

WEEKLY WEATHER AND CROP BULLETIN

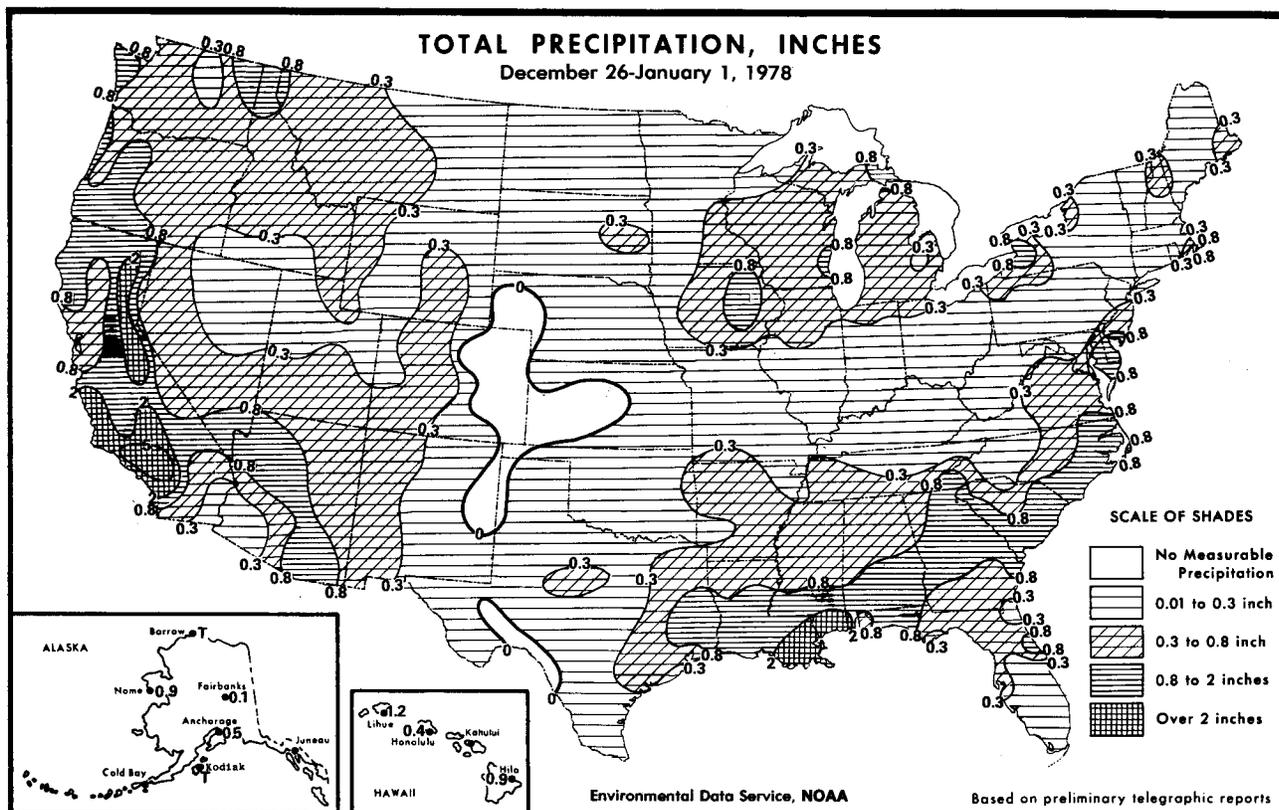
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National Weather Summary

December 26 - January 1

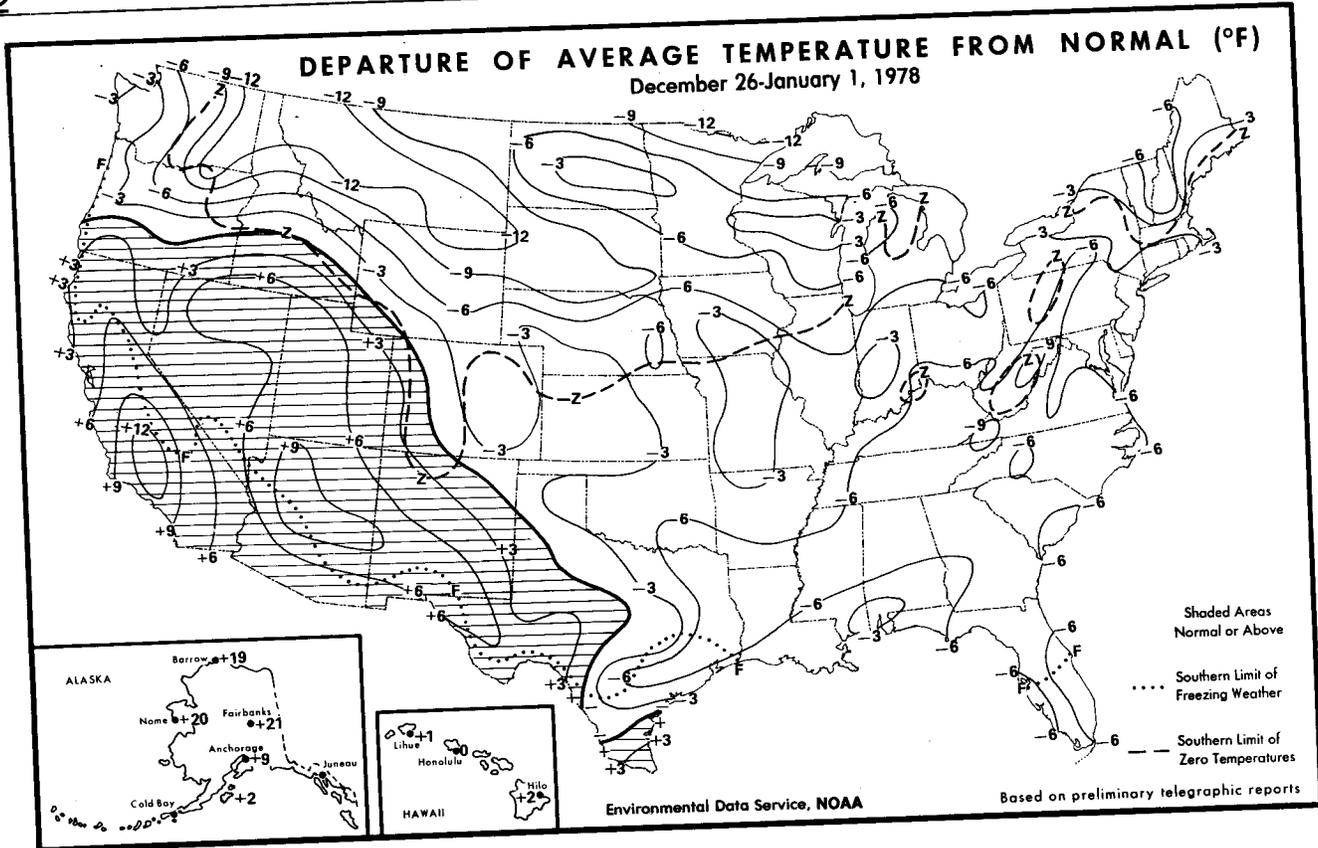
HIGHLIGHTS: A persistent low pressure system off the West Coast caused Pacific storms to move into the western U.S. Precipitation in varying amounts fell west of the Continental Divide and large snows were reported in the Sierra Nevada Mountains, an important water source for California. Most of the dry West Texas region received light measurements of moisture, but the western sections of Oklahoma and Kansas and eastern Colorado got little or none.

Freezing temperatures extended into Florida as far south as the Orlando area. A cold Canadian air mass pushed southward and enveloped most of the Pacific Northwest and the entire Nation from the Great Plains to the Atlantic Coast. A large portion of the Southwest (California, Nevada, and Utah) had above-normal readings. Averages were as much as 12-14° higher than expected for this time of year in the Los Angeles/Bakersfield sections.

It rained in most of California all day Monday; Los Angeles recorded more than one inch. The precipitation reached across the Golden State to Arizona and southern Nevada. Snow fell in the central sections of the Rockies and Appalachians as well as northern Michigan and western New York State.

Temperatures dipped to the 30's along the Gulf Coast from Texas to northern Florida. Record-breaking low readings for the day included 1° at South Bend, Ind., and 2° at Cincinnati; Shreveport, La., tied its 1879 mark of 18°.

The welcome rain continued to fall in the Southwest on Tuesday, especially in California. Since the rain began the Los Angeles basin had received up to 2 inches. The benefits were two-fold--replenishing the depleted water supply and cutting the fire hazard. Snow fell from the Great Lakes eastward; Sault Ste. Marie, Mich., set a record 9.9 inches of snow in a 24-hour span.



Rain kept falling over the West Coast on Wednesday and extended into Arizona and Nevada. Totals for the week showed more than 5 inches at Pasadena and San Gabriel and nearly 4 inches at Los Angeles. Rain became heavy in Las Vegas triggering localized flooding. Later in the day parts of Washington reported rain; Quillayute measured nearly an inch. Other rain counts showed more than one-half inch at Tucson, Ariz., and College Station, Texas. Snow continued over the Great Lakes and Midwest.

The Nation was frigid east of the Mississippi River. Huntsville, Ala., was chilled by a record-setting 18° while more than a half dozen Florida stations set new marks including Orlando's 31° and Tallahassee's 22°.

A Pacific front moved over the upper West Coast Thursday all the way to the Rockies; rain fell to the west and snow and freezing rain gripped an area from eastern Washington to Montana. Rain again was falling in California but lessening. Rain dampened the eastern two-thirds of Texas and Oklahoma, and soaked the lower Mississippi Valley and edged to the Florida Panhandle. New Orleans was drenched by nearly an inch and one-quarter and Biloxi, Miss., more than an inch and one-half. Light snow dusted a section from northern Michigan to upper New England.

