

WEEKLY WEATHER AND CROP BULLETIN

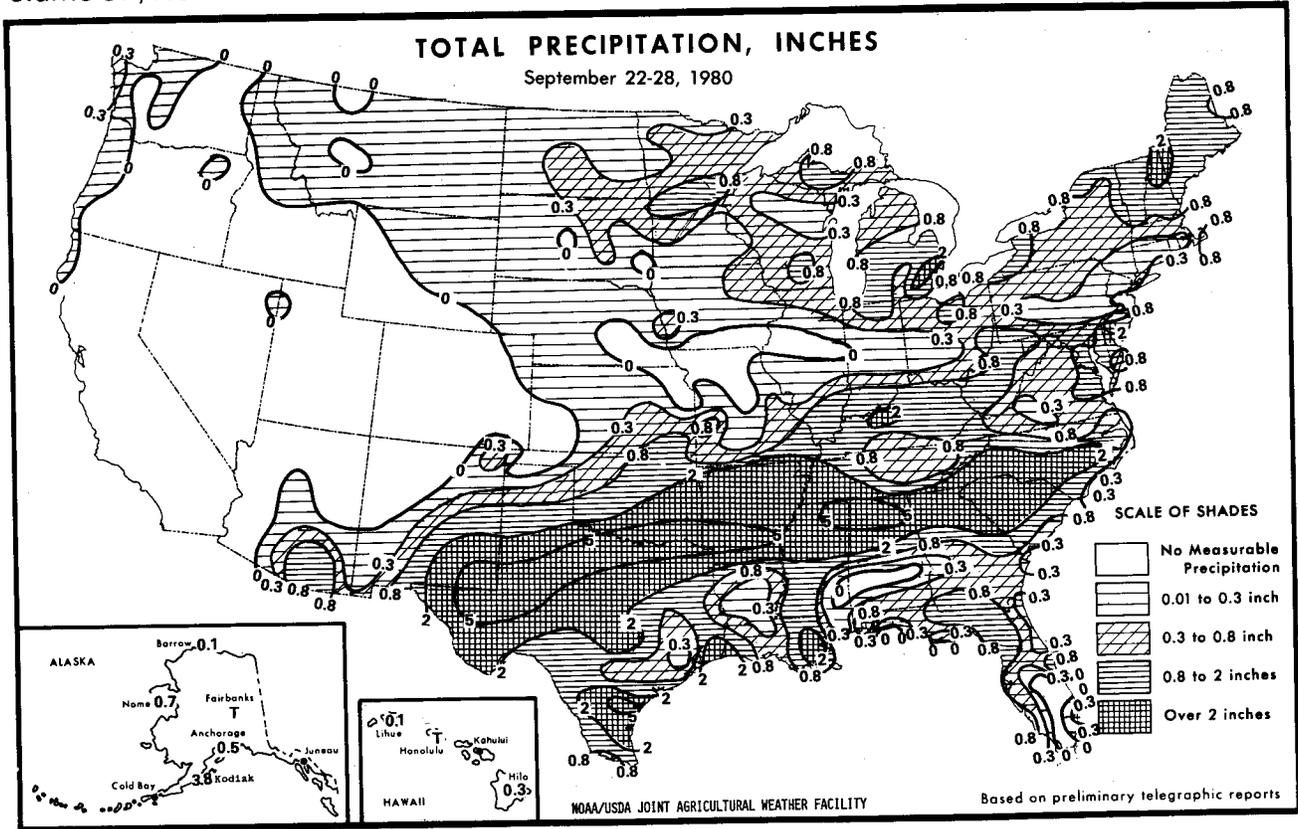
U.S. DEPARTMENT OF COMMERCE
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National Weather Summary

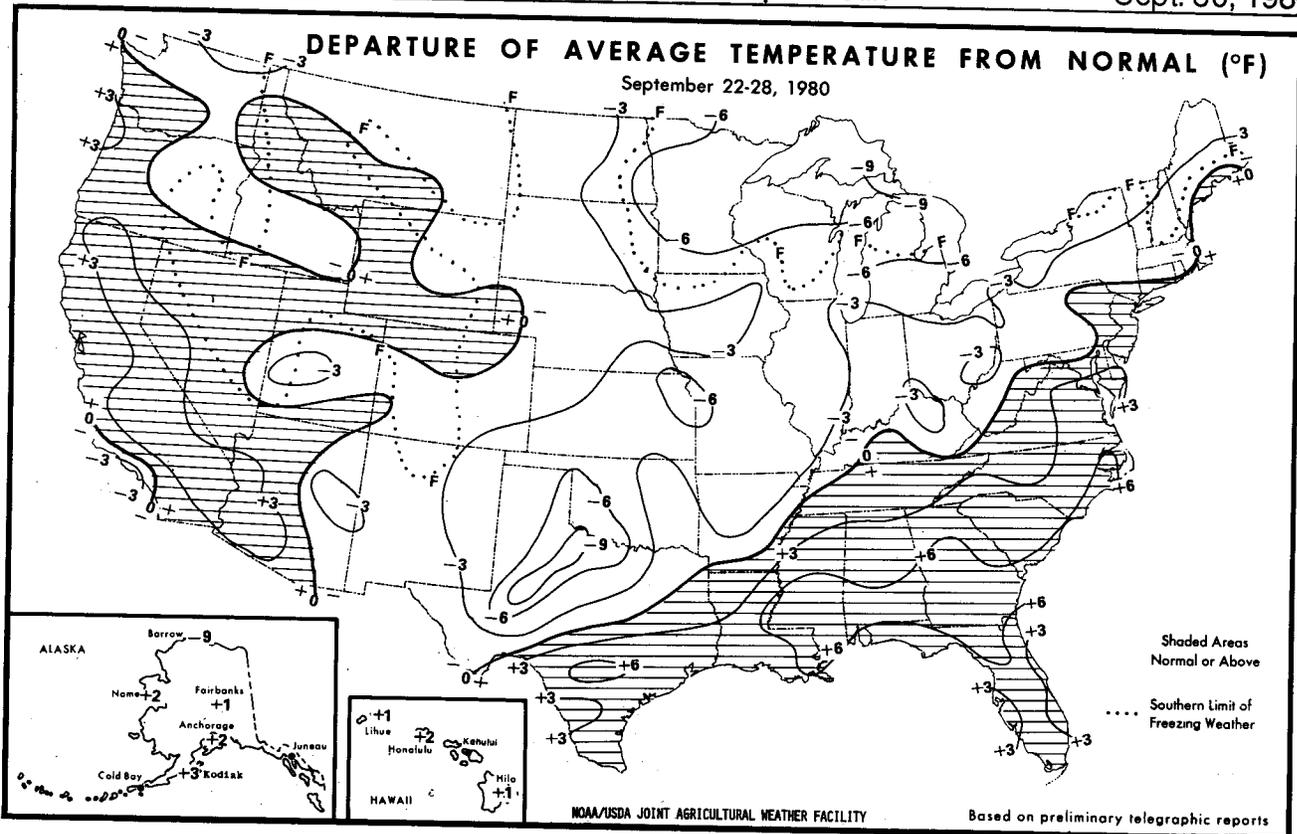
September 22-28

HIGHLIGHTS: Cooler air moved into the Nation through the northern Plains and by the end of the week had pushed to the Gulf of Mexico, effectively ending the heat wave that had persisted in parts of the country since June. The leading edge of the cool air became a warm front along the gulf coast and triggered nearly a week of heavy rain in much of the South. Hardest hit was the area from southwestern Texas through Arkansas to the Carolinas. Severe flooding resulted from 10-inch-plus rains in parts of north central Texas, Oklahoma, and Arkansas. Freezing temperatures chilled the northern tier of States from the Rockies through New England.

MONDAY... Much cooler air pushed into the Nation and advanced to a line from the eastern Great Lakes to southwestern Texas. Showers and

thunderstorms accompanied the advancing front. Strong storms produced severe weather over most of this area. Wind damage was reported in the southern sections of Missouri and Illinois. Hail pelted areas in western Kentucky and southern Indiana. The heaviest rain, as well as hail and high winds, hit southern Michigan where local flooding occurred. Meanwhile, summerlike weather prevailed over the Atlantic and Gulf Coast States. Temperatures soared into the eighties and nineties. Richmond, Va., scored a record 97°.

TUESDAY... The cold front moved rapidly through New England but more slowly further south. Shortly after noon, the front stretched from Virginia to south central Texas. Freezing weather covered much of Minnesota in the early morning, and readings in the thirties and forties



extended from the northern and central Rockies to the middle Mississippi Valley and western Great Lakes region. The unseasonably hot weather continued from eastern Texas across the South and up the Atlantic coast to Virginia. Augusta, Ga., climbed to a record 98°. Showers and thunderstorms occurred along the front and over the Gulf coast. Light showers dotted the central and northern Plains. Some heavy showers soaked points in Texas, Oklahoma, and Arkansas.

WEDNESDAY...The front became stationary from the Carolinas to central Texas, and precipitation was widespread on both sides of the frontal area. Elsewhere, another incursion of cold air moved into the Plains from central Canada. Showers and thunderstorms dampened much of the area east of the Rockies while the West was mostly fair. As the warm, moist air from the Gulf of Mexico was lifted over the stationary cooler air, heavy showers doused North Carolina and parts of Virginia; lighter showers extended all the way to eastern Pennsylvania. Moderate showers wet areas from Tennessee through Arkansas. The hot weather continued from eastern Texas to the Carolinas.

THURSDAY...The latest mass of cold air plunged rapidly southward, all the way to central Texas and eastward to the central Great Lakes region. A series of low pressure centers formed along the old, nearly stationary front which reached from Virginia to central Texas. Showers and thunderstorms carried northward along the east coast to New England and southwestward to Texas. An upper air disturbance of tropical origin combined with the surface front to produce some heavy downpours in Texas and lighter showers in New Mexico and Arizona. Light showers also covered the area from the Great Lakes to western New England. Temperatures

were cool over most of the Nation, but the heat wave held in the southern Gulf Coast States, the Southwest, and through California.

FRIDAY...The cool air enveloped nearly the entire Nation. Freezing weather covered much of Minnesota and Wisconsin, putting a blush on the ripening cranberries. Only the extreme Southeast, the Southwest, and California reached the 90-degree range. Light showers dotted New England, but the heavy showers and thunderstorms persisted in Texas and New Mexico and spread through Oklahoma. The widespread rains were mostly beneficial to the normally dry area, but some heavy downpours washed out newly sown grain.

SATURDAY...Warm, moist tropical air flowing northward from the Gulf of Mexico continued to bring rain and thunderstorms to the southern Plains and from Oklahoma eastward to the Carolinas. Widely scattered showers dotted the Gulf coast. The accumulation of rain caused severe flooding problems in parts of Texas and Oklahoma. Several roads and highways in north central Texas were closed because of high water. Many agricultural fields flooded. Far to the north, the highlands of New Hampshire and Maine reported its first snow of the season. Frost whitened the ground in western New York. Hot weather continued in the Southwest and Florida. Some 100-degree readings persisted in southern California.

SUNDAY...Flooding plagued Texas, Oklahoma, Arkansas, and Tennessee, triggered by the warm front along the Gulf coast. Very heavy rain fell in a broad band from southwestern Texas to the Carolinas. The system dumped 7 to 10 inches of rain in and around Wichita Falls, north

(continued on page 20)

National Agricultural Summary

September 22-28

HIGHLIGHTS: Rains in the eastern half of the Nation brought much-needed moisture to many areas. The heaviest amounts fell in the South from Texas eastward. Temperatures averaged below normal in all areas except parts of the West, the south central region, and along the east coast. Light to heavy frost whitened an area across the North from Montana to New York and dipped down into Iowa; crop damage was minimal. Farmers had 4 to 7 days suitable for fieldwork in nearly all areas of the Nation except Michigan and Wisconsin where continued wet weather and wet fields limited fieldwork to 2 to 3 days. Despite the rains, soil moisture was generally in short supply in all sections of the Nation except the north central region of Michigan, Minnesota, and Wisconsin where supplies ranged up to surplus. Small grain harvests neared completion, although some fields remained because wet conditions delayed combining. Winter wheat seeding advanced to 45% complete, about equal to last year and the average. Corn harvesting spread to all major States and reached 18% complete, compared with 7% a year ago and the 12% average; 89% of the crop was mature. Soybean harvesting was underway in nearly all major areas. Progress advanced to 12% complete; 68% of the crop had shed leaves. Grain sorghum harvesting was 41% finished; 66% of the crop had matured. Cotton bolls had opened on 63% of the acreage, and harvesting reached 18% complete. Rice harvesting scored 58% complete. Pastures and ranges rated fair to good in the north Atlantic, north central, and western States but rated poor to fair in the south Atlantic States and poor in the south central States. Recent rains should improve conditions in many areas. Supplemental feeding continued. Livestock moved from summer pastures and ranges as fall calving gained momentum.

CORN: Corn rated fair to good throughout much of the Corn Belt but only poor to fair in other major producing areas. Most of the crop reached the mature stage and was safe from a killing frost. Some late-planted fields in the North could use a bit more time to mature fully and realize the full potential of the crop. The mature stage ranged from 55% in Michigan to 99% in Illinois; harvesting ranged from 19% in Wisconsin to 20% in Illinois. To the west, the mature stage ranged from 84% in South Dakota to 95% in Iowa; harvesting varied from 39% in Minnesota to 46% in Missouri. In the Southeast, 100% of the crop was mature in Georgia, and 87% was harvested. In the 17 major producing States, 89% of the crop had matured and 18% was harvested. Progress exceeded last year and the average.

SOYBEANS: Soybeans rated fair to good in much of the Corn Belt but rated poor to fair in other major producing areas. Leaf shedding reached 68%, and 12% of the crop had been harvested. Crop progress edged slightly ahead of last year but about equaled the average. Harvesting was underway in all major States except South Carolina. Progress ranged from 1% in Michigan to 24% in Illinois.

SMALL GRAINS: Small grain harvests neared completion in most areas. However, some fields remained for harvest because wet conditions delayed combining. Winter wheat seeding in the 15 major States reached 45% complete, about equal to the level a year ago and the average. Seeding got underway in all States except

California; progress ranged up to 95% in South Dakota. Recent rains should help germination and growth, but more moisture is needed in many areas.

COTTON: Cotton rated poor to fair in all major growing areas except New Mexico where the crop is rated good. Bolls opened on 63% of the acreage in the 14 major States, and harvesting reached 18% complete, slightly ahead of last year and the average. Harvesting moved actively in all States except California and New Mexico. Texas dryland fields were being defoliated in the Panhandle, and some fields were plowed under on the Plains and Cross Timbers. Stalk destruction was active from central Texas southward. The Arizona harvest continued on a limited scale, and defoliating was active in many areas. The continued warm weather proved favorable for the development of late boll set.

OTHER CROPS: Grain sorghum harvesting began in all major States and reached 41% complete, slightly ahead of last year's 31% and the 34% average; 66% of the crop was mature. The Texas harvest advanced rapidly; some fields were grazed or baled on the Edwards Plateau.

Rice harvesting reached 58% complete, slightly ahead of last year and the average. Harvesting was underway in all major States; progress ranged from 5% in California to 100% in Texas.

The Maine potato harvest was delayed by rain. The Idaho harvest reached 20% complete. Harvesting continued actively in all other producing areas.

Peanut digging gained momentum and harvesting increased, ranging from 2% in Virginia and 8% in North Carolina to 39% in Georgia and 65% in Mississippi.

FRUITS AND NUTS: The apple harvest wound down in the southern States, but the tempo increased throughout the North. Apples in most northern regions needed cool temperatures to improve color and speed harvest. Florida citrus groves showed very good to excellent condition and adequate moisture supplies. Harvesting of new-crop grapefruit slowly began. The Arizona lemon harvest increased. Other new-crop fruit sized well. Groves were mostly in good condition. California grapefruit and Valencia orange harvests neared completion. Harvesters continued to pick dates, raisins, and table and wine grapes. The almond, pistachio, and walnut harvests continued. Texas pecans reached the hard dough stage.

