WEEKLY WEATHER AND CROP BULLETIN

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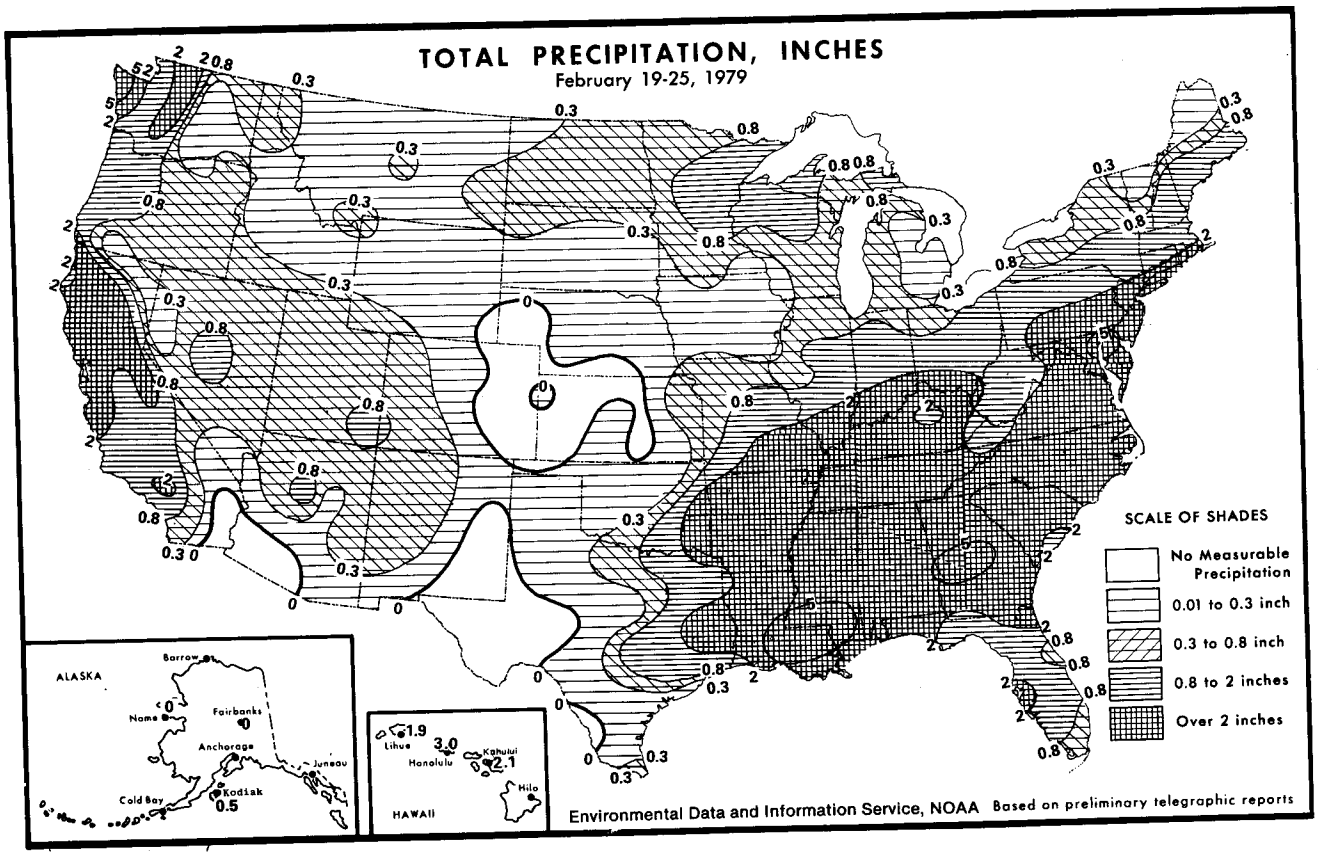


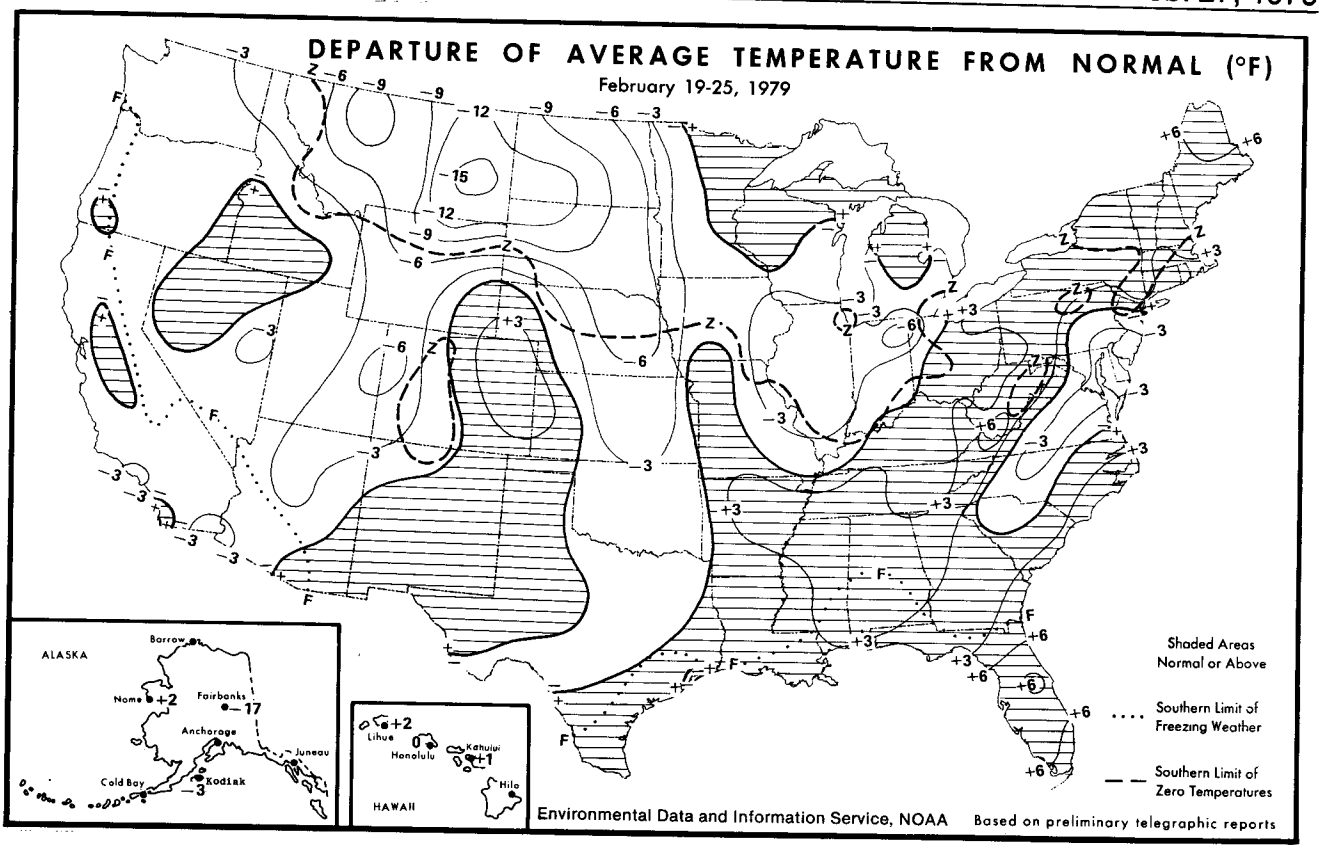
National Weather Summary

February 19 - 25

HIGHLIGHTS: A succession of storm systems edged onto the Pacific Coast during the week and accumulated moderate to heavy amounts of precipitation throughout the West. Heavy amounts of snow fell in the mountains. In the East, a slow-moving cold front was preceded by moisture from the Gulf of Mexico and proceeded from the Mississippi River at midweek to off the East Coast late Sunday. Heavy continuous rain, thunderstorms, hail, and a few tornadoes preceded the front. The severe weather left a continuing flood problem in the East. Temperatures were near or above normal in most of the Nation, but the northern Rockies and Plains averaged 12 to 15 degrees colder than normal.

A heavy blanket of snow covered the Northeast on Monday morning. Snow depths ranged from a half to one foot in North Carolina and nearly 2 feet in many areas northward. Blowing and drifting became a problem later in the day as colder air surged in behind the storm as it moved northeastward. Elsewhere, precipitation over the Nation consisted of rain over the Pacific Northwest, rainshowers in southern and western Arizona, drizzle in South Texas and light snow over the northern and central Rockies. Record minimum temperatures were reported over much of the Midwest Monday morning ranging from -20° at Muskegon, Mich., -13° at Dubuque, Iowa, -8° at Indianapolis, to -10° at Portland, Maine. Warmer temperatures reached into the central Plains Monday afternoon. Western Nebraska topped off near 60°, while much of the Plains were in the 50's.

Rain on the West Coast spread from Oregon to central California on Tuesday. The precipitation moved eastward falling as snow in the higher elevations. Rain and a few thunderstorms moved onto



the Texas coast early in the day and spread into the central Plains and lower Mississippi Valley. Freezing rain and some snow fell in the southern portion of South Dakota. The cold weather continued from the mid-Atlantic States northeastward. Temperatures dropped to near zero in many areas. The long freeze in the upper Midwest ended Tuesday afternoon as temperatures climbed above freezing in Iowa and Minnesota.

The storm system in the West barreled into the Plateau Region on Wednesday. Rain was scattered over the Pacific Coast States with the heaviest amounts in California. Heavy snow accumulated in mountain areas as the storm moved onto the Plateau. A cold front along the Mississippi Valley spread Gulf moisture northeastward. Rain extended from the lower Great Lakes and upper Ohio Valley into the mid-Atlantic States and southward to Florida. Maximum temperatures stayed generally above freezing in nearly all of the Nation except for the northern Plains, upper Mississippi Valley, and upper Michigan where readings in the teens and 20's prevailed.

A cold front moved rapidly through the Northeast Thursday morning, but the southern portion remained stationary through the South. The Gulf moisture was redirected and caught up in a storm center in western Nebraska. Rain, hail, freezing rain, and snow fell from the Gulf of Mexico to the northern Plains. Snow extended from the Rockies across the northern Plains and upper Mississippi Valley and into the western Great Lakes area. Rain and drizzle fell in the middle Mississippi Valley and showers and thunderstorms from the lower Ohio and lower Mississippi Valleys through the southeastern States. Rain persisted over the north and central Pacific Coast. Warm air pushed northward, and temperatures over most of the eastern U.S. rose above the freezing mark.

Rain covered a large portion of the country from the lower Great Lakes and southern New England to the Gulf of Mexico. A cold front from Michigan to Texas moved slowly eastward preceded by a strong flow of warm, very moist air from the Gulf of Mexico. Thunderstorms and rain, heavy at times, enveloped all of eastern U.S. Showers and thunderstorms dotted portions of the Southwest with light rain reported along the northern half of the Pacific Coast. Temperatures over most of the Nation were near or above seasonal normals, but the northernmost areas from Michigan westward were colder than normal.

