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, July, 1928

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	80.6	+0.5	Evergreen	101	27	3 stations	60	[2] 13	5.11	−0.34	Seale	10.84	Tuscumbia	1.34
Arizona	82.0	+0.7	3 stations	119	[2] 24	Big Spring Ranger Station.	31	13	1.55	−0.84	Young	5.11	8 stations	0.00
Arkansas	80.3	+0.3	Hope	102	23	Dutton	52	14	3.66	−0.16	Waters	9.84	Gilbert	0.46
California	72.1	−0.4	Palm Springs	120	24	Helm Creek	26	1	0.01	−0.06	Montague	0.57	199 stations	0.00
Colorado	65.7	−0.9	Lamar	105	5	Pearl	20	8	2.20	−0.05	Auldhurst	6.58	Glenwood Springs	0.08
Florida	81.5	+0.3	2 stations	101	29	New Smyrna	62	6	7.37	+0.14	Hilliard	17.44	Miami Beach	1.32
Georgia	80.3	+0.5	Eastman	101	5	Clayton	52	7	6.80	+1.09	Blue Ridge	11.58	Goat Rock	2.38
Idaho	69.0	+0.8	Orofino	114	26	Rostetter Ranger Station.	25	1	0.48	−0.21	Orofino	2.00	4 stations	0.00
Illinois	76.3	+0.3	2 stations	99	[2] 7	Mount Carroll	44	7	3.56	+0.26	Rochelle	7.42	Mount Carmel	0.34
Indiana	74.8	−0.5	Rochester	99	7	Goshen	43	29	3.55	+0.15	Veedersburg	9.00	Boonville	0.63
Iowa	73.9	+0.2	2 stations	98	6	Mason City	43	28	4.43	+0.61	Mount Ayr	9.32	Estherville	0.65
Kansas	77.5	−0.8	2 stations	105	4	2 stations	52	[2] 8	4.38	+1.03	Lincoln	12.77	Johnson	0.62
Kentucky	77.0	+0.1	Middlesboro	100	11	Dix Dam	50	29	4.07	−0.10	Frankfort	9.80	Marion	0.45
Louisiana	82.0	+0.4	Dodson	103	4	Angola	63	28	6.27	+0.05	Burrwood	12.75	Elizabeth	2.38
Maryland-Delaware	75.7	+0.5	Bell, Md	99	8	Oakland, Md	40	30	4.30	−0.03	Pleasant Hill, Md	8.20	Takoma, Md	1.29
Michigan	68.7	0.0	Houghton Lake	98	9	Humboldt	32	30	2.67	−0.27	Croswell	9.95	Webber Dam	0.20
Minnesota	69.3	−0.1	New Ulm	98	6	Meadowlands	38	28	4.14	+0.67	Virginia	7.37	Fairmont	0.44
Mississippi	81.7	+0.9	Aberdeen	103	[2] 3	Hernando	58	16	4.79	−0.17	Poplarville	10.46	University	0.70
Missouri	77.2	−0.2	Clinton	102	21	Louisiana	48	29	2.97	−1.08	Grant City	7.02	Morehouse	0.34
Montana	66.3	+0.1	3 stations	104	[2] 14	Adel	29	17	2.47	+0.93	Vida	6.21	Trout Creek	0.30
Nebraska	74.0	−0.6	Santee	104	6	Fort Robinson	40	8	3.99	+0.59	Wauneta	12.71	Fort Robinson	0.80
Nevada	73.6	+0.6	Logandale	114	[2] 24	Rye Patch	32	1	0.16	−0.22	Arthur	1.19	12 stations	0.00
New England	69.8	+0.8	3 stations	98	[2] 8	Somerset, Vt	34	31	4.45	+0.68	Fort Kent, Me	8.29	Bloomfield, Vt	1.40
New Jersey	74.2	+0.8	4 stations	96	[2] 8	Charlotteburg	41	30	6.86	+2.05	Dover	10.22	Moorestown	2.21
New Mexico	72.9	+0.5	Carlsbad	110	2	Selsor Ranch	25	1	1.92	−0.70	Pinos Altos	8.09	San Marcial	T.
New York	70.4	+0.8	2 stations	100	[2] 4	Indian Lake	34	26	4.72	+0.80	Boyds Corner	8.70	Lauterbrunnen	0.48
North Carolina	77.4	+1.0	2 stations	100	[2] 5	Mount Mitchell	45	2	4.87	−1.26	Chadbourn	13.57	Mount Airy	1.35
North Dakota	67.4	−0.1	Powers Lake	96	23	Hansboro	38	29	5.05	+2.44	Berthold Agency	12.22	Alpha	1.77
Ohio	73.7	+0.2	4 stations	97	[2] 20	Mount Vernon	45	31	4.75	+0.96	Ellsworth	9.27	Mount Healthy	1.29
Oklahoma	80.8	−0.7	Hobart	108	16	Boise City	54	22	4.01	+1.23	Webbers Falls	10.56	Guthrie	0.64
Oregon	68.4	+1.5	Pilot Rock	116	25	Fremont	24	18	0.32	−0.16	Astoria	1.42	9 stations	0.00
Pennsylvania	72.8	+0.9	5 stations	96	[2] 4	2 stations	40	[2] 30	5.44	+1.09	Quakertown	11.81	Philadelphia (Point Breeze).	2.37
South Carolina	79.5	−0.2	Calhoun Falls	100	5	2 stations	58	[2] 1	6.81	+0.88	Marion	13.34	Santuck	1.34
South Dakota	72.2	+0.2	Wagner	105	6	Oelrichs	40	9	2.92	+0.09	Castlewood	6.31	Ottumwa	0.74
Tennessee	78.3	+1.0	4 stations	98	[2] 3	Elkmont.	48	1	3.57	−0.85	Liberty	7.44	Dresden	T.
Texas	83.6	+0.7	Cameron	109	13	O2 Ranch	43	[2] 21	2.70	+0.09	Seminole	8.25	2 stations	0.00
Utah	71.7	+0.1	St. George	110	26	3 stations	21	7	0.48	−0.45	Escalante	1.82	5 stations	0.00
Virginia	76.0	+0.9	3 stations	100	[2] 4	Burkes Garden	45	15	3.44	−1.22	Wallaceton	9.47	Ivanhoe	1.47
Washington	68.5	+1.9	Wahluke	118	24	Bumping Lake	32	14	0.77	+0.12	Lost Creek	2.55	4 stations	0.00
West Virginia	73.5	+0.4	Point Pleasant	102	22	Bayard	35	30	4.23	−0.10	Dam 13, Ohio River	8.97	Upper Tract	1.10
Wisconsin	69.3	0.0	2 stations	97	[2] 7	Long Lake	31	29	3.81	+0.14	Antigo	8.52	Prairie du Sac	0.94
Wyoming	64.6	−1.1	Wheatland	105	5	Foxpark	23	[2] 8	2.09	+0.76	Knowles	5.44	Green River	0.18
Alaska														
Hawaii	74.6	+0.4	Waialua Mill	94	[2] 25	Volcano observatory	52	[2] 7	8.70	+2.60	Honomanu Valley	31.85	Mahukona	0.00
Porto Rico	78.8	+0.1	Rio Piedras	96	14	Jayuya	57	25	5.42	−1.09	Maricao	13.85	Santa Rita	0.40

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Alaska:														
May	41.0	0.0	2 stations	76	31	Barrow	−2	17	1.97	+0.54	Latouche	16.59	2 stations	T.
June	52.3	+0.3	2 stations	88	[2] 8	Barrow	13	2	1.78	−0.05	Chignik	16.24	Barrow	T.
Hawaii, June	73.5	+0.4	2 stations	92	1	2 stations	52	[2] 8	4.07	−0.61	Puu Kukui (upper)	20.00	9 stations	0.00

[1] For description of tables and charts, see Review, January, 1928, p. 29.

