

WEEKLY WEATHER AND CROP BULLETIN

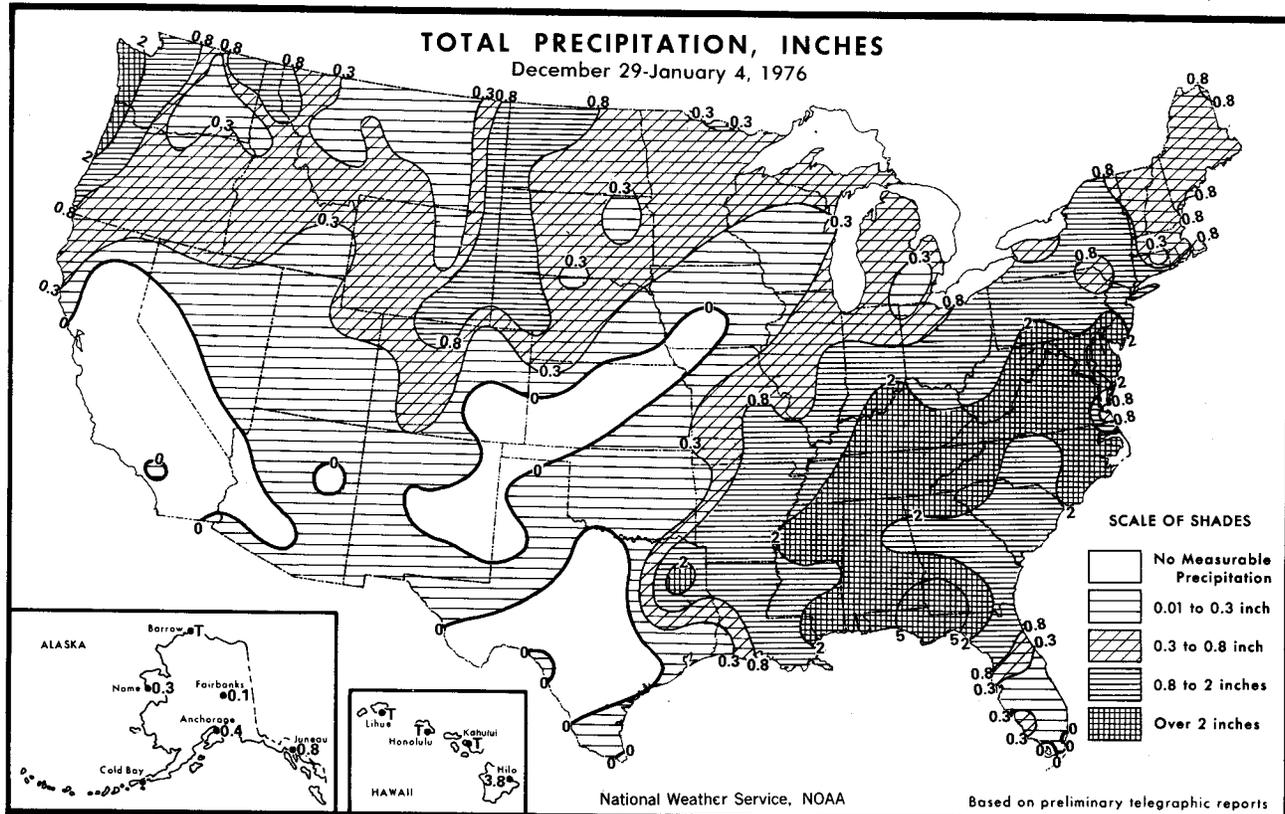
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NATIONAL WEATHER SUMMARY

For the Week of December 29-January 5

HIGHLIGHTS: A powerful winter storm that came to life in the central Rockies and then spread into the Plains created severe, and at times, near blizzard conditions over much of the western two-thirds of the Nation. Snow, bitter cold temperatures, and blustery winds dominated western weather patterns during the week. Widespread arctic air pushed temperatures to 10° below normal in the central and southern Rockies. Heaviest precipitation focused along the Appalachians, lower Mississippi Valley, southern Atlantic Coast, and portions of the upper Great Plains.

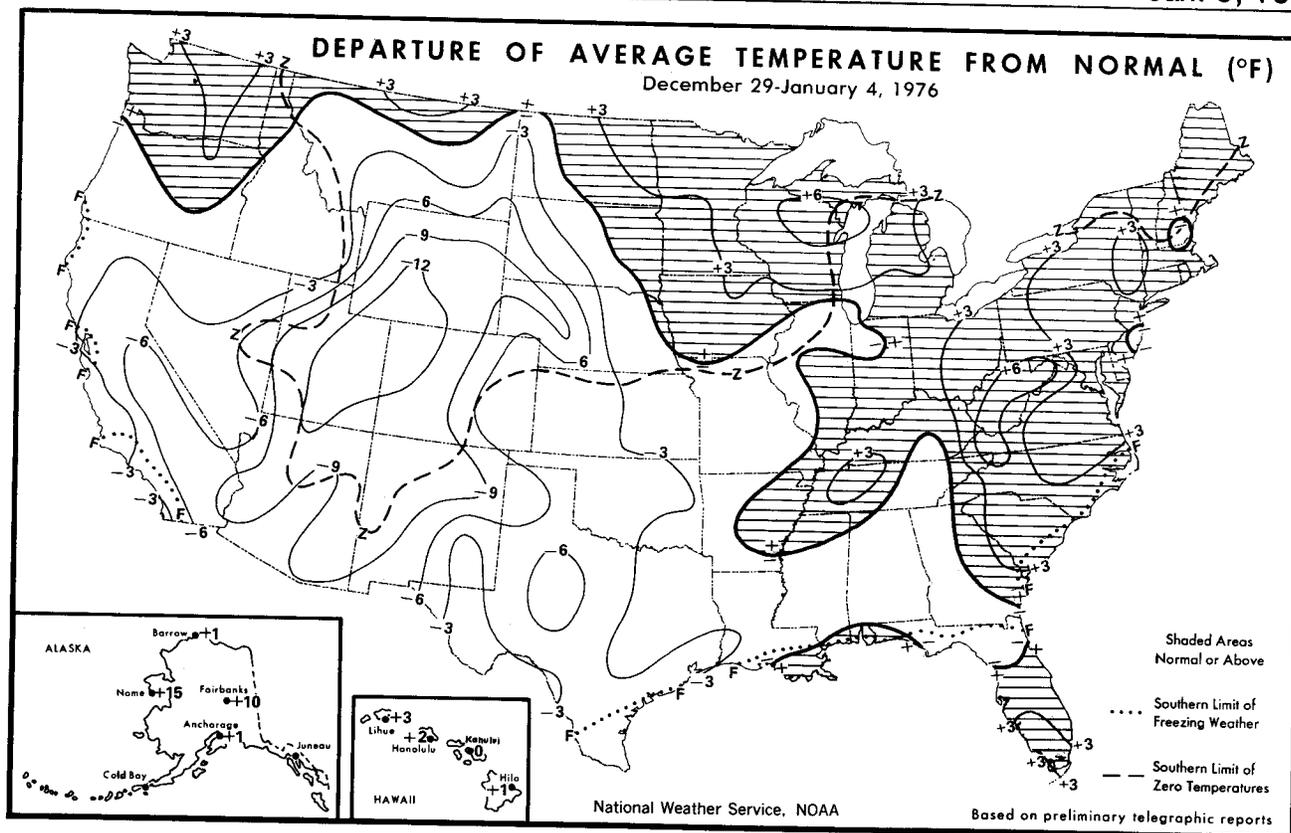
Monday's slow moving low pressure center over southwest Arkansas kept conditions soggy over most of the Mississippi and Ohio Valleys and lower great Plains. Throughout the day the low triggered locally heavy thunderstorms from northern Michigan across northern Illinois into Oklahoma. As the day progressed, however, snow fell in

the Texas Panhandle and changed to a mixture of rain and snow in Oklahoma and to freezing rain or snow in parts of Missouri, Kansas, and Illinois. Meantime rain streamed into portions of Arkansas, Tennessee, and Kentucky. Southern Alabama looked back on an unusually wet year; 107 inches of rain put Evergreen, Ala. at twice its normal total.

Elsewhere freezing rain slicked highways from central Missouri through much of Illinois and southeast Wisconsin. Travelers advisories were posted from the middle Mississippi Valley into the central Great Lakes.

Showers and thunderstorms that developed in the middle Mississippi Valley in the afternoon moved into the Southeast by sunset. The only large area of clear skies stretched from the southern Intermountain region across the central Rockies into the northern Plains.

A vigorous cold front cutting through Idaho on Tuesday set the stage for a major storm over the



central Rockies and Plateau region. In its path the front left gusty winds and scattered rain and snow showers from Montana and Wyoming into Nevada. Mullan, Idaho collected 4 inches of snow and Salt Lake City, Utah, 3 inches. At times strong winds created near blizzard conditions in the central Rockies.

Meantime much colder air pushing southward through the Northwest gave rise to rain and sleet along coastal regions. In view of the threatening storm, travelers throughout much of the West were urged to use caution.

In the East several frontal systems produced rain and drizzle from the eastern Great Lakes into the Ohio Valley and middle Atlantic Coast States, showers and thundershowers from the southern Atlantic Coast to the lower Mississippi Valley, and a few thundershowers along the central Gulf Coast.

At midweek blowing and drifting snow posed the greatest threat to travelers as the western storm intensified and spread into the Plains. Snow filled the air from eastern Washington and Oregon into Utah and from Montana and Wyoming into Colorado and Nebraska.

Heavy snow with gusty winds sent up blizzard warnings in parts of Wyoming and Nebraska. Blowing snow swept through the mountains of Utah and New Mexico. Nearby, snow was an uncommon sight in Tucson, Ariz.

Nationwide, precipitation was widespread from the Mississippi Valley through most of the southern Atlantic Coast States. Rain and snow showers occurred farther north, ahead of a New England cold front.

