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 amd precipitation by sections, August, 1929

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	80.2	+0.6	Madison	102	3	Scottsboro	50	30	2.10	−2.44	Dothan	7.07	Union Springs	0.02
Arizona	79.6	0.0	Parker	115	[2] 29	Alpine	38	20	2.74	+0.41	Baboquivari	7.52	Mohawk	0.18
Arkansas	80.8	+1.1	Booneville	110	6	Dutton	41	15	1.29	−2.40	St. Francis	4.73	3 stations	0.00
California	73.9	+1.8	Greenland Ranch	122	12	Sierraville	25	26	0.10	0.00	Aguanga	4.70	251 stations	0.00
Colorado	66.4	+1.6	Rocky Ford	106	17	Pearl	28	23	3.17	+1.08	Victor	10.95	Rifle	0.11
Florida	81.4	0.0	2 stations	99	[2] 6	2 stations	58	[2] 16	6.40	−0.69	Penny Farms	11.78	Indiantown	1.76
Georgia	80.2	+0.8	Talbotton	102	3	Blue Ridge	48	[2] 5	3.24	−1.98	Thomasville	11.68	Hartwell	0.13
Idaho	70.3	+3.7	Orofino	110	27	3 stations	28	[2] 5	0.37	−0.26	Obsidian	2.01	3 stations	0.00
Illinois	72.3	−1.9	2 stations	100	22	2 stations	42	15	2.51	−0.95	Flora	6.41	Paris	0.59
Indiana	71.2	−2.1	Rome	101	1	do	39	[2] 16	2.75	−0.56	Winona Lake	6.25	Terre Haute	0.45
Iowa	71.9	+0.2	Keokuk (No. 2)	102	22	Decorah	37	15	2.44	−1.00	Toledo	9.27	Guthrie Center	0.78
Kansas	78.9	+1.5	2 stations	110	[2] 2	Oketo	44	15	2.14	−0.95	Salina	7.99	Oswego	0.41
Kentucky	74.0	−1.6	do	100	[2] 15	Farmers	37	18	2.06	−1.67	Uniontown	5.84	St. John	0.31
Louisiana	82.1	+0.4	Dodson	105	21	Robeline	53	16	3.30	−1.89	Delta Farms	7.86	Logansport	0.00
Maryland-Delaware	71.5	−1.8	Frederick, Md	99	1	Oakland, Md	35	[2] 20	2.70	−1.57	Grantsville, Md	5.13	Woodstock, Md	1.18
Michigan	64.9	−1.6	2 stations	95	[2] 2	2 stations	29	[2] 7	1.28	−1.54	Black Lake Forest	3.86	Grand Ledge	0.12
Minnesota	68.2	+1.5	Beardsley	104	24	Meadowlands	28	15	1.98	−1.32	Waseca	4.75	Fergus Falls	0.50
Mississippi	80.4	−0.1	4 stations	102	[2] 3	Utica	50	[2] 16	2.24	−2.07	Pearlington	6.64	Scott	0.07
Missouri	76.0	0.0	Lamonte	105	1	2 stations	43	15	2.50	−1.25	Campbell	8.57	Neosho	0.32
Montana	69.3	+4.8	Big Timber	107	14	do	24	[2] 20	0.34	−0.82	Hebgen Dam	1.31	3 stations	0.00
Nebraska	75.7	+2.9	Merriman	110	24	do	34	[2] 4	1.48	−1.33	North Platte	6.17	Lebanon	0.07
Nevada	74.1	+3.2	Las Vegas	111	[2] 2	Rye Patch	31	27	0.68	+0.29	Sharp	5.07	4 stations	0.00
New England	65.0	−1.8	3 stations	94	[2] 1	Garfield, Vt	30	30	2.68	−1.23	Hyannis, Mass	7.13	Hiram, Me	0.95
New Jersey	69.8	−2.0	Belvedere	97	1	Charlotteburg	39	21	2.58	−2.21	Plainfield	4.86	Sandy Hook	0.88
New Mexico	69.2	−0.5	Nara Visa (near)	105	3	Therma	25	[2] 15	3.57	+1.09	Des Moines	9.62	Lake Avalon	0.18
New York	65.1	−2.2	2 stations	96	26	2 stations	32	20	2.85	−0.92	High Market	8.43	Addison	0.42
North Carolina	74.7	−0.9	7 stations	97	[2] 2	Banners Elk	36	5	4.05	−1.46	Southport	10.51	Bryson City	0.74
North Dakota	68.5	+3.1	Maddock	106	31	Steele	26	14	0.77	−1.51	Stanton	2.06	Portal	T.
Ohio	68.0	−3.6	3 stations	95	[2] 2	Canfield	36	20	2.79	−0.59	McConnelsville	7.34	Ellsworth	0.71
Oklahoma	83.6	+2.5	Jefferson	112	5	Smithville	44	15	0.78	−2.21	Miami	3.68	3 stations	0.00
Oregon	67.9	+2.1	Waldo	109	10	Fremont	22	22	0.14	−0.36	Union	1.52	34 stations	0.00
Pennsylvania	67.7	−2.3	2 stations	98	1	Gouldsboro	31	20	2.52	−1.71	Phoenixville	7.20	Lloyd	0.20
South Carolina	78.0	−0.9	do	101	[2] 2	Hogback Mountain	50	4	3.18	−2.65	Ferguson	8.70	Landrum	0.60
South Dakota	73.6	+3.6	Hopewell	110	15	Pollock	32	14	1.30	−1.01	Rochford	3.72	Dupree	0.03
Tennessee	75.7	−0.7	Covington	101	3	2 stations	43	[2] 30	2.40	−1.64	Kenton	6.73	Rock Island	0.12
Texas	84.1	+1.4	Cleburne	112	4	Alpine	51	17	0.87	−1.69	Romero	6.62	34 stations	0.00
Utah	71.7	+1.8	St. George	108	[2] 13	Woodruff	35	[2] 14	1.53	+0.43	Hole-in-the-Rock Ranger Station.	5.38	Riverdale	0.08
Virginia	72.4	−1.2	Winchester	99	1	Burkes Garden	37	31	2.65	−2.02	Clarksville	8.43	2 stations	0.98
Washington	67.6	+1.7	Wahluke	108	11	Stockdill Ranch	29	25	0.41	−0.53	Mount Baker Lodge	2.45	14 stations	0.00
West Virginia	69.1	−2.9	Moorefield	101	14	Bayard	33	31	3.31	−0.66	Sutton	5.75	Wardensville	0.14
Wisconsin	66.6	−0.3	High Falls	99	31	Prentice	30	15	1.87	−1.42	Wausau	3.66	Milwaukee	0.35
Wyoming	67.8	+3.9	2 stations	103	[2] 15	Moran	24	14	0.98	−0.12	Lyman	5.90	Pavillion	0.00
Alaska (July)	55.6	−1.0	Wonder Lake	85	12	Fort Yukon	25	29	3.64	+0.90	Ketchikan	10.90	White Mountain	0.25
Hawaii	76.1	+1.3	3 stations	94	[2] 7	Volcano Observatory.	54	[2] 5	5.43	−1.15	Puohakamoa	25.89	Lahaina	0.26
Porto Rico	78.6	−0.3	Canovanas	95	1	Jayuya	59	12	9.81	+2.62	Maricao	25.25	Santa Isabel	2.42

[1] For description of tables and charts, see REVIEW, January, 1929, p. 36.