Rain continued to fall over much of the Nation on Saturday. Rain fell heavily at times from Texas eastward to the Atlantic and northeastward to New England. Thunderstorms were rife in the South and spread northward into the Midwest. Several tornadoes and hail storms hit the South. The near continuous rain and melting snow caused floods or impending flooding to threaten many areas, especially on either side of the Appalachian Mountains. In the West, a cold front spread rain over the northern Pacific Coast. Temperatures remained normal or above except for the northern Plains where cold weather had returned.

The slow-moving cold front, with attendant waves moving northward, headed off the East Coast late Sunday. The northward-moving waves, or low centers, caused some heavy rain and swirled moisture well behind the frontal system causing some heavy snow in Arkansas and Missouri. Thunderstorms and some tornadoes were reported in the Southeast. Flooding presented a major problem in the East as streams swelled and ice jammed in many spots. Light rain continued along the Pacific Coast. Fair skies prevailed over the Plains and from southern California to Louisiana. Cooler weather returned to the Plains and moved eastward.

National Agricultural Summary

February 19 - 25

HIGHLIGHTS: Moderating temperatures melted snowcover on the Great Plains which improved soil moisture but exposed some wheat stands to winds. Rains across the Southeast and along the West Coast moved soil moisture into the surplus category which slowed land preparations in most areas. Some land was plowed and fertilized where drainage was adequate. Very little fieldwork was accomplished outside of the extreme southern areas of the United States. Winter wheat rated fair to mostly good throughout the major production areas. Snowcover remained adequate from Nebraska northward. Earliest fields in the Southwest moved past the jointing stage and advanced into the stem elongation stage. Only southern pastures were available for grazing, but many of these were muddy which limited their use. Growers continued to prune and spray deciduous orchards where weather conditions permitted. Peaches bloomed in the extreme South. The citrus harvests advanced on schedule. Vegetable activities centered in California, Arizona, Texas, and Florida.

SMALL GRAINS: Winter wheat rated fair to mostly good with greening reported in the southern Great Plains. Snowcover receded dramatically during the past week but blanketed the crop from Nebraska northward. Snowmelt in the Northwest provided needed soil moisture and some winterkill became evident, but the extent of the damage was unknown. Corn Belt winter wheat remained under a mantle of snow.

Kansas wheat began greening in the West but some blowing resulted from high winds and the absence of snowcover. No barley or oats was planted, while normally 4% and 6% respectively was in the ground. Oklahoma winter wheat rated fair to good with cattle grazing 40% of the acreage. Texas winter wheat began greening on the northern High Plains with some blowing also reported. The High Plains crop needed additional soil moisture while other areas of the State held adequate water but needed warm clear weather for growth.

Arizona winter wheat rated good with progress of the crop reaching the stem elongation stage. California wheat made good growth. Farmers sprayed for weed control and fertilized. Melting snow in Washington improved soil moisture for the winter wheat.

OTHER CROPS: The Texas cotton harvest was virtually complete with only a few isolated stands remaining to be picked. Losses increased substantially during the past 10 days. A few growers in the Lower Rio Grande Valley planted some cotton, but most farmers waited for warmer and drier weather. Snows delayed the Oklahoma cotton harvest which stood at 94% complete. The Arizona cotton harvest wound down while land preparation advanced for the 1979 crop. California cotton producers performed pre-irrigation activities.

Florida tobacco plants were ready to set out in fields. Georgia tobacco plantbeds rated good. Tennessee tobacco plantbed preparation was slowed by snowy, wet weather.

Early corn and sorghum planting began in Florida, Texas, and Arizona.

FRUITS AND NUTS: Deciduous fruit growers pruned trees and sprayed orchards where weather conditions permitted; these areas were mostly limited to the western States. Peaches bloomed in South Texas. Arkansas reported no winter damage to the peach crop.

Florida citrus groves rated excellent with moisture adequate in all areas. New growth and bloom bud progressed rapidly. Orange drop was not heavy, and early and mid-season harvests were active in all areas. The Temple harvest advanced with good demand. The Arizona and Texas citrus harvests advanced on schedule. California growers harvested good supplies of desert grapefruit, lemons, Navel oranges, and tangelos.

VEGETABLES: Florida vegetable crops rated mostly good with warm weather beneficial to plant growth and fruit development. Shipments advanced 4% from the previous week with snap beans, sweet corn, lettuce, parsley, squash, and strawberries registering increases. Supplies of other vegetable crops held steady or declined. Growers reported less bloom and fruit droppage, windburn, and fruit scarring. Arizona growers harvested a full volume of lettuce, broccoli, cauliflower, and carrots. Arizona melon planting hit full swing. Texas growers harvested cabbage, spinach, cauliflower, and lettuce. Melon planting moved actively with some early fields germinated in the south. California vegetable growers harvested asparagus, lettuce, celery, and cole crops; farmworkers' strikes disrupted harvests. Broccoli and cauliflower harvests were light but should increase. Processing tomato planting made good progress.

PASTURES AND LIVESTOCK: Pastures rated mostly fair throughout the South. Temperatures were above normal which promoted growth, but many areas were too wet to graze. In the Southwest, rangelands improved with adequate soil moisture, but grasses needed warmer temperatures. Farmers fertilized pastures where snowcover receded and soils were firm enough to support equipment. Hay, roughage, and feed supplies remained adequate with the exception of some areas of the South and Mountain States. Cattle generally rated fair to good with moderating temperatures lessening stress except in extreme northern areas and the Atlantic Coast. Calving and lambing advanced with no apparent unusual losses except in the Middle Atlantic States where severe weather hit early in the week.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Feb. 25, 1979

States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
ALA.Birmingham	53	+ 5	3.0	+ 1.6
Mobile	59	+ 4	4.9	+ 3.6
Montgomery	57	+ 5	4.0	+ 2.8
ALASKA.Anchorage	--	--	--	--
Barrow	--	--	--	--
Fairbanks	-17	-17	0	- .1
Juneau	--	--	--	--
Kodiak	29	- 3	.5	- .7
Nome	7	+ 2	0	- .2
ARIZ.Flagstaff	26	- 5	1.2	+ .8
Phoenix	55	- 1	.1	- .1
Tucson	54	0	T	- .2
Winslow	39	- 2	.2	+ .1
Yuma	58	- 3	T	- .1
ARK.Fort Smith	44	- 1	3.5	+ 2.7
Little Rock	47	+ 3	3.3	+ 2.2
CALIF.Bakersfield	52	- 2	.9	+ .7
Eureka	48	- 1	1.8	+ .6
Fresno	53	+ 2	1.2	+ .8
Los Angeles	55	- 3	1.7	+ 1.0
Red Bluff	49	- 2	2.6	+ 1.9
San Diego	58	+ 1	.4	0
San Francisco	51	- 1	2.4	+ 1.7
Stockton	51	+ 1	1.9	+ 1.4
COLO.Denver	36	+ 2	.1	- .1
Grand Junction	29	- 7	.5	+ .3
Pueblo	38	+ 2	T	- .1
CONN.Bridgeport	35	+ 3	2.0	+ 1.3
Hartford	29	+ 1	1.6	+ .8
D.C.Washington	36	- 2	4.2	+ 3.5
FLA.Apalachicola	58	+ 1	1.1	+ .1
Daytona Beach	67	+ 7	.7	- .1
Ft. Myers	73	+ 8	1.8	+ 1.2
Jacksonville	60	+ 3	2.3	+ 1.4
Key West	76	+ 4	.2	- .2
Lakeland	71	+ 8	.9	+ .2
Miami	73	+ 5	.6	+ .1
Orlando	66	+ 4	1.0	+ .2
Tallahassee	58	+ 2	1.2	- .1
Tampa	69	+ 7	2.7	+ 1.9
W.Palm Beach	73	+ 6	.7	0
GA.Atlanta	49	+ 3	2.7	+ 1.5
Augusta	51	+ 2	3.8	+ 2.8
Macon	53	+ 2	5.1	+ 3.9
Savannah	56	+ 3	2.8	+ 2.0
HAWAII.Hilo	--	--	--	--
Honolulu	73	0	3.0	+ 2.4
Kahului	73	+ 1	2.1	+ 1.5
Lihue	73	+ 2	1.9	+ .9
IDAHO.Boise	39	+ 2	.2	- .1
Lewiston	39	- 1	.2	0
Pocatello	31	0	.2	0
ILL.Cairo	--	--	--	--
Chicago	26	- 3	.4	0
Moline	25	- 3	.7	+ .3
Peoria	25	- 4	1.0	+ .6
Rockford	21	- 5	.4	0
Springfield	28	- 4	.6	+ .1
IND.Evansville	34	- 3	4.0	+ 3.1
Ft. Wayne	22	- 7	.7	+ .2
Indianapolis	30	- 2	1.9	+ 1.3
South Bend	26	- 2	.8	+ .3
IOWA.Burlington	26	- 3	.2	- .2
Des Moines	26	0	.2	- .1
Dubuque	20	- 4	.2	- .2
Sioux City	19	- 6	.2	- .1
KANS.Concordia	29	- 4	T	- .3
Dodge City	37	+ 1	T	- .2
Goodland	37	+ 4	T	- .1
Topeka	30	- 5	.5	+ .2
Wichita	35	- 3	T	- .3
KY.Lexington	37	0	1.9	+ 1.0
Louisville	37	0	3.4	+ 2.5
LA.Baton Rouge	57	+ 2	6.1	+ 4.9
Lake Charles	56	0	1.9	+ .8
New Orleans	59	+ 2	4.8	+ 3.5
Shreveport	53	+ 1	1.9	+ 1.0
MAINE.Caribou	22	+ 7	.1	- .5
Portland	27	+ 3	1.4	+ .5
MD.Baltimore	34	- 2	5.1	+ 4.4
MASS.Boston	35	+ 3	1.5	+ .6
Chatham	33	--	2.7	--
MICH.Alpena	21	+ 2	.3	- .1
Detroit	27	- 1	.3	- .2
Flint	24	- 1	.2	- .2
Grand Rapids	24	- 2	.4	0
Houghton Lake	22	+ 3	.3	0
Lansing	25	0	.3	- .1
Marquette	16	+ 1	.7	+ .3
Muskegon	23	- 3	.4	0
S. Ste. Marie	16	0	.9	+ .5
MINN.Duluth	15	+ 1	1.1	+ .9
Internatl Falls	11	+ 2	.4	+ .2
Minneapolis	21	+ 2	.9	+ .7
Rochester	17	- 1	.1	- .1
St. Cloud	15	- 1	.9	+ .7
MISS.Jackson	53	+ 2	4.6	+ 3.4
Meridian	55	+ 4	3.3	+ 2.0
MO.Columbia	34	- 1	.8	+ .4
Kansas City	32	+ 2	.6	+ .2
St. Louis	32	- 5	1.1	+ .5
Springfield	38	0	.9	+ .3
MONT.Billings	21	- 8	.1	- .1
Glasgow	5	-12	.1	0
Great Falls	18	-10	.1	- .1
Havre	12	- 8	.1	0
Helena	19	- 8	.1	0
Kalispell	23	- 4	.2	0
Miles City	9	-15	.4	+ .3
Missoula	26	- 3	T	- .1
NEBR.Grand Island	23	- 6	.1	- .1
Lincoln	24	- 6	.1	- .2
Norfolk	20	- 6	.2	0
N.Platte	26	- 3	T	- .1
Omaha	23	- 4	.1	- .2
Valentine	22	- 4	T	- .1
NEV.Ely	26	- 3	.4	+ .2
Las Vegas	50	- 1	T	- .1
Reno	38	0	.3	+ .1
Winnemucca	36	+ 1	.4	+ .2
N.H.Concord	27	+ 3	1.1	+ .5
N.J.Atlantic City	32	- 3	4.1	+ 3.2
Trenton	34	0	2.8	+ 2.1
N.MEX.Albuquerque	42	+ 1	.3	+ .2
Roswell	46	+ 2	0	- .1
N.Y.Albany	29	+ 4	1.0	+ .4
Binghamton	29	+ 6	1.0	+ .4
Buffalo	30	+ 5	.4	- .2
New York	33	- 1	2.6	+ 1.8
Rochester	29	+ 3	.4	- .2
Syracuse	30	+ 4	.6	- .1
N.C.Asheville	45	+ 5	3.2	+ 2.2
Charlotte	43	- 2	4.9	+ 3.9
Greensboro	39	- 3	3.2	+ 2.3
Hatteras	50	+ 4	2.1	+ 1.1
Raleigh	43	0	3.4	+ 2.6
Wilmington	54	+ 5	2.9	+ 2.0
N.DAK.Bismarck	4	-12	.6	+ .5
Fargo	7	- 6	.6	+ .5
Williston	7	- 9	.2	+ .1
OHIO.Akron-Canton	31	+ 2	1.7	+ 1.1
Cincinnati	33	- 1	2.9	+ 2.1
Cleveland	34	+ 5	1.3	+ .7
Columbus	32	+ 1	1.6	+ 1.0
Dayton	32	0	1.7	+ 1.1
Toledo	27	- 1	.4	- .1
Youngstown	33	+ 5	1.4	+ .8
OKLA.Okla. City	41	- 2	T	- .4
Tulsa	41	- 2	.2	- .3
OREG.Astoria	43	- 1	1.9	0
Burns	31	- 2	.6	+ .3
Medford	43	+ 1	.2	- .3
Pendleton	40	- 1	.2	- .1
Portland	43	- 1	1.9	+ .9
Salem	43	- 1	1.4	+ .3
PA.Allentown	31	0	3.0	+ 2.3
Erie	29	+ 3	1.0	+ .4
Harrisburg	31	- 3	3.2	+ 2.6
Philadelphia	32	- 3	4.2	+ 3.5
Pittsburgh	32	+ 2	1.9	+ 1.3
Scranton	29	+ 1	1.5	+ 1.0
R.I. Providence	31	+ 1	1.7	+ .8
S.C. Charleston	55	+ 4	1.2	+ .3
Columbia	48	- 1	4.4	+ 3.4
Greenville	44	- 1	4.1	+ 2.9
S.D. Aberdeen	10	- 8	.2	0
Huron	14	- 6	.1	- .1
Rapid City	21	- 6	.1	0
Sioux Falls	16	- 6	.3	0
TENN.Chattanooga	46	+ 2	2.0	+ .7
Knoxville	46	+ 2	2.0	+ .8
Memphis	48	+ 3	3.9	+ 1.7
Nashville	45	+ 3	2.2	+ 1.1
TEX.Abilene	51	+ 2	.1	- .1
Amarillo	42	+ 1	T	- .1
Austin	53	- 2	1.5	+ .7
Beaumont	57	+ 1	.6	- .4
Brownsville	64	0	.3	0
Corpus Christi	62	+ 1	T	- .5
Del Rio	55	- 2	T	- .3
El Paso	50	0	0	- .1
Fort Worth	48	- 2	.7	+ .1
Galveston	55	- 2	T	- .6
Houston	57	+ 1	1.6	+ .7
Lubbock	46	+ 2	T	- .1
Midland	50	+ 1	T	- .1
San Angelo	52	0	0	- .2
San Antonio	56	0	.2	- .3
Victoria	58	0	T	- .6
Waco	50	- 2	.2	- .4
Wichita Falls	46	- 1	.4	+ .1
UTAH.Blanding	30	- 4	.9	+ .7
Salt Lake City	34	- 1	.7	+ .4
VT.Burlington	25	+ 5	.1	- .3
VA.Lynchburg	38	- 1	3.3	+ 2.6
Norfolk	42	0	3.5	+ 2.7
Richmond	37	- 3	4.8	+ 4.0
Roanoke	38	- 1	3.5	+ 2.7
WASH.Colville	30	- 3	.6	+ .3
Omak	31	- 1	.2	- .1
Quillayute	40	- 2	5.2	+ 2.3
Seattle-Tacoma	42	- 1	1.3	+ .3
Spokane	30	- 4	.6	+ .2
Walla Walla	42	0	.4	+ .1
Yakima	37	- 1	.2	0
W.VA.Beckley	41	+ 8	1.0	+ .1
Charleston	40	+ 2	1.9	+ 1.1
Huntington	41	+ 4	2.1	+ 1.3
Parkersburg	36	0	1.8	+ 1.1
WISC.Green Bay	19	- 1	.6	+ .3
La Crosse	24	+ 2	.3	+ .1
Madison	21	- 1	.6	+ .3
Milwaukee	23	- 1	.5	+ .2
WYO.Casper	25	- 3	.2	+ .1
Cheyenne	32	+ 3	T	- .1
Lander	22	- 5	T	- .2
Sheridan	14	-13	.1	- .1
P.R.San Juan	79	+ 3	.4	- .2