[2] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, July, 1928*

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 0.01, 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							**69.8**	**+0.9**										**80**	**4.05**	**+0.6**										**5.5**		
Eastport	76	67	85	29.84	29.92	−0.01	61.3	+0.9	84	18	70	50	13	53	29	58	56	83	3.20	+0.1	11	5,298	s.	28	se.	23	3	10	18	7.2	0.0	0.0
Greenville, Me	1,070	6	----	28.79	29.92	------	65.4	------	86	11	76	36	7	55	36	----	----	----	3.86	------	13	------	nw.	----	------	----	10	12	9	----	0.0	0.0
Portland, Me	103	82	117	29.84	29.96	+.01	69.0	+0.9	90	18	77	55	30	61	28	63	59	73	2.52	−0.7	14	5,239	sw.	26	nw.	30	20	4	7	4.1	0.0	0.0
Concord	289	70	79	29.63	29.93	−.03	69.8	+1.3	93	8	81	45	30	59	39	----	----	----	6.04	+2.5	11	3,271	s.	20	w.	16	11	12	8	5.2	0.0	0.0
Burlington	403	11	48	29.49	29.92	−.02	69.8	−0.5	91	9	79	49	21	60	29	----	----	----	2.38	−1.1	13	5,332	s.	23	s.	15	8	12	11	5.7	0.0	0.0
Northfield	876	12	60	29.02	29.94	.00	66.4	+0.5	89	8	78	41	21	54	36	65	63	87	1.99	−1.7	13	3,928	s.	22	sw.	16	1	21	9	6.6	0.0	0.0
Boston	125	115	188	29.81	29.94	−.02	73.2	+1.5	94	8	81	57	7	65	32	66	62	72	4.14	+0.6	11	5,516	sw.	24	nw.	4	11	10	10	5.3	0.0	0.0
Nantucket	12	14	90	29.95	29.96	−.02	67.7	−0.1	82	18	74	56	8	62	18	65	63	90	3.50	+0.8	12	10,001	sw.	43	ne.	6	7	11	13	6.2	0.0	0.0
Block Island	26	11	46	29.92	29.95	−.02	69.2	+0.8	81	19	75	59	7	64	20	66	64	90	3.08	0.0	10	9,855	sw.	39	sw.	4	5	13	13	6.2	0.0	0.0
Providence	160	215	251	29.78	29.95	−.02	73.6	+0.2	93	39	82	56	7	65	31	66	63	73	5.00	+1.7	10	6,334	nw.	30	nw.	29	12	8	11	5.3	0.0	0.0
Hartford	159	122	----	29.79	29.96	−.01	74.0	+2.4	95	8	83	54	31	65	32	----	----	----	4.88	+0.5	12	------	sw.	----	------	----	14	6	11	4.6	0.0	0.0
New Haven	106	74	153	29.85	29.96	−.01	74.2	+2.4	92	18	83	55	30	66	29	67	64	75	7.86	+3.5	14	5,415	sw.	36	ne.	24	15	9	7	4.5	0.0	0.0
Middle Atlantic States							**75.4**	**+0.7**										**76**	**4.55**	**+0.2**										**4.9**		
Albany	97	102	115	29.84	29.94	−.02	74.2	+1.6	95	9	83	53	21	65	26	67	64	75	3.99	+0.6	10	4,228	sw.	19	s.	14	15	8	8	4.2	0.0	0.0
Binghamton	871	10	84	29.04	29.95	−.02	72.0	+2.0	93	8	82	46	31	62	36	----	----	----	3.73	+0.2	13	3,073	w.	17	w.	23	10	12	9	5.5	0.0	0.0
New York	314	414	454	29.64	29.96	−.02	75.0	+1.2	92	9	83	61	7	67	27	67	63	72	7.72	+3.5	14	9,181	s.	50	n.	20	6	14	11	5.9	0.0	0.0
Harrisburg	374	94	104	29.59	29.98	.00	75.4	+0.6	94	8	85	56	31	66	25	68	64	72	5.20	+1.3	13	3,339	w.	34	nw.	20	15	8	8	4.6	0.0	0.0
Philadelphia	114	123	341	29.86	29.98	.00	77.4	+1.2	93	20	85	64	29	69	23	70	67	74	3.60	−0.6	11	5,676	sw.	28	ne.	20	12	11	8	5.0	0.0	0.0
Reading	325	81	98	29.62	29.97	------	76.0	------	93	9	85	56	31	66	26	68	65	72	5.04	+0.8	10	3,511	sw.	22	n.	4	14	7	10	5.1	0.0	0.0
Scranton	805	111	119	29.13	29.98	.00	72.8	+1.1	93	9	83	49	30	62	33	66	63	74	8.57	+4.7	14	3,892	s.	23	s.	11	6	12	13	6.1	0.0	0.0
Atlantic City	52	37	172	29.92	29.97	−.01	72.1	0.0	88	28	78	61	7	66	22	68	66	83	3.40	−0.5	11	10,513	sw.	36	ne.	6	15	10	6	3.6	0.0	0.0
Cape May	17	13	49	------	------	------	73.1	−0.3	92	20	80	58	31	66	24	69	67	87	4.99	------	10	------	s.	----	------	----	12	12	7	----	0.0	0.0
Sandy Hook	22	10	55	29.94	29.96	------	74.9	------	90	8	82	63	21	68	25	68	66	80	8.42	------	12	7,732	sw.	41	n.	6	13	7	11	4.8	0.0	0.0
Trenton	190	159	183	29.77	29.97	------	75.4	------	93	9	85	59	30	66	28	69	66	76	7.17	+2.4	14	5,730	sw.	34	w.	4	13	7	11	5.5	0.0	0.0
Baltimore	123	100	215	29.85	29.97	−.01	79.2	+2.0	97	20	88	62	31	70	25	70	66	67	3.54	−1.1	11	5,673	sw.	34	nw.	4	16	8	7	4.5	0.0	0.0
Washington	112	62	85	29.86	29.97	−.03	78.1	+1.3	97	4	88	58	30	69	27	70	66	71	2.17	−2.5	10	3,049	s.	28	nw.	4	13	10	8	5.1	0.0	0.0
Cape Henry	18	8	54	29.97	29.99	------	77.5	------	97	20	85	62	31	70	24	72	70	80	5.94	+0.6	11	5,979	sw.	32	nw.	5	17	7	7	4.2	0.0	0.0
Lynchburg	681	153	188	29.27	30.00	−.01	77.8	+0.3	96	19	88	60	31	67	31	69	66	70	3.55	−0.7	8	3,736	w.	30	n.	20	12	17	2	4.6	0.0	0.0
Norfolk	91	170	205	29.92	30.01	+.01	79.0	+0.3	93	20	87	66	31	71	21	71	68	76	4.41	−1.3	12	7,130	s.	45	sw.	5	13	10	8	4.8	0.0	0.0
Richmond	144	11	52	29.86	30.00	−.01	78.4	−0.1	96	20	88	59	31	69	24	71	68	76	1.95	−2.8	7	4,205	sw.	31	nw.	27	17	11	3	3.6	0.0	0.0
Wytheville	2,304	49	55	27.71	30.01	.00	71.5	−1.1	88	19	82	54	15	61	31	65	63	79	2.83	−1.2	10	2,694	w.	19	sw.	5	7	16	8	5.5	0.0	0.0
South Atlantic States							**79.6**	**+0.5**										**80**	**5.32**	**−0.7**										**5.6**		
Asheville	2,253	70	84	27.72	30.00	−.02	73.0	+1.3	87	21	83	55	1	64	26	66	64	83	3.78	−1.0	13	3,613	se.	27	n.	5	7	17	7	5.5	0.0	0.0
Charlotte	779	55	62	29.20	30.02	.00	80.6	+2.2	97	20	90	64	1	71	26	71	69	75	1.76	−3.3	12	2,203	sw.	21	ne.	5	3	19	9	6.2	0.0	0.0
