CLIMATOLOGICAL DATA FOR OCTOBER 1948

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see REVIEW, January 1943, 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	62.0	−2.9	Ozark	89	16	Valley Head	23	20	1.47	−1.11	Ozark	5.96	Gulf Shores	.04
Arizona	62.6	+1.5	3 stations	106	[1] 3	Maverick	14	[1] 24	1.16	+.28	McNary	3.38	Seligman	T
Arkansas	60.0	−2.8	2 stations	90	[1] 1	Bethesda	20	18	2.40	−.76	Eagle Gap	6.06	Beech Grove	.40
California	61.0	−.1	Brawley	109	5	3 stations	7	30	.73	−.36	Klamath	6.12	18 stations	.00
Colorado	47.3	+.3	Eversoll Ranch	91	4	Spicer	−12	17	.73	−.48	Wolf Creek Pass	4.32	2 stations	.00
Florida	71.4	−1.6	Stuart	96	3	Marianna Ind. School	35	19	4.92	+.74	Pompano	17.41	Grape Hammock	.56
Georgia	62.0	−2.9	2 stations	87	[1] 3	Blairsville Exp. Sta	22	19	2.72	+.03	Doles	8.08	Pine Mountain Valley	.39
Idaho	47.8	+.5	Anderson Dam	87	12	Grouse	5	17	.71	−.81	2 stations	2.62	Challis	T
Illinois	52.9	−3.0	2 stations	85	1	Aurora College	16	18	1.79	−.85	Lawrenceville, 5 S	5.06	Sycamore	.37
Indiana	52.3	−2.9	do	82	[1] 29	2 stations	17	18	2.24	−.50	Franklin	4.19	La Porte	.23
Iowa	51.5	−1.1	Monroe	80	26	4 stations	16	17	1.91	−.40	Bedford	3.41	Lake View	.58
Kansas	57.0	−.5	Meade	94	4	Atwood	17	11	1.14	−.84	Independence	3.43	3 stations	T
Kentucky	54.8	−3.7	4 stations	85	[1] 1	Farmers	18	19	2.26	−.37	Murray	3.81	Stillwater	.28
Louisiana	66.3	−2.2	3 stations	93	[1] 1	Pollock	24	19	1.15	−2.05	Sarepta	3.52	Donaldsonville	.03
Maryland-Delaware	54.2	−2.2	Coleman, Md	88	1	Cumberland, Md	19	19	3.50	+.47	Georgetown, Del	6.81	Elkton, Md	1.02
Michigan	47.9	−1.0	Ontonagon	78	26	2 stations	15	18	1.32	−1.35	Sault Ste. Marie	3.68	Jackson	.33
Minnesota	48.2	+1.5	Taylors Falls, 1 NE	80	1	Angus	11	17	.83	−1.01	Albert Lea	2.06	Caribou, 2 S	.10
Mississippi	63.1	−2.4	Eupora	90	15	Hernando	24	30	1.14	−1.40	Paulding	3.77	2 stations	.03
Missouri	55.7	−2.2	2 stations	86	1	Anderson	18	18	2.38	−.58	St. Louis Ap	4.53	Neosho	.76
Montana	46.2	+1.0	Crow Agency	94	3	Wibaux, 2 E	1	17	.18	−.89	Haugan	1.65	12 stations	.00
Nebraska	51.9	.0	Chadron	89	4	Gordon	6	17	1.00	−.47	Falls City	3.76	Oxford	T
Nevada	53.2	+2.0	Overton	100	3	Smith	5	28	.54	−.14	Jarbidge	1.54	Lathrop Wells	.00
New England	48.6	−1.0	Winslow, Maine	84	1	Somerset, Vt	11	22	3.06	−.39	Pembroke, Mass	8.20	Danbury, Conn	.74
New Jersey	53.6	−1.2	Hammonton	81	2	Layton	16	22	2.29	−1.23	Cape May	5.69	Quakertown	1.11
New Mexico	54.6	+.8	White Sands	95	13	Eagle Nest	7	22	1.15	−.01	Jemez Springs	3.95	Floyd	T
New York	48.8	−1.3	7 stations	80	[1] 1	Indian Lake	11	22	2.96	−.34	South Wales	6.86	Millerton	.91
North Dakota	46.4	+2.2	Dunn Center	85	4	Medora	−1	17	.93	−.08	Sharon	2.16	Grenora	.13
Ohio	50.4	−2.9	Chesapeake	84	16	Mansfield, 6 N	19	21	2.39	−.13	Geneva	4.04	New Lexington, 1 N	.76
Oklahoma	61.0	−1.7	Cordell	96	13	Jay	19	18	.93	−2.02	Idabel	6.35	Lake Overholser	T
Oregon	48.9	−.9	2 stations	88	[1] 1	Fremont	−1	28	1.60	−.30	Valsetz	9.75	Paisley	T
Pennsylvania	50.3	−2.3	Phoenixville	85	1	2 stations	14	[1] 21	3.09	−.14	South Mountain	5.99	Allentown-Beth.-East	.96
South Carolina	59.7	−4.2	Conway	85	1	Walhalla	25	19	2.77	−.14	Orangeburg, No. 2	7.76	Batesburg	.79
South Dakota	49.4	+.5	McIntosh	90	4	Ralph	2	17	1.23	.00	Vermillion	2.47	Camp Crook	.08
Tennessee														
Texas	65.8	−1.9	2 stations	99	[1] 7	Stratford	24	18	1.38	−1.31	Carrizo Springs	6.69	12 stations	.00
Utah	50.3	+.9	St. George	93	[1] 3	Bryce Canyon	5	29	1.15	.00	Pineview Dam	3.44	Callao	.00
Virginia	54.4	−3.1	4 stations	83	[1] 2	3 stations	17	[1] 19	3.23	+.25	Luray	5.86	Emory	1.05
Washington	47.8	−2.4	Richland, 2 SW	83	4	Chewelah, 2 S	12	17	2.19	−.82	Mt. Baker Lodge	10.85	2 stations	.26
West Virginia	51.5	−3.2	Williamson	83	3	2 stations	14	[1] 19	2.38	−.44	Harpers Ferry	5.66	Brownsville	1.28
Wisconsin	48.2	−.3	2 stations	82	1	Winter P.K. Reservoir	7	18	1.01	−1.38	Ridgeway	2.95	Ladysmith R. S	.18
Wyoming	45.4	+1.5	Arvada	89	3	Foxpark	0	17	.68	−.42	Kirtley	2.45	2 stations	T
Alaska (Sept.)	41.1	−2.8	2 stations	72	3	Umiat	−6	28	4.29	+.65	Little Port Walter	35.95	Nenana	.27
Hawaii	73.6	−.4	4 stations	90	[1] 1	Haleakala R. S	37	9	6.04	+.37	Makahanoloa, No. 2	42.60	12 stations	.00
Puerto Rico	78.2	+.1	Ponce	96	[1] 30	2 stations	58	[1] 2	9.09	+.69	Guineo Reservoir	20.97	Cambalache Exp. Sta.	2.48

[1] Other dates also.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS, OCTOBER 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									48.8	+.3								80	3.58	.0														5.8	
