shows the change in mean pressure from the preceding month.

The use of a new base map for charts II and III began with the January 1930 issue.

CHART IV.—*Percentage of clear sky between sunrise and sunset.*—The average cloudiness at each regular Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the observed cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are the basis of this chart. The chart does not relate to the night hours.

CHART V.—*Total precipitation.*—The scales of shading with appropriate lines show the distribution of the monthly precipitation according to reports from both regular and cooperative observers. The inset on this chart shows the departure of the monthly totals from the corresponding normals, as indicated by the reports from the regular stations.

CHART VI.—*Isobars at sea level, and isotherms at surface; prevailing winds.*—The pressures have been reduced to sea level and standard gravity by the method described by Prof. Frank H. Bigelow in the REVIEW for January 1902, **30:** 13–16. The pressures have also been reduced to the mean of the 24 hours by the application of a suitable correction to the mean of 8 a. m. and 8 p. m. readings at stations taking two observations daily, and to the 8 a. m. or the 8 p. m. observation, at stations taking but a single observation.

The diurnal corrections so applied, except for stations established since 1901, will be found in the Annual Report of the Chief of the Weather Bureau, 1900–1901, volume 2, table 27, pages 140–164.

The sea-level temperatures are now omitted and average surface temperatures substituted. The isotherms cannot be drawn in such detail as might be desired, for data from only the regular Weather Bureau stations are used.

The prevailing wind directions are determined from hourly observations at almost all the stations. A few stations determine their prevailing directions from the daily or twice-daily observations only.

CHART VII.—*Wind roses for selected stations.*—The publication of this chart began in the REVIEW for January 1935, and gives wind roses for 28 selected stations. The roses are based on hourly percentages for the month.

CHART VIII.—*Total snowfall.*—This is based on the reports from regular and cooperative observers and shows the depth in inches of the snowfall during the month. In general, the depth is shown by lines connecting places of equal snowfall, but in special cases figures also are given. This chart is published only when the snowfall is sufficiently extensive to justify its preparation. The inset on this chart, when included, shows the depth of snow on the ground at 8 p. m. of the Monday nearest the end of the month and is a copy of the snow chart appearing in the snow and ice bulletin for that week.

CHARTS IX, X, etc.—*North Atlantic weather maps for particular days.*

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, January 1936

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	45.7	−0.7	Pushmataha	80	17	Valley Head	−11	31	12.34	+7.50	Brantley	12.34	Riverton	3.03
Arizona	43.7	−.5	Goulds Ranch	80	11	Fort Valley	−4	2	.78	−.34	Oracle	2.60	2 stations	T
Arkansas	37.1	−4.2	Magnolia	83	16	4 stations	−1	[1] 24	1.05	−3.17	Crossett	4.59	Fayetteville	.13
California	46.6	+1.8	Indio	85	23	Twin Lakes	−6	[1] 12	5.00	+.17	Cummings	27.41	6 stations	.00
Colorado	25.0	+.9	Longmont	74	11	Fraser	−33	30	.76	.0	Steamboat Springs	4.48	3 stations	T
Florida	58.9	−.1	Brooksville	88	6	2 stations	20	[1] 28	5.11	+2.31	Garniers	18.65	West Palm Beach	1.64
Georgia	44.0	−2.9	Fargo	82	18	Dalton	−6	31	9.21	+4.94	Flat Top	17.32	Fargo	3.15
Idaho	24.1	−.1	Kooskia	56	15	Tetonia	−35	26	3.76	+1.55	Roland	12.08	Howe	.55
Illinois	20.7	−5.8	4 stations	66	12	Freeport	−27	23	1.40	−.88	Mount Carmel	2.09	Chester	.56
Indiana	22.4	−6.6	2 stations	65	12	Marengo	−27	28	1.47	−1.56	Scottsburg	2.86	Goshen	.75
Iowa	9.5	−9.0	Keokuk	56	12	Elkader	−33	24	1.68	+.60	Tingley	3.85	Inwood (near)	.45
Kansas	26.3	−3.5	2 stations	70	11	Horton	−21	27	.71	+.05	Leavenworth	1.99	Norton	.10
Kentucky	29.4	−7.9	Murray	68	12	Taylorsville	−25	28	2.99	−1.34	Jackson	5.69	Owensboro	.95
Louisiana	49.6	−2.0	Urania	85	16	2 stations	12	[1] 28	5.17	+.33	Paradis	11.54	Plain Dealing	1.23
Maryland-Delaware	28.1	−5.9	Snow Hill, Md	62	13	Oakland, Md	−20	25	6.00	+2.70	Dover, Del	7.95	Chewsville, Md	3.89
Michigan	18.1	−2.9	2 stations	48	[1] 12	2 stations	−26	[1] 19	1.85	+.01	Deer Park	4.52	Yale	.45
Minnesota	−1.4	−10.8	do	40	[1] 2	Warroad	−55	23	.76	+.01	Fairmont	1.62	Alexandria	.07
Mississippi	44.1	−3.2	Columbia	82	6	Tupelo	−10	31	6.20	+1.16	Gulfport	13.35	Yazoo City	2.25
Missouri	24.4	−6.4	Garber	74	12	Conception	−25	27	1.01	−1.30	King City	3.61	2 stations	.05
Montana	17.2	−2.5	Norris (near)	60	4	Glasgow	−43	19	1.02	+.14	Haugan	7.02	Ennis	.09

[1] Other dates also.

Condensed climatological summary of temperature and precipitation by sections, January 1936—Continued

Section	Temperature: Section average	Temperature: Departure from the normal	Monthly extremes: Station	Highest	Date	Station	Lowest	Date	Precipitation: Section average	Departure from the normal	Greatest monthly: Station	Amount	Least monthly: Station	Amount
	° F.	° F.		° F.			° F.		In.	In.		In.		In.
Nebraska	17.8	−5.5	Benkelman	70	11	Weeping Water	−34	26	.92	+.41	Auburn	3.39	Sappa Valley	.08
Nevada	33.7	+4.1	Logandale	73	11	Owyhee	−19	30	1.41	+.22	Marlette Lake	9.26	4 stations	.00
New England	21.3	−1.3	Waterbury, Conn.	56	3	Bloomfield, Vt.	−29	[1] 21	6.31	+2.81	Portland, Me.	10.01	Bethlehem, N. H.	2.77
New Jersey	27.2	−3.7	Burlington	59	13	Layton	−15	26	6.34	+2.77	Elizabeth	8.58	Northfield	3.09
New Mexico	32.1	−1.6	Carlsbad	77	11	Elizabethtown	−33	30	.86	+.30	Cloudcroft	4.02	Bloomfield	.05
New York	20.8	−2.3	Setauket	54	[1] 3	Stillwater reservoir	−27	26	3.55	+.62	Mount Vernon	7.73	Haskinville	.85
North Carolina	37.0	−4.5	4 stations	75	[1] 18	Mount Mitchell	−12	31	7.79	+4.06	Rock House	13.97	Kinston	1.95
North Dakota	−5.8	−12.4	Hettinger	43	13	Edmore	−44	24	.56	+.11	Howard	2.20	Mayville	.09
Ohio	22.7	−5.7	Peebles (near)	62	14	McArthur	−30	24	1.65	−1.35	Demos	3.50	Danbury	.68
Oklahoma	35.6	−2.7	Okemah	78	12	Hooker	−6	8	.39	−1.02	Hugo	1.17	Watts	T
Oregon	33.9	+2.0	Powers	72	29	Seneca	−32	30	6.79	+2.92	Haskins Dam	23.44	Mitchell	.91
Pennsylvania	23.6	−4.7	Greensburg	59	14	Ebensburg	−30	23	4.21	+.99	George School	7.74	Sharon	1.34
South Carolina	41.2	−4.6	Kingstree	80	18	Long Creek	−4	31	7.68	+4.08	Caesars Head	14.28	Florence No. 1	2.05
South Dakota	5.8	−10.2	Pine Ridge	58	11	Pollock	−39	31	.65	+.11	Wagner	1.41	Oelrichs	.02
Tennessee	34.3	−4.8	Madisonville	78	17	Rugby	−12	[1] 24	5.02	+.30	Parkersville	12.38	Newbern	.90
Texas	45.8	−2.4	Laredo	98	17	2 stations	−2	30	.75	−.94	Port Arthur	4.63	3 stations	.00
Utah	27.0	+1.7	2 stations	68	[1] 11	Woodruff	−26	7	1.57	+.37	Silver Lake	9.27	2 stations	.00
Virginia	31.0	−5.4	Holland	72	19	Big Meadows	−17	23	6.44	+3.20	Pinnacles	9.61	Timberville	2.72
Washington	34.2	+3.7	South Bend (near)	60	22	Bumping Lake	−18	28	7.20	+1.88	Cougar (near)	27.48	2 stations	.86
West Virginia	26.7	−5.8	2 stations	64	14	Reedsville	−31	25	4.01	+.38	Pickens	7.85	Dam No. 25, Ohio River.	1.84
Wisconsin	9.1	−6.0	Brodhead	46	14	Grantsburg	−42	[1] 23	1.31	+.11	Racine	2.90	Hatfield	.52
Wyoming	18.5	−1.7	Wheatland	67	11	Buffalo Ranch	−43	29	1.22	+.43	Bechler River	9.83	Archer	.06
Alaska (December)	1.2	−2.3	2 stations	58	[1] 18	Fort Yukon	−71	7	2.97	+.09	View Cove	32.53	Barrow	.00
Hawaii	70.6	+2.3	do	89	[1] 5	Kanalohuluhulu	33	29	6.03	−2.99	Hilea-Manawaiopuna Divide.	18.50	Ka Lae	.03
Puerto Rico	73.3	+.3	Manati	92	31	Guineo Reservoir	43	7	1.47	−2.11	Rio Blanco	6.34	Cabo Rojo No. 2	.00

