

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

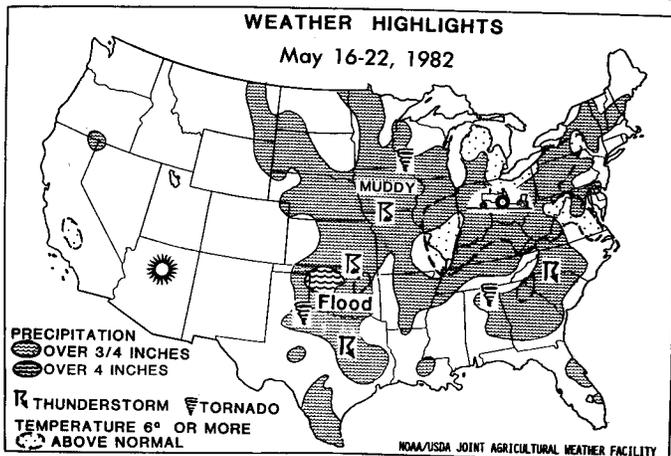
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May 25, 1982

National Weather Summary

MAY 16-22



and southern Plains and spread eastward to the Appalachians and over the Southeast. A few showers reached over the mountains to the east coast from southern New England to Georgia. Showers fell over the central Plateau in the West and in the northern Rockies, spreading to the northern high Plains.

WEDNESDAY... Warm weather brought showers and thunderstorms to all of the area east of the Mississippi River. A cold front moving into the Plains triggered thunderstorms through the central and northern Rockies and High Plains and to the middle Mississippi Valley. Light rain fell in the East, but isolated thunderstorms produced hail and high winds.

THURSDAY... Thunderstorms continued through the night in the central and northern Plains and then concentrated in western Kansas and Nebraska, northern Missouri, and southern Iowa. Severe weather in this area produced tornadoes, hail, and heavy downpours, resulting in widespread flooding. Later, showers and thunderstorms spread through the Ohio and Tennessee Valleys and covered all of the east coast States.

FRIDAY... The concentration of severe weather covered most of Iowa and southern Minnesota to the southern Lake Michigan region. The moderate to heavy rain caused local flooding and kept fields too wet and muddy for farmwork. Widely scattered thunderstorms covered the rest of the Plains and continued through the Ohio Valley and the east coast States south of New York. The weather was somewhat cooler than early in the week over the northern half of the Nation, but a warming trend was spreading into the West.

SATURDAY... Showers and thunderstorms covered much of the Nation, but most of the central and northern Plains had a respite from the showery weather.

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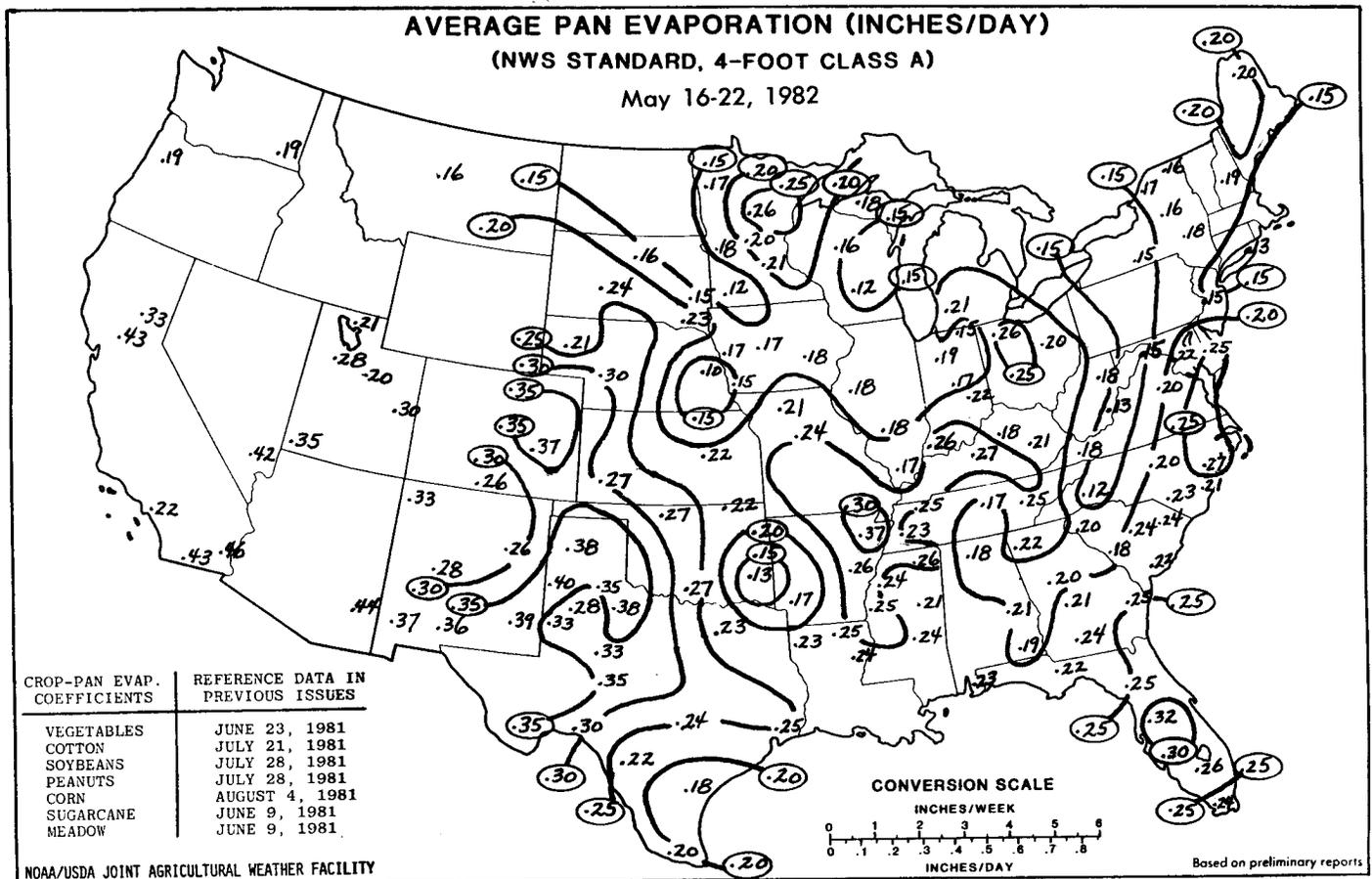
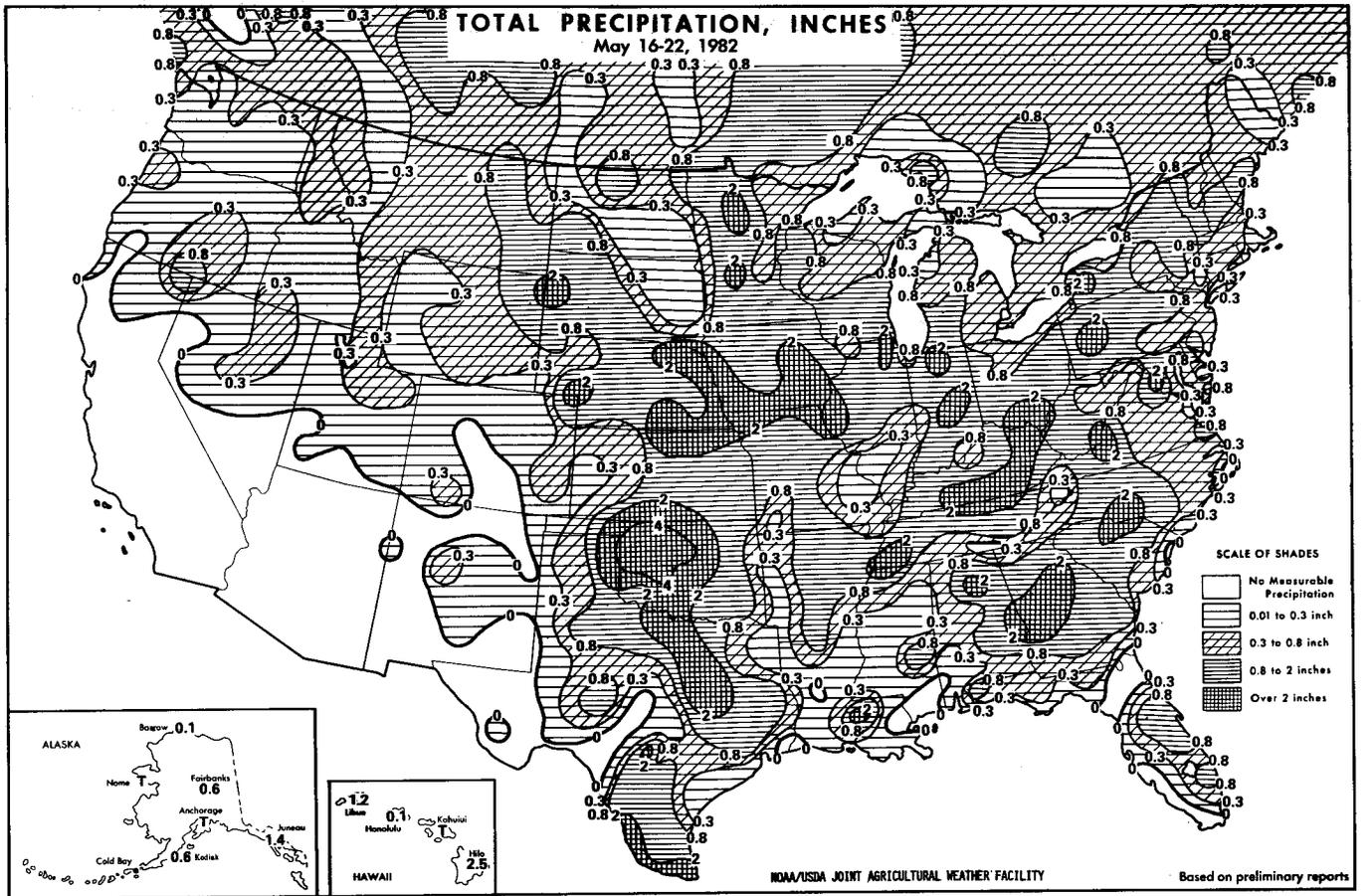
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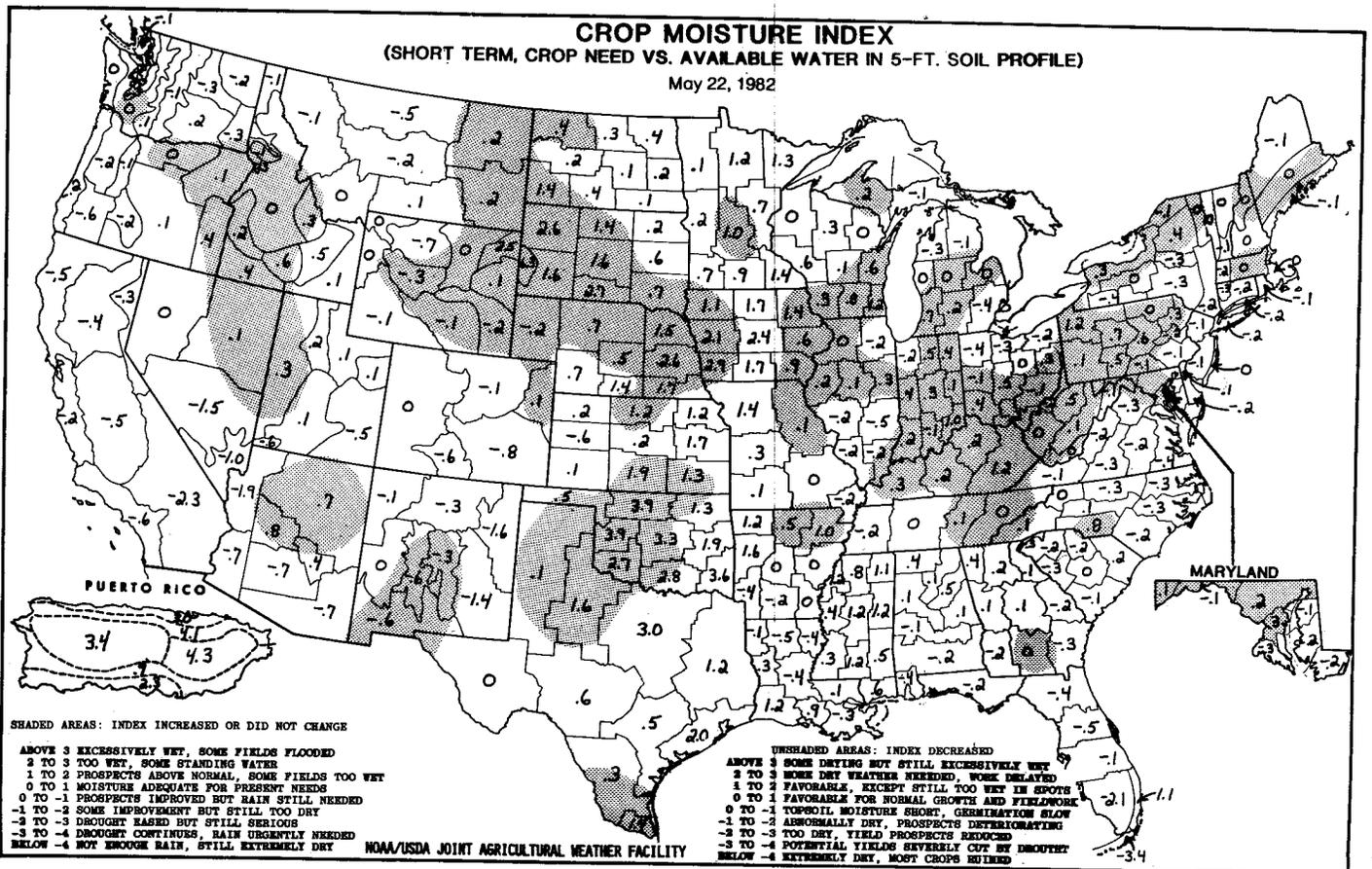
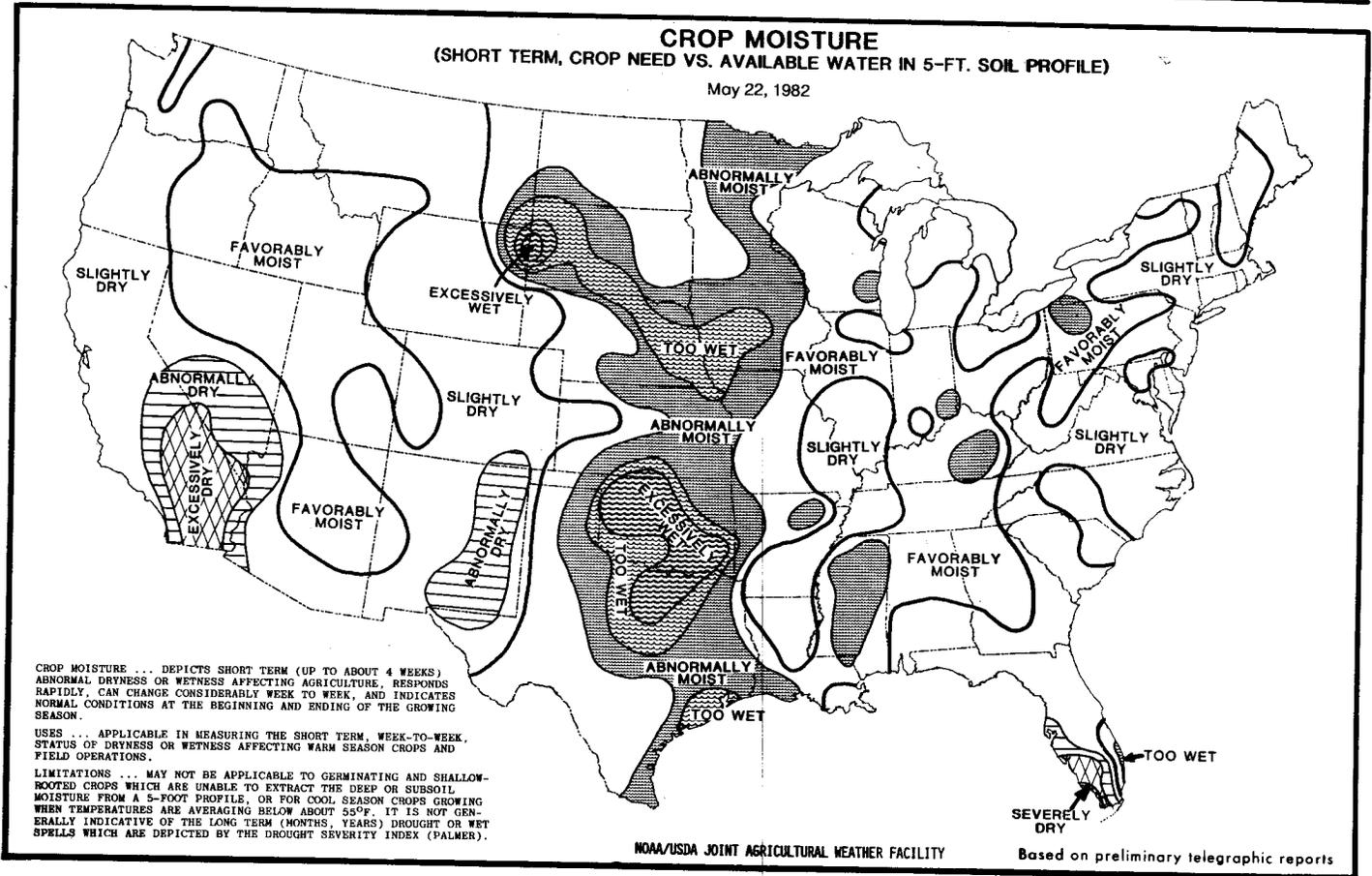
HIGHLIGHTS: Showers and thunderstorms covered most of the Nation. Only the extreme southwest remained dry all week. Violent thunderstorms triggered tornadoes, hail, and high wind over much of the eastern half of the country. Heavy downpours in Oklahoma caused some lodging in recently headed wheat. Near continuous rain in the western Cornbelt further delayed plantings but rain and warm weather in the eastern portion helped germinate newly planted seeds. The eastern seaboard States received needed rain but some areas remained dry.

