CLIMATOLOGICAL DATA FOR SEPTEMBER 1948

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see REVIEW, January 1948, p. 15]

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Section	Temperature								Precipitation					
	Section average	Departure from the normal	Monthly extremes						Section average	Departure from the normal	Greatest monthly		Least monthly	
			Station	Highest	Date	Station	Lowest	Date			Station	Amount	Station	Amount
	°F.	°F.		°F.			°F.		In.	In.		In.		In.
Alabama	73.5	−2.2	Frisco City	101	1	Valley Head	43	24	4.58	+1.24	Gulf Shores	13.27	Tuskegee	1.35
Arizona	74.5	+1.7	Parker	120	3	Fort Valley	24	23	.70	−.63	Y-Lightning Ranch	3.74	5 stations	.00
Arkansas	72.6	−1.7	2 stations	102	[1] 7	Batesville Livestock	35	28	.88	−2.41	Big Lake Outlet	4.68	2 stations	.00
California	67.8	0.0	Cow Creek	121	1	Twin Lakes	10	26	.29	−.10	Willits Howard R. S.	4.34	314 stations	.00
Colorado	61.1	+3.0	Lamar	103	1	Marshall Pass	10	10	.63	−.72	Cascade	2.26	Lime (near)	.00
Florida	79.2	−.3	Fellsmere	100	6	2 stations	54	[1] 28	10.37	+3.62	Clewiston	24.51	Cedar Key	2.45
Georgia	70.5	−2.2	4 stations	100	1	Blairsville Exp. Sta	45	13	4.09	+.46	Brunswick	9.32	Jasper	1.58
Idaho	57.7	+.6	2 stations	101	[1] 2	Obsidian, 4 NNE	15	24	1.18	+.10	Jerome	3.56	stations	T
Illinois	68.8	+1.0	Urbana Water Works	99	14	Freeport	37	27	2.84	−.83	Marshall, 1 W	7.39	Greenville	.72
Indiana	68.1	+.9	8 stations	96	[1] 12	Plymouth	37	27	2.71	−.59	Farmersburg, 3 SW	7.01	Henryville State Forest.	.57
Iowa	68.0	+3.6	Boone	102	19	Elkader	31	27	2.10	−1.92	Malvern	6.34	Sioux City, 8 N	.07
Kansas	71.9	+2.1	Phillipsburg	107	1	Atwood	29	30	1.57	−1.26	Emporia	8.09	Coffeyville	.07
Kentucky	69.6	−.8	Williamsburg	98	21	Hindman Settlement School.	36	[1] 25	1.92	−.98	Murray	4.70	Williamstown	.2
Louisiana	75.8	−2.1	Abbeville	104	7	3 stations	45	[1] 29	5.77	+1.69	Port Sulphur	19.75	Gloster	T
Maryland — Delaware.	66.9	−.9	Blackwater, Md	95	[1] 6	Oakland, Md	29	27	2.79	−.57	Ocean City, Md	8.15	Dover, Del	1.03
Michigan	63.4	+3.0	Bad Axe, 5 NW	96	11	Kenton U. S. Forest	19	22	1.64	−1.57	Three Rivers	4.19	Detour, 1 N	.32
Minnesota	63.4	+4.4	Fosston Power Plant	100	2	Allen Junction	21	22	1.66	−1.22	Artichoke Lake	5.10	Argyle	.16
Mississippi	73.2	−2.7	Port Gibson	98	9	3 stations	45	[1] 25	5.51	+2.42	Gulf Port	14.41	Cleveland	1.15
Missouri	70.2	+.9	St. Charles	100	20	Anderson	38	27	2.14	−1.90	Sikeston	5.63	Seligman	.06
Montana	58.2	+2.9	Albion	104	15	Wisdom	13	6	.47	−.90	Hebgen Dam	1.68	4 stations	T
Nebraska	68.4	+4.0	Alma	107	[1] 1	Cambridge	27	29	1.98	−.09	Firth	8.03	Lexington	.20
Nevada	63.5	+2.0	Overton	115	1	Fish Creek Ranch	9	[1] 25	.35	−.06	Lamoille	2.97	7 stations	.00
New England	60.8	+.5	Franklin, 1 NW., N. H.	95	13	2 stations	24	[1] 17	.97	−2.76	Nantucket, WB Apt., Mass.	3.62	Lawrence, Mass	.03
New Jersey	66.3	+.4	Layton, 3 NW	95	13	Layton, 3 NW	28	22	1.16	−2.65	Phillipsburg	2.81	Macopin Intake	.11
New Mexico	66.5	+2.0	Orogrande	112	7	Eagle Nest	20	[1] 29	.70	−1.02	Animas	2.56	33 stations	.00
New York	62.6	+1.3	Morrisville	99	4	Angelica	23	28	1.26	−2.22	Buffalo WB Apt	5.74	Schroon Lake	.04
North Carolina	68.8	−2.2	Goldsboro	98	21	Mt. Mitchell	30	26	4.51	+.44	Mortimer Exp. Sta	11.56	Marshall	1.24
North Dakota	63.7	+7.0	Dunn Center	107	16	Parshall	24	9	.39	−1.18	Wahpeton State School.	1.54	28 stations	.00
Ohio	66.6	+.9	2 stations	98	17	Canfield, 1 S	31	25	2.84	−1.08	Logan	8.92	Chilo Dam 34	.30
Oklahoma	74.3	+.1	Frederick	107	7	Kenton	35	[1] 28	.45	−2.69	Okeene	2.92	35 stations	.00
Oregon	58.0	+.1	2 stations	103	[1] 8	Chemult	19	[1] 15	1.89	+.70	Astoria	6.19	Adrian	.07
Pennsylvania	63.8	−.4	do	95	[1] 13	Philipsburg	25	22	1.62	−1.81	West Chester	4.95	Dingman's Ferry	.17
South Carolina	71.6	−2.9	Orangeburg	99	1	Caesars Head	41	26	6.04	+1.95	Orangeburg No. 2	13.24	Belton	2.03
South Dakota	67.0	+5.4	Pine Ridge	110	15	5 stations	32	[1] 8	1.13	−.41	Castlewood	3.83	Cottonwood	.04
Tennessee	70.4	−1.1	Dalehollow Dam	98	3	Waynesboro	38	24	3.37	+.31	Centerhill Dam	6.92	Oakridge No. 2	1.14
Texas	76.3	−1.0	Pecos	110	5	2 stations	34	[1] 28	2.01	−.98	McAllen	9.65	4 stations	.00
Utah	63.3	+2.5	Zion Nat'l. Park	107	[1] 1	Woodruff	18	27	.40	−.61	Blanding	2.15	do	.00
Virginia	67.1	−1.5	2 stations	95	21	Sugar Grove	30	26	3.39	+.15	Montebello	7.16	Rose Hill	1.00
Washington	57.4	−1.2	Lacrosse, 3 ESE	99	13	Stockdill Ranch	19	25	2.67	+.88	Quinault R.S	9.67	Richland, 2 SW	.04
West Virginia	65.3	−1.0	Logan	96	4	2 stations	28	26	3.16	+.19	Spruce Knobb	7.51	Athens	1.39
Wisconsin	64 9	+4.6	Wisconsin Rapids	99	16	Mellen Power Co. Dam.	23	22	1.96	−1.76	Goodrich	5.37	Superior Power Plant.	.39
Wyoming	59.7	+4.9	Shawnee	102	1	Bondurant	11	29	1.05	−.11	Grassy Lake Dam	2.57	Ft. Bridger	.04
Alaska (Aug.)	49.6	−3.0	Bell Island	86	14	Central	15	24	2.85	−.67	Attu	11.61	Wainwright	.40
Hawaii	74.7	+.1	Kaanapali	91	[1] 2	Haleakala R. S	40	10	4.94	−.35	Puohakamoa No. 2	33.00	Ukumehame	.00
Puerto Rico	78.9	+.4	Ponce	96	3	Garzas	57	7	10.76	+4.01	Rio Blanco (1800')	22.25	Cambalache Exp. Station.	2.07
Florida (Aug.)	81.2	−.3	De Funiak Springs	100	30	3 stations	62	[1] 7	7.85	+.81	Lakeland	15.57	Lake Trafford	1.82
Hawaii (Aug.)	75.2	+.4	2 stations	91	[1] 18	Haleakala R. S	41	29	5.65	−.69	Iliiliula Intake	33.40	Puako	T

[1] Other dates also.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR SEPTEMBER 1948

