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, November, 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	53.3	−0.8	Talladega	85	17	Riverton	16	26	2.15	−0.93	St. Bernard	5.11	2 stations	0.30
Arizona	51.1	−1.4	Parker	90	11	Alpine	−3	28	0.54	−0.32	Bly Ranger Station	2.48	8 stations	0.00
Arkansas	50.2	−1.4	3 stations	82	[2] 8	Dutton	13	26	4.25	+0.60	Bee Branch	7.71	Blytheville	1.80
California	51.4	−1.0	Indio	93	20	Sierraville	4	17	3.02	+0.56	Crescent City	9.63	2 stations	0.00
Colorado	34.1	−1.2	Lamar	77	13	Hermit	−24	30	1.73	+0.90	La Veta Pass	5.85	Haxtun	.33
Florida	64.2	−0.8	Venus	93	7	Jacksonville No. 2	23	27	0.69	−1.52	Panama City	2.41	4 stations	T.
Georgia	54.2	−0.3	St. George	87	19	Clayton	11	26	0.94	−1.71	Blue Ridge	3.11	2 stations	0.1
Idaho	36.0	+0.1	2 stations	70	[2] 10	2 stations	−15	18	1.31	−0.87	Roland	3.23	Salmon	0.09
Illinois	43.3	+1.2	Harrisburg	75	16	do	15	[2] 25	3.77	+1.37	Freeport	6.08	Morrisonville	1.49
Indiana	43.5	+1.3	Madison	77	17	Marengo	11	26	3.16	+0.07	Salem	4.84	Covington	1.53
Iowa	38.7	+2.1	3 stations	70	15	2 stations	8	[2] 3	3.83	+2.28	Mount Ayr	6.83	Lake Park	0.77
Kansas	43.3	−0.9	4 stations	77	[2] 11	Gove (near)	10	20	4.41	+3.07	Lebo	13.03	Gove (near)	0.58
Kentucky	46.8	+0.5	3 stations	78	17	2 stations	10	26	3.93	+0.40	Middlesboro	7.51	Lockport	2.55
Louisiana	58.0	−0.9	Schriever	89	18	do	22	26	3.20	−0.38	Delta Farms	9.14	Schriever	1.55
Maryland-Delaware	47.1	+2.5	Ferry Landing, Md.	80	18	do	13	26	1.88	−0.66	Oakland, Md	4.23	2 stations	1.04
Michigan	38.0	+1.6	Bay City	74	[2] 15	Humboldt	−2	29	3.24	+0.86	Ganges	6.37	Alpha	0.45
Minnesota	33.6	+3.8	Montevideo	64	13	Grand Marais	0	25	0.51	−0.57	Red Lake Falls	1.66	Redby	T.
Mississippi	54.3	−0.8	Port Gibson	85	16	Tupelo	17	26	3.24	−0.28	Rosedale	5.98	Natchez	1.55
Missouri	44.6	+0.1	Marshall	79	15	Neosho	9	26	5.10	+2.75	Centerview	10.88	St. Charles	0.74
Montana	33.6	+1.8	Valentine	72	22	2 stations	−14	[2] 18	0.34	−0.58	Heron	2.96	19 stations	0.00
Nebraska	37.5	+0.8	Sidney	78	14	Purdum	0	3	1.90	+1.16	Auburn	6.28	Fort Robinson	0.19
Nevada	40.0	−0.5	Logandale	80	[2] 6	Millett	−4	30	0.53	−0.13	Tuscarora	1.88	2 stations	0.00
New England	38.1	+0.2	Nashua, N. H.	79	16	Van Buren, Me.	−8	30	2.18	−1.32	New London, Conn.	5.05	Bethlehem, N. H.	0.70
New Jersey	45.1	+2.4	Indian Mills	78	18	2 stations	13	26	1.90	−1.24	Indian Mills	2.76	2 stations	1.20
New Mexico	40.2	−2.3	Elk	80	11	Selsor Ranch	−20	30	1.08	+0.49	Raton	4.73	Tatum	T.
New York	39.9	+2.3	3 stations	76	[2] 15	Indian Lake	−3	28	2.91	+0.04	High Market	4.94	Cairo	0.69
North Carolina	50.4	+0.6	Kinston	85	19	Mount Mitchell	−1	26	1.57	−0.85	Beaufort	6.35	Rockingham	0.25
North Dakota	31.0	+4.4	Carson	70	5	Berthold Agency	−11	21	0.48	−0.10	Linton	2.48	5 stations	0.00
Ohio	43.3	+1.8	Portsmouth	80	17	Bangorville	11	26	3.00	+0.36	Middletown	4.75	North Bass Island	1.55
Oklahoma	48.5	−1.7	Tishomingo	79	14	Boise City	1	19	3.42	+1.42	Newkirk	8.56	Hooker	1.37
Oregon	41.7	0.0	Cottage Grove	72	2	Lake	2	[2] 18	3.54	−1.33	Valsetz	16.95	Lake	0.36
Pennsylvania	43.4	+2.4	Lancaster	81	[2] 18	Montrose	4	26	2.32	−0.49	Westford	5.71	Sunbury	1.05
South Carolina	52.8	−0.8	4 stations	81	[2] 18	Caesars Head	11	26	0.72	−1.53	Caesars Head	3.11	Blackville	0.09
South Dakota	34.9	+1.2	Centerville	79	14	Vale	−4	3	0.96	+0.32	2 stations	2.29	Lemmon	0.00
Tennessee	48.8	+0.4	Etowa	82	15	Rugby	10	26	3.56	−0.01	Rugby	7.02	Embreeville	1.18
Texas	55.5	−1.6	Harlingen	92	1	Romero	0	19	2.62	+0.28	Cuero	8.34	Sterling City	0.00
Utah	37.8	+0.3	2 stations	75	[2] 11	Woodruff	−10	18	1.44	+0.42	Silver Lake	4.90	Fort Duchesne	0.02
Virginia	48.1	+1.7	Hopewell	83	[2] 17	Burkes Garden	11	26	1.34	−1.01	Dante	3.15	Winchester	0.60
Washington	39.7	0.0	2 stations	69	[2] 20	3 stations	7	2	3.39	−2.05	Wynoochee Oxbow	17.30	Irene Mountain	0.27
West Virginia	44.0	+1.4	Moorefield	81	[2] 3	Pickens	9	[2] 26	3.31	+0.52	Pickens	9.41	Upper Tract	0.65
Wisconsin	36.1	+2.6	2 stations	68	[2] 15	Long Lake	2	23	1.92	+0.10	Williams Bay	5.91	Superior	0.17
Wyoming	30.5	−0.7	do	70	[2] 10	Riverside	−26	18	1.08	+0.38	Middle Fork (near)	2.92	Deaver	0.24
Alaska (October)	29.0	−1.7	Sitka	61	31	Fort Yukon	−13	20	3.12	−0.56	Cordova	26.14	Fort Yukon	0.07
Hawaii	71.8	+0.3	Kaanapali	96	[2] 7	Kula Sanitarium	49	[2] 28	9.96	+1.55	Intake, Wainiha Power Canal.	47.65	Ka Lae	0.00
Porto Rico	78.0	+1.3	San German	96	13	San German	57	28	7.83	+0.62	Toro Negro	15.87	San Francisco	3.05

[1] For description of tables and charts, see Review, January, 1929, p. 29.

[2] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, November, 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 .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							**41.3**	**+1.8**										**73**	**2.37**	**-0.8**										**6.6**		
Eastport	76	67	85	29.82	29.90	-0.11	36.6	-0.1	59	19	43	14	27	30	32	33	28	71	1.71	-1.6	12	6,852	w.	38	s.	19	6	5	19	7.3	2.5	T.
Greenville, Me	1,070	6		28.74	29.93		30.7		59	15	38	8	30	24	27				2.71		12		nw.				9	8	13		6.5	
Portland, Me	103	82	117	29.85	29.97	-.04	39.6	+1.6	68	15	47	15	28	32	28	34	28	68	1.62	-1.8	10	5,680	n.	34	nw.	6	8	8	14	6.4	0.8	T.
