and New England. Much late corn was caught in Minnesota and Wisconsin, but in Iowa damage was largely confined to the north-central and northeastern portions, where it was rather heavy in some sections. Potatoes were heavily damaged in some Central-Northern States, while tobacco suffered severely in Wisconsin. Little or no frost injury occurred during the latter part of the month. During this period corn ripened rapidly in the Great Plains States, but maturity was slow in the Ohio and upper Mississippi Valleys, because of persistently damp, cloudy weather.

The drought that had prevailed during August in the western portion of the Cotton Belt was effectively broken, but there was no material improvement in the general condition of cotton in that area, while frequent rains interrupted picking and ginning, particularly in the northwestern portion of the belt. There was little change, likewise, in the condition of cotton in the eastern portion, though seasonable temperatures and generally light rainfall throughout the month were favorable for picking and ginning, which made rapid progress. At the close of the month picking was nearly completed in the southern portions of Mississippi and Alabama, well advanced in Georgia, and about finished in the southern counties of South Carolina.

Pasture lands continued in unusually good condition for the season in nearly all sections east of the Rocky Mountains, except in portions of the east Gulf States, and, during much of the month, in parts of the middle Atlantic coast area where moisture was deficient. Widespread rains in nearly all section of the country from the Great Plains eastward during the week ending September 25 were very beneficial to pastures, especially in New York, New Jersey, and Pennsylvania, while, at the same time, the range in much of the far Southwest was improved by generous showers.

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, 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	76.2	+1.1	2 stations	96	[2] 13	Valley Head	46	25	1.23	−2.17	Eufaula	4.55	2 stations	0.00
Alaska														
Arizona	69.9	−2.8	2 stations	113	[2] 5	Spring Valley R. S.	14	27	1.72	+0.39	Mormon Lake	9.44	Florence	0.00
Arkansas	73.0	−0.9	Booneville	98	11	Dutton	45	[2] 23	5.56	+2.23	Mena	13.91	Warren	1.39
California	69.1	+2.0	Greenland Ranch	120	9	Tamarack	20	26	1.23	+0.68	Helm Creek	6.02	2 stations	0.00
Colorado	55.0	−2.1	Lamar	97	9	Silverton	10	28	1.66	+0.27	Palisade Lake	5.38	Grover	T
Florida	79.7	+0.4	3 stations	98	[2] 4	Quincy	57	29	4.75	−1.89	St. Cloud	9.83	Bluff Springs	1.02
Georgia	76.5	+1.5	Alapaha	100	7	Clayton	41	21	1.97	−1.70	Millen	6.05	Newnan	0.10
Hawaii	75.5	+0.8	2 stations	93	[2] 29	2 stations	52	[2] 3	6.40	−0.13	Pahuamimi	39.60	2 stations	0.00
Idaho	59.9	+2.6	Glenns Ferry	104	2	Stanley	12	6	0.68	−0.33	Lifton	2.28	Spencer	T
Illinois	66.6	−0.4	Carbondale	95	28	Mount Carroll	28	14	3.98	+0.47	Hillsboro	7.32	Mascoutah	1.24
Indiana	67.0	+0.3	Crawfordsville	95	4	Connersville	28	14	3.40	+0.40	South Bend	7.83	Williams	0.93
Iowa	64.2	+0.8	6 stations	92	[2] 3	2 stations	28	14	5.79	+2.43	Washington	12.14	Centerville	1.88
Kansas	69.6	+0.1	2 stations	101	10	St. Francis	31	29	4.21	+1.40	Medicine Lodge	13.36	Bird City	0.48
Kentucky	69.8	−0.2	3 stations	94	[2] 27	Farmers	30	16	2.87	+0.11	Paducah	5.34	Scott	0.60
Louisiana	77.8	+0.1	Dodson	97	27	2 stations	50	[2] 24	5.24	+1.24	Grand Chenier	9.90	New Orleans No. 2	1.38
Maryland—Delaware	68.3	+1.2	Western Port, Md	92	2	Grantsville, Md	28	16	3.51	+0.31	Cecilton, Md	7.27	Costen, Md	1.22
Michigan	59.9	+0.2	Webber Dam	92	5	Houghton Lake	24	15	3.23	+0.23	Bloomingdale	7.42	St. James	0.86
Minnesota	60.8	+2.4	Beardsley	98	4	Angus	19	13	2.31	−0.49	Grand Meadow	8.28	Little Falls	0.50
Mississippi	76.6	+0.4	5 stations	97	[2] 2	Port Gibson	51	24	2.15	−1.19	Cleveland	5.17	Lake	0.30
Missouri	68.7	−0.3	Caruthersville (2)	98	[2] 3	Unionville	33	14	4.59	+0.86	Downing	11.83	Patton	1.23
Montana	57.3	+2.1	Roy	102	5	Outlook	18	11	1.37	+0.02	Red Lodge	9.32	Harlowton	0.00
Nebraska	64.3	+0.4	4 stations	97	[2] 3	Nenzel	29	13	3.70	+1.56	Utica	11.06	Kimball	0.55
Nevada	63.0	+0.6	Beatty	112	8	Rye Patch	20	17	0.96	+0.48	Schurz	3.57	Mina	0.03
New England	61.2	+1.8	Lowell, Mass	90	[2] 1	3 stations	26	[2] 18	2.40	−1.16	Pittsburg, N. H.	5.87	Boston, Mass	0.38
New Jersey	67.0	+1.3	3 stations	90	[2] 1	Charlotteburg	28	18	3.78	+0.18	Cape May City	6.26	Little Falls	2.24
New Mexico	62.5	−1.8	Orogrande	100	3	2 stations	22	[2] 28	1.91	+0.29	Diener	6.74	Fort Sumner	0.08
New York	61.8	+0.9	4 stations	91	[2] 1	2 stations	24	17	3.54	+0.20	Walden	5.75	Ogdensburg	1.24
North Carolina	71.5	+1.7	Greenville	98	[2] 4	Wenona	36	18	3.96	+0.16	Neuse	7.82	Cullowhee	0.65
North Dakota	60.1	+3.7	Donnybrook	99	3	Hansboro	15	13	2.39	+0.75	New England	5.80	Powers Lake	0.23
Ohio	65.7	+0.3	Middleport	96	26	Canfield	24	15	3.12	+0.62	Pataskala	6.26	Green	0.75
Oklahoma	73.9	+0.2	Oakwood	103	12	Kenton	38	29	7.07	+4.21	Tuskahoma	14.43	Ardmore	2.23
Oregon	61.4	+2.7	2 stations	104	[2] 6	Lapine	12	19	0.91	−0.54	Siskiyou	3.53	Bend	0.05
Pennsylvania	64.8	+1.2	Lancaster	92	4	West Bingham	22	17	3.55	+0.32	Biglerville	8.68	Parkers Landing	1.54
Porto Rico	79.2	+0.3	3 stations	97	[2] 5	Albonito	56	20	5.54	−2.62	Lares	10.51	Santa Isabel	1.26
South Carolina	75.5	+1.2	Garnett	99	7	2 stations	50	[2] 14	2.67	−1.15	Wedgefield	9.62	Greenwood	0.44
South Dakota	62.4	+1.8	2 stations	100	4	Elk Mountain	22	17	3.24	+1.37	Vale	7.34	Britton	0.97
