CLIMATOLOGICAL TABLES[1]

CONDENSED CLIMATOLOGICAL SUMMARY

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.

Condensed climatological summary of temperature and precipitation by sections, October, 1930

[For description of tables and charts, see REVIEW, January, 1930, p. 37]

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	62.5	−1.9	3 stations	88	[1] 9	Valley Head	23	31	2.72	+0.10	Brewton (near)	7.39	Centerville	0.81
Arizona	61.5	−1.4	Le Sage	105	8	Alpine	10	29	0.35	−0.53	Seligman	1.45	9 stations	0.00
Arkansas	60.1	−2.1	2 stations	92	[1] 9	Dutton	17	31	4.89	+1.92	Highland	8.45	Marianna	1.49
California	59.1	−0.7	Greenland Ranch	106	7	2 stations	11	[1] 25	0.38	−0.84	Crescent City	2.36	25 stations	0.00
Colorado	45.9	−0.4	2 stations	90	[1] 9	Crested Butte	−5	27	0.97	−0.32	Lamar	5.22	Del Norte	0.00
Florida	71.0	−2.0	Tarpon Springs	94	17	2 stations	35	[1] 26	2.70	−1.62	Chapman Field Garden.	13.37	Tarpon Springs	0.39
Georgia	62.2	−2.4	2 stations	91	17	Clayton	24	[1] 22	1.67	−1.09	Columbus	4.21	Hazlehurst	0.08
Idaho	45.0	−1.7	4 stations	81	[1] 3	Obsidian	6	28	1.63	+0.15	Grays Lake	3.99	Glenns Ferry	0.18
Illinois	53.5	−1.7	Mount Carmel	90	11	3 stations	16	[1] 20	2.23	−0.40	Marengo	4.17	Harrisburg	0.47
Indiana	52.8	−1.7	Edwardsport	91	14	Delphi	15	22	1.54	−1.15	Decker	3.31	Mount Vernon	0.66
Iowa	50.7	−1.1	Waterloo	95	12	Webster City	9	21	2.08	−0.35	Fairport	4.21	Logan	0.71
Kansas	55.0	−2.0	Medicine Lodge	94	9	Oketo	13	31	3.63	+1.72	Richfield	8.90	Oketo	0.55
Kentucky	55.9	−2.3	Bowling Green	94	12	2 stations	16	22	1.34	−1.43	Greenville	2.78	Cynthiana	0.44
Louisiana	67.2	−0.8	Cheneyville	93	8	do	27	31	4.62	+1.32	Monroe	8.80	St. Joseph	1.48
Maryland-Delaware	54.1	−2.2	Cumberland, Md	89	11	Oakland, Md	7	22	0.82	−2.04	Public Landing, Md.	2.29	2 stations	T.
Michigan	47.8	−1.2	Coldwater	88	[1] 12	Wolverine	7	25	1.92	−0.77	Painesdale	3.83	Lapeer	0.42
Minnesota	44.5	−1.1	New Ulm	89	9	4 stations	4	[1] 20	1.48	−0.37	Pigeon River Bridge	4.59	Gonvick	0.14
Mississippi	63.6	−1.2	Poplarville	91	9	do	26	31	3.12	+0.53	Collins	5.52	Water Valley	0.90
Missouri	55.3	−2.1	2 stations	92	[1] 9	Chillicothe	11	31	3.06	+0.17	Birchtree	7.09	Macon	0.48
Montana	40.0	−4.1	Belton	80	1	2 stations	−5	17	1.46	+0.45	Belton	5.64	Savage	0.21
Nebraska	50.5	−0.6	Tekamah	94	10	Arthur	9	30	2.67	+1.07	Hasley	6.82	Table Rock	0.23
Nevada	48.9	−1.7	Logandale	94	6	Zorra Vista Ranch	10	[1] 26	0.62	−0.03	Lamoille (near)	2.50	2 stations	0.00
New England	49.0	−0.4	3 stations	92	13	2 stations	15	23	2.96	−0.58	Blue Hill, Mass	6.22	Fort Kent, Me	0.77
New Jersey	52.5	−2.3	Flemington	89	13	Belleplain	12	23	1.95	−1.45	Hammonton	3.70	Boonton	0.93
New Mexico	53.2	0.0	Richland	93	9	Gavilan	4	27	2.12	+0.78	Porter	11.95	5 stations	0.00
New York	48.8	−1.1	Troy	86	13	Jeffersonville	15	[1] 21	1.53	−1.80	Philadelphia	6.80	Haskinville	0.28
North Carolina	56.7	−3.4	Goldsboro	92	17	Mount Mitchell	10	31	2.18	−1.12	Elizabethtown	6.66	Marion	0.80
North Dakota	40.8	−3.0	Wahpeton	86	11	Beach	0	17	1.81	+0.81	Powers Lake	3.49	Power	0.40
Ohio	51.1	−2.8	2 stations	90	[1] 11	2 stations	12	22	1.32	−1.35	Hiram	3.52	Wilmington	0.04
Oklahoma	60.4	−1.2	Alva	96	9	Smithville	22	31	4.13	+1.09	Lawton	10.85	Beaver	1.05
Oregon	48.6	−1.5	Madras	86	5	Lake	7	29	1.64	−0.61	Headworks	8.40	Paisley	0.12
Pennsylvania	50.8	−1.6	Brookville	93	15	Somersot	9	22	0.99	−2.19	Westford	3.33	Harrisburg (Weather Bureau).	0.11
South Carolina	60.5	−3.1	3 stations	88	[1] 6	Santuck	25	26	2.18	−0.84	Society Hill	5.07	Spartanburg	0.75
South Dakota	46.1	−2.5	Winner	92	10	5 stations	6	[1] 17	2.21	+0.84	Redfield	4.78	Hardy Ranger Station.	0.40
Tennessee	57.5	−1.9	2 stations	89	[1] 4	2 stations	19	[1] 22	2.64	−0.20	Johnsonville	4.28	Knoxville	1.44
Texas	66.0	−1.5	Riogrande	98	[1] 8	Miami	26	30	6.24	+3.65	Paint Rock	17.00	Clint	0.21
Utah	47.0	−1.8	St. George	89	7	Woodruff	6	[1] 29	1.17	−0.16	Brigham City	3.74	3 stations	0.00
Virginia	55.1	−2.4	Woodstock	89	10	Burkes Garden	10	22	1.24	−1.71	Onley	2.54	Mount Weather	0.09
Washington	46.7	−2.4	Lake Clealum	88	4	Mount Baker Lodge	12	16	3.06	−0.31	Tatoosh Island	14.54	3 stations	0.03
West Virginia	50.5	−4.2	Charleston	94	14	Alpena	8	22	0.96	−2.16	Bluefield	1.89	Moorefield	0.08
Wisconsin	46.7	−1.3	2 stations	89	11	Solon Springs	7	22	2.29	−0.25	Stanley	3.91	Plum Island	0.99
Wyoming	41.4	−1.6	Barnum	81	10	South Pass City	2	16	1.91	+0.73	Crandall Creek (near).	4.74	Wamsutter	0.11
Alaska (September)	42.7	−1.1	Tree Point	76	[1] 4	White Mountain	7	20	3.33	−0.13	Port Alexander	19.70	Barrow	0.05
Hawaii	74.7	+0.9	Kaanapali	96	6	Volcano Observatory.	51	19	5.96	+0.22	Hiloa-Manawaiopuna Divide.	22.00	2 stations	0.00
Porto Rico	78.8	+0.6	Caguas	96	27	Guineo Reservoir	48	18	5.73	−2.48	Guineo Reservoir	15.91	Ponce	0.81

[1] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, October, 1930*

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max. + mean min. ÷ 2	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with .01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	° F.	° F.	° F.		° F.	° F.		° F.	° F.	° F.	° F.	%	In.	In.		Miles								0-10	In.	In.