Temperatures again dipped sharply east of the Mississippi; record breakers went into the books from New Jersey to Florida. Tallahassee did itself one better by noting 21°. In North Carolina, Greensboro and Raleigh shivered at 13°. On the Jersey shore, Atlantic City's reading plunged to 8°, well below the former record of 15°.

Two systems dominated Friday's weather. A low pressure center tracked southeastward from Idaho carrying heavy snow and followed by frigid temperatures. Several inches of snow fell in Idaho and Montana as the storm moved toward the Plains. Meantime another low pressure system over Mississippi marched northeastward dumping a variety of precipitation from the South to the middle Atlantic States. Some points in the Carolinas reported one to two inches of rain.

Snow and bitter cold raced into the Plains and Midwest on Saturday. Below zero readings and several inches of snow made for a wintry New Year's Eve from the Dakotas to Michigan and Indiana.

Rain persisted from the Gulf Coast to the northern Atlantic Coast including thunderstorms over the Deep South and Florida.

Sunday dawned with snow in the upper Mississippi Valley and Great Lakes. The mass of cold air covered an area from the Northwest eastward to the Lakes and southward to Texas and Louisiana; it was -11° at Spokane and -36° at stations in Wyoming.

Low pressure over New York set off snow in the Northeast; 3 inches fell on Albany and Philadelphia as the storm edged into New England.

Other precipitation included rain over Florida and the northern half of California into southern Oregon. Snow fell in Oregon's interior and over northwestern Nevada. Snow and freezing rain bore down on Texas from Lubbock to San Antonio.

It was a damp year for Erie, Pa., and Buffalo. Erie notched its wettest year ever, 61.70 in., breaking the 1878 mark of 55.04 in. Buffalo weathered its second highest total since records began in 1871 adding up 53.55 in. of precipitation.

National Agricultural Summary

December 26 - January 1

HIGHLIGHTS: Subnormal temperatures kept fields frozen allowing farmers to plod through some of the last few standing acres of corn, soybeans, and sorghum. Cotton harvest was almost complete in all States except 95% finished in both Alabama and Oklahoma. Winter wheat rated fair to good; low temperatures put the crop in a near-dormant state. Dry soils plagued winter wheat in the southern Great Plains. Only extreme southern pastures supplied roughage to livestock and these grasslands rated only fair. Rains hit California drenching grasslands and replenishing stock ponds. Near-freezing temperatures did not damage the Florida citrus crops.

SMALL GRAINS: Winter wheat rated fair to good in most of the major production areas. Low temperatures put the crop in a near-dormant condition. Snow covered most of the northern Great Plains crop from Nebraska through the Dakotas and Montana. Low precipitation and winds kept southern Great Plains soils dry and winter wheat in a moisture-stressed condition. Snow blanketed some Pacific Northwest wheat.

In Kansas low temperatures and over-grazing pushed wheat condition down. Light winds caused only limited blowing damage. Kansas cattle grazed on 20% of the acreage compared with 5% last year when dry soils limited growth, and the 15% average. Oklahoma's wheat rated fair to good with 40% of the acreage able to provide roughage to cattle. Texas wheat grew slowly which limited grazing in most areas. Irrigated stands rated fair but dryland fields showed stress. Moisture supplies were seriously depleted in most areas. Some insignificant greenbug damage was reported. Colorado's winter wheat rated good except poor to fair in the southeast. Grazing was only fair. New Mexico's dryland stands rated fair; irrigated fair to good. In Montana snow cover was fair to good resulting in only light wind damage. Snow also covered Washington's wheat. Oregon wheat rated fair; farmers sprayed for pest control. California's recent wet, mild weather encouraged good growth but also halted additional plantings.

COTTON: Only a few States had cotton to be picked. Farmers in the southeastern States almost finished. In the Delta picking was virtually complete except Alabama at 95%. Oklahoma cotton picking reached 95% complete with gins running at capacity in some areas. Texas cotton picking was almost complete except a few Low Plains and Trans-Pecos fields. Gins operated on field-stored seed cotton on the Highland Low Plains and the Trans-Pecos. Farmers prepared seedbeds for the 1978 crop ahead of schedule in central areas. New Mexico and Arizona cotton harvests were almost finished. Rains halted California cotton plowdown.

OTHER CROPS: Farmers harvested some corn, soybeans, and sorghum throughout most areas of the Nation lacking snow cover. Soils froze enough to support equipment in northern areas including New Jersey, Ohio, Indiana, and Michigan. Missouri growers advanced soybean harvest to 95%, corn to 93%, and grain sorghum to 96%. Growers also harvested row crops in Maryland and Virginia. North Carolina's soybean harvest reached 88%, short of the 92% average. South Carolina and Georgia growers finished grain harvests. Mississippi soybean combining attained 96%, equal the average but short of 1976's 99%. Arkansas growers had some soybeans to harvest. Oklahoma soybean harvest reached 96% and grain sorghum 99%.

FRUITS AND NUTS: Fruit growers conducted limited pruning activities in deciduous orchards. Pecan picking advanced to completion with Texas standing at 98%, Mississippi 96%, and nearly finished in Georgia and New Mexico.

Florida citrus grove condition rated excellent; very little, if any, significant damage resulted from the near-freezing temperatures. Moisture was adequate to surplus; the rain and low temperatures slowed harvest. The Texas citrus harvest continued with some Valencias moving to market. California rains slowed citrus harvest but increased sizing.

VEGETABLES: Low temperatures in Florida and the holiday season combined to slow vegetable harvests. Shipments dropped 25% from a week earlier. Most crops rated good although cold winds and frost lightly damaged tender crops. Pepper and radish shipments increased; carrots, celery, and chinese cabbage held steady; other crop shipments declined. Florida strawberry harvest made good progress. Watermelon seeding advanced. Texas growers harvested bell peppers, carrots, broccoli, cabbage, spinach, and cauliflower. California rains slowed harvests of broccoli, cauliflower, celery, carrots, and lettuce. Market tomato harvest was slowing.

PASTURE AND LIVESTOCK: All but southern pastures were dormant. Florida cold lowered condition of pastures; permanent grazing land rated poor to fair. Oklahoma native pastures rated fair to good but stock ponds were low. Texas ranchers maintained livestock condition by feeding hay and mineral supplements. Both ranges and grain fields provided very little grazing. Producers culled herds to reduce overgrazing and conserve low feed supplies. California rains replenished stock water. Mild weather boosted grass growth but supplemental feeding was necessary.

Calving and lambing was active in the southern half of the Nation. Newborn mortality generally was low.

Temperature and Precipitation Data for the Week Ending Midnight, Lst., January 1, 1978