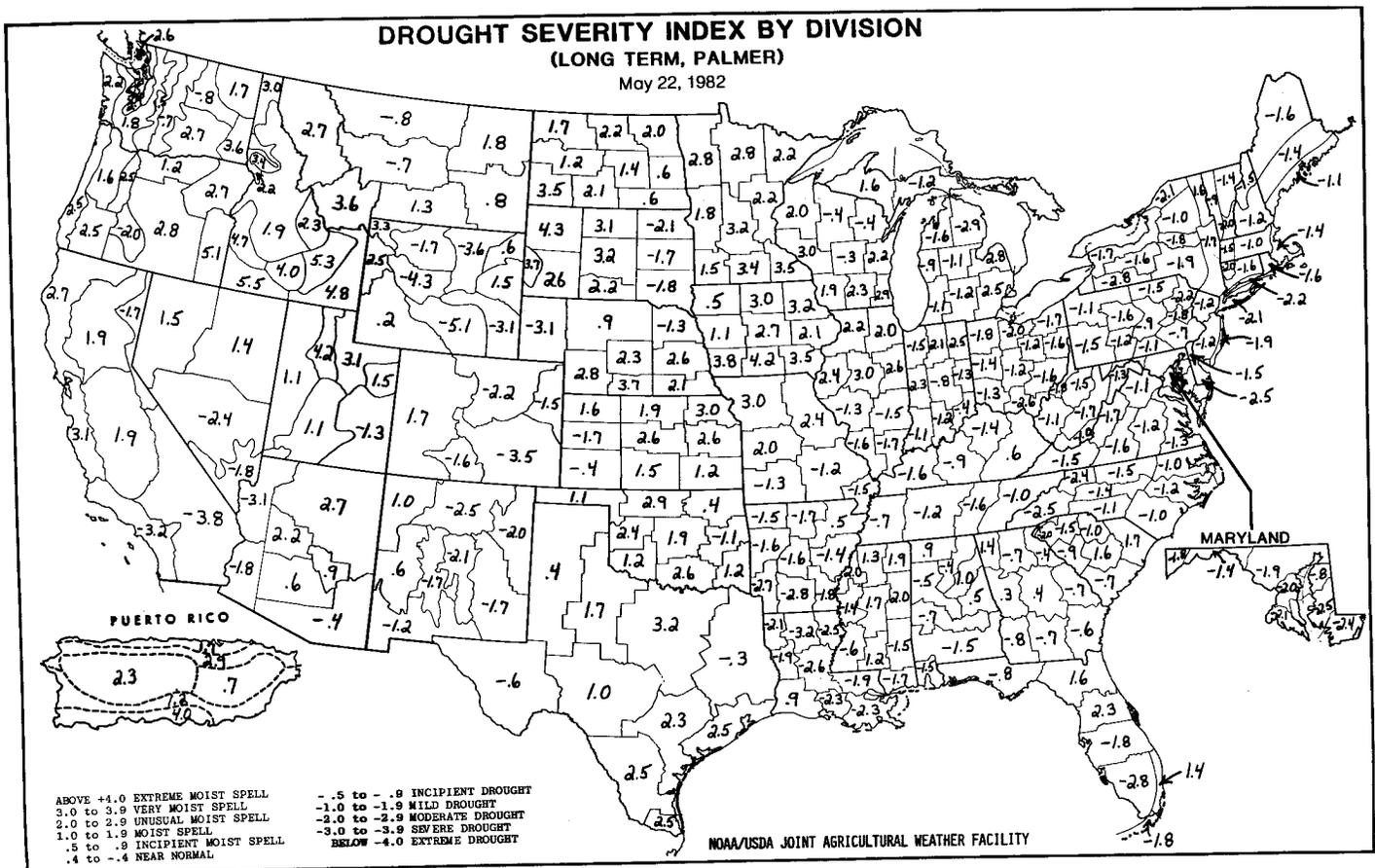
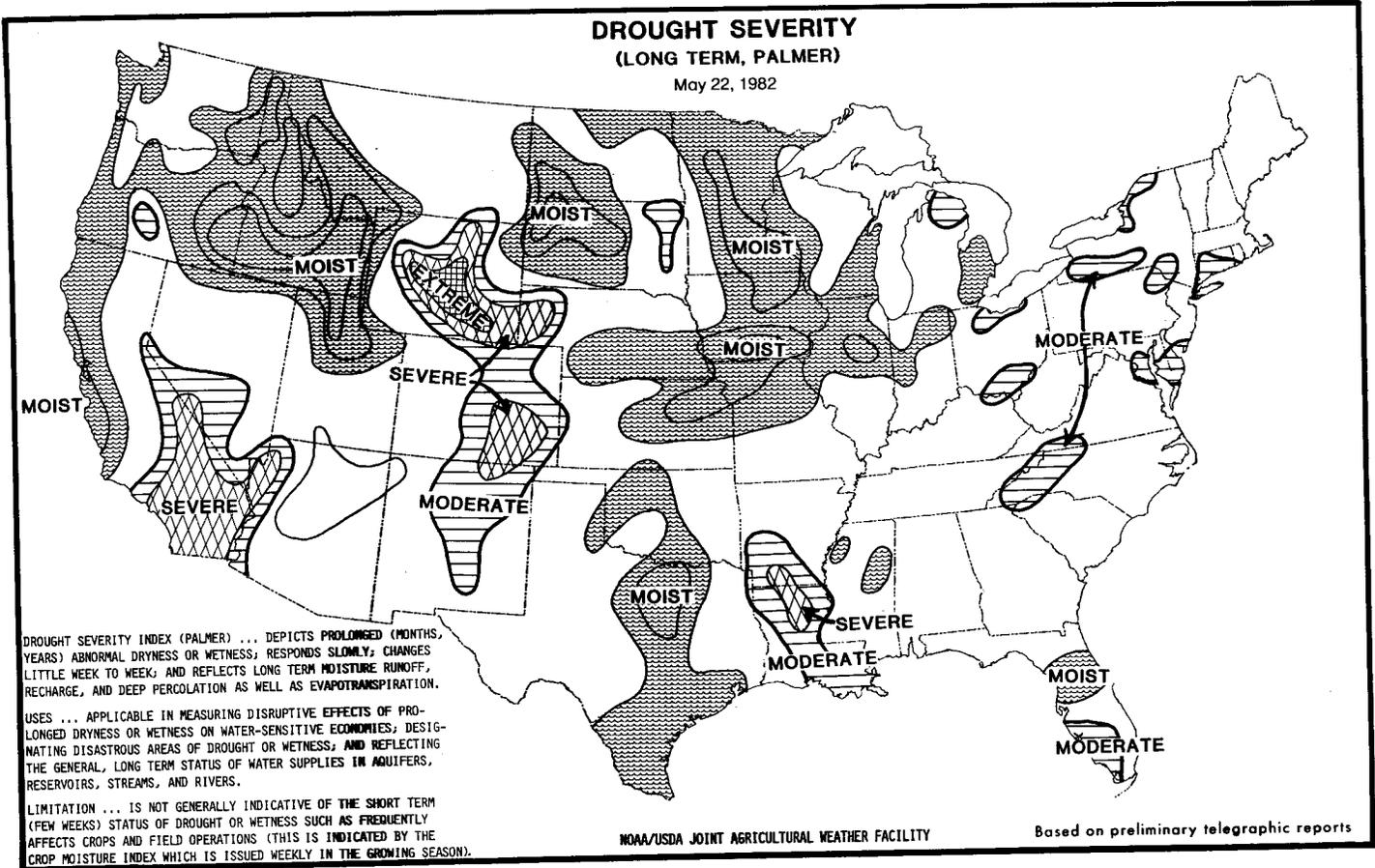
SUNDAY... Thunderstorms covered the Plains and pushed into the Midwest and through the Ohio and Tennessee Valleys to the Carolina coasts. Storms were isolated in Texas but were numerous and severe from western Oklahoma into Missouri. Tornadoes, hail, and heavy downpours accompanied the storms and resulted in local flooding through Oklahoma and isolated parts of Texas. Showers benefited dry soils in North Carolina and Virginia.

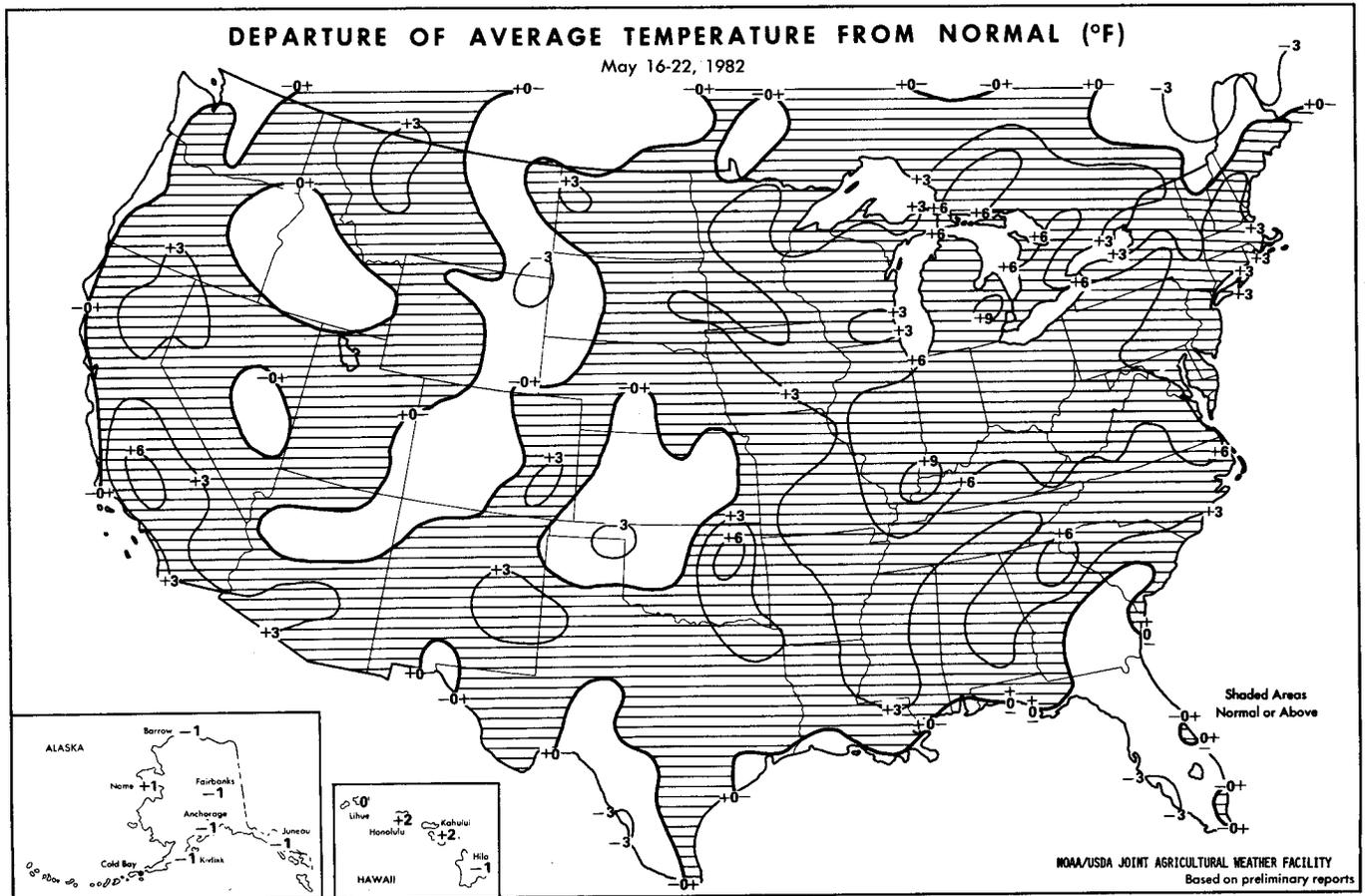
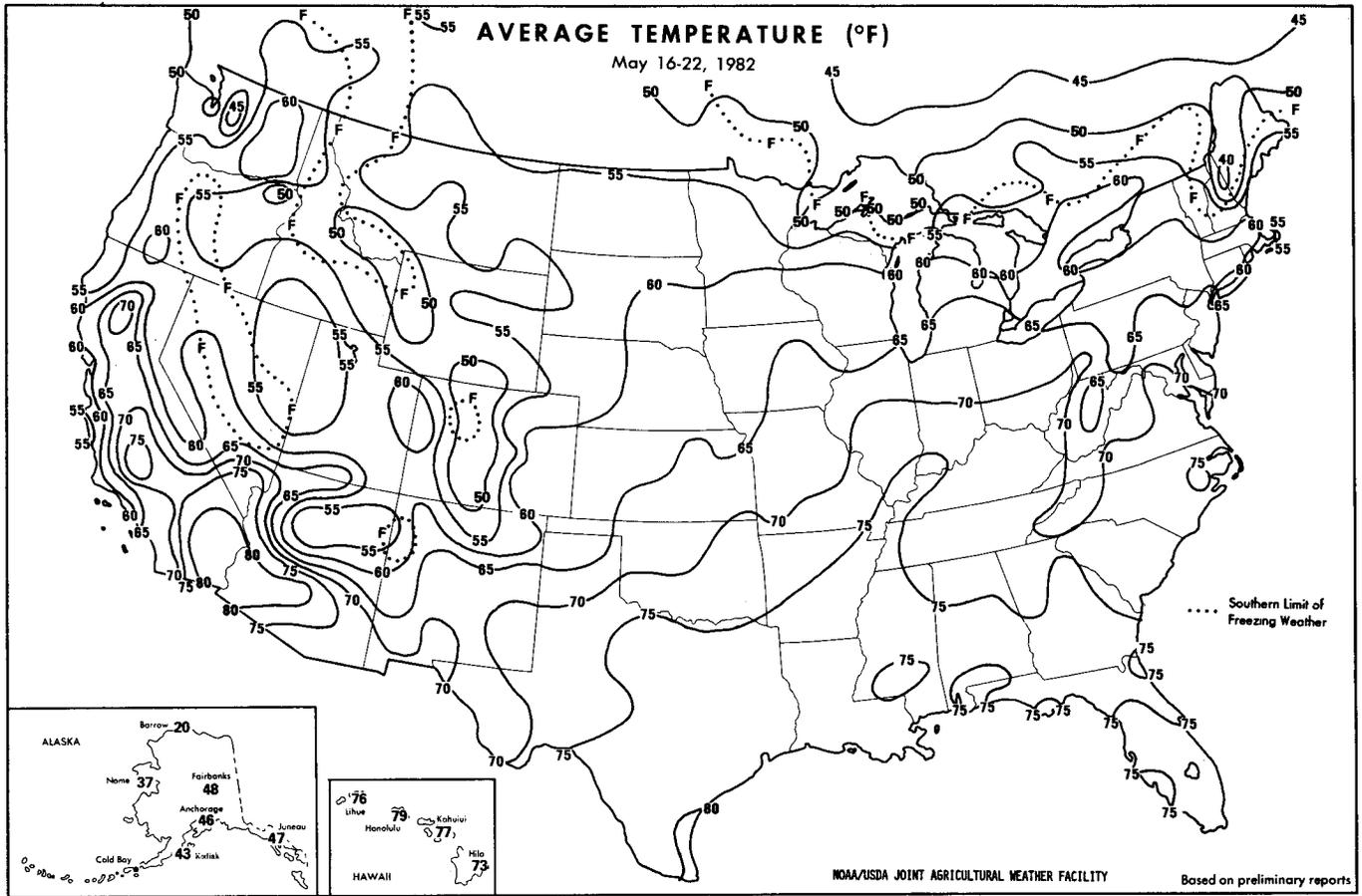
MONDAY... The thunderstorms abated through Oklahoma, leaving large flooded areas in the State. However, showers and thunderstorms continued through the rest of the Plains and northern Mississippi Valley. Showers continued through the Tennessee Valley, and some severe thunderstorms developed in Alabama and Georgia. Light showers were welcomed in the east coast States from Georgia to Pennsylvania. Showers covered the Pacific Northwest from northern California and the coast to the Rockies.

TUESDAY... Springlike weather prevailed over most of the Nation, although cool temperatures covered the northern Plateau and Rockies. Widely scattered showers and thunderstorms moved over the central



