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, August, 1923.

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	78.9	−0.6	Selma	98	18	2 stations	51	[2] 24	6.28	+1.56	Citronelle	10.96	Tuskegee	1.02
Alaska														
Arizona	77.0	−1.7	Mohawk	114	[2] 28	Fort Valley	39	22	3.30	+0.59	Henry's Camp	8.00	Yuma Citrus Station	0.06
Arkansas	81.9	+2.5	2 stations	109	[2] 4	Dutton	49	[2] 24	2.43	−1.40	Heber Springs	7.68	Fayetteville	0.00
California	71.1	−1.4	Greenland Ranch	119	28	Fordyce Dam	24	9	0.13	+0.03	West Branch	2.55	93 stations	0.00
Colorado	63.3	−1.5	Wray	99	[2] 11	Longs Peak	21	29	3.34	+1.38	Cuchara Camps	10.09	Rugh Ranch	0.57
Florida	81.3	0.0	New Smyrna	102	14	Davie	63	16	6.73	−0.56	Garniers	13.48	Ft. Pierce	1.09
Georgia	79.9	+0.4	2 stations	101	15	Clayton	50	16	5.63	+0.11	Milledgeville	11.56	Canton	2.37
Hawaii	74.7	+0.1	Pahala	92	17	Waimea	52	8	6.07	−1.79	Honomu	26.06	5 stations	0.00
Idaho	66.4	−0.2	Weiser	110	12	Stanley	21	2	0.90	+0.21	Wallace	2.33	2 stations	T.
Illinois	74.0	−0.1	Henry	103	11	Ottawa	38	26	4.89	+1.57	Sparta	13.22	Walnut	1.51
Indiana	72.8	−0.5	2 stations	99	[2] 11	2 stations	38	[2] 23	4.81	+1.55	Valparaiso	10.93	Angola	2.12
Iowa	70.6	−1.2	Fairfield	102	11	3 stations	38	22	5.42	+1.74	Grundy Center	13.14	Clinton	1.46
Kansas	78.2	+0.8	Medicine Lodge	113	14	Atwood	40	22	2.42	−0.65	Healy	7.76	Norwich	0.06
Kentucky	75.5	−0.2	Lone Oak	99	12	2 stations	43	24	6.04	+2.48	Calhoun	12.77	Anchorage	2.17
Louisiana	81.6	0.0	2 stations	104	17	2 stations	51	[2] 24	5.59	+0.36	Reserve	13.85	Plain Dealing	0.20
Maryland-Delaware	72.8	−0.6	2 stations	98	[2] 7	Grantsville, Md.	34	23	3.08	−1.34	Princess Anne, Md.	6.65	Delaware City, Del.	0.94
Michigan	64.4	−1.9	Charlotte	99	1	2 stations	29	[2] 8	2.61	−0.18	Maple Ridge	6.13	Eagle Harbor	0.55
Minnesota	64.9	−1.9	Pipestone	95	[2] 11	Angus	29	24	2.28	−0.84	New Ulm	7.21	Collegeville	0.75
Mississippi	80.2	−0.2	2 stations	100	15	Batesville	53	24	5.52	+1.07	Biloxi	11.53	Rosedale	0.57
Missouri	77.3	+1.3	Hollister	108	14	Unionville (2)	42	[2] 24	3.99	+0.31	St. Catharine	9.55	Neosho	0.24
Montana	63.8	−0.7	Billings	104	12	2 stations	30	[2] 1	1.69	+0.50	Red Lodge	4.86	Vananda	0.30
Nebraska	71.0	−1.8	2 stations	101	[2] 10	Ainsworth	35	22	4.76	+1.95	Wakefield	11.41	Harrisburg	1.56
Nevada	69.3	−1.5	Beatty	108	[2] 17	Rye Patch	24	11	0.65	+0.14	Schurz	2.92	Mina	0.02
New England	64.7	−1.7	Waterbury, Conn.	99	4	Berlin, N. H.	32	24	2.19	−1.63	Storrs, Conn.	4.53	Lewiston, Me.	0.98
New Jersey	70.8	−1.2	Little Falls	98	5	Charlotte	35	24	2.44	−2.30	Bridgeton	4.81	Little Falls	1.23
New Mexico	69.3	−0.9	Orogrande	110	1	Elizabethtown	31	28	3.78	+1.73	Des Moines	10.17	Artesia	0.09
New York	66.1	−1.2	Willard	97	3	2 stations	29	24	2.08	−1.78	Hoffmeister	4.96	Lauterbrunnen	T.
North Carolina	76.0	+0.7	Lumberton	100	16	Mount Mitchell	42	24	4.49	−1.12	Elizabethtown	11.74	Marshall	0.84
North Dakota	63.0	−2.4	Westhope	97	31	Hansboro	28	24	1.90	−0.38	Bottineau	4.98	Beach	0.24
Ohio	70.7	−1.1	Xenia	98	12	2 stations	34	[2] 22	4.34	+0.83	Athens	8.89	Catawba Island	1.64
Oklahoma	83.7	+3.0	4 stations	112	[2] 1	4 stations	49	23	1.54	−1.55	Union City	4.04	2 stations	T.
Oregon	67.3	+1.5	Echo	109	16	Lapine	26	8	0.45	−0.07	Cascade Locks	2.08	2 stations	T.
Pennsylvania	69.2	−0.8	3 stations	96	7	Clearfield	30	25	3.10	−1.41	Phoenixville	7.30	Indiana	0.59
Porto Rico	79.9	+0.7	Ponce	99	[2] 1	Aibonito	60	[2] 26	5.15	−2.20	Mayaguez	12.73	Ensenada	0.57
South Carolina	79.3	+0.5	Society Hill	101	15	Walhalla	54	27	7.44	+1.35	Georgetown	14.30	Due West	3.15
South Dakota	67.7	−1.8	Wagner	99	13	Castlewood	31	22	3.55	+0.82	Vermillion	8.85	Watertown	0.63
Tennessee	76.9	+0.1	2 stations	100	[2] 13	Rugby	44	24	6.19	+2.06	Hohenwald	11.62	Rogersville	1.75
Texas	83.8	+1.2	2 stations	112	[2] 1	2 stations	52	[2] 18	2.31	−0.29	Port Arthur	9.71	2 stations	0.00
Utah	68.0	−1.3	St. George	102	[2] 3	Winter Quarters	30	28	1.29	+0.20	Escalante	4.50	Lemay	T.
Virginia	73.5	−0.7	Danville	99	7	Burkes Garden	38	25	4.70	+0.68	Williamsburg	10.84	Lexington	1.89
Washington	67.5	+1.9	2 stations	108	16	Paradise Inn	32	7	1.05	+0.35	Headworks	2.46	Hanford	T.
West Virginia	71.0	−0.7	Moorefield	99	11	Terra Alta	33	23	4.39	+0.52	Pickens	12.42	Upper Tract	1.60
Wisconsin	65.0	−1.7	Lake Mills	98	1	Long Lake	28	25	2.79	−0.42	Manitowaoc	5.78	Danbury	0.71
Wyoming	63.1	−0.9	Thermopolis	102	11	2 stations	26	[2] 17	1.66	+0.55	Knowles	7.17	Green River	0.05

[1] For description of tables and charts, see REVIEW, July, 1922, pp. 384-385.

[2] Other dates also.

