

WEEKLY WEATHER AND CROP BULLETIN

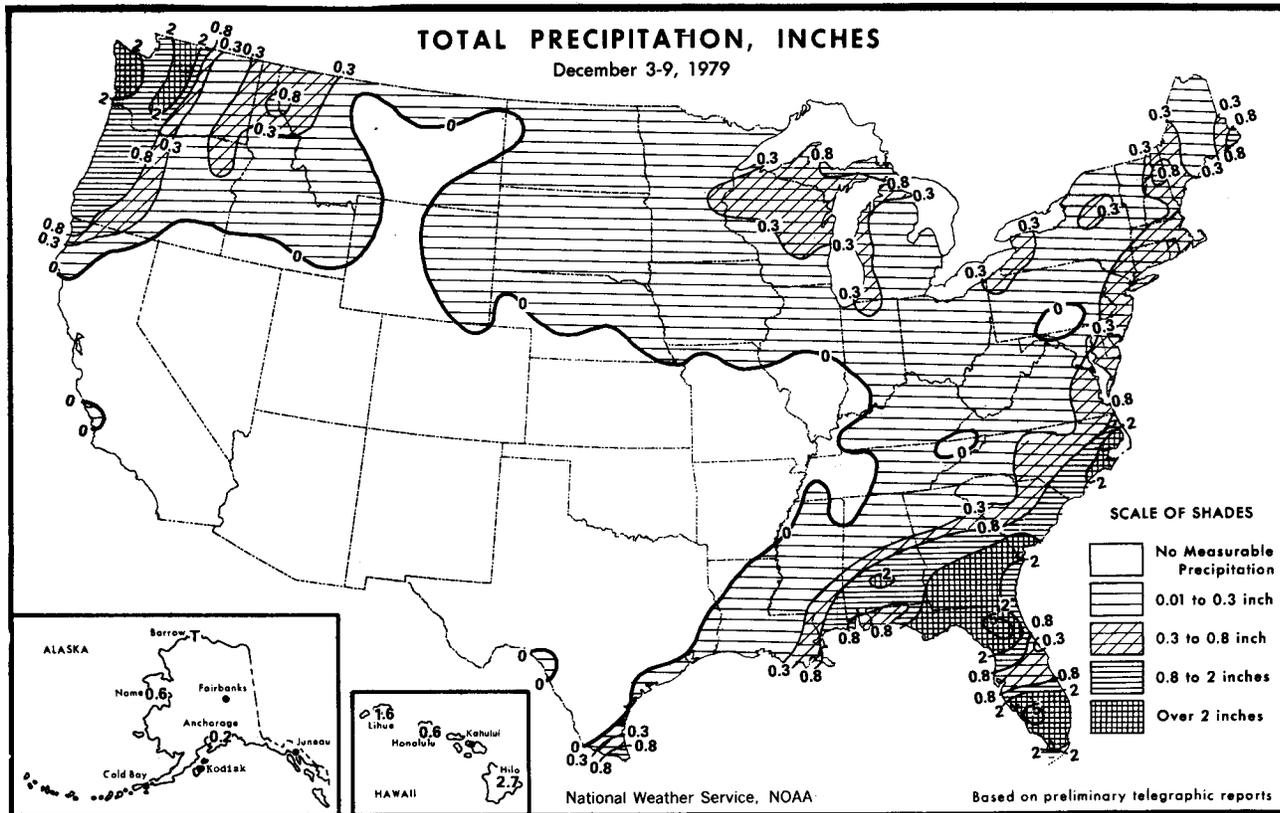
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National Weather Summary

December 3 - 9

HIGHLIGHTS: Nearly all the United States averaged warmer than normal temperatures. The warm readings persisted almost all week in the West, where some points averaged 15 to 17 degrees above normal. By contrast, parts of the Southeast ranged up to 7 degrees colder than the norm.

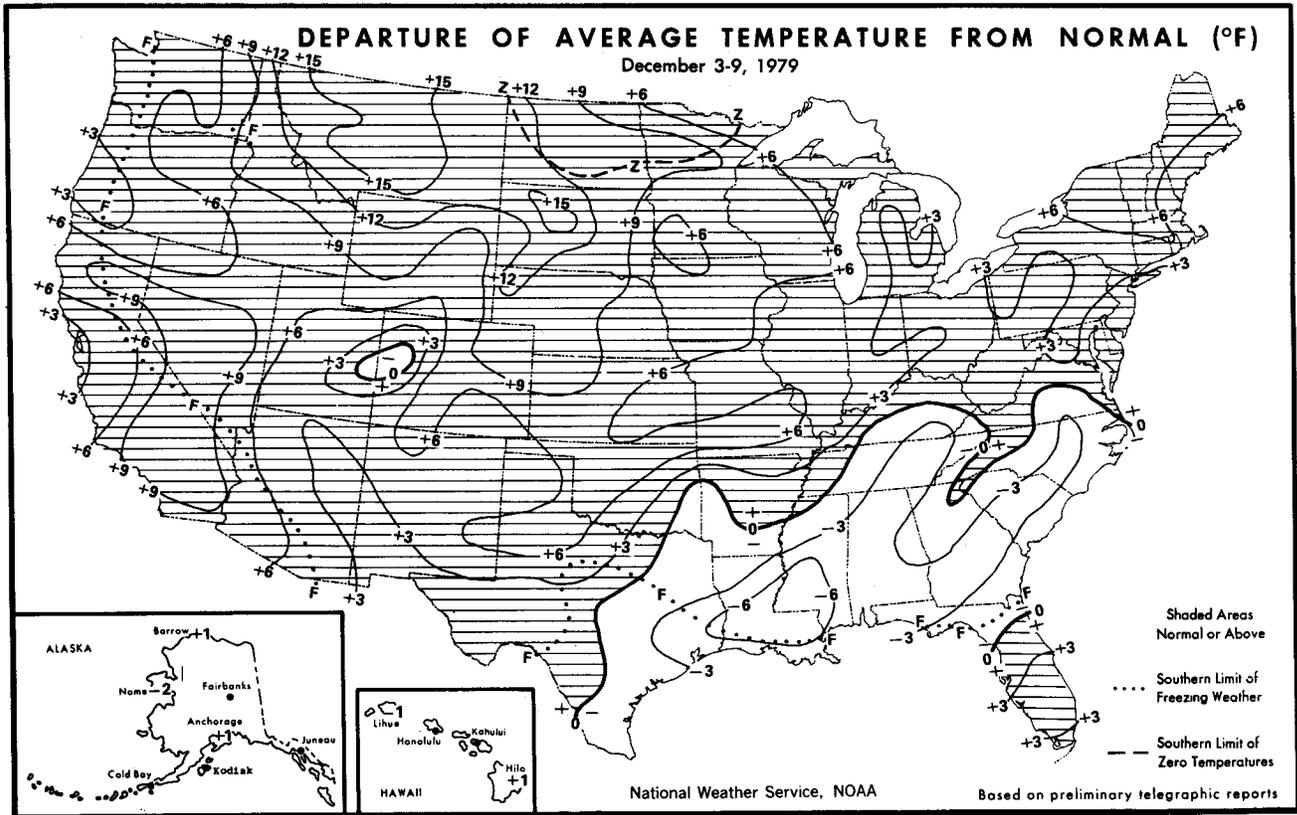
The only extreme amounts of moisture fell at opposite corners of the Nation--the Southeast and Northwest. Coastal areas of the Pacific Northwest accumulated heavy rain, while mountains to the east measured heavy snow. Both Florida and Georgia gathered heavy rain; lesser amounts extended up the East Coast.

On Monday, rain edged into the extreme Northwest, but clear weather spanned the Nation from the Southwest to New England. Nearly an inch of rain fell over Quillayute, western Washington; the rain changed to snow as it reached the eastern portion of the State.

The West Coast was unseasonably warm; Eureka, northwestern California, scored a record high 71°, topping the old mark by 5 degrees. Meantime, very cold air extended from Texas to the Atlantic Seaboard. For the third consecutive day, El Paso, Tex., at 17°, notched a record low temperature. Other records showed 16° at Huntsville, northern Alabama, 11° at Bristol, northeastern Tennessee, and in North Carolina, Asheville's 11° and Raleigh's 15°.

Rain persisted in the Pacific Northwest, while vastly differing temperatures divided the country on Tuesday.

Nearly an inch and one-half of rain soaked North Bend, western Oregon. Strong winds surged over the northern Plateau Region into the upper Plains.



warm air covered the land from the West Coast to the northern half of the Plains; a sampling of new marks included Los Angeles's 91°, 83° at San Diego and Phoenix, and 65° at Bismarck, N. Dak.

Cold air brought the mercury down to record levels across the South. Record low readings hit Baton Rouge, La., 27°; Jackson, Miss., 21°; and Columbia, S.C., 16°.

Little moisture fell over the Nation on Wednesday. About a half-inch of rain dampened Quillayute, Wash., and light showers dotted the eastern Gulf Coast. A few snow flurries dusted the upper Midwest. High winds continued to bluster over the Plateau Region and Rockies; Lander, west central Wyoming, clocked its strongest wind ever at 75 mph.

Contrasting record temperatures showed a frosty 29° at Baton Rouge and an unseasonably warm 52° at St. Cloud, central Minnesota.

On Thursday, heavy rains soaked the South; nearly 4.5 inches doused Gainesville, northern Florida. Other points from Louisiana to the Carolinas received 1 to 3 inches.

A low pressure system centered over Minnesota sent a mixture of snow, rain, and freezing drizzle through the northern half of the Mississippi Valley and the Dakotas.

Summerlike readings continued on the West Coast; records included San Diego's 91° and San Francisco's 73°.

Showers soaked southern Florida, while up to a half-foot of snow blanketed parts of Wisconsin on Friday.

More than 2 inches of rain fell over Fort Myers and Miami in Florida. Snow squalls raced over the Great Lakes States pushed by high winds with gusts exceeding 60 mph. Light rain dotted Maine.

Little rain or snow fell in the country on Saturday. A few flurries whirled over stations from eastern Ohio to the middle Atlantic Coast. Some light snow whitened the Great Lakes Region, and International Falls, northern Minnesota, measured 2 inches. Storms produced an inch and one-third of rain at West Palm Beach, on Florida's Atlantic shore.

The strong winds again buffeted the lower Great Lakes, then moved on to New England where they slackened somewhat. Gusty winds developed once again over Montana.

On Sunday, snow fell from the Great Lakes through New England. Total depths were close to a foot in extreme northern Michigan. A low pressure system edged over the northern Pacific Coast bringing up to three-quarters inch of rain to Washington and Oregon.

Much of the day was warm and windy over Montana and Nevada. Record high temperatures showed 63° at Winnemucca, northern Nevada, and a record-equaling 65° at Reno. In Montana, Missoula posted 49°; Great Falls knotted its high mark of 62°; and Havre, in the north central section of the State tallied 61°. Two years before, Havre had notched a record low -37° on the same day.

By day's end, however, the storm system reached Montana dropping temperatures and spreading some rain and snow.



National Agricultural Summary

December 3 - 9

HIGHLIGHTS: Very little rain fell throughout the United States giving farmers a chance to finish harvesting most row crops and seeding winter grains. The only areas with significant precipitation included the extreme Southeast and Florida, northward along the Atlantic Coast, and the Pacific Northwest. Temperatures ranged well above normal with the exception of the South from Texas to the Atlantic Coast. Farmers had from 4 days to a full week suitable for fieldwork. Winter wheat seeding neared completion with only minor acreages in the South remaining to be planted. Corn harvest was complete except in the Great Lakes States where progress reached 90%. Soybean harvest continued in the Southeast ranging from 87 to 91% complete. Cotton picking reached 88%, surpassing last year's 67% and the 78% average. Cattle grazed crop stubble in northern areas and fall-seeded crops in the South. Southwestern ranges were dry and deteriorating, badly in need of soil moisture. Fuel supplies held about steady from the previous week. LP gas rated 10% tight and 88% adequate. Diesel scored 16% tight and 83% adequate. Gasoline stood at 15% tight and 84% adequate.

SMALL GRAINS: Winter wheat seeding neared completion; only southern States reported some acreage to be planted. Kansas wheat condition rated only poor to fair; blowing in central and south central areas posed a serious potential problem. A few Kansas farmers were still seeding in south central areas. Texas planting reached 98%, compared with 100% last year and the 99% average; 85% of the crop was emerged. Winter wheat on the northern High Plains, Blacklands, and East Texas have adequate soil moisture; elsewhere, small grains suffered from dry conditions. South Texas has received no rainfall since early July. Winter wheat throughout the northern Plains had very little snowcover. Winter wheat in the Pacific Northwest emerged late showing only short growth, but the crop rated good; recent rains improved soil moisture conditions. Winter wheat rated good in the Corn Belt.

COTTON: Cotton picking advanced to 88% complete, well ahead of last year's 67% and the 78% average. Growers east of the southern Plains almost finished harvesting. The Oklahoma cotton harvest was very active forcing gins to operate around the clock. The Texas cotton harvest stood at 83%, well ahead of the 49% last year and the 71% average. Trailer shortages and gin backlogs forced Texas producers to store cotton in ricks and modules. California cotton harvest reached 96%; growers shredded, disced, and plowed down stalks.

OTHER CROPS: Corn picking was complete for all practical purposes in all areas of the Nation except several of the Great Lakes States. The Michigan harvest passed the 90% mark, the Wisconsin harvest reached 90%, and the Minnesota harvest stood at 91%. Other States in the Corn Belt had minor acreages to harvest. Iowa farmers reported below-normal harvest losses.

Soybean harvesting neared completion except in the Delta and the Southeast. Among the Delta States, the Alabama harvest stood at 96%, Arkansas 99%, and Mississippi 98%. In the Southeast, soybean harvest ranged from 87% in the Carolinas to 90% in Virginia and 91% in Georgia.

Sunflower combining was almost finished. The North Dakota harvest was essentially complete, and the Minnesota harvest stood at 97%. Farmers were kept busy drying the crop for storage.

FRUITS & NUTS: Growers continued to practice maintenance activities in deciduous orchards including pruning, fertilizing, and spraying. The pecan harvest ranged from 63% in Texas to 80% or better in Georgia, Alabama, Louisiana, and Mississippi. Texas growers abandoned some pecans because of variable quality and low prices.