Though the storm weakened slightly early Thursday morning in the western Plains, over a foot of

snow, bitter cold arctic air, and gusty winds maintained near blizzard conditions in parts of Wyoming and Nebraska. Snow and blowing snow impeded travel throughout the northern halves of the Rockies and Great Plains and light snow drifted into Minnesota, Wisconsin, and parts of Michigan. Effects of the storm even extended into the Southwest, where temperatures in the mountains of southern California halted in the 20's.

Pushing northeastward, the storm unloaded more than 8 inches of snow in a band from New Mexico to Minnesota. Cloudcroft, N. Mex. measured nearly 2 feet of snow as a result of the storm, but in northern Utah, Snowbird nearly tripled that, claiming over 5½ feet of snow.

Severe conditions also left an imprint on areas outside the heavy snow belt. Some of the lowest temperatures on record came out of southern California, where Santa Maria Airport sank to a frigid 20° amid widespread frost.

In the wake of the intense storm, cold air spread across the western two-thirds of the Nation on Saturday. From the central Gulf Coast States into New England a broad area of precipitation accompanied the cold front as it pushed eastward.

In the evening, snow tapered off in parts of New England. Heavy snow warnings were cancelled for Maine and New Hampshire as the storm moved rapidly towards the Atlantic Coast.

Bitter cold air continued its southeastern sweep across the Nation on Sunday. High pressure centers over Kansas and Colorado spread arctic air from the Rockies to the Appalachians. Despite sunny skies, below zero readings were widespread from the northern and central Rockies into the upper Mississippi Valley.

NATIONAL AGRICULTURAL SUMMARY
For the Week of December 29 - January 4

HIGHLIGHTS: Cold temperatures slowed small grain growth in the southern Great Plains and Southwest. Rain over much of the eastern half of the Nation and snow with blizzard conditions in the southern Great Plains increased the need for more care and feeding of livestock. Adverse weather conditions curtailed cotton harvesting. Freezing temperatures occurred in the California major citrus areas.

SMALL GRAINS: Cool weather restricted small grain growth throughout much of the South and Southwest. Only limited grazing of small grain fields was available in most Southern States.

Winter wheat condition in Kansas ranged from poor to fair in western areas to good in the east. Wind blowing was minimal and cold weather limited greenbug activity. Snow and rain in Oklahoma was beneficial. Wheat was in fair to mostly good condition, but cold temperatures slowed growth and greenbug activity. Wind in the Panhandle counties cut wheat in some areas where ground cover is light. In Texas, wheat from the Low Plains southward responded to recent moisture, showing some improvement. However, cool temperatures restricted growth in many localities. Control measures were needed in the Low Plains for greenbugs. Wheat made poor growth in the High Plains and grazing is below normal.

Winter wheat was in mostly good condition in Illinois, but only fair to good in Nebraska. Wheat stands varied considerably throughout the South and Southeast from fair to good. In Washington, wheat stands were in good shape despite some erosion. California small grains are stressed for moisture.

COTTON: Cold and wet weather hampered wrap-up of cotton harvesting in many areas. By January 4, cotton harvesting was nearly 98% finished in the 11 major producing States, continuing ahead of both last year and average.

Cotton harvest reached 98% complete in Texas, versus 94% a year ago and average 91%. Most localities were finished, except in the Low Plains, where trailer shortages caused delays. Wet weather impeded harvest and allowed gins to catch up with backlogs and ricked cotton. Seedbed preparations were on schedule in southern areas of Texas. In Mississippi, cotton harvesting was limited as soil moisture supplies are mostly surplus to excessive. Picking reached 96% complete, against 93% last year and average 97%. Cotton harvesting made modest progress in Oklahoma with 80% finished, much ahead of 67% a year ago. Harvest was mostly complete in Georgia.

Cotton cleanup was active in Arizona and harvest was winding up in California.

OTHER CROPS: Harvest of the remaining soybeans was slowed by inclement weather and the holidays.

Cold weather, snow, and rain brought sorghum combining to a halt in Oklahoma. In Arizona,

harvest was nearing completion.

Tobacco growers in Kentucky were bulking down and stripping tobacco to prepare for the reopening of the burley markets on the 5th. In Florida, Georgia, and South Carolina tobacco bed preparation, fumigation, and seeding were active.

Sugarcane harvest continued in the Texas Lower Rio Grande Valley and was active in Florida. Sugarbeet planting and harvesting continue in California. Subfreezing temperatures caused moderate wilting of sugarbeet tops in Arizona.

FRUITS AND NUTS: Freezing temperatures hit major citrus areas around California and Arizona; damage is uncertain. Citrus grove condition was excellent in Florida, where rains helped surface moisture and trees were very dormant; harvest was in high gear. The Texas citrus harvest remains active. California Desert grapefruit maturity is slow, tangerine quality good. South coast lemons need rain to size the spring crop. Navel orange and avocado picking was light.

Orchard and vineyard pruning activities progressed in most areas as weather permitted.

Pecan harvest was nearly finished in Georgia and rapidly nearing completion in Texas. In Oklahoma, harvest reached 90% complete.

VEGETABLES: Moderate temperatures in the Texas Rio Grande Valley allowed good harvesting of cabbage and lettuce and favored growing conditions for the carrot and onion crops. In the San Antonio Winter Garden area cabbage and carrot harvests were active, while light supplies of broccoli and cauliflower were moving to market. Florida vegetable crops improved as plant growth and fruit maturity responded to warmer temperatures. Volume was up sharply and supplies of most crops increased. Radish and cucumber supplies were steady. Preparation and planting were active on spring vegetable crops. Watermelon plantings continued strong and earlier seeded acreage was germinating to good stand. California broccoli, cauliflower, carrots, and lettuce were in good supply while supplies of celery increased and artichokes decreased.

PASTURES AND LIVESTOCK: Cold and rain limited grazing over much of the South and East while drifting snow and blizzard conditions caused considerable stress to livestock in the Mountain and northern Plains States. Grazing corn and milo fields continued in Kansas along with early seeded wheat fields, mainly in eastern areas. Winter wheat grazing declined in Oklahoma as cold weather stopped new growth. Rains from the Texas Low Plains southward aided small grains and pastures; however, cold weather restricted growth in many areas. Grazing in the High Plains is below normal. Supplemental feeding continued widespread across the Nation and condition of livestock in some areas is declining because of the adverse weather and poor quality of hay.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Jan. 4, 1976