Concord	289	70	79	29.65	29.97	-.09	38.5	+0.8	71	17	48	8	28	29	31				1.95	-1.1	9	3,422	nw.	25	w.	6	9	7	14	5.9	11.5	5.3
Burlington	403	11	48	29.53	29.98	-.07	36.4	+0.1	65	15	43	13	27	29	28				2.27	-0.4	15	6,606	s.	35	nw.	6	3	7	20	7.8	4.2	1.6
Northfield	876	12	60		29.98	-.07	34.2	+1.4	64	17	43	3	28	25	36			81	2.24	-0.4	15	3,647	n.	30	sw.	6	2	8	20	7.8	6.5	3.0
Boston	125	115	188	29.83	29.97	-.08	44.8	+2.8	76	17	52	18	26	37	26	39	34	69	1.85	-1.5	10	6,178	sw.	32	w.	6	5	7	18	7.1	1.4	0.0
Nantucket	12	14	90	29.96	29.97	-.08	45.4	+1.0	63	4	51	22	26	40	23	42	38	76	4.24	+1.0	11	10,114	w.	37	sw.	6	3	11	16	7.3	0.6	0.0
Block Island	26	11	46	29.94	29.97	-.09	46.0	+1.4	62	19	51	24	26	41	18	42	37	73	2.58	-1.0	10	12,678	w.	44	w.	27	6	13	11	5.9	0.2	0.0
Providence	160	215	251	29.81	29.98	-.09	44.2	+3.8	72	17	52	20	26	36	27	39	32	67	2.13	-0.9	8	7,271	nw.	42	nw.	6	10	11	9	5.5	T.	T.
Hartford	159	122		29.81	29.99	-.09	43.6	+4.1	72	17	51	19	26	36	28				1.88	-1.7	8		sw.				9	10	11	5.6	T.	T.
New Haven	106	74	153	29.89	30.01	-.06	44.5	+2.5	71	16	51	21	26	38	23	41	37	78	3.59	+0.2	9	5,617	sw.	26	sw.	19	8	10	12	6.0	T.	0.0
Middle Atlantic States							**47.3**	**+2.6**										**72**	**1.74**	**-0.8**										**6.6**		
Albany	97	108	115	29.89	30.00	-.08	42.6	+3.3	73	17	50	19	26	36	25	37	33	74	1.59	-1.2	12	4,107	nw.	22	w.	6	9	8	13	6.0	1.6	0.9
Binghamton	871	10	84	29.06	30.01	-.08	41.6	+2.9	70	18	49	17	26	35	28				2.11	-0.2	15	3,879	nw.	30	w.	19	6	4	20	7.3	5.1	0.0
New York	314	414	454	29.69	30.03	-.06	46.6	+2.4	71	18	53	21	26	40	19	41	35	68	2.16	-0.8	10	11,190	nw.	48	sw.	19	3	14	13	7.3	T.	0.0
Bellefonte	1,050	5	36	28.91	30.04		41.2		72	17	50	17	26	32	34	37	34	79	1.23		10		w.				2	5	23	8.1	1.7	0.0
Harrisburg	374	94	104	29.66	30.07	-.04	46.4	+3.6	76	18	54	23	26	39	29	41	35	67	2.25	-0.1	7	4,286	w.	40	sw.	19	4	10	16	7.0	T.	0.0
Philadelphia	114	123	367	29.93	30.06	-.04	49.0	+3.3	74	18	56	25	26	42	23	44	39	73	1.94	-0.8	8	9,007	sw.	41	sw.	19	4	10	16	7.0	T.	0.0
Reading	325	81	98	29.69	30.05		47.2		77	18	54	23	26	40	28	41	36	71	2.03	-1.1	8	4,105	w.	22	w.	6	1	13	16	7.5	0.1	0.0
Scranton	805	111	119	29.15	30.03	-.06	43.0	+2.5	72	18	50	18	26	36	26	39	35	76	1.88	-0.4	12	4,404	sw.	39	sw.	19	5	3	22	8.1	0.6	0.0
Atlantic City	52	37	172	29.99	30.05	-.05	48.2	+2.6	68	16	55	22	26	42	28	44	39	75	1.87	-1.0	10	11,134	w.	44	nw.	8	7	10	13	6.3	0.0	0.0
Cape May	17	13	49				48.8	+1.4	72	18	56	26	26	42	26	44	41	77	1.39		7		nw.				5	14	11		T.	0.0
Sandy Hook	22	10	55	30.00	30.02		46.7		67	18	52	25	26	42	16	42	38	74	1.89		10	10,329	sw.	41	nw.	8	3	13	14	6.8	T.	0.0
Trenton	190	159	183	29.83	30.04		46.6		73	18	54	21	26	39	26	41	37	74	1.91	-1.5	9	6,651	sw.	35	sw.	19	3	14	13	7.1	T.	0.0
Baltimore	123	100	215	29.94	30.07	-.04	50.3	+4.0	78	18	58	26	26	42	25	44	38	69	1.78	-0.8	7	6,628	sw.	38	nw.	8	6	13	11	6.4	T.	0.0
Washington	112	62	85	29.96	30.08	-.04	49.4	+4.2	78	18	58	23	26	40	30	42	37	69	2.01	-0.4	8	4,191	nw.	25	nw.	8	5	13	12	6.3	0.2	0.0
Cape Henry	18	8	54	30.07	30.09		53.0		80	19	60	28	27	46	27	47	42	71	1.47	-0.9	10	9,656	sw.	47	nw.	25	11	9	10	5.3	0.0	0.0
Lynchburg	681	153	188	29.36	30.12	-.01	49.8	+2.6	77	15	60	22	26	39	34	43	38	69	0.79	-1.5	6	5,429	nw.	30	sw.	19	10	14	6	4.8	0.0	0.0
Norfolk	91	170	205	30.02	30.12	+.01	52.3	+0.9	77	19	60	27	26	44	26	46	40	70	1.92	-0.2	10	9,222	sw.	38	nw.	26	11	7	12	5.3	T.	0.0
Richmond	144	11	52	29.96	30.12	.00	50.4	+2.1	80	18	60	24	26	40	31	43	38	70	1.20	-1.0	9	5,941	sw.	30	nw.	22	12	8	10	5.1	T.	0.0
Wytheville	2,304	49	55	27.72	30.15	+.02	43.6	+0.6	69	18	53	17	25	34	37	38	33	72	0.92	-1.2	10	5,032	w.	29	sw.	19	7	9	14	6.4	0.9	0.0
South Atlantic States							**54.5**	**+0.4**										**72**	**1.26**	**-1.1**										**4.4**		
Asheville	2,253	70	84	27.77	30.17	+.03	46.8	+1.7	71	3	57	18	26	37	33	40	35	72	0.89	-1.4	6	6,618	nw.	27	n.	25	12	6	12	5.1	T.	0.0
Charlotte	779	55	62	29.31	30.16	+.03	51.4	+0.8	76	18	61	22	26	42	32	45	40	72	0.52	-2.0	5	3,402	sw.	19	nw.	25	14	4	12	4.7	0.0	0.0
Greensboro	886	5	56	29.20	30.17		47.4		77	18	60	16	26	35	37	41	37	78	0.76		6	5,603	sw.	30	sw.	19	16	6	8	4.2	0.0	0.0
Hatteras	11	11	50	30.10	30.11	.00	56.1	-0.2	78	2	62	30	26	50	24	52	49	79	4.79	+1.3	11	9,879	nw.	60	n.	11	12	12	6	4.6	0.0	0.0
Raleigh	376	103	110	29.74	30.15	+.02	52.2	+1.2	76	18	62	23	26	42	30	45	39	69	0.54	-1.8	7	5,213	sw.	23	nw.	25	13	9	8	4.4	0.0	0.0
Wilmington	78	81	91	30.08	30.16	+.04	55.4	-0.6	80	18	64	27	26	46	29	50	46	79	2.74	+0.8	7	4,137	w.	23	sw.	19	15	9	6	4.1	0.0	0.0
Charleston	48	11	92	30.12	30.17	+.05	57.6	-0.5	80	18	65	32	26	50	27	51	46	72	1.03	-1.1	4	6,406	n.	27	ne.	9	16	5	9	4.1	0.0	0.0
Columbia, S. C	351	41	57	29.79	30.18	+.06	54.0	0.0	80	18	64	24	26	44	29	46	41	69	0.21	-2.0	3	4,275	n.	27	s.	19	14	6	10	4.3	0.0	0.0
Due West	711	10	55	29.42	30.20		51.4		77	17	62	18	26	40	38				0.76		4	5,519	sw.	24	w.	22	15	4	11	4.3	0.0	0.0
Greenville, S. C	1,039	139	146	29.05	30.16		52.2	+2.6	74	17	62	22	26	43	33	44	38	65	0.88		4	5,239	sw.	30	s.	19	13	7	10	4.5	0.0	0.0
