

WEEKLY WEATHER AND CROP BULLETIN

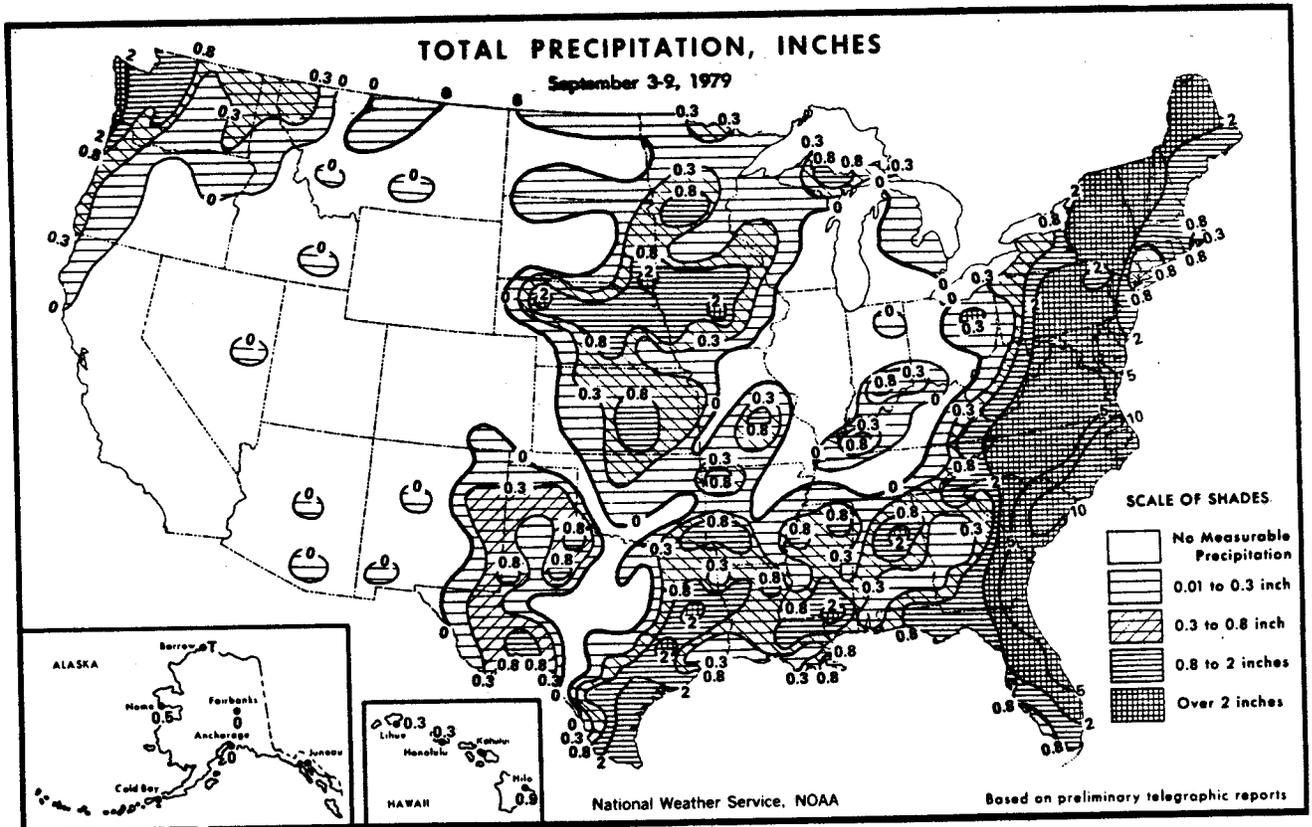
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National Weather Summary

September 3 - 9

HIGHLIGHTS: Hurricane David marched up the East Coast carrying 4 to 8 inches of rain and triggering tornadoes and flash floods. Much of the Nation west of the Rockies was dry, except the coastal sections of the Pacific Northwest. Two to 4 inches of rain fell over parts of Texas's Gulf Coast. The country averaged near- or above-normal temperatures, except a small area around the Great Lakes. Several stations from the Rockies westward measured readings 9 to 11 degrees above normal.

On Monday, Hurricane David inched onto Florida's east coast bringing high winds and heavy rains; Orlando logged more than 3.5 inches of rain.

Thunderstorms ranged over the Deep South and northern Plains; more than an inch dampened Birmingham, Ala. Sioux Falls, southeastern South Dakota, notched an inch and two-thirds.

Temperatures soared at opposite corners of the Nation. While parts of Arizona baked under 112°, Caribou, northern Maine, reached a record high 84°.

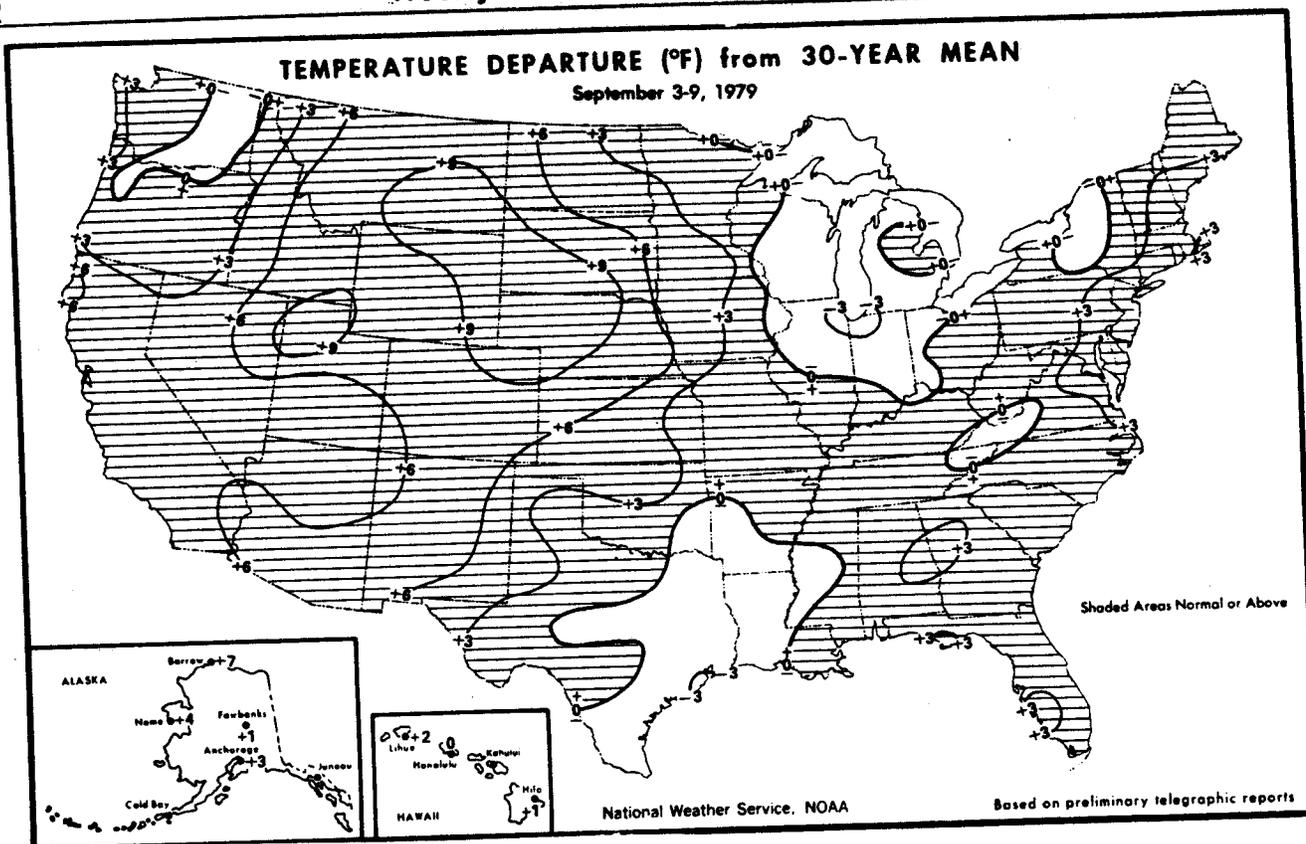
David surged up the Atlantic Coast on Tuesday dumping torrential rains on the eastern sections of Georgia and the Carolinas. More than 6 inches doused Charleston, S.C., and 5 inches drenched Cape Hatteras, N.C.

Storms also stretched from New Mexico through the southern Plains to Coastal Texas. Palacios, East Texas, measured 2.5 inches. Showers dotted the Pacific Northwest and upper Midwest.

Fargo, eastern North Dakota, hit a record high 98°.

On Wednesday, David was downgraded to a tropical storm, but continued to drop heavy rains on the middle Atlantic States.

More than 7 inches fell near Norfolk, southeastern Virginia, while 3 to 4 inches fell over



the Baltimore and Washington, D.C., areas. Tornadoes accompanied the storm from Virginia to Pennsylvania.

Meantime, strong storms gusted over the central Plains and Iowa. Large hail pelted portions of Nebraska. A section of Des Moines, Iowa, collected nearly 2.5 inches of rain.

Hot readings continued in the southern Rockies; Pueblo, south central Colorado, topped its 1899 high mark with a record 98°. Albuquerque scored 100° for the first time ever in September.

David headed through New England leaving 2-to-3-inch rains in its wake from New York State northeastward on Thursday.

Heavy rains also fell in the central Plains and along the Texas Coast. Nearly 2 inches soaked Wichita, Kans.; Palacios, Tex., posted another inch and two-thirds.

Temperatures soared again in the southern Rockies; in New Mexico, record-setting readings included Albuquerque's 98° and 97° at Alamogordo.

Most of the Nation escaped rain on Friday. David moved out of the country into the North Atlantic.

Severe storms formed over the northern half of the Plains; though rain was not heavy, four tornadoes touched down near Cheyenne, Wyo., and hail hit parts of South Dakota.

Warm temperatures again spanned the Nation from the Southwest through the Rockies. Phoenix, at 111°, tied its record of 27 days in one year at

110° or above. Salt Lake City's 99° set a record for the day, the month, and this late in the year.

While one-inch rains fell in Quillayute, western Washington, and Tampa, Fla., record-high temperatures baked the West on Saturday.

The northern tier of States turned unseasonably cold with record-low readings in the thirties in Michigan and 41° at Rochester, western New York.

New high marks were established from Arizona to Montana to Nebraska. A sampling showed the high nineties at some Montana stations and in western Nebraska. The 110° at Las Vegas, Nev., was also the warmest this late in the season. Phoenix noted its record 28th day this year at 110° or above, and Salt Lake City notched 100°.

On Sunday, rain fell in the Pacific Northwest, southern Texas, and Florida, but much of the remainder of the country remained dry.

The two-day rainfall totals at Quillayute reached nearly 3.5 inches; more than 2 inches soaked Brownsville, southern Texas,; and in Florida, both West Palm Beach and Jacksonville received more than an inch.

Record-breaking heat persisted in the Rockies and central Plains. New marks showed 90° at Cheyenne, 92° at Colorado Springs, central Colorado, and 102° at North Platte, west central Nebraska.

Cool temperatures broke records in Ohio, New York, and Louisiana. Akron, northwestern Ohio, noted 42°; Binghamton, southern New York, called in 38°; and Baton Rouge marked a record-equaling 63°.



National Agricultural Summary

September 3 - 9

HIGHLIGHTS: Hurricane David spread heavy rain from Florida to New England causing some water and wind damage to crops, mostly in southeastern States. The storm lodged some corn and caused light damage to fruit and vegetables. South Carolina appeared to have taken the brunt of the damage, particularly the vegetable crops. Much of the Nation received very little precipitation, except for the tropical storms which brought rainfall to the Atlantic and Gulf Coasts. Nevertheless, soil moisture rated adequate to surplus, except short in the West. Weekend frosts in extreme northern areas of the Nation produced minimal damage to growing crops. Average temperatures were above normal in many areas of the Nation and speeded development of crops to maturity, although in northern areas, crops were 1 to 3 weeks late. Farmers had 5 to 7 days suitable for fieldwork, except along the Atlantic Coast where Hurricane David shortened fieldwork to only 2 to 4 days. Winter wheat producers continued to plow and prepare seedbeds for the 1980 crop, seeding was becoming more widespread throughout the country. Spring wheat harvest advanced to 79% complete, 10 points fewer than last year and down 9 points from the average. Barley harvest advanced to 86%, equaling last year and only 1 point less than average. Oats combining stood at 94%, 5 points below last year and average. Rice combining became more widespread in the Delta, and among the five major producing States reached 34%, lagging the 38% last year and the 35% average. Winter wheat harvest was virtually complete; only small acreages remained in a few of the northwestern States. The cotton harvest continued in the Southwest, and minor acreages were harvested in the Southeast. Grain sorghum harvest moved northward from Texas into Oklahoma. Corn harvest advanced into the southern Corn Belt. A significant acreage of soybeans showed yellow leaves, and early fields began shedding leaves. Pastures rated good, and in some areas east of the Rockies excellent; many western ranges deteriorated from lack of soil moisture. Farm fuel improved from the previous week. LP gas rated 7% tight, 90% adequate, and 3% surplus. Diesel fuel scored 20% tight and 78% adequate. Gasoline stood at 16% tight and 83% adequate.

SMALL GRAINS: Winter wheat harvest neared completion with all States advancing to 95% or greater. Spring wheat harvest stood at 79%, lagging last year's 89% and the 88% average. Among the five major producing States, only Minnesota, at 57%, lagged far behind its normal 86%. Barley harvest reached 86%, equaling last year and only 1 point below the average. All major producing States stayed close to schedule, although Minnesota lagged by 9 points. Oats harvest advanced to 94% complete, compared with last year and the average of 99%; only Minnesota, at 80%, was less than 95% or better. Showers slowed the small grain harvests in the Pacific Northwest, and early rains further east lowered grain quality. Some malting barley was rejected because of too many sprouting grains.

Winter wheat producers continued to plow and prepare seedbeds for fall planting. Rains provided adequate soil moisture in all major producing areas. Seeding on the Great Plains ranged from 2% in

Oklahoma to 20% in South Dakota. Very little acreage was reported seeded in the Corn Belt.

CORN: Corn rated good in all major production areas. Northern areas need a frost-free September to mature the crop for grain harvest. Dent stage was well advanced in eastern north central States but lagged the average in Michigan and Wisconsin. Only 15 to 30% of the crop was mature, lagging the average by 5 to 28 points. In the western north central States, dent stage ranged from 47% in South Dakota, which was 30 points behind normal, to 86% in Missouri, which was 3 points ahead of normal. Only 5 to 25% of the crop was mature. Above-normal temperatures and sunny weather speeded development, but maturity continued to lag throughout most of the Corn Belt.

Corn harvest continued to advance northward and finally reached southern areas of the Corn Belt. Harvest was just beginning in Kansas and stood at 2% in Missouri.

SOYBEANS: In the eastern Corn Belt, soybean yellowing ranged from 20 to 40%, lagging the average by as much as 25 points. Some acreage began shedding leaves and ranged from 12% in Illinois to 15% in Ohio. In the western Corn Belt, yellowing ranged from 17 to 40% which was as much as 47 points behind normal in Minnesota. Very little acreage was shedding leaves. In the south central States, yellowing ranged from 12 to 22%; shedding of leaves ranged from 6 to 10%. The crop generally rated good, although some fields were very weedy in the Delta, and Hurricane David downed some southeastern stands.

COTTON: Most cotton rated only fair to good. Open bolls equaled or exceeded the average in the Southeast but generally were only half of normal in the Delta. New Mexico cotton bolls began opening, but the crop was late and bolls were small. Arizona growers defoliated stands and continued to pick cotton. Rains slowed the Texas harvest in some areas; picking stood at 9%, lagging last year's 17% and the 14% average. Some Arkansas bolls rotted, but overall, the crop needed moisture. Cotton picking began in the Southeast.

OTHER CROPS: Grain sorghum continued to color; stands matured as far north as Kansas. Texas harvest advanced to 64%, falling between the progress last year and average. Early fields were harvested in Oklahoma.

Rice harvest gradually expanded into the Delta. Rains delayed rice harvest along the Gulf Coast and in the five major States; combining advanced to 34%, lagging last year's 38% and the 35% average.

FRUITS & NUTS: Peach harvest continued along the West Coast and into extreme northern areas. Apple harvest advanced throughout all areas of the Nation, as growers finished harvesting summer varieties and moved into fall varieties.

In Florida, citrus groves continued to rate excellent, although Hurricane David blew some foliage and twigs from trees along the eastern coast. Producers tested new crop fruit with picking 2 to 3 weeks away. Texas citrus developed normally. Arizona citrus groves were in good condition; lemon harvest increased.