Caribou [2]	628	5	33	995.9	1,019.6	----	53	33	43.2	+1.7	72	7	20	21	36	678	36	85	4.63	+1.1	1.65	10	0	.8	.0	----	nw.	--	------	--	7	8	16	6.5	--
Eastport	75	67	82	1,015.6	1,018.3	+2.4	54	42	47.9	+.4	68	6	27	19	26	530	40	78	3.26	-.3	.83	9	1	T	.0	10.4	n.	32	se.	9	12	7	12	5.6	56
Portland, Maine [2]	103	6	43	1,014.9	1,018.6	+1.3	60	36	47.8	-.9	76	2	21	19	34	526	40	82	3.34	+.2	.98	9	0	.0	.0	9.2	n.	34	n.	25	8	13	10	5.5	59
Concord [2]	289	5	45	1,008.5	1,019.6	+2.3	62	33	47.4	-.4	76	1	17	19	42	546	38	79	1.44	-1.4	.81	9	0	.0	.0	6.4	nw.	22	e.	8	12	9	10	5.4	55
Mt. Washington	6,274	5	37	806.9	1,022.8	----	36	26	31.2	+1.5	49	1	6	19	28	1,049	25	79	4.59	-1.7	1.81	12	1	.35	.0	28.3	w.	--	------	--	8	9	14	6.1	45
Burlington [2]	403	6	51	1,004.4	1,019.6	+3.0	57	36	46.2	-3.0	73	1	23	19	34	579	39	85	2.51	-.5	.96	9	1	T	.0	7.7	n.	32	s.	16	4	12	15	6.6	36
Boston [2]	124	33	62	1,014.2	1,018.8	+1.5	62	46	54.4	+.6	79	1	33	19	28	341	42	72	4.84	+1.7	1.50	10	1	.0	.0	11.2	nw.	40	ne.	25	10	10	11	5.6	58
Nantucket [2]	12	4	34	1,017.3	1,017.6	.0	59	47	53.1	-1.1	75	2	29	22	23	370	48	85	7.22	+3.8	3.21	11	1	.0	.0	14.1	ne.	42	ne.	24	6	8	17	6.5	48
Block Island	26	11	46	1,016.6	1,017.6	.0	60	50	54.9	.0	72	2	38	19	25	314	48	82	3.28	-.3	1.23	11	0	.0	.0	17.2	ne.	57	ne.	24	13	5	13	5.4	54
Providence [2]	159	65	60	1,012.5	1,018.3	+.7	63	45	54.0	+1.8	83	1	29	22	30	351	44	79	4.85	+1.7	1.74	10	2	.0	.0	8.5	n.	32	sw.	17	11	6	14	5.5	56
Hartford [2]	159	5	44	1,012.9	1,019.0	+1.0	64	40	51.8	+.6	82	1	26	22	45	414	41	78	1.46	-2.1	.49	9	0	.0	.0	8.0	n.	29	s.	17	8	11	12	5.9	56
New Haven [2]	107	5	39	1,014.6	1,018.6	+.3	63	44	53.8	+2.0	78	2	28	19	32	349	43	74	1.54	-1.8	.82	9	1	.0	.0	8.1	ne.	26	ne.	25	10	12	9	5.4	55
MIDDLE ATLANTIC									54.8	-1.3								77	2.36	-.9														5.9	
Albany [2]	97	6	40	1,015.2	1,019.0	+1.4	60	37	48.6	-.7	76	2	20	22	38	509	40	82	2.42	.0	1.15	8	0	T	.0	7.3	n.	26	se.	17	3	16	12	6.5	42
Binghamton [4]	871	57	79	987.5	1,020.0	+1.7	60	39	49.4	-.6	73	1	24	22	36	482	40	86	2.23	-.7	1.19	11	0	1.0	.0	4.9	n.	17	sw.	8	8	7	16	6.4	48
New York [4]	314	415	454	1,007.5	1,019.0	+1.0	63	49	55.9	-.4	78	1	35	19	21	289	44	68	2.44	-1.1	.98	8	0	T	.0	13.5	n.	39	n.	24	10	11	10	5.6	56
Allentown [2]	385	4	58	1,005.1	1,019.3	----	63	40	51.6	-1.4	74	2	25	19	38	418	40	76	.96	-2.3	.29	7	0	.0	.0	----	nw.	--	------	--	7	12	12	6.3	--
Harrisburg [2]	374	30	49	1,005.8	1,019.6	+.6	62	43	52.8	-2.0	79	2	30	19	31	382	42	74	3.45	+.5	1.61	9	1	.0	.0	6.8	nw.	26	nw.	25	6	8	17	6.5	52
Philadelphia [4]	114	174	150	1,014.6	1,018.6	-.4	64	50	56.8	-1.0	78	1	37	19	25	268	44	76	1.39	-1.4	.46	9	0	.0	.0	8.3	n.	24	n.	25	8	12	11	5.5	57
Reading	323	47	306	1,007.1	1,019.3	+.3	64	45	54.4	-1.0	77	2	31	19	33	330	----	--	1.49	-1.6	.59	10	0	.0	.0	10.1	n.	33	ne.	5	7	10	14	6.3	41
Scranton	805	72	104	989.8	1,019.3	+.7	60	42	51.2	-.7	71	1	28	19	33	434	----	--	1.92	-1.1	1.13	12	0	.2	.0	6.2	n.	22	nw.	17	3	18	10	6.2	43
Atlantic City	52	37	172	1,015.9	1,018.0	-.6	63	51	56.6	-.3	76	2	36	19	24	267	49	82	3.19	.0	1.80	12	1	.0	.0	17.5	n.	58	ne.	5	5	10	16	6.4	53
Newark [2]	30	5	46	1,017.6	1,018.6	----	64	46	55.0	-.6	80	1	30	19	32	318	44	74	1.89	-1.9	.69	10	0	.0	.0	----	ne.	--	------	--	6	13	12	5.8	--
Trenton	190	89	107	1,011.9	1,019.0	+.7	63	46	54.8	-.8	77	1	32	19	26	323	----	--	1.27	-1.5	.52	10	0	.0	.0	9.5	n.	32	n.	24	10	10	11	5.6	49
Baltimore [4]	123	100	215	1,014.6	1,019.0	+.4	64	50	56.7	-1.5	80	1	37	19	25	268	44	72	3.62	+.7	1.90	6	0	.0	.0	10.3	n.	28	nw.	18	7	10	14	5.9	57
Washington [4]	112	56	100	1,015.2	1,019.3	+.3	65	48	56.2	-1.2	79	1	33	19	30	283	46	72	3.11	+.3	1.72	8	0	.0	.0	7.5	n.	25	ne.	5	7	10	14	6.3	59
Cape Henry	18	8	54	1,017.3	1,018.0	-.3	66	53	59.4	-2.7	78	10	40	20	25	195	52	82	2.45	-.6	2.09	6	0	.0	.0	14.5	n.	49	e.	5	12	6	13	5.3	69
Lynchburg [2]	686	5	58	994.6	1,019.6	+.3	66	44	55.0	-2.2	77	1	26	19	34	314	43	74	2.61	-.5	1.81	7	0	.0	.0	8.3	n.	25	n.	5	13	6	12	4.8	65
Norfolk [4]	91	80	125	1,015.2	1,018.6	-.4	67	53	60.1	-2.4	80	1	42	20	24	174	50	80	2.41	-.6	1.91	9	0	.0	.0	9.8	n.	32	e.	5	11	7	13	5.5	60
Richmond [4]	144	11	52	1,013.2	1,018.6	-.7	68	48	57.8	-1.8	82	1	33	19	32	240	46	83	3.27	+.4	2.33	9	0	.0	.0	7.6	n.	25	nw.	5	12	8	11	5.3	57
SOUTH ATLANTIC									60.8	-2.8								74	2.29	-.9														4.4	
Asheville	2,253	77	92	945.8	1,021.0	+1.0	67	42	54.4	-.9	79	2	27	19	44	329	41	76	.93	-1.8	.74	6	0	.0	.0	6.8	nw.	27	nw.	18	12	11	8	4.7	65
Charlotte [4]	779	63	86	991.5	1,019.3	.0	70	49	59.6	-2.1	81	1	34	19	31	184	46	68	2.38	-.6	1.64	7	0	.0	.0	5.7	ne.	19	ne.	4	14	11	6	4.2	73
