

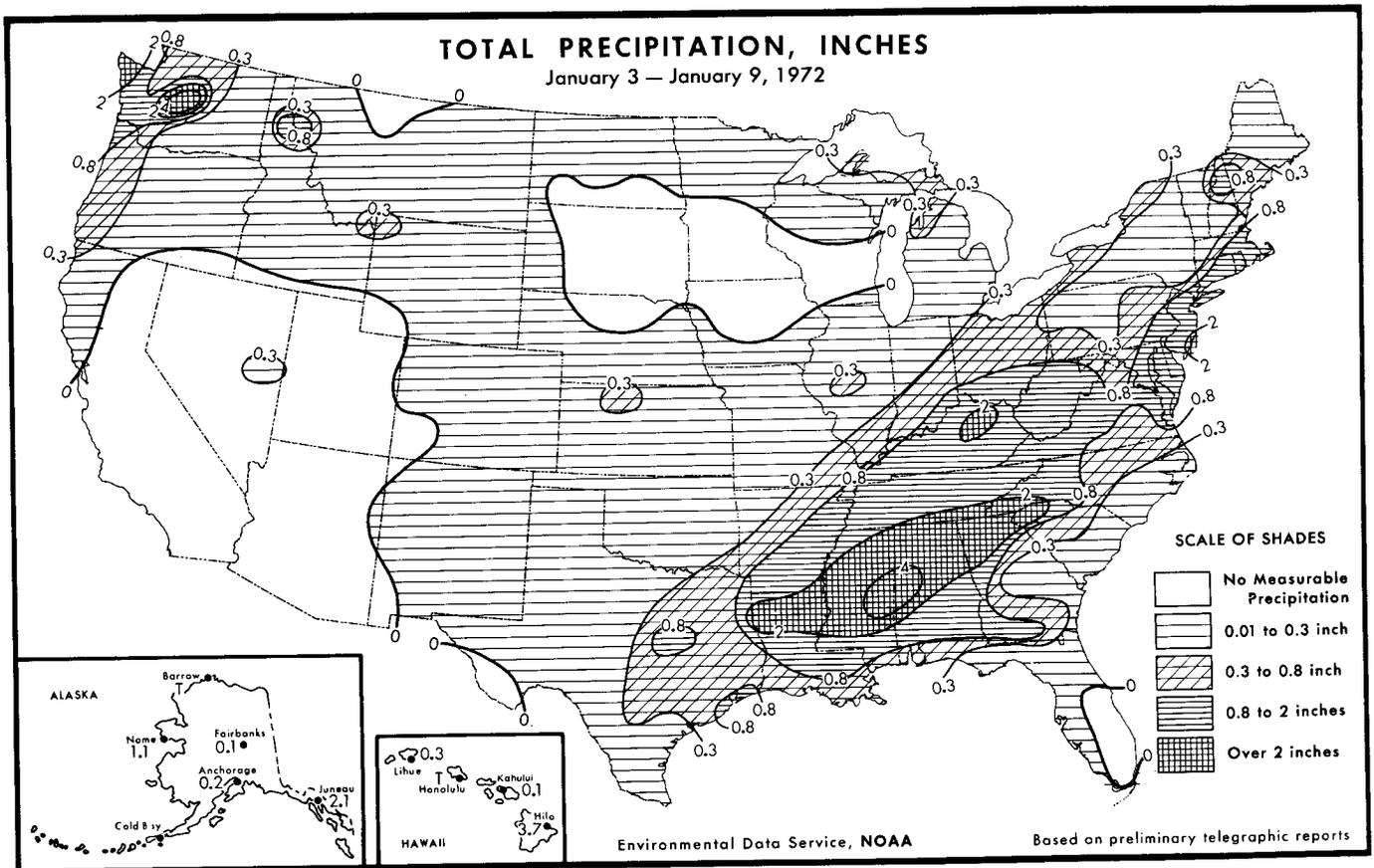
Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
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Edited by Lucius W. Dye JANUARY 10, 1972 Washington, D. C.

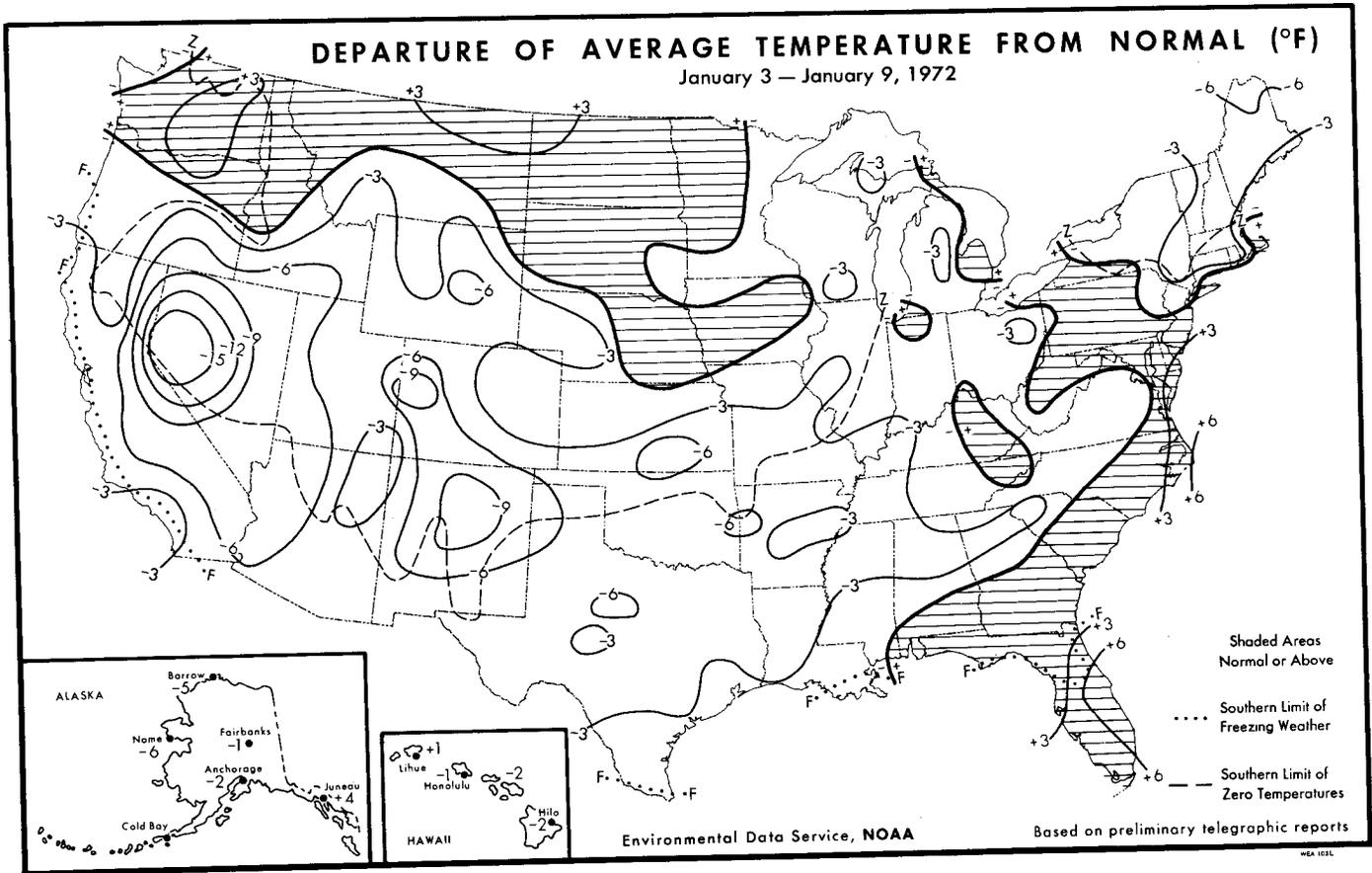


NATIONAL WEATHER SUMMARY

HIGHLIGHTS The coldest weather of the season came at midweek, followed by a quick warmup over the weekend. Precipitation was sparse over much of the West but heavy over parts of the Deep South.

PRECIPITATION: Snow fell in the central Rocky Mountains and spread across the nearby Great Plains early in the week. Up to 12 inches fell in parts of Montana and Wyoming with lesser amounts in Colorado and Nebraska. Skies were blue in the Far West and in the East. Large Highs covered those areas. The storm intensified. Snow and freezing precipitation fell along the leading edge of the arctic air mass as it pushed across mid-America. Strong winds drifted the snow. The visibility was reduced to less than a mile at times in parts of Colorado, Nebraska, and Kansas. By Monday evening, the severe winter weather had

spread to the southern Great Plains. Snow spread southward and eastward and by early Tuesday, snow or sleet fell over a belt extending from New Mexico and western Texas to New York and Pennsylvania. Warm moist tropical air moved northward overriding the cold arctic air. This released more snow, sleet, and freezing rain over a wide band along the arctic front. The deep drifts, icy roads, and strong winds slowed automobile travel. The storm continued through Wednesday but diminished in intensity Thursday. Friday was fair over most of the Nation. Precipitation was relatively sparse over the weekend being limited in the Pacific Northwest to light rain along the coast, snow in the western mountains, and showers in the lower Mississippi River Valley and the Ohio River Valley. Strong winds were widespread from the Pacific Northwest to the northern Rocky



Mountains Sunday afternoon when Rawlins, Wyo., registered gusts to 75 m.p.h. Weekly precipitation totals over much of the Nation were less than 0.25 inch. Totals exceeded 2.00 inches at Quillayutte, Wash., and in parts of the southern Great Plains. One of the largest totals was 7.50 inches at Nitta Yuma, Miss.