VEGETABLES: Fall vegetable harvests picked up momentum as more types of vegetables became available. Land preparation and planting moved very actively in Florida; early-planted vegetables were harvested. Crop conditions were good to very good in all growing areas of Florida. California growers harvested a wide variety of vegetables. Planting and harvesting continued at a brisk pace.

PASTURES AND RANGES: Pastures and ranges rated fair to good in the north Atlantic, north central, and western States but rated poor to fair in the south Atlantic States and poor in the south central States. Conditions in many areas should improve due to recent rains, but many areas still need more. Supplemental feeding continued. Livestock moved from summer pastures and ranges, and fall calving gained momentum.

Weather Data for the Week Ending Sept. 28, 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 Sept. 1	PCT. NORMAL SINCE Sept. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
														90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	83	66	95	59	75	4	2.3	1.5	1.3	3.2	91	93	56	3	0	2	2
AL MOBILE	90	72	93	67	81	6	1.2	-1.1	.7	5.1	81	90	56	4	0	3	1
AL MONTGOMERY	90	71	95	66	80	7	0	-1.0	0	1.2	29	81	44	5	0	0	0
AK ANCHORAGE	52	42	57	35	47	3	.5	0	.3	2.0	87	88	67	0	0	6	0
AK BARROW	24	17	30	12	18	-9	.1	0	.1	.8	200	89	78	0	6	2	0
AK FAIRBANKS	49	33	58	28	41	2	T	-2	T	1.0	100	64	46	0	5	1	0
AK KODIAK	54	47	61	45	50	3	3.8	2.3	1.3	5.4	95	78	78	0	0	4	3
AK NOME	46	36	52	27	41	3	.7	-.2	.3	1.3	57	74	58	0	1	3	0
AZ FLAGSTAFF	74	46	77	31	60	6	T	-.4	T	.7	41	70	12	0	1	0	0
AZ PHOENIX	99	71	103	65	85	5	.1	0	.1	.1	17	42	17	7	0	1	0
AZ TUCSON	91	65	94	60	78	1	1.5	1.2	.6	2.9	207	59	27	6	0	3	2
AZ WINSLOW	80	46	83	40	63	-3	0	-.1	0	.6	75	59	--	0	0	0	0
AZ YUMA	104	71	106	65	87	3	0	0	0	0	0	55	13	7	0	0	0
AR FORT SMITH	74	62	93	52	68	-2	3.1	2.3	1.1	3.2	103	82	68	1	0	6	3
AR LITTLE ROCK	74	60	95	50	67	-3	3.1	2.3	1.4	3.5	106	81	66	1	0	6	3
CA BAKERSFIELD	94	63	102	60	79	5	0	-.1	0	0	0	--	25	5	0	0	0
CA EUREKA	64	52	70	48	58	2	.1	-.2	.1	.2	29	96	68	0	0	2	0
CA FRESNO	93	57	99	53	75	4	0	-.1	0	0	0	59	29	6	0	0	0
CA LOS ANGELES	70	60	73	57	65	-7	0	0	0	0	0	88	62	0	0	0	0
CA RED BLUFF	94	58	100	50	76	4	0	0	0	.1	25	--	16	6	0	0	0
CA SAN DIEGO	73	66	74	64	70	0	0	0	0	0	0	80	65	0	0	0	0
CA SAN FRANCISCO	76	54	90	52	65	1	T	-.1	T	0	0	79	42	1	0	0	0
CA STOCKTON	90	54	96	51	72	2	0	-.1	0	0	0	81	28	3	0	0	0
CO DENVER	76	46	83	39	61	1	0	-.3	0	.7	64	61	19	0	0	0	0
CO GRAND JUNCTION	79	46	85	40	63	-1	0	-.2	0	.6	75	39	12	0	0	0	0
CO PUEBLO	76	46	88	40	61	-2	0	-.1	0	.5	71	73	29	0	0	0	0
CT BRIDGEPORT	73	56	87	46	64	1	.4	-.2	.3	2.4	89	79	41	0	0	2	1
CT HARTFORD	72	49	91	35	61	1	.3	-.5	.3	1.5	44	72	37	1	0	1	0
DC WASHINGTON	80	63	95	52	72	4	.9	.3	.9	1.8	60	78	49	2	0	1	0
FL APALACHICOLA	90	72	91	71	81	4	T	-1.8	T	3.2	37	90	58	2	0	1	0
FL DAYTONA BEACH	89	70	90	66	80	2	.1	-1.5	.1	1.7	25	93	56	3	0	0	0
FL FORT MYERS	95	77	96	77	86	6	.9	-1.0	.8	5.0	60	89	54	7	0	2	1
FL JACKSONVILLE	91	71	93	67	81	5	.2	-1.5	.1	3.0	41	97	56	6	0	2	0
FL KEY WEST	90	82	91	81	86	4	.1	-1.7	.1	5.4	78	77	49	6	0	1	0
FL MIAMI	91	80	91	78	86	5	T	-2.2	T	5.6	68	86	59	7	0	1	0
FL ORLANDO	93	72	95	67	83	4	.3	-1.3	.3	3.7	54	98	53	7	0	1	0
FL TALLAHASSEE	92	72	94	69	82	6	1.8	-.4	1.4	5.2	81	85	61	7	0	1	0
FL TAMPA	90	75	92	72	83	3	.8	-.4	.4	3.9	65	97	60	6	0	3	3
FL WEST PALM BEACH	91	74	92	73	83	2	.5	-2.0	.3	6.4	69	95	57	6	0	4	3
GA ATLANTA	84	67	93	56	76	6	1.9	-1.2	1.9	3.0	100	92	54	3	0	3	1
GA AUGUSTA	86	67	98	57	76	5	3.4	-2.7	1.9	3.5	113	83	55	3	0	3	3
GA MACON	88	71	94	64	79	6	.4	-.3	.2	2.7	90	88	59	5	0	2	0
GA SAVANNAH	90	72	95	68	81	7	T	-1.2	.4	4.1	77	86	54	5	0	2	0
HI HILO	--	--	--	--	76	1	.3	-.4	0	13.6	197	--	--	--	--	--	--
HI HONOLULU	90	76	90	74	82	2	T	-.2	T	.4	80	73	48	3	0	1	0
HI KAHULUI	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HI LIHUE	--	--	--	--	79	1	.1	-.4	--	--	--	--	--	--	--	--	--
ID BOISE	75	45	88	38	60	1	0	-.1	0	1.6	400	74	26	0	0	0	0
ID LEWISTON	75	47	82	41	61	1	0	-.2	0	1.0	143	77	29	0	0	0	0
ID POCATELLO	72	36	82	29	54	-2	0	-.1	0	1.4	280	70	21	0	3	0	0
IL CAIRO	73	59	90	53	66	-3	1.2	-.4	.8	2.3	70	--	--	1	0	3	1
IL CHICAGO	69	48	84	42	59	-2	.6	-.1	.5	5.7	204	75	43	0	0	2	0
IL MOLINE	70	45	78	37	57	-4	T	-.9	T	2.9	81	87	41	0	0	1	0
IL PEORIA	71	45	85	39	58	-4	T	-.8	T	4.1	124	89	42	0	0	0	0
IL ROCKFORD	67	48	75	39	57	-3	.4	-.5	.2	6.2	163	87	42	1	0	2	0
IN SPRINGFIELD	73	47	90	40	60	-4	.1	-.7	.1	5.0	161	97	45	1	0	2	1
IN EVANSVILLE	76	56	93	44	66	0	.8	-.2	.8	2.4	92	90	50	1	0	1	1
IN FORT WAYNE	72	50	89	39	61	-1	.6	0	.6	2.5	104	93	45	0	0	2	1
IN INDIANAPOLIS	74	50	88	41	62	-1	T	-.6	T	3.2	119	88	42	0	0	1	0
IN SOUTH BEND	71	49	88	43	60	-1	1.0	-.3	.8	5.6	193	86	49	0	0	2	1
IA BURLINGTON	69	46	79	37	58	-5	T	-.9	T	6.7	191	--	--	0	0	0	0
IA DES MOINES	71	46	80	36	59	-2	.1	-.6	.1	1.1	37	76	38	0	0	2	0
IA DUBUQUE	64	47	68	38	56	-3	.4	-.6	.3	6.5	151	88	44	0	0	2	0
IA SIOUX CITY	71	42	78	34	56	-4	T	-.6	T	1.4	52	86	42	0	0	1	0
KS CONCORDIA	72	49	77	43	61	-3	.1	-.6	.1	1.3	43	70	33	0	0	1	0
KS JODGE CITY	72	52	80	48	62	-3	T	-.4	T	0	0	74	43	0	0	0	0
KS GOODLAND	73	47	83	42	60	-1	.2	-.1	.2	2.3	164	81	34	0	0	1	0
KS TOPEKA	72	46	84	37	59	-6	T	-.7	T	1.2	38	82	45	0	0	0	0
KS WICHITA	73	54	84	52	64	-3	.3	-.6	.3	.6	17	72	41	0	0	1	0
KY LEXINGTON	71	56	84	45	63	-3	1.0	-.4	.9	2.3	92	88	60	0	0	2	1
KY LOUISVILLE	74	58	90	48	66	0	.8	-.1	.5	3.2	114	84	55	1	0	0	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Sept. 28, 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 Sept. 1	PCT. NORMAL SINCE Sept. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
														90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
LA BATON ROUGE	88	71	91	68	80	5	.6	-.2	.6	5.9	164	84	56	3	0	1	1
LA LAKE CHARLES	88	71	91	67	80	4	1.6	-.7	1.0	5.0	128	92	62	3	0	4	1
LA NEW ORLEANS	92	75	94	73	83	7	3.0	1.8	2.8	6.0	111	90	62	6	0	3	1
LA SHREVEPORT	86	67	98	57	77	2	.7	0	.4	1.2	41	89	51	4	0	3	0
ME CARIBOU	55	40	68	28	47	-3	1.1	-.3	.6	3.8	119	81	58	0	1	3	1
ME PORTLAND	70	45	88	36	58	2	1.5	-.8	1.3	3.1	107	86	36	0	0	2	1
MD BALTIMORE	75	55	87	40	65	0	.4	-.3	.4	1.0	33	77	44	0	0	1	0
MA BOSTON	72	52	90	45	62	1	.3	-.4	.3	.8	27	79	38	1	0	1	0
MA CHATHAM	69	53	83	44	61	--	1.5	--	.8	2.4	80	68	60	0	0	3	1
MI ALPENA	57	35	64	28	46	-8	.3	-.4	.2	2.5	81	--	--	0	4	3	0
MI DETROIT	68	47	89	35	58	-3	.8	-.3	.5	3.0	143	91	47	0	0	2	0
MI FLINT	63	43	78	34	53	-5	1.7	1.1	1.6	4.8	192	92	58	0	0	2	1
MI GRAND RAPIDS	66	43	76	35	55	-5	1.4	-.6	1.3	4.5	145	92	57	0	0	2	1
MI HOUGHTON LAKE	59	36	66	27	47	-7	.6	-.2	.5	3.8	123	90	59	0	2	2	0
MI LANSING	66	44	80	33	55	-6	.5	-.1	.4	3.1	129	96	55	0	0	2	1
MI MARQUETTE	54	34	61	27	44	-11	1.2	-.3	.9	6.9	216	98	55	0	2	5	1
MI MUSKOGON	63	43	69	37	53	-5	1.2	-.4	1.1	4.4	137	84	57	0	0	2	1
MI SAULT STE. MARIE	54	32	61	27	43	-9	.4	-.5	.2	3.1	84	84	60	0	5	3	0
MN DULUTH	56	35	62	27	45	-6	.5	-.1	.2	6.6	228	90	50	0	2	3	0
MN INT'L FALLS	55	33	67	26	44	-6	.2	-.5	.1	4.1	132	91	63	0	4	4	0
MN MINNEAPOLIS	61	40	68	31	50	-6	.1	-.5	.1	3.7	142	80	47	0	1	3	0
MN ROCHESTER	63	41	68	32	52	-5	.2	-.5	.1	2.9	97	83	52	0	1	4	0
MN SAINT CLOUD	60	34	68	27	47	-8	.9	-.4	.5	6.1	235	93	--	0	2	3	0
MS JACKSON	90	70	98	62	80	7	1.5	-.9	1.0	2.3	79	89	47	4	0	3	1
MS MERIDIAN	89	69	95	62	79	7	0	-.7	0	1.4	45	90	51	4	0	0	0
MO COLUMBIA	71	48	84	40	60	-6	0	-1.1	0	1.9	44	77	36	0	0	0	0
MO KANSAS CITY	71	47	82	38	59	-6	0	-1.0	0	1.7	42	79	40	0	0	1	0
MO SAINT LOUIS	74	53	90	46	63	-3	0	-.7	0	3.1	115	87	44	1	0	1	0
MO SPRINGFIELD	71	53	86	45	62	-4	.1	-.9	.1	1.8	46	85	47	0	0	1	0
MT BILLINGS	72	44	85	38	58	3	0	-.3	0	.7	50	58	23	0	0	1	0
MT GLASGOW	68	38	86	30	53	0	.2	-.1	.1	.9	113	90	38	0	1	2	0
MT GREAT FALLS	68	38	82	32	53	-2	.1	-.2	.1	.9	75	81	30	0	1	1	0
MT HAVRE	69	36	84	26	52	-1	.1	-.1	0	.5	45	79	33	0	2	2	0
MT HELENA	67	38	79	31	53	0	0	-.2	0	2.7	300	82	33	0	2	0	0
MT KALISPELL	65	34	76	28	50	0	.1	-.1	0	.7	64	93	43	0	3	2	0
MT MILES CITY	71	42	90	31	56	0	0	-.3	0	.8	67	73	27	1	1	1	0
MT MISSOULA	67	36	79	30	51	0	0	-.2	0	1.0	0	95	41	0	2	1	0
NE GRAND ISLAND	73	46	80	40	60	-1	0	-.5	0	.9	0	72	33	0	0	0	0
NE LINCOLN	73	51	79	34	62	0	0	-.6	0	.3	11	75	38	0	0	0	0
NE NORFOLK	73	43	80	34	58	-2	0	-.5	0	.9	39	85	35	0	0	1	0
NE NORTH PLATTE	73	41	80	37	57	-1	.1	-.3	.1	.4	21	83	33	0	0	2	0
NE OMAHA	71	45	78	35	58	-5	.3	-.3	.3	1.4	47	78	37	0	0	1	0
NE VALENTINE	74	40	84	34	57	-1	.1	-.2	.1	.5	36	78	28	0	0	1	0
NV ELY	77	32	81	27	55	1	0	-.1	0	1.7	340	53	12	0	4	0	0
NV LAS VEGAS	94	62	99	57	78	1	0	-.1	0	.2	50	24	11	6	0	0	0
NV RENO	83	40	89	35	61	4	0	-.1	0	.5	167	65	12	0	0	0	0
NV WINNEMUCCA	83	33	89	25	58	2	0	-.1	0	.2	50	47	10	0	4	0	0
NH CONCORD	68	41	88	28	55	-2	1.2	-.5	.8	2.2	76	84	36	0	2	3	0
NJ ATLANTIC CITY	76	54	94	39	65	1	1.3	-.7	1.2	1.7	63	87	49	1	0	2	1
NJ TRENTON	74	57	91	46	65	1	.4	-.3	.4	2.0	67	--	--	1	0	2	0
NM ALBUQUERQUE	79	52	84	45	66	-1	0	-.2	0	1.8	257	66	29	0	0	0	0
NM ROSWELL	71	57	81	53	64	-3	2.9	2.5	1.6	6.6	440	--	--	0	0	3	2
NY ALBANY	68	47	87	38	57	-1	.4	-.3	.2	2.2	73	82	51	0	0	3	0
NY BINGHAMTON	64	47	85	35	56	-1	.8	-.1	.8	2.8	100	94	53	0	0	2	1
NY BUFFALO	65	45	82	37	55	-3	.9	-.2	.5	4.4	142	90	57	0	0	3	0
NY NEW YORK	74	59	91	48	66	1	.1	-.6	0	1.1	35	75	45	1	0	2	0
NY ROCHESTER	67	48	88	39	57	-2	.4	-.1	.2	3.6	164	90	52	0	0	3	0
NY SYRACUSE	66	47	84	40	56	-3	.7	-.1	.5	3.5	140	85	52	0	0	3	0
NC ASHEVILLE	75	60	88	50	67	4	2.7	1.9	1.6	3.5	106	16	64	0	0	4	3
NC CHARLOTTE	80	64	94	52	72	3	2.7	1.9	1.3	3.6	113	78	57	2	0	3	2
NC GREENSBORO	77	61	93	47	69	2	1.5	-.7	1.3	1.8	55	98	68	2	0	4	1
NC HATTERAS	82	71	85	63	77	6	.6	-.7	.5	3.0	55	81	62	0	0	1	0
NC RALEIGH	81	62	94	50	72	4	1.0	-.2	.5	2.8	78	98	56	2	0	4	1
NC WILMINGTON	87	71	94	61	79	7	.2	-1.0	.1	4.5	83	85	53	4	0	3	0
ND BISMARCK	65	38	81	34	52	-2	.5	-.2	.5	1.1	85	83	42	0	0	2	0
ND FARGO	59	34	71	28	47	-8	.1	-.3	.1	2.5	139	87	49	0	3	1	0
ND WILLISTON	65	41	83	35	53	0	.1	-.1	.1	2.4	200	79	47	0	0	2	0
OH AKRON-CANTON	68	49	80	40	58	-2	.5	-.1	.4	1.8	75	84	51	0	0	2	0
OH CINCINNATI	71	52	86	40	62	-3	.3	-.3	.3	1.9	79	91	64	0	0	1	0
OH CLEVELAND	68	48	84	38	58	-3	.6	0	.5	3.1	119	86	53	0	0	2	1
OH COLUMBUS	72	51	85	40	62	0	.1	-.4	.1	2.0	87	88	53	0	0	1	0
OH DAYTON	74	51	88	39	62	-1	.2	-.3	.2	1.5	68	93	49	0	0	1	0
OH TOLEDO	70	46	91	33	58	-3	.4	-.1	.3	1.7	74	93	49	1	0	2	0
OH YOUNGSTOWN	67	46	80	38	56	-3	.7	-.1	.4	4.4	183	89	56	0	0	2	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Sept. 28, 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 Sept. 1	PCT. NORMAL SINCE Sept. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
														90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
OK OKLAHOMA CITY	73	59	86	51	66	-4	.8	0	.7	2.2	67	70	55	0	1	0	3	1
TULSA	74	63	90	56	68	-2	.9	.1	.7	3.5	90	77	59	0	0	0	2	1
OR ASTORIA	67	52	80	44	60	3	.2	.7	.1	2.5	96	86	68	0	0	1	2	0
BURNS	75	36	82	29	55	0	0	.1	0	.5	125	77	20	0	0	0	0	0
MEDFORD	86	45	93	38	65	4	0	.2	0	.2	40	84	21	2	0	0	0	0
PENDLETON	74	46	80	40	60	0	0	.2	0	.7	140	--	30	0	0	0	0	0
PORTLAND	73	52	82	44	63	3	.1	.4	.1	1.6	107	94	51	0	0	0	1	0
SALEM	78	47	89	40	63	3	T	.5	T	1.1	79	91	40	0	0	1	1	0
PA ALLENTOWN	76	55	93	44	65	4	.2	.6	.1	2.0	59	78	38	0	0	0	2	0
ERIE	67	50	84	40	59	-1	1.1	.3	.6	5.5	172	--	--	0	0	2	2	0
HARRISBURG	72	52	90	39	62	-2	.3	.3	.3	1.1	44	79	42	0	0	1	1	0
PHILADELPHIA	75	56	90	44	66	1	.3	.3	.3	2.8	100	83	38	0	0	0	0	0
PITTSBURGH	70	49	80	41	60	-1	.2	.4	.2	1.2	50	84	48	0	0	3	3	0
SCRANTON	70	51	88	40	61	-1	.1	.5	.1	1.4	54	79	39	0	0	2	2	0
RI PROVIDENCE	72	46	93	33	59	-1	.2	.5	.1	.9	30	74	38	1	0	2	2	0
SC CHARLESTON	89	70	95	65	80	7	.4	.7	.2	1.5	31	82	53	5	3	0	3	1
COLUMBIA	84	66	94	55	75	4	3.1	2.2	3.0	4.1	98	87	62	3	0	3	3	2
GREENVILLE	79	64	90	52	71	3	3.0	2.2	2.0	3.4	97	90	57	2	0	3	2	0
SD ABERDEEN	67	38	79	33	52	-3	.5	.1	.5	.9	56	90	41	0	0	1	1	0
HURON	72	37	82	32	54	-3	T	.4	T	.5	31	96	34	0	2	2	1	0
RAPID CITY	72	39	90	36	55	-2	.1	.2	.1	.4	33	72	28	1	0	1	0	0
ST LOUIS	69	38	77	32	54	-4	T	.6	T	.8	30	83	36	0	1	0	0	2
TN CHATTANOOGA	76	63	91	53	70	1	2.0	1.1	.8	2.9	83	95	72	2	0	3	3	0
KNOXVILLE	74	63	87	52	69	0	.7	.1	.4	2.1	81	95	65	0	0	3	3	0
MEMPHIS	77	67	93	59	72	2	2.6	2.0	1.5	5.2	186	77	62	1	0	5	2	0
NASHVILLE	76	63	94	51	69	1	.4	.3	.3	1.0	33	95	63	0	0	2	2	0
TX ABILENE	75	63	92	54	69	-4	4.2	3.6	1.6	5.3	252	90	70	1	0	5	5	1
AMARILLO	71	53	84	49	62	-5	.7	.3	.5	1.6	89	69	49	0	0	2	2	1
AUSTIN	88	73	94	68	81	4	2.8	1.9	1.9	5.5	157	90	57	4	0	5	1	1
BEAUMONT	89	75	92	72	82	5	2.3	1.2	2.0	20.9	418	91	68	3	0	4	4	1
BROWNSVILLE	92	77	96	72	85	4	1.4	.2	.8	1.5	31	85	58	6	0	4	4	1
CORPUS CHRISTI	92	75	98	74	83	4	4.2	3.1	2.9	4.3	93	91	62	6	0	3	2	1
DEL RIO	91	74	97	72	82	5	1.7	.9	1.4	1.7	59	84	48	4	0	3	3	1
EL PASO	79	62	86	58	70	-1	.9	.6	.6	1.9	158	63	42	0	0	4	2	1
FORT WORTH	79	65	96	54	72	-2	2.9	2.1	1.9	3.2	107	80	58	1	0	4	2	0
GALVESTON	86	78	89	73	82	4	2.3	1.1	1.1	4.4	83	81	72	0	0	4	2	0
HOUSTON	91	74	96	70	82	6	.2	.9	1.1	3.5	80	99	63	5	0	2	2	0
LUBBOCK	69	58	80	53	64	-4	2.4	1.8	1.5	3.5	167	88	63	0	0	5	2	0
MIDLAND	68	58	79	54	63	-9	7.0	6.6	2.1	9.6	600	91	75	0	0	6	5	3
SAN ANGELO	76	66	92	59	71	-3	4.3	3.6	2.4	11.0	423	88	57	1	0	6	3	0
SAN ANTONIO	91	77	95	75	84	8	.5	.4	.2	4.7	134	88	53	5	0	4	0	1
VICTORIA	89	74	94	73	82	4	1.5	.4	.8	4.4	102	95	65	5	0	4	4	0
WACO	83	69	98	60	76	0	1.2	.4	.5	1.7	55	90	49	3	0	4	0	0
WICHITA FALLS	73	59	92	50	66	-8	8.4	7.6	6.1	10.2	364	78	61	1	0	4	3	0
UT BLANDING	78	43	81	38	61	1	T	.2	T	.9	100	70	20	0	0	1	0	0
SALT LAKE CITY	78	47	86	38	63	2	0	.2	0	.8	133	56	18	0	0	0	0	0
VT BURLINGTON	62	42	76	31	52	-4	1.0	.3	.4	4.4	152	68	50	0	1	3	0	0
VA LYNCHBURG	75	56	93	42	66	1	.4	.3	.3	1.4	45	85	--	1	0	3	0	0
NORFOLK	82	67	97	49	75	5	.5	.4	.4	.8	21	83	51	2	0	2	4	1
RICHMOND	80	61	97	46	70	4	1.2	.9	1.0	2.2	65	85	51	2	0	4	1	0
ROANOKE	74	57	90	43	66	1	.3	.5	.1	1.6	48	87	57	1	0	2	0	0
WA COLVILLE	68	37	74	33	53	-3	0	.2	0	1.1	0	--	--	0	0	0	0	0
OMAK	75	59	78	41	59	0	T	.1	T	1.5	375	86	--	0	0	0	0	0
QUILLAYUTE	63	48	72	40	56	0	.5	1.1	.2	5.8	123	94	73	0	0	3	0	0
SEATTLE-TACOMA	66	50	76	48	58	1	T	.6	T	1.4	74	94	59	0	0	0	0	0
SPOKANE	70	42	77	35	56	0	T	.2	T	.8	114	84	36	0	0	1	0	0
WALLA-WALLA	74	51	82	43	63	1	T	.2	T	1.5	214	74	37	0	0	0	0	0
YAKIMA	77	43	81	38	60	2	T	.1	T	.5	125	77	29	0	0	0	0	0
WV BECKLEY	68	52	79	37	60	0	.8	.1	.3	1.6	52	95	60	0	0	4	0	0
CHARLESTON	73	57	81	45	65	-1	1.3	.6	.9	2.4	86	94	65	0	0	3	1	1
HUNTINGTON	71	57	80	46	64	-1	1.0	.4	1.0	1.8	67	89	67	0	0	2	0	0
PARKERSBURG	72	53	80	42	62	-3	.5	.1	.5	2.0	77	89	57	0	0	3	0	0
WI GREEN BAY	61	40	66	34	51	-5	.3	.4	.2	3.5	113	91	54	0	0	4	0	0
LA CROSSE	65	49	70	40	57	-2	.5	.2	.2	8.6	277	90	57	0	0	3	0	0
MADISON	62	41	69	31	52	-5	1.1	.4	.9	7.9	255	92	56	0	1	3	1	0
MILWAUKEE	62	45	69	39	54	-4	.3	.4	.2	3.5	121	81	49	0	0	2	0	0
CASPER	72	35	85	27	54	-2	T	.2	T	0	0	67	17	0	2	1	0	0
CHEYENNE	69	39	81	34	54	0	T	.2	T	1.0	100	66	26	0	0	2	0	0
LANDER	71	39	84	32	55	0	0	.3	0	.1	10	57	21	0	0	2	0	0
SHERIDAN	71	39	87	33	55	0	.1	.2	.1	1.3	108	74	28	0	0	1	0	0
PR SAN JUAN	91	77	92	76	84	3	2.8	1.5	1.3	4.1	72	85	57	6	0	5	2	2