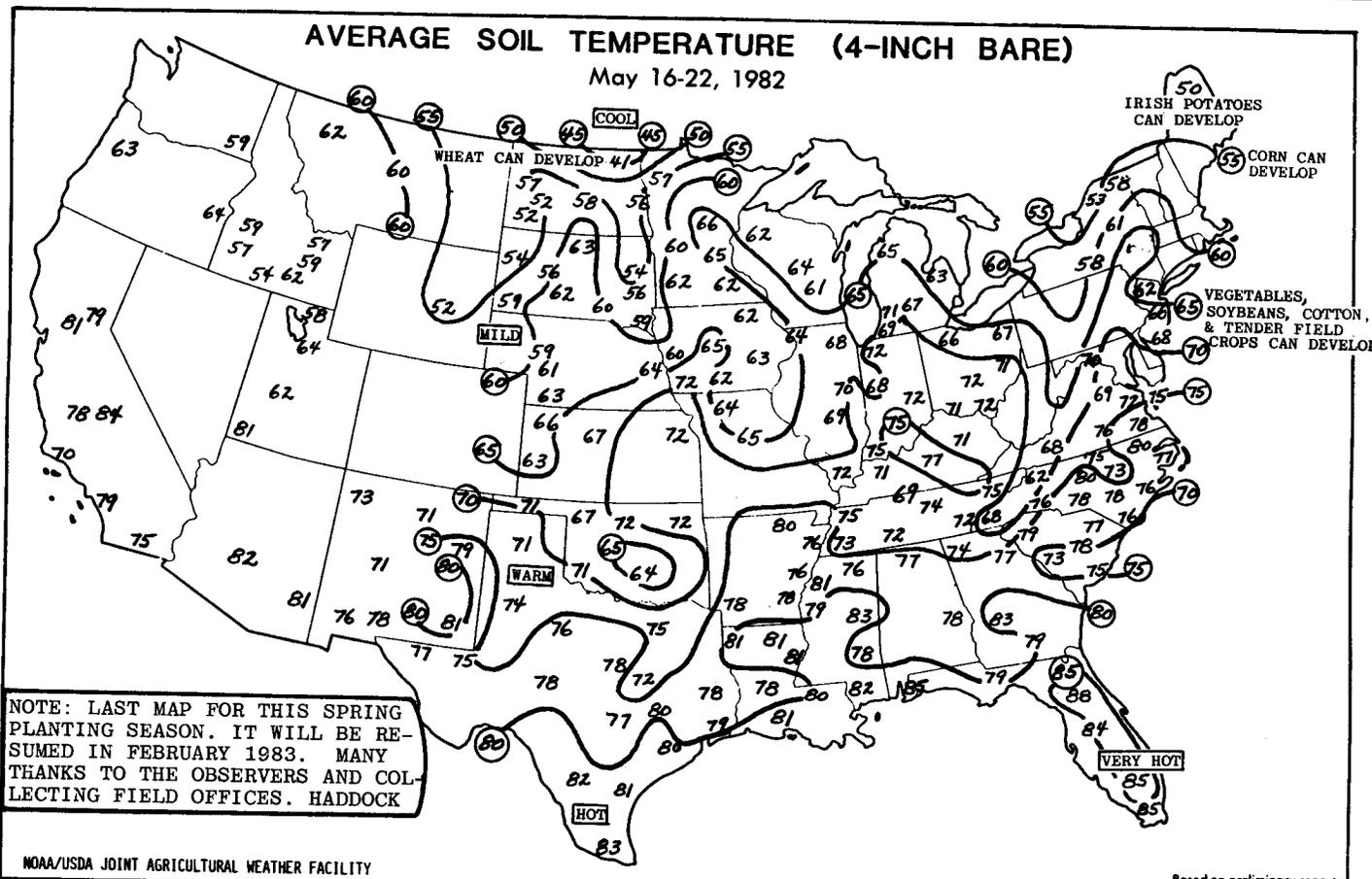






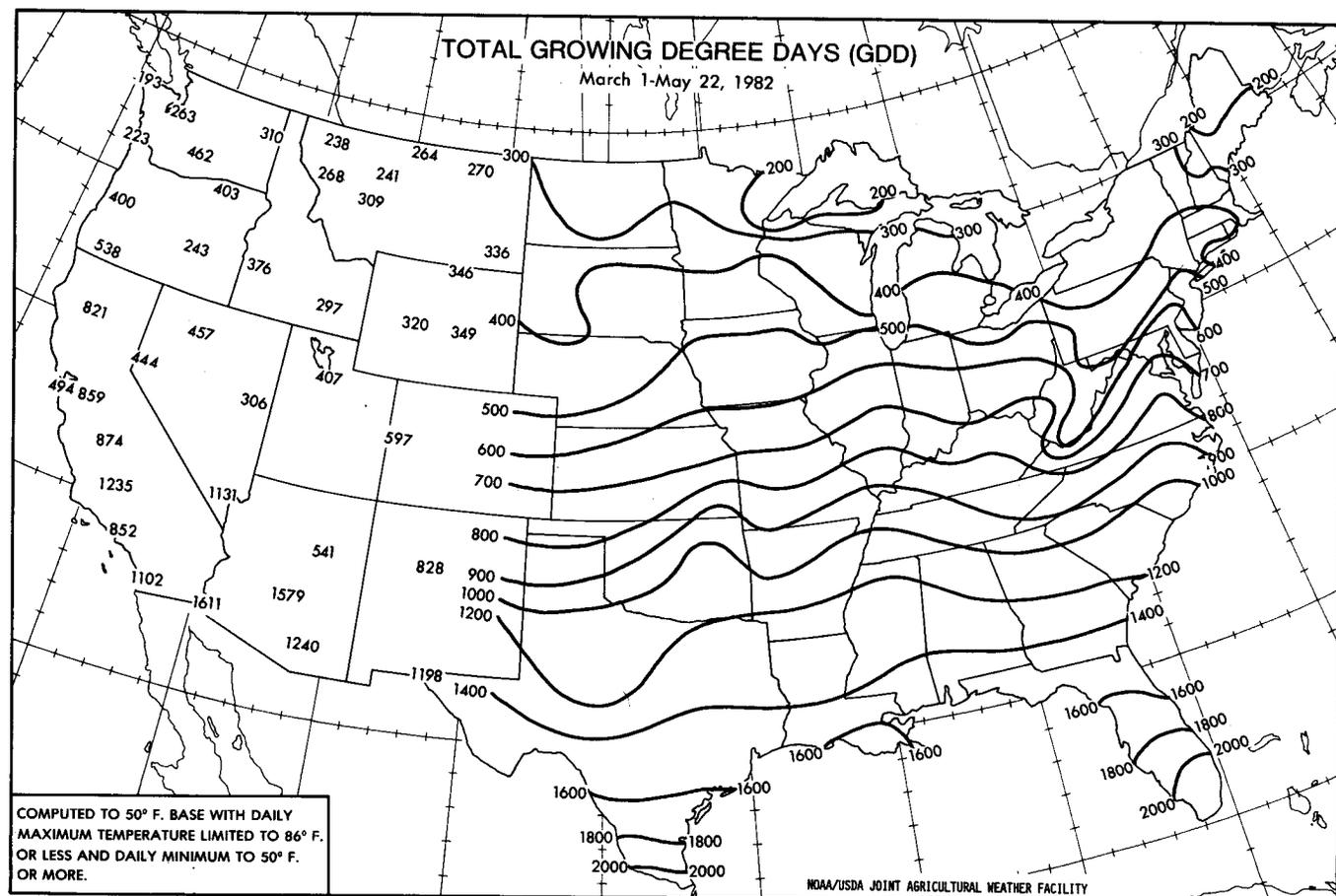
AVERAGE SOIL TEMPERATURE (4-INCH BARE)

May 16-22, 1982



TOTAL GROWING DEGREE DAYS (GDD)

March 1-May 22, 1982



Weather Data for the Week Ending May 22, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 28	PCT. NORMAL SINCE Feb. 28	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	88	62	90	59	75	4	.5	-.3	.5	13.1	94	25.5	115	97	42	1	0	2	0
MOBILE	87	64	88	61	75	0	T	-1.0	T	11.3	71	24.0	103	90	42	0	0	1	0
MONTGOMERY	88	66	89	62	77	4	1.3	.5	1.2	14.8	112	29.3	149	81	37	0	0	2	1
AK ANCHORAGE	55	37	60	31	46	-1	T	-.1	T	1.1	73	1.9	66	75	37	0	1	0	0
BARROW	23	17	27	12	20	-1	.1	.1	T	.9	180	1.6	160	98	82	0	7	2	0
FAIRBANKS	59	37	63	32	48	-1	.6	.4	.4	2.2	157	2.9	132	78	30	0	1	5	0
JUNEAU	52	41	63	32	47	-1	1.4	-.6	.5	12.7	140	17.0	110	87	58	0	1	6	1
KODIAK	49	38	51	30	43	-1	.6	-.4	.3	8.8	81	20.5	105	93	67	0	1	5	0
NOME	44	30	53	26	37	1	T	-.1	T	2.1	95	5.1	142	74	53	0	6	1	0
AZ PHOENIX	98	69	101	65	84	6	0	0	0	2.1	162	3.6	150	28	7	7	0	0	0
PRESCOTT	76	43	79	37	59	-2	0	0	0	3.4	117	6.4	112	68	19	0	0	0	0
TUCSON	92	58	96	55	75	2	0	0	0	1.8	138	3.4	121	25	6	6	0	0	0
YUMA	97	67	100	63	82	3	0	0	0	.9	180	1.6	160	40	11	7	0	0	0
AR FORT SMITH	83	62	86	60	73	2	.1	-1.1	.1	10.9	85	16.2	94	93	54	0	0	2	0
LITTLE ROCK	84	65	89	61	74	4	1.2	-.1	1.0	13.0	92	23.2	109	91	59	0	0	3	1
CA BAKERSFIELD	92	63	97	56	78	7	0	0	0	2.4	120	4.3	116	43	16	6	0	0	0
EUREKA	59	46	63	42	52	0	.1	-.4	.1	12.9	130	23.6	112	89	65	0	0	1	0
FRESNO	88	53	92	46	71	2	0	0	0	5.7	168	8.3	134	75	22	4	0	0	0
LOS ANGELES	70	59	78	58	65	3	0	0	0	5.3	156	8.6	115	84	60	0	0	0	0
RED BLUFF	87	55	92	47	71	3	T	-.2	T	4.8	87	11.0	90	66	18	4	0	1	0
SACRAMENTO	83	48	89	41	66	1	0	0	0	9.1	175	18.0	158	85	28	0	0	0	0
SAN DIEGO	71	62	81	60	66	3	T	0	T	4.9	204	9.0	161	83	59	0	0	0	0
SAN FRANCISCO	66	46	76	44	56	-2	0	0	0	9.6	204	22.5	201	86	52	0	0	0	0
CO DENVER	70	45	78	40	58	0	.1	-.6	T	1.7	34	2.1	37	76	26	0	0	2	0
GRAND JUNCTION	77	48	87	42	62	-1	.2	0	.2	1.8	86	2.3	72	67	19	0	0	1	0
PUEBLO	78	49	86	44	64	1	T	-.4	T	1.3	39	2.2	59	79	23	0	0	0	0
CT BRIDGEPORT	70	54	78	49	62	3	.5	-.3	.4	5.3	55	14.9	106	88	58	0	0	3	0
HARTFORD	77	50	85	45	64	4	.4	-.4	.3	7.1	70	14.3	93	88	38	0	0	4	0
DC WASHINGTON	82	63	87	57	73	6	2.1	1.2	1.1	8.4	93	13.8	105	86	47	0	0	2	2
FL APALACHICOLA	84	65	85	62	74	-1	.1	-.5	.1	11.8	116	21.1	133	92	64	0	0	1	0
DAYTONA BEACH	81	62	85	56	72	-4	.9	-.3	.8	12.7	172	17.2	148	93	60	0	0	3	1
JACKSONVILLE	87	59	91	58	73	-1	0	-.7	0	8.0	92	12.5	87	97	45	1	0	0	0
KEY WEST	84	75	86	74	80	-1	T	-.5	T	5.3	98	7.1	86	79	59	0	0	2	0
MIAMI	85	72	88	68	78	0	.1	-1.3	.1	16.2	167	17.4	134	83	51	0	0	1	0
ORLANDO	87	65	90	63	76	-1	1.1	-.4	.6	12.1	149	15.4	125	95	48	1	0	2	1
TALLAHASSEE	88	64	91	60	76	1	.2	-.8	.1	9.5	74	18.6	93	98	45	3	0	2	0
TAMPA	87	66	90	64	76	-2	.2	-.4	.1	5.1	69	9.0	76	97	42	1	0	2	0
WEST PALM BEACH	82	72	85	68	77	-1	1.0	-.2	.8	27.8	270	31.4	217	83	60	0	0	3	1
GA ATLANTA	85	62	89	60	74	4	1.7	-.8	1.5	12.2	88	23.6	112	89	44	0	0	4	1
AUGUSTA	85	59	90	56	72	-1	1.2	-.4	.9	8.1	74	15.6	93	100	49	1	0	4	1
MACON	87	64	92	60	76	1	2.4	-1.6	1.2	12.0	105	22.1	123	98	48	2	0	4	2
SAVANNAH	85	65	91	63	75	1	.3	-.7	.3	8.3	80	14.6	96	89	46	1	0	1	0
HI HILLO	79	66	82	64	73	-1	2.5	-.4	.7	60.9	174	81.2	154	91	65	0	0	6	3
HONOLULU	86	72	87	69	79	2	.1	-.2	.1	5.0	91	20.3	177	71	49	0	0	1	0
KAHULUI	86	68	89	64	77	2	T	-.1	T	6.8	145	20.3	199	79	51	0	0	0	0
LIHOE	83	70	84	67	76	0	1.2	-.7	.5	17.5	180	38.0	202	93	65	0	0	3	1
ID BOISE	72	43	80	34	57	-1	.1	-.1	.1	2.4	73	5.5	96	78	26	0	0	2	0
LEWISTON	71	47	80	43	59	1	T	-.3	T	1.7	57	4.9	102	82	34	0	0	2	0
POCATELLO	68	40	77	34	54	-1	.2	-.1	.1	4.1	128	6.4	128	87	33	0	0	2	0
IL CHICAGO	75	52	87	44	64	5	.5	-.3	.2	7.7	93	11.1	105	93	55	0	0	3	0
MOLINE	78	54	87	46	66	4	1.3	.5	.7	8.9	100	11.3	108	92	50	0	0	6	1
PEORIA	82	56	90	48	69	7	1.4	.5	1.1	12.1	120	15.9	128	91	49	1	0	4	1
QUINCY	77	59	85	53	68	2	2.5	1.6	1.2	9.6	102	14.1	98	60	0	0	5	5	
ROCKFORD	75	54	85	44	64	5	.9	0	.4	9.2	98	11.1	97	97	58	0	0	5	0
SPRINGFIELD	84	59	91	52	71	7	1.5	.7	1.0	8.2	89	14.6	127	89	50	2	0	2	1
IN EVANSVILLE	87	63	91	58	75	8	1.4	.5	.9	10.2	86	21.5	124	87	43	1	0	5	1
FORT WAYNE	79	59	85	56	69	8	1.9	1.0	.6	10.1	106	17.2	132	96	61	0	0	6	2
INDIANAPOLIS	83	60	87	58	71	8	2.0	1.1	1.0	10.5	101	17.7	122	86	47	0	0	5	2
SOUTH BEND	76	57	84	50	67	7	3.6	2.9	2.8	10.4	116	14.7	123	90	58	0	0	5	2
IA DES MOINES	73	57	82	48	65	3	1.2	.3	.4	13.4	168	16.6	175	87	62	0	0	6	0
SIOUX CITY	70	54	80	49	62	0	2.2	1.3	1.2	6.6	106	8.5	113	91	65	0	0	5	2
WATERLOO	74	57	83	46	66	6	2.4	1.5	1.3	12.1	146	13.4	144	93	60	0	0	5	2
KS CONCORDIA	73	56	80	52	65	1	2.7	1.7	2.4	9.8	142	11.0	141	92	61	0	0	2	1
DODGE CITY	75	55	81	49	65	0	.4	-.4	.3	3.6	73	5.1	93	83	44	0	0	3	0
GOODLAND	73	48	82	44	61	1	.3	-.3	.3	3.9	98	4.7	107	85	39	0	0	3	0
TOPEKA	72	55	76	51	64	-2	.8	-.1	.4	9.2	106	11.9	120	94	62	0	0	3	0
WICHITA	76	57	82	52	66	-1	1.9	1.1	1.7	9.6	135	12.1	149	87	54	0	0	3	1
KY BOWLING GREEN	84	61	89	55	72	4	2.3	1.4	1.2	11.4	92	19.4	92	99	51	0	0	5	1
LEXINGTON	84	61	86	59	72	7	1.1	-.2	.7	7.8	66	15.3	86	92	49	0	0	3	1
LOUISVILLE	84	62	88	60	73	7	.5	-.5	.4	9.8	80	16.8	93	89	49	0	0	3	0
LA ALEXANDRIA	87	67	90	65	77	1	0	0	0	8.1	54	17.4	79	43	1	0	0	0	0
BATON ROUGE	87	67	89	64	77	2	2.4	1.4	1.5	10.6	76	20.4	94	94	51	0	0	2	2
LAKE CHARLES	83	67	86	66	75	0	T	-1.2	T	11.7	98	16.2	84	100	64	0	0	1	0
NEW ORLEANS	89	65	90	61	77	1	T	-1.0	T	9.2	71	19.8	95	96	50	2	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending May 22, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 28	PCT. NORMAL SINCE Feb. 28	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	86	65	88	63	76	2	T	-1.1	T	7.4	56	14.0	71	95	53	0	0	1	0
ME CARIBOU	64	38	74	32	51	0	.2	-.5	.1	6.3	93	11.7	114	75	31	0	2	2	0
ME PORTLAND	68	45	81	37	56	3	.8	-.1	.8	8.9	91	16.5	106	88	39	0	0	1	1
MD BALTIMORE	80	58	85	49	69	4	.6	-.2	.4	7.5	77	14.9	104	92	49	0	0	3	0
MD SALISBURY	80	58	87	48	69	4	.3	-.5	.2	7.7	78	16.2	105	99	51	0	0	2	0
MA BOSTON	72	54	84	51	63	3	.2	-.5	.2	6.8	66	13.9	84	80	50	0	0	2	0
MA CHATHAM	60	47	66	43	54	1	.1	-.1	.1	7.8	--	15.9	--	89	73	0	0	1	0
MI ALPENA	67	46	90	39	57	5	.4	-.3	.3	5.4	84	7.4	87	82	47	1	0	2	0
MI DETROIT	77	54	89	52	66	7	.5	-.2	.3	6.5	78	10.9	99	88	46	0	0	4	0
MI FLINT	77	57	87	52	67	10	.4	-.3	.4	4.4	61	7.0	73	87	48	0	0	3	0
MI GRAND RAPIDS	75	56	85	52	66	8	.8	-.1	.4	7.2	88	10.6	100	92	51	0	0	1	0
MI HOUGHTON LAKE	71	52	82	43	62	8	.6	0	.5	6.2	103	8.6	106	86	46	0	0	4	0
MI LANSING	75	55	86	49	65	7	.8	0	.5	4.9	62	7.5	71	95	46	0	0	2	0
MI MARQUETTE	62	42	76	30	52	3	.8	0	.3	9.4	129	13.5	136	93	52	0	1	4	0
MI MUSKEGON	70	54	83	50	62	6	.8	-.2	.6	6.6	86	11.6	108	91	58	0	0	4	0
MI SAULT STE. MARIE	70	46	81	38	58	8	.2	-.5	-.2	8.6	141	13.5	152	80	40	0	0	2	0
MN ALEXANDRIA	66	50	76	41	58	3	1.0	-.2	.7	6.8	119	9.2	146	91	55	0	0	3	1
MN DULUTH	58	43	65	34	50	0	1.1	-.3	.6	8.3	124	10.9	138	82	57	0	0	4	1
MN INT'L FALLS	64	45	72	35	54	3	.5	-.1	.4	5.6	124	7.4	128	91	59	0	0	4	0
MN MINNEAPOLIS	71	54	80	48	63	5	.8	0	.6	7.6	136	10.8	161	82	53	0	0	2	1
MN ROCHESTER	67	53	77	47	60	3	1.4	-.6	1.1	10.8	164	12.7	174	93	66	0	0	3	1
MS GREENWOOD	90	67	93	65	78	5	.2	-.8	-.1	12.5	86	23.4	--	88	38	4	0	2	0
MS JACKSON	89	64	91	59	77	3	.1	-.9	-.1	12.1	88	21.7	103	96	40	2	0	1	0
MS MERIDIAN	89	61	91	58	75	2	1.8	1.0	1.8	13.2	92	23.2	107	91	40	2	0	1	1
MO CAPE GIRARDEAU	87	64	90	62	76	8	.3	-.7	.3	8.4	74	21.8	130	92	44	2	0	2	0
MO COLUMBIA	78	59	82	56	68	3	1.1	0	.9	8.3	86	12.6	106	99	62	0	0	5	1
MO KANSAS CITY	75	58	81	51	67	2	1.0	0	.6	11.1	123	14.9	142	99	66	0	0	3	1
MO SAINT LOUIS	83	63	89	61	73	6	.2	-.7	-.1	6.0	62	12.5	99	94	48	0	0	2	0
MO SPRINGFIELD	79	61	85	54	70	4	.4	-.8	-.3	7.7	69	12.4	92	96	63	0	0	2	0
MT BILLINGS	69	46	79	43	58	2	.6	-.1	.5	5.4	123	6.3	121	91	41	0	0	3	1
MT GLASGOW	61	48	72	46	55	-1	1.0	-.7	.4	2.7	142	3.9	170	90	64	0	0	5	0
MT GREAT FALLS	67	42	77	38	55	0	.5	-.1	.4	4.0	111	6.1	120	80	32	0	0	3	0
MT HAVRE	71	42	79	37	57	1	.4	-.1	.4	1.8	69	4.2	127	82	28	0	0	1	0
MT HELENA	69	42	76	39	56	3	.5	0	.3	2.4	89	4.0	121	83	35	0	0	4	0
MT KALISPELL	67	37	75	29	52	1	.2	-.3	.1	2.8	93	6.8	133	95	40	0	2	2	0
MT MILES CITY	63	47	77	44	55	-2	1.0	-.6	.6	3.1	97	4.3	113	98	60	0	0	3	1
MT MISSOULA	69	40	75	33	55	2	.5	-.1	.5	3.4	121	6.8	158	92	38	0	0	1	0
NE GRAND ISLAND	71	53	81	49	62	0	2.0	1.1	1.2	9.6	155	10.9	154	93	61	0	0	4	2
NE LINCOLN	72	56	81	52	64	2	.9	0	.6	9.4	145	10.3	134	89	63	0	0	3	1
NE NORFOLK	71	53	80	49	62	1	1.7	-.9	1.0	7.3	126	9.4	138	86	55	0	0	5	1
NE NORTH PLATTE	70	48	81	42	59	0	.9	-.1	.5	6.3	126	6.5	120	95	53	0	0	3	1
NE OMAHA	70	55	80	49	63	1	3.5	2.6	1.2	11.2	156	13.2	159	92	73	0	0	4	4
NE SCOTTSBLUFF	70	45	81	41	57	0	.2	-.4	.1	2.6	60	3.1	65	93	37	0	0	4	0
NE VALENTINE	71	47	86	42	59	1	1.6	1.0	.6	5.5	141	6.1	127	87	48	0	0	2	0
NV ELY	69	33	75	27	51	0	0	-.2	.1	4.8	178	6.0	171	82	26	0	0	4	2
NV LAS VEGAS	89	62	94	59	76	2	0	0	0	.6	67	1.8	113	30	10	3	0	0	0
NV RENO	76	39	83	33	57	2	0	-.2	0	1.6	89	3.2	86	72	20	0	0	0	0
NV WINNEMUCCA	76	37	84	27	57	2	.1	-.1	.1	1.8	82	2.4	62	71	18	0	2	1	0
NH CONCORD	75	44	85	36	59	3	.5	-.2	.5	6.3	81	13.4	111	85	30	0	0	1	1
NJ ATLANTIC CITY	78	56	86	45	67	5	.4	-.4	.2	6.8	65	13.0	80	94	53	0	0	4	0
NM ALBUQUERQUE	84	49	87	47	67	0	.4	-.3	.4	1.4	93	1.9	95	51	11	0	0	1	0
NM CLOVIS	83	55	91	49	69	2	.1	-.5	.1	.7	25	1.4	--	81	25	1	0	1	0
NM ROSWELL	87	57	93	51	72	3	T	-.2	T	.6	27	1.4	48	73	21	2	0	1	0
NY ALBANY	75	48	82	40	61	3	.6	-.2	.5	6.5	86	12.0	110	85	37	0	0	2	1
NY BINGHAMTON	73	52	80	47	63	7	.6	-.3	.4	6.4	73	11.8	94	88	47	0	0	3	0
NY BUFFALO	73	52	81	46	62	6	2.1	1.5	1.8	7.7	91	15.9	123	89	45	0	0	3	1
NY NEW YORK	74	58	84	52	66	3	T	-.7	T	6.8	67	13.9	93	92	50	0	0	2	0
NY ROCHESTER	72	50	80	45	61	4	.7	-.1	.4	4.8	67	9.9	88	87	46	0	0	4	0
NY SYRACUSE	73	49	79	45	61	4	1.0	-.4	.5	6.9	82	11.2	86	98	53	0	0	4	1
NC ASHEVILLE	82	57	86	54	70	5	.8	0	.4	6.5	61	19.1	116	100	52	0	0	4	0
NC CHARLOTTE	84	64	90	62	74	4	3.0	2.4	1.8	8.6	85	17.8	110	98	51	1	0	4	2
NC GREENSBORO	83	62	87	59	73	5	1.7	1.0	.9	7.2	81	14.6	100	93	57	0	0	6	1
NC HATTERAS	79	62	82	52	71	3	T	-.7	T	11.8	130	24.8	151	98	59	0	0	0	0
NC NEW BERN	85	64	87	59	75	4	.4	-.6	.4	6.2	59	17.6	103	86	47	0	0	1	0
NC RALEIGH	84	62	87	58	73	5	1.1	-.3	.3	7.6	84	15.9	108	92	54	0	0	6	0
NC WILMINGTON	83	62	85	59	72	1	.2	-.8	.1	5.9	59	18.2	117	91	51	0	0	3	0
ND BISMARCK	64	49	69	44	56	1	.1	-.4	.1	3.5	100	4.8	117	94	57	0	0	3	0
ND FARGO	68	49	75	40	58	3	.3	-.2	.2	3.3	72	5.2	104	85	49	0	0	3	0
ND GRAND FORKS	67	48	76	38	57	2	.8	-.2	.5	3.9	93	5.8	123	98	61	0	0	4	0
ND WILLISTON	67	50	77	41	59	3	T	-.4	T	3.4	113	5.1	128	94	62	0	0	1	0
OH AKRON-CANTON	80	57	86	54	68	9	1.6	.7	.9	7.3	78	13.7	105	83	45	0	0	4	1
OH CINCINNATI	83	58	85	55	71	7	1.9	1.0	.8	9.6	90	17.8	111	87	44	0	0	3	2
OH CLEVELAND	78	56	87	50	67	8	.8	0	.7	6.9	76	12.4	96	85	43	0	0	2	1
OH COLUMBUS	81	59	87	53	70	8	1.8	-.9	1.4	8.7	84	14.9	103	92	49	0	0	4	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending May 22, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 28	PCT. NORMAL SINCE Feb. 28	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	82	60	87	57	71	9	1.2	.4	.7	9.9	104	17.4	127	89	49	0	0	4	1	
TOLEDO	78	55	90	52	67	7	.8	.1	.4	6.6	85	11.2	105	92	54	1	0	5	0	
YOUNGSTOWN	79	55	86	50	67	9	1.2	.3	.9	6.0	62	11.9	85	88	44	0	0	2	1	
OK OKLAHOMA CITY	79	59	83	56	69	0	3.0	1.8	1.2	10.9	120	15.7	147	94	57	0	0	4	3	
TULSA	85	66	91	61	76	6	1.6	.4	.7	9.5	91	13.8	110	80	49	1	0	3	2	
OR ASTORIA	60	46	64	37	53	0	.1	.5	.1	14.5	106	39.0	134	89	60	0	0	3	0	
BURNS	66	37	73	29	51	-2	.4	.1	.4	2.0	77	5.0	94	71	51	0	2	1	0	
MEDFORD	76	44	83	35	60	2	.4	.3	.4	2.9	74	8.2	90	85	32	0	0	0	0	
PENDLETON	72	47	80	41	60	0	.3	.0	.2	2.7	87	4.9	92	73	26	0	0	2	0	
PORTLAND	70	49	78	41	60	2	.2	.3	.2	6.7	87	18.7	114	85	40	0	0	1	0	
SALEM	69	43	75	32	56	-1	.4	.1	.4	7.6	88	19.5	103	85	39	0	1	2	0	
PA ALLENTOWN	76	55	84	49	66	5	.6	.3	.4	7.3	71	13.5	90	94	51	0	0	4	0	
ERIE	71	53	80	47	62	7	.7	.5	.5	6.6	77	12.0	98	81	49	0	0	3	0	
HARRISBURG	77	56	82	48	66	2	.4	.1	.3	7.4	78	12.8	95	97	55	0	0	3	0	
PHILADELPHIA	77	59	85	53	68	4	.8	0	.6	9.6	103	17.2	128	87	49	0	0	3	1	
PITTSBURGH	80	56	87	50	68	7	1.1	.3	.4	6.5	68	13.2	98	90	49	0	0	3	0	
SCRANTON	75	55	80	47	65	5	1.7	.9	.6	7.7	95	13.0	117	89	48	0	0	5	2	
RI PROVIDENCE	72	51	82	47	61	4	.2	.5	.1	7.6	75	17.1	108	94	45	0	0	3	0	
SC CHARLESTON	83	63	85	60	73	0	.3	.6	.3	9.8	97	14.3	95	97	55	0	0	1	0	
COLUMBIA	86	62	92	58	74	1	1.8	1.0	1.3	10.0	92	18.0	107	98	49	2	0	2	1	
FLORENCE	84	62	86	60	73	1	1.5	.9	1.1	5.8	60	15.0	103	93	48	0	0	3	1	
GREENVILLE	84	61	87	58	73	3	1.0	.4	.5	8.7	71	20.0	104	98	50	0	0	4	1	
SD ABERDEEN	65	52	72	46	59	2	.2	.5	.1	5.6	117	7.1	129	83	58	0	0	4	0	
HURON	67	54	76	51	61	3	.2	.5	.1	5.6	117	7.1	129	83	58	0	0	4	0	
RAPID CITY	63	47	72	41	55	-1	1.5	.8	.7	7.9	152	8.6	151	93	66	0	0	5	2	
SIoux FALLS	68	53	78	49	61	2	.1	.7	.1	5.2	85	6.1	85	91	63	0	0	3	0	
TN CHATTANOOGA	85	59	87	56	72	3	.1	.7	.1	10.3	80	24.5	111	91	45	0	0	2	0	
KNOXVILLE	83	59	84	56	71	2	1.2	.5	.7	11.3	101	22.3	116	100	57	0	0	4	1	
MEMPHIS	85	67	88	64	76	4	2.4	1.5	1.6	14.8	105	25.6	116	90	54	0	0	3	2	
NASHVILLE	84	62	87	57	73	4	1.2	.3	.6	10.6	89	21.9	111	98	52	0	0	4	1	
TX ARILENE	86	65	92	59	75	2	.6	.3	.5	5.7	88	7.9	99	85	46	1	0	3	1	
AMARILLO	81	50	90	44	65	-1	.3	.4	.3	1.9	51	2.6	59	95	36	1	0	1	0	
AUSTIN	86	69	89	62	77	2	.2	.7	.2	10.7	129	11.8	97	92	54	0	0	2	0	
BEAUMONT	85	69	87	68	77	2	0	1.1	0	19.7	181	25.3	141	93	59	0	0	0	0	
BROWNSVILLE	86	73	89	69	80	0	3.0	2.4	1.5	10.0	286	10.7	178	89	65	0	0	5	3	
CORPUS CHRISTI	85	71	87	70	78	0	.5	.2	.4	3.2	58	11.4	133	99	69	0	0	2	0	
DEL RIO	87	68	91	63	78	-1	0	.6	0	2.1	49	4.6	81	88	52	2	0	0	0	
EL PASO	90	54	95	50	72	-1	.1	.1	.1	1.1	11	1.0	63	38	12	4	0	0	0	
FORT WORTH	82	66	86	60	74	1	2.5	1.5	1.8	14.0	136	18.2	137	90	57	0	0	1	0	
GALVESTON	81	74	82	72	77	1	.1	.7	.1	6.6	88	12.2	102	95	80	0	0	1	0	
HOUSTON	85	67	87	62	76	-1	1.2	.1	.8	9.9	100	13.1	82	93	56	0	0	3	1	
LUBBOCK	85	58	91	51	72	2	.5	.2	.4	5.2	121	5.6	110	91	35	3	0	3	0	
MIDLAND	88	61	94	54	74	1	.1	.5	.1	3.1	107	3.7	97	89	32	4	0	1	0	
SAN ANGELO	84	62	88	58	73	-2	.9	.2	.5	4.2	95	6.8	115	95	45	0	0	2	0	
SAN ANTONIO	85	69	87	66	77	0	.4	.3	.3	7.7	124	9.7	105	95	55	0	0	2	0	
VICTORIA	85	70	86	68	77	0	.1	.8	.1	7.1	96	12.9	119	93	61	0	0	2	0	
WACO	85	68	88	60	76	1	2.3	1.3	2.3	11.0	111	14.2	108	92	57	0	0	2	1	
WICHITA FALLS	86	64	92	58	75	2	3.4	2.4	1.0	16.9	211	19.5	210	89	52	1	0	6	5	
UT BLANDING	74	44	79	41	59	1	.3	.1	.3	3.1	129	4.6	112	56	23	0	0	1	0	
CEDAR CITY	75	42	80	35	59	2	.1	.1	.1	3.1	119	6.7	176	67	17	0	0	1	0	
SALT LAKE CITY	73	46	80	40	59	0	.7	.3	.6	5.3	110	7.1	104	78	25	0	0	2	1	
VT BURLINGTON	69	44	79	37	56	0	1.0	.3	.9	6.4	94	11.0	115	94	39	0	0	2	2	
VA NORFOLK	83	64	86	55	74	6	1.1	.3	.5	5.9	70	15.0	106	86	46	0	0	2	0	
RICHMOND	84	63	89	57	73	6	.5	.3	.3	7.4	85	14.6	107	96	54	0	0	3	0	
ROANOKE	84	59	89	56	71	6	2.0	1.2	1.1	6.6	75	14.9	109	93	46	0	0	5	2	
WA COLVILLE	69	43	78	38	56	0	.4	0	.2	3.8	119	7.9	123	75	35	0	0	2	0	
QUILLAYUTE	58	42	62	38	50	-1	.5	.5	.2	21.9	94	60.3	130	97	56	0	0	4	0	
SEATTLE-TACOMA	65	46	72	41	56	0	.2	.2	.1	6.8	89	19.4	117	79	42	0	0	2	0	
SPOKANE	70	44	78	40	57	2	.1	.2	.1	3.9	105	7.2	97	83	29	0	0	3	0	
WY YAKIMA	73	43	80	34	58	-1	.2	0	.2	1.1	79	2.9	85	76	27	0	0	1	0	
WV BECKLEY	79	56	81	54	67	8	1.9	1.1	1.9	6.8	66	13.0	80	95	46	0	0	4	1	
CHARLESTON	85	57	92	52	71	6	1.9	1.1	.7	8.3	83	15.3	99	95	39	1	0	4	2	
HUNTINGTON	84	57	88	52	71	5	1.9	1.0	.8	8.2	80	14.9	97	96	46	0	0	4	2	
PARKERSBURG	85	61	90	58	73	9	1.4	.4	.9	9.4	90	11.7	71	89	40	1	0	5	1	
WI GREEN BAY	67	52	75	45	60	4	1.1	.4	.5	6.6	105	7.7	97	94	62	0	0	4	0	
LA CROSSE	71	56	82	49	63	3	1.2	.4	.5	6.5	90	8.0	95	99	64	0	0	4	1	
MADISON	69	51	81	43	60	3	1.7	.9	.6	9.0	130	10.5	125	94	64	0	0	6	2	
MILWAUKEE	68	47	81	39	57	2	1.7	1.0	1.0	9.6	135	13.1	142	90	57	0	0	4	1	
WAUSAU	69	52	78	45	60	5	.3	.6	.2	8.8	131	10.7	126	88	47	0	0	2	0	
WY CASPER	68	39	76	36	54	0	.5	0	.3	3.7	95	4.5	100	89	35	0	0	4	0	
CHEYENNE	67	40	73	38	54	0	.2	.4	.1	2.3	55	3.0	63	91	33	0	0	3	0	
LANDER	67	41	79	39	54	1	.4	.2	.2	2.9	53	3.5	56	79	34	0	0	3	0	
SHERIDAN	69	41	80	36	55	1	.7	.2	.3	3.1	66	4.4	77	84	42	0	0	3	0	
PR SAN JUAN	90	75	93	73	82	3	.2	1.4	.1	11.5	115	20.0	131	91	58	3	0	3	0	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

