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, September, 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	74.7	−0.7	2 stations	98	[2] 10	Riverton	43	19	5.83	+2.56	Dothan	13.86	Dadeville	2.93
Arizona	74.0	+0.3	Mohawk	114	1	Alpine	25	8	1.88	+0.64	Benson	6.18	Mohawk	0.03
Arkansas	73.4	−0.8	2 stations	102	[2] 1	2 stations	41	19	2.46	−0.97	Waters	5.86	Pine Bluff	0.31
California	66.5	−0.8	Brawley	117	13	Portola	12	25	0.19	−0.35	Cuyamaca	3.21	114 stations	0.00
Colorado	55.5	−2.1	Sedgwick	100	2	2 stations	15	9	2.60	+1.20	Terminal Dam	6.38	Nast	0.33
Florida	79.2	−0.2	3 stations	97	[2] 8	Mount Pleasant	49	21	10.98	+4.21	Fellsmere	25.15	New Smyrna	3.94
Georgia	74.3	−1.0	do	97	[2] 6	Clayton	44	19	9.62	+6.15	Gleunville	24.51	Montezuma	2.68
Idaho	54.2	−2.9	2 stations	99	[2] 16	New Meadows	13	22	0.54	−0.44	Grace	2.67	3 stations	0.00
Illinois	66.1	−1.3	do	96	[2] 2	Freeport	30	18	2.94	−0.68	Golconda	8.17	Danville	0.66
Indiana	66.1	−0.9	South Bend	99	2	Wheatfield	28	19	3.05	−0.07	Evansville	6.50	Veedersburg	1.08
Iowa	62.4	−1.9	Decorah	98	2	3 stations	25	18	3.74	+0.07	Perry	7.36	Dubuque	1.55
Kansas	67.2	−2.4	2 stations	105	1	Atwood	34	10	1.91	−0.88	Minneola	3.70	Independence	0.32
Kentucky	69.5	−0.9	Beaver Dam	97	5	Farmers	35	20	4.69	+1.86	Burnside	8.54	Hopkinsville	1.83
Louisiana	77.6	−0.3	Dodson	102	9	4 stations	51	[2] 19	4.28	+0.32	New Orleans (No. 2)	17.10	Plain Dealing	0.60
Maryland-Delaware	68.3	+0.8	2 stations	100	3	2 stations	25	19	3.62	+0.36	Maryland Line, Md	7.73	Newburg, Md	0.68
Michigan	60.2	+0.1	do	98	[2] 2	Wolverine	19	19	1.76	−1.45	Ruse	6.01	Howard City	0.73
Minnesota	56.1	−2.2	Beardsley	103	2	2 stations	14	[2] 17	3.80	+0.93	Willmar	8.51	Red Lake Falls	0.80
Mississippi	75.8	−0.4	2 stations	100	[2] 1	Eupora	45	19	4.22	+1.28	Bay St. Louis	19.16	Vicksburg	0.34
Missouri	67.4	−1.6	3 stations	98	[2] 2	Unionville	33	18	3.20	−0.64	Morehouse	7.32	Nevada	0.88
Montana	51.0	−3.9	Plevna	103	1	Conway's ranch	12	7	1.36	0.00	Adel	4.45	Missoula	0.10
Nebraska	60.0	−3.9	Sidney	110	[2] 1	2 stations	28	[2] 5	2.82	+0.69	Butte	8.06	Western	0.75
Nevada	61.0	−0.8	Las Vegas	107	[2] 15	Rye Patch	14	28	0.34	−0.08	Kimberly	2.04	16 stations	0.00
New England	61.5	+1.9	Springfield, Mass	102	5	Chelsea, Vt	21	[2] 20	2.47	−0.99	Nantucket, Mass	5.88	North Grosvenor Dale, Conn.	0.55
New Jersey	67.0	+1.5	Elizabeth	100	4	Layton	28	21	4.74	+1.11	Hightstown	8.24	Atlantic City	2.12
New Mexico	63.6	−0.3	Richland	101	5	Therma	13	17	2.10	+0.51	Selsor Ranch	7.02	Orogrande	0.10
New York	63.2	+2.1	Scarsdale	102	3	Indian Lake	19	[2] 20	3.22	−0.23	Conklingville	7.73	Harkness	1.12
North Carolina	69.8	−0.3	2 stations	95	6	Banners Elk	30	[2] 19	5.82	+2.07	Rock House	18.09	Neuse	1.61
North Dakota	52.7	−3.7	Maddock	105	1	Lisbon	12	17	1.65	+0.01	Hankinson	4.31	Mayville	0.21
Ohio	65.5	0.0	Washington Court-house.	99	3	Canfield	28	19	3.02	+0.01	Batavia	6.17	Lakeview	1.47
Oklahoma	72.4	−1.6	2 stations	106	[2] 1	2 stations	38	10	3.93	+0.48	Antlers	9.16	Ralston	0.68
Oregon	57.7	−0.6	Oakridge	103	16	Harney Branch Experiment Station.	12	27	0.28	−1.12	Headworks	1.56	16 stations	0.00
Pennsylvania	65.7	+1.7	Lewisburg	101	3	2 stations	24	19	3.71	+0.23	Zelienople	8.72	Pittsburgh	1.05
South Carolina	72.6	−1.8	Trenton	97	6	Caesars Head	39	20	7.36	+3.18	Garnett	16.53	Florence (No. 1)	1.67
South Dakota	56.9	−4.0	Academy	110	2	3 stations	20	18	3.21	+1.52	Sioux Falls	8.28	Ottumwa	0.94
Tennessee	71.2	0.0	2 stations	98	[2] 6	Crossville	35	19	4.79	+1.73	Sewanee	9.69	Memphis	1.62
Texas	77.4	+0.2	3 stations	106	[2] 3	Dalhart	40	10	2.74	−0.14	Sherman	8.05	2 stations	0.00
Utah	59.4	−1.3	do	99	[2] 1	Soldier Summit	23	28	2.23	+1.09	Huntsville	4.90	Fort Duchesne	0.10
Virginia	68.7	+0.5	Woodstock	98	[2] 2	Burkes Garden	26	19	2.63	−0.79	Wallaceton	7.95	Burkes Garden	0.21
Washington	57.9	+0.1	Wahluke	100	[2] 12	Newport (a)	19	30	0.45	−1.54	Index (Sunset Mine)	1.89	2 stations	T.
West Virginia	66.5	+0.8	Moorefield	102	3	2 stations	24	[2] 19	2.95	−0.21	Sutton	6.25	Wardensville	0.57
Wisconsin	59.1	−0.6	High Falls	101	3	do	20	18	3.55	−0.06	Grantsburg	7.23	Plum Island	0.72
Wyoming	51.6	−3.6	Dull Center (near)	103	1	Dome Lake	14	8	2.08	+0.69	Sundance	3.93	Deaver	0.15
Alaska (August)	52.3	−0.8	Skagway	87	3	McKinley Park	24	29	3.21	+0.13	Ketchikan	21.07	White Mountain	0.21
Hawaii	75.9	+1.7	2 stations	95	[2] 9	Volcano Observatory.	53	15	2.61	−3.51	Keauhou (No. 2)	18.84	4 stations	0.00
Porto Rico	78.7	−0.2	Canovanas	95	18	Lares	61	7	8.00	+0.01	Maricao	24.61	Quebradillas	4.07

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

[2] Other dates also.

