

WEEKLY WEATHER AND CROP BULLETIN

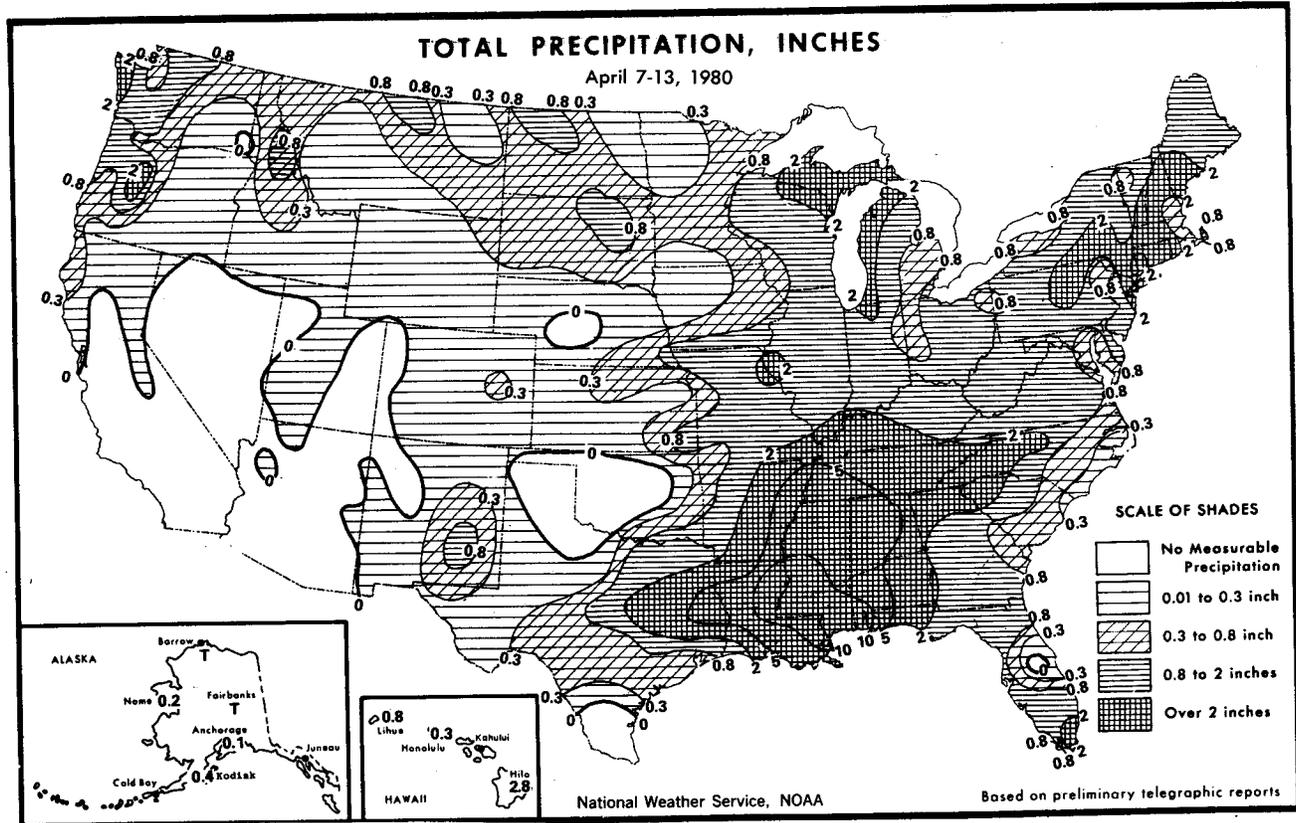
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National Weather Summary

April 7 - 13

HIGHLIGHTS: Severe springtime weather began in earnest. Most areas reported severe storms from eastern Texas to Michigan and eastward to the Atlantic Coast. Thunderstorms, hail, and tornadoes covered the region. Flooding was prevalent in the South.

Unusual winterlike weather, including snow, surprised portions of Missouri and Arkansas, the west central Plains, New Mexico and southwestern Texas. Late snows also fell over Iowa, the Dakotas, and Montana.

Temperatures ranged colder than normal from the central Rockies through Texas and northward

through Minnesota; readings averaged as much as 7 degrees below the norm.

On Monday, rain spanned the Gulf Coastal States, while a cold front triggered severe weather over parts of the southern Plains, Mississippi Valley, and Mississippi Delta Region.

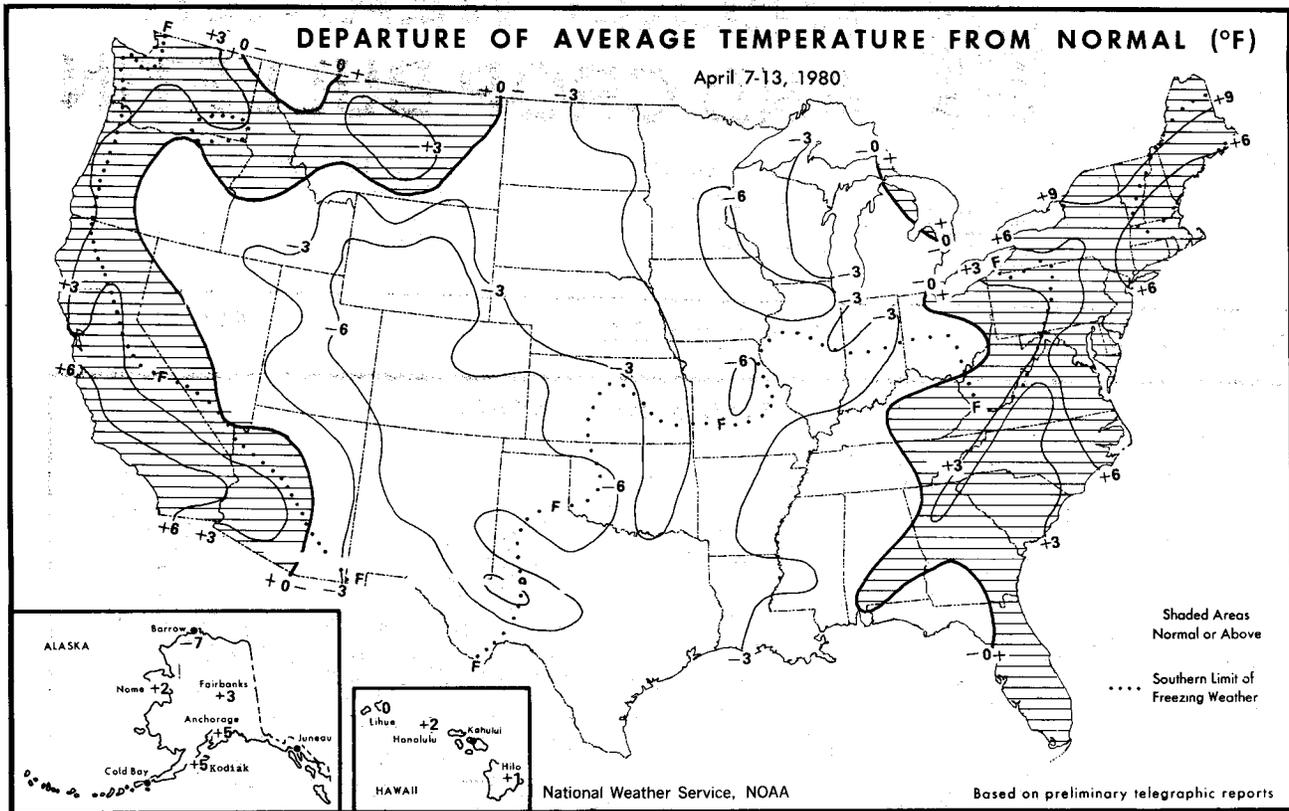
Nearly 4 inches of rain doused Miami, Fla., with lesser amounts in other Gulf States.

Severe thunderstorms produced tornadoes and very large hail over eastern and central Texas, Oklahoma, Arkansas, and sections of the Mississippi Valley; in all, 34 tornadoes touched down in nine States. The largest hail--about 4 inches in diameter--pummeled Danville, western Arkansas.

A half-foot of snow blanketed Minot, northern North Dakota. Goodland, western Kansas, noted an inch of snow.

Nearly three dozen tornadoes raced through the Nation from Illinois and Michigan to Florida on Tuesday. Ohio counted 13 of the twisters.

Heavy rains also fell in the same region. Memphis measured about 2.5 inches of rain begin-



ning Monday; more than an inch of rain soaked Muskegon, western Michigan, and Charlotte, southern North Carolina.

Snow persisted in the upper Midwest as Minneapolis/St. Paul weathered 5 inches.

The intense weather marched to the East Coast and moved northeastward to New England on Wednesday. Three tornadoes were sighted in the Northeast, and hail pelted several sections of the East from Florida to New York. Two to 4 inches of rain fell over Binghamton and White Plains, in New York, as well as Bridgeport, southwestern Connecticut.

Light snow lingered over northern Minnesota before edging out of the country.

The severe weather generally waned throughout the Nation on Thursday. The only patches of unsettled weather showed rain in New England and snow in the Dakotas.

Boston scored an inch and one-quarter of rain, and Providence, R.I., notched nearly 2 inches. Rain slackened as the storm trudged northeastward.

Snow fell over Montana but was heaviest in the Black Hills of western South Dakota where 8 inches mantled the area.

A strong low pressure system moved through the middle Mississippi Valley generating a wide variety of stormy weather on Friday.

Fifteen tornadoes touched down in Texas, Louisiana, Oklahoma, and Arkansas. Very heavy hail also pounded the region. Heavy rains deluged the Gulf Coast and reached the Tennessee Valley by day's end. More than 4 inches soaked Jackson, Miss., and 1 to 2 inches soaked Shreveport, northwestern Louisiana, and Memphis.

Meantime, further north and west, snow surprised some States, especially Iowa and New Mexico.

Six inches of snow covered Eagle Nest, northern New Mexico. More than a foot fell over Albia, southeastern Iowa. Other Iowa points reported 5 to 10 inches.

By contrast, Eureka, northern California, noted a record high 67°, toppling the old mark by 2 degrees.

The slow-moving frontal system set off torrential downpours in the Delta Region on Saturday. Rainfall of 5 to 9 inches was common from eastern Texas across northern Louisiana to central Mississippi. Many towns were flooded in southern Louisiana.

To the west, snow piled up in the New Mexico mountains, and 2 inches whitened El Paso, western Texas, and Lubbock, in the Texas Panhandle. The snow at El Paso established an April record.

On Sunday, low pressure intensified over southern Louisiana carrying very severe weather to much of the South and aggravating already serious flooding problems.

Weekend rain totals reached 9 inches in New Orleans. Baton Rouge suffered 8 inches, and Gulfport, southern Mississippi, received 10 inches and 100-mph winds. The rain extended to the Ohio Valley and Carolinas by day's end; an inch dampened Greenville, northern South Carolina.

Two dozen tornadoes ripped through the country from Louisiana to the Carolinas.

Meantime, record cold readings chilled the Rockies and West Texas, while snow fell over portions of the western half of Arkansas and southeastern Missouri.

Record low temperatures in the Rockies included 9° at Alamosa, southern Colorado, and 19° at Casper, central Wyoming. El Paso tallied a record low 28°, breaking the 1882 mark by 3 degrees.



National Agricultural Summary

April 7 - 13

HIGHLIGHTS: Storms continued to bring heavy rainfall into the south central States and snowstorms into some of the Mountain States and parts of the Plains. Most farmers had only 1 to 3 days suitable for fieldwork. Plowing throughout the Corn Belt and particularly the Delta fell behind schedule because frost was slow to leave the soil in northern areas, and wet conditions delayed activities throughout most of the South. In the Corn Belt, plowing lagged the average by 5 to 10 points; only Illinois plowing exceeded the average by 3 points. Pastures rated good and improving, although subnormal temperatures checked growth throughout much of the West. Winter wheat rated good as jointing advanced as far north as Kansas. Spring small grain seeding lagged the average, but growers made some progress. Spring wheat seeding stood at 3%, ahead of last year's 2% but short of the 8% average. Grain sorghum planting in the seven major producing States reached 22%, surpassing 1979's 15% and the 18% average. Corn planting stood at 2%, compared with 3% for last year and the average. Rice seeding advanced to 23%, falling between last year's 18% and the 26% average. Cotton planting in the 14 major producing States stood at 13%, 3 points ahead of last year. Excluding California, cotton planting reached 10%, the same as last year but 1 point ahead of the average. Farm fuel supplies generally rated adequate. LP gas scored 3% tight, 94% adequate, and 3% surplus. Diesel fuel rated 6% tight, 91% adequate, and 3% surplus. Gasoline stood at 5% tight, 92% adequate, and 3% surplus.

SMALL GRAINS: Winter wheat generally rated good throughout all major production areas, although some Kansas wheat in central and south central areas rated only poor to fair. Oklahoma wheat development continued to lag last year and the average with 40% of the wheat jointing, compared with 1979's 60% and the 70% average. Texas winter wheat heading spread into central areas; scarce moisture caused some stands to head on 6-inch stems. Rains would be welcome especially in the Panhandle where high winds depleted topsoil moisture. Arizona wheat continued heading with some stands beginning to turn yellow. In northern areas of the Great Plains, winter wheat continued greening; moisture would be helpful particularly in the Dakotas. Pacific Northwest winter wheat rated good; reseeding of winter-damaged stands was almost complete.

Spring wheat seeding in the five major producing States reached 3%, 1 point ahead of last year but 5 points below the average. Idaho seeding activity surpassed recent years; however, progress in Minnesota and the Dakotas lagged. Oats and barley seeding also lagged recent years in most major producing States. North Dakota growers felt topsoils were too dry for good germination.

CORN: Corn planting began in extreme southern areas of the Corn Belt; however, seeding did not reach 1% for the entire region. Wet soils continued to plague southeastern corn planting where progress stood at 27%, well behind last year's 45% and the 43% average.

COTTON: Cotton planting reached 13% in the 14 major producing States, slightly behind last year's 16%; last year, California planting was twice as far along as this year. Excluding California, cotton stood at 10%, equaling last year and 1

point ahead of average. Very little cotton was planted in the Southeast because of wet soils; however, only a small portion of the crop is grown in that area. South Texas cotton growers began irrigating ahead of schedule because of persistent dry conditions. Subnormal temperatures slowed growth in the lower Rio Grande Valley and Gulf Coast areas. Oklahoma cotton seedbed preparation at 45% complete, surpassed last year's 35% and the 30% average. California cotton planting advanced rapidly but late.

OTHER CROPS: Grain sorghum seeding was confined to Texas among the seven major producing States. Texas seeding reached 62%, surpassing last year's 41% and the 49% average. No other Great Plains State reported grain sorghum planting; however, for the group, seeding stood at 22%, compared with 15% last year and the 18% average.

Rice seeding reached 23%, exceeding last year's 18% but short of the 26% average. Planting was underway in all major producing States except California.

Peanut planting stood at 6% in Georgia, 5% in Alabama, and 2% in Texas. Progress generally lagged in Georgia and Texas.

FRUITS & NUTS: Deciduous fruit trees began blooming in northern areas. Peaches should begin blooming soon in New Jersey. Pennsylvania trees reached the prepink stage. Apricots bloomed in Washington, and Anjous bloomed in Oregon. Washington apples began clustering. Oregon sweet cherries reached the popcorn stage. Peaches began leafing out in southern areas. Virginia apple trees ranged from green tip to pink from north to south. Oregon filbert trees began leafing. Texas pecan trees ranged from budding to leafing out.

Florida citrus groves rated excellent with near-perfect growing weather. Trees showed an abundance of new growth. Harvest was very active and increasing on Valencias. Texas growers continued to harvest Valencias also. The Arizona Valencia harvest hit full swing; the grapefruit harvest was seasonally slow. California Navel harvest declined, and the desert grapefruit harvest slowed.

VEGETABLES: Wet weather continued to delay vegetable planting throughout many southern States. Growers in the Carolinas were able to plant some cabbage, peppers, tomatoes, cucumbers, snap beans, and melons. Florida vegetable shipments held steady; supplies of other crops held steady or declined, although supplies of cauliflower, snap beans, okra, peppers, and tomatoes increased. Texas vegetable producers harvested most supplies from the lower Rio Grande Valley. Elsewhere in the State, crops grew well, and producers continued to plant summer crops. California vegetable producers harvested lettuce, asparagus, broccoli, cauliflower, celery, green onions, and freezer spinach. Smudge pots were used to protect recent plantings of peppers and tomatoes.

PASTURES & LIVESTOCK: Pastures generally rated good and improving throughout most areas of the Nation. Subnormal temperatures slowed grass growth, and many ranchers were slow to move herds onto grasslands except in the Pacific Northwest where hay supplies were tight. Southern cattle producers had to contend with very wet pastureland. Calving and lambing moved well along, ranging from almost complete to 50 to 60% in the northern Great Plains. Colorado reported above-average losses because of the recent storms. Most other areas of the Nation sustained relatively light losses.