[2] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, August, 1929*

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							**65.9**	**−1.5**										**76**	**2.80**	**−0.8**										**5.0**		
Eastport	76	67	85	29.84	29.92	−0.04	60.1	−0.6	76	26	68	49	1	53	22	55	52	79	2.13	−0.9	9	5,366	s.	26	s.	24	4	11	16	6.9	0.0	0.0
Greenville, Me	1,070	6	----	28.78	29.94	------	61.2	------	81	10	70	43	8	52	31	----	----	----	3.52	------	12	5,905	nw.	29	------	5	4	13	14	----	0.0	0.0
Portland, Me	103	82	117	29.85	29.97	−.01	64.8	−1.6	81	25	73	52	21	56	26	58	54	73	4.28	+1.1	9	5,326	sw.	24	nw.	4	14	11	6	4.3	0.0	0.0
Concord	289	70	79	29.65	29.95	−.03	64.6	−2.2	88	12	77	41	21	53	38	----	----	----	3.00	−0.5	9	3,231	nw.	21	w.	4	13	12	6	4.5	0.0	0.0
Burlington	403	11	48	29.52	29.95	−.02	63.6	−4.3	85	26	73	45	30	54	31	----	----	----	1.54	−1.8	9	5,246	s.	22	s.	14	7	13	11	6.0	0.0	0.0
Northfield	876	12	60	29.04	29.98	.00	59.9	−3.5	83	26	72	37	21	48	38	56	54	84	1.79	−1.7	10	3,552	s.	25	s.	14	1	16	14	7.1	0.0	0.0
Boston	125	115	188	29.83	29.96	−.03	69.3	−0.6	90	1	78	54	21	60	27	61	57	70	2.22	−1.4	6	5,179	sw.	23	w.	4	12	10	9	5.2	0.0	0.0
Nantucket	12	14	90	29.96	29.97	−.02	67.3	−0.5	81	26	74	57	28	61	21	62	60	83	3.18	−0.2	6	8,843	sw.	34	se.	3	17	9	5	4.3	0.0	0.0
Block Island	26	11	46	29.94	29.97	−.02	67.9	−0.6	80	26	74	56	20	62	17	63	61	82	1.28	−2.4	8	8,593	s.	35	se.	11	16	9	6	4.2	0.0	0.0
Providence	160	215	251	29.80	29.97	−.02	69.0	−2.0	87	1	78	53	21	60	26	62	57	71	2.44	−1.1	10	6,691	nw.	40	nw.	4	16	7	8	4.3	0.0	0.0
Hartford	159	122	----	29.81	29.98	−.01	69.2	+0.3	90	12	79	50	21	59	32	----	----	----	4.82	+0.5	8	------	sw.	----	------	----	10	12	9	5.0	0.0	0.0
New Haven	106	74	153	29.87	29.98	−.01	69.2	−1.1	85	27	78	51	21	61	24	62	58	69	4.17	−0.1	7	5,466	n.	24	nw.	4	17	10	4	3.7	0.0	0.0
Middle Atlantic States							**71.6**	**−1.7**										**70**	**2.44**	**−1.9**										**4.7**		
Albany	97	107	115	29.87	29.97	−.01	68.6	−2.2	88	26	79	48	21	58	31	60	55	66	1.02	−2.7	7	4,306	s.	20	sw.	5	18	9	4	3.5	0.0	0.0
Binghamton	871	10	84	29.08	30.00	+.01	66.0	−2.0	90	26	78	43	8	54	38	----	----	----	1.64	−2.0	7	2,998	nw.	17	nw.	4	13	11	7	4.7	0.0	0.0
New York	314	414	454	29.65	29.98	−.02	71.2	−1.9	88	12	79	56	5	63	21	62	57	67	1.45	−2.9	9	9,251	s.	47	nw.	1	9	14	8	5.0	0.0	0.0
Bellefonte	1,050	5	36	28.92	30.01	------	65.3	------	90	10	81	36	20	50	45	59	54	69	1.22	------	7	------	w.	----	------	----	10	14	7	5.1	0.0	0.0
Harrisburg	374	94	104	29.62	30.01	.00	71.2	−1.4	93	1	81	50	31	61	34	61	56	64	2.49	−1.6	8	3,622	n.	25	nw.	4	11	12	8	4.6	0.0	0.0
Philadelphia	114	123	367	29.88	30.00	.00	73.2	−1.6	92	12	82	59	5	65	22	63	58	63	3.22	−1.4	9	7,925	n.	40	nw.	4	9	13	9	5.0	0.0	0.0
Reading	325	81	98	29.66	30.00	------	71.2	------	95	1	82	53	21	61	29	62	57	64	3.41	−0.8	10	3,565	n.	25	se.	14	14	10	7	4.5	0.0	0.0
Scranton	805	111	119	29.16	30.01	+.01	67.3	−2.5	89	1	79	44	31	56	38	59	54	67	3.29	−0.4	7	4,162	sw.	32	nw.	11	12	13	6	4.4	0.0	0.0
Atlantic City	52	37	172	29.94	29.99	−.01	71.2	−1.3	87	24	78	56	31	65	25	65	62	76	2.42	−2.1	7	9,022	s.	35	s.	3	12	13	6	4.4	0.0	0.0
Cape May	17	13	49	------	------	------	71.4	−2.0	86	12	79	55	31	64	24	66	64	81	1.86	------	6	------	s.	----	------	----	11	13	7	----	0.0	0.0
Sandy Hook	22	10	55	29.95	29.97	------	71.2	------	86	12	78	59	5	64	21	64	61	75	0.88	−4.1	8	8,263	s.	38	nw.	4	11	11	9	4.9	0.0	0.0
Trenton	190	159	183	29.78	29.98	------	70.8	------	93	12	81	55	31	61	27	63	58	68	2.64	−2.1	9	5,858	n.	34	nw.	4	10	11	10	5.1	0.0	0.0
Baltimore	123	100	215	29.87	29.99	−.02	74.4	−1.1	94	1	83	57	31	66	28	65	59	63	4.04	−0.3	9	5,978	s.	40	se.	14	16	8	7	4.3	0.0	0.0
Washington	112	62	85	29.88	30.00	−.01	74.4	−0.6	95	13	84	54	21	65	29	65	60	67	1.30	−2.7	5	3,138	n.	22	nw.	4	13	12	6	4.9	0.0	0.0
Cape Henry	18	8	54	29.97	29.99	------	75.3	------	92	11	82	61	22	69	22	69	67	78	1.92	−2.9	8	6,620	e.	27	ne.	11	9	13	9	5.4	0.0	0.0
Lynchburg	681	153	188	29.29	30.02	.00	73.2	−2.4	93	13	83	53	31	63	31	65	62	74	3.99	+0.2	12	3,392	n.	36	nw.	24	16	10	5	4.0	0.0	0.0
Norfolk	91	170	205	29.91	30.00	.00	76.7	−0.7	91	13	84	64	22	69	20	69	66	76	2.64	−2.6	8	6,187	s.	32	n.	11	12	10	9	5.1	0.0	0.0
Richmond	144	11	52	29.86	30.00	−.01	75.1	−1.4	94	18	85	54	5	65	28	67	63	73	2.41	−2.0	10	4,028	sw.	26	nw.	29	14	13	4	4.5	0.0	0.0
Wytheville	2,304	49	55	27.70	30.02	+.01	68.2	−2.3	87	2	79	44	31	58	33	62	59	81	2.68	−1.5	9	2,799	nw.	18	w.	3	15	8	8	4.7	0.0	0.0
South Atlantic States							**78.1**	**−0.1**										**79**	**4.44**	**−1.2**										**5.3**		
Asheville	2,253	70	84	27.73	30.02	.00	70.8	+0.3	87	10	81	51	31	61	28	64	62	81	0.82	−3.3	7	3,585	nw.	24	n.	4	6	22	3	5.0	0.0	0.0
Charlotte	779	55	62	29.19	30.01	−.01	76.7	−0.4	95	14	86	59	5	67	24	68	65	75	2.78	−2.3	10	2,351	ne.	21	nw.	24	8	17	6	5.2	0.0	0.0
Greensboro	886	5	56	29.09	30.03	------	73.2	------	91	2	84	51	31	63	31	67	66	84	4.32	------	12	3,970	ne.	24	ne.	19	9	15	7	5.1	0.0	0.0
Hatteras	11	5	50	29.97	29.98	−.02	77.4	−0.6	88	2	83	62	31	72	17	72	70	81	6.48	+0.7	15	6,661	ne.	36	n.	19	10	12	9	5.4	0.0	0.0
Raleigh	376	103	110	29.61	30.00	−.01	76.2	−0.8	93	2	85	59	30	67	24	69	66	77	2.43	−3.0	10	3,619	ne.	17	nw.	4	6	16	9	5.8	0.0	0.0
Wilmington	78	81	91	29.92	30.00	.00	77.5	−0.1	94	24	86	61	31	69	24	72	70	83	7.80	+1.4	15	3,495	w.	26	w.	3	9	14	8	5.5	0.0	0.0
Charleston	48	11	92	29.95	30.00	−.01	80.7	−0.3	96	4	87	68	30	74	19	74	72	80	5.22	−1.3	10	5,790	sw.	22	e.	21	5	16	10	5.9	0.0	0.0
Columbia, S. C	351	41	57	29.63	30.01	.00	79.6	0.0	97	2	89	60	31	70	27	70	67	76	6.05	+0.6	10	3,560	ne.	26	nw.	29	14	12	5	4.2	0.0	0.0
