December 3, then changed to the NW., and passed about 120 miles SW. of Guam the morning of December 4. The typhoon gradually inclined from a NW. course to the W. as it progressed across the ocean, and the morning of December 8 found it about 480 miles east of N. Luzon (lat. 17.50, long. 129). It began to move more rapidly at this time and was located between Tuguegarao, Cagayan Province, and Echague, Isabela Province, on the morning of December 9, moving SW., much decreased in intensity. It continued across central Luzon, and entered the China Sea close to and north of Iba, Zambales Province. On December 10, it was a depression in the China Sea about 150 miles WSW. of Manila. Gradually inclining to a WSW. and then a W. course, it reached the coast of Indochina and passed inland north of Padaran the morning of December 12.

Typhoon December 6 to 9.—As the preceding typhoon was moving across the ocean, a second disturbance appeared about 420 miles SE. of Guam. It moved W. by N. for a short time, then WNW. and filled up December 9 about 300 miles NNW. of Yap.

Typhoon, December 17 to 26.—On December 16, a depression over the eastern Caroline Islands moved WNW. and intensified into a typhoon about 300 miles SSE. of Guam (Dec. 17, 6 a. m.). It now began to move NW., gradually inclining to the WNW. as it reached the fourteenth parallel of latitude. On December 21 it was moving westward along 15.30° north latitude. December 22, it shifted to the WSW., and was located December 23 near latitude 14, longitude 126. From this point, it moved directly westward across southern Luzon into the China Sea, being about 50 miles SE. of Manila, December 24, 6 a. m., and about 300 miles W. by S. of Manila the morning of the 25th. It gradually filled up as it moved westward and no trace of it could be found by December 27.

Newspapers of December 31, 1935, reported that 28 lives were lost in this typhoon. Winds were violent over a small area, and the center moved quite fast across the Provinces of Camarines Norte and Sur, Tayabas, Laguna (only the southern part), and Batangas, thus minimizing the extent of damage. Near the center, houses built of strong materials were destroyed. Two ships were grounded along the northern coast of Camarines Norte and were towed into deeper water after the typhoon passed. Light material structures suffered extensive damage.

CLIMATOLOGICAL TABLES

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, December 1935

[For description of tables and charts, see REVIEW, January, p. 37]

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	41.2	−6.3	Bay Minette	78	[1] 9	Valley Head	7	26	4.24	−.67	Wadley	6.51	Riverton	1.18
Arizona	44.8	+.3	Quartzsite	83	3	Flagstaff	−1	31	.79	−.40	Ruby	2.10	Agua Caliente	T
Arkansas	37.6	−5.0	Magnolia	73	1	Lead Hill	−4	30	2.95	−1.31	Lutherville	5.95	Clarendon	.76
California	45.9	+.3	2 stations	83	1	Sierraville	−14	16	2.46	−1.21	Upper Mattole	14.37	Mercey Hot Springs	.08
Colorado	27.6	+2.2	Buena Vista	77	19	2 stations	−25	[1] 15	.36	−.54	Sapinero	1.90	3 stations	.00
Florida	52.6	−7.3	6 stations	84	9	Cottage Hill	17	27	2.73	−.03	Garniers	8.16	Chapman Field Garden.	.29
Georgia	40.8	−7.1	2 stations	77	8	Blairsville	0	31	2.75	−1.48	Tallapoosa	5.18	Hazlehurst	1.50
Idaho	25.0	−.9	do	55	[1] 11	Obsidian	−24	17	1.36	−.61	Roland	5.95	Challis	.10
Illinois	25.7	−4.7	Sparta	64	9	Danville	−15	27	1.22	−1.03	Golconda	2.21	Jacksonville	.70
Indiana	25.6	−6.5	Shoals	62	8	Marengo	−23	30	1.61	−1.25	La Porte	3.00	Frankfort	.80
Iowa	22.4	−1.5	Keokuk No. 2	59	9	Spencer	−19	26	.95	−.24	Monroe	2.06	Onawa	.15
Kansas	33.8	+1.0	Medicine Lodge	65	22	Centralia	−3	27	.27	−.58	Sedan	1.46	4 stations	T
Kentucky	30.0	−7.8	Harlan	63	9	2 stations	−14	[1] 27	2.39	−1.46	Flemingsburg	4.32	Franklin	1.21
Louisiana	48.1	−4.2	Port Sulphur	80	8	Tallulah	15	27	5.72	+.33	Woodworth	9.23	Bastrop	2.32
Maryland-Delaware	30.0	−5.4	Ferry Landing, Md.	66	9	Oakland, Md	−22	22	2.50	−.65	Friendsville, Md	5.45	Fallston, Md	1.43
Michigan	22.4	−2.8	Flint	51	1	Fife Lake	−24	29	1.38	−.70	Calumet	3.69	Iron River (near)	.33
Minnesota	14.3	−1.2	Pipestone	48	8	Big Falls	−33	20	.78	−.01	New Ulm	2.31	Alexandria	.15
Mississippi	41.9	−6.3	3 stations	73	[1] 7	West Point	10	27	3.90	−1.41	Poplarville	8.20	Holly Springs	.37
Missouri	30.7	−3.3	Doniphan	66	8	Greenville	−11	30	1.13	−.92	Fisk	2.79	Conception	.21
Montana	26.4	+3.4	Flatwillow (near)	68	6	Frazer	−27	25	.37	−.51	Heron	2.95	2 stations	.00
Nebraska	28.6	+2.1	3 stations	62	[1] 2	Gordon	−17	25	.29	−.41	Madison	1.12	Alma	.00
Nevada	32.9	+2.1	Logandale	70	[1] 1	Marlette Lake	−11	13	.87	−.10	Marlette Lake	3.26	2 stations	.13
New England	22.9	−3.6	Plymouth, Mass	56	9	Enosburg Falls, Vt	−24	29	1.34	−1.93	Bar Harbor, Maine	3.67	Springfield, Mass	.63
New Jersey	28.9	−4.8	3 stations	60	[1] 9	Runyon	−14	31	1.67	−1.98	Pleasantville	4.10	Culvers Lake	.75
New Mexico	33.6	−.3	2 stations	72	[1] 7	Therma	−21	17	.50	−.19	Jewett Ranger Station.	1.91	6 stations	.00

[1] Other dates also.

Condensed climatological summary of temperature and precipitation by sections, December 1935—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.
New York	22.1	−4.6	Cairo	60	9	Franklinville	−27	29	1.85	−1.05	Jamestown	6.72	Cairo	0.37
North Carolina	34.8	−7.7	2 stations	71	9	Mount Mitchell	−9	22	3.00	−.82	Newbern	7.69	Waterville	.65
North Dakota	12.6	.0	New Salem	51	6	2 stations	−34	[1] 10	.51	−.01	Fullerton	1.48	Amenia	.03
Ohio	25.4	−6.2	3 stations	58	9	Peebles (near)	−13	31	2.47	−.29	Jefferson	4.22	Napoleon	.98
Oklahoma	39.1	−.6	do	70	[1] 1	Oakwood	7	29	1.77	+.08	Antlers	5.06	Hooker	.11
Oregon	32.8	−.5	Brookings	70	20	Seneca	−12	20	3.12	−.68	Haskins Dam	12.69	Enterprise	.16
Pennsylvania	26.3	−4.8	3 stations	60	9	Somerset	−19	22	2.62	−.54	Edensburg	4.89	Matamoras	1.08
South Carolina	38.0	−8.8	Estill	78	9	Santuck	−1	31	2.82	−.81	Calhoun Falls	5.13	Laudrum	1.64
South Dakota	22.2	+1.4	Hot Springs	58	4	Ladelle	−27	26	.56	−.01	Aberdeen	1.86	2 stations	.05
Tennessee	33.4	−7.3	Bolivar	68	9	Rugby	−11	27	1.69	−2.88	Rugby	3.89	Elizabethton	.42
Texas	47.7	−1.8	2 stations	84	[1] 1	Follett	10	25	3.18	+.99	Richmond	13.34	Tulia (near)	.00
Utah	28.3	+1.8	St. George	64	1	Woodruff	−15	18	.80	−.27	Escalante	2.38	2 stations	T
Virginia	31.0	−7.0	2 stations	70	9	Burkes Garden	−14	31	2.31	−.77	Big Meadows	4.11	Mountain Lake	.52
Washington	34.5	+2.0	Bellingham (near)	66	27	Stockdill Ranch	−3	[1] 19	4.10	−1.29	Wynoochee Oxbow	22.01	Ellensburg	.38
West Virginia	27.5	−7.1	Hastings	62	7	Ryan	−20	31	3.66	+.32	Pickens	8.74	Brandywine	1.40
Wisconsin	19.4	−.9	Willow Reservoir	49	13	P. K. Reservoir	−28	22	.91	−.40	Kewaunee	2.49	Big St. Germain Dam.	.42
Wyoming	22.8	+1.2	2 stations	59	[1] 1	Moran	−34	17	.49	−.25	Bechler River	2.84	2 stations	.00
Alaska (November)	14.2	−.3	do	58	[1] 4	Fort Yukon	−61	24	3.67	+.84	View Cove	19.98	Barrow	.01
Hawaii	71.3	+1.4	Kaumana	91	31	Kanalohuluhulu	33	22	3.95	−5.82	Power House, Wainiha.	25.27	2 stations	.00
Puerto Rico	74.1	−.2	3 stations	92	16	Guineo Reservoir	42	14	3.77	−.73	Rio Grande (La Mina).	26.67	do	.00

[1] Other dates also.

