	0	0	0	4.6	105	40	15	0	0	0	0
CEDAR CITY	81	42	88	30	61	-2	0	- .1	0	0	0	6.7	163	42	11	0	1	0	0
SALT LAKE CITY	78	47	89	41	63	-1	T	- .3	T	.1	17	7.6	99	62	18	0	0	0	0
VT BURLINGTON	71	50	80	47	61	-3	.6	- .2	.6	2.0	125	13.1	109	95	46	0	0	2	1
VA NORFOLK	75	62	79	59	69	-5	.3	- .5	.3	1.6	100	18.4	112	88	51	0	0	1	0
RICHMOND	77	62	82	59	70	-3	.1	- .7	.1	3.0	188	18.7	116	90	61	0	0	1	0
ROANOKE	79	61	87	57	70	-1	1.5	.6	.6	3.6	212	20.9	129	94	56	0	0	3	2
WA COLVILLE	79	49	87	40	64	5	.3	- .1	.3	.4	44	8.7	113	74	42	0	0	1	0
QUILLAYUTE	65	44	76	37	55	0	T	- .8	T	.1	6	60.4	124	96	57	0	0	0	0
SEATTLE-TACOMA	72	49	83	45	61	2	T	- .4	T	0	0	19.5	110	78	36	0	0	0	0
SPOKANE	76	47	85	35	62	2	T	- .3	T	.1	14	7.3	87	73	26	0	0	0	0
YAKIMA	79	44	87	35	61	-2	T	- .2	T	0	0	3.1	82	78	23	0	0	1	0
WV BECKLEY	72	56	78	52	64	-2	1.5	.5	.7	2.6	137	19.1	100	100	69	0	0	3	2
CHARLESTON	78	58	85	52	68	-3	2.9	2.2	1.2	5.8	414	23.8	135	97	59	0	0	4	3
HUNTINGTON	76	57	81	52	67	-5	2.4	1.6	1.6	4.4	275	22.3	125	97	62	0	0	4	1
PARKERSBURG	78	59	82	52	68	-1	.5	- .6	.5	3.1	148	17.9	91	94	54	0	0	1	0
WI GREEN BAY	75	49	82	39	62	-1	.1	- .7	.1	.1	6	9.0	88	89	42	0	0	1	0
LA CROSSE	76	53	80	45	64	-3	T	- .9	T	0	0	8.6	77	94	42	0	0	1	0
MADISON	75	46	79	36	60	-4	.6	- .4	.5	.6	32	11.9	107	90	47	0	0	4	1
MILWAUKEE	75	51	86	42	63	0	.1	- .8	T	.1	6	13.8	120	81	42	0	0	3	0
WAUSAU	73	50	78	42	61	-1	.9	- .2	.9	1.2	57	11.9	103	88	38	0	0	1	1
WY CASPER	71	38	80	34	55	-5	.1	- .3	.1	.8	89	5.5	95	83	19	0	0	1	0
CHEYENNE	69	40	71	36	55	-5	.2	- .3	.2	1.1	100	5.6	86	80	28	0	0	1	0
LANDER	71	40	79	32	55	-4	.3	- .2	.3	.4	36	3.9	49	70	21	0	1	1	0
SHERIDAN	68	37	82	33	53	-6	.9	.1	.8	1.5	100	6.0	76	83	40	0	0	2	1
PR SAN JUAN	91	76	95	75	84	4	.1	- 1.2	.1	3.1	111	24.6	125	90	58	5	0	2	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

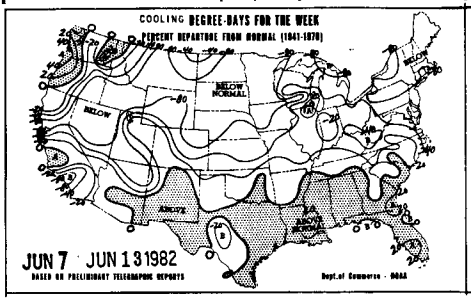
COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JUN. 13, 1982.

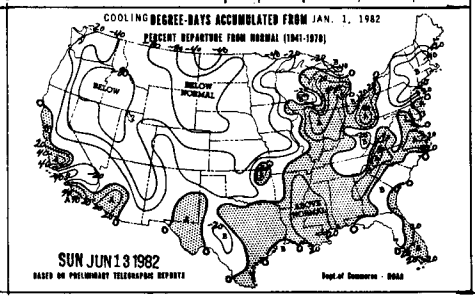
BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JAN. 1, 1982

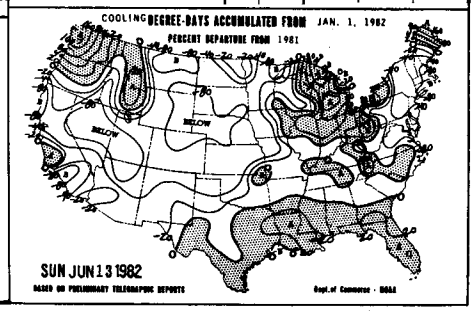
STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1981
ALA. BIRMINGHAM	82	1	451	6	23
MOBILE	116	11	761	40	103
MONTGOMERY	97	4	635	87	69
ARIZ. FLAGSTAFF	0	0	0	0	19
PHOENIX	144	18	1017	258	245
TUCSON	103	8	514	81	179
WINSLOW	23	18	49	80	135
YUMA	129	5	1026	43	201
ARK. FORT SMITH	71	12	329	54	48
LITTLE ROCK	80	5	448	77	7
CALIF. BAKERSFIELD	84	11	563	188	22
EUREKA	0	0	0	0	4
FRESNO	48	6	224	35	235
LOS ANGELES	0	10	19	42	123
RED BLUFF	56	9	253	50	145
SAN DIEGO	9	5	115	39	102
SAN FRANCISCO	0	1	13	12	13
STOCKTON	28	16	133	36	230
COLO. DENVER	0	19	7	22	74
GRAND JUNCTION	37	1	92	18	91
PUEBLO	21	17	76	32	117
CONN. BRIDGEPORT	3	14	12	34	51
HARTFORD	5	12	25	22	84
DEL. WILMINGTON	10	27	109	0	47
D.C. WASHINGTON	31	29	222	6	108
FLA. APALACHICOLA	100	2	658	53	76
DAYTONA BEACH	97	1	845	19	110
FORT MYERS	133	23	1590	390	310
JACKSONVILLE	117	21	787	85	89
KEY WEST	132	6	2080	255	534
LAKELAND	115	10	1056	2	201
MIAMI	126	16	1727	346	286
ORLANDO	121	17	1188	185	237
TALLAHASSEE	110	8	713	1	139
TAMPA	120	10	1047	18	184
WEST PALM BEACH	108	3	1559	314	315
GA. ATLANTA	82	11	415	97	50
AUGUSTA	105	17	391	76	45
MACON	95	3	564	31	8
SAVANNAH	111	17	656	54	22
IDAHO. BOISE	1	12	3	33	9
LEWISTON	11	1	16	20	1
POCATELLO	1	6	4	15	1
ILL. CAIRO	71	11	406	42	15
CHICAGO	22	6	105	24	22
MOLINE	19	21	118	13	10
PEORIA	32	9	177	30	29
ROCKFORD	31	1	142	51	55
SPRINGFIELD	39	12	217	41	13
IND. EVANSVILLE	48	12	277	21	7
FORT WAYNE	24	8	125	23	43
INDIANAPOLIS	40	3	186	35	24
SOUTH BEND	20	9	125	36	57
IOWA. BURLINGTON	23	19	134	16	7
DES MOINES	15	23	95	29	90
DUBUQUE	18	6	84	13	11
SIOUX CITY	7	31	63	70	101
KANS. CONCORDIA	29	23	98	83	125
DODGE CITY	36	22	125	70	169
GOODLAND	11	22	38	43	66
TOPEKA	28	27	101	129	156
WICHITA	41	27	149	126	138
KY. LEXINGTON	38	14	221	3	35
LOUISVILLE	41	11	234	13	51
LA. BATON ROUGE	131	28	969	259	274
LAKE CHARLES	110	4	778	21	83
NEW ORLEANS	120	13	988	228	169
SHREVEPORT	103	2	669	71	130

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1981
MAINE. CARIBOU	0	0	15	15	10
PORTLAND	0	0	6	6	21
MD. BALTIMORE	17	28	140	5	56
MASS. BOSTON	2	19	21	32	109
MICH. ALPENA	0	7	7	7	2
DETROIT	11	1	65	10	6
FLINT	9	8	100	50	68
GRAND RAPIDS	14	8	109	47	54
HOUGHTON LAKE	2	6	28	3	11
LANSING	15	9	94	33	57
MARQUETTE	2	8	8	8	4
MUSKEGON	0	14	56	14	37
S. STE. MARIE	0	0	6	6	5
MINN. DULUTH	0	0	0	0	4
INTERNAT'L FALLS	0	3	3	3	5
MINNEAPOLIS	2	21	48	16	8
ROCHESTER	0	21	42	11	1
ST. CLOUD	0	14	34	2	10
MISS. JACKSON	110	15	734	150	114
MERIDIAN	104	9	652	90	56
MO. COLUMBIA	36	15	124	96	74
KANSAS CITY	29	24	119	83	101
ST. LOUIS	51	14	259	18	11
SPRINGFIELD	46	10	213	11	25
MONT. BILLINGS	1	6	6	15	18
GLASGOW	4	4	7	16	4
GREAT FALLS	0	4	0	4	3
HAVRE	1	6	1	18	4
HELENA	1	1	1	1	0
KALISPELL	5	5	5	5	5
MILES CITY	4	14	10	39	9
MISSOULA	3	3	3	3	3
NEBR. GRAND ISLAND	12	28	46	80	113
LINCOLN	11	35	86	73	114
NORFOLK	7	29	47	61	115
NORTH PLATTE	3	27	13	75	63
OMAHA	9	30	68	110	95
VALENTINE	3	20	16	43	56
NEV. ELY	0	1	0	1	10
LAS VEGAS	96	13	515	63	280
RENO	1	6	3	11	43
WINNEMUCCA	0	7	4	14	38
N.H. CONCORD	0	7	10	11	51
N.J. ATLANTIC CITY	9	22	83	8	26
TRENTON	8	27	83	21	52
N.MEX. ALBUQUERQUE	64	4	141	31	75
ROSWELL	84	6	320	32	57
N.Y. ALBANY	2	19	26	35	62
BINGHAMTON	2	12	23	10	28
BUFFALO	2	12	32	4	2
NEW YORK	13	22	51	53	103
ROCHESTER	9	11	53	1	6
SYRACUSE	7	12	28	21	59
N.C. ASHEVILLE	48	10	196	65	34
CHARLOTTE	71	0	380	67	51
GREENSBORO	45	15	256	4	28
HATTERAS	31	29	291	61	19
RALEIGH	53	7	341	80	47
WILMINGTON	64	18	385	36	17
N.DAK. BISMARCK	0	14	3	31	3
FARGO	0	15	14	22	1
WILLISTON	6	4	18	5	26
OHIO. AKRON-CANTON	17	10	115	34	26
CINCINNATI	25	21	165	2	2
CLEVELAND	20	6	106	25	41
COLUMBUS	22	12	137	24	8
DAYTON	20	11	151	17	39
TOLEDO	21	9	88	0	23

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1981
YOUNGSTOWN	3	18	71	9	32
OKLA. OKLAHOMA CITY	68	6	248	70	115
TULSA	79	1	442	104	7
OREG. ASTORIA	0	0	0	0	0
BURNS	0	7	0	10	0
MEDFORD	11	0	25	3	7
PENDLETON	7	7	10	28	1
PORTLAND	11	4	15	5	7
SALEM	9	2	14	3	13
PA. ALLENTOWN	6	24	44	44	84
ERIE	5	9	55	21	28
HARRISBURG	9	32	66	72	78
PHILADELPHIA	10	33	107	32	48
PITTSBURGH	7	21	85	7	7
SCRANTON	3	18	45	19	43
R.I. PROVIDENCE	0	12	14	12	85
S.C. CHARLESTON	96	10	494	8	85
COLUMBIA	85	6	448	34	31
GREENVILLE	66	6	323	2	42
S.DAK. ABERDEEN	0	19	19	27	61
HURON	1	24	19	47	69
RAPID CITY	0	19	3	43	24
SIOUX FALLS	2	25	25	52	100
TENN. CHATTANOOGA	73	2	321	14	13
KNOXVILLE	56	12	264	61	19
MEMPHIS	103	14	522	83	96
NASHVILLE	65	9	330	2	6
TEXAS. ABILENE	107	6	572	17	29
AMARILLO	57	5	151	74	161
AUSTIN	111	1	866	111	66
BEAUMONT	120	13	716	21	54
BROWNSVILLE	137	16	1569	250	235
CORPUS CHRISTI	121	3	1065	15	62
DEL RIO	124	6	953	35	128
EL PASO	114	12	453	11	156
FORT WORTH	104	2	573	41	25
GALVESTON	123	13	778	10	37
HOUSTON	123	14	918	132	19
LUBBOCK	72	6	317	5	99
MIDLAND	106	7	490	8	52
SAN ANGELO	84	26	456	219	25
SAN ANTONIO	109	6	774	44	83
VICTORIA	117	2	933	60	43
WACO	114	2	722	60	69
WICHITA FALLS	106	0	490	47	46
UTAH SALT LAKE CITY	17	1	30	30	36
VT. BURLINGTON	0	13	31	3	23
VA. LYNCHBURG	32	16	173	7	50
NORFOLK	28	31	237	0	86
RICHMOND	34	23	257	19	37
ROANOKE	37	3	188	25	1
WASH. QUILLAYUTE	0	0	0	0	0
SEATTLE-TACOMA	3	3	3	3	2
SPOKANE	8	1	11	7	11
WALLA WALLA	21	4	42	26	8
YAKIMA	9	5	18	22	0
W. VA. BECKLEY	8	13	70	11	4
CHARLESTON	31	16	198	12	5
HUNTINGTON	27	23	169	48	45
PARKERSBURG	37	7	245	73	78
WIS. GREEN BAY	5	9	37	2	10
LACROSSE	19	9	81	4	3
MADISON	3	17	30	20	20
MILWAUKEE	13	1	27	8	4
WYO. CASPER	3	4	3	16	13
CHEYENNE	0	7	0	9	16
LANDER	1	1	3	1	11
SHERIDAN	0	7	0	20	2

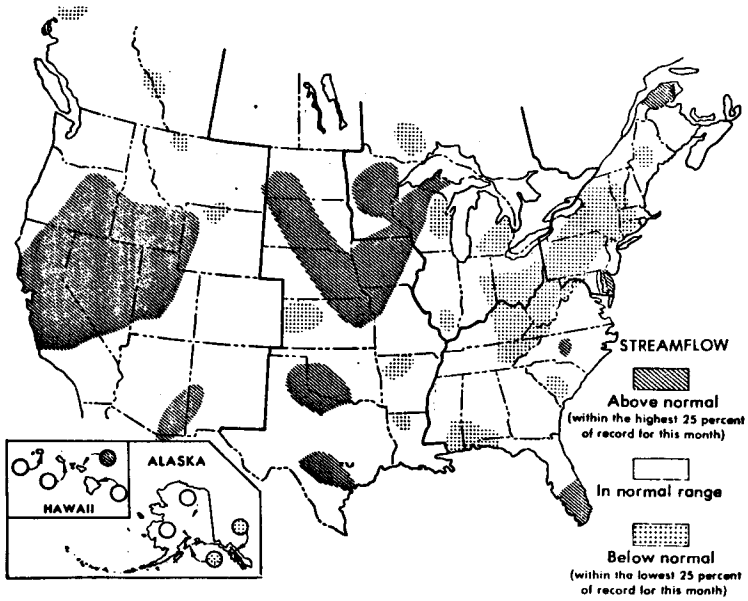






STREAMFLOW DURING MAY

U.S. GEOLOGICAL SURVEY



After well-below-normal streamflow conditions throughout much of the Northeast during May, recent heavy rainfall during the first weekend in June produced record-high water levels and flooding in parts of Connecticut. For much of the rest of the nation, streamflow conditions during May were normal, according to a monthend check on the Nation's water resources by the U.S. Geological Survey (USGS), U.S. Department of the Interior.

According to USGS, 60 percent of the key index gaging stations across the country reported normal streamflow conditions during May. Well-above-normal flows were reported in California, Nevada, and several of the Great Plains States.

In contrast, nearly one-fourth of the Nation's key index gaging stations reported well-below-normal conditions during May, mostly in the Northeastern States and in the Ohio River Valley. Twenty-two of the 30 index gaging stations from Vermont to Kentucky reported streamflow to within the lowest 25 percent of the record.

Storms in southern Connecticut over the first weekend in June caused record-high flows on several rivers. Water levels of the Quinnipiac River at Wallingford, Conn., reached 5.1 billion gallons a day (bgd) on June 6, the highest in 52 years of record. Flows of this magnitude on the Quinnipiac River are expected to occur on an average of less than once every 100 years.

Following the generally normal May trend, combined flow of the Nation's "Big Five" rivers--Mississippi, Columbia, St. Lawrence, Missouri, and Ohio--averaged 990 bgd, 14 percent below normal for the month. The "Big Five," which together drain more than half of the conterminous United States, provide a quick, useful check on the Nation's water resources.

Working in cooperation with Federal, State, and local officials across the country, USGS compiled the following highlights of water-resources conditions during May:

"Big Five"--Individual flows: Mississippi River near Vicksburg, Miss., had 401 bgd, 27 percent below normal and 38 percent below April; Columbia River at The Dalles, Ore., had 287 bgd, 4 percent above normal and 111 percent above April; St. Lawrence River near Massena, N.Y., had 186 bgd, 3 percent above normal and 4 percent above April; Missouri River at Hermann, Mo., had 80 bgd, 36 percent above normal and 71 percent above April; and the Ohio River at Louisville, Ky., had 35 bgd, 58 percent below normal and 60 percent below April.

Northeast--In contrast to the above-normal streamflow in April, Northeastern States from Vermont through Pennsylvania experienced well-below-normal streamflow. Ground-water levels in the key index wells in Connecticut declined and were generally below normal, but well above levels at this time last year. Combined storage contents in the Upper Allegheny, Beaver, and Monongahela River basin reservoirs in Pennsylvania were below normal during May.

Southeast--Streamflow conditions from Arkansas through the coastal States were normal, a continuing improvement over dry conditions that pervaded most of the Southeast during the past year and a half. Reservoir contents remained slightly below normal. Flow of Fisheating Creek, one of the main sources of inflow to depleted Lake Okeechobee--principal reservoir for southern Florida--was above normal at 18 million gallons per day, nearly 10 times its normal May flow. Water levels declined, however, in wells tapping the Floridan aquifer, the State's principal ground-water supply source, and continue to be generally below normal.

Great Plains and the Midwest--Streamflow conditions in the Great Plains and some Midwestern States were mixed, with South Dakota, Iowa, and Oklahoma reporting above-normal conditions and most of the remainder of this region reporting normal to well-above-normal conditions. In northeastern Minnesota, flow of the St. Louis River at Scanlon averaged 5.5 bgd, 91 percent above normal. Eastern Nebraska experienced heavy precipitation during May, producing lowland flooding. Streamflow conditions in Arkansas were varied, with the northern part of the State reporting well-below normal water levels, while the southern part of the State was in the normal range. Ground-water conditions in Arkansas fell. The level in the deep sand aquifer in east-central Arkansas fell about 5 feet, 15 feet below normal for May.

Rocky Mountain States--Streamflow conditions were normal throughout the region with the exception of northern Wyoming where cool weather has delayed the normal spring runoff in streams draining the snow-packed mountains. Ground-water levels declined in most wells, and the key index well at Holladay, Utah, established a new low level for the month. Storage contents in the key reservoirs in Wyoming are from 8 to 44 percent below normal for this time of year and are generally below the levels reported at this time last year.

Far West--While Washington and western Oregon reported normal streamflow for May, conditions in California and Nevada were well above normal at five of the seven key gaging stations. This upswing in flow is normal for the season when streams are being fed by mountain snowmelt. Ground-water levels were below normal at most index wells in the two adjoining States, but the Steptoe Valley well in eastern Nevada reached a record high level for the month. Combined contents of the 10 key index reservoirs in northern and central California decreased somewhat but remained about 20 percent above normal and were 13 percent above the contents of last year at this time.

National Agricultural Summary

June 7-13

HIGHLIGHTS: Mostly clear weather in Nebraska and Iowa finally permitted planting to proceed rapidly. Farmers planted much of their acreage during the week, but progress still lagged the average. Cool weather in nearly all areas except the South slowed the development of crops. Across the South, the warmer temperatures benefited plants. Farmers in the Southeast, the Delta, and the West had up to 6 days suitable for fieldwork. From the northern Plains, Nebraska, Iowa and through the Lake States, 4 to 6 days were suitable. Wet conditions in Kansas and Missouri limited the number of days available to 1 to 3 days. Elsewhere 3 to 4 days were suitable. Soil moisture supplies were adequate to surplus in all areas of the Nation except in the Northwest, the Delta, and in parts of the Southeast where supplies were rated short to adequate. Heavy rains in Missouri caused localized flooding. Winter wheat remained in fair to good condition; 90% of the acreage was heading. Fields were turning color across the central Plains and the Corn Belt. Harvesting gained momentum from the southern Plains through the Southeast. Spring wheat seeding was completed. The crop was in fair to good growth. Corn planting was 97% finished. The crop rated fair to good. Silking became more widespread in southern areas. Soybean planting reached 75%. Farmers in the Southeast began planting double-cropped soybeans as small grains were harvested. Ninety-two percent of the cotton acreage was planted; plants were squaring on 15% of the acreage. Sorghum was 60% planted, still well behind normal due to wet conditions. The peach harvest stretched northward in North Carolina. Pastures and livestock were in fair to good condition.

