

WEEKLY WEATHER AND CROP BULLETIN

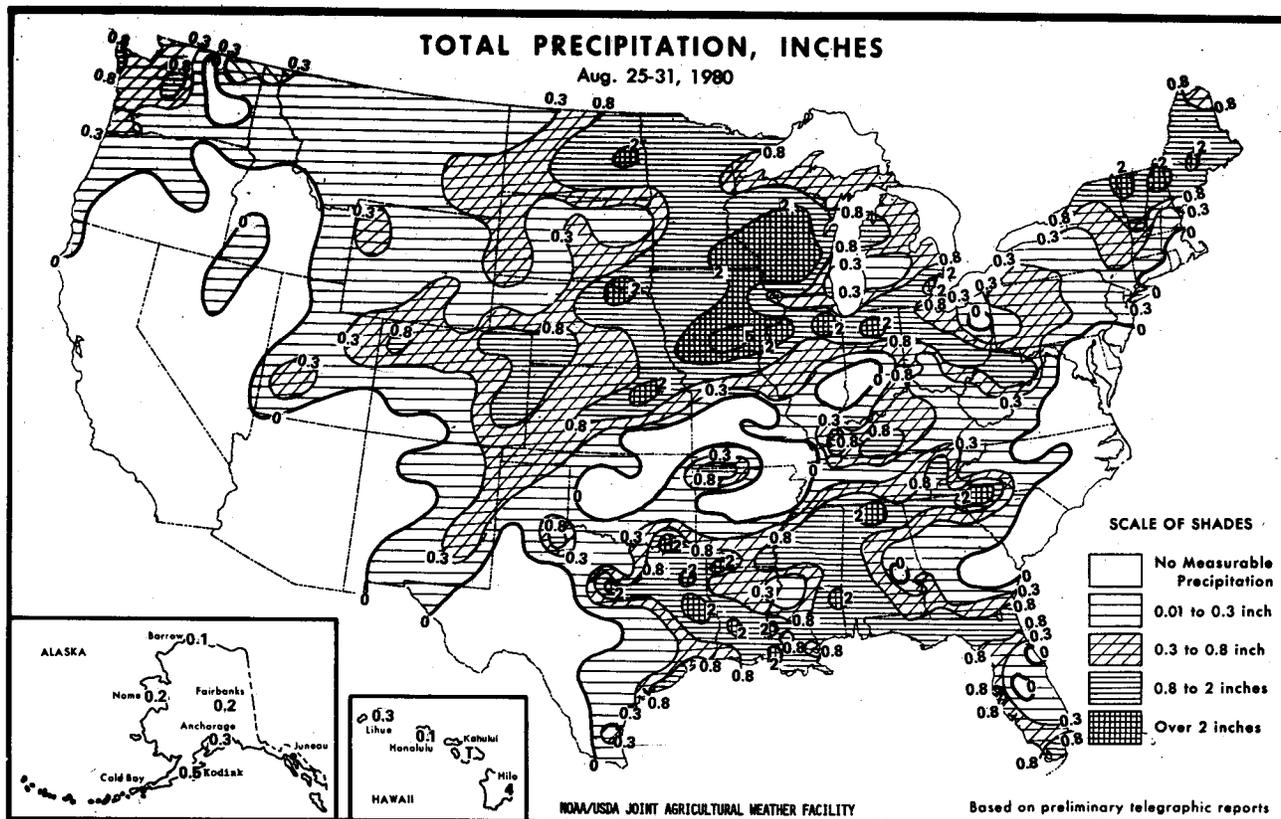
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National Weather Summary

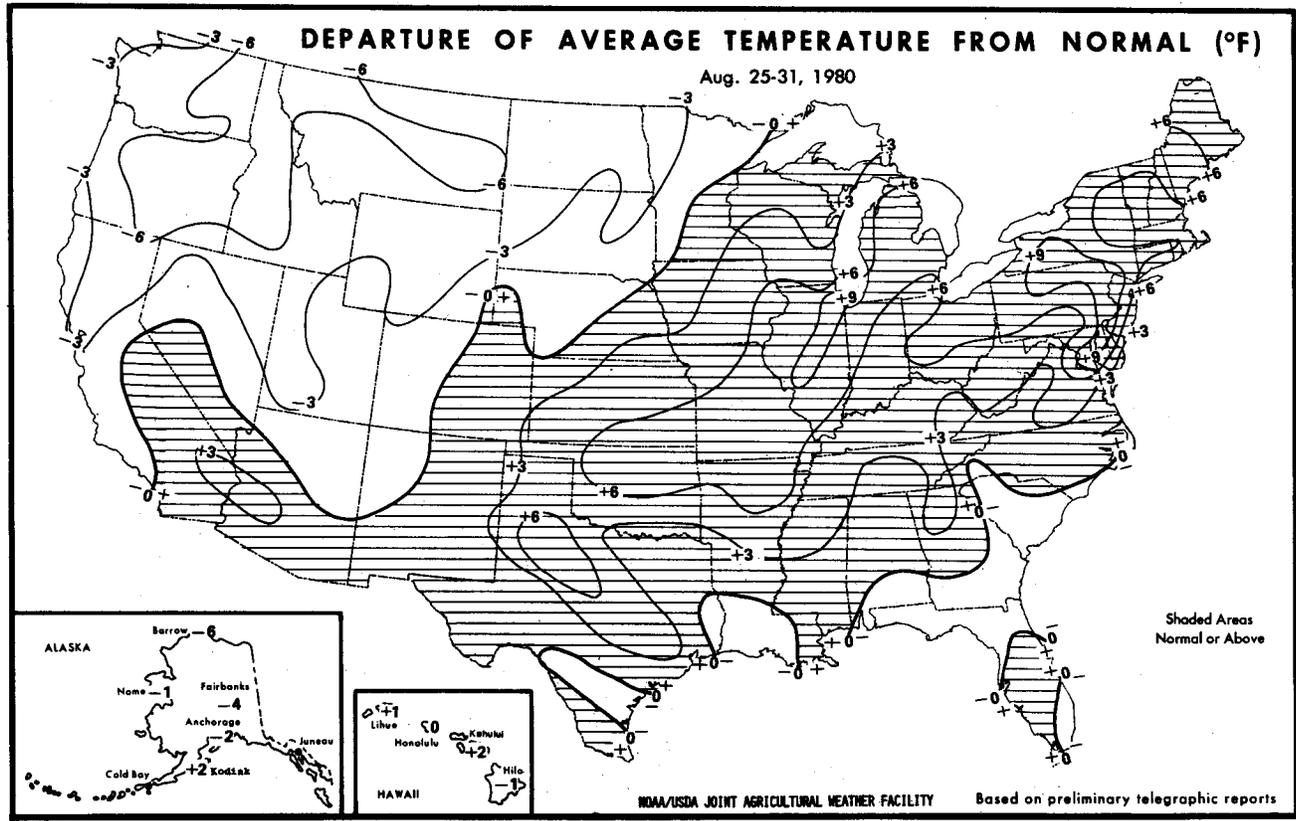
August 25 - 31

HIGHLIGHTS: Early in the week, a high pressure system centered in Pennsylvania and remained near that general area all week. Frontal systems, moving through the northern Plains, were forced northward around the high pressure. Showers and thunderstorms fell almost daily from Kansas and Missouri northward through the eastern Dakotas and eastward through the Great Lakes. As circulation around the high pressure was established, a warm, moist flow from the Gulf of Mexico triggered showers and thunderstorms from the lower Mississippi Valley to western New England. Warm weather continued from the Southwest to the southern Plains and northeastward through the mid-Atlantic States.

MONDAY...A cold front spread thunderstorms from Minnesota and Wisconsin to Colorado and Utah. Tornadoes were sighted in southwestern Nebraska. Hail

and high winds with occasional heavy rain worried areas from northeastern Colorado to Wisconsin. Thundershowers continued over the gulf coast States, and some needed, but light, rain fell in central Mississippi and Alabama. In the Southwest, thunderstorms were scarce in Arizona after Sunday's outbreak but were more widespread in New Mexico. The South baked under the heat; Wichita Falls, north central Texas, reached the century mark for the 66th day this season--peaking at 103°. Temperatures in the high nineties reached as far north as eastern Nebraska, but quite cool weather remained behind the cold front.

TUESDAY...The cold front extended, nearly stationary, from the central Great Lakes to the Texas Panhandle and into New Mexico. Showers and thunderstorms stirred along and behind the front. The contrast in temperatures across the front became quite



apparent. Late in the day, Spencer, northwestern Iowa, notched 56°, while Lamoni, in the south central part of the State, scored 94°. Showers and thunderstorms also covered the central and eastern gulf coast region, in southern Georgia and northern Florida. Showers dotted New England, Montana, and the Pacific Northwest coast.

WEDNESDAY...The front moved slowly to the St. Lawrence River Valley and extended southwestward through Missouri to the Texas Panhandle, then northwestward to a new front reaching from eastern Montana to northern California. The western front spread showers and thunderstorms across the northern Plateau and Rocky Mountain region. Occasional light rain was scattered along the northern Pacific coast. Thunderstorms were widely scattered along the weakening front to the east and through the southern half of the Plains and into New Mexico. A few thunderstorms rolled along the gulf coast. The wedge of hot weather reached northward from eastern Texas to Illinois.

THURSDAY...Showers dotted an area from the gulf coast through the lower half of the Mississippi Valley and the Plains from northeastern Texas to eastern Kansas. The showers covered large areas in Mississippi and Alabama. Elsewhere, thunderstorms carried through the northern States from Montana to the western Great Lakes. A few showers fell along the coast of New England, in Florida, and along the Washington coast. Showers and partly cloudy skies kept temperatures a little lower in the South, with the only 100-degree readings in a small part of the Southwest.

FRIDAY...A high pressure system, centered over the mid-Atlantic States, caused warm, moist air from the Gulf of Mexico to flow northward through the Mississippi Valley. Widely scattered showers and thunderstorms reached from the gulf coast to the Ohio Valley and Great Lakes region and across

portions of the upper Mississippi Valley. Storms in Minnesota produced walnut-sized hail. Some of the thunderstorms caused isolated areas of heavy rain. Local flooding occurred in some of the heavy rain areas. Afternoon temperatures topped the 100-degree mark in the southwestern deserts. Highs ranged to the nineties across much of New Mexico, through the southern half of the Plains and Mississippi Valley, across Florida and the southern half of the Atlantic Coast region.

SATURDAY...A cold front moved through the upper Mississippi Valley to a line from Michigan through Iowa to Kansas and into Nevada. Showers and thunderstorms formed along and behind the front and stretched from the central gulf coast to New York and western New England. Thunderstorms in the Southeast produced isolated areas of hail and high winds. In the West, showers fell in the western portions of Washington and Oregon, but to the South, it was clear from California across the southern Plateau. One-hundred-degree readings returned to the area from north central Texas to central Kansas. Highs hit the nineties across the rest of the South and northward along the east coast to the mid-Atlantic region.

SUNDAY...A complex frontal system extended from Michigan to Minnesota and then southward through Iowa to the Texas Panhandle and New Mexico. The front produced thunderstorms from the western portion of the Plains, across Kansas and Missouri through the Great Lakes region. A few widely scattered thunderstorms occurred in the Dakotas and northern Rockies. Showers and thunderstorms continued along the gulf coast and through the Ohio Valley into New England. Temperatures reached 100° in Texas, Oklahoma, and the Southwest. The nineties extended across the South and along the east coast to Maryland.

National Agricultural Summary

AUGUST 25 - 31

HIGHLIGHTS: Wet conditions delayed small grain harvests but helped restore soil moisture supplies and benefited row crops. Heaviest amounts of rain fell in the north central region of the Nation. Temperatures averaged above normal in all areas except much of the West, parts of the Southeast, and in southern Texas. Soil moisture was very short to short in the south Atlantic and south central States, and short to adequate in all other States except Wisconsin where supplies were rated as surplus. Farmers in all areas of the Nation except Wisconsin had 5 to 7 days suitable for fieldwork. In Wisconsin, frequent rains limited the number of days available to two. Winter wheat producers continued to plow and prepare land for fall seedings; planting was underway on a limited scale throughout many areas of the Nation. The spring wheat harvest advanced to 67% complete. Oats and barley harvests moved slowly due to wet conditions. Corn harvesting gained momentum in the South; 92% of the Nation's crop reached the dough stage, 64% the dent stage, and nearly 15% was mature. Grain sorghum heading reached 92%, and coloring advanced to about 41%. Harvesting increased in the South. Cotton bolls opened on 28% of the crop. Rice heading reached 89% complete, while harvesting was 35% complete. Early-planted soybean fields continued to turn color, and 90% of the crop had set pods. Recent rains improved pastures and ranges, with conditions reported fair to good except in parts of the Southeast, the south central region, and the West where poor to fair conditions persist. Supplemental feeding was still necessary in many areas.

CORN: Corn rated fair to good throughout much of the Corn Belt but only poor to fair in other areas of the Nation. In the eastern Corn Belt, dent stage ranged from 30% in Michigan to 85% in Illinois; mature stage ranged up to 40% in Illinois. In the western Corn Belt, dent stage ranged from 44% in South Dakota to 78% in Missouri; mature stage varied from 5% in Minnesota to 30% in Kansas. In the 17 major States, 92% of the crop reached the dough stage, 64% the dent stage, and about 15% the mature stage. Harvesting gained momentum in the South where progress ranged from 5% in Tennessee to 59% in Georgia. Fields, in areas where hot, dry conditions severely stressed the crop, continued to be salvaged for silage rather than harvested for grain.

SOYBEANS: Soybeans rated fair to good in much of the Corn Belt but rated poor to fair in other major growing areas. Early-planted fields continued to turn color and some started dropping leaves; 90% of the crop had set pods, slightly ahead of last year and the average. In areas where hot, dry conditions have prevailed, pod setting and bean development was hindered, and some fields have already been cut for hay or disked under.

SMALL GRAINS: Spring wheat harvesting advanced to 67% complete, well ahead of last year's 41% but equal to the average. Harvesting was only 45% complete in Montana and 58% complete in Idaho and North Dakota. In North Dakota, continued wet conditions have increased sprout

damage for spring wheat and durum wheat that is ripe and standing as well as grain in the swath.

Plowing for winter wheat gained momentum while planting moved actively though on a somewhat limited scale.

Wet conditions delayed harvesting for barley and oats in many areas.

COTTON: Cotton rated fair to poor in most major producing areas. Bolls opened on 28% of the crop, and harvesting got underway in many areas. Progress ranged from 19% in Georgia and South Carolina to 14% in Texas where harvest progressed slowly. In Texas, some dryland fields damaged by the drought were being plowed under while others continue to wilt and drop bolls. The intense heat has promoted early maturity. Wet cotton in modules, soaked from Hurricane Allen, continues to present problems.

OTHER CROPS: Grain sorghum heading advanced to 92% complete, coloring reached about 41%, and harvesting increased in the South. Harvesting in Texas reached 70% complete; many fields have been grazed out or baled because of poor grain development.

Rice heading reached 89% complete while harvesting advanced to 35% complete. Harvesting was finished in Texas and underway in all other areas except California.

The Idaho potato harvest got underway as early fields reached maturity. In northern Maine, farmers were killing vines on early varieties, while in southern New England, about half the crop was harvested.

FRUITS AND NUTS: The peach harvest continued across northern production areas and wound down in many southern areas. The apple harvest proceeded in all areas; northern growers began picking fall varieties. Bartlett pears were picked in New York.

Florida citrus groves rated very good to excellent. Rains were spotty, and irrigation continued in north central areas. New growth varied, depending on moisture.

In California, raisin grape laying was underway. The apple, wine grape, and desert lemon harvest began. The nectarine and Freestone peach harvests continued while the Cling peach and Bartlett pear harvests slowed. Valencia oranges, prunes, and pomegranates were harvested. Almond and pistachio harvesting got underway.

Arizona citrus groves generally rated good. The lemon harvest continues on an increasing scale. Other citrus fruits developed normally.

The Texas peach harvest continues in northern areas with light supplies available. Pecan prospects remain questionable as droppage continues.