Weather Data for the Week Ending April 13, 1980

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 March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	92 and below	.01 inch or more	.50 inch or more
ALA. Birmingham . . .	74	51	80	41	62	0	5.4	4.2	2.0	20.3	254	85	47	0	0	4	4
Mobile . . .	77	57	85	52	67	0	11.4	10.0	6.8	25.9	276	83	52	0	0	5	3
Montgomery . . .	74	54	78	45	64	-1	3.2	2.1	1.4	13.2	169	91	47	0	0	5	3
ALASKA. Anchorage . .	46	31	48	27	38	-5	.1	0	.1	.4	67	87	50	0	6	1	0
Barrow . . .	-6	-17	-2	-20	-12	-7	T	.1	T	0	0	67	66	0	7	0	0
Fairbanks . . .	38	18	50	14	28	3	T	.1	T	.2	33	59	46	0	7	2	0
Kodiak . . .	46	36	51	30	41	5	.4	.5	.2	4.4	85	79	61	0	2	5	0
Nome . . .	27	12	30	4	18	2	.2	0	.1	1.2	109	67	61	0	7	2	0
ARIZ. Flagstaff . . .	55	26	65	21	41	0	0	.4	0	5.0	208	55	17	0	7	0	0
Phoenix . . .	84	55	90	52	70	3	0	.1	0	1.0	125	40	10	2	0	0	0
Tucson . . .	78	49	86	47	64	0	0	.1	0	1.2	200	36	10	0	0	0	0
Winslow . . .	63	35	76	27	49	-3	0	.1	0	.8	133	--	--	0	2	0	0
Yuma . . .	88	57	95	52	73	3	0	.1	0	.5	100	28	11	2	0	0	0
ARK. Fort Smith . . .	68	43	84	37	56	-5	.3	.8	.2	3.7	69	78	39	0	0	3	3
Little Rock . . .	69	49	80	33	59	-2	4.3	3.1	1.5	9.0	132	63	42	0	0	5	0
CALIF. Bakersfield . .	81	50	89	45	65	4	0	.2	0	1.4	127	--	--	0	0	0	0
Eureka . . .	63	46	77	42	54	5	.7	0	.7	7.4	123	82	46	0	0	2	1
Fresno . . .	78	46	87	42	62	3	0	.3	0	2.1	91	79	26	0	0	0	0
Los Angeles . . .	77	55	85	52	66	5	0	.4	0	2.2	79	63	37	0	0	0	0
Red Bluff . . .	73	46	80	38	60	1	T	.4	T	2.6	81	66	28	0	0	0	0
San Diego . . .	76	59	83	55	68	7	0	.2	0	2.6	130	57	42	0	0	1	0
San Francisco . . .	70	46	80	40	58	3	T	.4	T	2.9	91	67	36	0	0	1	0
Stockton . . .	78	44	85	40	61	4	0	.4	0	1.6	64	--	33	0	0	0	0
COLO. Denver . . .	52	30	65	23	41	-5	.2	.2	.1	1.6	84	66	28	0	4	1	0
Grand Junction . . .	57	30	64	25	43	-7	T	.2	T	1.9	190	54	19	0	6	0	0
Pueblo . . .	59	28	75	22	43	-7	T	.3	T	1.5	150	--	26	0	5	2	0
CONN. Bridgeport . . .	54	45	62	42	49	2	3.4	2.6	3.0	11.7	244	84	48	0	0	3	1
Hartford . . .	60	43	68	33	52	5	2.6	1.7	2.0	9.3	179	81	44	0	0	2	1
D.C. Washington . . .	73	54	76	50	63	8	.8	.2	.7	5.8	132	82	40	0	0	2	1
FLA. Apalachicola . .	74	56	77	49	65	-1	1.7	.8	--	7.5	119	84	62	0	0	4	3
Daytona Beach . . .	81	60	90	47	71	2	T	.6	T	4.2	95	88	55	1	0	1	0
Ft. Myers . . .	87	65	89	56	76	3	1.1	.6	1.1	1.2	31	97	53	0	0	1	1
Jacksonville . . .	82	58	88	49	70	3	.9	.1	.6	8.6	179	96	51	0	0	4	1
Key West . . .	86	76	87	74	81	3	.2	.3	.2	2	8	87	64	0	0	1	0
Miami . . .	82	70	85	67	76	2	4.9	4.1	4.0	7.8	236	88	90	0	0	3	2
Orlando . . .	85	62	89	53	73	3	0	.7	0	3.2	60	94	46	0	0	0	0
Tallahassee . . .	77	51	83	40	64	-3	1.6	.6	.8	14.8	200	89	54	0	0	4	1
Tampa . . .	81	63	86	51	72	1	1.4	.8	1.2	3.9	81	86	57	0	0	2	1
W. Palm Beach . . .	82	66	84	57	74	1	1.2	.4	.7	2.3	49	86	56	0	0	2	2
GA. Atlanta . . .	73	52	81	45	62	2	1.6	.5	1.1	13.9	173	82	51	0	0	3	1
Augusta . . .	78	51	82	41	64	2	.5	.3	.3	12.7	212	85	47	0	0	3	0
Macon . . .	75	54	81	43	64	0	1.4	.5	.8	13.5	205	70	51	0	0	3	1
Savannah . . .	78	56	82	48	67	2	.7	0	.6	9.5	173	89	44	0	0	2	1
HAWAII. Hilo . . .	--	--	--	--	73	1	2.8	.3	--	52.8	285	--	--	0	0	0	0
Honolulu . . .	82	70	85	66	76	2	.3	.1	.1	3.4	87	88	58	0	0	3	0
Kahului . . .	--	--	--	--	--	0	--	--	--	--	--	--	--	0	0	0	0
Lihue . . .	--	--	--	--	73	0	.8	0	--	4.1	68	--	--	0	0	0	0
IDAHO. Boise . . .	59	34	71	25	47	-1	T	.3	T	2.4	171	68	24	0	3	2	0
Lewiston . . .	62	41	77	35	52	3	T	.3	T	1.5	115	63	32	0	0	0	0
Pocatello . . .	52	28	62	24	40	-4	.1	.1	.1	1.7	142	71	30	0	6	2	0
ILL. Cairo . . .	63	50	72	39	57	-1	2.0	1.0	.8	6.7	106	--	--	0	0	5	2
Chicago . . .	50	34	71	28	42	-5	1.4	.5	.6	3.8	90	90	59	0	3	6	2
Moline . . .	50	34	74	28	42	-7	1.2	.3	.6	3.4	85	84	54	0	4	3	2
Peoria . . .	52	36	73	30	44	-6	1.6	.6	1.1	4.9	109	86	59	0	2	3	1
Rockford . . .	48	33	71	23	41	-6	1.6	.7	.9	3.2	76	85	56	0	5	5	1
Springfield . . .	56	39	76	33	48	-4	1.2	.2	.7	5.8	129	89	58	0	0	5	1
IND. Evansville . . .	59	45	71	38	52	-3	2.0	1.0	.6	6.1	97	77	55	0	0	6	2
Ft. Wayne . . .	52	36	62	30	44	-4	.8	0	.4	5.7	136	86	60	0	2	6	0
Indianapolis . . .	55	39	68	33	47	-4	1.1	.2	.6	5.6	108	81	55	0	0	6	1
South Bend . . .	53	39	67	31	46	0	2.1	1.1	1.2	6.4	142	92	69	0	1	5	1
IOWA. Burlington . . .	51	37	73	31	44	-5	1.1	.2	.4	4.3	102	--	--	0	4	4	0
Des Moines . . .	51	34	72	28	42	-5	.4	.2	.3	1.9	58	87	51	0	4	3	0
Dubuque . . .	46	33	71	26	40	-6	.4	.6	.2	.25	56	80	57	0	5	3	0
Sioux City . . .	54	33	62	26	44	-4	.1	.4	.1	2.4	104	84	37	0	3	1	0
KANS. Concordia . . .	60	36	72	26	48	-3	.3	.2	.3	4.7	196	76	32	0	2	2	0
Dodge City . . .	61	36	72	28	48	-4	.1	.3	.1	3.2	178	74	31	0	2	2	0
Goodland . . .	51	31	63	28	41	-6	.1	.2	.1	3.7	264	79	44	0	5	1	0
Topeka . . .	61	39	71	31	50	-3	.1	.7	.1	5.0	143	67	37	0	1	2	0
Wichita . . .	63	39	73	34	51	-4	.3	.4	.2	5.0	172	72	31	0	0	2	0
KY. Lexington . . .	61	44	73	37	52	-1	1.5	.6	.6	7.8	124	77	44	0	0	6	1
Louisville . . .	62	45	73	39	53	-1	1.6	.6	.5	6.2	93	79	48	0	0	6	1

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending April 13, 1980

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-hours, in.	Total, in., since March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
LA. Baton Rouge	77	56	83	46	66	-1	8.1	6.9	4.5	20.5	293	87	48	0	0	3	2	
Lake Charles	74	54	80	43	64	-3	1.0	0	5	10.1	194	95	54	0	0	3	2	
New Orleans	76	55	81	45	66	-2	8.9	7.9	5.3	24.1	339	73	53	0	0	4	2	
Shreveport	74	50	88	40	62	-4	3.8	2.6	1.8	7.1	118	83	49	0	0	3	3	
MAINE. Caribou	51	36	56	20	44	9	1.1	.5	-	4.6	148	80	40	0	1	3	1	
Portland	54	37	65	28	46	5	3.1	2.3	2.8	8.3	173	85	52	0	1	2	1	
MD. Baltimore	70	47	75	39	59	6	.5	-	2	4.4	5.8	123	80	39	0	0	3	1
MASS. Boston	57	43	66	37	50	3	1.8	1.0	1.6	8.0	154	85	55	0	0	2	1	
Chatham	52	43	60	39	47	-	3	5	-	4	7.2	138	88	70	0	0	1	0
MICH. Alpena	46	35	58	29	40	-2	1.4	.8	-	3.4	121	-	-	0	0	5	1	
Detroit	52	37	62	28	44	-2	1.1	.3	.7	6.1	165	89	60	0	1	1	1	
Flint	49	37	60	28	43	-2	.6	0	.4	3.6	113	83	62	0	2	5	0	
Grand Rapids	50	38	63	28	44	-1	1.9	1.1	1.0	4.4	116	91	68	0	2	6	1	
Houghton Lake	44	35	54	26	39	-1	1.6	1.0	1.1	3.0	111	95	78	0	3	6	1	
Lansing	49	35	61	25	42	-2	5	2	2	3.2	91	87	69	0	2	6	1	
Marquette	37	29	48	21	33	-6	2.6	2.0	1.6	3.5	121	93	76	0	6	5	2	
Muskegon	48	36	62	31	42	-2	2.5	1.7	1.7	4.4	119	89	65	0	1	4	1	
S. Ste. Marie	42	32	49	28	37	0	2.5	2.0	1.6	3.8	146	100	69	0	4	6	1	
MINN. Duluth	34	27	39	24	31	-6	.4	-	2	1.5	58	82	60	0	6	6	0	
Internatl. Falls	38	24	47	15	31	-5	.4	0	.3	1.3	76	73	52	0	6	4	0	
Minneapolis	42	30	56	24	36	-7	.7	.3	.4	1.7	74	81	57	0	6	3	0	
Rochester	42	31	58	25	36	-6	.6	.1	.4	2.0	77	85	60	0	6	2	0	
St. Cloud	44	28	57	21	36	-4	.5	0	.4	1.3	62	84	-	0	6	3	0	
MISS. Jackson	71	49	79	41	60	-5	10.6	9.5	4.6	24.0	324	94	51	0	0	4	4	
Meridian	74	49	82	41	62	-3	7.7	6.4	2.9	21.9	267	92	46	0	0	5	4	
MO. Columbia	56	38	71	31	47	-6	1.0	.1	.9	3.9	95	81	49	0	2	3	1	
Kansas City	59	37	59	29	48	-5	.2	.6	.2	4.6	115	71	38	0	2	2	0	
St. Louis	60	42	80	35	51	-4	.9	0	.6	4.9	107	78	52	0	0	5	1	
Springfield	62	40	76	33	51	-4	.8	.2	.5	4.9	107	78	42	0	0	3	1	
MONT. Billings	58	33	70	27	46	3	.1	.3	.1	1.8	113	61	21	0	2	2	0	
Glasgow	56	30	68	22	43	2	T	T	.1	5.5	83	78	37	0	5	2	0	
Great Falls	57	33	76	26	45	2	.2	.1	.1	1.2	92	59	29	0	3	3	0	
Havre	56	30	76	26	43	1	.9	.7	.6	1.8	225	90	37	0	6	2	1	
Helena	54	28	71	18	41	-1	.1	.1	.1	1.3	144	74	27	0	6	3	0	
Kalispell	50	28	67	20	39	-1	.5	.3	.3	1.4	117	91	58	0	6	2	0	
Miles City	55	31	65	22	43	0	.3	0	.2	.8	80	73	32	0	6	2	0	
Missoula	56	30	73	25	43	0	.1	.1	.1	1.3	130	88	36	0	5	2	0	
NEBR. Grand Island	59	33	67	24	46	-2	.1	.4	.1	3.9	186	70	25	0	3	1	0	
Lincoln	59	35	70	27	47	-2	.4	.2	.4	3.5	140	74	31	0	2	1	0	
Norfolk	55	33	65	25	44	-3	T	.5	T	2.1	95	80	35	0	3	1	0	
N. Platte	59	31	67	26	45	-2	T	.4	T	3.4	200	65	25	0	4	0	0	
Omaha	56	34	68	24	45	-3	.2	.4	.1	2.8	108	86	23	0	3	1	0	
Valentine	56	30	65	24	43	-2	.3	.1	.2	2.0	154	84	30	0	5	2	0	
NEV. Ely	57	21	66	15	39	-1	0	.2	0	1.8	150	56	13	0	0	0	0	
Las Vegas	75	50	83	42	62	0	0	.1	0	.9	150	27	12	0	0	0	0	
Reno	66	30	78	23	48	2	0	.1	0	.9	129	66	16	0	6	0	0	
Winnemucca	63	24	76	15	44	0	0	.1	0	.4	57	52	17	0	6	0	1	
N. H. Concord	58	35	63	22	46	4	1.6	.9	1.2	5.8	157	--	48	0	3	3	0	
N. J. Atlantic City	64	47	69	38	56	6	1.8	1.0	1.8	9.1	160	90	52	0	0	1	1	
Trenton	66	50	73	43	58	8	1.4	.6	1.4	9.6	192	--	--	0	0	2	1	
N. MEX. Albuquerque	63	31	76	27	47	-7	T	.1	T	.6	100	50	15	0	5	0	0	
Roswell	67	37	87	31	52	-6	.9	.8	.5	.9	150	--	--	0	1	2	1	
N. Y. Albany	62	40	72	27	51	5	.9	.3	.6	6.0	167	80	50	0	1	4	1	
Binghamton	57	40	63	35	49	5	3.0	2.3	2.9	9.3	238	78	50	0	0	4	1	
Buffalo	56	41	70	35	49	5	.7	0	.4	5.2	133	79	54	0	0	4	0	
New York	62	49	68	43	56	5	2.3	1.5	2.3	11.7	221	75	50	0	0	2	1	
Rochester	61	43	74	38	52	8	.5	.1	.2	4.6	128	77	48	0	0	4	0	
Syracuse	59	42	70	36	51	6	1.4	.7	.9	6.2	148	57	48	0	0	3	1	
N. C. Asheville	66	43	74	39	57	2	3.7	2.8	1.8	11.8	193	89	55	0	0	4	3	
Charlotte	70	51	75	43	61	2	1.8	1.0	1.3	10.0	169	74	41	0	0	3	1	
Greensboro	69	49	74	40	59	2	2.3	1.5	.8	6.9	144	81	53	0	0	5	2	
Hatteras	73	56	78	43	64	7	.1	.6	.1	6.9	141	89	57	0	0	1	0	
Raleigh	74	53	81	45	64	5	.5	.2	.3	5.0	106	88	45	0	0	4	0	
Wilmington	76	55	78	45	65	3	.1	.6	.1	4.9	94	82	48	0	0	1	0	
N. DAK. Bismarck	50	27	54	21	38	-3	.4	0	.4	.7	54	79	39	0	6	1	0	
Fargo	48	27	51	21	37	-3	T	.5	T	.6	37	77	47	0	5	1	0	
Williston	53	25	64	21	39	-1	.4	.1	.2	.5	45	88	42	0	7	1	0	
OHIO. Akron-Canton	56	38	64	31	47	0	1.3	.5	.8	6.6	147	74	48	0	2	5	1	
Cincinnati	59	41	71	33	50	-2	1.6	.8	.5	7.6	141	86	56	0	0	6	0	
Cleveland	55	39	66	32	47	0	.8	0	.3	5.4	123	82	45	0	1	6	0	
Columbus	57	39	68	33	48	-1	1.0	.2	.4	5.0	106	78	51	0	0	6	0	
Dayton	56	38	69	32	47	-3	.7	.1	.3	6.7	146	85	50	0	1	6	0	
Toledo	54	37	66	28	46	-1	.8	.1	.3	5.2	144	85	59	0	2	5	0	
Youngstown	55	38	65	29	46	0	.7	.1	.4	6.6	143	72	50	0	2	5	0	

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending April 13, 1980

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-hours, in.	Total, in., since March 3	Pct. normal since March 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
OKLA.Okla. City	66	40	79	34	53	- 6	0	.7	0	1.4	44	63	23	0	0	0	0
Tulsa	71	46	85	40	58	- 1	T	.9	T	4.1	102	65	30	0	0	0	0
OREG.Astoria	62	39	76	34	51	- 4	1.8	.6	1.1	9.6	116	85	51	0	0	4	2
Burns	37	26	72	18	42	- 1	T	.1	T	1.0	100	84	24	0	5	1	0
Medford	66	38	81	30	52	3	.2	0	.1	2.0	100	85	38	0	1	3	0
Pendleton	63	37	79	31	50	0	.1	.1	.1	1.7	131	77	38	0	1	1	0
Portland	65	42	79	34	53	4	.7	.2	.4	4.7	107	86	50	0	0	3	0
Salem	64	38	76	29	51	2	1.0	.4	.7	5.9	113	93	48	0	1	4	1
PA.Allentown	65	46	72	41	56	7	1.1	.2	1.0	5.8	118	78	45	0	0	3	1
Erie	54	41	68	34	47	3	1.1	.3	.3	5.8	141	--	--	0	0	6	0
Harrisburg	66	43	71	38	55	4	1.4	.8	1.2	6.9	160	81	42	0	0	4	1
Philadelphia	69	49	75	42	59	8	.9	.1	.9	8.6	176	82	48	0	0	1	1
Pittsburgh	57	41	67	35	49	1	1.5	.7	1.0	7.3	152	81	50	0	0	3	1
Scranton	63	44	73	40	54	7	.7	0	.6	4.7	131	76	41	0	0	4	1
R.I.Providence	59	43	65	35	51	5	2.5	1.6	2.2	11.6	215	92	51	0	0	2	1
S.C.Charleston	78	54	81	46	66	2	.4	.3	.3	9.1	157	82	50	0	0	2	0
Columbia	75	50	79	41	63	0	1.4	.6	.8	11.3	188	92	43	0	0	3	2
Greenville	68	50	75	41	59	- 1	2.5	1.4	1.2	13.6	189	84	50	0	0	4	3
S.DAK.Aberdeen	49	30	53	24	40	- 3	1.2	.8	--	2.2	137	79	46	0	5	0	0
Huron	51	29	55	21	40	- 4	.8	.4	.4	1.7	100	85	44	0	5	2	0
Rapid City	52	30	60	26	41	- 2	.4	.1	.2	1.5	88	74	36	0	6	2	0
Sioux Falls	51	31	55	22	41	- 3	.2	.3	.2	1.4	64	88	45	0	4	1	0
TENN.Chattanooga	70	47	77	38	58	- 1	3.2	2.1	1.7	19.2	259	88	45	0	0	4	3
Knoxville	72	50	79	42	61	2	2.2	1.3	1.4	10.9	176	83	45	0	0	3	2
Memphis	67	50	77	39	59	- 3	6.2	4.9	1.8	16.8	233	69	56	0	0	5	4
Nashville	67	47	75	40	57	- 2	3.3	2.3	1.0	10.3	156	84	44	0	0	5	4
TEX.Abilene	72	45	90	39	59	- 6	.1	.4	.1	.8	44	49	26	1	0	2	0
Amarillo	63	33	79	28	48	- 7	T	.2	T	1.7	170	56	20	0	3	0	0
Austin	76	52	92	38	64	- 3	.5	.3	.3	3.8	119	66	39	1	0	2	0
Beaumont	75	54	81	42	65	- 3	.8	.1	.3	7.3	166	94	49	0	0	4	0
Brownsville	81	61	87	47	61	- 3	T	.3	T	.1	10	85	41	0	0	0	0
Corpus Christi	78	58	87	42	68	- 4	T	.4	T	.6	33	79	39	0	0	0	0
Del Rio	80	53	98	41	67	- 4	.4	.1	.2	.7	58	59	18	2	0	2	0
El Paso	74	40	88	28	57	- 6	.3	.2	.3	.5	83	40	18	0	2	1	0
Fort Worth	73	50	92	42	62	- 2	1.1	.1	.9	2.4	59	69	25	1	0	2	1
Galveston	70	60	74	45	65	- 3	.4	.2	.2	4.2	117	79	65	0	0	3	0
Houston	75	53	83	44	64	- 4	.6	.2	.5	5.7	142	80	43	0	0	4	1
Lubbock	69	39	88	34	54	- 5	.2	0	.1	.4	36	57	20	0	0	1	0
Midland	70	38	90	32	54	- 9	.2	.1	.1	.2	33	45	22	1	2	2	0
San Angelo	74	43	91	33	59	- 7	.5	.2	.3	1.2	86	58	25	1	0	2	0
San Antonio	79	50	92	37	65	- 4	.4	.2	.3	1.5	60	68	31	1	0	2	0
Victoria	74	53	80	45	64	- 6	.4	.2	.3	2.3	85	85	50	0	0	3	0
Waco	73	49	89	38	61	- 6	2.0	1.1	1.9	4.2	111	74	45	0	0	3	2
Wichita Falls	72	42	92	37	57	- 5	T	.7	T	1.1	38	65	18	1	0	0	0
UTAH.Blanding	54	28	63	22	41	- 5	T	.2	T	1.9	158	61	21	0	7	0	0
Salt Lake City	57	34	69	30	45	- 3	T	.5	T	2.7	108	70	26	0	5	1	0
VT.Burlington	58	41	66	26	49	8	.7	.1	.3	3.8	131	79	54	0	1	4	0
VA.Lynchburg	66	47	74	40	57	2	1.8	1.2	.8	6.7	149	83	90	0	0	5	2
Norfolk	71	52	78	46	62	5	.4	.2	.4	3.9	91	84	46	0	0	2	0
Richmond	74	53	82	47	64	7	1.3	.7	1.0	6.2	141	85	42	0	0	4	1
Roanoke	66	48	75	39	57	2	1.9	1.3	1.2	7.0	159	70	24	0	0	3	1
WASH.Colville	58	33	71	29	45	0	.5	.3	.4	2.9	207	--	--	0	3	3	0
Omak	62	35	73	23	48	1	.7	.5	.7	1.7	155	70	32	0	2	1	1
Quillayute	61	38	76	32	50	5	2.1	0	1.0	13.7	97	94	47	0	2	4	2
Seattle-Tacoma	62	42	76	35	52	4	.7	.1	.4	3.4	76	79	33	0	0	3	0
Spokane	58	36	72	30	47	2	.2	.1	.2	1.3	62	87	43	0	1	1	0
Walla Walla	65	42	80	36	54	3	T	.3	T	1.9	100	70	31	0	0	2	0
Yakima	65	36	76	27	50	2	.3	.2	.2	.9	150	81	31	0	2	2	0
W.VA.Beckley	61	41	67	34	51	0	1.6	.8	1.9	5.2	95	74	54	0	0	3	1
Charleston	65	44	73	33	55	0	1.2	.4	.7	6.7	129	67	48	0	0	3	1
Huntington	64	44	72	33	54	0	1.1	.3	.5	6.0	111	75	46	0	0	5	1
Parkersburg	61	42	69	33	51	- 2	1.1	.3	.7	5.9	118	72	50	0	0	3	1
WISC.Green Bay	46	34	54	25	40	- 2	1.5	.9	1.1	2.8	104	92	63	0	2	4	1
La Crosse	46	35	65	28	41	- 5	.4	.2	.3	2.4	80	87	60	0	4	3	0
Madison	47	32	64	22	40	- 4	1.0	.4	.6	2.4	80	86	54	0	5	4	1
Milwaukee	48	36	64	30	42	- 1	1.3	.7	.4	3.1	94	85	58	0	2	5	0
WYO.Casper	47	21	57	16	34	- 7	.1	.2	.1	1.5	100	72	35	0	7	3	0
Cheyenne	44	25	54	19	35	- 7	T	.4	T	1.7	100	73	44	0	7	2	0
Lander	46	25	55	17	35	- 6	.3	.2	.1	2.4	114	76	36	0	7	3	0
Sheridan	51	27	61	21	39	- 3	.1	.4	.1	1.5	71	79	31	0	6	3	0
P.R.San Juan	86	73	89	72	79	2	1.1	.4	.5	2.6	87	91	59	0	0	5	0

Based on preliminary reports and 1941-70 normals

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 ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures near normal. Rainfall ranged from 3.00 to 11.00 in. Heaviest rains 12th and 13th.