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 . . .	43	-1	1.9	+ .8	La. Baton Rouge . . .	51	0	1.8	+ .8	Youngstown . . .	30	+4	.9	+ .3
Mobile . . .	53	+2	2.7	1.4	Lake Charles . . .	50	-3	.2	- .9	OKLA. Okla. City . . .	34	-3	T	- .3
Montgomery . . .	46	-1	3.2	+2.2	New Orleans . . .	53	0	1.7	+ .6	Tulsa . . .	33	-4	.2	- .2
ALASKA. Anchorage . . .	12	+1	.4	+ .2	Shreveport . . .	46	-1	.8	- .2	OREG. Astoria . . .	42	+1	2.7	+ .4
Barrow . . .	13	+1	T	0	MAINE. Caribou . . .	13	+1	.8	+ .3	Burns . . .	25	0	.5	+ .1
Fairbanks . . .	3	+10	.1	0	Portland . . .	24	+2	.6	- .2	Medford . . .	35	-1	.4	- .4
Juneau . . .	28	+4	.8	- .1	MD. Baltimore . . .	34	+1	3.8	+3.1	Pendleton . . .	36	+4	.7	+ .3
Kodiak . . .	---	---	---	---	MASS. Boston . . .	31	+1	.7	- .2	Portland . . .	39	+1	1.5	+ .1
Nome . . .	19	+15	.3	+ .1	Chatham . . .	34	---	.9	---	Salem . . .	38	-1	1.5	- .1
ARIZ. Flagstaff . . .	18	-10	.1	- .4	MICH. Alpena . . .	22	+2	.4	0	PA. Allentown . . .	30	+2	1.3	+ .6
Phoenix . . .	43	-8	0	- .2	Detroit . . .	26	+1	.4	- .1	Erie . . .	29	+3	1.5	+ .9
Tucson . . .	41	-10	T	- .2	Flint . . .	26	+3	.3	- .1	Harrisburg . . .	32	+2	1.6	+1.0
Winslow . . .	25	-7	0	- .1	Grand Rapids . . .	23	+2	.5	+ .1	Philadelphia . . .	33	0	2.2	+1.5
Yuma . . .	46	-9	.1	0	Houghton Lake . . .	25	+1	.3	- .1	Pittsburgh . . .	31	+3	1.2	+ .6
ARK. Fort Smith . . .	36	-3	.1	- .5	Lansing . . .	25	+5	.7	+ .3	Scranton . . .	28	+2	.6	+ .1
Little Rock . . .	40	+1	1.3	+ .4	Marquette . . .	25	+4	.5	0	R.I. Providence . . .	30	+1	.8	0
CALIF. Bakersfield . . .	44	-2	0	- .2	Muskegon . . .	29	+4	.5	0	S.C. Charleston . . .	52	+4	1.2	+ .5
Eureka . . .	44	-3	.6	-1.0	S. Ste. Marie . . .	20	+4	.5	0	Columbia . . .	49	+4	1.7	+ .9
Fresno . . .	38	-6	0	- .4	MINN. Duluth . . .	14	+4	.8	+ .5	Greenville . . .	45	+3	2.0	+1.1
Los Angeles . . .	52	-5	0	- .6	Internatl Falls . . .	7	+4	.3	+ .1	S.D. Aberdeen . . .	11	0	.3	+ .2
Red Bluff . . .	41	-3	T	-1.0	Minneapolis . . .	19	+5	.3	+ .1	Huron . . .	15	+1	.3	+ .2
San Diego . . .	53	-2	T	- .4	Rochester . . .	17	+3	.1	- .1	Rapid City . . .	17	-6	1.1	+1.0
San Francisco . . .	45	-3	T	-1.0	St. Cloud . . .	13	+2	.3	+ .1	Sioux Falls . . .	15	0	.3	+ .2
Stockton . . .	41	-3	0	- .7	MISS. Jackson . . .	46	-1	1.4	+ .3	TENN. Chattanooga . . .	39	-1	2.4	+1.2
COLO. Denver . . .	21	-9	.3	+ .2	Meridian . . .	45	-2	1.0	- .1	Knoxville . . .	39	-1	2.0	+ .9
Grand Junction . . .	13	-13	.3	+ .2	MO. Columbia . . .	28	-1	.7	+ .3	Memphis . . .	43	+2	1.4	+ .3
Pueblo . . .	24	-6	T	- .1	Kansas City . . .	26	-2	T	- .3	Nashville . . .	42	+3	2.8	+1.7
CONN. Bridgeport . . .	33	+2	1.1	+ .4	St. Louis . . .	30	-2	.4	0	TEX. Abilene . . .	37	-7	T	- .2
Hartford . . .	26	+1	.2	- .6	Springfield . . .	31	-2	.4	- .1	Amarillo . . .	30	-6	.1	0
D.C. Washington . . .	38	+3	2.2	+2.2	MONT. Billings . . .	19	-4	.5	+ .4	Austin . . .	48	-2	0	- .4
FLA. Apalachicola . . .	54	0	5.1	+4.4	Glasgow . . .	13	+2	.1	0	Beaumont . . .	49	-3	.2	- .8
Daytona Beach . . .	60	+1	.3	- .1	Great Falls . . .	20	-2	.3	+ .1	Brownsville . . .	56	-5	T	- .3
Ft. Myers . . .	68	+4	.4	0	Havre . . .	17	+4	.2	+ .1	Corpus Christi . . .	54	-3	.1	- .2
Jacksonville . . .	53	-1	.8	+ .2	Helena . . .	17	-2	.1	0	Dallas . . .	---	---	---	---
Key West . . .	73	+2	0	- .3	Kalispell . . .	20	0	.5	+ .1	Del Rio . . .	47	-3	T	- .1
Lakeland . . .	63	+2	.1	- .4	Miles City . . .	16	-1	.3	- .2	El Paso . . .	36	-7	.1	0
Miami . . .	71	+3	T	- .4	Missoula . . .	21	0	.2	- .1	Fort Worth . . .	42	-3	0	- .4
Orlando . . .	61	+1	.3	- .2	NEBR. Grand Island . . .	21	-2	.1	0	Galveston . . .	52	-3	.1	- .7
Tallahassee . . .	51	-1	6.0	+5.1	Lincoln . . .	21	-2	T	- .1	Houston . . .	49	-3	.1	- .7
Tampa . . .	61	0	.2	- .3	Norfolk . . .	18	-2	.1	0	Lubbock . . .	34	-5	T	- .1
W. Palm Beach . . .	67	+1	.1	- .5	N. Platte . . .	15	-9	.6	+ .5	Midland . . .	39	-5	T	- .1
GA. Atlanta . . .	42	0	1.9	+ .9	Omaha . . .	23	+2	T	- .1	San Angelo . . .	39	-7	0	- .2
Augusta . . .	49	+4	1.7	+ .9	Valentine . . .	17	-7	.2	0	San Antonio . . .	47	-4	T	- .3
Macon . . .	47	0	1.4	+ .5	NEV. Ely . . .	38	-5	0	- .1	Victoria . . .	51	-3	T	- .4
Savannah . . .	52	+3	.9	+ .2	Las Vegas . . .	27	-4	T	- .3	Waco . . .	44	-3	0	- .4
HAWAII. Hilo . . .	72	+1	3.8	+1.2	Reno . . .	27	-1	.1	- .1	Wichita Falls . . .	37	-5	T	- .3
Honolulu . . .	75	+2	T	-1.0	Winneucca . . .	27	-1	.1	- .1	UTAH. Blanding . . .	17	-10	T	- .3
Kahului . . .	72	0	T	- .8	N.H. Concord . . .	30	-1	.7	+ .1	Salt Lake City . . .	18	-10	.3	0
Lihue . . .	75	+3	T	-1.5	N.J. Atlantic City . . .	23	0	1.8	+1.0	VT. Burlington . . .	19	+1	.3	- .1
IDAHO. Boise . . .	28	-1	.4	+ .1	Trenton . . .	33	0	1.8	+1.1	VA. Lynchburg . . .	37	+1	2.3	+1.6
Lewiston . . .	33	+1	T	- .3	N.MEX. Albuquerque . . .	24	-10	T	- .1	Norfolk . . .	42	+2	.8	+ .1
Pocatello . . .	22	-1	.1	- .1	Roswell . . .	35	-3	T	- .1	Richmond . . .	38	+1	2.3	-1.6
ILL. Cairo . . .	38	+1	1.2	+ .4	N.Y. Albany . . .	26	+4	1.0	+ .4	Roanoke . . .	38	+2	2.0	+1.3
Chicago . . .	24	-1	.6	+ .2	Binghamton . . .	23	+1	.8	+ .2	WASH. Colville . . .	27	+3	1.3	+ .8
Moline . . .	21	-1	.2	- .2	Buffalo . . .	28	+3	.8	+ .2	Omak . . .	27	+4	.1	- .3
Peoria . . .	24	0	.5	+ .1	New York . . .	35	+2	1.5	+ .8	Quillayute . . .	40	+1	3.6	+ .1
Rockford . . .	20	-1	.4	0	Rochester . . .	28	+3	.7	+ .2	Seattle-Tacoma . . .	39	+1	1.0	- .3
Springfield . . .	27	0	.6	+ .2	Syracuse . . .	26	+1	1.1	+ .5	Spokane . . .	28	+2	.8	+ .2
IND. Evansville . . .	34	+1	1.6	+ .9	N.C. Asheville . . .	39	+2	2.1	+1.3	Walla Walla . . .	36	+2	.6	+ .1
Ft. Wayne . . .	26	0	.3	- .2	Charlotte . . .	45	+4	1.7	+ .9	Yakima . . .	30	+2	T	- .3
Indianapolis . . .	28	0	.9	+ .3	Greensboro . . .	41	+3	1.9	+1.2	W.Va. Beckley . . .	36	+5	2.4	+1.6
South Bend . . .	27	+2	.6	0	Hatteras . . .	50	+4	2.3	+1.3	Charleston . . .	40	+6	1.7	+ .9
IOWA. Burlington . . .	24	0	.3	- .1	Raleigh . . .	42	+2	1.0	+ .3	Huntington . . .	39	+5	1.5	+ .8
Des Moines . . .	22	+2	T	- .3	Wilmingon . . .	51	+5	2.2	+1.5	Parkersburg . . .	37	+4	1.4	+ .7
Dubuque . . .	20	+1	T	- .4	N.DAK. Bismarck . . .	11	+1	.6	+ .5	WIS. Green Bay . . .	23	+6	.2	0
Sioux City . . .	20	+1	.1	0	Fargo . . .	11	+4	.6	+ .5	La Crosse . . .	20	+3	.2	0
KANS. Concordia . . .	24	-3	T	- .1	Williston . . .	7	-3	1.0	+ .9	Madison . . .	27	+4	T	- .3
Dodge City . . .	27	-4	T	- .1	OHIO. Akron-Canton . . .	32	+5	.9	+ .3	Milwaukee . . .	23	+3	.5	+ .1
Goodland . . .	24	-4	.4	+ .1	Cincinnati . . .	32	+1	1.2	+ .5	WYO. Casper . . .	14	-9	.2	+ .1
Topeka . . .	26	-2	T	- .3	Cleveland . . .	30	+3	.8	+ .2	Cheyenne . . .	17	-10	.3	+ .2
Wichita . . .	28	-3	T	- .2	Columbus . . .	32	+4	1.1	+ .5	Lander . . .	8	-12	.4	+ .3
KY. Lexington . . .	34	+1	2.0	+1.1	Dayton . . .	30	+2	1.1	+ .5	Sheridan . . .	15	-7	.3	+ .2
Louisville . . .	36	+2	2.9	+2.1	Toledo . . .	25	0	.5	0	P.R. San Juan . . .	77	+1	0	- .9

The Weekly Weather and Crop Bulletin is published by the National Weather Service, NOAA, and Statistical Reporting Service, USDA. Standard copy for the Bulletin is prepared by Dr. Richard E. Felch, agricultural climatologist, Lyle M. Denny, Orus W. Byrd, meteorologists, DeLon Brown, agricultural statistician, and Susan E. Atkins, editor.

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 SRS State offices in cooperation with the National Weather Service, NOAA.

ALABAMA: Temperatures 5° below normal. Extremes: 77° at Geneva on 2d, 16° at Huntsville on 5th. Rain occurred 30th and 2d in conjunction with cold fronts. Rainfall totals ranged from 6.45 in. at Evergreen to 0.47 in. at Logan Martin Dam.

Soil moisture mostly surplus. Farm activities limited to care and feeding of livestock and indoor work. Small grains fair to good condition. Livestock condition declining as a result of adverse weather conditions and poor quality of hay.

ARIZONA: Precipitation fell in north and southeast. Heaviest in White Mountains. Temperatures cold statewide, 9° below normal.

Cleanup activities for cotton. Grain sorghum harvest nearly complete. Sub-freezing temperatures caused moderate wilting sugarbeet tops. Planting small grains continues. Alfalfa fields dormant, grazing continues. Harvest lettuce full swing. Mixed vegetable harvest seasonal progress. Citrus harvest active Yuma, Salt River Valley. Freezing temperatures recorded, damage uncertain. Range conditions good mountains, poor southwest deserts. Ranchers feeding supplements, hauling water. Cattle, calves mostly fair condition. Sheep, lambs progressing well.

