UNITED STATES DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

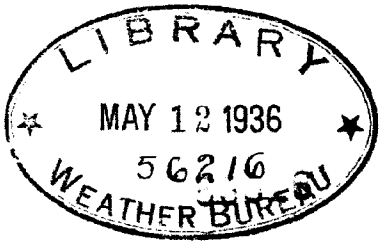
REPORT

OF THE

CHIEF OF THE WEATHER BUREAU

1934-35

QC
983
.U49
1934-1935
c.2



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1936

LIBRARY

For sale by the Superintendent of Documents, Washington, D.C. . . . . Price $1.50 (buckram)

N.O.A.A.
U.S. Dept. of Commerce

National Oceanic and Atmospheric Administration

Climate Database Modernization Program

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages
Faded or light ink
Binding intrudes into the text

This document has been imaged through the NOAA Climate Database Modernization Program. To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or www.reference@nodc.noaa.gov.

LASON
Imaging Subcontractor
12200 Kiln Court
Beltsville, MD 20704-1387
March 28, 2002

LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU,
Washington, D. C., August 13, 1935.

DEAR MR. SECRETARY: I submit herewith the administrative report of the Weather Bureau for the fiscal year ended June 30, 1935, and the statistical report of weather conditions in the United States for the calendar year 1934.

Sincerely yours,

W. R. GREGG, *Chief.*

Hon. HENRY A. WALLACE,
Secretary of Agriculture.

CONTENTS

	Page
Part I.—Administrative report	1
Introduction	1
Cooperation a vital factor in meteorological service	1
Weather of 1935 more favorable than 1934	6
Studies in air-mass analysis and its practical applications	7
Airplane observations and their use in forecasting	8
Consolidation of meteorological and communication activities at airport stations	8
The value of four maps a day in the airway service	9
Uniform procedure in preparing manuscript maps	9
Reorganization of the hurricane-warning service	9
Possible refinement of flood forecasting through the use of recording instruments	10
Some results of work in marine meteorology	11
The fire-weather service	11
Part II.—General summary of the weather conditions in the United States, by months, during the year 1934	13
Tornadoes, 1934	25
Hail, 1934	31
Losses from windstorms, 1934	32
Sunshine, 1934	35
Details of excessive rainfall, 1933 and 1934 [1]	42
Monthly and annual amounts of evaporation, 1934	65
Part III.—Climatology: Monthly and annual meteorological summaries, 1934	67
Charts of temperature and precipitation, 1934	facing 162

[1] Excessive rainfall data for the years 1931 and 1932 appeared in the 1933–34 issue of this report.

Part I.—ADMINISTRATIVE REPORT

INTRODUCTION

In the last annual report a brief account was given of the action that had been taken in the initiation of a more progressive and forward-looking program in meteorological service, along the lines recommended in a report by the Science Advisory Board. The most important recommendation was that relating to air-mass analysis and its more extensive and detailed use in forecasting. Other recommendations were largely designed to assist in the carrying out of this one. They include training of personnel, an extension of the airplane-observational program, and an increase in the number and greater detail in the character of surface observations. Since no additional funds were provided for the purpose, there was no recourse except to make a modest beginning in the realization of these objectives through reorganization and adjustment of existing service and cooperation with various Government departments and with other agencies. Some progress has resulted, and an account of it will be given in later sections of this report. First, however, it is believed well worth while to comment briefly on the value and the indispensability of cooperation in the organization and maintenance of meteorological service.

COOPERATION A VITAL FACTOR IN METEOROLOGICAL SERVICE

Probably in no other branch of the Federal service is cooperation a more vital factor than in the Weather Bureau. Generally speaking, it is of mutual benefit to the Bureau and to the cooperating agencies. It may be considered under three chief heads, international, governmental, and nongovernmental.

INTERNATIONAL COOPERATION

One of the finest examples of international cooperation and good will exists in connection with the science of meteorology. For more than 60 years the directors of national meteorological services have been meeting regularly to exchange ideas and information, and especially to secure harmony and standardization in important fields where otherwise effective cooperation would be impossible. Meteorology is essentially world-wide in its scope. No country, however large its geographic area, is of sufficient size to be independent of other countries in providing its people with an adequate weather service.

The history of government-supported meteorological organizations covers a period of about 75 years. Institutions concerned in some degree with meteorology existed earlier, but they had no official status. Several conferences of officials affiliated with government meteorological services were held in Europe in the early seventies, but a permanent organization was first effected at Rome in 1879. At the present time, there are 105 meteorological or closely related scientific services organized through their directors into what is known as the "International Meteorological Organization." Actually, only 54 countries are represented owing to the fact that in some instances several organizations operate independently of each other, although supported by the same government. The International Meteorological Organization is subdivided into commissions, each under the direction of a president. These subcommissions deal with more or less distinctive phases of meteorological work. Only directors can be members of the major organization, but the subcommissions are composed of an unlimited number of technical employees of the national services and a few outstanding scientists who have no official affiliations. Membership in the subcommissions, each of which includes one or more directors, now totals about 260 persons.

The International Meteorological Organization is wholly voluntary and is devoid of control by national treaties or conventions. Its recommendations are expressed in the form of resolutions, adherence to which is only a moral obligation. Meetings are held sexennially. This year (1935) the regular sexennial meeting will be held at Warsaw, Poland. Subcommissions meet as frequently as circumstances warrant, usually every 2 or 3 years. Most of them will meet this year at Danzig or Warsaw in September and, according to custom, just prior to the major meeting. The representatives from the United States Weather Bureau will be the Chief of the Weather Bureau and the Chief of the Division of Climate and Crop Weather.

Details of the cooperation accomplished through the International Meteorological Organization and its subcommissions are too numerous to be specified and described here. At the last sexennial meeting, held in 1929 at Copenhagen, 109 resolutions were adopted, covering a wide range of activities. Although many of them did not directly concern the United States Weather Bureau, all had international cooperative aspects and some of them were of great importance to every national service.

Exchange of observations is the most important feature of international cooperation. This is effected principally by radio, but cable and telephone are employed in some instances. Collateral features of the exchange are internationally standardized definitions, codes, etc., without which intelligent application of the data would be impossible. Cooperation with Canada is most complete. From a meteorological standpoint, there is no boundary line. Most Canadian reports are received at United States forecast centers as promptly as at Toronto and, similarly, observations made at United States stations are as promptly sent to Toronto. Exchange arrangements also exist with Mexico, the Philippines, and the Far East, and with the several independent meteorological organizations in the West Indies.

Twice each day, at 11 a. m. and 11 p. m., eastern standard time, bulletins are transmitted by radio directly from the Weather Bureau Office in Washington through the Navy radio stations at Arlington and Annapolis for the benefit of European meteorological services. These bulletins contain about 100 reports representative of weather conditions in North America and reports from ships in the western Atlantic. Correspondingly, twice daily, about 5 a. m. and 5 p. m., eastern standard time, bulletins containing about 100 European land-station observations and reports from ships in the eastern Atlantic are broadcast from the powerful Rugby station in England for the benefit of meteorological services in North America. These bulletins are copied at United States Navy radio stations and are made available immediately to the Weather Bureau.

COOPERATION WITH OTHER GOVERNMENT BUREAUS AND DEPARTMENTS

Every possible effort is made to take full advantage of the facilities of all agencies of the Government in securing and transmitting weather observations from both land and sea. In return, forecasts and warnings based on these data and on the Weather Bureau's own far-flung network of reporting stations are made available to those organizations.

DEPARTMENT OF AGRICULTURE

The bureaus in the Department of Agriculture with which cooperation is most extensive are the Forest Service, Office of Experiment Stations, Agricultural Economics, and Agricultural Engineering.

The forest fire-weather-warning service is one of the most active projects of the Weather Bureau. Its primary purpose is to issue weather forecasts for the large forested areas of the country during the season of fire hazard and especially to warn of weather conditions which favor the inception and spread of forest fires. For this purpose daily observations of weather conditions in the forests themselves are required. Meteorological stations, equipped with necessary instruments, are established therein. There are at present nearly 700 stations of this class. Employees of the Forest Service, State forestry services, and in some instances private owners of large tracts, mostly at lookout and ranger stations, serve as observers. They forward the reports by telegraph or telephone to the Weather Bureau offices from which the fire-weather warnings are issued.

In California there is a unique form of cooperation by the Forest Service in supplying a truck equipped with radio and meteorological apparatus for the use of the Weather Bureau in visiting large fires and furnishing weather reports and forecasts directly to those who direct the work of fighting the fires and preventing their spread. This subject is presented more fully later.

Lightning causes more fires in the forests of the far Western States than any other single agency. Forecasting of lightning storms is of great importance in enabling those charged with protection of the forests to make preparations for combating such fires as they occur. Study of lightning statistics with the general weather conditions accompanying thunderstorms is essential to successful forecasting. Lookouts, rangers, and other forestry employees record lightning occurrences at several hundred places in the forests and make them available to the Weather Bureau for study.

The Forest Service cooperates very actively also in the measurement of snow depth in the mountainous sections of the western part of the United States. This is a project of considerable difficulty, and the cost of establishing special stations at high levels would be very large. Many of the measurements are made by forest rangers as a part of their regular duties without any appreciable additional cost to the Government.

The Office of Experiment Stations cooperates chiefly by providing weather observations that are made by its field personnel and transmitted to the Weather Bureau for use in its weather

and crop service. The observations are made daily and are summarized each week as a basis for the Weekly Weather and Crop Bulletin which makes possible a running appraisal of the development of crops as influenced by weather conditions.

Cooperation is maintained also with the Bureau of Agricultural Economics in its crop-reporting work. Information as to current and past weather conditions as affecting growing crops and farm operations, collected through the Weather Bureau's extensive network of weather-crop observers and correspondents, is furnished at frequent intervals for use in the preparation of the regular monthly crop-condition report issued by the Crop Reporting Board. In some cases weekly weather and crop bulletins are issued jointly by the Weather Bureau and the State statisticians' offices of the Bureau of Agricultural Economics.

Active cooperation with the Bureau of Agricultural Engineering is of comparatively recent date. Under the terms of an agreement entered into by the two Bureaus and approved by the Secretary of Agriculture, the Weather Bureau will make available to the Bureau of Agricultural Engineering such mountain-snowfall data and general run-off forecasts as that Bureau may need in providing more detailed forecasts for specific irrigation projects. On its part the Bureau of Agricultural Engineering will furnish promptly to the Weather Bureau all data that it collects. These, together with records obtained by other agencies, will be published by the Weather Bureau as heretofore. Moreover, the two Bureaus will cooperate in the development of new equipment and methods of measurement and in other investigations in this very important project.

WAR DEPARTMENT

The War Department cooperates with the Weather Bureau in a very complete way, chiefly through its Signal Corps, Air Corps, and Engineer Corps.

Meteorological observations are virtually useless in current service unless immediately transmitted to a wide network of stations where they can be promptly charted, analyzed, and issued in the form of bulletins and forecasts. While this is taken care of in considerable part through contract with commercial companies, there are some regions where such facilities are lacking and in these cases the radio stations of the Signal Corps transmit weather observations regularly and promptly for use either locally or to the United States for inclusion in the Weather Bureau's general system of reports. For example, from 2 to 6 observations are made daily at 15 places in Alaska where Signal Corps radio stations are located. These reports are utilized in connection with the weather information and forecasts furnished by the Weather Bureau for airway operations in that Territory. Reports from 10 of the stations are transmitted twice daily to Seattle for distribution to Weather Bureau offices in the States. Again, weather bulletins containing observations taken at meteorological stations in Mexico and broadcast twice daily from Chapultepec, near Mexico City, are copied by the Signal Corps station at Marsh Field, Calif., and are made available to the Weather Bureau for distribution to its forecast centers and airway stations in the western part of the United States.

The Signal Corps cooperates also in providing upper-wind data from pilot-balloon soundings made at a number of military flying fields. These observations are used by the Weather Bureau to supplement its own. The cooperation in this case is not one-sided, as the meteorological service of the Signal Corps is similarly supplied with the complete network of Weather Bureau reports, both surface and upper air, in connection with the issuance of forecasts and warnings for purely military purposes.

A notable advance in cooperation was accomplished during the past year in connection with the organization of a country-wide network of airplane-observational stations. One of the participants in this program is the Air Corps. At eight of its flying fields daily flights are made, weather permitting, to a height of approximately 17,000 feet. A more extended account of the work is given later. The cost of a commercially-operated station of this type is about $10,000 per year, whereas the cost to the Air Corps is very slight, since pilots and equipment are already available and the flights are made as a part of the pilots' training.

The Engineer Corps cooperates with the Weather Bureau in connection with its river and flood service. Readings are made of river stages at about 100 of its river gages, and these are made immediately available for use in daily forecasts of all principal rivers throughout the country. These are of special value at times of floods. The Weather Bureau likewise furnishes its own data to the Engineer Corps as an aid in its operations.

NAVY DEPARTMENT

Cooperation with the Navy Department is similar, in many respects, to that with the War Department. Upper-air data of wind direction and velocity are secured at a number of pilot-balloon stations at flying fields of the Bureau of Aeronautics and transmitted to the Weather Bureau. Moreover, at eight of these fields daily airplane flights are made as a part of the Bureau's regular aerological program. In addition, frequent airplane observations are made from naval vessels in coastal waters and transmitted promptly to the Weather Bureau.

The Office of Communications provides cooperation of outstanding value and importance, both in the collection of surface reports transmitted from naval and commercial ships, and in the dissemination of bulletins and forecasts to marine interests, to foreign countries, and to the public generally. Only a brief summary can be given here.

About 10,000 observations from ships at sea are collected each year by naval radio stations.

Mexican and Central American reports are transmitted by the radio station of the Pan American Airways Co. at Brownsville, Tex., to the naval radio station at Pensacola, Fla., and thence by the latter to the Weather Bureau at Washington. This is a twice-daily service.

Observations are made at naval radio stations at 4 isolated places, 1 in Alaska, 2 in the Pacific, and 1 in Cuba, and transmitted to designated Weather Bureau offices in the States.

Observations taken in far eastern areas (China, Japan, Philippines, etc.) are collected at Manila and transmitted daily by naval radio to the Weather Bureau offices at San Francisco and Washington. The U. S. S. *Houston*, operating in the Far East, collects weather reports by copying weather bulletins broadcast from stations and from ships in those waters. These reports are also repeated to the Weather Bureau offices in San Francisco and Washington. Similarly the naval radio station at Dutch Harbor, Alaska, copies weather reports broadcast from radio stations in eastern Siberia and transmits them to Weather Bureau offices in Seattle, San Francisco, Juneau, and Washington.

Without such cooperation, it would be difficult or impossible to obtain highly valuable reports from these distant or isolated areas.

Extensive broadcasts of weather information from the United States, Alaska, Canada, West Indies, and from ships are made two or more times daily for the benefit of marine, agricultural, and aviation interests. The broadcasts include forecasts and warnings. Some 25 naval stations participate in this program, but the most extensive bulletins are those broadcast from Washington (NAA and NSS) and San Francisco (NPG) by remote control directly from the Weather Bureau offices. These two bulletins give data in such completeness as to enable vessel masters to prepare weather maps on shipboard.

An important feature of the Weather Bureau's work in ocean meteorology is its statistical section. Weather observations are made on large numbers of ships of all nations. These are entered on standard forms and sent by mail to the central office at Washington, where they are summarized and the results turned over to the Hydrographic Office for publication on pilot charts and in pilot books. The main items of information are the average wind direction and force; average barometric pressure and tracks of storms; summaries of fog conditions; and, more recently, special summaries in great detail, applicable to the planning and conduct of ocean aviation.

TREASURY DEPARTMENT

The Coast Guard cooperates very effectively and extensively with the Weather Bureau in several ways. At about 50 life-saving stations storm warnings are displayed, whenever issued by the Bureau. These displays consist of flags by day and lights at night.

Weather observations are made by employees at numerous life-saving stations on the Atlantic and Gulf coasts and on the Great Lakes and transmitted to Weather Bureau offices over Coast Guard telephone lines and by radio. This cooperation is of inestimable value in connection with the issuance of hurricane warnings. For the most part the Coast Guard stations are located at isolated places on the coast from which observations are especially needed and from which reports, especially of tides and swells, could not otherwise be obtained.

The Coast Guard cooperates also, during the ice-patrol season, by furnishing observations from its cutters, including in recent years upper-air wind data from pilot-balloon soundings.

DEPARTMENT OF COMMERCE

Cooperation with the Department of Commerce is provided chiefly by the Bureau of Air Commerce, the National Bureau of Standards, and the Bureau of Lighthouses.

The Bureau of Air Commerce has organized an extensive system of communications, both radio and teletype, along all of the principal airways in the country. At numerous points on these airways where it is necessary to have weather observations made, although there is no need for the assignment of highly trained meteorologists, employees of the Bureau of Air Commerce make the observations and transmit them to Weather Bureau offices. Reciprocally, at points where meteorologists are assigned they assume the duty of operating the communications facilities, including in many cases the broadcasting of weather reports and forecasts. A great advance has been made during the past year in this cooperation, which is now close and effective and altogether eliminates unnecessary duplication of personnel and cost throughout the airway service.

The National Bureau of Standards provides valuable cooperation in the calibration of Weather Bureau equipment, the facilities of the wind tunnel being made available for this purpose. That Bureau also furnishes material aid in testing supplies of various sorts, to determine whether or not they meet the specifications set up in securing bids.

Cooperation with the Bureau of Lighthouses is similar to that with the Coast Guard. At 17 lighthouses storm signals—flags by day and lights at night—are displayed whenever received by the Weather Bureau.

POST OFFICE DEPARTMENT

Forecasts are telegraphed each week day to postmasters, who are supplied with a simple stamping outfit composed of rubber type. The forecasts are stamped on addressed cards and distributed by mail in the nearby territory. In other cases the forecasts are posted in the post offices or are given out on telephone call.

DEPARTMENT OF THE INTERIOR

The Geological Survey and the Weather Bureau both maintain river gages. In the last 2 years a successful effort has been made by these two services to coordinate the work in a way that will prevent overlapping and will make it possible to use the same gages at approximately 60 stations, thereby decreasing the cost of installation and maintenance and giving an improved service. The Geological Survey is interested largely in the amount of water available for consumptive use, while the particular interest of the Weather Bureau is in forecasting river stages from day to day and issuing flood warnings. The objectives are different, but the basic data necessary in obtaining them are the same. A large number of the common gages are checked and repaired by the Geological Survey, the Weather Bureau paying the salaries of the observers. Also, the Survey furnishes this Bureau with rating curves and is in turn furnished telegraphic reports of heavy rains which enable the engineers to reach isolated streams promptly in order that they make make observations of flood run-off.

Other cooperating agencies of this Department are the Bureau of Reclamation, the Bureau of Indian Affairs, and the National Parks Service, all of which furnish daily, and at times more frequently, observations during the season of fire hazard in forested regions. Equipment is furnished by the Weather Bureau. The observations are useful in supplementing the Bureau's own data as a basis for fire-weather forecasts.

The Geological Survey and the Bureau of Reclamation also make evaporation measurements for the Weather Bureau at some of their stations in arid and semiarid regions.

COOPERATION WITH NONGOVERNMENTAL AGENCIES

It is quite out of the question to give anything like a complete account of the cooperation that the Bureau receives from thousands of individuals and hundreds of organizations of various kinds. Effort will be made merely to list some of the outstanding cases.

Data of high statistical value are provided in observations made at about 4,500 stations throughout the United States and its possessions. In some cases the cooperating agency is a commercial firm, a railroad, a power company, an agricultural college, or a university, but for the most part the observers are individuals whose only compensation is the assurance that they are contributing to a most worthy project, that of making possible an accurate appraisal of the climatic characteristics of all parts of the country.

Of the same type is the cooperation received from the masters of vessels of every maritime nation, whose observations, when summarized, likewise define the climate of the seas. Some 1,300 ships participate in this program.

More recently the upper air is receiving attention, and we have a constantly enlarging cooperation from air-transport companies which furnish, chiefly through their pilots, highly valuable information regarding weather conditions encountered in their flights.

More than 350 commercial radiophone stations throughout the country provide a valuable service in broadcasting forecasts and other information without cost to the Government. These radio broadcasts and the newspapers constitute the most extensive and effective method of distributing forecasts and warnings. Many millions of people are reached through these agencies.

MONETARY VALUE OF COOPERATION

It is impossible to give even an approximate estimate of the cost saved to the Government through the utilization by the Weather Bureau of the facilities of other bureaus and departments and through outright cooperation by individuals and organizations outside of the Government. The figure would be well up in the millions. For instance, the cost of operating the 4,500

cooperative climatological stations, if the observers were paid only $5 per month, would be $270,000 per year.

The observations made by the personnel of the Bureau of Air Commerce along the airways as a part of their regular duties would cost approximately $500,000 each year, if observers were employed for that service.

The cooperation of the War and Navy Departments in the airplane-observational program saves in the neighborhood of $150,000 per year.

Although other cases of cooperation outlined in this report would individually yield smaller savings than those cited, the total would be impressive. Cooperation yields many other benefits, however, in addition to the financial. It is more vital to the efficient organization and maintenance of meteorological service than is the case with any other public endeavor. It will be broadened and extended still further as circumstances warrant.

WEATHER OF 1935 MORE FAVORABLE THAN 1934

The severe and unprecedented drought of 1934, which seriously affected agriculture in the United States, did not carry over to an appreciable extent into the 1935 crop-growing season. Following the extremely hot, dry summer of last year, the fall months brought timely rains which produced soil moisture sufficient to permit the seeding and to promote the early growth of winter grains in practically all sections from the Great Plains eastward, except in the southwestern plains where moisture continued insufficient.

In the western mountains, the winter months had much heavier snowfall than during the preceding winter, assuring a better water supply for irrigation than was available for the summer of 1934. Thus, except in the southwestern plains, the crop-growing season of 1935 began under much more favorable conditions than that of 1934. The Southwest, comprising principally southwestern Nebraska, western Kansas, southeastern Colorado, western Oklahoma, northwestern Texas, and northeastern New Mexico, continued extremely dry till about the middle of May when heavy rainfall relieved the situation. Previous to the rains, there was in this area extensive and very destructive soil drifting by wind action, and the most severe, frequent, and wide-spread dust storms ever experienced in this country occurred. Rainfall had been deficient for a long time, and the soil became extremely dry, thus facilitating drifting and dustiness with any appreciable wind movement. On several occasions during March and April considerable dust was carried through the atmosphere as far east as the Atlantic coast.

During the spring months, moisture, as a rule, was ample over nearly all the principal agricultural areas of the country. In fact, frequent heavy rainfall kept the soil entirely too wet over large areas of the central valleys, which seriously delayed spring plantings in many sections. In addition, abnormally cool weather retarded germination and growth, further contributing to the lateness of the spring-planted crops. Damaging floods occurred in some places, especially over a belt extending from the lower Ohio Valley westward to southwestern Nebraska and eastern Colorado; many hundreds of thousands of acres of bottomland crops were destroyed. However, over most of the Midwest, where severe drought prevailed in 1934, the generous rainfall of the spring of 1935 was very favorable, especially in the central and northern Great Plains, and in general the weather was much more favorable than during the preceding year. By the beginning of summer the effect of the 1934 drought had largely disappeared, fewer than normal agricultural localities being in need of moisture. However, July was extremely warm, and precipitation was scanty in many sections of the country, with the result that, by the close of that month, droughty conditions had become reestablished over large areas of the Great Plains and Rocky Mountain States, being especially severe in the southern plains.

Rainfall for the first half of 1935 (January–June) was in marked contrast to that of 1934. For the country as a whole, the 1934 percentage of normal for this period was 79 and the 1935 average 109 percent of normal. Table 1 shows, by State averages, the percentage of normal precipitation for the several States for the first half of 1935, and also the percentages of the 1935 averages as related to those of 1934 as a base.

TABLE 1.—*Precipitation by States, January–June 1935*

State	Percentage of normal	1935 compared with 1934	State	Percentage of normal	1935 compared with 1934
	Percent	*Percent*		*Percent*	*Percent*
Alabama	97	103	Nevada	112	168
Arizona	146	242	New England	106	99
Arkansas	145	180	New Jersey	81	86
California	106	197	New Mexico	108	167
Colorado	110	164	New York	94	108
Florida	79	59	North Carolina	89	87
Georgia	84	80	North Dakota	104	202
Idaho	87	106	Ohio	94	155
Illinois	130	242	Oklahoma	132	181
Indiana	111	199	Oregon	84	109
Iowa	113	219	Pennsylvania	86	114
Kansas	120	179	South Carolina	71	70
Kentucky	148	211	South Dakota	104	195
Louisiana	118	106	Tennessee	117	131
Maryland and Delaware	109	110	Texas	130	140
Michigan	91	148	Utah	106	187
Minnesota	104	165	Virginia	112	114
Mississippi	113	127	Washington	100	108
Missouri	144	249	West Virginia	120	159
Montana	78	103	Wisconsin	98	140
Nebraska	123	230	Wyoming	105	146

STUDIES IN AIR-MASS ANALYSIS AND ITS PRACTICAL APPLICATIONS

The Weather Bureau, if it would not fall hopelessly behind similar institutions elsewhere, must keep informed of every increase in our knowledge of scientific or theoretical meteorology, a requirement that entails continuous and extensive reading and study. It is equally imperative that this Bureau itself also make additions to our understanding of atmospheric and weather phenomena. Finally, the Weather Bureau must keep fully informed of all meteorological arts—all applications of the science of meteorology to practical needs of every kind, in planting, harvesting, shipping, frost protection, forest-fire warnings, flood warnings, and the thousand and one other things, great and small, that affect our prosperity, our comfort, and our health. Such of these arts as would benefit this country the Weather Bureau must and does adopt and then, if need be, adapts them to our own conditions.

One of the most conspicuous and useful services of meteorology is that of forecasting the weather. The common method of making these forecasts is to picture symbolically on a map the existing weather at a given instant over a greater or less territory, and then to deduce from this synoptic map what the weather will be at various places during a specified coming period, such as 12, 24, or 36 hours from the time the charted observations were made. Until recent years the only map of this kind in common use consisted essentially of isobars (lines of equal pressure, reduced to sea level), isotherms (lines of equal atmospheric temperature near the surface), and symbols for cloudiness, wind direction and velocity, and such other weather facts as might be available and helpful to the weather forecaster. All the time, however, it was recognized that while some weather changes are home-made, by local heating and cooling, most of them are owing, mainly, to the replacement at a given locality of air in one condition by air of some other condition, and to the interactions of these different masses of air with each other. Clearly, then, a synoptic map giving the boundaries, or fronts, of the different masses of air over a given large territory, together with the states and conditions of these masses and the directions and speeds of their movements, also could be used, like the isobaric maps, in forecasting the coming weather. It is not obvious, however, from which of the two synoptic maps, the isobaric or the frontal, one could most clearly foresee the coming weather. Presumably some combination of the two such as the one which for years has been evolving at the Weather Bureau, would be better than is either alone.

But what would be the best combination that at the same time is practicable, that does not require data too expensive to obtain, and that can be so quickly mapped as to insure a well-considered forecast very soon after the observations on which it is based were made? This important question the Bureau is trying to answer as speedily as may be consistent with caution. To this end three young men, highly trained in the technique of constructing synoptic frontal maps, are making such charts at the central office of the Weather Bureau from both the morning and the evening observations for the entire United States and adjacent territory. These charts are the subjects of four round-table discussions every week with those of the Bureau's staff who are engaged in actual forecasting, and a few others who, though not forecasters, are familiar with the underlying theories. Much benefit has resulted to all concerned from these free discussions, and frankly searching, though always constructive, criticisms.

Work in this line is progressing. A reasonably successful system of forecasting must not be altered unless and until it is doubly certain that the proposed alteration is really an improvement. But immediately an improvement is clearly demonstrated the means of making it effective must and will be found.

AIRPLANE OBSERVATIONS AND THEIR USE IN FORECASTING

In 1931 airplanes were substituted for kites. The number of upper-air observations by airplanes available to the forecaster was increased to 25 within the last 2 years. These observational data have been employed in diagnosing the vertical extent and structure of the cold- and warm-air masses that cause and maintain our cyclonic and anticyclonic systems. Temperature-height graphs are prepared daily at each of the district forecast centers for all of the airplane stations received. At each point of inflection of the temperature curve, readings of relative humidity are entered. From these graphs it can readily be seen where the humidities at the usual cloud and precipitation levels are increasing and what the temperature-lapse rates are in such regions.

In addition, they permit an estimate of the slope of the frontal surfaces which separate the air masses. Information of this kind with the aid of the pilot-balloon data which consist of wind velocities and directions aids the forecaster in determining when and where precipitation will occur.

At present it is universally recognized that any appreciable precipitation is caused by the lifting of air masses, which results in decrease in temperature. If this lifting and resultant decrease of temperature are carried far enough, precipitation will ensue. The problem is to tell just how far this lifting will be carried. It may be brought about by frontal action either along the cold front or warm front, by thermal convection, where no front is involved, or by orographic action. To assist in determining this question in the particular case, vertical cross sections of specific humidity and potential temperature can be drawn. Graphs in the form of adiabatic charts, tephigrams, and emagrams can all be prepared from data obtained from airplane ascents. From several of these, but probably more readily from the emagram, can be determined the amount of frontal lifting required to produce precipitation. If no fronts are present, the probable maximum temperature for the afternoon may be determined from the emagram, which indicates how much afternoon heating will be needed to cause instability and thunderstorms. In fact, we may say that data obtained from the airplane observations are enabling us to tell more positively whether or not precipitation will occur and to evaluate more definitely the physical causes which operate to bring it about.

CONSOLIDATION OF METEOROLOGICAL AND COMMUNICATION ACTIVITIES AT AIRPORT STATIONS

During the past year the Weather Bureau and the Bureau of Air Commerce mutually agreed to combine the meteorological and communication activities at airports wherever practicable with a view to improving efficiency and effecting all possible economies. Arrangements were made to combine the services at the following 35 airports:

Abilene, Tex.
Albuquerque, N. Mex.
Amarillo, Tex.
Bellefonte, Pa.
Big Spring, Tex.
Boise, Idaho.
Boston, Mass.
Buffalo, N. Y.
Charleston, S. C.
Cincinnati, Ohio.
Columbus, Ohio.
Detroit, Mich.
Elko, Nev.
Fresno, Calif.
Greensboro, N. C.
Indianapolis, Ind.
Jackson, Miss.
Kingman, Ariz.
Kylertown, Pa.
Medford, Oreg.
Memphis, Tenn.
Moline, Ill.
Murfreesboro, Tenn.
North Platte, Nebr.
Oklahoma City, Okla.
Pasco, Wash.
Pendleton, Oreg.
Phoenix, Ariz.
Reno, Nev.
Richmond, Va.
Rock Springs, Wyo.
San Diego, Calif.
Spartanburg, S. C.
Wichita, Kans.
Winslow, Ariz.

At large centers where weather maps and meteorological personnel were needed to render a specialized service, the Weather Bureau personnel was retained and the Bureau of Air Commerce personnel reduced. Under this arrangement, the Weather Bureau personnel is now engaged to a considerable extent in communication work. At other airports where the demand for weather maps and meteorological advice was not great, the Weather Bureau personnel was withdrawn. The pilot-balloon work was moved to the Weather Bureau office in the city, or to some nearby point, and the surface weather observations were turned over to the Bureau of Air Commerce personnel. The consolidation made it possible for the Weather Bureau materially to strengthen its service at the 10 airway forecast centers by providing the personnel and assign-

ment of forecasters for 24-hour daily service. The arrangement permitted the Bureau of Air Commerce to extend its network of communications to other airways over which service had not been provided. The meteorological and communication services at important airports are now on a practicable and efficient basis, and duplication of effort has been eliminated.

THE VALUE OF FOUR MAPS A DAY IN THE AIRWAY SERVICE

For a number of years the Weather Bureau has recognized the need of improving the general weather service by the issuance of four maps a day. The cost, although relatively not large, has prevented the inauguration of the service because of the limited funds available. The framework for such a service was laid during the past year through reorganization of service for airways. The consolidation of meteorological and communication activities with the elimination of the airway sectional maps, which covered 4-hour periods, and their transmission as such by teletype made this beginning possible. Some of the savings in funds which resulted from the reorganization were used in providing a few additional reports, and with increased time available on Bureau of Air Commerce teletype circuits, more complete meteorological data were transmitted for the preparation and analysis of nation-wide maps at airport stations, covering a 6-hour period.

The 8 a. m. and 8 p. m. maps, prepared at airport stations from the regular collection of Weather Bureau signals, cover an area from Honolulu to Bermuda and from northern Alaska to southern Mexico. The 2 a. m. and 2 p. m. maps are prepared from selected airway sequence reports and off-airway station reports which cover the entire United States.

Weather maps on a 6-hour basis can be used more advantageously than on any other time basis. Many years ago it was recognized by meteorologists that the time interval between weather maps should be equal and that the basic observations should be taken at the same time at all stations day after day. This was the basis for the original establishment of 8 a. m. and 8 p. m., eastern standard time, observations and weather maps.

It was recognized from the beginning that more frequent maps were needed for the intensive service which aviation demanded. In 1929 the sectional 3-hour weather maps were inaugurated, but it was apparent that the area covered by these maps was not as extensive as it should be. A change was made in 1932 to 4-hourly airway sectional maps covering increased area. These also were too limited and had a further disadvantage in that the period was an odd multiple of the 12-hour basic period. The recent change to 6-hour maps reduced the disadvantages heretofore experienced. Moreover the 6-hour maps coincide in time with the maps prepared by a number of foreign meteorological services and will later permit the exchange of reports with other countries when funds are provided for placing the general weather service of the Bureau on a 6-hour basis.

This service for airways was inaugurated on May 1, 1935. Forecasts are issued four times a day covering a period of 8 hours in advance. When conditions warrant, special forecasts are issued between the 6-hour periods, based on 3-hour intermediate sectional maps which are prepared from the network of airway reports. The present plan is the most efficient yet devised and has some distinct meteorological advantages which no other timed system possesses.

UNIFORM PROCEDURE IN PREPARING MANUSCRIPT MAPS

On March 1, 1935, standardized procedures for drawing manuscript maps at all Weather Bureau offices and airport stations were put into effect. Uniformity in the use of symbols and other entries on maps and in drawing isograms is secured by this standardization, which is valuable for many reasons, but chiefly to aviators and others who have occasion to examine maps at different offices of the Bureau and also for the Bureau's own employees who are transferred from one field station to another. The symbols adopted by the Bureau were made to conform as nearly as practicable to international usage.

REORGANIZATION OF THE HURRICANE-WARNING SERVICE

For many years prior to July 1, 1935, the hurricane-warning service of the Weather Bureau was centered at Washington. Radio weather reports from ships in the areas frequented by hurricanes and meteorological observations from island and coastal stations in those areas were collected at Washington only. The reports were charted and advisory and warning messages were distributed from the Washington center for the benefit of shipping and residents of island and coastal communities. This is one of the most important services of the Bureau. It has been instrumental in saving many human lives and millions of dollars' worth of property.

Owing to the cost of repeating the observations to Weather Bureau offices on the South Atlantic and Gulf coasts, it was necessary to confine the information provided those offices for public service to 2 or 3 daily telegrams containing brief statements as to the location, intensity, and probable movement of the storm with notification of such warnings as were indicated by the reports collected. Personnel and facilities were inadequate for a continuous operation of the service for 24 hours each day. There was a hiatus between the daily 8 p. m., eastern standard time, collection of reports and the collection 12 hours later. During this 12-hour period tropical storms sometimes progressed rapidly, which made it difficult in some instances to collect observations at a center far removed from the storm zone and to distribute timely warnings to the threatened areas.

Funds in the amount of $80,000 were provided the Weather Bureau in the agricultural appropriation bill for reorganization and extension of the hurricane-warning service. Plans for the new form of service were prepared so that promptly on July 1, 1935, a special teletype system was set up by the Bureau to connect 10 stations on the coast with the new hurricane-forecast centers at Jacksonville, Fla., and New Orleans, La. Daily collection of land-station reports and observations by radio from ships in the region frequented by hurricanes will be transmitted over this teletype circuit. When tropical storms are in progress, additional observations at 6-hour intervals or oftener, if necessary, will be furnished to the teletype system with personnel on duty continuously 24 hours each day. This system enables the two forecast centers to receive reports and issue warnings with the dispatch that is possible only with direct communication service operated exclusively for that purpose. A superior information and warning service in connection with hurricanes is now available to the public in the areas served by Weather Bureau offices in the coastal sections of the South Atlantic and Gulf States.

Another hurricane forecast center will be located at San Juan, P. R. The areas to be served by the three centers are:

San Juan: Caribbean Sea and islands east of longitude 75° W. and south of latitude 20° N.

New Orleans: That portion of the Gulf of Mexico and its coast west of longitude 85° W.

Jacksonville: Remaining portions of the Atlantic coast, Caribbean Sea, and Gulf of Mexico areas, and islands and coasts south of latitude 35° N.

Warnings for the Atlantic coast north of latitude 35° N. will continue to be issued from Washington.

Incidental to the hurricane-warning-service reorganization, a new forecast center has been established at Jacksonville for North Carolina, South Carolina, Georgia, and Florida (except the extreme northwest portion) and ocean areas contiguous thereto.

POSSIBLE REFINEMENT OF FLOOD FORECASTING THROUGH THE USE OF RECORDING INSTRUMENTS

A flood is produced naturally in a primary drainage basin by the continued falling of rain or melting of snow at a rate greater than the maximum rate at which water can be discharged from the basin. In the United States a flood caused by snow alone is rare, and the forecasting of floods caused by rain falling on a snow mantle cannot be reduced to a formula. This discussion, therefore, will be confined to those floods caused solely by rain, and will be applicable only to primary basins in which the short time between the fall of heavy rain and the occurrence of the resulting flood makes it necessary to base forecasts more on rainfall data than on upstream river gage readings.

The season of the year, the preceding weather, and the drainage basin's topography, geology, and vegetal mantle are essential factors that must be considered in flood forecasting. Assuming that these data are all available and have been given proper places and weights in a formula, there still remains to be obtained the most important factor of all, namely, the hourly amounts of rainfall. This is not available in a complete form under the present system. The total amount and the approximate period in which the rain fell are readily obtained. The forecaster knows, for instance, that 2 inches fell in less than 12 or 18 hours, but he does not know that 80 percent of it fell in 2 hours, and that light showers occurred during the remainder of the period. This is a handicap, but in spite of it valuable flood forecasts are being made and are the means of saving human lives and property. Frequently these forecasts do not give the exact height of the crest and the hour of its occurrence, but they are sufficiently definite to enable the inhabitants of the threatened area to take the precautions necessary to protect their lives and property. The forecaster knows, however, that, given hourly amounts of rainfall for coordination with the continuous records of river stages now being made available through the recent cooperative and constructive work of the Weather Bureau and the Geological Survey, he could evolve formulas that would enable him materially to refine his flood forecasts. He could predict with considerable assurance and definiteness both the height and the time of the flood's crest, instead of expressing his forecasts in rather general language.

Continuous records of river stages are being obtained from recording stations constructed in the last 2 years with funds allotted by the Public Works Administration, and a similar advance in strengthening the method of measuring rainfall would not only make possible the refinement of flood forecasts in primary drainage basins but would also be of inestimable value in agriculture, soil conservation, and all branches of hydraulic engineering. The needs of the flood forecaster alone seem not to have had enough weight to bring about the installation of the required number of recording rain gages, but in the last few years other users of rainfall data have, individually and through their various organizations, been making insistent demands and endeavoring to provide means for the establishment of a network of these gages. The Weather Bureau, therefore, is hopeful that in the near future its flood forecasters may have available enough additional rainfall information to enable them to give to the residents of a threatened valley the exact height and time of arrival of a coming flood.

SOME RESULTS OF WORK IN MARINE METEOROLOGY

Further noteworthy improvement in accuracy of ships' meteorological instruments and reports was brought about during the year as a result of a program for critical review of mail returns, attended by numerous inspections and tests of instruments. In many cases shipping companies generously provided replacements for instruments found inaccurate, and the faithful efforts of ships' officers observing and reporting weather at sea were thereby made more effective.

Special research was pursued during the year along two lines. Files of ocean-weather observations were in part reexamined from the point of view of the needs of overseas aviation. Water-temperature investigations were continued and broadened.

All available data for an immense area in the tropical Pacific were intensively studied, and definite advances in our knowledge of the climate and meteorology of this hitherto obscure ocean region were obtained. The knowledge will bear upon prospective development of trans-Pacific air routes to the Philippines and Australia. Much work in this field remains to be done.

In water-temperature research special attention was devoted to testing the hypothesis, held in some quarters, that the variations in sea-surface temperatures along the Gulf Stream and at its origins in the Caribbean Sea can be made a practical basis for forecasting the weather of succeeding months over the eastern part of the United States. Mathematical correlation methods rigorously applied to this problem have so far brought mostly negative conclusions.

However, these studies are gradually laying a foundation for approach to the question whether, over longer periods of time running to several years or more in length, there may not be found cycles of sea-surface temperature variation of relatively small size but perhaps important as an influence upon some of the long-term aspects of our weather history, such as the drought of 1934. This is an ultimate objective of the water-temperature researches, which are being continued.

THE FIRE-WEATHER SERVICE

The fire-weather service, to which previous reference has been made, is one of the relatively small, but highly important activities of the Weather Bureau. It is conducted as an aid to fire-protection forces in the forestry services of the country. The problem of controlling forest fires is a difficult one involving heavy expenditure of time and money and at times requiring the services of large forces of men. The efficiency of fire control is largely dependent upon forestry officials being prepared for emergencies as they arise in proportion to the seriousness of the fire hazard. Since weather, more than any other factor, is responsible for the degree of fire hazard, forecasts covering those weather elements of direct bearing upon the fire-control problem are invaluable to the protection forces.

The fire-weather forecasting service was first offered to forestry interests in the States on the Pacific coast. It received such a favorable response that it has since been extended to forested areas under protection in other sections of the country. At present, forecasts are provided during periods of fire hazard to Government, State, and private forestry agencies in California, Oregon, Washington, Idaho, Montana, Minnesota, Wisconsin, Michigan, the Adirondacks, the New England States, and the southern Appalachians.

The plan of operation is essentially the same in all fire-weather districts. Meteorological substations are maintained at numerous places within the forested areas, and reports from these stations are transmitted daily by telephone or telegraph during the seasons of hazard to the headquarters of the forecaster for each district, seven in number. These reports, in conjunction with the general weather map, are used as a basis for the formulation of specialized forecasts which are telegraphed or telephoned to fire-control officers of the district, or else are broadcast by radio on exact schedules.

In the California district there is an additional and special method of operation conducted in cooperation with the United States Forest Service. An automobile truck, fitted with office, meteorological, and radio equipment capable of sending and receiving messages, is utilized. This truck unit, accompanied by a forecaster and a radio operator, virtually comprising a forecasting office on wheels, proceeds to every large forest fire. Observations are received by radio, and forecasts and advices are issued to those in charge of the fire-fighting crews on the ground. This arrangement offers distinct advantages over the method employed in other districts in that the forecaster becomes an integral and active part of the protective system, issuing minutely localized and adapted warnings and advices for immediate use. Operation of this mobile unit has been so successful that its use in other districts is urged.

In addition to the forecasting work, each fire-weather forecaster cooperates with forestry agencies in the conduct of research work leading to the improvement of forecasts and contributing to knowledge of the relationship between weather conditions and the various degrees of fire hazard.

PART II.—GENERAL SUMMARY OF THE WEATHER CONDITIONS IN THE UNITED STATES DURING THE YEAR 1934, WITH FOUR CHARTS

REVIEW OF THE WEATHER CONDITIONS DURING 1934

The wide-spread severe drought during the crop-growing season of 1934 was the outstanding feature of the year's weather. It began in the Northwest early in the spring, spread rapidly, and by the end of May had become the most extensive drought in the climatological history of the United States. In general by that date nearly three-fourths of the country was experiencing droughty conditions, which were most severe in the Ohio, and central and upper Mississippi Valleys, the central and northern Great Plains, most Rocky Mountain sections, and the Great Basin. The drought is discussed in detail in the Report of the Chief of the Weather Bureau for the year 1933–34.

The year was abnormally warm nearly everywhere; only small areas in Michigan and North Carolina and portions of New Jersey, New York, and New England averaged cooler than normal. The average for the entire year was 54.8° F., giving a plus departure for the year of 2.5°. Precipitation was decidedly below normal; the deficiency for all States was 3.7 inches. State deficiencies were greatest in the Ohio Valley and the central Plains States, and ranged from 11.37 inches in Ohio to 0.04 inch in New Jersey; 14 States had deficiencies of more than 5 inches. Ten of the forty-two climatic sections were wetter than normal, with excesses ranging from 0.20 inch in Oregon to 5.29 inches in Maryland-Delaware.

More temperature records were broken in 1934 than in any previous year of Weather Bureau history. For example, every station in Iowa established new high records for May except Glenwood, where the previous record was equaled; on the 31st every station in that State had a maximum of 100° F. or above. At many points in the interior valleys and the Northwest the May averages were higher than the June normal, and most central States reported one or more hottest months of record during the year. A few minimum temperature records (mostly seasonal) were broken in 1934, and some unusually cold weather occurred in Florida on December 12 and 13.

Extremes for the year were well within the previous records of −66° (February 1933) and 134° (July 1913). The lowest reported was −52° at Stillwater, N. Y., on February 9, with −51° noted at Vanderbilt, Mich., on the same date. All but 7 States had minima of zero or below, and in 27 States the minima were −20° or lower. The highest maximum reported was 125° at Greenland Ranch, California, on several days in July; Quartsite, Ariz., had 124° on July 11. With the exception of Maine, New Hampshire, Vermont, and Rhode Island all States had maxima of 100° or higher; in 12 States they exceeded 115°.

The summer of 1934 was by far the hottest of climatological history in a large midwestern area; at many points the excess was nearly double that of the previous record. At Columbia, Mo., and Oklahoma City, Okla., the average July maximum was 100°, and at Topeka, Kans., and Fort Smith, Ark., 102°. From June to August, inclusive, Des Moines, Iowa, had 22 days with maximum temperature of 100° or higher; Columbia, Mo., 34; Topeka, Kans., 47; Oklahoma City, Okla., 47, and Fort Smith, Ark., 53 days. The accumulated departures for the year at several outstanding stations were: Amarillo, Tex., 1,860°; Sheridan, Wyo., 1,983°; North Platte, Nebr., 2,099°; Miles City, Mont., 2,068°; Huron, S. Dak., 2,042°; and Pocatello, Idaho, 2,168°. Despite the hot weather of the summer 13 States had minima of 32° or lower in July and 20 States had such minima in August.

For the United States as a whole every month was warmer than normal, with the largest departures in January, May, and November. In January all sections were abnormally warm, with departures ranging from 1.4° in New England, to 11.7° over the northern slope (Montana, Wyoming, and western South Dakota and Nebraska). July and November were also above normal in all sections, but the departures were smaller. September was the nearest to normal, with a departure of only 0.1°. The largest negative departures occurred in February, mostly to east of the Mississippi River, and ranged from only 0.1° in the Florida Peninsula to 11.4° in the lower Lake region. Extreme variability in temperature during the year is shown by the fact that North Dakota had a plus departure of 11.3° for February. When sections, rather than stations, are considered, only New England was cooler than normal for the year, and 7 months in that section were abnormally warm.

Only 2 months, September and November, averaged above normal in precipitation for the entire United States; November was the relatively wettest month, with an excess of 0.8 inch. No month had above-normal precipitation in North Dakota. The largest annual deficiency, over 9 inches, occurred in the lower Lake region.

The spring of 1934 was the driest of record in the Dakotas, Minnesota, Nebraska, Iowa, and Illinois, and the second driest of record in Ohio, Indiana, Wisconsin, Missouri, and Kansas. The previous low records for this period were 40 to 70 percent greater than the 1934 totals. Rains in June, the first part of August, and early in September, with the cooler weather of the latter half of August, relieved droughty conditions, at least temporarily, over considerable areas.

During the year 1,106 stations reported at least 1 month with no precipitation, and 76 had months with totals of less than 0.01 inch. The greatest monthly total was 35.06 inches at Wynooche Oxbow, Wash., in January. This total was considerably exceeded at some stations in Alaska and Hawaii; Puohakamoa No. 2, Hawaii, measured 52 inches in April. Snowfall was variable in 1934, and was reported as far south as Georgia in April. California, Colorado, and Nevada had the least of record in March, and Maryland-Delaware had twice the normal that month. The total for April in California was only 3 percent of the normal. Three States had light snow in August; California had the heaviest September fall since 1901 over the northern and central Sierra Nevadas. September snows in Montana interrupted traffic and in some areas remained on the ground for nearly a week. New December records were established in portions of Minnesota and Ohio, and light snow fell in portions of Florida in December.

JANUARY

Except for extreme northern New York, northern Vermont and New Hampshire, and central and northern Maine, the month was decidedly warmer than normal. Precipitation was much below normal for the country, as a whole, with only limited areas in the Northeast, Northwest, the upper Mississippi Valley and northern Plains States, Oklahoma, southern California, the west Gulf area, and southeastern Florida having normal or above. In portions of Texas, however, monthly totals were three times the January average.

Zero weather during the month reached from southern New England southward over the Appalachian region to eastern Tennessee and western North Carolina, and was also reported in Ohio, Illinois, Indiana, Iowa, Nebraska, South Dakota, Montana, and to northward of these States. The relatively warmest weather, 16° above normal, occurred in the Dakotas. Much of the Plains States, the northern Rocky Mountain region, and the northern Plateau averaged 12° above, while more than half the country was 6° to 8° warmer than normal. Deficiencies in temperature seldom amounted to as much as 2°. At Boise, Idaho, Helena, Mont., Portland, Oreg., Sheridan and Yellowstone Park, Wyo., and some other stations it was the warmest January of record, while several other stations experienced the second warmest of record.

The first 2 days of the month were cold in central and northeastern sections of the country, but not so cold as the closing days of 1933. Elsewhere temperatures were normal or considerably above. The week ended January 9 was subnormal only in the Southwest from the Rio Grande Valley northward to Kansas, and was especially warm from the Mississippi Valley eastward. Minima of −12° were reported in North Dakota and Minnesota.

The early part of the following week brought cold weather to the Southeast; frost was reported in the southern interior of Florida on the 11th. Over most of the country the week averaged above normal; zero temperatures occurred at a few extreme northern stations. The week ended the 23d brought marked temperature variations; portions of the northern Rocky Mountain and Great Plains regions were 18° to 20° above normal, while in northern New York and in northern New England some stations were as much as 10° subnormal; at Canton, N. Y., the minimum for this week was −18°. Portions of central California were slightly cooler than normal.

During the last week a fast-moving cold wave spread eastward and southward from the Northwest to the Atlantic, attended by temperature drops of 20° to 50°. On the 30th zero temperatures had extended southward to Asheville, N. C., Cincinnati, Ohio, Indianapolis, Ind., Springfield, Ill., and Des Moines, Iowa. At Atlanta, Ga., the minimum was 6°. The coldest for the month, −46°, occurred at Big Falls, Minn., on the 29th. Temperatures moderated in the Northwest near the close of the week, and elsewhere the first few days had been unusually warm, so that, despite the cold just mentioned, only one station, Burlington, Vt., averaged below the weekly normal.

In some of the areas mentioned above, where precipitation exceeded the normal, the monthly totals were large; Wynooche Oxbow, Oreg., had 35.06 inches. In Texas, where limited areas had 300 percent of the normal, the greatest total was 12.45 inches at Bronson; Port Arthur noted the wettest January of record and Houston the wettest since 1891.

During the period ended January 9, light to moderate precipitation was rather general over the eastern half of the country. In portions of the Ohio Valley and Tennessee, the Gulf States. and along the Atlantic coast amounts were locally heavy. Moderately heavy falls also occurred in Arkansas, southern Missouri, and eastern Oklahoma and Texas. The following week brought good rains to west Gulf areas, western Washington and Oregon, and rain or snow to portions of New England. Elsewhere amounts were mostly light, with many Missouri Valley and mountain region stations having none.

The Middle Atlantic States, the lower Mississippi Valley, the west Gulf area, and western Washington and Oregon had generous amounts during the week ended January 23. Aside from local showers, the remainder of the country had little rain; much of the Southwest reported none. Good rains occurred the last week from extreme southern Texas eastward to western Florida and locally in the extreme Northeast and extreme Northwest. Other sections had light precipitation, except that large areas in New Mexico, Wyoming, Oklahoma, and Kansas were dry.

January snowfall was mostly light, though some stations in New York, New England, and northern Michigan reported considerable amounts. On the 8th snow was reported as far south as Little Rock, Ark.; the 14th brought heavy falls to northern New York and northern New England. Portions of southern Tennessee and western North Carolina had snow during the month.

Sunshine percentages varied; Binghamton, N. Y., averaged 18 percent subnormal and Dubuque, Iowa, 7 percent below. Stations in the Southwest were generally normal or above—over the southern Plateau the average cloudiness was only 1.5 as compared with an average of 8.7 (out of a possible 10.0) for the north Pacific coast region.

Relative humidity ranged from an average of 44 percent over the middle slope to 87 percent for North Dakota. The lowest station average was 35 percent at Yuma, Ariz., and the highest 92 percent at Devils Lake, N. Dak.

FEBRUARY

February was decidedly cooler than normal in the eastern half of the country, and far warmer than normal from eastern Texas, central Missouri, western Illinois, and central Wisconsin westward. Departures from normal, both plus and minus, amounted to 12° to 16° over considerable areas. At least 14 northeastern stations had the coldest February of record, and a few western and northwestern stations the warmest of record. Precipitation was much below normal from the Ohio and central Mississippi Valleys northward and northeastward. Amounts were near normal or above on the Atlantic coast, and central California and a western area centering over Colorado had more than normal. The Southwest and far Northwest were dry, and most of the Southern States had less than normal.

The lowest temperature reported in the continental United States was −52° at Stillwater, N. Y.; at Vanderbilt, Mich., the minimum was −51°, both occurring on the 9th. Minima of −30° or lower occurred in Michigan, Minnesota, Nebraska, Vermont, New York, North Dakota, Pennsylvania, South Dakota, Wisconsin, and Wyoming. Two Alaskan stations reported minima of −70°. The highest temperature reported in the United States was 91° at Hebbronville, Tex., on the 15th; Brawley, Calif., had 90° on the 10th. In Puerto Rico, Bayamon had 92° on the 17th.

Temperatures the first week were 3° to 19° subnormal along the Atlantic coast and in east Gulf States and were generally from 1° to 15° below in the Ohio Valley and Tennessee and in the Lake region. Elsewhere the weather was abnormally warm; at Bismarck, N. Dak., the weekly departure was +25°. The following week brought continued cold weather in more eastern sections, with larger negative departures noted along the Atlantic coast and in the Lake region. Washington, D. C., had −6° on the 9th, the coldest since 1912. Central and western districts were again warm. At Norfolk, Va., the week was 21° subnormal; at Havre, Mont., the excess was 27°.

The third week was practically a repetition of the second; the extremes of the weekly departures were −18° at Canton, N. Y., and +22° at several western stations. The fourth week averaged 4° to 14° subnormal in Atlantic coast sections and most Gulf States, and 8° to 18° subnormal in the Ohio Valley and Tennessee, the Lake region, and the upper Mississippi and Missouri Valleys. Except for portions of Montana, Wyoming, and Colorado, the mountain region and Pacific coast were warmer than normal.

Precipitation the first week was above normal at a few Atlantic coast stations and locally in the Gulf States and the Lake region. Many upper Mississippi and Missouri Valley and mountain region stations had only a trace or less. More substantial amounts occurred the following week in the Gulf States; elsewhere, except locally in the mountain region, the amounts were subnormal. During this week snow was reported as far south as northern Florida.

Gulf and Atlantic sections received substantial precipitation during the week ending February 20, and moderate precipitation occurred in some interior valley areas and in central and northern California; elsewhere the week was drier than normal. Precipitation was heavy in middle and north Atlantic districts, the Southeast, and some southern Pacific sections during the closing week, and moderate amounts occurred locally in portions of the central valleys and mountain region. In other sections the week brought little precipitation.

Snowfall was heavy from the middle and upper Mississippi Valleys eastward, but in the West amounts were generally less than normal. Many points in New England had several feet of snow, and during the latter part of the month 15 inches or more were reported as far south as Virginia and West Virginia. On the 1st snow was general from the Ohio Valley eastward and northward; at Washington, D. C., the total for that day was considerably more than the February normal.

Sunshine was usually below normal along the Atlantic coast south of New England, and in the southern Great Plains, the southern Rocky Mountain region, and locally to westward; at Pueblo, Colo., the deficiency was 12 percent. Over northern and most central areas the sunshine excess was marked; a few Lake region stations established new February records; and at several points in the northern Plains and northern Plateau the excess amounted to 15 percent or more.

Relative humidity varied from an average of 81 percent for North Dakota to 50 percent over the southern Plateau (portions of west Texas, New Mexico, Arizona, and southern California). At El Paso, Tex., the monthly average was 35 percent; at Lansing, Mich., 89 percent, and at Devils Lake, N. Dak., 90 percent.

MARCH

Except for southern Florida, all sections to the eastward of a line drawn from central Minnesota and northwestern Iowa to western Texas were colder than normal; to westward temperatures were higher than normal, with some stations in Oregon, Nevada, Idaho, California, and Arizona reporting the warmest March of record. Precipitation was irregularly distributed, with the Atlantic area, most of the South, and the States from Montana westward having more than normal; elsewhere amounts were mostly light.

Freezing weather occurred during the month as far south as northern Florida, southern Louisiana, and southern Texas, and was general in the West, except for portions of Washington, Oregon, California, and Arizona. Zero weather was reported in the Appalachian region, in portions of New York and New England, the Lake region, locally in Missouri, Illinois, and Iowa, and in Wisconsin, Minnesota, the Dakotas, Nebraska, Colorado, Idaho, Montana, and Wyoming. At most western stations the lowest temperatures occurred early in the month; the lowest reported was −30° at Long Lake, Wis., on the 18th. Nine States had temperatures of 90° or above; the highest maximum reported was 104° at Brawley, Calif., on the 15th.

The abnormally cold weather in most eastern sections at the end of February was followed by a return to warmer about the first of March, and the first few days of the month averaged exactly normal for the Atlantic coast, 2° subnormal in the Ohio Valley and Tennessee, and 3° subnormal in the Gulf States. In most other sections the week was warm, some stations noting an excess of 20° or more. The following week was unusually cold nearly everywhere except for a few points in the Missouri Valley, in the Mountain region, and along the Pacific coast, where temperatures were 14° to 16° above normal. The Ohio Valley and Tennessee averaged 10° subnormal, and most Atlantic, Great Lakes, and Gulf stations had negative departures of 3° to 9°. Temperature variations were more marked during the week ending March 20; most sections from the central Great Plains westward averaged 2° to 10° above normal, and some North Atlantic stations were warm, but elsewhere temperatures were 2° to 6° subnormal.

The week ended March 27 brought freezing weather southward to South Carolina, northern Arkansas, and central Texas. The relatively warmest weather, 3° to 9° above normal, occurred from the Rocky Mountains westward; portions of the east Gulf States were also above normal. Elsewhere it was cold, with large central and eastern areas averaging 6° to 12° subnormal, and zero weather reported locally in Nebraska and Wyoming and along the northern border. The closing days of the month were variable, with rather pronounced temperature alternations reported generally.

In 27 States precipitation was subnormal. The largest deficiency reported was 2.78 inches (in California), while Tennessee had the largest excess, 2.77 inches. Except for Texas, all the States which were effected by the 1934 spring and summer drought showed deficiencies, and there were some reports of insufficient water for stock and irrigation.

The greatest monthly total, 16.58 inches, was at Wynoochee Oxbow, Wash.; 83 stations had no rain during the month, and at Fresno, Calif., and several other stations the total was only a trace. Fresno had the driest March in 57 years.

The week ended March 6 brought heavy rains to the Southern States and moderate amounts to the Northeast, but the West, except for the Northwest, was dry. Precipitation the following week was moderate to heavy in Kentucky, Tennessee, West Virginia, and in the Atlantic States from South Carolina northward. Elsewhere amounts were mostly small, with Arizona, Nevada, and large areas in Washington, Oregon, California, Utah, Colorado, New Mexico, and Texas having none.

Substantial precipitation occurred during the week ended March 20 in most districts from the Mississippi Valley eastward and locally in the Rocky Mountain region. Much of the West, however, had no rain. Moderate to heavy and locally excessive amounts were reported the following week from central Texas to western Virginia and from the lower Lake region southward to the central Gulf coast. Scattered western areas had another dry week. The closing days of March were dry in the west Gulf States and the Southwest; light showers occurred in most central areas, with a few reports of heavy precipitation in scattered eastern, northern, and northwestern districts.

Snowfall was variable, ranging from the least of record for March in California, Colorado, and Nevada to 170 percent of normal in Virginia, and more than twice the normal in Maryland and Delaware. Ohio had the most snow since 1912 and Indiana the most since 1924. At some California mountain stations the monthly totals were only 3 percent of normal; Utah had less than 5 percent of the average for March.

Sunshine was generally above normal in western areas and locally above in northern and northeastern districts; at Eastport, Maine, the excess was 15 percent. At Atlantic City, N. J., the amount was 15 percent subnormal, and smaller deficiencies were reported in some central and southern districts.

Relative humidity averaged highest, 76 percent, in New England, the Florida Peninsula, and the upper Lake region, and lowest, 40 percent, over the southern Plateau. The highest station average reported was 90 percent at Eureka, Calif., and the lowest was 30 percent at Phoenix, Ariz.

APRIL

April was warmer than normal and decidedly dry. For the country, as a whole, the temperature excess was 2°, and the precipitation deficiency 0.74 inch. Seven States—Delaware, Maryland, Michigan, Minnesota, New Jersey, Ohio, and Wisconsin—had subnormal temperatures; the relatively coldest was Michigan, with a departure of −1.8°; the largest plus departure, 7.5°, was noted in Idaho. Only 12 States—Alabama, Florida, Georgia, the New England group, New Jersey, New York, and North Carolina—were wetter than normal; Florida and New England had the greatest excess, 1.30 inches, and Mississippi, with a departure of −2.43 inches, the largest deficiency. Indiana, Iowa, Kansas, Mississippi, Montana, Nebraska, the Dakotas, and Utah had less than half the normal.

Allakaket, Alaska, had a minimum of −28° on April 10, but the lowest observed in the United States was −11° at Foxpark, Wyo., on the 6th. The highest temperature recorded was 107° at Greenland Ranch, Calif., on the 11th and other dates. Minima of zero or below occurred in Colorado, Idaho, New Mexico, and Wyoming, and freezing or below was reported in every State except Louisiana. In six States—Arizona, California, Nevada, New Mexico, Texas, and Washington—maximum temperatures of 100° or higher occurred.

The greatest monthly precipitation reported was 52 inches, at Puohakamoa No. 2, Hawaii. Cheyenne, Okla., with a total of 14.30 inches, had the largest total in the continental United States. At 107 stations (78 of these in California) no precipitation fell, and at 13 stations the total was less than 0.01 inch.

At the beginning of the month temperatures in the Midwest and Northwest tended to below normal, but the East and South were warm. The week ended April 10 was warmer than normal generally; only five stations averaged subnormal and the largest deficiency was only 4°. The relatively warmest weather occurred in the Ohio Valley and Tennessee where excesses of 7° to 13° were common. The following week brought somewhat cooler weather to most sections east of the Rocky Mountains, but the West was abnormally warm.

The week ended the 24th averaged slightly above normal in the Northeast and locally in the west Gulf area; the West was warm, with large areas ranging from 6° to 15° above normal. The Ohio Valley and Tennessee, the upper Mississippi Valley, and portions of the Lake region were cool. The remainder of the month was cold in the East, except for southern Florida, and warm from the western Lake region and southern Great Plains westward. Deficiencies were largest, 2° to 9°, in Atlantic, Gulf, and Ohio Valley States, and excesses were largest, 2° to 10°, in the mountain regions.

The Northwest and a few central sections had precipitation at the beginning of the month. During the week ended April 10 amounts were generally subnormal, though heavy to locally excessive rains occurred in the Gulf States and moderate to heavy falls were reported in the Lake

region. The first part of the following week brought widespread rains to central and northern States east of the Mississippi River, and the close of the week was also showery, but most stations in the Ohio Valley and Tennessee and from the upper Mississippi Valley westward were drier than normal.

In the week ended April 24 moderate rains fell in the Northeast, the South Atlantic area, and most of the Gulf States; elsewhere amounts were usually light, with none reported over large central and western areas. The closing days of the month brought good rains to portions of Georgia, Alabama, Kentucky, Illinois, Missouri, Arkansas, and portions of the Pacific Northwest; elsewhere amounts were mostly light, and large areas in the Southwest and the Plains States had no rain.

Snowfall was mostly scanty, though New York had near normal, and some stations in upper Michigan had 15 inches or more. Some elevated stations in North Carolina had 1 to 4 inches, and flurries occurred southward to South Carolina and Georgia. Oklahoma and Texas had no snow; California had only 3 percent of the normal (a record low), and in Wyoming the mountain passes were open to traffic in April, nearly 6 weeks earlier than usual.

Sunshine was mostly excessive, with only a few stations having less than normal. The largest deficiency centered in the Lake region where Green Bay, Wis., was 20 percent subnormal. Record percentages occurred in Idaho, South Dakota, Iowa, Nebraska, and Missouri, with excesses ranging from 10 to 20 percent.

Relative humidity averaged generally near normal, except in a large central area where percentages were unusually low. In some sections new records were set, and several Iowa and Nebraska stations had deficiencies exceeding 14 percent. The highest sectional average was 74 percent in New England, the Florida Peninsula, and the north Pacific coast region; the lowest was 37 percent over the middle Plateau. The Missouri Valley average, 49 percent, was 11 percent below the 1933 figure.

Noteworthy features of the month were the numerous dust storms at many northern, central, and western stations, during some of which visibility was reduced to less than 50 feet, and the minor earthquakes at Burlington, Vt., on the 14th at 9:58 p. m. (this one was also felt at Canton, N. Y.), and in Choctaw County, Okla., on the 11th at 7:30 p.m.

At the close of the month many stations reported subsoil moisture decidedly deficient; wells were drying up and lakes and springs were unusually low. Several stations reported the lowest river stages of record for April.

MAY

May was hot and dry. For the United States, as a whole, the temperature excess was 4.1°, and only four States—Georgia, Louisiana, and the Carolinas—were cooler than normal; South Carolina had the largest deficiency, −1.9°. Excesses ranged from 0.1° in Florida to 12.8° in South Dakota, where it was the warmest May of record by a wide margin. The precipitation deficiency for the entire United States was −.95 inch. Thirteen States—Arizona, Connecticut, Delaware, Florida, Georgia, Louisiana, Maryland, Massachusetts, New Jersey, New Mexico, the Carolinas, and Virginia—were above normal; the largest excess was 2.76 inches in Florida and the smallest was 0.03 inch in New Mexico. The greatest monthly precipitation total was 20.94 inches at Homestead, Fla.; the least was none at 90 stations, while six stations had only a trace. Snowfall was decidedly subnormal and most States had none.

Maxima of 100° or above were reported in 29 States, with 115° noted at Blythe, Calif., on the 11th, and at four stations in Arizona on the 10th and at two on the 11th. Thirty States had minima of 32° or below; the lowest minimum, 6°, occurred at Dome Lake, Wyo., on the 13th. In Iowa, one of the several States where previous May heat and drought records were broken, it was the hottest and driest May in 62 years; all stations in the State but one had record-breaking temperatures, and on the 31st the maxima at every station was 100° or higher.

The first week averaged above normal generally, ranging from exactly normal at a few Gulf stations to as much as 18° above in the upper Mississippi and Missouri Valleys. The week ended May 15 brought cooler weather to many northern and eastern sections, with a few reports of damage by heavy frosts and freezing temperatures of the 12th and 13th, but for the country, as a whole, it averaged above normal.

The following week was abnormally warm in the central valleys, the Great Plains, and the Northwest, though the close of the week was marked by much cooler weather over the interior and the Northwest. Frosts occurred in New England, Minnesota, and some other States, with little or no damage resulting; the week, as a whole, was warmer than normal. The week ended May 29 continued abnormally warm in the Northwest, where a large area averaged 15° above normal. Except for portions of the near Southwest, and from upper Michigan and central Texas eastward, excesses were 3° to 12°. Generally to east of the Mississippi River it was a cool week, with a large area centered over the Appalachians noting averages of 6° subnormal; frost,

mostly light, was reported in New England, New York, West Virginia, Ohio, Indiana, Illinois, Michigan, and westward in Wisconsin and Minnesota. The closing days of the month averaged somewhat above normal, especially in the more western areas.

Moderate to locally heavy rains occurred the first week in the lower Mississippi and Missouri Valleys, at some Atlantic coast stations (at Hatteras, N. C., the weekly total was nearly 8 inches), and in the far Northwest, but most of the country was decidedly dry. The second week was drier than the first, except locally along the Atlantic and Pacific coasts, in the Gulf States, and at a few points in the mountain regions. The following week brought good rains to much of the Atlantic coast from North Carolina southward and light to moderate rains to portions of the lower Mississippi Valley and Lake regions, but elsewhere amounts were small, with approximately one third of the country having none. Precipitation during the week ended May 29 was again moderate to locally heavy along the Atlantic and Gulf coasts, and locally in central Texas, Oklahoma, Arkansas, and Louisiana. Elsewhere amounts were mostly light, and large areas had a rainless week. The closing days were generally dry.

Sunshine was decidedly above normal; many stations reported more days with 100 percent of the possible amount than in any previous May, and new high records were set in most western, central, and northern sections. South Dakota averaged 20 percent and Iowa 22 percent above normal. In the Southeast cloudiness predominated, and Georgia had less than normal sunshine.

Relative humidity was largely subnormal, especially in the drought area; New England, as a whole averaged 7 percent below, and record low averages were reported at Milwaukee, Wis., and Peoria, Ill.; at Minneapolis, Minn., the deficiency was nearly 25 percent.

Complaints of excessive temperature and lack of adequate precipitation were more numerous than in preceding months, and "At the end of May the most extensive drought in the climatological history of the United States had developed in the interior and in the Northwest and Western States." [1]

JUNE

June was hot, and, though precipitation was more abundant than in the preceding month, was drier than normal. Maxima of 100° occurred in all States except Maine, New Hampshire, Vermont, and Rhode Island, and 27 States had subnormal rainfall. For the country as a whole the precipitation deficiency was 0.16 inch, as compared with 0.95 inch in May. Light snows were reported in elevated regions of Wyoming and Nevada.

The highest temperature reported during the month was 122° at Greenland Ranch, Calif. Seven other States—Arizona, Iowa, Kansas, Nevada, New Mexico, Oklahoma, and Texas—had maxima of 110° or higher. Only four States—Arizona, California, Nevada, and Utah—averaged cooler than normal; in Arizona the deficiency was −4.3°. The relatively warmest weather occurred in the central areas, with Iowa noting a temperature excess of 7.6° for the month. For the entire United States the temperature excess was 2.8°, while for May it was 4.1°.

Among the stations setting new maximum temperature records for June were Charles City, Des Moines, and Dubuque, Iowa; Chicago, Springfield, and Peoria, Ill.; St. Louis, Mo.; Erie, and Harrisburg, Pa.; Fort Wayne, Ind.; Minneapolis, Minn.; Milwaukee, Wis., and Miami, Fla. At many stations in the Southwest, the Great Plains, and the central valleys, and at a few to eastward, it was the warmest June of record, and at some stations the warmest month since the beginning of observations. At most central and western stations the maxima occurred during the last decade; to eastward they were somewhat earlier. Daily temperatures during the month were generally normal or above, especially in the drought areas. Several stations here reported no days with subnormal warmth, and elsewhere such days were generally few. Locally along the Atlantic coast and in the mountain regions the first decade was relatively cool, but elsewhere was decidedly warm, with weekly excess of 15° to 20°. Thereafter temperatures were generally above normal, with only a few scattered deficiencies reported.

While most central and western areas were experiencing droughty conditions, some stations noted unusually heavy rains. At Tampa, Fla., the monthly total was 15.92 inches, a new record; nearly half of this, 7.81 inches, fell in 24 hours on the 12th–13th. Similarly, San Diego, Calif., with 0.47 inch, had the wettest June in that station's history. Rains were heavy in the Southeast during the first decade, and light to moderate showers occurred in many central valley areas, the Northwest and the Northeast, but much of the Southwest was dry. During the second decade amounts were again heavy in the Southeast, especially in Florida, and in portions of the Ohio Valley and the central Gulf area, and were light to moderately heavy over large areas in the Plains States, though dry weather continued in portions of the Southwest. In most areas precipitation the latter part of the month was subnormal.

The greatest monthly amount was 24.26 inches at St. Leo, Fla., and the least was none at 55 stations, 14 of which were in Arizona, 9 in California, 2 in Nevada, 4 in New Mexico, 1 in

[1] The 1934 Drought Situation to the End of May, Weekly Weather and Crop Bulletin, June 5, 1934.—J. B. Kincer.

Oregon, 24 in Texas, and 1 in Washington. At Loa, Utah, the total for the month was only a trace. As would be expected from the excessive temperature and deficiency of precipitation, sunshine was generally above normal and relative humidity subnormal. A few western and southeastern stations had deficient sunshine—at Los Angeles, Calif., the previous June low record was equaled, but elsewhere excesses ranged from 1 to 22 percent, and a new record was made at Charleston, S. C. Relative humidity varied from about normal to considerably below, especially in the drought areas, where some stations noted monthly deficiencies of 15 or 16 percent.

While June had much more precipitation than the preceding month, general rains were still badly needed at the close of the month over many central and western areas, especially from Missouri and Kansas southward.

JULY

July, with a temperature excess of 3.2°, was the hottest month of record in the United States. Over large areas precipitation was decidedly light, and several States reported the driest July ever known. "The severe and unprecedented drought over large northwestern, midwestern, and southwestern portions of the United States during the spring and early summer of 1934 remained largely unrelieved at the end of July. In fact, the extremely high temperatures and scanty rainfall greatly intensified unfavorable conditions in all sections between the Mississippi River and Rocky Mountains, except in some upper Mississippi Valley localities, principally northern Iowa and the southern portions of Wisconsin".[2]

With the exception of California and Washington, every State averaged warmer than normal. In California, the relatively coolest State, the departure was only −0.9°. Missouri, with an excess of 8.4°, and Kansas, with an excess of 8.3°, were the relatively warmest States, while Arkansas, Illinois, Indiana, Iowa, Ohio, Oklahoma, and South Dakota were all 5° or more above normal. It was the hottest month of record in Nebraska and Oklahoma, and the hottest July of record in Kansas, Ohio, and West Virginia. Many stations, especially in midwestern States, set new all-time maximum temperature records or equaled the previous highest. Among these were Concordia, Dodge City, Topeka, and Wichita, Kans., with 114°, 109.1°, 111°, and 109.2°, respectively; Lincoln, and Valentine, Nebr., 112°, and 110.4°; Detroit, Mich., 104.6°; Fort Wayne, Ind., 106°; Milwaukee, Wis., 104.8°, and St. Louis, Mo., 110°. In Kansas 50 of the 97 temperature stations set new absolute maximum records and 14 other stations equaled the previous record. At Topeka, the average maximum temperature was 102°, at Dodge City, 101°, and at Fort Smith, Ark., 102.1°. Topeka and Dodge City had 22 days on which the maximum temperature was 100° or higher, and Fort Smith had 25 such days.

The highest reported was 125° at Greenland Ranch, Calif., on the 12th; Quartzsite, Ariz., had a maximum of 124°. Twelve States noted temperatures of 115° or higher and in 26 States they were 110° or above. Minima of freezing or below occurred in Colorado, Idaho, Michigan, Montana, Nevada, New Mexico, North Dakota, Oregon, Utah, and Washington, and light frost damage was noted in North Dakota on the 6th. The lowest temperature reported was 23° at Pearl, Colo., on the 18th. Temperatures were highest in most central and midwestern sections from the 8th to about the 27th, with many stations averaging normal or above every day of the month. Generally to west of the Mississippi a few cooler-than-normal days occurred during the first and last decades, while to eastward, they were more common during the second and third decades.

Precipitation averaged above normal in portions of the far Northwest and locally in the Rocky Mountain and plateau regions, the lower Missouri and upper Mississippi Valleys, New York, the middle Atlantic coast, southern Florida, and the middle and west Gulf areas. At some Texas coast stations the monthly total was 300 percent of normal. In contrast, 261 stations had no rain during the month; these were in Arizona, California, Idaho, Kansas, Missouri, Nevada, New Mexico, Oklahoma, Oregon, Texas, and Washington and some stations in Colorado, Nebraska, and Utah had only a trace. In portions of the Gulf States and the Southwest precipitation occurred on only 1 or 2 days, chiefly in the first or last decade. Over the northern Plains and to westward the second and third decades brought the most rain; in central and eastern sections precipitation was fairly well distributed throughout the month, but amounts were usually small. As usual there were marked contrasts in local amounts; Reno, Nev., had only a trace for the month, and San Francisco, Calif., and Dallas, Tex., had 0.01 inch, while Meridian, Miss., had 6.14 inches in 11 hours and 20 minutes on the 6th, and Springfield, Ill., experienced the fourth wettest July of record.

Relative humidity was generally subnormal; in some Atlantic sections it averaged about normal, and in New England the deficiency was 3 percent. In central, southern, and western areas deficiencies were considerably larger, at some stations amounting to as much as 22 percent, and a few stations in the southern Great Plains set new low records.

[2] J. B. Kincer, Weekly Weather and Crop Bulletin, Aug. 7, 1934.

Sunshine was much above normal, with only a few stations noting deficiencies. The excesses ranged from 2 to 16 percent from the Ohio Valley eastward and from 1 to 17 percent from the Mississippi River to the Rockies; the far West had ample sunshine, one California station averaging 99 percent of the possible for the month.

AUGUST

August was 1.4° warmer than normal, but averaged more than 3° cooler than July; the average for the entire area was 74.2°. Precipitation averaged 2.95 inches, a deficiency of 0.21 inch; for the preceding month the deficiency was 0.70 inch. Thirty-two States reported temperature excesses, and two, Florida and West Virginia, were exactly normal. The relatively warmest State was Kansas, with an excess of 6.2°, followed by Oklahoma, with 5.8°. New Hampshire, with a deficiency of 3.5° for the month, was the coolest State. Seventeen States had more than normal precipitation; Alabama, with an excess of 1.48 inches, was the wettest State and reported the largest average, 6.01 inches; California, with an average of 0.11 inch, was 0.2 inch above normal. The largest deficiency, 1.58 inches, occurred in Kansas where the State average was only 1.32 inches. The largest monthly total was 19.90 inches at Swansboro, N. C.; the least was none at 143 stations, 103 of which were in California, 11 in Idaho, 8 in Montana, 5 in Nevada, 10 in Oregon, 3 in Texas, and 1 each in Louisiana, South Dakota, and Washington. Burlington, Kans., and Leeds (near), Utah, had only a trace.

Temperature averaged normal or above, except in portions of Minnesota, Wisconsin, Iowa, Michigan, Kentucky, West Virginia, and from Pennsylvania and Maryland-Delaware northeastward. Portions of New York and New England averaged 2° subnormal, and for the first time in 5 years Pennsylvania's absolute maximum for August was below 100°. A small area in Alabama, Georgia, and Florida was also slightly cooler than normal.

Generally the first half of the month was decidedly warm; but portions of the West and Northwest had the lowest temperatures during the first week, and Maryland-Delaware, New Jersey, and New England had cool spells each decade. Over the major portion of the country, however, especially in the interior, cooler weather was confined to the latter part of the month, notably the last decade. During this period Illinois averaged nearly 5° subnormal, and frost, light to killing, occurred in several North Central States, with thin ice reported in South Dakota on the 23d–25th.

Precipitation was below normal over an extensive northern area reaching from the Oregon coast to the Atlantic, in most Central States, except for portions of Nebraska, Oklahoma, eastern Iowa and Missouri, Illinois and Indiana, and in some east Gulf and Atlantic States. Elsewhere amounts were normal or above, with locally heavy falls in Oklahoma, the west Gulf area, and a few eastern sections.

In the Northwest most of the precipitation occurred during the first week. South Dakota and Utah are fairly representative of a large central and western area; in these States showers were fairly well distributed throughout the month, but amounts were decidedly subnormal. In more eastern areas the last two decades brought the most rain, while New England resembled the Western States in having a fairly uniform time distribution but subnormal amounts.

Over large central, southern, and western areas—notably in Texas, Nevada, and Minnesota—sunshine was above normal. Deficiencies were noted over much of California and in extensive eastern areas; New Jersey averaged 5 percent subnormal and in New England the deficiency was 6 percent.

Relative humidity was generally subnormal and many States had rather large deficiencies; New England was 5 percent subnormal.

Cooler weather of the closing decade and occasional substantial rains relieved droughty conditions, at least temporarily, in most of the Ohio Valley area and in portions of the Southwest, but many large central and western sections were suffering from continued lack of rain at the close of the month.

SEPTEMBER

September was 0.7° cooler than normal; the average for the entire area was 65.6°, while for August the average was 70.2°. Precipitation was above normal, with an average for all sections of 3.81 inches.

Temperatures during September averaged subnormal over a large central area reaching from Washington and the eastern Lake region southward to the central Gulf coast. The largest deficiencies, 4° to 6°, occurred in the Dakotas and portions of Minnesota, Iowa, Missouri, Kansas, Nebraska, Wyoming, Montana, and Washington. Other than in this central area the temperatures were somewhat above normal, with excesses of as much as 4° in portions of California, Texas, the southern Appalachian region, New York, and New England. Only 16 of the 42 climatological sections averaged warmer than normal; New York and New England, with plus

departures of 3°, were the relatively warmest areas. Several stations in these sections, among them Burlington and Northfield, Vt., and Canton, N. Y., had the warmest September of record. In other warmer-than-normal areas departures were usually small. The highest recorded temperature was 119° at Greenland Ranch, Calif., on the 4th; 12 other States had maxima exceeding 100°, and in 19 the maxima ranged from 95° to 99°. The lowest reported was −4° at Cut Bank, Mont., on the 25th, and in 25 States the minima were freezing or below.

The Atlantic coast was cool the first few days of the month and warmer thereafter. The Gulf States had the relatively warmest weather during the last decade. In the Ohio Valley and the Lake region most subnormal temperatures occurred during the first 10 days of the month, while the upper Mississippi and Missouri Valleys were mostly subnormal throughout September with the relatively coldest weather during the last decade. Some mountain-region stations had subnormal temperatures during the week ending September 11, and portions of Idaho, Montana, Nevada, Oregon, Washington, and Wyoming had unusually cold weather during the week ending the 25th, but elsewhere in the mountain region subnormal weather occurred mostly in the last decade. The Pacific coast was usually warmer than normal throughout the month.

Precipitation was generally above normal in a large interior section of the country reaching from the central Plains States eastward and in portions of the northern Plains States, the Northwest, southern California, southern Texas, and southern Florida. In some Missouri, Mississippi, and Ohio River Valley areas the totals were twice the normal, and some Atlantic stations received unusually large amounts. Twenty-four of the forty-two sections had above-normal precipitation, and in some instances the departures were large. Maryland-Delaware, with an average of 9.33 inches, was 6.10 inches above normal; New Jersey had an excess of 5.44 inches and Virginia 3.75 inches. In nine other sections the excess was more than 2 inches.

Good rains occurred during the first decade in the upper Mississippi and Missouri Valleys and along the Atlantic coast; also, during the second decade in many central and eastern sections, notably along the Atlantic coast and in the Gulf States and some western areas, and during the last decade in the upper Mississippi Valley, portions of the Missouri Valley, the Ohio Valley and Tennessee, and in some Gulf and Atlantic districts. Unusually heavy snows occurred during the last decade in some Northern and Western States, with new September records set in portions of North Dakota and Montana.

The largest monthly total reported was 17.45 inches at Washington, D. C., the most ever recorded at that station in any month since records began in 1817. In Kansas, Missouri, Texas, Oklahoma, and other previously dry areas some heavy falls occurred. The least reported was none at 77 stations in Arizona, California, Idaho, Nevada, New Mexico, Oregon, Texas, and Utah. Auldhurst, Colo., had only a trace during the month.

Relative humidity was generally near normal in most central areas, normal or somewhat below in more western districts, and above normal in the East, with some stations noting unusually high averages. Sunshine percentages were considerably above normal at some western stations, near or slightly below at many central points, and decidedly subnormal in the East, especially along the Atlantic coast. New low records were set in portions of North Carolina and to northward; at Binghamton, N. Y., the deficiency was 17 percent.

OCTOBER

October, with an average temperature of 57.5°, was 2.3° warmer than normal; precipitation was subnormal, averaging for all States 1.87 inches, a deficiency of 0.50 inch. Sections to east of a line drawn from eastern Ohio through western Virginia and central North Carolina to the Atlantic coast were colder than normal, with some New England areas noting deficiencies of as much as 4°. Elsewhere the month was from 2° to 8° above normal, with the largest excess noted in northwest Texas. Above-normal precipitation occurred in most of the east Gulf area, locally in Texas, New York, and Massachusetts, and in portions of the Lake region, the northern Plains, most of the Northwest, the Great Basin, and the Pacific coast. Some east Gulf sections had over 400 percent of normal, and portions of southern California, Nevada, Wisconsin, and Minnesota had double the normal.

Eight of the climatological sections had subnormal temperatures; South Carolina was exactly normal, and 33 were above normal. Nebraska, with a plus departure of 6.1°, was the relatively warmest State; eight States had positive departures of 5° or more, and in Wyoming, Nebraska, Colorado, and New Mexico it was the warmest October of record. The highest temperature recorded was 112° at El Centro, Calif., on the 1st; Arizona, Nevada, New Mexico, and Texas also had maxima above 100°. The lowest minimum recorded was −2° at South Pass City, Wyo., on the 24th; Florida and Louisiana were the only States not experiencing freezing temperature. New maximum temperature records were made at Roswell, N. Mex., Roseburg, Oreg., 25 Washington stations, and 12 Wyoming stations, while Block Island, R. I., had the coldest October since 1907. The growing season lasted well into the month, with killing

frost generally occurring much later than usual. In South Carolina, however, except on the coast, heavy to killing frosts were 2 weeks ahead of the average date.

Generally, the first half of the month averaged warm in most northern and western sections; minima occurred early in the first decade or late in the month. Central sections, notably Kansas, Missouri, Illinois, Iowa, and Minnesota, were above normal until the 26th or 28th; the Gulf States had their lowest temperatures during the last 3 to 6 days of the month, with the warmest weather occurring late in the second decade or early in the third. Farther east the subnormal days were more frequent, and New England had only about 6 days with above-normal warmth, mostly about the middle of the month.

Precipitation was subnormal in 32 sections and above normal in 10; the largest excess, 3.66 inches, occurred in Alabama. Deficiencies ranged from 0.03 inch in Mississippi and North Dakota to 2.34 inches in Texas; Colorado had the driest October of record, with only 8 percent of the normal, while Arizona had 12 percent of normal. At 4 stations in the United States the total precipitation for October was only a trace, and 146 had no rain at all during the month. Birmingham, Ala., had over four times the normal, while Keokuk, Iowa, had measurable precipitation on 3 days; Dubuque, Iowa, on 2 days; Indianapolis, Ind., on 1 day, and Shreveport, La., and Houston, Tex., had no measurable precipitation. Los Angeles, Calif., set a new 1-hour rainfall record, which was nearly three times the previous mark, and the 5.34 inches on the 19th–20th at Minneapolis, Minn., was a new October record for that station.

In most central and western areas the largest part of the monthly precipitation fell late in the second or early in the third decade, though several Midwestern and Western States had precipitation in each period. The east Gulf area received the most rain early in the month—in Alabama and Georgia before the 12th; the Ohio Valley and the Lake region had the most rain late in the month, while from West Virginia and Pennsylvania northeastward precipitation occurred each decade.

October was a sunshiny month in most sections; only a few deficiencies were reported, usually in California, Nevada, Idaho, and locally in the Dakotas and portions of the Atlantic coast. Excesses were general in the New England States, West Virginia, Virginia, Indiana, Illinois, Iowa, Wisconsin, Oklahoma, Texas, Arizona, Montana, Nebraska, Kansas, Maryland, and Delaware, and ranged from 1 or 2 percent to as much as 23 percent in portions of the Ohio Valley. Florida had nearly 100 percent the last 2 weeks and Missouri experienced unusually clear weather the first half of the month. Raleigh, N. C., had 20 days with 100 percent of sunshine. For the entire country relative humidity was somewhat subnormal, with most central and southwestern stations noting considerable deficiencies; in eastern sections deficiencies were usually smaller; southern California averaged about normal.

Snowfall was irregularly distributed; Texas had none, Colorado had the second lowest of record, Iowa and New Mexico noted only traces, Maryland and Delaware were exactly normal, western Pennsylvania had considerable snow, while New England averaged 1.4 inch above normal. In Oregon the month had less than September; Upper Michigan had some snow; Montana had two snowstorms during the second and third decades, confined mostly to the main range of the Rockies, with amounts of 12 to 20 inches. The Big Horn and Wind River Mountains of Wyoming received considerable, which melted rapidly. Utah had one-third the normal, West Virginia was slightly below normal, and South Dakota had no snow of consequence. Sandy Hook, N. J., had the first snow of record in October, and snow fell at Providence, R. I., for the second time in October in the climatological history of that station.

NOVEMBER

November was wetter and warmer than normal. The average temperature was 47.1°, an excess of 3.5°, and precipitation for the entire United States averaged 3.28 inches, or 0.98 inch more than the November normal. The highest temperature reported was 98° at Gila Bend, Ariz., Brawley, Calif., and Fort Stockton and San Marcos, Tex., and occurred early in the month; nine States had maxima of 90° or above. The lowest minimum was −27° at Elizabethtown, N. Mex.; 12 States had minima of zero or lower.

Except for Arizona and California, which averaged 0.2° subnormal and exactly normal, respectively, all sections were warmer than normal, with departures ranging from plus 0.7° in New Mexico to more than 6° in North Dakota; six States had excesses of 5° or more, and several stations in widely scattered sections reported the warmest November of record. In Illinois temperatures at the beginning of the second decade averaged about 25° above normal, and at Philadelphia, Pa., November 30 had a plus departure of 23°. In Minnesota it was the second November of record without a minimum temperature of zero or below. A number of records were broken in Montana, and in Wisconsin all temperature stations were warmer than normal. Atlantic City, N. J., had the warmest November in that station's history.

West of the Mississippi River most of the subnormal warmth occurred after the middle of the month, generally during the last week, though some northern Plains areas noted subnormal temperatures from the close of the first decade through the 18th of the month. Except in the far West, there were only a few cooler-than-normal days. In the eastern United States the warmest weather occurred mostly during the latter half of the month, though warm spells were general during the first 15 days in most Atlantic and Gulf coast sections, and some subnormal weather was noted during the last week in South Carolina, portions of New England, Maryland-Delaware, and locally in the Southeast.

Precipitation was subnormal in 13 of the 42 sections; Arizona, Florida, Georgia, Indiana, Kentucky, Montana, New England, New Jersey, New York, the Dakotas, Ohio, and Wyoming, with negative departures ranging from 0.01 inch in Arizona to 0.90 inch in Georgia; in only 4 sections was the departure greater than 0.50 inch. Elsewhere precipitation was above normal, with some sections noting excesses of more than 4 inches. In portions of western Michigan, most of Wisconsin, northwestern Illinois, southwestern Minnesota, most of Iowa, southeastern Nebraska, eastern Kansas, most of Missouri, northern Arkansas, and portions of northern Louisiana and eastern Texas the totals were from 2 to 6 times the normal, and many stations in this area had the wettest November of record. The Middle Atlantic States from North Carolina to Pennsylvania, and the Pacific coast area, also, had considerably more than normal. Thirty stations in eastern Ohio broke former precipitation records, and the 5.21 inches at Raleigh, N. C., on the 28th–29th, was a new November record for that station.

Despite the subnormal precipitation, New York, New England, and New Jersey had only a few rainless days. In the Southeast precipitation occurred in the first decade and again in the third; from the middle Mississippi Valley eastward the number of rainy days in each decade was greater, with the most noted after the 22d. In the central and southern Plains States rain fell each decade and was general at the middle and near the close of the month. The far West, except for California, had rain on most days; Washington reported a brief dry spell on the 9th–11th, and in Oregon the second week was relatively dry.

Snowfall varied in amount and distribution; a few Western States, notably Oregon, Utah, Wyoming, and Idaho, and some central-valley States had more than normal, but Montana had the least for 17 years, Oklahoma averaged only 0.2 inch, Michigan only one-third the normal, and from the lower Lake region and Ohio Valley and Tennessee eastward the monthly totals were small. Unusually heavy falls occurred late in the month in Minnesota, Iowa, and Missouri, and new records were made in western Missouri and northwestern Arkansas. In the latter State, Eureka Springs measured 11 inches, while some Wisconsin stations received over 2 feet of snow during the month.

Sunshine was above normal in portions of the northern Great Plains, in western New York, in Georgia, and locally elsewhere. In Tennessee the excess was 14 percent. Most of the Lake region, New York, New England, and several Central and nearly all Western States were considerably subnormal. Wisconsin was 11 percent below normal; Walla Walla, Wash., with a percentage of 15, equaled the previous low November record at that station. Michigan was decidedly below normal, with Sault Ste. Marie averaging only 6 percent of the total possible.

Relative humidity was generally normal or above, with excesses of 3 to 6 percent reported in New England and some central sections, and smaller departures elsewhere, except in the Southwest where slightly subnormal humidities were noted.

DECEMBER

December was nearly normal in temperature and had subnormal precipitation. The average temperature was 33.9°, or 0.2° subnormal, while precipitation averaged 2.07 inches, a deficiency of 0.53 inch.

The highest temperature recorded during the month was 91° at Mission, Tex., on the 29th, while Lake Placid, Fla., noted a maximum of 90° on several dates; elsewhere maxima ranged from 45° in Minnesota to 85° in Arizona. The lowest minimum temperature was −44° at two stations in North Dakota on the 26th; minima were zero or below in 31 of the 42 sections, and were below −20° in Colorado, Michigan, Minnesota, Montana, New Hampshire, New Mexico, New York, the Dakotas, Vermont, and Wisconsin.

Temperatures averaged above normal at most stations west of the ninety-fifth meridian and locally along the Atlantic coast, but the departures were seldom as much as 4°. In other sections the month averaged from 2° to 8° below normal, with the relatively coldest weather occurring in northern New York and Vermont.

In the Central and Western States the lowest temperatures occurred early in the month, usually during the first week or during the closing days, while the warmest weather was recorded around the 11th or between the 14th and 25th. In the East most cold weather occurred during the first 3 weeks, though some northern sections had their minima on the 27th, and in South

Carolina the lowest was reported on the 28th and 29th. The second week was marked by unusually cold weather in the Southeast. In Florida: "The freeze of December 12 and 13 was the most severe since 1928 over the western and northern divisions of the State, and the most severe and damaging since 1917 over the central and southern divisions. It was the first severe freeze ever recorded in Florida so early as the first half of December." [3]

Precipitation was above normal in Arizona, Idaho, Minnesota, Montana, New England, Oregon, Utah, and Washington, with excesses ranging from 0.02 inch to 0.73 inch. Deficiencies ranged from 0.01 inch in Wyoming to 1.80 inches in Kentucky. The greatest monthly fall reported was 30.09 inches at Mount Baker Lodge, Wash., and the least was none at 43 stations in Colorado, Florida, Kansas, New Mexico, North Dakota, and Texas. Five stations in Iowa, Oklahoma, South Dakota, and Wyoming had only a trace during the month. Washington, with an average of 6.20 inches, was the wettest State, while South Dakota, with 0.30 inch, was the driest. Drought conditions continued in some western sections, and Wyoming reported all storage reservoirs at the lowest stage of record.

Precipitation was decidedly irregular; some sections had only 1 or 2 general rains during the month, while others had light showers every 2 or 3 days. Rains were frequent in the Northwest, and in the Rocky Mountains and to westward fell mostly in the second and third decades. In most central areas rains were more frequent, but amounts were usually small. The Lake region and Ohio Valley had a good distribution throughout the month, while in eastern and northeastern sections the most rain fell during the three periods centering around the 1st, 18th, and 26th.

Snowfall was comparatively heavy in the northern Rockies and substantial falls were reported in portions of the northern Sierra Nevadas and the Cascades. Amounts in Washington were above normal, with 120 inches noted at Mount Baker Lodge, while in Oregon amounts ranged from a trace to 85 inches. Minnesota, Wisconsin, Michigan, New York, and the interior of New England had good snows; some northern Michigan stations received more than 4 feet. Snow was reported during the month as far south as central Florida; Tampa had a trace, the first since 1906. In the Southwest there was little snow, and New Jersey had the second least of record, but several Rocky Mountain States reported more snow on the ground and a higher water content than in December 1933.

Sunshine was mostly below normal, though portions of California, Colorado, western Kansas, Oklahoma, the Southwest, the Southeast, New England, and New Jersey had an excess. Deficiencies were greatest in the upper Mississippi Valley, most of Pennsylvania, and the Northwest, and ranged from 1 percent to more than 20 percent. New York State reported about 25 percent of the possible amount, while Omaha, Nebr., and Huron, S. Dak., had the second lowest of record for December; the latter station averaged only 10 percent for the month.

Relative humidity was variable; several large western areas were near normal and some central sections were above, while New England and Maryland-Delaware averaged 7 percent and 10 percent, respectively, subnormal.

TORNADOES, 1934

As customary in these reports from 1916 onward, the tornadoes of the year are individually described. A tabular style of presentation is used and the grouping by States again followed, with the several tornadoes of each State arranged chronologically. The information has been furnished chiefly by the section directors of the Bureau, and descriptions of many of the tornadoes have already been printed in the monthly section reports or in the Monthly Weather Review, while almost all of them were listed in the Review's table, Severe Local Storms. Owing to the receipt of additional information, some differences in details from the Review's description will be found in the table now printed; also a few additional tornadoes have been reported and some storms formerly classified as tornadoes are now thought to have been nontornadic and are omitted from the accompanying compilation. They are included, however, in the small table following to the extent of losses of life and property they caused.

GENERAL SYNOPSIS

During 1934 there were 147 tornadoes in 29 States; none occurred in Alaska, Hawaii, Puerto Rico, or the Virgin Islands. This is 113 less than the total for the preceding year and is the smallest number since 1931, when 94 such storms occurred, but is more than double the 1919 figure of 65 tornadoes.

About 50 percent of these storms occurred in the months of May, June, and July; during June, the month with the greatest number, there were 32 tornadoes, while in May of the preceding year there were 94 of these storms. Tornadoes were reported somewhere in the United

[3] W. J. Bennett, Weather Bureau office, Jacksonville, Fla.

States every month of the year, but December had only 1. The numbers for the other 10 months of 1934 were: January, 4; February, 12; March, 6; April, 10; May, 17; July, 24; August, 9; September, 10; October, 5; and November, 17. In November of the preceding year there was only 1 tornado.

The total loss of life through the 1934 tornadoes was 47, which is 11 greater than the 1931 figure and is the second lowest since 1916. There were over 5 times as many deaths from these storms in 1933, and in 1925 the number of fatalities was 794, or over 17 times the 1934 figure. Nearly 43 percent of the 1934 fatalities occurred in February, and 23 percent in October; these months, with May, accounted for nearly 83 percent of the total loss of life. Twenty deaths resulted from the February tornadoes; the other deaths, by months, due to the 1934 storms were: January, 1; May, 8; June, 3; October, 11; and November, 6. Six months, March, April, July, August, September, and December, had tornadoes, but no fatalities were reported. In most cases deaths were caused by flying debris, collapsing buildings, or falling trees, but there were a few instances where persons were pinned beneath vehicles overturned by the storms.

Property losses that were reported as a result of tornadoes (crop losses included) were probably much less than the true losses, for it is seldom feasible to secure estimates for all parts of a long track, and often no trustworthy reports can be obtained. Estimated losses amount to $4,424,950. This is about one-fourth the 1933 figure and is the fourth lowest since 1916; in 1923 tornado damage amounted to less than $3,000,000, and has been as high as $43,445,650 in a single year (1927). Minnesota, with a property loss of $929,000, was the State with the greatest tornado damage in 1934, and Missouri was second, with losses amounting to $905,000, while Georgia, with damages of $500,000, was third. In six other States, Kentucky, Alabama, Louisiana, Iowa, Texas, and Oklahoma, losses ranged from $117,200 (Alabama) to $448,950 (Iowa). The least amount of damage reported was $200 in South Carolina by the tornado of May 16 in Union County. In two States, North Carolina and North Dakota, estimates of damage were not obtained.

Several of the 1934 tornadoes were severe, but did not compare with those of May 1, 1933, in Louisiana (29 deaths; property losses of $1,450,000) nor with the Kentucky tornado of May 9, 1933, in which 34 lives were lost. The Alabama-Georgia storm of February 25 resulted in the death of 6 persons and caused property losses of $606,000. All the losses in Kentucky occurred on 1 day, October 31, when 2 tornadoes caused 6 fatalities and damage of $350,000, while the first 2 Mississippi tornadoes of the year, February 25, resulted in the loss of 12 lives. The Mississippi tornadoes are described in detail in the February 1934 Monthly Weather Review. The Missouri storm of October 23 caused 5 deaths and was the most destructive single storm of the year; the total damage was estimated at $900,000. Others of the 1934 tornadoes were unusual. For instance, the small tornado of April 19, in Florida, blew in the 30-ton door of a dirigible hangar; the Illinois no. 1 storm picked an automobile from the ground, hurled it a short distance through the air, and injured the three occupants; several funnel clouds were reported in the October 23 storm in Missouri; 6 tornado clouds were observed at the same time in the Kansas no. 13 storm, while the Montana storm of May 8 was heard and felt (to the extent of $50,000), but was not seen, as it occurred during a dense dust storm.

SYNOPSIS BY STATES

The list of States in which 1934 tornadoes occurred with fatal consequences, and the number of fatalities, is as follows: Alabama, 5; Arkansas, 2; Florida, 2; Georgia, 2; Iowa, 1; Kansas, 1; Kentucky, 6; Louisiana, 2; Minnesota, 1; Mississippi, 14; Missouri, 5; Oklahoma, 4; South Dakota, 1; and Texas, 1. Tornadoes occurred without loss of life in 15 other States, namely: California, Colorado, Illinois, Indiana, Maryland, Montana, Nebraska, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Wisconsin.

It will be noted that in several instances the tornadic character of a storm is given as somewhat doubtful, but in these cases the presence of marked rotary winds over a rather narrow area was taken as sufficient evidence to classify the storm as a tornado. There were 19 States in which no tornadoes were reported during 1934: Arizona, Connecticut, Delaware, Idaho, Maine, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming. Summarized geographically, only 2 States partially or wholly to the west of the one hundred and tenth meridian (California and Montana), and only 2 of those States partially or wholly to east of the seventy-fifth meridian (Pennsylvania and Rhode Island) experienced tornadoes during 1934, while with the exception of Delaware, Michigan, New Mexico, Virginia, and West Virginia, all States situated wholly between these two meridians were affected by such storms.

BOUNDARY-CROSSING TORNADOES

Four 1934 tornadoes definitely crossed State boundaries, and thus appear twice each in the table, where the count would appear to be 151 instead of the actual 147. (There is also a possibility that Illinois no. 3 is a continuation of Illinois no. 1, which would make the total for the year 146; as definite proof is lacking they were considered separate storms. Alabama no. 3 is said to have entered that State from Florida, but there is no record of a tornado in Florida on that date. Under the State names the length of path, deaths, and property losses are entered only for the portions within the respective State; but for convenience there are entered here the total length, deaths, and losses when such data are available. In the case of Alabama-Georgia tornado of February 1, complete data are lacking for Georgia, but it is thought the path was about 57 miles long; there were six deaths and property losses amounted to $606,000. The Arkansas-Oklahoma storm of November 20 covered a path of undetermined length, caused no fatalities, and did damage estimated at $20,000, while in the case of the Minnesota-South Dakota storm of June 19, no data are available for South Dakota. The other definite boundary-crossing tornado of the year, the Kansas-Oklahoma storm of May 4, covered a path 15 miles long, caused two deaths, and property damage of $39,800.

SPEED OF ADVANCE

There were hardly any instances when the time of passing of a tornado was so accurately reported from two or more places that the velocity of advance could be estimated satisfactorily. The Kansas storm of September 2 was said to have "traveled very slowly", while the Kansas-Oklahoma storm of May 4 moved at an estimated speed of 40 miles per hour, and a speed of approximately 35 miles per hour is indicated for the Nebraska storm of September 23.

SUMMARY FOR PAST YEARS

A detailed tornado summary for the 18-year period, 1916–33, is included in this report for the year 1933–34. The 19-year totals (1934 included) are 2,523 tornadoes, 5,167 fatalities, and property losses of $228,514,865.

ITEMS OF TABLE

Where two county names appear, the word "and" between them indicates that the tornado path began in the first named and was confined to those counties, unless it was one of the few tornadoes that crossed a State boundary, in which case merely the portion within the single State is indicated. The word "to" between names implies that three or more counties were in the path.

The direction of advance is entered usually to the nearest of eight chief compass points. If the tornado changed direction, the average direction is shown.

The length of path of a "not continuous" storm is not the length devastated but the entire distance from first havoc to last. The width of path, in case more than one width was reported, is the average as well as it can be computed.

When no deaths occurred, but it is known that injuries resulted, a reference and footnote are employed. The number of injuries is frequently known only indefinitely, as "several" or "some" (for either of which "several" is used) or "a few." In case there is a definite number of 2 to 4, reference to "a few" is entered, while 5 to 9 are shown as several.

Therefore 0 deaths without a reference indicates that not even injuries were reported.

Tornadoes of 1934, arranged by States

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Deaths	Property losses	Remarks
ALABAMA								
1. Feb. 25	Early afternoon	Chilton to Randolph	NE	*Miles* [1] 50	*Yards* 400	*Number* [1] 4	*Dollars* [1] 106,000	Continued into Georgia as Georgia no. 1; 40 persons injured; deaths and most damage in Clay County.
2. Feb. 25	4 p. m.	Bibb and Shelby	E	30	217	[2] 1	9,000	12 injured.
3. Feb. 25	10 p. m.	Geneva	NE	(3)	400	0	200	Occurred east of town of Geneva; may have entered from Florida.
4. Mar. 2	4 p. m.	Pickens	NE	2	100	[4] 0	2,000	
ARKANSAS								
1. June 10	8 p. m.	Washington	S	1½	(3)	0	13,000	
2. July 14	6 p. m.	Logan	E		(3)	0	4,000	
3. Nov. 20	3:20 a. m.	Desha	E	5		[5] 2	10,000	
4. Nov. 20	Night	Ashley	NE			0	5,000	
5. Nov. 20	Afternoon	Little River	NW	[1] 5	150	[1] 4 0	[1] 12,000	Continued into Oklahoma as Oklahoma no. 11.
6. Nov. 27	1:15 p. m.	Desha	NE		(3)	0	3,000	
CALIFORNIA								
1. Mar. 2	1:40 p. m.	Los Angeles	NNE	(7)	(4)	0	1,500	Waterspout passed inland.
COLORADO								
1. June 18	6 p. m.	Mesa	NE	(7)	(3)	0	(3)	
2. Aug. 18	P. m.	Washington				0	8,000	
FLORIDA								
1. Jan. 4	6:35 a. m.	Escambia				0	(3)	
2. Jan. 4	Noon	do			25	0	(3)	
3. Jan. 4	12:07–12:15 p.m.	do			116	1	30,000	
4. Feb. 26	5–6 a. m.	Alachua	NE		200	[6] 1	5,000	
5. Feb. 26	6:15 a. m.	Putnam	SE	1	117	0	12,500	
6. Feb. 26	6:30 a. m.	Saint Johns	NE		7	0	(3)	
7. Apr. 11		Palm Beach	SE		100	[4] 0	300	
8. Apr. 19		Dade			42	0	625	Funnel cloud observed; 30-ton door of dirigible hangar blown in.
9. May 31	2:30 p. m.	Madison		(7)	(4)	0	2,000	Tornado character somewhat doubtful.
10. Nov. 21	11:30 p. m.	Escambia	N	1	50	0	2,000	Do.
GEORGIA								
1. Feb. 25	Afternoon	Carroll	NE	[1] 7		[1] 2	[1] 500,000	2 tornadoes; continuation of Alabama no. 1.
2. Feb. 25	do	Henry	NE			0	(3)	
ILLINOIS								
1. Nov. 18	5:30 p. m.	do	NE	2	167	[4] 0	1,000	
2. Nov. 18		Rock Island	NE	1	50	0	3,000	
3. Nov. 18	6 p. m.	Lee	NE		267	0	15,000	May have been a continuation of Illinois no. 1.
INDIANA								
1. June 26	5–6 p. m.	Clay	SE	8	440	0	2,500	
2. July 24	5:30–6 p. m.	Marion	SE	7½	416	[6] 0	11,000	Most damage at ends of path.
Footnotes at end of each table.								
IOWA								
1. June 8	P. m.	Sacramento	NE	7	(4)	[4] 0	4,000	
2. June 19	do	Palo Alto				0	5,500	
3. June 20	2 a. m.	Cass and Adair	NE	10	(10)	[9] 1	300,000	3 funnel clouds reported.
4. June 26	12:30 a. m.	Cedar	NE	(7)	567	[6] 0	10,000	
5. July 4	4:30 p. m.	Tama	NE	(7)	(5)	0	500	
6. July 4	P. m.	Benton	NE	(7)	(5)	0	1,250	
7. July 4	do	Polk	NE	(7)	(5)	0	200	
8. July 5	3:30 p. m.	do	NE	(7)	(5)	0	2,500	
9. July 5	4 p. m.	Jasper	NE	30		0	32,000	
10. July 5	P. m.	Benton	NE	(7)	(5)	0	(3)	
11. July 10	2 a. m.	Chickasaw	SE	(7)		0	5,000	
12. July 10	do	Fayette and Clayton	SE	25		0	80,000	
13. Oct. 23	7:30 p. m.	Ida		(7)	(5)	[6] 0	8,000	
KANSAS								
1. Apr. 3	9 p. m.	Harper	S	2	33	0	1,000	Tornado character somewhat doubtful.
2. Apr. 9	5 p. m.	Jefferson and Leavenworth.	SE	3	100	0	(3)	
3. Apr. 30	7 p. m.	Rush	SE	1	440	[6] 0	1,500	
4. Apr. 30	7:30 p. m.	Lane		¼	50	[4] 0	500	
5. May 3	3 p. m.	Chautauqua	NE	10	50	0	1,000	
6. May 4	2:30 p. m.	Cowley	NE	1	(6)	0	500	Do.
7. May 4	4:30 p. m.	Montgomery	NE	[1] 5	1,320	[1] 9 1	[1] 4,800	Entered from Oklahoma; continuation of Oklahoma no. 5.
8. May 12	5:30 p. m.	Rooks	E	3	(5)	0	10,000	

Footnotes at end of table.

Tornadoes of 1934, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Deaths	Property losses	Remarks
KANSAS—contd.				*Miles*	*Yards*	*Number*	*Dollars*	
9. June 8	4:15 p. m.	Kiowa	NE.	20	33	0	3,000	Funnel cloud did not quite reach ground.
10. June 12	5:30 p. m.	Scott				0	5,800	
11. June 15	6 p. m.	Wichita	NE.	3	880	0	1,500	No details.
12. June 19	3:30 p. m.	do	NE.	(7)	(9)	0	(8)	Path not well defined.
13. June 19	5:45 p. m.	do		15		0	(8)	6 tornado clouds observed at same time; path not well defined.
14. July 25	1:15 p. m.	Osage	NE.	4	1,000	0	50	
15. July 25	3:30 p. m.	Johnson	NE.	10	300	0	(8)	Damaged buildings and telegraph poles.
16. Aug. 11	5:30 p. m.	do	E.	3	150	0	250	
17. Aug. 30	6 p. m.	Trego	SE.	8	300	[4]0	5,200	
18. Sept. 2	3:30–4 p. m.	Pratt	SE.	15	120	0	(8)	Touched ground only occasionally; traveled very slowly.
19. Sept. 23	6:30 p. m.	Thomas	NE.	9	440	0	2,725	
20. Nov. 17	8:18 p. m.	Sumner	NE.	3	200	[4]0	60,000	
KENTUCKY								
1. Oct. 31	3–7:30 p. m.	Hart to Pulaski (5 counties).		19	1,100	[1]6	350,000	2 tornadoes; 32 persons injured.
LOUISIANA								
1. Mar. 26	3:30 a. m.	Vernon	E.	¼	17	0	5,000	
2. Mar. 26	7 a. m.	Madison	N.	½	300	0	17,000	Tornado character somewhat doubtful.
3. Mar. 26	8:05–8:10 a. m.	Orleans	N.	4	50	[2]0	150,000	15 persons injured.
4. May 5	3 p. m.	Rapides	NE.	1	80	[2]2	8,000	2 tornadoes, paths about 2 miles apart.
5. Nov. 29	4 p. m.	West Baton Rouge	NE.	1	17	[2]0	1,200	
MARYLAND								
1. May 14	5–6 p. m.	Caroline	SE.	4	880	[4]0	5,000	
2. Aug. 2	10 a. m.	Anne Arundel	NW.	¼	17	[2]0	(11)	Waterspout also occurred.
3. Aug. 2	6 p. m.	Harford	NE.	1½	100	0	(8)	
4. Aug. 3	12:30 a. m.	Garrett	SE.		200	[4]0	3,000	
MINNESOTA								
1. June 4	2:15 p. m.	Mower		(3)	13	0	1,200	
2. June 7	8 p. m.	Redwood		(7)	(5)	0	10,000	Tornado character somewhat doubtful.
3. June 19	9–10 p. m.	11 counties		[1]100	(12)	[4]0	[1]898,000	Several tornadoes; entered from South Dakota.
4. June 25	3:45 p. m.	Hennepin	NE.	3	100	1	10,000	
5. June 25	4:30 p. m.	Winona		(7)	(5)	0	10,000	
MISSISSIPPI								
1. Feb. 25	2:35–2:50 p. m.	Lauderdale	NE.	10	250	6	30,000	[Described in February 1934, M. W. R.; 2 storms traversed
2. Feb. 25	2:55–3:20 p. m.	do	NE.	16	150	6	(11)	parallel courses; 20 persons injured.
3. May 5	5 p. m.	Franklin	NE.	5	1,320	[4]1	5,000	
4. Nov. 29	8:15 p. m.	Newton	NE.	(7)		[2]0	(11)	31 persons injured.
5. Nov. 29	P. m.	Hinds	NE.			[2]1	(11)	
6. Nov. 29	do	Jones	NE.	(7)		[2]0	(11)	
MISSOURI								
1. July 5		Nodaway				0	(11)	
2. July 31		Cole				[4]0	5,000	
3. Sept. 29	3:45 a. m.	Greene	NE.	(7)	100	0	500	Limited to 3 city blocks.
4. Oct. 23	5:15 p. m.	Nodaway		14	116	[2]5	900,000	20 injured, 12 seriously; several funnel clouds observed.
MONTANA								
1. Feb. 1		Teton		(7)	(5)	[6]0	2,000	Tornado character somewhat doubtful.
2. Apr. 30	3 p. m.	Jefferson	NE.	5	(10)	0	1,000	
3. May 8	6:30–8 p. m.	Sheridan			333	[2]0	50,000	Occurred during dust storm.
NEBRASKA								
1. May 12	4:30 p. m.	Gage		(7)	200	0	2,500	
2. June 7	11:20 a. m.	Antelope			833	0	2,000	
3. July 13	5:30 p. m.	Gage		6	880	0	8,000	
4. Aug. 16	8:35–9 p. m.	Lincoln			433	[5]0	20,000	
5. Sept. 23	6 p. m.	Sherman	NE.		(13)	[4]0	10,000	
6. Sept. 23	7:30–8 p. m.	Greeley	NE.		(13)	0	5,000	
7. Sept. 23	8 p. m.	Boone and Antelope	NE.	9	1,000	0	30,000	
NORTH CAROLINA								
1. July 20	P. m.	Wilson		(7)	(5)	0	(8)	Tornado character somewhat doubtful.
NORTH DAKOTA								
1. June 7	1:30 a. m.	McIntosh	ESE.			[2]0	(14)	Demolished C. C. C. Camp; 6 persons injured.

Footnotes at end of table.

Tornadoes of 1934, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Deaths	Property losses	Remarks
OHIO				*Miles*	*Yards*	*Number*	*Dollars*	
1. July 1	2:30 p. m.	Cuyahoga	ESE.	(7)	(8)	0	1,000	Described on p. 25, Ohio Climatological Data, 1934.
OKLAHOMA								
1. Apr. 3	6 p. m.	Major		5	200	[4] 0	5,000	
2. May 3	5:15 p. m.	Garvin		7	85	[9] 0	150,000	
3. May 4	2:30 p. m.	Washington				0	3,500	
4. May 4	3 p. m.	Tulsa		4	440	3	50,000	
5. May 4	3:30 p. m.	Nowata	NE.	[1] 10	880	[1] [2] 1	[1] 35,000	12 persons injured; continued into Kansas as Kansas no. 7.
6. May 4	P. m.	McCurtain		8	200	0	3,000	Damage chiefly to timber.
7. Aug. 12	4 p. m.	Grant		1	880	0	600	
8. Sept. 2	4:30 p. m.	Ellis		(7)	(8)	0	(13)	
9. Sept. 2	do	do	SE.	1	200	0	10,000	
10. Sept. 9	9:30 p. m.	Tillman	SE.		440	0	75,000	
11. Nov. 20	6 p. m.	McCurtain	NW.	(7)	430	[1] 4 0	[1] 8,000	Entered from Arkansas; continuation of Arkansas no. 5.
PENNSYLVANIA								
1. July 4	A. m.	Crawford		(7)	(8)	0	7,500	Tornado character somewhat doubtful.
RHODE ISLAND								
1. Dec. 1		Washington	NW.	¾	20	0	4,500	
SOUTH CAROLINA								
1. May 16	1 a. m.	Union		(7)	125	0	200	
SOUTH DAKOTA								
1. June 2		Fall River				0	(11)	
2. June 7	P. m.	Bon Homme				1	(11)	
3. June 8	do	Clark				0	5,000	4 tornadoes.
4. June 14		Yankton				0	(11)	
5. June 15		Fall River				0	(11)	
6. June 19	P. m.	Miner	E.			[1] 0	[1] [5]	Entered Minnesota as Minnesota no. 3; no details for South Dakota.
7. Aug. 13		Corson				0	(5)	
TENNESSEE								
1. June 17	5 p. m.	Davidson and Robertson	NW.		50	0	3,000	Occurred in sparsely-settled area.
2. July 22		Gibson	NE.	(7)	(8)	[4] 0	10,000	
TEXAS								
1. Jan. 3	3–4 p. m.	Jefferson	ESE.	¼	100	[4] 0	25,000	
2. Feb. 8		De Witt	SW.	¼	100	0	(11)	
3. Apr. 5	2:15 a. m.	Waller	SW.	¼	100	[6] 0	(11)	
4. Apr. 19	6:20 a. m.	Galveston	SE.	4	(10)	0	42,000	Path unusually wide.
5. July 24	5 p. m.	Freestone	SW.		200	[4] 0	15,000	
6. July 24	Night	Gonzales		20	300	0	2,250	
7. July 24	do	Williamson				0	(15)	
8. July 27	5 p. m.	Nacogdoches	E.	1½	880	0	300	
9. Sept. 9	5:30 p. m.	Ellis			200	0	(8)	Details lacking.
10. Nov. 2	Midnight	Jefferson	N.	6	33	0	75,000	
11. Nov. 3		Bexar		(7)	13	[4] 0	(11)	
12. Nov. 19	8 p. m.	Titus	NE.	3	75	[6] 1	4,000	
13. Nov. 20	A. m.	Tyler				0	(11)	6 buildings damaged.
WISCONSIN								
1. Mar. 17	2:45 a. m.	Dane	S.	(7)	40	0	1,300	Damage confined to 1 farm.
2. May 21	3 p. m.	Walworth		1½		0	10,000	
3. June 8	2:30 p. m.	Dodge		2	220	0	4,000	Details lacking.
4. June 20	5:45 p. m.	Green		3	330	0	10,000	Damage to farm buildings.
5. June 25	11:30 p. m.	Adams		1½	880	0	3,000	Tornado character somewhat doubtful.
6. June 30	3 p. m.	Waupaca				0	7,000	Do.
7. July 12	8 p. m.	Calumet and Manitowoc	E.			0	(17)	Cloud may not have reached ground.
8. Oct. 5		Polk		5	35	[4] 0	10,000	3 persons severely injured.

[1] Within this State.
[2] Injuries to 10 or more persons.
[3] Less than a mile.
[4] A few persons injured.
[5] Narrow.
[6] 1 person injured.
[7] Short.
[8] Slight damage.
[9] Several injured.
[10] Wide.
[11] Damage occurred—no estimate secured.
[12] 20 miles, within this State.
[13] 1 mile.
[14] Many thousand.
[15] Few hundred.
[16] Several thousand.
[17] None reported.

HAIL, 1934

Information about damaging hail has once more been collected, but no charts to indicate occurrence during the year are included in this report. The regular and cooperative stations have furnished practically all this information, which was assembled first by the officials in charge at the various section centers. Total hail losses for the year are estimated at over $11,390,405, which is probably too low, as in many cases the damage was described as "severe", "considerable", or as amounting to "many thousands of dollars."

Hail occurred somewhere in the United States every month of the year, but in January the amount of damage was negligible, and in March the total damage for the entire country was estimated at only $500; December had the third smallest property loss from hail, approximately $4,500. February brought noteworthy damage to only two States; in Texas the losses were placed at $6,000, while in Florida they were 10 times greater. Only one State, Louisiana, suffered appreciable loss in November; this was on the 20th, when a heavy hailstorm at Minden caused damage of $25,000 to skylights, roofs, and automobile tops between 3:30 and 4 p. m. Some of the stones were 4 inches in diameter. October had only moderate damage in 3 States; Illinois and Kentucky reported losses of $15,000, and Mississippi had "considerable" loss.

The other 6 months of the year had more frequent hailstorms, and damage was correspondingly greater, due in part to the condition of vegetation. July, with damage estimated at $2,521,820, was the month with greatest hail loss; May was second with $2,462,550, and June third with $2,290,750; figures for the other 3 months are August, $1,613,600; April, $123,000; and September, $112,146.

No damaging hail was reported in Nevada, New Jersey, or Utah, and no estimate of damage was received from Alabama, Arizona, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, North Dakota, Oregon, Pennsylvania, South Dakota, Vermont, Washington, and West Virginia. Alaska had hail in May, June, and July, with no damage reported; light hail fell at Hana, on the island of Maui, Hawaii, on December 1, and stones 1 centimeter in diameter were reported at the Mayaguez Experiment Station, Puerto Rico, on August 14.

Wisconsin, with total hail damage estimated at $2,368,000, had the greatest property loss in 1934; about $2,000,000 of this occurred on May 9 in seven counties. Iowa was second, with losses to crops reported by assessors amounting to $2,165,439, of which $465,385 occurred in one county. Several other States suffered serious damage, among them Montana, $938,500; Minnesota, $902,500; Illinois, $852,496; Kansas, $615,250; Arkansas, $546,200; and Michigan, $500,000. In nine other States, Florida, Georgia, Indiana, Missouri, New York, North Carolina, Oklahoma, Texas, and Virginia, losses exceeded $100,000, and ranged from $103,500 in Florida to $454,500 in Virginia. The Iowa figure is $1,022,660 smaller than that for the preceding year.

The size of the hailstones varied considerably, some being reported no larger than small peas, while the opposite extreme was probably the 4-inch stones reported in Louisiana. There were numerous accounts of stones the size of golf balls, which punctured roofs of houses, and Oklahoma reported stones the size of baseballs on May 4. In Wyoming sheep were killed by hail on June 15, and in Albany, Ga., people in a courtroom were cut by broken glass when hail shattered windows.

In most instances the areas covered by destructive hail were comparatively small—the outstanding exception being the series of storms in Wisconsin on May 9, which affected seven counties.

LOSSES FROM WINDSTORMS, 1934

For the nineteenth consecutive year statistics have been collected, chiefly through the field-service officials of the Bureau, of the losses of property and life resulting from all classes of severe winds except those that were considered to have been tornadoes. The accompanying table shows the results; the amounts presented are merely estimates, and frequently it was not feasible to make even a rough estimate, so that a reference is substituted. In nearly all instances where such references appear they stand for comparatively small losses.

Losses from windstorms, other than tornadoes, by months and sections, 1934

[Figures, except in last column, indicate dollars]

Section	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Number of lives lost
Alabama				(1)	500,000								[2] 500,000	2
Alaska											20,000	52,000	72,000	
Arizona			4,500	5,000	550		50						10,100	
Arkansas				6,000	2,500	239,000	[2] 40,250	20,500					[2] 308,250	
California							(1)						(1)	
Colorado			(1)			1,100				150		(1)	[2] 1,250	
Florida		18,000	1,500	(1)	2,000	(1)							[2] 21,500	
Georgia		(1)	5,000		(1)		(1)						[2] 5,000	
Hawaii														
Idaho					(1)		15,500						[2] 15,500	
Illinois	1,000				(1)	9,775	958,500	101,900	[2] 158	2,440	(1)		[2] 1,073,773	4
Indiana						37,500	(1)	7,000	(1)		(1)		[2] 44,500	2
Iowa					34,500	40,300	55,000						129,800	1
Kansas					51,250	10,200	1,500	25,900	16,400		(1)		[2] 105,250	
Kentucky						6,000	21,500			(1)			[2] 27,500	6
Louisiana			1,000	200,000		2,605,000	4,400	9,300			4,500		[2] 824,200	3
Maryland-Delaware						50,000						(1)	[2] 50,000	
Michigan	(1)	(1)	(1)	(1)	(1)		150,000	500,000				(1)	[2] 650,000	12
Minnesota	(1)			30,000	25,000	155,000	52,700	711,000					973,700	3
Mississippi				2,500	(1)	3,004,000					(1)	(1)	[2] 3,006,500	4
Missouri	(1)			(1)		53,500	10,000	42,000			3,000		[2] 108,500	
Montana	1,500			1,000	50,500	15,000	2,000				13,500	750	84,250	5
Nebraska						15,000	40,000	14,000					69,000	2
Nevada							3,000						3,000	
New England	(1)	(1)				(1)	(1)		(1)	(1)	2,000	(1)	[2] 2,000	[3] 4
New Jersey														
New Mexico				(1)		(1)	(1)		(1)		(1)		(1)	
New York		(1)		(1)	150,000	54,200	250,000						[2] 454,200	6
North Carolina	(1)		(1)		5,000								[2] 5,000	
North Dakota				(1)	(1)	(1)		(1)					(1)	2
Ohio	(1)			37,500		90,000	61,000	75,000		2,000			[2] 265,500	2
Oklahoma						5,750		(1)	11,500				[2] 17,250	1
Oregon								(1)		100,000			[2] 100,000	
Pennsylvania						58,500	(1)						[2] 58,500	3
Puerto Rico														
South Carolina		11,000			150,000	6,500	100	10,000			500		178,100	1
South Dakota	(1)					25,000	20,000			14,000			[2] 59,000	
Tennessee						(1)	(1)	(1)		(1)			(1)	
Texas					10,500	101,500	4,529,000						4,641,000	22
Utah														
Virginia				1,100		250				2,000			3,350	
Virgin Islands														
Washington			(1)		(1)				(1)	1,200,000			[2] 1,200,000	22
West Virginia						(1)	(1)						(1)	
Wisconsin				10,000	9,500	1,442,000	232,700	700,000		35,000	500		2,429,700	3
Wyoming														
Total	2,500	29,000	12,000	293,100	991,300	8,025,075	6,447,200	2,216,500	28,058	1,355,590	44,000	52,750	[2] 19,497,173	109

[1] Losses occurred; no estimate secured.
[2] Losses not readily estimated in addition to amount stated.
[3] "Several" deaths occurred in New England in December.

Deaths and fire losses caused by lightning, also havoc and loss of life caused by floods of streams, are omitted from the table, even though high winds were a feature of the electrical storm that caused the downpour. When hail or beating rain or both accompany the strong wind, or, in the colder months, sleet, glaze, or heavy snow, to aid in causing damage, an effort is made to estimate what share of the total loss was due to wind.

The number of deaths attributed to windstorms other than tornadoes in 1934 was 109, as compared with 156 in 1933. The total losses caused by these storms in 1934 was $19,497,173, or less than one-third the figure for the preceding year. Six States, Texas, Mississippi, Louisiana, Wisconsin, Washington, and Illinois, reported losses of more than a million dollars, with Texas having the largest total, $4,641,000; figures for the other States were, respectively, $3,006,500, $2,824,200, $2,429,700, $1,200,000, and $1,073,773. In 3 other States damage amounted to $500,000 or more.

June and July were the months of greatest property loss, most of which was caused by hurricanes. Eleven tropical disturbances were charted during the period from May to November, of which five were of known hurricane intensity. Damage in Louisiana and Mississippi from the June storm which passed inland over the Gulf coast exceeded $5,600,000, and July losses in Texas were more than $4,500,000. The total windstorm damage for June (tornadoes excluded) was over $8,000,000 and for July over $6,000,000; the 3 months of June, July, and August accounted for more than 85 percent of the yearly total. There were 22 deaths in Texas during the year, 19 of which occurred in July, and the State-wide storm of October 21 in Washington caused the death of 22 persons.

On December 26–27 one of the most severe windstorms in New England's history caused several deaths and severe damage in numerous sections. In the Washington storm of October 21 a maximum wind velocity of 87 miles per hour was recorded at North Head. This same storm was also felt in Oregon, but no estimate of damage was made. The force of the storm along the Oregon coast is shown by the fact that the light in the Tillamook Rock Lighthouse was put out for the first time in 50 years when 18 sections of the lens were smashed by the heavy seas. The light is 133 feet above mean high water.

The table below shows the deaths and property losses caused by windstorms other than tornadoes since 1916:

Year	Number of lives lost	Property damage	Year	Number of lives lost	Property damage
1916	65	$11,712,125	1927	64	$6,783,160
1917	25	1,400,550	1928	1,947	88,836,000
1918	79	7,602,200	1929	46	20,334,600
1919	344	28,170,760	1930	49	5,706,000
1920	42	4,735,400	1931	17	7,773,000
1921	65	13,174,650	1932	306	42,657,360
1922	133	5,055,800	1933	156	65,604,100
1923	68	5,261,800	1934	109	19,497,173
1924	78	13,545,750			
1925	88	11,612,380	Total	4,038	453,073,058
1926	357	93,610,250			

R. J. Martin, 1935.

Blank page retained for pagination

SUNSHINE, 1934

The following table gives for 161 stations the monthly amounts of sunshine and percentage of the possible, as derived from the automatic records made by an instrument designated the "thermometric recorder", illustrated in preceding volumes of this series.

This instrument does not record satisfactorily the duration of sunshine for about 1 hour after sunrise and for about 1 hour before sunset, and on this account it has been considered necessary to apply to the record for these hours what has been designated a "twilight correction." The amount of this correction is found by noting the comparative clearness of the sky during the time that elapses between the hour of sunrise and the moment the instrument begins to record and between the time the instrument ceases to act and the hour of sunset.

The average cloudiness of the whole sky is determined by numerous personal observations at all stations during the daytime, and is given in the column "Daylight" under "Cloudiness" in the tables of Part III.

Sunshine, 1934

Stations	January		February		March		April		May		June	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Albany, N. Y.	91	31	187	63	204	55	240	60	340	75	334	73
Albuquerque, N. Mex.	267	85	202	66	296	80	275	70	306	70	385	89
Alpena, Mich.	53	18	189	65	181	49	186	46	347	75	331	71
Amarillo, Tex.	249	79	182	60	238	64	274	70	302	70	345	79
Asheville, N. C.	177	57	168	55	192	52	201	51	283	65	267	61
Atlanta, Ga.	168	53	185	60	213	57	231	59	274	63	280	65
Atlantic City, N. J.	140	46	164	54	160	43	243	61	277	62	344	77
Augusta, Ga.	182	57	219	71	236	64	277	71	318	74	359	84
Austin, Tex.	151	47	177	57	258	69	233	60	320	76	339	80
Baker, Oreg.	128	45	151	52	254	69	296	73	353	77	335	72
Baltimore, Md.	167	55	186	62	187	50	252	63	301	68	336	75
Binghamton, N. Y.	52	18	159	54	147	40	178	44	271	60	248	54
Birmingham, Ala.	151	48	175	57	221	60	232	59	308	71	335	78
Bismarck, N. Dak.	129	46	197	68	196	53	285	70	329	70	286	60
Block Island, R. I.	152	51	168	56	226	61	269	67	296	66	282	62
Boise, Idaho	142	49	195	67	298	80	346	86	400	87	359	78
Boston, Mass.	118	40	183	62	237	64	278	69	311	69	287	63
Brownsville, Tex.	146	44	197	62	266	71	270	70	328	79	352	85
Buffalo, N. Y.	63	21	187	63	214	58	212	53	378	83	362	79
Burlington, Vt.	102	35	176	60	196	53	236	59	332	72	323	70
Canton, N. Y.	121	42	198	68	176	47	203	50	334	73	307	66
Cape Henry, Va.	167	54	155	51	180	48	257	65	273	62	359	82
Charles City, Iowa	101	34	177	60	208	56	247	61	365	80	349	76
Charleston, S. C.	190	60	203	66	221	59	278	71	303	70	358	83
Charlotte, N. C.	210	67	210	69	244	66	253	64	313	72	305	70
Chattanooga, Tenn.	154	49	208	68	204	55	254	65	324	75	300	69
Cheyenne, Wyo.	222	75	194	65	247	67	290	72	322	72	340	75
Chicago, Ill.	138	47	164	55	200	54	233	58	388	86	336	74
Cincinnati, Ohio	135	44	142	47	203	55	272	69	360	81	336	75
Cleveland, Ohio	92	31	147	50	208	56	236	59	375	83	371	81
Columbia, Mo.	182	60	223	74	239	64	319	80	391	88	366	82
Columbus, Ohio	130	43	165	55	179	48	234	59	362	81	344	77
Concordia, Kans.	172	57	223	74	241	65	319	80	344	77	352	79
Dallas, Tex.	173	54	167	54	260	70	271	69	344	80	408	95
Davenport, Iowa	125	42	172	58	216	58	266	66	375	83	368	81
Del Rio, Tex.	180	55	194	62	279	75	205	53	302	72	344	82
Denver, Colo.	220	73	144	48	218	59	271	68	287	64	345	77
Des Moines, Iowa	129	44	220	74	220	59	300	75	400	89	362	80
Detroit, Mich.	94	32	186	63	193	52	199	50	376	83	379	83
Devils Lake, N. Dak.	142	51	166	58	256	69	272	66	355	75	292	61
Dodge City, Kans.	256	84	198	66	259	70	296	75	344	78	365	82
Dubuque, Iowa	124	42	197	66	195	53	263	66	389	86	367	81
Duluth, Minn.	78	28	182	63	246	66	189	46	362	77	311	66
Eastport, Maine	125	44	182	62	243	66	246	61	302	66	285	61
Elkins, W. Va.	119	39	115	38	162	44	218	55	272	61	281	63
El Paso, Tex.	277	87	233	75	321	86	336	86	371	87	381	89
Erie, Pa.	64	22	192	65	174	47	230	57	380	84	380	83
Escanaba, Mich.	81	29	179	62	180	49	182	45	308	66	270	57
Eureka, Calif.	128	43	148	49	146	39	184	46	264	59	289	64
Evansville, Ind.	128	42	174	57	177	48	230	58	348	79	318	72
Fairbanks, Alaska	24	14	131	55	229	63	252	55	269	46	388	60
Fort Smith, Ark.	134	43	148	48	210	57	253	65	288	66	367	85
Fort Wayne, Ind.	133	44	168	56	193	52	204	51	370	82	393	87
Fort Worth, Tex.	167	53	158	51	269	72	248	63	323	75	386	90
Fresno, Calif.	134	43	188	62	324	87	387	98	391	89	395	90

Sunshine, 1934—Continued

Stations	July		August		September		October		November		December		Annual	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Albany, N. Y	365	78	307	71	204	54	160	47	66	22	98	35	2,596	55
Albuquerque, N. Mex	345	78	284	68	294	79	301	86	199	64	208	68	3,362	75
Alpena, Mich	384	81	321	74	154	41	180	53	35	12	42	15	2,403	50
Amarillo, Tex	363	82	289	69	264	71	286	82	182	59	198	65	3,172	71
Asheville, N. C	271	61	198	47	235	63	247	71	188	61	129	43	2,556	57
Atlanta, Ga	286	65	226	54	257	69	268	76	211	68	155	50	2,754	62
Atlantic City, N. J	308	68	243	57	183	49	209	61	173	57	159	54	2,603	57
Augusta, Ga	354	81	329	80	304	82	270	77	226	72	188	60	3,262	73
Austin, Tex	337	79	315	77	185	50	289	81	206	65	156	49	2,963	66
Baker, Oreg	411	87	394	90	285	76	186	54	125	44	109	40	3,027	65
Baltimore, Md	330	73	249	59	193	52	255	74	174	58	165	56	2,795	62
Binghamton, N. Y	270	58	206	48	117	31	123	36	75	25	57	20	1,903	41
Birmingham, Ala	310	71	284	68	268	72	236	67	202	65	122	39	2,844	63
Bismarck, N. Dak	333	69	315	72	161	43	168	50	144	51	79	30	2,622	57
Block Island, R. I	334	73	265	62	177	47	183	53	133	45	121	42	2,606	57
Boise, Idaho	432	92	405	93	325	87	201	59	138	48	68	25	3,309	71
Boston, Mass	286	62	241	56	120	32	187	55	130	44	140	49	2,518	55
Brownsville, Tex	272	65	310	77	234	63	273	76	205	63	168	52	3,021	67
Buffalo, N. Y	366	79	313	73	209	56	206	60	101	35	76	27	2,687	57
Burlington, Vt	350	75	302	70	198	53	141	41	40	14	83	30	2,479	53
Canton, N. Y	340	72	286	66	146	39	156	46	60	21	116	42	2,443	53
Cape Henry, Va	301	67	218	52	191	51	231	66	170	56	152	51	2,654	59
Charles City, Iowa	302	65	278	64	185	49	232	68	111	38	80	28	2,635	57
Charleston, S. C	335	77	290	70	262	70	259	74	239	76	176	57	3,114	69
Charlotte, N. C	283	64	244	58	254	68	266	76	224	72	166	54	2,972	67
Chattanooga, Tenn	251	57	180	43	286	77	248	71	200	64	113	37	2,722	61
Cheyenne, Wyo	296	65	309	72	257	69	279	81	182	61	212	74	3,150	71
Chicago, Ill	346	75	320	75	191	51	254	74	137	46	100	35	2,807	61
Cincinnati, Ohio	354	78	299	71	263	71	279	81	144	48	100	34	2,887	63
Cleveland, Ohio	364	79	298	70	224	60	201	59	74	25	56	20	2,646	56
Columbia, Mo	367	81	261	62	206	55	257	74	176	58	108	37	3,095	68
Columbus, Ohio	325	71	259	61	248	66	256	74	106	36	80	28	2,688	58
Concordia, Kans	387	85	292	69	293	79	290	84	170	57	154	53	3,237	72
Dallas, Tex	398	91	366	88	286	77	300	85	191	61	168	54	3,332	73
Davenport, Iowa	320	69	287	67	190	51	254	74	150	51	78	27	2,801	61
Del Rio, Tex	326	76	324	79	242	65	279	79	226	70	172	54	3,073	68
Denver, Colo	310	68	270	63	255	68	271	79	173	58	210	72	2,974	66
Des Moines, Iowa	354	77	267	62	195	52	261	76	127	43	74	26	2,909	63
Detroit, Mich	371	80	301	70	182	49	197	57	110	37	88	31	2,676	57
Devils Lake, N. Dak	375	78	330	75	172	46	156	46	140	50	122	46	2,778	60
Dodge City, Kans	400	89	326	77	290	78	308	89	218	72	233	79	3,493	78
Dubuque, Iowa	321	70	290	68	173	46	214	62	134	45	80	28	2,747	59
Duluth, Minn	397	83	313	71	154	41	166	49	80	28	112	42	2,590	55
Eastport, Maine	336	71	304	70	212	56	172	51	94	33	140	51	2,641	58
Elkins, W. Va	266	59	212	50	185	50	215	62	136	45	90	31	2,271	50
El Paso, Tex	384	88	352	85	329	89	305	86	266	84	211	67	3,766	84
Erie, Pa	371	80	287	67	216	58	186	54	57	19	34	12	2,571	54
Escanaba, Mich	322	68	301	69	135	36	165	49	58	20	77	29	2,258	48
Eureka, Calif	279	61	154	36	242	65	156	45	89	30	164	57	2,243	50
Evansville, Ind	319	71	258	61	210	56	280	81	178	58	117	39	2,737	60
Fairbanks, Alaska	134	22	97	19	212	54	40	13	97	51	51	42	1,924	41
Fort Smith, Ark	375	85	306	73	222	60	232	66	146	47	150	49	2,831	62
Fort Wayne, Ind	386	84	320	75	200	54	244	71	112	38	76	26	2,799	60
Fort Worth, Tex	370	85	339	82	232	63	287	82	194	65	172	55	3,145	70
Fresno, Calif	440	99	396	94	347	93	292	84	190	62	140	47	3,624	79

Sunshine, 1934—Continued

Stations	January		February		March		April		May		June	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Galveston, Tex	161	49	196	63	259	70	238	62	336	80	392	93
Grand Junction, Colo	219	72	170	56	295	80	306	77	334	75	381	85
Grand Rapids, Mich	99	34	182	62	163	44	198	49	380	83	352	77
Green Bay, Wis	83	29	186	64	170	46	159	39	306	66	279	60
Greensboro, N. C	162	52	182	60	195	53	254	64	311	71	300	69
Harrisburg, Pa	119	39	188	63	195	53	252	63	323	72	334	74
Havre, Mont	159	59	231	81	277	75	348	84	413	87	369	76
Helena, Mont	142	51	199	69	224	61	295	72	355	76	313	66
Honolulu, Hawaii	235	69	210	65	242	65	227	60	312	77	303	75
Houston, Tex	142	44	186	60	255	68	224	58	314	74	360	85
Huron, S. Dak	139	48	192	65	238	64	305	75	396	87	357	77
Indianapolis, Ind	115	38	153	51	228	61	281	70	360	81	339	75
Ithaca, N. Y	38	13	158	53	164	44	210	52	324	72	250	55
Jacksonville, Fla	187	58	195	62	243	65	277	72	224	53	305	72
Juneau, Alaska	10	4	65	25	174	47	131	30	220	42	198	36
Kalispell, Mont	99	36	172	60	210	57	336	82	374	80	333	70
Kansas City, Mo	144	48	206	69	237	64	303	76	366	82	385	86
Keokuk, Iowa	156	52	217	72	211	57	260	65	362	81	342	76
Key West, Fla	249	75	228	72	296	79	299	78	290	70	271	66
Knoxville, Tenn	149	48	174	57	191	51	259	66	342	78	313	72
La Crosse, Wis	92	32	201	68	236	64	262	65	392	86	357	77
Lander, Wyo	179	61	170	58	216	58	251	62	358	79	326	71
Lansing, Mich	70	24	165	56	156	42	179	45	350	77	353	77
Lincoln, Nebr	163	54	203	68	222	60	313	78	359	80	360	80
Little Rock, Ark	144	46	182	60	231	62	282	72	349	80	381	88
Los Angeles, Calif	284	90	166	54	289	78	285	73	353	82	236	55
Louisville, Ky	120	39	118	39	179	48	267	68	349	79	327	74
Macon, Ga	169	53	191	62	218	59	253	65	278	65	314	73
Madison, Wis	116	40	211	72	250	67	225	56	391	86	357	78
Marquette, Mich	44	16	110	38	124	34	106	26	241	52	200	42
Memphis, Tenn	131	42	197	64	235	63	290	74	363	84	344	79
Meridian, Miss	162	51	177	57	208	56	237	61	270	63	313	73
Miami, Fla	236	71	220	70	262	70	285	74	210	51	229	56
Miles City, Mont	135	48	205	71	198	53	314	77	391	84	310	66
Milwaukee, Wis	118	40	163	55	210	57	222	55	389	86	346	75
Minneapolis, Minn	94	33	174	60	211	57	233	58	384	83	363	78
Mobile, Ala	172	53	201	65	258	69	270	70	294	69	315	74
Modena, Utah	241	79	189	63	324	87	319	81	378	86	347	78
Nashville, Tenn	132	42	173	57	205	55	241	61	336	77	320	73
New Haven, Conn	148	50	191	64	209	56	234	59	255	57	245	54
New Orleans, La	155	48	191	61	248	67	243	63	252	60	299	71
New York, N. Y	151	51	196	66	217	59	274	68	308	68	332	73
Nome, Alaska	108	65	111	45	226	62	130	29	237	41	270	42
Norfolk, Va	164	53	174	57	194	52	294	74	280	64	333	76
North Head, Wash	40	14	139	48	155	42	173	42	195	42	246	52
North Platte, Nebr	217	73	208	70	247	67	306	76	340	76	350	77
Oklahoma City, Okla	205	65	164	54	235	63	287	73	342	79	405	93
Omaha, Nebr	148	50	227	76	247	67	321	80	384	86	358	79
Oswego, N. Y	29	10	145	49	190	51	242	60	358	79	317	69
Parkersburg, W. Va	101	33	129	43	139	37	185	47	306	69	314	70
Pensacola, Fla	161	50	196	63	254	68	256	66	233	55	279	66
Peoria, Ill	141	47	207	69	225	61	281	70	386	86	360	80
Philadelphia, Pa	144	48	179	60	187	50	254	64	269	60	296	66
Phoenix, Ariz	303	95	243	79	320	86	363	93	365	85	395	92
Pittsburgh, Pa	85	29	124	42	166	45	234	59	371	83	370	82

Sunshine, 1934—Continued

Stations	July		August		September		October		November		December		Annual	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Galveston, Tex	296	69	279	68	264	71	288	81	241	75	174	54	3, 124	70
Grand Junction, Colo	372	82	326	77	325	87	277	80	167	55	189	64	3, 361	74
Grand Rapids, Mich	360	77	292	68	164	44	214	63	64	22	61	22	2, 529	54
Green Bay, Wis	297	63	261	60	136	36	182	54	75	26	80	29	2, 214	48
Greensboro, N. C	250	56	200	48	213	57	281	81	192	62	151	50	2, 691	60
Harrisburg, Pa	337	74	248	58	186	50	214	62	140	47	113	39	2, 649	58
Havre, Mont	427	88	384	86	253	67	235	70	180	65	113	44	3, 389	74
Helena, Mont	377	79	364	83	247	66	176	52	161	57	98	37	2, 951	64
Honolulu, Hawaii	309	75	279	70	234	64	267	74	215	64	226	67	3, 059	69
Houston, Tex	309	72	294	72	251	68	299	84	224	70	168	53	3, 026	67
Huron, S. Dqk	335	72	318	73	217	58	223	65	155	53	110	40	2, 985	65
Indianapolis, Ind	335	74	256	60	212	57	289	84	152	51	84	29	2, 804	61
Ithaca, N. Y	281	61	253	59	172	46	153	45	58	20	53	19	2, 114	45
Jacksonville, Fla	336	78	298	73	272	74	256	72	216	68	164	52	2, 973	67
Juneau, Alaska	263	48	96	20	144	37	39	12	60	25	53	26	1, 453	29
Kalispell, Mont	380	79	401	91	194	51	108	32	55	20	28	11	2, 690	56
Kansas City, Mo	400	88	294	70	210	56	260	75	163	54	123	42	3, 091	68
Keokuk, Iowa	306	67	264	62	194	52	259	75	146	49	83	28	2, 800	61
Key West, Fla	288	69	281	70	224	61	278	78	248	76	189	57	3, 141	71
Knoxville, Tenn	281	63	192	46	219	59	239	68	188	61	117	39	2, 664	59
La Crosse, Wis	321	69	277	64	156	42	206	60	91	31	80	29	2, 671	57
Lander, Wyo	360	78	334	78	233	62	238	69	167	57	157	56	2, 989	66
Lansing, Mich	365	79	294	68	162	43	182	53	89	30	72	26	2, 437	52
Lincoln, Nebr	383	84	293	68	261	70	276	80	153	51	141	49	3, 127	68
Little Rock, Ark	398	90	340	82	270	73	293	84	190	61	143	47	3, 203	70
Los Angeles, Calif	337	77	323	78	290	78	248	71	211	68	198	64	3, 220	72
Louisville, Ky	331	74	230	55	210	56	262	75	188	62	115	39	2, 696	59
Macon, Ga	312	71	246	60	269	73	240	68	230	73	179	58	2, 899	65
Madison, Wis	338	73	290	67	165	44	202	59	77	26	104	37	2, 726	59
Marquette, Mich	329	69	274	62	112	30	149	44	32	11	42	16	1, 763	37
Memphis, Tenn	329	75	267	64	222	60	262	75	193	62	124	40	2, 957	65
Meridian, Miss	286	66	271	66	270	73	250	71	203	64	153	49	2, 800	62
Miami, Fla	299	71	272	67	211	57	267	75	212	65	234	72	2, 937	67
Miles City, Mont	373	79	336	77	196	52	216	64	151	53	114	42	2, 939	64
Milwaukee, Wis	340	73	297	69	171	46	212	62	110	38	91	32	2, 669	57
Minneapolis, Minn	377	80	320	73	193	51	198	58	105	37	87	32	2, 739	58
Mobile, Ala	287	66	263	64	274	74	261	74	227	71	188	60	3, 010	67
Modena, Utah	376	84	283	67	346	93	295	85	230	76	204	69	3, 532	79
Nashville, Tenn	298	67	222	53	190	51	245	70	212	69	116	38	2, 690	59
New Haven, Conn	255	56	253	59	132	35	198	58	136	46	147	51	2, 403	54
New Orleans, La	263	61	242	59	233	63	261	74	206	64	184	58	2, 777	62
New York, N. Y	323	70	258	60	173	46	209	61	138	46	156	54	2, 735	60
Nome, Alaska	155	25	170	33	158	40	40	13	66	34	48	37	1, 719	39
Norfolk, Va	249	56	209	50	115	31	212	61	169	55	154	52	2, 547	57
North Head, Wash	195	41	108	25	162	43	135	40	40	14	66	25	1, 654	36
North Platte, Nebr	352	77	328	77	256	68	281	82	179	60	168	59	3, 232	72
Oklahoma City, Okla	414	94	334	80	253	68	275	79	172	55	192	63	3, 278	72
Omaha, Nebr	373	81	283	66	231	62	283	82	154	52	108	38	3, 117	68
Osweg o, N. Y	326	70	267	62	146	39	151	44	43	15	32	11	2, 246	47
Parkersburg, W. Va	319	70	278	66	262	70	269	78	148	49	90	31	2, 540	55
Pensacola, Fla	290	68	248	61	246	66	266	75	215	67	180	57	2, 824	64
Peoria, Ill	343	75	295	69	207	55	277	80	159	54	96	33	2, 977	65
Philadelphia, Pa	278	61	218	51	166	45	218	63	152	51	167	57	2, 528	56
Phoenix, Ariz	369	85	287	69	341	92	323	92	236	75	230	74	3, 775	85
Pittsburgh, Pa	359	78	302	71	221	59	226	66	117	39	59	20	2, 634	56

Sunshine, 1934—Continued

Stations	January		February		March		April		May		June	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Pocatello, Idaho	100	34	158	53	280	76	324	81	357	79	321	70
Port Arthur, Tex	144	44	195	63	248	67	256	66	335	79	336	80
Portland, Maine	146	51	183	62	198	54	260	64	306	67	282	61
Portland, Oreg	52	18	118	41	199	54	243	60	229	49	291	62
Providence, R. I	146	49	184	62	251	68	284	71	315	70	311	68
Pueblo, Colo	262	86	192	64	253	68	284	72	303	69	337	76
Raleigh, N. C	159	51	182	60	205	55	240	61	258	59	307	70
Rapid City, S. Dak	175	60	231	79	221	60	319	79	364	80	298	64
Reading, Pa	156	52	176	59	186	50	249	62	294	66	284	63
Richmond, Va	166	54	181	60	183	49	244	62	293	66	336	76
Rochester, N. Y	31	11	140	47	172	46	201	50	354	78	335	73
Roseburg, Oreg	68	23	125	42	208	56	280	70	236	52	305	66
Roswell, N. Mex	249	78	241	78	278	75	286	73	329	77	366	85
Sacramento, Calif	125	41	137	45	288	77	342	86	386	87	388	87
St. Joseph, Mo	176	58	234	78	239	64	317	80	378	85	369	82
St. Louis, Mo	124	41	176	59	190	51	262	66	363	82	329	74
Salt Lake City, Utah	130	44	144	48	285	77	312	78	338	75	313	69
San Antonio, Tex	147	45	170	54	265	71	219	57	322	76	335	80
San Diego, Calif	268	84	180	58	263	71	275	71	336	78	262	61
Sandy Hook, N. J	115	38	172	57	185	50	243	61	264	59	313	70
San Francisco, Calif	179	59	154	51	248	67	294	74	324	73	320	72
San Jose, Calif	157	51	151	50	199	54	284	72	327	74	350	79
San Juan, P. R	283	82	273	84	238	64	283	75	287	71	274	69
Santa Fe, N. Mex	285	92	221	73	323	87	319	81	342	78	393	90
Sault Ste. Marie, Mich	80	28	171	59	160	43	171	42	319	69	251	53
Savannah, Ga	181	57	167	54	200	54	268	69	230	54	300	70
Scranton, Pa	92	.31	167	56	179	48	209	52	299	67	293	65
Seattle, Wash	36	13	119	41	188	51	204	50	209	44	299	63
Sheridan, Wyo	132	46	189	65	206	56	305	75	386	84	336	72
Sioux City, Iowa	141	48	204	69	240	65	312	78	396	88	360	79
Spokane, Wash	84	30	173	60	274	74	330	80	300	64	322	67
Springfield, Ill	124	41	186	62	213	57	285	71	374	84	366	82
Springfield, Mo	142	46	163	54	202	54	231	59	338	77	378	86
Syracuse, N. Y	22	8	113	38	124	33	183	45	309	68	240	52
Tampa, Fla	236	72	237	76	244	66	300	78	260	62	250	60
Tatoosh Island, Wash	37	13	138	46	180	49	260	63	253	54	268	60
Terre Haute, Ind	122	40	164	55	230	62	249	63	352	79	336	75
Toledo, Ohio	114	38	149	50	179	48	192	48	343	76	358	79
Trenton, N. J	147	49	206	69	202	55	271	68	309	69	342	76
Valentine, Nebr	164	56	195	66	214	58	297	74	362	80	329	72
Vicksburg, Miss	137	43	170	55	210	57	248	64	290	68	347	81
Walla Walla, Wash	79	28	142	49	239	65	295	72	316	68	316	67
Washington, D. C	126	41	144	48	167	45	226	57	267	60	317	71
Wichita, Kans	195	64	192	64	230	62	257	65	334	76	366	83
Williston, N. Dak	145	53	200	70	211	57	323	79	368	78	286	60
Wilmington, N. C	201	64	209	68	223	60	286	73	284	66	326	76
Winnemucca, Nev	182	61	144	48	255	69	318	79	362	81	324	72
Wytheville, Va	156	51	152	50	168	45	192	49	292	67	267	61
Yakima, Wash	147	53	184	64	248	67	288	70	349	75	387	82
Yellowstone Park, Wyo	128	45	168	58	216	58	305	75	358	78	309	66
Yuma, Ariz	304	96	258	84	356	96	385	99	424	99	408	95

Sunshine, 1934—Continued

Stations	July		August		September		October		November		December		Annual	
	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible	Hours	Percentage of possible
Pocatello, Idaho	373	80	332	77	248	66	216	63	152	52	113	40	2, 974	64
Port Arthur, Tex	273	64	279	68	255	69	283	80	206	64	157	49	2, 967	66
Portland, Maine	314	67	292	67	140	37	195	57	114	39	140	51	2, 570	56
Portland, Oreg	299	63	294	67	200	53	124	37	38	13	64	24	2, 151	45
Providence, R. I	310	67	270	63	150	40	194	56	132	45	158	56	2, 705	60
Pueblo, Colo	336	75	298	71	278	75	289	83	222	73	232	78	3, 286	74
Raleigh, N. C	258	58	205	49	153	41	277	79	195	63	138	46	2, 577	58
Rapid City, S. Dak	331	71	316	73	228	61	260	76	185	64	136	49	3, 064	68
Reading, Pa	316	69	252	59	165	44	189	55	129	43	106	36	2, 502	55
Richmond, Va	292	65	228	54	151	41	240	69	178	59	166	56	2, 658	59
Rochester, N. Y	320	69	262	61	165	44	177	52	62	21	40	14	2, 259	47
Roseburg, Oreg	345	74	357	83	302	81	171	50	63	22	51	18	2, 511	53
Roswell, N. Mex	374	86	333	81	292	79	313	89	253	81	220	71	3, 534	79
Sacramento, Calif	448	99	405	96	344	92	267	77	127	42	130	44	3, 387	73
St. Joseph, Mo	392	86	298	70	196	53	272	79	157	52	132	45	3, 160	69
St. Louis, Mo	323	71	222	53	144	39	262	76	182	60	96	33	2, 673	59
Salt Lake City, Utah	387	84	341	80	320	86	281	82	154	52	145	51	3, 150	69
San Antonio, Tex	317	74	326	80	234	63	283	80	214	66	137	43	2, 969	66
San Diego, Calif	315	72	304	73	286	77	241	68	232	74	186	60	3, 148	71
Sandy Hook, N. J	292	64	256	60	164	44	194	56	129	43	152	52	2, 479	54
San Francisco, Calif	298	66	234	55	288	77	230	66	146	48	188	63	2, 903	64
San Jose, Calif	403	90	346	82	312	84	237	68	138	45	159	53	3, 063	67
San Juan, P. R	256	63	277	70	194	53	237	65	236	70	172	50	3, 010	68
Santa Fe, N. Mex	337	76	299	72	278	75	287	82	195	63	210	69	3, 489	78
Sault Ste. Marie, Mich	356	75	243	56	98	26	120	35	18	6	72	27	2, 059	46
Savannah, Ga	302	69	257	62	233	63	220	62	215	68	150	48	2, 723	61
Scranton, Pa	349	76	263	62	191	51	188	55	118	40	106	37	2, 454	53
Seattle, Wash	273	57	270	61	159	42	131	39	73	26	36	14	1, 997	42
Sheridan, Wyo	387	82	341	78	234	62	229	67	165	57	124	45	3, 034	66
Sioux City, Iowa	349	76	314	73	248	66	259	75	136	46	87	31	3, 046	66
Spokane, Wash	393	81	380	86	206	55	144	43	84	30	56	22	2, 746	58
Springfield, Ill	360	79	258	61	176	47	273	79	168	56	92	32	2, 875	63
Springfield, Mo	392	88	266	63	218	59	264	76	189	62	150	50	2, 933	64
Syracuse N. Y	310	67	223	52	142	38	117	34	41	14	48	17	1, 872	39
Tampa, Fla	268	63	284	70	238	64	294	83	237	73	218	67	3, 066	70
Tatoosh Island, Wash	256	53	208	47	156	42	150	42	30	11	70	27	2, 006	42
Terre Haute, Ind	338	75	277	65	189	51	294	85	178	59	91	31	2, 820	62
Toledo, Ohio	336	73	301	70	210	56	214	62	80	27	61	21	2, 537	54
Trenton, N. J	345	76	273	64	192	52	221	64	167	56	154	53	2, 829	63
Valentine, Nebr	376	81	326	76	258	69	284	83	207	71	178	63	3, 190	71
Vicksburg, Miss	333	77	312	76	284	77	282	80	191	60	157	50	2, 961	66
Walla Walla, Wash	411	87	391	89	252	67	134	40	43	15	38	14	2, 656	55
Washington, D. C	314	69	225	53	158	42	212	61	143	47	138	47	2, 437	53
Wichita, Kans	390	87	310	73	232	62	279	80	156	51	158	53	3, 099	68
Williston, N. Dak	371	77	332	75	207	55	224	67	161	58	121	46	2, 949	65
Wilmington, N. C	322	73	298	72	207	56	284	81	230	74	163	53	3, 033	68
Winnemucca, Nev	430	94	381	89	335	89	202	59	133	45	152	53	3, 218	70
Wytheville, Va	232	52	125	30	175	47	253	73	162	53	131	44	2, 305	52
Yakima, Wash	425	89	378	86	260	69	190	56	81	29	97	36	3, 034	65
Yellowstone Park, Wyo	375	80	309	71	207	55	162	48	125	43	78	28	2, 740	59
Yuma, Ariz	409	94	361	87	360	97	328	93	283	90	253	81	4, 129	93

EXCESSIVE RAINFALL, 1933 AND 1934

The following tables contain statistics of excessive rainfall during the calendar years 1933 and 1934. Similar data for the years 1896 to 1930, inclusive, have been presented in the appropriate annual reports of the Chief of the Weather Bureau. The published data prior to 1896 consists of a record of maximum amounts of rainfall in 5- and 10-minute periods, also in 1 and 24 hours. The annual report for 1895–96 contains a summary of the records which up to that time had been made at the principal stations supplied with automatic gages.

The following tables show, for most stations of the Weather Bureau furnished with self-registering gages, the accumulated amounts of precipitation for each 5 minutes during all storms of 1933 and 1934 in which the rate of fall equaled or exceeded 0.25 inch in any 5-minute period, or 0.30 inch in any 10-minute period, or 0.35 inch in any 15-minute period, etc. If the period be 1 hour, the minimum fall would need to be 0.80 inch; if 2 hours, 1.40 inches. In the comparatively few cases when the excessive rate of fall continued for more than 2 hours, the record has been spread over 3 or more lines, as necessary, each line showing amounts through 50 minutes; the 4 left-hand columns have each but a single entry for the storm, while the amounts shown in the column headed "5 min." are, in reality, the 55-minute amount on the second line, the 105-minute amount on the third line, etc. Data for 1934 begin on page 54.

The excepted stations, for which the statistics of only the more intense storms appear here, are those in the South Atlantic and the Gulf States, including Arkansas, Kentucky, and Tennessee, but not including the western portion of Texas. San Juan is likewise an excepted station. In these States very heavy falls are so frequent that much space would be needed to print detailed statistics of each rainfall that attained to one of the limits mentioned above, so only the more intense rainfalls are shown. At most stations the only falls included are those in which 1.50 inches or more fell within an hour, as footnote 4 in the tables indicates.

In the columns under "Total duration", when the minute during the nighttime is not known reasonably well, "D. N." is entered, followed by an "a. m." or "p. m." as appropriate. "T" indicates trace, an amount too small for measurement.

Normal standard time at the place of occurrence is employed in these tables.