TEMPERATURE: A massive outbreak of cold arctic air pushed into the northern Rocky Mountains and northern Great Plains early in the week and advanced steadily southward. By Tuesday morning, subzero weather had reached the Texas Panhandle. On Wednesday morning Carlsbad, N. Mex., St. Louis, Mo., and Fayetteville, Ark., each registered 2° below zero and Thermal, Calif., recorded 17°, the

coldest temperature of record for Thermal. By Thursday morning, almost the entire Nation was in the "deep freeze." The temperature at Brownsville, Tex., had tumbled to 35° and New Orleans' Moisant Airport registered 34°.

The Deep South experienced mild afternoon temperatures. For instance, Montgomery, Ala., registered 78° and Ft. Myers, Fla., 85°, Wednesday afternoon.

The weekend was mostly fair and mild, not warm enough, however, to offset the cooler-than-normal weather earlier in the week except in parts of the northern Great Plains and along the middle and southern Atlantic coast.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Below normal temperatures prevailed over much of the central and western portion of the Nation during the week increasing the care and feeding of livestock. Feed supplies are generally adequate. Freeze damaged some crops in California and Arizona. Small grain and livestock are in good condition for this time of year. Farmwork was delayed by rain in eastern and southern States and snow in other areas. Farm activities consisted primarily of caring for livestock and harvesting cotton, soybeans, citrus, and vegetables. Farmers were active with end-of-year record keeping and repair work.

SMALL GRAINS: Fall-seeded small grains are in good condition over most of the Nation. Soil moisture is adequate. Snowcover has protected small grain fields in many north-central areas. Most fields are providing good grazing. Wind and cold damaged some fields from Texas northward. Tender growth in eastern and southern areas could receive cold damage later. Mild December weather promoted tender growth. In Kansas, the condition is mostly favorable. However, wind and insect infestation caused light damage. Yellowing is less pronounced than earlier. In the West, cool weather slowed growth. Planting continued in Arizona and is nearing the end in California.

COTTON: Cotton harvest was slowed in the Plains area of Texas and Oklahoma by freeze. Harvest is well behind schedule. Two thirds of the Texas crop has been picked to date compared with complete harvest this time last year. Rains delayed final harvest in Louisiana, Alabama, North Carolina and other southern areas. Harvest continues. Some fields may be lost due to rains. Cotton harvest in Arizona and California is nearing completion.

OTHER CROPS: Cold weather, snow cover and rain delayed harvest of remaining soybeans and corn in some areas. Early-planted flax in Texas made good progress while late plantings suffered heavy damage. The Florida and Louisiana sugarcane harvest continued during the week. In North Carolina and other southern States tobacco plant beds are being prepared. In Kentucky burley tobacco markets opened and deliveries have been light. In Nevada sugarbeet processing is active. Planting of sugarbeets continues in California and Arizona. Potatoes are being dug in Florida's Everglades.

Fruits and Nuts: Picking of Florida's citrus crop is in full swing. Trees need rain. Leaf cell moisture is low and light wilting is occurring. Irrigation has been limited as new growth is not wanted at present since frost could cause considerable damage. In Texas citrus is sizing well and color is expected to improve as a result of recent cool temperatures. Harvest of navel oranges in Arizona nears completion. Trees escaped cold weather. California's citrus was hit by cold. Growers have been firing frost protection devices. There was some undetermined damage in the Central Valley. Harvest of navel oranges increasing in southern California but slow in central areas. Pecan harvest continues in many areas.

Vegetables: Vegetables are in good supply in Florida. Harvesting of sweetcorn, tomatoes, eggplant, and peppers is well ahead of schedule. Watermelon seeding is active in south Florida and increasing in central areas. Cabbage transplanting in coastal areas of North Carolina has started. In Texas, most vegetables escaped freeze damage. Some light damage occurred in the lower Rio Grande Valley. Laredo has light supplies of cabbage, carrots, and lettuce. Spring onions, spinach, broccoli, and cabbage in the Coastal Bend area are making good progress. There are freeze-damaged crops in the Winter Garden and San Antonio areas but damage is not fully determined. Harvesting of lettuce and cabbage continues in Yuma area of Arizona. Growth of late vegetables slowed by cold wind. Cold delayed harvest of green leafy vegetables but very little damage. Broccoli and cauliflower harvest is slow in California. Lettuce harvest active in Imperial Valley of California. Winter potato digging active all areas.

PASTURES AND LIVESTOCK. Care and feeding livestock have been active during the week. Many ranges and fields are snow covered over the north-central States. Other areas are providing considerable grazing. Supplemental feeding is active in most areas. Livestock are in generally good condition. Feed supplies are mostly adequate throughout the Nation. In most areas disease and weight loss of livestock has been held to minimum. Livestock movement is near normal. Cold weather slowed grass and small grain growth in some areas.

Carl A. Ouzts
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, Lst., JANUARY 9, 1972