(continued on page 16)

Weather Data for the Week Ending Aug. 31, 1980

States and Stations	Temperature °F						Precipitation						Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hour, in.	Total, in., since June 2	Pct. normal since June 2	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
ALA. Birmingham	92	68	94	66	80	2	.3	.6	.2	7.9	59	89	44	7	0	2	0	
Mobile	90	72	92	70	81	0	1.0	.6	.8	15.5	71	94	54	3	0	3	1	
Montgomery	91	69	93	66	80	0	.0	.8	0	6.8	54	89	66	6	0	0	0	
ALASKA. Anchorage	61	44	66	40	52	-2	.3	.3	.1	8.1	145	88	45	0	0	4	0	
Barrow	33	27	38	21	30	-6	.1	.1	.3	1.4	61	93	59	7	5	0	0	
Fairbanks	57	39	63	33	48	-4	.2	.2	.1	4.0	71	84	68	0	0	2	0	
Kodiak	62	50	71	47	56	2	.5	.7	.3	3.5	29	91	61	0	0	2	0	
Nome	53	43	57	37	47	-1	.2	.6	.2	6.7	97	88	71	0	0	1	0	
ARIZ. Flagstaff	77	47	79	41	62	0	0	.5	0	5.0	89	76	25	0	0	0	0	
Phoenix	103	79	105	75	91	3	0	.3	0	.6	27	45	18	7	0	0	0	
Tucson	97	70	100	67	84	1	0	.5	0	4.0	80	66	19	7	0	0	0	
Winslow	87	59	89	57	73	-1	0	.3	0	3.1	100	--	--	0	0	0	0	
Yuma	106	78	109	72	92	1	0	.1	0	0	0	47	--	7	0	0	0	
ARK. Fort Smith	98	70	100	67	84	5	0	.7	0	5.2	53	75	30	7	0	0	0	
Little Rock	95	72	101	68	84	6	0	.7	0	1.4	14	80	33	7	0	0	0	
CALIF. Bakersfield	94	66	98	62	80	0	0	0	0	0	0	--	23	5	0	0	0	
Eureka	60	51	62	49	55	-2	0	.1	0	.5	42	95	73	0	0	1	0	
Fresno	93	61	97	59	77	0	0	0	0	0	0	64	21	6	0	0	0	
Los Angeles	74	62	76	62	68	-1	0	0	0	0	0	85	55	0	0	0	0	
Red Bluff	90	60	94	58	75	-3	0	.1	0	1.2	171	--	24	5	0	0	0	
San Diego	77	66	80	64	72	1	0	.1	0	0	0	88	62	0	0	0	0	
San Francisco	70	53	72	50	61	-3	0	0	0	.1	50	86	50	0	0	0	0	
Stockton	91	57	94	53	74	0	0	0	0	.5	500	78	29	5	0	0	0	
COLO. Denver	81	56	88	51	69	0	.4	.1	.2	4.7	94	67	27	0	0	3	0	
Grand Junction	84	58	90	53	71	-2	.2	0	.2	2.4	120	56	19	1	0	1	0	
Pueblo	87	58	93	55	73	1	0	.4	0	3.6	68	77	31	3	0	1	0	
CONN. Bridgeport	83	70	90	66	77	5	0	.8	0	11.1	116	86	64	1	0	0	0	
Hartford	84	64	90	59	74	6	.2	.7	.1	9.2	85	91	51	1	0	2	0	
D.C. Washington	95	74	97	70	85	10	0	1.0	0	6.5	53	89	40	7	0	0	0	
FLA. Apalachicola	88	72	90	71	80	-1	.8	1.2	.5	16.3	76	88	57	1	0	2	0	
Daytona Beach	88	74	89	72	81	0	0	1.6	0	13.5	67	91	57	0	0	0	0	
Ft. Myers	93	76	96	74	85	2	.5	1.4	.4	18.2	72	92	52	6	0	2	0	
Jacksonville	89	70	90	68	80	-1	1.4	.5	1.3	14.0	66	97	60	4	0	0	0	
Key West	90	79	92	76	84	1	.9	.4	1.5	15.6	119	78	58	6	0	3	0	
Miami	89	76	90	73	82	-1	1.1	.6	1.9	23.6	105	97	62	3	0	1	0	
Orlando	93	73	95	71	83	2	0	1.6	0	13.3	60	98	53	7	0	1	0	
Tallahassee	90	71	93	65	80	-1	1.0	.5	.8	20.3	91	96	55	3	0	3	1	
Tampa	90	73	92	70	82	0	1.3	.5	1.0	17.2	75	97	58	5	0	4	1	
W. Palm Beach	88	72	90	71	80	-3	.3	1.5	.2	16.8	79	98	60	1	0	2	0	
GA. Atlanta	91	70	94	68	81	5	0	.7	0	6.9	57	87	43	6	0	1	0	
Augusta	92	63	94	59	77	-1	.1	.8	0	7.1	54	99	38	7	0	0	0	
Macon	94	69	96	66	81	2	0	.8	0	7.3	61	95	42	7	0	1	0	
Savannah	90	69	93	65	80	0	0	1.4	0	7.0	35	95	49	4	0	0	0	
HAWAII. Hilo	--	--	--	--	75	-1	4.0	1.8	--	22.9	85	--	--	0	0	--	--	
Honolulu	87	76	89	75	81	0	.1	0	.1	.7	44	75	52	0	0	1	0	
Kahului	--	--	--	--	81	2	0	.1	0	.7	44	75	52	0	0	1	0	
Lihue	--	--	--	--	80	1	.3	.2	--	5.3	91	--	--	0	0	--	--	
IDAHO. Boise	77	47	87	37	62	-7	0	.1	0	.3	18	54	20	0	0	0	0	
Lewiston	76	49	85	42	62	-7	.2	0	.1	2.3	77	62	26	0	0	2	0	
Pocatello	75	48	81	43	62	-4	0	.2	0	2.7	123	58	25	0	0	0	0	
ILL. Cairo	91	72	95	68	82	5	0	.8	0	--	--	--	6	0	0	1	0	
Chicago	89	69	95	66	79	10	.5	.2	.4	14.9	133	83	47	4	0	2	0	
Moline	87	66	92	62	77	6	2.3	1.5	1.3	17.5	141	91	64	3	0	2	0	
Peoria	89	68	94	64	79	8	.7	0	.7	14.5	139	84	55	3	0	2	1	
Rockford	85	66	90	61	75	6	.4	.5	.4	14.6	117	92	58	1	0	1	0	
Springfield	91	70	95	62	81	9	.4	.2	.3	6.8	64	89	50	5	0	2	0	
IND. Evansville	92	66	95	63	79	5	.1	.5	.1	12.7	126	92	44	6	0	1	0	
Ft. Wayne	84	64	87	60	74	5	.8	.2	.5	10.8	103	95	65	0	0	3	1	
Indianapolis	87	65	90	60	76	5	0	.6	0	15.0	143	95	55	2	0	0	0	
South Bend	86	68	92	64	77	8	1.2	.5	.9	13.7	129	89	53	2	0	2	1	
IOWA. Burlington	87	67	91	63	77	6	3.6	2.8	3.6	23.0	195	--	--	3	0	1	1	
Des Moines	85	67	94	64	76	5	2.1	1.3	1.5	13.6	118	81	56	3	0	1	1	
Dubuque	82	66	86	64	74	6	.5	.5	.5	16.3	121	91	61	0	0	2	0	
Sioux City	79	63	93	59	71	1	1.4	.7	1.1	7.5	70	88	64	1	0	4	2	
KANS. Concordia	92	67	103	61	79	5	.3	.5	.2	5.1	45	81	42	5	0	2	0	
Dodge City	92	67	99	64	80	5	.4	.1	.2	7.5	84	81	36	6	0	1	0	
Goodland	84	58	95	53	71	0	1.0	.6	.5	12.5	162	91	42	3	0	3	0	
Topeka	94	66	98	60	80	5	1.5	.6	1.5	7.2	51	91	43	6	0	1	1	
Wichita	97	71	102	67	84	7	0	.7	0	5.5	46	78	34	6	0	0	0	
KY. Lexington	87	67	90	61	77	4	.8	.1	.7	12.6	100	86	51	1	0	0	0	
Louisville	89	69	94	67	79	5	.4	.3	.3	12.8	120	89	48	5	0	2	1	

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Aug. 31, 1980

States and Stations	Temperature °F						Precipitation					Relative Humidity, percent		Number of Days				
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since June 2	Pct. normal since June 2	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
LA. Baton Rouge . . .	91	70	93	66	80	-1	.5	-.4	.3	14.4	97	91	44	6	0	0	0	0
Lake Charles . . .	90	71	93	68	80	-1	.8	-.2	.5	11.0	68	91	54	6	0	0	2	0
New Orleans . . .	94	73	97	69	83	2	.7	-.5	.5	10.2	62	98	48	7	0	0	2	1
Shreveport . . .	97	70	101	65	83	1	.3	-.3	.2	4.8	55	89	38	7	0	0	3	0
MAINE. Caribou . . .	76	53	83	41	64	4	.5	-.3	.4	10.0	91	--	46	0	0	0	3	0
Portland . . .	83	62	89	56	73	9	.8	-.2	.6	7.6	92	86	51	0	0	0	3	1
MD. Baltimore . . .	92	69	94	65	80	7	0	-.9	0	10.3	87	92	44	4	0	0	0	0
MASS. Boston . . .	82	66	88	63	74	5	0	-.8	0	6.7	72	79	51	0	0	0	0	0
Chatham . . .	75	62	81	59	69	1	0	-.8	0	5.5	59	97	66	0	0	0	0	0
MICH. Alpena . . .	77	62	87	59	70	8	.3	-.4	.2	8.6	105	--	--	0	0	0	4	0
Detroit . . .	84	66	86	59	75	6	2.2	1.5	1.4	16.8	173	93	64	0	0	0	2	2
Flint . . .	82	66	86	60	74	8	.3	-.4	.3	11.1	116	96	65	0	0	0	1	0
Grand Rapids . . .	85	67	91	63	76	8	.3	-.6	0	12.5	140	97	65	2	0	0	1	0
Houghton Lake . . .	79	61	87	56	70	7	1.1	-.5	.6	7.0	80	100	64	0	0	0	3	1
Lansing . . .	84	67	88	64	75	8	.2	-.4	0	9.3	107	98	62	0	0	0	0	0
Marquette . . .	70	53	78	46	62	2	.4	-.4	.2	9.1	97	96	68	0	0	0	3	0
Muskegon . . .	80	65	89	62	73	5	.2	-.5	.2	13.5	173	94	67	0	0	0	1	0
S. Ste. Marie . . .	75	55	81	50	65	4	.4	-.4	.4	8.3	92	94	60	0	0	0	2	0
MINN. Duluth . . .	69	54	77	42	61	0	.5	-.3	.2	10.8	92	88	64	0	0	0	4	0
Internatl. Falls . . .	70	49	82	40	59	--	1.3	.5	1.0	7.8	69	91	52	0	0	0	2	1
Minneapolis . . .	76	61	90	55	68	--	1.1	.4	.4	10.1	94	77	59	1	0	0	4	0
Rochester . . .	76	62	88	57	69	--	2.8	2.0	1.3	12.2	103	91	75	0	0	0	4	3
St. Cloud . . .	74	55	88	45	65	0	.3	-.5	.3	13.2	114	92	62	0	0	0	4	3
MISS. Jackson . . .	94	69	98	66	82	2	.3	-.5	.3	6.2	55	95	43	6	0	0	3	1
Meridian . . .	93	68	96	65	81	2	1.1	-.3	1.0	8.6	68	97	47	6	0	1	1	0
MO. Columbia . . .	95	67	98	61	81	7	.3	-.8	0	4.8	42	78	33	7	0	0	0	0
Kansas City . . .	92	69	96	67	80	6	.6	-.3	.6	9.1	67	75	41	6	0	1	1	1
St. Louis . . .	93	72	98	66	83	8	.3	-.3	.2	8.9	82	78	37	6	0	2	0	0
Springfield . . .	95	70	98	66	83	8	.3	-.8	0	5.5	49	70	30	7	0	0	0	0
MONT. Billings . . .	74	50	78	48	62	-4	.1	-.2	.1	3.1	72	48	26	0	0	2	0	0
Glasgow . . .	74	47	83	39	60	-5	.1	-.2	.1	4.3	74	76	33	0	0	2	0	0
Great Falls . . .	72	44	80	37	58	-6	.1	-.2	.1	5.0	93	61	26	0	0	3	0	0
Havre . . .	73	44	79	39	59	-5	.1	-.2	.1	3.9	78	77	27	0	0	2	0	0
Helena . . .	73	44	81	36	58	-5	.1	-.2	.1	5.4	123	64	23	0	0	1	0	0
Kalispell . . .	68	38	76	32	53	-7	.1	-.3	.1	5.0	102	85	34	0	1	2	0	0
Miles City . . .	72	51	80	43	61	-7	.7	-.4	.5	5.8	95	78	36	0	0	6	0	0
Missoula . . .	72	42	83	32	57	-5	.3	-.3	.2	4.1	87	77	30	0	1	0	2	0
NEBR. Grand Island . . .	83	63	99	57	73	1	.3	-.2	.2	8.7	395	82	51	2	0	1	1	0
Lincoln . . .	85	66	99	61	76	4	1.2	.4	.8	10.5	91	84	59	2	0	4	4	1
Norfolk . . .	81	63	97	57	72	1	1.0	.4	.8	9.6	90	85	58	2	0	4	4	1
N. Platte . . .	81	57	90	53	69	-1	.8	.3	.7	5.3	61	80	38	1	0	4	4	1
Omaha . . .	81	65	93	59	73	2	1.0	.1	0	17.2	137	76	56	1	0	0	1	1
Valentine . . .	80	56	93	47	68	-2	.3	-.2	.1	6.2	73	80	37	1	0	4	0	0
NEV. Ely . . .	78	43	83	34	60	-3	0	-.1	0	1.8	100	49	18	0	0	0	0	0
Las Vegas . . .	99	73	101	66	86	1	0	-.1	0	.5	50	27	11	7	0	0	0	0
Reno . . .	81	43	86	35	62	-3	0	0	.9	82	76	17	0	0	0	0	0	0
Winnemucca . . .	83	45	91	37	64	-1	0	-.1	0	.8	47	45	14	1	0	0	0	0
N.H. Concord . . .	82	57	87	50	70	5	.1	-.6	.1	9.1	98	95	55	0	0	0	0	0
N.J. Atlantic City . . .	86	65	93	56	75	3	0	-.1	0	8.3	65	99	47	2	0	0	0	0
Trenton . . .	90	71	--	--	81	9	0	-.9	0	8.4	69	--	--	6	4	0	1	0
N.MEX. Albuquerque . . .	89	60	92	55	75	0	0	-.3	0	2.7	77	67	19	4	0	0	0	0
Roswell . . .	89	66	95	58	77	1	.5	-.2	.3	2.7	59	--	--	4	0	0	3	0
N.Y. Albany . . .	82	62	88	55	72	5	.6	-.1	.6	13.9	158	82	58	0	0	2	0	0
Binghamton . . .	84	63	89	59	74	9	.2	-.6	.2	9.3	88	95	50	0	0	1	0	0
Buffalo . . .	82	65	88	59	74	8	.3	-.5	.2	12.7	146	93	60	0	0	3	0	0
New York . . .	87	71	94	68	79	6	.4	-.5	.4	9.4	84	81	52	2	0	0	1	0
Rochester . . .	85	67	90	59	76	9	.4	-.6	0	11.8	144	93	55	1	0	0	0	0
Syracuse . . .	86	64	91	59	75	7	.1	-.7	0	7.7	79	89	52	0	0	1	1	0
N.C. Asheville . . .	84	59	86	56	71	0	.1	-.9	0	9.4	71	--	53	0	0	1	1	0
Charlotte . . .	89	65	90	63	77	1	.1	-.7	.1	6.9	57	--	53	0	0	0	0	0
Greensboro . . .	88	63	90	60	76	2	.1	-.9	0	8.2	65	97	43	1	0	1	0	0
Hatteras . . .	85	68	88	63	77	0	0	-.1	0	10.5	61	95	61	0	0	0	0	0
Raleigh . . .	90	64	91	59	77	0	.1	-.1	.1	9.0	66	--	61	4	0	1	0	0
Wilmington . . .	88	67	92	64	78	0	0	-.4	0	11.0	53	96	56	1	0	0	0	0
N.DAK. Bismarck . . .	70	51	82	42	60	-5	1.3	.9	.8	9.9	130	88	52	0	0	0	0	0
Fargo . . .	72	53	80	46	62	-4	1.1	.5	.9	7.5	81	89	52	0	0	2	3	1
Williston . . .	72	49	79	41	61	-4	.2	-.2	.2	4.3	61	81	37	0	0	0	1	0
OHIO. Akron-Canton . . .	84	67	90	61	76	8	0	-.6	0	13.9	139	87	48	1	0	0	1	0
Cincinnati . . .	87	65	89	61	76	3	.1	-.5	.1	13.5	127	97	54	0	0	1	1	0
Cleveland . . .	84	65	87	58	75	7	.1	-.5	.1	11.6	118	94	56	0	0	1	0	0
Columbus . . .	85	66	89	62	76	6	.1	-.4	.7	15.4	139	93	53	0	0	3	1	0
Dayton . . .	88	67	93	62	78	7	.2	-.4	.2	16.1	163	89	51	2	0	0	1	0
Toledo . . .	85	64	89	57	74	5	.6	-.1	.4	13.2	136	94	61	0	0	1	0	0
Youngstown . . .	83	62	85	55	72	5	.3	-.4	.3	17.3	166	82	53	0	0	1	0	0