Florida citrus groves rated excellent, although fruit size remained smaller than desired and splitting oranges increased droppage in some areas. Rains interrupted the Texas citrus harvest, but the moisture aided sizing. Arizona growers harvested oranges, lemons, tangerines, and grapefruit. California growers harvested grapefruit, lemons, Navels, Mandarins, and tangerines.

VEGETABLES: Florida vegetable shipments increased 3% from the previous week. Cabbage showed the biggest gain, but carrots, celery, chinese cabbage, sweet corn, parsley, radishes, and tomatoes also displayed increases. Other crops held steady or declined seasonally. Strawberry transplanting continued; blooms and small berries were evident with light harvest expected in late December. Rains in the lower Rio Grande Valley slowed vegetable harvests, but volume increased as fields dried. A freeze outside the Valley ended vegetable production of all but the hardier crops. California growers harvested broccoli, cauliflower, carrots, celery, lettuce, and tomatoes.

PASTURES & LIVESTOCK: Pastures generally rated fair to good from the Delta States eastward. Some cattle continued to graze crop stubble in the North. In the Southwest, ranges deteriorated because of dry soils. Arizona producers culled herds because of the lack of browse. Most livestock producers throughout the Nation began putting cattle on winter rations.

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 Dec. 3	Pct. normal since Dec. 3	Average maximum		Average minimum	Temperature °F		Precipitation
													30 and above		32 and below	.01 inch or more	.50 inch or more
ALA. Birmingham.	58	30	64	24	44	-3	.1	-1.1	.1	.1	8	80	33	0	4	1	0
Mobile.	63	38	66	28	51	-3	.7	-.6	.5	.7	54	71	39	0	2	2	0
Montgomery.	60	33	66	23	46	-3	1.5	-.4	1.5	136	73	35	0	3	1	1	
ALASKA. Anchorage.	23	10	37	-8	16	1	.2	-.1	.1	.2	67	77	71	0	7	5	0
Barrow.	-2	-14	17	-31	-8	2	.1	-.1	.1	.1	0	64	47	0	7	1	0
Fairbanks.	11	-4	30	-17	3	12	.2	-.2	.2	.2	0	77	46	0	7	3	0
Kodiak.	38	28	45	22	33	2	.2	-.2	.2	.2	0	66	55	0	5	2	0
Nome.	12	-3	31	-19	4	-2	.6	-.4	.5	.6	300	79	58	0	7	5	1
ARIZ. Flagstaff.	57	20	63	16	36	5	0	-.5	0	0	0	77	20	0	7	0	0
Phoenix.	77	43	83	40	60	6	0	-.1	0	0	0	40	12	0	0	0	0
Tucson.	77	40	79	37	59	6	0	-.2	0	0	0	25	8	0	0	0	0
Winslow.	55	19	58	14	37	1	0	-.1	0	0	0	0	0	0	7	0	0
Yuma.	79	50	82	45	65	-7	0	-.1	0	0	0	21	14	0	0	0	0
ARK. Fort Smith.	59	26	73	22	43	-1	0	-.7	0	0	0	77	27	0	7	0	0
Little Rock.	59	34	70	22	47	3	0	-1.0	0	0	0	56	34	0	3	0	0
CALIF. Bakersfield.	74	45	83	43	59	10	0	-.2	0	0	0	0	36	0	0	0	0
Eureka.	64	50	71	42	57	8	.2	-1.3	.2	.2	13	68	66	0	0	3	0
Fresno.	68	37	75	35	52	5	0	-.4	0	0	0	90	42	0	0	0	0
Los Angeles.	79	55	86	52	67	10	0	-.5	0	0	0	48	32	0	0	0	0
Red Bluff.	70	46	76	41	58	10	0	-.8	0	0	0	89	45	0	0	0	0
San Diego.	77	51	85	47	64	6	0	-.4	0	0	0	58	36	0	0	0	0
San Francisco.	65	44	69	40	54	3	0	-.8	0	0	0	86	53	0	0	0	0
Stockton.	66	39	69	34	52	5	0	-.6	0	0	0	52	0	0	0	0	0
COLO. Denver.	54	32	61	29	43	9	T	-.1	T	0	0	59	28	0	5	0	0
Grand Junction.	40	18	45	15	29	-3	0	-.1	0	0	0	82	53	0	7	0	0
Pueblo.	58	22	70	15	40	3	0	-.1	0	0	0	0	32	0	7	0	0
CONN. Bridgeport.	46	33	52	26	40	3	.6	-.2	.6	.6	75	55	49	0	4	2	1
Hartford.	44	26	53	13	35	4	.5	-.5	.4	.5	50	68	40	0	5	2	0
D.C. Washington.	54	36	60	29	45	5	.1	-.6	.1	.1	14	62	41	0	2	1	0
FLA. Apalachicola.	65	44	71	38	54	-2	2.1	1.3	1.5	2.1	263	77	50	0	0	2	2
Daytona Beach.	72	56	80	48	64	3	.2	-.2	.1	.2	50	91	62	0	0	2	0
Ft. Myers.	78	64	82	53	71	5	4.8	4.5	2.9	4.8	1600	88	60	0	0	3	2
Jacksonville.	67	43	75	34	55	-2	1.4	.9	1.4	1.4	280	83	61	0	0	2	1
Key West.	78	71	80	65	74	2	1.1	.7	.6	1.1	275	91	75	0	0	2	2
Miami.	77	68	80	61	72	3	2.8	2.4	2.7	2.8	700	92	76	0	0	2	1
Orlando.	76	57	81	49	66	4	.5	-.1	.4	.5	125	93	56	0	0	2	0
Tallahassee.	65	36	71	27	51	-4	4.3	3.4	4.3	4.3	478	82	50	0	2	1	1
Tampa.	73	58	79	49	65	3	.4	-.1	.3	.4	80	75	54	0	0	2	0
W. Palm Beach.	77	68	79	63	72	3	2.4	2.0	1.4	2.4	600	87	70	0	0	3	2
GA. Atlanta.	56	33	63	25	45	0	.1	-.8	.1	.1	11	63	37	0	4	1	0
Augusta.	59	30	65	16	44	-3	.5	-.2	.5	.5	71	69	28	0	5	1	1
Macon.	62	33	67	20	47	-2	1.0	.1	1.0	1.0	111	90	30	0	4	1	1
Savannah.	62	39	69	28	51	-1	1.8	1.1	1.8	1.8	257	71	43	0	3	1	1
HAWAII. Hilo.	--	--	--	--	73	1	2.7	-1.1	--	2.7	71	--	--	0	0	--	--
Honolulu.	82	67	86	62	74	0	.6	-.2	.2	.6	75	85	55	0	0	4	0
Kahului.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lihue.	--	--	--	--	72	-1	1.6	-.2	--	1.6	114	--	--	0	0	--	--
IDAHO. Boise.	48	33	54	29	40	7	.1	-.3	.1	.1	25	82	58	0	3	1	0
Lewiston.	52	40	60	35	46	10	.3	0	.2	.3	100	77	58	0	0	2	0
Pocatello.	42	33	51	27	37	8	.1	-.2	.1	.1	33	85	68	0	3	2	0
ILL. Cairo.	52	35	63	26	44	3	0	-.9	0	0	0	--	--	0	3	0	0
Chicago.	42	29	54	20	35	4	.2	-.3	.2	.2	40	71	53	0	5	1	0
Moline.	45	24	54	17	35	5	.1	-.3	T	.1	25	72	44	0	6	2	0
Peoria.	44	25	58	19	35	4	.1	-.3	.1	.1	25	76	45	0	6	1	0
Rockford.	41	23	53	11	32	4	.1	-.3	.1	.1	25	83	47	0	6	1	0
Springfield.	48	29	60	23	38	5	T	-.5	T	0	0	75	48	0	6	0	0
IND. Evansville.	51	31	62	21	41	4	T	-.8	T	0	0	76	44	0	4	0	0
Ft. Wayne.	39	25	50	10	32	1	.1	-.4	.1	.1	20	87	59	0	6	2	0
Indianapolis.	44	26	58	17	35	2	T	-.6	T	0	0	78	46	0	6	0	0
South Bend.	42	29	52	19	36	5	.4	-.2	.3	.4	67	88	62	0	4	2	0
IOWA. Burlington.	46	28	53	19	37	6	.1	-.3	.1	.1	25	--	--	0	6	1	0
Des Moines.	49	23	59	13	36	8	T	-.3	T	0	0	69	39	0	7	1	0
Dubuque.	42	23	50	15	33	7	.1	-.4	.1	.1	20	86	51	0	6	1	0
Sioux City.	46	22	58	12	34	8	0	-.2	T	0	0	71	49	0	7	1	0
KANS. Concordia.	54	28	69	23	41	9	0	-.2	0	0	0	74	30	0	6	0	0
Dodge City.	56	27	70	25	42	7	0	-.1	0	0	0	74	27	0	7	0	0
Goodland.	55	29	70	27	42	11	T	-.1	T	0	0	78	36	0	6	0	0
Topeka.	56	25	68	22	40	6	0	-.4	0	0	0	70	30	0	7	0	0
Wichita.	55	29	64	27	42	5	0	-.3	0	0	0	71	32	0	6	0	0
KY. Lexington.	49	25	59	13	37	0	.1	-.7	.1	.1	13	73	35	0	7	1	0
Louisville.	51	27	60	17	39	2	T	-.8	T	0	0	74	34	0	6	1	0

Based on preliminary reports and 1941-70 normals

States and Stations	Temperature °F						Precipitation						Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since Dec. 3	Pct. normal since Dec. 3	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
LA. Baton Rouge . . .	63	34	66	27	49	- 6	T	- 1.1	T	0	0	85	34	0	3	1	0	
Lake Charles . . .	65	36	68	32	50	- 5	T	- 1.3	T	0	0	81	40	0	1	1	0	
New Orleans . . .	62	37	68	31	50	- 6	.4	- .8	.4	.4	33	80	43	0	1	0		
Shreveport . . .	64	33	72	29	49	- 2	0	- .9	0	0	80	29	0	4	0	0		
MAINE. Caribou . . .	35	21	49	1	28	9	.2	- .5	.1	.2	29	75	58	0	6	3		
Portland . . .	43	22	53	11	33	4	.4	- .6	.2	.4	40	82	50	0	6	4		
MD. Baltimore . . .	52	28	60	20	40	3	T	- .8	T	0	0	70	36	0	5	1		
MASS. Boston . . .	47	31	58	24	39	3	.5	- .5	.4	.5	50	61	42	0	4	2		
Chatham . . .	48	34	56	25	41	-	.8	-	.5	.5	80	74	59	0	4	2		
MICH. Alpena . . .	36	23	49	15	30	4	.3	- .2	.2	.3	60	-	-	0	7	4		
Detroit . . .	40	23	51	10	32	1	T	- .6	T	0	0	87	59	0	6	1		
Flint . . .	40	27	50	17	34	4	.1	- .3	0	.1	25	86	65	0	6	0		
Grand Rapids . . .	40	28	52	21	34	4	.2	- .4	.2	.2	33	86	66	0	6	1		
Houghton Lake . . .	34	23	45	12	29	3	.2	- .3	.2	.2	40	92	68	0	7	1		
Lansing . . .	35	24	49	15	29	0	T	- .5	T	0	0	89	62	0	7	1		
Marquette . . .	31	18	43	6	24	- 2	.8	- .3	.6	.8	160	75	61	0	7	3		
Muskegon . . .	39	31	46	22	35	5	.4	- .2	.4	.4	67	73	64	0	3	1		
S. Ste. Marie . . .	33	19	44	13	26	3	1.1	- .5	.4	1.1	183	83	67	0	7	5		
MINN. Duluth . . .	34	18	43	2	26	9	.1	- .3	.1	.1	25	74	58	0	7	2		
Internatl. Falls . . .	28	8	39	-11	18	6	.2	0	.1	.2	100	87	63	0	7	5		
Minneapolis . . .	40	21	46	8	30	8	.2	0	.1	.2	100	83	54	0	7	2		
Rochester . . .	38	21	44	6	30	8	.1	- .1	.1	.1	50	86	61	0	7	1		
St. Cloud . . .	39	16	52	2	27	8	.2	0	.2	.2	100	84	-	0	7	1		
MISS. Jackson . . .	60	26	68	21	43	- 7	T	- 1.1	T	0	0	93	32	0	7	1		
Meridian . . .	62	28	68	23	45	- 4	.2	- 1.0	.2	.2	17	86	33	0	6	1		
MO. Columbia . . .	51	28	59	22	39	4	T	- .4	T	0	0	62	34	0	6	1		
Kansas City . . .	51	27	61	24	39	5	T	- .3	T	0	0	63	31	0	7	1		
St. Louis . . .	54	32	68	24	43	6	T	- .5	T	0	0	67	34	0	4	1		
Springfield . . .	58	31	67	24	45	7	0	- .6	0	0	0	63	27	0	4	0		
MONT. Billings . . .	53	37	65	30	45	16	T	- .2	T	0	0	50	33	0	2	1		
Glasgow . . .	45	25	58	16	35	14	T	- .1	T	0	0	91	60	0	6	1		
Great Falls . . .	52	33	62	23	43	12	T	- .2	T	0	0	61	40	0	5	1		
Havre . . .	52	28	61	14	40	19	.1	0	.1	.1	100	81	36	0	5	1		
Helena . . .	52	31	61	25	42	15	.1	0	T	.1	100	61	40	0	4	1		
Kalispell . . .	47	35	57	30	41	16	.3	0	.2	.3	100	90	62	0	2	4		
Miles City . . .	50	30	67	20	40	15	T	- .1	T	0	0	83	40	0	5	1		
Missoula . . .	46	34	54	30	40	13	.2	0	.2	.2	100	87	70	0	1	3		
NEBR. Grand Island . . .	51	28	59	25	39	10	T	- .1	T	0	0	65	40	0	7	1		
Lincoln . . .	48	27	64	20	38	8	.1	- .1	.1	.1	50	78	43	0	5	1		
Norfolk . . .	46	25	59	17	36	9	.1	0	.1	.1	100	80	52	0	7	1		
N. Platte . . .	48	28	55	23	38	9	T	- .1	T	0	0	72	47	0	6	1		
Omaha . . .	47	28	56	14	37	8	- .1	- .1	- .1	0	50	75	37	0	6	1		
Valentine . . .	44	27	58	16	36	9	T	- .1	T	0	0	72	52	0	5	0		
NEV. Ely . . .	57	21	63	18	39	12	0	- .2	0	0	0	65	27	0	7	0		
Las Vegas . . .	68	39	74	33	54	7	0	- .1	0	0	0	42	20	0	0	0		
Reno . . .	61	21	68	20	41	7	0	- .2	0	0	0	73	25	0	7	0		
Winnemucca . . .	55	21	63	17	38	6	0	- .2	0	0	0	81	33	0	7	0		
N.H. Concord . . .	43	20	58	11	31	4	.2	- .6	.1	.2	25	74	42	0	7	4		
N.J. Atlantic City . . .	49	28	56	21	38	1	.6	- .4	.6	.6	60	72	46	0	5	1		
Trenton . . .	47	32	53	25	40	2	.4	- .4	.4	.4	50	-	-	0	4	2		
N.MEX. Albuquerque . . .	61	26	63	21	43	6	0	- .1	0	0	0	66	21	0	7	0		
Roswell . . .	65	27	70	19	46	5	0	- .1	0	0	0	-	-	0	7	0		
N.Y. Albany . . .	44	26	54	14	35	6	.1	- .6	T	.1	14	76	41	0	5	2		
Binghamton . . .	40	26	52	17	33	5	.1	- .6	T	.1	14	76	39	0	6	3		
Buffalo . . .	42	28	52	22	35	5	.3	- .4	.2	.3	43	77	55	0	5	3		
New York . . .	46	34	54	26	40	2	.6	- .3	.6	.6	67	63	51	0	4	2		
Rochester . . .	43	27	57	14	35	4	.2	- .4	.1	.2	33	81	50	0	5	2		
Syracuse . . .	44	31	55	24	37	6	.3	- .4	.1	.3	43	72	53	0	3	3		
N.C. Asheville . . .	55	25	62	11	40	0	T	- .8	T	0	0	86	36	0	5	1		
Charlotte . . .	53	30	59	21	42	- 2	.3	- .5	.3	.3	38	66	40	0	4	1		
Greensboro . . .	52	29	60	15	41	- 1	.4	- .3	.3	.4	57	73	41	0	5	1		
Hatteras . . .	58	38	71	27	48	- 2	3.6	- 2.5	3.6	3.6	327	83	62	0	4	1		
Raleigh . . .	52	28	60	15	40	- 3	.4	- .3	.4	.4	57	85	49	0	5	1		
Wilmington . . .	58	37	62	27	47	- 2	1.5	- .7	1.3	1.5	188	76	37	0	3	2		
N.DAK. Bismarck . . .	45	13	65	- 3	29	10	.1	0	.1	.1	100	-	53	0	7	2		
Fargo . . .	36	16	46	2	26	9	.1	0	.1	.1	100	81	69	0	7	1		
Williston . . .	44	20	58	7	32	13	0	- .1	0	0	0	86	43	0	7	0		
OHIO. Akron-Canton . . .	42	25	57	11	34	2	.3	- .3	.2	.3	50	76	45	0	7	2		
Cincinnati . . .	49	27	59	18	38	3	0	- .7	0	0	0	68	41	0	6	0		
Cleveland . . .	42	25	56	10	33	1	.2	- .4	.2	.2	33	79	54	0	6	3		
Columbus . . .	46	26	57	14	36	3	.2	- .4	.1	.2	33	78	47	0	7	2		
Dayton . . .	47	25	58	12	36	3	.1	- .4	.1	.1	20	74	39	0	6	1		
Toledo . . .	41	25	54	14	33	3	T	- .5	T	0	0	78	51	0	6	2		
Youngstown . . .	41	26	56	13	34	3	.2	- .4	.2	.2	33	73	44	0	6	3		