TABLE 1.—*Climatological data for Weather Bureau stations, December 1935*

[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																		74	1.33	−2.1										6.4		
Eastport	76	67	85	29.78	29.87	−0.11	21.8	−4.5	41	9	27	1	29	17	21	21	17	80	1.07	−2.7	10	9,695	nw.	36	e.	9	6	8	17	6.8	5.5	0.3
Greenville, Maine	1,070	6	40	28.73	29.93		15.0		34	10	20	−12	29	10	23				1.75		10	6,114	nw.	22		5	9	5	17		23.0	
Portland, Maine	103	82	117	29.81	29.94	−.09	24.4	−3.2	43	10	30	2	29	18	20	21	15	69	2.14	−1.8	9	6,357	n.	27	nw.	4	13	10	8	4.8	4.2	T
Concord	289	60					23.4	−3.4	44	10	30	0	29	16	26				1.10	−2.0	8		nw.				13	7	11		5.8	
Burlington	403	11	48	29.54	30.01	−.04	18.2	−6.2	38	10	24	−8	30	12	32				1.20	−.7	12	6,911	nw.	29	s.	5	3	6	22	8.0	5.1	.6
Northfield	876	12	60	29.01	30.00	−.05	17.2	−3.2	39	10	25	−14	31	10	37	14	12	89	.83	−1.7	8	4,836	n.	24	ne.	6	5	4	22	7.5	6.1	2.5
Boston	124	336	360	29.81	29.95	−.10	27.1	−5.4	45	9	33	3	29	21	23	23	16	65	.66	−2.8	6	11,302	nw.	41	nw.	4	11	4	16	5.9	.3	.0
Nantucket	12	14	90	29.91	29.92	−.13	32.1	−3.7	51	9	37	10	29	28	22	29	25	77	2.97	−.8	14	10,848	w.	46	ne.	30	5	7	19	7.2	13.8	5.0
Block Island	26	11	46	29.92	29.95	−.11	31.0	−5.0	52	9	36	10	29	26	21	29	25	77	1.69	−2.1	13	14,345	nw.	43	nw.	5	9	6	16	6.4	9.2	4.0
Providence	160	215	251	29.78	29.96	−.10	27.8	−3.8	47	9	34	5	29	22	23	24	17	65	1.05	−2.3	7	9,411	nw.	35	nw.	27	10	9	12	5.4	2.5	1.2
Hartford	159	70	104	29.80	29.98	−.09	27.8	−2.0	51	9	34	5	29	22	24				.99	−3.0	10	6,737	nw.	32	nw.	4	10	7	14	5.7	.9	.0
New Haven	106	74	153	29.89	30.01	−.06	28.4	−4.1	53	9	34	5	29	22	25	25	18	66	.96	−3.0	9	6,971	nw.	27	nw.	4	10	7	14	6.0	4.9	1.4
Middle Atlantic States							30.6	−5.0										71	1.90	−1.4										6.9		
Albany	97	97	112	29.93	30.04	−.04	25.5	−3.0	51	9	32	−2	29	19	25	22	18	76	.85	−1.8	10	5,526	nw.	19	nw.	21	7	7	17	6.7	1.5	T
Binghamton	871	57	79	29.06	30.03	−.06	23.6	−4.6	48	9	29	−5	29	18	31				1.88	−.4	18	5,123	nw.	20	nw.	27	1	3	27	9.3	8.1	3.6
New York	314	415	454	29.66	30.01	−.08	30.6	−4.4	56	9	36	8	29	25	21	27	20	65	1.22	−2.4	11	12,077	nw.	51	nw.	4	9	8	14	6.3	7.6	3.7
Harrisburg	374	94	104	29.65	30.06	−.06	29.1	−3.6	56	9	34	5	26	24	19	26	20	69	2.21	−.8	13	6,339	w.	24	w.	21	3	9	19	7.5	7.5	3.5
Philadelphia	114	174	367	29.92	30.06	−.05	31.5	−4.8	59	9	36	9	26	26	16	28	20	64	1.55	−1.9	12	9,572	nw.	35	nw.	4	6	9	16	6.8	8.6	6.1
Reading	323	283	306	29.69	30.06		29.7	−2.5	56	9	35	7	26	25	20	26	21	69	1.91	−1.6	14	8,968	nw.	38	nw.	4	6	10	15	6.8	9.1	4.5
Scranton	805	72	104	29.14	30.04	−.06	25.3	−5.4	49	9	30	3	29	20	20	23	18	72	1.65	−1.4	18	4,864	sw.	24	nw.	20	2	8	21	7.8	12.0	4.3
Atlantic City	52	37	172	29.97	30.03	−.07	32.4	−4.0	60	9	38	9	29	26	23	29	24	72	3.38	−.6	11	12,335	w.	43	ne.	29	3	7	21	7.8	17.5	10.3
Sandy Hook	22	10	57	29.99	30.02		30.8		51	9	35	12	29	26	19	28	23	74	1.16	−2.9	13	13,334	nw.	43	nw.	27	11	3	17	6.4	6.8	4.5
Trenton	190	88	106	29.83	30.04		29.3	−5.1	56	9	35	8	29	24	21	26	22	73	1.40	−2.0	11	7,711	nw.	32	nw.	4	7	11	13	6.5	6.9	3.2
Baltimore	123	100	215	29.94	30.07	−.06	32.8	−4.4	62	9	38	8	26	27	24	29	22	68	2.16	−1.2	15	8,677	sw.	35	nw.	26	8	6	17	6.5	10.4	6.0
Washington	112	62	85	29.96	30.08	−.05	32.1	−4.5	62	9	38	4	26	26	22	28	22	67	2.06	−1.3	14	6,420	nw.	26	nw.	26	7	9	15	6.6	11.0	6.5
Cape Henry	18	8	54	30.04	30.06		37.4	−6.3	63	9	43	10	26	32	27	34	29	74	2.45	−1.0	8	11,533	nw.	42	n.	20	10	5	16	5.8	15.8	5.1
Lynchburg	686	5		29.34	30.11	−.03	32.4	−7.1	65	9	41	1	23	24	36				2.60	−.7	13		nw.				2	20	9		7.8	5.0
Norfolk	91	80	125	29.99	30.09	−.04	37.2	−5.9	65	9	43	9	26	31	27	33	27	70	2.23	−1.1	10	8,203	w.	37	w.	26	10	7	14	6.0	16.2	5.7
Richmond	144	11	52	29.94	30.11	−.03	33.3	−6.5	66	9	41	6	26	26	35	29	24	75	2.12	−1.2	13	6,528	nw.	29	nw.	25	8	10	13	6.1	12.3	6.8
Wytheville	2,304	49	55		30.12	−.03	27.0	−8.3	55	9	34	1	21	20	26			77	1.51	−1.4	14	6,582	w.	27	nw.	19	6	7	18		11.0	5.0
South Atlantic States							40.3	−7.1										72	2.64	−0.8										5.1		
Asheville	2,253	89	104	27.70	30.16	.00	30.7	−7.1	58	6	40	5	26	22	37	26	21	71	1.38	−1.8	7	8,079	nw.	34	nw.	20	9	8	14	6.2	6.6	3.3
Charlotte	779	63	86	29.26	30.13	−.03	35.9	−7.1	64	9	44	14	21	28	27	31	24	67	2.15	−1.7	9	5,507	sw.	23	nw.	19	14	6	11	5.1	10.5	7.0
Greensboro	886	6	56	29.13	30.12		31.4		62	9	40	1	23	22	35	27	22	74	1.89		9	6,558	w.	34	nw.	25	9	8	14	6.0	8.3	3.0
Hatteras	11	5	50		30.06	−.07	42.4	−7.7	66	8	48	22	21	37	24			82	4.03	−.2	5	12,358	nw.	44	nw.	26	15	5	11		2.0	.0
Raleigh	376	103	146	29.68	30.10	−.05	36.2	−6.8	65	9	44	10	23	29	27	32	27	73	2.94	−.6	9	7,549	nw.	30	w.	25	14	8	9	4.8	9.8	3.0
Wilmington	72	73	107	30.03	30.11	−.04	40.9	−8.2	67	9	49	17	27	32	28	35	30	72	5.01	+2.2	8	6,917	nw.	31	nw.	20	18	4	9	3.8	.0	.0
Charleston	48	11	92	30.07	30.12	−.03	44.6	−7.1	70	9	52	22	27	37	23	38	33	69	2.72	.0	7	7,949	n.	26	e.	12	14	5	12	5.0	T	.0
Columbia, S. C.	347	67	73	29.74	30.13	−.03	39.4	−7.8	66	9	47	17	27	32	28	34	27	66	2.80	−.2	9	5,043	nw.	19	w.	19	15	5	11	4.7	4.4	T
Greenville, S. C.	1,039	139					36.8	−5.4	66	10	46	14	27	28	32				1.67	−3.2	4		ne.				18	2	11		11.0	7.7
Augusta	182	62	77	29.92	30.12	−.04	40.6	−7.5	69	9	49	18	27	32	35	35	28	68	3.27	.0	7	4,631	nw.	21	w.	26	14	7	10	4.8	2.6	.0
Savannah	65	73	152	30.06	30.13	−.02	46.2	−6.2	71	9	55	20	27	37	30	39	34	72	1.69	−1.2	7	7,885	nw.	30	e.	12	15	4	12	4.9	.0	.0
Jacksonville	43	86	110	30.09	30.14	.00	49.5	−6.8	74	9	58	23	27	41	26	43	38	74	1.34	−1.7	6	6,251	nw.	19	sw.	13	12	3	16	5.8	.0	.0

