

# WEEKLY WEATHER AND CROP BULLETIN

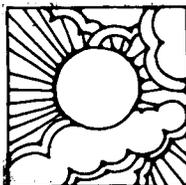
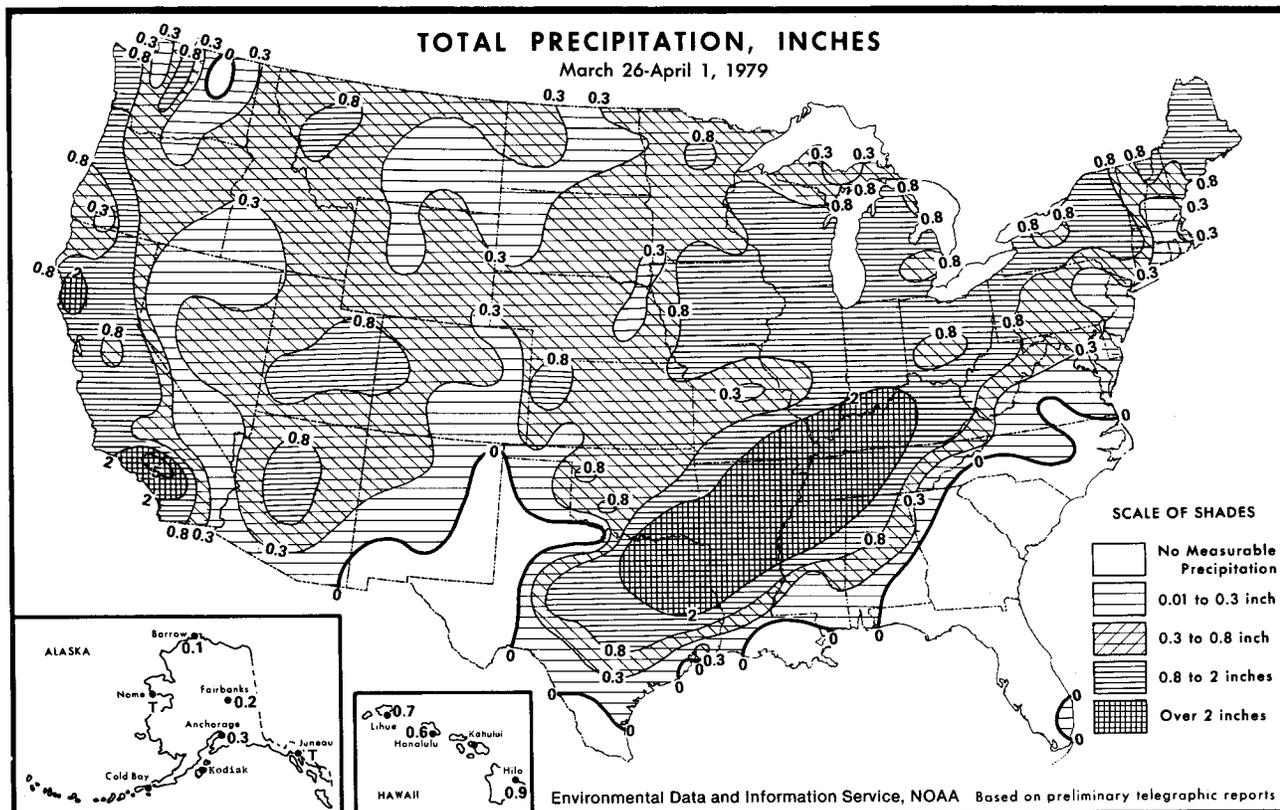
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## National Weather Summary

March 26 - April 1

**HIGHLIGHTS:** A series of weather disturbances moved down the West Coast into the Southwest and brought moderate to heavy moisture to coastal areas and snow to the mountains; the rain fell at intervals for four consecutive days in southern California. Heavy snow accumulated in the Plateau Region and the Rockies.

Severe weather---thunderstorms, high winds, hail, and tornadoes---struck the country from central Texas to the Ohio Valley. Sections close to this portion of the Nation also felt the unsettled weather. Rain again covered the Plains winter wheat area with snow in western parts at the end of

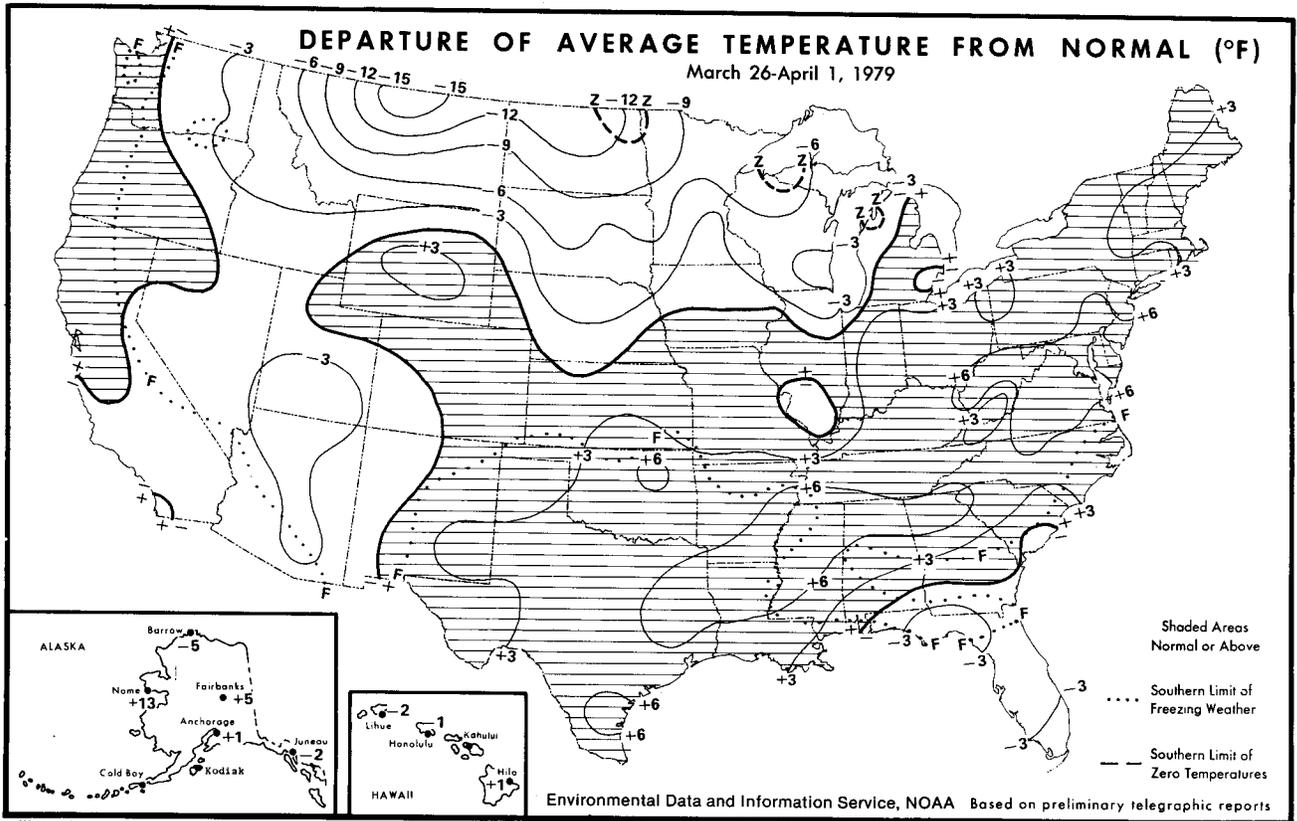
the week. The Southeast showed little or no precipitation.

Above-normal temperatures, including some record highs, spanned the country from Texas to New England. The northern Plains was colder than normal.

On Monday, scattered snow fell from the Rockies to Pennsylvania; accumulations included 4 inches at Cheyenne, Wyo., 5 inches at Goodland, western Kansas, and an inch at Pittsburgh.

While up to a half-inch of rain dampened the West Coast and northern New England, severe storms surged over the southern Plains. Heavy hail and a tornado were reported near Waco, Tex. Large hail also pelted McAlester, southeastern Oklahoma, and an area near the central Oklahoma/Arkansas border.

Record cold chilled the South. Huntsville, northern Alabama, at 28°, and 34° at Savannah, eastern Georgia, set new marks. In Florida, the record books opened to 32° at Jacksonville, 36° at Apalachicola, and 48° at West Palm Beach.



Pacific Coast rain became heavy on Tuesday changing to snow as it reached the inland mountains; more than an inch of rain soaked San Diego, Los Angeles, and Santa Barbara. By nightfall, snow had reached into Montana and Wyoming. Little moisture fell elsewhere; West Plains, southern Missouri, did receive a quarter-inch of rain.

Temperatures remained quite cold in Florida where Orlando scored a record-tying 42°.

Rain persisted in the West on Wednesday, while snow fell in the high elevations from California to Colorado. San Diego got a third-inch of rain; Phoenix chalked up a half-inch; and Green River, eastern Utah, gathered about an inch and one-half.

Strong southerly winds carried warm, moist Gulf air to the Mississippi and Ohio Valleys; Fort Wayne, northeastern Indiana, counted three-quarters inch of rain, and Toledo posted a half-inch. Meantime, arctic air swept into the upper halves of the Rockies and Plains States.

On Thursday, bad weather plagued the Nation from the western mountains to the Midwest. Austin, central Nevada, collected 2 feet of snow; 4 feet blanketed Utah mountains, and 4 to 10 inches whitened the basins between Provo and Cedar City.

Rain, heavy at times, drenched portions of the Plains and Midwest; accumulations ran from a half-inch in Minneapolis and Chicago to 1.35 in. at Abilene, northern Texas.

Hail and 18 tornadoes battered several States, though injuries and damage were slight. Iowa reported 10 of the twisters; Oklahoma, Texas, and Missouri---2 each; and one in both Kansas and Colorado.

On Friday, very heavy rains fell from Texas to the Midwest. Thunderstorms rumbled over an area from central to northeastern Texas and into Louisiana; a sample of the heaviest amounts showed 3.35 in. at Dallas and 3 inches near Shreveport, northwestern Louisiana. Other rainfall amounted to

an inch at Little Rock, three-quarters inch at Cape Girardeau, southeastern Missouri, and two-thirds inch at Pellston, northern Michigan. Waterways swelled from Illinois to the Gulf.

Hail peppered St. Louis, and a tornado was sighted at Kewanee, northwestern Illinois.

Snow fell in Washington's Cascade Mountains, the northern Rockies, and the eastern Dakotas and northern Minnesota.

Temperatures warmed considerably in the lower half of the middle Atlantic States; Baltimore hit a record 87°.

Thunderstorms continued to march over the Nation from Texas to the Ohio Valley on Saturday.

Shreveport gathered additional rain triggering floods. Points in southern Indiana and Kentucky were drenched by 3 to 4 inches. North central Texas and western Kentucky both reported two tornadoes, and large hail hit some Oklahoma stations.

Snow whitened the northern parts of the Rockies and Plains.

Temperatures soared in the East; records included 80° at Roanoke, southwestern Virginia, Washington's 85°, Baltimore's 83°, and Atlantic City's 85°, which broke the former high mark by 14 degrees. Record-tying readings showed 80° at Wilmington, Del., and Greensboro, north central North Carolina.

On Sunday, up to 4 inches of snow covered the Plains from Kansas to the Dakotas. Snow also persisted in the Rockies; Salt Lake City counted a half-foot.

Heavy rains fell from Arkansas and Missouri to Kentucky and Tennessee. Weekend rainfalls reached 5 to 8 inches in southeastern Missouri, western Kentucky and some Arkansas cities. These areas suffered extensive flooding.

Tornadoes ripped through northeastern Texas and Arkansas.



## National Agricultural Summary

March 26 - April 1

**HIGHLIGHTS:** Mild temperatures in the southern half of the Nation improved growing conditions for grasslands and small grains. The northern Great Plains and most of the Mountain States endured another week of subnormal readings, but winter wheat began greening in Montana. Precipitation kept soils saturated across the south central States, parts of the Corn Belt, and the Pacific Coastal States. Elsewhere, land preparation and planting advanced rapidly. The only area reporting short topsoil moisture was part of Florida. Subsoil moisture in some areas of the Great Plains rated only short to adequate, but most of the Nation moved into the early spring planting season with adequate to surplus soil moisture. Farmers had as much as 5 to 6 days suitable for fieldwork, except in the rainy areas where only 2 or 3 days were available. Plowing progress ranged from a low of 33 percent in Kentucky to a high of 65 percent in Ohio. Generally, land preparation surpassed last year and in many States the average as well. Missouri farmers appeared in far better shape with 60 percent of the land plowed compared with the rain-slowed 16 percent last year. Winter wheat rated fair to mostly good under the influence of adequate soil moisture and milder temperatures. Corn planting became widespread across the South where rains did not delay progress. Overall, corn planting stayed on schedule. Cotton planting advanced slowly, held in check by wet, cold soils. Grain sorghum planting barely got underway outside Texas. Rice seeding lagged far behind last year and the average in Texas and Louisiana---the only States where planting began. Grasslands rated good and improving throughout most of the Nation. Only a few Mountain States reported some farmers feeding supplemental rations. Calving and lambing advanced without any unusual deaths or problems. Deciduous blooms advanced northward into the Carolinas. Citrus harvests continued in Florida and California and were almost complete in other States.

**SMALL GRAINS:** Winter wheat rated fair to mostly good with stands showing improvement since the advent of milder weather. Topsoil moisture scored adequate in all major production areas. Some southern Great Plains stands were too wet to fertilize, but producers in other areas of the Nation topdressed small grains. Winter damage appeared minor with very little blowing, erosion, or heaving evident. Only Pacific Northwest growers reseeded seriously damaged winter wheat stands.

Kansas wheat stands improved with early plantings looking better than the late-planted stands. Oklahoma winter wheat grew vigorously with 30 percent in the joint stage, falling between 1978's 20 percent and the 45 percent average. Texas wheat prospects rated good to excellent, although dry soils plagued some High Plains stands. Insect damage appeared minimal as growers fertilized stands. Arizona's early stands formed heads. Early California plantings reached the boot stage.