Based on preliminary reports and 1941-70 normals

States and Stations	Temperature °F						Precipitation					Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since Dec. 3	Pct. normal since Dec. 3	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
OKLA.Okla. City	62	34	66	30	48	6	0	.3	0	0	0	58	23	0	3	0	0
Tulsa	61	34	68	27	48	6	0	.4	0	0	0	62	27	0	3	0	0
OREG.Astoria	55	43	63	38	49	5	1.6	.9	.7	1.6	64	95	74	0	0	5	1
Burns	46	27	48	20	36	6	T	.4	T	0	0	90	61	0	4	1	0
Medford	46	36	68	32	41	2	.7	.1	.6	.7	87	95	79	0	1	1	1
Pendleton	51	35	60	32	43	6	.1	.3	.1	.1	25	89	61	0	2	2	0
Portland	54	42	62	38	48	6	.9	.5	.6	.9	64	97	78	0	0	3	3
Salem	52	38	61	35	45	3	1.2	.3	.9	1.2	80	--	84	0	0	3	1
PA.Allentown	45	28	51	23	36	3	.4	.4	.4	.4	50	73	39	0	6	1	0
Erie	41	29	53	19	35	2	.5	.2	.5	.5	71	--	--	0	0	6	1
Harrisburg	47	31	54	24	39	4	T	.7	T	0	0	59	39	0	5	5	0
Philadelphia	47	30	52	23	39	1	.6	.2	.4	.6	75	74	51	0	5	1	0
Pittsburgh	45	26	57	16	35	3	.2	.4	.1	.2	33	56	37	0	6	2	0
Scranton	44	29	57	19	36	5	.1	.5	.1	.1	17	62	35	0	5	2	0
R.I.Providence	49	30	59	22	39	6	.5	.5	.5	.5	50	61	37	0	5	2	0
S.C.Charleston	61	35	68	24	48	--	1.6	.9	1.6	1.6	229	76	40	0	3	1	1
Columbia	58	29	65	16	43	--	.3	.4	.2	.3	43	85	39	0	5	2	0
Greenville	55	31	61	18	43	--	.1	.8	.1	.1	11	63	38	0	4	1	0
S.DAK.Aberdeen	43	20	53	2	31	11	.1	0	.1	.1	100	76	49	0	6	2	0
Huron	45	19	54	5	32	10	T	.1	T	0	0	85	51	0	7	2	0
Rapid City	53	26	68	19	40	11	.1	0	T	.1	100	73	35	0	7	2	0
Sioux Falls	39	19	45	8	29	6	T	.2	T	0	0	86	68	0	7	2	0
TENN.Chattanooga	53	25	60	20	39	--	.3	.1	.1	.1	8	78	35	0	7	1	0
Knoxville	53	28	61	19	40	--	.1	.9	.1	.1	10	76	37	0	6	1	0
Memphis	57	34	64	24	46	1	0	1.1	0	0	0	65	31	0	4	0	0
Nashville	54	25	62	14	40	--	.2	1.0	T	0	0	81	31	0	7	0	0
TEX.Abilene	68	38	79	31	53	5	0	.2	0	0	0	46	22	0	1	0	0
Amarillo	60	27	70	22	44	4	0	.1	0	0	0	70	28	0	7	0	0
Austin	69	39	73	35	54	0	0	.5	0	0	0	65	28	0	0	0	0
Beaumont	67	36	71	33	52	--	.4	1.1	T	0	0	80	36	0	0	1	0
Brownsville	69	50	77	44	59	--	1.0	.7	.6	1.0	333	97	66	0	0	1	1
Corpus Christi	73	47	78	35	60	0	T	.4	T	0	0	77	44	0	0	0	0
Del Rio	71	42	80	34	56	3	T	.1	T	0	0	65	33	0	0	1	0
El Paso	69	27	73	17	48	3	0	.1	0	0	0	55	14	0	6	0	0
Fort Worth	67	36	78	29	51	2	0	.4	0	0	0	54	23	0	1	0	0
Galveston	61	50	65	44	56	--	.3	.8	T	0	0	81	59	0	0	1	0
Houston	70	34	74	30	52	--	.4	1.0	0	0	0	89	39	0	1	0	0
Lubbock	65	33	70	24	49	6	0	.1	0	0	0	53	24	0	3	0	0
Midland	67	33	74	29	50	2	0	.1	0	0	0	46	23	0	4	0	0
San Angelo	69	31	78	23	50	1	0	.1	0	0	0	56	21	0	4	0	0
San Antonio	72	39	78	32	55	--	.1	.4	T	0	0	64	30	0	1	0	0
Victoria	71	43	74	38	57	--	.1	.5	T	0	0	79	40	0	0	1	0
Waco	68	35	73	30	51	0	0	.5	0	0	0	67	30	0	2	0	0
Wichita Falls	68	34	77	29	51	5	0	.3	0	0	0	62	22	0	3	0	0
UTAH.Blanding	49	25	52	22	37	5	0	.3	0	0	0	82	37	0	7	0	0
Salt Lake City	49	28	53	24	38	6	T	.4	T	0	0	90	52	0	6	0	0
VT.Burlington	40	27	52	16	34	8	.1	.5	.1	.1	17	69	47	0	5	3	0
VA.Lynchburg	51	25	58	13	38	--	.1	.6	.1	.1	14	73	--	0	5	1	0
Norfolk	54	36	62	29	45	1	.4	.3	.4	.4	57	70	50	0	3	1	0
Richmond	52	30	60	22	41	0	.7	.1	.6	.7	87	75	49	0	5	1	1
Roanoke	52	27	61	16	40	1	T	.7	T	0	0	70	27	0	5	1	0
WASH.Colville	41	33	49	24	37	8	.1	.4	.1	.1	20	--	--	0	1	3	0
Omak	38	29	45	23	34	5	.2	.2	.1	.2	50	--	--	0	6	3	0
Quillayute	51	42	55	35	46	5	4.1	.6	1.7	4.1	117	96	83	0	0	6	3
Seattle-Tacoma	51	42	55	38	46	5	1.0	.4	.6	1.0	71	89	77	0	0	4	1
Spokane	45	34	50	28	39	9	.4	.1	.2	.4	80	89	70	0	2	4	0
Walla Walla	51	39	61	35	45	6	.3	.1	.2	.3	75	91	74	0	0	3	0
Yakima	49	29	57	22	39	6	.1	.2	T	.1	33	91	65	0	6	1	0
W.VA.Beckley	49	23	59	10	36	1	.1	.6	.1	.1	14	61	33	0	6	1	0
Charleston	52	25	63	13	39	1	.1	.6	.1	.1	14	74	32	0	6	1	0
Huntington	52	27	63	14	39	2	.1	.6	.1	.1	14	66	30	0	6	1	0
Parkersburg	48	27	59	15	38	1	.2	.4	.2	.2	33	72	40	0	6	1	0
WISC.Green Bay	37	23	50	14	30	6	.4	.1	.4	.4	133	85	56	0	6	2	0
La Crosse	42	24	47	17	33	8	.2	.1	.2	.2	67	80	51	0	6	2	0
Madison	42	23	55	15	32	8	.1	.3	.1	.1	25	85	50	0	7	1	0
Milwaukee	41	27	53	21	34	7	.1	.3	.1	.1	25	77	51	0	7	1	0
WYO.Casper	43	26	49	14	35	7	.1	0	.1	.1	100	73	46	0	5	1	0
Cheyenne	49	30	57	23	39	9	T	.1	0	0	0	62	39	0	5	2	0
Lander	50	23	62	20	37	12	T	.1	T	0	0	69	41	0	7	0	0
Sheridan	50	27	69	17	39	11	.1	.1	T	.1	50	77	40	0	6	2	0
P.R.San Juan	84	75	87	74	80	2	.9	.2	.7	.9	82	90	62	0	0	3	1

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: Cold through 5th; 9° above normal 6th; average 2° subnormal. Rain on 6th and 7th; under 0.25 in. northern half, 0.50 to 1.50 in. across south half.

Fieldwork: 3.8 days suitable. Soil moisture adequate to surplus. Main activity crop harvest and seasonal chores. Soybeans 96% harvested, trailing 1978 by week. Cotton harvest 3 weeks behind 1978 at 92%. Wheat 95% seeded, 88% 1978. Pecans 80% harvested. Wheat, livestock mostly good condition; pastures fair to good.

ARIZONA: High pressure dominated weather. No precipitation. Temperatures ranged 4 to 9° above normal.

Cotton harvest 85% complete, 73% last year, average 79%. Small grain seedbed preparation continued, planting of main crop in progress. Normal cultural practices continues on sugarbeets. New and renovated alfalfa continued to make good progress. Lettuce harvest continued. Cauliflower, broccoli, cabbage making good progress. Mixed vegetables various stages of development. Harvest of Navel, sweet oranges, lemons, tangerines, grapefruit continued. Citrus groves in good condition. LP gas supplies adequate. Diesel adequate to tight. Gasoline mostly adequate. Drought quite severe. Herds being reduced due to lack of browse. Supplemental feeding, water hauling required. Cattle, calves in good condition.

ARKANSAS: Temperatures slightly above normal. Cool weather at beginning and end of week. Little or no rainfall.

Cotton 97% completed. Soybean harvest 99% complete. Rice and grain sorghum harvests complete. Small grain seeding completed; up to fairly good stands with normal growth. Small grain offering some grazing for cattle. Livestock and pasture fair to good condition. Some hay feeding.

CALIFORNIA: Rain only fell near northern border. Warm overlying air providing stability favorable for fog and haze in valley areas. Frost in the Salinas, Livermore, northern San Joaquin, Clear Lake, Ukiah and Santa Maria areas.

Cotton harvest 96% complete, 82% last year. Cotton shredding, discing, plowdown active. Winter grain planting continued; emerged fields good condition, herbicides being applied. Sugarbeet harvest continued. Rice stubble burning continued on limited basis, many fields yet to be burned. Pruning, fertilizing, dormant spraying active. Avocado harvest light. Date harvest continued. Grape crush ending. Desert grapefruit movement slow, lemons harvested, Navel oranges harvested. Quality, maturity good. Mandarin, tangerine harvests continued. Artichokes very light supply. Broccoli, cauliflower harvest active, mostly central coast. Carrot digging limited to market demands Salinas, Bakersfield. Celery decreasing Salinas-Watsonville, active Santa Maria, increasing south coast. Lettuce harvest past peak Palo Verde Valley, increasing Imperial Valley. Potato movement moderate Tulelake. Diggin continued Stockton, Riverside. Harvest market tomatoes still active south coast. Range grass growth slowing due cooler weather. More rain needed continue growth. Supplemental feeding active. Grazing stubble fields continued. Lambing slowing southern San Joaquin. Fuel supplies generally adequate.

COLORADO: Strong winds north and central mountains and front range areas. Precipitation light falling mainly in north and central mountains. Temperatures 4 to 6° above normal southeast; 2 to 4° above normal north central and northeast; 0 to 3° below normal in the San Luis Valley; 2 to 10° below west central areas.