TABLE 1.—*Climatological data for weather bureau stations, September, 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							**62.4**	**+1.6**										**80**	**2.51**	**−0.6**										**5.7**		
Eastport	76	67	85	30.02	30.10	+0.07	56.8	+1.0	81	2	64	40	21	50	29	52	49	80	4.28	+1.5	14	5,392	s.	25	nw.	11	6	6	18	6.8	0.0	0.0
Greenville, Me.	1,070	6		28.94	30.12		56.3		84	2	66	29	21	46	39				1.65		11	4,084	se.	27		2	8	6	16		0.0	0.0
Portland, Me.	103	82	117	30.01	30.13	+.08	60.3	+0.7	96	3	69	38	20	52	35	55	52	78	2.09	−1.0	10	4,242	e.	21	nw.	11	13	5	12	5.3	0.0	0.0
Concord	289	70	79	29.80	30.11	+.05	60.2	+0.9	93	3	72	30	20	48	50				2.23	−1.2	9	2,580	ne.	17	nw.	3	10	7	13	6.0	0.0	0.0
Burlington	403	11	48	29.65	30.09	+.03	60.6	+0.3	91	3	71	29	21	50	37				1.42	−2.1	10	5,447	s.	30	s.	16	6	11	13	6.2	0.0	0.0
Northfield	876	12	60	29.18	30.13	+.07	58.2	+2.1	92	3	71	22	21	46	48	55	51	86	2.39	−0.7	9	3,740	s.	19	s.	10	6	9	15	6.8	0.0	0.0
Boston	125	106	165	29.97	30.11	+.04	65.2	+2.0	97	3	74	40	21	57	28	58	55	75	0.76	−2.4	11	4,514	sw.	26	nw.	11	7	12	11	6.2	0.0	0.0
Nantucket	12	14	90	30.10	30.09	+.02	64.8	+2.0	85	3	71	50	24	59	22	60	58	86	5.88	+3.4	11	10,146	ne.	36	ne.	27	11	10	9	5.3	0.0	0.0
Block Island	26	11	46	30.06	30.09	+.01	64.6	+1.2	87	3	70	46	19	59	20	61	58	84	3.57	+0.9	10	9,758	ne.	31	n.	27	8	12	10	5.8	0.0	0.0
Providence	160	215	251	29.94	30.11	+.04	64.6	+1.4	95	3	74	39	21	56	28	59	55	76	2.27	−0.9	11	5,971	n.	32	n.	11	14	6	10	4.8	0.0	0.0
Hartford	159	122		29.94	30.11	+.04	65.3	+3.6	95	4	76	38	21	55	40				1.39	−2.1	8		sw.				13	8	9	5.1	0.0	0.0
New Haven	106	74	153	30.00	30.11	+.04	66.1	+2.6	95	3	75	40	21	57	29	59	56	75	1.31	−2.2	10	5,026	n.	23	s.	10	16	6	8	4.4	0.0	0.0
Middle Atlantic States							**68.2**	**+1.4**										**77**	**3.95**	**+0.8**										**5.1**		
Albany	97	107	115	30.00	30.10	+.03	65.4	+2.3	97	4	76	36	21	55	35	57	54	74	3.45	+0.3	10	3,685	s.	23	sw.	10	15	10	5	4.0	0.0	0.0
Binghamton	871	10	84	29.18	30.11	+.04	64.8	+3.5	94	3	77	32	21	53	38				2.55	−0.5	10	2,987	ne.	19	sw.	10	12	10	8	4.8	0.0	0.0
New York	314	414	454	29.77	30.10	+.02	68.8	+2.0	94	3	76	44	19	61	26	61	57	72	4.05	+0.7	9	7,719	e.	37	nw.	11	5	13	12	6.1	0.0	0.0
Bellefonte	1,050	5	36	29.00	30.11		64.2		95	3	78	29	19	51	45	57	53	77	3.19		12		s.				9	11	10	5.3	0.0	0.0
Harrisburg	374	94	104	29.72	30.12	+.04	67.4	+1.6	96	3	77	41	21	58	32	60	55	71	5.10	+2.0	9	3,203	ne.	21	ne.	7	8	12	10	5.3	0.0	0.0
Philadelphia	114	123	367	29.99	30.12	+.04	70.3	+2.3	94	3	79	45	19	62	27	62	58	72	6.51	+3.4	9	7,644	sw.	44	sw.	8	11	8	11	5.1	0.0	0.0
Reading	325	81	98	29.76	30.11		68.0		96	3	78	41	19	58	31	60	56	72	4.31	+1.1	9	3,170	se.	22	w.	14	13	8	9	4.9	0.0	0.0
Scranton	805	111	119	29.26	30.12	+.05	65.6	+2.7	96	3	77	35	21	54	40	58	55	75	3.26	+0.1	8	3,475	sw.	22	sw.	13	9	13	8	5.3	0.0	0.0
Atlantic City	52	37	172	30.04	30.10	+.03	67.6	+0.8	86	1	73	44	19	62	21	64	61	83	2.12	−0.5	5	10,688	s.	40	ne.	22	9	12	9	5.2	0.0	0.0
Cape May	17	13	49				67.2	−1.8	85	1	74	44	20	60	23	64	62	84	2.19		8		ne.				13	8	9		0.0	0.0
Sandy Hook	22	10	55	30.07	30.09		68.1		93	3	75	49	19	61	25	62	59	79	4.89	+1.5	10	8,437	sw.	34	n.	18	12	7	11	5.3	0.0	0.0
Trenton	190	159	183	29.90	30.10		67.8		95	4	78	41	19	58	32	61	57	76	7.14	+3.7	10	5,758	sw.	32	sw.	7	9	8	13	5.6	0.0	0.0
Baltimore	123	100	215	29.97	30.10	+.02	70.4	+1.9	96	2	79	44	19	62	27	62	59	72	2.79	−0.6	9	5,574	ne.	30	nw.	14	12	12	6	4.8	0.0	0.0
Washington	112	62	85	29.98	30.10	+.02	70.2	+2.1	97	2	81	44	20	60	36	62	58	75	4.32	+1.1	8	2,989	s.	25	nw.	14	10	12	8	4.8	0.0	0.0
Cape Henry	18	8	54	30.06	30.08		72.2		90	8	78	56	19	66	26	67	65	82	5.52	+2.7	9	8,747	ne.	43	ne.	22	9	7	14	5.7	0.0	0.0
Lynchburg	681	153	188	29.37	30.11	+.03	70.0	+1.0	93	6	80	39	20	60	37	62	59	76	2.29	−1.1	6	3,999	ne.	24	ne.	30	15	7	8	4.6	0.0	0.0
Norfolk	91	170	265	30.00	30.10	+.04	72.0	+0.4	88	7	79	54	19	65	26	66	64	82	3.87	+0.6	10	7,942	ne.	33	ne.	22	10	9	11	5.8	0.0	0.0
Richmond	144	11	52	29.96	30.10	+.03	71.2	+0.7	93	7	82	44	20	61	32	63	60	79	2.41	−0.8	7	4,625	sw.	18	e.	21	17	7	6	4.3	0.0	0.0
Wytheville	2,304	49	55	27.75	30.09	+.02	63.5	−0.1	85	6	74	35	19	53	36	59	57	86	2.72	−0.6	11	2,384	e.	16	sw.	14	11	9	10	5.4	0.0	0.0
South Atlantic States							**73.2**	**−0.2**										**84**	**7.91**	**+3.7**										**6.6**		
Asheville	2,253	70	84	27.77	30.08	+.01	66.4	+1.4	86	5	75	44	20	58	30	60	58	84	9.32	+6.3	14	4,093	se.	18	s.	21	6	11	13	6.4	0.0	0.0
Charlotte	779	55	62	29.25	30.08	+.01	71.2	−0.3	92	6	79	45	20	63	25	65	62	81	3.01	0.0	14	2,862	ne.	15	n.	22	8	8	14	6.2	0.0	0.0
Greensboro	886	5	56	29.16	30.10		68.9		92	6	79	39	20	59	34	63	62	87	3.11		12	4,863	ne.	29	s.	10	8	10	12	5.7	0.0	0.0
Hatteras	11	5	50	30.04	30.05	−.01	74.6	+0.1	86	9	80	60	1	70	21	71	69	85	13.71	+9.1	13	7,942	ne.	36	ne.	21	10	7	13	5.7	0.0	0.0