ARKANSAS: Temperatures ranged 5° below to 1° above normal. Extremes: 67 and 6°. Precipitation evenly distributed across State, amounts from 2.44 to 0.25 in.

Wet soil conditions stopped fieldwork. Winter wheat in good condition. Farming activities mostly caring for livestock, maintaining equipment and marketing. Hay supplies adequate.

CALIFORNIA: Scattered light precipitation extreme north 29th and 30th and again 3rd and 4th. Otherwise, fair except occasional fog Central Valley and north and central coastal valleys. Above normal temperatures beginning cooling to below normal end. Highs late week in 50's Low Valleys and lows in 20's most of Central Valley and low southeast deserts, teens parts of San Joaquin Valley and some coastal valleys north and central. Weekly averages near normal except 3° below normal low southeast deserts.

Rainfall needed over much of State. Small grain stressed for moisture. Cotton harvest winding up. Sugarbeets planting and harvesting continues. Pruning, most other orchard, vineyard activities progressing normally. Growers still holding dormant spray application to avoid oil burn, some irrigation continues. Date harvest continues. Some kiwi being harvested Bakersfield. Freezing temperatures hit major citrus areas around State during long weekend. Temperatures low as 17° reported. Fresno, Tulare, Kern, Riverside 4 to 5 nights below freezing temperatures. Duration below 28°, ranged 2 to 12 hours on 31st to 2d. Fruit quality should be affected, damage extent not assessed. Desert grapefruit maturity slow. Tangerine quality good. South coast lemons need rain to size spring crop. Navel orange, avocado picking light. Broccoli, cauliflower, carrots, lettuce in good supply. Celery increasing, artichoke slower. Potato digging continues. Range forage poor due to lack of moisture. Minor livestock movement. Predator problems normal.

COLORADO: Major winter storm mountains, northeast 30th. Cold and snow through 1st. Very little snow southeast and San Luis Valley. Greatest snow depths: Garrison 16 in., Ft. Collins and Durango 9 in. Cold front with minimum temperatures zero or below across entire State 2d and 3d. Warmer air moved in 4th.

Winter wheat and barley fair condition except southeast poor. Ranges and pastures fair condition. Livestock good condition, supplemental feeding active due to storms. Hay supplies mostly adequate.

FLORIDA: Temperatures slightly below normal. Rainfall heavy west, north; light to moderate elsewhere.

Soil moisture adequate to excessive north and Panhandle; adequate to short central and south. Harvest of field crops complete except a few soybean fields. Sugarcane harvest active. Small grains good condition. Tobacco seedbeds being planted. Some land being prepared. Pastures providing very poor grazing, except some Panhandle pastures good condition, others very poor to fair. Cattle and calves continue mostly fair, supplemental feeding occurring at heavier rate. Citrus grove condition excellent, rains helped surface moisture. Trees very dormant. Very little frost, isolated areas only. Harvest quite active. Vegetable crops improving as plant growth and fruit maturity respond to warming temperatures. Land preparation and planting active for spring crop. Volume up sharply as holiday lull ends. Most crops increased supplies. Radishes and cucumbers were steady. Harvest producing generally very good quality fruit. Strawberry harvest expected to be well underway by mid-January. Light potato harvest to start this week in Everglades. Watermelon plantings active with earlier seeded acreage germinating to good stands.

GEORGIA: Temperatures near normal except plus 3° around Augusta, minus 2° extreme south. Averages ranged near 40° northeast to mid-40's central and low 50's southeast. Rainfall 1.50 to 2.50 in. extreme north, 1.00 to 2.00 in. Most other areas, but less than 1.00 in. along coast. Narrow band of 2.50 to 5.00 in. of rain soaked area from Tallahassee, Fla. to Alma, Ga. Rain 3d, clearing and much colder 4th.

Soil moisture excessive most areas. Farming activities curtailed by weather and holidays. Corn, cotton and soybeans mostly harvested. Pecan harvesting nearly complete. Tobacco bed preparation active. Work continues clearing fields and fence rows. Small grain mostly good condition, some topdressing. Cattle and pastures mostly fair condition.

HAWAII: Weather favorable for crop growth. Some showers windward areas all Islands. Progress of plantings fair to good. Vegetable supplies adequate. Tomato production Maui and Hawaii decreasing. Banana supplies decreasing seasonally. Sugar harvesting ended. Pineapple harvesting light. Pastures fair to good condition. Moisture sufficient.

IDAHO: Temperatures averaged near normal, ranges from 3° above normal to 4° below normal.

Absolute temperatures ranged from 51° at Lewiston to -13° at Fairfield. Precipitation well below normal all areas.

Fieldwork limited due snow, cold weather and frozen ground. Livestock good condition and feed supplies adequate.

ILLINOIS: Temperatures 1° above normal to 2° below normal. Precipitation 0.10 to 1.50 in. Winter wheat and legumes mostly good condition. Livestock doing well.

INDIANA: Cold and cloudy. Daily high temperatures averaged 32° and 3° below normal. Daily lows averaged 23°, and 3° above normal. Extremes: -1° on 5th, 54° on 29th. Precipitation 0.33 in. North, 0.50 in. Central, 2.00 in. along Ohio River. Snow cover to 4 in. near Lake Michigan. Soils frozen 2 to 5 in. central and north. Sunshine averaged 24% of possible.

Farm activities confined to snow removal, equipment maintenance, caring for livestock and chores.

IOWA: Cloudy and mild weather prevailed until cold outbreak weekend. Temperatures averaged near normal to 2° above precipitation below normal ranging from traces central to 0.25 in. extreme northwest and extreme southeast.

Major farm activities mainly care and management of livestock and regular chores.

KANSAS: Precipitation averaged 0.33 in. extreme northwest and southeast, and 0.01 in. elsewhere. Temperatures averaged 25° or 3° below normal over northwest to 31° or near normal southeast.

Wheat condition unchanged. Poor to fair west, good east. Minimal amount of blowing occurred. Greenbug activity limited by cold weather. Cattle continue to graze stubble fields and early seeded wheat. Wheat pasture quite limited, except in east.

KENTUCKY: Cloudy and wet with precipitation averaging slightly over 2.00 in. statewide. Turning colder by week's end with temperatures falling into teens and averaging in mid-30's through week. Precipitation in form of rain through week, with snow showers on 3d and 4th.

Farm activity limited to winter chores and preparing tobacco for market. Bulking down tobacco and stripping active, preparing for post-holiday market which re-opens on 5th. Supplemental feeding of livestock necessary due to sub-freezing temperatures.

LOUISIANA: Temperatures near normal. Cool early, warming midweek, colder weekend. Rain most areas 29th, 30th and 2d. Temperature extremes 75° several locations 2d, 25° Winnsboro and Calhoun on 4th. Greatest 1-day rainfall 2.40 in. St. Joseph on 2d.

Agricultural activities routine chores and care of livestock.

MARYLAND AND DELAWARE: Temperatures averaged nearly normal. Highs, upper 50's; lows, low teens. Precipitation ranged from 0.30 to 3.38 in., with snow in most areas.

Normal winter chores major activity. Much time for repairs and maintenance work. Moisture supplies remain adequate. Most livestock off pasture due to snow.

MICHIGAN: Temperatures generally well above normal ranging from 8° above to 2° above. Tempera-

tures cold early with warming midweek and cooling toward late week. Maximum temperatures generally in mid to upper 30's. Minimum temperatures from 17° above at Muskegon to -19° at Stambaugh. Precipitation light. Amounts averaged 0.40 in. over Lower and 0.5 in. over Upper.

Farm chores and feeding livestock were main farm activities.

MINNESOTA: Mild with heavy snowfall. Temperatures averaged 2° to 4° above normal. Extremes: 35° to -27°. Storm on 1st and 2nd left 7 to 10 in. New snow from west central through northeast, 3 to 6 in. common elsewhere except lesser amounts lower southeast. Snow on ground at week's end - 10 to 16 in. southwest into north and northeast and 4 to 9 in. elsewhere except 1 to 3 in. lower southeast.

Farmwork mostly wintertime chores.

MISSISSIPPI: Temperatures near normal. Extremes: 71 and 23°. Greatest 24-hour rainfall was 1.68 in. at Picayune on 29th.

Soil moisture supplies are mostly surplus to excessive. Fieldwork: 0.8 day suitable. Cotton 96% harvested, 93% 1975, 97% average. Soybeans 99% harvested, 97% 1975. Winter wheat, oats, and livestock in mostly fair condition. Hay and roughage supplies mostly adequate, feed grain supplies short to adequate.

MISSOURI: Temperatures averaged 2° above normal, except Bootheel averaged 7° above normal. Precipitation general, ranging from 0.33 in. northwest to 1.07 in. Bootheel.

Major farm activities consist of winter care and management of livestock.

MONTANA: Week began warm. Winter storm 31st brought rapid dropping temperatures with blowing and drifting snow. Temperatures moderated slightly over weekend. Temperatures averaged near normal west and north central to 5° below normal central and south central. Moderate precipitation throughout, with heaviest amounts west and extreme east areas.

Livestock care and feeding more difficult with inclement weather. Many country roads drifted shut. Hay and feed supplies adequate. Winter wheat condition fair to good.