[1] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, January 1936*

[Compiled by Annie E. Small, by official authority, U. S. Weather Bureau]

District and station	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.
New England							24.6	+0.1										75	5.85	+2.4										5.9		
Eastport	76	67	85	29.76	29.84	−0.16	22.1	+1.7	49	3	30	−6	24	14	38	20	17	79	3.24	−0.7	12	10,896	nw.	45	ne.	19	9	3	19	6.7	8.2	3.8
Greenville, Maine	1,070	6	40	28.66	29.88		12.2		38	16	20	−20	31	4	40				8.04		13	6,660	n.	39		28	7	8	16		51.2	
Portland, Maine	103	82	117	29.76	29.89	−.16	24.6	+2.2	48	3	32	−1	30	17	29	21	13	65	10.01	+6.0	16	7,423	n.	35	s.	3	17	6	8	4.3	29.8	.2
Concord	289	60					21.6	.0	45	4	30	−12	30	13	32				5.67	+2.7	15		nw.				10	11	10		25.1	
Burlington	403	11	48	29.49	29.96	−.09	15.2	−3.6	40	3	23	−15	30	7	38				3.46	+1.7	19	7,544	s.	34	s.	13	5	6	20	7.6	28.6	12.7
Northfield	876	12	60	28.95	29.95	−.10	13.0	−2.2	39	4	24	−25	30	2	38	10	8	89	3.74	+1.4	19	5,351	n.	30	sw.	23	6	7	18	7.1	31.5	23.4
Boston	124	336	360		29.90	−.15	28.2	+.3	54	3	35	4	30	21	32			71	6.46	+2.8	15	9,361	w.	40	ne.	19	14	4	13	5.1	12.7	4.0
Nantucket	12	14	90	29.90	29.91	−.13	31.4	+.1	51	3	37	11	28	26	28	28	24	78	4.92	+1.2	16	11,481	w.	46	se.	10	5	8	18	6.6	.7	T
Block Island	26	11	46	29.90	29.93	−.14	30.4	−.6	52	3	36	9	28	25	34	28	24	78	5.49	+1.7	14	14,430	w.	54	ne.	19	7	10	14	6.3	1.9	T
Providence	160	215	251	29.74	29.93	−.13	28.3	+1.1	53	3	35	6	24	21	36	24	18	69	6.84	+3.1	12	9,875	nw.	40	nw.	16	16	4	11	4.5	12.0	6.3
Hartford	159	70	104	29.79	29.98	−.09	27.2	+1.7	53	3	34	3	23	21	37				6.95	+3.0	13	6,767	nw.	30	nw.	16	13	4	14	5.5	15.2	8.0
New Haven	106	74	153	29.85	29.98	−.10	28.2	.0	53	3	35	1	23	22	39	24	18	68	7.56	+3.6	12	7,290	nw.	35	ne.	19	10	9	12	5.6	11.2	4.9
Middle Atlantic States							29.5	−2.8										73	5.96	+2.7										6.3		
Albany	97	97	112	29.88	29.99	−.08	23.6	+.5	45	3	30	−6	26	17	23	20	15	72	4.59	+2.2	16	5,877	nw.	28	s.	13	9	7	15	6.3	22.7	9.2
Binghamton	871	57	79	29.03	30.00	−.08	22.1	−2.0	44	13	29	−8	30	15	32				3.12	+.7	18	5,726	w.	28	sw.	23	1	6	24	8.5	17.9	7.4
New York	314	415	454	29.63	29.99	−.11	29.9	−1.0	53	15	37	−2	23	23	28	26	20	69	6.82	+3.2	13	12,415	nw.	49	s.	3	10	8	13	5.6	9.1	3.1
Harrisburg	374	94	104	29.61	30.03	−.07	25.6	−3.4	44	13	32	−6	23	19	38	22	16	70	5.58	+2.5	17	5,905	w.	30	w.	22	7	11	13	6.4	24.4	8.5
Philadelphia	114	174	367	29.90	30.03	−.08	29.9	−2.7	52	13	36	−2	23	24	26	26	20	67	6.44	+3.1	16	9,336	nw.	38	sw.	13	9	10	12	5.7	4.9	.5
Reading	323	283	306	29.67	30.04		27.1	−2.3	48	13	34	−5	23	21	32	24	17	68	5.29	+1.7	15	9,461	nw.	42	nw.	23	7	9	15	6.5	13.8	5.8
Scranton	805	72	104	29.10	30.00	−.09	24.0	−2.6	46	3	30	−8	23	18	28	21	16	71	4.47	+1.4	16	4,953	sw.	24	se.	22	5	8	18	7.2	26.5	8.0
Atlantic City	52	37	172	29.96	30.02	−.09	31.2	−1.3	51	3	38	1	23	25	29	28	23	74	5.92	+2.4	12	12,494	w.	51	ne.	19	7	8	16	6.3	2.7	.1
Sandy Hook	22	10	57	29.96	29.99		29.0		52	13	35	0	23	24	27	26	23	81	5.78	+1.8	12	12,599	w.	51	w.	23	10	8	13	5.5	2.9	2.0
Trenton	190	88	106	29.80	30.02		27.8	−2.7	53	3	35	−3	23	21	30	25	20	75	6.00	+2.7	14	7,676	w.	35	ne.	19	8	13	10	5.7	3.9	2.6
Baltimore	123	100	215	29.91	30.05	−.07	30.8	−3.0	55	13	37	0	23	24	34	27	20	68	5.94	+2.4	14	8,115	sw.	42	sw.	23	9	7	15	5.9	2.2	.2
Washington	112	62	85	29.93	30.06	−.07	30.6	−2.8	58	13	37	0	23	24	37	27	20	68	5.87	+2.3	15	6,123	nw.	38	nw.	23	8	10	13	6.0	2.3	.3
Cape Henry	18	8	54	30.02	30.04		36.8	−3.4	72	19	44	12	23	30	40	33	30	81	6.46	+3.3	12	9,110	nw.	51	nw.	23	9	7	15	5.9	9.6	3.8
Lynchburg	686	5		29.30	30.07	−.06	32.4	−5.1	63	13	42	−1	23	23	46				9.46	+6.0	13		nw.				6	17	8		2.0	.0
Norfolk	91	80	125	29.96	30.06	−.07	37.4	−3.2	72	19	44	10	23	30	40	33	28	74	6.60	+3.5	12	7,320	w.	39	w.	19	8	7	16	6.5	8.3	2.0
Richmond	144	11	52	29.91	30.07	−.07	33.0	−4.9	59	13	40	6	23	25	28	29	25	78	7.76	+4.6	12	5,994	n.	38	nw.	23	9	8	14	6.1	3.0	.7
Wytheville	2,304	49	55		30.06	−.08	29.2	−3.8	55	16	38	−7	23	20	38			80	5.19	+2.1	14	5,959	w.	34	w.	22	9	6	16		4.0	.5