Augusta	182	62	77	29.97	30.17	+.04	55.0	+0.5	82	18	66	28	26	44	34	47	42	71	0.30	-2.1	3	3,215	nw.	22	sw.	30	15	7	8	4.0	0.0	0.0
Savannah	65	150	194	30.11	30.18	+.06	58.2	-0.3	80	19	67	31	26	49	28	50	45	72	0.90	-1.2	6	7,124	nw.	30	w.	22	15	6	9	4.2	0.0	0.0
Jacksonville	43	209	245	30.12	30.17	+.07	61.0	-1.2	80	17	69	34	26	53	26	54	49	72	0.67	-1.3	4	7,140	n.	27	sw.	19	9	13	8	5.1	0.0	0.0
Florida Peninsula							**70.3**	**-0.7**										**76**	**0.94**	**-1.3**										**5.1**		
Key West	22	10	64	30.05	30.07	+.05	73.4	-0.9	86	6	78	58	21	69	14	67	65	80	2.34	+0.2	7	6,984	ne.	24	nw.	10	14	10	6	4.3	0.0	0.0
Miami	25	71	164	30.07	30.10		71.8	-0.2	87	8	77	47	22	66	21	65	62	73	0.42	-2.4	9	7,836	e.	29	e.	15	4	11	15	6.7	0.0	0.0
Tampa	35	79	87	30.10	30.14	+.06	65.8	-1.1	84	17	75	40	26	56	28	58	54	74	0.05	-1.7	2	4,506	ne.	18	ne.	14	8	14	8	5.2	0.0	0.0
Titusville	44	5		30.09	30.14		66.6		88	19	76	32	22	57	38				0.30		3		w.				15	7	8	4.3	0.0	0.0
East Gulf States							**55.4**	**-0.7**										**72**	**2.12**	**-1.2**										**4.6**		
Atlanta	1,173	190	216	28.93	30.19	+.06	51.4	-0.7	76	17	60	23	26	43	27	45	38	67	1.21	-1.8	5	7,843	nw.	35	nw.	22	11	9	10	4.5	0.0	0.0
Macon	370	78	87	29.79	30.20	+.07	53.8	-0.4	81	18	64	26	26	43	36	46	41	71	0.73	-2.4	5	3,947	nw.	19	nw.	22	15	5	10	4.1	0.0	0.0
Thomasville	273	49	58	29.88	30.19	+.07	57.2	-1.3	81	18	67	29	26	47	29	49	45	75	1.10	-1.5	5	2,628	nw.	16	sw.	30	10	10	10	5.2	0.0	0.0
Apalachicola	36	42	49	30.14	30.18		58.6		76	18	66	33	26	51	24	53	50	79	0.55		2	5,519	n.	23	ne.	26	18	8	4	3.4	0.0	0.0
Pensacola	56	149	185	30.13	30.19	+.08	58.1	-2.1	75	18	65	31	26	51	24	52	48	73	1.44	-2.3	6	9,221	n.	44	s.	19	8	13	9	5.3	0.0	0.0
Anniston	741	9	57	29.42	30.23	+.11	51.4	-0.5	81	17	62	20	26	40	35				2.79	-0.6	5	3,388	nw.	17	nw.	20	15	7	8	4.0	0.0	0.0
Birmingham	700	11	48	29.43	30.21	+.09	53.3	-0.6	77	17	63	24	26	44	34	45	39	68	2.20	-1.2	5	4,574	nw.	22	se.	17	14	3	13	4.8	0.0	0.0
Mobile	57	125	161	30.13	30.19	+.08	58.0	-0.6	77	17	67	32	26	49	30	51	47	73	1.61	-2.0	5	6,875	n.	28	sw.	19	8	16	6	5.3	0.0	0.0
Montgomery	223	100	112	29.95	30.21	+.09	55.6	-0.2	80	17	66	28	26	46	30	47	40	64	1.07	-2.2	5	4,329	n.	23	nw.	19	14	7	9	4.4	0.0	0.0
Corinth	469	6					51.6		78	15	61	21	26	42	36				2.64		8						7	14	9		0.0	0.0
Meridian	375	87	95	29.79	30.20	+.08	54.3	+0.1	80	16	65	27	26	44	34	47	43	75	3.00	-1.1	9	3,690	n.	17	nw.	20	14	5	11	4.8	0.0	0.0
Vicksburg	247	65	73	29.93	30.21	+.09	55.4	-1.2	81	16	64	30	26	46	29	49	44	72	3.08	-0.6	9	4,363	se.	21	nw.	17	12	7	11	5.0	0.0	0.0
New Orleans	53	76	84	30.13	30.19	+.09	61.4	-0.2	83	17	69	37	26	54	23	54	49	72	5.10	+2.0	7	4,388	ne.	20	nw.	19	15	6	9	4.4	0.0	0.0
West Gulf States							**56.9**	**-0.9**										**76**	**3.07**	**+0.1**										**5.7**		
Shreveport	249	77	93	29.92	30.20	+.09	55.2	-0.8	78	16	64	33	26	46	30	49	43	72	2.87	-0.8	13	3,743	se.	18	w.	17	16	3	11	4.8	0.0	0.0
Bentonville	1,303	11	44	28.75	30.14	+.03	46.4	-0.3	72	14	55	21	26	37	32				4.74		9		s.		s.		16	1	13		T.	0.0
Fort Smith	457	79	94	29.67	30.16	+.05	49.5	-1.5	73	14	58	29	26	41	34	44	40	75	2.45	-0.4	8	5,067	e.	30	sw.	16	7	9	14	6.3	T.	0.0
Little Rock	357	136	153	29.79	30.18	+.06	51.4	-0.7	74	16	59	30	26	43	36	45	40	71	2.59	-2.0	7	5,537	s.	24	sw.	17	10	7	13	5.7	0.0	0.0
Austin	605	136	148	29.52	30.16		57.6	-0.9	84	7	67	34	20	48	35	52	48	76	2.18	-0.1	11	4,729	n.	29	se.	16	10	5	15	6.0	0.0	0.0
Brownsville	57	53	61	30.05	30.10		67.2	0.0	85	1	74	48	20	60	23	61	58	81	4.88	+2.9	7	4,573	n.	24	n.	9	7	14	9	6.1	0.0	0.0
Corpus Christi	20	11	78	30.12	30.14	+.07	64.6	+0.3	86	1	70	44	21	59	21	60	57	82	3.09	+0.7	7	6,705	n.	31	se.	16	4	11	15	6.9	0.0	0.0
Dallas	512	220	227	29.62	30.18		53.9		79	16	62	33	3	46	26				1.61		11	7,756	se.	37	sw.	16	12	6	12	5.4	T.	0.0
Fort Worth	670	106	114	29.44	30.16	+.06	54.8	-0.7	81	14	64	33	20	46	32	49	45	70	1.97	-0.6	8	5,233	se.	32	s.	16	9	7	14	6.1	0.0	0.0
Galveston	54	106	114	30.12	30.18	+.09	62.4	-0.9	80	1	68	44	3	57	21	58	55	82	3.87	+0.5	10	6,868	n.	27	n.	2	11	10	9	4.8	0.0	0.0
Groesbeck	461	11	56	29.67	30.16		55.4		81	16	65	34	4	46	34				1.41		12	6,080	n.	37	s.	16	9	8	13	5.7	0.0	0.0
Houston	138	292	314	30.03	30.18		60.2	-1.1	81	15	68	39	3	52	24				2.66	-1.0	14	8,134	e.	37	se.	16	11	9	10	5.3	0.0	0.0
Palestine	510	64	72	29.64	30.19	+.08	54.9	-2.3	80	15	64	31	3	46	31	50	45	74	6.59	+3.2	10	4,458	nw.	25	se.	16	10	5	15	5.6	0.0	0.0
Port Arthur	34	58	66	30.13	30.17		60.2		78	1	68	40	3	53	28	55	52	83	4.44		11	4,751	n.	24	nw.	17	13	6	11	5.0	0.0	0.0
San Antonio	693	119	132	29.42	30.16	+.08	59.4	-0.9	82	7	68	38	20	50	29	52	47	70	2.29	+0.4	6	4,162	ne.	25	nw.	16	12	3	15	5.9	0.0	0.0
Taylor	583	55	63	29.58	30.20	+.12	56.6	-1.1	81	7	66	33	20	47	38				1.43	-1.2	9	4,753	nw.	26	s.	16	10	7	13	5.4	0.0	0.0

TABLE 1.—*Climatological data for Weather Bureau stations, November, 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 dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with .01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	°Ft.	°Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.		In.	In.		Miles.								0-10	In.	In.