Growers in the Corn Belt and some Mountain States seeded spring grains including oats and barley. Seeding generally ranged from 5 to 10 percent, although Kansas oats seeding reached 25 percent and barley planting stood at 35 percent. Planting of these spring grains was not yet underway in the major production States.

**OTHER CROPS:** Corn seeding ranged from a low 3 percent complete in Virginia, the northernmost extent of corn planting activity, to a record-breaking 61 percent in Georgia. Georgia's record is almost double last year's 32 percent and well above the 26 percent average.

Soil temperatures gradually warmed giving a few more farmers the chance to plant cotton, but most seedings centered in Texas and the Southwest. Texas cotton planting stood at only 11 percent, short of 1978's 12 percent and the 19 percent average. Arizona cotton planting advanced to 25 percent, well ahead of last year's 8 percent. Rain delayed cotton planting in California's San Joaquin Valley. Planting continued in the Imperial Valley, but low temperatures slowed germination. Planting in the Southeast stood at 1 percent while farmers waited for higher temperatures.

Rice planting stood at 17 percent in Louisiana, far short of the 40 percent last year and the 28 percent average. Texas rice seeding fared no better as producers planted 16 percent of the acreage compared with 35 percent last year and the 38 percent average. Rains and wet soils hampered land preparation and seeding in both States. Growers seeded a few acres of Arkansas rice. Rains halted California land preparations.

Grain sorghum planting centered mostly in Texas, although minor acreages were planted in a few other southern States including Florida and Arkansas. Texas grain sorghum plantings stood at 33 percent, lagging the 53 percent last year and the 47 percent average. Rains held planting to a virtual standstill in Texas.

**FRUITS AND NUTS:** Deciduous fruit growers in northern production areas pruned and sprayed trees. Peaches bloomed as far north as Arkansas, Tennessee, and the Carolinas. Low temperatures kept buds closed in Virginia. Peaches in northern Georgia sustained some light frost damage. Washington apricots bloomed. California deciduous fruit and nut trees bloomed; almonds and walnuts developed.

Florida citrus rated excellent; irrigation supplemented inadequate soil moisture. New growth and full bloom continued. Harvest slowed prior to Valencia crop picking. The Texas citrus harvests were almost complete. Arizona picking advanced; some fruit was lost to high winds. Trees reached full bloom. California citrus showed variable quality.

**VEGETABLES:** Georgia growers harvested leafy vegetables. South Carolina growers planted snap beans, cucumbers, and tomatoes. Louisiana producers transplanted and staked tomatoes. Rains halted vegetable activities throughout the south central States. Colorado and Idaho growers planted onions. Florida vegetables rated good to excellent, although a cold front slowed growth and frosted some isolated stands. Shipments advanced 6 percent from the previous week. Only pepper supplies declined; other crop volumes held steady or increased. Florida strawberries rated good with volume up sharply as harvest neared its peak. California growers harvested a wide range of produce including asparagus, broccoli, cauliflower, celery, and lettuce. Tomato transplanting for fresh and processing continued.

**PASTURES AND LIVESTOCK:** Grasslands rated fair to good and improving as milder temperatures complemented ample soil moisture to produce good growing conditions. Greening extended into almost all areas of the Nation. Only a few Mountain States reported feeding supplemental rations. Calving and lambing continued with no unusual deaths. Some parts of the South and West were too wet to graze.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., April 1, 1979

States and Stations	Temperature Of		Precipitation Inches		States and Stations	Temperature Of		Precipitation Inches		States and Stations	Temperature Of		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	62	+ 5	.5	- .8	LA. Baton Rouge . . .	68	+ 5	T	- 1.2	Youngstown . . .	42	+ 1	1.2	+ .4
Mobile . . .	65	+ 2	.1	- 1.5	Lake Charles . . .	68	+ 4	T	- .9	OKLA. Okla. City . . .	58	+ 3	.3	- .1
Montgomery . . .	63	+ 3	0	- 1.3	New Orleans . . .	67	+ 3	0	- 1.1	Tulsa . . .	45	+ 3	.6	- .1
ALASKA. Anchorage . . .	29	+ 1	.3	+ .2	Shreveport . . .	68	+ 7	4.2	+ 3.2	OREG. Astoria . . .	59	+ 0	.9	- .4
Barrow . . .	5	+ 6	.1	0	MAINE. Caribou . . .	33	+ 4	1.0	+ .5	Burns . . .	39	+ 0	.3	+ .1
Fairbanks . . .	22	+ 5	.2	+ .1	Portland . . .	37	0	.4	- .4	Medford . . .	49	+ 2	T	- .3
Juneau . . .	32	- 2	---	- .8	MD. Baltimore . . .	55	+ 7	.4	- .4	Pendleton . . .	44	- 2	.4	+ .2
Kodiak . . .	---	---	---	---	MASS. Boston . . .	43	0	.4	- .5	Portland . . .	49	+ 2	.7	0
Nome . . .	24	+ 13	T	- .2	Chatham . . .	40	- 1	.1	- .3	Salem . . .	47	0	.6	- .2
ARIZ. Flagstaff . . .	32	- 5	.9	+ .5	MICH. Alpena . . .	33	+ 1	.8	+ .3	PA. Allentown . . .	49	+ 6	.2	+ .6
Phoenix . . .	61	- 2	.9	+ .8	Detroit . . .	40	- 1	1.1	+ .4	Erie . . .	40	+ 2	1.5	+ .8
Tucson . . .	58	- 3	T	- .1	Flint . . .	40	+ 2	.7	+ .1	Harrisburg . . .	51	+ 5	.8	+ .1
Winslow . . .	46	- 2	.3	+ .2	Grand Rapids . . .	39	0	1.2	+ .5	Philadelphia . . .	52	+ 6	.1	- .7
Yuma . . .	66	- 1	T	0	Houghton Lake . . .	31	- 2	1.1	+ .6	Pittsburgh . . .	46	+ 3	.6	- .2
ARK. Fort Smith . . .	59	+ 4	1.7	+ .8	Lansing . . .	40	+ 1	.8	+ .2	Scranton . . .	46	+ 5	.2	- .4
Little Rock . . .	59	+ 4	3.7	+ 2.6	Marquette . . .	23	- 5	.2	- .4	R. I. Providence . . .	43	+ 2	.1	- .8
CALIF. Bakersfield . . .	58	- 1	.5	+ .3	Muskegon . . .	35	- 3	1.0	+ .3	S. C. Charleston . . .	59	- 1	0	- 1.0
Eureka . . .	49	0	.4	- .5	S. Ste. Marie . . .	27	- 3	.8	+ .4	Columbia . . .	61	+ 3	0	- 1.0
Fresno . . .	56	0	1.0	+ .6	MINN. Duluth . . .	24	- 6	.6	+ .2	Greenville . . .	59	+ 4	0	- 1.2
Los Angeles . . .	57	- 3	3.3	+ 2.9	Internatl Falls . . .	21	- 7	.5	+ .2	S. D. Aberdeen . . .	26	- 8	.6	+ .3
Red Bluff . . .	56	+ 1	1.0	+ .5	Minneapolis . . .	33	- 2	.6	+ .2	Huron . . .	31	- 5	.8	+ .5
San Diego . . .	60	+ 1	1.3	+ 1.0	Rochester . . .	31	- 4	.7	+ .2	Rapid City . . .	35	- 1	.1	- .2
San Francisco . . .	54	0	1.9	+ 1.4	St. Cloud . . .	29	- 4	.3	- .1	Sioux Falls . . .	32	- 5	.2	- .2
Stockton . . .	56	+ 1	.7	+ .3	MISS. Jackson . . .	67	+ 7	T	- 1.2	TENN. Chattanooga . . .	59	+ 5	.2	- .8
COLO. Denver . . .	42	+ 1	.3	- .1	Meridian . . .	64	+ 4	.4	- 1.0	Knoxville . . .	63	+ 7	4.3	+ 3.1
Grand Junction . . .	44	- 1	1.1	+ .9	MO. Columbia . . .	49	+ 2	.3	- .4	Memphis . . .	58	+ 4	3.4	+ 2.3
Pueblo . . .	46	+ 2	T	- .2	Kansas City . . .	47	+ 1	.3	- .4	Nashville . . .	64	+ 5	1.6	+ 1.3
CONN. Bridgeport . . .	46	+ 4	.1	- .7	St. Louis . . .	48	- 1	.6	- .2	TEX. Abilene . . .	50	0	.2	0
Hartford . . .	46	+ 5	.2	- .7	Springfield . . .	51	+ 2	1.3	+ .5	Amarillo . . .	66	+ 3	1.0	+ .5
D. C. Washington . . .	57	+ 7	.3	- .4	MONT. Billings . . .	31	- 6	.1	- .2	Austin . . .	70	+ 6	T	- .7
FLA. Apalachicola . . .	64	- 2	T	- 1.0	Glasgow . . .	20	- 12	.3	+ .2	Beaumont . . .	75	+ 4	T	- .1
Daytona Beach . . .	69	- 2	0	- .6	Great Falls . . .	17	- 16	.5	+ .3	Brownsville . . .	74	+ 6	T	- .3
Ft. Myers . . .	62	- 2	0	- .8	Havre . . .	28	- 7	.8	+ .6	Corpus Christi . . .	70	+ 3	.1	- .1
Jacksonville . . .	73	- 3	0	- .4	Helena . . .	29	- 6	.5	+ .3	Del Rio . . .	58	0	0	- .1
Key West . . .	70	- 3	---	---	Kalispell . . .	29	- 7	.1	- .1	El Paso . . .	64	+ 5	2.1	+ 1.4
Lakeland . . .	70	- 3	T	- .6	Miles City . . .	32	- 5	1.0	+ .8	Fort Worth . . .	68	+ 4	0	- .6
Miami . . .	66	- 2	0	- .8	Missoula . . .	40	- 1	.3	- .1	Galveston . . .	70	+ 6	T	- .5
Orlando . . .	59	- 4	0	- 1.2	NEBR. Grand Island . . .	43	+ 1	.6	+ .2	Houston . . .	57	+ 4	T	- .2
Tallahassee . . .	67	- 1	0	- .8	Lincoln . . .	36	- 3	.2	- .2	Lubbock . . .	60	+ 2	0	- .1
Tampa . . .	69	- 3	T	- .8	Norfolk . . .	37	- 2	.4	+ .1	Midland . . .	66	+ 5	.8	+ .6
W. Palm Beach . . .	62	+ 7	T	- 1.3	N. Platte . . .	41	0	.4	- .1	San Angelo . . .	68	+ 4	.3	- .1
GA. Atlanta . . .	60	+ 2	0	- 1.0	Omaha . . .	32	- 5	.5	+ .2	San Antonio . . .	71	+ 5	T	- .4
Augusta . . .	62	+ 2	0	- 1.0	Valentine . . .	35	- 1	.5	+ .3	San Antonio . . .	66	+ 5	1.1	+ .4
Macon . . .	62	+ 1	0	- .9	NEV. Ely . . .	57	- 1	.1	0	Victoria . . .	62	+ 5	T	- .5
Savannah . . .	73	+ 1	.9	- 2.1	Las Vegas . . .	41	- 1	.2	+ .1	Waco . . .	39	- 3	.4	+ .2
HAWAII. Hilo . . .	72	- 1	.6	0	Reno . . .	42	+ 2	.2	0	Wichita Falls . . .	44	+ 1	.8	+ .4
Honolulu . . .	---	---	---	---	Winnemucca . . .	39	+ 2	.2	- .4	UTAH. Blanding . . .	38	+ 3	.3	- .2
Kahului . . .	70	- 2	.7	- .3	N. H. Concord . . .	52	+ 7	.1	- .8	Salt Lake City . . .	56	+ 6	T	- .7
Lihue . . .	43	- 1	.2	0	N. J. Atlantic City . . .	50	+ 4	.1	- .7	Norfolk . . .	57	+ 5	T	- .7
IDAHO. Boise . . .	43	- 3	.4	+ .2	Trenton . . .	49	- 1	.1	0	Norfolk . . .	60	+ 8	.1	- .6
Lewiston . . .	38	- 1	.4	+ .2	N. MEX. Albuquerque . . .	58	+ 5	0	- .1	Richmond . . .	57	+ 7	T	- .7
Pocatello . . .	53	0	4.6	+ 3.5	Roswell . . .	39	0	1.8	+ 1.2	Roanoke . . .	57	+ 7	T	- .2
ILL. Cairo . . .	39	- 3	1.9	+ 1.1	N. Y. Albany . . .	41	+ 4	.3	- .4	WASH. Colville . . .	38	- 3	0	- .2
Chicago . . .	42	0	1.6	+ .9	Binghamton . . .	41	+ 4	1.1	+ .4	Omak . . .	42	- 1	0	- .2
Moline . . .	44	+ 1	1.4	+ .6	Buffalo . . .	48	+ 3	.3	- .6	Quillayute . . .	43	0	.9	- 1.3
Peoria . . .	35	- 5	1.8	+ 1.0	New York . . .	41	+ 3	.7	+ .1	Seattle-Tacoma . . .	47	+ 2	.1	- .6
Rochford . . .	47	+ 2	.7	- .1	Rochester . . .	42	+ 3	.9	+ .2	Spokane . . .	36	- 5	.3	0
Springfield . . .	50	+ 1	4.1	+ 3.0	Syracuse . . .	55	+ 5	T	- 1.0	Walla Walla . . .	45	- 3	.6	+ .3
IND. Evansville . . .	46	+ 4	1.9	+ 1.1	N. C. Asheville . . .	59	+ 4	0	- 1.0	Yakima . . .	43	- 2	.1	0
Ft. Wayne . . .	48	+ 3	1.1	+ .2	Charlotte . . .	58	+ 6	T	- .8	W. VA. Beckley . . .	46	+ 1	.1	- .8
Indianapolis . . .	43	+ 2	1.7	+ .9	Greensboro . . .	57	+ 3	0	- .8	Charleston . . .	56	+ 7	.4	- .5
South Bend . . .	44	+ 1	1.8	+ 1.0	Hatteras . . .	58	+ 4	T	- .8	Huntington . . .	55	+ 6	.9	0
IOWA. Burlington . . .	42	+ 2	1.7	+ 1.1	Raleigh . . .	62	+ 4	0	- .8	Parkersburg . . .	53	+ 5	1.0	+ .2
Des Moines . . .	36	- 3	1.5	+ .6	Wilmington . . .	20	- 12	.3	+ .1	WISC. Green Bay . . .	31	- 4	1.1	+ .6
Dubuque . . .	37	- 3	.4	0	N. DAK. Bismarck . . .	22	- 10	.7	+ .4	La Crosse . . .	34	- 4	1.1	+ .5
Sioux City . . .	45	+ 1	.5	+ .1	Fargo . . .	21	- 11	.5	+ .3	Madison . . .	34	- 2	1.0	+ .5
KANS. Concordia . . .	46	0	.3	0	Williston . . .	45	+ 4	.9	+ .1	Milwaukee . . .	37	0	1.4	+ .8
Dodge City . . .	43	+ 2	.9	+ .6	OHIO. Akron-Canton . . .	50	+ 3	1.1	+ .2	WYO. Casper . . .	38	+ 3	.7	+ .4
Goodland . . .	47	+ 1	.8	+ .1	Cincinnati . . .	45	+ 4	1.3	+ .5	Cheyenne . . .	35	0	.2	- .1
Topeka . . .	52	+ 3	.4	- .7	Cleveland . . .	48	+ 4	.6	- .2	Lander . . .	39	+ 3	.3	- .1
Wichita . . .	53	+ 4	1.8	+ .7	Columbus . . .	49	+ 5	.4	- .4	Sheridan . . .	33	- 2	.5	+ .1
KY. Lexington . . .	53	+ 4	2.9	+ 1.8	Dayton . . .	43	+ 2	1.6	+ 1.0	P. R. San Juan . . .	78	+ 1	.8	+ .3
Louisville . . .	---	---	---	---	Toledo . . .	---	---	---	---	---	---	---	---	---