TABLE 1.—*Climatological data for Weather Bureau stations, January 1936*—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 0.01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F		°F	°F.		°F	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
South Atlantic States							**43.1**	**−2.4**										**77**	**5.56**	**+2.0**										**5.4**		
Asheville	2,253	89	104	27.64	30.08	−0.07	33.4	−2.0	63	16	43	1	23	24	38	29	24	74	7.15	+4.0	13	7,319	n.	31	nw.	19	11	6	14	5.9	3.8	0.4
Charlotte	779	63	86	29.20	30.06	−.09	37.7	−3.5	65	19	46	9	31	29	37	33	28	73	10.39	+6.4	14	5,516	ne.	46	sw.	19	12	6	13	5.5	4.7	2.0
Greensboro	886	6	56	29.08	30.06	------	33.4	------	59	19	43	3	27	24	33	29	25	79	8.08	------	13	5,939	sw.	35	sw.	19	10	8	13	5.6	4.9	1.5
Hatteras	11	5	50	30.04	30.05	−.09	43.1	−4.0	70	19	50	19	28	36	28	40	38	87	4.19	−.2	12	10,744	nw.	48	nw.	23	12	6	13	5.2	7.5	6.4
Raleigh	376	103	146	29.64	30.06	−.07	38.2	−2.9	69	19	47	9	28	30	38	34	30	79	6.62	+3.0	12	6,726	nw.	36	sw.	19	13	5	13	5.6	5.1	3.0
Wilmington	72	73	107	30.01	30.08	−.06	44.2	−2.3	71	19	53	18	31	35	31	39	34	75	4.00	+.7	11	7,203	nw.	47	sw.	19	13	8	10	4.7	6.5	4.6
Charleston	48	11	92	30.03	30.08	−.07	47.1	−2.8	70	19	55	23	28	39	34	43	39	79	2.54	−.5	11	7,509	w.	36	s.	19	12	5	14	5.5	.0	.0
Columbia, S. C.	347	67	73	29.69	30.08	−.07	43.0	−3.0	72	18	52	15	31	34	37	37	32	70	5.96	+2.5	15	5,039	nw.	43	sw.	19	15	5	11	5.0	6.2	3.2
Greenville, S. C.	1,039	139	----	------	------	------	37.9	−2.4	64	14	47	10	31	28	40	----	----	----	9.26	+4.4	13	------	ne.	----	------	---	16	2	13	----	4.8	2.9
Augusta	182	62	77	29.86	30.06	−.10	44.4	−2.6	73	18	54	17	31	34	39	39	33	71	6.00	+2.1	14	4,657	nw.	41	sw.	19	11	8	12	5.3	2.9	1.5
Savannah	65	73	152	30.00	30.08	−.07	50.5	−.9	75	7	60	22	28	41	37	44	41	79	3.27	+.5	14	7,919	nw.	43	w.	19	15	2	14	5.3	.0	.0
Jacksonville	43	86	110	30.04	30.09	−.06	54.9	−.5	80	6	64	24	28	45	32	49	45	78	1.82	−1.0	11	5,827	s.	35	s.	19	9	7	15	6.0	T	.0
Florida Peninsula							**67.2**	**+1.7**										**81**	**3.16**	**+0.8**										**4.7**		
Key West	22	10	64	30.02	30.04	−.06	71.0	+1.5	83	14	76	56	31	66	16	65	64	84	2.09	+.1	4	7,403	ne.	28	w.	19	20	7	4	3.4	.0	.0
Miami	25	124	168	30.05	30.08	−.05	68.8	+2.3	83	15	75	45	31	63	23	63	60	78	3.93	+1.4	6	7,984	se.	30	sw.	19	12	13	6	4.8	.0	.0
Tampa	35	88	197	30.04	30.08	−.04	61.8	+1.4	83	7	70	35	31	54	31	56	54	82	3.45	+.8	8	8,121	s.	33	sw.	19	7	11	13	5.9	.0	.0
Titusville	43	5	36	30.02	30.07	------	60.4	------	84	6	70	31	31	50	35	----	----	----	3.93	------	9	------	se.	----	------	---	10	11	10	----	.0	.0
East Gulf States							**46.8**	**−1.3**										**78**	**9.56**	**+4.8**										**5.1**		
Atlanta [1]	976	5	53	29.01	30.07	−.08	39.0	−3.6	71	18	49	5	31	29	35	34	30	78	10.82	+5.9	15	7,252	nw.	48	w.	19	13	5	13	5.4	8.0	4.2
Macon	370	79	87	29.67	30.08	−.08	44.4	−2.4	70	18	55	16	31	34	38	39	34	73	9.19	+5.0	17	5,373	nw.	38	s.	18	11	7	13	5.5	3.1	.0
Thomasville	273	49	58	29.80	30.10	−.06	52.4	+1.4	76	8	62	20	28	43	31	48	46	90	6.47	+2.4	16	------	sw.	----	------	---	11	4	16	----	.0	.0
Apalachicola	35	11	51	30.04	30.08	------	53.8	------	71	15	60	28	28	47	27	49	----	----	4.60	+1.0	13	------	e.	45	w.	19	9	8	14	----	.0	.0
Pensacola	56	149	185	30.01	30.07	−.07	53.2	+.7	73	6	60	24	28	46	34	50	47	84	16.30	+12.3	14	9,843	n.	50	s.	18	9	9	13	5.5	T	.0
Anniston	741	9	----	------	------	------	41.4	−.8	74	17	52	2	31	31	36	----	----	----	11.37	+6.2	17	------	nw.	----	------	---	14	5	12	----	10.0	8.0
Birmingham	700	11	48	29.29	30.07	−.09	41.6	−3.5	75	17	51	8	31	32	32	37	32	73	10.07	+4.6	17	6,184	nw.	27	se.	2	12	7	12	5.3	11.8	8.0
Mobile	57	86	105	30.00	30.06	−.09	51.4	−.1	77	6	60	23	28	43	30	47	44	79	14.59	+9.7	17	6,333	n.	28	nw.	19	10	8	13	5.4	T	.0
Montgomery	218	92	106	29.83	30.09	−.07	47.2	−1.0	77	17	56	19	28	38	29	42	37	73	12.14	+6.9	14	5,960	n.	30	w.	19	12	6	13	5.4	.3	.0
Meridian	375	67	92	29.66	30.07	−.09	44.4	−2.6	77	17	55	16	28	34	37	40	35	76	6.82	+1.5	15	5,126	ne.	22	nw.	6	13	7	11	4.8	1.4	T
Vicksburg	247	65	73	29.82	30.08	−.07	45.4	−2.8	76	17	54	19	28	37	36	40	35	74	3.60	−1.8	13	5,891	n.	26	nw.	6	9	9	13	6.0	3.0	T
New Orleans	53	76	84	30.00	30.06	−.07	54.5	+.3	79	6	62	29	28	46	34	50	47	82	8.78	+4.4	11	5,629	ne.	25	nw.	19	11	5	15	6.2	T	.0
West Gulf States							**46.6**	**−1.8**										**72**	**1.14**	**−1.7**										**4.8**		
Shreveport	249	92	227	29.80	30.08	−.06	44.6	−2.4	76	17	54	17	19	35	32	39	34	71	1.77	−2.2	7	8,300	ne.	31	s.	3	12	11	8	4.7	4.6	T
Bentonville	1,303	12	38	28.64	30.05	−.09	32.0	−2.1	68	12	41	2	27	23	30	----	----	----	.32	−2.4	5	6,684	nw.	24	sw.	13	7	7	17	----	1.1	.4
Fort Smith	457	79	94	29.57	30.07	−.07	37.0	−2.5	72	12	46	14	27	28	31	32	26	69	.22	−2.3	7	6,643	e.	29	w.	17	9	13	9	5.5	2.0	.0
Little Rock	357	94	102	29.70	30.10	−.05	38.2	−3.2	71	12	47	10	24	30	31	33	26	66	.93	−3.8	6	6,403	e.	25	sw.	12	9	11	11	5.3	1.4	T
Austin	605	136	148	29.41	30.05	------	49.4	−.1	82	16	62	23	20	37	38	41	33	61	.39	−1.7	4	6,183	n.	28	nw.	18	15	10	6	4.1	T	.0
