

WEEKLY WEATHER AND CROP BULLETIN

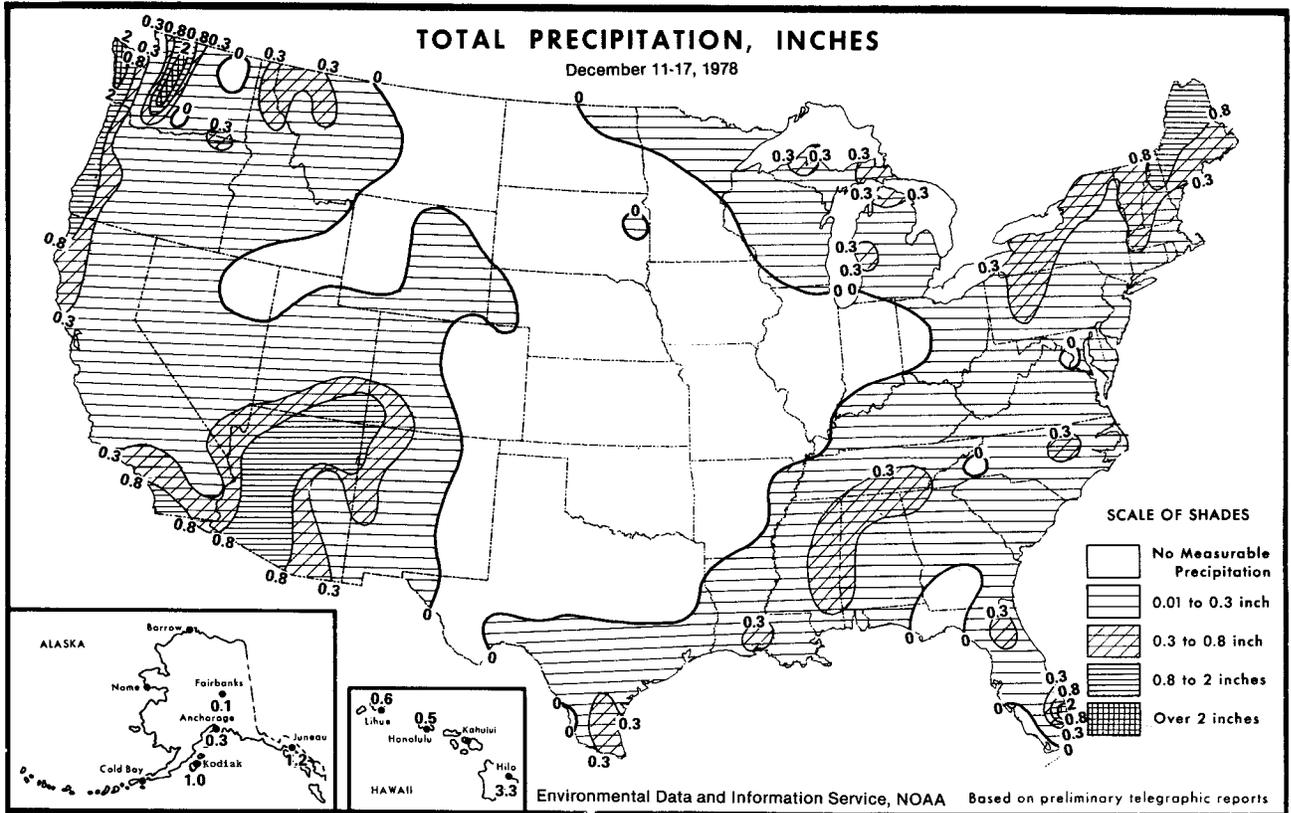
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National Weather Summary

December 11 - 17

HIGHLIGHTS: Moisture was scarce over much of the Nation. Only at the country's four corners did significant amounts fall. Heavy rain extended along the coast of the Pacific Northwest with moderate snows in the Columbia River Basin east of the Cascade Mountains. In the Southwest, rain and snow showers dumped about an inch of moisture. Northern Maine counted about 10 inches of snow. Southeastern Florida was soaked by heavy rains. Elsewhere little or no precipitation fell.

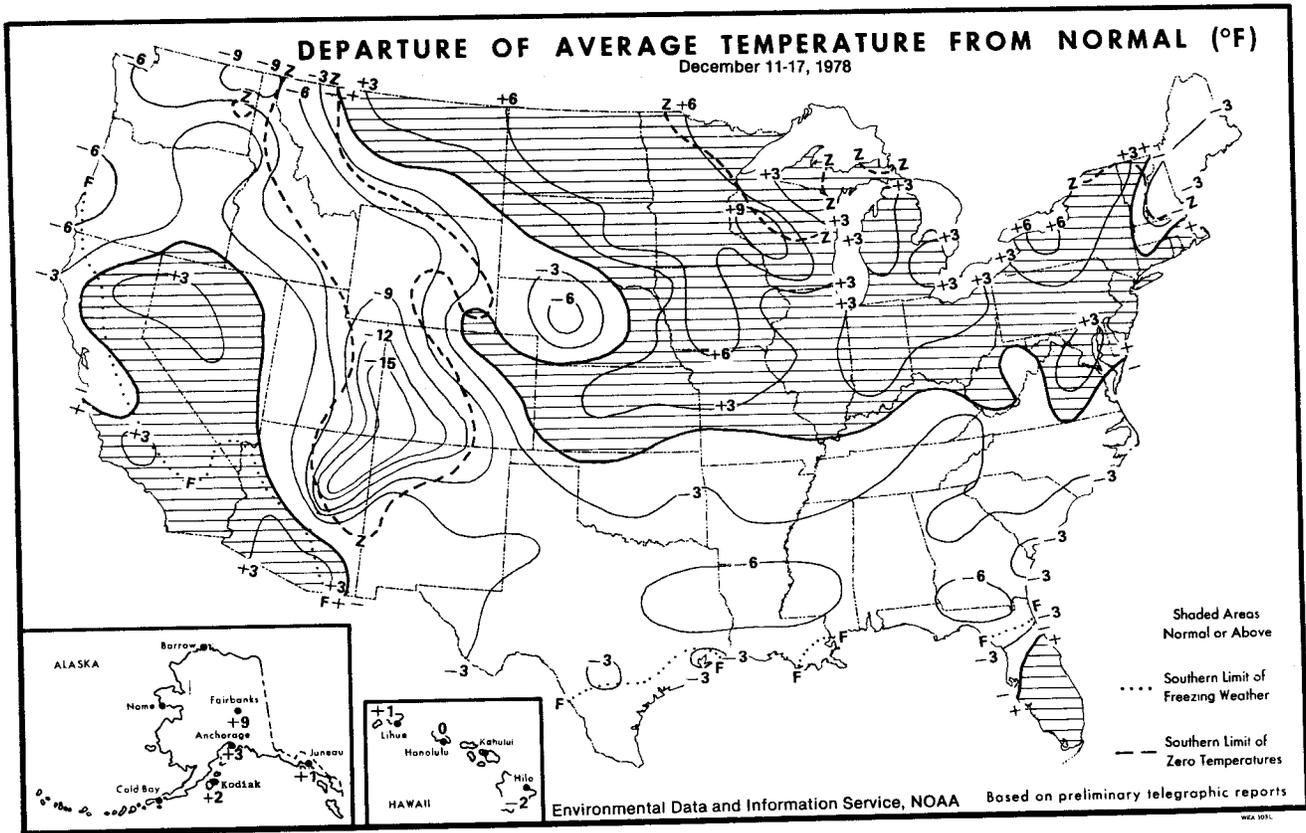
Warming covered the northern Plains, Lakes area, and the middle Atlantic Coast. Temperatures jumped as much as 9 degrees above normal in

Wisconsin. The South, western slopes of the Rockies, and Pacific Northwest averaged colder-than-normal readings; sections of the central Rockies were chilled by readings as much as 18 degrees below what is expected this time of year.

Calm weather prevailed over the Nation on Monday except at the far corners of the Northwest and Southeast. In the Pacific Northwest, up to a half-inch of rain dampened areas along the coast including Brookings, southwestern Oregon. Further inland, snow fell as far east as Idaho.

Florida's southeastern coast weathered heavy downpours. While Miami, West Palm Beach, and Fort Lauderdale collected 2 to 3 inches of rain, a bit further north, the town of Jupiter was deluged by 13 inches triggering flooding.

The lone temperature record for the day showed Austin, Tex., at 24°, breaking the 1966 low mark by 2 degrees.



The Nation's untroubled weather picture on Tuesday brought little moisture and few temperature extremes.

Showers dotted the Carolina coasts where Myrtle Beach and Cape Hatteras each measured a quarter-inch of rain. A few snow flurries dusted the Idaho/Nevada border, the Dakotas, and the upper Great Lakes.

Much of the Nation continued enjoying the uneventful weather on Wednesday.

Northern Michigan reported unsettled conditions; snow and gale force winds rushed across the Great Lakes. By nightfall, light snow was falling from western Pennsylvania across New York State to New England.

Showers were scattered along the Texas/Louisiana Gulf Coast region. Alice, Tex., logged a quarter-inch. Light rain also dampened parts of the Pacific Northwest; Quillayute, western Washington, notched nearly a half-inch.

Clear skies spanned most of the country on Thursday. Snow persisted over the Great Lakes and New England; Newport, northern Vermont, added 3 inches. Rains amounting to less than one-half inch fell over Oregon and Washington. From Washington's Cascade Mountains eastward to Montana, the moisture fell as snow.

On Friday, moisture once again was quite sparse. Some light drizzle in the Pacific Northwest and

some snow flurries over the upper Rockies and Great Lakes area about filled out the precipitation picture.

Record low temperatures chilled North Carolina; along the eastern coastline, Cape Hatteras noted 25°, and in the western part of the State Asheville tallied 14°.

A developing storm off the northern West Coast set off some rain and snow and was accompanied by dropping temperatures inland on Saturday.

Meantime light rain dampened an area from the Deep South to the middle Atlantic Coast; a third-inch fell over Huntsville, northern Alabama, and Chattanooga, southeastern Tennessee. Light snow added an inch to stations in Wisconsin and Michigan.

For the first time in several days, rather unsettled weather edged over portions of the Nation on Sunday.

The low pressure system near the Pacific Northwest carried snow from the northern half of the West Coast across the Plateau Region to the Rockies; up to 7 inches of snow blanketed southern and eastern Utah. Further south, rain soaked a section from southern California through Arizona. San Diego chalked up more than an inch while many Arizona points received one-half to one inch.

Meantime heavy snow spread over the Northeast; more than 4 inches fell in some New England areas.



National Agricultural Summary

December 11 - 17

HIGHLIGHTS: Very little precipitation fell throughout most of the United States giving farmers a chance to harvest late row crops and seed small grains in the Southwest. Plowing continued in the Corn Belt where soils held firm enough to support tillage equipment. Cotton harvest advanced rapidly in Texas and reached 63%; California harvest stood at 90%. Most soybeans were combined, but a few States across the South had some fields remaining. The grain sorghum harvest was virtually complete. Winter wheat rated fair to good--improved by earlier rains. Farmers seeded some fields across the South. Low temperatures slowed growth of most southern pastures. Northern pastures lay dormant or snow covered. Deciduous fruit growers pruned trees. California reported losses to citrus crops. Pecan harvest ranged from 81 to 85% complete. Vegetable growers prepared fields for spring planting as far north as South Carolina. Soil moisture rated adequate throughout most of the Nation with the exception of short in the Florida Peninsula.

SMALL GRAINS: Winter wheat rated fair to good throughout most of the Nation thanks to earlier rains which improved soil moisture in many areas. The snowcover receded on the Great Plains but protected the most northern fields from blowing and low temperatures. Planting continued in the Southwest and a few southern States.

Kansas wheat rated good although growth was subnormal. Above normal temperatures and melting snows aided wheat in the northwest. Oklahoma wheat pastures made some additional growth; insect activity was light. Cold weather slowed Texas wheat growth and freezes damaged some lush, tender southern growth. Grazing was fair to excellent. Stands need warm weather and additional moisture to maintain present condition. Montana wheat rated good with snowcover protecting the crop from wind damage. California farmers prepared and planted wheat in the San Joaquin Valley; low temperatures slowed germination.

COTTON: Open weather gave farmers a chance to harvest cotton in the Southwest. However, wet fields in some areas continued to present problems. Harvest was virtually finished from the Delta States eastward with most States reporting at least 99% picked.

The Texas cotton harvest moved at a rapid pace reaching 63%, but far short of the 99% last year and the 93% average. Gins on the High and Low Plains built backlogs quickly. Farmers continued to harvest as rapidly as weather permitted. In New Mexico, some cotton was picked, but many fields were too wet. The California harvest reached 90% complete; farmers shredded and disked cotton stubble in the San Joaquin Valley.

OTHER CROPS: Corn harvest activities were virtually done. Kentucky reported flooding losses in some low-lying fields.

The soybean harvest centered on the Delta States and the Southeast. The Mississippi harvest neared completion, and Arkansas combining advanced to 98%. Soybean combining in the southeastern States ranged from 84% in North Carolina to 95% in Georgia.

The grain sorghum harvest wound down to completion. Oklahoma reported good progress. The Texas harvest stood at about 100% complete. Wet grain and high humidity slowed the New Mexico grain sorghum harvest.

Tobacco growers stripped and marketed the leaf in Kentucky, Tennessee, Virginia, and North Carolina. South Carolina growers applied soil fumigants to plant beds.

Sugarcane harvests were almost complete in Louisiana and in full swing in Florida.

FRUITS AND NUTS: Deciduous fruit growers throughout northern production areas pruned apples, peaches, and grape vines. Cold delayed pecan harvests which ranged from 81% in Texas to 82% in Georgia and 85% in Alabama.

Florida citrus areas needed rain. Growers irrigated but some stress developed. Some fruit softened with moderate droppage. The orange harvest increased; tangerine and tangelo harvests proceeded actively. Subfreezing temperatures had a wide range of effects on the Arizona citrus crops. Unprotected groves sustained severe freeze damage. Harvests of lemons, Navels, sweets, early tangerine types, and grapefruit continued. California reported Ventura County sustained heavy avocado and citrus losses to freezing temperatures. The Navel fresh market crop sustained moderate to heavy losses. Very little of the Valencia crop suffered damage. California lemons sustained moderate damage, tangerines heavy losses, but little or no loss to the grapefruit crop.

VEGETABLES: Cooler temperatures in Florida slowed maturity but improved set and size. Shipments increased from the previous week. Cabbage and celery supplies advanced considerably with moderate increases for carrots, sweet corn, and lettuce. Supplies of other crops held steady or declined. A few strawberries were harvested. Spring watermelon planting progressed.

Subfreezing temperatures in Texas killed or damaged many vegetable crops. California had a good supply of broccoli, cauliflower, carrots, cabbage, brussels sprouts, celery, and potatoes. The desert lettuce crop escaped frost damage.