Fieldwork: 3.1 days suitable. Soil moisture mostly surplus. Conditions varied. Plowing, planting corn main activity. Planting progress: Corn 19%, 36% 1979, 26% average; cotton 3%, 12% average; peanuts 5%, 3% 1979; sorghum 2%, 3% 1979. Wheat 17% headed, 8% 1979. Potato planting well underway Sand Mountain area. Pastures improving.

ARIZONA: Sunny, dry, low humidity except for light snow over White Mountains 11th to 12th. Amounts ranged from traces to 8 in. with moisture amounts up to 0.50 in. Windy last half of week. Temperatures averaged 4° below to 4° above normal.

Small grains making good progress. Most small grains heading; some color fading west. Cotton 34% planted, 32% last year. Leaf development just begun Yuma area. Seedbed preparation corn in progress southeast. Good progress continued sugarbeets, safflower. Alfalfa haying continued. Southwest began 3d cutting while other areas mostly on 2d. Lettuce harvest good progress. Mixed vegetable harvest seasonal progress. Cantaloups, watermelons good progress. Thinning, weeding, vine turning active many fields. Grape vines excellent growth, shoot thinning in progress. Deciduous fruit trees very good condition, blooming, 1st setting well advanced. Valencia orange harvest full swing, grapefruit harvest active, seasonally slow. LP gas, gasoline adequate. Diesel fuel adequate except southeast where supplies deficient to adequate and southwest which is tight to adequate. Ranges mostly fair to good. Water supplies adequate; some shortage south. Cattle fair to good condition, pastures supplying mostly average amounts feed.

ARKANSAS: Severe thunderstorms with large hail and a mixture of rain, sleet, snow. Highest normal 64°, lowest 57°. Highest mean 63°, lowest 55°. Highest temperature 89°, lowest 30°.

Wet field conditions hampered land preparation. Diesel 85% adequate. Gasoline and LP gas 88% adequate, 12% surplus. Limited soybeans seedbed preparation. Rice planting began; 5% planted, 14% 1979, 13% average. Cotton bedding and fertilizing; 2% seeded, 3% 1979, 4% average. Corn 2% seeded, 15% 1979, 26% average. Sorghum 4% planted, 9% 1979, 12% average. Wheat condition good, some hail damage; fields jointing to boot stage. Oats good condition. Apples, peaches, strawberries good condition. Tomatoes being transplanted. Pasture average. Fescue growing. Alfalfa, cattle good condition.

CALIFORNIA: Precipitation early week all but south. Rainfall relatively light generally averaging about 0.50 in. Temperatures increased late week with south coast about 4 or 5° warmer than normal. Desert areas east of southern coast warmer than normal also.

Early grains heading. Grain hay harvest underway. Greenchopping oats and forage mixes. Rice planting preparation full swing. Planting expected active one week. Cotton planting full swing, late; 33% in ground, 64% year ago. Planting small white beans. Sugarbeet harvest active. Soil preparations, planting field corn, sugarbeets active. Alfalfa harvest increasing. Early walnut varie-

ties in full bloom Sacramento Valley. Navel orange harvest continued with declining packout. Desert grapefruit harvest continued slow. Harvest of Hass avocados resumed in San Diego area. Lemon harvest continued. Artichoke supplies decrease. Lettuce and asparagus harvest active. Broccoli movement heavy, cauliflower moderate. Celery supply light, quality down. Melon planting progressing well, good set in Blythe. Green onion supplies increase. Riverside potatoes wind down, planting Central Valley. Freezer spinach harvest continued. Pepper and tomato planting active, smudge pots used. Strawberry harvest to increase slightly. Processing tomato planting active. Range, pasture conditions excellent. Grasses in dry areas maturing. Calving, lambing still active. Fuel supplies generally adequate.

COLORADO: Light precipitation to 0.50 in. across southern mountains and eastern plains on 7th; 10th and 11th 0.25 to 0.50 in. along front range and in southeast. Temperatures averaged 2 to 5° below normal.

Winter wheat very good condition. Barley seeded 11%, 22% 1979, 33% average. Oats seeded 8%, 7% 1979, 35% average. Sugarbeets 2%, 6% 1979, 25% average. Spring wheat seeded 8%. Fieldwork: 1 day suitable. Ranges and pastures very good condition. Livestock good condition. Death loss above average. Topsoil moisture surplus; subsoil adequate. Fuel supplies adequate.

FLORIDA: Considerable cloudiness through 9th and clearing from Panhandle southward through 11th. Cloudy Panhandle at weekend but mostly sunny elsewhere except rain spreading across peninsula night of 13th. Rainfall statewide early week and Panhandle and over peninsula late week. Rainfall averaged around 1.00 in. with local amounts 2.00 to 5.00 in. mostly Panhandle, central, southeast areas. Temperatures around normal Panhandle and slightly above normal elsewhere. Highs in 70's Panhandle and 80's north central, south. Lows in 50's and 60's Panhandle and north, 60's to around 70° central and south except 70's lower east coast.

Soil moisture excessive low areas of south, excessive in extreme north and west; mostly adequate other areas. Planting corn, peanuts, soybeans delayed. Tobacco fair condition, blue mold still a problem. Sugarcane, small grains good condition. Supplies of all types fuel adequate. Pastures in good to excellent condition except some Panhandle and east coast areas. Cattle in fair to mostly good condition. Citrus grove condition continues excellent, near perfect growing weather. Moisture adequate except high Sand Hill groves. Abundance of new growth. New crop fruit progressing well. Harvest very active and increasing on Valencias. Overall vegetable crop conditions fair to very good; harvest fieldwork active weather permitting. Quality, size, yields fair to very good but variable some crops. Overall vegetable shipments held steady from previous week. Supplies cauliflower increased considerably; snap beans, okra, peppers, tomatoes also increased. Cabbage, carrots, chinese cabbage, sweet corn, cucumbers, eggplant, lettuce, potatoes, squash held steady but shipments celery, escarole, parsley, radishes, strawberries decreased. Watermelon crop fair to good southwest area; harvest light.

GEORGIA: Moderate rain southwest early week, with generally light rain statewide midweek. Weekend quite wet...especially over north; 3.00 to 4.00 in. over extreme north. Rainfall south ranged 0.33 in. to 2.00 in., bulk of rain 13th. Temperatures averaged 2° below normal.

Soil moisture surplus. Fieldwork: 2 days suitable. Wet fields still limiting fieldwork. Corn 37% planted, last year 82%, average 67%; fair to mostly good condition. Tobacco 45% transplanted, last year 89%, average 84%; mostly fair to good condition. Watermelons 42% planted, last year 84%, average 76%; fair to mostly good. Cotton 6% planted, last year 32%, average 27%. Peanuts 6% planted, last year 10%, average 13%. Sorghum 3% planted, last year 9%. Soybeans 0% planted this year, 2% last year, average 1%. Vegetable planting delayed; condition poor to fair. Small grains, pastures, cattle, hogs, fair to mostly good. LP gas 93% adequate; diesel fuel 93% adequate; gasoline 94% adequate.

HAWAII: Weather improved; rainfall light. Some heavier rains weekend Island Hawaii.

More sunny days beneficial to crops. Farm activities increased. Spraying for insect and disease control. Vegetable supplies generally light to moderate. Banana supplies light. Papaya production increasing; favorable weather improved orchard development. Pineapple harvesting slow. Sugar firms actively harvesting. Pastures generally fair to good. Excessive rains of past few weeks caused sogginess some areas. Fuel supplies adequate.

IDAHO: Temperatures relatively even averaging 1 to 4° below normal. Precipitation averaged below normal.

Fieldwork: 3 days suitable. Spring wheat 32% planted, spring barley 21%, sugarbeets 30%; all significantly above 1979 levels. Onions and dry peas below 1979 rate with 45% and 7% respectively. Winter wheat spotty. Potato planting limited. Fruit trees beginning to bloom. Calving and lambing mostly complete. Sheep shearing active. Hay supplies tight as weather keeps cattle off rangeland. Fuel supplies adequate.

ILLINOIS: Temperatures 1 to 6° below normal. Precipitation 0.50 to 2.00 in.

Soil moisture adequate. Winter wheat good. Oat seeding 18% complete, 20% 1979, 50% average. Alfalfa good. Plowing 1980 corn, soybean acreage 77% complete, 70% 1979, 74% average. Pastures good.

INDIANA: Cloudy, cool, rainy. Daytime temperatures averaged 5° below normal and ranged from 28 to 70°. Precipitation 2.10 in. southwest, 1.10 northwest, elsewhere 1.30 to 1.80 in. Sunshine only 37% of possible. Soil temperatures in low and middle 40's and below normal.

Fieldwork nil. Topsoil moisture surplus. Subsoil moisture adequate to mostly surplus. Acreage for spring planted crops 55% plowed, 1979 55%, average 60%. Corn 0% planted, 1979 0%, average 0%. Wheat fair to mostly good. Wheat 4 in., 1979 4 in., average 6 in. Wheat 3% jointed, 1979 5%. Oats 3% seeded, 1979 10%, average 10%. Clover 50% seeded, 1979 50%. Pasture condition fair.

IOWA: Cold with moderate precipitation south central, southeast; normal elsewhere. Temperatures averaged from 5 to 8° subnormal. Rain and snow fell 8th to 9th, mostly over east and moderate to heavy snow over some southern areas the 11th with amounts to 14 in.

Fieldwork: 1.8 days suitable. Oat acreage seeded 23% complete, last year 8%, normal 42%.

Plowing 56% complete, last year 54%, normal 63%. Topsoil and subsoil moisture adequate. Livestock in good condition, replacements slow, tight money.

KANSAS: Precipitation ranged from generally less than 0.25 in. west to over 1.00 in. east and north central. Rains fell early week, 10th, 11th. Temperatures ranged from 44° northwest to 53° southeast or from 2 to 5° below normal.

Wheat acreage 5% jointed, 5% last year, 15% average. Wheat condition good to excellent except central and south central where rating poor to fair. Soil-borne mosaic prevalent eastern half. Fieldwork: 1.5 days suitable. Oat planting 60% complete, 40% last year, 75% average. Barley seeding 60% complete, 50% last year, 80% average. Corn planting less than 1%, 1% last year, 4% average.

KENTUCKY: Rainfall averaged 1.50 in. central and east and around 1.80 in. west. Temperatures near or slightly above normal with above normal readings beginning of week and below normal temperatures weekend.

Rain and wet fields limited fieldwork to 2.5 days. Soil moisture surplus. Farmers 11 days behind normal progress. Plowing 40% complete. Corn planting just starting, less than 1% complete; about same as late 1979 spring, average 4%. Tobacco beds 67% seeded. Seeding of beds and development of plants late. Winter wheat good condition; sprayed and fertilized as weather and field conditions permit. Apple and peach prospects favorable with little freeze damage to date.

LOUISIANA: Rain statewide, over 3.00 in. most areas. Temperatures 2 to 4° below normal. Extremes: 34 and 88°.

Fieldwork: 2.9 days suitable. Soil moisture surplus. Corn planting 35%, 50% 1979, 57% average. Rice planting 42%, 33% 1979, 48% average. Sugarcane fair, growth slow. Small grains, pastures good. Livestock fair. Volume strawberry harvest underway. Light planting sweetpotatoes begun.

MARYLAND & DELAWARE: Temperatures averaged 4° above normal. Highs in upper 60's and lows in mid-40's. Precipitation averaged 1.08 in.

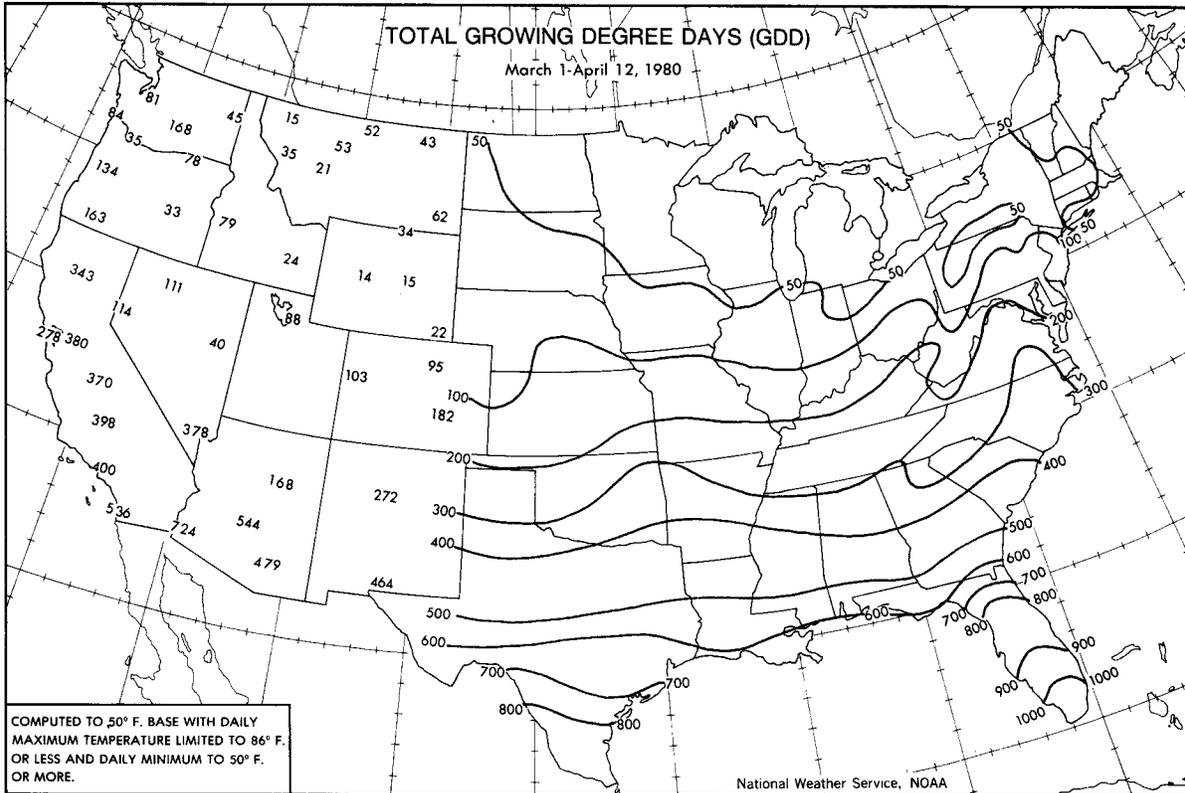
Plowing for corn very slow due to wet conditions. Small grains in good condition. Topdressing, late because of wet season. Tobacco beds over 95% planted. Stripping and marketing tobacco. Fruit prospects good.

MICHIGAN: Wet, temperatures near normal. Warmest temperatures occurred early week; coolest readings weekend. Precipitation above normal statewide with heaviest amount 2.00 in. over eastern Upper and northwest Lower and lightest amount, 0.50 in. to 1.00 in., over east central Lower. Most rain fell during first half of the week.

Farm activities stalled by wet weather.

MINNESOTA: Temperatures averaged 0 to 3° below normal west, 5 to 6° below normal east. Extremes: 70 and 15°. Precipitation averaged up to 0.50 in. below normal west, up to 0.25 in. above normal central, up to 0.25 in. below normal east. Precipitation totals were 0.25 in. or less west, 0.05 to 1.00 in. central, 0.25 to 0.50 in. east.

Although some small grain fields worked and seeded, most still have frost, are too wet, cold. Fieldwork expected to start later this week some drier areas of northwest, west central. Moisture supplies surplus southern third, central; adequate elsewhere. Seeded: Spring wheat 0%, 1979 0%, normal 12%; oats 0%, 1979 0%, normal 13%; barley 0%, 1979 0%, normal 5%.



MISSISSIPPI: Temperatures below normal. Extremes: 32 and 83°.

Soil moisture mostly surplus. Fieldwork: 3.2 days suitable. Farmers prepared fields early week. Heavy rains by weekend stopped all fieldwork. Extensive flooding along river basins during weekend. Plowing 33% complete, 47% 1979, 59% average. Cotton 1% planted. Corn 25% planted, 35% 1979, 36% average; 10% up to stand, 22% 1979; condition fair. Watermelons 31% planted, 65% 1979. Rice 20% planted, 1% 1979. Winter wheat 78% jointing, 78% 1979; 8% headed, 3% 1979; condition good to fair. Peaches fair to good condition. Pasture, livestock good to fair condition. Fuel supplies adequate.

MISSOURI: Temperatures near normal south, 2° below normal elsewhere. Precipitation general, averaging 1.00 in. east, and 0.50 to 0.75 in. west.

Fieldwork: 1.4 days suitable. Plowing 54% complete for spring planted crops, last year 60%, normal 58%. Oats 28% sown, last year 16%, normal 63%. Corn 1% planted, last year 1%, normal 10%. Condition of winter wheat mostly good. Condition of pasture mostly fair to good. Topsoil moisture adequate to surplus. Fuel supplies mostly adequate.

MONTANA: Precipitation of 0.75 in. over parts of north central and northeast midweek. Precipitation mostly moderate elsewhere except very light over most of northeast. Temperatures mild ranging 3° below normal over high country of southwest to 3° above normal in central.

Moisture short to adequate. Winter wheat greening; condition fair. Fieldwork getting started. Calving 60% complete, lambing 50% complete, shearing 55% complete. Ranges just starting to grow. Stock water supplies short to adequate.

NEBRASKA: Rain southeast; amounts averaged 0.50 to 1.00 in.; elsewhere less than 0.10 in. Cool week overall.

Oats planting 20% complete, year ago 10%, normal 45%. Winter wheat condition good. Corn planted 0%, last year 0%, average 0%. Topsoil and subsoil moisture adequate. LP gas, diesel, and gasoline supplies 5% surplus, 95% adequate. Fieldwork: 3 days suitable.

NEVADA: Pacific cold front swept thru early week. High pressure aloft slowly built up during week. Temperatures few degrees below normal north to near normal south. Extremes: 83 and 15°.

Calving and lambing continued. Winter grain growth beginning.

NEW ENGLAND: Near normal temperatures for most of the period; readings rose to 10° above normal on 11th and 12th. 2.00 in. to 4.00 in. of rain 9th and 10th causing flooding in southwestern New England.

NEW JERSEY: Temperatures averaged 5 to 8° above normal. Extremes: 36 and 76°. Rainfall averaged 2.23 in. north, 2.40 in. central, 1.53 in. south. Soil moisture in percent of field capacity 98% north, 95% central, 94% south. Soil temperature 49° north, 54° central, 57° south.

Many farmers pessimistic about crop prospects. Wet soils hampering field activities. Spraying fruit, liming and fertilizing grains and hay fields. Peach bloom will begin this week.

NEW MEXICO: Dry with rising temperatures through midweek. Strong front developed southward 11th bringing excessive windiness, sharply falling temperatures and snow and rain showers mainly to central highlands and east central and southeast Plains.

Planting preparations continued active, though interrupted by late season snowstorm. Little to no damage to young plants resulted. Occasional early cotton field planted but soils still too

cool for general planting. Wheat, barley progress satisfactory, jointing underway. Corn planting starting in south. Alfalfa, lettuce, onions, small grains growing well. Ranges beginning to green. Livestock fair to good condition, supplemental feeding active. Calving about 75%; lambing, shearing about done.