California almond knocking continued in full swing. Oregon filberts continued dropping. Pecans rated fair to mostly good.

(continued on page 22)

Weather Data for the Week Ending Sept. 9, 1979

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 Sept. 3	Pct. normal since Sept. 3	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
LA. Baton Rouge	89	71	91	63	80	0	1.0	0	1.0	100	94	56	3	0	0	0	0	
LA. Lake Charles	88	70	90	63	79	-1	1.1	0	1.1	10	97	61	0	0	0	1	0	
LA. New Orleans	91	74	93	72	82	+2	1.2	1.2	1.2	14	87	56	0	0	0	0	0	
LA. Shreveport	90	68	93	60	79	-1	1.2	1.2	1.2	0	93	50	0	0	0	0	0	
MAINE. Caribou	68	50	84	39	58	+1	3.1	2.7	3.1	0	88	51	0	0	0	0	0	
MAINE. Portland	73	55	83	44	65	+3	4.9	3.6	4.4	0	129	55	0	0	0	0	0	
MD. Baltimore	82	67	88	55	74	+3	4.4	3.6	4.4	0	550	60	0	0	0	0	0	
MASS. Boston	77	64	85	51	71	+4	1.1	1.1	1.1	0	138	62	0	0	0	0	0	
MASS. Chatham	72	59	78	53	65	-1	1.1	1.1	1.1	0	25	73	0	0	0	0	0	
MICH. Alpena	70	46	85	38	58	-1	1.1	1.1	1.1	0	13	54	0	0	0	0	0	
MICH. Detroit	76	53	85	40	66	-1	1.1	1.1	1.1	0	86	55	0	0	0	0	0	
MICH. Flint	75	52	84	38	64	0	1.1	1.1	1.1	0	97	51	0	0	0	0	0	
MICH. Grand Rapids	76	52	85	40	65	0	1.1	1.1	1.1	0	96	51	0	0	0	0	0	
MICH. Houghton Lake	71	51	82	34	62	+2	1.1	1.1	1.1	0	29	53	0	0	0	0	0	
MICH. Lansing	77	51	86	37	64	+1	1.1	1.1	1.1	0	96	45	0	0	0	0	0	
MICH. Marquette	66	46	86	36	56	-1	1.1	1.1	1.1	0	94	61	0	0	0	0	0	
MICH. Muskegon	73	52	80	42	62	-2	1.1	1.1	1.1	0	83	54	0	0	0	0	0	
MICH. S. Ste. Marie	67	43	83	34	56	-2	1.1	1.1	1.1	0	87	59	0	0	0	0	0	
MINN. Duluth	67	49	83	41	58	+1	1.1	1.1	1.1	0	13	89	58	0	0	0	0	
MINN. Internatl. Falls	67	46	85	37	56	0	1.1	1.1	1.1	0	63	98	65	0	0	0	0	
MINN. Minneapolis	77	55	92	43	66	+3	1.1	1.1	1.1	0	29	86	52	1	0	0	0	
MINN. Rochester	75	54	85	44	65	+3	1.1	1.1	1.1	0	38	92	57	0	0	0	0	
MINN. St. Cloud	73	52	88	40	62	+1	1.1	1.1	1.1	0	157	93	0	0	0	0	0	
MISS. Jackson	89	67	92	60	78	-1	1.1	1.1	1.1	0	93	53	4	0	0	0	0	
MISS. Meridian	90	69	94	63	80	+2	1.1	1.1	1.1	0	38	94	53	4	0	0	0	
MO. Columbia	83	59	89	50	71	0	1.1	1.1	1.1	0	93	51	0	0	0	0	0	
MO. Kansas City	84	62	89	53	73	+2	1.1	1.1	1.1	0	40	87	46	0	0	0	0	
MO. St. Louis	84	63	91	54	74	+2	1.1	1.1	1.1	0	87	42	3	0	0	0	0	
MO. Springfield	86	60	90	50	73	+1	1.1	1.1	1.1	0	11	87	45	2	0	0	0	
MONT. Billings	87	56	99	51	71	+9	1.1	1.1	1.1	0	52	21	2	0	0	0	0	
MONT. Glasgow	82	52	91	44	68	+7	1.1	1.1	1.1	0	70	25	2	0	0	0	0	
MONT. Great Falls	83	50	98	42	67	+7	1.1	1.1	1.1	0	67	59	18	2	0	0	0	
MONT. Havre	84	50	97	47	67	+7	1.1	1.1	1.1	0	66	20	1	0	0	0	0	
MONT. Helena	82	49	91	40	65	+6	1.1	1.1	1.1	0	67	67	18	2	0	0	0	
MONT. Kalispell	75	45	85	35	60	+3	1.1	1.1	1.1	0	66	20	1	0	0	0	0	
MONT. Miles City	87	59	96	50	73	+9	1.1	1.1	1.1	0	94	38	0	0	0	0	0	
MONT. Missoula	80	48	89	38	64	+5	1.1	1.1	1.1	0	67	25	2	0	0	0	0	
NEBR. Grand Island	88	62	93	55	75	+7	1.5	1.5	1.5	0	81	29	0	0	0	0	0	
NEBR. Lincoln	88	64	93	53	76	+7	1.5	1.5	1.5	0	84	44	4	0	0	0	0	
NEBR. Norfolk	87	63	94	52	74	+7	1.5	1.5	1.5	0	90	43	4	0	0	0	0	
NEBR. N. Platte	93	60	102	53	76	+10	1.5	1.5	1.5	0	87	46	3	0	0	0	0	
NEBR. Omaha	85	64	92	55	73	+6	1.7	1.7	1.7	0	77	32	5	0	0	0	0	
NEBR. Valentine	93	60	102	49	76	+11	1.7	1.7	1.7	0	213	86	49	2	0	0	0	
NEV. Ely	86	46	90	42	66	+6	1.7	1.7	1.7	0	200	76	24	4	0	0	0	
NEV. Las Vegas	106	70	110	65	88	+5	1.7	1.7	1.7	0	37	14	1	0	0	0	0	
NEV. Reno	90	45	95	40	67	+4	1.7	1.7	1.7	0	28	9	7	0	0	0	0	
NEV. Winnemucca	89	44	96	39	67	+5	1.7	1.7	1.7	0	76	14	4	0	0	0	0	
N.H. Concord	78	56	87	43	67	+5	1.9	1.9	1.9	0	73	16	4	0	0	0	0	
N.J. Atlantic City	80	66	85	50	73	+3	1.5	1.5	1.5	0	129	89	48	0	0	0	0	
N.J. Trenton	81	68	87	53	74	+4	1.5	1.5	1.5	0	188	84	51	0	0	0	0	
N.MEX. Albuquerque	96	64	100	62	80	+7	1.6	1.6	1.6	0	200	0	0	0	0	0	0	
N.MEX. Roswell	92	66	96	62	79	+6	1.6	1.6	1.6	0	48	13	7	0	0	0	0	
N.Y. Albany	76	56	86	38	66	+1	2.2	2.2	2.2	0	5	0	0	0	0	0	0	
N.Y. Binghamton	70	54	79	38	62	-1	2.0	2.0	2.0	0	314	88	53	0	0	0	0	
N.Y. Buffalo	74	55	86	41	65	+1	2.0	2.0	2.0	0	286	96	64	0	0	0	0	
N.Y. New York	80	69	85	55	75	+4	1.1	1.1	1.1	0	13	92	56	0	0	0	0	
N.Y. Rochester	74	54	86	41	65	0	1.1	1.1	1.1	0	100	70	55	0	0	0	0	
N.Y. Syracuse	73	56	83	42	65	-1	2.3	2.3	2.3	0	83	90	58	0	0	0	0	
N.C. Asheville	79	63	85	57	71	+2	2.8	2.8	2.8	0	329	90	57	0	0	0	0	
N.C. Charlotte	81	67	90	57	74	0	2.6	2.6	2.6	0	89	95	53	0	0	0	0	
N.C. Greensboro	82	65	89	53	74	+2	4.2	4.2	4.2	0	325	88	60	1	0	0	0	
N.C. Hatteras	82	74	87	72	78	+2	10.6	10.6	10.6	0	467	92	59	0	0	0	0	
N.C. Raleigh	83	66	89	54	75	+2	2.6	2.6	2.6	0	757	91	74	0	0	0	0	
N.C. Wilmington	85	72	90	63	78	+1	2.6	2.6	2.6	0	260	92	63	0	0	0	0	
N.DAK. Bismarck	79	49	87	39	64	+3	9.9	9.9	9.9	0	707	92	67	1	0	0	0	
N.DAK. Fargo	80	52	98	36	65	+4	0	0	0	0	90	36	0	0	0	0	0	
N.DAK. Williston	81	51	92	38	67	+7	0	0	0	0	83	39	1	0	0	0	0	
OHIO. Akron-Canton	76	59	86	42	67	+1	0	0	0	0	83	28	1	0	0	0	0	
OHIO. Cincinnati	79	61	86	50	70	-1	0	0	0	0	50	48	0	0	0	0	0	
OHIO. Cleveland	78	59	88	46	69	+3	0	0	0	0	100	89	47	0	0	0	0	
OHIO. Columbus	78	60	86	45	69	+1	0	0	0	0	88	50	0	0	0	0	0	
OHIO. Dayton	78	57	85	44	68	-1	0	0	0	0	95	60	0	0	0	0	0	
OHIO. Toledo	76	54	85	40	65	-2	0	0	0	0	93	53	0	0	0	0	0	
OHIO. Youngstown	76	55	84	37	66	+1	0	0	0	0	96	56	0	0	0	0	0	

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Sept. 9, 1979

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 Sept. 3	Pct. normal since Sept. 3	Average maximum	Average minimum	Temperature °F		Precipitation				
														90 and above	32 and below	.01 inch or more	.50 inch or more			
OKLA. Okla. City	88	66	90	59	77	+ 1	.2	-	.6	.2	.2	25	86	44	2	3	0	0	1	0
Tulsa	90	68	93	58	80	+ 4	.1	-	.8	.1	.1	11	87	44	3	0	0	2	4	0
OREG. Astoria	70	55	75	51	62	+ 3	3.6	+ 3.1	1.8	3.6	720	97	64	0	0	0	0	0	0	0
Burns	77	48	89	40	62	+ 1	0	-	.1	0	0	71	25	1	0	0	0	1	0	0
Medford	82	52	92	43	69	+ 2	.1	0	0	.1	100	80	30	1	0	0	0	2	2	0
Pendleton	77	53	90	49	65	-	.2	+	.1	.2	200	91	54	0	0	0	0	2	2	0
Portland	75	58	85	57	67	+ 3	.6	+	.2	.6	200	93	53	0	0	0	0	3	3	0
Salem	79	64	86	50	72	+ 4	3.0	+ 2.1	1.1	3.0	333	88	54	0	0	0	0	1	0	0
PA. Allentown	74	56	85	29	66	+ 2	.3	-	.5	-	500	97	60	0	0	0	0	2	2	0
Erie	80	66	86	48	72	+ 2	3.0	+ 2.4	1.2	2.1	263	91	58	0	0	0	0	2	2	0
Harrisburg	82	68	87	55	75	+ 4	2.1	+ 1.3	1.2	2.1	17	89	51	0	0	0	0	1	1	0
Philadelphia	77	59	84	45	68	+ 1	1.1	-	.5	.1	200	90	47	0	0	0	0	2	4	0
Pittsburgh	80	60	89	43	69	+ 3	1.4	+	.7	-	175	87	57	0	0	0	0	2	4	0
Scranton	79	63	85	49	71	+ 5	1.4	+	.6	-	585	92	68	0	0	0	0	4	4	0
R.I. Providence	86	74	90	71	80	+ 3	7.6	+ 6.3	6.2	7.6	482	88	51	3	3	0	0	3	3	0
S.C. Charleston	86	68	93	61	77	0	5.3	+ 4.2	4.2	5.3	78	92	61	0	0	0	0	3	3	0
Columbia	82	67	89	59	75	+ 1	.7	-	.2	.4	0	81	39	2	2	0	0	0	0	0
Greenville	83	56	96	40	69	+ 6	8	-	.4	-	0	86	38	3	3	0	0	1	0	0
S.D. Aberdeen	87	57	102	45	72	+ 8	10	-	.3	0	0	68	25	4	4	0	0	2	2	0
Huron	91	57	102	52	74	+10	T	-	.3	1.6	286	84	55	0	0	0	0	2	2	0
Rapid City	81	59	87	46	70	+ 6	2.0	+ 1.3	1.6	2.0	0	87	55	2	2	0	0	1	0	0
Sioux Falls	86	68	90	61	77	+ 2	.4	-	.4	.4	50	87	54	0	0	0	0	1	1	0
TENN. Chattanooga	86	68	89	60	77	+ 3	.1	-	.6	.1	14	91	54	0	0	0	0	1	0	0
Knoxville	86	68	89	60	77	+ 3	.2	-	.6	.2	25	84	50	4	4	0	0	0	0	0
Memphis	87	69	91	59	78	+ 2	0	-	.8	0	0	87	50	0	0	0	0	0	0	0
Nashville	85	66	89	54	76	+ 1	0	-	.5	0	71	27	7	1	1	0	0	2	2	0
TEX. Abilene	95	69	98	64	82	+ 3	.3	-	.2	.3	60	84	41	0	0	0	0	2	2	0
Amarillo	87	62	91	59	74	+	.3	-	.7	.1	13	91	44	0	0	0	0	0	0	0
Austin	92	72	95	69	82	+ 1	.1	-	.3	0	0	93	63	1	1	0	0	4	4	0
Beaumont	87	72	90	66	79	- 2	T	-	1.3	0	0	91	60	0	0	0	0	3	3	0
Brownsville	85	76	90	74	81	- 2	4.4	+ 3.2	2.6	4.4	367	91	66	2	2	0	0	4	4	0
Corpus Christi	89	76	91	74	82	- 1	4.4	+ 3.2	2.6	4.4	367	94	66	7	7	0	0	3	3	0
Del Rio	97	72	100	70	84	+ 1	.7	-	0	.7	100	92	33	0	0	0	0	0	0	0
El Paso	97	65	101	60	81	+ 4	0	-	.3	0	0	58	19	7	7	0	0	2	2	0
Fort Worth	94	69	97	58	82	+ 1	0	-	.7	1.2	129	87	68	0	0	0	0	2	2	0
Galveston	84	75	86	71	79	- 3	1.8	+ .4	1.2	1.8	18	98	60	3	3	0	0	2	2	0
Houston	89	70	92	64	80	- 1	.2	-	.9	.2	20	77	35	4	4	0	0	2	2	0
Lubbock	89	65	92	62	77	+ 3	.1	-	.4	.1	79	28	7	7	0	0	0	0	0	0
Lubbock	92	65	95	63	79	+ 1	T	-	.4	0	0	87	33	0	0	0	0	1	1	0
Midland	93	66	95	64	79	- 1	T	-	.6	0	0	87	47	6	6	0	0	0	0	0
San Angelo	91	74	93	70	83	+ 1	T	-	.8	0	0	87	47	0	0	0	0	3	3	0
San Antonio	88	73	90	70	80	- 2	2.2	+ 1.2	1.5	2.2	220	95	58	2	2	0	0	0	0	0
Victoria	92	69	93	60	80	- 2	T	-	.7	0	0	94	44	6	6	0	0	0	0	0
Waco	92	69	93	60	80	- 2	T	-	.6	0	0	91	38	0	0	0	0	0	0	0
Wichita Falls	94	67	96	59	81	+ 1	0	-	.3	0	0	45	-	6	6	0	0	2	2	0
UTAH. Blanding	91	54	94	50	72	+ 6	T	-	.3	0	0	50	16	0	0	0	0	0	0	0
Salt Lake City	94	62	100	54	78	+10	T	-	.2	1.6	375	89	61	0	0	0	0	2	2	0
VT. Burlington	71	54	84	43	63	+ 1	3.0	+ 2.2	1.6	3.0	325	91	92	0	0	0	0	1	1	0
VA. Lynchburg	80	65	87	52	73	+ 2	2.6	+ 1.8	2.6	4.6	418	84	59	2	2	0	0	3	3	0
Norfolk	83	71	91	67	77	+ 3	4.6	+ 3.5	4.3	2.7	389	96	67	0	0	0	0	3	3	0
Richmond	83	68	89	56	75	+ 2	3.5	+ 2.6	2.7	3.5	300	95	60	0	0	0	0	3	3	0
Roanoke	78	62	85	49	70	- 1	2.4	+ 1.6	2.2	2.4	200	-	-	0	0	0	0	1	1	0
WASH. Colville	73	49	83	43	61	- 1	.4	+	.2	.4	0	83	49	0	0	0	0	0	0	0
Omak	69	50	74	44	60	- 5	0	-	.1	1.3	5.6	622	98	68	0	0	0	6	6	4
Quillayute	69	53	74	50	61	+ 3	5.6	+ 4.7	1.3	5.6	275	91	59	0	0	0	0	5	5	1
Seattle-Tacoma	70	55	80	52	62	+ 1	1.1	+ .7	.7	1.1	200	81	38	0	0	0	0	1	1	0
Spokane	73	51	84	48	62	- 1	.4	+	.2	.4	200	81	38	0	0	0	0	1	1	0
Walla Walla	79	58	83	53	68	- 1	.3	+	.2	.3	300	72	32	1	1	0	0	0	0	0
Yakima	79	49	86	44	64	0	.1	+	.3	1.1	100	72	37	0	0	0	0	1	1	0
W. VA. Beckley	73	57	79	44	65	0	1.1	+	.0	1.1	138	95	66	0	0	0	0	0	0	0
Charleston	79	62	88	50	71	+ 1	.2	-	.5	.2	29	93	50	0	0	0	0	0	0	0
Huntington	80	64	87	52	72	+ 2	T	-	.7	0	0	88	55	0	0	0	0	0	0	0
Parkersburg	80	64	88	50	71	+ 1	T	-	.7	0	0	84	49	0	0	0	0	0	0	0
WISC. Green Bay	71	50	83	40	60	- 2	T	-	.8	0	0	87	62	0	0	0	0	0	0	0
La Crosse	75	55	87	44	64	- 1	.4	-	.4	.4	50	95	59	0	0	0	0	0	0	0
Madison	74	50	84	47	62	- 1	0	-	.8	0	0	94	55	0	0	0	0	0	0	0
Milwaukee	73	56	84	45	64	0	T	-	.7	0	0	89	58	3	3	0	0	0	0	0
Wyo. Casper	89	50	92	45	69	+ 7	9	-	.2	0	0	57	14	0	0	0	0	0	0	0
Cheyenne	86	54	91	52	70	+ 9	0	-	.3	0	0	52	18	2	2	0	0	0	0	0
Lander	88	53	92	50	71	+ 9	0	-	.2	0	0	46	15	3	3	0	0	0	0	0
Sheridan	88	52	99	44	70	+ 2	0	-	.3	0	0	64	20	0	0	0	0	0	0	0
P.R. San Juan	84	75	88	74	79	- 2	2.6	+ 1.1	1.4	2.6	173	97	72	0	0	0	0	6	6	1