EXCESSIVE PRECIPITATION, 1933

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
NEW ENGLAND STATES																				
Eastport, Maine:																				
May 31	10:01 a.m.	[1]D.N. a.m.	1.55	12:29 p.m.	1:01 p.m.	0.06	0.14	0.25	0.29	0.36	0.50	0.55	0.57	0.63	0.65	0.66	0.67	0.70	0.90	1.04
Aug. 24	9:55 a.m.	3:35 p.m.	1.49	11:52 a.m.	12:12 p.m.	.19	.15	.20	.29	.43	.48	.48	.49	.50	.51	.51	.56	.69	.93	1.11
Sept. 18	[3]1:05 p.m.	5:40 a.m.	3.62	12:02 a.m.	1:18 a.m.	.83	.08	.17	.26	.38	.46	.52	.60	.66	.71	.78	.98	1.24	1.39	1.53
Oct. 24–25	2:15 p.m.	10:35 a.m.	2.89	11:34 p.m.	12:10 a.m.	.38	.07	.21	.33	.49	.65	.82	.93	.95	.97	1.05	1.09	1.13	1.26	1.34
Portland, Maine:																				
July 30	1:30 p.m.	2:40 p.m.	.98	1:38 p.m.	1:51 p.m.	.01	.30	.59	.77	.77	.77	.77	.78	.82	.95	.97	.97	.97	.97	.97
Sept. 20	5:45 p.m.	8:20 p.m.	1.80	7:07 p.m.	7:48 p.m.	.13	.40	.73	.78	.80	.85	.88	1.01	1.10	1.11	1.13	1.15	1.17	1.17	1.17
Burlington, Vt.:																				
June 21	8:05 p.m.	10:00 p.m.	1.15	8:34 p.m.	8:45 p.m.	.06	.46	.85	.87	.89	.89	.90	.92	.95	.97	.99	1.03	1.08	1.09	1.09
June 28	3:43 p.m.	5:40 p.m.	.69	5:09 p.m.	5:26 p.m.	.19	.13	.31	.43	.48	.49	.50	.50	.50	.50	.50	.50	.50	.51	.51
	6:11 p.m.	6:36 p.m.	.01																	
Boston, Mass.:																				
June 21–22	11:40 p.m.	1:40 a.m.	.44	11:52 p.m.	12:07 a.m.	.01	.15	.29	.36	.38	.40	.40	.41	.41	.41	.42	.42	.43	.43	.43
July 8	7:50 p.m.	10:45 p.m.	.58	8:18 p.m.	8:28 p.m.	T	.27	.34	.35	.35	.35	.36	.36	.36	.36	.37	.37	.48	.50	.55
July 20	9:03 p.m.	[4]1:00 a.m.	1.10	9:27 p.m.	9:52 p.m.	.02	.05	.18	.56	.72	.80	.83	.86	.88	.89	.90	.91	.91	.95	1.03
Aug. 28	4:28 p.m.	7:15 p.m.	.59	4:51 p.m.	5:06 p.m.	.02	.10	.43	.54	.55	.56	.56	.56	.56	.56	.56	.57	.57	.57	.57
Sept. 16	[3]11:15 p.m.	3:40 p.m.	5.31	7:22 a.m.	8:42 a.m.	2.61	.07	.16	.24	.33	.48	.59	.66	.71	.78	.89	.97	1.20	1.37	1.47
Sept. 17	[3]4:25 p.m.	8:00 p.m.	2.55	11:07 a.m.	11:27 a.m.	1.72	.18	.40	.54	.60	.61	.62	.63	.64	.65	.65	.66	.68	.69	.69
Nantucket, Mass.:																				
June 22	1:40 a.m.	5:00 a.m.	1.67	1:50 a.m.	2:59 a.m.	T	.12	.16	.20	.24	.39	.48	.58	.60	.60	.61	.71	1.17	1.24	1.38
Aug. 4	1:20 a.m.	5:30 a.m.	.90	3:53 a.m.	4:12 a.m.	.45	.22	.30	.37	.43	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45
Sept. 9	3:10 a.m.	5:00 a.m.	.79	3:42 a.m.	3:51 a.m.	.08	.39	.56	.56	.57	.57	.57	.57	.59	.68	.69	.71	.71	.71	.71
Oct. 5	11:55 a.m.	6:20 p.m.	2.71	3:23 p.m.	4:40 p.m.	1.03	.05	.13	.30	.46	.61	.72	.76	.82	.89	.96	1.16	1.42	1.55	1.63
Block Island, R.I.:																				
Aug. 19	D.N. a.m.	D.N. a.m.	.61	4:13 a.m.	4:24 a.m.	.10	.06	.34	.36	.37	.37	.37	.37	.37	.37	.37	.44	.51	.51	.51

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
NEW ENGLAND STATES—cont.																				
Providence, R. I.:																				
May 31	D.N. a.m.	4:57 p.m.	2.12	3:12 a.m.	4:38 a.m.	0.30	0.16	0.28	0.31	0.37	0.45	0.53	0.55	0.58	0.66	0.77	1.00	1.27	1.41	1.50
July 1	9:15 p.m.	[1]D.N. a.m.	.72	11:01 p.m.	11:25 p.m.	.05	.12	.16	.23	.45	.56	.57	.58	.58	.58	.58	.58	.58	.61	.66
Aug. 4	D.N. a.m.	7:28 a.m.	.92	2:35 a.m.	2:56 a.m.	.12	.13	.21	.37	.59	.62	.63	.65	.67	.68	.68	.69	.70	.71	.77
New Haven, Conn.:																				
July 1	3:06 p.m.	4:10 p.m.	.84	3:10 p.m.	3:31 p.m.	.01	.27	.43	.64	.77	.81	.81	.81	.81	.81	.81	.83	.83	.83	.83
Do	6:55 p.m.	10:45 p.m.	1.75	7:25 p.m.	8:14 p.m.	.04	.05	.15	.27	.41	.61	.80	.95	1.03	1.10	1.15	1.21	1.31	1.38	1.56
Aug. 8–9	3:27 p.m.	2:10 a.m.	2.36	11:21 p.m.	12:15 a.m.	.60	.09	.19	.32	.51	.72	.84	.96	1.03	1.11	1.18	1.25	1.43	1.59	1.72
Sept. 28	3:43 a.m.	4:50 a.m.	.31	3:50 a.m.	3:56 a.m.	.01	.25	.27	.28	.28	.28	.28	.29	.29	.29	.29	.30	.30	.30	.30
Oct. 1	9:20 p.m.	11:35 p.m.	.47	10:17 p.m.	10:38 p.m.	.01	.10	.12	.35	.42	.45	.45	.45	.45	.45	.45	.46	.46	.46	.46
MIDDLE ATLANTIC STATES																				
Albany, N. Y.:																				
June 21	8:50 p.m.	9:42 p.m.	.42	9:20 p.m.	9:31 p.m.	.04	.14	.32	.36	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
July 22	3:40 p.m.	5:03 p.m.	.88	3:51 p.m.	4:22 p.m.	.01	.24	.31	.37	.61	.71	.79	.82	.83	.86	.86	.86	.87	.87	.87
Aug. 13	6:12 p.m.	8:25 p.m.	.68	6:20 p.m.	6:33 p.m.	.02	.13	.24	.37	.39	.42	.44	.51	.55	.56	.57	.61	.65	.66	.66
Aug. 18	5:02 p.m.	D.N. p.m.	.71	5:23 p.m.	5:43 p.m.	.03	.06	.14	.46	.63	.65	.66	.66	.66	.66	.66	.66	.66	.66	.66
Sept. 4	12:45 a.m.	9:20 a.m.	1.12	7:35 a.m.	8:00 a.m.	.36	.11	.25	.44	.57	.64	.66	.68	.69	.70	.70	.71	.74	.76	.76
Binghamton, N. Y.:																				
May 20	3:33 p.m.	5:00 p.m.	.40	4:03 p.m.	4:17 p.m.	.01	.21	.31	.35	.37	.38	.38	.38	.39	.39	.39	.39	.39	.39	.39
Aug. 3	6:20 p.m.	D.N. p.m.	1.54	7:58 p.m.	8:48 p.m.	.35	.06	.11	.19	.30	.40	.49	.56	.68	.85	.90	.97	1.07	1.15	1.17
Sept. 14	[2]10:20 p.m.	7:18 a.m.	1.22	3:39 a.m.	4:04 a.m.	.50	.08	.21	.28	.45	.51	.53	.55	.59	.62	.64	.65	.69	.69	.69
New York, N. Y.:																				
May 3	6:40 p.m.	7:25 p.m.	.58	6:54 p.m.	7:10 p.m.	T	.20	.41	.56	.58	.58	.58	.58	.58	.58	.58	.58	.58	.58	.58
June 5	11:22 p.m.	[1]12:20 a.m.	.61	11:23 p.m.	11:34 p.m.	T	.17	.49	.56	.57	.59	.60	.60	.60	.60	.60	.61	.61	.61	.61
June 7	5:10 p.m.	6:00 p.m.	.35	5:31 p.m.	5:37 p.m.	.02	.26	.32	.32	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
July 1	7:15 p.m.	9:30 p.m.	1.28	8:04 p.m.	8:50 p.m.	.02	.12	.45	.50	.51	.53	.62	.82	1.06	1.22	1.24	1.25	1.26	1.26	1.26
Harrisburg, Pa.:																				
June 7	10:09 p.m.	[1]D.N. a.m.	.66	10:11 p.m.	10:30 p.m.	.01	.08	.16	.43	.48	.49	.53	.54	.55	.55	.55	.56	.58	.59	.60
June 9	11:28 p.m.	[1]1:30 a.m.	.91	11:38 p.m.	12:00 p.m.	.01	.22	.50	.74	.85	.88	.88	.89	.89	.89	.89	.89	.90	.90	.90
July 2	2:36 p.m.	5:12 p.m.	1.66	3:25 p.m.	4:00 p.m.	.07	.14	.46	.85	1.11	1.31	1.43	1.50	1.52	1.53	1.54	1.54	1.58	1.59	1.59
July 16	1:03 a.m.	4:55 a.m.	.44	2:56 a.m.	3:10 a.m.	.07	.12	.30	.34	.35	.35	.35	.35	.35	.35	.35	.36	.36	.36	.37
Aug. 3	6:07 p.m.	7:08 p.m.	1.29	6:22 p.m.	6:37 p.m.	.01	.49	.88	1.22	1.23	1.23	1.23	1.25	1.27	1.28	1.28	1.28	1.28	1.40	1.49
	7:45 p.m.	10:45 p.m.	.23																	
Aug. 13	7:27 p.m.	[1]10:00 a.m.	.42	7:37 p.m.	7:45 p.m.	.01	.23	.29	.32	.33	.33	.33	.34	.34	.34	.34	.35	.35	.35	.35
Aug. 23	D.N. a.m.	[1]D.N. a.m.	5.28	6:05 p.m.	6:24 p.m.	1.84	.08	.36	.62	.70	.74	.77	.81	.85	.89	.93	1.00	1.14	1.27	1.41
Oct. 1	4:45 p.m.	7:12 p.m.	.60	4:58 p.m.	5:14 p.m.	.02	.25	.39	.47	.50	.51	.52	.53	.54	.55	.55	.55	.56	.56	.58
Philadelphia, Pa.:																				
Apr. 6	11:27 p.m.	[1]D.N. a.m.	.55	11:35 p.m.	12 mdt.	.01	.11	.29	.34	.39	.48	.52	.53	.54	.54	.54	.54	.54	.54	.54
May 20	6:46 p.m.	7:19 p.m.	.76	6:54 p.m.	7:11 p.m.	.01	.25	.61	.71	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75
May 24	4:11 p.m.	6:32 p.m.	1.74	4:11 p.m.	4:37 p.m.	.00	.38	.87	1.16	1.39	1.51	1.54	1.56	1.57	1.57	1.59	1.64	1.70	1.72	1.74
May 27	2:27 p.m.	3:00 p.m.	.54	2:33 p.m.	2:42 p.m.	.01	.40	.50	.52	.52	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
May 30	2:00 p.m.	2:35 p.m.	.43	2:06 p.m.	2:15 p.m.	.01	.28	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
June 12	9:04 p.m.	D.N. p.m.	1.37	9:19 p.m.	10:16 p.m.	.07	.20	.32	.39	.50	.65	.80	.82	.85	.86	.93	1.10	1.21	1.26	1.29
June 30	7:50 p.m.	D.N. p.m.	1.49	7:55 p.m.	8:12 p.m.	.02	.19	.47	.56	.62	.62	.62	.62	.62	.62	.62	.63	.67	.67	1.08
Do	7:50 p.m.	D.N. p.m.	1.49	9:48 p.m.	10:05 p.m.	.71	.34	.56	.67	.71	.73	.74	.75	.75	.75	.76	.77	.78	.78	.78
July 25	3:31 p.m.	4:49 p.m.	.62	3:50 p.m.	4:10 p.m.	.05	.08	.20	.34	.46	.48	.48	.53	.56	.57	.57	.57	.57	.57	.57
July 26	D.N. a.m.	7:28 a.m.	1.03	2:28 a.m.	2:41 a.m.	.37	.16	.31	.37	.38	.39	.39	.39	.40	.41	.43	.46	.53	.57	.61
Aug. 3	9:35 p.m.	[1]D.N. a.m.	1.04	10:02 p.m.	10:49 p.m.	.01	.22	.33	.38	.45	.53	.61	.63	.64	.69	.78	.82	.85	.88	.93
Aug. 13	10:15 p.m.	[1]11:25 a.m.	1.19	11:05 p.m.	11:27 p.m.	.19	.21	.29	.41	.55	.59	.63	.67	.68	.71	.73	.73	.78	.87	.90
Aug. 18	D.N. a.m.	D.N. a.m.	.58	3:40 a.m.	3:57 a.m.	.03	.12	.23	.50	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
Aug. 22	[3]D.N. a.m.	1:45 p.m.	1.88	5:26 a.m.	5:47 a.m.	1.17	.11	.21	.33	.65	.70	.70	.71	.71	.71	.71	.71	.71	.71	.71
Reading, Pa.:																				
May 29	7:57 p.m.	11:20 p.m.	1.43	8:32 p.m.	9:01 p.m.	.04	.17	.49	.87	1.02	1.15	1.24	1.25	1.26	1.26	1.27	1.27	1.35	1.35	1.35
June 30	8:30 p.m.	9:40 p.m.	.40	8:52 p.m.	9:04 p.m.	.01	.17	.31	.36	.36	.37	.38	.39	.39	.39	.39	.39	.39	.39	.39
July 16	10:40 p.m.	[1]4:00 a.m.	.76	10:59 p.m.	11:17 p.m.	.04	.15	.32	.44	.51	.52	.55	.59	.62	.64	.65	.68	.72	.72	.72
July 24	10:40 p.m.	11:45 p.m.	.36	10:44 p.m.	10:52 p.m.	.01	.20	.34	.34	.34	.34	.34	.34	.35	.35	.35	.35	.35	.35	.35
Aug. 13	8:10 p.m.	[1]9:00 a.m.	1.03	8:39 p.m.	9:04 p.m.	.01	.09	.35	.54	.66	.72	.75	.77	.81	.85	.86	.89	.91	.92	.92
Oct. 1	5:35 p.m.	9:30 p.m.	.70	6:23 p.m.	6:43 p.m.	.09	.13	.28	.38	.45	.46	.48	.49	.50	.51	.53	.55	.58	.59	.59
Scranton, Pa.:																				
May 24	9:45 a.m.	10:45 a.m.	.38	9:49 a.m.	9:57 a.m.	.01	.21	.32	.32	.34	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
June 5	2:33 p.m.	4:55 p.m.	1.28	2:58 p.m.	3:40 p.m.	.04	.20	.29	.52	.65	.76	.82	.93	1.10	1.23	1.24	1.24	1.24	1.24	1.24
June 30	6:00 p.m.	6:50 p.m.	.43	6:06 p.m.	6:23 p.m.	.01	.14	.21	.32	.40	.41	.41	.42	.42	.42	.42	.42	.42	.42	.42
July 2	2:30 p.m.	6:45 p.m.	1.69	3:08 p.m.	3:38 p.m.	.01	.13	.34	.63	.82	.89	.95	.97	1.03	1.07	1.10	1.15	1.24	1.37	1.46
July 24	3:05 p.m.	5:45 p.m.	2.71	3:19 p.m.	4:50 p.m.	.01	.42	.76	1.12	1.43	1.76	1.83	1.87	1.99	2.03	2.03	2.11	2.54	2.64	2.67
Aug. 3	8:05 p.m.	D.N. p.m.	1.25	9:26 p.m.	9:41 p.m.	.19	.30	.64	1.03	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.06	1.06
Sept. 16	[3]3:15 p.m.	3:30 p.m.	1.89	6:24 a.m.	7:18 a.m.	.53	.10	.27	.36	.43	.51	.59	.81	.92	.96	1.03	1.08	1.21	1.22	1.22
Atlantic City, N. J.:																				
June 30	11:07 p.m.	[1]2:00 a.m.	1.10	11:16 p.m.	11:40 p.m.	.01	.24	.39	.62	.92	.97	.98	1.00	1.01	1.01	1.01	1.02	1.06	1.08	1.08
July 9	4:38 p.m.	5:14 p.m.	.61	4:42 p.m.	5:02 p.m.	.01	.08	.12	.23	.58	.59	.59	.60	.60	.60	.60	.60	.60	.60	.60
Aug. 2	1:24 p.m.	1:55 p.m.	.49	1:24 p.m.	1:38 p.m.	.00	.16	.38	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49
Aug. 18	12:20 p.m.	3:20 p.m.	.71	2:23 p.m.	2:41 p.m.	.10	.32	.44	.55	.59	.59	.59	.59	.59	.60	.61	.61	.61	.61	.61
Aug. 21	2:55 p.m.	[1]11:57 a.m.	5.66	10:16 p.m.	12:00 p.m.	.49	.14	.26	.32	.34	.57	.68	.81	.97	1.09	1.19	1.61	2.93	4.78	5.08
Sept. 4	9:30 a.m.	11:05 a.m.	.95	10:34 a.m.	10:57 a.m.	.14	.17	.39	.60	.76	.81	.81	.81	.81	.81	.81	.81	.83	.83	.83
	11:48 a.m.	11:58 a.m.	.02																	
Sandy Hook, N. J.:																				
May 20	7:02 p.m.	8:15 p.m.	.55	7:04 p.m.	7:13 p.m.	.01	.23	.39	.41	.45	.49	.51	.52	.53	.53	.53	.53	.54	.54	.54
June 5	7:05 p.m.	8:50 p.m.	1.41	7:11 p.m.	7:25 p.m.	.01	.22	.43	.54	.58	.60	.60	.61	.62	.63	.64	.67	1.21	1.40	1.40
Do	7:05 p.m.	8:50 p.m.	1.41	8:20 p.m.	8:39 p.m.	.74	.26	.48	.62	.67	.67	.67	.67	.67	.67	.67	.67	.67	.67	.67
Do	11:05 p.m.	[1]D.N. a.m.	1.29	11:27 p.m.	11:55 p.m.	.02	.08	.33	.85	.99	1.05	1.10	1.12	1.21	1.26	1.26	1.27	12.7	1.27	1.27
July 1	7:58 p.m.	9:25 p.m.	.52	8:39 p.m.	8:53 p.m.	.04	.05	.25	.43	.45	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48
July 16	12:11 p.m.	1:25 p.m.	.50	12:18 p.m.	12:27 p.m.	.01	.16	.35	.43	.44	.45	.45	.46	.46	.46	.47	.49	.49	.49	.49
Aug. 23	1:09 p.m.	8:15 p.m.	1.38	6:23 p.m.	6:35 p.m.	.85	.15	.31	.35	.36	.37	.39	.40	.40	.40	.40	.42	.42	.53	.53

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated													
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MIDDLE ATLANTIC STATES—continued																				
Trenton, N. J.:																				
April 7	[2] 9:55 p.m.	D.N. a.m.	0.41	12:11 a.m.	12:18 a.m.	0.01	0.25	0.31	0.33	0.35	0.35	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
June 12	9:50 p.m.	[1] D.N. a.m.	1.45	10:03 p.m.	10:57 p.m.	.01	.33	.55	.70	.82	.92	1.05	1.09	1.11	1.20	1.27	1.32	1.36	1.38	1.42
Aug. 3	5:54 p.m.	[1] D.N. a.m.	1.24	10:32 p.m.	10:57 p.m.	.23	.36	.42	.49	.56	.62	.65	.68	.70	.71	.72	.73	.78	.86	.93
Aug. 11	[2] 7:30 p.m.	11:52 a.m.	1.49	4:42 a.m.	5:15 a.m.	.77	.13	.24	.35	.44	.52	.59	.65	.67	.69	.69	.70	.71	.71	.71
Aug. 18	3:10 p.m.	5:45 p.m.	1.38	4:38 p.m.	5:02 p.m.	.13	.15	.35	.66	.97	1.14	1.18	1.21	1.23	1.24	1.24	1.25	1.25	1.25	1.25
Sept. 28	[2] D.N. p.m.	D.N. a.m.	.60	12:02 a.m.	12:14 a.m.	.01	.22	.50	.55	.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.59
Baltimore, Md.:																				
April 6	9:20 p.m.	10:40 p.m.	.60	9:33 p.m.	9:45 p.m.	.01	.25	.43	.48	.49	.51	.53	.55	.57	.58	.58	.58	.59	.59	.59
May 24	5:28 p.m. 7:20 p.m.	6:10 p.m. 8:40 p.m.	.41 T	5:38 p.m.	5:47 p.m.	.01	.15	.33	.34	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
May 27	6:43 p.m.	10:30 p.m.	.96	6:54 p.m.	7:13 p.m.	.01	.19	.55	.79	.85	.87	.88	.88	.88	.89	.89	.89	.91	.93	.93
June 7	11:28 p.m.	[1] D.N. a.m.	.70	11:38 p.m.	11:50 p.m.	.01	.18	.42	.53	.57	.63	.65	.65	.65	.66	.66	.66	.66	.68	.68
June 27	2:51 p.m.	6:10 p.m.	.67	3:03 p.m.	3:28 p.m.	.04	.16	.32	.39	.49	.55	.58	.60	.62	.62	.62	.62	.62	.62	.62
July 2	4:06 p.m.	6:17 p.m.	.97	4:27 p.m.	4:59 p.m.	.01	.24	.45	.58	.68	.74	.79	.83	.84	.85	.86	.87	.93	.96	.96
Aug. 3	9:45 p.m.	11:40 p.m.	.81	10:10 p.m.	10:43 p.m.	.06	.17	.25	.40	.50	.59	.68	.73	.73	.73	.73	.73	.75	.75	.75
Aug. 21	D.N. a.m.	[1] 8:25 a.m.	3.36	2:38 p.m.	4:13 p.m.	.51	.05	.11	.15	.20	.30	.39	.48	.59	.68	.76	.88	1.10	1.38	1.50
Aug. 23	[2] 7:50 p.m.	[1] D.N. a.m.	7.62	2:35 p.m.	4:15 p.m.	4.15	.06	.13	.23	.31	.38	.43	.50	.62	.72	.81	.99	1.29	1.59	1.75
Washington, D. C.:																				
June 8	[2] 11:58 p.m.	2:50 a.m.	.75	12:01 a.m.	12:19 a.m.	.01	.12	.28	.49	.64	.65	.65	.65	.65	.65	.65	.66	.69	.72	.73
June 22	3:50 p.m.	4:20 p.m.	.47	3:53 p.m.	4:08 p.m.	.01	.07	.27	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46
June 25	3:30 p.m.	10:20 p.m.	1.14	4:52 p.m.	5:22 p.m.	.05	.07	.28	.46	.59	.80	.85	.87	.88	.88	.88	.89	.90	.91	.91
July 2	4:15 p.m.	5:50 p.m.	.82	4:52 p.m.	5:13 p.m.	.05	.12	.30	.50	.67	.72	.74	.75	.77	.77	.77	.77	.77	.77	.77
July 25	8:15 p.m.	11:00 p.m.	1.68	8:38 p.m.	9:36 p.m.	.01	.15	.50	.65	.83	1.04	1.11	1.16	1.24	1.29	1.36	1.51	1.60	1.62	1.65
Sept. 4	10:20 a.m.	12:15 p.m.	.51	11:30 a.m.	11:45 a.m.	.03	.19	.32	.43	.45	.47	.47	.48	.48	.48	.48	.48	.48	.48	.48
Sept. 14	12:55 a.m.	8:55 a.m.	.63	7:57 a.m.	8:10 a.m.	.07	.24	.48	.55	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56
Oct. 1	6:40 p.m.	10:05 p.m.	1.13	6:47 p.m.	7:22 p.m.	.01	.10	.14	.16	.23	.42	.75	.91	.94	.96	.97	.98	.99	1.06	1.09
Cape Henry, Va.:																				
May 28	3:02 p.m.	4:10 p.m.	.53	3:06 p.m.	3:32 p.m.	.01	.05	.20	.29	.38	.48	.52	.52	.52	.52	.52	.52	.52	.52	.52
May 30	8:25 p.m.	11:30 p.m.	1.04	8:50 p.m.	9:07 p.m.	.09	.24	.56	.69	.72	.73	.75	.76	.78	.80	.82	.83	.88	.91	.94
June 26	4:06 p.m.	5:50 p.m.	.53	4:33 p.m.	4:47 p.m.	.01	.08	.25	.39	.39	.39	.39	.39	.41	.50	.50	.51	.52	.52	.52
July 3	4:25 a.m.	4:43 a.m.	.36	4:27 a.m.	4:35 a.m.	.01	.29	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
July 11	5:25 a.m. 7:12 a.m.	6:05 a.m. 10:30 a.m.	.52 .31	5:28 a.m.	5:42 a.m.	.02	.28	.44	.49	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.52
Aug. 28	6:20 p.m.	8:20 p.m.	1.07	6:34 p.m.	7:30 p.m.	.01	.08	.13	.22	.33	.40	.50	.54	.60	.69	.79	.97	1.06	1.06	1.06
Do	9:10 p.m.	[1] 1:10 a.m.	1.96	10:38 p.m.	11:28 p.m.	.17	.11	.22	.32	.49	.75	.99	1.28	1.50	1.60	1.72	1.75	1.78	1.78	1.78
Norfolk, Va.:																				
July 9	9:14 p.m.	10:15 p.m.	.66	9:19 p.m.	9:40 p.m.	.01	.20	.38	.54	.60	.63	.63	.64	.65	.65	.65	.65	.65	.65	.65
July 11	4:45 a.m. 6:45 a.m.	5:40 a.m. 7:35 a.m.	.52 .09	4:52 a.m.	5:07 a.m.	.01	.21	.39	.47	.49	.50	.50	.50	.50	.51	.51	.51	.51	.51	.51
July 26	2:20 p.m. 4:15 p.m.	3:30 p.m. 6:05 p.m.	1.45 .02	2:41 p.m.	3:18 p.m.	.05	.07	.24	.50	.58	.73	1.02	1.32	1.40	1.40	1.40	14.0	1.40	1.40	1.40
Aug. 2	8:40 p.m.	9:45 p.m.	.72	8:40 p.m.	9:21 p.m.	.00	.09	.13	.22	.42	.50	.52	.58	.66	.69	.71	.72	.72	.72	.72
Aug. 11	6:25 p.m. 8:26 p.m.	6:55 p.m. 9:55 p.m.	.50 .21	6:33 p.m.	6:48 p.m.	.01	.12	.31	.47	.49	.49	.49	.49	.49	.49	.49	.49	.49	.51	
Aug. 20–21	1:25 p.m.	7:20 a.m.	6.62	11:01 p.m.	11:51 p.m.	.40	.05	.10	.19	.25	.30	.35	.43	.50	.55	.62	----	----	----	----
				[3] 11:51 p.m.	12:41 a.m.	------	.69	.80	.96	1.11	1.29	1.44	1.57	1.71	1.84	2.05	----	----	----	----
				[3] 12:41 a.m.	1:31 a.m.	------	2.17	2.26	2.36	2.56	2.68	2.80	2.96	3.09	3.22	3.41	----	----	----	----
				[3] 1:31 a.m.	1:38 a.m.	------	3.51	3.58	----	----	----	----	----	----	----	----	----	----	----	----
Aug. 21	[2] 1:25 p.m.	7:20 a.m.	6.62	3:03 a.m.	3:53 a.m.	4.15	.05	.10	.20	.27	.32	.36	.41	.46	.53	.58	----	----	----	----
				[3] 3:53 a.m.	4:43 a.m.	------	.65	.81	.96	1.10	1.17	1.34	1.46	1.61	1.69	1.78	----	----	----	----
				[3] 4:43 a.m.	5:17 a.m.	------	1.85	1.94	2.06	2.13	2.22	2.29	2.35	----	----	----	----	----	----	----
Aug. 28	6:30 p.m.	[1] D.N. a.m.	2.60	10:21 p.m.	11:11 p.m.	.94	.13	.14	.16	.31	.61	.89	1.24	1.42	1.52	1.59	1.62	1.62	1.62	1.63
Richmond, Va.:																				
Mar. 14	2:03 p.m.	3:15 p.m.	.54	2:05 p.m.	2:22 p.m.	.01	.10	.26	.39	.43	.46	.50	.50	.50	.50	.50	.50	.53	.53	.53
May 26	6:34 p.m.	6:58 p.m.	.57	6:38 p.m.	6:49 p.m.	.01	.35	.54	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56
May 29	6:45 p.m.	8:45 p.m.	.63	6:51 p.m.	7:24 p.m.	.01	.05	.11	.20	.25	.36	.52	.57	.58	.58	.59	.61	.61	.61	.62
May 29–30	9:15 p.m.	8:50 a.m.	.97	11:38 p.m.	12:01 a.m.	.07	.17	.37	.47	.56	.61	.64	.65	.65	.66	.67	.67	.71	.74	.76
June 25	8:35 p.m.	11:55 p.m.	.55	9:58 p.m.	10:12 p.m.	.01	.19	.34	.40	.42	.43	.43	.44	.45	.46	.47	.49	.54	.54	.54
July 2	5:55 p.m.	6:50 p.m.	.82	5:58 p.m.	6:23 p.m.	.01	.11	.31	.58	.66	.77	.79	.80	.81	.81	.81	.81	.81	.81	.81
July 3	D.N. a.m.	D.N. a.m.	1.13	1:31 a.m.	1:51 a.m.	.09	.23	.35	.57	.81	.85	.88	.93	.97	.99	1.01	1.03	1.04	1.04	1.04
Aug. 10	1:52 p.m.	4:20 p.m.	.85	3:15 p.m.	3:37 p.m.	.18	.13	.21	.33	.57	.65	.65	.66	.66	.66	.67	.67	.67	.67	.67
Aug. 11	4:45 p.m.	5:25 p.m.	.61	4:50 p.m.	5:06 p.m.	.01	.11	.33	.54	.59	.59	.59	.60	.60	.60	.60	.60	.60	.60	.60
Aug. 26	4:38 p.m.	5:15 p.m.	.74	4:38 p.m.	5:02 p.m.	.00	.15	.29	.48	.64	.72	.73	.74	.74	.74	.74	.74	.74	.74	.74
Aug. 28	6:20 p.m.	[1] D.N. a.m.	1.81	6:35 p.m.	6:45 p.m.	.02	.12	.30	.34	.37	.38	.38	.38	.38	.39	.40	.41	.93	1.27	1.35
Do	6:20 p.m.	[1] D.N. a.m.	1.81	7:41 p.m.	8:04 p.m.	.46	.18	.34	.54	.71	.77	.80	.84	.88	.89	.90	.93	1.02	1.12	1.22
Wytheville, Va.:																				
Apr. 6	3:16 p.m.	7:10 p.m.	.53	3:27 p.m.	3:37 p.m.	.02	.17	.36	.39	.41	.42	.43	.44	.44	.44	.44	.47	.47	.47	.47
May 10	1:17 a.m.	6:55 a.m.	1.03	1:17 a.m.	1:25 a.m.	.00	.32	.38	.39	.40	.41	.42	.43	.44	.45	.46	.48	.51	.60	.65
July 11	6:13 p.m.	7:06 p.m.	.67	6:13 p.m.	6:37 p.m.	.00	.21	.36	.41	.57	.66	.66	.66	.67	.67	.67	.67	.67	.67	.67
SOUTH ATLANTIC STATES																				
Asheville, N. C.: [4]																				
Sept. 12	3:28 p.m.	4:50 p.m.	1.08	3:34 p.m.	3:59 p.m.	.02	.21	.53	.65	.82	.94	1.00	1.03	1.05	1.06	1.06	1.06	1.06	1.06	1.06
Charlotte, N. C.: [4]																				
May 5	9:20 a.m.	3:20 p.m.	.87	11:17 a.m.	11:32 a.m.	.02	.11	.38	.65	.70	.71	.73	.74	.74	.74	.74	.74	.74	.74	.74
Aug. 11	6:03 p.m.	7:05 p.m.	.88	6:24 p.m.	6:39 p.m.	.18	.29	.49	.63	.69	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70
Sept. 13	2:05 a.m.	6:10 a.m.	4.10	4:03 a.m.	4:43 a.m.	1.48	.19	.47	.79	1.17	1.49	1.63	1.79	2.04	2.13	2.21	2.35	2.48	2.60	2.62
Oct. 1	10:30 p.m.	[1] 3:15 a.m.	2.29	10:52 p.m.	11:38 p.m.	.09	.15	.33	.56	.73	.89	1.06	1.19	1.37	1.50	1.58	1.74	1.94	2.07	2.14
Greensboro, N. C.: [4]																				
Aug. 2	2:47 p.m.	7:25 p.m.	1.75	2:59 p.m.	3:22 p.m.	.03	.22	.59	.82	1.22	1.42	1.48	1.50	1.53	1.55	1.56	1.58	1.60	1.60	1.61
Aug. 17	5:36 p.m.	8:42 p.m.	1.62	6:02 p.m.	6:27 p.m.	.14	.23	.36	.51	.72	.83	.88	.93	.95	1.03	1.15	1.32	1.37	1.42	1.46
Aug. 28	5:45 p.m. 7:00 p.m.	6:32 p.m. 8:20 p.m.	.61 .47	6:12 p.m.	6:22 p.m.	.03	.31	.57	.58	.58	.58	.58	.58	.58	.58	.58	.58	.88	.94	1.04

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
SOUTH ATLANTIC STATES—continued																			
Hatteras, N. C.:[4]																			
Feb. 8	[2]D.N. p.m.	2:20 p.m.	2.06	3:49 a.m.	4:03 a.m.	0.24	0.25	0.43	0.60	0.64	0.78	0.81	0.85	0.88	0.89	0.90	0.91	0.93	0.95	0.96
May 31	12:12 p.m.	8:45 p.m.	3.09	1:10 p.m.	2:01 p.m.	.78	.18	.34	.41	.45	.53	.69	.94	1.18	1.31	1.41	1.57	1.75	1.86	1.93
July 11	D.N. a.m.	5:12 p.m.	6.62	8:07 a.m.	8:16 a.m.	.34	.45	.72	.76	.86	.88	.93	1.00	1.01	1.02	1.04	1.11	1.14	1.62	2.70
Do	D.N. a.m.	5:12 p.m.	6.62	9:30 a.m.	10:04 a.m.	1.50	.12	.21	.37	.58	1.10	1.28	1.53	1.57	1.59	1.60	1.62	1.69	1.70	1.70
Do	D.N. a.m.	5:12 p.m.	6.62	2:18 p.m.	3:24 p.m.	3.57	.27	.59	.70	.72	.84	.97	1.35	1.52	1.74	2.10	2.64	2.89	2.95	2.99
Aug. 22	7:02 a.m.	8:05 a.m.	.91	7:39 a.m.	7:52 a.m.	.06	.26	.59	.83	.84	.85	.85	.85	.85	.85	.85	.85	.85	.85	.85
Aug. 31	D.N. a.m.	9:43 a.m.	1.41	3:40 a.m.	3:55 a.m.	.39	.18	.40	.60	.67	.69	.73	.78	.82	.87	.89	.91	.93	.95	.97
Sept. 7	8:30 a.m.	8:56 a.m.	.62	8:32 a.m.	8:40 a.m.	.02	.39	.57	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
Sept. 15–16	1:02 p.m.	4:25 p.m.	12.54	9:43 p.m.	10:33 p.m.	3.12	.13	.26	.42	.57	.67	.88	1.04	1.24	1.42	1.56	----	----	----	----
				[5]10:33 p.m.	11:23 p.m.	------	1.64	1.67	1.73	1.82	1.91	2.60	2.09	2.21	2.36	2.65	----	----	----	----
				[6]11:23 p.m.	12:13 a.m.	------	2.90	3.09	3.24	3.42	3.61	3.77	3.96	4.13	4.22	4.31	----	----	----	----
				[5]12:13 a.m.	12:18 a.m.	------	4.43	----	----	----	----	----	----	----	----	----	----	----	----	----
Raleigh, N. C.:[4]																			
May 27	5:26 p.m.	6:36 p.m.	.64	5:37 p.m.	5:47 p.m.	.01	.26	.50	.54	.59	.59	.60	.60	.60	.61	.61	.63	.63	.63	.64
	7:23 p.m.	7:45 p.m.	.01																	
Wilmington, N. C.:[4]																			
Sept. 6	12:50 p.m.	10:20 p.m.	3.51	5:21 p.m.	5:38 p.m.	.91	.13	.35	.60	.66	.69	.71	.72	.74	.75	.76	.88	1.00	1.09	1.33
Sept. 7	1:10 a.m.	7:05 a.m.	2.14	3:16 a.m.	3:28 a.m.	.26	.27	.64	.76	.76	.77	.77	.78	.78	.78	.79	.79	.79	.80	.81
Do	1:10 a.m.	7:05 a.m.	2.14	5:36 a.m.	6:01 a.m.	1.24	.16	.29	.52	.70	.85	.87	.88	.89	.89	.89	.89	.90	.90	.90
Charleston, S. C.:[4]																			
June 12	9:01 p.m.	10:30 p.m.	.68	10:00 p.m.	10:17 p.m.	.12	.15	.38	.66	.73	.76	.76	.76	.76	.76	.76	.76	.76	.76	.76
July 20	1:32 a.m.	8:40 a.m.	1.49	1:40 a.m.	1:59 a.m.	.09	.10	.31	.59	.77	.79	.81	.82	.83	.92	.97	.99	1.01	1.09	1.11
Aug. 12	6:43 p.m.	11:30 p.m.	2.34	7:00 p.m.	7:52 p.m.	.04	.24	.42	.60	.69	.73	.82	1.08	1.50	1.78	1.96	2.09	2.15	2.15	2.17
Sept. 6	[2]1:53 p.m.	7:56 a.m.	10.03	5:23 a.m.	6:51 a.m.	3.46	.48	.98	1.44	1.89	2.19	2.42	2.61	2.82	3.04	3.45	4.07	5.20	6.03	6.04
Do	[2]1:53 p.m.	7:56 a.m.	10.03	7:29 a.m.	7:38 a.m.	9.53	.23	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Columbia, S. C.:[4]																			
May 2	9:38 p.m.	[1]7:00 a.m.	1.80	9:43 p.m.	10:26 p.m.	.01	.23	.46	.50	.67	.94	1.11	1.2	21.3	31.4	41.4	51.5	71.6	81.6	81.6
May 30	4:50 p.m.	8:40 p.m.	2.26	5:33 p.m.	6:26 p.m.	.18	.24	.52	.72	.85	1.05	1.21	1.43	(3)	(3)	(3)	(3)	(3)	(3)	(3)
June 24	5:00 p.m.	7:38 p.m.	.92	7:18 p.m.	7:27 p.m.	.31	.34	.52	.60	.61	.61	.61	.61	.61	.61	.61	.61	.61	.61	.61
Aug. 16	1:25 p.m.	3:20 p.m.	1.32	1:46 p.m.	2:06 p.m.	.02	.31	.54	.75	1.06	1.10	1.12	1.17	1.18	1.19	1.21	1.27	1.30	1.30	1.30
Augusta, Ga.:[4]																			
May 27	1:30 p.m.	3:50 p.m.	1.00	1:50 p.m.	2:08 p.m.	.20	.29	.45	.64	.72	.74	.74	.76	.76	.76	.77	.79	.80	.80	.80
July 19	4:35 p.m.	[1]1:30 a.m.	3.09	4:37 p.m.	5:01 p.m.	.01	.16	.31	.59	.88	1.03	1.03	1.04	1.04	1.04	1.04	1.06	1.32	1.70	2.33
Aug. 17	6:25 p.m.	10:30 p.m.	2.57	7:46 p.m.	8:25 p.m.	.81	.16	.39	.49	.58	.84	1.10	1.28	1.40	1.47	1.52	1.56	1.61	1.70	1.75
Savannah, Ga.:[4]																			
June 12	5:30 p.m.	10:05 p.m.	2.21	6:29 p.m.	7:13 p.m.	.11	.21	.64	.91	1.11	1.27	1.41	1.62	1.76	1.84	1.86	1.91	2.03	2.04	2.04
July 20	12:24 p.m.	2:58 p.m.	.92	12:28 p.m.	12:45 p.m.	.01	.13	.48	.70	.76	.77	.78	.78	.78	.78	.78	.84	.88	.89	.89
Aug. 29	7:02 p.m.	8:50 p.m.	1.36	7:32 p.m.	8:01 p.m.	.05	.30	.55	.69	.87	1.03	1.19	1.22	1.22	1.26	1.29	1.30	1.31	1.31	1.31
Sept. 5	7:38 a.m.	[1]3:10 a.m.	6.51	10:12 a.m.	10:32 a.m.	.37	.22	.60	.83	.98	1.00	1.06	1.13	1.29	1.32	1.32	1.33	1.35	1.37	1.39
Oct. 15	1:58 a.m.	3:30 a.m.	1.62	2:09 a.m.	2:38 a.m.	.19	.32	.57	.77	.91	1.16	1.41	1.42	1.42	1.42	1.42	1.42	1.43	1.43	1.43
Oct. 21	D.N. a.m.	9:35 a.m.	2.30	5:34 a.m.	5:53 a.m.	.04	.25	.61	.84	.93	.96	1.00	1.04	1.10	1.15	1.21	1.27	1.31	1.33	1.35
Do	D.N. a.m.	9:35 a.m.	2.30	8:00 a.m.	8:15 a.m.	1.45	.34	.61	.73	.77	.77	.78	.79	.79	.79	.79	.81	.85	.85	.85
Jacksonville, Fla.:[4]																			
Jan. 25	8:54 a.m.	11:16 a.m.	.68	10:07 a.m.	10:16 a.m.	.08	.21	.55	.57	.59	.59	.59	.59	.59	.59	.59	.59	.60	.60	.60
Apr. 5	7:59 p.m.	[1]7:35 a.m.	2.41	8:53 p.m.	9:08 p.m.	.08	.25	.55	.65	.70	.75	.77	.80	.85	.95	1.05	1.25	1.52	1.55	1.66
Apr. 24	8:20 p.m.	D.N. p.m.	.81	8:54 p.m.	9:03 p.m.	.16	.41	.61	.61	.61	.62	.65	.65	.65	.65	.65	.65	.65	.65	.65
May 29	2:16 p.m.	4:00 p.m.	1.06	2:25 p.m.	2:52 p.m.	.03	.19	.35	.59	.74	.86	.90	.97	1.00	1.01	1.02	1.03	1.03	1.03	1.03
June 23	(12:53 p.m.	1:15 p.m.	1.04	1:03 p.m.	1:13 p.m.	.01	.57	1.02	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.07	1.30	1.41
	2:15 p.m.	D.N. p.m.	.63)																	
June 26	4:10 p.m.	6:25 p.m.	1.56	4:25 p.m.	4:51 p.m.	.06	.10	.24	.59	1.15	1.25	1.32	1.37	1.39	1.40	1.41	1.41	1.41	1.43	1.50
July 4	9:57 a.m.	12:35 p.m.	1.36	10:35 a.m.	11:09 a.m.	.08	.19	.36	.51	.72	.93	1.04	1.14	1.16	1.18	1.19	1.21	1.26	1.27	1.28
July 10	7:23 p.m.	8:52 p.m.	1.18	8:03 p.m.	8:16 p.m.	.15	.23	.60	.72	.75	.75	.77	.95	1.02	1.03	1.03	1.03	1.03	1.03	1.03
July 20	4:15 p.m.	8:30 p.m.	2.94	5:15 p.m.	5:59 p.m.	.09	.14	.42	.90	1.35	1.71	2.07	2.34	2.56	2.64	2.67	2.70	2.72	2.77	2.80
July 24	11:03 a.m.	12:20 p.m.	.90	11:43 a.m.	12:08 p.m.	.01	.10	.31	.49	.72	.88	.89	.89	.89	.89	.89	.89	.89	.89	.89
Aug. 6	3:20 p.m.	6:55 p.m.	1.75	3:58 p.m.	4:10 p.m.	.09	.20	.50	.60	.64	.69	.76	.78	.83	.92	1.05	1.39	1.52	1.56	1.61
Oct. 22	11:30 a.m.	[4]D.N. a.m.	6.34	9:32 p.m.	10:29 p.m.	.71	.12	.30	.55	.88	1.28	1.74	2.07	2.40	2.70	2.90	3.21	3.39	3.60	4.19
FLORIDA PENINSULA																			
Key West, Fla.:[4]																			
June 8	3:13 p.m.	9:15 p.m.	1.69	5:02 p.m.	5:32 p.m.	.20	.27	.60	.87	1.07	1.21	1.33	1.38	1.40	1.43	1.45	1.46	1.48	1.49	1.49
June 15	2:12 a.m.	D.N. a.m.	1.51	2:17 a.m.	2:37 a.m.	.04	.28	.66	.90	1.10	1.16	1.24	1.29	1.30	1.35	1.41	1.42	1.45	1.45	1.46
June 21	10:00 a.m.	[1]5:55 a.m.	4.46	7:35 p.m.	8:08 p.m.	.23	.17	.31	.73	1.18	1.63	2.06	2.28	2.29	2.38	2.40	2.42	2.44	2.63	2.75
Do	10:00 a.m.	[1]5:55 a.m.	4.46	9:41 p.m.	9:56 p.m.	3.06	.28	.62	.82	.89	.90	.91	.91	.91	.91	.91	.91	.91	.91	.91
Oct. 4	4:15 p.m.	[1]5:10 a.m.	7.81	5:35 p.m.	7:01 p.m.	.91	.17	.32	.44	.54	.73	.90	1.13	1.17	1.47	1.92	2.45	2.87	3.24	3.56
Miami, Fla.:[4]																			
Feb. 28	7:10 p.m.	D.N. p.m.	2.32	11:03 p.m.	11:29 p.m.	.52	.13	.44	.81	1.26	1.67	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Apr. 11	5:10 p.m.	7:55 p.m.	1.25	5:22 p.m.	5:34 p.m.	.02	.25	.50	.62	.62	.62	.62	.62	.62	.62	.62	.62	.77	1.22	1.22
Apr. 16	4:45 p.m.	D.N. p.m.	1.25	8:37 p.m.	8:48 p.m.	.48	.39	.55	.59	.61	.72	.76	.76	.76	.76	.76	.77	.77	.77	.77
May 30	D.N. a.m.	D.N. a.m.	2.60	1:17 a.m.	1:48 a.m.	1.04	.21	.50	.76	.95	1.08	1.29	1.38	1.45	1.48	1.51	1.55	1.56	1.56	1.56
June 14	3:12 p.m.	5:48 p.m.	5.17	3:20 p.m.	4:33 p.m.	.02	.43	.87	1.57	1.79	2.34	2.89	3.24	3.53	3.79	4.00	4.53	5.09	5.12	5.13
June 15	2:57 p.m.	8:15 p.m.	1.87	4:07 p.m.	4:33 p.m.	.21	.23	.60	.86	1.16	1.34	1.45	1.48	1.50	1.51	1.51	1.52	1.53	1.53	1.54
June 20	D.N. a.m.	D.N. a.m.	.69	4:21 a.m.	4:32 a.m.	.01	.31	.50	.64	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68
July 9	6:19 a.m.	7:25 a.m.	.59	6:29 a.m.	6:35 a.m.	.05	.39	.53	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
July 13	3:36 p.m.	5:15 p.m.	1.20	3:45 p.m.	4:11 p.m.	.02	.13	.20	.37	.78	.96	1.02	1.11	1.14	1.16	1.17	1.18	1.18	1.18	1.18
Aug. 18	[2]D.N. p.m.	3:40 p.m.	3.86	7:31 a.m.	8:07 a.m.	.98	.46	.76	1.06	1.41	1.48	1.63	1.96	2.05	2.12	2.17	2.24	2.33	2.45	2.60
Aug. 22	11:32 a.m.	2:54 p.m.	4.31	12:49 p.m.	1:56 p.m.	1.56	.24	.42	.66	.83	1.07	1.16	1.21	1.43	1.78	1.88	2.16	2.56	2.74	2.74
Oct. 5	[2]3:52 p.m.	1:00 p.m.	6.99	6:27 a.m.	7:39 a.m.	4.20	.14	.22	.37	.47	.59	.75	.90	1.02	1.20	1.37	1.62	1.89	2.01	2.13
Oct. 20	10:55 a.m.	3:10 p.m.	1.69	11:49 a.m.	12:07 p.m.	.44	.36	.66	.84	.94	.99	1.01	1.02	1.03	1.03	1.03	1.04	1.04	1.04	1.05
Oct. 23	7:45 p.m.	D.N. p.m.	.71	8:41 p.m.	8:51 p.m.	.06	.36	.54	.60	.63	.65	.65	.66	.66	.66	.66	.66	.66	.66	.66

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
FLORIDA PENINSULA—contd.																			
Tampa, Fla.:[4]																			
Apr. 11	3:40 p.m.	5:45 p.m.	1.66	4:02 p.m.	4:30 p.m.	1.03	1.12	1.46	1.83	1.99	1.11	1.23	1.25	1.25	1.26	1.31	1.58	1.63	1.63	1.63
Apr. 16	[2] 11:10 p.m.	7:00 a.m.	1.76	2:01 a.m.	2:12 a.m.	.17	.34	.66	.74	.77	.79	.80	.82	.83	.87	.90	1.01	1.11	1.14	1.20
July 8	4:40 p.m.	7:00 p.m.	1.49	5:01 p.m.	5:27 p.m.	.12	.15	.51	.80	.95	1.07	1.15	1.17	1.19	1.21	1.23	1.32	1.37	1.37	1.37
July 12	D.N. a.m.	7:05 p.m.	4.78	5:52 a.m.	6:17 a.m.	1.42	.30	.52	.61	.79	1.02	1.06	1.10	1.11	1.11	1.11	1.16	1.29	1.37	1.37
Aug. 2	2:10 p.m.	3:10 p.m.	1.22	2:28 p.m.	2:45 p.m.	.01	.26	.67	1.08	1.17	1.19	1.20	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Aug. 3	11:05 a.m.	3:00 p.m.	1.72	11:09 a.m.	11:54 a.m.	.01	.24	.48	.57	.84	1.12	1.21	1.27	1.41	1.52	1.57	1.59	1.60	1.63	1.68
Sept. 5	[2] 10:55 a.m.	2:05 p.m.	7.28	3:00 a.m.	4:00 a.m.	3.29	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	1.51	(3)	(3)	2.01
Oct. 16	5:40 p.m.	6:55 p.m.	1.21	5:44 p.m.	6:19 p.m.	.03	.15	.32	.48	.60	.69	.91	1.01	1.08	1.12	1.14	1.17	1.18	1.18	1.18
EAST GULF STATES																				
Atlanta, Ga.:[4]																				
June 10	2:25 p.m.	4:10 p.m.	2.14	2:35 p.m.	2:57 p.m.	.07	.37	1.19	1.64	1.76	1.85	1.86	1.86	1.86	1.86	1.86	1.86	1.95	2.07	2.07
June 29	2:10 p.m.	3:52 p.m.	1.08	2:13 p.m.	2:44 p.m.	.01	.10	.31	.62	.77	.83	.93	.98	1.01	1.03	1.04	1.05	1.06	1.07	1.07
Oct. 16	2:45 p.m.	D.N. p.m.	1.20	4:32 p.m.	4:43 p.m.	.22	.41	.76	.84	.87	.88	.89	.89	.89	.90	.90	.92	.94	.96	.98
Macon, Ga.:[4]																				
Feb. 7	3:34 p.m.	[1] 5:30 a.m.	2.06	5:20 p.m.	5:43 p.m.	.12	.41	.69	.86	.95	1.03	1.05	1.07	1.11	1.13	1.18	1.24	1.31	1.39	1.48
July 11	9:15 p.m.	[1] 1:45 a.m.	2.11	9:43 p.m.	10:22 p.m.	.04	.24	.57	.94	1.19	1.34	1.51	1.64	1.73	1.79	1.82	1.85	1.86	1.87	1.93
Aug. 13	2:14 p.m.	5:30 p.m.	1.23	3:13 p.m.	3:26 p.m.	.60	.27	.52	.59	.59	.59	.59	.60	.60	.61	.61	.61	.61	.62	.62
Pensacola, Fla.:[4]																				
Jan. 25	[1] D.N. p.m.	D.N. a.m.	1.20	12:28 a.m.	12:50 a.m.	.24	.19	.42	.61	.83	.94	.96	.96	.96	.96	.96	.96	.96	.96	.96
Apr. 9	2:55 a.m.	2:10 p.m.	1.87	1:05 p.m.	1:13 p.m.	1.27	.34	.58	.59	.59	.59	.59	.60	.60	.60	.60	.60	.60	.60	.60
May 27	7:14 a.m.	7:45 a.m.	.66	7:18 a.m.	7:31 a.m.	.01	.19	.55	.64	.64	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
May 30	3:33 p.m.	4:17 p.m.	.94	3:36 p.m.	3:58 p.m.	.01	.19	.50	.60	.81	.93	.93	.93	.93	.93	.93	.93	.93	.93	.93
July 1	10:16 a.m.	12:10 p.m.	1.12	10:31 a.m.	10:51 a.m.	.18	.26	.55	.77	.87	.91	.92	.93	.93	.93	.93	.94	.94	.94	.94
July 15	12:07 p.m.	6:14 p.m.	1.97	1:08 p.m.	1:23 p.m.	.17	.19	.48	.72	.74	.74	.74	.75	.75	.84	.84	.85	.89	1.02	1.02
July 21	5:37 a.m.	10:51 a.m.	2.59	5:45 a.m.	6:21 a.m.	.03	.22	.40	.52	.70	.85	.97	1.07	1.13	1.16	1.17	1.21	1.31	1.44	1.55
Birmingham, Ala.:[4]																				
May 27	D.N. a.m.	D.N. a.m.	.98	3:07 a.m.	3:34 a.m.	.06	.16	.28	.51	.63	.81	.90	.91	.91	.91	.91	.91	.91	.91	.92
June 12	9:48 p.m.	[1] D.N. a.m.	1.40	9:55 p.m.	10:29 p.m.	.02	.11	.25	.45	.77	.95	1.09	1.23	1.28	1.31	1.32	1.34	1.35	1.35	1.36
July 9	6:07 p.m.	[1] D.N. a.m.	.87	6:22 p.m.	6:34 p.m.	.02	.28	.51	.62	.67	.71	.75	.75	.76	.76	.76	.76	.76	.77	.77
July 27	1:16 p.m.	2:20 p.m.	.84	1:16 p.m.	1:30 p.m.	.00	.24	.63	.76	.81	.82	.82	.83	.83	.84	.84	.84	.84	.84	.84
Sept. 2	1:13 p.m.	2:30 p.m.	1.23	1:15 p.m.	1:41 p.m.	.01	.81	.34	.58	.90	1.04	1.11	1.15	1.19	1.20	1.21	1.21	1.22	1.22	1.22
Nov. 21	3:40 p.m.	4:25 p.m.	.73	3:52 p.m.	4:02 p.m.	.01	.33	.63	.66	.66	.71	.72	.72	.72	.72	.72	.72	.72	.72	.72
Mobile, Ala.:[4]																				
Apr. 9	1:00 a.m.	10:15 a.m.	3.16	4:13 a.m.	4:43 a.m.	1.02	.13	.38	.71	.93	1.31	1.59	1.61	1.61	1.63	1.64	1.67	1.76	1.84	1.89
Apr. 14	3:40 p.m.	[1] 4:30 a.m.	4.48	5:48 p.m.	6:38 p.m.	1.24	.13	.20	.32	.40	.53	.73	.88	1.15	1.32	1.42	1.49	1.51	1.51	1.51
June 25	5:45 a.m.	12:40 p.m.	1.98	7:18 a.m.	7:56 a.m.	.39	.13	.41	.65	.89	.99	1.11	1.23	1.33	1.37	1.42	1.46	1.47	1.51	1.53
June 28	12:48 p.m.	4:00 p.m.	2.29	1:07 p.m.	1:43 p.m.	.06	.20	.52	.91	1.29	1.52	1.88	2.07	2.12	2.14	2.16	2.18	2.18	2.19	2.21
July 2	11:20 a.m.	4:30 p.m.	2.71	11:30 a.m.	12:20 p.m.	.07	.20	.41	.72	1.06	1.40	1.73	1.97	2.17	2.28	2.40	2.49	2.52	2.54	2.55
July 13	3:05 p.m.	6:30 p.m.	1.70	3:40 p.m.	4:01 p.m.	.17	.39	.84	1.25	1.39	1.44	1.45	1.46	1.46	1.47	1.47	1.47	1.47	1.49	1.51
July 24	9:53 a.m.	11:45 a.m.	1.37	10:56 a.m.	11:29 a.m.	.11	.20	.31	.52	.73	.91	1.12	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26
Montgomery, Ala.:[4]																				
Feb. 7	11:10 a.m.	6:35 p.m.	1.39	1:48 p.m.	2:05 p.m.	.16	.12	.44	.61	.69	.78	.84	.88	.90	.93	.94	.99	1.05	1.06	1.06
Mar. 18	1:33 p.m.	2:28 p.m.	.60	1:56 p.m.	2:02 p.m.	.01	.52	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
Mar. 19	9:20 a.m.	[1] 3:15 a.m.	5.86	10:20 a.m.	11:17 a.m.	.13	.12	.24	.34	.43	.56	.78	.93	1.09	1.13	1.27	1.64	2.01	2.13	2.62
Apr. 24	2:48 p.m.	3:23 p.m.	.74	3:07 p.m.	3:18 p.m.	.01	.35	.66	.72	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73
July 26	1:06 p.m.	2:20 p.m.	.55	1:21 p.m.	1:30 p.m.	.02	.26	.50	.52	.52	.52	.52	.52	.52	.53	.53	.53	.53	.53	.53
Aug. 4	3:29 p.m.	6:07 p.m.	.93	3:46 p.m.	3:58 p.m.	.01	.40	.73	.84	.87	.88	.88	.89	.90	.90	.90	.90	.90	.91	.91
Sept. 8	3:40 a.m.	7:15 a.m.	1.56	6:37 a.m.	6:52 a.m.	.87	.17	.48	.66	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69
Sept. 12	2:10 p.m.	4:55 p.m.	2.40	2:16 p.m.	3:09 p.m.	.01	.24	.65	.92	1.01	1.19	1.46	1.58	1.73	2.00	2.22	2.34	2.38	2.38	2.38
Meridian, Miss.:[4]																				
Feb. 19	4:05 p.m.	11:10 p.m.	1.56	5:16 p.m.	5:26 p.m.	.16	.29	.60	.65	.66	.69	.70	.72	.75	.80	.80	.82	1.26	1.28	1.30
Mar. 19	5:20 a.m.	7:50 a.m.	1.22	6:00 a.m.	6:25 a.m.	.10	.16	.33	.51	.86	1.05	1.08	1.10	1.11	1.12	1.12	1.12	1.12	1.12	1.12
May 5	[2] 5:25 p.m.	4:00 a.m.	.91	2:42 a.m.	2:59 a.m.	.12	.22	.44	.66	.75	.78	.78	.79	.79	.79	.79	.79	.79	.79	.79
June 10	12:40 a.m.	4:00 a.m.	1.75	12:54 a.m.	1:30 a.m.	.17	.22	.48	.58	.66	.72	.83	1.20	1.26	1.29	1.31	1.34	1.36	1.40	1.50
June 29	11:14 a.m.	4:50 p.m.	2.32	11:25 a.m.	12:34 p.m.	.07	.25	.58	.86	1.01	1.07	1.10	1.14	1.19	1.21	1.27	1.69	2.07	2.14	2.15
July 10	D.N. a.m.	5:30 a.m.	1.38	1:54 a.m.	2:08 a.m.	.24	.15	.51	.76	.81	.84	.86	.87	.88	.90	.93	.98	1.05	1.06	1.06
July 15	8:49 p.m.	11:35 p.m.	1.63	9:05 p.m.	9:45 p.m.	.04	.25	.44	.60	.69	.83	.90	1.16	1.36	1.42	1.44	1.46	1.54	1.57	1.58
July 24	3:00 p.m.	10:00 p.m.	.93	5:46 p.m.	6:02 p.m.	.03	.31	.60	.72	.77	.79	.81	.82	.83	.85	.85	.86	.87	.87	.88
Aug. 24	2:19 p.m.	3:20 p.m.	1.06	2:23 p.m.	2:54 p.m.	.03	.23	.50	.60	.72	.84	.95	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Sept. 1	3:41 p.m.	5:05 p.m.	1.31	3:45 p.m.	3:56 p.m.	.02	.35	.56	.62	.62	.62	.62	.72	.96	1.10	1.20	1.27	1.29	1.29	1.29
Vicksburg, Miss.:[4]																				
Feb. 7	1:45 a.m.	12:20 p.m.	4.67	6:27 a.m.	7:17 a.m.	1.19	.31	.41	.54	.72	.84	1.00	1.25	1.50	1.85	2.09	2.14	2.26	2.55	2.74
Mar. 19	D.N. a.m.	3:45 a.m.	1.92	12:30 a.m.	1:06 a.m.	.21	.20	.28	.47	.69	.95	1.11	1.29	1.36	1.41	1.45	1.50	1.60	1.63	1.67
Mar. 31	7:20 a.m.	9:45 a.m.	.82	8:09 a.m.	8:21 a.m.	.11	.14	.43	.58	.61	.64	.64	.65	.65	.66	.66	.67	.70	.71	.71
May 4	5:21 p.m.	D.N. p.m.	1.31	7:31 p.m.	7:50 p.m.	.03	.29	.83	1.18	1.26	1.27	1.27	1.27	1.28	1.28	1.28	1.28	1.28	1.28	1.28
June 24	5:24 p.m.	6:20 p.m.	.72	5:36 p.m.	5:47 p.m.	.01	.26	.61	.68	.69	.70	.71	.71	.71	.71	.71	.71	.71	.71	.71
July 10	8:40 a.m.	12:15 p.m.	.94	9:34 a.m.	9:46 a.m.	.09	.28	.50	.60	.61	.61	.62	.62	.62	.62	.63	.64	.67	.84	.85
July 15	9:55 p.m.	[1] D.N. p.m.	4.40	10:05 p.m.	11:00 p.m.	.01	.15	.29	.44	.70	.73	.84	1.06	1.24	1.45	1.58	1.76	1.81	1.81	1.81
Sept. 30	4:50 p.m.	5:40 p.m.	.89	5:09 p.m.	5:21 p.m.	.09	.27	.54	.70	.76	.79	.80	.80	.80	.80	.80	.80	.80	.80	.80
Dec. 5	10:39 p.m.	[1] 8:45 a.m.	2.43	10:47 p.m.	11:05 p.m.	.01	.34	.61	.79	.89	.92	1.01	1.07	1.11	1.15	1.17	1.23	1.29	1.35	1.41
New Orleans, La.:[4]																				
Apr. 26	2:38 p.m.	5:00 p.m.	1.21	2:55 p.m.	3:14 p.m.	.03	.15	.43	.73	.85	.90	.96	1.04	1.09	1.10	1.10	1.11	1.11	1.12	1.18
May 23	11:23 a.m.	4:15 p.m.	1.28	12:17 p.m.	12:43 p.m.	.29	.11	.25	.58	.77	.90	.96	.97	.97	.98	.99	.99	.99	.99	.99
July 1	5:59 p.m.	7:30 p.m.	1.44	6:09 p.m.	6:33 p.m.	.05	.24	.55	.87	1.19	1.34	1.37	1.38	1.39	1.39	1.39	1.39	1.39	1.39	1.39
July 24	10:32 a.m.	11:45 a.m.	.92	10:43 a.m.	11:00 a.m.	.01	.18	.49	.73	.88	.90	.91	.91	.91	.91	.91	.91	.91	.91	.91
Aug. 9	9:39 a.m.	11:35 a.m.	1.64	9:35 a.m.	10:22 a.m.	.02	.30	.45	.63	.81	1.01	1.13	1.18	1.23	1.32	1.36	1.40	1.59	1.62	1.62
Aug. 15	12:05 p.m.	1:50 p.m.	1.03	12:39 p.m.	12:56 p.m.	.08	.26	.52	.71	.91	.92	.93	.93	.93	.93	.94	.95	.95	.95	.95

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
WEST GULF STATES																				
Shreveport, La.:[4]																				
Mar. 30	12:53 p.m.	9:30 p.m.	2.89	5:22 p.m.	5:47 p.m.	0.78	0.34	0.75	1.04	1.17	1.37	1.39	1.42	1.44	1.48	1.53	1.58	1.90	1.98	1.99
July 15	6:25 p.m.	[1] 5:00 a.m.	3.62	7:15 p.m.	8:03 p.m.	.63	.14	.32	.36	.43	.56	.80	1.17	1.43	1.55	1.63	1.70	1.74	2.10	2.32
July 24	9:00 a.m.	[1] 10:40 a.m.	10.19	6:28 p.m.	6:48 p.m.	2.91	.14	.39	.61	.72	.76	.79	.81	.84	.86	.91	1.02	1.46	2.00	2.37
Sept. 24	5:35 p.m.	6:25 p.m.	1.00	5:42 p.m.	6:06 p.m.	.02	.26	.47	.61	.77	.86	.94	.97	.98	.98	.98	.98	.98	.98	.98
Oct. 1	12:45 p.m.	4:30 p.m.	2.21	1:35 p.m.	1:58 p.m.	.55	.14	.58	1.08	1.41	1.54	1.56	1.57	1.60	1.61	1.61	1.62	1.62	1.62	1.64
Fort Smith, Ark.:[4]																				
Sept. 1	7:00 p.m.	10:50 p.m.	1.98	8:13 p.m.	8:36 p.m.	.15	.14	.28	.51	.95	1.07	1.08	1.08	1.08	1.08	1.16	1.45	1.55	1.80	1.83
Sept. 2	6:20 a.m.	5:00 p.m.	2.01	9:26 a.m.	9:57 a.m.	.20	.16	.37	.58	.75	.88	.98	1.05	1.09	1.13	1.16	1.19	1.25	1.32	1.41
Sept. 25	4:40 a.m.	7:35 a.m.	1.56	5:59 a.m.	6:29 a.m.	.14	.10	.31	.53	.77	1.00	1.10	1.12	1.12	1.23	1.27	1.40	1.42	1.42	1.42
Little Rock, Ark.:[4]																				
Apr. 20	8:00 p.m.	D.N. a.m.	2.80	9:46 p.m.	10:15 p.m.	.49	.13	.27	.50	.59	.81	.94	1.02	1.03	1.04	1.07	1.18	1.64	1 68	1.8
Aug. 12	11:23 a.m.	1:10 p.m.	2.39	12 noon	12:55 p.m.	.08	.11	.30	.53	(3)	(3)	(3)	(3)	(3)	(3)	(2)	2.31	2.31	2.31	2.31
Aug. 14	11:25 a.m.	12:56 p.m.	1.41	12:04 p.m.	12:24 p.m.	.01	.31	.62	.85	1.00	1.07	1.10	1.22	1.32	1.36	1.39	1.40	1.40	1.40	1.40
Aug. 28	2:05 p.m.	2:44 p.m.	1.34	2:08 p.m.	2:26 p.m.	.01	.29	.65	1.07	1.25	1.28	1.32	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Sept. 1	7:13 p.m.	11:45 p.m.	3.36	8:56 p.m.	9:29 p.m.	.51	.26	.61	.94	1.27	1.51	1.71	1.84	1.91	2.01	2.10	2.17	2.42	2.77	2.84
Austin, Tex.:[4]																				
Oct. 26	9:45 p.m.	[1] D.N. a.m	2.22	10:31 p.m.	11:11 p.m.	.03	.15	.41	.51	.63	.87	1.14	1.47	1.79	1.84	1.85	1.90	1.94	1.96	1.98
Brownsville, Tex.:[4]																				
May 25	10:24 p.m.	[1] 11:10 a.m.	2.27	10:45 p.m.	11:14 p.m.	.05	.21	.53	.86	1.16	1.42	1.53	1.55	1.57	1.58	1.59	1.60	1.62	1.62	1.63
May 27–28	10:30 p.m.	D.N. a.m.	2.04	11:40 p.m.	12:18 a.m.	.22	.16	.37	.88	1.13	1.24	1.43	1.57	1.66	1.70	1.75	1.79	1.81	1.81	1.82
Corpus Christi, Tex.:[4]																				
May 25	11:50 a.m.	2:45 p.m.	2.17	12:36 p.m.	1:36 p.m.	.11	.18	.35	.61	.80	1.01	1.18	1.38	1.53	1.64	1.75	1.90	1.99	2.05	2.05
June 12	9:30 a.m.	10:35 a.m.	1.16	10:00 a.m.	10:27 a.m.	17	.26	.60	.72	.77	.93	.99	.99	.99	.99	.99	.99	.99	.99	.99
Dallas, Tex.:[4]																				
Apr. 25	3:43 p.m.	10:54 p.m.	3.42	5:52 p.m.	6:51 p.m.	.16	.23	.59	.88	1.02	1.09	1.20	1.37	1.62	1.83	2.10	2.49	2.76	2.81	2.87
Fort Worth, Tex.:[4]																				
May 24	9:40 p.m.	[5] 5:45 a.m.	2.01	11:23 p.m.	11:57 p.m.	.14	.10	.23	.42	.63	.82	.94	1.04	1.06	1.08	1.09	1.12	1.16	1.18	1.22
July 30	4:30 a.m.	4:10 p.m.	5.27	3:23 p.m.	4:01 p.m.	3.53	.16	.40	.69	.95	1.10	1.23	1.51	1.69	1.73	1.74	1.74	1.74	1.74	1.74
Sept. 11	6:02 a.m.	9:15 a.m.	3.21	7:24 a.m.	8:16 a.m.	.99	.17	.24	.41	.58	.78	.89	.96	1.07	1.26	1.56	1.71	1.87	2.12	2.22
Galveston, Tex.:[4]																				
Jan. 7	8:07 p.m.	[1] D.N. a.m.	1.61	8:56 p.m.	9:11 p.m.	.05	.16	.51	.66	.66	.67	.67	.67	.70	.70	.72	.73	.80	.82	.87
Mar. 5	6:53 p.m.	D.N. p.m.	3.17	7:36 p.m.	8:10 p.m.	.15	.14	.55	1.05	1.61	1.80	2.17	2.35	2.38	2.43	2.45	2.49	2.56	2.64	2.75
July 23	[2] 10:29 p.m.	12:12 p.m.	3.95	2:34 a.m.	2:51 a.m.	.56	.19	.39	.78	.83	.84	.85	1.01	1.03	1.04	1.05	1.07	1.32	1.53	1.54
Sept. 7	D.N. a.m.	D.N. a.m.	1.53	4:40 a.m.	5:10 a.m.	.04	.32	.52	.84	1.18	1.28	1.41	1.47	1.49	1.49	1.49	1.49	1.49	1.49	1.49
Oct. 1	D.N. a.m.	2:57 p.m.	4.73	4:55 a.m.	5:24 a.m.	.02	.10	.38	.69	.73	.89	1.01	1.06	1.12	1.14	1.18	1.20	1.23	1.44	2.05
Do	D.N. a.m.	2:57 p.m.	4.73	6:40 a.m.	7:27 a.m.	1.49	.19	.47	.60	.74	.97	1.18	1.38	1.66	1.84	1.90	2.09	2.25	2.25	2.26
Nov. 12	D.N. a.m.	6:22 a.m.	3.33	1:58 a.m.	2:27 a.m.	.04	.18	.53	.90	1.29	1.63	1.76	1.78	1.80	1.82	1.83	1.84	1.87	1.88	1.89
Houston, Tex.:[4]																				
Mar. 5	3:20 p.m.	[1] 7:50 a.m.	2.48	5:37 p.m.	6:12 p.m.	.06	.22	.64	1.14	1.34	1.45	1.55	1.65	1.69	1.75	1.86	1.92	1.99	2.04	2.08
July 22	D.N. a.m.	7:25 a.m.	1.04	5:27 a.m.	5:49 a.m.	.06	.10	.31	.55	.72	.81	.83	.85	.87	.89	.93	.95	.97	.98	.98
Aug. 14–15	D.N. p.m.	D.N. a.m.	1.66	11:48 p.m.	12:30 a.m.	.01	.21	.39	.59	.85	1.01	1.18	1.39	1.54	1.60	1.62	1.64	1.65	1.65	1.65
Aug. 30	1:44 p.m.	7:20 p.m.	1.62	2:04 p.m.	2:35 p.m.	.13	.18	.39	.54	.71	.90	1.07	1.15	1.20	1.22	1.23	1.26	1.30	1.35	1.40
Sept. 6	2:37 p.m.	3:45 p.m.	1.28	2:50 p.m.	3:30 p.m.	.01	.13	.33	.52	.63	.79	1.00	1.12	1.23	1.26	1.27	1.27	1.27	1.27	1.27
Nov. 11–12	8:57 p.m.	3:15 a.m.	1.36	11:46 p.m.	12:15 a.m.	.04	.12	.37	.64	.94	1.11	1.24	1.26	1.27	1.27	1.28	1.29	1.29	1.29	1.29
Palestine, Tex.:[4]																				
Mar. 30	2:20 p.m.	4:02 p.m.	2.58	2:36 p.m.	3:44 p.m.	.01	.43	.65	.81	1.07	1.19	1.32	1.47	1.66	1.76	1.97	2.37	2.57	2.57	2.57
Apr. 29	8:15 a.m.	3:45 p.m.	1.39	3:14 p.m.	3:33 p.m.	.86	.21	.60	.83	1.02	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
May 24	5:01 p.m.	9:40 p.m.	2.37	5:24 p.m.	5:39 p.m.	.01	.34	.72	.85	.87	.88	.88	.88	.88	.88	.88	.94	1.22	1.85	2.18
Port Arthur, Tex.:[4]																				
Mar. 5	6:12 p.m.	[4] 10:05 a.m.	4.41	8:04 p.m.	9:30 p.m.	.06	.28	.78	1.22	1.43	1.57	1.63	1.83	1.99	2.06	2.16	2.32	2.80	2.98	3.04
July 16	12:43 p.m.	5:20 p.m.	1.88	2:34 p.m.	3:02 p.m.	.01	.32	.61	.96	1.29	1.53	1.66	1.69	1.80	1.81	1.81	1.81	1.81	1.82	1.85
July 22	[3] 9:09 p.m.	4:29 p.m.	8.14	8:38 a.m. [3] 9:28 a.m. [3] 10:18 a.m.	9:28 a.m. 10:18 a.m. 10:56 a.m.	1.59	.19 2.30 3.43	.31 2.43 3.51	.61 2.46 3.57	.87 2.50 3.64	1.15 2.53 3.75	1.49 2.56 3.94	1.69 2.72 4.11	1.88 2.91 4.30	2.06 3.14 ----	2.27 3.33 ----	---- ---- ----	---- ---- ----	---- ---- ----	---- ---- ----
July 25	D.N. a.m.	4:00 a.m.	2.17	2:14 a.m.	2:47 a.m.	.09	.34	.85	1.20	1.45	1.71	1.93	2.02	2.06	2.06	2.06	2.08	2.08	2.08	2.08
Aug. 19	4:33 p.m.	5:37 p.m.	1.25	4:35 p.m.	4:54 p.m.	.01	.18	.63	.91	1.10	1.17	1.19	1.20	1.22	1.23	1.23	1.24	1.24	1.24	1.24
San Antonio, Tex.:[4]																				
June 13	7:10 a.m. 9:30 a.m.	9:08 a.m. 11:00 a.m.	1.27 T	7:56 a.m.	8:24 a.m.	.01	.25	.47	.60	.86	.93	1.10	1.15	1.23	1.24	1.25	1.25	1.26	1 26	1.26
OHIO VALLEY AND TENNESSEE																				
Chattanooga, Tenn.:[4]																				
May 2	9:42 a.m. 11:53 a.m.	11:30 a.m. 12:10 p.m.	1.29 T	9:54 a.m.	10:11 a.m.	.03	.10	.22	.83	1.00	1.02	1.03	1.15	1.16	1.16	1.17	1.21	1.25	1.26	1.26
Aug. 1	11:05 a.m.	1:05 p.m.	1.35	11:42 a.m.	12:08 p.m.	.05	.16	.30	.69	.94	1.12	1.18	1.21	1.25	1.27	1.28	1.29	1.29	1.30	1.30
Aug. 26	1:30 p.m.	2:45 p.m.	1.62	1:37 p.m.	2:00 p.m.	.01	.24	.47	.80	1.11	1.29	1.32	1.35	1.44	1.47	1.50	1.59	1.61	1.61	1.61
Aug. 28	7:50 p.m.	[1] 1:15 a.m.	2.02	9:18 p.m.	9:54 p.m.	.53	.21	.41	.52	.59	.68	.86	1.11	1.20	1.25	1.30	1.40	1.44	1.48	1.48
Knoxville, Tenn.:[4]																				
June 9	1:55 p.m.	4:20 p.m.	1.83	2:07 p.m.	2:34 p.m.	.03	.35	.84	1.26	1.44	1.58	1.68	1.71	1.74	1.76	1.78	1.79	1.79	1.80	1.80
June 12	12:09 p.m.	1:54 p.m.	.96	12:19 p.m.	12:44 p.m.	.04	.22	.46	.50	.67	.83	.86	.88	.89	.90	.91	.91	.92	.92	.92
July 11	2:48 p.m.	3:10 p.m.	.53	2:55 p.m.	3:02 p.m.	.03	.39	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Aug. 2	6:35 p.m.	9:15 p.m.	1.25	6:48 p.m.	7:09 p.m.	.02	.35	.61	.88	1.03	1.11	1.15	1.18	1.19	1.19	1.20	1.20	1.20	1.22	1.23
Aug. 13	2:20 p.m.	5:10 p.m.	1.24	2:57 p.m.	3:18 p.m.	.06	.19	.45	.60	.79	.85	.88	.90	.93	.95	.97	1.01	1.14	1.18	1.18
Aug. 17	10:32 a.m.	11:55 a.m.	1.22	10:46 a.m.	11:12 a.m.	.01	.15	.29	.64	.92	1.06	1.17	1.19	1.20	1.20	1.20	1.21	1.21	1.21	1.21
Aug. 28	2:23 p.m.	4:25 p.m.	1.18	2:27 p.m.	2:47 p.m.	.02	.12	.32	.67	.84	.90	.94	1.05	1.06	1.07	1.07	1.09	1.12	1.15	1.16
Sept. 5	1:28 p.m.	5:50 p.m.	2.08	2:11 p.m.	2:34 p.m.	.58	.38	.72	.94	1.11	1.22	1.29	1.32	1.33	1.33	1.34	1.36	1.39	1.42	1.47
Sept. 14	12:38 p.m.	2:10 p.m.	.92	12:50 p.m.	1:09 p.m.	.04	.22	.47	.71	.85	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88
Memphis, Tenn.:[4]																				
May 7	8:00 a.m.	12 noon	1.82	8:55 a.m.	9:12 a.m.	.19	.16	.47	.95	1.00	1.00	1.00	1.00	1.01	1.02	1.02	1.05	1.10	1.45	1.61
July 26	12:28 p.m.	7:25 p.m.	2.02	2:48 p.m.	2:56 p.m.	.11	.60	.76	.77	.77	.77	.77	.77	.78	.78	.79	.79	.79	.83	1.19

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
OHIO VALLEY AND TENNESSEE—contd.																				
Nashville, Tenn.:[4]																				
May 7	7:45 p.m.	9:30 p.m.	1.00	7:58 p.m.	8:11 p.m.	0.01	0.43	0.69	0.78	0.83	0.86	0.87	0.89	0.91	0.92	0.93	0.95	0.99	0.99	0.99
June 12	3:20 p.m.	4:35 p.m.	.91	3:54 p.m.	4:08 p.m.	.16	.26	.54	.70	.73	.74	.75	.75	.75	.75	.75	.75	.75	.75	.75
Aug. 3	10:48 a.m.	2:00 p.m.	1.24	12:11 p.m.	12:22 p.m.	.38	.44	.79	.85	.85	.85	.85	.85	.85	.85	.85	.85	.85	.86	.86
Sept. 3	7:45 p.m.	10:00 p.m.	.93	7:58 p.m.	8:13 p.m.	.07	.27	.47	.60	.63	.65	.67	.68	.70	.71	.73	.77	.82	.85	.86
Louisville, Ky.:																				
Mar. 18	5:30 p.m.	11:49 p.m.	.90	9:19 p.m.	9:42 p.m.	.21	.10	.23	.35	.43	.48	.49	.50	.52	.53	.54	.57	.60	.63	.66
May 9	7:01 p.m.	10:50 p.m.	.67	8:29 p.m.	8:37 p.m.	.35	.23	.31	.31	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
May 13	9:10 p.m.	[1] 6:25 a.m.	1.97	9:38 p.m.	9:52 p.m.	.03	.18	.46	.58	.61	.65	.69	.70	.71	.71	.71	.71	.71	.71	.71
May 14	[2] 9:10 p.m.	6:25 a.m.	1.97	2:01 a.m.	2:29 a.m.	.87	.10	.14	.27	.52	.78	.83	.86	.86	.86	.86	.86	.88	.91	.96
Aug. 10	5:40 p.m.	7:01 p.m.	.60	6:10 p.m.	6:23 p.m.	.01	.22	.50	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
Sept. 3	2:00 p.m.	2:55 p.m.	.80	2:13 p.m.	2:29 p.m.	.01	.37	.64	.78	.79	.79	.79	.79	.79	.79	.79	.79	.79	.79	.79
Sept. 10	2:40 p.m.	3:55 p.m.	.68	2:50 p.m.	3:06 p.m.	.03	.16	.48	.59	.62	.64	.64	.64	.65	.65	.65	.65	.65	.65	.65
Sept. 25	2:50 p.m.	6:10 p.m.	.55	3:18 p.m.	3:30 p.m.	.04	.21	.33	.37	.38	.39	.40	.40	.41	.42	.43	.45	.50	.51	.51
Sept. 28	2:45 p.m.	6:00 p.m.	.88	4:02 p.m.	4:28 p.m.	.10	.09	.21	.35	.48	.65	.76	.78	.78	.78	.78	.78	.78	.78	.78
Evansville, Ind.:																				
Apr. 9	8:28 a.m.	8:55 a.m.	.41	8:36 a.m.	8:52 a.m.	.01	.10	.31	.38	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
May 13	7:23 p.m.	[1] 7:33 a.m.	2.67	8:22 p.m.	8:55 p.m.	.01	.17	.27	.32	.39	.46	.61	.66	.66	.67	.68	.68	.68	.68	.68
May 13–14	7:23 p.m.	7:33 a.m.	2.67	10:54 p.m.	12:47 a.m.	.72	.21	.25	.26	.28	.28	.32	.37	.40	.45	.51	.80	.84	1.32	1.62
May 15	5:56 a.m.	11:05 a.m.	.88	7:18 a.m.	7:49 a.m.	.05	.07	.15	.25	.35	.47	.58	.62	.64	.65	.66	.69	.70	.70	.80
July 9	12:50 a.m.	2:12 p.m.	2.94	4:52 a.m.	5:21 a.m.	.65	.05	.15	.22	.28	.47	.52	.55	.56	.58	.59	.61	.68	.73	.79
Do	12:50 a.m.	2:12 p.m.	2.94	11:06 a.m.	11:49 a.m.	2.07	.05	.11	.24	.26	.29	.36	.48	.60	.64	.67	.72	.79	.86	.86
Sept. 13	3:51 p.m.	4:04 p.m.	.34	3:53 p.m.	4:00 p.m.	.01	.28	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
Oct. 22	1:00 a.m.	8:08 a.m.	1.44	1:05 a.m.	2:05 a.m.	.01	.11	.16	.21	.35	.42	.54	.67	.66	.69	.75	.85	.89	.94	.98
Indianapolis, Ind.:																				
May 11	1:00 a.m.	8:17 a.m.	.97	2:23 a.m.	2:38 a.m.	.03	.15	.28	.41	.44	.45	.45	.49	.53	.56	.56	.69	.69	.70	.82
May 13	[2] 5:52 p.m.	7:27 a.m.	1.18	2:17 a.m.	2:38 a.m.	.42	.13	.21	.25	.48	.54	.55	.56	.57	.59	.61	.64	.67	.67	.67
May 24	1:31 p.m.	6:48 p.m.	.68	1:36 p.m.	1:56 p.m.	.01	.32	.48	.52	.58	.58	.58	.58	.58	.58	.58	.59	.60	.61	.62
June 25	8:35 a.m.	9:32 a.m.	1.49	8:38 a.m.	9:10 a.m.	.01	.12	.41	.77	.94	1.16	1.42	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
July 1	6:51 p.m.	9:18 p.m.	3.12	7:01 p.m.	8:37 p.m.	.01	.18	.31	.36	.51	.63	.75	.92	1.17	1.56	1.94	2.43	2.86	3.08	3.10
July 24	6:32 a.m.	10:14 a.m.	1.98	6:58 a.m.	8:18 a.m.	.09	.07	.18	.33	.45	.57	.77	.99	1.11	1.16	1.23	1.33	1.64	1.71	1.78
Sept. 2	8:07 p.m.	[1] 1:00 a.m.	1.35	8:13 p.m.	8:58 p.m.	.01	.12	.26	.40	.43	.50	.51	.52	.56	.73	.73	.76	.81	.82	.84
Sept. 26	4:14 p.m.	8:07 p.m.	.86	4:16 p.m.	4:33 p.m.	.01	.40	.66	.78	.82	.82	.82	.82	.82	.82	.82	.82	.83	.83	.83
Do	8:33 p.m.	[1] 5:20 a.m.	1.19	10:53 p.m.	11:18 p.m.	.10	.09	.23	.34	.45	.51	.52	.52	.52	.53	.53	.64	.69	.89	.95
Terre Haute, Ind.:																				
May 13	[2] D.N.p.m.	6:18 a.m.	1.51	1:33 a.m.	2:02 a.m.	.21	.11	.32	.70	.75	.78	.85	.86	.87	.88	.89	.89	.89	.89	.89
May 24	1:48 p.m.	3:07 p.m.	.76	2:04 p.m.	2:28 p.m.	.01	.16	.21	.31	.61	.68	.70	.72	.73	.74	.75	.75	.75	.75	.75
Aug. 10	12:15 a.m.	6:04 a.m.	2.34	12:20 a.m.	1:26 a.m.	.02	.05	.19	.28	.33	.40	.51	.59	.71	1.00	1.34	1.50	1.68	1.70	1.74
Sept. 2	3:58 p.m.	7:30 p.m.	1.34	4:04 p.m.	4:14 p.m.	.01	.22	.30	.34	.34	.34	.34	.35	.36	.36	.36	.36	.36	.36	.36
Do	3:58 p.m.	7:30 p.m.	1.34	6:25 p.m.	7:08 p.m.	.41	.07	.17	.19	.37	.57	.72	.79	.88	.92	.92	.92	.93	.93	.93
Sept. 13	8:45 p.m.	D.N.p.m.	.38	9:18 p.m.	9:27 p.m.	.01	.14	.30	.32	.33	.33	.34	.34	.34	.34	.34	.35	.36	.37	.37
Sept. 25	7:15 a.m.	12:02 p.m.	1.69	10:34 a.m.	11:54 a.m.	.11	.07	.12	.29	.46	.54	.57	.60	.69	.82	.91	1.23	1.56	1.58	1.58
Cincinnati, Ohio:																				
Mar. 18–19	4:35 p.m.	3:00 a.m.	2.62	11:45 p.m.	1:05 a.m.	1.27	.10	.17	.23	.26	.32	.39	.44	.48	.58	.66	.98	1.21	1.25	1.31
May 11	7:07 a.m.	10:30 a.m.	.58	7:20 a.m.	7:30 a.m.	.02	.30	.42	.46	.48	.48	.48	.48	.48	.48	.48	.48	.49	.53	.54
May 13	5:27 a.m.	10:40 a.m.	2.80	5:27 a.m.	6:34 a.m.	.00	.13	.23	.38	.52	.64	.74	.83	.92	1.03	1.13	1.36	1.49	1.55	1.61
Do	5:27 a.m.	10:40 a.m.	2.80	7:48 a.m.	8:52 a.m.	1.65	.07	.11	.21	.25	.30	.40	.48	.56	.67	.72	.85	.93	.95	1.02
May 25	4:00 p.m.	5:53 p.m.	.68	4:46 p.m.	5:00 p.m.	.06	.14	.34	.56	.56	.56	.57	.58	.60	.61	.62	.62	.62	.62	.62
June 25	4:45 p.m.	8:50 p.m.	1.20	5:49 p.m.	6:10 p.m.	.02	.36	.73	.85	.97	1.01	1.04	1.06	1.06	1.07	1.09	1.11	1.12	1.15	1.16
June 30	4:50 p.m.	8:20 p.m.	1.36	5:05 p.m.	5:30 p.m.	.02	.17	.58	.76	.91	1.00	1.02	1.03	1.06	1.07	1.07	1.09	1.09	1.11	1.12
Aug. 3	5:25 p.m.	5:45 p.m.	.34	5:25 p.m.	5:38 p.m.	.00	.05	.24	.34	.34	.34	.34	.35	.46	.47	.47	.47	.47	.47	.47
	6:00 p.m.	6:15 p.m.	.13																	
Sept. 14	2:35 p.m.	4:28 p.m.	1.10	4:06 p.m.	4:26 p.m.	.47	.31	.51	.57	.63	.63	.63	.63	.63	.63	.63	.64	.65	.65	.65
	4:55 p.m.	5:30 p.m.	.02																	
Columbus, Ohio:																				
May 11	3:30 a.m.	10:45 a.m.	1.74	4:02 a.m.	4:29 a.m.	.04	.23	.38	.41	.59	.68	.75	.76	.76	.76	.76	.76	.91	1.11	1.23
Sept. 2	5:40 p.m.	7:20 p.m.	.80	5:42 p.m.	5:57 p.m.	.01	.25	.46	.57	.58	.58	.59	.60	.64	.66	.69	.71	.76	.79	.79
Elkins, W.Va.:																				
May 11	3:30 a.m.	2:40 p.m.	1.52	7:59 a.m.	8:51 a.m.	.30	.11	.20	.21	.23	.36	.50	.59	.62	.67	.76	.81	.84	.84	.84
May 24	9:40 p.m.	[1] 1:00 a.m.	.77	9:48 p.m.	10:03 p.m.	.01	.33	.53	.61	.64	.65	.66	.67	.69	.69	.69	.69	.69	.69	.69
June 8	1:25 a.m.	2:00 a.m.	.38	1:26 a.m.	1:37 a.m.	T	.24	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
June 26	8:56 a.m.	11:25 a.m.	1.17	9:07 a.m.	10:04 a.m.	.01	.11	.17	.32	.55	.65	.70	.75	.77	.80	.93	1.16	1.16	1.16	1.16
July 10	3:02 p.m.	3:35 p.m.	.33	3:23 p.m.	3:32 p.m.	.01	.21	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
Sept. 13	11:43 a.m.	1:35 p.m.	.80	12:24 p.m.	12:37 p.m.	.17	.19	.44	.55	.58	.59	.61	.62	.62	.62	.62	.63	.63	.63	.63
Sept. 20	[2] 9:57 p.m.	6:30 a.m.	1.60	12:45 a.m.	1:54 a.m.	.18	.19	.26	.33	.39	.43	.47	.49	.55	.59	.63	.80	1.08	1.11	1.15
Parkersburg, W.Va.:																				
May 9	7:59 p.m.	9:35 p.m.	.41	9:11 p.m.	9:26 p.m.	.03	.07	.25	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
May 10	[1] 11:55 p.m.	12:35 a.m.	.46	12:01 a.m.	12:12 a.m.	.02	.15	.35	.42	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
May 24	6:40 p.m.	[1] D.N.a.m.	1.79	6:47 p.m.	7:13 p.m.	.01	.19	.42	.60	.68	.73	.75	.76	.76	.76	.76	.76	.80	.81	.82
Do	6:40 p.m.	[1] D.N.a.m.	1.79	8:51 p.m.	9:35 p.m.	.86	.12	.36	.52	.57	.67	.69	.69	.82	.88	.88	.91	.91	.92	.92
June 26	3:58 p.m.	5:20 p.m.	.54	4:41 p.m.	4:59 p.m.	.02	.19	.35	.46	.51	.52	.52	.52	.52	.52	.52	.52	.52	.52	.52
July 1	6:30 p.m.	7:55 p.m.	.99	6:34 p.m.	6:56 p.m.	.01	.16	.36	.77	.90	.94	.95	.96	.97	.97	.98	.98	.98	.98	.98
July 2	7:21 p.m.	8:15 p.m.	.54	7:23 p.m.	7:39 p.m.	.01	.06	.18	.38	.48	.48	.48	.51	.52	.53	.53	.53	.53	.53	.53
Aug. 2	1:47 p.m.	5:40 p.m.	1.90	1:55 p.m.	3:06 p.m.	.01	.13	.28	.42	.57	.71	.80	.88	.97	1.02	1.10	1.49	1.72	1.75	1.80
Aug. 3	4:55 p.m.	8:14 p.m.	.99	7:42 p.m.	7:58 p.m.	.51	.06	.24	.45	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Pittsburgh, Pa.:																				
May 9	7:15 p.m.	[1] D.N.a.m.	.80	9:34 p.m.	9:45 p.m.	.24	.15	.38	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.41	.41
May 13	8:05 p.m.	D.N.p.m.	.67	9:16 p.m.	9:42 p.m.	.05	.15	.30	.34	.48	.54	.58	.59	.59	.59	.61	.62	.62	.62	.62
May 24	4:45 p.m.	7:05 p.m.	.84	6:05 p.m.	6:23 p.m.	.34	.17	.29	.40	.47	.47	.47	.47	.48	.48	.48	.50	.50	.50	.52
	8:00 p.m.	9:15 p.m.	.48																	
July 2	2:30 p.m.	7:30 p.m.	.93	6:05 p.m.	6:21 p.m.	.32	.10	.34	.48	.51	.53	.55	.56	.58	.59	.60	.60	.61	.61	.61
July 22	2:40 p.m.	4:05 p.m.	.42	3:04 p.m.	3:16 p.m.	.03	.16	.30	.35	.35	.37	.38	.38	.38	.38	.38	.39	.39	.39	.39
July 29	11:38 a.m.	11:55 a.m.	.35	11:42 a.m.	11:49 a.m.	.01	.18	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
Aug. 3	3:36 p.m.	7:10 p.m.	1.03	3:38 p.m.	3:51 p.m.	.01	.60	.65	.70	.72	.73	.75	.77	.78	.79	.79	.80	.83	.87	.92
Aug. 16	5:40 p.m.	9:05 p.m.	1.98	5:44 p.m.	7:03 p.m.	.01	.19	.33	.44	.61	.75	.84	.90	.95	1.06	1.16	1.46	1.61	1.88	1.93
Sept. 27	12:25 p.m.	6:15 p.m.	1.66	4:29 p.m.	5:26 p.m.	.37	.06	.17	.22	.32	.41	.44	.56	.69	.85	.99	1.23	1.28	1.28	1.29

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
LOWER LAKE REGION																				
Buffalo, N. Y.:																				
May 2	12:05 p.m.	4:00 p.m.	0.60	12:11 p.m.	12:30 p.m.	0.02	0.24	0.34	0.43	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.52	0.54	0.54
May 12	8:45 p.m.	11:10 p.m.	.91	9:31 p.m.	9:53 p.m.	.06	.20	.50	.61	.76	.81	.84	.85	.85	.85	.85	.85	.85	.85	.85
June 7	6:10 p.m.	7:55 p.m.	.71	6:19 p.m.	6:42 p.m.	.01	.17	.34	.48	.57	.61	.62	.65	.68	.68	.69	.70	.70	.70	.70
Canton, N. Y.:																				
May 30	2:22 p.m.	4:15 p.m.	.62	3:09 p.m.	3:34 p.m.	.03	.16	.29	.35	.40	.45	.49	.49	.51	.54	.58	.59	.59	.59	.59
June 7	1:50 a.m.	2:15 a.m.	.32	1:52 a.m.	1:59 a.m.	.01	.19	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
June 28	3:46 p.m.	5:48 p.m.	1.17	3:48 p.m.	4:06 p.m.	.01	.38	.76	.98	1.06	1.09	1.11	1.12	1.12	1.12	1.12	1.12	1.14	1.61	1.16
Sept. 9	12:35 p.m.	1:20 p.m.	.37	12:55 p.m.	1:10 p.m.	.01	.08	.12	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
Ithaca, N. Y.:																				
June 21	6:23 p.m.	6:43 p.m.	.38	6:23 p.m.	6:35 p.m.	.00	.11	.35	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
June 25	2:37 p.m.	4:45 p.m.	.97	3:11 p.m.	3:44 p.m.	.10	.09	.22	.32	.41	.48	.73	.81	.82	.83	.84	.85	.87	.87	.87
July 1	4:25 p.m.	5:45 p.m.	.63	4:29 p.m.	4:46 p.m.	.01	.21	.46	.55	.58	.58	.59	.59	.60	.60	.60	.61	.62	.62	.62
July 31	1:36 p.m.	2:30 p.m.	.77	1:51 p.m.	2:24 p.m.	.01	.27	.40	.57	.62	.63	.69	.76	.76	.76	.76	.76	.76	.76	.76
	3:35 p.m.	3:42 p.m.	T																	
Aug. 13	1:30 p.m.	2:45 p.m.	.59	1:47 p.m.	2:01 p.m.	.01	.09	.30	.44	.44	.49	.52	.55	.57	.58	.58	.58	.58	.58	.58
Oswego, N. Y.:																				
July 16	7:05 p.m.	7:40 p.m.	.55	7:12 p.m.	7:27 p.m.	.01	.14	.33	.51	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
Rochester, N. Y.:																				
May 12	10:10 p.m.	1:45 a.m.	.76	11:15 p.m.	11:30 p.m.	.14	.10	.15	.35	.39	.39	.40	.41	.42	.43	.44	.44	.45	.49	.61
June 30	1:28 p.m.	2:08 p.m.	.55	1:45 p.m.	1:58 p.m.	.01	.16	.51	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
Aug. 13	2:30 a.m.	6:45 a.m.	.98	4:07 a.m.	4:37 a.m.	.24	.23	.30	.34	.36	.38	.51	.53	.54	.63	.65	.66	.68	.73	.73
Syracuse, N. Y.:																				
May 29	8:35 p.m.	10:30 p.m.	.63	8:44 p.m.	8:59 p.m.	T	.16	.31	.36	.40	.44	.46	.47	.51	.54	.60	.62	.63	.63	.63
June 30	3:25 p.m.	4:25 p.m.	1.00	3:45 p.m.	4:13 p.m.	.03	.10	.23	.53	.83	.90	.95	.96	.97	.97	.97	.97	.97	.97	.97
Erie, Pa.:																				
June 7	8:03 p.m.	D.N. p.m.	.68	8:33 p.m.	8:55 p.m.	.01	.19	.36	.47	.52	.57	.57	.57	.57	.57	.57	.57	.57	.64	.67
Sept. 3	D.N. a.m.	12:10 p.m.	2.26	7:07 a.m.	7:52 a.m.	.89	.11	.20	.25	.30	.41	.52	.62	.74	.89	.90	.93	.96	.98	1.03
Cleveland, Ohio:																				
May 24	4:28 p.m.	5:08 p.m.	.44	4:29 p.m.	4:43 p.m.	T	.24	.34	.42	.42	.42	.43	.44	.44	.44	.44	.44	.44	.44	.44
July 2	7:02 a.m.	11:20 a.m.	1.00	7:42 a.m.	8:05 a.m.	.04	.10	.35	.51	.62	.69	.70	.71	.71	.72	.73	.74	.76	.79	.81
Aug. 3	11:01 a.m.	3:04 p.m.	1.16	12:22 p.m.	12:47 p.m.	.36	.07	.16	.39	.55	.63	.65	.67	.68	.69	.70	.72	.77	.79	.80
Sandusky, Ohio:																				
May 24	3:24 p.m.	4:05 p.m.	.46	3:24 p.m.	3:39 p.m.	.00	.10	.30	.43	.45	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46
Aug. 3	8:30 a.m.	1:45 p.m.	1.10	10:49 a.m.	11:10 a.m.	.23	.13	.24	.31	.43	.47	.49	.51	.52	.54	.55	.55	.62	.64	.67
Sept. 19	12:23 p.m.	3:45 p.m.	1.12	1:08 p.m.	1:18 p.m.	.09	.31	.55	.57	.62	.62	.62	.62	.62	.62	.62	.62	.79	.99	1.03
Toledo, Ohio:																				
Aug. 1	1:23 p.m.	3:06 p.m.	1.14	1:54 p.m.	2:42 p.m.	.02	.13	.44	.61	.65	.65	.69	.85	.91	1.00	1.05	1.10	1.12	1.12	1.12
Fort Wayne, Ind.:																				
Mar. 13	6:20 p.m.	8:10 p.m.	.55	7:24 p.m.	7:39 p.m.	.08	.26	.36	.41	.44	.46	.47	.47	.47	.47	.47	.47	.47	.47	.47
July 2	D.N. a.m.	8:50 a.m.	1.98	4:45 a.m.	5:37 a.m.	.54	.09	.18	.25	.41	.46	.50	.54	.60	.73	.77	.83	.86	.96	1.05
July 9	D.N. a.m.	D.N. a.m.	.56	1:43 a.m.	2:13 a.m.	.01	.05	.21	.28	.34	.44	.52	.54	.55	.55	.55	.55	.55	.55	.55
Sept. 5	5:00 a.m.	6:36 a.m.	.50	6:09 a.m.	6:22 a.m.	.08	.10	.34	.41	.41	.41	.41	.42	.42	.42	.42	.42	.42	.42	.42
Sept. 16	5:40 p.m.	8:45 p.m.	.70	5:54 p.m.	6:17 p.m.	.03	.20	.30	.45	.51	.55	.57	.59	.62	.64	.65	.65	.65	.65	.66
Sept. 26	1:30 p.m.	7:05 a.m.	1.84	6:04 p.m.	6:19 p.m.	.05	.17	.28	.36	.39	.42	.44	.45	.46	.47	.50	.52	.60	.63	.64
Sept. 30	9:25 p.m.	D.N. a.m.	1.13	9:27 p.m.	10:01 p.m.	.01	.13	.20	.28	.39	.52	.62	.68	.70	.71	.71	.72	.73	.78	.80
Detroit, Mich.:																				
Aug. 3	11:55 p.m.	11:30 a.m.	1.83	9:10 a.m.	9:40 a.m.	1.25	.05	.11	.22	.34	.46	.52	.53	.54	.55	.56	.56	.57	.58	.58
UPPER LAKE REGION																				
Alpena, Mich																				
July 23	1:25 p.m.	4:30 p.m.	1.04	3:30 p.m.	3:58 p.m.	.31	.15	.36	.45	.58	.63	.70	.71	.72	.72	.72	.73	.73	.73	.73
Sept. 3	6:08 p.m.	8:50 p.m.	.68	8:25 p.m.	8:32 p.m.	.36	.28	.31	.31	.31	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
Sept. 30	4:53 p.m.	8:45 p.m.	.70	5:26 p.m.	5:46 p.m.	.09	.17	.34	.38	.47	.47	.48	.48	.49	.49	.49	.49	.51	.51	.51
Escanaba, Mich.:																				
June 7	D.N. a.m.	6:20 a.m.	.66	3:28 a.m.	3:45 a.m.	.01	.17	.26	.46	.50	.50	.51	.51	.51	.51	.52	.53	.56	.57	.60
July 6	1:24 p.m.	2:49 p.m.	1.50	1:33 p.m.	2:30 p.m.	.02	.08	.20	.33	.59	.93	1.09	1.19	1.24	1.30	1.34	1.47	1.48	1.48	1.46
Sept. 2	11:05 a.m.	11:52 a.m.	.47	11:13 a.m.	11:24 a.m.	.01	.12	.42	.44	.44	.45	.45	.45	.46	.46	1.46	.46	.46	.46	.46
Grand Rapids, Mich.:																				
Apr. 10	3:49 p.m.	6:18 p.m.	.90	5:05 p.m.	5:15 p.m.	.49	.27	.35	.35	.35	.35	.35	.35	.35	.35	.35	.38	.41	.41	.41
Apr. 30	4:46 p.m.	7:06 p.m.	.58	5:05 p.m.	5:15 p.m.	.01	.28	.45	.48	.49	.50	.51	.51	.51	.51	.51	.51	.51	.57	.57
May 20	2:12 a.m.	6:41 a.m.	.85	3:00 a.m.	3:15 a.m.	.06	.10	.49	.55	.55	.58	.57	.61	.64	.66	.67	.71	.77	.78	.78
July 15	10:22 a.m.	12:04 p.m.	1.03	10:29 a.m.	10:54 a.m.	.02	.14	.21	.44	.49	.58	.58	.58	.63	.65	.70	.88	1.01	1.01	1.01
Do	1:43 p.m.	2:11 p.m.	.35	1:52 p.m.	2:01 p.m.	.01	.15	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
Sept. 30	6:04 p.m.	9:07 p.m.	.98	6:31 p.m.	7:06 p.m.	.01	.10	.13	.36	.65	.70	.79	.84	.85	.86	.86	.87	.88	.91	.95
Nov. 29	9:38 a.m.	8:19 p.m.	1.08	7:44 p.m.	7:59 p.m.	.72	.08	.25	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
Lansing, Mich.:																				
May 20	4:15 a.m.	7:20 a.m.	.62	4:25 a.m.	4:37 a.m.	.01	.37	.51	.57	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
June 30	9:00 p.m.	2:00 a.m.	1.86	12:57 a.m.	1:41 a.m.	.32	.12	.20	.22	.28	.39	.62	.81	1.21	1.51	1.53	1.54	1.54	1.54	1.54
Sept. 26	D. N. a.m.	D. N. a.m.	.67	12:18 a.m.	12:28 a.m.	.02	.18	.34	.34	.35	.35	.35	.35	.49	.56	.56	.57	.64	.65	.65
Sept. 30	7:42 p.m.	D.N. a.m.	1.62	7:45 p.m.	8:48 p.m.	.01	.16	.20	.20	.20	.27	.43	.44	.62	.67	.73	.94	1.06	1.11	1.18
Oct. 21	11:42 a.m.	D.N. p.m.	1.86	6:17 p.m.	6:50 p.m.	.68	.36	.42	.45	.50	.57	.62	.67	.68	.70	.71	.75	.82	.89	.96
Marquette, Mich.:																				
June 8	6:05 p.m.	8:34 p.m.	.50	6:12 p.m.	6:22 p.m.	.01	.19	.30	.33	.36	.38	.40	.41	.41	.42	.42	.43	.44	.44	.48
Sault Ste. Marie, Mich.:																				
June 24	6:50 a.m.	9:45 a.m.	.96	8:33 a.m.	9:08 a.m.	.21	.16	.31	.49	.52	.58	.67	.73	.74	.74	.74	.75	.75	.75	.75
Sept. 19	5:48 p.m.	6:50 p.m.	.50	6:03 p.m.	6:12 p.m.	.01	.30	.43	.45	.46	.47	.47	.47	.48	.48	.49	.49	.49	.49	.49
Sept. 25	6:55 a.m.	12:12 p.m.	.68	9:07 a.m.	9:17 a.m.	.27	.18	.32	.35	.36	.36	.37	.37	.37	.37	.37	.37	.39	.40	.40
Chicago, Ill.:																				
June 29	5:24 p.m.	8:46 p.m.	2.75	6:34 p.m.	7:18 p.m.	.36	.21	.68	.80	.85	1.10	1.38	1.53	1.81	2.03	2.04	2.10	2.27	2.39	2.39
July 2	2:01 a.m.	6:25 a.m.	1.63	2:05 a.m.	2:25 a.m.	.01	.41	.80	1.00	1.16	1.18	1.20	1.20	1.21	1.22	1.23	1.24	1.29	1.37	1.40
Sept. 26	12:12 p.m.	12:07 a.m.	2.46	12:24 p.m.	1:16 p.m.	.03	.17	.38	.51	.55	.63	.72	.73	.73	.75	.94	.99	1.03	1.41	1.61
Do	12:12 p.m.	12:07 a.m.	2.46	1:58 p.m.	2:12 p.m.	1.09	.30	.45	.52	.53	.55	.57	.57	.57	.57	.58	.59	.59	.62	.64
Oct. 21	3:10 p.m.	7:54 p.m.	1.03	3:57 p.m.	4:23 p.m.	.05	.35	.58	.72	.80	.85	.87	.88	.89	.89	.89	.89	.90	.90	.91

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated											
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
UPPER LAKE REGION—contd.																				
Green Bay, Wis.:																				
June 2	10:55 p.m.	[1] 12:30 a.m.	0.81	10:58 p.m.	11:36 p.m.	0.01	0.11	0.25	0.37	0.40	0.49	0.49	0.57	0.70	0.70	0.76	0.76	0.80	0.80	0.80
June 5	7:50 p.m.	10:00 p.m.	1.21	8:17 p.m.	8:45 p.m.	.01	.16	.37	.62	.92	1.10	1.15	1.16	1.17	1.17	1.17	1.18	1.19	1.20	1.20
June 11	10:00 a.m.	10:25 a.m.	.34	10:03 a.m.	10:13 a.m.	.01	.19	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.47	.58
	11:35 a.m.	12:05 p.m.	.25																	
June 20	8:05 p.m.	9:25 p.m.	1.16	8:31 p.m.	8:52 p.m.	.02	.28	.78	1.04	1.11	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
July 19	8:50 p.m.	10:45 p.m.	1.87	8:59 p.m.	9:54 p.m.	.03	.19	.45	.64	.80	1.06	1.28	1.33	1.43	1.53	1.72	1.82	1.84	1.84	1.84
Aug. 7	1:50 a.m.	9:15 a.m.	.40	1:58 a.m.	2:05 a.m.	.01	.27	.33	.33	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
Sept. 19	1:40 a.m.	D.N. a.m.	.62	1:47 a.m.	1:57 a.m.	.03	.21	.46	.47	.47	.47	.47	.47	.47	.48	.48	.58	.59	.59	.59
Milwaukee, Wis.:																				
May 19	6:20 a.m.	9:05 a.m.	1.58	7:07 a.m.	7:25 a.m.	.03	.18	.72	1.10	1.20	1.22	1.24	1.26	1.29	1.32	1.34	1.40	1.47	1.53	1.55
May 19–20	11:00 p.m.	D.N. a.m.	1.67	11:17 p.m.	12:02 a.m.	.01	.05	.11	.20	.22	.36	.58	.82	.93	1.01	1.02	1.05	1.12	1.20	1.32
July 14	12:10 p.m.	4:25 p.m.	1.27	2:11 p.m.	2:45 p.m.	.61	.10	.16	.32	.35	.43	.54	.58	.59	.60	.60	.61	.64	.65	.66
Oct. 21	[2] 6:30 p.m.	8:25 a.m.	1.80	5:23 a.m.	5:33 a.m.	.92	.16	.31	.33	.35	.37	.40	.41	.42	.43	.45	.48	.56	.58	.70
Duluth, Minn.:																				
Sept. 8	9:40 a.m.	11:55 a.m.	1.50	9:58 a.m.	10:27 a.m.	.05	.19	.50	.85	1.11	1.26	1.35	1.37	1.38	1.38	1.38	1.38	1.42	1.44	1.45
NORTH DAKOTA																				
Bismarck, N. Dak.:																				
May 23	1:55 p.m.	2:27 p.m.	.41	2:01 p.m.	2:14 p.m.	.01	.16	.35	.40	.40	.40	.40	.40	.40	.40	.40	.41	.42	.42	.42
	2:55 p.m.	3:40 p.m.	.02																	
June 19	12:50 p.m.	4:08 p.m.	.85	12:55 p.m.	1:30 p.m.	.02	.06	.13	.26	.45	.56	.64	.71	.73	.74	.75	.75	.75	.77	.78
Williston, N. Dak.:																				
July 3	4:42 p.m.	5:18 p.m.	.44	4:55 p.m.	5:09 p.m.	.04	.18	.35	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
Sept. 15	1:20 p.m.	4:30 p.m.	.61	2:10 p.m.	2:22 p.m.	.05	.18	.35	.41	.41	.41	.42	.42	.43	.44	.45	.46	.50	.54	.55
UPPER MISSISSIPPI VALLEY																				
Minneapolis, Minn:																				
May 18	9:25 p.m.	[1] 1:00 a.m.	.87	9:38 p.m.	9:58 p.m.	.01	.10	.24	.34	.42	.46	.49	.52	.55	.58	.61	.64	.69	.71	.71
July 10	8:17 a.m.	10:10 a.m.	.67	8:39 a.m.	9:02 a.m.	.12	.08	.17	.34	.46	.49	.50	.51	.52	.52	.53	.53	.55	.55	.55
Sept. 25	4:55 p.m.	5:48 p.m.	.53	4:55 p.m.	5:10 p.m.	.00	.20	.40	.50	.52	.52	.52	.52	.52	.52	.52	.53	.53	.53	.53
LaCrosse, Wis.:																				
May 19	8:30 p.m.	9:45 p.m.	.41	9:13 p.m.	9:24 p.m.	.07	.11	.31	.33	.34	.34	.34	.34	.34	.34	.34	.34	.35	.37	.39
	10:10 p.m.	11:30 p.m.	.06																	
June 8	1:58 p.m.	2:22 p.m.	.57	2:02 p.m.	2:13 p.m.	.01	.17	.52	.55	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56
June 30	9:47 p.m.	[1] 12:15 a.m.	.96	10:07 p.m.	10:28 p.m.	.02	.07	.24	.41	.51	.54	.58	.61	.63	.65	.68	.76	.84	.91	.94
July 1	5:12 p.m.	6:02 p.m.	.69	5:31 p.m.	5:44 p.m.	.05	.12	.44	.59	.63	.64	.64	.64	.64	.64	.64	.73	.99	.99	1.00
	6:22 p.m.	6:40 p.m.	.35																	
	7:20 p.m.	8:20 p.m.	.44																	
Do	6:22 p.m.	6:40 p.m.	.35	6:29 p.m.	6:40 p.m.	.02	.21	.32	.33	.33	.33	.33	.33	.33	.33	.33	.34	.47	.77	.77
	7:20 p.m.	8:20 p.m.	.44																	
July 13	3:20 a.m.	4:35 a.m.	.43	4:04 a.m.	4:15 a.m.	.10	.22	.31	.32	.32	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33
July 21	5:12 a.m.	7:10 a.m.	.83	5:23 a.m.	5:32 p.m.	.02	.27	.44	.45	.46	.46	.52	.56	.56	.56	.59	.71	.80	.80	.81
Madison, Wis.:																				
May 15	3:13 p.m.	4:56 p.m.	1.37	3:16 p.m.	3:45 p.m.	.02	.19	.49	.78	1.05	1.21	1.28	1.30	1.32	1.33	1.34	1.35	1.35	1.35	1.35
May 19	9:35 p.m.	[1] 2:45 a.m.	1.99	9:45 p.m.	10:12 p.m.	.01	.11	.47	.81	1.00	1.06	1.10	1.11	1.12	1.12	1.12	1.14	1.18	1.50	1.64
July 1	7:55 p.m.	[1] 12:20 a.m.	.59	9:02 p.m.	9:09 p.m.	.01	.21	.31	.32	.32	.32	.32	.32	.32	.33	.33	.36	.40	.47	.54
July 2	1:18 a.m.	3:28 a.m.	1.27	2:14 a.m.	2:33 a.m.	.54	.14	.36	.52	.60	.62	.62	.63	.65	.66	.67	.69	.73	.73	.73
Aug. 7	2:48 a.m.	10:14 a.m.	1.76	3:29 a.m.	3:47 a.m.	.04	.11	.27	.41	.45	.48	.49	.49	.53	.61	.62	.78	.81	.87	.87
Charles City, Iowa:																				
Apr. 30	10:28 p.m.	[1] 1:00 a.m.	.82	10:45 p.m.	10:53 p.m.	.10	.18	.31	.32	.32	.32	.32	.36	.48	.50	.51	.56	.64	.65	.70
May 7	11:24 a.m.	2:15 p.m.	.74	12:36 p.m.	12:50 p.m.	.06	.08	.37	.55	.58	.58	.59	.61	.64	.66	.67	.68	.68	.68	.68
May 28	12:05 p.m.	7:25 p.m.	.87	6:02 p.m.	6:22 p.m.	.28	.11	.28	.41	.46	.48	.49	.51	.53	.55	.55	.57	.59	.59	.59
June 30	9:02 p.m.	[1] D.N.a.m.	.80	9:19 p.m.	9:39 p.m.	.01	.13	.25	.39	.47	.47	.48	.49	.51	.52	.53	.55	.60	.63	.64
July 1	5:50 p.m.	7:40 p.m.	.79	6:08 p.m.	6:34 p.m.	.02	.10	.21	.34	.42	.49	.50	.51	.52	.52	.52	.52	.77	.77	.77
Do	10:35 p.m.	[1] D.N.a.m.	1.04	11:06 p.m.	11:50 p.m.	.03	.33	.51	.64	.70	.76	.81	.84	.90	.99	1.00	1.01	1.01	1.01	1.01
Sept. 2	[1] 10:34 p.m.	2:45 a.m.	.95	12:07 a.m.	12:47 a.m.	.01	.18	.31	.42	.47	.54	.60	.65	.72	.75	.78	.80	.87	.90	.93
Oct. 15	7:05 p.m.	[1] 1:45 a.m.	1.44	11:30 p.m.	11:45 p.m.	.65	.15	.23	.35	.39	.43	.47	.49	.50	.52	.53	.57	.65	.71	.78
Davenport, Iowa:																				
Apr. 9	9:20 p.m.	11:20 p.m.	1.23	10:16 p.m.	10:46 p.m.	.03	.06	.23	.40	.59	.92	1.14	1.15	1.15	1.16	1.18	1.19	1.20	1.20	1.20
June 23	1:10 p.m.	2:50 p.m.	1.03	1:24 p.m.	2:17 p.m.	.06	.05	.11	.20	.36	.52	.59	.68	.75	.83	.92	.97	.97	.97	.97
Aug. 2	1:23 p.m.	3:20 p.m.	.92	1:30 p.m.	1:56 p.m.	.02	.20	.21	.21	.28	.69	.70	.71	.72	.75	.79	.86	.88	.89	.90
Sept. 26	7:15 a.m.	6:25 p.m.	2.14	8:23 a.m.	9:04 a.m.	.02	.12	.56	.77	.79	.84	1.02	1.19	1.29	1.30	1.31	1.34	1.38	1.41	1.46
Des Moines, Iowa:																				
July 7	4:39 p.m.	5:28 p.m.	.81	4:45 p.m.	5:03 p.m.	.01	.14	.35	.55	.73	.73	.75	.75	.79	.80	.80	.80	.80	.80	.80
July 21	6:30 a.m.	10:55 a.m.	2.28	6:56 a.m.	7:04 a.m.	.01	.33	.49	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Do	6:30 a.m.	10:55 a.m.	2.28	10:13 a.m.	10:30 a.m.	1.71	.14	.31	.49	.57	.57	.57	.57	.57	.57	.57	.57	.57	.57	.57
Sept. 25	8:28 p.m.	[1] 7:30 a.m.	1.25	8:34 p.m.	9:00 p.m.	.01	.09	.21	.31	.45	.59	.62	.65	.67	.71	.73	.76	.77	.81	.83
Oct. 15	5:18 p.m.	[1] 12:30 a.m.	2.31	8:44 p.m.	9:29 p.m.	.58	.06	.17	.22	.24	.38	.57	.71	.84	1.05	1.08	1.11	1.13	1.15	.54
Dubuque, Iowa:																				
Mar. 30	6:52 p.m.	11:40 p.m.	2.32	7:21 p.m.	7:38 p.m.	.03	.22	.44	.69	.78	.79	.81	.81	.81	.82	.89	1.00	1.41	1.73	1.88
Do	6:52 p.m.	11:40 p.m.	2.32	8:09 p.m.	8:54 p.m.	.86	.13	.15	.27	.37	.46	.57	.61	.82	.94	.95	1.02	1.08	1.16	1.20
May 12	3:40 p.m.	4:50 p.m.	.39	4:03 p.m.	4:09 p.m.	.04	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
May 15	4:11 p.m.	8:50 p.m.	.51	4:47 p.m.	4:52 p.m.	.01	.30	.31	.31	.31	.31	.31	.31	.31	.32	.32	.32	.32	.32	.32
May 28	8:32 p.m.	10:45 p.m.	.80	9:00 p.m.	9:10 p.m.	.05	.15	.29	.44	.52	.53	.56	.58	.61	.64	.67	.71	.75	.75	.75
July 1	10:05 p.m.	[1] D.N.a.m.	1.89	10:18 p.m.	10:58 p.m.	.03	.14	.29	.39	.44	.52	.57	.62	.73	.74	.74	.74	.74	.75	.75
July 2	[1] 10:05 p.m.	D.N.a.m.	1.89	1:02 a.m.	1:18 a.m.	.85	.20	.78	.96	.99	.99	1.00	1.01	1.02	1.03	1.03	1.03	1.03	1.03	1.03
Aug. 2	8:16 a.m.	9:13 a.m.	.59	8:16 a.m.	8:36 a.m.	.00	.07	.35	.47	.52	.55	.56	.57	.58	.58	.59	.59	.59	.59	.59
Aug. 17	12:54 p.m.	1:17 p.m.	.45	1:08 p.m.	1:15 p.m.	.02	.38	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
UPPER MISSISSIPPI VALLEY—continued																			
Keokuk, Iowa:																			
May 25	5:35 p.m.	[1] 10:00 a.m.	2.75	9:39 p.m.	10:08 p.m.	0.68	0.09	0.18	0.29	0.37	0.43	0.52	0.53	0.54	0.54	0.55	0.55	0.55	0.57	0.62
May 26	[2] 5:35 p.m.	10:00 a.m.	2.75	1:07 a.m.	1:27 a.m.	1.72	.08	.31	.53	.61	.63	.64	.65	.67	.69	.73	.82	.93	.98	1.00
June 25	[1] 10:57 p.m.	2:40 a.m.	.81	1:41 a.m.	2:08 a.m.	.22	.13	.30	.35	.43	.56	.59	.59	.59	.59	.59	.59	.59	.59	.59
June 28	7:05 p.m.	[1] 6:58 a.m.	4.99	11:33 p.m.	11:52 p.m.	.53	.12	.26	.35	.61	.62	.62	.63	.64	.65	.66	.69	.74	.80	.97
June 29	[2] 7:05 p.m.	6:58 a.m.	4.99	3:26 a.m.	4:50 a.m.	1.98	.17	.53	.85	1.09	1.19	1.33	1.46	1.71	1.87	2.02	2.20	2.79	2.95	2.98
Sept. 25	12:46 p.m.	1:48 p.m.	.72	1:33 p.m.	1:44 p.m.	.07	.47	.63	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Cairo, Ill:																			
Jan. 21	9:05 p.m.	[1] D.N.a.m.	.69	10:20 p.m.	10:26 p.m.	.11	.25	.27	.32	.37	.39	.42	.47	.53	.53	.54	.57	.58	.58	.58
May 5	1:35 a.m.	7:02 a.m.	1.02	1:44 a.m.	2:13 a.m.	.04	.07	.17	.35	.55	.72	.84	.85	.86	.88	.91	.93	.94	.94	.94
May 9	8:54 p.m.	[2] 2:20 a.m.	.72	9:53 p.m.	10:16 p.m.	.19	.11	.19	.27	.38	.48	.49	.50	.50	.50	.50	.50	.52	.52	.53
May 11	6:02 a.m.	3:48 p.m.	2.81	9:00 a.m.	9:44 a.m.	.77	.05	.22	.49	.80	.91	.93	.97	1.08	1.18	1.19	1.20	1.52	1.56	1.59
June 28	3:02 p.m.	5:08 p.m.	.54	3:07 p.m.	3:21 p.m.	.01	.11	.28	.35	.35	.36	.36	.36	.36	.36	.36	.39	.52	.52	.53
July 9	3:40 a.m.	12:51 p.m.	2.40	5:38 a.m.	6:25 a.m.	.25	.05	.17	.25	.29	.36	.53	.64	.84	.90	.93	1.00	1.11	1.26	1.33
Do	3:40 a.m.	12:51 p.m.	2.40	10:59 a.m.	11:13 a.m.	1.85	.24	.39	.47	.49	.50	.51	.52	.52	.53	.53	.53	.54	.55	.55
July 25	6:33 a.m.	[2] 12:45 a.m.	2.27	7:54 a.m.	8:31 a.m.	.18	.09	.20	.38	.75	.99	1.14	1.25	1.29	1.30	1.31	1.34	1.39	1.47	1.55
July 27	6:57 p.m.	8:00 p.m.	.50	7:02 p.m.	7:17 p.m.	.01	.14	.35	.46	.48	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49
Aug. 1	1:12 p.m.	2:03 p.m.	.46	1:18 p.m.	1:32 p.m.	.01	.16	.32	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
Aug. 3	3:28 p.m.	7:55 p.m.	1.09	5:46 p.m.	6:20 p.m.	.12	.05	.11	.19	.25	.43	.62	.70	.73	.76	.79	.83	.94	.96	.97
Aug. 10	7:30 p.m.	[1] D.N.a.m.	1.81	7:57 p.m.	9:00 p.m.	.01	.08	.10	.17	.24	.45	.58	.67	.75	.83	.92	1.28	1.35	1.52	1.54
Aug. 27	8:52 p.m.	D.N.p.m.	.53	8:56 p.m.	9:06 p.m.	.01	.17	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.42	.51
Sept. 3	11:48 a.m.	1:02 p.m.	1.17	12:12 p.m.	12:57 p.m.	.01	.19	.41	.52	.62	.74	.83	.94	1.06	1.15	1.16	1.16	1.16	1.16	1.16
Sept. 24	8:14 p.m.	[2] D.N.a.m.	.71	11:37 p.m.	11:42 p.m.	.45	.25	.25	.25	.25	.25	.25	.25	.25	.25	.26	.26	.26	.26	.26
Sept. 27	[2] 11:35 p.m.	7:48 a.m.	1.94	2:32 a.m.	3:07 a.m.	.21	.13	.34	.50	.84	1.08	1.16	1.27	1.28	1.29	1.29	1.30	1.30	1.36	1.45
Sept. 28	3:40 a.m.	1:57 p.m.	2.23	6:36 a.m.	6:56 a.m.	.21	.18	.31	.47	.53	.57	.61	.66	.67	.70	.72	.77	.98	1.08	1.28
Peoria, Ill.:																			
Mar. 31	3:39 p.m.	[1] 12:50 a.m.	2.26	5:27 p.m.	6:01 p.m.	.09	.10	.32	.50	.83	.95	1.03	1.09	1.52	1.15	1.17	1.22	1.31	1.38	1.49
May 10	4:35 p.m.	12 mdt.	1.45	5:54 p.m.	6:55 p.m.	.06	.19	.23	.25	.37	.43	.43	.43	.44	.50	.57	1.02	1.06	1.06	1.06
May 16–17	8:42 p.m.	D.N.a.m.	.92	11:46 p.m.	12:01 a.m.	.26	.20	.30	.35	.38	.39	.40	.42	.44	.46	.49	.52	.61	.63	.64
May 26	[2] 6:19 p.m.	D.N.a.m.	.62	1:35 a.m.	1:41 a.m.	.31	.25	.30	.30	.30	.30	.30	.30	.31	.31	.31	.31	.31	.31	.31
July 2	4:14 a.m.	6:36 a.m.	.59	5:01 a.m.	5:22 a.m.	.05	.06	.16	.34	.41	.43	.46	.46	.51	.52	.52	.53	.53	.54	.54
July 23	4:49 p.m.	6:47 p.m.	.68	4:53 p.m.	5:06 p.m.	.02	.23	.48	.56	.57	.57	.57	.58	.59	.60	.62	.64	.65	.66	.66
Aug. 1	3:45 p.m.	4:34 p.m.	.43	4:12 p.m.	4:21 p.m.	.02	.17	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.42	.42	.42
	5:02 p.m.	5:30 p.m.	.01																	
Aug. 2	12:49 p.m.	1:14 p.m.	.43	12:54 p.m.	1:06 p.m.	.01	.10	.37	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
Aug. 17	2:35 a.m.	4:10 a.m.	.49	2:45 a.m.	2:54 a.m.	.01	.27	.35	.39	.42	.43	.43	.45	.46	.47	.47	.47	.48	.48	.48
Sept. 22	1:25 a.m.	6:52 a.m.	.68	2:36 a.m.	2:51 a.m.	.06	.12	.36	.48	.49	.50	.50	.50	.50	.51	.52	.52	.52	.52	.52
Sept. 26	1:52 p.m.	6:37 p.m.	2.42	3:07 p.m.	3:46 p.m.	.08	.19	.28	.40	.57	.72	1.01	1.21	1.30	1.33	1.36	1.42	1.44	1.59	1.85
Oct. 21	1:20 p.m.	3:25 p.m.	.36	2:21 p.m.	2:29 p.m.	.03	.12	.32	.32	.32	.32	.32	.32	.32	.32	.32	.33	.33	.33	.33
	4:03 p.m.	5:40 p.m.	.30																	
Springfield, Ill.:																			
Mar. 18	5:40 p.m.	[1] 6:26 a.m.	.92	6:01 p.m.	6:20 p.m.	.11	.19	.41	.54	.59	.63	.66	.67	.69	.70	.72	.75	.79	.79	.80
Mar. 31	[2] 10:40 p.m.	5:15 a.m.	.83	12:43 a.m.	1:01 a.m.	.04	.10	.26	.36	.44	.46	.48	.49	.51	.53	.56	.63	.65	.66	.68
Do	2:20 p.m.	[1] 1:52 a.m.	2.55	3:37 p.m.	4:45 p.m.	.08	.17	.36	.48	.53	.62	.67	.90	1.12	1.16	1.21	1.42	1.59	1.62	1.65
May 1	3:12 p.m.	6:35 p.m.	.98	5:46 p.m.	6:05 p.m.	.36	.24	.34	.43	.52	.53	.59	.59	.61	.62	.62	.62	.62	.62	.62
May 11	[2] 11:30 p.m.	2:50 a.m.	.80	12:41 a.m.	12:57 a.m.	.15	.06	.23	.54	.58	.58	.58	.59	.59	.59	.59	.60	.61	.63	.64
May 20	6:30 p.m.	[1] 12:30 a.m.	1.02	7:44 p.m.	7:58 p.m.	.03	.08	.37	.59	.63	.65	.66	.67	.69	.70	.72	.74	.78	.83	.86
May 21	10:25 p.m.	[1] 12:30 a.m.	.95	10:46 p.m.	11:05 p.m.	.01	.30	.41	.64	.78	.80	.81	.82	.83	.84	.86	.88	.93	.93	.94
May 28	9:06 p.m.	10:40 p.m.	.89	9:11 p.m.	9:42 p.m.	.01	.19	.36	.38	.44	.55	.71	.74	.79	.84	.85	.86	.87	.88	.88
June 5	1:15 a.m.	3:00 a.m.	1.16	1:58 a.m.	2:20 a.m.	.03	.12	.40	.70	1.03	1.11	1.11	1.12	1.12	1.12	1.12	1.12	1.13	1.13	1.13
June 12	4:15 a.m.	8:15 a.m.	.84	4:53 a.m.	5:15 a.m.	.01	.19	.37	.49	.59	.63	.65	.67	.68	.69	.70	.72	.73	.75	.77
June 28	2:07 p.m.	3:40 p.m.	1.04	2:35 p.m.	2:56 p.m.	.04	.49	.79	.87	.93	.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Aug. 2	2:40 p.m.	4:40 p.m.	.80	2:47 p.m.	3:05 p.m.	.01	.15	.42	.65	.73	.75	.76	.76	.76	.77	.77	.77	.78	.79	.79
Sept. 26	12:15 a.m.	9:15 a.m.	1.54	7:12 a.m.	7:58 a.m.	.59	.20	.38	.45	.45	.45	.45	.54	.59	.75	.78	.79	.84	.93	.95
Do	5:12 p.m.	11:20 p.m.	1.64	5:48 p.m.	6:33 p.m.	.02	.22	.25	.32	.46	.60	.67	.79	.92	.99	1.01	1.02	1.02	1.03	1.26
St. Louis, Mo.:																			
Jan. 21	7:35 p.m.	[1] D.N.a.m.	.74	8:36 p.m.	8:53 p.m.	.06	.17	.25	.36	.40	.42	.43	.44	.44	.45	.45	.46	.47	.51	.56
May 12	[2] 5:00 p.m.	D.N. a.m.	.91	2:37 a.m.	2:55 a.m.	.05	.28	.41	.49	.54	.56	.58	.59	.60	.62	.65	.70	.79	.85	.85
May 24	[2] 10:05 p.m.	D.N. a.m.	.46	12:39 a.m.	12:49 a.m.	.01	.24	.41	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
July 23	5:40 p.m.	7:20 p.m.	3.68	5:42 p.m.	6:47 p.m.	.01	.33	.62	1.14	1.42	1.80	2.12	2.50	2.81	3.07	3.24	3.47	3.65	3.67	3.67
Sept. 26	6:00 p.m.	D.N.p.m.	.62	8:19 p.m.	8:27 p.m.	.05	.32	.39	.41	.42	.43	.43	.43	.44	.44	.44	.45	.49	.49	.50
Oct. 21	8:35 p.m.	[1] D.N. a.m.	1.71	9:53 p.m.	10:47 p.m.	.42	.07	.21	.33	.46	.61	.68	.72	.80	.85	.90	.95	1.03	1.05	1.07
MISSOURI VALLEY																			
Columbia, Mo.:																			
May 1	12:53 p.m.	1:32 p.m.	.49	12:59 p.m.	1:14 p.m.	.02	.14	.33	.43	.45	.45	.46	.47	.47	.47	.47	.47	.47	.47	.47
May 10	7:15 a.m.	[1] D.N. a.m.	.76	10:10 p.m.	10:17 p.m.	.26	.36	.43	.44	.44	.44	.44	.44	.44	.44	.45	.45	.47	.47	.48
May 11	7:40 p.m.	[1] D.N. a.m.	2.14	7:49 p.m.	8:17 p.m.	.01	.11	.32	.46	.92	1.15	1.25	1.27	1.28	1.29	1.30	1.30	1.30	1.30	1.30
May 12	[2] 7:40 p.m.	D.N. a.m.	2.14	12:02 a.m.	12:12 a.m.	1.48	.30	.42	.45	.47	.48	.49	.50	.52	.54	.56	.60	.68	.66	.66
June 12	6:06 a.m.	11:58 a.m.	1.57	7:05 a.m.	7:33 a.m.	.04	.09	.26	.42	.54	.67	.74	.77	.80	.82	.85	.97	1.02	1.07	1.17
Aug. 2	6:18 p.m.	D.N.p.m.	1.46	6:37 p.m.	7:08 p.m.	.04	.27	.58	(3)	(3)	(3)	1.29	1.34	1.34	1.36	1.38	1.38	1.38	1.38	1.39
Kansas City, Mo.:																			
May 10	6:25 p.m.	10:40 p.m.	.90	7:14 p.m.	7:44 p.m.	.18	.12	.24	.37	.46	.54	.66	.70	.71	.72	.72	.72	.72	.72	.72
May 17	1:07 p.m.	1:53 p.m.	.64	1:34 p.m.	1:47 p.m.	.04	.20	.54	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
May 28	12:00 p.m.	2:50 a.m.	.72	12:07 a.m.	12:25 a.m.	.04	.21	.36	.43	.47	.49	.50	.51	.53	.54	.56	.59	.62	.64	.66
Sept. 12	4:48 p.m.	6:55 p.m.	.70	6:11 p.m.	6:23 p.m.	.25	.26	.39	.44	.45	.45	.45	.45	.45	.45	.45	.45	.46	.64	.67
	7:15 p.m.	[1] 2:00 a.m.	1.08																	
St. Joseph, Mo.:																			
Apr. 29	5:04 p.m.	5:32 p.m.	.35	5:12 p.m.	5:21 p.m.	.02	.19	.33	.33	.33	.33	.33	.33	.33	.34	.34	.35	.35	.35	.35
	5:53 p.m.	6:38 p.m.	.02																	
May 11	5:56 p.m.	6:15 p.m.	.44	5:57 p.m.	6:06 p.m.	T	.34	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
June 12	2:55 a.m.	8:51 a.m.	2.44	3:00 a.m.	3:45 a.m.	.02	.11	.28	.68	.95	1.22	1.47	1.64	1.82	1.91	1.95	1.96	1.97	1.97	1.99
June 27–28	7:19 p.m.	4:45 a.m.	3.23	11:44 p.m.	12:49 a.m.	.54	.13	.30	.48	.64	.67	.69	.76	.83	.93	1.00	1.17	1.39	1.59	1.62
June 28	[2] 7:19 p.m.	4:45 a.m.	3.23	2:44 a.m.	3:32 a.m.	2.39	.07	.16	.19	.24	.34	.40	.50	.61	.71	.77	.80	.82	.82	.84
Sept. 19	12:30 a.m.	3:30 a.m.	.68	1:30 a.m.	1:51 a.m.	.09	.20	.34	.39	.40	.40	.41	.41	.41	.42	.43	.45	.55	.59	.59
Sept. 24	8:01 a.m.	9:35 a.m.	.85	8:45 a.m.	9:06 a.m.	.08	.10	.38	.58	.69	.71	.75	.75	.77	.77	.77	.77	.77	.77	.77
Sept. 26	[2] 11:10 p.m.	4:45 p.m.	1.49	1:07 a.m.	1:19 a.m.	.14	.11	.33	.37	.37	.38	.38	.38	.38	.38	.39	.45	.50	.59	.61

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	60 min.	80 min.	100 min.	120 min.
MISSOURI VALLEY—continued																			
Springfield, Mo.:																			
May 11	10:45 p.m.	[1] 3:20 a.m.	0.88	11:02 p.m.	11:36 p.m.	0.02	0.08	0.10	0.21	0.31	0.39	0.57	0.70	0.74	0.77	0.77	0.78	0.82	0.83	0.83
May 12	7:35 p.m.	9:50 p.m.	.99	8:47 p.m.	9:33 p.m.	.01	.10	.11	.15	.32	.55	.69	.75	.85	.95	.98	.98	.98	.98	.98
May 13	2:10 a.m.	6:32 a.m.	1.23	4:10 a.m.	4:51 a.m.	.12	.20	.33	.47	.51	.60	.65	.73	.82	.86	.90	.95	1.10	1.11	1.11
June 27	12:45 a.m.	6:22 a.m.	2.97	1:35 a.m.	2:45 a.m.	.11	.21	.32	.36	.36	.37	.43	.57	.78	1.04	1.15	1.18	1.43	1.52	1.77
July 8	1:40 p.m.	3:25 p.m.	.59	2:09 p.m.	2:17 p.m.	.06	.21	.30	.31	.31	.36	.44	.44	.44	.44	.44	.45	.53	.53	.53
Do	4:10 p.m.	5:47 p.m.	1.94	4:21 p.m.	5:00 p.m.	.01	.22	.37	.69	1.12	1.51	1.65	1.76	1.88	1.90	1.91	1.92	1.93	1.93	1.93
July 9	1:18 a.m.	11:00 a.m.	1.19	1:24 a.m.	1:44 a.m.	.03	.09	.22	.35	.40	.41	.42	.44	.45	.46	.47	.49	.53	.57	.61
Aug. 2	9:36 p.m.	[4] 4:10 a.m.	2.32	9:40 p.m.	10:12 p.m.	.01	.39	.74	.98	1.21	1.43	1.57	1.63	1.63	1.63	1.63	1.64	1.70	1.72	1.74
Aug. 11	[2] 8:10 p.m.	1:55 a.m.	.90	12:58 a.m.	1:23 a.m.	.08	.28	.53	.70	.81	.87	.88	.88	.88	.88	.88	.88	.88	.88	.88
Aug. 12	7:10 p.m.	9:20 p.m.	.71	7:18 p.m.	7:38 p.m.	.04	.16	.36	.43	.50	.53	.57	.60	.63	.64	.66	.67	.67	.67	.67
Sept. 2	3:52 a.m.	6:26 a.m.	1.25	4:06 a.m.	4:39 a.m.	.03	.12	.20	.34	.55	.85	1.05	1.14	1.17	1.17	1.17	1.18	1.19	1.21	1.22
Do	8:40 a.m.	3:17 p.m.	1.11	10:32 a.m.	11:12 a.m.	.04	.16	.25	.32	.48	.58	.66	.71	.76	.77	.78	.83	.89	.94	1.00
Sept. 13	5:50 p.m.	6:08 p.m.	.42	5:55 p.m.	6:06 p.m.	.01	.18	.37	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
Sept. 26	2:25 p.m.	4:50 p.m.	.80	2:47 p.m.	3:21 p.m.	.07	.09	.15	.29	.38	.48	.56	.62	.62	.62	.62	.66	.72	.72	.73
Do	7:10 p.m.	[1] 12:30 a.m.	.86	8:01 p.m.	8:23 p.m.	.16	.16	.24	.32	.53	.59	.59	.62	.63	.64	.67	.67	.69	.69	.69
Sept. 28	7:30 a.m.	1:20 p.m.	1.27	8:50 a.m.	9:42 a.m.	.05	.15	.29	.33	.35	.36	.36	.37	.44	.59	.72	.78	.80	.81	.81
Oct. 15	3:02 p.m.	4:55 p.m.	.97	3:31 p.m.	3:56 p.m.	.13	.14	.29	.44	.60	.70	.72	.75	.76	.77	.79	.83	.84	.84	.84
Topeka, Kans.:																			
Apr. 19	2:54 p.m.	8:39 p.m.	1.53	3:52 p.m.	4:24 p.m.	.21	.07	.20	.25	.46	.71	.98	1.03	1.03	1.03	1.04	1.04	1.04	1.08	1.11
June 27	6:05 p.m.	10:00 p.m.	1.58	6:17 p.m.	6:55 p.m.	.01	.21	.31	.61	.94	1.13	1.24	1.40	1.51	1.53	1.54	1.56	1.57	1.57	1.57
Aug. 2	6:28 p.m.	6:54 p.m.	.42	6:30 p.m.	6:41 p.m.	.01	.11	.34	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
Sept. 12	3:16 p.m.	11:45 p.m.	1.55	8:38 p.m.	8:55 p.m.	.82	.16	.27	.53	.62	.63	.63	.63	.63	.63	.63	.63	.63	.65	.68
Lincoln, Nebr.:																			
June 29	9:08 p.m.	10:20 p.m.	1.50	9:16 p.m.	9:42 p.m.	.02	.26	.70	1.12	1.33	1.44	1.46	1.47	1.47	1.47	1.47	1.48	1.48	1.48	1.48
July 17	4:55 p.m.	8:38 p.m.	1.29	7:25 p.m.	7:49 p.m.	.70	.05	.13	.23	.41	.50	.52	.53	.54	.55	.56	.59	.59	.59	.59
Aug. 22	4:18 p.m.	11:40 p.m.	2.30	8:26 p.m.	9:08 p.m.	.89	.06	.26	.48	.72	.90	.98	1.07	1.32	1.36	1.37	1.38	1.39	1.39	1.40
Sept. 12	9:03 a.m.	[1] 6:40 a.m.	2.45	9:48 a.m.	11:01 a.m.	.10	.05	.13	.43	.66	.77	.82	.85	.86	.88	.90	1.29	1.48	1.51	1.55
Sept. 25	5:20 p.m.	6:30 p.m.	1.39	5:31 p.m.	6:09 p.m.	.06	.12	.22	.32	.55	.80	1.03	1.18	1.25	1.28	1.32	1.33	1.33	1.33	1.33
Omaha, Nebr.:																			
July 7	8:50 p.m.	[1] 12:30 a.m.	2.18	8:57 p.m.	9:40 p.m.	.01	.12	.24	.40	.57	.72	.94	1.19	1.35	1.39	1.40	1.40	1.41	1.52	1.71
Valentine, Nebr.:																			
May 27	4:40 p.m.	5:58 p.m.	.85	4:44 p.m.	5:07 p.m.	.01	.10	.28	.49	.64	.73	.74	.75	.79	.82	.84	.84	.84	.84	.84
July 12	5:20 p.m.	6:15 p.m.	.57	5:33 pm.	5:47 p.m.	.02	.06	.35	.54	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
	6:35 p.m.	6:50 p.m.	T																	
July 14	[3] 11:08 p.m.	D.N. a.m.	.98	12:15 a.m.	12:48 a.m.	.02	.05	.13	.38	.58	.81	.89	.94	.96	.96	.96	.96	.96	.96	.96
Aug. 15	1:03 p.m.	2:08 p.m.	.44	1:22 p.m.	1:33 p.m.	.01	.16	.38	.41	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
Aug. 21	10:15 p.m.	[1] 1:10 a.m.	.70	10:27 p.m.	10:57 p.m.	.01	.07	.19	.34	.37	.45	.57	.59	.64	.67	.69	.69	.69	.69	.69
Sioux City, Iowa:																			
June 2	3:17 a.m.	7:10 a.m.	.47	3:25 a.m.	3:47 a.m.	.01	.11	.17	.22	.40	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45
June 7	5:35 p.m.	6:25 p.m.	.45	6:04 p.m.	6:11 p.m.	.02	.38	.42	.42	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
July 6	9:57 p.m.	[1] 3:50 a.m.	.77	10:37 p.m.	10:52 p.m.	.01	.16	.24	.37	.41	.42	.42	.42	.42	.43	.43	.45	.47	.50	.53
Sept. 1	12:45 a.m.	3:25 a.m.	.79	1:32 a.m.	1:51 a.m.	.01	.16	.27	.48	.62	.62	.62	.66	.70	.72	.72	.73	.73	.77	.78
Do	7:18 p.m.	10:50 p.m.	2.33	7:51 p.m.	8:30 p.m.	.01	.27	.46	.64	.75	1.10	1.33	1.60	1.68	1.72	1.74	1.81	1.86	1.93	1.94
Sept. 3	2:47 a.m.	3:50 a.m.	.74	2:52 a.m.	3:11 a.m.	.02	.21	.47	.57	.67	.71	.72	.72	.72	.72	.72	.72	.72	.72	.72
Sept. 15	8:55 p.m.	11:50 p.m.	1.40	9:44 p.m.	10:10 p.m.	.18	.14	.29	.59	.89	1.04	1.07	1.10	1.11	1.11	1.11	1.21	1.22	1.22	1.22
Huron, S. Dak.:																			
June 7	6:54 p.m.	[1] 12:40 a.m.	1.02	7:01 p.m.	7:22 p.m.	.01	.25	.45	.48	.57	.62	.64	.66	.68	.69	.70	.71	.71	.71	.71
July 12	9:15 p.m.	11:58 p.m.	.79	9:26 p.m.	9:58 p.m.	.04	.17	.26	.31	.36	.45	.60	.66	.67	.67	.68	.68	.70	.72	.74
Aug. 15	2:05 p.m.	4:00 p.m.	1.21	2:18 p.m.	2:23 p.m.	.01	.28	.29	.29	.29	.29	.29	.29	.30	.30	.30	.39	1.17	1.19	1.20
Do	2:05 p.m.	4:00 p.m.	1.21	3:11 p.m.	3:32 p.m.	.32	.05	.28	.51	.83	.86	.87	.88	.88	.88	.89	.89	.89	.89	.89
NORTHERN SLOPE																			
Havre, Mont.:																			
June 22	D.N. a.m.	5:25 a.m.	.67	2:37 a.m.	2:57 a.m.	.01	.18	.31	.36	.44	.47	.51	.53	.55	.56	.57	.58	.61	.65	.65
Rapid City, S. Dak.:																			
May 22	3:25 p.m.	4:12 p.m.	.60	3:54 p.m.	4:04 p.m.	.17	.14	.39	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.52
	5:28 p.m.	8:00 p.m.	.35																	
July 6	11:20 a.m.	3:05 p.m.	1.73	12:54 p.m.	1:35 p.m.	.35	.15	.50	.78	.92	1.00	1.11	1.15	1.29	1.32	1.34	1.36	1.37	1.37	1.38
Cheyenne, Wyo.:																			
June 19	3:06 p.m.	4:50 p.m.	.49	3:12 p.m.	3:29 p.m.	.02	.08	.25	.42	.45	.45	.46	.46	.46	.46	.46	.46	.46	.47	.47
North Platte, Nebr.:																			
Aug. 1	[3] 11:05 p.m.	2:50 a.m.	1.16	12:22 a.m.	12:53 a.m.	.21	.10	.18	.38	.54	.63	.77	.81	.83	.88	.95	.95	.95	.95	.95
MIDDLE SLOPE																			
Pueblo, Colo.:																			
June 11	9:54 p.m.	[1] 3:20 a.m.	1.57	10:17 p.m.	11:37 p.m.	.04	.10	.18	.25	.33	.36	.39	.57	.68	.77	.88	1.09	1.34	1.45	1.47
July 31	5:43 p.m.	11:38 p.m.	1.21	7:37 p.m.	7:53 p.m.	.21	.18	.36	.42	.45	.48	.54	.58	.62	.66	.71	.77	.82	.88	.93
Concordia, Kans.:																			
May 27	7:37 p.m.	8:36 p.m.	.71	8:03 p.m.	8:17 p.m.	.02	.17	.47	.65	.68	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69
July 7	2:52 p.m.	[1] 3:30 a.m.	2.19	10:30 p.m.	11:03 p.m.	.76	.05	.17	.26	.35	.48	.70	.85	.86	.86	.87	.88	.88	.88	.88
July 8	[2] 2:52 p.m.	3:30 a.m.	2.19	12:35 a.m.	12:57 a.m.	1.65	.14	.25	.32	.45	.48	.49	.49	.49	.49	.49	.50	.50	.51	.52
July 13	2:45 a.m.	5:15 a.m.	.84	3:02 a.m.	3:42 a.m.	.04	.15	.25	.34	.38	.42	.49	.58	.66	.68	.69	.71	.73	.78	.80
Aug. 22	4:35 a.m.	7:35 a.m.	1.58	5:05 a.m.	5:40 a.m.	.14	.08	.17	.37	.47	.51	.56	.63	.63	.64	.65	.67	.71	.77	1.31
Do	4:35 a.m.	7:35 a.m.	1.58	6:51 a.m.	7:07 a.m.	.94	.20	.40	.52	.56	.60	.63	.63	.63	.64	.64	.64	.64	.64	.04
Sept. 12	6:10 a.m.	1:15 p.m.	1.69	8:30 a.m.	9:01 a.m.	.01	.18	.26	.51	.75	.78	.86	.89	.90	.90	.90	.90	.95	1.14	1.15
Sept. 25	7:58 p.m.	9:56 p.m.	.75	8:30 p.m.	9:11 p.m.	.01	.06	.10	.16	.29	.42	.50	.55	.64	.67	.67	.71	.74	.74	.74
Dodge City, Kans.:																			
Aug. 16	12:47 a.m.	4:00 a.m.	1.00	12:53 a.m.	1:19 a.m.	.01	.09	.24	.45	.59	.69	.73	.76	.80	.83	.84	.86	.90	.92	.95
Aug. 19	9:32 p.m.	11:40 p.m.	2.66	9:32 p.m.	10:27 p.m.	.00	.32	.83	1.34	1.55	1.73	1.97	2.15	2.27	2.36	2.47	2.56	2.63	2.65	2.65
Aug. 27	12:20 a.m.	2:15 a.m.	.91	1:34 a.m.	1:50 a.m.	.24	.26	.48	.61	.67	.67	.67	.67	.67	.67	.67	.67	.67	.67	.67

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1933 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated											
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MIDDLE SLOPE—con.																				
Wichita, Kans.:																				
Aug. 20	1:15 p.m.	5:50 p.m.	1.58	3:47 p.m.	4:08 p.m.	0.02	0.16	0.55	0.88	1.01	1.05	1.10	1.14	1.17	1.22	1.29	1.36	1.36	1.52	1.56
Do	6:32 p.m.	8:30 p.m.	.60	6:33 p.m.	6:57 p.m.	T	.17	.28	.35	.45	.53	.57	.58	.58	.58	.58	.59	.59	.59	.60
Aug. 27	4:00 p.m.	10:00 p.m.	1.09	4:09 p.m.	4:31 p.m.	.01	.09	.15	.36	.58	.62	.62	.62	.62	.63	.63	.64	.65	.65	.67
Sept. 12	5:50 p.m.	D.N. p.m.	1.01	5:54 p.m.	6:22 p.m.	.02	.11	.36	.47	.62	.72	.78	.79	.79	.79	.79	.79	.87	.91	.95
Oklahoma City, Okla.:[4]																				
Oct. 11	9:33 p.m.	[1] 3:25 a.m.	1.39	9:37 p.m.	9:53 p.m.	.03	.21	.48	.73	.80	.86	.88	.90	.90	.90	.90	.90	.90	.90	.91
SOUTHERN SLOPE																				
Abilene, Tex.:[4]																				
May 24	1:50 p.m.	3:20 p.m.	2.76	2:18 p.m.	2:56 p.m.	.10	.23	.86	1.27	1.68	1.93	2.23	2.50	2.65	2.66	2.66	2.66	2.66	2.66	2.66
Nov. 20	D.N. a.m.	6:35 a.m.	1.89	2:56 a.m.	3:13 a.m.	.43	.22	.44	.60	.67	.69	.70	.72	.76	.86	.95	1.15	1.33	1.37	1.38
Amarillo, Tex.:[4]																				
Aug. 22	1:55 p.m.	7:15 p.m.	1.82	2:48 p.m.	3:03 p.m.	.61	.15	.49	.62	.64	.70	.78	.98	1.04	1.07	1.09	1.12	1.16	1.16	1.17
Roswell, N. Mex.:																				
May 14	2:28 p.m.	4:15 p.m.	.43	3:10 p.m.	3:22 p.m.	.01	.15	.31	.37	.37	.37	.38	.38	.39	.39	.40	.41	.42	.42	.42
July 15	11:10 p.m.	[1] 2:24 a.m.	.53	11:43 p.m.	11:52 p.m.	.06	.16	.33	.37	.37	.38	.38	.38	.39	.39	.39	.40	.41	.46	.47
Aug. 23	2:36 p.m.	6:15 p.m.	.71	3:06 p.m.	3:32 p.m.	.01	.12	.17	.31	.44	.55	.58	.59	.60	.61	.62	.64	.65	.67	.68
Aug. 24	4:31 p.m.	6:12 p.m.	.74	5:00 p.m.	5:27 p.m.	.05	.08	.24	.36	.43	.58	.67	.67	.67	.67	.67	.68	.69	.69	.69
Aug. 27	7:54 p.m.	8:45 p.m.	.36	8:10 p.m.	8:21 p.m.	.02	.16	.30	.32	.33	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34
Sept. 18	7:40 p.m. 9:05 p.m.	8:45 p.m. 11:20 p.m.	.50 .45	7:40 p.m.	8:00 p.m.	.00	.10	.17	.35	.45	.47	.48	.49	.49	.49	.49	.50	.50	.51	.64
SOUTHERN PLATEAU																				
Albuquerque, N. Mex.:																				
June 17	9:09 p.m.	[1] 2:10 a.m.	2.13	10:35 p.m.	11:36 p.m.	.21	.09	.21	.31	.45	.61	.81	1.01	1.17	1.22	1.32	1.55	1.68	1.75	1.83
July 2	3:40 p.m.	5:05 p.m.	.55	4:22 p.m.	4:33 p.m.	.01	.14	.42	.51	.53	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
July 16	4:05 p.m.	10:20 p.m.	.71	4:22 p.m.	4:37 p.m.	.01	.28	.47	.56	.56	.56	.56	.56	.56	.56	.56	.56	.57	.57	.57
Aug. 27	1:26 p.m.	2:20 p.m.	.38	1:37 p.m.	1:42 p.m.	.05	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
Santa Fe, N. Mex.:																				
June 20	10:00 a.m.	3:20 p.m.	1.31	10:43 a.m.	11:28 a.m.	.01	.08	.21	.37	.49	.65	.70	.74	.90	1.04	1.08	1.14	1.17	1.18	1.19
Phoenix, Ariz.:																				
Sept. 8	1:06 p.m.	2:35 p.m.	1.29	1:09 p.m.	1:46 p.m.	.01	.19	.46	.64	.72	.84	1.16	1.25	1.28	1.28	1.28	1.28	1.28	1.28	1.28
MIDDLE PLATEAU																				
Reno, Nev.:																				
Aug. 18	4:10 p.m.	5:24 p.m.	.55	5:05 p.m.	5:19 p.m.	.19	.10	.24	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
Modena, Utah:																				
July 24	2:23 p.m.	3:24 p.m.	.38	2:38 p.m.	2:53 p.m.	.01	.20	.29	.35	.36	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
Grand Junction, Colo.:																				
July 5	6:10 p.m.	7:45 p.m.	.46	7:01 p.m.	7:22 p.m.	.01	.17	.29	.36	.43	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
NORTHERN PLATEAU																				
Baker, Oreg.:																				
Aug. 4	10:32 a.m.	11:30 a.m.	.41	10:43 a.m.	10:49 a.m.	.04	.27	.31	.32	.33	.34	.35	.35	.36	.36	.37	.37	.37	.37	.37
Pocatello, Idaho:																				
July 8	12:50 p.m.	4:48 p.m.	.79	4:14 p.m.	4:24 p.m.	.42	.26	.34	.36	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
NORTH PACIFIC COAST REGION																				
Tatoosh Island, Wash.:																				
Nov. 21	4:33 p.m.	[1] 7:50 a.m.	3.20	10:04 p.m.	11:20 p.m.	.74	.08	.24	.35	.46	.54	.63	.72	.85	.95	1.18	1.42	1.66	1.79	1.88
SOUTH PACIFIC COAST REGION																				
Los Angeles, Calif.:																				
Jan. 19	[2] 5:30 p.m.	D.N. p.m.	2.74	4:51 p.m.	5:09 p.m.	1.75	.19	.45	.58	.63	.65	.68	.69	.70	.71	.73	.73	.74	.79	.81
San Diego, Calif.:																				
Jan. 19	D.N. p.m.	[1] D.N. a.m.	1.56	10:23 p.m.	10:58 p.m.	.10	.19	.20	.29	.36	.46	.62	.73	.76	.80	.81	.83	.88	.94	.99
Apr. 28	5:06 a.m.	7:38 a.m.	1.03	5:21 a.m.	5:56 a.m.	.06	.05	.13	.26	.34	.52	.67	.76	.79	.80	.84	.85	.93	.94	.96
ISLAND POSSESSIONS																				
San Juan, P. R.:[4]																				
Mar. 3	D.N. a.m.	D.N. a.m.	1.52	3:33 a.m.	3:58 a.m.	.06	.11	.23	.56	1.03	1.41	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
Apr. 23	6:52 p.m.	7:35 p.m.	.96	6:54 p.m.	7:22 p.m.	.01	.12	.25	.54	.76	.87	.94	.95	.95	.95	.95	.95	.95	.95	.95
Apr. 24	2:01 p.m.	5:05 p.m.	3.65	2:45 p.m.	4:38 p.m.	.04	.13	.29	.65	.92	1.18	1.35	1.43	1.46	1.49	1.57	1.94	2.59	3.25	3.56
May 17	12:01 p.m.	1:22 p.m.	.98	12:21 p.m.	12:32 p.m.	.01	.34	.50	.55	.56	.57	.57	.57	.57	.57	.77	.97	.97	.97	.97
May 26	9:38 p.m.	10:50 p.m.	1.24	9:54 p.m.	10:16 p.m.	.14	.13	.34	.67	.85	.94	1.01	1.06	1.08	1.08	1.09	1.10	1.10	1.10	1.10
May 28	12:09 p.m.	5:55 p.m.	4.06	12:16 p.m.	1:19 p.m.	.05	.26	.52	.72	.81	1.03	1.38	1.75	2.07	2.34	2.55	3.02	3.14	3.34	3.44
June 22	2:57 p.m.	4:20 p.m.	1.81	3:07 p.m.	3:41 p.m.	.03	.16	.50	.90	1.20	1.35	1.51	1.69	1.74	1.74	1.75	1.76	1.78	1.78	1.78
Honolulu, Hawaii:																				
Jan. 3	4:05 p.m.	6:36 p.m.	1.08	4:43 p.m.	5:13 p.m.	.07	.09	.18	.20	.28	.50	.67	.68	.69	.69	.69	.69	.73	.98	1.01
Feb. 14	D.N. a.m.	7:05 a.m.	1.67	1:30 a.m.	2:30 a.m.	.01	.22	.37	.42	.64	.89	.93	.95	.98	1.03	1.12	1.27	1.40	1.49	1.52
Mar. 3	D.N. a.m.	9:05 a.m.	.95	6:54 a.m.	7:04 a.m.	.19	.09	.36	.38	.38	.40	.46	.56	.56	.56	.57	.57	.71	.72	.76
Do	10:26 a.m.	7:10 p.m.	1.53	1:53 p.m.	2:19 p.m.	.27	.08	.20	.43	.58	.70	.72	.72	.72	.72	.72	.72	.73	.79	.80

[1] On following date. [2] On preceding date. [3] From defective record. [4] Rate 0.40 inch in 5 minutes, or 1.50 inches in 1 hour.

NOTE.—The following stations had no excessive precipitation during the year 1933: North Dakota; Moorhead, Minn., and Devils Lake, N. Dak.; Northern slope; Helena, Kalispell, and Miles City, Mont., and Lander, Sheridan, and Yellowstone Park, Wyo.; Middle slope, Denver, Colo.; Southern slope, Del Rio, Tex.; Southern plateau, El Paso, Tex., and Yuma, Ariz.; Middle plateau, Winnemucca, Nev., and Salt Lake City, Utah; Northern plateau, Boise, Idaho, and Walla Walla and Yakima, Wash.; North Pacific coast region, North Head and Seattle, Wash., and Medford, Portland, and Roseburg, Oreg.; Middle Pacific coast region, Eureka, Red Bluff, Sacramento, and San Francisco, Calif.; South Pacific coast region, Fresno, Calif.; Alaska, Fairbanks and Juneau.