Raleigh	376	103	110	29.60	30.08	+.01	70.8	−0.3	89	6	79	44	20	63	26	65	63	84	4.12	+0.5	10	4,240	ne.	17	n.	14	9	10	11	5.8	0.0	0.0
Wilmington	78	81	91	29.98	30.06	+.01	73.6	+0.5	87	11	81	51	20	67	21	69	68	87	6.56	+2.0	12	4,108	n.	18	n.	21	8	7	15	6.4	0.0	0.0
Charleston	48	11	92	29.98	30.03	−.01	75.9	−0.7	87	14	81	54	20	71	19	71	70	84	3.86	−0.7	14	7,390	e.	26	ne.	21	4	10	16	7.2	0.0	0.0
Columbia, S. C.	351	41	57	29.69	30.06	+.01	73.8	−0.7	92	7	82	49	20	66	21	67	65	82	3.27	−0.2	11	3,984	ne.	18	s.	13	5	14	11	6.4	0.0	0.0
Due West	711	10	55	29.52	30.09		71.0		92	6	78	47	20	64	25				15.44		16	5,378	ne.	24	w.	16	3	13	14	6.6	0.0	0.0
Greenville, S. C.	1,039	139	146	28.99	30.07		70.4	−0.2	91	6	77	47	20	63	21	65	62	84	12.95	+9.3	18	5,411	ne.	26	ne.	21	8	8	14	6.4	0.0	0.0
Augusta	182	62	77	29.84	30.03	−.02	75.3	0.0	94	6	83	51	20	67	25	68	66	81	11.36	+8.0	12	3,404	ne.	20	nw.	17	3	14	13	7.1	0.0	0.0
Savannah	65	150	194	29.95	30.02	−.01	75.7	−0.5	89	6	82	54	20	70	19	71	70	89	10.31	+4.9	17	6,577	e.	26	e.	29	2	6	22	8.0	0.0	0.0
Jacksonville	43	209	245	29.93	29.98	−.02	77.2	−1.1	90	13	83	61	20	72	17	73	71	86	8.58	+1.2	20	6,860	e.	37	se.	30	1	13	16	7.4	0.0	0.0
Florida Peninsula							**81.3**	**+0.6**										**82**	**11.89**	**+4.8**										**6.8**		
Key West	22	10	64	29.86	29.88	−.06	82.4	+0.2	90	19	87	71	8	77	15	76	74	79	5.57	−1.1	15	6,998	se.	66	w.	28	5	16	9	6.0	0.0	0.0
Miami	25	141	168	29.89	29.92	−.06	81.0	+0.9	89	24	86	71	22	76	14	75	73	80	16.82	+8.5	18	7,111	e.	56	e.	28	1	9	20	7.6	0.0	0.0
Tampa	35	79	87	29.90	29.93	−.04	80.5	+0.6	93	15	88	70	21	73	20	74	73	87	13.29	+6.9	22	4,322	ne.	33	e.	29	1	9	20	8.0	0.0	0.0
Titusville	44	5		29.89	29.94		79.7		90	4	86	68	20	73	19				16.03		22		se.				8	13	9	5.4	0.0	0.0
East Gulf States							**75.3**	**−0.4**										**81**	**7.04**	**+2.8**										**6.1**		
Atlanta	1,173	190	216	28.82	30.04	−.01	71.3	−1.1	88	6	78	51	20	65	20	65	62	80	10.19	+7.2	15	5,687	e.	30	w.	16	2	11	17	7.4	0.0	0.0
Macon	370	78	87	29.63	30.02	−.01	74.2	−0.6	91	6	82	52	20	67	25	68	66	82	5.95	+2.8	12	3,820	ne.	20	se.	3	3	14	13	6.6	0.0	0.0
Thomasville	273	49	58	29.69	29.98	−.03	76.6	−0.2	92	8	84	56	20	69	21	70	69	87	6.53	+1.6	17	2,943	ne.	18	ne.	30	1	8	21	8.1	0.0	0.0
Apalachicola	36	42	49	29.90	29.94		77.0		87	14	82	60	21	72	18	73	71	83	8.40	+0.3	16	7,201	ne.	59	se.	30	8	6	16	6.8	0.0	0.0
Pensacola	56	149	185	29.89	29.95	−.04	76.8	−1.2	89	11	81	61	21	72	16	72	70	84	8.96	+3.6	12	8,839	ne.	70	ne.	30	7	10	13	6.2	0.0	0.0
Anniston	741	9	57	29.26	30.05	+.02	73.1	+1.8	93	6	82	51	19	64	29				6.00	+2.3	14	2,768	se.	13	se.	16	9	12	9	5.5	0.0	0.0
Birmingham	700	11	48	29.27	30.02	−.01	74.5	−0.3	92	10	84	50	19	65	30	66	64	80	5.98	+2.6	12	3,868	ne.	23	s.	7	8	11	11	5.8	0.0	0.0
Mobile	57	125	161	29.89	29.95	−.05	76.9	−1.2	92	11	84	58	19	70	27	71	69	83	5.26	+0.3	12	6,462	n.	44	n.	30	7	11	12	6.0	0.0	0.0
Montgomery	223	100	112	29.76	30.00	−.02	75.7	−0.6	93	10	84	56	22	68	22	68	65	78	5.42	+2.4	15	4,214	e.	24	e.	11	5	20	5	5.6	0.0	0.0
Corinth	469	6					74.4		96	6	85	46	19	64	35				7.34		12		se.				5	20	5		0.0	0.0
Meridian	375	87	95	29.59	29.98	−.04	75.0	+0.5	91	5	83	52	19	67	26	68	66	81	4.86	+1.9	10	3,507	ne.	20	ne.	30	7	13	10	6.0	0.0	0.0
Vicksburg	247	65	73	29.72	29.99	−.03	75.8	−0.5	92	1	85	55	19	67	23	68	65	77	0.34	−2.5	4	3,814	n.	20	nw.	13	13	11	6	4.3	0.0	0.0
New Orleans	53	76	84	29.89	29.94	−.04	78.6	−0.6	93	4	85	63	19	72	19	72	69	79	16.57	+11.5	14	3,842	ne.	26	se.	7	9	6	15	4.6	0.0	0.0
West Gulf States							**78.0**	**+0.9**										**72**	**2.52**	**−1.0**										**3.6**		
Shreveport	249	77	93	29.70	29.96	−.04	77.7	+0.8	95	1	88	59	20	68	26	68	65	73	5.62	+2.8	5	3,192	e.	16	se.	2	19	8	3	2.9	0.0	0.0
Bentonville	1,303	11	44	28.65	30.00	−.02	69.8	+0.9	93	4	81	50	10	59	30				3.81		9	1,929	s.	12	s.	4	19	6	5		0.0	0.0
Fort Smith	457	79	94	29.51	29.98	−.03	74.0	0.0	96	4	84	56	19	64	28	65	60	69	3.52	+0.5	6	3,933	e.	20	w.	4	15	7	8	4.4	0.0	0.0
Little Rock	357	136	153	29.63	30.00	−.03	74.5	+0.4	93	1	84	53	19	65	28	65	60	68	1.43	−1.7	7	4,062	e.	32	nw.	12	13	7	10	5.1	0.0	0.0
Austin	605	136	148	29.30	29.92		79.4	+1.1	97	9	91	59	22	68	29	68	64	67	2.63	−0.8	3	3,926	se.	29	n.	13	16	9	5	3.6	0.0	0.0
Brownsville	57	83	100	29.83	29.89		81.2	+0.6	93	7	89	68	23	74	21	74	72	81	5.16	−0.4	11	5,193	se.	23	ne.	21	11	15	4	4.4	0.0	0.0
Corpus Christi	20	11	78	29.90	29.92	−.03	81.4	+1.7	94	30	88	70	23	75	20	75	73	79	3.65	−0.8	6	6,875	e.	38	n.	14	14	13	3	3.9	0.0	0.0
Dallas	512	220	227	29.42	29.96		77.0		95	4	86	60	10	68	23				2.23	−0.5	5	6,705	e.	35	e.	8	24	3	3	2.0	0.0	0.0
Fort Worth	670	106	114	29.24	29.94	−.05	77.8	+0.9	97	1	88	60	10	68	27	66	61	62	2.29	−0.2	7	4,881	se.	23	se.	8	18	4	8	3.6	0.0	0.0