Due west	711	10	55	29.28	30.04	------	78.2	------	96	24	89	60	31	68	29	----	----	----	0.66	------	9	4,616	sw.	29	nw.	24	13	15	3	4.0	0.0	0.0
Greenville, S. C	1,039	139	146	28.94	30.01	------	77.2	+1.4	94	2	87	60	5	68	25	68	64	71	1.35	−4.2	9	4,511	ne.	26	n.	29	10	15	6	4.8	0.0	0.0
Augusta	182	62	77	29.80	29.99	−.02	81.3	+0.9	98	24	91	63	31	71	27	72	69	74	0.90	−4.1	5	2,966	ne.	35	w.	11	7	16	8	5.5	0.0	0.0
Savannah	65	150	194	29.94	30.01	.00	80.4	−0.3	96	4	89	68	27	72	23	74	72	84	8.99	+1.7	14	5,735	w.	36	w.	4	5	12	14	6.3	0.0	0.0
Jacksonville	43	209	245	29.96	30.01	.00	80.8	−0.9	93	12	88	68	31	73	23	74	72	82	6.02	+0.2	16	5,960	sw.	36	w.	12	2	18	11	6.4	0.0	0.0
Florida Peninsula							**82.3**	**+0.2**										**77**	**6.33**	**0.0**										**5.2**		
Key West	22	10	64	29.96	29.98	.00	82.6	−0.9	92	14	88	71	17	77	16	76	74	75	6.10	+1.6	13	5,827	e.	31	w.	28	13	11	7	4.8	0.0	0.0
Miami	25	141	168	29.99	30.02	−.01	81.8	+0.4	90	14	87	71	28	76	15	75	73	75	5.51	−0.7	18	5,944	e.	26	sw.	28	7	17	7	5.7	0.0	0.0
Tampa	35	79	87	29.97	30.00	.00	82.6	+1.1	94	8	90	71	26	75	20	75	73	82	7.38	−0.8	20	3,234	ne.	20	e.	22	1	14	16	7.0	0.0	0.0
Titusville	44	5	----	29.95	30.00	------	81.2	------	98	12	90	69	21	72	25	----	----	----	4.15	------	12	------	sw.	----	------	----	18	11	2	3.3	0.0	0.0
East Gulf States							**80.6**	**+0.7**										**75**	**3.98**	**−1.3**										**4.4**		
Atlanta	1,173	190	216	28.80	30.01	.00	78.3	+1.3	94	8	88	61	16	69	25	68	63	66	1.49	−3.0	9	5,546	nw.	24	nw.	24	12	13	6	4.5	0.0	0.0
Macon	370	78	87	29.62	30.01	.00	79.8	−0.1	96	8	90	62	28	70	27	72	69	76	3.08	−1.3	9	3,261	s.	24	nw.	24	6	22	3	4.7	0.0	0.0
Thomasville	273	49	58	29.72	30.01	+.01	80.3	−0.7	94	4	90	65	29	71	24	73	72	85	11.68	+5.9	19	2,357	sw.	17	sw.	16	1	18	12	6.7	0.0	0.0
Apalachicola	36	42	49	29.96	30.00	------	80.9	------	90	13	87	70	31	75	16	76	74	80	6.78	−0.8	14	3,996	sw.	31	ne.	25	9	12	10	5.6	0.0	0.0
Pensacola	56	149	185	29.94	30.00	+.02	81.2	+0.3	93	30	86	68	16	76	17	75	73	82	5.04	−3.0	10	6,213	w.	28	ne.	4	9	15	7	5.2	0.0	0.0
Anniston	741	9	57	29.25	30.03	+.04	78.8	+2.4	95	9	91	54	16	66	36	----	----	----	0.72	−3.3	5	2,199	se.	14	nw.	24	20	10	1	2.7	0.0	0.0
Birmingham	700	11	48	29.27	30.02	+.03	80.6	+1.4	98	8	92	57	16	69	32	69	65	69	2.01	−2.2	8	2,999	n.	19	se.	21	18	11	2	3.2	0.0	0.0
Mobile	57	125	161	29.94	30.00	+.02	81.9	+0.9	93	20	90	64	16	74	26	74	72	80	6.88	0.0	12	4,432	sw.	35	ne.	12	9	13	9	5.5	0.0	0.0
Montgomery	223	100	112	29.76	30.00	+.01	81.6	+0.8	97	3	92	64	16	72	26	71	68	70	0.82	−3.4	9	3,459	sw.	31	n.	12	16	14	1	3.3	0.0	0.0
Corinth	469	6	----	------	------	------	79.4	------	101	3	92	56	16	66	39	----	----	----	3.26	------	6	------	se.	----	------	----	18	12	1	----	0.0	0.0
Meridian	375	87	95	29.61	30.00	+.02	80.4	+0.9	96	2	91	59	16	70	30	71	67	70	0.79	−3.8	5	2,744	sw.	23	e.	12	18	11	2	3.1	0.0	0.0
Vicksburg	247	65	73	29.74	30.02	+.04	80.6	−0.2	97	12	90	63	16	71	25	72	68	71	1.83	−1.6	4	3,287	n.	18	w.	11	18	10	3	2.9	0.0	0.0
New Orleans	53	76	84	29.95	30.00	+.02	83.5	+1.3	94	4	91	70	25	76	21	76	74	79	6.70	+0.9	13	2,923	ne.	22	e.	25	10	15	6	5.1	0.0	0.0
West Gulf States							**83.7**	**+1.8**										**67**	**0.73**	**−2.1**										**2.5**		
Shreveport	249	77	93	29.73	29.99	+.02	84.4	+2.4	102	12	95	64	16	74	26	72	67	62	0.50	−2.2	5	3,519	se.	31	nw.	13	28	3	0	1.5	0.0	0.0
Bentonville	1,303	11	44	28.66	29.98	+.01	79.2	+2.7	101	6	92	49	15	66	36	----	----	----	0.20	------	2	2,445	s.	16	nw.	24	30	1	0	----	0.0	0.0
Fort Smith	457	79	94	29.50	29.97	.00	83.8	+3.3	105	6	95	58	15	72	32	70	64	58	0.12	−3.2	2	4,027	e.	24	e.	7	19	9	3	3.2	0.0	0.0
Little Rock	357	136	153	29.63	30.00	+.02	81.6	+1.8	102	3	93	61	16	71	27	69	64	61	1.95	−1.8	6	4,591	e.	29	nw.	25	19	9	3	3.0	0.0	0.0
Austin	605	136	148	29.33	29.96	------	85.2	+1.4	100	14	96	68	31	74	27	72	66	61	0.01	−2.0	1	4,071	se.	19	se.	31	24	7	0	2.3	0.0	0.0
Brownsville	57	83	100	29.89	29.95	------	83.6	−0.3	95	15	92	73	30	76	19	75	73	79	3.29	+0.7	4	5,904	se.	25	ne.	25	17	11	3	3.6	0.0	0.0
Corpus Christi	20	11	78	29.96	29.97	+.04	83.6	+1.1	98	15	90	75	25	77	22	77	75	81	1.59	−0.7	4	6,587	e.	24	e.	31	21	7	3	2.7	0.0	0.0
Dallas	512	220	227	29.44	29.98	------	86.2	------	102	3	96	68	16	76	26	----	----	----	0.04	−2.7	2	6,183	se.	33	n.	4	31	0	0	0.9	0.0	0.0
Fort Worth	670	106	114	29.25	29.94	.00	86.8	+3.8	105	3	98	68	15	76	29	71	63	52	T.	−2.6	0	5,486	se.	18	ne.	14	25	4	2	2.5	0.0	0.0
Galveston	54	106	114	29.95	30.01	+.05	83.8	+0.8	94	14	88	74	24	79	15	76	74	77	0.94	−3.3	4	5,904	s.	19	s.	13	22	7	2	3.2	0.0	0.0
Groesbeck	461	11	56	29.52	29.99	------	83.4	------	100	12	96	64	31	71	31	----	----	----	0.13	−1.8	2	5,140	se.	31	ne.	13	23	8	0	2.2	0.0	0.0
Houston	138	292	314	29.85	29.99	------	84.0	+0.8	98	14	93	71	16	75	24	----	----	----	1.33	−2.8	9	5,949	s.	36	n.	26	16	15	0	3.4	0.0	0.0
Palestine	510	64	72	29.47	29.99	+.02	83.2	+1.4	99	12	95	64	31	72	30	71	66	65	T.	−2.2	0	3,797	s.	18	ne.	13	24	6	1	2.2	0.0	0.0
Port Arthur	34	58	66	29.95	29.99	------	83.5	------	96	14	91	72	30	76	21	76	73	79	3.65	------	7	4,259	e.	21	e.	13	25	4	2	2.2	0.0	0.0
San Antonio	693	119	132	29.24	29.95	+.02	85.1	+1.6	99	14	96	70	31	74	25	72	66	62	0.01	−2.4	1	3,973	se.	17	se.	18	18	13	0	3.1	0.0	0.0
Taylor	583	55	63	29.41	30.02	+.07	84.0	+2.3	101	13	96	67	15	72	28	----	----	----	0.27	−2.1	2	4,380	s.	28	se.	29	24	7	0	2.1	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, August, 1929*—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer	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.