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 warmer early, cooler 8th and 9th, average normal. Rains limited to scattered showers 4th, heaviest 1.15 in. Birmingham.

Fieldwork: 5.4 days suitable. Soil moisture mostly adequate. Spraying cotton, preparing for soybean and cotton harvest, corn harvesting, main activities. Condition of soybeans good to excellent; corn, peanuts, sorghum, pastures mostly good; cotton fair to good. Corn 93% mature, 80% 1978, 82% average; 50% harvested, 37% 1978, 22% average. Soybeans 98% setting pods, 87% 1978; 22% leaves turning, 22% 1978, 25% average; 10% dropping leaves; 4% mature, 10% 1978. Cotton 10% bolls open, 23% 1978, 17% average. Peanuts 8% dug, 9% 1978, 17% average.

ALASKA: Weather warm and dry. Temperatures 4 to 9° above normal.

Generally sunny skies prevailed. Crop harvesting throughout much of railbelt. Combining barley nearly 50% complete few farms. Moisture content barley dropped rapidly, limiting much need for drying. Harvesting 2d crop hay complete Matanuska Valley. Potato digging increasing, spuds sizing well. Vegetable harvest active. No general killing frost. Ground moisture supply adequate.

ARIZONA: High pressure, high temperatures, dry air. Temperatures 6° above normal. Weak showers, mainly White Mountains, southeast.

Cotton good progress. Defoliation, harvest active west. Many central fields showing mature bolls. Irrigation active east, weather encouraged late fruiting. About 55% cotton open west, 30 to 40% central, 5 to 10% east. Insect controls limited. Harvest early sorghum active. Corn for grain, good progress. Alfalfa haying excellent progress. Planting, fertilizing, irrigating fall, winter lettuce, other mixed vegetables. Fall cantaloups, watermelons good progress. Lemon harvest increasing. Citrus groves good condition. Gasoline, diesel adequate north, west; adequate to tight central, southeast. LP gas adequate. Cattle, calves good condition. Range deterioration, little rain. Stock water short. Some areas only half normal summer rain.

ARKANSAS: Rainfall light. Highest normal 79°, lowest 73°. Highest mean 81°, lowest 72°. Highest temperature 96°, lowest 89°. Most rainfall 1.73 in.

Soil moisture adequate. Fieldwork: 5.7 days suitable. Diesel 81% adequate, 15% tight; gasoline 89% adequate, 7% tight; LP gas 98% adequate. Soybean condition good, rain needed, some weed problems; pod set 88%, 81% 1978. Cotton fair to good condition; 7% open bolls, 29% 1978, 21% average. Some boll rot. Moisture needed most areas. Rice 89% headed, 100% 1978; 6% harvested, 10% 1978, 10% average. Corn 22% harvested, 23% 1978, 34% average. Sorghum 10% harvested, 32% 1978, 34% average. Apple quality excellent. Grape quality excellent. Pastures average condition. Some fertilization of fall pastures. Hay cutting continued. Cattle good condition, weight gains favorable.

CALIFORNIA: Average temperatures warmer than normal along the central and south coast and over southeast interior. Remainder of State had mixture of average temperatures above and below normal. Precipitation confined to extreme north with greatest amounts on coast. Upper level dis-

turbance early in period served to intensify surface weather fronts sufficiently for rainfall production.

Cotton 90% setting boll stage, 20% open boll stage. Rice 97% headed, 35% turning color stage. Corn all tasseled, 95% silk stage. Nectarine, peach, pear, and plum harvests declined. Raisin lay good progress. Wine grape harvest expanded. Almond knocking full swing. Broccoli harvest increased central coast, cauliflower continued active. Carrot harvest moderate Bakersfield, Salinas Valley. Celery and lettuce increased slightly central coast. Bell pepper movement increasing Salinas starting Santa Maria. Potato digging light Stockton, Riverside, Santa Maria. Digging starting Tulalake. Sweetpotato harvest increasing San Joaquin Valley. Harvest market tomatoes active coastal counties, northern San Joaquin Valley. Processing tomato harvest into late districts with about 33% of tonnage still out. Gathering cattle and movement from summer ranges increasing. Range feed short few local areas. Water supplies adequate. Milk, egg production normal. Fuel supplies generally adequate.

COLORADO: Warm and dry conditions prevailed through 6th. Some precipitation 7th. Temperatures above normal.

Winter wheat seeded 30%, 45% 1978, 39% average. Spring wheat harvested 64%, 100% 1978. Corn dough 83%, 82% 1978; dented 55%, 63% 1978. Corn silage harvested 11%, 9% 1978, 23% average. Sorghum completely headed, ripening in southeast. Dry beans cut 24%, 33% 1978, 37% average. Threshed 8%, 13% 1978, 19% average. Alfalfa third cutting 50%, 53% 1978. Fieldwork: 6 days suitable. Ranges and pastures good condition. Livestock good condition. Fuel supplies mostly adequate.

FLORIDA: Hurricane David near Palm Beach early on 3d moved northward along east coast exiting northeast Florida late on 4th. Wind gusts 50 to 80 mph with maximums of 90 mph and heavy 4.00 to 8.00 in. rains east half of Peninsula with much lighter rains and wind west half. Normal scattered thundershowers remainder of week. Temperatures averaged 2° above normal south, near normal elsewhere.

Soil moisture mostly adequate, however a few wet spots remain. Corn harvest about complete. Peanut harvest just getting underway. Hay harvest slow due to frequent showers. Tobacco sales continued. Sugarcane mostly good condition. Damage from Hurricane David confined mostly to eastern growing area. Fuel supplies mostly adequate. Pastures good to excellent condition except fair Panhandle. Excess water from Hurricane David some low-lying eastern Peninsula areas. Cattle good condition. Citrus grove condition excellent except east coast, where groves lost some fruit foliage and twigs from high winds from Hurricane David. Rainfall varied. New crop fruit testing continued with picking two to three weeks away. Hurricane David hit southern vegetable farming areas on the 2d and 3d. Rainfall relatively light most areas, from 1.00 to 6.00 in. but as high as 12.00 in. some isolated areas. Vegetable damage not severe; spot resetting necessary to bring stands up to normal. Land

preparation very active. Eggplant, pepper, tomato transplanting gaining. Seeding sweet corn, snap beans, squash, okra making headway. Celery transplanting increasing; growing crop progressing favorably. General crop condition good, improving. Fieldwork very active. Volume for local markets increasing from older cucumber, squash, okra.

GEORGIA: Temperatures 2 to 3° warmer than normal west, north and central; near normal southeast where Hurricane David brought damaging winds and rainfall totals of 3.00 to 7.00 in. to eastern portions 4th and 5th. Thundershowers continued in southeast ahead of cold front which crossed State during weekend with an additional 0.50 to 1.00 in. Totals ranged down to 1.00 in. central and less than 0.10 in. north and west.

Soil moisture surplus coast, adequate elsewhere. Hurricane David's rains restricted fieldwork to 4 days. David damaged pecan groves, blew down part of remaining corn and some soybeans in southeast. Soybeans improved, fair to mostly good, rain was beneficial. Corn fair to good; 62% harvested, last year 54%, average 36%. Peanuts fair to mostly good, wetness slowed harvest; 21% dug and 11% threshed, last year 24% and 15%, average 22% and 14%. Cotton fair to good; 48% open, 46% last year, 1% picked same as last year and average. Tobacco harvest about finished, marketing continued. Apples fair to mostly good; 79% picked, last year 66%. Pastures and hay crops fair to mostly good. Cattle and hogs good. Wheat 3% planted, last year 1%. Rye 1% seeded, equal last year. Other small grains 4% seeded, last year 2%. Pecans mostly fair to good, considerable limb breakage southeast. LP gas 97% adequate; diesel 88% adequate, 10% tight; gasoline 88% adequate, 11% tight.

HAWAII: Hot, humid, however, improving. Early week rains brought cooling effect. Temperatures rose slightly during latter part of week.

Heavy irrigation, frequent spraying continuing. Some leafy crops suffering spoilage losses. Dry weather in some eastern sections on Island Hawaii affecting crop progress. Some spoilage losses lettuce crops. Supplies heavy head cabbage, long eggplant; others light to moderate. Banana, papaya supplies light. Some papaya fields active harvesting. Pineapple harvesting declining. Sugar harvesting steady. Pastures generally good. Fuel supplies adequate.

IDAHO: Temperatures near normal early week, above normal late week. Range 27 to 97°.

Precipitation quite spotty and mainly north. Harvest progress satisfactory, clean-up slowed north by showers. Winter wheat 95% harvested, 85% last year, 85% normal. Spring wheat 75% complete, same as last year and normal. Barley 80% harvested, 70% last year, 75% normal. Potato vines dying 40%, 35% last year. Dry beans 40% swathed, 45% last year. Onions 25% dug, 30% last year. Ranges deteriorating and mostly in fair to poor condition.

ILLINOIS: Temperatures averaged normal to 3° below normal. Precipitation light, 0.50 to 0.70 in. west; 0 to 0.40 in. other areas.

Soil moisture adequate. Corn 80% dented, 80% 1978, 86% average; 30% mature, 46% 1978, 58% average; condition good. Soybeans 35% turning yellow, 42% 1978, 53% average; 12% shedding leaves, 18% 1978, 25% average; condition good; harvest beginning limited basis. Winter wheat land 66% plowed, 55% 1978, 76% average. Third crop alfalfa hay 76% cut, 76% 1978, 79% average; condition good. Pasture conditions good. Fieldwork: 6.5 days suitable.

INDIANA: Sunny, warm, and dry. Temperatures averaged slightly above normal ranging from 39 to 90°. Humidities low. Sunshine 77 to 89% of possible. Rainfall zero except 0.50 in. at Terre Haute and Tipton.

Fieldwork: 6 days suitable. Topsoil and subsoil moisture mostly adequate. Wheat land 30% plowed, 1978 35%, average 50%. Corn 75% dented, 1978 70%, average 75%; 15% mature, 1978 15%, average 25%. Soybeans 20% turning yellow, 1978 35%, average 55%. Tobacco harvest 30%, 1978 30%, average 25%. Silo filling 15%, 1978 20%, average 30%. Tomatoes picked once 90%.

IOWA: Warm with little or no rain southeast and east central and spotty showers elsewhere falling mostly on 5th to 6th.

Fieldwork: 5.4 days favorable. Corn condition good to excellent; in or past dough stage 94%, 1978 100%, normal 97%; in or past dent stage 61%, 1978 82%, normal 83%; mature 1978 39%, normal 48%. Soybean condition mostly good; leaves turning 40%, 1978 77%, normal 63%. Hay condition good to excellent. Third crop alfalfa hay harvested 74%, 1978 77%, normal 72%. Topsoil moisture adequate to surplus. Subsoil moisture adequate. Livestock market movement normal. Herd replacement normal. Pasture condition good to excellent.

KANSAS: Precipitation averaged little or none west; 0.25 to 0.50 in. elsewhere. Temperatures averaged from 75° east central to 79° south central or from 6 to 8° above normal northwest to 2 to 5° above normal elsewhere.

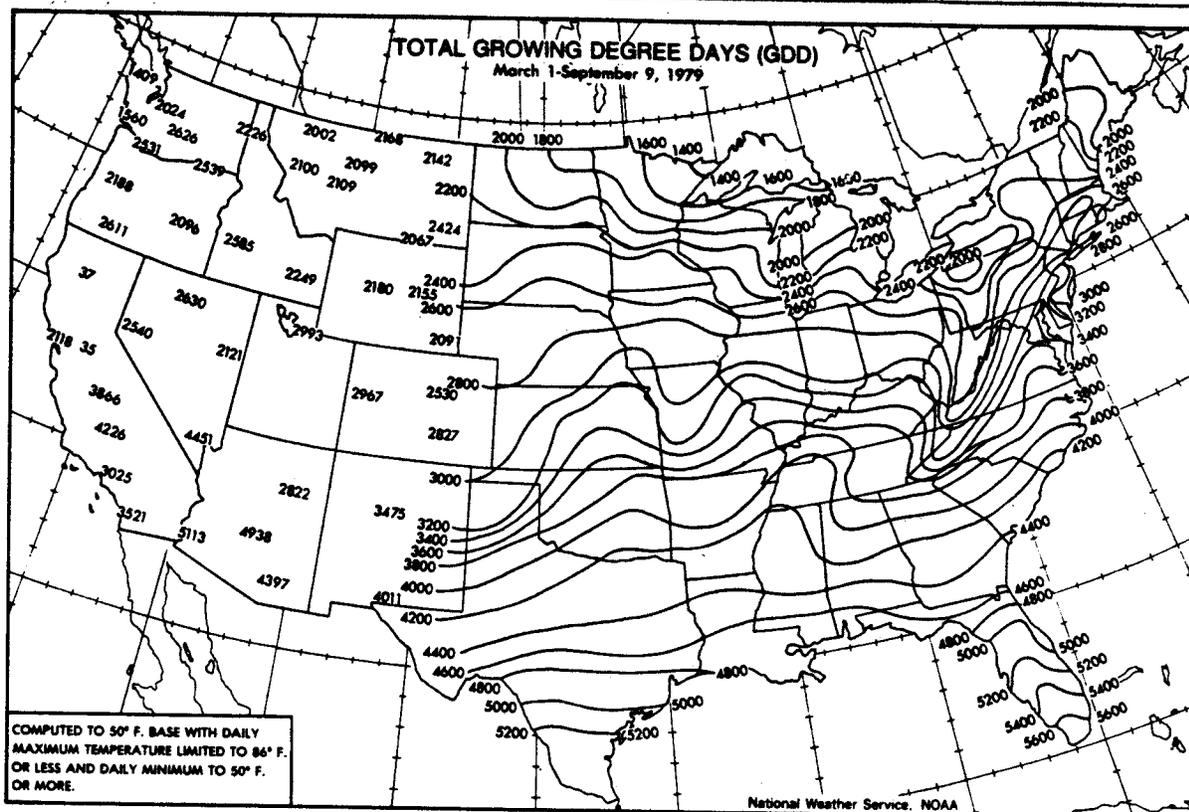
Wheat seeding underway, 5% in, equals 1978 and average. Corn dented 70%, last year 70%, average 75%; mature 25%, last year 40%, average 40%; harvest just underway, last year 5%, average 5%. Sorghum coloring 45%, last year 50%, average 55%; mature 10%, last year 10%, average 15%; harvested 0%, last year 5%, average 5%. Soybeans shedding leaves 5%, last year 20%. Fourth cutting alfalfa 40%, last year 35%, average 25%. New alfalfa seedings 45% completed, last year 50%, average 50%. Fieldwork: 6.0 days suitable.