TABLE I.—*Climatological data for Weather Bureau stations, August, 1923.*

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.												Precipitation.			Wind.										
	Barometer above sea level.	Thermometer above ground.	Anemometer above ground.	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.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Total.	Departure from normal.	Days with 0.01, or more.	Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	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.							65.6	−1.7										78	1.93	−2.0										4.6		
Eastport	76	67	85	29.86	29.94	−.02	57.6	−3.1	76	5	66	45	28	49	26	53	51	85	2.47	−0.8	11	5,937	s.	32	s.	21	8	11	12	6.2	0.0	0.0
Greenville, Me.	1,070	6	.....	28.79	29.95	.....	59.2	.....	81	3	70	36	24	49	32	.....	.....	.....	2.85	.....	13	.....	.....	.....	.....	.....	13	6	12	.....	0.0	0.0
Portland, Me.	103	82	117	29.86	29.98	.00	64.1	−2.3	86	4	72	48	24	56	24	58	54	75	3.18	−0.4	12	6,267	s.	33	nw.	22	15	10	6	4.2	0.0	0.0
Concord	288	70	79	29.66	29.96	−.02	65.6	−1.2	92	4	78	42	24	53	35	.....	.....	.....	2.19	−1.6	9	3,064	s.	24	nw.	13	18	11	2	3.2	0.0	0.0
Burlington	404	11	48	29.51	29.94	−.03	64.8	−1.3	87	7	76	40	24	53	32	.....	.....	.....	2.29	−1.7	10	7,002	s.	42	sw.	28	12	9	10	5.1	0.0	0.0
Northfield	876	12	60	29.03	29.97	−.01	61.6	−1.3	87	3	76	36	24	47	37	57	55	81	1.07	−2.9	9	4,889	s.	32	s.	28	8	15	8	5.6	0.0	0.0
Boston	125	115	188	29.83	29.97	−.02	69.4	−0.5	94	4	78	51	24	61	25	62	58	72	1.86	−2.2	7	6,800	w.	32	sw.	21	10	15	6	4.6	0.0	0.0
Nantucket	12	14	90	29.97	29.98	−.01	65.4	−2.6	78	10	72	51	17	58	20	61	59	85	1.90	−1.2	5	9,924	sw.	46	sw.	22	14	6	11	5.0	0.0	0.0
Block Island	26	11	46	29.96	29.98	−.01	66.4	−2.1	80	15	72	53	23	60	17	62	60	86	1.10	−2.4	3	9,729	sw.	38	sw.	22	14	9	8	4.5	0.0	0.0
Providence	160	216	251	29.81	29.98	−.01	68.2	−2.8	90	4	78	50	23	59	25	61	57	71	1.48	−2.6	6	7,764	s.	48	w.	13	15	12	4	3.9	0.0	0.0
Hartford	159	122	140	29.80	29.97	−.02	69.4	+0.5	92	4	80	46	24	58	30	62	58	72	2.57	−2.0	6	5,114	s.	31	sw.	21	11	12	8	4.7	0.0	0.0
New Haven	106	74	153	29.87	29.98	−.01	68.6	−1.7	91	5	77	48	23	60	24	62	59	72	1.17	−3.8	6	6,037	s.	31	sw.	21	18	5	8	3.7	0.0	0.0
Middle Atlantic States.							72.3	−0.9										77	2.86	−1.6										5.0		
Albany	97	102	115	29.86	29.96	−.02	69.2	−1.6	93	5	80	45	24	58	30	61	56	68	2.21	−1.8	7	5,055	s.	30	s.	21	17	12	2	3.1	0.0	0.0
Binghamton	871	10	84	29.05	29.97	−.02	67.0	−0.5	91	6	80	43	23	54	38	.....	.....	.....	2.19	−1.2	5	3,635	nw.	28	sw.	21	9	14	8	5.2	0.0	0.0
New York	314	414	454	29.65	29.98	−.02	71.3	−1.8	89	5	79	53	22	64	25	63	60	73	1.12	−3.4	7	10,261	s.	58	nw.	22	14	11	6	4.9	0.0	0.0
Harrisburg	374	94	104	29.60	30.00	−.01	71.8	−0.3	92	7	81	49	24	63	28	64	60	71	0.73	−3.5	8	3,710	sw.	26	sw.	28	12	8	11	5.4	0.0	0.0
Philadelphia	114	123	190	29.87	29.99	−.01	73.8	−1.0	91	7	82	55	23	66	24	65	61	70	4.26	−0.4	10	6,269	sw.	29	n.	22	11	10	10	5.3	0.0	0.0
Reading	325	81	98	29.64	29.98	.....	72.5	.....	92	7	82	48	23	63	30	66	62	75	1.27	−3.2	8	3,447	se.	25	n.	22	10	17	4	5.0	0.0	0.0
Scranton	805	111	119	29.14	29.99	−.01	68.4	−0.9	91	7	80	45	24	57	33	62	59	76	3.32	−0.9	8	4,056	s.	28	s.	21	10	16	5	5.0	0.0	0.0
Atlantic City	52	37	172	29.93	29.98	−.02	71.6	−0.9	91	8	77	55	23	66	20	67	64	80	1.27	−3.0	8	10,702	s.	44	nw.	22	14	11	6	4.4	0.0	0.0
Cape May	17	13	49	30.00	30.02	+.02	72.8	−0.6	93	8	80	51	23	66	22	68	66	85	4.02	−0.2	13	5,231	s.	24	sw.	21	15	6	10	4.6	0.0	0.0
Sandy Hook	22	10	55	29.96	29.98	.....	71.4	.....	88	4	78	56	23	65	22	65	62	77	1.96	.....	6	9,584	s.	44	nw.	22	15	12	4	3.9	0.0	0.0
Trenton	190	159	183	29.78	29.98	.....	71.6	.....	90	4	81	48	23	62	26	64	61	74	3.32	−2.0	8	6,777	sw.	35	nw.	22	11	8	12	5.5	0.0	0.0
Baltimore	123	100	113	29.85	29.98	−.03	74.8	−0.7	96	8	83	55	23	66	25	67	63	72	3.14	−1.1	10	3,957	s.	22	sw.	21	8	12	11	5.6	0.0	0.0
Washington	112	62	85	29.87	29.99	−.02	74.4	−0.6	94	3	84	51	22	65	28	68	65	78	2.19	−2.2	11	3,531	sw.	28	nw.	12	10	11	10	5.5	0.0	0.0
Lynchburg	681	153	188	29.27	30.00	−.02	74.8	−0.8	94	8	84	49	24	65	29	67	65	78	3.44	−0.8	13	4,182	w.	34	n.	8	11	13	7	4.8	0.0	0.0
Norfolk	91	170	205	29.91	30.00	.00	77.4	0.0	92	8	85	59	23	70	22	71	69	83	4.47	−1.5	13	7,738	s.	41	nw.	11	6	13	12	6.1	0.0	0.0
Richmond	144	11	52	29.84	29.99	−.02	75.2	−2.3	94	15	84	49	22	66	31	69	67	82	6.41	+2.0	12	4,660	sw.	33	sw.	5	9	11	11	5.7	0.0	0.0
Wytheville	2,304	49	56	27.70	30.01	.00	70.0	−0.5	87	6	79	48	25	61	30	64	63	85	2.39	−2.2	14	3,280	w.	19	w.	21	13	14	4	4.6	0.0	0.0
South Atlantic States.							79.2	+0.9										83	5.20	−0.9										6.0		
Asheville	2,255	70	84	27.74	30.02	.00	72.6	+2.1	88	21	82	51	25	63	28	66	64	85	2.75	−1.8	12	3,642	nw.	27	nw.	5	10	19	2	4.5	0.0	0.0
Charlotte	779	55	62	29.19	30.01	−.01	78.4	+1.3	97	15	88	56	23	69	27	70	67	78	2.93	−2.6	10	2,402	sw.	17	nw.	22	5	14	12	6.5	0.0	0.0
Hatteras	11	11	50	29.99	30.00	.00	78.5	+0.5	89	13	84	66	24	74	14	74	73	85	5.02	−0.8	10	8,721	sw.	56	nw.	22	9	14	8	5.4	0.0	0.0
Manteo	12	5	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Raleigh	376	103	110	29.61	30.00	−.01	77.4	+0.6	96	15	86	56	23	68	34	71	69	83	3.88	−2.0	12	4,702	sw.	31	n.	22	5	13	13	6.6	0.0	0.0
Wilmington	78	81	91	29.94	30.02	+.02	79.2	+1.6	93	7	86	62	24	72	19	74	73	87	5.04	−1.5	20	4,541	sw.	34	ne.	30	9	12	10	5.5	0.0	0.0
Charleston	48	11	92	29.98	30.03	+.02	81.8	+0.8	96	12	88	70	25	75	22	75	73	82	12.29	+5.3	18	6,501	sw.	32	ne.	30	5	13	13	6.7	0.0	0.0