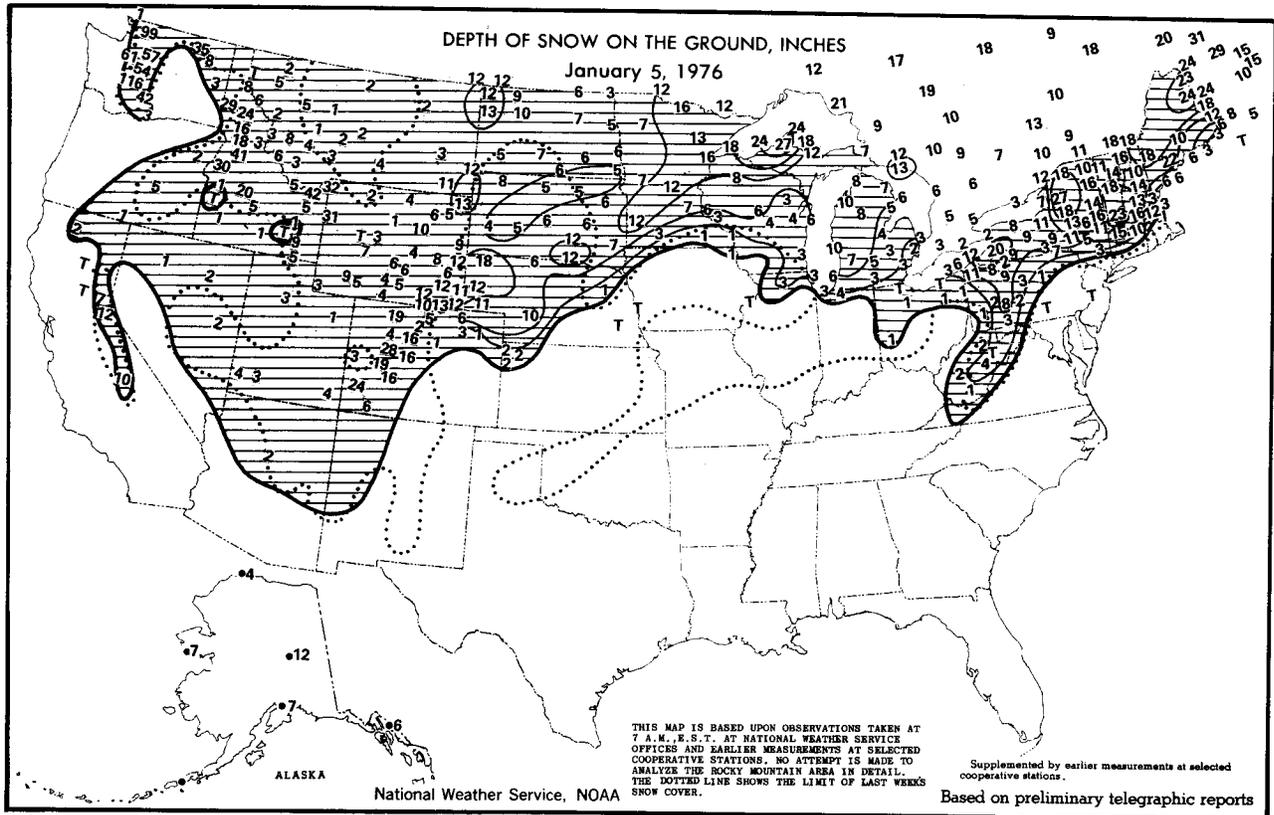
NEBRASKA: Temperatures above normal early week, colder 31st and 1st. By weekend, temperatures well below normal. Extremely heavy snows west and north central midweek. East and southeast received considerably less.

Winter wheat condition fair to good with some snow cover. Winter rye fair to good condition. Forty five percent of corn and milo stalk fields, 20% of wheat and rye acreage being pastured. Supplemental feeding necessary on snow covered fields and pastures. Feed grain and hay supplies mostly average. Culling continues.

NEVADA: Light snow accompanied cold air north and central early week, northeast near end. Temperatures averaged from normal to 6° below. Extremes: 13° below zero Mountain City, 64° Las Vegas and Logandale.

Livestock benefitting from light or no snow cover. Water and feed supplies adequate.

NEW ENGLAND: Temperatures averaged 3 to 5° above normal north and central, near normal south. Lowest temperature -19° Houlton Maine on 30th. Warmest 49° Chatham, Mass. on 1st. Unusually warm 1st with above freezing temperatures throughout



resulting in considerable settling, loss snow cover especially Vermont. Precipitation ranged 0.75 in. north 1.50 in. south. New snow totaling 6 to 12 in. west of a line from Berkshires Mass. To eastern Maine. Mostly rain elsewhere. Major farm activities care and management of livestock. Livestock wintering well.

NEW JERSEY: Temperatures averaged 2° below normal. Inland and near normal along coast. Averages 29° north, 32° south and 35° coastal. Extremes: 12° at Charlottburg, East Millstone and Newton and 51° at Cape May Court House. Precipitation totals averaged 0.30 to 1.40 in. above normal, averaging: 1.10 in. north, 2.05 in. south and 2.13 in. coastal. Heaviest 24-hour total 2.03 in. at Cape May Court House on 31st. Snow on 1st, with the most falling at Long Branch and Freehold.

Farmers caring for livestock and doing other regular winter chores.

NEW MEXICO: Coldest week yet for winter. Mild early week, turning windy and colder with light precipitation west New Year's Eve and much colder statewide on 1st through weekend. Precipitation from storm mostly traces to a few hundredths ranging to more than 0.50 in. at Ruidoso. Soil moisture short most areas. Irrigated winter wheat fair to good, dryland fair. Barley good southern areas. Limited grazing of wheat. Ranges fair to good, recent moisture beneficial. Livestock good.

NEW YORK: Temperatures above normal. Coldest days 29th and 2d when zero or lower was widespread in northeast. Precipitation near to above normal. Mixed precipitation on 30th. Six or more inches snow fell 3d in northeast with mixed precipitation elsewhere.

NORTH CAROLINA: Temperatures about 4° above normal. Precipitation 1.00 to 2.00 in. above normal.

Days suitable fieldwork 1.2. Soil moisture adequate to mostly surplus. Small grains fair to mostly good. Pastures poor to good. Farm feed supplies mostly adequate.

NORTH DAKOTA: Temperatures ranged from 1° above normal southwest to 6° above normal northeast. Extremes: 43 and -24°. Snow cover ranges from 4 to 24 in., most areas 5 to 15 in. Weekend very cold with temperatures ranging -18 to -30° most areas.

Blowing snow causing some problems in farmyards. Some drifting on secondary roads. Most livestock receiving supplemental feed.

OHIO: Cloudy and wet. At Columbus, sunshine at minimum with only 3.5 hours. Precipitation every day. Week started cold with -3° at Toledo on 29th, warming trend 30th-3d. Temperatures at or above normal, warmest in southeast. Precipitation heaviest east central and southeast totaling 0.50 to 1.00 in. Snow fall end of week heaviest east with 1.00 to 3.00 in. Cold front on 3d, temperatures dropping sharply. Temperatures in teens, on 4th. In snow belt area, snow fall approached 2 ft. over weekend in snow belt area.

OKLAHOMA: Temperatures averaged from 2° above normal to 3° below normal. Precipitation ranged from a trace Panhandle to 0.54 in. northeast and southeast. Weekend cold and dry except few showers east central.

Cold weather, rain, and snow brought sorghum and soybean harvest to a halt, but cotton harvest made modest progress reaching 80% complete, 67% a year ago. Cold weather slowed greenbug

activity, but wind erosion was cutting some wheat in Panhandle counties where cover is light. Wheat mostly good to fair condition, but with no new growth, grazing declined. Snow and rain beneficial. Pecan harvest near 90% complete. Farmers busy with year-end records. Supplemental feeding heavy most areas as cold increases and pasture and range supplies diminish and lose quality.

OREGON: Temperatures slightly above normal. Extremes: 60's, 20's west; 50's, -1° east. Precipitation along coast ranged 1.25 to 1.41 in., western valleys 0.17 to 1.27 in. east 0.59 in. or less.

General winter farm activities are continuing. Spraying grain fields. Fall grain looks fair, crimson clover good in western valleys. Pruning orchards. Potatoes and onions continue to be moved from storage. Most livestock on supplemental feed. Feed supplies appear adequate.

PENNSYLVANIA: Mild, cloudy and wet until 3d, dry and very cold remainder. Temperatures in 20's and 30's until cold frontal passage 2d with temperatures dropping 10 to 15° precipitation changed to snow and accumulated 1 to 2 in. statewide except Pocono Mountains where up to a foot fell. Melted precipitation from 0.75 in. central to 2.00 in. southeast, 1.00 to 2.00 in. common elsewhere.

Normal winter farm chores. Preparations for attending State Farm Show.

PUERTO RICO: Island average rainfall 0.24 in. highest weekly total 1.49 inches at Pico Del Este-Luquillo. Highest 24-hour total 0.41 in. at Pico Del Este-Luquillo. Temperatures averaged about 73° on coasts and 66° interior.

SOUTH CAROLINA: Temperatures averaged above normal. Cooler than normal beginning and end of week. Highs near 70° late week. Rainfall averaged above normal for week.

Tobacco bed fumigation and seeding, harvesting greens, cabbage and setting spring cabbage. Some late soybean harvest. Peach tree pruning, setting new trees. Setting pine seedlings. Preparation for spring crops.

SOUTH DAKOTA: Near blizzard conditions 1st and 2d as arctic air mass moved across State. Most highways blocked for short period on 1st. Major and primary highways open by weekend with most secondary roads blocked. Precipitation in the form of snow ranged from over 1.00 in. moisture content to generally over 0.25 in. Temperatures averaged above normal early week to well below normal by week's end. Extremes: 52° Oral 1st, -29° Aberdeen 4th. Snow cover ranging from 2 to 21 in.

Shoveling snow, feeding and caring for livestock main farm activities. Feedyards still in bad condition. Opening silage storage areas. Cull cows still moving to market.

TENNESSEE: Rains general early and late week. Rainfall averaged 1.94 in., ranging from 1.40 in. at Memphis to 2.86 in. at Chattanooga. Temperatures mild at first but cooled during week. Weekend lows teens and low 20's and highs, upper 20's and low 30's.

Small grains look good. All burley tobacco stripped. Cattle and pastures in generally good condition.