KENTUCKY: Temperatures averaged near or slightly above normal through most of week. They dropped to much below seasonal levels over weekend. Precipitation generally quite light and spotty.

Fieldwork: 5.5 days suitable. Soil moisture adequate. Burley tobacco cutting good progress at 57% cut, last year 45%, 57% average. Weather end of week favorable for drying and curing but some rotting and houseburn of early cut tobacco reported. Dark types 52% cut, 45% last year, 57% average. Corn 25% mature, 34% 1978, 35% average; 85% dented and 100% still in dough; prospects excellent. Corn for silage harvest 20% completed. Soybeans 75% leaves entirely green, 18% leaves turning yellow and 7% shedding leaves. Maturity of soybeans highly variable, many fields weedy.

LOUISIANA: Temperatures 1° below normal to 2° above. Extremes: 95 and 56°. Widely scattered showers at midweek.

Fieldwork: 4.8 days suitable. Soil moisture adequate. Soybeans good; 96% setting pods; leaves turning 12%, 39% last year. Rice 85% ripe, 94% last year; 77% harvested, 84% last year, 78% average. Cotton fair to good; 9% opening bolls, 37% last year, 24% average. Corn 68% harvested, 76% last year, 57% average. Sorghum fair to good; 89% turning color, 96% last year; 58% ripe, 65% last year; 26% harvested, 45% last year. Sweet potatoes 32% dug, 41% last year, 35% average. Sugarcane good; 11% planted, 13% last year, 19%



average. Pecans fair to good. Pastures, hay, cattle good.

MARYLAND & DELAWARE: Temperatures averaged 7° above normal. Highs in mid-80's except 70's in mountains and lows in 70's except 60's in mountains. Precipitation heavy occurring at mid-week in connection with Tropical Storm David.

Fieldwork: 3.8 days suitable. Soil moisture supplies surplus. No apparent damage from Hurricane David. Fuel supplies mostly adequate. Corn dent stage 70%, 75% last year, 72% normal; matured 20%, 35% last year, 41% normal. Harvest for grain starting. Harvest for corn silage 30% complete. Soybeans 85% podded, 95% last year; yellowed 10%, 21% last year, 17% average. Tobacco harvest 60%. Apple harvest just starting.

MICHIGAN: Temperatures near normal. Dry Lower and interior portions Upper. Warm midweek, cold weekend with scattered light frost.

Warm, dry weather pushed development forward, still 2 to 3 weeks behind normal maturity. Fieldwork: 6 days suitable. Soil moisture adequate, except Bay-Thumb area short. Pasture feed supplies average. Corn 40% dented, 75% last year, 55% average. Silage 5% harvested, 12% last year and average. Oats 95% harvested, virtually complete last year and average. Wheat seeding underway. Dry beans 15% harvested, 40% last year, 20% average. Soybeans 20% turning, 50% last year and 45% average. Sugarbeet areas dry, potential yield reduction. Early potato harvest roughly equal to last year and normal. Third cut hay 40%, equal to last year, 35% normal. Summer apples 95% picked, McIntosh 15%, Red Delicious 10%. Peaches 80% harvested, pears 60%, plums 55%. Cucumbers 90% harvested. Onions 25% pulled, 45% last year, 40% normal. Sweet corn 85% picked, equal last year and normal.

Tomatoes 45% complete, 50% last year, 60% normal. Cabbage 55% cut, equal last year, 60% normal.

MINNESOTA: Temperatures averaged 1 to 4° above normal. Extremes: 98 and 29°. Precipitation averaged near normal to 0.50 in. below except locally up to 0.50 in. above in central. Precipitation totals generally less than 0.50 in. except locally heavy accumulations greater than 1.00 in. central, southwest.

Good weather enhanced row crop development, good harvesting progress small grains. Combining small grains 90% completed southern 2/3d's, only 33% wheat crop combined important northwest district. Many farmers putting up last hay crop, some silage cutting to start this week. Wet fields again hindered sweet corn harvest.

Corn 80% in dough, 1978 99%, normal 97%; 30% denting, 1978 81%, normal 80%. Soybeans 35% turning yellow, 1978 79%, normal 82%; shedding leaves 6%, 1978 25%, normal 42%. Combined: Spring wheat 57%, 1978 94%, normal 86%; oats 80%, 1978 96%, normal 97%; barley 84%, 1978 99%, normal 93%; winter wheat 95%, 1978 99%, normal 99%; rye 95%, 1978 95%, normal 99%; flax 19%, 1978 36%, normal 56%. Winter wheat seeded 30%, 1978 34%, normal 38%. Rye seeded 25%, 1978 34%, normal 36%.

MISSISSIPPI: Temperatures near normal. Extremes: 57 and 95°. Scattered thundershowers early week.

Soil moisture adequate. Fieldwork: 5.2 days suitable. Farmers cleaning up turnrows, preparing harvesting equipment. Hay harvest active. Rice harvested in some areas. Soybeans 96% podding, 98% 1978, 95% average; 22% turning color, 36% 1978; 6% shedding, 7% 1978, 11% average; condition good. Cotton 19% open bolls, 76% 1978, 42% average; harvest not yet started, 2% harvested 1978, 1% average; condition fair to good. Rice 95% headed, 99% 1978, 95% average; 40% mature, 71%

1978; 11% harvested, 25% 1978, 11% average; condition good. Corn 82% mature, 91% 1978; 18% harvested, 24% 1978, 16% average; condition good. Sorghum 52% ripe, 75% 1978; 20% harvested, 28% 1978, 26% average. Hay crops 81% harvested, 84% 1978, 77% average. Sweetpotatoes 22% harvested, 34% 1978, 30% average. Pecan condition rated fair to poor. Pastures good condition. Diesel and gasoline supplies adequate to tight. LP gas supplies adequate. Peanuts 18% harvested, 28% 1978, 35% average.

MISSOURI: Temperatures 1 to 3° above normal, warmest in Bootheel. Precipitation absent Bootheel, rather general elsewhere.

Fieldwork: 4.6 days suitable. Corn 86% dented, last year 59%, normal 83%; 25% mature, last year 22%, normal 42%; 2% harvested, last year 5%, normal 8%. Soybeans 94% setting pods or beyond, last year 93%, normal 90%; 17% turning color, last year 16%. Grain sorghum 35% mature, last year 32%, normal 37%. Cotton 22% with open bolls, last year 45%, normal 21%. Alfalfa hay third cutting 84% complete, last year 92%, normal 84%. Condition of soybeans and pasture mostly fair to good; cotton mostly fair. Soil moisture mostly adequate. Fuel supplies for farmwork mostly adequate.

MONTANA: Very hot, dry week. Temperatures averaged 4 to 8° above normal. Temperatures reached into 90's 8th with some areas recording temperatures over 100°. For many areas warmest temperatures recorded so late in summer season. Some mountain areas west received moderate rainfall; elsewhere very dry.

Soil moisture short. Fieldwork: 6 days suitable. Winter wheat 15% planted, 1978 15%, average 20%. Spring grain harvest near normal progress. Barley harvested 65%, 65% 1978, 70% average. Corn silage harvested 10%, 15% 1978, 20% average. Oats harvested 65%, 75% 1978, 75% average. Spring wheat harvested 65%, 65% 1978, 70% average. Dry beans harvested 10%, 10% 1978, 20% average. Second cutting alfalfa 75% complete. Cattle, 15% moved from summer ranges. Sheep, 20% moved. Grazing prospects on fall ranges fair. Number of calves and lambs contracted slightly below average.

NEBRASKA: Precipitation up to 0.50 in. east; little or none west. Temperatures 7° above normal east; 10° above west.

Corn dent 55%, year ago 80%, normal 80%; corn mature over 5%, year ago 15%, normal over 25%. Sorghum turning 65%, year ago 75%, normal 75%. Soybean leaves turning 35%, year ago 50%, normal 55%. Third cutting alfalfa 90%, year ago 95%. Winter wheat seeding 15%, year ago 20%, normal 15%. Diesel and gasoline 85% adequate, 15% tight. Fieldwork: 6.4 days suitable.

NEVADA: Quite warm averaging 5 to 6° above normal. Extremes: 31 and new record high 110°. Only trace precipitation east/central.

Harvesting alfalfa hay ranged from third cutting west to sixth crop extreme southern valley. Limited movement livestock to date.

NEW ENGLAND: Showers the 3d brought 0.10 to 0.20 in. rain. Tropical Storm David came the 6th leaving 1.25 to 2.50 in. south and 1.00 to 3.00 in. north. Temperatures 3d 12 to 20° above normal. Normal temperatures arrived 8th.

Maine potato farmers have 70 to 80% of their vines killed as harvesting commences this week. Heavy rains and high winds from David damaged southern corn fields. Corn reaching dent stage but most still in milk stage. Poor hay weather

but good for seeding cover crops. Disease problems in vegetables. Massachusetts cranberry harvest beginning. Available grazing adequate to good. Soil moisture adequate to surplus. Fuel supplies adequate to tight.

NEW JERSEY: Temperatures averaged 2 to 3° above normal. Extremes: 42 and 89°. Rainfall averaged 3.59 in. north, 2.19 in. central, 1.86 south. Soil moisture in percent of field capacity 86% north, 88% central, 74% south. Soil temperature 63° north, 71° central, south.

Fieldwork: 5.2 days suitable. Tropical Storm David caused considerable crop damage. Hardest hit crops: Tomatoes, peppers, apples, field corn. Harvest of fall vegetables increasing. Very limited sweetpotato digging starting. Fall apples coloring, light harvest beginning. Cranberry harvest expected to get underway next week. Corn silage making general. Hay making progressing as weather conditions permit. Farm fuel supplies adequate.

NEW MEXICO: Hot and relatively dry. Only very widely scattered showers; amounts negligible. Temperatures mostly 3 to 7° warmer than normals.

Weather mostly conducive for crop advancement and outside activities. Crops good condition. Cotton late, many small bolls, occasional open boll. Sorghum grain starting color. Corn ensilage continued. Haying into 5th cut south, 2d and 3d north. Picking green chile and apples continued. Planting winter wheat proceeded with good soil moisture. Ranges, livestock good condition.

NEW YORK: Warm temperatures beginning of week dropping after remains of Tropical Storm David moved through State on 6th. Some overnight freezing temperatures reported in north country. Precipitation above normal in many areas.

Good week for fieldwork until Tropical Storm David moved through area. No serious crop damage reported. Corn in good condition, needs continued warm temperatures. Silage corn 5% chopped, same as last year. Oat combining 93% complete. Second cutting alfalfa about finished. Third cutting 37% complete, 30% last year. Vegetable harvests continued active. McIntosh apple harvest started in Hudson Valley. Peach and pear harvests continued. Early variety grapes being harvested.

NORTH CAROLINA: Temperatures 2 to 4° above normal. Precipitation above normal; 1.00 to 3.00 in. mountains, 10.00 in. several eastern locations.

Fieldwork: 3.0 days suitable. Soil moisture surplus. Condition of cotton, sorghum grain, corn, pasture, sweetpotatoes, apples fair to mostly good. Soybeans fair to good. Peanuts mostly fair to good. Harvested: Burley tobacco 54%, 1978 20%, average 40%; sweetpotatoes 7%, 1978 19%, average 14%; corn for grain 24%, 1978 21%, average 25%; corn for silage 61%, 1978 56%; apples 33%, 1978 29%, average 31%. Phenological stages: Corn mature 86%; cotton open boll 17%; soybeans flowering 79%; soybeans pod set 64%.

NORTH DAKOTA: Dry, warm weather. Most areas received no rain. Largest amount 0.21 in. north central. Temperatures averaged 4 to 7° above normal. Scattered frost morning of 7th north-east. Extremes: 98 and 32°.

Excellent week for small grain harvest. Combining of wheat nearing completion southeast; about 60% remains north. More good weather needed for harvest and row crop development. Scattered light frost several areas, minimal damage.

Localized hail damage northeast. Percents combined and in swath with last year and average: Hard red spring wheat 63 and 25, 86 and 9, 81 and 13; durum wheat 44 and 33, 78 and 13, 67 and 20; oats 79 and 16, 93 and 5, 89 and 8; barley 84 and 12, 96 and 3, 91 and 7. Potatoes 4% dug, last year 9% and average 6%. Bracts of heads yellow on 24% of sunflower, average 43% yellow or beyond. Flax and dry edible bean harvest also underway.

OHIO: Warm, drying weather. Minimums low 40's, high mid-80's; average about normal. Less than one-half the reporting stations indicated rain.

Warm, dry weather pushed crop maturity. Row crop development less than a week behind normal. Corn dry down, and leaves falling from beans now very noticeable. Harvest of hay and hayseeds, tobacco, corn silage, potatoes, fruits and vegetables made good progress. Limited fall plowing also took place. Corn dented or beyond 75%, 75% 1978, 85% average. Corn matured 25%, 20% 1978, 30% average. Soybean leaves yellowing or beyond 40%, 35% 1978, 45% average. Soybeans shedding leaves 15%, 10% 1978, 20% average. Corn harvest silage 20%, 25% 1978, 30% average. Potato harvest 35%, 40% 1978, 40% average. Alfalfa, 3d cutting 50%, 70% 1978, 70% average. Fieldwork: 5 days favorable. Pasture condition very good. Soil moisture adequate.

OKLAHOMA: Temperatures ranged from 5 to 6° above normal Panhandle to 2 to 4° below normal east central. Cool, dry front moved through at mid-week sparking light showers ranging from 0.34 in. southeast to zero east central.

Topsoil and subsoil moisture adequate. Wheat seeding just begun; 2% complete 1979 and 1978, 5% normal. Wheat seedbed preparations 71%, 65% 1978 and normal. All crops in good or better condition. Open bolls reported on 2% cotton acreage, normal for this date. Sorghum harvest just beginning east. Peanuts and soybeans developing faster than normal. Fieldwork: 6.0 days suitable.

OREGON: Heavy rains on parts of west. Coastal and Willamette Valley areas 1.50 to 2.50 in. Other areas 0.10 to 0.50 in. Temperatures averaged near normal to 5° above; greatest departure along coast and extreme east.

Soil moisture mostly adequate to surplus; short in south central, southeast and a few Columbia Basin areas. Winter wheat harvest slowed: 96% complete. Fall seeding preparation continuing; less than 2% of 1980 winter wheat seeded. Fall planting of seed crops underway: field burning winding down; red clover and some bentgrass still to be harvested. Sugarbeet seed, hops, mint, and alfalfa harvest continuing as weather permits. Evergreen blackberry harvest finishing up. Prune harvest to get underway shortly. Anjou pear harvest in full swing; and quality excellent. Apple harvest coming along normally; color and size good. Cranberry development slowed by cool, wet weather. Filberts starting to drop. Sweet corn harvest continuing; weather causing some lodging. Onion harvest continuing; need sunshine for proper curing. Dry beans being cut. Potato harvest progressing normally. Livestock condition good. Range and pasture poor to good. Recent rains bringing on growth. Fall pasture preparation and seeding underway.

PENNSYLVANIA: Warm and humid early week, much drier and cooler following passage north of Tropical Storm David 6th. Temperatures 50's to 80's beginning and 30's to 70's weekend. Extremes: 89° southeast 4th to 29° with frost north

central 9th. Twenty-four hour storm rainfall accounted for nearly entire weekly total that ranged from 0.25 in. extreme western to 5.00 in. lower Susquehanna Valley; elsewhere 1.00 to 3.00 in. common.

Fieldwork: 4 days suitable. Soil moisture adequate to surplus. Activities: Hay making; fall plowing; limited barley and wheat planting; harvest of potatoes, tobacco, oats, fruits and vegetables, ensilage corn. Oats 98% combined, last year 99%. Tobacco 86% cut, 50% last year. Potatoes 46% dug, last year 36%. Corn 48% dough, last year 45%, average 51%; 44% dented, last year 43% dented, normal 29%. Fall plowing 45%, last year 41%. Barley and wheat sown under 5%. Alfalfa second cut 93%, third cut 58%. Clo-tim second cut 83%. Fourth cut alfalfa 6%. Hay quality mostly poor to fair. Feed from pastures average to above.