Brownsville	57	88	96	29.94	30.00	------	57.4	−2.4	83	15	66	32	19	49	37	53	50	84	.41	−1.1	10	8,448	nw.	38	s.	17	12	4	15	6.0	.0	.0
Corpus Christi	20	11	78	30.02	30.04	−.06	54.4	−1.6	86	17	63	29	19	46	34	50	47	83	.61	−1.0	8	7,587	n.	31	n.	18	13	5	13	5.3	.0	.0
Dallas	512	220	227	29.49	30.06	------	43.6	------	79	12	54	14	19	33	33	37	30	64	.48	−1.9	3	9,058	n.	31	nw.	18	15	8	8	4.2	3.6	.4
Fort Worth	679	92	110	29.34	30.07	−.05	44.0	−1.4	80	12	55	16	19	33	40	----	----	----	.67	−1.4	4	7,363	n.	31	nw.	12	22	1	8	3.3	4.5	T
Galveston	54	106	114	30.00	30.05	−.08	52.0	−1.8	70	17	58	28	19	46	35	49	47	87	2.75	−.7	14	8,180	n.	40	nw.	18	11	7	13	5.3	.0	.0
Houston	138	292	314	29.91	30.06	------	51.3	−1.4	81	16	60	23	19	42	39	----	----	----	1.94	−1.8	14	9,091	n.	40	nw.	18	14	3	14	5.3	.0	.0
Palestine	510	64	72	29.52	30.07	−.05	46.4	−1.8	75	11	57	17	19	36	36	40	34	68	.42	−3.0	3	6,260	s.	24	sw.	17	15	6	10	4.5	2.6	T
Port Arthur	34	58	66	30.02	30.06	------	51.2	------	73	17	59	25	19	43	36	----	----	----	4.63	+.9	14	6,805	n.	31	nw.	18	13	5	13	5.4	T	.0
San Antonio	693	242	301	29.30	30.03	−.07	52.0	−.3	84	16	63	25	19	41	32	44	36	62	.43	−1.0	7	8,429	ne.	38	nw.	18	14	12	5	4.0	T	.0
Ohio Valley and Tennessee							**28.0**	**−5.6**										**77**	**3.20**	**−0.7**										**7.0**		
Chattanooga	762	71	214	29.25	30.09	−0.07	37.6	−3.6	71	17	46	5	27	29	36	34	28	71	9.62	+4.4	16	6,225	w.	34	w.	22	10	10	11	5.6	6.4	2.8
Knoxville	995	66	84	28.99	30.08	−.07	34.8	−4.0	64	17	43	2	27	26	40	32	28	80	7.84	+3.2	13	4,682	w.	25	w.	22	12	6	13	6.0	5.5	1.7
Memphis	399	78	86	29.65	30.09	−.07	36.4	−4.5	69	17	44	6	27	29	38	32	26	68	2.19	−2.6	9	6,510	n.	26	n.	22	11	7	13	5.6	2.4	.0
Nashville	546	168	191	29.51	30.12	−.04	33.0	−5.6	68	17	42	−3	27	24	45	29	26	76	3.52	−1.2	15	7,368	nw.	32	nw.	19	8	6	17	6.5	9.2	.2
Lexington	989	6	----	------	------	------	26.8	−6.1	58	14	34	−15	23	20	32	----	----	----	4.00	−1.8	16	------	sw.	---	------	---	13	4	14	----	15.6	6.0
Louisville	525	188	234	29.50	30.11	−.03	27.8	−6.6	60	12	36	−11	23	20	46	24	19	73	1.59	−2.4	12	8,048	sw.	38	nw.	22	7	9	15	6.7	6.1	1.6
Evansville	431	76	116	29.61	30.10	−.04	27.9	−5.6	62	12	35	−8	27	21	43	24	20	73	1.80	−1.9	12	7,204	nw.	34	nw.	22	5	7	19	6.9	5.3	2.8
Indianapolis	822	194	230	29.14	30.07	−.05	22.2	−6.2	57	12	30	−18	23	15	49	20	15	77	1.32	−1.6	12	8,840	w.	39	w.	22	3	10	18	7.6	7.1	3.1
Terre Haute	575	96	129	29.42	30.07	------	23.6	------	60	12	31	−15	23	16	48	21	17	80	1.43	−1.3	15	7,445	w.	35	nw.	22	8	8	15	6.4	7.8	3.0
Cincinnati	627	11	51	29.37	30.08	−.04	25.2	−5.1	57	14	33	−16	23	17	47	22	17	75	1.28	−2.2	13	6,564	sw.	28	sw.	13	4	7	20	7.5	9.9	2.2
Columbus	822	90	210	29.14	30.06	−.05	23.8	−4.8	50	14	31	−16	22	17	49	22	18	78	1.26	−1.8	14	7,981	sw.	37	w.	22	2	12	17	7.6	12.1	2.6
Dayton	900	58	153	29.01	30.04	------	23.4	−6.1	53	14	31	−16	23	16	47	----	----	----	1.47	−1.8	12	7,289	sw.	34	nw.	22	2	12	17	7.5	10.4	1.4
Elkins	1,947	59	78	27.93	30.09	−.03	25.2	−5.2	56	14	34	−16	23	16	45	23	20	84	4.74	+1.0	22	5,435	w.	32	w.	22	3	8	20	8.0	12.8	3.8
Parkersburg	637	77	84	29.41	30.10	−.02	25.8	−6.7	56	14	34	−16	23	17	54	23	21	84	2.49	−1.1	17	5,382	sw.	35	nw.	22	3	6	22	8.1	18.6	7.3
Pittsburgh [1]	842	164	410	28.61	30.02	−.09	22.6	−8.1	51	13	30	−16	23	15	49	20	18	85	3.50	+.4	16	8,887	sw.	40	w.	13	1	7	23	8.3	20.9	7.7
Lower Lake Region							**21.8**	**−2.7**										**83**	**1.96**	**−0.6**										**8.4**		
Buffalo	768	243	280	29.11	29.97	−.10	23.2	−1.4	46	13	28	−3	27	18	24	21	19	85	2.26	−1.0	24	13,678	sw.	56	w.	13	2	5	24	8.6	20.0	8.6
Canton	448	10	61	29.46	29.97	------	14.2	−2.1	42	13	22	−15	26	7	38	13	12	93	2.27	−.2	15	6,336	w.	37	w.	13	2	9	20	7.7	15.4	6.8
Ithaca	836	77	100	29.04	29.98	------	22.8	−1.5	41	13	29	−3	23	17	29	20	16	78	2.08	−.1	20	8,240	w.	35	se.	9	4	4	23	8.3	15.9	8.4
Oswego	335	71	85	29.59	29.97	−.10	22.4	−1.5	42	13	28	−2	30	17	30	20	17	79	2.30	−.6	17	9,518	se.	37	w.	23	1	3	27	8.9	21.5	11.7
Rochester	523	85	102	29.39	29.98	−.09	23.3	−1.3	43	13	28	−2	27	19	34	21	16	74	2.88	.0	22	7,904	w.	34	w.	23	0	4	27	9.0	28.0	13.0
Syracuse	596	65	79	29.33	30.00	−.07	23.3	+.3	44	15	29	0	30	18	30	----	----	----	3.18	+.2	21	6,284	w.	25	w.	23	2	4	25	8.8	26.4	11.0
Erie	714	130	166	29.20	29.99	−.09	23.6	−3.2	50	13	30	−7	23	18	36	22	18	82	1.58	−1.2	19	11,334	sw.	42	sw.	22	2	3	26	8.8	11.7	6.0
Cleveland	762	267	318	29.15	30.00	−.09	23.8	−2.7	51	13	31	−10	22	17	44	22	19	84	1.41	−1.1	17	12,426	sw.	43	w.	13	3	4	24	8.4	11.2	2.4
Sandusky	629	5	67	29.32	30.03	−.06	22.4	−3.9	48	14	29	−12	22	16	38	----	----	----	1.07	−1.2	14	7,957	sw.	28	sw.	22	4	5	22	7.8	8.7	1.4
Toledo	628	79	87	29.32	30.03	−.06	20.9	−4.9	48	14	27	−12	22	14	32	19	16	82	1.40	−.8	15	8,537	w.	30	w.	22	4	3	24	8.0	8.4	2.0
Fort Wayne	857	69	84	29.08	30.04	------	19.7	−7.2	50	14	26	−18	22	13	38	18	15	86	1.55	−.8	12	7,824	w.	30	w.	22	4	9	18	7.2	7.8	2.3
Detroit	626	5	78	29.29	30.00	−.08	21.6	−2.8	46	13	28	−6	27	16	24	20	17	83	1.48	−.6	16	8,742	w.	34	sw.	21	0	5	26	8.7	10.1	1.5