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 cool early week warming to above normal weekend, 5° above normal for week. Rainfall 0.50 in. north half over weekend.

Fieldwork: 5.1 days suitable. Soil moisture adequate. Land preparation, corn planting, fertilizer and lime spreading main activities. Plowing 54% complete. Fruit orchard spraying continued, tent caterpillar infestation some areas. Pastures improving, in fair condition. Summer potatoes 60% planted Sand Mountain area. Wheat fair to good condition.

**ARIZONA:** Strong weather system triggered showers, thunderstorms. Precipitation over 2.00 in. central areas. Cool, dry air followed; temperatures 1 to 7° below normal.

Field activities delayed somewhat. Cotton planting active central, west; 25% planted, 8% last year. Cotton planting southwest nearly complete, central areas gaining momentum. Rain interrupted planting corn, milo, safflower. Wheat, barley good progress, most fields emerged, many early fields forming heads. Some lodging problems, not too severe. Sugarbeets good progress. First cutting alfalfa complete western areas, regrowth rapid, second cutting near. First cutting nearing completion central areas. Some cut hay damaged by rain. Lettuce harvest Yuma, Salt River Valley; later lettuce plantings excellent progress, harvest south central areas expected shortly. Mixed vegetable harvest making normal progress. Watermelon, cantaloup planting virtually complete. Grapes excellent growth, vines spreading rapidly. Citrus harvest active. Many groves full bloom. Some fruit lost, high winds. Ranges good condition, adequate stock water, surplus soil moisture. Cattle, calves good shape. Some movement range livestock. Calving going well. Some stockers brought in, excellent forage supplies.

**ARKANSAS:** Mild, very wet. Temperatures above normal. Precipitation very heavy.

Land preparation slowed as cool weather and rains kept farmers out of fields. Fieldwork: 3.5 days available. Small acreage of rice, corn and sorghum planted. Nitrogen topdressing continued on small grains and pastures. Soil moisture adequate to surplus. Wheat and oats fair to good condition. Ample moisture and warm days combined to give good growth. Some bottomland small grains drowned out. Strawberries fair to good condition; blooms evident. Peaches beginning to bloom in southwest. Pastures average condition, beginning to supply good grazing. Cool season grasses fertilized and growing well. Alfalfa in southwest very good growth, cutting expected in 7 to 10 days. Cattle fair condition. Herds being treated for insect control.

**CALIFORNIA:** Cold winter-type storm during middle of period brought moderate to heavy precipitation to large area. Largest amounts at lower elevations 3.30 to 3.50 in. and 3.00 to 3.50 in. Snow level over northern half of state dropped to near 2,000 ft. with one to two feet of new snow added to present pack. Temperatures below to much below normal latter part of period, with minimum temperatures at a few lower elevation stations dropping to near freezing. Considerable nighttime cloudiness helped keep minimum temperatures above freezing.

Planting small grains continue northeast early plantings desert area boot stage. Weed con-

trol active north coast, San Joaquin, Sacramento Valleys. Alfalfa growth hampered cool temperatures San Joaquin Valley. Cutting, baling alfalfa delayed light rain Imperial, San Joaquin Valley. Planting corn under way San Joaquin Valley. Sugarbeet growth good San Joaquin, Imperial Valley. Planting cotton affected by rain San Joaquin Valley, south desert. Planting continued Imperial Valley. Weather affected cotton germination Imperial Valley. Rice ground preparation halted by wet fields Sacramento Valley. Deciduous fruit, nut trees bloomed. Fungicides applied. Grapes leafed out. Citrus harvested quality variable. Almonds, walnuts developed. Artichoke harvest increasing. Asparagus cutting full swing desert, increasing other areas. Broccoli, cauliflower supplies steady central coast. Celery harvest full swing south coast, planting increasing central coast. Lettuce almost done Imperial Valley, peaked Palo Verde Valley. Very light lettuce harvest San Joaquin Valley. Strawberry movement still light south desert due cool temperatures, rain. Picking started at Santa Maria. Tomato planting for fresh market and processing continued. Pole tomatoes San Joaquin Valley through hot caps, staking active. Warmer temperatures increase grass growth. Calving, lambing continue mountain areas. Sheep shearing active San Joaquin, beginning foothill areas. Bee colonies continue movement from almond orchards to citrus, other fruits, foothill areas.

**COLORADO:** Almost daily precipitation in many mountain and western locations. Heavier amounts 31st and 1st with 6 to 8 in. snow along front range, up to 11 in. in eastern plains. Temperatures warmer, averaging 2 to 5° above normal.

Winter wheat good condition; very little wind damage. Wheat pastured 6% mostly in southeast. Seeding of spring crops and other fieldwork delayed 2 or 3 weeks. Onion seeding 9% complete. Subsoil moisture short to adequate. Calving 49% complete, lambing 31% complete, death losses near average. Ranges and pastures poor to good; prospects improving with recent moisture.

**FLORIDA:** Cold, polar air mass 26th on heels of cold front moving through weekend. Low readings upper 20's and 30's north, 26th to 27th. Warming trend began by midweek. Temperatures overall a little below seasonal norms but highs in upper 70's and low 80's and lows in 50's and 60's prevailed by 1st. Rainfall only trace early on 30th along east coast.

Soil moisture mostly adequate Panhandle, scattered central, short most other areas. Planting corn about complete. Slight damage from cold to early corn in Panhandle. Tobacco transplanting active. Land prepared for planting peanuts, soybeans. Sugarcane harvest practically complete. Young cane good condition. Small grains very good progress. Cattle fair to good condition. Pastures improved north, Panhandle; central mostly fair, surface moisture greatly reduced by winds. Pastures fair to good south. Citrus conditions excellent. Rain needed, irrigation many areas. New growth and bloom continuing; full, open bloom most areas. Harvest slow before volume Valencia picking starts. Overall vegetable crop condition good to excellent. Growth slowed as cold front moved into area. Light frost isolated areas. Fruit set, size improved. Wind-burn, fruit scarring evident most southern growing

areas. Planting, other fieldwork active. Harvest increasing. Quality, size, continue good to very good. Shipments up 6% from previous week. Supplies chinese cabbage, cucumbers, okra, strawberries up considerably; shipments cabbage, sweet corn, lettuce, cauliflower, potatoes increased while snap beans, carrots, celery, eggplant, escarole, parsley, radishes, squash, tomatoes held steady. Pepper supplies decreased. Strawberry crop condition good. Volume up sharply. Harvest near peak. Quality generally good. Watermelon crop condition fair to good; growth, progress slowed due to cool weather. Stages of development variable, from germinating to setting fruit. Planting nearing completion north, active west.

GEORGIA: Temperatures 1 to 5° below normal ranging from near 50° north to near 60° south. Rainfall varied from less than 0.25 in. south to over 2.50 in. northeast. Little or no precipitation 31st and 1st. Temperatures warmer 31st and 1st ranging from mid 60's north to lower 70's south.

Soil moisture adequate except southern border short. Fieldwork: 5 days suitable. Very active land preparation and spring planting central and south, land preparation north. Corn fair to mostly good, 61% planted (a record high), last year 32%, average 26%. Tobacco fair to good, 45% transplanted, last year 18%, average 40%. Watermelons fair to good, 72% planted, last year 50%. Cotton 1% planted, last year 3%, average 2%. Less than 1% soybeans and sorghum seeded. Small grains fair to mostly good. Peaches good, no freeze damage central from freeze on 26th, light damage north, spraying and bloom thinning active. Apples good, some fire blight north. Leafy vegetables moving from south in fair volume, good quality. Pastures fair to good. Cattle fair to mostly good. Hogs good.

HAWAII: Favorable weather continued. Some good showers usually dry Waimea district Island of Kauai. Elsewhere showers light Island chain. More rains needed Kona district Island of Hawaii.

Vegetable supplies gradually increasing. Banana supplies light. Papaya supplies light but improving. Pineapple harvesting steady. Sugar harvesting active. Pastures generally fair to good.

IDAHO: Temperatures near normal. Precipitation general but lighter in east.

Fieldwork starting in some north and south central localities and gaining momentum in southwest. Spring wheat and barley 10% seeded, about the same as last year. Onions 33% planted. Winter wheat condition poor to good. Soil moisture generally adequate. Seed potato movement active. Calf and lamb losses near normal. Hay supplies above normal.

ILLINOIS: Temperatures 5° below normal to 2° above normal. Precipitation 1.50 in. north, 0.75 in. central, 1.00 to 5.00 in. south.

Soil moisture adequate to surplus. Winter wheat mostly good condition. Livestock fair to good condition; feedlots muddy. River grain movement limited due to flooding waterways. Fieldwork limited by excessive soil moisture. Main activities, repairing machinery, buying supplies, livestock care.

INDIANA: Cloudy and rainy last 5 days. Low temperatures 6° above normal; high temperatures 2° below normal. Temperatures ranged from 22 to 76°. Rainfall 2.00 in. southwest and north central, 1.50 in. elsewhere except 0.80 in. east central. Soil temperatures 40's north and central, low 50's south.

Muddy conditions prevail. Some tilling, oats and clover seeding on sand. Wheat fertilized.

Fields greening. Preparing tobacco beds. Usual chores.

IOWA: Precipitation heavy all but northwest. Heavy, wet snow fell on 1st and early 2d with 4 to 7 in. snow over at least half of State; however, southeast and extreme south areas received mostly rain and northwest measured only 1 or 2 in. new snow. Stream flows continue high and standing water abundant. Temperatures near normal south to about 3° subnormal north.

KANSAS: Intermittent precipitation east and north during week, statewide weekend; accumulating generally 0.25 to 0.75 in. Temperatures 42° northwest to 53° southeast or 4° above normal southeast to 1 to 3° above normal elsewhere.

Wheat condition improved due to moisture and warm temperatures. Early seeded wheat appears in better shape than later seeded wheat. Oats seeding 25% complete, 20% last year, 55% average. Barley seeding 35% complete, 25% last year, 55% average. Topsoil moisture generally adequate to surplus. Subsoil moisture generally adequate with exception of northwest and west central where it remained short.

KENTUCKY: Temperatures slightly above normal. Precipitation light and spotty first 4 days; weekend, 3.00 to 5.00 in. rain common in west and around 1.00 in. east.

Fieldwork: 2.3 days suitable. Soils saturated after heavy weekend rain. River bottom and lowlands flooded some areas. Erosion evident. Tobacco plantbeds 60% seeded, last year 32%, average 65%. Plowing 33% completed. Several reports of winter damage to alfalfa and red clover seedlings. Winter-kill light to moderate on fall seeded wheat and barley. Pastures good condition. Early fruit prospects good.

LOUISIANA: Temperatures 2 to 6° above normal. Extremes: 85 and 34°. Showers late week; heavy northwest.

Fieldwork: 5.2 days suitable. Soil moisture adequate. Seedbed preparation, planting active. Rice 17% planted, 40% last year, 28% average; 3% emerged. Corn 30% planted, 38% last year, 31% average. Shaving sugarcane stubble, weed control. Bedding sweetpotatoes. Beginning strawberry picking. Transplanting and staking tomatoes. Planting Irish potatoes north, to a stand south. Small grains fair to good. Pastures average. Cattle fair to good.

MARYLAND & DELAWARE: Temperatures 4° above normal. Highs, upper 50's to low 60's; lows, upper 30's to low 40's. Precipitation light to moderate with stations reporting 1.00 to 2.00 in. rainfall. Saturday, mostly sunny and warm 31st. Light morning showers followed by variable cloudiness 1st.

Soil moisture adequate to surplus. Fieldwork progressing at near normal pace. Plowing for corn, spreading fertilizer and manure, major activities. Tobacco beds good condition. Small grains good to fair condition. Fruit growers pruning and spraying. No damage to fruit.

MICHIGAN: Temperatures 3° below normal over northern Lower and 6° below normal over Upper. Temperatures near normal over southern Lower. Maximum temperatures reached into 60's over Lower. Precipitation generally heavy especially over Lower averaging near 1.00 in. Over Upper precipitation 0.50 in. Snow depth restricted to extreme northern Lower and Upper and ranges from 2 in. over northern Lower to 24 in. over western Upper.

