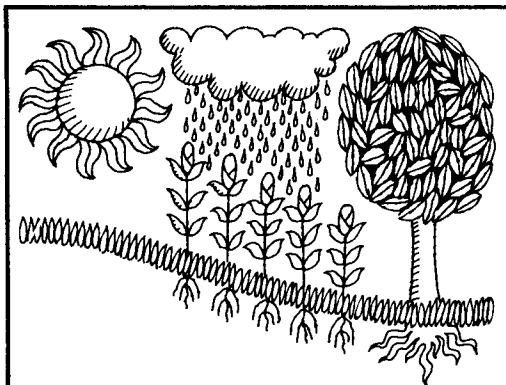




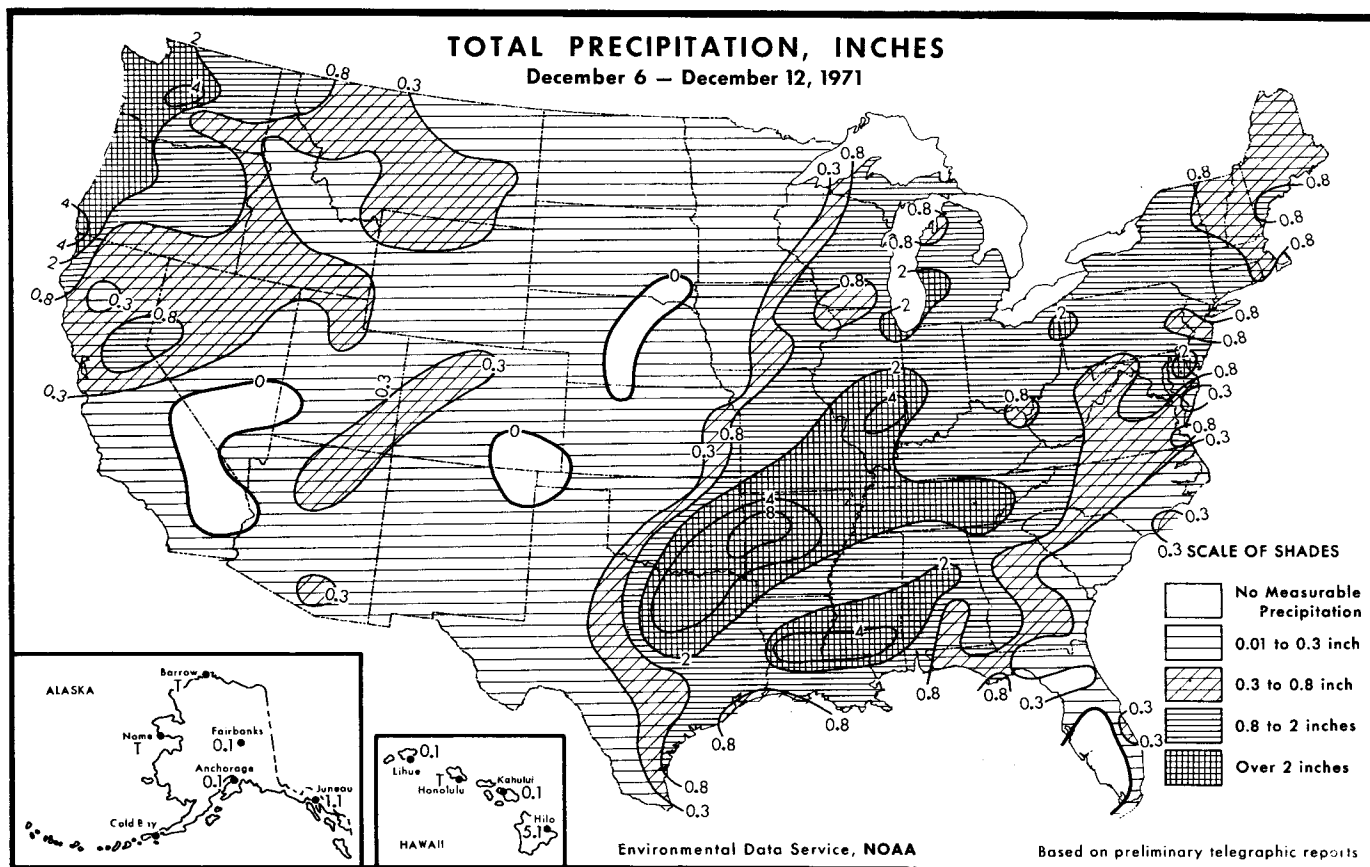
Weekly Weather & Crop Bulletin

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NATIONAL WEATHER SUMMARY

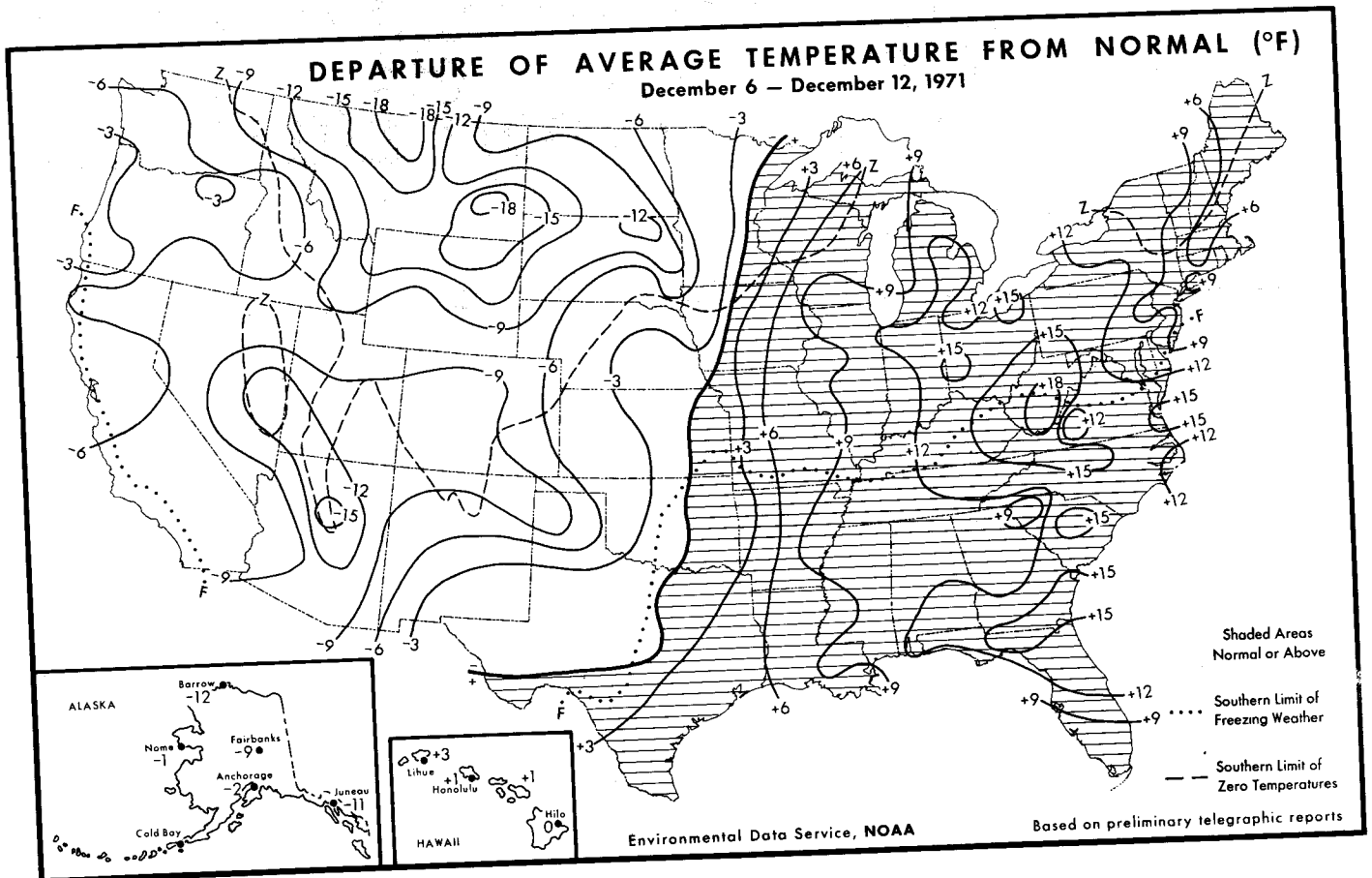
HIGHLIGHTS: Cold, snow, and strong winds combined to form blizzards in parts of the West. Mixtures of snow, freezing rain, and freezing drizzle iced the Northeast. Heavy rains flooded portions of the Lower Mississippi River Valley early in the week and numerous streams in Oklahoma, Arkansas, and Texas late in the week. Florida enjoyed plentiful sunshine although fog occurred on one or two mornings.

PRECIPITATION: Several storms brought a variety of inclement weather to much of the Nation last week. Early in the week, rain, drizzle and fog occurred from the Great Lakes to the Gulf of Mexico. Heavy rains, 6.00 to 8.00 inches, caused flash floods in the Lower Mississippi River Valley. Freezing rain and freezing drizzle iced the highways and coated trees, power lines, and other outdoor objects from Pennsylvania to New

England. Travel, even on foot, became difficult on Monday. It rained at Glens Falls, N.Y., when the temperature was 14°. Rain does not usually occur at such low temperatures. When it does occur in such cold weather, it freezes quickly coating streets, trees, etc., with a clear hard layer of ice.