Tennessee	71.5	+0.4	Perryville	95	[2] 27	Rugby	38	[2] 15	2.57	−0.36	Covington	6.39	Copperhill	0.41
Texas	77.9	+0.8	Encinal	107	1	Clint	40	20	4.61	+1.79	Fort McIntosh	12.94	O 2 Ranch	0.30
Utah	59.0	−0.9	St. George	104	6	Loa	19	27	1.07	−0.08	Lower Mill Creek	3.27	Midlake	0.00
Virginia	68.7	+0.8	Danville	93	[2] 3	Burkes Garden	35	15	3.98	+0.80	Diamond Springs	7.30	Speers Ferry	1.55
Washington	60.6	+2.6	Trinidad	100	8	Wilbur	20	23	0.98	−0.69	Silverton	3.48	Rimrock	0.03
West Virginia	66.5	+0.8	Robertsburg	96	25	Terra Alta	29	10	3.31	+0.40	Organ Cave	5.36	Beckley	1.00
Wisconsin	59.8	+0.2	2 stations	90	5	7 stations	21	[2] 13	3.22	−0.28	Meadow Valley	7.22	Hayward	0.75
Wyoming	54.8	+0.1	2 stations	98	[2] 3	Riverside	11	[2] 18	3.43	+2.17	Verona	8.61	Gallatin	0.89

[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, September, 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.							61.7	+1.1										82	1.96	−1.2										5.5		
Eastport	76	67	85	30.02	30.10	+.07	54.9	−0.9	73	18	62	40	30	48	23	51	48	85	1.36	−1.6	10	5,252	s.	26	n.	17	6	13	11	6.1	0.0	0.0
Greenville, Me	1,070	6		28.95	30.11		56.2		77	24	66	32	20	46	37				2.11		10		se.				10	11	9		0.0	0.0
Portland, Me	103	82	117	30.01	30.13	+.08	60.3	+0.7	80	1	67	44	15	54	23	55	52	80	0.83	−2.4	11	5,182	s.	24	nw.	28	11	10	9	5.3	0.0	0.0
Concord	288	70	79	29.81	30.12	+.06	61.2	+1.9	87	1	72	32	15	50	42				2.51	−0.7	12	2,667	se.	20	sw.	3	15	6	9	4.9	0.0	0.0
Burlington	404	11	48	29.66	30.09	+.03	59.6	+0.7	84	2	69	33	15	50	31				3.74	+0.4	10	6,818	s.	36	s.	3	5	14	11	6.1	0.0	0.0
Northfield	876	12	60	29.18	30.12	+.06	57.0	+2.4	83	1	69	26	15	45	45	54	52	89	2.37	−0.4	11	4,704	s.	28	s.	7	4	10	16	7.0	0.0	0.0
Boston	125	115	188	29.97	30.11	+.04	64.2	+1.0	82	1	72	47	15	57	30	58	54	76	0.38	−2.8	6	5,572	e.	26	nw.	30	8	17	5	5.1	0.0	0.0
Nantucket	12	14	90	30.09	30.10	+.02	62.8	0.0	77	3	69	51	26	56	21	59	57	88	1.01	−1.7	6	8,755	se.	36	ne.	16	14	9	7	5.0	0.0	0.0
Block Island	26	11	46	30.08	30.11	+.03	63.9	+0.5	78	3	69	50	16	58	20	59	57	83	3.39	+0.4	7	8,869	sw.	36	nw.	30	14	6	10	4.7	0.0	0.0
Providence	160	215	251	29.94	30.11	+.04	63.6	+0.4	81	3	72	44	15	55	28	58	55	80	1.52	−1.6	8	6,740	nw.	34	nw.	30	6	19	5	5.4	0.0	0.0
Hartford	159	122	140	29.93	30.10	+.03	65.2	+3.5	86	1	74	40	15	56	34	59	56	79	2.39	−1.1	8	3,938	s.	21	s.	8	10	9	11	6.1	0.0	0.0
New Haven	106	74	153	30.00	30.11	+.04	65.6	+2.1	84	4	73	43	15	58	30	60	56	77	2.11	−1.7	6	5,568	n.	26	nw.	30	12	7	11	5.2	0.0	0.0
Middle Atlantic States.							67.9	+1.3										79	3.83	+0.4										5.2		
Albany	97	102	115	30.00	30.10	+.03	64.0	+0.9	85	1	72	40	15	56	30	58	56	81	4.01	+0.8	9	4,370	s.	26	s.	8	15	6	9	4.7	0.0	0.0
Binghamton	871	10	84	29.16	30.09	+.02	62.6	+2.6	87	1	72	35	15	53	39				3.55	+0.8	12	2,878	e.	22	sw.	3	2	13	15	7.3	0.0	0.0
New York	314	414	454	29.78	30.11	+.03	67.0	+0.2	84	4	74	48	15	60	22	61	59	80	2.34	−1.2	7	8,843	n.	42	nw.	30	9	13	8	5.9	0.0	0.0
Harrisburg	374	94	104	29.72	30.12	+.04	67.2	+2.3	87	4	76	42	17	59	28	61	57	75	4.06	+1.2	12	3,450	ne.	26	ne.	30	8	10	12	5.4	0.0	0.0
Philadelphia	114	123	190	29.90	30.12	+.04	69.6	+1.6	85	4	77	50	16	62	20	62	57	71	3.64	+0.3	9	5,351	s.	29	ne.	30	9	13	8	5.3	0.0	0.0
Reading	325	81	98	29.77	30.11		67.5		86	4	76	42	17	59	29	62	60	80	3.34	−0.3	12	2,373	se.	13	se.	22	15	9	6	4.3	0.0	0.0
Scranton	805	111	119	29.26	30.12	+.05	64.0	+1.8	85	2	73	37	15	55	39	59	56	81	4.38	+1.5	12	3,496	n.	19	sw.	3	6	13	11	6.1	0.0	0.0
Atlantic City	52	37	172	30.05	30.10	+.03	68.2	+1.4	81	29	74	48	17	63	19	64	61	81	3.06	0.0	7	9,150	s.	34	s.	8	12	14	4	4.4	0.0	0.0
Cape May	17	13	49	30.12	30.14	+.07	69.0	0.0	82	25	75	46	17	63	24	64	62	84	6.26	+3.3	7	4,478	se.	20	se.	8	16	6	8	4.3	0.0	0.0
Sandy Hook	22	10	55	30.08	30.10		68.2		83	4	74	52	18	63	21	62	58	78	3.62		7	8,331	s.	44	nw.	30	12	11	7	4.9	0.0	0.0
Trenton	190	159	183	29.90	30.10		67.6		84	4	76	46	17	59	27	61	58	77	4.19	+0.6	8	5,933	n.	47	nw.	12	9	12	9	5.5	0.0	0.0
Baltimore	123	100	113	29.97	30.10	+.02	70.4	+1.9	86	4	78	48	17	63	24	63	60	73	3.85	0.0	10	3,497	se.	17	ne.	30	10	10	10	5.3	0.0	0.0
Washington	112	62	85	29.98	30.10	+.02	69.6	+1.5	87	3	78	44	17	61	29	63	61	79	3.15	−0.4	12	2,934	n.	16	nw.	30	12	9	9	5.5	0.0	0.0
Cape Henry	18	8	54	30.06	30.08		72.8		89	21	78	52	18	67	22	67	64	79	4.15	+0.1	6	8,491	ne.	44	n.	30	9	14	7	5.5	0.0	0.0
Lynchburg	681	153	188	29.36	30.10	+.02	70.0	+1.0	90	4	80	45	18	60	30	63	60	81	2.84	−0.8	12	3,201	e.	24	nw.	29	7	15	8	5.1	0.0	0.0
Norfolk	91	170	205	30.00	30.10	+.04	73.6	+2.0	88	4	80	55	18	67	24	66	63	78	3.23	−0.8	7	7,335	ne.	35	n.	30	6	17	7	5.5	0.0	0.0
Richmond	144	11	52	29.96	30.10	+.03	70.8	0.0	87	4	80	48	18	62	27	64	62	82	4.25	+0.8	8	4,191	ne.	29	nw.	5	10	11	9	5.0	0.0	0.0
Wytheville	2,304	49	55	27.76	30.10	+.03	65.1	+1.5	84	6	75	43	17	55	31	59	58	86	4.84	+1.6	9	2,495	e.	20	sw.	7	13	15	2	4.0	0.0	0.0
South Atlantic States.							75.1	+1.7										81	3.64	−1.0										5.3		
Asheville	2,255	70	84	27.80	30.10	+.03	67.6	+2.6	83	5	78	48	16	58	30	61	59	84	2.64	−0.3	6	4,209	se.	37	se.	7	9	19	2	4.4	0.0	0.0
Charlotte	779	55	62	29.26	30.08	+.01	73.7	+2.2	91	7	83	53	16	64	25	65	63	77	2.32	−0.9	10	2,572	ne.	13	w.	6	6	16	8	5.7	0.0	0.0
Hatteras	11	11	50	30.06	30.07	+.01	74.8	+0.3	88	4	80	61	18	70	18	70	68	81	3.16	−2.2	8	8,310	ne.	37	n.	29	8	12	10	5.6	0.0	0.0
Manteo	12	5	42				72.8		92	4		46	18		30				4.24		5		ne.				13	4	13		0.0	0.0
Raleigh	376	103	110	29.69	30.09	+.02	72.8	+2.2	91	4	82	52	16	64	24	66	64	83	6.35	+3.0	12	4,513	ne.	20	ne.	28	3	17	10	6.4	0.0	0.0