PUERTO RICO: Island average rainfall 7.28 in. or 5.46 in. above normal. Temperatures averaged about 79° on coasts and 74° interior. Extremes: 98 and 61°.

Passage of Hurricanes David on August 30-31 and Frederic on September 4-5 caused severe floods and wind damage around Island with severe losses in agriculture.

SOUTH CAROLINA: Wet, windy with thundershowers. Highest 24 hour rainfall 9.20 in. Highest temperature 93°.

Fieldwork: 2 days suitable. Corn condition good, light wind damage; 94% mature, 94% last year, 93% average; 57% harvested, 55% last year, 46% average. Cotton condition fair to good, little wind, rain damage; 69% open bolls, 52% last year, 43% average. Soybean condition fair to good, 94% setting pods, 93% last year, 88% average; insecticides applied. Apple condition good to excellent; 63% harvested, 61% last year, 61% average. Grapes fair to good; 82% harvested, 94% last year, 90% average. Extensive vegetable crop damage by strong winds, heavy rains. Pasture and hay crops improving, fair to good condition.

SOUTH DAKOTA: Temperatures unseasonably warm. Average temperatures 4 to 10° above normal. Extremes: 105 and 36°. Precipitation scattered, mainly near weekend. Greatest amounts in south central and southeast.

Fieldwork: 5.5 days suitable. Row crops in good condition. Main farm work: fall tillage, hay harvest and fall seeding. Topsoil moisture short parts of west, south central, southeast and north; adequate elsewhere. Grasshoppers and black-birds troublesome. Grain transportation and storage problems continue. Farm fuel supplies showed little change and mostly adequate. Flax 94% ripe, 1978 89%, average 97%. Spring wheat 96% harvested, 1978 100%, average 100%. Flax 57% harvested, 1978 79%, average 92%. Corn 79% in dough and beyond, 1978 91%, average 95%. Corn 47% dented and beyond, 1978 71%, average 77%. Corn 20% mature, 1978 38%, average 33%. Soybeans 20% shedding leaves, 1978 32%, average 37%. Sorghum 61% showing color, 1978 66%, average 66%. Winter wheat 20% seeded, 1978 37%, average 27%. Rye 22% seeded, 1978 42%, average 28%.

TENNESSEE: Hurricane David moved through Carolinas midweek bringing as much as 2.50 in. rain northeast. Otherwise, weak high pressure allowed isolated showers. Temperatures normal west and middle, above normal southwest. Cold front 7th brought dry, cooler air.

Soil moisture adequate. Fieldwork: 4.5 days suitable. Pastures excellent. Corn mature 42%, 1978 57%, average 48%; harvested for grain 5%,

1978 and average 8%. Cotton open bolls 9%, 1978 27%, average 17%. Soybeans mature 1%, 1978 3%, average 6%. Burley tobacco harvested 68%, 1978 56%, average 66%. Main activities: Harvesting tobacco, cutting silage, and haying. Fuel supplies adequate.

TEXAS: First of week high pressure ridge brought warm, humid conditions and afternoon thunder-showers. Cold front 7th inched southward bringing cooler, drier air. Temperatures near normal. Rainfall ranged from 0.50 in. below normal Panhandle, North Texas, and Southwest; 2.00 in. above normal lower Gulf Coast.

Hot, open weather Panhandle enhanced cotton growth, promoted seeding small grains. Intermittent showers hampered cotton, corn harvest in Blacklands, South Texas; heavy thunderstorms Gulf Coast halted rice, cotton harvest; Edwards Plateau, Northern High Plains, Cross-Timbers need rain. Insect damage generally light although bollworm increasing High Plains. Cotton good growth, development High Plains. Producers spraying some fields bollworms. Bolls began opening Low Plains. Rains Blacklands, South Central Texas curtailed stripping; heavy rains halted harvesting Rio Grande Valley through Upper Gulf Coast. Root rot causing some producer concern. Sorghum harvest spread northward. Producers finished harvest Edwards Plateau. Virtually all fields had begun heading by weekend. Rain halted corn harvest Blacklands. Panhandle producers cut silage. Early planted soybeans began to yellow High Plains. Soybeans rate good to excellent, except Gulf Coast fields that received too much moisture. Few Cross-Timbers peanut fields dug by weekend. Harvest centered South Central, South Texas. Many Cross-Timbers producers would welcome rain. Wheat, oat fields seeded throughout Panhandle; some had emerged by midweek. Most plantings to date dryland fields to graze. Sugarbeets, sugarcane made good progress. Cotton open bolls 19%, harvested 9%, 17% 1978, 14% average. Rice harvested 98%, 99% 1978, 14% average. Sorghum headed 100%; turning color 80%; mature 69%; harvested for grain 64%, 68% 1978, 60% average. Wheat planted 12%, 11% 1978, 13% average; emerged 1%. Corn harvested 33%, 41% 1978, 35% average. Peanuts harvested 23%, 16% 1978, 19% average. Sunflowers harvested 0%, 2% 1978, 14% average. Oats planted 8%, 13% 1978, 9% average.

Ranges, pastures furnished abundance of forage for grazing. Surplus growth being baled or left for winter needs. On Edwards Plateau, some browning from moisture shortage reported. Sheep, goat shearing continued. Most cattle in good flesh for fall, some fall calves born.

Lower Rio Grande Valley began to dry out from recent heavy rains. Where conditions allowed, peppers being thinned. Sweet corn, cabbage, bell peppers, cauliflower, tomatoes, broccoli making normal progress. More cabbage planted as fields dry. Citrus trees and fruit developing normally. Some rust mite reported. San Antonio-Winter Garden area, fall vegetables looking good. Coastal Bend, cucumber planting delayed by rain. Early cucumbers growing nicely. East Texas sweetpotato harvest active. Some tomatoes, watermelons, okra, cantaloups also harvested. Volume began to slow. Planting, caring for fall vegetables common. North Texas, harvest remaining watermelons, cantaloups. Trans-Pecos movement sweet corn, bell peppers, cantaloup, cabbage, watermelons. High Plains, harvest bell peppers, cucumbers, cabbage, cantaloups, tomatoes, sweet corn, peas and beans continued. Watermelons continued available good volume. Prospects promising for excellent pecan crop. Droppage continued to be problem, most

trees heavily loaded. Scab, weevils, and sticky shuck problem many areas.

UTAH: Few isolated very light showers. Soil moisture deficit many ranges and dryland fields severe stress. Increasing trend temperatures. Record values few stations weekend. Average temperatures ranged from near normal to 7° above.

Fieldwork: 7 days suitable. Third crop alfalfa 40% complete. Sweet corn and tomatoes 60% picked, good quality. Peach and pear crops nearing peak. Winter wheat seeding moving ahead in spite of soil moisture shortage. Livestock moving from early depressed ranges.

VIRGINIA: Tropical Storm David moved through night of 5th dumping heavy rains which resulted in some flash flooding. Several tornadoes occurred in east and north as storm moved northward. Hot and humid with thunderstorms first and midweek turning drier and cooler weekend with temperatures dipping into 60's and 70's and lows in 40's and 50's. Average temperatures low 70's. Extremes: 40 and 91°. Heavy rainfall averaged 3.00 to 4.00 in. occurring mainly 5th. Heaviest rainfall 7.00 to 8.00 in., least was less than 1.00 in.

Topsoil moisture mostly surplus. Fieldwork: 2.2 days available. Corn condition good; grain combined 6%, 11% 1978, 15% average; Tidewater, southeast grain picked 9%, 20% 1978; minor losses reported as winds downed stalks; silage harvests delayed by rain. Tobacco harvest progress: Flue-cured 65%, 61% 1978, 65% usual; fire-cured 66%, 43% 1978, 57% average; burley 42%, 32% 1978, 49% usual; sun-cured 55%, 52% 1978, 59% average; condition mostly good, burley fair. Less than 1% wheat, barley, winter oats seeded. Apples 12% picked, 15% 1978, 17% average. Pastures, soybeans, peanuts in good shape. Haying delayed by weather, some losses in east.

WASHINGTON: West: Temperatures averaged a few degrees above normal; precipitation averaged much above normal.

Vegetable and berry harvests continue while flower bulb planting 85% complete. Pastures responding to recent precipitation.

East: Temperatures averaged normal to 3° above normal; precipitation averaged much above normal in most areas.

Red and Golden Delicious, pear, nectarine, and peach harvests continued. Norgold potato harvest nearing completion. Dry bean harvest interrupted by rain. Range conditions improved. Wheat harvested 100%, 1978 87%.

WEST VIRGINIA: Temperatures above normal. Extremes: 92 and 43°. Precipitation below normal northwest, normal southwest, above normal elsewhere. David triggered heavy showers east.

Soil moisture surplus to adequate. Farmwork: 2.9 days suitable. Major activities: haying, pasture clipping. 2d haying 55% complete, average 80%; 81% 1978. Much cut hay abandoned due to rotting. Oats harvested 88%, average 95%, 97% 1978. Potatoes dug 49%, average 57%, 60% 1978. Tobacco harvest 41%, average 49%, 31% 1978. Corn mostly good. Fruit mostly fair. Livestock good. Fuel supplies adequate, becoming tight central and south.

WISCONSIN: Temperatures averaged about 2° below normal. Highs warmed to 80's 5th but fell to around 60° 7th. Lows cooled from 50's early week to 40's and 30's 8th. Scattered frost north 8th.

(continued on page 23)

World Weather and Crop Update

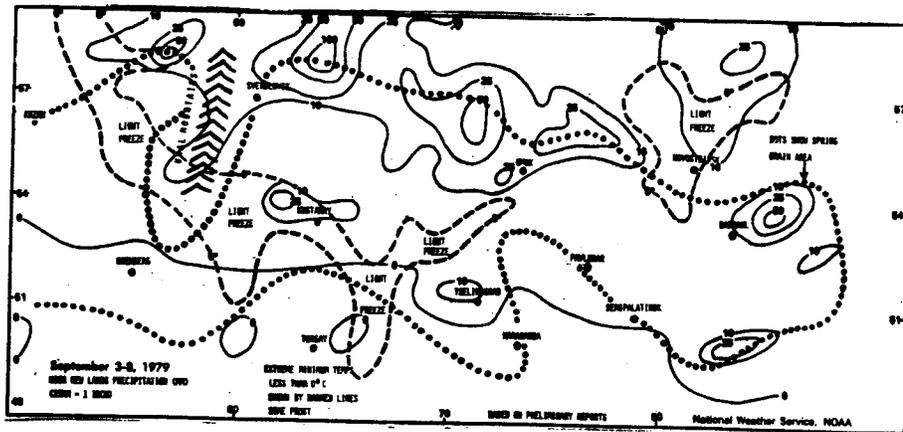
September 3 - 9

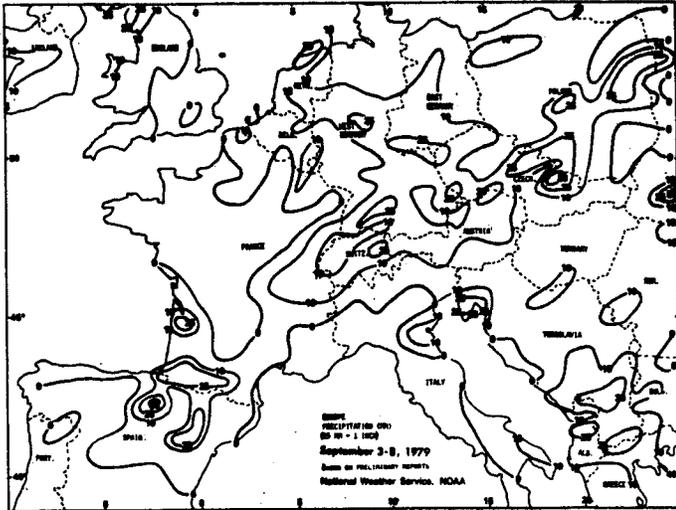
HIGHLIGHTS:

- USSR.** Harvesting spring grains in New Lands...rainy in the north. Sowing winter grain...generally favorable conditions.
- EUROPE.** Harvest of small grain continued in north...light rains in some areas.
- CHINA.** Harvesting rice in northern crop areas*...heavy rains in some areas.
- INDIA.** Rice turning color in the north*...continued dry in many areas.
- AUSTRALIA.** Grains heading in the north, jointing south...dry in the north, wet south.
- ARGENTINA.** Grain jointing...soil moisture adequate.
- CANADA.** Harvesting grains...some interference by rain in the north.

*Based on normal crop calendar information.

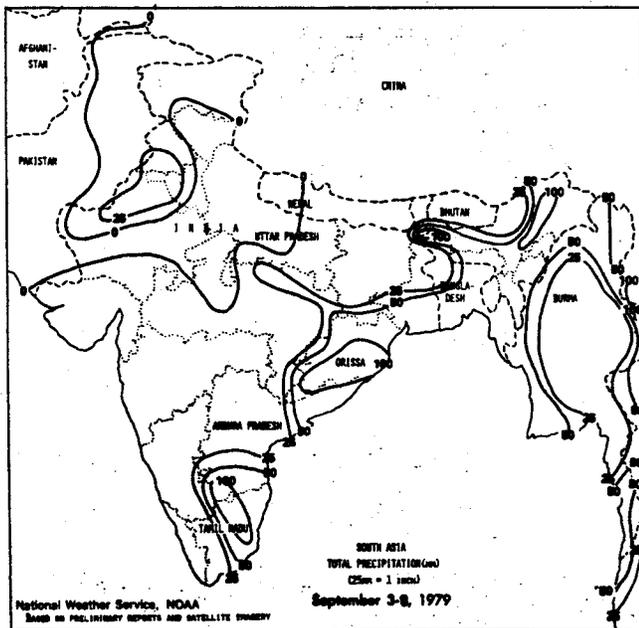
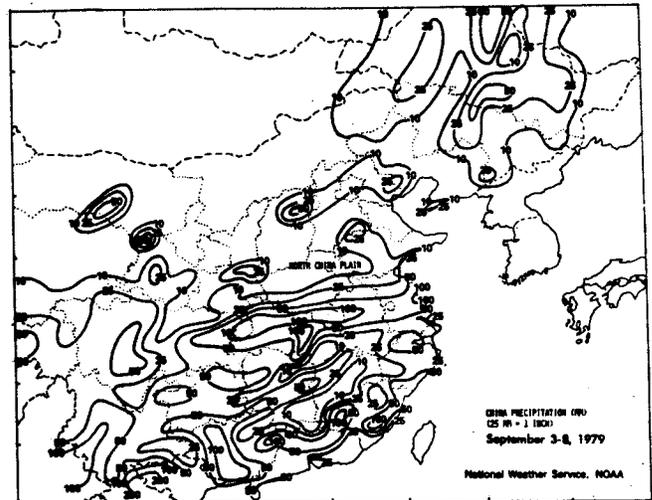
USSR. A variable rainfall pattern over the winter grain belt of European USSR generally complemented last week's totals. The rains probably did not interfere with sowing operations, as amounts remained light. Soil moisture in the southeastern Ukraine and North Caucasus was given a boost by above-normal totals. Much of the Volga Valley remained dry, but grain sowing began there in hopes that rains would soon arrive. Grain harvest continued in the New Lands under ever-improving conditions. Above-normal rains were restricted to northern portions of the crop area, and although the harvest has begun, the greatest activity was centered just to the south. Frost occurred again just east of the Urals late in the week, but the crop had matured sufficiently to avoid damage.