EXCESSIVE PRECIPITATION, 1934

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	90 min.	100 min.	120 min.
NEW ENGLAND STATES																				
Eastport, Maine:																				
July 16	8:38 a.m.	10:45 a.m.	1.53	8:46 a.m.	9:39 a.m.	0.04	0.05	0.11	0.20	0.38	0.57	0.84	0.99	1.10	1.16	1.31	1.36	1.47	1.48	1.49
Aug. 3	9:25 a.m.	4:05 p.m.	1.28	1:23 p.m.	1:37 p.m.	.75	.05	.26	.37	.40	.44	.45	.47	.48	.50	.52	.52	.52	.53	.53
Portland, Maine:																				
June 6	2:22 p.m.	5:05 p.m.	.86	2:25 p.m.	3:01 p.m.	.01	.09	.27	.38	.50	.58	.65	.73	.76	.76	.77	.77	.77	.79	.81
July 26	11:37 a.m.	12:17 p.m.	.68	11:50 a.m.	12:11 p.m.	.09	.15	.32	.47	.55	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
July 28	1:35 p.m.	5:50 p.m.	1.11	3:48 p.m.	4:11 p.m.	.35	.09	.24	.42	.58	.63	.65	.65	.66	.66	.67	.68	.72	.74	.75
Sept. 17	7:50 a.m.	[1] 7:25 p.m.	2.57	8:04 p.m.	8:42 p.m.	.95	.06	.11	.24	.36	.47	.55	.60	.65	.68	.70	.71	.71	.71	.71
Nov. 6	1:00 p.m.	8:35 p.m.	.51	6:08 p.m.	6:22 p.m.	.04	.12	.31	.41	.42	.43	.43	.43	.43	.45	.46	.46	.46	.47	.47
Burlington, Vt.:																				
July 13	8:25 p.m.	8:55 p.m.	.48	8:25 p.m.	8:43 p.m.	.00	.10	.23	.38	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Northfield, Vt.:[5]																				
Aug. 24	8:10 p.m.	9:10 p.m.	.70	8:16 p.m.	8:36 p.m.	.01	.07	.17	.36	.56	.57	.58	.62	.67	.69	.69	.69	.69	.69	.69
Boston, Mass.:																				
Sept. 17	10:46 a.m.	5:40 p.m.	1.14	2:56 p.m.	3:41 p.m.	.18	.07	.20	.31	.39	.50	.58	.78	.88	.93	.95	.95	.95	.95	.95
Sept. 22	3:00 p.m.	[1] 6:15 a.m.	1.28	7:11 p.m.	7:36 p.m.	.11	.07	.19	.28	.35	.46	.47	.47	.49	.50	.50	.51	.51	.51	.51
Nantucket, Mass.:																				
June 12	7:28 p.m.	9:30 p.m.	.64	7:32 p.m.	7:55 p.m.	.01	.19	.25	.37	.46	.53	.55	.57	.58	.58	.59	.60	.62	.62	.63
Aug. 11	8:01 a.m.	12:55 p.m.	.94	10:06 a.m.	10:59 a.m.	.03	.08	.12	.17	.20	.25	.44	.55	.58	.66	.72	.80	.82	.83	.88
Sept. 18	1:20 a.m.	3:20 a.m.	1.06	2:16 a.m.	2:55 a.m.	.31	.06	.13	.22	.27	.32	.50	.64	.73	.74	.75	.75	.75	.75	.75
Block Island, R. I.:																				
June 12	5:16 p.m.	9:10 p.m.	1.06	5:20 p.m.	6:06 p.m.	T	.13	.18	.21	.31	.35	.37	.42	.74	.81	.84	.87	.94	1.03	1.04
Providence, R. I.:																				
June 10	4:19 p.m.	7:05 p.m.	.55	4:33 p.m.	4:46 p.m.	.01	.23	.38	.40	.44	.47	.48	.49	.49	.50	.51	.52	.53	.54	.54
New Haven, Conn.:																				
July 25	7:24 p.m.	[1] 12:10 a.m.	.80	11:08 p.m.	11:20 p.m.	.01	.35	.62	.68	.72	.75	.76	.77	.79	.79	.79	.79	.79	.79	.79
Aug. 2	8:47 p.m.	[1] 12:35 a.m.	1.48	10:48 p.m.	11:44 p.m.	.02	.09	.18	.33	.52	.67	.93	1.03	1.14	1.21	1.34	1.42	1.45	1.46	1.46
Sept. 4	[2] 2:45 p.m.	7:05 a.m.	.79	3:14 a.m.	3:33 a.m.	.33	.17	.26	.32	.42	.43	.43	.44	.44	.44	.44	.44	.44	.44	.44
Sept. 8	12:06 p.m.	11:15 p.m.	2.50	5:06 p.m.	5:57 p.m.	.19	.12	.23	.29	.34	.37	.42	.48	.64	.72	.79	.81	.82	.82	.83
Do	12:06 p.m.	11:15 p.m.	2.50	8:39 p.m.	9:56 p.m.	1.24	.05	.10	.16	.21	.28	.38	.43	.53	.62	.68	.83	1.11	1.20	1.25
MIDDLE ATLANTIC STATES																				
Albany, N. Y.:																				
May 10	2:53 p.m.	5:45 p.m.	.52	3:01 p.m.	3:11 p.m.	.01	.09	.36	.40	.42	.42	.42	.42	.42	.42	.42	.43	.48	.49	.50
June 6	2:00 p.m.	3:20 p.m.	.85	2:03 p.m.	2:22 p.m.	.01	.37	.46	.64	.78	.81	.82	.82	.83	.83	.83	.83	.84	.84	.84
June 10	12:30 p.m.	2:48 p.m.	.81	12:37 p.m.	12:59 p.m.	.02	.06	.23	.42	.53	.56	.56	.56	.56	.56	.56	.56	.64	.69	.77
July 13	5:47 p.m.	7:25 p.m.	.68	5:52 p.m.	6:09 p.m.	.02	.12	.25	.34	.44	.45	.47	.48	.52	.63	.65	.65	.66	.66	.66
Aug. 22	3:21 p.m.	5:10 p.m.	.72	4:12 p.m.	4:23 p.m.	.10	.25	.49	.53	.56	.57	.59	.60	.61	.61	.62	.62	.62	.62	.63
	5:32 p.m.	6:05 p.m.	.01																	
Binghamton, N. Y.:																				
May 10	1:43 p.m.	5:15 p.m.	.56	2:00 p.m.	2:15 p.m.	T	.15	.30	.45	.45	.46	.47	.48	.49	.50	.50	.52	.53	.55	.56
May 22	1:30 p.m.	2:24 p.m.	.78	1:31 p.m.	2:00 p.m.	T	.08	.26	.52	.58	.67	.75	.77	.78	.78	.78	.78	.79	.83	.84
	2:41 p.m.	3:22 p.m.	.06																	
June 12	5:52 p.m.	7:35 p.m.	.54	5:54 p.m.	6:06 p.m.	T	.31	.52	.53	.53	.53	.53	.53	.53	.53	.54	.54	.54	.54	.54
July 28[3]	6:30 a.m.	11:09 a.m.	.94	7:42 a.m.	8:23 a.m.	.04	.07	.13	.24	.38	.45	.54	.60	.65	.69	.71	.73	.79	.83	.87
July 30[3]	6:38 p.m.	D.N. p.m.	.60	6:58 p.m.	7:14 p.m.	.01	.16	.22	.40	.44	.47	.51	.52	.53	.54	.54	.55	.57	.58	.58
Aug. 22	2:01 p.m.	4:45 p.m.	.71	2:27 p.m.	2:38 p.m.	.01	.39	.54	.58	.61	.63	.65	.68	.68	.69	.69	.69	.69	.69	.69
Sept. 4	D.N. a.m.	9:25 a.m.	1.26	6:00 a.m.	6:41 a.m.	.32	.08	.21	.34	.38	.57	.70	.79	.85	.89	.90	.90	.91	.91	.93
Sept. 22	D.N. a.m.	1:15 p.m.	.82	9:27 a.m.	9:52 a.m.	.13	.09	.27	.35	.40	.46	.50	.51	.52	.53	.53	.56	.60	.65	.66
New York, N. Y.:																				
June 12	2:22 p.m.	5:30 p.m.	.88	2:53 p.m.	3:15 p.m.	.01	.13	.19	.33	.53	.62	.64	.66	.68	.71	.73	.76	.83	.85	.86
July 28	10:45 a.m.	2:20 p.m.	2.22	10:50 a.m.	11:24 a.m.	.01	.10	.26	.50	.72	.78	.81	.90	.91	.91	.92	.97	.97	1.15	1.86
Do	10:45 a.m.	2:20 p.m.	2.22	12:22 p.m.	1:13 p.m.	.99	.07	.22	.41	.42	.68	.90	.94	.96	1.10	1.18	1.22	1.22	1.23	1.23
Sept. 8	[2] 2:55 p.m.	10:00 p.m.	4.98	4:19 p.m.	5:19 p.m.	1.58	.13	.23	.27	.31	.32	.36	.55	.97	1.22	1.44	1.79	1.90	2.10	2.25
Do	[2] 2:55 p.m.	10:00 p.m.	4.98	6:15 p.m.	7:05 p.m.	3.81	.06	.14	.24	.32	.36	.45	.56	.67	.74	.81	.89	1.01	1.07	1.10
Harrisburg, Pa.:																				
June 6	4:13 p.m.	5:30 p.m.	.52	4:23 p.m.	4:38 p.m.	.01	.26	.38	.44	.47	.48	.49	.50	.51	.51	.51	.51	.51	.51	.51
June 10	7:12 p.m.	D.N. p.m.	.53	7:20 p.m.	7:35 p.m.	.01	.16	.33	.39	.41	.43	.48	.49	.49	.49	.50	.50	.50	.51	.52
July 3	7:20 p.m.	7:55 p.m.	.42	7:33 p.m.	7:48 p.m.	.03	.20	.31	.38	.39	.39	.39	.39	.39	.39	.39	.39	.39	.68	.68
	8:43 p.m.	D.N. p.m.	.37																	
July 7	3:12 p.m.	4:08 p.m.	.39	3:34 p.m.	3:45 p.m.	.01	.23	.33	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
July 25	4:20 p.m.	5:30 p.m.	.50	4:40 p.m.	4:54 p.m.	.01	.28	.38	.47	.48	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49
Aug. 3	12:03 a.m.	D.N. a.m.	.65	12:15 a.m.	12:40 a.m.	.01	.09	.26	.36	.44	.49	.51	.52	.53	.53	.55	.57	.58	.58	.58
Aug. 10	7:46 p.m.	D.N. p.m.	.85	7:54 p.m.	8:26 p.m.	.01	.14	.36	.48	.62	.73	.79	.82	.82	.82	.82	.82	.83	.83	.84
Aug. 15	4:21 p.m.	5:03 p.m.	.39	4:34 p.m.	4:40 p.m.	.01	.33	.37	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
Sept. 16	D.N. a.m.	8:00 p.m.	2.99	6:29 p.m.	7:08 p.m.	1.91	.15	.31	.51	.66	.79	.95	1.00	1.07	1.08	1.08	1.08	1.06	1.08	1.08
Dec. 1	[6] 7:50 a.m.	12:15 p.m.	3.59	7:24 a.m.	9:08 a.m.	1.51	.22	.33	.53	.68	.76	.87	.90	.94	.98	1.04	1.14	1.37	1.52	1.70
Philadelphia, Pa.:																				
June 22	4:39 p.m.	5:22 p.m.	.52	4:50 p.m.	4:59 p.m.	.02	.30	.47	.49	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Aug. 12	11:18 a.m.	8:15 p.m.	1.51	6:43 p.m.	7:32 p.m.	.46	.10	.24	.27	.35	.41	.47	.67	.82	.95	1.03	1.05	1.05	1.05	1.05
Aug. 14	D.N. p.m.	D.N. p.m.	.64	11:16 p.m.	11:45 p.m.	.01	.17	.21	.27	.34	.43	.62	.63	.63	.63	.63	.63	.63	.63	.63
Sept. 6	10:05 p.m.	[1] D.N. a.m.	.98	10:59 p.m.	11:29 p.m.	.07	.14	.25	.39	.53	.64	.71	.75	.78	.79	.80	.83	.86	.89	.90
Sept. 7	12:53 p.m.	[1] D.N. a.m.	1.79	1:13 p.m.	1:30 p.m.	.01	.08	.13	.38	.48	.49	.49	.49	.49	.49	.49	.49	.49	.68	.84
Reading, Pa.:																				
July 13	3:10 a.m.	7:30 a.m.	2.69	4:12 a.m.	[3] 6:12 a.m.	.06	.10	.14	.16	.24	.30	.46	.60	.87	.98	1.08	1.13	[3] 1.49	[3] 1.89	[3] 2.07
July 15	5:15 p.m.	6:40 p.m.	1.04	5:34 p.m.	6:15 p.m.	.01	.09	.17	.26	.39	.66	.82	.90	.96	1.00	1.01	1.03	1.03	1.03	1.03
Sept. 29	12:55 p.m.	[1] 9:55 a.m.	3.14	[5] 7:04 p.m.	7:54 p.m.	.49	.12	.33	.34	.36	.39	.39	.48	.49	.54	.63	----	----	----	----
				[5] 7:54 p.m.	8:44 p.m.	------	.70	.76	.92	1.05	1.16	1.26	1.29	1.40	1.45	1.50	----	----	----	----
				[3] 8:44 p.m.	9:24 p.m.	------	1.63	1.71	1.81	1.93	2.08	2.15	2.23	2.28	----	----	----	----	----	----

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated											
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MIDDLE ATLANTIC STATES—contd.																				
Scranton, Pa.:																				
May 22	3:03 p.m.	5:00 p.m.	0.42	3:17 p.m.	3:28 p.m.	0.01	0.13	0.30	0.35	0.35	0.36	0.36	0.36	0.38	0.39	0.39	0.39	0.40	0.41	0.41
July 27	7:37 p.m.	[1] 6:40 a.m.	3.20	10:08 p.m.	10:50 p.m.	.34	.14	.32	.42	.46	.51	.56	.82	1.00	1.04	1.07	1.11	1.28	1.35	1.42
July 28	[2] 10:17 a.m.	1:00 p.m.	.48	10:17 a.m.	10:34 a.m.	.00	.18	.28	.36	.41	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	.48
Aug. 10	5:45 p.m.	6:38 p.m.	.53	5:57 p.m.	6:12 p.m.	.02	.15	.41	.51	.52	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
Atlantic City, N. J.:																				u
June 10	5:38 p.m.	7:00 p.m.	.59	5:38 p.m.	5:54 p.m.	.00	.14	.28	.48	.53	.54	.54	.54	.54	.54	.54	.56	.59	.59	.59
June 29	7:12 p.m.	7:55 p.m.	.59	7:28 p.m.	7:43 p.m.	.03	.26	.47	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56
Aug. 2	10:20 p.m.	[1] 1:30 a.m.	1.12	11:15 p.m.	11:43 p.m.	.09	.07	.25	.44	.58	.87	.97	.97	.97	.97	.97	.97	.97	1.02	1.02
Aug. 15	6:55 p.m.	9:30 p.m.	1.07	7:37 p.m.	8:10 p.m.	.05	.09	.21	.26	.36	.63	.84	.91	.92	.93	.93	.96	1.01	1.02	1.02
Aug. 16	11:32 a.m.	6:00 p.m.	1.38	3:04 p.m.	3:34 p.m.	.13	.13	.31	.50	.57	.61	.70	.71	.73	.74	.74	.75	.78	.80	.95
Sept. 7	6:05 p.m.	[1] 1:30 a.m.	1.34	10:48 p.m.	11:20 p.m.	.21	.06	.22	.36	.53	.66	.76	.79	.81	.83	.84	.91	.99	1.08	1.12
Sept. 8	1:28 p.m.	6:20 p.m.	1.76	3:05 p.m.	4:00 p.m.	.35	.08	.19	.29	.38	.40	.54	.61	.68	.73	.78	.87	1.00	1.14	1.22
Sandy Hook, N. J.:																				
June 12	1:55 p.m.	5:50 p.m.	1.21	3:21 p.m.	3:39 p.m.	.32	.15	.34	.54	.73	.74	.75	.75	.77	.78	.79	.80	.85	.88	.89
July 7	7:50 p.m.	8:50 p.m.	1.13	7:54 p.m.	8:23 p.m.	.01	.22	.54	.80	.89	1.01	1.08	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
July 20	2:45 p.m.	4:10 p.m.	.48	2:54 p.m.	3:09 p.m.	.02	.13	.29	.35	.38	.40	.42	.43	.44	.45	.46	.46	.46	.46	.46
July 25	D.N. a.m.	7:25 a.m.	1.05	3:02 a.m.	3:22 a.m.	.18	.05	.20	.39	.57	.61	.63	.64	.65	.67	.69	.72	.74	.75	.77
July 28	2:25 p.m.	4:55 p.m.	1.28	2:58 p.m.	3:27 p.m.	.02	.40	.64	.80	.87	.95	1.01	1.03	1.10	1.13	1.16	1.19	1.24	1.25	1.26
Sept. 8	1:40 p.m.	9:15 p.m.	2.53	5:50 p.m.	7:35 p.m.	.64	.07	.14	.22	.31	.41	.50	.61	.71	.76	.81	.97	1.42	1.70	1.81
Sept. 17	[2] 6:10 p.m.	11:55 a.m.	3.47	3:32 a.m.	4:38 a.m.	1.37	.08	.19	.33	.41	.52	.63	.72	.80	.90	1.01	1.29	1.41	1.44	1.47
Trenton, N. J.:																				
May 22	5:26 p.m.	8:40 p.m.	1.13	5:43 p.m.	5:58 p.m.	.02	.29	.49	.63	.66	.67	.71	.73	.75	.77	.84	.88	.98	1.08	1.10
June 12	1:05 p.m.	1:41 p.m.	.50	1:15 p.m.	1:31 p.m.	.01	.17	.27	.46	.49	.49	.49	.49	.49	.49	.49	.49	.67	1.07	1.11
	2:08 p.m.	4:25 p.m.	.66																	
Do	2:08 p.m.	4:25 p.m.	.66	2:31 p.m.	2:45 p.m.	.05	.18	.40	.50	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61	.61
July 7–8	11:30 p.m.	D.N. a.m.	.58	11:54 p.m.	12:06 a.m.	.01	.16	.48	.56	.56	.56	.57	.57	.57	.57	.57	.57	.57	.57	.57
July 20	3:27 p.m.	4:19 p.m.	.97	3:55 p.m.	4:14 p.m.	.07	.25	.65	.81	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90
Sept. 17	[2] 6:00 p.m.	9:25 a.m.	3.45	4:19 a.m.	5:44 a.m.	.50	.10	.22	.35	.44	.60	.73	.89	1.03	1.20	1.32	1.35	1.63	1.74	1.81
Sept. 23	7:51 p.m.	[1] D.N. a.m.	1.37	7:55 p.m.	8:41 p.m.	.01	.17	.35	.53	.64	.77	.84	.93	1.00	1.07	1.10	1.12	1.13	1.14	1.15
Baltimore, Md.:																				
June 12	11:50 a.m.	1:20 p.m.	.57	12:24 p.m.	12:36 p.m.	.10	.19	.37	.40	.41	.43	.45	.47	.47	.47	.47	.47	.47	.47	.47
June 27	4:01 p.m.	4:58 p.m.	1.28	4:04 p.m.	4:29 p.m.	.01	.13	.33	.59	1.03	1.20	1.21	1.23	1.23	1.26	1.27	1.27	1.27	1.27	1.27
July 13	10:53 a.m.	12:20 p.m.	.58	10:56 a.m.	11:14 a.m.	.01	.21	.40	.48	.53	.53	.55	.55	.56	.56	.56	.56	.57	.57	.57
July 25	7:06 p.m.	8:25 p.m.	.44	7:16 p.m.	7:33 p.m.	.01	.18	.30	.41	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
July 29	8:30 a.m.	12:50 p.m.	.94	10:54 a.m.	11:43 a.m.	.14	.10	.16	.18	.26	.39	.49	.57	.67	.72	.77	.79	.79	.79	.80
Aug. 2	10:09 a.m.	10:45 a.m.	.44	10:09 a.m.	10:17 a.m.	.00	.34	.42	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
Aug. 12	2:00 p.m.	3:15 p.m.	1.14	2:48 p.m.	3:00 p.m.	.09	.43	.89	1.01	1.04	1.04	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Aug. 15	3:42 p.m.	5:00 p.m.	1.13	4:21 p.m.	4:39 p.m.	.01	.35	.64	1.02	1.10	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.19	1.26
	5:24 p.m.	7:10 p.m.	.27																	
Aug. 25	6:50 p.m.	10:50 p.m.	2.36	8:30 p.m.	10:00 p.m.	.09	.11	.23	.39	.52	.60	.70	.80	.82	.85	.87	1.22	1.93	2.23	2.27
Sept. 7	12:30 p.m.	[1] 7:20 a.m.	3.54	9:14 p.m.	10:04 p.m.	1.97	.06	.11	.16	.25	.38	.59	.90	1.19	1.31	1.36	1.39	1.43	1.46	1.48
Sept. 16	4:00 p.m.	10:10 p.m.	1.17	8:43 p.m.	8:52 p.m.	.83	.16	.29	.30	.31	.32	.34	.34	.34	.34	.34	.34	.34	.34	.34
Sept. 27	2:43 p.m.	3:10 p.m.	.40	2:46 p.m.	2:54 p.m.	.01	.23	.34	.37	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
Sept. 29	9:00 p.m.	[1] 7:28 a.m.	2.06	10:47 p.m.	11:44 p.m.	.11	.08	.23	.28	.32	.39	.47	.50	.57	.65	.80	.93	1.07	1.16	1.24
Washington, D. C.:																				
June 27	2:00 p.m.	2:30 p.m.	.38	2:09 p.m.	2:19 p.m.	.09	.15	.34	.35	.35	.35	.35	.35	.35	.38	.38	.36	.36	.36	.36
	2:50 p.m.	3:05 p.m.	.01																	
July 25	7:35 p.m.	10:20 p.m.	.52	7:49 p.m.	7:58 p.m.	.01	.34	.46	.48	.49	.50	.50	.50	.50	.50	.50	.50	.50	.50	.51
July 29	1:30 p.m.	[1] 2:00 a.m.	1.96	1:49 p.m.	2:42 p.m.	.02	.16	.26	.36	.43	.51	.63	.79	.96	1.19	1.44	1.52	1.58	1.64	1.68
Aug. 12	3:15 p.m.	3:55 p.m.	.80	3:17 p.m.	3:36 p.m.	.01	.18	.41	.66	.78	.79	.79	.79	.79	.79	.79	.79	.79	.79	.79
Aug. 15	3:10 p.m.	4:10 p.m.	.94	3:16 p.m.	3:31 p.m.	.01	.25	.58	.88	.90	.91	.91	.91	.92	.92	.92	.93	.93	.93	.93
Aug. 25	5:05 p.m.	6:40 p.m.	.60	5:30 p.m.	6:01 p.m.	.01	.08	.17	.25	.29	.40	.53	.57	.58	.58	.58	.58	.59	.59	.59
Sept. 3–4	11:02 p.m.	1:30 a.m.	1.25	11:30 p.m.	12:15 a.m.	.07	.15	.19	.23	.37	.45	.53	.60	.80	.88	.92	1.06	1.15	1.18	1.18
Sept. 7	10:37 a.m.	[1] 3:40 a.m.	3.80	10:37 a.m.	11:13 a.m.	.00	.06	.11	.23	.24	.31	.50	.71	.75	.75	.76	.77	.77	.78	.78
Do	10:37 a.m.	[1] 3:40 a.m.	3.80	1:49 p.m.	2:49 p.m.	1.01	.08	.16	.22	.27	.38	.49	.60	.82	.95	1.16	1.48	1.60	1.69	1.75
Sept. 12	11:05 a.m.	6:15 p.m.	4.01	12:48 p.m.	1:38 p.m.	.08	.07	.33	.76	1.24	1.73	2.06	2.31	2.71	3.16	3.38	3.42	3.52	3.56	3.61
Sept. 14	[4] 10:20 p.m.	8:50 a.m.	1.44	7:14 a.m.	7:57 a.m.	.56	.08	.16	.24	.26	.38	.45	.56	.63	.68	.70	.77	.87	.88	.88
Sept. 16	3:40 p.m.	9:30 p.m.	1.38	7:05 p.m.	7:31 p.m.	.54	.05	.16	.29	.50	.67	.70	.71	.73	.76	.78	.80	.84	.84	.84
Sept. 27	3:05 p.m.	3:30 p.m.	.42	3:07 p.m.	3:13 p.m.	.01	.32	.39	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
Dec. 1	[2] 10:45 p.m.	8:25 a.m.	1.07	7:35 a.m.	7:45 a.m.	.61	.15	.33	.36	.38	.40	.42	.45	.46	.46	.46	.46	.46	.46	.46
Cape Henry, Va.:																				
Mar. 28	[2] 11:30 p.m.	3:40 p.m.	2.16	4:16 a.m.	5:01 a.m.	1.08	.09	.19	.32	.40	.51	.56	.60	.66	.73	.76	.79	.85	.89	[2] .97
May 15	8:06 p.m.	[1] 4:15 a.m.	1.67	9:32 p.m.	10:31 p.m.	.55	.17	.32	.36	.42	.48	.52	.56	.59	.62	.65	.89	1.04	1.10	1.11
May 23	[2] 11:30 p.m.	3:50 a.m.	1.20	1:08 a.m.	1:50 a.m.	.08	.10	.19	.28	.47	.61	.68	.72	.78	.83	.85	.89	.93	.98	[2] 1.04
May 26	12:05 a.m.	9:55 a.m.	1.38	7:33 a.m.	8:03 a.m.	.68	.15	.25	.27	.29	.39	.57	.61	.62	.64	.65	.67	.69	.70	.70
June 12	4:12 p.m.	7:10 p.m.	.65	5:46 p.m.	5:53 p.m.	.09	.44	.52	.54	.55	.55	.56	.56	.56	.56	.56	.56	.56	.56	.56
July 1	11:20 p.m.	[1] 12:45 a.m.	.37	11:38 p.m.	11:46 p.m.	.02	.27	.32	.33	.33	.34	.34	.34	.34	.35	.35	.35	.35	.35	.35
July 25	11:10 p.m.	[1] 2:25 a.m.	.95	11:22 p.m.	11:54 p.m.	.01	.05	.14	.29	.48	.61	.69	.73	.77	.80	.82	.86	.88	.88	.91
July 29	2:30 p.m.	3:10 p.m.	.65	2:32 p.m.	2:47 p.m.	.01	.20	.42	.54	.54	.57	.63	.64	.64	.64	.64	.64	.76	.77	.77
	3:35 p.m.	4:15 p.m.	.13																	
July 30	4:00 p.m.	5:50 p.m.	.66	4:19 p.m.	4:29 p.m.	.09	.24	.40	.41	.42	.42	.42	.54	.56	.56	.56	.56	.57	.57	.57
Aug. 28	1:10 p.m.	3:25 p.m.	.59	2:32 p.m.	2:45 p.m.	.01	.26	.48	.55	.55	.55	.55	.56	.57	.58	.58	.58	.58	.60	.63
	4:05 p.m.	5:50 p.m.	.05																	
Sept. 8	[2] 11:40 a.m.	11:20 a.m.	4.51	7:17 a.m.	8:35 a.m.	2.32	.11	.26	.48	.58	.62	.70	.82	1.03	1.31	1.46	1.72	2.08	2.11	2.11
Sept. 13	2:10 a.m.	5:40 a.m.	2.01	2:47 a.m.	4:24 a.m.	.06	.05	.16	.43	.69	.73	.74	.75	.76	.78	.85	.99	1.49	1.85	1.91
Norfolk, Va.:																				
May 15	5:55 p.m.	[1] 4:45 a.m.	2.10	8:06 p.m.	9:55 p.m.	.04	.16	.40	.58	.66	.75	.83	.92	.95	.97	1.04	1.19	1.40	1.69	1.86
May 25	12:05 a.m.	9:20 a.m.	1.55	7:13 a.m.	7:43 a.m.	.79	.12	.22	.30	.49	.57	.65	.67	.69	.70	.71	.74	.75	.75	.76
July 5	4:26 p.m.	6:05 p.m.	1.41	4:31 p.m.	5:02 p.m.	.01	.22	.55	.67	.89	1.14	1.28	1.33	1.34	1.35	1.36	1.37	1.39	1.40	1.40
July 8	5:30 p.m.	10:45 p.m.	1.18	8:03 p.m.	8:18 p.m.	.39	.12	.37	.48	.49	.49	.49	.49	.53	.56	.60	.67	.71	.76	.79
July 13	2:10 p.m.	5:45 p.m.	1.29	2:53 p.m.	3:08 p.m.	.06	.26	.31	.48	.50	.51	.51	.51	.51	.52	.52	.52	.54	.62	.80
July 19	1:40 p.m.	2:54 p.m.	.58	1:53 p.m.	2:15 p.m.	.02	.09	.24	.40	.46	.50	.53	.54	.55	.55	.56	.56	.56	.56	.56
July 25	11:25 p.m.	[1] 2:15 a.m.	.69	11:39 p.m.	[1] 12:10 a.m.	.01	.12	.25	.39	.47	.56	.62	.66	.66	.66	.66	.66	.66	.67	.68
July 28	10:25 p.m.	[1] 12:50 a.m.	.96	11:16 p.m.	11:29 p.m.	.34	.10	.28	.44	.45	.48	.49	.52	.58	.58	.59	.61	.62	.62	.62

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MIDDLE ATLANTIC STATES—contd.																			
Norfolk, Va.—Con.																			
Aug. 11	6:40 p.m.	7:47 p.m.	0.53	6:45 p.m.	7:02 p.m.	0.01	0.21	0.38	0.45	0.49	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52
Aug. 18	6:10 p.m.	9:15 p.m.	.92	6:10 p.m.	6:19 p.m.	.00	.17	.35	.36	.39	.40	.41	.42	.43	.45	.53	.58	.59	.61	.62
Aug. 22	[2] 5:15 p.m.	8:25 a.m.	1.84	4:20 a.m.	4:58 a.m.	1.05	.12	.22	.25	.30	.41	.48	.57	.60	.61	.61	.61	.75	.78	.79
Sept. 7	11:18 a.m.	[1] 11:30 a.m.	3.16	7:54 p.m.	8:37 p.m.	1.11	.07	.19	.29	.49	.63	.78	.96	1.03	1.08	1.11	1.13	1.14	1.17	1.21
Sept. 13	1:05 a.m.	4:55 a.m.	1.36	1:20 a.m.	1:38 a.m.	.02	.11	.28	.41	.46	.49	.50	.51	.52	.52	.52	.53	.83	1.09	1.21
Do	1:05 a.m.	4:55 a.m.	1.36	2:28 a.m.	2:46 a.m.	.57	.18	.28	.42	.48	.52	.54	.61	.64	.65	.66	.68	.72	.75	.78
Sept. 21	4:40 p.m.	6:10 p.m.	.52	4:43 p.m.	5:03 p.m.	.01	.16	.23	.32	.45	.48	.49	.49	.50	.50	.50	.51	.51	.51	.51
Richmond, Va.:																			
June 10	6:45 p.m.	7:28 p. m	.59	6:48 p.m.	7:05 p.m.	.01	.29	.47	.53	.56	.57	.57	.57	.58	.58	.58	.58	.58	.58	.58
June 17	3:20 p.m.	5:10 p.m.	.66	3:32 p.m.	3:57 p.m.	.01	.20	.28	.40	.52	.58	.59	.60	.60	.61	.62	.63	.65	.65	.65
July 29	3:50 p.m.	12 Mdnt.	1.13	4:49 p.m.	5:02 p.m.	.03	.20	.42	.47	.49	.50	.51	.52	.54	.55	.55	.56	.56	.57	.58
Aug. 12	2:30 p.m.	6:50 p.m.	.79	2:42 p.m.	3:08 p.m.	.02	.14	.19	.24	.32	.59	.60	.60	.60	.60	.60	.60	.64	.64	.64
Aug. 16	4:00 p.m.	4:55 p.m.	.86	4:21 p.m.	4:32 p.m.	.03	.36	.77	.80	.82	.83	.83	.83	.83	.83	.83	.83	.83	.83	.83
Sept. 7	1:30 p.m.	[1] D.N. a.m.	2.03	6:49 p.m.	7:34 p.m.	.57	.09	.20	.42	.69	.87	1.04	1.14	1.23	1.29	1.32	1.38	1.40	1.41	1.41
Sept. 16	3:45 p.m.	7:20 p.m.	1.30	3:55 p.m.	4:56 p.m.	.02	.12	.15	.21	.29	.33	.38	.52	.68	.84	.94	1.18	1.20	1.24	1.27
Wytheville, Va.:																			
May 22	3:13 p.m.	3:43 p.m.	.66	3:18 p.m.	3:37 p.m.	.03	.33	.46	.56	.63	.63	.63	.63	.63	.63	.63	.63	.63	.63	.63
June 5	7:44 p.m.	9:15 p.m.	.59	7:51 p.m.	8:08 p.m.	.04	.06	.25	.44	.49	.51	.52	.53	.53	.53	.54	.55	.55	.55	.55
June 18	D.N. a.m.	1:55 p.m.	1.37	8:37 a.m.	8:55 a.m.	.37	.06	.19	.37	.46	.48	.51	.54	.59	.61	.61	.61	.61	.61	.62
Aug. 23	6:20 p.m.	[1] D.N. a.m.	1.66	6:34 p.m.	7:34 p.m.	.04	.09	.19	.26	.32	.34	.36	.47	.56	.74	1.01	1.27	1.37	1.44	1.45
Sept. 4	5:14 p.m.	6:18 p.m.	.49	5:20 p.m.	5:31 p.m.	.03	.23	.31	.33	.36	.37	.39	.40	.43	.44	.46	.46	.46	.46	.46
SOUTH ATLANTIC STATES																			
Asheville, N. C.: [4]																			
June 1	1:00 p.m.	2:04 p.m.	1.03	1:11 p.m.	1:33 p.m.	.01	.15	.40	.65	.84	.92	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Sept. 7	6:40 a.m.	11:35 a.m.	1.40	9:54 a.m.	10:15 a.m.	.34	.27	.57	.67	.86	.89	.91	.91	.93	.97	.99	1.02	1.05	1.06	1.06
Charlotte, N. C.: [4]																			
June 3	12:50 p.m.	5:15 p.m.	2.41	1:00 p.m.	1:46 p.m.	.02	.14	.32	.64	.92	1.14	1.20	1.23	1.35	1.58	1.87	1.96	1.98	2.06	2.09
June 4	[1] 10:42 p.m.	11:40 p.m.	.75																	
	[1] 12:05 a.m.	12:20 a.m.	.01	10:45 p.m.	10:54 p.m.	.02	.31	.55	.63	.69	.70	.70	.71	.72	.72	.73	.73	.73	.74	.74
	[2] 1:30 a.m.	3:15 a.m.	.03																	
June 6	5:54 p.m.	6:30 p.m.	.64	6:04 p.m.	6:14 p.m.	.11	.32	.51	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
June 23	9:44 p.m.	[1] 2:15 a.m.	1.16	10:31 p.m.	10:58 p.m.	.01	.20	.42	.61	.72	.84	.92	.93	.94	.95	.95	.96	.98	1.01	1.06
Aug. 23	11:33 a.m.	12:40 p.m.	2.53	11:33 a.m.	12:07 p.m.	.00	.16	.29	.83	1.39	1.33	2.22	2.49	2.51	2.51	2.52	2.52	2.53	2.53	2.53
Sept. 7	10:33 a.m.	1:05 p.m.	1.23	11:26 a.m.	11:41 a.m.	.11	.41	.69	.83	.87	.88	.92	.96	.98	1.03	1.06	1.09	1.12	1.12	1.12
Sept. 13	9:55 a.m.	12:30 p.m.	1.82	10:28 a.m.	11:08 a.m.	.08	.10	.39	.72	.98	1.20	1.38	1.50	1.62	1.67	1.69	1.71	1.72	1.73	1.74
Greensboro, N. C.: [4]																			
July 1	8:10 p.m.	[1] 1:00 a.m.	.87	8:13 p.m.	8:24 p.m.	.01	.33	.59	.64	.66	.67	.68	.68	.68	.68	.69	.69	.70	.74	.78
July 8	3:42 p.m.	7:45 p.m.	1.98	4:11 p.m.	4:57 p.m.	.06	.11	.22	.36	.50	.58	.84	1.06	1.16	1.26	1.33	1.46	1.65	1.72	1.77
Sept. 12	4:30 p.m.	6:30 p.m.	1.62	4:30 p.m.	4:53 p.m.	.00	.27	.69	1.24	1.44	1.54	1.58	1.59	1.60	1.61	1.61	1.61	1.62	1.62	1.62
Hatteras, N. C.: [4]																			
May 2	[1] D.N.p.m.	1:35 p.m.	6.26	8:25 a.m.	10:06 a.m.	1.80	.22	.40	.52	.57	.62	.66	.80	1.07	1.23	1.45	1.83	2.77	3.70	3.81
July 12	7:30 a.m.	9:25 a.m.	1.17	7:44 a.m.	8:05 a.m.	.05	.19	.40	.61	.74	.81	.89	.94	1.00	1.03	1.05	1.06	1.10	1.12	1.12
July 17	D.N. a.m.	6:40 a.m.	1.08	5:43 a.m.	6:05 a.m.	.01	.16	.37	.53	.75	.88	.93	1.01	1.04	1.06	1.07	1.07	1.07	1.07	1.07
Do	3:01 p.m.	4:58 p.m.	1.71	3:04 p.m.	3:42 p.m.	.01	.10	.22	.32	.57	.92	1.28	1.58	1.64	1.64	1.64	1.66	1.69	1.69	1.70
Aug. 4	5:25 p.m.	8:50 p.m.	1.65	5:36 p.m.	5:56 p.m.	.06	.21	.60	.93	1.22	1.28	1.32	1.39	1.45	1.51	1.54	1.55	1.56	1.56	1.57
Aug. 28	4:49 p.m.	5:58 p.m.	1.40	5:16 p.m.	5:38 p.m.	.15	.17	.49	.81	1.10	1.22	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Sept. 7	11:28 a.m.	[1] 8:43 a.m.	7.67	2:27 p.m.	3:21 p.m.	.83	.20	.41	.53	.55	.55	.63	.91	1.17	1.39	1.60	1.80	1.80	1.83	1.89
Sept. 18	D.N. a.m.	6:38 a.m.	1.43	4:05 a.m.	4:17 a.m.	.30	.19	.57	.72	.72	.72	.76	.77	.82	.86	.89	.99	1.02	1.05	1.05
Raleigh, N. C.: [4]																			
June 12	6:21 p.m.	9:40 p.m.	1.32	6:50 p.m.	7:19 p.m.	.01	.31	.47	.57	.66	.74	.96	1.02	1.08	1.13	1.15	1.17	1.19	1.22	1.29
June 18	2:50 p.m.	3:42 p.m.	1.03	3:07 p.m.	3:22 p.m.	.22	.14	.46	.65	.70	.73	.79	.81	.81	.81	.81	.81	.81	.81	.81
June 23	3:48 p.m.	6:30 p.m.	.67	3:51 p.m.	4:03 p.m.	.01	.31	.51	.60	.60	.62	.62	.62	.63	.64	.65	.65	.65	.66	.66
July 9	5:30 p.m.	6:47 p.m.	1.40	6:05 p.m.	6:33 p.m.	.32	.16	.26	.39	.64	.96	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
July 14	6:20 p.m.	7:20 p.m.	1.17	6:28 p.m.	7:01 p.m.	.01	.20	.40	.55	.66	.80	1.07	1.14	1.15	1.16	1.16	1.16	1.16	1.16	1.16
July 20	7:35 p.m.	9:45 p.m.	1.33	7:39 p.m.	8:08 p.m.	.01	.15	.34	.52	.72	1.06	1.16	1.21	1.26	1.27	1.27	1.28	1.28	1.28	1.32
Aug. 10	3:22 p.m.	3:55 p.m.	.77	3:23 p.m.	3:41 p.m.	.01	.19	.42	.60	.75	.76	.76	.76	.76	.76	.76	.76	.76	.76	.76
Aug. 26	[1] 10:45 p.m.	6:30 a.m.	2.48	5:13 a.m.	5:39 a.m.	.94	.25	.57	1.11	1.29	1.40	1.46	1.47	1.47	1.48	1.52	1.54	1.54	1.54	1.54
Sept. 13	[1] D.N. a.m.	D.N. a.m.	2.02	1:32 a.m.	2:08 a.m.	.29	.18	.25	.48	.67	.86	1.08	1.28	1.34	1.37	1.39	1.43	1.63	1.73	1.73
Sept. 27	7:30 p.m.	8:45 p.m.	1.20	8:02 p.m.	8:27 p.m.	.03	.10	.40	.81	.95	1.07	1.13	1.16	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Wilmington, N. C.: [4]																			
May 28	5:00 p.m.	9:05 p.m.	1.97	8:50 p.m.	8:59 p.m.	1.29	.39	.67	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68
Aug. 18	12:20 a.m.	10:10 a.m.	2.74	1:21 a.m.	2:15 a.m.	.20	.37	.71	.72	.73	.73	.75	.86	1.07	1.28	1.54	1.75	1.75	1.76	1.77
Charleston, S. C.: [4]																			
May 25	3:14 p.m.	4:15 p.m.	1.74	3:18 p.m.	3:47 p.m.	.01	.19	.67	1.15	1.41	1.58	1.71	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
Aug. 11	9:14 a.m.	1:08 p.m.	1.72	9:43 a.m.	10:07 a.m.	.30	.20	.33	.62	.85	.96	1.02	1.06	1.09	1.10	1.11	1.12	1.18	1.18	1.21
Aug. 27	1:49 p.m.	9:25 p.m.	1.46	1:58 p.m.	2:17 p.m.	.10	.16	.43	.69	.81	.87	.91	.93	.97	.99	.99	.99	1.00	1.00	1.00
Sept. 9	2:30 a.m.	11:20 a.m.	1.84	3:45 a.m.	4:04 a.m.	.08	.21	.47	.76	.95	.96	.96	.96	.96	.96	.96	1.28	1.28	1.28	1.28
Oct. 6	2:55 p.m.	9:00 p.m.	1.94	3:35 p.m.	4:15 p.m.	.18	.14	.28	.39	.53	.68	.91	1.03	1.22	1.30	1.33	1.50	1.56	1.60	1.69
Oct. 10	4:08 p.m.	[1] 8:41 a.m.	1.14	10:41 p.m.	10:55 p.m.	.26	.36	.60	.76	.78	.79	.82	.82	.82	.82	.82	.82	.83	.83	.83
Nov. 28	6:03 p.m.	[1] 7:10 a.m.	1.67	9:39 p.m.	9:57 p.m.	.05	.28	.56	.80	.90	.90	.90	.90	.91	.93	.98	1.07	1.16	1.24	
Columbia, S. C.: [4]																			
June 1	3:13 p.m.	5:35 p.m.	1.11	3:27 p.m.	3:52 p.m.	.09	.10	.27	.56	.77	.88	.94	.98	.99	.99	.99	.99	1.00	1.02	1.02
July 6	12:06 p.m.	12:23 p.m.	.82	12:08 p.m.	12:19 p.m.	.01	.16	.70	.81	.81	.81	.81	.81	.81	.81	.81	.81	.81	.81	.81
Aug. 8	4:08 p.m.	5:15 p.m.	.87	4:18 p.m.	4:40 p.m.	.02	.26	.52	.65	.76	.84	.84	.84	.85	.85	.85	.85	.85	.85	.85
Augusta, Ga.: [4]																			
April 17	10:50 p.m.	11:20 p.m.	.78																	
	[1] 12:10 a.m.	[1] 1:15 a.m.	.43	10:52 p.m.	11:04 p.m.	.02	.34	.71	.75	.76	.76	.76	.76	.76	.76	.76	.76	.77	.98	
May 15	3:31 p.m.	4:15 p.m.	.97	3:36 p.m.	3:50 p.m.	.03	.25	.67	.91	.91	.93	.94	.94	.94	.94	.94	.94	.94	.94	.94
May 21	1:50 p.m.	5:30 p.m.	1.24	1:57 p.m.	2:19 p.m.	.02	.14	.34	.62	.83	.91	.98	1.01	1.02	1.03	1.03	1.05	1.19	1.20	1.22
Sept. 9	2:30 p.m.	2:50 p.m.	.60	2:35 p.m.	2:45 p.m.	.01	.26	.56	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
Oct. 10	12:27 p.m.	8:20 p.m.	2.81	4:00 p.m.	5:09 p.m.	.46	.17	.26	.33	.53	.74	.96	1.18	1.40	1.54	1.69	1.95	2.31	2.35	2.35

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	60 min.	80 min.	100 min.	120 min.
SOUTH ATLANTIC STATES—contd.																			
Savannah, Ga.:[4]																			
May 16	3:17 p.m.	9:20 p.m.	4.08	3:21 p.m.	4:41 p.m.	0.01	0.14	0.39	0.43	0.73	0.90	0.98	1.13	1.32	1.45	1.62	1.98	2.53	2.64	2.67
May 25	4:24 p.m.	8:50 p.m.	1.51	5:49 p.m.	6:15 p.m.	.22	.18	.50	.63	.85	1.09	1.11	1.11	1.11	1.11	1.11	1.12	1.13	1.15	1.20
June 24	2:23 p.m.	3:45 p.m.	1.28	2:51 p.m.	3:20 p.m.	.04	.28	.59	.86	1.02	1.10	1.20	1.22	1.23	1.23	1.23	1.24	1.24	1.24	1.24
July 19	2:50 p.m.	4:03 p.m.	1.27	3:08 p.m.	3:45 p.m.	.02	.15	.22	.43	.62	.76	1.02	1.21	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Aug. 11	7:54 a.m.	10:20 a.m.	2.11	7:57 a.m.	8:17 a.m.	.01	.15	.42	.83	.97	1.00	1.03	1.04	1.09	1.11	1.27	1.55	1.95	2.08	2.09
Aug. 27	5:25 p.m.	9:05 p.m.	3.91	5:26 p.m.	6:27 p.m.	.01	.23	.45	.85	1.28	1.71	2.12	2.43	2.70	2.90	3.05	3.38	3.58	3.70	3.75
Sept. 8	3:20 p.m.	6:15 p.m.	1.74	3:54 p.m.	4:43 p.m.	.04	.14	.21	.49	.66	.88	.97	1.06	1.23	1.37	1.45	1.50	1.64	1.69	1.69
Oct. 6	3:44 p.m.	7:00 p.m.	.87	3:55 p.m.	4:12 p.m.	.01	.21	.40	.64	.73	.74	.75	.75	.76	.76	.76	.76	.76	.78	.81
Jacksonville, Fla.:[4]																			
May 20	D.N. a.m.	7:00 a.m.	1.60	4:47 a.m.	5:35 a.m.	.01	.31	.53	.67	.80	.85	.87	.90	1.01	1.36	1.48	1.51	1.51	1.54	1.58
June 1	3:19 p.m.	7:25 p.m.	4.43	4:45 p.m.	6:26 p.m.	.63	.13	.24	.49	.78	.96	1.15	1.24	1.44	1.68	1.81	1.89	2.65	3.40	3.74
July 14	5:28 p.m.	7:01 p.m.	1.38	5:42 p.m.	6:15 p.m.	.18	.20	.48	.66	.81	.91	1.01	1.11	1.16	1.17	1.19	1.20	1.20	1.20	1.20
Aug. 23	6:03 p.m.	7:59 p.m.	.98	6:10 p.m.	6:30 p.m.	.02	.20	.42	.63	.76	.82	.86	.88	.91	.93	.94	.94	.95	.96	.96
Aug. 28	7:11 p.m.	9:31 p.m.	1.60	7:33 p.m.	8:03 p.m.	.05	.15	.42	.67	1.00	1.30	1.40	1.44	1.46	1.48	1.49	1.51	1.54	1.54	1.55
Oct. 11	3:31 p.m.	4:03 p.m.	.60	3:33 p.m.	3:42 p.m.	.01	.39	.57	.58	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
FLORIDA PENINSULA																			
Key West Fla.:[4]																			
July 17	8:45 a.m.	9:55 a.m.	1.61	8:51 a.m.	9:21 a.m.	.02	.16	.37	.56	.88	1.24	1.43	1.47	1.52	1.56	1.58	1.58	1.59	1.59	1.59
Sept. 16	9:00 p.m.	D.N. p.m.	1.09	9:18 p.m.	9:46 p.m.	.01	.22	.50	.67	.77	.88	1.00	1.04	1.06	1.07	1.08	1.08	1.08	1.08	1.08
Miami, Fla.:[4]																			
Apr. 16	D.N. a.m.	D.N. a.m.	1.67	3:26 a.m.	4:03 a.m.	.52	.28	.53	.58	.66	.67	.80	1.07	1.15	1.15	1.15	1.15	1.15	1.15	1.15
May 17	1:45 p.m.	4:45 p.m.	2.72	2:00 p.m.	3:00 p.m.	.10	.11	.21	.31	.48	.65	.79	.92	1.15	1.49	1.68	2.02	2.25	2.30	2.57
May 19	10:03 a.m.	12:13 p.m.	1.28	10:13 a.m.	10:33 a.m.	.04	.14	.37	.65	.86	.90	1.00	1.08	1.12	1.16	1.18	1.19	1.21	1.24	1.24
May 27	11:29 a.m.	12:33 p.m.	1.26	11:32 a.m.	11:53 a.m.	.01	.39	.76	.99	1.15	1.20	1.21	1.21	1.23	1.23	1.25	1.25	1.25	1.25	1.25
June 5	6:30 a.m.	11:30 a.m.	2.81	6:33 a.m.	7:30 a.m.	.03	.18	.50	.74	.86	.92	.97	1.03	1.11	1.27	1.40	1.73	1.95	2.24	2.34
June 20	6:45 p.m.	7:25 p.m.	1.13	6:50 p.m.	7:15 p.m.	.03	.17	.43	.67	.94	1.07	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
June 15	D.N. p.m.	D.N. p.m.	.86	10:00 p.m.	10:10 p.m.	.05	.48	.66	.67	.67	.67	.67	.67	.67	.68	.68	.68	.81	.81	.81
July 12	4:36 p.m.	5:42 p.m.	1.33	4:53 p.m.	5:12 p.m.	.04	.22	.48	.97	1.22	1.27	1.28	1.28	1.29	1.29	1.29	1.29	1.29	1.29	1.29
July 15	5:07 p.m.	5:55 p.m.	1.06	5:09 p.m.	5:30 p.m.	.01	.26	.59	.82	.92	1.00	1.01	1.03	1.04	1.05	1.05	1.05	1.05	1.05	1.05
July 21	4:49 p.m.	D.N. p.m.	1.24	4:53 p.m.	5:22 p.m.	.03	.11	.27	.46	.72	.97	1.12	1.14	1.15	1.16	1.16	1.17	1.19	1.19	1.20
Sept. 15	1:01 p.m.	D.N. p.m.	3.63	1:31 p.m.	3:00 p.m.	.07	.20	.35	.60	.87	1.07	1.09	1.09	1.09	1.10	1.29	2.16	2.79	3.13	3.25
Sept. 20	9:40 a.m. 11:30 a.m.	10:45 a.m. 12:28 p.m.	.79 .01	9:48 a.m.	10:03 a.m.	.03	.27	.49	.64	.71	.74	.75	.75	.76	.76	.76	.76	.76	.76	.77
Tampa, Fla.:[4]																			
May 11	4:30 p.m.	6:40 p.m.	1.18	4:48 p.m.	5:02 p.m.	.01	.16	.57	.74	.82	.89	1.00	1.10	1.13	1.14	1.15	1.16	1.17	1.17	1.17
June 5	4:20 p.m.	8:03 p.m.	1.68	4:28 p.m.	5:18 p.m.	.02	.24	.42	.66	.77	.87	.98	1.11	1.26	1.43	1.52	1.56	1.62	1.64	1.64
June 6	1:15 p.m.	4:05 p.m.	2.63	1:29 p.m.	2:15 p.m.	.03	.26	.72	1.11	1.57	1.91	2.15	2.21	2.33	2.50	2.53	2.54	2.56	2.58	2.59
June 13	[8] 8:15 p.m.	[7] D.N. a.m.	9.00	4:35 a.m.	5:39 a.m.	2.39	.11	.21	.40	.84	1.30	1.69	2.11	2.47	2.68	3.05	3.60	4.04	4.23	4.56
July 12	9:50 a.m.	11:20 a.m.	1.37	9:54 a.m.	10:12 a.m.	.03	.29	.64	1.02	1.19	1.21	1.24	1.29	1.33	1.33	1.33	1.33	1.34	1.34	1.34
July 26	3:30 p.m.	5:05 p.m.	1.69	3:49 p.m.	4:11 p.m.	.03	.21	.59	1.06	1.45	1.53	1.55	1.56	1.58	1.59	1.63	1.66	1.66	1.66	1.66
Aug. 13	4:05 p.m.	5:30 p.m.	1.85	4:21 p.m.	4:53 p.m.	.06	.10	.25	.57	.85	1.10	1.28	1.40	1.42	1.42	1.47	1.74	1.79	1.79	1.79
Aug. 30	11:15 a.m.	2:20 p.m.	1.97	12:02 p.m.	12:21 p.m.	.30	.25	.68	1.08	1.39	1.45	1.55	1.57	1.61	1.65	1.65	1.66	1.67	1.67	1.67
Sept. 9	5:45 p.m.	D.N. p.m.	1.19	5:55 p.m.	6:19 p.m.	.01	.18	.45	.69	.90	1.01	1.00	1.09	1.11	1.13	1.14	1.14	1.15	1.15	1.17
Sept. 30	7:20 p.m.	[9] D.N. a.m.	1.46	8:39 p.m.	9:06 p.m.	.18	.25	.54	.78	.93	1.13	1.24	1.26	1.26	1.27	1.27	1.27	1.27	1.27	1.27
Oct. 8	7:15 p.m.	[9] D.N. a.m.	3.33	7:42 p.m.	8:28 p.m.	.20	.17	.46	.80	1.06	1.25	1.43	1.76	2.22	2.49	2.57	2.65	3.02	3.06	3.08
EAST GULF STATES																			
Atlanta, Ga.:[4]																			
July 18	10:55 a.m.	12:25 p.m.	1.82	10:58 a.m.	11:33 a.m.	.01	.24	.63	.85	1.07	1.31	1.63	1.78	1.79	1.79	1.79	1.80	1.80	1.81	1.81
July 19	12:27 p.m.	2:15 p.m.	1.40	12:28 p.m.	12:48 p.m.	.07	.19	.62	1.11	1.29	1.31	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.33
Aug. 11	7:10 p.m.	9:05 p.m.	1.31	7:13 p.m.	7:58 p.m.	T.	.15	.31	.38	.48	.62	.73	.95	1.17	1.28	1.30	1.31	1.31	1.31	1.31
Sept. 13	5:16 p.m.	7:15 p.m.	1.10	5:29 p.m.	5:49 p.m.	.02	.28	.45	.62	.74	.79	.82	.90	.97	1.02	1.06	1.07	1.07	1.07	1.08
Sept. 22	11:35 a.m.	1:10 p.m.	1.24	12:22 p.m.	12:40 p.m.	.01	.45	.69	.89	1.09	1.18	1.21	1.22	1.22	1.22	1.23	1.23	1.23	1.23	1.23
Macon, Ga.:[4]																			
Aug. 11	4:10 p.m. 6:05 p.m.	5:15 p.m. 7:35 p.m.	.84 .08	4:13 p.m.	4:28 p.m.	.02	.23	.42	.64	.69	.75	.80	.80	.81	.81	.82	.82	.82	.82	.83
Aug. 12	6:20 p.m.	8:15 p.m.	1.01	6:35 p.m.	6:54 p.m.	.01	.12	.33	.82	.91	.91	.91	.91	.92	.93	.94	.96	.99	1.00	1.00
Aug. 13	6:17 p.m.	7:32 p.m.	.83	6:20 p.m.	6:37 p.m.	.01	.14	.52	.64	.72	.73	.74	.75	.75	.76	.80	.82	.82	.82	.82
Aug. 26	11:55 a.m.	12:30 p.m.	.65	12:05 p.m.	12:16 p.m.	.01	.26	.55	.63	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64
Pensacola, Fla.:[4]																			
Apr. 15	11:06 a.m.	12:18 p.m.	.73	11:30 a.m.	11:43 a.m.	.03	.21	.53	.63	.67	.68	.69	.70	.70	.70	.70	.70	.70	.70	.70
Aug. 20	11:41 a.m.	3:55 p.m.	3.51	12:17 p.m.	12:55 p.m.	.05	.32	1.07	1.66	1.84	2.02	2.16	2.33	2.43	2.46	2.51	2.59	3.07	3.36	3.43
Aug. 21	9:46 a.m.	11:33 a.m.	1.32	9:54 a.m.	10:26 a.m.	.01	.15	.35	.52	.69	1.01	1.12	1.19	1.24	1.27	1.29	1.31	1.31	1.31	1.31
				12:46 a.m.	1:36 a.m.	2.65	.13	.24	.30	.40	.52	.69	.79	.88	.91	1.00	----	----	----	----
				[8] 1:36 a.m.	2:26 a.m.	------	1.11	1.22	1.40	1.63	1.86	2.00	2.21	2.37	2.48	2.65	----	----	----	----
Oct. 5	[8] 12:03 a.m.	11:30 a.m.	17.27	[8] 2:26 a.m.	3:16 a.m.	------	2.87	3.14	3.40	3.64	3.83	4.08	4.25	4.43	4.55	4.70	----	----	----	----
				3:16 a.m.	3:54 a.m.	------	4.84	4.97	5.14	5.33	5.42	5.59	5.69	5.78	5.82	5.88	5.99	6.29	6.56	7.03
Do	[8] 12:03 a.m.	11:30 a.m.	17.27	5:43 a.m.	6:03 a.m.	9.74	.26	.46	.65	.80	.85	.87	.90	.95	1.01	1.07	1.36	1.91	2.21	2.79
				7:29 a.m.	8:19 a.m.	12.01	.21	.39	.55	.70	.85	.99	1.08	1.17	1.19	1.42	----	----	----	----
Do	[8] 12:03 a.m.	11:30 a.m.	17.27	[8] 8:19 a.m.	9:09 a.m.	------	1.74	1.92	2.13	2.23	2.29	2.37	2.64	3.15	3.40	3.52	----	----	----	----
				[8] 9:09 a.m.	9:55 a.m.	------	3.56	3.64	3.70	3.84	4.05	4.19	4.29	4.45	4.55	4.63	4.77	5.15	5.22	5.23
Oct. 9	11:28 a.m.	[6] 6:29 a.m.	2.84	3:01 p.m.	3:35 p.m.	.37	.10	.42	.63	.84	.91	.99	1.14	1.17	1.19	1.20	1.21	1.24	1.45	1.53
Birmingham, Ala.:[4]																			
June 7	[9] D.N.p.m.	9:10 a.m.	2.55	2:02 a.m.	2:33 a.m.	.14	.10	.34	.78	1.16	1.36	1.47	1.50	1.55	1.59	1.62	1.69	1.74	1.80	1.82
June 29	4:11 p.m.	5:30 p.m.	1.30	4:18 p.m.	4:45 p.m.	.01	.22	.62	.90	1.07	1.17	1.24	1.25	1.26	1.27	1.28	1.29	1.29	1.29	1.29
July 25	7:33 p.m.	[10] D.N. a.m.	1.35	7:39 p.m.	7:55 p.m.	.01	.14	.54	.78	.84	.86	.87	.88	.89	.90	.90	.91	.94	.99	1.04
Aug. 12	3:50 p.m.	7:20 p.m.	1.44	3:59 p.m.	4:15 p.m.	.01	.30	.70	.89	.96	1.02	1.16	1.24	1.30	1.31	1.31	1.32	1.34	1.37	1.40
Aug. 20	2:57 p.m.	6:05 p.m.	1.05	3:03 p.m.	3:24 p.m.	.04	.11	.44	.72	.92	.97	.98	.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Aug. 22	2:35 p.m.	8:20 p.m.	2.37	3:43 p.m.	4:53 p.m.	.01	.32	.58	.75	.88	.98	1.19	1.31	1.44	1.50	1.56	1.75	2.18	2.22	2.23
Aug. 26	3:45 p.m.	4:57 p.m.	1.59	3:49 p.m.	4:20 p.m.	.01	.19	.45	.79	1.09	1.38	1.49	1.53	1.56	1.58	1.58	1.58	1.58	1.58	1.58

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated											
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	60 min.	80 min.	100 min.	120 min.
EAST GULF STATES—contd.																			
Mobile, Ala.: [4]																			
Mar. 3	10:05 a.m.	3:40 p.m.	2.04	10:08 a.m.	10:17 a.m.	0.01	0.27	0.60	0.64	0.73	0.76	0.81	0.91	1.11	1.24	1.36	1.48	1.62	1.71	1.73
Mar. 26	12:47 p.m.	6:30 p.m.	2.02	2:14 p.m.	2:53 p.m.	.03	.39	.69	.81	.93	1.09	1.23	1.40	1.49	1.54	1.54	1.55	1.57	1.60	1.69
Apr. 15	5:50 a.m.	11:25 a.m.	3.81	8:04 a.m.	9:23 a.m.	.92	.20	.33	.51	.79	.90	1.06	1.17	1.26	1.28	1.36	1.91	2.75	2.78	2.80
June 2	11:03 a.m.	2:03 p.m.	1.92	11:11 a.m.	12:02 p.m.	.02	.14	.35	.49	.60	.68	.90	1.17	1.38	1.48	1.67	1.83	1.87	1.87	1.88
July 5	3:30 p.m.	6:15 p.m.	1.11	3:36 p.m.	3:57 p.m.	.01	.14	.43	.71	.85	.91	.96	.98	1.00	1.01	1.03	1.06	1.08	1.02	1.10
Aug. 21	11:10 a.m.	8:45 p.m.	2.43	1:48 p.m.	2:28 p.m.	.78	.15	.26	.37	.50	.70	.88	1.03	1.15	1.21	1.25	1.30	1.35	1.42	1.46
Oct. 10	8:00 a.m.	9:12 a.m.	1.08	8:36 a.m.	9:04 a.m.	.04	.15	.29	.50	.73	.95	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Nov. 3	10:04 a.m.	1:00 p.m.	1.20	10:31 a.m.	11:00 a.m.	.03	.10	.32	.48	.59	.80	.95	.99	1.02	1.04	1.07	1.09	1.12	1.17	1.17
Nov. 21	7:02 p.m.	[1] D.N.a.m.	1.96	9:16 p.m.	10:12 p.m.	.05	.10	.21	.47	.65	.71	.85	.97	1.08	1.20	1.26	1.47	1.68	1.84	1.88
Montgomery, Ala.: [4]																			
May 11	3:29 p.m.	4:35 p.m.	.73	3:39 p.m.	3:56 p.m.	.04	.18	.36	.60	.66	----	----	----	----	----	----	----	----	----	----
Aug. 24	2:04 p.m.	2:25 p.m.	.59	2:06 p.m.	2:17 p.m.	.01	.27	.56	.58	.58	.58	.58	.58	.58	.58	.58	.58	.58	.58	.58
Meridian, Miss.: [4]																			
Mar. 26	10:31 a.m.	4:48 p.m.	1.43	11:36 a.m.	11:51 a.m.	.19	.13	.31	.63	.68	.70	.73	.76	.79	.82	.83	.86	.97	1.05	1.09
May 23	4:26 p.m.	7:55 p.m.	1.73	5:18 p.m.	5:41 p.m.	.21	.19	.53	.80	1.10	1.23	1.26	1.29	1.32	1.33	1.34	1.35	1.41	1.46	1.50
July 6	1:45 a.m.	1:49 p.m.	6.14	5:57 a.m.	7:31 a.m.	1.06	.17	.35	.66	.89	1.02	1.20	1.40	1.55	1.66	1.75	1.96	2.83	3.40	3.54
Nov. 21	12:38 p.m.	10:30 p.m.	2.53	5:51 p.m.	6:31 p.m.	1.06	.15	.40	.63	.71	.80	.84	.90	1.11	1.17	1.17	1.20	1.33	1.35	1.36
Dec. 25	6:26 p.m.	[1] 5:30 a.m.	2.05	10:08 p.m.	10.20 p.m.	.43	.35	.69	.81	.84	.92	.94	.96	.98	1.00	1.02	1.07	1.16	1.21	1.21
Vicksburg, Miss.: [4]																			
Feb. 25	12:25 p.m.	3:45 p.m.	1.75	12:58 p.m.	1:30 p.m.	.01	.26	.36	.61	.74	.85	1.01	1.11	1.18	1.28	1.34	1.42	1.56	1.64	1.67
July 29	6:20 p.m.	7:25 p.m.	1.10	6:27 p.m.	6:55 p.m.	.01	.14	.26	.50	.70	.91	1.01	1.05	1.08	1.09	1.09	1.09	1.09	1.09	1.09
Aug. 27	5:12 p.m.	D.N. p.m.	2.30	5:55 p.m.	7:04 p.m.	.39	.28	.42	.52	.62	.72	.89	1.00	1.10	1.23	1.36	1.59	1.82	1.83	1.87
Nov. 21	[2] 3:25 p.m.	3:25 p.m.	3.06	8:07 a.m.	8:46 a.m.	.54	.21	.31	.49	.69	1.07	1.32	1.55	1.71	1.72	1.74	1.76	1.78	1.96	2.02
Nov. 27	3:18 p.m.	6:20 p.m.	1.11	4:21 p.m.	4:34 p.m.	.21	.27	.46	.66	.67	.69	.72	.74	.75	.78	.80	.84	.89	.90	.90
New Orelans, La.: [4]																			
Mar. 3	D. N. a. m.	9:00 p.m.	3.49	4:59 a.m.	5:34 a.m.	.24	.21	.35	.44	.65	.84	1.02	1.12	1.17	1.30	1.37	1.42	1.98	2.14	2.22
Apr. 15	[2] 10:00 p.m.	8:45 a.m.	2.47	5:35 a.m.	6:06 a.m.	.12	.24	.41	.45	.59	.78	1.00	1.07	1.15	1.16	1.16	1.18	1.40	1.53	2.26
May 5	12:47 p.m.	2:30 p.m.	1.80	12:58 p.m.	1:24 p.m.	.07	.19	.57	1.09	1.45	1.62	1.67	1.68	1.68	1.70	1.72	1.73	1.73	1.73	1.73
May 21	1:05 p.m.	3:15 p.m.	1.55	2:02 p.m.	2:32 p.m.	.39	.10	.22	.40	.72	.92	1.14	1.14	1.15	1.15	1.15	1.15	1.16	1.16	1.16
June 29	11:25 a.m.	12:42 p.m.	.84	11:34 a.m.	11:52 a.m.	.02	.14	.44	.64	.73	.78	.81	.82	.82	.82	.82	.82	.82	.82	.82
July 5 [3]	9:05 a.m.	10:45 a.m.	1.46	9:32 a.m.	9:56 a.m.	.06	.29	.71	.95	1.06	1.20	1.28	1.31	1.33	1.36	1.38	1.40	1.40	1.40	1.40
July 13	10:58 a.m.	12:35 p.m.	1.24	11:45 a.m.	12:13 p.m.	.03	.29	.52	.76	.97	1.12	1.19	1.19	1.21	1.21	1.21	1.21	1.21	1.21	1.21
July 14	1:35 p.m.	3:17 p.m.	.72	2:08 p.m.	2:17 p.m.	.06	.36	.56	.58	.59	.60	.60	.61	.63	.64	.65	.66	.66	.66	.66
July 26 [3]	12:55 p.m.	3:28 p.m.	1.04	1:23 p.m.	1:33 p.m.	.15	.32	.56	.62	.69	.73	.73	.75	.76	.76	.80	.82	.85	.86	.89
Aug. 22	8:12 a.m.	1:00 p.m.	3.12	8:45 a.m.	9:39 a.m.	.06	.20	.33	.44	.53	.58	.63	.82	.95	1.39	1.84	1.97	2.11	2.27	2.68
WEST GULF STATES																			
Shreveport, La.: [4]																			
Apr. 27	2:00 p.m.	3:55 p.m.	.88	2:04 p.m.	2:14 p.m.	.03	.33	.62	.68	.70	.72	.73	.76	.78	.80	.82	.85	.85	.85	.85
May 5	11:35 a.m.	1:20 p.m.	1.06	12:15 p.m.	12:37 p.m.	.05	.12	.43	.60	.74	.83	.88	.92	.94	.97	1.00	1.01	1.01	1.01	1.01
Nov. 20	7:10 p.m.	[1] 9:30 a.m.	3.87	7:11 p.m.	7:44 p.m.	.01	.16	.21	.52	.87	1 27	1.49	1.60	1.62	1.65	1.69	1.84	1.86	1.92	2.05
Fort Smith, Ark.: [4]																			
Apr. 4	4:45 p.m.	[1] 2:20 a.m.	1.77	5:26 p.m.	5:45 p.m.	.19	.20	.38	.64	.74	.77	.78	.78	.78	.79	.79	.81	.82	.84	.85
Little Rock, Ark.: [4]																			
Apr. 4	9:11 a.m.	11:55 a.m.	1.25	9:12 a.m.	9:29 a.m.	.01	.25	.73	.96	1.03	1.03	1.03	1.03	1.03	1.03	.03	1.05	1.08	1.09	1.17
June 4	5:12 p.m.	11:30 p.m.	1.58	6:47 p.m.	7:09 p.m.	.12	.23	.61	.77	.89	.94	1.03	1.10	1.15	1.18	1.20	1.21	1.32	1.36	1.39
July 6	1:45 p.m.	3:45 p.m.	1.05	1:55 p.m.	2:18 p.m.	.01	.19	.45	.59	.89	.99	1.01	1.01	1.02	1.03	1.03	1.03	1.03	1.03	1.04
Aug. 28	4:00 a.m.	5:00 a.m.	.81	4:09 a.m.	4:27 a.m.	.02	.12	.37	.59	.75	.76	.77	.77	.78	.78	.78	.79	.79	.79	.79
Sept. 29	D.N. a.m.	5:15 p.m.	1.68	6:28 a.m.	6:42 a.m.	.04	.29	.53	.64	.68	.79	.85	.89	.92	.94	1.00	1.05	1.13	1.14	1.16
Brownsville, Tex.: [4]																			
Mar. 8	9:58 a.m.	2:47 p.m.	1.80	10:40 a.m.	11:09 a.m.	.16	.15	.46	.75	.92	1.06	1.20	1.24	1.28	1.31	1.35	1.39	1.52	1.62	1.62
Apr. 28	4:10 a.m.	7:15 a.m.	1.52	4:20 a.m.	4:40 a.m.	.01	.16	.60	.93	1.08	1.15	1.20	1.24	1.29	1.32	1.34	1.35	1.39	1.46	1.50
Sept. 15	12:15 p.m.	D.N. p.m.	4.79	12:53 p.m.	1:48 p.m.	.15	.11	.31	.50	.79	1.10	1.24	1.33	1.43	1.60	1.71	1.90	2.09	2.13	2.18
Corpus Christi, Tex.: [4]																			
Apr. 14	12:40 a.m.	10:15 a.m.	1.57	6:43 a.m.	7:00 a.m.	.67	.15	.42	.68	.72	.75	.76	.76	.76	.76	.76	.77	.77	.81	.81
Apr. 27	10:35 p.m.	[1] 1:45 a.m.	1.12	10:44 p.m.	11:00 p.m.	.01	.23	.49	.70	.75	.83	.91	.95	.98	1.01	1.02	1.02	1.04	1.06	1.08
Nov. 15	11:25 a.m.	2:25 p.m.	1.31	1:38 p.m.	1:58 p.m.	.54	.11	.30	.52	.72	.75	.77	.77	.77	.77	.77	.77	.77	.77	.77
Dallas, Tex.: [4]																			
Apr. 4	7:20 p.m.	[1] 1:40 a.m.	2.14	7:39 p.m.	8:14 p.m.	.08	.15	.23	.49	.69	.94	1.16	1.29	1.31	1.33	1.34	1.35	1.41	1.42	1.45
Sept. 14	[1] 11:40 p.m.	9:15 a.m.	4.45	2:26 a.m.	2:43 a.m.	2.48	.28	.54	.67	.77	.78	.80	.81	.85	.86	.88	.92	1.22	1.44	1.58
Fort Worth, Tex.: [4]																			
Sept. 14	[1] 11:40 p.m.	9:45 a.m.	2.87	2:34 a.m.	3:19 a.m.	.98	.12	.25	.33	.58	.82	.97	1.10	1.21	1.32	1.38	1.46	1.48	1.49	1.52
Sept. 20	9:35 p.m.	[1] 4:50 a.m.	1.07	10:47 p.m.	11:02 p.m.	.09	.12	.36	.64	.73	.81	.85	.85	.86	.86	.87	.88	.90	.91	.91
Nov. 19	4:59 p.m.	5:40 p.m.	.71	5:01 p.m.	5:10 p.m.	.02	.55	.64	.65	.66	.67	.68	.69	.69	.69	.69	.69	.69	.69	.69
Galveston, Tex.: [4]																			
Jan. 25	11:37 a.m.	7:15 p.m.	1.50	3:47 p.m.	4:10 p.m.	.14	.27	.69	.99	1.11	1.20	----	----	----	----	----	----	----	----	----
Apr. 6	[1] D.N.p.m.	8:12 a.m.	2.91	1:24 a.m.	2:00 a.m.	.02	.27	.67	.98	1.23	1.52	1.70	1.83	1.89	1.94	1.99	2.04	2.21	2.16	2.21
Aug. 26	2:32 p.m.	3:55 p.m.	.95	3:13 p.m.	3:28 p.m.	.05	.20	.65	.88	.89	.89	.89	.90	.90	.90	.90	.90	.90	.90	.90
Sept. 12	10:23 a.m.	4:33 p.m.	1.65	10:39 a.m.	10:57 a.m.	.01	.31	.77	.95	1.12	1.15	1.16	1.18	1.20	1.24	1.27	1.30	1.33	1.41	1.54
Oct. 30	9:29 a.m.	12:59 p.m.	1.18	10:15 a.m.	10:34 a.m.	.14	.24	.41	.59	.70	.71	.72	.73	.74	.74	.75	.91	1.00	1.01	1.02
Nov. 2	1:28 p.m.	[1] D.N.a.m.	1.98	10:08 p.m.	10:21 p.m.	.55	.41	.59	.66	.67	.69	.71	.71	.73	.74	.75	.75	.78	.81	.86
Nov. 27	1:29 p.m.	2:42 p.m.	.79	1:51 p.m.	2:11 p.m.	.01	.29	.45	.57	.71	.75	.77	.77	.77	.78	.78	.78	.78	.78	.78
Nov. 29	5:42 a.m.	12:06 p.m.	1.67	10:13 a.m.	10:25 a.m.	.95	.26	.48	.60	.61	.63	.63	.64	.64	.65	.67	.69	.71	.72	.72
Dec. 2–3	11:45 p.m.	D.N.a.m.	1.07	11:57 p.m.	12:24 a.m.	.04	.12	.27	.42	.66	.89	.96	1.00	1.01	1.01	1.02	1.02	1.02	1.02	1.02
Houston, Tex.: [4]																			
July 3	3:58 p.m.	5:12 p.m.	1.16	4:10 p.m.	4:29 p.m.	.03	.26	.44	.74	.88	.95	1.01	1.07	1.10	1.12	1.13	1.13	1.13	1.13	1.13
Nov. 27	10:46 a.m.	1:04 p.m.	1.02	11:22 a.m.	11:34 a.m.	.05	.26	.47	.64	.66	.66	.67	.68	.68	.68	.68	.78	.96	.97	.97
Dec. 2	4:25 p.m.	D.N.p.m.	1.88	6:33 p.m.	7:08 p.m.	.23	.16	.22	.40	.68	.83	.98	1.12	1.18	1.18	1.18	1.18	1.19	1.19	1.22
Palestine, Tex.: [4]																			
Apr. 5	7:30 p.m.	[1] D.N.a.m.	1.41	8:03 p.m.	8:16 p.m.	.02	.28	.61	.71	.72	.73	.74	.75	.75	.76	.76	.77	.82	.86	.90
May 5	D.N. a.m.	D.N. a.m.	1.21	2:44 a.m.	2:57 a.m.	.30	.23	.62	.70	.71	.73	.74	.75	.78	.78	.79	.79	.82	.91	.91
Aug. 26	6:12 p.m.	6:45 p.m.	1.16	6:12 p.m.	6:26 p.m.	.00	.33	.73	1.14	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Sept. 3	6:40 a.m.	12:20 p.m.	1.59	8:00 a.m.	8:22 a.m.	.31	.24	.66	.83	.95	1.00	1.01	1.04	1.06	1.08	1.09	1.11	1.12	1.18	1.19
Nov. 19	1:59 p.m.	10:15 p.m.	1.81	6:54 p.m.	7:38 p.m.	.15	.14	.26	.51	.70	.87	.95	1.24	1.32	1.46	1.53	1.55	1.62	1.64	1.64

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	60 min.	60 min.	80 min.	100 min.	120 min.
WEST GULF STATES—continued																			
Port Arthur, Tex.: [4]																			
Mar. 1	12:40 p.m.	8:06 p.m.	4.25	4:19 p.m.	6:24 p.m.	1.09	0.13	0.25	0.35	0.41	0.57	0.79	0.99	1.06	1.09	1.14	1.27	1.52	2.07	2.99
June 30	3:18 a.m.	3:55 a.m.	.90	3:19 a.m.	3:35 a.m.	.01	.40	.66	.77	.84	.87	.89	.89	.89	.89	.89	.89	.89	.89	.89
July 6	11:10 a.m.	11:50 a.m.	.64	11:24 a.m.	11:36 a.m.	.01	.27	.53	.60	.63	.63	.63	.63	.63	.63	.63	.63	.63	.63	.63
Sept. 27	8:33 p.m.	[1]D.N. a.m.	.85	8:53 p.m.	9:10 p.m.	.01	.29	.56	.71	.76	.76	.76	.76	.76	.76	.76	.76	.77	.77	.77
Nov. 27	1:55 p.m.	3:15 p.m.	.79	2:19 p.m.	2:38 p.m.	.01	.10	.22	.60	.69	.72	.75	.76	.77	.78	.78	.78	.78	.78	.78
San Antonio, Tex.: [4]																			
Apr. 5–6	10:05 p.m.	2:58 a.m.	1.81	11:39 p.m.	12:12 a.m.	.09	.14	.27	.61	.90	1.07	1.21	1.30	1.35	1.40	1.45	1.48	1.68	1.71	1.71
Apr. 19	12:40 a.m.	2:35 a.m.	.94	12:59 a.m.	1:17 a.m.	.01	.21	.49	.72	.86	.89	.90	.91	.91	.91	.91	.92	.93	.93	.93
July 25	2:45 p.m.	[1]10:45 a.m.	2.76	7:57 p.m.	8:34 p.m.	.83	.19	.47	.55	.63	.71	1.00	1.19	1.34	1.37	1.38	1.38	1.39	1.40	1.40
Nov. 2	4:52 p.m.	6:15 p.m.	1.02	5:02 p.m.	5:08 p.m.	.02	.69	.75	.78	.81	.86	.89	.95	.99	1.00	1.00	1.00	1.00	1.00	1.00
OHIO VALLEY AND TENNESSEE																			
Chattanooga, Tenn.: [4]																			
June 5	4:03 p.m.	5:12 p.m.	.71	4:06 p.m.	4:16 p.m.	.01	.38	.63	.67	.68	.69	.70	.70	.70	.70	.70	.70	.70	.70	.70
June 30	6:49 p.m.	7:47 p.m.	1.14	7:11 p.m.	7:40 p.m.	.20	.19	.32	.50	.62	.77	.91	.94	.94	.94	.94	.94	.94	.94	.94
Aug. 25	4:14 p.m.	5:36 p.m.	2.12	4:34 p.m.	4:57 p.m.	.25	.23	.55	1.15	1.64	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
Knoxville, Tenn.: [4]																			
June 1	4:20 p.m.	6:04 p.m.	1.05	5:26 p.m.	5:49 p.m.	.03	.18	.48	.63	.84	.99	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Aug. 13	9:52 p.m.	[1] 2:20 a.m.	2.90	9:52 p.m.	10:35 p.m.	.00	.24	.61	1.05	1.32	1.61	1.88	2.03	2.16	2.24	2.31	2.41	2.51	2.57	2.64
Memphis, Tenn.: [4]																			
May 15	11:44 a.m.	12:25 p.m.	.52	11:48 a.m.	11:55 a.m.	.01	.43	.47	.47	.49	.51	.51	.51	.51	.51	.51	.51	.51	.51	.51
Sept. 21	{12:50 p.m.	1:07 p.m.	.57	{12:56 p.m.	1:04 p.m.	.01	.47	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56	.58	.58	.58
	{1:58 p.m.	2:18 p.m.	.02																	
Nov. 21	[2] 9:40 p.m.	5:40 p.m.	10.48	4:00 a.m.	6:00 a.m.	1.74	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	[2]2.00	[2]2.51	[3]3.02	[3]3.53
Louisville, Ky.:																				
May 14	12:15 p.m.	2:10 p.m.	1.78	12:21 p.m.	12:50 p.m.	.03	.17	.61	1.01	1.23	1.32	1.36	1.38	1.45	1.51	1.54	1.64	1.71	1.73	1.75
June 2	8:30 a.m.	9:40 a.m.	.58	8:46 a.m.	8:57 a.m.	.05	.32	.47	.51	.52	.52	.52	.52	.53	.53	.53	.53	.53	.53	.53
June 9	7:35 a.m.	11:30 p.m.	.83	7:45 p.m.	8:23 p.m.	.02	.09	.26	.39	.50	.59	.63	.69	.74	.75	.75	.75	.76	.78	.80
June 22	9:25 p.m.	[1] 2:00 a.m.	1.04	10:33 p.m.	11:00 p.m.	.05	.07	.11	.16	.32	.52	.69	.72	.73	.74	.75	.77	.97	.98	.98
Aug. 8	12:38 p.m.	1:10 p.m.	.46	12:50 p.m.	1:01 p.m.	.01	.27	.43	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
Aug. 23	6:45 a.m.	11:00 a.m.	1.57	8:17 a.m.	8:38 a.m.	.30	.08	.30	.54	.68	.74	.76	.77	.82	.92	.94	.99	1.08	1.22	1.24
Aug. 24	D.N. a.m.	D.N. a.m.	.44	1:23 a.m.	1:32 a.m.	.05	.24	.36	.38	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
Sept. 15	4:20 p.m.	[1]D.N. a.m.	.74	4:23 p.m.	4:40 p.m.	.01	.18	.29	.39	.42	.44	.45	.45	.45	.46	.47	.50	.55	.60	.63
Evansville, Ind.:																				
June 4	5:48 p.m.	6:32 p.m.	.54	5:53 p.m.	6:06 p.m.	.01	.26	.37	.51	.52	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
June 21	2:42 p.m.	8:40 p.m.	3.31	4:06 p.m.	5:04 p.m.	.33	.17	.31	.39	.66	1.00	1.22	1.26	1.26	1.30	1.50	1.60	1.63	1.83	2.59
Do	2:42 p.m.	8:40 p.m.	3.31	5:41 p.m.	6:22 p.m.	2.05	.12	.14	.26	.51	.87	1.01	1.04	1.12	1.16	1.20	1.21	1.21	1.21	1.23
June 24	4:03 p.m.	5:18 p.m.	.59	4:07 p.m.	4:25 p.m.	.03	.12	.25	.43	.51	.53	.54	.55	.55	.55	.55	.55	.56	.56	.56
Sept. 11	7:33 a.m.	11:40 a.m.	.96	7:58 a.m.	8:17 a.m.	.12	.07	.11	.27	.46	.47	.48	.49	.49	.50	.51	.52	.55	.61	.68
Sept. 15	1:12 p.m.	3:02 p.m.	1.37	1:14 p.m.	1:33 p.m.	.01	.25	.62	.99	1.15	1.17	1.19	1.20	1.21	1.27	1.29	1.32	1.34	1.36	1.36
Sept. 21	1:07 p.m.	2:21 p.m.	.90	1:29 p.m.	2:02 p.m.	.01	.25	.62	.70	.74	.78	.86	.89	.89	.89	.89	.89	.89	.89	.89
Indianapolis, Ind.:																				
June 9	2:29 a.m.	6:24 a.m.	.84	5:09 a.m.	5:22 a.m.	.29	.10	.29	.40	.44	.45	.46	.51	.53	.53	.53	.54	.55	.55	.55
June 18	[2] 8:26 p.m.	8:48 a.m.	1.09	3:39 a.m.	4:13 a.m.	.06	.05	.16	.27	.39	.51	.57	.62	.63	.63	.63	.63	.63	.65	.84
July 6	3:27 p.m.	[1] 2:05 a.m.	1.67	3:48 p.m.	4:42 p.m.	.01	.28	.46	.56	.73	.94	1.02	1.04	1.11	1.15	1.22	1.28	1.30	1.32	1.34
Terre Haute, Ind.:																				
Apr. 6	4:45 a.m.	8:30 a.m.	.76	5:10 a.m.	5:45 a.m.	.02	.08	.18	.26	.31	.41	.51	.60	.62	.66	.67	.68	.73	.74	.74
June 24	1:40 a.m.	5:00 a.m.	.80	1:57 a.m.	2:12 a.m.	.03	.14	.31	.39	.43	.43	.43	.44	.44	.44	.44	.44	.45	.47	.47
July 6	1:55 p.m.	8:45 p.m.	1.72	2:12 p.m.	3:12 p.m.	.04	.12	.33	.50	.69	.81	.94	1.02	1.06	1.09	1.11	1.27	1.31	1.31	1.32
Aug. 10	9:02 p.m.	[1] 6:35 a.m.	.90	9:09 p.m.	9:33 p.m.	.02	.12	.23	.37	.51	.61	.61	.62	.62	.62	.62	.62	.62	.62	.62
Aug. 15	3:55 p.m.	[1] 4:40 a.m.	1.42	4:30 p.m.	4:45 p.m.	.05	.12	.26	.42	.46	.47	.47	.47	.47	.48	.48	.48	.48	.48	.48
Aug. 19	2:05 a.m.	5:55 a.m.	.53	2:49 a.m.	2:59 a.m.	.07	.16	.36	.37	.37	.37	.37	.37	.37	.37	.37	.38	.44	.44	.45
Sept. 26	6:05 p.m.	[1] 2:30 a.m.	.76	6:07 p.m.	6:15 p.m.	.01	.27	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.35	.39	.39
Sept. 28	5:15 p.m.	[1] 8:35 a.m.	1.18	10:15 p.m.	10:30 p.m.	.50	.06	.22	.38	.40	.42	.43	.45	.46	.48	.48	.50	.55	.56	.62
Cincinnati, Ohio:																				
June 5	11:38 a.m.	3:25 p.m.	.81	12:58 p.m.	1:14 p.m.	.08	.24	.39	.50	.53	.56	.57	.57	.57	.57	.58	.59	.66	.70	.73
June 9	1:18 a.m.	11:20 a.m.	.90	3:44 a.m.	4:09 a.m.	.12	.16	.37	.45	.49	.57	.58	.60	.60	.60	.60	.60	.60	.61	.61
July 27	3:49 p.m.	7:30 p.m.	1.29	4:03 p.m.	4:33 p.m.	.02	.18	.38	.74	.85	1.03	1.12	1.14	1.16	1.17	1.17	1.17	1.17	1.23	1.24
Aug. 3	1:40 a.m.	4:20 a.m.	1.00	2:53 a.m.	3:26 a.m.	.28	.14	.18	.26	.41	.46	.63	.71	.71	.72	.72	.72	.72	.72	.72
Columbus, Ohio:																				
June 27	12:10 a.m.	5:30 a.m.	1.08	2:54 a.m.	3:13 a.m.	.16	.11	.16	.39	.46	.48	.49	.50	.51	.58	.62	.68	.72	.89	.91
July 3	4:35 p.m.	5:05 p.m.	.54	4:39 p.m.	4:55 p.m.	.01	.08	.32	.51	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
July 10	3:35 p.m.	5:00 p.m.	.96	4:07 p.m.	4:30 p.m.	.01	.17	.43	.62	.86	.91	.92	.94	.95	.95	.95	.95	.95	.95	.95
Aug. 2	5:00 a.m.	6:10 a.m.	.84	5:20 a.m.	5:53 a.m.	.02	.11	.29	.33	.47	.68	.75	.82	.82	.82	.82	.82	.82	.82	.82
Aug. 9	3:40 p.m.	4:40 p.m.	.64	3:49 p.m.	4:07 p.m.	.04	.11	.31	.53	.58	.59	.59	.59	.59	.59	.60	.60	.60	.60	.60
Sept. 22	5:45 p.m.	8:00 p.m.	.52	6:32 p.m.	6:47 p.m.	.04	.15	.29	.36	.39	.44	.46	.47	.47	.47	.47	.47	.47	.48	.48
Parkersburg, W.Va.:																				
May 14	5:20 p.m.	[1] 4:30 p.m.	1.07	5:20 p.m.	5:51 p.m.	.00	.47	.58	.59	.60	.62	.68	.69	.70	.71	.72	.73	.73	.73	.73
June 23	5:50 p.m.	6:33 p.m.	.70	5:56 p.m.	6:21 p.m.	.01	.18	.37	.53	.54	.67	.69	.69	.69	.69	.69	.69	.69	.69	.69
Do	9:10 p.m.	[1] 12:30 a.m.	.92	10:15 p.m.	10:34 p.m.	.29	.12	.19	.35	.46	.48	.49	.50	.51	.52	.53	.54	.54	.56	.62
July 22	5:55 p.m.	8:38 p.m.	1.07	6:15 p.m.	6:45 p.m.	.13	.06	.22	.34	.46	.54	.63	.63	.63	.63	.64	.64	.79	.79	.79
Aug. 15	2:13 p.m.	2:54 p.m.	.51	2:13 p.m.	2:35 p.m.	.00	.13	.18	.29	.42	.47	.47	.49	.51	.51	.51	.51	.51	.51	.51
Aug. 23	5:40 p.m.	9:16 p.m.	1.12	6:00 p.m.	6:33 p.m.	.03	.18	.25	.35	.57	.80	.98	1.04	1.04	1.05	1.05	1.07	1.07	1.08	1.08
Sept. 7	10:06 p.m.	[1] D.N. a.m.	.85	10:40 p.m.	10:53 p.m.	.01	.22	.59	.72	.75	.76	.76	.76	.76	.76	.76	.77	.79	.80	.80
Pittsburgh, Pa.:																				
June 4	5:50 p.m.	6:20 p.m.	.53	5:50 p.m.	6:13 p.m.	.00	.12	.33	.35	.47	.52	.53	.53	.53	.53	.53	.53	.53	.53	.53
June 29	4:44 p.m.	5:25 p.m.	.68	4:44 p.m.	5:10 p.m.	.00	.12	.32	.40	.48	.57	.65	.67	.68	.68	.68	.68	.68	.68	.68
July 30	7:25 p.m.	D.N. p.m.	1.30	[2] 8:07 p.m.	9:15 p.m.	.14	.13	.28	.36	.47	.56	.73	.77	.84	.86	.88	.96	1.13	1.13	1.13
Aug. 2 [5]	9:30 p.m.	[1]D.N. a.m.	1.09	9:37 p.m.	10:01 p.m.	.01	.09	.21	.40	.46	.57	.61	.64	.67	.71	.74	.76	.83	.84	.89
Aug. 9	3:05 a.m.	3:55 a.m.	1.26	3:00 a.m.	3:16 a.m.	.77	.22	.27	.37	.40	.43	.46	.48	.49	.49	.49	.49	.49	.49	.49

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	60 min.	80 min.	100 min.	120 min.
OHIO VALLEY AND TENNESSEE—contd.																			
Pittsburgh, Pa.—Continued																			
Aug. 11 [3]	6:45 a.m.	10:00 a.m.	1.34	8:10 a.m.	8:55 a.m.	0.07	0.08	0.23	0.44	0.69	0.85	0.93	1.01	1.09	1.14	1.18	1.20	1.24	1.26	1.27
Aug. 13 [3]	7:32 a.m.	9:50 a.m.	.77	7:42 a.m.	7:59 a.m.	.01	.14	.34	.59	.62	.63	.67	.68	.70	.71	.71	.72	.75	.76	.76
Sept. 29	8:05 a.m.	1:55 p.m.	.92	8:40 a.m.	8:46 a.m.	.01	.26	.28	.29	.30	.33	.39	.41	.45	.54	.61	.68	.79	.82	.83
Buffalo, N.Y.:																			
July 6	[2] 10:00 p.m.	2:30 a.m.	.39	12:28 a.m.	12:41 a.m.	.01	.14	.26	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.38
Canton, N. Y.:																			
June 9	3:45 p.m.	6:52 p.m.	.92	5:06 p.m.	5:48 p.m.	.21	.06	.16	.26	.34	.41	.49	.56	.63	.66	.67	.68	.71	.71	.71
July 20	1:41 p.m.	3:23 p.m.	.69	1:54 p.m.	2:12 p.m.	.03	.06	.17	.41	.49	.50	.52	.54	.56	.56	.56	.56	.66	.66	.66
Do	4:43 p.m.	5:12 p.m.	.66	4:44 p.m.	5:02 p.m.	.02	.24	.34	.48	.61	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64
Ithaca, N. Y.:																			
June 3	5:55 p.m.	D.N. p.m.	1.46	6:06 p.m.	6:42 p.m.	.04	.18	.50	.83	.94	1.03	1.09	1.18	1.22	1.25	1.26	1.27	1.28	1.36	1.38
June 12	12:39 p.m.	2:50 p.m.	.54	12:51 p.m.	1:06 p.m.	.01	.18	.27	.44	.46	.46	.46	.46	.46	.47	.47	.47	.52	.53	.53
July 3	2:59 p.m.	3:54 p.m.	.43	3:06 p.m.	3:20 p.m.	.01	.17	.30	.37	.38	.38	.39	.40	.41	.42	.42	.42	.42	.42	.42
July 19	7:16 p.m.	8:51 p.m.	.53	7:27 p.m.	7:45 p.m.	.01	.10	.26	.41	.46	.48	.49	.49	.50	.51	.51	.52	.52	.52	.52
July 27	7:56 p.m.	D.N. p.m.	.77	7:59 p.m.	8:25 p.m.	.01	.09	.23	.38	.54	.59	.64	.64	.66	.67	.67	.71	.75	.76	.76
Aug. 22	12:42 p.m.	2:38 p.m.	1.03	12:44 p.m.	1:00 p.m.	.02	.28	.64	.71	.73	.73	.73	.73	.73	.74	.74	.75	1.00	1.01	1.01
Oswego, N. Y.:																			
June 10	8:42 a.m.	9:05 a.m.	.31	8:42 a.m.	8:51 a.m.	.00	.25	.29	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
Sept. 8	D.N. a.m.	10:20 a.m.	.85	6:12 a.m.	6:28 a.m.	.23	.12	.22	.35	.37	.40	.43	.45	.47	.49	.50	.54	.56	.58	.59
Rochester, N. Y.:																			
June 5	7:20 p.m.	9:30 p.m.	.47	7:28 p.m.	7:39 p.m.	T	.24	.41	.43	.44	.45	.45	.45	.45	.45	.45	.46	.47	.47	.47
Sept. 15	12:45 p.m.	2:30 p.m.	1.00	1:24 p.m.	1:30 p.m.	.06	.28	.29	.29	.29	.29	.30	.33	.36	.46	.68	.93	.94	.94	.94
Do	12:45 p.m.	2:30 p.m.	1.00	2:03 p.m.	2:20 p.m.	.40	.10	.26	.47	.58	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
Syracuse, N. Y.:																			
June 10	3:15 p.m.	4:10 p.m.	.47	3:39 p.m.	3:52 p.m.	.03	.16	.33	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
July 3	3:02 p.m.	3:55 p.m.	.77	3:13 p.m.	3:35 p.m.	.01	.55	.61	.62	.68	.75	.76	.76	.76	.76	.76	.76	.76	.76	.76
July 28	D.N. a.m.	D.N. a.m.	.54	2:34 a.m.	2:51 a.m.	.16	.18	.37	.41	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
Aug. 10	1:03 p.m.	1:52 p.m.	.75	1:10 p.m.	1:25 p.m.	.01	.27	.55	.70	.72	.72	.73	.74	.74	.74	.74	.74	.74	.74	.74
Sept. 27	11:40 a.m.	1:40 p.m.	.43	11:42 a.m.	11:50 a.m.	.01	.26	.34	.36	.38	.39	.40	.41	.41	.41	.41	.42	.42	.42	.42
Cleveland, Ohio:																			
June 18	11:04 a.m.	6:14 p.m.	1.42	12:30 p.m.	1:35 p.m.	.20	.08	.18	.31	.42	.45	.50	.57	.62	.67	.70	.82	.93	.98	1.03
July 11	6:43 p.m.	7:17 p.m.	.40	6:48 p.m.	6:58 p.m.	.01	.22	.33	.35	.38	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
Aug. 13	4:40 a.m.	5:50 a.m.	.58	5:11 a.m.	5:24 a.m.	.03	.21	.45	.52	.54	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
Sandusky, Ohio:																			
Apr. 3	2:16 p.m.	4:45 p.m.	.58	3:17 p.m.	3:33 p.m.	.05	.14	.18	.36	.40	.42	.46	.49	.49	.50	.51	.53	.53	.53	.53
Aug. 2	6:00 p.m.	[1] D.N. a.m.	1.77	6:33 p.m.	7:43 p.m.	.03	.17	.47	.52	.53	.64	.71	.79	.81	.83	.87	.98	1.31	1.34	1.42
Toledo, Ohio:																			
Apr. 5	1:44 p.m.	3:05 p.m.	1.06	1:56 p.m.	2:50 p.m.	.01	.06	.21	.42	.55	.65	.73	.79	.80	.80	.80	1.02	1.05	1.05	1.05
June 18	7:12 a.m.	2:30 p.m.	1.27	7:35 a.m.	8:16 a.m.	.03	.16	.32	.44	.59	.69	.79	.83	.90	.93	.94	.97	1.02	1.05	1.08
July 6	4:50 p.m.	6:15 p.m.	.98	5:17 p.m.	6:00 p.m.	.14	.08	.23	.25	.28	.42	.57	.65	.77	.81	.82	.84	.85	.88	.92
	6:33 p.m.	8:45 p.m.	.13																	
Aug. 2	6:01 p.m.	7:22 p.m.	.65	6:07 p.m.	6:23 p.m.	.01	.28	.43	.56	.59	.59	.59	.59	.59	.61	.62	.63	.64	.68	.74
	7:38 p.m.	10:00 p.m.	.20																	
Fort Wayne, Ind.:																			
June 22	12:09 p.m.	1:35 p.m.	.66	12:30 p.m.	12:49 p.m.	.12	.37	.47	.48	.49	.50	.51	.52	.53	.53	.53	.54	.54	.54	.54
June 26	7:30 p.m.	8:30 p.m.	1.43	7:30 p.m.	8:10 p.m.	.00	.30	.60	.77	.89	.97	1.11	1.32	1.38	1.41	1.42	1.43	1.43	1.43	1.43
July 13	11:50 a.m.	1:30 p.m.	.94	12:04 p.m.	12:25 p.m.	.05	.11	.29	.44	.58	.60	.60	.60	.60	.60	.61	.62	.89	.89	.89
Sept. 15	2:25 p.m.	3:00 p.m.	.46	2:29 p.m.	2:40 p.m.	.01	.29	.42	.43	.43	.44	.45	.45	.45	.45	.45	.45	.60	.65	.69
	3:30 p.m.	9:45 p.m.	.44																	
Detroit, Mich.:																			
July 6	4:00 p.m.	8:05 p.m.	.76	5:00 p.m.	5:30 p.m.	.12	.18	.31	.41	.47	.52	.58	.58	.58	.59	.59	.60	.62	.62	.62
Aug. 2	4:45 p.m.	5:55 p.m.	.87	4:53 p.m.	5:28 p.m.	.01	.11	.34	.48	.67	.66	.76	.83	.86	.86	.86	.86	.86	.86	.86
UPPER LAKE REGION																			
Alpena, Mich.:																			
May 21	4:02 p.m.	5:30 p.m.	1.35	4:07 p.m.	4:51 p.m.	.02	.27	.31	.35	.37	.42	.52	.77	1.00	1.18	1.19	1.21	1.32	1.33	1.33
June 5	2:35 p.m.	4:18 p.m.	.83	2:59 p.m.	3:34 p.m.	.09	.07	.12	.36	.44	.50	.55	.60	.61	.64	.68	.73	.74	.74	.74
July 6	12:32 p.m.	2:00 p.m.	.66	1:02 p.m.	1:22 p.m.	.08	.18	.31	.43	.50	.53	.54	.55	.57	.57	.57	.58	.58	.58	.58
July 29	8:35 p.m.	[1] 12:15 a.m.	1.07	11:09 p.m.	11:28 p.m.	.40	.14	.39	.52	.61	.62	.62	.63	.65	.65	.65	.66	.67	.67	.67
Sept. 15	5:04 p.m.	6:30 p.m.	.50	5:38 p.m.	5:53 p.m.	.07	.08	.27	.38	.38	.38	.40	.42	.42	.42	.43	.43	.43	.43	.43
Grand Rapids, Mich.:																			
June 28	2:21 a.m.	6:03 a.m.	1.35	3:16 a.m.	4:48 a.m.	.02	.21	.32	.35	.38	.39	.46	.50	.61	.73	.75	.90	1.13	1.29	1.30
Sept. 2	5:25 a.m.	10:49 p.m.	2.11	2:50 p.m.	3:31 p.m.	1.01	.07	.15	.25	.30	.37	.40	.54	.66	.69	.71	.74	.75	.79	.85
Sept. 11	1:47 p.m.	2:10 p.m.	.38	1:47 p.m.	2:01 p.m.	.00	.08	.29	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
Do	10:10 p.m.	11:28 p.m.	.47	10:51 p.m.	10:58 p.m.	.06	.12	.36	.37	.38	.40	.41	.41	.41	.41	.41	.41	.41	.41	.42
	11:47 p.m.	[1] 2:18 a.m.	.01																	
Lansing, Mich.:																			
Apr. 3	10:40 a.m.	1:00 p.m.	.61	11:33 a.m.	11:41 a.m.	.13	.33	.37	.40	.41	.43	.44	.45	.46	.46	.47	.47	.48	.48	.48
July 6	12:33 p.m.	3:58 p.m.	1.64	12:43 p.m.	1:46 p.m.	.04	.13	.15	.20	.43	.68	.81	.96	.98	.99	.99	1.31	1.46	1.51	1.55
Marquette, Mich.:																			
Aug. 18	8:50 p.m.	D.N. p.m.	.68	9:16 p.m.	9:34 p.m.	.01	.12	.27	.34	.41	.42	.43	.45	.47	.49	.51	.54	.61	.66	.66
Sept. 20	5:35 a.m.	3:47 p.m.	1.21	5:55 a.m.	6:09 a.m.	.01	.73	.79	.84	.85	.87	.88	.88	.89	.90	.91	.91	.92	.94	.99
Sept. 25	12:58 p.m.	3:40 p.m.	1.10	1:03 p.m.	1:23 p.m.	.01	.06	.29	.70	.85	.88	.89	.90	.91	.91	.92	.95	1.06	1.09	1.09
Chicago, Ill.:																			
June 22	9:47 a.m.	11:25 a.m.	.88	9:50 a.m.	10:10 a.m.	.02	.26	.44	.63	.72	.75	.75	.76	.77	.78	.80	.84	.86	.86	.86
Aug. 15	3:06 a.m.	7:07 a.m.	1.60	4:19 a.m.	4:51 a.m.	.02	.12	.24	.37	.63	.99	1.19	1.21	1.23	1.23	1.24	1.24	1.25	1.28	1.39
Aug. 23	11:12 p.m.	[1] 3:38 a.m.	.84	11:39 p.m.	11:59 p.m.	.01	.05	.18	.40	.45	.48	.50	.50	.51	.52	.52	.54	.59	.63	.69
Sept. 29	7:10 p.m.	10:02 p.m.	1.02	7:57 p.m.	8:34 p.m.	.04	.08	.19	.37	.51	.72	.78	.85	.88	.90	.91	.94	.97	.97	.98
Green Bay, Wis.:																			
May 20	4:15 p.m.	4:55 p.m.	.68	4:18 p.m.	4:42 p.m.	.01	.22	.36	.46	.56	.65	.66	.67	.67	.67	.67	.67	.67	.67	.67
June 25	8:40 p.m.	[1] 4:30 a.m.	2.17	9:13 p.m.	10:02 p.m.	.14	.23	.37	.42	.45	.57	.63	.66	.73	.85	.93	.97	1.08	1.15	1.22
July 5	8:40 p.m.	[1] 12:15 a.m.	1.49	9:47 p.m.	10:21 p.m.	.39	.09	.21	.51	.70	.79	.88	.95	.97	.97	.98	1.00	1.04	1.08	1.10
Aug. 2	8:48 a.m.	10:25 a.m.	1.41	9:01 a.m.	10:19 a.m.	.03	.12	.35	.36	.36	.36	.45	.55	.67	.68	.68	.93	1.38	1.38	1.38
Aug. 8	10:15 a.m.	11:30 a.m.	.62	10:15 a.m.	10:33 a.m.	.00	.10	.35	.51	.57	.57	.58	.58	.58	.59	.60	.62	.62	.62	.62

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
OHIO VALLEY AND TENNESSEE—contd.																				
Milwaukee, Wis.:																				
May 13	[2] 7:40 p.m.	7:15 a.m.	1.18	1:22 a.m.	1:45 a.m.	0.60	0.13	0.22	0.32	0.40	0.44	0.46	0.47	0.47	0.48	0.48	0.48	0.48	0.48	0.48
May 21	1:31 p.m.	2:06 p.m.	.49	1:38 p.m.	2:00 p.m.	.01	.15	.32	.40	.45	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Aug. 6	D.N. a.m.	7:25 a.m.	.52	3:58 a.m.	4:15 a.m.	.01	.06	.21	.37	.40	.42	.42	.42	.43	.43	.44	.46	.47	.48	.48
Nov. 19	4:15 p.m.	D.N. p.m.	1.76	8:02 p.m.	9:23 p.m.	.60	.11	.21	.34	.45	.48	.48	.48	.49	.56	.63	.71	1.10	1.15	1.15
Duluth, Minn.:																				
Aug. 18	4:30 p.m.	6:00 p.m.	.45	5:10 p.m.	5:21 p.m.	.03	.22	.32	.35	.38	.41	.41	.42	.42	.42	.42	.42	.42	.42	.42
Oct. 5	2:42 p.m.	7:15 p.m.	1.16	3:13 p.m.	3:35 p.m.	.05	.10	.31	.53	.82	.86	.87	.92	.93	.94	.95	.96	1.01	1.05	1.08
NORTH DAKOTA																				
Moorhead, Minn.:																				
June 7	1:45 p.m.	2:48 p.m.	.47	1:53 p.m.	2:09 p.m.	.01	.17	.35	.43	.45	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46
Aug. 7	10:24 p.m.	D.M. p.m.	.71	10:29 p.m.	10:55 p.m.	.01	.10	.21	.37	.45	.56	.59	.64	.66	.68	.69	.69	.70	.70	.70
Aug. 8	D.N. a.m.	D.N. a.m.	.72	1:18 a.m.	1:43 a.m.	.02	.16	.27	.36	.46	.51	.55	.60	.63	.63	.64	.65	.70	.70	.70
Oct. 19	3:25 p.m.	D.N. p.m.	1.43	5:42 p.m.	6:09 p.m.	.35	.16	.30	.37	.49	.58	.65	.67	.71	.74	.78	.81	.82	.83	.83
Bismarck, N. Dak.:																				
Aug. 13	10:30 p.m.	11:20 p.m.	.34	10:33 p.m.	10:39 p.m.	.01	.26	.30	.31	.32	.32	.32	.32	.32	.32	.33	.33	.33	.33	.33
UPPER MISSISSIPPI VALLEY																				
Minneapolis, Minn.:																				
Aug. 8	5:22 a.m.	6:10 a.m.	.69	5:26 a.m.	5:45 a.m.	.01	.23	.48	.56	.61	.63	.64	.66	.67	.68	.68	.68	.68	.68	.68
				10:10 p.m.	11:00 p.m.	.33	.12	.16	.18	.22	.30	.37	.45	.50	.55	.71	----	----	----	----
Oct. 19–20	5:55 p.m.	D.N. a.m.	4.55	[3] 11:00 p.m.	11:50 p.m.	------	.86	1.00	1.15	1.37	1.61	1.88	2.10	2.23	2.31	2.33	----	----	----	----
				[3] 11:50 p.m.	12:40 a.m.	------	2.38	2.42	2.45	2.50	2.59	2.67	2.70	2.72	2.73	2.75	----	----	----	----
				[3] 12:40 a.m.	1:20 a.m.	------	2.77	2.81	2.97	3.05	3.19	3.33	3.38	3.52	3.52	3.55	3.57	3.67	3.72	3.92
Oct. 20	2:30 p.m.	9:15 p.m.	.79	3:30 p.m.	3:43 p.m.	.04	.34	.49	.53	.55	.58	.59	.59	.59	.60	.60	.60	.61	.65	.66
La Crosse, Wis.:																				
June 8	6:37 p.m.	9:40 p.m.	.88	6:52 p.m.	7:06 p.m.	.02	.13	.32	.50	.53	.54	.55	.57	.58	.60	.61	.64	.65	.69	.77
July 5	6:32 p.m.	8:40 p.m.	3.26	6:52 p.m.	8:25 p.m.	.02	.70	1.33	1.79	1.92	1.97	1.99	2.13	2.26	2.38	2.46	2.61	3.01	3.24	3.24
July 9	10:56 p.m.	[1] 3:05 a.m.	1.42	11:30 p.m.	11:45 p.m.	.06	.21	.39	.60	.62	.63	.65	.65	.66	.66	.67	.68	.76	.88	1.06
July 12	4:25 p.m.	5:05 p.m.	.38	4:44 p.m.	4:55 p.m.	.02	.11	.33	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
July 26	2:55 a.m.	9:50 a.m.	1.82	2:59 a.m.	3:59 a.m.	.01	.08	.15	.22	.27	.33	.37	.40	.43	.47	.57	.86	.98	1.11	1.15
Aug. 18	8:46 p.m.	9:28 p.m.	.46	8:52 p.m.	9:08 p.m.	.01	.10	.27	.40	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
Sept. 2	1:55 p.m.	3:50 p.m.	1.20	2:42 p.m.	3:14 p.m.	.03	.27	.45	.52	.74	.97	1.05	1.08	1.10	1.12	1.15	1.16	1.17	1.17	1.17
Sept. 25	3:06 p.m.	3:47 p.m.	.53	3:37 p.m.	3:46 p.m.	.14	.19	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
Oct. 19	6:30 p.m.	[1] 12:10 a.m.	.81	11:33 p.m.	11:55 p.m.	.23	.16	.27	.43	.54	.57	.58	.58	.58	.58	.58	.58	.58	.58	.58
Madison, Wis.:																				
June 8	9:30 p.m.	[1] 12:10 a.m.	.87	9:36 p.m.	10:00 p.m.	.01	.10	.23	.36	.46	.57	.63	.65	.66	.68	.70	.74	.80	.82	.83
June 17	6:54 p.m.	11:40 p.m.	1.02	7:16 p.m.	8:01 p.m.	.01	.07	.24	.29	.31	.37	.48	.59	.64	.69	.72	.75	.81	.85	.89
Oct. 20	[2] 8:00 p.m.	8:12 a.m.	1.64	4:03 a.m.	4:33 a.m.	.86	.15	.19	.20	.31	.42	.52	.54	.56	.56	.56	.56	.56	.56	.56
Charles City, Iowa.:																				
Sept. 23	3:10 p.m.	3:45 p.m.	.34	3:15 p.m.	3:25 p.m.	.01	.24	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
Sept. 25	8:50 p.m.	[1] 8:00 a.m.	2.05	9:10 p.m.	10:00 p.m.	.03	.06	.16	.20	.27	.38	.41	.46	.49	.59	.70	.71	.73	.79	.80
Davenport, Iowa:																				
June 23–24	11:15 p.m.	12:30 a.m.	.80	11:40 p.m.	12:12 a.m.	.05	.09	.20	.41	.46	.51	.71	.73	.74	.74	.75	.75	.75	.75	.75
June 30	3:40 a.m.	6:30 a.m.	1.08	3:44 a.m.	4:39 a.m.	.01	.08	.17	.25	.28	.32	.56	.68	.70	.80	.87	.97	.99	1.01	1.04
July 12	2:35 a.m.	5:45 a.m.	1.42	2:45 a.m.	3:16 a.m.	.01	.05	.10	.29	.68	1.02	1.19	1.23	1.25	1.26	1.27	1.30	1.37	1.38	1.38
July 13	1:30 p.m.	2:22 p.m.	.51	1:39 p.m.	1:49 p.m.	.02	.21	.38	.40	.43	.47	.48	.48	.48	.49	.49	.49	.49	.49	.49
Aug. 5	[2] 11:30 p.m.	8:10 a.m.	1.60	1:30 a.m.	1:45 a.m.	.47	.13	.31	.50	.51	.54	.60	.66	.70	.72	.72	.72	.74	.76	.81
Aug. 10	10:53 p.m.	[1] 3:00 a.m.	1.02	10:56 p.m.	11:35 p.m.	.01	.17	.25	.29	.34	.36	.44	.60	.72	.75	.79	.82	.92	.93	.93
Aug. 14	12:02 p.m.	1:05 p.m.	1.01	12:08 p.m.	12:33 p.m.	.01	.15	.43	.82	.93	.98	.99	.99	1.00	1.00	1.00	1.00	1.00	1.00	1.12
	1:54 p.m.	2:20 p.m.	.26																	
Des Moines, Iowa:																				
May 9	4:36 p.m.	5:05 p.m.	.34	4:43 p.m.	4:50 p.m.	T	.26	.32	.33	.33	.34	.34	.34	.34	.34	.34	.34	.37	.49	.50
	5:19 p.m.	7:05 p.m.	.17																	
June 8	5:55 p.m.	8:20 p.m.	.90	5:59 p.m.	6:18 p.m.	.01	.27	.49	.63	.68	.68	.69	.69	.69	.69	.70	.72	.78	.87	.88
June 30	5:25 p.m.	6:55 p.m.	.65	5:44 p.m.	6:03 p.m.	.01	.11	.26	.45	.56	.57	.57	.57	.58	.59	.59	.63	.64	.64	.64
Sept. 12	5:55 a.m.	7:40 a.m.	.90	6:14 a.m.	6:56 a.m.	.04	.08	.17	.23	.38	.53	.66	.72	.78	.83	.86	.86	.86	.86	.86
Sept. 25	12:15 p.m.	5:20 p.m.	1.09	12:38 p.m.	1:05 p.m.	.05	.14	.21	.27	.33	.44	.56	.57	.57	.57	.57	.57	.65	.71	.88
Oct. 20	12:55 a.m.	3:30 a.m.	.49	2:33 a.m.	2:38 a.m.	.22	.26	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27	.27
Dubuque, Iowa:																				
June 20	4:50 p.m.	5:15 p.m.	.34	5:00 p.m.	5:09 p.m.	.01	.26	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
June 23	8:22 p.m.	9:33 p.m.	.77	8:37 p.m.	9:13 p.m.	.02	.14	.25	.36	.49	.59	.66	.73	.75	.75	.75	.75	.75	.75	.75
July 5	7:12 p.m.	8:40 p.m.	1.34	7:15 p.m.	7:41 p.m.	.01	.28	.53	.71	.89	1.10	1.12	1.13	1.21	1.25	1.27	1.31	1.32	1.33	1.33
July 10	3:25 a.m.	6:12 a.m.	.73	3:29 a.m.	3:47 a.m.	.01	.08	.27	.44	.51	.53	.54	.55	.56	.56	.56	.57	.58	.66	.72
July 18	8:26 p.m.	8:47 p.m.	.32	8:30 p.m.	8:40 p.m.	.01	.19	.30	.31	.31	.31	.31	.31	.31	.31	.33	.33	.33	.33	.33
	9:28 p.m.	9:33 p.m.	.02																	
July 26	12:19 a.m.	1:25 a.m.	.58	12:22 a.m.	12:47 a.m.	.01	.22	.32	.38	.44	.49	.50	.53	.56	.56	.56	.57	.57	.57	.57
Aug. 15	3:45 a.m.	5:40 a.m.	1.00	4:25 a.m.	4:58 a.m.	.03	.16	.42	.57	.67	.78	.84	.89	.91	.92	.92	.95	.97	.97	.97
Sept. 3	6:01 a.m.	6:55 a.m.	.45	6:19 a.m.	6:38 a.m.	.04	.05	.18	.33	.40	.41	.41	.41	.41	.41	.41	.45	.48	.54	.63
	7:08 a.m.	[1] 5:40 a.m.	2.75																	
Do	7:08 a.m.	[1] 5:40 a.m.	2.75	8:51 a.m.	9:26 a.m.	.54	.10	.23	.35	.45	.49	.55	.61	.63	.67	.70	.71	.89	1.11	1.18
Keokuk, Iowa:																				
June 8	10:33 p.m.	[1] 3:00 a.m.	1.58	10:37 p.m.	11:54 p.m.	.01	.11	.31	.55	.66	.69	.70	.72	.76	.77	.79	.89	1.37	1.39	1.40
June 22	6:20 a.m.	8:20 a.m.	.80	6:24 a.m.	6:57 a.m.	.01	.16	.32	.37	.38	.42	.56	.68	.71	.71	.72	.73	.75	.77	.79
July 12	2:25 a.m.	D.N. a.m.	.47	2:46 a.m.	3:04 a.m.	.01	.12	.21	.37	.44	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46
Aug. 11	7:13 p.m.	8:35 p.m.	.35	8:06 p.m.	8:14 p.m.	.04	.23	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
Aug. 31	7:50 p.m.	10:45 p.m.	.80	9:30 p.m.	9:51 p.m.	.24	.06	.13	.33	.46	.50	.54	.54	.55	.56	.56	.56	.56	.56	.56

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
UPPER MISSISSIPPI VALLEY—contd.																				
Cairo, Ill.:																				
May 5	D.N. a.m.	6:13 a.m.	0.54	5:09 a.m.	5:28 a.m.	0.06	0.13	0.29	0.40	0.45	0.46	0.47	0.48	0.49	0.50	0.50	0.51	0.51	0.51	0.51
July 1	11:23 a.m.	12:30 p.m.	1.34	11:43 a.m.	12:01 p.m.	.02	.27	.80	1.23	1.30	1.31	1.31	1.31	1.31	1.31	1.32	1.32	1.32	1.32	1.32
July 11	9:39 p.m.	D.N. p.m.	.83	10:05 p.m.	10:22 p.m.	.02	.15	.55	.77	.80	.80	.80	.81	.81	.81	.81	.81	.81	.81	.81
Aug. 12	10:30 p.m.	[1]D.N. a.m.	.62	10:30 p.m.	10:45 p.m.	.00	.15	.34	.42	.43	.44	.45	.45	.45	.45	.45	.45	.45	.46	.48
Aug. 24	12:37 a.m.	7:12 a.m.	.50	1:56 a.m.	2:06 a.m.	.01	.22	.32	.34	.34	.34	.35	.35	.36	.36	.37	.38	.41	.43	.46
Sept. 13	4:29 p.m.	5:50 p.m.	1.27	4:33 p.m.	5:07 p.m.	.01	.11	.26	.59	.90	1.03	1.14	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26
Sept. 21	5:17 p.m.	7:06 p.m.	.74	6:20 p.m.	6:38 p.m.	.08	.34	.50	.56	.66	.66	.66	.66	.66	.66	.66	.66	.66	.66	.66
Sept. 29	[2] 6:26 p.m.	7:24 a.m.	1.36	2:49 a.m.	3:11 a.m.	.20	.15	.37	.50	.55	.58	.61	.63	.65	.66	.69	.73	.87	.90	.90
Oct. 31	4:34 p.m.	6:05 p.m.	1.08	4:58 p.m.	5:35 p.m.	.04	.14	.55	.64	.70	.90	.93	1.00	1.02	1.03	1.03	1.04	1.04	1.04	1.04
Peoria, Ill.:																				
July 13	10:05 p.m.	[1] 4:05 a.m.	2.85	11:03 p.m.	11:49 p.m.	.20	.16	.36	.66	.73	.80	.84	.91	.98	1.03	1.05	1.12	1.23	1.26	1.28
July 14	[2] 10:05 p.m.	4:05 a.m.	2.85	3:09 a.m.	3:34 a.m.	2.05	.14	.27	.33	.52	.67	.69	.72	.79	.79	.80	.80	.80	.80	.80
Sept. 2	[2] 10:03 p.m.	5:25 p.m.	1.69	1:25 a.m.	1:45 a.m.	.23	.11	.27	.39	.58	.61	.64	.70	.75	.79	.81	.84	.94	.96	.96
Sept. 26	12:01 p.m.	2:56 p.m.	.87	1:31 p.m.	1:52 p.m.	.22	.05	.25	.37	.56	.60	.60	.61	.61	.62	.63	.63	.64	.65	.65
Springfield, Ill.:																				
June 17	12:24 p.m.	1:46 p.m.	.54	12:31 p.m.	12:45 p.m.	.02	.09	.30	.46	.47	.48	.49	.51	.51	.52	.52	.52	.52	.52	.52
June 22	8:38 a.m.	9:50 a.m.	.83	8:42 a.m.	8:58 a.m.	.01	.22	.49	.71	.73	.76	.76	.77	.78	.81	.81	.81	.82	.82	.82
June 30	2:48 p.m.	5:05 p.m.	1.65	2:51 p.m.	3:41 p.m.	.01	.07	.17	.25	.40	.75	1.17	1.26	1.39	1.46	1.56	1.61	1.63	1.63	1.64
July 13	6:39 p.m.	7:15 p.m.	.72	6:39 p.m.	7:02 p.m.	.00	.17	.47	.57	.62	.67	.70	.71	.72	.72	.72	.72	.72	.72	.72
July 15	1:30 a.m.	5:50 a.m.	2.72	2:31 a.m.	3:21 a.m.	.03	.10	.24	.54	.98	1.36	1.61	1.79	2.14	2.25	2.34	2.40	2.55	2.62	2.66
July 19	12:15 a.m.	1:40 a.m.	1.04	12:34 a.m.	1:21 a.m.	.04	.08	.26	.34	.36	.41	.42	.44	.60	.94	.98	.99	1.00	1.00	1.00
Aug. 11	10:00 p.m.	[1] 12:45 a.m.	1.23	10:31 p.m.	10:45 p.m.	T	.21	.45	.69	.71	.74	.77	.81	.84	.85	.85	.85	.88	.98	1.23
Sept. 26	1:37 p.m.	2:50 p.m.	.43	1:49 p.m.	2:01 p.m.	.03	.18	.34	.38	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
Nov. 2	7:25 p.m.	[1] 12:30 a.m.	1.68	8:40 p.m.	9:13 p.m.	.01	.26	.34	.38	.53	.79	.90	.99	1.01	1.01	1.01	1.01	1.03	1.09	1.13
Do	7:25 p.m.	[1] 12:30 a.m.	1.68	10:49 p.m.	11:07 p.m.	1.16	.10	.35	.43	.48	.50	.50	.50	.51	.51	.51	.51	.51	.51	.52
St. Louis, Mo.:																				
June 17	11:19 a.m.	1:20 p.m.	1.30	11:19 a.m.	12:27 p.m.	.00	.12	.24	.31	.33	.34	.34	.52	.60	.65	.73	.92	1.18	1.29	1.30
June 29	1:58 p.m.	2:18 p.m.	.35	2:02 p.m.	2:13 p.m.	.01	.21	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
July 31	8:23 p.m.	8:50 p.m.	.42	8:26 p.m.	8:41 p.m.	T	.15	.28	.39	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
Aug. 16	[2] 8:35 p.m.	8:30 a.m.	1.32	12:18 a.m.	12:40 a.m.	.12	.07	.15	.34	.50	.56	.59	.60	.62	.63	.66	.69	.71	.72	.72
Sept. 1	3:10 p.m.	5:30 p.m.	.75	3:33 p.m.	3:48 p.m.	.10	.32	.42	.49	.51	.53	.54	.55	.56	.57	.58	.60	.63	.64	.65
Sept. 3	5:50 a.m.	11:40 a.m.	1.20	6:12 a.m.	6:44 a.m.	.02	.14	.21	.28	.38	.54	.61	.65	.68	.70	.72	.74	.83	.88	.94
Sept. 28	6:28 p.m.	[1] 8:15 a.m.	.90	8:57 p.m.	9:06 p.m.	.32	.20	.31	.33	.34	.35	.35	.36	.37	.37	.37	.38	.41	.42	.45
Oct. 24	4:52 p.m.	[1] D.N. a.m.	1.72	5:05 p.m.	5:32 p.m.	.03	.14	.22	.24	.42	.54	.57	.58	.63	.65	.69	.73	.78	.80	.82
MISSOURI VALLEY																				
Columbia, Mo.:																				
June 9	12:24 p.m.	1:28 p.m.	.49	12:24 p.m.	12:45 p.m.	.00	.08	.27	.38	.44	.45	.45	.46	.46	.47	.48	.49	.49	.49	.49
June 17	2:37 p.m.	4:34 p.m.	1.46	2:37 p.m.	3:40 p.m.	.00	.15	.26	.45	.74	.92	.98	1.05	1.10	1.12	1.18	1.32	1.46	1.46	1.46
Aug. 16	[2] 11:11 p.m.	9:43 a.m.	2.59	6:55 a.m.	8:54 a.m.	.44	.08	.18	.41	.68	.78	.82	.84	.94	1.01	1.14	1.23	1.45	1.72	2.02
Aug. 17	6:16 a.m.	8:01 a.m.	1.04	6:31 a.m.	7:15 a.m.	.03	.11	.21	.35	.45	.50	.60	.76	.79	.92	.95	.95	.97	1.01	1.01
Sept. 12	3:47 a.m.	12:18 p.m.	2.43	3:57 a.m.	4:58 a.m.	.01	.12	.34	.50	.59	.62	.76	.84	.92	1.06	1.18	1.38	1.44	1.50	1.61
Sept. 13	8:55 a.m.	9:36 a.m.	.44	9:00 a.m.	9:15 a.m.	.01	.07	.30	.40	.41	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43
Sept. 28	2:37 p.m.	9:15 p.m.	2.03	5:03 p.m.	5:36 p.m.	.37	.32	.70	.81	.94	1.03	1.08	1.12	1.15	1.17	1.17	1.20	1.25	1.47	1.50
Oct. 24	12:31 p.m.	3:28 p.m.	1.00	12:55 p.m.	1:13 p.m.	.21	.09	.30	.38	.43	.45	.47	.49	.50	.50	.51	.53	.60	.68	.74
Kansas City, Mo.:																				
Apr. 3	11:10 p.m.	[1] 4:05 a.m.	1.38	11:21 p.m.	11:42 p.m.	.02	.25	.34	.41	.50	.53	.53	.53	.54	.55	.62	.67	.87	1.00	1.06
May 4	4:25 p.m.	7:01 p.m.	.71	5:13 p.m.	5:25 p.m.	.17	.12	.32	.37	.39	.41	.43	.45	.46	.47	.48	.49	.50	.53	.53
June 14	5:25 a.m.	8:50 a.m.	.99	7:30 a.m.	7:55 a.m.	.44	.09	.20	.32	.39	.48	.51	.52	.53	.54	.54	.55	.55	.55	.55
July 27	12:50 a.m.	4:50 a.m.	.71	3:06 a.m.	3:20 a.m.	.01	.13	.28	.46	.48	.49	.49	.49	.49	.49	.49	.57	.70	.70	.70
Sept. 13	10:38 a.m.	2:52 p.m.	.80	10:45 a.m.	11:07 a.m.	.05	.07	.16	.31	.49	.53	.55	.55	.56	.56	.57	.59	.62	.65	.69
Sept. 20	4:25 p.m.	[1] 8:00 a.m.	1.22	5:17 p.m.	5:32 p.m.	.13	.13	.28	.45	.46	.46	.46	.46	.46	.46	.46	.48	.60	.64	.68
Sept. 28	1:10 p.m.	4:50 p.m.	.92	1:56 p.m.	2:03 p.m.	.08	.24	.34	.34	.34	.35	.38	.55	.57	.58	.60	.61	.67	.69	.69
St. Joseph, Mo.:																				
April 3	8:18 p.m.	9:45 p.m.	.83	8:45 p.m.	9:12 p.m.	.12	.10	.16	.23	.36	.62	.68	.70	.70	.71	.71	.71	.71	.71	.71
April 26	2:50 a.m.	7:00 a.m.	1.80	4:27 a.m.	5:28 a.m.	.44	.06	.15	.27	.34	.49	.64	.82	.94	.97	1.01	1.22	1.30	1.34	1.36
June 8	7:15 p.m.	10:45 p.m.	2.12	8:43 p.m.	9:46 p.m.	.06	.22	.37	.45	.57	.85	1.00	1.00	1.06	1.32	1.48	1.88	2.01	2.05	2.06
Aug. 15	4:25 a.m.	9:15 a.m.	3.01	4:59 a.m.	5:55 a.m.	.13	.07	.25	.52	.79	1.28	1.46	1.53	1.59	1.63	1.70	1.84	1.94	1.95	2.05
Do	4:25 a.m.	9:15 a.m.	3.01	7:35 a.m.	8:07 a.m.	2.31	.11	.21	.31	.44	.53	.58	.62	.66	.68	.68	.68	.69	.70	.70
Sept. 14	8:45 p.m.	11:00 p.m.	.48	9:07 p.m.	9:13 p.m.	.03	.33	.38	.38	.41	.41	.41	.41	.42	.42	.42	.43	.45	.45	.45
Sept. 28	7:22 a.m.	10:40 a.m.	1.23	9:24 a.m.	9:43 a.m.	.66	.09	.24	.37	.45	.49	.51	.53	.54	.55	.56	.57	.57	.57	.57
Springfield, Mo.:																				
June 2	5:10 p.m. / 7:08 p.m.	6:20 p.m. / [1] 1:40 a.m.	.68 / .18	5:26 p.m.	5:49 p.m.	.01	.16	.34	.47	.53	.58	.62	.65	.67	.67	.67	.67	.67	.67	.78
June 15	11:19 a.m.	1:55 p.m.	.75	[3] 11:31 a.m.	11:54 a.m.	[3] T	[3] .11	[3] .27	.51	.61	.68	.68	.68	.68	.68	.69	.69	.72	.74	.74
June 17	1:12 p.m.	1:52 p.m.	.34	1:15 p.m.	1:23 p.m.	.01	.21	.32	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
July 14 [3]	5:12 p.m.	6:02 p.m.	.75	5:21 p.m.	5:42 p.m.	.01	.23	.31	.42	.68	.74	.74	.74	.74	.74	.74	.74	.74	.74	.74
Aug. 16	9:27 a.m. / 10:45 a.m.	10:30 a.m. / 12:10 p.m.	.46 / .09	9:38 a.m.	9:48 a.m.	.01	.15	.31	.32	.33	.44	.45	.45	.45	.45	.45	.45	.46	.49	.52
Sept. 1	3:45 p.m.	[1] 7:27 a.m.	1.58	4:01 p.m.	4:11 p.m.	.03	.22	.35	.37	.38	.40	.40	.40	.40	.40	.40	.41	.41	.41	.41
Oct. 24	12:29 p.m.	4:10 p.m.	.90	1:27 p.m.	1:57 p.m.	.21	.08	.25	.29	.32	.41	.63	.66	.68	.68	.68	.68	.68	.68	.69
Nov. 19	7:30 p.m.	[1] 4:30 a.m.	.98	9:47 p.m.	10:02 p.m.	.02	.25	.31	.41	.45	.48	.50	.51	.51	.66	.69	.72	.76	.79	.79
Topeka, Kans.:																				
May 12	8:14 p.m.	[1] 11:40 a.m.	4.20	8:38 p.m.	9:46 p.m.	.01	.05	.13	.17	.48	.56	.66	.83	.97	1.13	1.23	1.43	1.60	1.78	1.91
Do	8:14 p.m.	[1] 11:40 a.m.	4.20	10:40 p.m.	11:34 p.m.	1.94	.06	.17	.25	.30	.44	.50	.58	.83	.91	1.01	1.19	1.29	1.35	1.46
June 2	7:57 p.m.	D.N. a.m.	.55	9:32 p.m.	9:48 p.m.	.01	.19	.35	.44	.46	.48	.48	.49	.52	.52	.52	.52	.52	.52	.52
June 17	2:30 a.m.	D.N. a.m.	.87	2:44 a.m.	3:00 a.m.	.01	.26	.54	.61	.64	.66	.68	.69	.70	.71	.72	.76	.83	.85	.86
July 5	7:31 p.m.	[1] 2:50 a.m.	1.70	7:51 p.m.	8:28 p.m.	.02	.06	.13	.31	.42	.55	.92	1.05	1.11	1.13	1.14	1.15	1.20	1.24	1.25
July 27	[2] 8:20 p.m.	D.N. a.m.	.61	3:04 a.m.	3:22 a.m.	.01	.29	.44	.53	.57	.59	.59	.59	.60	.60	.60	.60	.60	.60	.60
Aug. 14	4:21 p.m.	5:28 p.m.	.88	4:34 p.m.	5:03 p.m.	.01	.30	.39	.53	.65	.75	.81	.85	.86	.87	.87	.87	.87	.87	.87
Sept. 1	6:10 a.m.	8:15 p.m.	1.58	5:49 p.m.	6:39 p.m.	.68	.11	.28	.38	.50	.55	.58	.59	.62	.75	.80	.83	.87	.89	.90

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MISSOURI VALLEY—continued																			
Lincoln, Nebr.:																			
June 8	12:30 a.m.	1:35 a.m.	0.64	12:45 a.m.	1:13 a.m.	0.01	0.07	0.10	0.28	0.51	0.60	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
June 14	1:10 a.m.	3:05 a.m.	.64	1:28 a.m.	1:47 a.m.	.06	.14	.26	.34	.41	.43	.45	.48	.50	.51	.52	.55	.57	.58	.58
Aug. 31	5:01 p.m.	5:58 p.m.	.47	5:05 p.m.	5:20 p.m.	.01	.19	.28	.43	.45	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46
Sept. 25	4:01 p.m.	[1] 3:10 a.m.	2.45	5:19 p.m.	6:01 p.m.	.13	.16	.41	.68	1.22	1.34	1.38	1.43	1.48	1.51	1.52	1.58	1.58	1.58	1.60
Omaha, Nebr.:																			
June 6	2:04 a.m.	5:10 a.m.	.70	2:12 a.m.	2:29 a.m.	.02	.26	.35	.43	.47	.47	.47	.47	.47	.47	.47	.49	.49	.49	.62
Oct. 20	[2] D.N. p.m.	D.N. a.m.	.57	12:17 a.m.	12:31 a.m.	.09	.31	.39	.44	.47	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48
Valentine, Nebr.:																			
June 16	2:18 p.m.	2:45 p.m.	.43	2:24 p.m.	2:33 p.m.	T	.18	.40	.42	.43	.43	.43	.45	.49	.49	.51	.53	.56	.59	.59
	2:54 p.m.	4:14 p.m.	.16																	
Aug. 30	3:36 p.m.	4:13 p.m.	.77	3:40 p.m.	3:53 p.m.	.01	.27	.46	.63	.67	.68	.75	.76	.76	.76	.76	.76	.76	.76	.76
Oct. 15	6:12 p.m.	8:09 p.m.	.60	7:12 p.m.	7:22 p.m.	.03	.06	.30	.32	.32	.32	.33	.34	.36	.43	.55	.57	.57	.80	.83
	8:40 p.m.	11:00 p.m.	.32																	
Sioux City, Iowa:																			
June 6	9:20 a.m.	1:45 p.m.	1.01	12:00 noon	12:33 p.m.	.16	.14	.38	.53	.61	.66	.69	.75	.76	.80	.81	.84	.85	.85	.85
Do	2:08 p.m.	2:30 p.m.	.36	2:11 p.m.	2:18 p.m.	.01	.29	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
June 7	4:48 p.m.	[1] 2:00 a.m.	2.62	5:10 p.m.	5:39 p.m.	.11	.18	.56	.69	.88	1.06	1.14	1.16	1.18	1.19	1.19	1.19	1.21	1.41	1.44
July 5	9:02 p.m.	11:25 p.m.	.65	9:13 p.m.	9:32 p.m.	.01	.18	.38	.50	.56	.56	.57	.57	.57	.57	.57	.58	.58	.59	.64
July 9	[2] 7:22 p.m.	6:10 a.m.	2.38	2:32 a.m.	3:22 a.m.	.95	.12	.19	.29	.40	.58	.74	.78	.86	.91	.98	1.02	1.24	1.27	1.27
Oct. 19	3:20 p.m.	[1] 12:20 a.m.	.70	10:52 p.m.	11:05 p.m.	.07	.22	.54	.59	.61	.62	.63	.63	.63	.63	.63	.63	.63	.63	.63
Huron, S. Dak.:																			
July 5	6:10 p.m.	8:20 p.m.	.92	6:24 p.m.	6:47 p.m.	.02	.25	.42	.62	.80	.85	.86	.87	.88	.88	.88	.88	.89	.89	.90
Aug. 13	7:35 p.m.	[1] 12:20 a.m.	.90	9:58 p.m.	10:18 p.m.	.14	.27	.47	.50	.60	.61	.62	.64	.65	.67	.68	.71	.75	.76	.76
NORTHERN SLOPE																			
Havre, Mont.:																			
June 4	1:18 p.m.	1:43 p.m.	.40	1:23 p.m.	1:30 p.m.	.01	.28	.35	.37	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
June 26	2:55 p.m.	3:35 p.m.	.78	2:59 p.m.	3:10 p.m.	.01	.33	.74	.78	.78	.79	.79	.79	.79	.79	.79	.79	.79	.79	.84
	3:50 p.m.	3:59 p.m.	.02																	
	4:43 p.m.	5:28 p.m.	.07																	
Rapid City, S. Dak.:																			
June 6	5:10 p.m.	9:20 p.m.	.52	7:26 p.m.	7:35 p.m.	.01	.34	.45	.46	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49	.51
Cheyenne, Wyo.:																			
May 4	4:29 p.m.	5:04 p.m.	.41	4:39 p.m.	4:52 p.m.	.01	.17	.32	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
July 26	4:31 p.m.	5:10 p.m.	1.36	4:35 p.m.	5:00 p.m.	.01	.20	.58	.92	1.23	1.30	1.33	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Aug. 6	4:48 p.m.	5:18 p.m.	.39	4:59 p.m.	5:08 p.m.	.01	.31	.37	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
Lander, Wyo.:																			
June 16	4:15 p.m.	5:30 p.m.	.81	4:32 p.m.	4:51 p.m.	.06	.26	.52	.59	.63	.64	.70	.71	.72	.74	.74	.75	.75	.75	.75
North Platte, Nebr.:																			
June 13	8:11 p.m.	8:38 p.m.	.47	8:13 p.m.	8:27 p.m.	.01	.16	.35	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46
June 16	7:27 p.m.	10:49 p.m.	.99	7:34 p.m.	8:01 p.m.	.01	.14	.41	.47	.62	.71	.73	.73	.74	.75	.76	.77	.79	.83	.88
Aug. 30	2:12 a.m.	3:15 a.m.	1.10	2:14 a.m.	2:42 a.m.	.01	.45	.75	.83	.95	1.05	1.08	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.09
Sept. 2	7:50 a.m.	4:20 p.m.	.69	12 noon	12:05 p.m.	.09	.25	.26	.26	.27	.35	.39	.41	.42	.44	.45	.48	.50	.50	.52
MIDDLE SLOPE																			
Concordia, Kans.:																			
May 12	5:25 p.m.	9:30 p.m.	.93	6:19 p.m.	6:30 p.m.	.05	.32	.60	.62	.63	.63	.63	.66	.66	.66	.66	.66	.67	.86	.86
June 22	2:10 a.m.	4:15 a.m.	.92	2:10 a.m.	2:31 a.m.	.00	.18	.48	.64	.73	.76	.78	.79	.80	.81	.81	.83	.87	.90	.91
July 5	2:16 p.m.	3:10 p.m.	.63	2:27 p.m.	2:53 p.m.	.02	.08	.26	.32	.50	.57	.60	.60	.60	.61	.61	.61	.61	.61	.61
Dodge City, Kans.:																			
June 16	9:25 p.m.	D.N. p.m.	.76	9:28 p.m.	9:55 p.m.	.02	.17	.29	.39	.46	.59	.64	.67	.69	.71	.72	.72	.74	.74	.74
Oct. 17	D.N. a.m.	6:50 a.m.	1.01	4:06 a.m.	4:17 a.m.	.13	.16	.33	.35	.35	.39	.48	.53	.54	.55	.56	.56	.56	.56	.69
Wichita, Kans.:																			
Apr. 3	6:50 p.m.	8:10 p.m.	.77	7:35 p.m.	7:59 p.m.	.03	.10	.21	.34	.64	.74	.74	.74	.74	.74	.74	.75	.76	.76	.77
	D.N. p.m.	[1] D.N. a.m.	.82																	
Sept. 2	6:18 p.m.	D.N. p.m.	.90	6:20 p.m.	6:40 p.m.	.01	.11	.42	.65	.76	.79	.80	.80	.80	.80	.80	.80	.80	.80	.80
Sept. 9	4:30 p.m.	D.N. p.m.	1.03	5:14 p.m.	5:52 p.m.	.02	.14	.20	.26	.33	.38	.43	.64	.79	.81	.85	.88	.89	.91	.92
Oct. 17	6:20 a.m.	11:50 a.m.	1.27	8:13 a.m.	8:38 a.m.	.44	.11	.23	.30	.43	.50	.54	.57	.60	.63	.66	.69	.72	.73	.75
Nov. 17	7:15 p.m.	D.N. p.m.	.94	10:18 p.m.	10:34 p.m.	.58	.09	.24	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
Oklahoma City, Okla.: [4]																			
May 3	7:05 a.m.	3:55 p.m.	1.50	1:10 p.m.	1:20 p.m.	.77	.28	.51	.54	.58	.62	.65	.67	.68	.69	.69	.70	.70	.73	.73
Sept. 9	8:55 p.m.	[1] 8:15 a.m.	2.97	9:51 p.m.	10:07 p.m.	.12	.15	.31	.66	.76	.78	.79	.80	.80	.81	.81	.82	.82	.85	.86
Sept. 10	[3] 8:55 p.m.	8:15 a.m.	2.97	1:00 a.m.	1:26 a.m.	1.37	.15	.33	.60	.79	.93	.98	.99	1.00	1.00	1.01	1.05	1.08	1.15	1.23
SOUTHERN SLOPE																			
Abilene, Tex.: [4]																			
Nov. 13	7:58 p.m.	[1] 3:30 a.m.	1.59	8:50 p.m.	9:13 p.m.	.05	.23	.40	.58	.82	.96	.98	1.01	1.09	1.13	1.17	1.20	1.26	1.27	1.29
Del Rio, Tex.: [4]																			
Apr. 18	10:48 p.m.	[1] D.N. a.m.	.90	10:54 p.m.	11:09 p.m.	.04	.17	.36	.69	.73	.75	.77	.78	.79	.79	.81	.85	.86	.86	.86
Sept. 3	6:20 a.m.	9:30 a.m.	2.70	6:30 a.m.	7:35 a.m.	.01	.25	.60	.82	1.13	1.28	1.38	1.46	1.56	1.69	1.85	2.26	2.54	2.57	2.58
Sept. 14	8:42 p.m.	9:20 p.m.	.72	8:46 p.m.	9:00 p.m.	.01	.21	.56	.67	.70	.70	.70	.71	.71	.71	.71	.71	.71	.71	.71
Roswell, N.Mex.:																			
June 3	4:57 p.m.	7:20 p.m.	.58	5:00 p.m.	5:10 p.m.	.01	.19	.32	.32	.32	.32	.33	.33	.34	.34	.34	.44	.57	.57	.57
Nov. 16	9:45 p.m.	11:12 p.m.	.56	10:26 p.m.	10:48 p.m.	.08	.08	.17	.23	.36	.46	.47	.48	.48	.48	.48	.48	.48	.48	.48
SOUTHERN PLATEAU																			
Phoenix, Ariz.:																			
Sept. 23	9:15 a.m.	9:55 a.m.	.61	9:15 a.m.	9:37 a.m.	.00	.20	.43	.50	.57	.61	.61	.61	.61	.61	.61	.61	.61	.61	.61
Nov. 16	3:30 p.m.	4:30 p.m.	.36	3:33 p.m.	3:42 p.m.	.01	.25	.33	.33	.33	.33	.33	.33	.34	.34	.34	.35	.35	.35	.35

See footnotes at end of table.

Accumulated amounts of precipitation for each 5 minutes for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes or 0.80 in 1 hour during 1934 at all stations furnished with self-registering gages—Continued

Station and date	Total duration		Total amount of precipitation	Excessive rate		Amount before excessive rate began	Depths of precipitation (in inches) during periods of time indicated												
	From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
MIDDLE PLATEAU																			
Reno, Nev.: [3]																			
Apr. 15	5:55 p.m.	8:15 p.m.	0.95	7:06 p.m.	7:46 p.m.	0.17	0.08	0.24	0.39	0.47	0.50	0.53	0.59	0.66	0.69	0.71	0.75	0.78	0.78	0.78
Salt Lake City, Utah:																			
Aug. 29	1:00 a.m.	3:30 a.m.	.59	1:13 a.m.	1:34 a.m.	T	.14	.41	.46	.52	.53	.55	.56	.56	.56	.56	.56	.57	.57	.57
NORTHERN PLATEAU																			
Boise, Idaho:																			
July 30	2:45 p.m.	3:40 p.m.	.40	2:52 p.m.	3:05 p.m.	.02	.21	.33	.36	.37	.37	.37	.37	.38	.38	.38	.38	.38	.38	.38
Pocatello, Idaho:																			
July 30	3:45 p.m.	4:12 p.m.	.47	3:47 p.m.	3:58 p.m.	.01	.28	.43	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46
NORTH PACIFIC COAST REGION																			
Portland, Oreg.:																			
Mar. 28	2:05 p.m.	3:55 p.m.	.59	2:21 p.m.	2:42 p.m.	.03	.13	.25	.37	.45	.47	.49	.50	.50	.51	.52	.55	.56	.56	.56
Roseburg, Oreg.:																			
June 25	3:46 p.m.	5:00 p.m.	.44	3:56 p.m.	4:12 p.m.	.01	.14	.27	.36	.39	.40	.41	.41	.42	.42	.43	.43	.43	.43	.43
MIDDLE PACIFIC COAST REGION																			
Eureka, Calif.:																			
Mar. 27	8:41 a.m.	[1] 7:20 a.m.	2.45	4:43 p.m.	5:05 p.m.	1.30	.16	.30	.35	.43	.47	.50	.54	.55	.55	.55	.55	.62	.69	.75
San Francisco, Calif.:																			
Nov. 14	5:31 p.m.	D.N. p.m.	1.09	8:47 p.m.	9:12 p.m.	.43	.16	.29	.42	.55	.62	.63	.64	.65	.65	.65	.65	.66	.66	.66
SOUTH PACIFIC COAST REGION																			
Los Angeles, Calif.:																			
Oct. 17	2:15 p.m.	4:28 p.m.	1.05	3:26 p.m.	3:59 p.m.	.08	.11	.30	.47	.58	.67	.80	.93	.94	.95	.96	.96	.97	.97	.98
	5:03 p.m.	6:08 p.m.	.02																	
ISLAND POSSESSIONS																			
San Juan, P. R.: [4]																			
Jan. 3	5:47 p.m.	D.N. p.m.	4.52	5:52 p.m.	7:13 p.m.	.01	.15	.26	.37	.63	1.00	1.36	1.55	1.75	1.87	2.10	2.56	3.66	3.79	4.26
July 25	12:30 p.m.	2:30 p.m.	1.01	12:56 p.m.	1:22 p.m.	.13	.11	.30	.42	.63	.82	.87	.87	.87	.87	.87	.87	.88	.88	.88
Sept. 26	[2] 9:55 p.m.	8:15 a.m.	4.73	3:41 a.m.	4:04 a.m.	1.24	.32	.64	.92	1.14	1.20	1.20	1.21	1.22	1.22	1.22	1.23	1.28	1.64	1.70
Do	[2] 9:55 p.m.	8:15 a.m.	4.73	6:10 a.m.	6:37 a.m.	3.28	.13	.36	.64	.86	1.14	1.25	1.35	1.39	1.41	1.42	1.43	1.43	1.44	1.45
Oct. 20	12:37 p.m.	1:30 p.m.	1.02	12:40 p.m.	1:00 p.m.	.01	.28	.53	.75	.95	.99	.99	.99	1.00	1.00	1.01	1.01	1.01	1.01	1.01
Nov. 9	12:45 p.m.	4:10 p.m.	1.91	2:00 p.m.	2:36 p.m.	.42	.26	.53	.60	.64	.78	1.10	1.33	1.37	1.39	1.40	1.44	1.45	1.46	1.48
Honolulu, Hawaii:																				
Sept. 11	D.N. a.m.	D.N. a.m.	.74	4:31 a.m.	4:50 a.m.	.10	.11	.34	.54	.60	.62	.62	.62	.63	.63	.64	.64	.64	.64	.64
Nov. 29	D.N. a.m.	D.N. a.m.	.45	4:12 a.m.	4:24 a.m.	.01	.25	.40	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
Dec. 23	D.N. a.m.	9:15 a.m.	1.15	7:40 a.m.	8:43 a.m.	.28	.12	.15	.21	.24	.26	.30	.47	.60	.65	.66	.79	.87	.87	.87

[1] On following date.
[2] On preceding date.
[3] From defective record.
[4] Rate 0.40 inch in 5 minutes or 1.50 inches in 1 hour.
[5] Record from July to December, inclusive.
[6] On Nov. 29.
[7] On June 15.
[8] Continued from line above.

NOTE.—The following stations had no excessive precipitation during the year 1934: West Gulf States, Austin, Tex.; Ohio Valley and Tennessee, Nashville, Tenn., and Elkins, W. Va.; Lower Lake region, Erie, Pa.; Upper Lake region, Escanaba, Mich., and Sault Ste. Marie, Mich.; North Dakota, Devils Lake and Williston, N. Dak.; Northern slope, Helena, Kalispell, and Miles City, Mont., and Sheridan and Yellowstone Park, Wyo.; Middle slope, Denver and Pueblo, Colo.; Southern slope, Del Rio, Tex.; Southern plateau, El Paso, Tex., Albuquerque and Santa Fe, N. Mex., and Yuma, Ariz.; Middle plateau, Winnemucca, Nev., Modena, Utah, and Grand Junction, Colo.; Northern plateau, Baker, Oreg., Walla Walla and Yakima, Wash.; North Pacific coast region, North Head, Seattle, and Tatoosh Island, Wash., and Medford, Oreg.; Middle Pacific coast region, Sacramento, Calif.; South Pacific coast region, Fresno and San Diego, Calif.; and Alaska, Fairbanks and Juneau.

[Excessive precipitation data for the years 1931 and 1932 appeared in the 1933–34 issue of this report.—R. J. M.]

MONTHLY AND ANNUAL EVAPORATION, 1934

The monthly and annual amounts of evaporation during the year 1934 appear below. The number of these reports at the present time is small, records appearing from less than half of the States.

The evaporation measurements are all made from cylindrical pans, 4 feet in diameter, 10 inches deep, placed on framework laid on the ground, and exposed as far as possible to full sunshine. A description of equipment and methods of observation appeared in the Monthly Weather Review of December 1916, pages 674 to 677.

Monthly and annual evaporation at class A stations (in inches and hundredths) for 1934

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
ALABAMA													
Silverhill				(1)									
Fairhope								5.99	4.84	3.69	2.59	1.79	
ARIZONA													
Lee's Ferry	2.47	3.36	7.39	10.04	13.09	13.63	15.73	13.76	9.83	7.07	3.72	1.56	101.60
Mesa	3.52	3.78	6.60	7.75	10.29	10.72	11.52	9.46	7.30	5.67	3.03	2.49	82.14
Roosevelt	1.58	2.26	4.99	7.60	10.16	10.43	10.94	7.48	4.61	3.44	1.82	1.07	66.39
Willcox	4.49	4.42	7.92	9.97	10.06	11.07	10.19	8.11	6.78	6.07	4.19	2.78	86.05
Yuma (citrus)	5.12	5.05	9.99	11.93	15.54	14.37	17.44	14.07	12.32	9.19	5.32	3.81	124.17
Yuma (valley)	4.36	4.64	7.75	9.38	11.93	11.63	14.33	12.10	9.55	7.62	4.45	3.52	101.26
University of Arizona (Tucson)	3.89	4.23	∞08	10.34	13.04	13.80	12.62	10.34	9.73	7.65	3.92	2.79	100.44
CALIFORNIA													
Alvarado (near)	1.07	1.91	3.22	5.54	6.98	7.32	7.99	6.94	5.26	3.66	1.96	1.40	53.26
Chula Vista	3.06	3.23	5.12	6.33	7.86	7.09	7.81	7.77	6.79	4.75	3.50	2.96	66.29
Fall River Mills	.89	1.20	4.12	6.03	8.13	9.42	13.02	11.78	8.40	3.99	1.25	.75	69.00
Oakdale (near)	.75	1.60	2.90	6.90	10.46	11.29	15.15	12.41	9.31	5.28	1.90	1.09	79.03
Tahoe (land pan)				3.37	4.05	3.49	6.16	5.97	4.74	1.98			
Lodi	.97	1.50	3.97	6.93	8.96	9.52	12.72	11.12	7.98	5.00	1.76	1.33	71.75
Davis	1.28	1.60	3.36	5.28	7.17	8.74	11.05	9.56	8.34	4.93	1.85	1.82	65.00
HAWAII													
Hoaeae (Upper)	4.16	3.75	4.88	5.32	6.61	7.39	7.26	7.55	6.31	6.50	4.79	3.74	68.26
Pahala	4.03	4.44	4.88	4.58	5.82	5.69	6.53	5.43	5.07	6.28	4.93	4.23	61.91
IDAHO													
Arrowrock				4.48	6.78	6.91	10.59	9.65	5.35	1.91			
Milner Dam				6.27	8.90	8.41	11.56	10.15	6.42	3.25	1.62		
IOWA													
Ames				6.40	12.11	12.36	10.75	8.58	4.31	4.21	1.39		
KANSAS													
Tribune				9.40	13.54	15.88	15.14	12.40	8.09				
MISSOURI													
Lakeside	1.35		4.00	5.71	7.88	9.02	11.05	8.71	4.58	4.01	2.99	.80	
MONTANA													
Agriculture College				6.08	8.35	7.54	9.70	9.79	4.75	3.28			49.50
Malta					8.94	7.54	10.05	8.44	4.78	2.31			42.07
Sherburne Lake					7.90	7.43	9.60	8.15	6.14	2.02			41.24
Valier					7.17	5.92	8.82	9.30	5.06	3.37			39.64
NEBRASKA													
Lincoln				9.02	14.18	14.19	17.65	11.08	6.30	5.70			
NEVADA													
Lahontan			4.13										
Lamoille			4.02	6.03	7.72	6.63	11.56	10.64	7.36	4.45			
NEW MEXICO													
Agriculture College	3.22	4.99	7.75	11.12	12.93	14.54	14.94	13.10	10.48	7.21	4.68	2.82	107.79
Elephant Butte Dam	3.29	5.23	8.57	11.27	14.78	17.48	16.69	14.08	11.30	8.29	4.94	2.70	118.62
Portales [2]				9.75	11.46	14.67	15.38	12.36	10.25	7.40	4.68	3.16	
NEW YORK													
Ithaca					5.93	6.75	7.06	5.50	4.21	2.04			
Albany					5.53	5.93	6.86	4.85	3.06	2.01			
NORTH CAROLINA													
Chapel Hill	1.41	3.10	3.07	4.58	5.28	6.55	5.66	4.79	3.58	2.90	2.33	1.59	44.84

[1] Silverhill equipment moved to Fairhope April 1934.
[2] Moved from Santa Fe to Portales.

NOTE.—No records made for Alaska in 1934.

Monthly and annual evaporation at class A stations (in inches and hundredths) for 1934—Continued

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
OHIO													
Ohio State University				2.92	5.36	6.66	7.04	5.06	3.32	2.16			
Wooster					6.06	7.21	6.38	5.26	4.03	2.43			
OREGON													
Corvallis				3.28	3.98	5.88	6.38	6.55	4.04				
Fish Lake						5.50	7.29	6.95					
Warm Springs				6.90	10.20	9.67	14.10	11.71	7.57				
PUERTO RICO													
San Juan	4.41	4.26	6.12	7.06	7.34	7.45	7.22	7.10	4.84	5.34	5.32	5.61	72.27
TEXAS													
Dilley	2.78	4.11	6.22	7.07	9.52	11.44	11.50	10.91	7.95	5.77	4.26	2.62	84.16
Austin	2.37	3.11	4.98	5.97	7.63	10.09	10.73	10.09	7.10	6.18	3.86	2.26	74.37
UTAH													
Myton					7.83	7.58	9.31	7.23	6.10	1.83			
Piute Dam					11.10	11.13	13.07	9.29	8.74	4.66			
Utah Lake				8.48	11.74	10.26	13.05	11.02	8.26	5.02			
VIRGIN ISLANDS													
St. Croix	4.74	4.68	5.95	6.50	6.94	6.35	7.24	7.43	7.13	6.82	7.33	7.11	78.22
WASHINGTON													
Lake Kachess					3.56	4.79	5.43	4.66	2.05	.57			
Walla Walla			3.18	4.96	6.27	7.68	10.37	8.81	5.70	2.60			
WEST VIRGINIA													
Clarksburg				3.60	6.01	7.11	7.05	4.69	3.58	2.62			

PART III. ANNUAL METEOROLOGICAL SUMMARIES FOR ONE HUNDRED AND EIGHTY-ONE STATIONS FOR 1934

EXPLANATION OF THE TABLES

For a detailed account of the method of reducing the observed barometric pressures the reader is referred to the report on the barometry of the United States, Canada, and the West Indies, to be found in the Annual Report of the Chief of the Weather Bureau, 1900–1901, volume II.

Pressure.—Two mercurial barometers of the well-known Fortin cistern pattern, or a modified form thereof, are furnished each station. One of these, the station barometer, is used in making all regular observations; the other, the extra, is held in reserve for use in case of emergency, except that monthly comparative readings are made on the two instruments for purpose of check upon the deterioration of either instrument.

Each barometer, before issue to station, is compared with the substandard at Washington, and a certificate of correction card furnished showing the several constant corrections that must be applied to the readings of the instrument in order to derive therefrom the actual pressure of the air in standard units at a specified elevation. Each observation as made, therefore, is corrected by the application of the following:

(1) Correction for scale error, capillarity, etc.

(2) Correction to standard gravity, comprising both latitude and altitude terms.

(3) Correction for removal—a correction applied if any change has been made in the elevation of the barometer, to reduce the readings to the elevation adopted in 1900. (However, at a very few stations the elevation of 1900, or the original elevation of a station opened since 1900, has been replaced as the "station elevation" by an actual elevation since established.)

Corrections 1, 2, and 3 are constant for any one station and are combined in a single sum.

(4) Correction for the temperature of the scale and mercurial column.

In the pressure columns of this part the values presented are those at the station elevations of the barometer cisterns, which are at various heights above the ground level, but usually less than 100 feet. On the other hand, daily weather maps and most other pressure data issued by the Bureau indicate sea-level pressures.

The monthly mean pressures given in the summary are deduced from the corrected observations of pressure at 8 a. m. and 8 p. m., seventy-fifth meridian time, by taking the mean thereof and applying thereto a correction to reduce to the mean of 24-hourly observations. At several Alaska stations and at Honolulu the mean is printed uncorrected. The extremes are determined, wherever possible, from the barograph trace.

Temperature.—The temperature of the air at 8 a. m. and 8 p. m., seventy-fifth meridian time, and at noon, local time, is obtained by the use of the whirled dry-bulb thermometer. The latter is a part of the whirled psychrometer and is mounted in the thermometer shelter adopted in 1885. The means of these observations are given in the columns headed 8 a. m., 8 p. m., and noon, respectively.

The maximum temperature is obtained by the use of the Negretti and Zambra mercurial thermometer, having a constriction in the bore of the tube below the scale. The minimum temperature is obtained by the use of the ordinary Rutherford alcohol minimum thermometer. Both instruments are read and the values recorded twice daily, at 8 a. m. and 8 p. m., seventy-fifth meridian time, and are set twice daily at 8 a. m. and 8 p. m. The extremes given in the summaries are for the civil day, midnight to midnight, normal standard time. The monthly means have been obtained by dividing the sum of the mean maximum and mean minimum temperatures by 2.

Moisture.—The monthly means of the dew point, relative humidity, and vapor pressure are given as computed directly from the original daily observations.

The rain gages used at the regular Weather Bureau stations have a circular catchment area of about 8 inches diameter, and the snow, hail, or sleet caught within them is melted and measured as water. The rain gage proper is set within an enclosing cylinder, which serves as an overflow attachment in the case of heavy rains and as a snow gage in the winter season.

The sum total of the depth of rain and melted snow is measured to within 0.01 inch at 8 a. m. and 8 p. m., seventy-fifth meridian time, daily. The total precipitation is determined from the amounts recorded daily, midnight to midnight, standard of time in local use.

The snow caught and retained in the gage is melted and measured as water. No correction is applied for snow that is lost out of the gage by the eddying action of the wind; consequently in some cases the record is less than would be given if the observer had measured cylinders of snow cut from the spots representing the average snowfall on the ground. When it is known that the catch of the snow gage is markedly at fault, an independent ground measurement is made and used as the official record. The loss of both rain and snow

caused by high winds, from gages exposed on the roofs of tall buildings in which some of the regular stations of the Weather Bureau are located is undoubtedly larger than is the case at the cooperative stations where the gages are located in the open country and near the ground, but this loss does not appear to be sufficient to make the monthly sums derived from these two classes of stations wholly inconsistent with each other.

By the maximum precipitation in 24 hours is meant the greatest measurement for any 24 consecutive hours; it does not refer to the rate of rainfall for 24 hours, as deduced from short, heavy showers.

The number of days with precipitation amounting to 0.01 and 0.04 inch, respectively, relates to the rainfall from midnight to midnight, standard of time in local use. No record is made of deposits of dew.

The total snowfall column presents the depth as unmelted snow. The month in this instance runs from the last observation of the preceding month to the last of the month itself.

The cloudiness recorded in the summaries is derived from personal observations. The proportion of sky covered by clouds is estimated by the observer at 8 a. m., 8 p. m., and noon, on a scale of 0–10. These observations cannot be combined into a daily mean in the present state of our knowledge of the diurnal variations in cloudiness, and are therefore given separately. In order, however, to obtain a general record of the sunshine as affecting the growth of plants, the observer keeps some memoranda of the cloudiness, sufficient to enable him at the end of the day to determine the average cloudiness on the scale given above from sunrise to sunset; the resulting average for each month is given in the column of "daylight" cloudiness.

The number of days that were clear, as given under "Number of days, etc.", includes those on which the daylight cloudiness was 0, 1, 2, or 3 tenths; the days partly cloudy were those on which the daylight cloudiness was 4, 5, 6, or 7 tenths; the cloudy days were those having 8, 9, or 10 tenths of cloudiness during daylight.

Wind.—The direction and velocity of the wind are recorded at nearly all the stations on what is known as the "triple register." On these instruments the direction of the wind is recorded every minute. The maximum velocities given are for 5-minute periods.

Beginning with January 1, 1932, the Weather Bureau began the practice of applying corrections to all records of wind velocity obtained from rotating cup anemometers. Correction tables for both 3-cup and 4-cup anemometers have been made available to stations and hence values furnished to the public are on a comparable basis, regardless of the particular instrument employed.

Number of days.—The number of days with hail includes all of those on which at least a trace of hail fell.

The number of days with dense fog includes all of those on which fog was dense enough to obscure objects 1,000 feet distant. Fog of less density is recorded as light.

Time.—8 a. m. and 8 p. m., in this part, indicate seventy-fifth meridian time, except in a few instances, where footnotes specify otherwise.

References and abbreviations.—H_b=height of barometer cistern above mean sea level on January 1, 1900, or when the station was established, if it was established since January 1, 1900, that being the elevation to which all previous readings have been reduced. It is designated as the "station, or adopted elevation." At almost all stations where a change has been made in the elevation of the barometer since January 1, 1900, a corresponding correction has been applied to the observed reading, thereby reducing all values to the "station, or adopted elevation." The actual elevation and the station, or adopted elevation, are identical, except at stations where the barometer has been moved since January 1, 1900; h_t=height of thermometer above ground; h_r=height of rain gage above ground; h_a=height of anemometer above ground.

ANNUAL METEOROLOGICAL SUMMARIES, 1934

Annual meteorological summaries for the year ending Dec. 31, 1934

ABILENE, TEX.

[ϕ=32°23′ N.; λ=99°40′ W.]

Month	Pressure			Temperature							Moisture														
		Extremes		Mean						Extremes	Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.30	28.63	28.01	39.0	53.0	51.1	58.5	36.5	47.5	75	24	32	33	33	78	50	54	0.192	0.197	0.199	0.34	0.19	0.0	4.0	3.8	4.0	3.7
February	28.31	28.68	27.82	39.8	53.5	53.3	60.9	36.8	48.8	80	17	31	30	30	70	46	46	.181	.179	.180	.77	.32	T	6.1	5.9	4.6	5.6
March	28.26	28.78	27.88	43.7	61.1	60.5	68.1	40.7	54.4	92	25	33	34	31	70	44	41	.202	.208	.183	3.23	1.63	.2	4.6	3.2	4.3	4.1
April	28.15	28.52	27.74	56.5	72.4	71.0	77.5	54.5	66.0	92	41	48	49	47	75	47	47	.348	.360	.340	2.61	.74	.0	4.3	4.2	4.7	4.6
May	28.15	28.41	27.89	63.5	83.2	81.4	87.9	61.5	74.7	101	45	54	51	51	72	36	39	.424	.384	.388	1.45	.89	.0	4.1	3.7	2.9	3.7
June	28.07	28.30	27.82	75.3	93.1	93.5	98.1	73.5	85.8	106	66	62	57	54	65	31	27	.567	.478	.417	.46	.26	.0	2.6	2.3	2.7	2.3
July	28.15	28.35	27.95	75.9	94.3	94.9	99.7	74.6	87.2	104	68	63	57	53	66	30	26	.585	.473	.416	.52	.44	.0	1.9	2.9	2.7	2.4
August	28.18	28.36	27.94	75.6	92.6	92.8	98.2	75.0	86.6	104	63	64	62	57	69	38	32	.609	.562	.469	.15	.14	.0	4.0	3.6	2.7	3.3
September	28.16	28.52	27.88	66.9	83.9	83.3	89.8	64.8	77.3	99	53	56	55	53	70	40	38	.481	.461	.420	.80	.85	.0	4.5	3.5	2.7	3.5
October	28.23	28.58	27.97	60.2	83.2	77.6	87.2	59.0	73.1	95	42	47	46	44	64	29	32	.356	.338	.307	.18	.13	.0	1.6	1.1	1.1	1.4
November	28.20	28.62	27.72	51.5	66.1	61.4	69.9	48.8	59.4	89	32	40	41	41	69	44	52	.277	.283	.279	2.45	1.59	.2	3.3	4.7	2.4	3.8
December	28.31	28.78	27.94	41.7	55.3	51.6	59.3	37.4	48.4	73	26	34	32	32	73	43	49	.206	.195	.193	.39	.17	.0	5.3	5.5	4.7	5.5
Year	28.21	28.78	27.72	57.5	74.3	72.7	79.6	55.3	67.4	106	17	47	46	44	70	40	40	.369	.343	.316	15.41	1.63	.4	3.9	3.7	3.3	3.7

ALBANY, N. Y.

[ϕ=42°39′ N.; λ=73°45′ W.]

January	30.00	30.59	28.98	22.5	27.4	26.5	33.0	17.4	25.2	50	−6	18	20	19	80	72	72	0.111	0.122	0.114	2.36	0.97	5.5	7.2	7.0	7.2	7.5
February	30.06	30.79	29.63	7.2	14.6	14.8	21.9	2.3	12.1	42	−20	−1	2	3	68	56	58	.045	.051	.055	2.68	1.31	23.7	4.5	4.7	4.3	4.8
March	30.06	30.60	29.38	27.2	35.5	33.9	41.8	22.9	32.4	58	3	21	23	24	76	59	65	.122	.133	.133	3.13	1.23	5.2	4.7	6.6	6.6	6.2
April	29.89	30.55	29.18	42.9	51.3	49.5	57.2	37.8	47.5	75	27	34	35	35	71	56	59	.200	.209	.209	2.82	1.08	.1	4.5	5.5	5.2	5.5
May	29.88	30.40	29.40	56.7	66.9	64.7	72.7	49.8	61.2	89	37	48	50	48	74	57	58	.354	.376	.357	2.56	1.03	.0	3.7	5.1	5.3	4.9
June	29.78	30.31	29.47	66.2	74.8	72.2	79.5	60.0	69.8	94	46	58	60	59	77	62	65	.501	.530	.511	5.75	2.64	.0	5.1	5.1	6.1	5.5
July	29.84	30.28	29.56	70.0	79.4	76.9	84.8	64.1	74.4	94	54	60	59	61	72	52	61	.536	.514	.558	2.08	1.35	.0	5.8	5.1	5.0	5.3
August	29.93	30.38	29.58	63.0	72.3	69.3	77.1	58.2	67.6	89	45	54	54	53	73	54	68	.430	.434	.465	2.76	.81	.6	5.0	5.3	4.6	5.1
September	30.01	30.41	29.61	61.4	70.5	67.6	74.6	57.9	66.2	85	47	58	61	60	88	73	76	.484	.547	.519	5.82	2.65	.0	7.0	6.3	5.9	6.7
October	29.93	30.43	29.43	43.5	52.6	50.4	57.2	40.4	48.8	75	32	39	43	42	86	72	73	.248	.293	.276	1.43	.56	T	5.0	6.0	5.8	5.5
November	30.02	30.62	29.27	41.7	46.5	44.6	50.1	37.7	43.9	65	20	37	38	38	83	72	77	.235	.244	.245	2.26	.70	T	8.6	8.0	6.6	8.4
December	29.96	30.43	28.97	23.4	27.5	27.4	33.2	18.9	26.6	67	1	18	19	18	77	70	66	.113	.122	.107	1.93	.99	3.8	6.9	7.2	7.2	7.0
Year	29.95	30.79	28.97	43.8	51.6	49.8	56.9	39.0	47.9	94	−20	37	39	39	77	63	66	.282	.298	.297	36.48	2.65	38.3	5.7	6.0	5.8	6.0

ALBUQUERQUE, N. MEX.

[ϕ=35°05′ N.; λ=106°43′ W.]

January	25.13	25.47	24.85	23.5	45.3	41.3	51.0	19.7	35.4	69	9	16	23	20	72	41	41	0.090	0.124	0.108	0.06	0.06	0.1	1.7	2.1	1.5	2.1
February	25.09	25.38	24.72	33.2	52.8	52.4	58.5	29.3	43.9	66	21	25	29	27	70	40	38	.135	.158	.148	.04	.03	T	4.1	5.0	5.2	5.0
March	25.08	25.54	24.77	34.9	61.0	62.9	67.0	31.6	49.3	79	19	22	27	25	59	28	25	.121	.145	.134	.01	.01	T	3.8	4.5	4.6	3.7
April	25.02	25.31	24.61	43.5	67.9	67.4	72.7	40.7	56.7	83	19	30	34	31	60	31	30	.175	.205	.186	.13	.12	.0	3.2	5.0	5.7	4.8
May	25.04	25.35	24.74	53.0	78.7	77.3	83.3	50.9	67.1	92	40	38	41	39	60	28	28	.241	.262	.241	.72	.24	.0	3.7	4.8	6.3	4.9
June	24.99	25.24	24.74	57.9	83.2	85.1	88.8	55.3	72.0	96	46	34	31	30	43	17	17	.211	.184	.183	.37	.25	.0	2.8	1.9	4.6	3.1
July	25.09	25.36	24.86	65.5	78.8	89.3	94.8	64.2	79.5	102	58	50	49	45	60	26	24	.369	.249	.307	.61	.18	.0	3.1	1.8	6.7	4.1
August	25.10	25.27	24.90	65.6	84.8	84.4	90.6	63.7	77.2	101	57	53	52	50	66	36	35	.407	.400	.365	2.10	1.02	.0	4.1	3.4	7.6	4.9
September	25.07	25.35	24.86	55.4	74.6	75.7	80.9	53.4	67.2	93	44	46	48	46	73	40	38	.324	.338	.317	1.08	.58	.0	2.4	2.5	4.5	3.2
October	25.14	25.42	24.73	44.8	69.0	65.8	75.3	42.1	58.7	85	31	34	43	41	66	40	42	.203	.282	.269	.24	.19	.0	1.5	2.3	2.4	2.3
November	25.08	25.41	24.66	33.7	52.1	48.3	58.0	30.8	44.4	76	14	27	32	33	76	49	57	.149	.184	.192	.84	.33	3.0	2.4	4.8	4.4	4.5
December	25.15	25.45	24.79	26.0	43.0	38.5	49.0	22.9	36.0	57	12	20	25	24	78	49	54	.112	.138	.131	.78	.55	.0	2.7	5.2	4.2	4.5
Year	25.08	25.54	24.61	44.8	65.9	65.7	72.5	42.0	57.3	102	9	33	36	34	65	35	36	.211	.222	.215	6.98	1.02	3.1	3.0	3.6	4.8	3.9

ALPENA, MICH.

[ϕ=45°05′ N.; λ=83°30′ W.]