SMALL GRAINS: Winter wheat continued in fair to good condition, although weeds, insects, and disease were becoming more of a problem. In the 15 major producing States, 90% of the acreage was heading compared with 93% a year ago. Heading was complete in California, Oklahoma, and most of the Corn Belt. Fields were turning color. Harvesting became more active in southern areas as weather permitted. The Texas harvest progressed well as dry, open weather permitted combining to reach 26% completion, 1 point ahead of last year. Kansas winter wheat was in good to excellent condition in the western two-thirds of the State, but rated only fair in the eastern third due to excessive moisture. The recent sunshine benefited the Oklahoma crop. Harvesting started in the southwestern portion of the State. In the Pacific Northwest, short soil moisture caused deterioration of dryland stands, but irrigated fields were in average condition. Development in Montana continued well behind average; only 19% of the acreage was heading, normally 35% would be heading.

Spring wheat seeding was virtually finished. Seeding in Montana passed the 90% mark, slower than usual because rain and cool weather continued to slow fieldwork. Plants had emerged on 91% of the acreage in the 5 major producing States. The crop was in fair to good condition and had ample soil moisture for good growth.

CORN: Corn planting in the 17 major producing States reached 97% completion compared with 95% a year earlier. Producers in western areas of the Corn Belt took advantage of clear weather and made rapid progress. Nebraska farmers planted 33% of their acreage during the week. By the end of the period, progress was only 2 percentage points behind normal. Planting in South Dakota also moved forward quickly but was still 13 points slower than average. Planting was finished or nearing completion in all States but South Dakota. Emerged plants were in fair to good condition. The crop was silking across the South with some of the earliest planted fields reaching the dough stage of development. Warmer weather is needed in the Corn Belt for good growth.

SOYBEANS: Soybean planting in the 18 major producing States was 75% completed, ahead of last year's 68% but lagging the average of 82%. Planting in Iowa, Nebraska, and Minnesota advanced rapidly as farmers enjoyed mostly clear weather. Nebraska producers planted 55% of their acreage during the week while growers in Iowa planted 40%, and Minnesota farmers were able to plant 24% of their acreage. Even though rapid progress was made, planting in Nebraska was only 65% completed, 30 points behind normal, and progress in Iowa reached 75%, 23 points behind average. Wet conditions in Kansas and Missouri continued to slow planting progress. Kansas producers had seeded only 15% of their acreage; normally 65% is seeded by this date. Growers in Missouri were 29 percentage points behind schedule. Emerged plants were in fair to good condition. Farmers in the Southeast began planting double-cropped soybeans as small grains were harvested.

COTTON: In the 14 major producing States, 92% of the cotton acreage had been planted, slightly behind the progress for last year and the average. Planting neared completion in all States except Oklahoma where planting was only 35% finished, 45 points behind normal. Cotton was squaring on 15% of the Nation's acreage. Plants were maturing rapidly in southern Texas where many early-planted fields were blooming.

SORGHUM: Sorghum planting in the 7 major producing States was 60% finished, well behind last year's 76% and the average of 81%. Clear weather enabled Nebraska growers to plant 50% of their acreage during the week while producers in South Dakota planted 26% of their acreage. Progress was still much slower than average. Planting was 35 percentage points behind normal in Kansas, Nebraska, and South Dakota and 25 points behind in Oklahoma. Cool, wet weather caused uneven head development in parts of Texas.

OTHER CROPS: Rice planting was virtually completed. Plants had emerged on 94% of the acreage and were in fair to good condition. The crop responded well to warmer temperatures. The final fertilization was underway along the Texas coast.

Peanut planting was finished in the Southeast. The Texas crop was only 40% planted, well behind the average of 61% due to delays caused by the weather. Planting was in full swing in the Cross Timbers area of the State.

Tobacco transplanting remained in full swing as weather allowed. Harvesting started in Georgia where 5% of the acreage was harvested, 3 points ahead of average. Growers in some areas cultivated and sidedressed the crop. Violent winds and hail damaged some of the South Carolina crop. However, the extent of the damage is not yet known.

FRUITS AND NUTS: The peach harvest became more widespread, reaching northward into North Carolina. Picking in Georgia was 37% completed. The California strawberry harvest continued active, with adequate movement to fresh market and processors. Michigan fruits were developing faster than average. Florida's citrus groves were in good condition and flushed with new growth.

(cont. on last page)

CROP PROGRESS

FOR WEEK ENDING JUNE 13

COTTON
% PLANTED

	1982	1981	AVG.
ALA	100	100	100
ARIZ	99	99	99
ARK	100	100	100
CALIF	100	100	NA
GA	99	100	100
LA	100	NA	NA
MISS	100	100	100
MO	100	100	100
N MEX	99	100	100
N C	100	100	100
OKLA	35	80	80
S C	100	100	100
TENN	100	100	100
TEX	91	93	92
14 STATES	92	NA	NA
EXCL. STATES WITH NA	91	95	94

COTTON
% SQUARING

	1982	1981	AVG.
ALA	0	35	8
ARIZ	55	56	48
ARK	15	4	NA
CALIF	0	7	NA
GA	34	59	47
LA	16	29	15
MISS	32	35	23
MO	0	0	0
N MEX	0	0	NA
N C	9	3	NA
OKLA	0	0	0
S C	31	47	NA
TENN	0	4	0
TEX	14	20	NA
14 STATES	15	20	NA
EXCL. STATES WITH NA	21	29	19

THESE 14 STATES PRODUCED 99% OF THE 1981 COTTON CROP.

NA - NOT AVAILABLE

CORN
% PLANTED

	1982	1981	AVG.
COLO	96	94	NA
GA	100	100	100
ILL	100	97	99
IND	100	75	100
IOWA	95	100	100
KANS	90	96	98
KY	99	87	94
MICH	100	99	99
MINN	97	99	99
MO	95	94	99
NEBR	98	100	100
N C	100	100	100
OHIO	100	80	93
PA	96	93	95
S DAK	85	100	98
VA	97	95	96
WIS	98	100	98
17 STATES	97	95	NA
EXCL. STATES WITH NA	97	95	99

THESE 17 STATES PRODUCED 93% OF THE 1981 CORN CROP.

RICE
% EMERGED

	1982	1981	AVG.
ARK	95	95	95
CALIF	79	90	NA
LA	99	NA	NA
MISS	97	99	97
TEX	99	100	NA
5 STATES	94	NA	NA
EXCL. STATES WITH NA	95	96	95

THESE 5 STATES PRODUCED 98% OF THE 1981 RICE CROP.

NA - NOT AVAILABLE

WINTER WHEAT
% HEADED

	1982	1981	AVG.
CALIF	100	100	NA
COLO	91	88	85
IDAHO	16	38	34
ILL	100	100	100
IND	100	100	100
KANS	100	100	99
MO	100	100	100
MONT	1	35	35
NEBR	98	100	98
OHIO	99	98	94
OKLA	100	100	100
OREG	88	95	NA
S DAK	62	92	79
TEX	99	100	NA
WASH	74	85	69
15 STATES	90	93	NA
EXCL. STATES WITH NA	88	92	90

THESE 15 STATES PRODUCED 88% OF THE 1981 WINTER WHEAT CROP.

SOYBEANS
% PLANTED

	1982	1981	AVG.
ALA	72	79	77
ARK	59	34	53
GA	70	70	76
ILL	90	75	91
IND	93	45	90
IOWA	75	99	98
KANS	15	45	65
KY	70	26	60
LA	78	77	78
MICH	95	90	90
MINN	92	99	98
MISS	74	65	70
MO	47	57	76
NEBR	65	98	95
N C	66	70	74
OHIO	100	44	82
S C	68	67	77
TENN	65	44	68
18 STATES	75	68	82

THESE 18 STATES PRODUCED 95% OF THE 1981 SOYBEAN CROP.

NA - NOT AVAILABLE

SPRING WHEAT
% EMERGED

	1982	1981	AVG.
IDAHO	100	100	99
MINN	94	99	97
MONT	85	100	95
N D	87	97	91
S DAK	100	100	100
5 STATES	91	98	95

THESE 5 STATES PRODUCED 92% OF THE 1981 SPRING WHEAT CROP.

SORGHUM
% PLANTED

	1982	1981	AVG.
COLO	55	56	73
KANS	30	50	65
MO	59	57	75
NEBR	60	96	95
OKLA	50	80	75
S DAK	47	84	82
TEX	89	94	92
7 STATES	60	76	81

THESE 7 STATES PRODUCED 92% OF THE 1981 SORGHUM CROP.

JUNE CROP PRODUCTION HIGHLIGHTS

WINTER WHEAT production is forecast at a record high 2.13 billion bushels, 2 percent above the previous record high production of 2.10 billion bushels set last year and 3 percent above last month's forecast. The 90 percent confidence interval for this 1982 production forecast is 1.91 to 2.35 billion bushels.

ORANGE production is forecast at 181 million boxes, down 3 percent from last month's forecast and 26 percent less than last season. Harvest is 89 percent complete.

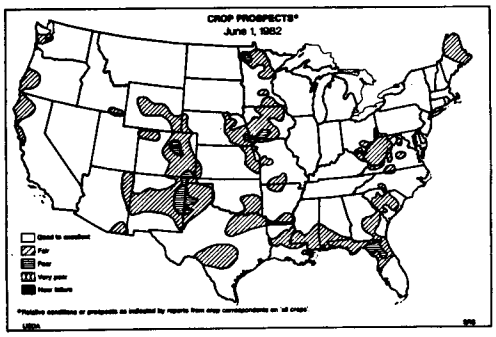
PEACH production in the U.S. is forecast at 2.12 billion pounds, 24 percent less than last season and 31 percent below the 1980 harvest. The California Clingstone peach crop is expected to total 1.02 billion pounds, 15 percent below last year and 32 percent less than 1980.

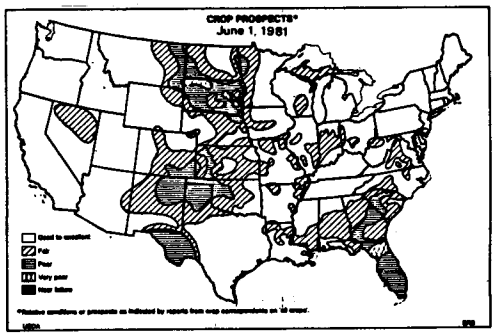
BARTLETT PEAR production in the three Pacific Coast States is forecast at 492 thousand tons, down 17 percent from the 1981 crop and 19 percent below 1980.

SWEET CHERRY production in the six Western States is expected to total 109 thousand tons, 15 percent less than last year and 20 percent below the 1980 crop.

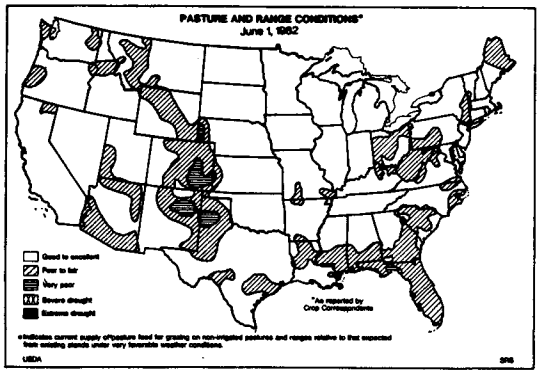
SPRING POTATO production is forecast at 20.2 million cwt, down 3 percent from both the May 1 forecast and the 1981 output.

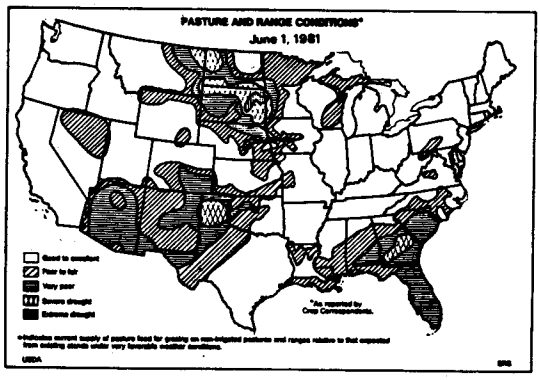
PASTURE AND RANGE FEED condition as of June 1 averaged 87 percent, 7 points more than June 1 a year ago and 5 points above the 1971-80 average for the date.





PASTURE AND RANGE FEED: The June 1 pasture and range feed condition for the 48 contiguous States was 87 percent, 7 points more than a year ago and 5 points above the 1971-80 average for the date. Conditions were less favorable than a year earlier in 25 States, better in 22 States and equal to last year in 1 State. Compared with last month, conditions improved in 26 States, remained the same in 7, and declined in 15 States. Ranges and pastures developed slowly in the Rocky Mountains from Montana to New Mexico, due to continued cool temperatures. Conditions were generally poor to fair in the higher elevations. Widespread showers improved conditions east to the Mississippi River, with pastures in mostly good to excellent condition. Dry conditions in the southeast during early May caused a decline in pasture conditions from a month earlier, but scattered showers late in the month resulted in improved growth. In most other areas of the Nation, ample soil moisture and warmer temperatures encouraged excellent growth, and pasture were in good to excellent condition.





State Summaries of Weather and Agriculture

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

ALABAMA: Temperatures averaged below normal in northern half and above normal in southern half. Rainfall varied from less than 1.00 in. to near 2.00 in.

Soil moisture adequate north, short south. Fieldwork: 5.1 days. Corn silked 48%, 49% 1981, 24% average. Sorghum planted 63%, 75% 1981, 62% average. Soybeans planted 72%, 79% 1981, 77% average. Wheat harvested 38%, 60% 1981, 50% average. Hay harvested 48%. Conditions: Cotton, peanuts, wheat, livestock, pastures good, corn and sorghum fair to good. Activities: Planting sorghum and soybeans, cultivating field crops, controlling pests on fruit, vegetables, and crops; harvesting hay, wheat, peaches and early vegetables.

ALASKA: Generally fair weather with scattered areas of rain and isolated thundershowers late in the week. Daytime highs were near normal with nighttime lows above normal. Precipitation was light except in areas with amounts from 0.25 to 0.50 in. Seasonal totals remain generally below normal.

Farmers had 6 to 7 days of fieldwork under partly cloudy skies with intermittent showers. Small grain had good emergence. Potato and vegetable growth was slower than average. Wind had dried topsoil in some areas but generally adequate moisture in other areas. Subsoil moisture was adequate. Livestock in good condition.

ARIZONA: Weather sunny and dry. Windy conditions common in afternoons especially over central, northern sections. Average temperatures 10° below normal to 3° above.

Very little cotton left to be planted. Squaring in progress in 55% of cotton fields, just behind last year's 56%. Flowering, boll setting limited. Barley harvest winding down. Wheat combining at peak all areas except, southeast where harvest just began. Corn making good progress. Sorghum making seasonal progress. Sugarbeet harvest complete Yuma area, over halfway point central area. Safflower in full bloom. Guar planting very active. Alfalfa baling seasonal. Lettuce harvest finished. Dry onion bagging in progress. Limited harvest of carrots, green onions continued. Digging table stock potatoes will finish 18th. Manufacturing potatoes will go through end of June. Grape, plum harvest very active. Shipping of cantaloupes, honeydews, watermelons full swing western area. Valencia harvest should wind up by 18th. Grapefruit picked on demand. Citrus groves good condition, new crop developing satisfactorily. Ranges mostly good condition northern part State, southeastern ranges fair while central, southwestern ranges poor. Livestock fair to good condition. Soil moisture short, stock water short to adequate, drying continuing as temperatures increase.

ARKANSAS: Warm, wet week. Highest temperature 97°, lowest 49°. All departures from normal ranged from -4 to +2°. Most rainfall 3.13 in., least 0.26 in.

Five days available for fieldwork. Soil moisture adequate, but short southeast. Crop growth moderate. All crops in good condition. Soybeans planted 59%, 34% 1981, 53% average; emerged 48%, 27% 1981. Rice planted 98%, 97% 1981, 96% average; emerged 95%, also 1981 and average. Cotton squaring 15%, 4% 1981. Wheat harvest active, 49%, 33% 1981, 37% average. Oat harvest 60%, 63% 1981, 51% average. Sorghum planted 97%, 95% 1981, 89% average. Good pastures. Livestock good condition. Peach, blueberry and tomato harvests underway.

CALIFORNIA: All areas 2 to 4° below normal. Only precipitation was reported at Alturas. A continuation of last week. Only San Diego reported above normal temperatures. Much warmer temperatures expected next week (of the 18th). Lower than normal temperatures keeps retarding cotton growth. Thinning, cultivating, fertilizing, and irrigating of cotton fields remains active. Rice planting nearing completion with 97% planted, 100 last year.

Rice emerged 79%, 90% last year. Application of shrimp and weed remains active. Most small grains in final maturity stages. Wheat, barley and oats harvest picking up in San Joaquin Valley. Blackeye bean planting active as double crop field were being prepared. Corn, dry beans, and sugarbeets showing good growth. Corn and milo planting active in San Joaquin Valley. Royal apricots moving. Hass avocados continue to market. Sweet cherry packing finishing. Caprification in Calimyrna figs underway. Perlette grapes peaking. May Grand nectarines moving well. Gemfree, Royal May Freestone peaches picked. Red Beaut plums finishing; Santa Rosas beginning. Weak quality southern lemons to market. Good almond and walnut growth noted. Cool nights slowed vegetable development north half of State. Artichoke production light. Asparagus volume heavy to processing. Broccoli fairly heavy supply. Planting brussels sprouts. Bushberry harvest active. Cantaloup harvest increasing Palo Verde Valley, active Imperial Valley. Carrot volume decreasing Desert, increasing slowly San Joaquin, Salinas Valleys. Cauliflower fairly light volume central coast. Celery harvest started central coast, decreasing south coast. Sweet corn harvest decreasing Desert. Lettuce fairly heavy volume central coast, wide ranges sizes and quality. Onion harvest slow. Spring potato movement continues well below last year. Fall potato movement moderate. New crop potatoes light frost damage Tulelake. Strawberry movement adequate to fresh, processing. Market tomato harvest active Desert, increasing south coast. Processing tomato harvest very light Desert. Movement livestock to market, summer pastures tapering off. Lower elevation ranges dry, fire danger increasing. Cool temperatures higher elevations slowing grass growth.

COLORADO: Scattered thunderstorms with marble size hail moved across east on 10th. The 12th brought more wide-spread activity with hail the size of tennis balls at Colorado Springs and smaller hail across the Arkansas Basin. Very little precipitation in the San Luis Valley and west of the Continental Divide. Temperatures were mostly 1 to 3° below normal.

Prospects for most crops improving as recent moisture has offsett the dry conditions earlier in season. Seeding of spring grains virtually complete. Barley, 97% emerged and 19% headed. Sugarbeets, 47% thinned and dry beans 73% planted. Fall potatoes nearly all planted and 47% emerged. Corn doing well with 96% planted and 89% emerged with an average height of 4 in. Sorghum in fair condition with 55% planted and 47% emerged. Winter wheat crop in fair to good condition with 96% jointed, 91% emerged, and 11% turning color. Subsoil and topsoil moisture levels rated as short to adequate. Five and one-half days were suitable for fieldwork. Livestock in good condition.

FLORIDA: Skies remained sunny under high pressure with temperatures in the 90's. The only temporary break came 11th and 12th with a very weak cold front into central area. It did trigger a few thunderstorms but then reformed in southern Georgia late 13th.

Soil moisture mostly adequate south, adequate to short central areas, mostly short north and west. Corn good condition except in dry areas where conditions declining rapidly. Tobacco, hay harvest active. Peanuts, sugarcane, early planted soybeans fair to good condition. Soybean planting being delayed by dry conditions. Small grain harvest practically complete. Pastures in good condition south, mostly poor to fair north central thru Panhandle. Cattle in good condition in southern areas but only fair elsewhere. Citrus trees in good condition and flushed with new growth. Soil moisture sufficent. Harvest of all fruit types close to completion. Hot, dry weather prevailed in vegetable areas. Skies mostly clear with minimum rainfall. Winds light. Harvest essentially complete in central, southern areas. Lettuce harvest over. Volume increased watermelons. Volume about steady eggplant. Volume declined all other vegetables. Watermelon harvest at peak level.

GEORGIA: Rain on 4th and 10th with mainly mountains and south getting significant amounts. Over 1.00 in. south. Temperatures near normal. Averages ranged from upper 60's mountains to lows 80's southeast. Weather on 12th and 13th partly cloudy and hot with scattered showers and thunderstorms. Rainfall amounts averaged 0.50 in. or more.