District and station	Elevation of instruments: Barometer above sea level [1]	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Averages: Mean maximum	Temperature of the air: Averages: Mean minimum	Temperature of the air: Averages: Mean	Temperature of the air: Averages: Departure from normal	Temperature of the air: Extremes: Highest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Lowest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Greatest daily range	Total heating degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Precipitation: Days with thunderstorms	Precipitation: Total snowfall (unmelted)	Precipitation: Snow, sleet, and ice on ground at end of month	Wind: Average hourly speed	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Character of day (sunrise to sunset), number of days: Clear	Character of day (sunrise to sunset), number of days: Partly cloudy	Character of day (sunrise to sunset), number of days: Cloudy	Average cloudiness, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Ft.	Ft.	Mb.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.		°F.		°F.	%	In.	In.	In.			In.	In.	m. p. h.					0-3	4-7	8-10	0-10	%
NEW ENGLAND									60.3	+1.9								78	1.46	−2.0														4.4	
Caribou [2]	628	5	33	992.9	1,015.9	----	67	44	55.6	+3.1	86	6	29	17	37	298	46	80	3.27	−.3	2.09	12	3	0.0	0.0	----	nw.	--	----	--	8	10	12	5.9	--
Eastport	75	67	82	1,013.2	1,015.9	−1.0	64	48	56.0	+.2	75	27	40	17	27	272	48	79	.92	−1.9	.38	7	1	.0	.0	8.4	s.	21	ne.	24	10	9	11	5.3	66
Portland, Maine [2]	103	6	43	1,013.2	1,016.9	−.7	74	46	60.2	+2.3	86	6	30	17	41	160	50	75	.30	−2.8	.20	2	2	.0	.0	7.1	nw.	25	n.	24	18	7	5	3.7	76
Concord [2]	289	5	45	1,007.1	1,018.0	.0	76	44	60.2	+2.2	93	13	28	17	46	184	48	74	.41	−3.0	.35	3	1	.0	.0	5.5	nw.	25	nw.	21	19	5	6	3.7	67
Mt. Washington	6,274	5	37	809.7	1,022.8	----	47	36	41.4	+.4	62	13	22	22	18	709	37	88	2.74	−4.7	1.15	6	2	.0	.0	22.6	w.	--	----	--	8	11	11	5.6	49
Burlington [2]	403	6	51	1,003.1	1,017.6	+.7	75	49	61.8	+1.5	92	13	33	16	36	163	52	78	.87	−2.6	.45	3	3	.0	.0	7.3	s.	30	s.	17	13	9	8	4.5	54
Boston [2]	124	33	62	1,013.2	1,017.7	+.1	75	56	65.7	+2.5	90	13	44	22	26	76	51	66	.67	−2.5	.73	5	1	.0	.0	9.5	nw.	36	nw.	18	16	7	7	3.9	81
Nantucket [2]	12	4	34	1,017.3	1,018.0	+.4	70	54	62.4	−.4	78	10	44	23	23	112	56	84	3.62	+1.8	2.48	4	3	.0	.0	10.1	sw.	33	n.	1	13	11	6	4.2	76
Block Island	26	11	46	1,016.6	1,017.6	.0	72	58	65.0	+1.6	81	8	49	22	21	63	58	84	1.01	−1.6	.43	4	2	.0	.0	11.1	sw.	42	nw.	18	15	9	6	4.0	74
Providence [2]	159	65	60	1,011.9	1,018.0	+.4	77	55	66.3	+3.1	90	13	43	17	31	68	54	78	2.36	−.8	1.32	5	3	.0	.0	6.5	sw.	25	nw.	18	16	7	7	3.6	81
Hartford [2]	159	5	44	1,012.5	1,018.3	+.3	78	51	64.6	+2.9	91	13	37	17	39	90	54	78	.63	−2.9	.35	3	1	.0	.0	6.1	s.	28	nw.	18	14	11	5	4.3	75
New Haven [2]	107	5	39	1,014.2	1,018.0	.0	76	54	64.9	+3.1	85	13	37	22	35	71	54	76	.70	−2.5	.50	5	2	.0	.0	5.8	ne.	18	sw.	18	14	11	5	4.4	71
MIDDLE ATLANTIC									67.5	+.9								77	2.04	−1.2														5.6	
Albany [2]	97	6	40	1,013.9	1,017.6	.0	77	49	63.0	+1.8	92	13	33	17	41	136	52	79	1.51	−1.3	.96	6	5	.0	.0	6.2	s.	32	nw.	18	11	10	9	4.8	68
Binghamton [4]	871	57	79	981.4	1,012.9	−5.1	67	46	56.6	−.8	88	11	32	2	36	278	46	76	5.07	+1.8	2.08	16	2	.0	.0	5.9	w.	25	sw.	9	2	9	20	7.9	37
New York [4]	314	415	454	1,007.1	1,018.3	+.3	77	61	69.3	+2.5	88	13	51	22	25	20	56	68	1.13	−2.3	.56	4	2	.0	.0	10.4	sw.	37	nw.	18	12	13	5	4.6	69
Allentown [2]	385	4	58	1,004.7	1,018.6	----	78	53	65.4	+.6	90	13	39	23	40	86	54	80	1.32	−2.1	.80	5	5	.0	.0	----	sw.	--	----	--	9	9	12	5.7	--
Harrisburg [2]	374	30	49	1,005.1	1,018.6	+.3	78	55	66.4	+.6	90	13	41	22	36	71	55	76	.77	−2.3	.28	7	2	.0	.0	5.4	w.	23	nw.	9	8	7	15	6.2	53
Philadelphia [4]	114	174	150	1,014.2	1,018.3	.0	78	61	69.5	+1.5	89	9	50	23	25	21	58	78	1.24	−1.9	.89	4	2	.0	.0	6.3	s.	24	nw.	18	9	12	9	5.4	65
Reading	323	47	306	1,006.8	1,018.6	+.3	78	57	67.4	+.8	91	13	44	27	35	50	----	--	3.02	−.2	1.65	7	4	.0	.0	7.6	n.	40	n.	9	9	7	14	5.9	61
Scranton	805	72	104	989.5	1,018.3	.0	76	53	64.6	+1.7	89	13	38	22	38	99	----	--	.90	−2.3	.30	9	3	.0	.0	5.2	n.	28	nw.	18	6	20	4	5.0	69
Atlantic City	52	37	172	1,015.9	1,017.6	−.4	74	62	68.2	+1.4	85	20	51	25	18	40	61	81	.64	−2.0	.39	2	1	.0	.0	12.6	n.	34	ne.	24	13	8	9	4.9	67
Newark [2]	30	5	46	1,016.9	1,018.0	.0	79	58	68.4	+1.9	93	13	46	27	35	31	56	72	1.14	−2.6	.58	5	1	.0	.0	----	sw.	--	----	--	9	14	7	5.1	--
Trenton	190	89	107	1,011.5	1,018.3	−.3	78	58	67.5	+.6	89	13	46	22	30	46	----	--	1.59	−1.8	1.27	4	3	.0	.0	6.7	n.	23	w.	9	8	14	8	5.2	56
Baltimore [4]	123	100	215	1,013.9	1,018.3	+.3	79	62	70.2	+1.7	93	13	50	23	25	25	58	74	2.27	−1.1	.82	7	4	.0	.0	7.8	n.	39	sw.	18	11	8	11	5.4	69
Washington [4]	112	56	100	1,014.6	1,018.3	+.3	79	60	69.7	+1.5	91	13	48	27	30	27	58	70	3.63	+.4	1.21	6	2	.0	.0	5.1	n.	25	nw.	9	8	10	12	5.8	72