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 . . .	36	- 8	.4	- .8	LA. Baton Rouge . . .	46	- 5	1.4	+ .3	Youngstown . . .	22	- 4	.3	- .3
Mobile . . .	49	- 2	1.7	+ .4	Lake Charles . . .	47	- 6	1.3	+ .1	OKLA. Okla. City . . .	33	- 4	.1	- .2
Montgomery . . .	42	- 5	1.0	- .1	New Orleans . . .	48	- 5	2.6	+ 1.5	Tulsa . . .	32	- 5	.1	- .3
ALASKA. Anchorage . . .	20	+ 9	.5	+ .3	Shreveport . . .	39	- 8	.5	- .5	OREG. Astoria . . .	40	- 1	.8	- 1.5
Barrow . . .	5	+19	T	- .1	MAINE. Caribou . . .	7	- 5	.2	- .3	Burns . . .	26	0	.4	0
Fairbanks . . .	8	+21	.1	0	Portland . . .	22	0	T	- .8	Medford . . .	40	+4	.9	+ .1
Juneau . . .	-1	+ 2	T	- 1.1	MD. Baltimore . . .	28	- 5	.2	- .5	Pendleton . . .	19	-14	.5	+ .9
Kodiak . . .	31	+ 2	T	- .8	MASS. Boston . . .	29	- 2	T	- .9	Portland . . .	35	- 4	.5	- .9
Nome . . .	24	+20	.9	+ .8	Chatham . . .	29	- 1	1.2	- .1	Salem . . .	37	- 2	.5	- 1.1
ARIZ. Flagstaff . . .	37	+ 9	1.0	+ .5	MICH. Alpena . . .	13	- 7	.5	+ .1	PA. Allentown . . .	23	- 5	.5	- .1
Phoenix . . .	60	+ 9	.5	+ .3	Detroit . . .	20	- 6	.4	- .1	Erie . . .	21	- 5	.1	- .5
Tucson . . .	55	+ 4	1.1	+ .9	Flint . . .	17	- 7	.3	- .1	Harrisburg . . .	26	- 7	.3	- .4
Winslow . . .	41	+ 9	.1	0	Grand Rapids . . .	18	- 6	.4	0	Philadelphia . . .	24	- 4	.2	- .4
Yuma . . .	59	+ 4	.2	+ .1	Houghton Lake . . .	13	- 6	.3	- .1	Pittsburgh . . .	23	- 3	T	- .5
ARK. Fort Smith . . .	35	- 4	.4	- .2	Lansing . . .	16	- 8	.4	0	Scranton . . .	25	- 4	.1	- .7
Little Rock . . .	36	- 4	.3	- .6	Marquette . . .	12	- 8	.3	+ .1	R.I. Providence . . .	43	- 5	1.4	+ .7
CALIF. Bakersfield . . .	60	+14	1.2	+ 1.0	Muskegon . . .	19	- 7	.8	+ .3	S.C. Charleston . . .	36	- 9	.8	0
Eureka . . .	51	+ 3	1.5	+ .6	S. Ste. Marie . . .	8	- 8	1.0	+ .5	Columbia . . .	34	- 8	.6	- .3
Fresno . . .	55	+11	1.2	+ 3.0	MINN. Duluth . . .	3	- 7	T	- .3	Greenville . . .	4	- 8	.2	+ .1
Los Angeles . . .	69	+ 5	.6	- .4	Internatl Falls . . .	- 8	-12	T	- .2	S.D. Aberdeen . . .	7	- 8	.3	+ .2
Red Bluff . . .	54	+ 8	.7	+ .3	Minneapolis . . .	11	- 3	.3	+ .1	Huron . . .	13	-11	.1	0
Tucson . . .	51	+ 3	.7	- .3	Rochester . . .	9	- 6	.5	+ .3	Rapid City . . .	7	- 9	.2	+ .1
San Diego . . .	64	+ 8	.7	+ .3	St. Cloud . . .	6	- 5	.2	- .0	Sioux Falls . . .	7	- 9	.2	+ .1
San Francisco . . .	52	+ 8	.9	+ .3	MISS. Jackson . . .	41	- 6	.7	- .4	TENN. Chattanooga . . .	32	- 8	.7	- .5
Stockton . . .	27	+ 4	T	- .1	Meridian . . .	41	- 6	.6	- .6	Knoxville . . .	32	- 8	.2	- .9
COLO. Denver . . .	31	+ 4	.2	+ .1	MO. Columbia . . .	29	- 1	T	- .4	Memphis . . .	36	- 5	.3	- .8
Grand Junction . . .	27	+ 4	0	- .1	Kansas City . . .	25	- 4	T	- .4	Nashville . . .	31	- 8	.1	- 1.0
Pueblo . . .	26	- 5	.2	- .5	St. Louis . . .	28	- 4	T	- .4	TEX. Abilene . . .	44	- 0	.3	+ .1
CONN. Bridgeport . . .	22	- 3	.1	- .7	Springfield . . .	31	- 2	.1	- .4	Amarillo . . .	33	- 3	.2	+ .1
Hartford . . .	31	+ 4	.3	- .3	MONT. Billings . . .	13	-11	.3	+ .2	Austin . . .	48	- 2	.1	- .3
D.C. Washington . . .	31	+ 4	.3	- .3	Glasgow . . .	4	-14	.6	+ .4	Beaumont . . .	48	- 4	.9	- .1
FLA. Apalachicola . . .	48	- 6	.3	- .4	Great Falls . . .	6	- 8	.2	+ .1	Brownsville . . .	66	+ 5	.1	- .2
Daytona Beach . . .	52	- 6	1.0	+ .6	Havre . . .	6	-14	.4	+ .3	Corpus Christi . . .	59	+ 2	.1	- .2
Ft. Myers . . .	59	- 5	T	- .4	Helena . . .	6	- 8	.2	+ .1	Dallas . . .	55	+ 4	T	- .1
Jacksonville . . .	47	- 7	.2	- .4	Kalispell . . .	7	-14	.6	+ .2	Del Rio . . .	49	+ 6	.3	+ .2
Key West . . .	64	- 7	.1	- .2	Miles City . . .	6	-12	.2	+ .1	El Paso . . .	41	- 5	.3	- .1
Lakeland . . .	55	- 6	.1	- .4	Missoula . . .	12	-10	.3	0	Fort Worth . . .	41	- 5	.3	- .1
Miami . . .	64	- 3	.1	- .3	NEBR. Grand Island . . .	21	- 3	.2	+ .1	Galveston . . .	51	- 4	.8	- .5
Orlando . . .	56	- 4	.2	- .3	Lincoln . . .	18	- 6	.2	+ .1	Houston . . .	46	+ 2	.1	0
Tallahassee . . .	45	- 7	.7	- .2	Norfolk . . .	16	- 4	.1	0	Lubbock . . .	41	+ 1	.3	+ .2
Tampa . . .	54	- 6	.3	- .2	N. Platte . . .	21	- 3	.2	+ .1	Midland . . .	45	+ 1	.3	+ .1
W. Palm Beach . . .	62	- 4	T	- .6	Omaha . . .	18	- 4	.2	+ .1	San Angelo . . .	49	+ 3	.3	+ .1
GA. Atlanta . . .	34	- 8	1.1	+ .1	Valentine . . .	11	-10	.2	+ .1	San Antonio . . .	45	- 6	.1	- .2
Augusta . . .	38	- 7	1.0	+ .2	NEV. Ely . . .	28	+ 4	.2	0	Victoria . . .	50	- 4	.5	+ .1
Macon . . .	41	- 6	1.2	+ .2	Las Vegas . . .	50	+ 6	1.0	+ .9	Waco . . .	48	0	.2	- .2
Savannah . . .	43	- 6	1.0	+ .2	Reno . . .	34	+ 3	.6	+ .3	Wichita Falls . . .	39	- 3	.1	- .2
HAWAII. Hilo . . .	73	+ 2	.9	- 2.0	Winnemucca . . .	35	+ 7	.2	0	UTAH. Blanding . . .	33	+ 5	.4	+ .1
Honolulu . . .	73	0	.4	- .6	N.H. Concord . . .	14	- 7	.1	- .5	Salt Lake City . . .	36	+ 8	.3	0
Kahului . . .	73	+ 1	1.2	- .3	N.J. Atlantic City . . .	26	- 7	.6	- .2	VT. Burlington . . .	15	- 4	.1	- .3
Lihue . . .	30	0	.4	+ .1	Trenton . . .	27	- 5	.4	- .3	VA. Lynchburg . . .	30	- 6	.5	- .2
IDAHO. Boise . . .	21	-11	.6	+ .3	N.MEX. Albuquerque . . .	39	+ 4	.3	+ .2	Norfolk . . .	30	- 7	.5	- .2
Lewiston . . .	27	+ 3	.3	+ .1	Roswell . . .	43	+ 5	T	- .1	Richmond . . .	29	- 7	.1	- .6
Pocatello . . .	32	- 5	T	- .8	N.Y. Albany . . .	20	- 2	.2	- .4	Roanoke . . .	13	-12	.9	+ .4
ILL. Cairo . . .	19	- 6	.3	- .1	Binghamton . . .	16	- 7	.2	- .4	WASH. Colville . . .	17	- 7	.1	- .3
Chicago . . .	17	- 6	.5	+ .1	Buffalo . . .	21	- 4	1.1	+ .5	Omak . . .	35	- 4	1.9	- 1.6
Moline . . .	19	- 6	.3	- .1	New York . . .	29	- 4	.3	- .4	Quillayute . . .	39	0	.5	- .8
Peoria . . .	19	- 6	.3	- .1	Rochester . . .	22	- 3	.2	- .3	Seattle-Tacoma . . .	35	- 8	.1	- .7
Rockford . . .	25	- 3	.2	- .2	Syracuse . . .	23	- 2	T	- .6	Spokane . . .	12	-14	.8	+ .2
Springfield . . .	29	- 4	.1	- .6	N.C. Asheville . . .	30	- 7	.3	- .5	Walla Walla . . .	22	-13	.5	0
IND. Evansville . . .	22	- 4	.3	- .2	Charlotte . . .	35	- 6	.3	- .5	Yakima . . .	22	- 6	.4	+ .1
Ft. Wayne . . .	27	- 1	.2	- .4	Greensboro . . .	31	- 7	.3	- .4	W.Va. Beckley . . .	23	- 8	.1	- .7
Indianapolis . . .	20	- 5	.5	- .1	Hatteras . . .	40	- 6	.8	- .4	Charleston . . .	28	- 6	.1	- .6
South Bend . . .	21	- 3	.3	- .1	Raleigh . . .	32	- 8	.4	- .3	Huntington . . .	28	- 7	.2	- .4
IOWA. Burlington . . .	18	- 3	.5	+ .2	Wilmington . . .	38	- 8	.9	+ .2	Parkersburg . . .	26	- 1	.4	+ .2
Des Moines . . .	12	- 7	.6	+ .2	N.DAK. Bismarck . . .	8	- 3	.1	0	WIS. Green Bay . . .	16	- 8	.5	+ .3
Dubuque . . .	16	- 4	.2	+ .1	Fargo . . .	7	- 1	T	- .1	La Crosse . . .	10	- 8	.4	+ .1
Sioux City . . .	24	- 3	T	- .1	Williston . . .	5	- 6	T	- .1	Madison . . .	13	- 5	.8	+ .4
KANS. Concordia . . .	30	- 1	T	- .1	OHIO. Akron-Canton . . .	21	- 6	.2	- .4	Milwaukee . . .	16	- 5	.8	+ .2
Dodge City . . .	25	- 3	T	- .1	Cincinnati . . .	22	- 9	.1	- .6	WYO. Casper . . .	23	- 4	T	- .1
Goodland . . .	25	- 4	T	- .3	Cleveland . . .	22	- 6	.2	- .4	Cheyenne . . .	16	- 4	.1	0
Topeka . . .	25	- 4	T	- .1	Columbus . . .	24	- 4	.1	- .5	Lander . . .	9	-14	.2	+ .1
Wichita . . .	30	- 2	.1	- .7	Dayton . . .	24	- 5	.1	- .5	Sheridan . . .	16	- 4	.1	0
KY. Lexington . . .	26	- 7	.1	- .7	Toledo . . .	20	- 5	.3	- .2	P.R. San Juan . . .	79	+ 3	.2	- .8
Louisville . . .	29	- 5	.1	- .7										

Based on 1941-70 normals

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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.

ALABAMA: Temperatures 6° below normal. Rainfall light to moderate.

Fieldwork: 2.7 days suitable. Soil moisture adequate to surplus. Cotton 95% harvested. Soybeans 93% harvested. Small grains good condition. Pastures, livestock fair condition.

ARIZONA: Rain 0.25 to over 1.00 in. Snow level 8,000 ft., 1 to 4 in. White Mountains. Temperatures 4 to 10° above normal.