Soil moisture 13% very short, 45% short, 41% adequate, southwest quarter driest. Six days suitable for fieldwork. Small grain and hay harvest very active, planting also. Corn 37% fair, 55% good, 64% silked, last year 66%, 24% dough stage equal last year. Cotton 39% fair, 56% good, 34% squaring, last year 59%, average 47%, 3% setting bolls, last year 4%, average 5%. Sorghum 68% planted, last year 65%, average 60%. Peanuts 37% fair, 53% good, 41% blooming, 46% last year, 48% average, 10% pegging, last year and average 16%. Soybeans 38% fair, 58% good, 70% planted, same as last year, average 76%. Tobacco 40% fair, 52% good, 5% harvested, 3% last year, 2% average. Wheat 57% fair, 34% good, 65% harvested, 68% last year, 63% average. Watermelons 41% fair, 56% good, 4% harvested, 6% last year, 3% average. Peaches 37% harvested, 24% last year, 29% average. Hay crops 33% fair, 64% good. Pastures 30% fair, 66% good. Cattle fair to mostly good and hogs good.

HAWAII: Weather warm and humid. Few isolated heavy downpours. Minor floodings lowland areas. No serious crop damage. Most major crop sections dry. Frequent irrigation necessary. Crop condition fair to good. Vegetables: Supplies adequate. Ginger root plantings, normally completed by May but delayed because of wet conditions, now underway. Bananas: Supplies light. Papayas: Phytophthora still prevalent in older orchards. Production light. Pineapples: Harvesting heavier. Should be peaking late June or early July. Sugar: Harvesting very active. Pastures: Generally fair to good.

IDAHO: Temperatures averaged near normal in the north to 8° subnormal in southern valleys. Range: 26° at McCall and Silver City to 92° in several areas of south. Rainfall 0.10 to 0.40 in. below normal. Most precipitation at Rexburg with 1.40 in.

Potatoes all planted, 93% in 1981 and 96% average. Potatoes emerged 55%; same as 1981 and 65% average. Dry bean planting at 84%, 74% in 1981. Dry bean emergence at 25%; 66% last year. Dry peas all seeded. Field corn 90% planted. Sugarbeet thinning 75% completed; 90% in 1981. Winter wheat 16% headed; 55% in boot; 27% in joint. Last year, 38% headed; 38% in boot; 24% in joint. Average for headed 34%. Slight amount of spring wheat and barley headed. Almost 90% of both at most in joint. Last year, 60% of spring barley in pre-joint or joint. Isolated calving problems. Some ranges drying.

ILLINOIS: Temperatures 0 to 5° below normal. Precipitation light in the north and heavy in the south, 0.01 to 1.70 in.

Winter wheat 3% excellent, 65% good, 29% fair, and 3% poor; 100% of the crop headed, 65% turning yellow, 2% ripe. Corn planting 100%, 97% 1981, 99% average. Corn 9% excellent, 72% good, 18% fair, and 1% poor. Soybeans planting 90%, 75%

1981, 91% average. Soybeans 4% excellent, 64% good, 31% fair, and 1% poor. Alfalfa 66% of the first crop was cut, red clover 45% of the crop was cut. Oats 45% of the crop was headed, 15% filled. Pastures 21% excellent, 66% good, and 13% fair. Soil moisture 6% short, 53% adequate, 41% surplus.

INDIANA: Some torandos in southwest. No deaths. Near normal temperatures ranged from 36 to 87°. Rainfall 0.90 in. southwest and southeast diminishing to 0.20 in. in northwest. Sunshine 42% of possible in southwest to 74% in northeast.

Fieldwork averaged 3 days. Topsoil and subsoil moistue mostly adequate to surplus. Soybeans 93% planted, 1981 45%, average 90%. Soybeans 87% emerged, 1981 45%, average 80%. Soybean height 5 in., 1981 1 in., average 3 in. Corn 100% planted, 1981 75%, average 100%. Corn 19 in. tall, 1981 8 in., average 12 in. Wheat condition fair to good. Wheat 100% headed, 1981 100%, average 100%. Wheat 30% turning color, 1981 30%, average 35%. Oats 35% headed, 1981 50%, average 50%. Alfalfa hay 60% cut first time, 1981 45%, average 75%. Clover hay 45% cut, 1981 35%, average 55%. Tobacco plants 50% set, 1981 55%, average 65%. Pastures good.

IOWA: A cool, dry week excepting moderate showers over southwest and south central. Temperatures as low as 41° the 10th at Corning.

Topsoil moisture: 49% surplus, 51% adequate. Subsoil moisture: 48% surplus, 52% adequate. Corn acreage planted: 95% complete, last year 100%, normal 100%. Corn acreage emerged: 80%, last year 99%, normal 99%. Soybean acreage planted: 75% complete, last year 99%, normal 98%. Soybean acreage emerged: 35%, last year 91%, normal 89%. Oat acreage headed: 30%, last year 79%, normal 53%. First crop alfalfa hay harvested: 35%, last year 84%, normal 72%. First crop clover harvested: 15%, last year 41%, normal 43%. Fieldwork: 4.6 days suitable. Crop conditions: Corn and soybeans, fair to good; pasture, wheat, oats and hay mostly good. Livestock in good condition.

KANSAS: Rains averaged 0.06 in. southwest to 2.70 in. northeast. Local heavy rains of over 5.00 in. northeast night of 8th, 9th, caused serious small stream flooding. Temperatures averaged 65° northwest to 70° southeast, 2 to 5° below normal.

Wheat 100% headed, 100% last year, 99% average; 50% turning, 75% last year, 55% average. Wheat condition good to excellent western two-thirds, fair eastern third due to excessive moisture. Little or no planting progress eastern third. Corn 90% planted, 96% last year, 98% average. Sorghum 30% planted, 50% last year, 65% average. Soybeans 15% planted, 45% last year, 65% average. Alfalfa hay first cutting 60% complete, 90% last year and average; second cutting 2% complete, 10% last year, 5% average. Pasture and ranges continue good to excellent. Soil moisture short to adequate southwest, adequate remainder of west, adequate to surplus central, surplus east. Fieldwork: 2.5 days suitable.

KENTUCKY: Frequent thunderstorms with some producing heavy rains and scattered report of hail and high winds. Precipitation totals varied as some storms moved over same areas several times and other areas remained rain free. Some locations received almost no rain while other locations received up to 3.00 in. Warm and humid air dominated first half of week with temperatures above normal. Cold frort moved in 10th and 11th resulting in clear skies and cooling temperatures.

Soil moisture 38% surplus, 57% adequate, 5% short. Fieldwork: 3.5 days suitable. Burley tobacco 82% set, last year 75%, average 73%. Dark tobaccos 88% set. Set plants in mostly good condition. Some resetting necessary due to insects, disease and early set in dry fields. Corn 99% planted, last year 87%, average 94%. Corn in mostly good condition, average height 20 in. Soybeans 70% planted, last year 26%, average 60%. Planting of double crop soybeans beginning as small grains harvested. Small grain harvest slowed by rain. Barley 20% harvested. Wheat harvest started. Pastures good to excellent condition.

LOUISIANA: Rainfall: Scattered showers, generally 0.50 to 1.50 in. Temperatures: Normal to 2° above.

Soil moisture very short to short prior to scattered showers over weekend. Days suitable: 6.3. Corn silked 75%, 67% 1981, 56% average; dough 24%, 36% 1981; condition fair. Cotton planted 100%, squaring 16%, 29% 1981, 15% average; condition fair to good. Rice emerged 99%; heading 6%, 8% 1981; condition fair to good. Sorghum planted 92%, 84% 1981, 81% average; emerged 88%, 80% 1981, 74% average; headed 12%, 13% 1981; condition fair. Soybeans planted 78% 1982 and average, 77% 1981; emerged 70%, 71% 1981, 68% average; condition fair to good. Sweetpotatoes transplanted 90% 1982 and 1981, 86% average; condition fair to good. Wheat harvested 93%, 82% 1981, 85% average. Sugarcane condition fair to good. Pecans rated fair to good. Peaches harvested 24%, 25% 1981. Hay first cutting 83%, 75% 1981. Vegetables rated fair to good. Pasture and livestock rated fair to good.

MARYLAND AND DELAWARE: Temperatures 6° below normal. Highs low to mid 70's, low's upper 50's. Rainfall average 1.18 in. Weekend temperatures in mid 60's. Rainfall from 1.00 to 2.50 in.

Fieldwork interrupted by rains. Maryland: 3 days for fieldwork. Soybeans planted 55%, last year 70%, average 60%. Alfalfa cut 65%, last year 70%. Other hays 35% harvested; last year 40%. Tobacco plantings 55%, last year 75%, average 60%. Barley harvest began, last year 10% harvested, 85% turned. Wheat 20% turned. Rye 85% turned. Last years amounts: 100%, 70%, 75%, respectively. Delaware: 5 days suitable. Soybeans planted 80%, last year 75%, average 60%. Hays cut: Alfalfa 85%, last year 90%. Other hays 55%, last year 85%. Barley harvest underway, last year 5%. Acreage turned color: barley 100%, wheat 30%; rye 30%. Last year, 75%; 65%; 30%. Soil moisture supplies adequate to surplus. Additional problems caused by rains. Grain lodging, weeds in corn, delayed vegetable maturation.

MICHIGAN: Week was cool and dry. Temperatures averaged 1 to 4° below normal in most of the State, normal in the northern division of the lower Peninsula. Precipitation ranged from 1.50 in. in the central lower to 0.50 in. or greater in the northeast lower and the entire upper Peninsula. Amounts of 0.25 in. or less for the rest of the State.

Cool temperatures slowed progress of crops. Statewide, 5.5 days suitable for fieldwork. Soybeans near completion with 95% seeded, 90% last year and average. Side-dressing and weed control now the major corn activity. Dry bean planting 55% complete, 65% last year and 62% average. Winter wheat 80% headed, last year 60% and 76% average. Oats 10% headed last year and average. Fruits developing ahead of normal. Vegetable crops recovering from recent cool wet weather. Strawberry picking started with 10% harvested. Asparagus harvest nearing completion.

MINNESOTA: Temperatures were from the low 50's to the low 60's and were generally from 3 to 8° below normal. Highest reported temperatures was 83° at Becker and Hutchinson while the coolest was 35° at Fosston and Itasca. Rainfall was above normal north and generally below normal central and south. The northwest and north central average was 1.34 and 1.07 ins. respectively while the east central and southeast averaged 0.15 and 0.12 in. respectively.

Crop growth and development made slow progress. Weather cool but dry which allowed planting to make very good progress. Majority of State continue to dry from May rain. Only north hampered by rain middle of week. Topsoil moisture 14% short, 72% adequate, and 14% surplus. Planted: Soybeans 92%, 1981 99%, normal 98%; sunflowers 90%, 1981 99%, normal 96%; potatoes 95%, 1981 98%, normal 96%; dry beans 92%. Emerged: Field corn 91%, 1981 99%, normal 96%; soybeans 60%, 1981 86%, normal 86%; spring wheat 94%, 1981 99%, normal 97%; oats 97%, 1981 99%, normal 98%; barley 94%, 1981 99%, normal 96%. Jointing: Spring wheat 30%, 1981 72%, normal 48%; oats 32%, 1981 78%, normal 52%; barley 26%, 1981 73%, normal 49%. First crop cut: alfalfa hay 42%, 1981 31%, normal 40%.

MISSISSIPPI: Temperatures slightly above normal. Extremes: 51° and 99°. Showers and thunderstorms late in week with heaviest amounts in the central area.

Soil moisture adequate north with range of adequate to very short remainder of State. Fieldwork: 6.0 days suitable. Wheat harvest, soybean planting and cotton insect control measures were main farm activities. Cotton all planted and up to stand; 32% squaring, 35% last year, 23% average; condition good to fair. Rice 97% to stand, 99% last year, 97% average; condition good to fair. Soybeans 74% planted, 65% last year, 70% average; 50% to stand, 50% last year; condition fair to good. Corn 21% silked, 38% last year. Sorghum 85% planted; sweetpotatoes 81% planted. Winter wheat 65% harvested; hay 43%; peaches 17%. Pastures fair to good condition.

MISSOURI: Heavy rains continued producing widespread flooding, especially in northern areas. Rainfall averaged from 3.00 to 4.00 in. in the north and 0.50 to 1.50 in. in the south. Locally heavy amounts of up to 5.00 in. were also present. Temperatures averaged from 2 to 5° below normal.

Fieldwork: 1.3 days suitable. Grain sorghum 59% planted, last year 57%, normal 75%. Soybeans 47% planted, last year 57%, normal 76%. Wheat 60% coloring, last year 90%, normal 69%. Wheat 5% harvested, last year 7%, normal 13%. Alfalfa hay-1st cutting 42% harvested, last year 86%, normal 78%. Condition of winter wheat fair to good. Condition of pastures mostly good. Topsoil moisture supply mostly surplus.

MONTANA: Rainfall from 1.00 to 3.00 in. over southwest, south central, southeast and northeast early in week. Elsewhere rain was light. Temperatures ranged from normal west to 6° below normal southeast. Freezing temperatures confined mostly to southwest.

Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 3. Rain and cool weather continue to slow fieldwork and crop progress. Winter wheat condition fair to good, 1% headed--normally 35%. Spring planted cereal grains 90 to 95% planted, corn and dry beans 85%, potatoes 90%. Percent emerged: Spring wheat 85, 100, 95; barley 85, 100, 95. Condition of spring wheat, barley and oats good, sugarbeets fair to good. Rate of growth hay and ranges slow to average. Livestock 85% moved to summer ranges.

NEBRASKA: Precipitation: Light amounts due to scattered thunderstorms. Heaviest accumulations of 0.50 in. were over east central and southeast. Temperatures: 3 to 6° below normal.

Corn planting 98% complete, 100% last year and normal. Emerged 60%, 95% last year and normal. Sorghum 60% planted, 96% last year, 95% normal. Emerged 15%, 80% last year and 85% normal. Soybeans 65% planted, 98% last year and 95% normal. Emerged 15%, 85% last year and normal. Wheat fair to good. Various disease problems becoming evident. Headed 98%, 100% last year and 98% normal. Turning color 5%, 45% last year and 15% normal. Alfalfa mostly good to excellent. Harvested 35%, behind 85% last year and 75% normal. Pasture and range feed supplies adequate. Feedlots had begun to dry out. High winds in western counties damaged early planted corn and sugarbeet stands. Topsoil moisture adequate. Subsoil moisture mostly adequate to surplus. Days suitable for fieldwork 5.8.

NEVADA: Week began cool and damp but ended warm and dry. Temperatures warmed steadily midweek under mostly sunny skies. Scattered showers occurred beginning and end of week northern areas. Gusty afternoon winds reported entire State. Temperature extremes ranged from 22 to 100°.

Most spring planted crops emerged except at high elevations. Second cuttings alfalfa hay well along extreme south. None elsewhere. Gusty winds tended to deplete topsoil moistue supplies. Movement cattle and sheep to spring and summer ranges slower than year earlier.

NEW ENGLAND: Temperatures averaged 4 to 7° below normal south and coastal sections, near to 4° above normal northern interior. Warmest days 10th and 11th with many interior readings 80+. Lowest overnight reading was 43 at St. Johnsbury, VT. on the 10th and Houlton, ME. on the 11th. Precipitation least amounts again over northern Maine; most, southern New England. Readings were mostly in excess 0.20 in. a few 1.00 in. or more. Windsor Locks, CT. had 1.69 in. for the week.

Soil moisture: mostly adequate. About 3 days favorable for fieldwork. Grazing adequate. Cranberries: Growth slowed, pink stage, open blossoms in about one week. Good control of gypsy moth. Apples, fruit set less than 1 in. Corn for silage 95% planted. Hay: Some loss of quality of rained-on hay, lodging, 22% harvested. Potatoes: Maine planting virtually complete, about 20% emerged, dry. Blueberries, dry. Strawberries, good prospects.

NEW JERSEY: Temperatures averaged 8° below normal. Extremes: 42° at Toms River on 9th 85° at Flemington on 10th. Rainfall averaged 1.83 in. north, 2.29 in. central and 1.81 in. south. Heaviest 24 hour total 2.83 in. at Long Branch on 12th and 13th. Estimated soil moisture, in percent of field capacity averaged: 92 north, 83 central and 74 south. Four inch soil temperature averaged: 60 north, 62 central and 62 south.

Fieldwork: 3.9 days suitable. Wet weather interrupting planting and harvesting schedules. Vegetable harvest increasing. June drop in progress on peaches. Wet conditions hurting strawberry production. Blueberry harvest should begin this week. Barley combining and hay making delayed by rain. Pasture growth good.

NEW MEXICO: Average temperatures were a few degrees below normal in most areas of the State.

Rainfall interrupted outside activities on the eastside of the State and in the central mountains. Other areas remained warm, clear, and conducive for outdoor work. Soil moisture in a short to adequate supply. Most cotton fields in good condition, however, growth has been slowed due to cool nighttime temperatures. Alfalfa hay fields in good condition. Harvest conditions have remained good in most areas. Irrigated wheat and barley in good condition and the dryland crop in poor condition. Grain harvest just getting underway. Grain sorghum planting continuing. Corn fields making good progress. Peanut planting nearing completion. Onion harvest remains active. Pecans progressing normally. Ranges continue to fair condition. Most areas still in need of good rain. Cattle and sheep in good condition. Cotton planted 99%, 100% 1981, 100% average.

NEW YORK: Temperatures below normal. Heavy early week rains slowed fieldwork. Rain on Long Island especially heavy.

Corn planting 93% complete, 95% 1981, 93% average. Moisture, cool temperatures slowed growth. First cut alfalfa 10% done, 7% 1981, 17% average. Clover-timothy 7% done, 5% 1981, 10% average. Grass silage 16% cut, 9% 1981, 21% average. Dry bean planting progress slow. Western counties sweet corn, tomatoes 95% planted. Cabbage 50% planted. Long Island fieldwork halted, many fields flooded.

NORTH CAROLINA: Temperatures: 2 to 4° below normal. Precipitation: Near 0 at some locations on the coast to 3.28 in. at Raleigh-Durham.

Fieldwork: 3.3 days suitable. Soil moisture: 2% short, 47% adequate, and 51% surplus. Conditions: Pasture mostly good; field tobacco fair to good; corn, cotton, and peanuts mostly good; soybeans, hay, and Irish potatoes fair to mostly good. Plantings: Sweetpotatoes 78%, 1981 79%, 79% average; sorghum 72%, 1981 83%, 75% average; soybeans 66%, 1981 70%, 74% average; burley tobacco 97%, 1981 94%, 85% average. Harvests: Irish potatoes 10%, 1981 12%, 13% average; wheat 20%, 1981 27%, 23% average; oats 26%, 1981 40%, 33% average; barley 38%, 1981 40%, 38% average; rye 15%, 1981 45%, 33% average; hay 47%, 1981 45%, 47% average. Phenological stages: Cotton squaring 9%, 1981 3%; corn silked 1%, 1981 2%. Major farm activities: Small grain harvest, soybean planting, and cultivation of tobacco.

NORTH DAKOTA: Cool, wet weather prevailed. Temperatures averaged 2 to 8° below normal. Averages ranged from 52° north central to 57° northwest, east central, south central and southeast. Extremes: 83° west central, 32° northeast. Precipitation averaged from 0.16 in. above normal southeast to 1.64 in. above normal central. Averages from 1.07 in. southeast to 2.50 in. central.

Final completion of small grain seeding and row crop planting was held up last week with rains received across State. Small grains 98% or more seeded. Southwest and south central districts have the most acreage remaining. Row crop planting behind average with potatoes and soybeans virtually complete. Sunflower planting 84% done, about 4 days behind average pace. Average of 4.6 days suitable for fieldwork. Excellent moisture conditions continue with five consecutive weeks of adequate to surplus moisture. As of 13th, 95% of the State with adequate topsoil moisture, 5% surplus. Last year, 13% short or very short, 73 adequate and 14 surplus. Average 39% short or very short, 58 adequate and 3 surplus. Percentages planted through 13th along with last year and average: Hard red spring wheat 98, 99, 99; durum 99, 99, 98; barley 99, 98, 98; oats 98, 99, 99; sunflower 84, 91, 91; flax 82, 89, 86; corn 87, 93, 93; and dry beans 98, 96, 97.

OHIO: Cool, with high temperatures averaging as much as 6° below normal. Highs averaged in mid to upper 70's. Lows averaged in the 50's. Soil temperatures, 4 in. under bare ground, averaged in the upper 60's to around 70°. Growing degree accumulations from 7 to as much as 25 below normal; seven day totals ranged from 94 to 130. Rain from 0.25 to 0.75 in. below normal. Few stations reported less than 0.10 in. although 0.25 to 0.75 in. common.

Crops rated mostly fair except corn good. Corn development averaged 8 to 10 leaves emerged. Warmer, drier weather helped crops grow better. Few localities have standing water in fields from heavy thunderstorms. Wheat headed 99%, 98% 1981, 94% average. Corn planted 100%, 80% 1981, 93% average. Soybeans planted 100%, 44% 1981, 82% average. Oats headed 30%, 24% 1981, 28% average. Alfalfa (first cut) 60%, 30% 1981, 50% average. Other hay (first cut) 35%, 14% 1981, 39% average. Tobacco transplanted 55%, 40% 1981, 50% average. Days favorable: 3.5. Pasture condition fair. Soil moisture 65% adequate, 35% surplus.

OKLAHOMA: Rainfall ranged from 0.41 in. in the north central division to 1.96 in. in the southwest division. Temperatures averaged from 4° below normal in the Panhandle to 2° above normal in the northeast division.