Another storm raged across the western mountains. Snow and arctic cold covered the Rocky Mountains and the western Great Plains. By Tuesday morning the snow had accumulated to 6 inches at Flagstaff and Prescott both in Arizona and by Wednesday, 7 inches covered the ground at Tucson, Ariz. This is the heaviest snow known to have fallen at Tucson from a single storm.

By midweek the heavy rains in the East were ending but two storms pounded the West. One spread heavy snow in the southern Rocky Mountains



and freezing rain or freezing drizzle to the central and southern Great Plains. Snow accumulated to 10 to 12 inches in spots in New Mexico. The second western storm lashed the northwest Pacific Coast with heavy rain and gales along the coast and snow in the nearby hills and mountains. The strong winds whistled through the passes and blizzards occurred in Montana east of the Continental Divide. At Livingston, Mont., winds averaging 70 m.p.h. and gusting to 104 m.p.h. picked up snow that had fallen and reduced the visibility to zero. Winds reached 60 m.p.h. over wide areas in the western Great Plains.

Late in the week, heavy rains fell in the Red River Valley flooding streams in Oklahoma, Arkansas, and Texas.

TEMPERATURE: Arctic cold covered the Northeast early in the week. Houlton, Maine, registered 14° below zero Monday morning when the lowest temperature at Palm Beach, Fla., was 75°. Winter gripped the West. Subzero temperature pushed into northern Montana Tuesday and plunged far southward each subsequent day. On Wednesday morning, the mercury at West Yellowstone, Mont., plummeted to 33° below zero. Thursday morning, Bryce Canyon, Utah, registered 8° below zero. Subfreezing weather occurred over western Texas.

The temperature at Dalhart, Texas, dropped to 19° Wednesday and 20° Thursday. As cold air plunged southward behind the storm center, mild weather streamed northward ahead of the system. San Angelo and San Antonio, both in Texas, registered 35° and 70°, respectively, as their Thursday morning minimums.

While bone-chilling cold persisted over the West, the Gulf States enjoyed balmy afternoons. Baton Rouge, La., registered 83° and Ft. Myers, Fla., 84° Thursday afternoon.

The weekend brought continued cold to the West and mild temperatures to the East. Savannah, Ga., warmed to 83° Saturday, the highest temperature of record for any December. Bridgeport, Conn., registered 65° Saturday. This is the warmest temperature of record for so late in the season at Bridgeport. Much of the East enjoyed weekend afternoon temperatures which would be normal in October. In contrast, all of North Dakota and parts of nearby States remained below zero all day Sunday. The warmest temperature at Cut Bank, Mont., Sunday was 9° below zero. Much of the northern Great Plains averaged 12° to 18° colder than normal. The middle and upper Ohio River Valley and the middle Appalachians averaged 12° to 18° warmer than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Cotton harvest slowed from Arizona to Carolinas. * Warm temperatures and rain boosted grain growth in South. * Corn and soybean crops nearly all harvested.

SMALL GRAINS: Winter wheat growth was slowed by cold temperatures on the Great Plains, however, the crop remains in good to excellent shape. The moisture supply continues to increase and is adequate to surplus. Most of the acreage is dormant and snow-covered in the northern Great Plains. High winds lashed across eastern Colorado, but fortunately did not damage any wheat acreage. Fall-seeded grains look good in the Pacific Northwest, but some erosion occurred due to heavy rains and melting snow. In Arizona, seeding of small grains was active with some growers preparing fields for later plantings.

Fall-sown grains got a big boost in the East. Heavy rains combined with balmy temperatures to improve prospects. The weather was ideal for growth of late-planted acreage. It was the 2d straight week of heavy rains in the South. Final seedings were held up due to wet fields.

CORN: Only a few scattered fields of corn remain to be harvested in the Corn Belt. Wet conditions generally delayed farmers who attempted to pick their last fields. Some fields were picked in northern Wisconsin over the weekend. High winds damaged unharvested acreage in western Indiana. Adequate storage facilities are still scarce in some States and some corn remains piled on the ground.

Fieldwork was stopped in the South and very little corn was picked. However, farmers are also harvesting their last fields and little concern was expressed. About 5% of the acreage remains unpicked in Alabama, and 10% in Virginia and North Carolina.

SOYBEANS: Hard rains halted soybean combining in the South. Over 90% of the acreage is harvested, but rains and flooding damaged unharvested beans. Weather conditions will be a critical factor in gathering the final Alabama acreage. The largest acreage remaining for harvest is located along the Atlantic Coast. Wet fields and poor drying conditions are slowing field operations. South Carolina growers have only 55% of their crop combined; Virginia and North Carolina growers 85%. Harvesting has ended in the important North Central States.

COTTON: Cotton farmers had another bad week harvest wise. Inclement weather curtailed harvesting from Arizona to the Carolinas. In the Deep South excessive rains kept cotton picking machinery parked all week. Less than 5% of the crop is left to pick in most States, but wet conditions are not helping quality. Texas growers continue to struggle along due to bad weather. Only 38% of their crop is picked, versus 97% last fall. Both yield and quality continue to decline. Rain and snow limited picking in Arizona and New Mexico. Harvest progressed almost uninterrupted in California, with growers shredding and disking soon after harvest.

OTHER CROPS: Sorghum grain harvesting is slowly coming to a close. Muddy fields continue to prolong completion. Only small acreages are left to be harvested in most States. Hard rains have caused additional damage to the unharvested Oklahoma crop. Marketing of burley tobacco remains strong, with record high prices set in North Carolina. Tobacco bed preparations for the 1972 crop started in Virginia. Florida potato digging is scheduled to start in late December. Digging is active in the Stockton and Perris areas of California. Sugar beets had a rough week in California as frost damaged some acreage in Riverside County and slowed growth in Arizona. Harvesting of the sugarcane crop is coming to a close in Hawaii and is in full swing in Florida, but headway was slowed in Louisiana due to rain.

Fruits & Nuts: Florida citrus groves remain in good condition, but irrigation increased. Rains came to California slowing orchard and vineyard activity. Freezing weather occurred late in the week, but growers used frost protection devices and little damage was done. Frost also hit Arizona with the colder sections of the Salt River Valley and Yuma area having 6 nights of freezing temperatures. Damage was minor. Pecan harvesting made only fair progress as rains halted orchard activity throughout the South.

Vegetables: Florida vegetable harvesting accelerated as field conditions improved. Tomato supplies are at peak volume from Dade County. Moving West, Texas vegetable shipments also increased as fields dried to allow harvest to resume. Carrot digging on the High Plains was still held up by soft fields. Cold weather slowed lettuce cutting in Arizona. Most California vegetables are light in volume. Lettuce supplies are increasing from the Imperial Valley. Fall vegetables are making favorable progress in South Carolina.

PASTURES AND LIVESTOCK: Warm, early fall-like temperatures reduced the stress on livestock in the Eastern half of the Nation. Many herds were able to remain outside and forage through harvested crop fields. Heavy rains improved the winter pasture outlook in the South, but many new seedings were too soft to pasture. Winter pastures are not furnishing much grazing in the Delta States and normal winter feeding is active. Flooding in southeast Oklahoma caused some livestock losses. In the West--conditions were in reverse as cold wintry weather blanketed the Nation from the Great Plains to the Pacific ocean. Drifting snow made feeding operations difficult in many areas. Although fields are snow covered, some herds on the northern Great Plains are still foraging through harvested corn and sorghum fields.