NEW YORK: Mild, wet. Temperatures averaged 5° above normal. Warm early week, cool toward weekend. Heavy rain on 9th, near 5.00 in. in Catskills. Rainfall near normal in Hudson Valley, Champlain Valley, and in western sections, but above or much above normal elsewhere.

NORTH CAROLINA: Temperatures 1 to 3° above normal. Precipitation above normal in west, below normal in east.

Fieldwork: 4.3 days suitable. Soil moisture adequate to surplus. Condition of wheat, oats, barley, rye mostly good, improving; pastures mostly good, improving; tobacco beds mostly good, improving; Irish potatoes fair to good, improving; peaches fair to mostly good, improving; truck crops mostly fair to good, unchanged. Tobacco plant supply adequate. Plantings of Irish potatoes 59%; corn 28%, 27% 1979, 33% average; cotton 1%, 6% 1979, 5% average; spring cabbage almost complete; other spring vegetables slowed by wet conditions; summer cabbage, watermelons, green peppers underway; sorghum, soybeans, flue tobacco underway. Major activities: Planting and land preparation.

NORTH DAKOTA: Rain, snow early week west and south. Heavy, wet snow, up to 17 in. fell in extreme northwest. Equivalent moisture up to 1.81 in. helped replenish low soil moisture supplies. Elsewhere south and west, precipitation lighter. Only trace of precipitation northeast. Temperatures near normal. Extremes: 10° northwest and 68° north central.

Fieldwork began in many areas, becoming general. Some small grain seeding begun, mostly south. Hard red spring wheat seeding 1% completed. Durum, barley, and oats seeding begun. Last year no seeding by this date. Averages for this date: Hard red spring wheat 2%, durum 1%, barley 1%, oats 2%. Soil moisture short; additional rainfall needed to assure germination. Livestock in good shape. Calving and lambing progressing well with generally nice weather. Minimal losses. Calving 60% completed, lambing 69%.

OHIO: Temperatures normal to 3° below normal. Extremes: 71 and 24°. Rains statewide 6 days; precipitation average over 1.00 in. Range from 0.60 in. to 2.30 in. Soil temperatures from mid to upper 40's.

Land for spring crops plowed 60%, 70% 1979, 70% average. No corn planted. Oats planted less than 5%, 15% 1979, 35% average. Potatoes planted less than 5%, 5% 1979, 10% average. Sugarbeets planted 0%, 0% 1979, 20% average. Tobacco sown 40%, 55% 1979, 70% average. Fieldwork: 1 day favorable. Pasture condition fair to good. Soil moisture surplus.

OKLAHOMA: Temperatures ranged from 7° below normal Panhandle to near normal northeast. Dry, but heavy rain in southeast over weekend with several spots recording over 3.00 in. Colder weather over weekend bringing first April snow to southeast in 60 years.

Wheat fair to good condition but development continues to lag last year and average. Wheat jointing 40%, 60% 1979, 70% average. Seedbed preparations and planting activities resumed after delay because of wet soils. Soil blowing a major

concern of producers in drier west central and southwest. Seedbed preparations: Cotton 45%, 35% 1979, 30% average; sorghum 40%, 40% 1979, 35% average; corn 70%, 75% 1979, 75% average. Corn planted 10%, 5% 1979, 10% average. Fieldwork: 5.0 days suitable.

OREGON: Temperatures varied from near normal to 5° below normal. Spring-like temperatures moved in over weekend. Precipitation ranged from 2.00 to over 3.00 in. along coast; 1.00 to 2.50 in. in western valleys; 0.10 to 0.50 in. in eastern sections.

Soil moisture mostly adequate to surplus west; adequate east. Winter wheat condition good; re-seeding virtually complete. Most spring seeding and fertilizing finished except for higher elevations. Summer fallow activities, plowing, and spraying well along. Sweet cherries popcorn stage in Willamette Valley; a week behind normal in Wasco County. Strawberries and canberries showing new growth. Filberts leafing out; leafroller sprays being applied. Anjous in full bloom in Jackson County. Potato plantings progressing well in early areas. Onion and pea plantings finishing up. Livestock condition good west, fair to good east. Range and pasture conditions improving with moisture; condition mostly fair. Cattle being turned out early due to hay shortage. Cool weather delaying range growth east.

PENNSYLVANIA: Mild, wet; rain every day west and 5 days east. Amounts from near 1.00 in. extreme southeast to 2.50 in. central mountains with 1.00 to 2.00 in. elsewhere. Temperatures averaged 1 to 5° above normal. Extremes: 26 and 75°.

Fieldwork: 3 days suitable. Soil moisture mostly surplus. Activities: Equipment preparation; fence repair; plowing, and discing; spreading manure, lime, fertilizer; orchard pruning, spraying; planting oats. Plowing 9%, last year 16%. Oats 6% planted, 1% 1979. Potatoes under 5% planted, down from last year's 5%. Tobacco beds planted under 5%, last year 31%. Corn less than 5% planted, same as last year. Wheat, barley 100% pre-boot. Hay stand conditions mostly good to fair. Fruit in pre-pink stage. Some vegetables planted.

PUERTO RICO: Island average rainfall 1.65 in. or 0.72 in. above normal. Temperatures averaged about 77 to 78° on coasts and 72 to 74° interior. Extremes: 94 and 53°.

SOUTH CAROLINA: Temperatures averaged near normal. Rainfall considerably above normal.

Soil moisture generally excessive. Plowing 34% completed. Corn condition fair; 21% planted, critical period, 74% last year, 68% average. Tobacco plants nearly oversized, supplies adequate; 16% transplanted, condition fair to good, 57% last year, 48% average. Small grain fair to good. Less than 1% cotton planted, 11% last year, 19% average. Peach spraying continued between showers, condition fair to good. Tomatoes fair to good, 86% planted, 89% last year. Cucumbers good, 58% planted, 84% last year. Snap beans fair, 73% planted, 81% last year. Watermelons poor to fair due to moisture problem, 45% planted, 68% last year, 76% average.

SOUTH DAKOTA: Precipitation statewide. Average temperatures normal to 5° subnormal. Extremes: 63 and 17°.

Fieldwork continued on limited scale, interrupted by rain and snow. Soil moisture short northwest and west central, surplus in narrow band eastern border, adequate elsewhere. Fuel supplies adequate. Farm activities: Planting, feeding, calv-

ing, lambing, machinery preparation. Winter wheat and rye fair condition; turning green. Moisture beneficial. Livestock good, ranges mostly fair. Feed supplies adequate, stock water low. Light death loss to calves and lambs. Calving 50% complete; lambing 67% complete. Oats seeded 7%, 1979 0%, average 18%. Barley seeded 5%, 1979 0%, average 13%. Spring wheat seeded 10%, 1979 0%, average 17%.

TENNESSEE: Very wet; rains every day except 9th and 10th. Heaviest amounts west with over 6.00 in. Temperatures ranged from 4° above normal northeast to 2° below normal west.

Fieldwork: 2.4 days suitable. Soil moisture surplus. Spring plowing 45% complete, 1979 46%, average 57%. Tobacco plantbeds 83% seeded, 1979 98%, 92% average. Corn planted 5%, 1979 3%, average 6%. Pastures fair to good. Cattle good, grazing pasture. Cotton planting begun in south central. Wheat and oats fair. Gas and diesel fuel supplies adequate. Activities: Plowing, fertilizing, chores.

TEXAS: Midweek cold front brought some precipitation. Temperatures below normal West Texas, Panhandle; near normal elsewhere. Rainfall above normal Central, East Central; near normal elsewhere. Weekend cold front produced record lows while dumping 6 in. snow on portions Trans-Pecos. Strong winds prevalent Panhandle further depleting surface moisture on small grains. Showers Central, East Texas delaying planting, fieldwork. South Texas dry.

Cotton planting active Blacklands between showers. Young cotton South Texas being irrigated ahead of schedule due to persistent short moisture situation. Cool temperatures slowed growth in emerged Valley. Gulf Coast fields. Few High Plains sorghum fields planted; soils must warm before planting becomes widespread. Cutworms, greenbugs damaged stands along Gulf Coast. Some South Texas fields cultivated. Corn planting accelerated High Plains while Gulf Coast, Valley producers cultivated earlier stands. Small grains heading spread Central Texas. Scarce moisture caused some oat, wheat stands to head at 6 in. height. Greenbug activity decreased. Rains would be welcomed wheat areas especially Panhandle where surface moisture depleted by high winds. First peanuts planted South Central, South Texas. Land preparation active Cross Timbers. Alfalfa good start although weevils damaged some Trans-Pecos, southern High Plains stands. Soybean land preparation began South Central, Gulf Coast. Cotton planted 13%, 12% 1979, 13% average. Rice planted 64%, 36% 1979, 65% average; emerged 20%. Sorghum planted 62%, 41% 1979, 49% average. Wheat headed 2%. Corn planted 42%, 33% 1979, 42% average. Peanuts planted 2%, 3% 1979, 11% average. Sugarbeets planted 55%, 67% 1979, 78% average.

Movement cattle off wheat fields on High Plains continued where grain harvest planned. Forage growth remained short most native ranges and pastures. Some greening where moisture received. Supplemental feeding tapered off eastern and southern areas. Sheep, goat shearing continued. Livestock fair to good condition. Marketing continued slow due to lower prices.

Lower Rio Grande Valley harvests cabbage, carrots, lettuce continued steady while supplies onions increased. Tomatoes, watermelons, squash, beans making excellent growth; watermelons beginning to vine. San Antonio-Winter Garden carrot harvest continued. Cabbage growing rapidly. Potatoes making good growth. Some watermelons replanted. East Texas planting tomatoes, cantaloups, watermelons active. Potatoes, beans, onions looking good. North Texas cutworms continued to damage

onions, tomatoes, peppers, potatoes. Spraying active for control. El Paso some chili peppers up. Lettuce, onions making good progress. Some snow received morning of 14th. High Plains land preparation continued for summer harvested crops. Some onions, potatoes planted. Peach trees continued to leaf out most areas, however, fruit set reduced by freezing temperatures and hail storms in some areas. Remaining fruit set quite varied. Pecan trees budding, leafing out most areas; spraying schedules started.

UTAH: Few isolated showers or snow flurries early week. Little or no precipitation latter part. Amounts generally light to moderate. Temperatures below normal.

Soil moisture adequate. Fieldwork made good progress with 5 to 7 days suitable. Soil preparation and fertilizer spreading major activities. Spring wheat about 33% planted, oats and barley 27%. Fruit bloom delayed by cool weather but very little damage to date. Calving 78% complete. Lambing and shearing about 50% complete. Cattle and sheep in good condition; losses moderate.

VIRGINIA: Temperatures averaged little above normal. Extremes: 82 and 30°. Showers and thunderstorms mainly on 9th and again at end of period. Amounts averaged 1.50 in. but varied greatly ranging from less than 0.25 in. some eastern areas to over 2.00 in. southwest.

Soil temperature average about 56°. Wet soils delaying spring seedings. Topsoil moisture adequate to surplus. Fieldwork: 2.7 days suitable. Corn 5% seeded, 11% 1979, 16% average; Tidewater, southeast progress 10% done, 19% 1979; growers applying herbicide southeast. Eastern Shore: Potatoes 75% seeded, virtually done 1979; growers preparing land for snap beans, cucumbers, tomatoes. Pastures, wheat in good condition. Alfalfa weevil spraying active north, condition good. Peach prospects good to excellent, in full bloom all areas except extreme north. Apples in green tip north, breaking buds southwest, in pink southern Piedmont. Tobacco: Burley beds 85% seeded southwest; flue-cured and burley seedlings emerging, condition good to excellent. Spring oats seeding active. Peanut land being prepared southeast. Farm fuel supplies adequate.

WASHINGTON: West: Temperatures averaged 2° above normal San Juans to 2° below normal east Cascades. Precipitation averaged above normal from 0.20 in. San Juans to 2.20 in. coastal area.

Planting green peas, lettuce, spinach, onions, seed beets, strawberries, raspberries. Many spring vegetables showing good growth. Field rhubarb, tulips, daffodil flowers harvested. Livestock to pastures increasing.

East: Temperatures averaged 3° below normal. Precipitation averaged 0.20 in. below normal.

Activities: Seedbed preparation, spring plantings, herbicide application. Hops, mint, wheat, potatoes, radish seed, grapes, apples planted. Apricots in full bloom. Apples clustering. Some bud kill in cherry crop. Calving, lambing virtually complete. Hay supplies light.

WEST VIRGINIA: Temperatures above normal. Extremes: 76 and 22°. Some frost late week. Precipitation above normal, some light flooding.

Soil moisture surplus to adequate. Fieldwork: 2.2 days suitable. Hay, grain, other feed supplies, fuels adequate.

(continued on page 27)

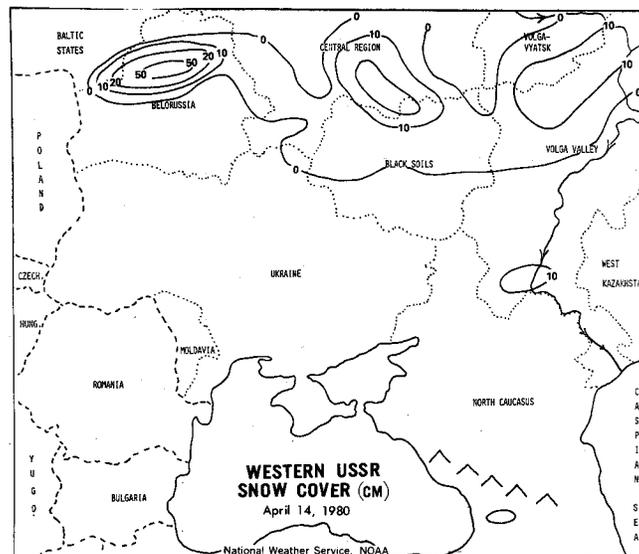
International Weather and Crop Summary

April 7 - 13

HIGHLIGHTS:

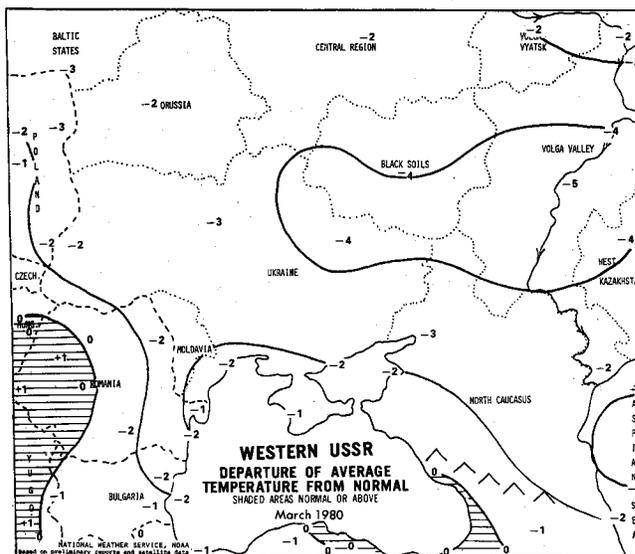
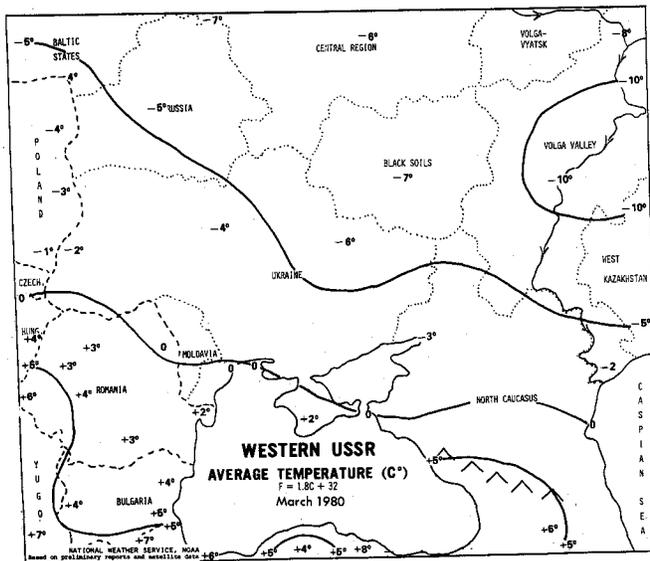
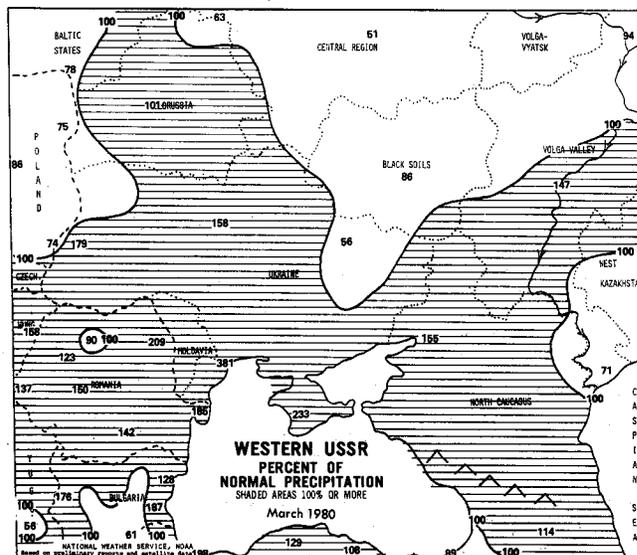
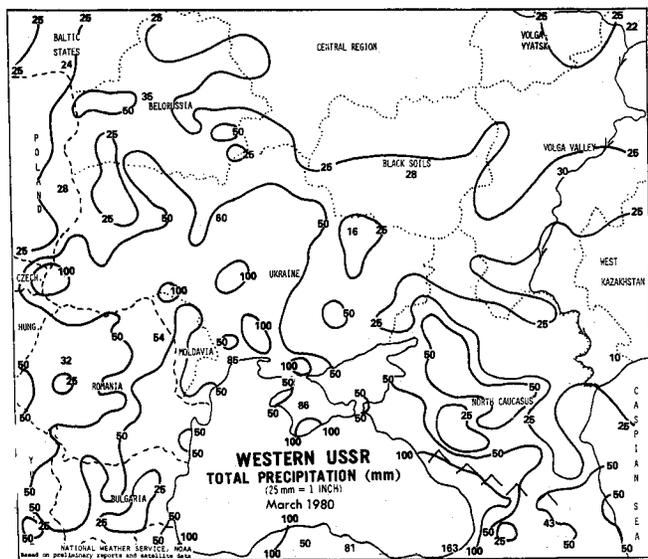
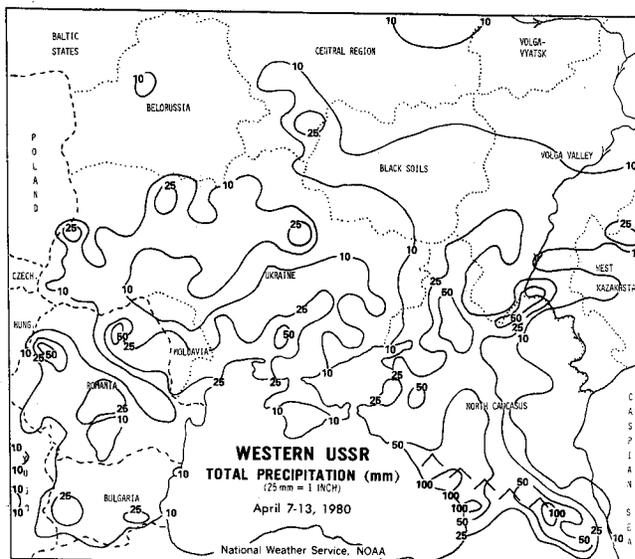
- USSR. Winter grains greening up in south...quite wet field conditions in some areas. Cotton planting beginning...generally favorable moisture conditions.
- EUROPE. Winter grains heading in Spain*...adequate moisture.
- CHINA. Wheat jointing on North China Plain*... good soil moisture. Planting rice and other spring crops*...too wet just south of Yangtze River.
- INDIA Harvesting wheat in the north*...hot and dry.
- AUSTRALIA. Winter grain planting season near*...conditions too dry.
- NORTHWESTERN AFRICA. Winter grains turning color*...favorable conditions.
- ARGENTINA. Late soybeans podding*...good soil moisture.
- BRAZIL. Harvesting soybeans*...generally favorable weather.
- MEXICO. Vegetable harvesting...sunny and dry, water supply unusually low in the west. Citrus fruit developing...beneficial rains over central and southern districts.
- CANADA. Spring grain planting season approaching*...soils too dry in some southern areas.