TABLE 1.—*Climatological data for Weather Bureau stations, December 1935*—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: Departure from normal	Temperature: Maximum	Temperature: Date	Temperature: Mean maximum	Temperature: Minimum	Temperature: Date	Temperature: Mean minimum	Temperature: 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.
Florida Peninsula							60.8	−5.7										76	1.44	−0.4										4.7		
Key West	22	10	64	30.07	30.09	+0.01	65.7	−4.6	80	9	71	52	27	60	24	60	57	78	0.95	−.7	2	7,683	ne.	38	w.	12	15	13	3	3.9	0.0	0.0
Miami	25	124	168	30.08	30.11	.00	62.0	−6.0	81	10	70	37	21	54	26	55	51	73	.52	−1.2	3	8,039	n.	41	s.	12	11	12	8	5.1	.0	.0
Tampa	35	88	197	30.08	30.12	.00	54.6	−6.5	77	8	64	30	27	45	30	48	44	77	2.86	+.8	6	8,560	n.	39	se.	12	9	13	9	5.2	.0	.0
Titusville	43	5	36	30.06	30.11	------	53.2	------	81	9	64	28	27	42	34	----	----	----	2.39	------	6	------	w.	----	----	---	8	14	9	----	.0	.0
East Gulf States							43.0	−6.4										72	4.32	−0.5										5.2		
Atlanta [1]	976	5	53	29.08	30.15	−.01	36.2	−8.5	62	9	44	12	26	28	33	31	26	73	3.06	−1.6	6	7,616	nw.	31	nw.	19	11	8	12	5.4	.4	.2
Macon	370	79	87	29.74	30.15	−.01	40.4	−7.1	66	9	50	19	26	31	39	34	28	67	3.31	−.7	8	5,553	nw.	20	nw.	19	15	6	10	4.5	1.5	.0
Thomasville	273	49	58	29.87	30.17	+.02	46.4	−6.1	70	8	56	20	27	36	36	41	39	86	2.69	−1.6	9	------	nw.	----	----	---	15	4	12	----	.0	.0
Apalachicola	35	11	51	30.11	30.15	------	49.6	------	72	10	58	26	27	41	24	44	----	----	3.13	−2.0	7	------	n.	----	----	---	10	7	14	----	.0	.0
Pensacola	56	149	185	30.10	30.17	+.02	47.2	−6.8	68	8	55	23	27	39	30	43	38	76	6.18	+1.5	9	9,753	n.	46	e.	12	13	8	10	5.1	.0	.0
Anniston	741	9	----	------	------	------	38.3	−5.9	63	9	47	12	26	29	34	----	----	----	4.75	−.3	7	------	nw.	----	----	---	12	5	14	----	.2	T
Birmingham	700	11	48	29.38	30.17	+.01	38.8	−7.6	65	10	47	13	26	31	27	33	28	69	4.10	−1.0	6	5,654	nw.	27	e.	29	13	5	13	5.4	1.0	.0
Mobile	57	86	105	30.10	30.16	+.01	46.9	−5.3	72	1	56	24	27	38	30	41	36	72	4.98	.0	9	7,659	n.	29	nw.	12	11	10	10	5.2	T	.0
Montgomery	218	92	105	29.92	30.18	+.02	42.0	−7.4	67	7	50	21	27	34	32	36	31	70	4.87	.0	7	5,545	n.	21	n.	12	11	8	12	5.3	1.4	.0
Meridian	375	67	92	29.77	30.18	+.02	41.9	−5.8	68	9	52	18	27	32	38	35	30	70	4.23	−1.0	7	4,517	n.	19	s.	7	13	4	14	5.2	1.5	.0
Vicksburg	247	65	73	29.93	30.20	+.05	44.2	−5.8	68	6	52	22	26	36	27	38	31	65	3.42	−1.9	8	5,343	n.	18	nw.	14	9	10	12	5.7	3.0	.0
New Orleans	53	76	84	30.12	30.18	+.05	51.0	−4.6	74	7	59	28	27	44	28	45	39	71	7.06	+2.3	10	5,635	ne.	23	e.	11	10	11	10	5.4	.0	.0
West Gulf States							48.0	−2.4										74	4.11	+1.1										6.4		
Shreveport	249	92	227	29.92	30.20	+.07	45.5	−3.6	69	8	53	23	26	38	27	39	33	65	3.39	−.9	7	7,669	ne.	28	n.	25	14	6	11	5.2	1.4	.0
Bentonville	1,303	12	38	28.76	30.17	+.04	35.4	−2.1	60	9	43	11	26	28	26	----	----	----	2.10	------	5	5,981	nw.	24	nw.	19	9	13	9	----	1.0	T
Fort Smith	457	79	94	29.68	30.18	+.05	37.8	−4.3	61	13	45	15	30	30	28	33	28	71	3.63	+.9	6	6,216	e.	23	w.	14	11	10	10	5.1	5.8	3.0
Little Rock	357	94	102	29.81	30.20	+.06	38.4	−5.8	64	8	45	17	26	32	30	34	27	65	1.87	−2.3	6	5,930	nw.	22	ne.	28	11	8	12	5.1	.5	T
Austin	605	136	148	29.51	30.15	------	50.4	−.6	75	8	58	30	26	43	26	45	41	74	2.84	+.2	12	5,302	n.	25	n.	28	7	6	18	6.9	.0	.0
Brownsville	57	88	96	30.02	30.08	------	60.8	−.4	79	8	68	39	27	54	25	56	54	84	3.93	+2.4	14	7,861	nw.	25	se.	7	1	6	24	8.3	.0	.0
Corpus Christi	20	11	78	30.10	30.12	.00	57.0	−1.0	76	6	62	39	26	52	20	54	51	84	5.69	+4.2	15	7,630	n.	31	n.	30	5	6	20	7.6	.0	.0
Dallas	512	220	227	29.60	30.17	------	44.8	------	65	9	52	20	26	38	28	40	35	71	.90	−1.5	6	8,092	n.	29	n.	25	7	9	15	6.3	T	.0
Fort Worth	679	92	110	29.45	30.18	+.06	45.5	−2.0	67	9	53	21	26	38	29	----	----	----	2.26	+.4	10	6,151	n.	27	n.	14	12	5	14	5.4	.0	.0
Galveston	54	106	114	30.10	30.16	+.04	54.6	−1.8	72	14	60	36	26	49	18	51	47	78	7.22	+3.5	12	8,197	n.	30	n.	11	6	7	18	7.4	.0	.0
Houston	138	292	314	30.01	30.17	------	52.2	−2.2	74	8	59	32	26	45	22	----	----	----	7.93	+3.7	10	8,866	n.	30	s.	6	7	7	17	6.5	.0	.0
Palestine	510	64	72	29.64	30.18	+.06	46.2	−3.7	69	9	54	22	26	38	27	41	35	69	6.42	+2.8	10	5,511	n.	19	nw.	29	9	10	12	6.0	1.4	.0
Port Arthur	34	58	66	30.13	30.17	------	52.0	------	72	1	59	33	26	45	26	----	----	----	5.46	+.2	12	6,794	e.	27	ne.	31	8	9	14	6.0	.0	.0
San Antonio	693	242	301	29.40	30.13	+.02	52.0	−1.7	75	8	60	29	26	44	25	47	43	77	1.86	+.2	11	7,470	ne.	26	ne.	1	6	5	20	7.5	.0	.0
Ohio Valley and Tennessee							29.4	−7.2										77	2.25	−1.3										7.4		
Chattanooga	762	71	214	29.34	30.18	+.02	36.0	−7.3	64	9	43	11	26	29	27	31	25	68	2.97	−2.2	6	6,533	nw.	31	nw.	19	11	5	15	6.0	6.9	.4
Knoxville	995	66	84	29.07	30.17	+.01	32.6	−7.7	60	9	40	9	26	26	28	29	25	74	1.70	−2.8	8	4,751	w.	25	e.	29	8	7	16	6.6	7.0	3.1
Memphis	399	78	86	29.75	30.19	+.04	37.2	−6.4	62	9	44	14	26	31	21	33	26	66	.91	−3.6	6	5,768	sw.	25	n.	25	14	7	10	5.0	3.2	.6
Nashville	546	168	191	29.59	30.20	+.05	34.0	−7.0	60	9	41	10	27	27	32	30	25	72	.91	−3.3	5	7,299	nw.	30	nw.	25	3	12	16	7.2	5.0	1.0
Lexington	989	6	----	------	------	------	28.7	−7.1	55	9	34	−5	27	23	29	----	----	----	3.12	−.6	14	------	sw.	----	----	---	8	4	19	----	17.7	10.0