Ohio Valley and Tennessee							**46.0**	**+0.8**										**74**	**3.54**	**0.0**										**7.0**		
Chattanooga	762	190	215	29.37	30.20	+0.06	51.0	+0.6	75	17	60	23	26	42	27	44	37	63	4.18	+0.8	6	5,608	nw.	27	nw.	22	10	8	12	5.3	0.0	0.0
Knoxville	995	102	111	29.11	30.19	+.06	48.6	+0.7	75	17	58	22	26	40	32	43	38	73	3.43	+0.4	7	4,096	sw.	25	s.	17	10	7	13	5.8	T.	0.0
Memphis	399	76	97	29.75	30.18	+.06	51.3	−0.4	80	16	59	28	26	44	26	46	41	73	4.06	−0.2	10	4,914	sw.	28	sw.	21	10	7	13	5.6	T.	0.0
Nashville	546	168	191	29.60	30.20	+.08	49.2	+0.2	73	17	57	21	26	41	26	43	38	69	2.63	−0.9	10	6,273	w.	34	s.	17	10	7	13	5.8	0.0	0.0
Lexington	989	193	230	29.08	30.18	+.06	44.9	+0.1	73	17	52	17	26	38	22				3.79	+0.3	16	8,821	sw.	38	sw.	21	7	7	16	6.5	0.4	0.0
Louisville	525	188	234	29.57	30.16	+.04	46.6	−0.1	74	17	54	21	26	39	24	42	37	73	2.94	−0.7	14	7,555	s.	31	s.	17	10	3	17	6.1	T.	0.0
Evansville	431	76	116	29.71	30.19	+.07	46.8	+0.2	71	16	54	22	26	40	28	42	37	74	3.13	−0.6	14	6,666	s.	35	sw.	17	12	2	16	5.9	T.	0.0
Indianapolis	822	194	230	29.22	30.12	+.02	43.4	+1.1	69	17	50	19	26	37	23	39	34	76	3.66	+0.3	17	8,257	s.	34	nw.	21	7	5	18	7.3	0.7	0.0
Royal Center	736	11	55	29.28	30.09		41.0		70	17	48	16	26	34	28				1.76		13	7,919	sw.	30	sw.	17	6	4	20	7.5	0.9	0.0
Terre Haute	575	96	129	29.49	30.12		44.2		69	17	51	19	26	37	24	40	35	76	2.08		18	6,642	s.	32	s.	17	10	2	18	6.8	0.1	0.0
Cincinnati	627	11	51	29.44	30.14	+.02	44.6	+2.1	75	17	52	19	26	37	34	40	36	78	3.25	+0.4	14	5,568	sw.	29	nw.	21	6	4	20	7.0	T.	0.0
Columbus	822	179	222	29.22	30.11	.00	44.0	+2.1	73	17	50	22	26	38	25	39	35	75	2.32	−0.4	15	7,301	nw.	36	nw.	21	2	7	21	7.9	T.	0.0
Dayton	899	137	173	29.14	30.12		43.7	+1.7	73	17	50	21	26	37	27	39	35	76	3.50	+0.6	15	6,900	sw.	36	nw.	21	3	6	21	8.0	0.5	0.0
Elkins	1,947	59	67	28.04	30.14	+.02	41.4	+1.1	74	17	51	16	26	32	46	38	34	81	3.98	+1.1	15	4,126	w.	30	w.	19	0	5	25	8.9	5.0	0.0
Parkersburg	637	77	82	29.47	30.14	+.02	45.2	+1.4	75	17	53	22	26	38	34	40	35	73	2.88	0.0	15	4,307	sw.	30	sw.	21	1	7	22	8.6	T.	0.0
Pittsburgh	842	353	410	29.16	30.08	−.02	43.9	+0.7	72	17	50	18	26	38	24	39	35	75	1.91	−0.4	17	7,774	w.	34	w.	30	0	7	23	8.3	1.4	0.0
Lower Lake Region							**42.1**	**+2.8**										**78**	**3.34**	**+0.5**										**8.0**		
Buffalo	767	247	280	29.14	29.98	−.07	41.4	+2.0	67	17	47	18	26	36	18	39	36	84	2.67	−0.4	15	12,399	sw.	58	w.	6	2	7	21	8.0	3.6	0.0
Canton	448	10	61	29.48	29.97		36.0	+2.1	65	15	43	15	27	29	25				3.83	+0.4	16	6,292	w.	39	nw.	6	5	7	18	7.4	4.8	T.
Ithaca	836	5	100	29.07	30.00		40.5		69	15	47	19	26	34	27	36	33	78	3.19	+0.8	17	5,882	nw.	33	nw.	6	3	7	20	7.6	10.2	0.0
Oswego	335	76	91	29.61	29.99	−.06	41.0	+2.1	70	15	47	20	26	35	21	38	35	79	3.76	+0.4	19	6,734	s.	34	w.	6	2	6	22	8.3	3.0	0.0
Rochester	523	86	102	29.42	30.01	−.05	41.8	+3.9	71	15	47	20	26	36	22	38	34	77	4.57	+2.0	17	5,516	w.	30	w.	19	2	5	23	8.3	9.2	0.0
Syracuse	596	65	97	29.38	30.03	−.03	42.0	+3.3	70	15	48	17	26	36	23				3.88	+1.2	16	4,579	w.	28	sw.	19	3	5	22	8.0	10.2	0.0
Erie	714	130	166	29.24	30.02	−.04	44.4	+3.0	70	17	49	25	25	39	22	39	35	73	3.88	+0.6	18	10,109	s.	36	sw.	21	3	4	23	8.3	5.9	0.0
Cleveland	762	190	201	29.21	30.05	−.02	44.2	+3.3	71	17	49	23	25	39	20	39	34	73	3.25	+0.6	18	10,139	sw.	44	nw.	12	2	4	24	8.4	1.2	0.0
Sandusky	629	5	67	29.37	30.07	−.01	44.0	+2.9	70	17	50	19	26	38	21				2.57	+0.2	14	7,292	sw.	28	w.	12	3	2	25	8.4	0.2	0.0
Toledo	628	208	243	29.37	30.06	−.01	43.2	+3.8	70	15	49	20	26	38	20	39	35	79	2.40	0.0	14	9,814	sw.	41	sw.	15	4	7	19	7.3	1.8	0.0
Fort Wayne	856	113	124	29.12	30.07		42.4	+1.8	70	17	49	20	26	36	22	38	35	79	2.67		16	7,074	sw.	29	n.	12	4	7	19	7.7	7.5	0.0
Detroit	730	218	258	29.23	30.04	−.02	42.4	+3.1	71	15	48	19	26	37	23	38	35	80	2.69	+0.2	11	7,521	sw.	38	sw.	15	2	8	20	8.0	1.0	0.0
Upper Lake Region							**37.6**	**+2.4**										**79**	**2.64**	**+0.2**										**7.7**		
Alpena	609	13	92	29.31	29.99	−.02	36.4	+2.0	60	15	42	19	25	31	28	34	30	80	3.06	+0.5	15	7,263	nw.	35	sw.	15	1	6	23	8.2	8.4	2.8
Escanaba	612	54	60	29.33	30.01	−.02	35.2	+2.1	56	6	41	16	25	30	27	32	28	76	0.55	−1.6	11	7,441	nw.	30	ne.	17	4	5	21	7.4	1.3	0.0
Grand Haven	632	54	89	29.32	30.02	−.02	40.5	+2.0	59	14	46	21	25	35	22	38	35	82	5.48	+2.8	18	8,903	n.	46	w.	6	3	5	22	8.2	7.3	0.0
Grand Rapids	707	70	87	29.25	30.03	−.02	40.8	+2.4	65	15	46	21	25	35	23	37	34	78	4.47	+1.7	16	4,291	nw.	23	nw.	21	2	8	20	8.4	3.5	0.0
Houghton	668	64	99	29.25	29.99	−.03	34.6	+2.6	58	14	40	17	25	29	24				0.72	−2.1	12	6,847	w.	40	w.	5	2	8	20	7.9	2.0	T.