NATION'S WATER PICTURE MIXED

The Nation's water picture for April showed mixed trends. More than half of the index gaging stations reported normal streamflow conditions during the month, while the spring snowmelt boosted streamflow in the Northeast and Northwest to well-above-normal levels. Parts of the Southeast, however, from West Virginia, south to the Carolinas, reported well-below-normal streamflow conditions, according to a month-end check on water-resource conditions by the U.S. Geological Survey (USGS), Department of Interior.

During April, after nearly 2 years of drought, the three major reservoirs that supply New York City--Pepacton, Cannonsville, and Neversink--reached full storage capacity and spilled. Combined contents of the three reservoirs on May 1, 1982, was 272 billion gallons, 101 percent of their full usable capacity. The full reservoirs and the generally good surface- and ground-water conditions throughout the Delaware River basin allowed the Delaware River Basin Commission to lift its drought emergency warning on April 27.

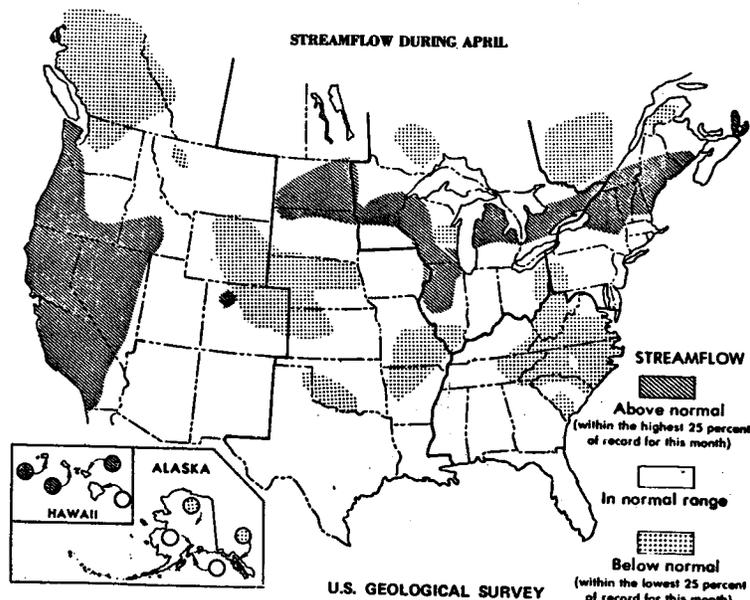
USGS hydrologists said that 7 or the 16 index gaging stations from Maine to New York were well-above-normal during April. In contrast, conditions remain fairly dry in the Southeast, which has been reporting well-below-normal streamflow in some areas for almost 2 years. More than 70 percent of the key index gaging stations from West Virginia to South Carolina reported well-below-normal conditions.

According to USGS, as streamflow conditions continue below normal in most of the Southeast and as the growing season begins and more moisture is lost through evaporation and transpiration from plants, another dry year like 1981 is a distinct possibility in the Southeast.