Columbia, S. C.	351	41	57	29.65	30.02	+.01	80.0	+0.5	98	15	89	62	24	71	24	72	71	84	5.47	−1.3	18	3,929	sw.	24	w.	28	4	13	14	6.6	0.0	0.0
Due West	711	10	55	29.28	30.04	.....	78.1	.....	96	15	88	58	25	68	28	.....	.....	.....	3.15	.....	10	4,726	sw.	36	sw.	17	0	20	11	6.5	0.0	0.0
Greenville, S. C.	1,039	113	122	28.93	30.00	.....	76.7	.....	93	16	85	59	24	68	23	70	68	82	11.17	.....	13	4,516	sw.	39	nw.	28	8	15	8	5.4	0.0	0.0
Augusta	180	62	77	29.82	30.01	.00	80.8	+0.4	96	14	89	67	24	73	22	73	71	80	3.36	−2.2	13	2,928	s.	19	nw.	17	4	15	12	6.8	0.0	0.0
Savannah	65	150	194	29.96	30.03	+.02	81.9	+1.2	96	13	91	68	30	73	23	74	72	82	6.60	−0.9	12	7,249	sw.	37	nw.	30	6	16	9	5.9	0.0	0.0
Jacksonville	43	209	245	30.00	30.05	+.04	81.9	+0.2	94	7	90	70	30	74	23	74	72	80	4.67	−1.5	16	7,290	sw.	48	sw.	27	7	14	10	6.0	0.0	0.0
Florida Peninsula.							82.1	−0.2										77	5.25	−1.7										5.0		
Key West	22	10	64	30.01	30.03	+.05	82.7	−0.8	90	1	88	71	21	77	15	76	73	75	3.88	−0.8	11	6,131	se.	38	se.	6	13	12	6	4.5	0.0	0.0
Miami	25	71	79	30.04	30.07	.....	81.6	−0.4	89	13	87	71	13	76	18	75	73	75	6.34	−1.3	13	4,817	e.	24	e.	11	12	10	9	4.9	0.0	0.0
Sand Key	23	39	72	30.02	30.06	+.08	81.1	.....	86	3	84	70	6	78	13	76	74	76	3.43	.....	10	8,430	e.	35	se.	7	12	14	5	4.6	0.0	0.0
Tampa	35	79	87	30.02	30.05	+.05	81.9	+0.5	93	28	89	71	31	74	19	75	74	83	5.52	−3.1	16	3,375	e.	28	se.	20	3	17	11	6.1	0.0	0.0
East Gulf States.							79.4	−0.2										84	5.68	+0.8										6.2		
Atlanta	1,174	190	216	28.81	30.03	+.02	77.4	+0.4	94	15	86	64	26	69	22	72	70	84	4.17	−0.3	14	6,021	w.	29	w.	6	6	9	16	6.4	0.0	0.0
Macon	370	78	87	29.63	30.02	+.01	80.3	+2.1	96	15	89	68	1	72	23	73	71	81	6.39	+2.2	9	3,648	sw.	21	nw.	8	4	11	16	6.9	0.0	0.0
Thomasville	273	49	58	29.75	30.04	+.04	79.9	−1.1	94	20	89	67	31	71	23	74	72	84	6.89	+1.9	19	2,607	sw.	18	sw.	23	4	15	12	6.7	0.0	0.0
Apalachicola	36	42	49	30.00	30.04	.....	80.4	.....	90	12	85	72	22	75	14	75	74	82	5.62	.....	12	4,177	s.	19	w.	14	14	12	5	4.2	0.0	0.0
Pensacola	56	149	185	29.97	30.03	+.05	78.8	−2.1	88	11	84	69	1	74	15	75	74	85	9.59	+2.4	16	7,027	sw.	40	s.	14	3	15	13	6.8	0.0	0.0
Anniston	741	9	57	29.27	30.05	+.06	77.8	+1.4	94	15	87	56	25	68	29	.....	.....	.....	4.01	−0.5	16	2,273	sw.	23	nw.	16	10	10	11	5.7	0.0	0.0
Birmingham	700	11	48	29.29	30.04	+.05	78.4	−1.4	95	15	87	58	25	70	28	71	70	83	6.90	+2.4	16	3,279	s.	21	nw.	19	8	14	9	5.6	0.0	0.0
Mobile	57	125	161	29.96	30.02	+.04	80.6	+0.1	91	16	87	70	31	74	20	75	74	88	4.46	−2.4	16	5,117	sw.	28	nw.	14	4	18	9	6.6	0.0	0.0
Montgomery	223	100	112	29.79	30.03	+.04	79.8	−1.0	92	18	88	67	25	72	22	73	72	84	6.30	+2.1	11	3,635	sw.	36	nw.	13	3	13	15	6.8	0.0	0.0
Corinth	469	6	.....	.....	.....	.....	79.6	.....	98	15	90	55	24	70	33	.....	.....	.....	3.96	.....	8	.....	se.	.....	.....	.....	5	21	5	.....	0.0	0.0
Meridian	375	85	93	29.62	30.01	+.03	78.9	+0.4	93	15	87	60	26	70	26	73	71	83	4.49	+0.9	13	3,063	sw.	33	e.	15	7	19	5	5.6	0.0	0.0
Vicksburg	247	65	73	29.75	30.02	+.04	80.0	−0.8	95	16	88	61	25	72	25	74	72	83	1.68	−1.8	8	3,651	sw.	17	sw.	28	7	12	12	6.2	0.0	0.0
New Orleans	53	76	84	29.96	30.01	+.03	82.0	−0.2	93	17	89	70	6	75	19	76	74	83	7.60	+2.0	16	3,592	sw.	23	n.	19	2	20	9	6.5	0.0	0.0
West Gulf States.							83.2	+2.0										72	2.22	−0.7										4.0		
Shreveport	249	77	93	29.72	29.98	+.01	83.0	+1.6	100	17	92	61	24	74	28	73	70	72	2.03	−0.2	3	4,472	se.	18	e.	18	21	6	4	3.4	0.0	0.0
Bentonville	1,303	11	44	.....	.....	.....	80.8	+4.3	104	14	93	55	24	68	35	.....	.....	.....	0.71	.....	3	.....	.....	.....	.....	.....	17	11	3	.....	0.0	0.0
Fort Smith	457	79	94	29.47	29.94	−.03	84.6	+5.2	107	4	96	62	24	73	29	71	66	61	0.29	−3.4	3	4,512	e.	25	se.	5	14	13	4	4.1	0.0	0.0
Little Rock	357	136	144	29.60	29.97	−.01	81.5	+1.7	98	17	91	61	24	72	29	73	70	77	2.55	−1.1	8	4,774	s.	50	nw.	17	16	8	7	4.2	0.0	0.0
Brownsville	57	53	61	29.88	29.94	.....	84.4	.....	95	24	92	74	30	77	20	75	73	78	1.34	.....	8	6,436	s.	28	s.	27	19	12	0	2.8	0.0	0.0
Corpus Christi	20	11	73	29.95	29.97	+.04	83.4	+1.3	93	23	90	72	28	77	17	77	75	82	2.64	+0.4	5	9,590	s.	34	s.	27	15	13	3	3.6	0.0	0.0
Dallas	512	109	117	29.43	29.96	.....	85.4	.....	104	1	95	67	24	76	29	.....	.....	.....	0.97	.....	6	5,085	s.	26	s.	17	20	8	3	3.6	0.0	0.0
Fort Worth	670	106	114	29.24	29.93	−.01	85.2	+2.3	104	1	96	67	24	75	25	70	63	55	1.68	−0.2	4	6,239	se.	28	e.	31	17	12	2	3.6	0.0	0.0
Galveston	54	106	114	29.95	30.01	+.05	82.4	−0.6	92	23	87	71	29	78	20	76	74	80	4.61	−0.4	9	6,974	s.	32	w.	29	8	19	4	4.5	0.0	0.0
Groesbeck	461	11	56	29.50	29.97	.....	84.3	.....	102	3	96	64	26	73	30	.....	.....	.....	2.13	.....	3	7,012	s.	36	sw.	19	15	13	3	3.8	0.0	0.0
Houston	138	111	121	29.85	29.99	.....	83.2	+0.3	98	18	92	68	26	74	26	.....	.....	.....	3.82	.....	15	4,585	s.	28	e.	18	14	13	4	4.5	0.0	0.0
Palestine	510	64	72	29.46	29.98	+.01	83.2	+1.4	101	17	94	64	24	73	27	72	67	67	1.83	−0.4	5	4,933	s.	26	nw.	30	10	17	4	4.7	0.0	0.0
Port Arthur	34	58	66	29.95	29.99	.....	82.4	.....	94	23	89	65	26	75	23	75	73	80	9.71	.....	10	5,669	s.	32	ne.	18	10	16	5	4.8	0.0	0.0
San Antonio	693	119	132	29.24	29.95	+.02	84.2	+2.2	99	2	95	69	9	74	26	72	68	67	2.94	+0.2	3	5,271	se.	31	w.	27	15	15	1	3.7	0.0	0.0
Taylor	583	55	63	29.40	30.01	+.06	84.0	+2.3	100	3	95	67	25	73	27	.....	.....	.....	1.38	−1.1	5	5,951	s.	31	sw.	27	12	17	2	4.3	0.0	0.0