[1] Observations taken at airport.

TABLE 1.—*Climatological data for Weather Bureau stations, January 1936*—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 0.01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F		°F	°F.		°F	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Upper Lake Region							15.9	−2.5										84	2.02	+0.2										7.7		
Alpena	609	13	89	29.29	29.98	−0.06	18.8	−0.3	36	3	25	−5	23	13	26	17	14	84	1.99	+0.1	18	7,916	nw.	34	nw.	13	1	10	20	8.0	23.7	14.4
Escanaba	612	54	60	29.32	30.02	−.03	15.4	.0	35	3	21	−14	26	9	23	14	11	86	1.60	+.1	13	6,883	nw.	32	n.	22	2	10	19	8.1	16.8	7.0
Grand Rapids	707	70	244	29.20	30.00	−.06	21.4	−3.1	44	14	26	−1	22	16	19	20	17	83	2.13	−.2	19	8,397	sw.	31	w.	13	1	1	29	9.3	24.3	11.1
Lansing	878	6	88	29.02	30.00	------	19.4	−3.0	41	12	26	−9	27	13	25	18	16	88	1.78	.0	15	7,445	sw.	30	w.	13	0	2	29	9.2	17.2	10.2
Ludington	637	5	54	29.27	29.99	------	21.0	−2.1	41	14	26	−6	31	16	21	20	----	----	2.18	.0	21	------	w.	----	----	---	0	6	25	----	26.9	14.5
Marquette	734	77	111	29.16	30.00	−.04	16.2	−.1	36	1	21	−8	24	12	15	15	13	90	2.87	+.5	20	7,480	w.	28	w.	23	0	4	27	9.0	28.1	20.0
Sault Ste. Marie	614	11	52	29.27	30.01	−.02	12.8	−.5	35	3	19	−17	23	6	27	12	11	91	2.59	+.6	24	5,306	se.	32	nw.	23	2	8	21	8.2	33.6	14.9
Chicago	673	7	131	29.29	30.05	−.05	19.0	−4.7	49	12	25	−17	23	13	30	17	13	77	1.64	−.3	12	8,260	w.	28	nw.	22	9	6	16	6.7	11.6	1.9
Green Bay	617	109	141	29.32	30.02	−.04	11.8	−3.9	36	12	20	−24	24	4	24	11	7	80	1.42	−.1	11	6,939	sw.	32	ne.	18	8	3	20	6.8	15.5	10.5
Milwaukee	681	97	221	29.26	30.03	−.05	16.2	−4.4	43	14	22	−21	22	10	28	15	10	76	2.54	+.8	14	9,814	w.	35	ne.	18	8	7	16	6.5	24.8	11.4
Duluth	1,133	5	47	28.76	30.06	−.03	2.6	−5.3	32	3	11	−35	23	−6	25	1	−2	83	1.53	+.6	9	9,858	nw.	36	nw.	26	12	6	13	5.0	18.1	12.2
North Dakota							−5.7	−10.7										86	0.46	−0.1										6.3		
Moorhead, Minn	940	50	58	29.08	30.18	+.07	−6.2	−10.0	25	10	3	−37	22	−15	27	−6	−7	97	.39	−.3	11	5,749	n.	20	nw.	3	5	12	14	6.4	6.3	7.7
Bismarck	1,674	8	57	28.24	30.16	+.03	−3.8	−11.6	30	3	5	−28	22	−13	34	−4	−10	72	.36	−.1	9	4,858	nw.	27	nw.	3	8	8	15	6.5	7.6	8.4
Devils Lake	1,478	11	44	28.47	30.19	+.07	−10.5	−12.3	26	10	−1	−37	22	−20	31	−11	−12	96	.36	−.1	9	5,681	nw.	23	e.	12	6	9	16	6.8	4.4	11.6
Grand Forks	833	12	67	------	------	------	−10.1	------	23	3	0	−39	22	−21	34	−11	----	----	.80	------	8	------	nw.	27	s.	8	2	22	7	----	10.5	14.5
Williston	1,878	41	48	28.03	30.15	+.04	−2.4	−8.8	31	2	6	−30	19	−11	36	−3	−7	79	.71	+.2	11	4,484	se.	21	nw.	3	11	7	13	5.5	7.2	11.8
Upper Mississippi Valley							15.0	−6.7										84	1.44	−0.2										6.3		
Minneapolis	918	102	208	29.05	30.09	------	3.8	−8.9	35	1	11	−34	22	−4	26	4	2	89	.77	−.1	13	7,318	nw.	34	nw.	22	11	4	16	6.2	9.1	8.0
La Crosse	714	11	48	29.27	30.09	−.02	9.6	−6.5	37	12	18	−28	22	2	28	8	6	87	.90	−.2	13	3,932	nw.	18	nw.	22	10	6	15	6.0	10.0	7.0
Madison	974	70	78	28.94	30.05	−.05	11.0	−5.7	42	14	18	−26	22	4	27	10	9	91	1.78	+.4	13	6,216	nw.	29	ne.	17	6	9	16	6.5	16.8	11.5
Charles City	1,015	10	51	28.96	30.11	−.03	6.0	−7.7	36	12	15	−29	22	−3	31	5	3	88	1.44	+.4	13	5,123	nw.	19	nw.	22	9	9	13	6.0	14.8	13.7
Davenport	606	66	161	29.40	30.10	−.02	14.6	−7.2	48	12	22	−22	22	8	35	13	10	82	1.44	.0	12	7,315	nw.	32	nw.	22	7	9	15	6.5	17.1	4.7
Des Moines	861	5	99	29.16	30.13	−.01	11.2	−8.9	41	12	19	−22	22	4	27	10	8	86	1.86	+.8	10	6,967	nw.	27	nw.	30	11	5	15	5.9	21.1	9.5
Dubuque	700	60	79	29.29	30.09	−.03	11.9	−7.2	43	14	19	−26	22	4	29	10	7	80	1.46	+.2	13	4,696	nw.	21	nw.	22	8	6	17	6.6	15.5	7.2
Keokuk	614	64	78	29.42	30.14	.00	17.2	−7.7	56	12	25	−18	22	9	40	15	12	81	1.74	+.2	16	6,202	nw.	28	nw.	22	11	8	12	5.8	14.6	9.6
Cairo	358	87	93	29.70	30.10	−.06	30.8	−4.1	66	12	38	−3	27	24	39	27	23	78	.95	−2.8	10	7,384	nw.	30	n.	18	4	7	20	7.3	1.4	.5
Peoria	609	11	45	29.40	30.10	−.02	17.2	−5.9	53	12	25	−20	23	10	38	15	13	84	1.79	.0	13	5,886	w.	35	nw.	22	10	9	12	5.9	15.4	3.9
Springfield, Ill	636	5	191	29.38	30.09	−.04	21.2	−5.3	59	12	28	−16	23	14	45	19	16	84	1.77	−.3	14	8,689	w.	36	nw.	22	8	5	18	6.6	13.0	3.5
St. Louis	568	179	303	29.46	30.09	−.05	25.4	−5.4	67	12	32	−10	23	18	48	23	18	76	1.32	−1.0	14	9,017	nw.	39	sw.	12	9	3	19	6.7	7.0	3.6
Missouri Valley							16.7	−7.4										82	1.25	+0.2										6.0		