New England							**50.9**	**−0.2**										**76**	**3.05**	**−0.2**										**5.4**		
Eastport	76	67	85	29.93	30.02	+0.02	50.5	+3.0	82	12	57	32	21	44	31	45	41	75	1.24	−2.3	9	7,710	n.	45	ne.	25	8	6	17	6.6	T.	0.0
Greenville, Me.	1,070	6	----	28.88	30.06	------	46.4	------	83	13	55	24	21	38	32	----	----	----	2.80	------	9	4,114	n.	21	------	26	12	10	9	----	T.	0.0
Portland, Me.	103	82	117	29.93	30.06	+.02	51.0	+1.1	82	13	59	30	23	44	26	45	40	72	4.13	+1.0	9	5,767	n.	36	ne.	25	15	4	12	4.9	T.	0.0
Concord	289	70	79	29.73	30.05	.00	47.8	−1.9	88	13	60	20	23	36	47	----	----	----	2.76	−0.1	9	2,845	n.	20	ne.	25	16	6	9	4.3	T.	0.0
Burlington	403	11	48	29.62	30.07	+.03	48.1	−1.1	79	13	57	28	27	39	32	----	----	----	2.48	−0.5	8	4,947	n.	26	n.	25	9	6	16	6.3	T.	0.0
Northfield	876	12	60	------	30.10	+.06	44.5	−1.0	84	13	57	16	23	32	44	----	----	88	1.10	−1.8	6	3,570	s.	21	ne.	17	7	11	13	6.4	1.8	0.0
Boston	125	106	165	29.90	30.04	−.01	53.0	−0.6	87	13	60	34	21	46	29	47	43	74	5.83	+2.7	10	5,520	nw.	30	n.	25	13	8	10	5.2	T.	0.0
Nantucket	12	14	90	29.99	30.00	−.05	54.6	+0.4	73	14	59	40	23	50	18	50	46	77	3.28	−0.1	13	11,098	n.	43	n.	25	9	9	13	5.9	0.0	0.0
Block Island	26	11	46	29.99	30.02	−.03	54.2	−0.7	73	13	59	39	25	49	19	50	46	76	4.16	+0.6	8	11,293	n.	50	nw.	25	12	8	11	5.4	0.0	0.0
Providence	160	215	251	29.86	30.04	−.01	51.9	−0.3	77	12	60	33	22	44	27	46	41	71	3.60	+0.5	10	7,625	nw.	38	nw.	25	16	4	11	4.6	0.0	0.0
Hartford	159	122	----	29.88	30.06	.00	51.6	+0.4	84	13	62	29	21	42	36	----	----	----	2.43	−1.1	10	------	n.	----	------	----	13	8	10	4.6	T.	0.0
New Haven	106	74	153	29.94	30.06	.00	52.8	−1.0	77	10	62	31	23	44	30	47	42	71	2.50	−1.2	10	5,795	n.	26	n.	15	12	10	9	4.7	0.0	0.0
Middle Atlantic States							**54.8**	**−1.8**										**69**	**1.32**	**−1.7**										**4.6**		
Albany	97	107	115	29.97	30.08	+.02	51.5	−0.6	81	13	61	27	23	42	33	45	41	77	1.13	−1.6	8	3,743	s.	24	nw.	25	14	10	7	4.7	T.	0.0
Binghamton	871	10	84	29.16	30.11	+.05	49.4	−0.6	81	14	60	23	23	39	38	----	----	----	0.93	−2.0	7	3,026	ne.	20	w.	19	6	6	19	6.9	0.4	0.0
New York	314	414	454	29.73	30.06	.00	55.0	−1.3	76	13	62	36	20	48	22	48	42	66	1.76	−1.8	8	9,058	n.	54	nw.	25	10	11	10	5.3	0.0	0.0
Bellefonte	1,050	5	36	28.98	30.11	------	48.0	------	82	14	61	18	27	34	45	41	37	75	0.43	------	5	------	sw.	----	------	----	9	12	10	5.7	T.	0.0
Harrisburg	374	94	104	29.72	30.12	+.04	53.9	−0.9	80	14	63	30	21	44	31	46	40	64	0.11	−2.8	6	3,650	nw.	24	sw.	19	13	12	6	4.5	T.	0.0
Philadelphia	114	123	367	29.96	30.09	+.02	56.7	−1.1	81	13	65	37	21	49	27	48	42	62	1.74	−1.1	7	8,187	n.	46	nw.	25	17	6	8	4.0	0.0	0.0
Reading	325	81	98	29.74	30.10	------	54.0	−0.7	81	17	64	31	23	44	33	46	41	67	0.66	−2.5	4	3,030	nw.	26	w.	17	13	10	8	4.9	0.0	0.0
Scranton	805	111	119	29.23	30.10	+.03	50.6	−1.3	81	14	61	27	21	40	35	44	39	72	1.34	−1.7	6	3,586	n.	26	nw.	17	10	14	7	5.1	T.	0.0
Atlantic City	52	37	172	30.01	30.07	.00	54.7	−2.2	71	28	62	32	21	48	23	50	46	75	2.43	−0.8	7	10,208	nw.	50	nw.	25	17	7	7	3.9	0.0	0.0
Cape May	17	13	49	------	------	------	55.2	−4.4	75	13	63	34	21	47	24	51	47	76	2.46	−0.8	6	------	nw.	----	------	----	15	11	5	----	0.0	0.0
Sandy Hook	22	10	55	30.03	30.05	------	55.4	------	74	13	61	38	21	50	20	49	44	71	1.89	−1.9	6	9,602	ne.	44	n.	25	12	10	9	4.9	0.0	0.0
Trenton	190	159	183	29.87	30.07	------	54.0	−1.6	80	13	63	31	21	45	29	47	41	67	2.08	−0.7	8	6,264	nw.	38	nw.	25	18	4	9	3.9	0.0	0.0
Baltimore	123	100	215	29.96	30.10	+.02	57.6	−0.6	82	17	66	36	21	49	27	49	42	61	0.37	−2.5	5	6,203	n.	33	nw.	25	17	9	5	3.8	T.	0.0
Washington	112	62	85	29.98	30.11	+.03	56.2	−1.2	84	17	66	31	21	46	34	47	41	64	0.28	−2.6	4	3,405	nw.	34	nw.	17	17	5	9	4.4	0.0	0.0
Cape Henry	18	8	54	30.05	30.07	------	59.8	−2.3	88	17	65	36	23	54	28	53	49	71	1.59	−1.4	8	9,926	ne.	45	nw.	25	17	6	8	4.4	0.0	0.0
Lynchburg	681	153	188	29.38	30.13	+.04	55.6	−2.9	83	16	67	26	22	44	41	47	42	67	0.62	−2.5	7	3,480	w.	30	n.	25	14	10	7	4.4	T.	0.0
Norfolk	91	170	205	30.00	30.10	+.03	59.7	−2.8	85	17	66	39	26	53	24	52	46	67	2.00	−1.0	7	7,980	ne.	36	nw.	25	15	8	8	4.4	0.0	0.0
Richmond	144	11	52	29.96	30.11	+.03	57.2	−2.4	84	17	68	29	23	46	36	48	42	66	1.31	−1.6	7	4,525	ne.	24	n.	25	16	11	4	3.7	0.0	0.0
Wytheville	2,304	49	55	27.72	30.12	+.03	50.2	−3.4	76	11	62	18	22	39	40	43	39	72	1.10	−1.7	9	3,275	w.	23	sw.	19	15	6	10	4.5	0.6	T.
South Atlantic States							**61.5**	**−2.7**										**71**	**1.65**	**−1.6**										**4.1**		
Asheville	2,253	70	84	27.76	30.14	+.05	52.8	−2.5	75	10	63	26	22	43	39	46	42	76	1.00	−1.8	8	4,411	se.	25	n.	17	14	10	7	4.5	T.	T.