Steve J. Psodna
Agricultural Statistician

Merry Christmas and a Happy New Year

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., December 12, 1971

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA.Birmingham.	58	+10	2.6	+1.5	New Orleans	63	+7	1.9	+1.0	OKLA.Okla. City	40	-1	.8	+ .5
Mobile.	66	+12	1.2	- .1	Shreveport.	57	+6	1.2	+ .1	Tulsa	42	+1	2.3	+1.9
Montgomery.	62	+13	1.1	-1.0	MAINE.Caribou.	25	+7	.7	+ .1	OREG.Astoria.	40	-3	3.3	0
ALASKA.Anchorage. . . .	14	-2	.1	- .1	Portland.	35	+7	1.2	+ .3	Burns	22	-8	.8	+ .4
Barrow.	-22	-12	T	0	MD.Baltimore.	48	+11	.9	0	Medford	37	-1	.7	- .1
Fairbanks	-15	-9	.1	0	MASS.Boston	44	+8	.5	- .3	Pendleton	34	-3	.9	+ .5
Juneau.	19	-11	1.1	+ .2	Chatham	44	---	.9	---	Portland.	38	-4	2.9	+1.2
Nome.	7	-1	T	.2	MICH.Alpena	37	+11	1.9	+1.5	Salem	41	+8	.8	0
ARIZ.Flagstaff.	15	-16	.4	0	Detroit	41	+11	1.4	+ .8	PA.Allentown.	44	+14	1.1	+ .5
Phoenix	44	-9	.2	0	Flint	41	+14	1.2	+ .8	Erie	45	+11	1.7	+1.1
Tucson.	42	-11	.7	+ .5	Grand Rapids.	39	+9	2.9	+2.4	Harrisburg.	47	+12	.9	+ .2
Winslow	24	-9	.4	+ .3	Houghton Lake	36	+12	1.9	+1.5	Philadelphia.	47	+15	1.5	+ .9
Yuma.	57	+1	T	- .1	Lansing	41	+12	.2	- .3	Pittsburgh.	40	+10	1.0	+ .4
ARK.Fort Smith.	45	+2	8.2	+7.6	Marquette	33	+7	.9	+ .4	Scranton.	42	+8	.5	- .3
Little Rock	51	+9	4.4	+3.5	Muskegon.	39	+8	2.4	+1.9	R.I.Providence.	65	+14	1.1	- .6
CALIF.Bakersfield. . . .	43	-7	.1	- .1	S.Ste.Marie	33	+10	1.8	+1.3	S.C.Charleston.	63	+16	.1	- .6
Eureka.	44	-6	1.7	+ .2	MINN.Duluth	18	+2	.2	- .1	Columbia.	54	+9	1.2	+ .5
Fresno.	41	-7	.2	- .2	Internatl Falls	9	-3	.1	- .1	S.DAK.Aberdeen.	8	-13	.2	0
Los Angeles	51	-8	.2	- .3	Minneapolis	20	0	.1	- .1	Huron	14	-6	.1	- .1
Red Bluff	42	-6	.3	- .7	Rochester	24	+3	.4	+ .2	Rapid City.	18	-11	.1	0
San Diego	51	-7	T	- .4	St. Cloud	15	-4	.1	- .1	Sioux Falls	15	-8	T	- .1
San Francisco	47	-4	.6	- .3	MISS.Jackson.	58	+8	3.4	+2.2	TENN.Chattanooga. . . .	53	+10	2.5	+1.3
Stockton.	43	-4	.9	- .3	Meridian.	59	+10	3.1	+1.9	Knoxville	55	+13	2.1	+1.2
COLO.Denver	23	-10	.1	0	MO.Columbia	42	+7	1.8	+1.4	Memphis	54	+11	3.0	+1.9
Grand Junction.	20	-10	.3	+ .1	Kansas City	39	+2	1.2	+ .7	Nashville	54	+12	2.1	+1.2
Pueblo.	27	-7	T	- .1	St. Louis	44	+8	3.5	+3.0	TEX.Abilene	46	-1	.5	+ .2
CONN.Bridgeport	44	+9	1.8	+1.0	Springfield	42	+4	2.8	+2.3	Amarillo.	31	-9	T	- .2
Hartford.	37	+5	1.4	+ .7	MONT.Billings	13	-13	.7	+ .6	Austin.	56	+3	.6	0
D.C.Washington.	49	+10	1.3	+ .6	Glasgow	10	-9	T	- .1	Beaumont.	60	+5	.7	- .4
FLA.Apalachicola.	67	+10	.8	+ .2	Great Falls	12	-16	.5	+ .3	Brownsville	68	+4	.2	- .2
Ft. Myers	74	+9	0	- .3	Havre	3	-19	.2	+ .1	Corpus Christi.	65	+5	1.4	+ .9
Jacksonville.	71	+14	T	- .5	Helena.	11	-14	.1	0	Dallas	49	0	4.8	+4.2
Key West.	78	+7	T	- .4	Kalispell	13	-13	.8	+ .5	Del Rio	55	+2	T	- .1
Lakeland.	74	+11	T	- .4	Miles City	7	-18	.7	+ .6	El Paso	44	-1	.2	+ .1
Miami	75	+6	T	- .4	Missoula.	15	-10	.5	+ .2	Fort Worth.	50	+1	4.2	+3.7
Orlando	70	+15	.1	- .6	NEBR.Grand Island. . . .	27	-1	.1	0	Galveston	62	+4	.4	- .6
Tallahassee	72	+9	0	- .4	Lincoln	30	-2	.1	- .1	Houston	59	+5	1.3	+ .3
Tampa	56	+11	.6	- .4	Norfolk	24	-3	T	- .2	Lubbock	40	-2	T	- .1
GA.Atlanta.	61	+13	.2	- .6	North Platte.	25	-4	T	- .1	Midland	45	-2	.1	0
Augusta	60	+10	.3	- .6	Omaha	26	-3	.1	- .1	San Angelo.	48	-1	.3	+ .1
Macon	68	+16	T	- .6	Valentine	21	-5	T	- .1	San Antonio	57	+3	.3	- .1
Savannah.	72	0	5.1	+1.7	NEV.Ely	15	-13	.1	0	Victoria.	62	+4	.8	+1.2
HAWAII.Hilo	75	+1	T	- .7	Las Vegas	38	-8	T	- .2	Waco.	51	0	2.4	+1.8
Honolulu.	74	+1	.1	-1.8	Reno.	27	-6	T	- .2	Wichita Falls	44	-2	1.2	+ .9
Kahului	76	+3	.1	-1.1	Winnemucca.	23	-8	.5	+ .3	UTAH.Blanding	21	-11	.5	+ .2
Lihue	78	-5	.4	+ .1	N.H.Concord	32	+5	.7	+ .9	Salt Lake City.	23	-8	.7	+ .4
IDAHO.Boise	30	-6	.3	0	N.J.Atlantic City	46	+8	1.6	+ .1	VT.Burlington	35	+11	.8	+ .3
Lewiston.	19	-10	.8	+ .6	Trenton	47	+10	.7	0	VA.Lynchburg.	53	+14	.8	+ .1
Pocatello	51	+10	2.1	+1.2	N.MEX.Albuquerque	32	-6	.2	+ .1	Norfolk	59	+15	.9	+ .3
ILL.Cairo	43	+12	2.6	+2.1	Roswell	39	-1	.1	0	Richmond.	54	+14	.3	- .4
Chicago	37	+9	.9	+ .5	N.Y.Albany	36	+8	1.0	+ .4	Roanoke	51	+12	.6	- .1
Moline	37	+8	1.8	+1.3	Binghamton.	40	+12	1.8	+1.2	WASH.Colville	19	-10	.9	+ .5
Peoria	37	+10	1.6	+1.2	Buffalo	42	+13	.9	+ .2	Omaha.	---	---	---	---
Rockford.	43	+10	2.0	+1.6	New York.	45	+7	.9	+ .1	Quillayute.	36	-6	3.7	+ .1
IND.Evansville.	47	+10	1.6	+ .9	Rochester	40	+10	1.2	+ .6	Seattle-Tacoma.	36	-5	2.2	+ .7
Fort Wayne.	42	+13	1.8	+1.3	Syracuse.	41	+11	1.3	+ .6	Spokane	22	-10	1.5	+1.0
Indianapolis.	44	+12	2.0	+1.4	N.C.Asheville	53	+13	1.9	+1.3	Walla Walla	36	-3	.8	+ .4
South Bend.	47	+17	1.8	+1.3	Charlotte	56	+13	.7	- .1	Yakima.	27	-6	.5	+ .3
IOWA.Burlington.	37	+8	1.1	+ .7	Greensboro.	56	+15	.6	- .1	W.VA.Beckley.	52	+18	1.2	+ .4
Des Moines.	32	+5	.4	+ .1	Hatteras.	59	+10	T	-1.0	Charleston.	56	+18	1.2	+ .5
Dubuque	36	+11	.5	+ .1	Raleigh	58	+15	.5	- .2	Huntington.	53	+15	.6	- .1
Sioux City.	23	-4	.1	- .1	Wilmington.	63	+14	.5	- .2	Parkersburg.	52	+16	.8	+ .1
KANS.Concordia.	32	-1	.1	- .1	N.DAK.Bismarck.	10	-10	.3	+ .2	WIS.Green Bay	32	+8	1.0	+ .7
Dodge City.	31	-5	T	- .1	Fargo	11	-5	.3	+ .2	La Crosse	30	+6	1.1	+ .9
Goodland.	28	-4	T	- .1	Williston	8	-10	.2	+ .1	Madison	35	+11	.8	+ .4
Topeka	36	+1	.5	+ .2	OHIO.Akron-Canton. . . .	44	+12	1.6	+1.1	Milwaukee	35	+9	1.4	+1.0
Wichita	35	-2	.3	+ .1	Cincinnati.	48	+14	1.5	+ .8	WYO.Casper.	16	-12	.2	+ .1
KY.Lexington.	52	+15	1.6	+ .9	Cleveland	47	+16	1.4	+ .8	Cheyenne.	22	-8	.1	0
Louisville.	51	+14	1.6	+ .9	Columbus.	47	+14	1.5	+1.0	Lander.	16	-8	.3	- .3
LA.Baton Rouge.	70	+16	1.8	+ .7	Dayton.	47	+15	1.1	+ .5	Sheridan.	10	-17	.4	+ .2
Lake Charles.	62	+7	1.3	0	Toledo.	41	+11	1.6	+1.2	P.R. San Juan	79	+2	.4	- .7
					Youngstown.	44	+14	2.4	+1.7					

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

CONDENSED STATE SUMMARIES

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

ALABAMA: Unseasonably warm and humid all week with average temperatures more than 13° above normal. Daily maximums in 70's or 80's all sections. Considerable cloudiness and humid all week with frequent rain. Weekly totals were very heavy north and west and moderate southeast with amounts ranging from near 5.00 inches at Huntsville to 0.50 inch at Dothan. Rains halted harvest, but provided moisture for winter crops. About 6% or 7% cotton still in fields, mostly central. Weather conditions will determine remaining production harvested. Corn harvest stymied at 94% complete--98% year ago. Soybean harvest about 88% complete to fall behind 92% year ago. Weather critical factor for remainder harvest. Pecan harvest made only fair progress. Warm temperatures and ample moisture improved small grains and winter grazing crops. Supplies stored feed adequate most farms. Livestock good.

