FORM MAP C

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

DAILY WEATHER MAP

SECOND EDITION.

FRIDAY, October 19, 1917.—8 A. M.

4 a.m. 5 a.m. 6 a.m. 7 a.m. 8 a.m. 9 a.m.

LOW — HIGH — LOW — HIGH

Warmer 20° to 30°

Colder 20° to 40°

Washington, D. C., Friday, October 19, 1917---8 A. M.

WEATHER CONDITIONS AND GENERAL FORECAST.

A trough of low pressure extends this morning from the lower Lakes southward to Georgia, with warm southerly winds on the east side and cold northwest winds to the westward. General rains have fallen in the lower Lake region and thence southwestward to Alabama. Snow is falling along Lake Superior and in Minnesota. Heavy frost, with freezing temperature, is reported from Oklahoma and the northern portion of Texas.

There will be rain this afternoon and to-night in Atlantic coast districts and along the lower Lakes. Saturday will be fair, with a considerable drop in temperature in Atlantic coast districts and the East Gulf States.

Storm warnings are displayed on the Great Lakes, and on the Atlantic coast from Norfolk to Eastport.

The winds along the New England coast will be fresh to strong south, shifting to west late Saturday night; on the middle Atlantic coast continued fresh southeast winds this afternoon, becoming northwest and strong to-night; on the south Atlantic coast moderate south, becoming west on Saturday; on the east Gulf coast moderate northwest.

Steamers departing to-day for European ports will have fresh southeast winds and rainy weather to the Grand Banks.

FORECAST TILL 8 P. M. SATURDAY.

For Northern New England, probably rain to-night and Saturday; colder to-night in Vermont and New Hampshire; colder Saturday; fresh northwest winds.

For Southern New England, rain to-night, probably clearing Saturday morning; colder to-night in Massachusetts and Connecticut; much colder Saturday; fresh to strong south winds this afternoon and to-night, becoming west Saturday.

For Eastern New York, rain to-night and probably Saturday morning; much colder; fresh northwest to north winds.

For Eastern Pennsylvania, rain and much colder to-night. Saturday partly cloudy and colder, except rain in northeast portion; fresh northwest winds.

For New Jersey, Delaware, and Maryland, rain to-night, probably clearing Saturday morning; much colder; fresh northwest winds.

For the District of Columbia, rain and much colder to-night, probably clearing Saturday morning; colder Saturday; fresh northwest winds.

For Virginia, rain and colder to-night. Saturday probably fair and colder; fresh northwest winds.

For North Carolina, probably rain to-night and Saturday; colder to-night in west and central portions; much colder Saturday; fresh northwest winds.

For South Carolina, rain to-night; colder. Saturday partly cloudy and much colder; fresh northwest winds.

For Georgia, partly cloudy to-night, except rain in southeast portion; colder; light frost to-night in north and central portions, killing in exposed places. Saturday fair and much colder; fresh northwest winds.

For Florida, fair to-night and Saturday, except rain to-night in central and south portions; much colder in north portion to-night and Saturday, with killing frost Sunday morning in north portion; fresh west to northwest winds.

For Alabama, and Mississippi, fair and much colder to-night; killing frost in north and central portions. Saturday partly cloudy; moderate northwest winds.

For Tennessee, fair to-night; colder in east portion; killing frost. Saturday partly cloudy; warmer in west portion.

For Kentucky, fair, continued cold to-night with killing frost. Saturday partly cloudy, with slowly rising temperature in west portion.

For West Virginia, fair and colder to-night, except rain in east portion. Saturday fair, continued cold.

For Western New York, rain to-night, probably turning into snow Saturday; much colder to-night; colder in east portion Saturday.

For Western Pennsylvania, partly cloudy and much colder to-night, except rain near Lake Erie. Saturday partly cloudy.

For Ohio, fair and colder to-night, except snow flurries near the Lakes; killing frost. Saturday partly cloudy, with slowly rising temperature.

For Indiana, fair, continued cold to-night with freezing temperature. Saturday partly cloudy and warmer.

For Lower Michigan, fair and somewhat colder to-night, with snow flurries on the west shore; freezing temperature in the interior to-night. Saturday partly cloudy, with slowly rising temperature.