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Aug. 31, 1980

States and Stations	Temperature °F						Precipitation						Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since June 2	Pct. normal since June 2	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
OKLA.Okla. City	98	72	101	67	85	6	T	-.7	T	3.6	38	65	27	7	0	0	0	
Tulsa	99	75	101	71	87	8	T	-.8	0	7.9	71	76	32	7	0	0	0	
OREG.Astoria	65	50	69	42	57	-3	.4	-.0	.2	3.4	71	90	64	0	0	4	0	
Burns	73	39	82	28	56	-7	T	-.1	T	1.1	58	65	18	0	1	1	0	
Medford	82	49	88	44	65	-4	T	-.1	0	1.2	75	77	24	0	0	0	0	
Pendleton	76	48	85	40	62	-7	0	-.1	0	1.9	106	--	26	0	0	0	0	
Portland	73	52	86	44	62	-3	.4	-.2	.2	2.9	104	86	47	0	0	3	0	
Salem	75	45	85	36	59	-6	T	-.2	T	2.0	83	93	45	0	0	1	0	
PA.Allentown	92	68	94	64	80	10	T	-.8	.1	4.9	41	86	38	6	0	0	0	
Erie	82	66	86	60	74	8	.6	-.2	.6	17.0	167	--	--	0	0	1	0	
Harrisburg	90	66	92	64	78	6	.1	-.6	.1	5.7	58	99	53	6	6	2	1	
Philadelphia	93	72	95	69	82	9	0	-.9	0	9.2	79	81	48	6	0	0	0	
Pittsburgh	87	65	89	61	76	8	.1	-.5	-.1	16.0	157	91	51	0	0	2	0	
Scranton	90	67	92	62	78	10	.1	-.6	.1	9.3	87	86	38	4	0	0	0	
R.I.Providence	84	64	95	58	74	6	0	-.9	0	9.3	87	86	38	4	0	1	0	
S.C.Charleston	89	66	92	64	77	-2	0	-.9	0	7.9	84	87	51	2	0	0	0	
Columbia	89	61	91	58	75	-4	T	-1.3	0	11.0	53	93	49	2	0	0	0	
Greenville	88	63	90	59	75	-1	2.1	1.2	T	6.9	46	--	45	2	0	1	0	
S.DAK.Aberdeen	73	57	83	45	65	-2	.2	-.2	.1	9.1	107	69	50	0	0	2	2	
Huron	74	55	85	49	64	-4	T	-.4	T	12.0	154	92	58	0	0	2	0	
Rapid City	76	53	87	46	64	-4	T	-.2	.4	9.0	123	74	36	0	0	2	0	
Sioux Falls	77	59	91	54	68	-1	1.0	.3	.7	6.8	68	82	60	1	0	3	0	
TENN.Chattanooga	89	66	92	64	77	1	.7	0	.6	4.9	41	93	43	4	0	3	1	
Knoxville	90	68	92	66	79	3	.9	.3	.9	8.0	70	77	43	4	0	2	1	
Memphis	96	73	101	71	85	6	.2	-.7	.2	11.5	113	75	34	7	0	1	0	
Nashville	92	68	95	66	80	3	.2	-.5	.1	7.7	75	87	40	5	0	3	0	
TEX.Abilene	98	75	101	72	87	6	0	-.5	0	2.9	40	62	23	7	0	0	0	
Amarillo	93	62	98	58	78	3	.1	-.5	.1	3.7	41	71	24	6	0	1	0	
Austin	97	74	99	71	86	3	T	-.7	T	1.7	24	82	32	0	0	0	0	
Beaumont	91	74	91	--	82	0	.6	-.7	.6	4.2	26	92	57	5	0	2	1	
Brownsville	93	76	95	71	85	1	T	-.9	T	8.7	132	88	51	7	0	1	0	
Corpus Christi	91	75	93	74	83	-1	.2	-.8	.1	13.3	173	81	53	6	0	2	0	
Del Rio	97	73	99	70	85	0	0	-.5	0	2.9	67	81	29	7	0	0	0	
El Paso	93	68	98	63	80	1	.1	-.2	.1	2.1	60	58	27	5	0	2	0	
Fort Worth	98	74	102	68	86	3	T	-.6	T	2.0	28	69	29	6	0	0	0	
Galveston	87	79	90	70	84	1	1.8	-.6	1.5	6.9	54	81	63	3	0	3	1	
Houston	96	73	101	72	85	3	.2	-.9	.1	4.1	32	94	44	7	0	3	0	
Lubbock	94	69	99	63	82	6	0	-.4	0	3.7	55	61	22	6	0	0	0	
Midland	94	67	98	63	81	1	0	-.4	0	2.5	50	69	23	7	0	0	0	
San Angelo	96	71	98	66	83	1	T	-.5	T	6.7	143	76	28	7	0	0	0	
San Antonio	94	73	96	68	83	0	.3	-.4	.3	3.6	52	92	44	7	0	1	0	
Victoria	93	74	96	71	84	0	.1	-.8	T	6.1	67	90	48	7	0	2	0	
Waco	99	74	101	70	87	3	.1	-.5	.1	.4	7	82	31	7	0	1	0	
Wichita Falls	100	72	103	68	86	3	.2	-.3	.2	.6	8	70	26	7	0	0	0	
UTAH.Blanding	82	50	85	--	66	-2	0	-.3	0	.7	23	54	17	0	0	0	0	
Salt Lake City	83	55	91	50	69	-2	.1	-.1	T	2.0	69	64	25	2	0	2	0	
VT.Burlington	80	60	85	54	71	6	2.1	1.3	.9	12.3	118	96	62	0	0	5	2	
VA.Lynchburg	93	62	95	58	78	5	0	-.9	0	5.6	49	97	--	7	0	0	0	
Norfolk	90	67	93	61	78	2	0	-1.2	0	6.9	45	88	44	5	0	0	0	
Richmond	95	66	98	61	80	5	0	-1.0	0	7.8	56	95	41	7	0	0	0	
Roanoke	89	60	91	59	75	2	.1	-.8	.1	10.0	90	66	43	3	0	1	0	
WASH.Colville	70	44	79	39	57	-7	.7	.7	.6	4.1	512	--	--	0	0	3	0	
Omak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Quillayute	63	48	67	37	55	-3	.9	.2	.4	3.6	101	98	69	0	0	4	0	
Seattle-Tacoma	68	51	78	46	59	-4	.5	.2	.3	2.9	91	86	49	0	0	4	0	
Spokane	71	45	80	39	57	-8	T	-.1	T	2.1	88	76	29	0	0	0	0	
Walla Walla	77	54	88	47	65	-6	.1	0	.1	1.4	70	59	28	0	0	0	0	
Yakima	77	43	84	36	60	-6	.3	.2	.3	1.4	117	78	32	0	0	3	0	
W.VA.Beckley	81	60	82	57	70	3	T	-.8	T	14.9	121	96	50	0	0	1	0	
Charleston	88	65	92	63	76	4	.4	-.3	.2	20.8	173	99	60	1	0	2	0	
Huntington	87	65	89	63	76	4	.2	-.5	.1	15.5	141	98	57	0	0	0	0	
Parkersburg	88	65	91	63	77	5	.9	.2	.6	15.8	135	88	54	5	0	2	1	
WISC.Green Bay	74	61	78	55	67	2	2.0	1.3	.8	12.2	134	96	78	0	0	6	2	
La Crosse	81	68	90	64	74	5	3.3	2.6	1.2	15.7	144	94	77	1	0	6	3	
Madison	80	62	90	60	71	5	2.3	1.6	.8	15.6	141	94	67	1	0	4	3	
Milwaukee	77	62	86	55	70	3	.1	-.5	.1	13.2	138	94	64	0	0	1	0	
WYO.Casper	78	48	86	43	62	-4	.3	.2	.1	1.6	57	74	23	0	0	2	0	
Cheyenne	75	51	84	44	63	-2	.3	0	.2	3.6	62	73	30	0	0	3	0	
Lander	76	50	83	44	63	-3	T	-.1	T	.5	17	63	24	0	0	1	0	
Sheridan	75	46	89	39	61	-5	T	-.3	T	2.4	79	79	27	0	0	3	0	
P.R.San Juan	91	78	93	77	85	3	1.2	-.4	.4	6.4	34	85	55	0	0	0	0	

Based on preliminary reports and 1941-70 normals

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 3° above normal. Rainfall below normal in the northcentral areas, adequate in coastal and northeast areas.

Fieldwork: 5.8 days. Soil moisture very short to short. Activities: Applying chemicals, harvesting hay and corn, care of livestock and poultry. Corn: Mature 93%, 82% 1979, 73% average; harvested 46%, 36% 1979. Soybeans: Blooming 98%, 97% 1979; setting pods 86%, 86% 1979; leaves turning yellow 18%, 9% 1979; dropping leaves 10%, 4% 1979. Cotton bolls open 20%, 4% 1979, 10% average. Peanuts dug 2%, 2% 1979. Condition: Corn and pastures poor, soybeans, cotton, peanuts, poor to fair, sorghum mostly fair.

ALASKA: Tanana Valley rather cool with the middle of the week wet. By week's end the first frost occurred. Matanuska Valley temperatures averaged near normal with light to moderate precipitation. Kenai Peninsula had seasonal temperatures with only light amounts of precipitation. Kodiak Island temperatures averaged above normal with only light amounts of precipitation.

Prospects for small grain crops varied widely throughout Rail Belt. Tanana Valley grain crops ranged from below average to above average. Matanuska Valley prospects were average or below. Small grains turning color, small percentage turning ripe. Some dairymen completed harvest silage and second crop hay. Few areas had up to 5 days suitable for haying. Most less than 3 days. Harvesting of potatoes underway. Prospects for potatoes ranged below average to above average. Soil moisture supplies adequate to surplus.

ARIZONA: Scattered showers mainly over central mountains, amounts under 0.50 in. Average temperatures from 3° below to 3° above normal.

Cotton crop continues developing well, 60% stands having bolls opening. Insect controls picking up for bollworm, other insects, but still below normal for second year in row. Sorghum harvest begun Yuma area. Corn making seasonal progress. Planting 1981 sugarbeet crop begun. Alfalfa haying continues with southwestern areas in 6th cutting while other areas in 4th and 5th. Land preparation, planting fall and early winter vegetables well advanced. Lemon harvest continues on increasing scale. Other citrus fruits developing normally. Groves generally good condition. Lack of rainfall contributed deterioration rangeland. Southern ranges poor to fair condition, fair conditions central and northern. Livestock fair to good, water short to adequate.

ARKANSAS: Widely scattered light rainfall. Temperatures averaged up to 7° above normal.

Soil moisture short. Some abandonment of crop acreage continued. Fieldwork possible 7.0 days. Soybeans blooming 86%, setting pods 63%. Several fields baled for hay. Rice 5% harvested, 0% 1979, 2% average. Rice headed 90%. Cotton open bolls 33%, 5% 1979, 7% average. Corn 30% harvested, 11% 1979, 22% average. Sorghum 28% harvested, 3% 1979, 17% average. Much of corn and sorghum being harvested for silage instead of grain. Cattle marketings heavy due to lack of pasture and water. Supplemental feeding necessary. Cattle losing weight, milk production declining. No hay regrowth. Pastures supplying below average feed.

CALIFORNIA: Temperatures 1 to 3° below normal most areas. Few showers and thunderstorms.

Crop progress good. Small grain stubble being burned or baled. Rice behind normal, 65% headed and 10% turning compared to 95% and 31% last year. Cool evenings slowing maturity. Cotton bolls set in most fields with 8% open compared to 17% last year. Corn maturing and nearing harvest. Some silage cutting. Milo harvest beginning in some areas. Sugarbeets progressing normally. Alfalfa seed harvest in full swing. Apple harvest started. Raisin grape laying underway. Tokay harvest beginning. Wine grape harvest underway. Nectarine harvest continues. Cling peach harvest slowing. Free-stone peach harvest continues. Bartlett pear harvest ending. Plum packouts low. Pomegranates and prunes harvested. Desert lemon harvest beginning. Valencia orange harvest active. Almond and pistachio harvest underway. Walnut harvest beginning in a few weeks. Artichokes light. Broccoli, Brussels sprouts, carrot, celery, cauliflower movement remain about same Central Coast. Planting cauliflower westside. Snap beans doing well. Cantaloupes active, some between early and late crop. Miscellaneous melon harvest shifting northward. Bell peppers increasing. Potatoes look good in Tulelake. Riverside in full swing. Processing tomatoes yield good. Fresh market tomatoes active King City, San Joaquin. Watermelons wind down Merced, active Stanislaus, San Joaquin. Ranges extremely dry, fire hazard high. Feed and water supplies adequate. Milk and egg production normal.

COLORADO: Light precipitation over widespread area, heavier amounts over the southwest. Light snow along front range on 31st. Temperatures below normal over Colorado and Rio Grande Basins, near normal Arkansas, Platte, and Kansas Basins.

Winter wheat seeded 7%, 7% 1979, 18% average. Barley harvested 68%, 67% 1979, 74% average. Spring wheat harvested 33%, 49% 1979. Corn dough 82%, 67% 1979, 72% average; dented 38%, 33% 1979, 45% average. Sorghum headed 97%, 88% 1979, 92% average; turned color 33%, 33% 1979, 41% average. Dry beans cut 17%, 8% 1979; threshed 6%. Onions harvested 10%. Alfalfa 2d cutting 83%, 100% 1979, 88% average; 3d cutting 29%, 34% 1979, 35% average. Five and one-half days suitable for fieldwork.

FLORIDA: Light easterly winds, near normal temperatures and widely scattered thundershowers prevailed. Thunderstorm activity increased over central and south the 30th and 31st with the approach of a tropical wave from the Atlantic.

Soil moisture mostly adequate, a few dry areas remain in Panhandle and middle east coast. Corn harvest complete in western Panhandle, continues in other areas. Tobacco marketing active. Peanut harvest light, increasing. Soybeans fair condition, early plantings in pod filling stage. Haymaking continues. Sugarcane good to excellent condition, light cutting for seed underway. Panhandle and northern pastures generally poor to fair; good to excellent other areas. Cattle good condition. Citrus grove condition very good to excellent. Rain spotty, irrigation continued north central groves. New growth varies depending on moisture. Harvest of 1980-81 grapefruit several weeks away. Vegetable planting continues to gain momentum for

the fall season. Snap bean planting increasing in southeast; early plantings of pole beans in Gadsden County being tied. Eggplant, pepper, celery, tomato plantings making excellent progress. Cucumber seeding active west central area; early plantings in Dade area have begun to put on runners. Sweet corn seeding very active in Everglades. Fall water-melons Sumter County area growing well. Cabbage plants in seedbeds in very good condition. Trans-planting expected to begin soon. Light squash seeding underway.

GEORGIA: Temperatures averaged close to normal. Low 70's mountains, near 80° elsewhere. Rainfall generally light, spotty amounts excess 2.00 in.

Soil moisture mostly very short to short. Six days suitable for fieldwork. Crops still under stress. Armyworm infestation increasing. Corn mostly poor to fair, salvage harvest for silage continues. Surviving fields 100% dough, 99% dent, 96% mature, 59% harvested, last year 54%, average 37%. Soybeans poor to fair, 64% setting pods, 8% leaf drop. Peanuts poor to fair, 4% dug, last year 9% and 11% average, threshed 3%, last year 4% and 6% average. Cotton poor to fair, 52% open, last year 34%, harvested 1%, last year none. Apples mostly fair to good, 56% picked, 67% last year. Pecans mostly fair to good. Pastures and hay crops poor to fair, armyworms still active. Cattle mostly fair to good. Hogs fair to good.