PASTURES AND LIVESTOCK: Snowcover and low temperatures prevented grazing of northern pastures. Subnormal temperatures across the South curbed growth of permanent and native grasslands. Some native pastures probably will not produce grazing until next spring. Small grain pastures provided some forage across the South. Cattle rated fair to good with some cold stress reported in the West. Most herds fed on winter rations. Florida pastures rated poor to fair in the north and good in the south. Low temperatures set back Texas grasslands. Herds moved to crop stubble and winter wheat pastures. Cold and snow curbed grazing in Arizona; windmills and stock tanks froze. Cool California weather slowed grass growth and drying winds reduced soil moisture.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Dec. 17, 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 . . .	41	- 4	.2	- 1.0	LA. Baton Rouge . . .	47	- 6	.3	- .9	Youngstown . . .	32	+ 3	.2	- .4
Mobile . . .	49	- 4	.2	- 1.2	Lake Charles . . .	50	- 4	.1	- 1.2	OKLA. Okla. City . . .	38	- 2	0	- .3
Montgomery . . .	45	- 4	.1	- 1.1	New Orleans . . .	50	- 5	.1	- 1.1	Tulsa . . .	39	- 1	0	- .4
ALASKA Anchorage . . .	16	+ 3	.3	0	Shreveport . . .	43	- 6	T	- .7	OREG. Astoria . . .	40	- 3	1.8	- .6
Barrow . . .	-	-	-	-	MAINE. Caribou . . .	16	0	.9	+ .3	Burns . . .	25	- 3	.3	- .1
Fairbanks . . .	- 1	+ 9	.1	0	Portland . . .	23	- 3	.3	- .6	Medford . . .	34	- 4	.3	- .5
Juneau . . .	29	+ 1	1.2	+ .2	MD. Baltimore . . .	38	+ 3	T	- .8	Pendleton . . .	36	0	.1	- .2
Kodiak . . .	32	+ 2	1.0	- .1	MASS. Boston . . .	34	+ 1	.1	- .9	Portland . . .	38	- 3	.1	- 1.2
Nome . . .	-	-	-	-	Chatham . . .	35	-	.3	-	Salem . . .	36	- 5	.2	- 1.3
ARIZ. Flagstaff . . .	29	- 1	1.2	+ .7	MICH. Alpena . . .	29	+ 5	.3	- .1	PA. Allentown . . .	32	+ 1	.1	- .7
Phoenix . . .	57	+ 4	.9	+ .7	Detroit . . .	31	+ 2	T	- .5	Erie . . .	31	+ 2	.2	- .4
Tucson . . .	57	+ 5	.3	+ .1	Flint . . .	29	+ 2	.1	- .3	Harrisburg . . .	35	+ 2	.1	- .6
Winslow . . .	18	- 16	T	- .1	Grand Rapids . . .	30	+ 2	.2	- .3	Philadelphia . . .	37	+ 2	.1	- .7
Yuma . . .	57	+ 1	.8	+ .7	Houghton Lake . . .	25	+ 2	.2	- .2	Pittsburgh . . .	32	+ 2	.2	- .4
ARK. Fort Smith . . .	38	- 4	0	- .7	Lansing . . .	30	+ 3	T	- .5	Scranton . . .	30	+ 1	.1	- .5
Little Rock . . .	41	- 1	T	- .9	Marquette . . .	25	+ 1	.2	- .3	R.I. Providence . . .	31	0	.1	- .8
CALIF. Bakersfield . . .	51	+ 3	.1	0	Muskegon . . .	32	+ 3	.3	- .3	S.C. Charleston . . .	46	- 3	.2	- .5
Eureka . . .	45	- 4	.6	- .9	S. Ste. Marie . . .	21	+ 1	.7	+ .2	Columbia . . .	44	- 2	.2	- .6
Fresno . . .	45	- 1	.2	- .2	MINN. Duluth . . .	20	+ 5	T	- .3	Greenville . . .	40	- 3	.1	- .8
Los Angeles . . .	59	+ 1	.5	0	Internat'l Falls . . .	14	+ 5	T	- .2	S.D. Aberdeen . . .	22	+ 5	0	- .1
Red Bluff . . .	49	+ 3	.1	- .8	Minneapolis . . .	27	+ 8	T	- .2	Huron . . .	28	+ 8	0	- .1
San Diego . . .	59	+ 2	1.5	+ 1.1	Rochester . . .	24	+ 5	T	- .2	Rapid City . . .	26	- 1	0	- .1
San Francisco . . .	49	- 1	.2	- .7	St. Cloud . . .	23	+ 7	0	- .2	Sioux Falls . . .	21	+ 1	T	- .2
Stockton . . .	45	- 1	.4	- .2	MISS. Jackson . . .	42	- 7	.2	- 1.0	TENN. Chattanooga . . .	38	- 3	.5	- .7
COLO. Denver . . .	30	- 3	0	- .1	Meridian . . .	42	- 6	.3	- 1.0	Knoxville . . .	38	- 3	.3	- .7
Grand Junction . . .	12	- 18	.1	0	MO. Columbia . . .	37	+ 4	0	- .4	Memphis . . .	41	- 2	.1	- 1.0
Pueblo . . .	25	- 8	0	- .1	Kansas City . . .	37	+ 4	0	- .4	Nashville . . .	38	- 2	.2	- .8
CONN. Bridgeport . . .	37	+ 3	.3	- .5	St. Louis . . .	36	+ 1	0	- .5	TEX. Abilene . . .	43	- 4	0	- .2
Hartford . . .	27	- 1	.1	- .8	Springfield . . .	35	- 1	0	- .6	Amarillo . . .	36	- 3	0	- .2
D.C. Washington . . .	41	+ 4	T	- .7	MONT. Billings . . .	26	- 1	T	- .1	Austin . . .	48	- 5	.1	- .4
FLA. Apalachicola . . .	50	- 5	0	- .8	Glasgow . . .	22	+ 4	T	- .1	Beaumont . . .	53	- 1	.1	- 1.0
Daytona Beach . . .	61	+ 1	.2	- .3	Great Falls . . .	29	+ 2	.1	0	Brownsville . . .	58	- 4	+ .1	
Ft. Myers . . .	66	+ 1	T	- .3	Havre . . .	24	+ 5	T	- .1	Corpus Christi . . .	54	- 5	.3	- .1
Jacksonville . . .	49	- 6	.2	- .4	Helena . . .	19	- 5	.1	0	Del Rio . . .	47	- 5	.1	0
Key West . . .	72	+ 1	T	- .4	Kalispell . . .	19	- 5	.1	- .2	El Paso . . .	43	- 1	.1	0
Lakeland . . .	-	-	-	-	Miles City . . .	23	0	T	- .1	Fort Worth . . .	45	- 3	0	- .4
Miami . . .	68	0	T	- .4	Missoula . . .	18	- 7	.1	- .2	Galveston . . .	54	- 3	.3	- .5
Orlando . . .	62	0	T	- .4	NEBR. Grand Island . . .	26	- 1	0	- .1	Houston . . .	50	- 5	.1	- .8
Tallahassee . . .	47	- 6	0	- 1.0	Lincoln . . .	30	+ 2	0	- .2	Lubbock . . .	39	- 2	0	- .1
Tampa . . .	60	- 2	.1	- .4	Norfolk . . .	25	0	T	- .1	Midland . . .	42	- 4	0	- .1
W. Palm Beach . . .	67	0	2.0	+ 1.5	N. Platte . . .	20	- 7	0	- .1	San Angelo . . .	43	- 5	0	- .1
GA. Atlanta . . .	43	0	.1	- .9	Omaha . . .	30	+ 4	0	- .2	San Antonio . . .	51	- 2	.1	- .3
Augusta . . .	42	- 4	.1	- .7	Valentine . . .	20	- 5	0	- .1	Victoria . . .	50	- 7	.3	- .1
Macon . . .	45	- 3	.1	- .9	NEV. Ely . . .	28	+ 2	.2	+ .1	Waco . . .	44	- 6	0	- .5
Savannah . . .	48	- 2	.2	- .6	Las Vegas . . .	45	0	.3	+ .2	Wichita Falls . . .	40	- 4	0	- .3
HAWAII. Hilo . . .	70	- 2	3.3	- .5	Reno . . .	33	0	.3	+ .1	UTAH. Blanding . . .	20	- 10	1.0	+ .7
Honolulu . . .	74	0	.5	- .3	Winnemucca . . .	34	+ 3	T	- .2	Salt Lake City . . .	27	- 3	T	- .3
Kahului . . .	-	-	-	-	N.H. Concord . . .	20	- 5	.2	- .5	VT. Burlington . . .	28	+ 5	.2	- .3
Lihue . . .	74	+ 1	.6	- .8	N.J. Atlantic City . . .	36	+ 1	.2	- .7	VA. Lynchburg . . .	37	- 1	.1	- .7
IDAHO. Boise . . .	27	- 5	.1	- .2	Trenton . . .	37	+ 2	.1	- .7	Norfolk . . .	41	- 1	.1	- .6
Lewiston . . .	34	- 1	.1	- .2	N.MEX. Albuquerque . . .	33	- 3	.1	0	Richmond . . .	39	0	.2	- .5
Pocatello . . .	21	- 6	T	- .2	Roswell . . .	36	- 3	T	- .1	Roanoke . . .	37	0	T	- .7
ILL. Cairo . . .	39	0	0	- .9	N.Y. Albany . . .	28	+ 2	.1	- .6	WASH. Colville . . .	19	- 9	0	- .5
Chicago . . .	30	+ 1	T	- .5	Binghamton . . .	29	+ 4	.1	- .5	Omaha . . .	19	- 8	-	-
Moline . . .	28	+ 1	T	- .4	Buffalo . . .	32	+ 4	.3	- .4	Quillayute . . .	38	- 3	2.7	- .9
Peoria . . .	31	+ 3	0	- .4	New York . . .	37	+ 1	.2	- .6	Seattle-Tacoma . . .	34	- 7	.1	- 1.2
Rockford . . .	27	+ 2	T	- .4	Rochester . . .	36	+ 8	.4	- .1	Spokane . . .	24	- 5	.1	- .4
Springfield . . .	34	+ 3	0	- .4	Syracuse . . .	33	+ 5	.3	- .4	Walla Walla . . .	36	- 2	.4	0
IND. Evansville . . .	36	+ 1	.1	- .7	N.C. Asheville . . .	37	- 2	0	- .8	Yakima . . .	29	- 3	T	- .2
Ft. Wayne . . .	33	+ 4	T	- .5	Charlotte . . .	41	- 1	.2	- .6	W. VA. Beckley . . .	33	0	.1	- .7
Indianapolis . . .	35	+ 4	0	- .6	Greensboro . . .	38	- 1	.1	- .6	Charleston . . .	37	+ 1	.1	- .6
South Bend . . .	33	+ 5	T	- .6	Hatteras . . .	48	0	.3	- .8	Huntington . . .	36	0	.1	- .5
IOWA. Burlington . . .	32	+ 4	T	- .4	Raleigh . . .	40	- 1	.5	- .2	Parkersburg . . .	36	+ 1	.1	- .5
Des Moines . . .	32	+ 7	T	- .2	Wilmington . . .	44	- 3	.3	- .5	WISC. Green Bay . . .	24	+ 3	.1	- .2
Dubuque . . .	26	+ 3	T	- .4	N.DAK. Bismarck . . .	23	+ 7	T	- .1	La Crosse . . .	31	+ 9	T	- .2
Sioux City . . .	24	0	0	- .2	Fargo . . .	20	+ 7	T	- .1	Madison . . .	29	+ 7	.1	- .3
KANS. Concordia . . .	36	+ 5	0	- .2	Williston . . .	22	+ 6	T	- .1	Milwaukee . . .	28	+ 4	T	- .4
Dodge City . . .	36	+ 2	0	- .1	OHIO. Akron-Canton . . .	32	+ 3	T	- .5	WYO. Casper . . .	22	- 4	.1	0
Goodland . . .	32	+ 2	0	- .1	Cincinnati . . .	34	0	.1	- .5	Cheyenne . . .	30	+ 1	0	- .1
Topeka . . .	35	+ 3	0	- .4	Cleveland . . .	33	+ 3	T	- .5	Lander . . .	15	- 8	0	- .1
Wichita . . .	35	0	0	- .3	Columbus . . .	34	+ 3	.1	- .4	Sheridan . . .	20	- 6	T	- .1
KY. Lexington . . .	35	- 1	.2	- .6	Dayton . . .	34	+ 3	T	- .5	P.R. San Juan . . .	79	+ 2	.1	- .9
Louisville . . .	38	+ 3	.1	- .7	Toledo . . .	32	+ 4	T	- .5					

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 ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 2° below normal. Wide variation, hard freeze some areas, highs up to 60°. Some rain all stations 15th and 16th; heaviest near 0.50 in. northern areas.

Fieldwork: 4.1 days suitable. Soil moisture mostly adequate. Livestock, poultry care and feeding main activity. Small grains 94% seeded. Pecans 85% harvested, 93% 1977. Wheat fair to good condition. Livestock, pastures mostly fair.

ARIZONA: Major storm system arrived 16th. Snow higher elevations, scattered heavy rains elsewhere. Temperatures varied 5° above normal south, 4° below normal north.

Cotton harvest continued, conditions allowing. Harvest rapidly winding down west. Preparations, planting small grains increasing. Sugarbeet harvest standstill, muddy fields. Spring beets central, western areas, good condition. Alfalfa haying standstill. Sorghum harvest virtually complete. Lettuce harvest full swing Yuma area, tapering off central areas. Harvest mixed vegetables increasing. Subfreezing temperatures wide range effects citrus crop. Unprotected groves severe freeze damage. Harvest lemons, navels, sweets, early tangerine-types, grapefruit continued; conditions allowing. Exceedingly cold temperatures, snow had adverse effect on grazing. Some supplemental feeding. Windmills freezing, breaking ice on stock tanks.

ARKANSAS: Cool with little precipitation. Extremes: 13 and 62°. Precipitation ranged from 0 to 0.46 in.

Harvest activities increased. Fieldwork: 4 days available. Soybeans 98% to 99% completed; few scattered fields remain to be combined. Cotton harvest practically completed; less than 1% remain for scrapping. Most gins closed for season. Small grain conditions good; plant growth improved with moisture and warmer temperatures; generally good stands. Pasture growth improved as weather conditions permitted; northern areas good; southern areas fair. Cattle fair to good condition; reflected by pasture condition.

CALIFORNIA: Precipitation only extreme north; amounted to less than 0.25 in. Temperatures near normal. Only southeast interior below normal with maximum departures of 7°.

Cotton 90% harvested. Shredding, discing cotton San Joaquin Valley. Field preparation planting small grains underway. Cold weather problems for germinating small grains. Soybean harvest complete San Joaquin Valley. Corn virtually harvested. Sugarbeet harvest active. Milo harvest underway. Seasonal cultural activities continuing. Low temperatures brought dormancy to deciduous tree and vine crops. Fumigation for nematode control continuing. Ventura County reported heavy avocado and citrus loss due to freeze. Navel orange harvest slowed. Moderate to heavy loss to Navel fresh market crop. Little loss to Valencia crop. Moderate loss to lemon crop. Heavy loss to tangerine crop. Little or no loss to grapefruit crop. Avocado loss moderate. Broccoli, cauliflower, carrots, cabbage, brussels sprouts, celery and potatoes in good supply. Desert lettuce frost and insect damage minimal. Artichokes damaged, very light supply. Cool weather hampered grass growth. Drying winds reduced soil moisture. Supplemental feeding necessary most areas ranges; pastures not furnishing adequate feed. Calving, lambing continued.

COLORADO: Record breaking cold temperatures early week. Most extreme temperatures San Luis Valley. Other areas that showed marked departure from normal were Grand and Arkansas River Valleys. Temperatures 14 to 21° below normal. Due to extremely cold temperatures, precipitation was sparse. Few widely scattered snow showers reported. Southwesterly flow bringing an increase in moisture and higher temperatures to area west of Divide on weekend.