ALASKA: The most significant feature of the November weather was mean temperatures well below normal. Wind generated chill temperatures which are not reflected in heating degree days added to the problem. Precipitation was below normal all areas. Snowfall amounts were variable from light to heavy. Livestock generally good condition. Local grown feed supply adequate Tanana and Matanuska Valleys. Quality fair to good. Potato grading and selling continuing.

ARIZONA: Temperatures were much below normal over State with freezing temperatures in colder sections of both Salt River Valley and Yuma area on 6 nights. Pacific storm on 7th brought precipitation to most of State with snow above about 3,000 feet and accumulations of over 2 feet at higher elevations White Mountains. Rain and snow Pima, Graham, Greenlee Counties kept farmers out of fields. Cotton harvest those counties at standstill. Gins continue to operate with cotton picked prior to storm. Over 90% Arizonas cotton harvested, Yuma further advanced 95% complete. Most fields upland cotton Yuma plowed. Sorghum harvest nearing completion Salt River Valley and Yuma. Growth sugar beets slowed freezing temperatures. Seeding small grains accelerating and preparation land for later plantings active. Most alfalfa fields being pastured by sheep. Lettuce harvest nearing completion Salt River Valley, Pima, and Pinal Counties. Harvest Yuma slowed cold weather. Quality all areas generally excellent. Navel, sweet, lemon, tangelo, tangerine, and limited grapefruit harvest active Salt River Valley. Lemon, grapefruit, tangelo, navel, and sweet orange harvest continued Yuma. Little frost damage. Range conditions remain fair to good. Higher elevation ranges continue deteriorate thus supplemental feeding increasing.

ARKANSAS: Flooding rains around midweek all but southeast. Rainfall totals northwest half 4.00 to 7.00 inches, ranging to near 1.00 inch extreme southeast. Heaviest weekly total 9.11 inches Danville. Weekly mean temperatures mid-40's to low 50's, 4° to 7° above normal. Daily extremes: 25° at Fayetteville on 13th to 74° at Texarkana on 9th and Camden on 12th. Wet fields brought

fieldwork to standstill. Most row crops harvested earlier. Moisture very beneficial for fall seedings, winter grains and pastures. Fields new seedings too soft for grazing. Livestock receiving normal winter feedings.

CALIFORNIA: Cool and very windy several days. Average temperatures 4° to 8° below normal most areas and 10° below normal in low desert. Light precipitation during week and heavier on weekend. Totals ending Friday ranged from 2.00 inches on north coast to 0.10 inch in Central Valley, and about 0.25 inch on south coast. Cold, wet weather limited field activities. Sugar beets, cotton, and milo harvest continues. Some frost damage to sugar beets Riverside County. Shredding and disking cotton continue. Rain slowed orchard and vineyard activity. Pruning, spraying, and soil fumigation continue as weather permits. Some freezing temperatures December 9 and 10. Frost protection used, very little damage expected. Navel orange harvest continues slow. Grapefruit harvest continues Desert. Lemons and tangerine harvest continues. Picking avocados continues. Date harvest seasonal levels. Range grass growth slowed due to cold weather. Stockwater plentiful. Calving, lambing continue. Turkeys moving to processors. Artichokes Castroville light. Santa Maria, Salinas broccoli-cauliflower shipments light. Carrots, Salinas light; Desert carrots increasing. Central Coast celery light. Oxnard, San Diego districts to increase. Palo Verde lettuce active, Imperial increasing, Bakersfield light. Potato digging Stockton, Perris continues moderate. Potato shipments moderate levels. Tomatoes southern California light.

COLORADO: Cold all areas. Average temperatures 5° to 10° below normal. Very light snow eastern plains, light to moderate snow mountains and west, heavy some areas central mountains and southwest. Heavy snow falling west at end of period. Snow most of State past week. Surface soil moisture improved for fall grains. Fall-seeded grains good to excellent condition most areas. Local areas high winds eastern plains, but no damage to wheat. Limited corn grain harvest. Nearly all sorghum grain combined. Range and pasture condition fair. Most ranges snow covered western slope, supplemental feeding required. Livestock condition generally good.

FLORIDA: Temperatures average well above normal with departures nearly 10° in north and west. High pressure dominated the weather and rainfall was scattered showers. North and west averaged 0.50 inch, central 0.67 inch, and south generally less than 0.15 inch. Small grains responding well to moisture. Planting wheat continues. Soybean harvest near complete. Fair amount cotton to harvest. Sugarcane harvest full swing. Grazing fair to good. Small grains providing limited pasturage. Livestock fair to good. Calving slow, but increasing. Citrus grove condition very good. Rain needed. Irrigation in progress. Warm weather speeded evaporation. Color break excellent. Harvest active for processing and specialty fruits. Vegetable harvest accelerated with improved conditions. High temperatures, heavy

dew, fog adversely affected some salad vegetables, hastened maturity tomatoes. Quality most vegetables good. Fall harvest tomatoes peak volume; Dade County ground, other south staked acreage principle source. Cabbage, peppers increasing seasonally. Most tender vegetables steady or decreasing seasonally. Planting culture active all crops. Potato harvest scheduled for late December start. Seeding potatoes getting off to light start.

GEORGIA: Unusually warm week. Highs mostly in 60's and 70's but reached low 80's in south on weekend. Several new record highs for date. Lows ranged from high 30's and 40's extreme north to 60's south. No freezing temperatures in over a week. Averages ranged from 12° to 17° above normal and near late October normals. Rain 2 to 4 days. Amounts ranged from heavy north to mostly light in central and south. Most places south of the Atlanta-Athens area had less than 0.50 inch while more than 2.00 inches fell parts of extreme north. Excessive moisture delayed crop harvest and land preparation. Small grains, pastures and livestock remain fair to good condition.

HAWAII: Cool with overcast skies. Crop progress slowed by low temperatures. Sugarcane harvesting rapidly coming to close. Planting, weeding and fertilizing continuing pineapple plantations. Supplies fruits and vegetables ample. Harvesting coffee and macadamia nuts about normal. Pastures and cattle condition fair to good.

IDAHO: Temperatures averaged 3° to 12° below normal for week with greatest departures east. Precipitation averaged above normal, and much above north and east. Snow depths have increased to 36 to 46 inches at Pierce and Dixie, north; Deadwood Dam, Central Mountains; and Island Park Dam, northeast. Snowstorms made caring for livestock difficult. Grazing beet tops and stubble fields at standstill. Hay supplies adequate, although some heavier than normal culling occurring due livestock and hay price relationship.

ILLINOIS: Warm, cloudy, and rainy through Friday. Temperatures averaged 10° above normal and some rainfall exceeded 2.00 inches. Violent winds on Friday caused widespread miscellaneous damage in east-central, winds reaching 83 m.p.h. at Champaign. Temperatures soared to record highs for the date near 70°. Turned cool and sunny over weekend. Corn harvest virtually complete. Some corn still stored outside at scattered elevators. Fall plowing for corn and soybeans for 1972 making normal progress. Slightly over 60% completed. Winter wheat and small grains good. Fall rains encouraged lush growth. Livestock good condition. Cattle and hogs grazing corn stalk fields. Rainy weather caused muddy fields resulting in some health and discomfort problems to livestock. Soil moisture short 38%, adequate 52%, surplus 10%. Wells and ponds still low, but fall rains improved water levels. Little farm activity, only routine chores and some scattered plowing and applying fertilizer.

INDIANA: Dismal but warm. Temperatures averaged 11° above normal and precipitation exceeded 2.00 inches some areas. On Friday, intense low caused hurricane winds in gusts and damaged trees, roofs, windows, and unharvested grain western Indiana. Temperatures rose to 70° breaking high temperature records date. Turned cool and sunny over weekend. Few scattered corn, soybean, and sorghum

fields remain for harvest. Rains delayed harvesting and severely limited fieldwork.

IOWA: Cloudy week. Cold and dry northwest 1/3; warm with moderate to heavy precipitation elsewhere. Snow cover mostly limited to northwest.