Lansing	878	6	49	29.07	30.03		38.8	+1.3	66	15	44	19	25	33	28	37	35	89	4.07	+1.6	14	4,349	sw.	25	nw.	12	5	6	19	7.6	5.6	0.0
Ludington	637	60	66	29.30	30.01		39.2		56	14	44	22	25	34	21	37	34	82	4.39		18	8,295	n.	40	sw.	15	3	5	22	7.8	1.4	0.2
Marquette	734	77	111	29.18	30.00	−.02	35.3	+2.0	57	3	41	17	25	29	28	32	28	78	1.93	−1.0	16	7,185	w.	33	s.	23	3	2	25	8.5	6.8	T.
Port Huron	638	70	120	29.30	30.01	−.04	40.6	+3.1	70	15	46	20	25	35	23	37	34	80	2.54	+0.2	14	8,161	nw.	37	w.	15	3	9	18	7.4	3.2	0.0
Sault Sainte Marie	614	11	52	29.28	29.99	−.03	34.6	+2.6	52	15	40	14	25	29	27	32	28	79	1.12	−1.8	12	6,097	nw.	38	nw.	6	2	5	23	8.3	3.5	T.
Chicago	673	7	131	29.33	30.06	−.01	42.2	+2.1	68	15	48	20	25	37	21	38	34	75	4.00	+1.6	14	8,297	sw.	29	s.	14	7	4	19	7.0	T.	0.0
Green Bay	617	109	141	29.35	30.02	−.02	37.0	+3.0	58	14	42	17	25	32	22	33	29	75	1.18	−0.8	7	8,216	s.	42	sw.	15	5	7	18	7.5	1.1	0.4
Milwaukee	681	125	221	29.29	30.04	−.01	40.0	+2.7	64	15	45	19	25	34	22	36	32	76	4.88	+3.1	10	10,591	w.	44	sw.	14	6	6	18	7.3	1.2	0.0
Duluth	1,133	5	47	28.78	30.03	−.01	33.4	+3.4	57	13	40	10	25	26	27	29	25	76	0.30	−1.2	3	7,824	w.	34	nw.	21	7	7	16	6.7	T.	0.0
North Dakota							**31.8**	**+4.9**										**76**	**0.52**	**−0.2**										**4.9**		
Moorhead	940	50	58	29.02	30.07	.00	32.0	+4.9	58	13	41	8	25	23	27	28	25	79	0.30	−0.6	3	5,318	nw.	27	nw.	21	9	10	11	5.9	0.1	0.0
Bismarck	1,674	8	57	28.28	30.10	+.03	32.6	+4.1	64	10	44	4	25	21	42	28	23	74	0.07	−0.5	3	4,729	nw.	35	nw.	21	14	8	8	4.9	0.6	0.0
Devils Lake	1,478	11	44	28.44	30.06	.00	30.0	+5.5	54	10	40	6	1	20	33	26	22	80	1.73	+1.0	2	5,870	w.	28	nw.	21	14	7	9	4.7	T.	0.0
Ellendale	1,457	10	56	28.50	30.10		32.6		58	13	43	9	25	22	38				1.01		4	8,243	nw.	45	nw.	21	12	6	12	5.3	0.4	0.0
Grand Forks	833	12	67				31.0		57	13	41	9	25	21	33	27			1.13		2		nw.		nw.	15	5	11	14		T.	0.0
Williston	1,878	41	48	28.06	30.09	+.03	32.4	+5.2	59	4	44	7	2	21	37	27	21	69	T.	−0.6	0	4,026	sw.	28	nw.	21	16	9	5	3.7	T.	0.0
Upper Mississippi Valley							**40.8**	**+2.3**										**78**	**3.03**	**+1.4**										**6.4**		
Minneapolis	918	102	208	29.03	30.04		36.4	+4.0	59	13	43	15	25	30	23				0.35	−0.9	4	7,775	nw.	35	nw.	21	7	8	15	6.8	T.	0.0
St. Paul	837	236	261	29.13	30.06	.00	35.8	+3.3	57	13	42	15	25	29	24				0.21	−1.1	4	8,009	nw.	45	w.	15	7	8	15	6.5	0.3	0.0
La Crosse	714	11	48	29.27	30.06	−.01	38.2	+3.0	61	14	45	16	25	32	27	34	30	77	1.64	+0.1	7	3,884	nw.	26	sw.	15	7	6	17	6.9	1.8	0.0
Madison	974	70	78	28.99	30.07	+.01	37.5	+2.3	60	15	43	17	25	32	22	34	31	79	4.86	+3.1	10	7,458	nw.	32	s.	14	7	5	18	7.0	5.9	5.2
Wausau	1,247	4	64		30.04		34.8		55	5	40	15	25	29	25				0.61		6		nw.				5	2	23		2.5	T.