Recent sunshine beneficial to wheat. Harvest underway in southwest. Wheat headed: 100%, 100% 1981, 100% average. Sorghum planted: 50%, 80% 1981, 75% average. Sorghum up to stand: 15%, 45% 1981, 40% average. Cotton planted: 35%, 80% 1981, 80% average. Days suitable for fieldwork: 3.8.

OREGON: Cool, wet weather at beginning, warm and dry by end of week. Precipitation 0.60 in. northern Cascades; 0.40 in. on coastal and in northeast. Less than 0.10 in. elsewhere. More light rains and cool temperatures through weekend.

Soil moisture mostly short in west, short to adequate in east. Winter wheat showing moisture stress; 88% headed; 95% last year. Barley turning color in a few fields. Haying continues; some damage from rain. Field corn and mint making rapid growth. Strawberry harvest continues; nonirrigated fields dry. Caneberries in various bloom stages. Apple and pears good shape; codling moth and cover sprays being applied. Cranberries blooming. Early potatoes have closed rows; late potatoes emerging. Green pea harvest to start this week. Cannery crops doing well, growth slowed by cool weather. Onions being sprayed. Livestock condition good. Range and pastures poor to excellent. High ranges look good. Spraying continues.

PENNSYLVANIA: Third consecutive week cooler than normal week Statewide with temperatures averaging 2 to 8° below normal. Widespread cloudiness and rain 7th and weekend kept temperatures in the 50's and 60's while midweek sunshine pushed maxima into the 70's and 80's and clear nights allowed cooling into the 40's and 50's. Extremes: 88 and 42°. Rainfall from practically none west and 0.30 in. extreme southeast to 1.00 to 2.50 in. lower Susquehanna Valley where fourth consecutive week of much above normal amounts. One-half in. common north.

Two days suitable. Moisture surplus to adequate. Activities: Spraying; making hay and haylage; transplanting tobacco; harvesting green peas and strawberries; repairing equipment; and planting corn and soybeans. Soybeans 77% planted, last year 67%. Corn planting virtually complete, last year 93%, and average virtually complete. Tobacco transplanting 70% complete, last year 69%. Barley 29% turning yellow, last year 27%. Wheat 83% headed and less than 5% turning yellow, last year 79% headed and less than 5% turning yellow. Oats 19% headed, last year 21%. First cut alfal-

fa 27% complete, last year 39%. First cut Clo-Tim 10% complete, last year 24%. Quality of hay made poor to fair. Feed from pastures average to above average.

PUERTO RICO: Island average rainfall 1.00 in. or 0.73 in. below normal. Highest total 6.68 in. Temperatures averaged about 82 to 80° on Coasts and 77 to 74° Interior Divisions. Extremes: 95 and 58°.

SOUTH CAROLINA: Northwest, central and northeast thunderstorm line hit with areas of destructive hail, especially in northeast; additional thunderstorms over the weekend were not particularly violent. Rainfall was much less generous in south. Temperatures averaged above normal in east but near seasonal values elsewhere.

Soil moisture adequate. Five working days. Corn good condition, some blown over. Acreage silked at 29%, behind 41 last year, 31 average. Cotton fair to good condition, hail destroyed some acreage, assessment incomplete; squaring at 31%, 47 year ago. Soybean planting following small grain harvested interrupted by rains, 68% planted, 67 year ago, 77 average; up to good stands and expected to recover from storm injury. Much tobacco riddled by hail, whipped by violent winds; conditions reported fair to good, but evaluation continuing; 20% topped, 18 in 1981. Peach harvest of early variety Coronets and Redhavens getting underway with excellent quality. Piedmont harvesting very few peaches. Peach condition continues fair with little percent damage due to storms. Tomato condition good, 11% harvested, 15% last year. Small grains generally in good condition; wheat, barley yields good; wheat 46% harvested, 60 year ago, 53 average.

SOUTH DAKOTA: Rainfall spotty. Heaviest in west, central and north central. Largest amount 2.45 in. Most received less than 1.00 in. Precipitation for the year below normal in extreme east, above normal elsewhere. Temperatures 3 to 8° below normal. Extremes: 87 and 36°.

Activities: Row crop planting, spraying, machinery maintenance, cutting first crop alfalfa. Topsoil moisture surplus in central region, adequate elsewhere. Small grains in good condition. Tan leaf spot still present. Range and pastures good to excellent. June 1 condition rating best since 1978. Flax planted 93%, 1981 94%, average 94%. Corn planted 85%, 1981 100%, average 98%. Sorghum planted 47%, 1981 84%, average 82%. Soybeans planted 71%, 1981 100%, average 94%. Sunflowers planted 58%, 1981 79%, average 79%. Winter wheat boot stage and beyond 88%, 1981 100%, average 97%. Winter rye boot stage and beyond 93%, 1981 100%, average 97%. Spring wheat boot stage and beyond 25%, 1981 82%, average 54%. Oats boot stage and beyond 40%, 1981 84%, average 61%. Barley boot stage and beyond 33%, 1981 84%, average 61%. Winter wheat heading 62%, 1981 92%, average 79%. Winter rye heading 84%, 1981 100%, average 88%. Flax emerged 74%, 1981 80%. Alfalfa acreage harvested once 15%, 1981 29%, average 31%.

TENNESSEE: Early in the week high pressure was the primary weather control. A cold front on the 10th and a low pressure center on the 12th brought scattered showers, a few thunderstorms and locally heavy rains across the State both days. Temperatures ranged from highs in the 80's to lows in the 60's and averaged 1° above normal in the west and 1° below normal in middle and east. Precipitation occurred in showers and thunderstorms over most of the State with amounts ranging between 0.09 to 2.48 in.

Fieldwork: 4.8 days suitable. Soil moisture 68% adequate, 25% short, 7% surplus. Soybeans 65% planted, 1981 44%, average 68%. Tobacco 95% transplanted, 1981 89%, average 87%. Wheat 97% turning color, 60% ripe, 13% harvested. Oats 95% turning color, 23% ripe, 7% harvested. Development of small grains lagging behind last year and average. Pastures in fair to good condition. Alfalfa hay, 2nd cutting, 32% complete. Livestock in good condition. Activities: Planting soybeans; setting tobacco; harvesting small grains; making hay.

TEXAS: Weather: Thunderstorms West Texas; brief, heavy rains along stationary front North, Central Texas 11th and 12th. Temperatures near normal. Precipitation well above normal High Plains, Trans-Pecos, North central Texas, Upper Coast. Below average elsewhere.

Crops: Dry, open weather provided ideal conditions most fieldwork. Planting operations active, small grain harvest good progress. Scattered showers late week interrupted field operations some areas; High Plains, several crops minor hail damage. South Texas hot, dry weather depleting soil moisture; additional rainfall be welcomed. Cotton maturing rapidly South Texas; many early fields blooming. Southern High Plains, stands seedling to four-leaf stage. Replanting complete many areas. Several fields replanted to soybeans or sunflowers. Some replanted stands Blacklands not emerged. Insect control measures active many areas. Preplant moisture excellent sorghum seeding operations. Stands maturing rapidly Blacklands; head development uneven because cool, wet weather early spring. Some stands South Texas dry. Harvest underway soon scattered areas Lower Valley. Condition across State was 85% of normal with 11% excellent; 69% good; 18% fair; and 2% poor. This compares with 94% of normal last year. Corn good progress across the State; water to milk stage Central Texas. Some stands Northern High Plains damaged hail. Despite excess moisture during spring, some fields Central Texas southward dry, need additional moisture. Statewide condition 90% of normal with 19% excellent; 68% good; and 13% fair. Condition last year was 91% of normal. Wheat harvest good progress with dry, open weather. Green wheat, weeds harvesting problems some areas. Blacklands heads immature, yields variable because rust, excess moisture. Fields rapidly turning color under warm, sunny weather. Reported condition across the States was 73% of normal with 5% excellent; 40% good; 52% fair; and 3% poor. This compares with 76% of normal last year. Rice responding well to hot weather; final fertilization operations underway along coast. Rice condition was 86% of normal with 85% good and 15% fair. This compares with 94% last year. Peanut planting full swing Cross Timbers, although seeding later than normal because weather delays. Preplant moisture good most areas. Soybean planting active; many fields Blacklands double cropped following wheat. Scattered across Panhandle, hailed-out cotton replanted to soybeans.

Commercial vegetables: Lower Rio Grande Valley, harvest bell peppers, watermelons, honeydews, tomatoes, cucumbers active. Citrus making good progress. Coastal Bend, vegetables making good progress with warm, sunny weather. San Antonio-Winter Garden, cantaloupe harvest slowed because small fruit. Cucumber, potato, onion harvest active. East Texas, disease problem some tomato fields. Watermelon stands scattered areas poor condition because planting delays. Trans-Pecos, onions good progress; harvest underway some areas. Plains, onions western portion Floyd County severe hail damage. Grano varieties, in pre-pack size, suffered most damage; Spanish onions less damage since just beginning to bulb. Some fields total loss. Deaf Smith County potatoes, onions making good growth. Peach har-

vest active; freestones being picked Gillespie County. Crop good quality, but bacterial spot problem Central, East Texas. Pecan producers spray casebearers. Webworms increasing Central Texas through Edwards Plateau.

Range and livestock: Ranges, pastures respond good moisture supplies and warm sunny weather. Despite heavy weed crop some areas, grazing conditions good; cattle gaining weight. Heavy grasshopper populations problem Low Plains to Cross Timbers. Trans-Pecos, some portions Edwards Plateau, ranges fair to good condition; moisture supplies depleted rapidly by hot, dry winds. Livestock good condition; supplemental feeding continues western counties.

Crop progress: Cotton planted 91%, 93% 1981, 92% average. Cotton squaring 14%, 20% 1981. Cotton setting bolls 6%, 13% 1981. Rice emerged 98%, 100% 1981. Rice headed 0%, 4% 1981. Sorghum planted 89%, 94% 1981, 92% average. Sorghum headed 45%, 48% 1981. Sorghum turning color 10%, 18% 1981. Sorghum mature 0%, 1% 1981. Wheat headed 99%, 100% 1981. Wheat turning color 84%, 93% 1981. Wheat harvested for grain 26%, 27% 1981, 25% average. Oats harvested 44%, 56% 1981, 59% average. Peanuts planted 40%, 60% 1981, 61% average. Soybeans planted 50%, 49% 1981, 63% average. Sunflowers planted 43%, 72% 1981, 67% average.

UTAH: Few isolated showers and thunderstorms forepart period and again over weekend. Accumulated amounts moisture generally light to moderate. Rising trend temperatures, but averages continue below normal ranging between 2 and 9° below. Pan evaporation variable ranging between 1.64 and 3.30 in.

Cool nighttime temperatures continue to delay crop progress, mostly two to three weeks behind normal. Six days available for fieldwork. Soil moisture short-to-adequate. Winter wheat 52% headed, 66% in boot. Barley 34% headed, 62% in boot. Spring wheat 56% jointed and oats 40%. Corn 94% planted, 78% emerged. Condition fair--need warm weather. First cutting alfalfa hay 32% harvested. Cattle and sheep movement to summer range in progress, 75% complete. Range feed condition fair. Cattle and sheep condition good.

VIRGINIA: Cloudy skies at beginning of period followed by rain during the remainder of period. Rainfall amounts averaged 1.00 to 1.50 in. Temperatures were 3 to 4° below normal. Highs were in the 80's and lows in the 50's.

Intermittent showers continue to delay hay making and reduce hay quality. Wet ground also slowing barley harvest and planting of double-cropped soybeans. Cereal leaf beetles moving into corn fields along with other insect pests. Some tobacco was cultivated and sidedressing applied. Topsoil moisture rated 43% adequate, 57% surplus. Days suitable for fieldwork: 2.7. Pastures and alfalfa fields rated excellent. Tobacco rated good to excellent. Flue-cured tobacco 98% transplanted, 99% 1981, 94% average. Burley 89% transplanted, 100% 1981, 74% average. Fire-cured tobacco 81% set, 96% 1981, 93% average. Sun-cured tobacco 91% set, 90% 1981, 80% average. Wet fields slowed small grain harvest. Barley 24% combined, 40% 1981, 20% average. Wheat 3% cut, 8% 1981, 4% average. Oats 6% harvested, 10% 1981, 6% average. Some vegetable and strawberry growers ready to harvest but wet fields causing delays. Potato growers also worried about damage. Livestock remain in good condition on abundant pastures.

WASHINGTON: Cool marine air kept maximum temperatures mild during the first half of the week. Significant precipitation was confined to the Cascades and northeast portions of the State, otherwise only light spotty rainshowers dotted much of areas through 8th. By 10th, an offshore flow had developed. High pressures brought dry warmer air to both sides of the Cascade range. The high weakened 13th allowing a weak marine layer to cool west some.

West: Field corn, potato, green pea, cauliflower, sweet corn, and broccoli planting continued. Harvest of lettuce, radishes, spinach, and strawberries progressed. Many fields without irrigation in need of added rainfall. Some green pea fields in bloom and raspberries and blueberries beginning to form fruit. Vegetable seed fields in good condition. Pasture feed supplies adequate. Livestock in good condition. Dairymen busy greenchopping and silage cutting.

East: Dryland soil moisture short forcing wheat and barley crop prospects down to average or below average. Cheatgrass infestation also heavy. Irrigated wheat and barley in average condition. Dry beans, potatoes, dry peas, field corn, sweet corn and other vegetables were planted. Planting of most spring crops virtually completed. First cutting alfalfa was also accomplished. The first harvesting of green peas and cherries began last week. Other activities include spraying for apple thinning, fall crop fertilization, and weed control. Livestock in good condition. Pasture feed supplies adequate. Winter wheat headed 74%, 1981 65%, average 69%.

WEST VIRGINIA: Temperatures averaged 2.5° below normal. High 86°, low 46°. Precipitation averaged below normal in northwest and above normal throughout the remainder of the State.

Soil moisture adequate to surplus. Days worked: 2.6. Main activities: hay harvesting and gardening. Wheat fair to good condition; 16% pre-headed, 81% headed, 3% ripe; 15%, 84% and 1% in 1981. Barley good to fair condition; 16% pre-headed, 73% headed, 11% ripe; 8%, 89%, and 3% in 1981. Oats fair to good condition: 85% pre-headed, 13% headed, 2% ripe; 71%, 26%, and 1% in 1981. Corn fair to good condition: 92% planted, 87% emerged; 96% and 89% in 1981. Tobacco fair to poor condition; 56% set, 39% in 1981. Hay fair condition: 1st cutting 22% complete, 11% in 1981. Pastures good to fair condition. Gardens good to fair condition. Peaches, poor condition. Apples, fair to good condition.

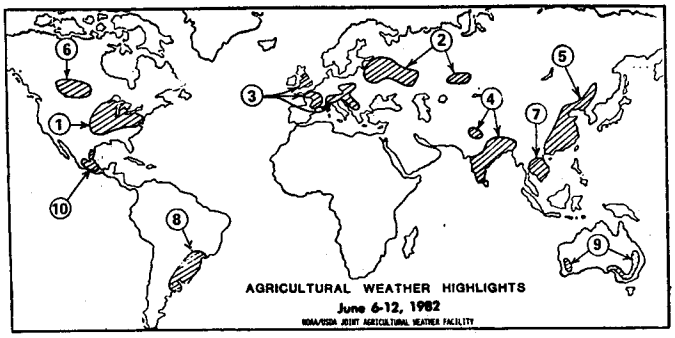
WISCONSIN: Temperatures averaged 3° below normal. Temperatures ranged from a high of 93° in Delavan on the 7th to a low of 37° in Madison on the 11th. Fair temperatures persisted. Scattered showers fell on the 9th. Precipitation totals were highly variable, but generally ranged from 0.10 to 0.70 in. A few stations in the north reported totals over 1.00 in. while many stations in the south received 0.10 in. or less.

Fieldwork: 6 days suitable. Ideal weather enabled farmers to make rapid progress with the first crop hay harvest. Currently 40% of the first crop harvested, 31% 1981, 22% average. Hay quaility appears to be very good. Pastures in good condition and rated at 91% of normal, 75% 1981, 85% average. Oats have not begun to head as of yet. Winter wheat heading in most areas. Corn planting winding down. Currently 98% of the intended corn acreage has been planted, 100% 1981, 98% average. Soybeans were planted during the week and currently planting 83% complete, 100% 1981, 90% average. Potatoes look very good. Topsoil moisture supplies were rated 35% short, 63% adequate and 2% surplus. Moisture supplies continue to be short in the northeast where they were rated 94% short.

(cont. on last page)

International Weather and Crop Summary

June 6-12



1. UNITED STATES: Diminishing rains and drying soils allow rapid planting in the western Corn Belt while wetness delays planting in parts of the central Plains. Cool weather over the northern half of the Nation slows crop development.

2. USSR: Unseasonably cold weather slows crop development in northern Europe; hot, dry weather continues in the central New Lands.

3. EUROPE: Timely rains required for favorable crop prospects in some areas.

4. SOUTH ASIA: Monsoon advances, while dry weather in winter grain areas favors late harvesting.

5. EASTERN ASIA: Beneficial rainfall over much of China, but too wet in the south and too dry in the Manchurian Valley.

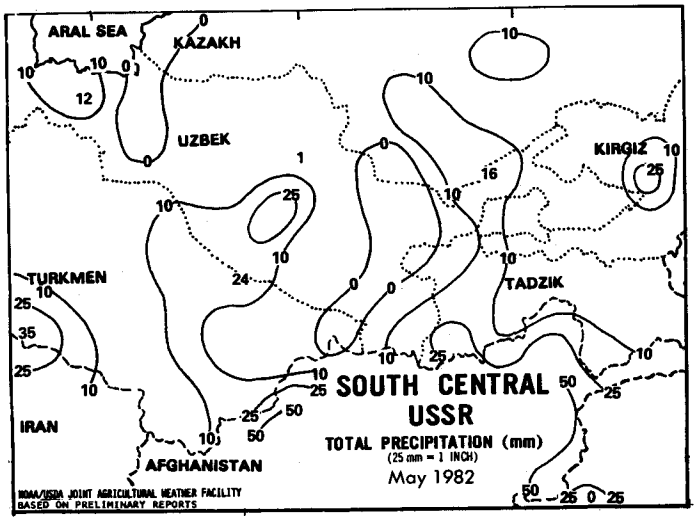
6. CANADA: Cool, showery weather slows crop development.

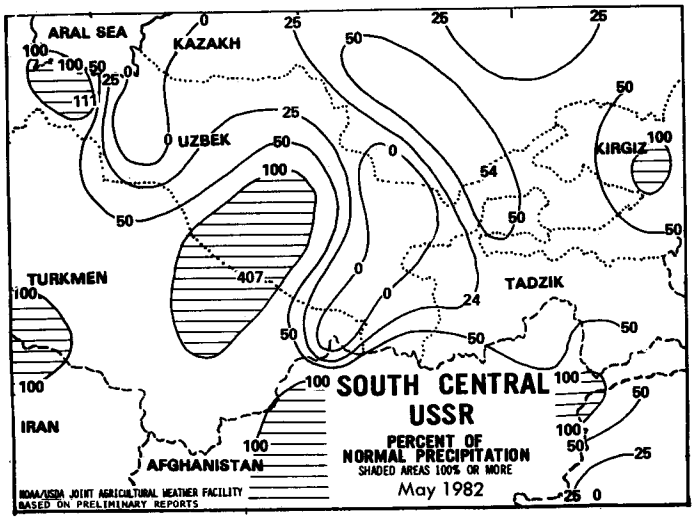
7. SOUTHEAST ASIA: Above-normal rainfall benefits most crop areas.

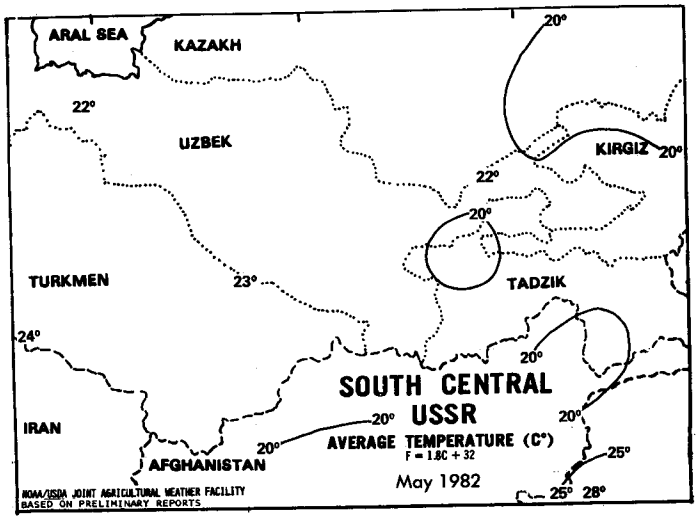
8. SOUTH AMERICA: Heavy rain improves soil moisture reserves in southern Brazil; light showers aid wheat in Argentina.