January	29.35	29.89	28.58	23.3	26.2	25.3	31.5	19.3	25.4	43	−7	20	20	21	84	75	83	0.112	0.114	0.124	1.00	0.18	9.4	8.7	8.8	8.2	8.7
February	29.53	30.33	28.60	4.4	14.0	10.3	19.5	−1.8	8.8	37	−28	−1	3	1	78	58	64	.047	.053	.049	.78	.54	11.5	5.8	5.3	2.8	5.1
March	29.44	29.92	28.68	19.3	27.1	24.8	30.3	13.6	22.0	47	−3	15	16	18	81	64	74	.094	.105	.107	2.22	.94	15.9	6.6	5.7	6.8	6.4
April	29.23	29.74	28.67	35.2	41.8	38.5	46.0	30.1	38.0	81	19	29	28	29	77	62	71	.158	.157	.163	2.10	.80	5.1	6.7	7.6	6.3	7.2
May	29.32	29.67	28.89	51.4	59.2	53.4	66.2	41.6	53.9	85	28	40	40	40	67	53	62	.258	.261	.255	1.75	1.36	T	4.2	4.4	3.5	4.5
June	29.23	29.73	28.83	60.4	66.2	64.2	72.5	52.6	62.6	98	41	52	52	53	76	63	69	.400	.398	.410	3.03	.83	.0	4.8	5.5	4.0	4.7
July	29.32	29.70	28.97	65.5	73.1	69.6	76.7	57.0	66.8	93	48	57	58	57	74	60	65	.467	.486	.470	3.22	1.35	.0	3.1	2.6	2.9	3.1
August	29.37	29.66	28.93	58.9	68.8	64.2	71.8	51.6	61.7	90	39	52	53	52	79	59	65	.407	.432	.400	1.38	.38	.0	4.1	4.2	4.3	4.1
September	29.35	29.78	28.86	55.5	62.1	58.1	65.2	51.2	58.2	83	38	53	54	54	91	76	86	.412	.436	.429	4.12	.78	.0	6.4	6.8	6.7	7.1
October	29.37	29.82	28.90	44.7	52.5	46.9	54.6	39.4	47.0	69	27	40	38	39	83	60	75	.255	.244	.247	1.57	.82	1.6	5.5	5.2	4.1	5.3
November	29.34	29.87	28.60	37.5	41.3	39.8	44.5	34.9	39.7	58	26	34	34	34	87	77	80	.199	.206	.204	2.57	.67	2.8	8.2	8.2	7.2	8.6
December	29.36	29.78	28.73	22.3	25.4	24.0	28.8	17.0	22.9	43	2	18	19	18	82	74	76	.098	.104	.101	1.48	.41	16.8	9.1	7.7	8.0	8.4
Year	29.35	30.33	28.58	39.9	46.5	43.3	50.6	33.9	42.2	98	−28	34	35	35	80	65	72	.242	.250	.247	25.22	1.36	68.1	6.1	6.0	5.4	6.1

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

ABILENE, TEX.

[H_b=1,738 ft.; h_t=10 ft.; h_r=3 ft.; h_a=52 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.6	S.	27	NW.	0	10	5	5	2	16	6	7	10	1	20	3	8	5	2	0	0	0	3	2	0	0	9	1	0
February	10.1	S.	31	S.	0	10	6	5	7	11	7	5	5	0	10	6	12	4	3	2	0	0	4	0	0	1	0	7	2	0
March	11.2	S	31	S.	0	9	10	2	3	21	3	5	9	0	17	6	8	6	5	2	1	0	0	0	0	2	7	3	0
April	10.4	S.	38	S.	1	6	9	9	6	21	5	2	2	0	14	8	8	11	7	0	0	0	0	0	0	2	0	7	0
May	9.4	S.	25	S.	0	7	6	6	14	20	3	0	5	1	19	5	7	5	4	0	0	0	0	0	0	12	0	6	0
June	11.1	S.	29	N.	0	0	1	1	16	41	0	1	0	0	23	5	2	5	4	0	0	0	0	0	0	28	0	3	0
July	9.9	S.	28	SE.	0	0	2	3	11	43	3	0	0	0	24	3	4	3	3	0	0	0	0	0	0	31	0	3	0
August	9.6	S.	22	S.	0	4	1	3	14	36	3	1	0	0	17	9	5	2	1	0	0	0	0	0	0	30	0	4	0
September	11.1	S.	26	S.	0	3	7	3	6	30	8	0	3	0	17	11	2	3	2	0	0	0	0	0	0	19	0	3	0
October	9.2	S.	27	S.	0	4	2	1	10	33	6	2	4	0	27	3	1	2	2	0	0	0	0	0	0	7	0	0	0
November	10.0	S.	28	S.	0	4	1	2	8	24	8	6	7	0	16	8	6	6	5	1	1	0	0	0	0	1	2	0	0
December	8.8	S.	31	W.	0	14	4	3	7	15	12	3	4	0	11	7	13	3	3	0	0	0	0	0	0	7	0	0	0
Year	10.0	S.	38	S.	1	71	54	43	104	311	64	32	49	2	215	74	76	55	41	5	2	0	7	2	1	131	31	34	0

ALBANY, N. Y.

[H_b=97 ft.; h_t=107 ft.; h_r=100 ft.; h_a=115 ft.]

January	7.9	S.	24	N.	0	18	1	3	1	20	2	6	11	0	5	4	22	11	7	24	6	0	15	2	11	0	24	0	0
February	8.6	S.	26	SW.	0	13	2	1	0	18	0	8	14	0	13	6	9	11	8	14	11	0	6	0	22	0	28	0	1
March	8.3	S.	22	W.	0	19	4	3	2	19	0	7	8	0	9	6	16	13	12	13	8	0	13	1	5	0	25	0	1
April	8.4	S.	25	S.	0	7	3	4	2	25	0	10	9	0	10	8	12	12	9	4	3	0	14	1	0	0	3	1	0
May	7.3	S.	26	SE.	0	17	1	2	2	25	4	6	5	0	11	13	7	9	7	0	0	0	9	0	0	0	0	3	1
June	8.2	S.	27	NW.	0	8	4	1	1	29	3	6	8	0	7	15	8	14	9	0	0	0	10	0	0	4	0	8	0
July	6.8	S.	21	SE.	0	12	1	0	3	36	2	5	3	0	10	10	11	8	6	0	0	3	10	1	0	6	0	6	0
August	7.0	S.	22	S.	0	11	2	3	0	28	4	8	6	0	11	13	7	8	8	0	0	0	8	1	0	0	0	2	0
September	6.9	S.	23	S.	0	7	1	0	2	35	1	5	8	1	5	10	15	14	13	0	0	0	15	3	0	0	0	1	0
October	7.5	S.	24	NE.	0	17	3	1	0	20	3	5	12	1	12	6	13	6	6	3	0	0	15	4	0	0	0	0	0
November	7.8	S.	25	S.	0	13	2	1	2	29	1	5	7	0	1	3	26	14	10	5	1	0	12	1	0	0	7	0	0
December	7.8	S.	27	SW.	0	13	3	1	2	14	5	10	14	0	6	7	18	10	7	20	8	0	7	1	15	0	25	0	1
Year	7.7	S.	27	SW.	0	155	27	20	17	298	25	81	105	2	100	101	164	130	102	83	37	3	134	15	53	10	112	21	4

ALBUQUERQUE, N. MEX.

[H_b=4,972 ft.; h_t=5 ft.; h_r=15 ft.; h_a=39 ft.]

January	6.4	N.	29	NW.	0	20	2	1	6	3	5	7	17	1	24	6	1	1	1	3	1	0	0	0	0	0	31	0	0
February	8.1	N.	33	NW.	2	17	4	2	2	8	7	9	6	1	8	14	6	2	0	1	0	0	0	0	0	0	22	1	0
March	9.7	N.	42	NW.	8	18	1	3	7	7	2	7	17	0	16	11	4	1	0	1	1	0	0	0	0	0	16	0	0
April	10.0	N.	43	NW.	4	12	7	2	6	4	11	9	9	0	9	17	4	2	1	0	0	1	0	0	0	0	6	3	0
May	9.8	N.	41	W.	7	19	4	4	7	5	6	9	8	0	10	14	7	5	4	0	0	0	0	0	0	3	0	10	0
June	9.7	SE.	37	S.	7	19	4	3	14	5	2	9	4	0	18	9	3	4	3	0	0	0	0	0	0	15	0	6	0
July	9.5	N.	39	NE.	6	14	3	4	8	11	8	5	8	1	11	18	2	8	5	0	0	0	0	0	0	20	0	15	0
August	8.2	N.	34	SE.	2	18	4	4	12	8	1	4	11	0	10	16	5	8	6	0	0	0	0	0	0	22	0	11	0
September	7.6	N.	40	NW.	2	18	2	2	12	6	5	8	7	0	17	8	5	6	4	0	0	0	0	0	0	2	0	7	0
October	7.3	N.	32	NW.	1	22	4	2	4	9	5	4	11	1	22	6	3	4	2	0	0	0	1	1	0	0	2	1	0
November	7.1	N.	38	NW.	3	12	5	3	2	4	7	9	15	3	11	13	6	9	6	5	4	0	2	1	0	0	15	2	0
December	6.5	N.	34	W.	1	16	6	2	1	3	6	12	14	2	13	12	6	4	3	0	0	0	4	2	0	0	28	0	0
Year	8.3	N.	43	NW.	43	205	46	32	81	73	65	92	127	9	169	144	52	54	35	10	6	1	7	4	0	71	120	56	0

ALPENA, MICH.

[H_b=609 ft.; h_t=13 ft.; h_r=4 ft.; h_a=89 ft.]

January	12.5	NW.	37	NW.	2	6	0	2	9	9	13	7	16	0	1	8	22	16	8	23	15	0	4	2	11	0	30	0	0
February	11.4	NW.	31	NW.	0	4	2	1	1	11	4	12	21	0	11	7	10	11	5	15	11	0	0	0	23	0	28	0	0
March	11.5	NW.	31	SW.	0	4	3	4	6	13	9	7	16	0	7	9	15	10	6	19	8	0	1	2	16	0	30	1	0
April	12.5	NW.	30	SW.	0	0	2	4	13	7	5	10	19	0	3	12	15	15	9	10	6	0	2	3	2	0	21	1	0
May	10.9	NW.	32	NW.	2	4	1	2	17	10	6	1	21	0	13	12	6	8	5	1	0	0	0	0	0	0	2	2	0
June	10.0	NW.	30	NW.	0	4	4	5	12	5	3	6	20	1	11	14	5	10	9	0	0	0	0	0	0	2	0	8	0
July	9.7	NW.	25	NW.	0	3	4	7	11	8	4	3	22	0	20	6	5	8	5	0	0	0	0	0	0	3	0	8	0
August	10.1	NW.	34	S.	1	5	3	6	6	10	7	9	16	0	14	13	4	12	10	0	0	1	0	0	0	0	0	5	0
September	9.6	SE.	32	SW.	1	6	6	4	7	12	6	7	11	1	5	10	15	14	12	0	0	0	7	5	0	0	0	7	0
October	12.0	NW.	34	SE.	2	4	3	8	7	6	12	8	14	0	13	7	11	8	6	5	3	0	2	1	0	0	10	1	0
November	12.4	NW.	34	SE.	2	5	4	3	9	12	11	5	10	1	1	4	25	17	11	7	5	0	8	2	0	0	13	0	0
December	11.9	NW.	35	NW.	3	5	3	2	1	11	9	11	20	0	2	5	24	18	7	23	17	0	0	0	23	0	31	0	0
Year	11.2	NW.	37	NW.	13	50	35	48	99	114	89	86	206	3	101	107	157	147	93	103	65	2	24	15	75	5	155	33	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

AMARILLO, TEX.

[ϕ=35°13′ N.; λ=101°50′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	26.32	26.76	25.99	30.0	48.6	46.3	54.5	27.5	41.0	72	18	18	21	20	61	36	37	0.098	0.113	0.110	0.09	0.08	0.8	2.1	2.5	2.5	2.5
February	26.34	26.68	25.83	31.7	48.1	48.2	55.6	29.1	42.4	81	5	19	24	24	59	41	42	.108	.131	.133	.09	.08	.1	4.7	4.8	3.8	4.8
March	26.32	26.81	25.92	36.6	55.0	56.4	63.9	34.3	49.1	84	18	24	26	25	64	40	37	.134	.145	.138	2.83	2.06	21.5	4.8	4.2	4.7	4.3
April	26.25	26.62	25.86	49.1	68.0	68.2	73.6	47.9	60.8	89	37	34	32	32	59	28	30	.205	.185	.189	.77	.30	.0	4.8	3.6	3.9	4.1
May	26.27	26.68	25.97	57.9	76.1	76.3	81.9	55.9	68.9	94	40	46	46	46	68	39	39	.326	.321	.322	3.21	1.28	.0	4.4	4.2	4.5	4.1
June	26.20	26.50	25.99	67.7	87.8	86.9	92.9	66.3	79.6	103	56	53	51	49	61	30	31	.405	.379	.361	1.94	.55	.0	2.1	2.3	4.6	2.9
July	26.29	26.55	26.06	71.7	92.9	92.3	97.2	71.0	84.1	105	64	52	50	50	52	25	25	.397	.369	.361	.19	.11	.0	2.7	2.6	3.5	2.9
August	26.32	26.52	26.11	70.6	87.5	88.8	93.2	69.7	81.4	104	57	55	55	55	61	37	36	.437	.435	.434	1.51	1.09	.0	4.3	4.0	4.0	4.4
September	26.28	26.65	26.04	57.9	77.5	76.4	84.7	55.5	70.1	96	40	48	46	45	72	34	36	.356	.320	.315	.96	.54	.0	4.3	2.3	3.4	3.6
October	26.33	26.74	25.98	53.0	74.3	71.3	80.4	51.5	66.0	95	34	38	38	37	60	31	32	.250	.247	.243	.21	.17	.0	2.8	2.1	2.0	2.3
November	26.27	26.74	25.78	41.3	56.9	54.3	63.0	39.5	51.2	86	23	32	32	32	71	44	47	.183	.190	.187	1.13	.59	.9	5.0	4.5	4.5	4.8
December	26.33	26.79	25.85	32.2	48.8	45.8	54.0	30.1	42.0	67	19	23	24	25	67	38	43	.123	.127	.133	.40	.40	3.0	2.7	4.8	3.9	4.2
Year	26.29	26.81	25.78	50.0	68.5	67.6	74.6	48.2	61.4	105	5	37	37	37	63	35	36	.252	.247	.244	13.33	2.06	26.3	3.7	3.5	3.8	3.7

ASHEVILLE, N. C.

[ϕ=35°36′ N.; λ=82°32′ W.]

January	27.77	28.00	27.24	34.9	45.0	41.4	50.0	31.3	40.6	69	0	29	28	28	79	54	61	0.177	0.175	0.168	1.66	0.65	T	5.0	5.0	4.3	5.6
February	27.74	28.28	27.25	27.5	39.4	36.2	45.1	23.6	34.4	66	6	20	21	21	74	48	55	.115	.118	.118	3.04	2.08	5.0	5.6	5.8	5.0	5.7
March	27.76	28.17	27.30	37.9	51.3	47.9	57.2	32.6	44.9	76	14	33	35	34	82	60	63	.199	.224	.212	5.07	1.34	.4	5.8	5.2	4.5	5.9
April	27.66	28.13	27.19	49.1	62.2	57.2	66.8	43.5	55.2	82	29	40	40	42	73	48	60	.268	.271	.281	2.89	.99	.5	4.8	6.1	5.9	5.8
May	27.70	28.06	27.25	57.6	71.9	67.3	76.7	51.7	64.2	87	41	50	48	49	76	46	55	.363	.345	.362	2.29	.83	.0	3.6	4.9	4.6	5.0
June	27.69	27.89	27.43	66.6	79.6	73.4	84.4	60.9	72.6	94	54	62	61	62	86	55	71	.556	.549	.569	5.50	1.83	.0	4.9	5.1	6.4	5.1
July	27.74	27.95	27.56	69.9	83.3	75.4	87.8	65.5	76.6	95	64	67	66	66	89	58	75	.653	.650	.653	4.50	.90	.0	6.4	5.5	7.4	6.6
August	27.78	28.01	27.64	68.5	79.6	73.0	83.2	64.5	73.8	90	54	65	64	66	88	60	78	.620	.604	.636	1.59	.64	.0	7.3	7.5	8.0	6.6
September	27.77	28.04	27.53	61.3	76.8	69.5	80.7	58.1	69.4	87	46	58	58	60	91	54	74	.496	.489	.532	3.90	1.40	.0	5.3	5.2	5.1	5.7
October	27.78	28.03	27.52	48.1	65.3	58.8	69.6	45.4	57.5	79	26	44	44	46	88	51	64	.308	.311	.332	3.57	2.13	.0	4.2	3.8	2.8	3.9
November	27.79	28.05	27.44	41.6	55.8	50.0	59.9	37.3	48.6	74	23	36	35	37	80	51	64	.229	.229	.241	4.53	1.19	T	5.2	4.2	4.2	4.6
December	27.75	28.09	27.14	31.6	41.5	38.0	46.2	28.1	37.2	64	8	26	27	27	80	58	66	.149	.155	.156	1.78	.62	.6	6.5	6.0	5.6	6.3
Year	27.74	28.28	27.14	49.6	62.6	57.3	67.3	45.2	56.2	95	0	44	44	45	82	54	66	.344	.343	.355	40.32	2.13	6.5	5.4	5.4	5.3	5.6

ATLANTA, GA.

[ϕ=33°39′ N.; λ=84°26′ W.]

January	28.92	29.12	28.50	40.6	47.9	47.6	52.7	37.8	45.2	68	7	36	38	39	84	69	74	0.233	0.244	0.257	2.72	0.85	0.0	5.0	5.0	4.6	5.4
February	28.89	29.42	28.40	33.2	42.7	42.8	49.0	30.9	40.0	66	13	28	33	33	81	70	69	.157	.194	.195	4.65	2.11	4.0	4.1	4.6	4.0	4.5
March	28.89	29.30	28.40	44.6	54.7	52.4	61.0	39.7	50.4	76	20	40	44	43	83	69	72	.263	.305	.290	4.07	2.27	.5	4.8	4.5	4.1	5.1
April	28.78	29.17	28.36	55.5	65.5	64.8	70.2	51.1	60.6	84	36	46	47	48	82	56	58	.328	.354	.352	3.08	.96	.0	3.8	5.5	4.6	5.3
May	28.78	29.15	28.35	63.3	73.3	72.5	77.7	60.4	69.0	85	52	56	56	56	78	58	59	.458	.470	.402	3.26	.92	.0	4.3	5.0	4.7	4.8
June	28.76	28.96	28.51	73.3	82.0	79.8	87.0	69.1	78.0	95	61	65	64	65	77	57	64	.626	.604	.625	4.19	1.26	.0	4.4	5.5	4.7	5.1
July	28.81	29.02	28.65	74.7	83.6	80.3	89.0	70.9	80.0	96	66	69	68	68	84	62	69	.712	.699	.697	5.49	1.82	.0	5.6	6.8	6.5	6.5
August	28.85	29.06	28.69	73.1	82.8	79.9	86.6	70.1	78.4	92	64	69	69	70	87	64	72	.713	.716	.729	3.32	1.31	.0	6.2	7.4	6.2	7.0
September	28.83	29.11	28.64	66.9	79.1	75.7	83.3	64.3	73.8	89	54	62	61	61	84	55	62	.556	.539	.551	4.68	1.24	.0	4.4	5.5	3.9	4.8
October	28.86	29.10	28.61	57.2	69.3	66.4	72.8	55.4	64.1	81	40	50	49	51	77	52	60	.375	.379	.394	5.34	3.46	.0	3.7	4.2	2.4	3.9
November	28.90	29.22	28.58	47.8	58.6	55.9	63.0	44.9	54.0	78	30	40	43	44	76	60	66	.271	.300	.300	1.66	.90	.0	3.4	4.2	4.2	4.0
December	29.11	29.42	28.65	36.8	46.1	41.6	50.1	32.7	41.4	64	18	32	33	34	82	63	74	.191	.204	.205	2.42	.63	.1	5.8	6.1	5.6	6.0
Year	28.87	29.42	28.35	55.6	65.5	63.3	70.2	52.3	61.2	96	7	49	50	51	81	61	67	.407	.417	.421	44.88	3.46	4.6	4.6	5.4	4.6	5.2

ATLANTIC CITY, N. J.

[ϕ=39°22′ N.; λ=74°25′ W.]

January	30.08	30.50	29.10	34.8	39.9	38.8	44.7	31.9	38.3	56	8	28	29	30	77	67	69	0.171	0.178	0.179	1.46	0.40	T	6.8	6.9	6.5	6.6
February	30.10	30.85	29.20	19.6	26.2	25.5	31.8	15.4	23.6	44	−9	13	15	16	72	61	66	.085	.092	.098	4.53	1.80	17.6	5.9	5.6	5.5	5.9
March	30.12	30.72	29.55	34.4	38.7	37.2	43.1	30.9	37.0	59	13	30	32	32	82	77	82	.172	.185	.186	4.68	1.17	15.8	6.6	6.7	6.9	6.8
April	29.96	30.65	29.24	46.9	51.8	48.2	55.1	42.7	48.9	66	34	41	42	41	81	72	78	.262	.276	.262	2.30	.55	.0	5.5	5.6	5.5	5.7
May	29.94	30.49	29.60	58.1	62.0	59.1	66.5	52.7	59.6	89	46	52	52	51	81	72	78	.392	.399	.381	4.88	1.47	.0	5.3	6.2	7.3	6.2
June	29.86	30.34	29.40	69.8	73.7	69.7	77.3	64.1	70.7	89	55	64	63	63	82	71	81	.596	.577	.580	2.48	.66	.0	5.1	5.9	7.3	5.7
July	29.91	30.26	29.72	74.7	77.8	74.5	81.4	70.0	75.7	91	64	68	68	68	80	78	81	.685	.705	.694	2.09	1.02	.0	5.7	6.7	6.9	6.5
August	29.99	30.38	29.76	70.2	75.3	71.6	78.1	65.6	71.8	89	53	64	64	63	80	68	77	.605	.601	.599	5.00	2.45	.0	6.3	6.0	6.6	6.4
September	30.03	30.38	29.55	68.4	72.3	70.0	74.4	64.8	69.6	81	51	64	64	65	86	78	84	.611	.617	.618	5.54	3.43	.0	6.9	6.8	5.6	6.8
October	29.99	30.34	29.54	53.0	60.6	57.2	63.0	48.3	55.6	76	35	45	45	47	75	59	69	.321	.323	.339	1.57	1.42	T	5.1	5.4	3.5	5.2
November	30.08	30.54	29.44	46.9	52.9	49.9	56.1	43.2	49.6	68	25	40	41	41	77	66	72	.265	.277	.275	2.83	1.45	T	5.9	5.6	4.8	5.9
December	30.04	30.48	29.21	33.6	40.7	37.1	43.6	29.2	36.4	60	12	26	27	26	72	58	64	.155	.164	.152	2.79	1.06	T	6.8	6.6	5.0	6.6
Year	30.01	30.85	29.10	50.9	56.0	53.2	59.6	46.6	53.1	91	−9	45	45	45	79	69	75	.360	.366	.364	40.45	3.43	33.4	6.0	6.2	5.9	6.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

AMARILLO, TEX.

[H_b=3,676 ft.; h_t=10 ft.; h_r=3 ft.; h_a=49 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.4	W.	27	NW.	0	7	6	2	3	7	8	15	14	0	22	6	3	3	1	3	2	0	1	1	1	0	24	0	0
February	10.4	S.	34	N.	1	10	1	2	12	9	10	3	9	0	13	6	9	2	1	1	1	0	3	3	2	0	17	0	0
March	9.9	NE.	26	N.	0	8	11	4	1	7	12	8	11	0	13	11	7	6	5	6	3	0	0	0	1	0	11	1	0
April	10.2	NE.	28	SW.	0	5	13	5	9	6	13	5	4	0	14	12	4	7	5	0	0	0	1	0	0	0	0	4	0
May	10.3	S.	32	SW.	1	2	4	6	19	16	9	3	3	0	12	15	4	10	10	0	0	0	0	0	0	8	0	9	0
June	10.7	S.	34	SW.	3	0	3	1	23	17	12	2	2	0	18	10	2	10	8	0	0	0	0	0	0	23	0	11	0
July	9.5	S.	21	NE.	0	2	1	0	19	14	20	3	3	0	20	10	1	2	2	0	0	0	0	0	0	30	0	5	0
August	9.0	S.	22	SE.	0	1	3	1	23	7	23	2	2	0	15	10	6	5	3	0	0	0	3	2	0	23	0	4	0
September	9.9	S.	28	NE.	0	6	9	2	11	13	13	2	4	0	17	11	2	5	5	0	0	0	0	0	0	9	0	6	0
October	9.1	S.	27	S.	0	4	4	1	10	15	12	7	9	0	22	6	3	3	2	0	0	0	2	1	0	2	0	1	0
November	9.2	SW.	28	NW.	0	2	3	1	6	8	17	12	11	0	13	7	10	7	4	4	2	0	3	2	0	0	7	1	0
December	8.8	SW.	27	N.	0	3	7	0	4	8	17	10	12	1	14	10	7	1	1	1	1	0	0	0	0	0	20	0	0
Year	9.7	S.	34	SW.	5	50	65	25	140	127	166	72	84	1	193	114	58	61	47	15	9	0	13	9	4	95	79	42	0

ASHEVILLE, N. C.

[H_b=2,253 ft.; h_t=89 ft.; h_r=87 ft.; h_a=104 ft.]

January	9.5	NW.	34	NW.	2	5	1	4	9	11	0	3	27	2	10	10	11	9	7	2	0	0	6	5	2	0	15	0	0
February	10.9	NW.	31	NW.	0	10	0	1	8	8	1	2	26	0	8	10	10	6	4	8	1	0	2	0	2	0	22	1	0
March	9.5	SE.	30	NW.	0	4	0	7	20	10	0	2	17	2	9	8	14	14	13	3	1	0	5	1	1	6	16	2	0
April	8.3	NW.	27	NW.	0	4	0	6	8	16	1	3	18	4	9	9	12	11	10	2	1	1	5	0	0	0	4	4	0
May	7.2	NW.	20	E.	0	9	2	5	15	8	1	0	14	8	10	12	9	9	8	0	0	0	4	2	0	0	0	6	0
June	5.9	NW.	25	N.	0	5	3	2	14	9	3	3	19	2	11	11	8	14	13	0	0	1	11	1	0	5	0	14	0
July	5.8	NW.	30	N.	0	14	1	2	12	6	2	2	21	2	6	8	17	21	18	0	0	1	14	1	0	9	0	21	0
August	5.9	S.	21	NW.	0	7	3	8	16	11	1	1	10	5	2	15	14	13	10	0	0	0	18	3	0	0	0	14	0
September	6.0	S.	18	S.	0	7	1	8	15	11	3	0	7	8	6	15	9	15	10	0	0	0	18	4	0	0	0	8	0
October	6.8	NW.	27	NW.	0	14	2	5	8	12	2	1	15	3	16	9	6	8	7	0	0	0	13	3	0	0	3	2	0
November	10.0	NW.	32	SE.	1	8	0	1	16	7	2	1	22	3	15	5	10	11	8	1	0	0	6	1	0	0	11	2	0
December	9.3	NW.	26	W.	0	15	1	1	11	7	3	1	20	3	7	10	14	11	8	5	2	0	5	0	3	0	21	0	0
Year	7.9	NW.	34	NW.	3	102	14	50	152	116	19	19	216	42	109	122	134	142	116	21	5	3	107	21	8	14	92	74	0

ATLANTA, GA.

[H_b=976 ft.; h_t=6 ft.; h_r=34 ft.; h_a=53 ft.]

January	11.7	E.	38	NW.	2	0	2	19	3	2	2	19	14	1	12	6	13	9	7	0	0	0	6	1	1	0	6	1	0
February	12.4	NW.	34	E.	3	1	0	16	2	0	3	11	23	0	13	7	8	9	7	2	1	1	5	3	2	0	16	2	0
March	11.0	E.	34	NW.	1	0	5	15	5	7	8	10	12	0	14	4	13	8	7	1	1	0	10	4	0	0	9	2	0
April	9.8	NW.	35	NW.	1	2	5	7	3	13	12	6	12	0	13	6	11	10	9	0	0	0	4	1	0	0	0	4	0
May	8.9	SE.	26	NW.	0	3	6	14	14	5	4	3	13	0	13	12	6	10	9	0	0	0	3	1	0	0	0	6	0
June	7.5	SE.	27	SW.	0	5	2	1	17	11	8	8	8	0	10	13	7	11	10	0	0	0	3	0	0	9	0	13	0
July	7.5	NW.	34	S.	1	2	3	5	5	10	14	10	13	0	5	13	13	14	13	0	0	0	2	0	0	14	0	17	0
August	7.5	W.	30	N.	0	1	4	5	11	11	10	8	12	0	0	18	13	11	9	0	0	0	2	0	0	4	0	10	0
September	7.4	NW.	24	SE.	0	4	4	14	9	8	2	7	12	0	11	13	6	10	9	0	0	0	4	2	0	0	0	4	0
October	8.8	NW.	29	NW.	0	2	16	8	8	2	2	5	19	0	17	7	7	8	6	0	0	0	3	0	0	0	0	1	0
November	10.6	NW.	26	SE.	0	2	1	12	12	4	4	8	17	0	16	4	10	10	9	0	0	0	5	2	0	0	2	2	0
December	8.8	NW.	28	NW.	0	9	5	8	3	4	1	16	15	1	11	5	15	13	9	2	1	0	11	4	1	0	16	1	0
Year	9.3	NW.	38	NW.	8	31	53	124	92	77	70	111	170	2	135	108	122	123	104	5	3	3	56	18	4	27	48	63	0

ATLANTIC CITY, N. J.

[H_b=52 ft.; h_t=37 ft.; h_r=33 ft.; h_a=172 ft.]

January	16.0	W.	50	NW.	6	7	5	6	1	7	7	24	5	0	7	10	14	10	7	4	0	0	7	4	1	0	12	0	0
February	16.4	W.	41	NE.	7	7	2	0	0	5	8	19	15	0	8	8	12	12	7	15	11	0	0	0	13	0	25	0	0
March	17.2	S.	39	N.	8	8	11	1	2	12	10	9	9	0	7	7	17	18	12	7	6	0	8	7	2	0	17	0	0
April	14.8	S.	45	SE.	6	3	5	6	9	13	7	7	10	0	10	10	10	9	9	0	0	0	5	5	0	0	0	2	0
May	16.5	S.	41	NE.	8	6	17	5	2	16	10	3	3	0	10	6	15	14	9	0	0	0	8	5	0	0	0	4	0
June	15.3	S.	50	SE.	5	2	5	3	10	15	12	11	2	0	8	13	9	7	7	0	0	0	10	4	0	0	0	6	0
July	13.2	S.	33	W.	1	3	6	5	5	19	17	1	6	0	3	15	13	9	6	0	0	0	8	5	0	0	1	7	0
August	13.0	S.	37	NE.	4	9	8	3	8	13	8	7	6	0	7	9	15	10	8	0	0	0	5	3	0	0	0	5	0
September	14.2	E.	60	NW.	2	4	12	12	7	8	4	7	6	0	5	10	15	12	7	0	0	0	5	0	0	0	0	4	0
October	15.7	W.	35	NW.	5	8	9	3	1	7	9	15	10	0	13	5	13	5	4	1	0	0	2	1	0	0	0	1	0
November	17.4	W.	52	S.	6	2	3	4	9	7	11	13	11	0	9	7	14	11	9	1	0	1	4	3	0	0	3	2	0
December	16.0	W.	53	SE.	6	8	1	0	4	4	9	18	18	0	7	8	16	9	7	2	0	0	3	1	5	0	19	1	0
Year	15.5	S.	60	NW.	64	67	84	48	58	126	112	134	101	0	94	108	163	126	92	30	17	1	65	38	21	1	76	32	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

AUGUSTA, GA.

[ϕ=33°28′ N.; λ=81°54′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.98	30.26	29.45	42.1	53.8	52.3	59.5	39.9	49.7	73	15	37	37	39	82	57	63	0.242	0.249	0.264	1.83	0.74	0.0	5.0	5.2	3.6	5.3
February	29.96	30.56	29.45	36.2	48.4	47.7	54.7	33.1	43.9	78	19	29	30	31	75	51	53	.171	.184	.185	3.84	1.10	T	4.8	4.4	3.5	4.7
March	29.95	30.42	29.42	46.8	56.7	58.1	65.5	43.1	54.3	80	29	40	40	42	79	51	58	.270	.277	.283	4.48	2.31	.0	4.5	4.9	5.0	4.9
April	29.81	30.24	29.30	58.1	70.9	67.9	75.2	53.9	64.6	89	39	49	46	48	72	46	53	.364	.340	.360	5.74	2.29	.0	4.5	4.2	4.0	4.8
May	29.79	30.14	29.12	66.0	77.0	73.8	80.7	60.8	70.8	89	52	58	55	57	77	50	59	.500	.455	.484	5.72	2.14	.0	4.9	4.7	3.9	5.0
June	29.76	30.00	29.48	76.8	87.2	83.0	91.1	70.4	80.8	98	62	70	67	68	80	53	64	.729	.673	.697	1.68	.43	.0	4.7	4.9	3.4	4.6
July	29.80	30.03	29.59	78.5	89.8	83.4	93.7	73.5	83.6	101	69	72	70	72	81	53	69	.787	.737	.777	2.16	.49	.0	4.9	5.9	6.6	5.6
August	29.85	30.11	29.68	76.7	87.1	81.9	90.7	72.7	81.7	98	63	72	72	72	86	61	74	.789	.779	.791	3.41	.98	.0	5.5	6.7	5.7	6.3
September	29.84	30.12	29.59	71.3	83.6	78.9	87.7	68.3	78.0	92	60	67	66	68	87	57	69	.672	.653	.681	2.04	1.03	.0	5.5	5.2	2.9	5.2
October	29.88	30.12	29.58	57.6	73.8	67.9	77.2	54.8	66.0	85	35	52	50	55	82	46	64	.409	.394	.446	3.73	3.14	.6	4.1	3.1	2.9	3.7
November	29.94	30.27	29.62	49.5	65.8	60.0	69.1	46.0	57.6	81	29	44	45	46	82	50	60	.314	.332	.335	.53	.12	.0	4.4	3.4	2.6	3.9
December	29.96	30.28	29.46	40.3	52.5	48.3	56.5	36.6	46.6	72	20	34	34	34	77	53	59	.206	.218	.207	2.39	.70	.0	6.1	5.7	5.3	5.7
Year	29.88	30.56	29.12	58.3	70.6	66.9	75.1	54.4	64.8	101	15	52	51	53	80	52	62	.454	.441	.459	37.55	3.14	T	4.9	4.9	4.1	5.0

AUSTIN, TEX.

[ϕ=30°17′ N.; λ=97°44′ W.]

January	29.49	29.86	29.21	46.7	56.9	56.5	62.2	43.9	53.0	81	29	42	44	45	85	67	68	0.292	0.316	0.323	9.13	3.38	0.0	5.3	6.0	4.3	5.7
February	29.50	29.91	29.04	45.4	58.9	58.1	64.6	42.0	53.3	82	27	40	41	41	82	54	56	.263	.269	.274	2.15	.68	.0	4.7	5.0	4.5	5.1
March	29.44	29.88	29.10	49.0	64.3	66.1	71.8	46.0	58.9	84	30	44	44	43	83	51	47	.300	.308	.299	3.82	1.72	T	5.3	3.6	2.5	3.8
April	29.33	29.66	28.93	61.8	75.4	74.8	80.1	60.1	70.1	93	48	57	56	56	85	53	54	.479	.474	.467	4.42	1.91	.0	6.1	4.8	4.6	5.1
May	29.30	29.52	29.07	66.6	82.4	81.9	87.0	64.0	75.5	96	53	61	59	58	82	47	48	.543	.512	.499	1.75	.81	.0	3.7	4.6	2.6	3.8
June	29.24	29.49	28.95	75.6	90.1	92.3	95.5	73.8	84.6	101	65	69	65	63	81	45	39	.719	.626	.582	.20	.14	.0	3.3	3.0	1.3	2.8
July	29.32	29.50	29.13	76.5	91.2	92.0	96.0	74.8	85.7	105	70	71	66	63	83	45	41	.751	.644	.586	.79	.68	.0	2.5	3.6	3.4	3.2
August	29.34	29.51	29.12	76.1	90.9	90.4	95.5	74.9	85.2	99	71	72	66	66	87	45	46	.779	.651	.636	.46	.22	.0	3.3	3.2	3.2	3.7
September	29.33	29.63	29.14	71.0	85.1	83.3	90.2	69.3	79.5	96	56	66	63	63	85	49	52	.661	.593	.582	1.07	.57	.0	7.1	5.7	3.8	5.7
October	29.39	29.73	29.14	63.9	83.5	82.1	87.8	63.1	75.4	92	50	56	55	54	77	40	39	.480	.461	.431	.03	.02	.0	3.5	2.8	1.3	2.6
November	29.40	29.72	28.86	56.1	70.5	66.6	74.2	53.1	63.6	88	35	51	48	48	85	50	54	.410	.379	.360	5.21	1.98	.0	4.6	3.8	2.7	4.0
December	29.52	29.90	29.19	47.2	58.6	57.5	63.9	44.7	54.3	75	29	42	43	44	82	59	63	.290	.307	.316	3.72	1.70	.0	5.6	5.6	5.1	5.7
Year	29.38	29.91	28.86	61.3	75.6	75.1	80.8	59.1	70.0	105	27	56	54	54	83	50	51	.498	.462	.446	32.75	3.38	T	4.6	4.3	3.3	4.3

BAKER, OREG.

[ϕ=44°46′ N.; λ=117°50′ W.]

January	26.64	27.06	26.11	32.1	39.5	38.6	42.7	28.4	35.6	53	20	27	30	32	82	69	78	0.150	0.168	0.185	0.70	0.27	0.8	5.7	6.6	6.9	6.5
February	26.53	26.86	26.15	33.4	46.2	46.5	49.8	30.2	40.0	58	23	29	36	38	84	68	74	.161	.213	.234	.57	.29	.4	5.4	6.0	5.4	5.4
March	26.55	26.93	26.25	35.7	53.9	55.7	59.2	32.0	45.6	73	22	28	33	35	73	48	50	.155	.194	.212	.55	.24	T	3.6	5.4	5.7	4.9
April	26.46	26.70	26.12	40.3	62.3	63.0	66.9	37.7	52.3	84	26	33	39	38	75	45	44	.190	.244	.238	1.34	.47	4.0	3.7	4.5	5.0	4.3
May	26.43	26.87	26.15	45.4	67.8	68.4	73.0	43.1	58.0	89	30	34	35	35	66	33	32	.201	.209	.208	.45	.21	.0	5.0	5.6	5.6	5.1
June	26.40	26.76	26.09	47.8	67.1	69.9	72.4	46.2	59.3	88	30	39	38	39	78	38	36	.243	.232	.243	2.78	1.54	.0	5.4	4.7	4.8	4.7
July	26.45	26.68	26.16	52.4	78.0	81.2	84.1	51.0	67.6	104	39	38	38	39	60	28	25	.235	.237	.247	.01	.01	.0	1.9	2.6	3.2	2.7
August	26.48	26.65	26.21	52.5	79.8	84.0	86.0	50.4	68.2	96	43	35	39	40	52	25	22	.205	.242	.246	.01	.01	.0	1.6	2.2	2.8	2.4
September	26.46	26.80	26.00	43.3	66.0	68.2	71.1	40.2	55.6	90	26	30	35	35	59	34	33	.162	.207	.206	.29	.29	1.7	4.1	3.8	4.4	4.5
October	26.50	26.89	26.08	42.0	57.1	57.1	61.6	37.8	49.7	85	30	33	39	39	72	54	53	.191	.239	.237	1.52	1.07	T	5.7	6.1	5.9	6.1
November	26.44	26.75	25.93	37.4	47.6	45.4	50.3	33.5	41.9	66	18	31	34	34	79	60	67	.176	.196	.202	1.02	.43	6.2	7.0	6.4	7.9	6.9
December	26.57	26.97	26.00	25.7	32.4	30.9	35.5	21.0	28.2	48	9	20	24	24	80	71	76	.109	.128	.129	1.01	.36	11.4	7.5	6.6	7.5	7.1
Year	26.49	27.06	25.93	40.7	58.1	59.1	62.7	37.6	50.2	104	9	31	35	36	71	48	49	.182	.209	.216	10.23	1.54	24.5	4.7	5.0	5.4	5.0

BALTIMORE, MD.

[ϕ=39°17′ N.; λ=76°37′ W.]

January	30.01	30.43	29.03	34.7	41.4	39.4	46.4	31.7	39.0	70	8	27	27	29	72	60	67	0.159	0.167	0.175	2.53	1.09	T	6.6	5.2	4.0	5.9
February	30.05	30.80	29.15	19.5	26.7	26.8	32.7	15.9	24.3	46	−7	10	11	15	64	59	59	.070	.078	.093	3.29	1.13	26.1	5.1	5.4	5.8	5.3
March	30.04	30.62	29.46	35.6	43.8	41.6	49.5	31.5	40.5	78	10	28	29	31	72	58	67	.159	.172	.184	4.47	1.62	13.8	5.7	6.1	5.2	6.1
April	29.87	30.54	29.25	50.0	58.4	56.1	62.8	44.8	53.8	83	35	38	40	42	65	53	60	.240	.261	.275	2.32	1.21	T	4.6	5.5	4.3	5.3
May	29.87	30.40	29.57	63.6	73.0	67.9	76.4	58.0	67.2	96	48	50	49	51	63	46	59	.375	.364	.398	4.04	1.72	.0	5.1	5.1	6.5	5.3
June	29.78	30.24	29.35	75.4	83.2	79.3	86.6	69.1	77.8	105	62	64	62	64	68	51	61	.598	.573	.607	5.30	2.45	.0	4.9	5.1	4.9	4.8
July	29.83	30.19	29.62	77.7	85.6	81.6	90.1	72.8	81.4	102	64	67	66	67	71	54	63	.677	.646	.674	2.24	1.07	.0	5.4	5.1	5.3	4.8
August	29.91	30.29	29.66	71.3	78.6	74.7	82.5	66.9	74.7	93	53	62	60	63	72	56	70	.565	.553	.606	6.63	2.36	.0	6.6	6.0	5.9	6.0
September	29.95	30.32	29.62	67.8	74.9	71.9	78.0	64.6	71.3	88	53	62	63	64	83	68	76	.580	.585	.597	12.41	3.90	.0	6.7	6.2	4.8	6.5
October	29.93	30.25	29.46	52.6	61.9	58.4	65.6	48.4	57.0	81	36	42	43	44	68	51	61	.280	.290	.311	.95	.75	.0	4.5	4.4	1.1	4.2
November	30.00	30.44	29.36	45.9	54.4	51.4	58.4	42.6	50.5	78	27	38	38	39	74	57	65	.248	.263	.261	3.51	1.61	T	6.4	5.7	4.3	5.5
December	29.97	30.42	29.14	34.0	40.4	37.9	44.5	30.9	37.7	67	17	25	26	25	69	56	59	.146	.149	.141	3.10	1.12	.1	7.0	6.6	5.1	6.3
Year	29.93	30.80	29.03	52.3	60.2	57.2	64.5	48.1	56.3	105	−7	43	43	44	70	55	64	.341	.341	.360	50.68	3.90	40.0	5.7	5.5	4.8	5.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

AUGUSTA, GA.

[H_b=180 ft.; h_t=62 ft.; h_r=54 ft.; h_a=77 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	6.1	NW.	22	W.	0	3	11	2	5	2	8	6	23	2	12	7	12	11	7	0	0	0	7	3	1	0	6	1	0
February	7.1	NE.	25	S.	0	4	18	3	2	4	4	4	13	4	11	9	8	8	7	2	0	0	1	0	1	0	9	1	0
March	7.2	NE.	24	SW.	0	6	16	2	7	8	5	7	8	3	14	6	11	8	6	0	0	0	1	0	0	0	3	3	0
April	6.9	S.	24	NW.	0	2	10	3	9	10	6	6	12	2	13	9	8	10	10	0	0	1	1	0	0	0	5	0	0
May	6.3	NE.	24	N.	0	3	19	5	8	8	4	6	9	0	12	8	11	11	8	0	0	1	0	0	0	0	5	0	0
June	5.5	S.	21	NW.	0	2	4	6	15	10	10	3	10	0	13	10	7	11	10	0	0	0	0	0	0	19	0	7	0
July	5.9	NW.	21	W.	0	1	4	3	6	12	11	8	17	0	6	19	6	13	10	0	0	0	0	0	0	24	0	17	0
August	5.6	S.	19	NW.	0	3	6	8	12	10	12	5	6	0	5	16	10	9	8	0	0	0	1	0	0	19	0	15	0
September	5.0	SE.	18	NE.	0	5	11	11	12	6	4	2	7	2	6	19	5	7	5	0	0	0	1	0	0	8	0	5	0
October	5.3	NW.	21	W.	0	1	18	7	4	1	1	6	19	5	17	7	7	4	2	0	0	0	6	2	0	0	0	2	0
November	6.3	NW.	21	SW.	0	3	11	7	6	3	6	6	14	4	17	3	10	8	6	0	0	1	4	1	0	0	4	2	0
December	5.9	NW.	21	NW.	0	3	7	3	1	4	5	11	22	6	10	9	12	12	8	0	0	0	4	2	0	0	8	0	0
Year	6.1	NW.	25	S.	0	36	135	60	87	78	76	70	160	28	136	122	107	112	87	2	0	3	26	8	2	70	30	63	0

AUSTIN, TEX.

[H_b=605 ft.; h_t=136 ft.; h_r=129 ft.; h_a=148 ft.]

January	7.7	N.	25	NW.	0	14	9	7	7	4	0	6	13	2	11	5	15	11	11	0	0	0	15	5	0	0	3	3	0
February	8.8	N.	32	NW.	1	13	12	2	9	6	2	4	8	0	9	10	9	8	6	0	0	0	7	0	0	0	4	2	0
March	10.3	S.	30	S.	0	17	3	2	17	14	0	3	6	0	17	8	6	6	5	1	0	1	5	0	0	0	2	6	0
April	9.1	SE.	32	SE.	1	18	5	3	21	10	3	0	0	0	12	9	9	8	7	0	0	2	2	1	0	2	0	9	0
May	7.3	SE.	29	N.	0	10	9	9	17	9	3	1	3	1	15	11	5	7	6	0	0	0	2	0	0	10	0	2	0
June	8.3	SE.	28	N.	0	1	0	8	32	18	0	0	0	1	19	10	1	3	1	0	0	0	1	0	0	28	0	1	0
July	9.2	S.	27	N.	0	2	4	1	22	28	3	1	1	0	19	8	4	4	4	0	0	0	0	0	0	29	0	6	0
August	8.5	S.	22	S.	0	4	1	5	16	31	3	1	1	0	18	11	2	5	4	0	0	0	1	0	0	29	0	3	0
September	8.8	S.	25	S.	0	4	6	7	27	13	1	0	0	2	6	18	6	9	6	0	0	0	3	0	0	20	0	4	0
October	7.2	S.	21	S.	0	10	5	8	17	12	0	0	5	5	20	9	2	2	0	0	0	0	3	0	0	8	0	1	0
November	8.3	S.	31	NW.	0	7	7	4	12	9	2	3	11	5	15	8	7	9	7	0	0	0	6	0	0	0	0	6	0
December	7.4	N.	38	NW.	1	12	8	6	10	9	5	4	8	0	11	6	14	12	7	0	0	0	12	1	0	0	3	0	0
Year	8.4	S.	38	NW.	3	112	69	62	207	163	22	23	56	16	172	113	80	84	64	1	0	4	57	7	0	126	12	43	0

BAKER, OREG.

[H_b=3,471 ft.; h_t=48 ft.; h_r=44 ft.; h_a=53 ft.]

January	6.3	SE.	24	SW.	0	5	1	3	26	9	4	9	3	0	8	8	15	14	7	10	4	0	7	1	0	0	25	0	0
February	6.4	SE.	15	SW.	0	8	1	1	29	5	3	5	3	1	10	5	13	8	4	4	1	0	1	0	0	0	20	0	0
March	7.4	SE.	25	W.	0	13	3	2	29	2	4	5	4	0	10	12	9	7	6	2	0	0	2	1	0	0	14	0	0
April	7.0	SE.	26	SW.	0	17	4	2	23	5	1	4	4	0	12	12	6	8	6	2	2	1	2	0	0	0	4	3	0
May	7.0	N.	21	SW.	0	15	1	1	24	3	3	7	1	1	7	21	3	4	2	0	0	1	0	0	0	0	1	1	0
June	6.6	N.	21	SW.	0	18	1	4	13	7	3	5	9	0	12	10	8	9	8	0	0	1	1	0	0	0	0	5	0
July	6.5	N.	21	SW.	0	19	3	2	26	4	1	2	5	0	23	8	0	1	0	0	0	0	0	0	0	6	0	2	1
August	6.7	N.	16	N.	0	18	0	1	28	4	0	4	7	0	23	6	2	1	0	0	0	0	0	0	0	6	0	1	0
September	6.7	N.	20	N.	0	18	3	0	25	7	1	2	4	0	14	9	7	2	1	3	2	0	1	0	0	0	6	0	0
October	6.8	SE.	26	SW.	0	6	2	3	24	9	4	7	7	0	6	11	14	8	6	1	0	0	3	0	0	0	8	1	0
November	7.4	SE.	23	SW.	0	2	0	1	31	15	7	4	0	0	3	12	15	15	8	14	6	0	4	0	0	0	10	0	0
December	6.4	SE.	26	SW.	0	2	2	1	20	20	6	9	1	1	5	7	19	11	8	14	10	0	17	4	9	0	30	0	0
Year	6.8	SE.	26	SW.	0	141	21	21	300	90	37	63	54	3	133	121	111	88	56	50	25	3	38	6	9	12	118	13	1

BALTIMORE, MD.

[H_b=123 ft.; h_t=100 ft.; h_r=90 ft.; h_a=215 ft.]

January	10.7	SW.	39	NW.	3	5	14	3	0	6	18	5	11	0	9	9	13	10	8	4	0	0	19	3	2	0	14	0	0
February	11.1	NW.	34	NW.	3	9	7	1	5	6	10	6	12	0	10	7	11	9	7	10	7	0	7	0	13	0	28	6	0
March	10.4	SW.	38	W.	3	11	13	3	6	9	13	0	7	0	6	11	14	16	12	9	5	0	13	3	3	0	18	1	0
April	10.4	SE.	32	NW.	1	5	8	4	7	15	9	3	9	0	11	9	10	8	8	2	0	0	5	0	0	0	0	2	0
May	10.6	NE.	35	NW.	1	9	14	6	6	11	8	1	7	0	10	11	10	10	8	0	0	0	3	0	0	6	0	4	0
June	10.2	SW.	36	SE.	4	2	6	2	8	13	23	2	4	0	12	12	6	10	7	0	0	0	3	0	0	8	0	6	0
July	9.0	S.	29	NE.	0	2	12	7	2	21	16	1	1	0	13	13	5	7	4	0	0	0	2	0	0	17	0	6	0
August	8.9	SW.	33	NW.	1	6	13	5	2	19	11	1	5	0	7	10	14	9	7	0	0	0	4	0	0	5	0	6	0
September	9.2	NE.	32	SE.	2	5	15	13	4	9	6	3	5	0	8	6	16	13	12	0	0	0	13	3	0	0	4	0	0
October	10.2	SW.	38	NW.	2	14	9	3	1	5	19	0	10	1	17	3	11	5	5	0	0	0	7	0	0	0	0	0	0
November	10.7	SW.	34	SE.	2	7	13	3	3	8	15	2	9	0	11	7	12	12	10	1	0	0	8	1	0	0	3	0	0
December	10.5	SW.	38	SW.	2	6	13	3	2	7	18	3	10	0	8	9	14	9	7	7	2	0	11	3	3	0	17	1	0
Year	10.2	SW.	39	NW.	24	81	137	53	46	129	166	27	90	1	122	107	136	118	95	33	14	0	95	13	21	36	80	30	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BELLEFONTE, PA.

[ϕ=40°54′ N.; λ=77°43′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.96	29.37	28.07	26.5	33.1	29.8	36.4	21.8	29.1	49	0	23	24	24	85	70	77	0.129	0.140	0.132	1.44	0.57	1.5	7.7	7.2	6.8	7.4
February	29.00	29.67	28.13	7.9	22.0	18.8	27.9	3.3	15.6	50	−31	5	9	9	89	57	66	.058	.069	.069	.68	.44	10.2	5.0	5.1	5.2	5.4
March	28.99	29.44	28.48	25.6	38.0	35.0	44.0	20.0	32.0	67	−13	22	25	24	82	61	65	.129	.142	.136	2.50	.83	5.9	6.3	5.8	5.7	6.3
April	28.85	29.46	28.27	42.0	53.1	49.4	58.8	33.8	46.3	73	22	35	35	35	77	54	60	.211	.212	.211	3.04	.91	.1	5.5	6.0	6.6	5.8
May	28.90	29.34	28.59	57.7	70.1	63.8	74.5	44.4	59.4	92	34	47	44	47	68	42	57	.334	.305	.335	1.06	.39	.0	4.5	5.0	5.5	5.4
June	28.82	29.21	28.45	68.8	78.4	72.5	82.7	57.8	70.2	96	39	60	59	61	74	53	69	.527	.515	.551	4.35	2.06	.0	5.6	6.0	6.3	6.0
July	28.88	29.23	28.66	69.9	82.1	75.0	86.3	59.8	73.0	100	48	61	61	61	74	50	64	.549	.546	.551	5.83	4.06	.0	5.9	5.4	6.0	5.7
August	28.95	29.30	28.72	62.3	72.4	66.6	76.2	55.0	65.6	90	36	58	58	60	86	63	79	.494	.509	.529	3.96	1.11	.0	4.7	5.6	5.5	5.8
September	28.98	29.30	28.64	59.3	69.6	64.4	73.2	53.5	63.4	82	39	57	60	58	92	72	82	.472	.523	.503	6.14	2.14	.0	5.8	6.5	5.4	7.0
October	28.95	29.28	28.46	43.3	56.8	49.8	60.8	37.5	49.2	77	21	38	40	40	83	54	70	.240	.255	.262	1.30	.53	.5	5.5	4.2	5.0	4.9
November	28.99	29.40	28.40	39.4	47.8	43.5	51.5	35.1	43.3	68	17	35	37	36	84	67	75	.218	.237	.228	2.89	1.03	T	7.3	8.1	7.5	7.8
December	28.93	29.34	28.12	25.1	31.5	28.3	35.2	19.7	27.4	65	1	21	22	22	86	66	75	.121	.123	.118	1.89	.81	2.8	7.9	7.4	7.8	7.9
Year	28.93	29.67	28.07	44.0	54.6	49.7	59.0	36.8	47.9	100	−31	38	40	40	82	59	70	.290	.298	.302	35.08	4.06	21.0	6.0	6.0	6.1	6.3

BIG SPRING, TEX.

[ϕ=32°14′ N.; λ=101°30′ W.]

January	27.47	27.83	27.18	34.8	52.8	49.0	58.8	32.5	45.6	77	21	29	31	32	78	46	53	0.166	0.181	0.181	0.31	0.22	T	3.3	3.3	3.0	3.8
February	27.48	27.83	27.01	38.1	56.0	54.0	62.1	35.1	48.6	80	14	30	32	30	73	45	44	.178	.190	.174	.08	.07	0.0	3.9	4.2	4.5	4.5
March	27.44	27.96	27.11	40.6	62.6	60.5	68.7	38.1	53.4	89	24	31	32	32	70	38	40	.181	.190	.188	1.82	1.35	T	3.5	2.6	3.3	3.5
April	27.34	27.70	26.96	54.3	73.1	71.9	77.9	52.6	65.2	92	39	47	47	46	77	43	43	.330	.331	.322	1.85	1.04	.0	4.7	3.9	4.2	4.2
May	27.34	27.65	27.10	62.5	82.8	82.9	87.4	60.6	74.0	99	44	52	50	50	70	35	34	.395	.375	.369	.20	.10	.0	4.1	2.9	3.2	3.5
June	27.27	27.53	27.00	73.7	91.3	90.7	96.6	71.1	83.8	106	62	60	54	51	63	30	29	.522	.422	.383	2.20	1.08	.0	2.4	2.0	3.2	2.6
July	27.37	27.56	27.17	73.3	92.0	91.6	96.8	71.5	84.2	101	66	60	57	53	65	32	30	.529	.469	.411	1.92	.80	.0	1.9	1.9	2.8	2.2
August	27.38	27.56	27.14	72.6	88.9	90.5	94.1	71.5	82.8	100	62	62	60	56	70	40	34	.555	.516	.464	3.41	1.72	.0	4.0	3.9	2.8	3.5
September	27.36	27.71	27.11	64.4	82.3	80.6	87.2	62.7	75.0	98	51	57	56	55	76	42	42	.475	.454	.437	.58	.34	.0	3.9	2.5	2.6	3.2
October	27.42	27.76	27.15	57.0	81.0	74.2	85.1	55.4	70.2	95	42	46	46	44	67	32	35	.337	.335	.304	.11	.05	.0	2.0	1.5	1.2	1.5
November	27.40	27.79	26.96	47.1	64.6	58.2	68.4	45.5	57.0	85	28	38	39	38	73	44	51	.250	.263	.246	2.05	1.27	2.2	3.6	4.3	2.2	3.5
December	27.49	27.96	27.10	37.6	53.9	49.5	59.2	34.9	47.0	76	24	31	32	31	76	46	50	.180	.194	.185	.08	.04	.0	4.6	5.7	4.9	5.4
Year	27.40	27.96	26.96	54.7	73.4	71.1	78.5	52.6	65.6	106	14	45	45	43	72	39	40	.342	.327	.305	14.61	1.72	2.2	3.5	3.2	3.2	3.4

BINGHAMTON, N. Y.

[ϕ=42°06′ N.; λ=75°55′ W.]

January	29.12	29.58	28.16	27.3	31.2	.....	34.7	21.3	28.0	54	−4	21	24	...	77	72	...	0.127	0.136	.....	1.53	0.45	2.3	8.7	8.1	.....	8.8
February	29.19	29.89	28.20	5.2	16.8	.....	22.9	−0.2	11.4	43	−26	0	5	...	80	58	...	.046	.057	.....	.88	.58	15.4	5.5	6.0	.....	6.2
March	29.20	29.68	28.62	27.2	36.4	.....	43.3	22.0	32.6	63	1	21	24	...	76	61	...	.125	.142	.....	3.60	1.30	5.3	7.5	7.3	.....	7.1
April	29.04	29.64	28.46	40.4	51.3	.....	56.3	34.7	45.5	74	26	34	36	...	78	58	...	.200	.216	.....	2.29	1.14	2.2	5.9	7.5	.....	6.9
May	29.09	29.54	28.68	53.9	68.6	.....	73.3	45.3	59.3	90	31	44	42	...	70	39	...	.302	.282	.....	2.11	.94	.0	4.8	5.9	.....	5.8
June	28.99	29.45	28.64	66.2	76.6	.....	80.4	59.0	69.7	92	44	57	58	...	74	54	...	.483	.489	.....	3.70	2.01	.0	6.5	7.1	.....	7.0
July	29.06	29.44	28.78	67.7	80.9	.....	84.8	60.1	72.4	94	49	60	60	...	76	50	...	.522	.524	.....	2.74	.99	.0	5.6	6.8	.....	6.6
August	29.12	29.52	28.79	59.5	71.4	.....	76.1	54.9	65.5	91	37	55	54	...	84	56	...	.439	.436	.....	3.23	.77	.0	6.3	6.7	.....	6.8
September	29.17	29.51	28.80	59.4	70.4	.....	74.3	55.4	64.8	84	40	56	58	...	90	66	...	.466	.492	.....	6.02	1.78	.0	8.1	7.7	.....	8.0
October	29.12	29.53	28.65	43.4	53.5	.....	57.8	38.7	48.2	76	29	38	40	...	82	62	...	.237	.260	.....	1.10	.33	T	6.3	6.9	.....	7.2
November	29.16	29.64	28.50	41.2	47.1	.....	50.8	37.5	44.2	74	17	36	38	...	82	72	...	.227	.249	.....	2.19	.74	.5	8.5	9.0	.....	8.5
December	29.10	29.51	28.21	25.0	29.6	.....	34.2	19.8	27.0	65	3	21	22	...	84	73	...	.123	.127	.....	2.35	1.32	3.1	9.0	9.4	.....	9.0
Year	29.11	29.89	28.16	43.0	52.8	.....	57.4	37.4	47.4	94	−26	37	38	...	79	60	...	.275	.284	.....	31.74	2.01	28.8	6.9	7.4	.....	7.3

BIRMINGHAM, ALA.

[ϕ=33°32′ N.; λ=86°50′ W.]

January	29.40	29.69	29.04	43.0	52.2	50.5	56.8	40.4	48.6	71	10	37	36	38	80	58	63	0.247	0.242	0.248	3.98	2.08	0.0	5.4	5.4	5.5	5.6
February	29.40	29.90	28.83	36.3	47.4	46.3	53.9	33.8	43.8	71	15	29	31	31	75	54	57	.165	.182	.180	4.96	2.94	T	4.9	4.9	4.2	4.7
March	29.36	29.69	28.94	46.8	58.4	55.9	64.4	41.9	53.2	77	21	40	41	41	78	58	61	.270	.281	.281	8.19	4.72	1.2	5.2	5.5	4.2	5.1
April	29.25	29.60	28.90	56.7	69.2	66.1	73.6	52.6	63.1	88	38	48	48	48	75	52	55	.364	.369	.352	2.83	.92	.0	4.3	5.0	4.9	5.0
May	29.23	29.56	28.87	65.4	79.0	75.0	82.7	61.5	72.1	91	52	58	58	57	78	50	56	.491	.487	.474	2.26	.83	.0	4.4	5.8	4.3	4.8
June	29.20	29.42	28.96	74.0	85.5	80.3	89.2	69.9	79.6	97	64	68	67	66	81	56	66	.681	.670	.654	7.60	3.25	.0	3.8	5.5	5.5	4.9
July	29.27	29.46	29.11	75.4	86.3	80.7	90.3	71.7	81.0	100	68	72	72	71	88	63	74	.772	.773	.765	5.75	1.35	.0	4.4	6.3	6.5	5.8
August	29.30	29.49	29.14	73.8	85.2	80.0	88.9	71.5	80.2	96	66	71	72	72	92	65	76	.766	.775	.772	9.25	2.37	.0	6.0	6.5	6.2	6.0
September	29.29	29.54	29.10	66.8	81.2	74.5	84.3	63.8	74.0	90	54	63	63	63	88	55	68	.579	.588	.583	1.53	.81	.0	4.3	4.9	4.3	4.5
October	29.32	29.56	29.11	58.0	73.5	66.9	76.8	55.7	66.2	86	40	52	55	56	82	55	70	.411	.450	.464	10.95	5.54	.0	3.1	4.7	2.6	4.1
November	29.35	29.67	28.87	49.2	62.8	57.3	66.5	45.8	56.2	80	30	42	43	44	76	52	62	.283	.300	.306	3.14	1.42	.0	3.7	3.9	4.5	3.8
December	29.39	29.71	28.88	40.3	48.8	45.9	53.3	36.2	44.8	67	17	35	35	35	80	61	66	.219	.222	.217	3.52	1.18	T	6.3	5.6	5.0	6.2
Year	29.31	29.90	28.83	57.1	69.1	65.0	73.4	53.7	63.6	100	10	51	52	52	81	58	64	.437	.445	.441	63.95	5.54	1.2	4.6	5.3	4.8	5.0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BELLEFONTE, PA.

[H_b=1,050 ft.; h_t=5 ft.; h_r=4 ft.; h_a=42 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp. 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January		W.				4	0	1	4	6	15	24	0	8	6	4	21	10	9	15	4	0	13	5	6	0	27	0	0
February		W.				2	10	0	1	5	11	16	5	6	9	9	10	6	3	14	5	0	3	0	18	0	28	0	0
March		SW.	38	SW.		4	10	2	5	7	13	8	2	11	9	7	15	12	11	13	5	0	10	3	7	0	27	0	0
April		W.	43	SE.		1	4	0	6	7	14	15	3	10	8	10	12	12	9	7	1	0	8	1	0	0	13	4	0
May		SW.	33	W.		4	4	4	7	2	15	6	8	12	8	16	7	10	7	0	0	0	8	4	0	2	0	3	0
June		SW.				3	3	4	4	4	16	13	1	12	6	15	9	9	8	0	0	1	10	1	0	3	0	9	0
July		SW.				1	8	2	6	4	18	4	4	15	9	12	10	12	11	0	0	1	10	2	0	9	0	11	0
August		SW.				4	5	3	8	4	14	5	1	18	11	9	11	12	10	0	0	0	18	7	0	0	0	8	0
September		SE.				5	4	3	12	4	10	7	4	11	4	12	14	14	10	0	0	0	22	13	0	0	0	3	0
October		SW.				6	10	0	3	3	24	3	6	7	15	6	10	7	5	3	2	0	8	3	0	0	9	0	0
November		SW.				3	2	1	8	5	19	12	6	4	3	6	21	12	9	6	0	0	9	5	0	0	12	2	0
December		W.				4	3	2	2	4	17	19	2	9	4	6	21	10	7	17	5	0	6	0	11	0	30	0	0
Year		SW.				41	63	22	66	55	186	132	42	123	92	112	161	126	99	75	22	2	125	44	42	14	146	40	0

BIG SPRING, TEX.

[H_b=2,537 ft.; h_t=5 ft.; h_r=3 ft.; h_a=62 ft.]

January		S.				5	10	7	4	16	10	8	2	0	16	8	7	4	3	2	0	0	12	5	0	0	17	0	0
February		NE.				4	14	11	4	8	8	5	2	0	11	10	7	2	1	0	0	0	6	1	0	0	12	0	0
March		S.				3	15	5	3	20	5	5	5	1	18	7	6	3	3	1	0	0	7	0	0	0	8	1	0
April		S.				0	15	7	8	15	6	5	4	0	13	11	6	6	4	0	0	1	8	0	0	2	0	9	0
May		S.				0	12	8	13	21	2	2	3	1	17	9	5	3	2	0	0	0	3	0	0	11	0	4	0
June		S.				0	1	6	10	40	1	2	0	0	23	4	3	4	3	0	0	0	0	0	0	27	0	9	0
July		S.				0	2	9	12	34	1	4	0	0	23	7	1	5	4	0	0	1	0	0	0	30	0	5	0
August		S.				1	1	10	19	31	0	0	0	0	19	9	3	3	3	0	0	0	2	0	0	26	0	3	0
September		S.				0	11	5	8	29	4	2	1	0	18	10	2	3	2	0	0	0	0	0	0	14	0	3	0
October		S.				0	9	7	11	24	5	4	2	0	24	7	0	3	2	0	0	0	4	0	0	4	0	2	0
November		S.				2	7	5	6	20	7	6	7	0	14	10	6	5	4	1	0	0	2	0	0	1	3	0	0
December		S.				1	11	10	1	21	5	8	5	0	13	5	13	3	1	0	0	0	5	1	0	0	11	0	0
Year		S.				16	108	90	99	279	54	51	31	2	209	97	59	44	32	4	1	2	49	7	0	114	49	39	0

BINGHAMTON, N. Y.

[H_b=871 ft.; h_t=60 ft.; h_r=53 ft.; h_a=68 ft.]

January	7.1	NW.	27	NW.	0	3	4	2	4	1	4	5	8	0	3	3	25	12	7	21	6	0	17	0	9	0	27	0	0
February	7.2	NW.	22	NW.	0	2	6	8	0	2	0	2	8	0	8	5	15	8	5	15	8	0	13	1	20	0	28	0	0
March	6.8	NW.	23	W.	0	1	6	7	3	2	2	3	7	0	6	5	20	13	11	10	6	0	15	1	7	0	27	0	0
April	6.6	NW.	19	SW.	0	3	4	2	4	3	6	4	4	0	8	4	18	12	8	6	1	0	12	1	0	0	9	0	0
May	5.6	NW.	21	NW.	0	0	12	8	1	0	2	1	6	1	9	8	14	9	6	0	0	3	12	0	0	1	1	4	0
June	5.8	NW.	29	SW.	0	5	4	4	0	3	4	4	6	0	2	13	15	11	10	0	0	1	11	1	0	3	0	5	0
July	5.0	NW.	22	NW.	0	5	9	6	2	1	2	4	2	0	7	7	17	11	7	0	0	1	18	1	0	7	0	11	0
August	5.0	NE.	17	S.	0	0	9	7	1	2	0	4	7	1	7	7	17	11	9	0	0	0	19	6	0	1	0	4	0
September	5.0	E.	18	SW.	0	0	7	6	2	1	1	4	3	2	8	8	20	10	9	0	0	0	19	7	0	0	0	2	0
October	5.9	NW.	18	SW.	0	6	6	5	2	0	1	4	7	1	8	3	20	9	6	2	0	0	13	4	0	0	7	0	0
November	6.6	W.	18	S.	0	1	1	7	4	3	1	5	7	1	2	4	24	12	10	8	2	0	11	0	0	0	10	0	0
December	7.2	NW.	28	NW.	0	3	3	2	5	2	2	5	9	0	2	3	26	13	9	24	7	0	11	0	8	0	27	0	0
Year	6.2	NW.	29	SW.	0	29	71	64	32	21	25	42	75	6	64	70	231	131	97	86	30	5	171	22	44	12	136	26	0

BIRMINGHAM, ALA.

[H_b=700 ft.; h_t=11 ft.; h_r=3 ft.; h_a=48 ft.]

January	7.3	E.	26	SE.	0	10	7	12	9	1	6	9	8	0	11	7	13	12	11	0	0	0	3	2	1	0	3	1	0
February	8.2	NW.	22	SE.	0	12	4	8	7	3	2	5	15	0	12	6	10	10	9	2	0	0	0	0	0	0	9	1	0
March	8.8	S.	25	E.	0	7	2	7	13	12	4	5	12	0	12	8	11	9	7	1	1	0	2	1	0	0	7	3	0
April	7.4	S.	22	N.	0	6	4	7	3	17	7	7	9	0	12	8	10	11	9	0	0	1	4	1	0	0	0	6	0
May	6.4	E.	18	S.	0	11	10	14	11	7	2	0	7	0	10	14	7	8	7	0	0	0	1	0	0	2	0	9	0
June	5.7	S.	29	SE.	0	6	5	2	12	15	7	5	6	2	10	14	6	12	11	0	0	0	1	0	0	0	12	0	16
July	5.3	S.	21	NE.	0	3	2	4	11	15	12	11	2	2	7	14	10	14	10	0	0	0	1	0	0	0	19	0	15
August	5.5	S.	21	SE.	0	1	5	4	16	16	13	3	3	1	6	13	12	11	8	0	0	0	0	1	0	0	11	0	18
September	5.0	SE.	24	SW.	0	9	5	6	16	11	0	0	10	3	11	13	6	5	4	0	0	0	3	2	0	0	3	0	7
October	5.5	NE.	16	S.	0	12	16	10	5	2	2	3	11	1	15	9	7	8	6	0	0	0	0	1	0	0	0	2	0
November	8.0	SE.	34	SE.	1	12	3	8	19	4	4	5	5	0	17	5	8	8	8	0	0	0	0	0	0	0	3	3	0
December	7.3	NW.	25	W.	0	10	3	5	10	7	8	7	12	0	8	9	14	12	11	2	0	1	5	1	1	0	9	1	0
Year	6.7	SE.	34	SE.	1	99	66	87	132	110	67	80	100	9	131	120	114	120	101	5	1	2	35	9	2	47	31	82	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BISMARCK, N. DAK.

[ϕ=46° 48′ N.; λ=100° 48′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.22	28.80	27.56	15.0	23.7	23.8	31.0	8.7	19.8	49	−11	12	16	18	86	71	77	0.083	0.098	0.108	0.08	0.04	0.3	5.9	6.2	6.0	5.8
February	28.34	28.74	27.83	16.9	29.4	27.5	34.4	12.9	23.6	56	−19	13	17	16	85	58	61	.092	.103	.103	.03	.03	.5	3.9	5.2	2.8	4.2
March	28.30	28.92	27.64	20.6	32.5	32.8	39.9	16.5	28.2	69	−3	15	19	20	78	58	59	.093	.109	.113	.62	.28	4.2	5.7	6.6	6.2	5.9
April	28.18	28.59	27.75	35.2	52.4	54.4	58.1	32.7	45.4	86	19	27	26	26	71	41	38	.145	.144	.144	.32	.26	2.1	3.8	4.3	4.5	4.0
May	28.11	28.58	27.57	55.0	73.0	76.7	80.6	50.7	65.6	102	34	37	38	37	53	32	27	.230	.239	.226	.09	.06	.0	5.5	5.4	4.4	5.0
June	28.10	28.45	27.82	57.7	72.3	74.2	77.7	54.4	66.0	90	48	49	47	49	75	44	46	.354	.334	.357	3.39	1.43	.0	5.5	5.5	5.4	5.4
July	28.15	28.47	27.79	63.6	81.0	82.7	87.5	60.9	74.2	106	43	52	54	52	67	40	36	.392	.418	.392	.98	.62	.0	4.8	4.7	4.7	4.5
August	28.19	28.53	27.82	58.4	77.6	79.3	83.4	56.3	69.8	102	33	47	46	44	67	34	30	.342	.320	.299	.50	.34	.0	4.1	3.9	4.4	4.0
September	28.17	28.60	27.85	44.4	58.5	60.1	64.6	40.6	52.6	89	25	39	40	40	81	55	52	.250	.262	.259	.54	.23	2.5	6.0	6.7	5.6	6.1
October	28.20	28.83	27.68	42.1	57.9	54.8	62.4	39.4	50.9	87	19	34	36	35	74	49	51	.204	.223	.212	.86	.61	T	5.0	5.4	5.0	5.4
November	28.18	28.75	27.54	29.3	41.9	38.8	46.0	25.8	35.9	67	13	23	27	26	77	58	61	.123	.145	.139	.20	.12	T	5.0	4.9	5.0	5.3
December	28.26	28.75	27.65	11.7	18.9	17.5	24.6	6.1	15.4	48	−22	8	12	12	81	73	78	.069	.085	.085	.13	.04	2.2	6.2	7.0	5.7	6.8
Year	28.20	28.92	27.54	37.5	51.6	51.9	57.5	33.8	45.6	106	−22	30	32	31	75	51	51	.198	.207	.203	7.74	1.43	11.8	5.1	5.5	5.0	5.2

BLOCK ISLAND, R. I.

[ϕ=41° 10′ N.; λ=71° 36′ W.]

January	30.05	30.62	29.01	31.3	34.4	33.7	38.8	27.7	33.2	49	8	26	28	27	77	77	77	0.150	0.165	0.163	3.06	1.18	T	6.3	5.7	5.4	6.1
February	30.04	30.87	28.70	19.2	22.6	21.7	27.8	12.8	20.3	43	−10	12	15	13	70	71	68	.084	.095	.086	3.89	1.04	16.1	5.9	5.7	4.9	5.6
March	30.12	30.72	29.50	32.8	36.5	34.3	39.1	28.3	33.7	53	11	28	30	31	82	76	88	.161	.171	.179	4.17	.98	14.4	4.7	4.5	5.9	5.6
April	29.97	30.71	29.25	43.4	47.8	43.2	50.5	38.4	44.4	66	31	38	40	39	82	76	85	.234	.252	.240	3.67	1.12	.0	4.6	4.5	4.2	4.9
May	29.96	30.55	29.51	53.3	58.3	54.2	61.4	48.4	54.9	76	40	48	50	48	83	77	82	.338	.372	.345	3.32	.81	.0	4.8	4.5	5.7	5.4
June	29.87	30.38	29.45	63.1	66.5	62.5	69.5	57.6	63.6	81	50	59	60	58	86	80	87	.499	.522	.491	3.31	1.09	.0	5.1	4.2	5.6	6.0
July	29.93	30.35	29.70	70.0	74.3	69.7	77.0	64.9	71.0	83	57	65	66	65	84	75	86	.621	.644	.633	.52	.18	.0	4.8	5.4	5.2	5.2
August	30.00	30.41	29.69	67.2	71.6	66.3	73.7	61.4	67.6	80	54	62	62	61	83	73	83	.561	.569	.542	1.50	.57	.0	5.9	4.9	5.2	5.5
September	30.08	30.47	29.71	65.5	68.6	65.9	70.7	62.2	66.4	76	56	63	64	62	90	84	91	.572	.595	.584	2.38	.59	.0	6.5	6.2	6.8	6.8
October	29.96	30.46	29.44	51.2	54.4	53.7	57.8	47.8	52.8	68	38	43	46	46	75	76	77	.291	.326	.327	3.09	1.53	T	5.4	6.1	4.6	5.7
November	30.08	30.66	29.29	47.1	50.1	48.0	52.8	42.7	47.8	65	27	42	44	42	82	81	82	.282	.309	.288	2.27	1.01	.0	6.4	6.3	5.3	6.3
December	29.99	30.49	29.06	31.8	34.1	34.5	39.2	27.1	33.2	60	12	24	25	25	73	69	67	.149	.154	.148	3.52	1.52	1.2	5.8	6.0	5.1	6.2
Year	30.00	30.87	28.70	48.0	51.6	49.0	54.9	43.3	49.1	83	−10	42	44	43	81	76	81	.328	.348	.336	34.70	1.53	31.7	5.5	5.3	5.3	5.8

BOISE, IDAHO

[ϕ=43° 37′ N.; λ=116° 13′ W.]

January	27.40	27.86	26.91	36.0	42.8	42.8	46.7	32.8	39.8	55	23	30	30	31	79	61	63	0.169	0.170	0.177	1.29	0.40	T	6.1	6.8	6.9	7.0
February	27.27	27.67	26.86	38.0	48.6	50.2	53.4	35.0	44.2	59	27	33	33	35	83	57	57	.190	.192	.204	1.59	.66	0.0	4.6	5.8	6.3	5.8
March	27.27	27.68	26.98	41.5	57.6	60.6	62.6	38.7	50.6	73	29	32	30	30	71	36	33	.188	.172	.172	.88	.40	.0	4.5	5.2	5.2	5.0
April	27.14	27.40	26.88	46.6	65.6	69.2	71.4	43.9	57.6	90	29	36	34	33	68	35	28	.212	.203	.190	.46	.19	.5	4.0	4.0	4.8	4.2
May	27.09	27.61	26.78	53.3	73.4	77.6	79.5	51.3	65.4	93	36	36	34	35	56	27	23	.218	.202	.208	.10	.19	.0	4.6	5.5	5.3	5.0
June	27.07	27.44	26.71	53.5	72.1	76.0	79.1	52.2	65.6	91	41	42	39	37	66	34	30	.208	.245	.231	1.22	.55	.0	4.8	4.4	5.2	4.9
July	27.10	27.35	26.74	62.3	84.8	90.1	91.8	60.4	76.1	108	52	40	40	38	46	22	17	.252	.252	.234	.41	.40	.0	3.5	2.0	1.9	2.6
August	27.14	27.31	26.85	60.9	83.8	88.6	90.8	59.0	74.9	100	52	39	40	39	46	22	18	.241	.253	.241	.10	.0	2.0	2.7	2.6	2.3
September	27.15	27.49	26.65	50.4	69.7	73.9	75.5	47.2	61.4	93	28	33	32	33	53	26	23	.192	.180	.190	.04	.03	T	3.4	4.1	2.1	3.6
October	27.22	27.62	26.83	47.0	60.5	61.4	65.8	43.1	54.4	82	33	36	37	39	69	46	46	.220	.226	.242	1.07	.44	.0	4.4	6.5	6.0	6.1
November	27.20	27.50	26.72	42.2	51.5	49.6	54.9	38.4	46.6	72	25	35	33	35	76	52	60	.201	.192	.208	1.07	.60	.3	6.3	7.1	6.7	6.8
December	27.36	27.73	26.80	30.9	35.1	35.4	38.1	27.7	32.9	53	20	26	27	27	83	73	71	.138	.146	.143	1.49	.36	4.7	7.4	8.3	7.9	8.8
Year	27.20	27.86	26.65	46.9	62.1	64.6	67.5	44.1	55.8	108	20	35	34	34	66	41	39	.208	.203	.203	10.62	.66	5.5	4.6	5.2	5.2	5.2

BOSTON, MASS.

[ϕ=42° 21′ N.; λ=71° 04′ W.]

January	29.93	30.56	28.88	26.1	31.3	30.6	37.2	21.9	29.6	56	−2	17	20	22	69	65	69	0.112	0.129	0.130	2.67	1.00	0.8	6.3	6.4	5.5	6.6
February	29.92	30.69	28.90	14.0	20.9	19.7	27.1	7.9	17.5	44	−18	3	6	5	61	51	51	.059	.067	.062	4.45	2.34	32.9	5.3	4.2	4.1	4.5
March	30.01	30.57	29.33	31.5	39.1	36.1	44.0	26.2	35.1	68	6	23	25	27	70	57	70	.139	.147	.151	4.04	2.14	10.5	4.4	5.0	6.3	5.3
April	29.87	30.52	29.18	44.6	52.6	48.5	56.4	39.7	48.0	72	32	35	35	35	70	54	62	.211	.211	.211	3.21	.78	T	4.0	4.9	5.2	4.5
May	29.84	30.35	29.32	57.4	65.4	61.9	70.2	51.0	60.6	87	41	44	43	43	65	48	54	.313	.298	.302	1.56	.75	.0	5.7	5.3	4.9	4.9
June	29.76	30.27	29.38	64.6	71.1	67.1	75.7	58.1	66.9	94	50	55	56	56	74	61	70	.449	.451	.462	3.11	.68	.0	5.0	6.1	5.9	5.5
July	29.80	30.27	29.58	71.9	78.0	74.3	81.6	64.7	73.2	93	57	60	59	62	69	55	68	.544	.528	.573	1.25	.61	.0	4.5	5.5	5.4	5.4
August	29.89	30.34	29.55	65.1	72.0	68.2	75.1	59.5	67.3	86	50	56	54	56	73	54	67	.460	.425	.465	1.83	.58	.0	5.0	5.4	4.1	5.4
September	29.99	30.38	29.59	62.2	67.4	65.2	70.4	58.7	64.6	81	52	59	61	61	90	81	87	.506	.540	.537	5.67	1.38	.0	8.1	7.0	6.3	7.3
October	29.86	30.39	29.34	46.0	53.0	51.0	56.2	43.0	49.6	71	32	39	41	41	76	65	70	.244	.267	.271	2.94	1.04	T	5.4	5.5	4.8	5.4
November	29.98	30.62	29.18	43.3	48.8	46.0	52.8	38.3	45.6	69	23	37	37	38	79	66	74	.242	.244	.248	1.78	.75	T	6.3	6.5	6.4	6.5
December	29.87	30.38	28.89	25.9	30.8	29.3	35.9	21.0	28.4	65	3	15	15	17	62	52	58	.109	.108	.103	1.64	.76	1.6	5.4	5.8	4.3	5.7
Year	29.89	30.69	28.88	46.0	52.5	49.8	56.9	40.8	48.9	94	−18	37	38	39	72	59	67	.282	.285	.293	34.15	2.34	45.8	5.4	5.6	5.3	5.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BISMARCK, N. DAK.

[H_b=1,674 ft.; h_t=8 ft.; h_r=3 ft.; h_a=57 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.9	NW.	34	NW.	1	3	3	8	7	5	4	9	21	2	7	15	9	3	1	12	1	0	6	1	16	0	31	0	0
February	9.4	NW.	38	NW.	1	4	4	8	6	1	2	9	22	0	15	7	6	1	0	8	1	0	1	0	10	0	27	0	0
March	10.5	NW.	32	NW.	1	6	7	5	8	4	4	6	22	0	6	16	9	7	4	12	4	0	1	0	13	0	27	0	0
April	11.5	NW.	36	NW.	4	10	7	3	4	4	2	6	22	2	17	8	5	4	1	2	1	0	3	0	0	0	16	1	0
May	10.5	NW.	38	NW.	1	8	8	7	12	2	2	7	14	2	10	13	8	3	1	0	0	0	1	0	0	11	0	3	0
June	10.2	NW.	27	NW.	0	3	15	6	7	2	3	9	15	0	10	10	10	12	7	0	0	0	1	0	0	0	0	8	0
July	9.5	E.	30	E.	0	6	16	15	8	0	2	3	12	0	11	17	3	7	5	0	0	0	0	0	6	14	0	8	0
August	9.0	NW.	32	NW.	1	4	9	11	10	1	2	6	17	2	14	12	5	3	3	0	0	1	0	0	0	7	0	5	0
September	9.4	NW.	30	SE.	0	9	4	4	12	3	3	1	21	3	8	10	12	8	5	1	1	0	5	1	0	0	5	1	0
October	9.1	NW.	31	W.	0	6	7	8	12	2	1	7	18	1	9	12	10	3	3	1	0	0	3	0	0	0	7	1	0
November	7.4	E.	22	NE.	0	8	8	13	9	5	0	7	8	2	12	8	10	4	2	3	0	0	7	3	5	0	27	0	0
December	8.7	NW.	35	NW.	1	4	3	7	10	7	2	5	23	1	7	7	17	5	2	17	5	0	5	1	21	0	31	0	0
Year	9.5	NW.	38	NW.	10	71	91	95	105	36	27	75	215	15	126	135	104	60	34	56	13	1	33	6	65	32	171	27	0

BLOCK ISLAND, R. I.

[H_b=26 ft.; h_t=11 ft.; h_r=3 ft.; h_a=46 ft.]

January	18.1	W.	45	NW.	10	4	4	6	2	2	12	17	15	0	7	12	12	9	6	5	0	0	10	6	4	0	17	0	0
February	20.5	NW.	53	NW.	12	15	2	3	1	3	4	7	20	1	9	8	11	12	11	13	9	0	5	1	20	0	28	0	1
March	16.4	SW.	43	NE.	7	9	9	4	5	8	16	6	5	0	8	12	11	11	11	5	4	0	17	7	7	0	21	2	0
April	14.1	S.	37	NW.	5	3	2	6	4	16	12	5	12	0	12	8	10	10	7	0	0	1	19	8	0	0	1	1	0
May	13.8	SW.	32	SE.	1	4	6	6	4	11	17	5	9	0	10	12	9	16	12	0	0	0	20	11	0	0	0	5	0
June	13.7	SW.	38	SE.	1	2	4	10	3	9	19	9	4	0	5	15	10	7	6	0	0	0	22	11	9	0	0	3	0
July	12.2	SW.	25	SW.	0	3	3	4	2	15	20	11	4	0	8	17	6	6	4	0	0	0	17	11	0	0	0	3	0
August	12.5	SW.	30	NW.	0	9	4	6	3	10	17	7	4	2	10	13	8	9	9	0	0	0	17	3	0	0	0	4	0
September	12.9	E.	40	SE.	2	3	9	20	4	5	7	5	6	1	6	9	15	13	11	0	0	0	23	8	0	0	0	1	0
October	18.2	N.	47	W.	11	15	7	4	2	3	9	11	11	0	9	9	13	13	8	1	0	0	5	0	0	0	0	0	0
November	17.6	W.	44	NW.	10	6	4	8	4	11	4	10	13	0	8	7	15	12	8	0	0	0	11	4	0	0	3	1	0
December	20.0	NW.	57	NW.	14	14	1	4	3	5	3	15	17	0	7	11	13	8	7	7	1	0	4	0	8	0	22	0	0
Year	15.8	W.	57	NW.	73	87	55	81	37	98	140	108	120	4	99	133	133	126	100	31	14	1	170	70	39	0	92	20	1

BOISE, IDAHO

[H_b=2,739 ft.; h_t=79 ft.; h_r=72 ft.; h_a=87 ft.]

January	5.4	SE.	18	SE.	0	3	2	6	22	2	1	3	21	2	7	4	20	11	6	3	0	0	3	2	0	0	13	0	0
February	4.7	SE.	17	NW.	0	2	3	1	16	2	1	3	26	2	9	5	14	10	5	0	0	0	1	1	0	0	7	0	0
March	5.3	SE.	22	NW.	0	2	5	5	18	4	1	2	23	2	12	9	10	8	6	0	0	0	0	0	0	0	4	1	0
April	6.0	NW.	21	SW.	0	4	0	8	10	0	0	2	30	6	15	10	5	5	5	1	1	1	1	0	0	1	3	1	0
May	6.2	NW.	28	SE.	0	3	2	2	15	2	4	5	23	6	10	13	8	4	1	0	0	0	0	0	0	3	0	3	0
June	5.8	NW.	16	NW.	0	8	1	2	10	4	6	6	21	2	12	7	11	7	5	0	0	0	0	0	0	2	0	5	0
July	5.7	NW.	26	NW.	0	6	2	3	18	3	2	3	23	2	22	8	1	2	1	0	0	0	0	0	0	19	0	2	0
August	5.2	NW.	23	NW.	0	0	1	3	18	3	0	4	30	3	21	8	2	1	1	0	0	0	0	0	0	19	0	1	0
September	5.2	NW.	17	NW.	0	5	0	3	14	1	2	4	30	1	16	11	3	3	0	1	0	0	1	0	0	3	1	2	0
October	5.1	SE.	22	SE.	0	8	3	8	15	2	1	4	20	1	10	3	18	10	7	0	0	0	0	0	0	0	0	2	0
November	5.7	SE.	24	SE.	0	1	5	4	15	4	3	2	23	3	6	7	17	13	9	4	4	2	2	0	0	0	4	2	0
December	5.4	SE.	30	NW.	0	9	0	7	20	5	0	2	17	2	0	6	25	15	10	10	6	0	10	4	7	0	25	0	0
Year	5.5	NW.	30	NW.	0	51	24	52	191	32	21	40	287	32	140	91	134	89	56	19	11	4	17	7	7	47	57	19	0

BOSTON, MASS.

[H_b=124 ft.; h_t=336 ft.; h_r=329 ft.; h_a=360 ft.]

January	15.3	W.	54	W.	10	7	4	5	2	3	9	22	10	0	6	13	12	9	6	14	3	0	7	3	9	0	23	0	0
February	16.7	NW.	51	NE.	8	11	1	1	3	2	10	11	17	0	10	12	6	9	8	12	8	0	2	2	18	0	28	0	0
March	15.2	W.	38	W.	7	13	4	5	5	3	17	11	4	0	9	13	9	13	12	10	6	0	5	2	5	0	22	0	0
April	14.5	SW.	47	SW.	4	8	0	9	4	11	8	14	6	0	11	15	4	9	6	1	0	0	7	1	0	0	1	0	0
May	13.3	SW.	40	SW.	4	6	4	3	4	8	17	12	8	0	11	14	6	11	6	0	0	0	4	1	0	0	2	0	0
June	13.1	SW.	39	E.	4	3	5	7	7	2	12	16	8	0	10	13	7	15	12	0	0	1	11	0	0	1	0	10	0
July	12.1	SW.	39	NW.	2	3	1	7	4	7	17	13	9	1	7	18	6	7	6	0	0	0	6	3	0	3	0	7	2
August	12.8	SW.	32	NW.	2	7	3	7	1	10	12	14	8	0	6	18	7	9	7	0	0	0	3	0	0	0	0	1	0
September	11.5	E.	45	SE.	3	5	5	8	10	7	9	5	11	0	4	10	16	15	12	0	0	0	19	9	0	0	0	2	0
October	15.0	W.	43	W.	7	11	3	4	2	6	9	13	14	0	11	9	11	9	8	2	1	0	4	1	0	0	0	0	0
November	14.3	W.	38	W.	4	5	0	6	5	8	11	13	12	0	6	10	14	11	7	4	0	0	6	3	0	0	10	1	0
December	15.9	NW.	60	W.	9	9	1	2	5	1	3	21	20	0	10	9	12	8	6	10	4	0	5	0	14	0	24	1	0
Year	14.1	SW.	60	W.	64	88	31	64	52	68	134	165	127	1	101	154	110	125	96	53	22	1	79	25	46	4	108	24	2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BROWNSVILLE, TEX.

[ϕ=25°54′ N.; λ=97°30′ W.]

Month	Pressure			Temperature								Moisture																	
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.00	30.48	29.73	59.8	68.2	64.6	71.1	56.8	64.0	81	42	56	57	57	89	69	79	0.482	0.490	0.498	2.37	0.90	0.0	5.7	6.0	5.8	6.4
February	30.02	30.33	29.59	58.1	69.2	64.5	72.0	55.4	63.7	84	42	55	55	56	90	63	75	.452	.458	.463	.82	.61	.0	3.7	4.8	3.8	4.6
March	30.00	30.37	29.66	57.9	67.9	65.6	72.7	55.2	64.0	82	38	55	52	55	90	60	69	.453	.414	.451	2.31	1.80	.0	3.5	3.8	2.7	3.5
April	29.86	30.15	29.55	69.0	79.7	74.4	81.6	67.4	74.5	90	59	66	64	66	91	60	75	.652	.614	.644	2.35	1.62	.0	4.7	4.7	5.2	4.5
May	29.84	30.04	29.68	71.5	83.4	78.5	86.3	69.6	78.0	93	63	68	65	67	90	55	69	.697	.624	.669	1.50	.92	.0	2.7	4.4	3.7	3.4
June	29.79	30.00	29.52	77.2	88.3	83.2	90.0	74.8	82.4	98	68	73	70	72	87	55	69	.806	.734	.782	.27	.24	.0	1.1	3.6	2.2	2.8
July	29.87	30.05	29.60	77.2	85.7	82.2	88.9	75.7	82.3	99	72	75	72	73	92	64	73	.862	.775	.802	3.64	1.22	.0	4.5	6.0	4.4	4.9
August	29.88	30.02	29.69	77.4	88.4	84.0	90.6	76.5	83.6	96	70	75	71	73	91	56	70	.855	.748	.809	.98	.32	.0	3.2	4.9	3.3	4.0
September	29.86	30.06	29.74	75.2	85.4	80.1	87.8	73.6	80.7	92	66	73	71	73	91	63	79	.806	.763	.807	7.49	4.87	.0	3.8	6.2	4.4	5.1
October	29.92	30.21	29.75	70.0	84.1	77.7	86.0	69.2	77.6	89	58	67	66	68	90	56	74	.665	.654	.697	.35	.23	.0	1.9	4.4	2.3	3.5
November	29.94	30.24	29.41	66.6	77.7	72.6	79.8	63.7	71.8	89	48	61	60	60	83	55	67	.565	.537	.552	.66	.50	.0	3.8	4.9	2.3	4.5
December	30.05	30.40	29.78	59.6	69.1	65.0	71.9	56.5	64.2	82	38	54	55	57	82	62	76	.451	.461	.494	1.18	.69	.0	6.0	5.3	4.1	5.6
Year	29.92	30.48	29.41	68.3	78.9	74.4	81.6	66.2	73.9	99	38	65	63	65	89	60	73	.646	.606	.639	23.92	4.87	.0	3.7	4.9	3.7	4.4

BUFFALO, N. Y.

[ϕ=42°53′ N.; λ=78°53′ W.]

January	29.20	29.72	28.29	26.4	28.0	27.4	33.7	21.3	27.5	48	−5	22	24	23	84	83	82	0.131	0.135	0.128	1.64	0.31	7.2	8.8	8.9	8.5	8.9
February	29.33	30.06	28.37	8.2	14.2	12.4	20.4	2.8	11.6	44	−20	4	9	8	81	78	81	.053	.066	.064	1.80	.53	20.2	5.6	6.1	4.2	5.8
March	29.27	29.69	28.72	25.7	30.0	30.5	35.6	21.6	28.6	60	6	20	23	25	78	74	78	.112	.128	.143	2.32	.55	4.0	7.0	6.2	6.4	7.0
April	29.10	29.63	28.42	39.4	42.9	41.7	51.3	34.2	42.8	68	25	33	33	34	80	72	75	.192	.183	.195	1.96	.75	3.2	7.0	6.8	7.0	6.8
May	29.17	29.56	28.80	54.2	59.9	58.5	66.1	47.5	56.8	82	35	42	43	44	66	57	61	.277	.284	.294	.54	.28	.0	3.7	4.2	3.7	4.0
June	29.06	29.48	28.69	64.5	69.9	69.9	75.2	60.2	67.7	90	50	56	57	58	73	65	67	.451	.472	.484	1.86	1.20	.0	5.0	4.2	4.4	4.6
July	29.13	29.53	28.88	69.6	75.6	75.7	79.7	63.9	71.8	88	54	59	60	59	71	59	58	.514	.522	.519	1.07	.58	.0	5.0	4.3	3.7	4.6
August	29.19	29.54	28.85	63.8	70.3	69.0	74.4	59.3	66.8	93	49	54	53	55	70	57	63	.434	.426	.455	1.18	.53	.0	4.3	4.6	3.9	4.7
September	29.22	29.49	28.85	63.1	68.3	65.4	72.5	59.0	65.8	87	45	57	58	57	82	71	75	.478	.489	.477	3.57	1.21	.0	6.3	5.6	5.3	6.1
October	29.20	29.61	28.77	47.1	53.2	50.3	57.1	43.7	50.4	73	29	40	41	41	78	65	70	.264	.276	.268	1.51	.73	.4	5.5	5.2	5.1	5.6
November	29.22	29.70	28.52	42.6	46.7	43.7	49.3	37.6	43.4	69	24	37	37	36	81	70	75	.232	.231	.229	2.55	.63	2.9	8.3	7.6	6.7	8.0
December	29.20	29.65	28.24	26.0	28.9	27.2	33.5	21.2	27.4	54	7	22	23	22	82	79	81	.121	.128	.123	2.89	.73	9.8	9.2	8.5	7.2	8.5
Year	29.19	30.06	28.24	44.2	49.0	47.6	54.1	39.4	46.7	93	−20	37	38	38	77	69	72	.272	.279	.282	22.89	1.21	47.7	6.3	6.0	5.5	6.2

BURLINGTON, VT.

[ϕ=44°29′ N.; λ=73°12′ W.]

January	29.61	30.23	28.50	15.8	19.4	.....	25.3	7.6	16.4	41	−17	11	14	...	80	77	...	0.091	0.099	.....	3.04	1.75	28.0	7.3	7.0	.....	7.2
February	29.67	30.37	28.62	1.8	8.5	.....	15.9	−4.7	5.6	34	−28	−4	−1	...	73	62	...	.039	.044	.....	1.22	.48	14.2	5.5	5.2	.....	5.4
March	29.70	30.27	29.05	23.5	29.8	.....	35.8	18.5	27.2	50	1	17	18	...	74	61	...	.103	.109	.....	1.55	.53	3.1	5.5	7.1	.....	6.6
April	29.53	30.16	28.85	41.2	49.2	.....	53.0	34.1	43.6	72	21	32	32	...	71	53	...	.183	.185	.....	2.13	1.16	T	6.4	6.3	.....	6.3
May	29.55	29.97	29.03	55.1	64.1	.....	68.7	44.9	56.8	84	31	42	40	...	82	43	...	.279	.265	.....	1.02	.53	.0	5.2	4.6	.....	5.0
June	29.44	29.96	29.11	64.0	70.9	.....	75.6	55.2	65.4	91	37	54	55	...	72	59	...	.435	.449	.....	3.81	.96	.0	5.6	5.1	.....	5.3
July	29.51	29.94	29.22	68.5	76.2	.....	80.8	59.4	70.1	90	48	58	57	...	70	53	...	.494	.475	.....	2.40	1.27	.0	4.9	5.5	.....	5.1
August	29.58	30.03	29.17	61.6	71.1	.....	75.3	54.1	64.7	89	41	52	51	...	70	50	...	.392	.384	.....	1.31	.47	.0	4.6	4.8	.....	4.9
September	29.66	30.03	29.23	61.1	68.1	.....	71.5	55.6	63.6	84	42	56	57	...	85	69	...	.461	.474	.....	4.05	1.14	.0	6.2	5.5	.....	6.3
October	29.56	30.12	29.06	42.1	48.6	.....	52.1	37.5	44.8	65	28	36	38	...	80	68	...	.219	.233	.....	1.65	.44	T	6.5	6.1	.....	6.4
November	29.64	30.26	28.91	38.1	41.1	.....	45.0	33.2	39.1	62	17	33	34	...	82	75	...	.201	.208	.....	2.47	.70	.5	8.7	8.7	.....	9.1
December	29.57	30.08	28.46	16.2	21.0	.....	25.5	9.4	17.4	64	−12	11	14	...	78	72	...	.087	.095	.....	2.68	1.25	19.8	7.0	7.2	.....	7.4
Year	29.58	30.37	28.46	40.8	47.3	.....	52.0	33.7	42.9	91	−28	33	34	...	75	62	...	.249	.252	.....	27.33	1.75	65.6	6.1	6.1	.....	6.2

CAIRO, ILL.

[ϕ=37°00′ N.; λ=89°10′ W.]

January	29.78	30.13	29.38	36.7	43.0	42.8	48.4	33.4	40.9	67	7	32	32	31	82	67	66	0.195	0.198	0.195	1.28	0.84	T	5.5	7.0	5.6	6.2
February	29.83	30.43	29.33	28.4	37.9	38.3	43.7	25.3	34.5	72	4	21	22	23	74	55	55	.119	.124	.126	2.01	1.32	1.3	6.1	5.2	6.2	5.8
March	29.75	30.11	29.30	37.9	47.0	49.2	53.8	35.0	44.4	74	14	32	31	32	78	57	55	.188	.186	.196	3.86	1.71	1.4	6.8	5.8	7.1	6.1
April	29.61	30.00	29.20	52.7	63.3	64.1	68.8	50.0	59.4	85	39	42	40	41	68	45	45	.283	.269	.281	1.69	1.17	.0	5.4	5.8	5.8	5.4
May	29.62	29.95	29.27	62.5	77.8	76.7	81.2	60.6	70.9	94	46	55	52	52	74	44	46	.439	.413	.410	1.59	1.22	.0	4.2	5.1	5.2	4.9
June	29.54	29.79	29.32	74.8	86.6	84.4	90.3	70.5	80.4	99	62	66	64	66	76	50	55	.656	.616	.641	.92	.43	.0	4.0	5.3	5.4	5.2
July	29.58	29.83	29.38	76.9	89.1	87.6	93.9	73.1	83.5	105	67	71	68	70	82	52	57	.756	.697	.731	3.41	1.34	.0	5.2	5.4	5.4	5.2
August	29.62	29.82	29.41	72.8	82.8	82.2	87.0	70.9	79.0	99	56	67	67	70	82	62	67	.672	.684	.736	2.70	.87	.0	6.9	6.8	6.4	6.5
September	29.64	29.95	29.34	62.5	72.2	69.6	76.8	60.4	68.6	89	52	59	60	61	88	67	76	.506	.529	.553	6.02	1.98	.0	5.6	7.0	5.9	6.4
October	29.70	30.05	29.25	54.7	70.7	66.5	74.1	53.3	63.7	84	36	50	48	51	84	47	59	.372	.364	.401	2.68	1.08	.0	3.4	3.9	3.9	3.5
November	29.69	30.07	29.98	45.8	55.9	54.7	61.4	43.7	52.6	76	33	38	38	39	76	55	58	.247	.252	.255	8.45	5.00	.0	5.0	4.9	4.4	4.8
December	29.77	30.16	29.17	33.1	39.2	39.0	44.5	30.8	37.6	54	14	28	30	30	82	69	72	.161	.170	.178	3.30	1.17	1.5	6.8	7.0	6.7	6.6
Year	29.68	30.43	28.98	53.3	63.8	62.9	68.7	50.6	59.6	105	4	47	48	47	79	56	59	.383	.375	.392	37.91	5.00	4.2	5.4	5.7	5.7	5.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

BROWNSVILLE, TEX.

[H_b=57 ft.; h_t=88 ft.; h_r=80 ft.; h_a=96 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.6	SE.	28	NW.	0	5	11	14	15	0	0	4	13	0	6	14	11	13	8	0	0	0	7	0	0	0	0	0	0
February	10.6	SE.	30	SE.	0	9	2	13	16	6	0	3	7	0	11	12	5	5	4	0	0	0	9	4	0	0	0	0	0
March	12.0	SE.	41	NW.	2	6	2	11	29	3	1	2	8	0	19	5	7	6	6	0	0	0	5	0	0	0	0	4	0
April	11.6	SE.	29	SE.	0	4	7	21	22	3	0	1	2	0	9	19	2	5	3	0	0	0	7	1	0	1	0	5	0
May	9.2	SE.	23	SE.	0	7	5	22	16	5	0	0	7	0	18	12	1	6	5	0	0	0	4	1	0	3	0	4	0
June	10.9	SE.	23	NE.	0	2	3	12	36	2	1	0	4	0	20	10	0	3	1	0	0	0	1	0	0	14	0	0	0
July	10.5	SE.	37	NW.	1	1	2	10	38	4	2	2	2	1	13	11	7	12	12	0	0	0	3	0	0	12	0	9	0
August	10.7	SE.	27	SE.	0	0	2	10	39	6	0	1	4	0	14	14	3	7	6	0	0	0	1	0	0	22	0	2	0
September	9.2	SE.	32	NE.	1	5	2	19	29	1	0	0	4	0	10	14	6	13	11	0	0	0	0	0	0	5	0	7	0
October	9.1	SE.	24	SE.	0	7	3	17	21	0	0	4	10	0	16	12	3	5	2	0	0	0	3	0	0	0	0	1	0
November	10.4	SE.	30	NW.	0	6	3	13	23	5	0	1	9	0	11	15	4	6	4	0	0	0	0	0	0	0	0	1	0
December	10.7	SE.	30	N.	0	6	2	5	27	6	1	0	14	1	10	13	8	7	6	0	0	0	6	0	0	0	0	1	0
Year	10.4	SE.	41	NW.	4	58	44	167	311	41	5	18	84	2	157	151	57	88	68	0	0	0	46	6	0	57	0	34	0

BUFFALO, N. Y.

[H_b=767 ft.; h_t=243 ft.; h_r=238 ft.; h_a=280 ft.]

January	19.4	SW.	49	SW.	16	0	9	5	5	5	19	14	5	0	1	4	26	21	12	20	17	0	4	0	9	0	27	0	0
February	14.3	SW.	40	W.	6	1	7	3	2	7	14	10	12	0	7	11	10	15	11	22	15	0	1	0	25	0	28	0	0
March	15.8	SW.	57	SW.	7	2	8	3	3	7	21	10	8	0	4	10	17	19	13	17	10	0	3	2	12	0	27	1	0
April	14.9	SW.	43	W.	9	2	7	5	5	6	25	9	1	0	7	9	14	17	10	9	6	0	4	1	0	0	11	1	0
May	12.0	SW.	45	SW.	7	1	8	2	3	9	25	9	5	0	15	12	4	4	3	0	0	0	1	0	0	0	2	0	0
June	13.1	SW.	37	SW.	5	3	6	9	3	5	19	8	6	1	12	14	4	10	6	0	0	0	1	0	0	1	0	4	0
July	11.3	SW.	52	SW.	3	5	10	6	4	8	14	8	7	0	11	16	4	7	3	0	0	0	5	0	0	0	8	1	0
August	11.6	SW.	43	W.	4	5	8	7	8	6	12	9	7	0	12	12	7	6	5	0	0	0	3	0	0	1	0	4	0
September	11.9	S.	47	SW.	4	2	5	5	7	23	7	5	6	0	8	9	13	13	12	0	0	0	7	0	0	0	0	5	0
October	16.0	W.	43	SW.	12	1	10	9	4	5	14	9	10	0	8	11	12	8	6	4	3	0	0	0	0	0	2	0	0
November	16.6	S.	50	SW.	8	3	4	2	6	12	12	11	10	0	2	6	22	15	11	8	5	0	5	0	1	0	12	0	0
December	16.8	W.	57	W.	16	4	5	6	7	6	8	22	4	0	1	6	24	23	16	28	20	0	2	0	12	0	29	1	0
Year	14.5	SW.	57	SW.	97	29	87	62	57	99	190	124	81	1	88	120	157	158	108	108	76	0	36	3	59	2	136	26	1

BURLINGTON, VT.

[H_b=403 ft.; h_t=11 ft.; h_r=3 ft.; h_a=48 ft.]

January	11.6	S.	41	S.	6	9	0	0	3	10	0	1	8	0	7	6	18	12	7	17	11	0	6	4	17	0	30	0	0
February	11.2	S.	38	S.	2	5	2	1	2	10	1	0	7	0	9	8	11	9	7	15	9	0	2	0	26	0	28	0	0
March	11.9	S.	42	S.	4	4	2	2	1	14	2	1	6	0	6	11	14	12	8	16	4	0	2	2	10	0	28	0	0
April	11.0	S.	39	SE.	2	5	1	3	4	12	0	4	1	0	8	7	15	14	10	2	2	0	10	2	0	0	10	1	0
May	9.5	S.	36	S.	1	5	0	1	2	13	3	1	6	0	10	12	9	10	4	0	0	0	1	0	0	0	2	3	0
June	9.1	S.	32	S.	1	4	0	2	1	16	0	3	4	0	8	15	7	12	11	0	0	0	4	0	0	1	0	11	0
July	8.4	S.	25	SE.	0	6	1	0	1	15	4	1	3	0	7	18	6	9	7	0	0	0	3	0	0	1	0	5	0
August	9.3	S.	30	S.	0	2	1	2	5	12	1	4	4	0	12	12	7	9	7	0	0	0	1	0	0	0	4	0	0
September	9.9	S.	32	S.	1	4	2	0	8	13	0	0	3	0	9	7	14	11	10	0	0	0	10	2	0	0	0	2	0
October	10.2	S.	27	S.	0	7	0	2	2	14	0	2	4	0	10	4	17	11	8	6	3	0	7	2	0	0	4	0	0
November	12.2	S.	38	S.	4	7	0	3	2	13	0	0	5	0	0	6	24	16	13	12	2	0	8	2	4	0	14	0	0
December	11.0	NW.	38	SE.	3	3	1	6	6	6	0	3	6	0	6	4	21	15	11	24	12	0	2	1	21	0	28	0	0
Year	10.4	S.	42	S.	24	61	10	22	37	148	11	20	56	0	92	110	163	140	103	92	43	0	56	15	78	2	144	26	0

CAIRO, ILL.

[H_b=356 ft.; h_t=87 ft.; h_r=80 ft.; h_a=93 ft.]

January	9.4	S.	29	NW.	0	6	8	5	6	14	11	2	10	0	9	6	16	7	4	3	1	0	3	3	2	0	10	1	0
February	9.6	N.	30	NW.	0	16	6	7	6	10	2	2	7	0	9	7	12	6	5	6	3	0	1	1	6	0	24	0	0
March	11.2	N.	31	N.	0	14	8	3	8	15	4	3	7	0	8	10	13	16	9	7	4	1	2	2	1	0	12	5	0
April	9.8	N.	32	NW.	2	12	6	4	2	14	11	4	7	0	10	8	12	9	7	0	0	0	1	0	0	0	0	5	0
May	7.2	N.	28	N.	0	13	12	7	11	10	3	1	5	0	11	12	8	6	5	0	0	0	0	0	0	0	2	5	0
June	6.9	SW.	31	NW.	0	4	3	2	12	17	14	2	5	1	10	11	9	10	4	0	0	0	0	0	0	16	0	11	0
July	6.6	S.	35	E.	1	4	7	4	8	25	12	0	1	1	10	12	9	8	6	0	0	0	1	0	0	22	0	9	0
August	7.1	S.	24	SW.	0	9	13	9	5	21	3	1	0	1	6	9	16	13	11	0	0	0	0	0	0	12	0	9	0
September	7.6	S.	25	NW.	0	5	5	8	11	17	4	3	6	1	7	8	15	13	10	0	0	1	5	0	0	0	0	5	0
October	6.8	N.	33	NW.	2	16	13	2	9	6	4	5	6	1	18	5	8	5	4	0	0	1	4	1	0	0	0	3	0
November	10.1	S.	32	SW.	1	6	4	7	9	16	10	2	6	0	13	6	11	9	9	0	0	0	0	0	0	0	0	4	0
December	9.4	N.	25	SW.	0	10	9	2	8	10	11	4	8	0	7	7	17	13	10	5	3	0	3	2	4	0	17	1	0
Year	8.5	S.	35	E.	6	115	94	60	95	175	89	29	68	5	118	101	146	115	84	21	11	3	20	9	13	52	63	58	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CANTON, N. Y.

[ϕ=44°36′ N.; λ=75°10′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.56	30.17	28.43	15.3	19.4	16.9	25.6	7.2	16.4	46	−19	13	15		92	83		0.101	0.105		2.36	0.57	14.8	7.2	7.2		7.0
February	29.65	30.38	28.59	−.1	8.4	4.1	14.6	−7.8	3.4	33	−28	−2	3		91	78		.044	.053		1.39	.49	19.1	5.0	4.6		4.7
March	29.62	30.17	29.05	23.5	28.8	26.9	34.3	17.9	26.1	55	−2	18	20		78	68		.108	.115		3.28	1.18	6.6	5.9	6.8		6.7
April	29.45	30.05	28.83	41.1	47.5	41.8	51.2	33.0	42.1	74	21	32	33		70	60		.182	.193		3.19	.88	3.8	5.8	6.8		6.7
May	29.47	29.89	29.03	55.9	64.9	57.9	69.2	43.8	56.5	84	29	41	40		59	42		.269	.265		.77	.26	T	4.1	4.9		4.5
June	29.37	29.89	29.04	64.2	72.6	67.1	76.8	54.9	65.8	93	36	55	56		73	58		.443	.467		3.01	1.24	.0	6.1	4.9		5.4
July	29.45	29.86	29.19	68.1	77.4	71.1	82.3	58.0	70.2	91	45	58	56		71	49		.488	.464		2.54	1.37	.0	4.7	4.3		4.5
August	29.52	29.97	29.15	61.7	72.4	63.9	76.6	52.1	64.4	93	36	52	50		71	47		.397	.383		.95	.44	.0	5.7	5.3		5.3
September	29.58	29.92	29.14	61.8	68.0	62.8	72.3	54.7	63.5	87	39	56	57		81	70		.451	.475		3.11	.60	.0	7.5	7.1		7.0
October	29.52	30.05	29.02	42.0	49.9	44.5	53.5	34.5	44.0	73	23	36	38		80	65		.224	.238		3.11	.85	.7	6.2	6.3		6.4
November	29.58	30.15	28.91	38.5	43.2	39.3	45.9	32.8	39.4	66	19	36	36		89	76		.222	.223		3.29	.78	1.8	8.7	8.5		8.5
December	29.54	30.04	28.45	12.8	18.6	15.0	24.1	4.6	14.4	58	−22	11	14		92	79		.085	.087		2.00	.66	15.6	6.9	7.7		6.9
Year	29.53	30.38	28.43	40.4	47.6	42.6	52.2	32.1	42.2	93	−28	34	35		79	65		.251	.256		29.00	1.37	62.4	6.2	6.2		6.1

CAPE HENRY, VA.

[ϕ=36°56′ N.; λ=76°00′ W.]

January	30.12	30.49	29.23	41.6	47.6	44.4	52.0	37.5	44.8	74	12	35	37	37	79	68	76	0.229	0.245	0.241	2.19	0.76	0.0	6.6	5.1	4.1	5.9
February	30.15	30.90	29.40	29.6	33.8	32.5	37.7	25.2	31.4	68	11	23	24	24	76	68	70	.130	.135	.134	6.18	2.35	9.6	6.0	5.6	4.9	5.8
March	30.14	30.68	29.47	41.6	47.7	44.1	53.0	37.0	45.0	77	27	36	37	38	81	70	79	.224	.232	.240	6.10	2.16	5.2	6.0	6.3	5.5	6.5
April	29.99	30.61	29.27	52.2	57.6	53.2	63.1	46.8	55.0	84	38	44	45	45	75	65	75	.296	.304	.307	2.59	.95	.0	5.8	4.3	4.8	5.6
May	29.97	30.45	29.62	64.4	70.1	65.5	73.0	58.1	65.6	94	48	57	57	57	78	66	75	.471	.472	.473	6.73	1.76	.0	5.1	4.5	4.9	5.0
June	29.92	30.31	29.56	77.3	83.4	75.1	86.6	69.7	78.2	100	64	69	69	68	76	63	78	.707	.722	.680	2.82	1.10	.0	3.6	4.0	5.1	4.4
July	29.95	30.24	29.73	78.6	83.9	78.3	86.5	72.5	79.5	95	69	72	72	72	80	70	81	.786	.802	.776	6.18	1.81	.0	4.6	5.2	5.6	5.6
August	30.02	30.32	29.82	75.9	80.5	75.3	82.9	71.0	77.0	94	63	69	70	69	81	70	80	.722	.734	.709	5.06	2.29	.0	5.3	5.5	6.2	6.2
September	30.04	30.35	29.66	72.9	76.6	72.7	78.4	69.4	73.9	88	65	68	68	68	86	77	86	.697	.702	.692	7.25	4.51	.0	6.8	6.6	5.7	7.2
October	30.04	30.34	29.50	59.0	65.7	61.5	67.8	54.4	61.1	80	35	50	50	51	74	60	71	.389	.389	.404	.17	.17	.0	3.5	4.1	3.3	4.0
November	30.12	30.43	29.61	51.0	57.8	53.6	60.8	45.6	53.2	76	29	43	45	44	75	65	72	.296	.325	.316	1.97	.66	.0	5.3	4.6	4.8	5.2
December	30.09	30.51	29.38	39.9	46.2	42.0	49.8	35.5	42.6	73	22	34	34	33	78	64	71	.206	.213	.195	1.78	.54	1.0	6.4	6.0	4.6	6.0
Year	30.04	30.90	29.23	57.0	62.6	58.2	66.0	51.9	58.9	100	11	50	51	50	78	67	76	.429	.440	.431	49.02	4.51	15.8	5.4	5.2	5.0	5.6

CHARLES CITY, IOWA

[ϕ=43°04′ N.; λ=92°38′ W.]

January	28.98	29.45	28.43	20.2	27.3	24.4	31.8	15.3	23.6	49	−11	17	20	20	86	71	81	0.101	0.116	0.113	0.61	0.38	2.4	6.5	6.8	5.5	6.8
February	29.12	29.61	28.59	15.0	25.1	23.8	30.1	12.1	21.1	57	−11	10	13	13	80	57	61	.075	.083	.084	.12	.08	1.6	5.4	5.0	5.7	4.9
March	29.02	29.47	28.40	23.0	33.4	34.2	41.5	19.6	30.6	69	4	17	18	17	76	47	50	.099	.104	.102	1.85	1.37	6.5	4.8	4.4	6.4	4.9
April	28.85	29.32	28.39	40.4	53.5	52.0	58.7	35.3	47.0	84	23	31	28	29	59	42	44	.175	.161	.166	.96	.44	T	3.0	5.2	4.4	4.5
May	28.88	29.19	28.52	60.7	78.2	76.1	83.1	52.9	68.0	104	37	42	40	39	52	28	30	.288	.266	.257	.54	.23	.0	2.9	2.6	2.8	2.6
June	28.81	29.02	28.51	69.1	83.6	81.4	88.6	63.1	75.8	105	48	56	54	54	64	39	42	.458	.434	.429	1.25	.37	.0	3.9	2.9	3.6	3.4
July	28.88	29.13	28.61	70.7	82.7	81.5	87.6	65.8	76.7	101	48	61	60	62	73	51	54	.552	.544	.589	3.91	1.20	.0	4.4	4.2	4.7	4.1
August	28.93	29.24	28.59	62.2	76.7	73.3	80.1	57.8	69.0	97	33	56	56	57	79	51	59	.464	.479	.508	3.86	.89	.0	4.3	4.6	3.5	4.5
September	28.90	29.21	28.64	51.8	64.9	60.6	68.3	47.6	58.0	82	33	49	51	52	90	62	74	.361	.390	.409	7.47	3.42	.0	5.7	5.8	5.8	5.7
October	28.96	29.36	28.38	45.5	61.6	55.7	65.2	42.8	54.0	83	24	40	42	43	82	50	64	.259	.281	.295	1.36	.92	T	4.1	3.6	3.1	3.6
November	28.91	29.39	28.22	34.9	44.2	41.4	47.0	32.1	39.6	66	20	32	34	34	86	68	75	.186	.206	.209	5.52	1.71	16.3	6.6	6.8	6.2	6.5
December	29.01	29.46	28.56	14.9	20.4	17.8	24.8	8.0	16.4	37	−14	12	15	14	88	79	85	.082	.091	.087	.84	.44	8.9	7.8	7.5	6.5	7.5
Year	28.94	29.61	28.22	42.4	54.6	51.8	58.9	37.7	48.3	105	−14	35	36	36	77	54	60	.258	.263	.271	28.29	3.42	35.7	5.0	5.0	4.8	4.9

CHARLESTON, S. C.

[ϕ=32°47′ N.; λ=79°58′ W.]

January	30.13	30.42	29.60	48.1	56.9	53.4	60.0	45.3	52.6	73	18	41	42	45	79	61	74	0.289	0.301	0.324	1.80	0.55	0.0	5.6	5.4	4.5	5.5
February	30.10	30.69	29.52	41.9	50.7	47.4	54.2	37.9	46.0	71	19	36	37	38	79	61	72	.229	.243	.244	3.07	.99	.0	4.6	5.0	2.8	5.0
March	30.10	30.55	29.57	51.2	60.3	56.6	64.4	47.7	56.0	77	32	46	49	50	84	68	80	.330	.263	.374	1.18	.42	.0	6.0	6.5	4.4	5.8
April	29.98	30.34	29.44	62.7	70.8	64.6	73.8	57.8	65.8	86	40	55	56	57	79	61	77	.461	.463	.476	1.72	.89	.0	5.4	4.9	4.2	5.4
May	29.93	30.30	29.17	69.4	74.7	70.5	77.9	64.1	71.0	89	56	63	63	64	79	67	80	.579	.581	.602	5.41	2.36	.0	5.7	5.2	6.2	5.7
June	29.94	30.14	29.65	79.5	84.8	79.2	87.3	73.8	80.6	94	66	74	73	75	82	69	86	.832	.825	.862	1.68	.53	.0	5.7	5.0	3.9	4.5
July	29.96	30.18	29.74	82.2	88.0	82.4	90.6	77.2	83.9	98	73	76	76	76	81	69	83	.884	.913	.913	2.35	.76	.0	6.3	6.4	6.4	6.2
August	30.02	30.22	29.84	80.8	86.2	80.3	88.5	75.8	82.2	96	64	74	72	75	80	65	83	.844	.907	.861	7.05	2.81	.0	5.6	5.9	6.3	6.2
September	29.99	30.21	29.74	75.7	81.9	77.8	84.2	72.2	78.2	91	63	71	71	72	86	70	84	.767	.762	.790	4.04	1.84	.0	6.3	6.3	4.9	6.4
October	30.02	30.26	29.70	64.5	73.7	69.4	76.0	61.4	68.7	87	49	57	56	60	77	57	73	.491	.483	.545	5.73	2.42	.0	4.1	3.6	3.0	3.7
November	30.10	30.42	29.81	55.4	65.7	60.6	67.6	51.8	59.7	81	35	48	50	52	78	59	74	.371	.398	.416	2.64	1.74	.0	4.5	3.7	2.9	4.1
December	30.10	30.42	29.59	46.8	55.3	50.5	58.2	42.3	50.2	72	23	40	40	42	77	58	73	.274	.272	.283	2.16	1.11	T	6.0	5.6	4.7	5.7
Year	30.03	30.69	29.17	63.2	70.8	66.1	73.6	58.9	66.2	98	18	57	57	59	80	64	78	.529	.526	.558	38.83	2.81	T	5.5	5.3	4.5	5.4

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CANTON, N. Y.

[H_b=448 ft.; h_t=10 ft.; h_r=4 ft.; h_a=61 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	10.3	E.	30	W.	0	2	5	6	1	0	8	5	4	0	7	5	19	17	11	21	14	0	3	0	16	0	30	0	0
February	9.0	SW.	26	SW.	0	1	1	3	2	1	10	6	4	0	9	13	6	10	8	15	10	0	0	0	26	0	28	0	1
March	10.0	SW.	31	W.	0	3	2	6	1	2	12	2	3	0	7	8	16	14	11	17	7	0	2	1	13	0	28	0	0
April	9.8	SW.	38	SW.	1	2	0	4	0	4	10	7	3	0	5	10	15	10	9	5	2	0	2	0	0	0	16	1	0
May	8.5	SW.	31	W.	0	3	1	3	1	1	14	6	2	0	15	9	7	11	5	1	0	0	0	0	0	0	2	4	0
June	8.2	W.	28	W.	0	0	2	5	1	2	13	3	4	0	8	14	8	10	8	0	0	1	2	1	0	1	0	7	1
July	6.9	SW.	22	SW.	0	2	2	3	6	2	11	5	0	0	13	11	7	9	7	0	0	2	2	0	0	3	0	7	0
August	7.5	SW.	29	SW.	0	2	3	2	1	2	12	8	1	0	9	15	7	8	4	0	0	0	0	0	0	3	0	5	0
September	7.3	SW.	29	W.	0	0	1	5	1	4	13	4	2	0	4	11	15	13	9	0	0	0	0	3	0	0	0	2	0
October	8.6	SW.	30	SW.	0	2	5	3	0	1	9	10	1	0	8	7	16	11	8	5	1	0	3	1	1	0	12	0	0
November	9.3	SW.	30	SW.	0	6	2	2	0	4	11	4	1	0	2	5	23	14	13	6	4	0	9	2	3	0	16	0	0
December	9.2	W.	38	W.	1	1	0	8	0	2	7	9	4	0	5	8	18	15	10	22	14	0	0	0	21	0	30	0	0
Year	8.7	SW.	38	W.	2	24	24	50	14	25	130	69	29	0	92	116	157	142	103	92	52	3	31	8	80	7	162	26	2

CAPE HENRY, VA.

[H_b=18 ft.; h_t=8 ft.; h_r=3 ft.; h_a=54 ft.]

January	12.5	SW.	48	NW.	2	7	11	3	4	7	19	3	8	0	9	9	13	10	6	0	0	0	8	7	1	0	5	0	0
February	16.0	N.	48	NW.	12	19	8	4	2	5	5	6	7	0	9	9	10	11	10	11	5	0	5	3	7	0	27	1	0
March	14.6	N.	51	NE.	6	15	13	2	10	6	10	4	2	0	9	6	16	16	12	5	4	1	5	5	0	0	9	1	0
April	12.4	SE.	41	N.	3	8	9	8	12	5	12	1	5	0	8	13	9	10	6	0	0	1	2	2	0	0	0	3	0
May	13.3	SW.	35	NE.	5	6	12	3	11	7	20	3	0	0	12	8	11	11	10	0	0	0	2	2	0	0	4	0	3
June	10.5	SW.	49	NW.	3	1	2	3	10	18	20	5	1	0	11	17	2	10	8	0	0	0	3	3	0	8	0	6	0
July	9.6	SW.	30	N.	0	1	3	9	6	11	24	3	5	0	4	21	6	14	12	0	0	0	1	2	0	9	0	14	0
August	10.3	SW.	38	NW.	1	4	9	8	10	8	19	3	1	0	6	14	11	12	11	0	0	0	0	0	0	5	0	13	0
September	11.9	SE.	38	NE.	1	3	14	10	16	7	6	0	3	1	4	9	17	9	7	0	0	0	3	1	0	0	0	6	0
October	14.3	N.	44	N.	3	14	13	6	2	3	11	5	8	0	16	7	8	1	1	0	0	0	1	1	0	0	0	0	0
November	13.8	SE.	38	N.	8	8	12	2	11	8	11	1	6	1	9	12	9	10	8	0	0	0	5	1	0	0	1	0	0
December	13.4	N.	41	N.	6	11	7	3	5	8	14	6	8	0	8	9	14	10	7	4	2	0	1	0	0	0	9	0	0
Year	12.7	SW.	51	NE.	50	97	113	61	99	93	171	40	54	2	105	134	126	124	98	20	11	2	36	27	8	26	51	47	0

CHARLES CITY, IOWA

[H_b=1,015 ft.; h_t=10 ft.; h_r=4 ft.; h_a=51 ft.]

January	8.0	NW.	26	NW.	0	6	2	0	14	7	10	5	18	0	8	5	18	6	3	11	4	0	6	2	17	0	31	0	0
February	8.3	NW.	21	NW.	0	10	3	2	13	5	2	4	17	0	10	11	7	3	1	9	3	0	0	0	16	0	28	0	0
March	9.0	N.	27	NW.	0	10	6	1	11	7	3	9	14	1	12	11	8	7	6	7	3	0	1	1	9	0	29	1	0
April	9.3	NW.	26	SW.	0	12	3	1	6	8	7	6	17	0	15	6	9	7	5	2	0	0	2	1	0	0	10	3	0
May	8.7	SE.	32	SE.	1	8	7	0	13	12	13	3	6	0	23	5	3	5	4	0	0	0	0	0	0	10	0	3	0
June	7.4	SE.	24	SW.	0	7	8	0	16	4	7	4	14	0	16	12	2	8	7	0	0	0	0	0	0	14	0	9	0
July	6.5	SE.	27	SW.	0	9	9	2	20	9	3	6	4	0	14	9	8	13	10	0	0	1	0	0	0	10	0	13	0
August	6.4	SE.	28	NE.	0	8	6	1	21	9	4	5	8	0	12	12	7	13	11	0	0	1	1	0	0	4	0	9	0
September	6.8	SE.	20	SE.	0	5	3	3	20	8	4	5	12	0	11	5	14	14	11	0	0	0	3	2	0	0	0	4	0
October	8.0	SE.	26	SW.	0	3	4	3	24	3	5	10	10	0	16	10	5	3	3	1	0	0	0	0	0	0	5	2	0
November	8.1	SE.	24	N.	0	10	4	3	16	7	2	8	9	1	7	6	17	14	12	4	3	0	3	1	2	0	17	0	0
December	8.0	NW.	21	NW.	0	12	3	1	10	11	2	6	17	0	7	3	21	8	6	15	8	0	3	0	24	0	31	0	0
Year	7.9	SE.	32	SE.	1	100	58	17	184	90	62	71	146	2	151	95	119	101	79	49	21	2	19	7	68	38	151	44	0

CHARLESTON, S. C.

[H_b=48 ft.; h_t=11 ft.; h_r=3 ft.; h_a=92 ft.]

January	10.2	N.	25	SW.	0	13	14	4	1	3	12	8	7	0	10	8	13	9	8	0	0	0	11	5	1	0	3	0	0
February	12.0	NE.	30	SW.	0	6	21	3	3	4	6	5	8	0	10	8	10	10	7	0	0	1	11	2	1	0	6	2	0
March	11.6	NE.	27	SW.	0	5	17	4	4	4	19	1	7	1	10	6	15	9	5	0	0	0	13	1	0	0	0	0	0
April	11.7	SW.	30	NE.	0	3	8	3	4	6	17	11	7	1	10	9	11	11	8	0	0	0	5	2	0	0	0	5	0
May	12 4	E.	53	SE.	2	7	10	15	5	5	12	5	3	0	7	12	12	7	6	0	0	0	2	1	0	0	0	5	0
June	9.7	S.	25	SW.	0	1	2	2	4	19	18	12	1	1	12	12	6	8	7	0	0	0	2	1	0	8	0	7	0
July	9.9	SW.	27	E.	0	5	5	2	5	9	22	10	4	0	2	22	7	9	9	0	0	0	2	0	0	13	0	18	0
August	9.8	SW.	26	NW.	0	1	7	5	2	16	18	12	1	0	4	16	11	16	13	0	0	0	6	0	0	1	0	6	0
September	9.2	S.	30	SE.	0	8	10	11	4	10	8	4	5	0	3	15	12	7	6	0	0	0	6	0	0	1	0	2	0
October	10.4	NE.	30	E.	0	9	22	7	4	3	6	2	9	0	16	7	8	8	6	0	0	0	6	1	0	0	0	1	0
November	11.0	N.	30	N.	0	13	11	7	5	7	7	8	2	0	17	3	10	5	4	0	0	0	8	1	0	0	0	0	0
December	10.1	W.	29	E.	0	9	13	5	0	4	6	14	11	0	8	9	14	11	4	1	0	0	5	0	0	0	2	0	0
Year	10.7	SW.	53	SE.	2	80	140	68	41	90	151	92	65	3	109	127	129	110	83	1	0	1	71	13	2	37	11	60	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CHARLOTTE, N. C.

[ϕ=35° 13′ N.; λ=80° 51′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.33	29.60	28.66	39.5	47.5	47.6	52.5	37.6	45.0	70	8	32	31	32	76	58	59	0.202	0.205	0.209	1.18	0.39	0.0	4.1	4.9	4.4	5.1
February	29.32	29.96	28.75	30.1	39.0	40.3	44.7	27.2	36.0	65	8	21	21	21	68	50	48	.118	.125	.126	3.23	1.33	.0	5.0	5.1	4.1	5.2
March	29.31	29.81	28.80	41.4	52.2	51.0	58.0	37.4	47.7	75	22	35	34	36	78	54	61	.219	.219	.229	2.67	.73	.4	6.0	4.9	4.4	5.4
April	29.18	29.70	28.56	53.2	64.1	63.6	69.6	50.0	59.8	85	34	44	44	44	73	50	52	.312	.304	.310	3.21	1.19	.0	5.7	5.5	4.9	5.6
May	29.18	29.58	28.65	61.4	72.3	71.3	76.9	58.5	67.7	88	48	54	52	51	78	52	54	.428	.396	.392	3.22	1.14	.0	4.7	4.9	4.5	4.6
June	29.14	29.39	28.89	72.8	82.1	80.2	86.7	68.9	77.8	96	61	65	64	63	79	56	60	.632	.592	.593	7.36	2.42	.0	4.6	5.1	4.8	5.0
July	29.19	29.42	28.97	74.7	85.0	80.2	89.1	70.7	79.9	96	67	69	68	70	84	58	72	.718	.691	.725	3.07	.72	.0	5.7	5.7	7.4	6.3
August	29.24	29.54	29.08	73.3	82.0	79.0	86.3	70.9	78.6	96	60	69	67	69	86	63	72	.709	.675	.710	4.23	2.61	.0	6.6	7.5	7.8	7.3
September	29.24	29.54	28.98	68.8	79.1	75.8	83.4	66.1	74.8	91	55	65	64	66	88	61	71	.627	.599	.634	4.89	1.96	.0	4.8	6.8	4.2	6.1
October	29.26	29.52	28.92	53.9	68.1	64.5	71.7	51.3	61.5	81	40	47	46	49	78	47	59	.337	.324	.361	4.07	2.97	.0	3.5	3.3	2.4	3.2
November	29.31	29.63	28.95	46.5	59.5	56.3	63.3	43.9	53.6	78	30	40	40	42	77	53	60	.272	.283	.293	3.08	1.10	.0	4.5	4.2	3.6	4.2
December	29.30	29.67	28.72	36.8	46.9	43.9	50.6	33.8	42.2	67	18	30	29	30	74	53	59	.174	.173	.175	3.29	1.20	T	5.9	5.6	4.5	5.8
Year	29.25	29.96	28.56	54.4	64.8	62.8	69.4	51.4	60.4	96	8	48	47	48	78	55	61	.396	.382	.396	43.50	2.97	.4	5.1	5.3	4.8	5.3

CHATTANOOGA, TENN.

[ϕ=35° 04′ N.; λ=85° 18′ W.]

January	29.36	29.61	28.88	40.7	48.9	47.6	53.0	37.5	45.2	70	8	35	36	36	82	64	67	0.226	0.233	0.230	4.20	2.79	0.0	5.1	5.0	5.1	5.1
February	29.36	29.91	28.87	32.6	43.0	43.3	49.7	30.7	40.2	69	11	25	26	26	73	52	52	.137	.146	.149	3.18	2.10	3.4	4.3	5.1	4.7	4.9
March	29.32	29.73	28.85	44.9	55.0	53.5	60.8	40.1	50.4	78	20	37	38	37	73	58	58	.233	.250	.239	11.01	3.21	.8	5.8	5.7	4.6	5.5
April	29.19	29.61	28.77	55.5	68.3	65.0	72.7	50.6	61.6	88	38	48	46	46	71	49	53	.333	.342	.325	3.17	1.47	T	4.9	6.3	5.3	5.6
May	29.20	29.57	28.84	65.7	77.5	75.0	82.5	60.3	71.4	92	49	54	54	55	68	47	53	.432	.437	.447	1.83	.64	.0	4.4	4.8	4.1	4.7
June	29.16	29.37	28.84	73.9	85.4	81.0	89.7	67.9	78.8	100	60	65	64	66	75	52	62	.628	.611	.641	6.19	1.96	.0	4.7	4.9	5.4	5.0
July	29.21	29.46	29.03	76.9	87.1	82.6	91.7	71.7	81.7	104	68	70	71	71	80	59	69	.745	.748	.753	6.46	1.34	.0	5.2	5.1	5.5	5.5
August	29.25	29.51	29.10	75.5	85.2	81.3	89.0	71.8	80.4	96	63	69	69	70	82	60	71	.723	.722	.743	6.50	2.72	.0	7.5	5.9	6.3	6.6
September	29.25	29.52	29.04	66.4	80.4	74.7	84.0	62.8	73.4	92	55	62	62	63	85	54	68	.556	.558	.582	2.81	.86	.0	4.9	4.4	3.2	4.4
October	29.29	29.54	29.04	55.4	71.1	65.8	74.8	52.5	63.6	83	35	50	52	53	82	54	66	.374	.417	.429	4.36	2.30	.0	3.4	4.3	3.0	3.6
November	29.33	29.67	28.91	46.7	59.7	56.1	64.3	43.7	54.0	77	28	39	40	40	76	51	57	.258	.274	.265	2.48	1.28	.0	3.8	3.9	3.8	3.9
December	29.35	29.72	28.79	37.4	45.3	44.5	50.1	34.7	42.4	65	15	30	31	31	74	58	61	.173	.180	.188	3.18	1.01	T	6.3	6.0	5.7	6.3
Year	29.27	29.91	28.77	56.0	67.2	64.2	71.9	52.0	61.9	104	8	48	49	50	77	55	61	.402	.410	.416	55.37	3.21	4.2	5.0	5.1	4.7	5.1

CHEYENNE, WYO.

[ϕ=41° 08′ N.; λ=104° 48′ W.]

January	24.01	24.29	23.67	28.0	41.5	35.8	45.1	22.8	34.0	60	11	17	19	19	63	40	50	0.094	0.100	0.100	0.29	0.11	3.8	2.7	5.8	5.4	5.4
February	24.04	24.35	23.63	25.9	38.3	34.5	42.5	20.8	31.6	66	−9	19	21	22	74	54	63	.102	.113	.121	1.32	.44	15.6	5.0	6.5	5.5	6.0
March	24.01	24.38	23.64	32.4	44.7	41.2	49.6	26.0	37.8	65	9	23	23	24	69	48	55	.121	.123	.131	.86	.30	6.7	5.5	7.0	6.5	5.4
April	24.01	24.32	23.56	35.6	52.1	51.1	56.5	32.5	44.5	75	18	26	23	27	69	42	45	.140	.135	.146	1.54	.62	15.5	4.0	5.6	7.2	5.4
May	24.04	24.38	23.73	50.2	69.1	66.6	72.8	45.5	59.2	86	29	35	34	35	58	32	36	.205	.198	.207	1.66	.41	2.8	5.3	5.4	6.6	5.7
June	24.00	24.32	23.66	53.5	73.1	70.7	77.8	49.3	63.6	90	40	39	38	36	61	30	35	.248	.232	.221	.87	.42	.0	3.9	4.9	6.4	4.7
July	24.10	24.36	23.92	62.1	83.4	79.2	87.3	58.1	72.7	97	45	44	40	42	54	24	31	.293	.260	.283	2.52	1.36	.6	4.6	4.8	6.4	5.2
August	24.14	24.30	23.94	57.0	77.2	74.9	81.4	54.2	67.8	92	41	45	42	44	67	31	37	.310	.278	.304	1.41	.50	.0	4.6	4.8	6.1	5.0
September	24.04	24.37	23.77	42.7	62.7	60.7	67.9	39.0	53.4	84	21	32	29	31	69	34	39	.181	.165	.175	.72	.31	1.2	4.0	4.9	5.3	4.7
October	24.08	24.45	23.49	42.8	62.1	55.8	65.2	38.1	51.6	80	30	26	24	26	53	26	33	.143	.135	.142	T	T	T	4.2	2.8	3.6	3.3
November	23.98	24.43	23.58	32.9	48.4	41.4	50.6	28.0	39.3	71	13	19	19	19	56	34	43	.101	.101	.101	.10	.05	1.1	3.5	5.2	4.9	4.9
December	23.98	24.33	23.54	27.9	39.3	31.7	42.0	20.0	31.0	63	8	14	16	16	58	38	50	.082	.088	.086	.15	.03	2.0	5.0	5.3	4.0	5.1
Year	24.04	24.45	23.49	40.9	57.7	53.6	61.6	36.2	48.9	97	−9	26	27	28	63	36	43	.168	.161	.168	11.44	1.36	47.7	4.3	5.2	5.7	5.2

CHICAGO, ILL.

[ϕ=41° 47′ N.; λ=87° 35′ W.]

January	29.35	29.74	28.74	29.5	33.2	33.3	38.9	25.7	32.3	55	−7	23	23	26	76	66	72	0.134	0.134	0.151	0.84	0.29	0.3	5.9	6.6	7.0	6.6
February	29.49	30.15	28.77	18.5	25.0	25.4	30.0	15.8	22.9	56	−2	11	14	15	72	60	62	.076	.084	.086	.52	.21	9.3	5.2	6.9	5.7	6.5
March	29.40	29.80	28.75	29.7	35.5	33.9	39.4	26.4	32.9	64	10	22	23	24	72	59	67	.126	.134	.135	1.21	.56	7.3	6.7	6.8	6.7	6.5
April	29.22	29.62	28.75	42.8	52.6	49.7	57.8	39.4	48.6	78	32	33	34	34	69	52	58	.191	.206	.201	1.32	.59	T	5.5	5.8	6.2	6.0
May	29.29	29.59	28.93	58.9	70.5	68.3	76.6	53.8	65.2	98	43	44	44	42	59	42	42	.293	.303	.276	.67	.41	.0	3.5	4.2	4.1	4.1
June	29.18	29.49	28.83	67.3	75.7	72.3	82.1	61.1	71.6	102	49	56	57	56	69	56	60	.463	.460	.460	2.24	.88	.0	5.8	5.2	5.2	5.1
July	29.24	29.57	28.97	73.0	80.1	78.0	84.8	68.4	76.6	105	57	64	63	61	73	58	59	.597	.592	.551	.42	.18	.0	5.5	5.2	4.6	5.3
August	29.30	29.53	28.91	67.7	76.8	73.9	79.9	65.0	72.4	100	50	59	58	59	74	55	61	.521	.516	.522	3.41	1.86	.0	5.1	4.7	5.8	5.2
September	29.28	29.60	28.85	60.0	68.5	65.5	71.3	57.0	64.2	88	43	56	57	58	86	68	77	.462	.481	.490	4.03	1.13	.0	6.7	7.1	6.0	7.0
October	29.34	29.65	28.88	50.5	60.3	58.2	63.4	48.5	56.0	81	31	43	44	46	77	57	64	.293	.302	.326	2.32	1.41	T	4.2	3.7	3.7	4.0
November	29.30	29.76	28.53	42.9	48.2	47.2	52.0	39.5	45.8	67	28	35	37	37	74	65	69	.220	.236	.244	3.87	1.43	T	7.1	7.7	6.7	7.5
December	29.36	29.60	28.74	25.1	27.8	27.5	31.7	20.7	26.2	42	−1	21	21	22	82	74	78	.116	.118	.121	1.93	.54	27.4	7.0	7.8	7.2	7.6
Year	29.31	30.15	28.53	47.2	54.5	52.8	59.0	43.4	51.2	105	−7	39	40	40	74	59	64	.291	.299	.297	22.78	1.86	44.3	5.7	5.9	5.7	6.0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CHARLOTTE, N. C.

[H_b=779 ft.; h_t=63 ft.; h_r=55 ft.; h_a=86 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	11.5	SW.	35	W.	1	16	9	1	1	4	17	19	4	0	13	8	10	9	6	0	0	0	10	6	1	0	4	0	0
February	11.9	NE.	38	NW.	3	11	15	1	6	5	6	6	6	0	9	8	11	7	7	0	0	0	7	3	3	0	19	2	0
March	13.4	SW.	35	NW.	3	12	15	2	2	2	22	5	2	0	14	3	14	17	11	4	2	0	7	2	0	0	11	3	0
April	13.0	SW.	35	NW.	2	11	6	5	3	1	23	8	3	0	8	11	11	9	8	0	0	0	6	3	0	0	0	4	0
May	12.2	NE.	44	NE.	2	3	20	4	4	5	16	9	1	0	14	8	9	8	8	0	0	0	6	2	0	0	3	0	0
June	10.2	SW.	34	NW.	1	5	5	3	9	7	15	15	1	0	10	11	9	12	10	0	0	0	7	3	0	12	0	11	0
July	9.4	SW.	45	NE.	3	6	8	6	1	8	18	14	0	1	3	17	11	17	14	0	0	0	4	2	0	11	0	18	0
August	7.3	SW.	24	SE.	0	1	14	5	8	9	17	7	0	1	1	11	19	14	7	0	0	0	8	2	0	9	0	11	0
September	6.0	NE.	18	SW.	0	7	23	4	5	5	9	5	2	0	6	14	10	7	7	0	0	0	14	6	0	1	0	6	0
October	6.6	NE.	26	SW.	0	8	22	6	3	8	6	5	3	1	21	4	6	5	5	0	0	0	10	4	0	0	0	0	0
November	7.7	NE.	22	N.	0	10	8	6	8	5	9	7	6	1	16	5	9	8	7	0	0	0	7	5	0	0	2	2	0
December	7.1	NE.	27	SW.	0	10	14	3	3	6	14	7	4	1	11	7	13	10	9	2	0	0	9	3	1	0	13	0	0
Year	9.7	SW.	45	NE.	15	100	159	46	53	65	172	98	32	5	126	107	132	123	99	6	2	0	95	41	5	33	49	60	0

CHATTANOOGA, TENN.

[H_b=762 ft.; h_t=71 ft.; h_r=64 ft.; h_a=214 ft.]

January	8.0	NE.	32	NW.	1	4	13	4	8	7	4	10	7	5	10	12	9	10	8	1	1	0	8	3	2	0	8	0	0
February	9.3	NE.	31	NW.	0	7	14	0	8	3	1	4	16	3	11	7	10	8	8	5	2	0	4	0	1	0	14	2	0
March	9.1	NE.	28	W.	0	6	11	1	11	7	9	7	5	5	12	9	10	13	12	2	1	0	4	0	0	0	7	2	0
April	8.4	W.	31	NW.	0	6	7	3	3	8	10	10	7	6	7	13	10	11	11	1	0	0	1	0	0	0	0	5	0
May	8.8	NE.	32	SW.	1	12	8	7	11	5	3	10	2	4	12	11	8	8	8	0	0	0	1	0	0	2	0	3	0
June	8.5	W.	32	E.	1	6	4	10	13	1	4	17	3	2	10	12	8	15	12	0	0	0	3	0	0	15	0	14	0
July	8.5	W.	32	NE.	1	4	5	5	9	6	6	17	4	6	7	17	7	15	12	0	0	1	4	0	0	20	0	13	0
August	6.3	W.	24	N.	0	1	6	7	10	8	7	16	1	6	4	15	12	15	11	0	0	0	6	0	0	14	0	9	0
September	5.7	W.	27	NW.	0	4	4	4	3	6	3	17	4	15	11	17	2	10	8	0	0	0	13	0	0	3	0	5	0
October	6.3	NE.	24	NW.	0	9	14	2	4	2	1	9	4	17	15	11	5	8	7	0	0	0	13	2	0	0	0	1	0
November	9.3	SE.	37	SE.	4	7	11	1	10	5	5	8	7	6	16	7	7	8	8	0	0	0	7	3	0	0	2	1	0
December	8.2	W.	38	W.	1	10	7	3	7	10	4	10	8	3	8	9	14	12	10	4	0	0	7	1	1	0	11	0	0
Year	7.5	W.	38	W.	9	76	104	47	97	68	57	135	68	78	123	140	102	133	115	13	4	1	71	9	4	54	42	55	0

CHEYENNE, WYO.

[H_b=6,094 ft.; h_t=50 ft.; h_r=42 ft.; h_a=71 ft.]

January	13.5	NW.	38	W.	5	7	1	1	0	2	7	17	27	0	8	13	10	7	4	8	6	0	2	0	3	0	27	0	0
February	10.5	W.	31	N.	0	10	1	0	3	5	7	13	17	0	7	9	12	9	8	12	9	0	4	2	6	0	24	0	0
March	13.4	W.	38	W.	8	7	4	1	1	7	6	19	17	0	5	11	15	16	8	15	14	0	6	1	3	0	24	1	0
April	9.9	N.	30	W.	0	12	4	1	0	8	7	12	15	1	10	11	9	8	6	6	6	0	1	0	3	0	16	2	0
May	9.3	W.	29	NW.	0	7	3	3	5	11	7	6	20	0	8	14	9	10	9	2	2	1	2	1	0	0	2	9	0
June	9.5	SE.	32	W.	1	3	4	3	11	5	10	11	12	1	12	14	4	8	7	0	0	2	0	0	0	0	9	0	0
July	8.8	NW.	38	W.	1	3	5	1	8	8	6	12	18	1	9	14	8	9	6	0	0	1	0	0	0	10	0	13	0
August	8.6	NW.	30	NW.	0	3	3	3	9	6	6	13	19	0	10	15	6	9	7	0	0	1	0	0	0	2	0	13	0
September	9.5	W.	29	NW.	0	8	7	3	2	3	7	15	15	0	11	13	6	5	4	2	2	0	2	1	1	0	8	3	0
October	11.5	W.	33	W.	5	4	4	1	6	6	9	18	14	0	17	11	3	0	2	1	0	0	4	2	0	0	5	0	0
November	11.0	W.	33	W.	1	5	2	0	4	5	4	26	14	0	10	11	9	3	2	7	3	0	1	0	3	0	20	0	0
December	13.3	NW.	39	W.	6	6	1	0	3	4	5	19	24	0	11	11	9	7	0	13	7	0	2	0	4	0	31	0	0
Year	10.7	W.	39	W.	27	75	39	17	52	70	81	181	212	3	118	147	100	91	61	66	49	5	24	7	23	12	157	50	0

CHICAGO, ILL.

[H_b=673 ft.; h_t=7 ft.; h_r=3 ft.; h_a=131 ft.]

January	12.1	SW.	36	NW.	1	2	2	2	8	13	16	10	9	0	8	5	18	9	4	7	2	0	4	0	6	0	23	0	0
February	11.3	NW.	32	NW.	1	3	8	7	6	10	7	2	13	0	6	9	13	9	5	18	9	0	1	0	17	0	28	0	0
March	13.1	SW.	30	W.	0	5	9	5	6	7	13	6	11	0	6	10	15	7	4	12	3	0	3	1	8	0	23	0	0
April	11.5	SW.	28	NW.	0	6	7	5	6	6	13	6	11	0	8	7	15	13	9	6	4	0	4	1	0	0	4	0	0
May	10.5	SW.	30	SW.	0	3	17	1	7	13	15	4	2	0	16	7	8	5	2	0	0	0	2	0	0	0	4	0	0
June	9.7	NE.	39	NW.	2	3	15	7	9	6	6	5	0	0	9	14	7	16	11	0	0	0	2	0	0	0	8	0	14
July	8.4	NE.	21	S.	0	6	19	4	9	6	7	9	2	0	9	14	8	8	4	0	0	0	2	0	0	12	0	5	0
August	9.0	NE.	24	NE.	0	1	12	9	13	9	6	9	3	0	9	15	7	10	7	0	0	0	2	0	0	5	0	8	0
September	9.3	S.	22	SW.	0	6	8	2	8	19	8	7	4	0	5	9	16	15	12	0	0	0	8	2	0	0	5	8	0
October	10.6	W.	35	NW.	1	3	8	5	7	13	9	12	5	0	15	9	7	3	3	1	0	0	1	0	0	0	2	2	0
November	12.3	SW.	31	SW.	0	3	3	0	9	12	14	11	8	0	3	10	17	11	11	3	0	1	2	0	0	0	7	2	0
December	10.9	W.	32	SW.	1	0	4	3	4	10	6	20	15	0	7	2	22	11	8	17	10	0	5	1	14	0	30	0	0
Year	10.6	SW.	39	NW.	6	41	112	50	90	127	120	102	88	0	101	111	153	117	80	64	28	1	33	4	45	31	113	44	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CINCINNATI, OHIO

[ϕ=39°09′ N.; λ=84°31′W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Extremes: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hourse	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.46	29.81	28.84	32.2	39.0	37.4	44.3	27.8	36.0	62	0	28	26	26	82	63	66	0.162	0.154	0.151	1.61	0.46	0.3	6.0	6.8	6.5	6.5
February	29.53	30.14	28.88	20.1	28.9	27.9	33.9	16.6	25.2	56	−7	17	17	18	86	61	66	.097	.099	.102	.96	.47	10.2	6.8	6.1	4.8	6.4
March	29.46	29.82	28.94	32.1	42.9	42.4	50.2	28.7	39.4	76	10	27	28	28	81	58	60	.152	.167	.166	2.83	.75	6.6	6.0	5.3	5.4	6.4
April	29.30	29.78	28.76	47.1	59.5	57.9	64.8	42.2	53.5	82	29	37	37	37	69	45	49	.231	.239	.238	1.16	.67	.3	4.9	6.3	6.0	5.7
May	29.35	29.73	29.00	61.2	74.8	71.8	78.8	54.6	66.7	92	42	49	46	46	66	40	43	.366	.333	.330	.98	.40	.0	3.5	4.3	4.0	4.3
June	29.25	29.46	28.95	72.7	85.1	80.3	89.5	66.7	78.1	101	56	63	63	63	72	50	56	.580	.590	.578	3.83	1.94	.0	4.0	4.3	6.5	4.8
July	29.30	29.58	29.08	75.7	89.8	84.4	94.0	70.5	82.2	108	59	66	64	64	73	45	52	.646	.602	.597	2.44	1.29	.0	4.8	5.1	6.6	5.4
August	29.36	29.58	29.11	69.1	82.9	78.0	86.8	65.5	76.2	97	51	62	61	61	78	50	58	.578	.572	.565	1.72	1.12	.0	5.3	5.6	5.5	5.7
September	29.37	29.63	29.06	61.8	77.0	70.9	80.6	58.9	69.8	92	44	58	57	57	87	52	63	.484	.479	.475	3.58	1.35	.0	4.8	5.3	4.5	5.6
October	29.42	29.73	28.96	48.4	66.4	60.8	69.9	45.8	57.8	83	31	40	42	41	82	42	49	.289	.282	.276	.35	.30	.0	4.5	2.6	2.6	3.6
November	29.43	29.82	28.82	42.2	49.7	49.7	57.6	39.2	48.4	75	23	35	36	35	77	54	59	.217	.224	.218	1.72	.70	T	6.5	6.3	5.0	6.4
December	29.45	29.86	28.66	29.9	35.4	33.9	40.5	26.2	33.4	52	10	25	26	27	83	69	76	.138	.144	.149	1.58	.49	3.4	8.0	7.6	7.3	7.6
Year	29.39	30.14	28.66	49.4	61.0	58.0	65.9	45.2	55.6	108	−7	42	42	42	78	52	58	.328	.324	.320	22.76	1.94	20.8	5.4	5.5	5.4	5.7

CLEVELAND, OHIO

[ϕ=41°30′ N.; λ=81°42′ W.]

January	29.24	29.68	28.50	31.3	32.9	33.1	40.4	25.8	33.1	58	1	24	23	24	74	68	68	0.139	0.132	0.131	1.58	0.65	3.9	8.4	7.6	7.6	7.5
February	29.36	30.03	28.54	13.4	19.4	18.8	26.1	8.2	17.2	46	−11	8	10	10	80	69	69	.067	.072	.071	1.02	.30	10.4	5.8	6.6	5.7	6.4
March	29.29	29.69	28.72	28.8	34.1	34.6	40.0	24.3	32.2	72	13	21	24	25	74	66	66	.117	.139	.146	2.43	.90	3.2	6.3	5.7	6.4	6.3
April	29.13	29.64	28.52	42.5	47.6	49.7	56.8	37.8	47.3	76	26	34	33	36	73	62	62	.198	.194	.215	2.43	.93	4.2	6.6	6.2	5.9	6.2
May	29.20	29.59	28.88	58.9	62.4	65.5	71.7	53.4	62.6	89	38	44	45	43	59	55	48	.296	.303	.288	.58	.27	.0	3.6	4.1	2.7	3.1
June	29.08	29.41	28.74	70.2	74.6	76.8	82.4	64.8	73.6	100	54	58	59	57	66	60	54	.491	.504	.479	2.26	1.54	.0	4.1	3.8	4.1	4.0
July	29.15	29.49	28.91	72.7	77.4	77.9	83.5	68.5	76.0	99	60	61	63	59	68	62	55	.541	.576	.514	2.70	1.14	.0	4.2	4.2	4.5	4.3
August	29.21	29.48	28.86	66.1	72.4	72.5	77.3	62.8	70.0	93	50	57	57	57	72	61	59	.479	.487	.479	2.46	.92	.0	5.4	4.2	4.4	4.7
September	29.22	29.48	28.88	62.8	70.4	68.0	74.0	60.2	67.1	85	47	57	57	57	81	64	70	.472	.476	.487	2.12	.67	.0	5.3	5.8	5.3	5.6
October	29.24	29.61	28.83	49.7	57.5	55.4	60.7	46.7	53.7	76	34	40	41	41	71	57	60	.260	.269	.271	.99	.26	T	5.5	5.3	4.3	5.2
November	29.24	29.65	28.65	44.0	49.2	47.5	53.1	40.9	47.0	73	30	36	36	37	72	63	67	.219	.225	.229	1.40	.32	1.5	7.1	8.2	7.6	8.1
December	29.24	29.65	28.31	28.7	31.8	31.6	36.6	25.5	31.0	55	10	24	24	24	81	74	74	.130	.134	.133	1.84	.55	20.4	8.0	8.7	7.6	8.5
Year	29.22	30.05	28.31	47.4	52.5	52.6	58.6	43.2	50.9	100	−11	39	39	39	73	63	63	.284	.293	.287	21.81	1.54	43.6	5.9	5.9	5.5	5.8

COLUMBIA, MO.

[ϕ=38°57′ N.; λ=92°20′ W.]

January	29.29	29.70	28.89	31.2	38.2	----	44.1	27.2	35.6	70	3	26	27	----	82	64	----	0.149	0.156	----	0.93	0.54	0.4	6.1	5.8	----	5.1
February	29.37	29.91	28.95	25.3	34.7	----	41.6	21.4	31.5	74	−14	19	20	----	76	57	----	.111	.114	----	1.06	.55	9.4	4.6	3.9	----	4.1
March	29.30	29.73	28.78	33.6	43.7	----	50.1	29.5	39.8	76	13	27	27	----	78	52	----	.153	.152	----	2.91	1.32	8.8	4.7	5.7	----	5.3
April	29.15	29.55	28.73	48.3	62.2	----	67.4	45.2	56.3	82	32	38	37	----	70	42	----	.245	.242	----	1.28	.60	.0	3.6	4.0	----	3.2
May	29.18	29.45	28.82	61.6	78.1	----	81.6	56.0	68.8	101	42	51	50	----	70	40	----	.389	.383	----	1.36	.74	.0	4.2	3.6	----	2.9
June	29.07	29.27	28.86	74.2	88.5	----	92.1	68.6	80.4	101	57	65	62	----	74	44	----	.632	.573	----	3.56	1.68	.0	3.9	4.3	----	3.2
July	29.12	29.35	28.81	77.6	96.0	----	99.9	73.6	86.8	111	59	64	61	----	63	33	----	.596	.539	----	.67	.28	.0	3.7	4.0	----	3.2
August	29.15	29.39	28.81	71.5	87.2	----	91.7	68.5	80.1	110	53	60	61	----	70	45	----	.543	.548	----	4.94	3.20	.0	6.3	5.1	----	4.6
September	29.16	29.51	28.84	58.8	69.9	----	74.6	55.7	65.2	87	38	56	56	----	90	63	----	.460	.463	----	8.31	3.21	.0	5.4	5.7	----	5.3
October	29.24	29.63	28.84	52.1	68.3	----	71.9	50.2	61.0	82	29	46	47	----	82	49	----	.327	.348	----	2.57	1.14	.0	2.8	2.8	----	3.4
November	29.18	29.62	28.46	42.2	53.6	----	58.1	39.5	48.8	77	25	37	39	----	81	60	----	.234	.254	----	4.40	1.11	1.9	5.4	5.0	----	4.9
December	29.28	29.71	28.92	27.9	33.6	----	37.9	24.0	31.0	56	5	25	27	----	86	76	----	.135	.150	----	1.19	.32	8.0	6.5	6.3	----	6.6
Year	29.21	29.91	28.46	50.4	62.8	----	67.6	46.6	57.1	111	−14	43	43	----	77	52	----	.331	.327	----	33.17	3.21	28.5	4.8	4.7	----	4.3

COLUMBIA, S. C.

[ϕ=34°00′ N.; λ=81°03′ W.]

January	29.80	30.09	29.22	42.1	52.5	51.3	58.0	40.2	49.1	74	14	36	37	38	80	58	63	0.235	0.245	0.254	1.10	0.31	0.0	4.8	5.0	4.3	5.1
February	29.78	30.43	29.23	34.5	45.1	44.5	51.9	31.5	41.7	70	14	28	28	29	76	53	54	.162	.168	.166	3.77	.98	T	4.6	4.8	3.8	4.5
March	29.77	30.27	29.19	45.7	57.9	55.8	63.4	42.5	53.0	80	26	39	40	41	78	54	62	.256	.264	.278	3.16	1.10	T	5.1	4.4	4.7	4.7
April	29.64	30.12	29.07	56.7	69.0	66.3	74.1	53.7	63.9	88	35	49	50	51	77	53	61	.364	.376	.392	2.81	1.00	.0	4.7	4.8	4.5	4.7
May	29.62	30.00	28.97	64.1	75.0	72.3	79.4	60.0	69.7	89	50	59	58	58	83	58	64	.505	.489	.489	3.61	1.87	.0	5.2	4.9	4.3	5.0
June	29.60	29.83	29.33	74.8	85.8	81.5	90.1	70.5	80.3	99	63	69	67	68	82	55	65	.703	.657	.674	3.30	1.22	.0	4.7	4.4	4.2	4.4
July	29.63	29.88	29.42	77.4	87.4	81.7	92.6	72.8	82.7	101	69	72	71	72	82	60	73	.771	.704	.775	4.27	.88	.0	5.1	5.3	4.3	5.2
August	29.68	29.96	29.51	75.1	85.4	79.7	89.5	71.9	80.7	98	61	71	71	70	87	62	74	.761	.753	.745	3.69	1.40	.0	5.9	5.6	5.6	5.8
September	29.68	29.97	29.43	70.9	81.4	77.2	85.8	68.2	77.0	91	58	68	67	68	91	63	74	.694	.672	.689	1.97	.93	.0	5.2	5.7	5.6	5.3
October	29.71	29.96	29.40	56.5	71.5	67.3	75.0	54.3	64.6	83	38	51	48	52	81	47	59	.391	.362	.407	2.60	2.21	.0	3.6	3.2	2.6	3.4
November	29.77	30.11	29.46	48.9	62.9	59.2	67.4	46.0	56.7	81	29	44	44	44	83	54	60	.314	.326	.323	3.18	2.04	.0	4.2	3.7	2.9	3.8
December	29.77	30.12	29.21	39.2	49.8	47.7	54.9	36.3	45.6	69	19	35	37	37	86	63	67	.218	.234	.230	2.29	.81	T	5.1	5.2	4.7	5.2
Year	29.70	30.43	28.97	57.2	68.6	65.4	73.5	54.0	63.8	101	14	52	52	52	82	57	65	.448	.442	.452	35.75	2.21	T	4.8	4.8	4.3	4.8

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

CINCINNATI, OHIO

[H_b=627 ft.; h_t=11 ft.; h_r=3 ft.; h_a=51 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	32°: Minimum temperature or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.0	SW.	30	NW.	0	4	6	4	7	9	15	12	5	0	11	2	18	10	8	8	3	0	2	0	5	0	23	1	0
February	8.6	NE.	28	W.	0	10	11	2	5	6	7	4	11	0	8	5	15	11	7	14	9	0	0	0	12	0	27	0	0
March	9.4	NE.	30	SW.	0	11	12	1	5	15	3	9	5	1	9	8	14	12	10	9	6	1	4	2	3	0	19	2	0
April	8.1	SW.	27	SW.	0	7	5	3	3	8	13	8	11	2	8	10	12	7	3	3	2	0	1	0	0	0	4	3	0
May	6.5	SW.	21	W.	0	13	13	6	1	7	15	1	5	1	13	12	6	5	4	0	0	0	1	0	0	3	0	3	0
June	6.3	SW.	36	W.	1	4	5	0	4	10	18	14	5	0	11	12	7	9	6	0	0	0	1	0	0	15	0	14	0
July	6.1	SW.	21	SW.	0	7	10	6	7	6	17	8	1	0	10	12	9	10	8	0	0	0	2	0	0	24	0	13	0
August	5.9	SW.	22	N.	0	11	8	4	7	8	14	2	7	1	7	12	12	9	8	0	0	0	3	0	0	10	0	5	0
September	6.3	S.	19	SW.	0	5	5	2	6	20	14	3	5	0	7	14	9	12	10	0	0	0	2	0	0	1	0	3	0
October	6.9	NE.	28	SW.	0	5	13	8	3	7	10	13	2	1	16	10	5	2	2	0	0	0	0	0	0	2	0	0	0
November	8.9	S.	27	SW.	0	6	6	3	9	14	12	3	7	0	7	7	16	9	7	2	1	0	3	0	0	0	8	0	0
December	8.7	SW.	27	SW.	0	5	3	4	6	12	16	10	6	0	4	8	19	10	8	9	3	0	0	0	5	0	27	0	0
Year	7.6	SW.	36	W.	1	88	97	43	63	122	154	87	70	6	111	112	142	106	81	45	24	1	34	4	25	63	110	44	0

CLEVELAND, OHIO

[H_b=762 ft.; h_t=267 ft.; h_r=264 ft.; h_a=337 ft.]

January	15.7	W.	60	W.	9	4	2	2	10	9	17	17	1	0	5	5	21	15	9	17	9	0	5	1	6	0	25	0	0
February	13.8	N.	49	W.	5	10	7	1	8	5	8	11	6	0	8	7	13	11	7	20	11	0	1	0	18	0	28	0	0
March	13.7	N.	38	S.	5	19	6	3	4	17	6	7	0	0	7	10	14	16	12	15	7	0	3	0	10	0	24	1	0
April	13.2	W.	50	NW.	6	9	2	2	9	12	9	15	2	0	7	10	13	16	12	8	5	1	5	1	0	0	7	4	0
May	11.7	N.	36	SW.	4	16	11	3	6	7	7	9	3	0	20	8	3	3	3	0	0	0	0	0	0	0	0	0	0
June	11.6	N.	32	S.	2	11	7	2	8	9	8	12	2	1	12	16	2	6	4	0	0	0	1	0	0	4	0	6	0
July	10.9	N.	38	S.	4	17	10	2	15	7	6	3	2	0	13	14	4	8	6	0	0	1	0	0	0	6	0	10	0
August	11.0	N.	44	N.	3	13	5	6	9	11	8	6	4	0	12	13	6	11	9	0	0	0	1	0	0	1	0	6	0
September	11.2	SE.	35	N.	1	6	7	2	18	16	3	5	3	0	9	11	10	13	8	0	0	0	2	1	0	0	0	5	0
October	14.9	SW.	58	W.	9	9	5	2	7	14	11	11	3	0	11	10	10	8	6	3	2	1	0	0	0	0	0	2	0
November	17.1	S.	47	W.	14	3	1	2	11	16	10	13	4	0	1	6	23	16	10	7	5	1	1	0	0	0	5	2	0
December	14.7	W.	38	W.	5	3	2	0	8	12	15	16	5	1	2	7	22	17	10	18	10	0	3	0	10	0	26	0	0
Year	13.3	S.	60	W.	67	120	65	27	113	135	108	125	35	2	107	117	141	140	96	88	49	4	22	3	44	11	115	36	0

COLUMBIA, MO.