For Upper Michigan, fair to-night, except snow flurries near Lake Superior. Saturday partly cloudy and warmer.

For the Upper Lakes, Lake Superior—fresh northwest winds to-night, diminishing Saturday and becoming easterly; snow to-night; clearing Saturday. Lakes Michigan and Huron—fresh to strong northwest winds to-night, diminishing Saturday; partly cloudy weather to-night and Saturday, with snow to-night over north portion.

For the Lower Lakes, fresh to strong northwest winds this afternoon and to-night, diminishing Saturday, with rain to-night; clearing Saturday.

A. J. HENRY, Forecaster.

For Illinois, fair to-night. Saturday fair in south, rain in north portion; warmer.

For Wisconsin, probably rain or snow to-night and Saturday, except fair in east portion to-night; warmer Saturday.

For Minnesota, unsettled to-night and Saturday, probably rain or snow in east and south portions; warmer to-night and in southeast portion Saturday.

For Iowa, fair to-night; warmer in west and central portions. Saturday rain and warmer.

For Missouri, fair to-night; warmer in west and central portions. Saturday fair, warmer.

For Kansas, fair, warmer to-night. Saturday fair; warmer in east and south portions.

For Nebraska, fair, warmer to-night. Saturday fair; warmer in southeast and colder in west portion.

For South Dakota, fair in west, rain or snow in east portion to-night; warmer. Saturday fair; colder in west and north portions.

For North Dakota, fair in west, rain or snow and warmer in east and central portions to-night. Saturday fair, colder.

For Montana, fair, colder to-night. Saturday fair.

For Wyoming, fair to-night; warmer in southwest and colder in north-central portion. Saturday fair; colder in south portion.

For Colorado, fair, warmer to-night. Saturday fair; colder in north-central portion.

For New Mexico, Arizona, and Utah, fair, warmer to-night and Saturday.

For California, Washington, Idaho, and Oregon, fair to-night and Saturday.

For Nevada, fair, warmer to-night and Saturday.

For Louisiana, fair, colder to-night; heavy frost nearly to the coast. Saturday fair; warmer in north and west portions; light northerly winds on the coast.

For Arkansas, fair to-night, with heavy to killing frost; colder in southeast and extreme east portions. Saturday fair, warmer.

For Eastern Texas, fair to-night; warmer in extreme northwest and colder on the east coast. Saturday fair, warmer; light north to east winds on the coast.

For Western Texas, fair to-night; warmer in north and west portions. Saturday fair; warmer in southeast portion.

For Oklahoma, fair, warmer to-night and Saturday.

Rice and alfalfa forecast: Fair Sunday in Oklahoma and Texas, probably fair Sunday and Monday in Louisiana and Arkansas.

Observations are taken at 8 a. m. 90° p. m., 75th meridian time.

Barometer readings are reduced to sea level and standard gravity. When heavy dotted red lines appear they indicate regions of marked changes in temperature during the last 24 hours. Shaded areas show regions of precipitation of .01 inch or more during the last 24 hours. Arrows point in the direction the wind is blowing. Solid black lines are isobars and solid red lines isotherms.

Wind velocities of less than 10 miles an hour, and amounts of precipitation of less than .01 of an inch, are not published hereon.

Symbols indicate: ○ clear, ◑ partly cloudy, ● cloudy, R rain, S snow, storm warnings, CW cold wave warnings, → storm track and location of storm center, date above, time (a. m. or p. m.) below, Ta, Tp, thunderstorms at or near the station during 12 hours ending 8 a. m. or 8 p. m., respectively.

WIND-BAROMETER INDICATIONS.

When the wind sets in from points between south and southeast and the barometer falls steadily a storm is approaching from the west or northwest, and its center will pass near or north of the observer within 12 to 24 hours with wind shifting to northwest by way of southwest and west. When the wind sets in from points between east and northeast and the barometer falls steadily a storm is approaching from the south or southwest, and its center will pass near or to the south or east of the observer within 12 or 24 hours with wind shifting to northwest by way of north. The rapidity of the storm's approach and its intensity will be indicated by the rate and the amount of the fall in the barometer.

Statute Miles 100 50 0 100 200 300 400

Kilometers 100 50 0 100 200 300 400 500

Reports from Atlantic and Alaskan Stations.