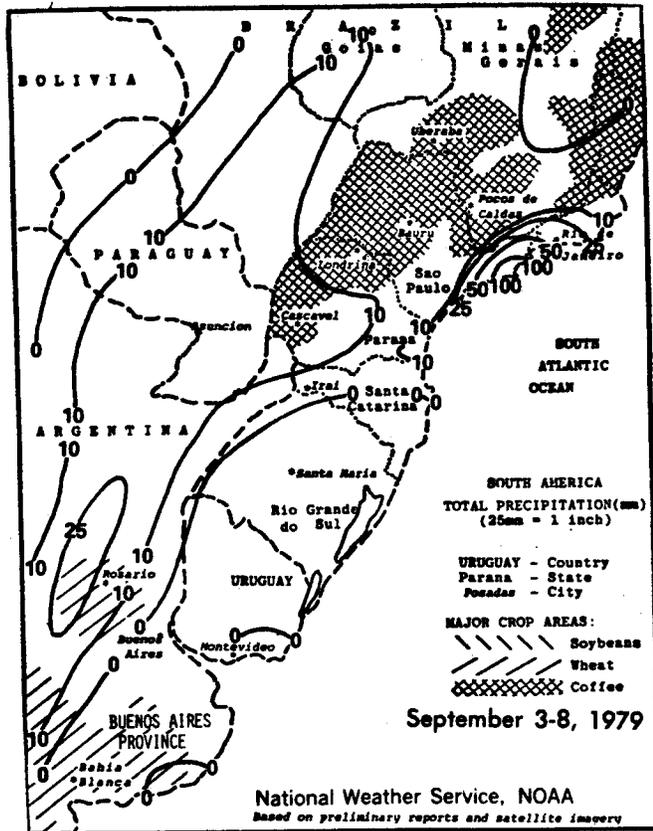


EUROPE. Late harvest of small grain continued in the northern countries under generally favorable conditions, as rainfall totals remained near normal or below. Generally fair weather prevailed over most maize-growing areas in France, Italy, Hungary, Yugoslavia, and Romania, where the crop neared maturity.

CHINA. Heavy rainfall continued over the southern half of the country---unusual for this late in the season. Heavy rains in southern parts of the North China Plain disrupted harvest activities there, but no losses are expected. The second rice crop in southern coastal provinces benefited from abundant rainfall again last week. Crop harvesting generally proceeded well in the northern part of the North China Plain, but rains likely caused harvest delays in the Manchurian Valley.

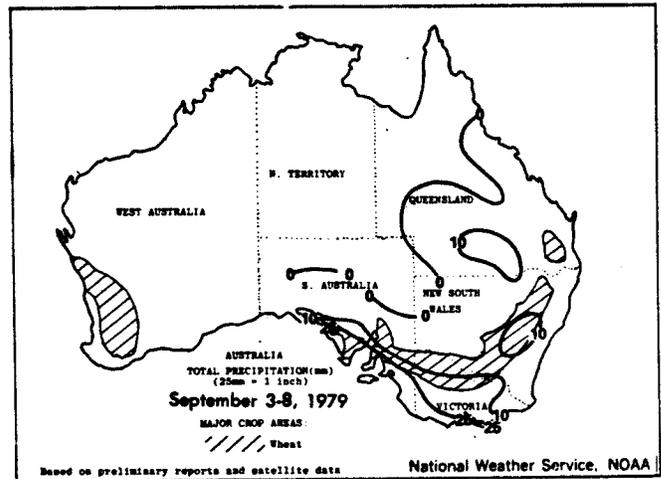


INDIA. Dry weather continued to plague most inland crop areas. Beneficial rains did fall in Orissa and Tamil Madu, boosting rice-crop prospects there, but most of Andhra Pradesh remained dry. For much of Uttar Pradesh, this marked the third consecutive week of no rainfall, and a substantial rice-crop failure may be imminent there.

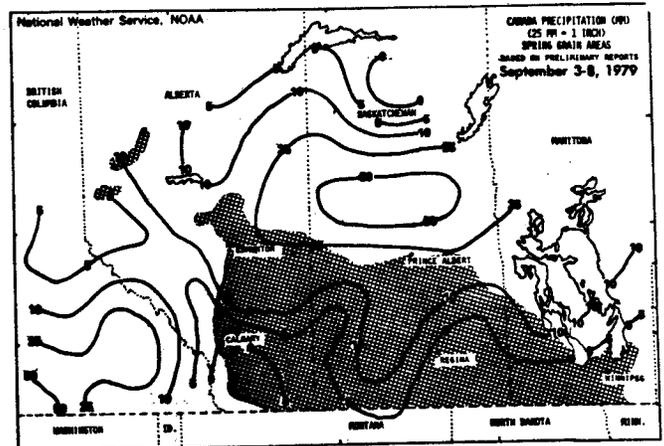


SOUTH AMERICA. Rainfall tapered off to near zero in most crop areas in southern Brazil and in Argentina's Buenos Aires Province, but winter grains should have adequate soil moisture for normal plant development. Unexpected rains in western portions of Argentina's grain areas boosted crop prospects there and replenished soil moisture for spring maize planting next month.

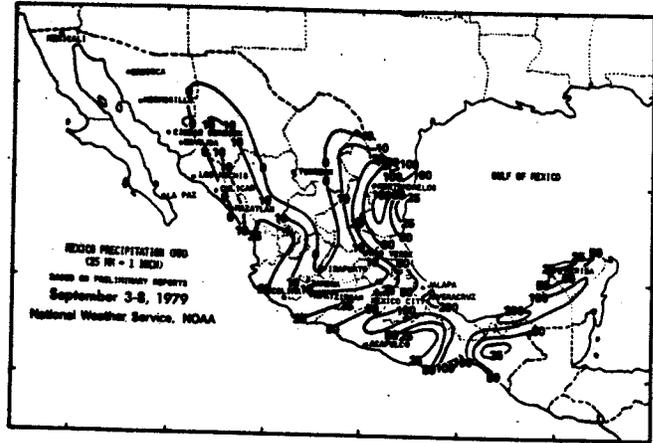
AUSTRALIA. Near-normal rainfall continued over much of the grain belt. The northern rim of the grain belt through South Australia, Victoria, and New South Wales is normally drier than the rest, but during the past two months or so, it has received even less rain than normal. Grain areas in Queensland and northeastern New South Wales also continued dry, but favorable conditions along southern portions of the entire grain belt may compensate and maintain an optimistic outlook for total production.



CANADA. Rainfall increased over northern portions of the Prairie Provinces grain belt. Totals remained generally light, however, and probably caused only minor delays in grain harvest. Reports of swathing progress ranged from roughly 50 percent in Alberta to nearly 80 percent in Saskatchewan, slightly lagging last year due to planting delays but with somewhat better harvest conditions now.



MEXICO. Light to extremely heavy rains covered the eastern citrus belt. Amounts of 10 to 20 mm at Rio Verde and 25 to 50 mm in the Montemorelos/Linares districts were beneficial, while up to 200 mm at Vera Cruz was excessive. The central plateau's vegetable areas were mostly dry and mild. Vegetable planting and growth over the west coast were generally favored by the hot, dry pattern. Culiacan's afternoon temperature maxima averaged 36°C with a relative humidity of 50 percent; overnight minima were 24°C with relative humidity of 80 percent. A few showers fell in the irrigation watersheds of the Sierras.



HURRICANE DAVID--PRELIMINARY REPORT

Dick DeAngelis
National Oceanographic Data Center
Environmental Data and Information Service, NOAA

David grew explosively to become one of the Caribbean's most potent and destructive storms, spawned 1500 miles east of the Windward Islands on August 25. Guadeloupe, Martinique, Dominica, Puerto Rico, the Dominican Republic, and Haiti were damaged by David's high winds, torrential rains, and storm tides. David's minimum pressure ranks seventh on the list of North Atlantic hurricanes.

The hurricane caused extensive agricultural losses in the Caribbean Islands. On Dominica, the entire crop (mostly bananas and grapefruit) was completely destroyed. In the Dominican Republic, much of the Nation's agriculture, including coffee and banana crops, were demolished. Crop damage on the other islands appeared a little less severe.

David moved through the Martinique Passage on the 29th. Winds were estimated at 140 mph near its center. On Dominica, nearly three-fourths of the island's 80,000 inhabitants were left homeless. Martinique suffered an estimated \$50 million loss as its banana crop was destroyed. Guadeloupe's banana crop in Dasse Terre was also lost, with the damage estimate set at \$100 million.

The following day, David passed 70 to 90 miles south of Puerto Rico. While hurricane-force winds extended only 50 miles, gales, torrential rains, and storm tides buffeted the south coast of the island. In a San Juan suburb, 11 inches of rain was reported in 12 hours, while 13 inches fell to the south in Cayey. In general, the storm resulted in 4 to 10 inches of rain throughout Puerto Rico and the Virgin Islands. Much of this was due to the backlash of southeasterly winds once David had moved southwest of the island. (USDA reported a preliminary \$54 million estimate of damage to Puerto Rico's agriculture on Sept. 5.)

David reached a peak by noon on the 30th when its central pressure dropped to 924 millibars and maximum winds climbed to 150 mph. Friday evening (the 31st), David turned toward the northwest and slammed into the Dominican Republic, just west of Santo Domingo. Winds in the capital pushed past

100 mph before the measuring equipment blew down. During the night, David crossed the island of Hispaniola.

While the mountains of the island weakened the storm, they also produced torrential rains, flash floods, and accelerated wind speeds. Floods were the great killer. The death toll stands at more than 1000. Heavy rains were also reported in southern and central Haiti as following southwesterlies rolled over the mountains. The death toll may reach the 1000 mark recorded in Honduras during Hurricane Fifi in 1974. Throughout the Dominican Republic, rainfall amounts ranged from 4 to 11 inches, but it is expected that more than 20 inches fell in the central mountains. Total crop damage appears to be less than 70 percent. In the northeastern area, there was 40 percent damage to the rice crop already harvested and 15 to 20 percent of the crops that remained in the ground were lost. Storms also damaged yautia, yucca, and plantain. Sugarcane and grinding mills were heavily hit; agricultural damage has been estimated at \$350 million.

On the morning of September 1, a weakened, somewhat disorganized David appeared along the northern coast of Haiti. Maximum winds were barely hurricane force. David remained in this state crossing the Windward Passage and the eastern tip of Cuba that afternoon. Once over more open water, David began to reintensify and headed northwestward. By the 2nd, 90-mph winds skirted the western Bahamas. During the afternoon, Andros Island reported 70-to-80-mph winds shortly before the eye appeared. Rainfall in the island chain totaled about 8 inches.

David approached Florida and packed 100-mph winds in the early morning hours of Labor Day (3d). A slight shift toward the north brought David's center about 50 miles east of Miami, where the beach area was being buffeted by gale-force winds. Wind gusts of 70-to-80 mph rushed along the east coast of Florida as David moved northward. This was accompanied by heavy surf and 2 to 5 inches of rain. By evening, David's eye was on the beach just south of Melbourne, remaining close

enough to water to maintain hurricane strength for a northward trek. West Palm Beach reported 58-mph winds with gusts to 75 mph before the power failed; gusts were estimated to have reached 85 mph.

On the 4th, David moved northward over open water for a short while. Later in the day, David moved ashore with 90-mph winds, this time near Savannah Beach. Once inland the storm began to weaken but persisted with heavy rains and locally strong winds far to the northeast of the center. This pattern continued as David made his way northward through the Carolinas on the 5th. From Savannah to Norfolk, reports of 4 to 8 inches of rain were common. Flash flooding inland and coastal storm surges atop spring tides created problems.

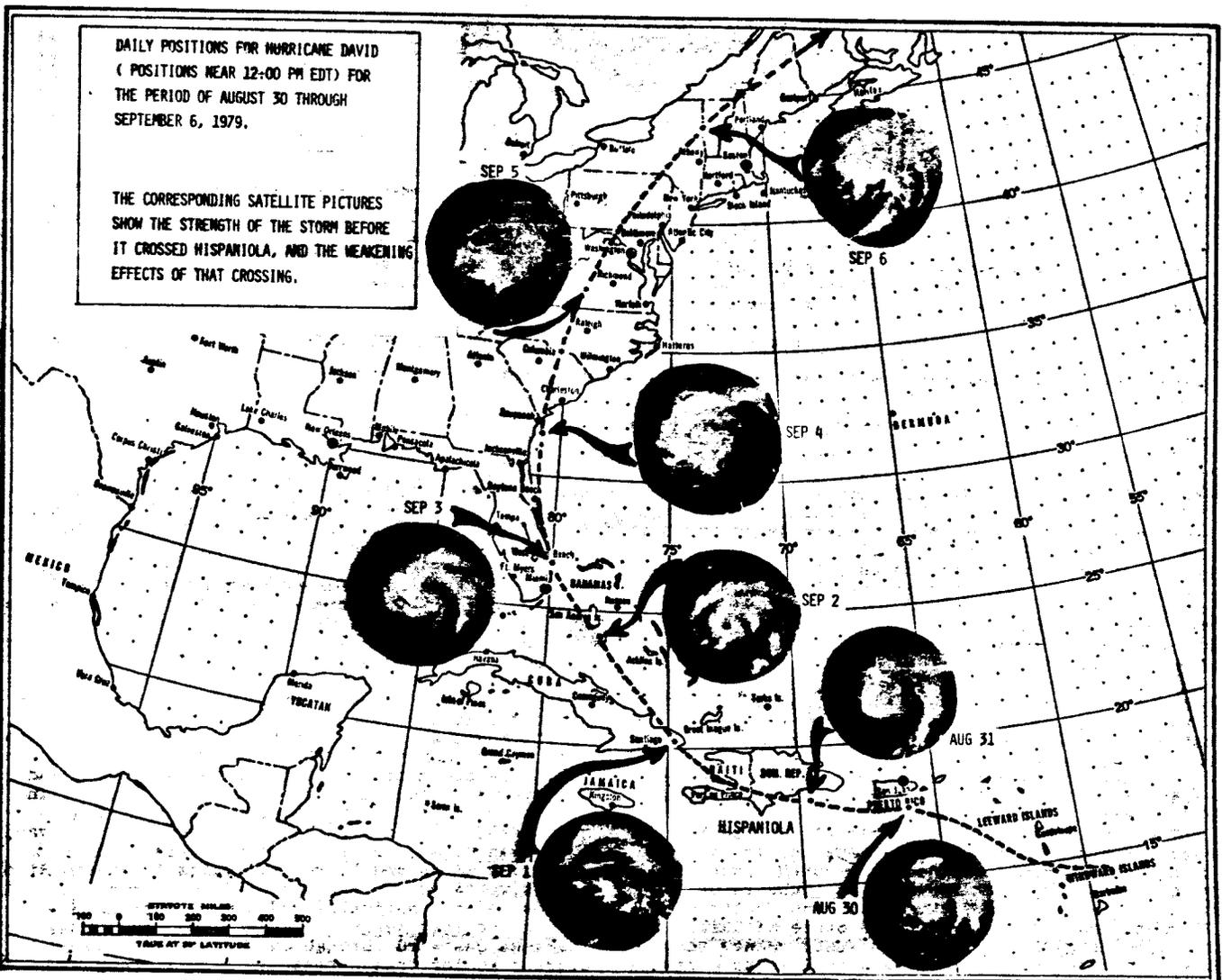
David was slow to weaken. He did not lose his tropical characteristics quickly as is usual when a storm moves into the northern latitudes. Through the night of the 5th, the storm rambled north northeastward through Virginia, Maryland, and central Pennsylvania. In addition to dumping 3 to 8 inches of rain east and northeast of his center, David spawned a number of small tornadoes east of

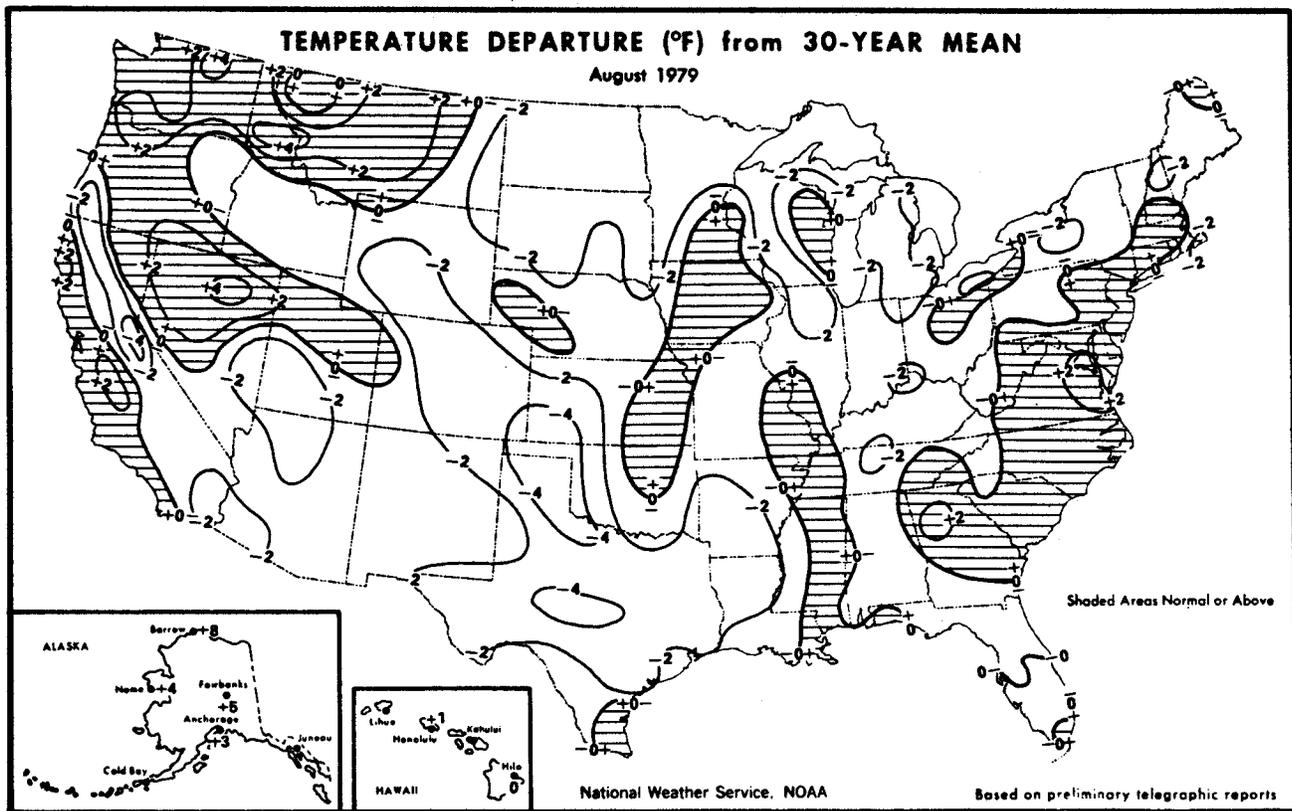
its center from southern Virginia through New Jersey. Wind gusts in the 40-to-50-mph range were common in squalls.