Ohio Valley and Tennessee							**72.8**	**−2.2**										**68**	**2.04**	**−1.4**										**4.2**		
Chattanooga	762	190	215	29.20	29.99	−0.01	77.8	+0.3	94	2	88	60	15	68	28	67	62	64	0.45	−3.6	1	4,396	ne.	22	nw.	10	15	15	1	3.5	0.0	0.0
Knoxville	995	102	111	28.99	30.02	+.01	75.6	−0.6	94	2	86	57	31	66	27	67	63	72	2.12	−1.8	8	3,563	ne.	22	n.	28	14	12	5	4.3	0.0	0.0
Memphis	399	76	97	29.59	30.01	+.03	78.6	−0.8	95	3	87	60	16	70	21	70	66	69	4.45	+1.1	5	3,687	e.	20	n.	9	20	9	2	2.9	0.0	0.0
Nashville	546	168	191	29.46	30.04	+.04	77.1	−0.7	95	2	87	58	15	67	32	68	63	68	0.51	−3.2	8	4,603	nw.	25	s.	6	18	10	3	3.6	0.0	0.0
Lexington	989	193	230	29.00	30.05	+.04	72.4	−2.1	93	1	82	54	15	62	29	----	----	----	1.49	−2.0	5	7,017	se.	38	n.	23	17	10	4	3.4	0.0	0.0
Louisville	525	188	234	29.47	30.05	+.05	75.0	−2.0	96	22	85	56	16	65	31	65	60	65	1.45	−2.0	8	5,440	n.	35	nw.	23	15	13	3	3.6	0.0	0.0
Evansville	431	76	116	29.59	30.05	+.06	75.5	−1.9	96	1	86	58	16	66	27	66	62	70	3.38	0.0	6	4,235	ne.	32	nw.	10	13	14	4	4.2	0.0	0.0
Indianapolis	822	194	230	29.16	30.04	+.04	72.4	−1.3	92	22	82	51	20	63	28	62	57	63	2.49	−0.8	6	5,624	e.	39	nw.	23	14	12	5	4.1	0.0	0.0
Royal Center	736	11	55	29.26	30.05	------	68.3	------	90	22	80	45	20	57	33	----	----	----	1.62	−0.9	8	4,806	s.	30	w.	13	11	12	8	4.5	0.0	0.0
Terre Haute	575	96	129	29.42	30.03	------	73.3	------	95	22	84	53	20	63	30	64	59	67	0.45	−2.8	6	4,461	n.	23	n.	2	14	11	6	4.4	0.0	0.0
Cincinnati	627	11	51	29.37	30.04	+.03	71.0	−2.6	90	13	82	50	16	60	35	62	58	69	1.80	−1.6	8	3,345	ne.	22	nw.	13	15	9	7	3.9	0.0	0.0
Columbus	822	179	222	29.18	30.05	+.04	69.5	−3.5	88	10	79	52	30	60	28	61	56	67	3.78	+0.5	7	4,899	nw.	30	nw.	13	15	11	5	4.2	0.0	0.0
Dayton	899	137	173	29.10	30.03	------	70.7	−2.7	88	13	81	51	20	60	34	62	57	67	1.21	−2.1	8	4,132	ne.	21	nw.	13	10	16	5	4.9	0.0	0.0
Elkins	1,947	59	67	28.04	30.05	+.03	65.3	−3.8	85	1	77	42	16	54	37	59	57	82	1.81	−2.0	7	2,385	nw.	24	nw.	27	8	11	12	6.0	0.0	0.0
Parkersburg	637	77	82	29.41	30.06	+.05	70.2	−3.7	90	1	81	49	16	60	34	61	57	70	3.87	+0.4	10	2,714	nw.	22	nw.	14	13	9	9	5.0	0.0	0.0
Pittsburgh	842	353	410	29.14	30.03	+.02	68.2	−4.7	87	10	78	51	31	59	30	60	55	66	1.79	−1.4	6	5,055	w.	27	nw.	4	12	8	11	4.9	0.0	0.0
Lower Lake Region							**67.1**	**−2.6**										**68**	**1.96**	**−1.1**										**4.7**		
Buffalo	767	247	280	29.18	30.00	+.01	65.8	−2.8	84	13	73	51	30	59	24	60	57	75	1.22	−1.9	3	8,416	sw.	36	w.	14	16	9	6	4.0	0.0	0.0
Canton	448	10	61	29.48	29.95	------	62.8	−5.0	83	22	73	38	30	52	32	----	----	----	1.81	−1.8	9	4,935	sw.	24	w.	15	14	5	12	5.1	0.0	0.0
Ithaca	836	5	100	29.11	30.00	------	63.6	------	88	10	75	41	31	52	41	58	55	74	5.27	+1.9	7	4,704	nw.	26	nw.	5	13	7	11	5.2	0.0	0.0
Oswego	335	76	91	29.62	29.98	−.01	65.2	−3.2	87	26	73	50	31	57	32	59	54	68	1.39	−1.2	8	5,163	s.	25	w.	4	14	8	9	4.5	0.0	0.0
Rochester	523	86	102	29.45	30.01	+.02	66.4	−2.8	90	22	76	48	20	57	33	58	52	65	1.31	−1.6	11	4,569	sw.	27	w.	5	16	6	9	4.5	0.0	0.0
Syracuse	596	65	79	29.36	30.00	+.01	66.2	−2.4	88	22	76	49	20	57	32	----	----	----	4.26	+1.4	8	4,101	s.	22	w.	4	12	9	10	5.0	0.0	0.0
Erie	714	130	166	29.26	30.02	+.01	67.4	−2.2	86	10	74	51	20	60	25	60	55	65	0.29	−3.0	3	7,334	nw.	26	nw.	3	16	10	5	3.7	0.0	0.0
Cleveland	762	267	337	29.22	30.03	+.02	68.0	−2.0	86	10	74	53	15	62	23	60	54	63	1.98	−0.8	7	7,890	n.	47	nw.	3	7	15	9	5.5	0.0	0.0
Sandusky	629	5	67	29.37	30.04	+.03	69.2	−2.6	90	11	78	51	16	60	31	----	----	----	1.58	−1.6	5	4,610	sw.	22	nw.	3	7	17	7	5.3	0.0	0.0
Toledo	628	208	243	29.37	30.05	+.05	69.0	−2.3	90	11	78	52	4	60	26	60	55	66	1.30	−1.6	6	6,847	sw.	29	w.	13	16	9	6	3.9	0.0	0.0
Fort Wayne	856	113	124	29.13	30.04	------	69.3	−1.8	88	22	79	49	16	60	27	61	57	68	2.62	−0.5	5	4,403	sw.	22	nw.	13	11	13	7	5.2	0.0	0.0
Detroit	730	218	258	29.26	30.04	+.03	69.0	−1.3	92	11	78	52	4	60	26	61	57	70	0.52	−2.3	7	5,414	sw.	21	nw.	3	14	11	6	4.8	0.0	0.0
Upper Lake Region							**65.3**	**−1.0**										**72**	**1.41**	**−1.4**										**4.8**		
Alpena	609	13	92	29.36	30.02	+.02	62.4	−1.7	92	31	73	44	16	52	33	57	53	75	2.25	−0.6	8	6,598	nw.	33	nw.	3	14	12	5	4.1	0.0	0.0
Escanaba	612	54	60	29.36	30.02	+.03	62.2	−2.1	92	31	71	44	28	53	31	58	54	78	1.87	−1.3	8	5,883	s.	32	nw.	14	14	8	9	4.4	0.0	0.0
Grand Haven	632	54	89	29.36	30.03	+.04	64.8	−2.3	80	9	74	45	16	56	27	59	55	70	0.85	−2.0	6	6,145	nw.	29	sw.	22	12	14	5	4.5	0.0	0.0
Grand Rapids	707	76	87	29.28	30.04	+.04	68.2	−1.5	88	10	79	47	16	57	34	59	53	62	0.70	−1.9	4	2,991	w.	18	nw.	14	6	13	12	6.0	0.0	0.0
Houghton	668	64	99	29.28	30.00	+.03	63.4	−0.3	88	24	73	46	19	54	29	----	----	----	1.14	−1.6	8	5,726	w.	31	w.	4	13	8	10	5.1	0.0	0.0