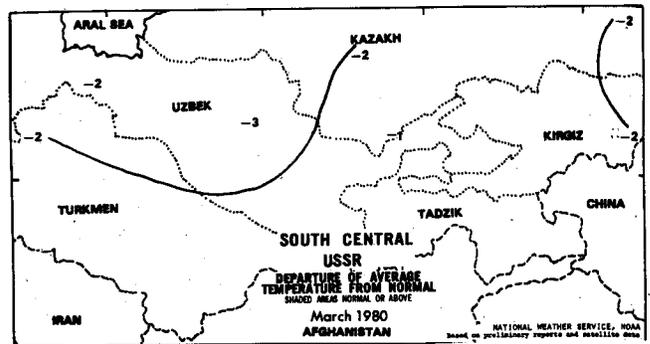
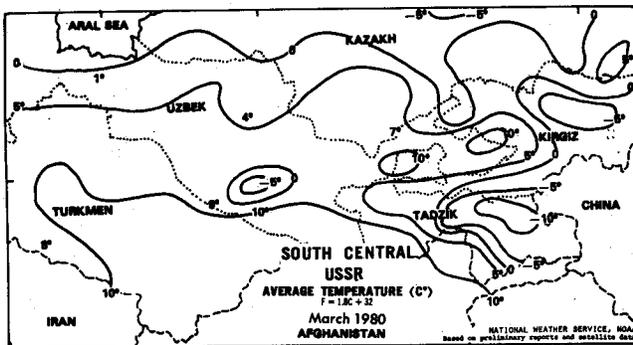
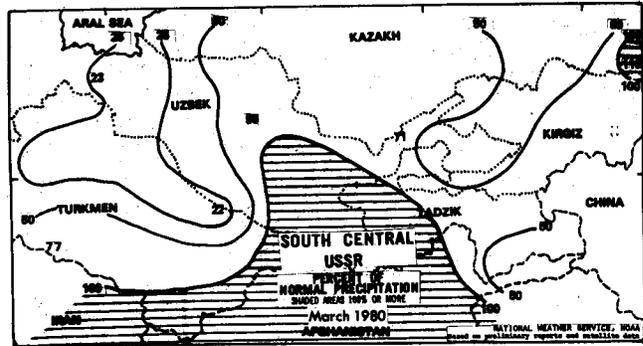
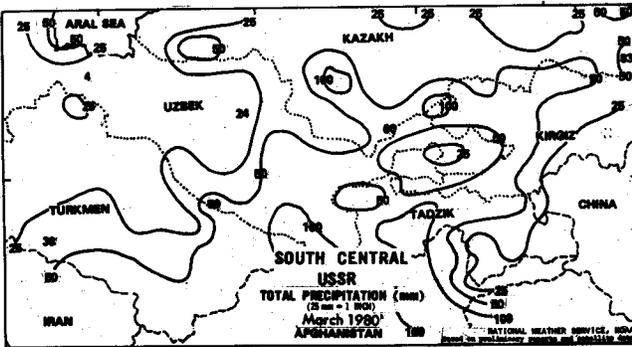
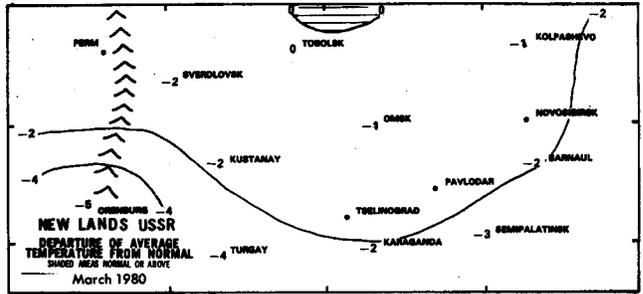
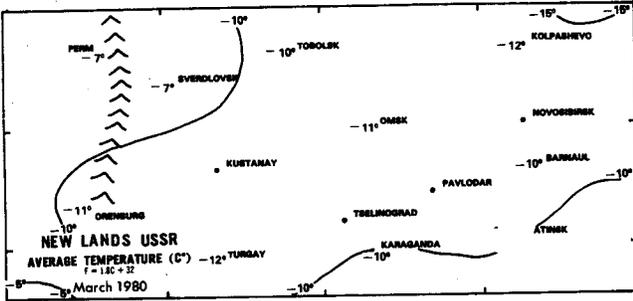
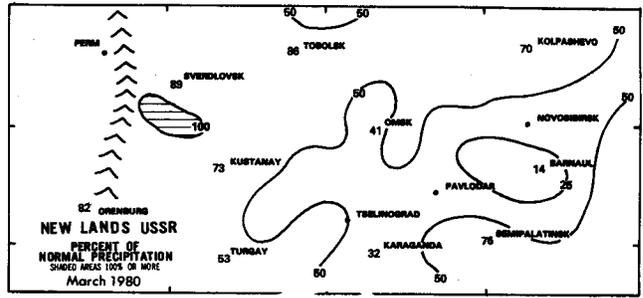
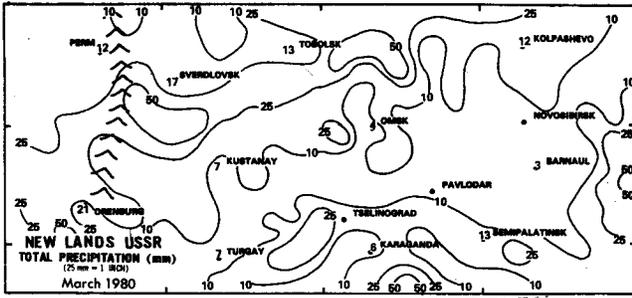
*Based on normal crop calendar information.



USSR. Above-normal precipitation of 20 to 40 mm in the southern half of the winter grain belt and 10 to 20 mm in the northern half maintained wet field conditions. Below-normal temperatures in March had delayed snowmelt over the belt, but sharply warmer conditions beginning late in the month combined with very rainy weather to clear winter grain areas of snow. The availability of so much moisture has benefited winter grains, but has hampered planting of spring crops, though field activity has been reported as far north as Belorussia. It would seem that nearly all crop areas in European Russia now have sufficient moisture.

Conditions in the New Lands stayed cooler and drier than normal during March. Areas most likely to experience moisture shortages later appear to be eastern portions, but a favorable summer rainfall pattern could reverse that trend. Cotton planting began in south central USSR with rain causing some minor problems. March precipitation had ranged above normal over much of the region, providing good moisture for planting, and snowpack in the mountains to the south and east appears good.

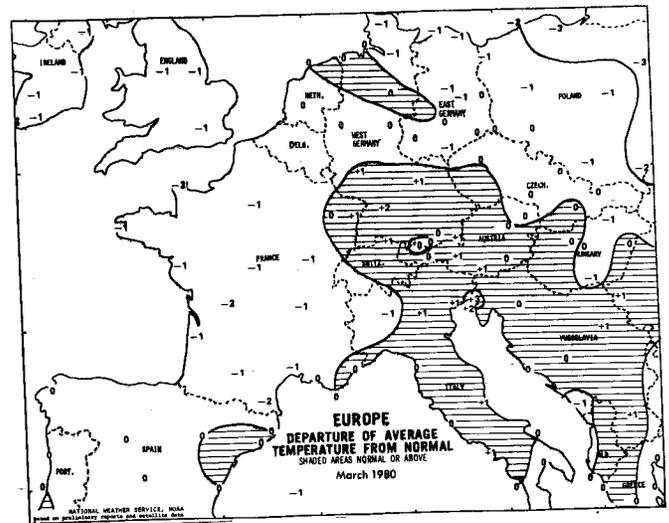
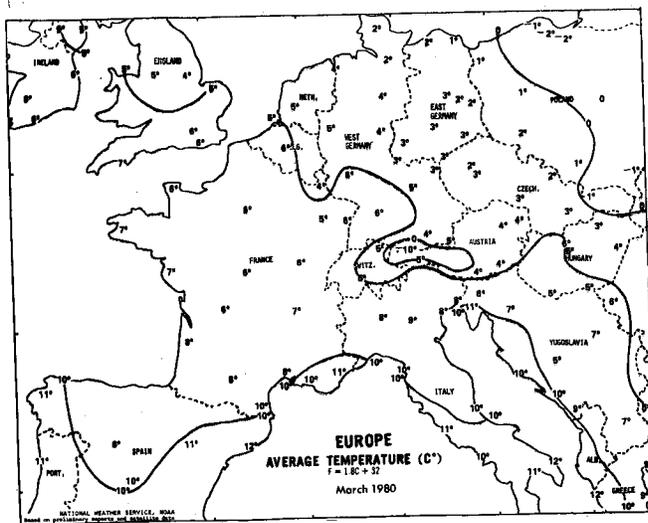
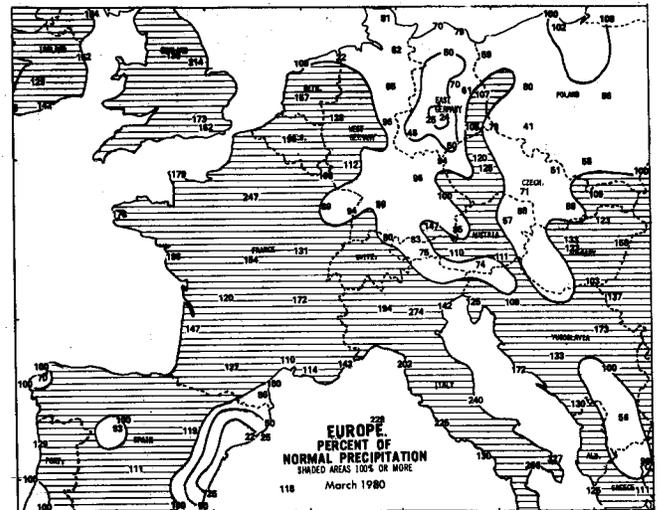
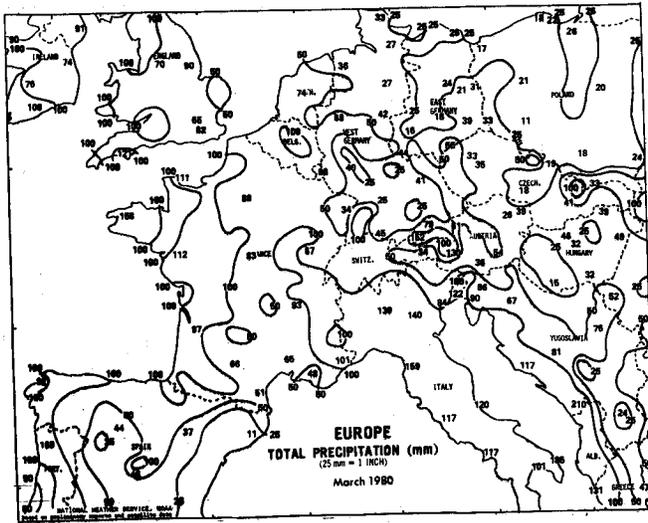
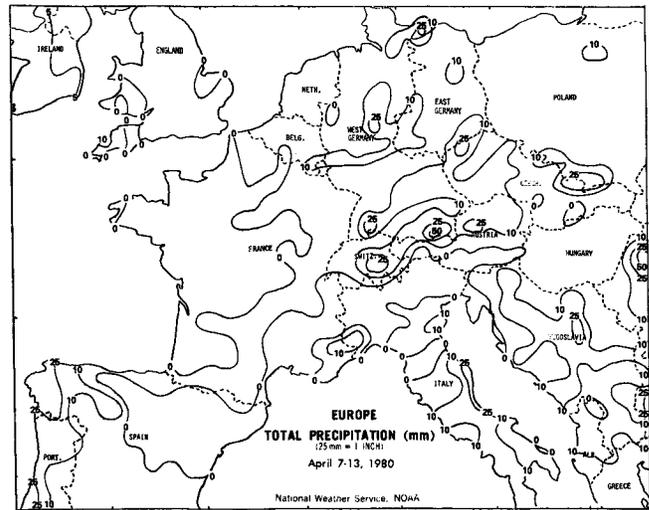




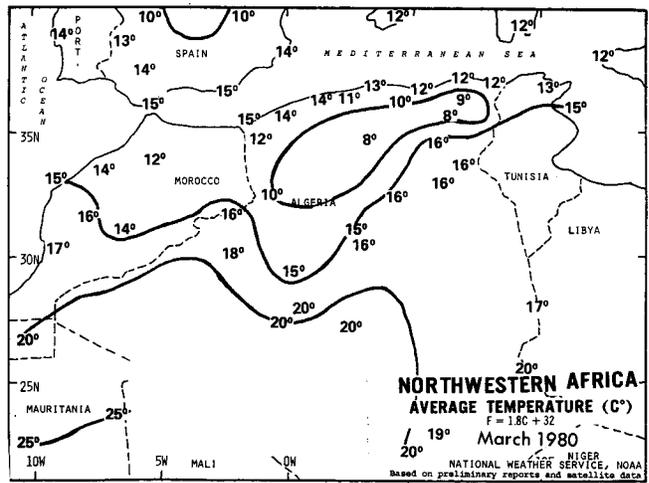
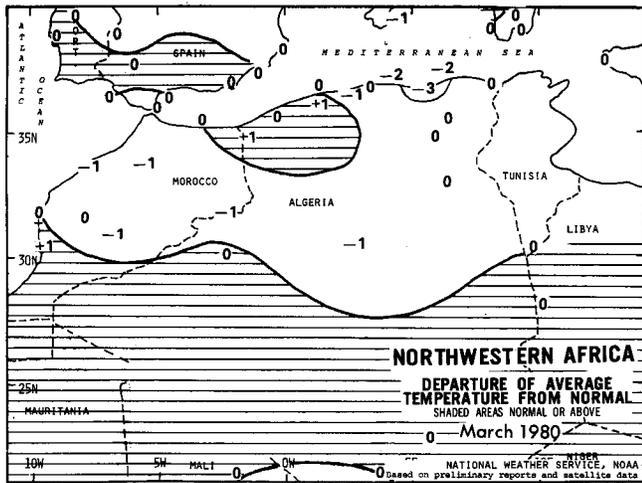
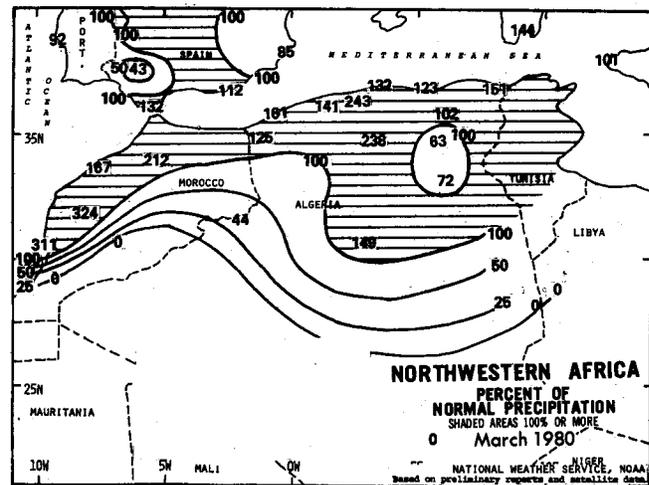
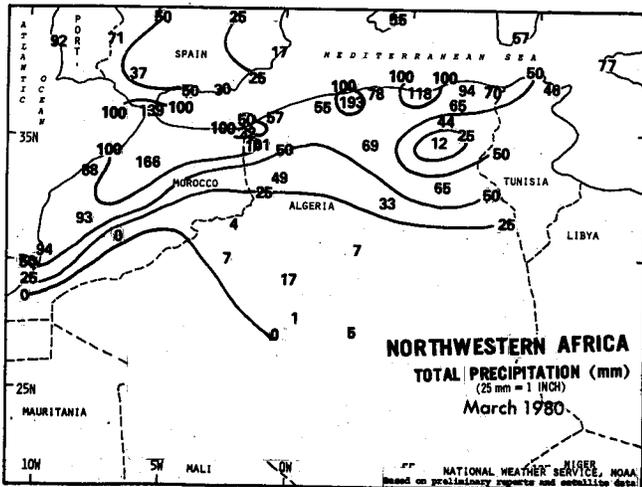
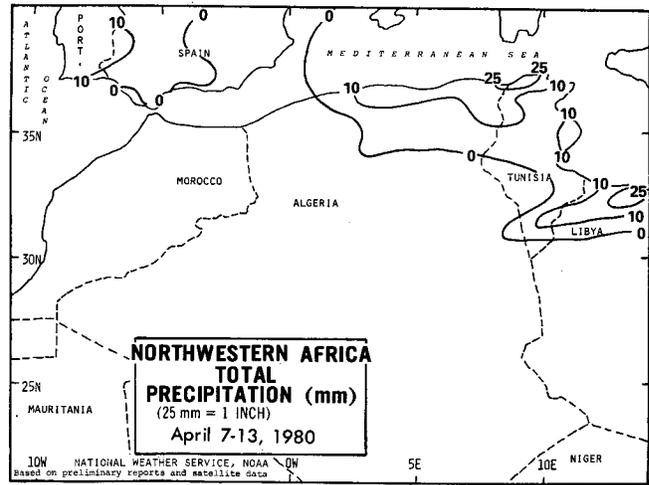
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based on preliminary reports and satellite data

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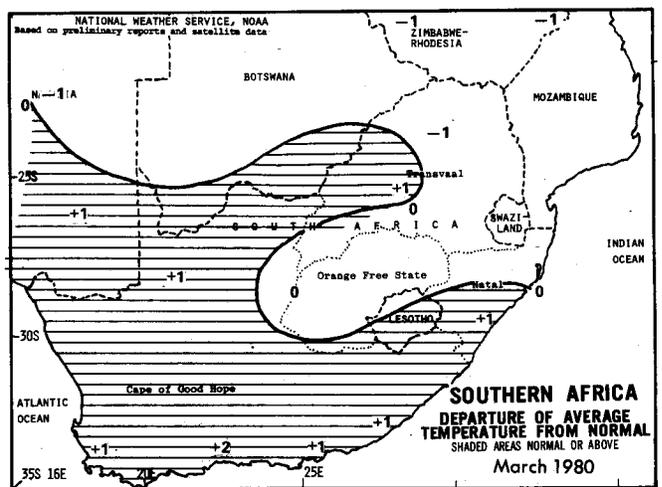
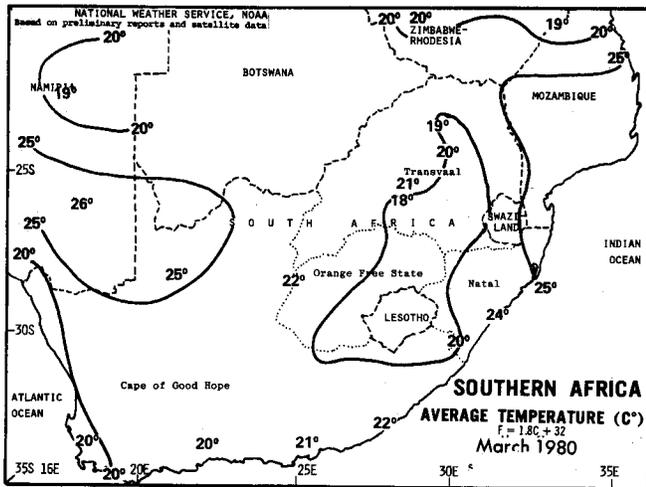
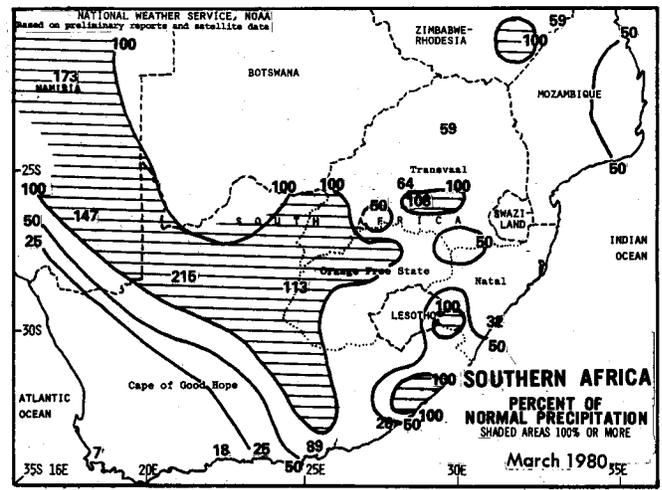
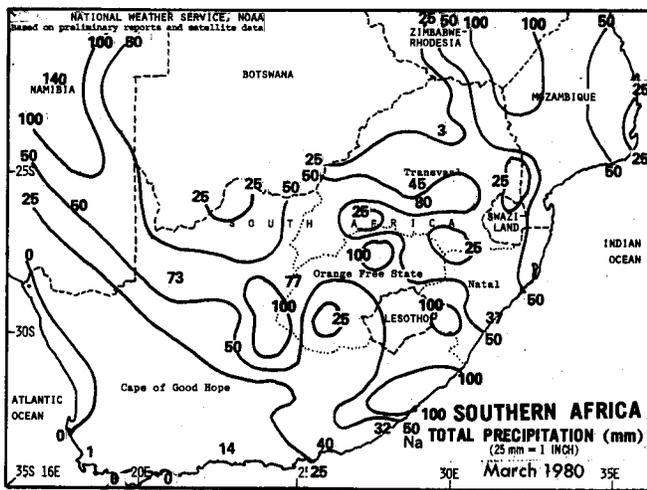
EUROPE. Dry weather continued in the southwestern countries, and precipitation decreased in most other areas. Above-normal moisture fell only at some locations north of the Alps. Relatively dry weather returned to Poland--a condition which had persisted for most of the winter and through March. Moisture will be needed soon as winter grains break dormancy. Nearly all other countries had adequate soil moisture due to above-normal March precipitation, and fields in Belgium and northern France may be too wet for spring fieldwork. Some abundant precipitation ameliorated relatively dry March weather over East and West Germany early in April. Temperatures in all areas remained near normal. In spite of a second consecutive week of dry weather in Spain, wheat in the heading stage should have adequate moisture due to abundant precipitation during March in most crop areas. The southeastern countries of Yugoslavia, Romania, and Bulgaria received near-normal precipitation after above-normal March totals, as greening-up of winter grains continued.