Hatteras	11	11	50	30.01	30.02	+.01	78.6	+0.4	88	2	84	67	8	73	18	74	72	81	2.17	−3.3	10	7,329	sw.	30	sw.	13	12	11	8	4.6	0.0	0.0
Raleigh	376	103	110	29.62	30.01	−.01	79.4	+0.6	95	21	88	64	31	70	23	72	69	77	2.31	−3.8	9	4,310	sw.	21	s.	4	7	18	6	5.6	0.0	0.0
Wilmington	78	81	91	29.96	30.04	+.03	79.0	−0.1	93	28	86	64	2	72	24	73	72	84	9.57	+2.4	13	4,722	sw.	22	ne.	2	11	11	9	5.5	0.0	0.0
Charleston	48	11	92	29.99	30.04	+.01	81.0	−0.4	94	28	87	70	14	75	21	75	73	81	5.16	−1.7	9	6,317	sw.	27	n.	29	10	10	11	5.7	0.0	0.0
Columbia, S. C	351	41	57	29.65	30.02	.00	80.8	−0.1	95	23	90	67	1	72	27	72	70	80	9.78	+3.7	16	3,253	s.	19	s.	7	12	11	8	5.1	0.0	0.0
Due West	711	10	55	29.29	30.05	------	79.2	------	96	4	89	63	15	69	27	----	----	----	2.44	------	9	4,235	sw.	29	n.	5	9	14	8	5.5	0.0	0.0
Greenville, S. C	1,039	139	146	28.95	30.02	------	78.6	+1.7	94	4	88	64	5	69	26	71	68	79	7.58	------	15	3,780	w.	34	w.	5	4	18	9	6.1	0.0	0.0
Augusta	182	62	77	29.82	30.01	−.01	82.0	+0.7	96	4	92	69	6	72	27	73	71	76	3.66	−1.7	11	3,196	s.	32	nw.	5	6	15	10	5.6	0.0	0.0
Savannah	65	150	194	29.97	30.04	+.01	81.2	−0.3	94	29	89	70	17	73	21	74	72	81	6.02	−0.6	13	6,533	sw.	29	nw.	5	9	11	11	5.9	0.0	0.0
Jacksonville	43	209	245	30.00	30.05	+.02	81.5	−0.6	94	27	90	69	3	74	20	74	72	80	8.96	+2.2	13	5,842	sw.	40	s.	1	4	16	11	6.2	0.0	0.0
Florida Peninsula							**82.5**	**+0.6**										**75**	**3.31**	**−2.7**										**5.8**		
Key West	22	10	64	30.01	30.03	.00	83.7	+0.2	92	22	89	73	9	78	16	76	74	74	1.73	−1.6	6	5,275	se.	25	se.	14	13	11	7	4.5	0.0	0.0
Miami	25	71	164	30.04	30.07	------	81.5	+0.5	89	24	87	70	29	76	18	75	73	75	3.65	−2.5	9	5,071	se.	24	se.	11	6	14	11	6.2	0.0	0.0
Tampa	35	79	87	30.02	30.05	+.01	82.4	+1.2	94	28	90	71	20	75	20	75	72	77	4.54	−3.9	13	3,180	e.	15	sw.	12	1	18	12	6.8	0.0	0.0
Titusville	44	5	----	30.01	30.06	------	81.4	------	98	2	91	68	5	72	26	----	----	----	5.65	------	10	------	sw.	----	------	----	9	9	13	5.9	0.0	0.0
East Gulf States							**80.9**	**+0.2**										**79**	**5.57**	**+0.4**										**5.5**		
Atlanta	1,173	190	216	28.83	30.04	+.02	78.8	+0.7	93	4	87	66	6	70	24	70	67	75	8.60	+4.0	14	4,826	nw.	36	nw.	6	7	14	10	6.0	0.0	0.0
Macon	370	78	87	29.64	30.03	+.01	80.7	−0.5	95	5	90	67	1	72	25	74	72	82	5.48	+0.8	14	3,266	s.	24	n.	6	14	10	7	4.6	0.0	0.0
Thomasville	273	49	58	29.75	30.04	+.01	81.1	−0.7	95	30	90	63	7	72	24	74	72	82	10.45	+5.1	19	2,109	sw.	19	n.	6	6	12	13	6.2	0.0	0.0
Apalachicola	36	42	49	30.00	30.04	------	81.2	------	94	29	87	69	2	75	17	76	74	80	4.75	------	14	3,730	sw.	34	ne.	30	10	13	8	5.2	0.0	0.0
Pensacola	56	149	185	29.98	30.04	+.03	81.1	+0.1	92	1	86	72	21	76	17	75	73	79	6.56	−0.2	18	6,482	s.	36	s.	1	6	16	9	6.2	0.0	0.0
Anniston	741	9	57	29.27	30.05	+.03	79.0	+1.1	95	4	90	61	15	69	29	----	----	----	3.82	−0.9	13	1,963	s.	18	nw.	21	8	19	4	4.7	0.0	0.0
Birmingham	700	11	48	29.29	30.04	+.03	79.9	−0.3	94	5	89	66	30	70	24	72	70	79	2.16	−2.5	11	2,847	s.	18	se.	24	8	15	8	5.3	0.0	0.0
Mobile	57	125	161	29.97	30.03	+.02	82.4	+1.0	96	1	90	71	31	75	21	75	73	80	3.33	−3.6	13	4,398	sw.	20	nw.	2	3	22	6	6.0	0.0	0.0
Montgomery	223	100	112	29.79	30.03	+.01	81.5	−0.2	95	4	90	69	6	72	24	73	71	78	3.69	−1.2	12	3,340	sw.	30	ne.	6	6	17	8	5.5	0.0	0.0
Corinth	469	6	----	------	------	------	81.4	------	98	4	91	62	30	72	28	----	----	----	1.78	------	10	------	s.	----	------	----	6	25	0	----	0.0	0.0
Meridian	375	87	95	29.64	30.02	.00	80.8	+0.4	95	5	90	68	15	71	22	74	71	80	8.08	+3.6	10	2,894	sw.	22	nw.	22	10	17	4	4.8	0.0	0.0
Vicksburg	247	65	73	29.76	30.04	+.04	81.2	−0.1	94	4	89	70	17	73	20	74	72	81	3.89	−0.6	11	3,319	w.	23	e.	10	11	12	8	4.9	0.0	0.0
New Orleans	53	76	84	29.97	30.02	+.02	82.9	+0.5	96	3	90	70	22	76	23	76	73	78	5.81	−0.6	17	2,940	w.	26	ne.	3	3	18	10	6.4	0.0	0.0
West Gulf States							**82.8**	**+0.3**										**74**	**2.11**	**−0.8**										**3.9**		
Shreveport	249	77	93	29.75	30.01	+.03	83.4	+0.2	99	4	93	68	23	74	23	74	71	74	3.46	−0.1	8	3,243	s.	17	ne.	12	15	9	7	4.4	0.0	0.0
Bentonville	1,303	11	44	28.64	29.98	+.01	77.2	−1.3	93	20	87	62	14	68	26	----	----	----	3.15	------	12	------	s.	----	w.	----	23	7	1	----	0.0	0.0
Fort Smith	457	79	94	29.50	29.97	.00	81.1	−0.4	99	4	90	66	14	72	24	73	70	73	2.48	−0.9	8	4,048	e.	28	se.	7	16	10	5	4.0	0.0	0.0
Little Rock	357	136	153	29.63	30.00	+.01	81.0	−0.1	95	4	90	68	29	72	25	73	70	72	2.79	−1.2	9	4,279	sw.	24	w.	22	14	7	10	4.7	0.0	0.0
Austin	605	136	148	29.34	29.96	------	84.4	------	99	3	95	70	27	74	25	74	70	69	1.75	−0.6	5	5,012	se.	25	ne.	26	12	17	2	4.1	0.0	0.0
Brownsville	57	53	61	29.89	29.95	------	84.0	+0.4	95	23	92	75	13	76	20	76	74	79	0.71	−1.2	4	5,349	se.	21	se.	26	23	7	1	2.2	0.0	0.0
Corpus Chritsi	20	11	78	29.96	29.98	+.02	83.6	+0.9	92	23	89	74	6	78	14	78	76	83	0.33	−1.3	4	8,559	se.	26	se.	26	14	11	6	4.1	0.0	0.0
