

WEEKLY WEATHER AND CROP BULLETIN

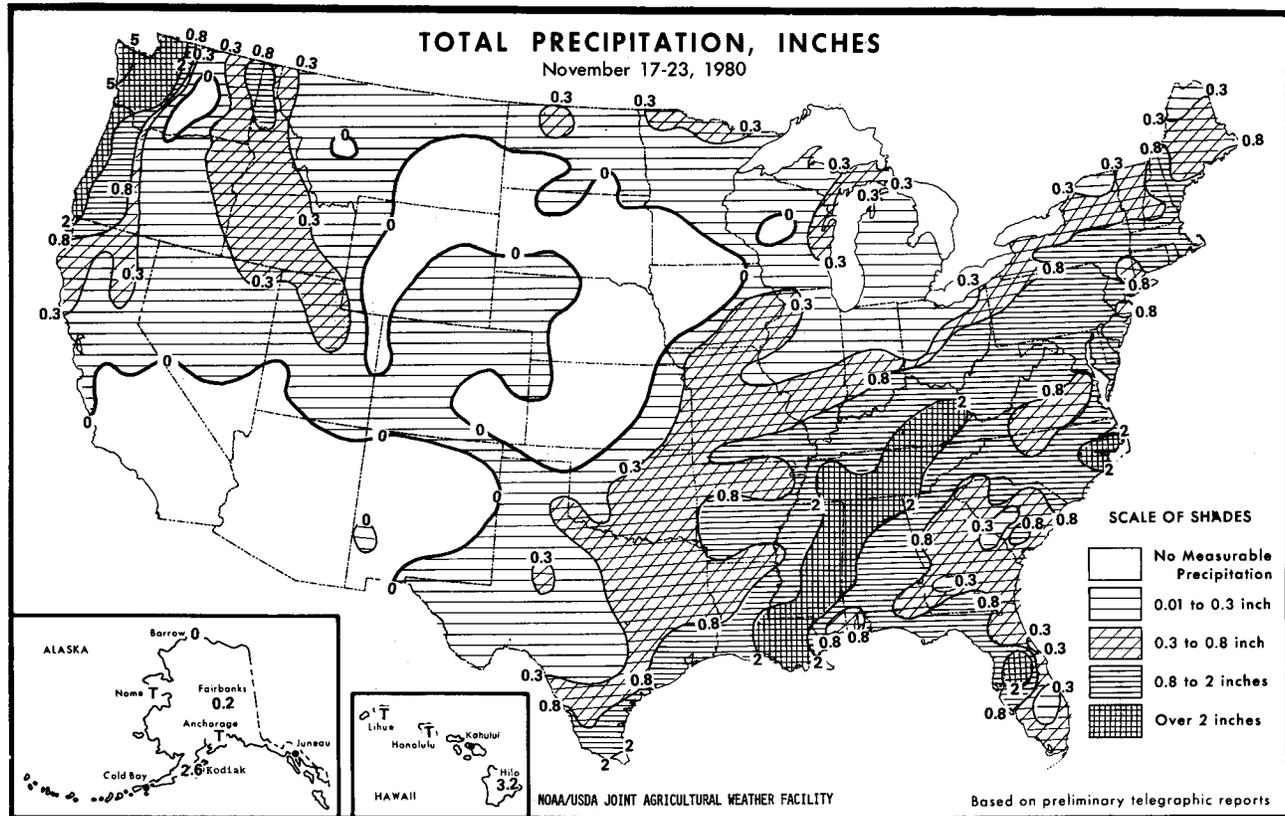
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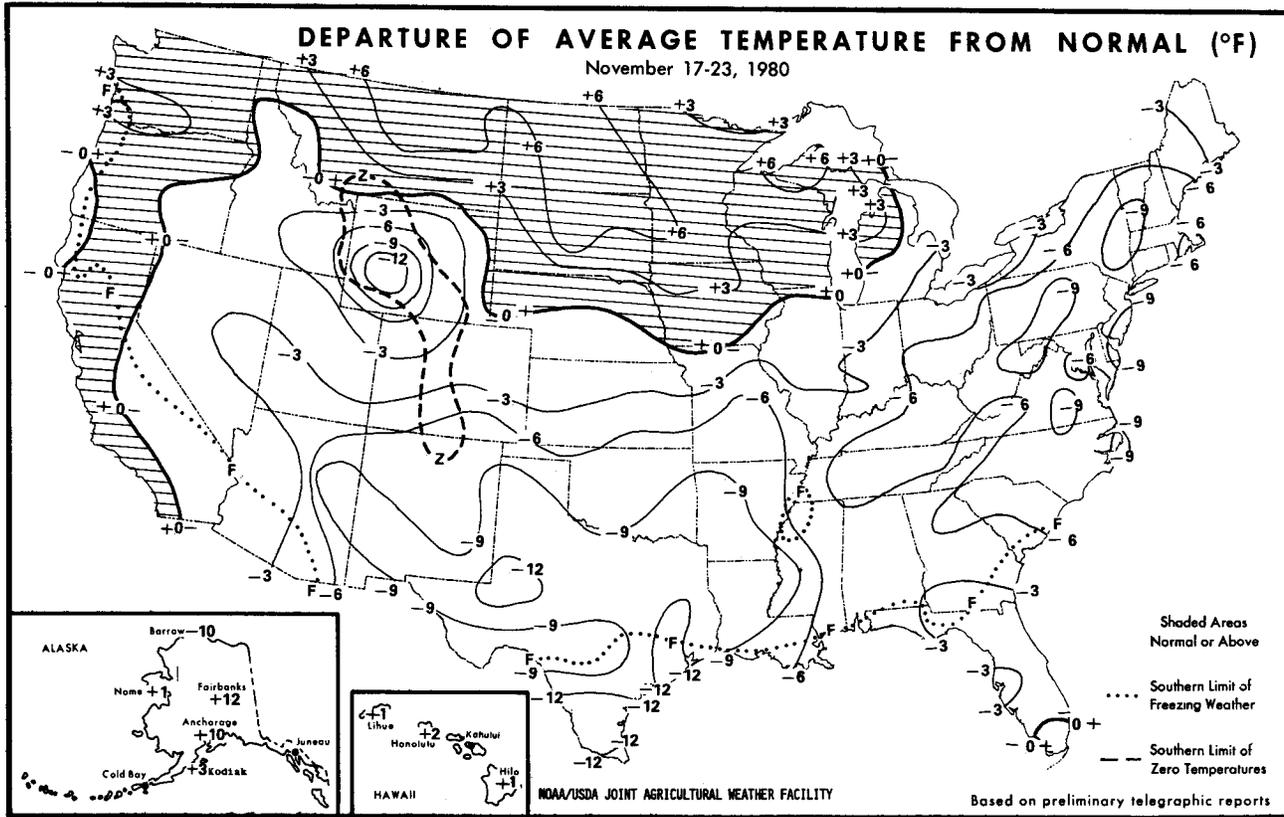
National Weather Summary

November 17-23

HIGHLIGHTS: Heavy precipitation fell over most of the southeastern third of the Nation and the North Pacific Coast, while chilly winter-like temperatures prevailed over most of the rest of the Nation. Temperatures 8 to 12 degrees below seasonal averages were centered over Texas, Wyoming, and the Northeast. Warmer than usual weather spanned the northern Plains to the Great Lakes. A winter storm moved early in the week from the southern Plains to the New England Coast, triggering snow from Ohio to Maine. Cold air followed in the wake of the storm and engulfed most of the Nation for several days. Freezing temperatures dipped into extreme northern Florida but did not threaten the citrus crop. A strong storm brought torrential rains and gale winds to the North Pacific Coast. During the weekend, heavy rains drenched a wide area from the Gulf to southern

New England in association with a Gulf frontal wave combining with an easterly-moving cold front.

MONDAY... A winter storm moving rapidly from the southern Plains into the Delta States produced widespread precipitation over the eastern third of the country. The heaviest rains, averaging 1½ inches, drenched an area from Kentucky to New Jersey. A half-foot of snow covered Ohio to Maine, while lighter amounts fell along the Oklahoma-Arkansas-Missouri border. Cold air pushed into the southern Plains as a large, fair weather system formed over the West and northern Plains. Another late season tropical depression moved rapidly northward across Cuba and into the eastern Gulf. It triggered tropical rains across Florida; 1-to 2-inch amounts improved soil moisture in the



central citrus belt. The Pacific Northwest received moderate showers as a front approached the coast.

TUESDAY...The winter storm moved rapidly up the East Coast, giving New England a little more snow and the East Coast some additional light rain. Cold air settled over most of the Nation, and freezing temperatures pushed into the southern Plains. Afternoon readings were generally in the 40's to 60's, except in New England, where they remained below freezing, and South Florida, where they rose to the warm 80's. Snow melting in the southern Plains gave some needed moisture to winter wheat. Rain continued over the northern Pacific States; a few spots picked up $1\frac{1}{2}$ inches.

WEDNESDAY...A very large and unseasonably cold high pressure system covered most of the country; however, rains lingered on in the Pacific Northwest and parts of New England. A developing front brought some light rain and snow to North Dakota. Freezing temperatures dipped overnight into the upper Gulf Coast States from central Texas to the eastern Carolinas. Widespread sunshine sent afternoon temperatures into the 40's and 50's over most areas except parts of New England which remained below freezing.

THURSDAY...Peaceful, cold weather dominated most of the Nation. Freezing temperatures dipped into northern Florida but did not threaten citrus. The airmass began to slowly moderate, and temperatures rose into the 60's across the southern tier of States during the afternoon. Precipitation was unusually light and isolated, and limited to the

North Pacific Coast, Great Lakes, and the extreme Southeast.

FRIDAY...A strong low pressure frontal system moved into the Pacific Northwest, bringing heavy rain and gusty winds. Up to 5 inches fell on western Washington, causing some flooding. Cloudiness and light rain spread across South Texas as a frontal wave began to develop in the West Gulf. The rest of the Nation was generally fair except for the eastern Great Lakes to New England where a weak front brought cloudiness and some light precipitation.

SATURDAY...Widespread rain blanketed the Northwest behind a cold front stretching from the northern Plains to California. The frontal wave in the western Gulf spread rain inland from central Texas to southern Alabama. Fair, cool weather dominated the Northeast, while warmer conditions spread over the Southeast to the central Plains. Another round of cold air began to move southward into the northern Plains and Rockies.

SUNDAY...Due to a number of weather systems, precipitation covered over half the Nation. There was an intensifying wave in the northern Gulf, cold fronts from the Great Lakes to Texas and along the Pacific Northwest Coast, and a deepening low pressure system over Nevada. The latter promises to be the next winter storm. Up to 2 inches of rain drenched southern Louisiana, Mississippi, and extended into central Alabama. The Southeast warmed while the Northwest became colder. Parts of the northern Plains and Rockies stayed below freezing all day. Pleasant fair weather spanned the desert Southwest.

National Agricultural Summary

November 17 - 23

HIGHLIGHTS: Cold weather and winter storms delayed outside activities in North Central areas while in the South Atlantic and South Central States heavy rains slowed fieldwork. Temperatures averaged well below normal in all areas of the Nation except along the West Coast and in the northern region of the country extending from the Great Lakes westward. Soil moisture was rated short to adequate except in Michigan, Wisconsin, and Mississippi where supplies were adequate to surplus. Farmers had up to 7 days suitable for fieldwork except in the South Atlantic and South Central States where rain and wet conditions limited fieldwork to 3 to 5 days. Corn harvest was nearly complete in most States, but advanced only a few points during the week in States with acreage standing. Soybean harvest advanced to 94% complete, equal to a year earlier and 3 points ahead of average. Grain sorghum harvest was virtually complete in major producing areas. Winter wheat was 89% emerged and showed fair to good condition, although more moisture was needed in most areas. Cotton picking advanced to 75% complete, compared with 64% a year ago. Fall plowing continued to progress ahead of normal in most areas. Pastures declined seasonally and were mostly reported in poor to fair condition. Winter wheat fields provided limited grazing.