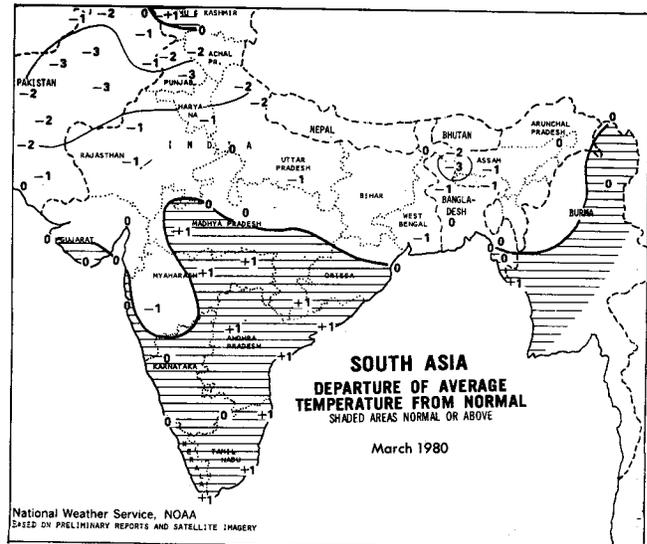
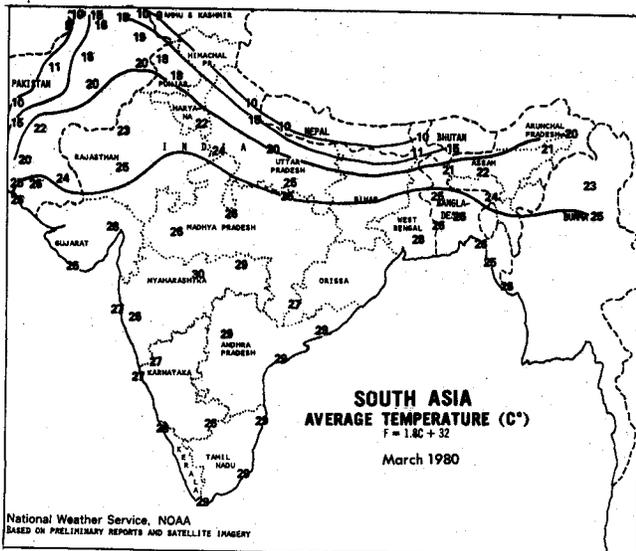
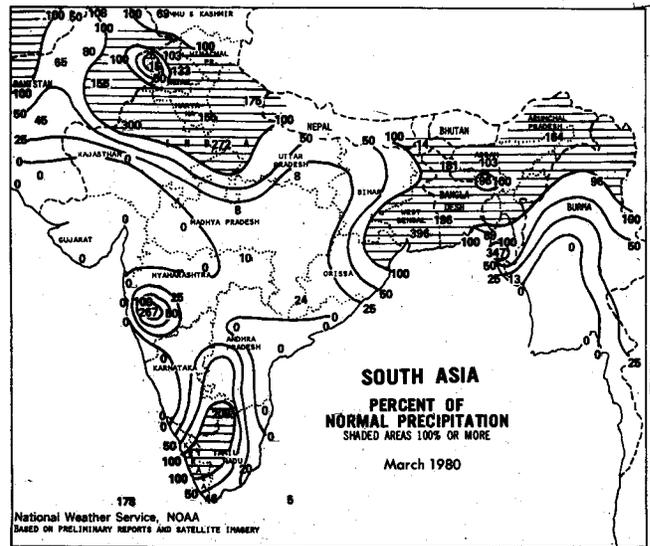
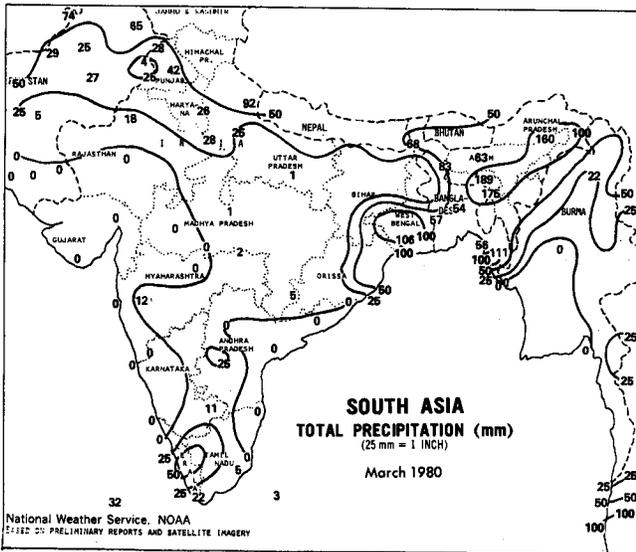
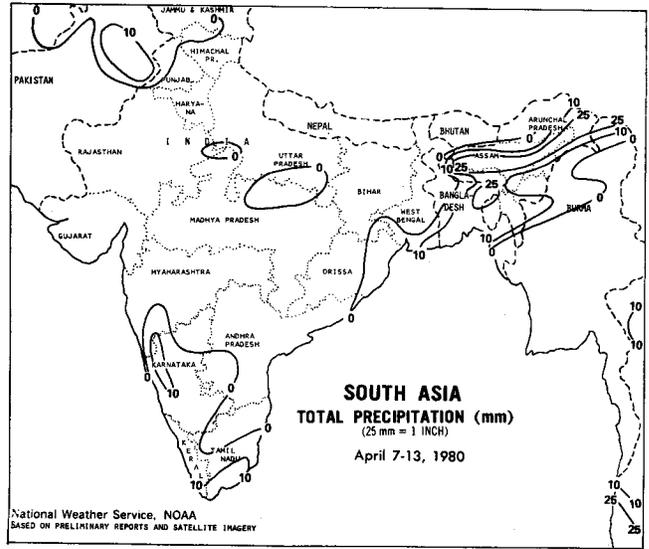
NORTHWESTERN AFRICA. Above-normal rainfall returned to northern grain areas of Tunisia and eastern Algeria, and dry weather persisted in Morocco for a third consecutive week. However, in nearly all locations winter grains should be ripening, and abundant March rainfall was almost certainly sufficient to assure a reasonable crop after earlier dryness.



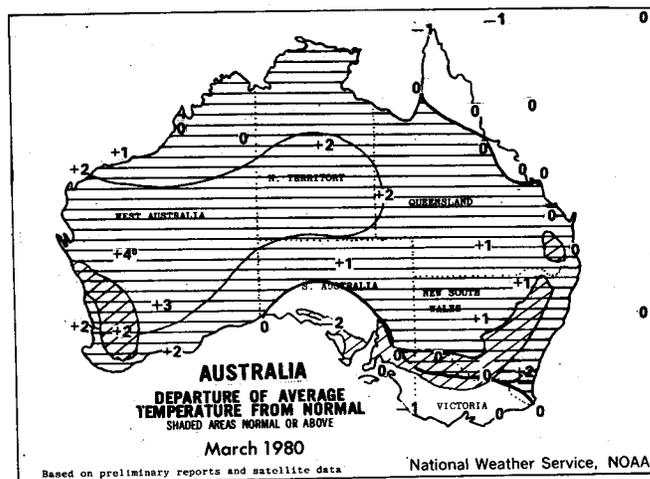
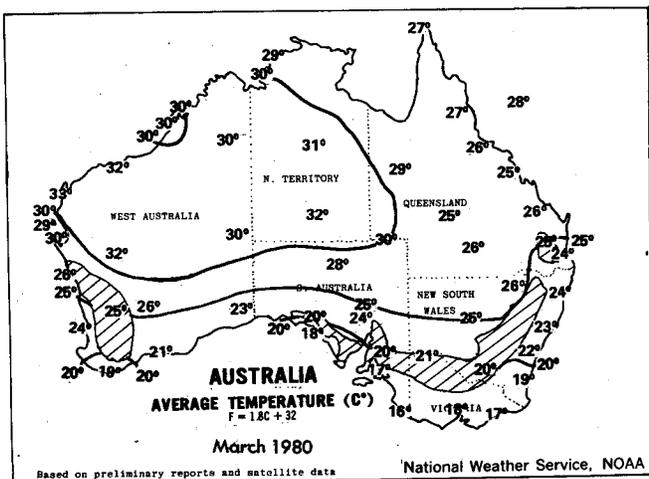
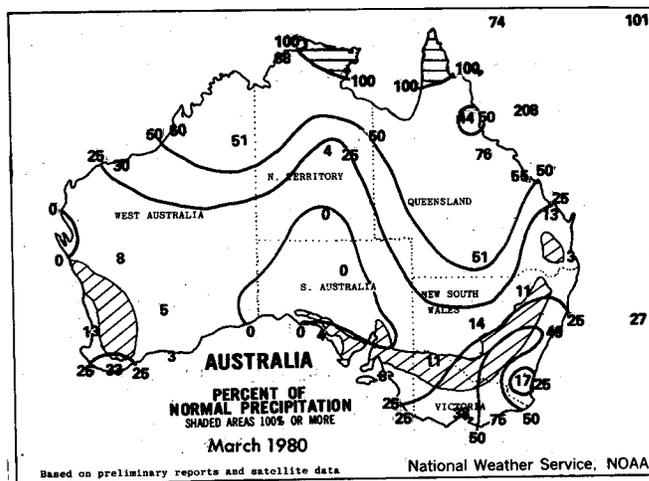
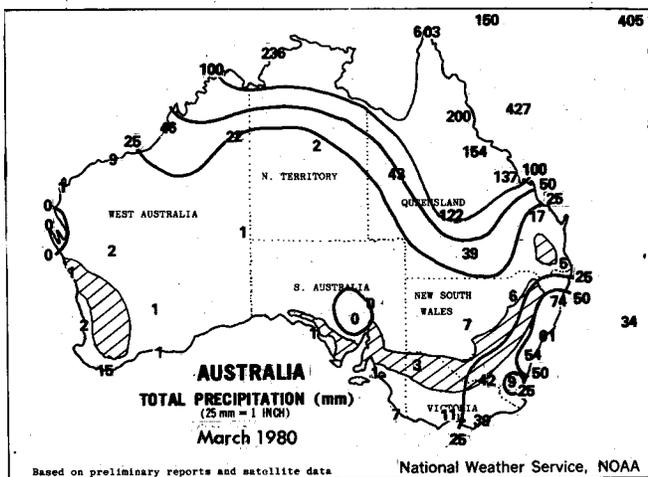
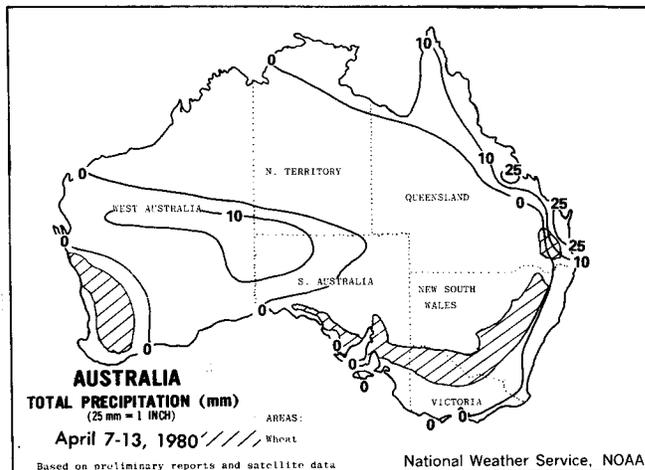
SOUTH AFRICA. Near-normal March temperatures and a variable rainfall pattern had little impact on maize since most of it had matured by early March.



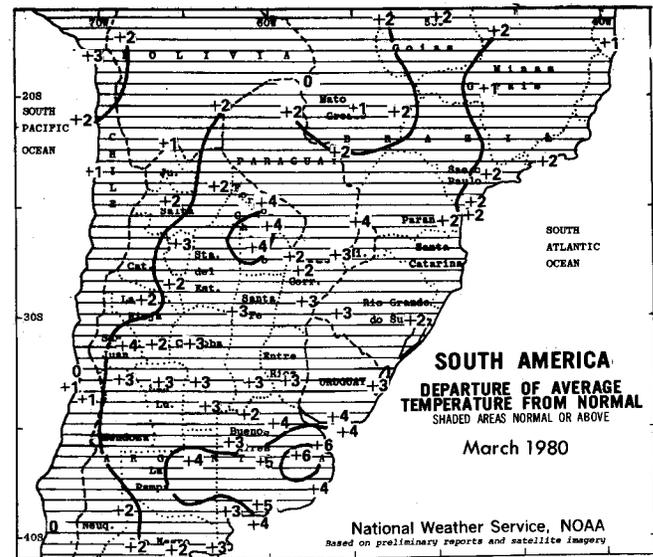
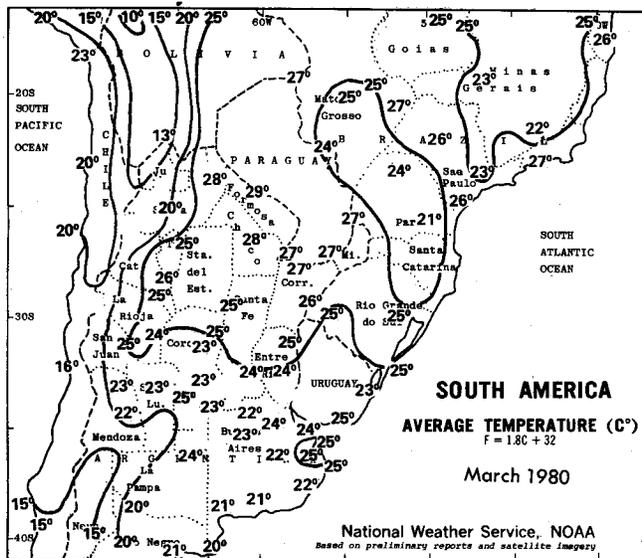
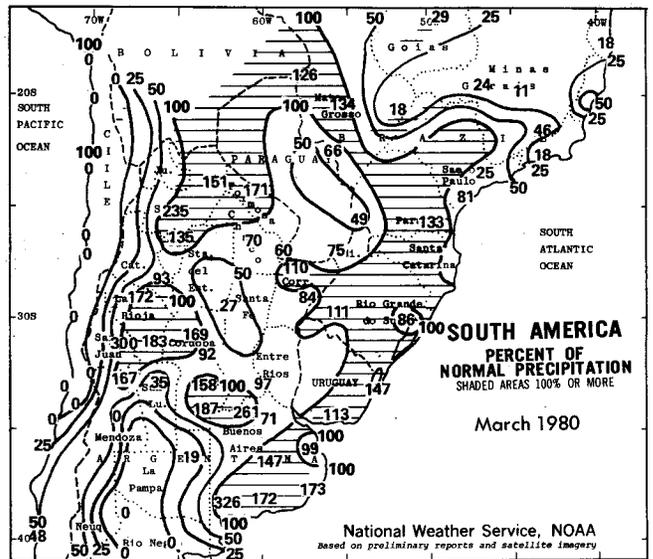
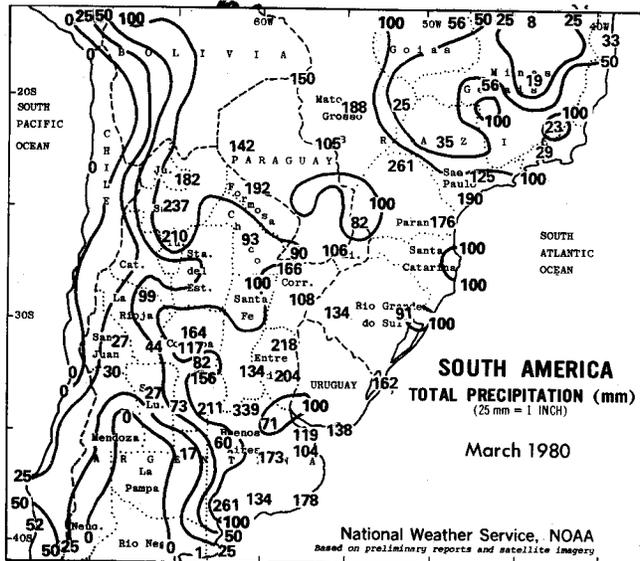
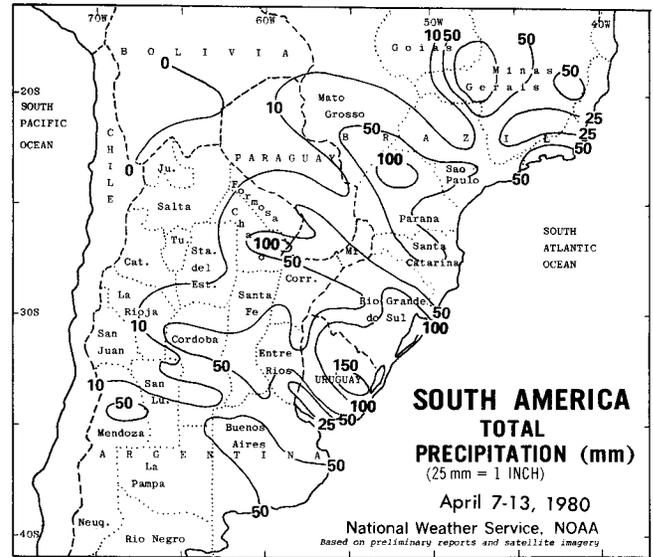
SOUTH ASIA. Very little rain fell in the north-western half of India, and temperatures ranged above normal with winter wheat mostly mature. Above-normal March rainfall in the major part of the belt fell mostly during the first week, and its benefit to unirrigated to wheat remains uncertain. The northern wheat areas did benefit from below-normal temperatures during March. Rainfall in extreme southern India remained light, prolonging the delay of rains which normally begin in March. Normal to above-normal rainfall continued over parts of Bangladesh and northeastern India, maintaining good soil moisture levels.