[H_b=784 ft.; h_t=6 ft.; h_r=3 ft.; h_a=84 ft.]

January	9.0	SW.	30	NW.	0	3	1	1	5	3	10	3	5	0	12	7	12	6	5	5	1	0	0	0	5	0	20	0	0
February	9.3	NW.	26	NW.	0	5	2	2	3	4	3	3	6	0	16	5	7	4	3	9	4	0	0	0	8	0	25	0	0
March	10.0	N.	27	N.	0	6	6	1	3	6	4	4	1	0	11	10	10	12	8	8	6	0	2	1	2	0	19	2	0
April	9.6	NW.	32	NW.	1	4	2	1	3	6	3	1	10	0	17	10	3	6	5	0	0	0	1	1	0	0	0	5	0
May	7.0	S.	22	S.	0	4	4	2	4	10	2	1	4	0	17	12	2	6	3	0	0	0	1	0	0	3	0	3	0
June	9.7	S.	34	NW.	1	3	2	1	8	9	4	2	1	0	17	13	0	10	8	0	0	1	0	0	0	21	0	11	0
July	7.4	SW.	19	W.	0	4	1	3	6	4	8	1	3	1	17	14	0	4	3	0	0	0	0	0	0	27	0	9	0
August	7.4	SW.	27	NW.	0	7	1	5	7	3	6	1	1	0	9	17	5	7	6	0	0	0	0	0	0	17	0	8	0
September	7.5	SE.	28	W.	0	3	3	1	9	3	4	4	3	0	10	9	11	16	12	0	0	0	0	0	0	0	0	9	0
October	7.4	S.	27	N.	0	2	3	2	6	7	2	4	5	0	17	9	5	6	5	0	0	0	0	0	0	0	1	2	0
November	9.4	SE.	28	SW.	0	2	2	1	7	8	7	3	5	0	12	10	8	12	10	3	2	0	0	0	0	0	6	2	0
December	8.7	NW.	27	SW.	0	3	1	3	4	3	3	8	6	0	8	5	18	10	9	8	5	0	1	1	7	0	27	1	0
Year	8.3	S.	34	NW.	2	46	28	23	65	61	56	35	50	1	163	121	81	99	77	33	18	1	4	3	22	68	98	52	0

COLUMBIA, S. C.

[H_b=351 ft.; h_t=41 ft.; h_r=32 ft.; h_a=57 ft.]

January	7.5	NE.	27	SW.	0	13	15	2	3	1	17	5	6	0	12	7	12	7	6	0	0	0	9	5	1	0	7	0	0
February	7.9	NE.	21	SW.	0	7	24	7	0	4	6	4	4	0	12	7	9	9	8	1	0	1	2	0	1	0	14	1	0
March	8.8	NE.	27	SW.	0	6	20	3	2	7	17	3	4	0	15	3	13	11	9	2	1	0	3	0	0	0	3	1	0
April	8.5	SW.	24	W.	0	2	14	0	3	6	20	5	9	1	15	6	9	12	8	0	0	0	2	0	0	0	0	2	0
May	7.4	NE.	28	NE.	0	2	23	3	14	4	10	4	2	0	13	5	13	12	11	0	0	0	7	0	0	0	0	5	0
June	6.8	S.	25	SW.	0	0	5	5	11	16	16	4	2	1	15	7	8	9	7	0	0	0	2	0	0	18	0	9	0
July	6.7	SW.	24	SW.	0	4	9	1	9	4	23	9	3	0	6	22	3	14	11	0	0	0	1	0	0	21	0	20	0
August	6.8	SW.	21	SW.	0	1	11	4	6	14	19	3	2	2	5	18	8	8	6	0	0	0	3	0	0	16	0	12	0
September	6.1	NE.	21	SE.	0	3	23	6	6	11	5	2	4	0	6	18	6	9	5	0	0	0	5	0	0	2	0	4	0
October	6.6	NE.	24	SW.	0	6	23	3	2	3	6	8	10	1	20	5	6	6	4	0	0	0	4	1	0	0	0	1	0
November	7.6	NE.	20	SW.	0	3	22	3	5	4	14	2	7	0	18	5	7	8	6	0	0	0	3	1	0	0	4	2	0
December	6.9	NE.	24	W.	0	5	17	2	2	3	12	9	10	2	10	9	12	12	9	2	0	0	3	2	0	0	8	0	0
Year	7.3	NE.	27	SW.	0	52	206	39	63	77	165	58	63	7	147	112	106	117	90	5	1	1	44	9	2	57	36	57	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

COLUMBUS, OHIO

[ϕ=39°58′ N.; λ=83°00′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Moisture: Cloudiness: 8 a. m.	Moisture: Cloudiness: Noon, local time	Moisture: Cloudiness: 8 p. m.	Moisture: Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.24	29.60	28.56	32.1	36.8	35.2	41.0	27.1	34.0	57	1	26	26	26	78	66	70	0.154	0.149	0.146	1.16	0.42	2.1	7.5	6.8	6.5	6.5
February	29.32	29.93	28.63	17.3	25.9	25.6	31.0	13.1	22.0	50	−8	13	14	15	81	59	64	.081	.086	.091	1.18	.58	13.2	5.9	5.9	6.1	5.6
March	29.25	29.63	28.76	30.4	39.8	40.3	46.8	27.5	37.2	72	10	24	27	28	76	62	61	.135	.159	.164	2.20	.67	6.8	5.9	6.0	5.4	6.0
April	29.10	29.60	28.58	44.9	54.5	55.1	61.1	40.9	51.0	78	28	36	38	38	74	56	56	.226	.239	.243	1.24	.43	.8	6.2	6.4	5.2	5.6
May	29.16	29.54	28.82	60.5	72.9	72.0	77.5	55.0	66.2	92	39	46	47	46	60	43	42	.325	.340	.325	.60	.25	.0	3.7	4.4	4.0	3.7
June	29.06	29.30	28.76	71.5	84.6	81.5	89.0	66.8	77.9	101	55	60	59	60	67	44	50	.520	.518	.534	2.74	1.08	.0	4.0	4.3	5.5	4.4
July	29.11	29.40	28.91	74.0	86.3	83.3	90.9	69.4	80.2	106	62	64	62	63	72	47	53	.602	.574	.584	2.94	1.08	.0	4.6	5.6	5.4	5.1
August	29.16	29.39	28.84	67.4	78.7	77.0	82.9	63.6	73.2	96	50	59	60	60	76	54	58	.524	.537	.545	4.13	1.60	.0	5.5	5.9	5.5	5.6
September	29.18	29.41	28.86	62.1	74.4	70.8	78.3	59.0	68.6	89	45	57	57	57	84	57	64	.480	.483	.488	3.36	1.10	.0	5.0	5.8	4.8	5.3
October	29.22	29.53	28.75	48.2	63.0	59.2	66.8	45.3	56.0	80	32	41	41	42	76	46	54	.269	.272	.276	.26	.22	.0	3.8	3.9	2.9	3.7
November	29.22	29.59	28.69	42.4	50.8	48.2	54.8	39.2	47.0	73	24	34	36	35	73	59	62	.209	.226	.218	.92	.30	T	6.6	7.3	7.0	7.2
December	29.23	29.63	28.39	28.5	33.7	32.5	38.0	25.3	31.6	50	9	24	26	26	83	72	76	.131	.142	.143	1.30	.55	3.0	7.6	8.0	6.8	7.6
Year	29.19	29.93	28.39	48.3	58.4	56.7	63.2	44.4	53.7	106	−8	40	41	41	75	55	59	.305	.310	.313	22.03	1.60	25.9	5.5	5.9	5.4	5.5

CONCORDIA, KANS.

[ϕ=39°35′ N.; λ=97°41′ W.]

January	28.65	29.06	28.20	28.3	37.8	36.9	44.3	23.8	34.0	68	6	22	24	24	75	59	62	0.120	0.133	0.134	0.43	0.25	0.8	4.5	5.1	5.7	4.6
February	28.73	29.15	28.36	25.7	37.5	37.3	44.1	23.1	33.6	72	−8	19	22	22	75	54	58	.106	.123	.121	1.22	.54	8.7	3.5	3.9	4.0	3.9
March	28.65	29.18	28.02	31.5	46.2	46.9	52.9	29.0	41.0	83	11	24	26	28	74	48	52	.132	.147	.156	.29	.13	1.2	5.3	5.3	5.3	5.2
April	28.54	28.97	28.07	46.3	63.3	63.5	69.5	44.7	57.1	88	33	34	33	33	65	36	35	.212	.202	.204	.71	.44	.0	4.2	3.7	3.6	3.7
May	28.52	28.95	28.06	61.2	78.0	76.6	82.5	58.5	70.5	101	46	50	49	50	69	39	44	.372	.360	.380	2.55	1.19	.0	4.2	3.6	4.6	3.9
June	28.41	28.69	28.16	72.2	87.8	88.7	92.9	68.6	80.8	102	56	60	58	57	67	32	36	.528	.493	.470	3.34	.92	.0	4.3	4.5	3.7	4.3
July	28.45	28.71	28.03	78.0	97.0	96.4	101.7	75.0	88.4	114	55	57	53	52	51	25	25	.474	.406	.397	.95	.63	.0	3.3	3.0	3.2	3.3
August	28.51	28.80	28.16	72.3	89.8	89.8	95.1	69.9	82.5	109	51	56	54	53	59	33	32	.462	.441	.421	.71	.22	.0	5.2	3.9	4.4	4.5
September	28.52	28.88	28.19	56.8	70.9	68.7	77.3	51.9	64.6	94	35	49	50	50	78	50	55	.376	.390	.385	1.82	.62	.0	3.8	4.6	3.9	4.4
October	28.58	29.16	28.16	52.1	70.0	65.8	74.6	50.1	62.4	91	28	43	44	44	74	41	40	.296	.308	.315	.75	.60	.0	2.1	2.9	2.7	2.7
November	28.54	29.07	27.99	40.2	51.4	47.9	56.1	36.8	46.4	78	23	35	36	37	81	61	69	.212	.220	.229	2.29	1.02	.6	4.9	5.5	4.7	5.2
December	28.66	29.17	28.20	25.9	34.1	30.9	38.8	22.0	30.4	54	2	23	26	25	89	71	77	.125	.142	.134	.22	.15	.5	4.8	5.6	5.0	5.3
Year	28.56	29.18	27.99	49.2	63.6	62.4	69.2	46.1	57.6	114	−8	39	40	40	71	46	50	.285	.280	.279	15.28	1.19	11.8	4.2	4.3	4.1	4.2

CORPUS CHRISTI, TEX.

[ϕ=27°49′ N.; λ=97°25′ W.]

January	30.10	30.58	29.82	56.2	63.4	62.3	67.1	53.6	60.4	77	38	53	54	56	88	72	80	0.424	0.445	0.466	4.78	1.81	0.0	5.9	6.7	5.0	6.3
February	30.12	30.47	29.65	54.0	63.9	62.0	67.5	51.0	59.2	82	38	51	51	53	89	66	74	.391	.396	.422	1.38	.48	.0	4.3	4.8	3.5	4.4
March	30.08	30.48	29.77	55.5	66.3	64.9	70.6	53.7	62.2	77	37	52	52	55	88	62	71	.410	.413	.447	1.67	.67	.0	4.1	3.4	2.0	3.9
April	29.94	30.24	29.62	68.4	75.7	73.4	77.7	66.7	72.2	92	60	64	64	65	87	69	77	.609	.609	.640	3.74	1.57	.0	7.0	6.0	5.6	6.2
May	29.92	30.12	29.75	72.3	81.4	78.8	83.5	70.0	76.8	90	58	67	66	68	84	62	69	.667	.659	.681	1.24	.64	.0	4.2	3.8	2.9	3.8
June	29.88	30.09	29.60	79.6	86.0	83.6	87.9	77.4	82.6	95	73	74	73	74	83	66	74	.831	.818	.850	.34	.25	.0	2.6	3.2	2.2	3.0
July	29.95	30.11	29.12	78.4	86.7	83.6	89.0	76.3	82.6	105	72	75	74	75	89	66	75	.864	.825	.859	5.46	3.88	.0	4.2	5.1	4.0	4.6
August	29.97	30.10	29.80	79.4	87.6	84.7	89.3	78.4	83.8	97	76	75	74	75	88	65	74	.876	.849	.876	.15	.12	.0	4.8	5.1	4.0	4.8
September	29.95	30.20	29.81	76.9	83.8	81.2	85.8	75.0	80.2	90	66	72	71	72	85	67	75	.792	.772	.795	6.36	2.53	.0	4.3	5.0	3.8	4.7
October	30.01	30.30	29.83	71.9	82.4	79.3	84.0	70.9	77.4	88	62	67	67	68	86	60	69	.679	.667	.695	1.04	.81	.0	2.8	2.8	2.2	2.8
November	30.00	30.35	29.44	66.4	74.8	71.7	76.7	64.1	70.4	87	43	61	60	60	84	61	69	.567	.543	.552	4.11	3.97	.0	3.6	4.7	3.3	3.9
December	30.12	30.54	29.83	55.6	64.2	62.0	67.7	52.8	60.2	80	37	51	53	53	84	68	74	.407	.439	.434	.70	.56	.0	6.1	5.7	5.6	5.9
Year	30.00	30.58	29.12	67.9	76.4	74.0	78.9	65.8	72.3	105	37	64	63	64	86	65	73	.626	.620	.643	30.97	3.97	.0	4.5	4.7	3.7	4.5

DALLAS, TEX.

[ϕ=32°46′ N.; λ=96°47′ W.]

January	29.58	29.94	29.31	42.5	50.7	52.0	56.2	39.9	48.0	73	22	38	41	40	87	72	66	0.248	0.267	0.262	1.28	0.90	0.0	4.9	5.3	4.9	5.0
February	29.60	30.07	29.07	42.6	50.8	53.2	58.2	38.4	48.3	76	20	35	37	36	76	61	56	.214	.227	.225	1.85	1.34	.1	4.3	5.5	5.1	5.4
March	29.44	30.05	29.11	46.2	58.9	60.3	65.4	43.0	54.2	88	27	40	42	41	80	56	53	.269	.281	.277	3.11	1.26	.7	4.9	3.9	3.4	4.1
April	29.42	29.80	29.04	59.4	70.2	72.0	74.7	58.1	66.4	89	48	55	54	54	84	58	55	.445	.434	.435	3.55	2.47	.0	5.8	6.5	4.9	5.7
May	29.40	29.66	29.15	66.1	78.5	80.0	82.7	64.0	73.4	94	53	59	58	57	81	51	48	.505	.485	.478	.96	.44	.0	3.5	5.0	3.5	4.3
June	29.34	29.59	29.08	75.5	89.6	91.8	93.6	74.3	84.0	100	67	66	62	62	72	40	38	.633	.559	.559	.10	.10	.0	2.2	1.6	.8	1.9
July	29.40	29.58	29.23	78.5	92.6	95.0	96.9	77.7	87.3	103	73	67	62	59	68	38	32	.661	.573	.514	.01	.01	.0	2.3	2.9	2.6	2.6
August	29.42	29.5[illegible]	29.18	78.5	92.2	94.3	97.0	78.1	87.6	103	70	69	65	61	72	41	34	.705	.613	.540	.24	.23	.0	3.6	3.8	2.9	3.5
September	29.42	29.77	29.18	67.7	80.0	81.5	85.6	65.9	75.8	95	54	62	60	58	84	53	48	.683	.543	.515	6.07	4.46	.0	5.0	4.8	2.7	4.1
October	29.48	29.82	29.26	63.0	79.0	78.9	83.3	61.4	72.4	90	49	53	54	50	71	44	40	.424	.436	.392	.09	.09	.0	1.8	2.2	1.0	2.1
November	29.48	29.8[illegible]	28.91	53.2	64.0	62.7	68.1	51.0	59.6	85	34	44	45	45	74	55	57	.310	.325	.324	5.01	1.42	.0	4.9	4.4	3.2	4.4
December	29.60	30.02	29.15	42.1	52.9	53.1	57.8	38.9	48.4	77	22	35	39	37	77	61	56	.224	.260	.238	.88	.69	.0	5.2	5.0	4.6	5.2
Year	29.46	30.07	28.91	58.5	71.6	72.9	76.6	57.6	67.1	103	20	52	52	50	77	52	49	.435	.417	.397	23.15	4.46	.8	4.1	4.2	3.3	4.0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

COLUMBUS, OHIO

[H_b=822 ft.; h_t=216 ft.; h_a=209 ft.; h_b=230 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	12.8	SW.	45	NW.	5	1	5	5	8	9	17	13	4	0	10	4	17	11	7	10	6	0	3	0	5	0	24	0	0
February	11.3	NE.	36	NW.	1	7	8	2	9	7	4	7	12	0	8	11	9	10	6	14	9	0	0	0	14	0	28	0	0
March	12.0	S.	40	W.	3	11	9	2	6	9	12	5	8	0	7	11	13	12	10	11	5	1	4	2	3	0	21	1	0
April	11.3	S.	38	W.	1	5	5	2	8	12	8	7	13	0	8	12	10	12	6	5	3	1	0	0	0	0	4	5	0
May	9.4	NE.	31	W.	0	11	14	4	2	9	13	4	5	0	16	13	2	6	5	0	0	0	0	0	0	2	0	2	0
June	9.8	S.	42	NW.	1	3	3	1	12	13	12	6	10	0	10	18	2	5	5	0	0	0	0	0	0	17	0	11	0
July	8.6	NE.	51	NW.	2	5	12	4	12	9	9	7	4	0	7	22	2	9	8	0	0	0	3	0	0	16	0	11	0
August	8.9	S.	42	N.	2	8	11	3	12	9	6	7	6	0	6	16	9	10	7	0	0	0	0	0	0	4	0	6	0
September	8.8	S.	29	SW.	0	3	4	3	10	15	5	5	6	0	9	16	5	11	10	0	0	0	0	0	0	0	0	3	0
October	10.4	SW.	41	W.	1	5	9	6	8	11	7	12	4	0	14	12	5	2	2	0	0	0	0	0	0	0	1	0	0
November	12.8	SE.	34	W.	3	3	4	6	11	11	11	6	8	0	3	10	17	8	7	4	0	0	3	1	0	0	10	2	0
December	12.0	SW.	38	W.	2	2	4	4	10	10	10	12	10	0	3	7	21	12	6	11	7	0	3	0	7	0	26	0	0
Year	10.7	SW.	51	NW.	21	64	88	42	117	124	114	91	90	0	101	152	112	108	79	55	30	2	23	3	29	39	114	41	0

CONCORDIA, KANS.

[H_b=1,392 ft.; h_t=50 ft.; h_r=42 ft.; h_a=58 ft.]

January	8.6	N.	27	N.	0	11	9	0	2	12	10	10	7	1	17	3	11	4	3	9	4	0	5	0	8	0	26	0	0
February	8.4	N.	26	N.	0	9	8	4	6	10	4	8	7	0	15	7	6	7	6	6	6	0	1	0	6	0	22	0	0
March	9.7	NE.	31	NE.	0	13	12	5	3	11	9	7	2	0	11	9	11	4	2	4	2	0	2	2	3	0	19	1	0
April	10.2	N.	32	NW.	1	12	8	4	3	11	8	7	5	2	15	10	5	6	3	0	0	1	2	0	0	0	0	2	0
May	9.5	S.	28	NE.	0	2	9	3	6	27	7	5	3	0	15	9	7	9	8	0	0	1	0	0	0	8	0	5	0
June	8.8	S.	35	NW.	1	2	9	6	5	24	9	4	1	0	13	14	3	10	10	0	0	0	0	0	0	18	0	16	0
July	8.8	S.	29	W.	0	6	4	5	5	26	11	1	2	2	19	10	2	4	3	0	0	0	0	0	0	28	0	4	0
August	8.2	SW.	24	NE.	0	2	12	14	9	11	9	3	1	1	12	16	3	7	4	0	0	0	1	0	0	20	0	11	0
September	9.2	S.	25	N.	0	9	4	2	8	20	7	3	5	2	13	10	7	11	8	0	0	0	2	0	0	3	0	8	0
October	8.2	S.	27	SW.	0	3	6	6	4	17	7	9	5	5	21	7	3	4	3	0	0	0	1	0	0	1	0	1	0
November	8.7	S.	27	NE.	0	11	5	8	5	10	7	10	3	1	12	7	11	7	6	3	1	0	4	0	1	0	11	2	0
December	8.4	N.	24	N.	0	13	9	3	5	9	3	11	8	1	11	9	11	3	2	6	2	0	4	1	5	0	31	0	0
Year	8.9	S.	35	NW.	2	93	95	60	61	188	91	78	49	15	174	111	80	76	58	28	15	2	22	3	23	78	109	50	0

CORPUS CHRISTI, TEX.

[H_b=20 ft.; h_t=11 ft.; h_r=63 ft.; h_a=78 ft.]

January	9.5	NE.	26	NW.	0	13	12	9	8	6	1	5	8	0	8	9	14	12	10	0	0	0	7	4	0	0	0	6	0
February	11.0	NE.	30	S.	0	9	11	13	4	8	2	4	5	0	13	9	6	5	4	0	0	0	5	1	0	0	0	1	0
March	11.7	S.	31	S.	0	17	3	5	9	21	1	4	2	0	16	9	6	7	6	0	0	0	4	3	0	0	0	4	0
April	11.8	S.	32	E.	1	9	7	12	16	16	0	0	0	0	6	12	12	6	6	0	0	0	1	1	0	0	1	10	0
May	10.6	SE.	27	E.	0	6	4	8	23	12	2	5	2	0	15	11	5	5	4	0	0	0	1	1	0	0	0	5	0
June	11.6	SE.	22	SE.	0	0	2	7	27	21	0	2	1	0	20	9	1	2	2	0	0	0	0	0	0	6	0	3	0
July	12.0	S.	47	S.	2	2	1	4	15	32	2	4	2	0	16	7	8	8	6	0	0	0	1	0	0	11	0	6	0
August	11.3	S.	24	SE.	0	3	1	5	22	27	2	2	0	0	12	15	4	3	1	0	0	0	0	0	0	8	0	2	0
September	10.6	SE.	28	NE.	0	4	3	8	20	21	1	3	0	0	13	10	7	12	8	0	0	0	0	0	0	1	0	5	0
October	9.5	SE.	23	SE.	0	10	3	8	25	9	2	4	1	0	22	5	4	3	3	0	0	0	2	2	0	0	0	1	0
November	10.7	SE.	28	N.	0	10	7	7	16	12	3	0	5	0	16	7	7	5	4	0	0	0	0	0	0	0	0	2	0
December	10.1	S.	30	N.	0	9	11	10	6	16	3	3	4	0	9	10	12	4	3	0	0	0	5	2	0	0	0	0	0
Year	10.9	S.	47	S.	3	92	65	96	191	201	19	36	30	0	166	113	86	72	57	0	0	0	26	14	0	27	0	45	0

DALLAS, TEX.

[H_b=512 ft.; h_t=220 ft.; h_r=194 ft.; h_a=227 ft.]

January	11.5	N.	38	W.	5	12	9	4	12	8	1	7	9	0	15	3	13	8	4	0	0	0	5	1	0	0	6	1	0
February	13.0	N.	35	W.	4	11	9	5	9	4	2	9	7	0	10	6	12	7	6	2	1	1	1	1	0	0	6	3	0
March	13.7	SE.	38	NW.	8	14	5	4	19	5	4	4	7	0	15	8	8	7	5	2	1	2	3	0	0	0	4	4	0
April	12.6	SE.	52	NW.	7	9	7	7	14	12	4	3	4	0	9	6	15	8	7	0	0	0	1	0	0	0	8	0	0
May	11.1	SE.	30	NE.	0	2	15	17	18	1	0	4	4	1	16	5	10	5	5	0	0	0	1	0	0	3	0	4	0
June	11.7	SE.	38	NE.	2	1	3	25	22	6	0	1	1	0	23	5	2	1	1	0	0	0	0	0	0	26	0	2	0
July	10.7	S.	33	NE.	1	0	5	11	19	20	3	1	2	1	22	8	1	1	0	0	0	0	0	0	0	9	30	2	0
August	10.4	S.	43	NE.	1	2	4	8	16	27	4	1	0	0	19	10	2	3	2	0	0	0	0	0	0	3	31	3	0
September	12.3	SE.	36	SE.	1	9	4	8	24	5	3	2	4	1	15	8	7	5	5	0	0	0	0	0	0	0	9	7	0
October	10.3	SE.	27	S.	0	6	16	13	9	9	1	2	5	1	24	4	3	1	1	0	0	0	0	0	0	0	0	1	0
November	12.4	SE.	44	W.	6	6	5	13	18	5	2	7	4	0	14	5	11	8	7	0	0	0	1	2	0	0	0	3	0
December	11.0	SE.	41	NW.	2	9	4	6	13	6	6	5	13	0	14	5	12	4	4	0	0	0	4	0	0	0	5	0	0
Year	11.7	SE.	52	NW.	37	81	86	121	194	108	30	46	60	4	196	73	96	58	47	4	2	5	20	2	1	99	21	38	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DAVENPORT, IOWA

[ϕ=41°30′ N.; λ=90°38′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.44	29.84	28.94	27.3	33.3	32.2	38.1	23.6	30.8	58	−5	23	24	25	82	67	73	0.130	0.137	0.143	0.77	0.32	1.7	6.3	6.6	6.0	6.6
February	29.57	30.14	28.99	18.6	26.8	27.0	31.8	15.9	23.8	61	−2	14	14	14	80	56	58	.066	.088	.087	.78	.32	6.1	5.0	6.6	4.0	5.5
March	29.47	29.93	28.86	29.2	38.0	38.6	44.3	25.9	35.1	64	8	22	22	24	72	54	56	.126	.130	.136	1.50	.72	2.5	5.9	5.7	6.4	6.0
April	29.30	29.71	28.84	43.4	57.1	56.6	61.9	40.7	51.3	78	30	34	33	34	69	42	46	.200	.201	.212	1.06	.54	T	4.2	5.1	6.0	5.1
May	29.34	29.64	28.99	61.0	77.4	78.0	82.5	57.9	70.2	103	46	46	42	42	59	30	30	.324	.287	.286	.81	.45	.0	3.2	4.3	2.8	3.7
June	29.22	29.45	28.94	71.6	85.6	87.0	91.6	67.3	79.4	104	55	60	59	59	68	43	40	.527	.517	.510	4.56	1.21	.0	5.2	4.6	4.5	4.9
July	29.29	29.59	29.02	72.8	85.2	86.6	91.4	69.9	80.6	106	59	63	63	65	72	50	50	.583	.594	.631	4.50	1.46	.0	6.0	4.5	4.4	5.2
August	29.35	29.61	29.02	65.8	78.7	78.1	83.1	63.1	73.1	100	48	59	60	62	78	54	59	.519	.542	.579	5.41	1.71	.0	4.8	5.8	4.5	5.6
September	29.34	29.66	28.94	57.4	67.0	65.1	72.5	54.4	63.4	86	38	54	54	56	89	66	73	.435	.440	.466	7.91	1.76	.0	6.0	6.9	4.6	6.3
October	29.41	29.78	28.89	49.8	64.1	60.6	68.2	47.7	58.0	82	30	44	44	46	80	50	59	.294	.308	.323	1.77	1.66	.0	4.2	3.8	2.9	4.0
November	29.36	29.83	28.50	40.1	49.2	46.9	52.8	37.8	45.3	68	25	36	37	38	84	65	72	.220	.236	.247	6.48	1.38	T	6.3	6.0	5.6	6.3
December	29.46	29.90	28.86	21.3	25.9	25.4	30.3	16.6	23.4	41	−5	18	20	22	87	78	83	.102	.111	.118	1.30	.41	10.0	7.3	7.4	6.3	7.6
Year	29.38	30.14	28.50	46.5	57.4	56.8	62.4	43.4	52.9	106	−5	39	39	41	77	55	58	.296	.299	.312	36.85	1.76	20.3	5.4	5.6	4.8	5.6

DEL RIO, TEX.

[ϕ=29°20′ N.; λ=100°53′ W.]

January	29.09	29.53	28.82	45.6	57.3	59.0	63.9	43.2	53.6	78	26	41	41	41	86	59	56	0.279	0.282	0.287	0.67	0.36	0.0	4.6	4.9	4.0	4.8
February	29.09	29.45	28.60	48.4	61.4	64.3	68.2	46.1	57.2	83	33	38	38	38	68	47	42	.245	.249	.247	.15	.32	.0	5.0	5.0	3.4	4.4
March	29.04	29.54	28.69	49.3	66.3	72.4	76.5	47.4	62.0	90	34	40	41	37	73	42	31	.272	.276	.236	.59	.38	.0	3.6	2.7	2.7	3.0
April	28.90	29.28	28.56	63.4	78.0	79.5	82.9	62.2	72.6	100	53	56	54	51	78	47	41	.459	.434	.391	1.17	.90	.0	6.0	5.2	5.4	5.6
May	28.89	29.21	28.64	69.0	85.0	86.3	89.8	67.4	78.6	102	55	59	56	52	72	40	34	.516	.466	.402	1.77	1.41	.0	4.2	4.6	4.1	4.1
June	28.82	29.06	28.54	76.2	89.4	94.1	95.8	75.7	85.8	104	70	66	63	57	72	44	30	.643	.587	.466	.28	.24	.0	4.1	1.7	3.0	2.8
July	28.90	29.08	28.62	76.7	90.3	92.3	95.2	75.9	85.6	100	70	68	65	60	76	44	38	.687	.614	.533	2.23	1.49	.0	4.4	3.8	4.6	4.1
August	28.92	29.08	28.68	77.0	89.6	92.7	95.0	76.9	86.0	99	74	69	66	61	77	46	36	.709	.640	.547	.10	.10	.0	3.3	3.6	3.1	3.3
September	28.91	29.25	28.70	72.3	82.9	85.9	88.8	70.8	79.8	94	63	67	65	62	84	56	46	.668	.629	.565	3.75	2.70	.0	6.1	5.2	4.0	5.1
October	28.98	29.31	28.75	65.0	81.3	81.1	85.6	64.1	74.8	95	53	58	59	55	78	48	43	.499	.510	.458	1.83	1.83	.0	3.1	3.2	2.2	2.9
November	29.00	29.31	28.48	56.0	70.4	69.4	74.5	53.9	64.2	87	34	47	48	46	75	48	45	.362	.381	.341	.11	.08	.0	3.6	3.6	2.1	3.3
December	29.11	29.50	28.84	47.7	60.1	60.0	64.7	44.8	54.8	76	32	40	42	41	77	56	55	.283	.297	.293	.61	.38	.0	5.5	6.1	5.6	5.7
Year	28.97	29.54	28.48	62.2	76.0	78.1	81.7	60.7	71.2	104	26	54	53	50	76	48	41	.468	.447	.397	13.26	2.70	.0	4.5	4.1	3.7	4.1

DENVER, COLO.

[ϕ=39°45′ N.; λ=105°00′ W.]

January	24.75	25.09	24.38	32.3	46.2	45.4	51.1	29.0	40.0	69	15	16	15	16	50	29	31	0.087	0.087	0.089	0.01	0.01	T	2.6	4.2	6.0	4.5
February	24.78	25.11	24.37	29.9	40.8	41.1	46.7	26.4	36.6	74	4	21	23	24	69	55	56	.110	.120	.129	2.01	.71	15.6	4.2	6.2	6.3	5.9
March	24.75	25.16	24.30	35.4	51.2	51.3	56.7	31.0	43.8	68	13	23	22	23	62	38	39	.122	.118	.125	1.00	.23	8.7	5.2	5.9	6.8	6.3
April	24.73	25.07	24.16	42.0	58.2	58.3	63.5	39.3	51.4	79	19	29	24	26	61	34	37	.159	.135	.145	1.10	.56	8.8	4.1	4.4	6.5	5.0
May	24.74	25.10	24.39	55.0	72.4	72.2	77.0	52.3	64.6	88	32	37	34	35	53	30	30	.221	.201	.210	1.58	.61	1.0	5.4	5.1	7.4	5.7
June	24.68	25.04	24.28	58.5	78.3	79.7	83.6	56.6	70.0	95	45	41	33	34	55	22	22	.265	.200	.200	.22	.14	.0	3.0	3.8	6.0	4.1
July	24.79	25.06	24.57	66.6	87.3	84.9	90.9	64.7	77.8	100	56	45	39	41	48	21	24	.307	.252	.267	.32	.12	.0	4.1	4.2	6.8	5.0
August	24.83	25.01	24.67	63.3	80.9	79.5	86.4	62.3	74.4	97	50	49	45	46	61	30	34	.352	.302	.325	.91	.22	.0	4.9	3.7	7.6	5.1
September	24.75	25.15	24.40	49.7	68.3	68.7	75.0	46.4	60.7	89	30	36	29	31	62	31	31	.211	.167	.178	.50	.18	T	4.0	4.1	4.8	4.1
October	24.79	25.24	24.18	47.2	67.0	65.1	71.4	44.3	57.8	87	35	26	23	25	45	22	24	.143	.128	.137	T	T	.0	3.0	3.1	4.5	3.4
November	24.71	25.18	24.30	36.6	52.4	49.6	55.1	33.6	44.4	79	14	20	21	22	52	33	38	.108	.112	.117	.61	.18	3.9	3.4	4.9	5.7	4.9
December	24.73	25.12	24.29	29.0	43.8	41.6	47.9	24.2	36.0	69	14	15	16	18	56	34	40	.085	.091	.099	.67	.48	7.0	2.3	4.5	4.5	4.1
Year	24.75	25.24	24.16	45.5	62.2	61.4	67.1	42.5	54.8	100	4	30	27	28	56	32	34	.181	.159	.168	8.93	.71	45.0	3.8	4.5	6.1	4.8

DES MOINES, IOWA

ϕ=41°35′ N.; λ=93°37′ W.]

January	29.18	29.67	28.72	24.5	31.8	30.2	36.7	20.0	28.4	59	−1	20	23	24	84	70	75	0.117	0.135	0.136	1.22	0.57	8.0	6.4	6.4	6.6	6.7
February	29.31	29.72	28.84	20.2	30.7	30.7	35.8	17.3	26.6	64	−10	14	16	17	77	54	56	.091	.100	.101	.72	.50	4.8	4.5	5.0	4.9	4.8
March	29.21	29.68	28.61	27.9	37.8	39.3	45.3	24.8	35.0	71	5	21	23	24	75	55	56	.121	.132	.140	1.00	.35	6.2	5.6	5.6	6.0	6.0
April	29.05	29.49	28.59	43.2	57.9	58.5	63.6	39.9	51.8	81	28	33	33	32	69	42	39	.197	.201	.188	.98	.63	.0	4.0	5.5	4.2	4.6
May	29.06	29.34	28.66	61.6	79.6	79.7	84.5	57.7	71.1	105	41	48	43	44	57	29	31	.323	.293	.307	1.06	.51	.0	3.6	3.1	3.8	3.2
June	28.96	29.21	28.70	71.2	87.7	85.4	92.1	67.2	79.6	103	56	58	57	56	65	37	41	.495	.480	.468	3.18	.94	.0	5.2	4.0	5.0	4.5
July	29.02	29.28	28.69	73.6	89.6	89.4	95.0	70.1	82.6	109	53	61	59	59	67	39	40	.550	.515	.520	2.52	1.24	.0	5.0	4.3	3.7	4.1
August	29.07	29.39	28.74	66.3	82.8	83.2	88.5	63.1	75.8	109	44	56	55	56	71	42	42	.472	.466	.473	1.39	.96	.0	6.5	5.1	4.3	5.3
September	29.07	29.39	28.80	54.2	67.6	66.0	72.0	50.9	61.4	88	35	51	52	53	89	59	64	.389	.401	.415	6.20	1.99	.0	6.1	6.5	5.5	6.1
October	29.13	29.57	28.63	49.4	64.9	62.1	69.9	46.6	58.2	86	28	44	45	47	82	51	58	.298	.317	.340	1.67	1.41	.0	3.7	2.9	2.2	2.9
November	29.10	29.57	28.47	38.6	47.8	45.6	51.1	34.7	42.9	71	19	35	37	37	87	68	74	.215	.235	.234	4.08	.92	6.4	5.5	6.4	5.9	6.1
December	29.21	29.66	28.72	21.9	26.1	25.4	29.9	15.7	22.8	43	−4	19	20	21	86	78	80	.106	.115	.115	.30	.13	3.4	8.3	7.6	7.8	8.0
Year	29.11	29.72	28.47	46.0	58.7	58.0	63.7	42.3	53.0	109	−10	38	39	39	76	52	55	.281	.282	.286	24.32	1.99	28.8	5.4	5.2	5.0	5.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DAVENPORT, IOWA

[H_b=606 ft.; h_t=66 ft.; h_r=60 ft.; h_a=161 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	10.6	SW.	35	NW.	1	3	4	6	4	3	15	12	15	0	8	6	17	6	4	8	2	0	5	3	9	0	26	0	0
February	10.1	NW	29	NW.	0	7	9	2	9	5	7	5	12	0	9	9	10	6	5	8	5	0	2	0	15	0	28	0	0
March	11.0	SW.	35	NW.	1	3	11	2	5	6	14	10	11	0	9	9	13	11	8	6	5	0	3	2	5	0	23	1	0
April	11.3	SW.	31	NW.	0	5	5	1	3	6	19	9	18	0	10	9	11	6	4	1	0	0	3	1	0	0	4	1	0
May	9.8	SW.	40	SW.	3	1	10	3	5	10	23	5	5	0	16	10	5	5	4	0	0	0	0	0	0	0	3	0	0
June	9.1	SW.	32	NW.	1	3	9	2	8	7	20	2	9	0	10	13	7	14	14	0	0	0	1	0	0	18	0	17	0
July	8.2	SW.	32	NW.	1	7	14	5	16	8	8	0	4	0	13	6	12	16	12	0	0	1	1	0	0	16	0	14	1
August	8.1	NE.	31	NW.	0	4	16	8	17	4	5	2	6	0	8	13	10	10	8	0	0	0	8	3	0	8	0	7	0
September	8.5	SW.	24	NW.	0	6	6	2	9	12	7	6	12	0	11	2	17	16	12	9	0	1	13	2	0	0	0	5	0
October	9.6	SW.	25	NW.	0	3	6	8	6	5	13	10	11	0	16	8	7	4	3	0	0	0	5	1	0	0	3	2	0
November	10.5	SW.	34	SW.	1	3	6	1	11	10	11	6	12	0	7	10	13	14	10	2	1	1	4	0	0	0	10	3	0
December	9.8	NW.	27	NW.	0	3	7	5	5	7	8	10	15	2	5	5	21	14	9	16	10	0	5	2	17	0	31	0	0
Year	9.7	SW.	40	SW.	8	48	103	45	98	77	150	77	130	2	122	100	143	122	93	41	23	3	50	14	46	51	125	53	1

DEL RIO, TEX.

[H_b=944 ft.; h_t=64 ft.; h_r=56 ft.; h_a=71 ft.]

January	8.1	NW.	27	NW.	0	6	2	12	13	2	0	6	17	4	14	8	9	8	5	0	0	0	13	2	0	0	3	0	0
February	9.4	SE.	34	W.	1	5	2	9	19	4	2	2	9	4	14	8	6	3	1	0	0	0	5	0	0	0	0	0	0
March	10.5	SE.	38	N.	4	9	2	11	20	3	0	1	11	5	22	4	5	3	3	0	0	0	1	0	0	0	1	0	1
April	9.8	SE.	41	W.	1	4	5	15	24	6	0	1	3	2	10	11	9	5	3	0	0	1	0	0	0	4	0	8	0
May	9.6	SE.	29	SE.	0	2	3	17	23	7	1	0	3	6	12	15	4	7	4	0	0	0	0	0	0	16	0	5	0
June	12.1	SE.	30	SE.	0	0	1	11	41	6	1	0	0	0	20	8	2	3	1	0	0	0	0	0	0	27	0	2	0
July	10.6	SE.	37	E.	2	3	5	13	29	10	2	0	0	0	15	12	4	5	4	0	0	0	0	0	0	28	0	2	0
August	10.6	SE.	23	SE.	0	2	2	22	27	8	0	0	0	1	16	13	2	1	1	0	0	0	0	0	0	30	0	0	0
September	10.2	SE.	41	N.	1	4	3	6	37	7	1	0	0	2	8	17	5	4	3	0	0	1	1	1	0	15	0	2	0
October	8.2	SE.	30	E.	0	0	2	15	27	10	1	1	2	4	19	9	3	2	2	0	0	0	0	0	0	4	0	1	0
November	9.3	SE.	34	W.	1	4	6	12	21	2	0	2	10	3	18	6	6	3	1	0	0	0	0	0	0	0	0	1	0
December	7.5	SE.	38	NW.	1	4	1	9	21	5	0	7	12	3	11	6	14	8	4	0	0	0	4	1	0	0	0	2	0
Year	9.7	SE.	41	W.	11	43	34	152	302	70	8	20	67	34	179	117	69	52	32	0	0	2	24	4	0	125	3	24	0

DENVER, COLO.

[H_b=529 ft.; h_t=106 ft.; h_r=98 ft.; h_a=113 ft.]

January	8.1	S.	32	N.	1	12	4	2	2	19	9	9	5	0	15	8	8	1	0	4	1	0	0	0	0	0	24	0	0
February	8.0	S.	28	N.	0	11	9	0	4	21	3	2	6	0	8	8	12	9	9	12	7	0	3	1	5	0	19	0	0
March	9.1	S.	35	N.	2	14	6	0	5	21	0	7	9	0	5	16	10	10	9	11	7	0	4	3	1	0	16	3	0
April	8.3	S.	33	N.	1	15	3	3	8	13	6	3	9	0	9	14	7	9	7	6	4	0	1	0	1	0	6	4	0
May	8.2	S.	27	SE.	0	6	2	3	5	21	4	7	14	0	7	14	10	10	7	1	1	0	1	2	0	0	1	12	0
June	8.4	S.	29	SE.	0	8	7	2	9	15	5	6	8	0	13	15	2	7	1	0	0	0	0	0	0	5	0	11	0
July	7.8	S.	27	N.	0	4	3	4	9	24	6	7	5	0	8	18	5	8	3	0	0	0	0	0	0	21	0	17	0
August	7.7	S.	28	NW.	0	9	3	0	5	17	10	6	11	1	3	26	2	10	5	0	0	0	0	0	0	9	0	18	0
September	7.8	S.	35	N.	1	10	10	3	8	14	7	2	6	0	12	12	6	6	3	2	1	0	0	0	0	0	2	6	0
October	7.9	S.	29	NW.	0	7	8	6	1	19	6	7	8	0	16	13	2	0	0	0	0	0	0	0	0	0	0	0	0
November	7.9	S.	30	W.	0	6	2	3	4	25	4	6	10	0	12	8	10	5	4	6	4	0	0	0	1	0	11	0	0
December	7.8	S.	32	W.	1	4	4	5	6	19	10	9	5	0	12	14	5	4	3	6	4	0	0	0	1	0	28	0	0
Year	8.1	S.	35	N.	6	106	61	31	66	228	70	71	96	1	120	166	79	79	51	48	29	0	9	6	9	35	107	71	0

DES MOINES, IOWA

[H_b=861 ft.; h_t=5 ft.; h_r=3 ft.; h_a=99 ft.]

January	9.8	NW.	38	NW.	1	8	2	5	9	9	8	7	13	1	7	7	17	5	4	11	5	0	10	3	10	0	28	0	0
February	10.9	NW	32	NW.	1	9	4	7	9	6	2	2	17	0	12	8	8	3	3	7	2	0	0	0	9	0	28	0	0
March	11.1	N.	32	W.	1	13	3	4	13	8	5	6	10	0	8	10	13	10	7	8	6	0	4	1	6	0	22	3	0
April	11.9	NW.	30	NW.	0	9	1	3	3	16	4	6	17	1	13	7	10	7	5	0	0	1	4	1	0	0	4	3	0
May	10.6	S.	35	W.	2	4	3	2	12	25	7	3	5	1	18	9	4	5	3	0	0	1	0	0	0	11	0	5	0
June	9.7	S.	38	W.	1	6	1	8	8	13	9	2	13	0	13	9	8	11	8	0	0	1	0	0	0	19	0	13	0
July	9.3	N.	32	N.	1	16	5	9	11	11	4	1	5	0	15	9	7	8	8	0	0	0	0	0	0	22	0	12	0
August	8.6	N.	30	N.	0	12	9	8	11	7	5	1	8	1	8	14	9	7	4	0	0	0	1	1	0	14	0	7	0
September	9.2	SE.	25	NW.	0	8	0	4	13	15	4	1	12	3	10	5	15	12	12	0	0	0	10	0	0	0	0	10	0
October	9.7	S.	30	NW.	0	4	3	6	13	10	8	8	8	2	20	6	5	3	3	0	0	0	7	0	0	0	4	3	0
November	10.3	SE.	30	N.	0	10	1	6	12	10	3	7	11	0	11	3	16	14	12	3	3	0	7	1	1	0	11	0	0
December	10.0	NW.	27	NW.	0	10	3	4	11	6	5	7	16	0	4	5	22	8	3	14	7	0	5	0	18	0	31	0	0
Year	10.1	S.	38	NW.	7	109	35	66	125	136	64	51	135	9	139	92	134	93	72	43	23	3	48	7	44	66	128	56	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DETROIT, MICH.

[ϕ=42°20′ N.; λ=83°03′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.38	29.86	28.61	28.6	31.5	30.2	36.8	23.2	30.0	51	1	23	22	23	78	69	74	0.132	0.127	0.131	1.65	0.43	6.0	8.8	8.5	8.1	8.2
February	29.52	30.28	28.65	11.2	19.4	17.3	24.2	5.3	14.8	42	−16	5	8	8	74	60	63	.057	.066	.064	.47	.20	5.1	6.5	7.0	4.9	6.2
March	29.44	29.86	28.80	24.6	33.7	31.1	38.0	20.5	29.2	66	3	19	22	21	77	62	66	.108	.130	.123	2.89	1.77	13.1	6.8	7.3	5.7	6.7
April	29.26	29.72	28.71	39.2	48.3	45.9	53.4	34.8	44.1	73	24	32	32	34	75	56	66	.181	.186	.206	2.79	.93	1.3	7.0	7.0	6.1	6.6
May	29.34	29.68	29.00	58.0	70.4	66.6	74.9	48.3	61.6	91	32	43	42	41	58	37	41	.288	.273	.268	.58	.21	.0	4.6	4.5	3.6	4.0
June	29.22	29.59	28.87	68.9	81.9	76.9	86.5	59.9	73.2	104	51	56	56	55	65	43	49	.460	.465	.444	1.39	.77	.0	5.6	5.5	4.5	5.2
July	29.29	29.66	29.02	71.4	83.4	78.9	87.3	63.8	75.6	105	53	60	57	58	68	42	51	.529	.479	.495	1.64	.82	.0	4.8	5.6	4.8	4.6
August	29.35	29.62	28.95	64.7	76.0	72.5	80.1	58.3	69.2	93	43	57	53	53	76	47	52	.481	.429	.425	1.84	1.04	.0	5.1	4.9	4.6	4.6
September	29.34	29.66	28.96	60.3	70.8	66.8	75.6	57.1	66.4	87	43	57	56	57	88	62	72	.475	.476	.485	2.90	.50	.0	6.4	6.6	5.6	6.1
October	29.38	29.73	28.98	46.7	57.8	52.4	61.5	42.9	52.2	82	28	41	43	42	80	59	68	.264	.286	.277	1.33	.95	T	4.5	5.2	3.6	4.9
November	29.36	29.84	28.69	40.2	47.9	44.7	50.0	37.2	43.6	66	26	35	35	36	81	64	72	.213	.219	.224	1.67	.42	T	7.4	9.4	6.4	8.2
December	29.38	29.82	28.49	24.4	28.9	27.1	32.4	19.5	26.0	46	2	21	23	23	88	77	82	.117	.123	.122	2.43	.51	12.2	6.9	8.0	7.8	7.9
Year	29.36	30.28	28.49	44.8	54.2	50.9	58.4	39.2	48.8	105	−16	37	37	38	76	56	63	.275	.272	.272	21.58	1.77	37.7	6.2	6.6	5.5	6.1

DEVILS LAKE, N. DAK.

[ϕ=48°07′ N.; λ=98°52′ W.]

January	28.41	28.99	27.57	8.1	14.1	13.9	22.0	1.3	11.6	40	−28	7	11	12	94	87	90	0.068	0.081	0.083	0.55	0.30	5.4	5.1	6.2	6.0	6.4
February	28.54	28.95	27.97	10.4	18.2	17.7	23.5	5.0	14.2	41	−20	9	13	14	92	80	87	.074	.089	.097	.10	.05	1.0	5.8	6.3	5.0	5.9
March	28.50	29.07	27.83	15.8	26.6	27.1	33.9	12.1	23.0	55	−6	11	14	17	82	56	64	.081	.093	.108	.43	.29	1.8	5.2	6.5	6.3	6.1
April	28.38	28.80	27.82	33.4	46.7	49.1	51.8	30.2	41.0	83	18	26	26	27	77	48	51	.143	.141	.149	.58	.21	2.3	5.3	6.3	5.4	5.9
May	28.32	28.80	27.75	51.6	69.8	70.8	76.2	46.4	61.3	106	28	36	34	34	57	32	29	.220	.211	.205	.68	.42	.0	5.8	5.4	4.6	5.6
June	28.32	28.60	28.05	55.7	69.9	69.6	74.2	51.7	63.0	88	43	49	47	48	79	48	51	.352	.332	.344	3.59	.81	.0	6.0	5.4	5.6	5.7
July	28.38	28.69	28.02	61.5	78.7	78.8	84.7	56.3	70.5	105	41	51	49	49	70	37	37	.384	.357	.353	1.58	1.11	.0	4.5	3.6	4.0	4.2
August	28.41	28.77	28.01	55.9	75.1	73.1	80.0	52.2	66.1	100	32	47	46	46	72	38	40	.336	.332	.323	1.00	.51	.0	4.7	4.7	4.8	4.7
September	28.38	28.79	28.01	42.4	58.0	56.0	62.4	39.5	51.0	85	24	38	40	38	83	56	55	.237	.261	.243	.73	.27	1.5	6.0	6.9	5.2	6.2
October	28.41	29.00	27.90	39.5	53.1	49.2	57.0	37.2	47.1	87	19	35	37	36	84	60	64	.209	.227	.221	1.89	.88	T	6.0	5.9	5.3	6.1
November	28.41	28.94	27.73	27.0	36.5	32.5	40.4	23.6	32.0	63	8	24	29	27	89	74	81	.129	.154	.146	.25	.16	.7	5.9	6.6	5.0	6.2
December	28.47	28.92	27.88	6.1	13.9	10.5	18.4	1.4	9.9	43	−33	5	9	8	95	80	91	.062	.072	.072	.40	.15	5.3	5.7	6.3	5.8	6.2
Year	28.41	29.07	27.57	34.0	46.7	45.7	52.0	29.7	40.9	106	−33	28	30	30	81	68	62	.191	.196	.195	11.78	1.11	18.0	5.5	5.8	5.2	5.8

DODGE CITY, KANS.

[ϕ=37°45′ N.; λ=100°00′ W.]

January	27.48	27.91	27.09	28.3	43.7	39.7	49.5	23.9	36.7	67	15	20	26	25	72	51	57	0.111	0.138	0.135	0.29	0.15	2.6	2.2	2.7	1.9	2.4
February	27.53	27.86	27.11	28.3	42.1	39.5	47.3	24.4	35.8	77	2	20	24	25	72	54	61	.114	.137	.141	1.60	.56	10.9	4.4	4.6	4.9	4.8
March	27.48	27.96	26.93	32.3	50.3	50.3	58.2	29.6	43.9	79	10	25	29	28	74	47	45	.136	.160	.156	.52	.23	2.7	4.7	4.4	5.5	5.0
April	27.40	27.79	26.94	44.9	63.7	63.9	69.3	43.2	56.2	89	35	32	33	33	62	37	36	.185	.197	.201	.42	.22	.0	3.8	4.2	3.6	4.1
May	27.39	27.84	27.05	58.6	78.3	77.1	82.9	56.1	69.5	98	41	47	45	45	68	35	36	.333	.306	.306	1.00	.45	.0	4.0	4.1	3.9	3.8
June	27.30	27.58	27.09	70.0	88.2	87.2	93.2	66.8	80.0	106	56	56	53	54	63	33	35	.454	.418	.426	2.34	.85	.0	2.6	2.3	4.1	2.6
July	27.36	27.63	27.07	76.1	96.6	96.0	101.0	73.6	87.3	109	61	52	51	48	46	23	22	.405	.383	.350	.43	.35	.0	2.5	2.1	3.1	2.1
August	27.40	27.64	27.16	71.4	90.9	90.5	95.8	69.9	82.8	105	52	55	54	53	60	31	31	.448	.433	.405	.24	.08	.0	4.7	3.6	3.7	3.6
September	27.40	27.78	27.12	56.2	73.4	70.6	79.1	52.2	65.6	98	33	49	48	48	78	44	46	.374	.351	.346	2.05	1.03	.0	3.8	3.2	2.9	3.1
October	27.46	27.98	27.06	51.2	71.2	66.1	75.5	49.3	62.4	91	33	42	41	43	71	37	46	.278	.283	.299	1.50	1.45	.0	1.8	2.6	1.6	2.2
November	27.40	27.91	26.79	39.0	54.7	49.3	58.6	36.0	47.4	81	22	31	33	35	74	49	61	.182	.194	.211	.98	.51	3.4	4.2	3.3	3.0	3.4
December	27.49	27.98	27.01	26.7	42.5	36.8	47.1	23.8	35.4	68	9	22	24	24	81	48	60	.117	.126	.131	.13	.10	.2	2.5	4.0	3.3	3.8
Year	27.42	27.98	26.79	48.6	66.3	63.9	71.5	45.7	58.6	109	2	38	38	38	68	41	45	.261	.260	.259	11.50	1.45	19.8	3.4	3.4	3.5	3.4

DUBUQUE, IOWA

[ϕ=42°30′ N.; λ=90°40′ W.]

January	29.32	29.74	28.78	25.0	30.8	29.8	35.7	21.0	28.4	53	−8	20	21	23	82	67	74	0.118	0.123	0.131	0.90	0.46	1.8	5.5	7.7	7.7	7.1
February	29.46	30.05	28.85	16.9	24.6	25.1	29.3	14.0	21.6	58	−2	11	12	13	75	56	60	.077	.080	.085	.86	.48	6.9	4.2	6.2	5.4	5.5
March	29.36	29.80	28.72	27.3	36.2	36.4	41.5	24.1	32.8	62	10	20	20	22	74	52	55	.119	.116	.123	1.72	.56	1.8	5.9	5.5	6.9	5.8
April	29.18	29.61	28.72	42.6	54.8	54.4	59.6	39.7	49.6	81	29	31	29	31	64	40	43	.180	.172	.180	1.03	.74	.4	4.0	5.3	6.7	5.7
May	29.22	29.54	28.84	59.5	77.6	77.1	82.2	55.9	69.0	104	41	44	40	41	58	26	29	.298	.262	.267	.76	.28	.0	3.5	3.8	3.7	4.0
June	29.12	29.42	28.86	69.7	83.7	83.0	89.2	65.4	77.3	104	54	57	57	57	65	42	44	.479	.477	.483	3.10	.77	.0	4.7	4.2	4.9	4.7
July	29.20	29.51	28.91	70.7	82.3	83.5	87.6	67.4	77.5	103	55	62	61	64	75	52	54	.571	.554	.618	5.48	1.72	.0	5.7	4.8	4.5	4.5
August	29.25	29.56	28.95	63.4	77.0	75.7	81.3	60.6	71.0	98	43	57	56	58	79	51	56	.457	.483	.526	3.29	1.26	.0	2.9	5.0	5.1	5.4
September	29.23	29.56	28.85	55.7	66.1	63.5	70.9	5.29	61.9	86	38	52	52	53	88	62	70	.406	.405	.425	6.54	3.20	.0	6.5	6.8	6.4	6.4
October	29.30	29.64	28.74	47.7	62.1	58.3	66.1	46.0	56.0	84	31	42	42	42	80	50	56	.272	.283	.287	1.20	1.20	.0	4.5	3.8	3.5	4.1
November	29.24	29.73	28.37	38.3	46.9	45.3	50.3	36.3	43.3	65	25	34	35	36	82	64	71	.204	.216	.228	8.63	2.01	T	6.3	6.8	7.0	6.6
December	29.34	29.78	28.66	19.0	23.9	23.4	28.1	14.1	21.1	39	−7	16	17	18	85	72	76	.092	.096	.101	.99	.46	7.3	7.9	7.9	7.5	7.4
Year	29.27	30.05	28.37	44.6	55.5	54.6	60.2	41.4	50.8	104	−8	37	37	38	76	58	57	.275	.272	.288	34.50	3.20	18.2	5.2	5.5	5.8	5.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DETROIT, MICH.

[H_b=626 ft.; h_t=5 ft.; h_r=3 ft.; h_a=78 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	32°: Minimum temperature or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																									
January	12.8	SW.	36	NW.	3	2	4	5	4	6	18	11	12	0	2	6	23	17	8	16	10	0	6	1	7	0	25	0	0
February	10.7	NW.	34	NW.	1	10	0	6	2	9	6	8	6	0	6	10	12	10	3	18	10	0	0	0	21	0	28	0	0
March	11.0	SW.	34	SW.	2	6	12	2	5	10	7	7	11	2	6	6	19	15	8	16	10	0	8	3	10	0	27	2	0
April	11.0	NW.	41	NW.	2	2	5	6	9	6	13	7	12	0	6	7	17	12	10	7	4	0	8	2	0	0	9	2	0
May	9.5	SW.	33	SW.	2	3	13	2	10	10	12	8	4	0	13	15	3	5	3	0	0	0	0	0	0	2	1	2	0
June	9.4	NE.	33	NW.	1	6	17	1	6	5	9	7	9	0	8	18	4	8	4	0	0	0	2	1	0	13	0	5	0
July	8.3	NE.	33	W.	1	7	22	6	12	4	6	3	2	0	12	12	7	7	5	0	0	1	1	1	0	13	0	9	0
August	8.2	NE.	32	NW.	1	11	12	6	9	6	4	6	8	0	12	12	7	7	5	0	0	0	4	1	0	5	0	5	0
September	8.4	SE.	29	SW.	0	2	9	3	15	10	11	3	5	2	7	13	10	14	10	0	0	0	0	10	4	0	0	7	0
October	10.4	SW.	28	NW.	0	4	10	2	8	4	16	9	8	1	15	5	11	6	4	3	0	0	1	0	0	0	4	0	0
November	12.1	SW.	41	NW.	3	2	4	0	12	8	15	8	11	0	0	7	23	12	9	5	1	0	4	0	0	0	13	1	0
December	10.7	SW.	33	SW.	3	3	5	4	4	7	14	11	14	0	3	8	20	12	10	22	9	0	13	0	13	0	30	0	0
Year	10.2	SW.	41	NW.	19	58	122	43	96	85	131	88	102	5	90	119	156	125	79	87	44	1	57	13	51	33	137	33	0

DEVILS LAKE, N. DAK.

[H_b=1,478 ft.; h_t=11 ft.; h_r=4 ft.; h_a=44 ft.]

January	10.1	SW.	35	NW.	1	6	4	3	9	6	15	9	10	0	8	6	17	11	4	19	8	0	5	2	22	0	31	0	0
February	9.6	NW.	33	N.	1	8	1	2	9	6	8	13	0	8	10	10	5	1	15	4	0	4	1	16	0	28	0	0	0
March	11.6	NW.	35	NW.	2	5	8	2	6	8	7	7	17	2	5	16	10	9	3	11	6	0	1	0	15	0	29	0	2
April	11.9	NW.	35	N.	4	13	8	3	4	2	8	5	17	0	6	13	11	8	3	9	2	0	3	0	0	0	21	1	2
May	11.3	SE.	34	NW.	2	7	8	8	14	7	1	6	11	0	10	12	9	8	4	0	0	0	0	0	0	5	4	4	0
June	10.0	NW.	25	NE.	0	5	6	12	7	4	4	10	12	0	10	8	12	18	14	0	0	0	4	1	0	0	7	2	2
July	9.5	SE.	29	NE.	0	9	8	9	10	9	3	7	6	1	13	14	4	8	3	0	0	0	0	0	0	9	0	5	2
August	9.4	SE.	30	NW.	0	6	9	3	14	7	4	9	10	0	11	16	4	6	4	0	0	0	0	0	0	6	0	5	1
September	9.6	NW.	29	NW.	0	7	4	2	13	7	4	7	15	1	7	9	14	8	5	3	2	0	6	0	0	0	7	0	2
October	9.8	NW.	34	N.	1	5	4	3	14	7	5	7	16	1	9	6	16	8	5	2	0	0	8	1	1	0	7	1	0
November	8.7	SE.	27	NW.	0	7	7	6	13	5	3	13	6	0	9	8	13	5	1	10	3	0	9	1	11	0	29	0	4
December	9.0	NW.	27	NW.	0	8	5	1	13	4	7	8	16	0	9	8	14	10	3	24	10	0	6	2	29	0	31	0	0
Year	10.0	NW.	35	NW.	11	86	72	54	126	75	67	96	149	5	105	126	134	104	50	93	35	0	46	8	94	20	187	23	15

DODGE CITY, KANS.

[H_b=2,509 ft.; h_t=10 ft.; h_r=3 ft.; h_a=86 ft.]

January	11.5	N.	31	N.	0	10	6	3	5	11	7	10	10	0	22	6	3	2	2	3	2	0	6	2	2	0	30	0	0
February	11.6	S.	46	N.	2	13	4	5	7	11	3	12	1	0	12	6	10	6	5	10	5	1	3	0	4	0	21	2	0
March	12.8	NE.	39	N.	7	9	12	4	7	10	6	10	4	0	12	9	10	4	4	3	2	0	2	0	0	0	20	0	0
April	12.5	S.	38	S.	5	10	10	2	10	13	5	6	4	0	16	6	8	5	4	0	0	1	3	2	0	0	0	2	0
May	13.9	S.	35	S.	1	3	9	4	12	24	6	1	3	0	17	8	6	8	6	0	0	0	0	0	0	12	0	4	0
June	14.5	S.	43	S.	6	0	10	2	9	29	3	6	1	0	21	7	2	8	7	0	0	1	0	0	0	21	0	13	0
July	13.2	S.	32	N.	2	4	6	2	5	34	6	3	2	0	24	7	0	5	1	0	0	1	0	0	0	30	0	6	0
August	12.0	S.	33	SE.	1	4	3	10	11	25	7	2	0	0	17	10	4	7	2	0	0	0	1	0	0	22	0	14	0
September	13.8	S.	35	NE.	4	8	7	3	5	27	2	3	5	0	16	11	3	7	5	0	0	0	3	1	0	3	0	6	0
October	12.1	S.	38	S.	4	4	6	6	8	21	5	6	6	0	21	7	3	2	2	0	0	0	2	2	0	1	0	2	0
November	12.3	S.	35	NW.	3	12	3	3	12	9	7	7	7	0	18	6	6	6	6	5	2	0	5	3	2	0	8	0	0
December	11.5	N.	31	N.	0	14	9	2	2	10	6	10	9	0	14	11	6	4	1	4	3	0	4	3	2	0	28	0	0
Year	12.6	S.	46	N.	35	91	85	46	93	224	63	76	52	0	210	94	61	64	45	25	14	4	29	13	10	89	107	49	0

DUBUQUE, IOWA

[H_b=700 ft.; h_t=60 ft.; h_r=53 ft.; h_a=79 ft.]

January	7.9	NW.	31	NW.	0	5	4	2	7	12	14	0	18	0	7	6	18	6	4	10	4	0	2	0	12	0	27	0	0
February	8.1	NW.	27	N.	0	7	5	1	5	14	5	1	16	2	8	10	10	5	4	9	4	0	0	0	15	0	28	0	0
March	8.0	NW.	30	NW.	0	5	6	2	3	19	5	2	19	1	10	9	12	9	8	7	3	0	2	0	7	0	26	1	0
April	8.1	NW.	24	NW.	0	2	1	2	5	14	6	4	26	0	11	5	14	6	4	4	1	0	0	0	0	0	1	3	0
May	6.7	S.	24	NW.	0	3	5	6	12	18	8	0	10	0	18	5	8	6	5	0	0	0	0	0	0	10	0	4	0
June	6.6	S.	28	NW.	0	7	5	8	7	13	7	1	12	0	13	9	8	12	9	0	0	1	0	0	0	15	0	11	0
July	5.4	S.	24	NW.	0	7	8	5	11	13	4	0	14	0	18	4	11	13	10	0	0	1	1	1	0	11	0	11	0
August	5.3	S.	16	N.	0	3	3	10	13	15	3	1	14	0	9	10	12	11	11	0	0	0	4	3	0	6	0	9	0
September	5.7	S.	18	SW.	0	6	0	1	8	24	3	2	15	1	8	6	16	14	10	0	0	0	7	2	0	0	0	4	0
October	6.5	S.	22	NW.	0	3	1	7	6	19	3	2	14	7	16	9	6	2	2	0	0	0	1	1	0	0	4	1	0
November	7.0	S.	19	NW.	0	2	3	1	11	16	7	1	15	4	6	8	16	14	11	5	0	0	4	1	0	0	12	1	0
December	6.8	NW.	23	NW.	0	3	3	5	4	13	7	4	23	0	5	7	19	12	5	19	12	0	1	0	20	0	31	0	0
Year	6.8	S.	31	NW.	0	53	44	50	92	190	72	18	196	15	127	88	150	110	83	54	24	2	22	8	54	42	129	45	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DULUTH, MINN.

[ϕ=46°47′ N.; λ=92°06′ W.]

Month	Pressure: Monthly mean	Pressure extremes: Maximum	Pressure extremes: Minimum	Temp. mean: 8 a. m.	Temp. mean: Noon, local time	Temp. mean: 8 p. m.	Temp. mean: Maximum	Temp. mean: Minimum	Temp. mean: Monthly	Temp. extremes: Maximum	Temp. extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.				
January	28.75	29.25	27.90	13.5	18.6	17.5	23.7	7.0	15.4	39	−30	12	16	15	91	87	89	0.087	0.099	0.095	1.03	0.31	9.2	7.7	7.0	6.7	7.5
February	28.93	29.48	28.25	3.1	13.8	13.1	18.3	.4	9.4	42	−21	1	7	9	89	74	82	.049	.066	.072	.44	.18	7.8	4.5	5.5	5.7	5.1
March	28.84	29.37	28.11	15.1	25.8	23.4	30.0	11.1	20.6	48	−9	12	15	15	86	63	71	.082	.096	.094	.96	.62	9.4	5.4	5.9	6.0	5.7
April	28.66	29.17	28.15	32.7	42.3	39.6	45.8	28.9	37.4	85	19	28	29	28	83	63	66	.153	.158	.157	1.36	.37	7.2	7.1	6.8	6.5	7.1
May	28.70	29.06	28.28	48.1	59.4	55.9	64.9	41.1	53.0	91	32	37	39	38	69	50	56	.227	.245	.242	1.10	.70	.0	4.8	5.4	4.0	4.8
June	28.67	29.13	28.28	54.2	65.2	62.2	70.1	48.6	59.4	85	34	49	51	51	84	64	69	.357	.387	.380	3.26	1.05	.0	5.9	5.2	6.2	5.9
July	28.75	28.98	28.47	60.7	72.1	68.3	75.7	55.0	65.4	90	46	54	56	54	81	58	62	.429	.460	.423	1.53	.63	.0	4.0	4.3	3.9	4.1
August	28.78	29.15	28.24	56.8	67.9	64.3	71.4	51.3	61.4	92	38	51	52	51	82	60	64	.385	.407	.386	2.19	.91	.0	4.2	5.3	4.8	4.9
September	28.74	29.01	28.43	48.1	57.1	53.6	60.7	44.8	52.8	70	31	46	49	48	93	76	81	.325	.360	.343	3.10	1.49	.0	7.2	6.9	7.1	7.1
October	28.76	29.19	28.19	42.0	51.4	47.1	55.2	39.3	47.2	79	23	38	41	40	88	70	78	.240	.265	.257	4.17	1.36	T	5.3	6.3	4.5	6.1
November	28.75	29.17	28.19	30.7	36.4	34.6	40.8	27.6	34.2	64	19	29	30	30	92	79	82	.157	.170	.166	1.90	1.15	4.2	7.3	8.1	6.6	7.9
December	28.80	20.27	28.20	8.9	14.1	11.5	18.9	2.2	10.6	38	−27	7	10	9	90	84	89	.062	.073	.070	1.94	1.25	24.4	6.3	6.0	6.1	6.2
Year	**28.76**	**29.48**	**27.90**	**34.5**	**43.7**	**40.9**	**48.0**	**29.8**	**38.9**	**92**	**−30**	**30**	**33**	**32**	**86**	**69**	**74**	**.213**	**.232**	**.224**	**22.98**	**1.49**	**62.2**	**5.8**	**6.1**	**5.7**	**6.0**

EASTPORT, MAINE

[ϕ=44°54′ N.; λ=66°59′ W.]

Month	Pressure: Monthly mean	Pressure extremes: Maximum	Pressure extremes: Minimum	Temp. mean: 8 a. m.	Temp. mean: Noon, local time	Temp. mean: 8 p. m.	Temp. mean: Maximum	Temp. mean: Minimum	Temp. mean: Monthly	Temp. extremes: Maximum	Temp. extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	29.95	30.69	28.75	17.2	19.8	19.5	28.2	10.7	19.4	44	−13	15	15	16	89	82	84	0.099	0.099	0.104	2.94	0.69	14.4	6.1	6.3	7.1	6.5
February	29.92	30.68	28.87	10.7	16.4	15.2	21.4	5.1	13.2	43	−22	8	10	10	86	77	80	.070	.080	.075	2.34	.98	19.9	5.6	5.3	4.9	5.3
March	30.05	30.72	29.31	26.9	31.9	30.0	36.1	21.9	29.0	50	2	22	22	23	81	67	75	.125	.130	.133	2.32	.60	5.7	5.4	4.7	7.0	5.6
April	29.94	30.53	29.45	38.6	42.8	39.4	47.0	33.7	40.4	56	23	34	36	35	84	78	84	.199	.216	.206	2.61	.68	T	5.5	5.5	5.2	5.3
May	29.88	30.36	29.30	48.9	53.8	49.1	58.5	41.5	50.0	80	36	41	42	40	76	66	74	.263	.269	.252	1.51	.64	.0	5.1	5.1	7.0	5.7
June	29.81	30.27	29.49	53.5	58.2	54.9	63.0	46.7	54.8	84	41	48	50	48	84	75	80	.346	.362	.343	3.33	.87	.0	6.3	6.8	7.0	6.6
July	29.85	30.38	29.60	60.4	64.5	59.5	69.6	52.1	60.8	79	48	54	56	54	82	77	84	.429	.460	.424	3.50	1.69	.0	4.2	5.2	4.3	5.8
August	29.94	30.42	29.55	58.6	63.8	58.1	67.0	52.3	59.6	75	47	53	54	52	83	71	82	.410	.419	.392	2.64	1.29	.0	4.2	6.4	5.5	5.7
September	30.08	30.51	29.65	56.8	60.9	57.7	63.8	52.9	58.4	73	47	54	54	54	91	80	89	.420	.426	.425	3.65	2.18	.0	7.0	6.0	5.8	6.7
October	29.86	30.50	29.15	44.5	49.1	46.4	51.5	40.3	45.9	63	32	38	37	39	78	65	78	.237	.231	.250	2.64	.79	.0	6.1	6.3	5.8	6.5
November	30.02	30.76	29.04	39.3	42.1	40.3	45.9	34.4	40.2	59	21	35	35	34	83	76	79	.217	.221	.212	3.52	1.46	2.7	8.3	7.3	7.0	7.6
December	29.85	30.37	28.78	18.7	22.2	21.5	27.9	13.9	20.9	56	1	13	14	14	78	68	72	.092	.093	.093	2.79	.77	8.1	5.5	5.6	5.7	5.7
Year	**29.93**	**30.76**	**28.75**	**39.5**	**43.8**	**41.0**	**48.3**	**33.8**	**41.0**	**84**	**−22**	**35**	**35**	**35**	**83**	**74**	**80**	**.242**	**.250**	**.242**	**33.79**	**2.18**	**50.8**	**5.8**	**5.9**	**6.0**	**6.1**

ELKINS, W. VA.

[ϕ=38°53′ N.; λ=79°49′ W.]

Month	Pressure: Monthly mean	Pressure extremes: Maximum	Pressure extremes: Minimum	Temp. mean: 8 a. m.	Temp. mean: Noon, local time	Temp. mean: 8 p. m.	Temp. mean: Maximum	Temp. mean: Minimum	Temp. mean: Monthly	Temp. extremes: Maximum	Temp. extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	28.05	28.29	27.30	31.2	37.8	34.7	43.8	24.9	34.4	64	−4	27	26	27	83	66	74	0.163	0.161	0.159	3.37	0.66	2.6	7.9	7.3	5.4	7.3
February	28.06	28.64	27.41	15.6	25.7	23.2	33.2	9.9	21.6	54	−18	12	15	17	86	63	75	.082	.091	.098	2.53	.79	22.9	7.5	6.8	6.4	7.0
March	28.07	28.46	27.61	31.2	41.4	38.4	49.3	25.1	37.2	69	−1	26	30	30	84	67	74	.156	.177	.173	4.66	.96	16.1	6.6	6.7	6.3	6.8
April	27.95	28.48	27.37	43.8	56.4	52.1	61.9	36.8	49.4	80	22	38	35	37	82	50	60	.243	.223	.233	3.14	1.07	.8	5.4	6.2	5.5	6.2
May	28.02	28.24	27.70	54.5	69.2	64.5	74.1	44.9	59.5	87	33	46	43	46	74	42	54	.315	.296	.321	2.16	1.13	.0	3.9	5.6	5.0	5.7
June	27.97	28.21	27.64	66.2	77.9	73.6	82.2	58.7	70.4	90	48	60	61	63	82	58	70	.528	.538	.575	4.71	1.14	.0	5.2	5.4	4.8	5.6
July	28.02	28.30	27.82	68.4	80.8	75.3	85.8	62.4	74.1	96	51	64	62	65	85	55	72	.588	.557	.627	2.97	.81	.0	5.5	4.8	5.3	5.6
August	28.07	28.31	27.88	62.4	74.6	68.8	79.1	58.0	68.6	86	43	60	59	63	91	60	82	.518	.514	.582	4.93	1.79	.0	6.4	5.9	5.8	6.5
September	28.08	28.35	27.82	55.8	73.2	64.2	77.4	51.8	64.6	83	39	54	56	59	95	57	84	.428	.460	.502	3.82	1.85	.0	3.5	6.0	4.7	6.3
October	28.07	28.33	27.61	41.7	58.8	51.6	64.1	37.4	50.8	79	23	38	40	42	89	52	70	.244	.268	.279	1.52	.70	T	4.6	4.0	2.8	4.6
November	28.09	28.40	27.72	38.5	50.5	44.0	55.4	33.7	44.6	71	13	33	33	34	81	53	71	.203	.203	.214	3.45	1.37	.5	6.8	5.8	5.4	6.7
December	28.03	28.39	27.26	27.8	33.8	31.3	40.0	21.8	30.9	65	−5	22	23	24	81	66	73	.130	.126	.129	2.11	.59	8.3	7.4	7.2	6.4	7.8
Year	**28.04**	**28.64**	**27.26**	**44.8**	**56.7**	**51.8**	**62.2**	**38.8**	**50.5**	**96**	**−18**	**40**	**40**	**42**	**84**	**57**	**72**	**.300**	**.301**	**.324**	**39.37**	**1.85**	**51.2**	**5.9**	**6.0**	**5.3**	**6.3**

EL PASO, TEX.

[ϕ=31°47′ N.; λ=106°30′ W.]

Month	Pressure: Monthly mean	Pressure extremes: Maximum	Pressure extremes: Minimum	Temp. mean: 8 a. m.	Temp. mean: Noon, local time	Temp. mean: 8 p. m.	Temp. mean: Maximum	Temp. mean: Minimum	Temp. mean: Monthly	Temp. extremes: Maximum	Temp. extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	26.27	26.60	25.97	34.7	51.7	54.3	59.0	31.8	45.4	72	19	18	21	22	50	30	29	0.101	0.113	0.119	0.01	0.01	T	0.7	1.3	0.5	1.5
February	26.24	26.51	25.95	44.3	60.2	62.4	66.4	41.2	53.8	76	33	25	26	26	47	27	26	.135	.140	.139	.12	.14	T	2.2	2.6	3.2	3.2
March	26.23	26.67	25.94	46.4	65.4	69.2	72.8	43.3	58.0	83	29	26	24	23	48	25	22	.144	.133	.129	.24	.17	T	1.3	2.1	2.7	2.0
April	26.14	26.41	25.86	57.6	74.5	76.4	79.9	56.2	68.0	91	44	32	30	29	41	20	19	.192	.170	.166	.05	.03	0.0	3.0	1.2	1.7	2.1
May	26.14	26.45	25.89	65.2	83.8	86.6	89.9	63.6	76.8	98	51	39	34	33	42	18	16	.259	.208	.200	.37	.32	.0	2.3	1.6	2.7	2.2
June	26.08	26.32	25.87	71.6	89.6	92.6	95.7	70.5	83.1	104	63	37	34	34	32	15	14	.244	.211	.209	.01	.01	.0	1.5	1.2	1.5	1.6
July	26.17	26.42	25.96	74.3	90.4	92.9	96.2	73.3	84.8	101	67	54	51	50	52	26	24	.431	.372	.359	.19	.16	.0	2.8	1.3	3.1	2.0
August	26.18	26.30	25.99	73.5	88.9	90.9	95.0	72.5	83.8	101	67	57	54	53	57	32	29	.464	.425	.405	.60	.20	.0	1.9	1.0	3.2	2.2
September	26.16	26.46	26.00	66.9	83.5	86.2	89.9	65.8	77.8	98	58	45	45	42	47	27	22	.314	.307	.274	.17	.16	.0	1.4	1.3	1.3	1.4
October	26.24	26.48	25.93	58.2	77.4	77.0	82.7	56.1	69.4	93	45	36	36	35	46	26	26	.225	.225	.215	.44	.30	.0	1.1	1.5	1.3	1.5
November	26.22	26.50	25.80	45.3	62.6	61.9	67.4	43.5	55.4	82	27	32	31	31	61	32	33	.188	.182	.182	.21	.21	.0	1.1	1.3	2.4	1.9
December	26.28	26.59	25.92	39.7	53.7	55.0	59.6	37.4	48.5	70	24	28	28	29	62	39	39	.158	.165	.172	.32	.15	T	3.3	3.8	2.7	3.7
Year	**26.20**	**26.67**	**25.80**	**56.5**	**73.5**	**75.4**	**79.5**	**54.6**	**67.1**	**104**	**19**	**36**	**34**	**34**	**49**	**26**	**25**	**.238**	**.221**	**.214**	**2.73**	**.32**	**T**	**1.9**	**1.7**	**2.2**	**2.1**

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DULUTH, MINN.

[H_b=1,133 ft.; h_t=5 ft.; h_r=3 ft.; h_a=47 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	13.4	NW.	47	NW.	7	1	7	4	4	2	14	10	20	0	5	6	20	12	9	21	11	0	4	2	24	0	31	0	0
February	12.5	NW.	39	NW.	2	4	7	3	2	2	12	8	18	0	10	10	8	6	4	14	6	0	4	1	23	0	28	0	0
March	13.3	W.	50	NW.	4	3	8	6	1	1	13	15	15	0	9	11	11	5	2	17	4	0	3	0	16	0	31	0	1
April	13.8	NW.	37	NW.	3	9	15	2	0	0	4	11	18	1	5	10	15	9	6	15	7	3	4	3	2	0	25	1	0
May	12.9	NE.	46	NW.	4	4	23	7	1	1	3	9	14	0	10	13	8	9	3	0	0	0	2	3	0	1	0	1	0
June	12.0	NE.	32	NW.	2	5	25	5	0	0	3	11	11	0	6	12	12	15	12	0	0	0	2	6	7	0	0	0	0
July	10.8	NE.	32	NE.	2	5	26	5	0	1	2	4	19	0	15	15	1	6	5	0	0	0	2	2	0	1	0	5	0
August	10.9	NE.	59	W.	2	5	22	4	0	2	7	12	10	0	11	10	10	10	9	0	0	0	7	4	0	3	0	3	0
September	10.0	NE.	31	SW.	0	5	23	2	3	0	6	6	15	0	5	6	19	15	10	0	0	0	9	7	0	0	2	3	0
October	13.6	NW.	43	NW.	6	3	18	5	2	0	4	12	18	0	10	7	14	9	7	5	0	1	6	6	0	0	6	4	0
November	12.9	NW.	36	NW.	2	8	8	4	4	2	7	12	15	0	3	6	21	8	6	10	3	0	7	4	5	0	22	0	0
December	12.4	NW.	44	NW.	7	4	3	0	6	1	13	7	28	0	10	4	17	10	5	19	10	0	1	1	30	0	31	0	0
Year	12.4	NW.	59	W.	41	56	185	47	23	12	88	117	201	1	99	110	156	114	78	101	41	6	55	40	100	5	176	26	1

EASTPORT, MAINE

[H_b=76 ft.; h_t=67 ft.; h_r=62 ft.; h_a=85 ft.]

January	12.7	NW.	51	E.	3	9	5	5	4	3	8	9	18	1	9	5	17	15	12	16	10	0	5	3	14	0	27	0	0
February	13.1	NW.	40	E.	5	8	8	1	1	2	9	6	21	0	11	6	11	14	8	17	13	0	1	0	22	0	28	0	1
March	10.8	SW.	32	NE.	1	5	5	5	4	2	22	6	13	0	6	14	11	13	6	15	10	0	6	5	10	0	28	0	0
April	11.9	SW.	44	E.	3	6	8	10	3	10	15	2	9	2	10	8	12	10	7	2	0	0	11	13	0	0	9	0	0
May	9.7	SW.	32	SW.	1	8	3	3	3	4	29	0	10	2	10	11	10	11	7	0	0	0	10	8	0	0	0	2	0
June	9.3	SW.	32	SE.	1	5	9	5	4	7	16	7	17	0	5	10	15	15	10	0	0	1	13	9	0	0	0	5	0
July	7.8	SW.	24	NW.	0	3	5	1	2	4	33	4	8	2	7	13	11	10	7	0	0	1	17	12	0	0	0	7	0
August	8.5	SW.	28	S.	0	9	1	0	2	4	26	7	10	3	9	14	8	9	7	0	0	0	7	5	0	0	0	3	0
September	7.6	SW.	32	SE.	1	2	4	9	5	7	25	3	3	2	9	4	17	12	9	0	0	0	19	11	0	0	0	0	1
October	11.6	N.	34	NE.	2	14	12	3	3	1	13	6	10	0	7	10	14	11	10	0	0	1	11	2	0	0	1	1	0
November	11.6	SW.	47	E.	1	4	4	4	1	5	22	10	9	1	5	4	21	12	11	4	2	0	13	2	1	0	15	0	0
December	13.1	NW.	51	SE.	5	7	3	1	2	2	4	6	37	0	9	9	13	9	8	11	5	0	3	0	21	0	29	0	0
Year	10.6	SW.	51	SE.	23	80	62	47	34	51	222	66	155	13	97	108	160	141	102	65	40	3	116	70	68	0	137	18	2

ELKINS, W. VA.

[H_b=1,947 ft.; h_t=59 ft.; h_r=52 ft.; h_a=78 ft.]

January	8.0	W.	32	NW.	1	2	6	4	9	7	5	20	5	4	4	9	18	17	14	9	5	0	5	1	6	0	23	0	0
February	6.8	NW.	26	W.	0	9	4	6	5	3	0	14	12	3	5	6	17	14	12	18	14	0	5	0	11	0	28	0	0
March	6.7	N.	32	W.	1	10	6	1	12	8	3	10	8	4	6	7	18	20	18	13	13	0	8	0	3	0	24	1	0
April	6.9	W.	38	W.	1	5	3	3	11	8	6	5	12	7	6	12	12	13	13	6	4	0	2	2	0	0	11	2	0
May	5.6	N.	28	W.	0	14	3	10	8	5	7	4	8	3	9	9	13	8	6	0	0	0	5	0	0	0	0	4	0
June	5.5	W.	29	NW.	6	6	4	3	12	8	5	6	11	5	8	15	7	13	11	0	0	0	4	2	0	1	0	8	0
July	4.4	NW.	23	W.	0	7	2	2	7	15	5	9	10	5	9	12	10	12	10	0	0	0	8	3	0	7	0	11	0
August	4.7	NW.	24	N.	0	7	4	1	8	9	4	7	14	8	4	14	13	14	12	0	0	0	16	9	0	0	0	6	0
September	4.1	SE.	28	W.	0	9	3	6	21	5	1	5	9	1	7	10	13	11	7	0	0	0	14	13	0	0	0	5	0
October	5.9	W.	34	W.	1	7	5	6	3	8	2	12	13	6	14	10	7	7	4	2	2	0	14	7	0	0	11	1	0
November	7.8	W.	32	W.	1	8	5	2	12	9	4	10	9	1	8	7	15	14	11	6	5	0	2	2	2	0	17	0	0
December	7.3	W.	30	W.	0	8	2	4	14	4	4	19	6	1	4	7	20	14	12	12	7	0	0	0	9	0	27	0	0
Year	6.1	W.	38	W.	5	92	47	48	122	89	46	121	117	48	84	118	163	157	130	66	50	0	83	39	31	8	141	38	0

EL PASO, TEX.

[H_b=3,778 ft.; h_t=152 ft.; h_r=145 ft.; h_a=175 ft.]

January	8.1	NW.	32	W.	1	2	10	12	2	2	1	10	23	0	25	4	2	1	0	2	0	0	0	0	0	0	13	0	0
February	9.6	NW.	48	W.	3	0	6	11	2	2	2	14	19	1	17	8	3	2	1	1	0	0	0	0	0	0	0	0	0
March	10.2	W.	39	NE.	3	4	7	11	5	2	1	18	13	1	26	1	4	3	2	2	1	0	1	1	0	0	1	1	0
April	10.4	W.	41	SW.	5	0	4	17	2	1	2	21	12	1	22	6	2	2	0	0	0	0	0	0	0	0	2	0	3
May	10.5	E.	45	NW.	5	0	8	18	7	1	4	9	16	0	22	8	1	2	2	0	0	0	0	0	0	0	19	0	6
June	9.4	W.	44	SW.	2	0	3	11	5	3	4	18	15	1	23	6	1	1	0	0	0	0	0	0	0	0	27	0	4
July	9.1	E.	33	SW.	1	0	4	29	4	6	3	5	9	2	23	8	0	4	2	0	0	0	0	0	0	0	31	0	8
August	9.5	E.	34	SW.	1	1	8	17	6	3	2	12	11	2	26	4	1	8	4	0	0	0	0	0	0	0	27	0	9
September	9.5	E.	32	NE.	1	0	6	23	3	2	1	14	10	1	25	4	1	3	1	0	0	0	0	0	0	0	18	0	2
October	8.1	W.	49	NW.	1	1	7	13	2	2	1	16	19	1	27	0	4	2	2	0	0	0	0	0	0	0	5	0	1
November	9.0	NW.	40	W.	4	3	5	12	5	0	2	16	17	0	23	6	1	1	1	0	0	0	1	0	0	0	3	0	0
December	7.8	NW.	28	NW.	0	1	8	11	1	2	0	16	23	0	17	7	7	3	3	1	0	0	0	0	0	0	6	0	0
Year	9.3	E.	49	NW.	27	12	75	185	44	26	23	169	186	10	276	62	27	32	18	6	1	1	1	1	0	129	23	34	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

ERIE, PA.

[ϕ=42°07′ N.; λ=80°05′ W.]

Month	Pressure			Temperature								Moisture													
		Extremes		Mean						Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.29	29.77	28.46	29.6	31.7	30.1	36.7	24.5	30.6	55	3	24	26	24	78	78	77	0.140	0.148	0.133	2.04	1.02	4.0	8.4	8.3	8.5	8.4
February	29.41	30.16	28.53	10.6	17.9	15.8	23.1	4.9	14.0	48	−13	5	11	10	78	73	75	.058	.072	.068	1.01	.37	10.4	4.8	5.2	5.4	5.0
March	29.35	29.75	28.79	28.2	33.4	32.4	38.2	23.3	30.8	69	9	22	24	26	75	69	76	.121	.137	.148	2.36	.87	5.5	6.5	5.3	6.3	5.9
April	29.18	29.69	28.52	41.8	46.8	45.3	53.8	36.2	45.0	77	27	34	36	36	75	69	71	.201	.218	.218	2.10	.76	3.0	5.6	5.7	4.9	5.3
May	29.25	29.63	28.93	58.7	63.4	63.3	70.5	51.0	60.8	87	36	45	47	48	61	54	60	.307	.337	.354	.55	.40	.0	3.5	3.2	3.0	3.3
June	29.14	29.51	28.79	69.4	75.0	74.2	80.7	63.0	71.8	97	54	58	62	61	68	64	66	.498	.558	.551	1.45	.54	.0	4.3	3.9	2.6	3.6
July	29.21	29.56	28.98	72.9	78.0	77.2	82.9	66.2	74.6	95	58	61	64	62	67	63	60	.541	.597	.559	1.90	.59	.0	4.4	4.0	3.5	4.0
August	29.27	29.57	28.96	65.6	72.8	70.1	76.7	60.7	68.7	92	49	56	60	58	72	65	66	.468	.535	.492	3.15	1.02	.0	4.5	3.5	3.4	4.0
September	29.28	29.54	28.93	63.6	71.2	67.0	75.5	59.6	67.6	87	47	58	61	58	83	69	74	.498	.539	.499	2.93	1.02	.0	5.6	5.8	5.0	5.4
October	29.28	29.68	28.85	48.4	55.8	52.6	59.1	44.9	52.0	74	31	40	44	42	74	66	68	.258	.304	.278	1.89	.62	3.7	5.1	4.6	5.1	4.9
November	29.29	29.72	28.60	43.6	48.7	46.0	52.0	40.5	46.2	72	27	36	39	38	75	69	73	.224	.248	.240	2.96	.72	2.6	7.7	7.0	8.0	7.8
December	29.28	29.71	28.36	28.0	31.0	30.2	35.2	24.5	29.8	50	10	23	24	24	80	75	76	.128	.131	.132	1.50	.25	8.2	8.6	7.8	8.3	8.5
Year	29.27	30.16	28.36	46.7	52.1	50.4	57.0	41.6	49.3	97	−13	38	42	41	74	68	70	.287	.319	.306	23.84	1.02	37.4	5.8	5.4	5.3	5.5

ESCANABA, MICH.

[ϕ=45°48′ N.; λ=87°05′ W.]

January	29.34	29.86	28.56	21.0	24.4	24.8	30.0	17.8	23.9	40	−11	18	19	20	87	79	81	0.106	0.113	0.120	0.98	0.41	9.3	8.4	7.8	8.1	7.9
February	29.54	30.31	28.68	5.6	14.1	13.0	19.4	1.1	10.2	43	−31	3	6	6	88	68	73	.054	.061	.062	.96	.65	11.7	5.9	6.3	4.6	5.6
March	29.44	29.97	28.62	18.0	24.8	24.1	30.0	13.8	21.9	48	−3	15	16	17	86	69	74	.093	.098	.102	1.68	.51	12.1	5.8	6.0	5.6	6.5
April	29.24	29.76	28.70	33.5	39.6	36.7	43.8	29.9	36.8	63	18	27	28	28	76	63	72	.144	.151	.156	3.01	1.58	4.0	6.3	7.4	6.9	7.0
May	29.31	29.65	28.84	48.9	54.7	53.5	60.9	42.6	51.8	88	30	39	39	39	70	57	60	.247	.244	.250	1.68	.52	.0	4.7	4.7	4.0	5.0
June	29.23	29.75	28.80	58.0	65.5	65.8	71.8	53.5	62.6	92	40	51	51	52	79	64	64	.388	.389	.402	1.91	.45	.0	7.1	4.7	4.6	5.4
July	29.33	29.66	29.00	63.1	70.3	69.4	73.7	57.6	65.6	88	46	56	57	58	79	65	68	.458	.476	.485	2.16	1.02	.0	4.3	4.9	4.1	4.9
August	29.36	29.67	28.90	57.6	66.1	64.7	70.1	51.8	61.0	83	37	52	52	52	82	63	65	.406	.416	.410	2.68	1.14	.0	3.4	5.5	5.1	5.0
September	29.33	29.72	28.87	52.3	58.1	55.8	61.3	47.7	54.5	70	32	49	51	51	90	79	84	.366	.391	.382	2.93	.74	T	7.3	7.2	7.1	7.2
October	29.36	29.81	28.75	44.4	51.3	49.2	54.9	40.3	47.6	72	25	39	40	40	82	66	71	.250	.259	.261	1.77	.73	T	6.1	6.3	5.5	6.4
November	29.33	29.77	28.58	35.3	39.4	38.3	42.7	32.1	37.4	56	23	31	33	32	85	78	79	.182	.195	.188	5.66	1.70	1.5	8.2	8.6	7.5	8.5
December	29.38	29.79	28.58	20 7	24.1	22.4	27.5	14.7	21.1	38	−6	17	18	18	85	75	80	.096	.100	.100	1.36	.60	13.5	8.4	8.5	7.8	8.0
Year	29.35	30.31	28.56	38.2	44.4	43.1	48.8	33.6	41.2	92	−31	33	34	34	82	69	73	.232	.241	.243	26.78	1.70	52.1	6.3	6.5	5.9	6.4

EUREKA, CALIF.

[ϕ=40°48′ N.; λ=124°11′ W.]

January	30.20	30.41	29.46	47.8	53.6	53.1	56.7	44.9	50.8	65	37	46	48	48	93	81	84	0.312	0.333	0.340	3.83	1.04	0.0	5.9	7.0	5.5	6.4
February	30.01	30.43	29.69	48.6	55.8	54.9	58.6	45.4	52.0	72	37	46	48	48	90	78	79	.310	.342	.337	2.31	.86	.0	5.5	6.6	6.8	6.4
March	30.08	30.28	29.80	50.9	56.0	56.5	59.2	49.1	54.2	72	41	50	52	52	95	86	86	.356	.388	.387	3.61	2.54	.0	6.4	7.8	7.4	7.3
April	30.02	30.18	29.78	50.4	56.1	55.4	58.4	48.9	53.6	64	42	49	52	52	95	87	88	.348	.387	.383	1.68	.85	.0	7.4	5.4	5.7	6.3
May	29.99	30.25	29.73	53.1	59.2	59.0	62.0	51.7	56.8	70	45	51	51	52	93	76	77	.372	.380	.387	1.23	.51	.0	8.3	4.9	5.3	5.6
June	29.96	30.16	29.64	51.7	57.5	57.9	60.0	51.2	55.6	66	47	49	50	51	92	76	77	.347	.360	.368	.29	.26	.0	6.1	4.1	4.4	4.7
July	30.00	30.12	29.84	53.9	59.2	59.9	61.6	53.0	57.3	68	48	52	52	52	95	78	76	.381	.388	.393	T	T	.0	8.1	6.5	3.5	5.6
August	29.99	30.14	29.87	54.3	58.5	58.6	60.6	53.4	57.0	71	49	53	53	54	95	83	84	.402	.407	.409	.01	.01	.0	8.6	6.7	6.1	7.3
September	29.93	30.12	29.61	50.4	57.7	57.1	60.2	49.2	54.7	65	41	49	51	51	96	78	82	.352	.373	.381	.47	.46	.0	4.1	3.3	3.6	4.3
October	29.99	30.26	29.64	51.4	58.4	57.8	61.5	49.0	55.2	72	40	49	51	52	93	77	80	.355	.375	.384	3.98	2.13	.0	5.8	5.8	5.2	6.4
November	30.02	30.33	29.41	51.2	57.9	56.2	60.4	47.7	54.0	74	37	48	50	50	89	76	82	.336	.364	.366	8.63	2.53	.0	7.4	7.8	7.2	7.6
December	30.14	30.49	29.72	45.3	53.5	52.3	56.2	42.1	49.2	67	36	42	45	46	90	75	80	.275	.305	.315	5.28	1.12	.0	4.4	5.4	6.2	5.9
Year	30.03	30.49	29.41	50.8	57.0	56.6	59.6	48.8	54.2	74	36	49	50	51	93	79	81	.346	.367	.371	31.32	2.54	.0	6.5	5.9	5.6	6.2

EVANSVILLE, IND.

[ϕ=37°58′ N.; λ=87°33′ W.]

January	29.70	30.03	29.21	35.3	41.0	40.5	46.3	31.5	38.9	62	4	29	31	30	76	68	67	0.170	0.182	0.178	1.09	0.57	0.3	6.5	7.7	5.8	6.7
February	29.75	30.36	29.26	25.7	34.4	34.1	39.5	22.5	31.0	66	−1	19	21	23	75	59	64	.109	.118	.126	1.14	.75	7.0	5.7	6.1	4.6	5.8
March	29.68	30.04	29.20	36.2	44.6	46.5	51.1	33.2	42.2	72	12	29	31	31	76	61	55	.171	.185	.185	2.95	1.14	4.1	5.9	5.8	5.8	6.2
April	29.52	29.95	29.08	50.8	62.0	62.0	67.2	47.5	57.4	86	38	39	39	39	65	45	46	.253	.259	.262	1.99	1.64	.0	5.2	5.3	5.0	5.5
May	29.55	29.91	29.20	63.8	76.1	76.4	80.9	59.5	70.2	95	44	50	50	49	63	42	40	.381	.377	.363	2.12	1.52	.0	4.3	4.6	3.5	4.2
June	29.46	29.66	29.25	74.6	85.9	82.1	90.3	70.5	80.4	97	63	66	65	66	74	51	61	.637	.636	.654	6.72	3.39	.0	3.8	4.8	6.2	4.9
July	29.51	29.78	29.31	77.5	87.9	86.8	92.4	73.8	83.1	104	66	70	68	69	78	54	58	.728	.704	.731	1.85	.69	.0	5.1	5.0	5.6	5.0
August	29.55	29.75	29.34	72.0	81.8	81.3	86.1	69.3	77.7	94	53	65	66	67	80	61	64	.645	.661	.697	3.66	2.06	.0	6.3	6.4	5.0	6.0
September	29.56	29.85	29.23	62.4	73.3	70.8	77.7	59.7	68.7	89	48	58	59	61	85	62	72	.489	.518	.544	8.14	1.94	.0	6.0	5.8	5.2	5.9
October	29.62	29.95	29.19	53.4	69.1	65.4	73.3	51.4	62.4	83	32	47	47	48	80	47	54	.339	.348	.348	.85	.47	.0	3.7	3.3	2.6	3.4
November	29.61	30.02	28.92	44.7	54.8	53.4	59.6	42.2	50.9	74	30	37	38	39	73	55	59	.228	.248	.251	2.11	.99	.0	4.9	5.0	3.7	4.7
December	29.68	30.09	28.99	32.3	37.6	37.0	42.7	29.4	36.0	55	13	27	28	28	79	68	70	.148	.157	.158	2.64	1.31	.6	6.9	6.9	6.2	6.8
Year	29.60	30.36	28.92	52.4	62.4	61.4	67.3	49.2	58.2	104	−1	45	45	46	75	56	59	.358	.366	.375	35.26	3.39	12.0	5.4	5.6	4.8	5.4

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

ERIE, PA.

[H_b=714 ft.; h_t=130 ft.; h_r=122 ft.; h_a=166 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp. 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	15.6	SW.	38	NW.	10	2	7	1	4	9	17	11	11	0	2	6	23	17	11	17	10	0	5	2	6	0	26	0	0
February	12.3	NW.	31	W.	0	11	6	1	2	8	10	7	11	0	12	7	9	11	7	15	11	0	0	0	22	0	28	0	0
March	13.8	N.	41	SW.	5	10	6	4	3	14	8	11	6	0	8	10	13	15	13	12	6	1	3	1	9	0	25	1	0
April	12.7	W.	38	SW.	5	6	5	2	1	14	6	18	8	0	10	12	8	16	10	9	5	0	4	2	0	0	6	2	0
May	10.6	N.	40	W.	3	14	4	0	4	7	7	11	15	0	19	7	5	3	2	0	0	0	0	0	0	0	0	0	0
June	11.2	W.	34	SE.	1	8	8	1	3	4	9	17	10	0	17	11	2	7	6	0	0	0	1	0	0	0	4	0	0
July	10.3	NW.	43	NW.	1	10	7	0	4	6	11	10	14	0	15	13	3	9	8	0	0	1	6	0	0	4	0	8	0
August	10.8	N.	30	S.	0	12	4	3	9	11	7	7	9	0	13	14	4	9	5	0	0	0	0	0	0	1	0	6	0
September	12.0	S.	30	S_r	0	6	5	4	8	16	7	3	11	0	10	10	10	12	9	0	0	0	2	0	0	0	0	3	0
October	13.8	N.	35	W.	2	10	10	2	4	6	13	8	9	0	14	7	10	8	6	2	2	0	0	0	0	0	3	1	0
November	16.4	SW.	48	S_r	9	4	3	0	8	10	17	4	14	0	3	8	19	15	13	8	4	0	1	1	0	0	5	3	0
December	14.5	SW.	38	SE.	5	6	4	3	6	10	15	7	11	0	3	5	23	19	16	22	14	0	3	0	8	0	28	0	0
Year	12.8	W.	48	S_r	39	99	69	21	56	115	127	114	129	0	126	110	129	141	106	85	52	2	19	6	45	9	121	28	0

ESCANABA, MICH.

[H_b=612 ft.; h_t=54 ft.; h_r=44 ft.; h_a=60 ft.]

January	10.1	S.	30	NW.	0	7	3	5	6	8	14	6	12	1	5	3	23	11	7	23	8	0	6	1	16	0	31	0	0
February	10.8	NW.	35	NW.	2	15	5	1	1	12	5	4	12	1	7	12	9	9	4	21	9	0	2	0	23	0	28	0	0
March	11.2	S.	32	N.	1	14	4	1	3	18	4	3	15	0	9	4	18	13	7	22	10	0	3	5	15	0	30	1	0
April	11.2	S.	28	NW.	0	9	5	4	2	15	6	5	13	1	2	12	16	9	8	15	5	0	4	0	2	0	20	2	2
May	10.6	S.	34	NW.	1	17	3	4	4	26	4	1	3	0	9	15	7	11	8	0	0	1	0	0	0	0	2	5	2
June	9.8	S.	35	W.	1	14	9	6	4	12	1	3	10	1	9	11	10	10	9	0	0	0	3	3	0	1	0	8	2
July	8.9	S.	23	W.	0	21	8	1	6	17	1	2	5	1	7	16	8	9	7	0	0	1	4	0	0	0	0	7	2
August	9.1	S.	27	NW.	0	15	6	3	5	16	4	5	8	0	9	15	7	9	8	0	0	0	1	0	0	0	0	5	2
September	9.3	S.	27	N.	0	17	6	3	5	14	6	2	5	2	4	10	16	17	9	1	0	0	15	5	0	0	0	7	1
October	11.0	S.	30	NW.	0	6	8	2	3	14	8	6	15	0	6	10	15	6	5	3	0	1	7	1	0	0	5	2	1
November	11.5	NW.	32	N.	1	6	5	3	3	10	11	5	17	0	3	2	25	13	11	10	5	0	9	1	1	0	17	0	0
December	10.5	NW.	28	N.	0	5	5	5	0	4	11	7	24	1	4	3	24	14	10	27	14	0	0	0	22	0	31	0	0
Year	10.3	S.	35	NW.	6	146	67	38	42	166	75	49	139	8	74	113	178	131	93	122	51	3	54	16	79	1	164	37	12

EUREKA, CALIF.

[H_b=62 ft.; h_t=73 ft.; h_r=65 ft.; h_a=89 ft.]

January	5.8	SE.	31	SW.	0	11	4	6	18	3	9	5	1	5	9	5	17	14	10	0	0	1	12	11	0	0	0	0	0
February	6.3	SE.	24	SE.	0	8	4	5	13	5	10	3	3	5	7	5	16	14	10	0	0	0	7	2	0	0	0	0	0
March	5.5	N.	23	N.	0	15	6	6	6	6	5	10	6	2	3	9	19	10	7	0	0	0	14	9	0	0	0	0	0
April	7.1	N.	27	N.	0	17	3	2	5	5	8	8	9	3	5	11	14	12	5	0	0	0	6	3	0	0	0	0	0
May	7.6	N.	24	SW.	0	22	1	4	6	2	8	5	12	2	11	8	12	11	6	0	0	0	4	6	0	0	0	1	0
June	7.9	N.	26	N.	0	18	4	0	4	5	6	8	14	1	13	7	10	3	1	0	0	0	3	1	0	0	0	0	0
July	6.9	NW.	17	NW.	0	25	2	0	3	10	4	3	15	0	5	19	7	0	0	0	0	0	3	0	0	0	0	0	0
August	6.3	N.	21	N.	0	24	2	3	2	3	5	9	11	3	4	9	18	1	0	0	0	0	17	2	0	0	0	0	0
September	6.1	N.	27	N.	0	15	0	3	7	1	12	9	11	2	13	9	8	3	2	0	0	0	17	10	0	0	0	0	0
October	6.4	SE.	31	N.	0	11	4	6	10	5	13	5	3	5	8	8	15	12	7	0	0	0	15	9	0	0	0	0	0
November	7.2	SE.	31	NW.	0	6	2	4	17	15	8	3	3	2	4	7	19	21	18	0	0	0	7	2	0	0	0	1	0
December	6.0	SE.	26	SE.	0	11	9	4	11	9	9	8	0	1	9	8	14	15	13	0	0	1	11	3	0	0	0	1	0
Year	6.6	N.	31	SW.	0	183	41	43	102	69	97	76	88	31	91	105	169	116	79	0	0	2	116	52	0	0	0	3	0

EVANSVILLE, IND.

[H_b=431 ft.; h_t=76 ft.; h_r=74 ft.; h_a=116 ft.]

January	9.7	S.	30	NW.	0	7	4	10	5	13	11	6	6	0	5	11	15	11	5	4	3	0	1	1	3	0	14	1	0
February	9.9	N.	25	N.	0	14	9	7	2	10	3	2	9	0	7	12	9	6	5	8	4	0	0	0	6	0	25	0	0
March	10.5	N.	32	SW.	1	16	9	4	5	13	7	3	4	1	9	6	16	14	13	7	4	0	0	2	1	0	17	1	0
April	9.6	S.	32	SW.	1	10	1	7	5	11	7	10	9	0	9	10	11	7	5	0	0	0	1	1	0	0	0	3	0
May	7.3	NE.	24	N.	0	7	14	8	4	10	9	6	3	1	13	12	6	6	4	0	0	0	2	1	0	0	2	0	0
June	7.7	S.	38	SW.	2	8	2	4	2	21	12	8	3	0	8	17	5	12	9	0	0	1	0	0	0	18	0	11	0
July	7.1	S.	32	NE.	2	12	5	6	3	13	14	7	2	0	10	13	8	8	7	0	0	0	0	0	0	20	0	12	0
August	7.5	S.	26	SW.	0	11	6	8	8	13	6	7	2	1	8	8	15	10	9	0	0	0	6	0	0	11	0	8	0
September	7.8	S.	30	SW.	0	8	2	9	5	18	6	6	5	1	9	9	12	16	12	0	0	0	4	1	0	0	0	7	0
October	7.3	E.	27	NW.	0	6	7	12	7	9	4	7	8	2	17	8	6	6	4	0	0	0	2	0	0	0	0	3	0
November	10.4	S.	39	SW.	2	6	3	6	8	14	10	4	8	1	12	8	10	8	5	0	0	0	2	1	0	0	5	2	0
December	9.6	NW.	25	SW.	0	11	4	5	4	11	9	9	9	0	6	8	17	12	8	6	3	0	3	1	5	0	19	1	0
Year	8.7	S.	39	SW.	8	116	66	86	53	156	98	75	68	7	113	122	130	116	86	25	14	1	25	8	15	51	80	49	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

FORT SMITH, ARK.

[ϕ=35°22′ N.; λ=94°24′ W.]

Month	Pressure			Temperature								Moisture													
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.65	30.01	29.36	37.8	45.3	46.1	51.4	34.6	43.0	70	15	32	35	35	80	67	66	0.190	0.211	0.208	2.11	0.74	T	5.8	5.7	4.6	5.6
February	29.69	30.21	29.15	35.2	45.8	47.3	53.4	32.6	43.0	77	15	28	28	28	73	53	50	.153	.160	.157	.78	.40	0.2	5.0	5.0	6.1	5.2
March	29.61	30.09	29.29	41.5	54.9	55.1	61.8	38.3	50.0	80	20	33	35	37	72	51	54	.196	.221	.235	2.83	1.00	1.7	5.1	5.2	5.4	5.1
April	29.50	29.84	29.16	55.4	67.9	68.8	73.7	52.7	63.2	87	42	44	43	44	66	44	44	.300	.299	.308	4.05	2.04	.0	4.6	3.7	4.1	4.2
May	29.49	29.75	29.21	63.0	78.2	77.8	83.3	60.5	71.9	99	52	55	55	56	77	46	50	.449	.446	.456	2.44	1.48	.0	4.2	3.9	4.7	4.4
June	29.41	29.61	29.20	74.9	90.0	90.4	95.8	72.2	84.0	103	65	66	64	65	74	43	44	.639	.597	.614	.99	.63	.0	2.9	3.4	2.4	3.2
July	29.45	29.64	29.25	78.6	95.9	96.9	102.1	76.3	89.2	107	71	66	61	60	65	32	31	.629	.535	.521	.15	.15	.0	3.6	3.4	3.2	3.7
August	29.48	29.65	29.27	78.2	92.1	93.1	99.3	76.3	87.8	109	66	65	64	60	65	42	41	.615	.605	.585	1.68	1.01	.0	4.9	5.0	4.8	5.0
September	29.50	29.85	29.23	63.1	74.8	74.4	80.6	60.9	70.8	93	51	58	58	59	85	59	61	.503	.504	.516	10.49	4.36	.0	4.6	5.5	3.5	4.6
October	29.57	29.96	29.24	56.8	74.4	71.6	78.7	55.4	67.0	87	40	50	52	53	80	46	54	.377	.403	.423	.67	.28	.0	3.2	2.6	2.6	3.2
November	29.56	29.99	28.91	47.3	58.2	56.7	62.8	44.9	53.8	78	31	40	40	40	76	53	57	.262	.298	.268	6.75	3.19	T	4.9	5.1	4.4	5.1
December	29.66	30.07	29.25	35.1	43.8	43.7	49.2	32.9	41.0	62	19	30	32	33	81	65	67	.171	.188	.195	1.06	.82	T	5.7	5.4	5.0	5.5
Year	29.55	30.21	28.91	55.6	68.5	68.5	74.3	53.1	63.7	109	15	47	47	48	74	50	52	.374	.372	.374	34.00	4.36	1.9	4.5	4.5	4.2	4.6

FORT WAYNE, IND.

[ϕ=41°05′ N.; λ=85°10′ W.]

January	29.16	29.57	28.53	28.9	33.6	32.1	38.9	25.0	32.0	56	−2	25	24	25	84	70	75	0.143	0.139	0.141	1.52	0.39	1.9	6.9	6.4	7.0	6.6
February	29.27	29.92	28.54	14.2	22.5	21.8	27.2	10.2	18.7	47	−10	10	13	14	81	65	72	.073	.083	.086	.66	.20	8.8	5.4	6.5	5.2	6.0
March	29.20	29.59	28.65	27.2	35.4	33.7	40.0	23.5	31.8	68	9	22	24	24	78	63	68	.121	.142	.138	2.75	1.48	10.1	6.5	6.9	6.1	6.6
April	29.08	29.48	28.53	41.8	51.6	51.7	56.9	38.0	47.4	77	28	34	34	37	74	53	59	.197	.200	.234	2.37	.79	.8	5.6	6.5	5.8	6.2
May	29.10	29.46	28.77	59.0	71.6	71.4	76.6	53.2	64.9	92	35	45	41	42	61	35	38	.309	.269	.290	1.20	.54	.0	3.6	3.9	4.1	3.9
June	28.99	29.25	28.68	70.2	84.7	80.7	88.7	64.4	76.6	102	52	58	57	56	66	40	46	.494	.473	.473	2.67	1.43	.0	3.6	4.6	5.3	4.5
July	29.05	29.37	28.82	72.9	86.3	84.5	90.9	67.8	79.4	106	56	61	60	59	68	42	44	.549	.526	.516	2.18	.94	.0	4.2	5.3	4.6	4.8
August	29.11	29.33	28.70	65.7	77.5	76.4	82.1	61.9	72.0	102	47	58	56	56	76	49	51	.502	.467	.475	3.75	2.33	.0	5.5	5.9	4.8	5.5
September	29.10	29.41	28.75	59.9	70.9	68.2	74.4	57.1	65.8	85	43	55	55	56	86	60	68	.452	.455	.471	3.56	.90	.0	6.1	5.7	5.2	6.1
October	29.16	29.48	28.75	47.0	60.2	55.8	64.2	44.0	54.1	78	29	42	42	43	82	54	63	.271	.283	.285	.82	.39	T	4.1	3.6	3.8	4.0
November	29.13	29.53	28.47	40.4	47.7	45.5	51.4	37.5	44.4	69	24	35	36	37	81	64	72	.216	.219	.230	3.36	1.24	.2	6.8	8.0	6.4	7.1
December	29.16	29.59	28.39	24.3	28.6	28.0	32.7	20.4	26.6	45	−2	21	23	24	88	77	83	.118	.123	.130	1.40	.47	14.5	7.8	8.6	7.1	8.0
Year	29.12	29.92	28.39	46.0	55.9	54.2	60.3	41.9	51.1	106	−10	39	39	39	77	56	62	.287	.282	.289	26.24	2.33	36.3	5.5	6.0	5.4	5.8

FORT WORTH, TEX.

[ϕ=32°45′ N.; λ=97°20′ W.]

January	29.42	29.78	29.10	42.7	51.6	----	57.9	39.9	48.9	75	22	38	38	---	82	65	---	0.243	0.248	----	1.86	1.35	0.0	5.2	4.7	----	4.8
February	29.44	29.91	28.84	41.7	51.3	----	60.2	38.2	49.2	80	21	35	34	---	77	57	---	.210	.210	----	1.67	.56	.5	4.5	5.2	----	4.9
March	29.38	29.90	28.89	45.9	60.0	----	67.2	42.4	54.8	93	26	39	39	---	78	50	---	.260	.258	----	4.28	1.97	.0	3.2	3.2	----	2.9
April	29.26	29.66	28.81	59.6	71.0	----	76.6	57.7	67.2	90	47	53	52	---	80	54	---	.415	.414	----	2.39	1.10	.0	4.5	4.6	----	4.0
May	29.26	29.49	28.95	66.1	79.3	----	85.0	63.8	74.4	97	54	58	57	---	76	50	---	.490	.481	----	.82	.76	.0	3.0	3.1	----	2.6
June	29.19	29.37	28.87	77.0	91.0	----	96.6	75.3	86.0	102	69	65	60	---	67	38	---	.628	.517	----	T	T	.0	1.5	1.0	----	1.1
July	29.25	29.41	29.02	79.0	93.9	----	99.0	77.3	88.2	105	72	66	60	---	65	34	---	.648	.527	----	.08	.07	.0	1.3	1.9	----	1.6
August	29.28	29.40	28.97	78.6	93.4	----	98.5	78.1	88.3	103	72	68	64	---	70	38	---	.683	.589	----	.13	.06	.0	2.0	2.0	----	1.7
September	29.28	29.62	28.97	68.1	81.0	----	87.7	66.0	76.8	98	55	62	60	---	80	50	---	.569	.528	----	4.90	2.89	.0	3.7	4.0	----	3.9
October	29.34	29.67	29.02	62.1	79.8	----	85.2	61.1	73.2	95	48	53	52	---	73	42	---	.423	.414	----	.12	.12	.0	1.2	1.4	----	1.7
November	29.31	29.72	28.75	53.0	65.5	----	70.0	50.4	60.2	87	35	45	46	---	76	53	---	.320	.335	----	2.30	1.13	.0	4.1	3.9	----	3.9
December	29.43	29.87	28.95	42.3	54.5	----	60.2	39.2	49.7	79	24	36	38	---	78	55	---	.230	.249	----	.56	.43	.0	5.2	4.3	----	4.5
Year	29.32	29.91	28.75	59.7	72.7	----	78.7	57.4	68.1	105	21	52	50	---	75	49	---	.427	.398	----	19.09	2.89	.5	3.3	3.3	----	3.1

FRESNO, CALIF.

[ϕ=36°43′ N.; λ=119°49′ W.]

January	29.89	30.13	29.53	41.0	48.5	51.4	52.8	39.1	46.0	70	32	38	42	42	91	79	73	0.235	0.265	0.267	0.43	0.22	0.0	4.6	6.5	5.4	6.6
February	29.75	30.06	29.45	47.8	57.8	61.5	63.6	45.3	54.4	74	35	44	47	45	88	69	58	.291	.323	.302	1.80	.91	.0	5.5	6.5	5.5	6.4
March	29.71	29.96	29.42	53.3	69.9	75.2	77.0	50.7	63.8	85	45	50	51	48	89	53	40	.359	.381	.340	T	T	.0	1.4	4.6	5.3	4.6
April	29.60	29.76	29.34	54.1	75.7	81.0	82.9	52.2	67.6	92	38	44	44	38	70	33	22	.294	.288	.234	T	T	.0	1.5	1.4	2.1	1.7
May	29.56	29.80	29.33	58.1	78.5	83.6	85.8	56.8	71.3	100	48	45	43	40	64	30	24	.306	.283	.254	.03	.03	.0	2.8	3.4	3.6	3.3
June	29.50	29.78	29.30	59.7	79.9	85.8	87.4	59.1	73.2	106	50	48	48	44	66	34	26	.335	.334	.302	.05	.05	.0	2.5	2.0	2.4	2.1
July	29.53	29.71	29.35	60.7	90.5	96.9	98.3	65.3	81.8	109	55	44	44	40	48	21	15	.300	.296	.255	.00	.00	.0	1.1	.5	.4	.5
August	29.53	29.69	29.40	66.0	89.2	96.3	97.6	64.5	81.0	106	58	48	48	42	54	25	16	.339	.337	.289	.00	.00	.0	1.7	1.5	1.5	1.5
September	29.51	29.76	29.29	63.4	84.8	90.4	92.2	60.9	76.6	103	45	41	43	39	47	24	19	.285	.278	.242	.01	.01	.0	.8	1.5	1.2	1.2
October	29.64	29.90	29.35	55.7	73.1	76.5	79.1	53.0	66.0	96	42	45	47	46	69	43	38	.304	.332	.316	1.74	.93	.0	2.3	2.7	3.2	3.0
November	29.75	29.98	29.53	49.6	60.3	61.4	64.4	46.6	55.5	78	35	47	51	50	92	72	67	.326	.371	.360	2.22	1.02	.0	2.9	6.3	4.8	5.7
December	29.82	30.11	29.50	42.7	51.5	52.5	55.0	40.0	47.5	67	32	40	44	44	92	77	75	.254	.293	.297	1.89	1.02	.0	4.4	6.4	5.7	6.5
Year	29.65	30.13	29.29	54.8	71.6	76.0	78.0	52.8	65.4	109	32	44	46	43	72	47	39	.301	.315	.280	8.17	1.02	.0	2.6	3.6	3.4	3.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

FORT SMITH, ARK.

[H_b=457 ft.; h_t=79 ft.; h_r=72 ft.; h_a=94 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	8.0	E.	24	E.	0	6	6	25	3	0	8	6	8	0	9	13	9	11	5	1	0	0	4	1	1	0	13	0	0
February	9.4	E.	27	NW.	0	4	8	23	1	3	6	4	7	0	12	5	11	7	4	2	1	0	3	1	1	0	13	2	0
March	9.4	E.	30	SW.	0	6	5	23	0	9	5	5	9	0	13	7	11	9	7	2	1	1	2	0	0	0	6	2	0
April	8.6	E.	32	SW.	1	7	7	18	7	3	8	4	6	0	14	8	8	7	7	0	0	0	1	0	0	0	0	4	0
May	6.8	E.	27	SE.	0	4	12	22	10	1	3	2	8	0	14	8	9	9	6	0	0	2	1	0	0	3	0	8	0
June	7.0	E.	30	SE.	0	0	8	29	5	4	8	1	3	2	18	10	2	4	3	0	0	0	0	0	0	26	0	8	0
July	7.0	E.	30	SE.	0	3	9	17	8	9	8	2	5	1	17	13	1	1	1	0	0	0	0	0	0	31	0	5	0
August	7.3	E.	25	E.	0	3	8	23	4	10	12	2	0	0	9	15	7	7	5	0	0	0	1	0	0	27	0	10	0
September	7.7	E.	34	W.	1	5	9	24	6	4	5	1	6	0	15	8	7	11	10	0	0	0	0	0	0	6	0	7	0
October	6.7	E.	22	NE	0	4	20	21	2	3	6	2	3	1	17	11	3	5	4	0	0	0	3	1	0	0	0	4	0
November	8.8	E.	28	W.	0	4	6	26	2	4	7	3	7	1	13	5	12	10	7	2	0	0	1	0	0	0	2	5	0
December	8.6	E.	22	W.	0	3	3	28	0	3	9	5	11	0	10	9	12	8	4	1	0	0	4	1	1	0	15	0	0
Year	7.9	E.	34	W.	2	49	101	279	48	53	85	37	73	5	161	112	92	89	63	8	2	3	19	4	3	93	49	55	0

FORT WAYNE, IND.

[H_b=857 ft.; h_t=69 ft.; h_r=63 ft.; h_a=84 ft.]

January	11.4	SW.	35	NW.	2	4	2	7	5	6	18	12	8	0	9	3	19	14	9	10	6	0	4	0	7	0	24	0	0
February	9.4	NW.	29	NW.	0	6	15	2	2	8	6	4	13	0	7	9	12	8	5	15	8	0	4	1	19	0	28	0	0
March	10.3	NW.	34	W.	1	6	11	4	2	12	5	10	12	0	6	9	16	12	7	15	8	0	4	2	9	0	25	1	0
April	10.0	NW.	30	NW.	0	3	6	4	3	10	11	10	13	0	11	5	14	11	8	6	2	1	4	0	0	0	9	3	0
May	8.2	SW.	27	W.	0	6	14	3	5	7	13	6	8	0	14	12	5	6	4	0	0	1	2	0	0	1	0	2	0
June	8.5	NW.	35	W.	2	2	5	7	2	8	12	12	12	0	9	16	5	6	6	0	0	0	1	1	0	16	0	10	0
July	7.5	SW.	32	NW.	1	4	11	8	3	7	10	11	8	0	11	15	5	4	4	0	0	2	0	0	0	17	0	6	0
August	7.4	SE.	30	SW.	0	7	6	8	11	5	5	9	11	0	8	15	8	11	6	0	0	0	1	0	0	5	0	9	0
September	7.5	S.	30	SW.	0	3	8	2	6	17	8	9	6	1	7	11	12	13	10	0	0	0	11	2	0	0	0	7	0
October	8.7	SW.	30	NW.	0	2	12	6	3	5	16	8	9	1	15	10	6	4	4	3	0	0	5	1	0	0	1	0	0
November	10.8	SW.	37	SW.	2	2	1	3	10	8	13	13	10	0	3	14	13	14	10	4	2	0	6	0	0	0	11	2	0
December	9.8	W.	28	W.	0	1	4	6	4	12	3	22	10	0	2	8	21	11	8	13	7	0	12	3	16	0	30	0	0
Year	9.1	SW.	37	SW.	8	46	95	60	56	105	120	126	120	2	102	127	136	114	81	66	33	4	54	10	51	39	128	40	0

FORT WORTH, TEX.

[H_b=679 ft.; h_t=92 ft.; h_r=85 ft.; h_a=110 ft.]

January	8.4	NW.	26	NW.	0	5	4	2	1	3	6	4	6	0	14	5	12	10	7	0	0	0	4	0	0	0	6	1	0
February	9.1	NW.	27	NW.	0	3	3	4	1	2	3	5	7	0	11	8	9	7	6	1	1	0	2	0	0	0	6	3	0
March	10.0	S.	29	S.	0	4	3	0	0	8	6	5	5	0	22	3	6	8	7	0	0	0	1	1	0	1	5	5	0
April	9.6	S.	30	NE.	0	7	4	0	4	5	8	1	1	0	13	9	8	8	7	0	0	0	2	0	0	1	0	7	0
May	8.5	SE.	26	NW.	0	2	7	3	5	4	1	3	5	1	22	6	3	5	1	0	0	0	0	0	0	5	0	1	0
June	10.3	S.	24	SW.	0	0	4	3	2	13	7	0	1	0	28	2	0	0	0	0	0	0	0	0	0	29	0	0	0
July	9.9	S.	32	SW.	1	0	0	2	3	5	16	2	2	1	23	7	1	2	1	0	0	0	0	0	0	30	0	3	0
August	9.8	SW.	27	E.	0	3	1	0	1	7	17	1	1	0	25	6	0	4	2	0	0	0	0	0	0	31	0	1	0
September	10.2	S.	30	SE.	0	3	0	2	6	8	7	0	4	0	15	8	7	5	5	0	0	0	0	0	0	15	0	4	0
October	7.8	SE.	24	SW.	0	2	4	0	4	5	5	3	4	4	24	5	2	1	1	0	0	0	0	0	0	3	0	1	0
November	10.0	SE.	35	W.	1	6	0	1	8	5	6	3	1	0	16	5	9	9	5	0	0	0	0	0	0	0	0	3	0
December	9.4	N.	37	N.	1	11	1	1	3	9	2	2	1	1	15	5	11	4	3	0	0	0	0	0	0	0	5	0	0
Year	9.4	S.	37	N.	3	46	31	18	38	74	84	29	38	7	228	69	68	63	45	1	1	0	9	1	0	115	22	29	0

FRESNO, CALIF.

[H_b=327 ft.; h_t=97 ft.; h_r=89 ft.; H_a=105 ft.]

January	4.1	NW.	19	NW.	0	3	6	4	9	6	3	6	10	15	7	9	15	5	4	0	0	0	18	9	0	0	1	0	0
February	5.2	E.	18	SW.	0	5	8	13	5	3	2	1	15	4	5	14	9	7	6	0	0	0	10	4	0	0	0	0	0
March	5.2	NW.	17	NW.	0	13	5	3	0	0	1	2	30	8	12	12	7	0	0	0	0	0	8	3	0	0	0	0	0
April	7.4	NW.	24	SW.	0	8	2	1	1	1	1	1	42	3	24	5	1	0	0	0	0	0	0	0	0	4	0	0	0
May	7.9	NW.	25	W.	0	5	2	1	2	0	0	10	41	1	18	7	6	1	0	0	0	0	0	0	0	11	0	1	0
June	7.6	NW.	21	NW.	0	1	4	0	0	3	10	34	4	4	24	2	4	1	1	0	0	0	0	0	0	10	0	1	0
July	7.9	NW.	18	NW.	0	2	0	0	0	1	4	54	1	29	1	1	0	0	0	0	0	0	0	0	0	28	0	0	0
August	6.9	NW.	16	NW.	0	5	0	0	1	0	9	41	6	25	5	1	0	0	0	0	0	0	0	0	0	26	0	1	0
September	6.0	NW.	17	NW.	0	7	3	1	3	2	2	1	38	3	25	4	1	1	0	0	0	0	0	0	0	21	0	2	0
October	5.3	NW.	21	NW.	0	5	4	12	1	0	1	8	24	7	21	3	7	5	4	0	0	0	0	0	0	6	0	1	0
November	4.4	NW.	16	E.	0	4	7	9	7	0	2	4	20	7	7	12	11	5	4	0	0	0	14	5	0	0	0	0	0
December	4.7	NW.	17	SE.	0	8	3	8	9	8	7	5	10	4	7	10	14	7	5	0	0	0	17	6	0	0	0	0	0
Year	6.0	NW.	25	W.	0	69	41	56	37	21	23	61	359	63	204	84	77	32	24	0	0	0	67	27	0	110	1	6	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

GALVESTON, TEX.

[ϕ=29°18′ N.; λ=94°50′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.07	30.45	29.72	55.2	59.2	58.0	62.7	52.4	57.6	76	36	52	51	52	90	78	83	0.414	0.412	0.417	8.42	2.15	0.0	6.0	5.9	5.8	5.6
February	30.08	30.56	29.66	53.1	58.8	57.7	62.7	49.6	56.2	73	34	49	50	51	87	75	79	.367	.382	.387	2.95	1.69	.0	4.8	4.1	3.6	4.2
March	30.04	30.39	29.77	55.9	62.5	61.4	67.3	53.9	60.6	75	37	52	54	56	88	74	82	.410	.431	.461	7.29	3.21	.0	3.4	3.7	3.4	3.6
April	29.94	30.20	29.55	66.2	71.4	69.7	74.0	65.0	69.5	78	59	61	61	63	86	73	80	.559	.563	.589	5.67	3.10	.0	6.0	4.0	5.1	4.9
May	29.88	30.11	29.73	71.8	77.6	76.4	80.1	70.8	75.4	87	61	66	66	66	82	68	72	.644	.637	.644	.62	.33	.0	3.8	3.0	2.7	3.0
June	29.86	30.08	29.51	80.3	84.7	83.0	86.6	79.4	83.0	96	75	73	73	73	78	68	72	.811	.812	.817	.01	.01	.0	2.1	2.1	1.5	1.7
July	29.93	30.10	29.62	79.6	84.6	83.0	86.9	77.7	82.3	93	71	74	74	74	84	72	75	.840	.847	.847	4.55	1.51	.0	4.9	4.3	3.8	4.5
August	29.94	30.09	29.66	80.6	84.9	83.1	87.0	79.4	83.2	90	71	75	75	75	83	72	76	.860	.857	.858	9.35	6.74	.0	5.1	4.3	3.7	4.5
September	29.93	30.13	29.79	77.8	81.4	79.7	84.2	75.5	79.8	87	67	71	70	70	79	71	74	.761	.755	.751	3.04	1.65	.0	3.7	3.8	4.0	3.9
October	29.98	30.26	29.80	72.9	79.1	77.4	81.2	71.8	76.5	84	64	66	66	66	81	65	70	.655	.648	.659	1.56	1.18	.0	2.6	2.4	1.9	2.5
November	30.00	30.32	29.44	65.8	70.0	68.1	72.4	63.0	67.7	82	45	59	58	58	80	68	72	.525	.515	.510	6.01	2.09	.0	3.3	3.3	2.7	3.1
December	30.11	30.49	29.78	54.2	60.1	58.5	62.8	52.0	57.4	73	33	49	51	51	84	75	79	.381	.414	.408	3.42	1.79	.0	4.4	4.7	5.0	5.2
Year	29.98	30.56	29.44	67.8	72.9	71.3	75.7	65.9	70.8	96	33	62	62	63	84	72	76	.602	.606	.612	52.89	6.74	.0	4.2	3.8	3.6	3.9

GRAND JUNCTION, COLO.

[ϕ=39°04′ N;. λ=108°34′ W.]

January	25.52	25.90	25.10	26.9	40.9	38.6	45.1	24.0	34.6	54	16	21	22	24	78	46	56	0.112	0.119	0.130	0.41	0.24	2.5	1.8	3.6	3.3	3.4
February	25.44	25.77	25.00	34.6	48.5	48.6	53.5	31.9	42.7	61	26	28	29	29	78	47	47	.155	.156	.156	1.36	.58	.3	4.7	5.7	6.2	5.6
March	25.42	25.92	25.01	38.6	58.4	61.0	64.6	35.9	50.2	73	25	24	22	21	54	24	21	.128	.120	.114	.09	.06	.0	4.2	4.0	5.4	4.3
April	25.32	25.64	24.85	47.2	66.8	68.8	72.9	45.2	59.0	84	30	28	26	23	51	24	22	.155	.141	.125	.55	.36	2.5	3.0	3.4	6.3	4.0
May	25.35	25.66	25.02	57.5	77.1	77.1	82.4	55.4	68.9	91	43	38	34	33	50	24	26	.228	.202	.197	1.48	1.05	.0	3.7	4.0	5.1	4.0
June	25.28	25.55	25.00	60.1	81.0	83.8	86.9	57.0	72.0	97	43	31	28	25	25	16	13	.179	.154	.137	.09	.07	.0	1.9	3.7	3.8	2.9
July	25.37	25.64	25.16	69.8	89.8	92.5	96.6	68.5	82.6	103	58	44	42	38	41	21	18	.295	.279	.244	.30	.18	.0	2.3	3.6	5.0	3.3
August	25.42	25.56	25.21	66.4	85.7	87.6	92.0	64.6	78.3	100	56	50	48	46	56	29	26	.304	.346	.327	1.45	.43	.0	3.9	3.8	5.6	4.0
September	25.36	25.70	25.05	53.9	74.0	76.7	80.4	51.4	65.9	90	35	36	34	32	54	25	22	.218	.200	.185	.72	.39	.0	2.3	1.9	2.8	2.2
October	25.45	25.78	24.92	46.0	66.8	66.0	72.8	43.0	57.9	84	31	29	27	27	52	24	24	.158	.148	.149	.03	.02	.0	2.5	2.9	3.1	2.7
November	25.42	25.79	25.00	35.6	49.9	47.0	54.2	32.1	43.2	72	20	25	27	26	65	45	47	.133	.149	.140	1.04	.39	3.0	3.8	5.7	4.1	4.6
December	25.50	25.83	25.10	26.9	38.2	36.3	42.7	23.7	33.2	52	17	22	23	24	80	54	60	.116	.124	.130	.58	.26	.4	4.6	4.9	4.2	4.6
Year	25.40	25.92	24.85	47.0	64.8	65.3	70.3	44.4	57.4	103	16	31	30	29	58	32	32	.187	.178	.170	8.10	1.05	8.7	3.2	3.9	4.6	3.8

GRAND RAPIDS, MICH.

[ϕ=42°58′ N.; λ=85°40′ W.]

January	29.28	29.74	28.60	29.1	32.1	31.0	37.1	24.9	31.0	57	0	23	23	23	77	68	72	0.132	0.128	0.135	1.40	0.38	1.4	8.1	8.9	7.6	8.0
February	29.44	30.19	28.65	12.8	20.2	18.1	24.4	7.3	15.8	43	−16	6	9	8	72	60	60	.062	.069	.063	.56	.28	8.7	6.6	5.7	4.4	5.9
March	29.35	29.75	28.68	26.1	32.6	30.4	36.0	22.0	29.0	50	9	19	19	19	72	57	62	.110	.115	.109	1.63	.98	1.7	7.3	6.3	5.0	6.5
April	29.16	29.54	28.64	38.9	48.3	47.1	52.8	35.7	44.2	78	25	31	32	32	74	56	59	.175	.187	.188	1.75	.62	1.1	7.1	6.7	5.2	6.3
May	29.24	29.56	28.94	57.2	70.4	69.7	75.9	51.4	63.6	95	33	43	43	42	61	39	39	.293	.293	.286	1.96	.72	.0	3.6	3.6	4.2	3.8
June	29.12	29.48	28.77	67.0	80.0	79.6	84.9	61.6	73.2	102	52	57	58	56	72	48	47	.478	.484	.469	3.04	1.41	.0	4.4	4.2	4.6	4.7
July	29.20	29.53	28.93	70.2	83.5	82.0	88.8	64.7	76.8	104	55	58	57	58	67	42	46	.499	.472	.495	.40	.23	.0	5.0	4.5	3.4	4.7
August	29.26	29.51	28.92	62.7	76.5	73.8	80.7	58.8	69.8	97	44	54	52	53	75	43	50	.443	.413	.426	1.62	.54	.0	5.1	3.8	4.4	4.5
September	29.23	29.56	28.81	58.8	69.0	65.0	72.6	55.6	64.1	86	44	54	55	57	86	63	75	.440	.459	.476	5.76	2.13	.0	7.3	6.1	5.9	6.9
October	29.28	29.60	28.81	46.9	56.7	53.5	61.3	43.5	52.4	77	32	40	42	42	79	59	65	.259	.278	.275	2.27	1.09	T	4.4	5.0	3.7	4.8
November	29.24	29.69	28.51	41.3	45.9	44.3	50.4	38.0	44.2	67	24	35	36	37	79	67	75	.218	.222	.236	3.40	1.27	.3	8.6	8.9	6.9	8.7
December	29.29	29.70	28.63	25.0	27.7	27.0	31.8	21.0	26.4	39	5	21	21	21	81	75	77	.112	.115	.116	1.51	.32	15.5	8.7	8.6	7.6	8.5
Year	29.26	30.19	28.51	44.7	53.6	51.8	58.1	40.4	49.2	104	−16	37	37	37	75	56	61	.268	.270	.273	25.30	2.13	28.7	6.4	6.0	5.2	6.1

GREEN BAY, WIS.

[ϕ=44°31′ N.; λ=88°00′ W.]

January	29.35	29.83	28.66	23.1	26.3	26.8	32.2	19.0	25.6	49	−13	17	18	20	77	70	75	0.109	0.116	0.122	0.92	0.33	6.3	7.9	8.1	7.8	7.7
February	29.54	30.25	28.73	10.4	16.9	17.7	22.6	6.3	14.4	46	−17	3	3	6	70	54	58	.056	.055	.064	.44	.20	8.1	6.1	5.8	4.8	5.7
March	29.43	29.87	28.66	22.5	29.5	28.8	34.7	18.2	26.4	50	4	16	16	18	76	57	62	.102	.101	.104	2.37	.81	12.3	6.2	6.9	6.0	6.8
April	29.23	29.66	28.73	37.5	45.9	44.5	50.2	34.3	42.2	76	27	30	29	30	74	54	61	.166	.163	.170	1.91	.87	2.4	7.2	7.9	7.2	7.8
May	29.30	29.61	28.93	55.2	68.4	64.9	74.5	48.1	61.3	99	32	42	41	43	63	38	48	.282	.273	.293	2.01	1.11	.0	5.6	5.5	6.0	5.6
June	29.22	29.64	28.85	64.1	73.3	73.4	79.6	58.9	69.2	101	47	55	54	55	74	53	55	.446	.426	.446	4.47	2.61	.0	6.8	6.2	5.6	6.4
July	29.30	29.64	29.00	67.0	75.5	74.8	80.7	61.5	71.1	95	52	58	59	60	74	58	61	.493	.509	.527	2.34	1.62	.0	5.5	5.4	5.4	5.6
August	29.35	29.65	28.99	60.1	71.3	70.0	75.5	55.7	65.6	94	40	54	52	55	81	54	60	.442	.413	.451	3.85	2.02	.0	5.3	6.4	5.5	5.8
September	29.32	29.68	28.84	55.0	64.0	60.2	67.7	50.5	59.1	84	37	51	52	52	88	67	76	.398	.411	.405	1.91	.64	.0	7.2	7.6	6.3	7.3
October	29.36	29.76	28.78	45.1	56.0	52.2	59.9	42.4	51.2	80	25	39	39	40	80	54	64	.247	.248	.259	1.60	.79	T	5.6	6.6	5.8	6.5
November	29.32	29.80	28.56	37.4	42.0	40.4	46.2	33.4	39.8	59	21	32	33	33	79	70	74	.187	.195	.197	6.19	2.05	.2	9.5	7.7	6.7	8.3
December	29.39	29.83	28.60	18.3	22.2	21.5	27.5	15.3	20.4	36	−12	14	15	16	83	72	78	.088	.089	.093	.98	.46	8.5	7.8	7.6	5.9	7.5
Year	29.34	30.25	28.56	41.3	49.3	47.9	54.3	36.8	45.5	101	−17	34	34	36	77	58	64	.251	.250	.261	28.99	2.61	37.8	6.7	6.8	6.0	6.8

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

GALVESTON, TEX.

[H_b=69 ft.; h_t=106 ft.; h_r=98 ft.; h_a=114 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp. 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	10.1	E.	29	E.	0	8	9	11	14	5	4	1	10	0	11	5	15	13	10	0	0	0	5	0	0	0	0	5	0
February	11.2	E.	32	NW.	1	7	7	11	6	9	2	6	8	0	15	6	7	7	6	0	0	0	1	0	0	0	0	2	0
March	10.7	S.	34	NW.	1	6	4	4	9	23	4	2	10	0	19	5	7	8	8	0	0	0	4	1	0	0	0	5	0
April	10.7	S.	32	SW.	1	12	3	5	16	19	2	0	1	2	10	13	7	9	6	0	0	1	2	0	0	0	0	8	0
May	10.2	SE.	21	NW.	0	4	6	9	15	16	5	1	6	0	18	12	1	4	2	0	0	0	0	0	0	0	0	2	0
June	10.9	S.	21	SE.	0	3	1	4	17	31	3	1	0	0	24	6	0	1	0	0	0	0	0	0	0	0	3	0	0
July	11.3	S.	46	SE.	2	1	2	3	6	29	13	6	1	1	16	10	5	12	9	0	0	0	0	0	0	0	3	0	0
August	10.9	S.	41	NE.	1	4	2	5	8	32	6	4	1	0	16	7	8	9	7	0	0	0	0	0	0	0	1	0	0
September	10.2	SE.	25	N.	0	9	0	4	25	19	1	0	2	0	14	12	4	11	8	0	0	0	0	0	0	0	0	4	0
October	9.1	S.	21	SW.	0	13	8	7	13	17	1	0	2	1	21	10	0	4	4	0	0	0	1	0	0	0	0	2	0
November	11.2	SE.	43	NW.	4	4	8	5	16	16	3	0	8	0	20	5	5	10	7	0	0	0	1	0	0	0	0	6	0
December	10.3	N.	38	NW.	2	11	8	5	13	13	3	3	5	1	13	6	12	9	7	0	0	0	9	6	0	0	0	3	0
Year	10.6	S.	46	SE.	12	82	58	73	158	229	47	24	54	5	197	97	71	97	74	0	0	2	22	7	0	7	0	52	0

GRAND JUNCTION, COLO.

[H_b=4,602 ft.; h_t=60 ft.; h_r=52 ft.; h_a=68 ft.]

January	5.3	NW.	25	S.	0	12	4	4	13	3	0	7	18	1	17	10	4	4	3	2	2	0	2	1	0	0	29	0	0
February	5.2	SE.	21	W.	0	9	5	2	15	5	2	8	9	1	9	8	11	10	6	1	1	0	2	1	0	0	12	1	0
March	6.4	SE.	30	N.	0	18	4	3	17	1	3	7	9	0	13	13	5	2	1	0	0	0	0	0	0	0	5	0	0
April	7.1	SE.	25	SW.	0	8	3	3	19	4	5	7	11	0	15	10	5	3	3	2	2	0	0	0	0	0	2	1	0
May	7.4	SE.	30	W.	0	11	3	5	23	4	4	3	8	1	15	9	7	5	5	0	0	0	0	0	0	0	2	0	0
June	7.8	SE.	31	SW.	0	14	4	4	15	7	5	4	7	0	19	10	1	3	1	0	0	0	0	0	0	0	11	0	3
July	7.4	SE.	30	S.	0	11	1	8	24	3	5	3	6	1	18	11	2	6	2	0	0	0	0	0	0	0	29	0	0
August	6.6	SE.	33	S.	1	16	6	6	27	4	1	1	1	0	13	15	3	6	6	0	0	0	0	0	0	0	21	0	0
September	6.8	SE.	27	SW.	0	12	3	6	21	5	0	3	10	0	23	5	2	4	4	0	0	0	0	0	0	0	2	0	2
October	6.2	SE.	35	S.	1	12	2	4	17	10	0	4	12	1	21	7	3	2	0	0	0	0	0	0	0	0	1	1	0
November	5.6	SE.	29	NW.	0	18	1	2	14	5	0	5	13	2	10	13	7	10	6	8	7	0	0	0	0	0	13	1	0
December	5.1	SE.	18	SW.	0	8	1	3	17	5	4	6	18	0	12	10	9	5	4	3	3	0	9	0	0	0	26	0	0
Year	6.4	SE.	35	S.	2	149	37	50	222	56	29	58	122	7	185	121	59	60	41	16	15	0	13	2	0	65	88	35	0

GRAND RAPIDS, MICH.

[H_b=707 ft.; h_t=70 ft.; h_r=70 ft.; h_a=244 ft.]

January	13.6	SW.	38	SW.	2	3	2	4	10	6	19	8	10	0	2	9	20	13	8	18	4	0	6	0	5	0	20	0	0
February	11.0	N.	33	N.	1	10	11	8	6	10	5	3	3	0	7	8	13	7	4	19	7	0	1	0	21	0	28	0	0
March	12.5	S.	33	W.	1	10	5	6	7	6	17	5	6	0	8	8	15	10	6	15	5	1	6	4	10	0	28	1	0
April	12.8	SW.	38	SW.	2	6	5	4	3	13	8	10	11	0	8	8	14	12	8	8	5	0	7	1	0	0	10	4	0
May	11.5	SW.	34	SE.	3	7	6	4	6	13	17	5	4	0	14	14	3	6	5	0	0	1	0	0	1	0	1	2	0
June	10.2	SW.	41	S.	3	8	7	6	9	5	12	10	2	1	9	16	5	9	9	0	0	1	2	1	0	11	0	10	0
July	8.7	N.	34	SW.	1	10	11	8	8	6	7	8	4	0	11	13	7	5	3	0	0	1	0	0	0	12	0	6	0
August	9.4	N.	34	NW.	1	12	10	6	11	6	8	6	3	0	13	9	9	10	6	0	0	0	5	1	0	3	0	7	0
September	9.7	S.	40	SW.	2	5	6	4	10	15	5	12	3	0	6	7	17	16	11	0	0	0	15	1	0	0	0	6	0
October	11.3	W.	30	NW.	0	3	7	8	8	8	8	13	7	0	13	8	10	6	6	3	0	0	8	0	0	0	0	2	0
November	12.8	SW.	38	SW.	3	4	3	2	11	13	12	6	9	0	2	3	25	15	10	8	3	0	11	0	0	0	9	3	0
December	11.3	SW.	38	SW.	2	5	5	9	8	8	11	8	8	0	2	5	24	14	10	23	13	0	6	0	14	0	30	0	0
Year	11.2	SW.	41	S.	21	83	78	69	97	109	129	94	70	1	95	108	162	123	86	94	37	3	68	8	50	27	125	41	0

GREEN BAY, WIS.

[H_b=617 ft.; h_t=109 ft.; h_r=101 ft.; h_a=141 ft.]

January	11.8	SW.	37	NW.	2	5	6	3	3	10	11	13	11	0	5	4	22	9	4	16	5	0	6	0	12	0	29	0	0
February	11.6	S.	32	NW.	1	11	3	4	2	15	5	6	10	0	10	8	10	5	3	15	4	0	2	0	20	0	28	0	1
March	13.0	S.	40	W.	3	6	7	2	4	13	6	13	11	0	6	8	17	11	7	13	7	0	6	0	12	0	28	2	0
April	12.6	NW.	36	S.	2	3	6	4	4	9	11	5	18	0	4	3	23	13	9	9	6	1	2	0	1	0	12	2	0
May	11.6	S.	36	S.	2	5	6	4	13	12	15	2	5	0	9	11	11	9	6	0	0	2	0	0	0	0	1	7	1
June	10.8	SW.	37	W.	1	4	9	3	9	10	6	10	8	1	5	13	12	13	10	0	0	0	1	0	0	5	0	8	0
July	8.8	S.	29	NW.	0	5	10	7	9	11	10	5	2	3	9	9	13	9	7	0	0	0	0	0	0	2	0	8	0
August	9.0	SE.	39	SW.	1	10	8	5	9	7	16	8	4	1	10	8	13	9	8	0	0	1	5	1	0	2	0	5	0
September	9.7	S.	28	N.	0	11	8	4	9	11	4	8	4	1	6	5	19	9	8	0	0	0	10	4	0	0	0	2	3
October	11.2	W.	30	NW.	0	3	5	6	9	9	9	16	5	0	8	7	16	4	3	4	0	0	2	0	0	0	3	1	0
November	11.7	SW.	34	NE.	1	6	5	3	5	10	11	8	12	0	2	7	21	11	11	6	1	0	6	2	1	0	13	0	0
December	10.3	W.	30	W.	0	7	2	1	2	8	12	16	14	0	7	2	22	12	5	20	11	0	0	0	22	0	31	0	0
Year	11.0	S.	40	W.	13	76	75	46	78	125	110	110	104	6	81	85	199	114	81	83	34	4	40	7	68	12	145	35	5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

GREENSBORO, N. C.

[ϕ=36°5′ N.; λ=79°57′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.20	29.53	28.48	34.8	46.9	41.6	51.3	31.5	41.4	69	4	30	32	31	82	58	69	0.185	0.200	0.198	1.59	0.57	0.0	5.5	5.2	5.3	5.5
February	29.20	29.87	28.58	25.8	36.8	33.3	41.9	22.1	32.0	65	6	20	22	22	78	56	63	.113	.125	.124	4.96	3.00	.5	4.8	5.6	5.1	5.4
March	29.19	29.71	28.67	37.6	50.8	45.8	55.7	32.5	44.1	77	15	33	34	35	82	58	69	.199	.215	.216	4.90	1.06	.4	6.1	6.0	5.4	5.9
April	29.06	29.61	28.43	51.6	64.6	59.2	69.2	45.2	57.2	86	30	43	43	44	74	48	58	.298	.296	.302	3.52	2.36	T	5.9	5.7	5.2	5.5
May	29.07	29.50	28.60	61.8	74.3	68.3	78.2	54.3	66.2	91	44	54	51	53	77	48	61	.426	.391	.415	4.63	1.99	.0	5.2	5.5	4.8	5.0
June	29.02	29.32	28.72	73.5	84.1	77.2	87.6	66.0	76.8	98	59	66	64	66	78	54	70	.635	.602	.640	3.19	1.30	.0	5.4	5.5	5.6	5.4
July	29.07	29.33	28.83	75.1	85.3	77.5	89.3	69.7	79.5	98	64	71	71	72	86	63	83	.753	.755	.777	7.14	1.99	.0	7.7	6.5	7.2	7.0
August	29.12	29.42	28.97	72.3	82.4	74.8	85.5	68.1	76.8	93	54	68	67	70	87	61	84	.697	.675	.727	2.25	.91	.0	7.9	8.0	7.7	7.8
September	29.13	29.45	28.84	66.1	77.0	70.0	80.6	62.7	71.6	89	49	64	65	66	94	68	87	.609	.623	.643	8.75	2.36	.0	5.9	6.6	4.3	6.1
October	29.15	29.42	28.76	49.9	66.6	56.4	69.8	44.5	57.2	82	27	46	46	49	87	50	79	.324	.326	.366	1.14	.40	.0	2.9	3.2	2.5	3.1
November	29.19	29.51	28.80	41.9	58.5	49.0	61.7	37.2	49.4	78	20	38	40	40	87	54	73	.258	.276	.272	3.30	1.49	T	4.6	5.2	4.0	4.9
December	29.17	29.56	28.55	33.4	45.4	38.0	48.8	28.7	38.8	66	15	28	29	28	80	53	68	.162	.167	.160	2.91	1.07	.2	6.7	6.2	4.9	6.5
Year	29.13	29.87	28.43	52.0	64.4	57.6	68.3	46.9	57.6	98	4	47	47	48	83	56	72	.388	.388	.403	48.28	3.00	1.1	5.7	5.8	5.2	5.7

HARRISBURG, PA.

[ϕ=40°16′ N.; λ=76°52′ W.]

January	29.71	30.15	28.76	29.9	35.7	35.3	40.4	27.3	33.8	54	6	22	22	24	70	60	63	0.127	0.135	0.138	2.78	1.04	0.2	5.1	6.1	5.7	6.6
February	29.76	30.47	28.85	14.9	23.3	24.2	30.8	12.0	21.4	52	−11	3	0	7	58	38	48	.050	.055	.069	1.00	.73	9.6	4.6	3.8	5.1	4.8
March	29.75	30.29	29.17	30.9	39.3	39.1	45.5	26.9	36.2	67	10	22	24	28	67	56	65	.123	.136	.159	3.34	1.08	6.5	5.5	5.9	5.7	6.0
April	29.59	30.26	28.98	45.4	55.2	54.6	60.5	41.2	50.8	76	33	36	37	38	70	53	56	.214	.229	.242	2.80	.89	T	5.1	5.7	5.2	5.1
May	29.60	30.12	29.27	59.2	69.6	67.1	74.2	53.6	63.9	91	43	46	47	49	64	47	56	.332	.338	.370	3.63	1.66	.0	5.0	5.4	4.4	5.1
June	29.50	29.95	29.06	69.8	79.2	77.7	84.1	64.7	74.4	100	53	60	59	62	74	53	61	.536	.522	.571	3.52	1.40	.0	5.9	5.3	5.1	5.1
July	29.55	29.92	29.33	73.0	82.7	79.9	87.8	68.4	78.1	97	59	64	61	63	75	50	60	.609	.551	.598	2.68	.79	.0	5.1	4.8	5.8	5.4
August	29.64	30.02	29.37	66.3	74.2	72.6	78.8	62.4	70.6	91	48	58	58	61	76	60	68	.497	.507	.553	5.08	1.17	.0	5.6	5.8	5.1	5.5
September	29.69	30.06	29.36	63.1	71.5	69.2	75.1	59.9	67.5	84	49	59	59	60	87	67	73	.515	.517	.528	8.96	2.99	.0	7.5	6.3	4.7	6.3
October	29.66	30.00	29.21	48.0	58.0	55.1	62.5	44.8	53.6	78	32	39	39	42	73	50	61	.252	.248	.277	1.40	.69	T	4.6	4.1	3.5	4.8
November	29.73	30.19	29.08	43.1	50.7	48.8	54.5	40.1	47.3	70	27	36	35	36	75	56	64	.226	.223	.237	3.82	1.04	T	5.9	6.3	4.4	6.2
December	29.69	30.12	28.86	30.4	34.8	33.8	39.2	27.4	33.3	65	15	22	22	21	68	58	59	.126	.125	.120	4.33	3.19	1.2	6.5	6.7	6.5	7.2
Year	29.66	30.47	28.76	47.8	56.2	54.8	61.1	44.1	52.6	100	−11	39	39	41	71	54	61	.301	.299	.322	43.34	3.19	17.5	5.5	5.5	5.1	5.7

HARTFORD, CONN.

[ϕ=41°46′ N.; λ=72°40′ W.]

January	29.92	30.51	28.88	26.2	32.2	----	37.2	22.6	29.9	56	2	21	22	---	79	65	---	0.123	0.132	----	3.74	1.41	0.5	5.1	----	----	6.1
February	29.94	30.70	28.97	11.5	18.7	----	26.1	6.9	16.5	44	−15	5	14	---	74	64	---	.058	.068	----	3.98	2.39	31.5	4.9	----	----	4.5
March	30.00	30.55	29.34	30.6	40.5	----	44.5	25.9	35.2	63	9	23	26	---	71	55	---	.129	.151	----	3.84	1.30	9.9	5.0	----	----	5.8
April	29.83	30.50	29.08	45.1	54.2	----	58.7	39.2	49.0	76	32	35	37	---	69	55	---	.211	.227	----	5.31	2.86	.0	4.5	----	----	4.6
May	29.82	30.38	29.34	58.2	68.2	----	72.4	50.5	61.4	88	38	50	54	---	75	62	---	.377	.437	----	5.53	2.24	.0	4.7	----	----	5.2
June	29.72	30.24	29.35	67.5	75.2	----	79.9	59.3	69.6	98	44	59	61	---	75	63	---	.507	.550	----	3.46	2.11	.0	4.9	----	----	5.4
July	29.78	30.21	29.56	71.9	80.9	----	85.2	65.0	75.1	97	55	63	62	---	74	56	---	.590	.585	----	2.97	1.31	.0	5.5	----	----	5.6
August	29.86	30.29	29.57	64.6	72.7	----	77.0	59.0	68.0	87	45	56	54	---	75	54	---	.466	.440	----	2.54	.89	.0	5.3	----	----	5.3
September	29.94	30.35	29.56	62.4	70.7	----	74.0	58.1	66.0	83	47	59	60	---	89	72	---	.508	.532	----	9.06	2.78	.0	8.0	----	----	7.8
October	29.86	30.34	29.33	45.4	54.6	----	58.7	41.5	50.1	74	35	38	40	---	76	59	---	.237	.259	----	2.42	.91	T	5.2	----	----	5.2
November	29.95	30.56	29.23	42.9	49.1	----	52.9	38.1	45.5	69	22	37	39	---	80	68	---	.238	.252	----	2.79	.93	T	5.9	----	----	6.5
December	29.87	30.35	28.92	25.7	31.9	----	36.1	23.2	29.6	64	8	18	23	---	73	68	---	.116	.138	----	3.36	1.44	.3	5.6	----	----	6.1
Year	29.87	30.70	28.88	46.0	54.1	----	58.6	40.8	49.7	98	−15	39	41	---	76	62	---	.297	.314	----	49.00	2.86	42.2	5.4	----	----	5.7

HATTERAS, N. C.

[ϕ=35°15′ N.; λ=75°40′ W.]

January	30.14	30.49	29.40	48.9	53.2	48.8	56.5	44.0	50.2	69	17	43	45	44	81	74	84	0.302	0.322	0.309	3.90	2.60	0.0	5.5	5.6	4.8	5.4
February	30.14	30.83	29.40	38.5	43.3	39.6	47.4	33.2	40.3	67	16	33	34	33	81	70	76	.199	.213	.201	3.98	.90	T	7.0	5.4	4.7	6.1
March	30.14	30.63	29.45	48.3	53.7	50.1	56.1	44.0	50.0	69	32	43	45	45	82	73	82	.289	.314	.310	5.42	3.10	.0	6.5	5.1	4.7	5.5
April	30.00	30.50	29.34	58.1	62.4	58.6	64.7	52.8	58.8	72	45	51	53	52	79	72	78	.387	.409	.396	3.10	1.65	.0	5.0	4.1	3.6	4.6
May	29.99	30.38	29.62	67.8	70.6	66.5	72.4	62.6	67.5	80	55	60	61	61	79	74	83	.538	.554	.547	10.37	7.44	.0	6.2	4.2	5.0	4.5
June	29.95	30.20	29.62	78.4	81.6	76.3	82.4	72.6	77.5	87	68	72	72	72	81	75	86	.782	.800	.779	2.36	.74	.0	4.8	3.8	4.9	4.0
July	29.99	30.21	29.74	80.7	84.7	79.1	85.2	75.8	80.5	90	72	74	75	74	80	73	84	.843	.870	.836	6.00	2.79	.0	6.3	3.5	5.9	5.0
August	30.04	30.25	29.83	80.0	83.7	77.5	84.0	73.9	79.0	89	68	72	74	72	78	72	83	.805	.833	.792	5.22	2.29	.0	5.8	5.4	6.6	5.3
September	30.03	30.25	29.25	77.0	80.2	75.6	80.8	72.5	76.6	85	68	72	72	71	84	77	87	.776	.783	.768	14.96	7.78	.0	7.3	5.9	5.9	6.2
October	30.03	30.31	29.64	64.8	69.9	65.0	71.0	59.7	65.4	83	44	57	57	58	78	66	78	.493	.494	.495	2.04	1.34	.0	4.1	3.6	2.5	3.7
November	30.12	30.39	29.69	56.7	62.5	59.3	65.3	52.5	58.9	75	39	50	52	52	79	68	77	.381	.405	.412	1.19	1.13	.0	4.8	4.6	4.2	4.7
December	30.10	30.47	29.51	45.9	51.1	46.8	53.9	41.0	47.4	72	25	41	45	43	84	79	86	.281	.317	.287	4.07	2.07	T	5.9	6.3	5.4	6.2
Year	30.06	30.83	29.25	62.1	66.4	61.9	68.3	57.0	62.7	90	16	56	57	56	80	73	82	.506	.526	.511	62.61	7.78	T	5.7	4.8	4.8	5.1

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

GREENSBORO, N. C.

[H_b=886 ft.; h_t=6 ft h_r=3 ft.; h_a=56 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.4	NE.	32	NW.	1	3	15	2	0	6	15	16	5	0	12	7	12	7	6	0	0	0	11	7	1	0	16	0	0
February	8.9	NE.	30	NW.	0	8	17	1	2	7	9	4	7	1	9	9	10	8	8	3	2	0	7	0	4	0	26	2	0
March	9.9	NE.	27	NE.	0	9	16	5	2	8	15	4	3	0	11	7	13	17	14	4	2	0	8	4	0	0	17	3	0
April	9.8	SW.	31	NW.	0	8	14	3	0	4	24	2	5	0	9	10	11	9	6	1	0	0	5	1	0	0	2	2	0
May	9.6	NE.	47	NE.	1	5	20	4	2	11	15	3	2	0	9	13	9	9	7	0	0	0	3	2	0	2	0	6	0
June	7.3	SW.	27	NW.	0	3	4	3	5	19	13	7	5	1	9	10	11	12	8	0	0	0	8	2	0	14	0	13	0
July	6.7	SW.	49	NW.	2	5	8	3	3	10	21	9	3	0	3	14	14	13	10	0	0	1	14	2	0	16	0	22	0
August	6.6	SW.	34	NW.	1	6	8	5	7	6	16	11	2	1	1	10	20	14	9	0	0	0	12	3	0	7	0	13	0
September	6.6	NE.	34	N.	1	12	18	7	8	6	4	3	0	2	6	15	9	15	12	0	0	0	23	9	0	0	0	8	0
October	7.3	NE.	30	W.	0	8	19	3	2	4	12	9	5	0	19	6	6	5	5	0	0	0	9	2	0	0	3	1	0
November	9.0	SW.	28	W.	0	6	13	5	6	6	12	7	5	0	14	4	12	9	8	1	0	0	8	2	0	0	12	0	0
December	7.6	SW.	29	SW.	0	6	12	3	2	6	13	6	13	1	7	9	15	11	7	5	1	0	7	1	2	0	23	0	0
Year	8.1	SW.	49	NW.	6	79	164	44	39	93	169	81	55	6	109	114	142	129	100	14	5	1	115	35	7	39	99	70	0

HARRISBURG, PA.

[H_b=374 ft.; h_t=94 ft.; h_r=42 ft.; h_a=104 ft.]

January	8.0	W.	30	NW.	0	3	12	4	2	3	6	18	14	0	6	9	16	10	9	7	3	0	11	4	5	0	23	0	0
February	9.2	NW.	30	NW.	0	3	11	4	6	4	6	8	14	0	11	7	10	4	4	11	4	0	0	0	15	0	28	0	0
March	7.9	W.	34	SW.	1	4	16	5	6	7	5	16	3	0	8	11	12	15	12	7	7	0	6	3	4	0	22	1	0
April	7.8	NW.	24	SW.	0	5	7	6	11	4	4	11	12	0	10	13	7	8	8	2	0	1	3	3	0	0	0	3	0
May	7.2	NE.	30	S.	0	7	10	11	5	3	10	9	7	0	7	17	7	11	8	0	0	0	2	0	0	2	0	3	0
June	7.3	W.	27	W.	0	5	7	3	3	11	10	13	8	0	8	19	3	9	8	0	0	1	2	0	0	5	0	5	0
July	6.1	W.	24	NE.	0	8	10	10	8	7	3	13	3	0	10	12	9	11	8	0	0	1	4	0	0	13	0	10	0
August	6.2	NE.	25	W.	0	11	9	8	7	9	5	8	5	0	13	5	13	12	11	0	0	1	6	0	0	1	0	7	0
September	6.0	E.	20	W.	0	7	11	11	10	5	5	5	5	1	8	11	11	14	13	0	0	0	15	2	0	0	0	3	0
October	7.4	W.	25	NW.	0	14	6	5	4	1	7	15	10	0	14	7	10	5	4	1	0	0	7	2	0	0	0	1	0
November	7.9	W.	29	W.	0	3	8	7	10	3	8	12	9	0	10	6	14	12	10	3	0	0	9	0	0	0	5	0	0
December	8.3	W.	35	NW.	1	6	6	6	5	4	5	17	13	0	6	7	18	10	6	10	-4	0	5	1	7	0	22	1	0
Year	7.4	W.	35	NW.	2	76	113	80	77	61	74	145	103	1	111	124	130	121	101	41	18	4	70	15	31	21	100	34	0

HARTFORD, CONN.

[H_b=159 ft.; h_t=70 ft.; h_r=63 ft.; h_a=104 ft.]

January	----	NW.	----	-------	----	7	0	0	2	8	6	1	7	0	7	11	13	9	7	12	4	0	8	1	9	0	28	0	0
February	----	NW.	----	-------	----	6	0	0	1	3	6	1	11	0	12	7	9	10	8	11	8	0	6	0	18	0	28	0	0
March	----	S.	----	-------	----	11	3	0	0	7	3	3	4	0	9	11	11	15	13	6	5	0	6	1	3	0	25	1	0
April	----	S.	----	-------	----	5	5	1	1	6	4	0	8	0	14	5	11	14	12	0	0	0	3	0	0	0	2	2	0
May	----	S.	----	-------	----	5	2	3	4	10	2	1	4	0	8	14	9	15	12	0	0	0	9	0	0	0	0	4	0
June	----	S.	----	-------	----	9	3	2	0	6	3	3	4	0	9	13	8	8	6	0	0	0	7	0	0	3	0	5	0
July	----	S.	----	-------	----	9	0	1	0	13	4	1	3	0	10	9	12	7	5	0	0	0	5	0	0	9	0	6	0
August	----	S.	----	-------	----	9	2	1	2	5	2	0	10	0	11	8	12	9	7	0	0	0	3	0	0	0	0	1	0
September	----	S.	----	-------	----	9	4	0	6	5	1	2	3	0	4	7	19	16	12	0	0	1	13	2	0	0	0	3	0
October	----	N.	----	-------	----	13	2	0	1	2	4	0	6	3	13	7	11	8	7	1	0	0	8	1	0	0	0	1	0
November	----	S.	----	-------	----	6	3	0	2	8	5	1	5	0	8	7	15	13	10	4	0	0	11	1	0	0	10	0	0
December	----	NW.	----	-------	----	10	0	0	0	2	5	3	11	0	9	8	14	10	6	5	1	0	7	0	13	0	25	0	0
Year	----	S.	----	-------	----	99	24	8	19	75	45	16	76	3	114	107	144	134	105	39	18	1	86	6	43	12	118	23	0

HATTERAS, N. C.