Galveston	54	106	114	29.89	29.95	−.03	80.5	+0.4	90	30	85	69	19	76	14	74	71	77	0.44	−5.1	6	5,882	s.	25	ne.	13	17	10	3	3.4	0.0	0.0
Groesbeck	461	11	56	29.49	29.96		77.4		96	4	89	58	25	66	32				2.19	−0.8	7	4,987	e.	27	sw.	13	18	7	5	3.3	0.0	0.0
Houston	138	292	314	29.80	29.95		80.0	+1.0	97	6	90	61	20	71	25				0.15	−3.9	5	6,483	e.	26	ne.	13	15	10	5	3.7	0.0	0.0
Palestine	510	64	72	29.44	29.96	−.03	77.6	+0.6	95	5	88	59	20	67	30	68	64	71	3.23	+0.3	4	3,624	ne.	26	nw.	8	18	7	5	3.2	0.0	0.0
Port Arthur	34	58	66	29.90	29.94		79.9		92	30	88	62	20	72	22	72	70	78	1.72		7	4,635	e.	25	e.	10	19	7	4	3.2	0.0	0.0
San Antonio	693	119	132	29.21	29.92	−.04	80.3	+1.3	97	9	91	61	22	70	26	69	64	65	2.02	−1.0	3	4,200	ne.	17	se.	5	16	10	4	3.6	0.0	0.0
Taylor	583	55	63	29.38	29.99	+.02	78.8	+1.9	97	8	90	59	22	67	27				0.65	−2.7	2	4,179	s.	16	s.	9	17	10	3	3.3	0.0	0.0

TABLE 1.—*Climatological data for weather bureau stations, September, 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							**68.6**	**−0.1**										**76**	**3.57**	**+0.6**										**5.3**		
Chattanooga	762	190	215	29.23	30.03	−0.03	72.0	−0.2	91	7	80	57	19	64	26	65	61	75	5.66	+2.6	10	3,691	ne.	21	se.	5	5	14	11	6.0	0.0	0.0
Knoxville	995	102	111	29.02	30.05	−.01	71.0	+0.4	91	8	80	47	19	62	28	64	61	77	4.39	+1.7	14	3,333	ne.	19	sw.	8	8	11	11	5.5	0.0	0.0
Memphis	399	76	97	29.58	30.00	−.03	73.8	+0.2	91	3	82	51	19	66	24	66	63	75	1.62	−1.2	8	3,355	e.	18	sw.	5	6	15	9	5.5	0.0	0.0
Nashville	546	168	191	29.48	30.06	.00	71.6	−0.2	92	6	81	48	19	62	30	64	60	75	4.85	+1.4	11	4,320	s.	28	nw.	9	8	8	14	5.9	0.0	0.0
Lexington	989	193	230	29.02	30.08	+.01	68.2	−0.3	90	2	77	40	19	59	29	----	----	----	4.35	+1.3	13	6,983	sw.	24	n.	29	12	11	7	4.7	0.0	0.0
Louisville	525	188	234	29.50	30.08	+.02	69.2	−1.3	91	2	78	43	19	61	34	62	60	78	3.21	+0.4	12	5,028	n.	32	w.	13	11	10	9	4.9	0.0	0.0
Evansville	431	76	116	29.61	30.07	+.01	69.8	−0.9	92	3	78	46	19	62	27	63	60	78	6.50	+3.2	12	3,877	ne.	26	w.	16	13	7	10	4.9	0.0	0.0
Indianapolis	822	194	230	29.18	30.07	+.01	66.4	−0.5	90	2	75	42	19	58	33	58	54	72	2.03	−1.4	9	6,025	e.	29	w.	5	14	6	10	4.8	0.0	0.0
Royal Center	736	11	55	29.29	30.09	----	63.8	----	90	2	74	35	19	53	37	----	----	----	2.81	−0.1	9	5,300	e.	28	sw.	9	12	7	11	5.0	0.0	0.0
Terre Haute	575	96	129	29.44	30.06	----	66.8	----	91	3	76	40	19	57	34	59	56	75	2.72	−0.9	10	4,830	s.	32	sw.	9	13	4	13	5.1	0.0	0.0
Cincinnati	627	11	51	29.40	30.08	+.01	67.1	0.0	92	2	77	39	19	57	33	60	57	78	5.17	+2.5	12	3,347	ne.	20	se.	16	12	8	10	5.0	0.0	0.0
Columbus	822	179	222	29.22	30.09	+.02	66.3	−0.2	91	3	75	40	19	57	27	59	56	76	2.28	−0.3	14	5,034	e.	32	nw.	5	11	9	10	5.0	0.0	0.0
Dayton	899	137	173	29.13	30.07	----	66.3	−0.3	91	2	76	40	19	57	33	59	56	76	3.04	+0.1	13	4,310	ne.	23	ne.	30	8	11	11	5.7	0.0	0.0
Elkins	1,947	59	67	28.09	30.12	+.04	62.9	−0.1	87	6	76	32	19	50	40	56	54	85	3.28	+0.1	10	2,135	nw.	24	w.	14	10	7	13	5.5	0.0	0.0
Parkersburg	637	77	82	29.45	30.11	+.03	68.0	+0.7	92	3	79	40	19	57	36	60	57	76	4.12	+1.4	11	2,497	se.	28	nw.	29	11	7	12	5.6	0.0	0.0
Pittsburgh	842	353	410	29.20	30.10	+.02	67.1	+0.7	90	5	76	40	19	58	28	59	54	67	1.05	−1.5	9	4,739	e.	32	w.	10	10	8	12	5.3	0.0	0.0
Lower Lake Region							**64.2**	**+1.2**										**74**	**2.62**	**−0.4**										**5.1**		
Buffalo	767	247	280	29.25	30.08	+.02	63.1	+0.7	86	5	70	37	20	56	22	59	56	83	3.25	+0.3	8	8,995	sw.	54	sw.	10	12	7	11	4.8	0.0	0.0
Canton	448	10	61	29.60	30.07	----	61.2	+1.9	91	5	71	25	21	51	36	----	----	----	2.51	−0.8	8	5,567	sw.	39	sw.	10	16	6	8	4.3	0.0	0.0
Ithaca	836	5	100	29.20	30.10	----	62.8	----	92	4	73	29	20	52	34	56	54	81	2.42	−0.6	11	4,794	nw.	26	s.	16	11	5	14	5.7	0.0	0.0
Oswego	335	76	91	29.72	30.08	+.02	63.4	+2.2	89	5	71	38	20	56	27	57	53	72	3.16	+0.4	12	5,154	s.	24	sw.	10	9	10	11	5.4	0.0	0.0
Rochester	523	86	102	29.53	30.10	+.04	64.6	+2.2	94	5	74	36	20	56	30	56	51	69	2.87	+0.4	7	4,651	sw.	35	w.	10	12	4	14	5.0	0.0	0.0
Syracuse	596	65	79	29.46	30.11	+.04	65.2	+3.6	93	4	74	35	21	56	31	----	----	----	3.90	+1.2	11	3,767	s.	20	nw.	11	10	10	10	5.5	0.0	0.0
Erie	714	130	166	29.32	30.09	+.03	65.2	+1.6	87	5	72	40	19	58	27	58	54	70	1.89	−1.5	12	7,701	n.	34	sw	10	14	3	13	4.9	0.0	0.0
Cleveland	762	267	337	29.27	30.09	+.03	65.6	+1.7	90	5	73	44	20	58	26	58	53	68	1.62	−1.7	12	7,656	s.	35	w.	10	13	4	13	5.2	0.0	0.0
Sandusky	629	5	67	29.42	30.10	+.04	65.6	+0.3	94	3	74	42	15	57	33	----	----	----	2.53	−0.4	12	4,593	s.	21	w.	10	10	10	10	5.6	0.0	0.0
Toledo	628	208	243	29.42	30.10	+.04	64.2	−0.2	90	3	73	42	18	56	31	57	53	74	3.21	+0.4	12	7,131	e.	36	w.	5	12	8	10	4.7	0.0	0.0
Fort Wayne	856	113	124	29.16	30.08	----	63.8	−1.7	90	3	73	38	19	54	34	57	53	76	2.35	−0.7	11	4,733	ne.	23	w.	16	11	8	11	5.1	0.0	0.0
Detroit	730	218	258	29.31	30.10	+.04	64.8	+1.3	90	3	73	42	18	56	25	57	54	74	1.75	−1.2	10	5,714	sw.	31	sw.	13	11	12	7	4.7	0.0	0.0