Wilmington	78	81	91	30.00	30.08	+.03	74.2	+1.1	89	5	81	56	18	67	20	69	68	85	7.20	+1.9	11	4,554	ne.	30	w.	12	7	19	4	5.0	0.0	0.0
Charleston	48	11	92	30.00	30.05	+.01	77.8	+1.2	95	6	84	62	16	71	20	72	70	82	2.11	−3.4	12	7,344	ne.	38	ne.	27	5	16	9	6.0	0.0	0.0
Columbia, S. C	351	41	57	29.70	30.08	+.03	76.3	+2.6	94	6	85	57	16	68	25	68	66	81	3.13	−0.3	9	3,961	ne.	17	w.	4	10	13	7	4.8	0.0	0.0
Due West	711	10	55	29.34	30.10		74.3		92	6	84	55	16	64	28				1.54		8	4,833	ne.	21	ne.	27	12	7	11	5.4	0.0	0.0
Greenville, S. C	1,039	113	122	28.99	30.07		73.4		89	6	82	54	16	65	26	66	62	76	1.41		9	4,735	ne.	31	n.	24	14	13	3	4.0	0.0	0.0
Augusta	180	62	77	29.86	30.05	.00	77.4	+2.1	94	6	86	58	16	68	25	69	66	77	1.62	−2.1	4	3,452	e.	16	s.	3	7	14	9	5.3	0.0	0.0
Savannah	65	150	194	29.97	30.04	+.01	78.2	+2.0	95	6	86	63	16	71	23	71	70	83	2.94	−2.6	10	6,986	ne.	36	ne.	17	8	13	9	5.5	0.0	0.0
Jacksonville	43	209	245	29.97	30.02	+.02	78.6	+0.3	93	8	85	66	29	72	20	72	70	82	4.89	−3.1	14	7,378	e.	38	ne.	26	7	14	9	5.9	0.0	0.0
Florida Peninsula.							80.8	−0.4										79	5.94	−2.0										5.3		
Key West	22	10	64	29.94	29.96	+.02	82.3	+0.1	90	12	88	72	24	77	14	76	74	77	4.97	−1.8	16	5,458	e.	24	s.	17	10	17	3	4.6	0.0	0.0
Miami	25	71	79	29.96	29.99		80.0	−1.5	88	27	85	69	13	74	17	75	73	80	6.21	−3.4	19	4,488	e.	21	nw.	26	7	14	9	5.8	0.0	0.0
Sand Key	23	39	72	29.94	29.97	+.03	81.0		88	9	84	71	25	78	12	76	74	78	1.58		10	7,468	e.	40	ne.	25	8	19	3	4.9	0.0	0.0
Tampa	35	79	87	29.96	29.99	+.02	80.0	+0.3	92	4	87	69	30	72	19	73	72	82	6.63	−0.8	16	3,579	ne.	25	ne.	15	2	21	7	5.9	0.0	0.0
East Gulf States.							77.3	+2.0										77	1.51	−2.4										4.2		
Atlanta	1,174	190	216	28.85	30.07	+.02	74.6	+2.2	88	6	83	57	16	66	22	67	64	74	0.54	−3.0	7	5,736	e.	26	e.	17	11	13	6	4.8	0.0	0.0
Macon	370	78	87	29.66	30.05	+.02	76.5	+3.6	94	6	86	55	29	67	27	69	66	79	5.08	+1.7	6	3,423	ne.	19	ne.	17	12	10	8	4.9	0.0	0.0
Thomasville	273	49	58	29.73	30.02	+.01	78.6	+1.8	95	7	88	62	29	70	25	71	69	81	2.32	−1.9	10	2,295	ne.	23	e.	7	6	11	13	6.0	0.0	0.0
Apalachicola	36	42	49	29.97	30.01		78.7		89	13	85	69	27	73	17	73	71	83	5.23		10	4,646	n.	30	ne.	16	18	8	4	3.6	0.0	0.0
Pensacola	56	149	185	29.96	30.02	+.03	79.1	+1.1	91	13	86	64	23	72	19	72	70	76	1.66	−3.6	6	7,089	ne.	34	e.	10	11	15	4	4.1	0.0	0.0
Anniston	741	9	57	29.30	30.09	+.06	74.6	+3.3	90	5	87	54	14	63	33				0.67	−2.9	6	2,876	n.	18	se.	17	17	12	1	2.9	0.0	0.0
Birmingham	700	11	48	29.32	30.07	+.04	75.8	+1.8	91	29	86	58	14	66	27	67	64	76	1.50	−2.0	3	3,410	n.	18	se.	17	12	14	4	3.9	0.0	0.0
Mobile	57	125	161	29.96	30.02	+.02	79.6	+1.7	91	12	88	63	23	71	24	72	69	79	0.47	−4.6	6	5,455	n.	28	se.	10	14	15	1	3.7	0.0	0.0
Montgomery	223	100	112	29.80	30.04	+.02	78.0	+1.7	92	6	87	62	22	69	26	69	66	72	0.12	−2.8	3	3,625	n.	20	e.	17	18	8	4	3.3	0.0	0.0
Corinth	469	6					74.6		92	1	85	54	16	64	31				3.88		6		se.				6	22	2		0.0	0.0
Meridian	375	85	93	29.65	30.04	+.02	75.9	+3.2	90	30	86	56	23	66	29	68	65	77	0.72	−2.8	4	2,811	ne.	28	sw.	5	16	12	2	3.6	0.0	0.0
Vicksburg	247	65	73	29.77	30.05	+.03	76.3	0.0	90	27	85	58	24	68	24	68	66	80	0.89	−2.4	5	3,646	se.	20	s.	16	11	12	7	4.8	0.0	0.0
New Orleans	53	76	84	29.96	30.01	+.03	81.2	+2.0	92	30	89	66	23	74	22	73	70	74	2.63	−2.2	10	3,689	se.	29	e.	10	13	14	3	4.4	0.0	0.0
West Gulf States.							76.9	+0.9										80	5.58	+2.1										5.3		
Shreveport	249	77	93	29.76	30.02	+.02	75.6	−0.1	90	28	84	59	23	68	24	69	67	83	9.03	+5.8	10	3,441	ne.	22	se.	17	18	3	9	4.1	0.0	0.0
Bentonville	1,303	11	44				70.8	+1.9	91	10	81	51	22	61	32				3.92		12		s.				10	6	14		0.0	0.0
Fort Smith	457	79	94	29.53	30.00	−.01	73.9	+1.2	93	12	83	57	24	65	31	66	63	76	4.54	+1.4	12	4,622	e.	27	w.	20	7	13	10	5.4	0.0	0.0
Little Rock	357	136	144	29.66	30.03	.00	73.2	−0.9	90	29	81	57	15	65	28	67	65	82	3.93	+0.7	9	4,011	s.	30	nw.	19	7	7	16	6.2	0.0	0.0
Brownsville	57	53	61	29.87	29.93		83.0		95	4	90	72	23	76	21	75	73	82	4.55		11	4,692	s.	22	s.	17	14	12	4	4.4	0.0	0.0
Corpus Christi	20	69	77	29.95	29.97	+.02	81.4	+2.4	92	1	86	70	15	76	18	76	74	83	6.35	+2.4	12	7,862	se.	44	ne.	20	6	9	15	6.6	0.0	0.0
Dallas	512	109	117	29.45	29.99		78.2		96	1	88	60	23	69	26				3.14		8	5,173	se.	44	se.	15	11	12	7	4.7	0.0	0.0
Fort Worth	670	106	114	29.26	29.96	−.03	78.5	+1.8	95	1	88	60	22	69	30	68	63	68	2.06	−0.9	4	5,728	e.	35	se.	15	11	13	6	4.9	0.0	0.0
Galveston	54	106	114	29.95	30.01	+.03	79.8	−0.3	88	2	84	68	15	75	18	75	73	84	9.91	+4.5	10	6,310	se.	33	se.	16	12	8	10	5.3	0.0	0.0
Groesbeck	461	11	56	29.51	29.98		78.0		94	1	88	59	22	68	27				2.27		7	5,369	se.	32	se.	16	7	16	7	5.4	0.0	0.0
Houston	138	111	121	29.85	29.99		79.2	+0.7	94	1	87	63	22	71	22				6.25		11	4,179	s.	28	n.	20	7	13	10	5.3	0.0	0.0
Palestine	510	64	72	29.48	30.00	+.01	76.3	−0.7	95	2	84	59	22	68	23	69	67	80	6.22	+3.0	8	3,743	s.	34	s.	17	10	12	8	5.4	0.0	0.0
Port Arthur	34	58	66	29.96	30.00		79.0		90	12	86	63	22	72	20	73	71	81	6.60		11	4,856	e.	26	se.	16	14	7	9	4.5	0.0	0.0
San Antonio	693	119	132	29.27	29.97	+.01	79.2	+2.1	93	3	88	62	21	71	25	71	68	78	2.98	0.0	10	4,505	se.	28	n.	20	7	13	10	6.0	0.0	0.0
Taylor	583	55	63	29.40	30.01	+.04	78.4	+1.5	94	3	87	60	22	70	23				5.19	+2.2	10	4,263	se.	28	se.	15	6	14	10	6.0	0.0	0.0

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

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.									Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Precipitation.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow, sleet and ice on ground at end of month.