CORN: Corn harvest was nearly complete in most States, but advanced only a few points in States with acreage still standing. In northern areas frozen ground was becoming general enabling combining in previously muddy fields. Rains slowed harvests throughout the South Atlantic and South Central States.

SOYBEANS: Soybean harvest was virtually finished in the North Central States, just ahead of the season's first storm. In the 18 major producing States, harvest reached 94% complete, equal to a year ago and 3 points ahead of the average. Progress was ahead of normal in all States except Arkansas, Georgia, and South Carolina where wet conditions delayed harvesting operations.

SMALL GRAINS: Winter wheat seeding neared completion in most States except California where farmers had seeded only 32% of their acreage; 89% of the acreage had emerged. The crop rated fair to good, although more moisture was needed in most areas. Texas fields benefited from recent moisture, although some fields in the Northern High Plains were still moisture stressed. Kansas fields rated good, and Nebraska fields fair to good. Oklahoma livestock producers pastured 5% of the wheat acreage, compared to 10% a year ago. Cool weather slowed growth in nearly all producing areas of the country.

COTTON: Cotton picking in the 14 major States reached 75% complete, compared with 64% a year ago. In the Delta, harvesting continued well ahead of

last year's slow pace. The New Mexico harvest was delayed by snow. The Arizona harvest caught up to the average as defoliant application wound down and stalk shredding and discing picked up. In Texas, harvesting was slowed by wet field conditions. Some gins in Texas were able to catch up while others closed due to a lack of cotton.

OTHER CROPS: Grain sorghum harvest neared completion in nearly all areas, slightly ahead of last year and the average. Sugarcane harvest was active in Florida and reached 51% complete in Louisiana. Peanut harvest ranged from 75% complete in Texas to 100% in Georgia. Tobacco stripping progressed as growers readied their crop for market.

FRUITS AND NUTS: Northern growers continued orchard maintenance work such as pruning, clean-up, and rodent control. Growers began moving fruit out of storage facilities. The Florida citrus grove condition improved as irrigation was discontinued with surface moisture adequate. Orange harvest for processing increased. The Texas citrus harvest progressed well with good size and quality fruit. Arizona citrus groves continued in good condition. Lemons, grapefruit, Navel oranges, and tangerines were picked. In California, the avocado and grape harvests were light and the Navel orange harvest slow. Good quality Valencia oranges were picked. The walnut harvest continues. The Texas pecan harvest remained steady and reached 33% complete. The New Mexico harvest picked up as hulls opened. Harvest was 48% complete in Georgia and 65% complete in Mississippi.

VEGETABLES: In Florida, overall shipments were up 30% from the previous week. The only crop with decreased supplies were cucumbers and squash; eggplant and okra held steady. Other vegetable crops gained. Strawberries grew well with light bloom and fruit set showing on early fields. The California market tomato harvest decreased seasonally. Broccoli supplies decreased in the Central Coast area. The lettuce harvest neared completion in the San Joaquin Valley, and increased in the Palo Verde Valley. Growers also harvested artichokes, cantaloups, honeydew, cauliflower, celery, and potatoes. The East Texas sweetpotato harvest was virtually complete. In the Lower Rio Grande Valley, cabbage and carrots continued to be harvested. Cucumbers and peppers progressed well. Onion seeding and transplanting was active. Chile peppers and lettuce harvests were active in the Trans-Pecos region as the bell pepper harvest wound down.

PASTURES AND LIVESTOCK: Pastures generally rated poor to fair, declining seasonally, although rainfall in the Southeast continued to spur growth. Ranchers moved herds onto winter grazing and small grain stands. Supplemental feeding increased in most areas.