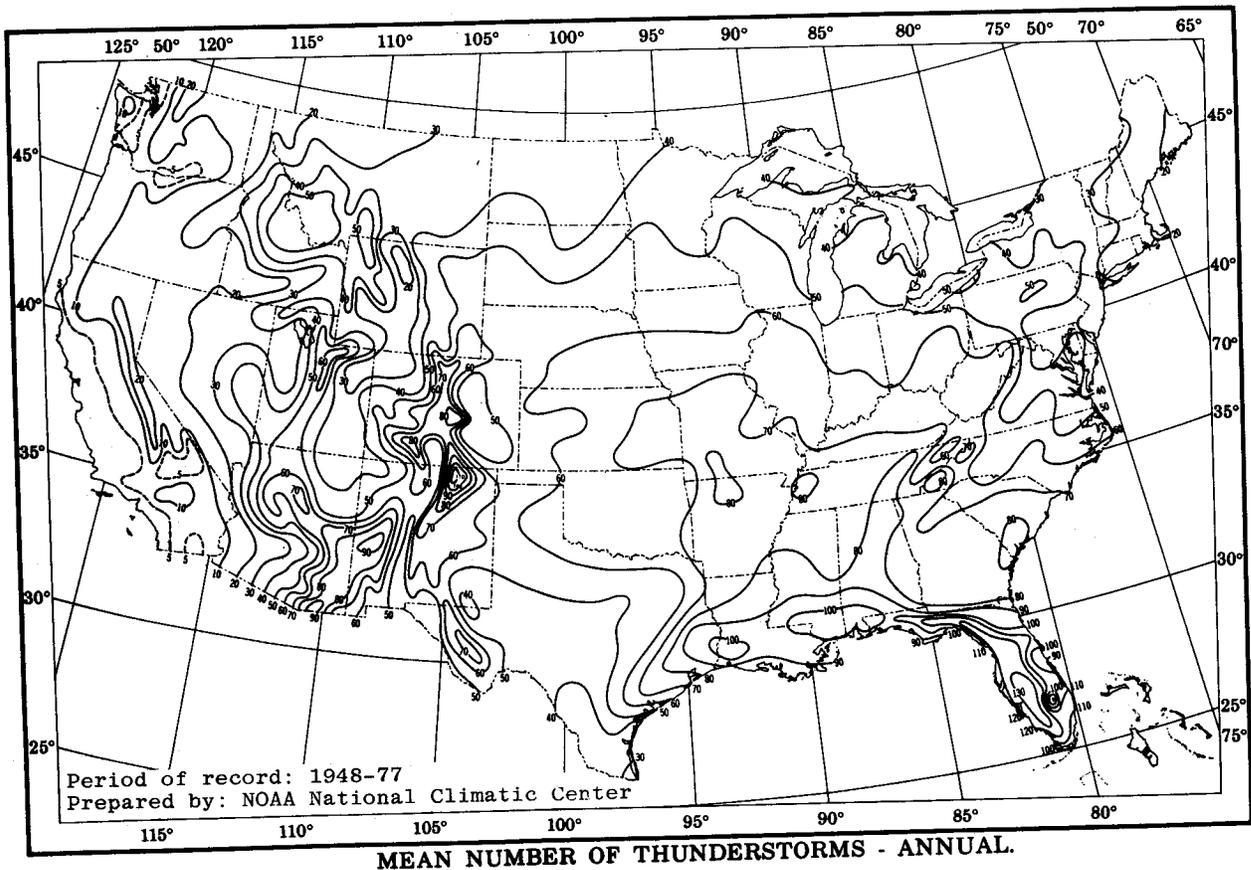
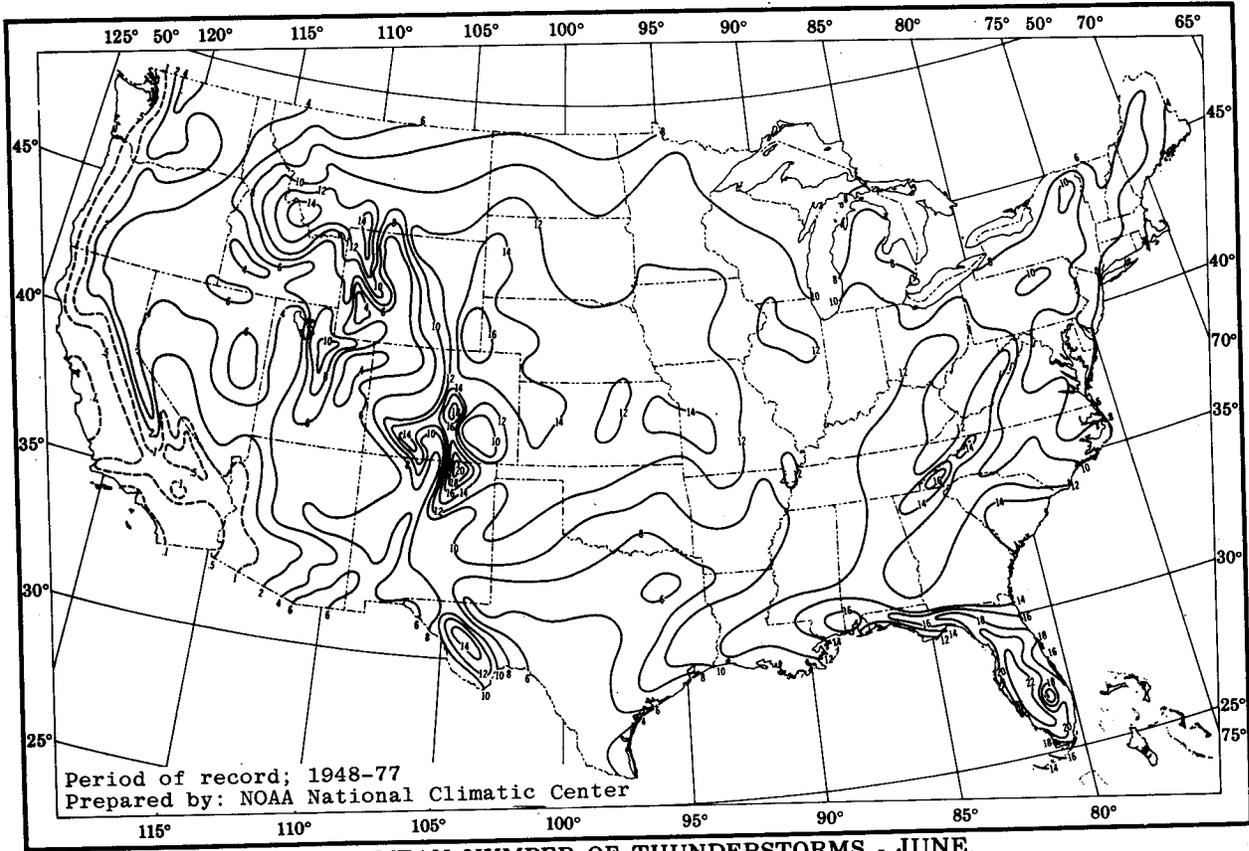
Reflecting generally good streamflow conditions, combined flow of the Nation's "Big Five" rivers--Mississippi, St. Lawrence, Columbia, Ohio, and Missouri--averaged 1,100 billion gallons a day (bgd) during April, slightly below normal for April and 14 percent below the March combined flow. The rivers, 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 hydrologists compiled the following highlights of water-resource conditions during April:

- * **Big Five**--Individual flows of the Big Five for April: Mississippi River near Vicksburg, Miss., 649 bgd, 10 percent above normal and 3 percent below last month; St. Lawrence River near Massena, N.Y., 179 bgd, 4 percent above normal and 9 percent above last month; Columbia River at The Dalles, Ore., 136 bgd, 4 percent below normal and 33 percent below the month of March; Ohio River at Louisville, Ky., 87 bgd, 35 percent below normal and 74 percent below March's flow; and the Missouri River at Hermann, Mo., 47 bgd, 17 percent below normal and 35 percent below March's flow.
- * **Northeast**--The spring thaw helped produce well-above-normal streamflow during April in the Northeast from Maine to New York. Reservoir contents generally rose, reaching above-average levels in some cases. Ground-water levels ranged from below to above normal. Several States experienced mild to severe flooding. Heavy rainfall and warm temperatures triggered melting of the winter's heavy snowpack, producing record-breaking floods on the Black River near Boonville, N.Y., and the Independence River near Donnattsburg, N.Y. Flooding was also reported in Vermont and New Hampshire.



- * **Southeast**--In contrast to the generally good conditions throughout much of the Nation, conditions remained fairly dry in the Southeast. Although higher flows of Fisheating Creek and Kissimmee River have boosted inflow to Lake Okeechobee, the principal reservoir for south Florida, the lake level remains at a near-record low level for April. In central Florida, flow of the St. Johns River, near Christmas, reported above-normal flow during April after 22 consecutive months of below-normal flow.
 - * **Great Lakes**--Streamflow was normal to above normal in much of the Great Lakes region, with small areas of well-below-normal streamflow in southern Illinois and northeastern Ohio. Flow of the Skillet Fork River at Wayne City, Ill., averaged 107 million gallons a day (mgd), 72 percent below normal for April. Conditions in northern Illinois were well-above-normal, with flow of the Pecatonica River at Freeport, Ill., averaging 1.3 bgd, 78 percent above normal for April. Flow of the South Branch Ontonagon River at Ewen, Mich., on April 17 reached its second highest level in 43 years of record.
 - * **Great Plains**--Scattered areas in the Great Plains reported below-normal streamflow and ground-water conditions during April. Most of Nebraska and parts of northwestern Kansas reported below-normal flows. Below-normal precipitation and high winds have produced dry conditions throughout Nebraska. Flow of the Niobrara River above Box Butte Reservoir in northwestern Nebraska, for example, has been below normal now for 6 consecutive months. Ground-water levels across Kansas ranged from less than 1 to more than 9 feet below the seasonal normal.
 - * **Rocky Mountains**--Streamflow conditions in the Rocky Mountain States were mixed, with Colorado, Wyoming, and New Mexico reporting normal to below-normal flows and Utah and Nevada reporting normal to well-above-normal flows. For the most part, ground-water levels generally declined seasonally throughout the region. Flow of the North Platte River above Seminole Reservoir near Sinclair, Wyo., averaged 422 mgd, 41 percent below normal for April. The total storage capacity of the key index reservoirs in Wyoming was 53 percent below normal for this time of year.
- (cont. on page 24)



National Agricultural Summary

May 17-23

HIGHLIGHTS: Heavy rains in the central and southern Great Plains limited fieldwork, cause localized flooding, and lodged some winter wheat fields. In the East, rainfall improved crop conditions and helped restore soil moisture supplies. Continued clear weather in the eastern Corn Belt permitted planting to progress rapidly. Rain and wet fields in the western North Central States limited fieldwork from less than a day in some areas to generally less than 4 days. In other regions, farmers had 4 to 7 days available for fieldwork. As a result of the heavy rain, soil moisture supplies were rated adequate to surplus in the West North Central States. Short to adequate supplies were reported elsewhere. Corn planting reached 77% completion, lagging the average of 80%. Soybeans were 39% planted, 2 points behind normal. Sorghum was 34% planted compared with the average of 45%. Cotton planting advanced to 63% completion, 18 points behind schedule. Winter wheat was in fair to good condition; 58% was headed. Spring wheat planting was 73% completed, 12 points behind normal; 54% of the acreage had emerged. Rice was 86% planted and 62% of the acreage had emerged. Vegetable harvesting and planting became more widespread in northern areas. Livestock were in fair to good condition.

SMALL GRAINS: Winter wheat was in fair to good condition although heavy rains in Oklahoma caused localized flooding and some lodging in fields. Winter wheat was 58% headed, lagging last year's rapid development but slightly ahead of average. Heading was underway in all States except Montana and South Dakota. Harvesting, which started in extreme southern areas, ranged up to 11% completed in Georgia.

Spring wheat seeding in the 5 major producing States reached 73%, behind last year's 95% and the average of 85%. Progress lagged the average in all States except Idaho. The crop had emerged on 54% of the total intended acreage. Stands were in fair to good condition. Moisture supplies were ample for good growth.

CORN: Corn planting in the 17 major producing States was 77% completed, equal to 1981 but 3 points slower than average. Progress was equal to or ahead of schedule in all States except Iowa, Minnesota, Nebraska, South Dakota, and Wisconsin. Planting was finished in Georgia and Ohio and nearly complete in Illinois, Indiana, and North Carolina. Rain and wet fields kept farmers sidelined during most of the week in much of the west north central region. Iowa growers were 40 percentage points behind schedule; South Dakota, 23 points; Iowa, 21 points; and Minnesota, 17 points slower than average. Emerged plants were in fair to good condition. Rainfall in the Southeast benefited stands as soils were becoming very dry.

SOYBEANS: Soybean planting was 39% complete in the 18 major producing States, compared to 30% a year earlier and the average of 41%. Producers in Indiana, Michigan, and Ohio took advantage of good weather conditions and planted 35, 25, and 25%, respectively, of their acreage during the week. Progress in Indiana pushed 35 percentage points ahead of normal while Ohio growers were 50 points ahead of average. However, wet weather delayed activities farther west. Progress fell behind

normal by as much as 32 percentage points in Nebraska, 40 in Minnesota, and 45 in Iowa. Very little planting was accomplished in this region during the week. Emerged plants were in fair to good condition.

SORGHUM: Sorghum planting was 34% completed in the 7 major producing States, behind last year's 42% and the average of 45%. Rain slowed progress in most areas. Nebraska producers fell 36 percentage points behind the average progress for this date. Planting ranged from 4% complete in Nebraska to 71% in Texas. Scattered showers provided good preplanting moisture in Texas.

COTTON: In the 14 major producing States, 63% of the cotton was planted, behind last year's progress of 81%. Planting in Texas was only 40% finished, 18 percentage points behind normal. Replanting was necessary in areas of the Blacklands of Texas which were washed by heavy rains. Planting was in full swing as weather permitted across the southern High Plains.

OTHER CROPS: Rice planting in the 5 major producing States was 86% finished, compared with 93% a year earlier. Seeding was nearly complete in all States except California, where planting stood at 50%. Rice had emerged on 62% of the acreage.

Peanut planting neared completion in the Southeast. Recent rainfall should help germination and growth of plants.

Tobacco plants were in fair to good condition as transplanting became widespread. Setting of the burley crop in Kentucky and Virginia was underway. The flue-cured crop in North Carolina was nearly all transplanted.

Hay harvests moved northward. Dry weather in the Southeast limited growth. Rain in some areas caused localized damage to cut hay.

FRUITS AND NUTS: Apples were in full bloom in New England. Harvesting of early variety peaches started in South Carolina.

Irrigation continued active in Florida's citrus groves although rain eased the dryness in some areas. New crop fruit made good progress. The Valencia orange harvest was active, but grapefruit picking slowed.

Early apricots were picked in the San Joaquin Valley of California. In the Coachella Valley, the grape harvest began. The Freestone peach harvest accelerated.

Texas citrus orchards had good bloom and fruit sets.

VEGETABLES: Vegetable harvesting and planting became more active in northern areas. Florida's vegetable shipments increased 4% from the previous week. The potato harvest remained very active in the Hastings area. The watermelon harvest increased as activity moved northward into the major producing areas.

Heavy rains and hail damaged some vegetable fields in Texas. In the San Antonio-Winter Garden area, hail damaged many watermelon fields. In East Texas, tomatoes were setting fruit.

California growers harvested a wide variety of vegetables under generally favorable weather conditions. Planting was also active in some areas of the State.

normal. Precipitation light.

Kodiak Island: Rain continued. Temperatures remain near normal. Precipitation near 1.25 in.

ARIZONA: Mostly sunny, warm days, cool nights except very light showers over Mogollon Rim, White Mountains and extreme southeast over weekend. Average temperatures 4° below normal to 7° above.

Cotton planting 94% complete, behind last year and average, both 97%. Cotton to be planted mostly double crop. Some replanting (Maricopa County) due to damage from salt buildup. Squaring of early planted cotton increasing, central, western areas. Barley harvest pass halfway point. Wheat harvest increasing. Corn development satisfactory. Sorghum planting continued. Flowering, seed setting of safflower increasing. Sugarbeet digging 75% complete, Yuma area and starting, central area. Alfalfa haying seasonal. Lettuce harvest full swing, southeast area. Potato digging, processing fresh market, full swing in central areas. Dry onion bagging, midpoint. Carrot digging winding down. Bunching of green onions seasonal. Cabbage, greens harvest continued. Early planted cantaloups, watermelons approaching maturity, Yuma area. Harvest should start May 28th. Valencia orange, grapefruit picking spotty. Lemons picked on demand. Peach harvest in progress. Nectarine picking began. Ranges mostly fair condition. Extreme southern, southwestern ranges poor condition. Lack moisture, warmer temperatures caused ranges begin drying out. Livestock fair to good condition. Rounding up, branding activities, southeastern regions. Water supplies mostly adequate. Shortages soil moisture southern half State.

ARKANSAS: Mostly warm and humid. Highest temperature 92°, lowest 52°. All departures ranged from 0 to +6°. Most rainfall 3.67 in., least zero.

Five days suitable for fieldwork. Soil moisture adequate. Farmwork on schedule. Crop growth moderate. Soybeans planted, 24%, 22% 1981, 21% average. Soybeans emerged 14%, 14% 1981. Rice planted 91%, 93% 1981, 87% average. Rice emerged 60%, 84% 1981, 82% average. Cotton planted 88%, 99% 1981, 88% average. Cotton emerged 86%, 83% 1981, 82% average. Corn planted 91%, 100% 1981, 81% average. Sorghum planted 85%, 89% 1981, 75% average. Wheat and oats in good condition. Livestock in good condition. Pastures supplying average forage.

CALIFORNIA: The San Joaquin Valley was 3° above normal, while the neighboring central coast was 1° below normal. The rest of State was 1 or 2° above normal. Most of the warming came near the end of the week. Rain was sparse and only near the Oregon border.

Cotton planting 100% complete, 100% last year. Stand showing good development. Rice planting continues, 50% seeded, 80% last year; 10% emerged, 40% last year. Pesticide application continues. Small grains developing rapidly and turning; 95% of winter wheat headed, 100% last year. Barley harvest getting started in areas of San Joaquin Valley. Cutting of oats and alfalfa for hay continues. Sugarbeet harvest active. Dry bean and field corn plantings continue. Warm weather pushing crop development, irrigation increasing. Red Delicious apples spotty, Santa Cruz County. Early apricots being picked San Joaquin Valley. Bing cherry harvest commencing, crop very light. Perlette grape harvest underway, Coachella Valley. Kiwi and olives, heavy sets. Thinning fruit in peaches and nectarines. Freestone peach harvest accelerating. Water applications began in Sacramento Valley prunes. Valencia quality excellent. Harvest brisk. Navel orange worm spraying continue in almonds; codling moth spraying in walnuts, Sacramento Valley.

Harvest artichokes, asparagus decreasing seasonally. Broccoli heavy supply central coast. First harvest cantaloup, watermelons Desert, carrot harvest active Desert, San Joaquin Valley. Cauliflower volume fairly heavy central coast. Celery harvest active south coast. Sweet corn harvest active Desert. Cucumber harvest underway southern California, San Joaquin Valley. Lettuce fairly heavy supply central coast. Grading market onions active Desert, increasing San Joaquin Valley. Freezer pea harvest active San Joaquin Valley. Spring potato movement increasing slowly. Strawberry harvest heavy. Planting sweetpotatoes active. Market tomato volume increasing Desert. Planting processing tomatoes late areas, early Desert fields maturing. Grass conditions improving mountain areas temperatures increase. Livestock movement summer pastures, market peak levels. Bee colonies being moved melon fields pollination.

COLORADO: Typical spring weather prevailed with scattered afternoon and evening thunderstorms. Precipitation averaged 0.20 in. except Kansas River Basin which received 0.75 in. and San Luis Valley with less than 0.10 in. Temperatures averaged 1 to 3° below normal most localities.

Seeding of spring grains rapidly nearing completion with barley, 96% seeded; oats, 86% seeded; spring wheat, 94% seeded. Barley 86% emerged. Sugarbeet seeding completed and thinning activities underway. Eighty percent of the corn in the ground and 33% emerged. Winter wheat crop in fair to good condition with 78% jointed and 19% headed. Subsoil and topsoil moisture supplies short to adequate. Four and one-half days suitable for fieldwork. Livestock in good condition.

FLORIDA: May's dry spell continued. Showers were confined mainly to mid, lower East Coast areas except some isolated thundershowers, Panhandle and extreme north. Weekend thunderstorms broke the dry spell over large portions of Peninsula. Rains of 1.00 to 2.00 in. common west central with spotty amounts near 3.00 in., some 1.00 in. Rains also occurred along the lower East Coast. Elsewhere, rains averaged less than 0.50 in. Temperatures remained about 4° below normal most of week but warmed to above normal, weekend.