HAWAII: Weather generally warm. Showers light. Some heavy isolated rains.

Hot weather affecting tender leafy crops, island of Maui. Heavy irrigation most areas. Spraying frequent for disease and insect control. Vegetable supplies light to moderate most crops. Eggplant and mustard cabbage heavy. Banana supplies light. Papaya supplies light. Pineapple harvesting down. Harvesting, island of Maui, ceased for the next two weeks. Sugar harvesting steady. Pastures generally fair to good.

IDAHO: Cool temperatures late in week. Light precipitation. Temperatures range from 97 to 17°. Less than 0.10 in. precipitation.

Winter wheat harvested 64%, 84% 1979, 74% average. Spring wheat harvested 58%, 58% 1979, 53% average. Spring barley harvested 57%, 52% 1979, 56% average. Potato harvest just underway as early fields reach maturity. Sizing problems in eastern areas. Range in good shape. Fieldwork: 6.0 days.

ILLINOIS: Temperatures 5 to 10° above normal. Precipitation 0.30 to 2.00 scattered areas.

Soil moisture 43% adequate, 57% short. Corn condition 4% excellent, 23% good, 54% fair, 19% poor; 85% dented, 57% last year, average 74%; 40% mature, 12% last year, average 35%. Soybean condition 4% excellent, 48% good, 41% fair, 7% poor; 26% turning yellow, 6% 1979, 26% average; 8% shedding leaves, 0% 1979, 6% average. Winter wheat acreage 65% plowed, 55% 1979, 64% average. Alfalfa 4% excellent, 39% good, 46% fair, 11% poor; third crop cut 65%, 50% 1979, 61% average. Pastures 5% excellent, 28% good, 42% fair, 22% poor, 3% failure. Fieldwork: 6.8 days suitable.

INDIANA: Temperatures averaged 8° above normal and ranged from 50 to 96°. Rainfall 0.20 to 0.40 in. in central and south, 0.70 to 1.50 in. in north.

Soil temperatures and humidities above normal. Fieldwork averaged 7.0 days. Topsoil and subsoil moisture short to mostly adequate. Corn 95% in dough, 1979 90%, average 90%. Corn 60% dented, 1979 40%, average 55%. Corn 10% mature, 1979 5%, average 10%. Soybeans 99% setting pods, 1979 97%, average 91%. Soybeans 10% turning color, 1979 5%,

average 20%. Few fields shedding leaves. Wheat land 25% plowed, 1979 20%, average 35%. Silos 15% filled, 1979 10%, average 15%.

IOWA: Warm with heavy rains early in the north and across southern districts late. Lamoni and Rathbun dam reported rainfalls in excess of 7.00 in. Precipitation light from the west central into the northeast district.

Fieldwork: 5.5 days favorable. Topsoil moisture: 14% short, 70% adequate, 16% surplus. Subsoil moisture: 24% short, 68% adequate, 8% surplus. Corn in or past dough stage: 94%, 1979 78%, normal 91%. Corn in or past dent stage: 70%, 1979 33%, normal 67%. Corn acreage mature: 10%, 1979 0%, normal 18%. Soybean leaves turning: 26%, 1979 9%, normal 29%. Soybean leaves shedding: 4%, 1979 0%, normal 6%. Third crop alfalfa hay harvested: 66%, 1979 51%, normal 56%. Crop conditions improved. Pasture condition fair to good. Grain movement increased. Market movement slow.

KANSAS: Rains 1.00 in. to 2.00 in. north central and northeast, spotty 0.50 in. to over 1.00 in. parts of northwest, otherwise rainfall light and spotty. Temperatures averaged 71° northwest, 2° below normal. Elsewhere 74 to 77°, about 7° above normal east and south central.

Corn dough 95%, last year and average 90%; corn dented 60%, last year 50%, average 60%; corn mature 30%, last year 20%, average 25%. Sorghum headed 85%, last year 90%, average 85%; sorghum coloring 30%, last year 25%, average 30%. Soybeans podding 90%, last year and average 90%. Rain aided fall crops and seedbed preparation for 1981 wheat. Six days suitable fieldwork.

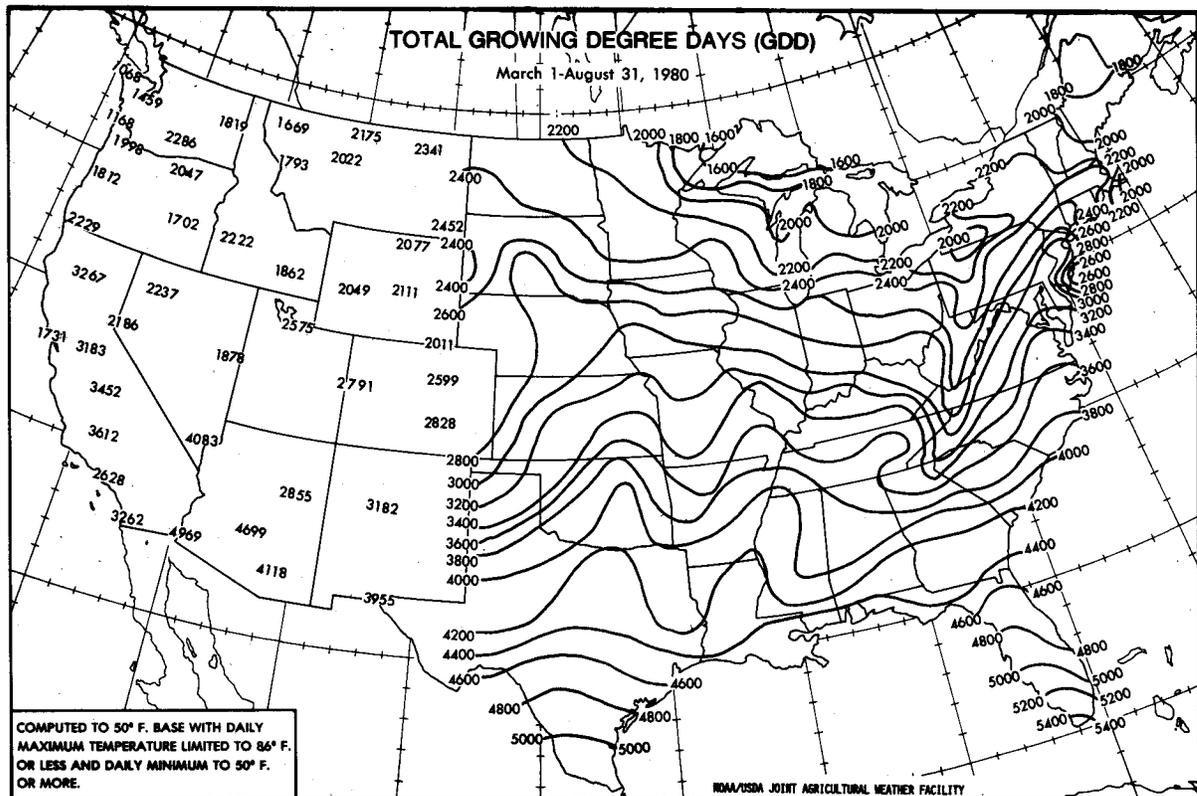
KENTUCKY: Mean temperatures continued to range well above normal, in most cases by 5 to 7°. Precipitation averaged around 0.50 in., however isolated amounts of more than 1.00 in. reported.

Continued hot and dry. Soil moisture 46% very short, 35% short and 19% adequate. Drought conditions prevail western and southeastern areas. Corn prospects decline. Corn condition 24% poor, 37% fair, 34% good and 5% excellent. Corn development: 20% mature, 50% dent but not mature. Dry conditions cut pod setting and bean development. Length of soybean growing season becoming big factor. Soybeans 87% podding, behind normal. Burley tobacco 24% cut, slightly behind normal. Dark tobacco 30% cut, normal. Rain needed for development of late tobacco crops. Tobacco condition mostly fair. Concern over hot curing conditions. Pastures and fall hay mostly short. Supplemental feeding some areas.

LOUISIANA: Rains scattered. Temperatures 1 below to 3° above normal. Extremes: 64 and 101°.

Soil moisture very short to short. Fieldwork: 6.1 days suitable. Corn mature 92%, 96% 1979. Harvested 58%, 46% 1979, 44% average. Cotton poor to fair. Open 33%, 4% 1979, 11% average. Light harvest underway. Rice fair. Headed 96%, 94% 1979. Ripe 82%, 78% 1979. Harvested 74%, 70% 1979, 67% average. Sorghum poor to fair. Turning color 84%, 84% 1979. Ripe 61%, 46% 1979. Harvested 26%, 21% 1979. Soybeans poor to fair. Set pods 83%, 88% 1979, 91% average. Leaves turning 17%, shedding 7%. Sugarcane fair. Light planting underway. Vegetables poor. Sweetpotatoes poor to fair. Harvested 34%, 26% 1979, 25% average. Pastures poor. Haying limited. Livestock fair. Some supplemental feeding.

MARYLAND & DELAWARE: Temperatures averaged 5° above normal. Highs low to mid 90's, lows in the 60's. Precipitation minimal.



Corn 70% dough, 70% dented. Harvest for silage, 30%, last year 10%. Soybeans 85% bloomed, 70% podded, last year 97% bloomed, 60% podded. Tobacco 50% harvested, last year 45%. Soil moisture supplies short. Fieldwork: 7.0 days suitable.

MICHIGAN: Temperatures well above normal ranging from 2 to 4° above normal Upper to 6 to 8° above normal Lower. Rain amounts were near 1.00 in. Upper and over 0.50 in. over Lower.

Crops matured at a very rapid rate due to warm temperatures. Corn in dough stage 95%, 72% last year, 90% normal. Corn dented 30%, 15% last year, 34% normal. Soybeans pods set 100%, 100% last year, 98% normal. Soybean leaves turning color 15%, 9% last year, 23% normal. Dry beans leaves turning 100%, 67% last year, 75% normal. Dry beans leaves dropping 40%, 19% last year, 31% normal. Dry beans harvested 3%, 0% last year, 5% normal. Oats harvested 95%, 81% last year, 91% normal. Potato harvest near normal. Hay harvest delayed tremendously due to continuing humidity. Hay 2d cut 85% complete, 100% last year and normal. Peaches, summer apples, blueberries and sweet corn in last half of picking season. Plums, pears, onions and tomatoes well underway. Diseases still causing damage to vegetables.

MINNESOTA: Temperatures averaged near normal, except 2 to 3° above normal in the south central and southeast and 4 to 5° above in the north central and northeast. Extremes: 93 and 35°. Precipitation averaged near normal. Exceptions were below normal precipitation in the west central and 1.00 to 3.00 in. above normal in the south central and southeast.

Wet fields, cool weather slowed crop development, harvest activity. Completion small grain harvest delayed three weeks, some fields lost because

sprouted. Hay quality lower. Third cutting growing well. Row crop development held back. Sunny weather needed to mature. Pastures improved greatly. Field corn: Denting 64%, 1979 8%, normal 55%; mature 5%, 1979 0%, normal 10%; silage cut 5%, 1979 0%, normal 9%. Soybeans: Turning yellow 28%, 1979 4%, normal 39%; shedding leaves 4%, 1979 0%, normal 9%. Spring wheat: Combined 84%, 1979 25%, normal 72%. Sweet corn for processing: Harvested 63%, 1979 35%, normal 59%. Seeded: Winter wheat 17%, 1979 6%, normal 13%; winter rye 16%, 1979 7%, normal 12%.

MISSISSIPPI: Scattered showers most areas. Greatest 24-hour rainfall 2.54 in. Temperatures ranged from 60 to 104°.

Soil moisture very short in Delta and northeast, elsewhere short to very short. Fieldwork: 6.1 days suitable. Pasture conditions worsened. Some soybeans cut for hay. In many areas crops have deteriorated too much to be helped by rains. Hay 80% harvested, 78% 1979, 74% average. Sorghum silage 58% harvested, 60% 1979. Peanuts 12% harvested, 14% 1979, 25% average. Corn for silage 90% harvested, 80% 1979. Sweetpotatoes 11% harvested, 15% 1979, 26% average. Soybeans 89% podding, 91% 1979, 83% average; 15% turning, 11% 1979; 4% shedding, 1% 1979 4% average; poor to fair condition. Corn 84% mature 60% 1979; 19% harvested, 11% 1979 and average; condition fair to poor. Cotton 55% open bolls, 4% 1979 22% average; condition fair to poor. Rice 94% headed 93% 1979, 86% average; 45% mature, 24% 1979; harvested 9%, 4% 1979; fair to good condition. Sorghum 49% ripe, 42% 1979. Pasture poor to fair condition. Pecans poor to fair condition.

MISSOURI: Temperatures averaged 5 to 6° above normal. Precipitation light and scattered.

Fieldwork: 6.2 days suitable. Corn 94% in dough stage, last year 92%, normal 88%. Corn 78% dented, last year 63%, normal 69%. Corn 25% mature, last year 11%, normal 20%. Grain sorghum 89% headed, last year 92%, normal 90%. Grain sorghum 29% mature, last year 14%, normal 23%. Soybeans 87% setting pods, last year 75%, normal 80%. Soybeans 6% turning color, last year 6%. Alfalfa hay third cutting, 88% harvested, last year 74%, normal 74%. Cotton 65% open bolls, last year 10%, normal 12%. Condition of soybeans, grain sorghum and cotton poor to fair. Condition of corn and pasture poor. Topsoil moisture supplies short.

MONTANA: Cool week again. Temperatures averaged 1 to 6° below normal. Freezing temperatures over much of west, southwest, and scattered areas in northcentral and central divisions. Highest temperature 94° at Broadus and Miles City, lowest 29° at West Yellowstone. Precipitation generally light except over southwest and southeast areas where moderate to heavy precipitation occurred.

Winter wheat seeding 10% complete. Moisture supplies short to adequate. Five days suitable for fieldwork. Crop progress to date, percentages followed by previous year and normal: Ripe but not yet harvested: winter wheat 25%, 10%, 15%; spring wheat 40%, 35%, 20%; barley 35%, 35%, 30%; oats 30%, 25%, 30%; harvested: winter wheat 75%, 90%, 85%; spring wheat 45%, 45%, 55%; barley 50%, 40%, 50%; oats 50%, 55%, 55%. Second cutting alfalfa hay 65% done. Fall and winter hay and forage supplies; short east, short to adequate central and surplus west. Twenty percent of cattle and 25% of sheep moved from summer ranges.

NEBRASKA: Temperatures cooler than normal. Precipitation generally light but widespread.

Dryland corn mostly fair to poor. Irrigated mostly good to fair. Dough stage 90%, 80% last year, 95% normal. Dent stage 60%, 20% last year, 60% normal. Maturity 10%, last year 1%, normal 10%. Soybeans mostly good to fair. Leaves turning 25%, 20% last year, 25% normal. Sorghum mostly good to fair. Heads turning 65%, 30% last year, 50% normal. Winter wheat seeding begun; moisture mostly favorable for germination. Topsoil and subsoil moisture both mostly short to adequate. Pasture and range feed supplies mostly short.

NEVADA: Cool weather dominated. Temperatures averaged below normal all areas except extreme south. Extremes: 27 and 101°. Light scattered rainfall. Strong winds accompanying storms caused minor damage extreme south.

Second cuttings alfalfa hay about completed northern two thirds State. Garlic harvest finished main producing area.

NEW ENGLAND: Above normal temperatures interrupted by a cool front midweek. Warm humid air returned. Scattered rainshowers on 31st, mostly in north. Shower amounts varied from 0.30 to 0.60 in.

Fieldwork: 5.0 days suitable. Hay 70% second crop and 25% third crop cut. Some farmers won't make 3d cut because storage full. Corn crop growing well. Harvest preparations underway south. About a third of the oats combined in northern Maine. Farmers killing vines on early variety potato fields in northern Maine. Have harvested about half of the potato crop in southern New England. Apple harvest of early varieties continues. Size a little smaller than normal. Dry weather slowed cranberry coloring. Vegetables good supply. Soil moisture mostly adequate north to short to very short south. Grazing conditions mostly adequate.

NEW JERSEY: Temperatures averaged 5 to 8° above normal. Extremes: 52 and 98°. Little or no precipitation fell second consecutive week. Estimated soil moisture, in percent of field capacity, averaged: 41 north, 32 central and 30 south.