TEXAS: Cool temperatures, light precipitation east, south early week. Cold front brought

showers east, south 2d. Below normal temperatures covered south where temperatures near normal. West, northwest temperatures 5 to 10° below normal, 2 to 6° below normal elsewhere. Precipitation very light except east, southeast.

Recent moisture benefit wheat, oat stands from Low Plains southward. Some fields already show response but cold weather slowing growth development. Cotton harvest rapidly nearing completion, gins catching up backlogs, working ricked cotton. Wheat in Low Plains southward responded recent moisture, show some improvement. Cool weather, however, restricted growth many localities, grazing still short. Control measures necessary low plains keep greenbug in check. High Plains, wheat poor growth, grazing below normal. Oats fair growth Blacklands, east following recent rains. Additional moisture, warm weather needed for normal growth, adequate grazing. Some farmers topdress stands following recent moisture. Cotton harvest reached 98% completion, 94% last year, average 91%. Most localities complete, except Low Plains, where shortage trailers cause delays. Wet weather delayed harvest, allowed gins catch up backlogs and ginning ricked cotton. Seedbed preparation on schedule southern areas. Sugarcane harvest continues Lower Rio Grande Valley.

Lower Rio Grande Valley: Moderate temperatures allowed pepper season lag. Lettuce harvest and cabbage cutting continues. Onions making good to excellent growth. Good weather provided excellent growing conditions carrot crop. San Antonio-Winter Garden: Cabbage, carrot harvest active. Light supplies cauliflower, broccoli continue move to market. Spinach supplies continue increase. Trans-Pecos: Planting spring onion, lettuce crops complete. Pecan harvest rapidly nearing completion. Citrus harvest remains active.

Wheat, oats, pastures responding to rains that covered from Low Plains southward. Cold weather, however limiting response some areas and grazing not showing much improvement. Warm, open weather would be welcome relief for many ranchers. Livestock condition holding up well for time of year in spite of drouth conditions many areas since late summer.

UTAH: Temperatures averaged 5° below normal. Significant precipitation occurred midweek, heaviest amounts in north central and northern mountains. Precipitation totals were about 0.50 in. above season normals.

Frigid temperatures made care of livestock and other chores more difficult. Sorting, grading, marketing of potatoes, apples, dry onions and processing sugarbeets also continue to be major farm activities.

VIRGINIA: Temperatures averaged 2 to 3° above normal. Extremes: 64 and 15° precipitation, heavy ranging from less 1.00 in. southeast to over 2.00 in. Some locations.

Fieldwork: 1.5 days suitable. Topsoil moisture 70% surplus, 30% adequate. Feeding and care of livestock primary activity. Livestock in good to excellent condition, adequate feed supply. Calving, lambing normal. Farm butchering active. Fertilizer, lime spreading, soil testing, fruit tree pruning continued as weather permitted. Organizing farm records for taxes, ordering supplies, arranging capital for another year. Some marketing of stored grains. Tobacco preparation for marketing continued.

WASHINGTON: West: Temperatures near normal. Precipitation below normal.

Harvesting carrots. Most cattle confined to sheds where hay and silage being fed. Hay from eastern areas of State being used in counties where flooding occurred earlier. Pruning and tying caneberries. East: Readings about 3° above normal. Precipitation slightly subnormal.

Some erosion in wheat fields. Wheat stands reported great. Pruning in orchards. Livestock on supplemental feed. Early calving begun.

WEST VIRGINIA: Temperatures and precipitation above normal throughout. High temperature was 56° at Charleston and low of 19° at Martinsburg.

Soil moisture surplus to adequate. Fieldwork: 2.2 days suitable. Farm activities limited to feeding and care of livestock. Weather condition permitted less feeding of livestock than normal. Livestock in good condition.

WISCONSIN: Mostly cloudy and mild until 1st. Highs 20's north, 30's south. Snow 4 to 6 in. extreme southeast 29th and 30th, light snow elsewhere. Major storm 1st and 2nd dumped excess of 4 in. snow north of line from Eau Claire to Marinette. Extreme northwest counties had excess of

8 in. Lesser amounts central and only traces south. Temperatures sharply colder following storm. Lows sub-zero north on 2nd, over State weekend. Highs did not reach zero northwest 3rd or 4th and only low teens southeast.

Frost penetration increasing where snow cover light. Average frost depths as of 2nd was 10 in., most for that date since 1968. Snow depths averaged 4 in., least since 1968.

WYOMING: Major winter storm hit much of State with heavy snows, extreme cold. Hardest hit was southeast, where more than a foot of snow fell in blizzard conditions. Precipitation ranged from near normal west of Divide to much above normal east of Divide. Most of east received 0.30 to 0.60 in. Temperatures began above normal but ended well below normal. Temperatures averaged 5° below normal south half and near to slightly above normal over north.

Blizzard brought heavy snow cover resulting in widespread supplemental feeding. High winds, extreme cold caused livestock suffering some loss of condition. No reports of heavy losses yet. Care and feeding livestock, digging out after storm major activities. Moisture very beneficial.

Heating Degree Days: Another Mild Winter in the East

At the turn of the century heating engineers developed the heating degree-day statistic to integrate temperature and fuel consumption. Concerned only with the outdoor air temperature, the heating degree-day statistic neglects other factors like solar radiation and wind. Many studies have shown that when the daily mean air temperature is 65° or above most buildings require no heat to maintain an inside temperature of at least 70°.

To determine the daily degree-day statistic subtract the daily mean temperature from a base temperature of 65° as shown:

$$65^{\circ} - \frac{\text{max temp} + \text{min temp}}{2.0} = \text{daily heating degree-days}$$

Each degree of mean temperature below 65° is 1 degree-day unit. If the daily mean temperature is 45°, 20 heating degree-days are accumulated.

At the halfway point in this winter's heating season, the eastern half of the country is running warmer than normal, helping to alleviate concern over heating fuel supplies. An excellent indicator of an area's demand for heating fuel is the heating degree day statistic, which relates average temperature to fuel needs.

In the same way a daily mean temperature of 25° means 40 heating degree-day units have been accumulated. About twice as much fuel is needed on a day with 40 heating degree-day units than on a day with 20 heating degree-day units. When the mean temperature exceeds 65°, the heating degree-day value for the day is zero. To determine the degree-days for any given period, add the degree-days for each day of the period.

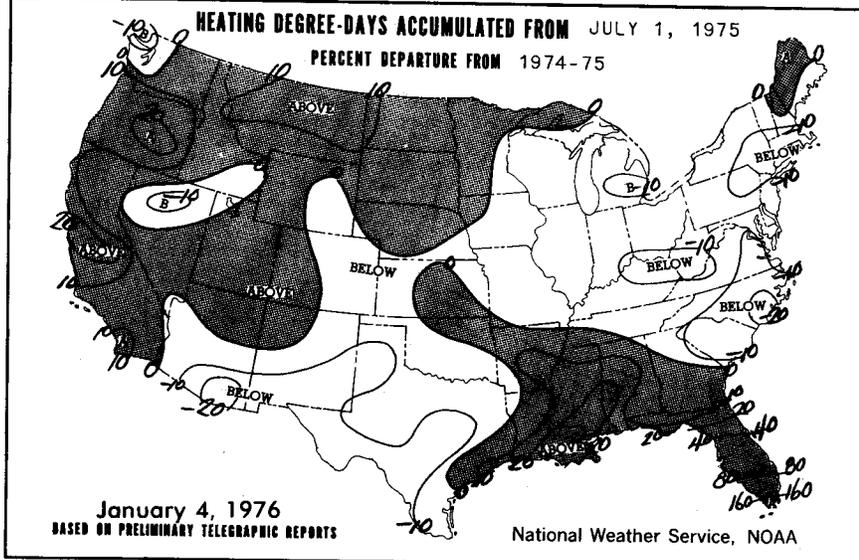
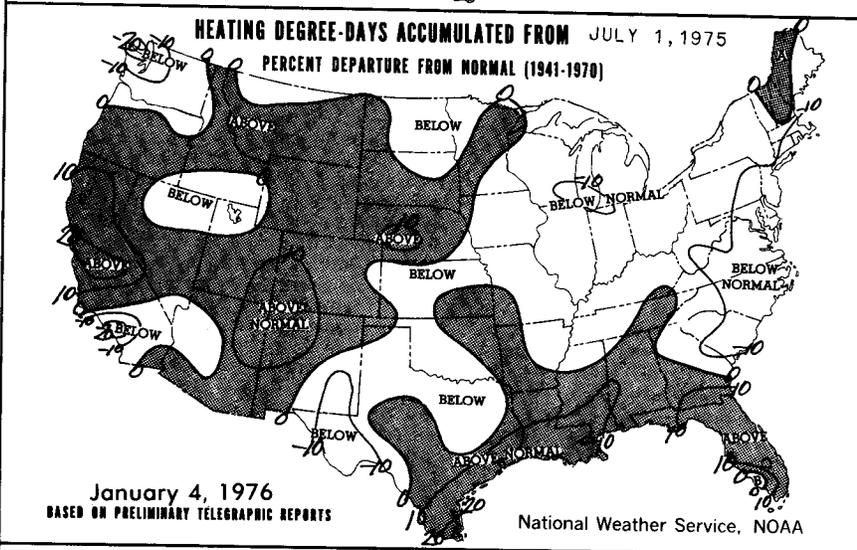
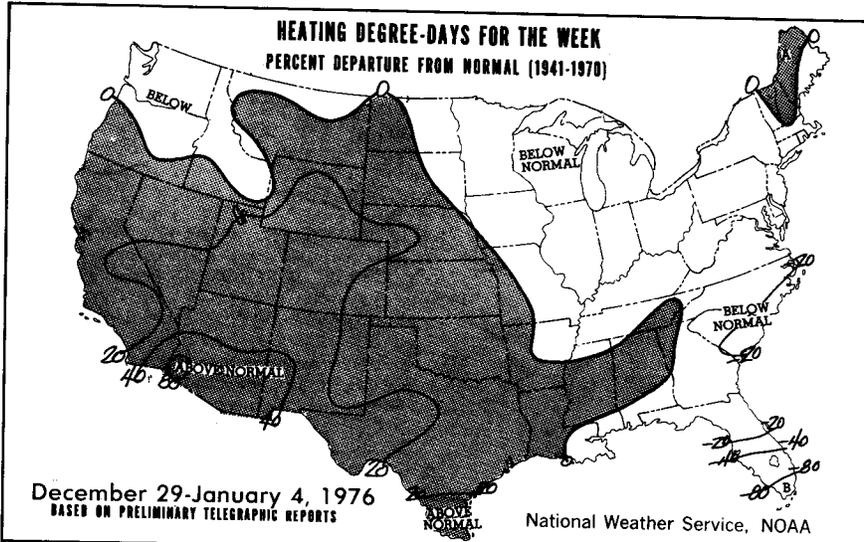
The fuel industry can monitor fuel consumption by keeping up-to-date on the heating degree-day accumulations. Then, forecasts can be converted into heating degree-day statistics and used to determine future fuel needs. High storage costs for oil and gas put a premium on the precise evaluation of use and demand rates for fuel and on the efficient scheduling of fuel deliveries.