Soil moisture mostly short; showers over the weekend helpful to some areas. Irrigated corn good condition, dry land corn poor. Tobacco harvest increasing slowly. Peanuts fair progress. Soybean planting active, early plantings up to good stands. Wheat harvest very active. Haymaking increasing. Sugarcane good growth. Pasture condition declined; mostly poor to fair. Some counties very poor. Mole cricket damage continues. Most areas need rain. Cattle mostly fair. Citrus groves dry until rains last weekend, most growers continued irrigating along with light rains. New growth hardening and turning darker green. New crop fruit making good progress, Valencia harvest active, picking of grapefruit slowing. Warm days, mild nights prevailed in vegetable areas. Weather was mostly dry, sunny until weekend when thunderstorms occurred over much of Peninsula. Rainfall was heaviest west central, lower east coast areas. Total shipments increased 4% from previous week. Volume increased for carrots, Chinese cabbage, sweet corn, okra, dry onions, southern peas and watermelons. Volume about steady for celery, eggplant, parsley, potatoes and tomatoes. Volume declined for snap beans, cabbage, cucumbers, escarole, lettuce, peppers, radishes, squash, and strawberries. Potato harvest remains very active in the Hastings area; potatoes remain the volume leader. Watermelon volume increasing as harvest moves north into main producing areas.

GEORGIA: Average temperatures generally above normal, ranging 64° at Clayton to 77° at Athens.

Rainfall averaged less than 0.25 in. with local amounts up to 3.00 in. Warm 22nd and 23rd with scattered thundershowers. Rainfall amounts averaged about 0.50 in., locally heavier amounts. Athens received 2.80 in.

Soil moisture 14% very short, 49% short, 33% adequate. Five days suitable for fieldwork. Planting active but slowed in southern third of State because of dry soils. Spraying and haying continue very active. Corn 100% planted, 100% last year, 97% average; condition 5% poor, 56% fair and 37% good. Cotton: 89% planted, 99% last year and 93% average; 2% squaring, 5% last year and 3% average; condition 60% fair, 38% good. Peanuts 90% planted; condition 5% poor, 41% fair and 54% good. Herbicides applied to peanuts. Soybeans 31% planted, 38% last year and 37% average; condition 5% poor, 48% fair and 47% good. Watermelons 98% planted, 99% last year; condition 11% poor, 48% fair and 41% good. Peaches 8% picked, 2% last year and 4% average; condition 18% very poor, 11% poor, 35% fair and 34% good. Apple condition 19% very poor, 19% poor, 41% fair and 21% good. Wheat 11% harvested this year and last, 8% average. Condition 7% poor, 54% fair and 38% good. Continued reports of some disease in wheat and small grains. Other small grain condition 52% fair and 45% good. Pastures 39% fair and 53% good. Cattle and hogs fair to mostly good.

HAWAII: Weather favorable. Warmer weather improving crop development. Frequent irrigation necessary in most major crop areas. Field activities increasing. Crop conditions generally good. Vegetables: Supplies increasing. Most leaf crops heavy. Bananas: Production light. Papayas: Orchards improving with the favorable weather. Supplies will continue light. Pineapple: Harvesting gaining momentum. Sugar: All sugar plantations in maximum harvest. Pastures: Generally fair to good.

IDAHO: Temperatures near normal but showed wide ranges. Highest temperature recorded was 87° at Hagerman while the low was 20° at New Meadows. A storm system brought varying amounts of precipitation. The most precipitation reported was at Rexburg with 1.29 in.

Warmer temperatures toward the end of the week improved the crop outlook. Spring grain seedings virtually complete. Spring wheat 89% emerged, 87% in 1981, 78% average. Barley 70% emerged, 77% in 1981. Winter wheat 10% boot or higher, 30% in 1981. Potatoes 80% planted, 59% in 1981, 76% average. Potatoes emerged 14%, 22% in 1981, 24% average. Sugarbeets 90% emerged, same as 1981.

ILLINOIS: Temperatures 2 to 3° above normal in the north, 4 to 7° above normal in the south. Precipitation moderate to heavy, 0.40 to 2.00 in.

Winter wheat 7% excellent, 66% good, 25% fair, and 2% poor; 75% of the crop headed, 15% filled. Corn planting 97%, 73% 1981, 79% average. Soybeans planting 67%, 19% 1981, 48% average. Alfalfa 15% of the first crop was cut, red clover 10% of the crop was cut. Pastures 3% excellent, 77% good, and 20% fair. Soil moisture 47% short, 52% adequate, 1% surplus. Activities: Preparing the soil for planting, planting corn and soybeans, applying herbicides, and baling hay.

INDIANA: Wet, warm week. Rains averaged 1.00 in. northwest and south central, 2.00 in. southeast, elsewhere 1.50 to 1.80 in. Temperatures 5° above normal, ranging from 49 to 91°. High humidities in north. Solar radiation 54% of possible.

Fieldwork averaged 5 days. Topsoil and subsoil moisture adequate. Corn 98% planted, 1981 30%, average 75%. Corn 85% emerged, 1981 35%, average 55%. Soybeans 75% planted, 1981 5%, average 40%. Soybeans 40% emerged, 1981 5%, average 20%. Spring

cropland 98% plowed. Wheat mostly fair to good condition. Wheat 40% headed, 1981 50%, average 65%. Wheat 5% in milk. Wheat 20 in. high. Oats 7 in. high, 1981 10 in., average 7 in. Alfalfa hay 15% cut first time, 1981 10%, average 25%. Pastures fair to good.

IOWA: Wet week with seasonal temperatures. Rain fell on most days with amounts upward to 3.00 in. or more in some southwest and southeast counties.

Topsoil moisture: 78% surplus, 20% adequate, 2% short. Subsoil moisture: 48% surplus, 52% adequate. Oat acreage emerged: 100%, last year 100%. Corn acreage planted: 70% complete, last year 95%, normal 91%. Corn acreage emerged: 55%, last year 58%, normal 57%. Soybean acreage emerged: 5%, last year 7%, normal 13%. Fieldwork: 1.4 days suitable. Crop conditions: Corn, fair to good; pasture, wheat, oats and hay mostly good. Livestock in good condition. Soybeans planted: 15% complete, last year 56%, normal 60%.

KANSAS: Precipitation averaged 0.05 in. west central, 0.50 to 0.75 in. elsewhere west and central, 1.50 to 2.00 in. elsewhere. Temperatures averaged 63° (3° above normal) northwest, 65 to 68° (1 to 2° above normal) elsewhere.

Wheat 99% jointed, 100% last year, 98% average; 75% headed, 95% last year, 60% average. Corn 75% planted, 65% last year, 75% average. Sorghum 10% planted, 10% last year, 20% average. Soybeans 5% planted, 10% last year, 15% average. Alfalfa hay 1st cut 10% complete, 45% last year, 30% average. Pasture and range good to excellent. Dry conditions southwest improving. Soil moisture short to adequate west central, southwest; adequate to surplus elsewhere. Some hail damage scattered areas. Cattle grazing excess wheat acres, native pasture. Fieldwork: 1.5 days suitable.

KENTUCKY: Summer-like weather. Daily highs were generally in 80's with average temperatures about 5° above normal. Precipitation fell in most areas, but due to nature of thunderstorms, rainfall totals varied from less than 0.50 to almost 5.00 in.

Soil moisture 60% short, 37% adequate, 3% surplus. Eastern and northern areas driest. Nearly 5 days suitable fieldwork. Corn 92% planted, 77% last year, 72% average. About 70% planted corn emerged, average height 5 in. Soybeans 36% planted, 13% last year, 21% average. Burley 15% set, same as last year, little ahead of average. Half of tobacco plants in beds 4 in. or greater. Wheat prospects fair, yield reduced by diseases, aphids and thin stands. Pastures fair to good. Pastures and hay crops hurt by lack of rain some areas. Strawberry picking underway.

LOUISIANA: Temperatures near normal south, about 2° above normal north. Rainfall averaged 0.30 to 1.20 in.

Soil moisture short to adequate. Days suitable 5.1. Corn silked 18%, 31% 1981; condition good. Cotton planted 94%, 88% 1981, 86% average; emerged 82%, 79% 1981, 70% average; condition fair to good. Hay first cutting 38%, 55% 1981. Rice planted 94%, 96% 1981, 95% average; emerged 89%, 91% 1981, 92% average; condition fair to good. Sorghum planted 78% 1982 and 1981, 54% average; emerged 70%, 66% 1981, 45% average; condition fair to good. Soybeans planted 34% 1982 and 1981, 39% average; emerged 22% 1982 and 1981, average 25%; condition fair to good. Sweetpotatoes planted 64%, 78% 1981, 58% average; condition good. Sugarcane rated good. Second stubble crop improving. Wheat harvested 10%, 24% 1981, 17% average. Peach harvest 3% 1982 and 1981. Vegetables rated fair to good. Pastures, livestock rated good.

MARYLAND AND DELAWARE: Temperatures averaged 6° above normal. Highs averaged in the mid to low

80's and lows were in the mid to upper 50's. The greatest amount of precipitation was received at Clarkeville, MD with 1.11 in. No rain fell at Upper Marlboro. Saturday, 22nd and Sunday, 23rd were completely overcast with rain as scattered showers. Highs both days were in the upper 50's to low 60's and lows were in the 50's.

Little rain, except in northern Maryland. Farmers in Maryland worked 6 days and in Delaware 7 days. Topsoil moisture remained in short supply except in northern Maryland. Subsoil moisture slipped to short to adequate depending primarily on soil type. Feed supplies were adequate but pasture growth short due to lack of moisture. Maryland's progress percentages: Barley and rye 100% headed, 90 and 95% respectively last year. Oats 45% headed, 70% last year. Wheat 75% headed, 80% last year. Field corn 90% planted 1981 and 1982. Soybeans 25% planted, 15% last year. Tobacco 20% planted 1981 and 1982. Snap beans and cucumbers 55% planted, 70% and 60% respectively last year. Sweet corn 80% planted both years. Tomatoes 75% planted, 80% last year. Watermelon 85% planted, 75% last year. A few acres still need to be plowed. Delaware's progress: Barley and rye 100% headed this year and last. Wheat 70% headed, 95% in 1981. Field corn 90% planted, 95% last year. Soybeans 35% planted this year and last. Snap beans 50% planted, 45% last year. Sweet corn 85% planted, 90% last year. Tomatoes 75% planted 1981 and 1982. Cucumbers 55% planted, 70% last year. A few acres remain to be plowed.

MICHIGAN: Temperatures averaged 1 to 8° above normal. The Upper Peninsula reported high temperatures of mid-70's to 80's and 80's to 90's in the Lower Peninsula during the first part of the week. A lingering frontal system lowered temperatures after midweek throughout most of the State. Precipitation amounts light early in the week, increasing in the Lower Peninsula with the frontal passage. Amounts up to 3.50 in. fell in the southwest.

Fieldwork continued between light showers; 6 days suitable. Corn 90% planted, 65% last year and 73% average. Soybean seeding 50% complete, last year 20% and 32% average. Potatoes 90% planted, last year 85%, 77% average. Dry bean planting just beginning. Oat and wheat growth helped by the rain. Soil moisture supplies improved.

MINNESOTA: Temperatures averaged from the upper 50's to mid 60's and were generally 1 to 4° above normal. Highest reported temperatures were 80° at Minneapolis and Olivia. Lowest reported temperature was 32 at Itasca. Rainfall was scattered with amounts generally from 0.25 to 2.50 in. The heaviest amounts were in the north central and southeast. Largest amount reported was 2.69 in. at Preston.

Heavy rain during early part of week stopped fieldwork for most of week. Rain soaked into soil in west central and southwest. Elsewhere, fields saturated and water standing in low spots. Some planting possible by end of week. Many areas require 1 to 2 weeks of drying. Topsoil moisture 37% adequate and 63% surplus. Planted: Field corn 67%, 1981 92%, normal 84%; soybeans 19%, 1981 65%, normal 59%; sunflowers 15%, 1981 66%, normal 60%; potatoes 34%, 1981 72%, normal 66%; sugarbeets 92%, 1981 99%, normal 92%; dry beans 7%; spring wheat 78%, 1981 99%, normal 91%; oats 88%, 1981 99%, normal 93%; barley 68%, 1981 99%, normal 87%. Emerged: Field corn 42%, 1981 42%, normal 41%; spring wheat 69%, 1981 96%, normal 76%; oats 80%, 1981 94%, normal 79%; barley 53%, 1981 94%, normal 71%.

MISSISSIPPI: Temperatures 2 to 3° above normal. Extremes: 51 and 93°. Rainfall limited to scattered afternoon and evening thunderstorms. Most

amounts under 1.00 in.

Soil moisture adequate north, short central and south. Fieldwork: 5.9 days suitable. Planting near completion most crops. Cotton 98% planted, 96% last year, 91% average; 75% to stand, 86% last year, 67% average; condition good to fair. Rice 94% planted, 97% last year, 91% average; 70% to stand, 89% last year, 82% average; condition good. Soybeans 34% planted, 36% last year, 31% average; 12% to stand, 17% last year, 14% average. Corn 95% planted, 78% to stand. Peanuts 76% planted, sorghum 56%, sweetpotatoes 36%. Winter wheat 10% ripe, 2% harvested. Hay harvest 22%. Pasture condition good to fair.

MISSOURI: Temperatures averaged 3° above normal with warmest area in Bootheel at 6° above normal. Precipitation fell across State with heaviest amounts in north and smallest amounts in east-central and Bootheel.

Fieldwork: 2.7 days suitable. Corn 85% planted, last year 75%, normal 70%. Grain sorghum 54% planted, last year 34%, normal 39%. Soybeans 33% planted, last year 19%, normal 38%. Wheat 68% headed, last year 94%, normal 68%. Alfalfa hay-1st cutting 26% harvested, last year 42%, normal 23%. Cotton 99% planted, last year 97%, normal 90%. Condition of winter wheat 2% poor, 55% fair, 42% good, 1% excellent. Condition of pasture 1% poor, 35% fair, 62% good, 2% excellent. Topsoil moisture supply, 14% short, 49% adequate, 37% surplus.

MONTANA: Very wet week northeast and southeast. Up to 2.00 in. of rain northeast and 4.00 in. southeast. Mostly moderate to heavy precipitation elsewhere. Temperatures mild and ranged from 1 to 2° below normal east and 1 to 3° above normal elsewhere.

Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 4. Winter wheat condition fair to good, less than 5% in boot stage, normally 25%. Percent planted compared with last year and average: Spring wheat 75, 90, 85; barley 80, 90, 85; oats 65, 85, 80; corn 55, 70, 70; potatoes 35, 55, 55; dry beans 35, 55, 65; sugarbeets 90, 100, 100. Percent emerged: Spring wheat 45, 75, 65; barley 45, 70, 65. Livestock moved to summer range, 60%.

NEBRASKA: Precipitation: Very wet. Amounts ranged from 0.75 in. in Panhandle up to 3.00 in. in east. Local amounts 5.00 to 7.00 in. not uncommon in east. Temperatures: Near normal.

Rains continued to frustrate farmers' efforts to plant row crops. Corn planted 45%, 85% last year and normal. Slowest progress since 1961. Southeast and east central areas 25% planted. Corn emerged 20%, 45% last year and normal. Soybeans planted 3%, 25% last year and 35% normal. Sorghum planted 4%, 25% last year and 40% normal. Wheat mostly good to fair; jointing 85%, 100% last year and 80% normal; headed 10%, 65% last year and 15% normal. Alfalfa good. First crop harvesting behind normal. Pasture and range feed supplies mostly adequate. Feedlots very muddy. Topsoil moisture mostly surplus to adequate. Subsoil moisture adequate to surplus. Days suitable: 1.8. Many eastern counties 0.5 day or less.

NEVADA: Cold front moved across State early in period but remainder of week sunny and mild. Significant rainfall northeast, moderate amount central, none south. Temperatures averaged above normal most areas. Extremes: 94 and 24°.

Vegetative growth slowed by low night temperatures early in period. Better progress remainder of week. Scattered showers aided summer grazing prospects northern half of State. Most all cattle and sheep moved to spring ranges.

NEW ENGLAND: Temperatures near normal northern Maine and coastal sections, elsewhere 2 to 5° above normal. Warmest days: 20th and 21st with 84°. Coolest day 22nd, with 23° at Houlton, ME. Precipitation occurred mostly on the 19th, 20th and 22nd. In general, amounts were below normal. Largest totals were at Bridgeport, CT with 1.02 in. and Lebanon, NH with 1.10 in.

Soil moisture short to adequate. Nearly 7 days favorable for fieldwork. Grazing short to adequate. New cranberry growth expected next week. Growers spraying for insects. Prospects appear good. Apples in full bloom. Corn for silage 50% planted. Some haylage harvested but growth has been slow. Potatoes: Maine 55% planted, Rhode Island about complete.

NEW JERSEY: Temperatures averaged 1 to 2° above normal. Extremes: 43° at Charlotteburg on 24th and 87° at Hammonton on 20th. Rainfall averaged 0.88 in. north, 0.95 in. central and 0.94 in. south. Heaviest 24-hour total was 1.12 in. at Flemington on 13th and 14th. Estimated soil moisture, in percent of field capacity, averaged: 66 north, 64 central and 65 south. Four inch soil temperature averaged: 62 north, 64 central and 65 south.

Recent rainfall very beneficial. Wet soil has limited land preparation and planting, however, harvest of spring crops increasing. Lettuce and spring greens becoming readily available. Cool temperatures have been beneficial for development of cole crops. Early tomatoes healthy and setting fruit. Apples and peaches sizing. Strawberry harvest to increase. Field corn up with good germination, warmer weather would help growth. Grains and pastures making good growth. Hay mowing halted because of rain.

NEW MEXICO: Average temperatures were near normal. Showers and thundershowers occurred over most of the State.

Soil moisture continues in short to adequate supply. Rainfall interrupted outdoor activities late in the week in some areas. Cotton in good condition. Earlier planted fields have emerged with good stands realized. Alfalfa hay harvest continuing to progress northward with most fields in good condition. Corn planting nearing completion. Most planted fields have emerged to acceptable stands. Irrigated wheat and barley remained in mostly good condition. Most fields have headed and coloring well advanced. The dryland crop in mostly poor condition. Planting of irrigated grain sorghum about 20% complete. Chile peppers continued to make normal growth with weeding of fields active. Onions in good condition with harvest expected to get underway soon. Lettuce harvest continuing in the Mesilla Valley but should begin to decrease in activity. Ranges in poor to fair condition. Cattle and sheep in good condition. Cotton planted 80%, 80% 1981, 90% average.

NEW YORK: Temperatures above normal, then cool on weekend. Scattered rain, mostly light. Widespread rain on 23rd.

Good fieldwork progress. Corn planting 62% complete, 57% 1981, 60% average. Oat planting 92% complete, 91% 1981, 86% average. Hudson Valley apples at petal fall, good set. Tart cherries show good set. Upstate potato planting making good progress.

NORTH CAROLINA: Temperatures: 1 to 5° above normal. Precipitation: Variable across the State ranging from 0 at Cape Hatteras to 4.36 in. at Chapel Hill.