Cape Henry	18	8	54	1,016.9	1,017.6	.0	77	66	71.8	.0	90	20	60	3	22	0	63	78	3.03	+.2	1.17	7	3	.0	.0	12.6	e.	38	n.	21	8	11	11	5.5	76
Lynchburg [2]	686	5	58	993.9	1,018.3	−.3	77	57	67.2	−.7	89	9	46	26	32	52	58	82	2.07	−1.2	1.12	10	2	.0	.0	7.2	n.	26	sw.	9	11	7	12	5.7	56
Norfolk [4]	91	80	125	1,014.9	1,018.3	.0	78	66	72.2	+.6	90	9	60	25	23	1	62	80	2.24	−1.0	.85	7	3	.0	.0	8.4	ne.	26	ne.	27	8	7	15	6.3	62
Richmond [4]	144	11	52	1,012.5	1,017.6	−.7	79	60	69.6	−.9	90	9	50	27	30	28	60	82	3.05	−.2	.79	7	3	.0	.0	5.6	n.	22	nw.	21	10	8	12	5.5	67
SOUTH ATLANTIC									72.6	−.3								78	4.90	+.8														6.7	
Asheville	2,253	77	92	944.8	1,018.3	−.3	77	56	66.4	+1.4	87	9	45	26	33	47	58	85	1.60	−1.4	.70	10	1	.0	.0	6.7	se.	27	e.	28	9	9	12	6.0	56
Charlotte [4]	779	63	86	989.8	1,017.6	−.4	80	62	71.0	−.5	92	21	52	26	28	18	59	73	3.07	+.1	1.22	9	0	.0	.0	5.5	ne.	19	ne.	27	8	8	14	5.7	63
Greensboro [2]	886	6	56	986.8	1,018.3	.0	80	58	68.8	−1.0	93	21	48	24	36	28	57	72	1.95	−1.3	1.36	8	1	.0	.0	7.4	ne.	25	ne.	26	10	7	13	5.5	53
Hatteras	11	5	47	1,016.3	1,016.6	−.7	78	71	74.5	.0	84	10	64	24	15	0	67	78	3.84	−.8	2.00	9	5	.0	.0	12.5	ne.	32	n.	23	11	5	14	6.0	59
Raleigh [4]	376	5	71	1,004.4	1,018.0	.0	81	62	71.2	+.1	94	20	50	25	30	14	60	76	4.01	+.4	1.97	10	4	.0	.0	6.3	ne.	15	ne.	27	4	15	11	6.2	48
Wilmington	72	73	107	1,015.9	1,017.3	−.3	81	66	73.5	+.4	92	10	54	25	22	1	64	80	7.23	+2.7	2.74	12	2	.0	.0	8.6	ne.	24	nw.	10	10	8	12	5.7	60
Charleston [4]	48	11	92	1,014.2	1,015.9	−1.0	81	69	75.4	−1.2	90	10	59	26	17	0	66	83	7.71	+3.2	2.55	15	5	.0	.0	11.0	ne.	26	ne.	17	6	11	13	6.2	53
Columbia, S. C. [4]	347	70	91	1,004.4	1,016.9	−.7	82	64	72.9	−1.6	93	9	53	25	27	7	63	77	5.31	+1.9	1.75	9	2	.0	.0	7.5	ne.	23	s.	3	11	5	14	5.8	54
Greenville, S. C. [2]	1,040	18	36	980.4	1,017.3	−.3	79	61	70.0	−.6	91	21	52	26	30	19	60	74	2.84	−.8	1.43	9	1	.0	.0	8.8	ne.	34	ne.	28	9	9	12	5.7	61
Augusta [4]	182	62	77	1,009.8	1,016.3	−.6	82	65	73.5	−1.8	94	9	55	26	28	4	63	74	8.04	+4.7	4.85	13	1	.0	.0	5.4	ne.	19	ne.	27	10	5	15	5.9	55
Savannah [2]	65	19	51	1,013.5	1,015.6	−1.0	84	68	76.0	+1.7	95	9	57	26	23	0	68	80	6.45	+1.0	3.00	11	4	.0	.0	9.4	ne.	26	ne.	25	6	12	12	6.1	42
Jacksonville [4]	43	86	110	1,012.9	1,014.6	−1.7	85	72	78.2	−.1	93	10	65	26	20	0	70	80	6.79	−.6	.87	20	5	.0	.0	8.3	e.	27	ne.	25	7	7	16	6.8	35
FLORIDA PENINSULA									81.3	+.5								81	9.26	+2.0														6.1	
Key West [4]	21	10	64	1,010.5	1,011.2	−2.7	88	77	82.2	+.5	92	10	72	26	16	0	75	80	13.84	+7.1	5.17	16	7	.0	.0	10.7	e.	73	nw.	21	4	20	6	5.5	57
Miami [4]	25	242	249	1,011.2	1,011.9	−3.0	85	76	80.6	−.3	90	6	70	26	15	0	74	84	10.57	+1.9	2.56	17	11	.0	.0	15.1	se.	62	se.	21	1	19	10	6.7	49
Tampa [2]	35	5	36	1,011.9	1,012.9	−2.0	89	73	81.2	+1.3	95	9	67	19	23	0	72	80	3.36	−3.1	1.34	13	8	.0	.0	7.6	ne.	25	n.	22	7	9	14	6.2	63
EAST GULF									74.4	−1.8								78	6.21	+1.4														5.1	
Atlanta [2]	1,173	33	72	975.3	1,015.9	−1.4	80	63	71.5	−1.3	91	9	52	26	26	14	60	73	3.60	+.6	1.84	5	0	.0	.0	8.3	ne.	28	e.	28	13	9	8	4.8	68
Macon [4]	370	79	87	1,002.7	1,015.9	−1.0	83	64	73.6	−1.2	93	9	54	26	30	3	62	71	1.63	−1.6	.95	6	2	.0	.0	5.7	e.	20	e.	26	10	8	12	5.9	69
Thomasville	273	48	----	1,006.1	1,015.9	−.4	85	67	75.8	−1.0	95	10	58	26	27	0	----	--	3.35	−1.5	1.57	7	1	.0	.0	----	----	--	----	--	3	13	14	----	--
Apalachicola	35	11	51	1,012.5	1,013.9	−1.7	83	71	77.0	−1.5	92	23	62	28	20	0	70	83	6.42	−1.7	2.37	12	5	.0	.0	8.9	ne.	30	se.	4	12	4	14	5.7	48
Pensacola [4]	56	54	79	1,012.2	1,013.9	−2.0	83	70	76.2	−1.8	92	23	61	27	22	1	67	78	12.60	+7.3	5.28	11	3	.0	.0	7.8	e.	38	se.	4	13	6	11	5.2	66
Anniston	618	6	32	997.3	1,016.6	−.3	83	60	71.2	−2.9	92	22	48	24	35	6	62	78	3.13	−.5	1.45	5	0	.0	.0	----	----	--	----	--	--	--	--	--	--
Birmingham [2]	700	5	63	991.2	1,015.9	−1.4	83	62	72.5	−.7	94	22	50	24	33	4	61	72	3.63	+.2	2.34	7	1	.0	.0	7.5	e.	37	e.	4	14	7	9	4.6	61
Mobile [4]	57	86	161	1,012.2	1,014.2	−1.4	84	68	75.9	−1.2	92	23	60	28	24	1	66	80	7.26	+2.3	3.47	11	0	.0	.0	7.8	e.	34	s.	4	7	14	9	5.6	52
Montgomery [4]	218	92	105	1,007.1	1,014.6	−2.0	84	66	75.0	−1.3	93	22	58	29	27	3	64	75	3.13	+.1	1.82	8	1	.0	.0	6.4	e.	20	se.	4	16	7	7	4.5	70
Meridian [4]	375	67	92	1,001.7	1,015.2	−2.1	82	63	72.6	−1.9	92	1	53	30	28	11	64	80	5.69	+2.7	2.51	5	1	.0	.0	5.2	ne.	20	ne.	4	14	6	10	4.8	61
Vicksburg [4]	247	82	102	1,005.8	1,014.9	−1.7	82	65	73.4	−2.9	92	8	50	25	28	18	63	82	1.55	−1.3	.60	7	2	.0	.0	7.8	n.	23	n.	27	14	8	8	4.3	67
New Orleans C. O.	53	76	84	1,011.5	1,013.5	−2.1	83	70	76.8	−2.4	91	1	60	28	22	0	68	81	15.26	+10.2	6.78	13	3	.0	.0	7.3	ne.	34	ne.	4	11	7	12	5.5	54
New Orleans A. P. [2]	30	6	52	1,011.5	1,013.2	----	83	68	75.8	----	91	8	58	30	25	0	68	84	13.53	----	----	12	3	.0	.0	----	e.	--	----	--	13	6	11	5.1	--