The maps and table on pp 10-11 are regular features of the Bulletin. If a map shows a positive departure, the heating degree-day accumulation is greater than the comparative value. This means that temperatures have been colder and fuel consumption has been greater than expected. A negative departure indicates that conditions have been warmer than anticipated. Note the similarity between the weekly percent of normal departure and the temperature departure map on page 2.

Table 1 below shows the accumulation for the period July 1-Dec. 31, 1975 and the comparative values for the past 4 years and normal.

Table 1. The number of heating degree days accumulated at selected locations for the period July 1 to December 31 during the past 5 years in comparison with normal.

Location	July 1 - Dec. 31 Accumulation					
	1975	1974	1973	1972	1971	Normal
Washington, D.C.	1202	1370	1214	1483	1188	1550
Philadelphia, Pa.	1435	1645	1531	1810	1391	1775
Trenton, N.J.	1515	1722	1553	1825	1442	1785
New York, N.Y.	1501	1684	1484	1803	1459	1681
Boston, Mass.	1654	1985	1737	2121	1741	1971
Buffalo, N.Y.	2252	2434	2340	2650	2071	2508
Cleveland, Ohio	2088	2292	1870	2328	1785	2253
Detroit, Mich.	2211	2535	2205	2622	2069	2372
Chicago, Ill.	2011	2357	2142	2695	1869	2424
St. Louis, Mo.	1748	1948	1828	2168	1469	1801
Omaha, Nebr.	2138	2347	2396	2795	2149	2275
Minneapolis, Minn.	2804	2989	2947	3593	3015	3093
Denver, Colo.	2245	2435	2282	2760	2566	2300



Heating Degree Days (Base 65°) For Week Ending Jan. 4, 1976

States and Stations	Weekly		Seasonal † Accumulation			States and Stations	Weekly		Seasonal † Accumulation			States and Stations	Weekly		Seasonal † Accumulation		
	TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75
ALA. Birmingham	152	5	1230	19	80	Portland	287	-13	2860	-54	50	Tulsa	220	24	1530	-44	26
ALA. Mobile	83	-15	692	15	66	MD. Baltimore	213	-11	1587	-274	-112	OREG. Astoria	160	-8	2176	-32	211
ALA. Montgomery	131	5	1008	43	83	MASS. Boston	236	-9	1795	-281	-286	OREG. Burns	275	-3	3522	503	653
ARIZ. Flagstaff	329	70	2993	1	58	MICH. Alpena	298	-19	3103	-226	-94	OREG. Medford	209	6	2091	32	214
ARIZ. Phoenix	150	52	576	53	53	MICH. Detroit	273	-5	2363	-136	-282	OREG. Pendleton	200	-27	1938	-277	155
ARIZ. Tucson	164	66	696	22	-201	MICH. Flint	273	-18	2392	-349	-302	OREG. Portland	179	-6	1830	-165	245
ARIZ. Winslow	281	49	2245	253	31	MICH. Grand Rapids	275	-11	2565	-71	-359	OREG. Salem	187	5	2052	51	269
ARIZ. Yuma	128	58	470	56	2	MICH. Houghton Lake	294	-29	3086	-225	-147	PA. Allentown	243	-16	2011	-279	-243
ARK. Fort Smith	203	21	1499	119	26	MICH. Lansing	277	-10	2598	-91	-208	PA. Erie	254	-19	2355	-245	-262
ARK. Little Rock	174	-6	1384	8	145	MICH. Marquette	280	-35	3090	-133	3	PA. Harrisburg	230	-15	1856	-233	-256
CALIF. Bakersfield	146	13	990	72	90	MICH. S. Ste. Marie	251	-27	2412	-224	-252	PA. Philadelphia	220	-4	1570	-301	-162
CALIF. Eureka	147	23	2260	200	214	MICH. Muskegon	312	-31	3508	-93	-127	PA. Pittsburgh	235	-24	2244	-148	11
CALIF. Fresno	185	38	1374	281	255	MICH. S. Ste. Marie	356	-29	4031	98	19	PA. Scranton	258	-14	2163	-331	-202
CALIF. Los Angeles	71	1	455	-144	12	MICH. Internatl Falls	403	-27	4364	21	324	PA. R. I. Providence	238	-14	2101	-150	-154
CALIF. Red Bluff	160	16	1233	172	42	MICH. Minneapolis	324	-37	3025	-306	-99	PA. S. C. Charleston	89	-30	783	-100	-128
CALIF. San Diego	83	14	466	-26	52	MICH. Rochester	333	-21	3030	-250	-212	PA. S. C. Columbia	110	-30	977	-105	-92
CALIF. San Francisco	139	20	1441	245	196	MICH. St. Cloud	365	-14	3641	80	93	PA. S. DAK. Greenville	153	-8	1276	-52	-156
CALIF. Stockton	167	20	1294	179	114	MICH. MISS. Jackson	132	6	1018	68	123	PA. S. DAK. Aberdeen	373	-3	3264	-206	126
COLO. Denver	308	66	2458	53	-88	MICH. Meridian	138	9	1153	124	245	PA. S. DAK. Huron	347	-9	3240	14	202
COLO. Grand Junction	360	90	2642	284	248	MICH. MO. Columbia	221	-27	1972	-56	-226	PA. S. DAK. Rapid City	333	40	2976	72	208
COLO. Pueblo	286	44	2297	84	-13	MICH. Kansas City	273	17	2061	17	-88	PA. S. DAK. Sioux Falls	349	2	3217	57	194
CONN. Bridgeport	220	-18	1719	-223	-205	MICH. St. Louis	247	15	1904	3	-144	TENN. Chattanooga	182	7	1550	63	-58
CONN. Hartford	274	-6	2210	-264	-344	MICH. Springfield	234	11	1875	24	-73	TENN. Knoxville	181	6	1501	38	39
CONN. New Haven	222	-9	1677	-226	-192	MICH. MONT. Billings	324	31	3019	96	220	TENN. Memphis	165	-4	1232	-104	45
DEL. Wilmington	184	-26	1315	-345	-149	MICH. Glasgow	364	-9	3672	60	525	TENN. Nashville	159	-28	1397	-135	-60
D.C. Washington	73	-10	590	56	141	MICH. Great Falls	314	14	3185	104	457	TEX. Abilene	185	38	1136	71	-103
FLA. Apalachicola	42	-7	358	28	86	MICH. Havre	347	-12	3445	-204	398	TEX. Amarillo	229	27	1685	-11	-206
FLA. Daytona Beach	11	-17	161	-7	76	MICH. Helena	332	-12	3575	139	327	TEX. Austin	114	9	672	-16	-119
FLA. Ft. Myers	83	6	613	83	55	MICH. Kalispell	315	1	3508	-193	212	TEX. Brownsville	60	14	266	58	-16
FLA. Jacksonville	0	-7	15	2	11	MICH. Miles City	340	6	3310	104	383	TEX. Corpus Christi	77	13	383	48	-39
FLA. Key West	25	-17	285	39	96	MICH. Missoula	310	5	3490	69	432	TEX. Del Rio	116	13	600	-57	-123
FLA. Lakeland	0	-14	82	7	48	NEBR. Grand Island	308	15	2719	140	62	TEX. El Paso	198	44	1193	-6	-217
FLA. Miami	0	0	0	0	0	NEBR. Lincoln	305	12	2476	-12	-42	TEX. Fort Worth	152	14	870	-67	-72
FLA. Orlando	34	-8	286	35	83	NEBR. Norfolk	327	12	2876	83	177	TEX. Galveston	83	7	470	58	70
FLA. Tallahassee	96	5	744	94	-10	NEBR. North Platte	355	66	3143	375	179	TEX. Houston	98	7	643	92	59
FLA. Tampa	32	-10	299	41	122	NEBR. Omaha	290	1	2329	-71	-131	TEX. Lubbock	207	25	1398	-71	-225
FLA. W. Palm Beach	8	-13	122	13	51	NEBR. Valentine	351	44	3142	197	308	TEX. Midland	180	33	1106	14	-19
GA. Atlanta	161	0	1245	-44	1	NEBR. Ely	333	46	3233	38	49	TEX. Beaumont	100	9	668	68	0
GA. Augusta	112	-28	959	-126	-234	NEV. Las Vegas	186	33	1064	-47	-3	TEX. San Angelo	171	39	1021	75	11
GA. Macon	122	-4	957	-1	41	NEV. Reno	266	28	2618	86	-20	TEX. San Antonio	111	13	678	52	-92
GA. Savannah	93	-19	761	-58	40	NEV. Winnemucca	266	7	2532	-248	-334	TEX. Victoria	86	6	510	51	19
IDAHO. Boise	257	7	2452	23	163	N.H. Concord	315	8	3139	221	3	TEX. Waco	133	9	772	-45	-179
IDAHO. Lewiston	187	-45	2187	-135	165	N.H. N. J. Atlantic City	223	-1	1908	18	1	UTAH. Salt Lake C	189	25	1140	-38	-95
IDAHO. Pocatello	255	-35	2821	-92	-152	N.H. Trenton	224	-4	1652	-229	-159	UTAH. Burlington	323	-4	2954	-103	-59
ILL. Cairo	191	-7	1473	-85	-108	N.MEX. Albuquerque	286	71	2049	223	20	VA. Lynchburg	196	-7	1647	-90	-146
ILL. Chicago	282	3	2171	-200	-217	N.MEX. Roswell	206	15	1409	-226	-285	VA. Norfolk	157	-18	1156	-175	-89
ILL. Moline	307	9	2322	-205	-197	N.Y. Albany	288	-12	2495	-202	-411	VA. Richmond	188	-8	1388	-206	-282
ILL. Peoria	287	3	2336	-92	-124	N.Y. Binghamton	290	-9	2677	-173	-303	VA. Roanoke	191	-12	1575	-184	-236
ILL. Rockford	311	4	2646	-70	-48	N.Y. Buffalo	257	-24	2412	-214	-131	WASH. Quillayute	178	-4	1982	-557	-335
ILL. Springfield	264	-1	2054	-161	-159	N.Y. New York	213	-11	1606	-186	-182	WASH. Seattle-Tacoma	178	-7	1843	-339	-91
IND. Evansville	216	-8	1786	-104	-111	N.Y. Rochester	259	-21	2407	-146	-239	WASH. Spokane	260	-14	2937	20	192
IND. Fort Wayne	269	-4	2280	-174	-220	N.Y. Syracuse	274	-8	2480	-43	-210	WASH. Walla Walla	202	-16	1913	-138	167
IND. Indianapolis	255	-4	2138	-99	-170	N.C. Asheville	182	-14	1740	-39	8	WASH. Yakima	241	-19	2509	-113	205
IND. South Bend	265	-18	2147	-377	-134	N.C. Hatteras	104	-29	806	-140	-149	W.VA. Beckley	204	-34	2018	-310	-321
IOWA. Burlington	287	-2	2278	-160	-203	N.C. Charlotte	142	-26	1242	-110	-240	W.VA. Charleston	176	-41	1707	-180	-336
IOWA. Des Moines	297	-14	2331	-317	-154	N.C. Greensboro	166	-23	1410	-192	-143	W.VA. Huntington	183	-34	1701	-187	-204
IOWA. Dubuque	314	-10	2784	-125	-122	N.C. Raleigh	157	-18	1288	-173	-258	W.VA. Parkersburg	197	-27	1887	-50	-104
IOWA. Sioux City	316	-5	2811	-23	123	N.C. Wilmington	95	-38	780	-188	-228	WIS. Green Bay	293	-44	3125	-71	-129
KANS. Concordia	282	14	2197	-51	45	N.Dak. Bismarck	383	0	3582	-67	-178	WIS. LaCrosse	333	0	2900	-43	32
KANS. Dodge City	265	27	2017	-19	10	N.Dak. Fargo	375	-26	3622	-94	88	WIS. Madison	302	-28	2768	-319	-105
KANS. Goodland	283	24	2348	-135	-237	N.Dak. Williston	406	23	3887	147	400	WYO. Milwaukee	294	-18	2505	-381	-223
KANS. Topeka	274	17	2064	-53	-34	OHIO. Akron-Canton	217	-49	2154	-285	-215	WYO. Casper	353	63	3123	66	70
KANS. Wichita	258	23	1955	-58	83	OHIO. Cleveland	244	-19	2239	-134	-149	WYO. Cheyenne	333	68	2975	58	83
KY. Lexington	206	-18	1901	-8	-67	OHIO. Columbus	226	-32	2069	-230	-97	WYO. Lander	398	83	3428	173	97
KY. Louisville	199	-20	1646	-236	-212	OHIO. Cincinnati	227	-10	1866	-157	-308	WYO. Sheridan	348	48	3194	54	57
LA. Baton Rouge	96	-2	784	99	135	OHIO. Dayton	242	-15	2031	-210	-213						
LA. Lake Charles	103	13	702	112	108	OHIO. Toledo	278	-2	2504	-21	-116						
LA. New Orleans	82	-5	708	123	140	OHIO. Youngstown	246	-27	2367	-149	-204						
LA. Shreveport	135	10	897	5	-64	OKLA. Okla. City	216	21	1471	-22	-5						
MAINE. Caribou	363	-9	3910	36	64												