Lansing	878	6	49	29.10	30.03	------	65.9	−2.6	89	10	79	42	16	53	36	59	56	75	0.29	−2.5	6	2,773	w.	20	nw.	14	12	16	3	4.4	0.0	0.0
Ludington	637	60	66	29.34	30.03	------	63.4	------	80	22	70	45	28	56	21	58	55	77	0.97	−1.7	6	5,600	s.	24	s.	13	16	11	4	3.6	0.0	0.0
Marquette	734	77	111	29.21	30.01	+.03	63.4	−0.4	93	25	72	47	28	55	26	57	53	71	1.72	−1.0	8	6,612	n.	29	n.	14	8	12	11	5.7	0.0	0.0
Port Huron	638	70	120	29.34	30.03	+.03	65.9	−1.9	91	26	75	49	4	57	28	59	55	72	1.45	−1.2	5	6,438	nw.	27	w.	14	14	14	3	3.9	0.0	0.0
Sault Sainte Marie	614	11	52	29.32	30.01	+.02	61.6	−0.5	86	25	71	45	16	52	30	55	52	77	2.04	−0.6	6	5,043	nw.	35	nw.	4	14	9	8	4.6	0.0	0.0
Chicago	673	7	131	29.32	30.05	+.05	70.6	−1.0	93	22	78	54	15	63	24	62	58	71	3.49	+0.3	7	5,896	ne.	24	sw.	23	12	12	7	4.8	0.0	0.0
Green Bay	617	109	141	29.36	30.02	+.03	66.1	−1.6	89	31	76	46	15	56	27	60	56	72	1.70	−1.5	10	5,583	s.	27	nw.	13	8	12	11	5.8	0.0	0.0
Milwaukee	681	125	221	29.31	30.04	+.04	69.6	+0.4	90	25	78	50	15	62	25	61	56	68	0.35	−2.3	6	7,378	w.	29	sw.	16	13	11	7	4.6	0.0	0.0
Duluth	1,133	5	47	28.81	30.02	+.05	65.3	+2.7	90	31	76	41	15	54	30	57	53	73	0.93	−2.2	8	6,624	nw.	33	nw.	13	16	10	5	4.2	0.0	0.0
North Dakota							**69.3**	**+3.2**										**55**	**1.07**	**−1.3**										**3.6**		
Moorhead	940	50	58	28.98	29.98	+.02	69.8	+3.7	95	21	83	42	14	56	36	58	50	58	0.75	−2.1	6	4,681	s.	22	n.	13	13	11	7	4.5	0.0	0.0
Bismarck	1,674	8	57	28.21	29.96	+.02	70.6	+3.3	99	23	86	38	14	55	45	57	49	54	0.75	−1.1	4	5,012	e.	31	nw.	19	15	15	1	3.8	0.0	0.0
Devils Lake	1,478	11	44	28.43	29.98	+.04	67.1	+2.3	99	23	82	37	14	52	43	56	48	60	1.55	−0.9	7	5,241	s.	27	nw.	12	17	10	4	3.6	0.0	0.0
Ellendale	1,457	10	56	28.45	30.00	------	68.0	------	97	23	84	38	14	52	49	----	----	----	1.70	−1.4	10	7,166	se.	40	se.	19	14	13	4	3.9	0.0	0.0
Grand Forks	833	12	67	------	------	------	67.7	------	101	23	82	39	14	53	41	59	----	----	1.16	------	7	------	nw.	----	s.	24	26	4	1	----	0.0	0.0
Williston	1,878	41	48	28.00	29.94	+.01	69.8	+3.7	100	23	86	44	25	54	48	56	45	48	0.58	−0.9	4	3,829	se.	25	n.	24	23	7	1	2.4	0.0	0.0
Upper Mississippi Valley							**72.0**	**−0.7**										**71**	**2.20**	**−1.1**										**4.5**		
Minneapolis	918	102	208	29.02	29.99	------	71.0	+1.1	92	24	81	51	27	61	29	----	----	----	2.15	−1.0	7	6,374	s.	39	n.	11	11	13	7	4.5	0.0	0.0
St. Paul	837	236	261	29.11	30.01	+.04	70.1	+0.7	90	24	80	49	15	60	27	----	----	----	1.37	−1.6	7	6,309	se.	33	w.	25	14	13	4	4.2	0.0	0.0
La Crosse	714	11	48	29.26	30.02	+.04	69.4	−0.6	90	25	81	46	15	58	30	62	58	76	1.79	−1.9	8	2,189	s.	22	nw.	13	13	14	4	4.3	0.0	0.0
Madison	974	70	78	29.02	30.04	+.05	68.5	−1.3	91	22	77	49	15	60	26	61	56	70	0.87	−2.3	6	4,223	s.	22	nw.	13	13	13	5	4.4	0.0	0.0
Wausau	1,247	4	64	28.72	30.04	------	66.6	------	90	31	78	42	15	56	33	----	----	----	3.66	+0.1	9	3,068	s.	18	nw.	13	12	3	16	6.1	0.0	0.0
Charles City	1,015	10	51	28.97	30.03	+.06	69.4	+0.3	90	22	81	44	15	58	31	62	57	69	1.24	−2.2	4	3,360	se.	19	nw.	10	18	11	2	3.0	0.0	0.0
Davenport	606	71	79	29.38	30.03	+.05	72.4	−0.7	98	22	82	51	15	62	28	64	60	69	2.69	−0.8	4	4,428	sw.	28	w.	22	9	16	6	4.7	0.0	0.0
Des Moines	861	84	97	29.12	30.01	+.04	73.4	+0.3	95	21	84	49	15	63	32	64	60	70	2.82	−0.7	7	3,851	sw.	18	se.	2	12	12	7	4.4	0.0	0.0
Dubuque	700	81	96	29.29	30.03	+.05	70.4	−1.3	92	22	80	48	15	60	28	62	58	69	1.83	−1.4	3	3,170	s.	21	n.	13	12	11	8	4.9	0.0	0.0
Keokuk	614	64	78	29.38	30.04	+.06	73.2	−1.8	97	22	83	52	15	64	27	65	61	69	1.41	−1.8	5	3,602	s.	24	s.	2	10	12	9	5.0	0.0	0.0
Cairo	358	87	93	29.65	30.02	+.03	75.8	−2.0	96	2	85	57	15	67	25	68	65	75	3.29	+0.3	9	4,070	ne.	34	n.	13	13	9	9	4.6	0.0	0.0
Peoria	609	11	45	29.39	30.06	+.07	71.6	−0.9	95	22	82	49	15	61	30	64	60	75	3.02	−0.1	7	2,874	ne.	13	nw.	3	12	15	4	4.5	0.0	0.0
Springfield, Ill	636	154	191	29.37	30.03	+.04	72.6	−1.9	95	22	82	51	15	63	26	64	60	70	2.08	−1.1	6	6,570	s.	24	s.	21	10	14	7	4.6	0.0	0.0
Hannibal	534	74	109	29.46	30.02	+.04	74.1	−0.9	98	2	84	49	15	64	31	----	----	----	1.34	−2.0	10	4,193	sw.	21	e.	6	11	13	7	4.4	0.0	0.0
St. Louis	568	265	303	29.42	30.02	+.03	76.4	−0.9	99	2	85	57	15	67	24	66	62	66	3.40	+0.4	7	6,335	s.	33	sw.	13	18	9	4	3.4	0.0	0.0
Missouri Valley							**76.2**	**+2.3**										**64**	**1.85**	**−1.4**										**3.7**		
Columbia, Mo	784	6	84	29.20	30.01	+.04	76.6	+1.0	100	2	88	50	15	66	32	----	----	----	0.40	−3.2	6	4,109	ne.	25	sw.	13	14	12	5	4.2	0.0	0.0
Kansas City	963	161	181	28.99	29.99	+.02	78.2	+1.6	100	1	88	57	15	68	31	67	61	61	4.13	0.0	9	5,614	s.	33	sw.	24	14	13	4	3.9	0.0	0.0
St. Joseph	967	11	49	28.98	29.99	------	77.0	------	101	2	88	50	15	66	33	67	63	69	2.09	−1.4	10	4,629	se.	28	nw.	22	20	8	3	3.0	0.0	0.0