Field operations standstill, due to rain. Cotton harvest virtually complete. Small grain planting delayed. Sugarbeets good top growth, taproot development. Alfalfa hay wet Yuma, conditions normal other areas. Harvest lettuce, cabbage, broccoli hampered by rain. Immature vegetables good progress. Citrus harvest hampered rains, wet groves. Range condition prospects improved. Higher elevations need more rain; snow improved soil moisture, stock water supplies. Livestock fair to good condition.

ARKANSAS: Precipitation averaged 0.33 in. Temperatures colder than normal. Means ranged from 9 to 4° below normal. Extremes: 57 and 8°.

Cotton harvest virtually complete. Small acreage of soybeans yet to harvest. Cattle on full feed with very little grazing available. Field preparation minimal due to wet conditions.

CALIFORNIA: Temperatures well above normal; as much as 10° south coast and San Joaquin Valley. Rainfall heavy over southern half; some areas with 4.00 to 5.00 in. Seasonal rainfall amounts close to normal; few currently ahead of normal.

Early planted small grain fields growing very well with mild wet weather. Grain planting, cotton plowdown halted by rains. Pruning slowed due to rain. Citrus harvest slowed due to rain. Rains benefited sizing of citrus crops. Wet weather slowed vegetable harvest; artichokes, broccoli, and cauliflower in light supply. Celery harvest active. Carrot and lettuce harvest slower. Winter potatoes continue. Market tomatoes light, nearing end. Rains caused runoff, replenishing water supplies. Supplemental feeding necessary. Mild weather boosting grass growth and keeping mortality low newborn calves, lambs.

COLORADO: Dry weather continued over east. 5 to 12 in. snow mountains and western valleys, 30th and 31st. Higher mountain passes received over 12 in. Very light amounts snow east on 31st. Temperatures near normal over eastern plains. Western slope temperatures above normal. Clouds kept nighttime readings relatively mild.

Winter wheat good condition except southeast fair to poor. Winter barley fair condition. Ranges and pastures spring grazing prospects fair. Hay and roughage supplies eastern plains average, west slope slightly below average. Soil moisture short to very short. Livestock condition good.

FLORIDA: Temperatures the coldest for the year averaging 8 to 11° below normal with frost as far south as everglades and Homestead area. Rainfall generally 0.10 to 0.50 in.

Soil moisture mostly adequate, a few central areas dry. Farm activity slow; few fields of cotton and soybeans remain to be harvested. Sugarcane good condition, harvest continues active. Small grains good to excellent condition. Cold

temperatures, scattered frost lowered pasture conditions. Permanent pastures mostly poor to fair. Supplemental feeding necessary. Cattle good condition. Calving increasing. Citrus grove condition excellent. Near freezing conditions, very little if any significant damage. Moisture adequate to surplus. Harvest slowed by cold and rain. Cold weather and holiday slowed vegetable harvest. Shipments dropped 25% from previous week. Most crops generally good condition. Cold winds, frost caused light to moderate burn to tender crops. Crops declining in supply are snap beans, cabbage, sweet corn, cucumbers, eggplant, escarole, lettuce, okra, squash, tomatoes. Crops holding steady are carrots, celery, chinese cabbage. Shipments peppers, radishes increased. Strawberry harvest underway, making good progress. Light potato digging underway. Seeding watermelon acreage underway.

GEORGIA: Temperatures 4 to 8° below normal. Normals 33° extreme northeast, 54° extreme south. Colder midweek, warmed last of week. Rainfall first of week and again on 30th; 0.50 to 1.25 in. Rain again over 31st and 1st.

Soil moisture mostly surplus. Corn harvest virtually complete. Cotton, soybeans and pecan harvest nearing completion. Small grains fair to good. Pastures, cattle fair condition. Tobacco bed preparation underway.

HAWAII: Weather favorable. Rains light.

Crops fair to good condition with irrigation. Pasture areas Kona, Kau, Kohala areas Hawaii Island dry. More moisture needed. Feed low, cattle on grain, molasses supplement. Water hauling to stock in open ranges necessary. Vegetable supplies: Chinese head cabbages, dasheen heavy. Others light to moderate. Bananas heavy. Papayas seasonal decline light. Pineapple harvesting light.

IDAHO: Temperatures 3 to 13° below normal north, 3 to 8° above normal elsewhere. Extremes: -21 and 48°. Precipitation ranged 0.76 to trace.

Farm activity tending livestock, marketing. Feed supplies generally adequate.

ILLINOIS: Temperatures 2 to 7° below normal. Precipitation near 0.75 in. extreme northwest, less than 0.10 in. south.

Winter wheat mostly good. Livestock doing well most areas. Soil moisture adequate to surplus.

INDIANA: Cool, sunny but snow north on weekend 6 to 12 in. near Lake Michigan. Temperatures 3 to 6° below normal and ranged from -3 to 47°.

Fairly good weather for harvesting remaining beans and corn. Fieldwork resumed on frozen soils. Activities: Completing corn and soybean harvest; hauling grain to elevators; spreading fertilizer, lime and manure; caring for livestock and usual chores.

IOWA: Cold with moderate to heavy snowfall. Snow fell mostly on 31st, heaviest central to northeast. Some ice reported in south. Snow cover varied from 2 to 4 in. in south and west to 7 to 10 in. northeast.

KANSAS: Precipitation traces to none over west, few hundredths east. Temperatures averaged 25 to

28° north, 32 to 34° south, 1° above normal east central and from 2 to 4° below normal over west and north central.

Colder temperatures and extensive grazing caused slight decline wheat condition. Winds not strong, some gusting, limited blowing. Precipitation confined east. Wheat pasture 20%, last year 5%, average 15%. Livestock continue grazing stubble fields, wheat. Feed supplies adequate. Farm activities: Repairing machinery, caring livestock.

KENTUCKY: Temperatures and precipitation below normal.

Farm activities limited to necessary chores. Small grains mostly in good condition. Pastures mostly dormant and supplemental feeding of livestock necessary.

LOUISIANA: Temperatures below normal. Extremes: 76 and 17°. Rain 29th.

Farm activities: Feeding and care of livestock.

MARYLAND & DELAWARE: Temperatures 7° below normal. Highs in mid-40's, lows in upper teens. Precipitation light, amounts from 0.25 to 0.50 in. Snow on 1st.

Soybeans being harvested where possible. Excellent weather for tobacco stripping. Livestock in good condition; some concern over hay supplies.

MICHIGAN: Temperatures ranged from 5 to 9° below normal with largest departures over central and northern thumb regions and most of Upper. Cold with maximum temperatures near 20° northern Upper to near 32° southern Lower. Minimum temperatures -16° western Upper, -7° northern Lower early in week. Precipitation reached nearly 1.00 in. Upper and 0.80 in. southwestern and northern Lower. Snow depths from 7 in. near Detroit to 24 in. at Pellston.

Farm activities: Feeding livestock and farm chores with some corn harvested.

MINNESOTA: Cold with heavy snow south third end of week. Temperatures 6° below normal, except 12° below normal extreme north. Extremes: 30 and -30°. Precipitation 0.20 in. below normal north third, almost 0.25 in. above normal south third. Amounts ranged from less than 0.10 in. north to 0.50 in. south. New snowfall totaled less than 1 in. north generally 5 to 8 in. across south. Snow depth 12 to 18 in. north central, around 12 in. southeast and 3 to 6 in. elsewhere.

MISSISSIPPI: Temperatures 10° below normal over central and northern sections to slightly lower than normal at coast. Extremes: 11 to 70°.

Soil moisture surplus to adequate. Fieldwork: 2.5 days suitable. Soybeans 96% harvested, 99% last year, 96% average. Pecans 96% harvested, 99% last year, 96% average. Winter wheat in good to fair condition. Oats in good to fair condition. Pasture and livestock in fair condition. Hay and roughage supplies adequate. Feed grain supplies short to adequate.

MISSOURI: Temperatures 3 to 5° below normal. Rainfall 0.50 in. northeast, 0.33 in. in Bootheel, less than 0.10 in. elsewhere.

Soybeans 95% harvested. Corn 93% harvested. Grain sorghum 96% harvested. Winter wheat condition mostly fair to good. Supply of hay and other roughages mostly adequate. Losses of cattle and hogs due to unfavorable weather normal. General condition of livestock mostly good. Topsoil moisture supply mostly adequate to surplus.

MONTANA: Cold with frequent snow by end of period. Temperatures near normal at first but dropping, becoming very cold by end of week. Readings 3° below normal. Precipitation near normal northeast, above normal elsewhere, with most precipitation falling in central and northwest sections.

Winter wheat condition and snow cover fair to good; wind damage light. Livestock condition fair to good, most on supplemental feed. Hay supplies for winter feeding season short many areas.

NEBRASKA: Precipitation over central and east. Temperatures 5° below normal.

Continued lack of snow cover allowed more grazing of stalk fields.

NEVADA: Mild, wet weather continued. Storm brought more precipitation. Temperatures several degrees above normal. Extremes: -10 and 64°.

Supplemental feeding requirements increased by inclement weather.

NEW ENGLAND: Colder air prevailed most of week. Extremes: -11 and 45°. Precipitation generally light and very spotty.

NEW JERSEY: Temperatures 9° below normal; 21° north, 25° south and 27° coastal areas. Extremes: 4 and 50°. Precipitation above normal in coastal areas, light elsewhere; 0.18 in. north, 0.48 in. south and 0.72 in. coastal sections. 1 to 2 in. snow 1st.

Freezing temperatures halted most outside farm-work but some additional field corn and soybeans harvested. Routine chores on livestock farms continue.

NEW MEXICO: Extensive and persistent cloudiness. Rain and mountain snows most of west and south at midweek and again south 1st. Precipitation mostly light.

Surface and subsoil moisture continues short to very short in most areas. Clean-up operations on cotton and pecans continued. Irrigated winter wheat, fair to good condition. Dryland winter wheat, fair condition with very limited grazing. Livestock good; ranges fair.