Greensboro [2]	886	6	56	988.2	1,020.3	+.7	68	42	55.5	-3.0	80	1	28	19	41	302	44	70	2.28	-.8	1.84	7	0	.0	.0	7.3	n.	27	n.	5	15	10	6	3.9	66
Hatteras	11	5	47	1,017.3	1,017.6	-.4	67	57	62.2	-3.7	76	3	46	20	21	121	56	80	1.92	-3.0	1.38	7	1	.0	.0	12.0	n.	34	e.	5	13	4	14	5.3	60
Raleigh [4]	376	5	71	1,003.4	1,019.6	+.6	69	48	58.7	-3.3	79	1	34	19	31	209	47	76	2.80	-.1	2.30	8	0	.0	.0	6.3	n.	19	n.	4	8	10	13	5.7	53
Wilmington	72	73	107	1,017.6	1,019.3	+.7	70	52	61.2	-4.1	79	1	38	19	29	143	51	79	1.93	-1.3	1.43	8	0	.0	.0	8.0	n.	26	nw.	18	16	4	11	4.5	65
Charleston [4]	48	11	92	1,016.9	1,018.6	+.3	72	56	63.8	-4.0	80	14	43	19	22	87	52	79	2.64	-.6	1.21	7	1	.0	.0	9.1	n.	29	n.	18	18	6	7	3.9	71
Columbia, S.C. [4]	347	70	91	1,011.2	1,019.3	+.3	73	50	61.5	-2.8	80	14	38	20	34	134	49	76	2.70	+.1	1.69	7	0	.0	.0	6.5	ne.	23	ne.	4	17	7	7	3.9	69
Greenville, S.C. [2]	1,040	18	36	982.1	1,019.3	+.7	70	48	59.0	-1.2	81	1	35	19	30	191	45	66	1.08	-2.0	.47	6	0	.0	.0	7.7	ne.	33	n.	18	15	9	7	4.2	70
Augusta [4]	182	62	77	1,003.7	1,019.0	+.7	74	50	62.2	-3.1	82	14	38	20	38	120	48	64	1.90	-.6	1.32	7	0	.0	.0	4.8	nw.	19	ne.	4	18	6	7	3.7	74
Savannah [2]	65	19	51	1,016.9	1,018.6	+.6	75	53	64.0	-1.7	82	14	42	19	33	78	54	74	2.54	-.4	1.14	5	0	.0	.0	8.1	n.	26	n.	4	15	9	7	4.3	63
Jacksonville [4]	43	86	110	1,016.9	1,018.0	+.7	76	60	68.0	-3.1	83	1	47	20	24	37	58	79	4.43	.0	2.87	8	3	.0	.0	7.8	ne.	23	sw.	11	.4	7	10	4.8	55
FLORIDA PENINSULA									77.0	-.2								78	6.90	+1.3														5.6	
Key West	21	10	64	1,013.9	1,014.6	+.7	84	76	79.8	+.7	88	7	73	31	10	0	71	78	5.74	-.3	4.55	6	3	.0	.0	10.9	e.	45	n.	5	11	10	10	5.6	55
Miami [4]	25	242	249	1,013.9	1,014.6	-.3	81	73	76.9	-1.1	85	8	67	20	15	0	69	80	13.94	+6.2	6.02	13	1	.0	.0	15.1	ne.	79	nw.	5	6	16	9	6.2	49
Tampa [2]	35	5	36	1,015.9	1,016.3	+.4	84	65	74.2	-.1	92	3	57	20	26	0	64	75	1.02	-2.1	.53	4	2	.0	.0	7.2	ne.	24	sw.	4	9	15	7	5.0	69
EAST GULF									64.6	-2.3								74	1.58	-1.3														4.3	
Atlanta [2]	1,173	33	72	984.4	1,019.3	+.3	72	49	60.4	-2.3	80	2	32	18	37	158	47	68	.73	-2.0	.31	6	0	.0	.0	7.4	nw.	32	nw.	18	15	10	6	3.8	72
Macon [4]	370	79	87	1,002.4	1,019.0	+.4	74	49	61.1	-3.4	81	14	35	19	35	143	48	66	1.92	-.4	1.11	8	0	.0	.0	5.1	n.	26	nw.	17	15	8	8	4.5	73
Thomasville	273	48	----	1,009.8	1,020.0	+2.7	76	55	65.2	-3.0	84	16	40	19	35	73	----	--	2.14	-.8	.88	7	0	.0	.0	----	------	--	------	--	--	16	7	8	----	--
Apalachicola	35	11	51	1,016.6	1,017.6	+.7	75	60	67.4	-3.2	81	11	46	19	23	32	60	79	4.93	+1.7	3.30	6	0	.0	.0	7.6	ne.	26	n.	18	17	6	8	4.2	66
Pensacola [4]	56	54	79	1,013.9	1,018.3	+1.0	76	58	67.2	-2.7	84	2	40	18	32	39	56	72	1.22	-3.0	.84	4	1	.0	.0	6.8	ne.	24	n.	17	14	13	4	4.2	76
Anniston	618	6	32	997.6	1,020.3	+2.0	74	43	58.8	-4.2	82	17	29	20	48	200	47	77	.64	-2.0	.35	5	0	.0	.0	----	------	--	------	--	--	--	--	----	--
Birmingham [2]	700	5	63	996.6	1,019.3	+.3	75	46	60.5	-1.9	82	16	29	19	44	154	48	71	.70	-1.7	.36	4	0	.0	.0	6.0	e.	24	nw.	17	16	8	7	3.9	66
Mobile [4]	57	86	161	1,010.5	1,018.6	+1.0	78	57	67.2	-2.1	84	16	39	18	32	43	56	73	1.80	-1.8	1.34	5	1	.0	.0	7.0	n.	28	n.	17	10	16	5	4.6	66
Montgomery [4]	218	92	105	1,011.5	1,019.0	+.4	76	53	64.6	-2.0	84	2	37	18	36	74	50	71	1.85	-.6	1.05	5	1	.0	.0	5.5	n.	21	nw.	17	17	8	6	4.1	73
Meridian [4]	375	67	92	1,007.8	1,019.0	+1.0	78	47	62.4	-1.9	85	15	30	19	44	110	51	76	1.44	-1.0	1.20	4	1	.0	.0	7.3	n.	--	------	--	19	7	5	----	--
Vicksburg [4]	247	82	102	1,009.1	1,018.6	+.3	77	54	65.3	-1.4	85	1	32	18	31	67	49	78	.82	-2.0	.38	4	2	.0	.0	7.1	n.	23	n.	17	14	11	6	4.0	76
New Orleans C. O.	53	76	84	1,016.3	1,018.3	+1.4	79	63	71.0	.0	86	1	44	18	33	24	58	74	1.25	-2.0	1.16	5	0	.0	.0	6.3	ne.	22	ne.	18	11	11	9	5.0	73
New Orleans A. P. [2]	30	6	52	1,015.9	1,018.0	----	80	58	68.8	----	86	16	43	20	34	30	58	78	1.07	----	----	3	1	.0	.0	----	ne.	--	------	--	13	11	7	4.6	
WEST GULF									68.8	-.2								69	1.47	-1.6														4.9	
Shreveport [2]	181	5	64	1,009.5	1,018.3	+.7	80	51	65.7	-1.3	89	1	32	19	38	71	53	74	1.47	-1.2	.76	4	3	.0	.0	7.0	n.	28	n.	14	15	9	7	4.4	76
Fort Smith [2]	463	6	30	1,001.7	1,018.0	+.7	76	46	60.8	-2.0	89	15	26	18	41	160	44	67	1.94	-1.0	1.23	4	4	.0	.0	6.1	ne.	25	w.	7	14	9	8	4.5	69
Little Rock [2]	265	26	58	1,006.1	1,019.0	+1.0	74	49	61.2	-2.4	83	13	34	18	37	141	48	71	3.11	+.4	1.84	8	4	.0	.0	5.8	nw.	25	ne.	17	15	7	9	4.3	71
Austin [2]	621	5	41	995.9	1,017.6	+.7	82	58	69.9	+1.6	95	14	40	18	35	38	52	60	1.78	-1.4	1.76	4	2	.0	.0	8.4	s.	33	n.	17	13	4	14	5.1	67
Brownsville [2]	20	5	54	1,013.2	1,015.2	+.3	84	64	74.3	-.6	95	11	50	18	31	12	66	82	1.29	-2.3	.86	6	3	.0	.0	9.2	se.	34	nw.	17	6	14	11	5.7	60