The following day David turned northeastward through New York, northern New England, and into New Brunswick.

Death and damage figures are still sketchy, and only preliminary estimates are available. First guesses are putting the total damage estimate at about \$1.5 billion; this includes \$1 billion in the Dominican Republic and \$0.5 billion elsewhere. The death count was greatest in the Dominican Republic, where it is expected to reach 1,200. On Dominica, there were 23 reported deaths, while Puerto Rico has counted 8 or 9 deaths with 30 people missing. The U.S. estimate stands at 16 deaths so far.

From Florida to Connecticut, gusty winds, tornadoes, and local flooding caused damage. Up to 9 inches of rain drenched Virginia, and tornadoes struck both the northern and southern parts of the State. Maryland, Delaware, Pennsylvania, and New Jersey also reported tornadoes. Some Florida citrus was lost.





August Weather Summary

HIGHLIGHTS: August was a month of many contrasts. Some areas reported both record high and low temperatures. The season's first frost occurred in the northern tier from North Dakota to New England. Some of the heaviest precipitation of the month fell in the northern part of Iowa and in Ohio where as much as three times the normal amount was recorded.

A typical summer rainfall pattern prevailed from July 30 to August 5 as warm, moist air from the Gulf of Mexico flowed northward causing showers and thunderstorms in nearly all areas east of the Rockies. Seasonal showers edged westward into southern New Mexico and Arizona. Temperatures ranged cooler than normal in the northern and southern Plains, but most of the Nation was near or above normal.

August showers began in earnest in the Southwest, Plateau, and central Rockies during the week of August 6-12. The showers extended northward into southern Idaho where numerous fires burned dry forests. East of the Rockies, the influx of warm air continued into the early part of the week, but cooler air from Canada covered the area by the end of the week. Record high temperatures early in the week were followed by record low readings. Frost was reported in northern Minnesota and Michigan.

The cool air enveloped nearly all of the Nation early in the week of August 13-19, and frost spanned the Canadian border from North Dakota through New England. Showers and thunderstorms were moderate to heavy throughout the Southwest, Plateau, and northward into the State of Washington. The fire danger lowered in the West. Heavy showers also extended into the central Rockies and eastward

into the upper Midwest. Flooding plagued northern Nebraska, Iowa, and Illinois. Moderate to heavy rain fell along the Gulf Coast.

The week of August 20-26 was one of very heavy rain in some areas. Six to 8 inches aggravated the flooding in parts of Iowa and Minnesota. The lower Mississippi Valley, northern Alabama, and Georgia also reported heavy rain. Isolated heavy thunderstorms occurred throughout the week from northern Texas through the Plains. A succession of cool air surged into the central portion of the Nation triggering heavy downpours. Storm systems formed in the central United States and moved eastward. Most of the cold air remained in Canada producing some light frost near the North Dakota border. Average temperatures for the week were 3 to 6 degrees colder than normal in the central Rockies and eastern slopes, and about 3 degrees warmer than normal east of the Appalachians and on the West Coast.

Frequent rains fell from the eastern Great Plains to the Atlantic Coast from August 27 to the end of the month. Heavy amounts soaked eastern Kansas, western Missouri, and eastern Oklahoma where thunderstorms were most frequent at midweek. Early in the week, a tropical storm in the Gulf of Mexico dumped 5 or more inches of rain on Texas's southern tip. The storm stalled off the Mexican Coast and slowly dissipated but still brought moderate rain all along the Texas Gulf Coast. At the end of the month, another tropical storm was moving toward the Texas Coast, while Hurricane David brought rampaging winds and torrential rains to Puerto Rico on its westward trek.

Most of the Nation ranged warmer than normal during the last week of August. The area from Nebraska eastward through Ohio averaged 3 to 6 degrees cooler than normal.

Temperature and Precipitation Data for August 1979

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 . . .	78	- 1	2.3	- 2.0	LA. Baton Rouge . . .	81	- 1	4.9	+ .2	Youngstown . . .	68	- 1	4.7	+ 1.5
Mobile . . .	81	- 1	6.1	- .8	Lake Charles . . .	81	- 1	3.8	- 1.0	OKLA. Okla. City . . .	80	- 1	3.8	+ 1.2
Montgomery . . .	80	- 1	1.5	- 2.0	New Orleans . . .	83	+ 1	4.6	- .7	Tulsa . . .	82	+ 1	4.8	+ 1.8
ALASKA. Anchorage . . .	59	+ 3	1.5	- .8	Shreveport . . .	80	- 3	1.9	- .8	OREG. Astoria . . .	62	+ 2	.8	- .7
Barrow . . .	46	+ 8	.8	- .2	MAINE. Caribou . . .	82	- 0	5.0	+ 1.2	Burns . . .	67	+ 1	2.0	+ 1.6
Fairbanks . . .	60	+ 3	1.2	- 1.0	Portland . . .	65	- 1	5.5	+ 2.9	Medford . . .	70	0	.6	+ .3
Juneau . . .	---	---	---	---	MD. Baltimore . . .	76	+ 1	9.4	+ 5.2	Pendleton . . .	71	- 1	1.4	+ 1.1
Kodiak . . .	---	---	---	---	MASS. Boston . . .	72	+ 1	5.0	+ 1.5	Portland . . .	69	+ 2	1.2	+ .4
Nome . . .	53	+ 4	4.1	+ .5	Chatham . . .	66	- 5	5.0	+ 2.5	Salem . . .	66	0	.7	+ .1
ARIZ. Flagstaff . . .	60	- 4	2.4	- .3	MICH. Alpena . . .	63	- 1	2.1	- .6	PA. Allentown . . .	73	+ 1	2.1	- 2.1
Phoenix . . .	89	0	1.2	0	Detroit . . .	68	- 3	3.0	- .3	Erie . . .	70	+ 2	5.1	+ 1.7
Tucson . . .	83	- 1	2.6	+ .3	Flint . . .	67	- 1	2.5	- .8	Harrisburg . . .	73	- 1	3.2	0
Winslow . . .	75	- 1	1.5	0	Grand Rapids . . .	69	- 1	4.5	+ 2.0	Philadelphia . . .	76	+ 1	6.0	+ 1.9
Yuma . . .	90	- 3	1.3	+ .9	Houghton Lake . . .	63	- 2	3.9	+ 1.5	Pittsburgh . . .	70	0	6.8	+ 3.6
ARK. Fort Smith . . .	79	- 2	4.4	+ 1.5	Lansing . . .	68	- 2	2.3	- .5	Scranton . . .	71	+ 1	2.1	- 1.7
Little Rock . . .	79	- 2	4.5	+ 1.7	Marquette . . .	61	- 2	1.4	- 2.4	R.I. Providence . . .	70	0	10.1	+ 6.2
CALIF. Bakersfield . . .	82	0	0	0	Muskegon . . .	66	- 3	4.2	+ .6	S.C. Charleston . . .	81	+ 1	.9	- 5.5
Eureka . . .	59	+ 2	- 1	- .2	S. Ste. Marie . . .	61	- 2	5.2	+ 2.1	Columbia . . .	80	0	4.1	- 1.5
Fresno . . .	80	+ 2	0	0	MINN. Duluth . . .	62	- 2	2.1	- 1.7	Greenville . . .	77	- 1	4.3	+ .2
Los Angeles . . .	71	+ 1	T	0	Internat Falls . . .	60	- 3	3.2	- .2	S.D. Aberdeen . . .	68	- 3	1.2	- .9
Red Bluff . . .	79	- 1	T	- .2	Minneapolis . . .	70	+ 1	7.0	+ 3.9	Huron . . .	71	- 1	1.8	- .2
San Diego . . .	74	+ 3	T	- .1	Rochester . . .	69	0	9.5	+ 5.9	Rapid City . . .	69	- 3	2.3	+ .8
San Francisco . . .	64	+ 1	T	0	St. Cloud . . .	65	- 3	4.9	+ 1.0	Sioux Falls . . .	70	- 2	4.4	+ 1.6
Stockton . . .	77	+ 2	T	0	MISS. Jackson . . .	80	- 1	7.4	+ 3.8	TENN. Chattanooga . . .	78	0	4.5	+ 1.3
COLO. Denver . . .	70	- 2	5.9	+ 4.8	Meridian . . .	81	0	1.5	- 2.4	Knoxville . . .	78	+ 1	2.3	- .9
Grand Junction . . .	75	0	.6	- .5	MO. Columbia . . .	75	- 1	2.8	- 1.0	Memphis . . .	81	+ 1	5.9	+ 2.6
Pueblo . . .	72	- 3	2.0	0	Kansas City . . .	76	- 1	3.7	- .1	Nashville . . .	77	- 2	4.6	+ 1.4
CONN. Bridgeport . . .	73	0	4.4	+ .6	St. Louis . . .	78	+ 1	2.3	- .6	TEX. Abilene . . .	82	- 2	1.6	- .5
Hartford . . .	71	+ 1	4.4	+ .5	Springfield . . .	76	- 1	3.6	+ .7	Amarillo . . .	74	- 4	5.1	+ 2.2
D.C. Washington . . .	79	+ 2	5.4	+ .7	MONT. Billings . . .	72	+ 2	.9	- .1	Austin . . .	83	- 2	.6	- 1.6
FLA. Apalachicola . . .	81	- 1	3.8	- 4.3	Glasgow . . .	70	+ 1	.8	- .7	Beaumont . . .	82	- 2	4.1	- 1.6
Daytona Beach . . .	80	- 1	5.2	- 1.6	Great Falls . . .	69	+ 2	.3	- .8	Brownsville . . .	84	0	5.2	+ 2.5
Ft. Myers . . .	84	+ 1	14.8	+ 7.1	Havre . . .	70	+ 2	.2	- .9	Corpus Christi . . .	85	0	2.5	- .7
Jacksonville . . .	80	- 1	4.8	- 3.1	Helena . . .	68	+ 2	.8	- .2	Del Rio . . .	85	- 1	.7	- .5
Key West . . .	85	0	2.5	- 2.0	Kalispell . . .	61	- 2	1.1	- .2	El Paso . . .	79	- 2	2.2	+ 1.1
Lakeland . . .	81	- 1	5.8	- 1.4	Miles City . . .	72	- 1	1.7	- .5	Fort Worth . . .	83	- 2	2.5	+ .2
Miami . . .	82	- 1	4.8	- 1.9	Missoula . . .	69	+ 4	1.3	+ .4	Galveston . . .	82	- 1	4.5	+ .1
Orlando . . .	82	0	5.9	- .8	NEBR. Grand Island . . .	74	- 1	1.4	- 1.1	Houston . . .	82	- 1	4.6	+ .2
Tallahassee . . .	81	- 1	6.8	- .1	Lincoln . . .	75	- 1	2.8	- .5	Lubbock . . .	77	- 1	3.8	+ 1.9
Tampa . . .	82	0	12.8	+ 4.8	Norfolk . . .	73	- 1	2.8	+ .1	Midland . . .	79	- 3	2.2	+ .7
W. Palm Beach . . .	83	+ 1	3.1	- 3.8	N. Platte . . .	73	0	1.5	- .6	San Angelo . . .	80	- 5	2.2	+ .8
GA. Atlanta . . .	80	+ 2	7.3	+ 3.8	Omaha . . .	74	0	2.5	- 1.5	San Antonio . . .	83	- 2	2.1	- .3
Augusta . . .	80	0	3.6	- .6	Valentine . . .	71	- 2	.8	- 1.6	Victoria . . .	82	- 3	2.1	- 1.1
Macon . . .	81	0	4.2	+ .5	NEV. Ely . . .	64	- 2	.6	0	Waco . . .	82	- 4	4.6	+ 2.8
Savannah . . .	81	0	2.7	- 3.8	Las Vegas . . .	86	- 1	2.1	+ 1.6	Wichita Falls . . .	82	- 4	3.6	+ 1.8
HAWAII. Hilo . . .	76	0	7.1	- 3.8	Reno . . .	68	+ 1	.4	+ .2	UTAH. Blanding . . .	70	- 1	.6	- 1.0
Honolulu . . .	80	- 1	.2	- .6	Winemucca . . .	70	+ 2	1.7	+ 1.4	Salt Lake City . . .	76	+ 1	.6	- .3
Kahului . . .	---	---	---	---	N.H. Concord . . .	68	+ 1	4.2	+ 1.3	VT. Burlington . . .	66	- 1	3.4	- .3
Lihue . . .	---	---	---	---	N.J. Atlantic City . . .	73	0	4.1	- .8	VA. Lynchburg . . .	75	+ 1	3.4	- .7
IDAHO. Boise . . .	71	- 1	1.8	+ 1.5	Trenton . . .	75	+ 1	4.5	+ .3	Norfolk . . .	79	+ 2	1.8	- 4.0
Lewiston . . .	75	+ 3	.6	0	N.MEX. Albuquerque . . .	77	0	1.5	+ .2	Richmond . . .	78	+ 2	7.1	+ 2.0
Pocatello . . .	69	- 1	.7	+ .1	Roswell . . .	77	- 1	2.3	+ .8	Roanoke . . .	74	0	3.4	- .8
ILL. Cairo . . .	79	0	4.8	+ 1.3	N.Y. Albany . . .	69	- 1	2.7	- .2	WASH. Colville . . .	70	+ 3	1.3	+ .4
Chicago . . .	72	- 2	8.6	+ 5.5	Binghamton . . .	66	- 1	2.4	- 1.2	Omak . . .	72	+ 4	1.2	+ .6
Moline . . .	72	- 1	6.9	+ 3.5	Buffalo . . .	68	0	6.3	+ 2.8	Quillayute . . .	60	+ 1	.8	- 2.0
Peoria . . .	72	- 2	.9	- 2.2	New York . . .	76	+ 1	4.8	+ .3	Seattle-Tacoma . . .	64	0	1.0	- .1
Rockford . . .	70	- 2	6.7	+ 3.0	Rochester . . .	67	- 2	2.1	- .9	Spokane . . .	70	+ 2	1.0	+ .4
Springfield . . .	74	0	2.9	+ .2	Syracuse . . .	68	- 2	3.7	+ .2	Walla Walla . . .	74	0	1.2	+ .7
IND. Evansville . . .	75	- 1	2.4	- .6	N.C. Asheville . . .	73	0	3.6	- .9	Yakima . . .	70	+ 1	.4	+ .1
Ft. Wayne . . .	69	- 2	3.5	+ .6	Charlotte . . .	78	0	1.3	- 2.7	W.VA. Beckley . . .	69	0	3.4	- .4
Indianapolis . . .	72	- 1	6.1	+ 3.3	Greensboro . . .	77	+ 1	1.1	- 3.2	Charleston . . .	73	- 1	4.8	+ 1.1
South Bend . . .	71	0	8.3	+ 5.0	Hatteras . . .	78	0	3.3	- 3.5	Huntington . . .	74	0	6.9	+ 3.6
IOWA. Burlington . . .	73	- 1	3.0	- .4	Raleigh . . .	77	0	1.7	- 3.2	Parkersburg . . .	73	- 1	5.9	+ 2.6
Des Moines . . .	74	+ 1	5.1	+ 1.8	Wilmington . . .	81	+ 1	2.5	- 4.3	WISC. Green Bay . . .	70	+ 2	6.0	+ 3.4
Dubuque . . .	70	0	7.5	+ 3.5	N.DAK. Bismarck . . .	66	- 3	1.7	- .3	La Crosse . . .	69	- 2	7.2	+ 4.2
Sioux City . . .	72	- 2	6.3	+ 3.3	Fargo . . .	67	- 2	.9	- 2.0	Madison . . .	67	- 2	5.0	+ 1.9
KANS. Concordia . . .	76	- 1	2.1	- 1.1	Williston . . .	67	- 2	.3	- 1.3	Milwaukee . . .	69	0	4.9	+ 2.2
Dodge City . . .	74	- 4	1.5	- 1.1	OHIO. Akron-Canton . . .	69	- 1	4.3	+ 1.5	WYO. Casper . . .	68	- 2	2.7	+ 2.1
Goodland . . .	72	- 2	3.2	+ 1.1	Cincinnati . . .	72	- 2	4.8	+ 2.2	Cheyenne . . .	66	- 2	1.9	+ .4
Topeka . . .	77	0	4.1	- .1	Cleveland . . .	72	+ 2	4.5	+ 1.5	Lander . . .	67	- 2	2.3	+ 1.9
Wichita . . .	80	0	.7	- 2.4	Columbus . . .	72	0	8.6	+ 5.7	Sheridan . . .	68	- 1	1.1	+ .1
KY. Lexington . . .	74	- 1	4.7	+ 1.3	Dayton . . .	72	- 1	8.0	+ 5.4	P.R. San Juan . . .	83	+ 2	9.4	+ 2.4
Louisville . . .	76	0	2.4	- .6	Toledo . . .	69	- 2	4.7	+ 1.6					