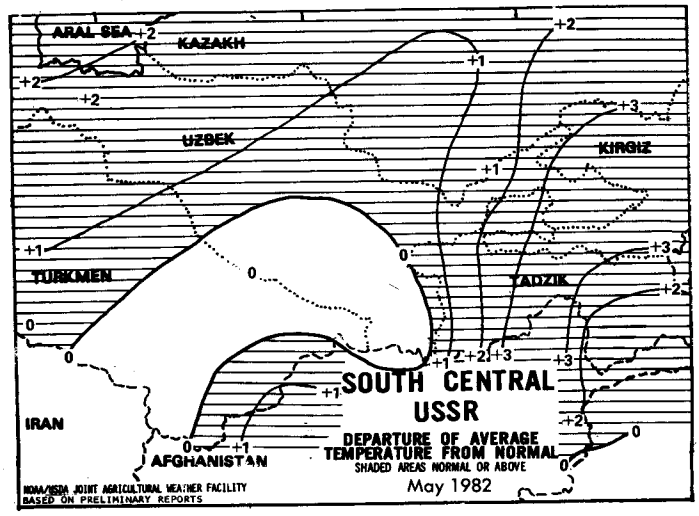
9. AUSTRALIA: Beneficial planting rains in West; still too dry in East.

stressing some immature crops but aiding harvest-

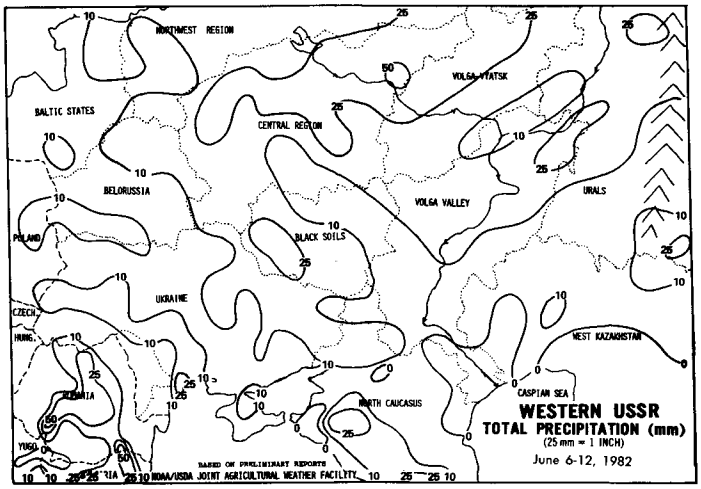


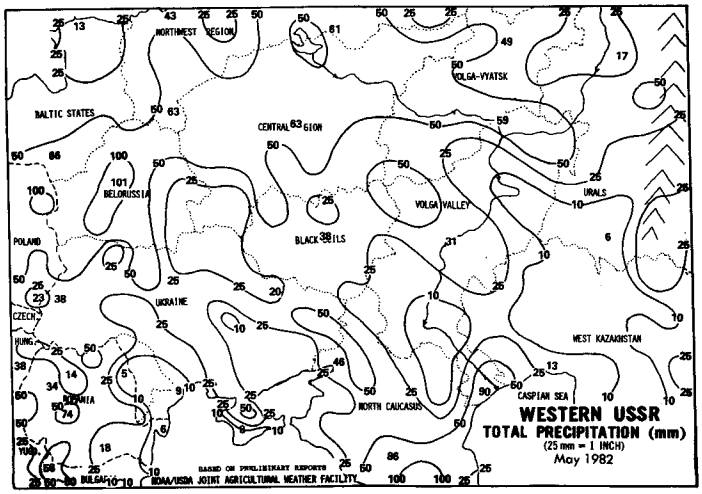


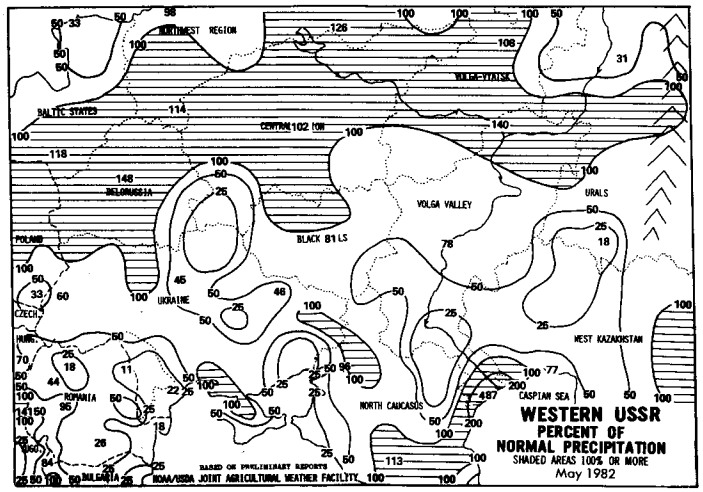


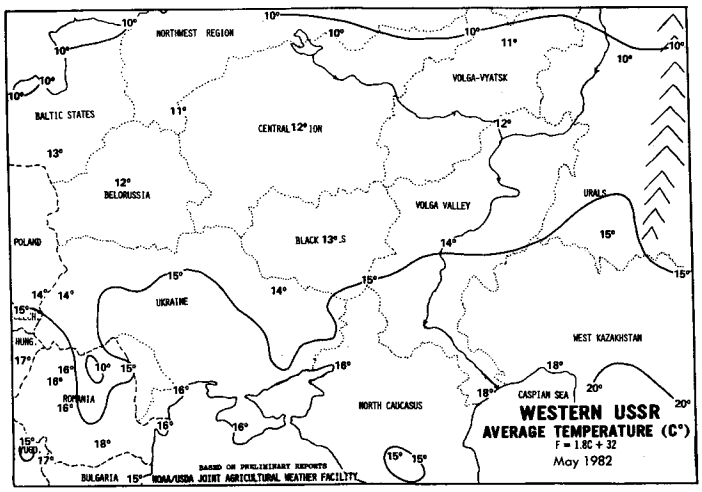


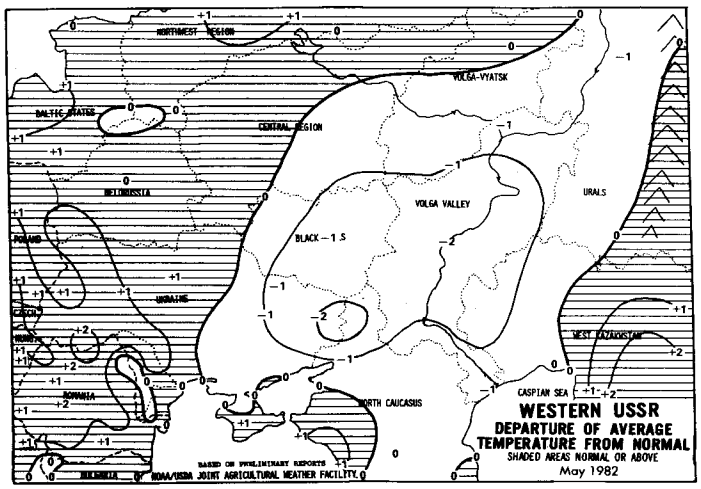
W.USSR: Light showers fell late in the week across the south, favoring crop growth. In May, below-normal precipitation fell on much of the south, reducing the yield potential of winter grains which entered the critical heading stage in the Ukraine and North Caucaus by midmonth. Additional moisture is needed in these areas. In the north, wet weather during the week continued May's pattern of above-normal precipitation. Unseasonably cold weather moved into northern areas during the week with subfreezing temperatures reported at some locations. Scattered frost likely occurred as far south as the northern Ukraine and southern Volga Valley which will slow crop development. Most of the spring grain crop was in the less critical vegetative growth stage in the areas with coldest temperatures.



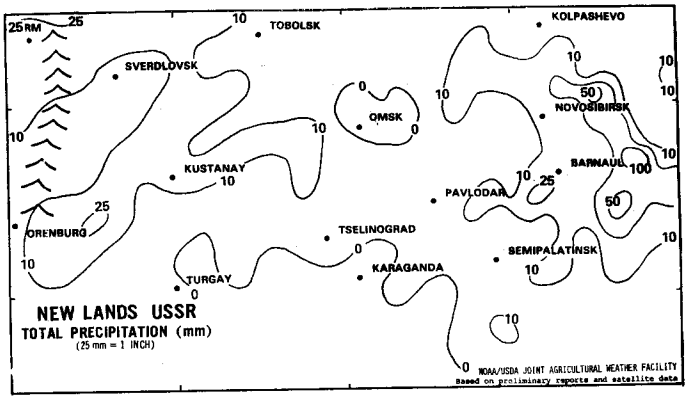


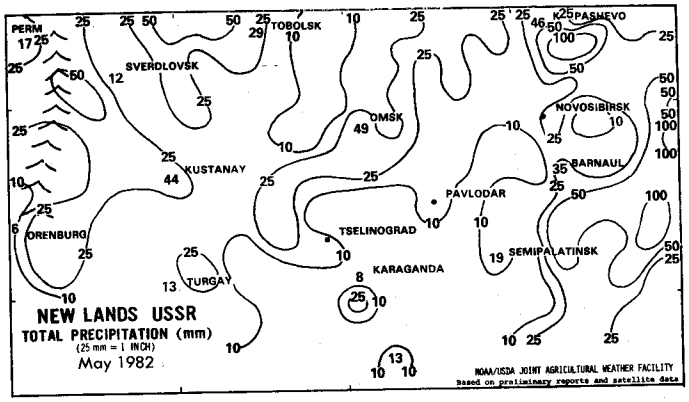


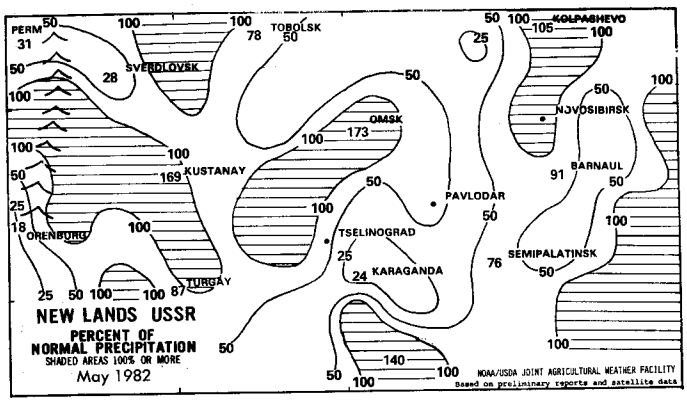


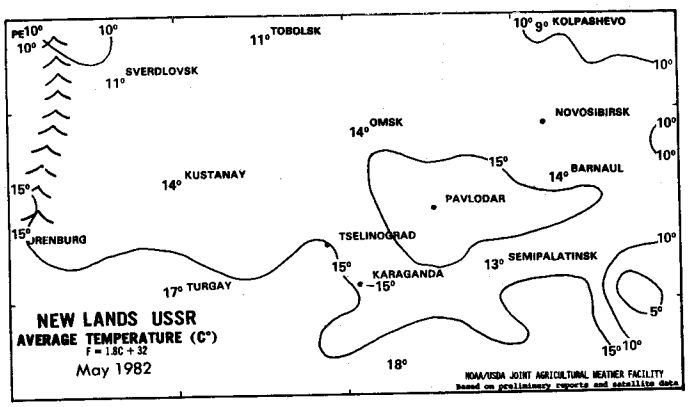


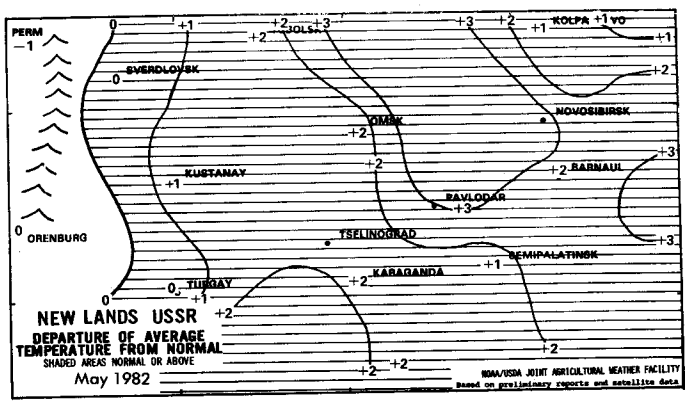
NEW LANDS: Showers fell on western grain areas early in the week, aiding emergence and early growth of spring grains. A high-pressure system kept most of the central section dry. Storm systems redeveloped in the east, bringing beneficial moisture to crop areas around Barnaul and Novosibirsk. In May, seasonal precipitation fell on some western and central locations, with spring grain seeding completed by the end of the month. Warmer-than-normal weather deterred all positive effects of the rain by increasing evaporation which reduced topsoil moisture. Hot, dry conditions continued to persist this week in central grain areas around Pavlodar and Omsk which further inhibited seed germination and imposed stress on the newly emerged crop.



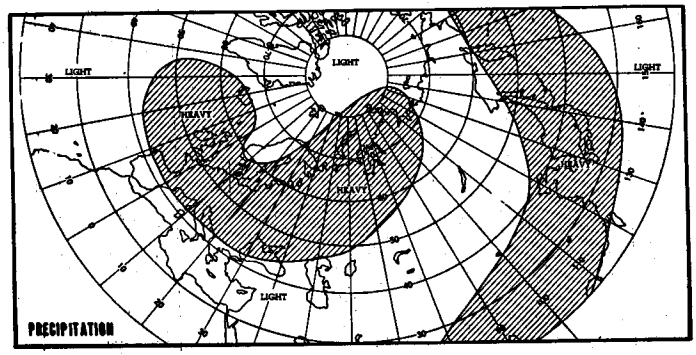


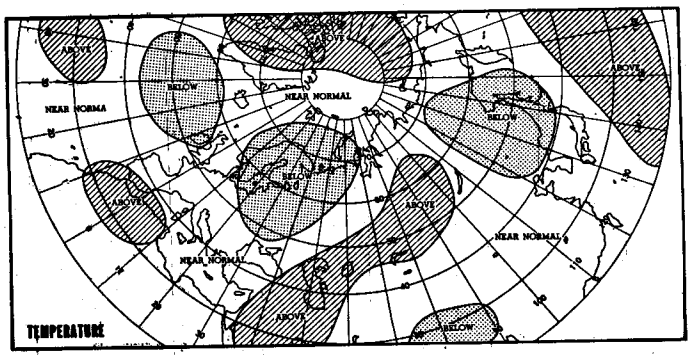




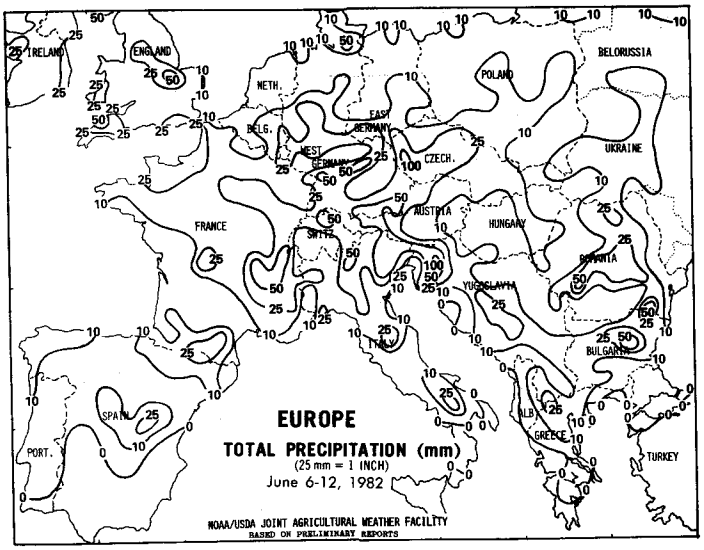


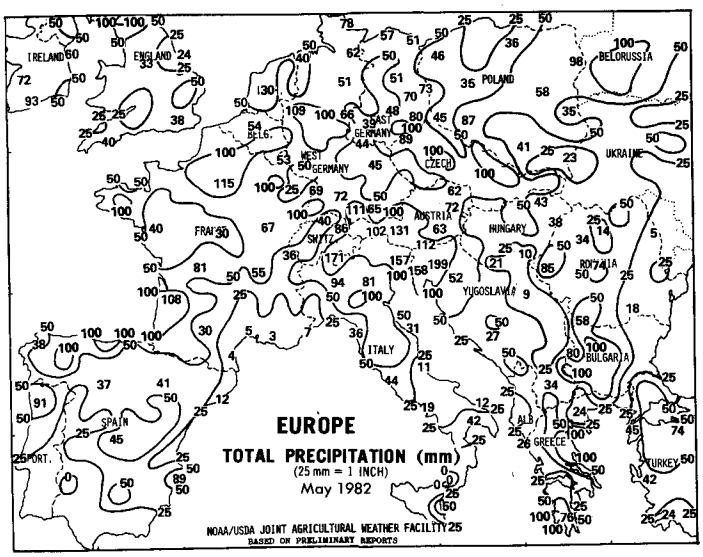
Eurasia Outlook for Mid-June to Mid-July

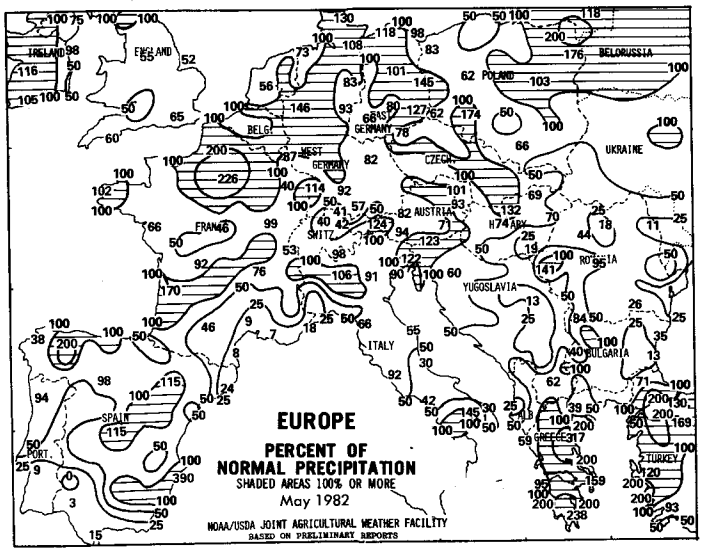


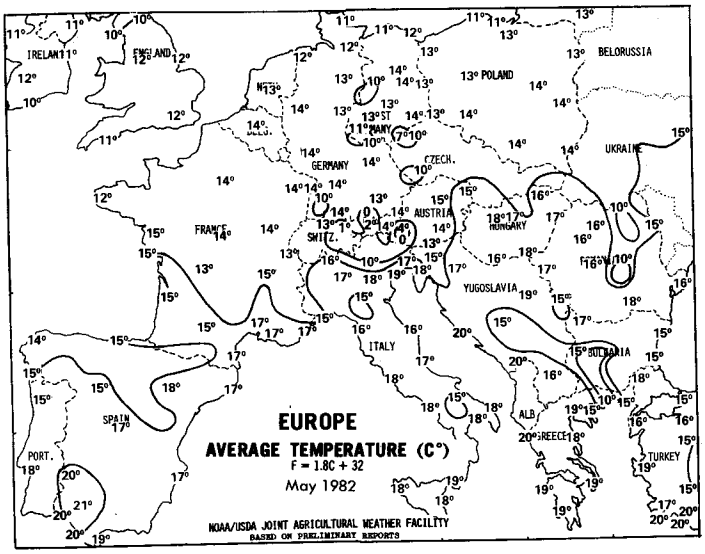


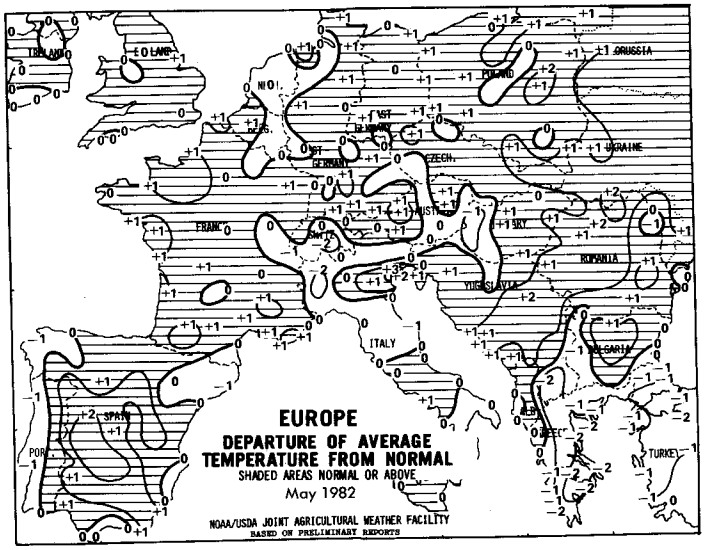
EUROPE: Showers fell on much of France and England, benefiting the growth of both winter and spring crops. In May, above-normal precipitation favored northern France, but below normal precipitation in other areas of France and England limited subsoil moisture. As a result, timely rains are needed to ensure good spring grain yields. In Spain, scattered showers in the north caused minor delays in winter grain harvesting while the south continued dry. In northern Europe, light precipitation fell on most crop areas, continuing the favorable weather of May. However, precipitation for May was below normal in some areas of Poland. Wet weather this past week improved moisture conditions in northern Italy and parts of the southeast. Soil moisture conditions are reportedly too low in Yugoslovia due to below-normal precipitation in May. Weekly temperatures for the region were above normal in the west, near normal in the south, and below normal in the northeast.