Upper Lake Region							**59.3**	**−0.3**										**75**	**2.48**	**−0.9**										**5.4**		
Alpena	609	13	92	29.42	30.08	+.05	57.6	0.0	96	3	67	30	19	48	32	53	49	78	1.90	−1.1	8	6,345	nw.	35	w.	10	12	7	11	5.2	0.0	0.0
Escanaba	612	54	60	29.39	30.05	+.04	55.8	−1.3	79	3	63	34	18	49	22	51	48	78	2.04	−1.3	12	6,632	s	28	nw.	10	10	13	7	5.2	0.0	0.0
Grand Haven	632	54	89	29.39	30.07	+.03	60.6	−0.3	84	4	70	36	19	51	29	54	50	73	0.88	−2.8	6	6,486	s.	36	w.	10	10	12	8	4.9	0.0	0.0
Grand Rapids	707	70	87	29.32	30.08	+.03	62.9	+0.2	91	3	74	36	19	52	32	54	49	68	0.99	−2.5	7	3,304	w.	24	nw.	10	9	4	17	6.2	0.0	0.0
Houghton	668	64	99	29.29	30.02	+.02	56.2	−0.7	94	2	64	38	17	48	31	----	----	----	3.60	0.0	13	5,816	e.	25	w.	10	6	10	14	6.5	0.0	0.0
Lansing	878	6	49	29.14	30.08	----	61.4	0.0	92	2	73	32	19	49	34	55	52	81	1.23	−1.7	8	2,839	s.	18	w.	10	11	9	10	5.3	0.0	0.0
Ludington	637	60	66	29.37	30.06	----	58.9	−0.4	81	2	67	35	19	51	29	53	50	77	2.88	−0.4	12	6,436	s.	33	w.	10	13	11	6	4.1	0.0	0.0
Marquette	734	77	111	29.23	30.04	+.04	57.3	−0.2	96	3	65	36	18	50	33	50	47	75	3.79	+0.5	15	7,352	nw.	37	sw.	15	6	10	14	6.4	0.0	0.0
Port Huron	638	70	120	29.39	30.08	+.02	62.5	+0.9	92	3	72	37	18	53	28	55	51	72	1.16	−1.7	7	6,476	sw.	31	w.	10	9	15	6	4.4	0.0	0.0
Sault Ste. Marie	614	11	52	29.37	30.07	+.05	56.4	+0.9	89	4	65	33	19	48	32	50	47	79	2.92	−1.3	13	4,690	nw.	30	nw.	10	12	6	12	6.1	0.0	0.0
Chicago	673	7	131	29.35	30.07	+.03	64.6	−0.6	91	2	72	42	18	57	28	57	52	72	3.03	−0.1	8	6,169	s.	25	sw.	13	11	8	11	4.9	0.0	0.0
Green Bay	617	109	141	29.38	30.04	+.02	59.8	−0.6	92	3	69	35	18	51	29	53	49	74	2.38	−1.1	9	6,959	s.	32	s.	15	8	9	13	6.0	0.0	0.0
Milwaukee	681	125	221	29.33	30.06	+.03	62.3	−0.2	93	2	70	37	18	55	25	55	51	71	3.15	−0.1	7	8,633	sw.	33	sw.	15	13	5	12	4.9	0.0	0.0
Duluth	1,133	5	47	28.80	30.02	+.04	53.8	−1.3	90	2	63	28	19	45	31	47	44	77	4.82	+1.5	13	7,923	nw.	31	nw.	4	11	7	12	5.7	0.0	0.0
North Dakota							**52.7**	**−4.5**										**68**	**1.60**	**0.0**										**6.1**		
Moorhead	940	50	58	28.99	30.01	+.05	54.8	−3.4	93	1	65	24	18	44	35	47	42	68	0.91	−1.3	9	5,066	s.	23	s.	21	7	7	16	6.5	0.0	0.0
Bismarck	1,674	8	57	28.22	30.01	+.07	53.1	−5.0	102	1	64	30	18	43	46	46	40	69	1.69	+0.5	6	4,859	nw.	25	sw.	14	7	12	11	6.0	0.0	0.0
Devils Lake	1,478	11	44	28.42	30.00	+.06	50.8	−5.1	100	1	61	23	18	40	38	44	39	71	2.73	+1.1	6	5,051	s.	24	ne.	2	7	10	13	6.1	0.0	0.0
Ellendale	1,457	10	56	28.45	30.02	----	53.4	----	94	1	65	20	18	42	33	----	----	----	1.40	−0.6	11	7,602	nw.	33	nw.	3	4	9	17	6.9	0.0	0.0
Grand Forks	833	12	67	----	----	----	53.6	----	95	1	65	18	18	42	40	47	----	----	1.49	----	6	----	nw.	----	s.	15	14	10	6	----	0.0	0.0
Williston	1,878	41	48	28.02	30.01	+.08	52.2	−4.4	96	1	63	31	8	42	38	45	38	66	1.25	+0.2	9	3,973	nw.	24	nw.	3	10	13	7	5.1	0.0	0.0
Upper Mississippi Valley							**63.7**	**−1.5**										**74**	**3.18**	**−0.5**										**5.0**		
Minneapolis	918	102	208	29.02	30.00	----	59.0	−2.4	95	3	67	32	18	51	26	----	----	----	3.57	+0.4	12	7,290	s.	31	s.	23	8	8	14	6.2	0.0	0.0
St. Paul	837	236	261	29.11	30.02	+.03	58.4	−2.9	93	2	67	32	18	50	29	----	----	----	3.36	+0.3	9	7,479	se.	35	sw.	3	7	10	13	6.3	0.0	0.0
La Crosse	714	11	48	29.27	30.04	+.03	61.2	−1.0	96	2	72	32	18	50	33	54	51	79	4.33	+0.3	10	2,742	s.	14	s.	15	11	11	8	4.9	0.0	0.0
Madison	974	70	78	29.03	30.07	+.04	60.6	−1.8	91	2	70	37	18	52	30	54	49	73	3.17	−0.6	8	5,014	s.	22	s.	15	11	13	6	4.3	0.0	0.0
Wausau	1,247	4	64	28.72	30.05	----	58.6	----	95	3	70	31	18	48	34	----	----	----	2.24	−1.5	9	3,885	s.	22	sw.	4	10	13	7	5.0	0.0	0.0
Charles City	1,015	10	51	28.97	30.05	+.05	60.4	−0.6	93	2	71	29	18	50	32	53	49	74	3.96	+0.3	10	4,201	se.	22	sw.	2	14	8	8	4.2	0.0	0.0
Davenport	606	71	79	29.38	30.04	+.01	64.6	−1.0	92	2	74	35	18	55	30	57	52	70	3.13	−0.4	11	5,140	s.	30	s.	4	11	7	12	5.2	0.0	0.0
Des Moines	861	84	97	29.12	30.02	.00	63.8	−1.8	92	2	74	37	18	54	30	56	52	72	4.67	+1.0	9	4,322	s.	25	sw.	15	8	12	10	5.1	0.0	0.0
Dubuque	700	81	96	29.30	30.05	+.02	62.6	−1.4	91	2	72	35	18	53	33	55	50	69	1.55	−2.5	7	3,792	s.	20	s.	15	13	6	11	5.0	0.0	0.0
Keokuk	614	64	78	29.38	30.05	+.02	65.4	−2.1	92	2	75	42	18	56	29	58	54	72	4.77	+0.9	10	3,901	s.	27	sw.	4	12	10	8	5.0	0.0	0.0
Cairo	358	87	93	29.66	30.03	−.02	70.0	−1.5	89	1	78	48	19	62	25	64	61	81	5.44	+2.6	11	3,894	ne.	28	n.	29	9	10	11	5.6	0.0	0.0
Peoria	609	11	45	29.41	30.07	+.03	65.2	+0.9	92	2	76	35	18	55	32	57	53	76	1.04	−3.0	7	3,352	s.	17	sw.	4	15	8	7	4.2	0.0	0.0
Springfield, Ill.	636	154	191	29.38	30.05	.00	65.4	−2.2	92	2	75	38	18	56	29	58	55	75	1.65	−2.0	8	6,870	s.	30	n.	29	12	7	11	4.9	0.0	0.0
Hannibal	534	74	109	29.48	30.05	+.02	66.4	−1.3	94	2	76	43	18	57	29	----	----	----	3.18	−0.8	8	4,694	s.	31	sw.	4	12	9	9	4.9	0.0	0.0
St. Louis	568	265	303	29.44	30.04	.00	68.7	−1.4	92	2	77	46	19	60	24	61	56	72	1.71	−1.8	11	6,158	s.	32	n.	29	12	9	9	4.6	0.0	0.0