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 . . .	42	- 4	2.9	+1.8	New Orleans	53	- 1	.7	-. 2	OKLA. Okla. City . . .	32	- 5	.1	-. 2
Mobile . . .	54	+ 1	.5	-. 6	Shreveport . . .	43	- 5	2.4	+1.3	Tulsa . . .	33	- 4	.1	-. 3
Montgomery . . .	48	+ 0	1.0	+ .1	MAINE, Caribou . . .	5	- 6	.1	-. 4	OREG. Astoria . . .	42	+ 1	1.3	-1.4
ALASKA, Anchorage . .	10	- 2	.2	0	Portland . . .	19	- 3	.4	-. 6	Burns . . .	21	- 4	T	-. 4
Barrow . . .	-20	- 5	T	0	MD, Baltimore . . .	36	+ 1	1.3	+ .5	Medford . . .	33	- 2	T	-. 7
Fairbanks . . .	-13	- 1	.1	-. 1	MASS, Boston . . .	31	+ 1	.9	0	Pendleton . . .	37	+ 4	.1	-. 2
Juneau . . .	30	+ 4	2.1	+1.2	Nantucket . . .	33	- 1	1.9	-. 4	Portland . . .	40	+ 1	.5	-. 8
Nome . . .	- 1	- 6	1.1	+ .9	MICH, Alpena . . .	20	- 2	.2	-. 3	Salem . . .	38	- 1	.5	-1.1
ARIZ, Flagstaff . . .	22	- 6	0	-. 5	Detroit . . .	25	- 2	.2	-. 3	PA, Allentown . . .	28	- 1	.9	+ .2
Phoenix . . .	47	- 3	0	-. 2	Flint . . .	24	+ 1	.2	-. 2	Erie . . .	28	+ 2	.3	-. 3
Tucson . . .	47	- 3	0	-. 2	Grand Rapids . . .	23	- 2	.1	-. 3	Harrisburg . . .	34	+ 2	.6	0
Winslow . . .	28	- 2	0	-. 1	Houghton Lake . . .	17	- 3	.1	-. 3	Philadelphia . . .	33	+ 1	1.2	+ .5
Yuma . . .	47	- 6	0	-. 1	Lansing . . .	22	- 3	.2	-. 2	Pittsburgh . . .	30	+ 1	.5	-. 2
ARK, Fort Smith . . .	34	- 6	.3	-. 3	Marquette . . .	17	- 3	.1	-. 3	Scranton . . .	27	- 1	.3	-. 2
Little Rock . . .	40	- 1	.8	-. 4	Muskegon . . .	25	- 2	.1	-. 4	R. I. Providence . . .	27	- 3	1.2	+ .3
CALIF, Bakersfield . .	41	- 6	T	-. 3	S. Ste. Marie . . .	17	+ 1	.5	0	S. C. Charleston . . .	52	+ 2	.1	-. 5
Eureka . . .	43	- 5	T	-1.5	MINN, Duluth . . .	9	0	.1	-. 1	Columbia . . .	48	+ 2	.6	-. 1
Fresno . . .	38	- 7	T	-. 5	Internatl Falls . . .	4	0	.1	-. 1	Greenville . . .	41	- 3	2.2	+1.2
Los Angeles . . .	54	- 2	0	-. 6	Minneapolis . . .	12	- 1	T	-. 2	S. DAK, Aberdeen . .	14	+ 2	T	-. 1
Red Bluff . . .	43	- 2	0	-1.0	Rochester . . .	12	- 2	0	-. 2	Huron . . .	15	0	T	-. 1
San Diego . . .	53	- 3	0	-. 5	St. Cloud . . .	12	+ 1	T	-. 2	Rapid City . . .	24	+ 1	T	-. 1
San Francisco . . .	43	- 5	0	-. 9	MISS, Jackson . . .	46	- 2	2.8	+1.7	Sioux Falls . . .	15	- 2	0	-. 1
Stockton . . .	38	- 6	0	-. 7	Meridian . . .	46	- 2	5.9	+4.9	TENN, Chattanooga . .	40	- 1	3.0	+1.7
COLO, Denver . . .	27	- 2	.1	0	MO, Columbia . . .	28	- 3	.2	-. 2	Knoxville . . .	-	-	-	-
Grand Junction . . .	17	- 9	.1	-. 1	Kansas City . . .	29	- 3	.1	-. 2	Memphis . . .	38	- 3	1.8	+ .4
Pueblo . . .	27	- 3	.1	0	St. Louis . . .	30	- 2	.3	-. 2	Nashville . . .	38	- 2	1.8	+ .6
CONN, Bridgeport . . .	31	+ 1	-	-	Springfield . . .	31	- 3	.2	-. 2	TEX, Abilene . . .	39	- 6	.2	0
Hartford . . .	24	- 4	.6	-. 2	MONT, Billings . . .	23	- 5	.1	-. 1	Amarillo . . .	31	- 6	.1	0
D. C. Washington . . .	37	0	1.2	+ .6	Glasgow . . .	17	+ 5	T	-. 2	Austin . . .	46	- 5	2.2	-. 4
FLA, Apalachicola . .	56	+ 1	.1	-. 6	Great Falls . . .	25	+ 2	T	-. 2	Beaumont . . .	48	- 5	2.6	+1.6
Ft. Myers . . .	71	+ 7	0	-. 3	Hayre . . .	18	+ 2	T	-. 1	Brownsville . . .	61	0	T	-. 4
Jacksonville . . .	59	+ 3	.1	-. 4	Helena . . .	17	- 3	.1	0	Corpus Christi . . .	57	- 1	.1	-. 3
Key West . . .	75	+ 5	.3	-. 4	Kalispell . . .	21	0	.1	-. 2	Dallas . . .	42	- 4	.4	-. 2
Lakeland . . .	66	+ 4	T	-. 5	Miles City . . .	19	+ 1	.1	0	Del Rio . . .	47	- 4	.1	-. 1
Miami . . .	73	+ 6	T	-. 5	Missoula . . .	21	+ 1	.2	0	El Paso . . .	38	- 5	.2	0
Orlando . . .	68	+ 8	0	-. 5	NEBR, Grand Island . .	26	+ 3	.1	0	Fort Worth . . .	40	- 6	.5	+ .1
Tallahassee . . .	54	0	.2	-. 5	Lincoln . . .	27	+ 1	.1	-. 1	Galveston . . .	54	- 2	1.1	+ .2
Tampa . . .	65	+ 3	.1	-. 4	Norfolk . . .	24	+ 3	T	-. 2	Houston . . .	50	- 1	.6	-. 3
GA, Atlanta . . .	42	- 3	2.9	+2.0	North Platte . . .	20	- 5	T	-. 1	Lubbock . . .	36	- 3	.1	0
Augusta . . .	49	+ 2	.1	-. 6	Omaha . . .	25	+ 3	T	-. 2	Midland . . .	39	- 5	.1	-. 1
Macon . . .	49	0	.1	-. 7	Valentine . . .	12	- 0	T	-. 1	San Angelo . . .	44	- 2	.2	0
Savannah . . .	54	+ 2	.1	-. 5	NEV, Ely . . .	27	- 7	T	-. 2	San Antonio . . .	47	- 5	.5	+ .1
HAWAII, Hilo . . .	69	- 2	3.7	+ .7	Las Vegas . . .	38	- 5	0	-. 1	Victoria . . .	53	- 3	.2	-. 2
Honolulu . . .	72	- 1	T	-. 8	Reno . . .	13	-17	0	-. 3	Waco . . .	43	- 5	1.1	+ .5
Kahului . . .	70	- 2	.1	-. 9	Winnemucca . . .	15	-12	0	-. 2	Wichita Falls . . .	38	- 5	T	-. 2
Lihue . . .	72	+ 1	.3	-. 9	N. H. Concord . . .	18	- 4	.2	-. 6	UTAH, Blanding . . .	24	- 2	0	-. 3
IDAH, Boise . . .	29	0	T	-. 3	N. J. Atlantic City . . .	38	+ 3	2.1	+1.3	Salt Lake City . . .	25	- 3	-	-
Lewiston . . .	32	+ 1	.2	-. 1	Trenton . . .	33	- 1	1.2	+ .6	VT, Burlington . . .	15	- 2	.2	-. 2
Pocatello . . .	17	- 6	T	-. 3	N. MEX, Albuquerque . .	26	- 9	.1	0	VA, Lynchburg . . .	36	- 2	.9	+ .2
ILL, Cairo . . .	34	- 3	.7	-. 2	Roswell . . .	33	- 4	.2	+ .1	Norfolk . . .	44	+ 3	1.1	+ .4
Chicago . . .	25	- 1	.2	-. 2	N. Y. Albany . . .	19	- 4	.1	-. 4	Richmond . . .	37	- 2	.6	-. 2
Moline . . .	22	- 2	.1	-. 3	Binghamton . . .	24	0	.2	-. 4	Roanoke . . .	36	- 2	T	-. 7
Peoria . . .	23	- 3	.1	-. 4	Buffalo . . .	25	0	.6	0	WASH, Colville . . .	26	+ 2	.2	-. 2
Rockford . . .	22	- 1	T	-. 4	New York . . .	32	- 2	1.0	+ .2	Omak . . .	18	- 4	T	-. 3
Springfield . . .	26	- 3	.4	-. 1	Rochester . . .	24	- 2	.5	0	Quillayute . . .	37	- 2	2.5	-1.1
IND, Evansville . . .	31	- 4	.8	0	Syracuse . . .	24	- 1	.1	-. 6	Seattle-Tacoma . . .	40	+ 1	.6	-. 7
Fort Wayne . . .	26	- 1	.3	-. 3	N. C. Asheville . . .	39	0	1.0	+ .3	Spokane . . .	28	+ 2	.1	-. 5
Indianapolis . . .	28	- 1	.6	-. 1	Charlotte . . .	41	- 1	1.1	+ .3	Walla Walla . . .	40	+ 6	T	-. 5
South Bend . . .	27	+ 1	.1	-. 4	Greensboro . . .	38	- 1	.7	-. 1	Yakima . . .	32	+ 4	T	-. 3
IOWA, Burlington . . .	25	- 1	.1	-. 2	Hatteras . . .	53	+ 6	.2	-. 8	W. VA, Beckley . . .	33	- 1	1.8	+ .8
Des Moines . . .	22	+ 1	T	-. 4	Raleigh . . .	43	+ 1	.3	-. 4	Charleston . . .	38	+ 1	1.7	+ .7
Dubuque . . .	20	0	T	-. 2	Wilmington . . .	50	+ 2	.1	-. 5	Huntington . . .	35	- 2	1.9	+1.1
Sioux City . . .	20	0	T	-. 2	N. DAK, Bismarck . . .	13	+ 1	T	-. 1	Parkersburg . . .	34	- 1	1.2	+ .5
KANS, Concordia . . .	28	0	.2	+ .1	Fargo . . .	12	+ 3	T	-. 1	WIS, Green Bay . . .	16	- 2	T	-. 3
Dodge City . . .	29	- 3	.1	0	Williston . . .	15	+ 4	.1	0	La Crosse . . .	16	- 2	T	-. 3
Goodland . . .	26	- 2	.2	+ .1	OHIO, Akron-Canton . . .	26	- 3	.5	-. 2	Madison . . .	16	- 3	T	-. 4
Topeka . . .	27	- 3	.1	-. 2	Cincinnati . . .	32	0	.9	+ .2	Milwaukee . . .	20	- 1	T	-. 4
Wichita . . .	25	- 8	.1	-. 1	Cleveland . . .	29	0	.7	+ .1	WYO, Casper . . .	19	- 6	T	-. 1
KY, Lexington . . .	36	+ 1	2.1	+1.0	Columbus . . .	29	- 1	.6	-. 1	Cheyenne . . .	24	- 3	.1	0
Louisville . . .	34	- 1	1.3	+ .5	Dayton . . .	28	- 2	.6	-. 1	Lander . . .	18	- 2	T	-. 1
LA, Baton Rouge . . .	51	- 2	1.9	+ .8	Toledo . . .	25	- 2	.3	-. 2	Sheridan . . .	19	- 4	.1	-. 1
Lake Charles . . .	50	- 4	.4	-. 7	Youngstown . . .	27	- 1	.3	-. 4	P. R. San Juan . . .	78	+ 2	.1	-1.0

* Departures are from 30-year means (1931-60). Based on preliminary reports

CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists

ALABAMA: General rains early in the week, then fair and the coldest weather of the season Wednesday and Thursday nights with frost or freezing all the way to the coast. Increasing cloudiness and much warmer over the weekend with heavy rains most sections Sunday and Sunday night. Temperatures averaged 2° above normal. Rainfall heavy all sections except moderate near coast. Cold wet weather limited activities to routine chores and feeding and caring for livestock. Harvest of remaining cotton, corn, and soybeans made little progress. Soil moisture adequate to surplus. Greens continue in good supply. Irish potato seed beginning to arrive Baldwin area. Growth winter grazing crops checked by low temperatures at midweek but condition remains good. Most fields too wet to graze. Livestock good condition as result of supplemental feeding. Marketing of cattle and calves off.

ARIZONA: Temperatures were below normal with freezing temperatures in colder sections of both Salt River Valley and Yuma area on every night of week. No significant precipitation. Cotton harvest nears completion all areas. Small acreage Yuma and Central areas remains for harvest. 5% of acreage in southeast needs harvesting. Many fields statewide shredded and plowed. Planting of small grains is in full swing. Emergence and growth retarded by cold weather. Safflower planting continues. Emergence and growth slow due to cold weather. Progress of fall-planted sugar beets is satisfactory. Plants made good growth and taproots developing satisfactorily. Alfalfa fields continue to provide good grazing for sheep. Harvesting lettuce, cabbage, romaine continued, Yuma area. Early morning harvest delayed by low temperatures. Growth of late-planted lettuce, cabbage, carrots, romaine, and other vegetables slow due to cold windy weather. Preparations in full swing, cantaloupes, other melons. Harvesting navel oranges nearing completion in Salt River Valley. Harvesting sweets, lemons, tangelos, and a few grapefruit continued. No widespread damage from cold nights last week. Harvest of lemons, grapefruit, navel, sweet oranges continued in Yuma. Groves escaped serious injury from cold weather. Groves both areas generally good condition. Ranges remain generally fair to good providing near normal feed amounts. Soil moisture and stock water generally adequate. Limited supplemental feeding continues. Livestock fair to good condition.