Stations	Pressure.	Temp., dry bulb.	Wind. Direction.	Wind. Force.*	Weather.
October 19, 1917.					
Hamilton, Bermuda					
Turks Island, W. I.	29.90		se.	2	clear.
Havana, Cuba, W. I.	29.94	82	ne.	2	clear.
Nassau, N. P., W. I.	29.94	82	ne.	2	clear.
October 18 (local time).					
Honolulu, H. I., 9 p. m.	29.98	78	s.	1	p. cloudy.
8 p. m., 135th mer. time.					
Nome, Alaska	30.10	34	ne.		cloudy.
Tanana, Alaska	30.24	14	ne.		clear.
Eagle, Alaska	30.20	20	0		cloudy.
Valdez, Alaska	30.30	34	0		cloudy.
Sitka, Alaska	30.38	44	0		cloudy.
Dutch Harbor, Alaska	29.96	42	0		p. cloudy.
Juneau, Alaska	30.30	42	ne.	1	rain.

*Beaufort scale.

RIVER STAGES 8 a. m., OCTOBER 19, 1917.

Flood stages.	Stations.	Height above zero.	Change.	Remarks.
Feet.		*Feet.*	*Feet.*	
22	Pittsburgh	6.0	0.0	Rising.
36	Parkersburg	11.7	− 0.2	Falling.
50	Cincinnati	12.5	+ 0.7	Rising.
28	Louisville	6.6	+ 0.3	Falling.
35	Evansville	2.8	− 0.1	Falling.
45	Cairo	6.8	− 0.3	Falling.
16	Terre Haute	3.5	+ 4.0	Rising.
16	Peoria			
40	Nashville	7.3	− 0.1	Falling.
33	Chattanooga	8.0	0.0	Rising.
14	Pierre			
17	Sioux City			
19	Omaha	7.7	0.0	Falling.
22	Kansas City	6.6	0.0	Falling.
14	St. Paul	2.0	+ 0.2	Rising.
12	La Crosse	2.3	0.0	Falling.
18	Dubuque	2.9	0.0	Rising.
15	Davenport	2.4	+ 0.2	Rising.
14	Keokuk	1.5	+ 0.2	Rising.
30	St. Louis	1.8	0.0	Falling.
35	Memphis	3.9	− 0.1	Falling.
45	Vicksburg	4.2	− 0.3	Falling.
18	New Orleans	4.5	− 0.2	Falling.
22	Fort Smith			
25	Little Rock	− 1.2	0.0	Rising.
29	Shreveport	− 4.7	0.0	Falling.
32	Augusta	7.4	+ 0.1	Falling.