FLORIDA: Rainfall on 11th moderate to heavy some southeast coastal localities. On 14th another cold front passed over Peninsula with little rainfall. Low temperatures 10 to 20° below normal north and Panhandle to nearly 3° below normal elsewhere.

Soil moisture variable; adequate Panhandle, north and eastern coastal areas, short northeast, central and parts of southwest. Soybean and cotton harvest practically complete. Sugarcane harvest full swing. Seeding grains virtually complete. Early grains fair to good condition. Preparation of land for early spring planting just beginning. Pastures good condition south, poor to fair elsewhere. Cattle good condition. Rain needed, all citrus areas; conditions cool, windy, dry. Some stress; many growers irrigating. Some fruit softening. Fruit droppage moderate, orange harvest increasing. Tangerine and tangelo harvest very active. Vegetable crops fair to good condition, few excellent. Cooler temperatures beneficial plant growth, fruit maturity slowed but set, size improved. Harvest very active but will start slowing for Holidays this week. Overall shipments up 8% from previous week. Cabbage, celery supplies up considerably; carrots, sweet corn, lettuce increased. Shipments chinese cabbage, cucumbers, eggplant, escarole, peppers, tomatoes held steady while snap beans, okra, radishes, squash decreased. Quality, size good to very good. Yields variable, market conditions improved. Planting active several crops. Strawberry crop continues good growth; bloom, fruit set improving. Light harvest underway; size, quality fair to good. Improved volume expected by late December. Planting early spring watermelon crop active. Light harvest fall crop underway.

GEORGIA: Temperatures 1 to 2° below normal north and 2 to 4° below normal south, ranging from upper 30's northeast to low 50's southeast. Rainfall averaged less than 0.25 in. over middle and east to more than 1.00 in. north. Few high spots to 3.00 in. in extreme northwest. Some light amounts north and central 16th; clearing and turning colder 17th.

Soil moisture adequate. Fieldwork: 5 days suitable. Main activity late harvest and fall seedings. Corn 98% picked, last year 89%. Pecans mostly fair to good; 82% gathered, last year 88%. Wheat seedings 89% complete, last year 96%. Rye 92% planted, last year 98%. Other small grains 90% planted, last year 97%. Small grains much improved. Winter pastures also improved, permanent pasture can't recover until spring, overall condition poor to mostly fair. Cattle fair to good. Hogs fair to mostly good.

HAWAII: Wet, windy cool weather continued.

Crops further bruised by gusty winds. Spraying frequent for disease control. Spoilage losses occurring. Leaf stripping leafy crops by gusty

winds; trimmings necessary. Quality, yield affected. Burdock harvesting active; other light. Banana supplies light; light damage by strong winds. Papaya spraying frequent; supplies light. Pine-apple harvesting slow. Sugar grinding slacking. Pastures generally good.

IDAHO: Temperatures 1 to 13° below normal. High temperature 47°. Precipitation generally below normal. Largest amounts in the north.

Potato marketing hindered by cold weather some localities. Most farm activity centered around feeding and caring for livestock. Livestock in good condition.

ILLINOIS: Temperatures 1 to 4° above normal northern two-thirds, normal south. Precipitation extremely light.

Winter wheat good. Plowing 1979 corn and soybean acreage 71% complete, 1977 46%, average 62%. Livestock good condition. Soil moisture adequate.

INDIANA: Sunny and temperatures 3° above normal which ranged from 16 to 51°. Sunshine 80% of possible. No significant precipitation. No snowcover. Low humidities.

Fieldwork minimal. Soils too soft to support equipment most areas. Activities: Equipment and building maintenance, hauling manure.

IOWA: Mild, dry. Temperatures few degrees above normal and snow melted over south and diminished to depths of 1 to 5 in. over north.

KANSAS: Very dry and mild. Light snowcover from previous week. Snow northwest melted by midweek. Temperatures 34° northwest to 39° northeast; 1° above normal southwest to almost 6° above normal northeast.

Wheat condition good although some areas have little growth. Warm temperatures and melting snows aided wheat in northwest. Topsoil moisture supplies adequate. Subsoil moisture supplies short. Livestock requiring less supplemental feeding in warmer temperatures.

KENTUCKY: Precipitation less than 0.25 in., falling on 16th. Temperatures near to slightly above normal.

Rains from previous week caused serious flooding along major rivers. Agricultural losses not great, because most of crops had been harvested. Few remaining corn and soybean fields in low areas along rivers lost. Small amount of field stored hay also lost. Major activities included stripping and marketing tobacco and cleaning up flood damage.

LOUISIANA: Temperatures 4 to 6° above normal. Extremes: 81 and 20°. Showers statewide.

Sugarcane harvest nearing completion. Caring for livestock.

MARYLAND & DELAWARE: Temperatures about normal. Highs in 40's; lows in 20's. Precipitation widespread with all stations reporting about 1.00 in.

Tobacco stripping making good progress. Farmers applying lime. Rain helped moisture supply.

MICHIGAN: Temperatures 2 to 4° above normal. Temperatures 0 to -6° over Upper Peninsula, while Detroit warmest with 44° on 15th. Over southern Lower precipitation generally totaled less than 0.10 in. Amounts generally around 0.25 in. over northern Lower. Over Upper amounts generally less than 0.75 in. Two to four in. new snow accumulated over northern Lower and eastern Upper while existing snow depths either held their own or decreased elsewhere.

Main farm activities: Equipment and building repair, cattle feeding, chores.

MINNESOTA: Temperatures 6° above normal. Extremes: 40 and -13°. Precipitation 0.20 in. below normal. Amounts mostly traces to 0.02 in. north and east. Snowfall mostly traces northeast. Snow depth at week end ranged from 2 to 4 in. west; 4 to 8 in. most of east and north; up to 16 in. extreme north central.

MISSISSIPPI: Temperatures about 10° below normal. Extremes: 12 and 80°. Some heavy rainfall early week, remainder mostly dry.

Soil moisture adequate. Fieldwork: 3.3 days suitable. Farmers winding up harvest of few remaining soybean fields where conditions allow. Cold temperatures and heavy frosts set back winter grazing. Soybeans virtually 100% harvested, 91% 1977, 92% average. Winter wheat planting virtually complete; crop in fair condition. Hay and roughage supplies mostly adequate with supplies short in scattered areas. Feed grain supplies adequate to short. Pastures poor to fair condition; livestock fair.

MISSOURI: Temperatures 3° above normal northwest, 6° below normal Bootheel, near normal elsewhere. Little or no precipitation.

Condition of winter wheat mostly fair to good. Topsoil moisture mostly adequate. Supplies of hay and other roughages mostly adequate. Livestock losses due to unfavorable weather about normal. General condition of livestock mostly fair to good.

MONTANA: Temperatures below normal extreme west, near normal elsewhere. Lowest minimums midweek west well below zero. Precipitation light with greater amount higher elevations. Windy at times, especially east slopes of Rockies, causing local blowing and drifting, closing many roads.

Winter wheat condition and snowcover good. Wind damage light. Livestock condition mostly good. Some stress due to extended cold weather. About 90% of livestock on supplemental feed. Grazing difficult to closed.

NEBRASKA: Temperatures slightly below normal central and west, above normal southeast. No significant precipitation.

Supplemental feeding light due to mild weather.

NEVADA: Mostly fair and dry. Temperatures near normal to slightly below. Extremes: 4 and 64°. Cotton harvest nearing completion. Livestock good condition.

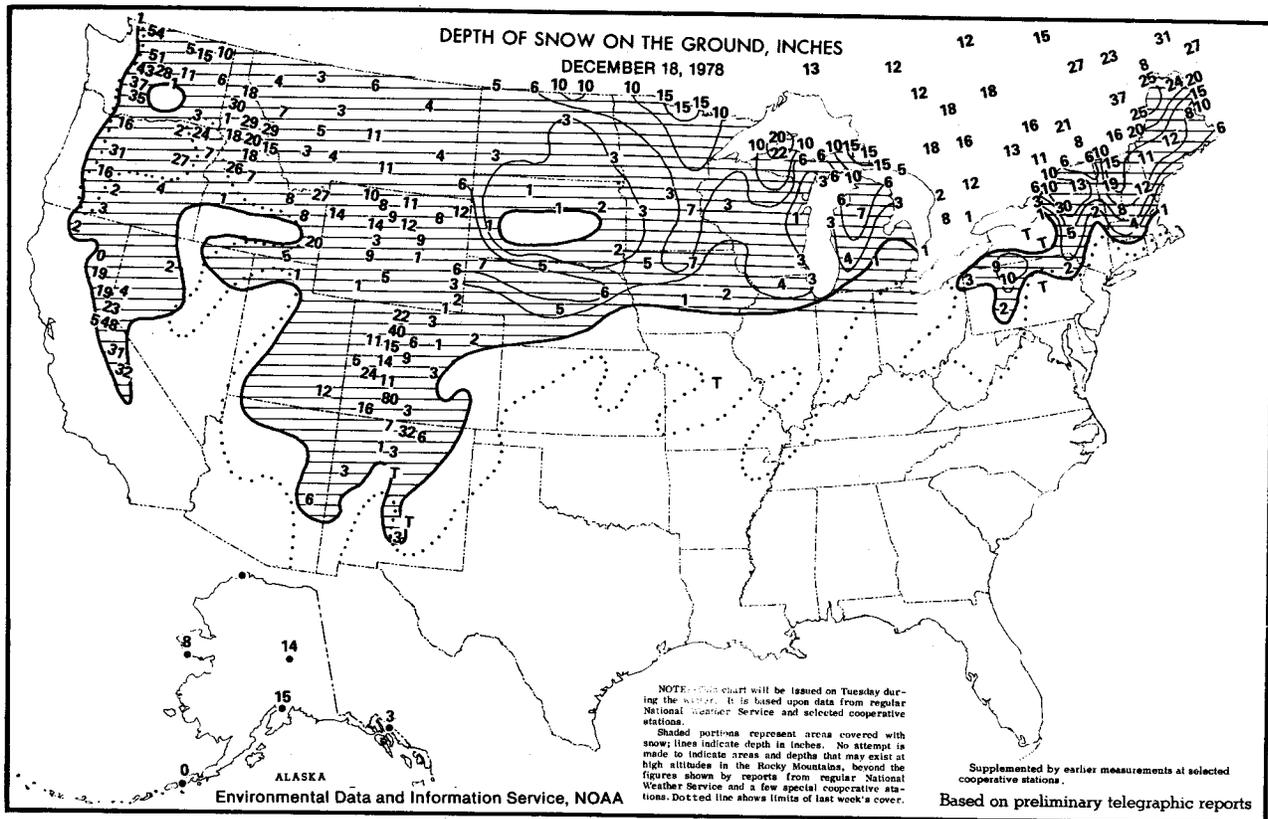
NEW ENGLAND: Temperatures well below normal early week; gradual warming to above normal by weekend. New surge of cold air entered region 17th. Some light snowfall northern New England 11th and 15th. Less than 0.25 in. rain over southern and central section 16th. Some snow mountains of Vermont and New Hampshire 17th.

NEW JERSEY: Temperatures close to normal, averaging 32° north, 35° south and 37° coastal. Extremes: 14 and 55°. Precipitation well below normal, averaging 0.07 in. north, 0.18 in. south and 0.24 in. coastal.

Farmers continue to prune trees, care for livestock and repair and maintain machinery.

NEW MEXICO: Dry till light rains and snows mountains and west 17th. Temperatures 4 to 12° colder than normals but did warm gradually through week.

Light moisture in few producing areas, but fields still too wet for harvest in some places. Cotton still very late, and some areas still can't



get in fields. Very little grain sorghum or peanuts harvested due to humidity. Chile and pecan picking active as weather permitted. Ranges fair, livestock good.

NEW YORK: Temperatures slightly above normal ranging from mid-20's to mid-30's. Precipitation ranged 0.10 in. south to 0.50 in. north. Snow depths ranged from none southeast to 5 to 10 in. north and west with highest amount 30 in. on Tug Hill Plateau.

NORTH CAROLINA: Temperatures 3° subnormal. Precipitation light rainfall.

Fieldwork: 4.2 days suitable. Soil moisture adequate. Oats, barley, wheat and rye fair to mostly good. Pasture fair to good. Harvested: Soybeans 84%, 1977 84%; average 90%; cotton nearing completion. Small grain seedings nearing completion.

NORTH DAKOTA: Sunny, warm and dry weather. Temperatures above normal with extremes ranging from 41 to -12°. Precipitation ranged from zero to 0.10 in. Snow depth declined due to warmer weather and ranged from 2 to 4 in.

Marketing of farm products slow due to transportation problems. Some insect problems reported in stored grain, making it advisable to make periodic checks of grain in bin. No serious livestock problems reported as animals are good condition.

OHIO: Light rain or snow; totals generally less than 0.10 in., 0.50 to 0.60 in. below normal. Temperatures 4° above normal north and 2° above normal south. Extremes: 15 and 55°.

Farm activity limited to general farm chores. Grading and packing apples, potatoes, and onions underway.

OKLAHOMA: No precipitation of significance. Temperatures averaged 2 to 5° below normal in south half and from normal to 2° below normal in the north half.

Cotton and grain sorghum harvests made good progress. Livestock remain in good condition. Wheat pastures made some additional growth; insect activity has been light in small grain pastures.

OREGON: Temperatures near to a little below normal except 6 to 10° below normal northeast. Precipitation ranged from 1.00 to 2.00 in. along coast and in Willamette Valley. Amounts of 0.25 to 5.00 in. recorded in northeast. Elsewhere, precipitation less than 0.20 in. Extremes: Mid-50's, low 20's west; high 40's, below zero east.

Fieldwork minimal. Rain eliminated any fieldwork. Most activity machinery repair and livestock feeding. Storage supplies of onions and potatoes continued to go to market.

PENNSYLVANIA: Mild, dry week. Snow flurries mountains early in week and 17th; light rain 16th. Several inches new snow northwest 17th. Precipitation trace southeast to over 0.50 in. northwest interior. Snowcover confined to higher elevations with trace to 6 in. Poconos and up to 11 in. northwest snow belt. Temperatures 2 to 4° above normal south and central; 2° below normal northwest interior. Extremes: 56 and 6°. Normal winter chores.

PUERTO RICO: Island average rainfall 0.04 in. or 1.00 in. below normal. Temperatures about 76° on coasts and 71° interior. Extremes: 90 and 54°.

SOUTH CAROLINA: Cooler than usual with daily minimums in 20's and 30's and first general freeze 17th. Precipitation less than usual with scattered rain 11th and more general light rains 16th.

Very little cotton remained to be picked. Soybean harvest winding down; completion some areas delayed by rains. Pruning apple, peach trees; grape vines. Soil fumigants applied to tobacco beds. Preparing tomato and other vegetable land in coastal areas for spring planting. Small grains, pastures need rain to stimulate growth.

SOUTH DAKOTA: Temperatures normal to 11° above normal after four weeks of below normal readings. Extremes: -10 and 55°. Precipitation less than 0.10 in.

TENNESSEE: Dry week. High pressure dominated. Light rainfall at weekend; amounts averaged 0.50 in. or less. Temperatures upper 30's and low 40's; 1° below normal.

Soil moisture surplus. Pastures fair. Cattle on supplemental feed. Burley tobacco stripping in final stages. General chores and livestock care main activities.