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 well above normal 22d to 24th, averaged 5° above normal. Increasingly heavy rains. Southern areas totaled 4.00 to 6.00 in.

Fieldwork: under 1 day suitable. Soil moisture mostly surplus. Routine livestock and poultry care, preparing equipment for spring main activities. Plowing 27% complete, advances made mostly southern areas. Fieldwork progress behind normal. Pasture feed short, causing heavy usage stored feed some areas. Stored feed supply less than adequate. Wheat condition poor to fair.

ARIZONA: Storms mainly affected northern areas. Snow level near 5,000 ft. Precipitation 0.10 in. southern area, over 1.00 in. northwest, north mountains. Temperatures 5° below normal northwest and north central, 1° above normal southeast.

Field conditions generally excellent. Cotton harvest winding down; land preparations well advanced new crop. Small grains good growth, favorable conditions. Many fields past jointing, in stem elongation stage. Land preparations underway corn, sorghum grain. Sugarbeet harvest Cochise County to resume. Spring beets good progress. First cutting alfalfa increasing, some fields green chopped. Harvest lettuce, broccoli, cauliflower, carrots, full volume. Immature vegetables all stages development, growing well. Planting watermelons, cantaloups full swing. Harvest citrus normal progress. Groves with minor damage, good recovery; some groves requiring major pruning. Ranges, pastures improving. Some problems getting to cattle, stock tanks due to wet conditions. Some purchasing of stockers due to heavy feed potential. Calving underway. Stock water, soil moisture adequate. Sheep on feed moving to market.

ARKANSAS: Temperatures near normal, precipitation heavy. Extremes: 10 and 74°. Average temperatures 41 to 53°; 3° below to 3° above normal.

Livestock fair to good condition; still on full feed. No fieldwork. Wheat dormant. Limited to no damage reported in peach orchards. Pasture growth beginning.

CALIFORNIA: Moderate to heavy precipitation occurred during midweek. New snow of 4 to 6 ft. added at higher elevations of central and northern Sierra. Snow reported down to 1800 ft. elevation in northern Sierra. Temperatures much below normal in higher elevations of north and elsewhere near to a little below normal.

Low level areas became supersaturated over northern half. Inclement weather halted planting. Central coast, Riverside County, San Joaquin, Imperial Valley showed good growth small grains. Sacramento Valley showed fair growth; wet fields. Weed control San Joaquin Valley, Riverside County. Fertilization San Joaquin Valley. Alfalfa growth stimulated San Joaquin Valley. Planting preparation continues south coast. Baling active Imperial Valley. Weed control active San Joaquin Valley. Sugarbeet planting preparation active south coast. Imperial Valley good sugarbeet growth. Sacramento Valley fair beet growth. Cotton pre-irrigation active San Joaquin Valley. Normal seasonal orchard activities. Avocados, dates, desert grapefruit, lemons, Navel oranges, tangelos continue good supplies. Artichokes recovered from frost. Asparagus, celery, cole crops and lettuce harvests disrupted by farm workers strike. Celery growing Salinas; harvesting south coast. Broccoli, cauliflower harvests light; should increase. Lettuce lighter than normal. Strawberries recovered frost south. Processing tomato planting made good progress. Range conditions improved; increased soil moisture. Warmer weather needed strong grass growth. Bee colonies continue movement to almond orchards.

COLORADO: Series of weak frontal systems brought several periods of light snow to mountains and west. Temperatures in Colorado Basin averaged 3° below normal while San Luis Valley about 8° below normal. Arkansas Basin 1° above normal and Platte and Kansas Basins about 2° above normal.

FLORIDA: Stationary cold front across central moved off Peninsula 19th. High pressure dominated through 24th when a cold front entered Panhandle, moving to central area on 25th. Scattered rainfall up to 0.33 in. occurred central, south through 24th with 2.00 to 3.00 in. Panhandle north; 1.00 in. central, south 24th and 25th. Highs averaged from upper 60's north to low 80's extreme south, cooling to low 60's north and 70° south on 24th. Lows averaged in 40's in Panhandle to near 60° in south, cooling to around 40° in north and around 60° in south on 24th.

Soil moisture mostly excessive west, adequate north and central, adequate to short in south. Land preparation active. Planting of early corn just beginning. Tobacco plants about ready for transplanting. Small grains improving. Sugarcane harvest active. Young cane good growth. Winter annual pastures providing most of grazing, northern, many central locations. Supplemental feeding continued. Permanent pastures greening up in south. Cattle in fair to good condition. Citrus grove condition excellent. Moisture adequate all areas. New growth and bloom buds progressing rapidly. Orange droppage not heavy, early and mid-orange harvest active all areas. Temple harvest very active with good demand. Overall vegetable crop condition mostly good. Warmer weather beneficial to plant growth and fruit development. Shipments up 4% from previous week. Increased shipments snap beans, sweet corn, lettuce, parsley, squash, strawberries, while cabbage, eggplant, escarole, peppers, potatoes, radishes, tomatoes held steady. Supplies carrots, celery, cucumbers, declined. Planting active, replanting steady where necessary. Bloom, fruit droppage declined, less windburn, fruit scarring. Strawberry plants good condition. Bloom fruit set improving, volume increasing. Watermelon crop condition improved. Planting underway north.

GEORGIA: Temperatures ranged upper 30's mountains to mid-50's south. Moderate to heavy rainfall.

Soil moisture surplus. Fieldwork hampered by adverse weather conditions. Small grains fair north to good south. Pasture conditions ranged from poor in central, fair in north to good in south. Livestock condition ranged from fair to good in north to good in south. Some damage to poultry houses and greenhouses in central and north due to sleet and snow storm. Tobacco plants good. Few fields corn planted southern areas.

HAWAII: Heavy rains early part of week most Islands. Flooding caused by torrential rains caused extensive damage to property and agriculture windward coast Island Hawaii. Over 21 in. recorded 24 hour period Hilo 20th.