NEW YORK: Temperatures below normal, many sub-zero lows. Heavy snow squalls east of Great Lakes; 3 in. in many areas. Light precipitation elsewhere. Snow cover mostly light.

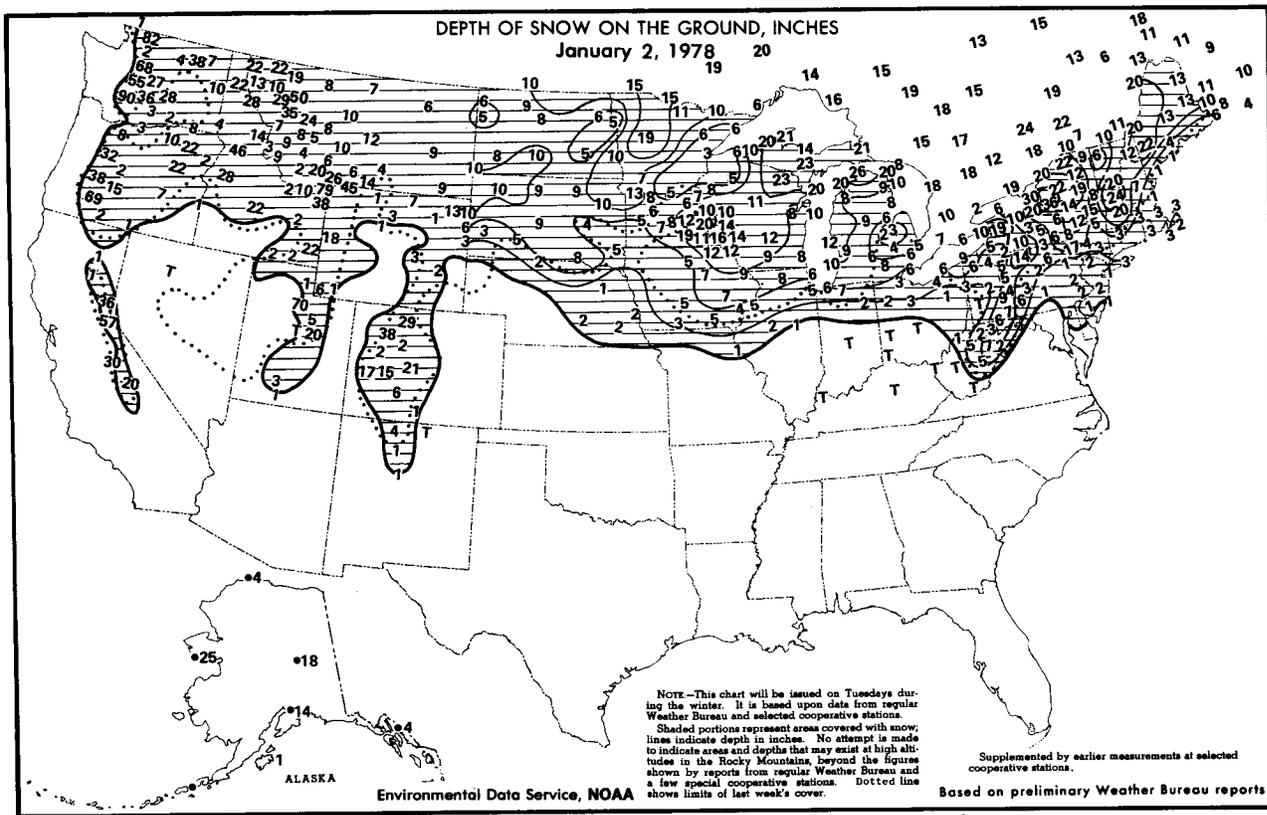
NORTH CAROLINA: Temperatures 6° below normal. Precipitation light.

Fieldwork: 3.1 days suitable. Major activities: Soybean harvest; farm maintenance, livestock feeding. Soil moisture adequate to surplus. Condition small grains good; pastures fair to good. Harvested: Soybeans 88%, average 92%.

NORTH DAKOTA: Temperatures below normal. Precipitation light except southwest. Extremes: 31 and -22°. Most precipitation less than 0.10 in. but Bowman received 0.23 in.

Travel hazardous due to ice, snow drifts and blowing snow. Most farm activity related to winter conditions: Scooping snow, cleaning roads and caring for livestock. If severe winter weather continues there will be possibility of livestock feed shortages. Grain movement slow.

OHIO: Arctic air 26th to 28th. Warm, above normal temperatures 29th to 31st. Storm spread snow and much colder air 1st.



Limited corn and soybean harvest. Continued marketing and grading apples, potatoes and other tubers. Livestock requiring normal amount of care. Wheat and pastures dormant.

OKLAHOMA: Temperatures 7 to 2° below normal. Lows 10 to 15° most areas. Light precipitation ranging from 0.01 in. Panhandle to 0.32 in. southeast.

Topsoil moisture short, subsoil moisture short and declining. Wheat fair to good condition. Percent of acreage grazed 40%. Sorghum harvest incomplete in east but overall 99% complete. Soybean harvest now 96% complete. Cotton harvest 95% complete. Gins running at capacity in several areas. Native pastures and ranges rated good to fair but supplemental feeding required. Farm ponds low in south central and southwest. Livestock fair to good condition.

OREGON: Temperatures generally averaged 2 to 5° above normal except Columbia Gorge and north central areas where temperatures 3 to 8° below normal. Heavy rain along southern coast and southwestern valleys. East of Cascades precipitation ranged from 0.20 to 0.40 in. except south central area 1.29 to 1.14 in. Extremes: Low 60's, low 30's west; mid-40's, near zero east.

Soil moisture supply adequate. Fall grains fair. Farmers spraying fields. Onions and potatoes moving. Hay also moving. Feeding heavy; feed supplies locally good. Livestock in excellent shape.

PENNSYLVANIA: Fair and dry with some sunshine most days. Temperatures mostly in 0 to 35° range except weekend somewhat milder. Readings 5 to 10° below normal. Extremes: 45 and -16°. Precipitation mostly as snow 1st; 0.50 in. melted northwest

to 0.10 in. east central. Snowfall 2 in. except northwest where 6 to 8 in.

Farmers doing normal winter chores.

PUERTO RICO: Island rainfall 0.73 in. or 0.21 in. below normal. Temperatures about 78° on coasts and 72° interior. Extremes: 90 and 58°.

SOUTH CAROLINA: Colder than normal with highest temperatures first half in 60's; 12° midweek. Last half cloudy with normal rainfall.

Pruning peaches, apple trees and grape vines. Winding up cotton, soybean harvest.

SOUTH DAKOTA: Temperatures 6 to 12° below normal. Extremes: -19 and 44°. Most precipitation late week and generally less than 0.25 in. Central through southeast received 0.25 to 0.43 in. Most areas received some snow, heaviest northeast.

TENNESSEE: Cold temperatures and light showers. Temperatures ranged from the mid-30's to the mid-20's; several degrees below normal. Rainfall less than 0.50 in.; much less than normal.

Farm activities: Care and feeding livestock, cutting wood, fencing, selling tobacco.

TEXAS: Cloudy skies, fog, drizzle. Cold front 31st and 1st brought colder temperatures and snow. Temperatures 4 to 7° above normal Edwards Plateau, Blacklands, Upper Coast, Lower Valley, near normal elsewhere. Rainfall normal East Texas, Upper Coast, below normal elsewhere.

Wheat, oats slow growth due cooler temperatures, short moisture. Limited grazing available, more moisture needed to maintain present grazing levels. Cotton harvest complete except few fields Low Plains, Trans-Pecos areas. Gins operate on field-

stored seed cotton, High, Low Plains, Trans-Pecos areas. Seedbed preparation 1978 crop are ahead schedule central, southern areas. Wheat slow growth, limited grazing most areas. Irrigated stands fair growth, dryland stands showing moisture stress. Moisture supplies seriously depleted most areas; greenbug damage reported, but not serious. Oats generally good growth East Texas, Upper Gulf Coast, south central. Grazing fair, but moisture needed to maintain growth rates. Cotton harvested 100%, 97% 1976, 94% average. Pecans harvested 98%, 98% 1976, 94% average. Flax planted 100%, 64% 1977, 100% average.

Lower Rio Grande Valley bell pepper harvest nearing completion. Carrot movement beginning to increase. Broccoli, cabbage harvest active. Potato planting underway. Citrus harvest continues; some Valencias moving to market. San Antonio-Winter Garden areas harvest of cabbage, carrots, spinach continues. Eagle Pass, broccoli, cauliflower, spinach harvest progressing. High Plains, land preparation continues. Pecan harvest nearing completion many areas.

Ranchers maintaining livestock condition feeding hay, mineral supplement. Range pasture poor; grain fields little grazing; dry weather. Lambing, calving active. Most areas few losses reported. Further herd culling necessary where grazing short, feed supplies low.

UTAH: Snow in mountains and rain and snow in valleys. Amounts generally light to moderate but locally heavy few isolated sections southwest. Temperatures 1 to 9° above normal.

Serious concern over lack of precipitation in east and south. Activities: Sorting, grading and marketing potatoes, onions and apples. Sugarbeet processing continues.

VIRGINIA: Rainfall 0.02 in. Temperatures 6° below normal, averaging in low 30's. Extremes: 63 and 3°.

Topsoil moisture adequate to surplus. Fieldwork: 2.7 days favorable. Winter grains and

grazing excellent. Many dairies buying most feed. Activities: Ending corn, soybean harvests; preparing tobacco for market; liming.

WASHINGTON: West: Temperatures 1 to 3° below normal. Precipitation varied from 0.60 to 2.20 in. below normal.

Very little farm activity. Low-lying farmland overly-saturated from recent flooding.

East: Temperatures 5 to 7° below normal except 12° below normal northeast. Precipitation near normal to 0.10 in. above.