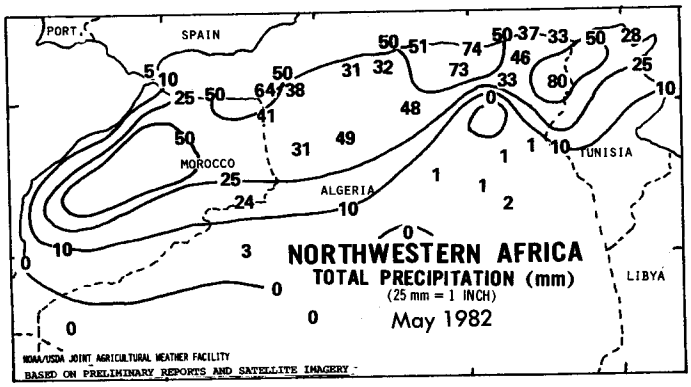


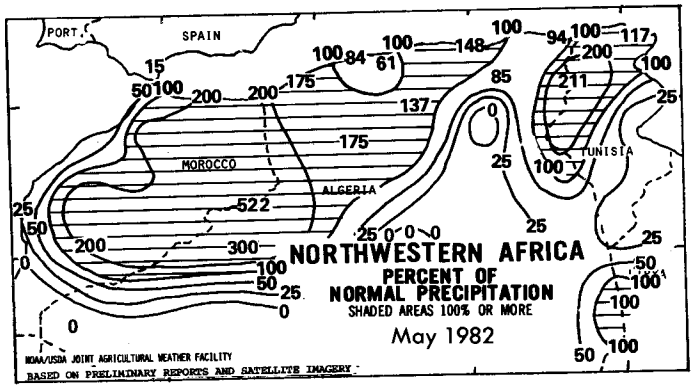


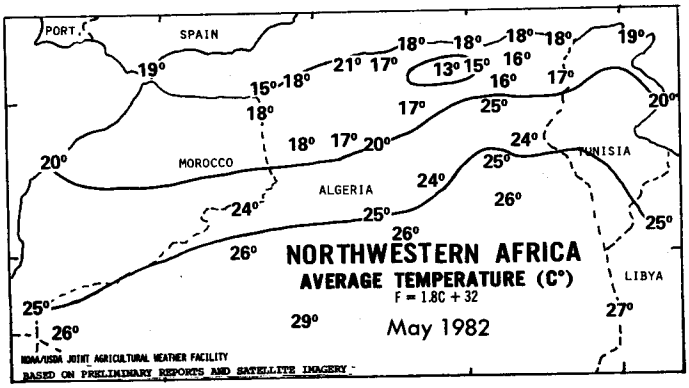


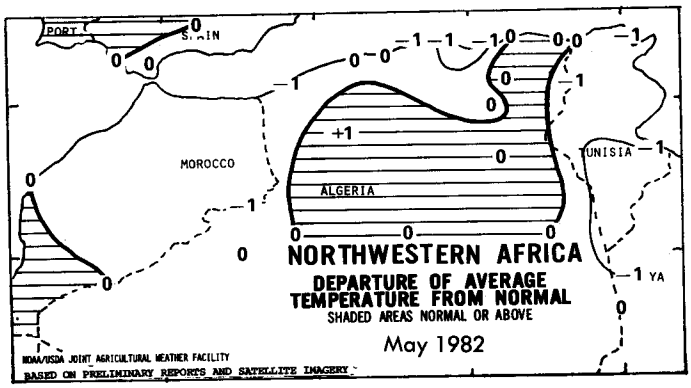


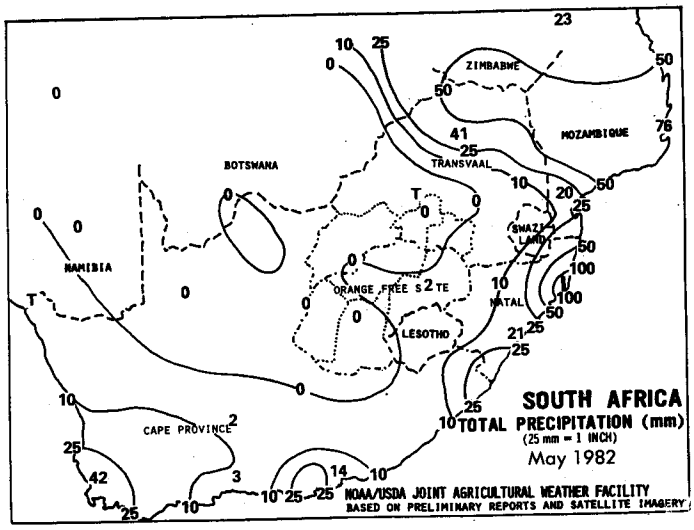


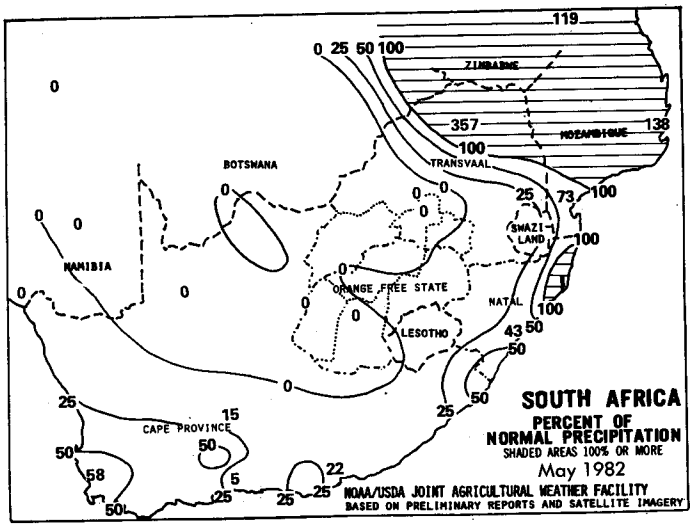

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

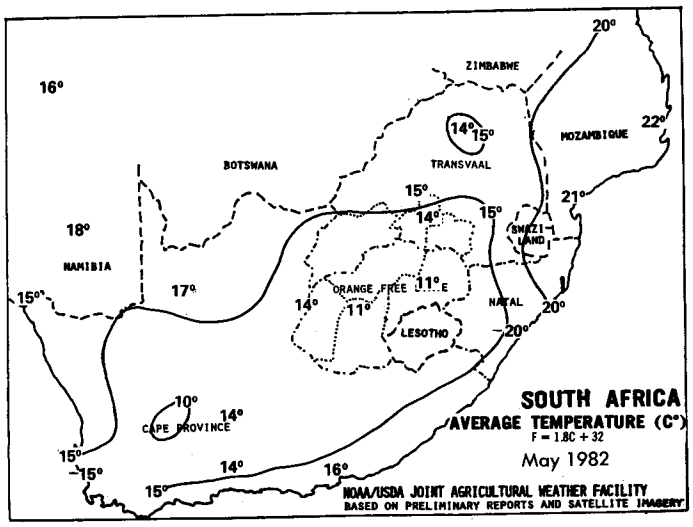

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
NORTHWESTERN AFRICA
PERCENT OF
NORMAL PRECIPITATION
SHADED AREAS 100% OR MORE
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

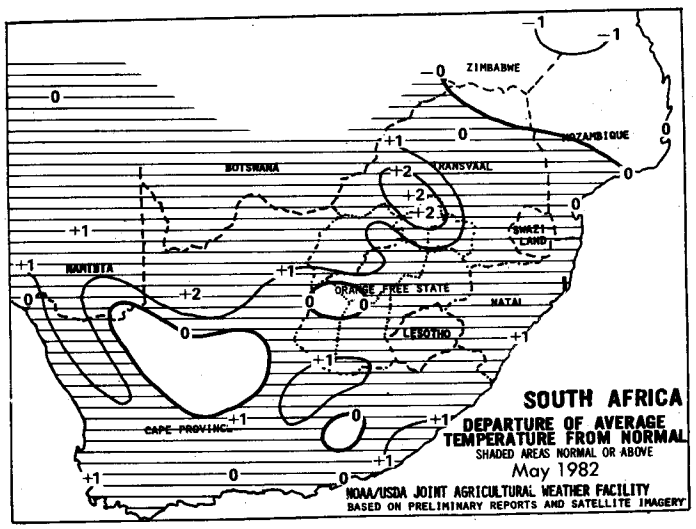

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY


MOROCCO
ALGERIA
TUNISIA
NORTHWESTERN AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
SHADED AREAS NORMAL OR ABOVE
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

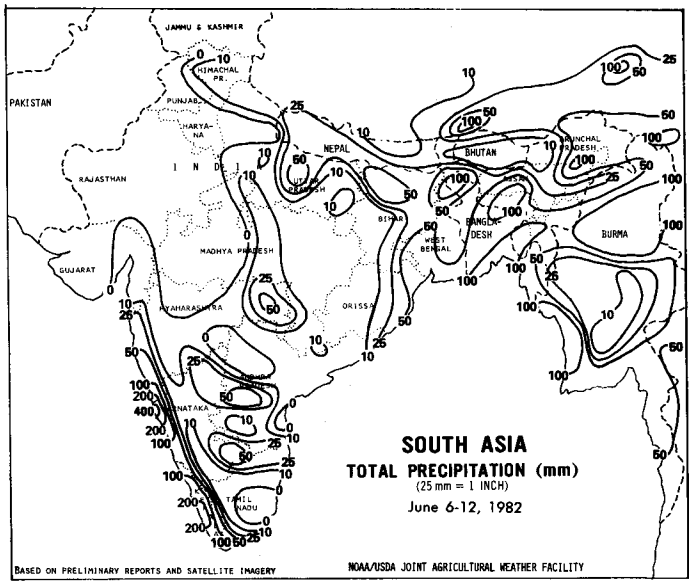

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

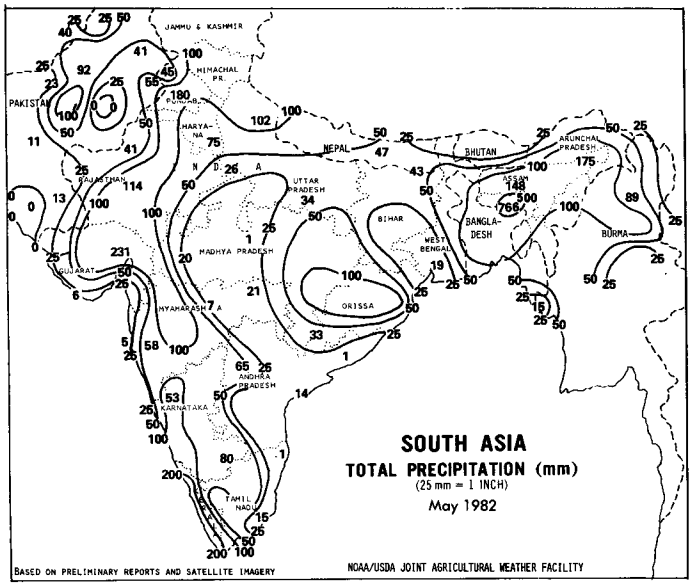

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
PERCENT OF
NORMAL PRECIPITATION
SHADED AREAS 100% OR MORE
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

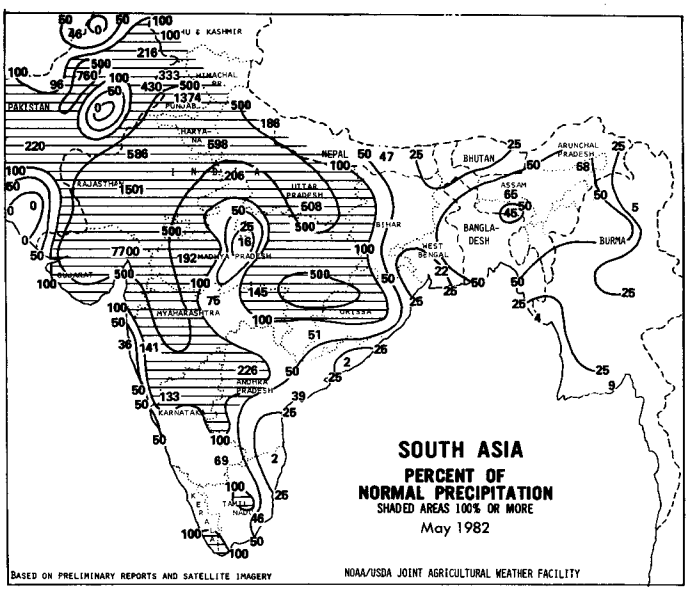

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

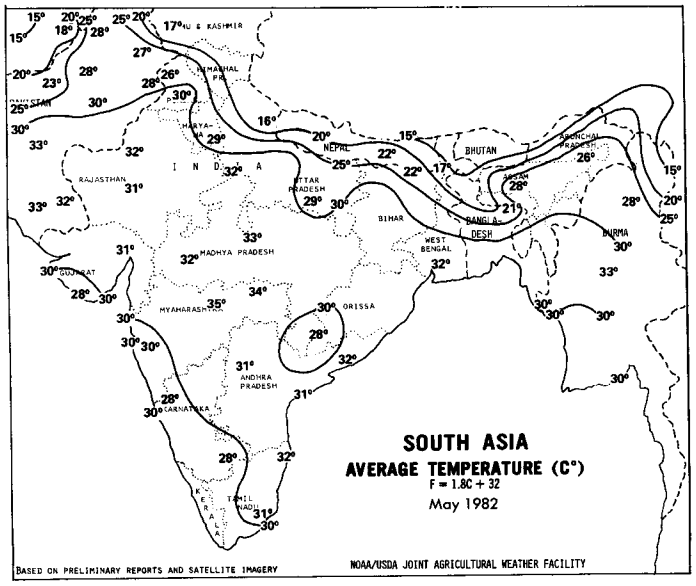

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
SHADED AREAS NORMAL OR ABOVE
May 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

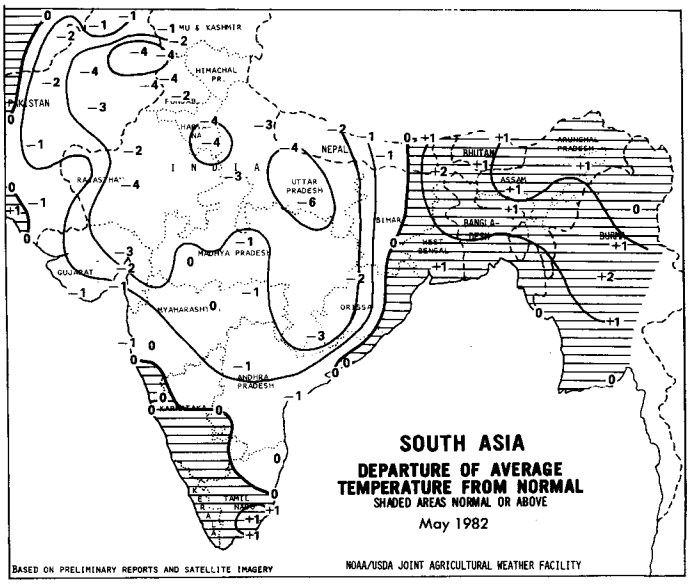
SOUTH ASIA: Abundant rainfall continued in Bangladesh and northeastern India. Much of that area had below-normal rainfall in May and reportedly was becoming too dry for early-season crops. By the week's end, the monsoon apparently had advanced into Bangledash. Monsoonal rains increased and spread further north along India's southwestern coast. Amounts in early June have ranged substantially above normal, as opposed to relatively light totals in May. Interior parts of India saw a slight intensification of shower activity during the week. Winter grain areas in northern India and Pakistan had favorably warm, dry weather for late harvesting. Cool, wet weather in that area during May damaged recently cut grains, substantially reducing quality and causing some losses, especially in Pakistan where the unfavorable conditions persisted longer.



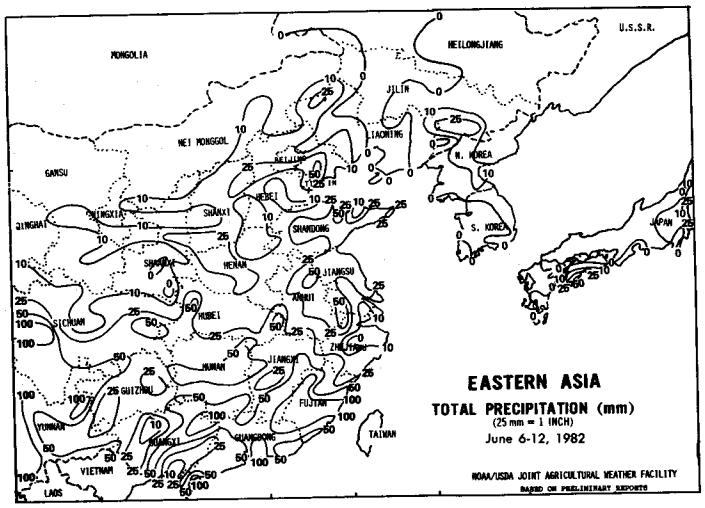


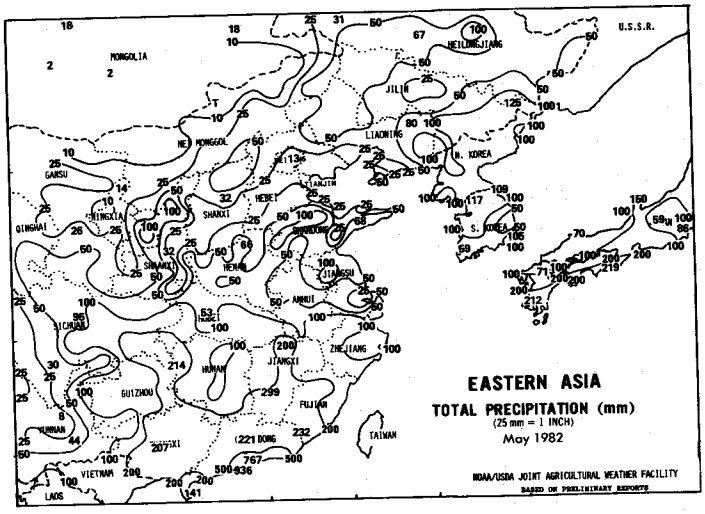


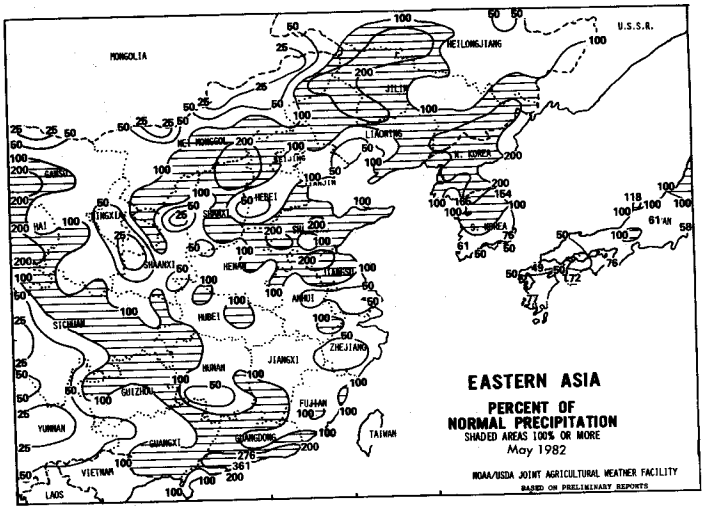


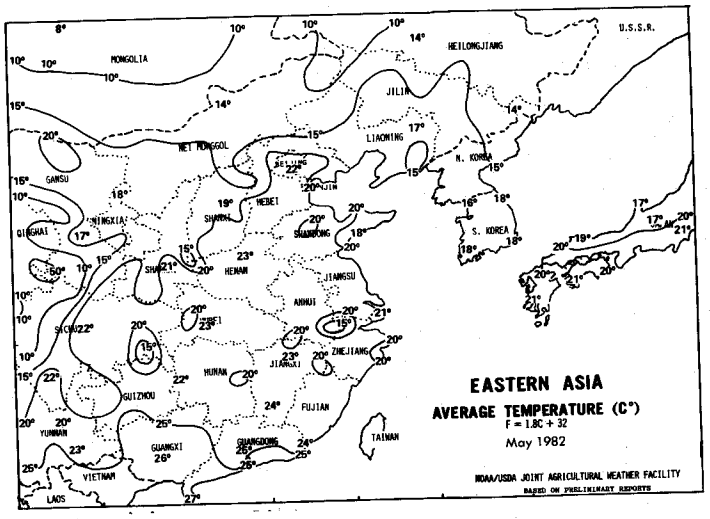


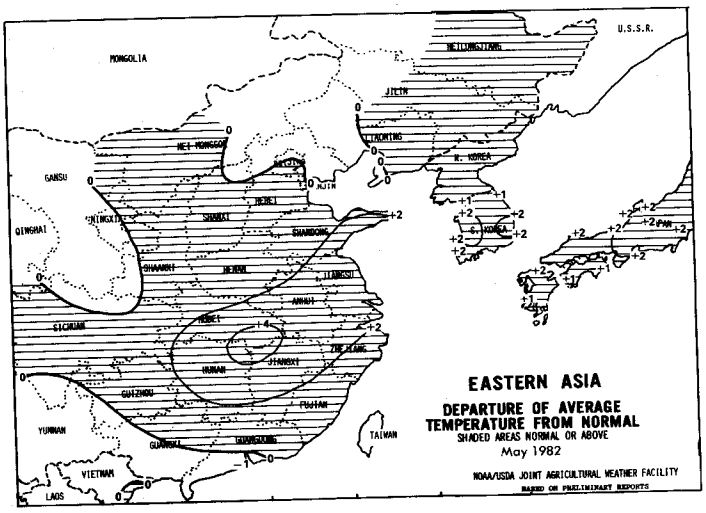
EASTERN ASIA: Temperatures stayed near normal over most of the North China Plain, but hot, dry weather returned to Hebei and the Manchurian Valley. A cold frontal system brought beneficial rainfall and cooler weather to Hebei at the week's end, but reservoir levels should remain low, and rainfed summer crops need much more moisture soon in order to prevent yield losses. Unfavorably dry conditions also persisted in the Manchurian Valley. In both of these areas, weather during May was warmer and drier than normal. Precipitation in the Yangtze Valley increased to near normal, improving growing conditions north of the river. Only in localized areas of Anhui and Jiangsu were nonirrigated spring crops adversely affected by generally warm, dry weather in May. Some areas along China's southern coast, where early rice was maturing, had unfavorably cool, wet weather. This pattern persisted for most of May. In South Korea, warm, dry weather promoted rice growth. Below-normal May rainfall along the southern coast had little impact, for rains last week ameliorated conditions.