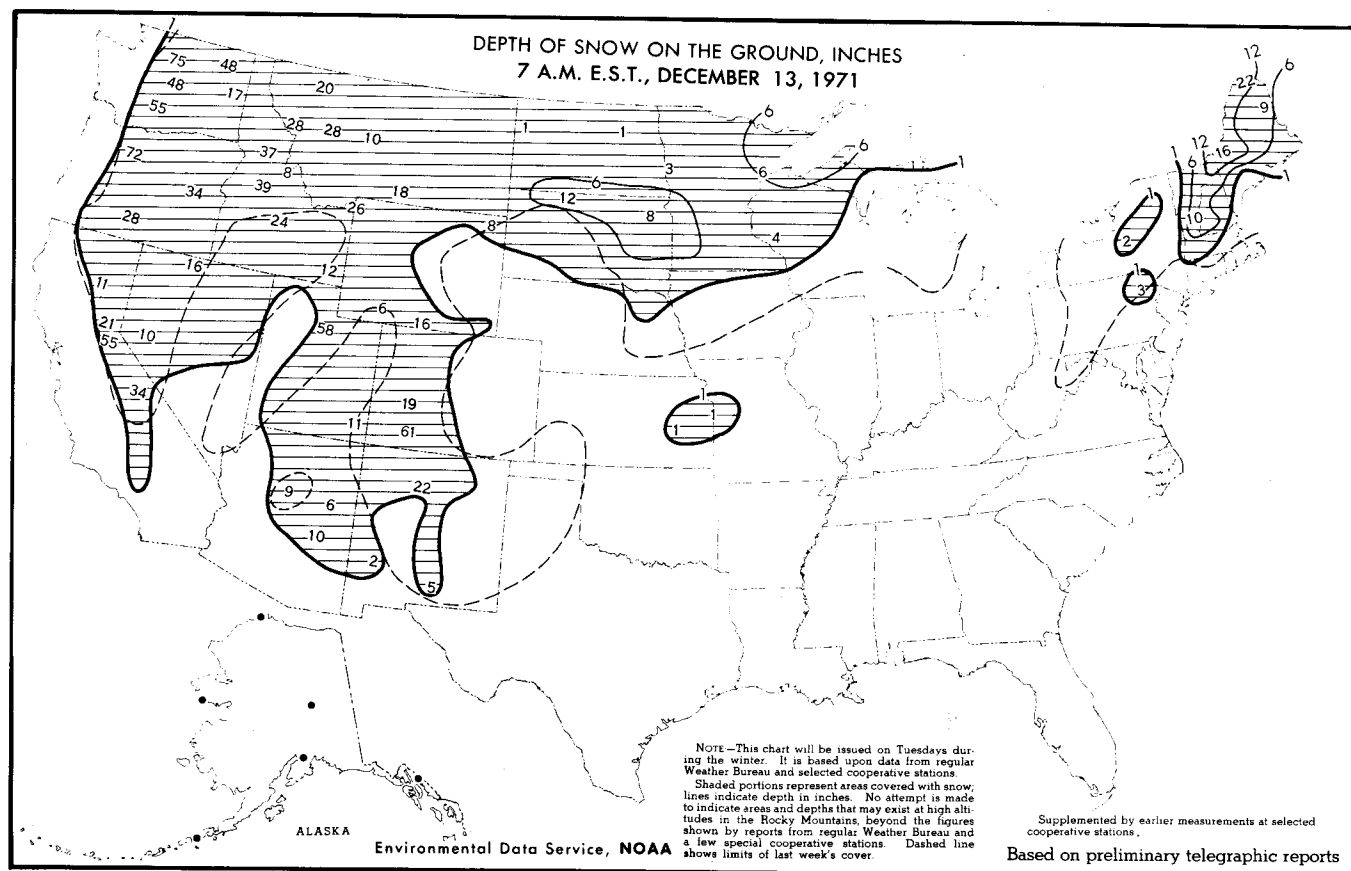
KANSAS: Cloudy and cool most of week. Light to moderate precipitation extreme east, generally 0.50 to 2.00 inches that area, light to locally moderate precipitation elsewhere. Weekly mean temperatures averaged above normal eastern 1/3, below seasonal elsewhere. Wheat growth slowed by cold cloudy weather, but crop remained in good condition. Some yellowing and leaf rust. Surface and subsoil moisture adequate to surplus. Completion harvest fall crops delayed by wet fields. Wet fields limited grazing livestock and increased supplemental feeding. Potential wheat pasture forage abundant and feed supplies ample. Feedlots muddy tending to reduce gains.

KENTUCKY: Temperatures above normal all days. Averaging 10° to 17° above normal for week. Rain one or more locations on 6 days. Weekly totals 1.00 to more than 2.00 inches. Heaviest weekly totals in 4 months. As of 12th, most days and past 25 days were cloudy. Record-breaking high totals for date on 10th. Upper 60's to upper 70's. High winds on 10th to near 70 m.p.h. one or more locations. Several injuries and damage to property and trees in scattered locations. Burley stripping active. Market strong until some weakness end last week sales period. Wheat and barley good condition. Recent rains replenished soil moisture. Pastures good, still supplying considerable feed.

LOUISIANA: Mild week with high temperatures in 70's and 80's several days. Minimums in 60's and 70's 4 days south. Weekly averages 7° to 13° above normal. Extremes: 83° Baton Rouge Thursday, Baton Rouge and Lafayette Sunday, and 36° at Clinton Tuesday and Winnfield Wednesday. Heavy rains of previous period ended on Monday. Moderate showers late Thursday through Friday and light to moderate showers again Sunday most areas. Weekly totals ranged from less than 0.50 inch portions of northeast and southwest to more than 2.00 inches from central into southeast. The greatest 24-hour amount was 4.31 inches measured at Amite Tuesday morning. Fieldwork virtually halted by excessive moisture and continued showers. Some progress made sugarcane harvest 80% completed. Cotton 95% harvested. Soybeans 95% to 100% combined. Acreage not harvested damaged by heavy rains and flooding. Winter pastures improving, but not furnishing much grazing. Pasture feed about average.

MARYLAND AND DELAWARE: Unseasonably warm with temperatures averaging 9° to 14° above normal. Weekly highs mostly in 60's with some 70's in southern Eastern Shore; lows in 30's. Rainfall, on 6th and 8th heavy, totaling mostly 1.00 to 2.00 inches except 0.50 to 1.00 inch southern Eastern Shore. Wet fields and poor drying weather stymie harvest remaining corn and soybean acreage. Warm moist weather favorable for late small grain seedings.

MICHIGAN: Seasonal temperatures early. Unseasonably mild with heavy rain after midweek. Cooler as period ended. Maximum temperatures in mid-60's set many daily records on December 10. Temperatures averaged 7° to 11° above normal Upper Peninsula, 9° to 13° above normal Lower Peninsula. Precipita-



tion totals 1.75 inches Upper Peninsula, 1.25 to 2.75 inches Lower Peninsula with heaviest totals southwest.

MINNESOTA: Temperatures were 6° below normal in west to 6° above normal in extreme northeast and southeast. Extremes: 37°, -16°. Precipitation generally light and less than 0.25 inch except southeast counties receiving more than 1.00 inch. Snow depth average more than 6 inches within an area north of Worthington-Twin Cities line and south of International Falls-Alexandria line.

MISSISSIPPI: Heavy rains widespread and most stations averaged 4 days of rain with weekly totals of an inch or more. Many locations reported 1-day amounts over 2.50 inches with the greatest 1-day amount of 6.00 inches at Liberty on 6th. Weekly temperature averages were near normal up to 6° above normal. Weekly extremes: 36° and 82°. Damaging winds on 6th at Bay Springs, and on 10th at Columbia with 5 persons injured. Over weekend: More widespread showers and some dense ground fog. Soil moisture adequate to excessive north, south-central and southeast. Other areas surplus to excessive. Average 1/2 day suitable fieldwork. Corn 98%, cotton 98%, soybeans 98%, pecans 80% harvested. Hay and roughage and feed grain supplies stored on farms mostly adequate. Winter wheat, oats, and pastures mostly fair to good condition and livestock mostly good.

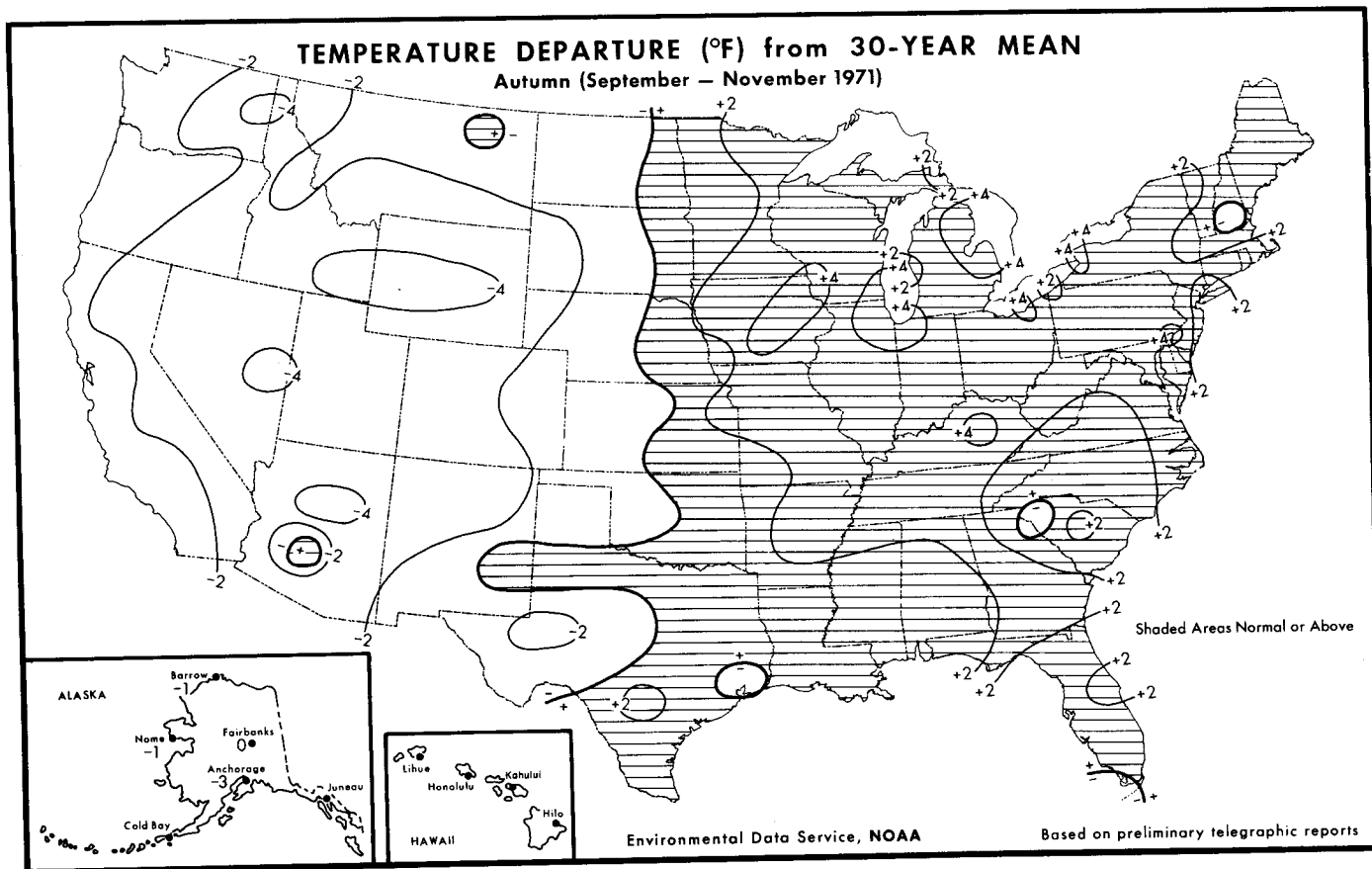
MISSOURI: Heavy rains caused minor flooding in Ozarks and in Bootheel Thursday and Friday December 9 and 10. West Plains reported more than 8.00 inches of rain. Rains averaged from 0.25 inch northwest to 1.50 inches central, and