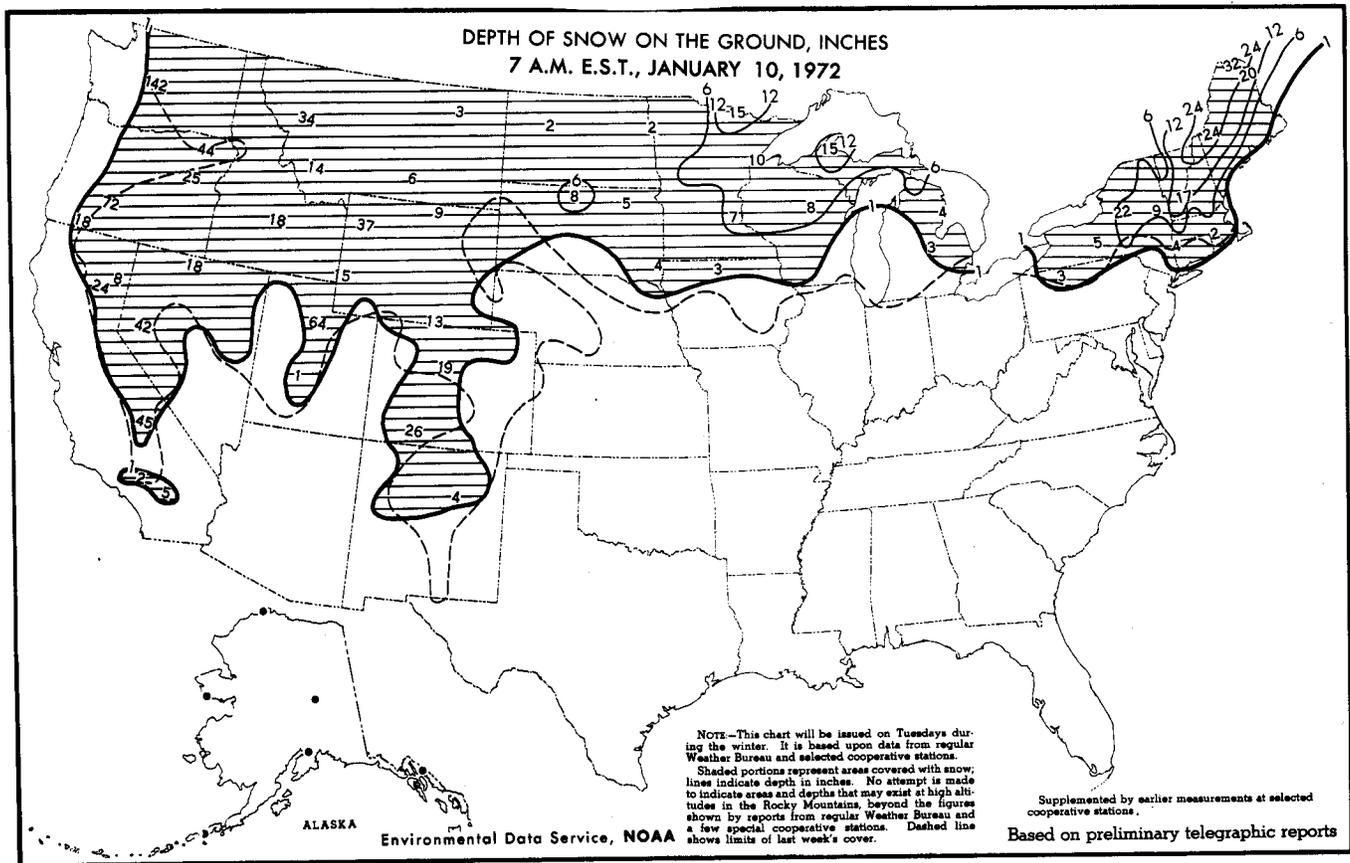
ARKANSAS: Coldest weather this season early in week with a pronounced warming trend latter part. Temperature averages ranged from normal at Pine Bluff and Little Rock to 5° below normal at Mountain Home. The lowest reading was 2° below zero at Fayetteville on 5th with the highest 75° at Texarkana on 9th. Most sections of State had precipitation during the early part of the week with heaviest amounts in south and east. 2.71 inches at Arkansas City, 2.03 inches at Camden, and 1.86 inches at Greers Ferry. Other stations State had lesser amounts with Fayetteville getting only 0.23 inch and Fort Smith getting 0.25 inch. Some of precipitation fell as freezing rain, sleet, or snow with sufficient icing to

cause slick roads especially over western and northern portions of State. No fieldwork of consequence due to wet fields and cold weather. Warming trend end of week beneficial to small grains. Winter grazing crops normal but heavy livestock feeding required. Livestock mostly normal condition this date. Farmers busy with records, credit arrangements, machinery repairs and other off-season tasks.

CALIFORNIA: Average temperatures near normal Los Angeles Basin, northern Sacramento Valley, 4° to 8° below normal most of rest of State. Very cold northeastern interior. Extensive fog San Joaquin Valley beginning of week, again weekend; clear, cold otherwise. No precipitation. Growth and development retarded due to cold frosty weather. Equipment resuming operations as field conditions permit. Some final planting small grain, sugar beets, alfalfa continues. Cotton harvest nearing end as plow down date nears. Cold spell hit all citrus producing areas. Heaviest damage to tangerine and valencia orange in Coachella Valley. Too early to determine extent of damage expected on grapefruit. In Redlands-Highland area low temperatures were recorded with firing of frost protective devices. Damage believed minimal. In Central Valley damage is evident in colder areas. Harvest of navel oranges increasing in southern California but at slow pace in central California. Harvest of avocados continues. Forage growth slowed by cold. Stock water adequate. Supplemental feeding very active. Calving, lambing increasing north. Bees moving to almonds. Egg production declined. Cold temperatures Coachella Valley January 5 and 6 delayed morning harvest green leafy vegetable crop. Apparently, very little crop damage. Artichokes Castroville slow. Broccoli, cauliflower harvest slow Salinas. Carrots, deserts near normal. San Diego celery slightly decreased this week. Orange, Oxnard expects steady or slight decrease this week. Lettuce active Imperial. Palo Verde harvest practically complete. Winter potato digging active all areas.

COLORADO: Severe storm first part of period with high winds. Very cold temperatures and light to heavy snow. Minimums 5° to 20° below zero lower elevations, 30° to 40° below zero mountains. Much warmer east latter part of period from chinook winds. Moderate warming west. High winds through week caused heavy drifting of snow and heavy damage. Soil moisture supplies adequate most areas for fall grains. Winter wheat, barley, and rye excellent condition for winter. Most acreage providing good ground cover against wind erosion. Sizeable acreage eastern Plains continue to provide good grazing. Range and pasture condition fair. Range and pastures snow covered western half of State. Supplemental feeding heavy most areas. Livestock condition good. Light weight loss from subzero temperatures past week.

FLORIDA: A cold front located in north and west Florida on weekend of January 1 and 2 slowly pushed its way southward through State on January 6 and 7. Temperatures dropped sharply behind front. Average temperature drop of 20° in



2 days was common. A warming trend set in week-end of 8th and 9th, so that weekly temperatures continued above normal. Temperatures averaged 2° to 5° above normal in north and west Florida and 3° to 8° above normal elsewhere. Rainfall was widespread in north and west, averaging 1.20 inches in northwest division and 0.60 inch in north division. Elsewhere rainfall was spotty, averaging near 0.10 inch. Minimum temperatures for week were 23° at Monticello, Smith Creek, and Defuniak Springs, and 24° at Milton and Tallahassee. Most fall-sown crops remain in growing condition. Crops on sandy well-drained soils central and southern Florida are showing some signs of dryness. Inadequate soil moisture slowing growth of grasses most areas. Conditions fair to mostly good for pastures and livestock. Florida citrus trees and fruit need rain. Leaf cell moisture low. Very light wilting. Limited irrigation because new growth is unwanted. Harvest increasing. Harvest active last week as weather continued moderate to warm. Most vegetable commodities in good supply. Sweet corn, tomatoes, eggplant, and peppers harvesting well ahead of schedule. Red potatoes being dug in Everglades. Vines being killed in Ft. Myers this week. Watermelon seeding active south, increasing central.

GEORGIA: Mild beginning of period turning cold at midweek and continued cool through Saturday morning. Mild again at end of week. Freezing on 3 to 4 days in north and on 1 or 2 days most of south and central. First freeze in almost 3 weeks for much of State. Extremes: 15° at Blairsville and 78° at Valdosta. Rain at begin-

ning and end of period with amounts ranging from excessive north to very light extreme south and southeast. Totals had exceeded 3.00 inches over most of northern 1/3 of State by Monday morning with rain continuing. Farm activity delayed due to wet land. Pastures, livestock, and small grains mostly good condition.

HAWAII: Cool with scattered light showers. Low temperatures slowing crop growth and maturity. Farm operations on sugarcane and pineapple confined to planting, weeding, and fertilizing. Supplies of local vegetables and fruits adequate. Coffee harvesting declining seasonally. Pastures and cattle condition fair to good.

IDAHO: Temperatures averaged only slightly lower than for the previous week. Average was 2° to 10° below normal except near normal north. Precipitation light and below normal. Averages generally less than 0.10 inch. Only 2 stations east reported more than 0.25 inch. Supplemental feeding of livestock continues at high level. High winds some areas removed snow cover exposing fall-seeded crops to possible frost damage. Farming activity at low level as below normal temperatures persist.

ILLINOIS: Temperatures averaged few degrees above normal but ranged from -7° on January 5 in northwest to 50's in south over weekend. Precipitation to 0.50 inch fell mostly on 4th and 5th. Considerable sun last half of period. No snow cover. Winter grains and livestock in good condition. Soil moisture levels adequate. Routine farm chores are main activities.