Fieldwork: 5.2 days suitable. Soil moisture: 5% very short, 43% short, 50% adequate, and 2% surplus. Conditions: Wheat, oats, and pasture fair to good; barley and rye fair to mostly good; field tobacco fair to good; corn, cotton, and

truck crops fair to mostly good; Irish potatoes mostly good. Plantings: Corn 99%, 1981 99%, 97% average; cotton 94%, 1981 99%, 94% average; peanuts 92%, 1981 93%, 77% average; sweetpotatoes 31%, 1981 23%, 32% average; sorghum 64%, 1981 62%, 43% average; soybeans 45%, 1981 36%, 40% average; flue-cured tobacco 95%, 1981 98%, 87% average; burley tobacco 34%, 1981 26%, 25% average. Major farm activities: Soybean planting, transplanting tobacco, and cutting hay.

NORTH DAKOTA: Temperatures averaged near normal. Averages ranged from 52° north central to 58° south-east. Extremes: 77° northwest 22nd to 38° several locations 22nd. Precipitation averaged 0.15 in. below normal east central to 1.44 in. above normal southwest. Most rain received was 3.05 in. southwest.

Planting of crops resumed late in the week as fields began to dry. However, widespread showers on 23rd, again interrupted progress. Soil moisture adequate to surplus. An average of 3.9 days were suitable for fieldwork. Small grain seeding remains about one week behind normal. Progress in some western areas 2 weeks behind. Row crop planting also well behind normal. Dry, sunny weather needed to allow planting to continue. Most emerged grain in good to very good condition. Weed infestations becoming heavy. Planting progress with last year's pace and the average: Hard red spring wheat 61, 94, 77; durum 55, 92, 71; barley 71, 90, 75; oats 58, 94, 74; sunflower 10, 38, 36; corn 25, 55, 44; dry beans 17, 45, 46; flax 14, 43, 34; potatoes 61, 81, 68.

OHIO: Widespread rainfall by midweek began to replenish soil moisture in surface layers. Only 0.50 in. at Dayton but most stations reported 1.00 to 2.40 in. Temperatures reached into mid or upper 80's early week. Daytime highs fell into 70's late week. Averages 5 to 8° above normal. Growing degree days accumulated 120 northwest to over 140 south; 25 to over 40 above normal. Mean soil temperatures, 4 in. under bare ground, averaged from upper 60's to low 70's. Under grass, 4 in. temperatures from mid to upper 60's.

Rain finally brought needed moisture for germination of recently planted corn and soybeans. Rains should help grassland growth too. Herbicides not as effective because of extended dry weather; rotary hoeing early week to improve effectiveness. Some post emergence herbicides applied. Crops generally rate fair but corn good. Winter wheat heading on short straw. Some cutworm, armyworm, and bean leaf beetle but not economic problem yet. Corn planted 100%, 40% 1981, 70% average. Corn emerged 75%, 15% 1981. Soybeans planted 90%, 6% 1981, 40% average. Soybeans emerged 50%, 0% 1981. Potatoes planted 100%, 50% 1981, 75% average. Winter wheat headed 15%, 10% 1981, 15% average. Alfalfa 1st cut harvested 10%, 5% 1981, 5% average. Days favorable: 5.5. Pasture condition fair. Soil moisture 53% short, 42% adequate, 5% surplus.

OKLAHOMA: Rainfall ranged from 0.38 in. east central to 3.15 in. north central. Temperatures ranged from 2° below normal Panhandle and north central to 4° above normal east central.

Moisture received enabling wheat kernels to fill well. Sunshine needed for crop advancement. Excess moisture causing tall wheat to lodge and increasing concern than low fields may drown out. Majority of wheat acreage not damaged yet. Wheat heading: 95%, 100% 1981, 100% average. Sorghum planted: 15%, 40% 1981, 30% average. Sorghum up to stand: 10%, 10% 1981, 10% average. Cotton planted: 10%, 25% 1981, 25% average. Days suitable for fieldwork: 2.6.

OREGON: Temperatures averaged 1° above normal in west, 1° below in east. Rainfall up to 0.40 in. in west; up to 0.90 in. in east.

Rain brought some temporary relief; soil moisture short to adequate. Winter wheat good shape; 77% booted, 95% last year; 15% headed, 48% last year. Cheatgrass and some foot rot a concern to wheat growers. Winter barley heading. Grass seed crops mostly good condition; spraying for rust in some fields. Mint growth slow in west; good in east. Haying getting underway. Silage harvest continues. Hood River fruit crops good; petal fall and thinning sprays going on. Some tree damage in Douglas County from wet, cool spring. Strawberries in late bloom stage; harvest around corner. Caneberry bloom to start; winter damage becoming visible; extent not known. Potato planting in late areas continues. Growth behind normal in Malheur County. Green peas in good shape. Planting of vegetable crops continues. Harvest of asparagus and salad crops continues. Livestock mostly good condition with Umatilla County tick problem under control. Range and pastures need rain and warm weather. Upper ranges should have good growth when weather warms and snows melt. Hay supplies short in many areas.

PENNSYLVANIA: First part of week was warm and dry; last half unsettled. Temperatures were rather warm with the State average being 4° above the normal. Extremes: 89 and 34°. Precipitation was recorded across the entire State, but amounts varied considerably, due to scattered thundershowers. Most areas received 1.00 in. or more with isolated areas receiving less than 0.50 in., the largest weekly average for the year.

Four days suitable. Moisture short to adequate. Activities: Plowing, discing, spraying, making hay and haylage, harvesting rye for silage and green chop, harvesting asparagus, and planting corn, potatoes, soybeans, tomatoes, cabbage, and peppers. Plowing 93% complete, last year and average 90%. Soybeans 35% planted, last year 20%. Potatoes 85% planted compared with 81% last year. Corn 79% planted, last year and average 62%. Barley 36% in boot and 52% headed, last year 39% in boot and 37% headed. Wheat 37% in boot and 16% headed, last year 43% in boot and 5% headed. Hay stand conditions fair to good. First cut alfalfa 9% complete, last year 5%. Feed from pastures below average to average. Virtually all cherries and apples in full bloom or past.

PUERTO RICO: Island average rainfall 1.55 in. or 0.10 in. below normal. Highest total 4.74 in. Temperatures averaged about 81 to 79° on Coasts and 75 to 74° Interior Divisions. Extremes: 93 and 58°.

SOUTH CAROLINA: Temperatures averaged 1 to 2° above normal. Rainfall came in the form of scattered showers and thunderstorms.

Soil moisture averaged short to adequate. Five days suited for fieldwork. Corn fair to good condition, some drought stress evident. Cotton fair, all been planted with good stands reported. Tobacco transplanting complete, growers actively applying sidedressing and insecticide. Peach harvest active in lower coastal-plains and ridge areas. Camden variety currently being picked. Wheat and oats condition fairly good, with 1 and 4% harvested, respectively. Tomatoes good condition, snap beans, cucumbers and melons fair to good. Some light harvest of snaps and cukes underway.

SOUTH DAKOTA: Rain continues over most areas. Northeast and east central 0.05 to 0.30 in. Low land flooding west and portions of southeast. Temperatures near normal west, 2 to 6° below normal east. Extremes: 85 and 31°. Two days suitable. Activities: Small grain seeding, row crop and flax planting, machinery and fence repair, and livestock care. Topsoil moisture mostly adequate. Large areas surplus in west, central and southeast. Win-

ter wheat and rye good condition. Calving and lambing 92% complete. Range and pastures good. Three-fourths cattle moved to pastures. Spring wheat planted 96%, 1981 100%, average 98%. Oats planted 98%, 1981 100%, average 97%. Barley planted 94%, 1981 100%, average 96%. Flax planted 55%, 1981 79%, average 66%. Corn planted 43%, 1981 81%, average 66%. Sorghum planted 8%, 1981 19%, average 19%. Spring wheat emerged 86%, 1981 100%. Oats emerged 91%, 1981 97%. Barley emerged 85%, 1981 98%. Winter wheat in boot stage 39%, 1981 77%, average 40%. Rye in boot stage 46%, 1981 76%, average 46%.

TEXAS: Weather: Warm, moist tropical settled over State resulting scattered thunderstorms. Temperatures near normal. Rainfall near normal East Texas; above-normal West, North, South Texas. Lower Rio Grande Valley 3.00 in. above-normal.

Range and pasture: Ranges, pastures make good progress. Some areas Edwards Plateau, range grasses short supply because prolonged, dry weather. Scattered showers improving situation, but supplemental feeding continues. Although weeds problem, grazing conditions improved; cattle gaining weight. Livestock producers spraying for hornflies, grubs.

Crops: Scattered showers, thunderstorms dominate weather during week, fieldwork interrupted many areas. Severe tornadoes destroyed some farmsteads northern part Gray County; hail damaged, destroyed some wheat fields Plains. East, Central Texas, some spring-planted crops lost to flooding. Coastal Bend warm, open weather ideal conditions for crop development. Cotton planting full swing across Southern High Plains as weather conditions permit. Blacklands some stands stunted by waterlogged fields. Replanting necessary in areas washed by heavy rains. Lower Valley leaves several stands yellowing from excessive moisture. Sorghum planting making good progress across High Plains; scattered showers provided excellent pre-plant moisture many areas. Cool soil temperatures, cloudy weather delayed crop development Low Plains, Blacklands. Insects problem Central Texas, some stands damaged. Along Upper Coast some stands shorter than usual because excess moisture. Hail damaged some fields South Texas. Corn planting nearing completion, most fields good condition. Development slowed by cool, cloudy weather; South Texas stands not tall. Wheat condition made improvement with additional moisture, but heavy rains, hail damaged, destroyed several fields across State. Harvest underway where weather permit; wet fields, green wheat delaying operations many areas. Across Plains, recent showers provide good moisture for wheat heading. In some southern areas of State, light test weights reported; yields below normal. Reported condition across State was 68% of normal with 2% excellent; 30% good; 63% fair; and 5% poor. This compares with 76% of normal last year. Grass continues problem many rice fields along coast. Wet fields continue delay soybean planting many areas. Some replanting underway fields which flooded out. Hay meadows make good progress with continued moisture; however, warm weather, sunshine welcomed many areas. Rain delay cutting, baling operations portions Central Texas. Trans-Pecos, alfalfa fields making good growth after first cutting.

Commercial vegetables: Lower Rio Grande Valley heavy rains damaged early melon fields; some losses occurred. Harvest cucumbers, honeydews, cantaloups, watermelons, green peppers continued. Onion harvest winding down. Okra, tomatoes, squash making good growth. Most citrus orchards good bloom, fruit set. Coastal Bend, cucumbers, watermelons, tomatoes make good progress. San Antonio-Winter Garden, many watermelon fields damaged by hail. Hail damaged onions; cucumber stands trying to recover from previous week's hail damage. East Texas, tomatoes setting fruit; cantaloups, watermelons

good progress. Sweetpotato planting continued. Trans-Pecos, onions, carrots making fair progress following recent hail damage. Cantaloups, tomatoes, onions making good progress Hudspeth County. Plains, onion fields recovered from recent hail damage, but yields may be affected. Potatoes make good progress. Peach harvest gaining momentum; prices remain good most varieties. Excess moisture caused some fruit droppage South Central Texas; fungus, leaf curl East Texas. Pecan trees set nutlets across most State. Producers watching for casebearers; spraying operations in progress southern half of State. Cotton planted 40%, 73% 1981, 58% average. Cotton squaring 8%, 15% 1981. Cotton setting bolls 1%, 1% 1981. Rice planted 98%, 98% 1981, 99% average. Rice emerged 88%, 93% 1981. Sorghum planted 71%, 85% 1981, 78% average. Sorghum headed 17%, 15% 1981. Sorghum turning color 0%, 1% 1981. Wheat headed 90%, 98% 1981. Wheat turning color 23%, 53% 1981. Wheat harvested for grain 0%, 5% 1981, 1% average. Oats for grain harvested 6%, 22% 1981, 12% average. Corn planted 98%, 99% 1981, 98% average. Peanuts planted 14%, 30% 1981, 25% average. Soybeans planted 6%, 24% 1981, 18% average. Sunflowers planted 9%, 42% 1981, 21% average.

UTAH: Scattered areas shower and thunderstorm activity principally north and west portions. Accumulated amounts moisture generally light to moderate, but locally heavy few localities. Average temperature generally below normal. Averages ranged between 3° above normal and 9° below. Pan evaporation ranged from 1.38 and 2.44 in. during period.

Fieldwork interrupted by scattered rains, but still averaged 6 days. Major activities included corn planting, irrigation, branding, and some livestock movement. All spring crops behind normal. Small grains and hay have started to grow. Both winter wheat and alfalfa about 10 in. high. Corn just over 50% planted, 22% emerged. Insect activity delayed by cool spring. Some alfalfa weevil damage starting.

VIRGINIA: Temperatures averaged 3 to 8° above normal. Scattered showers and thunderstorms brought amounts ranging from 0.10 to near 4.00 in.

Soils were drying and some planting was being delayed. Insect populations were increasing and spraying was active in small grain fields. Late in the week and during the weekend soil moisture was being replenished and topsoil moisture still rated 71% short, 25% adequate and 4% surplus. Days suitable for fieldwork: 5.2. Corn planting progress 89%, 90% 1981, 83% average. Stands in good to excellent condition. Peanut planting nearing completion, 99% this year, 89% 1981, 72% average. Soybean planting 30% complete, 33% 1981, 22% average. Flue-cured tobacco 65% transplanted, the same as last year, 46% average. Burley 14% transplanted, 19% 1981, 13% average. Fire-cured tobacco 29% set, 33% 1981, 24% average. Sun-cured tobacco 11% set, 36% 1981, 24% average. Pastures and hay rated poor in the western mountains, central and southeastern areas. Pastures and hay rate fair in northern, southwestern and southern areas but rate good in the Tidewater. Hay yields below average and wheat yield prospects declining. Strawberries abundant and sweetpotato and truck crop planting continued. Livestock continue in good condition.

WASHINGTON: High pressure gave way to a frontal system on 17th. The front and the rain showers that followed it produced all of the measurable precipitation on 17th and 18th. A strong high followed the front and was the dominant feature during the remainder of the week.

West: Field corn, potato, sweet corn, barley, green peas, carrots, lettuce, cucumbers, and other

summer vegetables were planted. Field and sweet corn about 60% completed. Strawberries and blueberries past bloom with raspberry bloom just beginning. Berry spraying was also done. Harvest of field rhubarb, radishes, spinach, and winter cauliflower continued. Cabbage and mustard seed look good. Grass silage cutting and green chopping was done. Cattle in good condition with feed supplies adequate. Pastures in good condition.

East: Field corn, potato, dry bean, dry pea, sweet corn, green pea and other summer vegetables were planted. Most crop planting well along. Norgold potatoes have emerged in good condition. Wheat, barley in average condition with cheatgrass infestation fairly heavy. Wheat fields in southern counties beginning to head. First cutting alfalfa progressing. Cherries and pears in fair condition. Cherries have been adversely affected by poor pollination and untimely frosts. Apple spraying and other orchard chores continue. Pastures improving. Range cattle and sheep moving to higher elevations. Cattle in good condition, feed supplies adequate. Winter wheat 19% headed, 19% 1981, 14% average.

WEST VIRGINIA: Temperatures averaged well above normal. High 92°, low 37°. Precipitation well above normal except in south and northeast where it was near normal and below normal respectively. Range of 0.15 to 2.47 in.

Soil moisture very short to short. Days worked averaged 5.3. Main activities: Gardening, corn planting, general maintenance. Small grains in fair condition. Oats: 92% planted, 78% emerged; 93% and 81% in 1981. Corn: 79% planted, 43% emerged; 50% and 36% in 1981. Wheat: 15% pre-jointed, 55% jointed, 30% heading; 31%, 55% and 14% in 1981. Barley: 10% pre-jointed, 37% jointed and 53% heading; 18%, 43% and 39% in 1981. Tobacco in poor condition, 100% bedded, 75% emerged, 15% set; 100%, 95% and 5% in 1981. Pasture and hay in poor to fair condition. First cutting 4% complete, 5% in 1981. Peaches poor to fair condition. Apples fair condition. Showers during middle of week relieved stress temporarily in some areas. Lack of precipitation remains a problem.

WISCONSIN: Week started on a mild note as temperatures reached the 70's and 80's on the 17th through 19th. Week's warmest temperature, 83°, was recorded in Lafarge on the 18th and Neenan on the 19th. Temperatures averaged 2° above normal. The lowest reading, 28°, was recorded in Morse on the 21st. Sporadic and widespread rainfall covered State during week. Most areas received precipitation in the 1.00 to 1.50 in. range except the northeast and north central areas which received 0.50 in. The heaviest rainfall was recorded in Racine which received 3.00 in.

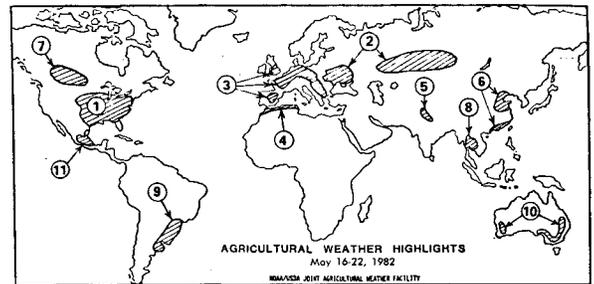
Fieldwork: 3 days suitable. Sporadic rainfall made field activities difficult. Reporters rated topsoil moisture conditions 4% short, 46% adequate, 50% surplus. Corn planting continued to the extent possible; 60% complete, 87% 1981, 64% average. Planting of soybeans has begun; 25% complete, 39% 1981, 26% average. Spring plowing continuing; 72% complete, 98% 1981, 85% average. Pastures showed good growth; 94% of normal, 82% 1981, 84% average. Hay fields look good and first crop haying activity expected to begin before Memorial Day. Warm temperatures in May have pushed growing degree days to 19% above normal.

WYOMING: Very wet northeast and little cool throughout. Belle Fourche Drainage an average of 4.00 in. of rain more than 3.00 in. above normal. All stations recorded at least some rain. Center of State along with the Snake Drainage slightly on dry side. Temperatures just a bit on cool side averaging 2° above normal.