Based on 1941-70 normals

Heating Degree Days (Base 65° F.)
August 1979

ALA. Birmingham	0	MAINE, Caribou	146	OKLA. Okla. City	0
Mobile	0	Portland	82	Tulsa	0
Montgomery	0	MD. Baltimore	3	OREG. Astoria	92
ALASKA, Anchorage	171	MASS. Boston	15	Burns U.	45
Barrow	--	Chatham	41	Medford	2
Fairbanks	--	NICH. Alpena	107	Pendleton	0
Juneau	--	Detroit	29	Portland	2
Nome	--	Flint	36	Salem	47
ARIZ. Flagstaff	157	Grand Rapids	31	PA. Allentown	22
Phoenix	0	Houghton Lake	109	Erie	17
Tucson	0	Lansing	41	Harrisburg	14
Winslow	0	Marquette U	153	Philadelphia	7
Yuma	0	S. Ste. Marie	203	Pittsburgh	26
ARK. Fort Smith	0	MINN. Duluth	115	Scranton	31
Little Rock	0	Internatl Falls	161	R. I. Providence	25
CALIF. Bakersfield	0	Minneapolis	24	S. C. Charleston	0
Eureka U.	165	Rochester	47	Columbia	0
Fresno	0	St. Cloud	79	Greenville	0
Los Angeles U	0	MISS. Jackson	0	S. DAK. Aberdeen	41
Red Bluff	0	Meridian	0	Huron	27
Stockton	0	Vicksburg U	--	Rapid City	25
San Diego	0	MO. Columbia	4	Sioux Falls	28
San Francisco	56	Kansas City	5	TENN. Chattanooga	0
COLO. Denver	20	St. Louis	0	Knoxville	0
Grand Junction	3	Springfield	1	Memphis	0
Pueblo	8	MONT. Billings	7	Nashville	0
CONN. Bridgeport	15	Glasgow	17	TEX. Abilene	0
Hartford	3	Great Falls	15	Amarillo	2
D.C. Washington	0	Havre	13	Austin	0
FLA. Apalachicola	0	Helena	15	Beaumont	0
Ft. Myers	0	Kalispell	17	Brownsville	0
Jacksonville	0	Miles City	14	Corpus Christi	0
Key West	0	Missoula	13	Dallas	--
Daytona Beach	0	NEBR. Grand Island	10	Del Rio	0
Miami	0	Lincoln	7	El Paso	0
Orlando	0	Norfolk	14	Fort Worth	0
W. Palm Beach	0	North Platte	11	Galveston U.	0
Tallahassee	0	Omaha	15	Houston	0
Tampa	0	Valentine	24	Lubbock	0
GA. Atlanta	0	NEV. Ely	95	Midland	0
Augusta	0	Las Vegas	0	San Angelo	0
Macon	0	Reno	28	San Antonio	0
Savannah	0	Winnemucca	18	Victoria	0
IDAHO, Boise	2	N. H. Concord	64	Waco	0
Lewiston	0	N. J. Atlantic City	21	Wichita Falls	0
Pocatello	10	Trenton U	10	UTAH, Milford	8
ILL. Cairo U.	0	N. MEX. Albuquerque	0	Salt Lake City	0
Chicago	13	Roswell	0	VT. Burlington	65
Moline	22	N. Y. Albany	37	VA. Lynchburg	6
Peoria	19	Binghamton	73	Norfolk	0
Rockford	26	Buffalo	35	Richmond	0
Springfield	9	New York	5	Roanoke	9
IND. Evansville	1	Rochester	37	WASH. Colville	2
Fort Wayne	31	Syracuse	39	Omak	--
Indianapolis	13	N. C. Asheville	0	Quillayute	137
South Bend	17	Charlotte	0	Seattle-Tacoma	40
IOWA, Burlington	19	Greensboro	2	Spokane	4
Des Moines	10	Hatteras R.	0	Walla Walla U.	0
Dubuque	27	Raleigh	0	Yakima	4
Sioux City	13	Wilmington	0	W. VA. Beckley	37
KANS. Concordia	10	N. DAK. Bismarck	55	Charleston	10
Dodge City	7	Fargo	45	Huntington	5
Goodland	21	Williston U	42	Parkersburg U.	7
Topeka	4	OHIO. Akron-Canton	28	WIS. Green Bay	36
Wichita	0	Cincinnati U.	14	Madison	62
KY. Lexington	0	Cleveland	11	Milwaukee	25
Louisville	0	Columbus	16	WYO. Casper	41
LA. Baton Rouge	0	Dayton	23	Cheyenne	62
Lake Charles	0	Toledo	33	Lander	61
New Orleans	0	Youngstown	37	Sheridan	20
Shreveport	0				

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

CROP DEVELOPMENT
FOR WEEK ENDING SEPTEMBER 9

	CORN DENT STAGE				CORN MATURE		
	1979	1978	AVG.		1979	1978	AVG.
COLO	55	63	NA	COLO	NA	NA	NA
GA	NA	NA	NA	GA	NA	NA	NA
ILL	80	80	86	ILL	30	46	58
IND	75	70	75	IND	15	15	25
IOWA	61	82	83	IOWA	NA	39	48
KANS	70	70	75	KANS	25	40	40
KY	85	NA	NA	KY	25	34	35
MICH	40	75	55	MICH	NA	NA	NA
MINN	30	81	80	MINN	NA	NA	NA
MO	86	59	83	MO	25	22	44
NEBR	55	80	80	NEBR	5	15	25
NC	NA	NA	NA	NC	86	NA	NA
OHIO	75	75	85	OHIO	25	20	30
PA	44	43	29	PA	NA	NA	NA
S DAK	47	71	77	S DAK	20	30	33
VA	NA	NA	NA	VA	NA	NA	NA
WISC	35	70	60	WISC	NA	NA	NA

	SOYBEANS YELLOWING		
	1979	1978	AVG.
ALA	22	22	25
ARK	NA	NA	NA
GA	NA	NA	NA
ILL	35	42	53
IND	20	35	55
IOWA	40	77	63
KANS	NA	NA	NA
KY	18	NA	NA
LA	12	39	NA
MICH	20	50	45
MINN	35	79	82
MISS	22	36	NA
MO	17	16	NA
NEBR	35	50	55
NC	NA	NA	NA
OHIO	40	35	45
SC	NA	NA	NA
TENN	NA	NA	NA

	COTTON OPEN BOLLS		
	1979	1978	AVG.
ALA	10	23	17
ARIZ	NA	NA	NA
ARK	7	29	21
CALIF	20	NA	NA
GA	48	46	NA
LA	9	37	24
MISS	19	76	42
MO	22	45	21
N MEX	NA	NA	NA
NC	17	NA	NA
OKLA	2	NA	2
SC	69	52	43
TENN	9	27	17
TEX	19	NA	NA

PLANTING PROGRESS
FOR WEEK ENDING SEPTEMBER 9

	WINTER WHEAT		
	1979	1978	AVG.
CALIF	NA	NA	NA
COLO	30	45	39
IDA	NA	NA	NA
ILL	NA	NA	NA
IND	NA	NA	NA
KANS	5	5	5
MO	NA	NA	NA
MONT	15	15	20
NEBR	15	20	15
OHIO	NA	NA	NA
OKLA	2	2	5
OREG	2	NA	NA
S DAK	20	37	27
TEX	12	11	13
WASH	NA	NA	NA

HARVEST PROGRESS
FOR WEEK ENDING SEPTEMBER 9

	SPRING WHEAT		
	1979	1978	AVG.
IDAHO	75	75	75
MINN	57	94	86
MONT	65	65	70
N DAK	88	95	94
S DAK	96	100	100
S STATES	79	89	88

THESE 5 STATES PRODUCED 95%
OF THE 1978 SPRING WHEAT
CROP EXCLUDING DURUM.

	RICE		
	1979	1978	AVG.
ARK	6	10	10
CALIF	NA	NA	NA
LA	77	84	78
MISS	11	25	11
TEX	98	99	96
S STATES	34	38	35

THESE 5 STATES PRODUCED 99%
OF THE 1978 RICE CROP.

NA NOT AVAILABLE

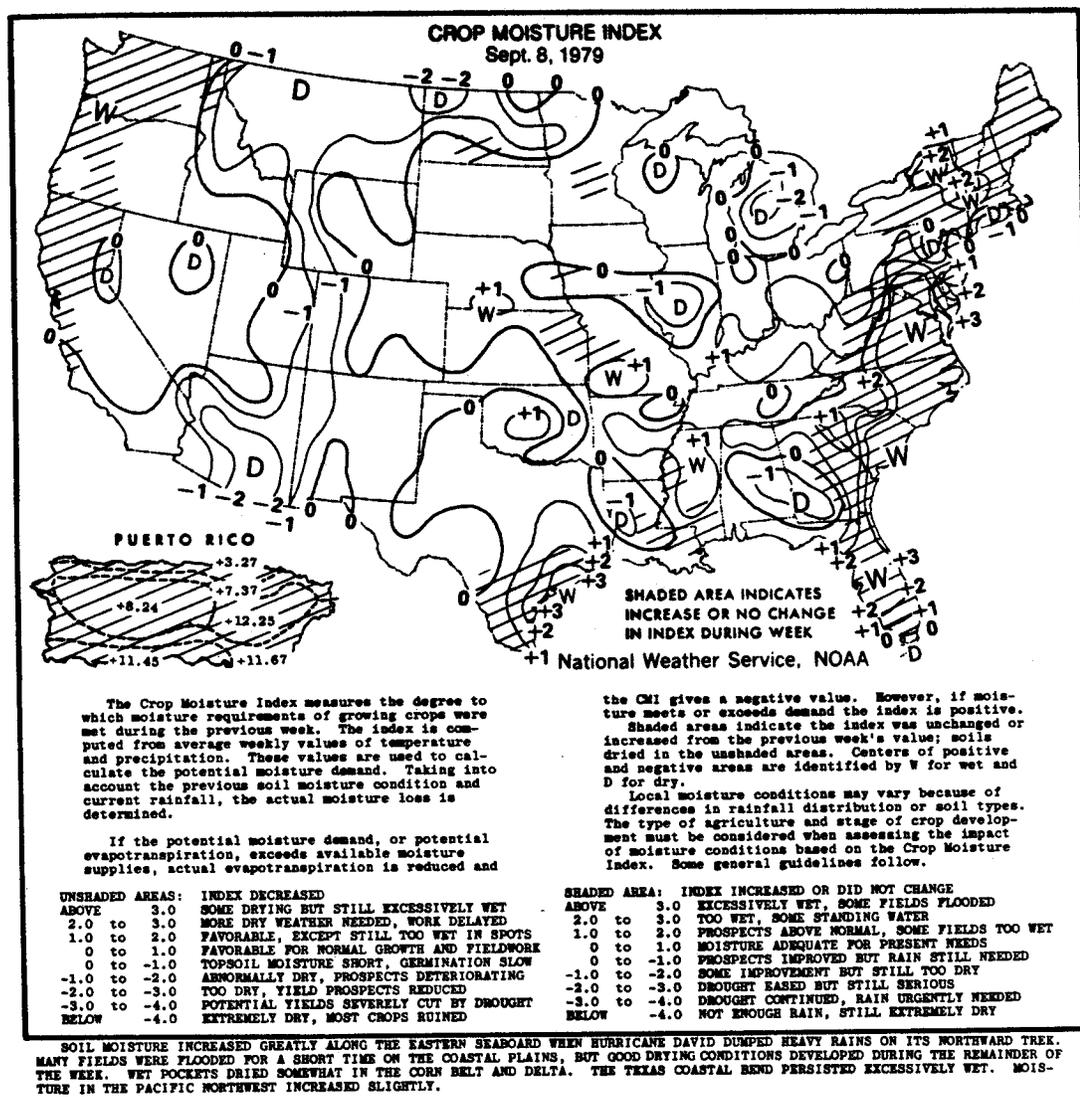
THESE 15 STATES PRODUCED 90%
OF THE 1979 WINTER WHEAT
CROP.

(continued from page 3)

VEGETABLES: Hurricane David damaged vegetable crops and delayed harvests along the Atlantic Coast States. Most damage was concentrated in South Carolina. Florida vegetable damage was not severe and spot resetting fixed the damage. Texas growers continued to harvest a wide variety of vegetable crops and continued to plant fall vegetables. In California, a wide variety of vegetables was harvested. The processing-tomato harvest advanced

into late areas with about one-third of the tonnage remained to harvest.

PASTURES & LIVESTOCK: Pastures rated good to excellent from the Rocky Mountains eastward. In the West, stands rated fair to good but deteriorated because of dry soils. Rains hampered hay harvests along the Atlantic Seaboard. Western livestock producers continued to move herds from summer pastures.



(continued from page 12)

Extremes: 89 and 27°. Rainfall very light, only northwest half had scattered showers and thunderstorms of 0.10 to 0.20 in.

Harvesting of crops active. Fieldwork: 6 days suitable. Oats 90% combined, 1978 98%, normal 99%. Quality oats lowered by previous harvesting delays. Straw being baled. Third crop hay being harvested southern half, finishing second crop north. Hay supplies adequate to surplus. Pasture conditions well above normal due to heavy rainfall in August. Corn and soybean crops maturing better in sunshine and some warmer temperatures. Corn 35% in dent, 1978 70%, normal 60%. Early corn has husks changing color and ears starting to hang down. Corn crop still needs most of September free from frost to mature for grain. Seed corn being harvested. Soybean leaves 5% yellowing, 1978 35%, normal 30%. Soybean crop looks very good if frost holds off.

Wheat ground being plowed, a little winter wheat being sown. Sweet corn and tobacco harvests going strong. Early apple varieties being picked. Digging of fall potatoes starting. Soil moisture mostly adequate to surplus, a few shortages northwest.

WYOMING: Temperatures above normal. Maximums mid-80's to mid-90's. Minimums mid-30's and 40's except one station with 27°. Precipitation almost nonexistent.

Topsoil and subsoil moisture short to adequate. Most small grains mature. Harvested: Spring wheat 74%, oats 71%, barley 75%, potatoes 23%, corn silage 6%. Some malt barley rejected, too many sprouts. Corn for grain 45% denting, 12% mature. Dry beans 38% windrowed, 16% combined. Alfalfa hay second cutting 76% complete, a few areas on third cutting. Other hay harvest 93% completed. 1980 winter wheat crop 44% planted. Fall-winter grazing prospects mostly fair, few dry areas poor. Cattle, calves 29% contracted, 5% marketed. Sheep, lambs 33% contracted, 11% marketed.

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