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 4° above normal. Cooler by weekend. Above normal rainfall in the north, light elsewhere. More widespread by weekend.

Fieldwork: 5.0 days suitable. Soil moisture mostly short. Activities: Harvesting cotton, soybeans, corn, peanuts; land preparation; care of livestock and poultry. Corn harvested 86%, 64% 1979, 46% average. Soybeans: Turning yellow 80%, 65% 1979, 63% average; shedding 58%, 35% 1979; maturing 31%, 19% 1979, 31% average; harvested 11%, 2% 1979. Cotton: Bolls open 86%, 36% 1979, 45% average; harvested 20%, 2% 1979, 8% average. Peanuts: Dug 36%, 41% 1979, 57% average; combined 24%, 31% 1979, 47% average. Wheat seeded 13%, 19% 1979. Sorghum harvested 32%, 28% 1979. Condition: Soybeans, cotton, pastures, poor; pecans poor to fair.

ARIZONA: Widely scattered thundershowers over Mogollon Rim, White Mountains, southeast areas. Amounts mostly under 0.25 in., but some amounts over 1.00 in., southeast. Temperatures ranged from 4° below normal in northeast to 4° above in southwest.

Cotton making satisfactory progress; 95% of stands having open bolls. Harvest continues, limited scale. Defoliating in progress Yuma, Central Valley areas. Irrigation mostly complete. Continued warm weather favorable for development of late boll set. Corn mature, harvest in progress. Sorghum for grain ripening, harvest accelerating. Planting 1981 sugarbeet crop about 70% complete. Alfalfa haying active, western areas in 7th cutting, other areas mostly in 5th. Lettuce harvest underway Cochise County. Lettuce, mixed vegetables central, western areas good progress. Earlier planted melons fall harvest sizing well, harvest increasing. Green chili harvest good progress Cochise County. Lemon harvest increasing. Other new crop fruits sizing well. Groves mostly good condition. Below average conditions, prospects for winter ranges poor. Southeastern counties poor to fair ranges, very poor southwestern area. Central, northern in fair condition. Livestock good to excellent central, northern but poor to fair southern counties. Water short south, short to adequate north.

ARKANSAS: Change from hot, dry to cool, wet weather occurred. Highest temperature 97°, lowest 45°. All departures from normal -1 to -8°. Most rainfall 7.39 in., least 0.82 in.

Fieldwork possible 5.0 days. Soil moisture remained short. Soybeans blooming 100%, setting 96%, yellowing 48%, shedding 41%, mature 16%, harvested 3%, 1% 1979, 4% average. Rice 80% ripe, 45% harvested, 26% 1979, 41% average. Cotton open bolls 91%, 41% 1979, 51% average, harvested 20%, 3% 1979, 8% average. Corn 98% harvested, 34% 1979, 54% average. Sorghum 88% harvested, 55% 1979, 65% average. Wheat 8% planted, 9% 1979, 13% average. Oats 8% planted, 10% 1979, 16% average. Livestock marketings continued. Supplemental feeding necessary. Rain has helped summer grasses regrowth.

CALIFORNIA: Average temperatures were a few degrees above normal. Except for a few hundredths of an inch of rain close to the Oregon border, the entire state was dry.

Rice 95% headed, 60% turning color, 5% harvested, 13% last year. Fields being drained.

Open cotton 40%, defoliation active. Early corn for grain harvested. Silage corn, sugar beets, safflower, dry beans, and alfalfa seed and hay harvest active. Land preparation for small grains progressing. Apples underway in Watsonville district. San Diego avocados coming off earlier than normal. Dates, raisin, table and wine grapes continue. Sacramento Valley olives graining momentum. Almonds, pistachios, walnuts continue. Condition of citrus good due to cooler weather. Grapefruit and Valencia oranges nearing completion. Broccoli fairly heavy volume. Cantaloup harvest continues San Joaquin Valley, West Riverside. Carrot harvest started Bakersfield, continues Salinas Valley. Cauliflower movement moderate Central Coast. Celery harvest active Central Coast. Lettuce movement heavy Central Coast. Fall potato harvest slow Tulalake. Strawberry volume light. Sweetpotato harvest increasing. Market tomato harvest continues San Joaquin Valley and Coastal districts. Harvest of processing tomatoes active late districts. Cattle moving from high mountain ranges to lower elevations for wintering.

COLORADO: Most areas dry and cool. Precipitation widely scattered with amounts less than 0.10 in. Temperatures averaged 1 to 3° below normal.