FLORIDA: Rain statewide 5th, 6th, 7th, 8th and extreme south on 9th. Rainfall averaged 1.00 to 2.00 in. south, less than 1.00 in; central with local amounts over 2.00 in. Panhandle, north. Lows mainly in 30's and 40's Panhandle and north to 60's south. Highs were mainly 60's north to 70's south.

Soil moisture mostly adequate west, short to adequate north and central, adequate to excessive south. Soybean harvest about complete. Cotton and sugarcane harvest active. Sugarcane good condition. Planting small grains practically complete. Early planted grains north and west making little growth due to cold. Fuel supplies mostly adequate with tight supplies a few scattered southern localities. Pasture conditions ranged mostly good south, poor to fair other areas. Winter pasture seeding continued. Cattle fair to good. Grove condition excellent. Fruit size still less than desired and splitting of oranges is on increase causing heavy droppage in some areas. Cold front early week on vegetable growing areas dropped temperatures into 40's and 50's along coast into high 30's in some colder locations. Slow-moving front last of week accompanied by cloudy skies and numerous showers, some locally heavy. Winds generally light to moderate. Overall crop condition fair to very good. Windburn caused light damage to foliage. Rains caused leaching of fertilizer, harvest delays some areas. Total shipments up 3% from previous week. Cabbage increased considerably while shipments carrots, celery, chinese cabbage, sweet corn; parsley, radishes, tomatoes gained. Holding steady volume were cauliflower. Escarole, lettuce, peppers, snap bean, cucumber, eggplant, okra, squash supplies decreased. Some crops declining seasonally. Strawberry transplanting continued. Bloom, small berries evident some fields. Light harvest expected late December. Watermelon planting expected to get underway in southwest area this week.

GEORGIA: Temperatures averaged 5 to 8° below normal. Coldest weather of fall season 3d and 4th with low teens mountains and subfreezing entire state. Rainfall near end of period. Amounts averaged 1.00 to 3.00 in. south, 0.75 in. central and 0.01 in. north. Cool and dry 8th and 9th.

Soil moisture mostly adequate to surplus. Fieldwork: 4 days suitable. Corn 98% harvested, 98% last year. Cotton fair to good; 96% harvested, 98% last year. Soybeans fair to mostly good; 91% harvested, 94% last year. Pecans poor to fair, 86% harvested, 77% last year. Wheat 94% planted, 82% last year. Rye 98% planted, 85% last year. Other small grains 95% planted, 85% last year. Pastures fair to good. Cattle and hogs good. LP gas 94% adequate. Diesel fuel 94% adequate, 6% tight. Gasoline 92% adequate, 7% tight.

HAWAII: Weather unfavorable. Windy, wet, cool. Strong winds caused heavy bruising to crops exposed

areas. Leafy plants, tomato flower clusters, vine crops were affected. Rains heavy at times. Cool weather retarding crop development upper elevation.

Vegetable supplies light, bruising will lower quality, yield. Banana supplies light. Cool weather affecting ripening. Papayas: Few trees toppled from gusty winds. Supplies light. Pine-apple harvest slow. Some areas resuming harvesting. Sugar mills shutting down for annual repairs. Pastures generally good. Fuel supplies adequate.

IDAHO: Temperatures ranged from near normal southeast to 6° to 10° above normal north. Extremes: 58 and -13°. Precipitation generally below normal, except scattered locations above normal.

Farmwork limited to chores, repairing machinery, caring for livestock, year-end marketing. Livestock in fair to good condition. Feed supplies generally adequate.

ILLINOIS: Temperatures 4 to 7° above normal, minimum temperatures below zero, maximum temperatures 60's to 70's. Precipitation light, trace to 0.20 in.

Corn harvest virtually completed. Winter wheat seedings mostly in good condition. Fall plowing, fertilizer application continuing in some areas. Livestock grazing stubble.

INDIANA: Warm, dry. Temperatures averaged 4° above normal and ranged from 21 to 62°. Precipitation 0 south, 0.10 in. north. Soil temperature in 30's. Sunshine 70% of possible. Humidity low.

Fieldwork mostly limited to early in period and to frozen soils. Some plowing and tilling operations continued before thaw later in week. Some areas fieldwork over for season. Other activities: Ready buildings, equipment and livestock facilities for winter, stripping tobacco, spreading lime and fertilizer, cutting wood, mending fences, caring for livestock.

IOWA: Warm, dry. Temperatures average 7 to 10° above normal. Little precipitation fell on the 6th to 7th. Fieldwork: 6.2 days favorable. Corn harvest 98%, 1978 100%, normal 100%. Corn harvest loss subnormal. Soybean acreage harvested 100%, 1978 100%, normal 100%. Fall plowing 53%, 1978 50%. Topsoil moisture adequate to surplus. Subsoil moisture adequate. Livestock good condition. Livestock market movement normal, herd replacement increases.

KANSAS: Unseasonably mild and dry, no moisture. Temperatures averaged low 40's; 8 to 12° above normal.

Wheat condition poor to fair. Blowing central, south central with serious potential. Crop excellent northwest. Some seeding still occurring south central.

KENTUCKY: Week began cold with temperatures averaging 5 to 10° below normal. Average temperature for week about 10 to 15° above normal. Dry with precipitation averaging around 0.10 in.

Burley market strong; quality good. Many growers short of their poundage quota as leaf weighing light. Most farmers in major corn and soybean areas finished harvest. Few fields harvested where soil dried enough to support harvesting equipment. Fall seeded wheat has made satisfactory growth except some low wet areas. Pastures continue to supply considerable forage.

LOUISIANA: Temperatures normal to 5° below normal. Extremes: 72 and 23°. Scattered showers.

Fieldwork: 5.7 days suitable. Soil moisture adequate. Cotton 99% harvested, 100% last year, 98% average. Sugarcane 95% harvested, 85% last year, 79% average. Oats and wheat 100% planted, 100% last year and average. Pecans 88% harvested, 85% last year. Pastures fair. Cattle fair to good, supplemental feeding.

MARYLAND & DELAWARE: Temperatures averaged 10° above normal. Highs ranged around 50° and lows in low 30's. Precipitation light except 0.50 to 1.00 in. on Eastern Shore. Windy and mild 8th. Clear and cool 9th.

MICHIGAN: Mild with temperatures averaging 2 to 6° above normal. Precipitation light over most of Lower and western Upper. Locally heavy snow showers over extreme northern Lower and eastern Upper. Corn harvest over 90% complete. Main farm activities included feeding livestock and farm chores.

MINNESOTA: Temperatures averaged 5 to 10° above normal. Extremes: 48 and -11°. Precipitation averaged 0.10 to 0.20 in. below normal; totals light, less than 0.25 in. Trace of new snow central, west central. Snow depth on ground ranges from 2 to 5 in.

Harvest moving ahead. Only east central, southwest have much unpicked corn remaining. Most other areas nearing completion. Moisture adequate in northern two-thirds, surplus southern one-third. Harvested: Corn 91%, 1978 100%, normal 100%; sunflowers 97%, 1978 100%, normal 100%.

MISSISSIPPI: Temperatures 6 to 13° below normal. Greatest rainfall 1.60 in. Extremes: 14 to 70°.

Soil moisture mostly adequate with some scattered surplus. Fieldwork: 4.1 days suitable. Dry weather enabled most farmers to complete harvesting. Field preparation and planning for the 1980 crop underway. Soybeans 98% harvested, 99% 1978, 93% average. Cotton 95% harvested, 100% 1978, 93% average. Pecans 85% harvested, 75% 1978, 85% average. Winter wheat 97% harvested, 98% 1978; condition good to fair. Pasture, livestock fair to good condition. Hay and roughage supply mostly adequate with scattered surplus. Feed grain supplies adequate. Diesel, gasoline and LP gas supplies adequate.

MISSOURI: Temperatures averaged near normal. Few rain showers northeast, none elsewhere.

MONTANA: Temperatures averaged 7 to 17° above normal. Windy most days. Heavy rainfall over much of west early week, with 1.50 to 2.50 in. Mostly dry to light precipitation elsewhere.

Winter wheat condition fair with wind damage light. Soil moisture short despite rain and snow in many areas. About 40% of cattle and 60% of sheep receiving supplemental feed. Cattle and feed in good condition.

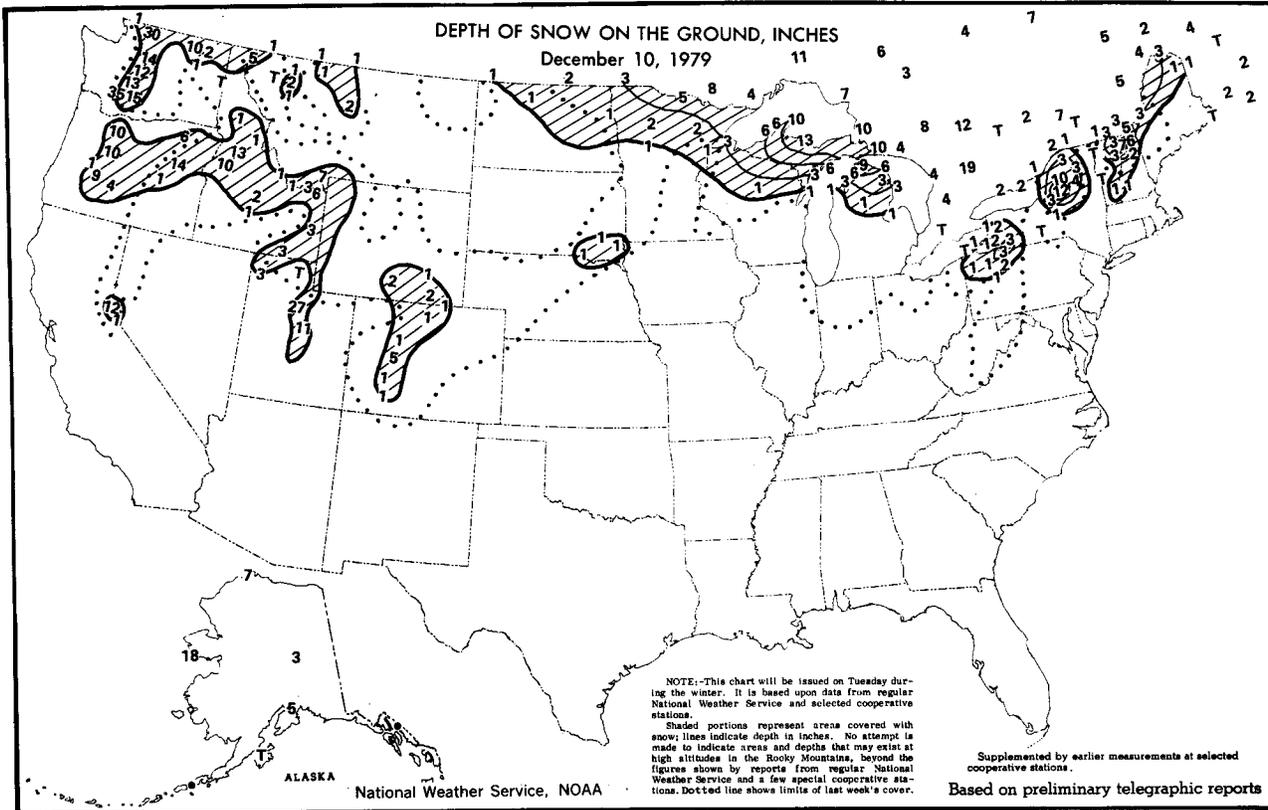
NEBRASKA: Temperatures averaged 10° above normal. Precipitation light to nothing.

Progress made on harvesting of remaining corn fields.

NEVADA: Mild, dry. No precipitation. Temperatures averaged several degrees above normal. Extremes: 11 and 74°.

Cotton harvest still in progress. Caring for livestock.

NEW ENGLAND: Normal temperatures early week rose to above normal midweek, but dropped 5 to 10° below normal by weekend. Precipitation 0.50 in. of



rain on 6th, otherwise light snow flurries mainly over far north.

NEW JERSEY: Temperatures near normal averaging 35° north, 38° south, 40° coastal. Extremes: 15 and 56°. Precipitation slightly below normal averaging 0.55 in. north, 0.50 in. south, 0.51 in. coastal. Snow over north on 8th; less than 1 in.

Farm activity: Fruit tree pruning, corn and soybean combining, apple packing, caring for livestock.

NEW MEXICO: Dry with generally mild temperatures and cold nights. Windy and turning colder statewide 5th. Moderating temperatures into weekend. Temperatures generally averaged 2 to 6° warmer than normal.

Soil moisture short. No fuel shortages. Cotton 75% harvested. Open weather permitted most harvest to finish except cotton, pecans. Red chile winding up. Pecans full swing. Winter wheat good condition. Continued increase of grazing. Livestock good. Ranges fair, but short on moisture.

NEW YORK: Week started and ended cold, mild mid-week weather produced continuation of above average temperatures. Several stations 3 to 5° above normal. Several storms moved north down St. Lawrence River Valley but most areas dry. Weak disturbance moving off east coast produced 0.50 to 1.00 in. rain over southeast 6th. Snowfall light with significant amounts restricted to Great Lakes snowbelt.

NORTH CAROLINA: Temperatures slightly below normal. Precipitation below normal.

Fieldwork: 4.4 days suitable. Soil moisture adequate. Condition of wheat, oats, barley, rye, pasture fair to mostly good with some

small grains excellent and some pastures poor. Harvested: Corn 99%, 1978 100%, average 99%, cotton 94%, 1978 92%, average 92%; soybeans 87%, 1978 77%, average 82%; sorghum 95%, 1978 100%, average 97%. Planted: Wheat 95%, 1978 92%, barley 98%, 1978 97%; oats 98%, 1978 97%.

NORTH DAKOTA: Mild weather; temperatures averaged 8 to 12° above normal. South central especially mild averaging 18° above normal. Mercury hit 60's in west on 4th. Extremes: 68 and -6°. Significant precipitation mainly confined to northern third. North central received most with 0.50 in.

Harvest virtually complete now with sunflower and corn combining drawing to close. Drying still being done for long term storage. Livestock in good shape; little snowcover allowed grazing to continue but most livestock receiving some supplemental feed due to poor pastures.