Dallas	512	220	227	29.44	29.97	------	82.3	------	97	22	91	69	28	74	21	----	----	----	3.64	------	7	6,678	se.	34	se.	7	17	6	8	4.0	0.0	0.0
Fort Worth	670	106	114	29.25	29.95	−.01	83.1	−0.5	98	4	92	69	9	74	23	73	69	68	4.24	+1.7	6	6,082	s.	25	se.	7	13	12	6	4.5	0.0	0.0
Galveston	54	106	114	29.97	30.02	+.04	83.8	+0.4	91	23	88	72	7	80	15	77	74	77	1.14	−2.6	5	6,754	s.	26	s.	7	18	11	2	3.2	0.0	0.0
Groesbeck	461	11	56	29.50	29.98	------	82.3	------	98	13	92	66	24	72	26	----	----	----	4.03	------	8	6,032	se.	42	sw.	24	17	9	5	3.9	0.0	0.0
Houston	138	292	314	29.86	30.00	------	84.3	+0.6	98	23	93	70	10	76	22	----	----	----	3.43	−0.7	8	6,372	s.	33	ne.	10	15	14	2	4.0	0.0	0.0
Palestine	510	64	72	29.48	30.00	+.03	82.4	+0.2	95	21	91	69	26	73	21	74	71	75	2.81	+0.1	8	4,169	s.	22	s.	6	19	5	7	3.8	0.0	0.0
Port Arthur	34	58	66	29.97	30.01	------	83.3	------	93	17	90	73	18	77	19	76	74	78	5.01	------	13	4,483	s.	22	e.	22	16	10	5	3.9	0.0	0.0
San Antonio	693	119	132	29.24	29.95	.00	85.0	+1.2	100	25	96	71	26	74	25	73	68	64	1.03	−1.1	6	5,042	se.	30	sw.	24	13	14	4	4.2	0.0	0.0
Taylor	583	55	63	29.41	30.02	+.06	84.2	+1.5	100	13	95	70	27	73	27	----	----	----	1.10	−1.5	4	5,704	s.	28	s.	7	16	11	4	3.9	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, July, 1928*—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: Departure from normal	Temperature: Maximum	Temperature: Date	Temperature: Mean maximum	Temperature: Minimum	Temperature: Date	Temperature: Mean minimum	Temperature: Greatest daily range	Mean wet thermometer	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with 0.01, 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							**76.4**	**−0.1**										**74**	**3.72**	**−0.1**										**5.0**		
Chattanooga	762	190	215	29.21	30.01	−0.01	78.4	0.0	94	4	88	65	3	69	26	71	68	77	6.85	+2.6	15	3,688	sw.	28	ne.	7	4	21	6	5.8	0.0	0.0
Knoxville	995	102	111	28.99	30.02	.00	78.0	+0.9	94	3	88	62	1	68	30	70	67	78	2.56	−1.8	12	3,103	sw.	31	n.	4	5	19	7	6.0	0.0	0.0
Memphis	399	76	97	29.58	30.00	.00	80.8	+0.1	94	4	88	64	30	73	21	73	70	72	1.36	−1.8	6	4,185	sw.	28	sw.	22	14	13	4	4.1	0.0	0.0
Nashville	546	168	191	29.45	30.02	+.01	79.0	−0.1	93	22	88	64	15	70	26	71	78	73	3.62	−0.3	12	4,062	w.	36	n.	7	4	21	6	5.5	0.0	0.0
Lexington	989	193	230	28.98	30.02	+.01	75.8	−0.1	90	21	84	58	29	68	21	----	----	----	5.16	+0.7	10	5,973	sw.	28	sw.	5	20	8	3	3.4	0.0	0.0
Louisville	525	188	234	29.44	30.02	+.02	77.3	−1.3	92	20	86	57	30	69	25	70	66	73	2.17	−1.5	7	4,780	s.	28	n.	4	10	19	2	4.4	0.0	0.0
Evansville	431	76	116	29.56	30.02	+.02	79.5	+0.8	95	21	88	58	29	71	26	71	67	71	1.82	−1.6	6	4,272	s.	40	nw.	6	12	17	2	4.5	0.0	0.0
Indianapolis	822	194	230	29.13	30.00	+.01	75.7	0.0	91	7	85	55	29	67	23	67	63	68	3.07	−0.3	10	5,307	s.	37	w.	4	7	21	3	4.9	0.0	0.0
Royal Center	736	11	55	29.21	30.00	------	72.1	------	90	7	83	48	29	62	27	----	----	----	3.54	------	12	4,556	s.	39	nw.	10	10	14	7	5.2	0.0	0.0
Terre Haute	575	96	129	29.38	29.99	------	76.7	------	94	10	86	56	30	67	25	68	64	69	2.45	------	8	4,597	s.	32	n.	4	9	20	2	4.7	0.0	0.0
Cincinnati	627	11	51	29.34	30.00	.00	75.4	+0.3	93	21	86	53	30	65	27	69	66	74	4.61	+1.3	8	3,172	sw.	33	nw.	11	10	18	3	4.5	0.0	0.0
Columbus	822	179	222	29.15	30.00	.00	75.0	+0.1	92	20	84	58	29	66	23	68	64	73	6.27	+2.7	14	4,497	s.	41	nw.	27	14	14	3	4.2	0.0	0.0
Dayton	899	137	173	29.06	29.99	------	75.4	0.0	93	21	85	53	30	66	27	67	64	71	2.24	−1.0	7	4,306	sw.	33	w.	20	6	22	3	5.7	0.0	0.0
Elkins	1,947	59	67	28.03	30.02	+.01	69.4	−0.9	90	8	80	46	30	58	32	64	62	84	4.81	+0.2	16	2,421	w.	22	w.	4	6	16	9	6.0	0.0	0.0
Parkersburg	637	77	82	29.38	30.03	+.02	76.0	+0.6	94	20	86	56	30	66	31	68	64	72	2.61	−2.0	10	2,657	se.	22	nw.	20	11	12	8	5.4	0.0	0.0
Pittsburgh	842	353	410	29.10	29.98	−.02	73.4	−1.2	93	8	82	55	29	65	26	67	64	74	4.93	+0.9	11	5,218	sw.	27	w.	9	9	15	7	5.6	0.0	0.0
Lower Lake Region							**72.1**	**+0.6**										**73**	**4.03**	**+0.8**										**5.0**		
Buffalo	767	247	280	29.13	29.95	−.02	69.2	−0.6	87	8	75	53	29	63	20	66	63	82	2.74	−0.3	10	9,154	sw.	50	w.	3	11	11	9	5.3	0.0	0.0
Canton	448	10	61	29.45	29.91	------	69.0	+1.5	93	9	78	47	26	59	32	----	----	----	3.30	+0.1	16	5,213	sw.	26	sw.	15	18	8	5	3.8	0.0	0.0
Ithaca	836	5	100	29.04	29.93	------	70.4	------	92	8	80	46	30	60	35	65	62	77	2.84	−0.7	11	4,741	nw.	22	nw.	29	9	11	11	5.7	0.0	0.0
Oswego	335	76	91	29.57	29.93	−.03	69.6	−0.8	92	9	77	54	31	62	30	64	61	75	3.62	+0.7	11	4,765	w.	20	sw.	3	9	12	10	5.4	0.0	0.0
Rochester	523	86	102	29.40	29.96	−.01	72.0	+1.3	94	8	81	54	31	63	30	64	60	69	3.72	+0.8	8	4,589	sw.	24	sw.	18	11	12	8	4.8	0.0	0.0
Syracuse	597	97	113	29.32	29.96	−.01	71.1	+0.8	92	9	79	54	29	63	27	----	----	----	6.14	+2.5	11	5,809	nw.	26	nw.	28	10	10	11	5.6	0.0	0.0
Erie	714	130	166	29.22	29.96	−.02	72.4	+1.4	90	8	79	56	30	66	24	66	63	73	3.63	+0.6	9	7,056	w.	46	sw.	3	17	7	7	3.8	0.0	0.0