Districts and Stations.	Pressure. Reduced to sea level and standard gravity.	Pressure. Abnormal change in 24 hours.	Temperature. Dry bulb.	Temperature. Change in 24 hours.	Temperature. Highest yesterday.	Temperature. Lowest last night.	Wind velocity in miles per hour.	Precipitation in past 24 hours. Inches.
Montreal, Que	29.78	− 22	55	+18	56	20		.04
Greenville, Me	30.10	− 22	48	+10	46	40		0
Eastport, Me	30.22	− 18	50	+18	52	42	14	0
Northfield, Vt	30.06	− 24	54	+12	56	42	10	0
Portland, Me	30.12	− 16	52	+10	50	48	10	0
Boston, Mass	30.14	− 20	58	+12	58	54	12	0
Nantucket, Mass	30.20	− 18	58	+8		52	16	0
Block Island, R. I	30.14	− 20	58	6	56	54	20	0
Hartford, Conn	30.08	− 26	62	+16	62	54	10	0
Canton, N. Y	29.70		64	+16		60	36	0
Syracuse, N. Y	29.78	− 26	64	+12	64	60	30	0
Binghamton, N. Y	29.92		64	+12		58	12	0
Albany, N. Y	29.98	− 34	60	+ 8	62	56	12	0
New York, N. Y	30.06		60	+ 6	56	56	32	0
Sandy Hook, N. J	30.04	− 26	60	+ 4	58	58	20	0
Scranton, Pa	29.96	− 28	64	+12	64	58		0
Harrisburg, Pa	29.94	− 30	64	+14	58	58		0
Philadelphia, Pa	30.04	− 24	60	+10	62	54		0
Atlantic City, N. J	30.06	− 22	62	+ 4	62	60	12	0
Baltimore, Md	29.96	− 28	64	+12	62	58		0
WASHINGTON, D. C	29.94	− 28	64	+11	61	58		0
Norfolk, Va	30.04		68		80	62	18	0
Richmond, Va	30.00	− 30	62	+ 6	76	60		0
Lynchburg, Va	29.90	− 30	68	+12	68	60	14	0
Wytheville, Va	29.78	− 34	70	+ 8	80	62	18	.02
Charlotte, N. C	29.92	− 20	70	+10	76	66	22	0
Asheville, N. C	29.84	− 26	64	+ 4	66	62	14	0
Raleigh, N. C	29.98	− 22	66	+ 8	78	62		0
Hatteras, N. C	30.04	− 14	72	0	78	68		0
Wilmington, N. C	30.02	− 18	72	+ 8	76	68		0
Charleston, S. C	29.98	− 12	74	+ 4	78	70		0
Columbia, S. C	29.94		70	+ 8		68	10	0
Greenville, S. C	29.90		68	+ 6		66		.02
Augusta, Ga	29.92	− 16	72	+ 4	80	70		0
Savannah, Ga	29.98	− 12	74	+ 6	80	70		0
Jacksonville, Fla	29.96	− 6	74	+ 4	82	70		.02
Titusville, Fla	29.94	− 6	76	+ 2	86	70		0
Miami, Fla	29.92	− 8	76	− 4	84	74		.16
Key West, Fla	29.92	− 6	80	+ 2	84	76		.04
Atlanta, Ga	29.88	− 16	68	+ 4	72	66	10	.68
Macon, Ga	29.92	− 12	72	+ 2	80	70		.18
Thomasville, Ga	29.96	− 4	74	0	82	70		0
Tampa, Fla	29.98	− 4	74	0	82	68		.12
Apalachicola, Fla	29.94	− 4	74	0	82	68		0
Pensacola, Fla	29.96	+ 2	70	− 4	78	70	10	.16
Mobile, Ala	29.96	+ 2	70	− 4	84	70	14	.04
Montgomery, Ala	29.92	− 4	72	0	80	70		.10
Birmingham, Ala	30.04	+ 8	50	−20	72	50	12	1.20
Meridian, Miss	30.02	+ 2	60	−20	78	56	12	.22
Corinth, Miss	30.06		58	−24				.78
Vicksburg, Miss	30.20		60	−12	84	46	10	.18
New Orleans, La	30.04	+10	60	−12	88	60	16	.02
Burrwood, La	29.94	− 2	74	0	82	72		0
Shreveport, La	30.25	+20	40	−28	86	40		0
Fort Smith, Ark	30.30	+12	32	−40	74	32		0
Little Rock, Ark	30.24	+20	40	−28	76	38	10	.22
Palestine, Tex	30.28	+16	40	−32	78	40		.02