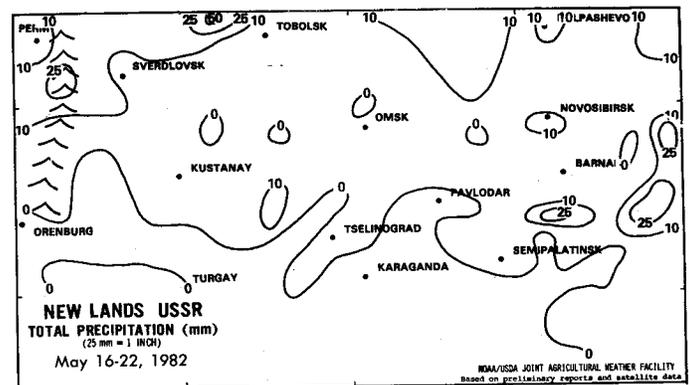
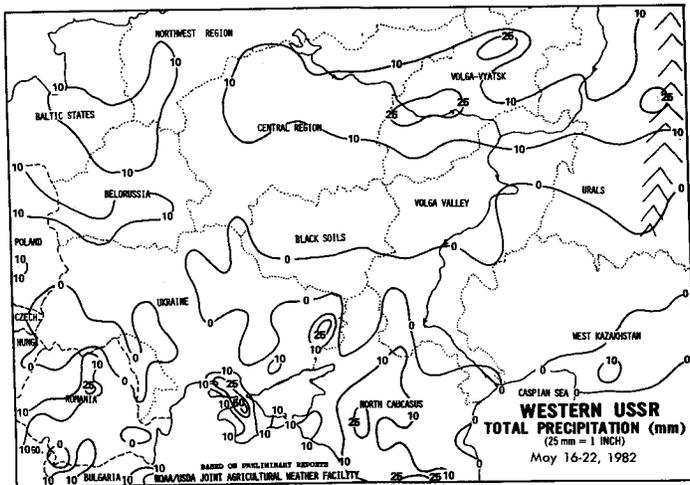
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International Weather and Crop Summary

May 16-22



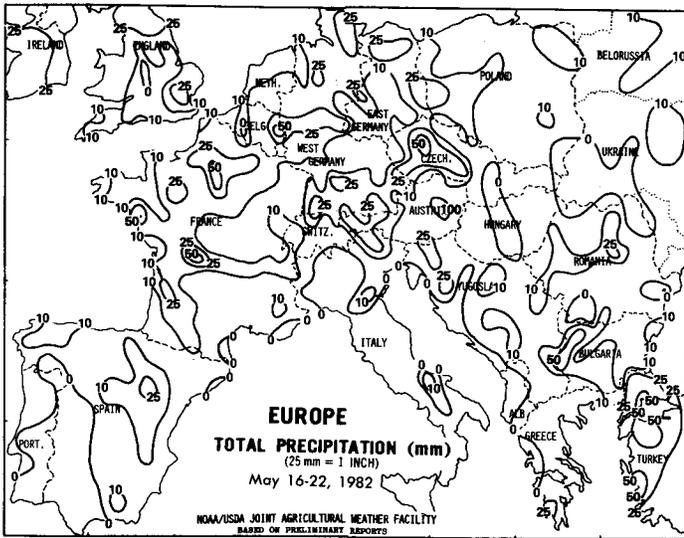
1. UNITED STATES: Warm, wet weather throughout the East aids crop growth. In the Cornbelt, persistent rains slow planting in western fields while soybean planting progresses rapidly in eastern section. Heavy rains continue over central and southern Plains, flooding and lodging some wheat.
2. USSR: Dry weather continues over most crop areas in the Ukraine and the New Lands.
3. EUROPE: Rains and favorable temperatures stimulate crop growth in many areas.
4. NORTHWESTERN AFRICA: Winter grain harvest begins; rains interfere in the east.
5. SOUTH ASIA: Beneficially drier in wheat areas; monsoon approaches from the southeast.
6. EASTERN ASIA: Hot, dry weather in the north hurts nonirrigated crops; drier in the south.
7. CANADA: Showery weather slows spring grain planting.
8. SOUTHEAST ASIA: Monsoon advances over Thailand; rice planting begins.
9. SOUTH AMERICA: Showers in Brazil delay crop harvests but improve moisture supplies for wheat; favorably dry weather for crop harvests in Argentina.
10. AUSTRALIA: Light showers fall in wheat belt, but significant moisture needed for wheat planting.
11. MEXICO: Rainy season intensifies over the south and, spreading northward, boosts crop development, especially in the southern Plateau and western gulf coast.



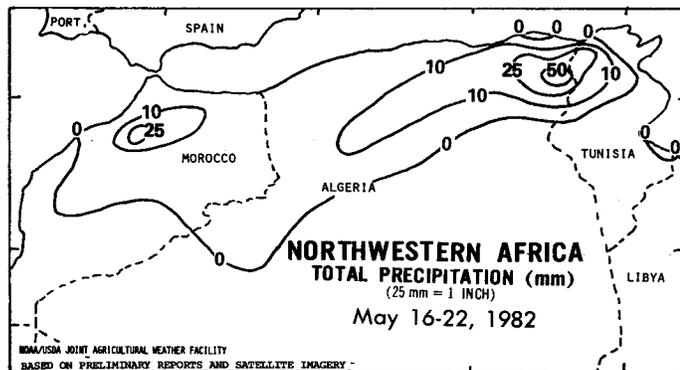
USSR: Persistent showery weather continued over northern crop areas of European USSR. Although rainfall was generally lighter than the previous week, further delays in fieldwork probably occurred. In contrast, mostly dry weather continued over the Ukraine for the third consecutive week. Beneficial precipitation, which fell on parts of the Crimea and North Caucasus late in the week, improved growing conditions. Reports indicate that over 70 percent of corn and over 80 percent of sugarbeet sowing has been completed. In addition, winter grains in many

areas are in the early jointing stage; however, growth is more advanced in the southern Ukraine and North Caucasus. Weekly temperatures were below normal over most of the region with well-below normal readings in northeast European USSR.

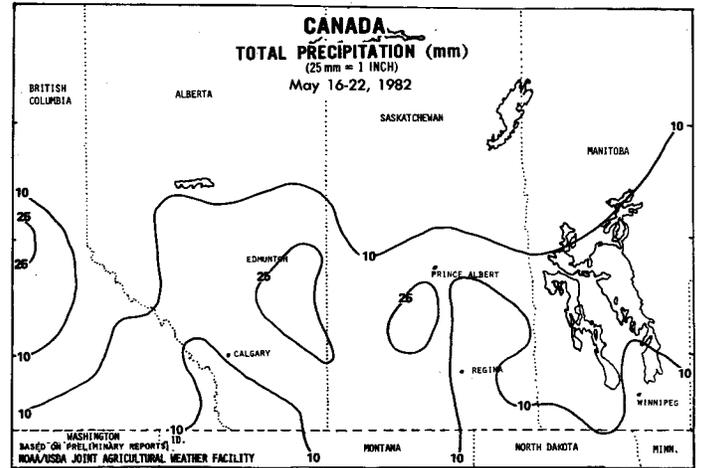
In the New Lands, generally dry conditions persisted over the spring grain area. A few light, spotty showers penetrated the region at week's end, but abundant rainfall is needed soon over the entire area to ensure a favorable start for the spring grain crop. At present, spring grain sowing is intensive over many areas. Weekly temperatures were well above normal over the entire grain area, with daily maximums around 33°C reported at many locations early in the week.



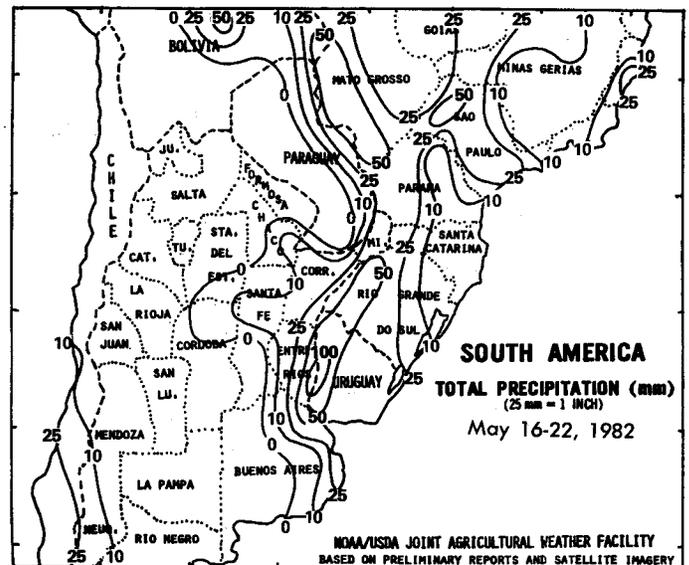
EUROPE: A series of eastward moving storm systems produced widespread precipitation over crop areas in England, northern France, and most of northern Europe. Rainfall in these areas ranged from 10 to 25 mm, benefiting both winter grains and emerging spring sown crops. Some grain areas in Spain also received beneficial moisture, although rainfall was lighter and more widespread than those in northern Europe. In southeast Europe, mostly light, scattered precipitation maintained favorable growing conditions for all grain crops. Weekly temperatures were above normal in many areas except the southeast, where slightly below-normal temperatures were reported.



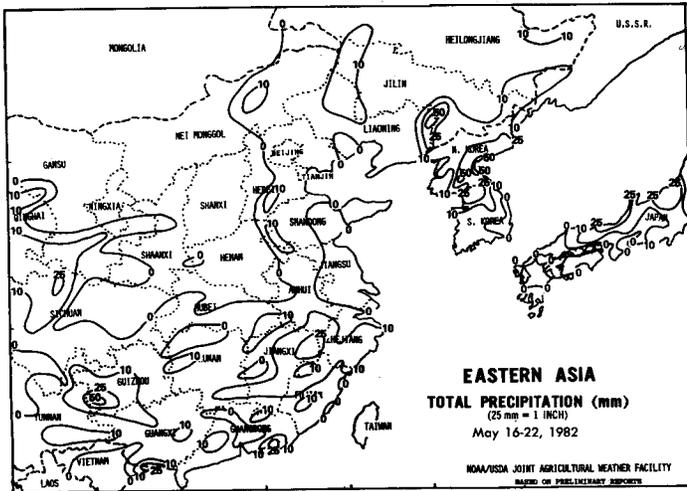
NORTHWESTERN AFRICA: Rains early in the week over some inland crop areas of Morocco were followed by generally dry weather. Winter grain harvesting should be advancing rapidly in the south. Many winter grain areas of Algeria and Tunisia had little or no rainfall, but persistent wet weather in some inland areas disrupted harvesting. Temperatures in that wet area stayed slightly below normal but were near normal elsewhere.



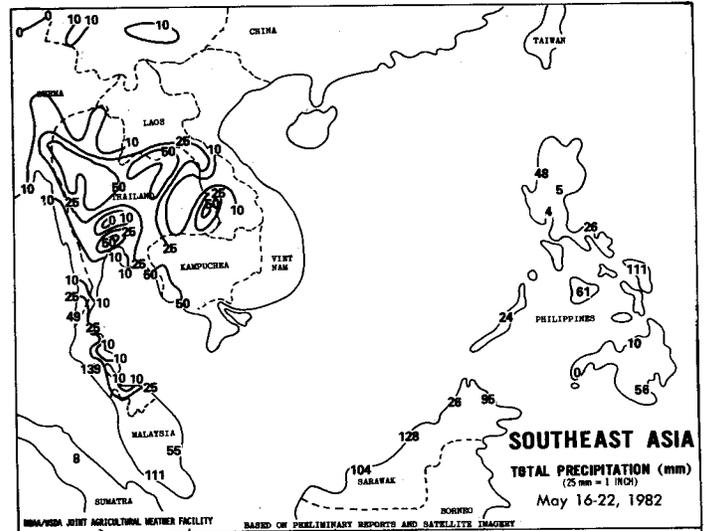
CANADA: Wheat planting progressed in the Prairie Provinces during the week; however, most crop areas received 10-20 mm of rainfall. Heavier amounts (20-30 mm) fell in the central and northern crop areas of Alberta while generally less than 10 mm were reported in eastern Saskatchewan and extreme southwestern Manitoba. The rainfall improved soil moisture conditions in most areas which will aid germination and emergence of newly sown crops. However, dry, mild weather is needed throughout the Canadian Prairies to facilitate planting of wheat and other crops during the next few weeks. Planting progress continues to lag behind sowing rates of the past 2 years.



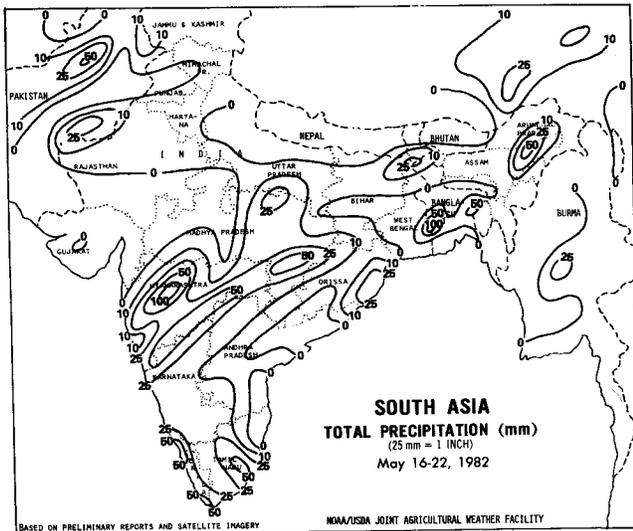
SOUTH AMERICA: Widespread showers fell over Brazil's crop area during the first half of the week. Rainfall in excess of 30 mm in western Rio Grande do Sul delayed the harvest of late-maturing soybeans while significant rains in Sao Paulo interfered with the citrus and coffee harvests. The rainfall in southern Brazil benefited the restoration of soil moisture reserves following the prolonged dry spells of the past growing season, and improved topsoil moisture supplies needed for early wheat development. Limited data from Argentina suggest that mostly dry weather occurred during the week which aided crop harvests. Moisture reserves should be adequate for planting and early growth of the wheat crop. Seasonably cool weather prevailed over Argentina.



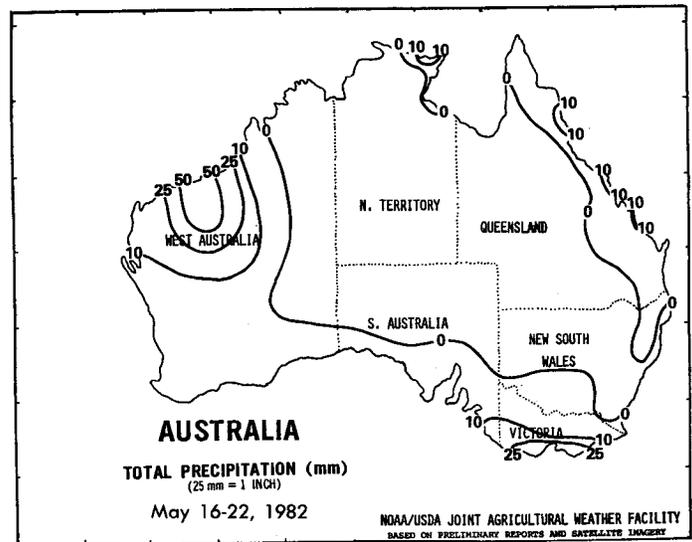
EASTERN ASIA: Episodes of unfavorably hot, dry weather continued to plague important crop areas near the Yellow River on the North China Plain. With winter grains mostly in the filling stage, nonirrigated fields were the most seriously affected, but some shriveling of grains in irrigated fields was likely. This extreme weather was also unfavorable for newly sown, nonirrigated spring crops. Scattered showers helped some very localized areas, but for the most part, the lighter rainfall was of little benefit. Rainfall south of the Yangtze River slackened somewhat, allowing flood-stricken areas in Guangdong to dry out. Rainfed crops in most parts of the south have adequate moisture. In South Korea, rainfall was greater in the north for the second consecutive week. Although rainfall in the south decreased further from last week's below-normal amounts, conditions should have remained favorable for planting rice. Temperatures stayed near normal.



SOUTHEAST ASIA: Rainfall increased over much of Thailand as monsoon showers moved further northward. Many locations reported above-normal amounts for the week. Satellite imagery indicated that similar rains occurred over the rest of the region, especially in Kampuchea. Rice planting should be in progress in most areas. Temperatures stayed near normal.



SOUTH ASIA: Drier weather returned to the wheat harvest areas in northern India and Pakistan. Temperatures remained substantially below normal, but readings were high enough that out grain dried fairly rapidly. There have been no reports as to the extent of damage to wheat by the recent cool, wet weather. Premonsoon showers continued over the southeastern two-thirds of India, with amounts ranging from much-above to much-below normal. The monsoon appears to be approaching on schedule from the southeast.



AUSTRALIA: The peak sowing period for wheat throughout the major crop areas of Australia usually occurs within the next several weeks if sufficient moisture is available for planting. Beneficial showers fell over West Australia, but weekly totals were generally less than 5-8 mm. Substantial rains are needed for wheat sowing in this area which usually produces over 25 percent of the total wheat crop. Crop areas of Victoria and South Australia also received mostly light rainfall during the week. The major producing state of New South Wales needs additional moisture for planting while early seeded wheat in Queensland has adequate subsoil moisture but limited topsoil supplies for early growth. Sugarcane areas of Queensland generally received 10-25 mm of rainfall.

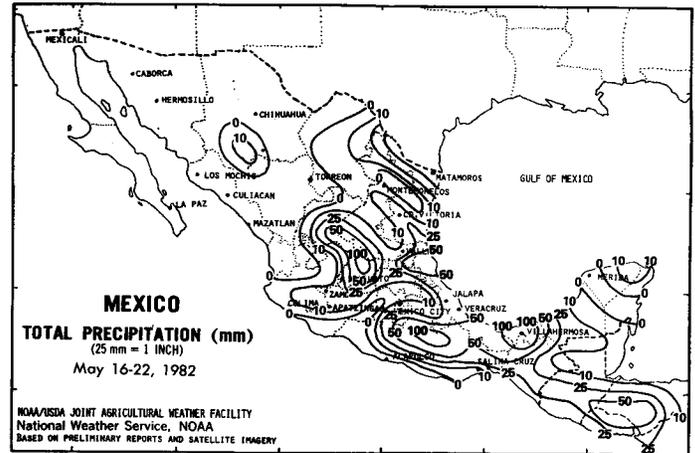


FIRST CLASS MAIL

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(cont. from page 20)

Topsoil moisture adequate 69% State. Four days suitable for fieldwork. Rain, wet fields slowed planting. Spring wheat planted: 70%; last year 85%. Spring wheat emerged: 50%; last year 55%; normal 75%. Oats planted: 70%; last year 80%; normal 88%. Oats emerged: 35%; last year 60%; normal 73%. Barley planted: 85%; last year 90%. Barley emerged: 70%; last year 75%; normal 79%. Corn planted: 50%; last year 75%; normal 76%. Corn emerged: 10%; last year 30%; normal 44%. Potatoes planted: 30%; last year 55%; normal 63%. Dry beans planted: 5%; last year 10%; normal 24%. Current prospects winter wheat, spring planted small grains, alfalfa mostly good. Summer grazing prospects fair to good. Stock water adequate most areas. Range sheep: Ewes lambled 80%; shorn 85%.



(cont. from page 11)

* **Far West**--Streamflow conditions throughout the Far West were well-above normal for April, with 80 percent of the key index stations from Washington to California reporting above normal conditions. The combined content of 10 key index reservoirs in the state was 22 percent above normal. Ground-water levels in Los Angeles County and Santa Ynez Valley wells were below normal, but the levels in the Upper Cuyama and Santa Maria Valley index wells were above normal.

MEXICO: The rainy season, intensifying over the south and spreading northward, boosted crop development. The first significant rains of the season over most of the southern Plateau cornbelt should greatly help the young crop which had been generally moisture stressed since planting. Rains extending northward along the western gulf coast benefited sugarcane, coffee, grain sorghum, corn, and most citrus. However, the Montemorelos citrus district remained dry together with the northwestern part of the country. Irrigated soybeans, cotton, and other summer crops in the northwest should have progressed well with abundant sunshine and near seasonal temperatures.

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