Fieldwork: 6.0 days suitable. Soil moisture critically short in most areas. Summer vegetable volume light. Fall vegetable acreage developing well under irrigation. Irish potato harvest advancing. Very limited sweetpotato digging begun. Harvest of fall variety apples beginning. Peach harvest of the Blake and Cresthaven continues. Rio-Oso-Gem harvest started. Harvest of corn for silage becoming general. Late planted field corn and soybeans need rain. Pastures growth poor.

NEW MEXICO: Soil moisture still short. Dryland crops continue in poor condition. Irrigated crops fair to good. Cotton good condition with approximately 3% of bolls open, slightly behind normal but ahead of last year. Third cutting of alfalfa nearly complete in north, fourth cut 75% complete in south and fifth cut beginning in south. Irrigated grain sorghum fair to good condition with some in dough stage. Winter wheat seeding continuing. Corn good condition with some grain acreage being cut for silage. Ranges improved to fair condition but more rain needed to make winter grass. Livestock good condition.

NEW YORK: Temperatures averaged 3 to 10° above normal. Rainfall subnormal except for isolated storms.

Corn condition good, many fields dry. Oats 76% done, 84% 1979, 88% average. Second cutting alfalfa 83% in, 86% 1979, 92% average. Third cutting 32% cut, 29% 1979, 33% average. Harvest of vegetable crops continues strong all areas. Late potatoes maturing well. Early variety apple harvest active, quality good. Peach harvest active. Bartlett pear harvest underway western counties.

NORTH CAROLINA: Temperatures near normal to 3° above. Precipitation: No significant recordings.

Fieldwork: 6.3 days suitable. Soil moisture: 40% very short, 52% short, 8% adequate. Conditions: Apples fair to good; field tobacco, corn, cotton, soybeans, sorghum, sweetpotatoes fair; peanuts, hay poor to mostly fair; pastures poor to fair. Harvested: Sweetpotatoes 10%, 1979 9%, average 11%; flue-cured tobacco 71%, 1979 80%, average 75%; burley tobacco 20%; corn for grain 17%; corn for silage 60%; apples 18%, 1979 23%, average 24%; hay 76%, average 80%. Phenological stages: Cotton 38% opened bolls, 1979 13%; corn soft dough 99%, 1979 100%; corn dent 94%, 1979 83%; corn mature 76%, 1979 75%; soybeans flowered 89%, 1979 77%; soybeans pod set 65%, 1979 51%.

NORTH DAKOTA: Thunderstorms dropped more than 1.00 in. rain in central and east central sections. During the weekend a gentle light rain spread east. Temperatures were on the cool side and ranged from 2 to 5° below normal, reaching near freezing in the northeast. Extremes: 34 and 87°.

Continued wet weather promoted sprout damage and delayed harvest to where it is starting to fall behind normal. Sprouting very serious in durum affecting the ripe standing grain as well as grain in the swath. Some hail and a few tornadoes in central and east central portions damaged crops. Combining percentages followed by previous year and normal are: Hard red spring wheat 58, 31, 61; durum 35, 18, 44; barley 64, 62, 78; oats 73, 54, 75 and flax 21, 6, 18. Row crops much improved. Sunflower rated 62% good to very good, 31% fair and 7% poor. Potatoes 1% dug. Pasture growth

improved with only 20% poor versus 46% poor last week. Topsoil and subsoil moisture improved but subsoil moisture still short over more than half of the State.

OHIO: Mean temperatures were 5 to 9° above normal. Extremes: 55 and 90°. Precipitation variable. Most areas reported up to 0.50 in. The exception was the northwest, where precipitation ranged from 0.50 to 2.00 in.

Dry weather beneficial to corn and soybeans. Mexican bean beetles are doing economic damage in southwest, and the demand for aerial insecticide application services has exceeded supply. Spread of blue mold in burley fields has been checked. Flies and humidity are bothering cattle and dairy cows. Corn, dented or beyond 45%, 45% 1979, 65% average. Soybeans, pod set or beyond 95%, 90% 1979, 95% average. Soybeans, leaves turning yellow 15%, 10% 1979, 15% average. Tobacco cut 15%, 15% 1979, 20% average. Days favorable 6.0. Pasture condition good. Soil moisture 88% adequate, 12% surplus.

OKLAHOMA: Temperatures averaged 3 to 6° above normal. Precipitation ranged from 0.01 to 0.29 in.

Scattered showers again temporary relief many areas but generally widespread rains needed for drought cease. Dryland crops continued deteriorate, highly questionable whether rains would be much value if received. Wheat seedbed prepared 30%, 50% 1979, 45% average; wheat planted less than 1%, 5% 1979, 5% average. Sorghum headed 85%, 95% 1979, 95% average; sorghum milk to dough 50%, 50% 1979, 70% average; sorghum mature 15%, 10% 1979, 20% average. Cotton setting bolls 80%, 95% 1979 and average; cotton open bolls 10%, 5% 1979 and average. Days suitable for fieldwork: 6.4.

OREGON: Temperatures below normal, 8° below normal in central and northeast. Precipitation limited to coastal zone and the northwest corner averaging 0.10 in.

Soil moisture supplies mostly short to adequate in western and eastern portions, adequate in central. Winter wheat harvest 92% completed, 96% 1979. Storage facilities tight. Spring grain harvest progressing. Preparations for fall grass seeding. Peppermint harvest winding up. Bartlett pear harvest active, apples look good. Peach harvest in full swing. Filbert set heavy. Evergreen blackberries harvest still on. Cranberries turning color. Potatoes look good, harvest active at Hermiston-Boardman. Snap beans, broccoli and sweet corn harvest good. Livestock, range and pasture condition good.

PENNSYLVANIA: Temperatures ranged 5 to 11° above normal. Extremes: 95 and 49°. Precipitation very light and generally less than 0.50 in.

Six days suitable. Soil moisture short to adequate. Oat harvest virtually complete, last year 92%. Tobacco harvest 30%, last year 28%. Potato harvest 34% complete, last year 33%. Ensilage corn 14%, last year 6%. Corn 48% in dough, 29% in dent; last year 53% in dough, 17% in dent, and 2% mature; average 55% in dough, 26% in dent and 2% mature. Fall plowing 33%, last year 30%. Alfalfa second cutting 91%, last year 88%. Third cutting alfalfa 59%, last year 33%. Fourth cutting alfalfa 10%, last year 3%. Second cutting Clo-tim 92%, 67% 1979. Hay quality good to fair. Feed from pasture below average to average.

PUERTO RICO: Island average rainfall 1.03 in. or 0.73 in. below normal. Temperatures averaged 83° on coasts and 75 to 79° interior divisions. Extremes: 57 and 98°.

SOUTH CAROLINA: Some heavy precipitation in northwest, but most areas remained relatively dry. Highest temperatures 97°.

Days available for fieldwork: 6.0. Most row crops deteriorating in drought. Corn condition poor: 91% mature same as 1979, 88% average; 42% harvested, 47% year ago, 39% average. Cotton suffering dry stress, prematurely open bolls at 62%, 39% last year, 31% average; 1% harvested much earlier than last year, average. Soybean condition poor to fair, some shedding due to drought, heat stress; blooming 94%, 97% year ago, 90% average; some scarcely setting pods, 70%, 86% last year, 77% average; 10% leaves turning color ahead of usual due to drought. Tobacco 84% harvested, 98% year ago. Peaches 98% harvested, 99% last year. Apple condition poor to fair with disappointing color, size; 23% harvested, 54% last year, 43% average. Cattle fed hay since pastures very short. Planting winter grazing at 2%, early to meet future requirements sooner. Fall snap beans 79% planted, 97% last year. Fall cucumbers 81% planted, 87% last year. Irrigating fall tomatoes.

SOUTH DAKOTA: Cooler temperatures with scattered showers and thunderstorms. Temperatures ranged from 2 to 4° below normal in the east and 4 to 7° below normal in the west. Extremes: 96 and 35°. Rainfall ranged from 0.10 in. in west to 3.00 in. in the southeast.

Crop and pasture conditions continue to improve but only late planted corn acreage really benefited much from the moisture. The sunflower and grain sorghum crops have shown definite improvement. Livestock fair to good condition. High levels of nitrates and prussic acid in silage in drought areas. Sunflowers bloomed 97%, 91% 1979, 91% average. Soybeans shedding leaves 14%, 5% 1979, 9% average. Flax harvested 66%, 25% 1979, 69% average. Corn dough stage 80%, 61% 1979, 84% average. Corn dented 44%, 18% 1979, 48% average. Corn mature 10%, 3% 1979, 10% average. Grain sorghum colored 39%, 39% 1979, 40% average. Winter wheat seeded 6%, 1% 1979, 4% average.

TENNESSEE: Scattered showers few areas, amounts generally less than 0.50 in. Temperatures averaged above normal, highs ranged mid 80's to mid 90's.

Fieldwork: 6.0 days suitable. Soil moisture levels very short. Activities: Harvesting tobacco and corn, mowing pastures, spraying for insects. Corn 95% dented, 1979 83%, average 79%. Corn 38% matures, 1979 22%, average 28%. Corn 5% harvested, 1979 3%, average 3%. Cotton 15% open bolls, 1979 3%, average 11%. Soybeans 90% setting pods, 1979 87%, average 72%. Burley tobacco 80% topped, 40% harvested, 1979 45%, average 38%.

TEXAS: Weather: Scattered showers. Temperatures above normal. Rainfall above normal by 0.50 in. northeast, slightly above normal southeast. Remainder continued below normal. South central, Lower Coast near normal.

Commercial vegetables: In Lower Rio Grande Valley, planting of cabbage, cauliflower, tomatoes, broccoli continues. Early planted vegetables up, progressing well. In Coastal Bend area, planting of fall vegetables continued. In San Antonio-Winter Garden area, planting of fall vegetables nearing completion. Cabbage, tomatoes, broccoli up to a stand, making good growth. Some spinach land being planted Crystal City. In Central, most planting of fall vegetables being delayed by continued hot, dry weather. In East, planting of

beans, squash, peas, tomatoes, broccoli continued. Watermelon harvest continued with light supplies. Irrigated sweetpotatoes look good while dryland sweetpotatoes suffer from lack of moisture. On High Plains harvest of potatoes continues to taper off with light supplies. Carrot harvest begun. Steady supplies of cucumbers, cabbage, peppers available. In Trans-Pecos, harvest of cabbage, honeydew, corn, okra, squash, chili peppers active. Peach harvest continues North, High Plains with light supplies. Pecan prospects remain questionable as droppage continues.

Range and livestock: Recent scattered showers provided some relief from high temperatures, caused some greening up of ranges, pastures; however, available forage remained short, dry most areas. Improved conditions found South where heavy rains fell from Hurricane Allen. Emergency feed programs being established most drought stricken counties. Most livestock condition remained fair to good. Goat shearing continued Edwards Plateau.

Crops: Very little precipitation, hot, dry conditions continued. Dryland crops continued to mature rapidly and development in many corn, cotton, sorghum fields poor. Harvest of corn, cotton, sorghum continued. Land preparation for small grains delayed due to lack of moisture. Cotton harvest progressed slowly, moving towards Plains. Plains dryland fields hit hard by drought. Some fields being plowed up, others continue to wilt, drop bolls. Intense heat promoted early maturing. Harvest continued Blacklands, Cross-Timbers and expected to gain momentum as fields nearing full maturity. Irrigated fields in fair condition. Gradual, steady build-up of bollworm activity. Rio Grande Valley harvest virtually complete, wet cotton in modules soaked by Hurricane Allen's rains, continued problem. Sorghum harvest 70% complete. North central portion many fields being grazed out, baled because of poor grain development. Heads failed to develop on many dryland stands in Plains. These fields may be grazed, baled. Irrigated fields withstood heat fairly well. Plains, Blacklands, Cross-Timbers, greenbugs appearing, have caused light damage. Corn harvest 42% complete. Fields remaining wilting rapidly, stalks breaking, ears dropping. High and Low Plains fields being cut for silage. High Plains irrigated fields in fair condition, prospects remain fair to good. Insects, disease minimal. First cutting of rice virtually complete, producers awaiting second crop. Soybeans have been revived by recent showers, fair to good condition. Some fields being cut for hay. Blackland, Northeast plants flowering, setting pods. Coast plants setting, filling pods. Hay harvest virtually stopped, growth of hay fields, meadows minimal. Additional rainfall needed to produce second cutting. Cotton open bolls 26%, 17% 1979. Cotton harvested 14%, 8% 1979, 10% average. Sorghum harvested for grain 70%, 58% 1979, 59% average. Wheat planted all purposes 1%, 4% 1979, 3% average. Corn for grain harvested 42%, 31% 1979, 28% average.

UTAH: Recurring periods shower and thunder-storm activity most areas. Accumulated amounts moisture generally moderate but locally heavy few stations. Temperatures averaged from 2° above normal to 7° below.

Small grain harvest winding down with only high elevation areas still active. Winter wheat 85% combined, spring wheat 74% and barley 82%. Between 25 and 33% of third crop hay harvested. Cattle coming off summer ranges in good condition. Flies and pinkeye have been troublesome. Peach and pear picking active. Dry onion harvest to begin in a week, dry beans in two weeks. Corn all tasseled but developing slow.

VIRGINIA: Hot, humid. Average temperatures in upper 70's, slightly above normal. Extremes: 50's to 100°. Rainfall very light occurring as isolated showers, averaging less than 0.10 in.

Aflatoxin showing up in drought stressed corn. Very few peanut runners pegged due to dry, hard soils southeast. Topsoil moisture mostly short. Fieldwork: 5.9 days available. Corn: 90% in dough, 70% dented, 50% mature; 15% silage cut; 10% grain combined, 5% 1979, 9% average. Tidewater, southeast corn for grain 20% combined, 6% 1979. Tobacco harvested: Flue-cured 50%, 55% 1979, 55% usual; fire-cured 35%, 60% 1979, 44% average; burley 25%, 25% 1979, 31% usual; sun-cured 30%, 35% 1979, 46% average. Apples 10% picked, 6% 1979, 11% usual. Peach harvests winding up. Most tobacco in good condition, except only fair eastern flue-cured belt. Soybeans rated poor with aerial spraying of heavy spider mite. Corn earworm infestations active. Peanuts fair. Pastures poor to fair, clipping active. Tomatoes picked; fall cucumbers, snap beans irrigated Eastern Shore.

WASHINGTON: West: Temperatures averaged 1 to 4° below normal with precipitation a little below in most areas. Vegetable harvests continued, including lettuce, cabbage, cauliflower, sweet corn, broccoli, and cucumber. Combining of cabbage seed and swathing of spinach seed took place. Green pea harvest virtually complete, carrots and silage corn to begin soon. Blackberry picking continued. Pastures made good growth. Late vegetables still behind schedule due to the cool weather. Haying operation slowed, but supplies remain adequate.

East: Temperatures averaged several degrees below normal. Precipitation was below normal, except Colville and Pullman which were above normal. Bartletts about done and D'Anjou's starting, peaches, plums, prunes, and early Golden Delicious apple harvests continue. Both Red and Golden Delicious apples in good condition. Norgold potatoes and early Russet varieties were dug. Hops, sweet corn, and alfalfa were also harvested. Wheat harvest progressed rapidly. Barley harvest nearing completion. Some oats and dry beans also harvested. Range and soil moisture conditions remain adequate.

WEST VIRGINIA: Temperatures above normal. Extremes: 96 and 44°. Precipitation well below normal, average less than 1.00 in. Soil moisture adequate. Average days worked: 4.9. Major activities: haying, pasture clipping, gardening. Hay good, 2nd cutting 67% complete 84% of normal. Oats good to fair, 93% harvested, 89% of normal. Corn good to fair, 6% pre-silked, 43% silked and 51% dough stage. Potatoes good to fair, 44% harvested 83% of normal. Tobacco fair, 30% harvested, 75% of normal. 85% topped. Pastures good to fair. Gardens fair to good. Dry weather allowed for harvesting progress.

WISCONSIN: Temperatures 2° above normal. Extremes: 92 and 42°. Rainfall continued above normal due to numerous showers and thunderstorms. Totals ranged from 0.50 in. southeast to 2.50 in. west central. Many stations had record high rainfall in August.