INDIANA: Temperatures averaged 2° above normal but 5th was coldest of winter with some subzero temperatures. By weekend temperatures in high 40's and partly cloudy skies. Snow disappeared. Precipitation of 0.20 to 0.80 inch early in week and on 9th. Soils frozen several inches in north and central early in week, but mostly thawed later. Grasses greener than usual for January. Snowcover hampered outside activities and delayed completion of harvest on few remaining fields of corn and soybeans. Farmers were occupied with snow removal. Care of livestock and chores.

IOWA: Dry, cold at beginning; mild latter half. On 5th, -22° at Waterloo and Fayette; 49° on 9th Lamoni and Burlington. Precipitation 1 to 3 inches northeast.

KANSAS: Arctic air surge first part of week. Light snow and strong winds accompanied the very cold weather. Lowest temperatures of winter early in period, below zero much of northwestern portion. Coldest was 13° below zero at Colby early on 4th. Fair weather with warming trend after January 4. Weekly means averaged near seasonal north-central, 3° to 8° below normal elsewhere. Conditions continued mostly favorable for wheat although some wheat suffered wind damage. Wheat yellowing less pronounced and insect infestation light. Livestock supplementary feeding stepped up temporarily because of brief snow storm. Available forage from crop residue and cured grasses gradually being reduced. A few cattle died from grass tetany after grazing rank wheat. Livestock movement normal. Unfinished local harvesting continued on frozen ground. Farmers activities included local irrigation, machinery repairs, updating record and farm meeting attendance.

KENTUCKY: Temperatures seasonable and above, then coldest of winter 5th and 6th. Maxima in 30's on 5th and below freezing north on 6th; moderating, then unseasonably mild on 9th. Sunny 4 days. Rain turning to freezing rain and light snow on 4th and 5th. Snow depth trace to 1 inch, most melting by late 6th. Rain on 9th. Weekly precipitation totals 1.00 inch to almost 2.50 inches. Weather limiting outside work, except feeding and winter care of livestock. Some supplemental cattle feeding as snow and cold reduced pasture usage. Burley markets opened following holidays, deliveries light most warehouses, many expected to close early. Tobacco still selling well, little price spread between grades.

LOUISIANA: Weather this week was warm, very cold, then warm again. Lowest temperatures of winter most areas Thursday or Friday. Readings in high 70's again by Sunday. Average for week 1° to 3° below normal north and southwest, 1° to 3° above normal southeast half. Temperature extremes: 79° Lafayette and New Orleans January 9, 15° Ashland and Homer January 6. Precipitation moderate to heavy. Totals less than 1.00 inch parts of south but more than 3.00 inches north and east-central. Greatest 1-day total, 3.89 inches measured at Winnfield morning of January 4. Little or no fieldwork due to excessive moisture. Harvest of sugarcane virtually completed. Some mills will grind cane for another week. Scrapping of cotton and soybeans continued as weather permitted. Hard freeze set back pastures. Supply of pasture feed average. Supplemental feeding is general. Livestock mostly in good condition.

MARYLAND AND DELAWARE: Temperatures averaged near

normal after 4 weeks with much above-normal temperatures. Extremes mostly mid-40's to mid-50's, teens to mid-20's. Rainfall on the 4th, 5th, and 9th totaled mostly between 0.75 inch and 1.75 inches. Growers continue work on corn and soybean harvest whenever weather and soil conditions permit. Only scattered fields and parts of fields remain. Small grains continue favorable outlook. Livestock in good condition.

MICHIGAN: Subzero temperatures midweek, much above normal end of period. Temperature averages: normal to 2° above normal Upper Peninsula; 3° below to 3° above normal Lower Peninsula, largest departures interior. Precipitation totals generally less than 0.25 inch with near 0.50 inch northwest Lower Michigan and Keweenaw Peninsula.

MINNESOTA: Temperature generally normal across the State. Extremes 38°, -30°. Precipitation: Northern half of State generally less than 0.25 inch, little to no precipitation rest of State. Snow depth across the State generally 3 to 13 inches, greatest depths are in northeast and eastern north-central districts, averaging more than 12 inches.

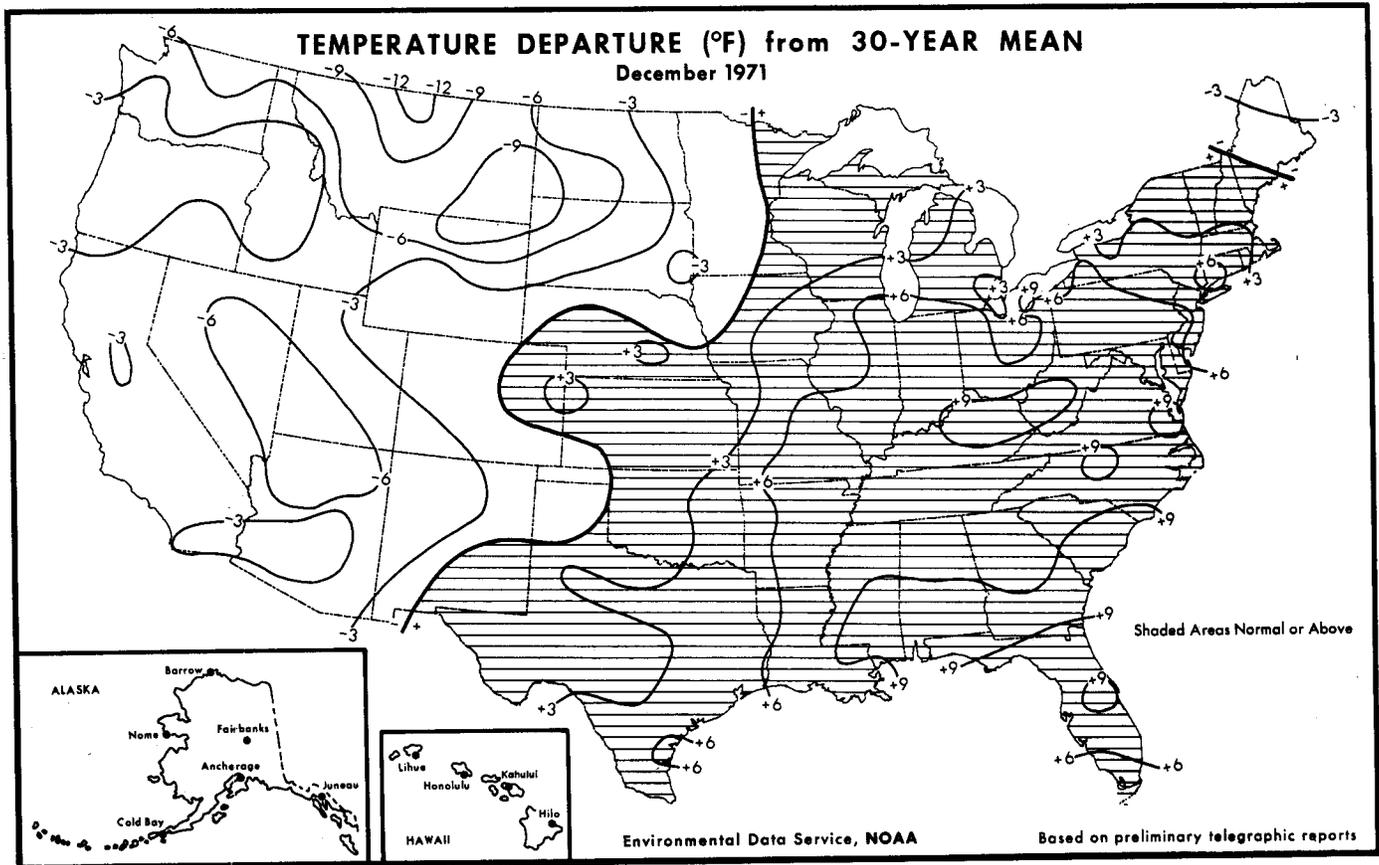
MISSISSIPPI: Generally 3 or 4 days with precipitation. Weekly totals mostly from 2.00 to over 5.00 inches. Nitta Yuma reported 7.50 inches. Temperatures turned colder during week but averages above normal extreme southeast. Extremes: 78° Wiggins on 1st; 10°, Oxford on 6th. Over the weekend: Temperatures warmed with rain Sunday and this morning. Amounts ranged up to the 4.30 inches at Kosciusko. Some wind damage and tornadoes Sunday night. Civil Defense estimated Laurel tornado property damages \$428,000. No fatalities, one family injured. Wet weather continued to keep farmers out of their fields while subfreezing temperatures slowed growth winter pastures. Weather limited farm activity to care of livestock and maintenance of buildings and equipment. An average of less than 1 day was suitable for fieldwork. Soil moisture mostly surplus. Some flooding of low lying pastures.

MISSOURI: Cold air swept across State early in week, ending 4 weeks of above-normal temperatures. Subzero temperatures Wednesday morning, warming to above normal by weekend. Temperatures averaged near normal north to 3° below normal south. Precipitation light, averaging from 0.75 inch southeast to 0.10 inch north.

MONTANA: Mild week as progressive warming allowed temperatures to average within a few degrees of normal throughout State. Only light precipitation. Strong west winds caused extensive drifting of snowcover, especially during weekend. Winter wheat snowcovered and in good condition, but light wind damage. Winter grazing difficult most areas. Virtually all range livestock receiving supplemental feed with feeding being hampered by drifted snow. Most areas have less than normal amounts of hay and other roughages for sale. Feed grains for sale about normal.