Louisville	525	188	234	29.58	30.19	+.05	29.1	−8.5	54	9	35	−1	27	23	20	26	22	75	2.17	−1.6	10	8,010	sw.	33	w.	25	6	9	16	6.9	9.8	4.2
Evansville	431	76	116	29.69	30.18	+.05	29.8	−7.3	58	9	36	2	27	24	23	27	22	74	1.55	−2.0	9	6,731	nw.	28	nw.	19	7	8	16	6.6	10.0	5.3
Indianapolis	822	194	230	29.23	30.15	+.03	25.9	−6.3	52	9	32	−6	27	19	24	23	19	75	1.84	−1.1	15	8,262	w.	37	w.	25	2	6	23	8.3	7.5	3.8
Terre Haute	575	96	129	29.51	30.15	------	26.9	------	56	9	34	−6	27	20	23	24	21	80	1.39	−1.5	13	7,091	nw.	31	nw.	25	7	5	19	7.2	7.9	3.7
Cincinnati	627	11	51	29.45	30.16	+.03	27.2	−6.2	53	9	33	−6	27	21	25	25	22	81	1.92	−1.1	16	6,353	w.	29	w.	25	5	3	23	8.1	9.7	4.7
Columbus	822	90	210	29.22	30.13	+.01	26.2	−6.2	52	8	32	−4	25	21	27	24	21	82	2.32	−.4	20	7,207	w.	33	w.	25	3	9	19	8.0	9.8	4.0
Dayton	900	58	153	29.12	30.12	------	26.4	−6.2	52	9	32	−2	25	21	24	----	----	----	2.53	−.2	18	6,785	sw.	32	w.	25	5	6	20	7.7	11.7	4.2
Elkins	1,947	59	78	27.99	30.15	+.03	24.8	−7.9	52	8	32	−11	22	18	30	23	20	83	3.84	+.4	25	5,399	w.	30	w.	25	1	5	25	8.9	29.8	7.5
Parkersburg	637	77	84	29.48	30.17	+.03	28.2	−7.0	55	9	34	−2	31	22	31	26	23	82	3.24	+.2	19	5,405	sw.	27	sw.	25	4	5	22	8.0	13.4	7.0
Pittsburgh [1]	842	164	410	28.67	30.07	−.04	24.8	−9.4	49	8	30	−5	26	20	25	23	21	89	3.27	+.4	24	8,516	sw.	39	sw.	25	1	5	25	8.9	20.4	6.0
Lower Lake Region							24.0	−5.2										85	2.52	−0.2										8.6		
Buffalo	768	243	280	29.19	30.05	−.01	24.3	−5.5	46	7	29	4	21	20	23	23	21	85	3.21	−.2	24	10,301	w.	50	sw.	5	1	7	23	8.7	27.7	5.4
Canton	448	10	61	29.54	30.04	------	15.0	−7.7	39	10	22	−17	29	8	33	14	13	95	1.45	−1.2	14	5,459	w.	18	sw.	5	8	4	19	6.9	12.7	3.2
Ithaca	836	77	100	29.10	30.04	------	23.8	−5.2	46	9	29	−4	29	18	21	22	19	82	2.89	+.5	21	6,741	nw.	25	n.	5	0	5	26	8.9	14.5	2.0
Oswego	335	71	85	29.66	30.04	−.02	23.4	−5.6	43	9	28	0	29	18	25	22	19	82	3.61	+.1	18	7,404	nw.	27	nw.	5	0	4	27	9.1	20.8	7.4
Rochester	523	86	102	29.46	30.06	.00	24.4	−4.9	46	8	29	3	29	20	24	23	18	77	3.35	+.6	26	6,081	w.	25	sw.	5	0	2	29	9.4	28.6	10.0
Syracuse	596	65	79	29.38	30.04	−.03	23.3	−5.0	45	9	29	−3	29	18	30	----	----	----	3.79	+.7	23	5,030	w.	21	nw.	20	0	5	26	9.0	31.3	7.0
Erie	714	130	166	29.26	30.06	−.01	26.6	−5.3	49	8	31	−1	26	22	23	25	22	82	2.62	−.2	24	9,218	nw.	31	sw.	5	0	4	27	9.2	22.7	6.0
Cleveland	762	267	318	29.22	30.08	−.01	26.9	−4.3	52	8	32	0	25	22	22	25	23	86	2.83	+.4	26	11,483	sw.	40	nw.	20	1	1	29	9.4	23.0	4.7
Sandusky	629	5	67	29.39	30.10	+.01	26.1	−5.1	50	8	31	−1	25	21	24	----	----	----	1.71	−.6	18	7,285	sw.	27	nw.	20	1	6	24	8.6	10.5	3.4
Toledo	628	79	87	29.40	30.12	−.04	24.8	−5.6	49	8	30	−1	25	20	23	23	21	84	1.61	−.7	15	7,358	w.	26	w.	25	3	6	22	8.1	9.8	3.0
Fort Wayne	857	69	84	29.16	30.12	------	23.9	−3.4	50	8	30	−4	25	18	22	22	20	87	1.53	−1.0	15	6,860	w.	25	w.	25	3	7	21	8.0	10.3	4.0
Detroit [1]	626	5	78	29.38	30.09	+.02	25.0	−4.3	48	8	30	5	29	20	18	24	22	86	1.66	−.7	16	7,563	nw.	27	nw.	20	4	3	24	8.4	8.9	2.3
Upper Lake Region							22.6	−1.7										84	1.38	−0.7										8.4		
Alpena	609	13	89	29.40	30.10	+.08	21.8	−3.0	40	8	27	−2	25	16	26	20	18	83	1.19	−.9	15	7,629	nw.	25	e.	23	1	4	26	8.7	16.1	5.7
Escanaba	612	54	60	29.42	30.12	+.09	22.6	+.2	38	8	28	1	20	18	22	21	19	84	1.01	−.7	15	7,426	nw.	31	n.	3	1	4	26	8.7	11.9	3.8
Grand Rapids	707	70	244	29.30	30.10	+.05	26.1	−2.4	46	8	30	2	30	22	23	24	21	82	1.65	−.9	14	7,645	sw.	28	sw.	4	2	4	25	8.6	9.0	3.2
Lansing	878	6	88	29.12	30.09	------	23.1	−4.1	46	8	28	−3	30	18	23	22	20	87	1.49	−.6	18	6,649	w.	22	nw.	20	2	3	26	9.0	11.5	5.0
Ludington	637	5	54	29.37	30.09	------	26.4	−2.0	42	7	30	−5	30	22	33	24	----	----	1.30	−1.2	17	------	e.	----	----	---	1	8	22	----	13.7	5.3
Marquette	734	77	111	29.27	30.10	+.08	23.2	+.6	40	8	28	3	22	19	23	22	20	89	2.91	+.2	19	7,096	w.	28	sw.	30	0	3	28	9.4	28.8	10.5
Sault Ste. Marie	614	11	52	29.39	30.13	+.13	18.2	−2.3	37	8	25	−13	21	11	37	17	15	86	.99	−1.4	19	5,508	n.	24	nw.	4	3	5	23	8.3	9.4	2.4
Chicago	673	7	131	29.38	30.13	+.05	25.2	−3.6	46	9	31	−3	27	20	28	24	20	78	1.24	−.8	13	7,872	nw.	26	nw.	20	5	6	20	7.6	8.2	2.0
Green Bay	617	109	141	29.42	30.11	+.07	21.9	−.4	39	6	27	−7	21	16	21	21	18	83	.90	−.8	11	7,453	nw.	26	nw.	19	3	3	25	8.5	10.8	6.0
Milwaukee	681	97	221	29.35	30.11	+.05	24.4	−1.7	42	6	29	−3	26	20	20	23	19	78	1.42	−.3	13	9,646	nw.	32	n.	3	5	4	22	7.8	9.7	3.3
Duluth	1,133	5	47	28.83	30.12	+.07	15.4	−.5	36	15	22	−17	20	9	28	15	13	89	1.11	.0	11	7,890	nw.	43	nw.	19	6	5	20	7.5	7.5	5.2
North Dakota							12.9	+0.5										88	0.59	0.0										6.2		
Moorhead, Minn	940	50	58	29.09	30.17	+.09	12.1	+.6	35	7	20	−19	20	5	29	11	10	93	.60	−.1	9	6,495	s.	26	n.	25	4	9	18	7.7	8.5	7.6
Bismarck	1,674	8	57	28.27	30.15	+.07	15.3	+.6	40	1	25	−19	26	6	36	14	12	84	.71	+.1	7	5,572	nw.	38	nw.	24	11	8	12	5.6	9.5	5.8
Devils Lake	1,478	11	44	28.50	30.16	+.10	8.4	−1.1	29	6	17	−23	25	0	34	8	7	94	.53	.0	9	5,808	nw.	34	nw.	24	7	5	19	7.0	4.1	9.0
Grand Forks	833	12	67	------	------	------	9.2	------	36	7	18	−23	20	0	35	9	----	----	.72	------	13	------	nw.	30	nw.	18	4	7	20	----	7.7	11.0
Williston	1,878	41	48	28.07	30.15	+.09	15.8	+2.0	39	7	26	−19	26	6	39	14	11	82	.51	−.1	7	4,837	se.	27	nw.	42	14	7	10	4.6	4.1	5.0