Sugarcane suffered damage from flooding, washout, erosion. Harvesting and planting all Islands delayed further because of wet conditions. Papaya harvest off 50%. Disease major problem, too wet to spray. Harvesting and production expected to return to normal following week because of favorable weather second half. Leafy vegetable crops experienced spoilage, reduced yields because of excessive moisture. Harvest light. Pineapple harvesting light.

IDAHO: Showery weather with temperatures averaging around seasonal normals. Temperatures ranged from 51 to -1°. Precipitation close to normal. Most mountain stations normal increases in snow depth.

Conditions wet and field activities limited. Milder temperatures generally favorable for calving and lambing. Some areas wet weather causing problems. Feed supplies adequate.

ILLINOIS: Temperatures 2 to 4° below normal, 9th straight week below normal temperatures. Precipitation less than 1.00 in. north, over 5.00 in. south. Snowfall 2 in. or less north, up to 24 in. south. Snow depth 10 to 14 in. north, 1 to 24 in. south.

Soil moisture surplus to adequate. Winter wheat mostly good condition; winter damage unknown. Livestock fair to good condition, feed rations heavy. Grain, livestock marketings hampered by snow; movement improving.

INDIANA: Moderately cold, wet south. Temperatures near 1° below normal and ranged from 8 to 61°. Precipitation 2.50 in. south, 1.00 in. central, and 0.40 in. north. Snowcover 5 in. south, 6 in. central, 3 in. north, and 10 in. near Lake Michigan. Soil freeze depth unchanged 2 in. central to 6 in. north. Percent sunshine 25% south and central to 40% northeast. Major storm central and south 25th. Ice and snow problems. Local flooding central and south due to ice jams and heavy rain.

Little outside activity. Potential danger to overwintering crops due to snow melt, water pooling and freezing in low spots. Warm trend permitted cleaning of bunkers. Other activities: Caring for livestock, shop work, equipment maintenance.

IOWA: Temperatures few degrees subnormal. Precipitation light except moderate to heavy in east central and northeast. Most of precipitation fell on 20th and 21st as snow northwest and as rain, ice, sleet, or snow elsewhere. Daily thawing reduced snow depths a few inches. Water content of snow now varies from 1 in. or less southwest to around 6 in. northeast and some east central areas.

KANSAS: Some moderation in temperatures, scattered moisture from rain and snow. Temperatures 1 to 4° above normal west, 2 to 4° below normal central and east. Precipitation trace amounts west, less than 0.25 in. central and 0.25 to 0.75 in. with isolated totals of near 1.00 in. extreme east.

Cattle beginning to move to wheat pasture. Feedlots muddy causing feeding problems. Milder temperatures reducing supplemental feed requirements. Some wheat showing green in west, some blowing occurred. Barley seeded 0%, last year 0%, average 4%. Oats seeded 0%, last year 0%, average 6%.

KENTUCKY: Temperatures near normal. Precipitation heavy to excessive with major flooding near end of week. Precipitation averaged around 3.00 to 4.00 in.

Topsoil saturated. Muddy lots and wet fields make feeding difficult. Livestock fair to good condition. Plenty of hay. Less cattle, less demand for hay. No fieldwork.

LOUISIANA: Temperatures normal to 2° above normal. Extremes: 79 and 22°. General heavy rains late week.

Activities: Care and feeding of livestock.

MARYLAND & DELAWARE: Temperatures 12° below normal. Highs in 30's and lows in teens. Rainfall varied considerably but most stations recorded 1.00 to 2.00 in. rainfall. Snowfall of 20 in. recorded except lower Eastern Shore. Occasional rainfall 24th and 25th, heavy at times.

MICHIGAN: Temperatures around normal over Lower and normal to 5° below normal over Upper Peninsula. Maximum temperatures near or above freezing. Low to mid-40's on 23d. Precipitation 0.20 to 1.20 in. falling as snow early week and rain later. Snow depths over Lower ranged from around 1 in. extreme southeast to 25 in. extreme north.

Farm activities included feeding livestock.

MINNESOTA: Temperatures near normal. Extremes: 38 and -20°. Precipitation near normal south and northwest and 0.25 to 0.75 in. above normal elsewhere except 0.75 to 0.91 in. above normal extreme east central through northeast. Some rain south early week. Precipitation totaled 0.10 to 0.50 in. south and northwest and 0.50 to 1.12 in. elsewhere. Snowfall less than 3 in. southeast, 3 to 6 in. elsewhere except 6 to 12 in. east central through northeast. Snow depth 15 to 25 in. south and northwest and 25 to 35 in. elsewhere.

MISSISSIPPI: Temperatures 10 to 12° below normal central, north; 5° below normal south. Extremes: 10 and 76°. Snow, ice, northern areas early week, one area up to 6 in. ice on roads. Warmer midweek. Heavy rains late week central, south, with some flooding along river banks.

Soil moisture surplus to excessive. Fieldwork: 1.6 days suitable. Fields generally wet, boggy, but some land preparation done where dry enough. Warmer weather aiding growth of winter grazing but feeding continued; hay and roughage supplies short to very short. Feed grains adequate to short. Winter wheat condition mostly poor but improving. Livestock mostly fair condition.

MISSOURI: Temperatures 3 to 5° below normal north and east, 1 to 3° below normal west Ozarks and west central Plains. Precipitation 1.00 in. extreme northwest, over 3.00 in. extreme southeast, and 1.00 to 2.00 in. elsewhere.

Warming temperatures eased burden of farm activities.

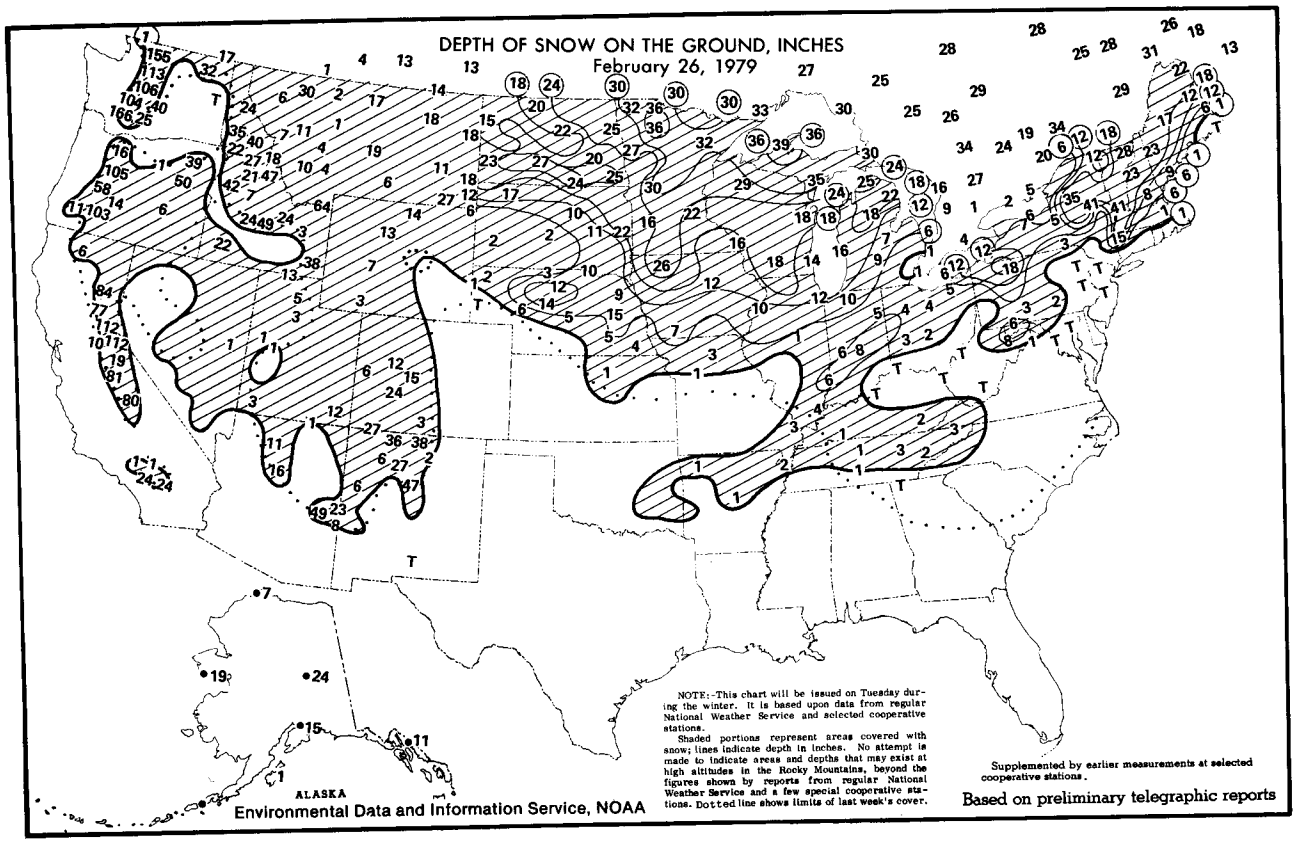
MONTANA: Temperatures from 15° below normal east to 10° below central and 5° below west and southwest. Precipitation heavy over southeast; light to moderate elsewhere.

Winter wheat condition and snowcover good. Livestock fair to good condition. Calving and lambing about 10% complete. Cold and wet conditions causing some problems. Grain and hay supplies adequate. Grazing mostly closed.

NEBRASKA: Temperatures normal to 5° below normal; warmest week in over month. Precipitation ranged from traces west and north central to 0.20 in. east and south central. Snowcover thinning as melting occurred 3 to 4 days.

NEVADA: Series cold fronts produced considerable snow Sierras, rain or snow interior. Temperatures near normal. Extremes: 65 and 1°.

Snowcover protected winter grains. Calving and lambing gaining momentum.



NEW ENGLAND: Extremely cold early week, moderating midweek. General rains at weekend; some mixed rain and snow far north.

NEW JERSEY: Excessive precipitation and sharp temperature contrasts. Temperatures 3 to 6° below normal, averaging 27° north, 31° south and 33° coastal. Extremes: -8 and 51°. Precipitation 1.00 to 3.00 in. above normal, averaging 2.83 in. north, 3.22 in. south and 4.08 in. coastal. Record breaking snowstorms 19th dumped as much as 24 in. snow southern and coastal sections.

Local flooding caused some problems on farms. Growers caring for livestock and tending to other winter chores.

NEW MEXICO: Warm early week turning cooler with scattered rain and snow showers midweek then warming again weekend.

Land prepartation active. Wheat and barley good. Spring lettuce up. Pecan pruning in progress. Livestock fair. Supplemental feeding active. Shearing, lambing, calving in progress.

NEW YORK: Arctic air entrenched for several weeks finally displaced bringing near normal temperatures in 20's to lower 30's. Precipitation above normal south ranging from 1.00 to 2.50 in. but close to normal elsewhere.

NORTH CAROLINA: Temperatures normal in mountains; elsewhere 3 to 10° subnormal. Precipitation excessive; 2.00 to 4.00 in.

Fieldwork: Less than one day suitable. Soil moisture surplus. Condition of small grains fair to good, pastures poor to fair. Supplies of hay, roughage and feed grains adequate.