Several inches snow providing cover for winter wheat. Very little orchard activity--some pruning. Minimal activity except feeding livestock and routine chores.

WEST VIRGINIA: Temperatures below normal except northeast was little above. Precipitation well below normal.

Soil moisture adequate. Fieldwork: 4.8 days suitable. Hay and grain supplies mostly adequate.

WISCONSIN: Very cold with sub-zero temperatures mornings of 26th to 28th. Moderate temperatures midweek with highs in 20's and reaching 30's southeast 31st. Light snow and flurries 28th to 30th. Heavy snow developed 31st and continues 1st. Central and south had 4 to 8 in., while north had 1 to 3 in. Temperatures dropped below zero on 1st after storm passed and skies cleared. Snow depths as of 30th averaged 6 in., but several inches added to snow cover on 31st. Frost depths about 3 in., slight increase from mid-December but less than half of normal.

WYOMING: Temperatures substantially above normal southwest and substantially below normal north and east. Precipitation spotty, near or above normal in north, elsewhere, near or less than normal.

Most livestock fed some supplemental feed. Hay supplies adequate most areas and livestock in good condition.

World Weather and Crop Update

December 26 - January 1

USSR. Temperatures moderated over the winter grain areas of European USSR. Fairly heavy precipitation fell over many areas--snow in the northern regions and rain in the south. The warmer temperatures and rain have practically eliminated any snow cover in the southern and eastern Ukraine, lower Volga Valley, and the North Caucasus, thus increasing, for the time being, the vulnerability of the dormant wheat plants to extreme temperature changes.

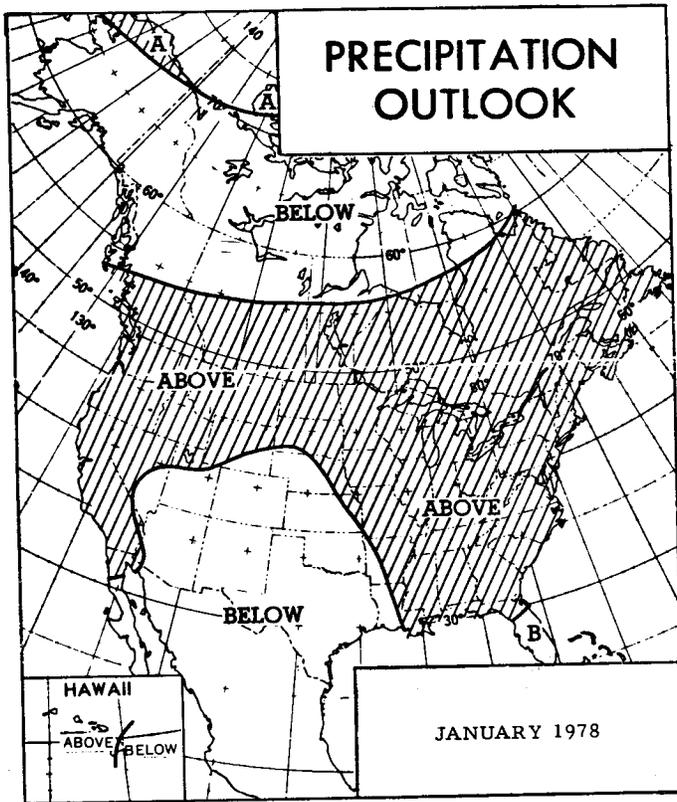
ASIA. The main grain areas in Australia were essentially dry as the wheat harvest neared completion. Although substantial rains in the previous week brought some relief to Queensland, crops and pastures in most areas needed moisture. Northeastern India received light to moderate rainfall, but it was dry elsewhere on the sub-continent. Heavy, unseasonable rains were widespread over the southern half of the People's Republic of China.

AFRICA. In South Africa, excellent rains have helped crops and pastures throughout the Orange Free State which has been suffering from a moisture deficiency. Almost daily rains have greatly

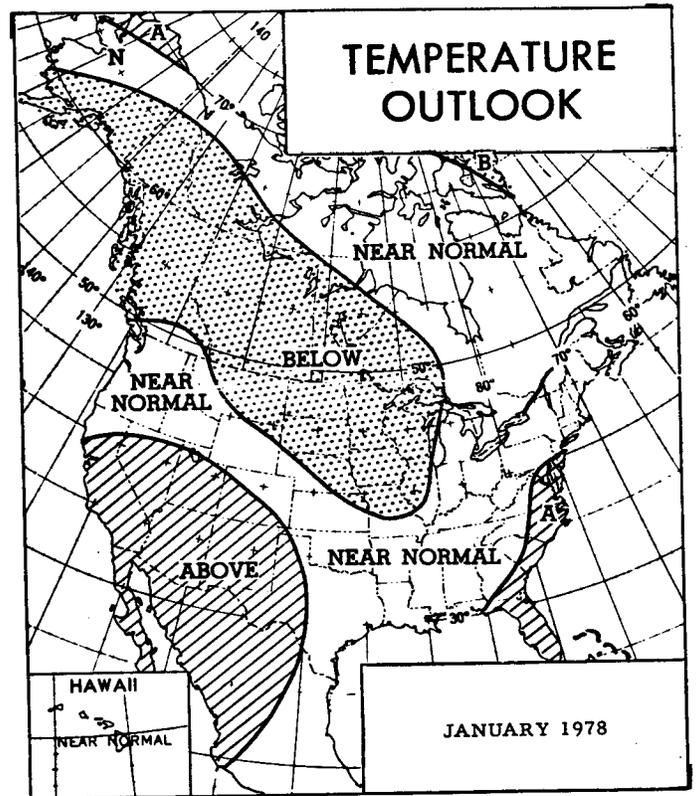
improved soil moisture in the Transvaal although excessive precipitation may have caused some local flooding. In North Africa, moderate to locally heavy rains were general in Morocco, but Algeria and Tunisia were without significant moisture. Central Africa is in the dry season with practically no significant rainfall recorded for this region.

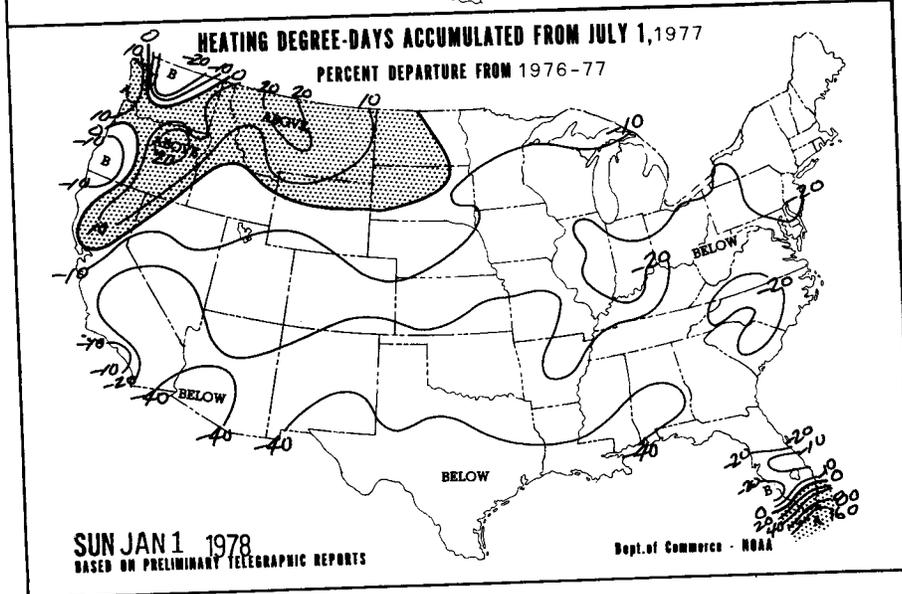
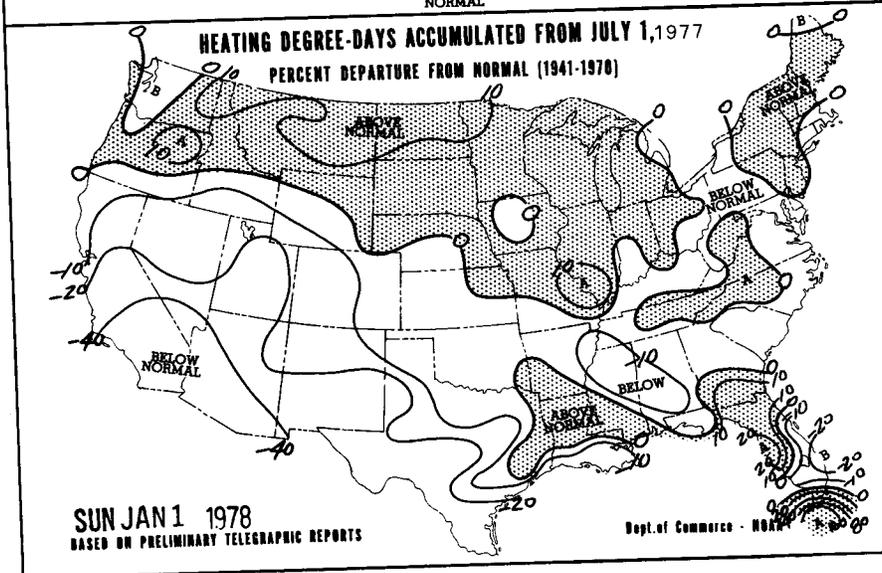
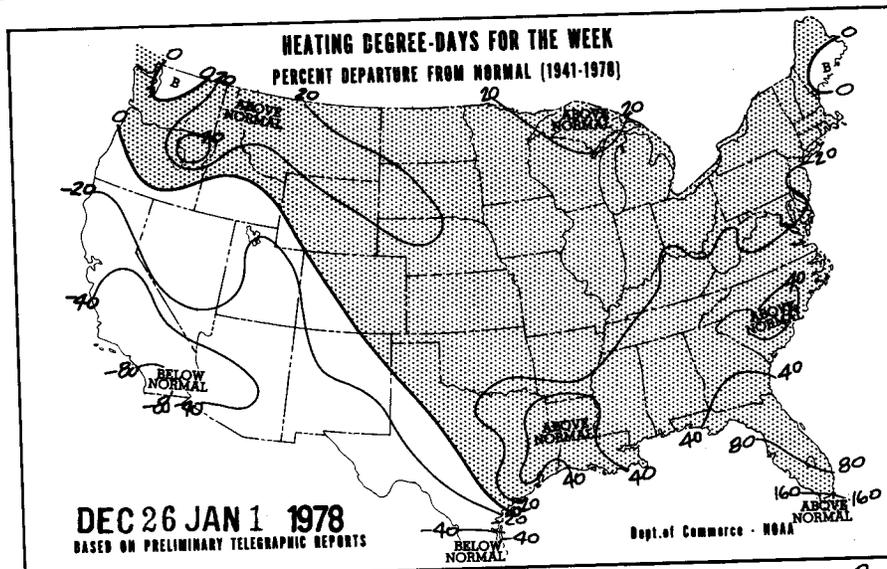
SOUTH AMERICA. Sunny, dry weather favored the wheat harvest in the central and southern grain areas of Argentina, but substantial rains occurred in the northern and western regions. Widespread rains fell throughout much of Brazil's main agricultural areas in the south and southeast, but rainfall was scattered and light in the northeast where more rain is needed.