	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.				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.						
	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.							**69.3**	**+0.8**										**78**	**2.66**	**−0.1**										**5.4**		
Chattanooga	762	189	213	29.28	30.08	+.02	73.2	+1.0	87	12	83	55	16	64	28	65	61	74	2.90	−0.4	8	3,658	n.	44	s.	20	10	14	6	4.6	0.0	0.0
Knoxville	996	102	111	29.04	30.08	+.02	72.4	+1.8	89	4	83	50	15	62	29	64	61	77	1.50	−1.3	7	3,275	n.	25	w.	6	16	9	5	3.6	0.0	0.0
Memphis	399	76	97	29.62	30.04	+.01	73.8	+0.2	89	27	81	57	14	66	25	68	66	82	5.47	+2.4	10	3,834	sw.	26	sw.	20	12	6	12	5.2	0.0	0.0
Nashville	546	168	191	29.50	30.08	+.02	71.8	0.0	88	26	81	48	16	63	28	64	61	76	1.44	−2.2	6	4,732	nw.	26	sw.	4	11	9	10	5.3	0.0	0.0
Lexington	989	193	230	29.04	30.09	+.02	69.0	+1.1	88	1	78	41	14	60	27	.....	.....	.....	1.51	−0.9	10	7,787	sw.	34	sw.	6	9	12	9	5.3	0.0	0.0
Louisville	525	219	255	29.51	30.09	+.03	70.8	+0.3	89	1	80	45	14	62	28	62	58	71	3.61	+1.0	10	6,298	s.	43	n.	28	11	9	10	5.0	0.0	0.0
Evansville	431	139	175	29.61	30.07	+.01	70.8	+1.1	92	28	80	46	15	62	28	63	59	73	1.84	−0.8	7	6,218	sw.	30	sw.	20	7	15	8	5.7	0.0	0.0
Indianapolis	822	194	230	29.20	30.08	+.02	67.0	+0.1	86	27	75	42	14	59	26	60	57	76	3.91	+0.9	8	6,355	s.	28	w.	7	7	12	11	6.1	0.0	0.0
Royal Center	736	11	55	29.28	30.08	.....	64.4	.....	85	27	74	33	14	54	31	.....	.....	.....	3.24	.....	11	5,127	s.	25	w.	8	3	11	16	7.1	0.0	0.0
Terre Haute	575	96	129	29.45	30.06	.....	67.2	.....	86	28	76	39	14	59	25	61	58	78	3.40	.....	10	5,161	s.	40	n.	28	3	13	14	6.8	0.0	0.0
Cincinnati	628	11	51	29.41	30.08	+.01	68.3	+1.2	90	27	78	39	14	58	32	.....	61	81	1.40	−0.9	8	3,791	ne.	19	se.	20	10	11	9	5.0	0.0	0.0
Columbus	824	179	222	29.23	30.10	+.03	66.9	+0.4	83	1	76	39	14	58	29	60	56	76	3.39	+0.9	10	5,930	s.	28	w.	27	10	10	10	5.4	0.0	0.0
Dayton	899	137	173	29.13	30.08	.....	67.0	−0.4	87	1	76	37	14	58	32	60	57	76	3.45	+1.0	8	4,795	ne.	40	sw.	27	13	11	6	4.6	0.0	0.0
Elkins	1,947	59	67	28.10	30.13	+.05	63.6	+1.7	86	26	76	35	16	52	37	57	55	89	2.33	−0.5	9	2,167	w.	17	nw.	30	10	10	10	5.3	0.0	0.0
Parkersburg	638	77	84	29.46	30.11	+.03	68.4	+2.3	88	1	78	41	16	58	31	61	58	80	2.92	+0.2	11	2,629	se.	15	n.	30	13	9	8	5.0	0.0	0.0
Pittsburgh	842	353	410	29.20	30.10	+.02	67.4	+1.0	87	1	76	42	16	59	30	60	57	76	1.62	−0.9	8	5,586	nw.	31	w.	13	8	10	12	5.8	0.0	0.0
Lower Lake Region.							**63.3**	**+0.4**										**77**	**2.87**	**0.0**										**6.2**		
Buffalo	767	247	280	29.28	30.10	+.04	62.9	+0.5	85	26	70	40	14	56	25	57	53	74	1.86	−1.3	9	8,495	sw.	56	w.	8	4	18	8	6.0	0.0	0.0
Canton	448	10	61	29.59	30.06	.....	59.4	+0.1	87	2	70	30	17	49	33	.....	.....	.....	2.10	−0.7	10	5,437	sw.	32	w.	13	12	6	12	5.5	0.0	0.0
Oswego	335	76	91	.....	30.09	+.03	61.5	+0.3	88	2	69	42	17	59	29	.....	.....	78	2.75	−0.1	15	5,598	s.	32	n.	29	8	7	15	....	T.	0.0
Rochester	523	86	102	29.54	30.10	+.04	62.2	+0.2	88	2	70	38	17	54	32	56	53	76	3.35	+1.0	11	4,202	sw.	28	sw.	27	4	11	15	7.0	0.0	0.0
Syracuse	597	97	113	29.46	30.11	+.04	62.2	+0.6	86	2	70	38	17	54	28	.....	.....	.....	2.94	+0.1	12	5,909	s.	32	s.	8	4	9	17	6.9	0.0	0.0
Erie	714	130	166	29.32	30.09	+.03	64.9	+1.3	86	2	71	44	16	58	23	59	55	74	3.52	0.0	14	7,836	n.	38	w.	8	8	15	7	5.7	0.0	0.0
Cleveland	762	190	201	29.28	30.10	+.04	64.7	+0.8	85	26	70	41	15	59	28	59	55	76	3.32	+0.1	11	7,433	s.	36	ne.	29	3	15	12	6.9	0.0	0.0
Sandusky	629	62	70	29.41	30.09	+.03	65.2	−0.1	88	2	72	41	15	58	25	.....	.....	.....	3.26	+0.6	15	4,483	sw.	27	nw.	8	3	15	12	6.8	0.0	0.0
Toledo	628	208	243	29.42	30.10	+.04	64.6	+0.2	86	27	72	40	14	57	25	59	56	79	3.69	+1.3	11	7,206	sw.	31	w.	2	15	8	7	4.8	0.0	0.0
Fort Wayne	856	113	124	29.17	30.09	.....	65.0	−0.5	86	27	74	40	15	56	34	59	56	79	2.41	.....	10	4,408	e.	22	sw.	6	5	15	10	6.0	0.0	0.0
Detroit	730	218	258	29.30	30.09	+.03	64.0	+0.5	85	27	71	40	14	57	20	59	56	80	1.90	−0.6	13	5,972	sw.	31	sw.	7	6	14	10	6.3	0.0	0.0
Upper Lake Region.							**59.5**	**+0.2**										**83**	**3.26**	**+0.1**										**6.0**		
Alpena	609	13	92	29.44	30.11	+.08	56.4	−0.9	79	2	64	34	13	48	27	54	52	87	1.65	−1.8	12	6,476	se.	38	nw.	12	9	10	11	5.9	T.	0.0
Escanaba	612	54	60	29.42	30.08	+.07	55.8	−1.1	71	5	63	32	13	49	26	53	51	87	2.34	−1.2	12	5,956	s.	30	nw.	12	11	10	9	5.0	T.	0.0
Grand Haven	632	54	89	29.39	30.06	+.02	61.0	+0.1	84	1	69	37	16	53	29	57	54	82	3.42	+0.2	12	6,056	w.	35	sw.	12	10	10	10	5.7	0.0	0.0
Grand Rapids	707	70	87	29.32	30.09	+.04	63.0	+1.2	86	5	72	42	13	54	27	57	54	79	5.77	+2.6	10	3,206	e.	20	w.	12	5	13	12	6.6	0.0	0.0
Houghton	668	62	99	29.32	30.05	+.05	57.0	+0.9	84	26	66	36	13	48	31	.....	.....	.....	3.83	+0.3	10	5,702	e.	37	w.	12	8	9	13	6.0	0.5	0.0
Lansing	878	11	62	29.15	30.09	.....	62.1	+0.8	86	5	72	36	16	52	31	56	55	88	5.61	+3.0	11	2,558	sw.	15	sw.	2	3	15	12	6.6	0.0	0.0