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR SEPTEMBER 1948—Continued

District and station	Elevation of instruments: Barometer above sea level[1]	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Averages: Mean maximum	Temperature of the air: Averages: Mean minimum	Temperature of the air: Averages: Mean	Temperature of the air: Averages: Departure from normal	Temperature of the air: Extremes: Highest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Lowest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Greatest daily range	Total heating degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Precipitation: Days with thunderstorms	Precipitation: Total snowfall (unmelted)	Precipitation: Snow, sleet, and ice on ground at end of month	Wind: Average hourly speed	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Character of day (sunrise to sunset), number of days: Clear	Character of day (sunrise to sunset), number of days: Partly cloudy	Character of day (sunrise to sunset), number of days: Cloudy	Average cloudiness, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Ft.	Ft.	Mb.	Mb.	Mb.	°F	°F	°F	°F	°F		°F		°F		°F	%	In.	In.	In.			In.	In.	m. p. h.					0-3	4-7	8-10	0-10	%
WEST GULF									77.6	−.5								70	2.40	−1.6															4.0	
Shreveport [2]	181	5	64	1,005.8	1,014.6	−1.3	89	65	76.9	−1.0	99	6	53	30	35	0	62	69	.41	−2.4	.37	3	1	0.0	0.0	8.5	n.	40	w.	8	20	6	4	3.4	84
Fort Smith [2]	463	6	30	999.0	1,014.9	−.7	88	60	74.0	.0	98	6	46	26	40	10	57	66	.14	−2.8	.08	3	4	.0	.0	6.2	ne.	24	n.	28	17	11	2	3.5	84
Little Rock [2]	265	26	58	1,003.1	1,015.9	−.4	84	63	73.8	−.3	96	8	54	30	31	10	62	74	1.20	−2.0	.91	6	4	.0	.0	7.3	ne.	25	e.	19	15	9	6	4.2	73
Austin [2]	621	5	41	992.6	1,013.9	−.7	90	67	78.4	+.1	101	5	53	30	37	0	62	66	1.24	−2.2	.99	5	1	.0	.0	9.1	n.	28	ne.	26	16	8	6	3.8	66
Brownsville [2]	20	5	54	1,009.5	1,011.2	−1.3	88	72	80.0	−.6	99	4	57	29	31	0	70	81	8.90	+3.1	5.44	10	4	.0	.0	8.9	se.	26	se.	8	13	8	9	4.9	70
Corpus Christi [2]	44	6	33	1,012.2	1,012.9	−1.0	88	70	79.3	+.7	100	4	54	28	34	0	70	82	6.64	-----	4.47	6	0	.0	.0	9.5	ne.	29	w.	8	18	6	6	3.9	73
Dallas [2]	488	34	45	996.3	1,014.6	−.6	90	66	77.6	+.2	99	6	49	27	37	2	58	58	.07	−2.6	.07	2	1	.0	.0	8.7	ne.	27	s.	6	22	5	3	2.9	90
Fort Worth [2]	706	40	56	990.9	1,014.6	−.3	90	66	77.6	+1.7	99	5	53	27	33	1	58	56	.19	−2.3	.19	2	1	.0	.0	9.4	e.	27	s.	6	21	6	3	3.0	86
Galveston [4]	54	122	129	1,011.5	1,013.5	−1.4	82	74	78.0	−2.1	90	4	63	27	19	0	70	72	4.83	−.7	3.30	7	4	.0	.0	12.2	ne.	29	ne.	12	16	8	6	4.1	71
Houston [4]	138	157	190	1,008.5	1,013.5	−1.4	87	70	78.5	−.5	96	5	57	28	27	0	66	78	.90	−3.2	.67	5	1	.0	.0	9.9	ne.	25	se.	16	13	7	10	5.0	61
Laredo [2]	418	10	38	997.6	1,012.2	-----	91	70	80.6	−1.6	103	5	55	28	31	0	64	68	4.25	+1.0	1.40	10	5	.0	.0	-----	ne.	--	------	--	13	11	6	4.5	--
Palestine	510	64	72	997.0	1,014.6	−1.0	87	66	76.8	−.2	97	5	54	29	29	1	60	60	.36	−2.6	.33	3	1	.0	.0	6.6	ne.	23	s.	8	18	6	6	3.6	77
Port Arthur [4]	34	59	134	1,011.9	1,013.2	−1.7	85	70	77.6	−1.9	92	1	56	28	27	0	67	83	2.43	−2.4	2.03	8	2	.0	.0	12.7	ne.	33	se.	16	16	7	7	4.3	72
San Antonio [2]	794	6	51	990.2	1,013.9	−.3	88	67	77.7	−1.3	100	5	51	27	33	0	62	68	1.98	−1.1	1.18	8	3	.0	.0	8.3	ne.	34	se.	8	11	11	8	4.7	67
OHIO VALLEY AND TENNESSEE									69.2	+1.6								72	2.81	−.2															5.6	
Chattanooga [2]	762	6	66	989.5	1,016.3	−1.3	83	60	71.5	+3.3	92	22	52	24	32	3	61	76	3.08	.0	1.32	8	3	.0	.0	6.0	n.	30	nw.	7	11	8	11	5.4	60
Knoxville [2]	995	27	71	981.7	1,016.9	−1.1	82	60	71.5	+2.1	90	9	52	24	32	12	59	70	1.52	−1.2	.55	9	2	.0	.0	6.7	ne.	24	ne.	28	11	11	8	5.2	42
Memphis [6]	399	5	49	1,001.7	1,015.6	−1.0	84	62	73.0	+1.1	94	21	50	26	33	16	61	72	2.22	−.6	.91	7	2	.0	.0	7.0	n.	19	n.	25	18	4	8	4.1	74
Nashville [2]	546	5	72	997.0	1,016.6	−1.4	83	61	71.9	+.1	93	2	49	26	32	20	59	70	3.31	−.1	1.55	10	3	.0	.0	6.5	n.	26	s.	5	14	9	7	4.3	60
Lexington [2]	989	4	58	982.4	1,018.3	.0	80	58	69.0	+.5	92	20	46	24	36	46	56	69	2.14	−.9	.92	7	4	.0	.0	-----	ne.	--	------	--	8	14	8	5.3	--
Louisville [2]	525	5	54	1,000.0	1,016.9	−1.1	82	59	70.4	+1.4	94	16	48	24	43	24	56	65	1.47	−1.3	1.05	5	2	.0	.0	6.7	ne.	20	ne.	25	8	13	9	5.4	62
Evansville [2]	431	6	40	1,001.4	1,016.9	−.4	81	59	69.9	+2.2	92	20	48	24	39	22	59	74	4.33	+1.0	1.60	7	2	.0	.0	7.2	ne.	27	ne.	25	11	9	10	5.3	72
Indianapolis [2]	823	5	54	988.2	1,017.3	−.3	78	56	67.4	+2.0	90	19	46	23	35	52	56	71	3.03	-----	1.48	9	7	.0	.0	8.6	sw.	25	w.	8	7	10	13	5.9	60
Terre Haute [2]	575	4	36	996.6	1,017.3	.0	80	56	68.4	+.1	94	20	44	23	39	42	58	75	5.08	+1.5	2.72	9	6	.0	.0	7.7	ne.	34	w.	20	8	8	14	5.8	66