EUROPE. Above-normal temperatures with frequent, but generally light, precipitation prevailed over most of western and eastern Europe. Winter grains in almost all areas were without snow cover at the end of December. Moderate to locally heavy showers fell over northern and central Spain. Light rain moistened much of Turkey's main wheat growing areas.



Average Monthly Weather Outlook





HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JAN. 1, 1978.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +									
	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77							
ALA. BIRMINGHAM.....	20	5	1139	39	46	464	MAINE. CARBOU.....	25	25	3693	74	718	OKLA. OKLAHOMA CITY.....	22	27	1350	19	55	450	
MOBILE.....	20	5	680	11	11	621	PORTLAND.....	25	31	2912	84	411	TULSA.....	22	27	1374	19	59	509	
MONTGOMERY.....	20	5	754	17	17	622	MD. BALTIMORE.....	25	31	1712	85	460	OREG. ASTORIA.....	22	27	1190	19	59	509	
ARIZ. FLAGSTAFF.....	18	71	216	75	52	212	MASS. BOSTON.....	25	11	1926	80	375	BURNS.....	22	27	1190	19	59	509	
PHOENIX.....	18	71	109	109	212	246	MICH. ALPENA.....	25	4	3163	74	494	MEDFORD.....	22	27	1190	19	59	509	
TUCSON.....	18	71	109	109	212	246	DETROIT.....	25	4	2211	221	378	PENDELTON.....	22	27	1190	19	59	509	
WINSTON.....	18	71	109	109	212	246	GRAND RAPIDS.....	25	4	2211	221	378	PORTLAND.....	22	27	1190	19	59	509	
YUMA.....	18	71	109	109	212	246	HOUGHTON LAKE.....	25	4	2211	221	378	SALEM.....	22	27	1190	19	59	509	
ARK. FORT SMITH.....	20	5	132	2	5	296	LANSING.....	25	4	1400	14	14	PA. ALLENTOWN.....	22	27	1190	19	59	509	
LITTLE ROCK.....	20	5	409	1	5	231	MARGUETTE.....	25	4	1400	14	14	HARRISBURG.....	22	27	1190	19	59	509	
CALIF. BAKERSFIELD.....	20	5	1037	11	11	11	MUSKOGON.....	25	4	1400	14	14	PHILADELPHIA.....	22	27	1190	19	59	509	
EUREKA.....	20	5	1037	11	11	11	S. STE. MARIE.....	25	4	1400	14	14	SCRANTON.....	22	27	1190	19	59	509	
FRESNO.....	20	5	1037	11	11	11	MINN. DULUTH.....	25	4	1400	14	14	TEMPERANCE.....	22	27	1190	19	59	509	
LOS ANGELES.....	20	5	1037	11	11	11	INTERNATL FALLS.....	25	4	1400	14	14	TRINITY.....	22	27	1190	19	59	509	
RED BLUFF.....	20	5	1037	11	11	11	MINNEAPOLIS.....	25	4	1400	14	14	WILKES BARRE.....	22	27	1190	19	59	509	
SAN DIEGO.....	20	5	1037	11	11	11	ROCHESTER.....	25	4	1400	14	14	YONKONIA.....	22	27	1190	19	59	509	
SAN FRANCISCO.....	20	5	1037	11	11	11	ST. CLOUD.....	25	4	1400	14	14	MISS. JACKSON.....	22	27	1190	19	59	509	
STOCKTON.....	20	5	1037	11	11	11	MISS. MERIDIAN.....	22	27	1190	19	59	MO. COLUMBIA.....	22	27	1190	19	59	509	
COLO. DENVER.....	20	5	2110	26	26	479	KANSAS CITY.....	22	27	1190	19	59	KANSAS CITY.....	22	27	1190	19	59	509	
GRAND JUNCTION.....	20	5	1994	22	22	479	ST. LOUIS.....	22	27	1190	19	59	ST. LOUIS.....	22	27	1190	19	59	509	
PUEBLO.....	20	5	2035	23	23	479	SPRINGFIELD.....	22	27	1190	19	59	CONN. BRIDGEPORT.....	22	27	1190	19	59	509	
CONN. BRIDGEPORT.....	22	27	1190	19	59	509	MONT. BILLINGS.....	22	27	1190	19	59	HARTFORD.....	22	27	1190	19	59	509	
HARTFORD.....	22	27	1190	19	59	509	GLASGOW.....	22	27	1190	19	59	DEL. WILMINGTON.....	22	27	1190	19	59	509	
DEL. WILMINGTON.....	22	27	1190	19	59	509	GREAT FALLS.....	22	27	1190	19	59	D.C. WASHINGTON.....	22	27	1190	19	59	509	
D.C. WASHINGTON.....	22	27	1190	19	59	509	HAVRE.....	22	27	1190	19	59	FLA. APALACHICOLA.....	17	17	222	2	2	488	
FLA. APALACHICOLA.....	17	17	222	2	2	488	HELENA.....	22	27	1190	19	59	DAYTONA BEACH.....	17	17	222	2	2	488	
DAYTONA BEACH.....	17	17	222	2	2	488	KALISPELL.....	22	27	1190	19	59	FORT MYERS.....	17	17	222	2	2	488	
FORT MYERS.....	17	17	222	2	2	488	MILES CITY.....	22	27	1190	19	59	JACKSONVILLE.....	17	17	222	2	2	488	
JACKSONVILLE.....	17	17	222	2	2	488	MISSOULA.....	22	27	1190	19	59	KEY WEST.....	17	17	222	2	2	488	
KEY WEST.....	17	17	222	2	2	488	NEBR. GRAND ISLAND.....	22	27	1190	19	59	LAKELAND.....	17	17	222	2	2	488	
LAKELAND.....	17	17	222	2	2	488	LINCOLN.....	22	27	1190	19	59	MIAMI.....	17	17	222	2	2	488	
MIAMI.....	17	17	222	2	2	488	NORFOLK.....	22	27	1190	19	59	ORLANDO.....	17	17	222	2	2	488	
ORLANDO.....	17	17	222	2	2	488	NORTH PLATTE.....	22	27	1190	19	59	TALLAHASSEE.....	17	17	222	2	2	488	
TALLAHASSEE.....	17	17	222	2	2	488	OKAHA.....	22	27	1190	19	59	TAMPA.....	17	17	222	2	2	488	
TAMPA.....	17	17	222	2	2	488	VALENTINE.....	22	27	1190	19	59	WEST PALM BEACH.....	17	17	222	2	2	488	
WEST PALM BEACH.....	17	17	222	2	2	488	NEV. ELY.....	22	27	1190	19	59	GA. ATLANTA.....	21	21	323	3	3	368	
GA. ATLANTA.....	21	21	323	3	3	368	LAS VEGAS.....	22	27	1190	19	59	AUGUSTA.....	21	21	323	3	3	368	
AUGUSTA.....	21	21	323	3	3	368	WINNEMCCA.....	22	27	1190	19	59	Macon.....	21	21	323	3	3	368	
Macon.....	21	21	323	3	3	368	N.H. CONCORD.....	22	27	1190	19	59	SAVANNAH.....	21	21	323	3	3	368	
SAVANNAH.....	21	21	323	3	3	368	N.J. ATLANTIC CITY.....	22	27	1190	19	59	IDAHO. BOISE.....	23	23	154	15	15	172	
IDAHO. BOISE.....	23	23	154	15	15	172	TRENTON.....	22	27	1190	19	59	LEWISTON.....	23	23	154	15	15	172	
LEWISTON.....	23	23	154	15	15	172	ROSWELL.....	22	27	1190	19	59	POCATELLO.....	23	23	154	15	15	172	
POCATELLO.....	23	23	154	15	15	172	N.Y. ALBANY.....	22	27	1190	19	59	ILL. CAIRO.....	22	22	168	18	18	205	
ILL. CAIRO.....	22	22	168	18	18	205	BINGHAMTON.....	22	27	1190	19	59	CHICAGO.....	22	22	168	18	18	205	
CHICAGO.....	22	22	168	18	18	205	BUFFALO.....	22	27	1190	19	59	NOLINE.....	22	22	168	18	18	205	
NOLINE.....	22	22	168	18	18	205	NEW YORK.....	22	27	1190	19	59	PEORIA.....	22	22	168	18	18	205	
PEORIA.....	22	22	168	18	18	205	ROCHESTER.....	22	27	1190	19	59	ROCKFORD.....	22	22	168	18	18	205	
ROCKFORD.....	22	22	168	18	18	205	SYRACUSE.....	22	27	1190	19	59	SPRINGFIELD.....	22	22	168	18	18	205	
SPRINGFIELD.....	22	22	168	18	18	205	N.C. ASHEVILLE.....	22	27	1190	19	59	IND. EVANSVILLE.....	20	20	456	4	4	511	
IND. EVANSVILLE.....	20	20	456	4	4	511	CHARLOTTE.....	22	27	1190	19	59	FORT WAYNE.....	20	20	456	4	4	511	
FORT WAYNE.....	20	20	456	4	4	511	GREENSBORO.....	22	27	1190	19	59	INDIANAPOLIS.....	20	20	456	4	4	511	
INDIANAPOLIS.....	20	20	456	4	4	511	HATTERAS.....	22	27	1190	19	59	SOUTH BEND.....	20	20	456	4	4	511	
SOUTH BEND.....	20	20	456	4	4	511	WILLINGTON.....	22	27	1190	19	59	IOWA. BURLINGTON.....	20	20	456	4	4	511	
IOWA. BURLINGTON.....	20	20	456	4	4	511	N.DAK. BISHARCK.....	20	20	387	3	3	409	DES MOINES.....	20	20	456	4	4	511
DES MOINES.....	20	20	456	4	4	511	FARGO.....	20	20	387	3	3	409	DEQUETTE.....	20	20	456	4	4	511
DEQUETTE.....	20	20	456	4	4	511	HILLSTON.....	20	20	387	3	3	409	SIoux CITY.....	20	20	456	4	4	511
SIoux CITY.....	20	20	456	4	4	511	OHIO. ARRON-CANTON.....	20	20	387	3	3	409	KANS. CONCORDIA.....	20	20	456	4	4	511
KANS. CONCORDIA.....	20	20	456	4	4	511	CINCINNATI.....	20	20	387	3	3	409	BOGGE CITY.....	20	20	456	4	4	511
BOGGE CITY.....	20	20	456	4	4	511	CLEVELAND.....	20	20	387	3	3	409	GOOBLAND.....	20	20	456	4	4	511
GOOBLAND.....	20	20	456	4	4	511	COLUMBUS.....	20	20	387	3	3	409	TOPEKA.....	20	20	456	4	4	511
TOPEKA.....	20	20	456	4	4	511	DAYTON.....	20	20	387	3	3	409	RICHITA.....	20	20	456	4	4	511
RICHITA.....	20	20	456	4	4	511	TOLEDO.....	20	20	387	3	3	409	KY. LEXINGTON.....	20	20	456	4	4	511
KY. LEXINGTON.....	20	20	456	4	4	511	WASH. QUILLAYUTE.....	20	20	387	3	3	409	LOUISVILLE.....	20	20	456	4	4	511
LOUISVILLE.....	20	20	456	4	4	511	SEATTLE-TACOMA.....	20	20	387	3	3	409	LA. BATON ROUGE.....	20	20	456	4	4	511
LA. BATON ROUGE.....	20	20	456	4	4	511	SPOKANE.....	20	20	387	3	3	409	NEW ORLEANS.....	20	20	456	4	4	511
NEW ORLEANS.....	20	20	456	4	4	511	HALLA HALLA.....	20	20	387	3	3	409	SHREVEPORT.....	20	20	456	4	4	511