Rain and wet fields slowing harvesting. Fieldwork: 2.0 days suitable. Oats 80% harvested, 1979 60%, normal 90%. Some acreage

(continued on page 16)

International Weather and Crop Summary

August 25 - 31

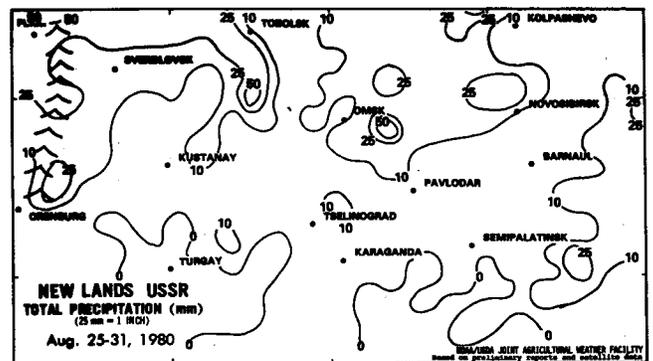
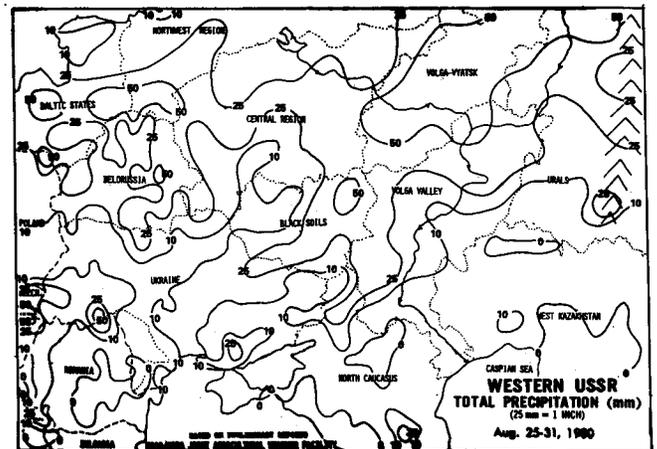
HIGHLIGHTS:

- USSR: Harvesting winter grain in the north...wet, cold.
Harvesting spring grains in the southern New Lands...wet in the north;
dry in the south.
- EUROPE: Harvesting winter grains in the north...some areas continue too wet.
- CHINA: Spring-sown crops nearly mature in central areas*...wet in the south,
generally favorable elsewhere.
- INDIA: Rice heading in the north*...wet in Uttar Pradesh and Madhya Pradesh.
Cotton in vegetative stage in central areas...relatively dry in cotton-
producing region.
- THAILAND: Wet season crop in vegetative stage*...monsoon rains slacken in most areas.
- AUSTRALIA: Winter grains beginning spring growth*...dry weather continues.
- ARGENTINA: Winter grains beginning spring growth*...dry in west.
- BRAZIL: Winter grains beginning spring growth*...favorable weather.
- CANADA: Harvesting cereal crops...favorable harvest weather, except for northwest
and southeast wheat areas.
- MEXICO: Planting vegetables in the west coast...irrigation water storage increasing
from rains over the watersheds.

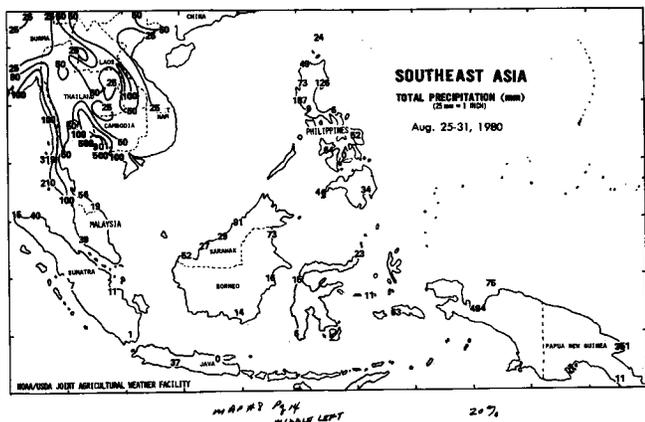
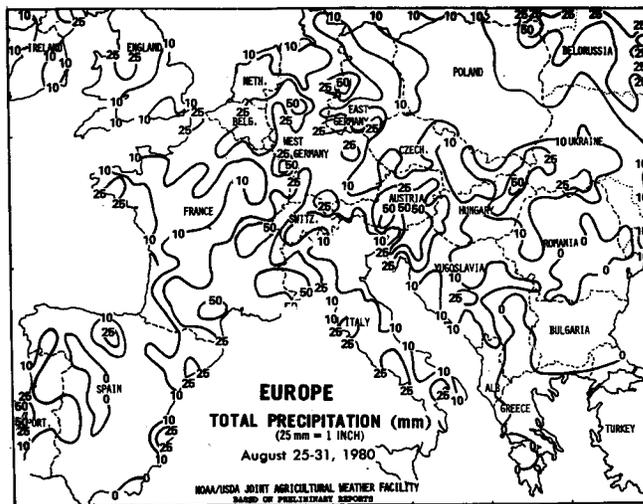
*Based on normal crop calendar information.

USSR. The cold, wet weather pattern which has complicated crop development throughout this season continued this week. Locally heavy rain (25 to 50 mm) fell in northern areas, which are still involved in harvesting. These crop areas of European USSR include Belorussia, Central Chernozem region, and all but the lowest part of the Volga Valley. The harvest weather delays continue to increase concern about autumn grain sowing. Scattered frost occurred late in the week in the Central Chernozem region, the upper Volga Valley, and Urals which further aggravates the crop situation.

In the New Lands, above-average rain (25 to 50 mm) fell in the northern crop area from Sverdlovsk to Omsk to Novosibirsk. The wet weather continued to hamper ripening in the north. Relatively dry weather aided spring grain harvests in the southern portion of the New Lands.

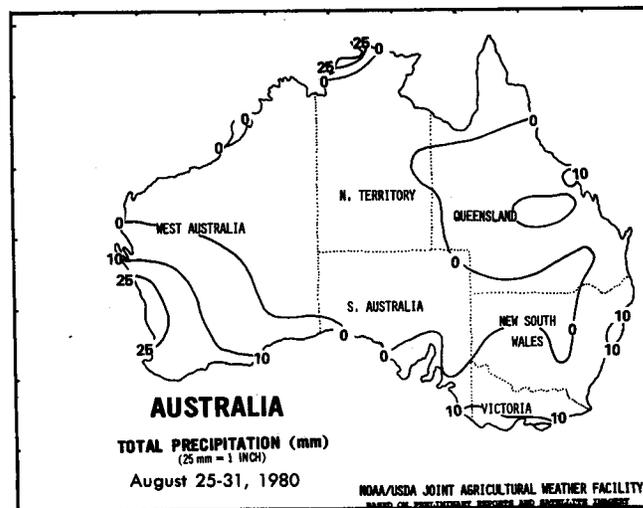


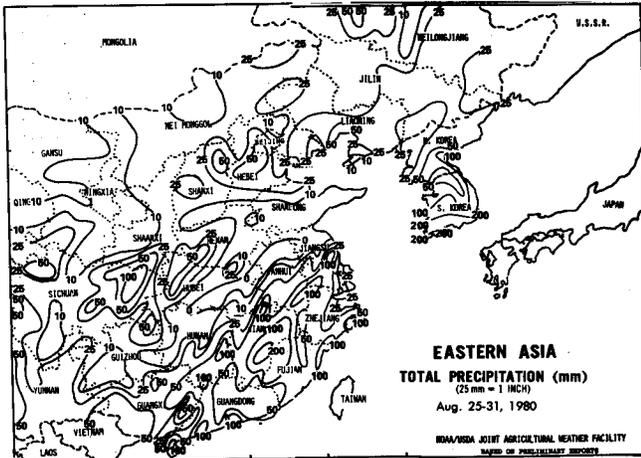
EUROPE. A highly variable rainfall pattern this week resulted from two storm systems moving across Europe. One storm pushed across southern Europe bringing rain to previously dry parts of the Iberian peninsula, southern France, and Italy. At the same time, a frontal system worked its way across northern Europe producing above-average rain in northern France, the Benelux countries, West Germany, Austria, and Yugoslavia. In the major crop areas of France, southern England, and most East European countries, the relatively light amounts did not slow grain harvests. Temperatures, in general, were mostly below average throughout Europe, especially in areas of above-average precipitation. The cool wet weather slowed harvesting activities in these areas.



SOUTHEAST ASIA. Rainfall was quite variable in Thailand with above-average precipitation concentrated only along coastal regions. Most of the interior received below-average weekly rainfall except for the north central, rice-producing area of Thailand where seasonal amounts fell. Although moisture is plentiful for wet season crops such as rice, maize, cassava, and groundnuts, reservoir levels need to be increased for use to generate hydroelectric power and to meet dry season irrigation needs.

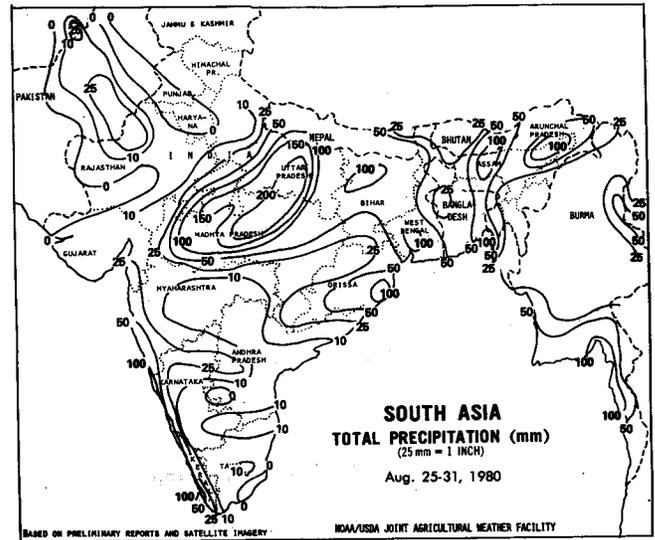
AUSTRALIA. The winter wheat areas of southern and eastern Australia received virtually no rainfall this week. The crop area of western Australia did receive 10 to 25 mm of rain, which improved crop prospects in the second largest wheat-producing state of Australia. Additional moisture is needed in New South Wales, the largest producing state, to maintain the crop condition as the spring growth period begins. In Queensland, drought conditions have caused extensive stress to the crop.



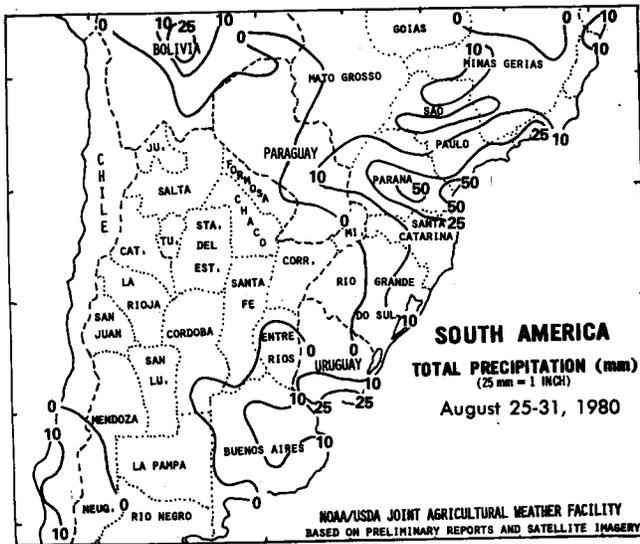


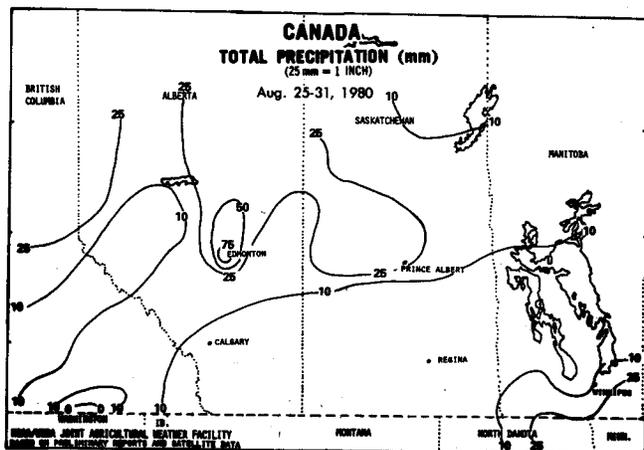
CHINA. Much of the Yangtze Valley continued to receive above-average rainfall this week; however, the heaviest concentration shifted further south from southern Jiangxi, southern Hunan through Guangxi. Rice is the major crop grown in this region. Coastal areas of Zhejiang received heavy rainfall from the remnants of Typhoon Norris. Cotton-producing areas of Jiangsu and Hubei continued to receive above-average rainfall. The nearly-matured cotton crop in the Yangtze River Basin has been severely damaged by heavy rains and subsequent flooding. Hebei and Beijing received some much-needed rainfall. Harvesting of corn and soybeans will begin soon in northern China.

SOUTH ASIA. Except for the west coastal regions, southern India was relatively dry this week. Moisture supplies are less than adequate in Tamil Nadu and interior Karnataka causing some stress to cotton and groundnuts. Heavy rainfall in north central India, especially in Uttar Pradesh and Madhya Pradesh, ranged from 100 to 230 mm. Rice is the main crop in this area. The heavy rain aggravated the problem of flooding along the Ganges River Basin. Below-average rainfall occurred in Bangladesh.



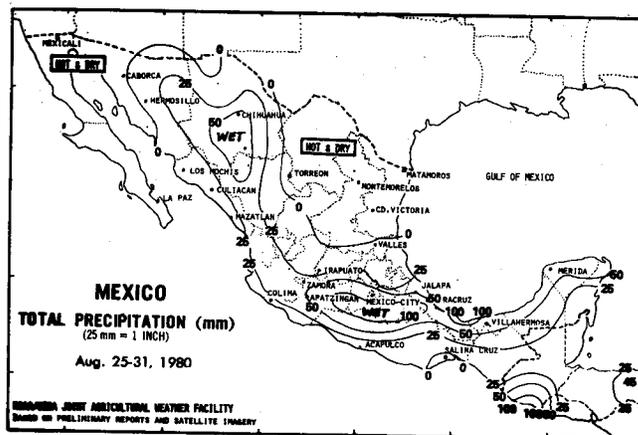
SOUTH AMERICA. Light showers produced generally less than 15 mm of rain this week in Buenos Aires Province, Argentina's major wheat-producing state. Conditions remain favorable for wheat in this province; however, lack of moisture in the adjacent provinces of La Pampa and Cordoba is raising concern for crops in these areas. In Brazil, northeastern Rio Grande do Sul State received 10 to 18 mm, but further north, the winter wheat area of Parana State benefited from weekly totals of 25 to 50 mm. Moisture is ample in this area. Mild temperatures prevailed in Brazil's coffee belt.





CANADA. Cool, clear weather prevailed over the Canadian Prairies early in the week providing favorable harvesting conditions. Light showers occurred in most of the Canadian wheat belt later in the week. However, conditions remained favorable for harvesting in Saskatchewan where over 50 percent of the grain crop has been harvested. In Alberta, heavy showers produced 50 to 85 mm near Edmonton, while cold nighttime temperatures slowed ripening and produced frost which may have damaged some late maturing crops. In Manitoba, weekly totals of 10 to 25 mm slowed harvesting.

MEXICO. Hot, dry weather in the northeastern citrus orchards decreased soil moisture left from Hurricane Allen. Ample irrigation water should be available after the storm. Seasonal rains continued in the northwestern mountain watersheds, which support fall and winter vegetable production along the west coast. Heavy rains during the past 2 weeks may have hurt some open cotton at Chihuahua. Sunny weather favored resumption of harvest at Torreon and Hermosillo. The Southern Plateau's corn crop had beneficial showers averaging 25 mm.



(continued from page 3)

VEGETABLES: Land preparation and planting of fall vegetables gained momentum in most areas. Summer vegetable harvests continued to decline.

California vegetable volume remained about the same on the central coast but increased slightly elsewhere. Florida growers planted a wide variety of fall vegetables. In Texas, fall planting continues in most areas, although the

(continued from page 12)

will not be harvested due to severe lodging and weed growth. Straw supply adequate but hard to get dry for baling. High moisture content in small grains. Third crop hay 15% harvested, 1979 5%, normal 10%. Excellent third crop growth but poor weather in August for harvest. Fourth crop coming fast where third crop removed. Pastures have good growth for fall grazing. Corn crop 45% in dent, 1979 5%, normal 35%. Wet fields could cause problems for harvesting corn silage. Soybeans have large plant growth and good pod fill. A few early soybean varieties turning yellow. Tobacco harvest in full swing, large plant growth but some storm damage. Potato and vegetable harvest hampered by wet weather. Some vegetable acreage bypassed. Mint harvest difficult due to rains. Good early apple crop being picked.

central region's planting was delayed by continued hot, dry weather.