Corpus Christi [2]	44	6	33	1,015.9	1,016.6	+.7	83	63	73.2	+2.1	94	2	47	19	35	14	64	82	1.44	----	1.44	1	0	.0	.0	9.4	se.	35	n.	17	13	8	10	4.9	58
Dallas [2]	488	34	45	999.7	1,018.0	+1.1	79	53	66.3	-1.0	92	15	34	18	37	65	48	58	.91	-1.8	.60	5	2	.0	.0	8.4	s.	30	sw.	6	13	9	9	4.6	73
Fort Worth [2]	706	40	56	993.9	1,018.0	+1.1	79	55	66.8	+1.1	92	15	38	18	35	59	48	57	2.09	-.7	1.27	7	5	.0	.0	----	------	--	------	--	13	18	10	4.9	--
Galveston [4]	54	122	129	1,015.9	1,017.6	+.7	77	67	71.7	-1.0	85	1	47	18	23	16	62	80	.31	-4.0	.31	1	1	.0	.0	10.5	e.	31	n.	17	16	9	6	4.2	72
Houston [4]	138	157	190	1,012.5	1,017.6	+.7	82	61	71.5	+1.2	90	1	41	18	28	23	56	75	.09	-3.6	.06	3	1	.0	.0	8.9	se.	29	n.	17	15	6	10	4.6	73
Laredo [2]	418	10	38	1,001.4	1,015.9	----	83	63	73.3	-.4	95	6	49	18	32	15	60	70	2.35	+.2	1.56	4	2	.0	.0	----	se.	--	------	--	9	10	12	5.6	--
Palestine	510	64	72	1,000.3	1,018.6	+1.0	80	56	68.0	+.8	90	14	40	18	32	54	48	55	.51	-2.8	.36	3	1	.0	.0	6.1	n.	22	nw.	6	11	8	12	5.3	67
Port Arthur [4]	34	59	134	1,016.6	1,017.6	+1.0	80	62	70.7	-.9	88	1	39	18	26	27	56	77	.01	-3.4	.01	1	2	.0	.0	10.6	ne.	33	n.	17	15	8	8	4.4	73
San Antonio [2]	794	6	51	992.9	1,016.9	+.6	82	59	70.4	-.1	93	6	44	19	36	32	54	63	3.24	+1.0	3.24	2	2	.0	.0	8.1	ne.	36	ne.	17	12	4	15	5.7	57

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS, OCTOBER 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	%
OHIO VALLEY AND TENNESSEE																																				
Chattanooga [2]	762	6	66	994.9	1,020.0	+.7	72	43	54.0	−2.6	82	14	27	19	42	234	46	74	2.23	−.4														5.5	
Knoxville [2]	995	27	71	984.8	1,020.3	+2.0	70	44	57.0	−1.6	80	1	29	19	41	249	44	75	1.48	−1.5	.56	6	0	.0	.0	5.8	s.	32	sw.	17	14	6	11	4.6	60
Memphis [2]	399	5	49	1,008.8	1,019.0	+.7	74	46	60.0	−1.4	84	15	29	18	41	174	47	67	1.27	−1.4	.95	5	0	.0	.0	6.7	ne.	34	sw.	17	13	9	9	4.5	53
Nashville [2]	546	5	72	997.6	1,019.6	+.3	72	44	58.0	−3.0	82	15	28	18	42	226	45	69	2.21	−.5	1.06	7	3	.0	.0	6.8	n.	25	nw.	16	18	6	7	3.5	76
Lexington [2]	989	4	58	984.1	1,021.0	+2.4	65	43	53.8	−3.6	80	16	24	18	37	351	42	73	1.59	−.9	1.00	3	1	.0	.0	6.3	s.	22	nw.	8	14	13	4	3.9	58
Louisville [2]	525	5	54	1,002.4	1,019.3	+.3	67	43	55.1	−2.4	79	1	25	18	46	309	43	69	3.29	+.7	1.43	9	1	.0	.0	----	s.	----	----	--	11	9	11	--	--
Evansville [2]	431	6	40	1,003.7	1,019.3	+.3	67	42	54.8	−2.2	78	30	26	18	41	318	45	75	2.19	−.5	1.40	8	1	.0	.0	6.3	e.	27	sw.	11	9	11	11	5.8	54
Indianapolis [2]	823	5	54	989.5	1,019.3	+.7	62	40	51.2	−2.9	77	30	22	18	41	427	41	74	2.35	−.5	1.84	7	1	.0	.0	6.1	sw.	23	sw.	7	13	10	8	4.4	68
Terre Haute [2]	575	4	36	998.6	1,020.0	+1.7	64	41	52.4	−3.8	76	28	24	18	38	394	43	74	2.12	------	1.03	11	1	.0	.0	8.7	se.	34	e.	7	10	10	11	5.5	50
Cincinnati [4]	627	135	148	997.3	1,020.3	+1.0	64	46	55.0	−2.0	79	30	32	18	37	312	42	72	2.32	−.4	1.34	9	1	.0	.0	7.5	se.	29	sw.	7	11	9	11	5.2	62
Columbus [4]	822	90	110	993.6	1,020.0	+1.0	62	44	52.6	−2.6	75	16	29	18	34	380	42	76	2.18	−.3	1.25	7	0	.0	.0	4.2	e.	16	n.	17	8	8	15	5.9	52
Dayton [2]	1,003	6	55	983.1	1,019.6	+1.3	60	41	50.5	−3.3	73	30	26	18	32	452	41	74	1.98	−.5	1.38	8	0	.0	.0	7.6	n.	29	sw.	12	9	5	17	6.1	53
Elkins [2]	1,947	5	45	950.6	1,021.0	+.3	61	36	48.6	−2.5	76	16	21	19	46	512	40	84	2.24	−.3	1.54	12	2	.0	.0	9.1	w.	33	w.	9	8	10	13	6.2	50
Parkersburg	637	77	84	----	----	----	63	42	52.4	−3.7	79	16	29	19	37	390	43	82	2.75	−.2	.82	12	1	.8	.0	5.4	n.	24	sw.	8	4	7	20	7.3	43
Pittsburgh [2]	842	39	54	989.2	1,020.0	+1.0	60	42	50.7	−3.4	76	16	30	19	31	444	40	75	2.29	−.2	1.14	10	1	.0	.0	5.4	nw.	17	nw.	19	5	9	17	7.0	44
LOWER LAKES																			3.14	+.6	1.15	14	1	T	.0	9.0	s.	27	w.	8	2	10	19	7.4	18
Buffalo [2]	768	34	96	991.2	1,019.6	+2.0	58	41	49.4	−2.1	73	7	30	21	31	478	40	79	2.68	−.2														6.7	
Canton	448	10	61	1,002.7	1,019.0	+2.4	57	35	49.6	−1.5	72	7	20	21	38	588	38	80	4.74	+1.4	1.38	11	2	T	.0	10.9	sw.	44	sw.	9	5	8	18	6.9	33
Oswego	335	71	85	----	----	----	56	42	46.0	−1.5	72	7	20	21	38	588	38	80	2.97	−.1	1.41	11	1	T	.0	6.1	ne.	29	w.	10	7	8	16	6.4	45
Rochester [2]	523	4	69	1,000.3	1,019.6	+1.6	59	39	49.2	−1.1	71	7	32	22	29	492	----	--	2.69	−.6	1.33	8	0	T	.0	8.0	s.	24	n.	24	6	10	15	6.7	41
Syracuse [2]	596	5	57	997.6	1,020.0	+2.0	60	38	49.0	−2.5	75	16	28	22	39	494	41	84	2.66	.0	1.28	9	0	T	.0	7.6	sw.	31	sw.	11	6	10	15	6.9	49
Erie [4]	714	57	81	993.6	1,020.0	+2.0	58	45	48.8	−.7	76	7	24	22	43	500	41	82	1.87	−1.3	.91	9	0	T	.0	7.7	sw.	26	sw.	9	4	12	15	6.9	33
Cleveland [2]	762	27	54	991.5	1,019.3	+1.0	59	41	51.4	−2.0	74	16	36	19	26	423	40	81	5.01	+1.3	1.68	15	1	T	.0	7.9	se.	26	w.	9	5	7	19	7.1	36