FIRST CLASS MAIL

COM 210

Heating Degree Days (Base 65° F.)

December 1977

ALA. Birmingham . . .	640	MAINE. Caribou . . .	1488	OKLA. Okla. City . . .	766
Mobile . . .	439	Portland . . .	1219	Tulsa . . .	801
Montgomery . . .	479	MD. Baltimore . . .	1219	OREG. Astoria . . .	646
ALASKA. Anchorage . . .	1659	MASS. Boston . . .	904	Burns U. . .	1020
Barrow . . .	2256	Chatham . . .	948	Medford . . .	694
Fairbanks . . .	2480	MICH. Alpena . . .	1317	Pendleton . . .	927
Juneau . . .	1423	Detroit . . .	1218	Portland . . .	707
Nome . . .	1746	Flint . . .	1210	Salem . . .	671
ARIZ. Flagstaff . . .	843	Grand Rapids . . .	1204	PA. Allentown . . .	1077
Phoenix . . .	155	Houghton Lake . . .	1347	R. I. Providence . . .	1131
Tucson . . .	242	Lansing . . .	1226	Harrisburg . . .	1029
Winslow . . .	716	Marquette U . . .	1328	Philadelphia . . .	998
Yuma . . .	142	S. Ste. Marie . . .	1396	Pittsburgh . . .	1043
ARK. Fort Smith . . .	773	MINN. Duluth . . .	1662	Scranton . . .	1090
Little Rock . . .	750	Internatl Falls . . .	1908	R. I. Providence . . .	1030
CALIF. Bakersfield . . .	240	Minneapolis . . .	1565	S. C. Charleston . . .	459
Eureka U . . .	427	Rochester . . .	1570	Columbia . . .	629
Fresno . . .	417	St. Cloud . . .	1674	Greenville . . .	681
Los Angeles U . . .	132	MISS. Jackson . . .	534	S. DAK. Aberdeen . . .	1669
Red Bluff . . .	462	Meridian . . .	517	Huron . . .	1530
Stockton . . .	451	Vicksburg U . . .	----	Rapid City . . .	1330
San Diego . . .	55	MO. Columbia . . .	1053	Sioux Falls . . .	1503
San Francisco . . .	385	Kansas City . . .	1094	TENN. Chattanooga . . .	753
COLO. Denver . . .	920	St. Louis . . .	1059	Knoxville . . .	764
Grand Junction . . .	975	Springfield . . .	906	Memphis . . .	813
Pueblo . . .	894	MONT. Billings . . .	1380	Nashville . . .	500
CONN. Bridgeport . . .	971	Glasgow . . .	1502	TEX. Abilene . . .	768
Hartford . . .	1141	Great Falls . . .	1640	Amarillo . . .	354
D. C. Washington . . .	829	Havre . . .	1368	Austin . . .	321
FLA. Apalachicola . . .	371	Helena . . .	1405	Beaumont . . .	100
Ft. Myers . . .	133	Kalispell . . .	1577	Brownsville . . .	160
Jacksonville . . .	366	Miles City . . .	1245	Corpus Christi . . .	----
Key West . . .	36	Missoula . . .	1185	Dallas . . .	294
Lakeland U . . .	199	NEBR. Grand Island . . .	1230	Del Rio . . .	472
Miami . . .	58	Lincoln . . .	1318	El Paso . . .	536
Orlando . . .	179	Norfolk . . .	1236	Fort Worth . . .	238
Daytona Beach . . .	241	North Platte . . .	1268	Galveston U . . .	365
Tallahassee . . .	433	Omaha . . .	1396	Houston . . .	611
Tampa . . .	222	Valentine . . .	1056	Lubbock . . .	478
GA. Atlanta . . .	701	NEV. Ely . . .	399	Midland . . .	390
Augusta . . .	598	Las Vegas . . .	821	San Angelo . . .	360
Macon . . .	554	Reno . . .	798	San Antonio . . .	281
Savannah . . .	457	Winnemucca . . .	1360	Victoria . . .	417
IDAHO. Boise . . .	852	N. H. Concord . . .	910	Waco . . .	645
Lewiston . . .	868	N. J. Atlantic City . . .	944	Wichita Falls . . .	898
Pocatello . . .	990	Trenton U . . .	757	UTAH. Milford . . .	835
ILL. Cairo U . . .	851	N. MEX. Albuquerque . . .	551	Salt Lake City . . .	1314
Chicago . . .	1242	Roswell . . .	1179	VT. Burlington . . .	887
Peoria . . .	1301	N. Y. Albany . . .	1246	VA. Lynchburg . . .	662
Rockford . . .	1393	Binghamton . . .	1146	Norfolk . . .	784
Springfield . . .	1172	Buffalo . . .	901	Richmond . . .	896
IND. Evansville . . .	970	New York . . .	1127	Roanoke . . .	1272
Fort Wayne . . .	1218	Rochester . . .	1162	WASH. Colville . . .	----
Indianapolis . . .	1104	Syracuse . . .	868	Omak . . .	767
South Bend . . .	1206	N. C. Asheville . . .	690	Quillayute . . .	701
IOWA. Burlington . . .	1281	Charlotte . . .	821	Seattle-Tacoma . . .	1197
Des Moines . . .	1289	Greensboro . . .	504	Spokane . . .	846
Dubuque . . .	1472	Hatteras R. . . .	768	Walla Walla U . . .	968
Sioux City . . .	1309	Raleigh . . .	537	Yakima . . .	997
KANS. Concordia . . .	1085	Wilmington . . .	1687	W. VA. Beckley . . .	919
Goodland . . .	903	N. DAK. Bismarck . . .	1817	Charleston . . .	919
Topeka . . .	1033	Fargo . . .	1759	Huntington . . .	984
Wichita . . .	1075	Williston U . . .	1130	Parkersburg U . . .	1454
KY. Lexington . . .	972	OHIO. Akron-Canton . . .	1118	WIS. Green Bay . . .	1404
Louisville . . .	935	Cincinnati U . . .	1103	Madison . . .	1302
LA. Baton Rouge . . .	387	Cleveland . . .	1081	Milwaukee . . .	1240
Lake Charles . . .	367	Columbus . . .	1108	WYO. Casper . . .	1108
New Orleans . . .	342	Dayton . . .	1241	Cheyenne . . .	1193
Shreveport . . .	549	Toledo . . .	1142	Lander . . .	----
		Youngstown . . .		Sheridan . . .	752

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