Columbia, Mo	784	6	84	29.22	30.10	−.03	22.8	−6.4	64	12	31	−16	27	15	45	----	----	----	.93	−1.0	12	6,722	w.	25	nw.	22	10	7	14	5.6	8.5	4.8
Kansas City [1]	750	32	45	29.27	30.11	−.04	21.7	−6.5	56	13	30	−8	27	14	43	19	15	78	1.17	.0	10	7,386	nw.	32	n.	22	7	10	14	6.2	5.9	2.2
St. Joseph	967	11	49	29.02	30.11	------	16.8	------	51	13	25	−17	27	8	38	15	12	82	2.62	+1.6	11	6,369	nw.	26	nw.	3	14	7	10	4.7	24.0	9.6
Springfield, Mo	1,324	98	104	28.62	30.07	−.07	28.0	−5.5	68	12	36	−6	27	20	33	25	19	73	.17	−2.2	7	8,164	nw.	28	sw.	12	8	10	13	5.8	.6	T
Iola	984	11	50	29.00	30.09	−.05	28.0	−1.8	59	11	37	−3	27	19	35	----	----	----	1.08	−.2	4	------	n.	----	----	---	8	9	14	----	1.0	.0
Topeka	987	65	87	------	------	------	21.2	−6.4	56	13	30	−6	23	13	45	----	----	----	1.73	+.8	6	6,499	nw.	23	nw.	3	11	7	13	5.5	13.2	1.1
Lincoln	1,189	11	81	28.79	30.13	−.02	14.0	−8.8	47	13	23	−19	27	5	35	12	9	83	1.64	+1.0	10	6,348	n.	30	nw.	12	6	11	14	6.5	19.3	10.0
Omaha [1]	1,105	170	200	29.02	30.16	+.01	10.4	−11.5	44	10	19	−21	27	2	32	9	6	85	1.50	+.8	13	6,676	nw.	34	nw.	12	9	7	15	6.2	25.7	12.0
Valentine	2,598	47	54	27.26	30.13	+.01	13.2	−5.7	51	13	25	−21	27	1	37	11	8	83	.98	+.5	12	6,100	w.	24	nw.	12	7	12	12	6.7	13.2	12.2
Sioux City	1,138	64	106	28.84	30.14	−.01	6.8	−11.0	39	10	16	−21	22	−2	30	6	4	87	1.46	+.7	13	6,424	nw.	30	nw.	12	8	7	16	6.4	19.4	10.0
Huron	1,306	60	74	28.68	30.18	+.02	.5	−10.8	40	10	10	−26	22	−9	35	0	−2	87	.52	.0	11	5,725	nw.	28	nw.	3	9	7	15	6.0	7.3	5.2
Northern Slope							19.1	−0.2										76	0.77	0.0										6.5		
Missoula	3,263	80	91	------	------	------	26.8	------	44	2	33	−7	29	20	24	----	----	----	1.23	+.2	12	5,112	se.	27	se.	9	4	2	25	8.2	10.0	1.8
Havre	2,505	11	67	27.33	30.11	+.01	9.6	−3.3	46	22	20	−24	19	−1	51	8	6	90	.51	−.2	10	6,582	e.	30	sw.	28	7	10	14	6.5	8.1	2.2
Helena	4,124	85	111	25.72	30.05	−.10	23.2	+3.0	51	22	30	−9	29	16	23	20	15	69	.57	−.3	8	5,450	sw.	31	sw.	21	3	4	24	8.0	10.8	2.8
Kalispell	2,973	48	56	------	30.01	−.11	25.0	+4.6	46	22	32	−4	29	18	25	----	----	86	1.93	+.4	13	3,745	nw.	21	sw.	11	3	9	19	----	20.3	7.5
Miles City	2,371	48	55	27.45	30.13	+.01	10.8	−3.7	46	13	20	−20	19	1	37	9	5	76	.58	−.1	12	4,140	ne.	25	n.	24	7	8	16	6.8	8.3	5.7
Rapid City	3,259	50	58	26.53	30.13	+.03	16.8	−5.2	55	13	28	−12	18	6	41	14	10	80	.51	+.1	10	4,885	se.	28	n.	24	8	10	13	5.8	8.2	4.7
Cheyenne	6,094	50	71	23.79	30.00	−.05	25.4	−.1	58	11	36	−10	29	14	40	20	13	63	.30	−.1	9	12,528	nw.	54	nw.	2	10	12	9	5.2	3.8	T
Lander	5,372	60	68	24.52	30.05	−.07	22.6	+4.3	52	22	35	−13	8	10	45	18	14	76	.26	−.3	4	4,019	sw.	50	sw.	13	11	15	5	4.6	2.9	.0
Sheridan	3,790	10	47	25.99	30.04	------	19.5	------	57	11	31	−13	29	8	44	16	10	69	.76	−.1	10	4,033	nw.	32	nw.	11	4	11	16	6.6	10.8	1.0
Yellowstone Park	6,241	12	46	23.76	30.11	−.03	17.0	−.6	38	11	26	−14	29	8	30	15	11	76	1.31	−.3	20	6,293	sw.	30	sw.	11	5	5	21	7.3	32.1	12.5
North Platte	2,821	11	51	27.02	30.08	−.04	21.7	−1.2	63	11	33	−7	18	10	43	18	14	77	.48	+.1	8	5,088	w.	25	n.	12	8	9	14	6.0	5.0	1.0
Middle Slope							29.8	−0.6										66	0.49	−0.1										5.2		
Denver	5,292	106	113	24.60	29.97	−0.08	32.2	+2.4	67	11	43	4	29	21	38	26	14	49	0.40	0.0	7	6,513	s.	32	nw.	24	9	12	10	5.5	6.1	0.0
Pueblo	4,685	80	86	25.19	29.98	−.07	33.4	+3.5	67	11	46	2	18	21	40	26	15	53	.23	−.1	5	6,622	nw.	45	w.	15	10	15	6	4.7	2.9	.0
Concordia	1,392	50	58	28.59	30.13	−.01	22.0	−4.4	54	11	30	−2	23	14	36	19	16	83	.69	+.1	7	5,903	n.	26	nw.	12	12	9	10	5.5	6.0	T
Dodge City	2,509	10	86	27.39	30.09	−.02	28.4	−.6	61	22	39	4	30	18	41	24	20	74	.59	+.2	7	7,947	n.	30	n.	12	14	7	10	4.6	6.9	T
Wichita	1,358	85	93	28.59	30.08	−.05	28.0	−3.3	59	13	36	2	27	20	31	25	19	70	.94	+.2	3	7,681	n.	26	sw.	13	10	9	12	5.6	4.1	.0
Oklahoma City	1,214	10	47	28.75	30.07	−.04	35.0	−1.4	69	12	45	12	26	25	36	29	23	68	.09	−1.1	4	7,569	n.	25	nw.	12	12	7	12	5.3	.3	T
Southern Slope							42.0	−0.7										60	0.73	+0.1										4.4		
Abilene	1,738	10	52	28.21	30.06	−.03	43.4	−.8	76	12	56	9	19	31	39	34	24	54	.60	−.4	2	7,428	s.	25	s.	4	15	7	9	4.3	3.8	T
Amarillo	3,676	10	49	26.22	30.03	−.03	35.6	+.3	69	15	46	11	30	25	36	29	22	66	1.02	+.5	6	6,939	w.	23	w.	12	10	13	8	4.9	10.3	.0
Del Rio	944	64	71	29.02	30.02	−.04	50.2	−2.1	83	16	64	23	19	37	41	41	32	59	.33	−.2	3	5,594	se.	37	nw.	18	16	9	6	3.8	.0	.0
Roswell	3,566	75	85	26.36	30.04	.00	39.0	−.2	72	15	52	10	19	26	46	31	23	60	.98	+.4	4	5,685	s.	34	nw.	3	16	10	5	4.4	9.7	2.7