Charlotte	779	55	62	29.27	30.12	+.04	59.2	−2.5	83	16	69	34	26	49	30	51	46	70	1.19	−1.8	8	2,737	ne.	15	nw.	17	17	4	10	4.1	0.0	0.0
Greensboro	886	5	56	29.16	30.12	------	55.1	------	82	16	67	23	26	43	42	47	43	76	1.10	------	8	4,532	ne.	23	nw.	17	15	5	11	4.2	0.0	0.0
Hatteras	11	5	50	30.04	30.05	−.01	63.2	−2.7	81	13	68	42	27	58	25	58	54	76	2.71	−2.2	7	10,141	n.	34	nw.	25	12	10	9	4.8	0.0	0.0
Raleigh	376	103	110	29.70	30.10	+.03	58.4	−3.6	83	16	68	34	26	48	29	50	44	66	2.91	0.0	8	5,212	ne.	30	nw.	25	17	7	7	4.2	0.0	0.0
Wilmington	78	81	91	30.01	30.09	+.03	61.2	−4.1	85	16	70	37	26	52	28	54	49	72	1.86	−1.4	4	3,901	n.	18	n.	1	17	7	7	4.1	0.0	0.0
Charleston	48	11	92	30.03	30.08	+.02	64.9	−2.9	86	16	72	45	31	57	20	58	53	72	0.79	−2.5	4	6,571	ne.	22	n.	29	16	9	6	4.0	0.0	0.0
Columbia, S. C.	351	41	57	29.72	30.11	+.04	61.3	−3.0	84	17	72	38	26	51	33	53	46	65	1.92	−0.6	5	3,682	ne.	18	sw.	30	16	9	6	3.6	0.0	0.0
Due West	711	10	55	29.37	30.15	------	60.0	------	84	17	71	33	25	49	35	----	----	----	0.81	------	5	4,974	ne.	26	w.	30	14	10	7	4.0	0.0	0.0
Greenville, S. C.	1,039	139	146	29.01	30.10	------	60.0	−0.2	84	16	69	36	31	51	29	51	45	66	1.45	−1.7	6	4,712	ne.	28	n.	24	15	10	6	3.9	0.0	0.0
Augusta	182	62	77	29.89	30.08	+.01	62.7	−2.6	85	17	73	37	27	52	37	54	50	72	2.16	−0.3	7	2,877	nw.	15	w.	30	16	8	7	3.6	0.0	0.0
Savannah	65	150	194	30.00	30.07	+.02	65.2	−2.7	87	17	74	43	31	56	26	57	52	71	0.64	−2.3	4	6,610	n.	22	sw.	29	17	7	7	4.0	0.0	0.0
Jacksonville	43	209	245	30.00	30.05	+.03	67.8	−3.3	86	17	75	43	31	60	23	60	56	73	1.57	−2.9	6	7,181	n.	24	s.	29	11	14	6	4.8	0.0	0.0
Florida Peninsula							**76.0**	**−0.8**										**76**	**4.69**	**−1.2**										**5.2**		
Key West	22	10	64	29.93	29.95	+.01	78.9	−0.2	89	17	84	67	31	74	15	72	70	77	7.81	+1.8	11	6,783	ne.	28	se.	7	10	15	6	5.0	0.0	0.0
Miami	25	124	168	29.95	29.98	.00	76.8	−0.2	88	18	82	60	31	71	16	70	67	76	5.09	−3.4	15	6,957	e.	24	e.	6	5	16	10	6.0	0.0	0.0
Tampa	35	79	197	29.98	30.02	+.04	72.2	−2.1	88	16	81	50	31	64	23	64	60	74	1.17	−1.9	5	8,008	ne.	28	e.	12	13	8	10	4.8	0.0	0.0
Titusville	44	5	----	29.97	30.02	------	72.2	------	89	8	80	50	31	65	28	----	----	----	4.90	------	11	------	ne.	----	------	----	9	16	6	5.0	0.0	0.0
East Gulf States							**64.2**	**−2.3**										**71**	**2.58**	**−0.3**										**4.0**		
Atlanta	1,173	190	216	28.87	30.12	+.05	60.0	−3.0	79	16	68	32	31	52	26	51	44	64	1.25	−1.3	6	6,227	nw.	28	nw.	31	15	8	8	4.1	0.0	0.0
Macon	370	78	87	29.70	30.10	+.04	61.8	−2.7	85	17	73	35	26	50	35	53	48	67	2.87	+0.5	4	3,950	nw.	18	nw.	30	18	8	5	3.2	0.0	0.0
Thomasville	273	49	103	29.77	30.07	+.03	65.4	−2.8	86	16	76	38	31	55	31	56	52	70	0.80	−2.2	5	4,760	ne.	17	nw.	31	14	10	7	4.3	0.0	0.0
Apalachicola	36	11	51	30.01	30.05	------	68.2	------	85	9	76	43	31	61	23	61	57	73	0.58	−2.6	4	6,312	n.	32	se.	6	16	9	6	3.7	0.0	0.0
Pensacola	56	149	185	30.00	30.06	+.03	67.6	−2.3	82	1	75	40	31	61	23	60	55	70	4.08	−0.1	9	8,991	ne.	35	se.	7	16	4	11	4.5	0.0	0.0
Anniston	741	9	57	29.33	30.13	+.06	59.2	−3.2	82	16	71	30	31	47	39	----	----	----	1.37	−1.2	5	2,661	se.	16	nw.	30	19	6	6	3.4	0.0	0.0
Birmingham	700	11	48	29.34	30.11	+.04	62.3	−2.5	83	16	73	31	31	52	31	54	49	72	2.55	+0.1	3	3,884	n.	23	se.	8	15	7	9	4.0	0.0	0.0
Mobile	57	125	161	30.00	30.06	+.02	67.2	−2.1	86	8	76	40	31	59	27	60	57	76	4.27	+0.7	8	6,427	n.	28	n.	17	16	4	11	4.6	0.0	0.0
Montgomery	223	100	112	29.86	30.11	+.05	64.0	−2.6	84	16	73	36	31	55	33	56	51	69	2.08	−0.4	5	3,909	ne.	20	n.	31	17	5	9	3.9	0.0	0.0
Corinth	469	6	----	------	------	------	61.0	------	86	11	72	28	31	50	37	----	----	----	1.72	------	6	------	se.	----	------	----	6	19	6	----	0.0	0.0
Meridian	375	87	95	29.69	30.09	+.03	62.8	−1.5	84	16	73	33	31	52	36	56	52	75	4.40	+2.0	6	3,062	ne.	17	se.	7	16	4	11	4.2	0.0	0.0
Vicksburg	247	65	73	29.82	30.10	+.04	64.8	−1.9	87	10	74	36	31	55	32	56	52	71	1.94	−0.8	8	4,178	e.	18	s.	7	15	9	7	4.1	0.0	0.0
New Orleans	53	76	84	29.99	30.04	+.01	70.8	−0.2	86	16	78	46	31	64	20	63	59	74	4.81	+1.5	9	4,605	ne.	20	n.	29	16	8	7	4.1	0.0	0.0
West Gulf States							**66.9**	**−1.0**										**76**	**6.13**	**+3.0**										**4.9**		
Shreveport	249	77	93	29.80	30.07	+.02	64.7	−1.9	87	10	74	40	31	56	29	59	57	81	4.72	+2.0	6	3,492	e.	18	se.	6	20	4	7	4.0	0.0	0.0
Bentonville	1,303	11	44	28.70	30.07	+.02	56.6	−1.4	85	9	67	23	31	46	31	----	----	----	4.38	------	6	2,705	s.	16	s.	26	22	2	7	----	0.0	0.0
Fort Smith	457	79	94	29.60	30.08	+.03	61.4	−1.4	89	9	71	33	31	52	31	53	48	69	2.94	0.0	6	4,976	e.	20	e.	6	13	8	10	4.4	0.0	0.0
Little Rock	357	136	153	29.72	30.10	+.04	61.1	−2.5	83	9	70	34	31	52	25	54	48	68	3.12	+0.4	5	4,925	e.	24	n.	28	16	5	10	4.4	0.0	0.0
Austin	605	136	148	29.39	30.02	------	68.0	−0.3	89	10	77	41	25	59	31	61	57	75	8.07	+4.9	11	4,538	e.	33	n.	23	10	8	13	5.6	0.0	0.0
Brownsville	57	83	100	29.89	29.95	------	75.6	+0.7	89	9	82	51	30	69	22	70	68	84	9.36	+6.1	13	6,391	e.	38	nw.	28	1	14	16	7.0	0.0	0.0
Corpus Christi	20	11	78	29.96	29.98	−.02	73.6	+0.4	86	9	79	53	30	68	19	68	66	80	7.72	+5.2	13	7,881	se.	34	ne.	28	7	8	16	6.7	0.0	0.0
Dallas	512	220	227	29.50	30.05	------	64.6	------	84	11	73	41	31	56	25	----	----	----	5.12	+2.4	6	7,871	e.	27	n.	28	16	5	10	4.2	0.0	0.0
Fort Worth	670	106	114	29.33	30.04	+.01	65.6	−1.1	88	8	74	43	31	57	24	58	55	75	7.96	+5.2	8	5,303	se.	21	s.	26	12	5	14	5.1	0.0	0.0