Weather Data for the Week Ending Nov. 23, 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
AL BIRMINGHAM	55	36	61	26	46	-5	1.8	.8	1.5	10.8	119	88	57	0	4	3	1
MOBILE	61	41	78	31	51	-5	.7	.2	.5	9.5	82	81	55	0	2	3	1
MONTGOMERY	59	40	64	29	49	-4	1.4	.5	1.4	7.9	87	84	62	0	2	3	1
AK ANCHORAGE	33	23	36	19	29	10	T	.2	T	5.8	126	69	72	0	7	2	0
BARROW	-10	-16	-8	-24	-13	-10	0	.1	0	1.3	108	83	65	0	7	0	0
FAIRBANKS	20	3	24	-6	12	12	.2	.2	.1	2.0	87	61	50	0	7	1	0
KODIAK	44	33	45	26	37	3	2.6	1.3	.7	20.1	116	91	73	0	4	5	1
NOME	24	7	29	-7	15	1	T	.2	T	3.2	68	85	57	0	7	1	0
AZ FLAGSTAFF	47	20	52	12	33	-1	0	.3	0	1.8	42	--	21	0	7	0	0
PHOENIX	70	46	75	40	58	0	0	.1	0	.1	7	46	23	0	0	0	0
TUCSON	64	42	70	39	53	-3	0	.2	0	3.1	115	51	25	0	0	0	0
WINSLOW	48	14	57	10	31	-10	0	.1	0	.8	44	--	--	0	7	0	0
YUMA	75	47	79	45	61	-1	0	.1	0	0	0	57	21	0	0	0	0
AR FORT SMITH	49	29	55	20	39	-9	.8	.1	.6	8.1	87	91	61	0	5	2	1
LITTLE ROCK	49	34	56	26	41	-7	.9	0	.5	11.8	127	87	58	0	3	3	0
CA BAKERSFIELD	69	39	72	36	54	0	0	.2	0	0	0	--	29	0	0	0	0
EUREKA	56	44	59	39	50	-1	.5	.9	.4	3.4	40	94	76	0	0	3	0
FRESNO	65	37	67	33	51	-1	T	.3	T	.1	7	79	40	0	0	0	0
LOS ANGELES	72	49	77	45	60	0	0	.6	0	0	0	55	37	0	0	0	0
RED BLUFF	65	42	73	34	53	2	.1	.6	.1	1.0	27	--	43	0	0	3	0
SAN DIEGO	72	48	76	44	60	0	0	.3	0	.1	7	50	47	0	0	2	0
SAN FRANCISCO	63	46	67	42	55	1	.1	.5	.1	.2	7	84	52	0	0	0	0
STOCKTON	64	40	69	35	52	1	T	.4	T	.1	5	--	43	0	0	1	0
CO DENVER	48	24	62	17	36	-1	.1	0	.1	1.2	41	64	31	0	7	2	0
GRAND JUNCTION	48	23	52	19	36	-2	T	.1	T	2.0	91	65	26	0	7	0	0
PUEBLO	51	15	64	10	33	-5	T	.1	T	.6	30	92	28	0	7	0	0
CT BRIDGEPORT	45	29	49	25	37	-7	.8	.1	.8	8.2	95	75	43	0	6	2	1
HARTFORD	41	23	45	18	32	-7	1.1	.1	.8	5.6	58	77	47	0	7	2	1
DC WASHINGTON	50	35	56	33	42	-4	.9	.2	.6	5.8	73	74	47	0	0	2	1
FL APALACHICOLA	66	50	73	37	58	-2	1.0	.4	.9	9.6	70	72	53	0	0	2	1
DAYTONA BEACH	72	54	80	46	63	-1	.3	.1	.3	5.5	38	85	55	0	0	3	0
FORT MYERS	77	60	85	51	68	0	.5	.2	.4	8.4	59	92	58	0	0	2	0
JACKSONVILLE	68	48	80	37	58	-1	.4	0	.4	6.5	47	83	56	0	0	2	0
KEY WEST	78	70	84	65	74	0	.3	.2	.1	36.6	242	89	70	0	0	2	0
MIAMI	79	64	87	57	71	0	.3	.2	.3	14.6	75	89	60	0	0	2	0
ORLANDO	74	54	82	46	64	-1	2.3	2.0	2.2	8.0	63	90	57	0	0	1	1
TALLAHASSEE	66	43	75	30	55	-3	1.1	.4	1.1	12.2	104	84	51	0	2	1	1
TAMPA	71	55	79	46	63	-2	1.0	.6	1.0	7.0	69	87	62	0	0	1	1
WEST PALM BEACH	77	60	86	50	69	-1	.4	0	.4	12.2	59	88	58	0	0	1	0
GA ATLANTA	52	35	58	28	43	-6	.4	.5	.3	8.1	98	79	50	0	3	2	0
AUGUSTA	58	36	66	28	47	-5	.1	.5	.1	8.2	115	82	32	0	3	2	0
MACON	60	38	67	29	49	-4	.5	.2	.4	7.2	99	85	50	0	3	3	0
SAVANNAH	59	43	68	35	51	-5	.6	.1	.6	8.3	82	78	59	0	0	2	1
HI HILO	--	--	--	--	74	1	3.2	.1	--	--	--	--	--	--	--	--	--
HONOLULU	87	71	88	67	78	2	T	.8	T	.8	19	83	48	0	0	0	0
KAHULUI	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LITUE	--	--	--	--	76	1	T	1.4	T	--	--	--	--	--	--	--	--
ID BOISE	46	27	49	23	37	-1	.6	.3	.3	3.3	157	87	41	0	6	0	0
LEWISTON	47	35	52	29	41	2	.3	0	.1	2.6	93	80	61	0	3	0	0
POCATELLO	41	19	46	12	30	-3	.3	.1	.1	4.0	200	91	56	0	7	4	0
IL CAIRO	48	34	53	28	41	-5	1.3	3	1.0	--	--	--	--	0	4	3	1
CHICAGO	46	27	54	21	37	0	.1	.4	.1	8.1	109	82	49	0	6	2	0
MOLINE	45	27	54	20	36	-1	.4	0	.4	5.1	65	74	43	0	5	1	0
PEORIA	46	27	52	20	36	-1	.2	.2	.1	7.0	92	83	54	0	6	1	0
ROCKFORD	44	26	55	21	35	0	.2	.4	.2	8.1	91	78	49	0	6	1	0
SPRINGFIELD	46	27	52	19	37	-2	.2	.3	.2	6.8	84	88	49	0	5	1	0
IN EVANSVILLE	47	31	51	25	39	-4	1.3	.6	1.0	6.8	88	82	55	0	5	2	1
FORT WAYNE	42	27	49	23	35	-3	T	.6	T	4.7	64	78	54	0	6	1	0
INDIANAPOLIS	42	27	48	20	35	-4	.4	.3	.3	5.6	72	82	53	0	6	2	0
SOUTH BEND	46	30	56	26	38	1	.2	.4	.2	9.5	116	80	54	0	6	1	0
IA BURLINGTON	46	27	52	23	37	0	.4	0	.4	9.3	115	--	--	0	6	1	0
DES MOINES	47	26	56	17	37	2	T	.3	T	3.6	56	71	36	0	6	0	0
DUBUQUE	43	26	50	21	35	2	.2	.4	.2	10.0	105	86	48	0	6	1	0
KS CONCORDIA	49	20	59	14	35	1	0	.2	0	2.7	52	88	38	0	6	0	0
SIoux CITY	50	24	62	16	37	-2	0	.1	0	3.3	59	78	37	0	6	0	0
CONCORDIA	52	23	59	16	38	-3	T	.1	T	.3	8	66	27	0	6	0	0
DODGE CITY	51	18	61	11	35	-1	.1	.1	.1	2.6	90	78	28	0	7	1	0
GOODLAND	50	26	57	20	38	-2	.2	0	.1	8.8	128	86	40	0	6	1	0
TOPEKA	49	26	55	21	37	-5	T	.2	T	2.5	34	85	46	0	7	1	0
WICHITA	45	28	52	21	36	-6	1.4	.6	1.2	6.0	83	86	55	0	5	3	1
KY LEXINGTON	49	30	54	24	40	-3	1.5	.6	1.0	8.2	103	79	49	0	5	3	1
LOUISVILLE	49	30	54	24	40	-3	1.5	.6	1.0	8.2	103	79	49	0	5	3	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Nov. 23, 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	BAYON ROUGE	58	41	70	32	50	-7	3.0	-2.0	2.5	17.2	181	86	57	0	1	3	1
	LAKE CHARLES	55	40	65	32	48	-11	.9	-.2	.8	11.0	101	89	60	0	2	1	
	NEW ORLEANS	60	46	75	38	53	-6	1.5	.5	1.2	13.7	128	84	60	0	0	3	
	SHREVEPORT	54	36	59	25	45	-10	.8	-.1	.4	6.9	78	92	60	0	3	0	
ME	CARIBOU	34	21	42	12	28	-1	.2	-.6	.2	7.6	81	83	59	0	7	0	
	PORTLAND	40	19	45	10	30	-7	1.3	-.1	1.2	7.8	77	83	60	0	7	1	
MD	BALTIMORE	47	28	53	25	37	-7	1.2	.5	.6	5.7	70	79	42	0	6	2	
MA	BOSTON	44	30	50	26	37	-7	1.3	.2	1.2	6.9	73	74	55	0	6	2	
	CHATHAM	45	33	51	28	39	--	1.9	--	1.2	--	--	81	64	0	3	4	
MI	ALPENA	42	22	53	12	32	-1	.1	-.5	T	4.2	58	--	0	6	2		
	DETROIT	43	23	50	19	33	-5	T	-.5	T	4.6	70	84	49	0	7	0	
	FLINT	42	24	53	19	33	-3	.1	-.4	.1	7.4	112	86	59	0	6	0	
	GRAND RAPIDS	43	27	55	24	35	-1	.2	-.4	.1	7.4	91	87	56	0	6	0	
	HOUGHTON LAKE	41	28	50	25	35	3	.1	-.5	.1	7.1	88	85	59	0	6	0	
	LANSING	43	29	54	20	36	-1	.1	-.4	T	5.8	114	86	56	0	5	2	
	MARQUETTE	40	25	53	20	32	6	.2	-.5	.1	11.4	137	87	53	0	7	4	
	MUSKEGON	42	34	48	29	38	1	.2	-.5	.2	7.9	93	77	61	0	4	2	
	SAULT STE. MARIE	39	21	51	11	30	-1	.3	-.4	.3	7.4	80	90	65	0	7	3	
MN	DULUTH	37	23	50	13	30	5	T	-.4	T	8.8	129	77	54	0	6	2	
	INT'L FALLS	35	16	42	6	25	4	.4	-.1	.4	7.5	125	81	66	0	7	1	
	MINNEAPOLIS	46	24	58	15	35	6	T	-.3	T	4.5	83	74	46	0	6	1	
	ROCHESTER	43	23	54	14	33	3	T	-.2	T	4.9	83	81	47	0	6	0	
	SAINT CLOUD	44	18	56	10	31	6	T	-.3	T	7.0	127	86	--	0	7	1	
MS	JACKSON	54	35	67	25	44	-9	1.7	.7	.8	9.4	115	93	60	0	4	3	
	MERIDIAN	58	37	71	28	48	-5	2.2	1.3	1.1	13.3	166	89	55	0	3	3	
MO	COLUMBIA	45	27	53	21	36	-5	.4	0	.4	6.8	71	72	51	0	6	2	
	KANSAS CITY	48	28	55	20	38	-2	.3	0	.3	6.1	72	77	41	0	5	1	
	SAINT LOUIS	48	32	55	24	40	-2	.4	-.2	.4	6.6	89	76	52	0	5	2	
	SPRINGFIELD	45	27	53	19	36	-7	.8	-.3	.5	6.9	73	85	57	0	6	3	
MT	BILLINGS	48	26	57	16	37	4	T	-.2	T	3.4	113	53	25	0	6	0	
	GLASGOW	48	23	61	13	36	10	T	-.1	T	2.4	150	86	46	0	7	1	
	GREAT FALLS	49	25	58	12	37	4	T	-.1	T	2.6	108	71	35	0	6	1	
	HAVRE	46	25	55	12	35	8	T	-.1	T	2.8	140	84	39	0	6	1	
	HELENA	43	21	58	12	32	3	0	-.1	0	4.2	233	81	39	0	7	0	
	KALISPELL	41	22	53	14	31	2	.1	-.3	.1	1.9	54	88	62	0	6	2	
	MILES CITY	47	26	57	18	36	7	0	-.1	0	2.8	127	74	35	0	6	0	
NE	MISSOULA	40	21	51	15	30	-1	T	-.2	T	2.2	367	87	59	0	7	1	
	GRAND ISLAND	49	21	61	16	35	-1	T	-.1	T	2.4	800	80	35	0	7	0	
	LINCOLN	51	22	60	16	36	-1	0	-.2	0	2.4	47	77	33	0	5	0	
	NORFOLK	48	23	60	17	35	2	T	-.1	T	2.8	68	80	39	0	6	0	
	NORTH PLATTE	51	14	62	12	33	-1	T	-.1	T	1.5	44	74	27	0	7	0	
	OMAHA	48	23	59	12	36	2	0	-.2	0	5.0	85	84	41	0	6	0	
	VALENTINE	50	20	60	13	35	2	T	-.1	T	2.0	71	95	28	0	7	1	
NV	ELY	44	14	53	4	29	-3	T	-.1	T	2.4	185	69	44	0	7	1	
	LAS VEGAS	63	36	67	30	50	-1	0	-.1	0	.2	20	30	13	0	2	0	
	RENO	54	24	56	19	39	0	T	-.2	T	1.0	77	88	32	0	6	1	
	WINNEMUCCA	51	21	55	12	36	1	.2	0	.2	1.0	59	86	33	0	5	1	
NH	CONCORD	40	18	44	11	29	-7	.7	-.3	.5	5.8	66	80	48	0	7	2	
NJ	ATLANTIC CITY	46	22	50	18	34	-10	1.2	-.2	.7	6.9	72	86	52	0	7	2	
	TRENTON	44	32	49	25	38	-7	.6	-.2	.4	7.0	81	--	--	0	4	2	
NM	ALBUQUERQUE	50	19	57	15	35	-7	T	-.1	T	2.0	111	77	27	0	7	0	
	ROSWELL	48	25	61	19	37	-8	T	0	T	7.2	232	--	--	0	6	0	
NY	ALBANY	37	19	45	13	28	-9	1.1	-.4	.6	6.0	75	83	55	0	7	2	
	BINGHAMTON	35	25	44	15	30	-6	1.2	.5	1.1	7.7	91	89	69	0	7	4	
	BUFFALO	41	31	50	20	36	-2	.3	-.6	.1	10.1	109	72	65	0	3	3	
	NEW YORK	43	34	50	29	38	-7	.8	-.1	.5	5.7	63	76	57	0	3	2	
	ROCHESTER	41	30	50	19	36	-3	.6	-.1	.3	8.6	118	82	68	0	5	3	
	SYRACUSE	40	26	48	18	33	-6	.6	-.2	.4	7.8	93	83	58	0	7	4	
NC	ASHEVILLE	50	29	58	22	40	-5	.8	0	.5	8.6	93	85	52	0	5	2	
	CHARLOTTE	50	33	58	27	42	-7	.8	-.1	.8	9.5	116	86	46	0	4	2	
	GREENSBORO	50	30	55	24	40	-6	.7	-.1	.7	6.7	80	79	47	0	5	2	
	HATTERAS	56	36	69	27	46	-8	2.7	1.7	2.2	10.8	77	76	56	0	4	2	
	RALEIGH	53	30	58	21	41	-7	1.2	.5	1.1	7.7	90	89	46	0	4	2	
	WILMINGTON	59	37	70	28	48	-6	1.0	-.3	.7	8.6	77	89	61	0	2	4	
ND	BISMARCK	45	21	57	13	33	7	T	-.1	T	3.5	140	89	41	0	7	0	
	FARGO	42	21	50	15	32	7	.3	-.1	.2	3.9	111	82	49	0	7	2	
	WILLISTON	39	22	45	15	30	6	T	-.1	T	4.4	210	83	59	0	7	1	
OH	AKRON-CANTON	41	27	47	22	34	-4	.5	0	.4	4.7	68	82	55	0	6	2	
	CINCINNATI	45	27	50	20	36	-6	1.2	.4	.8	6.8	93	87	58	0	6	2	
	CLEVELAND	42	28	49	23	35	-4	.2	-.4	.2	5.9	79	81	59	0	6	3	
	COLUMBUS	40	27	46	20	34	-6	.8	-.1	.6	5.4	86	78	64	0	6	2	
	DAYTON	40	25	47	20	33	-7	.7	-.1	.6	4.8	75	83	64	0	6	2	
	TOLEDO	42	24	50	18	33	-4	T	-.5	T	4.0	63	90	59	0	6	2	
	YOUNGSTOWN	37	25	45	20	31	-7	.3	-.4	.2	7.3	94	87	65	0	7	3	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Nov. 23, 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	90 AND ABOVE	32 AND BELOW	PRECIPI- TATION	
																.01 INCH OR MORE	.50 INCH OR MORE
OK OKLAHOMA CITY	50	30	61	23	40	-7	.3	.1	.3	3.7	52	96	52	0	5	3	0
TULSA	50	31	60	23	40	-7	.5	.1	.4	6.3	72	94	54	0	5	3	0
OR ASTORIA	56	45	59	34	50	5	2.9	.5	1.4	15.0	87	94	75	0	0	7	3
BURNS	48	21	50	19	35	1	.2	.2	.1	2.0	80	95	42	0	3	2	0
MEDFORD	49	35	54	28	42	0	.9	.2	.6	3.8	76	97	74	0	3	3	1
PENDLETON	49	33	60	30	41	2	.1	.3	.1	2.7	93	86	65	0	3	1	0
PORTLAND	53	41	58	36	47	3	1.1	.3	.6	7.9	82	98	76	0	0	7	1
SALEM	54	39	60	30	47	3	1.5	0	1.4	6.8	66	88	79	0	4	4	1
PA ALLENTOWN	43	27	51	20	35	-5	1.0	.1	.7	6.7	74	77	55	0	6	2	1
ERIE	40	30	47	20	35	-4	.3	.6	.2	13.4	140	--	--	0	5	3	0
HARRISBURG	40	25	47	21	33	-9	1.2	.4	1.1	5.7	73	60	43	0	7	3	1
PHILADELPHIA	44	29	50	25	37	-7	1.1	.3	1.0	9.6	117	75	55	0	6	2	1
PITTSBURGH	37	24	46	17	31	-8	1.0	.4	.8	5.2	72	86	62	0	7	3	1
SCRANTON	38	25	43	17	31	-7	.9	.2	.8	5.1	65	79	52	0	7	2	1
RI PROVIDENCE	45	27	51	25	36	-5	1.4	.2	1.1	6.3	62	69	53	0	2	2	1
SC CHARLESTON	59	38	67	29	49	-6	.6	.1	.4	5.6	57	87	61	0	3	3	0
COLUMBIA	56	33	62	24	45	-7	.2	.4	.2	9.7	109	84	59	0	4	3	0
GREENVILLE	52	32	59	25	42	-7	.4	.3	.3	11.0	120	74	49	0	5	2	0
SD ABERDEEN	47	21	57	18	34	7	T	.1	T	2.4	73	83	39	0	7	0	0
HURON	47	23	58	16	35	6	T	.1	T	1.6	42	85	40	0	6	0	0
RAPID CITY	45	23	56	11	34	1	T	.1	T	3.2	128	68	40	0	7	0	0
STOIX FALLS	47	20	56	15	34	4	T	.2	T	2.2	44	76	36	0	6	0	0
TN CHATTANOOGA	50	34	55	25	42	-5	2.3	1.3	1.4	9.8	103	73	59	0	4	4	2
KNOXVILLE	49	32	52	24	40	-7	1.2	.4	.8	6.5	80	91	61	0	4	3	1
MEMPHIS	52	38	57	31	45	-4	1.7	.7	1.6	12.6	147	84	55	0	1	3	1
NASHVILLE	51	32	56	24	41	-5	1.4	.5	1.3	4.3	53	89	49	0	4	3	1
TX ABILENE	49	34	56	27	42	-10	.1	.1	T	8.4	142	83	61	0	4	2	0
AMARILLO	44	22	51	15	33	-11	.1	0	.1	2.5	61	86	51	0	7	1	0
AUSTIN	58	41	71	33	49	-8	.1	.4	.1	9.2	110	83	53	0	0	1	0
BEAUMONT	56	43	62	36	50	-9	1.2	.2	1.0	33.5	277	84	63	0	0	3	1
BROWNSVILLE	63	48	66	40	56	-11	2.0	1.7	.9	6.1	63	76	58	0	0	3	2
CORPUS CHRISTI	57	43	62	37	50	-13	1.0	.7	.8	8.3	95	82	57	0	0	2	1
DEL RIO	57	41	69	35	49	-9	.2	.1	.2	3.5	60	86	50	0	4	2	0
EL PASO	51	31	59	22	41	-9	T	.1	T	3.5	159	89	48	0	1	0	0
FORT WORTH	52	36	60	28	44	-10	.3	.2	.3	8.8	117	89	61	0	2	2	0
GALVESTON	54	47	59	42	50	-12	.7	.1	.6	6.2	56	86	70	0	0	4	1
HOUSTON	57	40	64	32	48	-11	.8	.2	.6	11.1	93	88	57	0	1	4	1
LUBBOCK	46	27	54	18	37	-10	T	0	T	4.8	102	90	57	0	5	1	0
MIDLAND	48	28	56	19	38	-13	T	0	T	10.1	289	90	55	0	1	1	0
SAN ANGELO	53	33	60	26	43	-11	.2	0	.1	13.3	246	94	55	0	4	2	0
SAN ANTONIO	61	40	70	32	50	-8	.2	.1	.2	8.3	104	89	49	0	1	4	0
VICTORIA	58	42	66	32	50	-11	.6	.1	.4	7.8	77	89	56	0	1	4	0
WACO	55	38	63	30	46	-9	.3	.2	.2	4.6	61	92	58	0	2	3	0
WICHITA FALLS	49	33	59	28	41	-8	.3	.1	.2	13.3	199	90	60	0	4	3	0
UT BLANDING	47	19	50	14	33	-3	.1	0	.1	--	--	67	23	0	7	1	0
SALT LAKE CITY	45	26	49	21	36	-1	.4	.1	.3	3.4	117	85	48	0	6	2	0
VT BURLINGTON	35	23	43	11	29	-6	.4	.3	.2	8.2	103	89	65	0	6	2	0
VA LYNCHBURG	49	29	56	21	39	-6	.7	.1	.7	6.0	75	76	55	0	5	4	1
NORFOLK	51	32	65	27	42	-8	1.2	.5	.6	7.3	78	82	55	0	5	4	1
RICHMOND	50	28	57	23	39	-8	.6	.2	.6	10.5	117	86	45	0	5	2	1
ROANOKE	48	29	57	22	39	-6	.7	.2	.6	5.1	61	71	46	0	5	1	1
WA COLVILLE	40	31	47	19	35	2	.8	.3	.5	--	--	--	--	0	3	4	1
OMAK	43	32	52	23	37	--	T	--	--	--	--	88	--	0	3	2	0
QUILLAYUTE	52	39	59	29	45	2	8.0	4.7	3.5	30.6	112	97	77	0	2	5	3
SEATTLE-TACOMA	51	41	55	36	46	3	2.2	.7	1.5	8.7	81	88	75	0	0	5	1
SPOKANE	39	30	46	23	34	1	.7	.2	.6	3.0	79	90	82	0	5	3	1
WALLA-WALLA	49	37	55	32	43	2	.4	.2	.2	6.8	179	92	74	0	1	3	0
YAKIMA	49	32	62	25	40	4	T	.3	T	1.7	94	89	60	0	5	0	0
WV BECKLEY	43	25	50	15	34	-6	.8	.1	.6	4.7	59	83	56	0	6	3	1
CHARLESTON	46	27	53	20	37	-7	1.6	.9	1.4	6.3	83	91	58	0	5	3	1
HUNTINGTON	46	28	53	21	37	-6	1.8	1.1	1.6	5.4	76	89	58	0	5	3	1
PARKERSBURG	42	27	50	21	35	-8	1.1	.5	.8	5.1	75	90	66	0	7	3	1
WI GREEN BAY	42	27	50	21	35	3	.3	.1	.3	6.1	91	81	54	0	6	1	0
LA CROSSE	44	26	56	20	35	2	T	.4	T	11.1	168	77	52	0	3	1	0
MADISON	42	23	53	15	33	1	.2	.2	.2	10.2	150	86	50	0	7	1	0
MILWAUKEE	44	28	53	24	36	2	.2	.3	.2	6.5	97	73	55	0	6	1	0
WY CASPER	36	18	44	10	27	-4	.1	.1	.1	1.5	65	68	48	0	7	2	0
CHEYENNE	41	20	54	8	31	-3	.1	.1	.1	1.9	79	69	43	0	7	0	0
LANDER	27	5	45	-5	16	-13	T	.2	T	2.3	74	86	56	0	7	0	0
SHERIDAN	47	18	60	9	33	2	T	.2	T	2.8	93	72	31	0	7	0	0
PR SAN JUAN	87	77	89	75	82	3	.9	.4	.4	12.7	79	83	58	0	0	6	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 ESS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 5° below normal. Rain heaviest over weekend.