OHIO: Temperatures ranged 63 to 90°; 3° above normal. Precipitation ranged from near zero in northwest to 0.10 to 0.25 in. elsewhere. The average was 0.40 in. below normal. Only snowcover remaining is in scattered areas of northeast.

OKLAHOMA: Dry, mild with most averages in mid-40's. Temperatures above normal except south central section ranging from 6° above normal to 2° below normal. No rain.

Cotton harvest very active with most gins running day and night. Supplemental feeding statewide.

OREGON: Mild temperatures with frequent rain prevailed over west with readings mostly 2 to 6° above normal. Heavy rain early week along coast ranged from 2.50 to nearly 5.50 in. Interior valleys averaged over 2.00 in. Eastern temperatures generally 1 to 5° above normal. North central area received 0.25 to 0.75 in. rain with lesser amounts elsewhere.

Little field activity. Some vegetables for local market harvested. Much activity cutting and displaying trees for Christmas. Few fields of grains in east not harvested as yet. Live-stock condition mostly good. Supplemental feeding on increase. Hay supply short to adequate.

PENNSYLVANIA: Partly sunny, moderately cool and dry. Temperatures near to 6° above normal. Extremes: 60 and 9°. Midperiod precipitation confined to southeast and west totaled 0.50 in. or less. Windy with widespread snow flurries 8th.

PUERTO RICO: Island average rainfall 0.71 in. or 0.38 in. below normal. Temperatures averaged about 79° on coasts and 74° interior. Extremes: 93 and 57°.

SOUTH CAROLINA: Beginning and ending cooler than usual, midweek temperatures somewhat higher most areas. Extremes: 13 and 70°. Heaviest rainfall on southern coast near midweek.

Late cotton scrapping virtually finished. Soybeans harvested every suitable day reached 87%. Seeding small grains approaching completion, conditions favorable. Preparing tobacco beds; sampling soil, liming; pruning fruit trees, grape vines; general maintenance.

SOUTH DAKOTA: Mild weather. Average temperatures 3 to 16° above normal. Extremes: 69 and 0°. Precipitation light, generally less than 0.10 in. Most snowcover gone.

TENNESSEE: Cool early week under arctic high pressure. Most areas with teens and low 20's. Rain 6th; amounts light west, 0.25 in. east. Warmer at weekend.

Soil moisture adequate. Pastures fair. Soybean and corn harvests virtually complete. Tobacco stripping advancing slowly. Farmers busy grading and selling tobacco.

TEXAS: Rapidly moving midweek cold front had no precipitation. Temperature range 7° above normal west to 4° below normal east. Only Rio Grande Valley received measurable precipitation.

Warm days, cool nights prevalent statewide enabling growers to complete sorghum, sugarbeet harvests. Soybean harvest 99% complete. Open weather enabled Plains cotton harvest to peak. Northern High Plains, Blacklands, East Texas have adequate moisture for small grains but remainder of State's small grain suffering dry conditions. Lower Rio Grande Valley received good rains but moisture sparse elsewhere. Many cotton producers completed harvest although 25% High Plains crop remained and nearly 30% Low Plains crop to be harvested. Trailer shortages, gin backlogs forced producers to store cotton in ricks, modules. Sorghum harvest virtually complete. Stocker cattle grazing Panhandle sorghum, corn stubble. Sugarbeet harvest virtually complete as open weather enabled remaining fields to be dug. Sugar content high. Few Central Texas, Valley soybean fields remained for harvest. Recent warm days promoted small grain growth High Plains, East Texas where soil moisture adequate. Southern Low Plains, Cross-Timbers, Edwards Plateau, South Texas remain bleak as dry

conditions hamper emergence, growth. South Texas received no precipitation since early July. Producers continue to await moisture to resume flax, oat, wheat seedings. Recent grain mite, greenbug buildup throughout Blacklands caused growers to spray. Insect buildup minimal statewide. Cotton harvested 83%, 49% 1978, 71% average. Sorghum harvested 100%, 97% 1978, 99% average. Wheat planted 98%, 100% 1978, 99% average; emerged 85%. Soybeans harvested 99%, 97% 1978, 98% average. Sugarbeets harvested 100%, 95% 1978, 96% average. Pecans harvested 63%, 70% 1978, 76% average. Barley planted 89%, 100% 1978. Flax planted 49%, 69% 1978. Oats planted 95%, 100% 1978, 99% average.

Condition livestock remains generally good even though range and pasture conditions continue to deteriorate from dry weather. Livestock condition aided by grazing of corn, milo stubble and supplemental feeding of hay and concentrate. Some small grain fields providing limited amount of grazing. Grass fires numerous. Stock water continued to diminish as most areas remain dry.

In lower Rio Grande Valley slow soaking rains fell early week which slowed and delayed vegetable, citrus harvest. By weekend, activities normal. Harvest cabbage, carrots moving in good volume. Spinach and lettuce made excellent growth with some lettuce harvested in light volume. Pepper harvest about complete. Citrus harvest interrupted by rain but quickly resumed as groves dried. Moisture needed to aid sizing. San Antonio-Winter Garden harvests carrots, cabbage, broccoli continued. Production from all summer crops ended week ago when all froze. Irrigation continued above normal. At Laredo preparation and planting of onions continued. In Coastal Bend cucumber harvest neared completion. Continued dry weather reduced yield prospects. At El Paso red chile pepper harvest continued. Onions making good growth with planting continuing. On High Plains some carrots for processing continued to move light volume. Pecan harvest tapered off as many areas nearing completion. With mixed quality and low price, many pecans being left behind.

UTAH: Few isolated very light showers or snow flurries north central. Little or no activity elsewhere. Temperatures showed rising trend that continued very variable ranging from 5° above to 9° below normal.

Routine chores, caring for livestock and poultry. Sorting, grading and marketing potatoes, onions, apples from storage.

VIRGINIA: Temperatures averaged near normal. Extremes ranged from teens to lower 60's. Rain on 6th, 7th generally light ranging from only trace or none in some western sections to around 0.50 in. southeast.

Topsoil moisture mostly adequate. Pastures, winter grains, grazing excellent. Fieldwork: 4.5 days available. Harvest progress: Corn 96%, soybeans 90%, sorghum 85%. Good weather for field activities. Some liming, fertilizing, plowing, building, machine repair, fencing, discing, orchard pruning, small grain seeding, treating plant beds. Other tasks: Grading and marketing burley tobacco, soil testing, calving, lambing, marketing and feeding of livestock. Farm fuel supply adequate.

WASHINGTON: West: Temperatures averaged 4° above normal. Precipitation slightly to well above normal.

Carrot harvest ending. Beef and dairy cattle on winter rations. Hay supplies short to adequate.

East: Temperatures averaged 3 to 5° above normal. Precipitation above normal.

Fruit growers pruning. Late grain plantings emerging. Soil moisture improved. Some grain stands small but in generally good condition.

WEST VIRGINIA: Temperatures near normal; 5° above normal northeast. High 64°, low -1°. Precipitation well below normal.

Fieldwork: 4.5 days suitable. Soil moisture adequate. Hay adequate, feed grains adequate, other feed adequate. Fuels adequate. Pasture normal.

WISCONSIN: Temperatures above normal. Highs reached 50's on 5th, lows mostly in teens and 20's. Extremes: 55 and -3°. Colder air and snow moved into northern areas late 6th and

continued 7th. Snowfall 2 to 6 in. northern third, rain and drizzle 0.05 to 0.30 in. south before changing to snow flurries. Colder on weekend with highs in 20's and 30's.

Corn harvest continuing. Corn for grain about 90% harvested, 1978 and normal 99%. Snowcover trace or none except few inches north. Some increase in frost penetration due to lack of snowcover.

WYOMING: Temperatures well above normal. Precipitation mostly below normal.

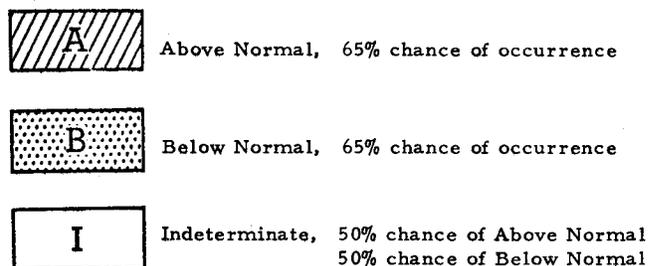
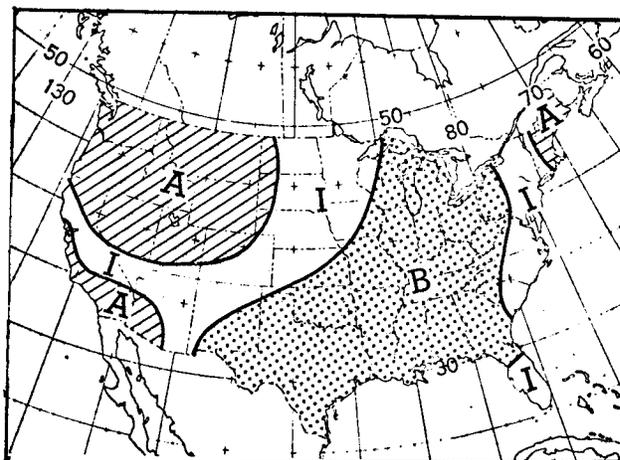
Winter wheat fair to good condition, additional moisture needed in northeast. Livestock mostly good condition. Supplemental feeding in areas with snowcover. Unseasonable warm weather melting heavy snowcover southeast. Hay supplies adequate.

OUTLOOK FOR WINTER AVERAGE TEMPERATURES

December 1979 through February 1980

The Midwest, the South, and the southern Great Plains are the regions of the United States most likely to experience a cold winter this year. Temperatures there are given a 65-percent chance of falling below normal for a fourth consecutive year but need not equal the intense cold of the recent winters. Much of the northwest quarter of the country, that part stretching from Denver and Rapid City to northern California and the Pacific Northwest, should, by contrast, enjoy a milder winter than normal, along with the southwestern border from Tucson to San Francisco. The confidence factor is again 65 percent. While eastern New England is also expected to be milder than normal, the rest of the East Coast as far as South Carolina, remains unpredictable, as does southern Florida and much of the northern Great Plains.

The predicted national temperature pattern favors active storm tracks and extra rain or snow in the South and East. Therefore, the Rio Grande Valley, the Gulf Coast States, the Appalachians and upper Ohio Valley, and all of the East Coast except southern Florida are given a 55-percent chance of getting more than the usual amounts. The area most likely to remain drier than usual extends from California northeastward through the Great Basin to the northern Rockies and from there eastward to the Great Lakes. The confidence level is 55 percent. Unmentioned areas are rated equally likely to be wet or dry.

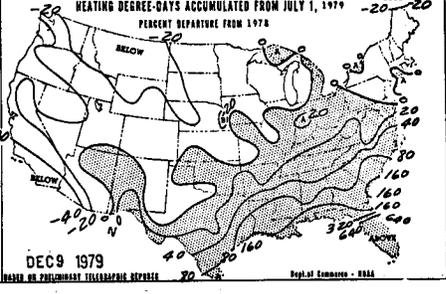
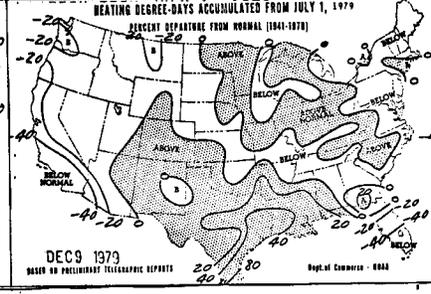
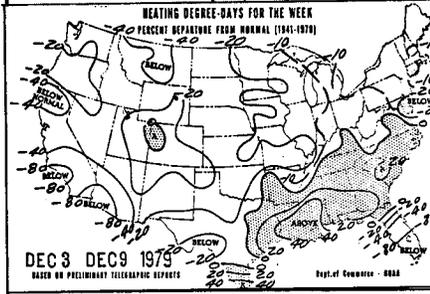


The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the year 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 65% probability of occurring where forecast (shaded area), based on the verification scores of twenty-one years of experimental seasonal predictions.

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING DEC. 9, 1979.

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1, 1979.

Table with 3 columns of station data. Each column lists states and stations with weekly and seasonal accumulation values for heating degree days. The columns are labeled 'STATES AND STATIONS' and contain data for various locations across the United States.