Cleveland	762	190	201	29.17	29.97	−.02	73.1	+1.7	89	8	80	56	29	66	26	65	61	68	6.91	+3.5	12	5,772	sw.	32	w.	27	8	13	10	5.4	0.0	0.0
Sandusky	629	5	67	29.31	29.98	−.01	74.8	+1.4	92	7	84	55	30	65	29	----	----	----	4.04	+0.6	12	4,387	sw.	20	nw.	27	7	18	6	5.2	0.0	0.0
Toledo	628	208	243	29.31	29.98	−.01	74.2	+1.0	91	8	83	55	29	65	25	66	63	70	3.28	+0.3	11	6,874	sw.	42	sw.	19	14	15	2	3.7	0.0	0.0
Fort Wayne	856	113	124	29.07	29.98	------	74.0	+0.5	91	7	84	51	29	64	27	67	63	74	4.32	------	12	4,668	sw.	30	sw.	21	6	19	6	5.8	0.0	0.0
Detroit	730	218	258	29.20	29.97	−.01	73.6	+1.5	93	8	83	56	29	64	26	65	61	69	4.07	+0.8	8	5,302	sw.	27	sw.	3	5	18	8	5.8	0.0	0.0
Upper Lake Region							**67.9**	**−0.1**										**76**	**2.85**	**−0.2**										**4.9**		
Alpena	609	13	92	29.29	29.95	−.02	66.8	+0.9	95	8	76	46	30	58	31	62	58	75	1.65	−1.1	12	6,395	nw.	27	nw.	15	11	14	6	5.3	0.0	0.0
Escanaba	612	54	60	29.28	29.94	−0.3	65.4	−0.6	85	3	74	48	29	57	25	60	57	78	4.04	+0.7	12	6,229	s.	32	ne.	24	10	14	7	4.5	0.0	0.0
Grand Haven	632	54	89	29.29	29.96	−.02	68.9	+0.2	89	8	76	49	29	62	24	64	61	77	1.13	−1.5	7	6,140	s.	28	se.	3	14	13	4	4.2	0.0	0.0
Grand Rapids	707	70	87	29.22	29.97	−.01	72.6	+0.3	95	8	82	48	29	63	27	65	61	69	0.81	−2.1	8	3,460	w.	16	w.	3	8	15	8	5.2	0.0	0.0
Houghton	668	64	99	29.22	29.94	−.02	63.9	−1.6	87	16	73	46	28	55	29	----	----	----	3.81	+0.7	13	6,184	w.	48	nw.	7	6	15	10	6.1	0.0	0.0
Lansing	878	6	49	29.04	29.96	------	70.5	−0.4	91	7	81	46	29	60	29	65	62	77	1.89	−1.2	10	2,741	w.	16	w.	3	16	10	5	4.4	0.0	0.0
Ludington	637	60	66	29.27	29.96	------	66.4	------	84	8	73	51	30	60	21	62	60	80	1.84	------	10	5,876	s.	22	s.	9	17	8	6	3.7	0.0	0.0
Marquette	734	77	111	29.16	29.95	−.01	63.4	−1.5	88	16	72	48	19	55	28	60	58	84	2.63	−0.5	12	5,138	nw.	31	sw.	31	6	14	11	6.0	0.0	0.0
Port Huron	638	70	120	29.27	29.96	−.02	70.2	+1.4	89	8	79	53	29	62	26	64	61	75	2.64	−0.2	9	5,906	sw.	24	nw.	14	13	14	4	4.1	0.0	0.0
Sault Ste. Marie	614	11	52	29.26	29.94	−.03	63.0	−0.8	91	8	72	43	30	54	33	58	55	79	3.46	+0.7	13	4,557	w.	38	nw.	7	8	14	9	5.4	0.0	0.0
Chicago	673	7	131	29.27	29.99	+.01	72.8	+0.3	92	7	80	55	29	65	21	66	63	74	2.95	−0.4	10	5,467	s.	33	nw.	19	12	10	9	4.8	0.0	0.0
Green Bay	617	109	141	29.29	29.95	−.02	69.8	−0.2	91	8	79	50	29	61	26	64	60	74	3.46	0.0	11	6,229	s.	34	s.	2	12	10	9	5.0	0.0	0.0
Milwaukee	681	125	221	29.25	29.98	+.01	71.8	+1.7	94	7	80	54	28	63	29	64	60	70	1.47	−1.4	9	7,008	w.	35	sw.	2	14	9	8	4.7	0.0	0.0
Duluth	1,133	5	47	28.75	29.95	.00	63.0	−0.9	85	16	73	46	28	53	30	59	56	82	7.08	+3.3	12	6,742	ne.	32	nw.	7	13	12	6	4.6	0.0	0.0
North Dakota							**68.0**	**−0.6**										**74**	**5.39**	**+2.6**										**4.4**		
Moorhead	940	50	58	28.93	29.92	−.02	69.3	+1.2	89	25	79	51	29	59	30	63	60	74	7.17	+3.7	10	4,571	n.	46	nw.	1	12	13	6	4.9	0.0	0.0
Bismarck	1,674	8	57	28.18	29.93	.00	69.4	−0.4	92	5	80	47	28	58	29	62	59	73	5.06	+2.8	10	4,797	n.	44	nw.	6	18	7	6	4.2	0.0	0.0
Devils Lake	1,478	11	44	28.39	29.93	.00	66.0	−1.4	89	30	77	45	29	55	32	60	57	77	3.27	−0.5	12	4,786	nw.	35	nw.	6	13	9	9	4.7	0.0	0.0
Ellendale	1,457	10	56	28.40	29.93	------	69.2	------	89	30	80	48	28	58	29	----	----	----	4.92	------	14	6,909	nw.	53	ne.	7	12	16	3	4.5	0.0	0.0
Grand Forks	833	12	67	------	------	------	68.0	------	87	15	78	48	29	58	31	63	----	----	4.68	------	11	------	nw.	----	ne.	11	10	16	5	4.6	0.0	0.0
Williston	1,878	41	48	27.99	29.93	+.01	67.3	−1.6	90	14	78	48	28	56	29	60	56	70	6.07	+4.2	15	3,822	ne.	44	w.	5	16	12	3	3.7	0.0	0.0
Upper Mississippi Valley							**75.4**	**+0.4**										**72**	**3.91**	**+0.4**										**4.8**		
Minneapolis	918	102	208	28.96	29.92	------	72.3	0.0	94	7	82	54	29	63	26	----	----	----	3.68	0.0	11	6,129	s.	34	nw.	2	7	17	7	5.6	0.0	0.0
St. Paul	837	236	261	29.04	29.93	−.02	71.7	−0.4	91	7	82	53	28	62	25	----	----	----	3.63	+0.1	8	6,263	sw.	33	se.	6	11	14	6	5.0	0.0	0.0
La Crosse	714	11	48	29.19	29.94	−.02	72.7	−0.1	92	7	83	50	28	63	30	66	63	77	6.14	+2.2	11	2,128	s.	21	ne.	2	14	5	12	4.9	0.0	0.0
Madison	974	70	78	28.95	29.97	.00	71.9	−0.2	90	7	80	54	28	64	23	65	62	73	2.64	−1.2	7	4,311	sw.	19	nw.	2	10	11	10	5.5	0.0	0.0
Wausau	1,247	4	----	28.65	29.96	------	69.4	------	90	7	79	47	29	60	30	----	----	----	3.69	------	10	------	nw.	----	----	----	9	8	14	6.1	0.0	0.0
Charles City	1,015	10	51	28.91	29.96	.00	72.8	+0.5	92	6	83	49	28	62	28	66	63	73	3.94	+0.4	10	3,226	se.	18	s.	2	16	11	4	3.3	0.0	0.0
Davenport	606	71	79	29.32	29.97	.00	76.0	+0.7	94	7	86	54	28	66	26	68	65	70	4.57	+1.2	9	3,174	s.	22	w.	8	14	9	8	4.7	0.0	0.0
Des Moines	861	84	97	29.06	29.95	−.01	75.4	0.0	95	6	85	57	30	65	27	68	64	73	5.68	+2.2	14	3,925	s.	23	sw.	7	12	13	6	4.9	0.0	0.0
Dubuque	700	81	96	29.23	29.96	−.01	73.6	−0.5	92	7	83	51	29	64	26	66	63	72	3.22	−0.7	11	3,482	s.	21	nw.	19	9	11	11	5.8	0.0	0.0