Galveston	54	106	114	29.98	30.04	+.01	71.5	−1.2	83	10	76	53	31	67	15	66	63	77	6.92	+2.6	11	7,426	se.	27	se.	6	12	12	7	4.5	0.0	0.0
Groesbeck	461	11	56	29.55	30.04	------	65.7	------	86	11	75	38	31	57	28	----	----	----	5.92	+1.8	8	5,845	e.	28	s.	6	17	5	9	4.3	0.0	0.0
Houston	138	292	314	29.88	30.04	------	69.7	−0.6	89	9	78	44	31	62	25	----	----	----	7.57	+3.8	10	8,421	se.	36	s.	6	14	10	7	4.6	0.0	0.0
Palestine	510	64	72	29.53	30.07	+.04	65.3	−1.9	86	11	74	37	31	56	27	58	55	77	6.62	+3.3	8	4,204	e.	21	se.	6	16	5	10	4.4	0.0	0.0
Port Arthur	34	58	66	30.00	30.04	------	70.0	------	89	10	78	44	31	62	26	64	62	81	5.41	+2.0	10	5,493	e.	26	e.	18	14	9	8	4.2	0.0	0.0
San Antonio	693	242	301	29.28	29.99	−.02	69.8	−0.7	90	10	78	47	24	62	26	62	58	72	4.01	+1.8	10	8,218	e.	35	sw.	6	9	7	15	6.2	0.0	0.0
Taylor	571	38	51	29.45	30.05	+.03	67.2	−1.1	88	10	77	40	25	58	30	----	----	----	6.55	+3.5	10	4,553	se.	24	se.	4	12	11	8	4.4	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, October, 1930*—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max. + mean min. ÷ 2	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with .01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Ohio Valley and Tennessee							**55.2**	**−2.5**										**68**	**1.33**	**−1.4**										**4.5**		
Chattanooga	762	190	215	29.30	30.12	+0.03	58.7	−3.2	81	16	68	33	31	50	29	51	45	67	2.81	−0.2	5	4,128	nw.	28	nw.	30	16	6	9	4.3	0.0	0.0
Knoxville	995	102	111	29.07	30.13	+.04	57.3	−2.6	80	15	67	32	22	47	33	50	45	71	1.44	−1.2	7	3,126	sw.	21	sw.	27	14	10	7	4.3	T.	0.0
Memphis	399	76	97	29.68	30.10	+.03	61.5	−1.8	84	11	70	32	31	53	27	53	47	65	1.96	−0.7	6	4,228	e.	24	w.	30	15	7	9	4.5	0.0	0.0
Nashville	546	168	191	29.55	30.14	+.06	58.6	−2.4	84	11	69	32	31	49	34	51	46	71	2.11	−0.4	6	4,804	nw.	30	se.	7	18	5	8	3.7	T.	0.0
Lexington	989	193	230	29.07	30.15	+.07	54.7	−2.7	82	11	64	27	20	46	31	----	----	----	0.63	−2.0	5	7,329	e.	36	s.	8	15	9	7	4.1	T.	0.0
Louisville	525	188	234	29.55	30.13	+.05	56.4	−2.9	85	11	65	31	20	47	32	48	42	65	0.80	−1.8	6	5,433	n.	30	nw.	28	14	8	9	4.1	T.	0.0
Evansville	431	76	116	29.65	30.12	+.04	57.2	−2.2	86	11	66	30	20	48	30	50	44	69	1.31	−1.5	9	4,815	e.	24	sw.	16	17	7	7	3.9	T.	0.0
Indianapolis	822	194	230	29.22	30.12	+.05	53.6	−2.1	83	12	62	25	20	45	28	46	39	65	1.77	−1.0	7	6,447	s.	27	nw.	19	16	8	7	4.2	T.	0.0
Royal Center	736	11	55	29.31	30.12	------	50.5	------	82	12	60	20	20	41	31	----	----	----	1.34	−1.6	7	5,551	e.	27	w.	19	12	10	9	5.2	1.0	0.0
Terre Haute	575	96	129	29.49	30.11	------	54.7	------	84	12	64	28	20	45	30	47	42	68	1.73	−1.0	5	5,020	nw.	24	w.	17	16	7	8	4.0	0.0	0.0
Cincinnati	627	11	51	29.44	30.13	+.05	54.0	−1.7	82	15	64	23	22	44	35	46	40	68	0.78	−1.7	6	3,653	ne.	18	sw.	19	15	10	6	4.2	0.0	0.0
Columbus	822	216	230	29.24	30.12	+.04	53.8	−1.4	84	11	63	25	20	44	26	45	39	64	0.70	−1.8	6	6,047	ne.	30	w.	19	14	11	6	4.5	T.	T.
Dayton	899	137	173	29.16	30.12	------	53.6	−1.4	82	12	63	26	22	44	30	46	41	70	1.17	−1.4	6	4,451	ne.	27	w.	19	15	8	8	4.5	T.	0.0
Elkins	1,947	59	67	28.07	30.17	+.07	47.5	−4.8	79	11	61	14	22	34	47	40	35	76	0.82	−2.1	6	2,693	w.	22	w.	17	7	17	7	5.5	0.4	T.
Parkersburg	637	77	82	29.48	30.15	+.07	53.4	−2.7	84	14	64	23	22	43	36	45	39	68	0.68	−1.8	6	2,941	se.	19	sw.	30	13	5	13	5.5	0.0	0.0
Pittsburgh	842	353	410	29.22	30.13	+.05	52.4	−3.3	82	13	62	26	20	43	31	45	39	68	1.17	−1.4	8	5,388	w.	30	w.	19	13	7	11	5.0	T.	0.0
Lower Lake Region							**50.7**	**−1.5**										**74**	**1.84**	**−1.0**										**5.9**		
Buffalo	767	247	280	29.24	30.08	+.03	51.4	−0.5	78	12	58	29	25	44	26	46	42	77	1.79	−1.5	10	8,312	w.	44	nw.	19	8	9	14	6.0	1.9	0.0
Canton	448	10	61	29.59	30.07	------	47.0	−0.2	80	12	57	25	26	37	34	----	----	----	1.83	−1.2	9	4,195	sw.	25	w.	29	10	10	11	5.7	7.5	0.0
Ithaca	836	5	100	29.18	30.10	------	49.1	−2.0	84	14	60	26	23	38	39	43	39	77	1.41	−1.6	8	4,767	nw.	25	nw.	25	8	11	12	6.0	1.2	0.0
Oswego	335	71	85	29.71	30.08	+.03	49.1	−2.1	75	13	56	31	19	42	28	45	41	76	2.25	−1.0	11	5,296	s.	28	n.	25	7	10	14	6.3	3.2	0.0
Rochester	523	86	102	29.53	30.11	+.06	50.4	−1.1	80	13	59	30	20	42	29	44	40	74	1.83	−0.8	10	4,130	sw.	25	sw.	19	7	8	16	6.3	2.5	0.0
Syracuse	596	65	79	29.43	30.08	+.02	51.2	+0.2	82	14	60	32	19	43	32	----	----	----	1.30	−1.5	12	3,513	s.	20	nw.	20	9	11	11	5.8	0.6	0.0
Erie	714	130	166	29.32	30.10	+.05	51.6	−1.8	80	13	59	28	19	44	23	46	41	72	3.23	−0.5	13	8,156	n.	38	sw.	18	11	3	17	5.9	4.6	0.0
Cleveland	762	267	337	29.27	30.11	+.05	51.8	−1.8	77	13	58	30	20	46	27	45	39	64	1.52	−1.3	9	8,837	sw.	38	nw.	31	9	6	16	6.2	T.	0.0
Sandusky	629	5	67	29.43	30.12	+.06	51.3	−3.0	79	16	60	26	20	43	31	----	----	----	1.07	−1.4	8	4,834	e.	22	w.	17	8	15	8	5.7	T.	0.0
Toledo	628	208	243	29.43	30.12	+.07	51.0	−2.4	77	13	59	27	20	44	27	45	40	71	1.82	−0.6	8	6,984	w.	31	w.	19	13	7	11	5.1	0.5	0.0
Fort Wayne	856	100	119	29.18	30.12	------	51.2	−2.5	80	12	60	25	20	43	27	45	41	74	2.18	−0.4	7	4,968	e.	26	sw.	19	9	11	11	5.5	0.2	0.0
Detroit	730	218	258	29.32	30.13	+.08	51.6	−0.9	80	13	58	28	20	45	24	46	43	80	1.80	−0.6	8	5,417	e.	28	w.	18	8	11	12	5.8	1.4	0.0
Upper Lake Region							**47.2**	**−1.4**										**80**	**1.96**	**−0.8**										**6.7**		
Alpena	609	13	92	29.41	30.08	+.05	44.3	−2.8	71	13	51	25	20	37	24	41	39	86	1.11	−1.6	15	5,798	se.	28	nw.	17	7	8	16	6.6	5.3	0.2
Escanaba	612	54	60	29.39	30.06	+.05	45.4	−0.6	64	11	51	21	22	40	25	42	38	79	1.09	−1.5	5	6,224	s.	26	nw.	16	9	8	14	5.7	T.	T.