4.00 inches or more Ozarks. Because of the high percentage of cloudiness, temperatures averaged 5° above normal.

MONTANA: Cold week with temperatures ranging from 9° to 19° below normal. Very cold Tuesday and weekend. Below zero temperatures occurred all divisions, coldest West Yellowstone with 33° below zero. Snow heavy statewide except southwestern valley and northern plains. Winter wheat condition fair to good, wind damage light. Most winter wheat snow covered. Winter ranges and pastures fair to good, but most snow covered. Sixty-five percent range cattle and 70% range sheep receiving some type supplemental feed.

NEBRASKA: Cloudy, cool, and damp with frequent light snow flurries. Farmers finishing harvesting operations, but soils generally too muddy for equipment. Farm activities consist mostly livestock care and moving feed supplies. Cattle continue graze fields, but limited supplemental feeding necessary few areas. About 75% hay and forage feed supplies average or better. Scattered reports sickness in livestock due cold, damp conditions. Feedyards muddy.

NEVADA: Very cold week. Temperatures at all divisions reached 10° below normal. Precipitation light to moderate in north, light in south. General snowfall in north from 1 inch at Virginia City to 9 inches at Sheldon. Snow cover in mountains. Harvest cotton crop Pahrump Valley 3/4 complete. Greenhouse tomatoes being harvested southern Nevada. Range and livestock generally good condition. Supplies stockwater, feed, and
(Continued on page 10.)



AUTUMN WEATHER (September–November 1971)

TEMPERATURE: The parade of Highs and Lows across the Nation in September brought the usual alternating periods of hot, humid, summer weather and early autumn chill. October brought more temperature contrasts. In the last week, the coldest October weather in several decades occurred over the Great Basin and central Rocky Mountains while parts of the east enjoyed an extended Indian Summer--warmest October in a century. The changeable weather continued into November but in spite of the record-breaking temperature extremes, the November mean temperatures were within a few degrees of normal. In general, temperatures for the 3-month period, September to November, averaged slightly below normal over the West and slightly warmer than normal over the East.

PRECIPITATION: September rainfall totals ranged from 2.00 to more than 5.00 inches in western Washington and northwestern Oregon. Most other areas west of the Rocky Mountains received less than 1.00 inch in September. East of the Rocky Mountains, the September totals ranged widely--from less than 1.00 inch to more than 16.00 inches. For most areas, September rainfall amounts were between 50% and 150% of normal.

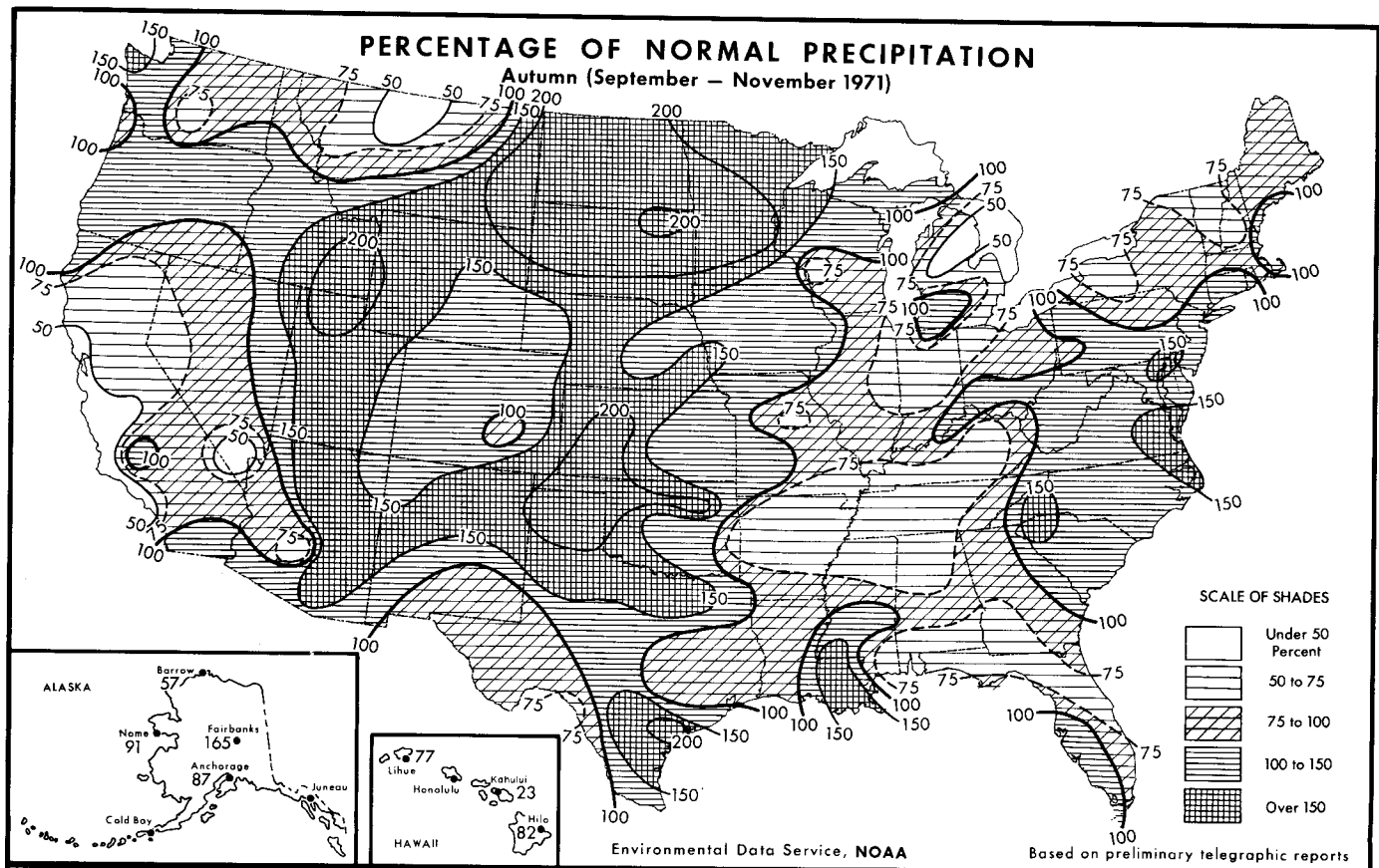
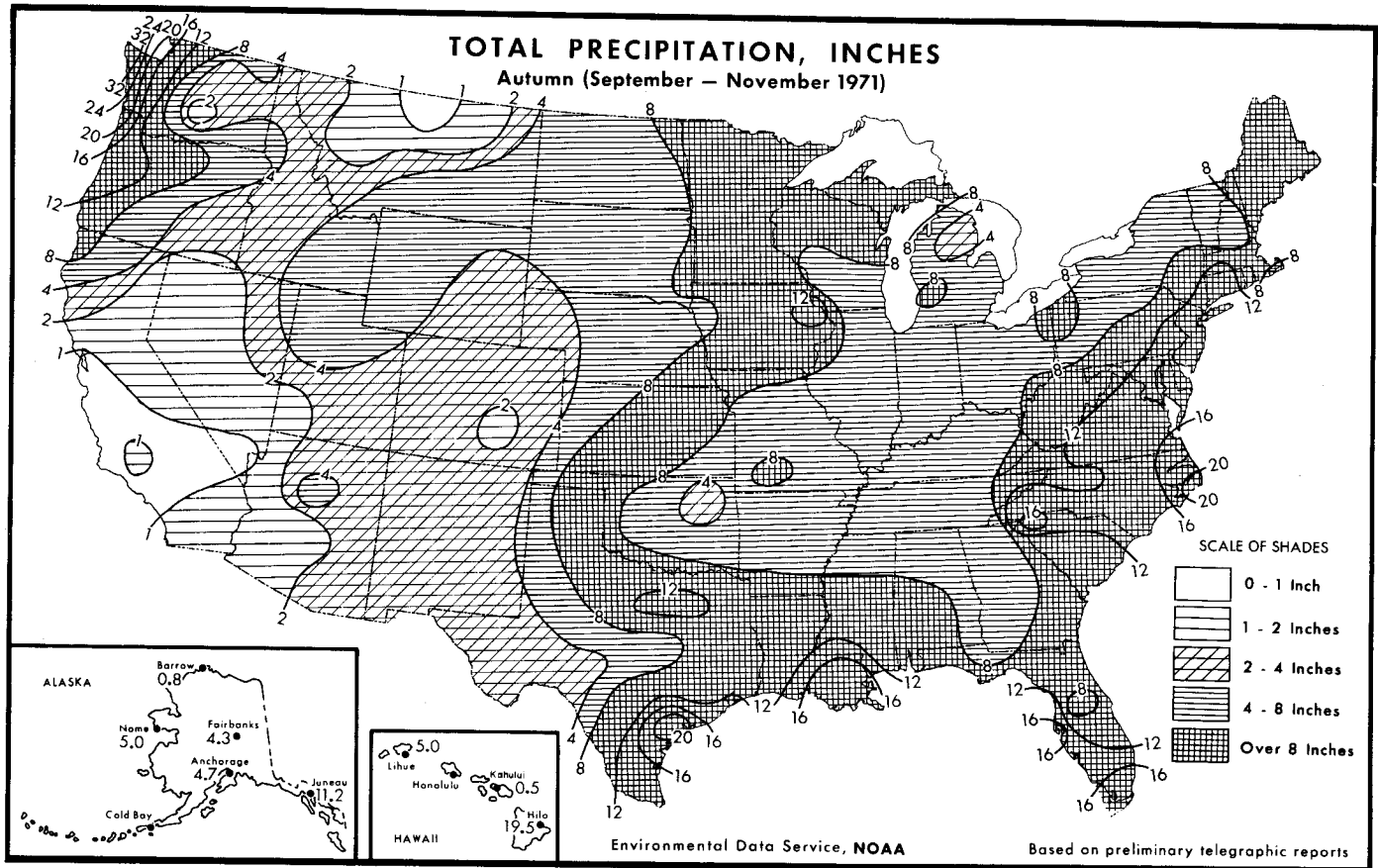
Hurricane Ginger soaked portions of the Eastern Seaboard early in October. Another system blanketed portions of the Rocky Mountains with wet snow. Heavy snows belted again parts of the West