Farm activities: Feeding livestock.

MINNESOTA: Temperatures 2 to 9° below normal. Extremes: 45 and -2°. Precipitation near normal except 0.40 to 0.59 in. above normal southeast. Precipitation totals less than 0.25 in. west central and southwest and 0.25 to 0.75 in. elsewhere except 0.75 to 1.14 in. extreme southeast. Snowfall less than 1 in. south half and 2 to 6 in. north half. Snow depth less than 1 in. south to 24 in. north central and northeast.

MISSISSIPPI: Temperatures 2 to 7° below normal. Extremes: 24 and 83°. Some rainfall in north and central areas early week.

Soil moisture adequate. Fieldwork: 3.7 days suitable. Wet soils hampered land preparation early week but my midweek fieldwork active in many areas. Pastures greening and winter grazing crops being utilized. Acreage plowed 45%, 48% 1978, 48% average. Corn 23% planted, 25% 1978, 20% average. Irish potatoes 63% planted, 72% 1978. Winter wheat fair to good condition; 20% jointing, 26% 1978. Watermelon 58% planted. Pastures fair condition. Livestock fair condition.

MISSOURI: Temperatures cool, averaging 1° below normal north, near normal central, and 4° below east Ozarks and Bootheel. Precipitation heavy, with flooding in Bootheel. East Ozarks nearly 2.00 in. rainfall, Bootheel averaged 3.00 in., north central averaged 0.50 in., west Ozarks averaged 0.25 in.

Fieldwork: 0.4 days suitable. Plowing 60% completed for spring planted crops, last year 16%, normal 45%. Oats 11% sown, last year 3%, normal 47%. Condition of winter wheat and pasture mostly fair to good. Hay and roughage supplies mostly adequate. Topsoil moisture supplies mostly surplus.

MONTANA: Generally wet, cool. Temperatures 10° below normal north to near normal southwest. Precipitation moderate to heavy over north, central, and west. Most precipitation fell as snow. West received precipitation daily.

Winter wheat fair to good. Some areas greening. Winterkill appears light. Calving and lambing 55% complete, shearing 50% complete, losses about normal. Hay and grain supplies adequate.

NEBRASKA: Temperatures near normal to slightly below. Precipitation 0.30 to 0.40 in. with up to 0.50 in. southeast.

Winter wheat condition fair to good. Oats and barley planting 5% complete; year ago none; normal 15%. Fieldwork: 1.3 days suitable. Calving and lambing progressing well; losses near normal.

NEVADA: Temperatures near normal. Extremes: 78 and 15°. High Sierras 2 to 3 feet snow. Heaviest precipitation east of Sierras, 2.13 in. (2 feet snow) at Austin.

Winter grains greening. Seedbed preparation full swing. Irrigation started. Ranges slowly greening. Calving and lambing continuing.

NEW ENGLAND: Northwestern air flow first half of week; temperatures seasonal. During latter half of week series of weak fronts moved through area. Temperatures 5 to 10° above normal. Light rain 29th and 30th. Rainfall generally less than 0.50 in.

NEW JERSEY: Record cold and warm temperatures averaging 4° above normal. Extremes: 9 and 85°. Rainfall 0.59 in. north, 0.19 in. central, 0.27 in. south. Soil moisture, in percent of field capacity, 48% north, 52% central and south.

Preparation and planting increased. Showers halting field activity. Early spring progress ahead of schedule.

NEW MEXICO: Temperatures near normal. Precipitation 28th, 29th and weekend mostly over west and north mountains.

Open weather conducive to growth and outdoor work. Land preparation, irrigation continued main activity; some planting. Occasional below freezing early morning temperatures south. Wheat, barley growing well, some fields grazing out. Alfalfa growing south but weevil and aphids active. Sugar-beets, Irish potatoes eastside, chile Mesilla Valley mostly planted. Corn plantings started south, cotton about to start. Pecans starting to bud. Ranges greening, livestock fair to good condition. Calving 60% through, lambing 75%, shearing near done.

NEW YORK: Temperatures ranged from mid-30's to mid-40's; 1 to 9° above normal. Precipitation above normal western third. Mohawk Valley and St. Lawrence Valley ranging from 0.75 to 1.50 in., elsewhere below normal precipitation of 0.50 in. or less.

NORTH CAROLINA: Temperatures above normal. Precipitation dry; west light showers.

Fieldwork: 4.4 days suitable. Soil moisture mostly adequate to surplus. Condition of small grains and tobacco plant beds fair to mostly good. Irish potatoes, pastures, and truck crops fair to good. Corn planting just underway.

NORTH DAKOTA: Temperatures 8 to 14° below normal. Extremes: 45 and -6°. Precipitation 0.30 to 0.50 in. except southwest and south central less than 0.15 in.

Continued cold delayed potential for early fieldwork. Snow melt quite slow; flood potential lessened.

OHIO: Early week cool and dry. Warm weather week-end bringing 1.00 in. rain. High temperature 80° southeast, low 15° northeast. Soil temperatures warming rapidly. Soils sections of northwest just recently thawed.

Wheat condition good to excellent but some suffocation in low land of central and northwest, some heaving northeast. Maple sirup flow good. Limited number of livestock turned on greening pasture. Few tobacco beds sown. Soil moisture adequate to surplus. Fieldwork: 2 days suitable. Pasture condition fair to good. Land plowed (spring and fall) 65%, 50% 1978, 60% average. Oats sown 10%, less than 1% 1978, 10% average. Tobacco beds sown 35%, 35% 1978, 35% average.

OKLAHOMA: Temperatures 3 to 5° above normal central, south, and east; near normal elsewhere. Rainfall heaviest in southeast, up to 6.75 in.; amounts elsewhere ranged from near 0.25 to 1.25 in. except southwest only trace.

Excellent weather enabled small grains vigorous growth and development. Soils too wet to work eastern third. Wheat good condition with growth rapid. Several instances cattle lost to wheat bloat. Wheat 30% jointing, 20% 1978, 45% average. Cattle remain good to fair condition; supplemental feeding active. Fieldwork: 5.0 days suitable.

OREGON: Temperatures well above normal early week to cooling trend weekend with temperatures near seasonal normal. Maximum temperatures lower 60's to lower 70's; minimum temperatures lower 30's in west, upper 20's and lower 30's east. First few days of week dry. Rainfall along coast 0.44 to 1.22 in.; Willamette Valley near normal at 0.60 in.; northeast 0.30 to 0.60 in.; south received 0.10 in. or less.

Soil moisture adequate. Field activities slow west due to rain most of week. Spring plantings

coming along well. Reseeding of winter damaged grain in Columbia River Valley will be more than earlier anticipated. Pastures greening and growing well west of Cascades; cool weather east of Cascades slowed growth. Range outlook good. Good snowpack and adequate stream flow for irrigation. Livestock and livestock prices look good. Feed supplies adequate. Some sheep being sheared.

**PENNSYLVANIA:** Partly sunny and mild after cold beginning. Daily temperatures mostly 40's minimum to 60's maximum. Extremes: 6 and 82°. Scattered showers 29th and weekend provided 0.30 in. rainfall east increasing to 1.00 to 1.50 in. northwest.

Limited spring plowing south with preparations for spring fieldwork active.

**PUERTO RICO:** Island average rainfall 1.61 in. or 1.04 in. above normal. Temperatures averaged about 77° on coasts and 72° interior. Extremes: 93 and 47°.

**SOUTH CAROLINA:** Cooler than usual earlier ranged to well above normal as week ended. Temperatures above 80° 31st, 1st some locations.

Soil moisture adequate. Fieldwork: 5 days suitable. Acreage plowed 57%. Tobacco plant supply adequate, fair to good condition; 3% transplanted, 3% last year. Cotton planting awaiting warmer soils; 1% planted. Corn condition fair to good; 29% planted, 36% last year. Planting completion: Snap beans 57%, all cucumbers 62%, tomatoes 62%. Vegetables in good condition. Water-melons 26% planted, 42% last year, 49% average. Peaches past full bloom in ridge, early varieties in full bloom in Piedmont. Little or no frost damage to peaches, apples, grapes. Small grains condition good. Pastures fair to good, improving. Lime and nitrogen being applied to pastures.

**SOUTH DAKOTA:** Temperatures 5° below normal. Extremes: 2 and 69°. Rain and snow latter part of week. Precipitation ranged from trace northwest to 1.02 in. northeast. Snowcover ranged from 1 to 4 in. east, with little or none west.

**TENNESSEE:** Rainy; precipitation 7.00 in. west to 1.50 in. east. Temperatures 5 to 10° above normal.

Fieldwork: 1.7 days suitable. Soil moisture surplus; flooding in low areas. Spring plowing 40% complete, 1978 35%, average 49%. Tobacco plant beds 68% seeded, 1978 60%, average 83%. Wheat and oats fair. Topdressing continued. Pastures fair. Cattle good, still on supplemental feed. Fruit trees blooming. Commercial vegetable planting halted by surplus moisture.

**TEXAS:** Cold front first part and midweek triggered scattered thunderstorms in parts of central and east. Temperatures 8 to 10° above normal east and near normal western third. Rainfall below normal parts of northwest and south, above normal parts of north central and northwest, near normal elsewhere. Soil temperatures 65° or higher southern rolling plains, low 60's from northern rolling plains to east Texas, and low to middle 50's High Plains.

Rice, sorghum plantings behind schedule as cool, wet, cloudy conditions hampered land preparations, planting. Lower Rio Grande Valley, portions of Trans-Pecos, and parts of both High and Low Plains still need rains. Planting of cotton and corn moved ahead slowly but on schedule historically. Early planted cotton in Valley and other portions of south up to good stands. Warmer temperatures needed to promote germination on fields not yet emerged in central and Coastal Bend. Preplant activities continued on Plains as weather permitted.

Planting of American-Pima cotton began in El Paso area. Sorghum planting at standstill; waiting for drier conditions. Many planted fields slow in emerging due to cool and wet conditions. Corn emergence fared better than sorghum as excellent stands noted well into central Texas. Wet fields prevented planting in many areas but planting remained on schedule. Wheat prospects good to excellent; other than scattered dry portions of High Plains, moisture generally adequate to surplus. Many fields topdressed, some fields too wet for fertilization or grazing. Insect damage minimal. Heading observed in south. Peanut planting underway south. Sugarbeet planting active on High Plains. Flax which survived harsh winter blooming in south. Rice planting lagged as fields too wet to work. Warmer temperatures needed to facilitate germination and promote growth. Corn planted 24%, 24% 1978, 26% average. Cotton planted 11%, 12% 1978, 19% average. Peanuts planted 2%, 3% 1978, 6% average. Rice planted 16%, 35% 1978, 38% average. Sorghum planted 33%, 53% 1978, 47% average. Sugarbeets planted 30%, 23% 1978, 12% average.

Spring onion harvest continued. Light supplies cabbage and carrots available. Melons and tomatoes making favorable progress. Citrus harvest completed except few groves in eastern area of Valley. Spinach harvest completed. Rain and wet conditions east continued to delay field activities. Onion and potato planting continued. Peach trees in south setting fruit; trees in Hill Country in shuck split stage while trees in east dropping petals. Trees on High Plains and in Cross-Timbers remained full bloom. Pecan trees beginning to leaf in South and along upper Gulf Coast. Other areas, buds swelling, few early varieties at bud break.

Rangeland and pastures continued respond to recent rains and warmer temperatures thus reducing supplemental feeding. Cattle on High Plains making good gains on wheat pasture although some losses from bloat. Cattle movement off wheat for grain continued. Dry, sunny weather needed in central and east for additional forage development. Rangeland in south in good condition although additional moisture welcomed.

**UTAH:** Recurring rain or snow; amounts generally moderate to heavy. Temperatures ranged from 4° below normal to 5° above normal.

Cool temperatures, rain and snow halted land preparation. Winter wheat greening; soil moisture adequate. Most livestock doing well but feeding continued.

**VIRGINIA:** Cool then much warmer by late week. Temperatures near normal. Extremes: 85 and 21°. Showers and thunderstorms at beginning and again near end of period averaging about 1.50 in.

Topsoil moisture adequate to surplus. Fieldwork: 3.7 days suitable. Open weather allowed land preparation to advance rapidly many areas. Pastures, wheat, barley, apples, peaches in good condition. Some minor winterkill of small grains noted north, central, east. Flue-cured tobacco plant beds 95% seeded, burley 70%. Corn 3% planted, over 1% 1978, 1% average. Potatoes 35% seeded, over 65% Eastern Shore. Cool nights holding fruit buds dormant north. Few direct tomato seedings on Eastern Shore. Strawberries good east. Picking daffodils east. Livestock good. Moving cattle to pasture. Some low roughage supplies noted. Other activities: Fertilizing, liming, topdressing small grains; pruning and spraying orchards, marketing feeder calves, worming cattle.

WASHINGTON: West: Temperatures 1 to 2° below normal. Precipitation 0.40 to 1.30 in. below normal.

Soil preparation and seeding continued. Green pea seeding underway. Spinach, mustard, beets, corn, lettuce also planted. Pastures, berries making growth. Daffodil harvest continued.

East: Temperatures 2° below normal. Precipitation 0.20 in. below normal to 0.10 in. above normal.

Orchard pruning, cleanup, and spraying active. Apricots in full bloom. Hop yard work active. Early potato seeding active in warmer areas. Re-seeding fall grain killed by freeze, seeding spring grain major activities. Tillage on summerfallow active. Livestock fine; calving in full swing.

WEST VIRGINIA: Temperatures normal beginning of period to above normal at end. Extremes: 11 and 82°. Precipitation generally light with some heavy showers 31st.

Fieldwork: 6.7 days suitable. Soil moisture adequate. Hay, grain and other feed supplies adequate. Early plowing preparation continued.

WISCONSIN: Temperatures below normal. Week began cold with highs in 30's and lows below zero north. Readings warmed to 60's south 30th but much cooler again weekend. Extremes: 64 and -6°. Precipitation above normal. Light rain 28th, widespread showers and thunderstorms 29th to 30th with locally heavy rainfall and some hail. Snow developed 1st and continued into 2d. Heaviest amounts south where several inches accumulated. Precipitation ranged from 0.50 to 1.50 in. Some flooding Rock and Wolf Rivers.