Grand Haven	632	54	89	29.39	30.08	+.05	49.1	−1.6	80	12	56	27	25	42	28	45	41	79	2.37	−0.6	10	6,609	se.	37	nw.	19	6	5	20	7.2	1.0	0.0
Grand Rapids	707	70	244	29.33	30.11	+.07	49.9	−1.3	84	12	58	25	19	42	30	44	40	73	2.27	−0.5	9	6,018	se.	33	w.	17	5	8	18	7.6	0.4	0.0
Houghton	668	64	99	29.29	30.03	+.03	46.0	+0.3	84	11	52	25	17	40	25	----	----	----	3.30	+0.3	14	6,727	e.	37	w.	18	5	5	21	7.7	9.1	T.
Lansing	878	6	49	29.14	30.10	------	48.0	−2.3	80	12	57	23	21	39	30	44	42	88	1.00	−1.5	10	2,826	w.	14	w.	19	8	7	16	6.4	0.5	0.0
Ludington	637	60	66	29.38	30.08	------	48.0	−1.7	75	10	54	26	19	42	23	44	40	77	2.62	−0.3	10	6,485	w.	30	w.	17	8	8	15	6.2	1.2	T.
Marquette	734	77	111	29.23	30.04	+.03	46.8	+0.1	82	11	53	25	17	40	23	42	39	81	1.75	−1.0	12	7,151	w.	32	sw.	12	4	4	23	7.8	3.9	2.8
Port Huron	638	70	120	29.39	30.09	+.05	49.0	−1.5	79	13	56	26	22	42	29	44	42	80	0.98	−1.5	8	5,836	ne.	26	w.	18	9	13	9	5.6	4.0	0.0
Sault Sainte Marie	614	11	52	29.37	30.07	+.06	45.4	+0.8	76	9	51	21	25	39	23	41	39	84	2.88	−0.9	15	5,401	se.	30	nw.	17	6	8	17	6.7	11.7	0.0
Chicago	673	7	131	29.37	30.11	+.07	51.6	−2.4	80	10	58	24	20	45	27	46	41	72	2.81	+0.3	7	6,186	nw.	25	w.	17	10	12	9	5.4	T.	0.0
Green Bay	617	109	141	29.39	30.06	+.04	47.6	−0.9	81	12	54	22	19	41	29	42	38	76	1.70	−0.8	6	6,851	s.	30	w.	19	7	3	21	7.2	T.	0.0
Milwaukee	681	125	221	29.34	30.09	+.06	48.1	−3.0	78	13	55	24	19	42	30	44	40	79	2.01	−0.3	7	7,627	w.	33	se.	7	10	8	13	6.0	T.	0.0
Duluth	1,133	5	47	28.80	30.04	+.04	41.8	−2.3	78	12	49	16	31	34	32	38	36	84	1.53	−0.8	12	7,484	ne.	42	nw.	16	5	6	20	7.2	0.4	0.0
North Dakota							**41.0**	**−2.8**										**77**	**1.61**	**+0.4**										**6.4**		
Moorhead	940	50	58	28.98	30.01	+.01	43.6	−0.9	84	11	52	12	21	35	32	39	35	77	1.37	−0.3	12	6,206	s.	26	nw.	17	4	8	19	7.6	0.2	T.
Bismarck	1,674	8	57	28.21	30.02	+.03	41.4	−3.5	73	8	50	14	18	32	36	37	32	73	1.94	+1.0	11	6,404	nw.	42	nw.	17	13	6	12	5.2	T.	0.0
Devils Lake	1,478	11	44	28.41	30.01	+.02	39.7	−2.7	67	11	48	14	18	32	29	36	33	84	2.26	+1.0	11	6,759	nw.	37	nw.	17	3	12	16	7.3	T.	0.0
Ellendale	1,457	10	56	28.43	30.01	------	42.8	------	77	11	52	9	21	33	38	----	----	----	1.80	+0.6	11	8,985	nw.	46	nw.	17	7	6	18	6.9	0.1	0.0
Grand Forks	833	12	67	------	------	------	41.6	------	79	11	50	12	31	33	32	38	----	----	1.88	------	11	------	nw.	35	w.	17	3	11	17	----	0.4	0.0
Williston	1,878	41	48	28.03	30.05	+.07	39.4	−4.0	70	8	50	11	18	29	38	34	30	74	0.66	−0.2	7	5,367	nw.	37	w.	16	12	10	9	4.9	T.	0.0
Upper Mississippi Valley							**51.9**	**−1.2**										**74**	**2.03**	**−0.4**										**5.3**		
Minneapolis	918	102	208	29.03	30.02	------	47.8	−1.1	86	10	56	21	19	40	30	----	----	----	1.14	−0.9	10	8,360	s.	30	w.	17	7	9	15	6.7	0.5	T.
St. Paul	837	236	261	29.11	30.03	+.02	47.2	−1.4	84	10	55	20	19	40	27	----	----	----	1.50	−0.7	9	8,797	se.	37	w.	17	5	9	17	6.8	0.9	0.0
La Crosse	714	11	48	29.27	30.05	+.03	48.8	−1.5	85	10	57	19	22	40	30	43	40	77	1.66	−0.7	9	3,189	s.	16	sw.	17	8	6	17	6.4	T.	0.0
Madison	974	70	78	29.02	30.08	+.05	48.1	−2.2	82	10	55	21	19	41	27	43	40	77	1.63	−0.8	7	5,232	s.	24	w.	17	8	12	11	5.8	T.	0.0
Wausau	1,247	4	62	------	30.08	------	46.2	------	82	10	53	19	22	39	29	----	----	----	2.89	+0.1	6	4,495	se.	24	w.	18	8	4	19	----	T.	0.0
Charles City	1,015	10	51	28.99	30.08	+.06	48.0	−0.6	86	10	56	18	20	40	28	42	39	77	1.78	−0.6	12	4,508	se.	23	w.	17	10	7	14	5.9	2.0	T.
Davenport	606	71	79	29.42	30.09	+.05	52.2	−1.5	88	10	61	23	21	44	28	46	42	74	2.89	+0.5	9	5,671	se.	34	w.	17	12	7	12	5.2	T.	0.0
Des Moines	861	5	99	29.16	30.08	+.05	52.3	−1.1	86	10	61	21	21	44	32	46	41	71	2.64	+0.1	10	6,239	se.	34	w.	17	12	5	14	5.5	0.5	T.