Winter wheat seeded 85%, 88% 1979, 90% average, emerged 59%, 60% 1979, 67% average. Barley harvest virtually complete. Spring wheat harvest 90%, 89% 1979. Corn dented 94%, 91% 1979; mature 59%, 45% 1979, 73% average. Grain harvest underway; silage harvest 75%, 84% 1979, 88% average. Sorghum ripe 54%, 53% 1979, 57% average; grain harvest underway; forage harvest 47%. Dry beans cut 74%, 91% 1979, 93% average; threshed 49%, 58% 1979, 68% average. Onions harvested 46%, 37% 1979. Fieldwork: 6.0 days suitable. Ranges and pastures fair condition. Livestock in good condition.

FLORIDA: Considerable sunshine with warm temperatures and only occasional cloudiness. Widely scattered thundershowers mostly during afternoon, evening hours. Accumulations of rainfall generally less than 1.00 in. with a few local amounts of 1.00 to 2.00 in. in heavier thundershowers. Temperatures mainly 1 to 3° above seasonal normals.

Soil moisture variable. Panhandle mostly dry, Peninsula short to adequate, more dry areas showing up. Corn and hay harvest winding down, peanut harvest active. Soybean harvest about to begin, a lot of early beans showing color. Sugarcane excellent condition, cutting cane for seed continues. Panhandle, northern pastures in poor to fair condition; mostly good to excellent central and south, but scattered areas still need additional moisture. Cattle fair to good. Citrus groves very good to excellent condition. Moisture generally adequate; some irrigation. New crop fruit making good progress. Harvest of new crop grapefruit slowly beginning. Land preparation, planting very active. Growers able to stay on regular planting schedules as shower activity less frequent. Harvest active early acreage pole beans, squash, sweet corn, cucumbers for local market. Light scrapping eggplant, very light harvest snap beans underway southeast. Crop condition generally good to very good all

growing areas. Fieldwork remains very active, weather permitting.

GEORGIA: Hot, dry most sections. Temperatures averaged 5 to 8° above normal despite cooler weather north late in week. Rainfall averaged 1.50 to 2.00 in. in northern counties, spotty elsewhere and averaged less than 0.25 in. No significant rain south-east. Temperature extremes: 98 and 57°.

Soil moisture very short to short. Five days suitable for fieldwork. Continued stress reduction. Armyworm infestation remains heavy. Corn mostly poor to fair, 100% mature, 87% harvested, 75% last year, 65% average. Soybeans mostly poor to fair, 97% setting pods, 30% leaf drop, 2% harvested, 1% harvested last year, 2% average. Peanuts poor to fair, 55% dug, 64% last year, 72% average, 39% threshed, 48% last year, 58% average. Some fields harvested for hay only. Cotton poor to fair, 94% open, 71% last year, 39% harvested, 9% last year, 10% average. Small grain planting, wheat 5%, 12% last year, 11% average; rye 9%, 12% last year, 13% average; other small grains 8%, 12% last year, 14% average. Apples fair to good, 89% picked, 94% last year. Pecans poor to mostly fair. Pasture and hay crops mostly poor to fair. Cattle and hogs fair to good.

HAWAII: Weather favorable. Rainfall light, mainly in higher elevations. Most crop acres dry. Heavy irrigation necessary. Spraying frequent to control insect and disease damage.

Vegetable supplies adequate. Chinese cabbage heavy. Others light to moderate. Banana harvesting light. Papaya harvesting active. Pineapple harvesting down. Sugar harvesting resuming after last week's heavy rains. Pastures generally fair to good. Some areas dry. More rains needed.

IDAHO: Temperatures below normal, averages in the low 50's. Precipitation below normal. Rain showers heaviest in north but were below 0.50 in. Spring wheat harvested 96%, 99% 1979, 89% average. Spring barley harvested 94%, 99% 1979, 93% average. Potatoes harvested 20%, 26% 1979, 16% average. Winter wheat 33% planted, 20% emerged. Red clover seed 31% harvested, alfalfa seed 42% harvested. Both far behind schedule. Apples 30% picked. Fieldwork: 5.0 days suitable. Range and pasture grasses very good.

ILLINOIS: Temperatures 1 to 5° below normal. Precipitation 0.05 to 0.60 in. north, none central, 1.00 in. extreme south.

Soil moisture 10% short, 75% adequate, 15% surplus. Corn 20% harvested, 4% 1979, 9% average. Soybeans 90% shedding leaves, 86% 1979, 86% average; 24% harvested, 30% 1979, 28% average. Winter wheat acreage 10% seeded, 10% 1979, 11% average. Sorghum 15% harvested. Pastures 16% excellent, 50% good, 31% fair, 3% poor. Fieldwork: 5.8 days suitable.

INDIANA: Mild week. First below normal temperature week since July and first fall minimum temperatures into the 30's, including central and south central areas. Rainfall first of week 0.40 in. north, central and southeast, 1.00 in. in southwest.

Fieldwork averaged 6.0 days. Topsoil and subsoil moisture adequate. Corn 12% harvested, 1979 4%, average 7%. Corn 90% mature, 1979 75%, average 75%. Corn moisture 27%. Soybeans 15% combined, 1979 10%, average 10%. Soybeans 90% dropping leaves, 1979 80%, average 80%. Soybeans 60% mature, 1979 45%, average 50%. Soybean moisture content 15%. Wheat land 55% plowed, 1979 50%, average 60%. Wheat 15% seeded, 1979 12%, average 13%. Tobacco 90% harvested, 1979 85%, average 80%. Silos 75%

filled, 1979 65%, average 65%. Pasture condition unchanged, rated fair to good.

IOWA: A cool, dry week. Temperatures averaged 2 to 3° subnormal with many localities reporting light frost the 23d and from light-to-killing freeze the 26th.

Fieldwork: 5.6 days favorable. Topsoil moisture: 9% short, 76% adequate, 15% surplus. Subsoil moisture: 13% short, 77% adequate, 10% surplus. Corn acreage mature: 95%, 1979 85%, normal 93%. Corn acreage harvested: 13%, 1979 4%, normal 9%. Soybean leaves shedding: 95%, 1979 78%, normal 89%. Soybeans mature: 75%, 1979 57%, normal 84%. Soybean acreage harvested: 15%, 1979 15%, normal 20%. Fall plowing complete: 4%, 1979 0%, normal 0%. Crop conditions decline, variable. Pasture condition mostly good. Grain movement moderate to heavy.

KANSAS: Precipitation limited to spotty amounts over the north and from 0.50 in. to over 1.00 in. in the southeast quarter. Temperatures averaged from near normal in the northwest and southeast districts to 2 to 4° below normal elsewhere.

Winter wheat planting 50% complete, last year 50%, average 45%. Sorghum acreage matured 40%, last year and average 45%. Acreage of sorghum harvested 15%, last year 10%, average 15%. Soybeans harvested 10%, last year 5%, average 2%. Soybeans shedding leaves on 60% of the acreage, last year 55%. Corn acreage matured 85%, last year 70%, average 80%. Corn harvest for grain 40%, last year 20%, average 25%.

KENTUCKY: Temperatures averaged about normal. Rainfall amounts averaged about 2.00 in. over the west and about 0.75 in. over the east.

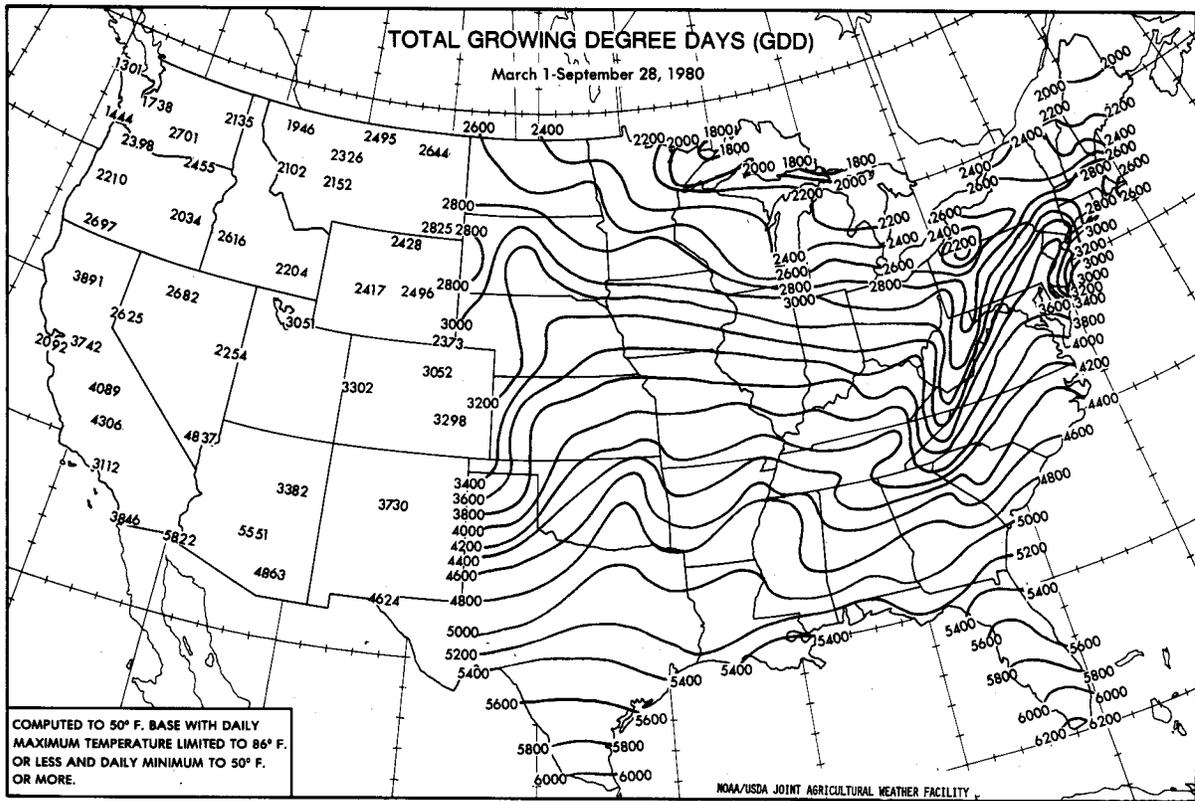
Soil moisture 9% very short, 37% short, 52% adequate, 2% surplus. Corn 95% mature with 38% harvested. Last year 8% harvested, average 18%. Tobacco harvest winding down and nearing completion many areas. Housed tobacco curing rapidly. Soybean harvest 13% complete, last year 3%, average 6%; 48% dropping leaves. Sorghum harvest underway. Pastures improving with cooler weather and rains. Winter wheat 10% seeded, mostly cover crop. Apple and pepper harvests underway.

LOUISIANA: Rainfall scattered. Temperatures 4 to 8° above normal. Extremes: 56 and 101°.

Soil moisture short. Fieldwork: 5.7 days suitable. Corn harvested 94%, 91% 1979, 85% average. Cotton poor; bolls open 78%, 41% 1979, 56% average; harvested 17%, 0% 1979, 7% average. Rice harvested 92%, 90% 1979, 92% average. Sorghum turning color 94%; ripe 82%, 78% 1979; harvested 71%, 69% 1979, 82% average. Soybeans poor to fair; leaves turning 68%, 54% 1979; shedding 54%, 31% 1979; harvested 8%, 4% 1979, 11% average. Sugarcane fair to good; planted 54%, 60% 1979, 53% average. Vegetables poor. Sweetpotatoes harvested 61%, 58% 1979, 56% average. Pecans poor to fair. Pastures poor. Haying limited. Final cutting 71%. Wheat planted 7%, 17% 1979. Livestock fair. Supplemental feeding continued.

MARYLAND & DELAWARE: Temperatures averaged 7° above normal. Highs low to mid 80's, lows in 60's. Precipitation widespread.

Corn silage 90% cut, two weeks ahead of schedule. Corn grain, 40%, last year 25%, normal 33%. Soybeans 65% yellowed, 30% shed leaves, last year 40% yellowed, 20% shed leaves. Tobacco 95% harvested, last year 100%. Barley, wheat and rye seeded 30%. Oats planted 10%. Soil moisture short to adequate. Pastures short. Nearly 6.0 days suitable for fieldwork.



MICHIGAN: Temperatures ranged 7 to 9° below normal over Upper to 1 to 3° below normal over extreme southern Lower. Temperatures were warm early in week, marked cooling trend toward end of week. General precipitation with heaviest amounts reported across central Lower and southwest Upper.

Rains slow harvest. Three days suitable for fieldwork. Conditions improved by weekend. Soil moisture supplies generally surplus. Corn 55% mature, 33% last year, 51% average, 2% harvested, none last year, 3% average. Corn silage 35% harvested, 44% last year, 55% average. Soybeans 55% shed, 65% last year, 75% normal, 1% harvested, none last year, 3% normal. Dry beans 45% harvested, 76% last year, 62% normal. Potatoes 50% dug, 54% last year, 50% average. Winter wheat 15% planted, 54% last year, 35% normal. Hay 60% third cut, 84% last year, 66% normal. Apple picking well underway. Grape harvest started. Onion harvest winding down. Other vegetable harvests near completion.

MINNESOTA: Temperatures averaged 4 to 7° below normal. Precipitation averaged near normal in the central and east central districts, 0.25 to 0.50 in. below normal elsewhere. Precipitation totals were light in all districts with most stations reporting 0.50 in. or less.

Frost set in but little damage crops. Mid-week rains kept fields wet and hindered fieldwork. Heavy frost welcome to kill weeds and promote harvest. Sunny weather needed to dry crops. Topsoil moisture 31% surplus, 62% adequate, 7% short. Field corn: Mature 87%, 1979 38%, normal 80%; harvested 3%, 1979 0%, normal 9%; silage cut 58%, 1979 26%, normal 70%. Soybeans: Mature 82%, 1979 41%, normal 71%; harvested 8%, 1979 8%, normal 20%. Harvested: Sunflowers 12%, 1979 5%, normal 20%; flax 55%, 1979 68%, normal 79%; potatoes 50%, 1979 47%,

normal 54%; sugarbeets 2%, 1979 2%, normal 6%. Seeded: Winter wheat 90%, 1979 84%, normal 81%; winter rye 83%, 1979 82%, normal 77%.

MISSISSIPPI: Temperatures near normal. Extremes: 50 and 98°. Greatest 24-hour rainfall 3.50 in.

Soil moisture short to very short. Fieldwork: 5.3 days suitable. Harvest in full swing for cotton and soybeans. Rains came too late to help most crops but pastures and planting of winter grazing did benefit. Hay 91% harvested, 87% 1979, 86% average. Sorghum silage 94% harvested, 80% 1979. Peanuts 65% harvested, 58% 1979, 57% average. Corn 72% harvested, 50% 1979, 45% average; poor to very poor condition. Sweet-potatoes 36% harvested, 41% 1979, 42% average. Winter wheat 6% planted, 18% 1979, 25% average. Soybeans 7% harvested, 4% 1979, 7% average; 27% mature, 18% average; 67% shedding, 60% 1979, 56% average; poor to very poor condition. Sorghum 92% ripe, 81% 1979; 52% harvested, 38% 1979, 53% average. Cotton 99% open bolls, 88% 1979, 82% average; 11% harvested, 2% 1979, 10% average; condition fair to poor. Rice 88% mature, 91% 1979; 62% harvested, 55% 1979, 48% average; fair condition. Pastures poor condition. Pecans poor condition.

MISSOURI: Temperatures averaged near normal. Rainfall ranged from none to near 2.50 in.

Fieldwork: 5.7 days suitable. Corn 90% mature, last year 75%. Corn 46% harvested, last year 17%, normal 28%. Grain sorghum 89% coloring. Grain sorghum 69% mature, last year 67%, normal 68%. Grain sorghum 35% harvested, last year 16%, normal 24%. Soybeans 80% turning color, last year 72%. Soybeans 39% mature, last year 34%, normal 35%. Soybeans 12% harvested, last year 9%, normal 8%. Winter wheat 21% seeded, last year 18%. Cotton 87%

with open bolls, last year 65%, normal 63%. Cotton 40% harvested, last year 1%, normal 4%. Fall plowing 6% complete, last year 6%. Condition of pasture poor to fair. Topsoil moisture supplies short.