Missouri Valley							**63.3**	**−2.7**										**71**	**2.31**	**−0.8**										**5.3**		
Columbia, Mo.	784	6	84	29.21	30.03	.00	66.9	−1.3	96	2	76	44	18	58	29	----	----	----	3.06	−1.3	9	4,021	se.	27	sw.	4	13	7	10	4.9	0.0	0.0
Kansas City	963	161	181	28.98	30.01	−.01	67.8	−1.1	93	2	77	45	18	59	30	59	54	67	1.55	−3.0	11	5,723	s.	22	nw.	9	12	11	7	4.8	0.0	0.0
St. Joseph	967	11	49	28.98	30.01	----	66.6	----	94	2	77	43	18	56	33	58	53	72	1.94	−1.9	10	4,642	se.	22	nw.	13	9	13	8	4.9	0.0	0.0
Springfield, Mo.	1,324	98	104	28.64	30.04	+.01	68.5	−0.4	89	2	77	50	10	60	23	60	57	73	2.37	−1.2	8	5,503	se.	24	se.	19	16	7	7	3.9	0.0	0.0
Iola	984	11	50	28.97	30.00	−.01	68.9	−0.9	94	2	81	43	10	57	37	----	----	----	1.86	−3.1	11	3,266	s.	16	s.	15	13	7	10	4.7	0.0	0.0
Topeka	987	92	107	----	----	----	67.6	−1.1	94	2	78	46	10	57	30	----	----	----	1.49	−2.3	6	5,637	s.	36	se.	19	12	11	7	4.8	0.0	0.0
Lincoln	1,189	11	81	28.75	30.00	+.01	64.6	−1.8	98	2	75	42	18	54	34	55	50	68	1.82	−1.2	8	6,489	s.	24	n.	29	8	11	11	5.6	0.0	0.0
Omaha	1,105	115	122	28.84	30.02	+.02	63.6	−3.2	95	2	73	41	18	54	29	56	51	70	2.05	−1.2	13	4,969	s.	26	nw.	6	14	7	9	4.8	0.0	0.0
Valentine	2,598	47	54	27.32	30.02	+.06	56.6	−5.9	98	2	67	24	6	46	42	49	44	70	2.10	+0.8	16	5,206	n.	34	s.	22	8	9	13	6.0	T.	0.0
Sioux City	1,135	94	164	28.81	30.02	+.04	60.6	−2.8	96	2	70	34	18	52	32	54	49	74	3.18	+0.2	10	7,765	se.	39	s.	23	6	12	12	6.0	0.0	0.0
Huron	1,306	59	74	28.63	30.04	+.08	57.1	−4.2	104	2	67	30	18	47	37	50	45	72	2.79	+1.2	12	5,865	se.	28	s.	2	6	10	14	6.7	0.0	0.0
Pierre	1,572	70	75	----	----	----	58.1	−5.7	104	1	68	37	18	48	44	----	----	----	1.28	+0.2	11	----	----	----	----	----	9	8	13	----	0.0	0.0
Yankton	1,233	49	57	28.69	30.00	+.02	59.8	−4.2	99	2	70	35	18	50	34	----	----	----	4.57	+1.8	11	4,726	nw.	28	s.	23	5	9	16	6.9	0.0	0.0

TABLE 1.—*Climatological data for weather bureau stations, September, 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							53.0	−4.4										65	1.54	+0.3										5.3		
Billings	3,140	5					54.4		97	1	69	24	8	40	52				1.66		10		nw.				8	8	14		0.0	0.0
Havre	2,505	11	44	27.40	30.04	+.10	52.4	−4.0	83	1	66	24	6	39	44	44	36	61	1.46	+0.2	8	3,456	sw.	32	n.	14	11	8	11	5.0	0.0	0.0
Helena	4,110	87	112	25.84	30.04	+.07	50.7	−5.9	82	1	62	30	7	40	37	42	34	59	1.57	+0.3	10	4,486	sw.	34	nw.	14	12	7	11	5.1	T.	0.0
Kalispell	2,973	48	56	26.96	30.00	+.04	51.6	−1.9	82	17	64	28	29	39	41	42	33	57	0.51	−0.7	6	3,482	nw.	27	ne.	4	12	10	8	4.4	0.0	0.0
Miles City	2,371	48	55	27.50	30.05	+.10	55.4	−5.8	100	1	66	33	7	45	44	46	38	62	1.86	+0.8	9	3,211	nw.	29	nw.	21	13	6	11	5.3	0.0	0.0
Rapid City	3,259	50	58	26.65	30.06	+.10	54.2	−6.2	99	1	64	34	6	44	42	47	40	66	1.80	+0.6	11	4,467	n.	30	n.	14	11	7	12	5.7	T.	0.0
Cheyenne	6,088	84	101	24.05	29.97	+.01	53.0	−4.0	89	1	64	28	9	42	41	45	39	69	1.81	+0.6	13	6,264	w.	41	w.	23	10	10	10	5.5	0.8	0.0
Lander	5,372	60	68	24.67	30.00	+.04	53.6	−2.1	90	1	66	31	8	41	44	45	39	68	1.82	+0.9	11	2,753	sw.	34	sw.	23	11	11	8	4.9	4.0	0.0
Sheridan	3,790	10	47	26.13	30.02		53.0		94	1	66	28	9	41	54	45	39	68	1.15	−0.1	13	2,509	nw.	25	sw.	21	12	8	10	5.9	0.0	0.0
Yellowstone Park	6,241	11	48	23.92	30.02	+.05	46.8	−6.6	79	1	59	25	8	35	39	38	31	64	1.17	−0.1	11	4,192	sw.	28	nw.	15	8	11	11	5.6	4.5	0.0
North Platte	2,821	11	51	27.09	29.99	+.02	59.2	−2.9	96	1	70	36	10	48	39	51	46	72	2.22	+0.9	10	4,572	ne.	26	n.	15	9	11	10	5.6	0.0	0.0
Middle Slope							66.2	−1.8										64	2.02	−0.2										4.2		
Denver	5,292	106	113	24.76	29.96	.00	58.8	−4.1	93	1	70	34	6	48	35	49	43	63	1.34	+0.4	8	4,241	n.	22	nw.	5	11	11	8	4.6	T.	0.0
Pueblo	4,685	80	86	25.27	29.89	−.07	63.8	−0.8	92	1	77	42	16	51	40	51	43	57	0.51	−0.2	8	3,775	e.	32	w.	3	13	11	6	4.2	0.0	0.0
Concordia	1,392	50	58	28.55	30.01	+.02	65.8	−2.5	96	2	76	45	5	55	34	56	51	66	2.96	+0.4	13	5,079	s.	26	s.	19	11	10	9	5.2	0.0	0.0
Dodge City	2,509	11	51	27.42	29.99	+.01	66.8	−2.6	100	1	79	44	10	54	38	56	50	65	2.61	+0.7	7	6,481	s.	27	se.	3	19	6	5	3.1	0.0	0.0
Wichita	1,358	139	158	28.56	29.97	−.03	69.6	−1.0	94	2	80	47	10	59	30	59	53	65	0.98	−2.1	8	7,671	s.	36	sw.	15	14	10	6	4.4	0.0	0.0
Broken Arrow	765	11	56	29.18	30.00		71.2		95	1	82	52	10	61	29				3.07	−0.5	7	6,441	s.	26	n.	29	15	5	10	4.2	0.0	0.0
Oklahoma City	1,214	10	47	28.72	29.97	−.02	72.7	−0.1	97	1	83	52	10	62	32	63	59	70	2.69	−0.4	7	5,507	s.	30	nw.	7	17	3	10	3.9	0.0	0.0
Southern Slope							73.7	+0.2										62	2.05	−0.4										3.9		
Abilene	1,738	10	52	28.17	29.95	−.01	75.6	+0.3	97	4	86	55	10	65	29	63	57	63	4.37	+1.7	6	5,231	se.	23	s.	4	15	7	8	3.9	0.0	0.0
Amarillo	3,676	10	49	26.29	29.96	.00	68.2	−1.1	93	3	80	47	11	57	31	58	52	66	1.97	−0.3	10	6,020	s.	22	n.	9	15	8	7	4.6	0.0	0.0