Charles City	1,015	10	51	28.98	30.09	+.01	36.3	+3.3	60	11	43	16	25	30	26	33	30	82	3.47	+2.1	8	4,942	nw.	27	sw.	14	13	2	15	6.1	2.4	0.0
Davenport	606	71	79	29.41	30.08	.00	41.4	+2.4	67	15	48	17	25	35	26	37	33	76	4.29	+2.5	13	5,258	nw.	26	s.	14	9	4	17	6.6	0.6	0.0
Des Moines	861	84	97	29.16	30.09	+.01	40.4	+2.0	67	15	48	17	25	33	28	37	33	78	4.62	+3.2	10	5,317	sw.	37	sw.	14	11	5	14	6.3	8.4	7.3
Dubuque	700	81	96	29.30	30.07	.00	39.2	+2.2	64	15	45	17	25	33	25	35	31	76	4.88	+3.2	12	5,058	nw.	24	nw.	21	8	5	17	6.9	4.5	4.4
Keokuk	614	64	78	29.42	30.11	+.02	42.9	+1.8	69	15	50	20	25	36	26	38	34	76	5.18	+3.2	10	5,479	s.	31	s.	14	10	4	16	6.3	0.3	0.0
Cairo	358	87	93	29.78	30.17	+.05	47.7	+0.4	70	15	55	25	26	40	28	43	38	72	3.30	−0.4	12	6,125	s.	32	sw.	17	9	6	15	6.1	0.0	0.0
Peoria	609	11	45	29.43	30.10	+.01	41.7	+4.2	66	15	48	18	25	35	26	38	35	82	3.97	+1.6	13	5,052	nw.	24	sw.	17	9	5	16	6.0	T.	0.0
Springfield, Ill.	636	10	91	29.41	30.10	.00	43.0	+0.8	67	15	50	19	25	36	26	40	38	86	1.79	−0.7	9	8,957	nw.	37	nw.	21	8	6	16	6.4	T.	0.0
Hannibal	534	74	109	29.52	30.10	+.01	44.2	+2.1	70	15	51	21	25	37	29				3.82	+1.9	11	6,263	sw.	30	s.	14	11	5	14	6.0	T.	0.0
St. Louis	568	265	303	29.51	30.13	+.03	46.0	+0.9	70	11	53	23	25	39	32	41	36	72	1.90	−0.9	12	9,394	sw.	41	sw.	14	12	3	15	5.7	T.	0.0
Missouri Valley							**40.4**	**+1.4**										**75**	**3.40**	**+2.2**										**5.4**		
Columbia, Mo.	784	6	84	29.27	30.12	+.03	44.5	+1.2	70	15	52	19	25	36	34				4.68	+2.4	12	5,535	s.	35	nw.	16	12	3	15	5.8	0.3	0.0
Kansas City	963	161	181	29.07	30.13	+.04	45.2	+1.5	74	15	53	21	25	37	25	40	34	71	8.55	+6.7	10	7,260	s.	30	sw.	14	14	4	12	5.2	0.6	0.0
St. Joseph	967	11	49	29.05	30.11		43.6		73	15	52	18	25	35	30	38	34	74	6.98		8	6,056	nw.	29	sw.	14	15	4	11	4.9	0.1	0.0
Springfield, Mo.	1,324	98	104	28.73	30.16	+.06	45.4	−0.3	68	14	53	22	25	38	30	40	35	75	2.08	−0.6	9	7,240	s.	29	s.	15	14	2	14	5.3	1.6	0.0
Iola	984	11	50	29.06	30.13	+.04	44.6	+0.5	72	15	54	22	25	35	32				9.01	+7.6	11	4,297	s.	20	sw.	14	11	5	14	5.8	T.	0.0
Topeka	987	92	107				44.0	+1.2	73	15	53	20	25	35	31				6.08	+4.8	11	6,932	sw.	29	sw.	14	13	7	10	4.9	0.1	0.0
Lincoln	1,189	11	81	28.82	30.12	+.04	40.2	+1.1	66	15	48	16	25	32	29	35	31	76	2.87	+2.0	7	7,029	s.	34	w.	14	8	6	16	6.1	12.2	4.5
Omaha	1,106	115	122	28.90	30.11	+.03	40.6	+2.1	65	15	48	18	25	34	25	36	31	73	2.87	+1.8	8	6,088	nw.	28	n.	17	12	9	9	4.9	15.8	6.1
Valentine	2,598	47	54	27.36	30.15	+.07	35.4	+0.8	66	10	45	8	3	25	37	30	26	74	0.69	0.0	7	5,189	w.	31	s.	12	11	6	13	5.4	5.7	0.0
Sioux City	1,135	94	164	28.88	30.12	+.04	37.4	+2.2	63	13	44	15	25	30	25	34	30	76	0.88	−0.1	5	8,303	nw.	45	sw.	14	10	10	10	5.5	6.3	0.0
Huron	1,306	59	74	28.69	30.13	+.05	34.4	+2.9	61	13	43	11	25	26	38	30	26	78	1.07	+0.5	4	5,962	nw.	42	nw.	14	10	11	9	5.1	2.2	0.0
Pierre	1,572	70	75		30.14	+.06	36.1	+2.5	68	13	45	11	3	27	35			80	0.62	+0.2	5	4,508	nw.	32	nw.	24	12	9	9		2.0	0.0
Yankton	1,233	49	57	28.77	30.12	+.04	36.6	+1.8	64	13	44	13	25	29	27				1.44	+0.6	3	5,360	nw.	29	w.	14	7	10	13	6.1	12.0	0.0

TABLE I.—*Climatological data for Weather Bureau stations, November, 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 .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							34.0	+1.3										71	0.77	0.0										5.4		
Billings	3,140	5					35.4		67	10	48	8	29	23	47				0.41		5		nw.				20	4	6			
Harve	2,505	11	44	27.41	30.12	+0.09	33.6	+2.4	68	12	48	4	19	19	48	27	20	66	0.02	−0.6	1	3,848	sw.	28	sw.	9	14	8	8	4.3	0.4	0.0
Helena	4,110	87	112	25.86	30.15	+.05	36.4	+3.2	60	21	45	13	2	28	26	30	23	63	0.02	−0.7	1	4,799	sw.	30	sw.	10	6	13	11	6.1	0.5	0.0
Kalispell	2,973	48	56	27.02	30.15	+.08	34.4	+2.0	58	21	42	15	1	27	27	31	27	80	0.50	−1.4	5	2,493	nw.	20	sw.	10	7	5	18	6.8	0.5	T.
Miles City	2,371	48	55	27.55	30.17	+.10	35.8	+4.9	63	22	48	10	29	24	38	29	23	65	0.26	−0.3	2	3,068	s.	21	nw.	5	14	7	9	4.3	1.6	0.6
Rapid City	3,259	50	58	26.67	30.17	+.09	37.8	+1.9	72	13	48	14	2	27	42	31	24	62	0.78	+0.3	5	4,251	w.	30	nw.	14	11	10	9	4.9	3.1	0.0
Cheyenne	6,088	84	101	24.04	30.15	+.08	34.4	−0.4	64	10	45	7	2	24	35	28	22	65	1.19	+0.7	7	7,256	w.	54	nw.	14	11	5	14	5.8	14.6	8.0
Lander	5,372	60	68	24.71	30.23	+.13	27.4	−2.9	63	10	38	−7	30	17	38	24	22	86	2.55	+2.0	5	1,973	n.	28	w.	12	14	6	10	4.9	26.2	16.5
Sheridan	3,790	10	47	26.16	30.18		32.2		69	10	45	−2	29	20	39	27	22	76	1.12		7	2,163	nw.	17	nw.	14	12	13	5	4.6	10.8	5.5
Yellowstone Park	6,241	11	48	23.95	30.24	+.13	29.1	−0.2	53	12	38	0	18	20	30	25	20	73	0.59	−0.8	8	4,750	sw.	32	sw.	9	6	6	18	6.9	8.0	1.8
North Platte	2,821	11	51	27.15	30.15	+.07	37.0	+0.4	72	10	48	11	3	26	39	31	26	72	0.99	+0.5	7	4,474	n.	28	nw.	14	14	4	12	5.1	9.5	5.8
Middle Slope							42.4	−0.4										72	2.84	+1.8										5.0		
Denver	5,292	106	113	24.78	30.14	+.08	39.6	−0.2	72	12	50	10	2	29	36	32	24	60	1.58	+1.0	6	4,462	s.	28	w.	14	12	10	8	4.7	23.1	8.2
Pueblo	4,685	80	86	25.36	30.15	+.10	37.3	−2.1	73	10	51	−1	19	24	44	31	24	64	1.19	+0.8	6	3,376	nw.	44	nw.	14	13	13	4	3.9	11.3	3.3
Concordia	1,392	50	58	28.65	30.16	+.08	42.2	+0.8	69	15	51	20	25	33	31	37	33	76	2.59	+1.6	8	5,274	s.	30	w.	14	10	7	13	5.7	2.6	T.