See footnotes at end of table.

TABLE 1.—*Climatological data for Weather Bureau stations, December 1935*—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: Departure from normal	Temperature: Maximum	Temperature: Date	Temperature: Mean maximum	Temperature: Minimum	Temperature: Date	Temperature: Mean minimum	Temperature: 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 Mississippi Valley							23.6	−3.4										82	1.12	−0.6										7.1		
Minneapolis	918	102	208	29.10	30.12	------	17.6	−2.0	40	7	24	−12	26	12	30	17	15	85	1.04	+0.1	8	7,880	nw.	25	nw.	9	2	9	20	8.2	8.3	3.0
La Crosse	714	11	48	29.34	30.15	+.07	20.3	−2.0	41	7	26	−10	26	14	25	19	16	85	.82	−.5	10	4,423	s.	16	nw.	9	5	3	23	8.0	7.4	3.5
Madison	974	70	78	29.03	30.14	+.06	20.7	−2.1	41	7	26	−9	26	15	21	20	18	90	.82	−.8	10	6,697	nw.	30	n.	25	5	3	23	8.0	6.7	5.2
Charles City	1,015	10	51	29.02	30.16	+.06	17.9	−2.5	40	7	25	−13	26	11	26	17	15	86	1.50	+.2	9	5,616	se.	20	w.	24	5	6	20	7.5	13.0	7.8
Davenport	606	66	161	29.48	30.17	+.07	23.0	−4.1	48	9	29	−9	26	17	26	21	18	81	.91	−.6	9	7,469	nw.	35	nw.	25	8	3	20	7.0	9.1	4.2
Des Moines	861	5	99	29.22	30.16	+.05	24.1	−1.9	50	8	31	−6	26	17	26	22	19	82	.80	−.4	9	7,577	nw.	37	nw.	24	8	5	18	6.8	6.3	1.7
Dubuque	700	60	79	29.37	30.16	+.06	21.8	−2.9	44	7	28	−9	26	15	30	20	16	80	.96	−.5	11	4,997	nw.	20	nw.	25	6	4	21	7.5	8.9	3.2
Keokuk	614	64	78	29.50	30.21	+.09	25.6	−4.0	56	9	33	−7	26	18	25	23	18	77	1.00	−.4	9	6,057	nw.	28	nw.	25	9	4	18	6.5	6.8	1.5
Cairo	358	87	93	29.79	30.18	+.03	33.0	−4.8	59	8	40	9	30	26	22	30	26	76	1.99	−1.4	9	6,714	nw.	26	nw.	25	9	7	15	6.3	4.7	2.9
Peoria	609	11	45	29.48	30.18	+.07	23.2	−4.9	51	9	30	−9	27	16	26	21	19	85	1.39	−.4	9	5,753	w.	25	nw.	25	11	2	18	6.3	10.9	3.8
Springfield, Ill.	636	5	191	29.46	30.17	+.05	26.2	−5.5	55	9	33	−3	26	20	25	24	22	84	1.06	−1.1	9	8,658	s.	32	w.	25	8	2	21	6.9	4.8	1.6
St. Louis	568	179	303	29.54	30.17	+.04	30.3	−4.4	57	9	37	2	26	24	28	27	23	76	1.11	−1.1	10	8,925	nw.	36	nw.	25	12	2	17	6.2	2.8	.4
Missouri Valley							28.9	+0.1										79	0.48	−0.7										5.8		
Columbia, Mo.	784	6	84	29.31	30.17	+.05	30.6	−2.6	57	9	38	0	26	23	24	----	----	----	.97	−.9	8	6,479	nw.	32	nw.	25	10	10	11	5.2	2.8	T
Kansas City [1]	750	32	45	29.33	30.17	+.05	32.2	−.3	57	8	40	3	25	25	25	28	24	73	.25	−1.1	6	6,908	sw.	35	nw.	25	11	7	13	5.5	1.0	.0
St. Joseph	967	11	49	29.09	30.16	------	30.6	------	56	7	38	0	25	23	25	27	23	76	.25	−.7	7	6,581	nw.	32	nw.	22	11	8	12	5.6	.8	T
Springfield, Mo.	1,324	98	104	28.71	30.17	+.04	33.0	−3.2	57	9	40	7	26	26	24	29	25	76	.62	−1.7	6	7,677	se.	27	nw.	23	10	12	9	5.1	1.4	.0
Iola	984	11	50	29.10	30.19	+.07	34.3	+.4	57	8	43	9	25	26	27	----	----	----	.32	−1.1	6	------	sw.	----	----	----	7	13	11	----	1.0	.0
Topeka	987	65	87	------	------	------	32.2	+.2	57	9	40	4	25	24	26	----	----	----	.42	−.6	7	6,442	s.	30	nw.	25	11	12	8	5.3	.7	T
Lincoln	1,189	11	81	28.84	30.16	+.04	29.6	+2.0	56	8	37	0	25	22	26	26	22	78	.30	−.5	7	7,379	s.	37	nw.	22	11	4	16	5.9	1.8	.0
Omaha	1,105	170	200	29.07	30.17	+.06	27.2	+.8	55	8	35	−3	26	20	28	25	22	81	.40	−.5	6	8,131	se.	36	nw.	25	7	9	15	6.3	1.5	T
Valentine	2,598	47	54	27.33	30.15	+.05	25.8	+1.2	51	11	36	−6	25	15	36	23	20	79	.32	−.3	8	6,310	w.	31	nw.	22	9	9	13	6.1	2.4	.0
Sioux City	1,138	64	106	28.88	30.15	+.03	24.6	+1.5	53	8	32	−7	26	17	27	22	19	83	.64	−.3	10	7,558	nw.	38	nw.	25	7	11	13	6.5	5.2	1.4
Huron	1,306	60	74	28.70	30.17	+.07	19.4	+.7	48	8	28	−14	26	11	31	18	16	88	.77	+.2	10	6,637	nw.	32	nw.	22	8	8	15	6.6	6.8	3.3
Northern Slope							26.8	+3.0										72	0.36	−0.5										5.5		
Havre	2,505	11	67	27.39	30.12	+.07	25.0	+4.6	52	10	36	−17	24	14	37	22	18	79	.19	−.4	4	6,067	sw.	30	sw.	21	11	11	9	5.3	5.1	.5
Helena	4,124	85	111	25.87	30.20	+.07	27.8	+3.6	46	10	35	7	24	21	25	24	18	66	T	−.8	0	4,860	sw.	29	sw.	31	9	9	13	6.2	.1	.0
Missoula	3,263	80	91	------	------	------	28.4	------	46	10	34	10	22	23	19	----	----	----	.28	−.8	4	3,301	se.	20	se.	12	3	6	22	8.1	T	.0
Kalispell	2,973	48	56	------	30.20	+.13	28.8	+3.9	47	10	32	18	5	25	16	----	----	----	1.02	−.4	12	2,890	nw.	15	sw.	10	0	3	28	----	5.9	2.0
Miles City	2,371	48	55	27.53	30.17	+.07	26.2	+5.2	49	11	36	−10	25	16	37	23	19	77	.77	+.1	6	4,043	s.	25	nw.	9	11	9	11	5.3	8.7	1.6
Rapid City	3,259	50	58	26.64	30.18	+.09	29.6	+2.7	56	30	40	−4	25	19	40	25	19	69	.25	−.2	5	6,151	w.	31	nw.	22	6	14	11	5.8	2.6	.0
Cheyenne	6,094	50	71	23.93	30.14	+.05	29.4	+.9	56	12	42	5	15	17	42	22	13	55	.07	−.5	2	9,970	nw.	42	w.	12	12	10	9	4.6	.7	T
Lander	5,372	60	68	24.68	30.25	+.10	21.8	+1.4	49	22	34	−9	17	9	37	17	10	76	.49	−.2	3	2,651	sw.	21	nw.	22	16	7	8	3.8	5.2	2.4
Sheridan	3,700	10	47	26.13	30.16	------	28.7	------	51	4	40	8	24	18	37	24	19	74	.41	−.2	7	3,529	nw.	26	nw.	22	15	5	11	4.8	3.0	.0
Yellowstone Park	6,241	12	46	23.92	30.28	+.12	22.2	+.6	37	26	31	−1	16	14	26	18	14	72	.22	−1.3	5	5,055	sw.	21	sw.	9	7	6	18	6.4	4.0	5.9
North Platte	2,821	11	51	27.12	30.15	+.05	30.5	+3.8	51	11	40	1	25	21	34	25	21	76	.27	−.3	5	5,479	w.	25	n.	22	11	11	9	5.0	.6	.0