Springfield, Mo	1,324	98	104	28.65	30.03	+.06	77.0	+1.3	97	1	87	56	15	67	30	66	62	66	2.97	−1.1	6	5,658	s.	33	se.	8	25	6	0	1.9	0.0	0.0
Iola	984	11	50	28.97	29.99	+.03	79.2	+2.1	102	1	92	49	15	66	37	----	----	----	0.81	−2.7	7	3,166	s.	18	n.	6	14	13	4	4.0	0.0	0.0
Topeka	987	92	107	------	------	------	78.4	+2.2	103	2	90	53	15	67	41	----	----	----	2.64	−1.4	7	5,297	s.	24	ne.	3	14	13	4	3.9	0.0	0.0
Lincoln	1,189	11	81	28.74	29.97	+.02	76.7	+2.3	104	21	88	48	15	65	41	65	60	62	0.92	−2.6	6	5,462	s.	25	nw.	13	12	11	8	4.4	0.0	0.0
Omaha	1,105	115	122	28.84	29.99	+.03	75.8	+1.4	98	21	86	53	15	66	30	66	61	65	1.56	−1.5	7	4,237	s.	26	nw.	13	16	13	2	3.2	0.0	0.0
Valentine	2,598	47	54	27.33	29.99	+.05	74.6	+2.9	102	15	89	42	14	60	45	62	55	59	2.60	+0.4	10	4,896	s.	28	s.	20	19	7	5	3.7	0.0	0.0
Sioux City	1,135	94	164	28.81	29.99	+.04	73.8	+1.8	94	21	85	48	15	63	33	64	59	65	1.55	−1.6	10	6,504	se.	38	n.	11	15	13	3	4.0	0.0	0.0
Huron	1,306	59	74	28.62	29.99	+.04	73.0	+3.6	99	24	87	42	14	59	43	61	55	61	1.99	−0.5	10	5,613	se.	35	n.	21	17	12	2	3.6	0.0	0.0
Pierre	1,572	70	75	------	------	------	77.6	+4.8	108	15	92	44	14	63	50	----	----	----	0.68	−1.4	4	------	------	----	------	----	20	8	3	----	0.0	0.0
Yankton	1,233	49	57	28.68	29.97	+.02	74.1	+2.1	97	24	86	47	14	62	39	----	----	----	1.68	−1.3	8	3,865	se.	22	n.	24	12	15	4	4.3	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, August, 1929*—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer	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							**71.4**	**+5.0**										**50**	**1.23**	**0.0**										**3.5**		
Billings	3,140	5					72.2		103	14	92	45	14	52	58				0.23		5		nw.				21	6	4		0.0	0.0
Havre	2,505	11	44	27.36	29.94	+0.03	71.6	+6.2	99	14	89	41	20	54	49	55	42	42	0.26	−1.0	5	3,592	e.	28	w.	10	18	13	0	2.8	0.0	0.0
Helena	4,110	87	112	25.85	29.94	.00	72.2	+7.2	99	14	87	49	20	57	43	54	41	40	0.11	−0.7	2	4,906	sw.	29	sw.	18	18	11	2	3.0	0.0	0.0
Kalispell	2,973	48	56	26.93	29.91	−.02	67.9	+5.1	94	30	84	39	20	52	44	52	38	40	0.14	−0.7	2	3,994	nw.	25	w.	19	23	8	0	2.3	0.0	0.0
Miles City	2,371	48	55	27.47	29.96	+.03	75.8	+4.3	100	14	91	52	3	61	42	58	46	42	0.28	−0.8	6	3,278	s.	24	nw.	12	18	11	2	3.0	0.0	0.0
Rapid City	3,259	50	58	26.67	30.00	+.07	73.1	+3.6	103	15	87	49	14	59	48	59	50	50	1.29	−0.4	7	4,489	w.	25	n.	6	17	12	2	3.5	0.0	0.0
Cheyenne	6,088	84	101	24.17	30.00	+.08	68.4	+2.8	90	15	80	49	14	56	35	55	48	56	1.80	+0.2	10	6,198	s.	34	sw.	19	10	13	8	5.1	0.0	0.0
Lander	5,372	60	68	24.76	29.98	+.06	71.5	+6.0	95	14	87	48	8	56	43	55	46	49	0.28	−0.2	4	3,313	sw.	29	nw.	19	10	17	4	4.5	0.0	0.0
Sheridan	3,790	10	47	26.15	29.98		70.6		99	14	89	43	14	52	56	57	49	58	0.63	−0.3	3	2,441	s.	17	se.	25	18	13	0	3.2	0.0	0.0
Yellowstone Park	6,241	11	48	24.04	30.02	+.09	64.8	+3.9	87	14	80	42	10	50	43	50	40	51	1.37	+0.3	8	4,658	sw.	36	sw.	26	13	12	6	4.0	0.0	0.0
North Platte	2,821	11	51	27.11	29.97	+.03	77.0	+6.2	101	16	91	50	14	64	41	64	58	62	6.17	+3.8	8	3,701	se.	20	n.	16	18	9	4	3.6	0.0	0.0
Middle Slope							**78.3**	**+2.4**										**57**	**1.82**	**−0.9**										**3.6**		
Denver	5,292	106	113	24.87	30.02	+.10	73.0	+2.3	93	15	84	55	6	62	31	58	51	53	2.72	+1.3	4	4,321	s.	24	ne.	28	12	16	3	4.2	0.0	0.0
Pueblo	4,685	80	86	25.37	29.96	+.05	74.4	+1.7	96	15	87	56	12	62	37	60	53	56	4.44	+2.6	11	3,852	nw.	26	sw.	21	13	14	4	4.3	0.0	0.0
Concordia	1,392	50	58	28.55	29.99	+.04	78.2	+1.7	103	21	90	53	15	67	34	66	61	62	1.33	−1.6	8	4,280	s.	24	ne.	6	10	12	9	4.8	0.0	0.0
Dodge City	2,509	11	51	27.46	30.00	+.07	79.2	+1.5	102	5	92	57	14	66	38	65	58	60	1.58	−1.1	9	5,264	se.	30	ne.	31	20	5	6	3.1	0.0	0.0
Wichita	1,358	139	158	28.57	29.96	+.01	80.7	+2.4	105	5	92	60	15	69	38	67	60	58	1.30	−1.8	4	7,053	s.	27	s.	21	16	11	4	3.5	0.0	0.0
Broken Arrow	765	11	56	29.18	30.00		81.2		102	6	94	56	15	69	34				0.43	−3.4	3	6,872	s.	23	n.	9	19	11	1	3.1	0.0	0.0
Oklahoma City	1,214	10	47	28.72	29.96	+.02	84.4	+4.7	106	6	97	62	29	72	31	68	61	54	0.93	−2.0	2	5,227	s.	19	n.	11	25	5	1	2.0	0.0	0.0
Southern Slope							**82.3**	**+2.7**										**52**	**1.36**	**−0.9**										**2.6**		
Abilene	1,738	10	52	28.19	29.94	+.02	86.4	+4.4	103	5	99	67	15	74	32	67	56	43	0.05	−2.2	1	5,129	s.	19	e.	4	22	8	1	2.6	0.0	0.0
Amarillo	3,676	10	49	26.36	29.99	+.07	79.2	+3.5	98	5	92	63	9	67	33	64	56	55	4.54	+1.5	12	4,565	sw.	24	ne.	3	20	8	3	3.0	0.0	0.0
Del Rio	944	64	71	28.95	29.91	+.01	86.2	+2.0	100	13	96	71	30	76	26	71	64	53	T.	−1.7	0	5,633	se.	25	e.	14	26	5	0	1.7	0.0	0.0
Roswell	3,566	75	85	26.43	29.96	+.08	77.4	+0.8	95	6	90	59	17	64	36	63	55	55	0.85	−1.3	7	3,650	se.	29	sw.	22	20	8	3	3.1	0.0	0.0
Southern Plateau							**78.6**	**+1.2**										**58**	**1.56**	**+0.5**										**4.0**		