NORTH DAKOTA: Winter storm 22d brought heavy snow and blocked roads. Snowfall up to 9 in. Water equivalents around 0.50 in. Temperatures 5 to 10° below normal. Extremes: -35° northeast to 42° southwest.

Storm maintained good snowcover but prolonged heavy livestock feeding. Calving and lambing beginning.

OHIO: Temperatures nearly normal. Extremes: -8 and 68°. Precipitation well above usual. Water equivalent 0.50 in. with some totals up to 2.00 in. north. Central and south received 1.00 to 3.00 in. precipitation with average of 1.90 in.

Soil temperatures just a few degrees warmer than previous week; bare soil temperatures at 4 inches still mostly in mid to upper 20's. Lambing continued. Maple sirup began to flow in south.

OKLAHOMA: Temperatures slightly below normal. Panhandle 1° above normal while elsewhere 3 to 4° below normal. Maximum temperatures ranged from mid-70's southeast and 50's and 60's elsewhere. Minimum temperatures generally in 20's and 30's. Precipitation in form of thunderstorms midweek and snow by weekend fell in southeast. Small amounts precipitation fell elsewhere. Heavier snowfall in southeast from 10 to 14 in. Liquid precipitation ranged from a trace in west to over 4 in. in southeast.

Topsoil and subsoil moisture supplies adequate. Wheat good to fair condition. Grazing reported on about 40% of acreage. Cotton harvest delayed by snow. Harvest 94% complete. Gins still working through muddles but nearing end of season. Native pastures rated poor to fair. Livestock in

fair condition. Hay very short but expected to last until spring.

OREGON: Temperatures near to a little below normal. Maximum temperatures rnaged in 40's and lower 50's. Minimum temperatures dipped into 30's west and 20's east of Cascades. Rainfall along coast ranged from 1.50 to 3.00 in. while northwest interior valleys received 1.50 to 2.00 in. Precipitation elsewhere ranged from 0.20 to 0.40 in.

Not much fieldwork yet. Fields still wet or frozen. Pruning and spraying continued. Many berry fields have canes trimmed and tied. Storage crops continue to move. Livestock feeding continued heavy. Supplies adequate. Calving beginning east.

PENNSYLVANIA: Mildest week this year as temperatures moderated to normal levels averaging 20 to 25° higher than previous week. Extremes: 51 and -7°. Mostly cloudy and wet with precipitation from 1.00 in. north central to nearly 5.00 in. extreme southeast; mostly as rain last 3 days. Snow depth 50% or less than previous week with only new snow confined to northwest where Erie reported 12 in. 25th.

Normal winter chores.

PUERTO RICO: Island average rainfall 1.00 in. or 0.36 in. above normal. Temperatures averaged about 77° on coasts and 72° interior. Extremes: 90 and 51°.

SOUTH CAROLINA: Wet, cool with lows 25th into teens. Snow, sleet, freezing rain general 25th with snow, ice cover slowly melting first half of week. General rains last half of week filled most rivers above flood stage.

Feeding, caring for livestock. Pruning fruit trees, grape vines, weather permitting. Farm planning, equipment maintenance.

SOUTH DAKOTA: Temperatures below normal but warmed 10°. Averages: 9° Northeast; 24° Southwest. Extremes: -17 and 49°. Midweek storm dumped heavy snow northwest and north central and freezing drizzle southeast. Precipitation 0.20 to 0.78 in. north; 0.20 in. or less south.

TENNESSEE: Warm and cold front alternated; cold front at weekend with rain, sleet, and snow. Snow accumulation 1 to 3 in. west and 3 to 6 in. east. Total precipitation 2.00 to 3.86 in. Temperatures mild; near normal.

Soil moisture surplus. Small grains and pasture fair. Tobacco plantbed preparation slowed by snow and wet ground.

TEXAS: Early week cloudy skies, fog, rain over east. Later week cold front spawned heavy thundershowers across east; a few severe thunderstorms with heavy rains, hail. By 25th, clear skies and high pressure once again. Rainfall near 1.00 in. above normal over northeast, east Texas, and eastern areas of north central. Rainfall near normal most of Texas, slightly below normal over south central and lower coast and slightly above normal precipitation over western north central. Temperatures 4° below normal over east. Elsewhere, temperatures close to normal with mid-40's over Panhandle, mid-50's over most central areas and near 60° along coast.

Rain, drizzle delayed preplant activities over eastern half while conditions over western half generally favorable for land preparation, fertilization and herbicide application. Cotton harvest now virtually complete, only a few fields in scattered areas left to harvest. Losses due to weathering increased significantly during last ten days. Only a very small acreage planted in valley as most growers waiting for drier, warmer conditions. Corn and sorghum planting begun south, but cool, wet weather has most producers waiting for drier fields, warmer soil temperatures. Wheat stands in northern part of northern High Plains beginning to green. Most other areas have adequate to surplus moisture, and warm, sunny weather needed to boost vegetative growth. Most fields are still short of moisture, with blowing reported in a few fields. From the Cross-Timbers eastward, some growers topdressed stands in drier fields. Oat stands made some limited growth; more warm weather and sunshine needed to improve heavily freeze-damaged stands. Some stands fertilized to improve spring growth.

Supplies cabbage, spinach, cauliflower, carrots moved to market; demand for lettuce strong, despite light heads. Melon planting active; some early fields up. Citrus harvest active. Cabbage, carrot and watermelon planting active. Peach trees started blooming south through upper coast.

Pastures and ranges in Blacklands and north, east and south greening up with cool season grasses following few days sunny weather during mid-month. Recent rains should help green up native ranges, although continued moisture deteriorated dry forages many areas. Central small grain pastures too wet to graze. Hay supplies short in north and east. Livestock fair to good condition. Goat shearing active Edwards Plateau.

UTAH: Recurring rain or snow; amounts generally light to moderate except locally heavy few areas north. Cooling trend; temperatures ranged between 7° below normal and 2° above.

Livestock in hard-to-get areas being maintained by supplemental feeding. Calves and lambs continued to drop. Some sales of apples and onions.

VIRGINIA: Generally cold with warming trend at weekend. Temperatures 30°; 10° below normal. Extremes: -4 and 65°. Precipitation averaged 0.90 in.; mostly as snow.

Topsoil moisture mostly surplus, adequate to surplus southwest. Fieldwork: 0.8 day suitable southwest, none elsewhere. Winter grains and grazing covered by snow, condition good. Most livestock securing protein and forage requirements through increased feeding rates. Feed, hay supplies ample. Calf losses above usual due to extreme cold, heavy snow, and difficulties tending cows with newborn. Some losses of newborn pigs. Scours, lice, grass tetany in some localities. Cows with calves becoming thin in central areas. Few southeastern growers spreading fertilizer, lime on snow covered fields. Biggest task of week coping with snow.

WASHINGTON: West: Temperatures 1° above normal. Precipitation near normal to 0.10 in. below normal.

Moderate weather allowed some flower and strawberry growth. Pasture fertilizing, berry caning only other field activities. Some freeze damage to strawberry plants reported. Livestock continue on supplemental feed. Hay adequate.

East: Temperatures 1° above to 1° below normal. Precipitation 0.10 in. above to 0.10 in. below normal.

New precipitation combined with melting snow to improve soil moisture. Report of winter injury to grain coming in but extent of damage still unknown. Spring seeding starting in early areas, will be general soon. Pruning continued. Some mouse damage discovered. Feed adequate.

WEST VIRGINIA: Temperatures 2 to 6° below normal north, 1° above average south. Extremes: -12 and

68°. Precipitation daily; 0.50 to 1.25 in. above normal.

Fieldwork: 0.4 day available. Soil moisture adequate to surplus. Hay, grain and other feed supplies adequate to surplus. Melting snow and mud limiting effective care for livestock.

WYOMING: Temperatures below normal with exception of southeast. Precipitation generally below normal with many stations reporting little or no precipitation.

Warmer temperatures reduced stress on livestock. Lambing, calving continued. Some hay shortages. Most livestock good condition. Winter wheat mostly good.

WISCONSIN: Week began cold with sub-zero temperatures morning 19th. Readings went above freezing 20th for first time in several weeks. Highs reached 40° 23d but turned colder weekend. Precipitation 20th to 22d was mixture rain, freezing rain, and snow. Few thunderstorms evening 22d. Snowfall totaled 1 to 3 in. south, 3 to 5 in. north. Precipitation about 0.30 in. south and 0.50 in. north. Frost depths averaged about 8 in., slight increase from two weeks earlier. Snow depths averaged nearly 28 in. but were settling with the warmer temperatures 23d.

World Weather and Crop Update

February 19 - 25

USSR. Dry conditions with moderately cold temperatures dominated the past week's weather over the winter grain areas of the Soviet Union. The colder temperatures should hold dormancy over the entire area. No unusual or severe winterkill areas were noted so far this winter, but the next few weeks will be very critical.

CHINA. The best moisture of the winter fell over the winter wheat-producing areas last week with amounts in excess of 25 mm in many locations. This moisture should help the overall moisture conditions as well as reducing the potential for soil blowing such as occurred the week before. This is the time of the year when precipitation should be starting to increase. Because of the very warm temperatures which persisted, much of the winter crop may be very close to breaking dormancy, and the moisture over the next 2 to 4 weeks will be very important.

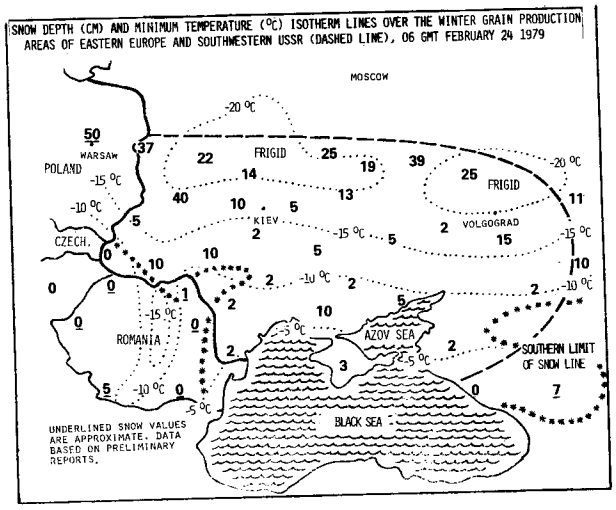
AUSTRALIA. Significant rainfall was limited to the northern portions of the country where two tropical storms remain somewhat stationary and continue to pour warm, moist air over the area. Some rainfall also dampened the southeastern coast as well, but generally, critical data in the winter wheat-producing areas are missing; however, no significant moisture is likely to have fallen. Seeding of winter wheat is still several weeks away.