Dodge City	2,509	11	51	27.51	30.17	+.10	42.6	0.0	70	15	54	20	3	32	36	36	33	78	2.35	+1.6	9	6,187	s.	31	s.	13	19	4	7	3.5	T.	0.0
Wichita	1,358	139	158	28.67	30.13	+.05	44.9	+0.1	69	15	54	25	25	36	33	40	37	78	5.45	+4.3	10	8,381	s.	40	s.	14	13	7	10	5.2	0.9	0.0
Broken Arrow	765	11	56	29.32	30.16		47.2		75	14	56	23	26	38	33				2.41		12	7,800	s.	32	sw.	14	7	9	14	6.2	T.	0.0
Oklahoma City	1,214	10	47	28.85	30.16	+.08	47.8	−1.0	76	15	57	28	3	39	31	42	38	76	3.88	+1.6	9	6,296	s.	25	s.	13	11	4	15	6.0	0.1	0.0
Southern Slope							50.0	−1.7										72	1.18	0.0										4.7		
Abilene	1,738	10	52	28.33	30.17	+.10	52.0	−1.5	77	14	62	26	20	42	35	45	40	72	0.49	−0.9	7	5,590	s.	28	s.	16	11	6	13	5.7	0.0	0.0
Amarillo	3,676	10	49	26.35	30.14	+.09	44.2	−1.3	69	10	54	20	19	34	31	38	34	77	3.54	+2.4	5	5,684	sw.	24	se.	18	17	7	6	3.8	13.9	0.0
Del Rio	944	64	71	29.13	30.13	+.08	57.7	−2.3	83	7	67	33	20	49	35	51	45	69	0.38	−0.8	5	4,545	se.	31	n.	16	11	7	12	5.4	0.0	0.0
Roswell	3,566	75	85	26.47	30.13	+.10	46.3	−1.8	71	15	58	20	19	35	39	39	34	70	0.31	−0.6	3	4,204	s.	34	nw.	18	16	9	5	3.9	T.	0.0
Southern Plateau							49.2	−0.2										58	0.40	−0.1										3.4		
El Paso	3,778	152	175	26.28	30.11	+.11	51.4	−1.3	75	15	62	28	19	41	32	42	34	58	0.79	+0.3	4	5,737	e.	35	w.	16	18	7	5	3.3	0.0	0.0
Santa Fe	7,013	38	53	23.29	30.13	−.10	37.4	−1.5	65	11	47	16	30	27	34	31	25	68	0.58	−0.1	7	3,610	n.	25	n.	8	13	5	12	4.9	2.7	0.0
Flagstaff	6,907	10	59	23.39	30.07	+.05	35.7	+0.3	68	11	48	7	18	24	42	30		75	1.82		8		e.				13	12	5		2.0	T.
Phoenix	1,108	10	82	28.86	30.03	+.05	60.2	+0.5	84	11	74	33	30	47	36	48	38	50	0.16	−0.8	2	2,127	e.	20	sw.	13	15	12	3	3.6	0.0	0.0
Yuma	141	9	54	29.88	30.03	+.05	62.2	−0.2	83	10	76	38	29	49	34	49	35	41	0.04	−0.2	2	3,426	n.	22	w.	13	26	1	3	1.9	0.0	0.0
Independence	3,957	6	27	26.30	30.13	+.08	48.3	+1.1	79	6	63	22	30	34	38	34			0.43	+0.1	1		nw.				20	6	4		0.0	0.0
Middle Plateau							39.4	+0.1										62	0.82	0.0										4.8		
Reno	4,532	74	81	25.55	30.14	+.03	42.2	+1.2	72	5	56	16	29	28	42	34	25	57	0.29	−0.4	5	3,372	w.	30	w.	6	15	12	3	4.0	0.7	0.0
Tonopah	6,090	12	20				38.9		65	5	46	17	18	32	25	31	20	46	0.27		3		se.									
Winnemucca	4,344	18	56	25.73	30.20	+.06	37.3	−1.1	64	5	51	9	29	24	39	32	26	68	0.64	0.0	8	3,834	ne.	29	nw.	16	10	15	5	4.2	1.4	1.0
Modena	5,473	10	43	24.69	30.12	+.04	36.8	+0.4	66	11	50	8	29	23	44	30	23	63	0.22	−0.4	4	5,825	sw.	38	sw.	13	14	10	6	4.3	0.2	0.0
Salt Lake City	4,360	163	203	25.72	30.16	+.04	40.5	−0.6	63	12	47	18	18	34	22	35	29	67	1.86	+0.5	12	1,600	nw.	30	s.	6	6	2	12	6.3	6.1	T.
Grand Junction	4,602	60	68	25.48	30.12	+.04	40.1	+0.8	61	7	49	24	19	31	31	34	30	71	1.09	+0.5	10	3,084	se.	36	sw.	13	11	8	11	5.4	4.5	0.7
Northern Plateau							39.8	+0.4										74	0.81	−0.6										7.2		
Baker	3,471	48	53	26.56	30.20	+.04	37.2	+1.2	56	11	45	17	18	29	24	34	29	72	0.40	−0.8	9	3,512	se.	21	s.	10	6	10	14	6.7	0.7	T.
Boise	2,739	78	86	27.30	30.21	+.04	41.8	+0.8	67	11	50	21	18	33	27	36	30	68	0.76	−0.5	8	3,014	se.	21	se.	11	5	10	15	6.7	T.	T.
Lewiston	757	40	48	29.35	30.18	+.06	41.8	+0.4	64	10	50	24	2	34	34				0.39	−0.9	10	1,643	e.	18	nw.	10	3	8	19	7.6	T.	0.0
Pocatello	4,477	60	68	25.57	30.17	+.03	37.8	+1.1	62	12	45	12	18	30	26	33	28	70	1.34	+0.8	8	4,607	se.	26	s.	12	4	12	14	6.7	6.3	3.0
Spokane	1,929	101	110	28.09	30.19	+.09	37.6	−0.9	53	10	44	22	2	31	28	35	32	81	1.24	−0.8	11	2,296	nw.	23	sw.	10	5	3	22	7.9	0.9	T.
Walla Walla	991	57	65	29.08	30.17	+.04	42.8	0.0	64	9	49	28	19	36	23	39	36	80	0.75	−1.3	11	2,108	s.	19	se.	8	5	5	20	7.3	T.	0.0
North Pacific Coast Region							47.6	+1.2										84	4.30	−2.3										7.9		
North Head	211	11	56	29.85	30.08	+.03	48.4	+0.2	62	21	53	38	17	44	16	47	45	90	6.32	−1.1	16	10,441	se.	58	s.	8	4	6	20	8.0	0.0	0.0
Port Angeles	29	8	53		30.06		44.6		57	4	50	33	18	39	17				1.92	−2.5	13	3,329	sw.	26	sw	30	1	7	22		0.0	0.0
Seattle	125	215	250	29.96	30.09	+.05	46.8	+1.2	63	2	51	34	18	42	16	44	41	80	2.29	−3.0	17	4,801	se	32	s.	10	1	5	24	8.6	0.0	0.0
Tacoma	194	172	201	29.88	30.10	+.06	46.4	+1.8	64	20	52	31	18	41	21				2.68	−3.9	15	4,273	s.	32	sw.	30	0	6	24	8.9	0.0	0.0
Tatoosh Island	86	9	53	29.94	30.03	+.06	48.4	+2.5	62	2	51	41	30	46	12	47	46	92	9.04	−3.0	23	11,912	e.	51	s.	15	4	5	21	7.9	0.0	0.0
Yakima	1,071	5					40.1		61	4	50	22	19	30	32	36		80	0.62		7		se.				9	6	15	6.2	0.0	0.0
Medford	1,425	4	80	28.60	30.14		44.4		70	9	54	23	24	35	35	41	38	82	1.11		14		w.	30	se.	2	5	5	20	7.3	0.3	T.