TABLE I.—*Climatological data for Weather Bureau stations, August, 1923*—Continued.

Districts and stations.	Elevation of instruments. Barometer above sea level.	Thermometer above ground.	Anemometer above ground.	Pressure. Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Temperature of the air. Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Precipitation. Total.	Departure from normal.	Days with 0.01, or more.	Wind. Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Direction.	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.							74.6	−0.3										76	4.39	+1.0										5.4		
Chattanooga	762	189	213	29.22	30.01	+.01	77.4	−0.1	93	16	86	58	25	69	25	70	67	78	2.94	−0.8	10	3,788	sw.	33	nw.	16	6	22	3	5.3	0.0	0.0
Knoxville	996	102	111	28.98	30.01	.00	76.2	0.0	92	8	86	54	25	67	27	69	66	79	2.97	−1.0	8	3,468	sw.	30	sw.	21	7	12	12	6.1	0.0	0.0
Memphis	399	76	97	29.57	29.99	+.01	80.5	+1.0	94	17	88	59	24	73	22	73	71	77	5.06	+1.9	9	4,764	sw.	32	nw.	9	11	15	5	4.1	0.0	0.0
Nashville	546	168	191	29.45	30.02	+.02	76.4	−1.4	94	15	86	54	24	67	27	70	68	80	9.60	+6.1	14	4,213	sw.	38	se.	6	7	11	13	5.7	0.0	0.0
Lexington	989	193	230	28.96	30.01	.00	74.4	−0.2	90	11	83	51	22	66	22	.....	.....	.....	4.02	+0.4	13	6,769	sw.	36	nw.	26	9	13	9	5.3	0.0	0.0
Louisville	525	219	255	29.43	30.01	+.01	76.4	−0.6	94	12	86	52	23	67	28	68	65	73	2.29	−1.2	11	5,611	s.	58	nw.	12	12	10	9	4.7	0.0	0.0
Evansville	431	139	175	29.54	30.00	+.01	78.4	+1.4	96	7	88	52	23	69	25	70	67	73	3.09	−0.2	14	5,621	sw.	34	se.	20	4	25	2	5.6	0.0	0.0
Indianapolis	822	194	230	29.13	30.00	.00	73.2	−0.5	92	11	83	49	22	64	28	65	62	73	4.83	+1.5	13	6,438	sw.	52	w.	12	9	14	8	5.3	0.0	0.0
Royal Center	736	11	55	29.21	29.99	.....	68.8	.....	91	11	80	41	23	58	32	.....	.....	.....	4.04	.....	11	5,090	sw.	37	s.	4	4	11	16	6.7	0.0	0.0
Terre Haute	575	96	129	29.38	29.98	.....	74.5	.....	93	11	84	50	23	65	28	67	64	76	6.91	.....	10	5,167	sw.	48	w.	4	4	21	6	5.6	0.0	0.0
Cincinnati	628	11	51	29.33	29.99	−.02	74.0	+0.4	95	12	85	46	23	63	35	.....	65	78	3.72	+0.4	12	3,784	sw.	36	nw.	12	12	11	8	5.1	0.0	0.0
Columbus	824	179	222	29.14	30.00	−.01	71.8	−1.2	90	12	81	48	23	63	31	64	60	72	4.97	+1.8	15	5,405	n.	56	w.	12	11	8	12	5.4	0.0	0.0
Dayton	899	137	173	29.05	29.98	.....	72.8	−0.8	91	12	83	46	23	63	32	65	61	71	3.23	+0.2	15	4,905	sw.	42	nw.	12	13	15	3	4.0	0.0	0.0
Elkins	1,947	59	67	28.02	30.01	−.01	68.9	+0.5	86	8	80	43	24	58	32	63	61	87	3.08	−0.6	13	2,727	w.	29	w.	28	5	18	8	6.0	0.0	0.0
Parkersburg	638	77	84	29.36	30.01	.00	73.0	−0.3	90	7	83	48	24	63	31	66	63	79	7.38	+3.8	14	2,729	se.	28	nw.	3	13	7	11	5.5	0.0	0.0
Pittsburgh	842	353	410	29.10	29.99	−.02	71.0	−1.9	90	7	80	46	23	62	25	63	60	72	4.24	+1.1	12	5,479	nw.	42	nw.	27	6	13	12	6.1	0.0	0.0
Lower Lake Region.							68.0	−1.7										68	2.13	−0.8										4.8		
Buffalo	767	247	280	29.16	29.98	−.01	67.2	−1.4	91	6	75	44	22	59	26	60	55	69	1.26	−1.7	8	9,759	sw.	72	w.	21	8	17	6	5.1	0.0	0.0
Canton	448	10	61	29.46	29.92	.....	64.5	−3.3	89	4	77	39	16	52	36	.....	.....	.....	2.36	−0.3	9	6,140	w.	39	sw.	28	17	9	5	3.7	0.0	0.0
Oswego	335	76	91	.....	29.95	−.04	65.0	−3.4	96	2	73	44	24	57	28	.....	.....	.....	1.84	−0.8	10	6,010	s.	30	sw.	21	12	17	2	.....	0.0	0.0
Rochester	523	86	102	29.42	29.98	−.01	67.0	−2.2	92	6	77	44	23	57	31	59	53	64	1.33	−1.6	7	5,071	sw.	45	w.	21	14	11	6	4.7	0.0	0.0
Syracuse	597	97	113	29.25	29.99	.00	66.4	−2.2	88	2	76	45	24	56	29	.....	.....	.....	1.16	−2.2	8	6,591	s.	37	w.	21	10	16	5	5.0	0.0	0.0
Erie	714	130	166	29.22	29.98	−.03	69.0	−0.6	88	6	77	47	26	61	32	61	56	65	1.43	−1.8	6	8,372	nw.	52	sw.	21	5	21	5	5.0	0.0	0.0
Cleveland	762	190	201	29.18	29.99	−.02	69.0	−1.0	86	2	76	49	23	62	28	62	58	71	3.97	+0.8	9	7,727	s.	36	w.	12	5	21	5	5.3	0.0	0.0
Sandusky	629	62	70	29.32	30.00	−.01	70.3	−1.5	87	7	78	48	25	62	28	.....	.....	.....	3.59	+0.2	8	4,949	ne.	30	w.	29	5	20	6	5.1	0.0	0.0
Toledo	628	208	243	29.32	30.00	.00	69.9	−1.4	92	7	79	45	22	61	29	62	57	67	2.67	0.0	10	8,380	sw.	47	sw.	21	13	13	5	4.0	0.0	0.0
Fort Wayne	856	113	124	29.09	30.00	.....	70.0	−1.1	89	7	79	46	22	60	29	63	59	70	4.35	.....	12	4,848	sw.	29	sw.	21	9	12	10	5.4	0.0	0.0
Detroit	730	218	258	29.21	29.99	−.02	69.2	−1.1	90	4	79	45	22	60	28	61	57	70	1.70	−1.1	10	6,820	sw.	42	w.	21	10	16	5	4.9	0.0	0.0
Upper Lake Region.							64.1	−2.2										74	26.8	−0.3										5.4		
Alpena	609	13	92	29.32	29.99	−.01	61.0	−3.1	84	31	70	39	22	51	29	57	53	75	3.07	−0.3	10	7,591	nw.	44	nw.	21	9	13	9	5.3	0.0	0.0
Escanaba	612	54	60	29.32	29.98	−.01	60.6	−3.9	80	14	69	41	22	52	27	57	54	81	2.14	−1.5	11	6,121	s.	28	ne.	7	12	13	6	4.5	0.0	0.0
Grand Haven	632	54	89	29.30	29.97	−.02	65.2	−1.9	85	1	73	46	22	57	26	60	56	75	3.38	+0.8	11	6,138	nw.	38	w.	12	12	15	4	4.8	0.0	0.0
Grand Rapids	707	70	87	29.23	29.99	−.01	68.2	−1.8	91	4	79	44	22	58	33	60	56	67	2.07	−0.5	10	3,450	w.	22	w.	24	4	17	10	5.9	0.0	0.0
Houghton	668	62	99	29.25	29.97	.00	60.7	−2.6	82	11	70	46	15	52	31	.....	.....	.....	1.24	−1.6	11	6,698	w.	43	w.	14	9	13	9	5.6	0.0	0.0
Lansing	878	11	62	29.05	29.98	.....	66.7	−1.9	91	4	79	40	22	54	36	60	57	78	1.27	−1.4	11	2,995	sw.	18	sw.	21	6	16	9	5.5	0.0	0.0
Ludington	637	60	66	29.30	29.99	.....	62.6	.....	81	3	70	46	26	55	24	58	54	75	2.88	.....	10	5,942	s.	28	s.	14	13	14	4	4.3	0.0	0.0
Marquette	734	77	111	29.20	30.00	+.02	60.8	−2.7	85	6	69	44	22	52	32	55	51	73	1.08	−1.8	11	6,370	nw.	25	sw.	13	4	11	16	7.0	0.0	0.0
Port Huron	638	70	120	29.29	29.98	−.02	66.9	−0.9	88	10	77	42	23	57	31	59	54	69	0.99	−1.6	11	7,238	ne.	39	w.	24	6	22	3	4.9	0.0	0.0
Saginaw	641	69	77	29.30	29.98	.....	66.4	.....	89	7	77	39	22	55	30	61	58	76	2.98	+0.1	9	4,896	sw.	28	sw.	21	8	16	7	5.6	0.0	0.0