Del Rio	944	64	71	28.91	29.88	−.06	80.2	+1.0	98	4	90	64	21	71	25	69	63	62	1.47	−1.5	8	5,366	se.	22	se.	8	18	7	5	3.7	0.0	0.0
Roswell	3,566	75	85	26.36	29.90	−.02	70.9	+0.6	93	2	84	52	10	58	35	59	51	58	0.42	−1.7	4	4,323	s.	32	ne.	15	17	10	3	3.4	0.0	0.0
Southern Plateau							72.3	+1.5										54	1.42	+0.6										2.7		
El Paso	3,778	152	175	26.15	29.84	−.04	76.6	+2.7	93	2	87	59	11	66	29	60	50	45	0.12	−1.1	3	6,225	e.	33	w.	21	20	7	3	3.2	0.0	0.0
Santa Fe	7,013	38	53	23.32	29.89	−.04	60.6	−0.3	83	2	72	43	14	49	32	50	43	62	5.15	+3.7	8	3,465	se.	24	nw.	15	11	15	4	3.9	0.0	0.0
Flagstaff	6,907	10	59	23.39	29.83	−.06	58.8	+3.3	83	15	71	36	13	46	42	48		61	0.74		6		sw.		sw.	22	7	17	6		0.0	0.0
Phoenix	1,108	10	107	28.62	29.74	−.07	84.0	+1.3	107	14	97	65	8	71	41	66	57	47	0.19	−0.6	3	3,166	se.	20	se.	17	20	8	2	2.4	0.0	0.0
Yuma	141	9	54	29.59	29.72	−.06	84.0	+0.3	111	14	98	61	23	70	42	69	60	53	1.47	+1.1	3	2,351	sw.	25	ne.	2	25	3	2	1.4	0.0	0.0
Independence	3,957	6	27	25.90	29.86	.00	69.8	+1.8	99	1	87	41	23	52	49	49			0.19	+0.1	2		nw.				26	0	4		0.0	0.0
Middle Plateau							60.9	−1.0										43	1.04	+0.4										2.6		
Reno	4,532	74	81	25.42	29.86	−.09	61.2	+1.5	96	17	79	31	27	43	49	45	31	37	0.03	−0.2	2	3,872	w.	24	s.	20	24	6	0	1.2	0.0	0.0
Tonopah	6,090	12	20				63.2		86	1	74	40	27	52	29	46	27	30	0.40		4		se.									
Winnemucca	4,344	18	56	25.59	29.94	+.01	57.0	−2.2	97	17	77	26	28	37	55	42	27	36	0.06	−0.4	1	3,619	ne.	19	nw.	20	27	3	0	1.4	0.0	0.0
Modena	5,473	10	43	24.59	29.85	−.07	60.0	0.0	88	14	76	32	29	44	47	47	34	46	0.49	−0.3	1	6,455	sw.	36	sw.	27	17	10	3	2.8	0.0	0.0
Salt Lake City	4,360	163	203	25.58	29.90	−.05	61.8	−2.6	88	18	72	43	9	52	33	51	44	54	2.45	+1.5	8	4,580	nw.	30	w.	3	17	5	8	3.9	0.0	0.0
Grand Junction	4,602	60	68	25.36	29.90	−.05	64.7	−1.5	87	1	76	42	9	53	34	52	43	54	2.16	+1.2	13	4,294	se.	26	s.	22	16	10	4	3.6	0.0	0.0
Northern Plateau							58.4	−2.2										46	0.48	−0.4										3.8		
Baker	3,471	48	53	26.46	30.04	+.05	53.3	−2.7	90	17	68	27	29	38	46	42	30	46	0.28	−0.5	2	3,334	se.	18	nw.	3	16	9	5	3.5	0.0	0.0
Boise	2,739	78	86	27.14	29.98	+.01	58.8	−3.1	94	17	72	34	29	46	41	47	35	46	0.26	−0.3	4	2,735	w.	18	w.	2	19	9	2	2.5	0.0	0.0
Lewiston	757	40	48	29.19	30.00	+.02	61.2	−1.6	96	13	75	37	30	47	44				0.39	−0.6	4	1,642	e.	17	nw.	1	9	5	16	4.6	0.0	0.0
Pocatello	4,477	60	68	25.46	29.94	−.02	56.6	−3.6	88	17	70	30	29	44	37	44	32	45	1.21	+0.4	5	4,006	se.	27	sw.	2	14	9	7	3.9	T.	0.0
Spokane	1,929	101	110	27.98	30.02	+.04	57.8	−1.4	90	13	71	32	30	45	38	47	36	49	0.30	−0.6	5	2,855	s.	18	n.	9	10	13	7	4.7	0.0	0.0
Walla Walla	991	57	65	28.93	29.99	−.01	63.0	−0.8	93	13	75	40	29	51	33	50	36	43	0.47	−0.5	4	2,429	s.	19	w.	20	17	6	6	3.7	0.0	0.0
North Pacific Coast Region							60.0	+1.8										65	0.17	−2.0										3.4		
North Head	211	11	56	29.81	30.03	.00	58.6	+2.1	83	16	64	49	26	53	30	55	52	82	0.45	−2.5	5	6,704	n.	30	n.	20	17	7	7	3.7	0.0	0.0
Port Angeles	29	8	53		30.06		56.6		80	5	66	37	24	47	32				0.18	−1.3	3	2,649	sw.	19	w.	1	17	10	3		0.0	0.0
Seattle	125	215	250	29.88	30.02	+.01	60.8	+2.7	81	13	70	43	27	52	27	54	48	66	0.09	−1.7	4	3,128	n.	17	ne.	20	21	2	7	2.9	0.0	0.0
Tacoma	194	172	201	29.82	30.02	.00	60.0	+2.7	81	10	70	41	27	50	29				0.08	−2.0	2	3,770	n.	23	n.	25	15	7	8	4.5	0.0	0.0
Tatoosh Island	86	9	53	29.93	30.03	+.02	54.6	+1.6	73	13	60	43	28	49	21	52	50	88	0.07	−4.6	4	6,180	ne.	41	ne.	16	12	8	10	4.8	0.0	0.0
Yakima	1,076	58	67	28.86	30.01		61.6		92	14	75	35	21	18	40	50	39	48	0.17	−0.3	2	3,035	nw.	22	nw.	20	18	6	6	3.5	0.0	0.0
Medford	1,425	4	80	28.44	29.93		61.4		99	16	82	31	28	41	53	51	40	56	T.		0		se.	15	n.	4	21	6	3	2.0	0.0	0.0
Portland, Oreg.	153	68	106	29.84	30.00	−.03	64.8	+3.1	87	16	76	45	27	54	31	55	47	59	0.31	−1.7	3	3,165	nw.	18	ne.	29	16	9	5	3.2	0.0	0.0
Roseburg	510	75	99	29.42	29.97	−.05	61.4	−1.5	92	13	77	35	27	46	43	51	41	56	0.03	−1.2	1	1,883	n.	17	n.	2	17	10	3	2.8	0.0	0.0
Middle Pacific Coast Region							65.3	+0.5										62	T.	−0.6										2.4		
Eureka	62	73	89	29.90	29.97	−.04	55.6	−0.3	72	11	61	44	30	50	21	53	52	89	0.00	−1.0	0	3,264	n.	23	nw.	2	11	7	12	5.2	0.0	0.0
Red Bluff	330	5	58	29.48	29.82	−.11	73.9	+0.8	107	15	90	46	30	58	43	54	36	30	0.00	−0.8	0	3,119	nw.	18	n.	21	26	4	0	1.0	0.0	0.0
Sacramento	69	106	117	29.75	29.82	−.07	70.4	+1.1	102	15	86	47	27	55	42	57	47	52	0.00	−0.4	0	4,064	s.	21	sw.	18	29	1	0	0.3	0.0	0.0
San Francisco	155	208	243	29.71	29.88	−.06	61.4	+0.5	79	14	68	51	29	55	25	56	53	79	T.	−0.4	0	4,165	w.	24	w.	9	17	8	5	3.6	0.0	0.0
San Jose	141	12	110	29.73	29.88		65.2	+0.5	93	14	79	42	25	51	39				0.00	−0.4	0	3,495	nw.	24	sw.	18	24	6	0	1.8	0.0	0.0
South Pacific Coast Region							70.9	+1.1										64	0.20	+0.1										4.6		
Fresno	327	89	98		29.82	−.05	74.4	+1.0	103	16	90	48	28	59	39			39	0.01	−0.2	1	3,705	nw.	17	s.	18	27	2	1		0.0	0.0