Sandusky	629	5	67	996.3	1,019.6	+1.6	58	43	50.1	−2.6	72	30	28	21	35	464	41	77	2.86	+.1	1.28	11	3	T	.0	8.9	s.	40	w.	9	3	12	16	7.2	36
Toledo [2]	628	5	47	996.3	1,020.0	+1.4	59	39	50.8	−3.5	69	7	30	21	25	437	----	--	2.02	−.4	.74	11	2	.0	.0	7.8	sw.	29	w.	19	8	7	16	6.4	41
Fort Wayne [2]	857	5	34	988.2	1,019.6	+1.3	60	39	49.0	−2.6	73	1	25	18	33	497	41	78	1.74	−.6	.68	10	1	.0	.0	9.0	sw.	38	sw.	9	6	8	17	6.7	39
Detroit [2]	730	5	77	992.9	1,020.0	+2.0	58	42	49.6	−3.1	75	1	25	18	40	475	40	76	1.57	−1.0	.56	9	0	.0	.0	7.3	sw.	28	sw.	7	9	10	12	5.9	61
UPPER LAKES																			1.34	−1.0	.43	10	1	.0	.0	8.7	sw.	38	nw.	9	7	9	15	6.5	38
Alpena	609	5	89	995.9	1,018.6	+1.7	55	40	48.4	−.5	74	1	25	18	28	549	41	74	1.06	−1.6														5.7	
Escanaba	612	51	72	995.6	1,018.6	+2.0	54	40	47.3	+.2	62	1	21	18	26	553	40	80	.78	−1.9	.28	10	0	T	.0	9.5	nw.	29	sw.	10	7	6	18	6.5	46
Grand Rapids [4]	707	70	244	992.9	1,019.0	+1.4	59	42	47.2	+1.2	76	1	34	20	33	443	38	74	1.56	−1.1	1.08	8	0	T	.0	10.3	s.	33	n.	23	12	7	12	5.3	50
Lansing [4]	878	5	90	987.1	1,019.3	+1.3	58	38	50.7	−.5	76	1	24	18	33	520	39	73	.79	−2.0	.37	5	0	T	.0	9.7	se.	31	w.	9	8	12	11	5.8	48
Marquette	734	44	73	990.2	1,018.0	+1.7	56	40	48.2	−2.1	75	1	24	18	33	520	39	73	1.01	−1.5	.39	9	1	T	.0	8.1	sw.	34	nw.	9	6	12	13	6.2	42
Sault Sainte Marie [2]	614	10	52	995.3	1,018.3	+1.7	53	37	48.0	+2.0	67	1	24	18	32	622	40	84	.54	−2.2	.24	8	1	.1	.0	8.5	s.	32	s.	15	8	10	13	5.7	46
Chicago [2]	673	5	38	994.2	1,019.3	+1.3	62	42	45.0	+1.0	67	1	24	18	32	622	40	84	3.68	+.6	1.25	13	0	7.2	.0	9.8	se.	42	w.	9	4	8	19	7.3	43
Green Bay	617	5	32	995.6	1,018.3	+1.7	59	37	51.5	−1.0	80	1	20	18	34	419	40	69	.62	−1.9	.39	7	1	.0	.0	8.7	s.	30	w.	9	8	13	10	5.5	65
Milwaukee [2]	681	33	66	993.6	1,019.3	+2.0	59	41	48.0	−.5	71	26	18	18	36	528	37	67	.71	−1.8	.26	5	1	.0	.0	7.8	se.	27	sw.	9	11	14	6	5.0	65
Duluth [4]	1,133	5	47	975.6	1,017.3	+1.4	57	39	50.2	+.7	72	1	21	18	31	460	40	70	.33	−2.0	.26	4	0	.0	.0	12.4	sw.	42	se.	7	10	10	11	5.2	55
NORTH DAKOTA																			.54	−1.8	.27	3	0	T	.0	11.3	nw.	41	nw.	15	15	5	11	4.7	61
Fargo [2]	940	5	47	981.4	1,015.9	.0	61	36	48.1	+3.3	78	25	16	17	40	521	34	60	.98	−.2														4.6	
Bismarck [2]	1,677	5	41	955.6	1,016.6	−.3	61	31	46.8	+3.6	78	25	16	17	40	521	34	62	.53	−1.2	.33	4	0	T	.0	13.2	s.	36	se.	5	18	6	7	4.1	60
Devils Lake	1,478	11	44	961.7	1,015.9	+1.0	58	34	46.0	+2.4	79	3	11	17	47	586	33	64	1.50	+.6	.91	6	0	T	.0	10.6	nw.	34	nw.	7	14	9	8	4.7	72
Williston	1,878	42	50	948.2	1,015.9	−.4	61	32	46.3	+3.9	74	3	11	17	37	582	33	60	1.68	+.4	1.42	4	0	.1	.0	9.1	nw.	27	s.	4	13	12	6	4.6	75
UPPER MISSISSIPPI																			.19	−.7	.19	1	0	T	.0	6.6	n.	33	nw.	15	13	7	11	5.1	80
Minneapolis-St. Paul [2]	919	43	74	983.1	1,016.9	+1.0	62	40	52.3	−.5	75	28	22	17	34	428	37	70	1.58	−.9														4.2	
La Crosse [2]	672	5	29	991.5	1,018.0	+1.4	62	37	51.2	+2.3	71	26	20	17	34	487	38	63	.60	−1.5	.30	5	1	T	.0	11.2	se.	34	se.	6	18	7	6	3.6	72
Madison [2]	974	27	39	983.1	1,019.0	+1.4	60	36	49.2	+.1	72	28	18	18	38	519	38	70	.90	−1.4	.61	8	1	T	.0	9.2	se.	30	w.	9	16	8	7	4.2	68
Charles City	1,015	10	51	981.7	1,019.0	+1.7	62	38	48.2	−1.1	73	26	23	17	34	455	38	70	1.29	−1.1	.90	6	1	.0	.0	9.7	s.	33	w.	9	15	8	8	4.4	63
Moline [2]	606	6	50	996.6	1,019.0	+1.4	63	39	50.3	+1.7	73	26	23	17	34	455	----	--	2.14	−.2	1.74	5	1	.0	.0	6.0	se.	20	s.	15	20	6	5	3.1	--
Des Moines [4]	860	5	99	983.4	1,018.6	+1.7	66	41	51.1	−.9	75	1	23	18	38	431	40	70	1.81	−.6	1.59	5	3	.0	.0	7.5	se.	27	se.	7	17	4	10	4.3	64
Dubuque	699	60	79	992.9	1,018.3	+.7	63	40	53.6	−.2	76	26	27	17	42	366	38	68	1.55	−1.0	.78	5	2	.0	.0	8.5	se.	26	n.	16	14	8	9	4.3	--
Burlington [2]	702	4	36	993.2	1,019.0	+1.4	64	40	51.4	−.5	73	26	27	17	37	423	40	74	2.32	−.2	1.90	6	1	.0	.0	5.1	s.	18	se.	6	17	6	8	4.1	--
Cairo	357	5	99	1,006.1	1,019.0	+1.0	69	48	51.8	−2.0	78	1	23	18	39	406	41	78	2.05	−.6	1.21	4	2	.0	.0	8.6	s.	28	sw.	18	16	6	9	4.4	--
Peoria [2]	609	7	26	996.6	1,019.3	+1.0	63	41	58.4	−2.1	80	13	33	18	33	207	----	--	1.59	−1.2	.69	8	1	.0	.0	6.8	ne.	26	sw.	7	18	8	5	3.7	81
Springfield, Ill. [4]	636	5	191	996.6	1,020.0	+2.0	65	42	52.2	−1.3	80	1	22	18	33	398	40	69	1.18	−1.1	.98	6	0	.0	.0	7.9	s.	25	sw.	7	15	6	10	4.8	65
St. Louis [4]	568	33	59	998.6	1,019.3	+1.3	67	48	53.6	.0	80	1	24	18	34	353	42	70	1.27	−1.3	.41	8	1	.0	.0	9.5	s.	31	w.	7	13	9	9	4.7	58
MISSOURI VALLEY																			2.25	−.5	.62	9	2	.0	.0	9.4	s.	29	s.	6	15	10	6	4.2	72
Columbia, Mo. [4]	784	6	66	989.8	1,018.6	+.6	69	43	53.8	+.1	82	1	28	18	35	279	42	66	1.74	−.4														3.9	