Fieldwork: 4.4 days suitable. Soil moisture mostly adequate. Activities: Harvesting, seeding small grains, plowing, chores, care of livestock and poultry. Soybeans harvested 92%, 83% 1979, 82% average. Cotton harvested 98%, 74% 1979, 80% average. Wheat seeded 92%, 83% 1979. Condition: Livestock, wheat, fair to good; pasture, pecans, mostly fair.

ARIZONA: Cool, sunny and breezy sums up week. Couple of weak storms left only small amounts of rain and snow in north. Temperatures generally 1 to 9° below normal.

Cotton harvest has caught up to average of 65% but still behind last year's 74% harvested. Defoliant application winding down while stalk shredding, discing are picking up. Late sorghum harvest in progress. Crown development continues sugarbeets. Sheep pasturing of alfalfa fields still active. New planting and renovation of old fields continues. Ground preparation for planting of small grains still in progress. Some early planting begun. Lettuce harvest central, western areas. Harvest mixed vegetables, broccoli, mixed greens, green onions, carrots good progress. Honeydew harvest active, limited. Land preparation, planting vegetables for winter harvest full swing, mostly western areas. Citrus harvest, lemons, grapefruit, Navel and sweets, tangerines active. Grapefruit harvest seasonally limited. Citrus groves mostly good condition. Most deciduous trees starting dormancy result freezing, near freezing nights. Range northern and central fair, southern deserts poor to very poor. Livestock fair to good, water short to adequate.

ARKANSAS: Cold, wet week. Highest temperature 58°, lowest 10°. All departures from normal ranged from -7 to -12°. Most rainfall 2.65 in., least 1.14 in.

Soil moisture adequate. Fieldwork possible 4 days. Cotton poor condition, 98% harvested, 87% 1979, 90% average. Soybeans poor condition, 100% yellowing, 99% shedding, 97% mature; 82% harvested, 94% 1979, 88% average. Oats good condition, 96% planted, 88% 1979, 92% average. Wheat 88% planted, 94% 1979, 90% average. Protein, hay supplements being fed cattle. Winter hay supplies low. Below average feed requirements from pastures.

CALIFORNIA: A weak weather system brought light amounts of precipitation to scattered areas of the northern half of State late in the week. Amounts were largest near the Oregon border, up to 0.50 in., tapering down to a few hundredths at the northern end of the San Joaquin Valley. The nearly Statewide trend to below normal average temperatures continued for the second week. The southeastern Desert averaged the greatest departure from normal. Freezing temperatures were noted in all districts at least one night.

Winter wheat 32% planted, 7% emerged. Rice harvest finished, stubble burning very active. Dry bean and field corn harvests almost complete. Milo and alfalfa hay harvests progressing well. Barley crop 25% planted. Cotton 85% complete. Avocado harvest light. Table and wine grape harvest light. Kiwi harvest ending. Navel orange harvest slow. Color good, sizes small. Valencia quality good for this time of year. Walnut harvest continues. Artichoke light supply. Broccoli decreasing slightly Central Coast; some harvest San

Joaquin Valley. Very light cantaloup, honeydew movement Desert. Cauliflower harvest fairly light, Central Coast; light harvest San Joaquin Valley, South Coast. Celery decreasing sharply Salinas-Watsonville; South Coast increasing. Lettuce harvest near end San Joaquin Valley; light harvest Santa Maria, South Coast; Palo Verde Valley increasing. Potato shipping active Tulalake-Butte Valley. Market tomato harvest decreasing seasonally. Rains November 22d northern, central areas beneficial starting new grass. Stock water supplies short. Calving, lambing continue active.

COLORADO: Dry, weak cold fronts 18th, 20th, change to winter-like conditions in mountains and east late 22d, 23d. Precipitation amounts generally light. Average temperatures generally 5 to 8° below normal at lower elevations, 9 to 13° above normal at higher elevations.

Winter wheat emerged 98%, 99% 1979 and average.

FLORIDA: Week began with warm, moist air as a tropical depression moved north along the Gulf Coast. Skies cleared as a strong cold front moved through the 18th, brisk northerly winds blew up to 20 miles per hour, 18th and 19th as a cool, dry high pressure settled over the State through the week. The season's first light freeze with scattered frost occurred in the Panhandle and Big Bend areas, 20th, 21st. Moderating temperatures by weekend with light rain spreading over Panhandle on 22d as a frontal wave developed in the northern Gulf. Rainfall averaged 2.00 in. Panhandle, north; 2.50 in. central; less than 1.00 in. south. Temperatures averaged 3° below normal Panhandle and near normal elsewhere.

Soil moisture adequate most of Peninsula, short upper north and most of Panhandle. Soybean harvest about complete. Cotton, sugarcane harvest active. Seeding small grains continues. Early planted grains slow growth due to cold weather. Sugarcane good to excellent condition. Grazing improved. Pastures mainly poor to fair. Cattle fair condition. Citrus tree condition improved. Irrigation discontinued, surface moisture adequate. Orange harvest for processing increasing. Overall vegetable shipments up 30% from previous week. Crops gaining were snap beans, cabbage, carrots, celery, chinese cabbage, sweet corn, escarole, lettuce, green peppers, parsley, radishes and tomatoes. Crops holding steady were eggplant and okra. Supplies of cucumbers and squash declined. Harvest for most crops is expected to gain as season progresses. Strawberry plants growing well. Light bloom, fruit set showing early fields.

GEORGIA: Temperatures ranged 3° above normal south to slightly below normal north. Rainfall first half of week more than 1.00 in. northwest.

Soil moisture variable, adequate north, short south. Harvest slowed somewhat. General rain 22d and 23d brought much needed moisture to south. Four days suitable for fieldwork. Corn harvest very limited progress, 99% harvested, 97% last year, average 94%. Soybeans poor to fair, 68% harvested, 74% last year, 73% average. Peanut harvest complete, same last year and average. Cotton poor to fair, 98% harvested, 86% last year, 81% average. Apple harvest complete. Pecans mostly fair to good, 48% harvested, 60% last year, average 61%. Wheat seeded 62%, 76% last year and average. Rye 84% planted, last year 86%, 84% average. Other small

grains 82% seeded, same as last year and average. Pastures and hay crops poor to fair. Cattle fair to good. Hogs fair to mostly good.

HAWAII: Favorable weather for crop growth continues. Rains some sections beneficial. Temperatures at higher elevation dropping, slowing crop progress.

Diseases and insects have been contained with regular spraying. Vegetables; supplies adequate. Snap bean, sweet pepper harvest very light. Acreage for harvest is small. Bananas; fields in active harvest. Supplies adequate. Papayas; moderate supplies are expected. Rains beneficial to orchards. Sugar; more mills are closing for annual repairs. Weekly harvesting decreasing. Pineapples; steady light harvesting expected for fresh sales. Pastures; generally favorable.