TEXAS: Little precipitation noted. Light showers latter part of week Lower Valley. Temperatures near normal Panhandle, west, south, north central, east. Upper coast 5° below normal; 3° below normal central. Rainfall below normal East Texas, north central, central; near normal Panhandle, West Texas, Edwards Plateau, Upper and Lower Valley, above normal far South Texas.

Cotton harvest moved at rapid pace; gins High, Low Plains building backlogs unginced cotton. Farmers continue harvest as rapidly as weather permits. Wheat, oat growth slowed by record low temperatures many localities. Freeze damaged flax, may replant some stands South Texas. Sorghum harvest essentially complete; only few fields High, Low Plains to be harvested. Wheat growth slowed by cold weather; some freeze damage southern areas where lush, tender growth noted. Grazing fair to excellent. Warm weather needed maintain present conditions. Stands eastern High Plains need more moisture. Greenbug populations relatively low; grain mites continue build up central, eastern areas. Oats furnishing good to excellent grazing from Low Plains southward. Record low temperatures many localities produced freeze damage many areas, but stands expected to recover. Cotton harvested 63%, 99% 1977, 93% average. Peanuts harvested 100%, 100% 1977, 100% average. Pecans harvested 81%, 87% 1977, 81% average. Sorghum harvested 100%, 100% 1977, 100% average. Soybeans harvested 100%, 100% 1977, 100% average. Sugarbeets harvested 91%, 100% 1977, 98% average. Flax planted 78%, 88% 1977, 87% average.

Subfreezing temperatures killed or damaged many vegetables. Pecan harvest continued; cold weather delayed activity in some central areas. Livestock fair to good condition despite continued cold, wet weather. Ranchers hauling hay, increasing supplemental feeding. On High Plains, more cattle moved onto stalk, wheat fields. Native grasses, pastures declined following freezing temperatures. Some newborn lambs in Edwards Plateau lost during cold weather.

UTAH: Few isolated light showers early period with moderate to locally heavy showers rain or snow over weekend. Amounts of moisture variable

but heaviest south. Warming trend, average temperatures ranged between 3 and 25° below normal.

Most fall work completed. Many farmers preparing equipment for next spring. Sorting and marketing apples, potatoes, and onions.

VIRGINIA: Temperatures mostly near normal except several degrees below in southwest. Extremes: 75 and 13°. Precipitation moderate averaging about 1.23 in. occurring as rain mainly first part of week.

Topsoil moisture mostly adequate. Fieldwork: 3.7 days suitable. Winter grains and grazing good. Some fescue seeded in early fall has poor stands due to dry soil conditions in northern and central areas causing some producers to feed extra hay. Recent warm, rainy weather southeast and southside helped grazing especially rye. Livestock good; calving and lambing active. Feed adequate. Other activities: Plowing; ending soybean, corn, and milo harvests; liming; spreading manure; pruning orchards; tobacco marketing.

WASHINGTON: West: Temperatures 1 to 3° below normal. Precipitation ranged from 0.20 to 1.20 in. below normal.

Farm activity minimal. Pruning berry bushes continues. Carrot digging about complete. Livestock on winter rations; feed adequate.

East: Temperatures 4 to 8° below normal. Precipitation ranged from 0.10 to 0.20 in. below normal.

Soil moisture improved as snowcover started to melt. Only harvest activity is scattered sugarbeet digging and grain corn harvest. Fruit tree pruning continued. Cattle on winter programs.

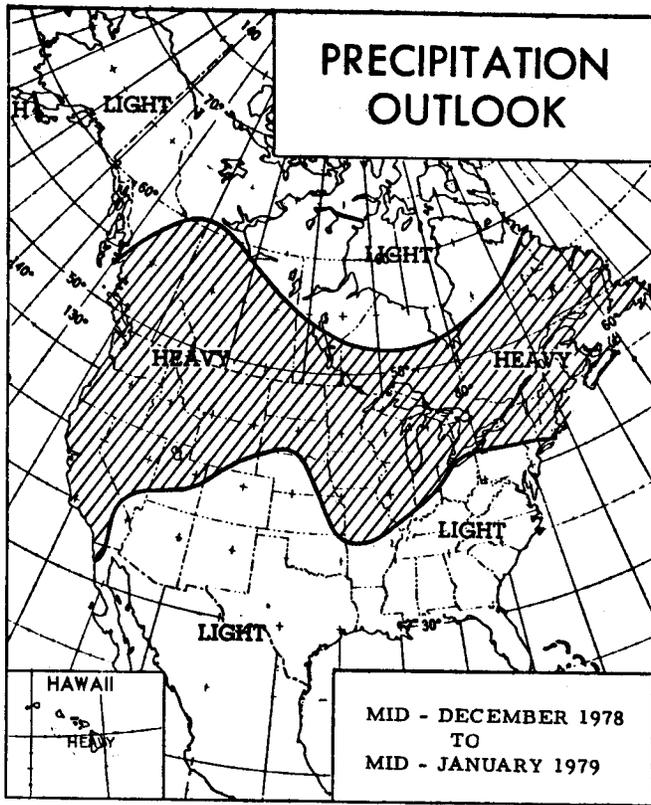
WEST VIRGINIA: Week began cold and ended with mild temperatures. Temperatures 1° above normal northeast and below normal elsewhere. Light scattered precipitation, heavier amounts 16th. Precipitation averaged 0.50 in. below normal.

Fieldwork: 1.9 days suitable. Soil moisture adequate to surplus. Hay supply adequate. Grain supply adequate to surplus. Some localized flood damage previous weekend.

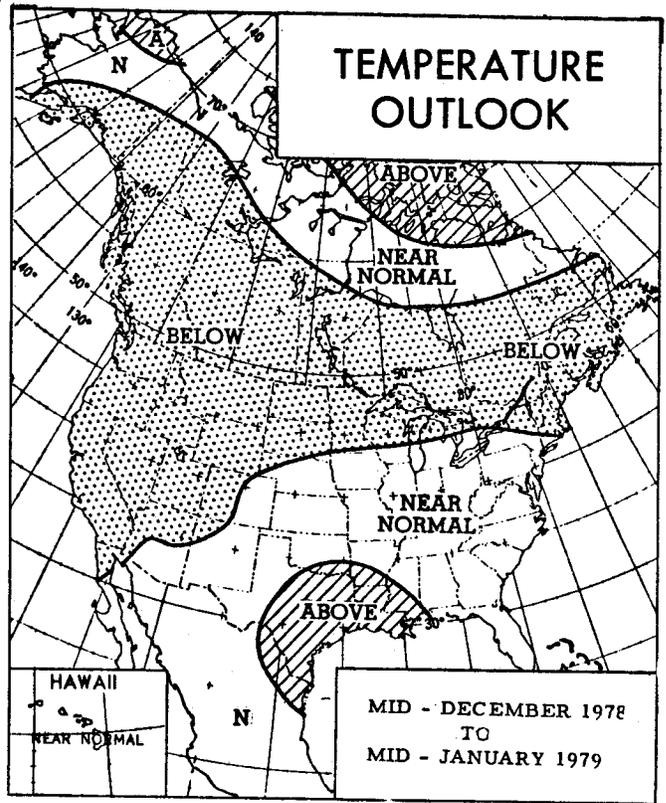
WISCONSIN: Temperatures above normal. Highs in 30's except low 40's south 15th. Lows in teens and 20's. No significant precipitation. Light snow north 11th to 12th, with freezing rain and sleet north central 12th. Brief snow showers south and east 16th, with some local accumulations of 1 to 3 in. Snow depths 6 in. but snow settling with above freezing temperatures. Frost depths averaged 3 in., about 2 in. less than normal.

WYOMING: Temperatures below normal and well below normal in Big Horn and Wind River drainages. Precipitation little below average with only few stations reporting measurable precipitation. Some snow still covers ground.

Ranchers taking care of livestock. Feeding extra heavy during December. Livestock good shape but in few places cold and snow had adverse effects on cattle and sheep. Snow pretty well blanketed winter wheat; protected from freezing and blowing out.



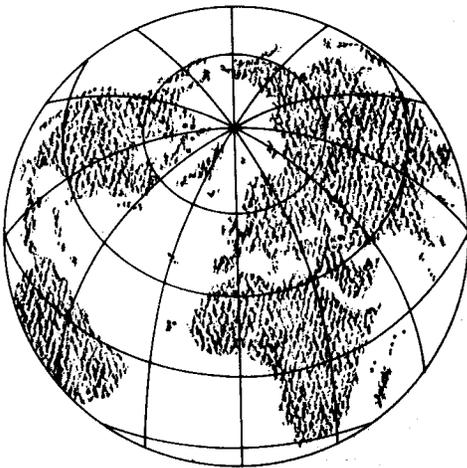
Average Monthly Weather Outlook



World Weather and Crop Update

December 11 - 17 and November Summary

USSR. The precipitation deficit in the Ukraine worsened in November, but caused only minor problems for winter grains and was quite beneficial for final harvest operations. Temperatures rose above normal during the month but dropped sharply in the second week of December. Snowfall began there in earnest early in December affording adequate protection from the cold. Last week much-above-normal precipitation fell as rain and melted most of the snowcover. In other agricultural areas of the country both precipitation and temperatures continued above normal, but conditions have been cold enough to build up a snowcover of more than 10 cm in most areas, and more than 20 cm over much of the Volga Valley, Ural Mountains, and New Lands.



PEOPLES'S REPUBLIC OF CHINA. November rainfall in the Yangtze Valley increased substantially over that of October, though it normally decreases during this season. This helped refill depleted reservoirs in the valley. Lesser rainfall over most of the winter wheat belt still ranged much above normal, and perhaps allowed substantial growth before the crop went into dormancy. Freezing conditions have occurred over almost the entire belt. Above-normal rains continued into December in the Yangtze Valley, but last week was virtually rainless over the entire country.

AUSTRALIA. Rainfall surged much above normal in November when wheat harvesting began. There have been no reports of interference with the harvest, however, and the forecast of excellent yields still stands. Lighter rains have continued into December, but essentially no rain fell last week in the belt where harvesting continued in the south.

INDIA. Most of northern India remained relatively dry in November, and central areas received rain only in the last few days of the month. Fortunately the region had adequate reservoir supplies from the heavy, late monsoon activity in September. Hints of normal wintertime precipitation marked

November in northern mountain areas, but December has been dry so far. Only in the peninsula did abundant rainfall continue which is normal for the season.

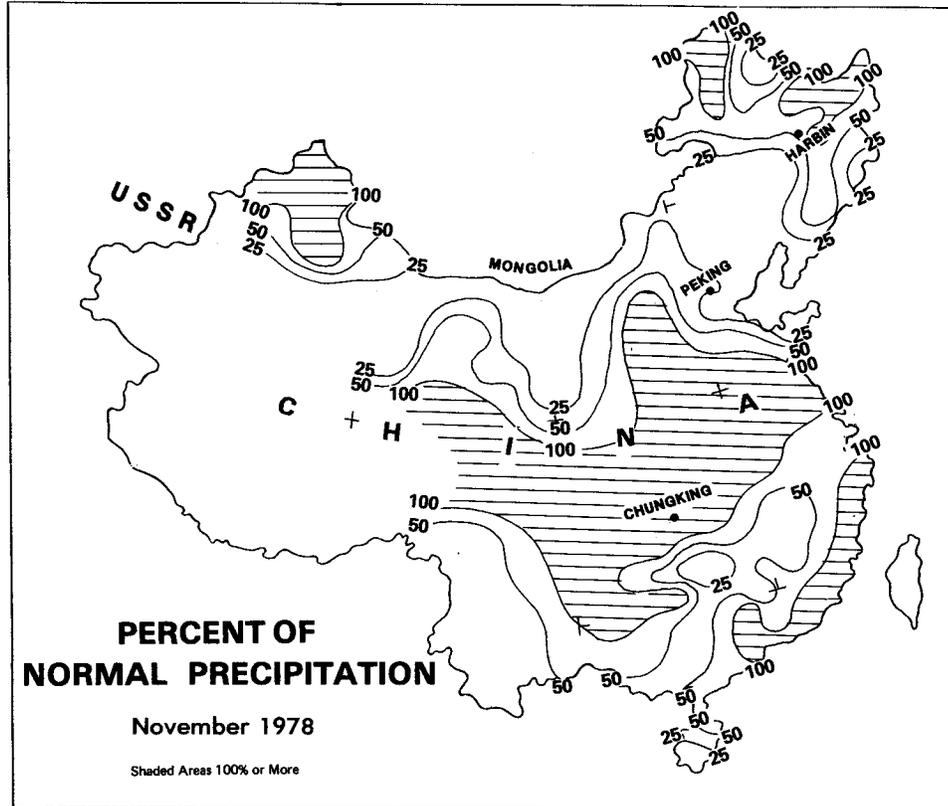
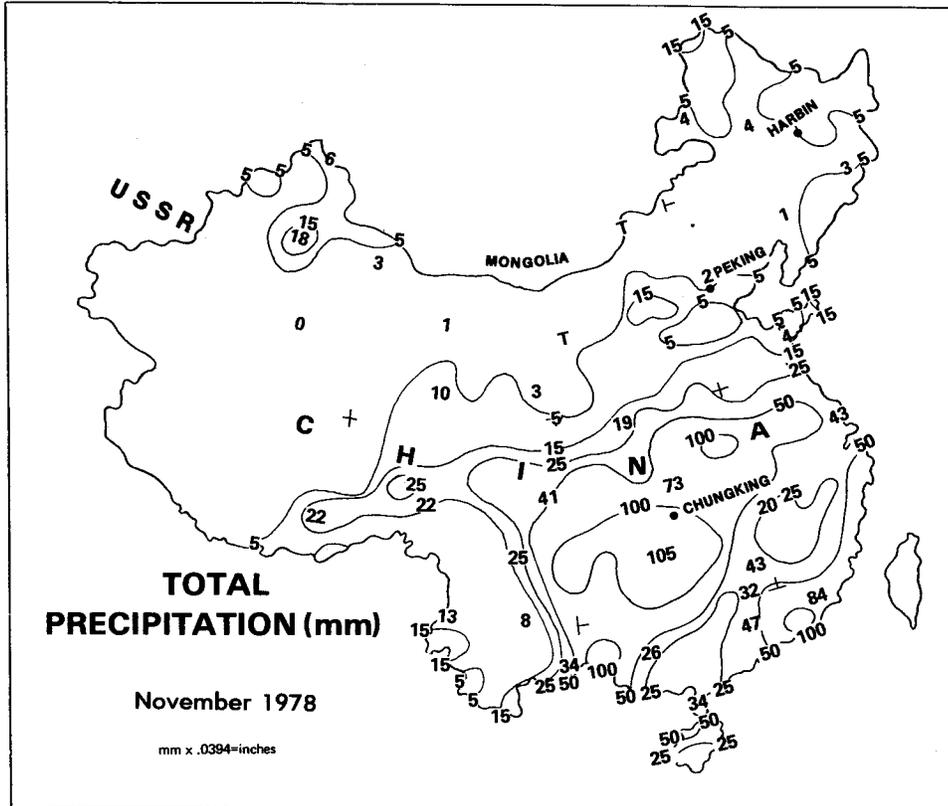
SOUTHEAST ASIA. The rainy season ended early over much of the area, and many locations reported less-than-normal rainfall. Rain was not needed in most areas because of excessive rains in late summer, and in fact, the dry weather has been quite favorable for the maturation and harvest of the rice crop. The harvest is in progress now. Substantial losses from earlier flooding have been reported in Vietnam, though other countries in the area seem to have fared better.