MONTANA: Generally dry except over portions of northeast, southwest, and south central. Portions of the northeast received 0.50 to 1.00 in. of rain. Temperatures were mild, changing from cool first of week to warm by end of week. Temperatures ranged 4° below normal northeast to near normal over south central. Freezing temperatures occurred over almost the entire area. Extremes: 82 and 19°.

Topsoil moisture short in central and north central parts. Subsoil adequate west, mostly short elsewhere. Days suitable for fieldwork, 5.0. Winter wheat planted 70%. Winter wheat germination fair to good. Winter wheat condition good. Crop harvesting to date, percent followed by previous year and average: Spring wheat 90%, 95%, 90%; barley 90%, 95%, 90%; oats 95%, 95%, 90%; corn silage 85%, 80%, 75%; dry beans 55%, 90%, 65%; potatoes 10%, 25%, 30%; sugarbeets 5%, 10%, 5%. Nearly 40% of the cattle and 45% of the sheep have been moved from summer ranges. Stock water supplies mostly short east, central, and north central, mostly adequate elsewhere. Hay and grain supplies for winter short east, mostly adequate elsewhere.

NEBRASKA: Temperatures 2° below normal. Precipitation 0.25 in. over Panhandle and north central; heaviest amounts over northeast with 0.80 in.; remainder less than 0.10 in.

Dryland corn mostly fair to poor. Irrigated corn fair to good. Corn 90% mature, last year 60% and normal 85%; harvested 15%, 1% last year and 5% normal. Ear droppage heavy across east. Soybeans mostly fair to good; turning 97%, 98% last year and 95% normal; shedding 75%, last year 75% and 80% normal; harvesting 15% complete, 10% last year and 10% normal. Sorghum fair to good; 90% mature, well ahead of 50% last year and 65% normal; harvested 25%, last year 3% and 5% normal. Wheat seeding 90%, 90% last year and 75% normal; emerged 60%. Dry topsoil conditions limiting growth. Alfalfa condition mostly fair to good. Topsoil moisture 88% short and 12% adequate, the same as last year. Subsoil moisture 81% short and 19% adequate. A year ago, subsoil supplies 54% short and 46% adequate. Pasture and range feed supplies mostly short to adequate. Days suitable 6.8.

NEVADA: Cool, cloudy early. Warming trend rest of week. Average temperatures showed mixed departure from normal. Little above normal west and south, but below normal north and east. Extremes: 17 and 97°. Only trace precipitation northeast early in week.

Digging 1980 potato crop gaining momentum. Livestock continue move off high elevations.

NEW ENGLAND: Wet north, dry south. Total rainfall greater than 1.00 in. north to about 0.10 in. south. Above normal temperatures beginning of week, below normal latter half. Scattered frost reported.

Fieldwork: 6.0 days suitable. Potato harvest delayed by rains northern Maine. Tuber quality reported good. Corn harvest continuing. Quality, quantity generally good. Hay harvested mostly as green chop or haylage. Apple harvest a week behind in some areas. Color development slow. Vegetables remain in good supply though warm weather crops nearly finished. Cranberry harvest 20% complete with berries of excellent quality and color. Soil moisture generally short to mostly adequate north. Grazing conditions generally adequate.

NEW JERSEY: Temperatures averaged near normal. Extremes: 32 and 94°. Rainfall averaged 0.21 in. north, 0.53 in. central, 1.16 in. south. Soil moisture, in percent of field capacity, averaged: 42 north, 54 central and 54 south.

Fieldwork: 5.4 days suitable. Soil moisture continues critically short in northern counties. Rain needed for pastures, alfalfa fields, fall seeded grains, cover crops and water harvest of cranberries. Harvest of fall vegetables under irrigation increasing. Irish potato harvest about complete. Sweetpotato harvest increasing. Peaches continue to move to market. Apple harvest active. Cranberry harvest general. Field corn and soybean harvest increasing. Pastures greening in southern counties that received rain.

NEW MEXICO: Soil moisture remains short in the northeast with an adequate supply elsewhere. Irrigated crops in good condition. Dryland crops continue poor to fair condition. Cotton remains good. Recent rains caused some second growth in plants. Alfalfa hay harvest again slowed due to rains and heavy morning dew. Winter wheat seeding slowed some areas due to rains. Irrigated crop is 90% planted and 75% emerged. Dryland crop is 75% planted and 60% emerged. Irrigated grain sorghum in fair to good condition with some grain harvest. Corn continues good most areas. Silage harvest advanced most areas and grain harvest continued on the east side. Ranges in fair to good condition with moderate grass development. Livestock continue good.

NEW YORK: Rainfall above normal in north, below normal south. Coastal areas very dry. Hard frost in most parts of north country on 28th.

Corn silage harvest 37% done, 41% 1979, 35% average. Grain corn harvest beginning all areas. Third cutting alfalfa 74% in, 69% 1979, 66% average. Harvest of Long Island potatoes, cauliflower active. Orange County lettuce, celery nearly finished. Harvest of Upstate vegetable crops active.

NORTH CAROLINA: Temperatures 2 to 6° above normal. Precipitation averaged 0.40 to 2.30 in.

Fieldwork: 5.2 days suitable. Soil moisture: 20% very short, 50% short, 27% adequate, 3% surplus. Conditions: Apples fair to good; cotton, peanuts, sorghum, sweetpotatoes fair; pastures poor to mostly fair; soybeans poor to fair. Harvested: Cotton 23%, 1979 9%, average 5%; sweet potatoes 27%, 1979 33%, average 34%; sorghum 36%; soybeans 2%; burley tobacco 93%, 1979 93%, average 85%; corn for grain 74%, 1979 60%, average 60%; corn silage 90%, 1979 85%; peanuts dug 17%, 1979 4%, average 14%; peanuts threshed 8%, 1979 2%, average 9%; apples 61%, 1979 55%, average 54%. Planted: Wheat 3%, 1979 7%. Phenological stages: Cotton open bolls 93%, 1979 49%; corn mature 95%, 1979 96%; soybeans pod set 95%, 1979 90%; soybeans leaves dropped 17%.

NORTH DAKOTA: Weather about normal. A killing frost hit the east on the 26th and 27th. Scattered frost observed in the west. Temperature extremes 22 and 89°.

Continued mostly cool and damp weather delayed small grain harvest again. Almost 50% of the durum unharvested in some north central areas. Combining completion vs. last year and normal: Hard red spring wheat 90, 96, 96; durum 80, 90, 90; barley 91, 99, 99; oats 94, 100, 99 and flax 46, 55, 72. Light frosts became more general but no hard, killing frost has yet

occurred over much of the State. Sunflower: 99% past bloom, 86% have bracts of heads turned yellow or beyond, 48% have bracts of heads turned brown or beyond and 3% were combined. Soybean and dry edible bean harvest lags at only 7 and 28% complete. Potato digging 42% complete. Sugarbeet harvest began on September 24 in southeast corner. Winter wheat and rye planting almost complete. Hay harvest and movement to headquarters continues. Livestock in good condition.

OHIO: High temperatures early last week reached into the 80's. Cool air spread late in the week, and average temperature range was 33 to 91°. Precipitation was normal most locations. The range was 0.02 to 1.01 in.

Row crops matured sooner than normal, and favorable weather permitted producers to complete harvest early. Corn moisture running in the 20 percents. Above normal weed growth in soybean fields causing some harvesting problems. Winter wheat seeding slightly behind normal. It is waiting on row crop harvesting and being delayed some locations by dry soil. Corn that has matured 90%, 80% 1979, 80% average. Corn harvested 15%, 3% 1979, 5% average. Soybeans that have matured 65%, 50% 1979, 55% average. Soybeans harvested 20%, 5% 1979, 10% average. Potatoes harvested 65%, 60% 1979, 60% average. Corn silage harvested 75%, 60% 1979, 65% average. Wheat planted 15%, 20% 1979, 20% average. Days favorable 6.0. Pasture condition fair to good. Soil moisture 11% short, 84% adequate, 5% surplus.

OKLAHOMA: Week averaged wet and cool. Temperatures ranged from 2° below normal in east to 6° below normal in west. Rains averaged from 0.25 in. in Panhandle to a much needed 8.00 in. plus in southeast. Except in west central and north-west good rains of 1.50 to 3.00 in. or better were the rule. Some flash flooding occurred in south central and southeast.

General rains fell, major wheat producing areas didn't receive as much and still critically short moisture. Wheat seedbeds prepared 85% 1980, 100% 1979, 95% average; wheat planted 25% 1980, 35% 1979 and average; wheat up to stand 10% 1980, 15% 1979, 10% average. Sorghum milk to dough 95% 1980, 100% 1979 and average; sorghum mature 65% 1980, 1979 and average; sorghum harvested 25% 1980, 10% 1979, 15% average. Cotton open bolls 65% 1980, 30% 1979, 35% average; cotton harvested 5% 1980, 5% 1979, zero average. Fieldwork: 6.5 days suitable.

OREGON: Temperatures varied from 3 to 4° above normal in the west to 1 to 6° below normal in the central and eastern sections. Precipitation averaged 0.60 in. along coast, 0.30 in. in the Willamette Valley and up to 0.10 in eastern section.

Soil moisture supplies short only in south-western corner. Fall planting of winter wheat 35%, 23% 1979. Red clover harvest about 50%, yields fair. Last cutting alfalfa in east. Alfalfa seed harvest continuing. Winter pears being picked in Hood River. Newtown apples started. Prune harvest in Willamette Valley continues. Filberts dropping. Potato harvest continuing. Sweet corn winding down. Livestock condition good. Range and pasture condition mostly fair.

PENNSYLVANIA: Hot, humid Monday, cool, sunny and dry remainder of week. Temperatures near to 3° below normal for coolest week since early June. Extremes 93 and 27°. Widely scattered showers and thunderstorms produced less than

0.50 in. rainfall all except isolated areas west where 1.00 to 1.50 in.

Five days suitable. Soil moisture short to adequate. Tobacco harvest virtually complete, same as last year. Potato harvest 75% complete, last year 77%. Ensilage corn 62%, last year 43%. Corn 43% mature, and 7% harvested; last year 23% mature and 2% harvested; average 31% mature and 3% harvested. Fall plowing 70%; last year 75%. Barley planted 56%, last year 65%. Wheat planted 55%, last year 42%. Third cutting alfalfa 87%, same as last year. Fourth cutting alfalfa 46%, last year 47%. Hay quality good to fair. Feed from pasture below average to average.

PUERTO RICO: Island average rainfall 2.19 in. or 0.36 in. above normal. Temperatures averaged about 82° on coasts and 75 to 78° Interior Divisions.

SOUTH CAROLINA: Temperatures varied from unusually hot during the first part of week to below normal by weekend. Scattered rain occurred during midweek and relatively heavy rains by weekend.

Rains too late for most crops. Corn condition poor, 88% harvested, 80% year ago, 79% average. Cotton harvest very active, condition poor, 35% harvested, 6% last year, 10% average. Soybean condition poor, 44% leaves turning color, 18% last year, 37% average; 24% shedding leaves, 9% last year, 17% average; 3% mature, 2% last year, 5% average. Pastures, fall hay, poor condition, but recent rains should help; hay cut at 67%, 70% last year, 66% average. Seeding of winter grazing at 27%, 46% year ago, 38% average. Apple harvest 73%, 83% year ago, 84% average.

SOUTH DAKOTA: Rainfall light, generally less than 0.10 in. Temperatures ranged 3 to 7° below normal. Extremes: 92 and 23°. Temperatures dipped to freezing or below many areas.

Harvesting picked up as additional acreage reached maturity. Seeding of winter wheat and rye nearing completion. Moisture needed in much of the winter wheat area to promote additional plant growth. Topsoil moisture adequate parts of north central, northeast and counties along eastern border. Critically short supplies over most of the West River area and a small part of central and east central. Short elsewhere. Hay and forage supplies adequate over eastern one-third, short to critically short elsewhere. Soybeans shedding leaves 92%, 84% 1979, 92% average. Corn mature 84%, 89% 1979, 96% average. Soybeans mature 61%. Sunflowers mature 70%. Grain sorghum mature 60%. Grain sorghum colored 97%, 94% 1979, 97% average. Soybeans harvested 18%, 7% 1979, 13% average. Grain sorghum harvested 11%, 2% 1979, 13% average. Corn for grain harvested 6%, 0% 1979, 6% average. Winter wheat seeded 95%, 92% 1979, 90% average.

TENNESSEE: Rain fell over virtually the entire area. Highest amounts in west and mid areas. Temperatures near normal, ranging -1 to +4°.

Fieldwork: 4.4 days suitable. Soil moisture 57% short, 39% adequate, 4% surplus. Pastures mostly poor, cattle fair. Corn 90% mature, 1979 76%, average 78%, 45% harvested, 1979 15%, average 16%. Cotton 95% open bolls, 1979 35%, average 41%, 40% harvested, 1979 0%, average 11%. Soybeans 15% mature, 1979 3%, average 7%, 2% harvested, 1979 0%, average 2%. Burley tobacco 90% harvested, 1979 95%, average 92%. Lespedeza hay 90% harvested, 1979 and average 82%. Winter wheat 25% seeded, 1979 18%, average 24%.

TEXAS: Weather: Numerous showers, thundershowers northern half State. Temperatures below normal Panhandle, North, East Texas. Precipitation normal Statewide, except Coast.

Crops: Scattered showers much needed moisture small grain fields; interrupted corn, cotton and sorghum harvest. Dryland cotton fields defoliated Panhandle. Some fields Plains, Cross-Timbers plowed under. Bollworm activity decrease. Stalk destruction active Central Texas southward. Corn harvest active High Plains. Sorghum harvest progressing rapidly High Plains. Fields grazed, baled Edwards Plateau. Wheat, oat planting behind schedule. Dry weather delayed land preparation, seeding; producers waiting for rain. Fields dusted in benefit recent rains. Producers Panhandle pre-watering fields in preparation wheat planting. Peanut fields Cross-Timbers improved recent rains. Rains too late for many dryland fields; plowed up, baled. Cooler temperatures, scattered showers improved hay conditions. East Texas prospects another cutting. Irrigated alfalfa cut, Low Plains, Trans-Pecos. Cotton open bolls 53%, 40% 1979. Cotton harvested 23%, 12% 1979, 16% average. Sorghum mature 61%, 76% 1979. Sorghum harvested for grain 76%, 68% 1979, 68% average. Wheat planted all purposes 36%, 48% 1979, 43% average. Wheat emerged 13%, 23% 1979. Corn for grain harvested 61%, 57% 1979, 56% average. Peanuts harvested 22%, 37% 1979, 34% average. Soybeans harvested 7%, 2% 1979, 2% average.

Commercial vegetables: Lower Rio Grande Valley, planting broccoli, cauliflower, onions, cabbage, lettuce continued. Harvest green peppers continued. Oranges, grapefruit sizing well. Coastal Bend cucumbers making good progress. San Antonio-Winter Garden area, cabbage, green peppers progressing well, tomatoes blooming, beginning to set fruit. Harvest of cucumbers for pickles active. East Texas, harvesting of tomatoes, peppers, watermelons continued. Sweetpotato harvest active. Trans-Pecos area, harvest of chili peppers, tomatoes, squash, black-eyed peas, green beans continued. High Plains, harvest of green peppers, carrots, cucumbers, watermelons, green beans active. Pecans hard dough stage.

Range and livestock: Range, pasture conditions improved. Recent rains beneficial, still need additional moisture. Some hay baling scattered areas South Texas. Livestock fair to good. Supplemental feeding continuing.

UTAH: Few isolated light showers principally southeast portion. Accumulated amounts moisture very light. Average temperatures ranged from near normal to 7° below.