NEBRASKA: Temperatures averaged 1° to 4° above normal all of State except southwest where slightly below normal. Precipitation averaged less than 0.50 inch. Snow and cold temperatures reduced stalk field grazing early last week. Melting of snow by weekend allowed grazing to resume. Most areas are free of snow cover. High winds last weekend local areas caused some topsoil erosion.

(Continued on Page 10)



WEATHER—December 1971

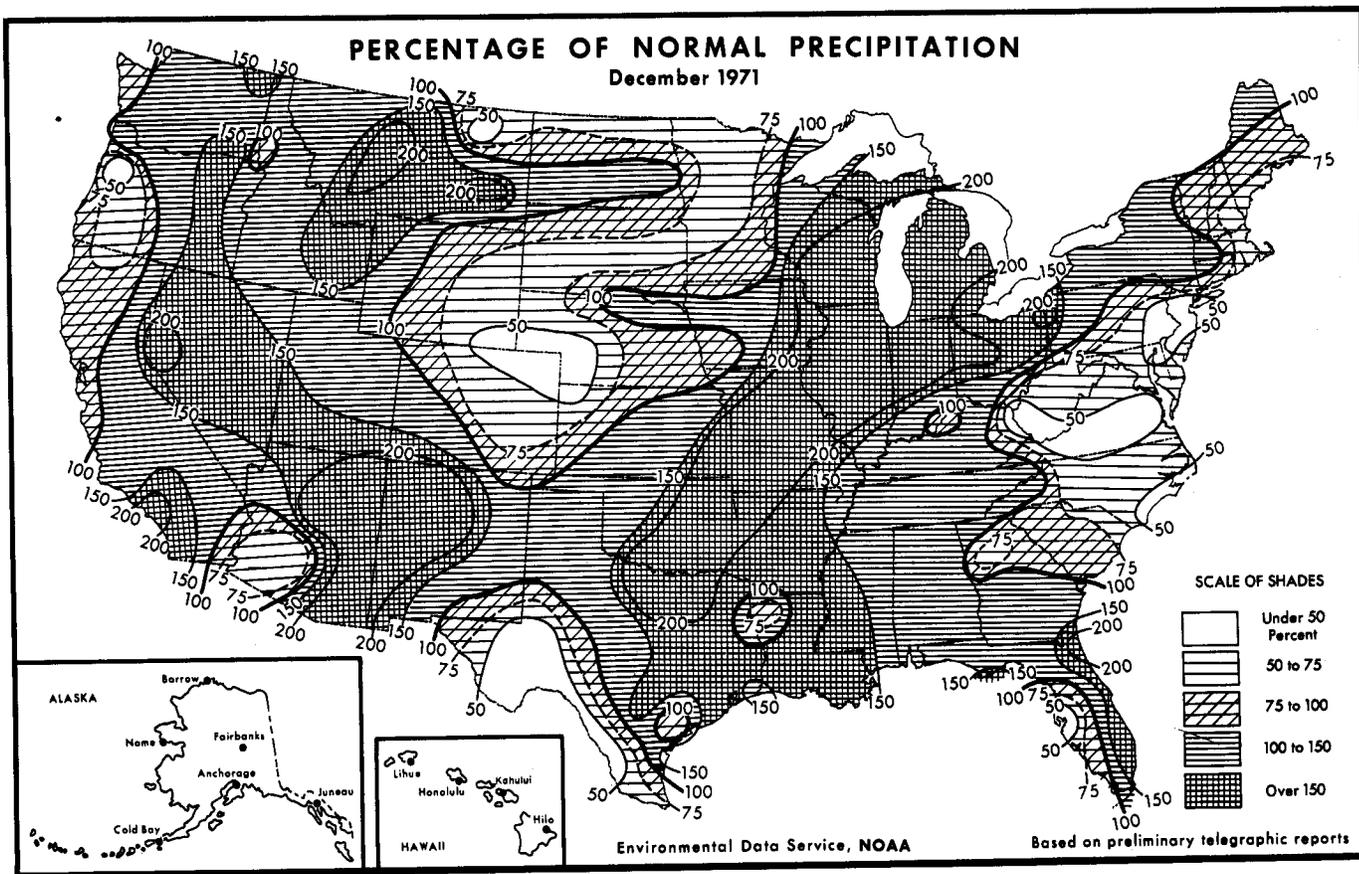
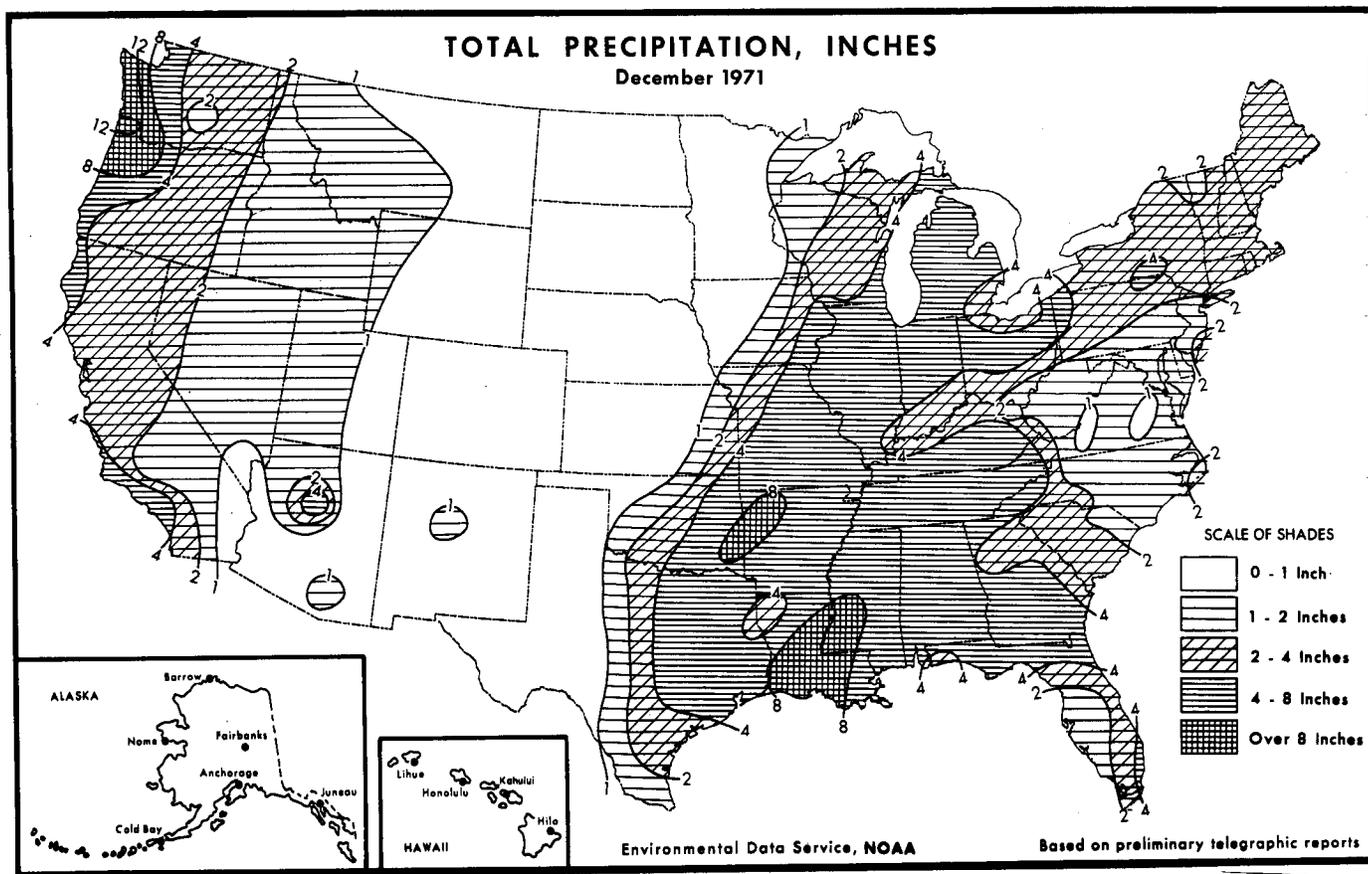
TEMPERATURE: Cold temperatures prevailed over most of the Nation at the beginning of December. Waterloo, Iowa, registered -5° and Hibbing, Minn., -4° on December 1. On the 2d, subzero weather was common over the northern portions of New York and New England. Boonville, N.Y., recorded 13° below zero on the morning of December 2. Subzero temperatures also occurred in several western and central States: Montana, Wyoming, Colorado, Minnesota, Wisconsin, and Iowa.

Bone-chilling cold continued over much of the West through the first three weeks of December. Parts of the Southwest averaged 15° colder than normal during that period. Mild weather came to the East in the second week of the month and continued to the end of the year. Baton Rouge, La., registered 83° and Ft. Myers, Fla., 84° on the afternoon of December 9. Savannah, Ga., warmed to 83° on the 11th; this is the highest December temperature of record for Savannah. Bridgeport, Conn., registered 65° on the same date. This is the warmest temperature of record for so late in the season at Bridgeport.

The Indian summer over the East was interrupted shortly after midmonth when a cold front pushed steadily southward. Subzero weather came to northern New England on the 19th. On the same date the mercury at Tallahassee, Fla., tumbled to 30° . Arctic cold continued its grip over the northern border States from Washington to Minnesota in the fourth week of December but mild southerly winds warmed mid-America and the East. Subzero chill prevailed over the Northwest, the northern Rocky Mountains, and the northern Great Plains in the last few days of December. Big

Piney, Wyo., recorded -26° on the morning of December 28. Temperatures over the Southeast continued mild to the end of the year. In parts of the East, December 1971 was the warmest December in many years. At Trenton, N.J., it was the warmest December in the 20th Century and the 2d warmest of record.