Cincinnati [4]	627	135	148	995.3	1,018.0	.0	82	61	71.5	+4.4	94	19	49	23	35	26	56	68	.70	−2.0	.46	7	2	.0	.0	4.3	ne.	14	ne.	23	7	12	11	5.8	57
Columbus [4]	822	90	110	988.5	1,018.0	.0	79	58	68.9	+2.4	92	17	45	23	31	45	55	70	2.25	−.3	1.07	7	4	.0	.0	7.6	s.	21	s.	11	7	14	9	5.6	69
Dayton [2]	1,003	6	55	982.1	1,018.0	+.4	79	57	67.8	+1.9	90	19	44	23	34	55	54	68	1.67	−1.2	.99	10	3	.0	.0	8.8	ne.	26	w.	18	6	12	12	6.1	62
Elkins [2]	1,947	5	45	950.6	1,019.3	.0	74	50	61.7	−.2	84	3	36	27	36	129	54	89	5.03	+1.9	2.08	8	5	.0	.0	4.5	n.	22	w.	21	3	13	14	6.8	56
Parkersburg	637	77	84	------	------	-----	79	58	68.3	+1.0	89	17	43	26	35	50	57	78	5.11	+2.4	1.37	7	5	.0	.0	5.5	se.	18	nw.	9	8	8	14	6.2	60
Pittsburgh [2]	842	39	54	988.2	1,018.3	.0	76	56	66.2	+1.5	87	17	43	23	30	75	53	70	1.27	−1.3	.50	5	1	.0	.0	8.7	s.	22	nw.	9	6	11	13	6.1	50
LOWER LAKES									65.2	+2.9								75	1.92	−1.0															5.7	
Buffalo [2]	768	34	96	990.5	1,018.6	+1.3	76	54	64.9	+3.3	92	5	39	22	34	93	53	74	5.74	+2.8	2.12	9	7	.0	.0	10.2	sw.	33	sw.	17	8	9	13	5.6	82
Canton	448	10	61	1,001.7	1,017.6	+1.0	74	48	61.4	+2.6	87	6	30	16	39	175	50	74	.84	−2.5	.30	6	3	.0	.0	5.2	w.	21	sw.	17	9	13	8	5.0	67
Oswego	335	71	85	------	------	-----	72	55	63.6	+2.1	87	6	44	26	35	118	-----	--	.86	−1.8	.22	9	4	.0	.0	7.1	se.	24	n.	20	11	10	9	5.0	58
Rochester [2]	523	4	69	999.3	1,018.6	+1.0	75	53	64.1	+1.7	91	5	40	22	35	114	53	78	1.54	−.9	.62	8	4	.0	.0	7.0	sw.	30	sw	17	9	9	12	5.6	66
Syracuse [2]	596	5	57	997.0	1,018.6	+.6	76	50	63.0	+2.7	89	13	34	25	45	135	54	81	1.02	−1.7	.56	5	5	.0	.0	6.6	sw.	25	w.	11	7	12	11	5.7	51
Erie [4]	714	57	81	992.6	1,018.3	+.7	74	59	66.4	+2.8	86	5	45	25	20	67	54	80	1.01	−2.4	.46	7	4	.0	.0	6.8	se.	22	se.	29	6	11	13	5.8	37
Cleveland [2]	762	27	54	990.5	1,018.0	.0	77	56	66.4	+2.6	89	17	40	26	32	75	55	72	2.49	−.8	1.09	8	3	.0	.0	8.2	s.	38	w.	19	5	9	16	6.2	48
Sandusky	629	5	67	994.9	1,018.0	.0	77	59	68.0	+2.7	91	19	48	27	29	44	-----	--	1.90	−1.1	.82	9	2	.0	.0	7.4	ne.	20	nw.	20	9	13	8	5.2	60
Toledo [2]	628	5	47	994.9	1,018.0	.0	77	56	66.6	+3.5	91	19	44	25	33	75	56	74	2.16	−.6	.96	9	4	.0	.0	9.2	sw.	26	nw.	20	7	9	14	6.2	59
Fort Wayne [2]	857	5	34	986.8	1,017.6	.0	79	55	67.0	+3.9	92	19	43	23	37	67	54	70	1.82	−1.2	.82	7	3	.0	.0	7.3	sw.	27	s.	6	6	10	14	6.2	64
Detroit [2]	730	5	77	992.2	1,018.6	+.6	76	56	66.2	+3.8	88	19	44	22	29	74	55	71	1.79	−1.1	.54	8	7	.0	.0	7.5	ne.	23	nw.	10	6	11	13	6.0	54
UPPER LAKES									64.0	+4.8								72	1.30	−2.0															4.5	
Alpena	609	5	89	996.6	1,019.3	+2.0	71	53	62.0	+4.4	88	17	40	22	29	130	53	75	.60	−2.4	.43	8	1	.0	.0	8.8	nw.	27	se.	16	11	10	9	5.0	72
Escanaba	612	51	72	996.3	1,018.6	+2.0	71	53	62.2	+5.1	79	17	42	26	28	123	53	74	1.03	−2.3	.71	6	3	.0	.0	8.5	n.	34	s.	1	14	10	6	3.8	71
Grand Rapids [4]	707	70	244	992.6	1,018.3	+1.0	78	57	67.4	+4.7	90	4	45	25	30	55	53	70	1.26	−2.3	.37	9	4	.0	.0	9.5	ne.	28	sw.	17	14	7	9	4.6	64
Lansing [4]	878	5	90	986.5	1,018.6	+1.0	77	54	65.2	+3.5	89	12	41	25	33	98	52	68	1.62	−1.3	.66	10	2	.0	.0	8.2	sw.	22	se.	29	9	9	12	5.4	59
Marquette	734	44	73	991.2	1,018.6	+2.3	71	53	62.0	+4.5	91	12	42	23	36	161	52	72	1.21	−2.0	.57	7	2	.0	.0	6.6	w.	26	sw.	12	16	7	7	4.0	67
Sault Sainte Marie [2]	614	10	52	992.2	1,019.0	+2.1	71	48	59.4	+5.4	88	5	38	22	36	193	50	80	2.02	−1.5	1.37	9	5	.0	.0	7.8	nw.	24	nw.	13	11	10	9	4.9	70
Chicago [2]	673	5	38	993.6	1,017.6	+.3	78	58	67.8	+2.9	92	19	49	27	35	49	56	70	2.38	−.8	1.37	9	1	.0	.0	7.4	ne.	29	s.	1	14	5	11	5.0	74
Green Bay	617	5	32	995.6	1,018.3	+2.0	75	53	64.0	+3.6	91	12	36	27	36	124	53	70	1.40	−2.1	.96	7	4	.0	.0	6.3	s.	24	se	1	10	12	8	4.9	69
Milwaukee [2]	681	33	66	993.2	1,018.0	+1.1	75	57	66.4	+5.4	92	12	47	25	32	73	56	73	1.24	−2.0	.40	8	4	.0	.0	11.0	sw.	33	sw.	17	16	7	7	4.5	59
Duluth [4]	1,133	5	47	976.6	1,018.3	+2.7	74	53	63.2	+8.1	91	12	43	9	34	137	49	72	.27	−3.0	.17	4	0	.0	.0	11.0	ne.	29	sw.	16	20	6	4	3.1	74
NORTH DAKOTA									64.0	+7.0								54	.29	−1.3															4.8	
Fargo [2]	940	5	47	981.4	1,015.6	+.7	78	51	64.7	+6.5	95	2	40	9	39	97	50	62	.85	−1.4	.36	6	3	.0	.0	12.0	s.	34	s.	4	12	10	8	4.7	67
Bismarck [2]	1,677	5	41	955.0	1,014.6	−.3	81	49	64.8	+7.5	103	15	34	28	52	99	44	52	.02	−1.2	.02	1	2	.0	.0	10.2	se.	33	se.	26	10	15	5	4.8	70
Devils Lake	1,478	11	44	962.1	1,015.2	+.6	78	49	63.4	+7.5	97	3	36	30	43	118	44	52	.27	−1.4	.14	3	2	.0	.0	8.4	se.	24	s.	27	12	14	4	4.4	79
Williston	1,878	42	50	947.2	1,013.5	−.7	78	48	63.2	+6.6	101	3	30	9	47	121	41	48	.02	−1.1	.01	2	1	.0	.0	6.6	se.	22	nw.	4	8	14	8	5.5	85