Port Arthur, Tex	30.20		50	−20	84	50	14	.76
Galveston, Tex	30.22	+22	54	−20	82	54	24	.08
Houston, Tex	30.24		50	−22		50	20	.04
Taylor, Tex	30.32		40	−32		40	12	.70
San Antonio, Tex	30.34	+24	44	−30	84	44		.44
Corpus Christi, Tex	30.30	+30	48	−32	86	42	16	.04
Brownsville, Tex	30.24	+38	56	−18	86	52	16	0
Memphis, Tenn	30.22	+20	40	−30	82	40	16	.22
Nashville, Tenn	30.08	+20	40	−32	78	40	14	.76
Chattanooga, Tenn	29.94	− 2	42	−14	72	42	20	1.00
Knoxville, Tenn	29.86	−24	56	− 2	78	56	14	1.52
Lexington, Ky	29.98		42	−22		38	20	.42
Louisville, Ky	30.06	+20	38	−32	78	38	20	.62
Evansville, Ind	30.12	+16	40	−22	82	38	14	.48
Terre Haute, Ind	30.04	+14	36	−26	78	36	18	.60
Indianapolis, Ind	30.00	+16	36	−26	76	36	24	.90
Cincinnati, Ohio	29.96	+10	38	−26	80	38	10	.80
Dayton, Ohio	29.90		38	−28		38	20	1.18
Columbus, Ohio	29.88	0	42	−22	78	40	20	.76
Elkins, W. Va	29.72	−34	64	+ 4	78	64	16	.02
Parkersburg, W. Va	29.80	−32	60	− 2	80	52	16	1.28
Pittsburgh, Pa	29.70	−32	60	+ 2	78	60	24	.50
Oswego, N. Y	29.72	−30	64	+14	66	62	24	.02
Rochester, N. Y	29.64		68	+18		62	14	.02
Buffalo, N. Y	29.56	−38	64	+ 4	74	62	30	.14
Erie, Pa	29.74	−16	50	− 8	74	50	20	1.02
Cleveland, Ohio	29.78	− 6	40	−16	72	44	24	.60
Toledo, Ohio	29.82	+ 6	40	−22	68	40	24	1.14
Detroit, Mich	29.80	+ 2	38	−24	66	38	24	.68
Saginaw, Mich	29.78		38	−16		38	14	.10
Alpena, Mich	29.66	0	38	−10	66	38	24	.62
Sault Ste. Marie, Mich	29.56	− 8	38	− 6	58	38	18	.18
Houghton, Mich	29.72		38	−12		38	14	.10
Marquette, Mich	29.62	+ 8	32	−14	68	32	16	0
Escanaba, Mich	29.62	+ 6	34	−16	68	34	18	.01
Green Bay, Wis	29.80	+12	32	−26	60	32	24	0
Ludington, Mich	29.80		36	−18	58	36	28	.22
Grand Haven, Mich	29.86	+12	36	−22	62	36	26	.24
Grand Rapids, Mich	29.86	+14	36	−24	70	36	24	.92
Fort Wayne, Ind	29.94	+16	34	−28	62	34	20	2.40
Chicago, Ill	29.96	+14	34	−28	68	34	16	0
Milwaukee, Wis	29.90	+12	32	−28	64	32	12	0
Duluth, Minn	29.92	+20	24	−16	40	24	20	.10
St. Paul, Minn	30.04	+12	26	−16		26	18	0
Madison, Wis	29.92	+10	28	−18	58	28	14	0
La Crosse, Wis	30.00		30	−20		30	10	0
Charles City, Iowa	30.10	+10	26	−20	46	26		0
Dubuque, Iowa	30.06	+10	30	−24	58	28	12	0
Davenport, Iowa	30.10	+12	30	−28	58	28	14	0
Des Moines, Iowa	30.14	+ 2	26	−20	46	26		0
Keokuk, Iowa	30.16	+ 8	32	−28	58	32	10	0
Peoria, Ill	30.08		32	−30		32	18	.02
Springfield, Ill	30.08	+12	36	−26	72	36		.02
St. Louis, Mo	30.14	+16	38	−32	74	36	12	.20
Cairo, Ill	30.14	+18	38	−32	82	38		.24
Springfield, Mo	30.24	+ 6	26	−28	56	26	10	0
St. Joseph, Mo	30.26	+ 2	26	−18	44	26		0
Kansas City, Mo	30.26	+ 2	30	−16	46	30	12	0
Wichita, Kans	30.30	0	24	−20	46	22		0
Concordia, Kans	30.30	− 6	20	−24	44	20		0
Omaha, Nebr	30.24	− 2	22	−18	40	20		0
Lincoln, Nebr	30.24		18	−22		18		0
Valentine, Nebr	30.12	−28	20	− 6	32	12	10	0