IDAHO: Temperatures below normal ranging from 52 to -3°, averaging in the low to mid-30's. Dry conditions prevailed. Rain showers on Friday turned to snow by Sunday. Some fall plowing but frost has stopped. Main farm activities include machine maintenance, marketing and other routine chores. Livestock feed situation adequate; many herds grazing on crop residue. Weaning, branding and vaccinations very active. Fall calving and lambing underway.

ILLINOIS: Temperatures near normal north, 1 to 6° below south. Precipitation 0.10 to 0.40 in. north and central, 1.00 in. southern areas.

Soil moisture 63% short, 37% adequate. Corn 100% harvested, 95% 1979, 96% average. Winter wheat 100% emerged, 100% 1979; condition 11% excellent, 72% good, 17% fair. Plowing 1981 corn and soybean acreage 77% complete, 66% 1979, 60% average. Pastures 31% good, 52% fair, 15% poor, 2% failure; supplying 26% of livestock roughage requirements, 29% 1979, 34% average. Fieldwork: 6.5 days suitable.

INDIANA: Cool, cloudy week. Temperatures ranged from 16 to 59°. Rains at beginning and end of period ranged from 0.20 in. in north to 1.10 in. in south. Sunshine 57% of possible.

Fieldwork averaged 5 days. Topsoil and subsoil moisture short to adequate. Spring cropland 70% tilled, 1979 45%, average 40%. Corn 99% harvested, 1979 90%, average 85%. Corn moisture 16%. Soybeans 100% combined, 1979 99%, average 98%. Wheat 96% emerged, 1979 95%, average 90%. Wheat stands and condition fair to mostly good. Tobacco 35% stripped, 1979 35%.

IOWA: In the southeast and east central, precipitation and temperatures averaged near normal, elsewhere, dry mild weather reported. On the 18th, Corning and Cherokee reported 10°.

Corn acreage harvested: 100%, 1979 87%, normal 95%. Soybean acreage harvested: 100%, 1979 100%, normal 98%.

KANSAS: No significant precipitation. Temperatures averaged from 36 to 38° west and north central to from 39 to 41° east and south central. This was from near normal north to around 4° below normal south.

Corn harvest complete, 95% last year and 96% average. Sorghum grain harvest advanced to 97%, 90% last year and average. Soybean harvest progressed to 98%, 97% last year, 90% average. Winter wheat seeding nearly complete at 99%, 97% a year ago, 99% average. Wheat emerged 95%, condition rated good. Pasture and range condition poor. Surface and subsoil moisture mostly short. Fieldwork: 6.0 days suitable.

KENTUCKY: Temperatures averaged 5 to 7° below normal with highs ranging mostly in the 40's to mid-50's. Rainfall totals were in the 2.00 in. range

in the west and in the 1.25 to 1.75 in. range in the east.

Corn and soybean harvest and fall wheat seeding virtually finished. Rainfall very welcome for fall seeded grain, pastures and to replenish short topsoil and subsoil moisture. Burley stripping progressing as leaf comes into case. Much of the burley has been slow to come into case because of dry weather. Burley market opened November 24 with opening prices in the mid-\$160's per cwt. Live-stock mostly satisfactory condition, several reports of poor conception on sows from breedings in the heat of summer.

LOUISIANA: Rains statewide. Temperatures 7 to 9° below normal. Extremes: 24 and 76°.

Soil moisture adequate. Fieldwork: 4.4 days suitable. Cotton harvested 100%, 91% 1979, 92% average. Soybeans harvested 97%, 97% 1979, 96% average. Sugarcane fair, harvested 51%, 64% 1979, 59% average. Vegetables fair. Sweetpotato harvest complete. Pecans harvested 50%, 68% 1979. Pastures poor to fair. Wheat planted 92%, 95% 1979, 93% average; emerged 80%. Livestock fair. Supplemental feeding continues.

MARYLAND & DELAWARE: Temperatures averaged 5° below normal. Highs averaged in the mid-40's and 50's and lows averaged between 20 to upper 30's. Precipitation near normal, averaging 1.00 in.

MICHIGAN: Temperatures 1 to 5° above normal Upper and northern Lower, 1 to 3° below normal southern lower. Precipitation below normal. Maximum precipitation 0.25 in. to 0.33 in. No significant snowfall.

Row crop harvest nearly complete. Soil moisture adequate to surplus. Corn for grain 95% picked, 85% last year, 89% normal. Harvest moisture 22%. Soybeans 99% harvested, 96% last year, 95% normal. Winter wheat growth slowed by cool fall temperatures. Fall plowing 60% complete, 50% last year, 55% normal.

MINNESOTA: Temperatures averaged 5 to 7° above normal across the north, 4 to 6° above normal central, 2 to 4° above normal south. Precipitation averaged below normal except extreme north. Departures ranged from 0.15 in. above to 0.15 in. below normal in north-west. The northeast was generally more than 0.25 in. below normal. Remainder of State very near 0.25 in. below normal. Precipitation totals less than 0.05 in. over southern three-quarters and mainly 0.05 to 0.10 in. elsewhere. Extremes: 0.43 in. at International Falls; traces at a number of stations in south. Snowfall only trace or less than 1.00 in. except for extreme north where 1.00 to 4.00 in. reported.

MISSISSIPPI: Temperatures about 8° below normal. Extremes: 81 and 20°. Rainfall widespread early in week and over weekend.

Soil moisture adequate to surplus. Fieldwork: 3.3 days suitable. Cotton 98% harvested, 84% 1979, 86% average. Soybeans 89% harvested, 93% 1979, 87% average. Pecans 65% harvested, 69% 1979, 63% average. Winter wheat 90% planted, 92% 1979, 90% average; condition good. Pasture condition fair, livestock condition fair. Hay and roughage supplies mostly short, feed grain supplies short.

MISSOURI: Temperatures averaged 2 to 5° below normal. Rainfall ranged from none in the north and northwest to 0.25 in. in central to 1.00 in. or more in the extreme south.

Winter wheat 92% emerged. Soybeans 100% harvested, last year 100%, normal 89%. Cotton 100% harvested, last year 96%, normal 90%.

MONTANA: Precipitation very light except for some areas of west where moderate rain fell late week. Week began cool but warmed by midweek. Temperatures

averaged 2° below normal over snowcovered southwest, 8° above normal over northeast and 7° above normal in north central. Highest was 61° at Glasgow, lowest 8° below zero at West Yellowstone.

Cattle and sheep in good condition. Pastures and ranges open. Stock water supplies short to adequate east, adequate elsewhere.

NEBRASKA: Temperatures near normal. Precipitation scarce.

Corn harvest 98%, 86% last year and 88% normal. Panhandle producers 90% complete, all others 98% plus. Winter wheat mostly fair to good. Eastern fields showing improvement but concern exists in most other areas over extended dry conditions. Topsoil moisture mostly short to adequate. Subsoil supplies mostly short. Pasture and range feed supplies mostly short to adequate. Days suitable: 6.9.

NEVADA: Occasional cloudiness north most of week. Light showers end of period. Daytime temperatures seasonable, low nighttime temperatures resulted in mean 3 to 4° below normal. Extremes: 69 and 1° below zero.

Cotton harvest gaining momentum. Livestock good condition. Ranch activities confined to care and feeding livestock.

NEW ENGLAND: Temperatures below normal until week-end, when they reached low 40's and 50's. Record early snowfall, beginning week, left 6 to 12 in. over region. Rain and high winds along the coast, by weekend. Total precipitation for the period 1.00 to 1.50 in. south and coast, 0.20 to 1.00 in. elsewhere.

NEW JERSEY: Temperatures 7 to 8° below normal, averaging 33° north, 36° south and 38° coastal. Extremes: 13° Newton and 59° Bridgeton 17th. Precipitation totals near normal, averaging 0.99 in. north, 0.79 in. south and 1.05 in. coastal. Snow from 2 to 4 in., fell over north 17th.

Field corn and soybean harvest in clean-up stage. Fruit pruning continues. Fall seeded grains and cover crops look good. Cider-making active.

NEW MEXICO: Soil moisture adequate in southern and mountain regions, short elsewhere. Moderate to severe freezes continue to occur with snow slowing harvest activity in some areas. Cotton harvest slowed, due to snow, through most of week except for the far southern regions. Winter wheat and barley in good condition. Grazing activities continue to increase. Grain sorghum harvest about 95% complete. Harvest of pecans increasing as hulls continue to open. Red chile harvest active most areas. Ranges mostly fair condition. Livestock good condition with little or no supplemental feeding. Cotton harvested 45%, 52% 1979, 57% average.

NEW YORK: Below normal temperatures ranged from the mid 20's in the Adirondacks to the mid 30's. Precipitation ranged from 0.25 in. in the extreme north and west to over 1.00 in. in the southeast. Six to 13 in. of snow fell in the eastern southern tier, Catskills and Hudson Valley, 4 to 8 in. in western and central areas, and 1 to 3 in. of snow fell in the St. Lawrence Valley.

NORTH CAROLINA: Temperatures: 4 to 6° below normal. Precipitation: 0.50 to 2.00 in.

Fieldwork: 3.9 days suitable. Soil moisture: 6% surplus, 80% adequate, 13% short, 1% very short. Conditions: Wheat, oats, barley, rye good; pastures fair to good. Harvested: Cotton 95%, 1979 74%, average 79%; sorghum grain 91%, 1979 89%, average 90%; soybeans 61%, 1979 57%, average 55%; corn for grain 97%, 1979 95%, average 95%. Planted: Wheat 87%, average 82%; oats 92%, 1979 93%; barley 92%, 1979 94%; rye 82%, 1979 91%.

NORTH DAKOTA: Mostly mild but colder on the 22d and 23d. Temperatures averaged 6 to 9° above normal. Extremes: 9 and 60°. Precipitation mostly light.

Week had mild fall weather with above normal temperatures and little snow, similar to the past several weeks. Completion of harvest delayed by the late planting of some fields that are taking longer to dry with short, damp days. Some harvest progress early in week. Ground freeze now becoming general across northern portion of State enabling combining in previously muddy fields with some progress made during the evening hours. Some sunflower, flax, corn, dry edible bean and small grain fields remain standing. Some fields will not be harvested until spring. Snow cover mostly light in northern portions with none to only a few patches in southern portions. Roads in mostly good condition.

OHIO: Maximum temperatures averaged as much as 9° below normal; minimums while below normal did not deviate as far. Early winter snowstorm left as much as 6.00 in. of snow in band from west central into northeast, pushed precipitation above normal there. Northwest below normal amounts totaled less than 0.20 in. Soil temperatures, under bare ground, fell into low and mid-30's at times but maximum values generally reached to 40°.

Winter storms held field activity to a minimum but most harvesting complete and plowing for spring planted crops well along.

OKLAHOMA: Temperatures averaged below normal, ranging from 7° below northeastern sections to 10° below southeastern sections. All divisions except the Panhandle received precipitation. Amounts averaged less than 0.05 in. north central and west central divisions to 0.75 in. southeast division.

Rain and snow received beneficial to completion of wheat seeding and seed germination. Harvest of oil crops remained active. Wheat up-to-stand 90%, 75% 1979, and 90% average. Wheat 5% grazed, 10% last year, and 5% average. Cotton 60% harvested, 35% 1979, and 30% average. Days suitable fieldwork: 4.9.

OREGON: Near normal temperatures. Precipitation up to 1.50 in. recorded along northern coastal zone, decreasing southward to only 0.20 in. along southern section of coast. Rainfall averaged 0.20 in. in western valley and central areas. Little or no rainfall in northeastern and southeastern areas reported.

Soil moisture supplies adequate. Winter wheat condition good; 92% emerged; 87 last year. Some fall spraying, mostly too wet. Livestock condition good. Range and pasture condition good. Feed supplies adequate.

PENNSYLVANIA: Coldest week since mid-March and wettest since mid-October. First snowstorm of season produced 2.00 to 8.00 in. most sections and up to 16.00 in. northeast; 0.50 to 2.00 in. precipitation from storms beginning and end of period. Temperatures 3 to 8° below normal.