Sault Sainte Marie	614	11	52	29.29	29.98	−.01	58.4	−2.2	80	3	67	42	23	49	30	54	51	80	3.20	+0.1	11	5,005	nw.	40	nw.	21	7	12	12	6.1	0.0	0.0
Chicago	823	140	310	29.12	29.99	−.01	70.8	−2.0	89	14	77	54	22	65	23	64	60	71	7.76	+4.9	11	7,002	ne.	45	nw.	11	9	13	9	5.2	0.0	0.0
Green Bay	617	109	144	29.32	29.97	−.02	65.3	−1.7	87	6	75	44	22	56	28	58	54	72	3.65	+0.6	9	6,730	s.	35	nw.	21	4	12	15	7.0	0.0	0.0
Milwaukee	681	125	139	29.26	29.99	−.01	67.8	−1.4	89	14	75	48	22	61	25	61	57	70	2.91	+0.1	12	6,130	ne.	27	sw.	21	9	13	9	5.4	0.0	0.0
Duluth	1,133	11	47	28.78	29.99	+.02	60.3	−2.3	84	30	70	38	24	50	32	56	52	77	1.76	−1.8	12	7,340	nw.	37	nw.	24	12	16	3	4.6	0.0	0.0
North Dakota.							63.9	−2.3										68	1.69	−0.6										5.3		
Moorhead	940	50	58	28.99	30.00	+.04	63.9	−2.2	87	13	75	40	24	53	30	57	52	71	2.83	−0.3	8	4,549	n.	25	nw.	25	7	11	13	6.1	0.0	0.0
Bismarck	1,674	8	57	28.28	30.05	+.11	65.4	−1.9	89	30	77	43	22	54	37	56	52	69	0.63	−1.4	4	5,094	nw.	36	nw.	13	8	13	10	5.7	0.0	0.0
Devils Lake	1,478	11	44	28.44	30.00	+.06	62.0	−3.1	90	30	75	36	24	49	34	55	50	71	2.25	−0.5	16	5,711	w.	32	nw.	17	13	11	7	4.5	0.0	0.0
Ellendale	1,457	10	56	28.47	30.02	.....	63.8	.....	87	13	76	39	24	52	32	.....	.....	.....	1.45	.....	9	6,838	nw.	40	n.	26	9	17	5	5.2	0.0	0.0
Grand Forks	835	12	89	.....	.....	.....	62.9	.....	90	30	76	34	24	50	39	.....	.....	.....	3.21	.....	11	.....	se.	60	ne.	17	11	8	12	.....	0.0	0.0
Williston	1,878	41	48	28.04	29.99	+.06	64.2	−1.9	91	30	77	40	1	52	37	55	49	63	1.05	−0.3	7	4,218	n.	31	e.	10	12	12	7	4.9	0.0	0.0
Upper Mississippi Valley.							72.3	−0.8										74	4.03	+0.8										5.2		
Minneapolis	918	102	208	29.00	29.97	.....	67.2	.....	88	13	77	46	22	58	30	.....	.....	.....	1.98	−1.7	13	6,604	nw.	32	n.	19	5	17	9	5.9	0.0	0.0
St. Paul	837	236	261	29.10	30.00	+.03	66.9	−2.5	88	11	77	45	22	57	31	.....	.....	.....	1.92	−1.5	10	6,772	nw.	37	sw.	13	7	19	5	5.0	0.0	0.0
La Crosse	714	11	48	29.23	29.98	.00	68.0	−2.0	91	11	79	43	22	58	34	.....	.....	.....	2.30	−1.1	16	2,572	se.	16	s.	13	11	9	11	5.3	0.0	0.0
Madison	974	70	78	28.97	29.99	.00	67.9	−1.9	89	11	76	48	22	59	31	61	58	75	5.59	+2.4	15	4,701	nw.	25	ne.	4	10	10	11	5.3	0.0	0.0
Wausau	1,247	4	.....	28.69	30.02	.....	62.4	.....	84	11	73	38	25	52	32	.....	.....	.....	1.96	.....	8	.....	nw.	.....	.....	.....	14	6	11	4.9	0.0	0.0
Charles City	1,015	10	49	28.94	29.99	+.02	68.1	−2.6	91	11	79	43	22	57	31	62	58	75	5.10	+1.7	14	3,173	se.	22	nw.	3	11	14	6	4.8	0.0	0.0
Davenport	606	71	79	29.33	29.98	.00	72.9	−0.2	97	11	83	47	22	62	29	64	60	70	1.61	−2.0	10	4,273	e.	29	nw.	4	10	9	12	5.6	0.0	0.0
Des Moines	861	84	97	29.08	29.97	.00	71.4	−1.7	95	11	81	48	22	62	31	65	63	78	5.34	+1.7	14	3,927	n.	34	e.	4	12	5	14	5.6	0.0	0.0
Dubuque	698	81	96	29.26	30.00	+.02	69.6	−2.1	94	11	79	45	25	60	28	62	58	72	4.77	+1.7	12	3,322	nw.	29	sw.	11	9	10	12	6.1	0.0	0.0
Keokuk	614	64	78	29.32	29.98	.00	74.9	−0.1	98	7	84	51	23	65	25	66	62	69	3.63	+0.4	15	3,973	ne.	21	sw.	27	11	8	12	5.5	0.0	0.0
Cairo	358	87	93	29.60	29.97	−.02	78.4	+0.6	96	12	87	57	23	70	22	72	69	79	2.48	−0.4	10	4,471	s.	36	w.	3	10	11	10	5.5	0.0	0.0
Peoria	609	11	45	29.34	30.00	+.01	73.4	+0.9	97	11	85	46	22	62	31	66	63	77	2.84	−0.1	11	2,721	ne.	29	sw.	7	18	5	8	3.9	0.0	0.0
Springfield, Ill	636	10	91	29.30	29.96	−.03	75.0	+0.5	97	11	85	51	23	65	28	68	65	77	5.35	+2.6	9	4,474	ne.	38	nw.	4	13	9	9	4.6	0.0	0.0
Hannibal	534	74	109	29.40	29.96	−.02	75.6	+0.6	98	11	86	50	23	66	29	.....	.....	.....	7.29	+3.9	12	4,675	sw.	28	nw.	4	14	8	9	4.6	0.0	0.0
St. Louis	568	265	303	29.37	29.96	−.03	77.9	+0.6	98	11	86	56	22	69	26	69	66	72	6.19	+3.5	12	6,575	s.	44	w.	5	10	10	11	5.4	0.0	0.0
Missouri Valley.							73.6	−0.1										71	4.08	+0.7										4.9		
Columbia, Mo.	784	11	84	29.14	29.96	−.01	76.2	+1.5	97	11	86	48	23	66	31	.....	.....	.....	3.92	+0.9	9	4,094	se.	40	sw.	5	10	13	8	5.3	0.0	0.0
Kansas City	963	161	181	28.94	29.95	−.02	77.3	+1.5	99	7	86	52	22	68	25	68	63	67	2.88	−1.9	13	6,352	n.	31	n.	21	14	10	7	4.5	0.0	0.0
St. Joseph	967	11	49	28.93	29.94	.....	76.2	.....	98	11	86	50	22	66	31	67	64	72	4.34	.....	17	4,428	se.	30	nw.	4	13	15	3	4.2	0.0	0.0
Springfield, Mo.	1,324	98	104	28.60	29.97	.00	78.6	+3.8	100	14	89	54	23	68	33	68	64	68	0.78	−3.5	6	5,902	s.	30	n.	21	20	9	2	2.8	0.0	0.0
Iola	984	11	50	28.92	29.94	−.02	80.8	+4.5	104	3	94	51	23	68	38	.....	.....	.....	3.39	−0.1	10	4,039	s.	21	n.	21	12	16	3	4.4	0.0	0.0
Topeka	987	92	107	.....	.....	.....	76.9	+0.9	100	11	88	51	22	66	30	.....	.....	.....	4.78	+0.5	12	6,288	se.	50	nw.	7	13	7	11	4.6	0.0	0.0
Drexel	1,299	10	54	28.60	29.97	.....	70.8	.....	95	11	81	43	22	60	28	.....	.....	.....	5.34	.....	15	5,461	ne.	30	nw.	4	12	9	10	5.0	0.0	0.0
Lincoln	1,189	11	84	28.72	29.96	+.01	73.2	−1.1	96	11	83	46	22	63	32	66	62	73	5.50	+1.8	13	5,934	ne.	67	nw.	4	6	12	13	6.4	0.0	0.0
Omaha	1,105	115	122	28.82	29.97	+.01	72.9	−1.5	96	11	82	48	22	64	25	66	63	74	4.24	+0.6	15	4,685	ne.	38	n.	11	13	10	8	4.7	0.0	0.0
Valentine	2,593	47	54	27.33	30.01	+.07	67.8	−3.9	94	13	80	39	22	56	35	60	56	71	2.61	−0.2	14	5,312	s.	30	ne.	3	6	17	8	5.5	0.0	0.0
Sioux City	1,135	94	164	28.80	29.99	+.04	70.4	−1.6	89	19	80	43	22	61	27	63	60	74	7.63	+4.6	15	6,028	se.	36	w.	15	11	13	7	5.0	0.0	0.0
Huron	1,306	59	74	28.64	30.02	+.07	68.5	−0.9	93	13	79	39	22	58	32	60	56	68	2.89	+0.2	12	4,987	se.	32	ne.	20	9	16	6	5.2	0.0	0.0
Pierre	1,572	70	75	28.35	29.99	+.05	69.8	−3.0	93	18	80	44	22	59	34	62	57	68	3.76	+1.8	10	4,719	e.	48	nw.	5	11	9	11	5.4	0.0	0.0
Yankton	1,233	49	57	28.69	29.98	+.03	70.2	−1.8	90	14	80	43	22	60	27	.....	.....	.....	6.55	+3.4	12	3,938	se.	47	nw.	3	10	14	7	5.4	0.0	0.0