WYOMING: Temperatures 2 to 5° above normal. Highs 50's and 60's. Lows, teens and 20's. Precipitation above normal Snake, Green, Bear drainages and part of Upper and Lower Platte drainages. Other areas slightly below normal.

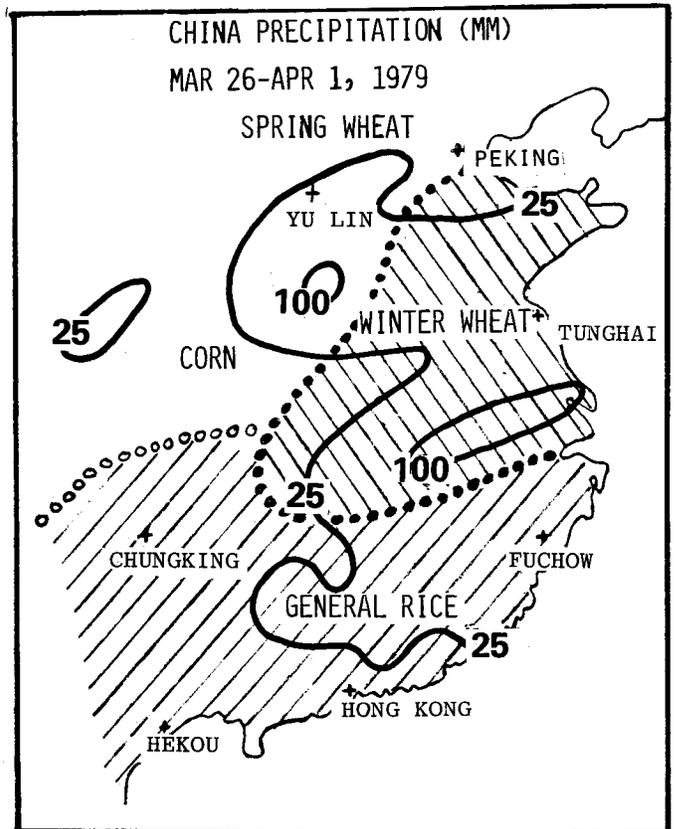
Topsoil moisture adequate. Acreage planted: Spring wheat 5%; barley 8%. Small amount of oats seeded. Wet fields slowing land preparation and planting. Winter wheat mostly good; little wind damage. Livestock generally fair to good condition. Spring calves born 42%, range ewes lambed 24%, farm flock ewes lambed 50%, range sheep shorn 28%, farm flock sheep shorn 45%. Death losses for calves and lambs light to normal.

**World Weather and Crop Update**

March 26 - April 1

USSR. Precipitation in European Russia remained near normal, and though totals rose slightly over last week's, they stayed mostly in the range of 5 to 25 mm. A warming trend through most of the week continued the advance of greening-up and fieldwork northward. Temperatures rose to near 30°C in Krasnodar Kray getting growth off to a good start, but the possibility of frost damage to the young plants remains a very real threat. In the New Lands, precipitation tapered off even further with most locations reporting no accumulations. Abundant rains of 15 to 35 mm covered most cotton areas in the south providing good conditions for sowing operations requiring little use of irrigation waters.

CHINA. Rainfall totals for last week over most of the winter wheat area on the North China Plain exceeded normal amounts for the whole month of March (see fig. 1). Most areas received 25 to 45 mm with higher totals above 100 mm in the Yangtze Valley. These rains will provide excellent growing conditions for wheat and further improve the crop outlook. Abundant and above-normal rainfall continued in the rice-growing areas of the southeast, and rains in southwestern areas neared normal with no excessive amounts in either area.



**AUSTRALIA.** Most of the country remained dry again last week with only light amounts of generally less than 10 mm falling along some coastal areas. This is a transition time with growth of crops in the north and east essentially over, and winter grain planting in the south still some weeks away.

**INDIA.** The hot, dry weather of the last two weeks continued with seasonally hot day-time temperatures near 35°C prevailing. Most of the wheat crop should have passed the moisture-sensitive stage by now, and harvesting will get under way shortly.

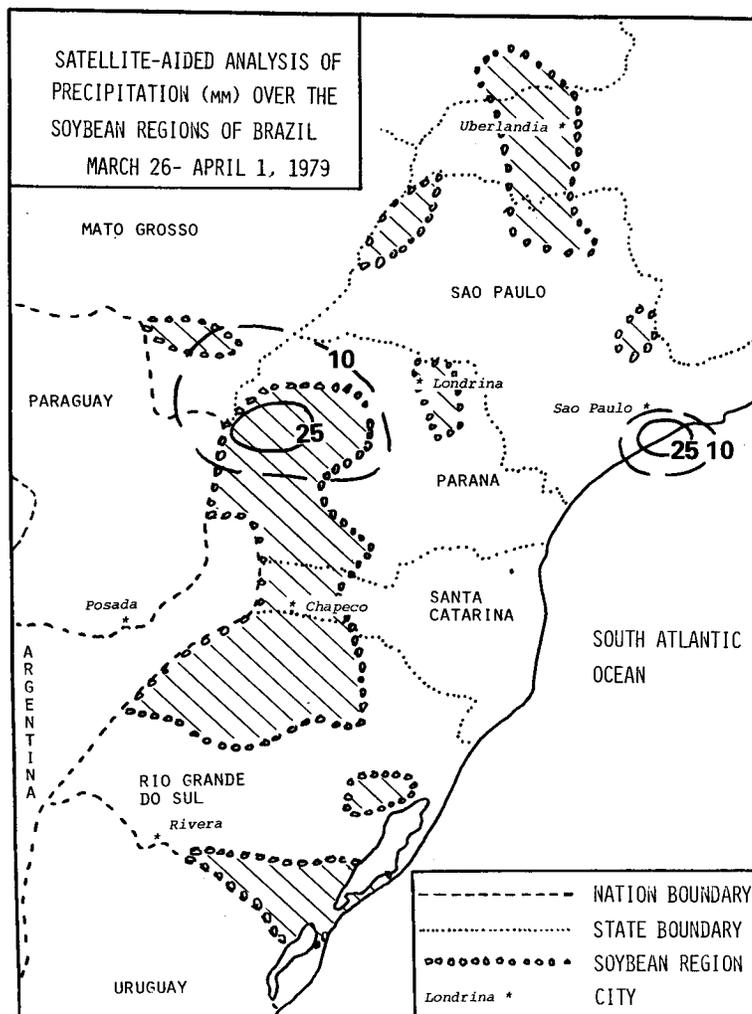
**AFRICA.** Rainfall over Morocco and western Algeria diminished to less than 5 mm, while more easterly areas were wetter with Tunisia receiving 20 to 30 mm. The winter grain crops in these areas should have sufficient soil moisture to see them through as rains taper off in April. In South Africa's Maize Triangle, rainfall was patchy, but a large portion of the dry southwestern half received near-normal 10 to 15 mm totals. Soil moisture in that area remains deficient, however, as crop development continues under stress.

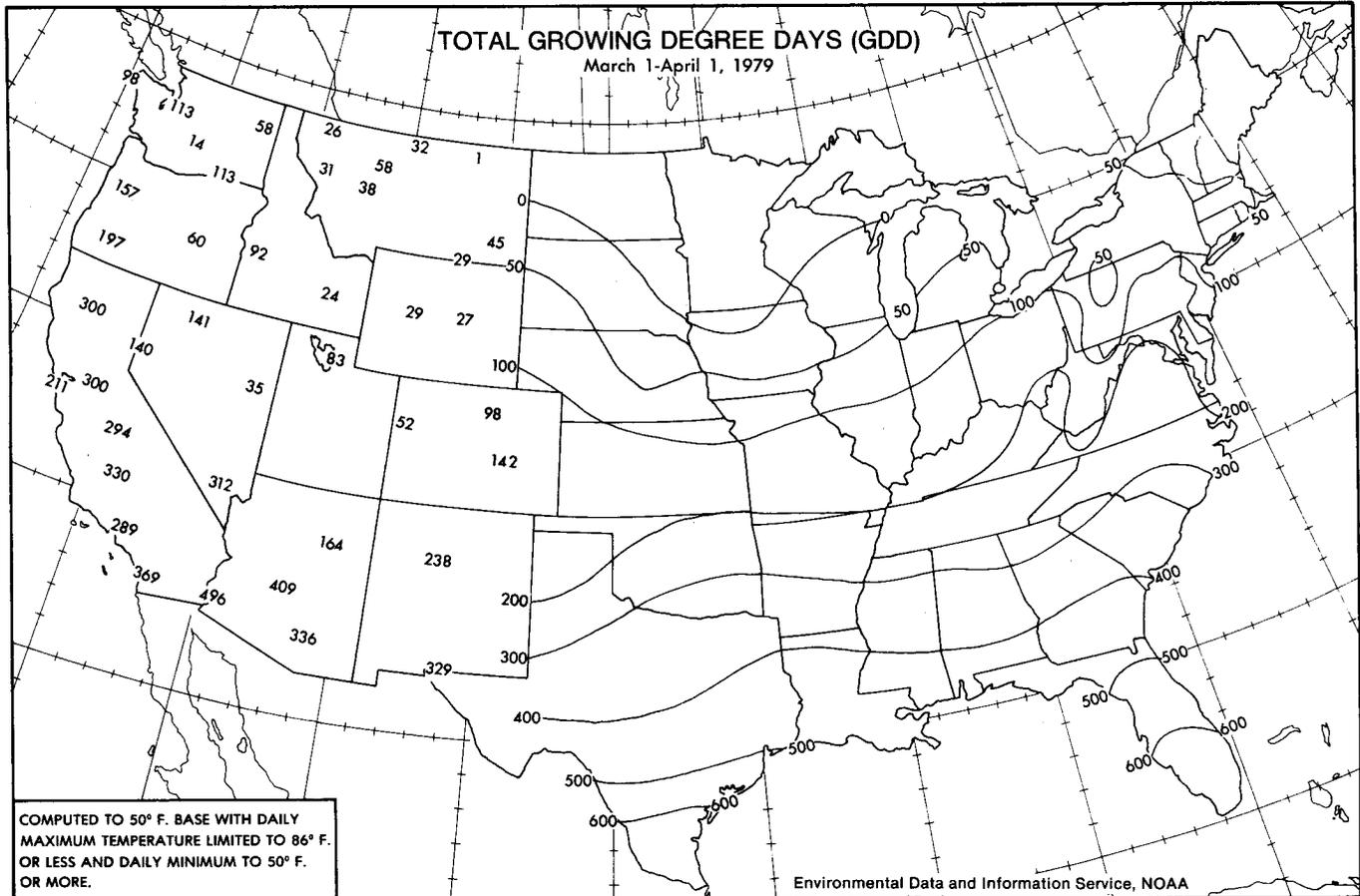
**EUROPE.** Nearly all of Europe received normal or above-normal precipitation again last week, mostly

in the form of rain. Totals ranged mostly from 15 to 35 mm but greater amounts up to 80 mm just north of the Alps may have prolonged previously reported disruption of fieldwork. Weather in the Iberian Peninsula turned drier in most portions, but only in a limited area in the East should soil moisture be a limiting factor in wheat development.

**SOUTH AMERICA.** Relatively dry weather continued for the second consecutive week in the soybean-growing areas of Brazil (see fig. 2). This maintained ideal conditions for harvesting, and the pod-filling of late varieties in Rio Grande do Sul was most probably only slightly affected. In Argentina, dry weather returned to the major soybean area, but soil moisture should be quite adequate for the pod-filling of late varieties.

**MEXICO.** Warm, sunny, dry conditions prevailed over the major fruit and vegetable areas. Afternoon maxima of 28° to 30°C and nighttime minima of 11° to 13°C favored development of tomatoes and melons but was slightly too warm for strawberries. Low humidities and no rain helped control diseases. Since February, continuous dry weather has concerned citrus, especially tangerine, producers in the northeast.





**USING THE GROWING DEGREE DAY**

Plants grow, develop, and produce best within a certain range of air temperature. At temperatures above or below this range, heat or cold can hinder plant productivity. Within these limits, there is a direct relationship between temperature and the speed a plant develops.

The range of temperature for growth varies with the type of plant. For corn and soybeans, the apparent limits are about 50° and 86°, and for small grains, 40° and 90°. Each degree of temperature above the minimum for growth contributes to development of the crop and is called a growing degree day (GDD) unit.

To calculate the GDD accumulation for a certain day:

$$GDD = \frac{\text{daily max. } (86^{\circ}) + \text{daily min. } (50^{\circ})}{2.0} - 50^{\circ}$$

Use 86° for maximum temperatures above 86° because above that point heat does not contribute to crop development. For minimums below 50°, use 50°; temperatures below this level stop development.

The Weekly Weather and Crop Bulletin introduced this method for calculating GDDs in 1969, and starting with this issue will publish GDD data for the 1979 season. In 1970, the hybrid seed corn industry

adopted the GDD unit as a common basis for evaluating crop maturity.

GDD information has many uses. A grower who knows the expected growing degree day accumulation can select varieties that utilize the entire growing season, and minimize the risk of frost damage. If adverse weather delays planting, a grower can select other varieties. In the same way, GDD information is useful if reseeding is required and also helps in the selection of seed.

After selecting and planting the seed, the grower can follow crop development or progress of the growing season. First, the grower should note the number of GDDs accumulated at the time of planting from the map on this page. This value is the base figure.

For example, assume 350 GDDs had accumulated at planting time. If as of a certain date, 1,200 GDDs had accumulated, only 850 contributed to development of the crop. If the variety requires 2,400 to mature, 1,550 still are needed before the crop is safe from frost. Use a table of normals in the same way to determine if the season is progressing normally.

The Bulletin occasionally will publish a separate map indicating the GDD departures from normal.

LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):  
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

Station	Mar. 8	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26	May 3
<b>West:</b>									
Phoenix, Ariz.	76	160	252	352	458	579	710	839	974
Fresno, Calif.	50	102	164	232	309	391	481	570	663
Denver, Colo.	13	30	52	83	117	152	199	255	311
Pocatello, Idaho	4	7	15	30	51	77	113	148	188
Glasgow, Mont.	1	2	7	18	35	54	85	117	159
Pendleton, Ore.	8	20	41	66	99	142	187	231	281
<b>North Central:</b>									
Des Moines, Iowa	5	14	23	41	67	94	138	194	259
Minneapolis, Minn.	0	1	4	11	25	40	71	109	162
North Platte, Nebr.	10	24	39	67	100	133	180	236	296
Omaha, Nebr.	8	20	33	58	91	127	178	244	316
Fargo, N. Dak.	0	0	2	8	17	30	54	85	134
Huron, S. Dak.	2	5	12	26	46	70	108	154	210
Green Bay, Wis.	0	1	3	7	17	28	55	85	125
Madison, Wis.	1	3	8	17	33	53	89	132	186
<b>South Central:</b>									
Fort Smith, Ark.	41	87	131	191	269	348	437	551	664
Dodge City, Kans.	20	46	76	121	172	222	286	365	442
Topeka, Kans.	18	42	63	101	148	194	254	337	418
Wichita, Kans.	22	50	77	121	177	231	297	388	474
Shreveport, La.	61	132	203	282	384	488	593	728	866
Columbia, Mo.	18	39	58	93	137	184	245	330	417
St. Louis, Mo.	19	41	60	97	142	190	254	345	436
Oklahoma City, Okla.	35	76	119	174	246	318	400	505	605
Amarillo, Tex.	33	78	123	180	244	308	385	474	560
Corpus Christi, Tex.	95	210	324	445	587	728	878	1049	1229
Fort Worth, Tex.	57	122	191	271	369	470	578	710	838
Midland, Tex.	57	128	200	282	376	473	578	700	822
<b>Midwest:</b>									
Chicago, Ill.	5	10	18	35	36	81	124	177	238
Moline, Ill.	5	10	18	36	61	90	135	192	261
Peoria, Ill.	8	16	25	46	74	105	152	214	284
Indianapolis, Ind.	12	26	39	64	95	128	175	250	324
Louisville, Ky.	22	48	71	108	156	207	272	370	466
Flint, Mich.	2	5	9	19	35	53	87	127	175
Grand Rapids, Mich.	1	5	10	20	37	55	89	131	185
Columbus, Ohio	12	26	38	64	95	129	176	246	320
<b>Northeast:</b>									
Portland, Maine	0	1	1	4	12	24	41	65	94
Albany, N.Y.	1	4	6	16	33	51	84	130	179
Binghamton, N.Y.	1	3	5	14	28	41	66	105	145
Syracuse, N.Y.	2	5	8	19	36	51	83	126	174
Harrisburg, Pa.	8	17	28	52	83	116	163	228	295
Philadelphia, Pa.	8	20	31	57	91	125	175	238	302
Pittsburgh, Pa.	10	21	32	55	82	111	154	217	287
Williamsport, Pa.	4	10	15	33	58	84	126	182	243
Richmond, Va.	29	61	89	137	194	254	327	425	517
<b>Southeast:</b>									
Macon, Ga.	58	127	195	278	375	477	580	715	858
Raleigh, N.C.	39	82	118	174	240	311	389	497	604
Memphis, Tenn.	39	85	127	183	258	337	422	539	659
Nashville, Tenn.	35	74	109	158	222	288	363	474	585

LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):  
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

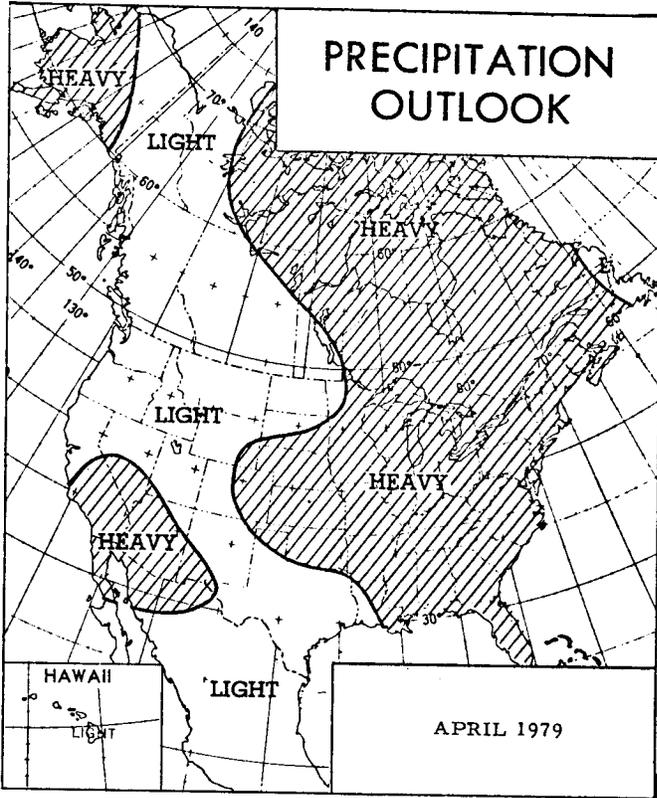
May 10	May 17	May 24	May 31	June 7	June 14	June 21	June 28	July 5	July 12	July 19
1123	1274	1442	1614	1794	1976	2172	2378	2593	2817	3045
767	877	1008	1139	1276	1411	1569	1732	1895	2066	2243
378	447	524	613	709	819	937	1068	1212	1360	1510
247	305	378	456	540	630	734	846	965	1101	1244
209	274	347	429	517	613	716	821	934	1073	1217
345	418	504	592	698	795	913	1033	1159	1303	1460
340	428	525	629	753	897	1046	1201	1369	1535	1705
224	295	374	458	565	691	822	954	1103	1252	1409
366	440	523	617	722	846	977	1115	1271	1424	1580
405	502	607	722	854	1007	1165	1327	1504	1677	1855
186	250	325	404	503	612	724	839	968	1108	1253
272	345	425	514	621	743	870	1001	1150	1305	1462
176	234	302	374	466	573	683	797	923	1050	1185
255	325	406	491	597	719	845	977	1119	1258	1406
794	929	1081	1240	1406	1589	1774	1964	2159	2356	2553
537	634	741	865	997	1154	1318	1487	1667	1847	2026
519	623	741	867	1006	1168	1333	1503	1685	1862	2042
582	691	816	952	1100	1271	1447	1628	1819	2010	2196
1020	1178	1348	1525	1706	1902	2100	2300	2504	2712	2916
519	622	741	864	1003	1168	1330	1501	1681	1857	2039
541	647	770	899	1047	1220	1389	1566	1752	1932	2119
728	849	988	1137	1294	1475	1658	1844	2039	2233	2428
667	770	889	1019	1156	1311	1478	1649	1830	2010	2187
1411	1600	1794	1998	2200	2412	2626	2840	3055	3270	3487
988	1140	1308	1486	1670	1871	2072	2278	2488	2702	2916
964	1110	1263	1431	1603	1788	1978	2171	2364	2558	2754
313	391	481	579	701	843	984	1142	1310	1470	1639
344	429	526	629	755	898	1045	1200	1365	1524	1691
367	454	554	660	788	938	1085	1245	1415	1576	1746
411	499	602	708	834	986	1132	1293	1462	1623	1792
569	677	801	932	1073	1239	1399	1572	1752	1926	2110
239	302	375	455	555	676	795	924	1064	1197	1338
252	321	398	482	588	717	841	976	1121	1259	1408
404	490	593	697	818	964	1104	1260	1424	1581	1749
135	181	237	304	386	470	563	668	787	903	1032
244	313	393	478	586	702	820	963	1110	1248	1402
198	253	320	387	476	580	683	805	938	1058	1197
236	300	376	457	559	677	794	930	1075	1212	1360
377	463	563	667	792	936	1075	1239	1410	1573	1748
384	475	576	681	811	955	1094	1262	1436	1604	1785
364	442	533	625	736	869	994	1140	1295	1438	1595
318	397	485	576	686	814	937	1083	1237	1380	1537
620	733	858	984	1120	1279	1430	1608	1786	1962	2147
999	1149	1314	1484	1656	1842	2029	2225	2421	2616	2814
718	839	976	1113	1255	1420	1579	1757	1936	2113	2298
793	935	1094	1257	1427	1618	1804	1999	2198	2398	2599
705	831	974	1120	1276	1454	1626	1810	1998	2134	2376

LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):  
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

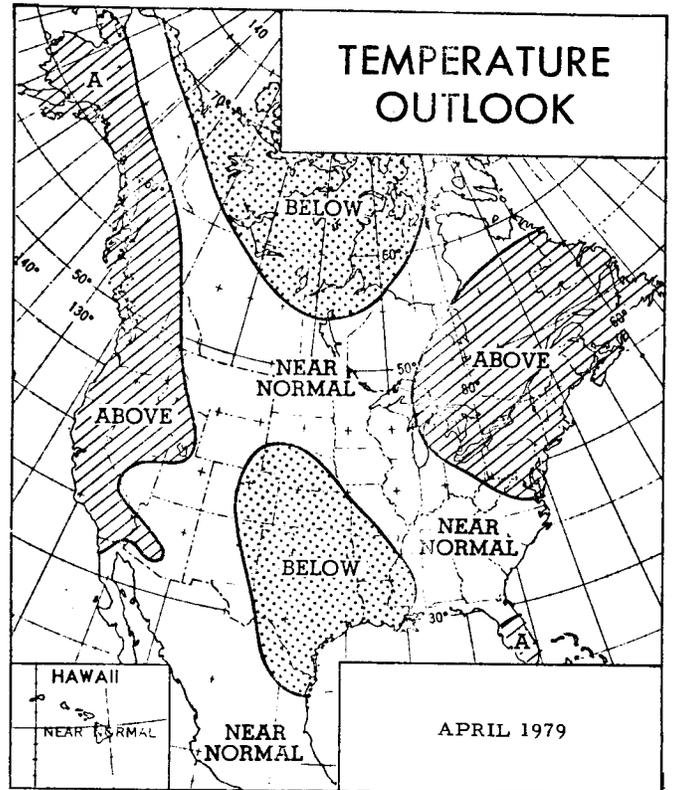
Station	July 26	Aug. 2	Aug. 9	Aug. 16	Aug. 23	Aug. 30	Sept. 6	Sept. 13	Sept. 2
<b>West:</b>									
Phoenix, Ariz.	3274	3499	3721	3943	4161	4373	4582	4792	4986
Fresno, Calif.	2422	2603	2773	2946	3115	3274	3436	3592	3734
Denver, Colo.	1663	1818	1971	2118	2256	2394	2512	2630	2730
Pocatello, Idaho	1389	1535	1677	1815	1943	2062	2172	2283	2372
Glasgow, Mont.	1366	1511	1658	1794	1925	2037	2135	2229	2300
Pendleton, Ore.	1611	1768	1919	2071	2214	2337	2465	2584	2685
<b>North Central:</b>									
Des Moines, Iowa	1880	2057	2228	2384	2535	2688	2822	2942	3044
Minneapolis, Minn.	1572	1732	1889	2030	2167	2303	2418	2519	2600
North Platte, Nebr.	1740	1906	2068	2216	2357	2503	2625	2740	2840
Omaha, Nebr.	2039	2222	2401	2566	2724	2889	3031	3159	3268
Fargo, N. Dak.	1405	1551	1696	1828	1957	2082	2186	2278	2353
Huron, S. Dak.	1623	1783	1942	2088	2229	2373	2491	2598	2687
Green Bay, Wis.	1324	1463	1597	1714	1828	1948	2057	2151	2228
Madison, Wis.	1557	1708	1853	1986	2117	2249	2368	2471	2560
<b>South Central:</b>									
Fort Smith, Ark.	2754	2958	3157	3349	3540	3726	3905	4070	4229
Dodge City, Kans.	2211	2398	2587	2761	2929	3103	3257	3399	3531
Topeka, Kans.	2231	2420	2608	2779	2949	3120	3274	3414	3542
Wichita, Kans.	2392	2590	2788	2971	3148	3328	3493	3645	3784
Shreveport, La.	3124	3333	3542	3747	3951	4150	4345	4529	4709
Columbia, Mo.	2226	2414	2598	2769	2937	3107	3263	3404	3535
St. Louis, Mo.	2313	2507	2696	2872	3046	3220	3381	3527	3661
Oklahoma City, Okla.	2629	2831	3032	3226	3415	3603	3779	3941	4095
Amarillo, Tex.	2368	2552	2736	2911	3080	3250	3407	3553	3690
Corpus Christi, Tex.	3704	3922	4138	4356	4573	4784	4998	5206	5411
Fort Worth, Tex.	3132	3350	3567	3781	3990	4196	4397	4584	4766
Midland, Tex.	2950	3149	3347	3541	3734	3920	4101	4270	4436
<b>Midwest:</b>									
Chicago, Ill.	1814	1989	2158	2316	2473	2631	2778	2905	3023
Moline, Ill.	1863	2034	2198	2350	2499	2652	2787	2904	3014
Peoria, Ill.	1922	2098	2266	2421	2574	2730	2871	2996	3110
Indianapolis, Ind.	1987	2142	2308	2464	2618	2770	2915	3041	3161
Louisville, Ky.	2301	2489	2673	2845	3018	3186	3353	3497	3630
Flint, Mich.	1483	1628	1765	1893	2016	2145	2263	2364	2452
Grand Rapids, Mich.	1560	1712	1858	1993	2125	2260	2387	2494	2590
Columbus, Ohio	1917	2085	2247	2399	2553	2703	2849	2973	3087
<b>Northeast:</b>									
Portland, Maine	1164	1293	1411	1532	1646	1755	1856	1945	2018
Albany, N.Y.	1557	1710	1851	1990	2123	2252	2378	2481	2568
Binghamton, N.Y.	1334	1473	1601	1724	1844	1960	2077	2169	2245
Syracuse, N.Y.	1511	1662	1805	1943	2072	2204	2333	2438	2525
Harrisburg, Pa.	1925	2105	2270	2433	2593	2747	2902	3031	3148
Philadelphia, Pa.	1969	2154	2323	2493	2660	2820	2985	3120	3244
Pittsburgh, Pa.	1756	1917	2068	2214	2356	2497	2635	2751	2856
Williamsport, Pa.	1697	1858	2006	2152	2294	2432	2569	2683	2784
Richmond, Va.	2335	2521	2701	2881	3056	3224	3394	3539	3675
<b>Southeast:</b>									
Macon, Ga.	3014	3214	3415	3612	3808	3997	4185	4363	4532
Raleigh, N.C.	2489	2678	2863	3046	3227	3399	3572	3725	3868
Memphis, Tenn.	2804	3011	3214	3411	3604	3792	3974	4143	4303
Nashville, Tenn.	2573	2770	2962	3145	3330	3508	3683	3842	3990

LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):  
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

Sept. 27	Oct. 4	Oct. 11	Oct. 18	Oct. 25	Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29	Dec. 6
5168	5347	5511	5664	5802	5930	6040	6141	6218	6297	6372
3878	4016	4137	4250	4352	4446	4526	4596	4643	4683	4716
2815	2901	2981	3052	3111	3161	3193	3228	3252	3273	3292
2452	2525	2608	2663	2707	2739	2757	2771	2776	2780	2781
2366	2427	2479	2529	2563	2591	2606	2615	2620	2623	2624
2785	2863	2926	2981	3026	3057	3074	3087	3097	3109	3115
3133	3218	3289	3371	3427	3467	3489	3512	3527	3534	3539
2666	2725	2777	2837	2875	2901	2912	2921	2927	2928	2929
2923	3004	3081	3156	3213	3261	3288	3316	3334	3349	3360
3362	3450	3527	3614	3674	3721	3748	3775	3792	3802	3810
2413	2468	2515	2565	2595	2616	2627	2632	2635	2635	2635
2761	2830	2890	2955	2998	3030	3048	3063	3072	3076	3078
2291	2346	2389	2442	2474	2495	2506	2513	2520	2521	2522
2633	2703	2759	2823	2863	2890	2907	2920	2929	2931	2934
4378	4508	4628	4747	4843	4925	4981	5045	5097	5138	5169
3641	3749	3847	3941	4010	4069	4105	4144	4172	4195	4213
3655	3756	3849	3947	4020	4077	4111	4150	4178	4197	4211
3906	4019	4121	4224	4300	4359	4396	4437	4467	4488	4504
4881	5034	5173	5309	5422	5521	5595	5674	5751	5814	5864
3651	3756	3847	3944	4014	4069	4103	4144	4173	4192	4207
3784	3892	3984	4081	4151	4205	4239	4278	4308	4326	4340
4241	4367	4482	4597	4685	4759	4808	4865	4908	4942	4971
3813	3926	4029	4127	4205	4273	4317	4372	4414	4451	4484
5614	5798	5978	6154	6312	6452	6573	6691	6811	6917	7012
4940	5094	5234	5376	5493	5592	5665	5746	5817	5877	5926
4593	4733	4864	4990	5093	5182	5246	5319	5381	5437	5483
3123	3211	3283	3363	3415	3451	3473	3494	3512	3519	3524
3108	3193	3264	3345	3400	3439	3461	3484	3501	3508	3515
3209	3295	3368	3448	3503	3542	3564	3589	3607	3615	3621
3269	3360	3437	3519	3578	3618	3644	3672	3695	3706	3714
3751	3859	3947	4041	4113	4166	4201	4241	4276	4296	4310
2527	2595	2652	2710	2752	2778	2796	2808	2820	2825	2828
2668	2740	2799	2862	2903	2931	2946	2961	2974	2979	2983
3193	3282	3357	3436	3495	3533	3561	3585	3608	3620	3627
2087	2145	2192	2236	2271	2293	2308	2315	2324	2328	2330
2648	2717	2776	2833	2877	2905	2923	2934	2945	2950	2953
2313	2372	2417	2468	2503	2524	2539	2548	2558	2562	2564
2606	2677	2733	2790	2835	2863	2882	2896	2910	2917	2921
3247	3336	3412	3485	3540	3578	3609	3631	3650	3659	3667
3349	3444	3530	3606	3669	3712	3749	3775	3800	3815	3825
2946	3027	3092	3160	3211	3243	3267	3288	3310	3320	3327
2869	2946	3011	3076	3126	3158	3182	3197	3209	3215	3219
3794	3901	3997	4087	4160	4219	4272	4318	4363	4393	4415
4692	4839	4972	5095	5203	5292	5370	5441	5517	5574	5617
3997	4114	4217	4314	4395	4460	4518	4568	4623	4658	4683
4452	4584	4701	4816	4907	4981	5035	5093	5148	5187	5217
4125	4248	4354	4458	4540	4604	4650	4700	4746	4776	4800



Average Monthly Weather Outlook

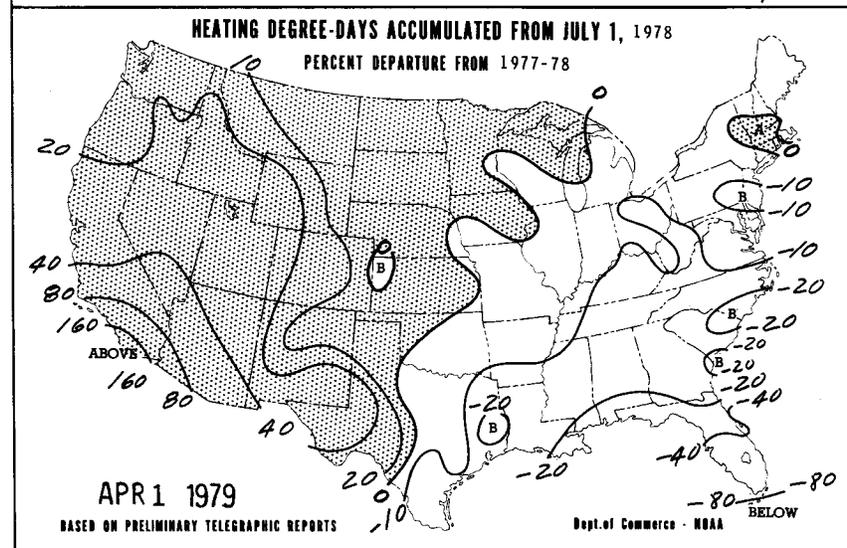
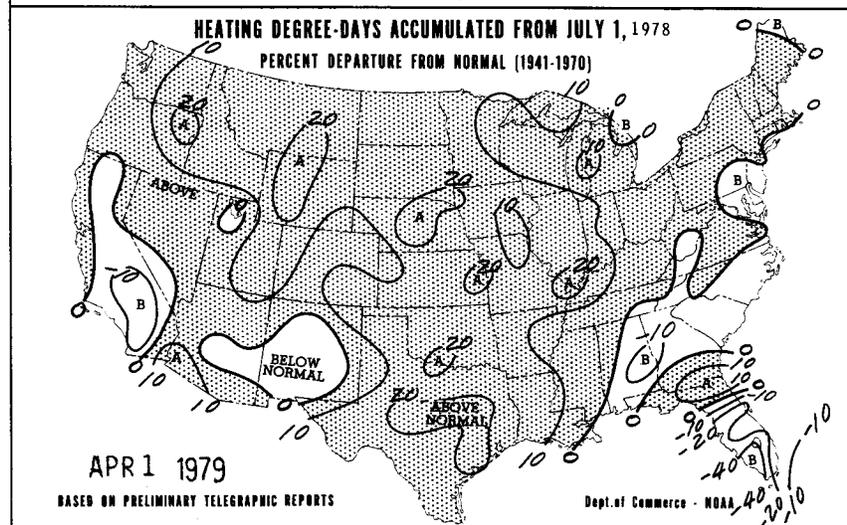
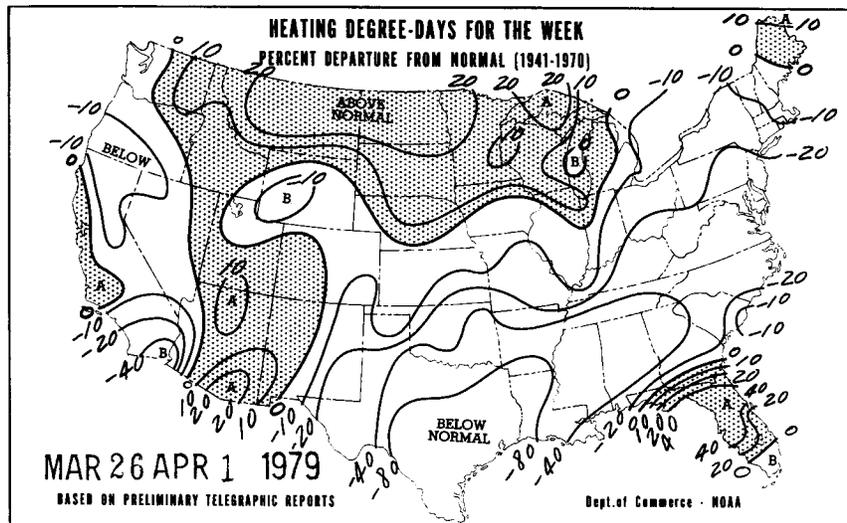


Heating Degree Days (Base 65° F.)

March 1979

ALA. Birmingham . . . . .	302	MAINE, Caribou . . . . .	1018	OKLA. Okla. City . . . . .	429
Mobile . . . . .	152	Portland . . . . .	905	Tulsa . . . . .	391
Montgomery . . . . .	194	MD. Baltimore . . . . .	520	OREG. Astoria . . . . .	543
ALASKA, Anchorage . . . . .	2139	MASS. Boston . . . . .	691	Burns U. . . . .	792
Barrow . . . . .	2535	Chatham . . . . .	806	Medford . . . . .	483
Fairbanks . . . . .	1638	MICH. Alpena . . . . .	1038	Pendleton . . . . .	582
Juneau . . . . .	904	Detroit . . . . .	843	Portland . . . . .	434
Nome . . . . .	--	Flint . . . . .	829	Salem . . . . .	486
ARIZ. Flagstaff . . . . .	1008	Grand Rapids . . . . .	864	PA. Allentown . . . . .	633
Phoenix . . . . .	143	Houghton Lake . . . . .	1053	Erie . . . . .	874
Tucson . . . . .	260	Lansing . . . . .	834	Harrisburg . . . . .	611
Winslow . . . . .	646	Marquette U . . . . .	1254	Philadelphia . . . . .	556
Yuma . . . . .	83	S. Ste. Marie . . . . .	1171	Pittsburgh . . . . .	671
ARK. Fort Smith . . . . .	393	MINN. Duluth . . . . .	1293	Scranton . . . . .	747
Little Rock . . . . .	368	Internatl Falls . . . . .	1402	R. I. Providence . . . . .	755
CALIF. Bakersfield . . . . .	211	Minneapolis . . . . .	1112	S. C. Charleston . . . . .	241
Eureka U. . . . .	459	Rochester . . . . .	1183	Columbia . . . . .	294
Fresno . . . . .	233	St. Cloud . . . . .	1260	Greenville . . . . .	336
Los Angeles U . . . . .	226	MISS. Jackson . . . . .	262	S. DAK. Aberdeen . . . . .	1245
Red Bluff . . . . .	248	Meridian . . . . .	261	Huron . . . . .	1130
Stockton . . . . .	263	Vicksburg U . . . . .	--	Rapid City . . . . .	910
San Diego . . . . .	153	MO. Columbia . . . . .	633	Sioux Falls . . . . .	1134
San Francisco . . . . .	319	Kansas City . . . . .	698	TENN. Chattanooga . . . . .	390
COLO. Denver . . . . .	751	St. Louis . . . . .	644	Knoxville . . . . .	376
Grand Junction . . . . .	732	Springfield . . . . .	606	Memphis . . . . .	345
Pueblo . . . . .	674	MONT. Billings . . . . .	887	Nashville . . . . .	449
CONN. Bridgeport . . . . .	675	Glasgow . . . . .	1283	TEX. Abilene . . . . .	272
Hartford . . . . .	730	Great Falls . . . . .	931	Amarillo . . . . .	561
D. C. Washington . . . . .	425	Havre . . . . .	1024	Austin . . . . .	144
FLA. Apalachicola . . . . .	204	Helena . . . . .	930	Beaumont . . . . .	125
Ft. Myers . . . . .	13	Kalispell . . . . .	964	Brownsville . . . . .	41
Jacksonville . . . . .	160	Miles City . . . . .	1090	Corpus Christi . . . . .	38
Key West . . . . .	0	Missoula . . . . .	893	Dallas . . . . .	--
Daytona Beach . . . . .	79	NEBR. Grand Island . . . . .	867	Del Rio . . . . .	125
Miami . . . . .	13	Lincoln . . . . .	816	El Paso . . . . .	362
Orlando . . . . .	71	Norfolk . . . . .	989	Fort Worth . . . . .	261
W. Palm Beach . . . . .	23	North Platte . . . . .	862	Galveston U. . . . .	120
Tallahassee . . . . .	217	Omaha . . . . .	921	Houston . . . . .	135
Tampa . . . . .	53	Valentine . . . . .	986	Lubbock . . . . .	369
GA. Atlanta . . . . .	279	NEV. Ely . . . . .	933	Midland . . . . .	297
Augusta . . . . .	265	Las Vegas . . . . .	270	San Angelo . . . . .	251
Macon . . . . .	226	Reno . . . . .	709	San Antonio . . . . .	107
Savannah . . . . .	181	Winnemucca . . . . .	710	Victoria . . . . .	79
IDAHO, Boise . . . . .	668	N. H. Concord . . . . .	841	Waco . . . . .	217
Lewiston . . . . .	582	N. J. Atlantic City . . . . .	623	Wichita Falls . . . . .	342
Pocatello . . . . .	884	Trenton U . . . . .	568	UTAH, Milford . . . . .	800
ILL. Cairo U. . . . .	515	N. MEX. Albuquerque . . . . .	509	Salt Lake City . . . . .	666
Chicago . . . . .	910	Roswell . . . . .	444	VT. Burlington . . . . .	866
Moline . . . . .	884	N. Y. Albany . . . . .	803	VA. Lynchburg . . . . .	489
Peoria . . . . .	833	Binghamton . . . . .	832	Norfolk . . . . .	499
Rockford . . . . .	1026	Buffalo . . . . .	823	Richmond . . . . .	439
Springfield . . . . .	758	New York . . . . .	630	Roanoke . . . . .	512
IND. Evansville . . . . .	559	Rochester . . . . .	813	WASH. Colville . . . . .	749
Fort Wayne . . . . .	731	Syracuse . . . . .	796	Omak . . . . .	--
Indianapolis . . . . .	665	N. C. Asheville . . . . .	457	Quillayute . . . . .	600
South Bend . . . . .	793	Charlotte . . . . .	350	Seattle-Tacoma . . . . .	479
IOWA, Burlington . . . . .	816	Greensboro . . . . .	440	Spokane . . . . .	756
Des Moines . . . . .	912	Hatteras R. . . . .	439	Walla Walla U. . . . .	517
Dubuque . . . . .	1053	Raleigh . . . . .	398	Yakima . . . . .	641
Sioux City . . . . .	1038	Wilmington . . . . .	346	W. VA. Beckley . . . . .	597
KANS. Concordia . . . . .	720	N. DAK. Bismarck . . . . .	1320	Charleston . . . . .	456
Dodge City . . . . .	613	Fargo . . . . .	1377	Huntington . . . . .	484
Goodland . . . . .	710	Williston U . . . . .	1294	Parkersburg U. . . . .	579
Topeka . . . . .	694	OHIO. Akron-Canton . . . . .	712	WIS. Green Bay . . . . .	1117
Wichita . . . . .	560	Cincinnati U. . . . .	563	Madison . . . . .	1013
KY. Lexington . . . . .	522	Cleveland . . . . .	680	Milwaukee . . . . .	980
Louisville . . . . .	514	Columbus . . . . .	637	WYO. Casper . . . . .	910
LA. Baton Rouge . . . . .	178	Dayton . . . . .	634	Cheyenne . . . . .	893
Lake Charles . . . . .	151	Toledo . . . . .	808	Lander . . . . .	962
New Orleans . . . . .	128	Youngstown . . . . .	781	Sheridan . . . . .	979
Shreveport . . . . .	216				