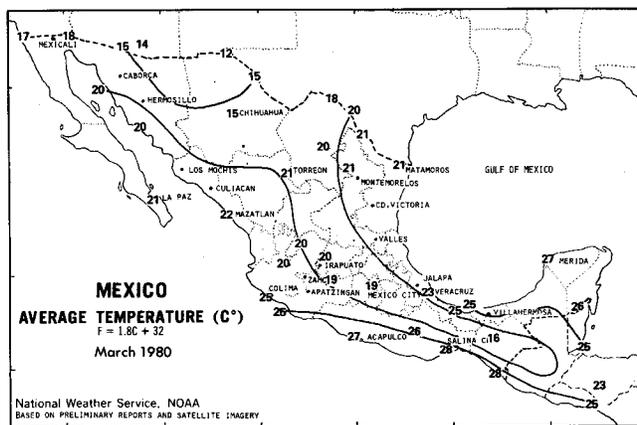
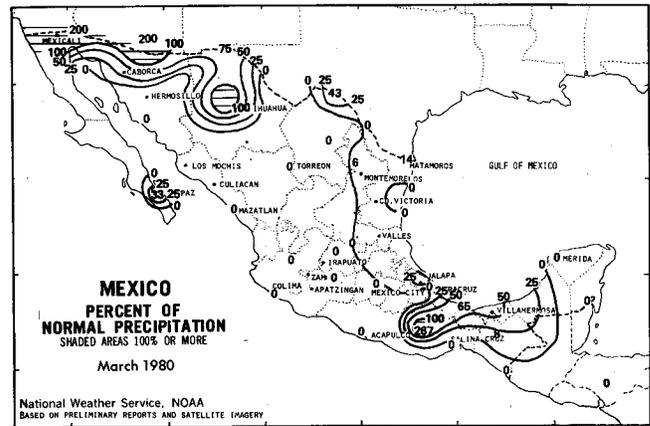
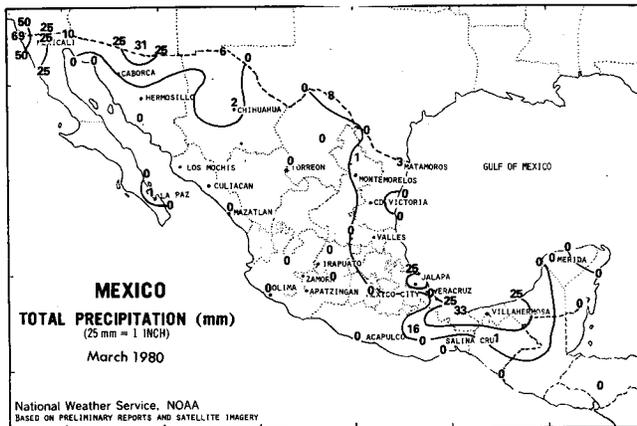
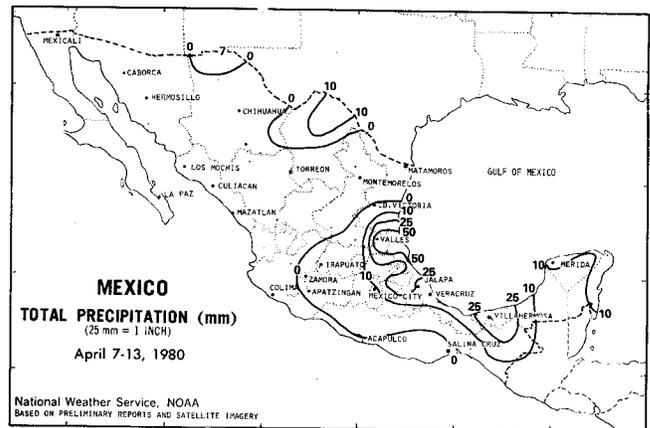
AUSTRALIA. Dry weather this week over the winter grain belt continued a pattern which began in early February. While March temperatures averaged near normal, scant rainfall raised concerns among stockmen in New South Wales, and serious, imminent losses have been reported. Winter grain planting prospects will remain dim until widespread, abundant rain falls.



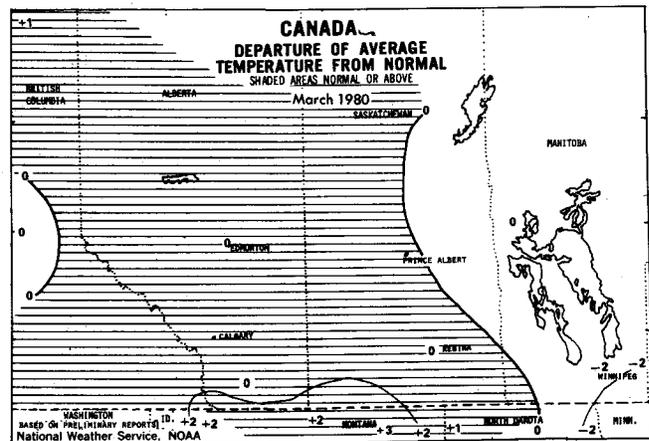
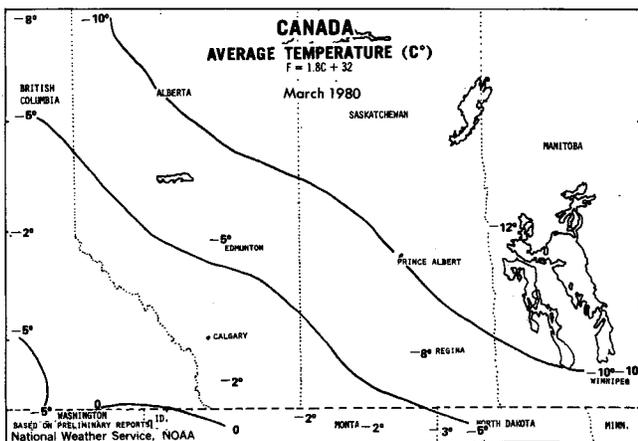
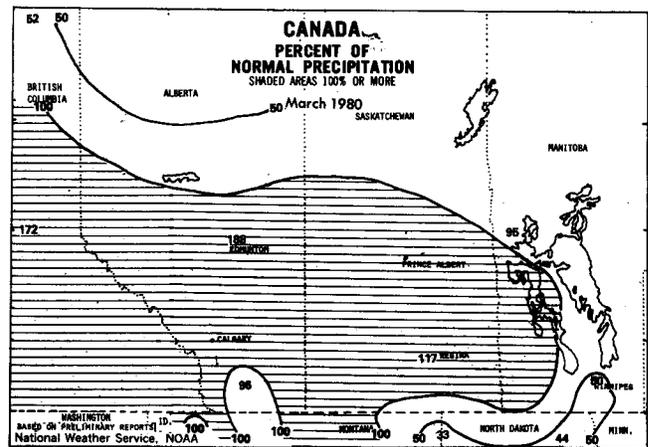
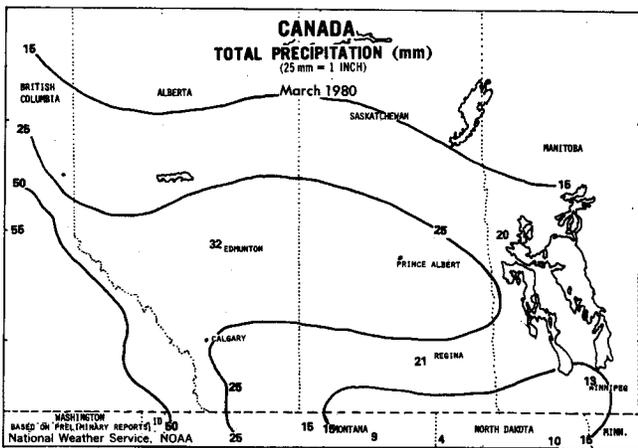
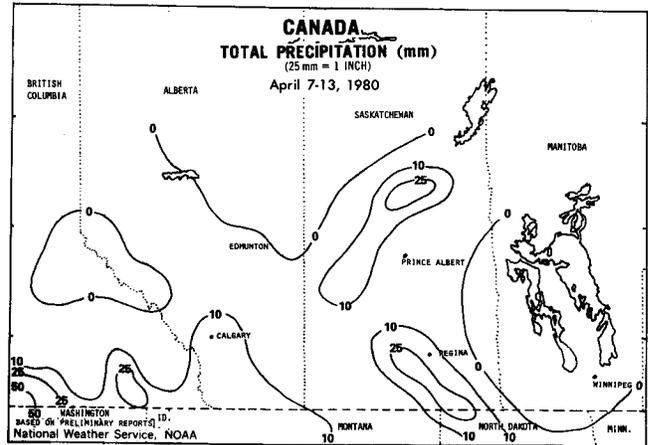
SOUTH AMERICA. Rains in Argentina's soybean belt decreased to 30 to 60 mm this week, still above normal for this season. March precipitation totals reached normal in most parts of the belt due to heavy rains late in the month. Warmer than normal conditions during March may have speeded development of late-planted soybeans, possibly enabling them to mature sufficiently to avoid damage by an early frost. In Brazil, some soybean harvest areas received much-above-normal rainfall which may have interfered with harvesting, but favorable weather prevailed in most areas.



MEXICO. Sunny, dry weather over most central and western areas favored vegetable production during March and early April. Winter vegetable irrigations, being heavy, coupled with initially small water supply, to drop reservoir levels unusually low--almost down to a third of the norm. Drought intensified as winter and spring rains only fell across the southeast and extreme northwest. Only light rains fell over the northern two-thirds of the eastern citrus belt during March when trees were in bloom. However, abundant rains fell across Valles and Jalapa this week enhancing early-stage fruit development.

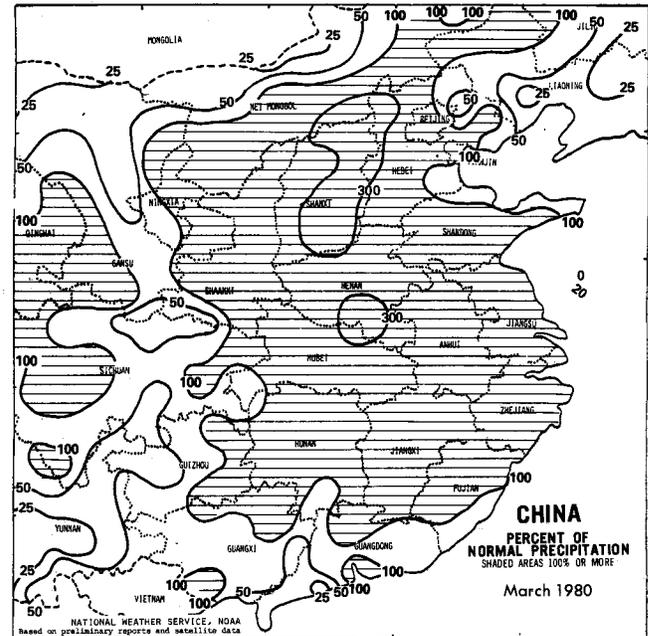
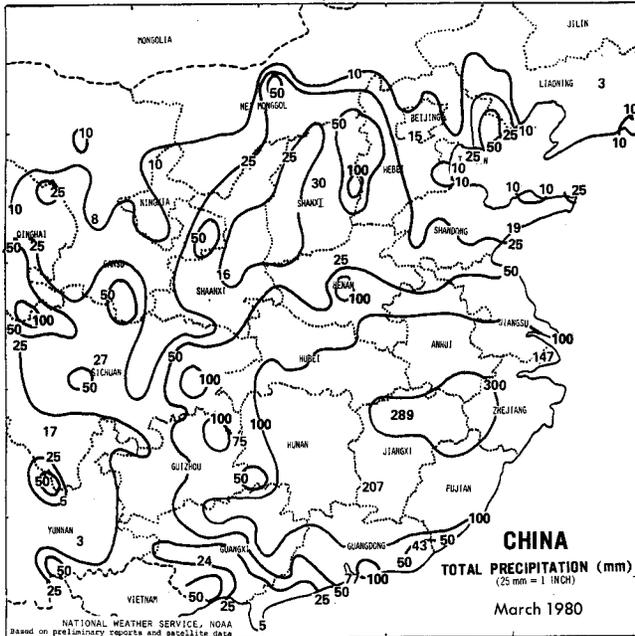
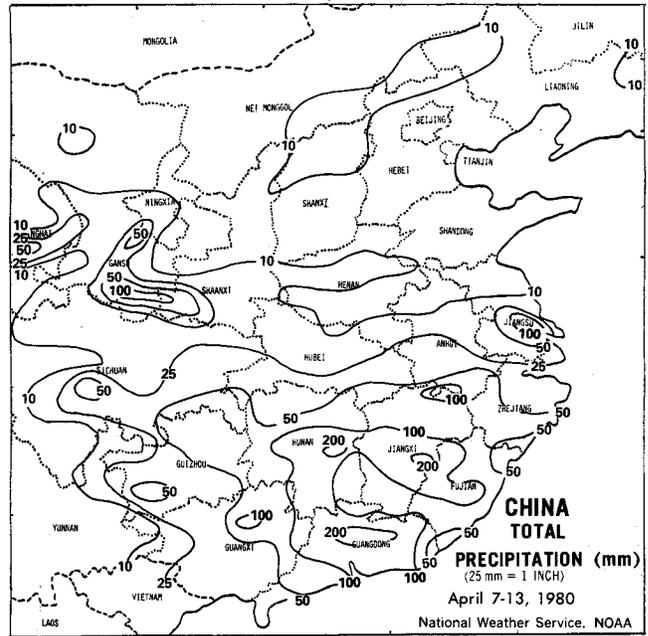


CANADA. Precipitation in the Prairie Province grain areas averaged about 5 mm at most locations, with higher totals of 15 to 30 mm in pockets of Saskatchewan and southern Alberta. The rains in the latter area may have at least partially alleviated dry conditions which had persisted through March. No moisture fell in Manitoba, and conditions remain quite dry as the spring grain planting season approaches.

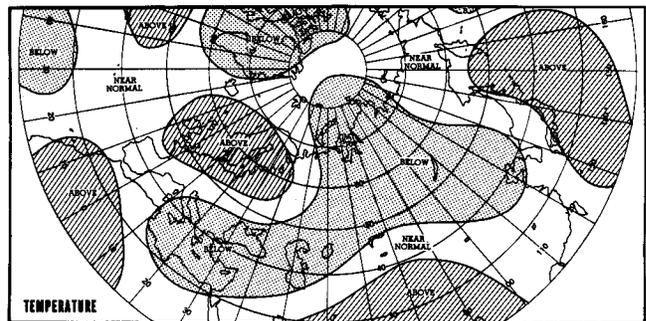
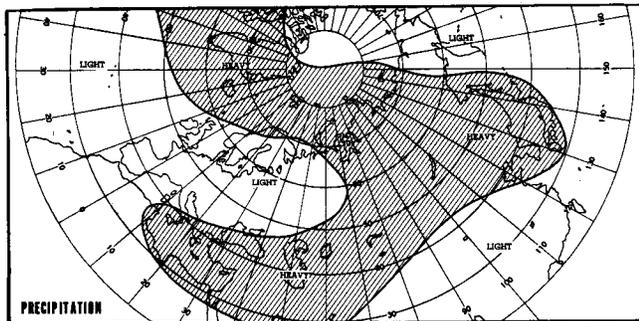


CHINA. Rainfall decreased over the North China Plain, but winter wheat should have quite adequate moisture due to abundant precipitation in March which continued into early April. Temperatures remained high enough for wheat growth to continue, with jointing occurring north of the Yangtze River. Wheat in the mountains to the northwest benefited from above-normal March precipitation at most locations, and still heavier rains so far in April improved conditions in nearly all remaining dry spots. Earlier than normal precipitation in spring wheat areas northwest of Beijing improved conditions as the planting season approached.

Rainfall increased again south of the Yangtze River, with many areas receiving nearly four times the norm. Wet weather there began back in February and continued through March. Slightly drier weather in late March and early April allowed some planting of rice and other spring crops, but the return of excessive rainfall (150 to 200 mm) this week caused additional problems. The heavy rainfall did extend southward into Guangdong Province where it alleviated dry conditions which had been developing during March.



EURASIA OUTLOOK FOR MID-APRIL TO MID-MAY 1980



CROP PRODUCTION HIGHLIGHTS

SPRING POTATO production is forecast at a record low 16.8 million cwt, down 21 percent from last season and 6 percent smaller than the 1978 crop.

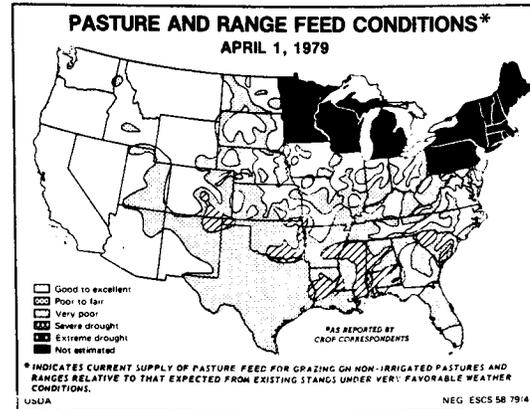
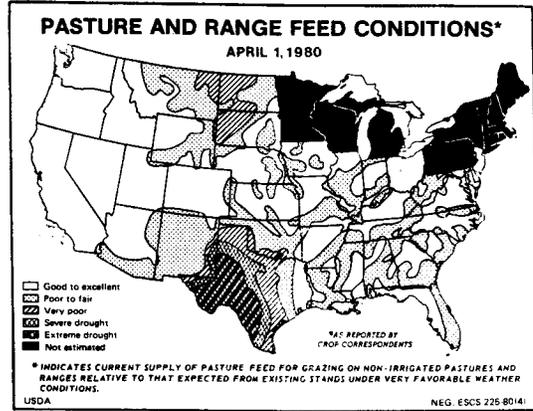
CITRUS production is expected to total 16.0 million tons, 1 percent above last month, and 20 percent more than the 1978-79 crop.

ORANGE production is forecast at a record high 265 million boxes, 1 percent above March 1 and 26 percent more than last season. Harvest of the orange crop was 56 percent complete on April 1.

GRAPEFRUIT production forecast at 69.2 million boxes, is 1 percent above the March 1 forecast and 3 percent greater than the 1978-79 crop. About 73 percent of the crop had been harvested by April 1.

LEMON production is expected to total 21.6 million boxes, virtually the same as last month's forecast but 11 percent above the 1978-79 crop.

Crop Reporting Board, ESCS, USDA



WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES
Issued as of April 1, 1980

The table below shows the runoff forecast in percent of the 15-year (1963-77) average. The forecasts are for the remainder of the water year except for the full water year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1980, for the Columbia, Missouri, Yellowstone, and North Platte Basins; April 1 to July 31, 1980 for the Snake; November 1, 1979 to June 30, 1980 for the Little Colorado Basins; and January 1 to June 30, 1980, for the Gila Basin. The publication "Water Supply Outlook for the Western United States", issued as of April 1, 1980, contains the complete water supply forecasts for about 375 stations in the western United States.

River	Stations	Forecast	Percent
		1,000 Acre-feet	15-year average
Columbia	Grand Coulee, WA	58,700	83
Columbia	The Dalles, OR	86,000	83
Snake	Lower Granite, WA	19,000	82
Sacramento	Red Bluff, CA	9,600	107
San Joaquin	Big Creek, CA	2,000	156
Weber	Gateway, UT	490	159
Jordan	Utah Lake, UT	442	181
Truckee	L. Tahoe-Farad	360	132
Colorado	L. Powell infl.	10,800	155
Green	Green River, UT	4,400	148
San Juan	Bluff, UT	1,650	191
Little Colo.	Woodruff, AZ	57	471
Gila	Solomon, AZ	165	295
Rio Grande	San Marcial, NM	1,100	335
Arkansas	Pueblo, CO	425	162
Missouri	Ft. Peck, MT	3,319	67
Yellowstone	Sidney, MT	6,169	79
North Platte	Glendo, WY	1,081	112

National Weather Service
and Soil Conservation Service, USDA

Correction: The March 1980 monthly maps appearing in Volume 67, No. 15 on April 8 (pp. 16-17), should carry the month of March below the map title.

SEEDING PROGRESS
FOR WEEK ENDING APRIL 13

	CORN		
	1980	1979	AVG.
COLO	0	0	2
GA	37	82	67
ILL	0	0	1
IND	0	0	0
IOWA	0	0	0
KANS	1	1	4
KY	0	0	4
MICH	0	0	0
MINN	0	0	0
MO	1	1	10
NEBR	0	0	0
N C	28	27	33
OHIO	0	0	0
PA	0	0	0
S DAK	0	0	0
VA	5	11	16
WIS	0	0	0
17 STATES	2	3	3

THESE 17 STATES PRODUCED 93% OF THE 1979 CORN CROP.

	RICE		
	1980	1979	AVG.
ARK	5	14	13
CALIF	0	0	0
LA	42	33	44
MISS	20	1	NA
TEX	64	36	65
5 STATES	23	18	26

THESE 5 STATES PRODUCED 99% OF THE 1979 RICE CROP.

	COTTON		
	1980	1979	AVG.
ALA	3	0	12
ARIZ	24	32	NA
ARK	2	3	4
CALIF	33	64	NA
GA	6	32	27
LA	0	0	1
MISS	1	0	0
MO	0	0	2
N MEX	0	0	0
N C	1	5	5
OKLA	0	0	0
S C	0	0	0
TENN	0	0	2
TEX	13	12	13
14 STATES	13	16	NA
EXCL CALIF	10	16	3

THESE 14 STATES PRODUCED 99% OF THE 1979 COTTON CROP.