PASTURES AND LIVESTOCK: Pastures and ranges rated fair to good except in parts of the Southeast, the south central region, and the West where poor to fair conditions continue. Supplemental feeding was still necessary in many areas. Livestock continued to be moved from summer pastures and ranges.

Cranberry crop looks good. Soil moisture mostly surplus.

WYOMING: Temperatures near normal. Extremes: 95 and 34°. Precipitation generally below normal with few exceptions.

Topsoil moisture short 64%. Winter wheat harvest virtually complete, 20% planted for 1981 crop. Small amount emerged. Spring wheat mature 90%. Harvested 75%. Oats mature 86%, harvested 62%. Barley mature 94%, harvested 80%. Dry beans setting pods 97%; windrowed 26%; combined 10%. Corn milk 31%; dough 45%; dented 22%; small amount mature. Second cutting alfalfa 74% complete, third cutting 18%. Other hay 92% harvested. Calf, lamb weights about same as last year. Livestock shipments about same as usual. Stock water adequate.

CROP PROGRESS

FOR WEEK ENDING AUG 31, 1980

	CORN % DONE		
	1980	1979	AVG.
COLO	88	67	72
GA	100	NA	NA
ILL	95	85	92
IND	95	90	90
IOWA	94	78	91
KANS	95	90	90
KY	95	93	94
MICH	95	72	90
MINN	94	26	82
MO	94	92	88
NEBR	90	86	95
N C	99	100	NA
OHIO	95	95	100
PA	48	53	55
S DAK	80	61	84
VA	90	NA	NA
WIS	85	50	75
17 STATES	92	NA	NA

EXCL. STATES WITH NA 92 74 89
 THESE 17 STATES PRODUCED 93% OF THE 1979 CORN CROP.

	SOYBEAN % SETTING PODS		
	1980	1979	AVG.
ALA	86	88	NA
ARK	63	NA	NA
GA	64	NA	NA
ILL	99	96	98
IND	99	97	91
IOWA	100	100	100
KANS	90	90	90
KY	87	90	89
LA	83	86	91
MICH	100	100	98
MINN	99	95	98
MISS	89	91	83
MO	87	75	80
NEBR	100	99	100
N C	65	51	NA
OHIO	100	100	100
S C	70	86	77
TENN	90	87	72
18 STATES	90	NA	NA

EXCL. STATES WITH NA 94 93 92

THESE 18 STATES PRODUCED 94% OF THE 1979 SOYBEAN CROP.

	SORGHUM % HEADED		
	1980	1979	AVG.
COLO	87	85	92
KANS	85	90	85
MO	89	92	90
NEBR	100	100	100
OKLA	85	95	95
S DAK	95	94	94
TEX	96	98	NA
7 STATES	92	95	NA

EXCL. STATES WITH NA 90 93 90

	CORN % DENT		
	1980	1979	AVG.
COLO	38	33	45
GA	99	NA	NA
ILL	85	57	74
IND	60	40	55
IOWA	70	33	87
KANS	60	50	60
KY	70	50	67
MICH	30	15	34
MINN	64	8	55
MO	78	63	69
NEBR	80	28	80
N C	94	83	NA
OHIO	48	45	65
PA	29	17	26
S DAK	74	18	48
VA	70	NA	NA
WIS	45	5	35
17 STATES	64	NA	NA

EXCL. STATES WITH NA 62 33 59

	COTTON % BOLL'S OPENING		
	1980	1979	AVG.
ALA	20	4	10
ARIZ	60	NA	NA
ARK	33	5	7
CALF	8	17	NA
GA	52	34	NA
LA	33	4	11
MISS	55	4	22
MO	65	10	12
N MEX	3	0	5
N C	38	13	NA
ORLA	10	5	5
S C	62	39	31
TENN	15	3	11
TEX	26	17	NA
14 STATES	28	NA	NA

EXCL. STATES WITH NA 34 5 13

THESE 14 STATES PRODUCED 99% OF THE 1979 COTTON CROP.

	SORGHUM % COLORING		
	1980	1979	AVG.
COLO	33	33	41
KANS	30	25	30
MO	NA	NA	NA
NEBR	65	30	50
OKLA	80	50	70
S DAK	39	39	40
TEX	70	67	NA
7 STATES	NA	NA	NA

EXCL. STATES WITH NA 41 30 40

THESE 7 STATES PRODUCED 92% OF THE 1979 SORGHUM CROP.

17 LESS THAN 5%
 NA = NOT AVAILABLE

	CORN % HARVEST		
	1980	1979	AVG.
COLO	17	17	17
GA	96	NA	NA
ILL	40	12	35
IND	10	5	10
IOWA	10	6	10
KANS	30	20	29
KY	20	13	10
MICH	1	0	2
MINN	5	0	10
MO	25	11	20
NEBR	10	1	10
N C	74	75	NA
OHIO	NA	NA	NA
PA	0	2	2
S DAK	10	3	10
VA	50	NA	NA
WIS	0	0	0
17 STATES	NA	NA	NA

EXCL. STATES WITH NA 15 4 10

	RICE % HEADED		
	1980	1979	AVG.
ARK	90	NA	NA
CALF	65	95	NA
LA	96	94	NA
MISS	94	93	86
TEX	100	100	NA
5 STATES	89	NA	NA

EXCL. STATES WITH NA 94 93 86

	RICE % HARVESTED		
	1980	1979	AVG.
ARK	5	0	2
CALF	0	0	NA
LA	74	70	67
MISS	9	4	NA
TEX	100	97	94
5 STATES	35	31	NA

EXCL. STATES WITH NA 45 41 41

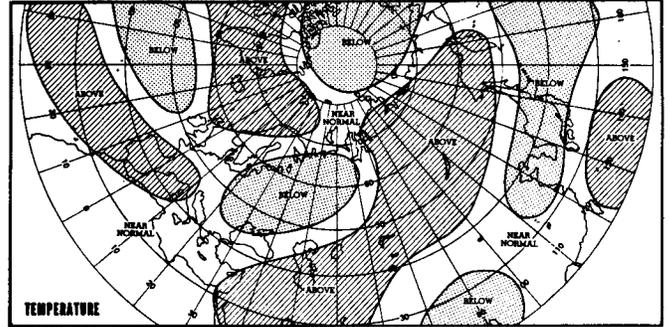
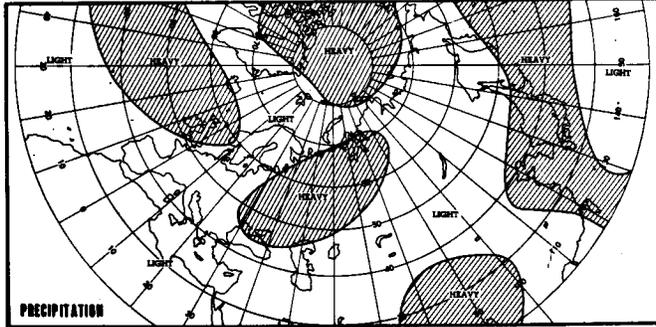
	SPRING WHEAT % HARVESTED		
	1980	1979	AVG.
IOWA	58	58	53
MINN	84	25	72
MONT	45	45	55
N D	58	31	61
S DAK	100	81	98
5 STATES	67	41	67

THESE 5 STATES PRODUCED 92% OF THE 1979 SPRING WHEAT CROP.

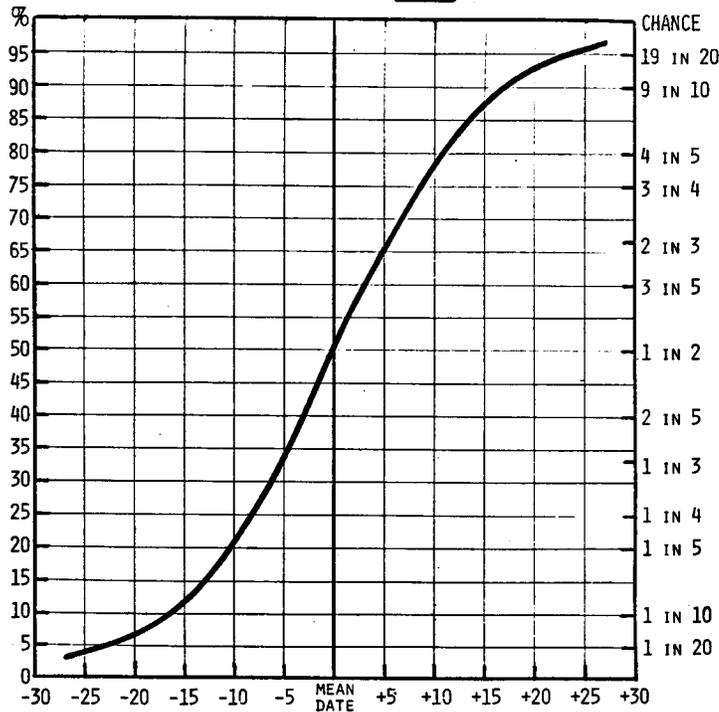
EURASIA WEATHER OUTLOOK ... SEPTEMBER 1980 ... CLIMATE ANALYSIS CENTER

The predicted monthly temperature and precipitation patterns outside the United States are by-products of the procedures used to make monthly forecasts for the United States itself. Those procedures require the construction of charts of expected monthly upper-air circulation around the Northern Hemisphere, from which inferences about corresponding surface weather can be made. In areas outside the United States, in-

ferences should be regarded as tentative since they have not been systematically tested by observation and their average accuracy remains unknown. The weather services of many of the nations of the Hemisphere issue tested monthly forecasts for their own territories. Those forecasts should be consulted where available.

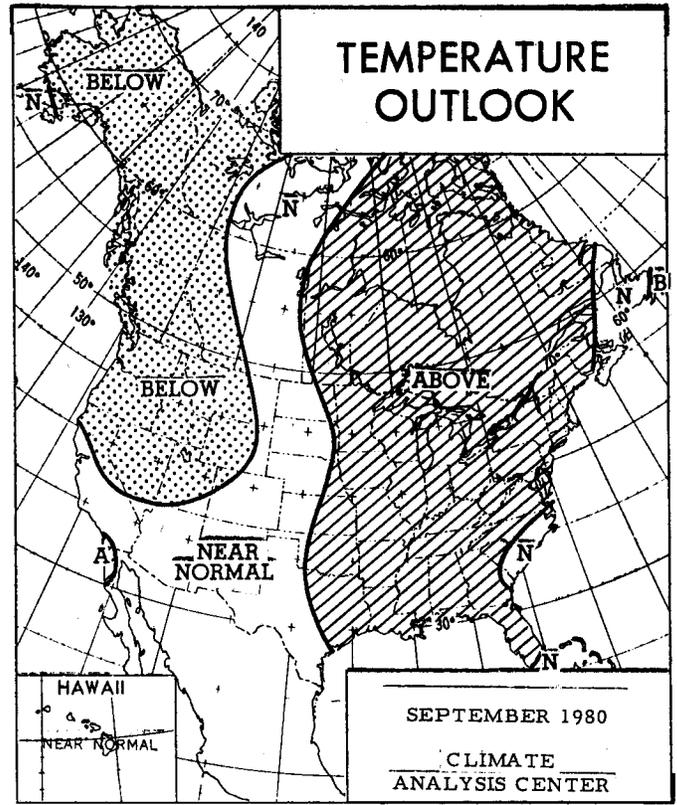
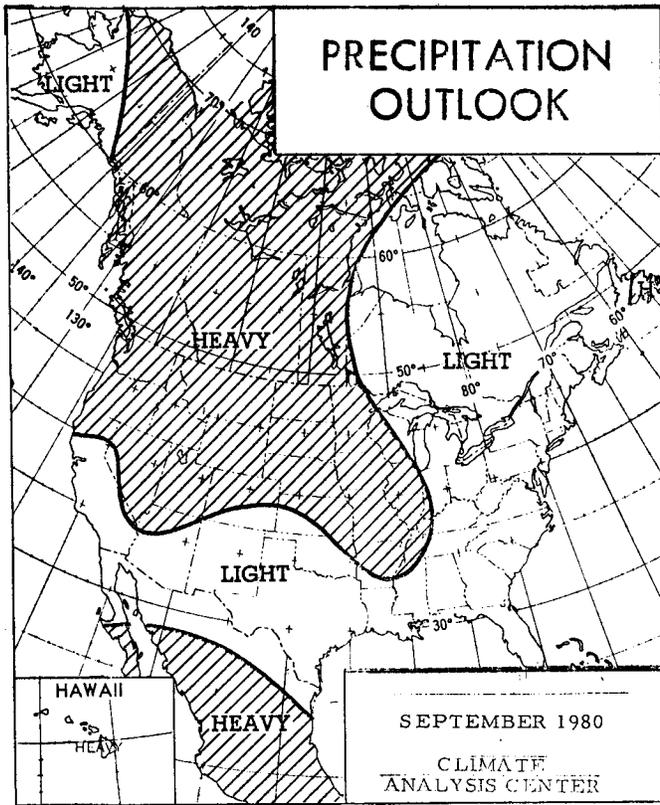


PROBABILITY OF FIRST FALL FREEZE BEFORE A CERTAIN DATE



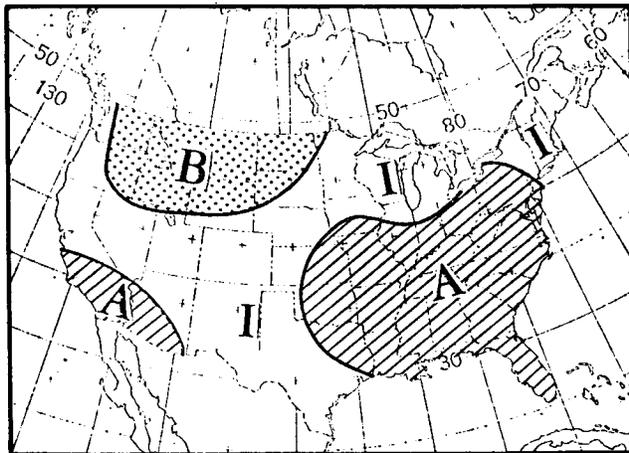
NUMBER OF DAYS TO SUBSTRACT FROM, OR ADD TO, THE MEAN DATE OF FIRST FREEZE (32 °F OR LOWER) IN THE FALL, TO OBTAIN OTHER PROBABILITIES OF OCCURRENCE. THE NATIONAL CURVE DEPICTED ABOVE WAS DERIVED FROM NUMEROUS, LONG-TERM REPORTS THROUGHOUT THE NATION. DH

Average Monthly Weather Outlook



OUTLOOK FOR FALL AVERAGE TEMPERATURES

SEPTEMBER THROUGH NOVEMBER 1980

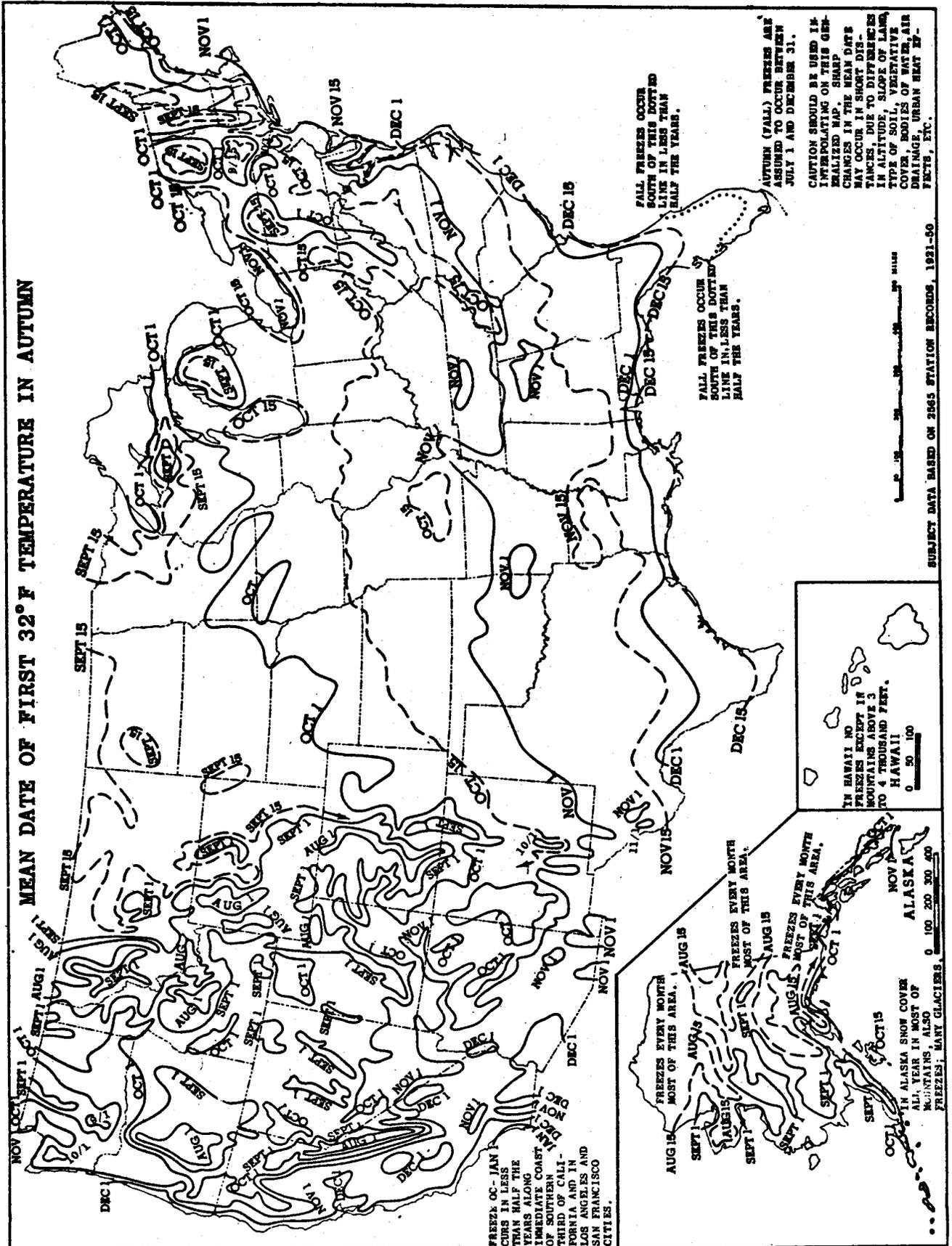


-  **A** ABOVE NORMAL, 60% CHANCE OF OCCURRENCE
-  **B** BELOW NORMAL, 60% CHANCE OF OCCURRENCE
-  **I** INDETERMINATE, 50% CHANCE OF ABOVE NORMAL
50% CHANCE OF BELOW NORMAL

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the year 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-one years of experimental seasonal predictions.