[H_b=11 ft.; h_t=5 ft.; h_r=4 ft.; h_a=50 ft.]

January	13.1	N.	37	NW.	1	12	13	1	1	3	12	12	8	0	11	8	12	14	9	0	0	0	3	4	1	0	3	0	0
February	16.0	N.	37	N.	6	18	12	1	3	2	3	4	13	0	6	9	13	10	10	1	0	0	0	0	0	0	11	2	0
March	14.4	NE.	43	NW.	3	15	16	0	2	4	15	2	5	3	12	7	12	12	11	0	0	0	1	1	0	0	1	3	0
April	12.0	SW.	34	NE.	2	3	20	5	1	4	19	4	3	1	13	9	8	9	8	0	0	0	3	1	0	0	0	3	0
May	13.1	SW.	32	NE.	1	7	15	2	1	10	23	3	1	0	14	8	9	13	12	0	0	0	1	1	0	0	0	1	0
June	11.5	SW.	35	S.	2	0	2	4	3	11	30	9	1	0	15	9	6	10	7	0	0	0	0	0	0	0	0	4	0
July	10.9	SW.	30	NW.	0	4	4	2	6	2	35	7	2	0	11	11	9	10	9	0	0	0	0	0	0	1	0	9	0
August	11.3	SW.	37	NW.	1	4	17	1	1	4	27	6	2	0	8	14	9	10	8	0	0	0	0	0	0	0	0	6	0
September	11.0	NE.	65	NW.	1	3	17	7	13	3	11	3	3	0	7	10	13	15	12	0	0	0	0	0	0	0	0	3	0
October	12.9	NE.	32	NW.	1	16	17	4	1	0	6	9	9	0	16	9	6	8	5	0	0	0	0	0	0	0	0	0	0
November	15.1	N.	37	N.	1	11	10	1	7	7	10	6	8	0	13	9	8	10	6	0	0	0	1	1	0	0	0	3	0
December	13.9	N.	37	S.	5	19	13	0	2	1	5	12	10	0	10	5	16	11	8	2	0	0	0	0	0	0	4	0	0
Year	12.9	SW.	65	NW.	24	112	156	28	41	51	196	77	65	4	136	108	121	132	105	3	0	0	9	7	1	1	19	34	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

HAVRE, MONT.

[ϕ=48°34′ N.; λ=109°40′ W.]

Month	Pressure			Temperature								Moisture													
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	27.36	27.95	26.69	27.3	33.8	29.3	38.1	17.3	27.7	51	−9	20	23	22	73	65	75	0.110	0.128	0.124	0.22	0.13	3.1	5.5	6.1	6.1	5.8
February	27.44	27.77	27.07	24.0	36.0	34.2	41.4	19.8	30.6	59	−14	19	22	23	83	57	64	.113	.129	.134	.07	.04	.4	3.2	4.7	4.0	4.3
March	27.44	28.09	26.85	26.2	37.4	37.3	42.9	22.4	32.6	65	−7	21	22	24	81	55	60	.117	.128	.132	1.05	.43	15.3	6.3	6.6	5.6	6.1
April	27.38	27.88	26.88	36.0	59.8	60.0	64.8	34.5	49.6	81	20	28	27	26	72	30	29	.152	.149	.143	.83	.79	1.8	3.4	3.1	3.2	3.1
May	27.31	27.75	26.90	51.0	72.4	73.8	77.4	47.6	62.5	95	34	39	35	35	64	27	27	.239	.212	.210	.58	.18	.0	4.7	3.8	4.8	4.0
June	27.29	27.62	26.98	53.2	70.3	70.9	74.8	49.8	62.3	86	41	44	42	42	73	40	39	.295	.278	.271	3.12	1.14	.0	4.9	4.6	5.4	5.0
July	27.32	27.66	26.85	58.5	80.6	83.9	87.1	56.1	71.6	100	41	43	42	40	60	28	25	.279	.275	.258	.21	.19	.0	3.4	3.4	2.3	2.9
August	27.40	27.67	26.97	53.4	77.3	80.6	83.5	52.1	67.8	102	40	41	41	40	66	30	26	.265	.283	.259	.98	.34	.0	4.6	3.0	2.5	3.0
September	27.36	27.87	27.04	41.7	58.5	58.8	63.9	38.8	51.4	88	20	36	36	36	81	50	48	.216	.217	.215	1.74	.83	8.7	5.5	5.7	6.2	5.6
October	27.37	27.95	26.93	39.7	55.6	54.8	61.6	36.8	49.2	87	20	34	35	34	81	47	49	.197	.193	.196	.67	.31	1.5	3.8	5.0	4.8	5.0
November	27.29	27.80	26.76	30.9	44.7	39.9	49.6	26.3	38.0	71	8	25	28	28	80	54	63	.138	.151	.149	.13	.09	1.0	5.5	4.4	4.1	4.7
December	27.39	27.88	26.77	19.1	25.1	22.0	33.1	13.1	23.1	57	−19	14	17	16	80	72	79	.092	.104	.104	.66	.16	7.3	6.0	6.4	6.7	6.4
Year	27.36	28.09	26.69	38.4	54.3	53.8	59.8	34.6	47.2	102	−19	30	31	30	74	46	49	.184	.186	.183	10.26	1.14	39.1	4.7	4.7	4.6	4.7

HELENA, MONT.

[ϕ=46°34′ N.; λ=112°04′ W.]

January	25.84	26.32	25.26	30.9	35.5	36.6	41.2	25.7	33.4	53	1	22	24	24	69	62	60	0.118	0.127	0.128	0.24	0.18	1.8	6.7	7.5	7.0	6.6
February	25.88	26.15	25.58	27.2	34.5	36.5	41.1	23.1	32.1	62	−8	20	23	23	72	63	58	.115	.135	.131	.28	.13	5.3	4.7	5.0	6.2	5.1
March	25.84	26.33	25.47	31.8	41.3	44.7	48.7	27.3	38.6	64	13	23	26	27	71	56	51	.124	.145	.145	.93	.29	9.7	6.9	7.1	7.1	6.7
April	25.81	26.18	25.29	40.6	56.0	59.4	62.0	38.1	50.0	77	22	29	32	31	63	42	37	.161	.180	.175	.56	.32	4.4	5.3	4.7	5.7	4.8
May	25.77	26.19	25.48	49.2	67.9	69.7	73.1	46.1	59.6	89	31	36	38	37	61	34	33	.213	.230	.227	.34	.12	T	5.9	6.0	7.5	6.1
June	25.75	26.10	25.47	50.7	65.4	66.8	70.7	48.2	59.4	86	37	41	42	42	72	46	44	.262	.268	.267	2.85	1.21	.0	4.9	5.6	6.5	5.9
July	25.80	26.07	25.45	58.3	77.4	79.5	83.3	55.9	69.6	99	46	42	45	44	56	34	32	.270	.308	.297	.24	.13	.0	2.2	4.1	5.1	4.0
August	25.85	26.09	25.50	56.5	75.7	80.2	82.6	55.0	68.8	92	43	39	43	42	53	32	27	.238	.277	.265	.03	.02	.0	4.7	3.3	4.1	4.3
September	25.82	26.20	25.48	43.9	57.4	59.3	63.1	40.4	51.8	85	19	32	36	34	65	48	44	.184	.218	.204	.03	.03	6.4	6.2	7.1	7.3	6.5
October	25.84	26.23	25.45	42.5	52.4	52.9	56.4	39.1	48.8	78	27	34	37	37	74	58	59	.199	.222	.225	1.05	.35	2.0	6.5	7.3	7.5	6.9
November	25.74	26.17	25.34	36.0	43.3	42.0	46.8	32.0	39.4	66	22	29	31	31	74	64	65	.160	.175	.171	.31	.21	.2	7.1	7.5	7.0	7.3
December	25.82	26.33	25.26	20.7	24.9	24.8	29.4	15.7	22.6	51	−14	13	17	18	71	72	73	.082	.100	.099	.89	.25	15.1	6.2	7.5	7.1	7.9
Year	25.81	26.33	25.26	40.7	52.6	54.4	58.4	37.2	47.8	99	−14	30	33	32	67	51	49	.177	.199	.194	8.35	1.21	44.9	5.6	6.1	6.5	6.0

HONOLULU, HAWAII

[ϕ=21°19′ N.; λ=157°52′ W.]

January	29.99	30.12	29.86	72.3	76.3	73.1	78.1	68.9	73.5	80	66	65	65	64	78	68	75	0.613	0.613	0.605	2.24	1.06	0.0	4.9	5.4	2.9	4.7
February	30.01	30.20	29.82	71.3	75.0	72.0	76.6	67.5	72.0	81	62	63	63	64	76	68	75	.582	.586	.592	1.54	.55	.0	4.0	4.7	4.2	4.5
March	29.98	30.13	29.83	71.3	74.8	71.3	77.0	66.6	71.8	81	63	63	62	62	75	66	74	.574	.569	.562	.65	.32	.0	4.0	4.4	3.5	4.5
April	30.01	30.15	29.78	70.5	73.8	70.2	75.4	65.9	70.6	80	61	61	63	62	73	70	77	.544	.586	.568	.81	.35	.0	5.1	5.6	6.0	5.5
May	30.01	30.12	29.89	75.1	77.6	74.1	79.5	70.6	75.0	83	68	66	66	66	75	68	76	.648	.639	.641	.57	.40	.0	4.8	4.3	3.1	3.9
June	30.00	30.08	29.88	77.5	80.2	76.6	82.0	72.8	77.4	85	70	67	67	67	70	64	73	.655	.658	.665	1.84	.67	.0	3.8	4.9	5.2	4.4
July	29.99	30.10	29.88	78.1	81.3	77.6	83.0	73.9	78.4	85	71	68	67	68	71	63	72	.678	.667	.676	.38	.12	.0	4.6	4.2	3.7	3.9
August	29.97	30.07	29.85	79.3	82.2	78.6	83.9	75.2	79.6	87	72	69	69	69	72	65	73	.717	.706	.714	.94	.37	.0	5.2	5.4	4.1	5.0
September	29.94	30.02	29.80	79.0	81.7	78.1	83.7	74.4	79.0	87	71	69	69	68	72	65	73	.710	.703	.695	2.82	1.18	.0	4.3	5.5	3.9	4.9
October	29.97	30.09	29.75	78.2	81.4	76.9	82.7	73.5	78.1	87	70	69	69	69	73	66	76	.702	.700	.703	1.61	.65	.0	3.5	4.2	4.6	3.9
November	29.98	30.10	29.78	76.2	78.8	75.4	80.5	72.1	76.3	85	67	68	68	68	76	71	78	.684	.691	.684	2.49	.96	.0	4.4	5.3	5.2	4.7
December	29.96	30.10	29.75	73.8	77.7	74.1	79.5	70.3	74.9	83	66	67	68	67	78	72	79	.655	.684	.660	2.48	1.17	.0	3.6	4.9	4.5	4.1
Year	29.98	30.20	29.75	75.2	78.4	74.8	80.2	71.0	75.6	87	61	66	66	66	74	67	75	.647	.650	.647	18.37	1.18	.0	4.4	4.9	4.2	4.5

HOUSTON, TEX.

[ϕ=29°47′ N.; λ=95°24′ W.]

January	29.99	30.38	29.68	51.4	58.9	----	63.0	49.2	56.1	78	31	48	49	---	83	72	---	0.362	0.376	----	9.94	2.48	0.0	5.2	5.8	----	5.9
February	30.00	30.46	29.56	50.0	59.0	----	63.7	46.1	54.9	77	29	44	45	---	81	62	---	.312	.312	----	3.12	1.84	.0	4.2	4.6	----	4.7
March	29.96	30.29	29.67	53.2	64.9	----	70.8	51.4	61.1	81	31	48	49	---	84	60	---	.364	.371	----	4.46	3.14	.0	3.9	4.5	----	4.2
April	29.85	30.12	29.50	63.1	73.8	----	78.5	62.2	70.4	89	55	59	59	---	90	63	---	.530	.531	----	4.10	2.06	.0	5.9	5.3	----	5.4
May	29.80	30.02	29.61	67.8	79.5	----	83.3	66.4	74.8	92	56	64	62	---	88	56	---	.601	.564	----	1.70	.70	.0	3.7	4.9	----	3.8
June	29.77	29.98	29.43	77.1	89.3	----	92.5	74.8	83.6	100	70	72	68	---	86	51	---	.795	.694	----	.12	.10	.0	1.5	5.5	----	3.2
July	29.84	29.99	29.59	76.3	88.6	----	92.5	74.4	83.4	100	68	74	70	---	93	56	---	.843	.732	----	4.39	1.16	.0	3.3	5.4	----	4.7
August	29.86	30.01	29.68	77.1	87.9	----	91.5	75.5	83.5	96	70	74	71	---	92	59	---	.851	.766	----	1.61	.68	.0	3.4	6.7	----	4.8
September	29.84	30.05	29.70	72.4	83.1	----	86.9	70.5	78.7	93	59	69	68	---	89	61	---	.722	.685	----	3.57	1.13	.0	2.9	5.7	----	4.8
October	29.90	30.17	29.70	67.9	81.2	----	84.1	67.1	75.6	90	58	64	62	---	87	54	---	.600	.580	----	T	T	.0	2.3	4.2	----	3.1
November	29.92	30.24	29.36	59.4	69.8	----	73.3	57.5	65.4	87	42	54	54	---	85	59	---	.453	.441	----	4.93	1.42	.0	3.1	4.4	----	3.9
December	30.02	30.39	29.70	51.9	61.6	----	65.0	48.5	56.8	78	28	47	47	---	84	61	---	.360	.364	----	4.04	1.92	.0	4.8	5.3	----	5.3
Year	29.90	30.46	29.36	64.0	74.8	----	78.8	62.0	70.4	100	28	60	59	---	87	60	---	.566	.535	----	41.98	3.14	.0	3.7	5.2	----	4.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

HAVRE, MONT.

[H_b=2,505 ft.; h_t=11 ft.; h_r=3 ft.; h_a=67 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	12.1	SW.	31	SW.	0	0	10	6	0	0	22	18	6	0	7	14	10	5	2	9	4	0	0	0	8	0	29	0	0
February	8.8	SW.	37	SW.	1	1	6	12	0	0	10	17	8	2	12	10	6	3	0	6	3	0	2	2	7	0	28	0	0
March	10.2	E.	38	W.	1	1	14	14	3	0	14	9	6	1	5	16	10	11	6	14	10	0	0	0	8	0	24	0	0
April	9.8	E.	34	NW.	3	5	8	16	2	0	7	7	12	3	20	5	5	3	2	2	1	0	0	0	8	0	24	0	0
May	10.0	SW.	37	SW.	3	3	2	6	4	3	13	13	18	0	13	16	2	10	5	0	0	0	0	0	0	0	12	0	2
June	9.9	E.	36	SW.	3	4	5	14	5	1	14	9	8	0	10	15	5	13	7	0	0	0	0	0	0	5	0	4	1
July	8.7	SW.	44	SW.	1	0	6	12	6	0	14	12	10	2	17	12	2	2	1	0	0	0	0	0	0	0	5	5	1
August	7.5	E.	39	W.	1	5	8	14	2	1	5	10	17	0	18	12	1	8	8	0	0	0	0	0	0	11	0	5	1
September	8.7	SW.	25	SW.	0	4	8	9	2	1	16	8	11	1	7	15	8	11	9	6	4	1	0	0	2	0	7	4	2
October	9.3	SW.	30	SW.	0	2	10	10	1	2	18	9	8	2	9	15	7	7	5	2	2	0	2	0	0	0	8	0	0
November	8.3	SW.	38	SW.	2	0	6	14	1	2	17	5	12	3	14	9	7	4	1	5	3	0	2	0	2	0	21	0	2
December	9.7	SW.	31	SW.	0	0	5	8	0	0	23	15	10	1	6	11	14	8	6	12	8	0	4	0	8	0	29	0	1
Year	9.4	SW.	44	SW.	15	25	88	135	26	10	173	132	126	15	138	150	77	85	52	56	35	4	10	2	35	23	156	21	12

HELENA, MONT.

[H_b=4,124 ft.; h_t=85 ft.; h_r=78 ft.; h_a=111 ft.]

January	8.8	W.	38	W.	2	5	1	1	0	4	17	24	10	0	2	16	13	4	3	14	4	0	1	0	6	0	24	1	4
February	7.0	SW.	27	NW.	0	4	1	0	0	4	22	9	16	0	11	8	9	6	2	11	6	0	0	0	5	0	21	0	3
March	8.9	W.	36	SW.	1	6	2	3	1	1	14	23	12	0	4	13	14	13	10	15	11	0	1	0	3	0	19	0	0
April	8.8	SW.	38	SW.	1	11	4	4	0	1	18	15	7	0	13	7	10	4	2	2	1	0	0	0	1	0	6	2	0
May	8.6	SW.	48	S.	1	6	4	3	1	3	25	12	8	0	4	17	10	9	6	1	0	0	0	0	0	1	7	0	0
June	8.6	NW.	35	SW.	1	6	2	4	1	4	14	11	18	0	6	12	12	10	8	0	0	3	0	0	0	0	9	0	0
July	8.6	SW.	39	SW.	2	6	2	0	2	3	25	9	13	2	14	13	4	6	2	0	0	0	0	0	0	6	0	7	2
August	8.0	SW.	35	SW.	1	6	7	4	0	6	23	3	13	0	13	12	6	2	0	0	0	0	0	0	0	6	0	3	0
September	8.9	SW.	30	SW.	0	7	1	2	0	1	25	11	12	1	6	10	14	9	4	7	5	0	0	0	2	0	6	1	1
October	8.2	SW.	32	S.	2	4	0	1	1	0	37	13	6	0	4	9	18	12	5	5	2	0	3	1	0	0	5	0	0
November	7.2	SW.	30	SW.	0	2	0	0	0	1	38	14	5	0	3	7	20	4	2	12	3	0	3	2	1	0	17	0	3
December	6.8	W.	38	W.	1	6	2	0	0	1	18	20	11	4	1	9	21	9	7	23	9	0	13	5	15	0	30	0	0
Year	8.2	SW.	48	S.	12	69	26	22	6	29	276	164	131	7	81	133	151	88	51	90	41	3	21	8	33	12	129	30	13

HONOLULU, HAWAII

[H_b=38 ft.; h_t=86 ft.; h_r=68 ft.; h_a=100 ft.]

January	7.7	E.	30	NE.	0	7	19	28	3	2	2	1	0	0	12	13	6	12	6	0	0	0	0	0	0	0	0	0	0
February	8.1	E.	33	NE.	1	6	12	17	6	1	8	2	1	3	13	10	5	9	8	0	0	0	0	0	0	0	0	0	0
March	8.3	NE.	24	NE.	0	6	26	15	1	2	3	2	4	3	13	13	5	10	5	0	0	0	0	0	0	0	1	0	0
April	10.9	NE.	29	E.	0	6	28	20	0	0	0	1	3	2	9	13	8	8	6	0	0	0	0	0	0	0	1	0	0
May	9.4	E.	24	NE.	0	4	20	29	1	1	0	7	0	0	14	14	3	13	5	0	0	0	0	0	0	0	0	0	0
June	10.5	E.	27	E.	0	0	11	45	0	1	1	2	0	0	14	12	4	18	8	0	0	0	0	0	0	0	1	1	0
July	9.4	E.	24	NE.	0	1	17	36	4	0	2	2	0	0	15	13	3	10	5	0	0	0	0	0	0	0	1	0	0
August	8.5	E.	24	NE.	0	3	21	33	3	1	1	0	0	0	9	15	7	8	4	0	0	0	0	0	0	0	0	0	0
September	8.6	E.	27	E.	0	3	6	47	1	1	1	0	0	1	10	14	6	21	12	0	0	0	0	0	0	0	2	0	0
October	9.1	E.	25	E.	0	2	20	33	2	2	1	1	1	0	17	11	3	15	6	0	0	0	0	0	0	0	0	0	0
November	9.1	E.	23	SW.	0	3	13	42	1	0	1	0	0	0	10	14	6	17	8	0	0	0	0	0	0	0	1	0	0
December	8.7	E.	27	E.	0	9	21	29	0	1	0	0	0	2	14	14	3	14	9	0	0	0	0	0	0	0	0	0	0
Year	9.0	E.	33	NE.	1	50	214	374	22	12	20	18	9	11	150	156	59	155	82	0	0	0	0	0	0	0	7	0	

HOUSTON, TEX.

[H_b=138 ft.; h_t=292 ft.; h_r=286 ft.; h_a=314 ft.]

January	11.4	SE.	29	NE.	0	4	5	4	7	2	2	3	4	0	12	4	15	10	9	0	0	0	19	2	0	0	2	6	0
February	12.4	N.	33	NW.	2	5	6	5	1	2	2	4	3	0	13	8	7	7	6	0	0	0	10	1	0	0	1	2	0
March	12.3	S.	36	SE.	2	6	2	4	4	10	1	2	2	0	13	11	7	7	7	0	0	0	11	0	0	0	1	5	0
April	11.4	S.	49	NW.	3	5	6	5	3	8	2	0	1	0	8	12	10	10	9	0	0	0	11	0	0	0	2	9	0
May	11.1	SE.	31	SE.	0	3	10	3	3	5	2	2	3	0	16	11	4	6	4	0	0	0	6	0	0	0	4	2	0
June	10.9	S.	25	S.	0	4	2	2	3	15	4	0	0	0	20	10	0	3	2	0	0	0	0	0	0	0	0	0	0
July	11.2	S.	48	SE.	4	2	2	1	3	12	6	3	2	0	11	13	7	10	9	0	0	0	1	0	0	0	24	12	0
August	10.4	S.	32	NE.	1	2	4	1	1	12	5	3	1	2	10	17	4	9	7	0	0	0	1	0	0	0	21	8	0
September	11.0	SE.	29	NE.	0	5	0	7	10	8	0	2	0	0	10	13	7	10	7	0	0	0	3	0	0	0	4	9	0
October	10.9	S.	25	S.	0	5	8	6	2	4	4	1	0	0	16	14	1	0	0	0	0	0	9	0	0	0	0	2	0
November	12.6	SE.	37	S.	2	1	5	9	4	7	1	1	2	0	18	5	7	9	7	0	0	0	9	0	0	0	0	5	0
December	11.6	SE.	43	SE.	4	4	7	2	6	8	2	0	2	0	12	6	13	11	8	0	0	0	12	0	0	0	2	1	0
Year	11.4	S.	49	NW.	18	46	57	49	48	91	31	21	19	3	159	124	82	92	75	0	0	2	92	3	0	76	6	67	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

HURON, S. DAK.

[ϕ=44°21′ N.; λ=98°14′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean			Extremes					Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.66	29.22	28.04	18.4	26.5	26.6	34.3	12.8	23.6	59	−10	14	17	20	83	68	75	0.090	0.108	0.116	0.06	0.05	0.5	5.2	5.9	4.7	5.6
February	28.78	29.17	28.32	16.8	30.0	30.3	36.7	12.8	24.8	61	−12	11	14	16	75	53	54	.077	.096	.093	.11	.09	1.7	3.9	4.6	3.1	4.4
March	28.71	29.30	28.04	23.3	37.1	36.4	43.4	18.2	30.8	72	1	16	17	18	72	45	50	.094	.100	.098	.84	.40	8.9	5.7	4.1	4.6	4.6
April	28.57	29.03	28.12	38.8	55.4	56.8	61.2	35.6	48.4	91	23	25	23	22	60	32	31	.140	.127	.125	.03	.02	T	3.9	3.4	3.5	3.6
May	28.50	28.96	28.00	60.5	79.8	79.9	85.5	54.5	70.0	106	38	40	38	36	49	25	25	.266	.244	.228	.65	.63	.0	2.3	2.3	3.1	2.5
June	28.47	28.77	28.12	64.7	79.0	80.6	84.7	60.3	72.5	96	50	54	50	49	69	40	37	.416	.368	.361	2.52	.77	.0	4.1	3.8	3.6	3.4
July	28.52	28.83	28.19	68.7	85.0	85.8	90.8	65.0	77.9	111	49	56	55	54	66	38	37	.472	.438	.427	2.11	.92	.0	3.8	3.7	3.9	3.0
August	28.59	28.95	28.25	61.9	79.8	80.8	85.8	58.9	72.4	110	40	52	50	50	71	38	37	.417	.396	.391	1.45	.97	.0	3.7	3.2	3.6	3.3
September	28.57	28.96	28.24	47.6	63.1	63.1	69.0	44.8	56.9	90	28	42	42	42	82	50	49	.282	.291	.285	1.52	.96	.0	4.7	4.4	4.2	4.6
October	28.61	29.22	27.90	44.2	61.2	57.9	65.9	41.9	53.9	88	23	38	40	39	79	50	53	.239	.264	.257	.41	.13	.1	3.5	3.9	2.8	3.7
November	28.61	29.16	28.03	31.4	43.9	41.0	48.5	29.1	38.8	74	15	27	29	29	83	61	65	.148	.165	.163	.74	.34	.5	4.5	4.6	4.4	4.3
December	28.70	29.23	28.12	17.1	21.8	20.9	28.4	11.5	20.0	48	−14	14	15	16	86	75	79	.087	.090	.092	.27	.10	2.3	7.0	6.3	5.8	6.4
Year	28.61	29.30	27.90	41.1	55.2	55.0	61.2	37.1	49.2	111	−14	32	32	33	73	48	49	.227	.224	.220	10.71	.97	14.0	4.4	4.2	3.9	4.1

INDIANAPOLIS, IND.

[ϕ=39°46′ N.; λ=86°10′ W.]

January	29.24	29.58	28.67	31.1	36.2	35.3	41.7	26.3	34.0	62	−1	25	24	25	76	63	66	0.144	0.140	0.144	1.25	0.37	1.0	6.6	6.7	7.4	7.0
February	29.32	29.90	28.69	19.7	27.1	26.8	32.0	15.0	23.5	57	−7	12	14	15	72	57	59	.083	.088	.089	.86	.42	9.7	6.5	6.8	6.3	7.1
March	29.25	29.60	28.76	31.3	39.4	39.1	44.5	26.1	35.3	72	8	23	23	23	72	52	54	.134	.134	.135	3.32	1.50	9.1	6.5	6.0	5.4	5.9
April	29.10	29.53	28.58	46.1	57.2	56.6	62.1	42.1	52.1	79	32	36	34	36	68	43	50	.219	.207	.230	2.23	1.75	T	5.0	5.1	6.0	5.5
May	29.16	29.50	28.81	61.3	73.8	73.7	78.6	56.2	67.4	94	40	46	42	43	60	34	37	.333	.277	.298	.60	.35	.0	4.3	3.6	4.4	4.0
June	29.06	29.27	28.81	72.3	85.6	82.2	89.6	67.6	78.6	101	59	60	59	61	67	42	51	.529	.516	.548	2.98	1.19	.0	3.7	4.4	5.9	5.1
July	29.11	29.40	28.86	75.0	87.2	85.2	92.1	71.1	81.6	106	60	65	61	63	71	43	49	.619	.546	.580	2.50	1.67	.0	4.5	4.5	4.9	5.3
August	29.16	29.34	28.90	68.6	78.9	77.8	83.2	65.3	74.2	97	48	61	59	60	78	53	56	.567	.527	.546	2.49	1.01	.0	5.8	6.4	5.9	5.9
September	29.16	29.44	28.82	60.8	71.5	69.8	75.6	57.4	66.5	89	45	56	55	56	84	59	63	.461	.456	.466	4.54	1.06	.0	6.2	6.2	5.0	6.0
October	29.21	29.51	28.76	50.2	64.2	61.9	68.6	47.4	58.0	82	30	42	40	41	75	42	47	.285	.261	.270	.19	.19	.0	3.2	2.8	3.1	3.5
November	29.19	29.57	28.55	42.6	50.7	48.8	55.0	38.4	46.7	73	26	34	34	34	72	54	58	.211	.208	.213	2.14	.73	T	6.5	5.9	6.5	6.8
December	29.23	29.65	28.48	27.6	32.4	31.2	36.7	23.6	30.2	51	4	23	23	24	80	67	72	.123	.127	.128	1.87	.77	4.9	7.7	8.1	7.1	8.2
Year	29.18	29.90	28.48	48.9	58.7	57.4	63.3	44.7	54.0	106	−7	40	39	40	73	51	55	.309	.291	.304	24.97	1.75	24.7	5.5	5.5	5.7	5.9

ITHACA, N. Y.

[ϕ=42°27′ N.; λ=76°29′ W.]

January	29.14	29.64	28.21	27.7	31.4	27.9	34.3	21.0	27.6	53	−3	21	23	21	76	69	76	0.126	0.133	0.122	1.18	0.65	1.7	9.2	9.5	8.8	9.3
February	29.23	29.93	28.26	7.7	18.9	14.3	23.5	2.2	12.8	43	−24	1	8	6	71	61	70	.049	.064	.062	1.00	.39	16.9	7.2	6.8	6.2	6.8
March	29.21	29.65	28.64	27.7	35.4	33.5	42.2	22.3	32.2	62	5	20	22	24	72	59	65	.119	.125	.133	3.05	.89	7.4	7.3	7.4	6.1	7.2
April	29.05	29.63	28.47	42.4	52.0	46.5	56.3	34.6	45.4	75	26	34	33	34	72	52	63	.196	.195	.198	2.62	1.33	5.0	5.7	6.8	6.5	6.3
May	29.10	29.54	28.70	57.4	70.1	62.4	74.6	45.2	59.9	90	31	42	40	43	57	35	51	.276	.264	.293	.53	.28	.0	4.4	5.1	5.1	5.0
June	29.00	29.46	28.63	68.0	77.2	70.9	81.3	59.0	70.2	98	44	57	57	58	68	52	65	.471	.472	.493	4.78	1.91	.0	7.7	6.1	5.6	6.8
July	29.07	29.47	28.81	70.7	81.6	73.1	85.5	59.8	72.6	97	49	60	58	60	71	46	64	.528	.486	.522	4.11	.83	.0	6.1	5.5	5.2	5.5
August	29.14	29.54	28.79	62.7	74.2	65.5	77.3	54.8	66.0	92	38	55	55	55	77	53	70	.450	.448	.449	3.86	1.17	.0	6.2	5.9	4.9	5.8
September	29.18	29.50	28.81	61.2	70.5	64.5	74.6	55.5	65.0	86	39	57	58	57	86	66	78	.471	.491	.479	4.96	2.28	.0	7.3	6.9	5.0	6.8
October	29.14	29.54	28.69	45.4	53.7	48.1	57.6	40.1	48.8	75	29	39	40	41	78	61	76	.245	.259	.265	1.66	.50	.7	7.4	6.8	4.8	6.7
November	29.18	29.63	28.46	41.2	47.3	44.5	50.3	37.7	44.0	74	19	36	38	37	81	70	75	.226	.245	.237	1.93	.73	2.3	8.9	8.4	8.0	8.5
December	29.13	29.57	28.19	24.8	29.1	27.0	33.9	19.3	26.6	64	3	20	22	20	82	72	73	.117	.120	.108	1.61	.63	3.7	8.9	9.0	7.7	8.9
Year	29.13	29.93	28.19	44.7	53.4	48.2	57.6	37.6	47.6	98	−24	37	38	38	74	58	69	.273	.275	.280	31.29	2.28	37.7	7.2	7.0	6.2	7.0

JACKSONVILLE, FLA.

[ϕ=30°20′ N.; λ=81°39′ W.]

January	30.12	30.34	29.75	51.9	62.8	58.9	66.7	49.2	58.0	79	28	47	48	50	84	60	73	0.432	0.364	0.380	1.08	0.38	0.0	5.2	5.6	4.2	5.7
February	30.10	30.55	29.63	48.4	59.6	55.2	64.5	43.8	54.2	81	31	43	45	44	81	60	69	.290	.310	.298	3.48	1.15	.0	3.9	5.1	3.4	4.8
March	30.10	30.44	29.71	54.7	67.4	61.5	71.2	51.7	61.4	84	31	50	49	52	84	54	72	.380	.374	.403	2.18	.86	.0	3.8	4.7	4.1	4.6
April	29.98	30.22	29.58	63.4	75.4	70.1	78.9	60.1	69.5	88	43	57	54	56	81	50	64	.487	.450	.480	2.92	1.00	.0	3.9	4.5	4.6	4.4
May	29.92	30.21	29.52	70.8	78.5	72.8	81.2	66.9	74.0	90	54	66	63	65	85	61	77	.636	.583	.620	6.33	1.97	.0	6.8	7.6	6.9	7.3
June	29.95	30.12	29.65	77.9	85.6	79.2	88.3	73.1	80.7	95	64	72	70	72	83	60	79	.789	.723	.777	13.23	4.78	.0	3.8	5.5	5.7	5.1
July	29.98	30.16	29.69	78.6	87.7	80.7	91.2	73.8	82.5	96	65	73	71	72	82	58	75	.808	.767	.784	5.07	1.39	.0	3.0	5.0	5.9	4.6
August	30.03	30.17	29.86	78.4	87.2	79.8	90.2	74.3	82.2	94	67	73	71	73	83	60	79	.810	.783	.801	5.98	1.89	.0	3.1	4.9	5.3	4.7
September	29.98	30.16	29.76	74.2	84.6	78.4	86.7	71.7	79.2	93	66	71	69	72	89	60	80	.755	.718	.777	1.99	.78	.0	3.3	5.9	4.9	4.7
October	29.99	30.25	29.74	67.3	78.8	72.5	80.8	65.1	73.0	89	50	62	62	64	86	59	76	.595	.594	.622	5.24	2.03	.0	2.8	4.7	3.5	3.7
November	30.08	30.38	29.83	57.3	70.9	65.0	73.0	55.6	64.3	84	35	52	53	56	84	56	73	.427	.437	.472	.31	.25	.0	4.0	4.7	3.6	4.4
December	30.11	30.36	29.70	49.8	61.2	56.4	65.0	46.4	55.7	80	23	44	46	46	82	59	70	.320	.347	.344	.70	.48	T	6.6	6.2	4.7	6.0
Year	30.03	30.55	29.52	64.4	75.0	69.2	78.1	61.0	69.6	96	23	50	58	60	84	58	74	.560	.536	.563	48.51	4.78	T	4.2	5.4	4.7	5.0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

HURON, S. DAK.

[H_b=1,306 ft.; h_t=60 ft.; h_r=53 ft.; h_a=74 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	9.6	N.	28	N.	0	11	3	0	16	10	2	8	12	0	11	8	12	3	0	11	2	0	7	3	13	0	31	0	0
February	9.9	N.	28	NW.	0	9	1	5	8	8	7	5	13	0	12	9	7	2	1	7	2	0	0	0	9	0	28	0	0
March	11.2	N.	30	N.	0	18	7	2	7	12	4	6	6	0	14	11	6	8	6	9	6	0	0	0	8	0	27	0	0
April	11.3	N.	30	NW.	0	18	4	2	5	6	7	5	13	0	19	4	7	2	0	1	0	0	2	2	0	1	9	0	0
May	11.2	S.	33	NW.	1	10	4	4	10	14	5	5	10	0	25	4	2	3	2	0	0	0	1	0	0	11	0	4	0
June	10.5	SE.	44	NW.	1	12	3	5	14	8	8	1	9	0	17	9	4	11	7	0	0	0	0	0	0	11	0	7	0
July	10.3	SE.	42	NW.	3	10	8	6	24	8	3	1	2	0	20	10	1	13	8	0	0	0	0	0	0	14	0	13	0
August	9.3	SE.	32	S.	1	8	5	9	16	5	3	7	8	1	18	11	2	5	3	0	0	1	1	0	0	10	0	6	0
September	10.2	SE.	22	N.	0	16	3	3	18	3	3	5	9	0	14	5	11	10	6	0	0	0	1	1	0	1	1	4	0
October	9.9	SE.	28	W.	0	7	2	4	19	9	3	7	10	1	18	6	7	7	6	1	1	0	2	0	0	5	2	2	0
November	8.6	N.	23	N.	0	13	3	2	17	6	4	7	8	0	16	4	10	7	4	3	1	0	10	2	3	0	19	0	0
December	9.6	N.	24	NW.	0	15	4	2	10	10	2	7	12	0	10	5	16	6	3	20	5	0	4	0	19	0	31	0	1
Year	10.1	SE.	44	NW.	6	147	47	44	164	99	51	64	112	2	194	86	85	77	46	52	17	1	28	8	52	48	151	36	1

INDIANAPOLIS, IND.

[H_b=822 ft.; h_t=194 ft.; h_r=188 ft.; h_a=230 ft.]

January	12.0	S.	40	NW.	1	5	3	5	6	24	1	12	6	0	8	4	19	12	6	10	5	0	2	0	7	0	22	1	0
February	11.3	S.	29	NE.	0	6	9	5	10	7	3	5	11	0	3	12	13	11	5	17	10	0	1	0	13	0	28	0	0
March	12.0	S.	43	W.	2	7	9	6	4	14	4	9	9	0	7	12	12	16	10	13	10	1	6	3	6	0	22	1	0
April	11.1	S.	34	W.	2	6	2	3	3	13	9	11	13	0	9	10	11	7	6	4	0	1	5	0	0	0	1	1	0
May	9.6	SW.	30	W.	0	8	9	8	7	9	12	4	5	0	14	13	4	5	3	0	0	0	0	0	0	1	0	0	0
June	9.2	SW.	35	S.	1	5	4	3	4	16	20	5	3	0	13	7	10	11	8	0	0	1	0	0	0	16	0	10	0
July	8.7	S.	32	W.	1	5	9	4	6	12	14	8	3	1	9	14	8	11	6	0	0	0	1	0	0	18	0	11	0
August	9.0	S.	24	N.	0	6	8	5	8	14	7	5	9	0	7	13	11	15	10	0	0	0	1	0	0	6	0	10	0
September	9.1	S.	31	N.	0	5	4	2	4	23	11	2	9	0	6	14	10	15	12	0	0	0	10	1	0	0	0	7	0
October	10.3	S.	34	NW.	1	4	6	7	8	12	10	8	7	0	15	12	4	1	1	0	0	0	2	0	0	0	1	1	0
November	13.0	S.	35	SW.	3	5	2	5	8	13	10	5	12	0	4	9	17	12	8	3	0	0	4	0	0	0	9	1	0
December	11.6	W.	30	NW.	0	5	2	4	4	13	9	14	11	0	4	3	24	12	5	11	8	0	8	0	5	0	28	0	0
Year	10.6	S.	43	W.	11	67	67	57	72	170	110	88	98	1	99	123	143	128	80	58	33	3	40	4	31	41	111	43	0

ITHACA, N. Y.

[H_b=836 ft.; h_t=77 ft.; h_r=49 ft.; h_a=100 ft.]

January	11.9	NW.	35	SE.	4	8	1	3	9	16	2	8	15	0	1	3	27	9	6	21	7	0	3	1	10	0	27	0	0
February	10.6	NW.	30	NW.	0	12	2	8	8	6	1	5	14	0	5	8	15	15	7	18	15	0	1	0	20	0	28	0	0
March	10.4	NW.	30	S.	0	5	4	1	10	11	7	4	19	1	5	7	19	17	11	12	9	0	5	0	7	0	27	0	0
April	10.1	NW.	39	SE.	1	10	1	2	13	11	4	3	15	1	8	6	16	15	11	7	6	0	8	2	0	0	12	0	0
May	8.0	NW.	27	W.	0	9	2	3	7	11	1	1	23	5	11	10	10	7	3	0	0	0	2	0	0	1	1	4	0
June	8.4	NW.	28	SE.	0	10	2	4	8	15	3	3	15	0	3	13	14	11	9	0	0	0	5	0	0	7	0	7	0
July	7.2	NW.	38	W.	1	9	3	7	12	9	1	2	17	2	11	8	12	15	11	0	0	1	7	0	0	7	0	11	0
August	7.9	NW.	22	S.	0	8	3	8	16	13	2	0	11	1	8	11	12	11	9	0	0	1	8	0	0	1	0	4	0
September	9.0	SE.	22	S.	0	4	4	4	24	12	5	1	6	0	4	12	14	12	9	0	0	0	12	0	0	0	0	2	0
October	9.2	NW.	27	NW.	0	14	2	6	11	9	2	5	13	0	6	8	17	13	10	2	2	0	7	0	0	0	3	0	0
November	11.5	SE.	34	SE.	1	2	1	0	21	6	10	6	14	0	2	4	24	15	11	9	5	0	5	0	1	0	10	0	0
December	10.8	NW.	34	W.	1	3	1	3	8	10	5	11	21	0	1	4	26	15	6	25	11	0	5	0	10	0	28	0	0
Year	9.6	NW.	39	SE.	8	94	26	49	147	129	43	49	183	10	65	94	206	155	103	94	55	2	68	3	48	16	136	28	0

JACKSONVILLE, FLA.

[H_b=43 ft.; h_t=86 ft.; h_r=78 ft.; h_a=110 ft.]

January	7.9	NE.	25	SW.	0	10	12	7	3	3	5	8	14	0	9	9	13	7	7	0	0	0	4	3	0	0	2	0	0
February	10.1	NE.	32	SE.	2	7	17	2	3	4	10	4	9	0	12	8	8	8	6	0	0	0	5	3	0	0	1	2	0
March	8.9	NE.	32	W.	1	9	13	6	10	5	10	1	7	1	14	7	10	6	5	0	0	0	6	4	0	0	1	1	0
April	8.3	SW.	22	W.	0	2	6	6	14	3	14	6	6	3	14	9	7	8	8	0	0	0	3	2	0	0	0	6	0
May	8.8	NE.	24	N.	0	7	13	13	7	5	12	3	2	0	4	9	18	13	12	0	0	0	1	1	0	0	1	6	0
June	7.1	SE.	26	SW.	0	3	5	3	19	15	10	4	1	0	10	16	4	12	11	0	0	1	1	0	0	13	0	7	0
July	7.5	SW.	32	NE.	2	5	2	2	13	12	11	13	4	0	7	23	1	15	12	0	0	1	0	0	0	19	0	18	0
August	6.9	S.	23	W.	0	2	5	4	13	10	17	7	3	1	11	14	6	15	11	0	0	0	1	0	0	24	0	14	0
September	6.6	E.	20	E.	0	8	7	13	13	4	6	1	7	1	10	16	4	9	6	0	0	0	3	1	0	3	0	7	0
October	7.2	NE.	24	NE.	0	14	19	10	2	3	2	5	7	0	16	10	5	11	10	0	0	0	0	0	0	0	0	6	0
November	8.4	NE.	21	NE.	0	10	13	6	5	3	7	4	12	0	12	10	8	5	3	0	0	0	4	0	0	0	0	0	0
December	8.0	NW.	25	W.	0	13	10	3	3	3	3	14	13	0	8	9	14	7	4	1	0	0	3	1	0	0	3	1	0
Year	8.0	NE.	32	NE.	5	90	122	75	105	70	107	70	85	6	127	140	98	116	95	1	0	2	31	15	0	60	7	68	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

KALISPELL, MONT.

[ϕ=48°10′ N.; λ=114°25′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	27.03	27.59	26.38	31.2	35.4	35.7	39.2	27.7	33.4	56	13	28	29	30	88	77	79	0.154	0.159	0.165	0.88	0.35	1.1	4.9	7.9	7.2	7.3
February	27.06	27.39	26.73	26.6	35.3	37.9	41.2	24.3	32.8	55	2	24	28	29	90	74	71	.133	.156	.165	.06	.04	.4	3.8	5.0	5.1	4.9
March	27.00	27.47	26.61	32.7	44.4	46.7	49.6	30.1	39.8	64	22	28	31	31	83	61	56	.153	.176	.173	2.72	.90	17.4	5.5	6.4	6.8	6.4
April	26.94	27.28	26.50	40.5	59.1	60.7	64.0	38.9	51.4	79	26	34	34	32	77	42	39	.192	.196	.187	.68	.34	2.6	4.1	3.3	3.6	3.6
May	26.92	27.33	26.60	46.6	64.1	67.3	69.8	44.6	57.2	89	33	40	39	38	78	41	37	.249	.242	.238	1.22	.49	0.0	4.5	5.7	5.4	5.5
June	26.88	27.22	26.62	49.4	65.7	68.6	71.2	47.1	59.2	89	40	41	42	39	75	44	38	.261	.267	.243	2.96	1.09	.0	5.4	5.6	5.5	5.6
July	26.92	27.15	26.62	54.2	76.8	78.9	81.8	52.2	67.0	101	43	42	39	39	65	28	26	.269	.245	.249	.27	.20	.0	2.8	3.5	3.9	3.6
August	26.97	27.16	26.68	51.8	75.9	79.8	81.7	50.2	66.0	90	44	39	38	36	62	27	22	.239	.235	.219	.07	.07	.0	2.9	2.1	2.5	2.6
September	26.96	27.34	26.68	42.2	57.5	59.7	62.8	39.5	51.2	88	17	35	37	36	76	52	46	.207	.226	.218	.71	.28	T	5.9	6.6	6.8	6.5
October	26.98	27.35	26.58	40.2	51.6	51.3	54.9	37.6	46.2	76	30	35	39	40	82	66	67	.205	.245	.248	2.26	1.02	T	6.1	7.2	7.4	7.1
November	26.89	27.33	26.44	36.2	41.7	40.3	44.3	33.7	39.0	63	27	33	35	35	88	78	82	.189	.206	.201	.97	.20	3.6	7.8	8.5	7.9	8.3
December	27.00	27.54	26.38	26.1	29.9	29.9	32.5	22.8	27.6	46	2	22	24	24	85	78	79	.121	.131	.131	.94	.23	9.0	7.2	9.4	8.8	9.1
Year	26.96	27.59	26.38	39.8	53.1	54.7	57.8	37.4	47.6	101	2	33	35	34	79	56	54	.198	.207	.203	13.74	1.09	34.1	5.1	5.9	5.9	5.9

KANSAS CITY, MO.

[ϕ=39°05′ N.; λ=94°37′ W.]

January	29.32	29.77	28.87	30.9	38.9	38.3	44.5	26.4	35.4	70	5	26	26	28	81	63	66	0.147	0.151	0.158	0.49	0.41	0.6	5.5	5.4	5.1	5.6
February	29.40	29.88	28.98	26.1	38.2	38.2	44.7	22.2	33.4	76	−13	19	21	21	75	50	52	.111	.117	.119	.81	.48	5.6	4.4	4.5	4.5	4.3
March	29.31	29.84	28.71	33.5	45.2	46.5	53.7	30.0	41.8	79	14	26	27	28	75	52	50	.147	.150	.159	.65	.30	1.0	4.5	5.3	5.6	5.6
April	29.17	29.60	28.76	48.6	63.0	64.2	69.0	46.4	57.7	86	36	38	38	38	68	42	41	.239	.249	.248	2.40	1.75	.0	4.0	4.8	4.6	4.5
May	29.18	29.54	28.84	62.1	78.5	78.8	83.0	58.9	71.0	103	46	52	50	51	71	40	40	.399	.377	.388	3.14	1.56	.0	3.8	3.8	3.4	3.7
June	29.07	29.32	28.83	74.7	89.8	90.8	94.6	71.8	83.2	108	60	62	60	59	67	39	37	.566	.528	.516	1.71	.99	.0	4.5	3.4	3.0	3.6
July	29.11	29.33	28.75	79.2	96.6	96.9	101.5	75.2	88.4	110	56	62	58	57	56	30	29	.551	.494	.478	2.26	1.03	.0	3.5	2.9	2.4	2.9
August	29.15	29.42	28.75	73.4	90.2	89.2	95.5	70.6	83.0	111	51	60	58	56	66	37	37	.537	.494	.477	1.44	.39	.0	5.1	4.2	3.8	4.5
September	29.17	29.55	28.91	57.5	71.9	69.9	76.8	54.9	65.8	92	37	54	54	55	90	56	63	.444	.437	.459	6.44	1.67	.0	5.1	5.3	4.8	5.2
October	29.24	29.73	28.85	54.0	70.2	67.1	74.6	51.4	63.0	87	31	48	46	50	82	45	55	.352	.334	.378	1.88	.79	.0	3.3	3.3	3.0	3.2
November	29.20	29.70	28.51	42.7	53.7	50.4	57.0	38.9	48.0	78	22	38	39	40	84	61	70	.242	.252	.260	5.40	2.08	5.0	5.5	5.7	5.0	5.7
December	29.32	29.79	28.90	28.5	34.4	32.7	38.1	24.1	31.1	55	7	24	27	27	84	73	79	.136	.150	.151	.53	.22	4.4	5.5	5.8	6.5	6.1
Year	29.22	29.88	28.51	50.9	64.2	63.6	69.4	47.6	58.5	111	−13	42	42	42	75	49	52	.323	.311	.316	27.15	2.08	16.6	4.6	4.6	4.3	4.6

KEOKUK, IOWA

[ϕ=40°22′ N.; λ=91°26′ W.]

January	29.45	29.86	29.02	29.8	35.9	35.0	41.3	24.6	33.0	67	−1	24	25	25	78	63	67	0.134	0.143	0.146	0.81	0.46	0.4	7.4	6.7	5.4	6.6
February	29.56	30.09	29.06	21.1	30.9	30.5	36.7	18.3	27.5	67	−7	15	17	17	74	57	56	.092	.102	.102	.91	.54	8.1	4.2	4.3	3.2	4.5
March	29.48	29.90	28.93	31.1	39.7	39.2	46.7	26.7	36.7	69	0	24	24	27	72	54	62	.135	.135	.154	1.77	.34	9.5	5.6	5.7	6.5	6.1
April	29.31	29.70	28.84	47.1	59.2	59.0	64.5	43.7	54.1	80	31	36	36	36	66	44	45	.222	.229	.232	2.64	1.35	.0	3.9	4.6	5.3	4.7
May	29.34	29.62	28.98	62.8	76.8	76.3	81.4	58.6	70.0	102	47	48	48	50	60	37	42	.350	.343	.379	1.34	.45	.0	2.7	3.4	3.3	3.3
June	29.23	29.44	28.99	73.6	87.7	87.0	93.1	69.6	81.4	104	58	62	61	62	67	43	45	.555	.556	.562	3.01	1.58	.0	4.8	3.9	4.7	4.2
July	29.28	29.53	28.98	77.3	91.1	91.5	96.5	73.2	84.8	110	61	62	61	60	62	40	40	.566	.551	.543	.95	.47	.0	4.9	4.3	4.2	4.6
August	29.33	29.59	28.98	69.9	83.1	82.5	88.7	66.9	77.8	110	50	59	59	60	70	47	50	.530	.523	.552	2.66	1.06	.0	5.8	5.9	4.8	5.6
September	29.33	29.66	28.98	58.9	68.6	66.4	73.8	55.1	64.4	87	38	54	54	55	85	61	69	.439	.428	.454	6.40	1.48	.0	5.3	5.7	5.1	5.7
October	29.40	29.80	28.94	51.5	65.7	62.2	69.5	48.7	59.1	82	29	44	45	46	77	49	57	.303	.319	.330	1.93	1.37	.0	2.8	3.3	3.0	3.1
November	29.35	29.82	28.47	42.0	50.9	48.3	54.9	38.8	46.8	73	26	35	37	38	78	61	67	.221	.238	.238	4.86	1.12	T	5.2	5.7	5.6	5.8
December	29.46	29.94	29.04	25.1	29.1	28.6	33.8	20.3	27.0	47	−1	20	22	23	80	72	77	.112	.119	.126	.91	.28	6.5	7.3	7.8	6.2	7.7
Year	29.38	30.09	28.47	49.2	59.9	58.9	65.1	45.4	55.2	110	−7	40	41	42	72	52	56	.305	.307	.318	28.19	1.58	24.5	5.0	5.1	4.8	5.2

KEY WEST, FLA.

[ϕ=24°33′ N.; λ=81°48′ W.]

January	30.08	30.24	29.91	68.4	74.5	70.1	76.4	66.3	71.4	80	57	63	64	64	83	71	80	0.587	0.618	0.595	1.10	0.67	0.0	3.5	4.5	3.1	3.9
February	30.08	30.29	29.86	67.5	74.4	69.1	76.1	64.8	70.4	83	59	62	62	62	83	66	77	.565	.568	.558	.95	1.00	.0	3.2	3.6	3.7	3.8
March	30.06	30.28	29.85	70.7	76.3	71.5	78.5	67.9	73.2	84	56	63	64	63	78	66	74	.593	.609	.583	1.45	1.02	.0	4.0	4.9	2.8	4.3
April	29.98	30.14	29.71	76.0	80.3	75.7	82.9	71.1	77.0	89	62	68	69	68	76	68	76	.689	.707	.680	.93	.40	.0	2.9	3.9	3.2	3.6
May	29.91	30.09	29.70	79.8	83.3	78.7	85.8	74.7	80.2	90	69	72	72	71	76	69	78	.777	.783	.757	4.70	2.03	.0	5.1	5.1	5.5	5.4
June	29.94	30.09	29.76	82.1	84.7	81.1	87.3	77.7	82.5	90	72	74	75	74	77	73	79	.844	.870	.841	2.84	.99	.0	5.4	6.1	5.7	6.1
July	30.00	30.11	29.89	83.2	86.4	82.5	88.5	77.3	82.9	91	70	74	75	74	74	70	76	.843	.879	.839	5.03	1.66	.0	4.0	5.2	5.8	5.4
August	30.00	30.13	29.87	83.4	86.6	82.6	89.1	77.6	83.4	91	72	74	74	74	73	67	75	.831	.845	.832	2.24	.60	.0	4.0	5.6	3.4	5.1
September	29.94	30.10	29.82	81.7	85.8	82.1	88.2	76.7	82.4	91	72	75	76	74	79	72	78	.856	.883	.852	6.72	1.74	.0	5.3	5.9	2.9	5.9
October	29.94	30.17	29.76	79.5	83.4	79.6	85.2	76.0	80.6	90	71	71	72	71	77	69	75	.772	.794	.760	3.01	1.83	.0	3.0	4.1	3.2	4.2
November	30.01	30.21	29.83	72.9	77.3	73.4	78.9	70.5	74.7	85	62	66	66	65	78	68	76	.640	.645	.633	2.12	.95	.0	4.7	3.1	2.9	4.1
December	30.08	30.30	29.89	68.0	74.2	70.4	76.5	65.5	71.0	83	45	63	63	64	84	69	80	.592	.598	.607	.41	.17	.0	4.2	4.9	4.3	5.3
Year	30.00	30.30	29.70	76.1	80.6	76.4	82.8	72.2	77.5	91	45	69	69	69	78	69	77	.716	.733	.711	31.50	2.03	.0	4.1	4.7	3.9	4.8

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

KALISPELL, MONT.

[H_b=2,973 ft.; h_t=48 ft.; h_r=40 ft.; h_a=56 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	5.4	NW.	23	W.	0	0	3	3	5	9	9	19	13	1	5	8	18	13	7	16	5	0	4	1	4	0	25	1	0
February	5.4	NW.	23	N.	0	5	3	3	2	7	2	15	17	2	13	5	10	4	0	5	2	0	2	2	4	0	23	0	0
March	6.7	NW.	26	NW.	0	3	2	1	9	6	8	10	21	2	6	11	14	12	10	6	6	0	0	0	1	0	24	1	1
April	7.0	NW.	22	NE.	0	0	7	2	13	4	5	14	14	1	17	7	6	5	4	2	2	0	0	0	0	0	4	1	0
May	6.8	W.	23	W.	0	3	5	1	11	3	5	19	14	1	7	18	6	8	6	0	0	0	0	0	0	0	0	9	0
June	7.0	W.	24	SW.	0	5	8	1	8	2	3	17	16	0	6	15	9	10	8	0	0	0	2	0	0	0	0	6	0
July	7.0	W.	21	W.	0	2	3	4	8	3	0	25	17	0	14	15	2	3	2	0	0	0	0	0	0	4	0	6	0
August	6.4	NW.	25	W.	0	3	1	4	13	5	0	16	20	0	19	12	0	1	1	0	0	0	0	0	0	1	0	2	0
September	6.1	W.	23	W.	0	3	3	5	11	4	8	12	12	2	6	8	16	7	5	2	2	0	0	0	0	0	6	0	0
October	5.5	W.	24	W.	0	3	1	7	6	4	5	19	14	3	7	4	20	8	8	1	0	0	0	0	0	0	4	0	0
November	4.8	NW.	23	SW.	0	3	0	8	6	7	9	9	16	2	3	4	23	17	8	7	6	0	8	1	0	0	13	0	0
December	5.7	NW.	23	SW.	0	7	5	0	8	0	15	9	17	1	0	3	28	13	9	20	12	0	3	0	14	0	30	0	0
Year	6.2	NW.	26	NW.	0	37	41	39	100	54	69	184	191	15	103	110	152	101	68	59	35	2	17	4	23	5	129	26	1

KANSAS CITY, MO.

[H_b=750 ft.; h_t=33 ft.; h_r=38 ft.; h_a=45 ft.]

January	9.9	SW.	37	N.	2	9	7	5	1	7	21	5	6	1	11	8	12	5	3	12	2	0	17	3	5	0	23	0	0
February	9.9	N.	32	NW.	1	14	8	9	2	5	11	1	5	1	12	8	8	5	4	10	5	0	7	2	7	0	23	0	0
March	12.0	SW.	32	N.	2	10	13	2	3	9	13	5	6	1	8	14	9	8	6	7	5	0	6	1	0	0	18	1	0
April	11.5	NW.	40	NW.	2	11	6	3	1	8	13	2	13	3	12	9	9	6	5	0	0	2	5	2	0	0	0	5	0
May	9.2	SW.	40	N.	2	9	8	4	2	10	22	1	4	2	17	9	5	7	6	0	0	1	6	1	0	5	0	4	0
June	9.8	SW.	41	NW.	3	7	11	5	4	7	25	0	1	0	17	8	5	8	7	0	0	1	1	0	0	21	0	9	0
July	9.8	SW.	43	NW.	2	4	4	5	3	14	28	1	1	2	21	9	1	7	5	0	0	0	1	0	0	29	0	8	0
August	9.2	SW.	35	SW.	1	4	14	12	5	5	15	2	4	1	13	14	4	10	7	0	0	1	1	0	0	19	0	11	0
September	9.2	S.	27	NW.	0	6	4	8	10	11	8	0	11	2	10	11	9	14	12	0	0	0	18	5	0	2	0	8	0
October	8.5	SW.	27	SW.	0	7	5	12	4	11	15	3	3	2	19	7	5	6	6	0	0	0	10	5	0	0	1	2	0
November	9.5	SW.	42	N.	1	9	8	8	6	4	15	5	5	0	11	6	13	13	13	3	3	0	12	3	1	0	8	2	0
December	10.1	SW.	32	NW.	2	10	7	8	4	6	13	5	9	0	9	6	16	7	3	8	3	0	9	1	7	0	27	0	0
Year	9.9	SW.	43	NW.	18	100	95	81	45	97	199	30	68	15	160	109	96	96	77	40	18	5	93	23	20	76	100	50	0

KEOKUK, IOWA

[H_b=614 ft. h_t=64 ft.; h_r=56 ft.; h_a=78 ft.]

January	8.9	SW.	30	NW.	0	5	3	5	7	6	19	4	13	0	8	6	17	4	4	5	2	0	1	1	7	0	26	0	0
February	8.7	N.	24	N.	0	8	3	10	3	8	5	3	16	0	13	7	8	3	3	7	3	0	1	1	9	0	27	0	0
March	9.5	N.	30	NW.	0	10	3	8	9	7	8	8	8	1	8	6	17	12	11	6	6	1	2	2	4	0	21	0	0
April	9.5	NW.	26	NW.	0	7	4	3	5	5	15	3	15	3	13	5	12	7	5	0	0	1	1	0	0	0	1	2	0
May	7.4	S.	24	NW.	0	7	6	8	3	17	10	8	1	2	19	7	5	8	5	0	0	0	0	0	0	5	0	4	0
June	7.3	S.	31	W.	0	8	2	3	5	21	6	4	8	3	13	10	7	8	7	0	0	2	0	0	0	21	0	10	0
July	7.5	E.	23	NW.	0	12	7	10	5	7	13	5	2	1	11	13	7	4	4	0	0	0	0	0	0	24	0	10	0
August	6.9	SW.	32	SW.	1	5	12	13	9	5	12	1	3	2	9	10	12	7	5	0	0	0	0	0	0	13	0	7	0
September	7.2	S.	19	S.	0	6	5	1	8	11	12	2	10	5	11	6	13	15	14	0	0	0	2	1	0	0	0	12	0
October	7.3	SW.	23	SW.	0	2	3	4	11	12	9	6	8	7	20	4	7	3	3	0	0	0	2	0	0	0	1	3	0
November	8.9	SW.	27	SW.	0	9	5	2	12	10	9	4	8	1	12	3	15	16	11	2	1	0	1	1	0	0	9	4	0
December	8.3	NW.	28	SW.	0	5	3	4	5	13	7	7	16	2	5	4	22	11	8	12	7	0	2	1	10	0	31	0	0
Year	8.1	S.	32	SW.	1	84	56	71	82	122	125	55	108	27	142	81	142	98	80	32	19	4	12	7	30	63	116	52	0

KEY WEST, FLA.

[H_b=22 ft.; h_t=10 ft.; h_r=3 ft.; h_a=64 ft.]

January	9.4	NE.	24	NW.	0	9	20	24	4	1	1	2	0	1	16	10	5	6	5	0	0	0	1	0	0	0	0	1	0
February	9.7	N.	25	N.	0	16	17	4	6	3	1	3	6	0	16	6	6	7	1	0	0	0	0	0	0	0	0	5	0
March	11.1	E.	30	W.	0	13	12	22	6	3	0	0	5	1	13	14	4	8	5	0	0	0	0	0	0	0	0	1	0
April	9.6	E.	27	NW.	0	6	10	23	7	3	1	4	4	2	18	7	5	9	7	0	0	0	0	0	0	0	0	5	0
May	9.2	SE.	29	W.	0	1	3	14	12	11	7	5	9	0	9	14	8	9	7	0	0	0	0	0	0	0	0	7	0
June	9.5	SE.	22	SE.	0	5	2	17	16	11	2	1	5	1	6	13	11	10	6	0	0	0	0	0	0	3	0	12	0
July	8.1	SE.	27	SW.	0	3	4	22	15	4	4	5	4	1	9	14	8	12	10	0	0	0	0	0	0	8	0	17	0
August	8.2	E.	30	NW.	0	2	5	31	14	5	1	1	3	0	12	13	6	20	13	0	0	0	0	0	0	8	0	21	0
September	8.8	E.	21	SW.	0	2	10	26	6	4	2	2	4	4	4	18	8	22	17	0	0	0	0	0	0	5	0	20	0
October	9.4	NE.	21	NW.	0	5	23	20	6	2	1	1	4	0	14	12	5	8	4	0	0	0	0	0	0	0	0	4	0
November	10.1	NE.	21	W.	0	10	29	12	8	1	0	0	0	0	15	8	7	7	3	0	0	0	0	0	0	0	0	1	0
December	9.7	NE.	32	NW.	1	11	27	11	6	1	0	4	2	0	10	12	9	6	3	0	0	0	1	1	0	0	0	1	0
Year	9.4	E.	32	NW.	1	83	162	226	106	49	20	28	46	10	142	141	82	124	81	0	0	0	2	1	0	25	0	95	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

KNOXVILLE, TENN.

[ϕ=35° 58′ N.; λ=83° 55′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.10	29.36	28.56	38.0	46.3	45.2	51.2	35.1	43.2	68	5	33	32	33	82	58	64	0.206	0.195	0.204	3.96	2.30	T	5.6	5.4	4.7	5.5
February	29.10	29.66	28.60	29.9	39.9	40.1	45.3	28.1	36.7	64	9	22	23	25	71	52	57	.122	.128	.139	3.05	1.95	7.6	3.6	4.7	5.6	4.9
March	29.06	29.47	28.57	42.0	53.3	51.6	59.4	37.5	48.4	74	20	34	35	35	75	55	58	.213	.225	.217	7.79	2.81	1.2	5.8	4.7	4.9	5.6
April	28.94	29.40	28.49	53.0	66.2	62.9	71.4	43.6	60.0	87	35	44	41	42	72	44	49	.306	.287	.284	2.38	.65	T	5.0	4.9	4.4	4.9
May	28.96	29.36	28.56	62.5	75.7	73.2	81.1	57.4	69.2	91	50	54	52	52	74	47	52	.419	.409	.412	4.41	1.51	.0	3.2	3.3	3.8	3.4
June	28.92	29.13	28.59	72.1	84.5	79.9	89.6	66.8	78.2	99	61	65	64	65	79	52	62	.619	.613	.621	5.08	1.41	.0	3.6	3.0	4.6	3.9
July	28.97	29.20	28.78	75.5	86.4	82.3	91.6	70.7	81.2	101	67	69	69	70	81	57	67	.710	.707	.727	4.35	1.78	.0	4.8	4.3	4.7	4.7
August	29.01	29.24	28.86	72.6	82.3	78.6	87.3	69.4	78.4	93	61	68	68	69	85	64	74	.686	.697	.716	7.47	2.90	.0	6.4	6.5	5.7	6.6
September	29.01	29.28	28.79	65.4	79.6	73.2	83.7	62.0	72.8	89	53	61	61	62	87	54	70	.548	.539	.571	2.92	1.16	.0	5.5	5.1	3.6	4.8
October	29.05	29.31	28.73	52.7	68.8	63.6	72.9	50.3	61.0	81	33	48	48	50	84	51	63	.348	.362	.379	4.36	1.61	.0	3.5	3.2	2.8	3.4
November	29.07	29.41	28.59	44.0	57.8	54.2	62.5	40.8	51.6	75	28	37	39	40	77	51	61	.235	.253	.263	1.92	1.33	.0	3.8	3.5	4.2	3.9
December	29.09	29.45	28.49	34.9	42.9	40.9	47.1	31.7	39.4	60	15	29	30	31	79	60	68	.168	.169	.182	2.72	.78	.3	6.0	5.8	5.8	5.9
Year	29.02	29.66	28.49	53.6	65.3	62.1	70.3	49.9	60.1	101	5	47	47	48	79	54	62	.382	.382	.393	50.41	2.90	9.1	4.7	4.5	4.6	4.8

LA CROSSE, WIS.

[ϕ=43° 49′ N.; λ=91° 15′ W.]

January	29.27	29.74	28.62	22.0	27.4	26.1	32.7	17.1	24.9	50	−13	18	20	20	85	74	76	0.108	0.119	0.115	0.86	0.32	4.8	7.1	8.0	6.3	7.9
February	29.43	30.00	28.80	14.4	24.1	23.7	28.9	11.5	20.2	56	−7	10	12	13	82	58	62	.073	.077	.084	.20	.15	2.8	5.3	4.9	6.3	5.1
March	29.32	29.75	28.61	23.7	34.9	33.7	40.7	20.3	30.5	65	5	17	18	20	76	50	57	.102	.104	.114	1.58	1.03	12.9	5.9	5.4	5.4	5.7
April	29.13	29.58	28.72	40.8	51.6	51.3	56.9	37.3	47.1	85	25	31	33	33	69	52	54	.177	.197	.198	.90	.50	.1	5.8	6.1	5.7	6.1
May	29.16	29.46	28.78	58.8	77.1	75.3	81.9	54.0	68.0	107	39	44	45	44	59	34	35	.298	.316	.298	.91	.58	.0	4.3	4.1	4.6	4.3
June	29.09	29.40	28.80	66.8	80.7	78.4	85.8	62.4	74.1	97	50	57	58	59	71	47	54	.470	.490	.519	3.56	.89	.0	4.6	4.9	5.1	5.0
July	29.16	29.44	28.84	68.0	82.2	80.2	86.3	64.5	75.4	102	50	62	63	64	82	54	60	.563	.592	.620	8.27	3.42	.0	4.8	4.2	5.1	4.7
August	29.22	29.55	28.85	61.1	76.8	73.4	80.5	58.3	69.4	94	40	56	56	57	85	50	59	.476	.478	.502	1.90	.64	.0	5.1	4.6	5.0	4.9
September	29.20	29.50	28.89	53.2	65.2	60.8	68.9	49.9	59.4	84	35	51	53	54	94	66	79	.394	.417	.437	9.04	3.05	.0	6.6	6.5	6.1	7.0
October	29.25	29.62	28.62	46.3	60.9	56.7	64.4	43.8	54.1	84	27	42	43	44	84	54	63	.272	.287	.296	2.38	1.26	T	4.6	5.5	5.1	4.8
November	29.21	29.70	28.42	36.2	43.9	42.1	47.2	33.7	40.4	65	23	32	33	34	86	68	75	.193	.202	.207	7.01	1.33	15.5	6.8	7.3	7.2	7.4
December	29.31	29.74	28.52	15.9	21.0	19.7	25.6	9.6	17.6	39	−13	13	16	16	88	78	82	.085	.091	.090	1.12	.74	9.0	7.8	7.4	8.0	7.5
Year	29.23	30.00	28.42	42.3	53.8	51.8	58.3	38.5	48.4	107	−13	36	38	38	80	57	63	.268	.281	.290	37.73	3.42	45.1	5.7	5.7	5.8	5.9

LANDER, WYO.

[ϕ=42° 50′ N.; λ=108° 45′ W.]

January	24.69	25.07	24.24	21.0	37.2	35.2	43.3	15.9	29.6	56	4	15	22	21	78	54	56	0.083	0.116	0.111	0.01	0.01	0.2	2.8	3.6	4.0	4.3
February	24.70	25.00	24.32	21.7	36.0	35.7	41.2	17.6	29.4	62	−8	18	25	24	86	64	63	.100	.135	.126	.78	.47	10.1	3.9	4.7	4.6	5.0
March	24.67	25.09	24.27	31.0	46.3	47.9	53.2	25.7	39.4	66	3	25	29	25	80	53	44	.137	.158	.132	.92	.67	10.5	4.7	5.0	4.1	4.8
April	24.65	25.02	24.16	35.4	53.5	55.3	59.4	33.5	46.4	75	17	29	30	29	78	45	43	.161	.166	.161	3.10	1.02	23.8	3.3	5.4	6.2	4.9
May	24.65	25.03	24.29	48.3	70.7	72.5	76.6	45.9	61.2	87	32	36	31	30	63	27	24	.211	.177	.163	.92	.90	3.5	3.2	4.2	2.7	3.4
June	24.60	24.94	24.32	52.8	71.5	72.1	77.2	48.5	62.8	90	34	38	36	34	61	29	28	.234	.219	.200	.90	.85	.0	2.5	4.5	5.3	3.8
July	24.70	24.99	24.45	59.8	82.5	82.9	88.3	55.6	72.0	97	45	41	38	37	52	24	24	.268	.246	.244	1.35	1.00	.0	2.2	3.4	3.9	3.3
August	24.75	24.91	24.50	55.6	78.7	78.5	84.6	52.6	68.6	94	40	42	41	42	61	28	30	.267	.265	.278	.37	.32	.0	2.6	3.3	4.0	3.5
September	24.67	25.01	24.26	41.1	62.2	62.7	68.1	38.1	53.1	88	21	34	33	32	77	39	37	.196	.193	.186	1.67	.66	4.8	4.6	4.2	4.3	4.6
October	24.71	25.10	24.20	40.2	60.1	58.4	66.4	36.5	51.4	80	29	29	30	30	66	35	37	.161	.170	.171	.72	.55	.0	2.9	3.3	4.5	3.5
November	24.64	25.07	24.22	26.8	44.6	39.2	48.5	22.1	35.3	69	−1	21	23	22	78	44	55	.112	.119	.117	.71	.32	11.3	3.2	4.2	3.4	4.4
December	24.66	25.07	24.18	16.7	29.2	25.8	34.0	10.5	22.2	50	−5	12	18	19	83	64	77	.074	.096	.103	.20	.20	3.3	2.0	3.6	4.1	4.1
Year	24.67	25.10	24.16	37.5	56.0	55.5	61.7	33.5	47.6	97	−8	28	30	29	72	42	43	.167	.172	.166	11.65	1.02	67.0	3.2	4.1	4.3	4.1

LANSING, MICH.

[ϕ=42° 44′ N.; λ=84° 26′ W.]

January	29.09	29.57	28.37	27.0	31.5	29.3	35.7	22.9	29.2	54	−1	24	26	26	89	80	88	0.138	0.145	0.150	1.05	0.31	3.0	8.3	7.6	7.7	8.2
February	29.24	29.98	28.42	8.9	20.4	15.5	23.4	2.9	13.2	42	−18	7	12	12	93	69	86	.064	.079	.078	.27	.12	4.6	5.5	5.5	5.5	5.6
March	29.16	29.56	28.50	23.5	33.1	29.0	36.2	18.0	27.1	57	−4	20	24	24	88	67	82	.117	.136	.136	1.88	.97	12.6	7.4	6.9	5.4	6.8
April	28.98	29.40	28.46	38.1	49.4	44.8	52.8	33.1	43.0	76	24	34	36	37	84	63	76	.196	.216	.226	2.68	.77	4.6	6.5	6.5	6.1	6.6
May	29.07	29.39	28.74	55.9	71.1	65.4	73.6	46.5	60.0	88	28	46	46	46	70	42	52	.320	.322	.330	1.35	.58	.0	4.3	3.7	3.4	4.5
June	28.96	29.31	28.63	66.4	82.2	75.8	84.0	58.1	71.0	97	48	58	59	59	76	47	57	.501	.506	.510	1.67	.59	.0	4.7	4.3	4.1	4.7
July	29.03	29.39	28.74	68.7	84.0	79.1	86.3	61.0	73.6	102	52	60	59	61	74	44	55	.528	.507	.541	2.14	1.64	.0	4.4	5.7	4.1	5.0
August	29.09	29.33	28.69	61.0	77.5	70.3	79.1	55.3	67.2	95	41	56	55	56	86	48	62	.476	.464	.467	1.51	.67	.0	4.5	3.9	4.8	4.9
September	29.07	29.37	28.68	57.5	70.4	63.0	72.5	53.6	63.0	84	39	56	58	58	94	66	84	.460	.506	.496	2.21	.41	.0	7.7	6.1	5.6	6.6
October	29.12	29.45	28.68	44.7	57.0	50.5	59.3	39.9	49.6	78	27	41	43	43	89	62	76	.269	.286	.285	1.53	.90	T	4.7	4.9	3.5	5.1
November	29.08	29.51	28.38	38.9	45.6	42.1	48.5	34.9	41.7	65	22	36	38	37	90	75	83	.227	.242	.234	2.85	1.14	T	7.0	8.4	7.4	8.3
December	29.10	29.51	28.35	23.2	27.2	25.0	30.4	17.1	23.8	39	−2	22	24	23	94	86	91	.120	.127	.125	1.78	.53	16.8	8.4	8.5	7.6	8.1
Year	29.08	29.98	28.35	42.8	54.1	49.2	56.8	36.9	46.9	102	−18	38	40	40	86	62	74	.284	.295	.298	21.00	1.64	41.6	6.2	6.0	5.8	6.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

KNOXVILLE, TENN.

[H_b=995 ft.; h_t= 66 ft.; h_r=57 ft.; h_a=84 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp. 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	6.9	SW.	27	SW.	0	10	17	2	0	2	18	10	2	1	13	6	12	10	9	2	0	0	16	2	2	0	9	0	0
February	7.4	NE.	24	S.	0	14	16	3	1	2	7	9	4	0	13	6	9	9	6	8	2	0	6	1	1	0	19	1	0
March	7.1	SW.	28	SW.	0	3	23	3	2	6	11	6	6	2	11	7	13	14	12	3	1	0	9	2	0	0	8	5	0
April	6.7	SW.	31	W.	0	3	15	5	0	7	13	10	6	1	11	10	9	12	9	2	1	0	7	1	0	0	0	2	0
May	5.6	NE.	24	W.	0	4	13	18	7	5	5	7	1	0	19	8	4	8	8	0	0	1	17	3	0	3	0	5	0
June	5.2	W.	21	W.	0	3	6	14	6	5	9	16	1	0	15	12	3	12	12	0	0	0	19	3	0	13	0	14	0
July	5.4	SW.	27	NE.	0	1	6	10	6	5	19	12	2	1	13	12	6	12	9	0	0	0	16	1	0	19	0	11	0
August	4.9	SW.	21	E.	0	2	9	8	0	5	18	12	1	7	5	15	11	15	13	0	0	1	22	3	0	8	0	9	0
September	4.2	W.	17	W.	0	5	10	15	1	4	7	9	5	4	8	16	6	10	6	0	0	0	23	6	0	0	0	3	0
October	5.1	NE.	21	W.	0	4	18	15	1	2	7	11	3	1	19	6	6	7	6	0	0	0	18	4	0	0	0	1	0
November	6.1	E.	28	NW.	0	1	11	13	5	1	7	9	10	3	17	5	8	8	8	0	0	0	10	2	0	0	5	2	0
December	6.0	W.	29	W.	0	3	10	9	1	5	11	14	6	3	10	8	13	14	12	8	1	0	9	0	3	0	16	0	0
Year	5.9	NE.	31	W.	0	53	156	115	30	49	132	125	47	23	154	111	100	131	110	23	5	2	172	28	6	43	57	53	0

LA CROSSE, WIS.

[H_b=714 ft.; h_t=11 ft.; h_r=3 ft.; h_a= 48 ft.]

January	6.4	S.	25	NW.	0	4	3	0	6	16	9	13	10	1	5	4	22	10	6	14	6	0	10	1	15	0	29	0	0
February	6.6	NW.	19	S.	0	6	4	1	6	12	4	4	19	0	11	8	9	3	2	13	3	0	0	0	17	0	28	0	0
March	7.4	S.	23	NW.	0	8	5	2	3	17	9	4	14	0	10	10	11	8	5	13	4	1	5	2	10	0	27	2	0
April	7.5	NW.	24	NW.	0	5	3	2	3	11	10	9	17	0	9	6	15	9	4	4	1	2	5	0	0	0	5	2	0
May	6.1	S.	21	W.	0	6	2	0	12	22	7	3	9	1	14	11	6	4	3	0	0	0	2	1	0	8	0	5	0
June	5.0	S.	19	W.	0	6	2	7	8	18	1	6	11	1	10	13	7	9	7	0	0	1	2	1	0	11	0	12	0
July	4.0	S.	23	NW.	0	7	3	3	10	20	7	2	7	3	12	10	9	12	11	0	0	1	9	1	0	9	0	11	1
August	4.4	S.	19	W.	0	8	5	4	11	11	10	4	6	3	11	11	9	11	9	0	0	0	12	1	0	5	0	7	0
September	4.7	S.	14	SW.	0	4	2	1	12	19	3	3	13	3	5	9	16	14	12	0	0	0	19	2	0	0	0	6	0
October	6.2	S.	19	NW.	0	2	4	3	15	12	8	7	9	2	12	10	9	4	3	3	0	0	9	0	0	0	4	5	0
November	6.2	NW.	18	NW.	0	7	4	1	10	15	3	5	14	1	4	8	18	12	11	5	5	0	14	2	1	0	14	1	0
December	5.9	S.	18	W.	0	4	4	0	5	13	8	12	16	0	4	8	19	11	7	21	9	0	16	0	22	0	31	0	0
Year	5.9	S.	25	NW.	0	67	41	24	101	186	79	72	145	15	107	108	150	107	80	73	28	5	103	11	65	33	138	51	1

LANDER, WYO.

[H_b=5,372 ft.; h_t=60 ft.; h_r=54 ft.; h_a=68 ft.]

January	4.8	SW.	38	SW.	2	3	5	2	6	10	15	14	6	1	14	14	3	1	0	5	1	0	0	0	1	0	30	0	0
February	4.3	SW.	20	NE.	0	3	10	3	3	6	15	2	5	9	9	10	9	9	5	9	9	0	1	1	4	0	28	0	0
March	6.7	W.	45	SW.	3	1	10	8	0	4	7	15	16	1	9	16	6	6	4	7	5	0	1	1	2	0	25	1	0
April	5.9	SW.	38	SW.	1	1	10	8	6	2	7	18	5	2	9	15	6	10	8	6	5	0	1	0	2	0	11	4	0
May	5.8	SW.	29	SW.	0	3	3	5	5	3	14	14	9	6	17	12	2	3	2	2	2	0	0	0	0	0	2	4	0
June	6.5	SW.	27	SW.	0	3	10	4	5	2	20	12	3	1	13	14	3	4	1	0	0	2	0	0	0	0	0	8	0
July	6.0	SW.	28	SW.	0	2	2	1	8	4	15	22	4	4	16	14	1	9	5	0	0	0	0	0	0	13	0	8	0
August	5.5	SW.	44	SW.	1	4	14	2	3	2	12	18	6	1	18	9	4	3	2	0	0	0	0	0	0	4	0	4	0
September	5.1	SW.	37	SW.	1	6	4	6	4	4	20	9	4	3	11	12	7	7	6	3	3	0	0	0	0	0	9	2	0
October	5.5	SW.	24	W.	0	1	4	6	7	5	18	15	4	2	19	8	4	3	3	0	0	0	0	0	0	0	4	0	0
November	4.6	SW.	29	S.	0	1	1	6	5	10	21	8	6	2	9	17	4	4	4	4	4	0	2	0	6	0	25	0	0
December	6.1	SW.	37	W.	5	1	2	7	7	9	19	13	3	1	13	11	7	1	1	2	1	0	0	0	16	0	30	0	0
Year	5.6	SW.	45	SW.	13	29	75	58	59	61	183	160	72	33	157	152	56	60	41	38	30	2	5	2	31	17	164	31	0

LANSING, MICH.

[H_b=878 ft.; h_t=6 ft.; h_r=3 ft.; h_a=88 ft.]

January	11.8	W.	32	W.	2	2	2	7	9	6	17	14	5	0	1	9	21	13	6	16	5	0	6	0	8	0	25	0	0
February	9.6	S.	30	NW.	0	6	5	8	3	8	11	4	11	0	10	7	11	8	4	16	8	0	0	0	21	0	28	0	0
March	10.6	S.	32	W.	1	7	4	4	6	8	11	13	9	0	5	10	16	9	6	15	5	0	7	0	11	0	29	1	0
April	11.0	W.	30	NW.	0	1	3	4	3	16	8	14	11	0	7	7	16	13	11	7	5	1	5	0	0	0	14	3	0
May	9.0	S.	29	NW.	0	1	1	8	3	15	10	9	7	0	12	14	5	6	5	0	0	0	2	0	0	0	1	3	0
June	8.4	W.	28	W.	0	1	6	14	4	9	7	15	4	0	11	16	3	7	6	0	0	0	2	0	0	7	0	7	0
July	7.3	SW.	30	W.	0	6	4	12	10	5	9	7	8	1	10	12	9	5	3	0	0	0	2	0	0	9	0	4	0
August	7.5	S.	29	NW.	0	7	8	7	10	7	8	5	10	0	11	13	7	6	5	0	0	0	2	0	0	2	0	4	0
September	7.7	S.	22	W.	0	3	10	3	5	22	8	5	4	0	6	9	15	16	12	0	0	0	5	1	0	0	0	6	0
October	9.6	W.	26	W.	0	4	6	7	5	7	11	14	7	1	13	6	12	6	6	2	0	0	6	2	0	0	7	0	0
November	11.3	SW.	30	NW.	0	1	1	3	11	12	13	9	9	1	2	7	21	13	11	7	0	0	2	0	0	0	13	2	0
December	10.1	SW.	27	NW.	0	3	6	5	6	8	15	9	10	0	3	5	23	17	12	21	16	0	2	0	19	0	31	0	0
Year	9.5	W.	32	W.	3	50	56	82	75	123	128	118	95	3	91	115	159	119	87	84	39	1	37	3	59	18	148	30	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

LINCOLN NEBR.

[ϕ=40°49′ N.; λ=96°45′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.82	29.28	28.36	26.6	35.5	34.0	41.0	21.7	31.6	68	1	21	24	23	78	64	63	0.118	0.133	0.128	0.25	0.12	2.1	5.7	5.9	4.6	5.5
February	28.92	29.31	28.54	22.6	34.8	34.4	40.9	19.6	30.2	69	−9	15	18	17	70	51	50	.090	.107	.101	.78	.46	5.6	3.4	4.2	3.4	4.1
March	28.84	29.38	28.20	29.0	42.6	43.5	50.0	26.0	38.0	79	8	22	23	24	74	49	48	.120	.132	.135	.80	.33	6.1	5.5	6.6	5.5	6.1
April	28.70	29.16	28.27	44.7	63.0	62.1	68.2	42.2	55.2	87	29	32	32	32	62	34	35	.190	.195	.194	.35	.26	.0	3.6	4.5	3.9	4.1
May	28.68	29.09	28.28	61.4	81.3	79.2	85.9	57.9	71.9	104	39	47	46	46	61	31	34	.339	.326	.330	.49	.24	.0	3.4	3.6	4.2	3.6
June	28.59	28.83	28.30	70.6	87.4	86.7	92.7	66.9	79.8	104	53	59	56	55	68	38	36	.509	.466	.439	2.47	.64	.0	3.6	4.7	3.1	4.1
July	28.63	28.91	28.24	76.3	92.6	93.7	100.2	73.0	86.6	112	49	58	53	54	56	27	29	.492	.430	.437	.40	.11	.0	2.8	2.8	3.1	3.2
August	28.70	29.01	28.38	69.4	86.3	85.0	91.5	66.5	79.0	110	45	55	55	54	64	38	38	.460	.465	.441	2.59	1.09	.0	5.7	4.4	4.0	4.5
September	28.70	29.03	28.37	54.8	69.1	66.1	74.1	50.8	62.4	92	36	48	50	50	80	54	60	.360	.393	.386	4.47	2.45	.0	3.6	5.0	3.7	4.4
October	28.76	29.33	28.29	50.4	68.0	64.0	72.2	48.2	60.2	90	27	43	44	45	76	44	53	.287	.308	.324	1.93	1.43	.0	2.5	3.4	2.7	2.9
November	28.72	29.23	28.22	38.7	48.9	46.0	52.8	35.9	44.4	77	23	33	35	36	81	62	70	.200	.214	.222	2.26	1.00	.2	5.9	5.8	4.8	5.5
December	28.84	29.37	28.42	23.7	29.3	27.6	33.8	19.2	26.5	47	−2	20	23	22	82	74	77	.110	.124	.121	.44	.13	4.9	5.7	6.2	4.7	6.0
Year	28.74	29.38	28.20	47.4	61.6	60.2	67.0	44.0	55.5	112	−9	38	38	38	71	47	49	.273	.274	.272	17.23	2.45	18.9	4.3	4.8	4.0	4.5

LITTLE ROCK, ARK.

[ϕ=34°45′ N.; λ=92°16′ W.]

January	29.78	30.15	29.39	39.5	47.4	47.5	53.0	36.5	44.8	70	14	35	35	36	84	65	65	0.223	0.227	0.227	2.63	1.64	T	5.8	6.2	4.4	6.0
February	29.82	30.41	29.31	34.8	45.4	46.3	50.7	32.6	41.6	72	15	27	28	27	74	52	51	.153	.157	.151	1.40	.52	0.2	4.4	4.9	5.1	5.0
March	29.75	30.18	29.38	42.3	53.7	54.8	60.1	39.3	49.7	78	22	35	35	35	77	53	52	.223	.223	.215	6.84	2.92	2.0	4.8	5.1	5.4	5.2
April	29.63	29.98	29.27	55.5	66.6	68.0	72.1	52.8	62.4	86	40	45	44	43	70	48	45	.318	.312	.307	5.81	3.18	.0	4.6	5.8	4.3	5.3
May	29.61	29.91	29.33	64.7	77.4	76.0	81.1	61.5	71.3	97	53	58	55	56	74	49	54	.463	.452	.473	2.74	.87	.0	3.5	5.3	4.7	4.3
June	29.55	29.75	29.32	75.5	88.0	85.4	91.3	71.0	81.2	98	66	67	66	68	76	50	57	.676	.655	.686	3.17	1.61	.0	2.3	3.7	3.4	2.8
July	29.59	29.80	29.42	77.0	92.1	90.4	96.0	74.0	85.0	103	67	69	67	68	78	45	49	.714	.664	.677	2.28	1.05	.0	3.2	3.5	4.1	3.4
August	29.62	29.78	29.40	76.1	90.7	89.9	95.2	74.0	84.6	105	63	68	66	66	76	46	48	.684	.649	.647	2.15	.82	.0	5.5	4.8	5.4	5.0
September	29.63	29.93	29.39	64.3	77.7	76.4	82.2	62.0	72.1	95	52	60	58	58	86	54	56	.531	.505	.501	4.00	1.73	.0	5.1	4.7	3.4	4.5
October	29.70	30.09	29.39	58.6	74.9	72.5	79.0	57.4	68.2	88	43	52	54	52	80	48	51	.409	.437	.410	.52	.28	.0	3.8	3.5	2.7	3.2
November	29.69	30.07	29.05	47.5	59.4	57.8	63.8	44.9	54.4	81	34	41	41	42	81	53	57	.282	.274	.284	4.93	2.54	T	4.7	5.2	4.0	5.1
December	29.79	30.20	29.35	36.0	45.2	45.4	50.5	33.9	42.2	62	17	30	33	34	79	64	67	.177	.198	.215	5.90	1.94	T	6.1	6.3	4.4	6.0
Year	29.68	30.41	29.05	56.0	68.2	67.5	72.9	53.3	63.1	105	14	49	48	49	78	52	54	.404	.396	.399	42.37	3.18	2.2	4.5	4.9	4.3	4.6

LOS ANGELES, CALIF.

[ϕ=34°03′ N.; λ=118°15′ W.]

January	29.77	30.03	29.55	52.7	67.7	64.0	70.6	50.2	60.4	80	44	36	35	40	56	35	46	0.219	0.214	0.259	3.22	0.20	.0	1.2	1.5	1.1	1.5
February	29.74	29.97	29.48	53.2	64.0	62.2	67.1	51.9	59.5	80	45	46	45	47	80	56	64	.321	.315	.337	2.04	1.19	.0	6.4	5.4	5.2	5.5
March	29.66	29.86	29.42	57.3	72.1	69.3	75.8	55.2	65.5	92	51	48	47	49	75	47	54	.342	.340	.356	.01	.01	.0	3.7	3.6	3.5	4.1
April	29.60	29.75	29.37	57.0	70.9	67.6	73.4	55.9	64.6	86	52	51	50	51	81	50	57	.378	.367	.379	T	T	.0	6.3	2.1	2.2	3.6
May	29.57	29.70	29.43	59.5	74.5	71.1	76.6	58.4	67.5	95	53	54	54	54	83	49	56	.422	.413	.426	.00	.00	.0	6.1	2.2	1.7	3.3
June	29.56	29.69	29.42	59.3	69.8	68.6	72.0	58.5	65.2	81	54	54	54	54	83	59	62	.422	.427	.425	.41	.41	.0	7.0	5.5	3.1	5.4
July	29.56	29.70	29.32	64.2	78.5	76.6	81.5	63.1	72.3	95	58	59	59	59	84	53	56	.508	.498	.504	T	T	.0	5.5	2.1	1.2	3.2
August	29.58	29.71	29.46	63.0	77.8	73.8	80.3	61.9	71.1	88	59	59	60	60	88	54	62	.505	.516	.512	.01	.01	.0	6.3	1.7	1.1	3.4
September	29.53	29.68	29.37	64.4	80.1	75.6	82.5	62.9	72.7	98	54	53	52	54	71	43	50	.423	.409	.424	.13	.13	.0	4.6	3.2	1.7	2.9
October	29.62	29.82	29.41	60.0	74.4	68.5	76.6	58.4	67.5	92	53	50	52	53	74	49	60	.373	.391	.407	2.31	2.00	.0	3.6	3.3	3.0	3.6
November	29.68	29.86	29.49	56.3	68.3	64.3	70.7	54.8	62.8	89	50	45	44	48	68	47	59	.309	.307	.347	2.79	1.57	.0	3.9	3.8	3.7	4.0
December	29.71	29.97	29.48	54.8	66.1	63.2	68.6	52.9	60.8	79	44	39	40	44	59	44	54	.252	.265	.304	3.75	1.78	.0	4.1	4.2	3.5	4.0
Year	29.63	30.03	29.32	58.5	72.0	68.7	74.6	57.0	65.8	98	44	50	49	51	75	49	57	.373	.372	.390	14.67	2.00	.0	4.9	3.2	2.6	3.7

LOUISVILLE, KY.

[ϕ=38°15′ N.; λ=85°45′ W.]

January	29.59	29.90	29.05	34.8	41.3	41.2	46.2	30.7	38.4	64	2	28	29	28	76	63	61	0.163	0.171	0.165	1.01	0.51	T	5.8	6.7	5.7	6.0
February	29.65	30.20	29.02	24.5	33.0	33.4	38.5	21.1	29.8	64	0	19	18	19	76	53	54	.106	.101	.107	.44	.26	3.9	6.1	6.1	4.9	5.6
March	29.58	29.95	29.06	36.1	45.0	45.9	52.3	32.4	42.4	75	16	28	28	30	75	53	55	.164	.170	.178	3.66	1.31	4.5	6.0	5.5	4.1	5.2
April	29.42	29.88	28.93	49.5	61.4	62.0	67.2	45.7	56.4	87	33	38	37	39	66	43	44	.243	.239	.253	1.44	.83	T	4.5	5.7	4.9	4.8
May	29.45	29.83	29.10	61.7	75.0	75.4	79.4	57.8	68.6	91	45	50	48	48	67	41	40	.376	.353	.352	3.25	2.79	.0	4.6	5.0	2.8	3.9
June	29.37	29.58	29.08	73.3	84.9	82.8	89.0	69.6	79.3	98	61	64	63	65	73	50	57	.601	.592	.633	4.27	1.35	.0	4.0	4.4	5.2	4.5
July	29.42	29.68	29.18	76.1	87.4	85.7	91.7	73.1	82.4	105	64	68	66	68	77	51	57	.694	.651	.686	2.10	.80	.0	5.8	5.4	5.3	5.5
August	29.46	29.67	29.25	71.3	81.6	79.9	85.7	68.0	76.8	94	53	65	64	64	80	57	61	.626	.617	.621	4.91	2.01	.0	6.1	5.5	4.8	5.6
September	29.47	29.75	29.17	62.2	73.8	72.0	78.7	60.0	69.4	89	47	58	58	59	86	59	65	.486	.495	.508	3.07	1.44	.0	6.1	6.1	3.2	5.0
October	29.53	29.83	29.04	52.1	67.1	64.4	71.3	49.4	60.4	82	34	45	47	44	78	50	49	.317	.342	.309	.52	.23	.0	3.2	3.7	2.5	3.1
November	29.53	29.94	28.90	44.4	55.1	53.3	59.2	41.4	50.3	77	27	36	38	36	72	55	54	.223	.250	.229	1.14	.49	.0	5.5	5.6	4.3	5.2
December	29.58	29.98	28.80	32.8	38.2	37.4	43.0	29.3	36.2	54	10	27	28	28	79	65	68	.151	.156	.156	2.37	.68	2.0	6.8	6.5	6.2	6.5
Year	29.50	30.26	28.80	51.6	62.0	61.1	66.8	48.2	57.5	105	0	44	44	44	75	53	55	.346	.345	.350	28.12	2.79	10.4	5.4	5.5	4.4	5.1

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

LINCOLN, NEBR.

[H_b=1,189 ft.; h_t=11 ft.; h_r=3 ft.; h_a=81 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	10.3	S.	34	NW.	1	19	1	0	2	20	3	10	7	0	12	8	11	5	2	11	5	0	6	2	8	0	29	0	0
February	9.8	S.	35	NW.	1	13	4	4	4	14	4	5	7	1	13	7	8	5	4	8	4	0	2	0	9	0	26	0	0
March	11.0	N.	29	N.	0	20	5	1	5	17	3	7	4	0	7	10	14	7	5	1	6	0	3	0	4	0	22	1	0
April	12.1	S.	38	NW.	3	17	2	1	2	21	4	2	10	1	14	9	7	4	2	0	0	0	1	0	0	0	4	1	0
May	11.4	S.	30	N.	0	10	3	2	3	38	3	2	1	0	16	11	4	5	3	0	0	1	0	0	0	13	0	4	0
June	10.0	S.	35	NW.	3	8	6	6	6	25	4	2	3	0	13	14	3	10	7	0	0	0	0	0	0	17	0	9	0
July	10.1	S.	53	NW.	1	10	6	10	7	25	1	2	1	0	17	11	3	7	4	0	0	0	3	0	0	17	0	6	0
August	9.1	NE.	40	N.	1	10	14	7	8	16	4	1	2	0	12	13	6	7	7	0	0	0	3	0	0	17	0	11	0
September	10.4	S.	32	SW.	2	14	1	0	14	18	2	2	8	1	12	9	9	9	8	0	0	0	8	0	0	1	0	4	0
October	9.7	S.	29	N.	0	8	3	5	9	14	7	10	4	2	20	9	2	5	5	0	0	0	5	0	0	1	4	3	0
November	9.7	S.	30	N.	0	12	7	3	10	16	1	7	4	0	12	6	13	7	6	1	1	0	6	0	2	0	10	0	0
December	10.0	N.	27	NW.	0	17	3	2	3	17	3	10	6	1	9	9	13	6	4	8	5	0	7	2	9	0	31	0	0
Year	10.3	S.	53	NW.	12	158	55	41	73	241	39	60	57	6	157	115	93	77	57	29	21	1	41	4	32	76	126	39	0

LITTLE ROCK, ARK.

[H_b=357 ft.; h_t=94 ft.; h_r=87 ft.; h_a=102 ft.]

January	7.9	S.	24	N.	0	9	5	11	6	14	5	7	5	0	11	5	15	11	8	1	0	0	16	6	2	0	10	0	0
February	8.7	E.	23	NW.	0	10	8	16	6	2	5	4	5	0	13	4	11	8	5	4	1	0	3	0	3	0	15	2	0
March	9.6	SW.	25	NW.	0	7	11	12	6	9	8	5	4	0	14	3	14	9	8	4	1	1	10	3	0	0	6	7	0
April	8.9	S.	28	W.	0	13	6	8	6	7	12	3	5	0	10	10	10	9	7	0	0	1	4	1	0	0	0	7	0
May	7.1	E.	31	SW.	0	7	10	12	3	15	0	5	10	0	14	10	7	10	7	0	0	1	3	0	0	2	0	9	0
June	7.2	S.	28	NW.	0	2	3	10	4	19	9	9	4	0	19	9	2	5	5	0	0	0	2	0	0	21	0	10	0
July	7.4	SW.	34	N.	3	1	0	4	9	17	19	10	2	0	19	9	3	4	3	0	0	0	1	1	0	30	0	7	0
August	8.0	SW.	28	NE.	0	1	2	16	9	16	12	5	1	0	10	15	6	6	5	0	0	1	3	0	0	25	0	9	0
September	7.6	S.	21	W.	0	8	2	11	4	13	9	9	4	0	15	6	9	7	7	0	0	0	3	0	0	6	0	3	0
October	6.7	E.	25	SW.	0	14	6	8	4	12	4	5	7	2	20	4	7	3	3	0	0	0	5	0	0	0	0	3	0
November	8.4	S.	27	SW.	0	4	4	11	7	12	8	7	7	0	12	7	11	9	7	1	0	0	7	2	0	0	0	4	0
December	8.1	SW.	24	SW.	0	4	9	11	6	5	11	6	9	1	9	8	14	10	9	1	0	0	8	2	0	0	11	4	0
Year	8.0	S.	34	N.	3	80	66	130	70	141	102	75	63	3	166	90	109	91	74	11	2	5	65	15	5	84	42	65	0

LOS ANGELES, CALIF.

[H_b=338 ft.; h_t=159 ft.; h_r=151 ft.; h_a=191 ft.]

January	5.5	NE.	22	NW.	0	8	15	1	3	5	14	10	6	0	25	5	1	2	2	0	0	0	4	3	0	0	0	0	0
February	5.7	NE.	15	NW.	0	2	14	3	8	3	18	4	4	0	9	6	13	7	6	0	0	0	9	0	0	0	0	2	0
March	5.2	SE.	14	E.	0	2	12	7	5	3	17	10	6	0	13	14	4	1	0	0	0	0	8	4	0	1	0	1	0
April	5.5	SW.	16	W.	0	1	5	8	8	6	27	4	1	0	16	9	5	0	0	0	0	0	11	2	0	0	0	0	0
May	5.8	SW.	18	W.	0	0	8	10	9	2	32	1	0	0	18	13	0	0	0	0	0	0	6	1	0	2	0	0	0
June	5.8	SW.	19	NW.	0	0	8	5	11	2	30	2	2	0	8	11	11	1	1	0	0	0	5	0	0	0	0	0	0
July	5.5	SW.	16	SE.	0	0	2	8	12	7	27	5	1	0	16	15	0	0	0	0	0	0	8	0	0	4	0	0	0
August	5.4	SW.	13	SW.	0	1	2	9	11	4	31	2	2	0	16	14	1	1	0	0	0	0	15	2	0	0	0	1	0
September	5.3	SW.	17	SW.	0	7	4	8	5	4	24	8	0	0	18	8	4	1	1	0	0	0	3	0	0	8	0	0	0
October	5.4	SW.	20	SE.	0	6	8	8	3	4	21	9	3	0	18	6	7	4	4	0	0	0	11	6	0	1	0	2	0
November	5.6	NE.	23	NW.	0	10	9	5	7	5	10	10	4	0	15	8	7	6	5	0	0	0	6	1	0	0	0	1	0
December	6.0	NE.	19	NE.	0	17	17	5	5	4	9	4	1	0	17	3	11	8	7	0	0	0	2	2	0	0	0	0	0
Year	5.6	SW.	23	NW.	0	54	104	77	87	49	260	69	30	0	189	112	64	31	26	0	0	0	88	21	0	16	0	7	0

LOUISVILLE, KY.

[H_b=525 ft.; h_t=188 ft.; h_r=183 ft.; h_a=234 ft.]

January	10.8	S.	38	NW.	2	7	6	4	6	16	7	8	8	0	10	5	16	7	4	5	0	0	3	0	2	0	16	2	0
February	11.1	N.	31	N.	0	17	9	3	8	8	1	2	8	0	9	10	9	4	4	7	3	0	0	0	5	0	27	0	0
March	12.1	S.	37	S.	1	13	8	4	5	19	3	5	5	0	11	10	10	12	11	6	4	1	3	1	2	0	19	1	0
April	10.8	S.	37	NW.	1	8	6	3	6	10	11	8	8	0	10	17	3	7	4	1	0	0	1	0	1	0	0	3	0
May	8.4	N.	30	N.	0	16	11	5	5	13	9	3	0	0	14	12	5	6	3	0	0	0	0	1	0	2	0	1	0
June	8.8	S.	41	S.	2	13	2	2	3	27	6	2	5	0	12	11	7	12	10	0	0	0	1	1	0	0	13	0	11
July	8.8	S.	32	S.	1	13	2	2	7	32	1	3	0	0	8	12	11	11	10	0	0	0	1	1	1	0	16	0	14
August	8.4	S.	32	S.	1	14	2	3	7	20	6	1	3	1	9	11	11	15	12	0	0	0	0	1	0	0	12	0	10
September	8.4	S.	35	N.	1	12	6	6	4	10	19	4	3	1	8	15	7	15	11	0	0	0	4	3	0	0	0	4	0
October	8.4	S.	31	N.	0	16	3	4	10	19	4	3	1	0	8	9	4	4	3	0	0	0	2	0	0	0	0	1	0
November	8.9	N.	41	NW.	1	23	5	11	6	15	1	1	0	0	10	10	10	7	5	0	0	0	1	1	0	0	6	0	0
December	12.2	S.	41	SE.	4	9	5	6	13	10	7	4	6	0	10	10	10	7	5	0	0	0	1	1	0	0	18	0	0
Year	10.9	SW.	30	W.	0	9	2	7	5	9	11	7	12	0	9	8	16	11	7	8	2	0	0	0	4	0	18	0	0
	9.9	S.	41	S.	13	157	65	58	81	198	67	47	56	1	128	128	109	111	84	27	9	2	16	9	13	43	86	47	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MACON, GA.

[ϕ=32°50′ N.; λ=83°38′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean			Extremes					Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.				
January	29.79	30.04	29.35	41.8	54.1	52.2	59.6	40.0	49.8	73	14	37	36	38	83	55	60	0.244	0.251	0.259	2.57	1.35	0.0	5.5	5.0	5.3	5.3
February	29.77	30.31	29.26	36.8	48.9	47.8	55.1	33.0	44.0	75	20	30	31	31	76	51	53	.173	.184	.180	3.51	1.19	T	5.7	4.7	2.8	4.6
March	29.75	30.18	29.27	46.8	60.0	58.1	65.7	42.4	54.0	79	24	42	42	41	82	54	56	.287	.289	.281	6.39	4.17	.0	5.6	4.3	4.3	5.2
April	29.62	30.00	29.17	57.2	70.5	67.9	75.2	53.4	64.3	88	39	49	47	48	76	47	54	.376	.352	.368	5.71	2.35	.0	4.5	5.0	4.5	4.8
May	29.59	29.92	29.13	65.9	76.6	73.7	80.9	60.9	70.9	90	53	59	56	59	79	52	64	.509	.470	.514	4.85	1.82	.0	5.1	5.0	5.9	5.4
June	29.58	29.79	29.31	75.6	85.7	81.6	89.4	70.2	79.8	97	64	68	66	68	79	53	64	.692	.638	.680	1.93	.38	.0	4.3	5.3	4.3	4.4
July	29.62	29.83	29.44	77.6	88.6	82.5	93.0	73.0	83.0	101	68	71	70	71	80	54	69	.750	.717	.749	3.84	1.40	.0	3.7	5.7	6.5	5.3
August	29.67	29.90	29.50	75.9	86.0	80.3	90.3	71.5	80.9	95	66	71	69	71	84	58	74	.754	.720	.754	5.08	2.09	.0	4.9	6.2	6.1	6.0
September	29.65	29.93	29.43	68.4	83.3	78.1	87.0	65.1	76.0	92	57	64	63	66	87	51	67	.611	.576	.640	2.14	1.38	.0	3.9	5.0	2.5	4.5
October	29.68	29.92	29.40	57.3	73.6	68.8	77.4	54.8	66.1	85	34	52	50	54	83	48	62	.412	.402	.445	3.12	1.34	.0	3.6	3.3	2.8	3.4
November	29.75	30.08	29.43	48.1	65.4	60.4	69.2	45.3	57.2	81	27	42	41	42	81	45	54	.299	.292	.305	1.19	.61	.0	3.5	3.3	3.7	3.6
December	29.78	30.09	29.29	39.5	52.3	47.9	56.0	35.7	45.8	70	19	33	35	35	79	55	61	.196	.221	.219	1.56	.63	T	5.3	5.7	4.0	5.5
Year	29.69	30.31	29.13	57.6	70.4	66.6	74.9	53.8	64.3	101	14	52	50	52	81	52	62	.442	.426	.449	41.89	4.17	T	4.6	4.9	4.4	4.8

MADISON, WIS.

[ϕ=43°05′ N.; λ=89°23′ W.]

January	28.98	29.40	28.42	23.3	27.9	28.2	33.9	19.2	26.6	51	−14	20	22	23	87	76	79	0.117	0.124	0.130	0.70	0.33	3.0	6.2	7.5	7.4	7.1
February	29.14	29.74	28.47	13.7	20.8	21.1	26.5	10.5	18.5	55	−4	11	11	12	88	64	67	.074	.075	.078	.19	.13	2.1	5.8	5.4	4.3	5.6
March	29.04	29.46	28.36	24.9	31.9	32.0	37.5	20.7	29.1	57	7	20	19	21	81	60	63	.116	.110	.116	1.65	.68	4.6	5.6	5.4	6.0	5.8
April	28.86	29.26	28.40	40.5	49.6	49.2	54.4	37.1	45.8	76	30	30	29	31	67	48	53	.169	.169	.177	1.08	.45	.1	5.3	5.5	5.6	5.7
May	28.93	29.24	28.58	58.0	72.9	72.8	78.3	53.1	65.7	101	35	42	43	42	57	36	34	.281	.297	.277	.82	.77	.0	3.3	4.6	3.1	3.8
June	28.85	29.17	28.54	66.6	78.3	77.3	83.8	62.4	73.1	100	49	57	58	60	72	52	55	.471	.503	.521	2.77	1.02	.0	4.7	5.1	4.7	4.7
July	28.92	29.23	28.66	68.7	79.7	80.9	85.1	65.5	75.3	101	55	60	62	63	76	58	56	.538	.580	.593	3.42	1.53	.0	4.8	4.8	4.0	4.6
August	28.97	29.26	28.64	63.1	73.8	73.4	78.9	59.8	69.4	95	47	56	56	58	79	55	60	.478	.475	.507	2.21	1.08	.0	4.8	5.0	4.5	4.7
September	28.94	29.24	28.50	55.7	64.8	61.8	69.0	52.2	60.6	84	37	53	54	53	92	68	75	.421	.430	.422	4.25	1.30	.0	6.0	7.2	5.5	6.8
October	28.99	29.35	28.42	47.3	57.7	56.0	62.5	45.2	53.8	81	28	42	43	44	82	60	65	.275	.292	.301	2.27	1.78	T	4.2	4.2	4.1	4.5
November	28.93	29.42	28.12	37.9	43.5	42.7	47.9	35.4	41.6	61	26	34	35	36	87	73	79	.210	.218	.228	7.86	2.30	.2	6.4	7.5	6.3	7.0
December	29.01	29.42	28.24	18.2	21.8	21.7	26.9	13.5	20.2	36	−8	17	19	19	93	87	89	.096	.104	.106	.97	.46	7.3	7.6	6.8	6.3	7.3
Year	28.96	29.74	28.12	43.2	51.9	51.4	57.1	39.6	48.3	101	−14	37	38	38	80	61	65	.270	.281	.288	28.19	2.30	17.3	5.4	5.8	5.2	5.6

MARQUETTE, MICH.

[ϕ=46°34′ N.; λ=87°24′ W.]

January	29.17	29.70	28.33	21.4	24.1	24.0	29.2	17.4	23.3	44	−9	18	20	21	87	84	88	0.107	0.115	0.121	3.00	0.59	27.4	8.4	8.5	9.0	8.6
February	29.38	30.11	28.54	7.5	13.6	12.5	18.8	3.1	11.0	42	−11	5	8	9	86	79	84	.057	.066	.068	1.02	.46	11.0	6.9	7.5	5.8	7.0
March	29.28	29.86	28.52	18.3	24.3	22.8	29.7	14.2	22.0	48	−2	15	18	18	85	76	82	.091	.104	.105	2.30	.97	20.8	7.0	7.7	6.2	7.6
April	29.08	29.61	28.57	33.8	39.3	37.1	44.1	29.7	36.9	83	16	27	29	28	77	68	73	.146	.158	.158	2.92	.72	21.2	7.3	8.1	8.6	8.0
May	29.15	29.46	28.63	50.9	58.9	53.2	66.1	42.4	54.2	99	34	38	40	39	62	53	61	.238	.267	.253	.60	.46	.0	5.9	6.1	6.3	6.3
June	29.09	29.62	28.64	56.4	63.0	60.7	70.2	49.1	59.6	95	36	48	49	50	75	63	68	.340	.357	.372	2.16	.95	.0	7.0	6.7	5.3	6.7
July	29.18	29.50	28.80	62.8	67.1	64.8	72.7	54.8	63.8	90	47	53	53	54	72	63	69	.412	.415	.428	2.01	.80	.0	4.8	6.0	4.8	5.3
August	29.21	29.52	28.74	59.1	65.9	62.3	69.7	52.2	61.0	94	38	49	50	51	69	59	67	.356	.379	.383	1.83	.68	.0	5.3	6.0	5.6	5.6
September	29.18	29.57	28.75	52.0	57.5	53.6	61.3	46.8	54.0	79	36	48	50	49	88	78	84	.350	.373	.354	6.59	1.55	.0	6.8	7.3	7.7	7.8
October	29.19	29.66	28.61	45.2	51.3	48.4	55.2	40.8	48.0	81	29	40	41	40	83	70	76	.258	.266	.261	.93	.28	1.0	6.8	7.1	5.6	6.7
November	29.18	29.59	28.51	35.0	37.4	37.3	41.8	31.8	36.8	57	23	31	33	33	86	84	83	.180	.189	.189	5.76	1.54	12.1	9.2	8.9	8.4	8.5
December	29.22	29.63	28.45	20.5	23.3	21.7	27.1	16.5	21.8	40	−2	18	19	19	87	82	87	.097	.104	.101	2.30	.41	24.0	9.3	8.7	8.4	8.7
Year	29.19	30.11	28.33	38.6	43.8	41.5	48.8	33.2	41.0	99	−11	32	34	34	80	72	77	.219	.233	.233	31.42	1.55	117.5	7.1	7.4	6.8	7.2

MEDFORD, OREG.

[ϕ=42°23′ N.; λ=122°52′ W.]

January	28.84	29.15	28.15	37.7	43.2	46.9	48.2	34.6	41.4	56	26	37	39	40	96	86	78	0.222	0.240	0.250	2.70	1.16	T	6.2	8.4	8.0	8.7
February	28.65	29.04	28.30	37.6	50.3	55.8	57.5	33.6	45.6	65	26	35	38	38	91	65	55	.203	.232	.236	.76	.48	0.0	5.5	6.6	5.4	6.4
March	28.69	28.99	28.35	43.7	61.3	67.9	69.7	40.4	55.0	80	28	40	42	41	88	52	41	.255	.277	.262	1.15	.54	.0	5.9	6.2	7.0	6.5
April	28.61	28.88	28.35	45.0	65.8	70.8	73.6	42.0	57.8	88	30	42	44	41	88	46	37	.264	.285	.262	1.11	.47	.0	3.9	4.7	5.1	4.7
May	28.57	28.92	28.23	49.7	69.1	71.8	74.3	47.5	60.9	93	26	44	43	44	84	42	40	.300	.286	.295	.99	.37	.0	6.8	6.3	7.3	6.8
June	28.56	28.84	28.20	51.2	72.9	76.7	79.6	49.8	64.7	100	38	46	44	43	82	36	33	.311	.288	.284	.83	.31	.0	4.6	3.6	4.6	4.5
July	28.56	28.73	28.33	55.6	80.9	85.9	88.0	54.1	71.0	95	47	47	46	45	72	30	25	.323	.315	.304	.02	.02	.0	1.8	1.2	2.1	1.7
August	28.57	28.76	28.36	57.5	83.8	90.8	92.5	55.6	74.0	103	47	46	46	43	66	28	21	.315	.313	.282	.02	.02	.0	1.6	1.4	2.5	1.8
September	28.56	28.83	28.15	49.2	74.7	82.3	84.1	46.5	65.3	104	34	39	41	38	70	33	23	.243	.259	.228	.31	.23	.0	1.6	1.9	1.6	1.8
October	28.63	28.92	28.17	45.1	61.8	66.9	69.8	41.4	55.6	92	28	41	41	40	85	51	42	.261	.267	.255	2.48	1.03	.0	5.8	6.1	5.6	5.8
November	28.63	28.98	27.99	41.6	50.8	51.8	55.0	38.5	46.8	74	30	40	42	42	93	72	71	.245	.266	.268	3.44	.49	.0	6.4	8.0	8.5	8.4
December	28.77	29.15	28.27	35.7	43.0	45.1	47.6	32.8	40.2	63	24	34	37	37	94	80	74	.200	.220	.221	2.18	.47	T	6.1	7.8	6.5	7.5
Year	28.64	29.15	27.99	45.8	63.1	67.7	70.0	43.1	56.5	104	24	41	42	41	84	52	45	.262	.271	.262	15.99	1.16	T	4.7	5.2	5.4	5.4

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MACON, GA.

[H_b=370 ft.; h_t=79 ft.; h_r=73 ft.; h_a=87 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	7.2	NW.	24	NW.	0	6	10	7	1	4	4	9	18	3	15	2	14	9	8	0	0	0	8	3	1	0	6	0	0
February	8.3	NW.	26	S.	0	3	9	4	1	4	1	5	23	6	14	4	10	10	9	1	0	0	4	0	1	0	11	2	0
March	7.8	S.	22	NW.	0	9	14	3	4	10	6	3	13	0	13	7	11	9	7	0	0	0	5	0	0	0	5	1	0
April	7.4	S.	25	SW.	0	7	4	5	2	16	10	4	10	2	13	7	10	11	9	0	0	0	2	0	0	0	0	7	0
May	6.7	E.	20	N.	0	11	10	14	5	10	2	4	6	0	11	10	10	10	9	0	0	0	2	1	0	0	0	9	0
June	6.0	S.	26	S.	0	6	3	2	5	22	6	9	5	2	12	11	7	11	7	0	0	0	1	1	0	18	0	10	0
July	6.0	S.	24	NW.	0	5	3	3	4	16	9	8	12	2	5	23	3	11	11	0	0	0	1	0	0	21	0	16	0
August	5.6	S.	27	N.	0	10	4	5	5	14	8	8	7	1	3	21	7	15	11	0	0	0	3	0	0	21	0	13	0
September	5.3	N.	15	SW.	0	14	6	6	4	11	4	2	11	2	9	18	3	6	5	0	0	0	4	1	0	4	0	5	0
October	6.4	N.	21	NW.	0	17	15	8	2	2	2	1	12	3	20	5	6	4	4	0	0	0	3	0	0	0	0	1	0
November	7.6	NW.	24	S.	0	12	4	11	3	6	4	2	17	1	19	1	10	8	4	0	0	0	3	1	0	0	3	0	0
December	6.9	NW.	24	W.	0	12	7	4	3	6	3	5	20	2	11	6	14	13	10	3	0	0	6	1	0	0	12	0	0
Year	6.8	NW.	27	N.	0	112	89	72	39	121	59	60	154	24	145	115	105	117	94	4	0	0	42	8	2	64	37	64	0

MADISON, WIS.

[H_b=974 ft.; h_t=70 ft.; h_r=62 ft.; h_a=78 ft.]

January	9.8	NW.	32	NW.	1	4	5	0	9	8	12	12	12	0	5	8	18	8	4	15	5	0	13	0	13	0	28	0	0
February	9.7	NW.	27	NW.	0	7	5	3	6	11	4	3	17	0	8	9	11	5	1	18	5	0	1	0	19	0	28	0	0
March	10.2	NW.	28	NW.	0	9	4	4	5	11	8	7	12	2	10	8	13	9	5	11	5	1	10	3	11	0	29	1	0
April	10.8	NW.	30	NW.	0	6	2	4	4	10	7	9	18	0	10	6	14	8	4	7	2	0	6	1	0	0	6	2	0
May	9.2	S.	30	W.	0	5	2	3	11	18	7	6	8	2	17	8	6	5	1	0	0	0	0	0	0	6	0	2	0
June	8.4	NW.	30	NW.	0	9	5	9	7	8	6	6	9	1	10	15	5	10	8	0	0	0	1	0	0	10	0	10	0
July	6.8	SE.	21	SW.	0	8	6	0	11	10	4	5	9	3	14	11	6	8	8	0	0	0	5	0	0	8	0	8	1
August	7.7	SE.	21	NE.	0	7	9	3	8	11	9	4	10	1	12	10	9	10	6	0	0	0	8	0	0	3	0	7	1
September	8.0	S.	21	N.	0	8	8	2	8	17	3	10	4	0	7	6	17	14	13	0	0	0	16	4	0	0	0	2	1
October	9.5	W.	30	NW.	0	2	9	3	8	9	9	14	8	0	16	4	11	4	3	3	1	0	8	3	0	0	4	2	0
November	10.2	NW.	35	NE.	1	5	2	1	11	10	9	8	13	1	7	6	17	13	10	4	1	0	9	1	1	0	11	2	0
December	9.3	NW.	25	SE.	0	5	2	3	12	6	9	8	17	0	6	5	20	12	4	23	11	0	15	1	23	0	31	0	0
Year	9.1	NW.	35	NE.	2	75	59	41	100	129	87	92	137	10	122	96	147	106	67	81	30	1	92	13	67	27	137	36	3

MARQUETTE, MICH.

[H_b=734 ft.; h_t=77 ft.; h_r=70 ft.; h_a=111 ft.]

January	10.4	S.	35	SW.	4	4	1	1	7	13	4	16	14	2	2	3	26	22	15	27	21	0	3	2	17	0	31	0	0
February	11.4	S.	40	W.	4	3	1	1	3	14	4	17	13	0	5	6	17	17	10	21	17	0	0	0	23	0	28	0	0
March	10.2	W.	36	S.	3	7	0	5	5	10	7	18	9	1	6	4	21	18	10	18	14	0	1	0	17	0	29	0	1
April	11.1	NW.	32	S.	1	5	5	4	6	9	5	10	15	1	1	12	17	16	9	17	12	0	1	1	5	0	21	0	0
May	10.8	SW.	44	S.	3	7	2	5	10	10	10	4	13	1	8	9	14	7	4	0	0	0	1	0	0	1	0	1	0
June	8.8	NW.	31	SW.	0	4	2	5	10	10	2	10	17	0	5	12	13	14	12	0	0	0	2	5	0	3	0	8	0
July	8.0	S.	28	NW.	0	7	1	8	10	10	5	4	16	1	10	12	9	11	9	0	0	1	2	4	0	1	0	6	0
August	9.1	W.	32	W.	2	0	0	5	8	16	4	15	13	1	6	17	8	7	7	0	0	0	1	0	0	1	0	3	0
September	8.5	S.	27	NW.	0	7	4	5	6	12	1	13	11	1	2	10	18	18	13	0	0	1	6	5	0	0	0	5	0
October	11.0	W.	34	S.	2	2	4	2	6	11	8	12	15	2	8	6	17	11	5	4	3	1	0	2	0	0	6	2	0
November	10.7	W.	36	SW.	2	8	2	4	7	11	1	18	9	0	1	5	24	18	14	12	8	0	1	1	1	0	14	0	0
December	10.6	W.	30	S.	0	3	1	2	3	17	4	21	10	1	2	2	27	19	15	26	19	0	0	0	23	0	31	0	0
Year	10.0	W.	44	S.	21	57	23	47	81	143	55	158	155	11	56	98	211	178	123	125	94	3	18	20	86	6	160	25	1

MEDFORD, OREG.

[H_b=1,329 ft.; h_t=29 ft.; h_r=26 ft.; h_a=58 ft.]

January	4.0	NW.	21	W.	0	9	5	3	3	8	8	11	13	2	0	8	23	17	9	2	0	0	24	15	0	0	13	0	0
February	5.3	N.	35	SE.	1	3	6	1	9	12	3	7	11	4	6	8	14	7	4	0	0	1	10	7	0	0	13	1	0
March	4.8	NW.	21	NW.	0	7	5	2	4	13	6	10	11	4	9	4	18	7	4	0	0	0	4	4	0	0	4	0	0
April	5.6	NW.	22	W.	0	6	7	1	6	10	6	8	21	1	13	7	10	6	5	0	0	0	0	0	0	0	1	3	0
May	7.0	NW.	25	SE.	0	4	7	1	3	4	3	20	17	3	5	8	18	11	9	0	0	0	0	0	0	0	3	0	0
June	6.8	NW.	27	NW.	0	6	0	1	1	0	7	11	29	5	12	10	8	8	5	0	0	0	0	0	0	0	4	0	0
July	7.5	NW.	22	N.	0	4	2	0	1	2	7	11	31	4	26	3	2	1	0	0	0	0	0	0	0	0	0	1	0
August	6.7	NW.	42	SE.	1	1	2	3	5	4	7	14	24	2	23	7	1	1	0	0	0	0	0	0	0	0	0	0	0
September	5.7	NW.	26	NW.	0	3	0	0	4	11	6	12	22	2	25	4	1	3	3	0	0	0	1	1	0	0	0	0	0
October	5.6	NW.	35	SE.	2	8	2	1	5	7	7	6	23	3	8	9	14	8	7	0	0	0	5	2	0	0	2	1	0
November	4.8	NW.	30	SE.	0	3	6	0	8	8	14	10	9	2	4	1	25	21	19	0	0	0	17	10	0	0	4	0	0
December	4.4	NW.	21	NW.	0	7	2	4	4	10	11	3	13	8	4	7	20	13	11	2	0	0	18	10	0	0	15	0	0
Year	5.7	NW.	42	SE.	4	61	38	22	48	89	85	123	224	40	135	76	154	103	76	4	0	1	79	49	0	56	51	9	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MEMPHIS, TENN.

[ϕ=35°09′ N.; λ=90°03′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.74	30.10	29.34	41.3	48.2	47.6	52.6	37.8	45.2	69	11	35	37	38	80	66	72	0.223	0.236	0.245	2.62	1.19	T	5.6	6.2	5.2	6.1
February	29.77	30.37	29.25	34.5	43.2	44.6	48.9	31.4	40.2	70	12	26	27	29	72	55	57	.145	.154	.166	1.37	.71	T	4.6	4.6	4.6	4.7
March	29.70	30.07	29.30	42.8	51.2	53.3	58.2	40.1	49.2	75	20	36	38	42	78	64	69	.221	.248	.285	6.38	1.82	0.5	5.1	4.9	5.0	5.0
April	29.58	29.94	29.24	56.7	66.0	67.0	71.7	54.0	62.8	83	44	46	47	49	69	54	55	.327	.349	.372	1.27	.59	.0	5.1	4.3	4.4	4.5
May	29.56	29.89	29.22	66.7	78.2	77.9	82.4	63.8	73.1	93	53	55	52	56	68	44	49	.445	.418	.458	2.54	1.05	.0	3.5	4.5	4.2	4.1
June	29.51	29.72	29.27	76.1	85.2	84.8	89.5	72.6	81.0	97	66	66	66	66	74	55	56	.659	.643	.654	2.96	.94	.0	3.1	4.0	4.4	4.0
July	29.56	29.77	29.39	78.4	88.8	88.0	93.9	75.9	84.9	104	67	70	70	69	77	55	56	.741	.735	.718	.73	.52	.0	4.4	5.0	5.0	4.9
August	29.58	29.75	29.40	76.2	86.9	86.8	92.1	74.7	83.4	105	62	69	68	68	79	56	57	.716	.702	.698	2.19	.80	.0	6.5	5.7	6.2	6.0
September	29.59	29.86	29.35	66.5	76.8	75.1	80.9	64.0	72.4	91	54	60	60	61	80	58	63	.529	.538	.542	3.22	1.90	.0	5.1	5.5	4.2	5.4
October	29.65	30.02	29.34	59.5	73.3	71.1	77.1	58.1	67.6	87	39	52	52	53	77	50	55	.402	.415	.427	1.11	.82	.0	3.6	3.3	1.9	3.2
November	29.65	30.03	29.00	49.1	59.0	58.2	64.5	46.9	55.7	78	34	41	41	42	73	54	56	.273	.277	.281	13.21	10.48	.0	4.7	4.3	4.2	4.4
December	29.74	30.15	29.20	38.0	44.7	45.6	49.6	35.5	42.6	61	17	32	34	36	78	66	69	.190	.207	.224	5.37	1.72	T	5.3	6.3	5.2	6.0
Year	29.64	30.37	29.00	57.2	66.8	66.7	71.8	54.6	63.2	105	11	49	49	51	75	56	60	.406	.410	.422	42.97	10.48	.5	4.7	4.9	4.5	4.9

MERIDIAN, MISS.

[ϕ=32°21′ N.; λ=88°40′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.77	30.09	29.42	44.3	54.6	51.8	60.2	41.5	50.8	74	16	39	38	41	83	57	68	0.268	0.259	0.281	3.16	1.49	0.0	5.6	5.2	4.5	5.6
February	29.77	30.30	29.16	38.1	51.5	49.4	57.7	34.9	46.3	75	20	33	32	34	81	51	57	.196	.194	.203	5.66	2.22	T	5.5	4.9	3.8	4.9
March	29.72	30.03	29.34	47.9	60.9	58.9	67.0	43.5	55.2	80	24	43	41	41	84	52	54	.307	.292	.280	5.72	3.52	T	5.1	4.7	3.6	5.1
April	29.62	29.94	29.31	57.4	71.4	68.2	76.0	54.0	65.0	89	40	52	49	50	84	50	56	.412	.382	.383	1.96	.94	.0	5.6	4.5	4.9	4.9
May	29.58	29.88	29.27	66.0	78.4	74.3	83.0	61.9	72.4	95	54	60	59	61	82	54	65	.526	.520	.543	3.79	1.73	.0	5.2	4.7	4.5	5.0
June	29.56	29.77	29.27	75.5	87.0	82.3	91.6	70.6	81.1	97	66	70	68	69	83	55	66	.734	.697	.710	4.52	1.28	.0	4.0	3.9	4.2	4.1
July	29.62	29.80	29.49	76.1	86.9	82.3	91.2	72.5	81.8	99	69	72	70	72	87	60	72	.778	.748	.788	11.57	6.14	.0	4.3	4.8	5.6	5.0
August	29.65	29.81	29.49	74.9	87.3	81.3	91.5	72.1	81.8	98	67	72	71	73	90	59	76	.774	.755	.802	3.89	.94	.0	6.5	5.2	5.9	5.4
September	29.64	29.89	29.46	67.3	82.2	75.7	86.2	63.6	74.9	94	54	64	62	66	88	51	72	.595	.564	.645	3.63	2.26	.0	4.1	3.8	4.2	4.0
October	29.67	29.96	29.43	59.0	76.2	68.7	79.4	56.6	68.0	90	42	55	56	61	87	53	76	.448	.475	.540	4.21	2.72	.0	3.3	3.8	2.0	3.5
November	29.71	30.04	29.21	49.9	65.4	58.5	69.1	47.2	58.2	82	30	46	46	49	88	52	71	.333	.338	.366	6.44	2.64	.0	3.9	4.2	4.6	4.2
December	29.77	30.10	29.32	41.0	53.0	50.1	57.8	37.7	47.8	76	18	37	37	39	86	57	66	.243	.250	.263	5.04	2.07	T	5.8	5.7	3.9	5.5
Year	29.67	30.30	29.16	58.1	71.2	66.8	75.9	54.7	65.3	99	16	54	52	55	85	54	67	.468	.456	.484	59.59	6.14	T	4.9	4.6	4.3	4.8

MIAMI, FLA.

[ϕ=25°48′ N.; λ=80°12′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.11	30.28	29.86	65.4	74.1	70.2	75.4	63.5	69.4	81	45	59	60	60	79	63	71	0.513	0.540	0.537	2.94	1.85	0.0	5.5	6.0	4.3	5.5
February	30.09	30.31	29.82	63.2	72.5	68.9	74.4	60.3	67.4	83	45	57	57	59	81	60	71	.480	.484	.511	5.20	3.62	.0	4.7	5.4	4.0	5.0
March	30.08	30.29	29.81	67.8	74.7	71.1	76.7	64.7	70.7	84	45	60	61	61	76	63	72	.541	.551	.559	1.28	.46	.0	5.0	6.4	5.1	5.9
April	30.00	30.20	29.62	72.3	78.0	74.5	80.3	67.6	74.0	86	52	64	65	65	76	65	73	.608	.624	.622	6.27	2.08	.0	4.7	5.7	3.7	5.4
May	29.93	30.14	29.67	77.2	80.3	76.6	83.0	72.4	77.7	90	67	70	70	70	80	72	80	.740	.736	.728	16.10	4.78	.0	5.5	7.2	7.3	7.2
June	29.97	30.14	29.77	80.4	83.6	80.3	85.6	75.4	80.5	93	70	73	73	72	79	71	77	.817	.811	.795	9.56	3.70	.0	6.6	8.0	7.8	7.6
July	30.02	30.12	29.91	81.8	85.5	80.9	87.7	76.6	82.2	90	69	73	73	73	75	67	77	.810	.813	.811	8.18	1.75	.0	5.5	7.8	7.4	6.7
August	30.03	30.18	29.84	81.7	85.0	82.1	87.7	76.5	82.1	93	71	73	73	73	76	67	74	.820	.808	.805	3.20	.89	.0	5.4	6.7	5.2	6.1
September	29.97	30.14	29.80	80.3	84.2	80.7	86.3	75.7	81.0	93	71	74	73	73	80	70	78	.825	.817	.816	9.69	4.20	.0	6.1	7.2	5.3	7.2
October	29.96	30.21	29.75	78.1	83.4	79.6	84.9	74.5	79.7	90	65	69	69	69	74	62	71	.716	.710	.718	3.14	.93	.0	4.5	5.7	3.8	5.1
November	30.04	30.23	29.87	70.2	77.5	73.6	78.5	66.6	72.6	84	48	60	62	62	71	61	69	.543	.579	.579	2.26	.93	.0	5.2	5.3	5.4	5.5
December	30.10	30.27	29.88	64.1	73.1	69.4	75.6	61.5	68.6	83	30	58	58	60	79	62	72	.510	.532	.554	.97	.46	.0	4.7	6.0	3.6	5.1
Year	30.02	30.31	29.62	73.5	79.3	75.7	81.3	69.6	75.5	93	30	66	66	66	77	65	74	.660	.667	.670	68.79	4.78	.0	5.3	6.5	5.2	6.0

MILES CITY, MONT.

[ϕ=46°25′ N.; λ=105°49′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	27.51	28.04	26.91	21.7	31.2	31.5	37.6	17.7	27.6	52	0	18	22	25	85	68	76	0.101	0.123	0.138	0.12	0.06	0.2	4.9	5.2	5.0	5.5
February	27.61	27.98	27.24	23.6	36.9	37.7	42.9	20.8	31.8	64	−13	20	24	24	85	61	58	.115	.136	.138	.05	.04	.8	3.9	3.9	4.0	4.0
March	27.56	28.26	27.02	27.2	39.5	40.9	45.7	23.8	34.8	69	3	22	22	22	81	53	49	.119	.118	.118	1.05	.44	8.2	6.2	5.6	5.6	5.7
April	27.49	28.02	27.00	37.6	57.7	60.9	64.0	36.1	50.0	81	22	25	25	24	61	31	28	.138	.139	.135	.40	.36	.3	3.2	3.7	4.9	3.7
May	27.41	27.88	26.99	54.6	75.5	79.1	81.4	52.4	66.9	101	32	36	34	33	51	24	20	.218	.201	.190	.34	.34	.0	3.6	3.9	4.0	3.5
June	27.37	27.77	26.94	58.7	75.1	77.0	81.0	55.6	68.3	97	43	44	41	41	61	33	31	.296	.266	.262	.66	.32	.0	5.0	4.2	5.2	4.4
July	27.41	27.78	26.92	67.5	85.5	88.8	91.7	64.7	78.2	105	42	47	43	40	49	25	21	.328	.292	.257	.67	.62	.0	3.2	2.8	3.9	3.5
August	27.50	27.73	27.09	60.9	79.4	82.3	85.9	58.7	72.3	107	43	43	43	42	54	30	26	.284	.285	.269	.42	.35	.0	3.9	3.4	3.6	3.6
September	27.47	27.97	27.10	45.0	60.7	63.1	67.3	42.1	54.7	92	26	36	36	35	72	45	41	.213	.216	.204	1.04	.31	3.5	5.7	5.6	5.8	5.8
October	27.49	28.09	27.02	43.6	59.3	59.5	64.7	40.6	52.6	86	24	33	34	33	67	41	39	.189	.196	.188	.03	.02	.0	4.0	4.0	4.8	4.4
November	27.44	28.00	26.92	30.2	45.9	45.2	52.2	28.1	40.2	72	20	24	27	28	77	51	53	.126	.144	.149	.38	.38	T	3.9	5.2	4.2	5.0
December	27.52	28.03	27.02	17.7	26.2	25.1	31.5	13.5	22.5	47	−11	15	19	19	87	72	76	.093	.110	.110	.35	.12	5.2	6.0	6.4	5.4	6.3
Year	27.48	28.26	26.91	40.7	56.1	57.6	62.2	37.8	50.0	107	−13	30	31	30	69	44	43	.185	.186	.180	5.51	.62	18.2	4.5	4.5	4.7	4.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MEMPHIS, TENN.

[H_b=399 ft.; h_t=78 ft.; h_r=70 ft.; h_a=86 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorm	Electricity: Aurora
	Mi.		*Mi.*																										
January	7.9	SW.	30	N.	0	6	7	8	9	10	9	5	5	3	9	7	15	10	9	2	0	0	1	1	2	0	6	0	0
February	8.4	E.	26	N.	0	11	8	12	8	4	5	3	4	1	15	3	10	7	3	5	1	0	1	0	2	0	14	1	0
March	9.4	SW.	28	N.	0	8	9	11	4	11	11	4	3	1	14	5	12	9	8	5	1	1	2	1	0	0	6	4	0
April	8.4	SW.	27	NW.	0	9	12	5	4	6	13	3	6	2	12	11	7	6	5	0	0	0	0	0	0	0	0	5	0
May	6.1	NE.	27	W.	0	10	12	9	9	6	8	1	0	7	15	8	8	6	6	0	0	0	1	0	0	0	3	8	0
June	6.5	SW.	25	N.	0	4	2	11	3	10	22	5	1	2	13	11	6	7	7	0	0	0	0	0	0	15	0	8	0
July	6.7	SW.	28	NW.	0	3	2	6	3	11	31	2	1	3	10	14	7	4	3	0	0	0	1	0	0	25	0	10	0
August	7.2	SW.	21	NE.	0	4	9	4	2	8	27	1	2	5	5	16	10	7	6	0	0	0	0	0	0	17	0	9	0
September	7.0	SW.	22	NE.	0	8	6	3	10	9	11	0	4	9	9	12	9	7	6	0	0	0	1	0	0	2	0	6	0
October	6.2	E.	21	SW.	0	4	15	14	6	4	8	3	2	6	18	9	4	5	4	0	0	0	2	0	0	0	0	2	0
November	8.1	SW.	40	W.	1	2	9	10	12	4	12	2	4	5	14	7	9	10	8	0	0	0	0	0	0	0	0	3	0
December	8.1	SW.	26	N.	0	5	11	5	8	6	11	9	2	5	9	8	14	13	10	2	0	0	1	0	1	0	9	2	0
Year	7.5	SW.	40	W.	1	74	102	98	78	89	168	38	34	49	143	111	111	91	75	14	2	2	10	2	5	62	35	58	0

MERIDIAN, MISS.

[H_b=375 ft.; h_t=67 ft.; h_r=60 ft.; h_a=92 ft.]

January	6.4	E.	22	NE.	0	4	14	17	6	0	7	4	6	4	11	8	12	14	10	0	0	0	10	2	1	0	3	1	0
February	7.2	NE.	28	SW.	0	2	19	8	7	0	6	4	9	1	14	4	10	10	9	1	0	2	7	0	0	0	7	2	0
March	7.6	SW.	19	SE.	0	7	9	7	6	11	12	3	6	1	12	7	12	8	7	1	0	0	7	1	0	0	5	6	0
April	6.7	SW.	22	SW.	0	7	9	6	2	7	19	5	3	2	11	11	8	8	7	0	0	0	12	3	0	0	0	7	0
May	5.4	NE.	20	W.	0	10	14	16	3	4	4	5	5	1	11	12	8	12	9	0	0	1	4	1	0	2	0	8	0
June	5.4	W.	26	S.	0	3	7	5	11	7	11	10	5	1	14	10	6	10	7	0	0	0	2	0	0	21	0	12	0
July	5.2	SW.	27	NE.	0	4	3	5	4	11	15	15	4	1	11	12	8	14	12	0	0	0	2	0	0	20	0	13	0
August	5.1	SW.	26	NE.	0	1	5	12	5	10	17	7	2	3	9	11	11	10	10	0	0	0	7	0	0	23	0	14	0
September	4.5	E.	18	SW.	0	7	7	16	1	6	8	1	4	10	13	14	3	9	7	0	0	0	3	0	0	9	0	4	0
October	4.8	NE.	17	N.	0	7	17	18	1	1	4	4	2	8	18	7	6	7	6	0	0	0	7	0	0	0	0	2	0
November	6.6	SE.	26	SE.	0	5	11	14	9	1	6	2	4	8	16	4	10	7	6	0	0	0	9	0	0	0	2	4	0
December	6.0	SW.	24	NW.	0	9	9	11	4	3	12	4	7	3	11	7	13	11	9	1	0	0	10	1	0	0	8	2	0
Year	5.9	E.	28	SW.	0	66	124	135	59	61	121	64	57	43	151	107	107	120	99	3	0	3	80	8	1	75	25	75	0

MIAMI, FLA.

[H_b=25 ft.; h_t=124 ft.; h_r=117 ft.; h_a=168 ft.]

January	9.6	SE.	19	N.	0	12	11	10	13	3	2	5	6	0	9	13	9	4	4	0	0	0	1	0	0	0	0	1	0
February	10.6	SE.	30	W.	0	14	4	11	11	4	4	2	6	0	12	7	9	9	8	0	0	0	0	0	0	0	0	1	0
March	10.8	E.	25	W.	0	12	7	17	13	5	1	2	5	0	9	9	13	10	8	0	0	0	1	0	0	0	0	3	0
April	10.1	NE.	31	S.	0	7	14	13	10	4	2	3	7	0	9	11	10	12	10	0	0	0	0	0	0	0	0	8	0
May	9.2	SE.	35	SW.	1	4	11	10	14	9	5	6	3	0	1	14	16	20	18	0	0	0	0	0	0	0	0	14	0
June	9.8	SE.	27	S.	0	3	3	20	15	6	6	4	3	0	2	10	18	18	14	0	0	0	0	0	0	3	0	10	0
July	8.4	SE.	24	NE.	0	5	3	15	16	10	6	4	3	0	3	16	12	19	14	0	0	0	0	0	0	3	0	15	0
August	8.1	SE.	24	SW.	0	6	7	18	21	1	3	2	3	1	4	18	9	17	15	0	0	0	0	0	0	1	0	18	0
September	8.9	E.	29	W.	0	4	15	16	8	5	2	2	6	2	1	16	13	20	16	0	0	0	0	0	0	2	0	13	0
October	9.9	NE.	23	NE.	0	8	24	13	6	4	5	1	1	0	11	13	7	11	10	0	0	0	0	0	0	0	0	0	0
November	10.7	NE.	22	NE.	0	16	20	11	8	1	0	0	4	0	8	11	11	12	5	0	0	0	0	0	0	0	0	1	0
December	9.6	E.	25	NW.	0	15	6	14	9	4	2	5	6	1	10	13	8	10	5	0	0	0	1	0	0	0	2	0	0
Year	9.6	E.	35	SW.	1	106	125	168	144	56	38	36	53	4	79	151	135	162	127	0	0	0	3	0	0	9	2	84	0

MILES CITY, MONT.

[H_b=2,371 ft.; h_t=48 ft.; h_r= 41 ft.; h_a= 55 ft.]

January	5.7	S.	26	NW.	0	2	4	11	1	16	11	10	5	2	11	9	11	4	1	8	2	0	1	1	6	0	30	0	0
February	5.9	S.	24	NW.	0	6	9	2	3	14	4	7	10	1	14	10	4	2	1	7	1	0	1	1	7	0	26	0	0
March	8.0	S.	29	NW.	0	4	15	3	5	15	3	4	11	2	7	16	8	7	5	13	4	0	0	0	7	0	25	0	0
April	7.8	S.	30	N.	0	10	11	3	2	13	3	7	10	1	15	11	4	2	2	2	2	0	0	0	0	0	9	0	0
May	7.0	S.	30	S.	0	6	14	2	7	10	6	6	10	1	17	13	1	2	2	0	0	0	0	0	0	0	8	0	0
June	7.8	E.	41	NW.	2	9	7	9	4	7	8	7	6	3	12	13	5	5	4	0	0	0	0	0	0	3	3	0	0
July	7.3	NE.	29	N.	0	10	15	7	6	9	6	1	7	1	17	11	3	2	2	0	0	0	0	0	0	19	0	9	0
August	6.6	N.	35	NW.	1	8	13	3	8	12	1	4	10	3	16	10	5	2	2	0	0	0	0	0	0	12	0	2	0
September	6.6	S.	24	N.	0	12	4	2	3	14	4	8	11	2	9	10	11	5	4	6	2	0	0	0	0	2	0	0	0
October	6.3	S.	27	NW.	0	7	5	4	5	11	8	9	8	5	12	13	6	2	0	0	0	0	1	1	0	0	5	0	0
November	5.3	S.	22	W.	0	4	10	4	2	15	10	7	2	6	11	12	7	2	1	4	0	0	0	0	1	0	25	0	0
December	6.0	S.	24	NW.	0	7	3	7	3	13	9	10	7	3	8	8	15	9	3	14	7	0	3	3	14	0	31	0	0
Year	6.7	S.	41	NW.	3	85	110	57	49	149	73	80	97	30	149	136	80	44	27	54	18	0	6	6	35	44	156	16	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MILWAUKEE, WIS.

[ϕ=43°02′ N.; λ=87°54′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.31	29.72	28.71	27.3	30.7	30.8	36.5	23.3	29.9	56	−10	21	21	24	75	67	74	0.123	0.126	0.140	1.00	0.54	0.8	6.6	7.1	7.5	7.6
February	29.47	30.11	28.72	16.8	23.0	22.6	28.2	13.8	21.0	54	−1	8	10	10	67	54	57	.067	.072	.074	.55	.15	9.2	7.0	6.1	5.9	6.4
March	29.37	29.77	28.67	27.2	32.3	32.5	37.6	22.8	30.2	55	8	19	20	20	70	60	61	.114	.120	.118	1.97	.99	7.1	7.0	5.6	5.7	6.1
April	29.18	29.56	28.68	40.4	48.7	46.1	53.6	37.0	45.3	80	31	30	31	32	68	54	62	.169	.176	.185	1.53	.48	.2	5.2	6.6	6.9	6.3
May	29.26	29.56	28.90	57.2	64.2	63.4	72.1	49.1	60.6	93	36	41	42	42	56	47	49	.270	.275	.283	2.75	1.36	.0	4.2	4.0	4.0	4.1
June	29.16	29.52	28.79	64.8	71.8	70.9	78.8	57.8	68.3	104	45	54	53	52	70	55	54	.429	.414	.399	2.32	.76	.0	5.4	4.9	5.7	5.5
July	29.24	29.55	28.96	69.9	74.5	73.6	79.9	65.0	72.4	105	55	60	60	60	72	63	64	.528	.523	.521	1.10	.58	.0	5.9	4.7	4.8	5.3
August	29.28	29.55	28.91	65.3	73.2	71.0	76.7	61.7	69.2	97	49	56	55	56	72	56	62	.464	.467	.474	1.43	.79	.0	4.1	4.1	4.7	4.5
September	29.26	29.58	28.78	58.0	64.4	61.5	68.2	54.4	61.3	85	42	53	54	54	85	71	78	.425	.436	.453	4.33	1.45	.0	6.3	7.3	6.1	6.7
October	29.32	29.66	28.79	49.3	56.7	54.6	60.6	47.5	54.0	84	30	42	43	44	76	62	68	.274	.291	.302	2.28	1.78	T	4.2	5.0	3.6	4.9
November	29.26	29.73	28.51	40.3	45.3	44.1	49.6	36.9	43.2	63	25	34	35	36	80	68	73	.210	.215	.225	8.56	1.98	T	7.0	7.6	6.4	7.6
December	29.33	29.77	28.65	22.2	26.2	26.1	30.9	17.9	24.4	40	−5	16	19	19	76	71	73	.094	.101	.106	1.22	.54	8.1	7.7	7.3	7.4	7.6
Year	29.29	30.11	28.51	44.9	50.9	49.8	56.1	40.6	48.3	105	−10	36	37	37	72	61	65	.264	.269	.272	29.02	1.98	25.4	5.9	5.9	5.7	6.0

MINNEAPOLIS, MINN.

[ϕ=44°59′ N.; λ=93°18′ W.]

January	29.03	29.57	28.32	18.8	22.6	22.6	29.4	13.0	21.2	47	−18	15	16	17	82	76	79	0.095	0.102	0.103	0.68	0.24	6.1	6.6	8.0	6.5	7.4
February	29.19	29.65	28.65	13.8	21.4	22.1	26.5	10.6	18.6	51	−9	8	9	12	76	56	63	.068	.072	.082	.17	.13	2.1	5.7	5.2	6.0	5.4
March	29.10	29.59	28.38	22.5	32.7	33.3	39.0	18.9	29.0	65	2	15	16	17	72	50	59	.091	.098	.100	.68	.27	5.9	5.3	6.5	6.6	6.3
April	28.92	29.39	28.39	39.3	50.3	51.4	55.5	36.5	46.0	91	27	28	26	26	64	43	42	.155	.148	.150	1.57	1.26	.4	5.9	6.8	6.2	6.5
May	28.93	29.27	28.49	60.4	75.7	76.6	80.9	56.5	68.7	106	40	39	39	38	47	28	27	.254	.258	.245	.21	.12	.0	4.3	5.2	4.7	5.1
June	28.89	29.17	28.49	66.2	79.0	78.0	84.0	62.1	73.0	104	51	53	52	53	65	41	45	.415	.396	.419	2.30	1.39	.0	5.1	5.5	5.4	5.7
July	28.96	29.21	28.70	69.9	81.8	81.9	86.8	65.5	76.2	105	53	58	56	55	67	44	42	.496	.471	.455	1.46	.79	.0	4.4	5.2	5.2	5.1
August	29.01	29.35	28.47	62.6	75.6	75.3	80.1	60.1	70.1	97	42	53	50	52	71	44	46	.417	.397	.412	1.61	.69	.0	3.9	5.7	5.3	5.1
September	28.98	29.26	28.69	51.6	61.9	61.4	66.2	48.3	57.2	86	33	46	48	49	83	62	65	.332	.351	.360	4.86	1.43	.0	5.8	7.0	5.3	6.3
October	29.01	29.43	28.37	47.7	59.0	56.8	62.5	45.5	54.0	81	28	40	42	42	74	55	58	.252	.279	.275	5.64	5.34	T	5.4	5.9	4.9	5.8
November	28.99	29.43	28.43	35.7	42.3	40.3	45.3	32.2	38.8	70	21	30	31	31	79	66	70	.172	.181	.177	2.38	.87	8.5	6.9	7.4	7.0	7.3
December	29.07	29.56	28.55	14.0	17.7	16.8	22.5	7.4	15.0	42	−19	11	13	13	88	82	84	.077	.083	.085	1.23	.74	13.0	7.3	7.0	6.6	7.1
Year	29.01	29.65	28.32	41.9	51.7	51.4	56.6	38.0	47.3	106	−19	33	33	34	72	54	56	.235	.236	.239	22.73	5.34	36.0	5.6	6.3	5.8	6.1

MOBILE, ALA.

[ϕ=30°41′ N.; λ=88°02′ W.]

January	30.10	30.39	29.70	50.1	58.8	57.0	63.0	47.4	55.2	76	24	44	45	47	81	62	70	0.323	0.332	0.348	4.31	1.12	0.0	5.9	6.3	4.9	5.7
February	30.09	30.58	29.62	44.6	54.7	54.6	60.7	41.9	51.3	72	28	38	40	43	79	60	67	.242	.264	.297	4.90	1.30	.0	4.4	5.2	3.0	4.5
March	30.07	30.36	29.69	52.1	63.3	59.8	66.9	48.7	57.8	78	30	47	48	50	85	60	73	.356	.367	.390	5.93	3.20	T	4.7	4.4	3.7	4.3
April	29.96	30.23	29.61	61.5	71.4	67.6	74.9	58.9	66.9	85	47	56	54	58	83	58	74	.466	.453	.508	6.43	3.83	.0	5.2	4.7	4.1	4.7
May	29.89	30.16	29.62	69.6	79.5	74.9	82.0	66.1	74.0	90	56	64	64	65	83	61	74	.605	.602	.634	5.63	1.55	.0	4.8	5.9	5.9	5.5
June	29.88	30.09	29.61	78.1	85.1	81.7	88.3	73.9	81.1	95	65	72	71	72	83	64	73	.789	.757	.781	4.14	1.92	.0	3.7	6.2	4.9	5.2
July	29.95	30.10	29.78	77.8	86.7	82.4	89.6	74.8	82.2	97	70	73	71	73	86	62	74	.815	.766	.810	6.06	2.27	.0	6.2	6.7	6.7	6.3
August	29.98	30.11	29.82	77.7	86.1	80.6	88.8	74.4	81.6	93	70	74	73	73	87	65	75	.826	.810	.819	7.59	2.43	.0	5.6	7.0	7.2	6.3
September	29.95	30.20	29.77	71.5	82.7	78.8	85.3	69.1	77.2	91	61	67	66	69	86	58	72	.667	.653	.716	.95	.46	.0	3.6	4.5	3.7	4.3
October	29.97	30.25	29.62	64.3	77.4	73.4	79.9	63.0	71.4	86	47	60	61	64	85	59	73	.531	.553	.603	7.39	4.71	.0	3.8	3.9	2.7	3.8
November	30.04	30.35	29.63	55.9	68.0	64.2	71.2	52.9	62.0	82	39	50	53	54	82	61	70	.390	.426	.438	5.31	2.30	.0	4.0	3.8	2.6	3.9
December	30.11	30.40	29.70	46.2	55.7	53.6	59.9	43.3	51.6	74	24	42	46	46	85	70	75	.292	.334	.332	2.93	1.51	.0	4.7	5.5	3.4	5.1
Year	30.00	30.58	29.61	62.4	72.4	69.0	75.9	59.5	67.7	97	24	57	58	60	84	62	73	.525	.526	.556	61.57	4.71	T	4.7	5.3	4.4	5.0

MODENA, UTAH

[ϕ=37°48′ N.; λ=113°54′ W.]

January	24.74	25.07	24.34	23.0	40.2	38.5	45.2	19.3	32.2	58	8	20	23	22	88	50	51	0.108	0.122	0.117	0.23	0.15	1.8	2.6	4.0	4.1	3.9
February	24.66	24.91	24.30	27.0	48.0	48.0	52.9	23.5	38.2	67	14	22	24	23	80	40	40	.116	.128	.125	.34	.28	T	2.6	6.7	5.6	5.9
March	24.68	25.04	24.39	31.5	59.8	61.2	65.2	28.3	46.8	73	13	18	19	17	58	21	20	.104	.107	.100	.06	.05	.0	2.6	5.6	5.1	5.0
April	24.58	24.81	24.25	37.2	65.2	65.8	70.5	33.8	52.2	80	20	20	23	18	49	24	18	.108	.125	.101	.51	.31	.6	2.1	5.2	4.8	4.3
May	24.58	24.85	24.28	44.9	74.0	75.1	78.7	42.4	60.6	90	31	19	23	20	35	16	15	.103	.124	.109	.28	.28	.3	2.6	3.5	3.5	3.3
June	24.54	24.80	24.33	46.4	74.1	75.9	79.1	44.7	61.9	93	32	23	25	22	41	19	16	.131	.140	.128	.40	.32	.0	2.6	4.2	4.2	3.6
July	24.65	24.83	24.49	58.7	86.1	87.2	90.6	56.7	73.6	98	48	34	37	32	44	21	17	.225	.237	.196	.54	.21	.0	2.9	2.8	3.6	3.1
August	24.68	24.80	24.55	59.3	82.6	80.6	86.6	57.6	72.1	93	54	48	46	45	68	32	33	.342	.325	.312	1.81	1.06	.0	4.2	5.7	6.5	5.7
September	24.62	24.85	24.29	46.4	73.7	75.0	78.6	43.9	61.2	91	29	29	30	27	52	22	18	.166	.175	.150	.72	.53	.4	1.0	2.4	2.1	1.9
October	24.68	24.98	24.27	38.5	64.1	62.9	69.2	34.6	51.9	80	27	26	28	25	61	28	26	.142	.154	.135	.55	.54	.0	2.5	3.1	3.4	3.2
November	24.65	24.93	24.26	30.4	51.2	47.2	54.7	27.2	41.0	73	13	22	23	24	72	41	43	.121	.141	.126	.28	.12	1.5	4.0	4.6	4.6	4.5
December	24.71	25.00	24.37	23.0	38.5	35.1	42.4	19.5	31.0	56	4	20	24	23	88	56	60	.109	.131	.126	1.08	.76	.1	3.9	5.2	5.3	5.5
Year	24.65	25.07	24.26	38.9	63.1	62.7	67.8	36.0	51.9	98	4	25	27	25	61	31	30	.148	.159	.144	6.80	1.06	4.7	2.8	4.4	4.4	4.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MILWAUKEE, WIS.

[H_b=681 ft.; h_t=97 ft.; h_r=89 ft.; h_a=221 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	14.5	W.	41	NW.	2	8	0	1	5	7	12	18	11	0	5	4	22	7	5	11	2	0	13	0	7	0	23	0	0
February	14.0	N.	41	N.	3	20	3	1	5	6	7	8	6	0	7	5	16	7	4	18	6	0	4	0	18	0	28	0	0
March	14.2	W.	35	SW.	5	9	6	4	4	7	12	8	12	0	9	9	13	9	5	14	5	0	11	0	10	0	29	1	0
April	14.1	NW.	42	S.	5	7	1	4	5	7	7	11	18	0	8	8	14	9	6	5	3	0	7	0	0	0	4	2	0
May	12.8	SW.	40	SW.	4	6	5	6	5	13	14	10	3	0	12	12	7	5	4	0	0	1	1	0	3	0	5	0	0
June	12.2	N.	51	W.	3	15	3	3	12	4	7	9	7	0	8	15	7	10	7	0	0	1	7	0	0	6	0	9	0
July	9.3	E.	29	N.	0	17	9	11	7	7	4	5	2	0	13	6	12	7	5	0	0	0	5	0	0	3	0	5	0
August	11.4	E.	35	N.	1	10	7	7	10	7	3	11	6	1	14	9	8	9	5	0	0	0	8	2	0	3	0	3	0
September	11.5	S.	30	N.	0	12	5	2	2	14	9	8	8	0	7	7	16	10	10	0	0	1	13	6	0	0	0	5	0
October	13.5	W.	40	NW.	2	6	7	3	9	9	4	16	8	0	12	9	10	3	3	3	0	0	4	1	0	0	3	1	0
November	14.4	W.	44	S.	8	6	2	2	4	14	8	12	12	0	4	6	20	12	11	3	0	0	11	4	0	0	9	3	0
December	13.8	W.	47	SE.	5	10	1	2	3	7	4	16	19	0	5	8	18	10	5	20	9	0	8	0	17	0	31	0	0
Year	13.0	W.	51	W.	38	126	49	46	71	102	91	132	112	1	104	98	163	98	70	74	25	3	92	13	52	15	127	34	0

MINNEAPOLIS, MINN.

[H_b=918 ft.; h_t=102 ft.; h_r=92 ft.; h_a=208 ft.]

January	11.4	NW.	38	NW.	2	5	2	0	11	11	7	12	14	0	4	9	18	8	5	18	6	0	13	0	18	0	30	0	0
February	11.7	NW.	32	N.	1	12	3	4	8	9	4	5	11	0	10	7	11	4	1	14	4	0	8	0	20	0	28	0	0
March	12.7	NW.	37	NW.	2	7	5	3	7	9	7	7	17	0	6	12	13	10	5	13	8	0	7	1	12	0	27	0	0
April	13.1	NW.	35	NW.	2	5	5	3	5	3	10	11	18	0	9	4	17	7	5	8	2	0	7	0	0	1	11	3	0
May	11.8	S.	44	NW.	2	12	2	5	10	12	6	5	10	0	8	16	7	5	2	0	0	0	2	0	0	7	0	6	0
June	10.9	SE.	35	SE.	2	5	8	4	13	7	7	8	7	1	7	11	12	12	8	0	0	2	3	0	0	11	0	12	0
July	9.4	N.	30	SE.	0	13	2	3	17	15	3	4	5	0	12	10	9	9	6	0	0	0	4	0	0	7	0	9	0
August	10.3	S.	43	NW.	2	10	2	2	15	10	6	6	11	0	13	9	9	7	6	0	0	0	4	1	0	6	0	5	0
September	10.5	NW.	32	NW.	1	14	1	1	14	10	3	8	9	0	8	8	14	17	13	0	0	0	15	2	0	0	0	7	0
October	11.9	SE.	32	NW.	1	3	3	7	15	6	7	12	9	0	10	8	13	8	5	3	0	1	9	0	0	0	5	5	0
November	11.3	NW.	32	N.	1	10	2	5	8	10	6	7	12	0	5	7	18	7	6	7	3	0	16	0	4	0	14	0	0
December	10.9	NW.	30	W.	0	9	1	2	9	9	4	10	18	0	6	8	17	9	7	20	9	0	18	0	26	0	31	0	0
Year	11.3	NW.	44	NW.	16	105	36	39	132	111	70	95	141	1	98	109	158	103	69	83	32	3	106	4	80	32	146	47	0

MOBILE, ALA.

[H_b=57 ft.; h_t=126 ft.; h_r=119 ft.; h_a=161 ft.]

January	9.3	N.	32	NW.	1	12	12	8	3	5	5	7	10	0	10	5	16	11	10	0	0	0	5	4	0	0	3	2	0
February	10.5	N.	34	NW.	1	13	9	6	2	7	3	4	12	0	13	7	8	10	8	0	0	0	3	3	0	0	3	5	0
March	10.7	S.	36	SE.	1	7	5	4	10	18	4	5	8	1	15	8	8	7	7	1	0	0	9	5	0	0	1	4	0
April	9.5	S.	35	NW.	1	13	2	0	6	16	11	7	5	0	11	11	8	10	9	0	0	0	10	8	0	0	0	11	0
May	9.1	E.	30	NW.	0	9	12	7	5	11	6	4	8	0	10	11	10	13	9	0	0	0	2	2	0	1	0	8	0
June	8.4	S.	45	NW.	1	6	5	4	5	17	11	6	6	0	6	19	5	12	7	0	0	0	1	0	0	11	0	14	0
July	8.6	SW.	29	E.	0	6	4	2	4	9	15	11	11	0	4	15	12	14	13	0	0	0	0	0	0	18	0	14	0
August	7.6	S.	29	N.	0	6	9	2	2	12	10	13	8	0	3	18	10	15	14	0	0	0	0	0	0	13	0	19	0
September	7.5	N.	26	SE.	0	18	6	9	4	11	4	2	6	0	13	14	3	8	6	0	0	0	0	0	0	3	0	6	0
October	8.6	N.	25	NE.	0	23	12	3	3	4	6	0	11	0	17	7	7	5	5	0	0	0	1	0	0	0	0	2	0
November	10.5	N.	38	SE.	3	8	6	12	10	1	7	6	10	0	17	6	7	6	5	0	0	0	3	1	0	0	0	3	0
December	8.9	N.	42	SE.	1	17	7	2	7	6	8	6	9	0	12	5	14	10	10	0	0	0	9	6	0	0	4	2	0
Year	9.1	N.	45	NW.	9	138	89	59	61	117	90	71	104	1	131	126	108	121	103	1	0	0	43	29	0	46	11	90	0

MODENA, UTAH

[H_b=5,473 ft.; h_t=10 ft.; h_r=3 ft.; h_a=46 ft.]

January	8.4	E.	28	S.	0	5	17	10	3	2	14	10	1	0	13	15	3	2	2	2	1	0	1	0	0	0	30	0	0
February	9.1	SW.	29	W.	0	3	8	2	0	5	22	14	2	0	7	9	12	4	2	4	1	0	1	0	0	0	27	0	0
March	9.5	W.	30	NW.	0	3	6	9	1	3	16	22	2	0	12	9	10	2	1	0	0	0	0	0	0	0	24	1	0
April	10.5	SW.	36	SW.	2	3	4	6	3	2	14	25	3	0	12	13	5	4	2	2	1	1	0	0	0	0	8	3	0
May	11.3	SW.	37	SW.	3	1	4	5	3	6	25	15	3	0	19	5	7	1	1	1	0	0	0	0	0	0	1	1	0
June	11.1	SW.	39	SW.	2	1	2	3	2	7	31	14	0	0	16	8	6	2	2	0	0	0	0	0	0	1	0	2	0
July	11.6	SW.	33	SW.	2	2	1	0	1	4	38	13	2	1	19	7	5	3	3	0	0	0	0	0	0	19	0	6	0
August	9.6	SW.	31	NE.	0	2	2	1	1	2	39	13	2	0	5	19	7	12	7	0	0	1	0	0	0	0	9	14	0
September	10.6	SW.	48	SW.	3	0	3	8	2	1	20	21	4	1	23	6	1	3	3	1	1	2	0	0	0	2	4	2	0
October	9.4	W.	36	SW.	1	5	4	9	0	3	19	21	0	1	19	5	7	3	1	0	0	0	0	0	0	0	12	0	0
November	9.8	SW.	36	NW.	1	3	7	3	0	4	20	17	4	2	12	10	8	5	2	6	3	1	0	0	0	0	23	1	0
December	8.4	SW.	35	SW.	2	7	8	8	3	0	19	12	4	1	10	11	10	4	3	2	1	0	0	0	1	0	31	0	0
Year	9.9	SW.	48	SW.	16	35	66	64	18	40	277	197	27	6	167	117	81	45	29	18	9	5	2	0	1	31	160	30	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MONTGOMERY, ALA.

[ϕ=32°23′ N.; λ=86°18′ W.]

Month	Pressure			Temperature								Moisture													
		Extremes		Mean						Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.94	30.23	29.59	45.7	54.6	53.9	59.4	43.7	51.6	75	18	40	40	40	80	60	61	0.273	0.277	0.271	1.86	0.50	0.0	6.1	6.2	5.5	6.2
February	29.93	30.44	29.37	39.5	50.4	50.6	57.4	36.9	47.2	79	22	32	34	32	75	55	53	.189	.205	.196	3.55	1.30	.0	5.9	5.3	4.3	5.2
March	29.90	30.24	29.46	49.8	61.4	60.2	68.0	45.9	57.0	79	26	44	44	42	80	55	54	.314	.309	.289	5.09	2.89	T	6.2	5.4	4.5	5.4
April	29.78	30.12	29.43	58.7	70.7	69.1	75.5	55.7	65.6	88	39	51	50	50	77	52	56	.399	.390	.394	3.40	1.24	.0	5.2	5.4	4.4	5.4
May	29.73	30.05	29.38	67.8	78.4	76.2	82.8	64.0	73.4	91	56	60	60	60	78	55	60	.538	.528	.530	4.50	1.57	.0	6.2	6.0	5.6	6.1
June	29.72	29.92	29.45	76.3	86.3	82.7	90.8	72.0	81.4	98	67	70	68	68	82	56	64	.737	.682	.693	3.33	.85	.0	3.9	4.9	5.1	4.7
July	29.78	29.98	29.64	77.1	87.4	82.2	91.5	73.6	82.6	98	69	72	71	71	85	59	71	.784	.754	.764	4.10	1.32	.0	4.9	6.1	7.1	5.8
August	29.82	30.00	29.65	75.2	85.4	80.7	89.5	72.7	81.1	96	68	72	72	72	90	64	76	.783	.775	.787	4.19	.83	.0	6.7	6.9	6.7	6.5
September	29.80	30.05	29.60	69.1	83.3	78.4	87.1	66.4	76.8	93	58	65	63	64	86	51	63	.614	.577	.606	1.32	.86	.0	3.6	4.4	4.1	4.3
October	29.83	30.09	29.53	60.6	75.1	71.0	78.4	59.4	68.9	86	44	56	55	58	85	53	66	.464	.456	.502	7.95	4.74	.0	3.4	4.5	4.2	4.0
November	29.89	30.21	29.48	50.5	64.8	61.6	68.4	48.5	58.4	80	33	45	45	46	83	51	58	.323	.326	.333	2.25	1.46	.0	3.4	3.9	4.5	3.9
December	29.94	30.25	29.45	42.1	51.4	50.1	55.8	39.4	47.6	69	20	37	38	38	81	62	65	.236	.251	.251	2.83	1.17	T	5.7	6.4	5.1	6.2
Year	29.84	30.44	29.37	59.4	70.8	68.1	75.4	56.5	66.0	98	18	54	53	53	82	56	62	.471	.461	.468	44.37	4.74	T	5.1	5.4	5.1	5.3

MOORHEAD, MINN.