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR SEPTEMBER 1948—Continued

District and station	Elevation of instruments: Barometer above sea level [1]	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Averages: Mean maximum	Temperature of the air: Averages: Mean minimum	Temperature of the air: Averages: Mean	Temperature of the air: Averages: Departure from normal	Temperature of the air: Extremes: Highest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Lowest	Temperature of the air: Extremes: Date	Temperature of the air: Extremes: Greatest daily range	Total heating degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Precipitation: Days with thunderstorms	Precipitation: Total snowfall (unmelted)	Precipitation: Snow, sleet, and ice on ground at end of month	Wind: Average hourly speed	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Character of day (sunrise to sunset), number of days: Clear	Character of day: Partly cloudy	Character of day: Cloudy	Average cloudiness, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Ft.	Ft.	Mb.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.		°F.		°F.	%	In.	In.	In.			In.	In.	m. p. h.					0-3	4-7	8-10	0-10	%
Upper Mississippi																																			
Minneapolis-St. Paul [1]	919	43	74	983.7	1,016.6	+1.4	80	56	68.6	+3.8	94	12	43	10	33	58	52	71 61	2.39 1.04	−1.3 −2.1	.79	4	2	0.0	0.0	9.0	se.	34	s.	16	18	8	4	4.4 3.4	75
La Crosse [1]	672	5	29	991.5	1,017.3	+1.4	78	53	66.4	+5.0	93	15	38	27	38	98	53	68	1.29	−2.7	.93	4	3	.0	.0	6.7	s.	26	sw.	17	13	13	4	4.2	77
Madison [1]	974	27	39	983.1	1,018.0	+1.4	79	53	65.6	+4.2	93	19	38	27	40	104	53	70	1.87	−1.8	.72	10	5	.0	.0	8.0	ne.	42	w.	19	14	7	9	4.7	70
Charles City	1,015	10	51	981.7	1,018.3	+2.0	79	54	66.4	+5.4	93	19	42	27	38	81	----	--	3.03	−.6	2.05	5	5	.0	.0	5.0	e.	19	s.	17	16	11	3	3.2	--
Moline [1]	606	6	50	995.6	1,018.0	+1.1	79	56	67.6	+3.7	93	19	43	27	35	69	57	72	3.66	+.1	1.72	8	3	.0	.0	6.9	e.	31	e.	20	17	4	9	4.4	73
Des Moines [4]	860	5	99	982.7	1,017.6	+1.7	82	59	70.4	+4.8	97	19	46	28	31	36	56	70	1.61	−2.1	.75	6	5	.0	.0	7.6	o.	28	sw.	17	13	12	5	4.1	--
Dubuque	699	60	79	992.6	1,017.6	+1.0	79	58	68.2	+4.2	94	19	45	27	30	57	56	75	1.59	−2.4	.93	7	4	.0	.0	4.2	ne.	17	n.	19	13	8	9	4.6	--
Burlington [1]	702	4	36	992.2	1,017.6	+.7	80	57	68.2	+1.8	94	19	46	9	33	56	58	80	4.76	+.3	2.36	6	6	.0	.0	8.1	ne.	34	nw.	20	15	5	10	4.6	--
Cairo	357	5	99	1,003.7	1,016.3	−.3	81	63	72.1	−.4	92	2	53	24	28	15	----	--	4.70	+1.8	2.87	5	3	.0	.0	7.5	ne.	24	n.	8	12	9	9	5.0	72
Peoria [1]	609	7	26	995.6	1,017.6	+.3	80	58	69.0	+3.1	95	19	47	9	34	39	57	72	1.72	−2.3	.81	8	4	.0	.0	7.8	ne.	31	e.	1	13	7	10	4.9	70
Springfield, Ill. [4]	636	5	191	994.2	1,017.3	+.7	81	58	69.3	+4.5	94	19	46	24	35	43	58	72	.90	−2.7	.29	8	5	.0	.0	9.2	ne.	26	s.	1	11	9	10	5.1	64
St. Louis [4]	568	33	59	996.6	1,016.9	−.4	82	63	72.7	+2.3	95	20	51	26	27	16	----	--	2.50	−1.0	1.05	8	4	.0	.0	9.5	s.	28	n.	8	13	8	9	----	76
Missouri Valley																																			
Columbia, Mo. [4]	784	6	66	988.8	1,016.9	+.3	82	60	69.9	+3.8	93	20	49	25	31	31	58	69 76	2.58 2.52	−.5 −1.8	1.31	5	4	.0	.0	5.9	e.	18	ne.	28	18	7	5	3.7 3.9	--
Kansas City [1]	963	38	76	982.4	1,016.6	+1.0	83	62	72.6	+3.7	95	20	48	26	28	13	56	65	1.88	−1.9	1.42	7	6	.0	.0	8.8	ne.	26	n.	8	20	6	4	3.0	--
St. Joseph [1]	967	5	51	982.1	1,016.3	+.7	84	60	71.6	+3.2	96	1	46	26	31	24	58	73	1.51	−2.4	.95	6	9	.0	.0	6.8	s.	26	sw.	17	17	8	5	3.6	--
Springfield, Mo. [1]	1,324	5	50	1,004.1	1,016.9	+.3	81	58	69.4	+1.0	91	19	44	26	31	42	58	76	2.73	−.8	2.51	5	5	.0	.0	9.0	s.	42	n.	7	16	8	6	3.9	--
Topeka [4]	987	65	87	984.8	1,016.3	+.4	85	60	72.6	+3.9	99	1	47	27	35	20	57	72	1.36	−2.5	1.00	4	7	.0	.0	7.8	s.	23	sw.	17	17	9	4	3.3	--
Lincoln [4]	1,189	6	81	973.9	1,016.3	+1.4	82	59	70.8	+4.4	100	1	43	28	33	42	56	70	5.17	+2.2	2.14	7	6	.0	.0	7.5	s.	26	s.	17	19	7	4	3.4	--
Norfolk, Nebr. [2]	1,551	5	38	961.4	1,016.6	-----	81	55	68.0	+4.0	98	19	41	30	44	72	53	68	3.63	+.8	3.07	5	3	.0	.0	----	se.	--	------	--	17	8	5	3.7	--
Omaha [1]	1,105	5	68	977.3	1,016.6	+1.0	82	58	70.0	+4.3	96	19	43	27	36	36	58	71	4.86	+1.6	3.62	5	6	.0	.0	8.6	s.	42	e.	1	16	9	5	3.8	--
Valentine	2,598	46	54	924.1	1,014.9	−.3	80	53	67.0	+4.5	95	4	39	8	44	73	46	55	1.55	+.2	.91	7	6	.0	.0	9.2	s.	23	s.	4	17	5	8	4.0	--
Sioux City [1]	1,138	5	40	975.3	1,014.6	−.6	84	55	69.2	+6.7	98	19	38	28	42	49	53	66	.31	−2.7	.31	1	2	.0	.0	8.7	e.	35	w.	17	15	9	6	3.8	--
Huron [1]	1,301	5	41	969.2	1,015.6	+.4	80	53	66.4	+5.1	94	15	41	30	44	79	52	68	2.84	+1.3	2.54	7	5	.0	.0	12.0	se.	33	se.	4	15	5	10	4.7	--
Northern Slope																																			