Ludington	637	60	66	29.38	30.08	.....	58.8	.....	78	1	66	36	15	51	25	55	52	84	2.53	.....	11	5,855	e.	33	w.	12	10	12	8	5.0	0.0	0.0
Marquette	734	77	111	29.29	30.09	+.09	56.8	0.0	83	26	65	36	13	49	30	52	49	80	1.63	−1.9	10	6,997	nw.	36	w.	12	6	10	14	6.6	0.2	0.0
Port Huron	638	70	120	29.39	30.08	+.02	61.6	0.0	85	27	69	34	14	54	25	57	54	80	3.87	+1.2	10	6,390	ne.	33	w.	8	5	15	10	6.0	0.0	0.0
Saginaw	641	69	77	29.40	30.10	.....	61.1	.....	84	5	70	39	13	52	27	57	55	86	3.01	−0.1	10	4,511	ne.	24	sw.	2	5	14	11	6.4	0.0	0.0
Sault Sainte Marie	614	11	52	29.40	30.10	+.08	56.1	+1.8	76	27	65	34	15	47	29	52	50	88	2.63	−0.8	10	4,547	nw.	30	nw.	13	6	11	13	6.4	0.3	0.0
Chicago	823	140	310	29.19	30.08	+.04	65.1	−1.2	80	27	70	42	14	60	17	60	57	78	2.50	−0.5	11	6,828	s.	30	s.	1	5	17	8	5.7	0.0	0.0
Green Bay	617	109	144	29.40	30.06	+.04	59.8	+0.7	81	27	68	34	14	52	27	54	51	81	1.48	−1.6	9	6,821	s.	34	ne.	20	2	14	14	7.2	0.0	0.0
Milwaukee	681	125	139	29.34	30.07	+.04	61.8	−0.7	81	2	68	38	14	56	20	57	54	81	5.22	+2.3	11	6,241	ne.	35	e.	6	6	13	11	6.2	0.0	0.0
Duluth	1,133	11	47	28.82	30.04	+.06	56.4	+1.3	81	27	64	30	13	48	29	50	47	79	2.61	−0.9	9	8,081	ne.	32	nw.	12	10	11	9	4.9	T.	0.0
North Dakota.							**59.8**	**+2.7**										**66**	**2.18**	**+0.7**										**5.3**		
Moorhead	940	50	58	28.96	29.97	+.01	60.6	+2.4	84	23	72	27	13	49	38	53	48	69	1.68	−0.6	8	6,027	s.	30	nw.	6	9	11	10	5.6	0.0	0.0
Bismarck	1,674	8	57	28.22	29.99	+.05	61.0	+2.9	94	3	73	34	13	49	39	52	46	66	2.83	+1.6	11	6,392	n.	26	n.	17	11	6	13	5.7	0.0	0.0
Devils Lake	1,478	11	44	28.39	29.95	+.01	58.2	+2.6	90	1	70	25	13	46	38	51	46	72	1.63	+0.2	8	7,133	s.	35	sw.	5	13	5	12	5.1	0.0	0.0
Ellendale	1,457	10	56	28.42	29.98	.....	60.5	.....	90	5	73	34	13	48	45	.....	.....	.....	1.11	.....	7	9,422	s.	40	se.	24	12	10	8	4.6	0.0	0.0
Grand Forks	835	12	89	.....	.....	.....	59.0	.....	87	15	71	24	13	47	42	.....	.....	.....	2.22	.....	7	.....	se.	30	se.	24	14	2	14	....	0.0	0.0
Williston	1,878	41	48	27.99	29.95	+.02	59.6	+3.0	97	3	72	27	12	47	42	49	41	59	2.60	+1.7	6	5,745	n.	29	se.	5	8	12	10	5.6	0.0	0.0
Upper Mississippi Valley.							**65.2**	**−0.3**										**80**	**4.23**	**+0.9**										**6.1**		
Minneapolis	918	102	208	29.02	30.00	.....	63.1	.....	88	4	73	34	13	54	28	.....	.....	.....	1.61	−2.0	12	7,684	s.	34	nw.	11	8	8	14	5.9	0.0	0.0
St. Paul	837	236	261	29.12	30.02	+.03	62.4	+1.1	87	5	72	33	13	53	28	.....	.....	.....	1.10	−2.3	11	8,321	se.	43	se.	16	8	17	5	5.1	0.0	0.0
La Crosse	714	11	48	29.28	30.04	+.03	62.2	0.0	86	5	72	31	14	53	30	.....	.....	.....	4.00	−0.1	7	2,803	se.	15	s.	25	6	12	12	6.5	0.0	0.0
Madison	974	70	78	29.03	30.07	+.04	61.7	−0.7	85	5	69	39	14	54	24	56	53	80	4.36	+1.2	10	4,984	s.	34	ne.	20	4	12	14	6.7	0.0	0.0
Wausau	1,247	4	.....	28.75	30.09	.....	58.0	.....	82	26	68	27	14	48	33	.....	.....	.....	3.57	.....	8	.....	se.	.....	.....	.....	12	6	12	5.3	0.0	0.0
Charles City	1,015	10	49	28.97	30.04	+.04	62.4	+0.7	87	5	72	33	14	52	29	56	54	81	7.12	+4.3	10	3,985	se.	24	se.	16	9	12	9	5.4	0.0	0.0
Davenport	606	71	79	29.39	30.05	+.02	65.6	0.0	87	4	75	40	14	57	28	59	56	77	4.53	+1.4	11	4,018	e.	23	nw.	11	7	8	15	6.2	0.0	0.0
Des Moines	861	84	97	29.11	30.01	−.01	65.2	−0.4	87	3	74	39	14	56	29	60	58	83	5.17	+2.1	12	4,089	se.	28	s.	26	9	11	10	5.9	0.0	0.0
Dubuque	698	81	96	29.33	30.08	+.05	62.8	−1.2	86	5	71	35	14	54	27	57	54	81	5.04	+1.4	10	3,234	s.	19	se.	16	6	10	14	6.6	0.0	0.0
Keokuk	614	64	78	29.37	30.04	+.01	67.1	−0.4	88	4	76	40	14	58	29	60	56	74	4.64	+0.7	12	4,293	se.	26	sw.	8	8	6	16	6.3	0.0	0.0
Cairo	358	87	93	29.67	30.04	−.01	70.6	−0.9	90	28	78	50	16	63	24	64	62	82	3.48	+1.0	9	4,577	s.	26	sw.	20	6	8	16	6.6	0.0	0.0
Peoria	636	11	45	29.41	30.07	+.03	65.4	+1.1	86	3	75	37	14	55	30	60	58	84	5.28	+2.2	12	2,783	se.	15	sw.	8	8	10	12	5.8	0.0	0.0
Springfield, Ill	644	10	91	29.36	30.03	−.02	66.4	−1.2	83	4	74	39	14	58	28	61	58	83	5.66	+2.3	9	4,727	se.	21	s.	26	7	9	14	6.0	0.0	0.0
Hannibal	534	74	109	29.46	30.03	.00	67.4	−0.3	87	28	76	43	14	58	32	.....	.....	.....	3.69	+0.1	13	4,897	e.	27	sw.	8	6	12	12	6.1	0.0	0.0
St. Louis	568	265	303	29.43	30.04	.00	69.0	−1.1	88	28	77	47	14	62	23	62	59	77	3.51	+0.6	13	7,220	s.	32	sw.	20	7	6	17	6.5	0.0	0.0
Missouri Valley.							**67.1**	**+1.5**										**72**	**4.84**	**+2.2**										**4.9**		
Columbia, Mo.	784	11	84	29.19	30.01	−.02	68.2	+0.4	88	28	78	44	22	59	32	.....	.....	.....	3.03	+0.2	11	4,274	se.	24	nw.	25	8	12	10	5.7	0.0	0.0
Kansas City	963	161	181	28.98	30.00	−.02	69.2	+1.7	89	3	78	49	14	61	27	62	58	73	9.61	+5.8	12	6,151	se.	41	nw.	6	11	13	6	4.8	0.0	0.0
St. Joseph	967	11	49	28.96	29.99	.....	68.6	.....	92	3	78	45	14	59	29	61	58	78	5.02	.....	12	4,844	se.	33	nw.	29	12	10	8	4.7	0.0	0.0
Springfield, Mo.	1,324	98	104	28.64	30.03	.00	69.2	+1.3	88	10	78	52	22	61	27	62	59	75	3.82	+0.1	12	6,386	se.	26	se.	16	11	12	7	4.8	0.0	0.0