at midmonth while torrential rains fell in the Florida Keys. Recordbreaking snow fell in the central Rocky Mountains at the close of the month. Rawlins, Wyo., measured 16 inches on the ground on the 28th and Salt Lake City, Utah, received 8.5 inches on the 31st. Above-normal rains replenished the depleted soil moisture in the Corn Belt.

Generous rains fell along the Eastern seaboard on the first two days of November. A touch of winter hit New England in the middle of the second week. Boston, Mass., lay under an inch of snow on the morning of November 11. This is the earliest date that an inch or more of snow fell at Boston since November 5, 1892. Several inches of snow fell to the lee of the Great Lakes in the third week of November. The "rainy season" got well underway in the Pacific Northwest. Rains fell along the coast while snow whitened the Cascades, northern Sierras, the northern and central Rocky Mountains, and spread to the Great Plains. Mixtures of heavy snow, freezing rain, gusty winds, and cold temperatures in the Northeast combined to make the weather about as miserable as in November 1950.

Seasonal precipitation totals exceeded the normals over most areas west of the Mississippi River and from the Carolinas to New England. Most other areas received only slightly less than normal rainfall.

L. W. Dye



(NEVADA continued from page 7.)

soil moisture adequate most areas. Most activity centers around maintenance chores and supplemental feeding.

NEW ENGLAND: Very mild, cloudy, and wet week. Temperatures averaged 6° to 12° above normal with quite mild nights after a sudden warming from last week's cold. Maxima in 60's much of south on December 11. Frequent precipitation daily in southern half, though mostly light. Greatest totals on December 6 and 7 and 9 and 10. Weekly totals mostly 0.50 to 1.50 inches, with some heavier along coastal Connecticut. New snowfall mostly under 3 inches, but up to 10 inches few northern spots. Some mixed precipitation, with rain, glaze, sleet, and snow locally in south on 6th and 7th.

NEW JERSEY: Temperatures gradually warmed up during week to recordbreaking readings in the mid-60's on 11th. Early morning temperatures on 12th were in 20's and 30's. Rainfall on 6th and 7th was particularly heavy over southeast where totals reached nearly 3.00 inches. North Jersey averaged 0.70 inch, central and southern interior 1.20 inches, and the coastal division 2.00 inches.

NEW MEXICO: Generally light precipitation mid-week. Local totals of 0.50 to 1.00 inch in mountains. Temperatures averaged 5° to 10° below normal in north 1/3 of State and locally in southwest. Elsewhere near normal. Freezing minimum temperatures common and generally lowest on Sunday. Warmest daytime temperatures on Tuesday and Saturday. Topsoil, subsoil moisture adequate. Scattered areas short. Snow, rain interrupted sorghum, cotton harvest. Wheat, barley good. Pecan harvest continuing. Ranges good to fair. Livestock mostly good. Supplemental feeding scattered areas. Pasturing winter wheat.

NEW YORK: Much cloudiness and mild temperatures with little day-to-day change through 9th. Abundant sunshine and warmest temperature since November 19 occurred 10th through 12th. Maxima in 50's some days, with 63° New York City and 62° at Poughkeepsie. Minima in 40's Long Island and mostly above freezing Upstate 7th through 11th. Coldest minima near 5° in north east 1/4 on 6th. Moderate to heavy precipitation on 6th and 7th with light rain or drizzle continuing through mid-week. Weekly totals 1.20 to 1.80 inches southern plateau and 0.70 to 1.00 inch elsewhere. Little snowfall of consequence. Snow cover eliminated by weekend except in higher elevations of northern half.

NORTH CAROLINA: Temperatures above freezing continuously since December 6, averaging near 10° above normal. Heavy rain and melting snow southern mountains 6th and 7th caused some flash flooding. Rainfall totals up to 5.00 inches that area, tapering off to 1.00 inch northern mountains and western Piedmont and less than 1.00 inch rest of State. Soil moisture continues adequate to surplus. Mostly surplus. Corn, sorghum grain, lespedeza seed harvest about 90% complete, soybeans 70% cotton 80% to 85%. Small grains mostly good, seeding late, about 80% complete. Pastures remain mostly good. Labor supplies adequate for light demands. Record high prices burley tobacco.

NORTH DAKOTA: Temperatures averaged 4° to 12° below normal. Colder end of week. Precipitation none to 0.50 inch, heaviest in south and west. Snow cover 4 to 7 inches south and west, little

or none elsewhere. Moisture supplies considered adequate. Some late-harvested crops being dried. Winter wheat and rye generally good condition. Livestock good. Many cattle still grazing stubble and fall pastures, but receiving supplemental feed. Some ranchers backgrounding calves. Most calves weaned.

OHIO: Very warm, wet, and cloudy week. Temperatures averaged 12° to 15° above normal. Highs climbed into 70's on 10th. On 10th Columbus recorded a high of 72° which was the highest temperature ever recorded in any December. Rain especially widespread and heavy on 6th and 7th. Weekly precipitation amounts generally in 1.50 to 3.50 inches. Unusually warm weather contributed to excellent winter wheat growth. Chopping corn stalks and finishing fall plowing were some farm activities. Hunting season in progress.

OKLAHOMA: Heavy rains southeast Wednesday and Thursday caused considerable flooding. Average precipitation varied from 0.05 inch Panhandle to 8.04 inches southeast. Temperatures averaged from 2° above normal east to 7° below normal Panhandle. Fall harvest activities near standstill most areas due inclement weather. Cotton, sorghum grain incurred additional damage some areas. Flooding southeast caused some livestock losses. Temporary supplemental feeding livestock became more widespread as additional cattle removed from small grain due wet fields. Small grain growth slowed by cold, but grazing mostly good to excellent and livestock continued to make favorable gains. Some losses due bloat, wheat poisoning. Winter feed reserve mostly adequate. Surface soil moisture 55% adequate, 45% surplus. Subsoil moisture 96% adequate, only 4% short.

OREGON: Continued wet wintry week with heavy snow in mountains. Temperatures averaged mostly 2° to 6° below normal. Minima: -13° to 20° east, 26° to 38° west. Maxima: 37° to 57°. Snow at first and last of week was general on 8th with motorists stranded northeast on 9th. Valley totals 2:00 to 5:00 inches except coast, Cascades mountain depths 72 to 106 inches, northeast mountains 36 inches. Precipitation totaled mostly 1.00 to 1.30 inches eastern part; 1.90 inches northwest. Wet western half, 4:00 to 6.80 inches. Heavy rains continued hold outside farming activity to minimum. Stands fall-seeded grain crops look good. Hay stocks adequate with high prices.