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



HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING APR. 1, 1979.

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					
ALA. BIRMINGHAM...	30	31	22	214	21	22	MAINE CARIBOU...	220	31	8066	108	156	YOUNGSTOWN...	157	13	5766	133	382
ALA. MOBILE...	29	20	21	161	19	21	MAINE PORTLAND...	192	7	6483	114	61	OKLA. OKLAHOMA CITY...	61	23	3994	59	18
ALA. MONTGOMERY...	29	20	21	159	19	21	MD BALTIMORE...	82	40	4194	101	338	OKLA. TULSA...	48	57	4018	53	80
ARIZ FLAGSTAFF...	226	30	6270	289	1327	1327	MASS BOSTON...	156	1	5013	108	94	OREG ASTORIA...	139	1	4389	240	496
ARIZ PHOENIX...	209	1	1703	289	1327	1327	MASS WINTHROP...	224	9	7051	147	366	OREG BURNS...	114	1	6625	639	111
ARIZ TUCSON...	448	1	1775	289	1327	1327	MICH ALPENA...	224	1	6066	416	358	OREG MEDFORD...	114	1	4180	20	20
ARIZ WINSLOW...	128	1	1154	171	568	568	MICH BENTON...	11	1	6802	528	107	OREG PORTLAND...	114	1	4503	99	99
ARIZ YUMA...	128	1	1154	171	568	568	MICH DETROIT...	11	1	6802	528	107	OREG SALEM...	114	1	4503	99	99
ARK FORT SMITH...	45	29	3743	547	1533	1533	MICH GRAND RAPIDS...	187	1	6433	280	107	PA ALLENTOWN...	110	4	5094	1	90
ARK LITTLE ROCK...	42	32	3414	211	933	933	MICH HOUGHTON LAKE...	239	1	6333	280	107	PA ERIE...	110	4	5094	1	90
CALIF BAKERSFIELD...	50	1	1763	267	713	713	MICH LANSING...	207	2	6333	322	34	PA HARRISBURG...	110	4	5094	1	90
CALIF EUREKA...	112	1	3703	145	624	624	MICH MARQUETTE...	207	2	6333	322	34	PA PHILADELPHIA...	110	4	5094	1	90
CALIF FRESNO...	109	1	3703	145	624	624	MICH MUSKOGEE...	207	2	6333	322	34	PA PITTSBURGH...	110	4	5094	1	90
CALIF LOS ANGELES...	108	1	1350	95	647	647	MICH S. STE. MARIE...	206	19	8214	48	3	PA SCRANTON...	110	4	5094	1	90
CALIF RED BLUFF...	108	1	1350	95	647	647	MINN DULUTH...	82	37	8901	582	29	R. I. PROVIDENCE...	155	11	5395	226	80
CALIF SAN DIEGO...	108	1	1350	95	647	647	MINN INTERNATL FALLS...	239	46	7051	91	42	S. C. CHARLESTON...	43	1	1908	169	426
CALIF SAN FRANCISCO...	108	1	1350	95	647	647	MINN MINNEAPOLIS...	239	46	7051	91	42	S. C. COLUMBIA...	1	1	2330	170	778
CALIF STOCKTON...	61	1	2425	95	647	647	MINN ROCHESTER...	239	46	7051	91	42	S. C. GREENVILLE...	45	2	3021	22	357
COLO DENVER...	61	1	5599	418	711	711	MISS JACKSON...	18	29	2404	178	480	S. DAK ABERDEEN...	50	45	8623	937	65
COLO GRAND JUNCTION...	43	15	6055	988	1585	1585	MISS MERIDIAN...	22	25	2472	164	334	S. DAK HURON...	50	45	8623	937	65
COLO PUEBLO...	50	15	5478	646	589	589	MO COLUMBIA...	104	24	5138	485	233	S. DAK RAPID CITY...	29	2	216	930	251
CONN BRIDGEPORT...	30	29	4699	37	255	255	MO KANSAS CITY...	127	17	4550	799	146	S. DAK ST. JOHNS...	29	2	216	930	251
CONN HARTFORD...	35	35	5856	252	188	188	MO SPRINGFIELD...	97	17	4101	721	325	TENN CHATTANOOGA...	43	4	3021	973	145
DEL WILMINGTON...	95	38	4522	73	577	577	MONT BILLINGS...	36	39	1225	356	129	TENN KNOXVILLE...	43	4	3021	195	425
D.C. WASHINGTON...	68	38	3638	250	361	361	MONT GLASSBORO...	36	39	1225	356	129	TENN MEMPHIS...	43	4	3021	199	515
FLA PALM BEACH...	17	1390	2	56	521	521	MONT GREAT FALLS...	36	39	1225	356	129	TEXAS ABILENE...	37	37	277	266	105
FLA DAYTONA BEACH...	17	1390	2	56	521	521	MONT HAVANA...	36	39	1225	356	129	TEXAS AMARILLO...	10	10	10	266	21
FLA FORT MEADE...	17	1390	2	56	521	521	MONT HAWAII...	36	39	1225	356	129	TEXAS AUSTIN...	10	10	10	266	21
FLA JACKSONVILLE...	17	1390	2	56	521	521	MONT HELIX...	36	39	1225	356	129	TEXAS BEAUMONT...	10	10	10	266	21
FLA KEY WEST...	17	1390	2	56	521	521	MONT HELLAS...	36	39	1225	356	129	TEXAS BROWNSVILLE...	10	10	10	266	21
FLA LAKELAND...	17	1390	2	56	521	521	MONT HILLSVILLE...	36	39	1225	356	129	TEXAS CORPUS CHRISTI...	10	10	10	266	21
FLA MIAMI...	17	1390	2	56	521	521	NEBR GRAND ISLAND...	171	1	6892	1135	555	UTAH DEL RIO...	4	4	2599	490	188
FLA MIAMI BEACH...	17	1390	2	56	521	521	NEBR LINCOLN...	171	1	6892	1135	555	UTAH DEL PASO...	4	4	2599	490	188
FLA ORLANDO...	17	1390	2	56	521	521	NEBR NORFOLK...	171	1	6892	1135	555	UTAH FORT MORT...	4	4	2599	490	188
FLA TALLAHASSEE...	17	1390	2	56	521	521	NEBR NORTH PLATTE...	171	1	6892	1135	555	UTAH GALVESTON...	4	4	2599	490	188
FLA TAMPA...	17	1390	2	56	521	521	NEBR OMAHA...	171	1	6892	1135	555	UTAH HOUSTON...	4	4	2599	490	188
FLA WEST PALM BEACH...	17	1390	2	56	521	521	NEBR VALENTINE...	171	1	6892	1135	555	UTAH LUBBOCK...	4	4	2599	490	188
GA ATLANTA...	22	44	2687	246	601	601	NEV ELV...	208	5	6831	411	1274	UTAH MIDLAND...	4	4	2599	490	188
GA AUGUSTA...	22	44	2687	246	601	601	NEV LAS VEGAS...	208	5	6831	411	1274	UTAH SAN ANGELO...	4	4	2599	490	188
GA MACON...	22	44	2687	246	601	601	NEV RENO...	208	5	6831	411	1274	UTAH SAN ANTONIO...	4	4	2599	490	188
GA SAVANNAH...	22	44	2687	246	601	601	N.H. WINNEBUCCA...	156	18	5594	46	1151	UTAH VICTORIA...	4	4	2599	490	188
IDAHO BOISE...	152	42	5630	606	1351	1351	N.H. CONCORD...	186	7	6679	290	377	UTAH RICHMOND HILLS...	37	2	3354	567	53
IDAHO LEWISTON...	152	42	5630	606	1351	1351	N.J. ATLANTIC CITY...	97	40	4724	299	27	UTAH SALT LAKE CITY...	42	10	5228	23	1245
IDAHO POCAHELLO...	152	42	5630	606	1351	1351	N.J. TRENTON...	102	32	4465	19	373	VT BURLINGTON...	190	18	7083	233	130
ILL CAIRO...	21	4362	770	79	79	79	N.MEX ALBUQUERQUE...	109	1	3809	157	265	VA LYNCHBURG...	75	22	4056	154	344
ILL CHICAGO...	21	4362	770	79	79	79	N.MEX ROSWELL...	58	25	3447	56	697	VA NORFOLK...	66	41	4162	225	371
ILL COLEMAN...	21	4362	770	79	79	79	N.Y. ALBANY...	61	19	6315	232	73	VA RICHMOND...	66	41	4162	225	371
ILL DECATUR...	21	4362	770	79	79	79	N.Y. BINGHAMTON...	61	19	6315	232	73	WASH GUILLYAYUTE...	149	98	4787	118	306
ILL PEORIA...	21	4362	770	79	79	79	N.Y. BUFFALO...	61	19	6315	232	73	WASH SEATTLE-TACOMA...	149	98	4787	118	306
ILL ROCKFORD...	21	4362	770	79	79	79	N.Y. NEW YORK...	61	19	6315	232	73	WASH SPOKANE...	149	98	4787	118	306
ILL SPRINGFIELD...	21	4362	770	79	79	79	N.C. RALEIGH...	61	19	6315	232	73	WASH WALLA WALLA...	149	98	4787	118	306
IND EVANSVILLE...	100	10	4734	454	402	402	N.C. WILKINGTON...	61	19	6315	232	73	WASH YAKIMA...	149	98	4787	118	306
IND FORT WAYNE...	100	10	4734	454	402	402	N.D. CHARLOTTE...	311	83	9082	1129	489	W. VA BECKLEY...	97	41	4769	193	688
IND INDIANAPOLIS...	100	10	4734	454	402	402	N.D. GREENSBORO...	311	83	9082	1129	489	W. VA CHARLESTON...	97	41	4769	193	688
IND SOUTH BEND...	100	10	4734	454	402	402	N.D. HATTERAS...	311	83	9082	1129	489	W. VA HUNTINGTON...	97	41	4769	193	688
IOWA BURLINGTON...	53	3	6515	949	93	93	N.D. RALEIGH...	311	83	9082	1129	489	W. VA PARKERSBURG...	97	41	4769	193	688
IOWA DES MOINES...	53	3	6515	949	93	93	N.D. WILKINGTON...	311	83	9082	1129	489	WIS GREEN BAY...	230	21	7709	648	129
IOWA SUBURB...	53	3	6515	949	93	93	N.D. DILLON...	311	83	9082	1129	489	WIS LACROSSE...	230	21	7709	648	129
IOWA SIOUX CITY...	53	3	6515	949	93	93	N.D. FARGO...	311	83	9082	1129	489	WIS MADISON...	230	21	7709	648	129
KANS CONCORDIA...	141	1	5861	253	484	484	N.D. HILLSBORO...	311	83	9082	1129	489	WIS MILWAUKEE...	230	21	7709	648	129
KANS DODGE CITY...	141	1	5861	253	484	484	N.D. BISMARCK...	311	83	9082	1129	489	WYO CASPER...	10	10	717	99	93
KANS GODDARD...	141	1	5861	253	484	484	OHIO AKRON-CANTON...	139	26	5671	187	445	WYO CHEYENNE...	10	10	717	99	93
KANS TOPEKA...	141	1	5861	253	484	484	OHIO CINCINNATI...	139	26	5671	187	445	WYO LANDER...	10	10	717	99	93
KANS WICHITA...	141	1	5861	253	484	484	OHIO CLEVELAND...	139	26	5671	187	445	WYO SHERIDAN...	10	10	717	99	93
KY LEXINGTON...	84	33	4581	253	484	484	OHIO COLUMBUS...	139	26	5671	187	445						
KY LOUISVILLE...	84	33	4581	253	484	484	OHIO DAYTON...	139	26	5671	187	445						
LA BATON ROUGE...	14	13	1733	93	352	352	OHIO TOLEDO...	139	26	5671	187	445						

# IMMEDIATE - U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

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