Los Angeles	338	159	191	29.50	29.86	−.02	70.2	+1.2	99	17	78	55	29	62	33	62	58	72	0.32	+0.2	2	3,054	sw.	17	se.	17	17	5	8	3.9	0.0	0.0
San Diego	87	62	70	29.76	29.84	−.05	68.2	+1.1	95	17	73	57	30	63	31	63	60	81	0.26	+0.2	3	3,730	nw.	26	se.	17	11	12	7	5.2	0.0	0.0
West Indies																																
San Juan, P. R.	82	9	54	29.84	29.92		79.9	−0.6	88	18	85	69	16	75	13				5.84	−1.0	22	5,787	e.	48	n.	16	1	20	9	6.1	0.0	0.0
Panama Canal																																
Balboa Heights	118	7	97	[1]29.74	[2]29.83	+.01	79.3	−0.5	91	4	85	71	27	74	17			[3]88	9.26	+1.3	21	3,487	s.	27	ne.	23	0	7	23	8.3	0.0	0.0
Cristobal	38	7	97	[1]29.79	[2]29.82	−.01	81.6	+1.2	92	22	88	72	16	75	18	76	75	[3]83	7.90	−4.5	19	4,123	s.	22	n.	9	0	12	18	8.0	0.0	0.0
Alaska																																
Juneau	80	11	50	[1]30.03	[1]30.12		52.2		66	9	58	38	22	47	23	50	49	89	5.52		15	3,153	w.	29	e.	13	4	8	18	7.6	0.0	0.0
Hawaiian Islands																																
Honolulu	38	86	100	[1]29.94	[1]29.98		79.3		88	9	84	71	8	74	16	71	68	69	1.35	+0.1	15	4,930	e.	22	e.	28	14	13	3	4.1	0.0	0.0

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

[2] Observations taken bihourly.

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

Stations	Altitude above mean sea level Jan. 1, 1919	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: Mean maximum	Temperature of the air: Mean minimum	Temperature of the air: Highest	Temperature of the air: Lowest	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Total snowfall
	Feet	*Inches*	*Inches*	*Inches*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Inches*	*Inches*	*Inches*
Cape Race, N. F.	99				53.8		60.2	47.5	70	37	2.17		0.0
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	29.77	30.09	+0.08	56.8	+1.7	64.1	49.5	80	34	3.11	−0.56	0.0
Doucet, Que.	1,236												
Montreal, Que.	187	29.86	30.06	+.02	60.5	+2.1	68.7	52.3	87	37	2.25	−1.05	0.0
Ottawa, Ont.	236	29.82	30.08	+.04	61.8	+4.4	73.8	49.9	97	30	2.18	−0.51	0.0
Kingston, Ont.	285	29.77	30.08	+.04	62.2	+2.2	69.2	55.2	83	36	1.22	−1.58	0.0
Toronto, Ont.	379	29.68	30.08	+.02	62.2	+3.2	71.0	53.4	94	37	0.78	−2.47	0.0
Cochrane, Ont.	930				50.2		59.2	41.3	82	28	3.76		T.
White River, Ont.	1,244	28.69	30.01	+.03	48.5	−1.8	59.4	37.7	85	26	4.71	+1.94	0.0
London, Ont.	808				62.2		73.9	50.6	94	28	1.58		0.0
Southampton, Ont.	656	29.36	30.07	+.02	60.4	+2.9	70.4	50.4	90	30	0.94	−2.00	0.0
Parry Sound, Ont.	688	29.38	30.06	+.03	59.4	+3.4	68.6	50.2	90	34	1.97	−1.70	0.0
Port Arthur, Ont.	644	29.32	30.03	+.05	52.3	+0.1	60.7	43.9	86	30	5.14	+1.66	0.0
Winnipeg, Man.	760												
Minnedosa, Man.	1,690	28.18	30.01	+.07	47.6	−2.9	59.5	35.8	92	18	1.40	+0.04	0.0
Le Pas, Man.	860				47.0		55.6	38.4	75	30	1.95		T.
Qu'Appelle, Sask.	2,115	27.74	29.99	+.07	48.5	−2.6	58.1	38.9	82	28	1.75	+0.42	0.0
Moose Jaw, Sask.	1,759				52.6		63.9	41.3	90	32	0.92		0.0
Swift Current, Sask.	2,392	27.44	29.95	+.03	51.3	−1.8	64.7	37.9	92	24	1.37	+0.15	0.0
Medicine Hat, Alb.	2,144	27.68	29.93	+.01	53.6	−1.4	66.0	41.2	80	25	0.33	−0.85	0.0
Calgary, Alb.	3,428	26.46	30.04	+.12	48.8	−1.0	61.4	36.2	79	23	1.02	−0.34	0.0
Banff, Alb.	4,521	25.43	30.00	+.07	46.5	+0.7	59.1	33.9	77	22	1.32	−0.35	1.1
Prince Albert, Sask.	1,450	28.42	29.99	+.09	49.2	+0.8	59.1	39.4	77	30	1.83	+0.55	0.0
Battleford, Sask.	1,592	28.24	29.97	+.07	50.3	−1.5	61.7	39.0	77	28	1.07	−0.18	0.0
Edmonton, Alb.	2,150	27.67	29.96	+.06	49.1	−0.2	60.3	37.9	74	20	0.34	−0.99	0.0
Kamloops, B. C.	1,262												
Victoria, B. C.	230	29.78	30.03	+.02	60.1	+5.3	69.2	51.0	82	45	0.10	−2.06	0.0
Barkerville, B. C.	4,180												
Estevan Point, B. C.	20												
Prince Rupert, B. C.	170												
Hamilton, Ber.	151												

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Father Point, Que.	20	29.81	29.83	−0.08	54.0	−1.6	61.8	46.2	72	42	4.74	+1.69	0.0
Winnipeg, Man.	760	29.14	29.95	+.01	68.3	+4.9	81.9	54.7	100	37	0.55	−2.12	0.0
Qu'Appelle, Sask.	2,115	27.74	29.95	+.02	65.1	+3.6	80.4	49.8	93	36	0.23	−1.41	0.0
Swift Current, Sask.	2,392	27.43	29.89	−.04	68.2	+4.2	86.4	50.1	100	35	0.48	−1.43	0.0
Medicine Hat, Alb.	2,144	27.63	29.83	−.09	72.8	+7.1	87.9	57.8	100	45	0.21	−1.46	0.0
Calgary, Alb.	3,428	26.43	29.93	+.02	63.2	+3.8	79.7	46.7	93	34	0.67	−1.47	0.0
Banff, Alb.	4,521	25.44	29.93	+.02	59.1	+2.8	75.7	42.5	90	31	0.82	−1.71	0.0
Battleford, Sask.	1,592	28.20	29.91	.00	65.5	+2.9	81.1	49.9	94	37	0.30	−2.06	0.0
Edmonton, Alb.	2,150	27.64	29.88	−.04	60.2	+1.4	73.8	46.7	86	38	2.27	+0.14	0.0
Kamloops, B. C.	1,262	28.66	29.92	+.01	70.0	+1.4	83.3	56.7	92	44	0.37	−0.72	0.0
Estevan Point, B. C.	20				56.9		62.6	51.2	66	48	6.02		0.0
Prince Rupert, B. C.	170				57.4		63.3	51.5	84	46	7.00		0.0
Hamilton, Ber.	151	30.00	30.16	+.06	78.8	−0.8	84.5	73.1	88	69	13.60	+7.52	0.0