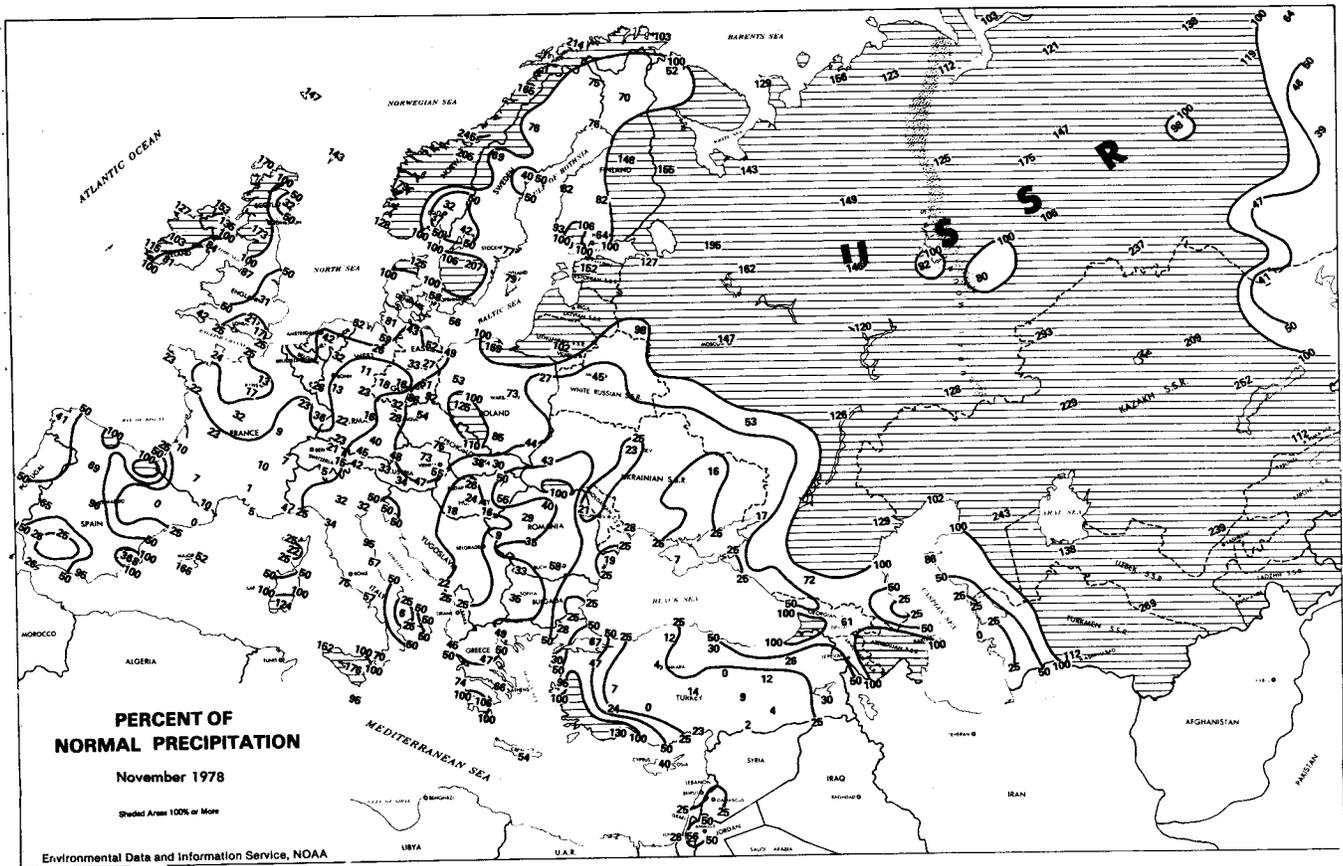
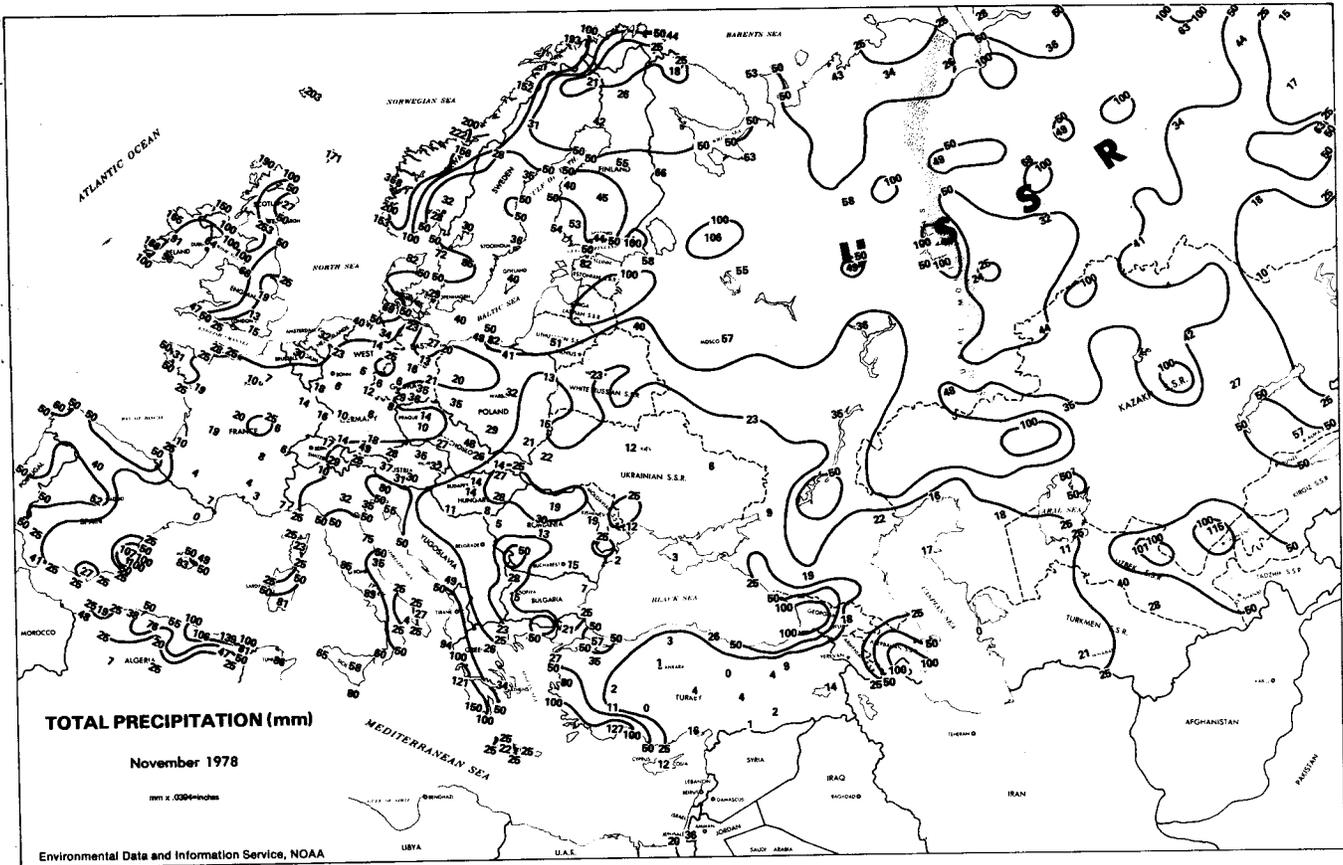
AFRICA. The onset of winter rains was delayed in parts of northwestern Africa. November rainfall in Morocco continued to be very much below normal, seriously inhibiting the germination of winter wheat. December brought heavier, more-normal, rains (20-30 mm/week) to northern parts of the country, and last week spread to cover most wheat areas. In South Africa's Maize Triangle, rainfall continued the pattern established in October. Southeastern portions of the area received near-normal totals while the western half remained below normal with some crop stress occurring as vegetative growth continues. Conditions were alleviated somewhat by more-abundant rains in early December; light rains of 5-15 mm continued last week.

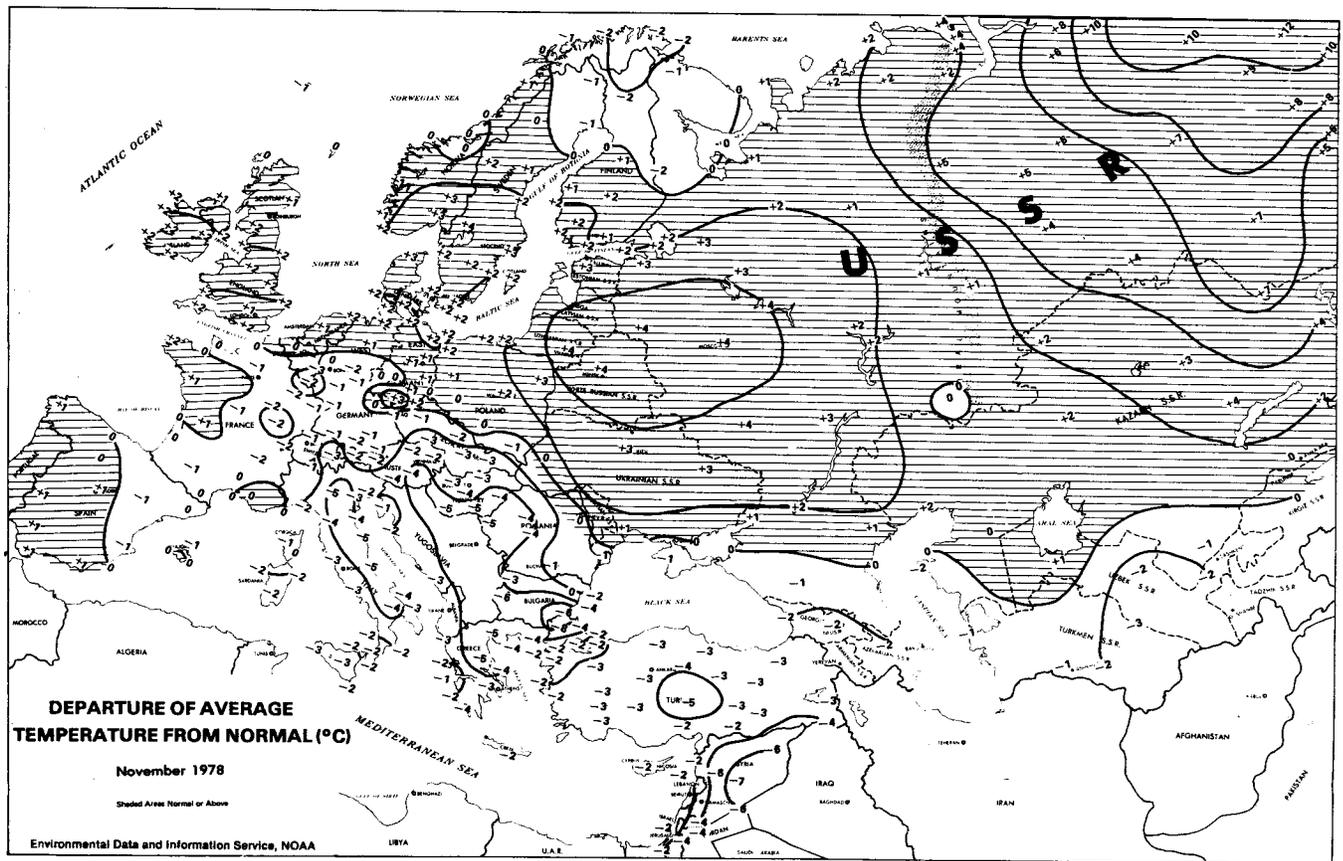
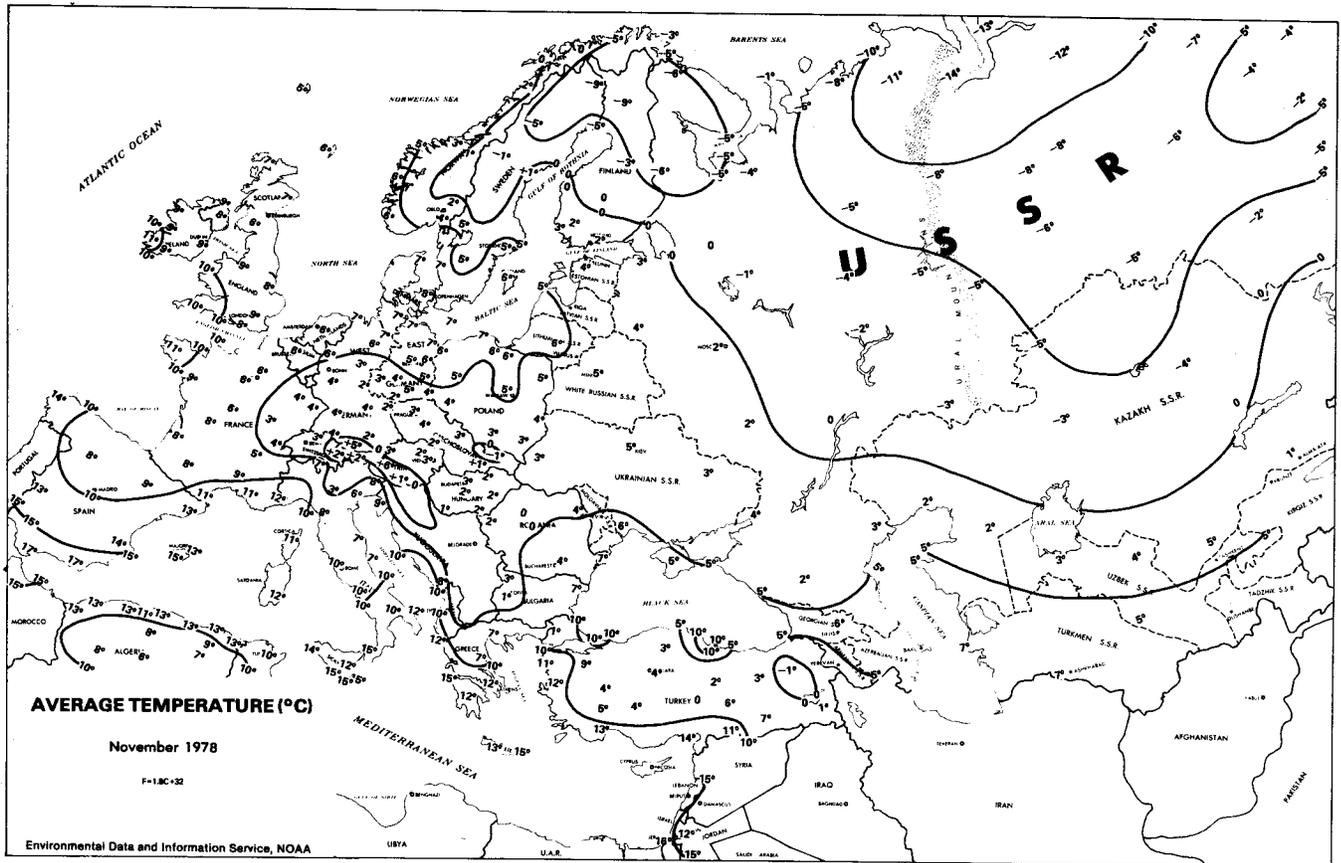
EUROPE. Much of Europe continued with below-normal precipitation in November. Italy and areas to the north had been wetter in October, but southern France, eastern Spain, and much of southeastern Europe have been dry since September. This has caused moisture shortages for winter grain crops in these areas inhibiting normal development. In southeastern Europe, the situation was further complicated by much-below-normal temperatures in November, and development of the crop before dormancy was far less than normal. December has brought more abundant precipitation to most areas, but deficiencies persist in eastern Spain and parts of France and southeastern Europe.