First frost of season many sections. Damage to corn ranged from none to complete kill. The crop was short of maturity, when frost hit. Fieldwork active all week. Major activities included hay harvest, cutting corn silage, planting fall grain and moving livestock to fall ranges. Third crop hay harvest 80% complete. Corn silage 30% harvested and winter wheat 68% planted. About 18% of cattle and 20% of sheep have moved from summer ranges. Both cattle and sheep in good condition.

VIRGINIA: Well above normal temperatures first of week gave way to well below normal by end of week. Average temperatures in the upper 60's, slightly above normal. Extremes: 99° to upper 30's. Rainfall moderate occurring all areas during middle of period, averaging about 0.75 in.

Topsoil moisture short to adequate. Fieldwork: 4.9 days suitable. Corn: 95% mature; 80% silage cut; 50% grain combined, 40% 1979, 41% average. Small grains seeded: Wheat 5%, 3% 1979, 8% usual; barley 10%, 10% 1979, 21% average; winter oats 20%, 10% 1979, 26% usual.

Soaking rains needed for proper small grain germination. Peanuts 4% dug, less than 1% 1979, 14% average; 2% combined, 0% 1979, 5% usual. Soybeans 2% combined, less than 1% 1979, 1% average. Eastern Shore sweetpotatoes 15% dug, 20% 1979. Apples 35% picked, 45% 1979, 48% average; harvest delayed for cooler weather to promote coloring. Fall cucumber, snap bean picking progressing on Eastern Shore. Pastures very poor except rated good southwest.

WASHINGTON: West: Average temperatures near normal except 6° below at Vancouver. Precipitation varied from much below on the coast to 2.85 in. at Stampede Pass and a little above at Longview and Sequim. Cucumbers, celery, cabbage, carrots, lettuce, cauliflower, tomatoes, beet seed, and seed potatoes harvests continue. Southern counties began sweet and silage corn harvesting, with activity expected to increase next week. Blueberry picking virtually completed. Pastures greening up. Other activities included green chopping and fall weed spraying.

East: Average temperatures 2 to 5° below normal. Very little precipitation except slight amount east slopes of Cascades and near normal amounts in far eastern part of the section. D'Anjou pears and Red and Golden Delicious apples, were being picked. Quality, size, and shape excellent. Grapes, hops, potatoes, dry beans, dry peas, sweet corn, and silage corn harvests also progressed. Third and fourth cuttings alfalfa hay being baled. Harvest of 1980 small grains nearing completion. Seeding of the 1981 crop just starting in Grafield, Franklin, Stevens, and Spokane Counties but almost complete in Adams, Lincoln, and Douglas Counties. Some reseeded taking place, though not extensive. Soil moisture adequate to good. Hay and forage supplies adequate.

WEST VIRGINIA: Temperatures mixed, above normal beginning period, below normal at end. High 98°, low 30°. Scattered frost mountainous areas. Precipitation near normal.

Fieldwork: 4.1 days suitable. Soil moisture adequate, shortages in eastern Panhandle. Corn mostly good, harvest for grain, 25% complete, 13% 1979. Small grain planting: Barley 31% complete, 39% 1979; wheat 25% complete, same 1979. Hay, 2d cutting 90%, 80% 1979, 3d cutting 65%, 57% 1979. Tobacco 85% banded, 89% 1979. Potatoes 82% dug, 80% 1979. Pasture mostly good. Fruit fair.

WISCONSIN: A cooler, drier week. Temperatures averaged about 6° below normal. Extremes: 71 and 21°. Frost north morning 26th. Rainfall below normal for first time in eight weeks. Weekly totals ranged from 0.30 in. to 0.90 in., heaviest north central.

Harvesting limited by wet fields. Fieldwork: 2.0 days suitable. Corn silo filling 18% done, 1979 25%, normal 55%. Chopping possible only on light soils or higher ground. Grain corn drying good, early varieties ready for harvest when field conditions permit. Grain corn 1% harvested, 1979 1%, normal 2%. Soybeans 60% shedding leaves, 1979 60%, normal 50%. No soybeans harvested yet. Some third crop hay to be made yet if weather favorable. Pastures very good but soft. Wet fields slowing planting of winter wheat, some seeded by airplane. Still some oats and straw out in fields. Fall plowing 5% done, 1979 5%, normal 10%. Able to plow on well drained soils and higher land. Potato and vegetable harvest hampered by wet soils, aban-

(continued on page 20)

International Weather and Crop Summary

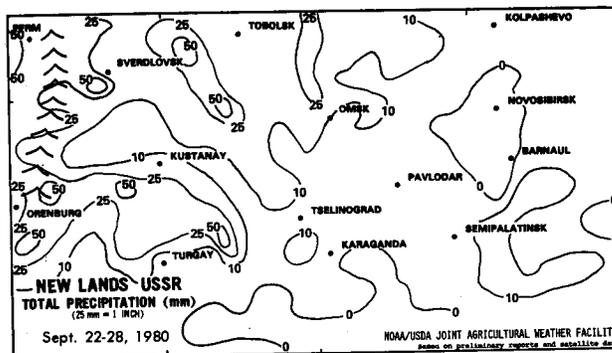
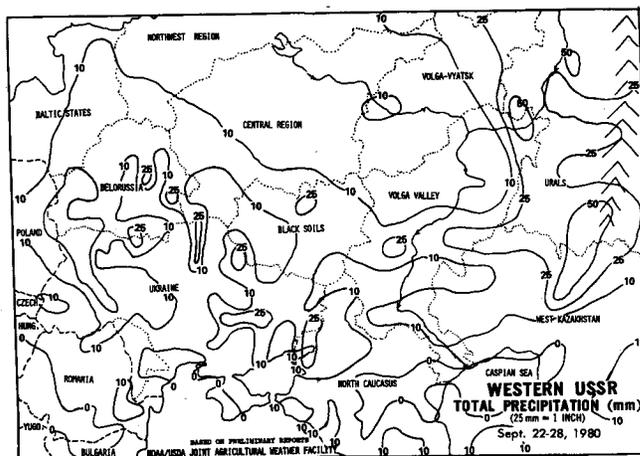
September 22 - 28

HIGHLIGHTS:

- USSR:** Sowing winter grains...soil moisture good to surplus.
Harvesting winter grains in northern New Lands...too wet in some areas.
 - EUROPE:** Sowing winter grains in the north...favorable conditions.
 - CHINA:** Winter wheat sowing season in the north*...conditions too dry.
Major harvest season in central areas*...favorable weather.
 - INDIA:** Harvesting autumn rice in the north*...only scattered showers.
Cotton flowering and setting bolls in central areas*...conditions too dry.
 - THAILAND:** Wet season crops in late vegetative growth*...monsoon tapers off in west, continues in east.
 - AUSTRALIA:** Winter wheat in late vegetative stage*...moisture stress worsens.
 - ARGENTINA:** Winter wheat crop in vegetative stage and preparation began for spring sowing*...some shower activity but more needed.
 - BRAZIL:** Winter wheat developing and spring sowing begins*...favorable weather.
 - CANADA:** Harvest operations continue...scattered light showers and cool weather.
 - MEXICO:** Citrus sizing in the northeast...beneficial rains finally arrive.
- *Based on normal crop calendar information.

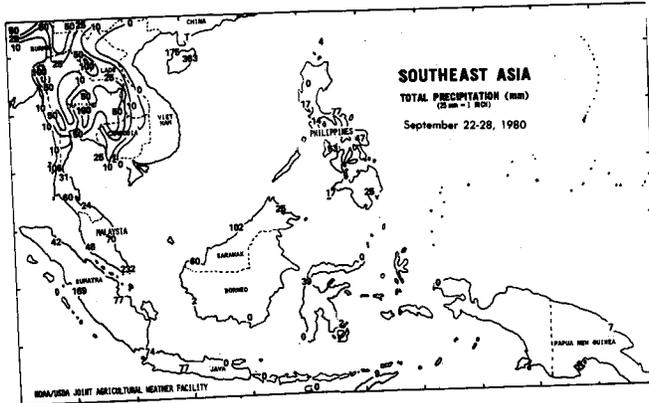
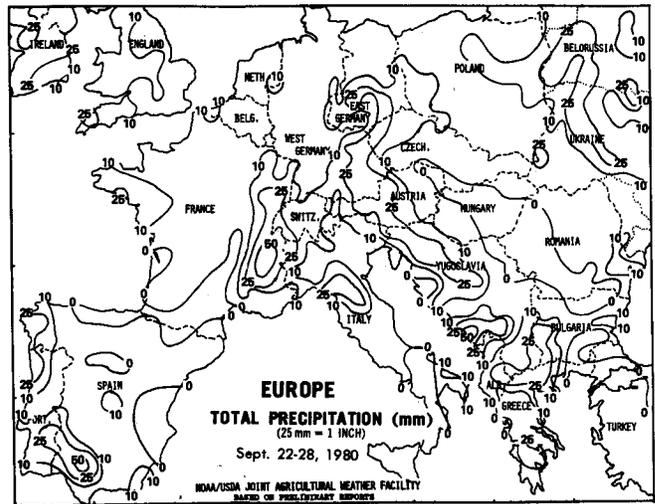
USSR. Much of European USSR received above-normal rainfall. Increasing rainfall in Belorussia again interfered with winter grain harvesting; not only may a substantial portion of grain go unharvested there this year, but area shortfalls in winter grain sowing are also expected. Late spring grain harvesting in the upper Volga Valley and northern Urals continued to be disrupted by persistent wet weather, but soil moisture reserves (for next spring) improved in the southern Urals. Rainfall in the eastern Ukraine slackened somewhat, and although totals over much of the Ukraine remained above normal, winter grain sowing probably benefited from the moisture. Temperatures dipped below normal over most of the winter grain belt, with light frost occurring at many central and northern locations. The frost did not damage winter grains but may have hurt spring-planted crops which had lagged in development.

In the New Lands, fronts coming across the northern Urals spread wet weather over the northwestern quadrant, creating unfavorable harvest conditions during most of the week. The northeastern quadrant had good harvest weather. Abundant rainfall in the southwest improved soil moisture for next year's crop.



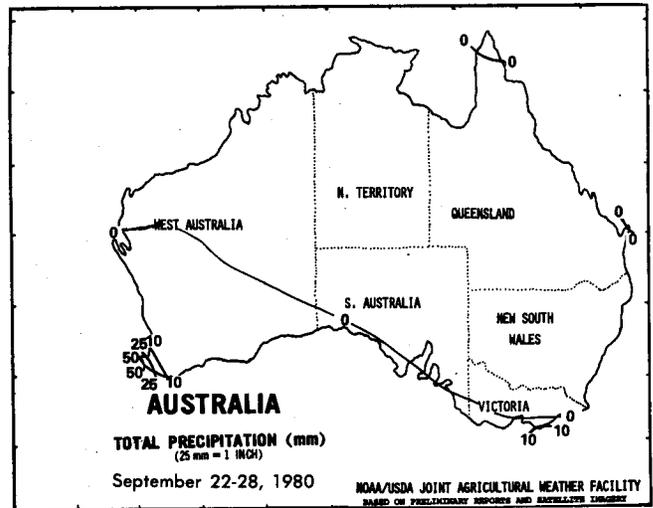
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
based on preliminary reports and satellite data

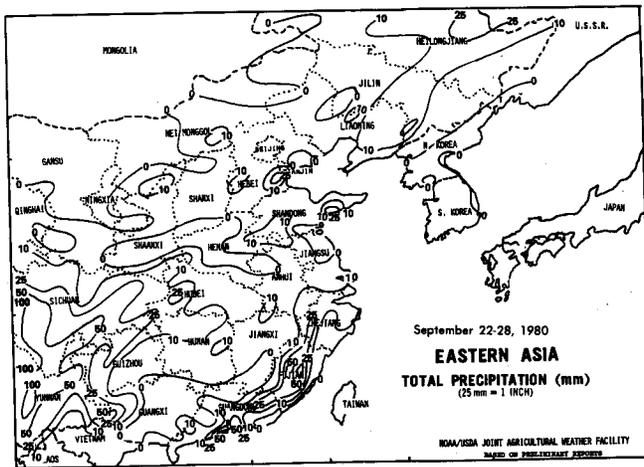
EUROPE. A front moving through at the beginning of the week dropped relatively heavy rainfall in the mountainous central portions of the region. However, most major agricultural areas received below-normal rainfall, which together with above-normal temperatures, allowed harvesting of spring crops and sowing of winter grains to continue in the north. Relatively wet weather in England interfered with harvesting of late spring grains but favored germination and early development of winter grains. At week's end, another front was advancing over the Iberian Peninsula.



SOUTHEAST ASIA. Showers diminished in frequency and intensity in northern and western portions of Thailand, although near-normal rainfall occurred in the east. The wet-season crops, such as rice and sugarcane, appear to have sufficient moisture supplies for reasonably good yield prospects. However, the withdrawal of the monsoon rains at this time would diminish hopes for complete recovery of reservoir levels to meet the needs for dry-season crop irrigation and hydroelectric power generation.

AUSTRALIA. Growing conditions for winter wheat remain unfavorable as virtually no rainfall occurred again this week in major crop areas. Soil moisture reserves are being depleted in West Australia while yield prospects continue to deteriorate in New South Wales and Queensland. Lack of moisture during the late vegetative stage when head formation occurs and during the flowering period which follows will lead to substantial crop damage. Rainfall in October will be crucial for proper crop development.

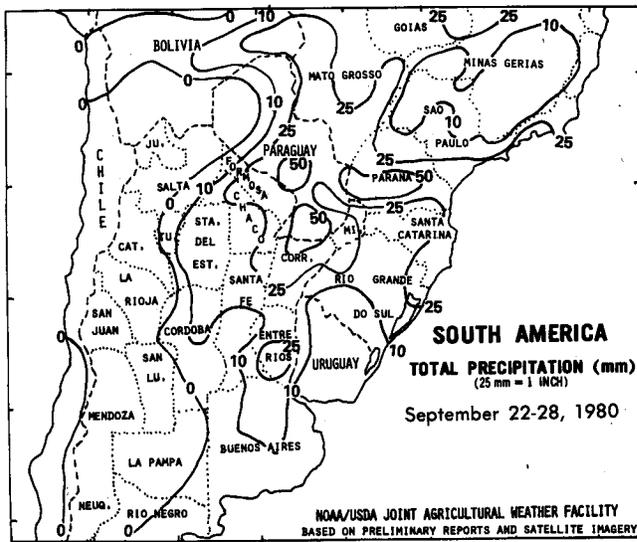
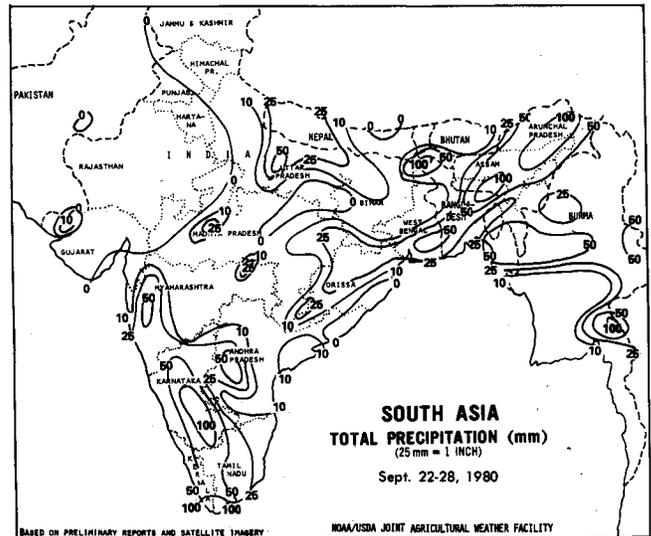