PENNSYLVANIA: Cloudy, wet week with widespread rain, drizzle, and fog. Little or no sun until weekend. Heaviest precipitation early in week with over 1.00 inch many stations. Some sleet and freezing rain Monday in mountains. Weekly totals 1.00 to 2.00 inches all but southeast and north-central, where 0.75 to 1.00 inch fell. Very mild nights and mild to warm days kept temperatures well above normal. Very warm air moved briefly into western counties on Friday, with Pittsburgh reaching 72°. Clearing on weekend produced cooler nights, but continued mild days. Weekly temperatures were 12° to 15° above normal in the west and 9° to 12° above normal elsewhere. Late fall farming operations limited to indoor activities.

PUERTO RICO: A dry cool week islandwide. Average rainfall 0.50 inch or about 1.20 inches below normal. Highest total 3.34 inches in eastern mountains. Some heavier showers in eastern interior and west coast area totaling 1.00 to 2.00 inches. Rest of Island generally less than 1.00 inch. Crop moisture conditions near normal all

divisions. Some areas south coast too dry for developing crops, but favorable for maturing sugarcane prior to harvest. Temperatures averaged 76° on coast and 70° to 71° interior divisions with average departure of 1.0° below normal. Sugarcane plantations final stages preparation for harvest season. Some irrigation south coast for young sugarcane crop. Coffee harvesting and drying operations continue good progress. Some soil preparation underway. Pastures generally good to excellent with some fertilizing. Minor crops developing well, except more rain needed south slopes and coast. Winter citrus beginning on market. Tobacco zones preparing seedbeds and replanting.

SOUTH CAROLINA: Very little rain except in upper Piedmont where amounts were 0.50 to 1.50 inches. Weekly temperatures averaged about normal in the northwest and 3° to 5° above normal other parts of State. Soil moisture continues to hinder harvest and other farm activities. Cotton 89%, soybeans 55% harvested. Pecans good condition. Pastures good. Wheat 69% planted, 59% emerged. Oats 86% planted, 74% emerged. Wheat, oats and fall vegetables good condition.

SOUTH DAKOTA: Weekly temperatures averaged from 2° below normal in southeast to 13° below normal in west. Extremes ranged from 19° below zero near Marcus on 9th to 49° at Edgemont on 7th and Rapid City on 9th. Precipitation fell as snow mostly first half of week with amounts from less than 0.10 inch in south to about 1.00 inch in north-central. Up to about 1 foot snow fell north-central accompanied by strong winds and drifting. Snow cover end of week ranged from trace portions of south to over one foot in portions of north. Snow cover many areas of State was reduced. Few haystacks still being moved to feeding grounds. Livestock good condition with some still grazing on harvested fields and winter ranges. Supplemental feeding necessary most areas. Main farmwork caring for livestock and repairing farm buildings. Drifting snow northeast made feeding operations more difficult.

TENNESSEE: Variable springlike weather with light to moderate rain showers almost every day. Heaviest rain 6th; totals over 1.00 inch. New record highs at some stations on 10th as temperatures climbed into mid-70's. Average weekly temperatures 9° to 12° above normal. Fieldwork made little or no progress due persistent rainfall. Harvest virtually complete. Burley tobacco market strong. Recent rainfall beneficial to small grains and pastures. Main activities turning to livestock care, routine chores, and planning for next year.

TEXAS: Heavy rains fell in north-central Texas Wednesday and Thursday caused flooding of most rivers and streams. Light to moderate amounts fell in south-central and east Texas. Paris caught a 7.54-inch deluge within 24 hours. Except for fair weather Friday and Saturday, skies were generally cloudy throughout week and cold temperatures continued in northwest Texas. Weather interrupted harvest cotton, sorghum, peanuts, soybeans for second week in row. Yield quality cotton, peanuts, and sorghum continue decline. Moisture adequate for small grain. Rain restricted grazing opportunities some areas. Wheat oats continue excellent progress. Percent harvested major crops; cotton 38, 97 last year; sorghum

98, 100 last year; soybeans 90, 99 last year; peanuts 97, 99 last year; sugar beets 56, 97 last year. Percent planted flax, 71, 91 last year. Vegetable harvest operations resumed as wet field conditions improved. Lower Rio Grande Valley cabbage, carrots and early fields lettuce, broccoli and cauliflower being harvested. Winter vegetables and spring onions making good progress. Laredo harvest fall tomatoes full swing while early harvest cabbage and lettuce getting underway. Supplies cabbage, carrots, spinach Winter Garden increasing. Growing and planting conditions improving. Carrot digging High Plains delayed by weather. Citrus harvest Lower Rio Grande Valley increasing. Pecan harvest 83% complete.

UTAH: Recurring periods of snow continued to plague the intermountain area during past week. Accumulated moisture ranged from 1.72 inches at Ogden Pioneer Power Plant to little or none at several locations in southeastern Utah. Average temperatures ranged from 4° to 17° below normal, with nearly half the stations recording sub-zero minimums. Extremely cold temperatures caused water freezing problems many farms and ranches. Drifting snow, associated with occasional strong winds, added to ranchers problems. Sorting, grading, and marketing potatoes, dry onions, and apples from storage continues active. Apple cider being pressed Utah County. Sugar beets harvested. Sugar factories operating at peak. Turkey processing past peak, should be virtually completed 2 more weeks. Care and feeding cattle and sheep feedlots and valley farms, dairy cattle, and poultry flocks continue major activities.

VIRGINIA: Temperatures above to much above normal. Rain at midweek and over weekend. Light rainfall restricted fieldwork. Remaining for harvest: corn 10%, mostly west, soybeans and grain sorghum 15%. Few stack peanuts to be threshed. Planting cover crops and late small grains continued east. Winter plowing slow, soils mostly too wet. Taking soil samples, spreading lime and fertilizer, and marketing tobacco. Tobacco producers treating plant beds. Soil moisture adequate to surplus. Lambing and calving beginning producing areas. Mild weather reduced stress on animals. Livestock condition good. Pastures supplying late forage. Feed supplies adequate, but quality off.

WASHINGTON: Western Washington: Cloudy, cool, and wet with occasional windy periods. Standing water stopped use of some pasture lands, but no shortage hay or roughage. Main activities centered around Christmas tree harvest, although some cranberry pruning taking place. Eastern Washington: Cold, wet, windy weather prevailed with snow covering much of the area at end of period. Most farm activities curtailed by weather. Grazing limited and more roughage being used. Many farmers used unfavorable weather to attend meetings. Some erosion occurred due to rain and snow melt.

WEST VIRGINIA: December 10 was the warmest December day ever for many stations as temperatures soared into the 70's. Rare December thunderstorms December 7 gave weeks heaviest rain. Weekly totals above 1.00 inch. Considerable sunshine throughout week. Major farm activities were usual chores and tending livestock. Some grazing still available. Livestock good condition.



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Questions and comments are invited; please send to Editor in Agricultural Climatology Service Office, address above.

WISCONSIN: Cloudy and damp weather with considerable fog prevailed much of week. Temperatures well above normal over southeast. Rain southeast and freezing rain northwest Friday. Up to 2.00 inches rain extreme southeast. Clearing and colder over weekend. Snow cover gone south of line from La Crosse to Green Bay. Some settling of snow cover in north. Frost entering ground. Most shallow lakes ice-covered. Some remaining corn in fields picked over weekend. Farm activities mainly care and feeding livestock.

WYOMING: A cold week with much of the State receiving light to heavy snows. Moran had most moisture with 1.64 inch. Temperatures averaged 4° to 13° below normal. Maxima were mostly 30's west of Divide and Upper Platte Drainage, high 30's to low 50's elsewhere. Minima were mostly -8° to -32° west of Divide, 3° to -22° east. Temperature extremes: 52° at Wheatland and -32° at Jackson. Main agricultural activity was care of livestock: all continue good condition. Winter pastures and ranges good condition. Feed supplies adequate. Soil and stockwater supplies adequate.

NATIONAL FLOOD SUMMARY DECEMBER 13, 1971

Flooding extended thru the weekend and continues in many areas due to the heavy rainfall last week in southeastern plains, lower Mississippi Valley and east Gulf drainage. A record high stage was observed locally in Arkansas and near record stages occurred locally in northeast Texas and east-central Oklahoma. The Buffalo River, in the white river basin of Arkansas; crested at 44 feet at Gilbert, Ark., Friday evening December 10. This was 14 feet above flood stage and a new record high stage at that station. Previous record high water at Gilbert was 42 feet in 1945. The Poteau River crested more than 15 feet over flood stage at Panama, Oklahoma Saturday morning December 11. The third highest stage of record at that point.

Major flooding occurred on the upper Sulphur River in northeast Texas where near record high levels were reported, and on the Little River in southwest Arkansas. Many roads were under water and impassable. Stages well above flood level

have occurred in the upper Trinity and upper Sabine River basins in Texas but the upper portions of these streams have crested and are now in recession. Downstream points will crest during this week. Substantial lowland flood is in progress on the Pearl River in Mississippi. Light flooding is occurring on parts of the Tombigbee River basin in Mississippi and Alabama and the St. Francis River in Arkansas.

During the weekend more than 1.00 inch of precipitation was reported in several local areas in the central states and in one or two places along the central west coast. In the last 24 hours heavy amounts were recorded at a number of stations in the San Joaquin Basin and Tulare and Buena Vista Lakes drainages in California, and in several local areas on the lower Texas coast and in the upper east Gulf drainage.

National Weather Service.