Middle Slope							34.9	+1.4										67	0.45	−0.4										4.7		
Denver	5,292	106	113	24.73	30.12	+.04	34.8	+2.5	65	12	46	15	25	23	36	26	14	46	.21	−.5	2	5,548	s.	27	nw.	22	15	8	8	4.1	.5	.0
Pueblo	4,685	80	86	25.32	30.13	+.05	33.2	+1.7	62	12	48	10	16	19	47	25	16	58	.11	−.4	2	4,591	nw.	27	w.	6	16	11	4	3.9	1.1	.2
Concordia	1,392	50	58	28.66	30.18	+.07	32.0	+1.3	54	12	40	4	25	25	28	28	25	81	.18	−.4	3	6,032	s.	25	nw.	25	8	12	11	5.8	.6	.0
Dodge City	2,509	10	86	27.49	30.18	+.08	35.4	+2.8	60	22	46	12	26	25	36	29	23	68	.12	−.4	2	8,299	s.	29	s.	2	16	8	7	3.8	1.5	.0
Wichita	1,358	85	93	28.69	30.17	+.06	34.8	+.2	58	22	42	12	25	28	31	31	26	73	.25	−.8	4	6,949	n.	27	n.	25	9	10	12	5.6	.1	T
Oklahoma City	1,214	10	47	28.86	30.19	+.08	39.1	−.2	63	9	47	15	26	31	32	34	30	75	1.81	+.3	6	6,823	s.	24	n.	25	12	9	10	5.1	5.7	T
Southern Slope							44.4	+0.2										69	0.66	−0.2										5.7		
Abilene	1,738	10	52	28.31	30.16	+.05	45.6	−.4	69	13	55	25	26	36	32	39	33	69	.49	−.8	5	6,238	s.	28	w.	28	8	8	15	6.2	T	.0
Amarillo	3,676	10	49	26.33	30.14	+.05	39.5	+2.5	65	13	50	19	25	29	38	32	25	64	.18	−.6	3	6,280	w.	22	w.	13	12	11	8	4.6	T	.0
Del Rio	944	64	71	29.10	30.11	+.01	51.6	−.6	73	11	59	33	26	44	30	47	44	80	1.85	+1.2	15	5,197	se.	23	nw.	14	5	6	20	7.4	.0	.0
Roswell	3,566	75	85	26.44	30.13	+.06	40.7	−.5	70	13	52	20	22	29	43	34	26	64	.13	−.5	1	5,167	s.	41	nw.	28	13	9	9	4.5	T	.0
Southern Plateau							43.2	+1.5										64	0.61	−0.1										3.7		
El Paso	3,778	152	175	26.25	30.09	+.06	46.5	+1.6	68	13	56	29	17	36	32	39	30	60	.34	−.2	4	6,738	e.	34	w.	28	19	7	5	3.3	T	.0
Albuquerque	4,972	5	39	25.11	30.15	------	34.7	------	55	3	48	14	17	21	38	27	21	68	.36	−.1	5	4,967	n.	28	w.	13	14	7	10	4.5	1.2	.0
Santa Fe	7,013	38	53	23.25	30.14	+.08	31.2	+.5	49	3	40	14	16	22	28	26	20	67	.36	−.4	4	4,424	n.	21	n.	7	18	9	4	3.6	3.2	.4
Flagstaff	6,907	10	59	23.34	30.05	−.01	31.2	+2.8	55	22	44	−1	31	18	43	26	----	76	.56	------	6	5,357	n.	29	nw.	28	11	13	7	----	1.8	1.5
Phoenix	1,108	10	107	28.86	30.03	−.01	54.3	+2.3	77	3	67	33	16	42	35	45	36	58	.39	−.6	5	3,463	e.	18	w.	29	13	12	6	3.9	.0	.0
Yuma	141	9	54	29.90	30.05	.00	56.2	+1.0	76	1	68	37	28	45	31	47	36	53	.30	−.2	2	4,411	n.	25	nw.	29	22	7	2	2.7	.0	.0
Independence	3,957	5	26	26.04	30.14	+.02	40.0	+.7	62	21	52	18	17	28	34	32	----	----	1.89	+1.1	3	------	n.	----	----	----	17	8	6	----	4.0	1.0
Middle Plateau							31.1	+0.9										72	0.83	−0.2										5.1		
Reno	4,527	61	76	25.55	30.20	+.05	33.8	+.1	59	11	45	10	17	23	32	29	23	66	.62	−.4	7	3,390	w.	24	sw.	11	11	6	14	5.1	1.2	.0
Tonopah	6,090	12	20	------	------	------	33.8	------	51	1	40	12	14	27	20	28	21	60	.30	------	6	------	se.	----	----	----	----	----	----	----	----	----
Winnemucca	4,344	18	56	25.71	30.21	+.03	31.6	+1.6	56	4	44	6	19	19	41	27	23	77	1.46	+.4	8	5,257	ne.	25	sw.	12	14	4	13	4.7	7.6	2.9
Modena	5,473	10	46	24.67	30.16	+.04	28.8	+.7	51	2	40	5	19	17	34	24	20	76	.47	−.4	5	5,417	w.	27	sw.	12	12	9	10	4.8	4.1	.8
Salt Lake City [1]	4,537	86	210	25.84	30.23	+.08	30.7	−1.2	52	12	40	11	18	21	31	27	24	83	.76	−.7	6	4,489	se.	30	nw.	12	11	4	16	5.8	9.3	5.5
Grand Junction	4,602	60	68	25.49	30.16	+.06	30.6	+3.1	51	1	40	6	29	21	34	26	21	72	.82	+.2	9	3,529	se.	14	nw.	4	13	5	13	5.0	5.2	3.0
Northern Plateau							30.1	−0.5										84	1.04	−0.6										7.5		
Baker	3,471	48	53	26.57	30.27	+.11	28.1	+.8	46	1	37	5	20	19	29	25	20	75	.37	−1.3	9	4,853	se.	17	n.	12	15	2	14	5.1	4.1	.0
Boise	2,739	79	87	27.35	30.31	+.11	29.0	−3.1	55	11	35	13	20	23	24	27	25	88	1.00	−.6	9	3,259	nw.	21	se.	12	7	3	21	7.3	.8	.0
Pocatello	4,477	60	68	25.58	30.25	+.06	27.6	−.1	45	6	36	4	17	19	29	24	20	77	.74	−.5	9	4,439	se.	24	se.	7	10	4	17	6.0	6.0	2.0
Spokane	1,929	101	110	28.09	30.21	+.13	31.3	+.8	45	11	35	16	19	28	17	30	29	91	1.78	−.4	13	3,632	ne.	15	s.	6	4	2	25	8.6	2.7	.0
Walla Walla	991	57	65	29.11	30.22	+.10	33.6	−1.9	56	11	38	22	23	29	22	32	30	87	1.39	−.7	11	3,288	s.	20	sw.	31	2	2	27	9.1	.1	.0
Yakima	1,076	58	67	29.03	30.22	------	31.0	+.3	51	31	35	22	23	27	19	30	28	89	.99	−.4	10	2,570	se.	16	nw.	31	0	6	25	9.1	2.3	.0
North Pacific Coast Region							44.5	+1.9										83	5.41	−1.8										7.7		
North Head	211	11	56	29.77	30.00	−.03	47.3	+3.2	63	20	51	39	1	43	20	44	39	77	5.97	−3.5	19	12,063	e.	59	s.	30	7	2	22	7.3	.0	.0
Seattle	125	90	321	29.89	30.02	+.01	45.0	+3.3	57	29	50	31	4	40	19	42	39	82	4.11	−1.5	18	6,563	se.	34	se.	7	5	6	20	7.1	.0	.0
Tatoosh Island	86	10	54	29.86	29.95	−.01	47.2	+3.3	57	17	50	38	5	45	11	45	42	84	8.19	−5.2	18	14,629	e.	57	s.	7	5	3	23	8.0	.0	.0
Medford	1,329	29	58	28.67	30.12	------	37.4	------	53	18	45	19	20	30	29	36	35	90	3.60	+.5	14	------	se.	36	se.	28	5	1	25	7.7	.0	.0
Portland, Oreg.	153	68	106	29.92	30.08	+.01	42.2	+1.0	55	7	47	28	22	38	17	38	34	73	5.89	−.8	17	5,295	e.	23	s.	7	8	3	20	6.8	.0	.0
Roseburg	510	45	76	29.53	30.09	−.02	40.6	−1.2	58	26	46	28	22	35	21	39	38	92	4.70	−.6	13	2,733	n.	15	w.	30	0	3	28	9.4	.0	.0