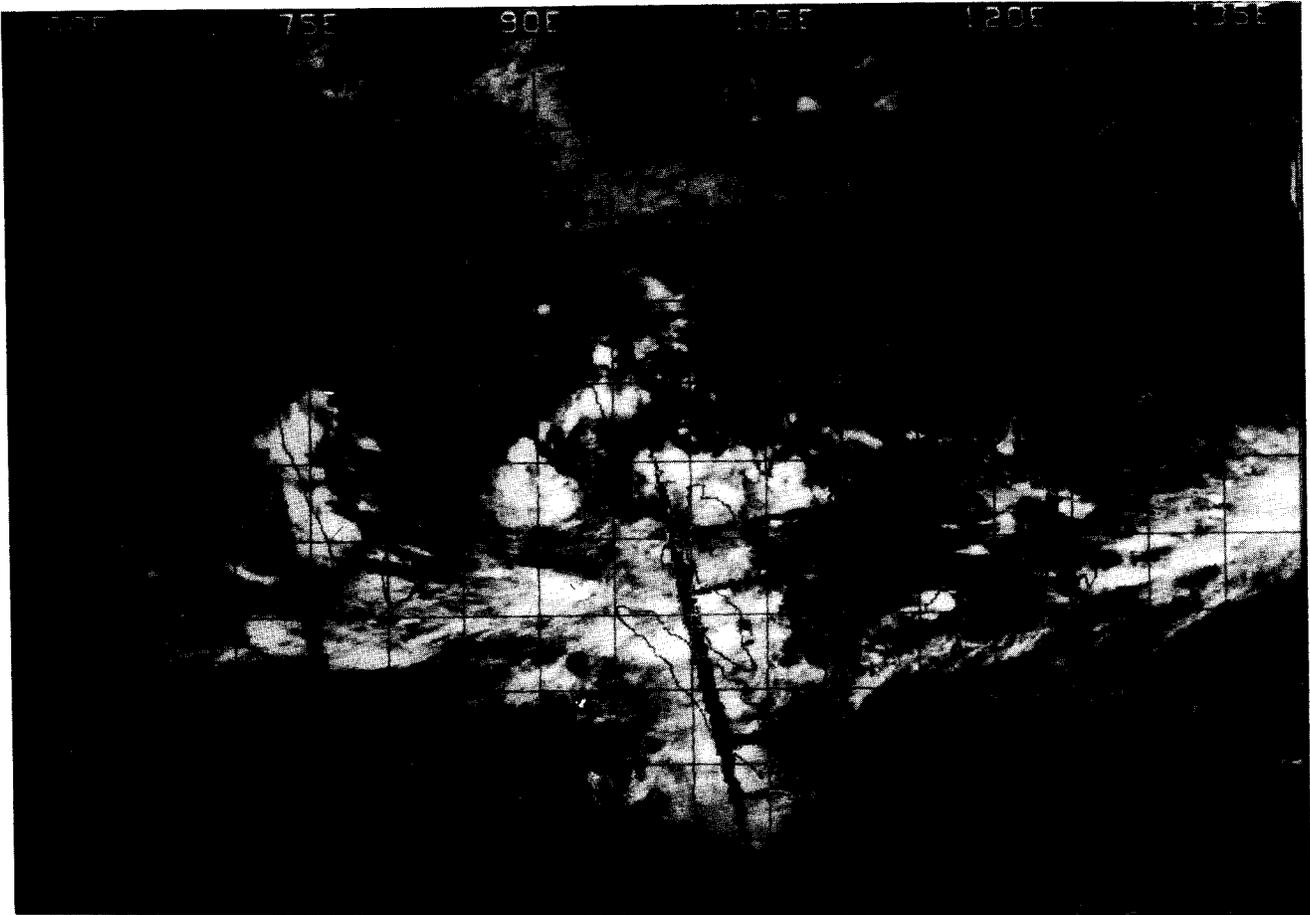
CHINA. Mostly dry weather prevailed in the North China Plain and over most of the Yangtze Valley, permitting harvesting to advance rapidly, but conditions in the north have not been favorable for sowing winter wheat. Rainfall deficits, which developed in July in the northern portions of the North China Plain, persisted in many areas through August and were not eliminated in September. Conditions may even be less favorable than a year ago, when farmers had difficulty sowing winter grains north of the Yellow River. Elsewhere, near-normal rainfall occurred over much of the Manchurian Valley, the Sichuan Valley, and southern coastal areas.

SOUTH ASIA. The heaviest rainfall continued to shift further eastward in the region, indicating a further retreat of the monsoon. Only scattered, post-monsoon showers occurred in central parts of India. The rain in the east will benefit "winter-harvested" rice. Interior peninsular areas of India saw a continued increase in rainfall, perhaps too late for full-harvested crops. A serious moisture deficit persisted in the vicinity of Gujarat, where yields of both cotton and groundnuts may suffer.

For comparison of the current withdrawal of the monsoon with the normal date, see maps on page 17.

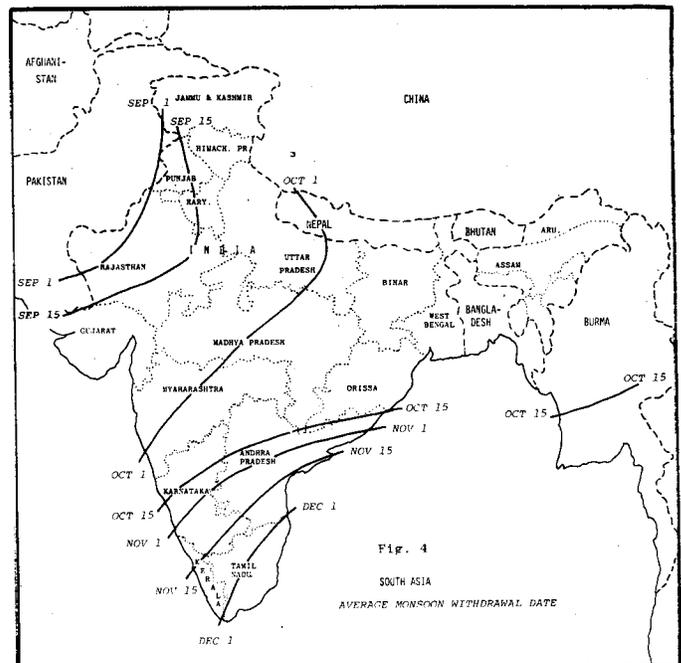


SOUTH AMERICA. Scattered light showers generally produced less than 10 mm in the major wheat areas of Buenos Aires, La Pampa, Cordoba, and most of Santa Fe. However, southern Santa Fe and Entre Rios, as well as the wheat-growing areas of Brazil, fared better with 10 to 25 mm in most locations. Strong northerly winds and warm temperatures preceded the onset of showers late in the week. Growing conditions remain favorable in Brazil; however, moisture is needed in Argentina. The winter wheat crop is advancing through vegetative growth and soon will enter the moisture-sensitive reproductive period. Further, the topsoil is very dry and rain is needed for the sowing of maize, soybeans, and other crops.



The southwest monsoon receded earlier than normal this year, but not as early as last year when it virtually disappeared by late August. The accompanying photo, taken by the TIROS satellite on September 29 at about 7 p.m. local time over south-east Asia, shows the monsoon continuing over southern Indochina but absent in India. The rains falling over southern India are typical of post-monsoonal conditions.

Normally, the monsoon is expected to withdraw rapidly from India beginning in the northwest in early September. The average withdrawal dates of the monsoon are shown on the map at the right. While rains generally will continue after the withdrawal, they are usually spotty and less intense.



CROP PROGRESS

FOR WEEK ENDING SEPT 28, 1980

	CORN % MATURE		
	1980	1979	AVG.
COLO	59	45	73
GA	100	NA	NA
ILL	99	91	96
IND	90	75	75
IOWA	95	85	93
KANS	85	70	80
KY	95	80	80
MICH	55	33	51
MINN	87	38	80
MO	90	75	74
NEBR	90	60	85
N C	95	96	NA
OHIO	90	80	80
PA	43	23	31
S DAK	84	89	96
VA	95	NA	NA
WIS	95	75	90
17 STATES	89	NA	NA
EXCL. STATES WITH NA	89	72	84

	CORN % HARVESTED		
	1980	1979	AVG.
COLO	5	0	12
GA	87	75	65
ILL	20	4	9
IND	12	4	7
IOWA	13	4	9
KANS	40	20	25
KY	38	8	18
MICH	2	0	3
MINN	3	0	9
MO	46	17	28
NEBR	15	1	5
N C	74	60	60
OHIO	15	3	5
PA	7	2	3
S DAK	6	0	6
VA	50	40	41
WIS	1	1	2
17 STATES	18	7	12

	WINTER WHEAT % PLANTED		
	1980	1979	AVG.
CALF	0	0	NA
COLO	85	88	90
IDA	33	60	46
ILL	10	10	11
IND	15	12	13
KANS	50	50	45
MO	21	18	NA
MONT	70	70	75
NEBR	90	90	75
OHIO	15	20	20
OKLA	25	35	35
OREG	35	23	NA
S DAK	95	92	90
TEX	36	48	43
WASH	47	46	NA
15 STATES	45	48	NA
EXCL. STATES WITH NA	48	52	49

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

	SOYBEAN % DROPPING LEAVES		
	1980	1979	AVG.
ALA	58	35	NA
ARK	41	NA	NA
GA	30	NA	NA
ILL	90	86	86
IND	90	80	80
IOWA	95	78	89
KANS	60	55	NA
KY	48	27	38
LA	54	31	NA
MICH	54	65	75
MINN	96	91	96
MISS	67	60	56
MO	39	34	35
NEBR	75	75	80
N C	17	NA	NA
OHIO	90	60	85
S C	24	9	17
TENN	40	NA	NA
18 STATES	68	NA	NA
EXCL. STATES WITH NA	78	70	73

	SOYBEAN % HARVESTED		
	1980	1979	AVG.
ALA	11	2	NA
ARK	3	1	4
GA	2	1	2
ILL	24	30	28
IND	15	10	10
IOWA	15	15	20
KANS	10	5	2
KY	13	3	6
LA	8	4	11
MICH	1	0	3
MINN	8	8	20
MISS	7	4	7
MO	12	9	8
NEBR	15	10	10
N C	2	NA	NA
OHIO	20	5	10
S C	0	0	0
TENN	2	0	2
18 STATES	12	NA	NA
EXCL. STATES WITH NA	12	10	13

THESE 18 STATES PRODUCED 94% OF THE 1979 SOYBEAN CROP.

	SORGHUM % MATURE		
	1980	1979	AVG.
COLO	54	53	57
KANS	40	45	45
MO	69	67	68
NEBR	90	50	65
OKLA	65	65	65
S DAK	60	NA	NA
TEX	81	76	NA
7 STATES	66	NA	NA
EXCL. STATES WITH NA	57	50	54

	SORGHUM % HARVESTED		
	1980	1979	AVG.
COLO	4	0	2
KANS	15	10	15
MO	35	16	24
NEBR	25	3	5
OKLA	25	10	15
S DAK	11	2	13
TEX	76	68	68
7 STATES	41	31	34

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

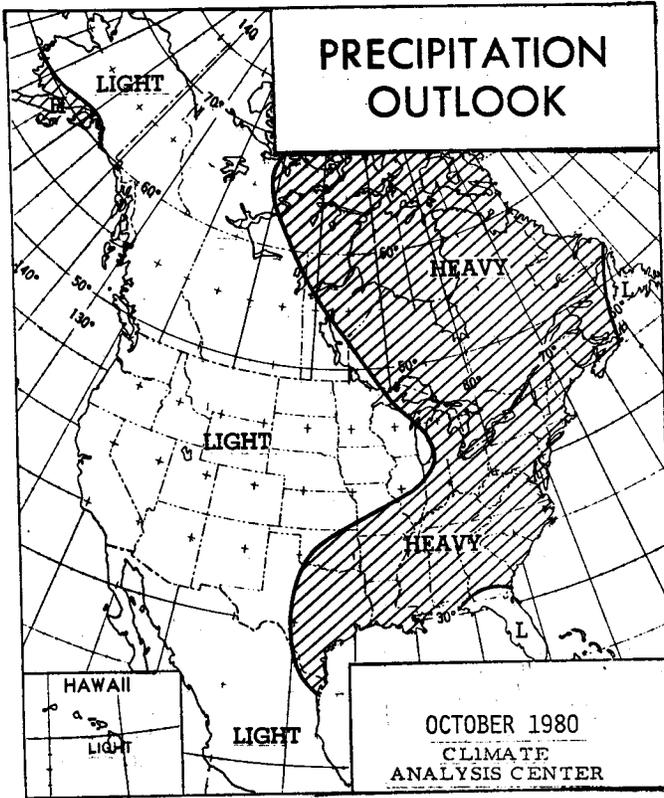
	COTTON % BOLLS OPENING		
	1980	1979	AVG.
ALA	86	36	45
ARIZ	95	NA	NA
ARK	93	41	53
CALF	40	67	NA
GA	94	71	NA
LA	78	41	56
MISS	99	88	82
MO	87	65	63
N MEX	30	30	35
N C	93	49	NA
OKLA	65	30	35
S C	95	84	78
TENN	95	35	41
TEX	53	40	NA
14 STATES	63	NA	NA
EXCL. STATES WITH NA	85	53	57

	COTTON % HARVESTED		
	1980	1979	AVG.
ALA	20	2	8
ARIZ	2	8	5
ARK	20	3	8
CALF	0	4	NA
GA	39	9	10
LA	17	0	7
MISS	11	2	11
MO	40	1	4
N MEX	0	0	0
N C	23	9	5
OKLA	5	5	0
S C	35	6	10
TENN	45	0	11
TEX	23	12	16
14 STATES	18	8	NA
EXCL. STATES WITH NA	20	9	13

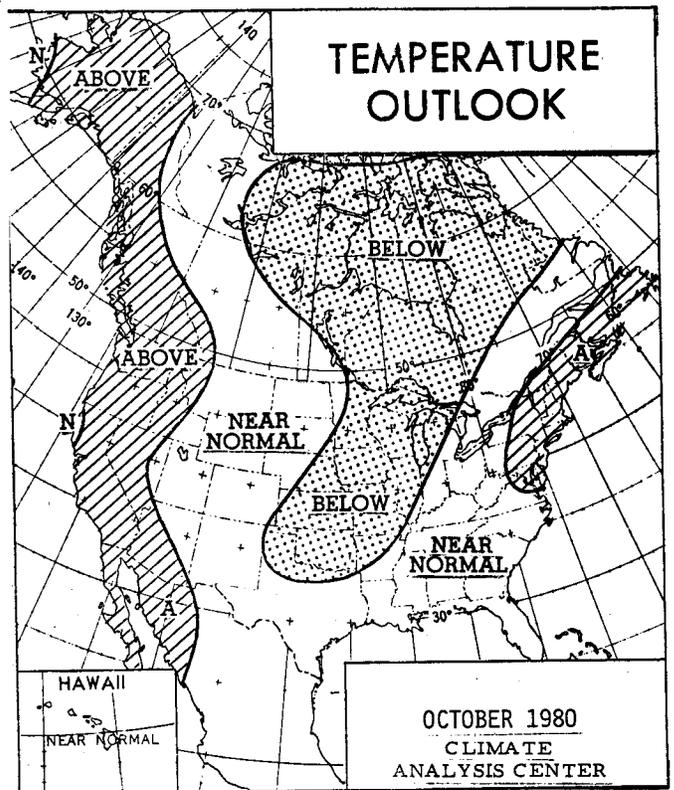
THESE 14 STATES PRODUCED 99% OF THE 1979 COTTON CROP.