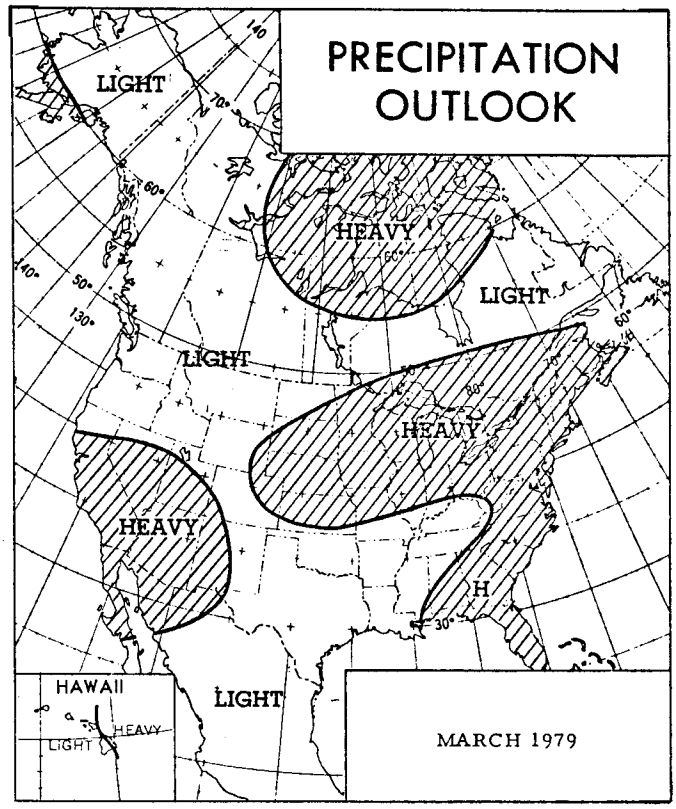
INDIA. Rainfall over India was seasonally light except in the northern States of Haryana and Uttar Pradesh and in the extreme southern states. Amounts in these areas were generally in the range of 20 to 40 mm with heaviest amounts in the southern States.

AFRICA. Abundant rainfall continued over the northern wheat growing areas of Africa with amounts in the range of 15 to 30 mm over most of Morocco and Tunisia. In South Africa, the best rains in several weeks fell over the Maize Triangle. Southern portions of the Triangle received up to 50 mm while the northern areas received 10 to 20.

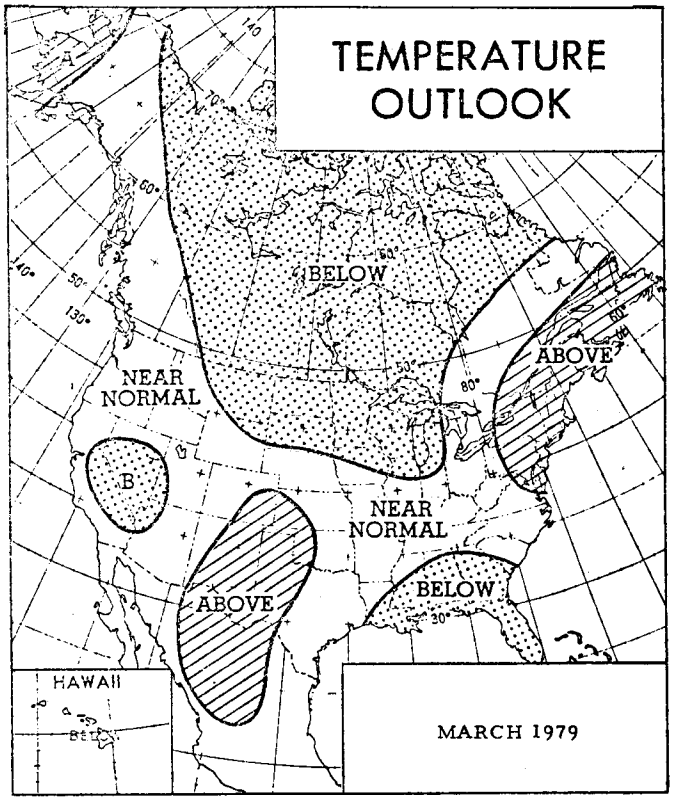
EUROPE. Precipitation over all of Europe ranged from zero up to 10 mm with most areas receiving only zero to 3 mm. These relatively dry conditions are a welcome relief from the heavy rains and snows of recent weeks. There is some developing concern over possible damage to winter grains from the combination of a very dry fall and very wet winter, particularly in northern parts of Europe.

(continued on backcover)



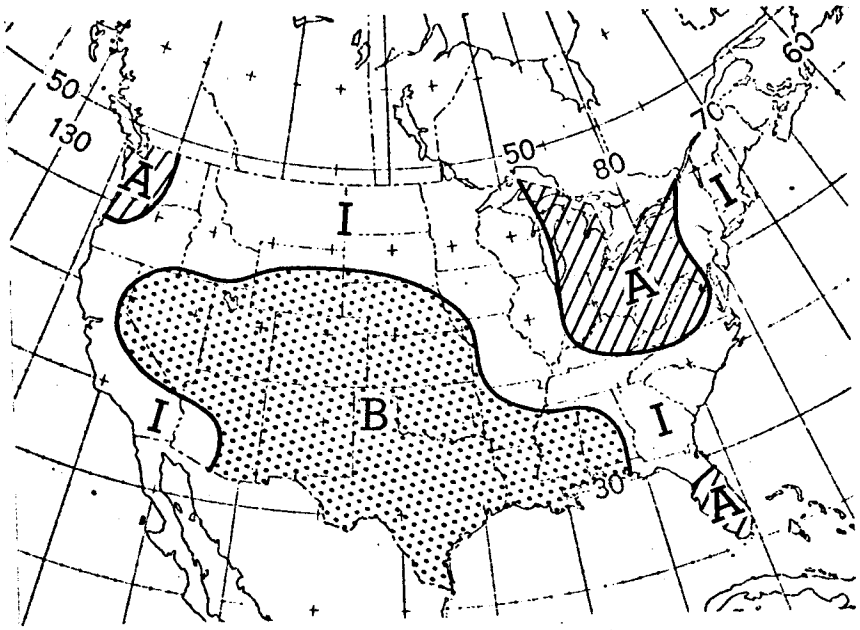


Average Monthly Weather Outlook



OUTLOOK FOR SPRING AVERAGE TEMPERATURES

March through May 1979



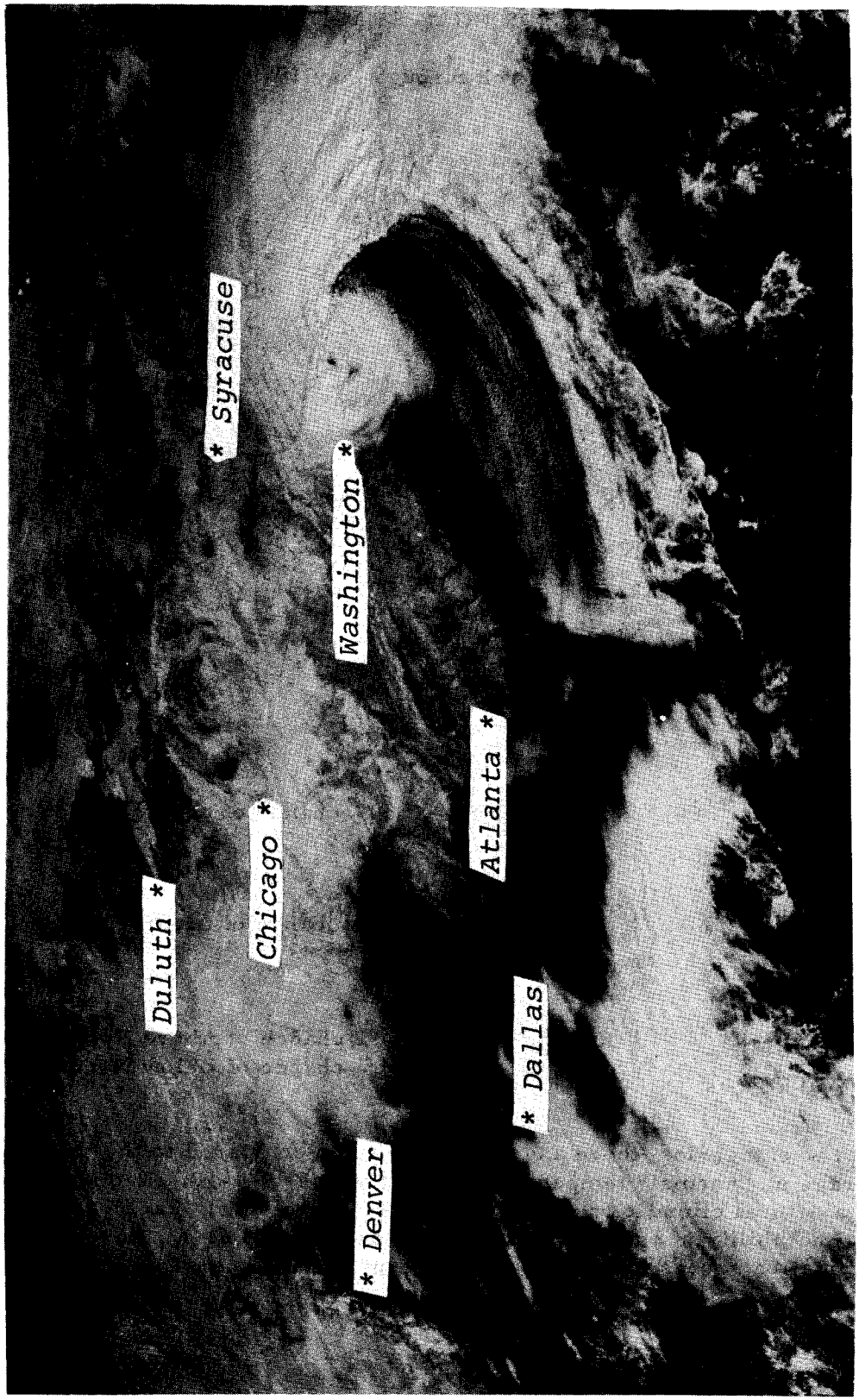
A	Above Normal,	60% chance of occurrence
B	Below Normal,	60% chance of occurrence
I	Indeterminate,	50% chance of Above Normal 50% chance of Below Normal

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the years 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 60% probability of occurring where forecast (shaded area), based on the verification scores of twenty years of experimental seasonal predictions.