[1] Observations taken at airport.

TABLE 1.—*Climatological data for Weather Bureau stations, January 1936*—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 0.01, or more	Wind: Total movement	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F		°F	°F.		°F	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Southern Plateau							44.8	+1.3										53	0.53	−0.1										3.7		
El Paso	3,778	152	175	26.18	30.02	+.01	45.5	+.5	69	16	57	24	20	34	35	36	23	46	.57	+.1	1	6,876	nw.	37	w.	16	18	7	6	3.4	T	.0
Albuquerque	4,972	5	39	25.03	30.07	------	32.6	------	64	15	46	10	7	19	41	26	20	68	.55	+.2	4	5,132	n.	35	nw.	3	11	11	9	4.6	6.8	.0
Santa Fe	7,013	38	53	23.16	30.06	+.02	28.2	−.6	52	15	38	8	19	18	28	24	18	68	.99	+.3	5	4,654	n.	24	n.	12	18	8	5	3.6	11.4	3.5
Flagstaff	6,907	10	59	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Phoenix	1,108	10	107	28.85	30.02	−.01	52.8	+1.6	76	27	67	30	19	38	39	41	27	42	.80	.0	2	3,662	e.	18	nw.	17	15	11	5	3.8	.0	.0
Yuma	141	9	54	29.89	30.04	−.01	55.4	+1.0	76	15	68	34	2	43	34	44	30	42	.24	−.2	2	4,250	n.	22	n.	19	15	13	3	3.2	.0	.0
Independence	3,957	5	26	26.00	30.08	+.01	42.3	+4.1	70	15	55	22	12	29	38	32	------	------	.02	−.9	1	------	nw.	------	------	------	21	5	5	------	T	.0
Middle Plateau							31.6	+3.4										70	0.85	−0.1										5.8		
Reno	4,527	61	76	25.49	30.10	−.03	38.0	+5.5	56	10	48	16	30	28	31	32	25	60	.62	−.9	6	5,216	w.	32	w.	14	8	11	12	5.7	T	.0
Tonopah	6,090	12	20	------	------	------	34.0	------	54	15	42	14	18	26	33	28	19	59	.02	------	1	------	se.	------	------	------	------	------	------	------	------	------
Winnemucca	4,344	18	56	25.63	30.10	−.06	34.0	+5.4	51	10	43	12	1	25	30	30	27	78	1.34	+.3	12	6,469	sw.	30	sw.	15	7	3	21	7.1	1.1	.0
Modena	5,473	10	46	24.61	30.06	−.04	29.8	+3.1	58	27	43	5	30	16	44	25	19	66	.06	−.8	2	7,118	sw.	32	sw.	11	15	8	8	4.2	.2	.0
Salt Lake City [1]	4,357	86	210	25.74	30.11	−.04	29.0	−.2	52	15	37	5	18	21	26	27	24	84	2.02	+.7	13	6,642	se.	34	nw.	11	6	9	16	6.9	10.4	2.2
Grand Junction	4,602	60	68	25.39	30.06	.00	27.4	+3.4	51	16	37	3	2	18	26	24	20	76	.22	−.4	6	3,338	n.	21	nw.	16	11	9	11	5.2	2.2	.0
Northern Plateau							30.7	+2.9										79	2.53	+0.8										8.1		
Baker	3,471	48	53	26.45	30.12	−.04	26.3	+1.4	46	11	34	−3	29	19	27	24	21	76	2.44	+1.0	20	4,767	se.	21	w.	11	4	4	23	7.8	25.0	2.8
Boise	2,739	79	87	27.23	30.16	−.03	31.6	+1.8	55	11	38	4	31	26	22	29	25	77	2.13	+.4	19	4,653	se.	21	se.	3	2	3	26	8.4	9.7	2.5
Pocatello	4,477	60	68	25.47	30.13	−.07	24.0	−.7	45	11	32	−7	31	16	31	23	19	79	2.46	+1.1	16	7,154	w.	36	s.	11	2	6	23	8.0	17.3	2.1
Spokane	1,929	101	110	27.93	30.03	−.09	31.8	+4.3	44	15	37	5	29	27	19	30	28	83	2.78	+.6	15	4,267	s.	24	s.	12	4	6	21	7.8	11.3	1.4
Walla Walla	991	57	65	28.95	30.04	−.11	37.5	+4.8	55	12	42	10	30	33	19	35	31	77	3.21	+1.2	15	4,650	s.	24	w.	5	1	5	25	9.0	6.3	4.1
Yakima	1,076	58	67	28.85	30.03	------	33.0	+5.6	52	13	39	11	29	27	21	31	28	83	2.14	+.8	10	3,101	nw.	25	sw.	11	5	6	20	7.7	11.2	.3
North Pacific Coast Region							44.6	+3.9										82	8.83	+2.1										8.0		
North Head	211	11	56	29.72	29.95	−.10	45.2	+3.1	55	21	50	32	30	41	16	43	40	83	10.46	+1.7	24	12,194	e.	73	s.	12	4	2	25	8.0	T	.0
Seattle	125	90	321	29.81	29.94	−.11	44.2	+4.7	56	22	48	29	30	40	17	41	38	78	7.17	+2.2	19	7,829	e.	40	sw.	4	5	8	18	7.1	.0	.0
Tatoosh Island	86	10	54	29.80	29.90	−.08	44.9	+3.7	51	23	48	37	30	42	11	42	39	82	10.94	−.9	24	13,949	e.	52	e.	10	4	4	23	7.8	.0	.0
Medford	1,329	29	58	28.64	30.08	------	40.6	------	62	10	47	22	31	34	31	39	37	88	6.67	+3.9	20	------	n.	------	------	------	3	4	24	8.4	T	.0
Portland, Oreg.	153	68	106	29.84	30.00	−.08	44.2	+4.8	55	2	48	27	30	40	15	41	37	78	8.55	+2.0	20	5,710	se.	30	sw.	12	3	4	24	8.1	.0	.0
Roseburg	510	45	76	29.48	30.04	−.06	44.4	+3.2	61	22	51	26	30	38	31	42	40	84	9.17	+3.9	20	3,206	sw.	27	w.	3	1	7	23	8.6	.0	.0
Middle Pacific Coast Region							51.1	+3.6										76	6.14	+1.0										6.8		
Eureka	62	73	89	30.01	30.08	−.02	49.6	+2.7	70	29	55	38	17	44	28	48	45	86	8.84	+1.7	21	5,932	se.	34	sw.	15	6	3	22	7.7	.0	.0
Redding	722	20	34	------	------	------	49.0	------	68	22	56	33	17	42	28	43	36	66	12.50	------	14	6,431	nw.	36	s.	10	7	5	19	7.0	T	.0
Sacramento	69	92	115	30.02	30.10	−.02	50.0	+4.2	66	28	57	35	20	43	25	47	43	77	3.80	+.1	12	5,647	se.	24	se.	8	10	8	10	6.0	.0	.0
San Francisco	155	208	243	29.92	30.09	−.02	53.8	+3.9	66	28	59	42	20	49	18	49	44	73	5.77	+1.2	12	4,652	n.	28	nw.	16	9	4	18	6.7	.0	.0
South Pacific Coast Region							55.5	+3.8										65	0.65	−1.6										5.7		
Fresno	327	97	105	29.76	30.12	+.02	50.5	+4.3	70	25	60	34	6	42	31	48	44	78	.68	−1.0	10	3,652	e.	19	sw.	11	12	3	16	5.9	.0	.0
Los Angeles	338	159	191	29.68	30.05	−.03	59.4	+4.8	79	26	68	44	25	51	27	48	37	51	.51	−2.6	5	4,260	ne.	25	nw.	17	12	11	8	4.8	.0	.0
San Diego	87	62	70	29.94	30.04	−.03	56.6	+2.3	73	27	64	43	18	49	25	49	43	66	.75	−1.3	3	3,766	nw.	18	nw.	12	8	8	15	6.4	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.93	30.02	------	75.2	+.2	86	31	80	67	22	70	16	------	------	------	2.47	−1.7	14	8,698	e.	35	e.	6	8	21	2	4.8	.0	.0
Panama Canal																																
Balboa Heights	118	6	92	------	[3] 29.80	−.04	80.2	+.3	91	30	88	69	7	72	19	------	------	[2] 76	.83	−.1	3	6,391	nw.	24	nw.	29	4	27	0	4.6	.0	.0
Cristobal	36	6	97	------	[3] 29.83	−.03	81.2	−.3	86	20	84	75	12	78	9	75	73	[2] 77	1.54	−1.9	13	9,566	n.	24	n.	28	6	20	5	5.4	.0	.0
Alaska																																
Fairbanks	454	11	87	------	[3] 29.88	------	−8.2	------	36	25	1	−44	4	18	38	------	------	80	.09	------	2	3,042	nw.	17	ne.	24	12	12	7	------	2.4	15.2
Juneau	80	96	116	[3] 29.76	[3] 29.85	------	26.6	------	42	20	30	10	14	23	15	25	22	81	4.86	------	18	4,707	s.	25	e.	12	4	4	23	8.3	30.3	7.2
Hawaiian Islands																																
Honolulu	38	86	100	[3] 29.91	[3] 29.95	------	73.6	+2.7	82	20	78	64	23	69	14	67	64	74	2.81	−1.0	10	6,281	e.	26	w.	31	13	11	7	4.6	.0	.0

[1] Observations taken at airport.
[2] Observations taken bihourly.
[3] Pressure not reduced to mean of 24 hours.

TABLE 2.—*Data furnished by the Canadian Meteorological Service, January 1936*

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
	Ft.	*In.*	*In.*	*In.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*In.*	*In.*	*In.*
Cape Race, Newfoundland	99												
Sydney, Cape Breton Island	48												
Halifax, Nova Scotia	88												
Yarmouth, Nova Scotia	65												
Charlottetown, Prince Edward Island	38												
Chatham, New Brunswick	28												
Father Point, Quebec	20												
Quebec, Quebec	296												
Doucet, Quebec	1,236												
Montreal, Quebec	187												
Ottawa, Ontario	236	29.64	29.92	−0.11	17.2	+7.6	23.5	10.8	39	−10	2.77	−0.22	20.5
Kingston, Ontario	285												
Toronto, Ontario	379	29.55	29.98	−.07	22.4	+1.0	27.8	17.0	41	−2	2.14	−.78	12.1
Cochrane, Ontario	930												
White River, Ontario	1,244												
London, Ontario	808				18.7		24.7	12.8	40	−7	2.16		19.4
Southampton, Ontario	656												
Parry Sound, Ontario	688												
Port Arthur, Ontario	644												
Winnipeg, Manitoba	760												
Minnedosa, Manitoba	1,690												
Le Pas, Manitoba	860				17.4		−9.5	−25.3	15	−43	.50		5.0
Qu'Appelle, Saskatchewan	2,115												
Moose Jaw, Saskatchewan	1,759				−5.0		2.4	−12.4	30	−33	.87		8.7
Swift Current, Saskatchewan	2,392												
Medicine Hat, Alberta	2,365	27.47	30.09	+.02	5.5	.0	15.5	−4.6	41	−26	1.14	−5.7	11.4
Calgary, Alberta	3,540												
Banff, Alberta	4,521												
Prince Albert, Saskatchewan	1,450												
Battleford, Saskatchewan	1,592												
Edmonton, Alberta	2,150												
Kamloops, British Columbia	1,262												
Victoria, British Columbia	230												
Barkerville, British Columbia	4,180												
Estevan Point, British Columbia	20												
Prince Rupert, British Columbia	170												
Hamilton, Bermuda	151												