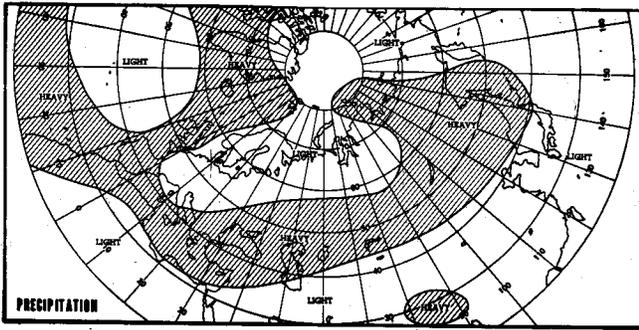
NA - NOT AVAILABLE

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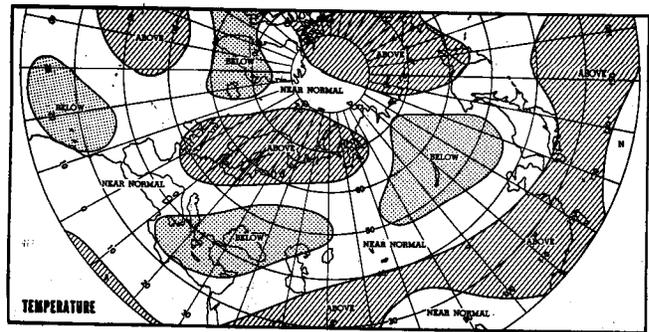


Average Monthly Weather Outlook





EURASIA WEATHER OUTLOOK...OCTOBER 1980...CLIMATE ANALYSIS CENTER



(continued from page 2)

central Texas. Heavy rain also flooded areas in Oklahoma, Arkansas, and Tennessee where isolated 6- to 10-inch amounts were reported. Elsewhere

(continued from page 12)

onment of sweet corn and other vegetables greater than normal. Tobacco harvest finishing up. Apple picking continuing, cranberry harvest underway. Soil moisture mostly surplus.

WYOMING: Temperatures below normal. Extremes: 82 and 22°. Precipitation below normal except Snake, Upper and Lower Platte Drainages.

Topsoil moisture short. Average of 6.0 days suitable for fieldwork. Winter wheat 96%

around the Nation, strong, gusty winds accompanied a cold front pushing into the northern Plains. Some light showers brushed the coastal areas of the Pacific Northwest.

planted, 82% emerged. Winter wheat prospects mostly good. Sugarbeet harvest expect to start this week. Acreage harvested: Potatoes 74%; corn silage 76%. Corn for grain 52% dented; 32% mature; 14% harvested. Dry beans 92% wind-rowed, 73% combined. Winter grazing prospects fair to good. Livestock producers expected to winter slightly fewer livestock than last year. Calf, lamb weight, slightly below last year most areas.

(continued from page 18)

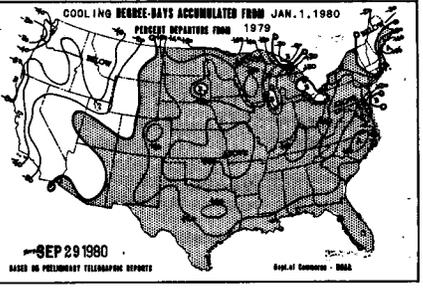
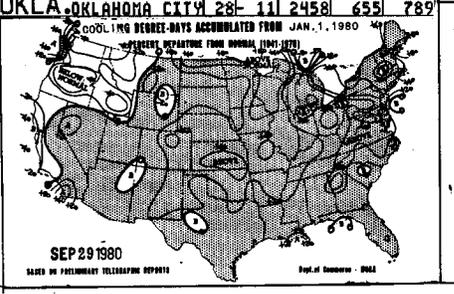
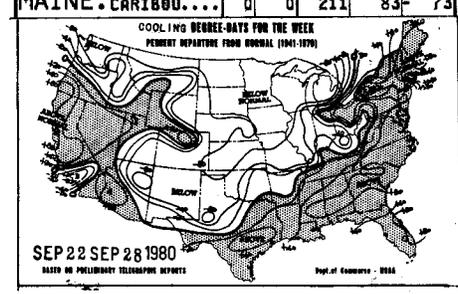
	RICE		
	% HARVESTED		
	1980	1979	AVG.
ARK	45	26	41
CALF	5	13	NA
LA	92	90	92
MISS	62	55	48
TEX	100	100	100
5 STATES	58	49	NA
EXCL. STATES WITH NA	69	59	66

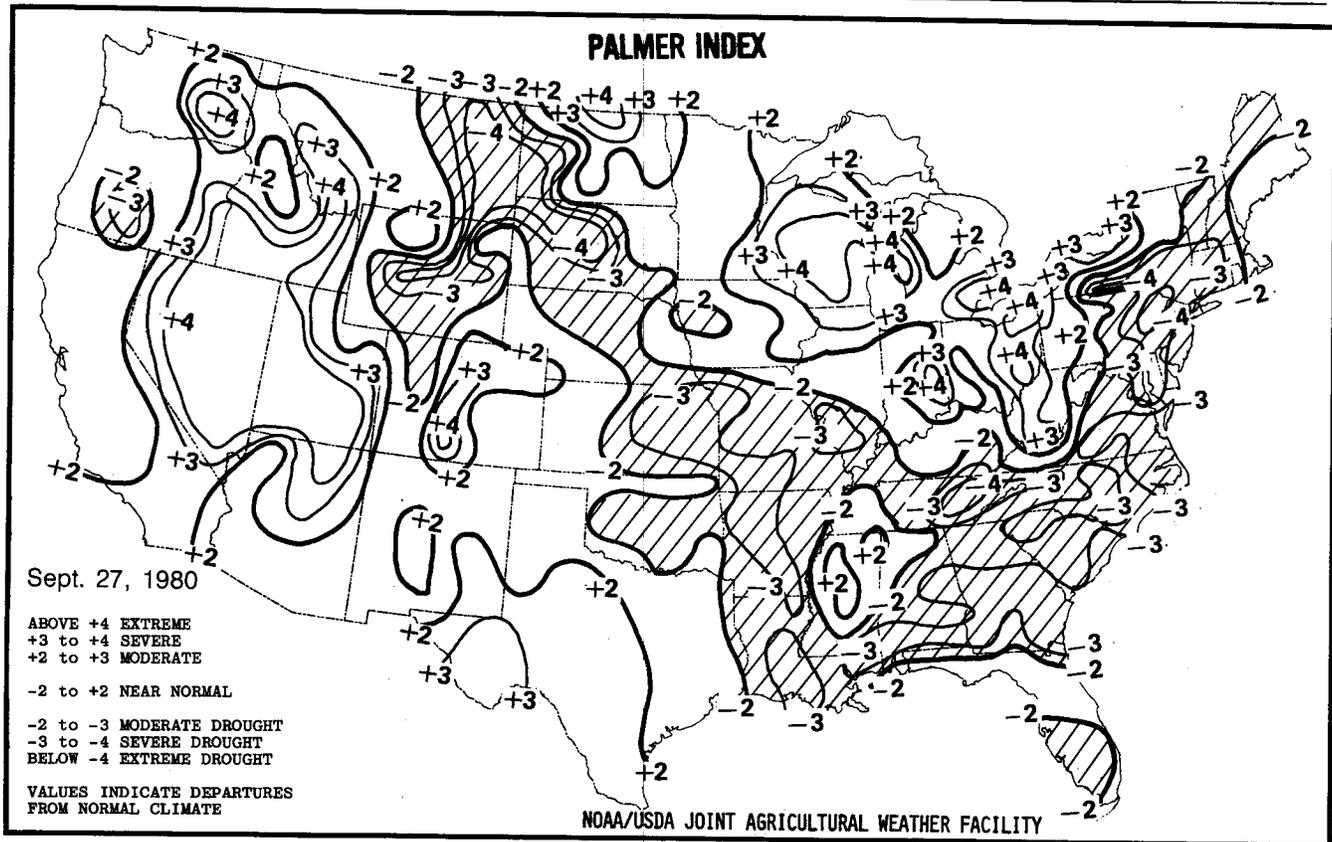
THESE 5 STATES PRODUCED 99% OF THE 1979 RICE CROP.

COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING SEP. 28, 1980.

* BASED ON 1941-70 NORMALS. ACCUMULATIONS FROM JANUARY 1, 1980.

Table with columns for STATES AND STATIONS, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +, and DEPARTURE FROM 1979. Rows list various states and cities with their respective cooling degree day data.





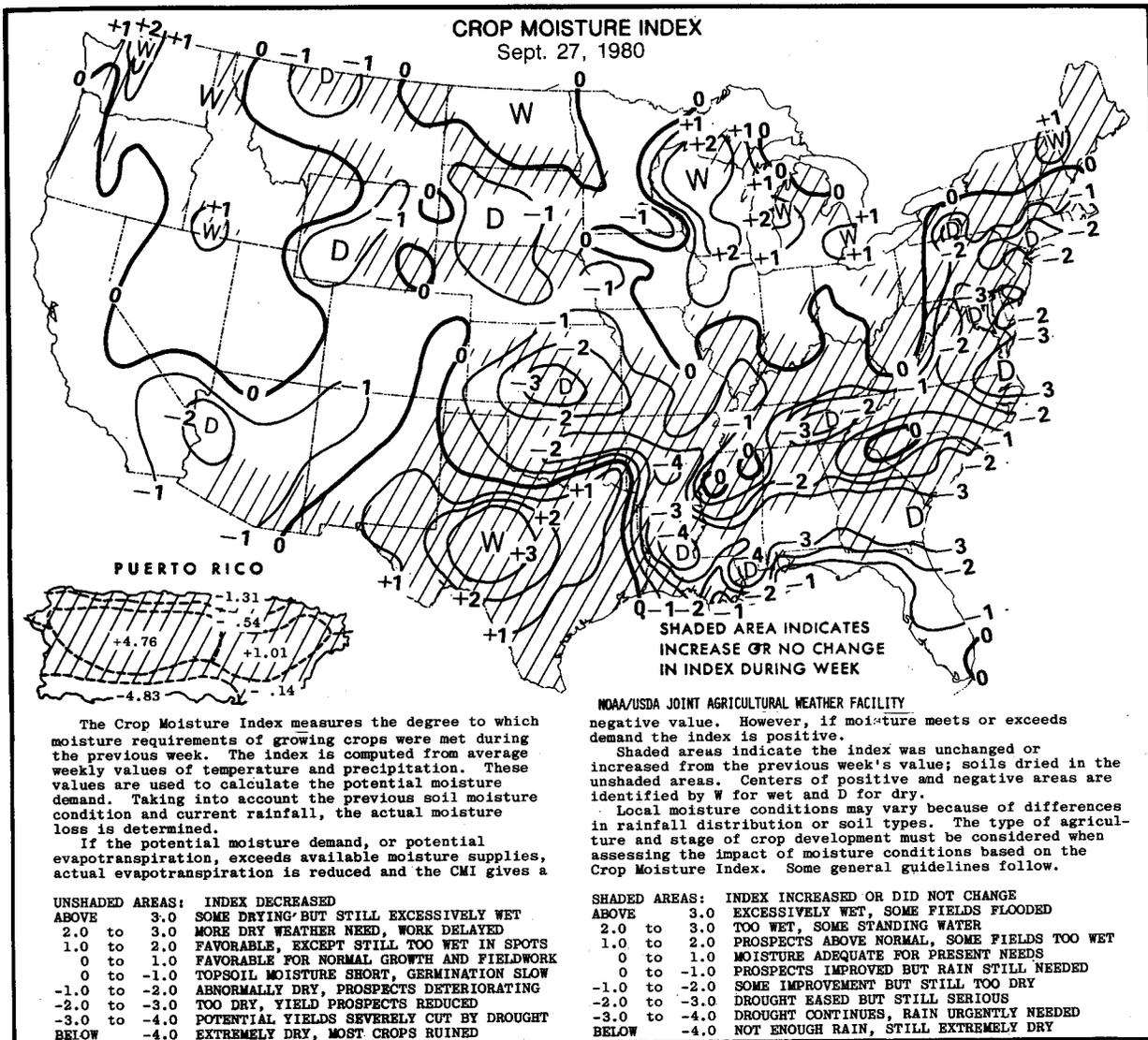
The Palmer Index

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 1980's when New York City almost ran out of water.



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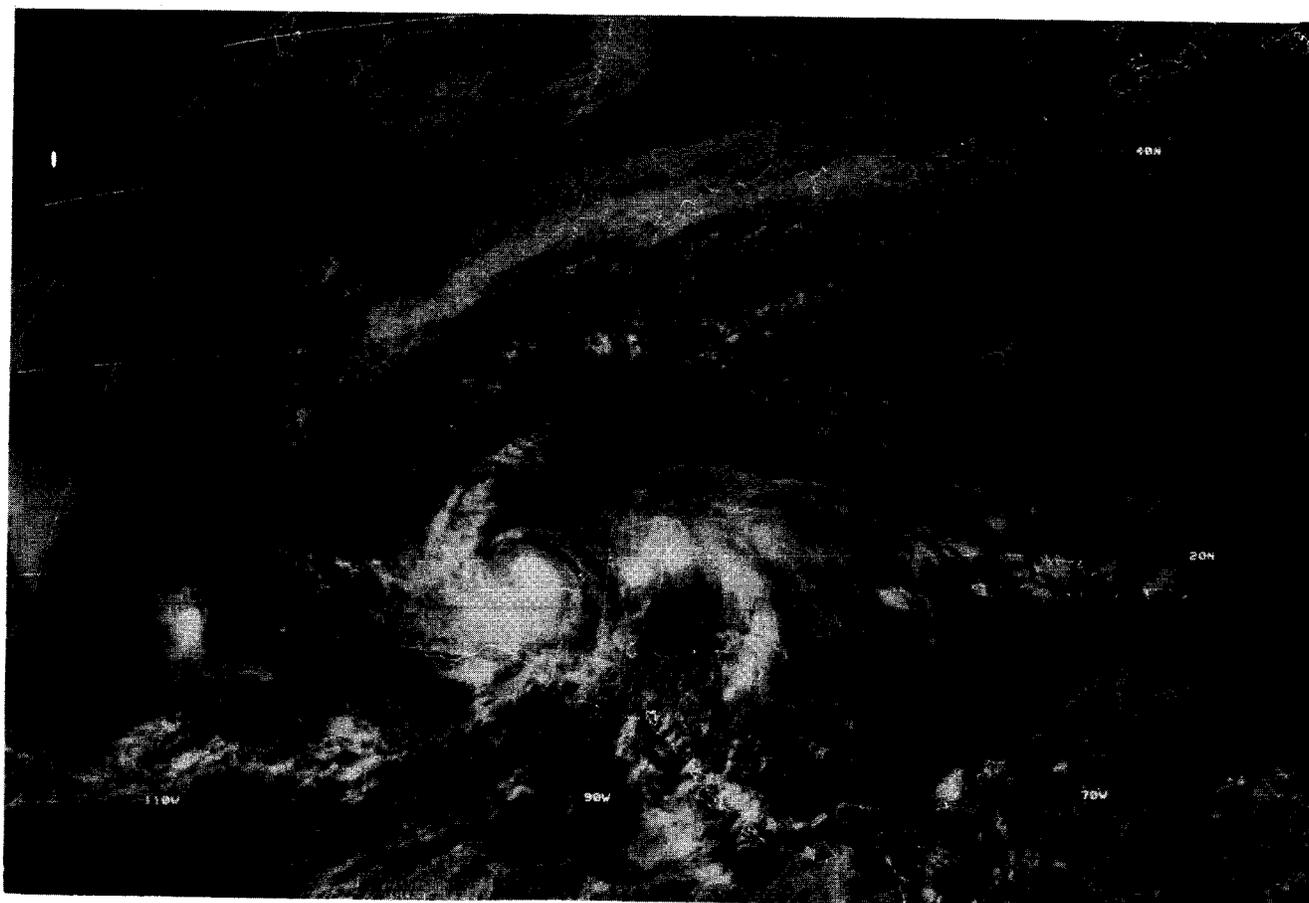
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Tropical Storm Hermine's cloudiness hovers over southeastern Mexico and the Bay of Campeche as shown in the satellite photo, September 23, 3 p.m. CDT. Earlier, the storm had swept across the southern Yucatan Peninsula; it finally dissipated in the central Sierra Madre Oriental Mountains. Torrential rains deluged parts of Veracruz and southeastern San Luis Potosi states.