PUERTO RICO: Island average rainfall 0.67 in. or 0.66 in. below normal. Temperatures averaged about 79° on coasts and 74° interior divisions. Extremes: 94 and 56°.

SOUTH CAROLINA: Temperatures averaged below normal except for south, which was normal. General frost first part of week. Rainfall normal for the week.

Soil moisture adequate. Days available for fieldwork: 3.5. Cotton harvest 96% complete, 92 last year, 89 average. Soybean maturity at 92%, 99 last year. Harvesting progress lagging, now 40%, 58 year ago, 60 average. Condition remains poor, yields are expected very low. Livestock condition fair to good,

pastures fair, winter grazing fair to good with 96% planted, 94 last year; 88% emerged, 88 last year, 86 average. Wheat condition good, 72% planted, 74 year ago, 70 average; emerging and growing well.

SOUTH DAKOTA: Mild days and cool nights prevailed. Average temperatures generally in the mid-30's and ranged from 4° below normal to 10° above normal with most of the State averaging about 5° above normal. Extremes: 67 and 4°. Most areas reported little or no precipitation. Small amounts of less than 0.10 in. fell over the south central.

TENNESSEE: Cold front brought rain early week, another front brought more rain by weekend. Amounts ranged between 2.00 and 4.00 in. Temperatures in the 40's and 50's averaged 6° below normal.

Harvest virtually complete. Activities: Preparing for tobacco sales; caring for livestock. Soil moisture adequate.

TEXAS: Weather: High pressure first half week fair skies; latter half upper air disturbance, cloudy skies, scattered rain. Temperatures 10° below normal west Texas; 3 to 6° below normal elsewhere. Rainfall 1.00 in. above normal Lower Valley; near normal elsewhere.

Range and livestock: Rains, snow provided needed moisture. High Plains snowfall helped wheat fields, should promote growth. Wheat pastures providing limited grazing. Supplemental feeding increased. Livestock fair to good, some movement of stocker cattle.

Commercial vegetables: Lower Rio Grande Valley, cabbage, carrot harvest continued. Cucumbers, peppers progressed well, onion seeding, transplanting continued. Citrus harvest progressing well. Fruit good size, quality. Coastal Bend, cucumber harvest nearing completion. Markets good, harvesting activity increased. San Antonio-Winter Garden area cabbage harvest steady, spinach harvest expected soon. Moisture conditions improved, onions progressing well. East Texas sweetpotatoes harvest virtually complete. Small, poor quality potatoes have reduced availability of fresh market supplies. Trans-Pecos region cabbage, bell peppers harvest nearing completion. Chili pepper, lettuce harvest active. Pecan harvest steady. Production light, heavy damage caused by birds, rodents.

Crops: Rain, snow kept most field operations standstill. Week's end limited harvest resumed. Cotton harvest slow progress wet field conditions prevailed. Rains, heavy snow High and Low Plains, Trans-Pecos grade reduction already low quality cotton. Some gins catch up backlog cotton; few gins High Plains closed lack of cotton. Hard freeze Panhandle help remove remaining foliage. Small grains benefit recent moisture. Some wheat fields Northern High Plains still moisture stressed; dryland fields limited grazing. High winds prevented significant snow accumulations. Oats grazed South Central areas. Reported wheat condition 10% excellent; 39% good; 30% fair; and 21% poor. Wet field conditions slowed peanut harvest. Cross-Timbers yields poor to fair; grades low. Soybean harvest some progress; wet fields slowed harvesting operations. Sugarcane harvest underway. Sugarbeet harvest delayed early week wet weather. Yield, sugar content low. Light cuttings of alfalfa hay Trans-Pecos. Because short hay supplies, producers buying hay out of state. Cotton harvested 64%, 52% 1979, 51% average. Sorghum harvested for grain 100%, 97% 1979, 98% average. Wheat planted all purposes 93%, 96% 1979, 96% average. Wheat emerged 86%, 79% average. Peanuts harvested 75%, 100% 1979, 96% average. Soybeans harvested 82%, 92% 1979, 91% average. Sugarbeets harvested 54%, 83%

1979, 84% average. Pecans harvested 33%, 38% 1979, 45% average. Sunflowers harvested 82%, 99% 1979, 96% average.

UTAH: Few isolated showers forepart period. Storm of moderate to locally heavy intensity over weekend. Cooling trend temperatures over weekend. Average temperatures ranged from 3° below normal to 11° below.

Soil moisture conditions on winter ranges and in winter wheat seeded areas improving. Major farm activities limited to care and feeding of livestock. Onion and potato storages open. Sorting and marketing in progress. Marketing of apples continued.

VIRGINIA: Storm system passing on 17th, 18th brought cooler temperatures, moderate amounts mixed precipitation. Higher elevations reported freezing rain, snow flurries. Another storm on 21st affected only coastal areas. On 23d another storm in Gulf States spread rain into extreme southern, southwest sections. Extremes: Upper 50's to mid teens. Rainfall 0.75 in. to 1.50 in.

Wet conditions slowed harvests, aided small grains. Topsoil moisture mostly adequate. Fieldwork: 4.1 days suitable. Harvest progress: Corn 95%, 90% 1979, 91% average; soybeans 70%, 77% 1979, 77% usual; grain sorghum 76%, 75% 1979. Small grains mostly good, pastures poor to fair except good southwest. Forage secured from grazing: Dairy cattle 17%, beef cattle 59%, sheep 74%. Other activities: Deer hunting; butchering hogs; preparing fire-cured, sun-cured tobacco for marketing; marketing last of peanuts; feeding livestock.

WASHINGTON: West: Cool, wet weather prevailed, with wind and heavy rains by week's end. Carrot harvest continued, as did Christmas tree cutting. Some problems with needle drop due to lack of cold temperatures reported. Winter seed cabbage crop looks good. Livestock in good shape and on winter rations.

East: Another week of overcast skies continued with moderate temperatures and little precipitation. Conditions have been good for post-harvest orchard activities. Corn harvest near completion. Winter wheat, barley reported in average to above average condition. Soil moisture adequate. Hay and forage supplies generally adequate.

WEST VIRGINIA: Temperatures averaged 8° below normal. High 53°, low 7°. Precipitation above normal.

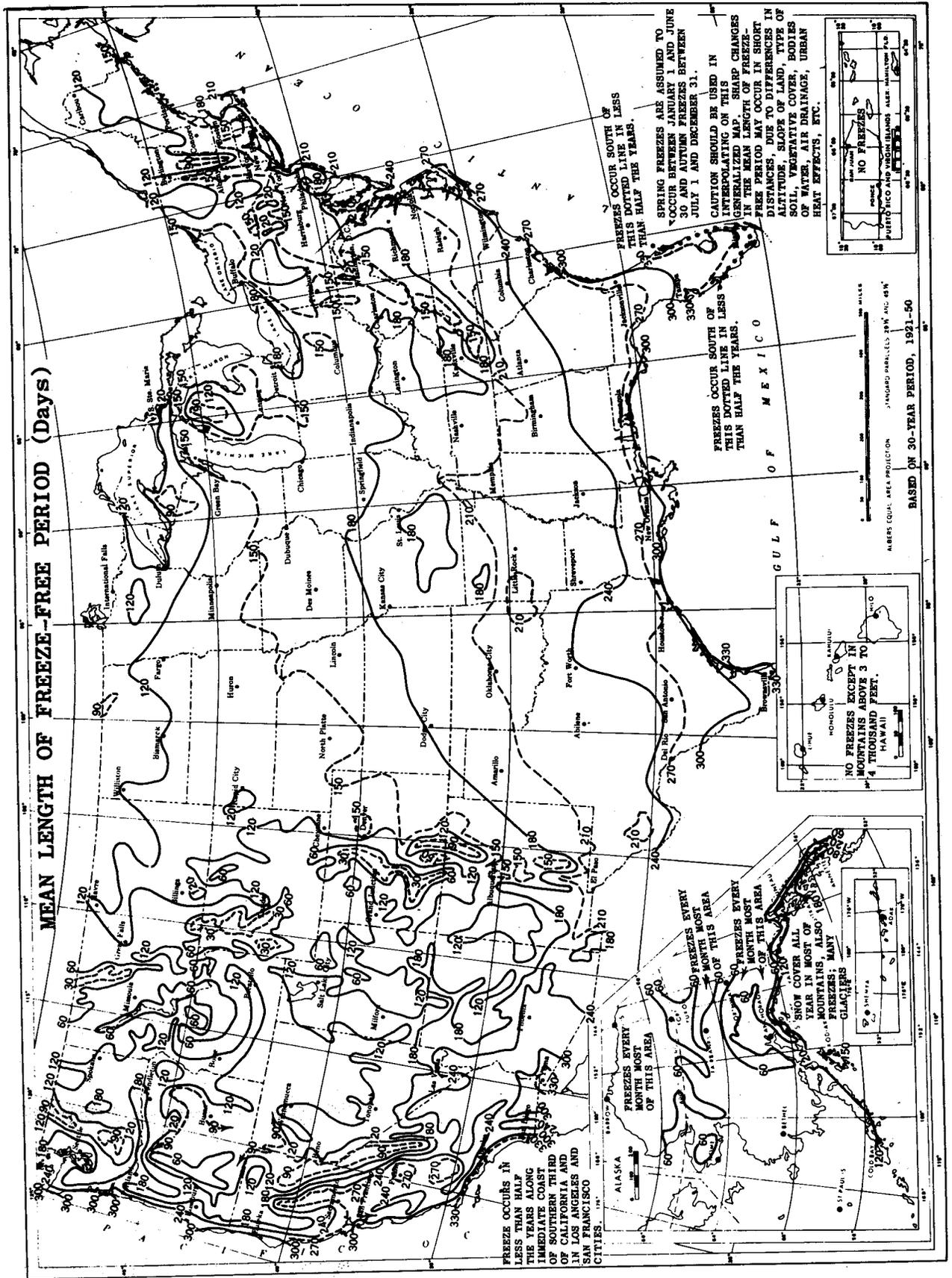
Soil moisture, adequate. Days suitable for fieldwork: 3.3. Hay, grain, other feeds all adequate. Pasture condition fair to poor.

WISCONSIN: Temperatures near normal. Highs in 30's beginning of week but reached 50's 22d with strong south winds. Lows in teens and 20's. Precipitation confined mostly to 23d when 0.25 to 0.50 in. rain fell as cold front moved through. Temperatures cooled to 30's again 23d.

Some corn harvesting and fall plowing continuing. Wet fields with corn standing will be left until ground freezes hard enough to support harvesting equipment. Much outside work has been accomplished during November.

WYOMING: All areas suffered with below seasonal temperatures. Lowest temperature -16°, highest 60°. Precipitation light.

Winter wheat mostly good. Some livestock still being marketed. Cattle in good condition. Some producers weaning calves. Activities mostly concerned with preparing for winter months.