Kansas City [2]	963	38	76	990.9	1,018.3	+.7	70	45	56.0	−.9	80	1	32	18	38	238	40	72	3.23	+.6	1.20	6	5	.0	.0	6.2	e.	21	nw.	17	16	9	6	3.6	--
St. Joseph [2]	967	5	51	988.5	1,018.3	+1.0	70	40	57.3	−.4	80	1	32	18	38	238	40	61	1.89	−.8	.94	5	3	.0	.0	8.4	sw.	34	w.	6	16	7	8	4.1	--
Springfield, Mo. [2]	1,324	5	50	973.2	1,019.0	+1.0	69	44	55.0	−1.0	78	15	27	18	43	310	40	69	2.06	−.8	1.07	5	5	.0	.0	6.8	s.	29	nw.	15	19	5	7	3.7	--
Topeka [4]	987	65	87	982.4	1,018.6	+1.3	71	44	56.6	−1.0	80	15	25	18	38	262	42	68	2.52	−.5	1.46	5	5	.0	.0	10.5	se.	29	nw.	17	13	7	11	4.8	--
Lincoln [4]	1,189	6	81	974.6	1,018.0	+1.4	67	41	57.6	+.6	81	5	32	24	41	232	39	68	1.77	−.6	.93	5	5	.0	.0	8.0	s.	24	w.	7	17	5	9	4.0	--
Norfolk, Neb. [2]	1,551	5	38	961.7	1,018.0	----	65	38	54.3	+.1	80	15	26	17	38	333	37	66	.97	−.9	.51	4	1	.0	.0	8.4	s.	31	w.	7	19	5	7	3.4	--
Omaha [2]	1,105	5	68	982.1	1,018.0	+.7	67	41	51.6	−.1	79	25	23	17	42	415	35	63	1.51	.0	1.03	5	2	.0	.0	----	nw.	--	----	--	19	5	7	3.4	--
Valentine	2,598	46	54	925.2	1,017.6	+.3	65	34	54.0	+.6	77	20	28	17	41	342	39	66	1.67	−.5	.97	3	1	.0	.0	9.9	s.	33	n.	15	17	8	6	3.9	--
Sioux City [2]	1,138	5	40	977.3	1,018.0	+1.1	66	37	49.4	+.1	83	24	19	17	45	484	31	57	.41	−.7	.35	4	1	T	.0	8.6	w.	34	nw.	7	19	7	5	3.5	--
Huron [2]	1,301	5	41	969.9	1,017.3	.0	63	34	51.4	+1.7	77	15	22	17	48	420	36	66	2.10	+.3	1.13	5	1	T	.0	9.4	nw.	31	nw.	15	15	10	6	3.8	--
									48.8	+1.1	76	24	15	17	43	504	34	70	1.03	−.2	.57	6	2	.0	.0	12.1	nw.	38	se.	5	14	12	5	4.4	--

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS, OCTOBER 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	Maximum velocity: Miles per hour	Maximum velocity: Direction	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	%
NORTHERN SLOPE									47.3	+2.0								54	.36	−.5														4.3	--
Billings [2]	3,570	16	39	892.7	1,016.9	−2.1	65	36	50.8	+2.8	84	3	20	17	40	445	26	39	.02	------	.02	1	0	T	.0	10.4	sw.	34	nw.	15	17	6	8	4.3	84
Butte	5,533	44	58	831.7	1,021.0	-----	59	24	41.6	+.1	73	13	14	17	50	725	27	66	.36	−.4	.24	5	1	2.0	2.	0---	s.	--	------	--	13	9	9	4.4	--
Glasgow	2,086	34	53	941.4	1,016.6	-----	66	30	48.0	+3.4	83	3	14	17	50	524	27	47	.02	−.8	.01	2	0	T	.0	---	nw.	--	------	--	12	9	10	4.8	--
Great Falls [2]	3,657	16	75	889.3	1,016.3	-----	63	38	50.6	+3.4	77	3	24	16	41	445	30	47	.08	−.8	.08	1	0	T	.0	14.5	sw.	44	sw.	7	17	5	9	4.4	81
Havre	2,507	11	67	927.2	1,016.9	+.3	65	30	47.4	+2.9	79	4	21	30	46	547	26	47	.09	−.6	.09	2	0	T	.0	7.5	w.	29	w.	4	15	7	9	4.5	83
Helena [2]	4,124	5	43	875.7	1,019.3	+1.3	61	28	44.1	+.3	73	11	15	17	36	646	30	62	.05	−.6	.05	1	0	.5	.0	6.3	w.	39	w.	4	16	7	8	4.2	77
Missoula [2]	3,263	4	32	904.2	1,020.0	+1.4	59	28	43.6	+.3	75	3	17	17	44	667	32	68	.23	−.7	.15	4	0	.3	0	4.3	se.	33	nw.	24	11	6	14	5.1	62
Kalispell	2,973	48	56	914.0	1,018.3	+.7	55	31	43.1	−.4	69	13	20	17	34	682	33	69	.40	−.7	.27	4	1	T	.0	4.8	nw.	20	w.	5	11	6	14	5.4	61
Miles City [2]	2,371	5	28	932.6	1,017.3	−1.3	66	33	49.7	-----	86	3	18	17	46	478	28	46	T	------	T	0	0	T	.0	---	nw.	--	------	--	16	9	6	4.2	--
Rapid City [2]	3,259	5	56	904.2	1,017.3	−.7	65	36	50.6	+3.0	83	3	17	17	42	448	28	48	1.70	+.8	1.42	3	0	T	.0	14.2	nw.	54	nw.	15	18	7	6	3.8	--
Cheyenne [2]	6,094	22	40	814.8	1,017.3	+.7	61	32	46.3	+1.5	79	3	6	17	44	579	26	50	.53	−.4	.35	4	1	3.6	.0	9.9	w.	35	nw.	15	17	8	6	3.8	--
Lander [2]	5,352	6	30	831.0	1,018.0	.0	60	33	46.6	+3.1	78	3	14	17	41	569	30	56	.83	−.5	.74	2	1	3.0	.0	6.4	sw.	30	w.	5	13	13	5	4.0	--
Sheridan [2]	3,790	5	38	880.1	1,018.0	.0	67	31	49.2	+4.6	85	3	16	17	51	494	28	52	.36	−.7	.23	2	0	T	.0	6.9	nw.	34	nw.	6	12	14	5	4.3	--
North Platte [1]	2,821	11	51	917.7	1,017.3	.0	68	33	50.2	+.5	81	25	15	17	53	456	32	60	.36	−.7	.28	3	1	T	.0	10.3	w.	45	nw.	7	19	5	7	3.5	--
MIDDLE SLOPE									57	.5+	.9							51	.51	−1.5														3.6	
Denver [4]	5,292	106	113	838.5	1,016.9	+.3	66	40	53.0	+1.8	82	3	22	17	41	378	24	42	.06	−1.0	.04	2	1	T	.0	7.1	s.	26	ne.	15	18	6	7	3.8	--
Pueblo [2]	4,690	5	36	854.7	1,016.9	+1.0	71	33	52.4	+1.2	87	3	22	7	51	392	26	44	.01	−.6	.01	1	0	.1	.0	6.6	nw.	33	nw.	15	18	5	8	3.9	--
Concordia	1,392	50	58	968.5	1,019.0	+1.4	70	42	55.8	−.1	81	5	28	17	39	288	36	51	1.32	−.7	.74	5	3	.0	.0	7.8	s.	27	s.	5	20	4	7	3.1	76
Dodge City [2]	2,509	5	58	929.2	1,016.6	−.7	72	43	57.4	+1.3	90	4	28	17	44	253	36	52	.32	−1.0	.19	3	2	.0	.0	14.9	se.	43	s.	5	17	10	4	3.5	--
Wichita [2]	1,358	52	64	967.8	1,017.6	+1.0	72	46	59.4	+.8	82	5	33	18	36	185	38	52	.67	−1.9	.33	6	5	.0	.0	13.0	s.	44	s.	5	18	6	7	3.7	--