	SPRING WHEAT		
	1980	1979	AVG.
IDA	37	25	25
MINN	0	0	12
MONT	0	1/	10
N DAK	1	0	2
S DAK	10	8	17
5 STATES	3	2	4

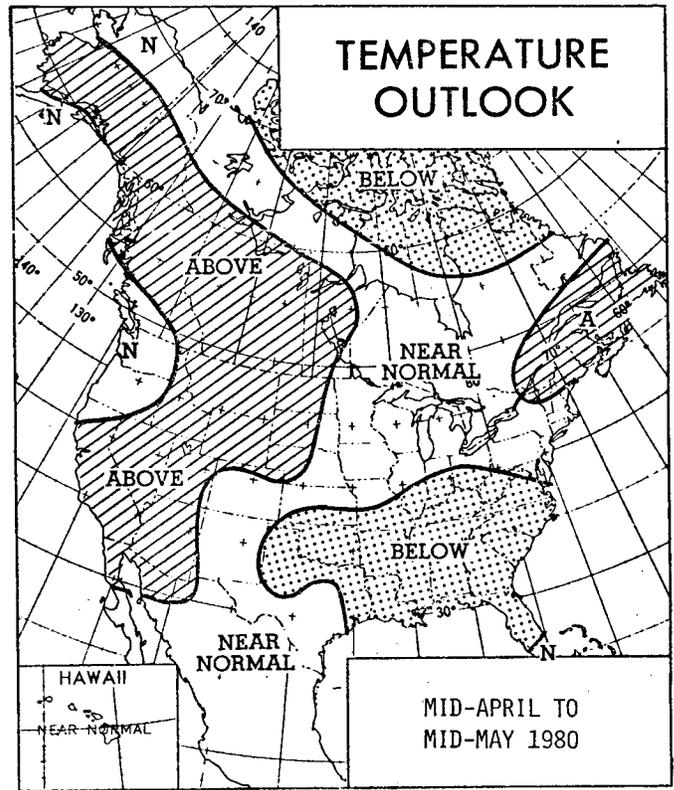
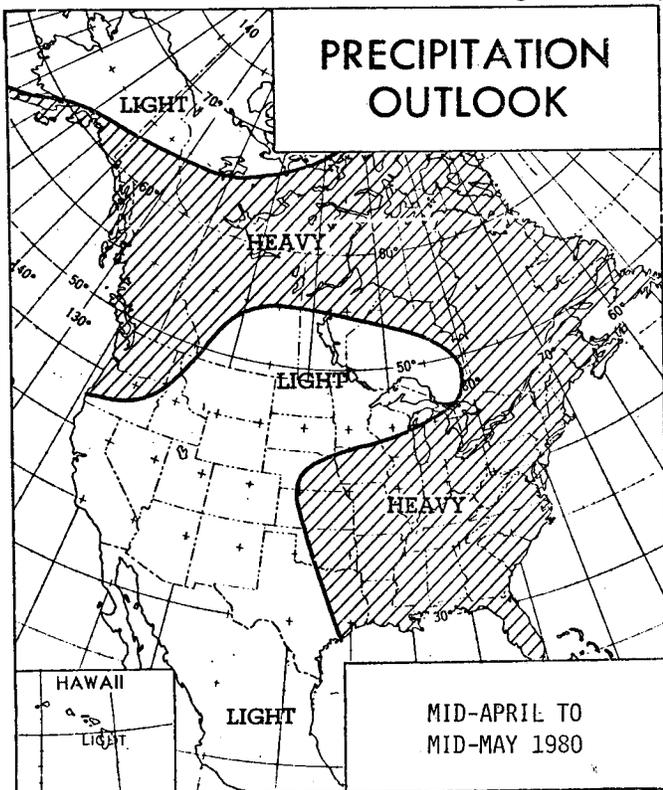
THESE 5 STATES PRODUCED 91% OF THE 1979 SPRING WHEAT CROP EXCLUDING DURUM.

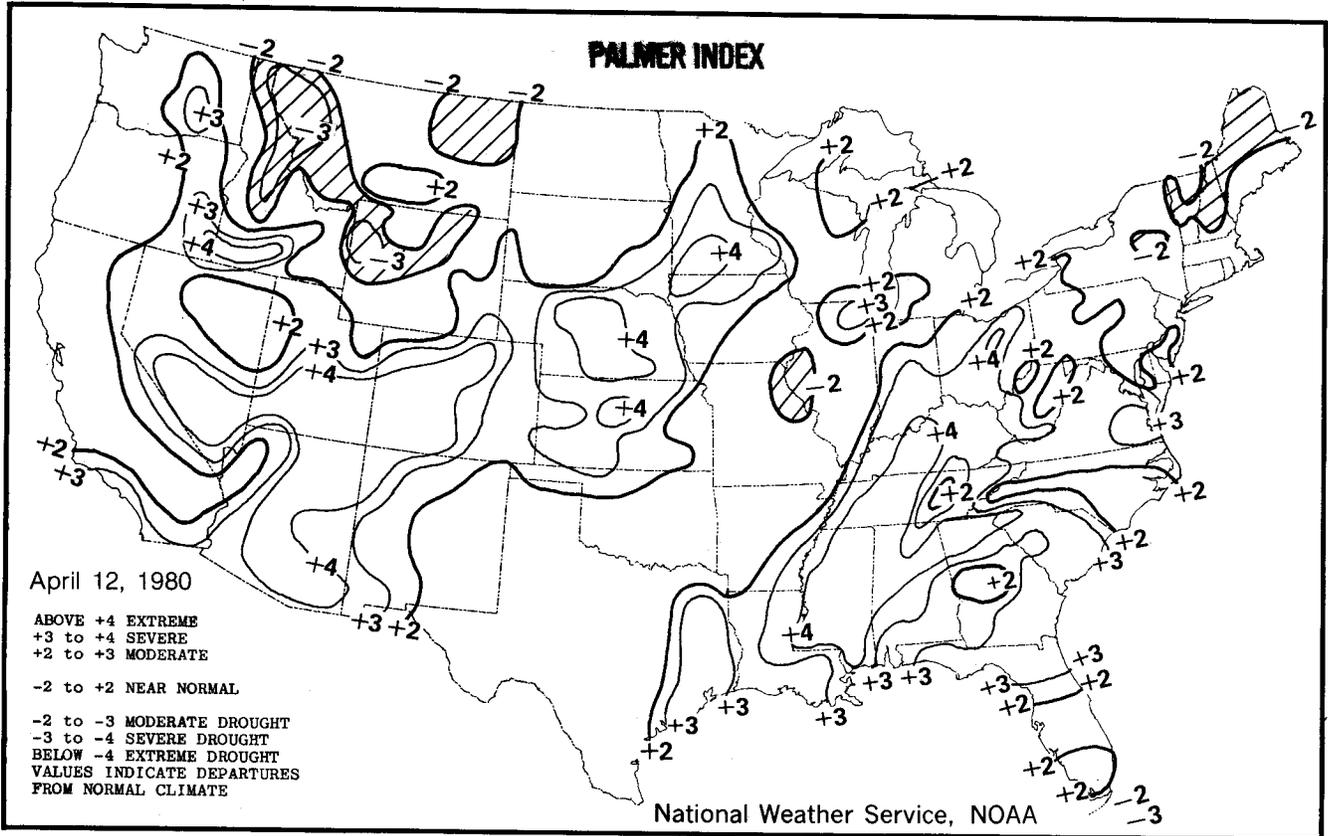
	GRAIN SORGHUM		
	1980	1979	AVG.
COLO	0	0	0
KANS	0	0	0
MO	0	0	0
NEBR	0	0	0
OKLA	0	0	0
S DAK	0	0	0
TEX	62	41	49
7 STATES	22	15	18

THESE 7 STATES PRODUCED 92% OF THE 1979 GRAIN SORGHUM CROP.

1/ LESS THAN 5%
NA NOT AVAILABLE

Average Monthly Weather Outlook





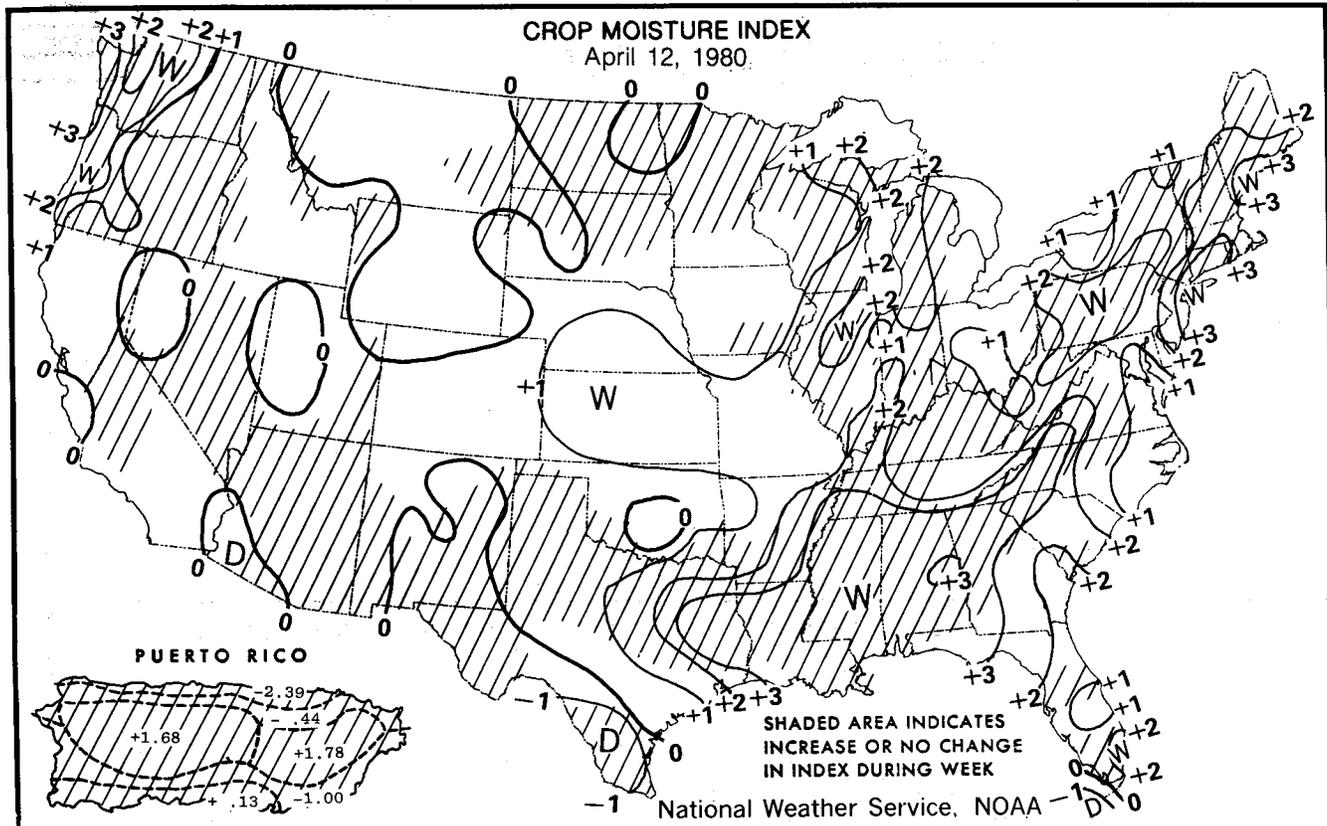
The Palmer Index

The Palmer Index is an index of meteorological drought, which may be defined as a prolonged and abnormal moisture deficiency. The general concept is one of supply and demand. Supply is represented by precipitation and stored soil moisture. Demand is the combination of potential evapotranspiration, the amount needed to recharge the soil moisture, and the runoff needed to keep the rivers, lakes, and reservoirs at a normal level. The results of this water balance accounting produce a positive or negative anomaly which is then weighted by a climate factor. The final product is an index that expresses the abnormality for that particular place for the period of time being computed. This manipulation allows the index to have a reasonably comparable local significance in space and time, that is, a certain index value obtained for a division in New York would have the same local significance as a like value in the more arid areas of western Kansas. This monthly increment is added to a portion of the previous month's index to include the duration of the anomaly in the final index.

The Palmer Index was designed as a climatological indicator of the scope and severity of past droughts. Using the Palmer Index on a real-time basis presents difficulties. A day or so of normal or better rainfall is certainly welcome in an area that has experienced a long drought, but one cannot know whether it indicates the end of the drought or just a brief respite. In order to

make the program have some real-time value, a system of computing a "probability" that a weather spell has ended was devised. This is not entirely satisfactory, but does allow one to assign a definite index value at times when there may be some doubt as to whether it should be positive (wet) or negative (dry).

Another aspect of using the Palmer Index is that one must remember that the demand part of the computations includes three parameters---potential evapotranspiration, recharge of soil moisture, and runoff, any one of which may produce a negative index. For instance if only enough rain fell to satisfy most of the expected evapotranspiration, but not enough to supply the expected recharge and runoff, then a negative index would result. If such a situation continued then one might find that agriculture was progressing at a near normal pace but the Palmer Index would be indicating a worsening drought. In this situation the drought would cause shallow wells and springs to go dry and the levels of rivers, lakes and reservoirs to fall below normal and, if this odd situation continued long enough, would cause serious economic stress to the livestock industry and eventually to other industries and cities. Then if rainfall fell below the minimum needed for agriculture, crops would suffer drastic and rapid decline because there would be no reserve water in the soil. Such a situation, to some extent, occurred during the Northeast drought in the 1960's when New York City almost ran out of water.



The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and the CMI gives a

negative value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

UNSHADED AREAS: INDEX DECREASED	
ABOVE 3.0	SOME DRYING BUT STILL EXCESSIVELY WET
2.0 to 3.0	MORE DRY WEATHER NEEDED, WORK DELAYED
1.0 to 2.0	FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 to 1.0	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 to -1.0	TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1.0 to -2.0	ABNORMALLY DRY, PROSPECTS DETERIORATING
-2.0 to -3.0	TOO DRY, YIELD PROSPECTS REDUCED
-3.0 to -4.0	POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4.0	EXTREMELY DRY, MOST CROPS RUINED

SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE	
ABOVE 3.0	EXCESSIVELY WET, SOME FIELDS FLOODED
2.0 to 3.0	TOO WET, SOME STANDING WATER
1.0 to 2.0	PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 to 1.0	MOISTURE ADEQUATE FOR PRESENT NEEDS
0 to -1.0	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1.0 to -2.0	SOME IMPROVEMENT BUT STILL TOO DRY
-2.0 to -3.0	DROUGHT EASED BUT STILL SERIOUS
-3.0 to -4.0	DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4.0	NOT ENOUGH RAIN, STILL EXTREMELY DRY

AFTER A SEASON OF LITTLE OR NO MOISTURE DEMAND FROM CROPS, WINTER RAIN AND/OR SNOW HAS ADEQUATELY REPLENISHED SOIL MOISTURE IN MOST AREAS OF THE NATION. THE AREA OF WEST TEXAS THAT WAS VERY DRY LAST FALL IS NOW MOSTLY ADEQUATE EXCEPT FOR PARTS OF THE LOWER RIO GRANDE, WHERE MOISTURE HAS IMPROVED BUT IS STILL TOO DRY. ELSEWHERE, IT IS TOO WET IN MUCH OF THE EAST. MOISTURE IS EXCESSIVE IN THE AREA FROM EAST TEXAS THROUGH MOST OF GEORGIA AND NORTH TO TENNESSEE AND SOUTHWEST VIRGINIA. THERE IS MUCH STANDING WATER, AND SOME FIELDS ARE FLOODED.

(continued from page 11)

WISCONSIN: Temperatures averaged 3° below normal. Week began mild with highs in 50's and 60's 7th but cooled to 30's and 40's remainder of week. Lows in 20's and 30's. Extremes: 68 and 22°. Precipitation above normal ranging from 0.60 in. northwest to 1.30 in. southeast. First severe storms of season 7th, tornadoes and thunderstorms south and east central. Periods of rain and snow throughout week, heaviest snow from west central to north.

Fieldwork prevented by rain, snow, and wet fields, less than 1 day suitable. Oats less than 1% seeded, 1979 none, normal 6%. Spring plowing less than 1% done, 1979 none, normal 5%. Frost still in ground north. Weather poor past week for maple sap run after a few good days early April. Feed supplies adequate, straw for bedding short

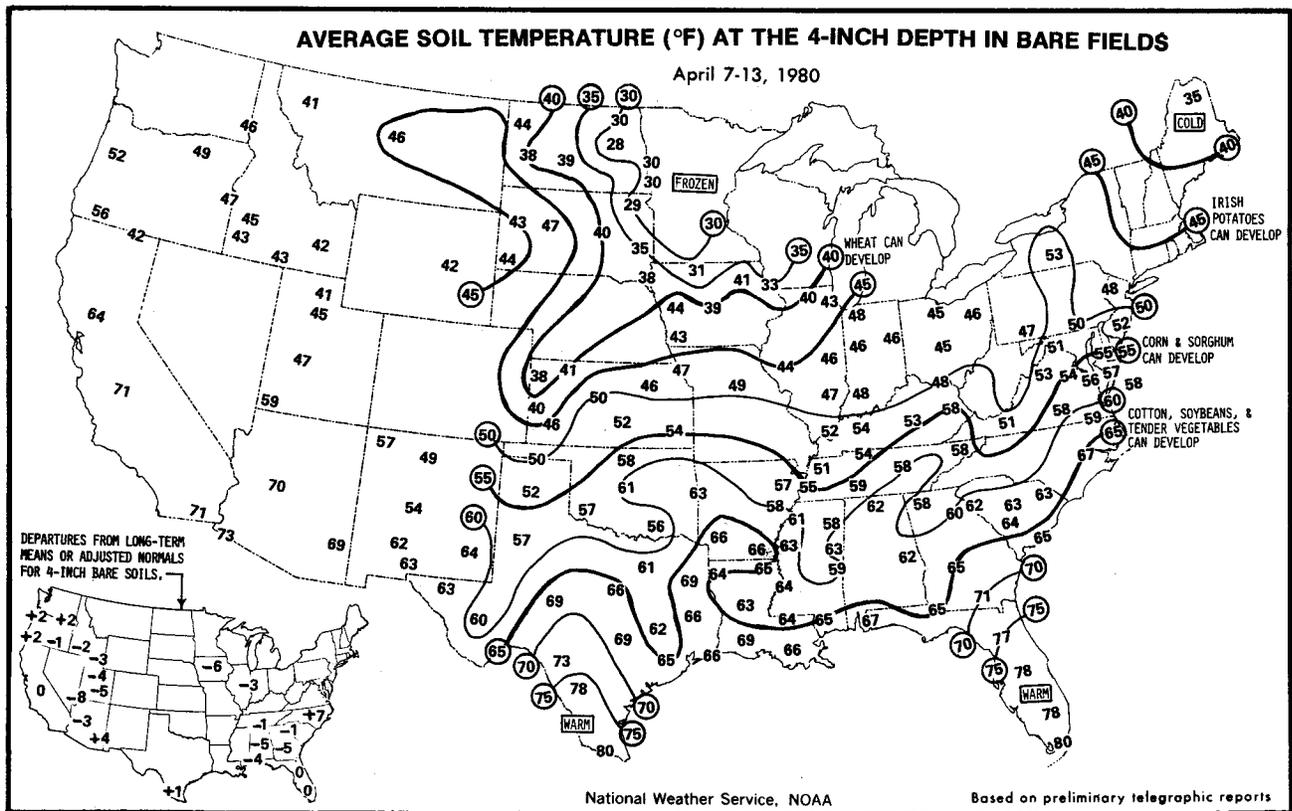
some areas. Manure being hauled where ground firm enough. Topsoil moisture adequate to surplus.

WYOMING: Temperatures near normal. Precipitation slightly below normal, except for central and northeast parts.

Topsoil moisture adequate. Acreage planted: Spring wheat 16%; oats 4%; barley 34%; sugarbeets 11%. Stormy weather, wet fields, snowcover slowing land preparation and planting spring crops. Fieldwork: 3 days suitable. Winter wheat mostly good condition. Prospects for alfalfa mostly good. Range, pastures fair to good. Spring calves born 56%. Range ewes lambed 26%. Farm flocks lambed 70%. Range sheep shorn 29%. Farm flocks shorn 62%. Calving, lambing, shearing slower than normal.



FIRST CLASS MAIL



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