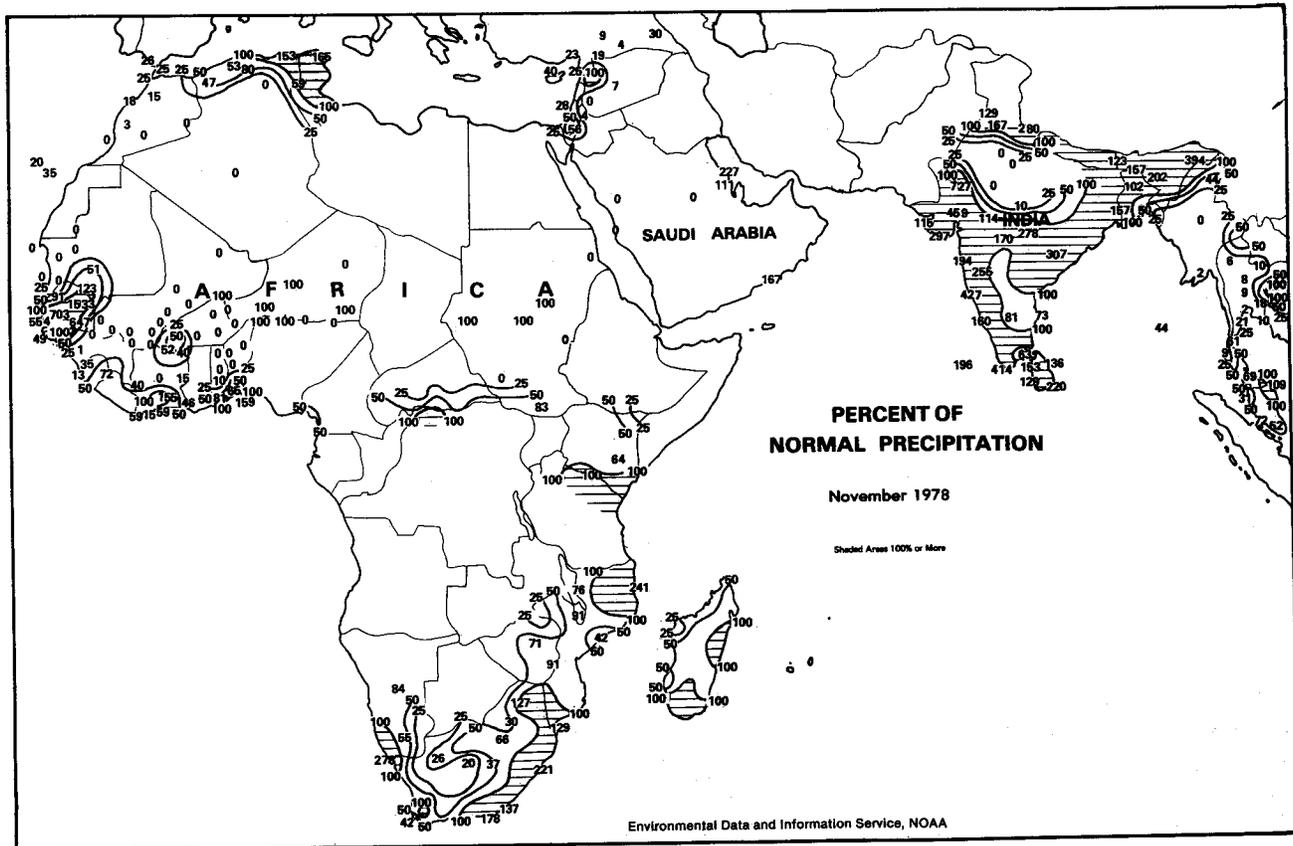
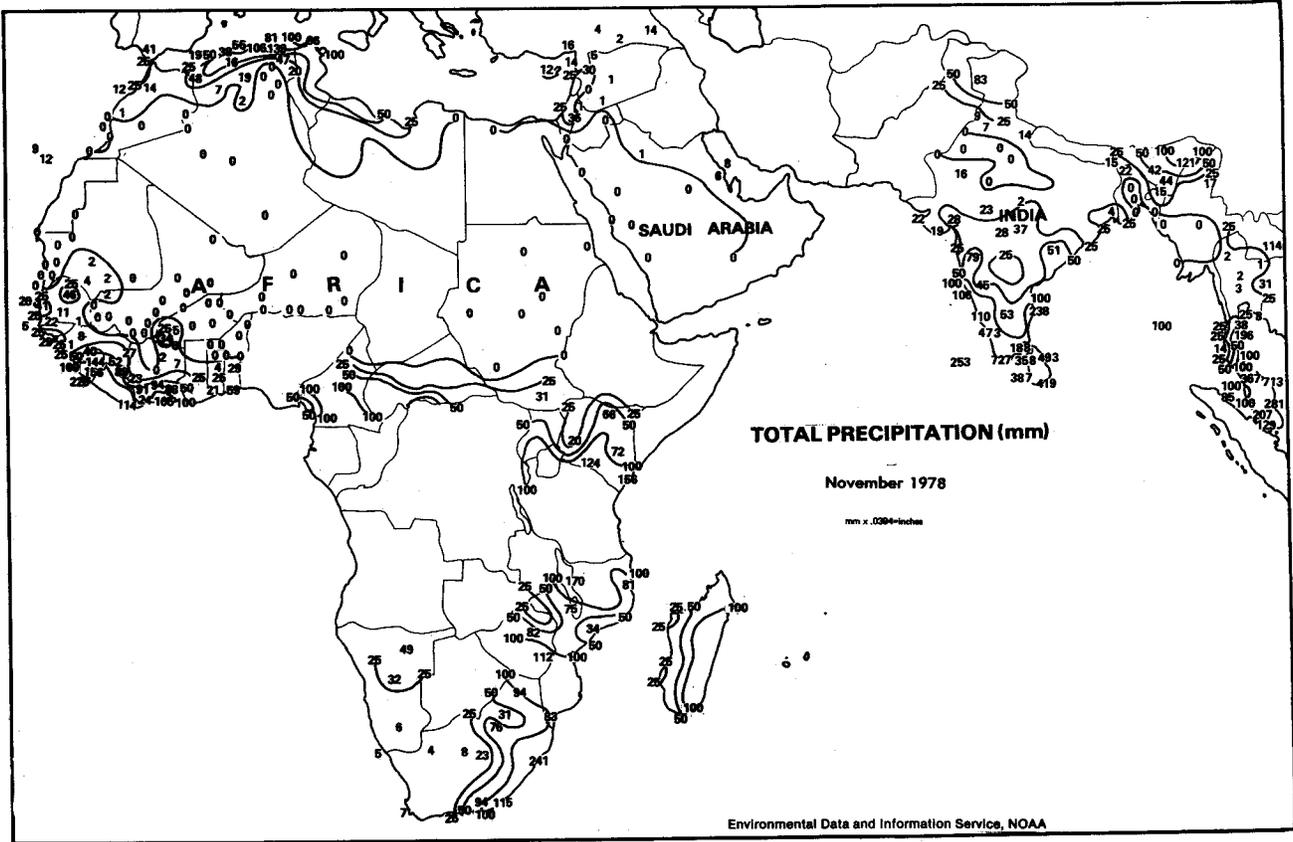
SOUTH AMERICA. Following some minor moisture deficiencies in October, rainfall in Brazil's soybean areas rose above normal in November. Intense rains in western Rio Grande do Sul early in the month necessitated some replanting because of erosion, but generally the outlook for the crop is very good with warm temperatures providing excellent growing conditions. Crop areas in western Parana needed additional rainfall for the past two weeks, but no cause for concern exists as yet. Agricultural areas in Argentina continued to receive above-normal rainfall in November disrupting corn planting and wheat harvesting. These conditions persisted into December in the corn belt, but dry weather has dominated the wheat belt for the past two weeks as the harvest moved into Buenos Aires. Last week in the corn belt, Santa Fe was somewhat drier, but wet conditions continued in Cordoba.

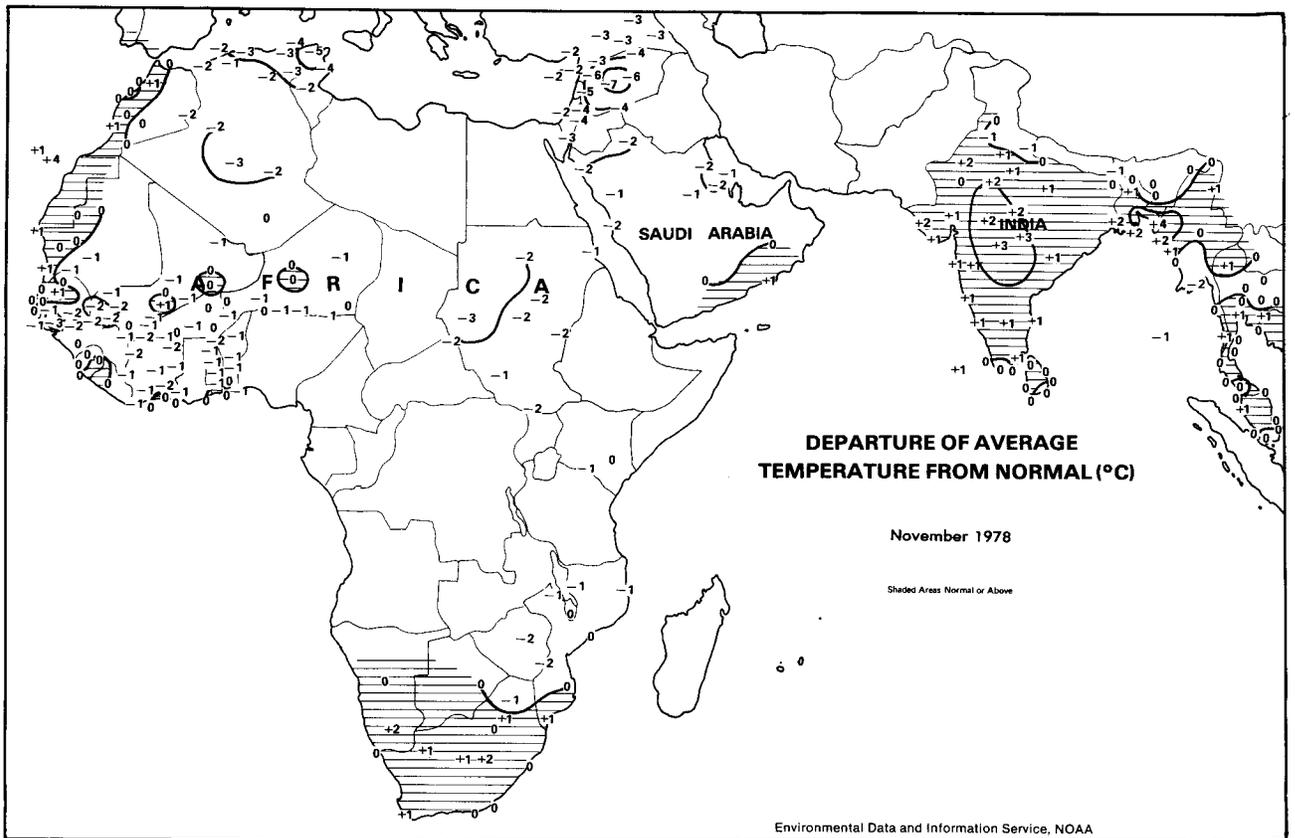
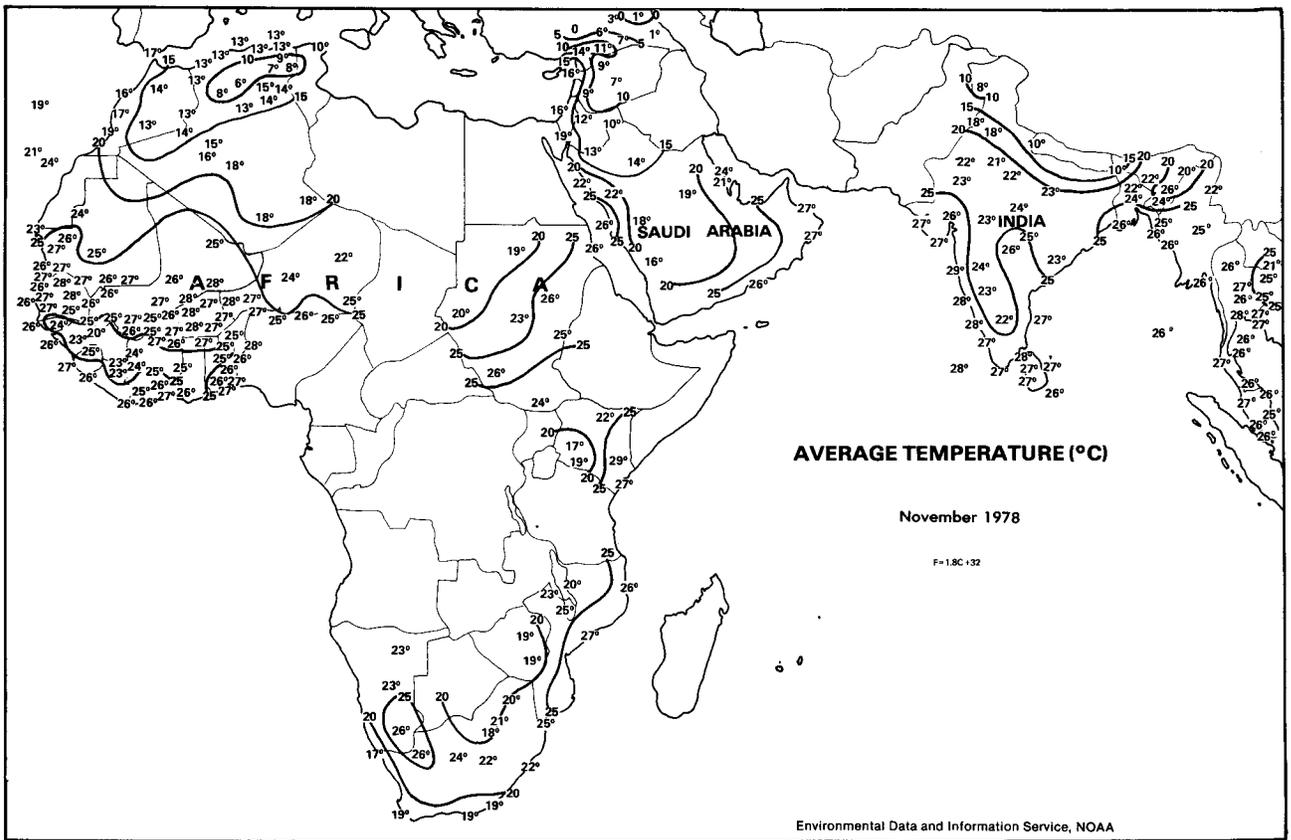
China Precipitation