[ϕ=46°52′ N.; λ=96°44′ W.]

January	29.02	29.65	28.17	11.2	15.8	15.7	24.0	3.5	13.8	40	−23	9	12	14	92	83	91	0.076	0.082	0.068	0.44	0.22	1.5	6.5	7.6	6.4	7.0
February	29.16	29.58	28.58	10.6	19.0	19.1	24.5	6.3	15.4	49	−15	8	12	14	90	72	78	.069	.082	.089	.06	.03	.7	4.9	6.7	6.0	6.4
March	29.09	29.68	28.41	17.6	28.0	28.4	34.7	13.8	24.2	61	−5	13	15	16	82	58	60	.085	.100	.104	.83	.57	5.1	5.4	7.3	6.1	6.3
April	28.92	29.38	28.38	35.2	47.7	48.5	53.1	31.7	42.4	88	21	28	29	29	76	52	52	.153	.160	.165	.66	.15	4.9	6.3	7.2	6.0	6.6
May	28.86	29.35	28.34	54.7	73.1	73.2	78.5	48.8	63.6	104	30	39	39	40	57	32	32	.247	.258	.265	1.15	.74	.0	5.3	5.8	4.6	5.5
June	28.85	29.13	28.46	60.2	71.9	73.5	76.9	55.4	66.2	89	42	52	52	51	78	52	49	.394	.397	.387	3.93	1.36	.0	5.6	6.6	5.8	5.8
July	28.91	29.20	28.59	64.5	79.8	81.0	85.3	59.7	72.5	106	46	54	52	52	70	40	40	.427	.412	.400	.80	.24	.0	5.4	4.0	4.2	4.4
August	28.98	29.34	28.53	58.7	75.2	74.7	79.6	55.4	67.5	95	39	50	49	48	75	42	41	.382	.375	.354	2.16	1.43	.0	4.6	5.1	5.7	5.1
September	28.94	29.30	28.62	45.6	60.1	59.0	64.7	42.3	53.5	89	26	41	42	43	85	54	59	.272	.280	.289	.93	.40	T	5.9	6.7	5.8	6.3
October	28.96	29.54	28.37	42.3	55.0	52.8	59.5	39.8	49.6	84	21	38	39	39	82	60	63	.233	.253	.247	2.07	1.32	T	5.4	6.1	5.3	5.9
November	28.98	29.48	28.33	29.1	38.6	36.2	42.0	26.3	34.2	68	11	26	28	28	86	67	73	.138	.152	.157	.54	.44	.6	6.6	6.1	5.2	6.7
December	29.08	29.57	28.51	9.3	13.7	12.0	19.3	2.8	11.0	44	−24	8	10	10	93	86	92	.066	.074	.073	.40	.17	5.2	6.5	7.6	5.6	7.2
Year	28.98	29.68	28.17	36.6	48.2	47.8	53.5	32.2	42.8	106	−24	30	32	32	80	58	61	.212	.219	.219	13.97	1.43	18.0	5.7	6.4	5.6	6.1

NANTUCKET, MASS.

[ϕ=41°17′ N.; λ=70°06′ W.]

January	30.05	30.62	29.05	30.7	35.0	32.6	39.2	26.5	32.8	50	7	26	27	26	81	72	77	0.150	0.159	0.155	3.30	1.12	0.8	6.3	5.1	4.3	6.6
February	30.03	30.82	28.80	29.8	25.7	22.7	29.7	15.4	22.6	44	−4	16	17	16	79	68	74	.097	.101	.096	4.22	1.47	10.2	5.2	5.8	4.2	5.6
March	30.13	30.74	29.57	34.8	37.9	34.3	39.8	29.3	34.6	55	13	30	30	30	81	73	84	.172	.170	.171	3.22	1.04	13.5	4.2	4.1	5.2	5.1
April	30.00	30.69	29.32	45.4	49.8	42.6	51.2	38.5	44.8	62	32	37	38	38	74	65	84	.230	.234	.232	2.73	.79	.0	4.6	4.4	4.4	4.9
May	29.98	30.57	29.51	55.3	59.9	52.1	62.2	48.6	55.4	73	39	47	47	47	76	65	84	.336	.338	.329	2.23	1.26	.0	4.9	5.4	4.5	5.8
June	29.89	30.40	29.45	63.6	67.7	60.4	70.0	56.4	63.2	82	49	57	57	57	81	71	90	.476	.483	.476	2.33	.93	.0	4.3	4.9	5.3	5.7
July	29.94	30.36	29.73	70.4	74.6	66.8	76.9	63.5	70.2	86	52	63	62	63	80	66	88	.593	.573	.584	.86	.49	.0	3.9	5.2	4.8	5.3
August	30.02	30.43	29.71	67.8	71.7	64.3	73.6	60.7	67.2	81	54	61	59	59	79	65	84	.547	.510	.510	2.21	.94	.0	5.4	4.9	3.8	5.0
September	30.10	30.48	29.68	66.3	70.5	64.1	72.6	61.1	66.8	81	54	62	62	62	87	76	92	.567	.569	.555	3.37	1.38	.0	6.2	5.9	4.5	6.7
October	29.96	30.46	29.41	51.7	55.0	52.0	57.4	47.7	52.6	69	38	44	44	45	77	70	77	.304	.302	.310	4.89	1.27	T	6.7	6.6	4.9	6.8
November	30.11	30.68	29.32	46.9	51.1	47.0	53.2	42.2	47.7	63	33	41	42	40	81	71	80	.275	.282	.266	2.54	1.08	T	6.4	6.1	5.5	6.9
December	29.99	30.47	29.15	32.4	35.4	33.6	39.1	28.1	33.6	58	11	25	26	25	72	67	70	.148	.151	.149	3.48	1.37	.4	6.4	5.7	4.6	6.1
Year	30.02	30.82	28.80	48.8	52.9	47.7	55.4	43.2	49.3	86	−4	42	43	42	79	69	82	.325	.323	.319	35.38	1.47	24.9	5.4	5.3	4.7	5.9

NASHVILLE, TENN.

[ϕ=36°10′ N.; λ=86°47′ W.]

January	29.61	29.93	29.17	37.9	45.2	45.1	50.4	34.5	42.4	65	6	33	34	34	83	67	67	0.207	0.213	0.217	2.99	1.89	T	5.9	6.6	4.6	6.5
February	29.63	30.21	29.09	29.9	40.1	40.0	45.6	26.9	36.2	72	6	23	25	25	76	57	57	.129	.141	.138	2.61	1.57	3.1	5.5	5.4	5.4	5.8
March	29.56	29.94	29.10	40.8	49.8	51.1	57.4	37.1	47.2	75	20	34	35	36	78	61	59	.209	.221	.222	7.99	2.39	.1	6.2	5.8	5.0	6.2
April	29.43	29.87	29.04	52.8	66.0	64.8	70.4	49.4	59.9	87	39	43	42	42	71	44	47	.297	.288	.295	2.24	.76	T	5.1	5.7	5.3	5.7
May	29.44	29.83	29.18	63.0	77.5	76.0	81.0	59.1	70.0	91	52	54	50	52	74	42	46	.426	.387	.408	1.61	1.33	.0	3.5	5.8	4.6	5.4
June	29.38	29.58	29.00	73.0	85.3	83.2	89.5	68.3	78.9	97	60	66	64	66	80	50	57	.651	.602	.641	5.79	3.21	.0	4.0	5.1	5.7	5.3
July	29.43	29.67	29.24	76.2	87.5	84.8	91.9	72.4	82.2	104	67	71	70	70	83	57	63	.752	.723	.737	3.85	1.39	.0	4.7	5.7	5.7	5.9
August	29.46	29.65	29.30	73.9	84.7	83.0	89.0	71.5	80.2	98	65	68	68	68	83	59	63	.695	.691	.703	1.87	1.20	.0	6.5	6.9	6.9	7.1
September	29.48	29.72	29.20	63.3	75.9	73.6	80.5	60.6	70.6	88	52	60	60	60	89	59	65	.523	.519	.536	4.52	1.67	.0	5.6	6.7	5.0	6.6
October	29.52	29.82	29.16	54.3	71.2	67.7	74.7	52.0	63.4	83	35	48	48	49	81	46	53	.355	.358	.376	2.02	1.11	.0	3.6	4.3	3.1	4.0
November	29.54	29.88	28.96	46.7	58.0	56.5	62.6	43.5	53.0	78	31	38	38	37	72	48	51	.247	.239	.238	1.45	.61	.0	5.4	4.1	3.8	4.9
December	29.59	29.96	28.97	35.3	43.3	42.5	47.6	32.2	39.9	61	14	30	31	32	79	64	67	.172	.184	.192	2.57	.72	.8	6.8	6.7	6.0	7.0
Year	29.51	30.21	28.96	53.9	65.4	64.0	70.0	50.6	60.3	104	6	47	47	48	79	54	58	.389	.380	.392	39.51	3.21	4.0	5.2	5.7	5.1	5.9

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

MONTGOMERY, ALA.

[H_b=255 ft.; h_t=92 ft.; h_r=90 ft.; h_a=105 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	7.5	E.	22	N.	0	12	9	12	7	3	5	10	4	0	9	5	17	13	11	0	0	0	7	1	0	0	3	1	0
February	8.2	N.	30	SW.	0	12	6	13	3	4	3	6	9	0	11	7	10	10	9	0	0	0	6	0	0	0	6	3	0
March	8.0	SE.	26	W.	0	11	5	8	9	8	7	8	6	0	12	7	12	9	7	1	1	0	4	2	0	0	4	2	0
April	7.3	SW.	22	N.	0	6	5	5	4	16	13	7	3	1	11	7	12	8	8	0	0	0	3	0	0	0	0	6	0
May	6.8	E.	25	SW.	0	10	14	15	11	2	5	2	3	0	9	10	12	11	8	0	0	0	0	0	0	0	0	9	0
June	5.9	S.	27	N.	0	5	3	4	9	11	10	9	8	1	14	8	8	13	12	0	0	0	3	1	0	18	0	12	0
July	6.1	SW.	21	W.	0	5	2	5	7	12	10	15	6	0	10	8	13	16	11	0	0	0	0	0	0	20	0	15	0
August	5.8	SW.	21	NE.	0	4	5	13	4	6	16	11	3	0	4	17	10	13	11	0	0	0	6	1	0	17	0	14	0
September	5.3	N.	18	SW.	0	6	15	7	11	9	1	4	7	0	13	11	6	6	5	0	0	0	2	1	0	10	0	3	0
October	6.4	N.	24	NW.	0	17	22	7	4	3	1	3	5	0	17	6	8	7	7	0	0	0	3	1	0	0	0	2	0
November	7.4	E.	24	SE.	0	12	6	16	6	5	7	6	2	0	17	4	9	7	7	0	0	0	2	2	0	0	0	1	0
December	6.9	N.	25	W.	0	13	5	9	9	2	10	8	6	0	11	5	15	12	10	2	0	0	6	4	0	0	7	1	0
Year	6.8	N.	30	SW.	0	113	97	114	84	81	88	89	62	2	138	95	132	125	106	3	1	0	42	13	0	68	20	69	0

MOORHEAD, MINN.

[H_b= 940 ft.; h_t=50 ft.; h_r=43 ft.; h_a=58 ft.]

January	10.1	S.	30	N.	0	15	1	2	3	19	6	5	11	0	5	9	17	10	3	18	8	0	9	2	21	0	31	0	1
February	9.3	S.	27	N.	0	14	6	0	5	16	2	7	6	0	3	10	13	4	0	16	4	0	0	0	19	0	28	0	0
March	10.7	S.	29	NW.	0	16	5	1	6	18	2	4	10	0	7	13	11	6	4	17	6	0	0	0	13	0	30	0	0
April	10.9	N.	35	N.	1	19	2	6	4	5	5	6	12	1	5	9	16	12	5	10	2	0	5	0	0	0	18	2	0
May	10.2	S.	30	SE.	0	11	6	9	7	12	3	8	6	0	9	14	8	11	6	0	0	0	3	0	0	6	1	9	0
June	9.1	NW.	38	NW.	1	10	9	7	6	7	2	5	13	1	8	10	12	14	9	0	0	0	0	0	0	0	0	9	0
July	8.5	S.	24	E.	0	13	7	10	9	16	3	2	2	0	12	14	5	9	5	0	0	0	0	0	0	8	0	7	0
August	8.5	S.	24	N.	0	8	4	3	11	18	3	6	9	0	9	13	9	7	6	0	0	0	1	0	0	6	0	7	0
September	9.1	S.	21	N.	0	13	4	2	7	17	3	4	9	1	6	12	12	11	5	1	0	0	5	1	0	0	5	1	1
October	8.9	S.	28	NW.	0	8	5	3	4	20	5	4	13	0	8	9	14	5	4	1	0	0	7	2	0	0	5	3	0
November	8.5	S.	22	NW.	0	9	6	2	7	14	4	8	10	0	4	14	12	6	2	9	2	0	2	0	7	0	26	0	0
December	9.1	N.	30	NW.	0	17	1	2	3	19	1	1	18	0	7	7	17	9	4	25	8	0	1	0	27	0	31	0	0
Year	9.4	S.	38	NW.	2	153	58	47	72	181	39	60	119	3	85	134	146	104	53	97	30	0	33	5	87	20	175	38	2

NANTUCKET, MASS.

[H_b=12 ft.; h_t=14 ft.; h_r=4 ft.; h_a=90 ft.]

January	15.4	W.	38	NE.	7	5	3	6	3	7	11	16	11	0	8	10	13	11	9	6	3	0	7	7	4	0	23	0	0
February	16.7	NW.	56	SW.	8	10	4	2	2	5	3	13	17	0	9	9	10	13	11	11	8	0	4	2	17	0	28	0	0
March	16.7	SW.	56	NE.	6	8	9	9	1	11	12	7	5	0	11	11	9	13	10	10	7	0	9	4	5	0	21	1	0
April	13.9	S.	36	NE.	4	5	7	4	6	13	10	7	8	0	14	6	10	11	9	0	0	2	10	7	0	0	1	2	0
May	14.1	SW.	43	S.	1	5	9	1	4	17	19	3	4	0	12	8	11	13	9	0	0	0	12	8	0	0	3	3	0
June	13.3	SW.	34	SW.	1	6	5	5	5	9	20	8	2	0	9	12	9	9	7	0	0	0	19	16	0	0	0	5	0
July	12.7	SW.	30	SW.	0	8	5	3	2	19	20	4	1	0	12	9	10	3	3	0	0	0	18	15	0	0	0	1	0
August	12.3	S.	33	NE.	1	7	10	4	5	15	11	7	3	0	12	9	10	10	7	0	0	0	11	8	0	0	0	3	0
September	12.3	E.	30	SW.	0	6	12	13	12	3	11	2	1	0	8	8	14	14	9	0	0	0	20	15	0	0	0	0	0
October	16.2	N.	45	N.	8	17	8	7	0	3	8	12	7	0	6	7	18	14	10	1	0	0	5	1	0	0	0	1	0
November	15.3	S.	40	SW.	3	4	4	9	5	12	3	12	10	1	6	7	17	10	6	2	0	0	8	3	0	0	0	0	0
December	15.6	NW.	44	SW.	7	5	3	2	5	3	4	17	23	0	8	6	17	8	6	6	2	0	1	1	9	0	20	0	0
Year	14.5	SW.	56	NE.	46	86	79	65	50	117	132	108	92	1	115	102	148	129	96	36	20	2	124	87	35	0	93	16	0

NASHVILLE, TENN.

[H_b=546 ft.; h_t=168 ft.; h_r=161 ft.; h_a=188 ft.]

January	9.3	W.	41	NW.	1	4	2	13	5	11	9	8	10	0	9	5	17	9	9	4	2	0	2	1	2	0	10	9	0
February	9.7	NW.	30	W.	0	5	8	5	8	4	4	4	18	0	8	9	11	8	6	6	3	0	0	0	4	0	22	9	0
March	10.3	S.	32	SE.	1	3	14	5	7	13	7	2	11	0	8	9	14	14	10	4	1	0	1	1	0	0	12	5	0
April	10.0	NW.	38	NW.	1	2	5	6	8	11	6	7	14	0	9	8	13	8	6	1	0	0	3	2	0	0	0	5	0
May	8.0	NE.	25	N.	0	6	14	10	6	7	4	6	7	2	7	17	7	5	5	0	0	0	4	1	0	0	1	6	0
June	7.2	W.	39	NW.	5	3	0	5	11	7	9	10	10	5	7	17	6	11	7	0	0	0	0	0	0	0	0	0	0
July	7.1	W.	30	N.	0	1	3	5	7	9	9	23	4	1	5	18	8	10	8	0	0	0	2	2	0	0	14	0	0
August	7.5	SW.	24	NW.	0	9	5	3	10	11	12	6	6	0	4	12	15	8	6	0	0	0	1	0	0	0	14	9	0
September	7.6	S.	33	NW.	1	5	3	8	9	12	8	7	8	0	4	13	13	14	11	0	0	0	1	0	0	0	0	7	0
October	7.9	NE.	33	NW.	1	5	12	9	5	4	7	6	12	2	14	9	8	6	6	0	0	0	1	0	0	0	0	1	0
November	11.4	SE.	38	SE.	4	4	2	6	14	9	9	7	7	2	11	10	9	8	5	0	0	0	0	0	0	0	4	1	0
December	9.6	NW.	30	NW.	0	2	9	4	11	7	9	9	11	0	6	9	16	12	10	6	2	0	0	0	3	0	15	1	0
Year	8.8	W.	41	NW.	14	50	77	79	101	105	93	95	118	12	92	136	137	113	89	21	8	3	28	14	9	49	63	69	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NEW HAVEN, CONN.

[ϕ=41°18′ N.; λ=72°56′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.99	30.55	28.95	27.6	34.0	33.4	38.6	24.7	31.6	53	5	21	22	23	76	63	66	0.127	0.137	0.137	3.52	1.11	T	5.6	6.8	5.6	6.6
February	30.01	30.77	29.04	12.8	20.9	19.6	26.5	8.3	17.4	44	−15	4	6	6	65	51	54	.059	.063	.067	3.82	1.95	46.3	5.8	5.0	4.2	5.3
March	30.06	30.58	29.44	31.3	39.7	36.2	43.7	27.2	35.4	62	10	24	25	28	73	55	70	.136	.144	.157	4.68	2.69	6.6	5.3	5.9	5.9	6.1
April	29.90	30.59	29.15	45.4	52.2	49.5	56.9	40.0	48.4	71	33	37	37	37	73	58	64	.224	.223	.226	4.98	1.53	.0	5.3	5.2	3.9	4.9
May	29.89	30.47	29.43	58.6	65.0	61.3	69.8	51.1	60.4	87	40	46	45	47	68	53	63	.336	.321	.344	5.23	2.02	.0	6.7	5.9	6.9	5.8
June	29.80	30.32	29.37	68.1	74.1	69.8	78.7	61.2	70.0	99	48	58	57	58	72	58	69	.493	.485	.498	3.42	2.36	.0	6.0	5.5	6.1	5.8
July	29.85	30.27	29.65	72.7	79.4	75.8	83.2	66.4	74.8	96	57	62	62	64	72	58	68	.575	.574	.606	3.04	1.10	.0	5.7	5.9	5.6	5.7
August	29.94	30.36	29.64	66.8	73.7	69.7	76.7	60.4	68.6	87	48	57	57	58	72	58	69	.481	.485	.506	2.45	1.49	.0	5.3	5.8	5.0	5.4
September	30.00	30.43	29.57	64.2	70.8	67.6	73.6	59.4	66.5	84	49	59	60	61	84	70	81	.513	.529	.552	8.76	2.88	.0	6.8	7.9	6.9	7.4
October	29.91	30.40	29.43	47.2	56.2	52.6	59.9	43.3	51.6	74	36	38	38	40	72	53	65	.240	.247	.265	2.51	1.08	T	4.8	5.9	4.2	5.2
November	30.02	30.61	29.36	43.8	50.2	47.1	53.8	39.6	46.7	70	24	37	38	38	77	64	71	.240	.248	.252	3.28	1.30	T	8.5	6.5	9.2	6.5
December	29.94	30.39	29.02	27.4	33.9	32.4	37.9	24.5	31.2	61	9	18	19	20	67	55	59	.115	.123	.121	3.34	1.56	.1	5.7	6.2	5.4	6.0
Year	29.94	30.77	28.95	47.2	54.2	51.2	58.3	42.2	50.2	99	−15	38	39	40	73	58	67	.295	.298	.311	49.03	2.88	53.0	6.0	6.0	5.7	5.9

NEW ORLEANS, LA.

[ϕ=29°57′ N.; λ=90°04′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	30.10	30.39	29.73	53.1	61.6	59.1	64.4	51.1	57.8	78	29	48	47	49	85	61	72	0.367	0.355	0.381	6.00	2.26	0.0	6.4	6.2	5.5	6.1
February	30.10	30.57	29.67	50.3	59.2	57.4	64.4	47.0	55.7	80	31	44	44	46	79	59	69	.303	.309	.330	3.33	1.42	.0	6.1	5.6	3.2	5.3
March	30.07	30.29	29.76	55.5	67.2	63.4	70.8	52.3	61.6	82	35	51	49	50	85	56	64	.399	.379	.386	5.93	3.49	.0	3.8	4.5	3.4	4.1
April	29.96	30.23	29.57	64.3	74.0	71.9	77.4	62.5	70.0	84	54	58	55	58	83	55	63	.511	.470	.502	4.55	2.50	.0	4.5	5.6	4.2	5.4
May	29.90	30.15	29.70	70.7	79.4	76.6	81.9	67.7	74.8	90	62	66	64	64	87	61	68	.652	.611	.620	10.39	2.11	.0	4.5	6.3	5.7	5.5
June	29.89	30.12	29.46	78.7	85.3	83.5	89.2	75.4	82.3	93	69	73	71	71	82	64	68	.804	.764	.771	5.24	1.37	.0	3.9	5.9	5.4	5.0
July	29.96	30.09	29.74	79.4	85.3	83.8	89.4	76.2	82.8	98	72	74	72	72	84	66	70	.836	.787	.799	7.72	1.46	.0	5.5	6.6	6.3	6.2
August	29.98	30.11	29.84	79.0	85.6	82.0	89.5	76.4	83.0	94	71	74	74	73	86	68	76	.848	.824	.816	11.46	3.13	.0	4.8	6.8	6.5	6.8
September	29.96	30.14	29.79	74.4	83.4	79.6	85.7	72.5	79.1	91	66	70	68	69	85	60	70	.729	.687	.709	1.16	.67	.0	3.9	5.9	4.8	5.1
October	29.98	30.26	29.71	69.4	79.7	75.7	81.8	68.9	75.4	87	58	63	62	64	81	56	69	.588	.574	.615	2.53	2.40	.0	4.6	4.2	3.0	3.9
November	30.04	30.34	29.61	60.0	70.3	66.7	73.1	57.8	65.4	84	45	53	53	55	79	57	69	.430	.431	.458	5.75	1.64	.0	3.7	3.9	3.5	4.3
December	30.12	30.43	29.79	50.9	60.1	57.3	63.7	48.2	56.0	78	29	45	46	48	81	62	73	.331	.347	.368	1.96	.90	.0	4.7	4.8	2.8	4.5
Year	30.00	30.57	29.46	65.5	74.3	71.4	77.6	63.0	70.3	98	29	60	59	60	83	60	69	.566	.545	.563	66.02	3.49	.0	4.7	5.5	4.5	5.2

NEW YORK, N. Y.

[ϕ=40°43′ N.; λ=74°00′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	29.76	30.24	28.78	30.8	35.9	35.7	41.5	27.2	34.4	57	5	23	24	24	72	61	62	0.139	0.142	0.143	3.35	1.34	0.2	5.8	6.5	5.6	6.5
February	29.78	30.52	28.84	15.4	21.7	21.6	28.9	10.8	19.8	43	−14	5	8	9	62	51	56	.061	.066	.074	2.80	.98	30.1	5.2	4.9	3.8	5.0
March	29.81	30.39	29.19	33.2	40.4	38.2	45.9	28.6	37.2	69	11	24	26	26	69	57	64	.143	.157	.158	4.40	2.54	8.5	5.3	5.8	5.9	6.3
April	29.66	30.35	28.94	45.8	52.9	49.7	57.5	41.5	49.5	75	34	37	37	36	71	58	62	.222	.229	.220	3.16	.92	T	4.5	4.6	3.7	5.1
May	29.66	30.22	29.33	59.2	67.7	62.8	71.7	53.4	62.6	88	43	48	48	45	69	52	58	.354	.352	.333	4.05	1.39	.0	4.5	4.5	6.5	5.5
June	29.57	30.06	29.06	69.0	76.2	72.5	80.4	64.4	72.4	97	57	60	60	59	74	58	66	.528	.526	.519	3.21	1.77	.0	5.2	5.3	5.2	5.8
July	29.63	30.02	29.42	72.9	80.6	76.1	84.2	68.2	76.2	94	62	63	62	64	74	53	68	.596	.584	.610	5.67	2.31	.0	5.4	5.1	5.2	5.4
August	29.70	30.11	29.39	66.9	73.4	71.2	77.4	63.3	70.4	86	52	59	57	59	77	58	68	.517	.485	.525	1.74	.78	.0	5.4	5.5	4.8	5.2
September	29.76	30.14	29.26	65.4	71.1	68.4	74.3	62.2	68.2	83	51	60	62	61	83	73	79	.527	.559	.551	10.19	4.92	.0	6.6	6.6	5.5	6.5
October	29.69	30.12	29.19	50.0	56.7	54.7	61.2	46.3	53.8	74	35	40	40	43	70	55	66	.266	.263	.292	2.27	1.60	T	4.1	5.3	3.5	4.6
November	29.78	30.32	29.09	45.7	51.1	48.8	54.8	41.6	48.2	74	25	37	38	38	73	62	67	.239	.246	.252	1.69	.49	T	6.2	6.0	5.8	6.0
December	29.72	30.14	28.83	30.1	35.4	34.8	40.6	26.1	33.4	64	10	21	22	21	66	57	55	.127	.136	.122	2.43	1.11	T	5.7	5.1	5.2	5.6
Year	29.71	30.52	28.78	48.7	55.3	52.9	59.9	44.5	52.2	97	−14	40	40	40	72	58	64	.310	.312	.317	44.96	4.92	38.8	5.3	5.4	5.0	5.6

NORFOLK, VA.

[ϕ=36°51′ N.; λ=76°17′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	30.06	30.42	29.18	41.0	47.6	46.3	53.5	37.7	45.6	72	10	35	35	35	79	64	67	0.226	0.231	0.231	1.83	0.75	0.0	6.8	5.0	5.0	5.8
February	30.09	30.85	29.33	28.6	34.2	32.8	39.4	24.6	32.0	66	6	23	25	24	78	68	71	.126	.139	.135	5.68	1.92	9.3	6.5	6.1	5.0	6.0
March	30.08	30.63	29.41	41.6	48.9	46.8	54.5	37.6	46.0	74	24	36	36	37	82	64	71	.230	.228	.235	6.31	2.00	10.8	6.5	6.5	6.2	6.5
April	29.92	30.54	29.20	52.5	62.0	57.3	67.7	47.6	57.6	82	30	44	44	44	74	54	65	.301	.305	.306	2.04	.88	.0	6.8	5.3	5.4	6.4
May	29.91	30.39	29.57	63.4	71.7	67.8	75.1	59.0	67.0	90	51	58	60	58	82	68	72	.486	.531	.503	6.96	2.19	.0	6.0	5.8	5.8	5.7
June	29.85	30.24	29.48	74.8	84.1	78.8	88.2	69.4	78.8	98	63	68	67	68	79	57	70	.689	.660	.685	1.68	.71	.0	5.3	6.0	5.7	5.9
July	29.89	30.17	29.68	76.7	84.0	79.3	88.0	71.7	79.8	96	67	71	72	72	84	67	79	.757	.780	.785	8.19	1.41	.0	6.9	7.3	6.0	7.1
August	29.96	30.28	29.74	74.5	81.9	75.9	84.3	70.9	77.6	92	63	68	68	68	82	64	77	.709	.696	.696	4.37	1.84	.0	6.4	6.3	8.0	7.1
September	29.98	30.29	29.64	71.5	77.0	72.5	80.6	68.6	74.6	90	64	68	67	68	88	73	86	.661	.667	.684	6.80	3.16	.0	7.4	8.4	7.3	8.2
October	29.96	30.29	29.45	56.4	65.3	61.6	69.0	53.7	61.4	80	38	50	48	50	78	54	66	.375	.353	.377	.20	.19	.0	3.7	4.5	3.1	4.1
November	30.06	30.37	29.54	49.6	58.8	55.4	63.0	46.4	54.7	76	27	43	43	43	77	57	66	.298	.311	.312	2.35	.74	.0	6.0	5.4	4.3	5.6
December	30.03	30.48	29.33	39.0	46.2	43.3	50.3	35.6	43.0	71	19	32	32	32	78	58	64	.198	.195	.187	1.83	.88	2.5	6.8	6.7	5.5	6.6
Year	29.98	30.85	29.18	55.8	63.5	59.8	67.8	51.9	59.8	8	6	50	50	50	80	62	71	.424	.425	.428	48.29	3.16	22.8	6.3	6.1	5.6	6.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NEW HAVEN, CONN.

[H_b=106 ft.; h_t=74 ft.; h_r=68 ft.; h_a=153 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.6	N.	27	W.	0	14	7	1	2	4	12	12	7	3	3	15	13	7	6	9	0	0	16	3	6	0	22	0	0
February	10.0	N.	30	NW.	0	18	7	0	1	6	7	4	13	0	9	10	9	10	8	12	8	0	14	0	17	0	28	0	0
March	9.8	N.	27	N.	0	13	10	3	2	14	11	2	6	1	8	11	12	14	13	6	5	0	17	4	2	0	21	0	0
April	9.2	S.	28	E.	0	11	6	5	5	15	8	0	10	0	12	8	10	12	11	0	0	0	12	0	0	0	0	0	0
May	8.6	S.	27	SW.	0	17	6	2	5	20	8	0	3	1	8	13	10	14	13	0	0	1	14	3	0	0	0	0	0
June	8.9	S.	27	N.	0	13	4	3	7	16	5	4	7	1	5	16	9	7	5	0	0	0	8	0	0	3	0	0	0
July	7.9	S.	31	NW.	0	10	4	1	5	25	10	1	6	0	9	12	10	6	6	0	0	0	7	0	0	5	0	0	0
August	8.3	S.	28	S.	0	18	9	2	2	16	9	4	2	0	9	10	12	8	6	0	0	0	2	0	0	0	0	0	0
September	8.6	N.	37	SE.	1	16	13	4	9	3	1	5	9	0	4	7	19	13	11	0	0	0	18	1	0	0	0	0	0
October	9.4	N.	32	SW.	1	20	9	1	0	4	10	5	12	1	12	8	11	8	7	1	0	1	13	0	0	0	0	0	0
November	9.2	NW.	31	S.	0	9	8	3	4	10	8	6	12	0	7	8	15	11	9	6	0	0	17	1	0	0	8	1	0
December	9.9	N.	32	S.	1	24	4	0	2	3	8	9	12	0	10	4	17	8	5	6	0	0	10	1	8	0	24	0	0
Year	9.0	N.	37	SE.	3	183	87	25	44	136	97	52	99	7	96	122	147	118	100	40	13	2	148	13	33	8	103	29	0

NEW ORLEANS, LA.

[H_b=53 ft.; h_t=76 ft.; h_r=71 ft.; h_a=84 ft.]

January	7.2	E.	25	E.	0	3	19	12	7	1	8	6	6	0	9	6	16	10	9	0	0	0	3	0	0	0	1	2	0
February	8.4	E.	24	E.	0	3	10	8	9	4	7	5	10	0	9	9	10	8	5	0	0	1	3	1	0	0	1	5	0
March	7.8	SE.	20	NE.	0	9	7	8	15	6	7	5	3	2	18	5	8	7	6	0	0	0	4	3	0	0	0	4	0
April	6.7	SW.	25	SW.	0	4	11	5	12	6	13	6	2	1	9	10	11	10	8	0	0	0	2	5	4	0	0	8	0
May	6.7	E.	21	N.	0	6	10	13	13	0	8	10	2	0	11	12	8	16	14	0	0	0	3	0	0	0	1	13	0
June	6.4	SE.	24	SE.	0	1	1	9	12	9	16	10	2	0	8	18	4	16	12	0	0	0	1	0	0	9	15	13	0
July	6.5	SW.	26	E.	0	0	3	8	8	7	14	18	4	0	5	17	9	17	15	0	0	0	0	0	0	0	15	20	0
August	5.7	SW.	25	NE.	0	0	6	7	15	7	13	11	3	0	1	17	13	18	17	0	0	0	2	0	0	0	17	16	0
September	6.0	SE.	27	SE.	0	2	16	6	22	4	2	3	4	1	10	14	6	8	6	0	0	0	1	1	0	0	1	7	0
October	6.9	NE.	20	N.	0	8	17	7	13	5	1	5	6	0	16	9	6	3	3	0	0	0	0	0	0	0	0	0	0
November	7.1	NE.	21	SW.	0	9	12	7	12	1	4	8	7	0	15	6	9	9	8	0	0	0	1	1	0	0	0	4	0
December	6.6	NE.	20	SE.	0	9	15	6	11	3	5	8	4	1	14	9	8	8	7	0	0	0	5	4	0	0	2	1	0
Year	6.8	SE.	27	SE.	0	54	127	96	149	53	98	95	53	5	125	132	108	130	110	0	0	3	28	14	0	49	4	93	0

NEW YORK, N. Y.

[H_b=314 ft.; h_t=415 ft.; h_r=398 ft.; h_a=454 ft.]

January	13.9	NW.	56	NW.	8	7	5	6	0	5	7	16	16	0	8	7	16	9	8	4	1	0	14	5	4	0	22	0	0
February	16.5	N.	51	NW.	10	18	3	0	1	2	8	4	20	0	11	7	10	8	7	10	7	0	9	1	18	0	28	0	0
March	14.5	SW.	46	N.	10	10	8	4	6	7	13	6	8	0	7	11	13	14	11	7	5	0	11	5	3	0	21	0	0
April	13.7	S.	44	NW.	7	11	5	4	5	16	6	2	11	0	11	8	11	15	12	1	1	0	11	2	0	0	0	2	0
May	12.3	SW.	46	W.	5	12	8	7	4	9	11	7	4	0	9	14	8	14	11	0	0	1	15	5	0	0	0	5	0
June	13.3	SW.	38	NW.	2	7	7	6	8	7	15	3	7	0	7	16	7	9	9	0	0	0	14	2	0	2	0	6	0
July	11.6	S.	58	NW.	3	7	5	4	8	11	14	6	7	0	9	12	10	9	8	0	0	0	12	1	0	5	0	9	0
August	12.2	S.	34	NW.	3	10	8	1	3	16	10	5	9	0	12	8	11	9	6	0	0	0	14	0	0	0	0	4	0
September	10.7	E.	46	NW.	4	11	12	10	11	4	4	3	5	0	8	8	14	12	12	0	0	0	16	2	0	0	0	3	0
October	14.7	N.	46	NW.	8	14	5	6	2	5	6	12	12	0	14	7	10	7	6	1	0	0	5	4	0	0	0	1	0
November	15.7	NW.	61	NW.	7	10	2	7	5	7	6	11	12	0	9	7	14	12	9	4	0	0	14	2	0	0	5	0	0
December	17.0	NW.	58	NW.	13	17	2	3	1	4	8	11	16	0	11	7	13	8	7	8	0	0	11	1	6	0	22	0	0
Year	13.8	N.	65	N.	80	134	70	58	54	93	108	86	127	0	116	112	137	126	106	35	14	1	146	30	31	7	98	30	0

NORFOLK, VA.

[H_b=91 ft.; h_t=81 ft.; h_r=73 ft.; h_a=125 ft.]

January	13.0	NE.	45	W.	3	10	10	6	1	7	14	9	5	0	12	5	14	10	6	0	0	0	12	1	1	0	4	0	0
February	13.3	N.	38	NW.	4	16	10	5	3	8	1	8	5	0	7	10	11	12	10	13	5	0	5	0	5	0	25	1	0
March	14.2	NE.	40	NW.	4	13	17	3	6	15	4	3	1	0	6	8	17	16	14	7	4	0	8	1	0	0	9	1	0
April	12.8	S.	41	NW.	1	11	11	11	4	12	8	2	1	0	6	11	13	8	5	0	0	1	8	1	0	0	2	0	0
May	13.1	NE.	32	N.	1	3	14	5	8	11	15	4	2	0	11	7	13	11	11	0	0	0	7	1	0	0	0	5	0
June	11.8	S.	44	NW.	4	1	2	5	8	19	18	5	2	0	6	14	10	10	6	0	0	0	5	0	0	0	13	10	0
July	10.5	S.	42	SW.	2	0	3	10	7	23	13	3	2	1	4	9	18	17	13	0	0	0	1	1	0	12	0	16	0
August	10.7	S.	40	W.	1	5	7	15	3	17	9	6	0	0	4	12	15	10	10	0	0	0	3	0	0	0	1	9	0
September	10.9	NE.	30	S.	0	7	16	12	10	8	5	1	1	0	2	6	22	12	12	0	0	0	9	0	0	0	0	5	0
October	12.4	NE.	44	NW.	3	15	11	6	2	10	4	8	6	0	16	7	8	3	2	0	0	0	12	3	0	0	0	0	0
November	13.4	S.	38	NW.	4	10	9	9	6	14	5	2	5	0	10	9	11	11	9	0	0	0	8	1	0	0	2	0	0
December	10.2	W.	30	W.	0	16	5	2	7	7	11	10	3	1	7	9	15	10	9	4	2	0	5	0	1	0	8	0	0
Year	12.2	S.	45	W.	27	107	115	89	65	151	107	61	33	2	91	107	167	130	107	24	11	1	83	9	7	26	48	49	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NORTHFIELD, VT.

[ϕ=44°10′ N.; λ=72°41′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January							27.6	4.7	16.2	46	−30				93	75	83				2.52	0.86	22.7				
February							18.8	−9.2	4.8	38	−28				89	65	80				1.10	.45	13.7				
March							38.7	13.4	26.0	60	−7				88	65	80				1.39	.39	5.0				
April							53.0	30.7	41.8	75	17				78	57	70				3.12	1.70	2.3				
May							69.4	39.2	54.3	85	25				70	56	69				1.05	.52	.0				
June							75.2	49.9	62.6	91	30				78	66	76				2.31	.72	.0				
July	29.02	29.45	28.75	66.6	76.3	69.2	80.9	53.1	67.0	89	41	58	61	60	76	59	73	0.501	0.535	0.522	1.83	.43	.0	5.3	6.1	5.0	5.3
August	29.10	29.51	28.72	57.6	69.9	61.7	73.8	46.3	60.0	88	32	51	51	54	80	53	76	.386	.394	.421	1.95	.71	.0	4.7	5.4	3.8	5.3
September	29.19	29.56	28.76	57.7	67.9	61.0	70.9	51.0	61.0	82	36	55	57	56	90	69	85	.440	.475	.458	3.45	1.50	.0	7.8	7.6	5.7	7.6
October	29.06	29.60	28.58	39.0	48.4	42.1	52.4	33.4	42.9	68	25	33	36	36	80	63	78	.196	.220	.217	1.19	.36	2.1	5.9	6.2	6.3	6.3
November	29.15	29.77	28.41	34.7	40.5	39.1	45.3	30.0	37.6	61	9	31	34	34	87	78	82	.187	.212	.215	2.63	.79	1.6	9.0	9.0	8.1	8.8
December	29.04	29.53	28.01	12.0	20.0	17.5	25.9	5.4	15.6	63	−18	8	13	12	85	72	79	.081	.090	.082	2.29	.77	20.5	6.3	6.4	5.7	6.5
Year							52.7	29.0	40.8	91	−30				83	65	78				24.83	1.70	67.9				

NORTH HEAD, WASH.

[ϕ=46°16′ N.; λ=124°04′ W.]

January	29.94	30.29	29.33	47.0	48.1	47.9	50.7	43.8	47.2	66	36	43	44	44	87	87	86	0.283	0.292	0.287	9.52	2.46	0.0	7.8	7.5	8.6	8.6
February	29.83	30.21	29.44	48.0	51.7	52.2	54.8	45.5	50.2	65	41	41	43	44	78	76	76	.260	.283	.286	2.14	1.83	.0	5.2	5.0	5.7	5.6
March	29.89	30.30	29.50	47.6	52.4	52.3	54.9	45.7	50.3	73	40	44	45	46	89	80	83	.291	.302	.316	6.22	1.39	.0	5.0	7.3	5.1	6.7
April	29.86	30.18	29.55	49.6	53.6	52.7	56.0	48.3	52.2	68	40	46	48	48	89	84	86	.318	.342	.342	2.03	.64	.0	6.9	6.1	6.3	6.7
May	29.81	30.21	29.37	52.4	57.5	57.1	60.0	50.8	55.4	83	46	47	50	50	85	79	80	.331	.363	.366	4.37	.90	.0	7.1	6.5	6.5	6.7
June	29.84	30.13	29.51	52.5	56.9	56.9	58.5	51.8	55.2	64	48	50	51	51	91	82	82	.357	.380	.360	.70	.31	.0	6.0	4.8	4.7	5.9
July	29.87	30.11	29.60	55.3	59.2	58.8	60.7	54.5	57.6	67	51	52	54	53	89	83	82	.389	.411	.407	.81	.35	.0	8.1	6.4	6.3	6.8
August	29.88	30.09	29.69	56.7	60.0	59.7	61.8	55.6	58.7	76	51	54	55	56	92	85	88	.421	.436	.447	1.02	.43	.0	8.6	7.6	7.3	8.2
September	29.83	30.12	29.29	54.7	59.0	58.9	61.1	53.0	57.0	93	46	52	52	52	89	80	82	.384	.394	.396	2.24	.93	.0	6.9	6.3	5.3	6.5
October	29.77	30.16	28.75	52.4	56.1	54.9	58.6	49.8	54.2	67	42	49	50	50	89	83	84	.350	.371	.363	7.76	1.47	.0	5.7	5.5	6.9	6.3
November	29.68	30.11	29.01	50.4	51.5	51.0	53.8	47.2	50.5	63	40	46	47	47	87	84	87	.317	.319	.324	10.18	1.70	.0	8.0	8.5	8.7	8.8
December	29.86	30.35	29.05	45.7	48.0	47.0	50.9	42.5	46.2	61	34	40	42	41	82	81	81	.250	.269	.259	8.94	1.14	T	7.0	6.9	7.8	7.6
Year	29.84	30.35	28.75	51.0	54.5	54.1	56.7	49.0	52.9	93	34	47	48	48	87	82	83	.329	.347	.348	55.93	2.46	T	6.9	6.5	6.6	7.0

NORTH PLATTE, NEBR.

[ϕ=41°08′ N.; λ=100°45′ W.]

January	27.11	27.52	26.65	24.1	40.4	36.2	47.3	20.4	33.8	64	10	20	24	23	84	54	59	0.108	0.126	0.122	0.05	0.04	0.1	4.7	3.6	3.2	4.5
February	27.19	27.52	26.79	22.1	40.0	38.1	46.1	19.9	33.0	70	−14	18	22	22	82	51	54	.101	.120	.121	.52	.23	5.3	3.1	4.8	5.2	4.9
March	27.14	27.65	26.57	28.1	46.4	46.4	53.1	24.7	38.9	78	10	22	24	27	78	46	50	.119	.132	.148	.36	.16	1.5	5.8	5.8	6.3	5.8
April	27.05	27.45	26.55	39.7	61.0	62.0	66.5	38.1	52.3	88	27	30	27	28	70	31	30	.172	.153	.155	.62	.33	T	4.2	4.9	4.9	4.3
May	27.02	27.49	26.63	55.0	78.9	76.8	83.3	54.5	68.9	99	40	47	45	46	71	34	36	.332	.313	.320	.65	.55	.0	4.6	4.5	5.8	5.2
June	26.95	27.27	26.65	63.5	83.5	84.5	89.0	61.5	75.2	101	50	55	52	52	75	36	34	.440	.402	.391	2.98	1.23	.0	4.8	3.3	4.7	4.4
July	27.01	27.32	26.75	69.7	92.4	91.4	97.7	68.2	83.0	106	56	57	53	52	66	29	29	.467	.409	.394	.79	.22	.0	4.3	3.0	4.8	3.9
August	27.09	27.35	26.86	63.7	83.8	85.3	89.5	62.7	76.1	106	44	56	57	54	78	43	37	.463	.450	.440	3.20	1.14	.0	4.4	4.3	4.8	4.6
September	27.05	27.46	26.77	48.5	66.2	64.6	73.7	45.5	59.6	91	26	43	45	45	82	51	52	.291	.323	.324	3.50	2.61	T	4.1	3.7	4.8	4.2
October	27.10	27.69	26.43	44.1	68.5	62.8	72.4	42.1	57.2	92	26	38	36	37	80	33	41	.241	.223	.236	.80	.27	.0	4.2	2.8	3.1	3.4
November	27.05	27.57	26.59	31.8	50.9	45.5	54.6	29.4	42.0	79	18	26	28	29	80	48	54	.143	.157	.158	.17	.12	.1	5.2	4.2	4.3	5.2
December	27.12	27.58	26.68	21.9	34.0	30.0	38.6	17.9	28.2	56	1	19	23	22	89	64	73	.105	.124	.122	.42	.28	4.9	4.8	6.0	4.1	5.4
Year	27.07	27.69	26.43	42.7	62.2	60.3	67.6	40.4	54.0	106	−14	36	36	36	78	43	46	.248	.247	.244	13.56	2.61	11.0	4.5	4.1	4.6	4.6

OKLAHOMA CITY, OKLA.

[ϕ=35°26′ N.; λ=97°33′ W.]

January	28.83	29.21	28.49	34.7	44.7	43.6	50.4	31.2	40.8	72	15	29	31	33	80	61	67	0.171	0.183	0.194	2.06	1.21	1.0	4.3	4.4	4.1	4.6
February	28.87	29.29	28.37	34.3	46.7	46.1	53.0	31.9	42.4	78	11	27	27	29	75	51	55	.153	.150	.171	1.15	.78	.8	4.5	6.2	6.1	5.8
March	28.80	29.34	28.40	38.7	52.6	54.2	61.7	35.9	48.8	86	19	31	32	33	74	51	49	.182	.192	.196	.95	.46	.1	4.7	5.5	5.6	6.1
April	28.70	29.11	28.35	53.7	67.4	67.0	72.6	51.2	61.9	91	40	44	43	43	73	47	46	.311	.310	.299	1.46	.48	.0	4.6	4.6	4.9	4.9
May	28.70	29.06	28.44	62.9	77.1	75.9	81.6	60.2	70.9	98	48	55	56	54	77	52	50	.448	.454	.425	3.61	1.62	.0	5.1	5.6	3.8	5.1
June	28.61	28.85	28.40	73.2	91.0	89.7	95.0	71.3	83.2	102	64	63	62	60	71	40	39	.579	.566	.537	1.98	.80	.0	3.5	2.9	2.1	3.0
July	28.67	28.87	28.44	77.1	96.5	95.3	100.4	76.2	88.3	106	65	61	59	56	59	30	28	.548	.502	.454	.13	.11	.0	3.4	2.2	2.4	3.1
August	28.69	28.92	28.47	76.3	92.4	91.7	96.9	75.4	86.2	107	59	62	62	60	64	40	38	.560	.553	.515	7.44	4.52	.0	5.2	4.9	3.8	5.0
September	28.70	29.08	28.37	61.9	75.4	73.6	80.8	59.5	70.2	91	43	57	58	58	84	58	60	.485	.519	.510	6.45	2.98	.0	5.1	5.0	3.8	4.7
October	28.78	29.16	28.49	58.0	73.4	69.0	77.8	56.1	67.0	84	36	50	52	52	76	50	57	.385	.418	.413	2.03	1.41	.0	3.1	2.4	2.3	2.8
November	28.73	29.19	28.20	46.9	58.0	54.9	63.1	43.6	53.4	82	30	40	42	43	79	60	66	.266	.288	.289	3.23	1.47	T	5.8	6.1	5.1	5.8
December	28.84	29.32	28.47	34.7	44.9	42.2	50.4	30.8	40.6	66	17	30	31	31	84	60	66	.178	.181	.180	.02	.00	T	4.0	5.0	4.2	5.2
Year	28.74	29.34	28.20	54.4	68.3	66.9	73.6	51.9	62.8	107	11	46	46	46	76	50	52	.356	.360	.349	31.11	4.52	1.4	4.4	4.6	4.6	4.7

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NORTHFIELD, VT.

[H_b=876 ft.; h_t=12 ft.; h_r=3 ft.; h_a=60 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	32°: Minimum temperature or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	7.5	N.	22	S.	0										5	10	16	13			13	0		0				9	0
February	8.6	N.	26	N.	0										10	7	11	9			9	0		0				9	0
March	8.6	S.	27	SW.	0										8	9	14	11			10	0		2				6	0
April	8.7	S.	34	SE.	1										6	14	10	12			3	0		0				1	0
May	7.7	S.	38	SW.	1										8	16	7	6			0	0		2				2	0
June	7.3	S.	23	SW.	0										4	19	7	12			0	0		1				6	0
July	6.9	S.	21	SW.	0	16	10	0	2	23	4	0	7	0	7	19	5	9	8	0	0	1	3	3	0	0	5	0	0
August	6.9	S.	25	S.	0	13	4	1	3	27	9	2	2	1	8	14	9	9	6	0	0	0	6	1	0	0	4	0	0
September	7.1	S.	32	SW.	1	7	5	1	2	19	17	0	1	8	4	8	18	13	9	0	0	0	15	4	0	0	3	0	0
October	7.8	N.	28	SW.	0	16	2	0	0	13	15	3	7	6	9	6	16	12	8	7	2	0	4	2	0	0	16	0	0
November	8.1	S.	28	S.	0	13	0	0	1	21	9	0	9	7	0	6	24	17	12	11	6	0	6	2	5	0	18	0	0
December	7.5	N.	25	NW.	0	17	5	0	2	16	12	2	5	3	7	8	16	14	8	19	13	0	0	0	21	0	30	0	0
Year	7.7	S.	38	SW.	3										76	136	153	137			56	1		17				21	0

NORTH HEAD, WASH.

[H_b=211 ft.; h_t=11 ft.; h_r=3 ft.; h_a=56 ft.]

January	18.3	S.	60	S.	18	3	2	11	7	18	9	7	5	0	2	3	26	25	22	0	0	0	11	4	0	0	0	0	0
February	13.2	E.	57	S.	5	9	0	17	7	16	1	2	2	2	9	7	12	13	9	0	0	0	4	1	0	0	0	0	0
March	12.8	N.	49	S.	7	15	4	8	3	17	7	3	3	2	8	6	17	14	11	0	0	0	11	5	0	0	0	0	0
April	11.8	N.	39	S.	2	27	1	3	2	11	5	4	6	1	7	8	15	14	9	0	0	0	12	0	0	0	0	0	0
May	14.4	N.	56	S.	6	17	1	2	8	12	7	5	8	2	6	10	15	15	11	0	0	0	2	0	0	0	0	0	0
June	14.6	N.	35	N.	5	32	1	1	3	3	2	5	13	0	8	12	10	10	4	0	0	0	5	1	0	0	0	0	0
July	13.5	N.	50	S.	4	34	0	0	0	10	1	10	7	0	4	12	15	10	5	0	0	0	3	1	0	0	0	0	0
August	12.4	N.	38	S.	1	34	0	0	2	12	5	3	6	0	3	5	23	11	6	0	0	0	16	10	0	0	0	0	0
September	10.7	N.	37	S.	1	30	2	4	4	7	5	4	4	0	5	12	13	14	8	0	0	0	9	2	0	0	1	0	2
October	15.6	S.	87	SE.	11	18	3	5	10	18	2	2	3	1	10	7	14	18	15	0	0	0	11	4	0	0	0	0	0
November	18.5	S.	68	S.	18	5	0	4	16	16	8	8	3	0	0	6	24	24	22	0	0	0	2	1	0	0	0	0	2
December	16.8	E.	65	S.	15	7	2	11	7	12	9	9	4	1	5	4	22	24	22	2	1	0	6	0	0	0	0	0	0
Year	14.4	N.	87	SE.	93	231	16	66	69	152	61	62	64	9	67	92	206	192	144	2	1	0	92	29	0	1	0	4	0

NORTH PLATTE, NEBR.

[H_b=2,821 ft.; h_t=11 ft.; h_r=3 ft.; h_a=51 ft.]

January	7.8	W.	27	NW.	0	8	4	2	4	8	6	17	13	0	15	9	7	3	0	8	3	0	4	2	3	0	30	0	0
February	7.9	W.	32	N.	1	7	5	8	6	6	4	12	8	0	13	4	11	7	5	8	6	0	9	0	6	0	28	0	0
March	9.5	W.	32	N.	1	14	6	6	3	8	3	15	6	1	6	16	9	6	3	9	3	0	4	0	2	0	26	0	0
April	8.8	N.	32	N.	1	18	3	1	2	6	7	16	5	2	16	5	9	6	3	1	1	1	4	1	0	0	8	2	0
May	8.8	S.	27	S.	0	5	6	3	14	16	7	9	2	0	10	14	7	7	3	0	0	0	0	0	0	0	11	11	0
June	8.6	S.	28	SW.	0	9	10	10	7	10	5	4	4	1	14	9	7	11	9	0	0	4	1	0	0	0	12	12	0
July	7.5	S.	35	W.	1	10	7	6	11	11	5	4	6	2	16	12	3	6	6	0	0	1	1	1	0	0	25	10	0
August	7.0	SE.	27	NW.	0	5	5	13	13	10	5	3	4	4	12	15	4	12	11	0	0	1	2	0	0	0	17	14	0
September	8.5	N.	25	N.	0	13	5	1	10	9	6	6	9	1	15	7	8	6	4	1	1	1	7	1	0	1	2	3	0
October	7.8	W.	28	S.	0	8	6	4	13	8	3	10	8	2	20	6	5	4	2	0	0	0	5	4	0	1	6	1	0
November	7.0	W.	26	NW.	0	13	5	3	9	6	4	12	5	3	13	7	10	3	1	4	2	0	6	5	2	0	22	0	0
December	7.6	W.	28	W.	0	8	1	2	6	10	4	18	12	1	9	13	9	4	3	7	3	0	13	5	5	0	31	0	0
Year	8.1	W.	35	W.	4	118	63	59	98	108	59	126	82	17	159	117	89	75	50	38	19	8	56	19	18	67	151	53	0

OKLAHOMA CITY, OKLA.

[H_b=1,214 ft.; h_t=10 ft.; h_r=3 ft.; h_a=47 ft.]

January	9.8	S.	28	N.	0	17	1	5	6	19	7	4	3	0	13	8	10	4	4	2	1	0	7	4	0	0	18	2	0
February	10.4	N.	32	N.	1	16	4	7	6	15	3	1	4	0	10	5	13	6	4	5	1	0	4	1	1	0	12	3	0
March	11.5	S.	33	N.	1	18	5	5	3	21	3	2	5	0	12	6	13	6	4	5	1	0	7	2	0	0	9	2	0
April	10.6	S.	29	N.	0	21	3	4	4	21	2	1	4	0	10	9	11	6	4	0	0	1	5	2	0	1	0	2	0
May	9.1	S.	24	SE.	0	11	5	6	11	23	0	1	5	0	12	9	10	7	5	0	0	0	1	0	0	0	3	0	4
June	10.3	S.	34	S.	1	4	3	2	20	31	0	0	0	0	20	7	3	6	6	0	0	0	0	0	0	0	25	0	8
July	9.7	S.	21	S.	0	6	0	5	12	36	1	0	2	0	20	7	4	2	1	0	0	0	0	0	0	0	30	0	2
August	8.9	S.	22	SW.	0	5	2	9	4	41	0	0	1	0	11	11	9	5	5	0	0	0	1	0	0	0	23	0	6
September	10.0	S.	26	NW.	0	11	3	5	11	25	0	1	3	1	10	15	5	9	9	0	0	0	2	0	0	0	3	0	9
October	8.7	S.	21	S.	0	8	2	7	9	25	5	1	5	0	20	8	3	7	7	0	0	0	0	0	0	0	0	0	5
November	10.5	S.	30	N.	0	10	3	3	13	21	0	4	6	0	8	9	13	9	8	4	2	0	6	2	0	0	0	1	3
December	10.3	S.	27	NW.	0	19	2	4	2	22	2	4	7	0	12	8	11	3	1	1	1	0	8	4	0	0	19	0	0
Year	10.0	S.	34	S.	3	146	33	62	101	300	23	19	45	1	158	102	105	70	58	17	6	1	41	15	1	85	59	46	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

OMAHA, NEBR.

[ϕ=41°16′ N.; λ=95°56′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.91	29.38	28.44	25.8	32.2	32.5	38.8	21.2	30.0	64	1	21	24	24	83	73	71	0.121	0.134	0.133	0.53	0.28	5.1	5.2	6.4	4.3	6.3
February	29.03	29.40	28.63	23.0	33.1	33.9	39.4	20.6	30.0	67	−7	16	17	19	74	52	54	.095	.106	.107	.87	.58	6.6	3.3	3.9	3.2	4.1
March	28.94	29.44	28.29	28.9	40.8	43.1	48.6	26.1	37.4	78	8	20	22	23	70	49	47	.114	.125	.126	.77	.46	7.0	5.3	6.0	4.5	5.8
April	28.80	29.25	28.38	45.6	61.1	61.4	66.7	43.2	55.0	85	31	31	29	28	59	32	31	.185	.174	.165	.28	.20	.0	3.6	4.6	4.3	4.1
May	28.78	29.16	28.39	62.8	80.6	81.1	85.5	60.3	72.9	103	49	45	42	41	54	27	27	.323	.284	.276	.60	.44	.0	3.1	3.0	3.5	2.9
June	28.69	29.06	28.41	71.2	85.7	85.4	90.6	67.4	79.0	104	58	58	57	56	66	39	40	.496	.476	.469	2.97	.98	.0	4.2	4.2	3.3	3.9
July	28.74	29.04	28.37	76.1	91.5	92.9	97.1	73.8	85.4	110	53	58	56	56	57	33	32	.502	.471	.472	.52	.45	.0	3.6	2.7	2.8	3.0
August	28.80	29.12	28.48	69.0	83.9	85.2	90.4	66.7	78.6	110	47	55	55	54	64	39	38	.454	.455	.444	1.11	.42	.0	5.8	3.7	4.3	4.4
September	28.80	29.13	28.48	54.6	67.8	65.8	72.8	51.2	62.0	89	36	48	48	50	81	53	59	.361	.364	.380	2.32	.84	.0	3.9	5.0	4.1	4.7
October	28.85	29.39	28.40	51.8	67.3	65.7	71.6	50.0	60.8	91	30	42	43	45	71	44	49	.286	.296	.316	1.92	1.28	.0	2.8	2.7	2.4	2.8
November	28.82	29.30	28.29	39.3	47.9	46.3	51.8	35.9	43.8	76	23	34	36	35	81	64	67	.204	.218	.211	2.68	1.17	1.8	5.7	5.2	5.0	5.5
December	28.93	29.42	28.51	23.4	27.8	26.6	32.1	18.5	25.3	46	−2	19	20	20	83	73	76	.108	.114	.114	.33	.16	3.4	7.4	6.4	4.3	6.8
Year	28.84	29.44	28.29	47.6	60.0	60.0	65.4	44.6	55.0	110	−7	37	37	38	70	48	49	.271	.268	.268	14.90	1.28	23.9	4.5	4.5	3.8	4.5

OSWEGO, N. Y.

[ϕ=43°29′ N.; λ=76°35′ W.]

January	29.70	30.24	28.67	25.4	26.6	25.7	31.4	18.7	25.0	47	−7	22	22	21	84	82	81	0.128	0.127	0.118	2.23	0.95	10.8	9.2	9.8	9.8	9.6
February	29.80	30.55	28.77	7.3	12.6	12.1	20.1	1.5	10.8	37	−21	4	6	7	84	74	79	.055	.059	.062	1.54	.33	18.0	7.4	8.2	6.2	7.6
March	29.76	30.23	29.20	26.6	30.9	31.3	37.6	22.3	30.0	61	5	19	21	23	72	65	70	.112	.118	.129	2.47	.50	11.7	7.1	7.6	7.7	7.6
April	29.60	30.17	29.00	40.9	46.1	43.2	51.0	34.5	42.8	77	25	32	33	33	72	62	68	.189	.197	.188	2.48	.99	3.5	5.8	6.9	6.8	6.6
May	29.63	30.04	29.17	54.2	57.6	57.0	66.5	44.9	55.7	81	35	42	41	41	64	56	56	.273	.268	.266	1.15	.42	.0	4.0	5.0	5.4	5.1
June	29.51	30.01	29.12	64.4	67.8	66.0	75.1	55.7	65.4	89	44	55	55	55	72	65	68	.442	.444	.439	1.97	.87	.0	5.9	4.7	5.2	5.5
July	29.58	29.99	29.32	69.2	74.5	71.9	79.0	63.1	71.0	94	57	60	58	59	72	58	65	.515	.494	.510	1.91	.60	.0	5.7	5.0	5.4	5.3
August	29.66	30.07	29.29	64.2	70.0	66.9	73.5	57.8	65.6	92	45	54	54	54	69	58	65	.422	.433	.434	1.07	.66	.0	5.7	4.2	5.0	5.2
September	29.70	29.98	29.26	62.2	68.7	65.1	72.6	58.0	65.3	87	45	56	57	57	82	68	75	.465	.473	.471	2.98	1.04	.0	7.4	6.5	6.8	6.9
October	29.66	30.12	29.21	46.4	51.3	49.5	55.4	41.6	48.5	76	30	38	38	39	72	63	68	.238	.246	.248	1.77	.61	T	6.7	6.6	6.1	6.7
November	29.70	30.22	29.02	42.2	46.1	45.0	49.5	38.3	43.9	66	25	36	36	37	78	70	73	.226	.232	.234	3.00	.66	.9	9.7	9.3	8.4	9.0
December	29.68	30.14	28.66	23.5	26.2	26.1	31.7	17.8	24.8	65	−1	17	20	19	76	76	71	.103	.113	.104	2.94	1.01	17.6	9.0	9.5	8.9	9.1
Year	29.66	30.55	28.66	43.9	48.2	46.6	53.6	37.8	45.7	94	−21	36	37	37	75	66	70	.264	.267	.267	25.51	1.04	62.5	7.0	6.9	6.8	7.0

PALESTINE, TEX.

[ϕ=31°45′ N.; λ=95°40′ W.]

January	29.60	30.00	29.31	45.9	54.1	53.9	59.0	43.3	51.2	75	26	42	43	43	88	69	69	0.292	0.302	0.296	5.35	1.93	0.0	4.8	5.3	5.1	5.5
February	29.63	30.12	29.17	44.3	54.3	54.1	60.8	40.3	50.6	77	26	38	37	38	81	57	55	.248	.230	.235	2.48	.75	T	4.8	4.6	4.5	4.5
March	29.57	30.01	29.25	48.2	60.3	62.7	67.2	44.9	56.0	82	27	43	41	42	82	54	52	.296	.281	.288	5.78	2.68	1.2	5.2	4.0	3.8	4.3
April	29.46	29.80	29.10	60.4	73.0	71.7	77.6	58.1	67.8	86	48	56	55	55	86	56	57	.463	.460	.446	4.82	2.98	.0	5.8	4.9	3.7	4.7
May	29.44	29.65	29.22	65.8	78.4	78.1	83.0	62.8	72.9	93	56	60	60	60	84	55	57	.534	.523	.533	3.46	1.93	.0	4.5	4.6	3.5	4.1
June	29.39	29.63	29.11	74.6	88.3	89.3	93.3	72.2	82.8	100	66	69	68	68	83	51	51	.713	.682	.688	.05	.04	.0	2.4	2.6	1.6	2.4
July	29.45	29.60	29.28	76.1	91.5	91.9	96.8	74.3	85.6	104	70	70	66	64	83	45	42	.743	.651	.609	1.17	1.15	.0	3.8	3.6	2.7	3.2
August	29.47	29.62	29.24	75.7	90.9	90.5	96.4	74.2	85.3	101	69	72	67	66	88	46	47	.780	.661	.649	1.48	1.16	.0	3.9	4.1	3.5	3.8
September	29.47	29.72	29.30	68.6	80.9	79.3	86.1	66.4	76.2	95	54	65	64	64	90	59	62	.640	.608	.614	3.74	1.59	.0	5.6	4.8	3.5	4.8
October	29.52	29.83	29.27	63.5	80.6	77.5	84.9	62.4	73.6	92	53	58	56	55	83	44	48	.495	.462	.452	.37	.34	.0	2.3	3.1	1.6	2.5
November	29.53	29.90	28.99	54.5	65.8	62.5	70.0	51.4	60.7	84	33	48	47	48	81	55	62	.364	.356	.356	9.27	2.63	.0	5.0	4.7	2.4	4.5
December	29.63	30.04	29.21	44.6	54.5	53.9	60.6	41.6	51.1	75	24	40	41	42	84	63	65	.268	.286	.291	4.20	1.78	.0	5.2	5.4	4.3	5.1
Year	29.51	30.12	28.99	60.2	72.7	72.1	78.0	57.7	67.8	104	24	55	54	54	84	54	56	.486	.468	.455	42.17	2.98	1.2	4.4	4.3	3.3	4.1

PARKERSBURG, W. VA.

[ϕ=39°16′ N.; λ=81°36′ W.]

January	29.51	29.86	28.78	33.5	40.0	37.4	44.8	28.0	36.4	60	−2	27	27	28	78	61	68	0.160	0.161	0.158	1.91	0.89	0.2	7.5	7.2	5.3	7.1
February	29.57	30.22	28.87	18.4	27.1	26.6	33.4	13.9	23.6	55	−7	14	16	19	82	64	72	.086	.098	.108	1.25	.44	12.0	6.1	6.7	4.6	6.4
March	29.52	29.91	28.99	32.0	42.0	42.7	51.3	27.4	39.4	73	7	27	28	30	82	62	62	.156	.163	.173	3.19	.73	11.7	6.3	6.9	5.0	6.5
April	29.36	29.88	28.81	47.9	60.7	57.1	65.2	41.6	53.4	83	27	39	38	39	73	44	54	.254	.236	.251	1.24	.33	T	5.2	5.5	4.3	5.3
May	29.40	29.80	29.03	60.5	74.1	72.0	78.8	52.7	65.8	93	43	49	47	49	67	42	46	.363	.345	.359	2.09	1.02	.0	3.3	4.1	3.1	3.9
June	29.30	29.54	29.02	71.7	85.7	81.1	88.6	66.9	77.2	98	54	63	63	64	75	52	58	.585	.585	.605	3.72	1.62	.0	4.5	4.7	4.3	4.4
July	29.36	29.65	29.14	73.6	86.1	81.0	90.8	68.5	79.6	103	58	66	67	67	79	54	65	.649	.663	.672	2.93	1.07	.0	4.5	4.8	5.4	4.9
August	29.42	29.67	29.16	67.6	79.4	75.8	83.5	63.9	73.7	95	49	62	63	65	83	58	70	.575	.593	.633	4.09	1.98	.0	5.9	5.8	4.9	5.2
September	29.43	29.68	29.16	63.0	76.2	70.6	80.7	58.5	69.6	90	45	58	60	61	86	57	73	.500	.515	.554	3.29	1.48	.0	3.8	4.9	4.2	4.9
October	29.47	29.78	29.01	46.9	64.1	57.9	68.2	42.7	55.4	80	28	42	43	45	83	48	64	.279	.295	.319	.49	.43	.0	3.7	4.0	2.4	3.6
November	29.50	29.86	29.00	41.4	53.9	49.1	57.4	37.5	47.4	76	19	36	35	37	80	51	64	.222	.218	.233	2.16	.98	T	5.7	6.5	4.9	6.2
December	29.50	29.91	28.63	30.7	37.8	34.7	42.1	26.2	34.2	56	12	27	27	27	85	65	72	.148	.149	.149	1.72	.62	.5	7.0	7.7	6.3	7.6
Year	29.44	30.22	28.63	48.9	60.4	57.2	65.4	43.9	54.6	103	−7	42	43	44	79	55	64	.331	.335	.351	28.68	1.98	24.4	5.3	5.7	4.6	5.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

OMAHA, NEBR.

[H_b=1,105 ft.; h_t=170 ft.; h_r=169 ft.; h_a=200 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.4	NW.	39	NW.	2	9	2	2	7	14	5	5	17	1	7	9	15	5	4	10	5	0	7	4	10	0	28	0	0
February	12.1	N.	38	NW.	2	14	2	5	4	15	3	3	10	0	15	4	9	6	4	8	5	0	1	0	9	0	23	0	0
March	12.6	N.	38	N.	3	19	2	4	3	19	2	6	7	0	10	8	13	8	4	7	5	0	1	0	3	0	21	1	0
April	13.5	N.	39	NW.	4	19	1	1	2	17	5	3	11	1	16	9	5	6	1	0	0	1	2	0	0	0	1	1	0
May	12.6	S.	37	N.	2	7	1	3	5	32	5	3	6	0	20	7	4	2	2	0	0	1	0	0	0	12	0	1	0
June	10.7	S.	39	S.	3	14	4	4	9	20	7	1	0	1	15	10	5	12	10	0	0	1	0	0	0	15	0	11	0
July	11.1	S.	34	N.	3	11	4	11	9	22	2	0	1	2	19	8	4	4	2	0	0	0	1	1	0	26	0	6	0
August	9.8	S.	35	N.	1	16	5	8	10	15	5	1	2	0	13	12	6	11	7	0	0	0	3	0	0	18	0	12	0
September	11.9	S.	31	N.	0	16	2	2	5	27	1	3	2	2	14	6	10	10	8	0	0	0	6	1	0	0	0	5	0
October	11.2	S.	36	S.	1	8	1	2	8	24	3	9	7	0	21	6	4	6	4	0	0	0	3	0	0	1	2	5	0
November	11.3	S.	35	N.	2	15	4	1	11	17	3	5	4	0	13	3	14	9	7	7	1	0	8	2	2	0	9	0	0
December	11.5	N.	32	N.	1	23	0	3	4	17	2	3	10	0	7	6	18	4	3	13	3	0	8	3	14	0	30	0	0
Year	11.5	S.	39	NW.	24	171	28	46	77	239	43	42	77	7	170	88	107	83	56	45	19	3	40	11	38	72	114	42	0

OSWEGO, N. Y.

[H_b=335 ft.; h_t=71 ft.; h_r=69 ft.; h_a=85 ft.]

January	12.0	SE.	32	NW.	1	6	1	4	13	9	10	5	14	0	0	2	29	19	13	21	13	0	6	1	12	0	27	0	0
February	11.2	S.	28	NW.	0	8	4	3	15	9	5	2	10	0	1	10	17	14	9	16	14	0	3	0	21	0	28	0	0
March	10.9	S.	30	W.	0	8	7	2	13	12	7	10	3	0	3	9	19	19	15	16	12	0	4	0	12	0	27	0	0
April	10.0	W.	28	SE.	0	3	3	1	13	19	1	18	2	0	5	12	13	14	9	6	5	0	2	0	0	0	14	1	0
May	7.9	W.	21	SW.	0	6	0	2	6	17	10	15	3	3	9	13	9	7	5	0	0	0	0	0	0	0	0	4	0
June	8.7	W.	22	N.	0	8	1	1	9	15	6	16	4	0	8	14	8	9	7	0	0	0	6	1	0	0	0	3	0
July	8.0	W.	23	SW.	0	11	0	2	5	14	7	16	7	0	11	10	10	9	7	0	0	0	0	0	3	0	0	5	0
August	8.5	S.	25	N.	0	10	3	2	16	3	3	10	5	0	10	13	8	6	3	0	0	0	0	0	2	0	3	0	0
September	9.3	SE.	26	W.	0	4	2	0	23	17	4	7	3	0	6	6	18	10	7	9	0	0	3	2	0	0	2	0	0
October	11.0	N.	30	NW.	0	8	6	4	10	15	6	5	8	0	7	7	17	11	8	2	1	0	1	0	0	0	1	1	0
November	11.7	S.	32	N.	1	8	3	1	13	16	5	3	11	0	2	1	27	16	12	5	2	1	3	0	0	6	0	0	0
December	12.2	SE.	41	W.	3	6	2	1	18	7	5	7	16	0	1	2	28	19	14	23	18	0	2	0	14	0	28	0	0
Year	10.1	S.	41	W.	5	86	32	23	154	153	69	114	86	3	63	99	203	153	109	89	65	1	30	4	59	5	131	19	0

PALESTINE, TEX.

[H_b=510 ft.; h_t=64 ft.; h_r=57 ft.; h_a=72 ft.]

January	7.8	NE.	25	N.	0	9	14	6	5	10	5	1	11	1	11	7	13	9	9	0	0	0	4	6	0	0	4	2	0
February	8.9	N.	29	E.	0	9	9	8	5	6	8	4	7	0	14	5	9	7	5	2	0	0	1	0	0	0	5	3	0
March	9.4	S.	27	S.	0	8	7	5	4	22	6	3	6	1	16	7	8	8	7	1	1	0	1	0	0	0	3	4	0
April	8.6	S.	27	NW.	0	7	7	13	4	20	4	1	4	0	9	16	5	9	8	0	0	2	1	1	0	0	0	8	0
May	7.0	NE.	24	S.	0	5	13	12	14	10	1	2	5	0	15	9	7	9	8	0	0	0	1	0	0	4	0	5	0
June	7.4	S.	23	NE.	0	2	3	5	14	22	11	2	1	0	22	8	0	2	1	0	0	0	1	0	0	26	0	2	0
July	8.0	S.	26	SE.	0	2	1	7	9	30	11	1	0	1	18	12	1	3	2	0	0	0	0	0	0	31	0	4	0
August	7.5	S.	25	E.	0	2	3	2	7	30	16	1	0	1	16	12	3	3	2	0	0	0	0	0	0	31	0	4	0
September	7.6	S.	22	SE.	0	7	6	4	10	27	3	0	2	1	10	12	8	8	7	0	0	0	1	0	0	8	0	7	0
October	6.7	S.	18	SW.	0	3	19	8	5	18	5	0	2	2	21	7	3	3	1	0	0	0	1	1	0	2	0	1	0
November	7.9	S.	25	S.	0	3	8	12	10	12	4	3	6	2	14	4	12	9	9	0	0	0	2	1	0	0	0	6	0
December	7.7	S.	28	W.	0	10	10	5	3	16	8	3	7	0	13	5	13	8	6	0	0	0	4	3	0	0	5	2	0
Year	7.9	S.	29	E.	0	67	100	87	90	223	82	21	51	9	179	104	82	78	65	3	1	2	17	12	0	102	17	48	0

PARKERSBURG, W. VA.

[H_b=637 ft.; h_t=77 ft.; h_r=70 ft.; h_a=84 ft.]

January	7.4	SW.	35	NW.	1	3	4	1	12	2	20	6	13	1	8	3	20	13	8	6	2	0	7	0	2	0	22	1	0
February	7.0	NW.	31	NW.	0	9	4	2	6	4	8	6	17	0	7	5	16	11	8	14	11	0	4	0	12	0	28	0	0
March	7.1	SE.	27	NW.	0	7	4	1	18	9	7	3	13	0	8	6	17	13	13	9	7	1	9	3	3	0	21	1	0
April	7.2	NW.	27	W.	0	3	1	2	14	3	8	8	21	0	10	10	10	9	8	4	2	0	3	0	0	0	4	5	0
May	5.6	NW.	36	W.	1	13	11	1	11	6	5	2	12	1	18	7	6	6	4	0	0	1	2	0	0	2	0	3	0
June	5.8	SW.	43	NW.	1	0	7	1	16	5	15	7	9	0	12	13	5	9	7	0	0	1	0	0	0	14	0	8	0
July	5.2	SE.	26	NW.	0	9	5	0	18	6	15	5	4	0	10	16	5	11	9	0	0	1	2	0	0	17	0	11	0
August	5.2	SE.	27	NW.	0	4	11	0	21	6	10	1	7	2	13	7	11	10	10	0	0	0	4	2	0	5	0	9	0
September	4.8	SE.	18	SW.	0	6	4	2	23	9	3	6	4	3	10	13	7	12	9	0	0	0	11	6	0	1	0	7	0
October	5.8	SE.	31	NW.	0	8	8	0	17	4	6	7	10	2	16	10	5	3	2	0	0	1	15	1	0	0	4	1	0
November	7.3	SE.	27	NW.	0	4	4	1	23	6	6	4	12	0	6	10	14	10	8	2	0	1	7	0	0	0	11	2	0
December	6.9	SW.	30	W.	0	2	8	2	11	6	14	5	13	1	5	4	22	10	6	9	3	0	9	0	6	0	26	0	0
Year	6.3	SE.	43	NW.	3	68	71	13	190	66	117	60	135	10	123	104	138	117	92	44	25	6	73	12	23	39	116	48	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PENSACOLA, FLA.

[ϕ=30°25′ N.; λ=87°13′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.10	36.37	29.77	52.3	57.9	57.3	63.0	50.0	56.5	74	25	48	49	52	87	74	84	0.376	0.379	0.410	4.11	1.68	0.0	5.6	5.5	4.8	5.7
February	30.10	30.56	29.63	46.4	54.5	54.7	60.6	43.3	52.0	72	28	42	44	48	84	71	79	.277	.313	.350	4.34	1.28	.0	5.1	3.8	3.6	4.2
March	30.08	30.38	29.67	53.9	62.1	60.3	66.2	50.8	58.5	77	30	50	53	55	89	73	84	.395	.426	.447	4.24	2.73	.0	3.2	3.8	3.1	3.8
April	29.97	30.24	29.62	63.1	69.6	67.5	72.9	60.4	66.6	81	48	57	58	59	83	69	77	.491	.507	.527	2.76	1.39	.0	4.1	3.8	3.7	3.8
May	29.90	30.17	29.62	71.1	75.9	74.3	78.5	67.6	73.0	86	58	65	66	67	82	73	78	.634	.643	.662	3.71	1.28	.0	4.4	5.0	5.7	5.0
June	29.91	30.11	29.64	78.6	82.4	80.7	85.1	75.0	80.0	93	65	73	71	73	83	70	77	.805	.772	.805	1.25	.50	.0	3.7	4.3	4.8	4.2
July	29.97	30.11	29.81	78.7	83.6	81.5	86.6	75.2	80.9	95	69	73	72	74	84	70	77	.817	.792	.829	3.79	1.54	.0	4.7	4.9	5.5	4.9
August	29.99	30.14	29.85	78.6	83.4	80.8	86.4	74.9	80.6	91	68	74	73	73	85	71	78	.827	.809	.818	8.88	4.83	.0	4.1	4.8	6.3	5.0
September	29.97	30.19	29.80	73.1	81.6	79.4	83.9	71.0	77.4	87	64	67	67	69	83	62	71	.682	.669	.711	.79	.30	.0	3.9	3.5	3.4	3.8
October	29.98	30.24	29.63	67.3	76.7	74.7	79.2	65.7	72.4	86	51	60	63	63	80	64	69	.546	.599	.596	20.51	17.07	.0	3.1	3.2	2.8	3.0
November	30.05	30.35	29.69	58.0	67.3	65.3	70.9	55.4	63.2	82	40	50	51	53	77	60	68	.304	.409	.445	2.35	1.01	.0	3.5	3.2	2.9	3.4
December	30.12	30.39	29.73	48.7	55.9	54.5	59.9	46.1	53.0	73	25	43	46	47	82	70	78	.312	.342	.353	2.56	1.27	.0	4.5	5.0	3.3	4.8
Year	30.01	30.56	29.62	64.2	70.9	69.2	74.4	61.3	67.8	95	25	58	59	61	83	69	77	.546	.555	.579	59.29	17.07	.0	4.2	4.2	4.2	4.3

PEORIA, ILL.

[ϕ=40°43′ N.; λ=89°36′ W.]

January	29.46	29.85	28.97	28.0	34.5	33.1	39.0	24.4	31.7	60	−4	24	25	26	84	68	74	0.136	0.143	0.152	1.05	0.36	0.8	5.5	5.4	5.4	5.7
February	29.58	30.14	28.99	18.1	28.3	26.6	32.5	15.0	23.8	62	−9	14	16	16	81	60	63	.084	.096	.094	.77	.30	10.8	3.4	4.4	3.4	4.1
March	29.48	29.90	28.90	28.4	38.0	37.4	43.8	24.4	34.1	68	−1	23	24	27	79	57	66	.132	.135	.152	1.76	.77	14.7	5.5	4.9	5.8	4.9
April	29.31	29.70	28.82	44.1	58.4	56.4	63.0	40.2	51.6	79	28	36	36	36	75	45	48	.223	.225	.225	1.13	.48	T	3.5	4.0	4.1	3.9
May	29.35	29.64	29.02	60.5	78.1	74.8	82.7	54.7	68.7	104	38	47	48	47	62	37	40	.336	.353	.340	.47	.25	0.0	2.5	2.3	2.1	2.1
June	29.24	29.45	28.97	71.5	87.0	83.6	92.6	65.8	79.2	105	53	62	63	62	72	47	51	.561	.581	.577	2.82	.80	.0	4.0	3.4	3.9	3.7
July	29.30	29.60	29.06	73.9	87.7	88.7	92.8	69.1	81.0	105	58	64	66	66	72	51	54	.605	.650	.663	5.44	3.35	.0	4.2	3.7	3.1	3.7
August	29.36	29.59	29.05	67.3	81.2	77.5	85.4	63.5	74.4	104	48	62	63	64	83	56	64	.578	.604	.619	2.30	.99	.0	4.3	3.7	3.2	4.1
September	29.35	29.67	28.92	57.8	69.6	64.2	73.4	54.1	63.8	88	39	56	58	58	94	68	79	.465	.491	.489	6.57	1.95	.0	6.2	5.6	4.5	5.3
October	29.42	29.75	28.97	48.3	66.0	58.8	69.1	45.7	57.4	83	27	44	46	46	84	50	64	.293	.327	.332	1.97	1.17	.0	2.2	2.2	2.4	2.3
November	29.37	29.83	28.56	41.2	50.3	46.9	54.0	37.9	46.0	71	24	37	38	38	86	64	72	.236	.246	.248	4.81	1.33	.0	5.2	5.1	5.0	4.9
December	29.46	29.90	28.95	28.3	38.2	27.2	32.5	19.5	26.0	45	−3	20	22	23	88	78	83	.112	.122	.127	1.34	.40	8.2	6.7	7.7	6.7	7.2
Year	29.39	30.14	28.56	46.9	58.9	56.3	63.4	42.9	53.1	105	−9	41	42	42	80	57	63	.313	.331	.335	30.43	3.35	34.5	4.4	4.4	4.1	4.3

PHILADELPHIA, PA.

[ϕ=39°57′ N.; λ=75°09′ W.]

January	30.02	30.49	29.04	34.0	39.3	39.4	43.9	31.6	37.8	59	10	25	25	26	69	58	60	0.151	0.153	0.157	2.91	1.34	T	6.6	6.2	5.5	6.3
February	30.05	30.81	29.12	18.6	24.2	25.7	30.1	14.2	22.2	47	−11	6	10	11	57	52	52	.064	.074	.081	2.75	.80	18.1	5.3	4.9	4.6	4.9
March	30.06	30.62	29.45	34.9	43.3	40.8	48.4	31.4	39.9	71	17	26	29	30	68	58	66	.149	.170	.180	2.92	.77	10.2	5.2	6.2	5.9	6.3
April	29.90	30.58	29.25	47.5	57.3	54.3	61.9	44.5	53.2	79	35	38	39	39	70	53	59	.234	.250	.249	3.11	1.03	0.0	5.1	5.0	3.6	4.7
May	29.89	30.44	29.54	61.2	71.5	67.2	75.5	56.7	66.1	95	47	47	47	48	62	45	55	.343	.339	.366	3.92	1.46	.0	5.4	5.3	6.6	5.5
June	29.79	30.27	29.28	71.9	81.4	77.7	85.3	67.2	76.2	102	59	62	60	62	73	50	60	.567	.532	.565	3.22	1.70	.0	7.1	5.0	5.2	5.5
July	29.85	30.22	29.64	75.1	83.6	79.9	87.6	71.0	79.3	98	64	65	64	65	73	53	61	.630	.608	.623	2.18	.85	.0	5.3	5.7	5.6	5.4
August	29.93	30.32	29.65	69.7	77.3	74.1	80.5	65.9	73.2	89	54	61	59	60	74	56	64	.551	.523	.543	4.29	1.51	.0	6.4	5.7	5.9	5.6
September	29.98	30.35	29.67	66.6	74.3	70.9	77.7	64.0	70.8	85	53	60	61	62	81	66	76	.641	.558	.576	6.27	2.13	.0	7.2	7.2	4.7	6.8
October	29.94	30.33	29.47	50.9	60.3	57.1	64.1	47.9	56.0	78	36	41	41	44	71	51	63	.273	.273	.304	1.54	1.28	T	4.8	4.9	3.2	4.7
November	30.02	30.52	29.34	46.7	53.9	51.8	57.6	43.6	50.6	75	28	38	40	40	73	60	66	.253	.266	.269	2.64	1.05	T	6.3	5.5	5.1	5.8
December	29.98	30.39	29.12	32.8	38.8	36.9	42.6	29.2	35.9	67	16	22	24	22	64	56	53	.134	.146	.123	2.61	1.02	T	7.3	6.8	5.1	6.4
Year	29.95	30.81	29.04	50.8	58.8	56.3	62.9	47.3	55.1	102	−11	41	42	42	70	55	61	.324	.324	.336	38.36	2.13	28.3	6.0	5.7	5.1	5.7

PHOENIX, ARIZ.

[ϕ=33°28′ N.; λ=112°00′ W.]

January	28.92	29.28	28.52	42.9	57.8	64.8	69.2	39.8	54.5	76	34	26	24	26	52	24	24	0.149	0.140	0.150	0.40	0.40	0.0	1.1	1.6	2.0	1.3
February	28.86	29.07	28.61	50.1	69.1	70.1	74.6	47.1	60.8	81	39	35	33	34	57	27	29	.208	.190	.201	.99	.98	.0	2.0	4.9	5.9	4.7
March	28.80	29.20	28.49	56.6	79.6	82.1	85.6	54.3	70.0	95	47	33	29	30	43	18	17	.197	.173	.174	.10	.09	.0	2.2	4.5	4.8	3.8
April	28.69	28.89	28.38	61.1	84.9	86.8	90.0	59.6	74.8	99	43	35	33	31	40	17	15	.216	.198	.181	.07	.07	.0	1.4	1.7	2.8	2.0
May	28.65	28.83	28.43	69.1	94.3	95.2	98.9	67.6	83.2	111	54	37	34	32	34	13	12	.234	.196	.185	.10	.05	.0	2.3	2.5	4.0	2.7
June	28.62	28.88	28.40	70.0	93.5	96.1	98.9	68.6	83.8	110	57	37	34	31	31	13	11	.229	.204	.183	.03	.03	.0	1.6	1.4	1.1	1.6
July	28.66	28.90	28.42	81.9	101.5	104.3	106.8	81.3	94.0	116	74	58	55	51	46	23	19	.498	.441	.387	.11	.06	.0	3.3	2.1	3.9	2.9
August	28.70	28.88	28.46	80.5	96.0	98.3	101.1	78.9	90.0	113	71	65	61	59	61	34	30	.619	.547	.504	1.07	.52	.0	5.7	3.7	4.7	5.0
September	28.66	28.82	28.44	72.2	94.4	95.0	99.0	70.6	84.8	108	52	51	48	46	49	22	21	.391	.350	.324	.66	.66	.0	1.1	1.4	2.1	1.5
October	28.77	28.97	28.47	61.7	86.9	85.3	91.5	59.5	75.5	103	48	40	37	40	46	18	22	.251	.227	.256	.00	.00	.0	1.3	2.3	3.2	2.5
November	28.82	29.06	28.53	49.7	71.3	69.4	75.7	47.2	61.4	93	32	35	34	38	60	28	34	.208	.208	.241	.63	.45	.0	1.6	3.6	3.6	3.3
December	28.90	29.20	28.69	45.7	63.9	62.5	68.4	43.5	56.0	81	30	35	33	37	68	37	43	.216	.212	.241	1.71	1.26	.0	2.7	3.6	4.3	3.9
Year	28.75	29.28	28.38	61.8	82.8	84.2	88.3	59.8	74.1	116	30	41	38	38	49	23	23	.285	.257	.252	5.87	1.26	.0	2.2	2.8	3.5	2.9

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PENSACOLA, FLA.

[H_b=56 ft.; h_t=149 ft.; h_r=131 ft.; h_a=185 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	13.1	NE.	40	SE.	4	7	15	11	2	0	2	11	8	0	11	4	16	8	6	0	0	1	2	2	0	0	2	2	0
February	13.6	NE.	35	SW.	3	12	13	5	4	5	2	6	9	0	13	9	6	10	8	0	0	1	1	1	0	0	2	9	0
March	12.8	SE.	44	SW.	1	8	9	5	11	9	11	0	9	0	16	8	7	9	6	0	0	0	6	5	0	0	1	3	0
April	11.4	SW.	44	NW.	2	10	6	4	13	6	12	4	5	0	14	13	3	8	7	0	0	0	7	7	0	0	0	8	0
May	11.9	E.	56	NE.	1	4	13	10	8	8	8	7	4	0	13	9	9	14	12	0	0	0	0	0	0	0	0	14	0
June	11.0	S.	30	S.	0	3	3	7	8	16	13	4	5	1	10	19	1	6	6	0	0	0	0	0	0	0	4	0	11
July	11.7	SW.	39	S.	2	3	8	4	9	2	20	5	11	0	11	14	6	13	9	0	0	0	0	0	0	0	5	0	16
August	9.8	S.	46	NE.	1	8	13	0	4	6	15	7	8	1	8	17	6	14	12	0	0	0	0	0	0	0	2	0	16
September	9.9	NE.	25	E.	0	7	19	5	6	11	5	4	3	0	16	13	1	5	4	0	0	0	0	0	0	0	0	0	7
October	11.5	NE.	38	S.	2	13	19	7	3	4	4	5	7	0	21	4	6	5	4	0	0	0	0	0	0	0	0	0	2
November	14.2	E.	47	S.	4	6	13	8	10	0	4	8	11	0	20	4	6	7	7	0	0	0	1	0	0	0	0	3	0
December	11.8	N.	34	SE.	1	13	15	6	3	2	7	10	6	0	13	4	14	11	7	0	0	0	8	6	0	0	4	0	0
Year	11.9	NE.	56	NE.	21	94	146	72	81	75	103	71	86	2	166	118	81	110	88	0	0	2	25	21	0	11	9	91	0

PEORIA, ILL.

[H_b=609 ft.; h_t=11 ft. h_r=4 ft.; h_a=45 ft.]

January	8.4	SW.	29	NW.	0	3	3	5	7	11	11	10	12	0	12	5	14	8	5	9	2	0	9	1	5	0	23	0	0
February	8.3	NW.	22	NW.	0	9	6	7	3	13	2	6	10	0	14	8	6	5	4	10	5	0	5	0	12	0	28	0	0
March	8.7	S.	28	W.	0	9	9	4	6	11	11	9	3	0	15	9	9	10	7	7	5	1	6	3	6	0	24	1	0
April	8.5	NW	24	W.	0	5	3	0	4	14	7	8	19	0	15	8	7	8	6	1	0	0	7	2	0	0	6	4	0
May	6.8	S.	21	NW.	0	6	8	4	8	13	14	3	5	1	24	3	4	4	4	0	0	0	1	0	0	0	9	3	0
June	6.0	SW.	20	SW.	0	3	6	3	8	15	14	3	7	1	13	16	1	15	9	0	0	0	0	0	16	0	16	0	0
July	5.5	S.	18	N.	0	7	9	4	13	14	6	2	5	2	17	10	4	11	9	0	0	0	1	0	20	0	12	1	0
August	5.5	S.	19	NE.	0	10	7	9	14	13	3	6	5	1	13	12	6	10	8	0	0	0	5	0	9	0	9	0	0
September	5.7	S.	14	SW.	0	6	4	1	11	16	3	8	9	2	12	7	11	13	10	0	0	0	16	0	0	0	0	5	0
October	6.5	S.	19	NW.	0	4	4	7	8	12	8	8	9	2	24	2	5	4	4	0	0	0	12	0	0	0	3	2	0
November	8.5	S.	28	SW.	0	6	2	5	12	12	9	6	8	0	14	6	10	15	11	0	0	0	5	0	0	0	11	3	0
December	7.8	NW.	24	SW.	0	5	4	6	7	8	8	12	11	1	7	6	18	12	7	16	7	0	9	2	12	0	31	0	0
Year	7.2	S.	29	NW.	0	73	65	55	101	152	96	75	103	10	178	92	95	115	87	43	19	1	76	8	35	54	122	55	1

PHILADELPHIA, PA.

[H_b=114 ft.; h_t=170 ft.; h_r=162 ft.; h_a=367 ft.]

January	12.7	W.	34	W.	3	4	11	4	0	3	10	23	7	0	8	8	15	9	8	4	0	0	6	0	2	0	12	0	0
February	13.5	NW.	32	NW.	3	16	4	2	0	5	10	4	15	0	12	7	9	9	6	11	8	0	3	0	16	0	28	0	0
March	13.9	SW.	40	SW.	2	14	8	3	6	14	11	4	2	0	7	11	13	14	12	6	5	0	8	4	1	0	18	0	0
April	11.8	S.	33	N.	2	5	8	4	4	15	9	4	11	0	12	9	9	10	8	0	0	0	2	0	0	0	0	2	0
May	12.6	SW.	39	SW.	4	10	12	8	2	5	18	3	4	0	10	12	9	10	8	0	0	0	3	0	2	0	3	0	0
June	12.0	SW.	35	SW.	1	5	4	3	6	10	21	4	7	0	8	17	5	9	6	0	0	0	2	0	5	0	4	0	0
July	10.6	SW.	38	N.	2	11	6	4	4	10	17	5	5	0	7	14	10	11	7	0	0	0	2	0	0	12	9	0	0
August	10.7	S.	31	E.	0	9	5	5	6	13	9	5	10	0	10	5	16	12	11	0	0	0	3	1	0	0	5	0	0
September	10.3	E.	36	NE.	1	7	10	12	6	10	4	4	7	0	6	8	16	15	14	0	0	0	3	1	0	0	0	4	0
October	12.4	N.	33	N.	1	10	10	3	5	4	12	8	10	0	14	6	11	5	5	1	0	0	5	1	0	0	0	1	0
November	13.4	NW.	44	S.	2	8	5	4	6	7	11	7	12	0	10	6	14	11	8	2	0	0	3	0	2	0	2	1	0
December	12.6	N.	43	S.	3	13	5	3	3	4	11	9	14	0	8	10	13	9	9	6	1	0	3	1	4	0	17	0	0
Year	12.2	SW.	44	S.	24	112	88	55	48	100	143	80	104	0	112	113	140	124	102	30	14	0	43	8	23	19	77	29	0

PHOENIX, ARIZ.

[H_b=55 ft.; h_t=10 ft.; h_r=81 ft.; h_a=107 ft.]

January	5.3	E.	20	E.	0	2	4	24	2	2	4	13	10	1	25	4	2	1	1	0	0	0	0	0	0	0	0	1	0
February	5.3	E.	21	NW.	0	1	6	14	2	5	5	4	18	1	11	9	8	2	2	0	0	0	0	0	0	0	0	2	0
March	6.1	E.	21	NE.	0	7	1	26	1	9	4	9	4	1	15	13	3	2	1	0	0	0	0	0	0	0	7	0	0
April	6.3	E.	24	SW.	0	4	2	20	3	5	6	7	12	1	24	4	2	1	1	0	0	0	0	0	0	0	19	0	1
May	6.4	E.	28	SW.	0	4	3	24	2	2	5	12	10	0	21	6	4	2	2	0	0	0	0	0	0	0	27	0	3
June	6.8	W.	28	NE.	0	6	1	19	2	5	3	16	8	0	25	4	1	1	0	0	0	0	0	0	0	0	27	0	1
July	7.1	W.	30	NW.	0	5	2	12	5	5	3	19	9	2	22	5	4	2	2	0	0	0	0	0	0	0	31	0	2
August	6.3	W.	34	S.	1	2	3	10	4	6	6	19	8	4	9	19	3	7	7	0	0	0	0	0	0	0	30	0	11
September	5.7	E.	21	SW.	0	4	5	18	3	4	8	12	4	2	24	5	1	2	2	0	0	0	0	0	0	0	24	0	1
October	5.5	E.	20	S.	0	3	0	25	5	2	3	13	11	0	21	7	3	0	0	0	0	0	0	0	0	0	19	0	0
November	5.2	E.	23	N.	0	7	4	21	2	2	8	10	6	0	18	7	5	3	2	0	0	0	1	0	0	0	4	0	0
December	4.9	E.	18	N.	0	3	6	20	6	3	8	11	4	1	17	5	9	3	3	0	0	0	3	2	0	0	2	0	0
Year	5.9	E.	34	S.	1	48	37	233	37	50	63	145	104	13	232	88	45	26	23	0	0	0	4	2	0	188	2	23	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PITTSBURGH, PA.

[ϕ=40°26′ N.; λ=80°00′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.21	29.59	28.38	31.9	35.9	34.6	49.8	26.7	33.8	58	−1	26	26	26	78	69	70	0.151	0.159	0.146	2.02	1.02	2.1	7.7	8.3	6.2	7.7
February	29.28	29.95	28.46	15.5	22.9	22.9	29.2	10.2	19.7	53	−11	10	13	12	79	65	62	.073	.082	.079	.85	.54	11.2	4.5	6.1	6.1	4.2
March	29.23	29.65	28.70	30.6	38.7	30.0	46.5	26.5	36.5	70	9	23	28	27	74	66	64	.136	.164	.152	2.15	.59	7.6	6.7	6.5	5.4	6.2
April	29.07	29.64	28.46	44.5	55.1	53.1	60.8	39.9	50.4	79	29	38	39	37	77	54	58	.237	.246	.230	2.41	1.48	.4	5.9	6.3	5.3	6.1
May	29.12	29.52	28.78	59.5	71.0	70.4	76.0	53.1	64.6	89	39	45	44	44	60	40	41	.320	.301	.307	.66	.35	.0	3.2	4.2	4.5	4.0
June	29.02	29.34	28.71	70.5	80.9	79.0	86.0	65.8	75.9	96	55	62	66	63	74	61	59	.561	.639	.580	4.45	1.56	.0	4.3	5.4	4.7	5.2
July	29.09	29.40	28.89	72.1	83.8	81.1	87.6	67.7	77.6	98	60	64	64	64	76	54	57	.598	.615	.597	3.25	1.30	.0	5.5	5.6	5.5	5.6
August	29.14	29.43	28.89	64.8	75.4	74.3	80.1	61.3	70.7	90	46	59	60	60	83	60	62	.523	.527	.528	7.47	1.50	.0	5.4	5.9	5.8	5.6
September	29.17	29.42	28.88	62.3	73.4	70.3	78.0	58.7	68.4	89	44	58	59	59	87	64	67	.494	.519	.504	3.78	1.99	.0	5.1	5.7	4.0	5.0
October	29.18	29.52	28.69	47.0	60.0	56.8	64.3	44.9	54.6	79	31	42	43	42	82	56	60	.274	.294	.286	.67	.35	T	4.3	4.2	3.9	4.6
November	29.20	29.57	28.70	42.8	50.1	47.5	53.5	40.2	46.8	73	25	35	36	35	74	61	63	.213	.229	.215	2.63	.90	1.7	6.1	7.7	7.6	7.4
December	29.19	29.61	28.31	30.7	34.8	33.6	39.1	26.7	32.9	61	12	25	25	24	76	66	66	.140	.157	.132	1.33	.37	1.2	8.2	8.0	8.2	8.3
Year	29.16	29.95	28.31	47.7	56.8	55.2	61.8	43.5	52.7	98	−11	41	42	41	77	60	61	.310	.326	.314	31.67	1.99	2.42	5.6	6.2	5.6	5.8

POCATELLO, IDAHO

[ϕ=42°52′ N.; λ=112°29′ W.]

January	25.65	26.05	25.18	30.8	37.0	35.9	40.3	27.9	34.1	50	15	25	26	27	79	63	68	0.138	0.141	0.147	0.73	0.29	2.5	7.2	6.7	6.3	7.0
February	25.54	25.87	25.14	34.2	44.1	45.0	49.6	31.7	40.6	61	24	28	31	32	80	61	60	.158	.173	.178	.84	.27	5.9	5.9	5.3	5.8	5.9
March	25.54	25.94	25.24	39.3	53.5	55.7	59.2	35.7	47.4	71	19	27	26	24	62	36	32	.151	.140	.134	.37	.14	.6	4.4	5.0	5.0	4.8
April	25.44	25.72	25.13	42.8	62.4	65.6	68.0	40.9	54.4	83	30	30	29	27	61	31	27	.166	.158	.148	.28	.08	.1	3.8	4.7	4.3	4.3
May	25.44	25.86	25.14	50.4	73.2	74.4	78.0	48.5	63.2	88	34	30	30	27	48	22	20	.170	.165	.149	T	T	.0	3.6	3.8	5.2	4.4
June	25.40	25.75	25.16	51.6	71.4	74.1	77.4	49.4	63.4	91	37	36	33	28	88	28	21	.215	.196	.157	.80	.33	.0	3.5	4.6	4.6	4.3
July	25.47	25.72	25.20	62.2	85.7	87.7	90.5	60.0	75.2	102	51	35	35	30	39	18	16	.218	.211	.181	.56	.47	.0	2.3	3.3	2.2	3.0
August	25.52	25.66	25.30	59.8	83.5	85.3	88.6	57.9	73.2	95	49	38	36	35	46	20	21	.237	.222	.222	.37	.31	.0	2.1	2.8	3.8	3.1
September	25.47	25.76	25.01	49.5	67.9	69.2	72.8	46.3	59.6	88	31	30	28	27	49	26	24	.165	.152	.151	.41	.40	T	3.4	3.5	4.0	3.9
October	25.54	25.94	25.12	44.8	61.3	59.8	67.2	41.8	54.5	84	32	32	33	31	62	38	36	.181	.190	.173	.65	.25	.0	3.2	4.9	4.7	4.6
November	25.50	25.79	25.08	36.8	46.8	44.5	50.5	33.9	42.2	69	23	29	30	30	75	57	59	.162	.169	.165	2.14	.62	10.4	5.9	6.3	5.9	6.1
December	25.59	25.94	25.12	27.2	32.1	31.3	35.4	23.2	29.3	47	10	22	24	23	80	70	70	.118	.125	.122	1.30	.37	13.9	6.2	7.3	6.5	6.9
Year	25.51	26.05	25.01	44.1	59.9	60.7	64.8	41.4	53.1	102	10	30	30	28	62	39	38	.173	.170	.160	8.45	.62	33.4	4.3	4.8	4.9	4.9

PORT ARTHUR, TEX.

[ϕ=29°52′ N.; λ=93°55′ W.]

January	30.09	30.44	29.74	51.5	59.0	----	62.8	48.7	55.8	80	30	48	49	---	90	72	---	0.361	0.380	----	8.50	3.34	0.0	6.1	5.4	----	6.4
February	30.10	30.57	29.65	50.0	59.3	----	63.3	46.8	55.0	75	32	46	47	---	88	65	---	.334	.331	----	3.39	1.68	.0	5.0	3.4	----	5.1
March	30.06	30.36	29.73	54.3	63.8	----	68.9	52.4	60.6	76	35	52	51	---	91	64	---	.401	.394	----	10.66	5.72	.0	4.3	3.5	----	4.5
April	29.96	30.21	29.63	64.6	73.5	----	76.2	63.3	69.8	83	53	60	60	---	86	64	---	.538	.540	----	3.32	1.59	.0	5.5	4.3	----	4.9
May	29.91	30.14	29.74	70.0	80.4	----	83.1	67.6	75.4	89	59	64	63	---	84	60	---	.620	.591	----	2.67	1.08	.0	4.0	3.8	----	4.0
June	29.88	30.11	29.61	79.9	87.6	84.0	90.1	76.1	83.1	96	71	72	70	72	78	57	67	.796	.738	0.774	2.20	1.04	.0	1.7	3.1	3.2	3.8
July	29.95	30.10	29.74	78.9	86.2	82.6	89.4	75.2	82.3	99	67	74	72	73	84	65	73	.834	.792	.807	4.62	1.19	.0	4.5	5.0	4.2	5.5
August	29.96	30.11	29.79	78.7	87.6	83.2	89.9	76.8	83.4	95	72	74	73	73	87	62	73	.849	.800	.823	5.26	2.21	.0	5.0	5.4	5.0	4.9
September	29.95	30.14	29.81	74.5	83.0	79.2	86.1	72.1	79.1	90	62	70	68	69	86	62	72	.741	.709	.719	4.59	1.54	.0	3.3	4.1	4.4	4.4
October	29.99	30.27	29.79	68.4	80.7	76.1	82.9	67.1	75.0	87	57	64	63	65	86	55	70	.605	.579	.629	.32	.32	.0	3.0	2.9	1.9	3.5
November	30.02	30.36	29.46	59.2	69.9	65.4	72.4	57.0	64.7	85	40	55	54	55	85	60	71	.451	.457	.462	5.77	1.31	.0	4.2	3.5	3.7	4.6
December	30.12	30.49	29.78	50.2	60.3	----	63.5	48.0	55.8	78	29	47	47	---	89	64	---	.348	.366	----	3.24	1.71	.0	4.2	4.6	----	5.5
Year	30.00	30.57	29.46	65.0	74.3	----	77.4	62.6	70.0	99	29	60	60	---	86	62	---	.573	.556	----	54.54	5.72	.0	4.2	4.1	----	4.8

PORTLAND, MAINE

[ϕ=43°39′ N.; λ=70°15′ W.]

January	29.94	30.66	28.81	18.3	24.7	24.9	31.7	15.4	23.6	48	−11	11	15	18	72	66	74	0.087	0.103	0.114	4.40	1.70	12.7	5.7	4.9	5.5	5.2
February	29.94	30.71	28.94	9.3	18.4	16.4	22.9	5.0	14.0	38	−18	0	6	6	63	58	62	.051	.064	.063	7.35	2.51	47.7	3.9	3.8	3.4	3.2
March	30.02	30.62	29.36	27.8	35.5	32.6	39.9	23.2	31.6	60	5	20	23	24	70	61	70	.117	.132	.137	3.86	.97	12.2	3.4	3.5	5.2	4.0
April	29.89	30.51	29.30	42.0	48.4	43.7	51.8	37.4	44.6	67	29	33	35	34	71	61	68	.192	.212	.195	4.62	1.61	.0	3.6	4.5	4.6	3.8
May	29.85	30.32	29.31	54.8	61.4	56.0	64.9	47.4	56.2	87	39	42	40	40	65	49	59	.278	.262	.263	2.20	1.37	.0	2.7	3.9	4.3	3.9
June	29.77	30.28	29.45	62.6	67.3	61.5	71.0	55.0	63.0	90	47	54	52	51	74	62	70	.422	.414	.385	3.51	1.15	.0	4.7	3.8	5.2	4.3
July	29.82	30.32	29.60	68.2	74.1	69.3	77.8	61.5	69.6	96	56	58	58	56	73	60	65	.500	.491	.467	3.35	1.33	.0	2.7	3.7	4.0	3.5
August	29.90	30.35	29.51	63.5	70.3	64.7	72.9	56.5	64.7	84	49	55	54	53	75	58	67	.444	.426	.412	1.10	.63	.0	3.1	3.7	3.8	3.2
September	30.02	30.41	29.61	61.2	65.8	62.0	68.6	57.0	62.8	81	48	58	59	57	88	80	85	.483	.510	.474	5.77	2.25	.0	5.3	5.5	5.1	5.9
October	29.86	30.47	29.27	44.6	52.7	48.6	54.9	40.8	47.8	71	30	37	40	38	75	64	68	.230	.262	.237	2.31	1.18	T	4.3	4.3	4.4	4.2
November	30.00	30.72	29.08	39.6	44.7	41.8	48.0	35.0	41.5	66	21	34	35	34	81	70	74	.216	.222	.211	3.11	.76	1.8	5.3	5.5	4.5	5.8
December	29.87	30.41	28.90	21.3	27.3	26.0	32.0	18.0	25.0	57	3	14	18	17	72	67	67	.098	.112	.105	3.90	1.13	10.8	4.1	4.7	4.3	4.2
Year	29.91	30.72	28.80	42.8	49.2	45.6	53.0	37.7	45.4	96	−18	35	36	36	73	63	69	.260	.268	.255	45.48	2.51	85.2	4.1	4.3	4.5	4.3

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PITTSBURGH, PA.

[H_b=842 ft.; h_t=164 ft.; h_r=167 ft.; h_a=410 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	11.7	W.	41	NW.	4	9	4	2	11	1	15	18	11	0	4	5	22	13	9	12	5	0	7	1	6	0	25	0	0
February	10.2	NW.	34	NW.	3	7	6	5	6	2	8	13	9	0	9	6	13	7	5	14	7	0	3	1	17	0	28	0	0
March	11.0	SW.	41	W.	2	7	5	6	8	4	12	7	13	0	10	7	14	12	11	11	5	0	6	2	5	0	21	1	0
April	10.5	W.	40	NW.	2	5	6	4	4	11	11	9	10	0	7	8	15	12	7	8	2	0	6	1	0	0	5	4	0
May	8.7	SW.	30	NW.	0	9	11	7	9	6	10	9	7	0	17	9	5	5	4	0	0	0	2	0	0	0	0	3	0
June	8.8	SW.	43	NW.	3	7	6	3	5	6	18	10	5	0	8	16	6	10	7	0	0	0	2	0	0	0	8	0	0
July	8.0	SW.	38	NW.	2	11	8	5	7	3	14	7	6	1	10	9	12	8	7	0	0	0	0	0	0	0	9	0	11	0
August	7.9	SW.	42	NW.	1	9	6	15	4	3	11	9	5	0	9	12	10	12	11	0	0	0	9	1	0	0	1	0	8	0
September	7.4	SE.	30	NW.	0	4	6	9	17	5	5	9	5	0	8	16	6	11	9	0	0	0	10	6	0	0	0	6	0
October	9.3	W.	37	NW.	1	5	7	5	8	6	15	8	8	0	14	5	12	7	4	2	2	0	9	6	0	0	1	0	8	0
November	9.6	SW.	32	SE.	1	3	1	6	13	7	13	8	9	0	3	12	15	13	8	5	3	1	3	1	0	0	8	2	0
December	11.2	W.	38	SW.	2	2	3	4	8	2	15	20	8	0	2	6	23	15	6	13	8	0	3	0	7	0	23	0	0
Year	9.5	SW.	43	NW.	21	69	69	71	100	50	147	127	96	1	101	111	153	125	88	65	32	1	60	19	35	18	111	43	0

POCATELLO, IDAHO

[H_b=4,477 ft.; h_t=60 ft.; h_r=52 ft.; h_a=68 ft.]

January	9.0	SE.	30	SW.	0	5	1	1	25	7	14	3	6	0	7	7	17	9	6	13	7	0	3	1	0	0	21	0	0
February	7.4	SE.	29	SW.	0	3	1	0	19	8	6	10	9	0	10	8	13	11	9	6	6	0	3	2	0	0	14	0	0
March	10.7	SW.	39	SW.	0	3	0	0	16	8	23	8	4	0	13	9	9	7	5	2	1	0	0	0	0	0	8	0	0
April	8.3	SE.	26	SW.	0	3	0	0	21	5	6	15	9	1	13	8	9	7	3	2	1	2	0	0	0	0	2	1	0
May	8.7	SE.	24	SW.	0	4	0	2	22	14	7	8	3	0	13	13	5	0	0	0	0	0	0	0	0	0	0	1	0
June	8.5	SE.	39	S.	1	4	1	1	16	13	5	12	8	0	14	9	7	9	4	0	0	1	0	0	0	1	0	4	0
July	8.7	SE.	38	SW.	1	3	0	1	25	4	6	11	9	0	17	12	2	2	2	0	0	0	0	0	0	19	0	7	0
August	8.0	SE.	27	S.	0	2	2	1	26	4	5	6	16	0	19	9	3	3	2	0	0	0	0	0	0	12	0	9	0
September	9.4	SE.	27	SW.	0	6	0	1	18	7	9	15	4	0	16	7	7	2	1	1	0	0	0	0	0	0	1	2	0
October	9.0	SE.	29	S.	0	4	0	1	26	10	5	12	4	0	13	11	7	6	4	0	0	1	0	0	0	0	1	1	0
November	9.8	SE.	31	SW.	0	1	0	3	25	16	11	2	2	0	8	9	13	14	11	15	9	0	2	0	2	0	9	0	0
December	10.8	SE.	37	SW.	2	3	0	4	19	9	20	2	5	0	5	8	18	14	10	16	10	0	4	1	8	0	28	0	0
Year	9.0	SE.	39	S.	4	41	5	15	261	105	117	104	81	1	148	107	110	84	57	55	34	4	12	4	10	32	84	25	0

PORT ARTHUR, TEX.

[H_b=34 ft.; h_t=59 ft.; h_r=51 ft.; h_a=66 ft.]

January	8.1	E.	30	NW.	0	2	6	10	4	0	3	2	2	2	8	9	14	11	8	0	0	0	4	5	0	0	2	4	0
February	9.9	E.	30	NE.	0	5	5	5	6	1	2	5	0	8	15	5	6	6	0	0	0	0	2	0	0	1	2	0	0
March	9.1	S.	27	NW.	0	1	5	6	4	5	3	1	6	0	13	11	7	10	8	0	0	0	0	3	0	0	0	4	0
April	8.6	S.	41	NW.	1	10	4	2	3	4	3	3	1	0	7	22	1	9	7	0	0	0	1	0	0	0	0	6	0
May	8.2	E.	24	NE.	0	12	2	6	2	1	2	1	4	1	13	17	1	7	7	0	0	0	0	0	0	0	0	3	0
June	7.9	S.	25	N.	0	5	4	3	9	31	1	4	2	1	16	13	1	7	6	0	0	0	0	0	0	0	0	5	0
July	8.5	S.	38	NE.	1	4	4	4	4	26	7	9	3	1	6	19	6	13	11	0	0	0	0	0	0	15	0	11	0
August	8.2	S.	34	NE.	1	7	6	5	5	25	6	5	2	1	9	18	4	12	9	0	0	0	0	0	0	20	0	7	0
September	7.1	E.	31	NW.	0	10	6	16	10	14	0	0	2	2	12	13	5	12	8	0	0	0	1	1	0	2	0	9	0
October	7.2	N.	25	N.	0	18	8	7	10	14	1	1	3	0	15	16	0	2	2	0	0	0	1	1	0	0	0	0	0
November	8.4	E.	32	NW.	1	11	9	12	8	9	3	3	4	1	11	14	5	9	9	0	0	0	0	2	0	0	0	5	0
December	7.8	S.	31	NW.	0	8	4	7	2	4	1	2	3	0	11	8	12	9	9	0	0	0	7	7	0	0	1	0	0
Year	8.2	S.	41	NW.	4	93	63	83	61	138	31	33	37	9	129	175	61	107	90	0	0	0	14	21	0	52	4	56	0

PORTLAND, MAINE

[H_b=103 ft.; h_t=82 ft.; h_r=75 ft.; h_a=117 ft.]

January	8.5	N.	35	S.	1	21	8	0	2	1	8	10	9	3	12	9	10	15	11	17	11	0	6	6	15	0	29	0	0
February	9.6	N.	34	NE.	1	17	3	0	1	3	0	12	12	2	17	6	5	10	8	10	9	0	2	2	20	0	28	0	4
March	9.4	N.	31	NW.	0	11	9	3	1	7	11	11	7	2	15	10	6	14	9	13	8	0	3	5	6	0	23	1	4
April	10.1	S.	44	SE.	2	6	7	4	3	11	15	3	9	2	15	8	7	12	8	9	0	0	1	2	0	0	3	2	2
May	9.0	SW.	28	SW.	0	16	3	2	2	10	20	4	3	2	19	6	6	9	5	0	0	0	5	5	0	0	3	3	0
June	8.8	SW.	24	NW.	0	5	3	13	2	10	13	0	9	5	15	9	6	16	13	0	0	0	9	8	0	1	0	9	0
July	7.9	S.	26	NW.	0	12	2	5	7	14	8	6	8	0	20	6	5	10	8	0	0	0	8	9	0	1	0	11	0
August	8.5	S.	25	NW.	0	15	2	1	0	10	20	3	10	1	16	11	4	7	3	0	0	0	2	5	0	0	0	3	0
September	7.9	S.	33	SE.	1	11	5	9	4	10	14	3	1	3	12	4	14	16	11	0	0	0	7	15	0	0	0	1	0
October	9.5	N.	27	N.	0	24	3	3	1	3	11	10	7	0	18	5	8	9	8	3	0	0	1	2	0	0	1	1	2
November	8.5	N.	35	S.	1	11	5	2	2	6	9	9	12	4	11	5	14	15	10	6	3	0	4	6	1	0	13	0	2
December	9.8	N.	48	SE.	5	24	2	0	2	8	7	12	12	0	15	7	9	12	10	12	6	0	1	1	18	0	27	0	3
Year	9.0	N.	48	SE.	11	173	52	42	27	88	142	83	99	24	185	86	94	145	104	61	37	0	49	66	60	2	124	31	17

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PORTLAND, OREG.

[ϕ=45°32′ N.; λ=122°41′ W.]

Month	Pressure			Temperature								Moisture																
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.06	30.42	29.47	44.9	48.7	49.0	51.5	42.3	46.9	59	34	41	42	42	86	78	79	0.256	0.268	0.275	6.02	1.18	0.0	8.7	8.0	8.2	8.5
February	29.92	30.33	29.54	44.6	52.1	54.4	56.4	42.5	49.4	62	33	40	40	41	84	66	62	.246	.254	.259	1.40	.60	.0	4.5	6.4	6.5	6.9
March	29.96	30.37	29.57	49.0	58.8	62.0	64.0	46.4	55.2	76	38	43	43	44	82	59	55	.280	.287	.293	5.18	2.15	.0	4.8	6.2	6.2	6.3
April	29.89	30.21	29.59	51.0	63.4	68.7	70.0	49.5	59.8	90	39	46	47	48	84	56	49	.318	.323	.334	2.46	.68	.0	5.7	5.5	5.6	5.8
May	29.86	30.26	29.48	53.5	64.9	69.1	70.8	52.1	61.4	90	43	48	48	48	82	56	51	.338	.340	.347	1.60	.53	.0	7.6	7.0	6.1	7.0
June	29.86	30.19	29.47	54.9	67.8	72.9	74.0	54.1	64.0	88	47	48	50	50	79	53	46	.342	.357	.368	.96	.19	.0	5.4	5.5	5.2	5.5
July	29.88	30.11	29.65	57.9	69.9	75.6	76.8	57.1	67.0	88	52	51	50	52	78	51	44	.375	.370	.389	.11	.10	.0	6.0	4.9	3.2	4.8
August	29.88	30.13	29.63	60.1	72.1	79.5	80.5	58.5	69.5	95	53	55	55	55	83	56	45	.433	.430	.436	.33	.23	.0	5.6	4.1	2.5	4.3
September	29.87	30.18	29.42	55.3	66.8	70.6	72.3	53.2	62.8	95	39	50	48	49	83	53	49	.363	.346	.358	1.32	.67	.0	5.6	4.7	4.5	5.6
October	29.85	30.22	29.27	52.2	61.6	62.7	65.5	49.2	57.4	85	42	48	48	48	85	64	60	.334	.347	.342	5.30	1.30	.0	7.4	6.5	6.9	6.9
November	29.81	30.22	29.07	48.4	52.1	51.2	54.9	45.9	50.3	68	39	45	45	45	88	77	81	.299	.300	.303	10.47	1.49	.0	7.6	8.6	8.8	8.8
December	30.00	30.43	29.27	42.4	45.5	45.2	48.1	40.1	44.1	57	34	38	38	38	83	76	78	.229	.232	.235	10.83	3.01	T	8.2	8.5	7.8	8.1
Year	29.90	30.43	29.07	51.3	60.3	63.4	65.4	49.2	57.3	95	33	46	46	47	83	62	58	.318	.321	.328	45.98	3.01	T	6.4	6.3	6.0	6.5

PROVIDENCE, R. I.

[ϕ=41°50′ N.; λ=71°25′ W.]

January	29.90	30.50	28.86	27.7	33.4	31.4	37.9	23.3	30.6	57	9	20	21	23	70	61	69	0.119	0.133	0.134	3.80	1.44	0.1	5.6	5.2	4.1	5.4
February	29.90	30.66	28.75	14.6	22.3	19.1	26.7	8.1	17.4	45	−17	4	7	7	60	51	57	.063	.070	.066	3.38	1.18	22.9	5.0	4.1	2.9	4.4
March	29.98	30.54	29.35	33.1	41.7	36.0	45.1	26.7	35.9	66	8	23	23	28	65	49	72	.139	.142	.159	3.82	1.50	7.3	4.3	3.9	5.6	4.7
April	29.83	30.52	29.11	47.1	55.0	48.4	58.4	39.6	49.0	75	30	34	34	35	63	47	62	.210	.202	.214	4.00	1.42	.0	4.0	3.8	3.6	3.8
May	29.82	30.38	29.34	59.7	67.3	61.2	71.6	50.8	60.9	87	39	44	42	45	60	45	59	.311	.295	.324	3.50	1.48	.0	5.4	4.2	5.0	4.7
June	29.73	30.22	29.35	67.7	74.7	68.6	78.4	59.0	68.7	96	48	55	56	56	66	54	68	.447	.457	.469	3.33	1.40	.0	4.0	4.4	5.3	4.3
July	29.78	30.22	29.57	73.7	80.1	74.8	84.4	65.4	74.9	96	55	61	59	62	66	52	67	.553	.533	.577	.82	.68	.0	4.4	4.8	4.3	4.4
August	29.86	30.28	29.55	67.1	73.8	68.0	76.9	59.2	68.0	87	49	56	53	56	70	51	68	.471	.429	.470	2.34	.70	.0	4.6	4.2	3.2	4.5
September	29.95	30.34	29.57	64.0	70.9	66.1	73.7	59.1	66.4	84	47	59	59	61	84	69	83	.504	.519	.537	4.13	1.20	.0	8.0	6.8	5.6	7.0
October	29.82	30.33	29.32	47.3	55.1	50.9	58.3	42.4	50.4	73	34	38	37	41	71	54	69	.236	.236	.270	2.26	.87	T	3.8	5.1	3.9	4.5
November	29.95	30.54	29.18	43.7	50.7	45.8	53.2	37.9	45.6	68	22	37	38	37	77	63	72	.238	.249	.241	3.88	1.88	T	5.1	5.3	5.5	5.4
December	29.84	30.32	28.93	26.8	32.4	31.9	36.8	22.8	29.8	64	5	17	16	18	64	51	58	.111	.112	.114	3.10	1.34	.8	4.7	5.2	4.4	5.0
Year	29.86	30.66	28.75	47.7	54.8	50.1	58.4	41.2	49.8	96	−17	37	37	39	68	54	67	.284	.281	.298	38.36	1.88	31.1	4.9	4.8	4.5	4.8

PUEBLO, COLO.

[ϕ=38°18′ N.; λ=104°36′ W.]

January	25.33	25.70	24.94	29.0	48.6	46.7	54.3	24.0	39.2	69	12	17	19	16	61	31	31	0.091	0.102	0.092	T	T	T	2.5	2.6	3.5	3.1
February	25.35	25.70	24.92	29.2	44.2	43.6	50.6	25.4	38.0	76	9	22	25	26	74	52	55	.117	.135	.143	1.23	.64	7.0	4.3	5.4	6.0	5.3
March	25.33	25.76	24.89	33.2	53.7	55.2	61.2	29.8	45.4	76	13	23	22	22	67	35	34	.122	.120	.121	.38	.21	3.5	4.2	5.8	6.0	5.4
April	25.28	25.62	24.75	41.7	62.8	64.0	68.8	38.9	53.8	85	27	28	26	24	61	27	27	.157	.139	.137	.60	.40	1.7	3.3	4.3	6.1	4.9
May	25.29	25.71	24.93	53.4	77.7	76.2	82.6	51.5	67.0	93	37	37	33	33	56	23	24	.223	.194	.192	.47	.24	.0	3.8	4.6	7.0	5.2
June	25.22	25.56	24.89	60.1	81.9	85.2	88.7	58.0	73.4	98	44	39	36	30	49	23	18	.247	.233	.182	.14	.08	.0	2.1	3.0	4.4	3.8
July	25.33	25.63	25.10	67.1	91.2	87.7	95.6	64.5	80.0	102	54	46	43	44	50	21	26	.321	.288	.295	1.85	1.58	.0	2.0	3.3	7.3	4.5
August	25.37	25.58	25.20	64.7	85.8	84.6	90.9	63.7	77.3	100	50	51	49	46	62	29	29	.376	.348	.319	.40	.17	.0	3.9	3.1	7.2	4.8
September	25.30	25.68	25.02	51.8	73.0	72.3	80.0	48.1	64.0	91	33	36	35	34	59	29	30	.220	.209	.207	34	.16	.0	2.9	3.1	5.1	4.0
October	25.36	25.84	24.76	46.4	70.4	67.8	75.4	43.0	59.2	91	27	26	26	26	46	21	24	.142	.144	.148	.01	.01	.0	2.9	2.7	3.5	3.2
November	25.28	25.77	24.80	34.6	55.8	51.2	59.4	30.9	45.2	81	14	20	23	23	56	30	38	.106	.122	.127	.23	.16	T	2.7	3.9	4.3	3.9
December	25.33	25.71	24.86	25.7	44.9	41.7	50.2	20.2	35.2	69	10	16	19	20	67	37	43	.087	.101	.106	.13	1.3	1.3	2.4	3.5	3.5	3.5
Year	25.31	25.84	24.75	44.7	65.8	64.7	71.5	41.5	56.5	102	9	30	30	29	59	30	32	.184	.178	.172	5.78	1.58	13.5	3.1	3.8	5.3	4.3

RALEIGH, N. C.

[ϕ=35°45′ N.; λ=78°37′ W.]

January	29.76	30.09	29.00	39.7	49.4	47.9	54.9	37.5	46.2	74	8	31	36	35	73	61	64	0.205	0.234	0.232	1.77	0.71	0.0	5.9	5.3	4.8	5.7
February	29.77	30.47	29.10	28.9	38.0	37.2	43.8	25.9	34.8	70	8	21	26	25	71	62	62	.119	.148	.143	3.09	.95	.6	4.7	5.2	4.3	5.6
March	29.76	30.30	29.16	41.2	52.2	50.5	59.0	37.4	48.2	79	20	34	40	40	76	66	68	.214	.271	.269	5.03	1.08	10.5	6.4	6.1	4.8	5.9
April	29.60	30.17	28.92	53.9	66.6	63.4	71.7	49.2	60.4	88	35	44	50	47	70	57	58	.308	.386	.342	3.09	1.71	.0	6.0	5.7	4.8	5.8
May	29.61	30.05	29.13	62.6	73.8	70.3	77.9	57.5	67.7	91	45	55	59	57	77	63	66	.446	.517	.480	4.68	2.22	.0	6.2	6.0	4.8	5.9
June	29.55	29.86	29.26	74.8	84.3	79.8	88.8	68.9	78.8	98	60	67	68	69	79	61	72	.676	.703	.716	5.05	1.68	.0	5.2	5.5	5.3	5.3
July	29.59	29.84	29.34	76.3	85.9	80.3	89.8	71.7	80.8	98	68	71	72	72	84	64	77	.760	.794	.798	6.37	1.96	.0	7.1	7.3	7.4	6.8
August	29.65	29.97	29.45	73.7	83.4	77.2	86.3	69.9	78.1	94	66	69	69	69	84	62	78	.707	.718	.720	6.51	2.81	.0	7.5	8.3	7.9	7.6
September	29.66	29.97	29.36	69.1	78.2	72.8	81.2	66.3	73.8	91	55	66	67	68	90	69	84	.647	.660	.698	6.12	2.62	.0	5.2	8.0	5.5	7.4
October	29.68	29.94	29.24	54.0	67.8	63.0	70.7	50.6	60.6	81	34	46	50	51	75	54	67	.328	.374	.395	.61	.22	.0	2.5	2.9	2.1	2.7
November	29.74	30.06	29.29	47.3	59.8	56.0	63.8	43.9	53.8	80	23	40	42	43	76	55	65	.278	.296	.310	8.04	5.21	T	3.7	4.7	3.6	4.8
December	29.72	30.09	29.06	37.5	46.4	43.7	51.1	34.0	42.6	69	18	29	33	34	71	61	69	.174	.200	.199	2.32	1.45	.4	6.3	5.6	4.9	5.8
Year	29.67	30.47	28.92	54.9	65.5	61.9	69.9	51.1	60.5	98	8	48	51	51	77	61	69	.405	.442	.441	52.68	5.21	11.5	5.6	5.9	5.0	5.8

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

PORTLAND, OREG.

[H_b=153 ft.; h_t=68 ft.; h_r=63 ft.; h_a=106 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp. 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	6.8	SE.	24	SW.	0	4	1	4	18	5	14	1	15	0	3	2	26	21	17	0	0	0	9	1	0	0	0	0	0
February	5.7	SE.	19	SW.	0	4	2	11	15	6	3	4	11	0	6	5	17	10	4	0	0	0	8	4	0	0	0	0	0
March	6.3	NW.	21	E.	0	6	4	5	15	1	8	7	16	0	8	9	14	14	12	0	0	0	9	3	1	0	0	0	1
April	5.7	NW.	21	SW.	0	6	3	1	4	3	8	2	33	0	11	6	13	10	9	0	0	1	9	0	0	0	0	0	2
May	6.5	NW.	18	NE.	0	4	2	3	7	7	9	11	19	0	6	5	20	14	10	0	0	0	3	1	0	0	0	0	0
June	6.6	NW.	18	SW.	0	10	1	2	6	6	5	5	25	0	10	7	13	8	5	0	0	1	0	0	0	0	0	0	2
July	6.7	NW.	18	NW.	0	9	1	3	4	7	4	2	32	0	12	10	9	2	1	0	0	0	0	0	0	0	0	0	0
August	6.3	NW.	15	NW.	0	7	0	2	6	2	5	2	37	1	15	10	6	3	2	0	0	0	0	0	0	5	0	0	0
September	5.9	NW.	17	NW.	0	8	4	2	9	3	3	2	29	0	7	14	9	7	5	0	0	0	5	1	0	2	0	0	0
October	6.6	NW.	24	S.	0	0	1	9	11	10	4	4	25	0	8	6	17	15	12	0	0	0	7	1	0	0	0	3	0
November	7.2	SE.	23	S.	0	1	1	3	20	13	13	5	3	1	2	3	25	24	23	0	0	1	7	3	0	0	0	0	0
December	8.3	S.	23	E.	0	2	0	10	15	20	5	4	6	0	3	3	25	23	19	2	0	0	3	0	0	0	0	0	0
Year	6.6	NW.	24	SW.	0	61	20	55	130	83	81	49	249	2	91	80	194	151	119	2	0	3	45	12	0	7	0	8	0

PROVIDENCE, R. I.

[H_b=160 ft.; h_t=215 ft.; h_r=211 ft.; h_a=251 ft.]

January	12.5	NW.	49	NW.	8	6	5	1	3	2	12	9	24	0	9	12	10	8	7	7	1	0	8	0	8	0	23	1	0
February	14.1	NW.	47	NW.	4	7	0	2	1	3	8	4	31	0	11	10	7	10	9	13	8	0	4	0	17	0	28	0	0
March	11.7	NW.	37	SW.	2	9	8	1	2	14	12	6	9	1	14	7	10	13	12	7	5	0	4	1	4	0	22	0	0
April	11.6	NW.	34	NW.	1	2	3	6	6	12	11	3	17	0	19	3	8	10	7	0	0	0	7	0	0	0	2	0	0
May	11.0	NW.	34	NW.	2	4	4	1	7	11	10	5	17	0	14	8	9	11	10	0	0	0	6	0	0	0	0	4	0
June	10.9	NW.	32	NW.	1	2	5	4	5	7	13	6	18	0	16	8	6	12	10	0	0	1	5	0	0	4	0	8	0
July	9.4	NW.	4	NW.	1	7	0	3	2	12	21	4	16	1	12	12	7	3	3	0	0	0	4	0	0	4	0	4	0
August	9.7	NW.	37	NW.	1	9	4	4	1	11	13	5	15	0	17	3	11	8	7	0	0	0	4	1	0	0	0	3	0
September	9.6	SE.	43	SE.	2	12	8	4	6	12	4	3	10	1	6	8	16	17	14	0	0	0	18	1	0	0	0	2	0
October	11.3	NW.	38	NW.	4	12	2	4	2	7	6	9	20	0	14	9	8	11	8	3	1	0	0	1	0	0	0	0	0
November	11.3	NW.	38	NW.	2	7	3	2	1	15	7	4	21	0	10	10	10	12	7	2	0	0	12	3	0	0	9	0	0
December	12.8	NW.	51	NW.	6	2	2	1	4	4	4	9	35	1	14	7	10	8	6	5	2	0	8	0	12	0	25	0	0
Year	11.3	NW.	51	NW.	34	79	44	35	40	113	121	67	227	4	156	97	112	125	100	37	17	2	87	7	41	8	109	22	0

PUEBLO, COLO.

[H_b=4,685 ft.; h_t=80 ft.; h_r=72 ft.; h_a=86 ft.]

January	7.0	N.	30	NW.	0	19	7	6	10	5	1	8	6	0	17	13	1	0	0	1	0	0	1	1	0	0	30	0	0
February	6.4	N.	27	N.	0	13	6	14	12	4	2	2	3	0	10	10	8	6	5	6	3	0	1	0	2	0	24	0	0
March	7.7	N.	40	N.	3	20	8	6	16	2	5	4	1	0	7	19	5	5	3	7	4	0	1	1	1	0	20	1	0
April	7.1	NW.	25	S.	0	5	5	11	12	4	2	3	18	0	10	16	4	6	2	2	2	0	0	0	0	0	4	1	0
May	7.7	NW.	30	SW.	0	13	8	12	7	0	0	7	15	0	6	22	3	5	4	0	0	1	0	0	0	10	9	4	0
June	8.0	E.	32	S.	1	10	2	8	5	8	8	8	11	0	16	11	3	2	2	0	0	0	0	0	0	15	9	3	0
July	7.3	NW.	37	NW.	3	5	5	9	2	3	5	9	24	0	11	18	2	7	4	0	0	0	0	0	0	27	0	9	0
August	7.3	E.	30	W.	0	5	5	19	4	5	5	5	14	0	11	17	3	8	4	0	0	0	0	0	0	20	0	8	0
September	7.1	E.	27	NE.	0	6	4	17	10	1	6	6	9	1	12	15	3	5	4	0	0	0	0	0	0	6	0	3	0
October	7.5	NW.	30	SW.	0	10	5	23	2	2	3	4	13	0	19	11	1	1	0	0	0	0	0	0	0	1	2	0	0
November	6.7	NW.	35	NW.	2	6	2	9	7	0	1	8	25	2	13	14	3	2	2	3	0	0	0	0	0	15	0	0	0
December	6.8	NW.	31	NW.	0	2	4	15	5	5	2	11	17	1	16	13	2	1	1	3	1	0	1	1	0	0	29	0	0
Year	7.2	NW.	40	N.	9	114	61	149	92	39	40	75	156	4	148	179	38	48	31	22	10	1	5	3	3	79	124	29	0

RALEIGH, N. C.

[H_b=376 ft.; h_t=103 ft.; h_r=94 ft.; h_a=146 ft.]

January	9.0	W.	37	NW.	1	8	10	3	1	1	11	20	7	1	11	6	14	6	5	0	0	0	5	3	1	0	5	0	0
February	9.9	NE.	30	NE.	0	8	16	6	2	1	9	4	10	0	9	7	12	9	8	3	1	0	3	1	3	0	23	1	0
March	10.1	SW.	30	N.	0	12	18	1	2	6	19	2	2	0	11	5	15	15	14	5	4	0	1	0	1	0	9	1	0
April	9.7	SW.	27	NW.	0	7	10	6	3	10	13	7	4	0	7	12	11	10	8	0	0	0	1	0	0	0	3	0	0
May	9.4	SW.	25	SW.	0	8	16	5	5	8	10	9	1	0	9	7	15	13	11	0	0	0	1	0	0	3	0	5	0
June	8.0	SW.	32	NW.	1	1	4	3	3	14	17	14	4	0	9	11	10	11	9	0	0	0	2	1	0	15	0	8	0
July	7.6	SW.	35	NE.	1	3	3	8	4	12	24	5	3	0	2	15	14	11	7	0	0	0	0	0	0	15	0	10	0
August	7.6	SW.	30	NW.	0	3	12	3	5	7	23	8	1	0	1	10	20	10	9	0	0	0	0	0	0	6	0	7	0
September	7.6	NE.	22	SE.	0	12	14	8	7	5	6	2	4	2	4	9	17	14	10	0	0	0	10	5	0	1	0	7	0
October	8.7	NE.	32	NW.	1	10	18	6	0	1	7	12	8	0	23	3	5	5	4	0	0	0	1	0	0	0	0	0	0
November	9.8	SW.	27	NE.	0	9	6	8	6	3	12	11	5	0	12	8	10	11	9	1	0	0	7	4	0	0	4	2	0
December	8.8	NW.	27	NW.	0	7	8	8	4	4	13	7	10	1	10	7	14	12	8	3	3	0	4	3	1	0	12	0	0
Year	8.8	SW.	37	NW.	4	88	135	65	42	72	164	101	59	4	108	100	157	127	102	12	8	0	35	17	6	40	53	44	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

RAPID CITY, S. DAK.

[ϕ=44°04′ N.; λ=103°12′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	26.61	27.05	26.12	27.9	40.0	36.0	45.7	21.5	33.6	63	3	20	22	23	73	52	60	0.109	0.120	0.123	0.19	0.13	0.8	3.6	5.8	5.3	5.5
February	26.70	27.05	26.37	25.6	39.0	37.2	44.9	18.6	31.8	69	−19	18	22	22	73	54	58	.105	.121	.125	.41	.18	5.8	3.5	3.6	4.6	3.7
March	26.66	27.23	26.16	27.9	40.5	39.1	46.5	21.3	33.9	74	3	21	26	25	78	60	61	.118	.142	.143	.64	.20	6.6	5.4	6.2	5.7	5.7
April	26.61	27.05	26.12	39.9	56.0	57.4	60.8	35.9	48.4	83	19	26	32	29	58	43	38	.139	.182	.164	1.17	.67	8.8	2.8	3.8	4.5	3.7
May	26.57	27.00	26.16	57.6	74.7	76.6	80.6	52.5	66.6	97	32	37	42	40	49	34	29	.226	.268	.251	.44	.23	.0	3.6	4.2	4.1	3.9
June	26.54	26.91	26.22	58.9	72.4	74.8	78.3	54.9	66.6	97	44	48	51	50	70	50	46	.340	.384	.363	3.45	1.49	.0	4.8	4.3	6.0	4.9
July	26.60	26.91	26.27	66.6	84.4	86.0	90.5	62.8	76.6	104	46	52	54	53	60	38	34	.391	.427	.407	.59	.27	.0	3.9	3.9	4.6	3.9
August	26.67	26.90	26.40	62.7	79.9	80.2	85.4	58.0	71.7	102	42	46	50	48	57	37	36	.322	.370	.350	.43	.12	.0	3.4	3.8	3.7	3.5
September	26.61	27.08	26.22	47.7	62.8	62.4	69.4	41.8	55.6	94	19	35	40	39	65	48	46	.209	.257	.245	.38	.14	0.4	5.3	4.7	4.7	4.8
October	26.64	27.21	26.05	47.4	63.4	57.5	67.3	41.7	54.5	89	25	34	38	36	63	41	47	.200	.232	.218	1.67	1.44	.0	4.3	3.8	2.9	3.3
November	26.59	27.14	26.06	35.2	50.1	42.8	54.0	31.4	42.7	74	18	25	30	29	67	50	61	.133	.168	.158	.39	.19	T	3.7	4.3	3.8	4.7
December	26.61	27.10	26.15	24.3	33.5	30.8	40.1	18.0	29.0	63	−11	15	21	20	68	62	67	.092	.115	.110	.44	.27	8.6	4.5	5.2	4.5	5.2
Year	26.62	27.23	26.05	43.5	58.1	56.7	63.6	38.2	50.9	104	−19	31	36	34	65	47	49	.199	.232	.221	10.20	1.49	31.0	4.1	4.5	4.5	4.4

READING, PA.

[ϕ=40°20′ N.; λ=75°58′ W.]

January	29.76	30.24	28.81	31.5	36.5	35.8	40.7	27.5	34.1	58	6	24	25	26	71	64	68	0.141	0.149	0.153	2.64	0.96	0.2	6.4	6.4	5.8	6.1
February	29.82	30.54	28.91	15.9	23.1	23.6	30.5	11.8	21.2	49	−11	6	9	12	64	53	60	.062	.075	.084	1.96	.85	16.6	5.0	4.3	5.1	4.6
March	29.80	30.36	29.21	33.0	41.7	39.6	46.8	27.7	37.2	71	12	24	27	28	70	57	64	.139	.157	.163	4.27	1.50	10.0	5.4	5.8	5.2	5.8
April	29.64	30.33	29.05	46.4	55.4	53.5	61.0	40.6	50.8	78	31	36	37	38	68	52	59	.215	.228	.241	2.56	.93	T	5.3	5.6	4.4	5.0
May	29.65	30.16	29.30	60.9	70.5	66.5	74.8	54.3	64.6	93	40	48	50	51	66	50	60	.360	.373	.393	3.03	1.18	.0	5.5	5.1	6.4	5.4
June	29.56	30.05	29.08	70.5	78.9	76.4	83.1	64.8	74.0	99	55	61	60	61	73	54	62	.548	.530	.557	2.02	.71	.0	6.3	5.6	5.3	5.5
July	29.61	29.99	29.40	73.6	81.9	77.8	86.2	67.6	76.9	97	56	65	65	66	76	59	68	.629	.636	.640	6.53	2.69	.0	5.6	5.8	5.7	5.1
August	29.69	30.08	29.42	66.7	74.3	71.4	78.4	61.8	70.1	87	47	59	58	59	77	59	67	.515	.503	.522	2.11	.69	.0	5.7	5.7	5.7	5.2
September	29.74	30.12	29.42	63.4	71.1	68.3	75.1	59.5	67.3	84	48	59	60	60	87	69	77	.519	.530	.535	8.03	3.62	.0	7.4	7.1	5.0	6.6
October	29.71	30.07	29.26	49.4	57.8	55.0	62.8	44.7	53.8	77	33	40	40	42	71	53	62	.261	.263	.276	1.61	.79	T	5.3	5.1	3.7	5.1
November	29.78	30.26	29.15	44.6	51.4	49.6	55.9	41.2	48.6	76	26	36	37	39	73	60	67	.232	.244	.253	2.85	1.09	T	6.5	6.0	5.5	6.2
December	29.73	30.15	28.90	30.4	35.0	34.7	39.8	26.9	33.4	67	13	23	23	23	72	60	61	.134	.131	.127	2.30	.70	.9	7.0	7.0	5.8	6.7
Year	29.71	30.54	28.81	48.9	56.5	54.4	61.3	44.0	52.7	99	−11	40	41	42	72	58	65	.313	.318	.329	39.91	3.62	27.7	6.0	5.8	5.3	5.6

REDDING, CALIF.

[ϕ=40°35′ N.; λ=122°24′ W.]

January	.....	29.71	28.86	45.3	.....	56.3	58.8	41.9	50.4	78	32	38	...	41	79	65	62	0.235	.....	0.263	5.30	3.84	0.0	4.0	.....	6.6	.....
February	.....	29.65	29.00	46.9	.....	57.8	59.6	44.9	52.2	72	35	41	...	42	82	67	62	.264	.....	.279	5.22	2.19	.0	5.9	.....	6.9	.....
March	.....	29.54	28.92	54.6	.....	71.9	73.8	52.3	63.0	87	43	41	...	42	64	42	40	.272	.....	.283	1.82	1.01	.0	5.0	.....	7.1	.....
April	.....	29.46	28.89	56.3	.....	75.5	77.4	54.1	65.8	88	43	42	...	41	60	39	34	.270	.....	.267	4.91	2.02	.0	3.0	.....	5.4	.....
May	.....	29.45	28.89	59.6	.....	78.0	79.8	57.9	68.8	96	44	45	...	42	63	39	36	.309	.....	.277	.67	.17	.0	4.7	.....	5.6	.....
June	.....	29.38	28.85	63.4	.....	84.7	86.0	62.5	74.2	110	51	45	...	42	55	31	27	.311	.....	.278	.74	.27	.0	3.4	.....	4.4	.....
July	.....	29.30	28.89	68.8	.....	93.5	94.2	67.2	80.7	105	58	44	...	38	43	21	15	.291	.....	.232	T	T	.0	.5	.....	.6	.....
August	.....	29.28	28.94	70.2	.....	96.1	97.1	68.1	82.6	106	62	44	...	38	41	22	15	.300	.....	.239	T	T	.0	1.3	.....	2.2	.....
September	29.08	29.38	28.86	66.7	86.3	89.6	90.9	64.4	77.6	105	44	38	36	33	37	19	16	.232	0.220	.195	.05	.05	.0	.6	1.9	1.3	1.5
October	29.22	29.49	28.88	56.8	71.8	73.3	75.7	54.2	65.0	98	42	40	40	39	59	38	37	.258	.255	.255	2.96	1.78	.0	4.2	5.3	5.6	5.1
November	29.29	29.59	28.82	49.5	57.5	57.6	60.8	46.5	53.6	79	40	43	43	44	83	63	65	.284	.286	.301	8.34	2.46	.0	6.4	7.1	7.4	7.6
December	29.39	29.72	28.99	44.0	52.5	52.4	56.0	41.2	48.6	72	28	34	35	36	73	59	60	.202	.210	.217	3.42	1.74	.0	4.2	6.1	5.6	6.3
Year	.....	29.72	28.80	56.8	.....	73.9	75.8	54.6	65.2	110	28	41	...	40	62	42	39	.269	.....	.257	33.43	3.84	.0	3.6	.....	4.9	.....

RENO, NEV.

[ϕ=39°32′ N.; λ=119°49′ W.]

January	25.65	25.96	25.18	30.8	45.9	48.7	52.2	27.0	39.6	64	20	24	28	29	75	51	47	.129	0.156	0.158	0.45	0.52	T	1.8	2.8	4.4	2.8
February	25.52	25.81	25.17	33.3	49.1	50.9	54.1	30.0	42.0	66	22	27	29	29	77	46	44	.148	.157	.160	.31	.21	T	5.8	4.9	6.2	5.6
March	25.56	25.84	25.22	40.2	62.1	63.8	67.7	37.1	52.4	76	28	30	30	31	68	31	32	.171	.171	.178	.09	.06	0.0	3.1	4.7	6.1	4.5
April	25.48	25.66	25.23	42.0	66.2	67.4	70.8	39.2	55.0	81	26	30	27	28	62	24	24	.168	.146	.156	.95	.95	T	1.8	2.7	4.2	2.5
May	25.45	25.74	25.21	46.9	69.5	70.2	74.9	45.4	60.2	88	35	35	31	34	64	27	29	.204	.177	.202	1.35	.83	.0	3.2	3.6	4.3	3.8
June	25.42	25.67	25.15	49.6	71.0	72.1	76.7	48.3	62.5	95	38	39	36	37	68	36	31	.244	.218	.223	.62	.20	.0	3.3	3.9	4.3	3.8
July	25.49	25.66	25.31	55.8	85.0	85.1	88.9	54.4	71.6	100	42	37	33	34	50	16	17	.225	.196	.204	T	T	.0	.7	1.0	1.1	.8
August	25.51	25.66	25.32	57.5	85.5	86.9	91.3	55.3	73.3	97	49	36	33	36	46	17	17	.215	.196	.210	.19	.19	.0	1.5	1.4	2.0	1.6
September	25.48	25.69	25.07	49.5	75.1	76.2	79.8	47.0	63.4	95	29	34	31	32	56	22	22	.194	.177	.184	.13	.13	T	.6	1.5	1.9	1.4
October	25.54	25.84	25.20	43.0	63.2	64.1	68.6	39.5	54.0	86	27	32	32	33	64	35	35	.178	.184	.190	1.09	.73	.0	4.2	3.6	4.2	4.0
November	25.51	25.75	25.11	37.6	52.2	52.1	56.4	33.4	44.9	74	20	28	31	32	70	45	48	.156	.172	.179	.38	.20	T	3.4	5.9	6.1	5.2
December	25.59	25.88	25.10	28.3	41.7	42.1	46.5	24.1	35.3	60	15	22	27	28	75	56	56	.116	.146	.151	.27	.20	1.1	3.0	4.6	3.6	4.0
Year	25.52	25.96	25.07	42.9	63.9	65.0	69.0	40.1	54.5	100	15	31	31	32	65	33	34	.179	.175	.183	5.83	.95	1.1	2.7	3.4	4.0	3.3

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

RAPID CITY, S. DAK.

[H_b=3,259 ft.; h_t=50 ft.; h_r=43 ft.; h_a=58 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	32° Minimum temperature or below	Electricity: Thunderstorms	Aurora
	Mi.		Mi.																										
January	8.4	W.	33	N.	1	13	3	1	4	2	3	17	14	5	5	18	8	3	2	10	3	0	4	0	3	0	26	0	0
February	7.5	W.	35	NW.	1	8	3	2	6	6	1	11	18	3	16	5	7	5	4	7	5	0	5	0	6	0	25	0	1
March	9.0	N.	32	NW.	2	13	11	3	6	8	0	9	12	6	9	12	10	10	6	14	8	0	1	0	7	0	25	0	0
April	9.5	N.	28	N.	0	18	5	2	6	3	1	19	6	0	16	11	3	5	4	4	3	0	1	1	1	0	11	0	0
May	9.0	N.	27	W.	0	17	4	6	4	8	0	14	8	1	13	15	3	4	3	0	0	1	0	0	0	10	1	3	0
June	8.0	N.	33	W.	1	9	9	3	5	9	3	12	10	0	12	10	8	12	9	0	0	1	3	0	0	3	0	11	0
July	7.9	N.	28	N.	0	9	7	5	7	9	2	17	6	0	15	15	1	8	3	0	0	1	0	0	0	18	0	10	0
August	8.4	W.	30	NW.	0	12	6	3	2	10	4	19	5	1	19	7	5	10	6	0	0	0	0	0	0	9	0	12	0
September	9.2	N.	28	N.	0	19	3	2	5	5	3	11	10	2	13	8	9	9	4	3	2	0	1	0	1	1	5	0	0
October	8.9	W.	32	NW.	3	11	3	2	7	7	0	15	17	0	17	12	2	5	3	0	0	0	2	0	0	0	5	1	0
November	6.7	W.	24	NE.	0	9	4	2	1	11	3	20	8	2	13	12	5	3	3	2	1	0	12	2	0	0	15	0	0
December	8.5	W.	29	NW.	0	13	4	2	6	4	2	17	13	1	12	8	11	6	4	9	4	0	8	1	8	0	30	0	0
Year	8.4	W.	35	NW.	8	151	62	33	59	82	22	181	125	15	160	133	72	80	51	49	26	3	37	4	26	41	143	37	1

READING, PA.

[H_b=323 ft.; h_t=283 ft.; h_r=275 ft.; h_a=306 ft.]

January	12.0	NW.	46	NW.	9	3	2	3	11	4	7	10	22	0	9	8	14	11	7	8	2	0	0	12	4	0	21	0	0
February	12.7	NW.	44	NW.	7	11	12	0	5	5	5	2	16	0	12	8	8	8	5	14	8	0	0	5	15	0	28	0	0
March	11.4	N.	41	W.	2	13	8	2	12	10	3	6	8	0	9	10	12	16	14	7	6	0	2	4	4	0	21	3	0
April	12.0	NW.	41	SE.	5	6	3	2	13	17	4	3	12	0	9	15	6	12	9	1	0	0	2	2	0	0	2	2	0
May	10.3	SW.	46	SW.	3	10	8	3	12	9	12	3	5	0	8	16	7	10	9	0	0	0	0	1	0	0	2	0	0
June	10.5	NW.	43	SE.	3	4	6	2	10	10	11	6	11	0	5	21	4	9	8	0	0	1	2	3	0	3	0	6	0
July	8.6	S.	57	N.	5	11	8	3	9	14	8	3	6	0	11	15	5	9	6	0	0	1	4	2	0	0	0	0	0
August	9.1	S.	34	NW.	1	11	7	1	11	13	7	4	8	0	11	12	8	12	9	0	0	0	4	5	0	0	0	5	0
September	10.3	SE.	35	E.	1	6	3	6	20	7	6	5	7	0	8	8	14	13	12	0	0	0	2	16	0	0	0	2	0
October	10.6	N.	35	NW.	4	11	4	4	7	8	6	8	14	0	13	7	11	7	5	2	0	0	2	7	0	0	0	1	0
November	13.6	NW.	41	S.	6	6	2	4	18	1	6	5	18	0	9	7	14	11	9	3	0	0	0	9	0	0	3	0	0
December	12.3	NW.	49	NW.	8	11	3	4	11	1	5	5	22	0	7	10	14	10	8	11	3	0	0	5	5	0	23	1	0
Year	11.1	NW.	57	N.	54	103	66	34	139	99	80	60	149	0	111	137	117	128	101	46	19	2	18	71	28	14	98	33	0

REDDING, CALIF.

[H_b=722 ft.; h_t=20 ft.; h_r=3 ft.; h_a=34 ft.]

January		NW.				10	2	1	10	10	4	3	19	3	8	8	15	6	6	0	0	0	5	9	0	0	1	0	0
February		NW.				6	1	0	17	10	5	1	19	0	6	3	19	14	10	0	0	0	1	4	0	0	0	0	0
March		NW.				12	1	1	10	8	7	0	21	2	4	11	16	6	5	0	0	0	3	0	0	0	0	1	0
April		NW.				7	1	1	12	4	8	4	22	1	14	8	8	5	5	0	0	1	0	0	0	0	0	2	0
May		NW.				7	2	1	9	10	6	5	21	1	10	8	13	8	5	0	0	0	0	1	0	0	5	0	0
June		NW.				10	5	1	9	9	4	2	20	0	18	8	4	5	5	0	0	0	0	0	0	0	14	0	4	0
July		SE.				7	1	5	17	13	1	1	17	0	20	1	1	0	0	0	0	0	0	0	0	0	24	0	2	0
August		NW.				7	1	1	21	8	0	1	23	0	21	7	3	0	0	0	0	0	0	0	0	0	30	0	1	0
September		NW.				11	2	1	15	8	1	4	18	0	24	4	2	2	0	0	0	0	0	0	0	0	20	0	1	0
October	7.3	NW.	27	S.	0	9	1	2	8	8	2	5	26	1	13	6	12	8	6	0	0	0	0	4	0	0	4	0	0
November	6.4	NW.	27	S.	0	9	0	4	6	10	5	7	19	0	4	7	19	15	13	0	0	0	4	0	0	0	0	0	0
December	7.3	NW.	25	N.	0	14	2	3	6	10	3	3	21	0	9	8	14	8	6	0	0	0	9	4	0	0	2	0	0
Year		NW.				109	19	21	137	108	46	36	246	8	160	79	126	77	61	0	0	1	22	18	0	97	3	18	0

RENO, NEV.

[H_b=4,527 ft.; h_t=61 ft.; h_r=53 ft.; h_a=76 ft.]

January	5.0	SW.	30	SW.	0	2	4	6	5	6	16	12	11	0	19	11	1	3	2	1	0	0	0	0	0	0	27	0	0
February	5.9	W.	28	W.	0	0	4	6	10	3	14	18	1	0	7	9	12	6	2	2	1	0	0	0	0	0	18	0	0
March	6.3	W.	25	W.	0	7	4	5	2	4	7	27	6	0	15	9	7	2	1	0	0	0	0	0	0	0	7	1	0
April	7.3	W.	31	W.	0	5	6	1	4	1	7	30	6	0	20	8	2	1	1	1	0	1	0	0	0	0	3	2	0
May	8.0	W.	31	W.	0	4	6	1	2	2	6	38	2	1	14	13	4	2	2	0	0	1	0	0	0	0	0	4	0
June	7.2	W.	31	W.	0	5	1	4	2	1	7	32	7	1	17	7	6	9	5	0	0	1	0	0	0	0	2	0	0
July	7.8	W.	25	W.	0	2	0	1	3	2	13	40	0	1	28	2	1	0	0	0	0	0	0	0	0	0	14	0	1
August	6.7	W.	30	W.	0	0	2	1	1	0	16	38	3	1	23	7	1	1	1	0	0	0	0	0	0	0	24	0	0
September	6.2	W.	27	W.	0	1	6	8	2	3	4	33	3	0	26	2	2	1	1	2	1	0	0	0	0	0	6	2	0
October	6.0	W.	24	W.	0	7	1	12	2	4	9	23	4	0	16	8	7	5	3	0	0	0	0	0	0	0	1	0	0
November	6.7	W.	32	W.	2	2	8	4	5	6	5	26	4	0	10	10	10	6	3	2	1	0	0	0	0	0	11	0	0
December	5.3	W.	32	SW.	1	3	10	6	1	3	13	20	6	0	14	12	5	3	2	3	2	0	1	1	0	0	27	0	0
Year	6.5	W.	32	W.	3	38	52	55	39	35	117	337	53	4	209	98	58	39	23	11	5	3	1	1	0	46	96	13	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

RICHMOND, VA.

[ϕ=37°32′ N.; λ=77°27′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.01	30.38	29.11	35.7	45.6	43.7	51.9	32.9	42.4	70	5	30	31	32	80	60	64	0.183	0.196	0.199	1.63	0.67	T	6.5	6.5	4.6	5.7
February	30.05	30.79	29.25	23.3	32.2	31.0	37.9	20.0	29.0	66	−1	18	20	22	76	61	68	.101	.114	.122	5.34	2.34	13.4	4.9	5.3	5.3	5.5
March	30.02	30.62	29.49	37.1	47.4	45.3	53.5	33.2	43.4	77	17	32	36	36	84	68	72	.197	.230	.223	4.36	.96	2.4	5.5	6.7	5.7	6.5
April	29.86	30.51	29.21	50.8	64.9	58.5	68.3	45.4	56.8	84	32	43	48	45	75	57	63	.284	.343	.312	2.10	.87	.0	5.5	5.4	5.4	5.9
May	29.86	30.37	29.49	62.2	73.6	69.3	77.3	56.7	67.0	95	47	54	54	54	76	55	61	.429	.430	.431	4.83	1.40	.0	4.9	4.9	5.7	6.9
June	29.79	30.18	29.42	74.3	84.5	78.3	88.2	68.0	78.1	98	59	66	65	67	77	54	70	.654	.630	.673	3.65	1.15	.0	3.8	3.8	4.7	6.3
July	29.83	30.15	29.62	75.8	85.6	79.6	89.9	71.2	80.6	100	63	71	70	71	85	62	77	.757	.740	.772	3.22	1.14	.0	6.1	4.8	4.4	5.3
August	29.91	30.26	29.69	72.2	80.6	75.3	84.1	68.0	76.0	93	50	67	66	68	83	64	78	.668	.663	.697	3.22	1.30	.0	6.0	6.6	6.4	6.5
September	29.94	30.28	29.63	67.7	76.2	71.4	79.8	64.8	72.3	90	55	65	65	66	91	70	85	.619	.636	.653	5.92	2.21	.0	7.1	6.8	4.7	6.7
October	29.94	30.25	29.39	51.5	65.7	58.7	69.1	45.5	58.0	80	32	46	45	47	80	50	68	.319	.319	.350	.82	.45	.0	3.0	3.7	1.6	3.6
November	30.01	30.39	29.45	44.0	57.9	52.2	62.3	39.9	51.1	80	26	38	39	40	81	53	65	.255	.273	.276	3.34	1.18	T	4.4	5.1	4.2	5.1
December	29.98	30.43	29.25	33.9	45.2	40.2	49.0	30.1	39.6	68	14	28	30	28	78	56	62	.162	.179	.159	2.32	1.14	3.9	5.7	5.1	4.0	5.3
Year	29.93	30.79	29.11	52.4	63.2	58.6	67.6	48.1	57.9	100	−1	46	47	48	80	59	69	.386	.396	.406	40.75	2.34	19.7	5.3	5.4	4.7	5.4

ROCHESTER, N. Y.

[ϕ=43°08′ N.; λ=77°42′ W.]

January	29.49	30.02	28.53	27.9	28.9	27.5	33.9	21.4	27.6	56	−4	21	22	21	75	76	75	0.126	0.131	0.119	1.94	0.64	8.5	9.3	9.3	8.9	9.3
February	29.60	30.37	28.62	9.5	15.1	14.1	21.5	3.8	12.6	44	−22	3	5	4	73	62	64	.054	.058	.056	1.97	.54	25.3	7.0	6.9	6.5	6.3
March	29.56	30.01	28.60	27.4	32.9	31.9	39.5	23.6	31.6	66	8	19	19	22	68	56	65	.108	.114	.127	1.74	.39	5.8	7.1	7.5	6.2	6.7
April	29.39	29.91	28.74	42.4	48.8	45.2	53.5	36.1	44.8	79	27	32	33	32	67	58	62	.184	.194	.184	1.36	.33	1.0	5.9	7.4	5.3	6.3
May	29.44	29.83	29.01	58.4	66.5	61.8	71.1	48.0	59.6	88	36	40	39	38	50	38	43	.253	.252	.243	.52	.30	.0	3.2	4.6	3.9	3.3
June	29.33	29.77	28.95	67.6	76.0	70.6	80.3	60.0	70.2	96	50	54	54	54	62	48	58	.424	.428	.435	2.28	.84	.0	5.5	4.9	3.8	4.4
July	29.40	29.80	29.12	70.8	78.7	75.3	82.7	65.3	73.0	94	52	57	57	56	63	48	52	.477	.469	.461	1.35	.74	.0	5.1	4.8	4.0	4.8
August	29.47	29.85	29.10	64.6	72.6	68.4	76.4	58.2	67.3	94	44	55	52	52	67	51	58	.410	.408	.407	1.76	.74	.0	5.2	5.5	4.3	5.3
September	29.50	29.76	29.09	63.5	71.4	66.0	74.9	58.9	66.9	88	46	56	57	57	76	63	73	.452	.473	.476	4.56	1.28	.0	5.8	6.1	6.2	6.3
October	29.48	29.90	29.04	46.7	53.7	49.8	57.4	42.8	50.1	80	31	38	39	40	72	59	69	.241	.249	.254	1.79	.81	1.0	6.8	5.8	5.8	6.0
November	29.50	30.00	28.82	42.7	47.0	44.3	49.9	38.4	44.2	67	23	36	36	36	77	67	73	.226	.227	.224	2.81	.79	1.6	8.8	8.2	7.0	8.7
December	29.48	29.95	28.50	25.6	28.6	26.7	32.9	20.7	26.8	64	9	19	20	18	74	69	67	.109	.113	.101	2.38	.51	12.3	9.2	9.1	7.6	9.2
Year	29.47	30.37	28.50	45.6	51.7	48.5	56.2	39.6	47.9	96	−22	36	36	36	69	58	63	.256	.260	.257	24.46	1.28	55.5	6.6	6.7	5.8	6.4

ROSEBURG, OREG

[ϕ=43°13′ N.; λ=123°20′ W.]

January	29.70	29.98	29.04	43.4	49.7	51.4	53.9	40.5	47.2	66	30	41	42	44	92	78	76	0.259	0.276	0.287	4.42	0.94	0.0	6.6	8.3	8.5	8.8
February	29.52	29.92	29.16	43.3	51.8	57.2	58.9	40.5	49.7	71	32	40	43	43	91	72	61	.254	.275	.277	1.20	.54	.0	6.0	7.2	6.1	7.4
March	29.57	29.94	29.25	46.6	60.2	66.7	68.5	44.5	56.5	80	33	44	47	48	92	63	54	.297	.331	.342	1.65	.53	.0	5.9	6.6	6.0	6.8
April	29.50	29.79	29.25	46.1	65.6	69.6	72.9	44.5	58.7	91	33	44	49	48	91	56	48	.288	.351	.336	2.00	.96	.0	3.6	4.2	4.4	4.4
May	29.47	29.83	29.11	50.8	67.4	70.2	73.5	49.6	61.6	95	39	47	49	50	87	52	50	.325	.348	.361	1.21	.47	.0	7.4	5.7	7.2	6.8
June	29.47	29.75	29.11	51.2	70.7	74.4	77.0	50.3	63.6	93	40	47	49	50	86	47	45	.322	.349	.369	1.43	.64	.0	5.3	4.4	4.4	4.5
July	29.49	29.68	29.25	55.2	74.0	79.5	81.3	53.7	67.5	94	45	49	50	50	81	45	38	.355	.371	.366	.06	.02	.0	4.7	3.2	2.3	3.9
August	29.48	29.68	29.24	55.6	78.0	84.8	86.0	54.0	70.0	101	46	50	52	49	81	41	31	.358	.385	.357	.09	.09	.0	2.7	1.5	2.2	2.6
September	29.46	29.73	29.03	50.7	70.9	76.6	78.5	48.3	63.4	104	35	44	46	44	79	43	33	.292	.313	.289	.57	.54	.0	3.4	2.8	2.4	3.0
October	29.48	29.78	29.99	49.8	63.1	66.9	70.4	46.6	58.5	96	37	46	47	46	88	59	52	.320	.331	.324	4.04	1.43	.0	5.7	5.6	5.6	6.2
November	29.47	29.87	28.78	47.8	53.8	53.8	57.9	44.9	51.4	76	36	45	46	46	90	75	77	.297	.309	.316	7.47	.90	.0	7.9	8.6	7.8	8.6
December	29.64	30.02	29.09	41.5	46.3	46.4	50.1	39.1	44.6	61	33	40	40	40	93	78	80	.246	.247	.253	5.39	.82	.0	8.6	8.0	8.3	8.7
Year	29.52	30.02	28.78	48.5	62.6	66.5	69.1	46.4	57.7	104	30	45	47	46	88	59	54	.301	.324	.323	29.53	1.43	.0	5.6	5.5	5.4	6.0

ROSWELL, N. MEX.