El Paso	3,778	152	175	26.23	29.92	+.08	79.0	−0.2	95	2	90	62	12	68	26	63	55	51	1.18	−0.5	15	5,042	e.	31	se.	14	14	16	1	3.6	0.0	0.0
Santa Fe	7,013	38	53	23.43	29.98	+.09	66.8	−0.6	82	17	78	53	6	56	28	56	51	68	3.84	+1.6	15	3,072	e.	19	ne.	26	6	18	7	5.8	0.0	0.0
Flagstaff	6,907	10	59	23.51	29.94	+.10	63.8	+1.0	82	29	77	46	19	51	34	54		73	3.03		17	4,254	nw.	32	nw.	8	1	21	9		0.0	0.0
Phoenix	1,108	10	107	28.70	29.81	+.02	89.6	+1.1	108	15	102	73	4	77	32	71	62	47	2.09	+1.1	11	3,465	w.	33	e.	22	17	11	3	3.7	0.0	0.0
Yuma	141	9	54	29.66	29.80	+.04	91.9	+1.5	113	30	105	73	17	79	32	75	68	51	0.69	+0.2	7	2,785	sw.	28	nw.	30	16	15	0	2.8	0.0	0.0
Independence	3,957	6	27	26.00	29.94	+.13	80.2	+4.1	102	12	96	56	26	64	40	57			T.	−0.1	0		s.				18	10	3		0.0	0.0
Middle Plateau							**74.2**	**+3.1**										**41**	**0.81**	**+0.1**										**3.2**		
Reno	4,532	74	81	25.51	29.91	+.07	73.5	+6.5	102	13	91	48	5	56	42	53	37	33	0.53	+0.3	2	4,646	w.	24	w.	15	24	7	0	1.8	0.0	0.0
Tonopah	6,090	12	20				73.6		92	13	84	56	5	63	25	55	41	36	1.70		4		se.								0.0	0.0
Winnemucca	4,344	18	56	25.65	29.95	+.07	73.2	+3.9	102	13	93	43	26	54	50	52	36	31	0.06	−0.1	1	3,710	sw.	29	nw.	16	20	11	0	2.6	0.0	0.0
Modena	5,473	10	43	24.71	29.94	+.08	70.7	+1.5	93	13	85	52	6	56	40	57	48	56	2.06	+0.8	15	5,324	w.	34	nw.	15	11	16	4	4.6	0.0	0.0
Salt Lake City	4,360	163	203	25.67	29.95	+.03	77.0	+2.5	98	14	88	61	25	66	33	61	52	46	0.41	−0.4	8	4,531	s.	35	ne.	24	20	9	2	3.2	0.0	0.0
Grand Junction	4,602	60	68	25.46	29.98	+.08	76.4	+1.0	95	13	89	59	10	64	32	59	49	45	0.99	−0.2	6	3,651	se.	25	s.	28	14	13	4	3.7	0.0	0.0
Northern Plateau							**74.8**	**+4.9**										**36**	**0.29**	**−0.2**										**2.5**		
Baker	3,471	48	53	26.48	29.99	+.04	69.4	+4.8	97	11	88	43	20	51	45	53	40	39	0.25	−0.2	2	3,686	se.	18	nw.	23	21	6	4	2.3	0.0	0.0
Boise	2,739	78	86	27.14	29.92	−.01	77.2	+5.4	103	14	93	52	24	61	42	57	42	34	0.11	−0.1	2	2,870	se.	20	ne.	25	19	11	1	2.5	0.0	0.0
Lewiston	757	40	48	29.14	29.93	−.02	77.5	+4.7	104	30	95	50	20	60	46				0.20	−0.4	2	2,265	e.	25	nw.	23	20	10	1	2.4	0.0	0.0
Pocatello	4,477	60	68	25.54	29.94	+.02	74.2	+4.6	98	14	89	49	11	60	43	56	43	41	1.11	+0.4	7	5,193	se.	45	sw.	14	12	15	4	4.2	0.0	0.0
Spokane	1,929	101	110	27.94	29.99	+.04	73.0	+4.9	99	28	89	44	20	57	44	55	40	35	0.06	−0.6	2	3,569	s.	23	sw.	23	24	6	1	1.8	0.0	0.0
Walla Walla	991	57	65	28.88	29.93	−.03	77.6	+4.9	101	2	92	51	24	64	36	57	40	31	0.03	−0.5	1	2,872	s.	16	w.	23	26	5	0	1.6	0.0	0.0
North Pacific Coast Region							**63.8**	**+1.5**										**66**	**0.48**	**−0.3**										**3.6**		
North Head	211	11	56	29.87	30.09	+0.6	58.8	+1.2	71	27	62	50	17	55	12	57	56	91	0.80	−0.2	6	8,635	n.	31	s.	31	13	9	9	4.8	0.0	0.0
Port Angeles	29	8	53	30.05	30.08		59.0		83	10	68	45	24	50	33				0.27	−0.4	5	4,303	sw.	22	w.	14	15	9	7	4.0	0.0	0.0
Seattle	125	215	250	29.91	30.04	+.04	64.8	+1.7	84	27	74	49	24	55	29	57	51	66	1.13	+0.4	5	4,278	nw.	20	sw.	21	16	10	5	3.6	0.0	0.0
Tacoma	194	172	201	29.85	30.05	+.03	64.9	+2.3	84	28	75	46	24	55	27				0.37	−0.4	4	4,396	n.	20	n.	10	11	17	3	4.6	0.0	0.0
Tatoosh Island	86	9	53	29.90	30.06	+.06	56.8	+1.5	69	27	61	48	10	52	19	56	55	95	1.02	−1.0	7	5,814	s.	27	s.	2	4	11	16	7.0	0.0	0.0
Yakima	1,076	58	67	28.81	29.94		74.6		100	1	90	45	24	59	38	56	42	38	T.	−0.2	0	3,722	nw.	20	nw.	18	26	4	1	1.5	0.0	0.0
Medford	1,425	4	80	28.47	29.94		70.6		102	10	91	45	27	50	52	57	49	54	0.00		0		nw.	19	nw.	2	28	3	0	0.8	0.0	0.0
Portland, Oreg.	153	68	106	29.88	30.03	+.02	69.1	+2.4	95	10	81	50	24	57	31	59	53	61	0.23	−0.4	2	3,388	nw.	14	s.	23	16	9	6	3.9	0.0	0.0
Roseburg	510	75	99	29.47	30.02	+.02	68.1	+0.1	98	10	84	46	20	52	41	57	49	58	0.01	−0.3	1	2,743	n.	18	nw.	14	24	5	2	1.8	0.0	0.0
Middle Pacific Coast Region							**68.4**	**+1.5**										**64**	**T.**	**0.0**										**2.5**		
Eureka	62	73	89	30.00	30.07	+.07	57.8	+1.8	70	27	63	50	25	53	20	55	53	86	0.01	−0.2	1	3,356	nw.	16	nw.	14	7	16	8	5.4	0.0	0.0
Red Bluff	330	54	58	29.53	29.87	+.01	80.6	+0.9	112	10	99	53	26	62	43	59	42	32	0.00	0.0	0	3,071	s.	15	nw.	9	29	2	0	0.5	0.0	0.0
Sacramento	69	106	117	29.81	29.88	+.03	75.1	+2.2	106	13	92	50	26	58	44	60	50	53	0.00	0.0	0	5,497	s.	17	s.	11	31	0	0	0.5	0.0	0.0
San Francisco	155	208	243	29.79	29.96	+.04	61.1	+2.0	77	19	67	52	7	55	22	56	54	84	0.00	0.0	0	5,872	w.	32	w.	22	13	18	0	4.1	0.0	0.0
San Jose	141	12	110	29.82	29.97		67.2	+0.5	94	13	80	47	26	54	41				0.00	0.0	0	3,809	nw.	17	nw.	23	27	4	0	1.9	0.0	0.0
South Pacific Coast Region							**76.6**	**+3.1**										**58**	**T.**	**0.0**										**2.1**		
Fresno	327	89	98	29.53	29.87	+.05	82.0	+1.3	105	13	99	56	26	65	38	61	45	32	T.	0.0	0	4,680	nw.	18	nw.	22	29	2	0	0.6	0.0	0.0