TABLE I.—*Climatological data for Weather Bureau stations, August, 1923*—Continued.

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.												Precipitation.			Wind.										
	Barometer above sea level.	Thermometer above ground.	Anemometer above ground.	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.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Total.	Departure from normal.	Days with 0.01, or more.	Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	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.							65.4	−0.9										64	1.76	+0.5										4.5		
Billings	3,140	5	.....	.....	.....	.....	68.2	.....	104	12	86	44	1	50	55	.....	.....	.....	2.08	.....	13	.....	ne.	.....	.....	.....	9	12	10	.....	0.0	0.0
Havre	2,505	11	44	27.42	29.99	+.08	65.0	−0.4	94	12	79	40	6	51	44	56	50	67	1.47	+0.2	7	3,146	e.	36	w.	9	16	14	1	3.7	0.0	0.0
Helena	4,110	87	112	25.87	29.99	+.05	64.8	−0.2	93	12	77	41	4	52	38	53	44	56	1.66	+1.0	9	5,017	sw.	32	nw.	25	10	15	6	4.8	0.0	0.0
Kalispell	2,973	48	56	26.95	29.96	+.03	64.0	+1.1	92	18	77	44	7	51	36	53	45	59	0.96	+0.1	9	3,919	nw.	29	sw.	9	18	9	4	3.7	0.0	0.0
Miles City	2,371	48	55	27.51	30.02	+.09	69.2	−2.3	99	12	81	47	1	57	40	57	50	59	0.57	−0.5	10	3,459	ne.	22	se.	27	13	13	5	3.8	0.0	0.0
Rapid City	3,259	50	58	26.67	30.03	+.10	67.0	−1.8	90	13	77	50	2	57	30	58	52	63	3.50	+1.4	14	4,592	w.	36	nw.	5	8	13	10	5.6	0.0	0.0
Cheyenne	6,088	84	101	24.13	29.98	+.06	63.7	−1.9	84	13	75	42	27	53	33	54	50	69	2.06	+0.6	16	6,812	s.	35	w.	5	7	17	7	5.4	0.0	0.0
Lander	5,372	60	68	24.74	29.99	+.07	66.2	+0.5	90	13	81	43	27	52	37	54	48	59	0.23	−0.3	5	3,630	sw.	36	sw.	13	12	17	2	4.5	0.0	0.0
Sheridan	3,790	10	47	26.18	30.03	.....	64.4	.....	94	12	78	43	27	51	43	56	51	72	1.44	.....	12	2,832	nw.	25	sw.	8	13	12	6	4.6	0.0	0.0
Yellowstone Park	6,200	11	48	24.00	30.02	+.09	58.2	−2.7	88	13	74	37	4	43	45	48	42	64	0.70	−0.3	11	4,403	s.	34	s.	9	9	17	5	5.0	0.0	0.0
North Platte	2,821	11	51	27.14	30.02	+.08	70.2	−0.6	91	20	82	47	22	59	36	62	59	77	4.70	+2.2	12	3,844	e.	37	nw.	4	17	6	8	3.9	0.0	0.0
Middle Slope.							76.4	+0.9										61	2.79	+0.4										4.2		
Denver	5,292	106	113	24.84	30.01	+.09	68.4	−2.3	87	13	79	53	29	58	30	57	52	65	3.87	+2.5	16	4,225	s.	30	n.	26	6	19	6	5.5	0.0	0.0
Pueblo	4,685	80	86	25.36	29.97	+.06	70.8	−1.3	93	3	82	53	23	59	33	60	55	68	4.65	+3.1	15	4,061	nw.	38	s.	15	5	19	7	5.6	0.0	0.0
Concordia	1,392	50	58	28.49	29.93	−.02	76.2	−0.3	97	11	87	51	22	65	36	66	62	67	2.75	−0.1	14	4,856	ne.	30	nw.	14	10	18	3	5.0	0.0	0.0
Dodge City	2,509	11	51	27.42	29.95	+.02	77.9	+0.2	100	15	91	50	23	65	36	64	58	58	1.46	−1.1	13	6,009	s.	29	s.	30	18	10	3	3.4	0.0	0.0
Wichita	1,358	139	158	28.52	29.90	−.05	81.4	+3.9	104	14	93	56	22	70	31	66	59	54	0.42	−2.7	5	9,081	s.	42	se.	25	20	9	2	3.2	0.0	0.0
Broken Arrow	765	11	52	29.16	29.97	.....	83.0	.....	107	1	95	58	23	71	34	.....	.....	.....	2.28	.....	5	7,654	s.	33	n.	21	16	10	5	3.8	0.0	0.0
Muskogee	652	4	.....	.....	.....	.....	85.1	.....	110	1	99	59	23	71	41	.....	.....	.....	2.23	.....	7	.....	s.	.....	.....	.....	16	14	1	.....	0.0	0.0
Oklahoma City	1,214	10	47	28.69	29.93	−.01	83.6	+5.1	106	1	96	61	23	72	31	67	60	53	3.57	+0.4	3	6,342	s.	31	s.	31	23	6	2	2.8	0.0	0.0
Southern Slope.							80.6	+1.5										54	1.02	−1.3										37		
Abilene	1,738	10	52	28.17	29.93	+.01	83.1	+1.9	102	4	94	63	24	72	29	67	59	53	1.28	−0.7	2	6,056	s.	23	se.	9	18	9	4	3.6	0.0	0.0
Amarillo	3,676	10	49	26.33	29.97	+.05	77.2	+2.6	99	4	90	55	22	65	31	63	56	56	1.54	−1.3	8	6,764	s.	32	ne.	21	12	17	2	4.2	0.0	0.0
Del Rio	944	64	71	28.96	29.92	+.02	85.0	+1.0	98	3	95	72	23	75	23	.....	.....	.....	0.49	−2.1	4	6,747	se.	37	n.	27	19	10	2	3.2	0.0	0.0
Roswell	3,566	75	85	26.38	29.90	+.02	77.0	+0.4	99	3	89	58	23	65	34	62	54	53	0.78	−1.2	5	4,930	se.	31	se.	6	11	17	3	3.9	0.0	0.0
Southern Plateau.							76.4	−1.0										52	1.37	0.0										3.1		
El Paso	3,762	110	133	26.19	29.86	+.02	78.8	+0.2	101	1	89	62	26	68	28	64	56	54	2.96	+1.2	12	7,018	se.	37	s.	16	14	13	4	3.9	0.0	0.0
Santa Fe	7,013	38	53	23.39	29.94	+.05	65.8	−1.6	87	1	77	47	23	55	30	54	49	65	2.33	0.0	20	3,910	se.	26	se.	5	8	14	9	5.4	0.0	0.0
Flagstaff	6,907	10	59	.....	.....	.....	61.8	−1.0	82	8	74	42	22	49	34	.....	.....	68	1.86	−0.9	13	4,435	w.	22	w.	3	7	17	7	.....	0.0	0.0
Phoenix	1,108	11	81	28.70	29.81	+.02	87.2	−1.8	105	2	99	70	22	76	33	71	63	50	0.65	−0.3	8	3,806	e.	27	nw.	31	17	9	5	3.5	0.0	0.0
Yuma	141	9	54	29.64	29.78	+.02	89.2	−1.2	107	28	103	68	8	75	37	72	64	50	0.29	−0.1	2	3,340	sw.	18	ne.	24	27	4	0	1.2	0.0	0.0
Independence	3,957	5	25	25.98	29.93	+.12	75.6	−0.8	97	26	91	52	10	60	38	54	35	28	0.11	0.0	2	5,598	nw.	35	se.	11	28	1	2	1.6	0.0	0.0
Middle Plateau.							69.8	−1.3										41	1.25	+0.5										3.2		
Reno	4,532	74	81	25.51	29.93	+.09	68.1	+1.1	93	11	85	44	4	51	42	50	37	42	0.73	+0.5	5	4,925	w.	30	w.	21	22	4	5	2.4	0.0	0.0