* Based on 1941-70 Normals.

† Accumulation July 1, 1975



FIRST CLASS MAIL

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Heating Degree Days (Base 65° F.)

December 1975

ALA. Birmingham . . .	626	MAINE, Caribou . . .	1674	OKLA. Okla. City . . .	714
Mobile . . .	401	Portland . . .	1258	Tulsa . . .	762
Montgomery . . .	561	MD. Baltimore . . .	853	OREG. Astoria . . .	623
ALASKA, Anchorage . . .	1654	MASS. Boston . . .	942	Burns U.	1054
Barrow . . .	2689	Chatham . . .	852	Medford	789
Fairbanks . . .	2513	MICH. Alpena . . .	1267	Pendleton	750
Juneau . . .	1245	Detroit . . .	1107	Portland	686
Nome . . .	--	Flint . . .	1117	Salem	708
ARIZ. Flagstaff . . .	1101	Grand Rapids . . .	1161	PA. Allentown	995
Phoenix . . .	310	Houghton Lake . . .	1272	Erie	1057
Tucson . . .	345	Lansing . . .	1145	Harrisburg	951
Winslow . . .	995	Marquette U . . .	1290	Philadelphia	866
Yuma . . .	270	S. Ste. Marie . . .	1394	Pittsburgh	989
ARK. Fort Smith . . .	741	MINN. Duluth . . .	1642	Scranton	1043
Little Rock . . .	682	Internatl Falls . . .	1801	R. I. Providence	1013
CALIF. Bakersfield . . .	521	Minneapolis . . .	1346	S. C. Charleston	466
Eureka U.	542	Rochester . . .	1312	Columbia	577
Fresno	648	St. Cloud . . .	1533	Greenville	683
Los Angeles U	247	MISS. Jackson . . .	543	S. DAK. Aberdeen	1465
Red Bluff	538	Meridian . . .	589	Huron	1346
Stockton	622	Vicksburg U . . .	--	Rapid City	1096
San Diego	246	MO. Columbia . . .	816	Sioux Falls	1397
San Francisco	480	Kansas City . . .	954	TENN. Chattanooga	785
COLO. Denver	843	St. Louis . . .	910	Knoxville	733
Grand Junction	1161	Springfield . . .	815	Memphis	643
Pueblo	874	MONT. Billings . . .	1095	Nashville	683
CONN. Bridgeport	908	Glasgow	1283	TEX. Abilene	578
Hartford	1125	Great Falls . . .	1122	Amarillo	757
D. C. Washington	752	Havre	1245	Austin	404
FLA. Apalachicola	350	Helena	1199	Beaumont	413
Ft. Myers	102	Kalispell	1160	Brownsville	180
Jacksonville	373	Miles City	1293	Corpus Christi	247
Key West	13	Missoula	1213	Dallas	--
Lakeland U.	179	NEBR. Grand Island	1166	Del Rio	361
Miami	49	Lincoln	1079	El Paso	640
Orlando	174	Norfolk	1247	Fort Worth	500
Daytona Beach	222	North Platte	1188	Galveston U.	309
Tallahassee	417	Omaha	1051	Houston	399
Tampa	183	Valentine	1215	Lubbock	680
GA. Atlanta	665	NEV. Ely	1123	Midland	360
Augusta	540	Las Vegas	516	San Angelo	518
Macon	537	Reno	961	San Antonio	394
Savannah	446	Winnemucca	923	Victoria	316
IDAHO, Boise	1035	N. H. Concord	1330	Waco	462
Lewiston	863	N. J. Atlantic City	906	Wichita Falls	607
Pocatello	1001	Trenton U	870	UTAH, Blanding R	--
ILL. Cairo U.	728	N. MEX. Albuquerque	905	Salt Lake City	989
Chicago	1029	Roswell	661	VT. Burlington	1385
Moline	1072	N. Y. Albany	1199	VA. Lynchburg	853
Peoria	1069	Binghamton	1192	Norfolk	670
Rockford	1172	Buffalo	1134	Richmond	770
Springfield	973	New York	857	Roanoke	809
IND. Evansville	861	Rochester	1146	WASH. Colville	1099
Fort Wayne	1036	Syracuse	1144	Omak	--
Indianapolis	992	N. C. Asheville	812	Quillayute	750
South Bend	991	Charlotte	694	Seattle-Tacoma	713
IOWA, Burlington	1070	Greensboro	765	Spokane	1048
Des Moines	1085	Hatteras R.	498	Walla Walla U.	785
Dubuque	1198	Raleigh	705	Yakima	931
Sioux City	1223	Wilmington	478	W. VA. Beckley	914
KANS. Concordia	968	N. DAK. Bismarck	1419	Charleston	813
Dodge City	845	Fargo	1550	Huntington	811
Goodland	909	Williston U	1522	Parkersburg U.	868
Topeka	941	OHIO, Akron-Canton	971	WIS. Green Bay	1351
Wichita	892	Cincinnati U.	848	Madison	1217
KY. Lexington	895	Cleveland	1015	Milwaukee	1143
Louisville	801	Columbus	973	WTO. Casper	1126
LA. Baton Rouge	446	Dayton	957	Cheyenne	998
Lake Charles	414	Toledo	1110	Lander	1277
New Orleans	417	Youngstown	1063	Sheridan	1122
Shreveport	492				

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