International Weather and Crop Summary

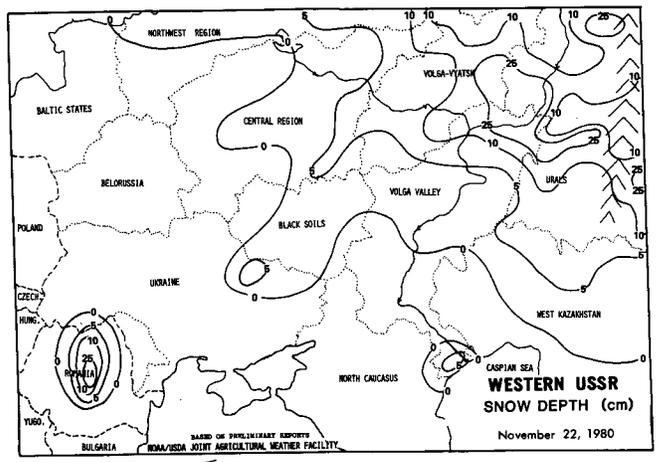
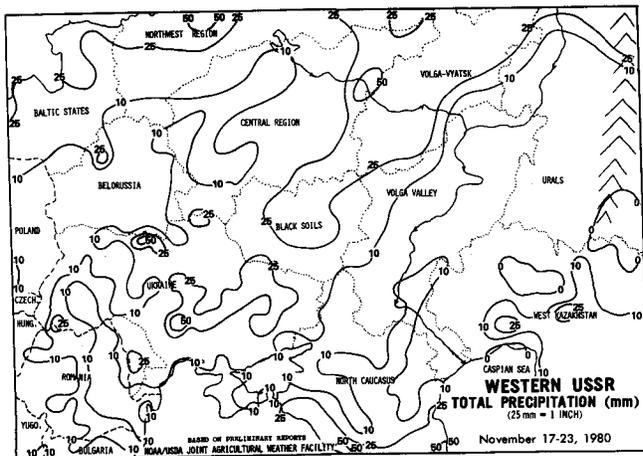
November 17 - 23

HIGHLIGHTS

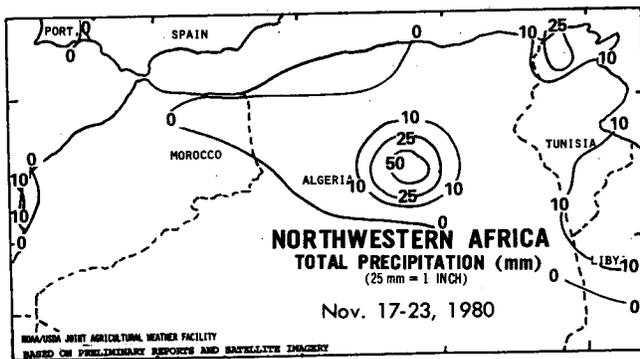
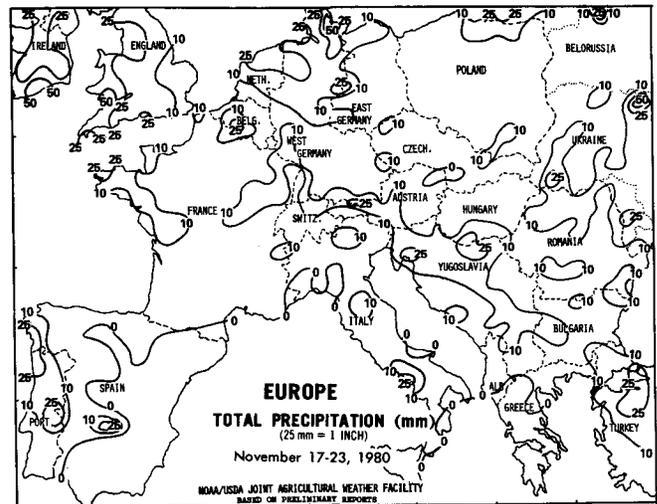
- WESTERN USSR: Rainy weather melted much of the earlier snow cover and kept soils quite wet. Temperatures rose above normal, but renewed winter grain growth occurred only in the south.
- EUROPE: Warmer weather allowed winter grain to resume growth in nearly all countries. Rainfall slackened in most countries, but interrupted fieldwork in the northwest, northern Yugoslavia, and southern Hungary.
- NORTHWESTERN AFRICA: Beneficial rain fell in northern Tunisia. Conditions remained too dry for winter grains in western Algeria.
- SOUTH AFRICA: Planting prospects improved in much of The Maize Triangle with widespread and locally heavy showers providing much needed soil moisture for maize germination.
- EASTERN ASIA: Light rain and mild temperatures benefited winter grains in China. Wet weather along China's southeastern coast and in South Korea hampered late rice harvesting.
- SOUTH ASIA: Rainfall was once again limited to southern portions of India.
- AUSTRALIA: Widely scattered light showers did not significantly hamper the wheat harvest. Dry weather prevailed in Queensland's sugar cane area.
- MEXICO: Cool brought color to northeastern citrus, while sunny conditions favored growth of West Coast vegetables and harvesting of Southern Plateau corn.
- SOUTH AMERICA: Wet weather interfered with field work in many crop areas. Soil moisture conditions are adequate for soybean and maize sowing in both Brazil and Argentina with only minor deficiencies in portions of Parana.

WESTERN USSR - Wet weather continued over much of European USSR. Heaviest totals fell in a broad band extending from the Ukraine northeastward through the Black Soils and Volga-Vyatsk regions. Most of the precipitation came in the form of rain as temperatures rose much above normal. Substantial snowmelt resulted, leaving only the northeastern

portions of the winter grain belt with a light snow covering. However, conditions remained too cold for renewed winter grain growth in all but the southernmost areas. The wet conditions in the Ukraine posed a danger of frost damaging winter grains, but occurrences of frost during the week were relatively light.

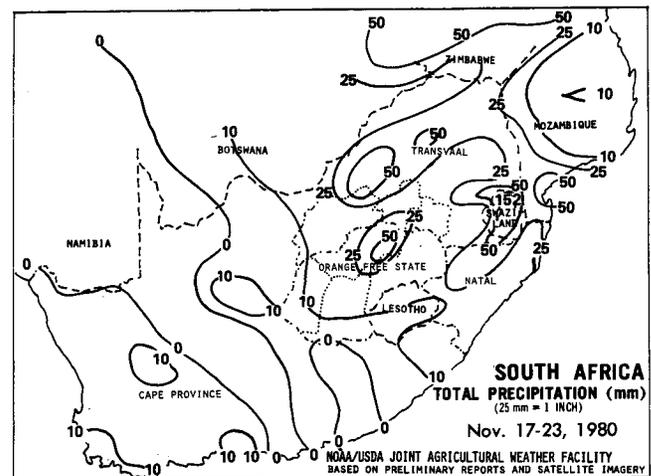


EUROPE - Drier weather returned to much of the region. Storms stayed to the north, dropping near-normal precipitation in parts of the northwestern countries. Only in northern Yugoslavia and southern Hungary did precipitation remain much above normal. Even there, late harvest activity was further delayed only over a relatively small area. Soil moisture remained in good supply as warmer temperatures allowed winter grains to resume growth in most countries. Temperature departures from normal stayed small in Mediterranean areas, but became quite large in central and northern countries as warm air moved in from the Atlantic.



NORTHWESTERN AFRICA - The only major agricultural area to receive substantial rainfall during the week was northern Tunisia. Most of this grain-producing area had normal or greater rainfall totals, maintaining good growing conditions. Moroccan crop areas had good soil moisture from previous rains, and only in western Algeria did winter grain prospects remain dim.

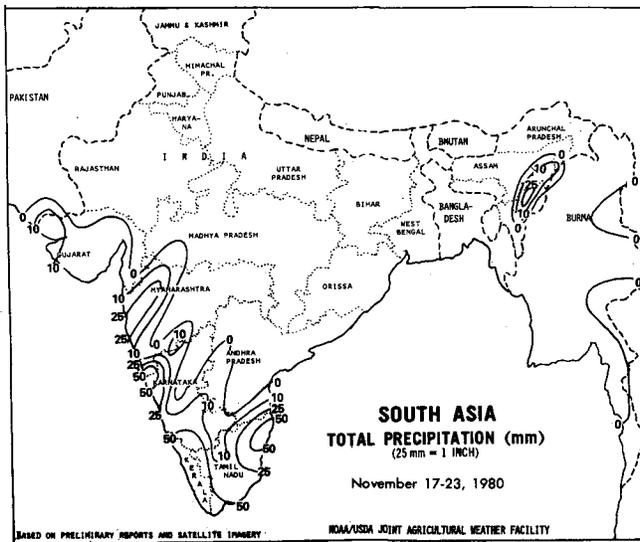
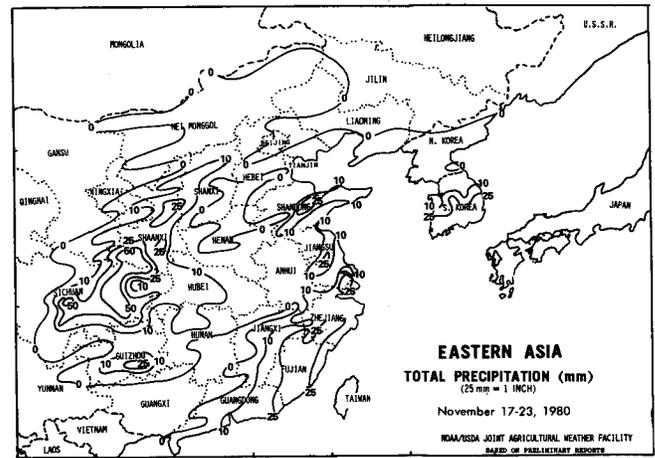
SOUTH AFRICA - Shower activity was more intense this week in both the Transvaal and the Orange Free State. A minimum of 10 mm fell in southern portions of The Maize Triangle, but localized, heavy showers produced 25 to 50 mm in some areas which had been too dry for maize planting. This new supply of moisture likely triggered intense fieldwork as farmers sow their crops at the beginning of the expected wet season.



MAP # 8
Pg 14 LOWER RIGHT

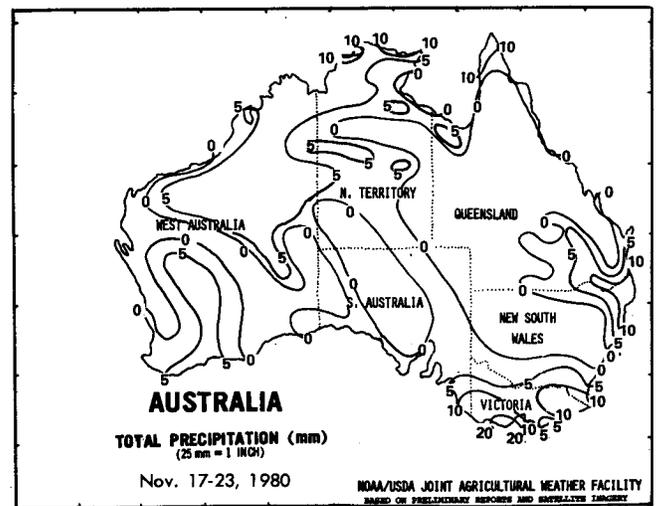
33%

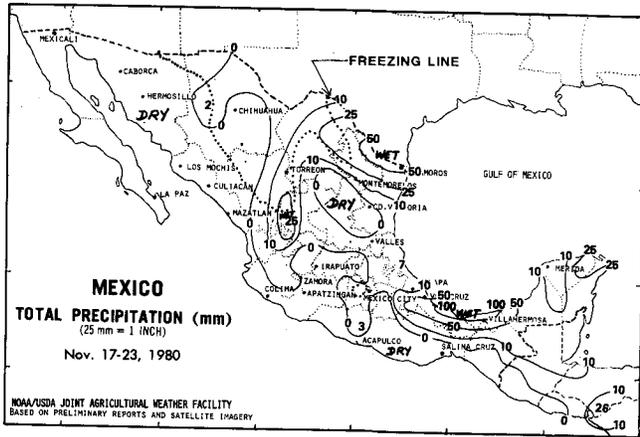
EASTERN ASIA - Precipitation generally increased in the region during the week. Heaviest amounts fell in the hills of China, and the Sichuan Valley received abundant beneficial moisture. Mostly light amounts fell on the North China Plain, with some limited areas of above-normal rainfall benefiting winter grains in parts of Shandong and Jiangsu. Growth continued in most winter grain areas as temperatures surged even further above normal. Late rice harvesting in South Korea and southeastern coastal provinces of China was interrupted by much-above-normal rains--the first in 3 weeks.



SOUTH ASIA - Rainfall was once again limited to southern portions of India. Moisture totals along the west coast resulted from remnants of last week's tropical depression which drenched the east coast. Later in the week, showers returned to the extreme south, but yielded below-normal totals along the east coast of Tamil Nadu.