Tonopah	6,090	12	20	24.10	29.90	.....	70.0	.....	87	1	81	52	29	59	29	49	29	27	0.14	−0.2	4	5,406	w.	22	e.	16	23	6	2	2.3	0.0	0.0
Winnemucca	4,344	18	56	25.63	29.95	+.07	67.8	−1.2	96	12	86	43	6	49	49	50	36	39	0.25	+0.1	3	4,089	sw.	40	s.	28	23	4	4	2.1	0.0	0.0
Modena	5,479	10	43	24.66	29.91	+.05	67.2	−1.4	90	27	83	44	6	51	44	50	37	43	2.13	+0.3	10	7,221	sw.	44	sw.	4	17	13	1	3.0	0.0	0.0
Salt Lake City	4,360	163	203	25.64	29.92	+.01	73.0	−1.5	90	9	85	52	30	61	31	56	44	41	2.41	+1.6	6	5,105	sw.	60	w.	2	16	11	4	3.5	0.0	0.0
Grand Junction	4,602	60	68	25.43	29.96	+.06	72.8	−3.3	92	5	85	55	30	60	33	58	50	53	1.86	+0.8	12	4,451	se.	35	se.	29	7	13	11	5.7	0.0	0.0
Northern Plateau.							71.4	+1.0										45	0.77	+0.4										3.3		
Baker	3,471	48	53	26.47	30.00	+.05	65.6	+0.7	95	17	81	39	5	50	41	53	45	53	0.77	+0.4	7	3,927	se.	18	se.	21	12	16	3	4.0	0.0	0.0
Boise	2,739	78	86	27.13	29.93	.00	73.1	+1.3	99	17	88	50	1	58	38	56	44	41	0.20	0.0	3	3,296	se.	24	nw.	7	21	7	3	2.5	0.0	0.0
Lewiston	757	40	48	29.15	29.95	.00	75.2	+1.7	106	18	92	53	4	59	45	.....	.....	.....	0.38	0.0	2	2,160	e.	29	se.	18	19	8	4	3.0	0.0	0.0
Pocatello	4,477	60	68	25.50	29.92	.00	69.6	−0.9	94	12	85	47	7	55	39	53	40	43	0.60	0.0	6	5,046	se.	40	sw.	19	15	12	4	4.0	0.0	0.0
Spokane	1,929	101	110	27.95	29.96	+.01	69.8	+1.7	99	17	84	47	3	56	37	56	46	51	2.12	+1.6	6	3,171	sw.	23	se.	18	15	12	4	3.8	0.0	0.0
Walla Walla	991	57	65	28.89	29.94	+.02	75.4	+1.6	103	16	88	56	3	62	39	58	46	39	0.57	+0.1	4	3,167	s.	15	sw.	19	21	9	1	2.4	0.0	0.0
North Pacific Coast Region.							65.1	+2.8										76	1.18	+0.4										4.0		
North Head	211	11	56	29.84	30.06	+.03	61.4	+3.5	71	20	65	52	2	58	15	59	58	89	0.24	−0.3	4	8,495	n.	34	n.	2	8	14	9	5.6	0.0	0.0
Port Angeles	29	8	53	30.04	30.07	.....	60.4	.....	78	29	69	42	2	52	28	.....	.....	.....	1.38	+0.7	4	4,834	sw.	22	w.	9	12	14	5	4.5	0.0	0.0
Seattle	125	215	250	29.92	30.06	+.06	65.7	+2.6	86	16	75	55	3	56	27	58	54	69	1.98	+1.5	5	4,188	n.	22	w.	22	11	17	3	4.1	0.0	0.0
Tacoma	213	113	120	29.81	30.03	+.01	66.0	+3.0	88	16	76	52	2	56	29	.....	.....	.....	2.28	+1.6	4	4,667	n.	27	w.	22	7	21	3	5.2	0.0	0.0
Tatoosh Island	86	9	57	29.97	30.06	+.06	57.1	+1.8	68	23	62	49	28	53	19	56	55	96	1.80	−0.3	10	6,648	s.	42	e.	21	1	15	15	0.5	0.0	0.0
Yakima	1,071	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Medford	1,425	4	.....	.....	.....	.....	70.6	.....	102	16	91	46	5	50	48	.....	.....	.....	0.89	.....	3	.....	nw.	.....	.....	.....	16	8	7	.....	0.0	0.0
Portland, Oreg.	153	68	106	29.86	30.02	+.01	70.6	+3.9	95	28	82	53	2	60	31	61	55	63	0.26	−0.4	2	3,475	nw.	17	nw.	27	14	11	6	4.5	0.0	0.0
Roseburg	510	9	57	29.46	30.01	+.01	70.0	+2.0	97	15	85	48	8	54	41	59	53	63	0.30	0.0	2	2,086	nw.	14	w.	20	17	8	6	3.8	0.0	0.0
Middle Pacific Coast Region.							66.0	+1.2										67	0.01	0.0										3.8		
Eureka	62	73	89	30.00	30.07	+.07	59.7	+3.9	73	20	64	50	8	55	18	57	55	88	0.02	−0.1	2	4,144	n.	26	sw.	20	9	9	13	6.2	0.0	0.0
Point Reyes	490	7	18	29.44	29.96	.....	54.8	+0.3	72	25	58	48	5	51	21	.....	.....	.....	0.03	.....	1	19,293	nw.	60	nw.	6	2	7	22	8.3	0.0	0.0
Red Bluff	332	50	56	29.54	29.88	+.02	79.2	−0.5	108	26	94	56	4	64	38	62	49	40	0.00	0.0	0	3,187	se.	16	se.	2	27	4	0	1.0	0.0	0.0
Sacramento	69	106	117	29.84	29.91	+.06	73.5	+0.6	102	26	88	53	5	58	39	61	52	56	T.	0.0	0	6,055	s.	24	s.	2	28	2	1	0.9	0.0	0.0
San Francisco	155	208	243	29.80	29.97	+.05	61.7	+2.6	83	25	68	52	7	55	28	56	54	83	0.01	0.0	1	8,135	w.	32	sw.	14	14	12	5	4.3	0.0	0.0
San Jose	141	12	110	29.83	29.98	.....	67.2	+0.5	97	25	80	48	2	54	40	.....	.....	.....	0.01	0.0	1	4,440	nw.	23	n.	10	22	9	0	2.3	0.0	0.0
South Pacific Coast Region.							70.4	−0.8										70	T.	0.0										2.4		
Fresno	327	89	98	29.54	29.89	+.07	79.0	−2.2	102	26	95	55	5	63	38	60	47	39	0.00	0.0	0	6,601	nw.	23	nw.	14	27	3	1	0.8	0.0	0.0
Los Angeles	338	159	191	29.58	29.93	+.05	69.6	−1.5	86	25	78	59	29	61	23	63	61	81	T.	0.0	0	3,693	sw.	21	nw.	24	20	9	2	3.3	0.0	0.0
San Diego	87	62	70	29.83	29.92	+.03	67.8	−0.9	78	25	72	59	11	63	14	63	61	83	T.	0.0	0	4,323	w.	18	nw.	27	18	10	3	3.6	0.0	0.0
San Luis Obispo	201	32	40	29.76	29.98	+.04	65.0	+1.5	89	17	78	45	8	52	36	55	52	75	0.00	0.0	0	2,785	nw.	14	nw.	19	27	4	0	1.9	0.0	0.0
West Indies.																																
San Juan, P. R.	82	9	54	29.94	30.02	.....	79.9	.....	88	19	84	71	11	75	14	.....	.....	.....	4.08	−3.3	21	10,834	e.	46	e.	20	8	19	4	5.0	0.0	0.0
Panama Canal.																																
Balboa Heights	118	7	97	29.73	29.85	+.01	80.2	0.0	91	4	86	69	11	74	17	75	74	85	5.37	−2.3	21	5,244	nw.	37	n.	5	0	9	22	7.8	0.0	0.0
Colon	36	7	97	29.81	29.85	.00	81.2	+1.1	89	5	86	71	27	76	14	77	76	86	15.35	+0.3	30	7,172	w.	30	w.	25	0	12	19	8.2	0.0	0.0
Alaska.																																
Juneau	80	11	54	29.88	29.97	.....	58.5	.....	87	20	67	46	17	50	35	55	52	83	6.86	.....	13	3,137	s.	27	nw.	4	10	6	15	6.1	0.0	0.0