Sioux City, Iowa	30.22	− 4	20	−16	36	20		0
Huron, S. Dak	30.16	−14	14	−16	32	14		.01
Pierre, S. Dak	30.12	−18	16	−14	30	16		0
Moorhead, Minn	30.10	− 8	14	−14	28	14		0
Bismarck, N. Dak	30.02	−30	20	− 4	28	12		0
Devils Lake, N. Dak	29.98	−20	18	− 6	26	12		.02
Williston, N. Dak	29.88	−36	32	+14	28	20		.04
Havre, Mont	29.96	−12	38	+22	44	36	12	.06
Billings, Mont	30.10		44	+28	46	36		.12
Helena, Mont	30.12	−22	42		52	30	12	0
Yellowstone Pk, Wyo					36			
Miles City, Mont					34			
Missoula, Mont						38	+20	0
Kalispell, Mont	30.16	−16	32	+10	40	32		0
Lewiston, Idaho	30.28		36	+ 8		36		0
Baker, Oreg	30.32		40	+18		40		0
Pocatello, Idaho	30.26	−20	38	+22	48	38	12	0
Boise, Idaho	30.36	−14	40	+10	54	36		0
Rapid City, S. Dak	30.10	−30	28	+ 4	32	20		0
Sheridan, Wyo	30.08	−26	42	+30	40	28	20	0
Lander, Wyo	30.18	−22	32	+14	44	20		0
Salt Lake City, Utah	30.40	−10	36	+ 6	44	32		0
Modena, Utah	30.40	+ 2	18	− 6	50	16	10	0
Grand Junction, Colo	30.40	+ 2	28	0	46	26	14	0
Durango, Colo					50			0
Cheyenne, Wyo	30.08	−30	38	+24	36	28	38	0
North Platte, Nebr	30.20	−16	18	+12	38	18		0
Denver, Colo	30.10	−26	42	+18	48	32		0
Pueblo, Colo	30.22	−20	24	− 4	38	24		0
Dodge City, Kans	30.30	− 4	22	− 4	46	22		0
Oklahoma, Okla	30.34	+ 4	26	−24	52	24		0
Altus, Okla	30.32		28	−20	66	26		0
Muskogee, Okla	30.32		26	−28	58	26		0
Amarillo, Tex	30.30	− 8	28	− 8	48	28	12	0
Dallas, Tex	30.34	+10	36	−36		36		0
Fort Worth, Tex	30.34	+10	40	−20	66	40		0
Abilene, Tex	30.36	+ 4	32	−20	60	32		0
El Paso, Tex	30.28	+14	38	−18	66	38		0
Del Rio, Tex	30.38		48	−22		48		0
Roswell, N. Mex	30.32	0	28	−14	60	28		0
Santa Fe, N. Mex	30.32	0	32	0	44	28	24	0
Flagstaff, Ariz	30.36	+ 6	16	− 8	44	14		0
Phoenix, Ariz	30.12	0	42	−16	80	40		0
Yuma, Ariz	30.14	+ 4	58	+ 8	78	58		0
Needles, Cal	30.13	− 4	58	+ 4	72			0
Tatoosh Island, Wash	30.34	− 6	48	+ 2	50	46	20	0
Spokane, Wash	30.28	− 8	32	+ 4	50	30		0
Walla Walla, Wash	30.24	− 6	42	+14	50	40		0
Seattle, Wash	30.36	− 6	48	+ 6	54	46		.01
Portland, Oreg	30.34	− 4	50	+ 8	54	48		0
North Head, Wash	30.34	− 8	50	+ 2	56	50	14	0
Roseburg, Oreg	30.38	+ 4	36	+ 4	64	36		0
Reno, Nev	30.42	0	28	− 2	56	28	10	0
Tonopah, Nev	30.32	−10	38	+ 8	50	38		0
Winnemucca, Nev	30.44	− 4	20	0	54	18		0
Eureka, Cal	30.22	0	46	0	64	44		0
Red Bluff, Cal	30.20	+ 4	50	− 4	80	50		0
Sacramento, Cal	30.18	− 2	56	+ 4	80	52		0
San Francisco, Cal	30.18	+ 2	56	− 2	76	56		0
Fresno, Cal	30.16	− 2	52	+ 4	82	52		0
San Luis Obispo, Cal	30.14	0	52	+ 4	82	52		0
Los Angeles, Cal	30.08	− 2	60	+ 4	84	58		0
San Diego, Cal	30.04	− 2	58	+ 2	78	56		0

Districts and Stations. — Atlantic Coast States and Lawrence Valley. — Gulf States. — Ohio Vall. and Tenn. — Lake Region. — Upr. Miss. Vall. — Missouri Valley. — Rocky Mountain and Plateau Region. — Pacific Slope.