Iola	984	11	50	28.96	29.98	−.05	71.9	+3.3	98	10	83	49	22	61	41	.....	.....	.....	4.23	+0.9	13	3,920	se.	22	ne.	11	6	10	14	6.2	0.0	0.0
Topeka	987	92	107	.....	.....	.....	69.8	+1.5	92	3	80	49	21	60	35	.....	.....	.....	2.43	−1.1	10	5,975	s.	34	e.	5	10	11	9	4.8	0.0	0.0
Drexel	1,299	10	54	28.61	29.98	.....	65.6	.....	91	4	76	38	14	55	31	.....	.....	.....	8.24	.....	11	6,039	se.	34	e.	28	8	16	6	5.2	0.0	0.0
Lincoln	1,189	11	84	28.74	29.98	−.01	67.6	+2.4	92	4	78	42	14	57	33	59	55	72	7.21	+4.6	9	6,202	se.	38	nw.	28	5	14	11	6.0	0.0	0.0
Omaha	1,105	115	122	28.83	30.00	.00	67.4	+0.6	92	4	76	44	14	58	28	59	55	73	9.32	+6.3	12	4,911	se.	36	n.	28	10	11	9	5.0	0.0	0.0
Valentine	2,598	47	54	27.29	29.98	+.02	62.8	+0.3	92	4	76	37	13	50	40	53	47	67	1.94	+0.2	10	6,354	w.	39	n.	1	14	11	5	3.7	0.0	0.0
Sioux City	1,135	94	164	28.80	30.00	+.02	65.3	+1.9	90	4	75	42	14	56	31	58	53	72	7.36	+4.9	11	8,045	s.	40	se.	24	10	13	7	4.8	0.0	0.0
Huron	1,306	59	74	28.61	30.00	+.04	64.0	+2.7	96	4	76	38	14	52	40	55	50	70	1.95	+0.3	10	6,756	se.	30	nw.	8	13	11	6	4.4	0.0	0.0
Pierre	1,572	70	76	28.31	29.96	+.01	64.4	+0.6	94	5	78	35	13	51	42	54	49	66	1.21	+0.1	8	6,216	e.	40	w.	25	17	6	7	3.9	0.0	0.0
Yankton	1,233	49	57	28.67	29.97	−.01	65.4	+1.4	92	4	76	43	13	55	34	.....	.....	.....	6.01	+3.6	9	4,984	se.	36	se.	28	11	11	8	4.8	0.0	0.0

TABLE I.—*Climatological data for Weather Bureau stations, September, 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 .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.
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F	°F.	°F.	°F.	%	In.	In.		Miles.								0-10	In.
Northern Slope.							58.2	+1.0										60	2.27	+1.1										4.2	
Billings	3,140	5					60.0		94	3	76	32	12	44	52				4.84		8		sw.				13	8	9		0.0
Havre	2,505	11	44	27.39	30.01	+.07	57.8	+1.4	89	2	74	30	28	42	49	48	41	61	0.50	−0.5	7	3,538	sw.	37	nw.	5	15	8	7	4.0	0.0
Helena	4,110	87	112	25.86	30.01	+.04	58.2	+1.6	87	2	71	36	23	46	38	46	34	46	0.16	−0.9	2	5,394	sw.	31	n.	16	16	5	9	3.9	0.0
Kalispell	2,973	48	56	26.97	30.00	+.04	57.0	+3.1	83	4	72	31	17	42	41	46	36	52	0.23	−1.1	3	4,014	nw.	36	nw.	15	21	6	3	2.9	0.0
Miles City	2,371	48	55	27.50	30.03	+.08	62.3	+1.1	99	3	74	38	18	50	42	50	42	56	4.26	+3.3	8	4,157	n.	29	n.	9	15	5	10	4.2	0.0
Rapid City	3,259	50	58	26.63	30.01	+.05	60.5	+1.4	90	3	72	34	18	49	42	50	42	56	4.90	+3.6	9	5,333	w.	42	nw.	5	16	6	8	4.4	0.0
Cheyenne	6,088	84	101	24.08	29.98	+.02	55.8	−1.2	82	9	68	35	7	44	38	46	39	61	2.78	+1.8	10	7,346	w.	46	w.	27	13	11	6	4.6	0.0
Lander	5,372	60	68	24.72	30.02	+.06	56.4	+1.2	86	3	70	31	18	43	40	46	39	61	5.64	+4.6	6	3,469	sw.	32	w.	4	11	11	8	4.9	T.
Sheridan	3,790	10	47	26.16	30.04		56.6		92	3	71	30	18	42	45	48	44	73	8.18		8	3,657	nw.	42	nw.	5	16	6	8	4.3	0.0
Yellowstone Park	6,200	11	48	23.97	30.03	+.06	52.3	−1.1	81	8	67	25	18	38	44	42	34	58	1.05	0.0	6	5,669	s.	33	s.	22	12	11	7	4.5	0.0
North Platte	2,821	11	51	27.12	30.02	+.05	63.8	+1.7	91	3	77	40	29	51	40	54	50	72	0.88	−0.6	6	4,272	se.	32	e.	27	16	8	6	3.8	0.0
Middle Slope.							68.1	+0.3										67	3.52	+1.6										4.5	
Denver	5,292	106	113	24.79	30.00	+.04	60.6	−2.3	86	9	72	40	29	49	32	49	42	58	0.75	−0.1	5	4,737	s.	29	n.	6	13	13	4	4.2	0.0
Pueblo	4,685	80	86	25.34	29.97	+.01	63.0	−1.4	89	9	76	35	29	50	40	51	44	58	1.36	+0.7	7	3,929	nw.	32	s.	23	16	10	4	3.8	0.0
Concordia	1,392	50	58	28.52	29.97	−.02	69.6	+1.5	92	4	80	48	21	59	33	60	55	70	2.94	+0.4	9	4,962	s.	24	se.	24	7	14	9	5.8	0.0
Dodge City	2,509	11	51	27.43	30.00	+.02	69.6	+0.2	92	10	82	47	20	58	36	59	54	71	2.50	+0.7	12	6,489	se.	30	se.	16	19	6	5	3.2	0.0
Wichita	1,358	139	158	28.55	29.96	−.04	71.8	+2.0	94	10	81	51	21	62	32	63	58	70	3.26	+0.1	14	8,544	s.	35	w.	29	10	12	8	5.1	0.0
Broken Arrow	765	11	52	29.20	30.02		73.0		94	10	82	55	21	64	33				4.26		12	7,691	se.	33	se.	18	12	8	10	5.0	0.0
Muskogee	652	4					75.0		98	10	87	52	8	63	40				5.41		10		se.				12	12	6		0.0
Oklahoma City	1,214	10	47	28.73	29.98	−.01	74.0	+1.9	93	9	83	55	22	65	29	65	62	76	10.28	+7.5	13	6,549	s.	48	nw.	18	16	7	7	4.1	0.0
Southern Slope.							74.2	+1.4										63	3.88	+1.4										3.8	
Abilene	1,738	10	52	28.18	29.95	−.01	77.2	+3.0	96	1	88	57	21	66	31	66	61	67	1.10	−2.0	5	6,196	s.	29	s.	27	10	11	9	5.2	0.0
Amarillo	3,676	10	49	26.32	29.99	+.03	69.8	+2.1	90	11	82	52	25	58	32	59	55	69	6.42	+4.1	11	6,164	se.	32	ne.	3	18	10	2	3.6	0.0
Del Rio	944	64	71	28.96	29.93	−.01	79.6	+0.7	97	1	88	61	21	72	26				2.27	−0.2	8	6,276	se.	36	e.	20	5	6	19	3.7	0.0
Roswell	3,566	75	85	26.38	29.92	.00	70.3	0.0	92	26	84	50	29	57	40	56	47	54	5.74	+3.9	6	4,556	s.	30	nw.	14	19	10	1	2.5	0.0
Southern Plateau.							69.4	−1.2										50	0.84	0.0										2.4	
El Paso	3,762	110	133	26.19	29.88	.00	73.5	+0.8	90	4	85	54	29	62	32	58	48	48	0.41	−1.0	3	5,994	se.	38	nw.	14	21	9	0	2.5	0.0