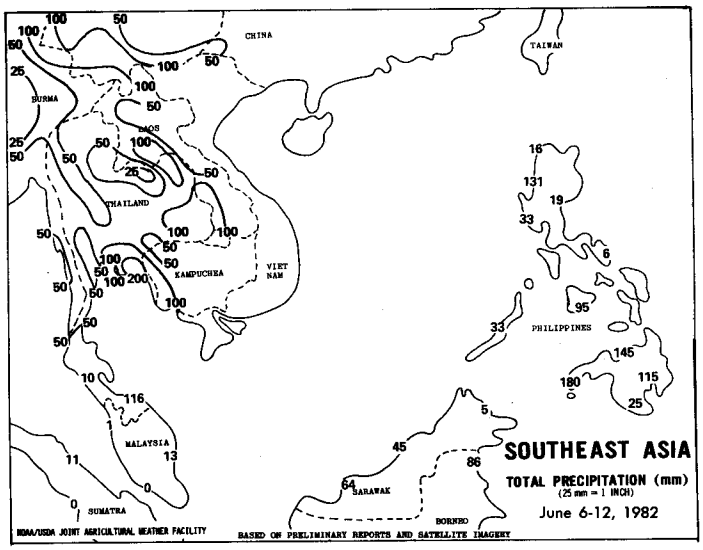




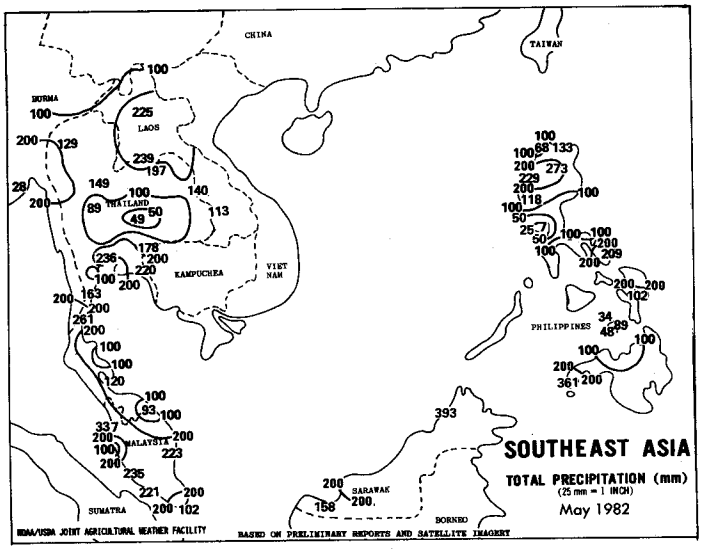


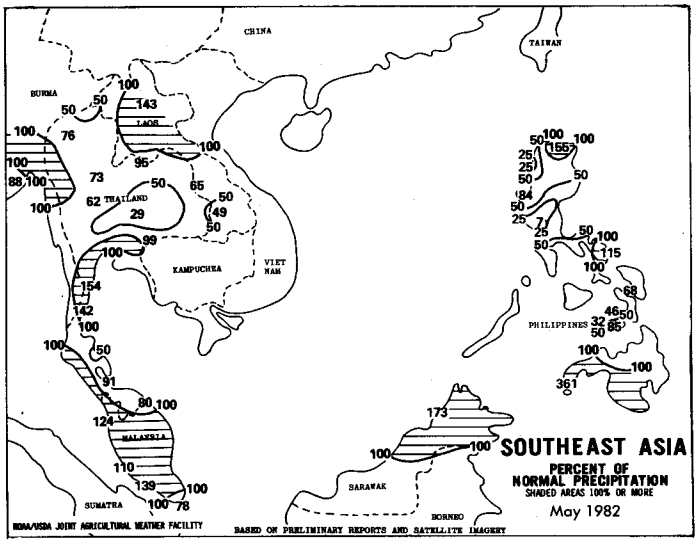


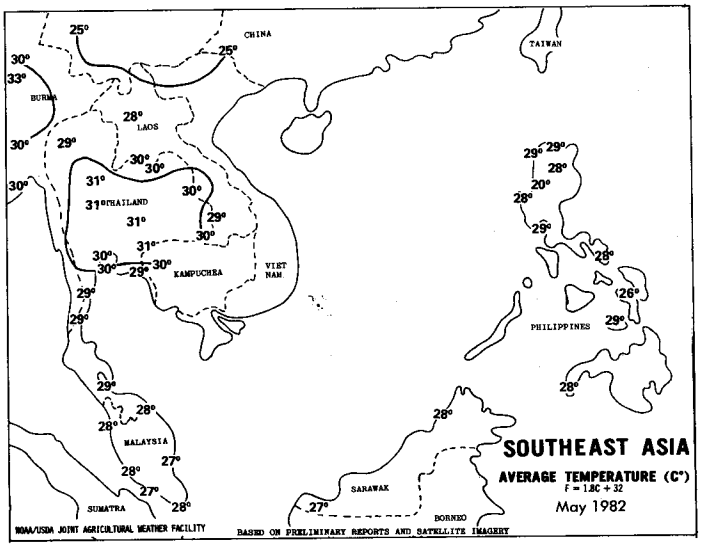


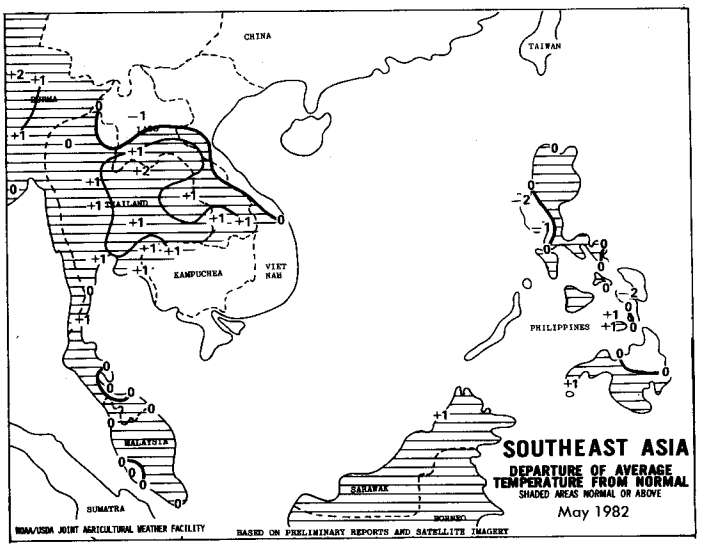


SOUTHEAST ASIA: Rainfall increased substantially over Thailand, with nearly all areas being wetter than normal. This moisture represented an improvement over conditions during May when some central portions of the country had below-normal rainfall. Corn in the vegetative stage may have been stressed somewhat, but no significant yield losses were likely. Irrigation supplies for newly planted rice were adequate during that relatively dry period. Correspondingly, May temperatures averaged above normal, but temperatures during the week were just slightly above the norm. Satellite imagery indicated that rainfall in Kampuchea and Vietnam during the week was about the same as in Thailand.

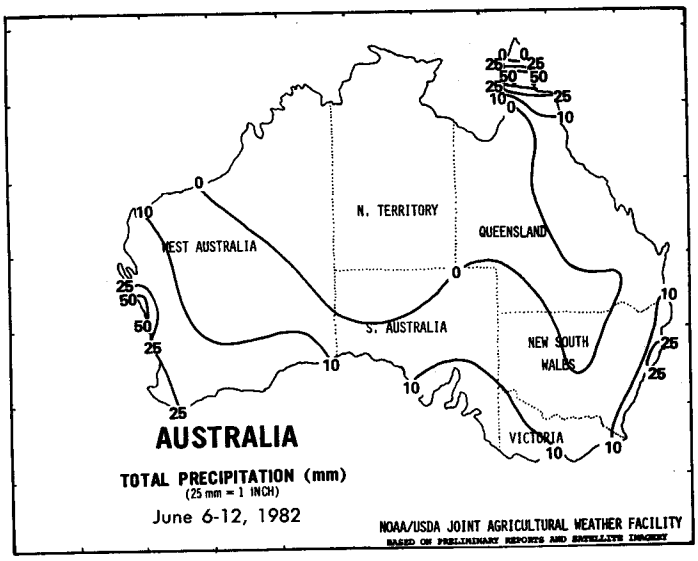


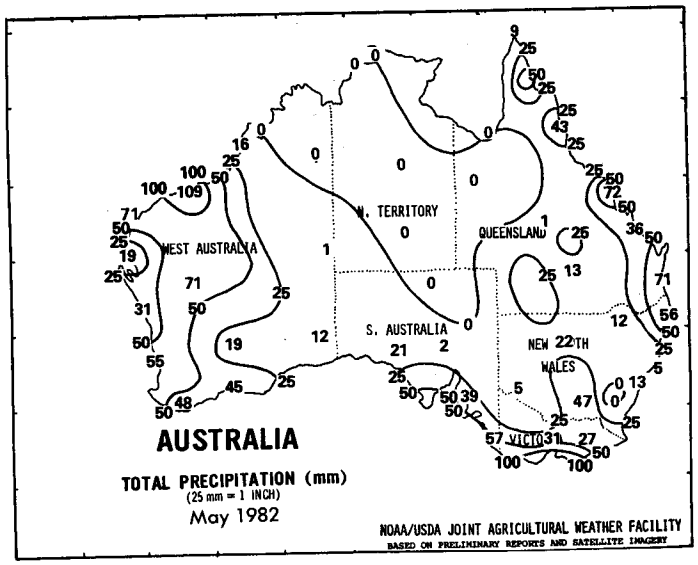


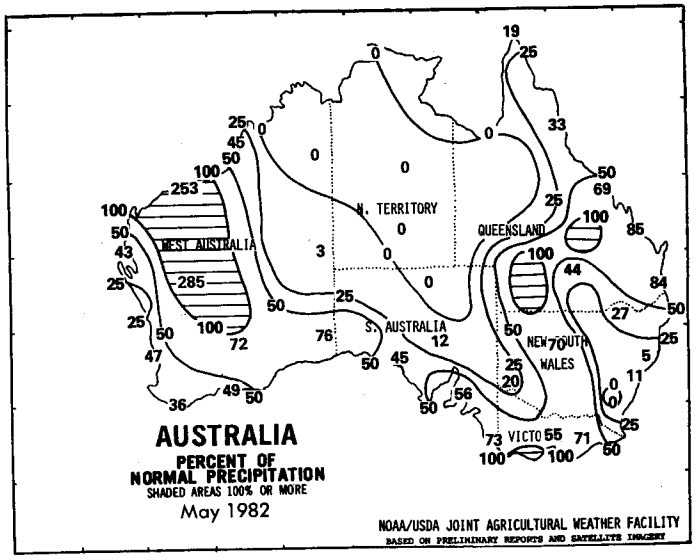


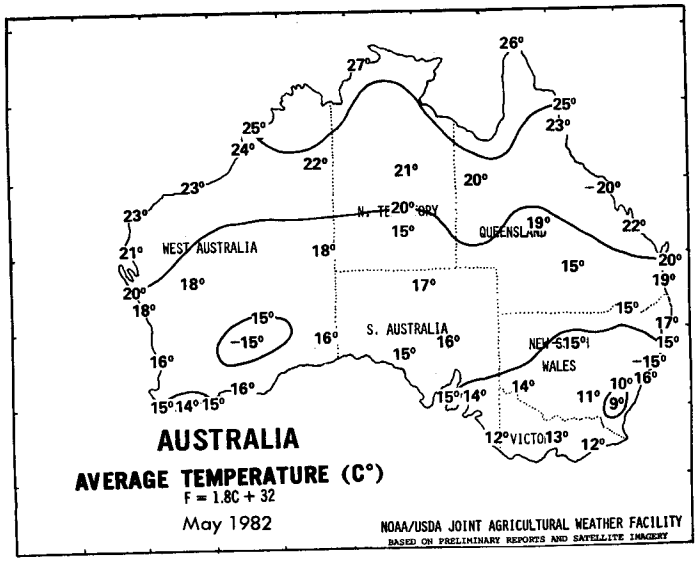


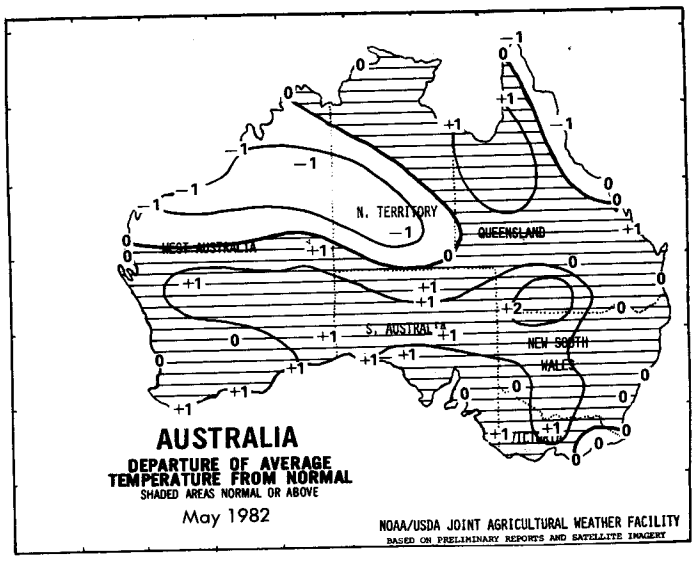
AUSTRALIA: Significant rainfall over widespread crop areas of Western Australia has improved wheat planting conditions in that State. May rainfall was well-below average over Australia's entire wheat belt which increased concern about yield prospects due to late sowing. Eastern crop areas received minimal amounts of weekly rainfall because of a blocking ridge of high pressure centered over southeastern Australia. New South Wales, producing about 40 percent of the wheat crop, continues to suffer from insufficient moisture for planting. Soaking rains are needed in eastern crop areas to moisten soils for germination and emergence. Southern crop areas also received below-average May rains, but light showers tended to occur at relatively frequent intervals, providing some beneficial effects for the available crop moisture supply.



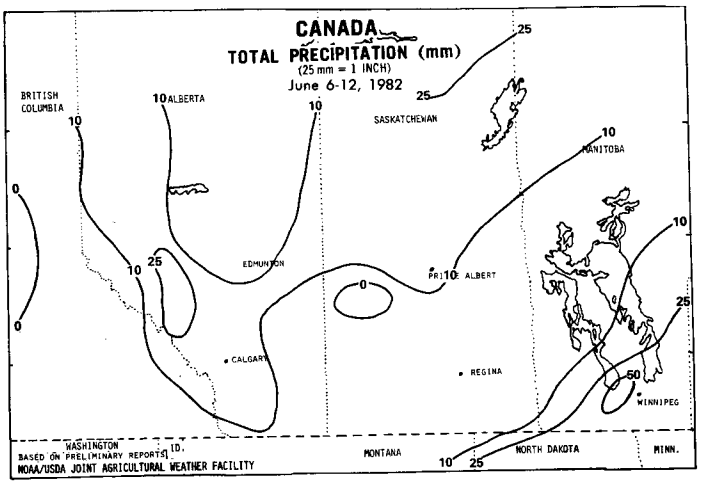


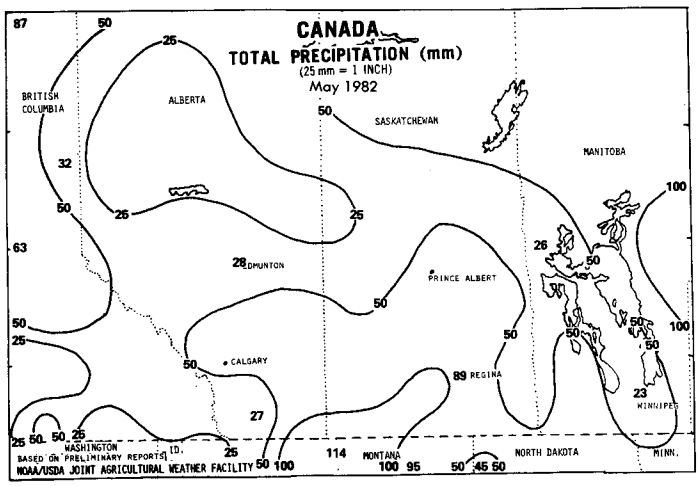


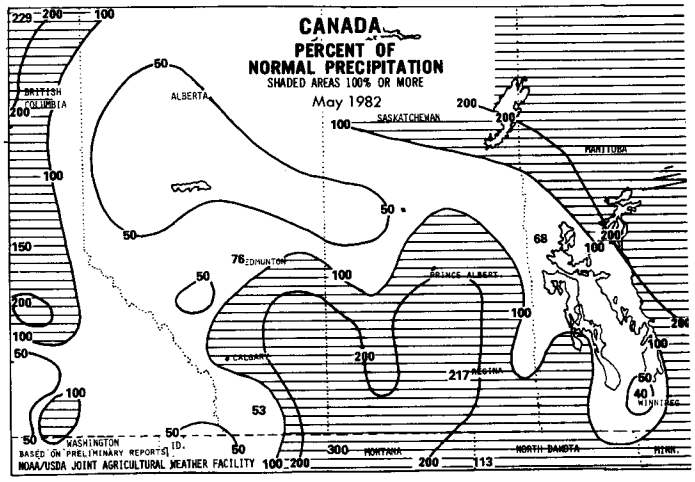


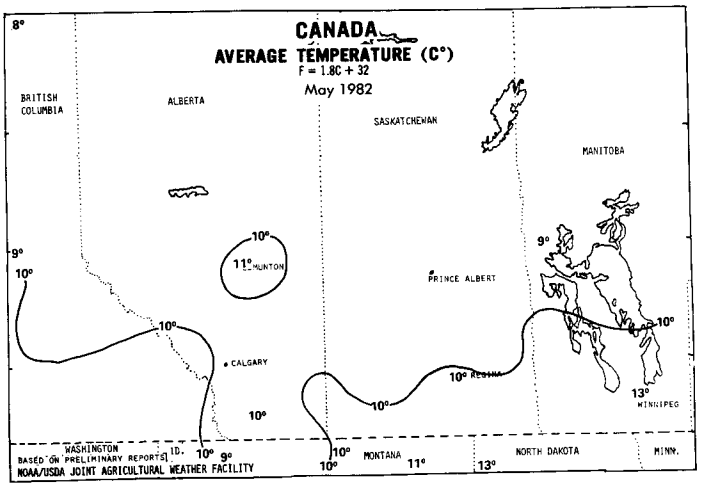


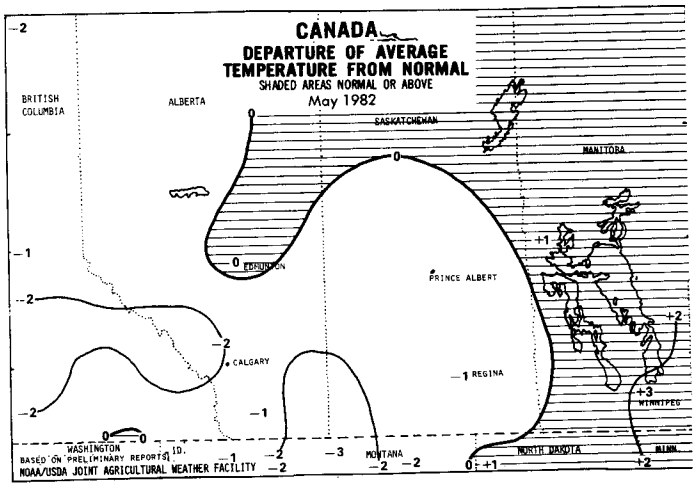
CANADA: Light showers fell over crop areas of Saskatchewan and eastern Alberta. However, heavier rainfall occurred over western Alberta and Manitoba. Nearly all crop areas received above-average May rainfall which provided adequate moisture for spring crop seeding. The wetness, in fact, caused some planting delays in portions of Saskatchewan and Manitoba. Spring planting has reached completion in Saskatchewan. Crop germination and emergence has been reported good, but crop development has been slowed by cooler-than-normal weather which has extended from May into June. Last week, minimum temperatures averaged 3-6°C in the crop areas. Warmer weather is needed for optimum growth and development.