Dubuque	700	81	96	29.32	30.08	+.04	50.1	−1.8	86	10	58	22	20	42	27	45	41	75	2.59	+0.1	9	3,648	s.	18	nw.	16	8	10	13	6.0	T.	0.0
Keokuk	614	64	78	29.42	30.11	+.06	54.0	−1.4	84	10	63	24	31	45	27	47	42	71	2.00	−0.3	5	4,349	nw.	28	w.	17	15	7	9	4.6	T.	0.0
Cairo	358	87	93	29.72	30.11	+.04	58.6	−1.8	84	12	67	32	31	50	28	51	46	72	1.05	−1.7	7	4,334	n.	22	nw.	30	14	8	9	4.5	T.	0.0
Peoria	609	11	45	29.44	30.12	+.07	53.0	+1.0	86	10	62	22	21	43	33	46	42	74	3.14	+0.8	6	3,498	se.	18	sw.	17	18	5	8	4.0	T.	0.0
Springfield, Ill	636	5	191	29.41	30.10	+.05	53.9	−1.9	85	10	63	25	31	45	32	48	44	78	1.44	−1.1	7	7,527	se.	34	s.	7	14	9	8	4.5	0.3	0.0
Hannibal	534	74	109	29.52	30.10	+.05	55.4	−0.6	85	9	65	24	20	46	31	----	----	----	2.22	−0.2	4	4,820	nw.	25	w.	17	17	6	8	4.1	T.	0.0
St. Louis	568	265	303	29.49	30.10	+.04	57.1	−1.2	84	10	65	31	31	49	30	49	44	67	1.84	−0.9	6	7,144	s.	31	s.	7	18	4	9	3.6	T.	0.0
Missouri Valley							**52.5**	**−1.2**										**69**	**2.56**	**+0.5**										**4.9**		
Columbia, Mo	784	6	84	29.25	30.09	+.04	55.2	−1.4	85	9	64	22	31	46	29	----	----	----	2.57	0.0	6	4,358	se.	23	nw.	30	14	9	8	4.5	T.	0.0
Kansas City	963	161	181	29.05	30.10	+.06	56.4	−1.3	88	9	65	28	31	48	28	48	43	68	2.10	−0.8	11	5,691	s.	28	nw.	16	14	8	9	4.6	T.	0.0
St. Joseph	967	11	49	29.03	30.08	------	55.0	------	86	9	64	23	31	46	32	47	42	70	3.99	+1.3	10	5,087	se.	29	nw.	29	14	9	8	4.5	T.	0.0
Springfield, Mo	1,324	98	104	28.70	30.12	+.07	55.5	−2.7	84	9	64	25	31	47	30	48	43	72	3.05	0.0	7	6,190	se.	28	se.	6	20	5	6	3.2	0.0	0.0
Iola	984	11	50	29.03	30.08	+.04	55.8	−2.0	85	9	66	22	31	46	32	----	----	----	3.43	+0.4	9	3,401	se.	17	n.	16	14	5	12	5.2	0.0	0.0
Topeka	987	92	107	------	------	------	55.5	−1.5	87	9	64	25	31	47	30	----	----	----	5.07	+2.6	11	5,837	s.	30	n.	16	12	7	12	5.1	0.3	0.0
Lincoln	1,189	11	81	28.79	30.06	+.03	53.6	−0.6	88	10	64	17	31	44	40	46	40	66	0.52	−1.4	5	6,539	s.	34	w.	17	12	8	11	5.1	T.	0.0
Omaha	1,105	115	122	28.88	30.07	+.04	53.6	−0.7	88	10	62	22	31	45	32	46	39	65	0.81	−1.4	8	4,978	s.	30	nw.	16	13	10	8	4.4	T.	0.0
Valentine	2,598	47	54	27.31	30.06	+.05	47.8	−1.5	88	10	59	18	19	36	44	40	34	70	2.88	+1.8	8	5,825	w.	30	nw.	17	11	10	10	5.2	0.5	0.0
Sioux City	1,135	94	164	28.84	30.06	+.04	51.2	+0.3	88	10	60	17	31	42	35	44	39	68	1.60	−0.2	7	8,585	nw.	42	nw.	17	11	10	10	5.2	0.2	0.0
Huron	1,306	59	74	28.63	30.05	+.04	46.9	−0.8	85	10	57	13	21	37	38	41	36	72	3.61	+2.3	8	6,247	se.	34	w.	17	10	10	11	5.3	T.	0.0
Pierre	1,572	70	75	28.34	30.03	+.02	48.0	−1.8	83	8	58	17	19	38	37	41	35	70	2.34	+1.5	11	6,068	nw.	37	nw.	17	11	11	9	5.1	T.	0.0
Yankton	1,233	49	57	28.71	30.04	+.03	50.2	−0.9	88	10	60	16	31	40	34	----	----	----	1.29	−0.1	7	5,323	nw.	29	uw	17	7	12	12	5.9	T.	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, October, 1930*—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max. + mean min. ÷ 2	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with .01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Northern Slope							43.1	−2.2										71	1.99	+1.0										5.8		
Billings	3,140	5	----	----	----	----	41.1	----	72	8	52	14	17	30	46	----	----	----	1.82	----	14	----	nw.	----	----	----	5	9	17	----	1.0	0.0
Havre	2,505	11	44	27.41	30.09	+0.11	39.7	−4.8	72	4	51	9	17	29	41	33	28	73	0.48	−0.2	7	5,657	nw.	31	sw.	26	10	9	12	5.6	0.5	0.0
Helena	4,124	89	113	25.83	30.07	+.04	41.9	−3.0	68	4	50	11	17	34	27	36	30	66	1.20	+0.3	11	4,217	sw.	23	sw.	27	5	5	21	7.4	3.7	0.0
Kalispell	2,973	48	56	26.99	30.08	+.07	41.4	−2.1	72	2	50	18	16	33	29	37	33	75	1.61	+0.6	11	2,387	nw.	16	ne.	15	6	9	16	6.8	2.5	0.0
Miles City	2,371	48	55	27.52	30.12	+.12	42.0	−4.5	72	8	53	13	19	32	39	36	31	71	0.66	−0.2	11	3,643	s.	25	w.	16	11	6	14	5.7	0.2	0.0
Rapid City	3,259	50	58	26.64	30.09	+.08	45.4	−3.1	80	8	55	18	16	36	43	39	32	67	3.58	+2.6	8	4,703	n.	30	nw.	2	10	11	10	5.7	0.6	0.0
Cheyenne	6,088	84	101	24.02	30.02	+.01	44.4	−0.4	72	9	56	19	17	32	38	36	30	65	1.49	+0.5	10	6,990	w.	42	w.	15	12	10	9	4.7	T.	0.0
Lander	5,372	60	68	24.65	30.05	+.01	43.8	+0.3	69	8	57	14	17	31	38	36	31	70	2.36	+1.0	6	2,754	sw.	33	sw.	25	17	9	5	3.8	1.5	0.0
Sheridan	3,790	10	47	26.13	30.08	----	41.4	----	76	8	52	12	7	31	48	36	32	76	2.02	+1.0	15	2,273	nw.	28	nw.	27	8	6	17	6.6	3.5	0.0
Yellowstone Park	6,241	11	48	23.90	30.09	+.07	38.3	−3.2	56	19	48	11	17	29	33	33	28	72	2.39	+1.0	15	4,007	sw.	28	sw.	14	4	10	17	7.0	9.5	0.0
North Platte	2,821	11	51	27.09	30.04	+.02	50.6	+0.9	86	10	62	23	30	39	44	43	38	72	4.15	+3.1	8	4,177	se.	22	n.	27	15	5	11	4.8	0.5	0.0
Middle Slope							54.5	−1.4										67	2.72	+0.8										4.7		
Denver	5,292	106	113	24.73	29.99	−.02	50.2	−1.0	80	9	61	26	17	39	38	40	30	52	0.63	−0.4	7	4,406	s.	32	ne.	15	16	11	4	3.8	0.5	0.0
Pueblo	4,685	80	86	25.27	29.95	−.04	51.3	−0.7	82	9	65	21	31	38	51	41	32	58	0.57	−0.1	9	3,726	nw.	23	s.	10	16	10	5	3.8	0.0	0.0
Concordia	1,392	50	58	28.61	30.10	+.07	53.8	−2.1	87	9	63	23	31	45	34	47	42	71	2.32	+0.4	8	4,745	s.	28	nw.	15	11	7	13	5.4	T.	0.0
Dodge City	2,509	11	51	27.46	30.07	+.05	54.8	−1.3	90	9	65	29	21	45	38	48	44	78	4.24	+2.9	9	5,699	se.	28	se.	11	13	6	12	4.9	0.0	0.0
Wichita	1,358	139	158	28.62	30.06	+.03	56.6	−2.0	86	9	64	29	31	49	26	50	45	71	2.55	0.0	7	7,606	s.	36	sw.	15	14	7	10	4.8	0.0	0.0