Oklahoma City [4]	1,214	10	47	974.6	1,018.0	+.7	76	50	63.0	+1.5	89	13	34	18	36	114	41	52	.54	−2.3	.53	4	2	.0	.0	8.0	s.	24	s.	6	20	5	6	3.1	77
Tulsa [2]	674	10	60	993.6	1,018.0	-----	76	46	61.2	−.4	88	15	29	18	40	150	44	62	.66	−2.7	.42	4	3	.0	.0	9.4	s.	43	nw.	7	17	5	9	4.1	68
SOUTHERN SLOPE									62.9	−.5								58	1.76	−.3														4.8	
Abilene [2]	1,755	4	59	956.3	1,016.9	+.3	76	52	64.2	−.1	91	15	32	18	35	100	46	57	2.21	−.3	1.41	5	2	.0	.0	11.6	s.	34	s.	5	10	7	14	5.7	66
Amarillo [2]	3,604	5	42	891.3	1,016.6	.0	74	44	58.5	+2.7	88	15	28	18	40	221	38	55	2.58	+.9	3.45	5	3	.0	.0	13.4	sw.	36	sw.	5	13	11	7	4.3	69
Del Rio	960	63	71	982.7	1,015.9	+.7	78	60	69.2	−.8	94	6	48	19	33	37	56	68	1.56	−.3	1.00	4	2	.0	.0	7.3	se.	26	n.	16	13	6	12	5.4	49
Roswell	3,614	6	29	893.3	1,016.3	+.7	75	43	59.0	−.5	89	15	32	26	44	209	37	52	.71	−.7	.31	7	4	.0	.0	7.0	s.	36	w.	31	10	16	5	4.6	65
Wichita Falls	1,030	4	49	981.0	1,017.6	-----	77	51	63.8	−3.7	91	15	35	18	37	104	45	57	1.75	−1.1	1.28	7	3	.0	.0	---	------	--	------	--	15	8	8	4.2	--
SOUTHERN PLATEAU									65.1	+2.1								46	.87	+.1														4.1	
El Paso [2]	3,916	35	85	887.6	1,014.2	+.3	76	53	64.4	+2.4	88	14	40	25	33	102	42	48	.18	−.6	.08	4	3	.0	.0	9.5	se.	40	se.	14	11	14	6	4.9	71
Albuquerque [2]	5,314	5	45	839.8	1,015.2	+.3	71	44	57.2	+.6	82	14	34	17	36	245	34	50	.60	−.2	.28	6	4	.0	.0	8.0	se.	42	s.	14	14	8	9	4.5	67
Flagstaff	6,907	34	48	792.4	1,018.0	+4.8	64	33	48.6	+1.7	76	8	25	26	42	508	31	55	1.87	+.4	.68	7	3	T	.0	----	nw.	--	------	--	14	7	10	4.6	--
Phoenix [4]	1,107	39	87	973.2	1,011.9	.0	88	62	74.6	+4.0	100	8	44	31	40	14	45	42	.96	+.5	.75	3	2	.0	.0	6.4	e.	24	e.	17	17	8	6	3.8	84
Tucson [2]	2,555	5	39	924.8	1,011.9	−.3	84	58	71.1	+2.4	95	3	43	31	39	23	44	40	.56	.0	.46	4	2	.0	.0	9.2	se.	43	se.	17	18	11	2	3.4	89
Yuma	142	9	54	1,003.4	1,010.5	−1.0	89	60	74.7	+1.4	105	3	45	31	39	7	49	42	1.07	+.8	1.03	3	2	.0	.0	4.9	sw.	24	n.	17	20	7	4	3.2	89
MIDDLE PLATEAU									50.7	+2.3								49	.53	−.3														4.1	
Ely [2]	6,262	8	41	810.7	1,018.0	-----	63	26	44.9	+3.1	76	2	10	28	48	628	25	46	.47	−.3	.34	3	2	.0	.0	11.1	s.	36	se.	3	13	11	7	4.4	84
Reno [2]	4,527	20	52	863.2	1,016.6	.0	71	31	50.8	+2.3	86	1	14	28	53	438	32	54	.17	−.2	.15	2	1	T	.0	6.1	s.	40	sw.	3	16	6	9	4.4	80
Winnemucca	4,339	5	56	868.9	1,016.9	−1.1	70	32	50.5	+2.2	84	2	17	28	52	454	29	48	.57	.0	.52	4	1	.0	.0	7.1	ne.	25	sw.	13	18	5	8	3.9	69
Modena	5,473	10	46	------	------	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake City [2]	4,357	32	58	868.9	1,016.9	+.3	66	40	53.1	+2.3	84	2	28	17	37	380	34	54	.87	−.4	.35	6	2	T	.0	8.3	se.	26	se.	3	15	7	9	4.3	72
Grand Junction [2]	4,602	5	26	861.8	1,017.6	+2.0	69	39	54.3	+1.5	83	14	29	17	38	337	28	42	.57	−.4	.53	2	1	T	.0	8.3	e.	34	nw.	5	19	6	6	3.5	-
NORTHERN PLATEAU									48.9	−.3								63	.66	−.6														4.8	
Baker [4]	3,471	36	54	900.8	1,019.3	.0	63	33	47.6	+1.0	78	13	18	28	42	536	32	64	.32	−.6	.25	4	2	T	.0	5.8	se.	28	sw.	3	13	7	11	5.0	78
Meacham	4,056	7	28	878.4	1,019.6	-----	57	35	46.1	-----	73	23	21	27	36	587	35	69	2.13	------	.85	8	1	.4	.0	----	se.	--	------	--	14	2	5	5.3	--
Boise [2]	2,739	5	49	921.1	1,017.3	−1.0	66	38	52.3	+2.2	80	3	22	27	39	394	33	50	.68	−.6	.39	4	1	.0	.0	8.0	se.	34	nw.	4	16	7	8	4.4	72
Lewiston	1,436	4	23	966.5	1,018.3	-----	64	39	51.2	-----	78	3	25	28	34	425	38	65	.40	------	.28	5	1	.0	.0	----	e.	--	------	--	15	4	12	4.5	--
Pocatello [2]	4,478	5	31	865.2	1,019.0	+1.4	65	32	48.4	+1.9	80	2	18	17	46	518	30	53	.35	−1.3	.20	3	1	T	.0	6.8	sw.	30	nw.	5	15	7	9	4.4	75
Ellensburg [2]	1,735	5	58	956.0	1,019.0	-----	60	31	45.8	−2.4	71	12	18	28	41	597	36	71	.43	−.1	.26	4	0	.0	.0	----	nw.	--	------	--	14	9	8	4.9	--
Spokane [2]	1,929	6	51	948.9	1,018.6	+.6	59	35	47.3	−1.0	72	23	23	29	33	551	35	64	.66	−.5	.43	4	0	T	.0	5.7	ne.	26	sw.	7	11	11	9	5.3	58
Walla Walla	991	57	65	982.4	1,018.6	+1.0	63	42	52.3	−1.2	78	3	29	28	28	391	----	--	.66	−.9	.26	9	0	.0	.0	3.9	s.	22	sw.	24	14	6	11	4.7	68
Yakima [2]	1,076	4	54	979.3	1,018.6	+1.0	66	33	49.3	−2.4	76	13	20	28	44	482	36	65	.27	−.4	.13	4	0	.0	.0	----	w.	--	------	--	13	9	9	4.6	--

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS, OCTOBER 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	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	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	%
NORTH PACIFIC COAST									52.1	+.6								77	2.44	-.9														6.4	
Kelso [3]	750	38	76	-----	-----	-----	62	38	50.2	-----	78	1	27	17	48	460	45	84	2.77	-----	.82	14	0	.0	.0	----	-----	--	-----	--	6	5	20	7.2	--