PRECIPITATION: December began with a mixture of snow, sleet, freezing rain, and freezing drizzle across much of the North and cold clouds and cold rain farther south. By December 2, a storm in the West was reaching major proportions. Gales whipped the coastal areas, rain fell along the coast, and heavy snow blanketed the Rocky Mountains. The storm dumped heavy snow over the southern Rocky Mountains and spread to the adjoining Great Plains. As the storm moved along the Gulf of Mexico coast, it dumped generous rains over the Deep South. The storm crossed the Florida Peninsula to the Atlantic Ocean. It produced combinations of cold rain, drizzle, snow and sleet. The snow accumulated to depths of 18 inches or more at some mountain locations in the Carolinas. Storms brought a variety of inclement weather to much of the Nation in the second week of December. Freezing rain and freezing drizzle iced the highways and coated the trees from Pennsylvania to New England. Heavy rains caused flash floods in the Lower Mississippi River Valley. Another storm raged in the western mountains. Snow reached depths of 10 to 12 inches in spots in New Mexico. A second western storm lashed the northwest Pacific coast with heavy rain and gales along the coast and snow in the nearby hills and mountains. The strong winds whistled



through the mountain passes and blizzards occurred in Montana east of the Continental Divide. Mixtures of snow, freezing rain and freezing drizzle fell south of the snow belt. Tornadoes occurred in a half dozen or more central States on December 15. A tornado caused one death at Springfield, Mo. Several persons of Poplar Bluffs, Mo., were injured by a tornado and tornadoes caused widespread damage in northeastern Arkansas.

A huge storm of the northern Pacific coast brought dismal weather to the Northwest in the fourth week of December. Flurries occurred over the northern Great Plains and eastward to the Great Lakes. Rain or drizzle mixed with fog reduced the visibility to near zero in some localities in the Middle Atlantic States.

In the closing days of the month, a Pacific storm moved southward bringing heavy rain to the already-soaked portions of southern California. Snow flurries occurred in the northern and central Rocky Mountains, the northern Great Plains, and eastward to New England. Freezing rain or freezing drizzle fell south of the snow zone and showers fell from the western Gulf coast to the northern Appalachians.

L. W. Dye

(NEBRASKA continued from Page 7)

Auctions, bookkeeping, preparing tax reports, and machinery repair were other activities last week. Some livestock care problems resulted from snow and cold, but no serious losses. Supplemental feeding required during early part of week.

NEVADA: Very cold week. Temperatures averaged 9° below normal extreme south to 12° below normal in north. Light precipitation only in northeast. Snow ground cover general except extreme south. Feeding and caring for livestock continues major farm activities. Livestock wintering in generally good condition. Hay and stock water supplies adequate most areas. Cattle deaths little above average. Sheep losses high some flocks due to predators.

NEW ENGLAND: Variable temperature with midweek quite cold and cold again Sunday morning but sudden warming to general than at close. Means 1° to 4° below normal except normal to 3° above normal in southeast. Frequent but mostly light precipitation with totals 0.05 to 0.50 inch except some in southeast up to over 1.00 inch. Heaviest precipitation on January 4, 5, and 9.

NEW JERSEY: Temperatures averaged near normal with mild weather at beginning and end of week and cool midweek. Extremes ranged from 5° above zero at East Millstone on 6th to the low 50's at several locations on 9th. Rain and snow on 4th and 5th and rain on 9th averaged 1.00 inch melted over the north, 1.60 inches over south, and 1.80 inches along the coast. Weekly totals varied from 0.90 inch at Newark to 2.80 inches at Millville. Snowfall of 2 inches or less in central and north on 5th.

NEW MEXICO: Cold waves Tuesday and Wednesday with mostly light snows and subzero minimum temperatures in north and some eastern plains localities. Warmer second half of week with highest temperatures Saturday. Moisture mostly adequate. Limited harvesting cotton extreme south. Grazing wheat barley continuing. Pecan harvest continuing. Ranges good to fair. Livestock mostly good. Supplemental feeding areas short of grass.

NEW YORK: Temperatures mild on 3d and 4th, cold midweek, with warming trend underway on 9th. Weekly averages coldest of winter to date but ranging below normal only in northeast quarter. Minimums 25° below zero northwest on 6th ranging to -5° to -15° southern interior and to low teens on Long Island. Maximums near 40° on 3d and 9th ranging down to teens and low 20's Upstate midweek. Rain coastal sections midweek and again on 9th. Totals near 1.00 inch. Precipitation light to very light elsewhere. Snowfall light with 3 to 5 inches western half and 1 to 3 inches remainder Upstate on 4th and 5th. Snow cover 1 to 5 inches southern interior up to 6 to 10 inches northern half with up to 20 inches eastern lee of Lake Ontario.

NORTH CAROLINA: Temperatures averaged near normal east and slightly below normal west. Rain mostly light and scattered. Totals trace to 3.00 inches averaging 0.50 inch or less except 0.75 inch coast and 1.00 to 2.00 inches mountains. Soil moisture adequate to surplus, generally adequate. Small grains improved, mostly good. Pasture condition remained good. Feed grains and hays adequate. Corn, cotton, and soybean harvest continued, weather and ground permitting. Tobacco plant bed and land preparation continued. Cabbage transplanting coastal counties. Cool weather at midweek slowed outside farm activities.

NORTH DAKOTA: Cold first of week followed by mild spell. Temperatures averaged near normal southwest to 7° above normal northeast. Precipitation mostly light. Snow cover 2 to 4 inches. Mild weather with no winter storms maintained cattle good to excellent condition. Some grazing but most livestock in winter quarters receiving hay and concentrates. Chores and year end bookwork main farm activities.

OHIO: Maximum temperatures 5° to 10° above normal on 3d and 9th. However, on 5th they were 5° to 10° below normal. Minimum temperatures were near normal except on 5th and 6th when they were 5° to 10° below normal. One to 4 inches of snow on 4th and 5th over most of State. Rain on 9th over most of State. Livestock feeding for winter and early spring markets kept Ohio farmers busy during past week. Rain most areas limited outside work. Light snow early in week gave some protection to wheat and hay crops.

OKLAHOMA: Temperatures averaged 1° to 5° below normal. Extremes: 70° and 4° below zero. Temperatures 10° or less entire State Wednesday morning. Precipitation averaged 0.25 inch southeast and 0.10 inch or less elsewhere. Very dry snow entire State Monday. Accumulations varied from trace southeast to 2 inches northwest. Cold inclement weather restricted field activities most areas until latter part of week. Cotton harvest fair to good progress over weekend, around 50% complete southwest. With ground drying out, good progress expected if fair weather prevails. Some soybeans, sorghum grain, guar, pecans also harvested past week. Small grains entering dormancy result cold weather. Conditions declined, 3/4 still good to excellent. Wheat pastures still furnishing ample grazing. Several fields, especially south-central Oklahoma, still too wet to graze. Winter ranges still furnishing fair to good grazing but quality deteriorating. Livestock mostly good condition, light shrink from cold weather. Some

supplemental feeding necessary most areas. Some loss from bloat and wheat pasture poisoning continues. Lice problem few herds.

OREGON: Milder wet days at first and last of week in northwest half of State. Averaged temperatures 1° to 5° above normal, continuing valley snow cover of 2 to 6 inches most of southeast half held temperature averages 3° to 12° below normal. Minima east minus 8° to 15° western 1/3 20° to 35°. Maxima 32° to 70°. Light precipitation only traces southern 1/3, elsewhere mostly up to 0.10 inch except 0.20 inch northeast and 0.40 inch north coast. Choring and making farm repairs are main activities. Grain and hay crops in good condition. Lambing is underway.

PENNSYLVANIA: Temperatures near normal after 4 straight weeks much above normal. Most northern counties near to 1° below normal, southeast 2° to 4° above normal, elsewhere near to 2° above normal. Coldest midweek, with subzero temperatures northern mountains. Extremes 50°, -7°. Precipitation generally light to moderate with under 0.50 inch central and northeast, 0.50 to 0.75 inch most of west, and up to 1.20 inches southeast corner. Mostly rain, but some snow west and north. Snow cover Monday morning confined to northern and western mountains with generally traces to 5 inches.

PUERTO RICO: A dry cool week. Rainfall averaged about 0.25 inch or about 1.00 inch below normal. Highest total 1.72 inches eastern mountains. Little or no rain southern divisions. Generally less than 0.50 inch all other divisions. Crop moisture conditions near normal except southern divisions where some zones too dry for normal development. Temperatures averaged 75° on coast and 69° interior with average departure of 1.0 degree below normal. Highest maximum 89°, lowest minimum 50°. No crop report due local holiday.

SOUTH CAROLINA: Rain on 4th, 1.00 to 1.50 inches in extreme northwest, less than 0.50 inch elsewhere. Rain began again in northwest late on 9th. Average temperature ranged from low 40's to mid-50's. The south was 3° above normal for week. Rest of State near normal. Coolest week since end of November. Most farmers had good weather for farm activities. Cotton, soybean harvest almost complete. Tobacco bed preparation continuing. Peach tree pruning and setting new orchards active. Land preparation for spring planting.

SOUTH DAKOTA: Weekly temperatures averaged from 3° below normal to 6° above normal. Temperatures were much below normal first of week and above normal end of week. Extremes ranged from 50° below zero near Ladelle on 4th to 54° at Wood and near Porcupine on 7th. Brookings reported a record low for date of 26° below zero on 4th. No precipitation most areas but a few reports of light snow with precipitation totals of less than 0.10 inch. Snow cover end of week ranged from none in southwest to about 1 foot in portions of north-central and northeast. Livestock in good condition. Supplemental feeding necessary most areas due to cold weather and light to moderate snow cover. Feeding and caring for livestock are main farm activities. No abnormal diseases or death loss problem in livestock. Winter wheat and rye fields still have light to adequate snow cover.