Broken Arrow	765	11	56	29.24	30.07	----	59.3	----	86	9	69	29	31	50	31	----	----	----	2.62	−0.7	6	7,733	se.	34	n.	28	14	5	12	4.8	0.0	0.0
Oklahoma City	1,214	10	47	28.78	30.06	+.03	60.5	−1.0	87	9	69	35	31	52	30	53	48	73	6.10	+3.2	10	5,771	s.	22	s.	15	11	10	10	5.3	0.0	0.0
Southern Slope							62.6	−0.6										75	5.82	+4.0										5.5		
Abilene	1,738	10	52	28.22	30.03	+.02	63.9	−1.5	87	8	72	39	29	56	27	57	54	77	6.25	+3.8	12	6,038	s.	28	sw.	26	12	6	13	5.5	0.0	0.0
Amarillo	3,676	10	49	26.30	30.02	+.02	56.8	−0.9	88	9	66	34	31	47	34	49	45	75	2.57	+0.9	11	6,205	s.	31	se.	1	14	4	13	4.9	0.0	0.0
Del Rio	944	64	71	28.98	29.96	−.02	69.1	−0.9	90	8	76	45	30	62	25	63	59	76	11.69	+9.9	15	5,791	se.	21	nw.	23	6	7	18	6.5	0.0	0.0
Roswell	3,566	75	85	26.37	29.96	.00	60.4	+0.9	85	9	70	35	30	50	36	53	49	73	2.76	+1.3	13	4,677	s.	32	nw.	1	12	8	11	5.0	0.0	0.0
Southern Plateau							60.1	+0.1										48	0.36	−0.2										1.6		
El Paso	3,778	152	175	26.16	29.89	−.03	65.8	+2.3	90	1	77	41	29	54	32	54	45	55	0.75	0.0	6	6,117	e.	48	ne.	5	26	2	3	2.2	0.0	0.0
Sante Fe	7,013	38	53	23.26	29.93	−.03	50.5	+0.1	72	9	62	27	29	38	32	39	30	52	0.64	−0.5	6	3,997	se.	18	nw.	14	19	9	3	2.8	0.0	0.0
Flagstaff	6,907	10	59	23.35	29.92	.00	44.9	+0.2	68	16	61	20	24	29	42	35	----	60	0.13	----	1	5,366	w.	30	s.	9	23	6	2	----	T.	0.0
Phoenix	1,108	10	107	28.68	29.83	−.05	70.4	−0.2	95	17	87	47	11	54	43	52	36	35	0.16	−0.3	1	3,070	e.	18	sw.	9	27	3	1	1.2	0.0	0.0
Yuma	141	9	54	29.68	29.83	−.04	72.0	−1.3	98	7	88	48	11	56	40	55	40	38	0.20	−0.1	2	3,271	n.	26	n.	26	31	0	0	0.3	0.0	0.0
Independence	3,957	6	27	25.96	29.99	+.04	57.0	−0.5	85	6	74	29	30	41	45	42	----	----	0.07	−0.3	1	----	nw.	----	----	----	24	5	2	----	0.0	0.0
Middle Plateau							49.1	−1.2										50	0.69	−0.1										2.7		
Reno	4,532	74	81	25.49	30.01	+.02	50.8	+1.1	76	23	66	24	26	35	44	40	29	50	0.07	−0.3	1	3,538	w.	36	sw.	7	23	6	2	2.1	0.0	0.0
Tonopah	6,090	12	20	----	----	----	50.8	----	73	7	61	28	26	40	24	39	28	44	0.06	----	2	----	nw.	----	----	----	----	----	----	----	----	----
Winnemucca	4,344	18	56	25.65	30.07	+.02	46.0	−2.3	75	7	64	15	26	28	53	36	26	53	0.26	−0.4	4	3,724	ne.	26	sw.	7	18	10	3	3.1	0.0	0.0
Modena	5,473	10	43	24.62	29.97	+.01	46.0	−2.0	72	7	62	19	29	30	47	36	26	54	1.09	+0.4	4	6,207	w.	40	s.	8	23	6	2	2.2	0.7	0.0
Salt Lake City	4,360	163	203	25.65	30.03	+.02	49.8	−2.7	71	8	59	30	16	41	28	42	34	58	1.42	0.0	9	4,174	nw.	26	nw.	8	17	9	5	3.8	T.	0.0
Grand Junction	4,602	60	68	25.38	29.96	−.03	52.9	+0.1	79	9	66	30	29	39	37	40	27	44	0.62	−0.3	4	3,603	n.	26	s.	10	21	9	1	2.4	0.0	0.0
Northern Plateau							48.1	−1.8										66	0.98	−0.2										5.3		
Baker	3,471	48	53	26.50	30.11	+.03	43.9	−2.7	69	5	57	18	28	31	37	38	31	63	0.29	−0.6	3	3,272	se.	17	se.	23	13	10	8	4.5	T.	0.0
Boise	2,739	78	86	27.21	30.08	+.02	49.6	−1.5	72	4	61	29	16	38	37	43	36	63	0.87	−0.4	6	2,514	se.	21	nw.	14	11	13	7	4.6	0.0	0.0
Lewiston	757	40	48	29.27	30.09	+.02	50.6	−0.9	78	3	61	27	30	40	35	----	----	----	1.08	−0.2	6	1,404	e.	23	sw.	14	9	7	15	6.0	0.0	0.0
Pocatello	4,477	60	68	25.50	30.04	.00	47.6	−0.8	70	19	59	25	28	37	35	40	33	64	1.65	+0.5	10	4,609	se.	24	sw.	25	10	9	12	5.5	T.	0.0
Spokane	1,929	101	110	28.02	30.09	+.03	46.2	−2.1	75	3	56	26	13	37	35	42	37	71	1.02	−0.2	6	3,027	s.	22	sw.	26	8	9	14	5.9	0.6	0.0
Walla Walla	991	57	65	29.01	30.09	+.02	50.6	−2.9	75	3	59	33	30	42	31	45	40	67	1.00	−0.5	9	2,039	s.	22	w.	14	12	7	12	5.5	0.0	0.0
North Pacific Coast Region							51.5	−0.3										75	3.22	0.0										6.1		
North Head	211	11	56	29.84	30.07	+.02	53.2	+0.3	67	29	57	43	28	49	21	50	47	83	3.26	−1.8	16	8,299	n.	42	s.	26	4	12	15	7.2	0.0	0.0
Port Angeles	29	8	53	----	30.08	----	47.1	----	62	4	54	33	13	41	21	----	----	----	2.99	+0.6	14	3,259	s.	30	w.	26	4	12	15	----	0.0	0.0
Seattle	125	215	250	29.93	30.06	+.01	51.0	−0.4	66	1	57	38	29	45	22	48	45	80	2.72	−0.1	14	4,116	se.	28	s.	26	3	16	12	6.8	0.0	0.0
Tacoma	194	172	201	29.86	30.07	+.03	50.3	−0.2	66	1	58	34	11	43	25	----	----	----	2.01	−1.3	11	4,111	s.	30	s.	26	5	10	16	7.1	0.0	0.0
Tatoosh Island	86	9	53	29.93	30.03	+.02	50.2	+0.3	59	30	54	37	16	47	14	48	47	90	14.54	+6.4	17	9,931	e.	44	e.	29	7	7	17	6.7	0.0	0.0
Yakima	1,076	58	67	28.92	30.08	----	48.9	−1.3	80	3	62	24	15	36	37	42	34	61	0.24	−0.4	4	2,445	nw.	26	sw.	14	15	8	8	4.4	0.0	0.0
Medford	1,329	29	58	28.64	30.05	----	53.5	----	83	3	69	27	15	38	44	46	39	65	0.30	−1.0	5	----	s.	21	n.	14	11	14	6	4.5	0.0	0.0
Portland, Oreg.	153	68	106	29.91	30.07	+.01	53.7	−0.5	69	1	61	38	16	46	24	49	44	74	2.15	−1.0	12	3,068	nw.	18	e.	20	5	13	13	6.5	0.0	0.0
Roseburg	510	75	99	29.52	30.08	.00	53.4	−0.5	75	22	65	35	15	42	36	49	44	73	0.80	−1.8	7	1,610	nw.	20	sw.	7	9	13	9	5.4	0.0	0.0
Middle Pacific Coast Region							60.8	+0.5										66	0.65	−0.6										2.7		
Eureka	62	73	89	30.00	30.07	+.01	52.6	−1.0	67	28	59	39	15	46	24	51	49	87	1.21	−1.1	6	2,485	n.	22	nw.	14	12	9	10	4.8	0.0	0.0
Red Bluff	330	5	58	29.60	29.96	−.07	64.2	−0.1	93	4	79	43	25	50	38	52	40	48	0.47	−0.9	3	3,479	nw.	24	nw.	7	21	9	1	2.4	0.0	0.0
Sacramento	69	106	117	29.87	29.94	−.05	63.0	+0.1	92	5	77	42	25	49	35	53	44	57	0.47	−0.4	3	4,039	nw.	28	sw.	7	27	4	0	1.1	0.0	0.0
San Francisco	155	208	243	29.80	29.97	−.04	63.2	+2.7	92	6	72	52	23	55	30	55	50	71	0.89	−0.2	3	3,707	w.	25	nw.	7	21	8	2	3.0	0.0	0.0