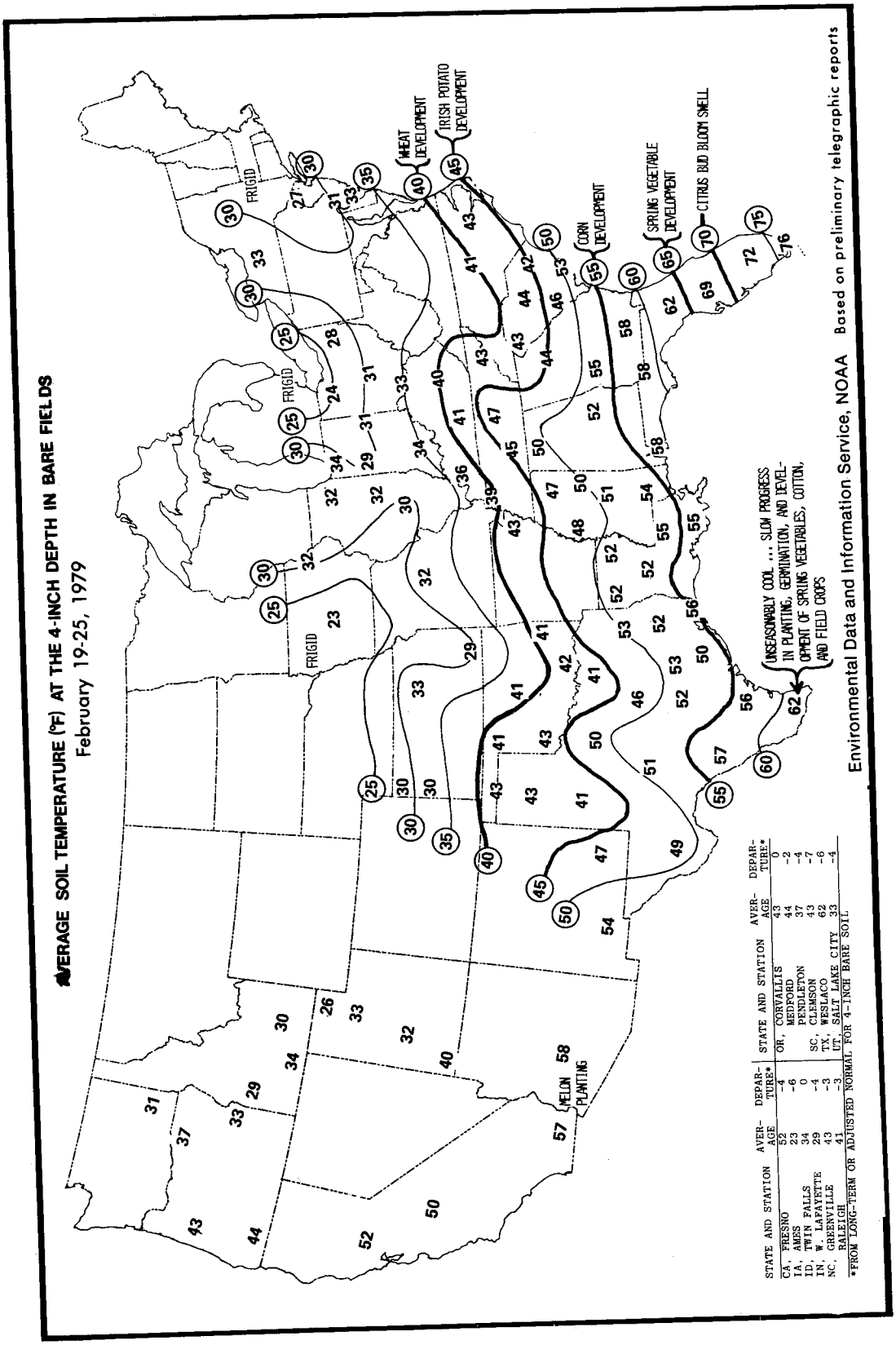
NOAA, National Weather Service
Climate Analysis Center

February 26, 1979

NATIONAL ENVIRONMENTAL SATELLITE SERVICE PHOTO TAKEN AT 1:00 PM EST MONDAY, FEB. 19, 1979.



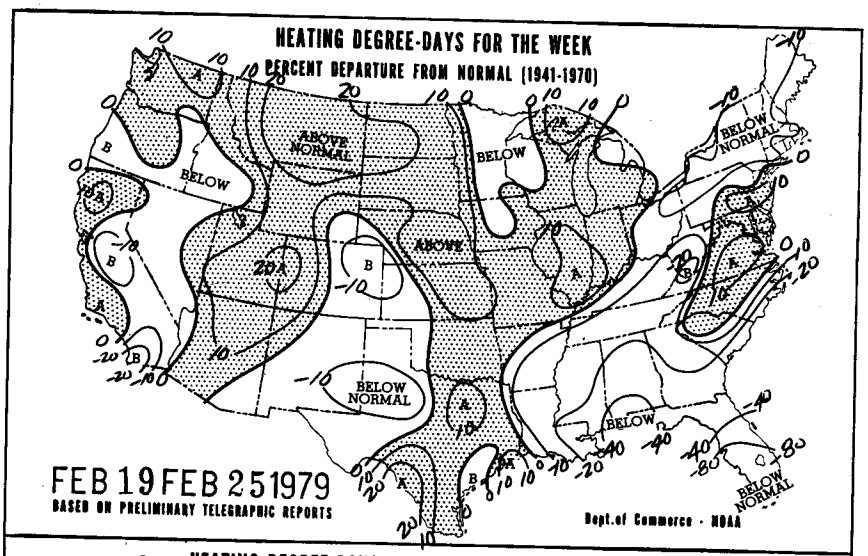
Two record-breaking events dominate the Nation. The Great Lakes are covered with more ice than had been seen on any previous satellite picture. The cloud pattern of the East Coast's Blizzard of 1979 churns over the Atlantic Ocean, leaving a swath of snow from Georgia to Maine.

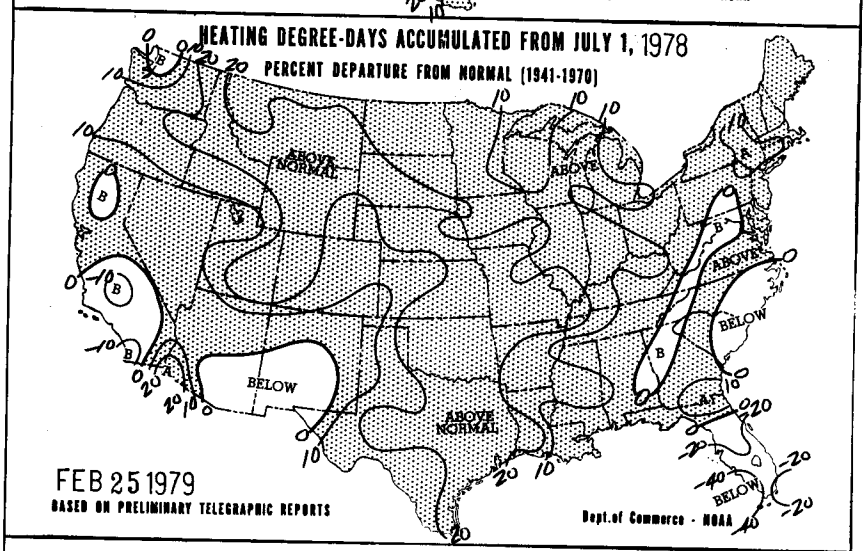


STATE AND STATION	AVERAGE	DEPARTURE*
CA, FRESNO	52	-4
IA, AMES	23	-6
ID, TWIN FALLS	34	0
IN, W. LAFAYETTE	29	-4
NC, GREENVILLE	43	-3
RALEIGH	41	-3

STATE AND STATION	AVERAGE	DEPARTURE*
OR, CORVALLIS	43	0
MEDFORD	44	-2
PENDLETON	37	-4
SC, CLEMSON	43	-7
TX, WESLACO	62	-6
UT, SALT LAKE CITY	33	-4

*FROM LONG-TERM OR ADJUSTED NORMAL FOR 4-INCH BARE SOIL


HEATING DEGREE-DAYS FOR THE WEEK
PERCENT DEPARTURE FROM NORMAL (1941-1970)
ABOVE NORMAL
BELOW
ABOVE
BELOW NORMAL
FEB 19 FEB 25 1979
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1978
PERCENT DEPARTURE FROM NORMAL (1941-1970)
ABOVE NORMAL
ABOVE
BELOW
FEB 25 1979
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
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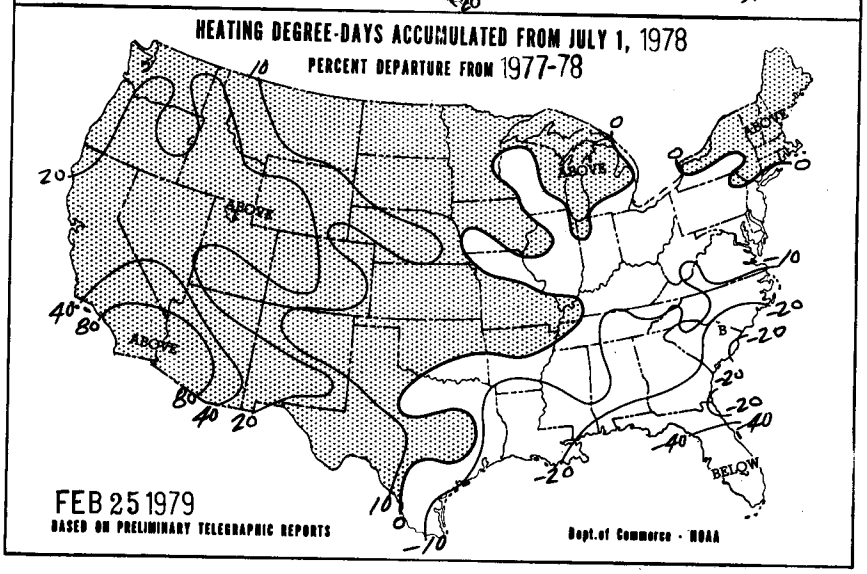
HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1978
PERCENT DEPARTURE FROM 1977-78
ABOVE
BELOW
FEB 25 1979
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING FEB. 25, 1979.