NOAA, National Weather Service, Climate Analysis Center

MEAN DATE OF FIRST 32°F TEMPERATURE IN AUTUMN



FREEZE OCT-JAN IN LESS THAN HALF THE YEARS ALONG IMMEDIATE COAST OF SOUTHERN THIRD OF CALIFORNIA AND IN LOS ANGELES AND SAN FRANCISCO CITIES.

FALL FREEZES OCCUR SOUTH OF THIS DOTTED LINE IN LESS THAN HALF THE YEARS.

FALL FREEZES OCCUR SOUTH OF THIS DOTTED LINE IN LESS THAN HALF THE YEARS.

AUTUMN (FALL) FREEZES ARE ASSUMED TO OCCUR BETWEEN JULY 1 AND DECEMBER 31.

CAUTION SHOULD BE USED IN INTERPOLATING ON THIS GENERALIZED MAP. SHARP CHANGES IN THE MEAN DATE MAY OCCUR IN SHORT DISTANCES, DUE TO DIFFERENCES IN ALTITUDE, SLOPE OF LAND, TYPE OF SOIL, VEGETATIVE COVER, BODIES OF WATER, AIR DRAINAGE, URBAN HEAT ISLANDS, ETC.

IN HAWAII NO FREEZES EXCEPT IN MOUNTAINS ABOVE 3 TO 4 THOUSAND FEET. HAWAII

ALASKA: FREEZES EVERY MONTH MOST OF THIS AREA. AUG 15
 SEPT 15
 OCT 15
 NOV 15
 DEC 15

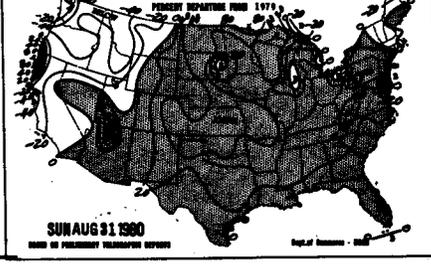
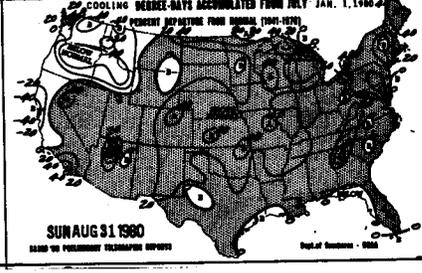
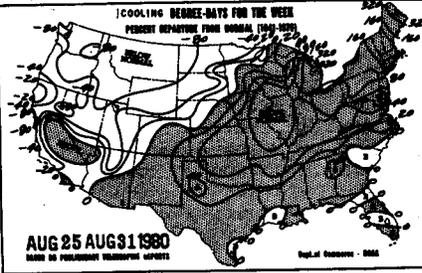
ALASKA: IN ALASKA SNOW COVER ALL YEAR IN MOST OF MOUNTAINS, ALSO FREEZES; MANY GLACIERS.

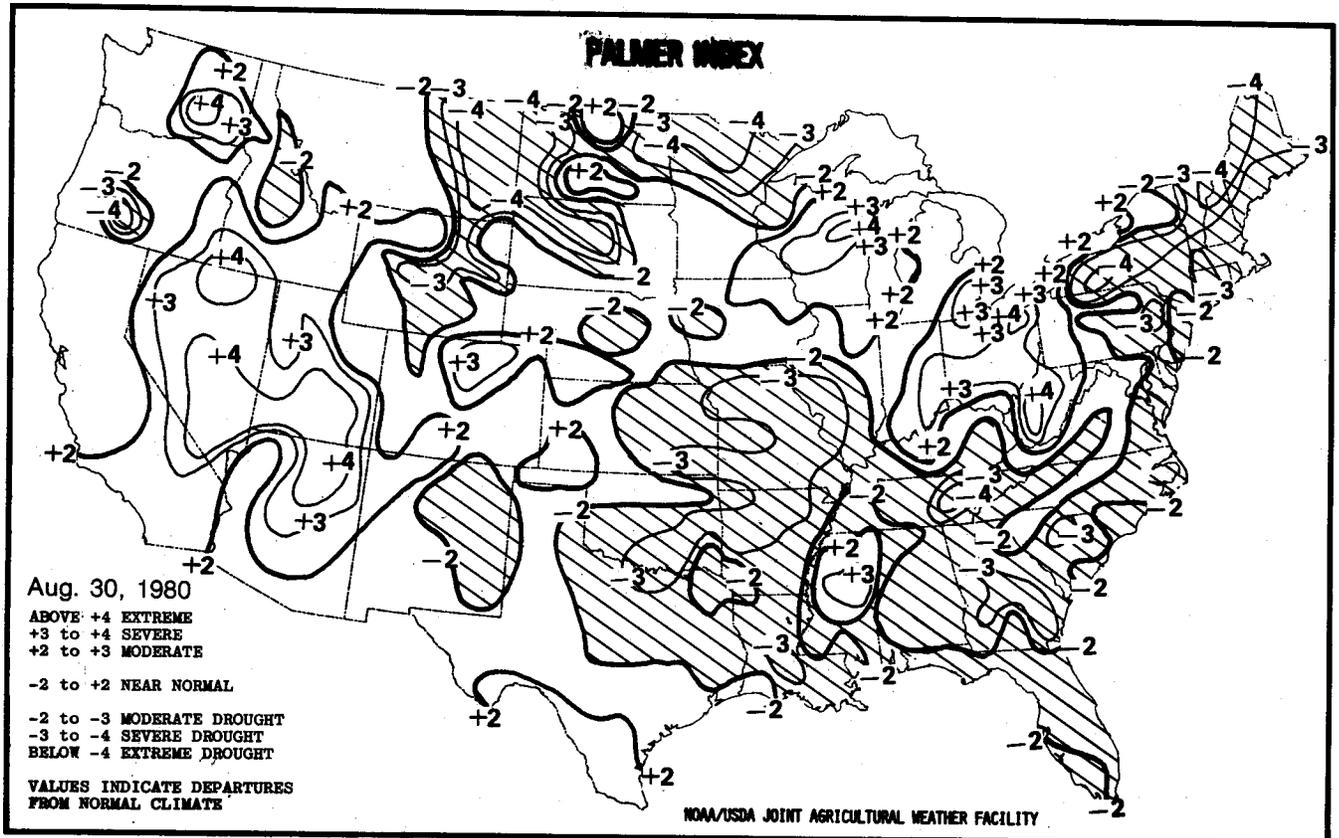
SUBJECT DATA BASED ON 2665 STATION RECORDS, 1921-50

COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING AUG. 31, 1980.

* BASED ON 1941-70 NORMALS. ACCUMULATIONS FROM JANUARY 1, 1980.

Table with columns for STATES AND STATIONS, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +, and DEPARTURE FROM 1979. Rows list various cities across the United States with their respective cooling degree day values.





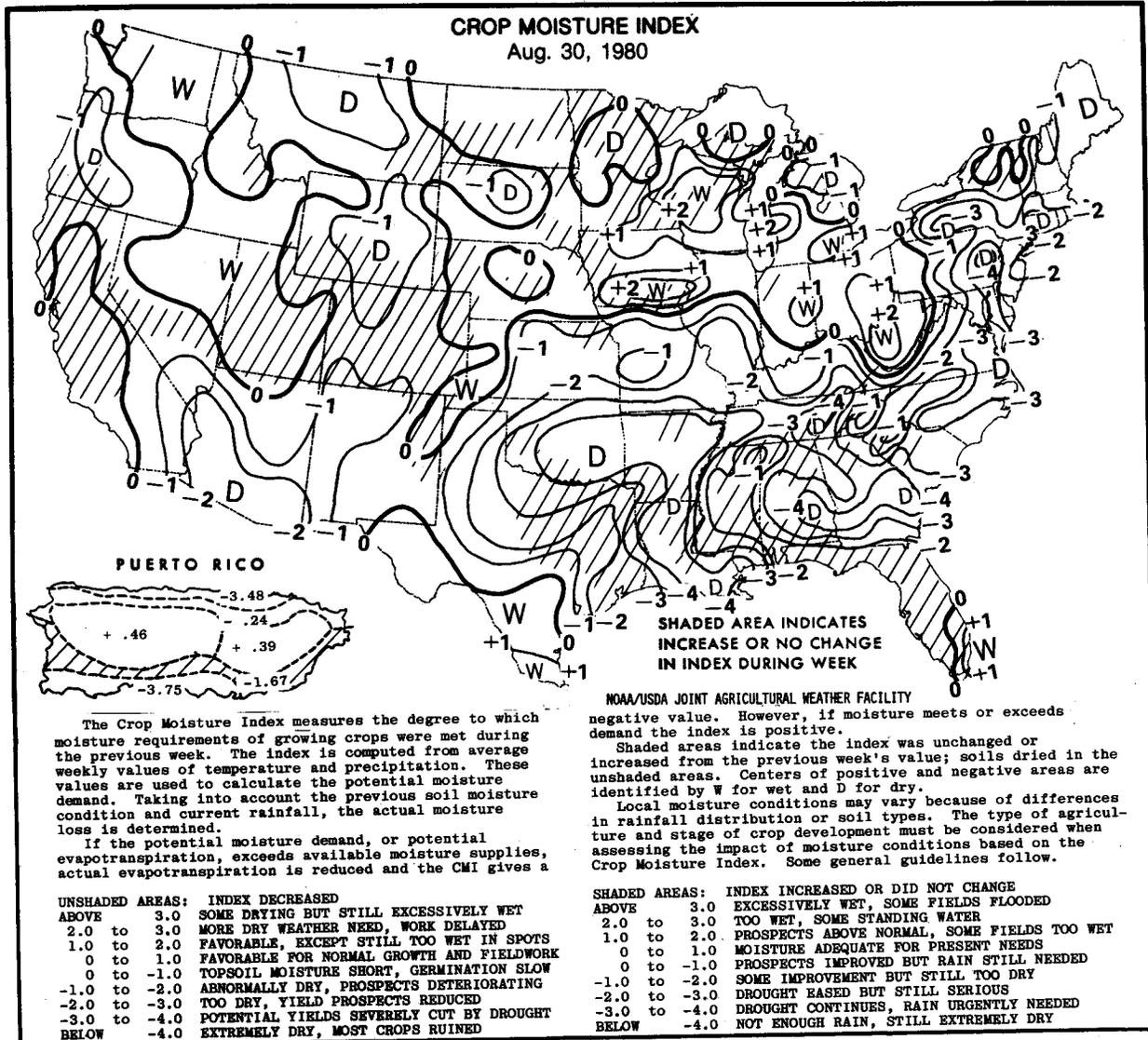
The Palmer Index

The Palmer Index is an index of meteorological drought, which may be defined as a prolonged and abnormal moisture deficiency. The general concept is one of supply and demand. Supply is represented by precipitation and stored soil moisture. Demand is the combination of potential evapotranspiration, the amount needed to recharge the soil moisture, and the runoff needed to keep the rivers, lakes, and reservoirs at a normal level. The results of this water balance accounting produce a positive or negative anomaly which is then weighted by a climate factor. The final product is an index that expresses the abnormality for that particular place for the period of time being computed. This manipulation allows the index to have a reasonably comparable local significance in space and time, that is, a certain index value obtained for a division in New York would have the same local significance as a like value in the more arid areas of western Kansas. This monthly increment is added to a portion of the previous month's index to include the duration of the anomaly in the final index.

The Palmer Index was designed as a climatological indicator of the scope and severity of past droughts. Using the Palmer Index on a real-time basis presents difficulties. A day or so of normal or better rainfall is certainly welcome in an area that has experienced a long drought, but one cannot know whether it indicates the end of the drought or just a brief respite. In order to

make the program have some real-time value, a system of computing a "probability" that a weather spell has ended was devised. This is not entirely satisfactory, but does allow one to assign a definite index value at times when there may be some doubt as to whether it should be positive (wet) or negative (dry).

Another aspect of using the Palmer Index is that one must remember that the demand part of the computations includes three parameters--potential evapotranspiration, recharge of soil moisture, and runoff, any one of which may produce a negative index. For instance if only enough rain fell to satisfy most of the expected evapotranspiration, but not enough to supply the expected recharge and runoff, then a negative index would result. If such a situation continued then one might find that agriculture was progressing at a near normal pace but the Palmer Index would be indicating a worsening drought. In this situation the drought would cause shallow wells and springs to go dry and the levels of rivers, lakes and reservoirs to fall below normal and, if this odd situation continued long enough, would cause serious economic stress to the livestock industry and eventually to other industries and cities. Then if rainfall fell below the minimum needed for agriculture, crops would suffer drastic and rapid decline because there would be no reserve water in the soil. Such a situation, to some extent, occurred during the Northeast drought in the 1960's when New York City almost ran out of water.



THE VERY DRY AREA CENTERED IN EASTERN OKLAHOMA AND CENTRAL ARKANSAS REMAINS EXTREMELY DRY. WELL ABOVE NORMAL TEMPERATURES CONTINUE TO CAUSE A HIGH DEMAND FOR CROP MOISTURE. INCREASED SHOWERS HELPED A LITTLE IN THE SOUTHERN PORTION OF THE AREA BUT MUCH MORE RAIN IS NEEDED. MONTANA NEEDS MORE RAIN, BUT MUCH OF THE AREA FROM THE DAKOTAS EASTWARD THROUGH OHIO HAS ENOUGH SOIL MOISTURE FOR CURRENT REQUIREMENTS EXCEPT FOR SOUTHERN ILLINOIS WHERE IT IS TOO DRY.

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U.S. Department of Commerce
 National Oceanic and Atmospheric Administration
 National Weather Service/Climate Analysis Center
 Managing Editor.....Don Haddock
 Meteorologists.....Lyle Denny
 Ray McInturff
 Jim Williams
 Meteorological Technician.....Wes Byrd
 Subscriptions.....Thelma Elis

U.S. Department of Agriculture
 Economics, Statistics, and Cooperatives Service
 Editor/Writer.....Jim Carlin
 Agricultural Statistician.....Bill Blackson
 World Food & Agricultural Outlook & Situation Board
 Agricultural Weather Analysts.....Laras Lambert
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