TENNESSEE: Cloudy, mild, and rainy weather interrupted at midweek by strong surge of polar air which cleared skies and dropped temperatures to well below normal. Rainfall general over State most of week; heavier in east where 3.01 inches at Chattanooga. Farm activity consisted mostly of routine care of livestock. Pastures are still furnishing considerable forage. Small grains are in good to excellent condition over State.

TEXAS: Arctic air, coldest of the winter season, swept across Texas first of week accompanied by snow, sleet, and freezing rain. On the 5th, temperatures plunged to below zero in parts of Panhandle and Trans-Pecos, to 13° at San Antonio, 25° at Cotulla and 36° at McAllen. Temperatures climbed gradually thereafter with unseasonably warm weather at end of week. McAllen recorded maximum of 87° on 9th. First freeze of winter for much of State slowed cotton harvest on High and Low Plains. Freeze damaged wheat and oats southern half of State where vegetation was tender. Early-planted flax good progress but late-planted flax suffered heavy freeze damage. Percent harvested to date cotton 66 this year and 100 last year. In Lower Rio Grande Valley most vegetable crops escaped frost damage, however reports of light damage were noted. Laredo still has light supplies of cabbage, carrots and lettuce. In the Coastal Bend spring onions, spinach, broccoli, and cabbage are making good growth. In the Winter Garden-San Antonio area, freeze damage was wide-spread. However, the total effect has not yet been fully determined. Harvest activities resumed last part of week. Citrus is sizing well and should improve color after last week's cool temperatures.

UTAH: A few scattered areas light snow northwest early in period and over weekend. Accumulated amounts of moisture light in valleys but heavier mountains. Temperatures averaged well below normal. Coldest minimums of season January 4 some northern stations. Scofield 35° below zero, coldest report received. Care and feeding cattle and sheep on feedlots and valley farms, dairy cattle, and poultry flocks continue leading activities. Two turkey plants still processing in January. Sugar processing in full force. Sorting, grading, and marketing potatoes, dry onions, and apples from storage continue.

VIRGINIA: Temperatures mostly near normal except for below normal around the 6th. Rain at midweek and late Sunday. Topsoil moisture supply 75% adequate, remainder surplus. Plowing for spring crops, fertilizing, pruning fruit trees, and preparing tobacco plant beds advanced for date. Winter grains and grazing crops above normal growth and furnishing considerable feed for livestock. Livestock in good condition. Winter feed supply adequate.

WASHINGTON: Western Washington: Cool dry weather prevailed with several windy periods. First harvest of forced Victoria rhubarb about to begin and Christmas tree pruning time is near. Fieldwork continues slow with chores the main activity. Majority of the high country logging curtailed due to deep snow. Livestock in good shape and on winter feeding schedules. Eastern Washington: Cool, dry with several windy periods except cold in Okanogan area. Farm activities confined for most part to chores and livestock care. Some fertilizer being spread. Fruit tree pruning continuing as weather permits but cold temperatures



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caused split wood at pruning cuts. Ground cover
 and condition requiring full feeding of livestock.
 Some early calving has also been reported.

WEST VIRGINIA: Touch of winter came January 5
 with 3-inch snowfall statewide with up to 7 inches
 higher elevations. Steady rain January 9 washed
 away most of snow. Additional rain January 2, 4,
 and 7 gave weekly totals over 2.00 inches many
 areas. Temperatures unseasonably warm except
 for latter part of week. Farm activities at
 slow pace due to winter weather. Ground storage
 moisture adequate most areas due to recent rains.
 Livestock remain in good condition.

WISCONSIN: Mostly sunny during week. Lowest
 temperatures of season Tuesday and Wednesday morn-
 ings when readings of 30° below zero were recorded
 at several stations. Rapid warmup to above nor-
 mal levels at end of period. No precipitation of
 consequence. Some melting and settling of snow
 cover during sunny mild weather. Farm activities
 mainly care and feeding of livestock. Feed
 supplies ample.

WYOMING: Light to heavy snow early, followed by
 extreme cold Monday and Tuesday. Some roads in
 north and southwest blocked for 1 or 2 days.
 Temperatures moderated rapidly from mid-Tuesday.
 Sheridan reported the most moisture with 1.13
 inches. Temperatures averaged 3° to 10° below
 normal except near normal Wind River Drainage.
 Maxima mostly 30's to low 40's west of Divide
 and Upper Platte Drainage, high 30's to mid 50's
 elsewhere. Minima were mostly -20° to -45° west
 of Divide, -10° to -40° east. Temperature ex-
 tremes: 56° at Torrington and -46° at Big Piney.
 Weather caused stress to livestock, no unusual
 losses. Supplies of stockwater and feed are
 adequate.

Heating Degree Days (Base 65° F.)
 DECEMBER 1971

ALA. Birmingham . . .	320	MAINE, Caribou . . .	1648	OKLA. Okla. City . . .	702
Mobile . . .	156	Portland . . .	1164	Tulsa . . .	653
Montgomery . . .	421	MD. Baltimore . . .	652	OREG. Astoria . . .	728
ALASKA, Anchorage . .	1508	MASS. Boston . . .	882	Burns U.	1267
Barrow	—	Chatham	842	Medford	889
Fairbanks	2195	MICH. Alpena	1154	Portland	868
Juneau	1360	Detroit	977	Salem	784
Nome	1767	Flint	1005	PA. Allentown	877
ARIZ. Flagstaff	1310	Grand Rapids	1016	Scranton	895
Phoenix	455	Houghton Lake	1197	Eric	760
Tucson	548	Lansing	1016	Harrisburg	719
Winslow	1068	Marquette U.	1218	Philadelphia	807
Yuma	415	S. Ste. Marie	1324	Pittsburgh	851
ARK. Fort Smith	572	MINN. Duluth	1552	Scranton	951
Little Rock	466	Internatl Falls	1745	R. I. Providence	922
CALIF. Bakersfield . . .	597	Minneapolis	1438	S. C. Charleston	220
Bureka U.	612	Rochester	1387	Columbia	292
Fresno	678	St. Cloud	1528	Greenville	449
Los Angeles U.	369	MISS. Jackson	235	S. DAK. Aberdeen	1486
Red Bluff	689	Meridian	244	Huron	1284
Sacramento	326	Vicksburg U.	755	Knockville	1470
San Diego	579	MO. Columbia	755	TENN. Chattanooga	478
San Francisco	1019	Kansas City	863	Knoxville	449
COLO. Denver	1204	St. Louis	751	Memphis	435
Grand Junction	972	Springfield	693	Portland	492
Pueblo	813	MONT. Billings	1401	Amarillo	844
CONN. Bridgeport	992	Glasgow	1680	Austin	273
Hartford	992	Great Falls	1456	Beaumont	194
D. C. Washington	597	Havre	1781	Corpus Christi	67
FLA. Apalachicola	106	Helena	1525	Dallas	384
Ft. Myers	92	Kalispell	1440	Del Rio	624
Jacksonville	0	Miles City	1637	El Paso	389
Key West	0	Missoula	1352	Fort Worth	656
Lakeland U.	0	NEBR. Grand Island	1083	Galveston U.	131
Miami	0	Lincoln	1042	Houston	194
Orlando	9	Norfolk	1257	Lubbock	656
Pensacola U.	134	North Platte	1157	Midland	528
Tallahassee	13	Omaha	1162	San Antonio	450
GA. Atlanta	390	Valentine	1251	Victoria	152
Augusta	301	NEV. Ely	1422	Waco	360
Macon	288	Las Vegas	724	Wichita Falls	578
Savannah	187	Reno	1183	UTAH, Blanding R.	—
IDAHO, Boise	1069	Winemucca	1253	Salt Lake City	1176
Lewiston	949	N. H. Concord	1185	VT. Burlington	1254
Pocatello	1309	N. J. Atlantic City	734	VA. Lynchburg	390
ILL. Cairo U.	873	Tranton U.	1022	Norfolk	546
Chicago	572	N. MEX. Albuquerque	743	Richmond	526
Moline	1026	Roswell	1082	Roanoke	603
Peoria	945	N. Y. Albany	1050	WASH. Colville	1324
Rockford	1051	Binghamton	971	Omak	880
Springfield	829	Buffalo	768	Quillayute	843
IND. Evansville	701	New York	1048	Seattle-Tacoma	1210
Port Wayne	894	Rochester	980	Spokane	842
Indianapolis	814	Syracuse	530	Walla Walla U.	1146
South Bend	951	N. C. Asheville	444	Yakima	692
IOWA, Burlington	1132	Charlotte	501	W. VA. Beckley	547
Des Moines	1150	Hatteras R.	277	Charleston	597
Dubuque	1150	Raleigh	456	Huntington	656
Sioux City	1252	Wilmington	276	Parkersburg U.	1282
KANS. Concordia	982	N. DAK. Bismarck	1672	Madison	1179
Dodge City	929	Fargo	1630	Milwaukee	1098
Goodland	927	Williston U.	1713	WYO. Casper	1268
Topeka	927	OHIO, Akron-Canton	899	Cheyenne	1107
Wichita	897	Cincinnati U.	727	Lander	1342
KY. Lexington	591	Cleveland	805	Sheridan	1501
Louisville	610	Columbus	828		
LA. Baton Rouge	142	Dayton	806		
Lake Charles	159	Toledo	966		
New Orleans	137	Youngstown	898		
Shreveport	304				

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