Santa Fe	7,013	38	53	23.35	29.95	+.02	58.6	−2.3	78	10	70	36	28	47	28	47	39	58	1.10	−0.5	10	3,921	e.	25	sw.	27	15	10	5	3.7	0.0
Flagstaff	6,907	10	59	23.42	29.94	+.05	53.4	−2.1	84	7	68	24	28	39	42	45		64	3.37		8	5,177	w.	38	se.	23	12	13	5		0.0
Phoenix	1,108	11	81	28.70	29.83	+.02	80.2	−1.2	105	5	94	50	28	66	38	63	53	45	0.97	0.0	3	3,398	e.	28	nw.	12	21	9	0	1.6	0.0
Yuma	141	9	54	29.67	29.82	+.04	81.6	−2.1	110	5	96	52	27	67	39	67	58	52	1.54	+1.4	3	2,315	sw.	27	se.	10	27	2	1	1.2	0.0
Independence	3,957	5	25	25.99	29.97	+.11	68.9	−0.2	98	8	83	37	24	55	37	52	35	32	0.20	+0.1	2	6,275	nw.	37	w.	25	19	10	1	2.9	0.0
Middle Plateau.							61.9	−0.1										46	0.88	+0.2										3.8	
Reno	4,532	74	81	25.50	29.96	+.01	62.7	+3.0	95	7	78	32	24	48	39	48	38	50	0.48	+0.2	5	4,106	w.	33	w.	2	18	7	5	3.2	0.0
Tonopah	6,090	12	20	24.10	29.93		61.6		88	8	71	32	23	52	25	46	30	36	1.09	+0.6	6	6,360	w.	36	nw.	26	19	9	2	3.3	T.
Winnemucca	4,344	18	56	25.64	29.99	+.06	60.4	+1.2	95	8	77	30	18	44	50	47	37	53	1.16	+0.8	7	3,958	sw.	25	ne.	17	17	3	10	3.9	0.0
Modena	5,479	10	43	24.65	29.95	+.03	58.2	−2.0	91	9	75	26	27	42	47	44	30	43	0.46	−0.7	6	6,434	w.	45	sw.	22	14	13	3	3.8	0.7
Salt Lake City	4,360	163	203	25.64	29.96	+.01	64.2	−0.2	91	10	75	36	27	53	32	50	38	43	1.41	+0.6	5	5,295	se.	42	s.	23	14	7	9	4.5	0.0
Grand Junction	4,602	60	68	25.42	29.97	+.02	64.0	−2.4	92	9	77	40	27	51	36	51	42	51	0.71	−0.2	5	4,197	se.	38	se.	4	14	9	7	4.1	0.0
Northern Plateau.							63.9	+2.6										46	0.40	−0.4										3.4	
Baker	3,471	48	53	26.47	30.02	+.03	59.5	+2.5	90	2	74	35	18	45	44	48	37	50	0.36	−0.4	3	4,329	se.	25	nw.	26	16	6	8	4.1	0.0
Boise	2,739	78	86	27.15	29.97	.00	65.7	+3.8	97	2	80	41	27	52	36	52	40	44	0.55	+0.1	3	3,019	se.	20	nw.	24	21	5	4	2.8	0.0
Lewiston	757	40	48	29.20	30.00	+.02	66.4	+2.9	98	2	83	39	23	49	47				0.10	−0.6	1	1,827	w.	27	n.	15	20	4	6	3.2	0.0
Pocatello	4,477	60	68	25.49	29.95	−.01	62.6	+1.9	90	8	76	35	27	49	41	47	34	43	0.86	0.0	3	6,149	se.	38	sw.	24	15	6	9	4.5	0.0
Spokane	1,929	101	110	27.98	30.00	+.02	62.3	+3.1	88	13	77	39	22	48	43	50	39	50	0.31	−0.7	3	2,860	sw.	23	nw.	15	17	6	7	3.3	0.0
Walla Walla	991	57	65	28.93	29.99	−.01	67.1	+1.7	93	8	79	44	22	55	37	53	41	44	0.21	−0.7	2	2,598	s.	13	w.	15	22	2	6	2.7	0.0
North Pacific Coast region.							60.4	+2.2										78	1.43	−1.0										4.5	
North Head	211	11	56	29.83	30.05	+.02	58.3	+2.1	82	30	63	49	22	54	21	56	54	87	2.05	+0.2	7	8,364	n.	68	s.	23	9	8	13	6.2	0.0
Port Angeles	29	8	53		30.07		56.2		78	10	65	38	23	47	32				1.47	−0.4	6	3,834	s.	24	w.	2	19	4	7		0.0
Seattle	125	215	250	29.94	30.07	+.06	60.8	+2.9	83	7	68	46	28	53	26	55	50	73	1.37	−0.4	5	4,167	n.	27	sw.	2	15	8	7	4.4	0.0
Tacoma	213	113	120	29.84	30.05	+.03	59.8	+2.2	81	7	68	44	28	51	27				1.16	−1.3	4	3,839	n.	30	s.	24	8	14	8	5.5	0.0
Tatoosh Island	86	9	57	29.95	30.05	+.03	54.8	+1.8	70	7	60	45	22	50	16	54	53	94	1.74	−4.4	8	7,994	s.	46	e.	30	8	10	12	5.8	0.0
Yakima	1,071	5					64.0		94	8	81	33	23	47	49				0.86		2		nw.				17	7	6	3.6	0.0
Medford	1,425	4					67.0		104	6	86	39	27	48	54				0.99		5		se.				19	2	9	2.8	0.0
Portland, Oreg.	153	68	106	29.86	30.02	−.01	64.5	+2.8	95	7	75	45	27	54	32	57	52	68	0.59	−1.2	4	3,502	nw.	19	e.	30	14	8	8	4.2	0.0
Roseburg	510	9	57	29.47	30.01	−.01	64.3	+1.4	100	7	78	44	18	50	47	55	48	66	1.63	+0.6	5	1,901	n.	18	n.	15	17	7	6	3.8	0.0
Middle Pacific Coast region.							65.6	+2.5										65	1.25	+0.7										3.6	
Eureka	62	73	89	29.96	30.03	+.02	57.2	+2.3	70	17	62	47	16	52	22	54	53	88	1.54	+0.4	3	3,721	n.	35	n.	16	10	8	12	5.9	0.0
Point Reyes	490	7	18	29.41	29.93		57.4	+1.3	87	17	62	48	11	52	31				0.82		3	11,962	nw.	48	n.	17	8	4	18	6.7	0.0
Red Bluff	332	50	56	29.55	29.89	−.04	75.0	+1.9	108	7	88	43	26	61	39	59	46	43	3.13	+2.3	4	3,502	se.	28	nw.	16	25	1	4	1.9	0.0
Sacramento	69	106	117	29.83	29.90	+.01	72.7	+3.4	107	7	86	46	26	59	38	60	50	53	0.50	+0.1	5	5,359	s.	31	n.	17	24	5	1	1.9	0.0
San Francisco	155	208	243	29.78	29.95	+.01	64.0	+3.1	87	5	72	52	10	56	31	57	53	76	0.44	+0.2	3	6,303	sw.	46	n.	17	21	5	4	3.1	0.0
San Jose	141	12	110	29.79	29.94		67.5	+2.8	100	6	82	45	27	53	42				0.62	+0.3	2	3,906	nw.	24	nw.	17	23	4	3	2.4	0.0
South Pacific Coast region.							70.2	+2.2										68	0.38	+0.2										3.0	
Fresno	327	89	98	29.54	29.89	+.02	76.4	+2.1	107	7	90	46	27	63	34	60	47	41	0.25	0.0	3	4,530	nw.	26	nw.	26	24	4	2	1.7	0.0
Los Angeles	338	159	191	29.57	29.93	+.05	70.4	+1.4	92	4	79	54	23	61	27	62	59	76	0.55	+0.5	3	3,614	sw.	18	nw.	26	15	5	10	4.1	0.0
San Diego	87	62	70	29.83	29.92	+.03	68.2	+1.1	85	5	74	53	27	62	22	63	61	81	0.03	0.0	2	4,251	nw.	20	nw.	20	17	7	6	3.6	0.0
San Luis Obispo	201	32	40	29.74	29.96	+.03	65.8	+4.3	96	6	79	44	24	53	39	56	52	72	0.70	+0.2	3	2,379	nw.	15	nw.	21	22	6	2	2.6	0.0
West Indies.																																