See footnotes at end of table.

TABLE I.—*Climatological data for Weather Bureau stations, December 1935*—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.
Middle Pacific Coast Region							50.1	+1.5										73	4.07	−0.3										6.2		
Eureka	62	73	89	30.01	30.08	−0.04	49.8	+1.6	66	24	57	36	13	43	28	47	44	82	6.79	+0.5	13	4,905	se.	30	s.	28	6	5	20	7.0	0.0	0.0
Redding	722	20	34				49.2		72	20	57	36	16	42	32	42	34	62	6.28		11	4,961	nw.	20	n.	19	10	4	17	6.4	.0	.0
Sacramento	66	92	115	30.03	30.10	−.04	47.7	+1.5	65	1	56	31	20	39	28	44	39	73	2.18	−.8	11	4,273	n.	30	se.	28	12	7	12	5.4	.0	.0
San Francisco	155	208	243	29.91	30.08	−.04	52.8	+1.5	63	20	58	43	22	48	18	48	43	74	3.25	−.7	11	3,818	n.	22	s.	11	12	5	14	5.8	.0	.0
South Pacific Coast Region							55.4	+2.5										66	0.77	−1.2										4.9		
Fresno	327	97	105	29.74	30.11	−.02	49.5	+3.3	71	1	60	30	18	39	30	45	40	72	1.16	−.3	5	3,581	e.	16	e.	29	14	7	10	5.0	.0	.0
Los Angeles	338	159	191	29.68	30.05	−.02	59.4	+2.8	77	19	68	46	13	50	26	49	39	56	.42	−2.2	4	4,184	ne.	18	se.	29	15	8	8	4.1	.0	.0
San Diego	87	62	70	29.94	30.04	−.03	57.4	+1.4	75	19	66	44	17	49	25	51	45	70	.74	−1.1	5	3,820	nw.	24	e.	19	11	7	13	5.5	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.91	30.00		76.1	−.2	85	27	81	67	10	71	16				2.08	−3.4	12	7,240	e.	40	ne.	7	8	20	3	5.0	.0	.0
Panama Canal																																
Balboa Heights	118	6	92		[2] 29.81	−.01	79.6	−.4	89	6	86	71	25	73	17			[3] 84	4.31	.6	9	5,154	nw.	22	n.	30	1	22	8	6.3	.0	.0
Cristobal	36	6	97		[2] 29.83	.00	80.6	+.7	87	7	84	72	3	77	10	76	74	[3] 82	13.02	+2.0	22	9,507	n.	31	nw.	2	5	17	9	6.2	.0	.0
Alaska																																
Fairbanks	454	11	87	[3] 29.34	[3] 29.93		−17.6		42	18	−10	−59	7	−26	35	−18	−21	84	.11		5	2,845	ne.	15	ne.	26	8	7	16	6.8	4.4	20.9
Juneau	80	96	116	[3] 29.56	[3] 29.65		34.0		52	18	39	7	8	29	19	32	27	76	9.31		27	6,938	se.	33	se.	14	3	2	26	8.8	39.3	.0
Hawaiian Islands																																
Honolulu	38	86	100	[3] 29.95	[3] 29.99		74.6	+2.2	85	8	79	60	24	70	18	68	65	75	1.58	−2.4	10	6,601	e.	25	e.	1	11	13	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, December 1935*

Station	Altitude above mean sea level, Jan. 1, 1919	Pressure: Station reduced to mean of 24 hours	Pressure: Sea level reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max.+ mean min. ÷2	Temperature of the air: Departure from normal	Temperature of the air: Mean maximum	Temperature of the air: Mean minimum	Temperature of the air: Highest	Temperature of the air: Lowest	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Total snowfall
	Feet	In.	In.	In.	°F	°F	°F	°F	°F	°F	In.	In.	In.
Cape Race, Newfoundland	99												
Sydney, Cape Breton Island	48	29.60	29.65	−0.24	30.6	+2.4	34.7	26.6	47	12	6.33	+1.70	14.2
Halifax, Nova Scotia	88	29.50	29.61	−.35	26.8	−.8	30.2	23.5	44	4	3.82	−1.30	17.9
Yarmouth, Nova Scotia	65	29.70	29.77	−.21	29.3	−1.4	33.2	25.3	48	9	3.97	−.80	28.8
Charlottetown, Prince Edward Island	38	29.66	29.70	−.24	25.5	+1.2	29.5	21.5	42	8	5.04	+1.38	28.5
Chatham, New Brunswick	28	29.70	29.73	−.21	20.3	+3.3	26.2	14.4	34	−9	1.66	−1.56	16.6
Father Point, Quebec	20												
Quebec, Quebec	296	29.64	29.98	−.03	15.3	+.1	19.3	11.3	32	−10	2.24	−1.45	22.4
Doucet, Quebec	1,236				4.8		11.8	−2.3	34	−32	.69		6.9
Montreal, Quebec	187												
Ottawa, Ontario	236	29.78	30.07	+.05	11.9	−5.1	18.7	5.2	37	−17	2.36	−.55	17.8
Kingston, Ontario	285												
Toronto, Ontario	379	29.70	30.13	+.08	22.7	−4.3	27.9	17.4	44	−6	2.07	−.84	14.7
Cochrane, Ontario	930												
White River, Ontario	1,244												
London, Ontario	808												
Southampton, Ontario	656												
Parry Sound, Ontario	688												
Port Arthur, Ontario	644												
Winnipeg, Manitoba	760	29.29	30.17	+.15	7.4	+3.3	14.7	.0	32	−24	.96	+.05	9.6
Minnedosa, Manitoba	1,690												
Le Pas, Manitoba	860												
Qu'Appelle, Saskatchewan	2,115	27.71	30.07	+.07	11.8	+4.4	20.7	2.9	40	−22	.30	−.22	3.0
Moose Jaw, Saskatchewan	1,759												
Swift Current, Saskatchewan	2,392												
Medicine Hat, Alberta	2,365	27.50	30.06	+.09	25.2	+7.0	34.4	15.9	48	−13	.43	−.12	4.3
Calgary, Alberta	3,540												
Banff, Alberta	4,521												
Prince Albert, Saskatchewan	1,450	28.49	30.15	+.14	9.0	+6.2	17.1	.9	34	−23	.57	−.17	5.3
Battleford, Saskatchewan	1,592	28.28	30.13	+.14	6.6	+1.2	15.9	−2.8	38	−34	.32	.00	3.2
Edmonton, Alberta	2,150												
Kamloops, British Columbia	1,262												
Victoria, British Columbia	230	29.74	29.99	+.02	44.4	+3.2	47.5	41.3	52	35	1.67	−6.31	.0
Barkerville, British Columbia	4,180												
Estevan Point, British Columbia	20												
Prince Rupert, British Columbia	170												
Hamilton, Bermuda	151												