International Weather and Crop Summary

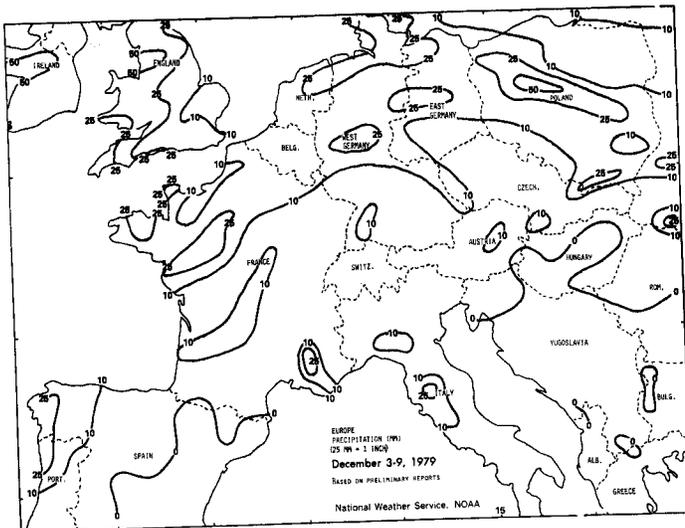
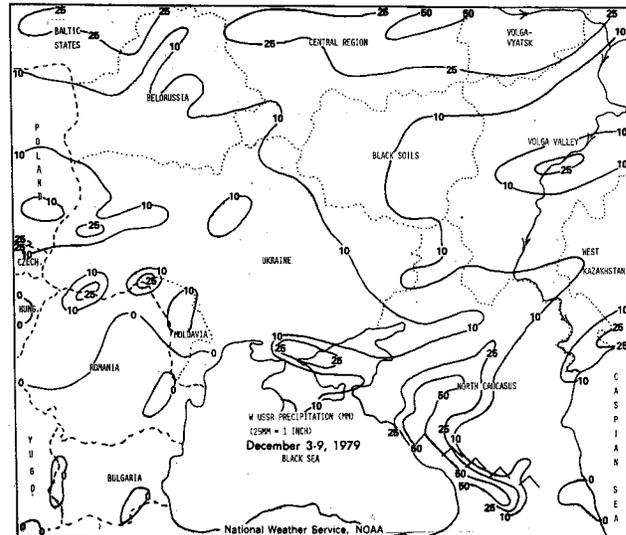
December 3 - 9

HIGHLIGHTS:

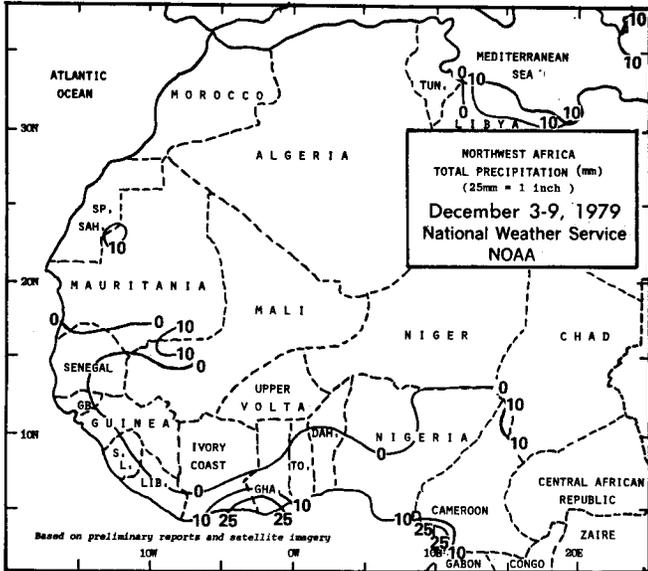
- USSR. Winter grains dormant in nearly all areas...no substantial snowcover as yet.
- EUROPE. Winter grain sowing nearly complete in the south*...somewhat dry in parts of eastern Spain.
- CHINA. Winter grains dormant in the north.
- INDIA. Sowing winter wheat...dry conditions persist in many northern areas. Harvesting cotton in the south*...favorable weather.
- AUSTRALIA. Harvesting winter grains*...favorable weather.
- AFRICA. Northern: sowing winter grains*...conditions becoming dry in Morocco. Southern: planting in the Maize Triangle...adequate soil moisture, good in the northeast.
- ARGENTINA. Harvesting wheat in Santa Fe*...too much rain.
- BRAZIL. Planting soybeans in Rio Grande do Sul...heavy rains in some areas.

*Based on normal crop calendar information.

USSR. Only light precipitation fell over most of the Ukraine, with scattered, above-normal amounts in the east, west, and south. No substantial snowcover has accumulated over major winter grain areas. Temperatures in the Black Soils area and north-eastern Ukraine dipped below normal late in the week but posed no danger to dormant wheat. Warmer than normal temperatures in the southwestern half of the Ukraine remained too low for any plant growth. Only in southern Krasnodar Kray near the Caucasus Mountains did temperatures warm sufficiently for winter wheat development to continue, and much of the Kray received above-normal precipitation maintaining favorable conditions.

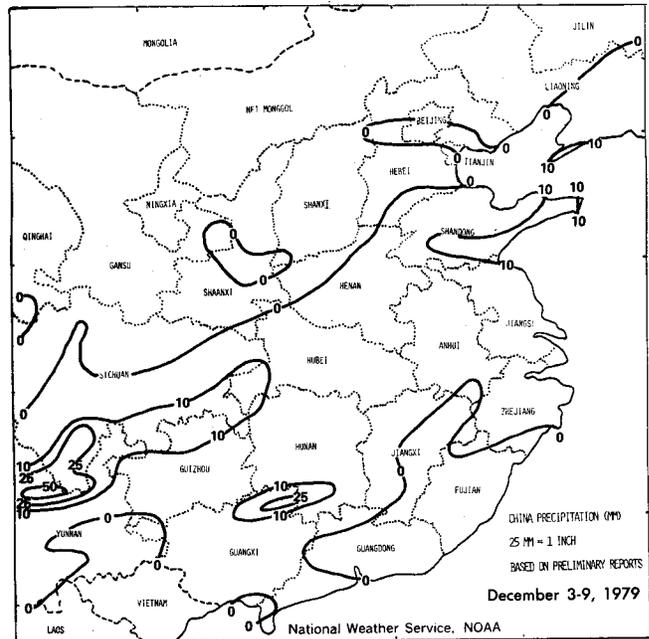


EUROPE. Moderate precipitation remained in the northern third of the continent; only scattered locations across the south received more than light totals. Some areas in eastern Spain, where winter grain sowing should still be in progress, were perhaps becoming a little dry for normal grain germination. Temperatures in Poland and East Germany stayed a bit too cold for winter grains to benefit from the moisture, but warmer conditions to the west permitted continued growth.

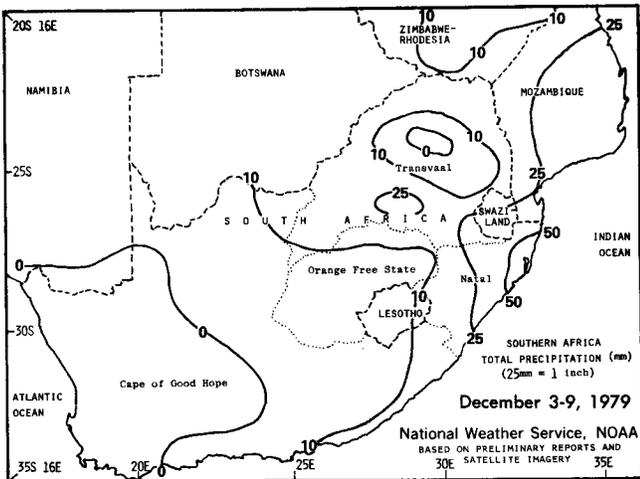


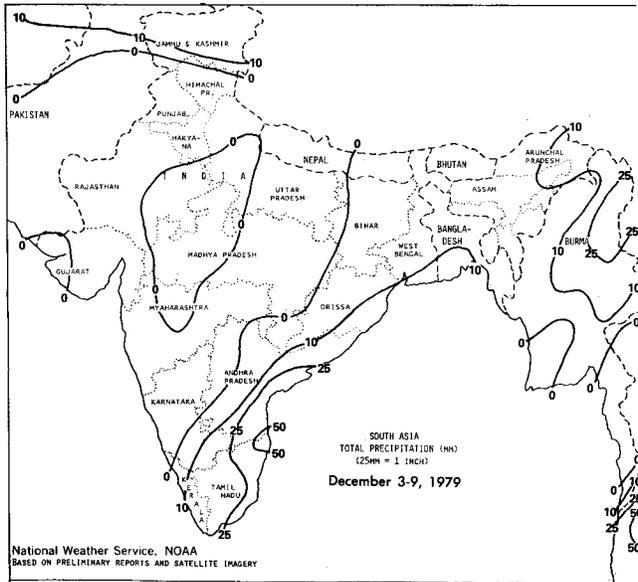
NORTH AFRICA. No rain fell in winter grain areas of Morocco, Algeria, and Tunisia again. Soil moisture remained good in Tunisia and eastern Algeria, but most of Morocco has received less than half of normal rainfall since October. Wheat, which was sown early under favorable soil moisture conditions, may be too dry now.

CHINA. Fair weather prevailed in southern coastal provinces as the late rice harvest wound down. Light precipitation of less than 5 mm did nothing much to reduce the need for irrigation in the southeastern two-thirds of the winter wheat belt. Wheat should now have gone dormant in the northern half of the belt, and will not require much moisture until growth resumes in late March.

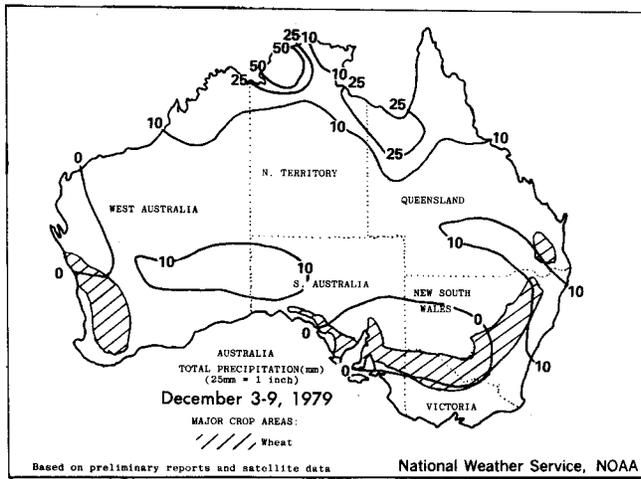


SOUTH AFRICA. Rainfall decreased to below normal in the northeastern part of the Maize Triangle, and virtually none fell in the southwest. However, even in the southwest, soil moisture should remain adequate, and conditions to the northeast continue quite good.

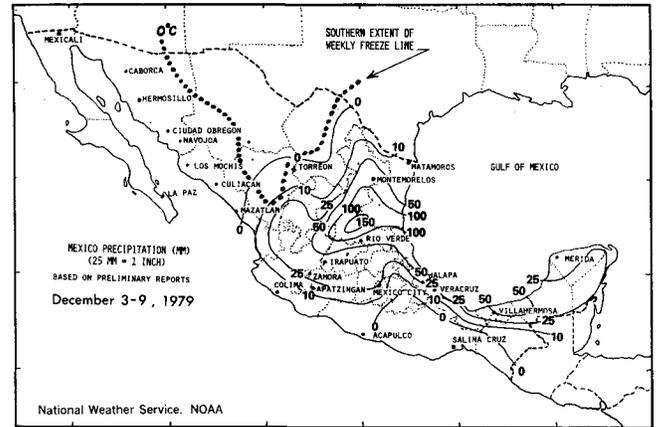




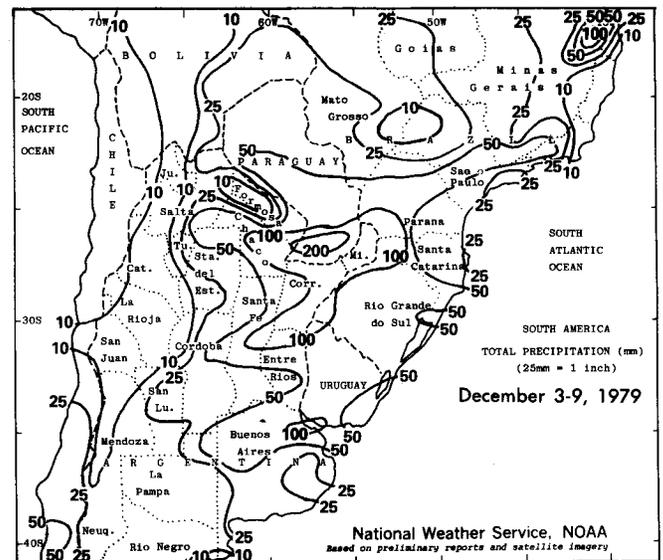
INDIA. Dry weather returned to most of the wheat belt, though light amounts of less than 9 mm fell in parts of Uttar Pradesh, eastern Rajasthan, and Madhya Pradesh. Important wheat areas in Punjab, Haryana, and northwestern Uttar Pradesh remained drastically deficient in soil moisture. The only substantial rain on the subcontinent fell in coastal areas of Andhra Pradesh and Tamil Nadu. Only the late harvesting of rice may have been affected by these above-normal rains.



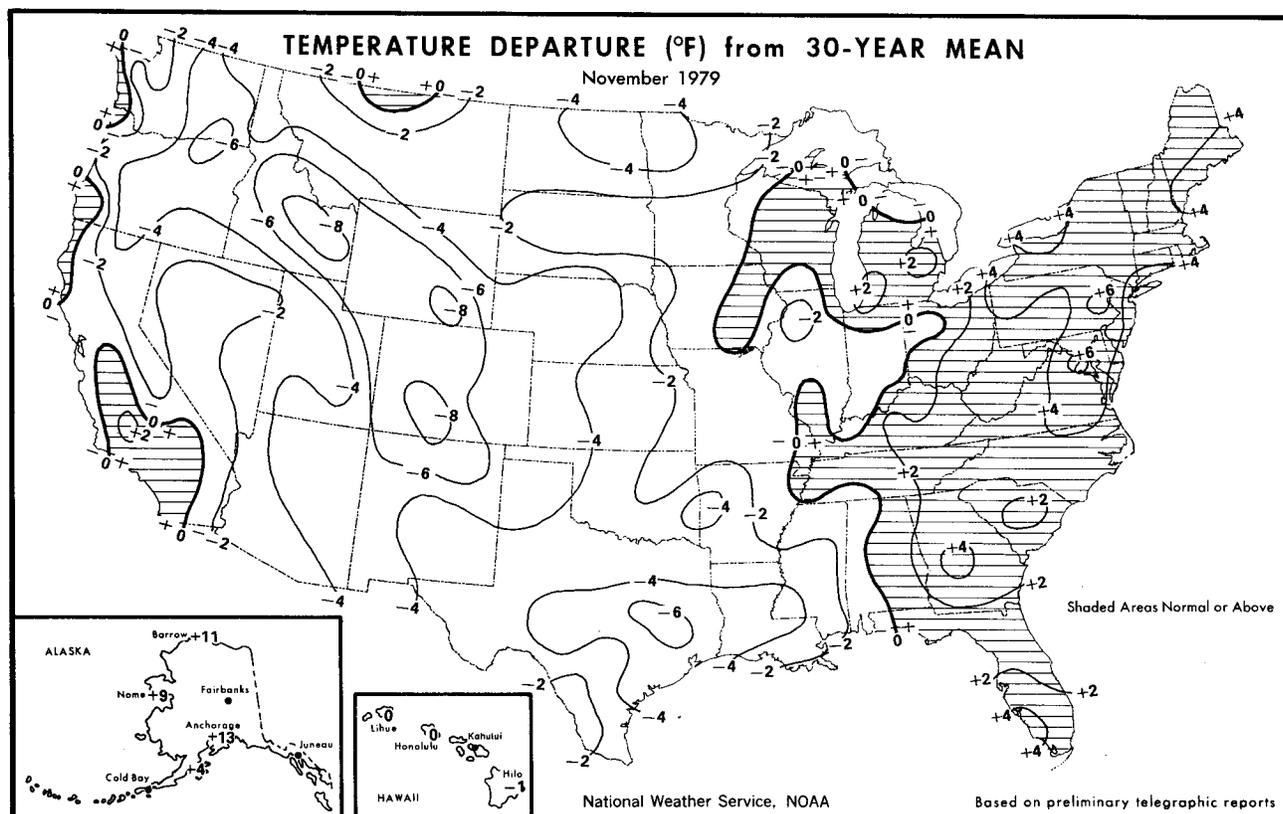
AUSTRALIA. Winter grain harvest areas experienced a second consecutive week of fair weather. Harvest activity has moved into the more southerly areas with an excellent crop expected. Increased rainfall in northern Queensland and the North Territory resulted from a southward shift of tropical weather systems--normal for this season.