San Juan, P. R.	82	9	54	29.88	29.96		80.0	−0.5	90	15	85	73	28	75	15				6.65	−0.2	13	7,504	e.	34	e.	7	7	19	4	4.9	0.0
Panama Canal.																																
Balboa Heights	118	7	97	29.71	29.83	−.01	80.6	+0.8	92	18	86	73	15	75	16	75	74	87	4.60	−3.0	15	4,984	nw.	26	nw.	17	0	14	16	7.7	0.0
Colon	36	7	97	29.79	29.83	−.01	81.0	+0.8	90	20	86	73	14	76	13	76	75	85	12.31	−0.2	22	6,067	w.	25	e.	14	0	8	22	8.3	0.0
Alaska.																																
Juneau	80	11	54	29.83	29.92		50.6		65	4	56	35	21	45	23	48	46	89	16.46		24	5,763	s.	40	se.	29	5	4	21	7.7	0.0

TABLE II.—*Data furnished by the Canadian Meteorological Service, September, 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	29.87	30.01	+0.04	52.7	−1.3	60.2	45.2	75	33	2.93	−0.78	0.0
Sydney, C. B. I	48	30.04	30.09	+.08	55.9	−0.6	63.7	48.2	73	32	3.50	+0.22	0.0
Halifax, N. S	88	29.98	30.08	+.04	58.0	−0.4	66.6	49.5	80	33	2.64	−1.07	0.0
Yarmouth, N. S	65	30.02	30.09	+.04	55.9	−0.2	63.9	47.8	73	40	3.23	−0.22	0.0
Charlottetown, P. E. I	38	30.01	30.05	+.04	56.6	−0.7	64.2	49.0	72	38	1.65	−1.75	0.0
Chatham, N. B	28	29.98	30.01	+.01	55.2	−0.2	62.5	48.0	72	42	2.62	−0.09	0.0
Father Point, Que	20	30.02	30.04	+.06	47.5	−2.9	55.9	39.1	73	27	1.80	−1.33	0.0
Quebec, Que	296	29.77	30.09	+.08	56.4	+1.3	64.2	48.7	77	36	3.62	−0.05	0.0
Montreal, Que	187	29.86	30.06	+.02	59.1	+0.7	67.2	51.0	82	39	1.58	−1.72	0.0
Stonecliffe, Ont	489												
Ottawa, Ont	236	29.82	30.08	+.04	60.4	+3.0	71.0	49.9	83	34	1.78	−0.91	0.0
Kingston, Ont	285	29.78	30.09	+.05	61.3	+1.3	68.7	53.9	82	38	2.19	−0.61	0.0
Toronto, Ont	379	29.68	30.08	+.02	60.7	+1.7	69.3	52.0	85	37	2.67	−0.58	0.0
Cochrane, Ont	930												
White River, Ont	1,244	28.72	30.03	+.05	51.5	+1.2	63.5	39.6	77	25	3.03	+0.26	2.0
Port Stanley, Ont	592	29.47	30.11	+.05	59.9	+0.4	67.9	51.9	80	34	1.78	−0.95	0.0
Southampton, Ont	656	29.38			58.7	+1.2	66.5	50.8	80	34	3.55	+0.61	0.0
Parry Sound, Ont	688	29.39	30.07	+.04	57.6	+1.6	67.1	48.1	82	33	3.53	−0.14	0.0
Port Arthur, Ont	644	29.34	30.05	+.07	52.9	+0.7	60.8	45.0	79	33	2.68	−0.80	0.0
Winnipeg, Man	760	29.13	29.95	+.01	58.8	+6.3	70.7	47.0	87	27	1.09	−0.94	0.0
Minnedosa, Man	1,690	28.16	29.97	+.03	55.0	+4.5	67.9	42.1	88	18	0.81	−0.55	0.0
Le Pas, Man	860				51.1		62.8	39.5	79	21	1.57		0.0
Qu'Appelle, Sask	2,115	27.71	29.94	+.02	54.7	+3.6	67.2	42.3	86	22	0.76	−0.57	0.0
Medicine Hat, Alb	2,144	27.69	29.93	+.01	59.6	+4.6	75.5	43.7	91	31	0.01	−1.17	0.0
Moose Jaw, Sask	1,759				55.9		70.1	41.6	90	20	1.39		0.0
Swift Current, Sask	2,392	27.43	30.04	+.12	55.0	+1.9	70.8	39.3	89	26	0.01	−1.21	0.0
Calgary, Alb	3,428												
Banff, Alb	4,521	25.46	30.01	+.08	50.1	+4.3	66.0	34.3	82	24	2.15	+0.48	4.8
Edmonton, Alb	2,150	27.69	29.96	+.06	52.9	+3.6	66.9	38.9	85	25	0.95	−0.38	0.0
Prince Albert, Sask	1,450	28.44	30.01	+.11	52.8	+4.4	64.3	41.4	76	27	1.03	−0.25	0.0
Battleford, Sask	1,592	28.24	29.97	+.07	54.7	+2.9	69.8	39.6	88	26	0.45	−0.80	0.0
Kamloops, B. C	1,262	28.80	30.09	+.12	58.4	+1.0	70.8	46.0	84	33	0.67	−0.18	0.0
Victoria, B. C	230	29.79	29.97	−.04	58.4	+3.6	66.5	50.2	81	44	1.44	−0.72	0.0
Barkerville, B. C	4,180	25.75	30.05	+.07	50.7	+4.0	66.2	35.2	73	23	2.77	−0.14	T.
Prince Rupert, B. C	170				55.9		63.2	48.6	76	40	8.78		0.0
Hamilton, Bermuda	151												

SEISMOLOGICAL REPORTS FOR SEPTEMBER, 1923.

W. J. HUMPHREYS, Professor in Charge.

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

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

Day.	Approximate time, Greenwich civil.	Station.	Approximate latitude.	Approximate longitude.	Intensity Rossi-forel.	Number of shocks.	Duration.	Sounds.	Remarks.	Observer.
	H. m.	ARIZONA.	° ′	° ′			*Sec.*			
Sept. 30	18 *ca*	Gisela	34 10	111 00	4?					Rachel Hickox.
	18 15*ca*	Pine	34 20	111 25	4?		2		Also felt at Payson	D. G. Goodfellow.
	18 27	Roosevelt	33 40	111 00	2	2	2	Rumbling	Felt by several	F. W. Crokin.
	18 45	Payson	34 10	111 00	4	1	1–2	do	do	R. C. James.
		CALIFORNIA.								
Sept. 3	12 19	Eureka	40 48	124 10	3	1	1	None	Awakened people	J. M. Jones.
6	12 *ca*	Santa Rosa	38 30	122 45	3	1	3*ca*		Awakened a few	M. W. Allen.
17	9 26	Eureka	40 48	124 10	3	2	2, 1	None	Felt by many	L. B. Cooper.
19	23 ..	Los Gatos	37 12	121 58	3–4	2	Brief.	do	do	I. H. Snyder.
22	0 50	Yorba Linda	33 50	117 45	3	1		do		P. J. Ton.
30	21 35	Calexico	32 41	115 30	4			do	Felt by several	R. Bradley.
		UTAH.								
Sept. 7	18 39	Richmond	41 55	112 10	4	1	30	Faint	Felt by many	J. R. Thomson.