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1977-78
ALA. BIRMINGHAM	80	-42	2355	86	-416
MOBILE	45	-32	1421	28	-493
MONTGOMERY	60	-37	1717	-130	-325
ARIZ. FLAGSTAFF	268	31	5136	236	1059
PHOENIX	67	2	1241	-40	623
TUCSON	74	-3	1477	80	459
WINSLOW	190	20	3743	192	703
YUMA	41	0	1061	192	508
ARK. FORT SMITH	146	3	3280	622	1
LITTLE ROCK	122	-23	2996	332	3
CALIF. BAKERSFIELD	86	7	1519	-205	574
EUREKA	118	5	3177	208	509
FRESNO	82	-16	1967	-58	467
LOS ANGELES	65	2	1082	-61	517
RED BLUFF	109	11	1880	-111	333
SAN DIEGO	44	-12	872	-117	555
SAN FRANCISCO	99	8	2194	184	503
STOCKTON	92	12	2127	40	570
COLO. DENVER	197	-22	4742	545	615
GRAND JUNCTION	253	47	5183	957	1359
PUEBLO	187	-16	4710	757	560
CONN. BRIDGEPORT	209	-24	3927	149	0
HARTFORD	247	-11	5018	454	393
DEL. WILMINGTON	233	22	3845	226	-294
D.C. WASHINGTON	203	17	3134	-47	-141
FLA. APALACHICOLA	48	-19	1162	33	-456
DAYTONA BEACH	18	-31	533	-209	-482
FORT MYERS	0	-28	211	-188	-376
JACKSONVILLE	47	-18	1301	200	-235
KEY WEST	0	-7	37	-21	-175
LAKELAND	4	-34	463	-108	-367
MIAMI	0	-14	157	-26	-128
ORLANDO	19	-23	472	-138	-274
TALLAHASSEE	52	-22	1442	129	-390
TAMPA	4	-36	478	-126	-441
WEST PALM BEACH	0	-21	205	-62	-192
GA. ATLANTA	110	-23	2347	-80	-460
AUGUSTA	98	-14	2074	-18	-301
MACON	84	-15	1851	-21	-348
SAVANNAH	67	-21	1497	-100	-417
IDAHO. BOISE	182	-12	4856	674	1166
LEWISTON	184	8	4777	828	1017
POCATELLO	234	-3	5730	749	1398
ILL. CAIRO	185	19	3752	751	115
CHICAGO	266	14	5200	738	39
MOLINE	284	22	5695	956	191
PEORIA	280	31	5326	802	-19
ROCKFORD	295	21	5683	675	-142
SPRINGFIELD	255	23	4865	703	-74
IND. EVANSVILLE	214	21	4062	529	182
FORT WAYNE	264	11	4974	463	-290
INDIANAPOLIS	246	16	4591	449	-77
SOUTH BEND	270	9	4931	283	-173
IOWA. BURLINGTON	273	22	5523	953	223
DES MOINES	270	2	5605	649	146
DUBUQUE	311	23	6106	786	66
SIOUX CITY	325	48	6341	1185	499
KANS. CONCORDIA	256	34	5016	842	216
DODGE CITY	192	-8	4494	750	312
GOODLAND	194	33	4870	497	46
TOPEKA	241	33	4933	982	323
WICHITA	210	19	4414	848	324
KY. LEXINGTON	195	4	3946	387	-246
LOUISVILLE	194	1	3730	222	308
LA. BATON ROUGE	54	-22	1531	132	-273
LAKE CHARLES	66	-4	1519	274	-218
NEW ORLEANS	49	-19	1285	64	-388
SHREVEPORT	86	-10	2109	342	-407
MAINE. CARIBOU	302	-50	6876	166	183
PORTLAND	266	-19	5453	258	133
MD. BALTIMORE	219	15	3588	81	-127
MASS. BOSTON	209	-25	4206	253	287
MICH. ALPENA	306	-14	5873	44	-127
DETROIT	266	6	5092	493	-111
FLINT	289	10	5374	397	77
GRAND RAPIDS	287	11	5464	635	161
HOUGHTON LAKE	300	-20	6253	429	136
LANSING	281	3	5342	429	-151
MARQUETTE	345	35	6429	755	672
MUSKEGON	290	14	5472	669	180
S. STE. MARIE	345	5	6877	597	232
MINN. DULUTH	347	-10	7445	593	254
INTERNATL FALLS	374	-15	8497	920	334
MINNEAPOLIS	308	-16	6402	448	-85
ROCHESTER	335	-12	7021	1066	389
ST. CLOUD	338	-8	7232	790	277
MISS. JACKSON	86	-17	2093	228	-370
MERIDIAN	77	-26	2158	210	-140
MO. COLUMBIA	214	6	4398	579	19
KANSAS CITY	227	15	4740	348	22
ST. LOUIS	218	19	4342	741	-129
SPRINGFIELD	187	1	4165	709	37
MONT. BILLINGS	307	55	6425	1348	456
GLASGOW	425	92	7724	1289	211
GREAT FALLS	326	67	6556	1262	37
HAVRE	423	105	7382	1130	505
HELENA	317	52	6777	1028	851
KALISPELL	291	22	6971	977	835
MILES CITY	380	90	6919	1225	244
MISSOULA	270	17	6576	964	1039
NEBR. GRAND ISLAND	294	45	5893	1177	615
LINCOLN	285	38	5612	987	115
NORFOLK	316	40	6098	975	337
NORTH PLATTE	276	27	6219	1358	595
OMAHA	275	30	5232	709	9
VALENTINE	297	23	6403	1188	315
NEV. ELY	265	14	5771	482	1064
LAS VEGAS	98	4	2151	55	664
RENO	187	2	4492	335	895
WINNEMUCCA	200	7	4783	195	1003
N.H. CONCORD	268	-19	5711	480	-34
N.J. ATLANTIC CITY	227	15	4015	436	208
TRENTON	238	24	3787	185	-140
N.MEX. ALBUQUERQUE	160	-5	3218	-70	178
ROSWELL	127	-17	2946	1	510
N.Y. ALBANY	252	28	5385	421	339
BINGHAMTON	252	-39	5407	291	-38
BUFFALO	246	31	5137	331	103
NEW YORK	218	2	3828	308	36
ROCHESTER	255	-20	5044	328	114
SYRACUSE	244	-31	5157	456	192
N.C. ASHEVILLE	143	-30	3134	-47	-437
CHARLOTTE	152	11	2620	-100	-216
GREENSBORO	184	20	3088	136	-379
HATTERAS	105	-26	1858	-126	-379
RALEIGH	153	1	2657	-64	-521
WILMINGTON	78	-36	1809	-120	-481
N.DAK. BISMARCK	426	81	7562	1019	322
FARGO	406	43	7711	966	261
WILLISTON	404	64	7653	1040	197
OHIO. AKRON-CANTON	237	-16	4843	378	-121
CINCINNATI	224	10	4327	554	-416
CLEVELAND	220	-33	4521	147	-250
COLUMBUS	233	-2	4527	328	-247
DAYTON	228	-6	4565	419	-243
TOLEDO	264	8	5125	518	-245
YOUNGSTOWN	221	-39	4867	286	-105
OKLA. OKLAHOMA CITY	166	10	3477	594	72
TULSA	167	10	3547	663	76
OREG. ASTORIA	150	3	3768	340	509
BURNS	241	14	5709	720	968
MEDFORD	146	-12	3613	163	609
PENDLETON	171	1	4868	1069	789
PORTLAND	149	2	3777	470	632
SALEM	153	6	3755	464	616
PA. ALLENTOWN	239	-2	4364	134	-69
ERIE	246	-25	4998	277	-84
HARRISBURG	245	-25	3890	-2	-372
PHILADELPHIA	233	-24	3749	175	-309
PITTSBURGH	229	-13	4800	474	185
SCRANTON	248	-8	5017	481	200
R.I. PROVIDENCE	233	-9	4524	349	143
S.C. CHARLESTON	72	-27	1608	-124	-372
COLUMBIA	119	2	1966	-129	-656
GREENVILLE	147	10	2617	134	-196
S.DAK. ABERDEEN	382	50	7203	915	91
HURON	359	44	6862	974	221
RAPID CITY	304	38	6169	1071	289
SIOUX FALLS	339	35	6668	932	119
TENN. CHATTANOOGA	130	-19	2773	27	-391
KNOXVILLE	130	-20	2932	219	-306
MEMPHIS	117	-23	2707	147	-124
NASHVILLE	139	-19	3166	281	-383
TEXAS. ABILENE	98	-12	2462	366	-42
AMARILLO	160	-6	3665	518	214
AUSTIN	85	7	1850	410	48
BEAUMONT	76	7	1424	168	-167
BROWNSVILLE	36	1	675	124	-79
CORPUS CHRISTI	42	0	880	188	-123
DEL RIO	75	-14	1563	243	-161
EL PASO	105	-2	2187	-32	-295
FORT WORTH	119	-14	2362	445	-185
GALVESTON	69	6	1212	220	-183
HOUSTON	60	-6	1154	329	-310
LUBBOCK	131	-17	3040	682	-139
MIDLAND	101	-9	2636	507	-425
SAN ANGELO	93	-1	2381	540	-309
SAN ANTONIO	73	-4	1573	255	-116
VICTORIA	55	-2	1389	550	-42
WACO	105	-13	2260	574	-194
WICHITA FALLS	125	-1	2945	626	-11
UTAH SALT LAKE CITY	218	7	4457	147	1076
VT. BURLINGTON	280	-34	6067	488	234
VA. LYNCHBURG	208	27	3477	269	-186
NORFOLK	162	-3	2673	-61	-135
RICHMOND	196	24	3144	134	-138
ROANOKE	187	7	3568	331	-227
WASH. QUILLAYUTE	174	13	4100	232	312
SEATTLE-TACOMA	155	1	3508	6	449
SPOKANE	242	26	6038	1184	1031
WALLA WALLA	157	-2	4223	649	654
YAKIMA	198	8	5180	766	920
W.VA. BECKLEY	161	-61	4067	-17	-470
CHARLESTON	173	-19	3730	270	-330
HUNTINGTON	165	-29	3831	356	-156
PARKERSBURG	198	-6	3893	293	-345
WIS. GREEN BAY	338	21	6433	659	265
LACROSSE	278	-23	5788	337	-452
MADISON	308	7	6157	591	26
MILWAUKEE	292	6	5563	327	36
WYO. CASPER	276	16	6340	1154	889
CHEYENNE	228	-21	5427	531	324
LANDER	298	33	6986	1465	1512
SHERIDAN	351	85	6795	1437	669

BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1978.

Agricultural Weather Facility
USDA South Bldg., Room 1248
Washington, DC 20250

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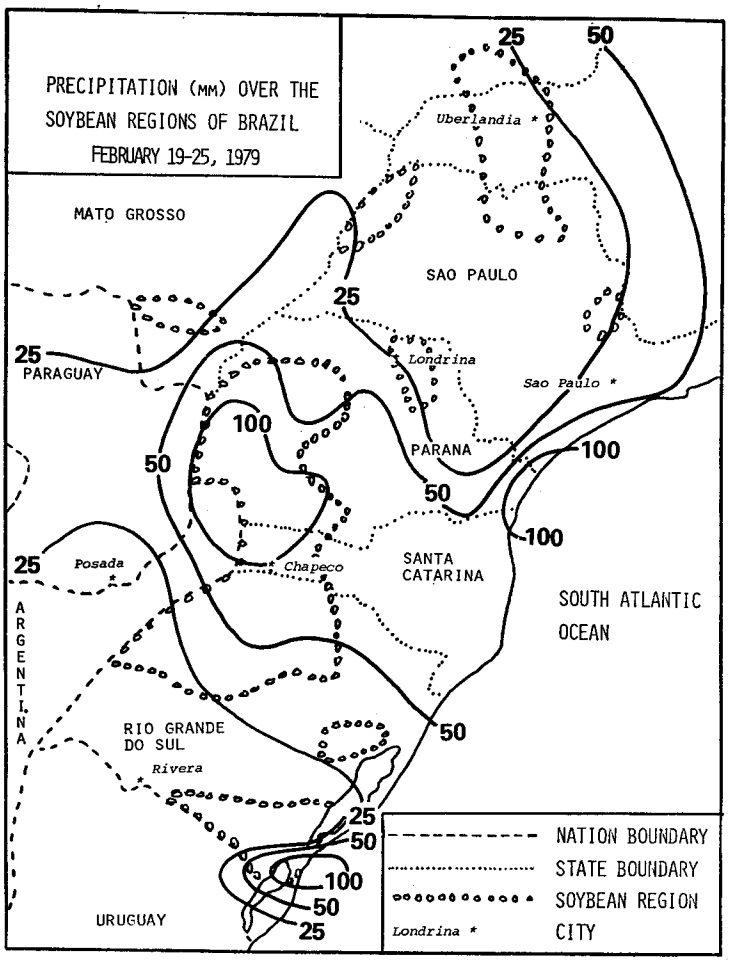
SOUTH AMERICA. Persistent rainfall continued over much of Rio Grande do Sul, Santa Catarina, and the Parana states in Brazil this past week; this about eliminates any concerns over drought. However, the impact on the current crop is still a major problem. Harvest of soybeans has started in parts of Parana with excellent quality indicated. Rainfall amounts for the week were generally 25 to 50 mm with as much as 140 mm in some sections. There is adequate moisture to carry crops through to maturity.