Keokuk	614	64	78	29.32	29.98	.00	77.4	+0.5	96	6	87	56	28	68	28	69	65	68	2.93	−0.5	7	3,800	s.	27	sw.	19	13	7	11	4.9	0.0	0.0
Cairo	358	87	93	29.63	30.00	.00	80.2	+0.6	94	4	88	62	29	72	21	72	69	72	1.43	−1.6	6	3,903	sw.	27	nw.	31	8	17	6	5.3	0.0	0.0
Peoria	609	11	45	29.34	30.00	+.02	75.6	+0.2	95	7	86	51	29	65	29	69	66	74	4.35	+0.8	9	2,782	s.	26	nw.	3	18	9	4	3.1	0.0	0.0
Springfield, Ill	636	10	91	29.31	29.97	−.01	77.8	+1.3	95	3	87	57	30	69	26	70	66	71	3.09	+0.2	8	4,262	s.	24	sw.	10	16	12	3	4.1	0.0	0.0
Hannibal	534	74	109	29.41	29.97	−.01	77.8	+1.0	95	19	87	59	30	68	26	----	----	----	2.76	−1.0	8	4,524	sw.	35	se.	10	13	10	8	4.5	0.0	0.0
St. Louis	568	265	303	29.39	29.98	−.01	79.9	+1.3	95	3	88	63	29	71	26	70	66	67	6.66	+3.7	4	6,305	sw.	34	e.	5	12	15	4	4.4	0.0	0.0
Missouri Valley							**76.2**	**+0.3**										**68**	**3.58**	**−0.3**										**4.2**		
Columbia, Mo	784	6	84	29.16	29.97	−.01	77.2	+0.3	94	5	86	58	30	68	28	----	----	----	3.72	+0.1	7	3,789	s.	23	s.	11	15	8	8	4.5	0.0	0.0
Kansas City	963	161	181	28.95	29.95	−.02	78.4	+0.3	95	5	87	61	28	70	29	70	66	27	2.64	−1.5	11	5,453	s.	32	ne.	10	15	11	5	4.1	0.0	0.0
St. Joseph	967	11	49	28.94	29.94	------	77.6	------	96	5	87	58	28	68	29	70	66	72	3.19	------	12	4,321	se.	34	se.	10	16	9	6	4.2	0.0	0.0
Springfield, Mo	1,324	98	104	28.64	30.01	+.03	76.6	−0.2	92	20	85	59	29	68	22	69	66	70	3.01	−1.8	5	5,617	s.	30	sw.	11	22	9	0	2.1	0.0	0.0
Iola	984	11	50	28.94	29.96	−.01	79.0	+0.8	95	5	89	60	28	69	30	----	----	----	3.31	−1.1	7	3,279	s.	19	ne.	11	16	9	6	4.2	0.0	0.0
Topeka	987	92	107	------	------	------	78.3	+0.5	98	4	88	60	30	69	25	----	----	----	2.75	−2.1	9	5,330	sw.	44	se.	10	15	10	6	4.2	0.0	0.0
Lincoln	1,189	11	81	28.72	29.93	−.02	77.0	+0.5	101	6	87	57	28	67	30	68	64	69	5.72	+1.9	13	5,223	s.	58	w.	4	8	12	11	5.6	0.0	0.0
Omaha	1,105	115	122	28.79	29.94	−.01	77.1	+0.4	99	6	86	58	28	68	28	68	64	67	6.55	+3.0	7	4,024	se.	32	sw.	4	13	16	2	4.1	0.0	0.0
Valentine	2,598	47	54	27.30	29.96	+.03	72.8	−0.9	94	1	84	53	9	61	39	63	58	66	3.76	+0.4	15	5,257	s.	30	sw.	3	11	15	5	4.7	0.0	0.0
Sioux City	1,135	94	164	28.77	29.95	.00	75.3	+1.0	98	6	86	53	28	65	27	66	62	66	3.83	+0.2	2	6,262	s.	33	n.	21	8	17	6	5.0	0.0	0.0
Huron	1,306	59	74	28.57	29.94	.00	72.4	+0.6	91	16	83	52	28	62	32	65	61	70	2.28	−0.9	10	5,263	s.	45	w.	1	16	14	1	3.7	0.0	0.0
Pierre	1,572	70	75	------	29.92	−.01	75.0	−0.3	97	30	86	56	27	63	35	----	----	64	3.22	−0.9	11	5,576	e.	33	s.	7	18	10	3	----	0.0	0.0
Yankton	1,233	49	57	28.64	29.92	−.02	74.7	+0.5	101	6	85	57	27	64	29	----	----	----	2.22	−1.2	4	4,080	s.	18	se.	5	10	18	3	4.6	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, July, 1928*—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 0.01, 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							68.0	+0.1										63	2.31	+0.7										4.4		
Billings	3,140	5					69.6		97	25	85	44	2	54	43				2.27		10		nw.				11	14	6		0.0	0.0
Havre	2,505	11	44	27.34	29.93	+0.02	69.5	+1.2	95	12	82	48	3	56	38	60	54	63	1.44	−0.4	9	3,917	e.	28	nw.	10	12	14	5	4.2	0.0	0.0
Helena	4,110	87	112	25.83	29.94	+.01	67.0	+1.3	95	26	80	47	4	54	34	56	49	60	1.65	+0.6	9	4,948	sw.	35	sw.	29	8	18	5	5.1	0.0	0.0
Kalispell	2,973	48	56	26.92	29.92	−.01	65.6	+1.5	92	26	78	45	5	53	35	56	50	64	1.49	+0.6	11	3,479	nw.	16	w.	3	16	13	2	3.8	0.0	0.0
Miles City	2,371	48	55	27.46	29.96	+.04	71.8	−1.1	95	15	84	52	3	60	31	61	55	62	4.78	+3.4	8	3,234	s.	47	w.	7	18	9	4	3.5	0.0	0.0
Rapid City	3,259	50	58	26.63	29.97	+.04	69.9	−1.1	92	5	81	53	12	59	31	61	56	64	2.80	+0.2	14	4,063	w.	36	ne.	26	15	12	4	4.1	0.0	0.0
Cheyenne	6,088	84	101	24.11	29.94	+.02	65.8	−0.9	90	31	79	45	8	53	38	54	47	58	1.95	−0.2	10	6,055	s.	37	w.	7	13	11	7	4.5	0.0	0.0
Lander	5,372	60	68	24.72	29.94	+.02	68.0	+0.6	93	30	84	43	2	52	42	55	48	55	0.37	−0.5	7	3,365	sw.	32	sw.	31	14	15	2	4.3	0.0	0.0
Sheridan	3,790	10	47	26.13	29.96		67.0		92	26	81	43	2	53	40	59	54	70	2.97		11	2,463	nw.	21	nw.	9	14	10	7	4.7	0.0	0.0
Yellowstone Park	6,241	11	48	23.99	29.99	+.07	60.6	−0.9	86	26	75	40	21	46	37	49	43	61	1.30	+0.1	13	4,202	sw.	25	nw.	9	8	16	7	5.1	0.0	0.0
North Platte	2,821	11	51	27.08	29.94	+.01	73.4	+0.5	98	6	84	55	8	63	40	65	61	71	5.04	+2.3	14	3,210	s.	24	ne.	11	16	8	7	4.3	0.0	0.0
Middle slope							76.8	−0.4										64	2.96	0.0										4.4		
Denver	5,292	106	113	24.81	29.95	−.04	71.0	−1.2	95	5	84	52	8	58	37	57	47	50	1.01	−0.7	9	4,486	s.	32	n.	28	13	12	6	4.5	0.0	0.0
Pueblo	4,685	80	86	25.34	29.93	+.02	74.0	−0.2	98	5	88	52	8	60	41	58	48	52	1.06	−0.9	7	4,146	n.	25	w.	28	12	17	2	4.4	0.0	0.0
Concordia	1,392	50	58	28.52	29.95	.00	77.2	−0.8	98	5	87	59	28	67	30	69	66	72	7.03	+3.2	15	4,105	s.	29	nw.	11	9	11	11	5.7	0.0	0.0
Dodge City	2,509	11	51	27.41	29.95	+.02	78.1	−0.3	100	3	90	60	8	66	35	66	61	65	2.34	−0.8	10	5,357	se.	29	se.	11	19	8	4	3.2	0.0	0.0