MEXICO: Heavy rains finally drenched wheat and strawberries in the southern plateau. The drought-stricken wheat should respond favorably to the moisture, but some diseases may develop in strawberries. Irrigation water storage increased with the rains, which also extended eastward across the citrus belt. Harvesting was delayed, but the additional moisture will greatly benefit crops and livestock. The drought that began last summer continued over north central and northwestern areas. Some wheat and rangelands are probably in very poor condition. The west coast vegetable area was sunny and warm but with some irrigation supplies on the low side. Culiacan afternoon maxima averaged 30°C with a relative humidity of 33 percent, while overnight minima averaged 13°C with a 94 percent humidity.



SOUTH AMERICA. Heavy rains drenched an area extending from Santa Fe Province in Argentina northeastward to Parana in Brazil. Heavy thunderstorm activity occurred in northern portions of Santa Fe's wheat belt, but only late-harvested fields may have sustained light damage. Much greater rainfall totals in Santa Catarina, northern Rio Grande do Sul, and southwestern Parana probably caused some wash-out of recently planted soybeans. Moderate amounts over the rest of the belt maintained good growing conditions. Above-normal rains in southern Buenos Aires Province of Argentina were not favorable for normal maturation of the wheat crop.



November Weather Summary

HIGHLIGHTS: Early in November, a frontal system stagnated in the Southeast and spread heavy rain from the lower Mississippi River to the mid-Atlantic States. Again, later in the month, a low center formed in the Texas Panhandle and moved northeastward through the Great Lakes spreading rain from the lower Mississippi River through the New England Coast. Strong northerly winds blowing across the warmer Great Lakes dropped snow--heavy in the eastern portions--on the lee shores. Monthly average temperatures were warmer than normal in the eastern third of the Nation and colder in the West.

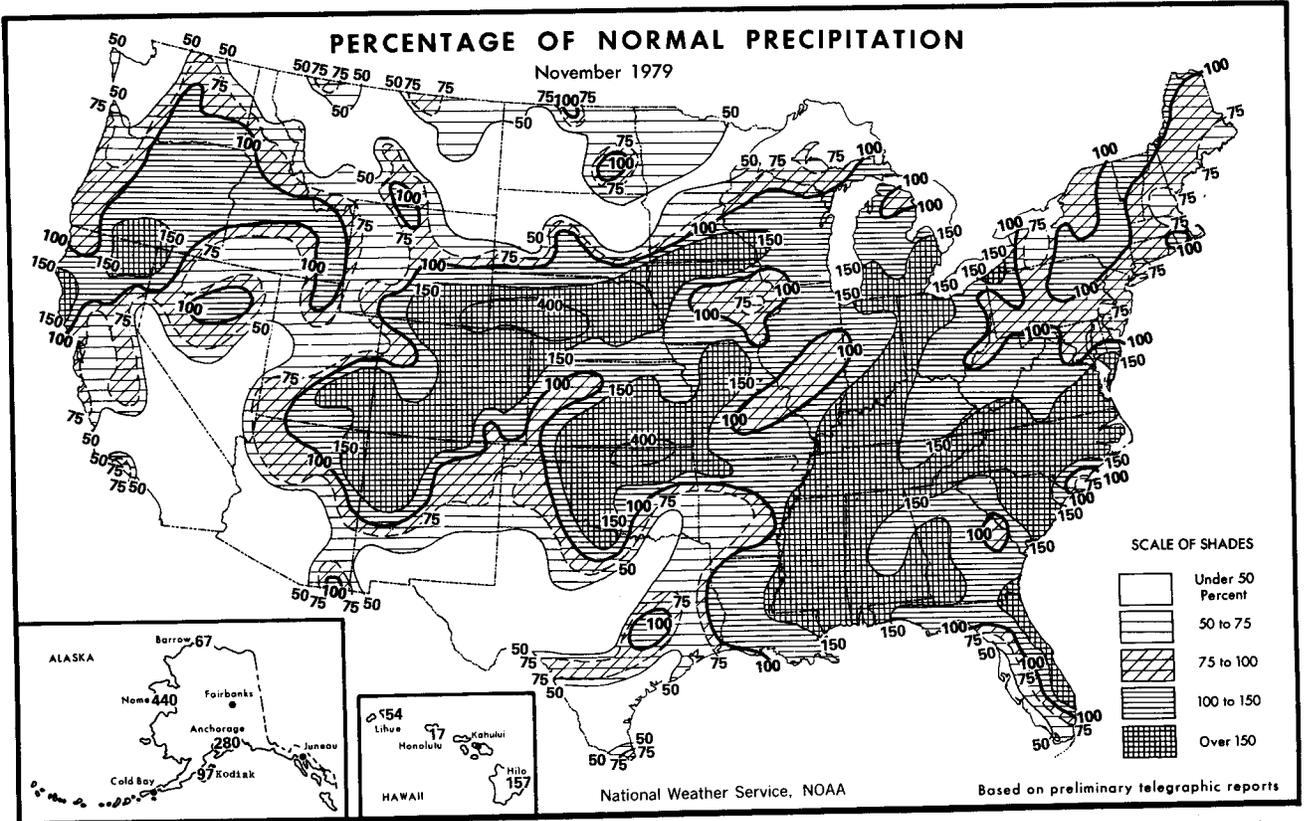
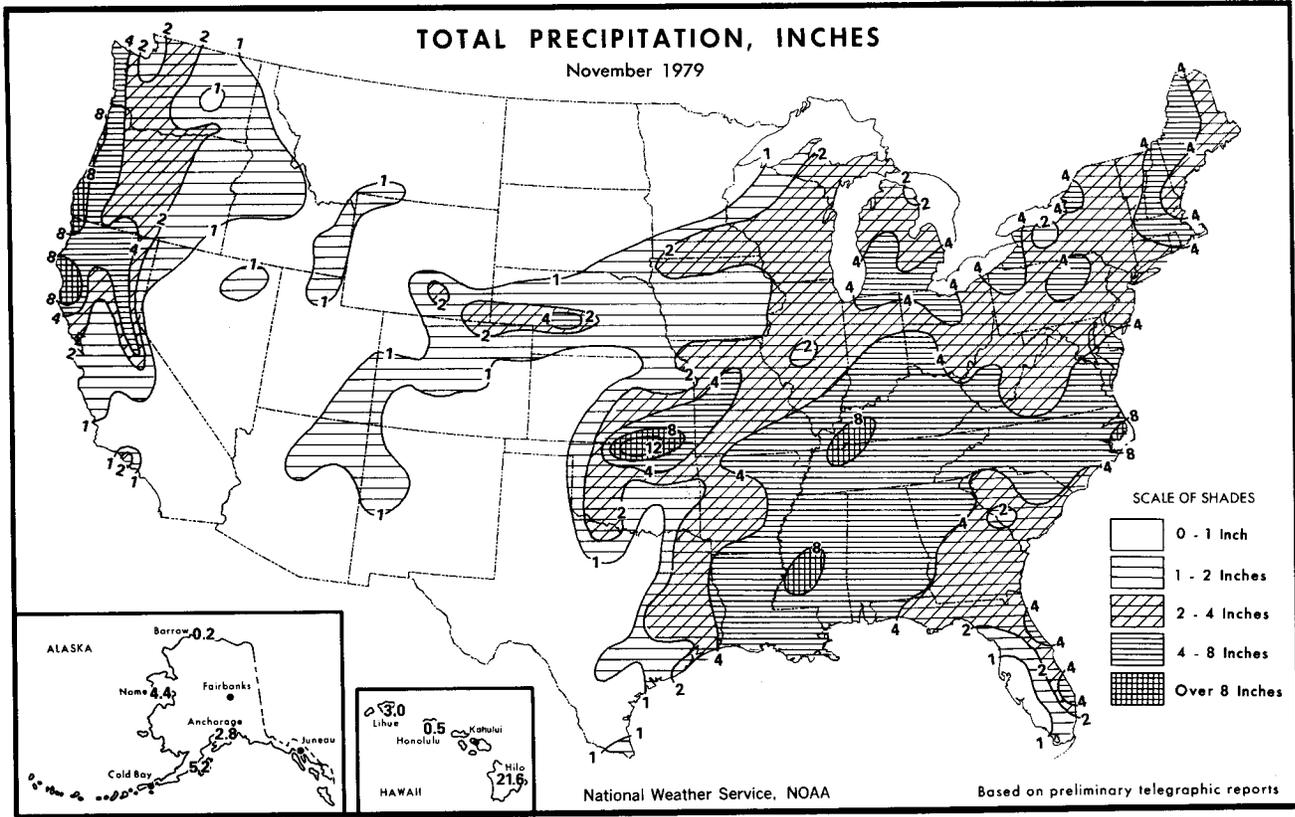
A vigorous frontal system edged through the eastern United States as November began at midweek. Rain, showers, and some thunderstorms moved with the front from the Mississippi River Valley to the East Coast. Snow fell in the northern Plains and Great Lakes area.

At the beginning of the week of November 5-11, a cold airmass moved into the northern Plains, and by midweek, had pushed southward into Mexico and off the Atlantic Coast. A second, somewhat colder system developed and moved rapidly, but slowed as it neared the East Coast. Precipitation with the first system was confined to snow in the central Plains and Rockies and rainshowers in the Lakes area. Rain, with snow at higher elevations, covered the Pacific Northwest and continued eastward. As the second system slowed toward the end of the week, more widespread and heavier rain occurred. The central and lower sections of the Mississippi River were deluged with more than 3 inches of rain. The area from Mississippi to the mid-Atlantic States measured over 2 inches. The colder air averaged 12 degrees below normal in the central Plains.

Precipitation was sparse over most of the Nation during the week of Nov. 12-18, but late in the week, a weather system headed into the Northwest spreading rain, with snow at higher elevations, through most of California and the central and northern Plateau. Elsewhere, the remnants of an earlier weather system spread rain along the Coast from the mid-Atlantic States through New England. Light rain or snow fell in the Great Lakes area. Average temperatures for the week in the central and northern Plains and Southwest showed warmer than normal, and the rest of the Nation was near normal.

The third week of November (19-25) was another week of heavy rain. An upper air, low pressure system moved into the Southwest and slowly eastward. Warm, moist air from the Gulf of Mexico moved northward. Blizzard conditions occurred in the Colorado/Wyoming border area and moved eastward toward the Great Lakes. Areas of heavy rain fell from central Oklahoma into northern Missouri and from the lower Mississippi River Valley through the Ohio Valley. The Mississippi Delta was again deluged with 5 or more inches of rain. Temperatures rose sharply in the East. Weekly averages ranged as much as 15 degrees warmer than normal. All of the area west of the Plains was cooler than normal.

During the last week of November, a large mass of very cold air dropped southward out of Canada and centered in Idaho. The center remained nearly stationary most of the week but elongated southeastward. The cold air reached from the Sierras in the West to the East Coast by the last of the month. Cold northerly winds blowing across the warmer Great Lakes produced snow squalls south of the Lakes. Much of the lee side of the eastern Lakes accumulated 2 to 3 feet of snow. More rain fell in the Pacific Northwest as November ended.