Portland, Oreg	153	68	106	29.96	30.12	+.02	46.6	−0.2	61	4	52	31	18	41	21	44	41	82	5.30	−0.8	16	3,147	se.	19	nw.	16	2	2	26	8.5	0.0	0.0
Roseburg	510	75	99	29.56	30.12	.00	47.6	+1.7	71	2	55	32	19	40	24	44	41	82	2.54	−2.1	15	2,149	s.	25	w.	11	4	8	18	7.7	0.0	0.0
Middle Pacific Coast Region							53.1	−0.6										76	3.89	+1.1										4.7		
Eureka	62	73	89	30.07	30.14	+.03	51.4	+0.3	71	2	58	35	17	44	23	48	45	82	4.90	−0.3	15	3,921	se.	27	se.	2	7	6	17	6.7	0.0	0.0
Red Bluff	330	54	58	29.77	30.13	+.02	51.7	−2.1	77	20	62	33	30	42	6	47	42	72	5.75	+2.8	7	3,370	nw.	33	se.	13	9	10	11	5.4	0.0	0.0
Sacramento	69	106	117	30.05	30.12	+.03	53.0	−0.6	70	1	62	36	20	44	27	49	45	76	2.98	+1.1	6	3,981	se.	32	se.	13	19	6	5	2.9	0.0	0.0
San Francisco	155	208	243	29.96	30.13	+.04	56.4	+0.1	70	1	63	45	30	50	19	51	46	74	3.35	+1.0	6	4,034	w.	30	s.	13	13	10	7	4.6	0.0	0.0
San Jose	141	12	110	29.98	30.13		53.5		74	1	65	33	30	42	33				2.47	+1.0	5	3,402	nw.	26	se.	13	15	11	4	3.8	0.0	0.0
South Pacific Coast Region							59.1	+0.9										64	1.29	+0.3										3.4		
Fresno	327	89	98	29.77	30.14	+.08	54.0	−0.2	75	2	65	35	28	43	30	48	43	71	1.57	+0.6	4	2,561	nw.	17	se.	14	19	7	4	3.0	0.0	0.0
Los Angeles	338	159	191	29.71	30.07	+.05	63.2	+2.3	85	20	72	49	15	54	28	51	41	54	1.67	+0.5	3	3,100	ne.	18	w.	12	17	6	7	3.5	0.0	0.0
San Diego	87	62	70	29.96	30.05	+.03	60.2	+0.5	83	20	68	45	30	52	32	53	47	67	0.63	−0.1	5	3,218	nw.	23	s.	14	13	11	6	3.8	0.0	0.0
West Indies																																
Juan, P. R.	82	9	54	29.83	29.91		78.9	+0.5	88	20	84	72	27	74	15				8.21	+1.3	24	6,154	e.	34	e.	15	5	21	4	5.4	0.0	0.0
Panama Canal																																
Balboa Heights	118	7	97	[1]29.75	[2]29.84	.00	78.4	−0.7	88	21	84	70	7	73	15	74	74	[2]90	20.51	+10.3	23	[3]3,824	nw.	[3]25	s.	5	0	5	25	8.7	0.0	0.0
Colon	38	7	97	[1]29.83	[2]29.83	−.02	79.8	+0.5	91	16	85	72	12	75	16	67	75	[2]88	17.20	−4.2	30	[3]5,330	s.	[3]32	sw.	26	0	5	25	8.7	0.0	0.0
Alaska																																
Juneau	80	11	50	[4]29.65	[4]29.74		38.8		58	2	43	22	13	35	19	37	34	82	9.02		23	6,721	e.	40	se.	3	5	0	25	8.2	4.2	T.
Hawaiian Islands																																
Honolulu	38	86	100	[4]30.01	[4]30.05		74.6		83	3	79	66	22	70	14	68	65	75	2.37	−1.5	17	5,591	e.	36	e.	4	9	6	15	6.3	0.0	0.0

[1] 8 a. m. observation only. [2] Observations taken bihourly. [3] 4-cup anemometer. [4] Pressure not reduced to mean of 24 hours.

TABLE 2.—*Data furnished by the Canadian Meteorological Service, November, 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				39.3		49.5	29.2	55	16	11.60		0.2
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	29.94	−0.08	29.3	+0.3	34.0	24.7	48	6	2.86	−0.90	6.3
Doucet, Que	1,236				23.3		30.6	16.0	47	−7	0.59		1.1
Montreal, Que	187	29.72	29.94	−.09	34.8	+3.0	40.3	29.2	62	15	3.97	+0.23	11.8
Ottawa, Ont	236	29.70	29.98	−.04	34.3	+2.6	40.8	27.7	64	12	2.69	+0.15	7.4
Kingston, Ont	285	29.66	29.98	−.06	38.3	+3.3	44.0	32.6	60	12	3.40	+0.16	1.9
Toronto, Ont	379	29.57	29.99	−.05	39.7	+4.1	45.2	34.2	65	16	4.22	+1.08	0.9
Cochrane, Ont	930				25.4		30.7	20.2	47	5	2.12		14.3
White River, Ont	1,244	28.59	29.94	−.04	24.8	+4.3	33.1	16.5	48	−7	1.01	−0.84	3.1
London, Ont	808				39.2		44.5	34.0	66	15	5.11		11.6
Southampton, Ont	656	29.24	29.97	−.05	38.1	+3.1	43.7	32.5	60	17	5.73	+2.03	8.0
Parry Sound, Ont	688	29.27	29.98	−.03	33.8	+1.7	39.5	28.1	52	10	4.96	+0.59	14.7
Port Arthur, Ont	644	29.28	30.01	+.01	32.6	+8.6	39.5	25.7	53	7	0.82	−0.51	0.4
Winnipeg, Man	760	29.17	30.04	.00	30.3	+12.3	36.9	23.8	55	8	1.66	+0.58	T.
Minnedosa, Man	1,690	28.16	30.03	−.01	27.3	+10.0	36.3	18.3	52	4	0.15	−0.85	T.
Le Pas, Man	860				24.9		32.9	16.9	43	0	0.05		0.5
Qu'Appelle, Sask	2,115	27.73	30.03	+.03	28.9	+10.1	39.1	18.8	52	4	0.03	−0.86	T.
Moose Jaw, Sask	1,759												
Swift Current, Sask	2,392	27.42	29.99	−.03	33.1	+9.9	47.0	19.2	64	2	T.	−0.69	T.
Medicine Hat, Alb	2,144												
Calgary, Alb	3,428												
Banff, Alb	4,521												
Prince Albert, Sask	1,450	28.40	30.01	−.02	28.0	+12.6	37.3	18.7	48	6	0.04	−0.79	0.3
Battleford, Sask	1,592	28.22	30.00	−.02	28.6	+12.3	40.3	17.0	56	6	T.	−0.58	T.
Edmonton, Alb	2,150												
Kamloops, B. C	1,262												
Victoria, B. C	230	29.81	30.07	+.08	46.4	+3.2	49.9	43.0	59	38	1.91	−5.06	0.0
Barkerville, B. C	4,180												
Estevan Point, B. C	20												
Prince Rupert, B. C	170												
Hamilton, Ber	151	29.99	30.15	+.10	67.4	−1.3	73.9	60.9	81	49	7.06	+2.68	0.0

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Father Point, Que	20	29.93	29.95	.00	41.3	+1.5	47.3	35.4	67	24	3.96	+1.06	0.0
Southampton, Ont	656				50.1	+4.0	58.4	41.9	80	25	5.53	+2.36	2.5
Winnipeg, Man	760	29.17	30.02	+.04	41.2	+2.1	50.0	32.5	68	16	0.42	−1.28	0.9
Medicine Hat, Alb	2,144	27.67	29.95	−.02	41.6	−3.2	53.0	30.2	68	18	0.40	−0.18	0.0
Calgary, Alb	3,428	26.42	30.04	+.09	38.0	−2.1	50.7	25.4	71	3	0.54	+0.06	3.0
Banff, Alb	4,521	25.39	30.02	+.07	36.0	−3.3	45.0	27.0	55	13	0.98	−0.04	1.6
Kamloops, B. C	1,262	28.73	30.04	+.08	45.0	−2.0	53.5	36.5	68	25	0.16	−0.45	0.0
Barkerville, B. C	4,180	25.62	29.95	+.01	34.5	−5.2	41.8	27.3	50	14	3.41	+0.71	19.3
Estevan Point, B. C	20				49.8		55.4	44.2	62	35	14.08		0.0
Prince Rupert, B. C	170				46.9		52.3	41.6	60	30	9.63		0.0