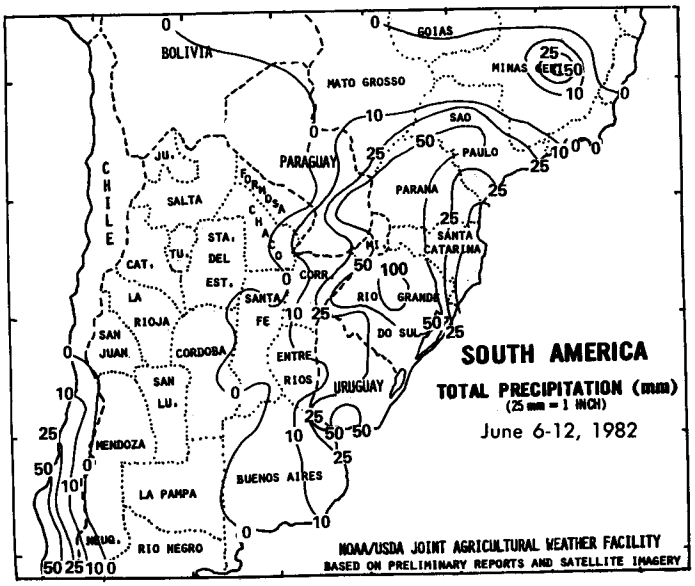
National Weather Summary (cont. from front page)

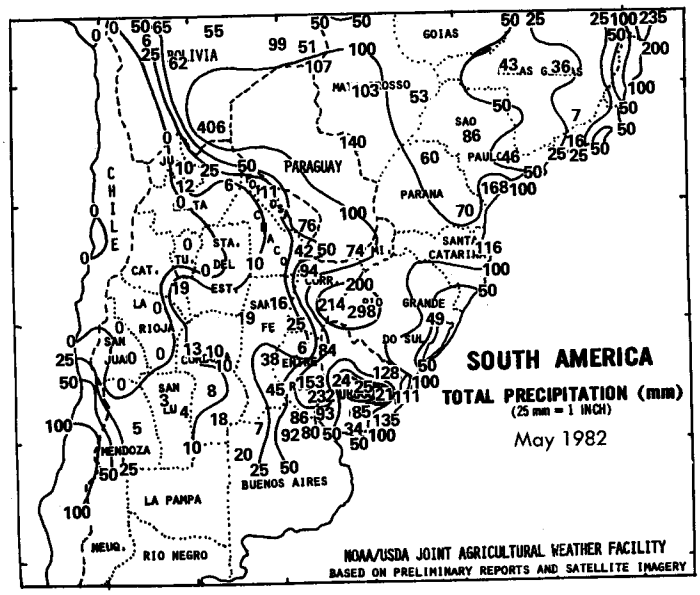
and Plains, but a wedge of warm air reached northward along the Pacific coast.

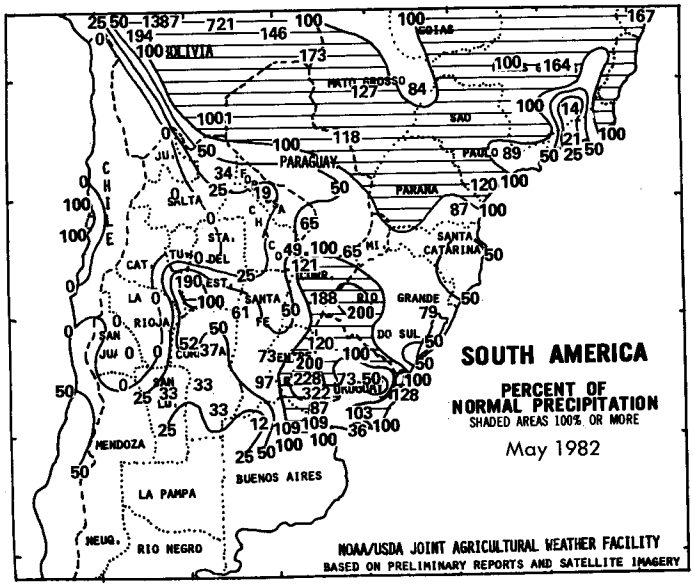
THURSDAY...Thunderstorms and showers associated with a cold front continued from the upper Ohio Valley to western New York and eastward to the coast from New Jersey to South Carolina. Southerly winds bearing moisture from the Gulf of Mexico triggered showers and thunderstorms over the High Plains from Texas to Montana. Late in the day, thunderstorms spread eastward into the central Plains. Cooler weather enveloped most of the Northern States.

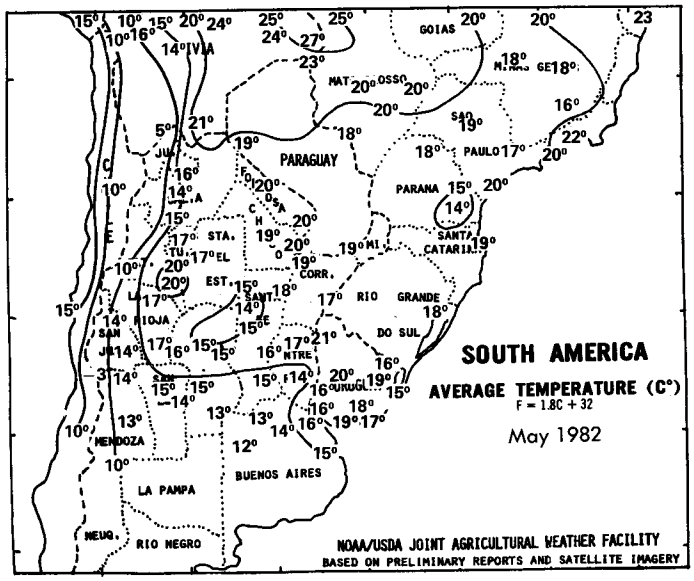
(cont. on p. 31)

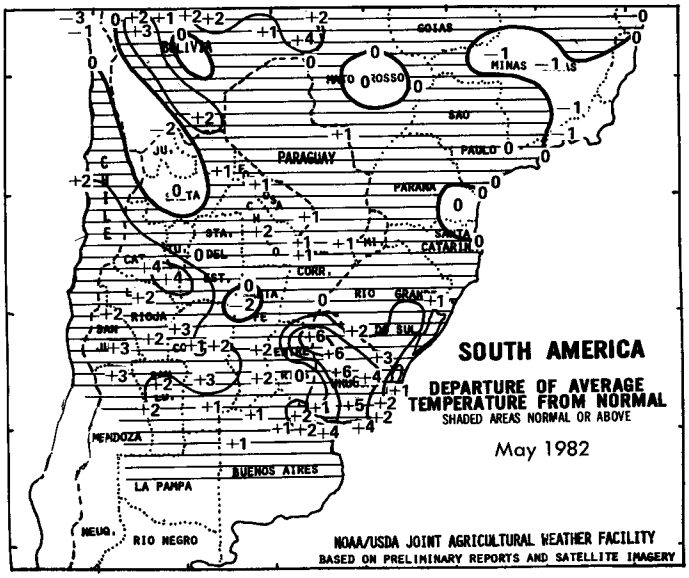
SOUTH AMERICA: Heavy rainfall occurred over southern Brazil during midweek as a storm system moved through the region. Much of this area had received below-average rainfall in May and preceding months. Thus, although the rainfall intensity was high, the beneficial moisture improved soil moisture reserves for wheat growth. Southern coffee areas of Parana and Sao Paulo also received significant rain, but amounts were lighter farther north. In Argentina, showers fell over crop areas, benefiting wheat planting and early growth. However, weekly totals were generally light so the soybean harvest was not greatly affected. Available data shows that much of the wheat areas received less than average May rainfall. Thus, additional rains during this early growth period for wheat would be very beneficial.



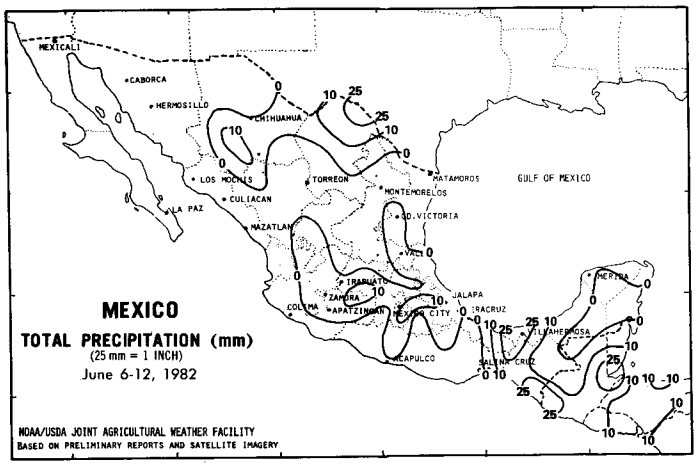


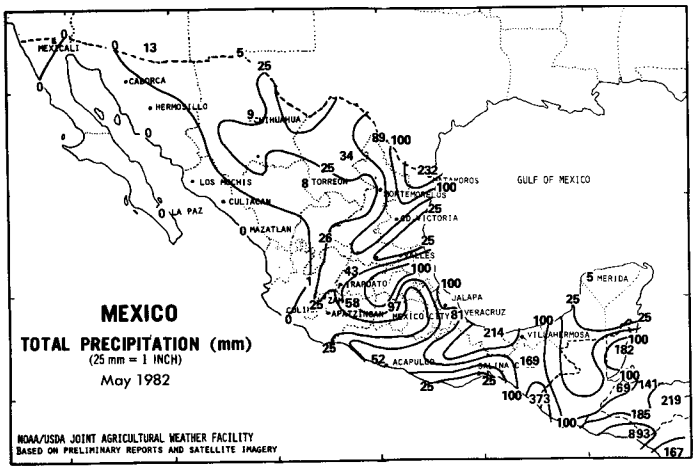


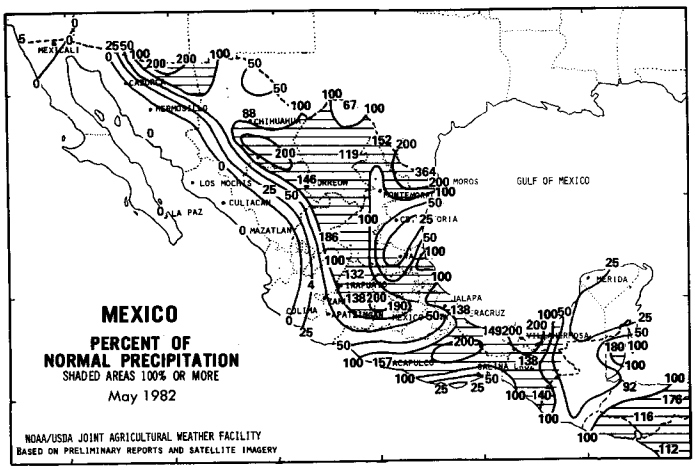


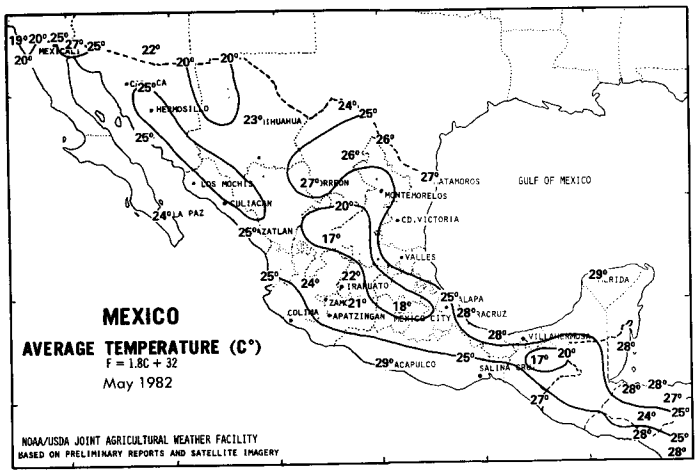


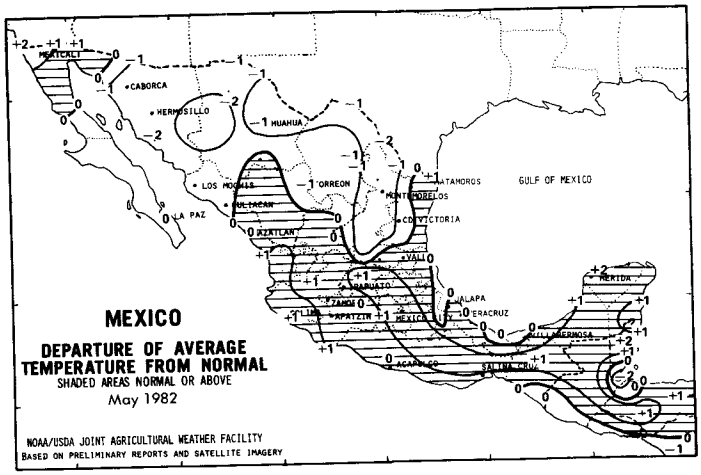
MEXICO: The rainy season remained stalled over the principal crop areas, stressing some immature crops but aiding grain harvesting and other field operations. Soil moisture was rather short over most rainfed areas of the southern Plateau Corn Belt; however, scattered moderate showers in May helped the young crop in eastern districts. Seasonal weather continues favorable for grains in the upper northeast; rains were heavy in May when crop moisture needs were large, and the weather became dry in June as early harvest began. Sunny, hot conditions continued to benefit cotton, soybeans, and irrigated summer crops in the north-central and northwestern regions.











National Weather Summary (cont. from p. 29)

FRIDAY...The warm, moist air from the Gulf of Mexico spread northward, triggering showers and thunderstorms through the Plains and most of the Mississippi River Valley. Severe weather with heavy downpours occurred through southern Oklahoma, northeastern Texas, and southern Arkansas. A few thunderstorms developed in Alabama and Florida. Unseasonably warm air spread through the West up to the Rockies.

SATURDAY...The area of showers and thunderstorms moved eastward ahead of a line from southeastern Texas to southwestern New York and reached the east coast from Massachusetts to Florida. A few thunderstorms continued over the High Plains, becoming moderate to heavy in western Kansas and Nebraska and spreading along a line to the Great Lakes. Light showers spread over the Pacific Northwest as cooler weather moved into that area.

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

IMMEDIATE – U. S. Weather Report
This Report Will be Treated in All Respects as Letter Mail

FIRST CLASS MAIL

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
210

U.S.MAIL

National Agricultural Summary (cont. from p. 11)

Harvesting of all types of fruits neared completion. Arizona's citrus groves were in good condition. New crop fruit developed satisfactorily. The Valencia orange harvest was nearly finished. Almond and walnut growth was good in California. Texas pecan producers continued spraying for casebearers.

VEGETABLES: Wet weather slowed planting and harvesting operations in northern areas but in the South warmer weather benefited crops. Cool weather farther north slowed the development of plants. Florida's vegetable harvest was essentially over in central and southern areas. However, the watermelon harvest was at peak levels. Cool nights slowed vegetable development in the northern half of California. Growers planted and harvested a wide variety of crops.

PASTURES AND LIVESTOCK: Pastures and ranges were in fair to mostly good condition. Warmer weather is needed to spur growth. Livestock were in fair to good condition. Herdsmen continued to move animals to summer grazing.

State Summaries (cont. from p. 19)

WYOMING: Temperatures below seasonal with 5 to 10° below normal. Precipitation amounts above normal in eastern portions while central portions below normal.

Topsoil moisture adequate 82% State. Average 5 days suitable fieldwork. Dry beans planted: 65%, year ago 85%. Dry beans emerged: 25%; year ago 50%; normal 62%. Potatoes planted: 85%; year ago 95%. Potatoes emerged: 40%; year ago 50%; normal 57%. Corn planted: 90%; most planted a year ago. Corn emerged: 70%; year ago 75%. Oats 85% emerged. Sugarbeets 25% thinned. Spring planted crops, alfalfa good condition most areas. Winter wheat fair to good condition, 40% headed, normal 58%. Light hail damage to crops few areas. Range and pastures mostly good condition. Stock water adequate most areas.

Heating Degree Days May 1982

ALA.Birmingham	6	MAINE,Caribou	356	OKLA.Okla. City	25
Mobile	0	Portland	320	Tulsa	11
Montgomery	0	MD.Baltimore	58	OREG.Astoria	391
ALASKA,Anchorage	-	MASS.Boston	231	Burns U.	484
Barrow	1495	Chatham	-	Medford	223
Fairbanks	555	MICH.Alpena	249	Pendleton	256
Juneau	-	Detroit	75	Portland	229
Nome	658	Flint	83	Salem	317
ARIZ.Flagstaff	969	Grand Rapids	91	PA.Allentown	110
Phoenix	457	Houghton Lake	148	Erie	158
Tucson	0	Lansing	108	Harrisburg	128
Winslow	10	Marquette U	311	Philadelphia	50
Yuma	129	S. Ste. Marie	273	Pittsburgh	82
ARK.Fort Smith	0	MINN.Duluth	370	Scranton	147
Little Rock	14	Internatl Falls	280	R.I.Providence	190
CALIF.Bakersfield	6	Minneapolis	117	S.C.Charleston	3
Eureka U.	0	Rochester	164	Columbia	5
Fresno	373	St. Cloud	189	Greenville	12
Los Angeles U	21	MISS.Jackson	4	S.DAK.Aberdeen	-
Red Bluff	75	Meridian	1	Huron	173
Stockton	35			Rapid City	358
San Diego	9	MO.Columbia	40	Sioux Falls	174
San Francisco	241	Kansas City	51	TENN.Chattanooga	13
COLO.Denver	306	St. Louis	9	Knoxville	20
Grand Junction	136	Springfield	33	Memphis	2
Pueblo	-	MONT.Billings	386	Nashville	8
CONN.Bridgeport	164	Glasgow	374	TEX.Abilene	22
Hartford	128	Great Falls	511	Amarillo	96
D.C.Washington	19	Havre	471	Austin	2
FLA.Apalachicola	0	Helena	428	Beaumont	0
Ft. Myers	0	Kalispell	495	Brownsville	0
Jacksonville	0	Miles City	-	Corpus Christi	0
Key West	0	Missoula	425	Dallas	-
Lakeland U.	-	NEBR.Grand Island	148	Del Rio	0
Miami	0	Lincoln	88	El Paso	17
Orlando	0	Norfolk	123	Fort Worth	9
W.Palm Beach	0	North Platte	239	Galveston U.	0
Tallahassee	0	Omaha	94	Houston	1
Tampa	0	Valentine	252	Lubbock	45
GA.Atlanta	2	NEV.Ely	472	Midland	21
Augusta	7	Las Vegas	9	San Angelo	20
Macon	2	Reno	307	San Antonio	2
Savannah	0	Winnemucca	327	Victoria	0
IDAHO.Boise	312	N.H.Concord	246	Waco	3
Lewiston	239	N.J.Atlantic City	77	Wichita Falls	27
Pocatello	406	Trenton U	-	UTAH,Milford	313
ILL.Cairo U.	7	N.MEX.Albuquerque	94	Salt Lake City	259
Chicago	93	Roswell	27	VT.Burlington	255
Moline	62	N.Y.Albany	182	VA.Lynchburg	29
Peoria	29	Binghamton	178	Norfolk	21
Rockford	74	Buffalo	147	Richmond	6
Springfield	9	New York	78	Roanoke	51
IND.Evansville	16	Rochester	162	WASH.Colville	-
Fort Wayne	51	Syracuse	183	Omak	-
Indianapolis	28	N.C.Asheville	38	Quillayute	465
South Bend	64	Charlotte	6	Seattle-Tacoma	312
IOWA,Burlington	-	Greensboro	14	Spokane	328
Des Moines	73	Hatteras R.	44	Walla Walla U.	179
Dubuque	-	Raleigh	15	Yakima	276
Sioux City	116	Wilmington	17	W.VA.Beckley	71
KANS.Concordia	71	N.DAK.Bismarck	310	Charleston	36
Dodge City	67	Fargo	222	Huntington	29
Goodland	197	Williston U	322	Parkersburg U.	-
Topeka	76	OHIO.Akron-Canton	54	WIS.Green Bay	152
Wichita	54	Cincinnati U.	28	Madison	155
KY.Lexington	14	Cleveland	78	Milwaukee	215
Louisville	13	Columbus	45	WYO.Casper	423
LA.Baton Rouge	0	Dayton	27	Cheyenne	446
Lake Charles	0	Toledo	81	Lander	400
New Orleans	0	Youngstown	81	Sheridan	436
Shreveport	4				

CORRECT THE MAY MONTHLY TABLE FOR SHERIDAN, WY: TEMPERATURE 51, DEPARTURE -2, PRECIPITATION 1.5, DEPARTURE -1.0

The Weekly Weather and Crop Bulletin is 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), 53rd Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the Bulletin. The contents may be reprinted freely, with proper credit.

Annual subscription: $25 domestic and $33 foreign airmail. Draft checks on U.S. banks or international money orders in U.S. funds, payable to U.S. Department of Commerce, NOAA. Order from the NOAA/USDA Joint Agricultural Weather Facility, USDA South Bldg., Room 5844, Washington, DC 20250.

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, Wes Byrd
Lyle Denny, Dave Smith

Subscriptions (202) 447-7917 . . . . Tamara Bibber

U.S. DEPARTMENT OF AGRICULTURE
Economic Management Service
Editor . . . . . Linda Hatcher
Statistical Reporting Service
Agricultural Statistician . . . . . Bill Blackson
World Agricultural Outlook Board
Agricultural Weather Analysts . . . . Laras Lambert
Ray Motha, Tom Puterbaugh