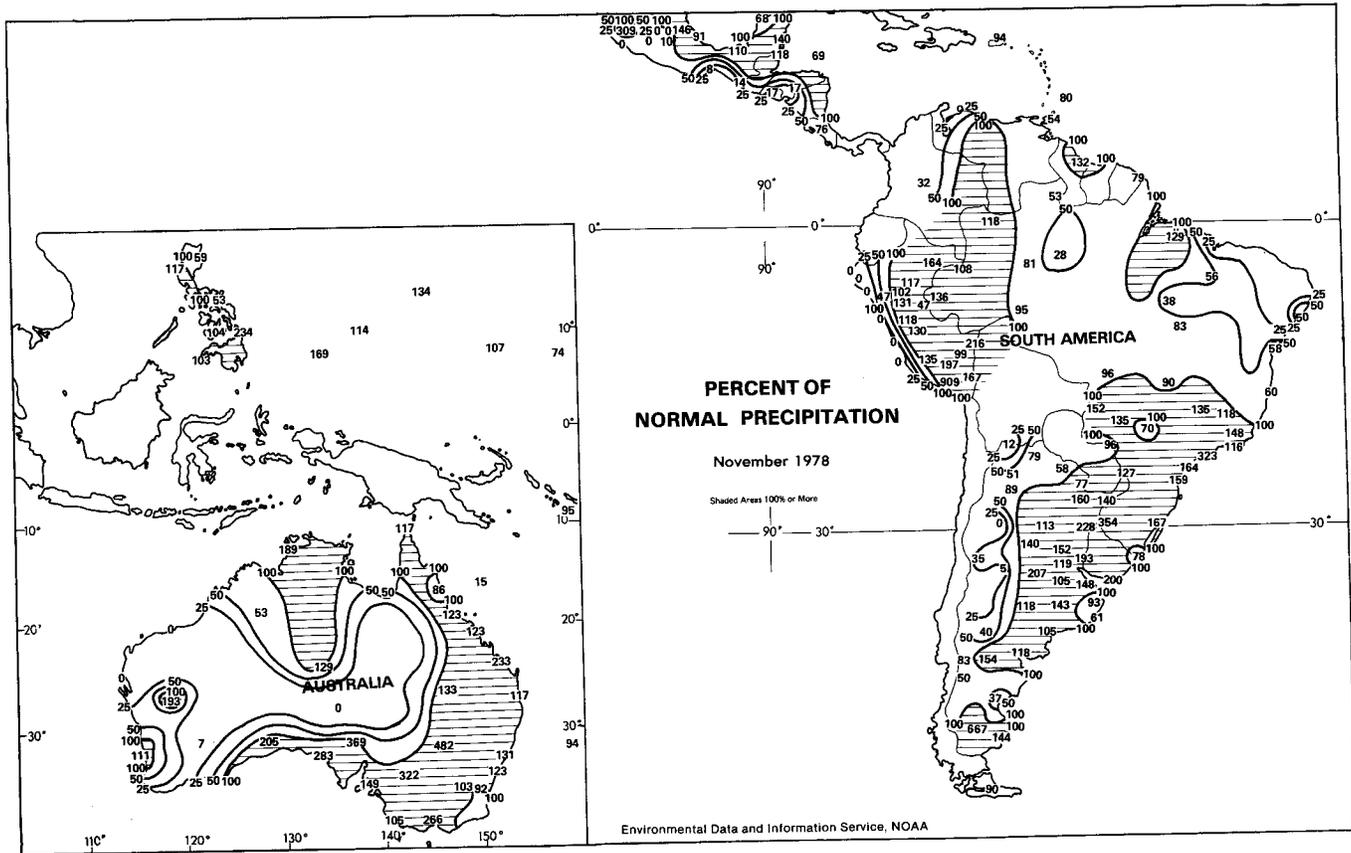
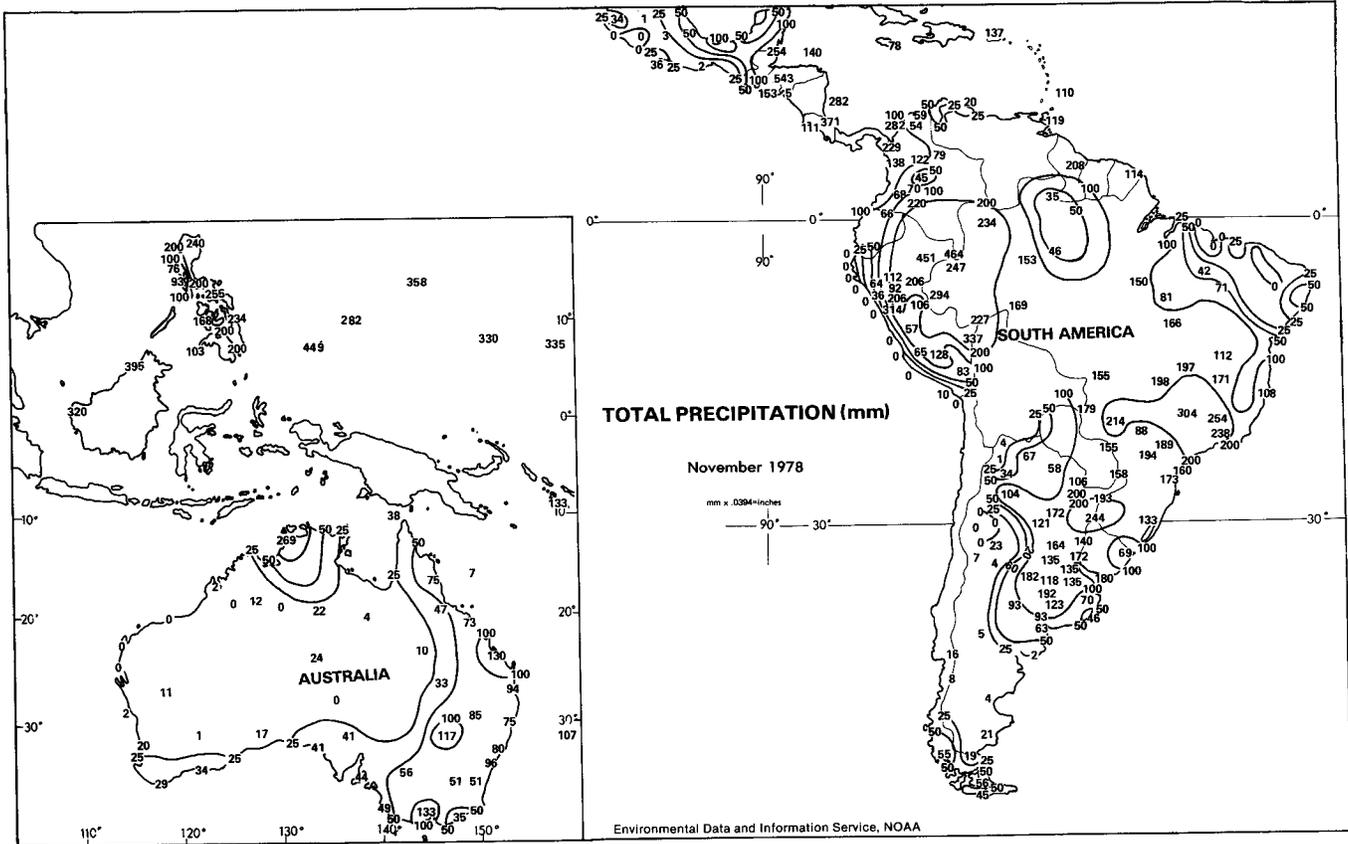


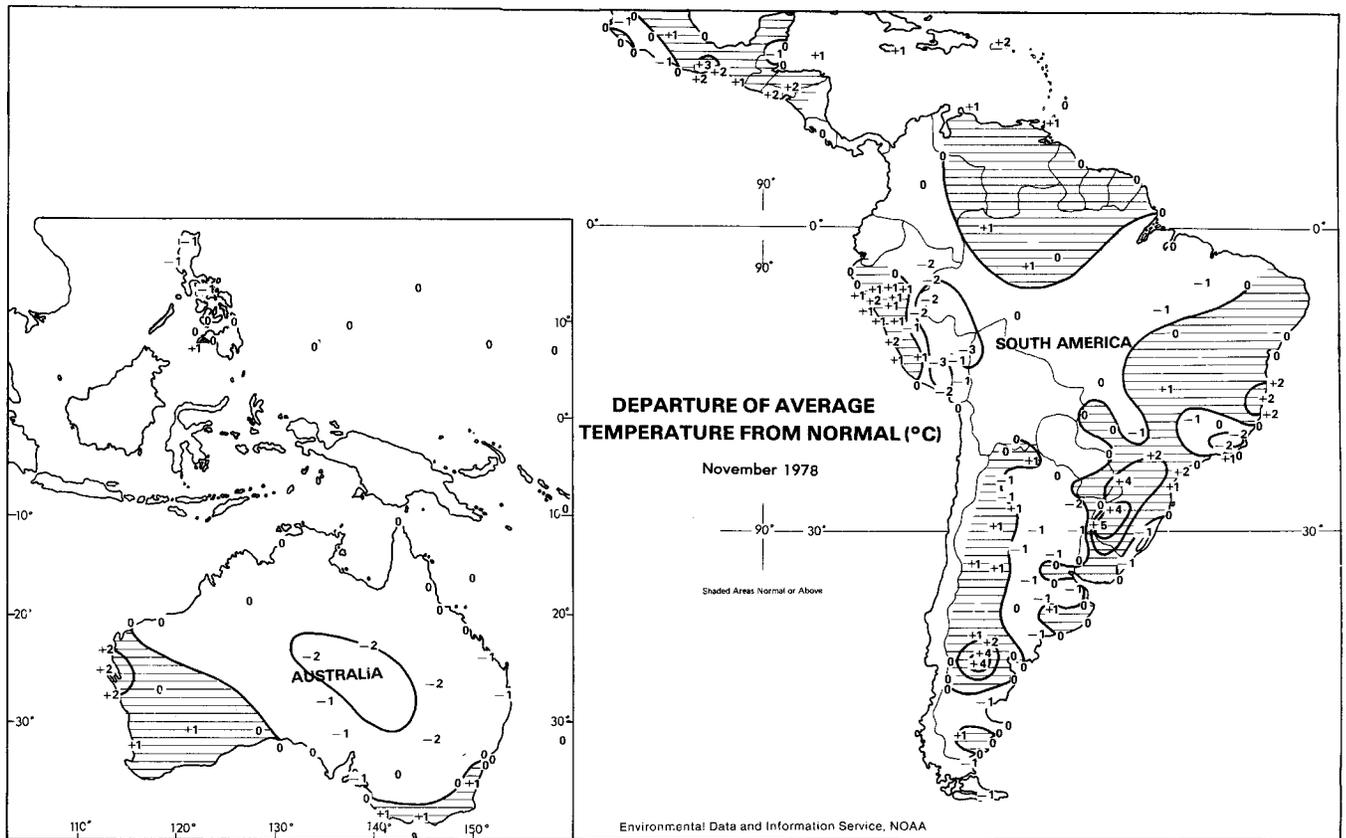
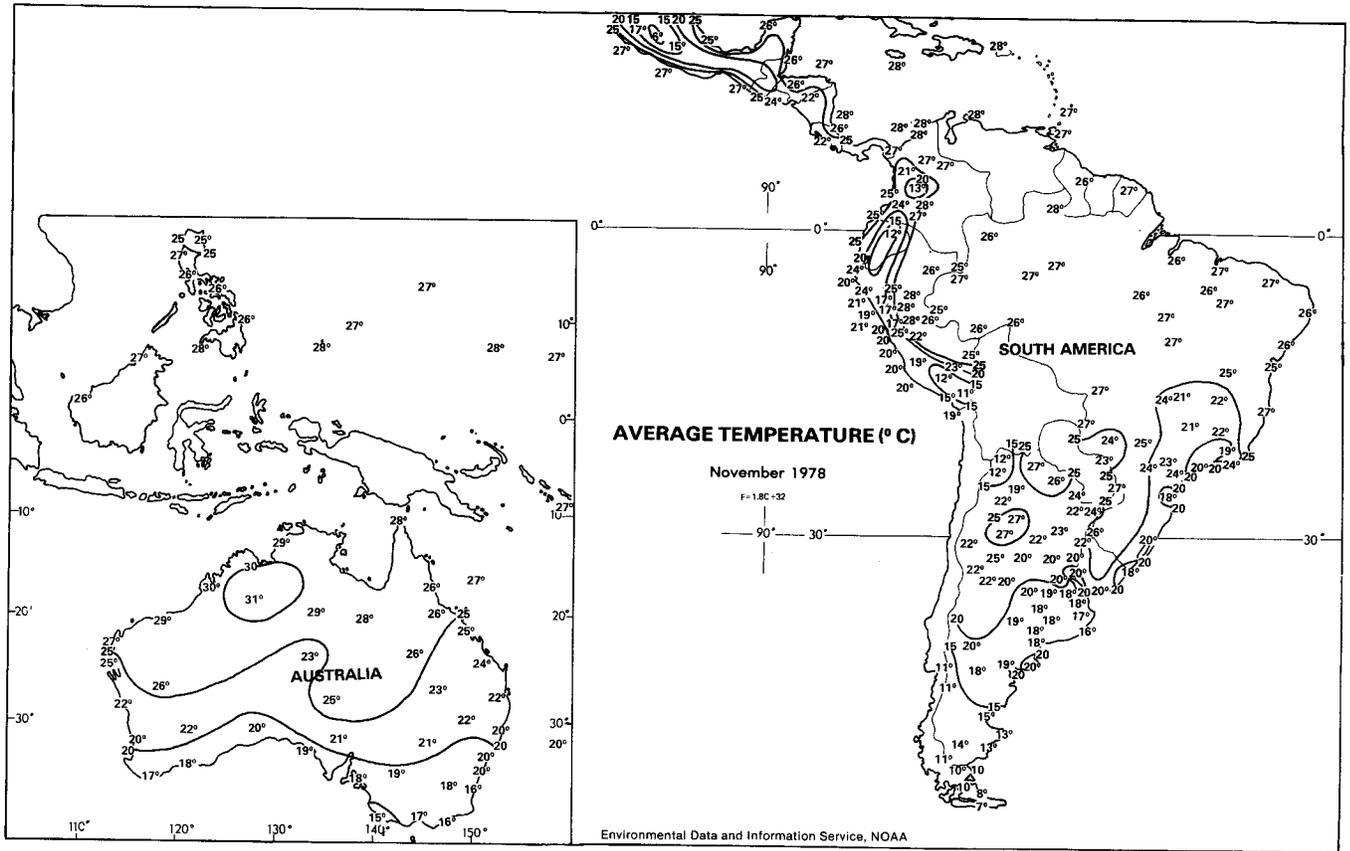