Los Angeles	338	159	191	29.55	29.91	+.03	75.8	+4.7	96	31	86	59	1	66	23	64	58	62	0.00	0.0	0	3,039	sw.	13	w.	15	24	7	0	2.1	0.0	0.0
San Diego	87	62	70	29.80	29.90	+.01	72.0	+3.3	83	31	77	62	11	67	16	66	64	80	0.00	0.0	0	3,992	nw.	18	w.	29	14	15	2	3.6	0.0	0.0
West Indies																																
San Juan, P. R.	82	9	54	29.89	29.98		79.8	−0.7	88	12	84	72	20	75	14				7.53	+0.1	26	8,741	e.	30	e.	19	1	27	3	5.5	0.0	0.0
Panama Canal																																
Balboa Heights	118	7	97	[1] 29.74	[1] 29.83	.00	79.6	−1.6	91	20	86	68	12	73	19			[2] 88	11.96	+3.8	22	4,359	nw.	27	ne.	23	0	3	28	8.6	0.0	0.0
Cristobal	38	7	97	[1] 29.81	[1] 29.84	−.01	81.0	+0.8	89	28	86	72	12	76	15	76	75	[2] 84	23.78	+8.4	28	5,485	w.	25	s.	23	0	7	24	8.4	0.0	0.0
Alaska																																
Juneau	80	11	50	[1] 29.84	[1] 29.93		56.1		85	3	63	43	31	49	37	52	49	82	5.08		17	3,958	se.	22	nw.	6	6	4	21	7.2	0.0	0.0
Hawaiian Islands																																
Honolulu	38	86	100	[1] 29.95	[1] 29.99		79.0		88	28	84	71	30	74	13	71	67	70	1.98	+0.7	19	5,629	e.	22	e.	3	9	18	4	4.7	0.0	0.0

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

[2] Observations taken hourly.

TABLE 2.—*Data furnished by the Canadian Meteorological Service, August, 1929*

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*	*Inch*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Inches*	*Inches*	*Inches*
Cape Race, N. F	99				58.8		66.1	51.5	71	47	3.62		0.0
Sydney, C. B. I	48	29.90	29.95	0.00	64.8	+1.5	73.8	55.9	81	49	3.14	−0.48	0.0
Halifax, N. S	88	29.86	29.96	.00	62.6	−1.0	71.9	53.3	82	46	3.99	−0.36	0.0
Yarmouth, N. S	65	29.83	29.90	−.07	60.6	+0.4	68.1	53.2	80	47	4.27	+0.65	0.0
Charlottetown, P. E. I	38	29.83	29.87	−.07	63.8	−0.5	71.9	55.8	81	40	1.82	−1.92	0.0
Chatham, N. B	28	29.77	29.80	−.13	63.2	0.0	74.0	52.4	84	40	3.33	−0.71	0.0
Father Point, Que	20												
Quebec, Que	296	29.60	29.92	−.01	61.8	−1.3	69.7	53.9	80	44	4.90	+1.07	0.0
Doucet, Que	1,236				55.2		66.8	43.7	80	28	4.23		0.0
Montreal, Que	187	29.72	29.92	−.03	64.7	−1.7	73.1	56.4	84	49	3.38	−0.19	0.0
Ottawa, Ont	236	29.69	29.95	−.01	64.5	−0.3	75.2	53.8	88	43	3.00	−0.03	0.0
Kingston, Ont	285	29.67	29.98	.00	64.8	−2.2	72.2	57.4	80	49	2.85	+0.47	0.0
Toronto, Ont	379	29.59	29.98	−.01	65.4	−0.6	75.5	55.3	88	49	1.94	−0.82	0.0
Cochrane, Ont	930				57.8		67.9	47.7	87	40	2.59		0.0
White River, Ont	1,244	28.67	29.97	+.01	55.2	−1.2	69.6	40.8	84	30	2.31	−0.99	0.0
London, Ont	808				65.6		78.8	52.4	94	41	1.69		0.0
Southampton, Ont	656	29.30	30.01	+.02	61.3	−2.5	70.7	51.8	84	39	0.99	−1.26	0.0
Parry Sound, Ont	688	29.31	29.99	+.01	62.7	−0.8	72.1	53.3	83	45	1.72	−1.00	0.0
Port Arthur, Ont	644	29.30	30.01	+.05	60.7	+1.2	71.0	50.4	88	41	1.49	−1.26	0.0
Winnipeg, Man	760												
Minnedosa, Man	1,690	29.18	29.96	+.02	63.7	+4.3	79.4	48.0	96	34	0.27	−1.83	0.0
Le Pas, Man	860				62.5		74.8	50.2	88	36	1.69		0.0
Qu'Appelle, Sask	2,115												
Moose Jaw, Sask	1,759				68.7		85.8	51.6	102	42	0.44		0.0
Swift Current, Sask	2,392												
Medicine Hat, Alb	2,144												
Calgary, Alb	3,428												
Banff, Alb	4,521												
Prince Albert, Sask	1,450	28.41	29.96	+.04	63.3	+4.4	76.7	50.0	90	41	1.54	−0.61	0.0
Battleford, Sask	1,592												
Edmonton, Alb	2,150												
Kamloops, B. C	1,262												
Victoria, B. C	230	29.78	30.03	+.02	60.1	+1.4	68.1	52.2	84	48	0.26	−0.34	0.0
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				55.2		63.6	46.9	77	39	2.50		0.0
Sydney, C. B. I	48	29.89	29.94	+.01	65.3	+3.0	76.4	54.2	86	45	3.02	−0.63	0.0
Halifax, N. S	88	29.89	29.99	+.03	65.0	+1.6	75.7	54.3	85	45	1.94	−2.11	0.0
Yarmouth, N. S	65	29.87	29.94	−.01	60.7	+1.2	68.4	53.0	74	44	1.59	−1.88	0.0
Charlottetown, P. E. I	38	29.82	29.86	−.04	66.0	+1.9	74.0	58.0	82	49	2.35	−1.14	0.0
Chatham, N. B	28	29.79	29.82	−.06	65.2	+0.2	77.4	53.0	90	38	2.32	−1.87	0.0
Montreal, Que	187	29.73	29.93	.00	69.8	+1.3	79.2	60.5	92	47	2.25	−2.04	0.0
Winnipeg, Man	760	29.09	29.90	−.03	68.1	+2.1	80.1	56.1	96	42	1.10	−1.98	0.0
Medicine Hat, Alb	2,144	27.60	29.80	−.10	72.9	+5.1	89.3	56.5	102	50	0.64	−1.45	0.0
Calgary, Alb	3,428	26.40	29.89	−.01	63.4	+2.8	80.5	46.4	93	35	1.30	−1.38	0.0
Banff, Alb	4,521	25.42	29.91	+.01	58.5	+1.9	75.1	41.9	88	30	0.56	−2.68	0.0
Edmonton, Alb	2,150	27.59	29.83	−.07	61.8	+1.2	75.7	47.9	88	38	3.79	+0.76	0.0
Kamloops, B. C	1,262	28.67	29.93	−.01	67.8	−0.7	80.8	54.9	96	46	0.63	−0.98	0.0
Estevan Point, B. C	20				55.4		62.0	48.9	68	40	7.29		0.0
Prince Rupert, B. C	170				55.0		60.9	49.1	69	46	6.19		0.0
Hamilton, Ber	151	30.10	30.26	+.12	80.0	+1.3	86.4	73.6	90	69	3.62	−0.82	0.0