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Cape Race, Newfoundland	99				33.3		37.7	28.9	46	12	4.33		3.4
Minnedosa, Manitoba	1,690	28.21	30.14	+0.12	7.3	+1.6	16.6	−2.0	33	−28	.38	−0.24	3.8
Le Pas, Manitoba	860				3.2		11.6	−5.1	30	−30	.27		2.7
Qu'Appelle, Saskatchewan	2,115												
Moose Jaw, Saskatchewan	1,759				15.4		25.3	5.5	42	−18	.68		4.2
Swift Current, Saskatchewan	2,392	27.42	30.05	+.06	21.0	+5.0	29.5	12.5	42	−17	.52	−.26	4.7
Calgary, Alberta	3,540	26.28	30.09	+.15	25.7	+7.5	36.1	15.3	48	−8	.44	−.15	4.4
Kamloops, British Columbia	1,262	28.76	30.09	+.15	33.7	+4.8	37.2	30.2	48	23	.47	−.31	4.5
Prince Rupert, British Columbia	170				40.6		45.8	35.5	56	27	13.24		T

TABLE 3.—*Severe local storms, January 1936*

[Compiled by Mary O. Souder from reports submitted by Weather Bureau officials]

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the Annual Report of the Chief of Bureau]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Sandy Hook, N. J	2					Sleet	Travel dangerous; several automobile accidents due to skidding; some pedestrians injured by falling on icy pavements.
New York State	2					do	Icy roads over most of the State; all traffic delayed.
Harrisburg, Pa	2					Glaze	Streets, fences, trees, and wires coated with ¼ inch of ice; many persons slipped and fell with more or less serious injuries.
Kenosha, near, Wis	11-12			4		Gale	Storm started about 5 p. m., of the 11th; 4 men in fishing boat, unable to reach shore because of ice floes, perished; Coast Guards unable to effect rescue.
North Head, Wash	12			34		Wind	Freighter *Iowa* went aground and all aboard lost.
Vancouver, Wash	12					do	Damage to orchards, shrubs, and power lines.
Boulder, Colo	12-13				$770	Wind	Property damaged.
Pueblo, Colo	15	11 a. m.-4 p. m.				Gale and dust	Wind of 45 miles an hour; homes and business houses filled with thick film of powdery dust; visibility reduced to ¾ mile; traffic impeded; some damage to trees, foliage, sheds, and roofs; amount not estimated.
Keokuk, Iowa	17					Glaze	Streets very slippery.
Iowa	17-18					Blizzard	Amount of snow varied from 3 inches in the north to 20 inches in the south; highway traffic paralyzed; railroad schedules disrupted and many cancellations occurred; State Highway Commission battled day and night at hopeless task of keeping the primary roads open; all country roads definitely blocked.
Milwaukee, Wis	17-18					Snow	14.4 inches of snow fell in 24 hours; 16-foot drifts reported in some places, while other spots were practically bare.
Fort Payne, Ala	18	A. m		4		Tornado	Cloudburst followed tornado making travel to the scene difficult; dozen or more persons injured, 3 seriously; several homes and a garage wrecked; others damaged.
Chipley, Fla	18	7 p. m	100	7	25,000	do	25 persons injured; property loss between $10,000 and $40,000; no crop loss; livestock and chickens killed; trees uprooted.
Edison, Ga., vicinity of	18	11:30 p. m		7	10,000	do	Negro woman and baby picked up from a mattress and carried into a swamp were found uninjured the following day; water tank carried nearly a quarter of a mile; in Atlanta a house was partly demolished; destructive winds reported from Athens, Augusta, Elberton, Jackson, Lorane, and Millen.
Hartford, Conn	18-19					Snow and sleet	14.6 inches of snow and sleet recorded during the 2 storms of the 18th and 19th; all highways kept open and traffic moving; no serious accidents reported.
Tennessee, entire State	18-19					Snow	Snow measurement of 5 inches from Williamson and Dickson Counties northward to the Kentucky line; 7 inches in Davidson County.
Dallas, Tex	18-20					Snow and ice	Snowfall 1.7 inches on the 18th, with some melting immediately after falling and freezing during the day and night; streets and highways slippery; many persons injured; some loss to crops.
Clermont, Fla	19	9:15 a. m	167	0	18,500	Tornado	Property damage $3,500; loss to crops, mostly citrus, $15,000; path 5 miles long.
Trenton, N. J	19					Sleet	3.8 inches of sleet, the heaviest since February 1920, interrupted traffic.
Charlotte, N. C	19	9:43 a. m				Severe line squall	Maximum velocity of 46 miles per hour; considerable minor damage reported.
Wilmington, N. C	19	A. m				Gale	Some property damage.
Greensboro, N. C	19				2,000	Wind	Property damaged.
New York State, except southeastern portion.	19			9		Blizzard	Great delay in automobile, bus, and train service; many motorists stalled on highways.
Scranton, Pa	19					Heavy snow and wind.	Heaviest snowfall ever recorded by the Weather Bureau in Scranton in any one storm, 20 inches; main highways almost impassable; secondary roads blocked; bus and train schedules interrupted.
Block Island, R. I	19				1,400	Sleet and glaze	Damage to wires, poles, and roofing.
South Carolina, northern and central portions.	19	A. m			200,000	Wind	Extensive property damage; trees uprooted; fences, poles, and wires blown down.
Harrisburg, Pa	19-20					Heavy snow and wind.	Traffic tied up by 14 inches of drifting snow; many schools closed for day or two; several days before conditions approached normal due to high winds on the 20th.
Marquette, Mich	22	A. m				Wind and snow	Snow blown in such quantities that visibility was zero at times; schools dismissed at noon; almost no movement of wheeled traffic of any sort; very high seas dashed over breakwater; fishermen, alarmed by the rapidly falling pressure, made port before noon.
Minnesota, entire State	22					Wind	High winds with unusually low temperatures, assumed blizzard proportions, seriously delaying traffic over the entire State; several fatalities resulted from the storm.
Pittsburgh, Pa	22					Wind and snow	Roads out of the city impassable because of snow drifts; many motorists stranded along highways.
Northern New York	23-23			15		Blizzard	4 inches of dry snow fell; severe winds caused drifting; traffic handicapped; many stalled automobiles, trucks, and busses had to be abandoned. Buffalo airport cut off about 36 hours because of drifts; storm conditions severe throughout northern New York; numerous highways almost impassable for from 12 to 36 hours; visibility extremely poor; 15 deaths attributed to the storm.
Dayton, Ohio	22-23					do	This storm the worst of the winter; several injuries and deaths attributed to the cold; numerous interruptions to car and bus service due to frozen air brakes and snapped trolleys; automobiles rendered unserviceable; schools closed.
Cleveland, Ohio	22-23					Snow and wind	Many roads blocked by drifts; busses stalled and abandoned; hundreds of persons marooned; much damage because of severe cold; hundreds of automobiles disabled; wires snapped; many persons had hands and feet frozen; few deaths from exposure.
Evansville, Ind	22-31					Snow and ice	The cold wave caused ice to form with lowering temperature; all traffic dangerous; 4 pedestrians had broken bones because of falls on the 22d; numerous motor accidents occurred; damage estimated to be in the thousands.
Chattanooga, Tenn	23-24	10:02 a. m. of 23-6 a. m. of 24.				Snow	6 inches of snow, the heaviest in the past 7 years, covered the ground; traffic delayed; 16 persons treated for injuries from falling.
Georgia	29-30					do	One of the most notable snowstorms ever known in Georgia; 4 inches covered the ground as far south as Newnan, Griffin, Greensboro, Monticello, and Washington; in Atlanta, the snowfall was 8 inches, the largest amount ever measured in a single storm.
Wilmington, N. C	29-30	11:15 p. m. of 29-2:15 p. m. of 30.				do	Snowfall of 6.5 inches, heaviest fall since December 1915; transportation on city streets and highways considerably impeded for several days.
Dallas, Tex	29-31					Rain, sleet, and snow.	Rain, sleet, and snow on the afternoon of the 29th; many accidents due to slippery streets and highways.

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