North Head	211	5	55	1,009.8	1,017.3	-.3	58	48	53.0	+.1	73	1	40	27	22	372	46	79	4.55	-.5	1.33	14	0	.0	.0	13.7	n.	46	s.	23	9	8	14	6.1	46
Seattle [4]	125	90	321	1,013.2	1,018.0	-.3	59	46	52.4	-1.3	72	2	36	27	27	390	45	83	2.31	-.5	.75	12	1	.0	.0	7.9	n.	41	s.	24	6	10	15	6.5	40
Tacoma	194	172	201	1,010.8	1,018.0	.0	58	44	51.0	+.5	71	2	33	27	30	434	----	--	3.00	-.3	.95	12	0	.0	.0	6.3	n.	38	sw.	24	6	9	16	6.4	36
Tatoosh Island	86	5	61	1,014.2	1,017.3	+.4	56	47	51.2	+1.3	65	22	42	29	16	431	46	84	4.98	-3.2	1.00	16	0	.0	.0	15.0	ne.	52	s.	6	8	7	16	6.4	42
Burns	4,162	35	47	874.7	1,018.0	-----	64	31	47.4	+1.4	78	12	13	28	44	546	31	54	.03	-.6	.02	2	1	T	.0	----	n.	--	-----	--	14	7	10	4.9	--
Eugene [3]	433	4	35	1,004.4	1,018.3	-----	62	40	51.2	-----	73	10	26	27	38	428	46	86	2.06	-----	.80	12	0	.0	.0	----	n.	--	-----	--	4	11	16	6.8	--
Medford [3]	1,329	29	58	969.9	1,017.6	.0	69	39	54.0	+.4	85	1	25	28	46	342	43	73	1.27	-.1	.50	7	0	.0	.0	----	s.	--	-----	--	8	10	13	6.1	--
Portland, Oreg. [4]	154	68	106	1,012.5	1,018.0	.0	63	48	55.2	+1.0	75	1	38	27	23	307	45	76	2.42	-.7	.65	11	0	.0	.0	5.6	nw.	19	e.	1	8	10	13	6.1	44
Roseburg	510	45	76	999.3	1,018.3	.0	65	45	55.0	+1.1	78	17	31	27	38	313	----	--	.97	-1.6	.41	7	0	.0	.0	3.3	n.	18	n.	7	3	7	21	7.4	32
MIDDLE PACIFIC COAST									60.6	+.2								68	1.37	-.5														4.8	
Eureka	60	72	88	1,015.9	1,018.3	.0	60	48	53.6	.0	73	2	40	30	23	354	50	85	3.33	+1.0	1.42	9	0	.0	.0	6.5	n.	27	ne.	11	8	7	16	6.2	42
Red Bluff [3]	353	5	26	1,002.0	1,014.6	-----	78	52	65.0	+.7	90	7	34	30	37	66	41	47	.51	-.8	.22	6	0	.0	.0	7.0	nw.	26	se.	3	17	6	8	4.3	79
Sacramento [4]	66	92	115	1,012.2	1,014.6	-.6	75	51	63.2	+.3	88	8	39	30	34	89	47	64	1.45	+.5	1.44	2	0	.0	.0	5.7	s.	17	sw.	18	17	11	3	3.6	77
San Francisco [4]	155	112	132	1,010.2	1,015.9	.0	68	53	60.4	-.1	84	17	47	30	33	158	51	78	.20	-.9	.15	4	0	.0	.0	7.4	w.	28	w.	29	11	12	8	4.9	62
SOUTH PACIFIC COAST									65.1	+1.2								68	.50	-.1														5.1	
Fresno [3]	327	5	34	1,002.4	1,014.6	-.6	81	49	65.0	+2.7	95	8	38	30	43	64	48	58	.08	-.5	.08	1	1	.0	.0	4.3	nw.	20	nw.	4	17	8	6	3.7	90
Los Angeles	338	236	263	-----	-----	-----	76	56	66.3	+1.0	96	7	48	31	38	38	----	--	.09	-.6	.09	2	0	.0	.0	5.5	w.	20	w.	30	9	12	10	5.4	60
San Diego [3]	87	20	55	1,011.2	1,014.2	.0	71	57	64.1	.0	86	7	47	31	32	50	56	77	1.32	+.8	1.14	3	1	.0	.0	6.1	nw.	18	sw.	17	4	15	12	6.2	45
ALASKA																																			
Anchorage [3]	132	6	44	989.5	994.2	-----	42	29	35.8	-.2	53	4	21	31	29	907	31	79	1.75	-.4	.75	14	0	7.8	T	5.7	n.	43	se.	28	0	3	28	8.9	--
Annette Island	113	5	53	1,007.5	1,011.5	-----	50	41	49.6	+2.0	56	1	34	31	19	614	42	86	19.70	+4.2	3.04	25	0	T	.0	----	se.	--	-----	--	0	8	23	8.5	--
Barrow	29	5	27	1,004.1	1,004.1	-----	16	5	10.6	-6.0	29	1	-14	20	26	1,698	8	88	.52	.0	.14	15	0	5.4	8.0	15.1	se.	40	nw.	25	0	9	22	8.2	--
Bethel [3]	28	5	31	993.2	994.6	-----	34	23	28.6	-2.8	44	1	6	25	19	1,124	26	85	1.20	-.5	.32	15	0	9.4	1.8	10.9	n.	40	-----	7	2	4	25	8.5	--
Cordova [3]	45	5	32	994.8	996.6	-----	44	34	39.4	-1.2	50	8	27	6	23	794	36	90	24.07	+10.6	3.14	29	1	1.4	T	----	e.	--	-----	--	0	0	31	9.2	--
Fairbanks [3]	455	5	63	980.0	997.3	-----	33	18	25.2	-1.4	52	1	1	20	32	1,238	23	84	.42	-.4	.09	13	0	5.9	2.0	4.9	n.	17	e.	3	0	4	27	8.6	--
Galena	139	4	66	991.5	996.3	-----	29	17	23.0	-3.3	45	2	-2	24	22	1,305	18	75	.48	-.2	.18	8	0	7.0	5.0	----	n.	35	e.	31	3	11	17	7.1	--
Gambell	32	5	32	998.0	999.0	-----	32	26	28.8	-2.1	41	1	13	30	13	1,122	24	82	.34	-1.0	-----	7	---	1.3	.0	19.0	ne.	44	ne.	30	0	1	30	9.0	--
Juneau [3]	80	6	30	1,006.1	1,006.8	-----	46	38	42.0	+.7	53	2	26	7	18	714	38	84	11.04	+2.7	1.62	30	0	.0	.0	12.6	se.	45	se.	13	0	2	29	9.0	--
Kotzebue [3]	20	5	31	998.6	999.0	-----	27	18	22.9	-1.8	39	1	0	26	17	1,308	22	86	.50	-.1	.24	10	0	3.3	3.0	11.6	ne.	37	se.	31	6	5	20	7.1	--
McGrath [3]	341	5	31	983.7	994.9	-----	30	16	23.1	-4.3	45	1	-12	25	29	1,300	20	80	.65	-1.3	.23	8	0	10.1	7.5	----	nw.	18	s.	30	2	5	24	8.0	--
Nome [3]	22	10	75	997.0	997.6	-----	32	19	25.8	-3.6	44	12	4	27	26	1,219	23	82	1.08	-.5	.61	9	0	9.9	.9	12.6	n.	47	e.	30	6	8	17	6.5	--
Northway [3]	1,718	5	32	953.0	998.6	-----	34	14	23.8	-1.8	53	2	-4	25	30	1,278	20	79	.17	-.3	.06	6	0	4.1	2.7	----	nw.	--	-----	--	2	8	21	7.8	--
HAWAII																																			
Honolulu [4]	38	86	98	1,015.6	1,016.9	+1.3	81	73	76.9	+.1	84	15	70	22	12	0	65	66	1.12	-.4	.23	13	0	.0	.0	11.2	ne.	27	se.	28	5	20	6	5.9	70

[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.

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