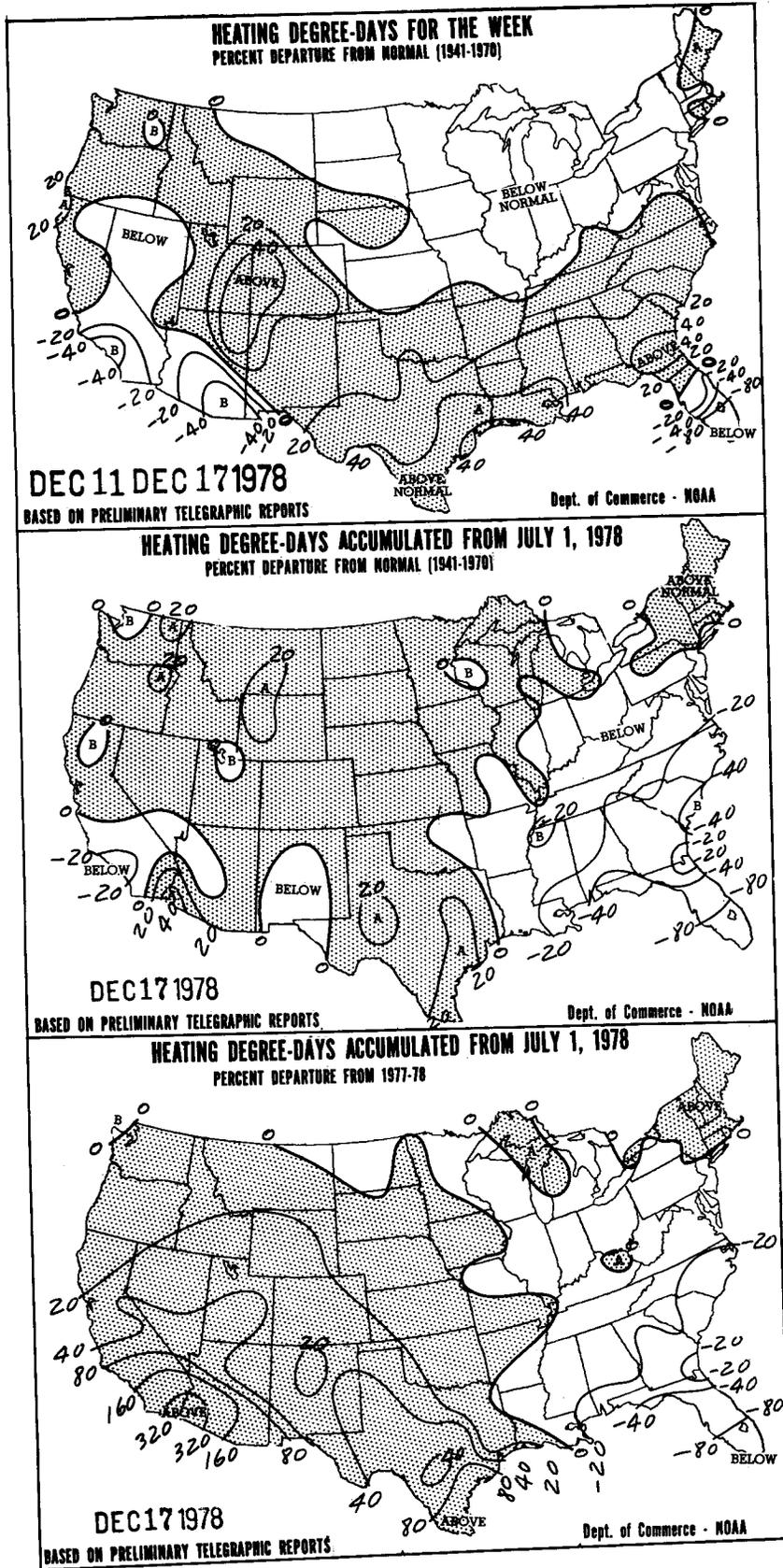












HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING DEC. 17, 1978.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78	TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78		TOTAL	DEPARTURE*	DEPARTURE FROM 1977-78			
ALA. BIRMINGHAM.....	116	23	706	150	147	162	MAINE CARIBOU.....	335	16	3251	265	253	YOUNGSTOWN.....	230	23	1787	77	33		
ALABAMA MONTGOMERY.....	116	23	420	150	147	162	MAINE PORTLAND.....	335	16	2512	112	16	OKLA. OKLAHOMA CITY.....	91	18	1035	2	67		
ARIZ. FLAGSTAFF.....	24	1	2398	25	647	647	MD. BALTIMORE.....	185	23	1168	155	68	OREG. ASTORIA.....	176	1	1033	19	67		
ARIZ. PHOENIX.....	24	1	3381	14	568	568	MASS. BOSTON.....	215	9	1667	176	231	OREG. BURNS.....	176	1	1033	19	67		
ARIZ. TUCSON.....	24	1	3491	14	568	568	MICH. ALPENA.....	247	4	2320	255	229	OREG. MEDFORD.....	176	1	1033	19	67		
ARIZ. WINSLOW.....	24	1	3491	14	568	568	MICH. DETROIT.....	247	4	1889	187	139	OREG. PORTLAND.....	176	1	1033	19	67		
ARIZ. YUMA.....	24	1	3491	14	568	568	MICH. GRANT RAPIDS.....	247	4	1889	187	139	OREG. SALEM.....	176	1	1033	19	67		
ARK. FORT SMITH.....	187	23	937	12	21	0	MICH. HOUGHTON LAKE.....	247	4	1889	187	139	PA. ALLENTOWN.....	331	9	1577	93	53		
ARK. LITTLE ROCK.....	187	23	839	12	21	0	MICH. LANSING.....	247	4	1889	187	139	PA. ELY.....	331	9	1577	93	53		
CALIF. BAKERSFIELD.....	99	21	525	78	182	182	MICH. MARQUETTE.....	247	4	1889	187	139	PA. HARRISBURG.....	331	9	1577	93	53		
CALIF. EUREKA.....	99	21	1891	125	175	175	MICH. MUSKOGON.....	247	4	1889	187	139	PA. PENNDELTON.....	331	9	1577	93	53		
CALIF. FRESNO.....	99	21	770	26	142	142	MICH. S. STE. MARIE.....	247	4	1889	187	139	PA. PITTSBURGH.....	331	9	1577	93	53		
CALIF. LOS ANGELES.....	99	21	333	98	186	186	MINN. DULUTH.....	312	39	3128	110	98	PA. SCRANTON.....	331	9	1577	93	53		
CALIF. RED BLUFF.....	99	21	659	66	216	216	MINN. INTERNATL FALLS.....	312	39	3566	243	110	R. I. PROVIDENCE.....	236	1	1786	142	166		
CALIF. SAN DIEGO.....	99	21	1019	90	193	193	MINN. MINNEAPOLIS.....	312	39	2388	15	224	S. C. CHARLESTON.....	129	19	344	253	143		
CALIF. SAN FRANCISCO.....	99	21	831	68	237	237	MINN. ROCHESTER.....	312	39	2299	287	135	S. C. COLUMBIA.....	129	19	505	257	240		
CALIF. STOCKTON.....	99	21	831	68	237	237	MINN. ST. CLOUD.....	312	39	2808	143	82	S. C. GREENVILLE.....	129	23	783	154	50		
COLO. DENVER.....	247	182	1985	157	373	373	MISS. JACKSON.....	156	43	559	92	68	S. DAK. ABERDEEN.....	295	41	2802	217	10		
COLO. GRAND JUNCTION.....	247	182	2014	297	567	567	MISS. MERIDIAN.....	156	43	593	127	53	TEXAS. HURON.....	61	61	261	229	156		
COLO. PUEBLO.....	247	182	1932	293	402	402	MO. COLUMBIA.....	195	19	1384	56	82	TEXAS. RAPID CITY.....	267	38	243	225	89		
CONN. BRIDGEPORT.....	199	20	1346	25	79	79	MO. KANSAS CITY.....	195	19	1384	56	82	TEXAS. SIOUX FALLS.....	267	38	2513	171	56		
CONN. HARTFORD.....	199	20	2096	291	326	326	MO. SPRINGFIELD.....	195	19	1353	30	117	TENN. CHATTANOOGA.....	186	19	843	220	128		
DEL. WILMINGTON.....	206	6	1274	79	181	181	MONT. BILLINGS.....	266	26	2770	436	320	TENN. KNOXVILLE.....	186	23	892	151	109		
D.C. WASHINGTON.....	165	28	903	255	132	132	NEBR. GLEASON.....	266	26	2770	436	320	TENN. MEMPHIS.....	186	23	711	212	25		
FLA. APALACHICOLA.....	97	26	196	145	141	141	NEBR. GREAT FALLS.....	266	26	2770	436	320	TENN. NASHVILLE.....	186	23	955	133	146		
FLA. DAYTONA BEACH.....	97	26	68	143	90	90	NEBR. HAYNE.....	266	26	2512	215	18	TEXAS. ABILENE.....	153	24	776	55	144		
FLA. FORT MYERS.....	97	26	96	143	90	90	NEBR. HELENA.....	266	26	2918	235	215	TEXAS. AMARILLO.....	200	16	1379	161	304		
FLA. JACKSONVILLE.....	111	32	286	57	62	62	NEBR. KALISPELL.....	266	26	1330	169	118	TEXAS. AUSTIN.....	200	16	487	44	166		
FLA. KEY WEST.....	111	32	4	57	62	62	NEBR. MILLS CITY.....	266	26	2713	339	44	TEXAS. BEAUFORT.....	200	16	34	45	87		
FLA. LAKELAND.....	111	32	4	57	62	62	NEBR. MISSOULA.....	266	26	3038	339	361	TEXAS. BROWNSVILLE.....	200	16	147	40	73		
FLA. MIAMI.....	111	32	4	57	62	62	NEBR. GRAND ISLAND.....	270	27	2147	261	324	TEXAS. CORPUS CHRISTI.....	200	16	282	40	108		
FLA. MIAMI BEACH.....	111	32	4	57	62	62	NEBR. LINCOLN.....	270	27	1950	152	55	TEXAS. EL PASO.....	200	16	733	19	181		
FLA. PALM BEACH.....	111	32	4	57	62	62	NEBR. NORFOLK.....	270	27	2206	157	151	TEXAS. FORT WORTH.....	200	16	633	19	48		
FLA. TAMPA.....	111	32	4	57	62	62	NEBR. NORTH PLATTE.....	270	27	2454	372	333	TEXAS. GALVESTON.....	200	16	255	11	88		
FLA. WEST PALM BEACH.....	111	32	4	57	62	62	NEBR. OMAHA.....	270	27	2799	295	23	TEXAS. HOUSTON.....	200	16	377	34	38		
GA. ATLANTA.....	155	4	612	290	218	218	NEBR. VALENTINE.....	270	27	2511	295	213	TEXAS. LUBBOCK.....	200	16	1095	55	331		
GA. AUGUSTA.....	155	4	570	179	63	63	NEV. ELY.....	255	15	2695	187	539	TEXAS. MIDLAND.....	200	16	977	33	397		
GA. MACON.....	155	4	456	199	122	122	NEV. LAS VEGAS.....	255	15	1710	39	309	TEXAS. SAN ANGELO.....	200	16	426	29	274		
GA. SAVANNAH.....	155	4	255	166	122	122	NEV. RENO.....	255	15	2038	75	389	TEXAS. SAN ANTONIO.....	200	16	426	29	274		
IDAHO. BOISE.....	263	35	2021	184	316	316	NEV. WINNEHUCCA.....	255	15	2226	96	480	TEXAS. VICTORIA.....	200	16	335	109	144		
IDAHO. LEISTON.....	263	35	2021	184	316	316	N. H. CONCORD.....	316	35	2504	317	118	TEXAS. WICHITA FALLS.....	200	16	904	113	149		
IDAHO. POCATELLO.....	263	35	2474	248	495	495	N. J. ATLANTIC CITY.....	207	3	1423	73	143	UTAH. SALT LAKE CITY.....	262	20	1778	78	342		
ILL. CHICAGO.....	153	23	1103	17	31	31	N. J. TRENTON.....	207	3	1257	78	127	VT. BURLINGTON.....	259	36	2493	213	162		
ILL. DECATUR.....	153	23	1810	45	160	160	N. MEX. ALBUQUERQUE.....	222	21	1270	42	150	VA. LYNCHBURG.....	194	3	1097	152	148		
ILL. Moline.....	153	23	1984	10	50	50	N. MEX. ROSWELL.....	222	21	1181	5	489	VA. NORFOLK.....	194	3	735	181	69		
ILL. PEORIA.....	153	23	1806	10	50	50	N. Y. ALBANY.....	256	17	2184	201	176	VA. RICHMOND.....	194	3	950	183	105		
ILL. ROCKFORD.....	153	23	2047	113	113	113	N. Y. BINGHAMTON.....	256	17	2132	3	76	VA. ROANOKE.....	194	3	1239	32	88		
ILL. SPRINGFIELD.....	153	23	1560	27	113	113	N. Y. BUFFALO.....	256	17	1934	20	38	WASH. QUILLAYUTE.....	187	12	212	21	78		
IND. EVANSVILLE.....	199	3	1286	68	19	19	N. Y. NEW YORK.....	256	17	1278	24	101	WASH. SEATTLE-TACOMA.....	187	12	469	61	370		
IND. FORT WAYNE.....	199	3	1750	48	133	133	N. Y. ROCHESTER.....	256	17	1824	62	70	WASH. SPOKANE.....	187	12	1746	203	221		
IND. INDIANAPOLIS.....	199	3	1518	103	350	350	N. Y. SYRACUSE.....	256	17	1926	31	1926	WASH. VERTHA.....	187	12	2245	233	180		
IND. SOUTH BEND.....	199	3	1735	119	117	117	N. C. ASHEVILLE.....	198	13	1077	235	176	W. VA. BECKLEY.....	226	1	1462	291	179		
IOWA. BURLINGTON.....	247	19	1913	159	30	30	N. C. CHARLOTTE.....	172	14	729	218	182	W. VA. CHARLESTON.....	226	1	1276	131	103		
IOWA. DES MOINES.....	247	19	2234	118	199	199	N. C. GREENSBORO.....	187	10	910	157	204	W. VA. HUNTINGTON.....	226	1	1206	131	103		
IOWA. DUBUQUE.....	247	19	2234	118	199	199	N. C. HATTERAS.....	187	10	818	209	109	W. VA. MARTINSBURG.....	226	1	1227	131	103		
IOWA. SIOUX CITY.....	247	19	2320	261	261	261	N. C. RALEIGH.....	174	11	836	220	278	W. VA. PARKERSBURG.....	226	1	1227	131	103		
KANS. CONCORDIA.....	203	38	1680	65	86	86	N. C. WILMINGTON.....	174	11	836	220	278	WIS. GREEN BAY.....	283	23	2509	113	90		
KANS. DOGGE CITY.....	203	38	1542	174	232	232	N. DAK. BISMARCK.....	288	53	2993	245	24	WIS. LACROSSE.....	283	23	2087	68	305		
KANS. GOOBLAND.....	203	38	2017	153	211	211	N. DAK. FARGO.....	310	51	3028	260	17	WIS. MADISON.....	283	23	2407	102	88		
KANS. TOPEKA.....	203	38	1686	107	79	79	N. DAK. HILLISTON.....	302	41	3100	261	45	WIS. MILWAUKEE.....	283	23	2085	62	94		
KANS. WICHITA.....	203	38	1420	120	208	208	OHIO AKRON-CANTON.....	229	20	1714	84	90	WYO. CASPER.....	302	34	2803	436	514		
KY. LEXINGTON.....	211	55	1169	57	99	99	OHIO CINCINNATI.....	229	20	1438	113	173	WYO. CHEYENNE.....	302	34	2487	243	243		
KY. LOUISVILLE.....	211	55	1169	57	99	99	OHIO CLEVELAND.....	229	20	1551	104	116	WYO. LANDER.....	302	34	2880	436	514		
LA. BATON ROUGE.....	122	37	355	99	12	12	OHIO COLUMBUS.....	229	20	1553	130	91	WYO. SHERIDAN.....	302	34	2880	436	514		

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