San Jose	141	12	110	29.83	29.98	----	61.0	+0.7	95	6	75	39	26	47	41	----	----	----	0.23	−0.5	4	3,239	nw.	19	nw.	8	22	8	1	2.3	0.0	0.0
South Pacific Coast Region							66.0	+1.7										54	0.17	−0.4										1.8		
Fresno	327	89	98	29.60	29.95	−.01	64.6	+0.6	92	6	79	42	26	50	37	53	42	52	0.18	−0.4	1	3,290	nw.	20	nw.	7	27	4	0	1.1	0.0	0.0
Los Angeles	338	159	191	29.55	29.91	−.04	68.7	+3.4	94	5	79	53	10	58	33	56	47	58	0.10	−0.6	1	3,054	sw.	12	w.	3	25	5	1	1.6	0.0	0.0
San Diego	87	62	70	29.81	29.90	−.05	64.8	+1.1	89	6	73	52	23	57	27	57	53	71	0.22	−0.3	1	3,494	nw.	18	nw.	12	21	5	5	2.8	0.0	0.0
West Indies																																
San Juan, P. R.	82	9	54	29.84	29.92	----	80.6	+0.8	93	3	86	73	8	75	17	----	----	----	4.08	−1.8	14	5,147	e.	25	e.	13	10	17	4	5.0	0.0	0.0
Panama Canal																																
Balboa Heights	118	6	97	----	[1] 29.83	+.01	79.0	−0.2	90	29	84	69	11	74	17	----	----	[1] 88	8.24	−1.9	22	4,697	s.	24	s.	11	0	8	23	8.3	0.0	0.0
Cristobal	36	6	97	----	[1] 29.82	.00	81.4	+1.6	91	1	87	73	17	76	15	76	74	[1] 83	7.26	−8.1	21	4,754	se.	22	sw.	15	0	13	18	7.8	0.0	0.0
Alaska																																
Fairbanks	455	11	44	[2] 29.39	[2] 29.92	----	26.0	----	44	20	32	4	31	19	25	25	19	69	0.94	----	10	1,712	e.	16	e.	15	7	6	18	6.8	10.2	5.2
Juneau	80	11	50	[2] 29.78	[2] 29.87	----	40.3	----	56	30	45	22	19	36	20	37	32	72	14.51	----	21	6,573	e.	40	ne.	16	7	3	21	7.1	0.4	0.0
Hawaiian Islands																																
Honolulu	38	86	100	[2] 29.93	[2] 29.97	----	78.0	+1.2	84	15	83	70	12	73	14	72	70	78	3.73	+2.2	15	4,574	e.	24	e.	23	17	8	6	4.1	0.0	0.0

[1] Observations taken bihourly.

[2] Pressure not reduced to mean of 24 hours.

TABLE 2.—*Data furnished by the Canadian Meteorological Service, October, 1930*

Stations	Altitude above mean sea level, Jan. 1, 1919	Pressure			Temperature of the air						Precipitation		
		Station reduced to mean of 24 hours	Sea level reduced to mean of 24 hours	Departure from normal	Mean max. + mean min. ÷2	Departure from normal	Mean maximum	Mean minimum	Highest	Lowest	Total	Departure from normal	Total snowfall
	Feet	*Inches*	*Inches*	*Inches*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	*Inches*	*Inches*	*Inches*
Cape Race, N. F.	99												
Sydney, C. B. I.	48												
Halifax, N. S.	88												
Yarmouth, N. S.	65												
Charlottetown, P. E. I.	38												
Chatham, N. B.	28												
Father Point, Que.	20												
Quebec, Que.	296	29.75	30.08	+0.08	45.9	+3.5	52.4	39.4	74	28	1.39	−1.76	0.8
Doucet, Que.	1,236				42.0		53.5	30.5	79	6	0.90		1.1
Montreal, Que.	187	29.80	30.01	.00	49.3	+4.5	56.0	42.7	77	30	1.41	−1.72	T.
Ottawa, Ont.	236	29.80	30.07	+.06	47.9	+4.1	58.1	37.7	82	25	1.77	−0.78	0.2
Kingston, Ont.	285	29.77	30.08	+.05	49.6	+2.6	56.5	42.8	72	29	1.06	−1.67	T.
Toronto, Ont.	379	29.68	30.09	+.05	49.0	+2.4	56.3	41.7	75	27	1.87	−0.49	0.2
Cochrane, Ont.	930				42.2		49.6	34.7	80	12	1.64		2.5
White River, Ont.	1,244	28.67	30.00	+.02	38.6	+1.5	47.4	29.9	76	2	1.98	−0.37	3.6
London, Ont.	808				47.9		58.7	37.0	79	21	2.85		1.4
Southampton, Ont.	656	29.36	30.08	+.06	47.2	+1.1	55.5	38.9	74	27	3.44	+0.27	3.9
Parry Sound, Ont.	688	29.37	30.07	+.06	46.9	+3.0	54.1	39.7	75	24	3.92	0.00	7.0
Port Arthur, Ont.	644	29.31	30.02	+.04	41.7	+1.8	47.6	35.8	70	20	3.40	+0.84	0.0
Winnipeg, Man.	760	29.15	30.00	+.02	38.9	−0.2	45.9	31.9	60	16	3.01	+1.31	1.0
Minnedosa, Man.	1,690	28.15	30.00	+.03	35.7	−2.1	44.6	26.8	64	7	2.05	+0.85	2.4
Le Pas, Man.	860				32.5		40.4	24.7	70	3	1.81		15.7
Qu'Appelle, Sask.	2,115	27.72	30.01	+.04	35.1	−4.3	43.6	26.5	62	10	1.33	+0.23	9.2
Moose Jaw, Sask.	1,759				37.1		47.0	27.1	67	5	1.40		5.1
Swift Current, Sask.	2,392	27.42	29.98	+.01	36.5	−5.6	47.1	25.9	70	5	1.08	+0.20	7.9
Medicine Hat, Alb.	2,144												
Calgary, Alb.	3,428												
Banff, Alb.	4,521												
Prince Albert, Sask.	1,450	28.42	30.02	+.05	34.1	−3.0	41.6	26.5	71	−2	2.55	+1.72	20.2
Battleford, Sask.	1,592	28.24	30.01	+.04	35.0	−4.6	43.6	26.4	74	0	1.89	+1.44	15.3
Edmonton, Alb.	2,150												
Kamloops, B. C.	1,262												
Victoria, B. C.	230	29.80	30.06	+.05	49.2	0.0	53.9	44.6	61	36	4.79	+2.42	0.0
Barkerville, B. C.	4,180												
Estevan Point, B. C.	20												
Prince Rupert, B. C.	170												
Hamilton, Ber.	151												

LATE REPORTS, SEPTEMBER, 1930

Sydney, C. B. I.	48	29.85	29.90	−0.11	59.2	+2.7	68.0	50.4	86	39	3.74	+0.46	0.0
Halifax, N. S.	88	29.84	29.94	−.10	61.0	+3.4	70.1	51.9	83	39	0.66	−3.05	0.0
Yarmouth, N. S.	65	29.84	29.91	−.14	59.0	+2.9	66.6	51.4	78	42	0.51	−3.10	0.0
Charlottetown, P. E. I.	38	29.80	29.84	−.17	59.9	+2.6	66.5	53.3	84	46	2.12	−1.28	0.0
Chatham, N. B.	28	29.79	29.82	−.18	57.0	+1.6	66.4	47.7	83	37	2.98	+0.27	0.0
Doucet, Que.	1,236				49.6		59.1	40.2	78	26	5.30		0.0
Medicine Hat, Alb.	2,144	27.46	29.69	−.23	56.6	+1.6	69.0	44.3	89	33	3.35	+2.17	T.
Calgary, Alb.	3,428	26.38	29.93	+.01	51.2	+1.4	63.6	38.9	84	26	1.37	+0.01	4.2
Banff, Alb.	4,521	25.36	29.90	−.03	48.9	+3.1	60.8	37.0	78	22	1.47	−0.20	2.9
Edmonton, Alb.	2,150	27.60	29.87	−.03	50.5	+1 2	61.6	39.4	81	23	1.25	−0.08	T.
Kamloops, B. C.	1,262	28.65	29.93	−.04	59.1	+1.7	69.3	48.9	85	31	0.50	−0.35	0.0
Estevan Point, B. C.	20				53.8		59.7	48.0	66	38	6.16		0.0
Prince Rupert, B. C.	170				54.2		61.6	46.9	76	38	9.53		0.0