Temperature and Precipitation Data for November 1979

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	53	1	5.5	1.8	LA. Baton Rouge . . .	55	- 4	5.1	3.1	Youngstown . . .	43	3	2.7	-.3
Moblie . . .	57	- 2	6.5	3.1	Lake Charles . . .	56	- 4	4.7	.6	OKLA. Okla. City . . .	47	- 2	1.9	.5
Montgomery . . .	56	1	4.1	.7	New Orleans . . .	58	- 2	4.3	.4	Tulsa . . .	48	- 1	5.6	3.7
ALASKA. Anchorage . .	34	13	2.8	1.8	Shreveport . . .	53	- 3	4.8	1.2	OREG. Astoria . . .	47	0	7.9	- 1.9
Barrow . . .	10	11	.2	-	MAINE. Caribou . . .	36	5	2.9	-.9	Burns . . .	42	- 4	1.9	.5
Fairbanks . . .	--	--	--	--	Portland . . .	42	3	4.0	- .6	Medford . . .	32	- 2	3.2	.1
Juneau . . .	--	--	--	--	MD. Baltimore . . .	51	5	2.5	- .6	Pendleton . . .	35	- 6	1.8	.3
Kodiak . . .	39	4	5.2	- .2	MASS. Boston . . .	49	4	3.3	- 1.2	Portland . . .	45	0	3.4	- 2.3
Nome . . .	25	9	4.4	3.4	Chatham . . .	49	- 1	4.2	--	Salem . . .	42	- 3	3.8	- 2.3
ARIZ. Flagstaff . . .	31	- 5	1.1	- .2	MICH. Alpena . . .	34	- 1	1.9	- .6	PA. Allentown . . .	48	6	3.0	- .6
Phoenix . . .	58	- 2	.1	- .4	Detroit . . .	40	0	4.2	1.9	Erie . . .	44	4	5.8	2.1
Tucson . . .	57	- 2	T	- .6	Flint . . .	40	2	3.6	1.3	Harrisburg . . .	47	3	2.7	-.5
Winslow . . .	38	- 5	.2	- .2	Grand Rapids . . .	41	2	5.5	2.7	Philadelphia . . .	50	4	2.5	-.9
Yuma . . .	62	- 2	0	- .2	Houghton Lake . . .	35	1	2.5	0	Pittsburgh . . .	45	4	2.4	-.1
ARK. Fort Smith . . .	46	- 4	1.0	- 1.2	Lansing . . .	38	0	3.3	1.0	Scranton . . .	46	4	3.2	.2
Little Rock . . .	49	- 2	2.5	- 1.4	Marquette . . .	29	0	2.5	-.9	R.I. Providence . . .	48	5	4.5	0
CALIF. Bakersfield . .	59	3	.2	-.5	Muskegon . . .	39	0	3.3	.3	S.C. Charleston . . .	59	3	3.3	1.2
Eureka . . .	53	1	6.2	.4	S. Ste. Marie . . .	32	- 1	3.7	.4	Columbia . . .	55	1	3.9	1.6
Fresno . . .	54	0	1.0	- .2	MINN. Duluth . . .	25	- 3	.5	- 1.2	Greenville . . .	53	2	3.9	.8
Los Angeles . . .	61	0	.2	- 1.6	Internatl Falls . .	22	- 3	.8	- .5	S.D. Aberdeen . . .	29	1	T	-.6
Red Bluff . . .	53	- 1	3.7	.6	Minneapolis . . .	32	0	1.0	- .2	Huron . . .	32	0	.2	-.5
San Diego . . .	62	1	.3	- 1.0	Rochester . . .	32	- 1	2.3	1.3	Rapid City . . .	33	- 2	.2	-.3
San Francisco . . .	54	- 1	1.9	-.4	St. Cloud . . .	29	- .6	-.5	-.5	Sioux Falls . . .	30	- 3	1.7	.8
Stockton . . .	54	1	1.0	-.7	MISS. Jackson . . .	51	- 4	8.8	4.9	TENN. Chattanooga .	50	1	7.4	3.5
COLO. Denver . . .	33	- 6	1.7	-.9	Meridian . . .	52	- 2	7.4	3.9	Knoxville . . .	51	2	5.7	2.1
Grand Junction . . .	33	- 7	1.0	-.4	MO. Columbia . . .	43	- 1	2.3	.5	Memphis . . .	51	0	7.4	3.5
Pueblo . . .	36	- 5	.9	.5	Kansas City . . .	41	- 1	1.8	.3	Nashville . . .	49	1	6.0	2.5
CONN. Bridgeport . . .	47	1	2.5	- 1.3	St. Louis . . .	45	0	2.1	-.4	TEX. Abilene . . .	51	- 3	.7	-.5
Hartford . . .	46	5	3.5	-.8	Springfield . . .	44	- 2	3.2	-.9	Amarillo . . .	41	- 5	4	-.1
D.C. Washington . . .	54	6	2.3	-.6	MONT. Billings . . .	34	- 2	.5	-.2	Austin . . .	57	- 2	.6	- 1.4
FLA. Apalachicola . .	62	1	2.9	.2	Glasgow . . .	27	- 2	.2	-.2	Beaumont . . .	56	- 4	3.2	- 1.1
Daytona Beach . . .	66	1	8.0	5.9	Great Falls . . .	33	- 2	.3	-.5	Brownsville . . .	65	- 3	1.2	-.1
Ft. Myers . . .	74	5	.5	-.8	Havre . . .	31	1	.1	-.4	Corpus Christi . . .	63	- 2	.3	- 1.3
Jacksonville . . .	62	1	3.6	- 1.8	Helena . . .	29	- 3	.1	-.5	Del Rio . . .	58	- 2	.6	-.1
Key West . . .	77	2	1.6	- 1.1	Kalispell . . .	29	- 2	.4	- 1.0	El Paso . . .	48	- 4	T	-.3
Lakeland . . .	--	--	--	--	Miles City . . .	30	- 2	.2	-.3	Fort Worth . . .	53	- 3	.4	- 1.6
Miami . . .	75	3	1.6	- 1.1	Missoula . . .	27	- 5	.5	-.5	Galveston . . .	59	- 5	2.1	- 1.1
Orlando . . .	68	1	1.9	.3	NEBR. Grand Island	34	- 4	1.8	1.2	Houston . . .	56	- 5	1.8	- 2.2
Tallahassee . . .	59	0	3.6	.8	Lincoln . . .	37	- 2	1.3	.4	Lubbock . . .	46	- 3	.1	-.4
Tampa . . .	69	2	.8	- 1.0	Norfolk . . .	33	- 3	1.7	1.1	Midland . . .	50	- 3	T	-.5
W. Palm Beach . . .	73	2	4.1	1.6	N. Platte . . .	32	- 4	4.4	3.9	San Angelo . . .	51	- 5	T	-.9
GA. Atlanta . . .	54	3	5.2	1.8	Omaha . . .	37	- 1	1.6	.6	San Antonio . . .	58	- 2	1.4	-.4
Augusta . . .	56	2	2.0	- .1	Valentine . . .	30	- 5	.6	.1	Victoria . . .	58	- 5	.9	- 1.4
Macon . . .	59	4	3.4	1.0	NEV. Ely . . .	31	- 3	.3	-.4	Waco . . .	52	- 6	.3	- 2.0
Savannah . . .	60	3	2.7	.8	Las Vegas . . .	52	- 1	T	-.4	Wichita Falls . . .	50	- 3	2.2	.8
HAWAII. Hilo . . .	73	- 1	21.6	7.8	Reno . . .	38	- 2	.2	-.5	UTAH. Blanding . . .	34	- 4	1.1	.3
Honolulu . . .	77	0	.5	- 2.5	Winnemucca . . .	36	- 1	.6	-.4	Salt Lake City . . .	37	- 2	1.0	-.3
Kahului . . .	--	--	--	--	N.H. Concord . . .	42	4	2.9	1.1	VT. Burlington . . .	41	4	3.9	1.0
Lihue . . .	75	0	3.0	- 2.6	N.J. Atlantic City .	49	3	3.2	- 1.0	VA. Lynchburg . . .	50	3	3.2	.5
IDAHO. Boise . . .	35	- 5	1.3	0	Trenton . . .	51	5	2.6	-.7	Norfolk . . .	56	4	5.3	2.4
Lewiston . . .	38	- 3	1.4	-.1	N.MEX. Albuquerque	41	- 4	.9	.6	Richmond . . .	53	4	5.5	2.3
Pocatello . . .	28	- 8	1.1	0	Roswell . . .	45	- 2	T	-.3	Roanoke . . .	50	3	3.8	1.3
ILL. Cairo . . .	48	0	5.4	1.5	N.Y. Albany . . .	44	4	3.4	.6	WASH. Colville . . .	31	- 3	1.0	- 1.0
Chicago . . .	41	1	2.8	.6	Binghamton . . .	43	5	3.7	.6	Omak . . .	31	- 4	1.4	-.2
Moline . . .	37	- 2	2.1	-.2	Buffalo . . .	44	4	4.1	.4	Quillayute . . .	44	0	7.5	- 6.3
Peoria . . .	38	- 2	2.8	-.8	New York . . .	50	3	3.0	-.8	Seattle-Tacoma . . .	44	- 1	1.9	- 4.0
Rockford . . .	36	- 2	2.4	0	Rochester . . .	43	2	1.8	- 1.0	Spokane . . .	31	- 5	1.2	- 1.0
Springfield . . .	42	0	2.0	- .1	Syracuse . . .	45	4	3.3	0	Walla Walla . . .	37	- 6	2.2	.3
IND. Evansville . . .	44	- 1	6.8	3.6	N.C. Asheville . . .	49	3	7.8	4.9	Yakima . . .	34	- 4	1.5	.4
Ft. Wayne . . .	40	0	3.9	1.2	Charlotte . . .	53	2	4.6	1.9	W.VA. Beckley . . .	44	2	3.7	.8
Indianapolis . . .	41	- 1	4.4	1.3	Greensboro . . .	52	4	4.8	2.2	Charleston . . .	48	3	4.0	1.2
South Bend . . .	42	2	4.9	2.2	Hatteras . . .	59	3	8.5	4.0	Huntington . . .	48	2	3.2	.3
IOWA. Burlington . .	40	0	1.5	0	Raleigh . . .	52	2	4.7	1.9	Parkersburg . . .	48	3	2.4	-.1
Des Moines . . .	38	0	1.4	0	Wilmington . . .	58	2	2.0	1.0	WISC. Green Bay . .	34	0	2.5	.6
Dubuque . . .	36	0	1.0	-.6	N.DAK. Bismarck . .	26	- 3	.1	-.5	La Crosse . . .	35	0	2.5	1.0
Sioux City . . .	34	- 2	1.0	1.0	Fargo . . .	25	- 4	.5	-.2	Madison . . .	35	0	2.3	.4
KANS. Concordia . . .	39	- 2	.9	.1	Williston . . .	25	- 3	.1	-.4	Milwaukee . . .	38	1	2.7	.7
Dodge City . . .	38	- 5	1.0	.4	OHIO. Akron-Canton	43	2	3.1	.6	WYO. Casper . . .	27	- 7	.8	.1
Goodland . . .	35	- 4	.8	.3	Cincinnati . . .	44	0	4.9	1.8	Cheyenne . . .	30	- 6	2.5	1.9
Topeka . . .	40	- 3	1.8	.5	Cleveland . . .	42	0	3.2	.4	Lander . . .	26	- 6	.6	-.3
Wichita . . .	42	- 3	2.1	.9	Columbus . . .	44	2	3.9	1.2	Sheridan . . .	30	- 3	.6	-.3
KY. Lexington . . .	46	1	4.5	1.1	Dayton . . .	43	1	4.9	2.3	P.R. San Juan . . .	86	7	15.9	10.4
Louisville . . .	47	2	5.9	2.6	Toledo . . .	41	1	4.3	2.0					

Based on 1941-70 normals

Heating Degree Days (Base 65° F.)

November 1979

ALA. Birmingham	366	MAINE, Caribou	870	OKLA. Okla. City	551
Mobile	246	Portland	672	Tulsa	525
Montgomery	282	MD. Baltimore	425	OREG. Astoria	537
ALASKA, Anchorage	937	MASS. Boston	484	Burns U.	984
Barrow	1642	Nantucket	480	Medford	668
Fairbanks	--	MICH. Alpena	929	Pendleton	902
Juneau	--	Detroit	758	Portland	592
Nome	1202	Flint	754	Salem	691
ARIZ. Flagstaff	1011	Grand Rapids	731	PA. Allentown	509
Phoenix	204	Houghton Lake	893	Erie	634
Tucson	252	Lansing	792	Harrisburg	536
Winslow	796	Marquette U.	1080	Philadelphia	439
Yuma	84	S. Ste. Marie	979	Pittsburgh	601
ARK. Fort Smith	567	MINN. Duluth	1059	Scranton	588
Little Rock	466	Internatl Falls	1277	R.I. Providence	498
CALIF. Bakersfield	196	Minneapolis	992	S.C. Charleston	203
Eureka U.	367	Rochester	974	Columbia	314
Fresno	323	St. Cloud	1081	Greenville	362
Los Angeles U.	121	MISS. Jackson	421	S. DAK. Aberdeen	1068
Red Bluff	356	Meridian	374	Huron	997
Sacramento	338	Vicksburg U.	--	Rapid City	962
San Diego	75	MO. Columbia	698	Sioux Falls	1038
San Francisco	320	Kansas City	720	TENN. Chattanooga	438
COLO. Denver	941	St. Louis	610	Knoxville	407
Grand Junction	945	Springfield	633	Memphis	426
Pueblo	870	MONT. Billings	937	Nashville	487
CONN. Bridgeport	523	Glasgow	1139	TEX. Abilene	421
Hartford	578	Great Falls	939	Amarillo	727
D.C. Washington	313	Havre	1003	Austin	278
FLA. Apalachicola	147	Helena	1071	Beaumont	278
Ft. Myers	15	Kalispell	1072	Brownsville	99
Jacksonville	144	Miles City	1048	Corpus Christi	131
Key West	0	Missoula	1130	Dallas	--
Lakeland U.	75	NEBR. Grand Island	915	Del Rio	233
Miami	0	Lincoln	825	El Paso	505
Orlando	47	Norfolk	954	Fort Worth	370
Pensacola U.	11	North Platte	975	Galveston U.	205
Tallahassee	213	Omaha	835	Houston	297
Tampa	47	Valentine	1040	Lubbock	570
GA. Atlanta	320	NEV. Ely	1005	Midland	459
Augusta	295	Las Vegas	395	San Angelo	430
Macon	221	Reno	805	San Antonio	243
Savannah	183	Winnemucca	875	Victoria	243
IDAHO, Boise	903	N. H. Concord	675	Waco	383
Lewiston	819	N. J. Atlantic City	483	Wichita Falls	463
Pocatello	1090	Trenton U.	412	UTAH, Blanding R	958
ILL. Cairo U.	497	N. MEX. Albuquerque	715	Salt Lake City	845
Chicago	726	Roswell	603	VT. Burlington	703
Moline	829	N. Y. Albany	619	VA. Lynchburg	444
Peoria	804	Binghamton	669	Norfolk	272
Rockford	866	Buffalo	636	Richmond	353
Springfield	684	New York	440	Roanoke	458
IND. Evansville	619	Rochester	655	WASH. Colville	1014
Fort Wayne	756	Syracuse	607	Omak	--
Indianapolis	705	N. C. Asheville	468	Quillayute	626
South Bend	672	Charlotte	357	Seattle-Tacoma	628
IOWA, Burlington	749	Greensboro	377	Spokane	1029
Des Moines	801	Hatteras R.	208	Walla Walla U.	829
Dubuque	873	Raleigh	394	Yakima	919
Sioux City	922	Wilmington	237	W. VA. Beckley	613
KANS. Concordia	782	N. DAK. Bismarck	1166	Charleston	519
Dodge City	816	Fargo	1209	Huntington	494
Goodland	910	Williston U.	1190	Parkersburg U.	512
Topeka	741	OHIO. Akron-Canton	644	WIS. Green Bay	928
Wichita	690	Cincinnati U.	616	Madison	890
KY. Lexington	574	Cleveland	670	Milwaukee	797
Louisville	534	Columbus	632	WYO. Casper	1149
LA. Baton Rouge	308	Dayton	649	Cheyenne	1058
Lake Charles	284	Toledo	724	Lander	1164
New Orleans	230	Youngstown	652	Sheridan	1051
Shreveport	366				

Preliminary reports from airport locations, except those marked U for urban and R for rural.
*Estimated.



FIRST CLASS MAIL

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 FOR WEEK ENDING DEC 9**

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	1979	1978	AVG.
ALA	82	100	95
ARIZ	85	73	79
ARK	87	99	98
CALIF	86	82	NA
GA	86	99	89
LA	89	100	98
MISS	85	100	93
MO	100	100	100
N MEX	75	NA	NA
N. C.	84	92	92
OKLA	NA	NA	NA
S. C.	100	100	100
TENN	87	100	90
TEX	83	49	71

14 STATES 88 67 78
 THESE 14 STATES PRODUCED 99%
 OF THE 1978 COTTON CROP.

NA NOT AVAILABLE

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