Wichita	1,358	139	158	28.54	29.93	+.03	79.3	−0.1	98	4	89	62	8	69	30	70	66	70	3.46	−0.2	10	7,541	s.	42	nw.	18	16	10	5	3.7	0.0	0.0
Broken Arrow	765	11	56	29.16	29.98		79.1		93	4	88	65	29	71	24				2.80		11	7,071	s.	32	w.	21	12	10	9	4.8	0.0	0.0
Oklahoma City	1,214	10	47	28.70	29.95	−.01	80.9	+0.3	98	4	90	66	8	71	26	71	68	72	2.86	−0.8	9	5,729	s.	19	n.	11	14	12	5	4.4	0.0	0.0
Southern slope							81.7	+0.5										56	2.69	+0.2										4.1		
Abilene	1,738	10	52	28.17	29.92	−.01	84.0	+1.2	103	3	94	65	27	74	27	70	63	59	3.05	+0.9	9	6,274	s.	27	s.	25	11	10	10	5.0	0.0	0.0
Amarillo	3,676	10	49	26.29	29.92	.00	77.7	+0.9	101	4	90	59	8	66	32	64	58	60	5.39	+2.2	9	5,694	s.	24	nw.	13	16	10	5	3.8	0.0	0.0
Del Rio	944	64	71	28.92	29.88	−.02	86.2	−0.1	100	3	95	70	28	77	22	71	64	54	1.38	−0.9	3	7,069	se.	27	s.	30	13	11	7	4.3	0.0	0.0
Roswell	3,566	75	85	26.37	29.88	.00	79.0	+0.1	102	1	92	62	24	66	33	63	54	51	0.95	−1.2	10	5,182	s.	27	sw.	3	19	12	0	3.2	0.0	0.0
Southern Plateau							80.2	+1.3										41	0.38	−0.8										2.6		
El Paso	3,778	152	175	26.16	29.82	−.02	83.6	+2.5	103	3	95	63	19	72	31	63	50	39	1.15	−0.8	4	6,347	e.	34	nw.	20	17	13	1	3.6	0.0	0.0
Santa Fe	7,013	38	53	23.37	29.87	−.01	69.8	+0.8	89	4	82	52	25	57	33	53	42	46	0.65	−1.7	11	3,847	e.	19	ne.	10	8	18	5	4.8	0.0	0.0
Flagstaff	6,907	10	59	23.46	29.87	+.04	66.1	+1.1	86	26	82	41	1	50	43	51	41	50	2.30		11		nw.				10	15	6		0.0	0.0
Phoenix	1,108	10	82	28.64	29.74	−.04	91.8	+2.0	112	24	105	69	1	78	35	67	52	31	0.11	−1.0	2	3,790	w.	23	n.	30	17	14	0	3.0	0.0	0.0
Yuma	141	9	54	29.60	29.74	−.02	91.0	+0.2	116	24	107	63	2	75	41	70	58	41	0.00	−0.2	0	3,472	sw.	22	se.	30	30	1	0	0.6	0.0	0.0
Independence	3,957	6	27	25.91	29.84	+.01	79.2	+1.1	102	24	96	53	3	62	40	54			0.00	−0.1	0		nw.				23	7	1	1.2	0.0	0.0
Middle Plateau							74.3	+1.9										31	0.46	−0.1										2.4		
Reno	4,532	74	81	25.46	29.86	−.01	72.5	+5.0	102	24	90	45	7	55	44	53	39	37	0.16	−0.1	3	4,868	w.	30	w.	31	23	8	0	1.8	0.0	0.0
Tonopah	6,090	12	20				75.2		95	28	87	44	1	63	31	51	31	22	0.02		1		se.									
Winnemucca	4,344	18	56	25.60	29.89	−.01	72.5	+1.9	102	26	90	44	19	54	49	52	35	32	0.29	+0.1	2	3,703	sw.	30	s.	15	26	5	0	2.2	0.0	0.0
Modena	5,473	10	43	24.64	29.86	.00	70.8	+0.2	96	27	89	42	2	53	46	51	35	35	1.05	−0.2	3	7,322	sw.	33	s.	12	21	10	0	2.2	0.0	0.0
Salt Lake City	4,360	163	203	25.60	29.87	−.03	77.4	+1.7	100	27	89	51	7	66	36	56	40	30	0.38	−0.1	4	5,593	s.	37	w.	15	21	8	2	2.8	0.0	0.0
Grand Junction	4,602	60	68	25.39	29.89	.00	78.2	+0.5	97	5	92	54	7	64	35	56	39	32	0.41	−0.1	7	4,604	se.	30	nw.	22	17	12	2	3.0	0.0	0.0
Northern Plateau							74.4	+3.3										41	0.60	+0.2										3.3		
Baker	3,471	48	53	26.44	26.96	+.01	68.0	+2.4	101	26	84	41	19	52	41	53	42	46	0.45	0.0	7	3,773	se.	27	se.	28	18	10	3	3.4	0.0	0.0
Boise	2,739	78	86	27.10	29.88	−.05	75.7	+2.8	105	25	91	48	6	60	38	58	45	41	0.13	−0.1	2	3,413	w.	25	ne.	15	22	7	2	2.7	0.0	0.0
Lewiston	757	40	48	29.10	29.89	−.06	77.6	+3.6	113	26	93	55	6	62	46				0.88	+0.5	7	2,030	e.	20	nw.	29	17	8	6	3.5	0.0	0.0
Pocatello	4,477	60	68	25.47	29.87	−.05	73.0	+2.2	97	26	88	42	7	58	40	54	40	37	0.29	−0.3	4	4,752	se.	30	sw.	17	12	15	4	4.2	0.0	0.0
Spokane	1,929	101	110	27.90	29.90	−.06	73.6	+4.6	108	26	87	50	1	60	40	57	45	46	1.26	+0.6	5	3,600	s.	22	n.	18	17	11	3	3.5	0.0	0.0
Walla Walla	991	57	65	28.84	29.89	−.08	78.2	+4.2	112	25	92	56	1	65	39	59	45	37	0.58	+0.2	6	2,805	w.	16	w.	2	20	9	2	2.4	0.0	0.0
North Pacific Coast Region							63.6	+1.6										68	0.45	−0.3										4.9		
North Head	211	11	56	29.80	30.02	−.06	57.6	+0.4	64	5	61	52	13	54	9	55	54	89	0.77	+0.1	8	9,560	n.	37	n.	12	4	4	23	8.1	0.0	0.0
Port Angeles	29	8	53		30.06		60.5		88	25	69	44	15	52	31				0.50	+0.1	3	4,243	nw.	22	w.	11	16	11	4		0.0	0.0
Seattle	125	215	250	29.89	30.02	−.02	65.0	+1.9	89	24	74	52	14	56	28	58	53	69	0.11	−0.5	2	4,447	nw.	16	s.	4	10	12	9	5.1	0.0	0.0
Tacoma	194	172	201	29.84	30.04	−.02	65.1	+2.3	91	26	74	51	13	56	29				0.51	−0.1	4	4,638	n.	21	sw.	11	11	10	10	5.6	0.0	0.0
Tatoosh Island	86	9	53	29.95	30.04	−.01	55.9	+0.8	71	25	59	49	15	53	16	54	53	92	0.71	−1.1	9	6,089	s.	28	s.	26	7	8	16	6.6	0.0	0.0
Yakima	1,071	5					76.2		111	26	92	52	2	60	52	60		50	0.13		2		nw.				20	11	0	2.8	0.0	0.0
Medford	1,425	4	80	28.44	29.91		71.8		106	22	91	45	6	53	50	58	49	53	T.		0		nw.	20	n.	31	23	5	3	2.0	0.0	0.0
Portland, Oreg	153	68	106	29.85	30.01	−.04	69.0	+2.3	99	24	79	50	2	59	32	60	54	64	0.42	−0.2	4	3,836	nw.	16	nw.	11	13	8	10	5.0	0.0	0.0
Roseburg	510	75	99	29.44	29.98	−.05	69.2	+1.8	103	24	83	49	6	56	41	58	50	59	0.12	−0.2	1	3,272	n.	17	ne.	20	14	13	4	3.8	0.0	0.0
Middle Pacific Coast Region							67.1	+0.1										68	T.	0.0										3.1		
Eureka	62	73	89	29.96	30.03	−.02	56.2	+0.7	65	4	60	48	23	53	11	54	52	88	0.02	−0.1	2	4,258	nw.	20	n.	5	2	17	12	7.0	0.0	0.0