TABLE 2.—*Data furnished by the Canadian Meteorological Service, December 1935*—Continued

LATE REPORTS FOR NOVEMBER 1935

Station	Altitude above mean sea level, Jan. 1, 1919	Pressure: Station reduced to mean of 24 hours	Pressure: Sea level reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max. + mean min. ÷2	Temperature of the air: Departure from normal	Temperature of the air: Mean maximum	Temperature of the air: Mean minimum	Temperature of the air: Highest	Temperature of the air: Lowest	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Total snowfall
	Feet	*In.*	*In.*	*In.*	°*F*	°*F*	°*F*	°*F*	°*F*	°*F*	*In.*	*In.*	*In.*
Cape Race, Newfoundland	99				40.7		46.2	35.2	54	14	6.34		0.0
Sydney, Cape Breton Island	48	30.06	30.11	+0.16	42.6	+5.5	48.7	36.6	72	27	6.61	+1.17	T
Halifax, Nova Scotia	88	29.87	29.88	−.03	43.8	+6.5	48.6	39.0	60	29	5.71	+.05	2.0
Yarmouth, Nova Scotia	65	29.99	30.06	+.04	45.4	+5.5	51.6	39.1	66	27	3.79	−.70	.5
Charlottetown, Prince Edward Island	38	30.04	30.08	+.12	41.2	+5.7	46.8	35.6	64	26	6.48	+2.51	1.5
Chatham, New Brunswick	28	30.04	30.07	+.10	34.2	+3.2	41.7	26.7	68	11	2.50	−1.25	6.4
Doucet, Quebec	1,236				21.1		31.1	11.1	53	−18	4.41		12.6
Ottawa, Ontario	236	29.87	30.14	+.12	34.6	+2.9	41.8	27.5	65	11	2.55	+.01	.2
White River, Ontario	1,244	28.73	30.09	+.11	18.4	−2.1	27.6	9.3	42	−14	1.73	−.12	16.9
Medicine Hat, Alberta	2,365	27.54	30.01	+.01	20.2	−7.2	29.1	11.3	48	−17	.67	−.25	5.3
Kamloops, British Columbia	1,262	28.85	30.18	+.22	32.2	−1.2	37.3	27.0	49	6	.22	−1.24	.9
Prince Rupert, British Columbia	170				39.4		43.9	34.9	51	26	12.06		.0
Hamilton, Bermuda	151	29.84	30.00	−.05	70.9	+2.2	75.6	66.3	82	57	3.62	−.76	.0

SEVERE LOCAL STORMS, DECEMBER 1935

[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
Buffalo, N. Y.	3			1		Snow and wind	Blinding snow and strong winds probably contributed to the death of a railroad man who was struck by a passing train.
Harris County, Tex.	6–8			8	$2,500,000	Rain	Torrential rains in this locality caused a phenomenal rise in Buffalo and White Oak Bayous; rainfall ranged from 5.52 inches at Houston to 16.49 inches at Satsuma; 8 persons drowned; approximately 100 blocks in the business and residential sections of the city inundated; damage to buildings, household furnishings and merchandise, and to roads and bridges.
Morgan and Cumberland Counties, Tenn.	12					Snowfall	12 inches of snow fell in this locality; traffic seriously impeded for several days.
Albany and Laramie Counties, Wyo., eastern portions.	13–14					Blizzard	In Albany County a severe blizzard began early in the afternoon of the 13th and continued until past midnight; snow heavy; traffic completely blocked; severe blizzard raged over the eastern portion of Laramie County from 3:30 p. m., of the 13th to 2:30 p. m., of the 14th; at Cheyenne only a few flakes of snow fell during the entire storm, while less than 7 miles to the east a severe storm caused roads to be completely blocked making it necessary to send tractors from Cheyenne to pull busses out of the drifts.
Pennsylvania, eastern half of State.	20					Snow	Snowfall, generally heavy, drifted badly in many places; traffic delayed.
Birmingham and Decatur, Ala., and vicinity.	21					Glaze	Ice-coated roads and sidewalks caused a number of accidents; traffic delayed.
Williston, N. Dak.	21					do	Streets and sidewalks unusually icy and slippery; traffic of all kinds hazardous.
Wilmington, Del., and vicinity	22	Noon–9:40 p. m.			3,500	do	Heaviest glaze storm in many years; ice on wires and trees; sidewalks and streets icy and dangerous for several days; considerable damage to wire system caused interruption of light and power for a time; several persons injured by falling.
Norfolk, Va.	23					Snow	Greatest depth on ground 9.0 inches at 2:30 a. m., heaviest snowfall since March 2, 1927; transportation facilities seriously disrupted; streets and highways very hazardous for all traffic.
Minnesota, northern portion	24					Severe blizzard	Several lives lost in the northern portion of the State.
Bismarck, N. Dak.	24			3		do	Wind reached a maximum velocity of 38 miles per hour with loose snow on the ground and temperature below zero; at least 3 persons were frozen to death in North Dakota.
Walla Walla, Wash.	24–25					Glaze	Ice on transmission wires, streets and walks; traffic hampered.
Cincinnati, Ohio, and vicinity	25	12:05 p. m.				Blizzard	A regular "western blizzard" swept the city; the blizzard was ushered in by moderate darkness and high winds and for the next 10 minutes the air was filled with a mass of fine, powdery snow, reducing visibility to absolute zero at times: traffic interrupted; some roads on the outskirts of the city blocked by drifts.
Elkins, W. Va., and vicinity	25–26					Severe blizzard	A sudden and severe blizzard struck Elkins at 6:55 p. m., of the 25th, and covered most of West Virginia; moderate to heavy snow was falling when the storm broke; the loose snow on the ground was whipped up and blown about until visibility was zero.
Buffalo, N. Y., and vicinity	26					Wind and snow	Blizzard-like conditions prevailed at times in the morning with strong winds; snow from 7 to 12 inches with temperature ranging between 8° and 10°.
Arkansas, northeastern portion	27–29			1		Rain, sleet, and snow.	Rain, sleet, and snow fell in most sections with stations in the Ozarks, the northern portion, receiving 6 inches or more; ice on highways made traveling hazardous; in some instances bus service was suspended; many persons injured.
Birmingham, Ala.	28					Glaze	A moderate glaze storm; considerable interruption to traffic.
Atlanta, Ga., and vicinity	28–29			4	1,000,000	do	This storm covered an area extending from Atlanta 40 miles to the north and even farther to the south; eastward as far as Augusta and westward in some places nearly to the Alabama line; in Atlanta shade trees and shrubbery were damaged on fully half the properties in the entire city; streetcar service interrupted for several days; telephone service failed to such an extent that the telephone company's loss in Atlanta alone amounted to about $300,000; including outside territory their loss was fully $500,000; loss sustained by the Georgia Power Co. was equally great; in Atlanta 4 lives were lost due to contact with live wires.
Augusta, Ga.	28–29				5,000	do	Trees and shrubbery damaged; telephone, telegraph, and power lines down; all transportation interrupted.
South Carolina	28–29					Glaze, sleet, and snow.	5 to over 14 inches of snow fell in the northern portion of the State; greatest depth of 14.4 inches reported at Crescent. During this period 1 to 6 inches of sleet covered the ground in the central portions and rain froze as it fell on the southern coast. Glaze was heavy in the central belt considerably damaging trees and shrubbery and snapping some wires; glaze on exposed objects measured ½ inch thick in places in the vicinity of Columbia.
Chattanooga, Tenn.	28–29					Sleet, ice, and snow.	Ground was covered with sleet, ice, and snow, delaying transportation facilities; bus schedules disrupted; communication lines affected on the 29th; trees and wires were coated with from ⅛ to ¼ inch of ice.
Wilmington, N. C.	29	1–7:30 a. m				Glaze	Streets and sidewalks somewhat dangerous; slight damage reported.
Norfolk, Va.	29					Snow and sleet	With additional snowfall of 5 inches and freezing rain in the afternoon travel was very hazardous; streetcars operated with difficulty as ice coated the trolley wires.