Billings [1]	3,570	16	39	891.3	1,013.2	−2.7	78	50	60.8	+3.8	97	14	41	8	43	124	36	51 40	.50 .40	−.7 -----	.20	4	1	.0	.0	9.5	sw	28	nw	4	12	11	7	4.7 4.6	81
Butte	5,533	44	58	831.4	1,018.0	-----	69	33	50.6	−1.1	87	14	26	28	54	430	31	52	.63	−.2	.30	5	0	.6	.0	----	s	--	------	--	15	5	10	4.5	--
Glasgow	2,086	34	53	940.4	1,014.2	-----	79	48	63.4	+6.1	98	3	39	6	49	116	39	44	.38	−.7	.35	4	2	.0	.0	----	nw	--	------	--	10	11	9	5.0	--
Great Falls [1]	3,657	16	75	888.9	1,014.6	-----	72	48	60.0	+2.1	92	14	35	24	38	199	36	44	.72	−.7	.41	5	1	T	.0	11.9	sw	42	sw	27	12	10	8	5.1	81
Havre	2,507	11	67	926.2	1,014.6	−.3	76	45	60.2	+3.8	97	14	36	6	52	177	34	42	.14	−1.2	.08	4	0	.0	.0	7.2	w	26	w	11	10	12	8	5.1	79
Helena [1]	4,124	5	43	874.7	1,015.9	+.7	73	41	56.8	+1.4	94	14	31	28	52	255	36	50	.31	−.9	.28	3	1	.0	.0	7.3	w	32	nw	11	13	9	8	4.7	73
Missoula [1]	3,263	4	32	902.8	1,016.3	.0	72	38	54.8	+1.4	92	2	27	24	50	307	36	54	.13	−1.1	.10	3	0	T	.0	6.3	nw	25	nw	22	13	8	9	4.9	62
Kalispell	2,973	48	56	912.6	1,015.2	+.3	69	41	54.8	+1.3	87	2	29	24	41	306	40	60	.10	−1.1	.06	3	0	.0	.0	5.5	w	22	sw	22	12	10	8	4.7	72
Miles City [1]	2,371	5	28	930.6	1,013.9	−1.7	80	51	65.4	-----	101	15	40	30	51	89	40	44	.45	-----	.31	5	2	.0	.0	----	se	--	------	--	9	11	10	5.2	--
Rapid City [1]	3,259	5	56	902.1	1,013.9	−1.7	81	52	66.6	+6.4	103	15	38	8	46	76	42	70	.59	−.6	.30	5	2	.0	.0	13.3	s	41	s	26	12	10	8	5.0	--
Cheyenne [1]	6,094	22	40	815.4	1,013.9	−.7	77	47	61.7	+4.7	91	4	35	9	47	143	38	50	.54	−.7	.39	4	6	.0	.0	9.0	w	28	se	25	10	11	9	5.0	--
Lander [1]	5,352	6	30	836.4	1,013.9	−1.0	77	48	62.4	+6.7	92	14	39	8	43	136	36	46	.73	−.2	.48	4	3	.0	.0	7.6	sw	35	sw	1	14	10	6	4.0	--
Sheridan [1]	3,790	5	38	884.9	1,014.2	−1.4	78	47	62.8	+6.5	99	14	35	8	48	133	40	51	1.04	−.2	.88	6	3	.0	.0	6.8	nw	36	nw	4	14	11	5	4.3	--
North Platte [4]	2,821	11	51	918.4	1,014.6	−.6	82	54	68.0	+5.9	94	12	37	29	43	60	50	64	.89	−.5	.60	4	5	.0	.0	8.3	se	34	se	23	15	12	3	3.7	--
Middle Slope																																			
Denver [4]	5,292	106	113	838.1	1,012.9	−1.7	81	56	71.9	+3.1	94	4	47	29	35	37	37	56 40	.50 .27	−1.6 −.7	.20	3	2	.0	.0	7.2	s.	31	s.	25	17	7	6	2.7 4.0	--
Pueblo [1]	4,690	5	36	857.8	1,013.2	−.7	86	51	68.3	+3.4	97	1	37	29	48	41	44	50	.17	−.6	.17	1	5	.0	.0	6.4	nw.	42	sw.	25	19	8	3	3.6	--
Concordia	1,392	50	58	966.8	1,015.9	+.7	84	60	68.6	+3.6	100	1	45	29	34	33	53	59	1.19	−.8	.86	6	7	.0	.0	8.3	se.	26	sw.	17	22	7	1	2.2	--
Dodge City [1]	2,509	5	58	928.5	1,014.6	−.3	85	58	71.8	+2.4	98	1	44	28	35	34	52	58	.62	−1.3	.58	4	4	.0	.0	15.0	se.	35	s.	16	24	4	2	2.1	--
Wichita [1]	1,358	52	64	967.8	1,015.6	+.7	85	61	73.3	+2.7	96	1	47	26	31	19	54	59	1.05	−2.0	.94	4	6	.0	.0	13.0	s.	49	nw.	8	22	6	2	2.5	--
Oklahoma City [4]	1,214	10	47	972.6	1,015.2	+.3	88	64	76.2	+3.4	100	6	49	27	31	6	54	57	.17	−2.9	.17	1	2	.0	.0	7.4	s.	20	s.	6	26	2	2	2.1	92
Tulsa [1]	674	10	60	991.5	1,015.6	+.4	87	61	73.9	+1.0	96	7	47	27	32	9	58	68	T	−3.0	T	0	1	.0	.0	8.4	s.	29	n.	8	22	7	1	2.7	87
Southern Slope																																			
Abilene [1]	1,755	4	59	953.9	1,013.5	−.7	90	62	74.6	+.8	105	6	45	28	40	10	53	54 52	.73 .01	−1.8 −2.7	.01	1	2	.0	.0	11.0	s.	38	n.	8	19	8	3	3.3 3.4	76
Amarillo [1]	3,604	5	42	891.0	1,014.3	−.6	86	56	76.2	+2.4	99	2	42	27	36	39	49	54	1.27	−1.0	1.02	4	4	.0	.0	12.5	s.	36	se.	2	22	5	3	2.7	86
Del Rio	960	63	71	979.3	1,011.9	−1.0	88	69	70.6	+2.8	100	1	53	28	29	0	62	63	2.15	−.8	1.71	5	1	.0	.0	7.0	se.	34	ne.	4	13	10	7	4.6	68
Roswell	3,614	6	29	892.3	1,013.2	−.3	87	55	70.8	+.5	103	5	38	28	45	30	44	46	.21	−1.9	.19	2	4	.0	.0	7.1	se.	36	sw.	20	18	9	3	3.4	81
Wichita Falls	1,030	4	49	978.3	1,014.2	-----	90	64	77.1	−1.0	105	5	49	29	36	4	55	54	T	−2.8	T	0	2	.0	.0	----	------	--	------	--	24	4	2	2.4	--
Southern Plateau																																			
El Paso [1]	3,916	35	85	886.2	1,010.8	−.4	88	64	77.1	+3.2	103	5	50	29	33	2	46	37 38	.50 .03	−.5 −1.2	.02	2	2	.0	.0	10.1	se.	38	nw.	6	19	5	6	2.8 3.4	81
Albuquerque [1]	5,314	5	45	839.5	1,011.9	.0	85	58	76.0	+3.7	98	3	44	29	36	13	41	40	.80	.0	.51	3	3	.0	.0	7.9	se.	31	sw.	25	17	10	3	3.5	79
Flagstaff	6,907	34	48	793.8	1,016.6	+4.4	78	43	71.4	+3.5	91	1	35	20	45	162	34	43	1.05	−.7	.62	6	7	.0	.0	----	n.	--	------	--	16	11	3	3.5	--
Phoenix [4]	1,107	39	87	970.2	1,008.1	−.4	100	72	60.3	+3.1	112	3	62	23	35	0	49	32	T	−.8	T	0	2	.0	.0	6.4	e.	26	n.	11	25	4	1	2.0	95
Tucson [1]	2,555	5	39	923.5	1,009.1	+.6	96	69	86.2	+2.5	117	2	58	20	42	0	54	36	.02	−.3	.02	1	0	.0	.0	5.0	sw.	17	s.	15	26	3	1	1.4	97
Yuma	142	9	54	1,001.0	1,008.1	+.3	103	70	86.2	+2.9	107	3	60	22	36	0	50	35	1.11	−.1	.84	4	5	.0	.0	7.9	se.	29	ne.	11	19	9	2	2.7	86