Red Bluff	330	54	58	29.48	29.82	−.07	81.6	+0.8	106	30	99	53	3	64	45	64	52	43	0.00	0.0	0	3,377	s.	16	nw.	6	29	2	0	0.7	0.0	0.0
Sacramento	69	106	117	29.77	29.84	−.04	73.0	−0.2	102	7	90	52	10	56	41	61	54	60	T.	0.0	0	6,161	s.	22	sw.	2	28	3	0	0.8	0.0	0.0
San Francisco	155	208	243	29.76	29.93	−.02	58.6	+0.1	75	7	64	50	17	53	21	54	52	83	T.	0.0	0	5,588	sw.	25	w.	6	10	14	7	4.9	0.0	0.0
San Jose	141	12	110	29.78	29.93		66.1	−0.8	94	7	79	48	17	53	39				0.00	0.0	0	4,433	nw.	19	se.	20	23	8	0	2.3	0.0	0.0
South Pacific Coast Region							72.4	−0.8										62	T.	0.0										2.4		
Fresno	327	89	98	29.49	29.83	.00	81.3	−0.8	108	30	98	54	1	64	39	60	44	34	0.00	0.0	0	5,350	nw.	21	nw.	8	26	5	0	1.0	0.0	0.0
Los Angeles	338	159	191	29.55	29.91	+.01	69.2	−1.0	85	31	79	56	13	60	24	61	57	71	0.00	0.0	0	3,322	sw.	13	sw.	1	22	9	0	2.8	0.0	0.0
San Diego	87	62	70	29.82	29.91	−.01	66.6	−0.6	78	31	71	59	6	62	16	62	59	81	T.	0.0	0	4,158	w.	17	s.	30	20	10	1	3.5	0.0	0.0
West Indies																																
San Juan, P. R.	82	9	54	29.94	30.03		80.0	−0.1	90	26	85	70	9	75	15				8.58	−2.2	19	9,488	e.	32	e.	9	2	25	4	5.6	0.0	0.0
Panama Canal																																
Balboa Heights	118	7	97	[1]29.72	[1]29.81	−.03	81.0	+0.7	92	15	87	70	7	75	17				7.91	+0.6	16		nw.		s.		28	0	13	18	7.8	0.0	0.0
Colon	38	7	97	[1]29.80	[1]29.82	−.04	82.2	+1.8	91	22	87	73	7	77	15				10.29	−5.4	19		n.		n.		16	0	5	26	8.6	0.0	0.0
Alaska																																
Juneau	80	11	54	[2]29.94	[2]30.02		56.3		85	3	63	44	24	50	34	52	48	78	4.61		13	4,432	se.	24	nw.	25	9	0	22	7.1	0.0	0.0
Hawaiian Islands																																
Honolulu	38	86	100	[2]29.99	[2]30.03		77.5		84	22	82	71	17	74	10	69	66	69	1.41	+0.2	10	7,478	e.	29	ne.	26	13	14	4	4.4	0.0	0.0

[1] Observations taken bi-hourly.

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

TABLE 2.—*Data furnished by the Canadian Meteorological Service, July, 1928*

Station	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	29.60	29.92	+0.01	67.1	+1.6	75.4	58.8	85	48	4.82	+0.56	0.0
Doucet, Que.	1,236				63.0		70.9	55.2	82	36	6.68		0.0
Montreal, Que.	187	29.68	29.88	−.05	70.9	+2.4	79.4	62.3	87	53	3.89	−0.40	0.0
Ottawa, Ont.	236												
Kingston, Ont.	285	29.62	29.92	−.05	68.2	0.0	75.2	61.2	85	51	2.68	−0.21	0.0
Toronto, Ont.	379	29.54	29.93	−.04	69.9	+1.9	79.4	60.4	90	52	5.64	+2.72	0.0
Cochrane, Ont.	930				62.3		72.1	52.5	86	38	2.49		0.0
White River, Ont.	1,244	28.60	29.89	−.05	60.9	+1.4	72.2	49.5	85	34	4.59	+1.79	0.0
London, Ont.	808				70.3		80.7	60.0	91	48	3.00		0.0
Southampton, Ont.	656	29.24	29.95	−.02	65.6	+0.9	74.6	56.6	89	46	5.70	+3.72	0.0
Parry Sound, Ont.	688	29.24	29.92	−.04	66.9	+0.9	75.0	58.8	86	48	4.67	+2.05	0.0
Port Arthur, Ont.	644	29.25	29.96	+.02	62.7	+0.7	71.9	53.6	90	42	3.46	−0.02	0.0
Winnipeg, Man.	760												
Minnedosa, Man.	1,690	28.16	29.94	+.01	63.8	+1.6	73.2	54.4	85	43	3.42	+0.82	0.0
Le Pas, Man.	860				63.6		75.2	52.0	86	40	2.60		0.0
Qu' Appelle, Sask.	2,115												
Moose Jaw, Sask.	1,759				65.8		78.5	53.2	92	42	1.58		0.0
Swift Current, Sask.	2,392	27.43	29.90	−.01	65.6	−0.9	78.0	53.3	90	43	2.78	+0.34	0.0
Medicine Hat, Alb.	2,144												
Calgary, Alb.	3,428												
Banff, Alb.	4,521												
Prince Albert, Sask.	1,450	28.41	29.96	+.05	65.1	+3.2	76.7	53.6	90	43	1.50	−0.55	0.0
Battleford, Sask.	1,592	28.22	29.93	+.03	65.3	+0.6	77.1	53.5	90	46	2.39	+0.05	0.0
Edmonton, Alb.	2,150												
Kamloops, B. C.	1,262												
Victoria, B. C.	230												
Barkerville, B. C.	4,180												
Estevan Point, B. C.	20												
Prince Rupert, B. C.	170												
Hamilton, Ber.	151												

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Cape Race, N. F.	99				48.5		56.0	41.0	68	36	1.62		0.0
Father Point, Que.	20	29.81	29.83	−0.04	54.1	+1.1	62.6	45.6	78	38	2.60	−0.38	0.0
Kingston, Ont.	285	29.55	29.86	−.11	59.8	−3.6	66.2	53.4	78	42	4.12	+1.69	0.0
London, Ont.	808				61.7		71.0	52.4	82	34	4.94		0.0
Southampton, Ont.	656	29.14	29.85	−.12	58.4	−2.0	69.3	47.5	84	35	3.83	+1.48	0.0
Winnipeg, Man.	760	29.02	29.84	−.05	59.4	−2.8	69.6	49.3	84	34	3.58	+0.29	0.0
Medicine Hat, Alb.	2,144	27.52	29.75	−.10	59.3	−2.7	70.5	48.2	86	36	3.58	+0.82	0.0
Calgary, Alb.	3,428	26.35	29.88	+.04	54.5	−1.5	65.9	43.2	81	30	8.45	+6.00	0.0
Banff, Alb.	4,521	25.33	29.85	+.01	50.9	−0.6	62.2	39.7	81	27	6.05	+2.72	1.9
Kamloops, B. C.	1,262	28.57	29.84	−.03	65.4	+1.6	75.7	55.1	92	43	1.55	+0.13	0.0
Barkerville, B. C.	4,180	25.62	29.88	+.01	51.7	+1.0	62.6	40.8	77	27	5.72	+2.24	0.0
Estevan Point, B. C.	20				54.4		60.2	48.6	67	41	1.47		0.0
Prince Rupert, B. C.	170				55.1		63.6	46.6	76	40	1.71		0.0
Hamilton, Ber.	151	29.98	30.14	+.02	75.6	+0.6	82.5	68.8	88	65	2.02	−3.93	0.0