TABLE II.—*Data furnished by the Canadian Meteorological Service, August, 1923.*

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.	*In.*	*In.*	*In.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	*In.*	*In.*	*In.*
St. Johns, N. F	125												
Sydney, C. B. I	48	29.89	29.94	−.01	59.9	−3.4	68.6	51.2	81	41	5.52	+1.90	0.0
Halifax, N. S	88	29.84	29.94	−.02	61.9	−1.7	72.2	51.7	82	41	5.78	+1.43	0.0
Yarmouth, N. S	65	29.88	29.95	−.02	57.3	−2.9	65.5	49.2	76	41	2.66	−1.35	0.0
Charlottetown, P. E. I	38	29.85	29.89	−.05	62.5	−1.8	69.7	55.3	79	50	1.69	−2.05	0.0
Chatham, N. B	28	29.79	29.82	−.11	60.3	−2.9	72.0	48.6	88	38	2.47	−1.57	0.0
Father Point, Que	20	29.83	29.85	−.06	53.0	−2.6	61.7	44.3	78	37	4.43	+1.38	0.0
Quebec, Que	296	29.59	29.91	−.02	62.0	−1.1	70.6	53.4	85	44	5.86	+2.03	0.0
Montreal, Que	187	29.70	29.90	−.05	65.7	−0.7	74.8	56.6	88	44	3.34	−0.23	0.0
Stonecliffe, Ont	489												
Ottawa, Ont	236	29.66	29.92	−.04	65.4	+0.6	77.4	53.5	89	40	2.19	−0.84	0.0
Kingston, Ont	285	29.64	29.94	−.04	66.6	−0.4	74.8	58.4	92	45	1.78	−0.60	0.0
Toronto, Ont	379	29.56	29.95	−.04	65.8	−0.2	76.3	55.2	90	43	3.58	+0.82	0.0
Cochrane, Ont	930												
White River, Ont	1,244	28.63	29.94	−.02	52.9	−3.5	66.1	39.7	76	30	2.61	−0.69	0.0
Port Stanley, Ont	592	29.36	30.00	.00	64.6	−1.3	74.5	54.8	85	39	1.06	−1.36	0.0
Southampton, Ont	656				61.3	−2.5	70.9	51.8	83	40	2.73	+0.48	0.0
Parry Sound, Ont	688	29.27	29.95	−.03	63.2	−0.3	74.9	51.5	92	41	3.87	+1.15	0.0
Port Arthur, Ont	644	29.27	29.98	+.02	58.0	−1.5	67.4	48.7	75	39	3.41	+0.66	0.0
Winnipeg, Man	760												
Minnedosa, Man	1,690	28.20	29.98	+.04	57.2	−2.2	69.1	45.3	81	32	0.98	−1.12	0.0
Le Pas, Man	860				55.9		67.6	44.3	77	30	3.45		0.0
Qu'Appelle, Sask	2,115	27.75	29.98	+.05	59.4	−2.1	71.4	47.4	84	39	1.63	−0.01	0.0
Medicine Hat, Alb	2,144												
Moose Jaw, Sask	1,759				62.5		76.8	48.3	89	35	1.42		0.0
Swift Current, Sask	2,392	27.46	30.05	+.12	61.7	−2.3	76.4	47.0	88	34	1.31	−0.60	0.0
Calgary, Alb	3,428												
Banff, Alb	4,521												
Edmonton, Alb	2,150												
Prince Albert, Sask	1,450	28.45	30.02	+.10	58.6	−0.3	70.1	47.2	78	40	2.91	+0.76	0.0
Battleford, Sask	1,592	28.26	29.98	+.07	61.2	−1.4	73.7	48.8	84	38	1.58	−0.78	0.0
Kamloops, B. C	1,262												
Victoria, B. C	230	29.78	30.03	+.02	60.9	+2.2	68.8	53.1	81	49	0.80	+0.20	0.0
Barkerville, B. C	4,180												
Triangle Island, B. C	680												
Prince Rupert, B. C	170												
Hamilton, Ber	151												

SEISMOLOGICAL REPORTS FOR AUGUST, 1923.

W. J. HUMPHREYS, Professor in Charge.

[Weather Bureau, Washington, October 3, 1923.]

TABLE 1.—*Noninstrumental earthquake reports, August, 1923.*

Day.	Approximate time, Greenwich civil.	Station.	Approximate latitude.	Approximate longitude.	Intensity Rossi-Forel.	Number of shocks.	Duration.	Sounds.	Remarks.	Observer.
		CALIFORNIA.	° ′	° ′			*Sec.*			
1923.	*H. m.*									
Aug. 25	11 24	Salinas	36 41	121 39	3	2	2	None	Felt by many	Dr. E. D. Eddy.
	11 25	Spreckels	36 38	121 36	5	1	30	do	do	Wm. Suttle.