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR SEPTEMBER 1948—Continued

District and station	Elevation of instruments: Barometer above sea level [1]	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Averages: Mean maximum	Averages: Mean minimum	Averages: Mean	Averages: Departure from normal	Extremes: Highest	Extremes: Date	Extremes: Lowest	Extremes: Date	Extremes: Greatest daily range	Total heating degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Days with 0.01 inch or more	Days with thunderstorms	Total snowfall (unmelted)	Snow, sleet, and ice on ground at end of month	Wind: Average hourly speed	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Character of day (sunrise to sunset), number of days: Clear	Partly cloudy	Cloudy	Average cloudiness, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Ft.	Ft.	Mb.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.		°F.		°F.	%	In.	In.	In.			In.	In.	m. p. h.					0-3	4-7	8-10	0-10	%
MIDDLE PLATEAU																																			
									62.8	+3.1								38	.27	−.4														2.9	
Ely [2]	6,262	8	41	810.0	1,014.2	----	77	37	57.0	+4.6	90	2	16	26	52	247	26	32	.26	−.4	.26	2	1	0.0	0.0	11.6	s.	36	se.	17	22	6	2	2.3	93
Reno [2]	4,527	20	52	862.2	1,013.9	+.7	82	38	60.4	+2.4	97	10	26	27	56	163	34	42	.01	−.2	.01	1	0	T	.0	6.5	s.	34	w.	23	20	6	4	2.9	91
Winnemucca	4,339	5	56	867.6	1,013.9	−.7	81	41	61.0	+1.8	96	2	24	27	54	153	31	37	.04	−.4	.04	1	1	T	.0	7.0	ne.	29	sw.	14	19	7	4	3.1	80
Modena	5,473	10	46	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Salt Lake City [2]	4,357	32	58	866.9	1,012.5	−.7	81	51	66.0	+3.3	96	14	34	27	42	86	38	40	.59	−.4	.53	4	3	.0	.0	9.3	se.	29	nw.	19	21	8	1	2.6	80
Grand Junction [2]	4,602	5	26	860.1	1,013.2	−.3	85	54	69.6	+3.4	97	1	45	30	39	18	38	38	.46	−.5	.29	6	4	.0	.0	8.6	e.	34	se.	16	16	8	6	3.7	--
NORTHERN PLATEAU																																			
									59.4	−.2								54	.76	+.1														4.0	
Baker [4]	3,471	36	54	895.7	1,015.9	−.4	73	40	56.6	+.6	91	10	29	23	48	275	40	61	.25	−.5	.11	4	0	.0	.0	5.7	se.	29	sw.	14	17	7	6	3.7	85
Meacham	4,056	7	28	877.8	1,017.6	----	66	42	53.8	----	89	10	31	23	36	360	39	62	.62	----	.41	7	0	T	.0	----	nw.	--	----	--	14	8	8	4.3	--
Boise [2]	2,739	5	49	919.1	1,013.9	−.7	76	47	61.8	+.6	95	14	33	24	41	155	36	43	.31	−.2	.16	3	0	.0	.0	9.1	se.	34	nw.	22	19	4	7	3.4	78
Burley [2]	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lewiston	1,436	4	23	963.8	1,014.9	----	77	48	62.5	----	95	13	34	24	41	130	43	53	.49	----	.25	4	2	.0	.0	----	e.	--	----	--	12	12	6	4.2	--
Pocatello [2]	4,478	5	31	863.5	1,014.9	+.7	77	44	60.7	+1.4	94	13	32	28	52	165	33	43	1.39	+.6	.51	6	3	.0	.0	7.1	sw.	27	s.	14	20	5	5	3.1	79
Ellensburg [2]	1,735	5	58	953.9	1,015.9	----	73	43	57.8	−.2	91	10	30	23	46	237	42	60	1.17	+.7	1.06	3	1	.0	.0	----	nw.	--	----	--	16	10	4	4.0	--
Lacrosse	1,544	5	43	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Spokane [2]	1,929	6	51	946.8	1,015.9	+1.0	72	45	58.1	−1.1	91	13	33	23	40	236	38	52	1.46	+.6	.92	7	0	.0	.0	7.2	sw.	34	sw.	14	10	11	9	4.9	72
Walla Walla	991	57	65	979.7	1,015.2	+.3	76	52	63.6	−.2	97	13	39	24	38	131	----	--	.53	−.4	.33	4	0	.0	.0	4.3	s.	21	sw.	14	15	7	8	4.2	66
Yakima [2]	1,076	4	54	976.6	1,015.2	.0	77	42	59.5	−2.3	96	11	30	29	50	191	43	57	.64	+.1	.63	3	0	.0	.0	----	w.	--	----	--	13	10	7	4.3	--
NORTH PACIFIC COAST																																			
									59.1	+.4								72	2.96	+1.0														5.0	--
Kelso [2]	750	38	76	----	----	----	70	44	57.4	----	90	10	35	29	43	232	51	80	3.21	----	1.17	10	1	.0	.0	----	n.	--	----	--	8	11	11	5.5	59
North Head	211	5	55	1,008.5	1,015.9	−.7	63	53	58.0	+1.5	81	9	44	24	23	222	52	84	4.90	+1.9	1.21	11	1	.0	.0	13.0	n.	54	s.	14	10	8	12	5.2	57
Seattle [4]	125	90	321	1,011.9	1,016.6	.0	68	52	59.6	−.7	83	9	43	25	28	181	51	78	3.07	+1.3	1.42	10	0	.0	.0	9.1	n.	36	s.	14	9	11	10	5.2	48
Tacoma	194	172	201	1,009.5	1,016.3	−.3	66	49	57.4	+.1	77	10	37	25	23	230	----	--	3.59	+1.5	1.33	10	1	.0	.0	7.6	n.	31	s.	14	8	12	10	5.2	45
Tatoosh Island	86	5	61	1,012.9	1,015.9	−.7	60	50	55.2	+2.2	67	10	46	19	18	292	52	88	5.34	+.7	1.14	14	1	.0	.0	12.3	s.	43	s.	2	9	7	14	6.1	--
Burns	4,162	35	47	873.7	1,015.2	----	73	38	55.7	+.1	91	10	24	23	48	284	34	48	1.15	+.3	.45	6	0	T	.0	----	n.	--	----	--	20	4	6	3.4	--
Eugene [2]	433	4	35	1,002.4	1,015.9	----	75	46	60.4	----	98	10	37	30	50	178	48	69	2.52	----	1.02	8	1	.0	.0	----	n.	--	----	--	15	8	7	4.4	--
Medford [2]	1,329	29	58	968.2	1,015.6	+1.0	79	46	62.2	−1.3	102	9	35	25	51	158	46	62	.30	−.4	.09	6	0	.0	.0	----	sw.	--	----	--	13	8	9	4.5	61
Portland, Oreg. [4]	154	68	106	1,010.8	1,016.3	+.4	73	53	63.0	+1.3	94	9	43	25	32	121	50	71	3.86	+1.9	1.11	8	0	.0	.0	6.1	nw.	21	s.	14	10	11	9	5.1	57
Rosebu g	510	45	76	----	----	----	76	49	62.5	−.4	98	9	41	30	49	135	----	--	1.71	+.4	.77	8	0	.0	.0	4.0	n.	20	sw.	14	11	8	11	5.0	
MIDDLE PACIFIC COAST																																			
									65.2	+.4								64	.65	.0														3.5	--
Auburn [2]	1,651	4	58	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eureka	60	72	88	1,014.6	1,016.9	+.6	61	50	55.2	−.7	70	2	44	25	19	295	51	86	1.71	+.7	1.10	5	0	.0	.0	5.7	nw.	21	n.	28	10	10	10	5.4	51
Red Bluff [2]	353	5	26	999.7	1,012.2	----	89	59	74.2	+1.1	105	10	48	27	42	20	42	38	.70	−.1	.58	3	0	.0	.0	6.9	nw.	26	nw.	23	21	5	4	2.8	84
Sacramento [4]	66	92	115	1,009.8	1,012.2	+.3	86	56	71.2	+1.9	103	10	47	25	40	28	48	52	.10	−.3	.10	1	0	.0	.0	5.7	s.	17	s.	21	25	2	3	1.6	90
San Francisco [4]	115	112	132	1,008.5	1,014.2	+.7	67	53	60.0	−.9	83	13	50	13	33	154	51	78	.09	−.4	.09	1	0	.0	.0	9.2	w.	28	w.	24	13	11	6	4.3	74
SOUTH PACIFIC COAST																																			
									71.2	+1.5								60	T	−.2														2.5	
Fresno [2]	327	5	34	999.7	1,011.5	+.3	92	56	73.8	+1.8	104	1	43	25	42	18	49	46	0	−.2	.0	0	0	.0	.0	5.2	nw.	23	nw.	23	25	5	0	1.6	98
Los Angeles	338	236	263	----	----	----	84	59	71.6	+2.6	100	11	51	26	37	4	----	--	T	−.2	T	0	0	.0	.0	5.2	w.	17	w.	24	23	6	1	2.2	85
San Diego [2]	87	20	55	1,008.5	1,011.9	.0	76	60	68.3	+.1	85	15	51	26	25	6	59	75	T	−.1	T	0	0	.0	.0	5.5	nw.	16	sw.	23	17	10	3	3.6	74
PANAMA CANAL																																			
BalboaHeights [6]	118	6	92	----	1,009.6	----	85	74	79.7	−.2	89	22	71	11	14	0	75	89	6.56	−1.4	2.22	21	11	.0	.0	4.6	s.	20	s.	19	0	13	17	7.8	--
Cristobal [6]	27	37	92	----	1,009.6	----	86	76	80.8	−.1	90	20	74	11	14	0	75	86	11.35	−1.3	2.55	27	9	.0	.0	5.5	s.	24	n.	7	0	9	21	7.8	--
ALASKA																																			
Anchorage [2]	132	6	44	1,000.3	1,005.4	----	55	36	45.6	−2.2	65	1	26	19	34	586	38	72	2.34	−.2	.68	12	0	.0	.0	5.4	n.	28	se.	16	2	7	21	7.9	--
Annette Island	113	5	53	1,008.5	1,012.5	----	55	46	50.8	−2.9	62	15	38	24	20	425	47	86	16.93	+7.7	3.92	20	0	.0	.0	----	se.	--	----	--	2	8	20	7.8	--
Barrow	29	5	27	1,011.2	1,011.2	----	30	20	24.6	−6.1	42	3	3	19	20	1,214	24	90	.88	+.4	.54	7	0	4.4	2.0	12.0	se.	37	se.	29	3	5	22	7.6	--
Bethel [2]	28	5	31	1,004.7	1,006.4	----	47	37	42.0	−3.1	61	6	27	22	19	693	38	85	3.08	+.1	.48	20	0	4.8	.0	10.5	nw.	63	s.	29	1	4	25	8.9	--
Cordova [2]	45	5	32	1,003.7	1,005.4	----	55	36	45.3	−2.4	67	2	27	27	35	591	42	88	20.26	+4.9	3.33	19	0	.0	.0	----	e.	27	se.	30	5	6	19	7.4	--
Fairbanks [2]	455	5	63	989.5	1,006.8	----	50	31	40.5	−3.1	67	8	16	19	34	735	36	79	.57	−.7	.21	10	0	2.1	.0	5.6	nw.	31	sw.	17	0	6	24	8.4	--
Galena	139	4	66	1,000.7	1,005.4	----	46	34	39.8	−2.0	64	8	22	19	26	755	31	69	2.15	+.4	.67	15	0	8.2	T	----	n.	40	e.	29	1	4	25	8.2	--
Gambell	32	5	32	1,007.5	1,008.5	----	41	35	38.3	−2.4	47	12	27	19	10	801	34	83	.92	−.9	----	8	----	.0	.0	16.0	n.	46	n.	16	0	4	26	9.0	--
Juneau [2]	80	6	30	1,008.5	1,009.5	----	55	42	48.2	−.4	66	13	27	28	31	503	42	80	11.51	+4.9	2.15	21	0	.0	.0	8.9	e.	38	se.	19	6	3	21	7.4	--
Kotzebue [2]	20	5	31	1,006.8	1,007.5	----	41	32	36.8	−3.6	56	8	19	22	21	851	32	79	.37	−.5	.13	9	0	.3	.0	15.2	se.	50	se.	29	7	4	19	7.1	--
McGrath [2]	341	5	31	993.7	1,006.4	----	48	32	39.9	−3.5	64	8	20	18	28	756	34	79	2.97	+.4	1.05	17	0	.4	.0	----	nw.	22	nw.	20	1	1	28	8.7	--
Nome [2]	22	10	75	1,006.4	1,007.1	----	44	31	37.4	−4.3	54	8	18	23	22	827	34	84	2.41	−.3	1.25	10	0	2.6	.0	13.6	n.	49	se.	28	7	3	20	7.2	--
Northway [2]	1,718	5	32	944.5	1,007.8	----	49	29	39.4	−2.4	64	5	16	23	33	772	32	74	.75	−.8	.46	6	0	4.3	T	----	nw.	--	----	--	2	5	23	7.9	--
HAWAII																																			
Honolulu [4]	38	86	98	1,014.6	1,015.9	----	83	74	78.7	+.5	85	18	70	23	13	0	66	66	1.41	+.1	.53	14	1	.0	.0	10.2	ne.	25	ne.	20	12	15	3	4.4	76

[1] Height of barometer cistern above mean sea level on January 1, 1900, or when station was first established since January 1, 1900. When station is moved to new location or airport, the pressure is reduced to the original elevation for homogeneity. These elevations do not represent the present station elevation in most cases.

[2] Data are from airport records. Pressures adjusted to original elevations according to note [1].

[3] Barometric, hygrometric, wind, character of day, and average cloudiness data from airport records; remainder from city office records.

[4] Barometric and hygrometric data from airport records; remainder from city office records.

[5] Barometric, temperature, degree day, and hygrometric data from airport; remainder from city office records.

[6] Bihourly hygrometric data.

NOTE.—Unless otherwise indicated, data in table are city office records.