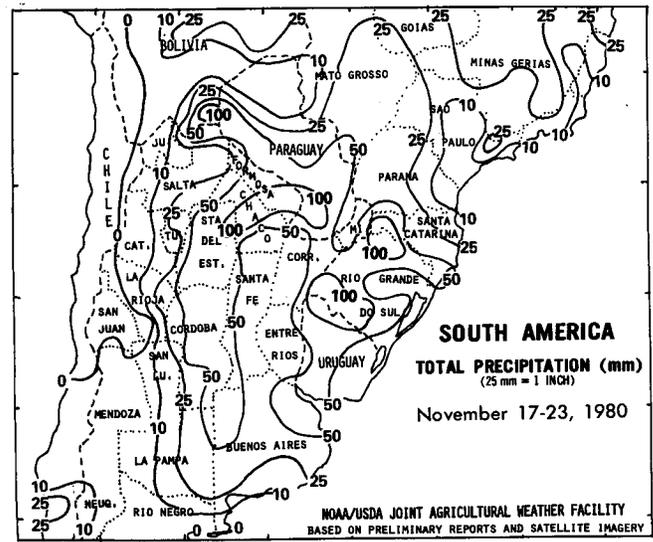
AUSTRALIA - Widely scattered, light rain fell over Australia's grain areas. Weekly totals were generally less than 5 mm, except for coastal areas of Victoria, northern New South Wales and southeastern Queensland where 10 to 20 mm fell. The scattered showers posed no significant problem for the wheat harvest which is underway in most areas. Yield prospects for barley and oats remain good since over half the sown area is in Victoria and South Australia. Summer crops in Queensland and New South Wales could use additional moisture for vigorous vegetative growth during the warm summer months. Dry weather prevailed this past week along Queensland's sugar-producing coastal region.





MEXICO - Cool temperatures averaging 4 to 8 degrees below normal blanketed the Northeast. It slowed growth of tender crops but helped color citrus fruit. Heavy rains falling over the extreme Northeast and along the Bay of Campeche interrupted harvest of minor crops. Dry, sunny conditions favored tomato development over the West Coast and corn harvesting in the southern Plateau. Freezing temperatures dipped into the North Central region and may have burned some pastures.

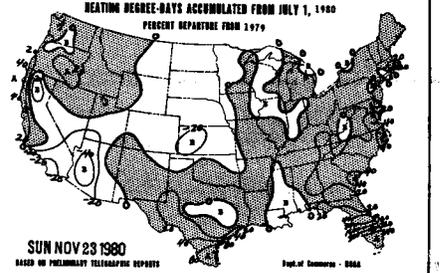
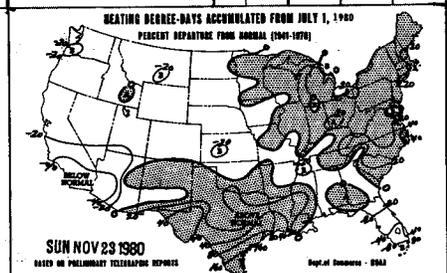
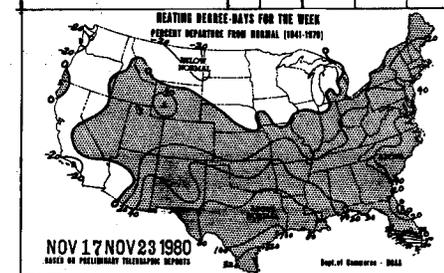
SOUTH AMERICA - Rain fell in most all major crop areas of Brazil and Argentina as two storm systems worked their way through the region. Above-normal precipitation was noted throughout Argentina's crop areas and through much of Rio Grande do Sul and Santa Catarina as well. The wet weather was unfavorable for the wheat harvest, in its late stages in Brazil, but, perhaps more importantly, provided good moisture supplies for maize and soybeans. In Argentina, the first-crop soybeans which represent about 60% of the total production are being planted with much improved soil moisture conditions during the past several weeks (the second crop comes after the wheat harvest). The heavy rain (100 to 115 mm) late in the week in parts of Rio Grande do Sul and Santa Catarina has delayed fieldwork. However, showers in Parana brought some relief to relatively dry areas. Soybean planting in Parana is one-half to three-quarters complete while about 40% of the crop is sown in Rio Grande do Sul.



HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING NOV. 23, 1980.

BASED ON 1941-70 NORMALS. * ACCUMULATION FROM JULY 1, 1980.

Table with 15 columns: STATES AND STATIONS, WEEKLY TOTAL, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION TOTAL, SEASONAL DEPARTURE*, SEASONAL DEPARTURE FROM 1979-80. Rows list various states and cities such as ALA. BIRMINGHAM, ARIZ. FLAGSTAFF, CALIF. BAKERSFIELD, etc.



NOV 17 NOV 23 1980. BASED ON PRELIMINARY TELETYPE REPORTS. Dep. of Commerce - NOAA.

THE 1980 MONSOON PRODUCES EXCELLENT RICE CROP IN THAILAND

Jim Williams, Ray Motha, and Charles Herring
NOAA/USDA Joint Agricultural Weather Facility

John Dyck
USDA Economics and Statistics Service

Although maize, cassava, sugar cane, and other crops are produced in Thailand, rice is by far the most important commodity, both for local consumption and export. It is grown throughout the country (see fig. 1), but cultivated most intensively in the Central Plains north of Bangkok. Most rice grown for export comes from this region.

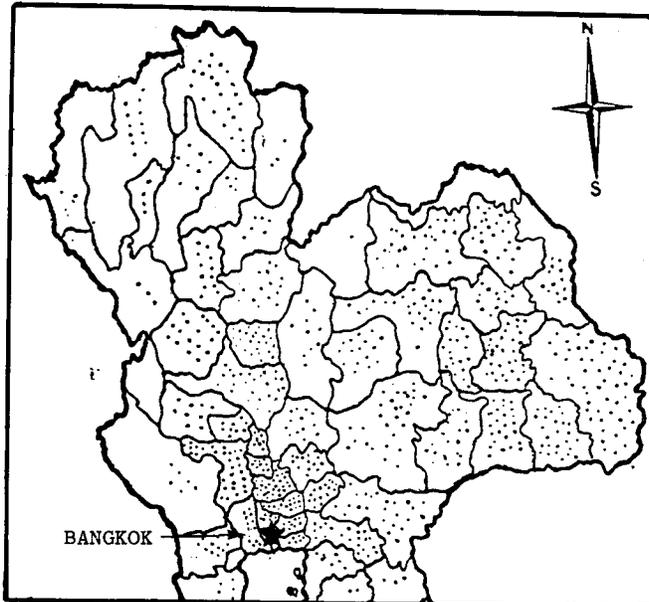


FIGURE 1: RICE-CULTIVATED AREA IN THAILAND BASED ON 3-YEAR AVERAGE PRODUCTION (1966-1968). EACH DOT REPRESENTS 8000 HECTARES. SOURCE ESS/USDA.

A monsoon climate is one dominated by constant winds from specific directions during different times of the year. In tropical climates, these seasonal shifts are frequently accompanied by a sudden dramatic increase (or decrease) in rainfall. The southwest monsoon, marking the onset of the wet season in Southeast Asia, normally extends from late May until mid-October. In 1979 the monsoon arrived late, performed erratically and departed early, leaving Thailand (and southern Asia in general) short of water required for both the main-season and subsequent dry-season crops. The 1980 monsoon arrived more-or-less on schedule and deposited near-normal amounts of rain over southeast Asia during most of the 5-month period. Rainfall at Lop Buri, near the center of the Central Plains, was reasonably representative of Thailand in general (see fig. 2 & 3). Above-normal rain fell during the first part of the season while below-normal amounts fell during the latter part, with the seasonal total near normal.

The traditional major crop is planted in early summer with the onset of the monsoon, normally beginning in May, and harvested at year's end. However, rice is increasingly double-cropped in the Central Plains. New varieties with shorter growing cycles are planted earlier in the spring, followed by another crop planted in mid-to-late-summer. The first crop, requiring irrigation in the dry season, now accounts for about one-tenth of the total rice production.

Thailand entered the 1980 monsoon season with both reservoirs and agricultural land critically short of water. This potentially hazardous situation resulted from the abnormally dry 1979 monsoon, coupled with water demands for dry season irrigation and hydro-electric power generation. Thus, the normal onset and active development of the 1980 monsoon was vital to the agricultural economy of the country.

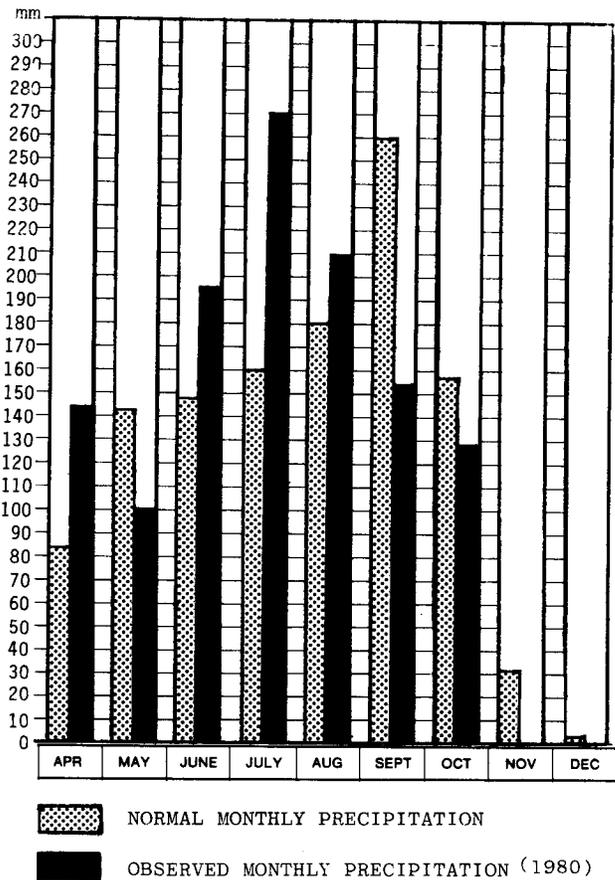


FIGURE 2: HISTOGRAMS OF NORMAL AND OBSERVED (1980) MONTHLY PRECIPITATION AT LOP BURI, THAILAND.



FIRST CLASS MAIL

CROP PROGRESS

FOR WEEK ENDING NOV 23, 1980

	SOYBEAN % HARVESTED		
	1980	1979	AVG.
ALA	92	83	82
ARK	82	94	88
GA	68	74	73
ILL	100	100	100
IND	100	99	98
IOWA	100	100	98
KANS	98	97	90
KY	99	97	96
LA	97	97	96
MICH	99	96	95
MINN	99	98	99
MISS	89	93	87
MO	100	100	89
NEBR	100	100	98
N C	61	57	55
OHIO	100	99	100
S C	40	58	60
TENN	100	91	76
18 STATES	94	94	91

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

	COTTON % HARVESTED		
	1980	1979	AVG.
ALA	98	74	80
ARIZ	65	74	65
ARK	98	87	90
CALF	85	90	NA
GA	98	86	81
LA	100	91	92
MISS	98	84	86
MO	100	96	90
N MEX	45	52	67
N C	95	74	79
OKLA	60	35	30
S C	96	92	89
TENN	100	71	76
TEX	64	52	51
14 STATES	75	64	NA
EXCL. STATES WITH NA	73	61	60

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

NA - NOT AVAILABLE

	WINTER WHEAT % EMERGED		
	1980	1979	AVG.
CALF	7	NA	NA
COLO	98	99	99
IDA	100	100	100
ILL	100	100	NA
IND	96	95	90
KANS	95	90	NA
MO	92	NA	NA
MONT	100	NA	NA
NEBR	100	100	100
OHIO	99	90	NA
OKLA	70	75	90
OREG	92	87	NA
S DAK	100	100	100
TEX	86	79	NA
WASH	99	95	NA
15 STATES	89	NA	NA
EXCL. STATES WITH NA	86	89	95

THESE 15 STATES PRODUCED 90%
OF THE 1979 WINTER WHEAT CROP.

NA - NOT AVAILABLE