[ϕ=33°24′ N.; λ=104°27′ W.]

January	26.46	26.88	26.15	29.3	48.9	51.5	56.9	25.3	41.1	73	15	18	21	22	63	36	32	0.099	0.114	0.115	0.04	0.04	T	2.9	2.5	1.9	2.6
February	26.44	26.75	26.03	34.3	52.8	57.8	61.8	31.4	46.6	75	15	21	23	24	57	33	28	.114	.124	.126	.04	.03	T	3.7	4.1	4.1	4.0
March	26.42	26.95	26.08	38.7	60.0	63.1	68.0	35.4	51.7	84	21	27	26	23	65	34	30	.148	.146	.129	1.12	.71	2.2	3.8	4.1	4.1	4.2
April	26.33	26.71	25.97	50.0	70.7	73.2	76.9	47.9	62.4	88	35	34	34	31	58	29	24	.203	.202	.179	.14	.10	.0	3.3	3.9	4.3	4.3
May	26.33	26.69	26.03	59.0	80.6	83.0	86.3	56.5	71.4	98	45	42	41	37	56	28	23	.285	.274	.237	.89	.64	.0	3.1	2.9	3.1	3.8
June	26.26	26.54	25.99	66.8	88.4	92.2	95.0	64.4	79.7	102	56	48	48	42	54	27	20	.349	.345	.280	.80	.70	.0	1.5	1.5	2.2	1.9
July	26.37	26.63	26.15	70.3	91.0	93.2	96.4	68.9	82.6	103	65	52	52	48	54	27	22	.400	.388	.334	.13	.08	.0	1.7	1.1	2.9	2.0
August	26.39	26.55	26.19	69.6	87.1	88.4	92.8	68.1	80.4	101	59	56	57	53	65	39	34	.460	.463	.408	1.48	1.41	.0	2.4	1.2	3.2	2.4
September	26.36	26.73	26.15	59.2	79.2	82.9	86.2	57.5	71.8	96	46	46	47	44	65	35	27	.331	.336	.297	T	T	.0	3.1	2.5	2.6	2.6
October	26.42	26.77	26.07	52.1	75.6	76.2	82.2	49.6	65.9	94	39	36	39	36	57	29	25	.235	.256	.223	.47	.30	.0	2.1	1.5	1.9	1.8
November	26.39	26.78	25.89	41.9	58.9	58.5	65.6	38.8	52.2	85	24	30	32	33	64	41	42	.174	.194	.196	1.80	1.19	.2	3.3	3.1	3.0	3.1
December	26.46	26.90	26.00	33.6	50.0	50.7	57.9	30.3	43.6	71	20	24	25	25	68	38	37	.132	.137	.141	.05	.05	.0	4.0	4.0	3.2	3.9
Year	26.38	26.95	25.89	50.4	70.3	72.6	77.1	47.8	62.4	103	15	36	37	35	60	33	29	.244	.248	.222	6.96	1.41	2.4	2.8	2.7	3.2	3.0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

RICHMOND, VA.

[H_b=144 ft.; h_t=11 ft.; h_r=3 ft.; h_a=52 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	32° Minimum temperature or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.8	NW.	34	N.	1	6	8	10	4	5	6	13	9	1	11	9	11	8	5	1	0	0	9	1	1	0	14	0	0
February	9.0	NE.	27	NW.	0	3	18	8	2	7	9	2	6	1	11	4	13	11	10	11	6	0	0	0	6	0	27	2	0
March	9.7	NE.	37	NW.	1	4	16	7	6	5	16	6	2	0	7	9	15	17	14	4	2	0	8	2	1	0	15	3	0
April	9.1	SW.	38	W.	1	2	11	7	14	10	8	6	2	0	7	12	11	11	6	0	0	0	1	0	0	0	6	3	0
May	8.8	NE.	24	SW.	0	3	16	8	6	4	16	5	4	0	13	5	13	12	8	0	0	0	0	0	0	3	0	2	0
June	7.3	SW.	30	NW.	0	0	1	4	12	6	16	13	8	0	11	14	5	10	9	0	0	0	0	0	0	14	0	10	0
July	7.0	SW.	32	NE.	1	3	2	6	14	8	17	10	2	0	6	21	4	12	8	0	0	0	4	0	0	17	0	11	0
August	6.7	SW.	30	NW.	0	0	10	7	12	4	20	8	1	0	6	8	17	14	11	0	0	0	3	0	0	3	0	11	0
September	6.9	NE.	21	S.	0	2	12	16	14	7	7	1	1	0	6	8	16	13	7	0	0	0	14	6	0	0	0	2	0
October	7.8	NE.	39	N.	1	1	26	8	4	2	16	5	6	0	16	10	5	4	2	0	0	0	7	4	0	0	1	0	0
November	8.7	NE.	27	SW.	0	3	14	6	9	8	9	4	7	0	10	9	11	9	8	2	0	0	8	3	0	0	9	1	0
December	8.4	SW.	30	W.	0	4	16	1	5	4	13	10	9	0	14	5	12	10	8	2	2	0	3	0	3	0	18	0	0
Year	8.2	SW.	39	N.	5	31	144	88	102	70	153	83	57	2	118	114	133	131	96	20	10	0	57	16	11	37	84	45	0

ROCHESTER, N. Y.

[H_b=523 ft.; h_t=86 ft.; h_r=77 ft.; h_a=102 ft.]

January	7.9	SW.	25	W.	0	1	5	4	8	7	16	14	7	0	0	5	26	21	11	21	16	0	2	0	10	0	24	0	0
February	7.6	SW.	23	NW.	0	5	4	2	7	15	7	14	0	0	6	10	12	15	10	19	15	0	0	0	21	0	28	0	0
March	8.0	W.	30	W.	0	6	6	3	7	4	14	15	7	0	6	10	15	17	12	16	10	0	3	0	7	0	25	0	0
April	7.0	W.	30	SW.	0	0	6	5	4	8	12	18	7	0	7	11	12	17	11	8	5	0	1	0	0	0	10	0	0
May	8.0	NW.	34	W.	1	6	8	4	1	4	16	10	13	0	16	12	3	4	2	0	0	0	0	0	0	0	0	3	0
June	8.6	W.	25	W.	0	6	9	7	1	3	13	9	12	0	15	10	5	8	7	0	0	0	0	0	0	4	0	4	0
July	7.4	NW.	18	W.	0	4	14	0	3	6	14	9	13	0	12	11	8	9	6	0	0	0	0	0	0	6	0	8	0
August	7.5	SW.	21	SW.	0	4	8	5	3	9	14	6	13	0	9	16	6	8	6	0	0	0	0	0	0	2	0	5	0
September	7.1	S.	22	SW.	0	2	4	5	5	15	15	9	5	0	9	5	16	13	11	0	0	0	7	1	0	0	0	6	0
October	9.0	SW.	24	W.	0	10	5	2	6	7	13	12	7	0	10	6	15	12	9	4	3	0	3	0	0	0	4	0	0
November	9.1	SW.	25	SW.	0	3	1	5	4	13	12	15	7	0	2	3	25	17	13	7	4	0	7	3	1	0	8	0	0
December	9.7	W.	31	W.	0	4	2	1	7	5	14	22	7	0	2	2	27	20	13	26	19	0	0	0	10	0	26	0	0
Year	8.1	SW.	34	W.	1	51	72	43	51	87	168	146	112	0	94	101	170	161	111	101	72	0	23	4	49	12	125	26	0

ROSEBURG, OREG.

[H_b=510 ft.; h_t=45 ft.; h_r=41 ft.; h_a=76 ft.]

January	3.6	SW.	19	SW.	0	13	2	4	4	13	13	5	8	0	0	6	25	15	13	0	0	0	20	15	0	0	1	0	0
February	3.5	NW.	19	S.	0	7	3	2	5	3	12	8	15	1	2	11	15	9	8	0	0	0	19	14	0	0	1	0	0
March	3.8	N.	20	SW.	0	14	4	2	2	3	10	7	11	9	3	16	12	11	8	0	0	0	14	10	0	0	0	0	0
April	4.1	N.	20	SW.	0	23	8	7	0	1	3	5	8	5	14	7	9	7	6	0	0	0	8	7	0	1	0	3	0
May	4.8	N.	21	SW.	0	28	3	4	1	4	6	4	9	3	4	11	16	11	8	0	0	0	3	1	0	2	0	1	0
June	5.5	N.	20	SW.	0	23	8	0	1	0	7	3	14	4	10	11	9	5	4	0	0	0	1	0	0	3	0	2	0
July	5.6	N.	17	NE.	0	34	13	1	1	0	0	3	8	2	13	14	4	3	0	0	0	0	0	0	0	1	0	2	0
August	5.2	N.	16	NE.	0	35	6	0	1	0	0	1	11	8	18	10	3	1	1	0	0	0	2	0	0	8	0	0	0
September	4.7	N.	17	N.	0	29	13	2	0	2	3	0	4	7	17	9	4	2	2	0	0	0	3	0	0	3	0	0	0
October	4.1	SW.	32	W.	1	13	7	4	0	4	15	1	17	1	7	10	14	11	8	0	0	0	8	4	0	1	0	0	0
November	4.2	SW.	18	NW.	0	8	2	5	4	18	13	4	5	1	2	3	25	23	23	0	0	1	16	6	0	0	0	0	0
December	4.0	SW.	19	W.	0	9	4	6	4	15	14	4	6	0	1	4	26	19	17	0	0	0	21	6	0	0	0	0	0
Year	4.4	N.	32	W.	1	236	73	37	23	63	96	45	116	41	91	112	162	117	98	0	0	1	115	63	0	19	2	8	0

ROSWELL, N. MEX.

[H_b=3,566 ft.; h_t=75 ft.; h_r=69 ft.; h_a=85 ft.]

January	6.9	N.	29	N.	0	17	2	2	5	14	3	5	11	3	21	7	3	1	1	3	1	0	2	2	0	0	30	0	0
February	8.2	S.	38	SW.	1	13	5	1	12	10	4	2	7	2	13	11	4	2	0	1	0	0	0	0	0	0	16	0	0
March	8.7	S.	40	NE.	3	13	7	4	7	11	3	10	6	1	16	8	7	4	3	3	2	0	2	0	0	0	10	0	0
April	9.4	S.	38	NW.	2	6	3	1	7	13	10	8	11	1	14	11	5	2	2	0	0	1	1	0	0	0	0	4	0
May	9.1	S.	35	NW.	1	6	3	3	19	9	7	3	9	3	12	17	2	6	4	0	0	0	0	0	0	0	9	0	0
June	8.7	SE.	32	SW.	1	4	5	7	14	7	7	3	9	4	22	7	1	2	2	0	0	0	0	0	0	26	0	5	0
July	8.6	S.	29	NW.	0	3	2	2	23	15	4	4	6	0	22	9	0	3	1	0	0	0	0	0	0	31	0	6	0
August	7.7	SE.	34	NW.	1	3	2	2	30	17	2	2	3	1	23	6	2	6	2	0	0	0	0	0	0	22	0	7	0
September	8.1	S.	35	NE.	1	8	4	3	12	13	8	6	4	2	21	6	3	0	0	0	0	0	0	0	0	12	0	2	0
October	7.4	S.	29	SW.	0	8	4	4	4	8	16	3	4	14	23	7	1	4	2	0	0	0	0	0	0	4	0	5	0
November	7.7	S.	32	NW.	2	7	3	2	7	17	3	9	11	1	18	7	5	6	4	2	2	1	2	1	0	0	5	2	0
December	6.8	N.	37	NW.	2	24	2	1	2	9	3	4	13	4	17	6	8	1	1	0	0	0	1	0	0	0	20	0	0
Year	8.1	S.	40	NE.	14	112	42	35	146	151	57	60	104	23	222	102	41	37	22	9	5	2	8	3	0	107	81	40	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SACRAMENTO, CALIF.

[ϕ=38°35′ N.; λ=121°30′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.17	30.45	29.62	43.6	50.1	52.3	53.8	41.8	47.8	70	37	41	44	44	91	81	76	0.258	0.290	0.292	1.33	1.23	0.0	5.0	5.8	5.3	6.0
February	30.04	30.37	29.70	47.7	56.7	58.8	60.4	45.8	53.1	67	38	44	47	47	88	71	68	.295	.323	.326	2.97	.64	.0	5.4	5.9	5.6	5.8
March	30.00	30.27	29.68	51.8	67.5	71.5	73.2	49.8	61.5	81	45	48	52	53	88	60	53	.337	.397	.404	.13	.08	.0	1.7	3.9	4.3	3.6
April	29.90	30.07	29.63	51.0	72.8	76.9	79.2	49.5	64.4	89	43	46	49	47	85	44	38	.318	.351	.334	.16	.11	.0	1.7	2.1	2.4	1.9
May	29.85	30.12	29.60	54.9	76.3	80.2	82.4	53.9	68.2	98	45	49	48	48	81	39	35	.348	.342	.337	.26	.18	.0	1.8	2.4	2.1	2.2
June	29.78	30.08	29.56	57.0	79.8	83.8	86.4	56.5	71.4	112	50	50	50	49	78	38	33	.361	.370	.359	.30	.29	.0	2.0	1.5	2.2	1.8
July	29.82	29.98	29.65	59.4	83.7	89.3	91.8	58.5	75.2	106	52	51	51	49	74	34	27	.372	.382	.350	.00	.00	.0	.2	.2	.1	.2
August	29.82	29.97	29.67	59.6	83.9	90.5	92.7	58.2	75.4	105	51	52	53	51	77	36	28	.389	.410	.377	T	T	.0	.7	.4	.5	.5
September	29.78	30.06	29.56	58.7	80.5	87.0	89.0	56.0	72.5	102	44	46	47	46	66	33	26	.318	.332	.310	.01	.01	.0	.6	1.0	.7	1.0
October	29.93	30.20	29.60	54.2	70.9	74.9	77.0	52.1	64.6	93	44	46	47	47	77	44	40	.320	.327	.331	.45	.34	.0	2.7	3.0	2.8	2.9
November	30.02	30.27	29.61	49.0	59.9	61.6	63.6	46.9	55.2	74	38	47	50	49	92	70	66	.321	.357	.353	2.61	1.18	.0	3.6	5.8	4.8	5.9
December	30.10	30.42	29.73	42.7	51.7	53.3	55.4	40.3	47.8	68	34	40	42	43	88	74	71	.246	.276	.283	2.50	1.76	.0	3.6	5.3	4.5	5.4
Year	29.93	30.45	29.56	52.5	69.5	73.3	75.4	50.8	63.1	112	34	47	48	48	82	52	47	.324	.346	.338	10.72	1.76	.0	2.4	3.1	2.9	3.1

ST. JOSEPH, MO.

[ϕ=39°49′ N.; λ=94°51′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	29.07	29.51	28.63	29.1	37.1	36.1	43.2	24.8	34.0	67	3	24	25	25	82	63	66	0.137	0.141	0.142	0.40	0.28	0.7	5.1	5.2	4.0	5.2
February	29.16	29.59	28.78	24.3	36.8	35.9	43.0	21.6	32.3	71	−10	18	18	19	76	48	51	.102	.105	.106	.88	.59	8.6	3.6	3.2	3.1	3.5
March	29.08	29.58	28.52	31.4	44.2	45.1	52.9	28.4	40.6	82	10	24	23	24	73	46	46	.131	.130	.140	.43	.12	2.3	4.6	4.8	4.9	5.2
April	28.94	29.37	28.52	47.3	62.6	63.2	68.5	45.1	56.8	85	34	35	34	33	63	38	35	.217	.221	.206	3.36	1.80	.0	3.0	3.1	2.9	3.6
May	28.95	29.31	28.60	61.0	78.2	77.8	83.0	58.5	70.8	103	45	49	48	49	66	38	40	.361	.360	.369	2.34	1.18	.0	2.7	2.5	2.4	2.6
June	28.84	29.06	28.63	73.0	88.3	88.2	93.2	70.1	81.6	103	57	61	60	60	67	41	42	.539	.531	.535	3.96	2.15	.0	4.0	2.4	2.1	3.0
July	28.88	29.13	28.55	77.3	95.0	95.7	100.3	74.3	87.3	108	54	59	57	57	55	30	28	.506	.483	.471	1.05	.92	.0	2.6	1.5	2.1	2.1
August	28.93	29.21	28.56	70.8	87.5	87.1	93.6	68.3	81.0	110	49	57	57	56	64	40	40	.477	.491	.480	5.84	3.32	.0	4.7	3.5	3.9	4.1
September	28.94	29.31	28.67	56.4	69.2	67.9	74.2	52.8	63.5	91	38	52	53	54	87	59	65	.415	.419	.451	7.05	1.54	.0	5.5	4.5	4.3	5.2
October	29.01	29.49	28.59	52.6	68.4	65.1	73.0	50.8	61.9	87	29	46	45	48	78	46	54	.321	.324	.351	1.66	1.10	.0	2.7	2.4	2.0	2.8
November	28.96	29.45	28.32	41.5	51.3	47.9	55.3	38.2	46.8	73	25	36	38	39	81	63	72	.225	.239	.247	5.22	1.32	6.1	5.1	5.6	3.7	5.4
December	29.08	29.53	28.70	26.1	32.2	30.2	35.9	22.0	29.0	51	4	22	25	25	85	73	78	.123	.137	.135	.27	.15	2.6	5.1	6.3	5.8	5.9
Year	28.99	29.59	28.32	49.2	62.6	61.7	68.0	46.2	57.1	110	−10	40	40	41	73	49	51	.296	.298	.303	32.46	3.32	20.3	4.1	3.8	3.4	4.0

ST. LOUIS, MO.

[ϕ=38°38′ N.; λ=90°12′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	29.53	29.89	29.10	33.7	39.5	39.5	45.5	30.2	37.8	65	4	26	27	28	73	62	63	0.147	0.159	0.168	1.72	0.73	1.4	6.4	6.3	5.0	6.1
February	29.60	30.18	29.14	26.3	34.5	34.0	39.9	22.8	31.4	72	2	18	20	21	71	56	58	.104	.114	.117	1.26	.59	8.5	5.2	4.5	3.0	4.2
March	29.52	29.93	29.03	34.7	44.9	44.0	50.5	31.0	40.8	73	13	27	27	28	74	51	56	.152	.155	.161	2.96	1.46	4.5	5.4	4.7	6.3	5.3
April	29.37	29.76	28.91	50.2	61.0	61.3	66.8	47.2	57.0	82	36	38	42	45	64	53	57	.244	.287	.323	2.40	.88	.0	4.7	4.0	3.6	4.0
May	29.40	29.69	29.05	63.8	77.0	76.5	81.7	60.8	71.2	96	47	48	49	50	59	40	43	.353	.372	.387	.54	.52	.0	2.9	3.2	1.9	2.6
June	29.29	29.48	29.09	75.7	89.1	86.2	93.1	72.0	82.6	102	65	63	64	64	66	44	49	.592	.595	.603	3.25	1.70	.0	2.9	4.0	2.8	3.7
July	29.34	29.62	29.07	79.2	93.1	92.1	98.0	76.5	87.2	110	68	64	64	64	61	41	42	.603	.608	.599	1.22	.94	.0	3.7	3.3	3.2	3.3
August	29.38	29.62	29.10	72.9	84.2	83.5	89.6	70.3	80.0	108	52	63	66	66	73	57	59	.591	.645	.663	3.14	1.96	.0	5.6	4.9	4.1	5.0
September	29.40	29.71	29.07	60.8	70.6	68.0	75.4	57.8	66.6	91	45	56	59	58	86	69	72	.469	.517	.502	5.86	1.27	.0	6.2	6.0	4.6	6.0
October	29.47	29.82	29.11	55.3	69.3	65.6	73.2	53.3	63.2	82	36	47	47	48	74	46	54	.333	.334	.352	2.23	1.73	.0	3.4	2.4	2.8	2.8
November	29.43	29.85	28.63	45.1	53.5	52.5	59.0	41.9	50.4	76	31	37	39	39	74	60	62	.236	.254	.253	2.66	1.18	T	4.8	4.2	4.8	4.7
December	29.53	29.93	29.02	29.6	34.8	34.3	40.0	26.7	33.4	51	10	25	26	27	81	71	75	.138	.147	.153	1.95	.72	8.8	5.9	6.6	5.4	6.6
Year	29.44	30.18	28.63	52.3	62.6	61.5	67.7	49.2	58.5	110	2	43	44	45	71	54	58	.330	.349	.357	29.19	1.96	23.2	4.8	4.5	4.0	4.5

SALT LAKE CITY, UTAH

[ϕ=40°46′ N.; λ=111°54′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Dew point: 8 a. m.	Dew point: Noon, local time	Dew point: 8 p. m.	Relative humidity: 8 a. m.	Relative humidity: Noon, local time	Relative humidity: 8 p. m.	Vapor pressure: 8 a. m.	Vapor pressure: Noon, local time	Vapor pressure: 8 p. m.	Precipitation: Total	Precipitation: Maximum in 24 hours	Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
January	25.81	26.20	25.32	31.7	38.4	38.3	41.7	28.3	35.0	54	19	25	28	28	74	64	67	0.132	0.150	0.156	1.47	0.78	6.8	5.6	6.8	6.0	6.5
February	25.69	26.00	25.28	38.8	51.6	47.4	51.2	34.9	43.0	62	29	30	32	33	72	56	58	.169	.182	.188	2.24	.92	2.9	5.9	5.6	5.9	5.9
March	25.71	26.15	25.42	43.3	56.7	57.8	60.7	40.6	50.6	71	30	29	28	27	58	35	31	.163	.156	.146	.96	.68	T	3.8	4.6	4.4	4.3
April	25.58	25.83	25.23	49.0	65.6	67.5	69.7	46.4	58.0	84	29	31	30	28	51	29	26	.172	.164	.155	.46	.35	3.0	3.3	4.3	4.3	4.0
May	25.56	25.97	25.21	59.0	76.9	78.1	80.9	55.4	68.2	90	38	32	30	31	40	20	19	.183	.171	.173	.01	.01	.0	2.9	3.1	4.6	3.6
June	25.52	25.85	25.25	59.2	76.2	78.6	80.6	56.3	68.4	93	47	37	35	32	46	25	21	.225	.206	.186	.82	.58	.0	3.2	3.9	4.3	3.8
July	25.60	25.80	25.33	70.0	88.8	89.7	92.8	66.6	79.7	103	56	41	40	37	37	20	20	.267	.243	.241	.68	.39	.0	2.3	2.2	3.3	2.8
August	25.64	25.79	25.42	68.1	86.5	87.4	90.5	65.2	77.8	100	58	45	46	42	45	26	23	.311	.319	.280	1.01	.64	.0	3.2	3.1	3.5	3.3
September	25.62	25.88	25.19	55.1	72.1	73.3	76.1	51.1	63.6	90	34	33	32	30	47	26	24	.191	.180	.169	.40	.29	.0	2.5	2.7	3.2	2.8
October	25.70	26.06	25.22	48.8	64.1	61.7	68.5	44.0	56.2	82	33	32	32	35	53	34	40	.178	.185	.208	1.48	.75	T	2.7	4.0	4.6	4.1
November	25.67	25.96	25.27	39.4	48.4	46.5	52.5	36.0	44.2	68	20	30	31	34	70	54	62	.167	.173	.197	2.89	.61	7.4	4.5	5.7	4.9	5.6
December	25.77	26.07	25.28	30.4	36.5	35.9	39.8	26.6	33.2	52	14	22	25	26	71	63	66	.120	.134	.138	1.87	.57	15.9	6.2	5.8	5.6	6.0
Year	25.66	26.20	25.19	49.4	63.5	63.5	67.1	46.0	56.5	103	14	32	32	32	55	38	38	.190	.189	.186	14.29	.92	36.0	3.8	4.3	4.6	4.4

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SACRAMENTO, CALIF.

[H_b=66 ft.; h_t=92 ft.; h_r=83 ft.; h_a=115 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	32° Minimum temperature or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	6.5	SE.	24	NW.	0	10	2	3	14	16	3	1	10	3	10	6	15	4	3	0	0	0	17	6	0	0	0	0	0
February	6.5	S.	23	SE.	0	14	1	1	14	9	4	4	6	3	8	8	12	13	10	0	0	1	4	0	0	0	0	0	2
March	6.4	S.	18	NW.	0	11	3	1	11	8	7	3	13	5	16	14	1	3	2	0	0	0	3	2	0	0	0	0	0
April	7.3	S.	26	NW.	0	8	4	0	11	18	9	3	5	2	23	4	3	2	2	0	0	0	1	0	0	0	0	0	0
May	8.1	S.	21	S.	0	2	0	1	12	21	13	3	9	1	23	7	1	3	2	0	0	0	6	0	0	7	0	1	0
June	8.6	S.	21	SW.	0	5	2	0	7	26	12	0	8	0	24	3	3	3	2	0	0	0	0	0	0	10	0	0	0
July	9.4	S.	21	SW.	0	1	1	0	10	34	13	0	3	0	30	1	0	0	0	0	0	0	0	0	0	18	0	0	0
August	8.2	S.	18	S.	0	3	1	0	8	32	16	1	1	0	29	2	0	0	0	0	0	0	0	0	0	22	0	1	0
September	7.8	S.	22	SW.	0	7	1	3	11	20	9	2	5	2	25	5	0	1	0	0	0	0	0	0	0	19	0	1	0
October	7.2	S.	27	N.	0	7	3	2	7	21	6	4	10	2	19	9	3	4	2	0	0	0	0	0	0	3	0	0	0
November	7.0	SE.	29	SE.	0	11	2	4	13	13	6	0	8	3	5	16	9	8	7	0	0	0	6	5	0	0	0	1	0
December	7.3	SE.	25	NW.	0	12	3	3	15	8	2	2	16	1	11	8	12	8	8	0	0	0	10	6	0	0	0	0	0
Year	7.5	S.	29	SE.	0	91	23	18	133	226	100	23	94	22	223	83	59	49	38	0	0	1	41	19	0	79	0	6	0

ST. JOSEPH, MO.

[H_b=967 ft.; h_t=11 ft.; h_r=3 ft.; h_a=49 ft.]

January	8.9	SW.	30	NW.	0	5	7	2	8	6	17	7	10	0	15	4	12	4	3	9	2	0	7	1	6	0	25	0	0
February	9.3	NW.	27	NW.	0	9	9	4	13	5	4	3	9	0	14	8	6	5	4	8	5	0	3	0	7	0	22	0	0
March	9.9	NE.	28	N.	0	8	11	4	9	12	7	3	8	0	11	11	9	7	5	6	3	0	4	1	1	0	20	1	0
April	10.1	NW.	33	NW.	1	11	4	3	7	12	3	5	15	0	18	6	6	5	4	0	0	0	3	1	0	0	0	3	0
May	7.8	SW.	31	W.	0	3	5	6	10	11	22	1	4	0	21	6	4	7	7	0	0	0	1	0	0	5	0	5	0
June	7.9	SW.	29	NW.	0	6	5	2	9	20	12	2	4	0	19	10	1	10	6	0	0	1	0	0	0	20	0	11	0
July	7.9	SW.	32	SE.	1	2	8	4	10	17	15	1	5	0	22	8	1	5	3	0	0	0	0	0	0	29	0	6	0
August	7.7	SW.	38	NW.	1	4	12	10	15	3	9	4	5	0	12	15	4	9	7	0	0	2	0	0	0	17	0	13	0
September	8.1	SE.	28	NW.	0	4	5	0	18	10	7	1	13	2	11	7	12	14	11	0	0	1	6	1	0	1	0	11	0
October	7.7	SE.	29	W.	0	4	3	5	14	12	13	6	5	0	21	6	4	6	4	0	0	0	3	0	0	0	1	3	0
November	8.8	SE.	32	N.	1	4	8	5	16	10	5	3	9	0	12	4	14	11	11	3	3	0	5	0	1	0	7	1	0
December	9.1	NW.	29	NW.	0	6	8	3	8	8	8	7	14	0	12	4	15	5	2	8	2	0	6	1	9	0	28	0	0
Year	8.6	SW.	38	NW.	4	66	85	48	137	126	122	43	101	2	188	89	88	88	67	34	15	4	38	5	24	72	103	54	0

ST. LOUIS, MO.

[H_b=568 ft.; h_t=265 ft.; h_r=258 ft.; h_a=303 ft.]

January	12.3	S.	34	SW.	2	7	1	4	4	16	12	9	9	0	11	5	15	5	5	4	1	1	2	0	4	0	17	1	0
February	11.8	S.	28	N.	0	11	4	12	0	16	2	5	6	0	14	5	9	6	4	8	6	0	1	1	7	0	23	0	0
March	12.7	NE.	35	SW.	4	7	13	6	2	15	7	6	6	0	12	8	11	13	10	8	7	0	3	2	3	0	18	1	0
April	12.5	S.	35	NW.	3	7	3	4	2	17	7	5	15	0	16	7	7	8	5	0	0	0	3	0	0	0	0	3	0
May	11.2	S.	30	S.	0	8	9	6	3	19	9	4	2	2	21	7	3	2	1	0	0	0	0	0	0	5	0	2	0
June	10.4	SW.	37	SW.	3	4	4	3	1	11	21	7	8	1	13	15	2	7	7	0	0	1	0	0	0	22	0	14	0
July	10.7	SW.	31	SW.	0	6	5	10	5	10	18	8	0	0	16	12	3	4	3	0	0	0	0	0	0	25	0	8	0
August	10.3	S.	32	SW.	1	6	7	9	7	15	8	8	2	0	10	12	9	10	9	0	0	0	0	0	0	14	0	9	0
September	11.1	S.	36	SW.	3	4	1	2	7	20	9	6	10	1	9	8	13	15	14	0	0	0	9	1	0	1	0	11	0
October	10.9	S.	32	N.	1	5	3	9	4	13	12	4	11	1	21	4	6	6	6	0	0	0	0	0	0	0	0	1	0
November	14.2	S.	43	SW.	6	7	2	3	5	15	14	6	8	0	15	6	9	8	7	1	0	0	0	0	0	0	2	0	0
December	11.9	S.	30	W.	0	4	4	6	2	15	7	8	16	0	9	4	18	11	10	10	6	0	5	3	4	0	24	1	0
Year	11.7	S.	43	SW.	23	76	56	74	42	182	126	76	93	5	167	93	105	95	81	31	20	2	23	7	18	67	84	51	0

SALT LAKE CITY, UTAH

[H_b=4,357 ft.; h_t=86 ft.; h_r=74 ft.; h_a=210 ft.]

January	5.6	NW.	27	SE.	0	8	5	4	10	7	4	7	17	0	6	11	14	9	8	6	5	0	0	0	0	0	22	0	0
February	6.1	NW.	25	SE.	0	5	5	6	11	5	1	8	15	0	9	6	13	12	7	3	3	0	0	0	0	0	6	0	0
March	7.0	NW.	38	NW.	1	7	2	8	11	8	2	9	15	0	13	12	6	5	4	1	0	0	0	0	0	0	2	0	0
April	7.8	NW.	27	NW.	0	11	4	4	9	7	0	9	16	0	14	10	6	4	2	3	1	0	0	0	0	0	1	0	0
May	8.7	S.	31	SE.	0	8	6	9	9	12	0	5	13	0	18	8	5	1	0	0	0	0	0	0	0	0	0	0	0
June	8.4	NW.	32	SE.	1	9	3	7	13	10	1	3	12	2	17	6	7	6	2	0	0	0	0	0	0	4	0	6	0
July	8.2	NW.	32	SW.	1	11	3	10	8	13	0	1	16	0	19	8	4	8	5	0	0	0	0	0	0	0	0	9	0
August	7.3	S.	27	NE.	0	4	0	8	13	11	3	3	19	1	21	5	5	7	3	0	0	0	0	0	0	17	0	7	0
September	7.6	NW.	31	SE.	0	7	3	3	10	8	2	8	19	0	20	6	4	5	2	0	0	0	1	0	0	0	0	3	0
October	6.6	S.	27	S.	0	4	5	5	14	10	0	12	11	1	14	12	5	6	6	1	0	0	1	0	0	0	0	2	0
November	6.4	SE.	29	W.	0	3	3	8	13	9	1	10	12	1	10	7	13	12	10	11	7	0	0	0	0	0	8	0	0
December	5.9	S.	30	N.	0	9	12	6	11	9	1	4	10	0	9	6	16	8	7	11	5	0	2	0	3	0	16	6	0
Year	7.1	NW.	38	NW.	3	86	51	78	132	109	15	79	175	5	170	97	98	83	56	36	21	1	3	0	3	42	63	27	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAN ANTONIO, TEX.

[ϕ=29°27′ N.; λ=98°28′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.37	29.80	29.09	49.2	57.6	59.1	63.8	46.5	55.2	75	32	44	47	46	82	70	64	0.304	0.342	0.334	4.88	1.10	0.0	4.9	6.1	4.7	5.9
February	29.39	29.79	28.94	48.3	59.2	60.6	65.9	45.0	55.4	82	29	42	44	42	78	60	54	.280	.313	.281	.43	.20	.0	4.3	5.1	4.5	5.1
March	29.34	29.79	29.02	50.4	64.4	69.7	73.8	48.1	61.0	85	31	43	48	42	78	56	40	.304	.358	.282	2.05	1.62	.0	4.6	2.9	2.2	3.4
April	29.22	29.57	28.86	62.3	75.0	76.1	80.9	60.8	70.8	98	54	57	59	57	84	59	54	.484	.573	.479	4.56	1.93	.0	6.5	5.2	5.5	5.5
May	29.20	29.43	28.97	67.7	81.6	83.7	87.3	66.1	76.7	97	58	60	64	62	79	57	50	.534	.613	.562	1.65	.64	.0	3.7	4.7	3.7	4.0
June	29.15	29.37	28.86	75.1	89.1	93.2	96.4	73.9	85.2	103	67	69	66	66	83	48	41	.714	.652	.638	.18	.18	.0	4.7	3.7	2.4	3.3
July	29.22	29.38	28.95	74.5	89.7	91.0	96.1	73.5	84.8	104	69	70	68	64	88	49	44	.742	.675	.645	3.83	2.86	.0	5.6	4.6	5.2	4.9
August	29.25	29.40	29.01	74.9	88.7	90.2	94.5	74.6	84.6	99	71	72	69	67	90	53	48	.771	.705	.685	.88	.72	.0	5.2	4.5	4.7	4.8
September	29.23	29.51	29.06	71.3	84.0	84.4	90.1	70.3	80.2	95	60	68	68	65	88	59	54	.689	.684	.621	1.95	.82	.0	6.8	6.0	4.4	5.4
October	29.29	29.59	29.07	66.6	82.1	81.8	87.1	65.6	76.4	93	57	60	62	58	80	51	46	.537	.562	.492	.19	.14	.0	4.0	3.3	2.9	3.4
November	29.30	29.64	28.80	58.6	71.2	68.8	75.3	55.9	65.6	88	38	54	55	55	86	59	65	.447	.468	.466	2.88	1.04	.0	4.9	4.0	3.1	4.2
December	29.41	29.79	29.13	50.4	58.8	59.7	64.5	47.5	56.0	75	33	46	47	48	85	68	67	.335	.353	.356	4.17	2.49	.0	5.6	6.4	5.1	6.0
Year	29.28	29.80	28.80	62.4	75.1	76.5	81.3	60.6	71.0	104	29	57	58	56	83	57	52	.512	.525	.483	27.65	2.86	.0	5.1	4.7	4.0	4.7

SAN DIEGO, CALIF.

[ϕ=32°43′ N.; λ=117°10′ W.]

January	30.01	30.24	29.84	50.2	63.0	60.5	65.3	46.9	56.1	74	42	39	41	46	68	50	62	0.244	0.270	0.317	0.30	0.30	0.0	2.3	2.4	2.5	2.3
February	30.01	30.22	29.74	54.4	62.2	60.6	64.6	52.0	58.3	79	45	48	51	50	82	69	73	.350	.377	.374	1.88	1.11	.0	8.0	7.1	5.8	6.6
March	29.92	30.09	29.69	56.2	66.7	64.0	69.1	54.5	61.8	85	48	51	53	54	85	65	74	.381	.408	.427	.24	.22	.0	6.3	5.5	6.1	5.9
April	29.86	29.98	29.66	58.2	65.8	64.2	67.7	56.9	62.3	74	52	53	55	55	83	68	73	.407	.431	.436	.01	.01	.0	7.5	8.3	4.2	4.6
May	29.84	29.95	29.69	60.5	67.6	66.8	70.1	59.3	64.7	83	54	56	57	57	85	69	72	.449	.466	.470	.02	.02	.0	7.1	3.1	3.7	4.1
June	29.83	29.95	29.69	61.3	66.5	65.8	68.2	59.8	64.0	71	56	56	56	57	83	70	74	.449	.452	.468	.47	.38	.0	9.0	4.9	5.6	6.2
July	29.82	29.95	29.59	65.2	71.7	70.7	73.8	64.1	69.0	84	59	62	62	62	88	72	74	.548	.557	.555	T	T	.0	8.5	3.6	3.9	4.9
August	29.84	29.96	29.73	65.9	71.3	70.0	73.2	64.9	69.0	79	62	62	63	62	87	74	77	.548	.567	.558	.02	.02	.0	9.7	2.3	3.5	4.9
September	29.78	29.96	29.65	64.9	73.4	72.0	75.9	63.5	69.7	89	55	59	60	59	82	65	66	.511	.532	.507	.18	.13	.0	3.3	2.7	2.6	3.6
October	29.88	30.06	29.69	60.9	68.7	66.7	71.0	58.8	64.9	81	53	56	57	58	84	68	76	.477	.473	.497	.42	.34	.0	6.3	4.1	4.4	4.5
November	29.94	30.11	29.76	55.8	67.0	63.2	68.6	53.9	61.2	82	47	50	49	53	81	57	71	.366	.365	.409	1.95	1.16	.0	5.1	3.9	4.1	4.4
December	29.96	30.20	29.75	54.5	63.7	62.1	66.5	51.7	59.1	78	44	46	48	50	74	61	68	.315	.349	.374	3.38	1.08	.0	3.7	5.1	5.2	5.3
Year	29.89	30.24	29.59	59.0	67.3	65.6	69.5	57.2	63.3	89	42	53	54	55	82	66	72	.418	.437	.449	8.87	1.16	.0	6.4	4.0	4.3	4.8

SANDUSKY, OHIO

[ϕ=41°25′ N.; λ=82°40′ W.]

January	29.40	29.86	28.65	29.9	34.8	----	39.5	25.3	32.4	58	2	26	25	---	82	69	---	0.146	0.142	----	1.19	0.35	1.6	7.6	7.1	----	7.2
February	29.52	30.23	28.68	13.3	22.4	----	26.7	8.1	17.4	47	−11	8	14	---	80	68	---	.066	.082	----	.75	.39	6.7	6.4	6.9	----	6.6
March	29.46	29.85	28.86	28.5	36.5	----	40.6	24.5	32.6	71	11	22	25	---	76	63	---	.122	.144	----	2.95	1.35	4.4	7.0	6.7	----	6.6
April	29.28	29.76	28.69	42.2	50.7	----	55.9	36.8	46.4	76	26	34	35	---	75	57	---	.202	.207	----	4.09	1.82	2.0	6.2	6.0	----	6.3
May	29.37	29.72	29.00	60.7	69.4	----	73.5	51.9	62.7	93	38	46	47	---	60	46	---	.327	.330	----	.64	.35	.0	3.2	3.9	----	4.0
June	29.23	29.58	28.88	72.7	81.3	----	85.7	64.2	75.0	104	56	60	60	---	65	52	---	.527	.543	----	1.48	.56	.0	4.7	4.5	----	5.0
July	29.30	29.63	29.02	76.8	84.3	----	87.1	68.4	77.8	104	59	63	63	---	64	50	---	.592	.578	----	1.24	.57	.0	4.9	4.5	----	4.9
August	29.36	29.60	28.96	68.3	77.1	----	80.9	61.8	71.4	98	46	58	58	---	72	53	---	.508	.506	----	2.99	1.77	.0	5.4	4.8	----	5.1
September	29.36	29.64	28.99	63.5	73.5	----	76.9	59.1	68.0	90	42	58	58	---	82	59	---	.491	.492	----	2.57	.58	.0	7.2	6.3	----	6.4
October	29.40	29.76	28.96	49.2	60.4	----	63.5	45.1	54.3	80	30	41	44	---	74	55	---	.267	.297	----	.98	.32	T	5.1	5.2	----	5.0
November	29.38	29.81	28.77	41.1	49.3	----	52.4	38.1	45.2	70	24	34	36	---	76	62	---	.205	.228	----	1.01	.35	T	7.8	8.2	----	8.0
December	29.40	29.84	28.41	27.3	32.2	----	35.3	23.2	29.2	47	1	23	24	---	82	72	---	.124	.133	----	1.23	.53	6.2	7.6	8.7	----	8.5
Year	29.37	30.23	28.41	47.8	56.0	----	59.8	42.2	51.0	104	−11	39	41	---	74	59	---	.298	.307	----	21.12	1.82	20.9	6.1	6.1	----	6.1

SANDY HOOK, N. J.

[ϕ=40°28′ N.; λ=74°01′ W.]

January	30.09	30.58	29.68	31.3	35.7	34.7	39.6	28.8	34.2	56	7	27	29	29	82	78	78	0.155	0.174	0.165	2.84	1.49	T	5.6	6.0	4.3	5.5
February	30.12	30.87	29.17	16.1	21.3	21.3	27.3	12.5	19.9	38	−11	10	14	14	76	68	72	.073	.082	.088	2.18	.60	21.4	5.2	4.6	3.0	4.6
March	30.14	30.73	29.51	32.6	38.9	36.2	42.8	28.6	35.7	68	11	27	31	30	80	74	77	.155	.184	.172	3.05	1.22	8.5	5.2	4.9	5.4	5.8
April	29.98	30.68	29.26	45.2	51.0	48.4	54.4	41.0	47.7	71	36	38	40	40	78	68	73	.238	.255	.251	2.92	.83	T	4.5	4.7	3.5	4.6
May	29.97	30.55	29.58	58.4	65.2	60.1	68.1	52.4	60.2	84	42	49	49	50	73	58	71	.361	.359	.367	3.56	1.09	.0	4.4	4.9	6.5	5.5
June	29.88	30.39	29.37	69.7	76.1	70.9	78.8	63.7	71.2	96	55	62	62	63	79	63	76	.572	.569	.575	3.40	1.59	.0	4.3	4.4	4.7	4.7
July	29.94	30.33	29.73	73.5	80.4	75.6	82.7	68.7	75.7	94	63	65	65	67	76	61	76	.629	.630	.674	4.74	1.36	.0	5.5	4.6	5.5	4.9
August	30.01	30.41	29.70	68.7	74.0	71.1	76.8	65.0	70.9	87	56	61	60	62	77	64	74	.550	.543	.572	2.09	1.16	.0	5.6	5.1	5.1	5.3
September	30.07	30.47	29.52	66.6	71.4	68.9	73.9	64.2	69.0	82	54	62	63	64	85	75	84	.565	.582	.597	10.00	3.51	.0	6.8	6.4	5.8	7.0
October	30.01	30.42	29.53	51.8	57.4	55.4	60.5	43.9	54.7	74	38	43	43	45	73	59	70	.293	.288	.314	2.15	1.44	T	4.7	5.3	3.9	4.9
November	30.10	30.62	29.44	46.1	51.0	48.7	53.9	43.0	48.4	69	28	39	40	40	78	67	73	.256	.264	.263	1.77	.57	T	6.8	5.7	5.2	6.1
December	30.05	30.47	29.14	31.9	36.3	35.0	39.5	28.1	33.8	63	14	25	26	25	74	66	65	.147	.156	.142	2.30	1.17	T	6.4	5.6	5.3	6.4
Year	30.03	30.87	29.08	49.3	54.9	52.2	58.2	45.4	51.8	96	−11	42	44	44	78	67	74	.333	.340	.348	41.00	3.51	29.9	5.4	5.2	4.8	5.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAN ANTONIO, TEX.

[H_b=693 ft.; h_t=242 ft.; h_r=235 ft.; h_a=301 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction of time of maximum velocity	Wind: By self-register: Days with 31 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp. 32° or below	Maximum temp. 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		Mi.																										
January	11.0	N.	38	E.	1	13	12	11	3	7	4	8	4	0	9	9	13	16	13	0	0	1	12	6	0	0	1	6	0
February	12.3	N.	41	N.	2	12	11	11	3	5	3	8	3	0	10	9	9	6	4	0	0	0	9	1	0	0	4	2	0
March	12.4	S.	36	N.	3	9	6	6	19	9	5	3	5	0	18	8	5	6	3	0	0	0	7	2	0	0	1	4	0
April	12.3	SE.	46	NW.	6	2	18	13	17	6	1	2	0	1	11	10	9	13	9	0	0	4	6	1	0	2	0	13	0
May	10.8	E.	35	SE.	2	8	13	21	11	2	0	4	3	0	15	12	4	8	5	0	0	0	1	0	0	12	0	5	0
June	11.9	SE.	30	SE.	0	2	2	19	28	5	0	2	1	1	14	15	1	2	1	0	0	0	0	0	0	28	0	2	0
July	12.3	SE.	43	NE.	4	0	5	13	26	7	3	3	3	2	9	17	5	6	6	0	0	0	1	0	0	28	0	7	0
August	11.1	SE.	32	NE.	1	1	9	21	18	11	2	0	0	0	6	22	3	3	2	0	0	0	0	0	0	30	0	3	0
September	11.5	SE.	41	E.	4	3	8	21	17	7	0	3	1	0	6	15	9	7	6	0	0	0	3	0	0	20	0	6	0
October	10.4	SE.	27	E.	0	8	6	18	22	4	1	1	2	0	18	9	4	2	2	0	0	0	2	1	0	6	0	1	0
November	11.9	SE.	49	W.	4	7	9	15	12	6	0	3	7	1	11	14	5	8	6	0	0	1	3	0	0	0	0	5	0
December	10.2	N.	44	NW.	1	8	14	12	4	8	9	6	1	0	9	7	15	12	7	0	0	0	7	4	0	0	0	1	0
Year	11.5	SE.	49	W.	28	73	113	181	180	77	28	43	30	5	136	147	82	89	64	0	0	6	51	15	0	126	6	55	0

SAN DIEGO, CALIF.

[H_b=87 ft.; h_t=62 ft.; h_r=55 ft.; h_a=70 ft.]

January	5.2	NW.	24	E.	0	4	6	9	6	6	7	3	20	1	23	5	3	1	1	0	0	0	9	3	0	0	0	0	0
February	6.0	NW.	24	NW.	0	4	5	4	1	8	3	11	18	2	4	10	14	7	7	0	0	0	6	1	0	0	0	2	0
March	6.0	NW.	18	NW.	0	6	1	11	1	7	3	11	17	5	9	6	16	3	1	0	0	0	11	6	0	0	0	0	0
April	6.9	W.	20	S.	0	7	5	0	4	6	12	15	11	0	13	9	8	1	0	0	0	0	2	0	0	0	0	0	0
May	7.0	SW.	20	W.	0	3	6	7	4	2	13	20	6	1	17	10	4	1	0	0	0	0	1	1	0	0	0	0	0
June	7.4	W.	21	S.	0	3	2	1	1	9	15	20	8	1	5	13	12	5	4	0	0	0	0	0	0	0	0	0	0
July	7.1	W.	17	S.	0	4	1	0	0	8	16	22	10	1	13	12	6	1	0	0	0	0	2	0	0	0	0	2	0
August	6.8	W.	15	W.	0	6	2	1	0	5	12	21	15	0	12	13	6	1	0	0	0	0	0	0	0	0	0	0	0
September	6.5	NW.	19	NW.	0	5	2	2	2	4	9	15	19	2	19	9	2	2	2	0	0	0	3	2	0	0	0	1	0
October	6.3	NW.	23	S.	0	6	2	5	2	4	5	7	30	1	17	4	10	4	3	0	0	0	3	2	0	0	0	0	0
November	5.5	NW.	22	S.	0	8	6	7	4	2	2	6	25	0	12	13	5	5	4	0	0	0	2	0	0	0	0	0	0
December	5.6	NW.	21	SE.	0	7	9	7	6	7	7	0	18	1	12	6	13	8	6	0	0	0	2	3	0	0	0	1	0
Year	6.4	NW.	24	E.	0	63	47	54	31	68	104	151	197	15	156	110	99	38	28	0	0	0	44	18	0	0	0	6	0

SANDUSKY, OHIO

[H_b=629 ft.; h_t=5 ft.; h_r=3 ft.; h_a=67 ft.]

January	11.2	SW.	39	NW.	1	0	2	2	2	4	14	5	2	0	7	4	20	15	8	12	8	0	6	1	6	0	25	0	0
February	9.9	SW.	27	NW.	0	4	2	4	3	3	5	3	4	0	4	10	14	9	6	15	9	0	2	0	19	0	28	0	0
March	10.1	SW.	29	SW.	0	4	6	1	1	9	6	3	1	0	6	9	16	14	12	12	6	0	4	0	8	0	23	0	0
April	9.9	SW.	27	NW.	0	1	2	3	1	5	9	6	3	0	8	4	18	16	13	7	4	0	2	1	0	0	5	3	0
May	9.9	SW.	27	NW.	0	3	7	6	2	4	7	2	1	0	13	14	4	4	2	0	0	0	0	0	3	0	0	0	0
June	8.1	NE.	23	NW.	0	7	6	5	1	6	11	2	1	0	8	16	6	4	4	0	0	0	0	0	0	10	0	5	0
July	8.2	SW.	23	NW.	0	0	4	5	5	3	2	6	5	1	0	9	16	6	8	6	0	0	0	0	0	12	0	7	0
August	7.7	NE.	31	NW.	0	4	5	5	3	2	6	4	1	0	9	12	10	11	7	0	0	0	2	0	0	4	0	5	0
September	7.3	S.	27	N.	0	3	2	1	3	11	6	4	1	0	4	16	10	12	12	0	0	0	2	0	0	1	0	4	0
October	7.7	S.	21	NW.	0	2	2	0	2	14	5	2	3	0	9	14	8	6	6	3	0	0	1	0	0	0	1	0	0
November	9.2	SW.	32	NW.	1	3	3	2	1	8	11	5	0	0	1	11	18	11	5	6	0	0	2	0	0	0	9	1	0
December	11.1	SW.	30	SW.	0	1	1	2	2	10	6	5	3	0	0	8	23	15	7	13	10	0	4	0	9	0	27	0	0
Year	9.9	SW.	27	W.	0	1	1	3	2	4	10	8	2	0	78	134	153	125	88	68	37	2	23	2	42	30	118	25	0
	9.2	SW.	39	NW.	2	26	37	33	23	78	96	50	22	0															

SANDY HOOK, N. J.

[H_b=22 ft.; h_t=10 ft.; h_r=3 ft.; h_a=57 ft.]

January	15.0	W.	44	NW.	6	5	7	6	0	5	17	14	8	0	7	8	16	8	7	4	0	0	12	5	5	0	18	0	0
February	16.1	NW.	43	NW.	8	8	5	1	0	5	12	8	17	0	12	6	10	9	7	10	7	0	7	1	19	0	28	0	0
March	14.4	SW.	38	W.	6	8	8	6	3	12	15	5	5	0	10	8	13	14	12	8	4	0	18	5	5	0	19	1	0
April	12.9	S.	35	S.	4	5	8	4	1	22	9	8	6	0	14	5	11	15	9	1	1	0	14	1	0	0	0	2	0
May	12.9	S.	35	W.	4	7	8	8	4	9	12	6	8	0	11	10	10	14	10	0	0	0	18	7	0	0	0	6	0
June	11.9	S.	35	W.	4	7	8	8	4	9	11	10	7	0	11	11	8	10	8	0	0	0	12	3	0	1	0	5	0
July	11.9	SW.	36	NW.	1	1	3	6	8	14	11	9	6	0	12	8	11	10	9	0	0	0	15	1	0	5	0	7	0
August	10.7	S.	43	S.	3	2	6	3	5	23	8	5	9	0	12	7	12	8	5	0	0	0	18	1	0	0	0	1	0
September	12.1	S.	30	NE.	0	6	8	4	3	19	8	6	6	0	6	9	15	14	10	0	0	0	15	1	0	0	0	1	0
October	11.9	E.	65	N.	2	4	14	9	6	8	7	7	6	0	13	9	9	7	6	1	0	0	10	1	0	0	0	2	0
November	14.8	W.	37	NW.	4	9	9	2	3	6	13	7	11	0	9	8	13	12	10	2	0	0	15	1	0	0	2	0	0
December	15.4	NW.	38	S.	4	6	5	5	6	10	11	7	11	0	9	7	15	8	6	6	0	0	11	2	7	0	18	0	0
Year	15.9	NW.	43	NW.	13	7	5	1	2	6	9	13	19	0	126	96	143	129	99	32	12	0	165	29	36	6	85	24	0
	13.6	SW.	65	N.	55	68	83	55	40	139	132	98	115	0															

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAN FRANCISCO, CALIF.

[ϕ=37°48′ N.; λ=122°26′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.05	30.28	29.53	48.3	52.8	55.3	57.3	46.4	51.8	72	40	44	43	43	85	71	67	0.285	0.281	0.284	1.03	0.82	0.0	5.2	5.1	5.2	4.8
February	29.92	30.27	29.58	51.6	57.1	58.4	61.2	50.0	55.6	67	44	47	46	47	86	67	67	.327	.311	.322	4.68	1.37	.0	6.8	6.5	6.4	6.0
March	29.92	30.16	29.63	54.5	64.1	63.5	68.2	53.1	60.6	81	49	51	51	51	89	64	66	.372	.379	.374	.07	.07	.0	5.9	5.8	7.1	5.4
April	29.84	29.97	29.62	52.7	62.8	60.9	66.5	51.5	59.0	77	48	48	48	48	85	61	65	.336	.342	.342	.51	.35	.0	5.4	4.0	4.2	3.9
May	29.81	30.05	29.58	55.0	64.0	62.8	67.5	53.8	60.6	87	50	50	50	51	83	64	65	.360	.369	.371	.12	.12	.0	4.9	3.9	3.4	4.3
June	29.74	29.88	29.46	55.1	65.4	63.0	68.1	53.8	61.0	95	50	50	51	51	84	61	67	.361	.375	.379	.68	.64	.0	4.6	2.6	3.4	3.1
July	29.80	29.93	29.67	54.4	63.8	61.8	66.4	53.5	60.0	77	51	51	52	52	89	67	71	.377	.390	.391	.01	.01	.0	7.7	3.1	2.6	4.3
August	29.80	29.91	29.61	55.5	64.7	62.5	67.3	54.5	60.9	88	51	52	53	54	90	68	74	.396	.408	.412	T	T	.0	7.5	3.9	4.2	5.5
September	29.74	29.96	29.52	56.3	69.0	65.5	72.4	54.9	63.6	92	52	52	50	51	86	55	62	.390	.370	.372	.13	.13	.0	4.7	2.4	2.4	3.0
October	29.86	30.13	29.50	56.8	66.2	63.2	68.9	54.6	61.8	87	50	51	50	51	82	57	67	.380	.365	.378	.88	.69	.0	4.7	4.5	5.0	4.9
November	29.93	30.17	29.55	54.8	60.5	60.5	63.9	53.1	58.5	75	49	51	50	52	89	71	73	.379	.370	.386	3.76	1.44	.0	6.1	6.5	5.8	6.6
December	29.99	30.32	29.62	49.6	54.4	55.6	58.2	47.6	52.9	69	42	43	41	42	79	64	64	.277	.262	.274	4.06	1.51	.0	4.5	4.4	5.5	4.9
Year	29.87	30.32	29.46	53.7	62.1	61.1	65.5	52.2	58.9	95	40	49	49	49	86	64	67	.353	.352	.357	15.93	1.51	.0	5.7	4.4	4.6	4.7

SAN JUAN, P. R.

[ϕ=18°29′ N.; λ=66°07′ W.]

January	29.94	30.07	29.82	73.8	78.1	----	79.9	69.8	74.8	83	65	68	70	---	82	76	---	0.677	0.729	-----	8.09	4.52	0.0	5.2	5.1	----	5.1
February	29.95	30.12	29.81	73.7	78.6	----	80.7	69.5	75.1	86	67	68	70	---	81	75	---	.674	.729	-----	1.80	.54	.0	5.1	5.0	----	5.0
March	29.93	30.10	29.81	75.4	78.3	----	80.7	69.8	75.2	85	67	68	69	---	76	73	---	.672	.701	-----	2.42	.28	.0	5.0	6.4	----	5.3
April	29.93	30.05	29.76	78.6	80.0	----	83.0	71.1	77.0	89	68	69	70	---	74	72	---	.718	.731	-----	1.25	.88	.0	3.9	4.7	----	4.8
May	29.91	30.00	29.76	80.2	81.4	----	84.1	73.1	78.6	91	70	70	72	---	72	73	---	.746	.786	-----	1.78	.50	.0	5.1	5.6	----	5.7
June	29.94	30.02	29.83	81.2	82.5	----	84.9	74.5	79.7	90	72	73	73	---	76	73	---	.806	.811	-----	4.99	1.88	.0	5.2	5.7	----	5.3
July	29.95	30.04	29.87	81.0	82.1	----	84.0	75.0	79.5	88	71	74	75	---	79	79	---	.835	.862	-----	6.84	2.46	.0	5.8	5.5	----	5.9
August	29.93	30.02	29.78	81.5	82.9	----	84.9	75.6	80.2	90	72	74	75	---	79	78	---	.851	.867	-----	6.72	2.45	.0	5.6	4.6	----	5.6
September	29.88	29.96	29.78	81.1	82.9	----	85.4	75.0	80.2	91	72	74	75	---	80	77	---	.847	.858	-----	11.56	5.31	.0	5.3	6.4	----	6.3
October	29.86	29.99	29.69	80.9	84.5	----	86.7	74.4	80.6	92	71	74	74	---	80	72	---	.835	.852	-----	4.73	1.02	.0	5.1	5.1	----	5.5
November	29.81	29.97	29.62	78.7	82.1	----	83.5	72.6	78.0	86	69	72	75	---	81	78	---	.798	.858	-----	6.74	2.74	.0	3.9	4.4	----	4.8
December	29.93	30.04	29.80	76.5	79.5	----	81.6	71.7	76.6	87	67	72	74	---	85	83	---	.776	.835	-----	9.53	3.52	.0	6.2	6.0	----	6.2
Year	29.91	30.12	29.62	78.6	81.1	----	83.3	72.7	78.0	92	65	71	73	---	79	76	---	.769	.802	-----	66.45	5.31	.0	5.1	5.3	----	5.5

SANTA FE, N. MEX.

[ϕ=35°41′ N.; λ=105°57′ W.]

January	23.27	23.59	23.02	25.2	37.6	36.1	43.5	21.8	32.6	54	6	16	21	22	65	50	54	0.089	0.112	0.116	0.63	0.30	7.2	1.7	2.2	2.0	1.9
February	23.27	23.55	22.90	32.6	44.7	44.5	49.6	29.5	39.6	65	19	23	26	26	66	51	50	.120	.142	.140	.79	.26	6.4	3.2	5.4	5.6	4.9
March	23.28	23.65	23.01	33.6	52.7	53.8	58.2	30.5	44.4	70	15	21	22	22	58	30	30	.110	.115	.115	T	T	T	1.8	4.4	4.4	3.6
April	23.24	23.50	22.88	40.3	59.0	58.9	63.7	38.5	51.1	73	21	28	28	27	63	33	31	.157	.152	.148	.46	.29	3.2	3.0	5.4	6.1	4.8
May	23.30	23.60	23.00	50.3	69.2	67.6	74.0	48.1	61.0	83	34	34	35	34	57	30	33	.203	.205	.199	2.67	1.91	.0	2.6	4.8	6.9	4.7
June	23.27	23.53	23.05	57.3	74.9	76.6	80.3	53.3	66.8	88	43	31	30	28	39	21	19	.183	.170	.163	.54	.22	.0	2.4	2.5	3.9	2.9
July	23.39	23.62	23.24	61.8	80.0	78.0	84.6	59.1	71.8	92	52	46	46	44	58	31	33	.314	.309	.294	1.98	.64	.0	3.4	4.3	7.6	5.1
August	23.40	23.54	23.22	60.7	77.3	75.6	81.6	58.8	70.2	90	51	47	49	47	63	40	40	.328	.345	.330	2.35	.70	.0	4.3	5.7	7.3	5.8
September	23.33	23.58	23.15	50.7	66.8	67.0	72.0	48.7	60.4	82	37	38	40	39	64	40	38	.243	.254	.242	1.34	.84	.0	3.3	3.6	5.1	4.0
October	23.37	23.64	23.01	45.3	63.1	59.5	66.9	41.7	54.3	76	33	27	31	32	50	31	37	.163	.176	.182	.23	.19	.0	2.6	2.6	3.3	3.1
November	23.26	23.61	22.84	33.1	46.9	42.1	50.2	29.4	39.8	70	3	23	28	28	66	52	60	.123	.155	.155	1.47	.46	10.2	3.0	4.8	4.7	4.7
December	23.29	23.56	22.92	26.2	38.6	34.2	42.4	22.6	32.5	57	7	19	25	25	71	58	67	.105	.137	.135	.80	.45	5.5	2.2	4.8	3.6	4.0
Year	23.31	23.65	22.84	43.1	59.2	57.8	63.9	40.2	52.0	92	3	29	32	31	60	39	41	.177	.189	.185	13.26	1.91	32.5	2.8	4.2	5.0	4.1

SAULT STE. MARIE, MICH.

[ϕ=46°30′ N.; λ=84°21′ W.]

January	29.31	29.94	28.56	16.8	19.2	20.6	26.4	11.9	19.2	40	−19	14	15	18	88	83	88	0.094	0.098	0.110	2.54	0.46	21.8	8.7	7.8	8.4	7.8
February	29.51	30.33	28.56	−3.1	7.4	6.1	14.3	9.9	2.2	34	−37	−5	2	3	90	77	86	.040	.052	.052	1.36	.39	16.7	5.8	5.0	4.2	5.3
March	29.41	29.96	28.60	14.1	23.4	20.8	26.8	8.0	17.4	39	−14	11	16	17	88	73	83	.083	.097	.101	2.06	.44	22.2	7.6	6.8	7.5	7.1
April	29.20	29.75	28.65	31.4	37.3	35.3	40.5	27.4	34.0	70	18	26	28	28	81	68	76	.143	.150	.155	3.37	1.04	5.6	7.5	7.1	6.8	6.8
May	29.29	29.64	28.82	46.9	58.2	53.4	62.3	39.3	50.8	82	38	37	38	38	69	50	58	.227	.241	.236	1.50	.64	T	5.4	4.8	5.3	5.2
June	29.21	29.71	28.78	55.8	65.5	61.6	70.7	47.7	59.2	89	35	48	50	49	77	60	64	.347	.372	.357	1.74	.58	.0	6.8	6.4	5.7	6.0
July	29.30	29.65	28.97	59.5	71.0	65.1	74.8	52.0	63.4	90	42	53	53	53	79	56	67	.403	.415	.413	2.54	1.21	.0	3.5	4.1	4.3	3.8
August	29.33	29.61	28.89	55.5	66.4	60.8	69.6	49.2	59.4	87	40	50	50	51	81	57	70	.366	.377	.384	2.02	.89	.0	5.3	4.0	4.9	5.0
September	29.31	29.75	28.79	53.0	60.4	55.6	64.2	48.4	56.3	81	34	49	50	50	88	71	83	.367	.386	.378	3.54	1.10	.0	8.3	7.4	6.0	7.3
October	29.32	29.84	28.77	42.3	49.1	45.8	52.8	38.5	45.6	67	28	37	38	38	82	69	76	.231	.234	.241	1.99	.93	1.3	7.2	6.6	6.2	6.6
November	29.31	29.79	28.56	36.1	38.9	38.3	42.2	33.0	37.6	55	22	32	33	33	84	79	81	.188	.195	.193	7.67	2.39	3.9	9.1	9.4	9.0	9.2
December	29.34	29.77	28.66	16.1	19.4	20.0	25.0	11.8	18.4	41	−5	13	14	17	85	79	87	.081	.086	.096	2.42	.37	31.4	7.5	7.5	7.6	7.5
Year	29.32	30.33	28.56	35.4	42.0	40.3	47.5	29.8	38.6	90	−37	30	32	33	83	68	77	.214	.225	.226	32.75	2.39	102.9	6.9	6.4	6.3	6.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAN FRANCISCO, CALIF.

[H_b=155 ft.; h_t=208 ft.; h_r=202 ft.; h_a=243 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T. or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	32°: Minimum temperature or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	5.2	N.	23	W.	0	14	3	1	3	3	3	7	19	9	13	7	11	7	3	0	0	0	8	1	0	0	0	0	0
February	5.9	SE.	21	NE.	0	7	6	2	9	10	5	11	6	0	6	9	13	13	12	0	0	0	3	1	0	0	0	0	0
March	5.9	W.	22	W.	0	9	1	2	5	4	11	26	4	0	8	16	7	2	1	0	0	0	7	5	0	0	0	0	0
April	7.7	W.	27	W.	0	2	1	0	2	3	19	32	1	0	15	9	6	4	4	0	0	0	1	0	0	0	0	0	0
May	8.5	W.	29	NW.	0	0	0	0	0	7	11	38	1	5	14	10	7	3	1	0	0	0	0	0	0	0	0	0	0
June	7.6	SW.	25	W.	0	0	1	0	2	4	22	25	0	6	19	4	7	3	3	0	0	0	0	0	0	0	1	0	0
July	8.9	SW.	25	W.	0	0	0	0	0	3	30	23	4	2	12	14	5	1	0	0	0	0	2	0	0	0	0	0	0
August	7.8	SW.	28	W.	0	0	0	0	0	3	30	26	0	3	6	14	11	0	0	0	0	0	6	0	0	0	0	1	0
September	6.6	SW.	24	SW.	0	1	3	0	3	3	16	30	0	4	16	10	4	1	1	0	0	0	2	0	0	2	0	0	0
October	6.4	W.	24	N.	0	5	2	1	4	3	22	18	5	2	13	7	11	4	3	0	0	0	2	0	0	0	0	0	0
November	5.6	W.	26	S.	0	9	5	0	6	8	7	18	5	2	6	9	15	10	7	0	0	0	5	1	0	0	0	0	0
December	6.2	N.	30	NE.	0	20	11	3	5	8	0	4	8	3	14	9	8	8	7	0	0	0	9	3	0	0	0	0	0
Year	6.9	W.	30	NE.	0	67	33	9	39	59	176	258	53	36	142	118	105	56	42	0	0	0	45	11	0	3	0	1	0

SAN JUAN, P. R.

[H_b=82 ft.; h_t=9 ft.; h_r=4 ft.; h_a=54 ft.]

January	11.7	E.	36	E.	2	0	2	11	7	10	0	1	0	0	6	22	3	24	21	0	0	0	0	0	0	0	1	0
February	9.9	E.	29	NE.	0	0	1	5	9	12	1	0	0	0	10	12	6	13	9	0	0	0	0	0	0	0	0	0
March	11.4	E.	31	E.	0	0	0	6	9	5	11	0	0	0	6	23	2	23	16	0	0	0	0	0	0	0	1	0
April	11.8	E.	30	E.	0	0	1	22	5	2	0	0	0	0	9	19	2	8	6	0	0	0	0	0	0	0	1	0
May	12.1	E.	30	E.	0	0	1	25	3	2	0	0	0	0	4	22	5	13	9	0	0	0	0	0	0	3	0	1	0
June	12.2	E.	27	NE.	0	0	2	24	1	3	0	0	0	0	6	20	4	12	8	0	0	0	0	0	0	0	1	0	0
July	13.4	E.	29	E.	0	0	0	25	4	2	0	0	0	0	4	21	6	20	16	0	0	0	0	0	0	0	0	5	0
August	12.4	E.	29	E.	0	0	1	21	1	8	0	0	0	0	2	23	6	22	17	0	0	0	0	0	0	1	0	6	0
September	9.3	E.	32	E.	1	0	0	13	4	8	0	0	0	0	2	18	10	20	16	0	0	0	0	0	0	2	0	12	0
October	8.2	S.	25	E.	0	0	0	7	6	18	0	0	0	0	3	24	4	14	12	0	0	0	0	0	0	5	0	5	0
November	8.6	S.	36	E.	1	1	2	4	3	15	4	1	0	0	7	21	2	19	15	0	0	0	0	0	0	0	0	5	0
December	14.1	E.	40	NE.	7	0	6	10	14	1	0	0	0	0	1	22	8	26	24	0	0	0	0	0	0	0	0	0	0
Year	11.3	E.	40	NE.	11	1	27	176	62	92	5	2	0	0	60	247	58	214	169	0	0	0	0	0	0	12	0	44	0

SANTA FE, N. MEX.

[H_b=7,013 ft.; h_t=38 ft.; h_r=31 ft.; h_a=53 ft.]

January	6.2	N.	21	N.	0	21	10	11	6	4	2	7	1	0	24	6	1	4	3	5	4	0	0	0	3	0	31	0	0
February	6.1	E.	24	N.	0	7	7	8	8	8	7	5	4	2	10	9	9	10	6	9	8	0	0	0	0	0	21	1	0
March	5.8	E.	25	SW.	0	6	3	14	5	7	6	8	10	5	15	14	2	0	0	6	0	0	0	0	0	0	16	0	0
April	6.5	SW.	22	SW.	0	7	9	8	8	5	9	4	3	7	10	17	3	7	2	2	2	0	1	0	0	0	6	0	0
May	6.8	E.	22	S.	0	7	10	11	10	6	6	4	1	7	11	14	6	6	6	0	0	2	0	0	0	0	6	0	0
June	7.0	SW.	22	S.	0	2	10	10	9	4	14	7	2	2	21	5	4	6	4	0	0	0	0	0	0	0	5	0	0
July	6.6	E.	21	SW.	0	9	9	21	11	5	2	1	3	1	9	18	4	11	9	0	0	0	3	0	0	0	4	0	15
August	5.8	E.	16	NW.	0	5	19	13	7	5	7	1	1	4	4	20	7	17	11	0	0	0	0	0	0	1	0	11	0
September	5.9	E.	23	E.	0	2	8	14	10	2	12	7	4	1	14	10	6	6	4	0	0	0	0	0	0	0	0	4	0
October	6.3	E.	22	SW.	0	8	5	19	10	5	9	2	3	1	21	4	6	3	3	0	0	0	0	0	0	0	0	1	0
November	6.0	N.	23	NW.	0	11	13	13	13	2	3	2	3	0	12	12	6	7	7	8	6	1	0	0	3	0	15	0	0
December	5.9	N.	21	N.	0	12	20	7	11	1	2	3	5	1	16	8	7	5	5	5	3	0	2	0	2	0	30	0	0
Year	6.3	E.	25	SW.	0	97	123	149	108	54	79	49	40	31	167	137	61	82	60	35	23	6	3	1	8	5	119	43	0

SAULT STE. MARIE, MICH.

[H_b=614 ft.; h_t=11 ft.; h_r=3 ft.; h_a=52 ft.]

January	9.7	SE.	38	NW.	1	7	3	7	17	2	7	8	11	0	4	5	22	24	17	26	22	0	4	0	18	0	31	0	0
February	7.9	NW.	30	NW.	0	5	1	10	7	4	4	10	15	0	10	7	11	11	11	15	11	0	13	4	26	0	28	0	0
March	9.1	NW.	32	NW.	1	2	3	8	15	1	6	8	19	0	7	6	18	19	16	24	18	0	11	3	20	0	31	0	1
April	9.6	NW.	25	NW.	0	2	5	7	11	4	4	5	21	1	5	10	15	17	12	20	10	0	5	1	3	0	27	2	0
May	9.0	NW.	33	NW.	1	0	0	8	16	4	9	9	15	1	10	11	10	14	5	1	0	0	6	0	0	0	4	3	2
June	9.0	NW.	33	NW.	0	1	4	8	16	0	4	11	14	2	7	12	11	12	8	0	0	1	11	0	0	0	0	5	1
July	7.1	SE.	21	NW.	0	0	3	10	5	2	5	14	22	1	15	12	4	13	9	0	0	0	3	2	0	1	0	7	2
August	7.2	NW.	23	SW.	0	0	3	10	5	5	5	5	20	0	8	19	4	11	6	0	0	0	1	10	4	0	0	4	2
September	7.5	NW.	32	NW.	1	5	1	11	12	3	7	1	18	0	4	9	17	17	11	0	0	0	17	2	0	0	0	2	3
October	6.7	SE.	21	SW.	0	4	6	8	15	1	6	3	22	1	7	7	17	11	6	5	3	0	13	1	0	0	5	0	0
November	10.2	NW.	40	NW.	3	2	5	5	16	2	6	3	22	0	0	4	26	21	17	11	7	0	8	1	1	0	12	1	1
December	9.7	SE.	28	NW.	0	7	4	8	19	3	7	0	12	0	0	4	20	23	17	25	23	0	9	1	25	0	31	0	1
	9.4	SE.	30	NW.	0	10	6	11	15	5	1	2	10	2	7	4	20	23	17	25	23	0	9	1	25	0	31	0	1
Year	8.6	NW.	40	NW.	7	45	41	101	164	31	65	76	199	8	84	106	175	193	135	127	94	2	110	19	93	1	169	24	13

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAVANNAH, GA.

[ϕ=32° 05′ N.; λ=81° 05′ W.]

Month	Pressure			Temperature								Moisture												Cloudiness			
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation						
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	30.11	30.37	29.64	47.9	59.0	54.7	63.8	46.0	54.9	77	23	42	45	46	82	63	74	0.295	0.328	0.339	2.16	0.97	0.0	5.3	4.9	4.8	5.1
February	30.08	30.64	29.54	42.8	54.1	48.8	58.5	38.6	48.6	73	22	37	40	38	80	61	69	.241	.268	.247	2.75	.93	.0	5.0	5.0	3.1	5.0
March	30.08	30.50	29.61	51.7	64.1	58.4	68.3	48.3	58.3	81	29	46	48	49	82	59	72	.334	.357	.363	1.06	.31	.0	5.6	4.5	3.7	5.2
April	29.95	30.28	29.48	61.5	73.2	66.2	77.5	57.4	67.4	87	40	54	53	55	78	52	69	.439	.425	.454	1.73	.53	.0	4.3	4.5	4.3	4.0
May	29.90	30.25	29.10	68.5	77.9	70.5	81.5	63.9	72.7	93	54	63	61	64	83	58	79	.585	.548	.591	9.02	4.12	.0	6.0	6.8	6.1	6.5
June	29.91	30.12	29.63	77.7	86.4	78.9	89.4	72.0	80.7	97	65	71	69	72	82	58	79	.771	.722	.782	2.19	1.28	.0	4.2	5.5	4.6	4.6
July	29.94	30.15	29.74	79.8	90.1	82.1	93.4	74.3	83.8	101	70	73	72	74	80	56	76	.808	.787	.828	4.06	1.38	.0	3.7	5.5	6.1	5.0
August	29.99	30.19	29.81	77.4	86.9	79.3	90.2	73.4	81.8	96	65	72	72	72	85	62	79	.801	.784	.789	10.40	4.22	.0	3.6	5.6	6.1	5.2
September	29.96	30.19	29.73	73.8	84.9	77.6	88.1	70.8	79.4	93	61	70	69	71	89	60	80	.747	.717	.759	4.20	1.88	.0	4.5	5.8	3.7	5.1
October	29.99	30.21	29.70	63.3	76.6	69.0	79.8	61.4	70.6	92	48	57	60	60	82	57	75	.499	.542	.548	2.19	.96	.0	4.1	3.8	2.8	3.9
November	30.07	30.39	29.80	54.0	69.0	61.4	71.9	51.2	61.6	83	34	48	50	50	82	53	68	.372	.394	.393	1.12	.81	.0	4.1	4.0	2.4	3.9
December	30.09	30.38	29.60	46.1	57.1	51.5	61.4	42.5	52.0	75	22	40	43	41	79	60	70	.269	.296	.282	1.46	.51	.0	5.8	5.0	4.4	5.6
Year	30.01	30.64	29.10	62.0	73.3	66.5	77.0	58.3	67.6	101	22	56	57	58	82	58	74	.513	.514	.531	42.34	4.22	.0	4.7	5.1	4.3	4.9

SCRANTON, PA.

[ϕ=41° 24′ N.; λ=75° 42′ W.]

January	29.21	29.66	28.27	28.2	32.9	31.8	36.2	24.0	30.1	47	0	23	23	24	79	67	71	0.135	0.137	0.133	1.58	0.65	2.1	8.1	7.5	6.8	7.6
February	29.27	29.96	28.30	9.4	18.9	18.2	25.9	5.0	15.4	48	−19	4	8	8	76	60	61	.054	.065	0.64	1.31	.57	17.8	4.8	5.1	4.2	5.0
March	29.26	29.80	28.68	28.9	38.4	36.6	44.6	24.5	34.6	67	7	24	26	26	81	62	65	.139	.149	.148	2.78	.91	8.7	5.8	5.9	4.6	5.8
April	29.12	29.75	28.50	43.0	52.9	51.2	58.8	37.8	48.3	76	29	35	35	37	74	53	59	.207	.208	.222	2.27	.95	T	5.2	6.3	5.2	5.6
May	29.14	29.63	28.78	57.4	69.8	65.9	74.3	49.7	62.0	92	35	48	46	48	72	46	56	.351	.338	.359	3.32	1.44	.0	4.5	5.3	6.4	5.3
June	29.06	29.51	28.69	68.0	78.4	74.9	81.7	60.9	71.3	93	47	60	58	59	77	51	60	.533	.500	.518	2.45	1.30	.0	5.0	5.8	5.3	5.2
July	29.12	29.48	28.88	70.1	81.8	76.9	86.1	62.7	74.4	95	51	62	61	61	75	51	60	.554	.547	.549	6.74	4.25	.0	4.2	5.5	6.4	5.1
August	29.19	29.57	28.88	62.2	72.8	69.4	76.5	57.7	67.1	86	41	56	56	57	82	58	66	.465	.471	.484	2.75	.72	.0	5.5	6.0	5.5	5.7
September	29.24	29.61	28.91	60.6	71.5	67.4	74.7	57.0	65.8	85	43	56	58	58	86	64	74	.464	.495	.503	4.40	1.16	.0	7.3	7.7	4.8	6.6
October	29.18	29.57	28.70	43.9	54.9	51.5	58.7	40.3	49.5	76	30	38	39	40	80	56	67	.239	.251	.263	1.06	.50	.0	5.8	6.2	4.6	5.4
November	29.25	29.73	28.57	41.9	48.2	46.3	52.0	39.1	45.6	75	21	37	38	38	82	68	73	.234	.245	.246	3.09	.83	T	7.3	7.8	6.7	7.0
December	29.18	29.60	28.30	27.1	31.9	30.4	35.6	22.6	29.1	65	8	22	24	21	81	70	67	.132	.134	.119	2.32	1.95	.7	7.5	7.1	7.0	7.3
Year	29.18	29.96	28.27	45.1	54.4	51.7	58.8	40.1	49.4	95	−19	39	39	40	79	59	65	.292	.295	.301	34.07	4.25	29.3	5.9	6.4	5.6	6.0

SEATTLE, WASH.

[ϕ=47° 36′ N.; λ=122° 20′ W.]

January	30.02	30.49	29.37	44.1	47.7	47.7	49.7	41.5	45.6	57	32	40	40	40	84	77	77	0.247	0.255	0.253	6.31	1.77	T	8.4	8.4	8.6	8.8
February	29.94	30.34	29.56	44.3	50.7	52.6	55.7	41.7	48.7	66	35	39	40	39	83	68	62	.242	.250	.244	1.29	.51	0.0	6.1	6.5	5.4	6.2
March	29.98	30.43	29.54	46.4	54.7	57.0	59.5	44.5	52.0	69	39	42	41	40	84	62	56	.267	.264	.254	2.65	.70	.0	6.2	6.5	6.7	6.4
April	29.92	30.28	29.60	49.2	58.7	62.9	64.9	48.0	56.4	81	37	44	44	44	84	60	53	.294	.296	.298	1.37	.84	.0	6.5	5.9	5.8	6.1
May	29.88	30.33	29.49	52.2	61.5	64.9	67.1	50.6	58.8	92	45	46	45	44	80	57	50	.314	.304	.294	2.48	1.17	.0	6.3	6.5	6.0	6.4
June	29.89	30.22	29.52	54.0	64.7	69.2	71.0	53.4	62.2	82	50	48	48	46	79	54	45	.330	.330	.320	.23	.18	.0	4.9	4.3	4.8	4.7
July	29.92	30.14	29.70	56.3	65.7	70.8	72.4	55.4	63.9	80	52	50	50	50	80	59	49	.365	.369	.361	.83	.64	.0	7.0	5.5	3.5	5.3
August	29.93	30.14	29.71	58.0	68.2	74.3	75.8	56.7	66.2	88	52	53	53	52	85	61	47	.407	.406	.386	.18	.10	.0	5.2	4.4	2.7	4.3
September	29.90	30.25	29.45	54.3	61.3	65.2	66.4	52.6	59.5	90	42	49	49	47	83	66	54	.351	.353	.329	2.22	.78	.0	6.3	6.4	6.0	6.4
October	29.86	30.27	29.10	50.8	58.0	59.5	62.0	48.4	55.2	77	41	46	47	47	85	69	66	.317	.333	.335	3.62	.83	.0	5.8	5.9	6.3	6.3
November	29.77	30.19	29.17	48.4	51.9	51.3	54.2	45.7	50.0	64	39	43	44	44	83	74	76	.285	.284	.287	6.67	1.59	.0	8.5	8.2	8.8	8.1
December	29.95	30.48	29.06	42.4	45.4	45.4	48.1	39.9	44.0	55	33	38	39	40	85	79	80	.231	.241	.245	5.46	.83	.4	7.5	7.8	7.7	8.5
Year	29.91	30.49	29.06	50.0	57.4	60.1	62.2	48.2	55.2	92	32	45	45	44	83	66	60	.304	.307	.301	33.31	1.77	.4	6.6	6.4	6.0	6.5

SHERIDAN, WYO.

[ϕ=44° 48′ N.; λ=106° 57′ W.]

January	26.12	26.58	25.60	22.6	37.0	34.6	43.3	19.4	31.4	63	6	18	22	23	82	55	62	0.099	0.118	0.121	0.32	0.25	2.9	6.0	5.4	5.5	6.1
February	26.19	26.53	25.87	21.7	40.9	37.3	45.8	17.0	31.4	70	−23	17	20	20	81	46	50	.098	.113	.108	.49	.29	6.5	3.8	4.3	4.4	4.5
March	26.14	26.59	25.71	28.0	42.8	42.2	48.8	23.0	35.9	70	−5	23	24	25	78	52	53	.121	.128	.133	1.61	.55	11.0	7.1	5.8	5.6	5.8
April	26.11	26.56	26.62	34.7	57.3	57.9	62.5	32.5	47.5	82	20	28	27	27	77	33	35	.151	.144	.147	2.39	1.02	18.5	3.9	4.4	4.8	4.4
May	26.07	26.50	25.73	47.9	73.3	75.2	78.7	44.0	61.4	94	30	38	35	36	69	28	26	.231	.215	.222	.53	.45	.0	4.3	3.5	4.9	3.8
June	26.02	26.39	25.67	54.5	72.9	74.0	78.8	49.6	64.2	93	36	46	44	43	73	40	38	.312	.293	.290	1.38	.57	.0	3.5	4.5	5.2	4.2
July	26.09	26.41	25.71	60.1	84.8	84.9	90.7	55.4	73.0	102	47	48	42	42	66	27	26	.342	.281	.272	.40	.14	.0	2.9	3.5	3.6	3.2
August	26.16	26.36	25.95	54.6	79.9	78.8	84.8	50.9	67.8	100	37	44	40	40	69	27	28	.288	.253	.253	.12	.05	.0	3.5	4.0	3.8	3.8
September	26.11	26.56	25.70	40.0	61.9	59.7	66.9	36.7	51.8	92	24	35	35	32	83	42	41	.208	.207	.180	1.92	.88	9.0	5.1	5.2	4.5	5.1
October	26.13	26.63	25.67	39.8	60.4	55.8	64.6	36.6	50.6	82	25	35	35	34	83	42	48	.202	.208	.199	1.49	.98	.0	4.4	3.4	4.3	3.9
November	26.06	26.55	25.60	29.0	48.4	42.7	53.2	25.8	39.5	73	14	24	26	26	82	45	53	.128	.138	.138	.25	.20	1.9	3.8	4.3	3.2	4.6
December	26.10	26.56	25.62	22.8	34.5	30.4	40.7	16.7	28.7	56	−10	17	20	20	78	54	66	.100	.109	.112	.66	.15	6.9	5.7	5.7	5.0	5.7
Year	26.11	26.69	25.60	38.0	57.9	56.1	63.2	34.0	48.6	102	−23	31	31	31	77	41	44	.190	.184	.181	11.56	1.02	56.7	4.5	4.5	4.6	4.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SAVANNAH, GA.

[H_b=65 ft.; h_t=73 ft.; h_r=71 ft.; h_a=152 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	10.5	W.	32	W.	1	9	12	6	5	4	9	10	7	0	11	7	13	7	6	0	0	0	11	5	0	0	3	0	0
February	12.0	NE.	34	W.	2	7	12	8	4	7	5	9	4	0	11	8	9	7	7	0	0	0	3	2	1	0	5	1	0
March	11.9	E.	31	SW.	0	9	4	9	8	10	11	7	4	0	15	3	13	7	4	0	0	0	5	2	0	0	2	0	0
April	11.8	SW.	31	NW.	0	3	6	3	8	12	14	8	6	0	17	7	6	8	7	0	0	0	5	2	0	0	0	4	0
May	10.8	E.	39	NW.	1	7	9	14	8	4	13	5	2	0	5	13	13	10	8	0	0	0	1	0	0	1	0	7	0
June	9.1	S.	30	E.	0	2	1	3	12	19	16	4	2	1	14	10	6	8	7	0	0	0	1	0	0	16	0	9	0
July	9.8	SW.	35	SE.	1	7	0	3	9	8	22	13	0	0	9	17	5	11	8	0	0	0	3	0	0	23	0	11	0
August	9.1	SW.	45	N.	1	4	3	5	6	13	22	8	1	0	9	17	5	11	10	0	0	0	3	0	0	20	0	15	0
September	8.3	N.	21	SE.	0	12	5	7	11	7	9	7	2	0	10	13	7	9	8	0	0	0	8	2	0	9	0	5	0
October	8.9	NE.	24	NW.	0	9	19	10	4	7	3	4	6	0	18	4	9	7	5	0	0	0	2	1	0	1	0	1	0
November	10.6	N.	26	S.	0	13	5	11	7	3	9	6	6	0	16	6	8	6	4	0	0	0	7	1	0	0	0	0	0
December	10.6	W.	34	W.	1	6	11	6	2	4	12	14	7	0	10	8	13	8	6	0	0	0	9	1	0	0	3	0	0
Year	10.3	SW.	45	N.	7	88	87	85	84	98	145	95	47	1	145	113	107	99	80	0	0	0	56	16	1	70	13	53	0

SCRANTON, PA.

[H_b=805 ft.; h_t=72 ft.; h_r=64 ft.; h_a=104 ft.]

January	7.5	SW.	32	NW.	1	12	5	3	4	2	22	0	14	0	4	7	20	11	8	18	3	0	5	1	7	0	26	0	0
February	7.8	N.	27	NW.	0	20	4	0	1	6	8	1	17	0	11	9	8	8	7	13	8	0	7	1	19	0	28	0	0
March	7.4	SW.	21	NW.	0	19	4	2	3	5	17	1	10	1	9	9	13	15	13	12	7	0	6	0	6	0	25	0	0
April	6.9	SW.	26	SE.	0	10	7	3	6	13	13	0	8	0	9	9	12	9	7	7	4	1	6	0	0	0	5	1	0
May	6.8	SW.	28	NW.	0	14	8	1	2	4	19	0	14	0	7	17	7	11	7	0	0	0	3	0	0	0	1	0	0
June	7.1	SW.	19	N.	0	15	3	1	3	9	21	0	8	0	4	19	7	10	8	0	0	0	1	0	0	0	4	0	0
July	5.8	N.	33	NW.	1	13	8	2	2	7	16	2	12	0	7	19	5	12	11	0	0	0	5	0	0	0	8	0	4
August	5.9	N.	18	NW.	0	24	8	1	4	4	15	0	6	0	6	14	11	10	8	0	0	0	5	0	0	0	8	0	10
September	5.9	N.	20	SW.	0	20	7	2	6	9	6	2	7	1	4	14	12	14	11	0	0	0	7	0	0	0	0	0	3
October	5.4	N.	24	NW.	0	25	4	3	0	10	11	1	7	1	10	9	12	8	5	1	0	0	10	0	0	0	3	0	0
November	7.0	N.	24	NW.	0	7	4	4	5	4	18	2	15	1	4	11	15	11	7	5	2	0	3	0	0	0	9	0	0
December	7.5	SW.	23	SE.	0	7	4	4	3	3	16	2	17	0	3	10	18	11	6	18	4	0	3	0	8	0	27	0	0
Year	6.9	N.	33	NW.	2	199	63	22	39	75	182	11	135	4	78	147	140	130	98	71	25	2	65	3	40	13	123	23	0

SEATTLE, WASH.

[H_b=125 ft.; h_t= 90 ft.; h_r=83 ft.; h_a=321 ft.]

January	11.8	S.	42	SW.	10	9	4	2	11	26	9	0	0	1	1	7	23	23	17	1	0	0	8	2	0	0	0	0	0
February	7.9	N.	35	SW.	3	15	6	2	11	9	8	3	2	0	7	10	11	9	6	0	0	0	10	5	0	0	0	0	0
March	9.2	N.	45	SW.	4	19	8	4	4	11	10	2	3	1	6	12	13	13	8	0	0	0	7	0	0	0	0	0	0
April	7.4	N.	34	SW.	1	13	6	3	11	2	7	8	6	4	6	11	13	11	6	0	0	0	4	2	0	0	1	0	0
May	7.4	N.	34	SW.	1	14	5	1	14	10	8	7	3	0	7	9	15	13	6	0	0	0	4	0	0	0	0	0	0
June	8.9	SE.	28	W.	0	11	12	2	9	5	4	7	9	1	11	13	6	4	1	0	0	0	2	1	0	0	0	0	0
July	8.6	N.	40	SW.	1	11	7	2	11	7	11	5	8	0	8	15	8	4	3	0	0	0	0	0	0	0	0	0	0
August	8.3	N.	28	SW.	0	11	7	2	11	7	11	5	6	1	12	12	7	4	2	0	0	0	13	2	0	0	0	0	0
September	7.0	N.	30	W.	0	18	7	0	5	8	5	6	12	1	6	10	14	8	8	0	0	0	11	2	0	0	0	1	0
October	7.7	N.	32	SW.	1	17	6	3	12	7	3	3	9	0	6	10	16	16	13	0	0	0	16	3	0	0	0	2	0
November	8.8	SE.	59	S.	2	11	6	5	20	10	4	2	4	0	9	6	16	24	20	0	0	0	5	2	0	0	0	1	0
December	11.1	SE.	37	SW.	4	5	2	3	27	17	5	1	0	0	1	6	24	22	18	4	2	0	6	3	0	0	0	0	0
Year	11.5	S.	45	SW.	7	11	2	0	18	18	11	0	2	0	1	6	24	22	18	4	2	0	6	3	0	0	0	0	0
	9.0	S.	59	S.	33	154	71	27	153	130	85	44	58	8	75	117	173	151	108	5	2	0	86	22	0	1	0	5	0

SHERIDAN, WYO.

[H_b=3,790 ft.; h_t=10 ft.; h_r=3 ft.; h_a=47 ft.]

January	5.2	NW.	33	NW.	2	3	3	0	7	12	5	6	24	2	5	15	11	6	2	7	4	0	5	0	2	0	31	0	0
February	5.0	NW.	21	NW.	0	3	4	4	4	6	9	7	18	1	9	13	6	6	4	8	6	0	2	0	6	0	27	0	0
March	6.9	NW.	30	NW.	0	3	6	5	5	10	3	1	27	2	8	11	12	12	10	15	8	1	0	0	2	0	25	1	0
April	5.9	NW.	24	NW.	0	3	4	3	2	10	13	4	17	4	14	10	6	6	5	5	5	1	0	0	0	0	17	1	0
May	5.2	NW.	21	SW.	0	2	5	0	9	7	10	11	15	3	13	16	2	3	2	8	0	0	0	0	0	5	2	3	0
June	5.7	NW.	24	NW.	0	2	6	1	16	5	6	7	16	1	15	9	6	13	8	0	0	0	1	0	0	4	0	11	0
July	5.1	NW.	27	NW.	0	2	6	3	15	8	8	5	12	3	18	12	1	4	4	0	0	0	0	0	0	20	0	6	1
August	4.9	NW.	30	NW.	0	4	4	4	6	10	8	4	14	8	17	7	7	5	1	0	0	0	0	0	0	11	0	2	0
September	5.0	NW.	21	NW.	0	5	6	2	4	11	4	1	23	4	12	7	11	10	9	7	5	0	1	0	1	2	2	10	0
October	5.7	NW.	22	NW.	0	2	8	4	8	11	8	4	15	2	15	11	5	8	5	0	0	0	2	0	0	0	3	1	0
November	4.1	NW.	30	NW.	0	1	3	0	8	18	9	6	12	3	13	9	8	5	1	1	4	0	0	0	1	1	0	0	0
December	6.1	NW.	30	NW.	0	4	6	1	11	10	6	2	22	0	7	14	10	11	8	15	8	0	0	0	2	1	6	28	0
Year	5.4	NW.	33	NW.	2	34	61	27	95	118	89	58	215	33	146	134	85	89	59	61	39	3	10	2	19	42	173	24	1

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SHREVEPORT, LA.

[ϕ=32°30′ N.; λ=93°40′ W.]

Month	Pressure			Temperature								Moisture													
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.88	30.24	29.53	45.4	53.5	53.4	58.2	43.2	50.7	74	21	41	44	44	86	74	75	0.280	0.314	0.312	5.91	2.29	0.0	6.3	6.7	5.2	6.1
February	29.90	30.45	29.41	42.5	53.3	53.2	59.0	39.5	49.2	76	24	37	39	38	80	61	59	.225	.251	.238	2.75	1.03	.3	5.1	4.5	4.2	4.7
March	29.84	30.25	29.46	48.3	60.2	61.8	67.4	46.1	56.8	82	31	42	44	44	78	57	56	.281	.305	.312	9.30	4.78	T	6.3	4.3	3.8	4.7
April	29.73	30.04	29.36	60.8	72.8	72.1	77.7	58.2	68.0	87	45	55	56	55	82	58	56	.449	.475	.448	4.13	1.81	.0	6.2	5.3	3.7	5.1
May	29.70	29.98	29.45	66.8	79.3	77.6	83.3	63.9	73.6	95	51	61	61	62	83	56	61	.549	.554	.556	4.46	2.58	.0	3.6	4.5	4.4	4.2
June	29.65	29.90	29.35	76.2	89.8	89.5	94.4	73.9	84.2	101	70	69	67	66	79	48	48	.709	.681	.650	.95	.92	.0	2.8	2.8	2.0	2.5
July	29.71	29.87	29.54	77.8	91.7	91.4	96.8	75.1	86.0	103	69	71	68	67	80	46	46	.753	.675	.660	.41	.36	.0	3.6	3.6	2.9	3.5
August	29.73	29.86	29.51	78.0	93.0	91.7	97.2	75.9	86.6	102	69	72	68	67	82	44	46	.786	.685	.672	.73	.71	.0	3.0	3.9	4.1	3.7
September	29.73	30.00	29.54	68.9	83.2	80.5	87.4	66.5	77.0	94	58	64	64	61	84	53	54	.609	.604	.556	1.51	.65	.0	3.7	3.9	3.7	3.8
October	29.79	30.14	29.52	63.1	80.4	78.0	84.5	62.3	73.4	91	51	56	56	54	80	44	45	.476	.463	.429	T	T	.0	3.2	2.4	1.0	2.2
November	29.80	30.17	29.23	53.0	65.4	63.3	69.5	50.7	60.1	84	37	46	46	46	79	54	58	.338	.344	.338	9.12	4.19	.0	5.2	4.1	3.8	4.4
December	29.90	30.32	29.46	43.9	54.2	53.4	59.3	40.7	50.0	71	23	39	40	41	82	61	65	.254	.273	.283	4.06	1.32	.0	5.8	4.3	4.3	4.7
Year	29.78	30.45	29.23	60.4	73.1	72.2	77.9	58.0	68.0	103	21	54	54	54	81	55	56	.476	.469	.455	43.33	4.78	.3	4.6	4.2	3.6	4.1

SIOUX CITY, IOWA

[ϕ=42°30′ N.; λ=96°24′ W.]

January	28.85	29.39	28.32	23.2	29.6	29.4	36.2	18.4	27.3	63	−5	19	22	21	82	72	72	0.108	0.124	0.124	0.50	0.38	5.0	5.7	7.5	6.4	6.9
February	28.98	29.34	28.54	19.2	31.2	30.8	37.0	16.8	26.9	64	−10	14	18	17	78	54	57	.086	.098	.101	.18	.16	2.2	3.9	5.8	4.8	4.9
March	28.89	29.43	28.20	25.7	38.3	39.9	45.2	22.9	34.0	74	2	19	20	22	74	51	51	.107	.119	.123	1.36	.62	9.4	5.3	6.5	6.6	6.1
April	28.74	29.23	28.28	42.9	58.1	59.3	64.0	39.8	51.9	86	29	30	29	28	62	36	34	.175	.170	.165	.55	.33	.0	4.3	5.1	3.7	4.5
May	28.70	29.10	28.27	62.6	80.9	81.0	86.0	59.1	72.6	105	39	45	41	41	53	27	26	.311	.279	.272	.60	.31	.0	3.6	4.0	5.1	3.9
June	28.64	28.88	28.25	68.8	81.9	83.2	87.4	64.5	75.0	104	55	57	56	56	68	45	43	.478	.468	.462	6.27	2.88	.0	4.4	5.2	4.5	4.8
July	28.68	29.00	28.37	72.7	86.9	86.4	91.7	68.9	80.3	107	49	59	60	62	64	43	47	.510	.534	.577	4.93	2.39	.0	4.9	3.4	3.9	3.7
August	28.76	29.10	28.48	65.2	81.4	81.8	86.9	62.1	74.5	108	44	55	55	54	72	44	41	.460	.457	.448	1.12	.38	.0	5.9	4.5	5.2	4.8
September	28.75	29.10	28.41	52.1	65.6	63.7	70.4	48.3	59.4	89	33	47	49	48	83	58	61	.339	.368	.359	3.43	1.08	.0	4.7	5.3	3.9	4.9
October	28.80	29.35	28.28	48.2	65.7	62.4	70.0	45.7	57.8	86	23	42	45	44	78	49	54	.275	.315	.308	1.24	.89	.0	3.3	4.7	3.7	3.8
November	28.78	29.29	28.31	36.2	46.7	44.6	50.4	33.3	41.8	76	21	31	33	33	82	63	66	.182	.197	.194	2.00	.81	T	6.2	6.5	5.4	6.0
December	28.88	29.41	28.36	20.7	25.2	23.4	30.0	14.3	22.2	48	−7	17	19	18	85	75	79	.099	.105	.104	.63	.62	7.3	7.8	8.2	4.9	7.5
Year	28.79	29.43	28.20	44.8	57.6	57.2	62.9	41.2	52.1	108	−10	36	37	37	73	51	53	.261	.270	.270	22.81	2.88	23.9	5.0	5.6	4.8	5.2

SPOKANE, WASH.

[ϕ=47°40′ N.; λ=117°25′ W.]

January	28.10	28.62	27.50	35.1	39.2	39.9	42.8	32.0	37.4	53	24	31	32	34	86	77	78	0.176	0.186	0.194	2.57	0.77	1.3	7.2	7.8	7.6	7.9
February	28.07	28.47	27.70	33.0	42.3	46.5	47.9	31.0	39.4	57	23	30	32	33	88	65	59	.167	.181	.191	.27	.16	.3	3.9	5.5	5.1	5.4
March	28.03	28.52	27.69	38.6	53.0	55.2	57.9	36.5	47.2	67	25	32	32	31	79	47	42	.188	.186	.179	1.53	.59	.0	5.0	5.4	7.2	5.6
April	27.96	28.29	27.57	46.2	64.2	67.0	68.7	44.3	56.5	84	32	38	36	35	74	37	32	.232	.218	.209	.34	.17	T	4.7	3.8	4.5	3.9
May	27.92	28.40	27.55	50.6	68.4	71.3	73.5	49.0	61.2	96	38	40	38	36	67	34	29	.253	.233	.214	.25	.12	.0	5.7	6.8	6.5	6.2
June	27.87	28.28	27.59	55.1	71.7	75.3	76.9	53.8	65.4	94	46	42	39	36	63	33	28	.273	.238	.222	.84	.59	.0	4.3	5.2	5.3	5.0
July	27.92	28.12	27.58	59.7	79.2	83.3	84.6	58.0	71.3	106	46	41	38	35	51	24	20	.261	.236	.210	T	T	.0	2.7	2.6	2.5	2.7
August	27.96	28.15	27.72	57.6	79.9	84.8	86.2	55.8	71.0	96	48	41	40	36	55	26	18	.260	.249	.213	.19	.19	.0	2.4	1.7	2.5	2.1
September	27.96	28.38	27.54	47.9	64.7	66.7	69.5	45.6	57.6	92	28	36	36	35	65	37	34	.216	.213	.207	.98	.68	.0	4.3	4.8	6.5	5.6
October	27.99	28.35	27.53	45.1	55.6	57.7	60.6	42.3	51.4	84	33	39	41	40	82	62	56	.244	.260	.248	3.45	1.30	T	5.9	7.0	6.1	7.0
November	27.92	28.30	27.44	40.8	46.4	45.8	48.8	38.3	43.6	64	27	37	38	38	87	72	75	.222	.227	.232	2.01	.42	1.0	7.9	7.6	8.1	8.2
December	28.06	28.58	27.38	31.8	34.6	34.3	37.1	28.7	32.9	50	22	28	29	29	87	81	82	.155	.161	.162	1.50	.31	7.9	8.1	8.9	7.9	8.6
Year	27.98	28.62	27.38	45.1	58.3	60.6	62.9	42.9	52.9	106	22	36	36	35	74	50	46	.221	.216	.207	13.93	1.30	10.5	5.2	5.6	5.8	5.7

SPRINGFIELD, ILL.

[ϕ=39°48′ N.; λ=89°39′ W.]

January	29.44	29.81	28.97	29.8	36.2	35.7	41.3	26.6	34.0	62	0	26	27	28	83	70	74	0.144	0.156	0.165	1.33	0.52	0.2	5.7	6.2	5.7	6.4
February	29.54	30.10	29.00	21.1	31.0	29.3	35.7	18.5	27.1	64	−3	16	20	19	80	62	66	.094	.109	.109	.90	.32	10.2	3.5	4.6	3.4	4.4
March	29.45	29.87	28.91	30.9	41.0	39.8	45.9	27.0	36.4	70	5	26	28	28	81	60	64	.146	.159	.161	3.50	1.35	15.7	5.7	5.1	6.6	5.9
April	29.28	29.68	28.81	47.1	60.8	59.1	65.2	43.9	54.6	77	34	37	36	38	69	42	49	.232	.233	.257	1.21	.43	.0	5.0	4.7	4.5	4.8
May	29.33	29.61	28.98	61.8	78.5	76.6	82.2	57.2	69.7	101	42	47	45	45	80	34	36	.338	.319	.323	.32	.20	.0	3.5	3.7	3.0	3.4
June	29.21	29.40	28.98	73.9	89.8	86.2	93.9	69.0	81.4	104	59	62	63	62	86	42	46	.558	.578	.558	4.55	1.77	.0	4.6	4.4	4.6	4.5
July	29.27	29.56	29.03	76.1	91.0	88.7	95.0	71.9	83.4	107	61	64	64	65	87	42	47	.599	.595	.631	6.11	2.72	.0	4.7	5.0	3.9	4.6
August	29.32	29.54	29.00	69.3	82.8	79.7	87.2	66.7	77.0	108	48	62	62	65	79	53	63	.588	.590	.654	3.62	1.58	.0	5.8	5.0	4.7	5.5
September	29.32	29.65	28.99	59.4	71.1	66.8	74.5	56.0	65.2	91	43	56	58	58	89	65	75	.464	.498	.502	5.24	1.81	.0	6.3	6.1	4.9	6.2
October	29.40	29.71	29.00	51.1	68.0	62.0	70.9	49.3	60.1	82	31	45	46	47	80	46	59	.311	.323	.335	1.64	1.12	.0	2.8	3.1	2.3	3.1
November	29.35	29.79	28.57	43.4	51.9	48.9	56.1	39.9	48.0	73	28	38	38	38	90	61	68	.242	.244	.245	5.38	2.34	.0	5.3	5.4	5.0	5.7
December	29.44	29.88	28.92	26.5	31.5	30.8	35.8	23.3	29.6	51	2	23	26	26	86	79	81	.127	.141	.143	1.88	.53	9.4	6.6	7.3	5.9	7.5
Year	29.36	30.10	28.57	49.2	61.1	58.6	65.3	45.8	55.5	108	−3	42	43	43	77	55	61	.320	.329	.340	35.68	2.72	35.5	5.0	5.0	4.5	5.2

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SHREVEPORT, LA.

[H_b=249 ft.; h_t=92 ft.; h_r=90 ft.; h_a=227 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Snow: Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.6	NE.	31	NE.	0	1	17	6	10	5	4	10	9	0	8	10	13	11	9	0	0	0	7	1	0	0	4	2	0
February	11.1	NE.	35	NW.	1	6	15	6	11	1	6	2	9	0	13	7	8	9	7	2	2	0	1	0	0	0	6	2	0
March	11.9	S.	35	W.	1	6	10	5	7	10	7	2	9	0	14	8	9	8	7	1	1	0	1	0	0	0	2	5	0
April	11.2	NE.	39	NE.	1	4	10	5	7	14	9	3	8	0	10	11	9	9	7	0	0	0	0	0	0	0	0	6	0
May	9.4	NE.	35	S.	1	2	16	16	10	7	4	4	3	0	13	11	7	10	8	0	0	0	1	0	0	0	2	6	0
June	8.8	S.	29	S.	0	1	5	8	6	19	13	3	5	0	21	8	1	2	1	0	0	0	0	0	0	28	0	5	0
July	9.5	SW.	33	NE.	1	0	2	8	9	19	20	3	1	0	17	12	2	3	2	0	0	0	0	0	0	30	0	4	0
August	9.6	SW.	34	NE.	1	0	3	7	19	12	20	0	1	0	15	15	1	2	1	0	0	0	0	0	0	31	0	4	0
September	10.4	S.	36	NE.	2	5	6	3	19	14	5	2	6	0	16	10	4	7	5	0	0	0	0	0	0	11	0	5	0
October	10.1	NE.	29	SW.	0	6	19	5	9	11	6	4	2	0	23	7	1	0	0	0	0	0	0	6	1	0	1	0	0
November	11.6	SE.	34	W.	3	2	9	7	14	6	9	7	6	0	15	6	9	11	10	0	0	1	3	0	0	0	0	6	0
December	11.2	NW.	41	NW.	2	1	11	6	8	12	10	4	10	0	14	6	11	8	5	0	0	0	5	1	0	0	4	2	0
Year	10.4	NE.	41	NW.	13	34	123	82	129	136	113	44	69	0	179	111	75	80	62	3	3	2	23	3	0	103	16	46	0

SIOUX CITY, IOWA

[H_b=1,135 ft.; h_t=64 ft.; h_r=57 ft.; h_a=106 ft.]

January	10.1	NW.	32	NW.	2	7	0	4	12	13	4	2	20	0	6	10	15	5	3	9	5	0	12	6	11	0	29	0	0
February	10.2	NW.	33	NW.	1	7	4	3	10	9	1	4	18	0	10	8	10	3	1	6	3	0	3	1	13	0	27	0	0
March	10.9	NW.	34	NW.	1	11	5	6	8	13	3	2	14	0	8	10	13	10	8	9	8	0	4	0	8	0	26	0	0
April	11.8	NW.	37	NW.	3	8	4	2	5	12	4	2	21	2	14	8	8	3	3	0	0	0	4	0	0	0	4	2	0
May	11.6	S.	32	NW.	1	2	5	1	16	18	9	2	9	0	17	10	4	4	3	0	0	0	0	0	0	12	0	4	0
June	9.3	SE.	37	NW.	2	7	4	9	18	4	4	1	12	1	11	11	8	9	7	0	0	0	0	0	0	14	0	8	0
July	9.9	SE.	30	SE.	0	7	1	16	23	5	0	0	7	0	17	9	5	9	8	0	0	0	1	0	0	17	0	13	0
August	8.5	SE.	24	SE.	0	9	14	6	12	9	5	1	6	0	11	12	8	10	7	0	0	0	4	0	0	11	0	12	0
September	9.8	SE.	25	SE.	0	7	2	4	19	4	4	2	16	2	13	6	11	9	6	0	0	0	4	0	0	0	0	6	0
October	9.6	SE.	30	SW.	0	3	6	3	19	4	4	2	21	0	18	4	9	6	5	0	0	0	4	1	0	0	5	3	0
November	9.1	NW.	30	NW.	0	8	3	6	14	7	1	2	19	0	11	4	15	7	5	5	0	0	10	4	2	0	13	1	0
December	10.5	NW.	31	NW.	0	8	6	3	7	12	1	1	24	0	4	9	18	3	2	18	3	0	6	1	20	0	31	0	0
Year	10.1	NW.	37	NW.	10	84	54	63	163	113	40	21	187	5	140	101	124	77	58	47	19	0	52	13	54	54	135	49	0

SPOKANE, WASH.

[H_b=1,020 ft.; h_t=101 ft.; h_r=94 ft.; h_a=110 ft.]

January	7.7	S.	25	SW.	0	2	11	4	3	25	13	1	2	1	5	3	23	16	11	5	5	0	12	5	0	0	18	0	0
February	6.0	E.	21	S.	0	14	9	13	0	8	6	0	4	2	8	9	11	6	2	2	1	0	10	3	1	0	16	0	0
March	6.8	S.	28	SW.	0	9	9	3	0	14	16	7	5	0	10	11	10	5	5	0	0	0	0	0	0	0	9	0	0
April	6.5	S.	24	NW.	0	6	8	7	1	13	17	3	3	2	16	7	7	5	4	1	0	0	0	0	0	0	1	0	0
May	7.3	S.	24	SW.	0	5	7	9	4	20	12	1	4	0	5	15	11	5	3	0	0	0	0	0	0	3	0	3	0
June	7.4	SE.	24	SE.	0	2	10	4	20	9	6	2	4	3	7	16	7	5	2	0	0	0	0	0	0	2	0	0	0
July	7.7	S.	22	SE.	0	1	7	2	9	22	13	4	2	2	22	6	3	0	0	0	0	0	0	0	0	7	0	1	2
August	5.2	S.	20	S.	0	5	6	6	1	14	10	7	8	5	26	2	3	1	1	0	0	0	0	0	0	7	0	2	0
September	6.4	S.	26	NE.	0	4	5	10	1	16	14	3	5	2	10	7	13	7	6	0	0	0	2	1	0	2	1	2	0
October	6.4	S.	24	SW.	0	9	10	9	0	19	6	4	1	4	6	5	20	13	11	1	1	0	10	3	0	0	0	0	0
November	7.0	S.	25	S.	0	4	4	10	2	25	6	3	1	5	3	4	23	17	12	4	4	1	10	4	0	0	4	0	0
December	6.9	S.	26	SW.	0	10	5	6	0	27	7	2	4	1	1	5	25	16	11	13	11	0	8	3	5	0	20	0	0
Year	6.8	S.	26	SW.	0	71	91	83	41	212	125	37	43	27	119	90	156	96	68	26	22	1	52	19	6	21	68	7	4

SPRINGFIELD, ILL.

[H_b=636 ft ; h_t=5 ft.; h_r=3 ft.; h_a=191 ft.]

January	12.4	S.	41	NW.	2	5	3	4	6	17	8	9	10	0	8	7	16	10	6	7	3	0	2	0	5	0	22	1	0
February	12.4	S.	32	NW.	1	8	6	5	6	11	6	3	11	0	10	12	6	5	4	11	5	0	2	0	9	0	28	0	0
March	12.7	S.	37	NW.	2	11	9	3	6	16	5	3	9	0	9	10	12	12	7	10	7	0	4	2	5	0	21	1	0
April	12.8	S.	35	NW.	2	7	3	0	6	15	6	8	15	0	14	4	12	6	5	0	0	0	2	0	0	0	3	0	0
May	12.8	S.	29	N.	0	10	9	2	6	21	8	2	4	0	18	9	4	5	3	0	0	0	0	0	0	8	0	1	0
June	10.8	S.	32	S.	1	3	4	5	18	11	6	9	0	0	11	16	3	10	10	0	0	0	2	0	0	0	12	0	0
July	10.0	S.	38	N.	3	7	8	6	16	12	10	3	0	0	12	12	7	9	9	0	0	0	1	0	0	23	0	14	0
August	10.0	S.	36	N.	2	8	9	6	15	13	2	6	3	0	10	12	9	10	9	0	0	0	4	2	0	13	0	10	0
September	9.8	S.	34	W.	1	4	5	2	10	22	3	6	8	0	7	10	13	11	9	0	0	0	7	2	0	1	6	0	0
October	10.1	S.	34	NW.	2	2	5	8	6	16	9	9	7	0	22	3	6	4	4	0	0	0	4	0	0	1	2	0	0
November	11.2	S.	34	NW.	2	2	5	8	6	16	7	7	7	0	11	6	13	12	11	0	0	1	3	1	0	0	7	3	0
December	13.2	S.	42	S.	3	4	4	3	12	16	7	7	15	0	7	4	20	11	10	13	6	0	11	4	9	0	29	0	0
December	11.6	NW.	32	NW.	1	7	2	5	9	12	5	7	15	0	7	4	20	11	10	13	6	0	11	4	9	0	29	0	0
Year	11.4	S.	42	S.	20	76	67	48	103	189	80	69	98	0	139	105	121	105	87	41	21	4	39	11	28	68	108	53	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SPRINGFIELD, MO.

[ϕ=37°12′ N.; λ=93°18′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.70	29.08	28.37	32.6	40.2	39.9	46.3	29.4	37.8	67	2	27	30	31	82	70	72	0.157	0.180	0.181	1.42	1.00	5.4	5.3	5.2	4.6	5.3
February	28.76	29.25	28.26	28.8	37.4	38.3	44.8	25.4	35.1	74	0	22	24	25	76	60	62	.124	.133	.136	1.38	.54	4.9	4.5	4.0	3.8	4.6
March	28.69	29.10	28.27	35.2	46.0	46.1	53.2	31.3	42.2	74	12	30	32	32	80	61	60	.169	.188	.182	2.76	1.73	5.2	3.7	4.0	5.8	4.6
April	28.59	28.92	28.27	50.7	60.5	60.9	66.0	47.5	56.8	81	37	40	39	40	69	48	51	.265	.258	.274	3.77	1.20	.0	3.1	3.4	4.0	3.9
May	28.61	28.86	28.32	62.1	74.3	73.8	78.6	57.9	68.2	95	47	52	49	51	70	44	47	.401	.366	.385	2.07	1.13	.0	2.9	2.7	3.4	2.5
June	28.53	28.73	28.35	73.8	86.4	84.2	89.7	69.2	79.4	98	62	64	61	62	73	48	50	.609	.545	.565	2.65	.86	.0	2.1	2.8	2.9	1.6
July	28.58	28.78	28.34	77.3	91.8	91.8	96.6	74.3	85.4	106	61	63	58	57	62	34	34	.581	.491	.476	.89	.83	.0	1.6	1.8	2.3	1.5
August	28.60	28.80	28.34	74.4	85.8	84.8	90.3	71.3	80.8	104	56	62	61	60	68	49	50	.564	.544	.535	2.60	.77	.0	4.7	4.5	4.5	4.0
September	28.61	28.93	28.35	59.6	69.9	67.8	75.5	56.0	65.8	87	41	55	56	56	86	63	67	.447	.463	.464	6.50	2.26	.0	4.9	4.8	4.0	4.7
October	28.68	29.04	28.35	56.1	70.0	65.6	73.3	53.3	63.3	83	34	48	48	48	75	46	55	.351	.356	.356	1.30	.90	.0	2.1	2.0	2.8	2.6
November	28.62	29.03	27.92	44.1	54.2	52.1	58.3	41.4	49.8	78	27	38	38	38	78	57	62	.241	.246	.248	5.70	2.31	15.6	4.4	4.1	4.4	3.9
December	28.70	29.08	28.34	30.0	36.2	35.7	41.5	26.6	34.0	59	8	26	28	29	86	72	77	.147	.160	.160	1.54	.53	5.0	5.7	5.1	5.1	5.0
Year	28.64	29.25	27.92	52.1	62.7	61.8	67.8	48.6	58.2	106	0	44	44	44	75	54	57	.338	.328	.330	32.58	2.31	36.1	3.8	3.7	4.0	3.7

SYRACUSE, N. Y.

[ϕ=43°03′ N.; λ=76°09′ W.]

January	29.42	29.93	28.43	27.6	29.3		34.1	20.5	27.3	53	−6	22	24		79	78		0.131	0.140		2.18	0.54	11.6	9.3	9.5		9.4
February	29.51	30.26	28.50	9.1	14.3		21.8	2.3	12.0	43	−24	2	5		71	64		.055	.058		1.43	.45	16.7	6.9	6.2		6.4
March	29.50	29.92	28.97	28.5	33.8		41.3	23.4	32.4	62	4	21	24		72	66		.121	.133		3.18	.88	9.0	7.1	7.4		7.3
April	29.32	29.91	28.73	43.4	50.4		55.4	36.5	46.0	77	29	35	37		73	61		.204	.223		1.95	.66	3.5	6.5	7.3		7.1
May	29.39	29.79	28.92	58.5	67.2		72.6	48.2	60.4	85	35	41	44		54	44		.273	.297		.80	.46	.0	3.8	5.2		5.2
June	29.26	29.74	28.90	69.9	76.1		80.5	60.7	70.6	100	46	56	56		64	53		.463	.467		2.79	1.13	.0	6.2	5.4		6.1
July	29.33	29.74	29.07	72.5	79.8		84.1	63.3	73.7	95	53	60	60		67	52		.533	.523		2.49	.81	.0	4.9	5.3		5.5
August	29.40	29.81	29.07	65.6	73.1		77.1	58.0	67.6	92	42	54	52		65	50		.425	.415		2.09	.75	.0	5.6	5.4		5.6
September	29.44	29.75	29.03	64.2	70.9		74.9	58.4	66.6	88	45	58	59		76	68		.463	.506		4.71	1.97	.0	7.4	6.7		7.0
October	29.41	29.83	28.94	47.0	52.8		57.4	41.5	49.4	78	29	38	39		74	61		.244	.249		1.66	.56	1.2	7.3	6.6		6.9
November	29.44	29.93	28.74	43.0	47.6		50.8	39.0	44.9	69	24	38	40		81	74		.239	.263		2.64	.66	3.6	8.9	8.3		8.5
December	29.40	29.87	28.43	24.3	27.4		33.0	19.0	26.0	67	1	19	22		80	80		.113	.127		2.78	.91	10.9	9.3	8.7		8.8
Year	29.40	30.26	28.43	46.1	51.9		56.9	39.2	48.1	100	−24	37	38		71	63		.272	.283		28.70	1.97	56.5	6.9	6.8		7.0

TAMPA, FLA.

[ϕ=27° 57′ N.; λ=82° 27′ W.]

January	30.12	30.32	29.89	56.3	69.5	64.3	72.5	54.2	63.4	81	34	53	53	53	89	58	70	0.427	0.430	0.441	1.16	0.58	0.0	4.9	4.0	2.7	4.1
February	30.09	30.40	29.80	54.1	67.1	61.6	71.4	51.6	61.5	81	43	50	52	52	87	69	71	.375	.400	.394	4.19	1.29	.0	3.0	2.9	2.4	3.2
March	30.08	30.37	29.84	59.6	72.3	66.7	75.8	57.3	66.6	85	40	55	55	56	85	56	71	.456	.460	.474	2.49	.92	.0	4.4	4.1	2.6	4.1
April	29.99	30.20	29.69	67.2	77.6	72.1	81.2	63.0	72.1	87	50	61	58	60	80	53	66	.548	.499	.521	3.68	1.08	.0	3.3	2.9	2.4	2.9
May	29.92	30.16	29.65	73.0	82.3	76.1	84.9	69.4	77.2	90	59	68	66	68	84	58	75	.684	.645	.679	3.78	1.18	.0	4.5	4.6	4.1	4.7
June	29.95	30.14	29.70	77.8	84.8	79.9	88.1	73.6	80.8	93	67	73	70	72	86	63	77	.815	.743	.779	15.92	7.81	.0	3.3	5.3	5.7	5.2
July	30.00	30.12	29.79	78.7	86.6	80.3	90.1	74.4	82.2	94	67	74	72	72	84	62	77	.825	.770	.789	6.81	1.87	.0	3.0	4.2	6.5	5.1
August	30.03	30.14	29.84	78.1	87.3	80.7	90.2	74.2	82.2	93	70	73	71	72	85	58	75	.816	.748	.781	6.10	1.97	.0	1.5	4.3	5.4	4.2
September	29.97	30.14	29.81	76.1	85.5	79.6	88.6	73.1	80.8	93	69	73	71	71	89	62	77	.804	.753	.768	7.62	2.00	.0	3.2	5.7	4.8	4.8
October	29.97	30.22	29.76	71.2	83.5	75.9	85.6	67.8	76.7	91	55	66	65	66	85	54	71	.661	.629	.645	3.54	3.33	.0	1.7	2.5	2.9	2.5
November	30.06	30.32	29.84	61.3	75.8	68.6	78.5	59.1	68.8	85	42	55	56	56	82	51	69	.468	.468	.501	.28	.28	.0	2.9	3.4	2.8	2.3
December	30.11	30.33	29.86	55.2	68.3	62.5	71.6	52.3	62.0	83	27	51	53	53	86	60	72	.410	.442	.434	.91	.72	T	4.2	4.2	2.5	4.3
Year	30.02	30.40	29.65	67.4	78.4	72.4	81.5	64.2	72.9	94	27	63	62	63	85	58	73	.607	.582	.600	56.48	7.81	T	3.3	4.0	3.7	4.0

TATOOSH ISLAND, WASH.

[ϕ=48° 23′ N.; λ=124° 44′ W.]

January	30.00	30.45	29.32	45.3	46.0	46.2	48.8	43.0	45.9	60	37	42	42	42	90	88	88	0.272	0.272	0.275	14.17	1.66	0.0	9.1	8.3	8.1	8.6
February	29.95	30.35	29.50	46.5	48.4	48.2	51.0	44.7	47.8	55	42	42	41	42	86	77	80	.272	.268	.268	4.21	1.22	.0	6.9	6.3	5.8	7.1
March	30.00	30.47	29.58	47.0	50.2	49.7	52.5	45.1	48.8	57	40	44	42	42	88	77	77	.284	.274	.270	8.22	2.13	.0	7.3	6.4	6.9	7.4
April	29.98	30.32	29.61	48.0	52.0	51.2	54.1	46.5	50.3	65	40	45	46	47	90	82	86	.304	.314	.322	2.80	1.54	.0	7.2	6.2	6.5	7.3
May	29.93	30.36	29.31	51.4	55.5	55.2	58.2	50.0	54.1	81	45	48	48	48	90	76	76	.341	.331	.331	5.20	1.53	.0	7.3	6.5	6.2	7.4
June	29.97	30.30	29.66	51.1	55.2	54.3	56.9	50.5	53.7	61	46	49	50	50	93	84	87	.348	.362	.363	.82	.23	.0	6.2	5.3	4.1	6.4
July	29.99	30.26	29.60	52.9	56.4	56.2	58.1	52.0	55.0	62	49	51	52	52	94	86	87	.375	.390	.393	3.88	1.84	.0	7.7	7.0	7.4	7.7
August	29.99	30.20	29.78	54.3	57.2	56.8	59.4	53.0	56.2	68	49	52	54	54	94	88	90	.395	.410	.415	3.41	1.66	.0	5.7	6.2	6.6	6.7
September	29.96	30.28	29.50	52.4	55.2	54.6	57.8	50.4	54.1	73	43	50	50	51	92	84	88	.374	.367	.377	3.23	1.07	.0	7.2	6.2	5.7	6.8
October	29.87	30.30	28.76	50.5	53.8	52.1	55.9	48.8	52.4	66	45	47	48	48	90	83	87	.331	.344	.341	8.28	2.45	.0	6.2	6.3	6.0	7.4
November	29.75	30.19	29.17	49.3	49.9	49.8	52.5	47.1	49.8	60	41	47	46	45	91	86	86	.319	.307	.305	13.50	1.57	.0	7.6	9.6	9.3	9.4
December	29.93	30.54	28.72	44.6	45.9	45.1	48.3	42.0	45.2	53	34	42	42	42	90	85	89	.268	.265	.270	14.38	2.30	4.9	7.2	6.7	7.6	7.7
Year	29.94	30.54	28.72	49.4	52.1	51.6	54.5	47.8	51.1	81	34	47	47	47	91	83	85	.324	.324	.328	82.10	2.45	4.9	7.1	6.8	6.7	7.7

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

SPRINGFIELD, MO.

[H_b=1,324 ft.; h_t=98 ft.; h_r=66 ft.; h_a=104 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: Number of winds, 8 a. m. and 8 p. m.: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	9.9	S.	26	NW.	0	6	4	4	17	7	8	10	5	1	11	7	13	6	5	5	3	0	10	1	4	0	17	0	0
February	10.5	N.	36	N.	0	10	9	6	11	3	4	3	9	1	12	7	9	7	5	7	5	0	4	0	8	0	20	1	0
March	11.3	S.	25	NW.	0	11	8	5	12	11	5	5	5	0	10	5	10	9	8	8	4	0	6	2	2	0	17	0	0
April	10.2	S.	29	NW.	0	13	2	3	10	10	7	6	9	0	16	7	7	10	8	0	0	0	5	1	0	0	0	5	0
May	8.6	S.	32	SE.	1	8	11	3	10	20	2	5	0	3	20	8	3	8	6	0	0	0	3	0	0	0	2	0	0
June	8.6	S.	35	NW.	1	2	3	2	14	25	8	1	3	2	25	5	0	9	6	0	0	1	2	0	0	16	0	11	0
July	8.7	S.	30	SE.	0	9	2	2	15	24	5	1	4	0	27	4	0	6	2	0	0	1	0	0	0	26	0	6	0
August	9.2	S.	29	SE.	0	3	5	8	13	17	12	2	2	0	14	12	5	11	9	0	0	0	5	0	0	16	0	10	0
September	9.4	SE.	27	W.	0	4	1	7	21	9	5	3	10	0	12	9	9	13	13	0	0	0	7	1	0	0	0	9	0
October	8.5	SE.	25	N.	0	7	2	7	20	13	4	1	8	0	20	8	3	4	3	0	0	0	2	0	0	0	0	2	0
November	11.3	SE.	31	SE.	0	4	6	4	14	15	3	10	4	0	17	6	7	12	8	3	2	0	6	0	1	0	5	2	0
December	11.1	SE.	25	SE.	0	6	4	6	13	7	5	10	11	0	12	6	13	9	6	12	4	0	7	3	6	0	23	0	0
Year	9.8	S.	35	NW.	2	83	57	57	170	161	68	57	70	7	202	84	79	104	79	35	18	2	57	8	21	60	82	51	0

SYRACUSE, N. Y.

[H_b=596 ft.; h_t=65 ft.; h_r=57 ft.; h_a=79 ft.]

January	8.7	W.	28	NW.	0	0	1	14	5	6	12	15	9	0	1	1	29	20	12	21	13	0	2	0	10	0	25	0	0
February	8.1	NW.	27	NW.	0	2	0	7	4	12	7	9	15	0	6	9	13	13	9	17	13	0	1	0	21	0	28	0	0
March	8.4	S.	24	S.	0	3	2	13	5	8	6	11	13	1	4	9	18	17	13	15	10	0	3	0	9	0	25	0	0
April	8.0	S.	22	SE.	0	2	2	6	7	15	4	15	9	0	5	9	16	15	11	8	5	0	2	0	0	0	8	1	0
May	6.9	NW.	21	NW.	0	2	1	6	6	11	9	12	15	0	8	17	6	7	4	0	0	0	0	0	0	0	0	3	0
June	7.2	S.	21	S.	0	0	0	12	8	13	4	15	8	0	7	12	11	12	10	0	0	0	2	1	0	0	7	6	0
July	6.4	S.	24	NW.	0	6	1	10	3	8	7	14	13	0	6	17	8	12	11	0	0	0	2	0	0	0	7	7	0
August	6.7	S.	21	NW.	0	2	1	11	8	14	5	12	9	0	9	14	8	11	9	0	0	0	0	0	0	0	7	5	0
September	6.7	S.	28	SW.	0	3	0	10	20	11	1	9	6	0	4	12	14	11	11	0	0	0	2	1	0	0	2	2	0
October	7.8	W.	24	NW.	0	7	2	6	6	14	10	11	7	0	6	9	16	10	8	3	1	0	0	0	0	0	1	0	0
November	8.4	S.	24	SE.	0	2	1	7	12	11	15	6	6	0	2	2	26	17	15	8	7	0	1	0	1	0	9	0	0
December	8.4	W.	31	NW.	0	5	1	12	2	8	14	11	9	0	1	4	26	21	12	22	18	0	2	0	12	0	26	0	0
Year	7.6	S.	31	NW.	0	34	12	113	86	131	94	140	119	1	59	115	191	166	125	94	67	2	15	2	53	16	122	24	0

TAMPA, FLA.

[H_b=35 ft.; h_t=88 ft.; h_r=81 ft.; h_a=197 ft.]

January	10.7	N.	23	NW.	0	18	8	9	5	4	7	6	5	0	14	13	4	4	4	0	0	0	8	2	0	0	0	1	0
February	11.9	NE.	46	NW.	2	13	10	5	4	5	2	6	11	0	18	4	6	8	7	0	0	0	6	1	0	0	0	4	0
March	11.3	N.	35	NW.	1	8	16	10	8	4	3	0	13	0	14	12	5	8	7	0	0	0	6	2	0	0	0	1	0
April	10.5	E.	37	NW.	2	4	6	17	5	6	2	9	11	0	20	6	4	7	5	0	0	0	2	0	0	0	0	8	0
May	10.6	E.	34	N.	1	3	10	19	8	3	4	5	10	0	11	13	7	9	6	0	0	0	0	0	0	0	0	9	0
June	9.8	SE.	37	SE.	3	1	1	11	23	8	6	6	4	0	8	18	4	15	15	0	0	0	0	0	0	8	0	15	0
July	8.9	E.	38	E.	2	3	4	12	19	7	0	11	6	0	6	20	5	20	17	0	0	0	0	0	0	21	0	25	0
August	8.7	E.	29	NE.	0	4	7	18	14	9	3	3	4	0	13	14	4	15	12	0	0	0	0	0	0	24	0	19	0
September	8.9	E.	32	E.	1	8	10	24	8	5	1	2	2	0	11	12	7	13	10	0	0	0	3	1	0	9	0	13	0
October	10.6	NE.	24	NE.	0	13	20	13	3	3	3	2	5	0	23	6	2	7	3	0	0	0	2	0	0	0	0	5	0
November	11.6	NE.	25	E.	0	18	16	12	4	5	0	3	4	0	16	13	1	1	1	0	0	0	2	0	0	0	0	0	0
December	10.1	N.	28	N.	0	19	12	10	4	4	3	3	7	0	15	10	6	5	3	1	0	0	8	2	0	0	2	0	0
Year	10.3	E.	46	NW.	12	110	120	160	105	63	34	59	82	0	169	141	55	112	90	1	0	0	37	8	0	64	2	100	0

TATOOSH ISLAND, WASH.

[H_b=86 ft.; h_t=10 ft.; h_r=3 ft.; h_a=54 ft.]

January	20.9	E.	64	SW.	21	1	1	18	4	11	15	8	4	0	2	3	26	26	24	0	0	0	0	5	0	0	0	0	0
February	19.1	E.	52	S.	16	0	1	36	2	7	6	3	1	0	6	5	17	14	9	0	0	0	0	3	0	0	0	0	0
March	15.5	E.	50	S.	11	1	1	27	1	6	13	11	2	0	6	4	21	13	12	0	0	0	0	5	0	0	0	0	0
April	10.5	SW.	43	E.	5	2	10	7	0	10	12	10	8	1	4	7	19	11	8	0	0	0	0	6	0	0	0	0	0
May	12.9	W.	56	S.	6	0	4	12	2	12	14	13	4	1	5	5	21	15	10	0	0	0	0	2	0	0	0	2	0
June	9.0	SW.	31	SW.	0	0	0	8	0	16	28	7	1	0	4	13	13	10	7	0	0	0	0	3	0	0	0	0	0
July	9.7	S.	41	S.	2	2	1	7	6	21	19	4	2	0	2	4	25	11	6	0	0	0	0	7	0	0	0	0	0
August	9.8	S.	24	S.	0	2	1	3	0	25	15	12	3	1	4	6	21	14	7	0	0	0	0	8	0	0	0	0	0
September	10.4	S.	42	SW.	2	0	0	9	2	22	9	4	1	0	5	6	19	15	13	0	0	0	0	8	0	0	0	0	0
October	15.2	E.	60	S.	10	0	0	9	2	10	7	7	2	1	6	5	20	21	17	0	0	0	0	12	0	0	0	0	0
November	17.5	E.	65	S.	17	0	1	24	2	13	9	7	2	1	0	2	28	26	24	0	0	0	0	9	0	0	0	0	0
December	19.2	E.	71	SW.	22	0	0	21	7	13	6	10	4	1	5	5	21	24	22	4	3	0	0	1	0	0	0	0	1
Year	14.1	E.	71	SW.	112	8	38	195	34	166	153	96	34	6	49	65	251	200	159	4	3	4	40	77	0	0	0	3	1

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

TERRE HAUTE, IND.

[ϕ=39°29′ N.; λ=87°24′ W.]

Month	Pressure			Temperature								Moisture												
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.52	29.83	28.97	31.5	36.9	36.3	43.1	27.8	35.4	62	1	26	27	28	78	70	73	0.148	0.160	0.167	2.07	0.72	1.3	6.3	7.4	4.6	6.9
February	29.60	30.19	28.98	21.7	30.2	29.3	34.9	17.8	26.4	61	−3	16	17	18	75	56	62	.093	.099	.104	.98	.38	11.7	5.9	5.5	4.1	5.4
March	29.52	29.90	29.00	31.9	40.9	40.7	46.8	27.7	37.2	73	6	26	28	30	76	62	67	.146	.168	.177	3.87	1.73	12.1	6.3	6.0	5.3	5.8
April	29.36	29.80	28.84	46.5	58.3	58.6	64.1	43.3	53.7	79	32	38	38	39	71	48	51	.236	.242	.260	2.56	1.33	T	4.3	5.3	4.2	4.9
May	29.40	29.75	29.05	60.6	75.2	74.8	79.9	55.4	67.6	95	38	47	43	45	61	36	38	.333	.300	.323	.44	.18	.0	3.8	3.2	3.3	3.3
June	29.29	29.49	29.05	72.7	87.1	83.0	91.9	68.0	80.0	104	57	62	64	67	70	49	61	.560	.620	.675	2.46	.60	.0	3.4	3.8	5.9	4.0
July	29.35	29.64	29.08	74.7	88.2	86.8	92.5	71.4	82.0	104	60	66	64	66	74	47	51	.641	.613	.646	4.58	1.78	.0	4.3	3.8	4.5	4.5
August	29.40	29.59	29.12	68.9	80.4	78.8	84.5	65.9	75.2	96	47	63	62	64	81	56	63	.594	.587	.634	4.63	1.42	.0	5.0	5.1	5.4	4.8
September	29.40	29.71	29.01	60.4	71.2	68.1	75.8	57.3	66.6	88	46	57	59	60	87	67	76	.372	.511	.524	7.06	1.38	.0	6.0	6.9	5.2	6.1
October	29.47	29.79	29.09	50.4	66.4	62.4	70.6	47.8	59.2	81	31	44	47	47	79	52	58	.301	.351	.346	.43	.27	.0	3.1	2.8	1.9	2.9
November	29.44	29.87	28.74	43.3	51.8	49.1	56.3	39.6	48.0	72	27	35	36	37	74	58	64	.223	.232	.237	4.28	2.10	.0	5.3	5.7	3.9	5.3
December	29.51	29.95	28.82	27.6	32.7	31.8	37.4	24.9	31.2	52	5	24	26	26	84	76	80	.129	.144	.146	1.73	.74	9.2	7.1	7.2	6.7	7.3
Year	29.44	30.19	28.74	49.2	59.9	58.3	64.8	45.6	55.2	104	−3	42	43	44	76	56	62	.315	.336	.353	35.11	2.10	34.3	5.1	5.2	4.6	5.1

TOLEDO, OHIO

[ϕ=41°40′ N.; λ=83°34′ W.]

January	29.40	29.86	28.67	29.6	33.5	31.8	38.6	24.9	31.8	57	1	24	23	24	80	65	72	0.142	0.128	0.137	1.42	0.38	2.6	7.3	6.6	7.0	6.5
February	29.53	30.27	28.69	13.0	20.5	19.8	25.5	8.4	17.0	46	−13	7	10	10	76	61	66	.064	.069	.073	.55	.39	6.6	6.2	5.8	5.0	5.3
March	29.45	29.86	28.83	26.9	34.5	33.7	38.9	23.5	31.2	67	11	20	23	24	74	63	66	.115	.137	.137	2.76	1.34	9.1	6.2	6.5	5.7	5.7
April	29.28	29.75	28.70	40.6	49.7	49.7	54.9	37.4	46.2	74	25	33	32	36	76	54	62	.194	.188	.220	5.31	1.80	.7	5.8	6.2	5.4	5.6
May	29.35	29.71	28.99	58.0	69.2	68.4	74.4	51.7	63.0	90	34	44	44	44	62	43	45	.303	.301	.305	.69	.45	.0	3.1	3.4	3.3	3.1
June	29.22	29.57	28.89	69.6	81.1	79.0	85.9	63.7	74.8	101	51	59	58	58	69	48	51	.506	.502	.490	1.83	1.27	.0	3.2	4.2	3.9	3.2
July	29.29	29.65	29.04	72.3	83.0	81.5	87.2	67.7	77.4	103	55	61	60	60	68	46	49	.543	.519	.515	1.64	1.14	.0	3.5	3.8	4.0	3.4
August	29.36	29.62	28.92	65.8	76.3	74.6	80.5	61.7	71.1	96	46	57	54	55	75	47	53	.490	.437	.461	1.80	.85	.0	4.1	4.3	4.4	3.5
September	29.36	29.67	28.98	60.9	71.5	68.4	75.5	58.7	67.1	86	45	56	56	57	86	60	69	.468	.464	.488	3.16	.78	.0	6.2	5.4	5.4	4.9
October	29.40	29.75	28.98	47.3	58.4	55.1	62.3	44.7	53.5	81	31	41	41	42	78	55	63	.267	.271	.277	.50	.26	T	4.2	4.2	3.1	4.0
November	29.39	29.81	28.72	40.6	48.1	45.8	51.3	38.2	44.8	69	25	34	35	36	77	60	68	.208	.218	.221	.96	.26	T	6.6	7.8	5.5	7.3
December	29.41	29.86	28.50	25.8	29.3	29.0	33.1	21.8	27.4	44	0	21	22	23	81	74	78	.117	.121	.127	1.85	.38	17.4	7.5	8.1	7.7	7.9
Year	29.37	30.27	28.50	45.9	54.6	53.1	59.0	41.9	50.4	103	−13	38	38	39	75	56	62	.285	.280	.288	22.47	1.80	36.4	5.3	5.5	5.0	5.0

TOPEKA, KANS.

[ϕ=39°03′ N.; λ=95°41′ W.]

January				29.5			44.9	25.3	35.1	69	3										0.29	0.19	1.1				5.3
February				25.4			45.6	23.2	34.4	75	−8										.95	.81	9.3				3.6
March				32.5			55.0	29.3	42.2	84	11										.76	.38	2.9				4.7
April				48.8			69.8	45.5	57.6	89	36										1.49	.94	.0				3.5
May				62.5			83.5	57.3	70.4	103	48										6.47	4.21	.0				2.9
June				74.6			95.3	69.6	82.4	105	60										3.00	.87	.0				3.2
July				79.6			102.0	74.2	88.1	111	57										2.87	1.70	.0				2.7
August				73.6			97.0	70.3	83.6	112	52										1.71	.93	.0				4.0
September				57.5			76.4	53.6	65.0	91	40										4.94	1.72	.0				4.4
October				52.8			75.1	50.7	62.9	88	31										1.91	1.02	.0				2.6
November				41.4			56.8	38.6	47.7	80	27										2.65	1.23	4.5				5.1
December				27.6			38.4	23.6	31.0	56	3										.26	.12	3.0				6.0
Year				50.5			70.0	46.8	58.4	112	−8										27.30	4.21	20.8				4.0

TRENTON, N. J.

[ϕ=40°13′ N.; λ=74°46′ W.]

January	29.92	30.40	28.92	30.5	36.5	35.8	41.3	27.2	34.2	59	7	24	25	26	77	65	68	0.145	0.150	0.155	3.37	1.45	0.2	6.2	6.4	6.0	6.5
February	29.96	30.71	29.01	14.2	21.8	21.5	27.5	9.5	18.5	42	−14	6	9	11	69	56	64	.060	.071	.080	2.21	.77	23.1	4.8	4.7	4.2	4.8
March	29.97	30.54	29.34	32.7	41.6	37.7	46.6	27.3	37.0	72	12	26	28	29	74	61	72	.148	.166	.170	2.92	.97	8.0	4.9	6.2	5.6	6.0
April	29.81	30.49	29.13	46.0	55.7	50.9	60.3	40.1	50.2	78	33	38	38	38	74	54	65	.234	.238	.243	2.73	.78	T	5.1	5.1	4.1	5.0
May	29.79	30.38	29.44	60.2	70.0	64.7	74.1	52.4	63.2	94	41	48	47	48	66	48	60	.351	.346	.362	4.79	1.33	.0	5.7	5.7	6.2	5.8
June	29.70	30.18	29.18	70.6	80.2	74.8	83.8	63.2	73.5	100	53	62	60	61	75	52	64	.557	.532	.546	3.41	1.18	.0	6.8	5.9	4.8	5.7
July	29.76	30.14	29.54	73.8	82.7	77.8	86.3	67.0	76.6	96	57	65	63	64	75	54	64	.627	.598	.607	2.90	.97	.0	5.4	5.5	6.0	5.3
August	29.84	30.23	29.55	67.4	75.4	71.8	79.5	61.5	70.5	88	49	60	57	60	78	55	68	.536	.486	.542	2.59	.76	.0	6.3	6.1	5.5	6.1
September	29.89	30.26	29.53	64.5	72.8	68.4	76.3	60.0	68.2	85	48	60	61	62	86	68	82	.533	.551	.575	10.49	3.46	.0	7.1	7.3	4.6	6.8
October	29.84	30.24	29.36	49.0	58.3	54.0	62.2	44.2	53.2	77	34	41	40	42	75	52	66	.269	.257	.285	2.15	1.73	T	4.7	5.4	3.1	4.8
November	29.93	30.43	29.26	44.5	52.4	48.7	56.0	40.2	48.1	75	25	38	38	39	78	61	70	.246	.255	.260	1.97	.77	T	6.2	5.8	4.7	5.8
December	29.88	30.30	29.00	30.2	36.9	33.9	40.5	26.1	33.3	67	11	23	24	24	73	59	65	.133	.145	.132	2.37	1.07	T	6.2	6.5	4.7	5.8
Year	29.86	30.71	28.92	48.6	57.0	53.3	61.2	43.2	52.2	100	−14	41	41	42	75	57	67	.320	.316	.330	41.90	3.46	31.3	5.8	5.9	5.0	5.7

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

TERRE HAUTE, IND.

[H_b=575 ft.; h_t=96 ft.; h_r= 86 ft.; h_a=129 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	10.4	S.	31	S.	0	6	3	5	5	17	7	9	10	0	7	5	19	9	5	6	2	0	1	0	4	0	21	1	0
February	9.8	NW.	25	N.	0	10	9	3	4	10	4	1	15	0	8	11	9	7	5	12	7	0	0	0	9	0	28	0	0
March	11.2	S.	39	W.	1	11	10	2	2	16	5	5	11	0	11	8	12	17	11	11	8	0	4	2	4	0	22	1	0
April	9.8	S.	39	S.	0	10	4	1	5	13	7	11	9	0	12	9	9	8	5	1	0	0	4	0	0	0	1	2	0
May	8.7	SW.	29	N.	0	11	8	8	4	10	10	3	7	1	19	7	5	4	3	0	0	0	1	0	0	3	0	4	0
June	8.5	SW.	40	N.	3	3	4	11	7	10	16	4	5	0	13	15	2	8	7	0	0	0	2	0	0	21	0	13	0
July	8.0	SW.	27	S.	0	7	10	8	3	14	11	2	6	1	13	12	6	10	9	0	0	0	2	0	0	19	0	10	0
August	7.9	S.	24	N.	0	10	10	5	9	13	9	2	4	0	10	15	6	14	11	0	0	0	2	0	0	8	0	10	0
September	8.0	S.	30	SW.	0	7	4	2	14	16	5	3	9	0	7	10	13	15	14	0	0	0	7	3	0	0	0	7	0
October	8.6	S.	24	NW.	0	6	10	4	8	10	8	10	6	0	19	7	5	3	2	0	0	0	1	1	0	0	1	1	0
November	11.3	S.	35	E.	2	7	4	5	13	13	5	6	8	0	11	7	12	12	10	0	0	0	1	0	0	0	8	3	0
December	9.8	NW.	25	SW.	0	3	5	3	6	13	10	7	15	0	6	6	19	10	6	10	6	0	6	0	5	0	27	0	0
Year	9.3	S.	40	N.	6	91	81	57	80	155	97	62	105	2	136	112	117	117	88	40	23	0	29	6	22	51	108	52	0

TOLEDO, OHIO

[H_b=628 ft.; h_t=79 ft.; h_r=72 ft.; h_a=87 ft.]

January	11.2	W.	33	NW.	1	3	4	7	5	4	12	15	12	0	10	4	7	13	9	12	6	0	7	0	6	0	25	0	0
February	9.9	NW.	27	NW.	0	8	6	9	5	5	7	7	9	0	11	7	10	6	2	17	6	0	3	0	20	0	28	0	0
March	10.6	SW.	32	W.	1	9	4	7	5	5	10	9	13	0	7	13	11	14	10	12	8	0	4	1	11	0	24	1	0
April	10.2	NW.	26	NE.	0	2	4	5	4	4	12	15	14	0	10	7	13	15	12	7	3	0	4	0	0	0	7	6	0
May	8.8	W.	24	NW.	0	8	8	10	6	4	11	15	0	0	20	7	4	5	4	0	0	0	1	1	0	3	0	4	0
June	8.8	SW.	24	NW.	0	3	4	12	3	7	12	10	9	0	16	13	1	6	5	0	0	0	0	0	0	11	0	6	0
July	8.3	E.	25	NW.	0	7	7	16	6	1	11	9	5	0	18	9	4	7	4	0	0	0	0	0	0	11	0	6	0
August	7.9	SW.	26	W.	0	6	7	12	8	5	5	9	10	0	17	11	3	8	5	0	0	1	1	0	0	4	0	4	0
September	7.7	SW.	24	SW.	0	6	2	7	8	14	9	8	6	0	7	16	7	13	10	0	0	0	5	0	0	0	0	7	0
October	9.5	W.	30	NW.	0	12	3	4	7	4	12	13	7	0	17	5	9	6	5	2	0	0	6	1	0	0	1	0	0
November	10.5	SW.	28	NW.	0	5	2	4	6	12	11	10	10	0	2	11	17	9	7	3	0	0	5	0	0	0	9	1	0
December	10.0	W.	32	NW.	1	6	4	5	5	5	10	16	11	0	3	6	22	16	11	16	11	0	7	1	13	0	29	0	0
Year	9.4	W.	33	NW.	3	75	55	98	68	70	122	136	106	0	138	109	118	118	84	69	34	1	44	4	50	29	123	35	0

TOPEKA, KANS.

[H_b=987 ft.; h_t=65 ft.; h_r=61 ft.; h_a=87 ft.]

January	9.3	S.	30	NW.	0	4	3	0	3	6	7	5	3	0	15	3	13	4	3	7	2	0	8	3	4	0	27	0	0
February	9.4	N.	27	N.	0	6	1	4	2	6	1	6	2	0	19	2	7	5	4	5	5	0	0	0	6	0	22	0	0
March	10.9	S.	30	N.	0	5	5	1	2	6	6	1	5	0	12	11	8	6	5	3	3	0	2	0	1	0	19	2	0
April	10.6	S.	32	NW.	1	3	1	2	2	5	7	4	6	0	18	3	9	7	6	0	0	2	2	0	0	0	7	0	0
May	10.6	S.	28	SW.	0	4	2	1	3	12	4	3	2	0	20	6	5	7	6	0	0	0	0	0	0	7	0	5	0
June	9.0	S.	32	NW.	1	0	3	4	2	15	3	1	2	0	15	14	1	10	9	0	0	0	0	0	0	22	0	11	0
July	9.5	S.	31	N.	0	2	1	1	1	16	6	1	3	0	21	8	2	5	4	0	0	0	0	0	0	29	0	8	0
August	9.3	S.	27	N.	0	3	4	5	4	7	6	1	1	0	12	15	4	8	6	0	0	0	1	0	0	21	0	10	0
September	8.8	S.	29	S.	0	1	0	0	1	7	4	5	7	0	13	10	7	12	8	0	0	0	7	3	0	2	0	10	0
October	9.3	S.	27	S.	0	3	1	3	3	11	1	9	0	0	20	9	2	8	7	0	0	0	2	0	0	0	2	7	0
November	8.4	S.	31	NW.	0	2	1	3	1	11	4	3	5	0	14	5	11	12	11	4	4	0	6	0	1	0	6	1	0
December	9.3	NW.	25	SW.	0	5	2	1	2	6	4	4	7	0	10	8	13	4	2	8	2	0	4	1	7	0	28	0	1
Year	9.4	S.	32	NW.	2	38	24	25	32	107	53	43	43	0	189	94	82	88	71	27	16	2	32	7	19	81	104	59	1

TRENTON, N. J.

[H_b=190 ft.; h_t= 88 ft.; h_r=83 ft.; h_a=106 ft.]

January	9.7	NW.	24	NW.	0	8	10	2	0	8	10	14	10	0	6	10	15	10	8	6	1	0	12	1	4	0	21	0	0
February	10.3	NW.	38	NW.	1	13	3	0	1	8	5	8	18	0	11	8	9	8	6	11	7	0	2	1	18	0	28	0	0
March	10.4	S.	35	SW.	1	12	8	3	4	16	7	6	6	0	7	13	11	13	10	9	5	0	9	5	3	0	22	2	0
April	9.9	S.	29	W.	0	4	7	3	7	14	4	5	16	0	11	11	8	13	8	1	0	0	8	0	0	0	0	1	0
May	9.5	N.	37	S.	2	15	9	4	1	13	12	3	5	0	6	14	11	12	7	0	0	0	1	0	0	2	0	2	0
June	9.5	S.	27	NW.	0	4	5	3	6	21	7	6	8	0	5	20	5	8	7	0	0	0	7	0	0	3	0	6	0
July	9.3	S.	46	NW.	1	12	4	4	4	22	5	5	6	0	10	11	10	13	10	0	0	0	5	0	0	9	0	14	0
August	8.2	S.	24	W.	0	15	4	3	8	20	5	2	5	0	9	8	14	11	11	0	0	0	9	1	0	0	0	7	0
September	8.3	S.	35	N.	1	9	12	10	6	9	3	3	8	0	6	9	15	15	12	0	0	0	13	1	0	0	0	4	0
October	8.1	N.	30	NW.	0	16	5	1	0	12	8	6	12	2	13	10	8	7	5	1	0	0	13	3	0	0	0	1	0
November	9.3	N.	33	NW.	1	6	5	5	7	11	8	8	10	0	9	9	12	12	8	3	0	0	10	0	0	0	7	0	0
December	10.3	NW.	32	NW.	2	16	4	2	3	5	8	10	14	0	8	9	14	10	7	7	1	0	5	1	7	0	24	0	0
Year	9.4	S.	46	NW.	9	130	76	40	47	159	82	76	118	2	101	132	132	132	99	38	14	1	102	15	32	14	102	37	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

VALENTINE, NEBR.

[ϕ=42°50′ N.; λ=100°32′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	27.32	27.74	26.82	22.5	36.9	33.2	44.5	16.5	30.5	64	−6	17	21	20	79	54	60	0.097	0.114	0.112	0.14	0.06	1.3	4.7	5.5	5.3	5.3
February	27.42	27.76	27.07	20.8	36.7	34.4	42.0	15.5	28.8	67	−24	15	19	20	78	51	58	.093	.107	.110	.55	.43	8.2	4.4	4.3	4.2	4.6
March	27.37	27.93	26.78	26.1	40.6	38.8	46.4	19.7	33.0	71	−1	20	23	23	76	54	57	.110	.128	.129	1.56	.88	14.8	5.8	5.0	5.8	6.0
April	27.28	27.67	26.86	38.6	57.9	58.9	63.4	35.9	49.6	90	24	26	28	28	61	36	35	.142	.157	.156	.36	.26	.3	4.2	3.7	5.1	4.2
May	27.24	27.70	26.82	57.4	77.6	77.4	83.3	51.5	67.4	102	35	42	40	40	57	29	30	.272	.256	.261	1.03	.77	.0	3.0	4.3	4.8	4.1
June	27.20	27.53	26.88	62.4	78.3	80.4	84.6	57.8	71.2	101	49	51	51	50	68	40	38	.382	.380	.373	2.37	.62	.0	4.7	3.8	4.5	4.3
July	27.23	27.54	26.94	68.5	89.2	90.4	95.7	65.3	80.5	110	48	54	52	50	64	30	28	.437	.391	.367	.44	.21	.0	2.4	2.3	4.4	3.0
August	27.32	27.58	27.09	63.7	81.7	82.4	87.5	60.1	73.8	107	43	50	50	50	64	35	36	.387	.373	.384	2.14	.77	.0	4.2	3.3	3.4	3.8
September	27.28	27.71	26.98	46.9	62.7	63.4	69.7	43.2	56.4	90	28	40	41	41	78	50	48	.256	.268	.270	1.31	.54	T	4.5	5.2	5.0	5.0
October	27.32	27.92	26.66	44.0	63.6	60.0	68.2	40.5	54.4	90	21	35	38	37	73	42	44	.215	.234	.227	1.26	.93	.0	4.3	3.8	2.9	3.7
November	27.28	27.85	26.80	31.4	48.4	43.4	52.5	28.5	40.5	76	15	25	29	27	77	51	56	.134	.157	.147	.08	.04	.4	5.0	4.6	5.0	5.0
December	27.34	27.85	26.87	21.3	30.5	27.6	37.4	14.5	26.0	56	−9	16	20	20	81	64	73	.094	.111	.112	.28	.14	3.0	4.9	5.6	5.4	5.5
Year	27.30	27.93	26.66	42.0	58.7	57.5	64.6	37.4	51.0	110	−24	33	34	33	71	45	47	.218	.223	.221	11.52	.93	28.0	4.3	4.4	4.6	4.5

VICKSBURG, MISS.

[ϕ=32°22′ N.; λ=90°53′ W.]

January	29.90	30.23	29.54	45.4	54.5	53.5	59.8	42.9	51.4	71	20	41	41	41	85	65	66	0.277	0.285	0.284	5.54	1.51	T	6.3	5.8	6.5	6.2
February	29.91	30.45	29.42	42.2	52.3	52.4	58.7	39.2	49.0	74	22	35	35	34	77	55	54	.218	.217	.209	5.38	1.77	T	5.4	5.4	4.7	5.2
March	29.86	30.15	29.50	48.6	59.0	60.4	67.0	45.7	56.4	79	29	43	42	42	81	57	55	.297	.291	.293	5.71	3.53	T	6.1	5.9	4.0	5.7
April	29.76	30.08	29.41	58.8	71.2	70.0	75.7	56.7	66.2	86	45	53	52	51	82	54	55	.424	.418	.396	1.45	.44	0.0	5.5	5.7	4.2	5.5
May	29.71	30.02	29.45	66.1	78.5	75.3	82.6	63.9	73.2	94	55	61	60	62	83	55	67	.541	.536	.578	3.47	1.08	.0	4.8	5.8	6.2	6.1
June	29.68	29.91	28.94	75.1	86.0	83.6	90.1	72.0	81.0	94	66	70	70	71	84	59	66	.728	.724	.749	8.45	4.94	.0	3.3	5.2	4.2	4.7
July	29.75	29.91	29.61	76.3	86.7	83.4	91.0	74.0	82.5	96	69	71	71	72	84	60	71	.753	.758	.799	3.91	1.10	.0	4.3	5.4	5.3	5.2
August	29.77	29.90	29.60	75.7	87.8	84.1	91.8	74.1	83.0	97	68	72	71	72	88	58	68	.778	.760	.784	4.35	2.30	.0	6.3	6.1	6.7	6.1
September	29.77	29.98	29.60	67.8	80.6	76.6	84.6	65.6	75.1	92	55	63	63	64	85	56	67	.586	.589	.605	3.64	1.79	.0	3.5	4.8	4.9	4.7
October	29.80	30.13	29.59	62.4	76.7	72.8	80.0	61.2	70.6	89	46	57	58	58	82	54	62	.478	.495	.496	2.44	2.44	.0	3.5	4.5	2.3	4.0
November	29.83	30.15	29.28	53.1	64.8	61.5	69.4	50.3	59.8	82	38	48	46	46	82	55	59	.356	.345	.333	7.42	3.06	.0	5.1	4.4	3.9	4.5
December	29.92	30.30	29.48	43.8	54.3	51.9	59.1	41.0	50.0	73	21	39	40	40	84	61	66	.260	.275	.273	6.01	2.15	.0	6.3	5.4	4.5	5.5
Year	29.80	30.45	28.94	59.6	71.0	68.8	75.8	57.2	66.5	97	20	54	54	54	83	57	63	.474	.474	.483	57.77	4.94	T	5.0	5.4	4.8	5.3

WALLA WALLA, WASH.

[ϕ=46°02′ N.; λ=118°20′ W.]

January	29.13	29.64	28.49	42.0	46.4	46.4	50.5	36.9	43.7	63	28	34	36	37	74	68	72	0.197	0.213	0.223	1.21	0.50	0.0	6.9	7.8	6.7	7.6
February	29.06	29.46	28.70	39.7	46.0	48.9	50.9	36.4	43.6	66	29	34	36	37	80	69	65	.197	.211	.223	.53	.27	T	5.0	5.5	5.8	5.7
March	29.04	29.55	28.70	46.7	57.9	61.2	63.4	43.4	53.4	74	32	36	38	38	68	49	45	.220	.234	.240	2.29	.86	.0	4.9	4.7	5.9	5.1
April	28.93	29.29	28.55	51.4	65.5	69.7	71.8	49.1	60.4	91	36	41	41	40	68	41	36	.262	.260	.256	.44	.17	T	4.3	3.8	4.4	4.0
May	28.89	29.40	28.57	54.6	70.7	73.9	76.7	52.6	64.6	99	43	41	40	39	61	35	31	.259	.253	.248	.41	.22	.0	4.3	5.2	5.7	5.2
June	28.85	29.26	28.52	58.2	73.7	78.7	80.4	56.7	68.6	100	48	44	42	39	61	34	27	.294	.272	.249	1.08	.55	.0	4.6	4.4	4.5	4.7
July	28.87	29.09	28.56	63.7	80.4	86.7	88.2	62.3	75.2	106	53	42	41	38	47	26	20	.274	.259	.235	.06	.06	.0	1.9	1.5	1.6	1.8
August	28.90	29.12	28.65	64.0	81.7	88.3	89.6	62.0	75.8	100	51	42	43	40	48	27	19	.276	.283	.248	.35	.35	.0	.7	1.2	1.7	1.4
September	28.92	29.35	28.54	55.7	69.6	73.0	75.0	53.1	64.0	98	36	39	39	38	56	36	31	.247	.242	.229	.60	.49	.0	5.1	4.4	4.5	4.7
October	28.96	29.31	28.45	51.3	59.7	62.0	65.0	47.8	56.4	88	32	41	42	43	70	56	53	.262	.276	.284	1.57	.45	.0	5.8	6.8	6.4	7.0
November	28.91	29.25	28.30	47.2	51.6	50.0	54.1	43.7	48.9	77	37	38	39	39	72	63	68	.232	.237	.245	2.38	.64	.0	8.6	8.7	8.9	8.7
December	29.10	29.61	28.38	38.4	40.8	40.5	44.6	34.0	39.3	60	27	32	31	32	77	70	73	.177	.174	.180	1.57	.56	T	8.7	8.4	7.9	8.8
Year	28.96	29.64	28.30	51.1	62.0	64.9	67.5	48.2	57.8	106	27	39	39	38	65	48	45	.241	.243	.238	12.49	.86	T	5.0	5.2	5.3	5.4

WASHINGTON, D. C.

[ϕ=38° 54′ N.; λ=77°03′ W.]

January	30.02	30.43	29.04	33.9	41.3	40.1	46.5	31.5	39.0	69	8	26	26	26	73	56	58	0.153	0.157	0.156	1.97	0.99	T	6.2	6.4	4.1	6.3
Feburary	30.08	30.83	29.20	19.2	26.6	27.1	33.5	15.6	24.6	50	−6	9	11	13	64	51	55	.068	.077	.086	3.22	1.27	18.1	5.1	4.9	5.8	5.4
March	30.05	30.62	29.47	35.1	44.6	43.2	51.0	31.4	41.2	78	16	28	27	29	70	53	60	.153	.161	.172	4.18	1.02	9.1	6.5	6.4	5.5	6.0
April	29.88	30.56	29.23	48.6	59.1	57.5	64.1	42.7	53.9	84	34	37	37	38	66	46	50	.227	.233	.240	2.27	1.06	T	5.6	5.6	5.8	5.4
May	29.88	30.39	29.58	61.3	72.3	68.3	77.1	55.9	66.5	95	47	50	48	50	68	45	57	.383	.350	.387	3.85	1.31	.0	5.1	5.4	7.0	5.3
June	29.79	30.22	29.36	74.0	82.1	79.3	86.7	67.6	77.2	101	61	64	64	65	72	55	64	.606	.598	.634	2.87	.99	.0	4.6	5.1	5.0	4.4
July	29.84	30.19	29.62	76.3	85.3	82.3	90.2	71.4	80.8	100	62	68	66	67	75	53	61	.683	.651	.668	2.88	2.01	.0	5.3	4.7	4.9	4.6
August	29.92	30.30	29.68	69.8	78.2	74.7	82.7	65.5	74.1	92	49	63	61	64	79	57	71	.589	.559	.616	5.21	1.40	.0	6.5	5.8	6.1	5.7
September	29.98	30.34	29.64	66.6	74.2	70.9	78.1	63.1	70.6	87	52	62	63	64	87	70	80	.579	.594	.606	17.45	4.30	.0	6.8	7.0	4.3	6.6
October	29.95	30.25	29.43	50.6	61.5	57.7	65.8	46.6	56.2	81	35	43	42	45	76	50	64	.288	.279	.314	.75	.52	.0	4.8	4.3	2.0	4.5
November	30.02	30.47	29.40	43.8	54.0	51.1	58.8	40.4	49.6	78	27	38	38	38	78	54	64	.245	.244	.257	3.58	1.49	T	5.6	5.6	4.4	5.8
December	29.99	30.45	29.19	33.6	37.7	37.7	37.9	44.7	29.9	37.3	68	17	26	25	24	71	55	56	.148	.143	.131	2.91	1.35	3.0	6.4	5.3	4.3	6.1
Year	29.95	30.83	29.04	51.1	59.7	57.5	64.9	46.9	55.9	101	−6	43	42	44	73	54	62	.343	.337	.355	51.14	4.30	30.2	5.7	5.5	4.9	5.5

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

VALENTINE, NEBR.

[H_b=2,598 ft.; h_t=47 ft.; h_r=36 ft.; h_a=54 ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	9.5	W.	30	SW.	0	6	2	3	1	2	8	28	10	2	8	12	11	6	1	9	5	0	4	0	3	0	29	0	0
February	8.9	W.	32	NW.	1	12	2	7	2	5	5	18	2	3	12	7	9	6	3	9	6	0	1	0	7	0	28	0	0
March	10.1	W.	31	N.	0	13	3	6	2	4	6	16	9	3	8	13	10	8	4	12	5	0	0	0	7	0	27	0	0
April	10.5	N.	31	N.	0	17	3	2	3	3	5	17	8	2	14	10	6	2	2	2	1	0	3	3	0	1	10	0	0
May	10.8	S.	32	NW.	1	10	4	5	4	13	10	9	6	1	15	12	4	5	4	0	0	0	2	0	0	11	0	8	0
June	9.7	N.	35	SE.	2	12	1	13	8	3	8	7	5	3	15	8	7	12	11	0	0	0	2	0	0	9	0	12	0
July	9.6	E.	35	NW.	2	11	8	11	4	11	4	8	2	3	18	11	2	6	3	0	0	0	0	0	0	22	0	10	0
August	8.9	N.	35	NW.	2	10	10	5	6	6	4	14	2	5	16	11	4	8	5	0	0	0	2	0	0	12	0	13	0
September	9.8	N.	29	SW.	0	19	1	4	5	7	4	11	7	2	12	10	8	8	7	2	1	1	4	0	1	2	3	0	0
October	9.5	W.	33	SE.	1	9	1	5	4	10	4	18	10	1	17	7	7	7	4	0	0	1	2	0	0	0	5	2	0
November	7.3	W.	30	SW.	0	11	5	8	0	6	6	16	6	2	11	7	12	3	1	2	2	0	9	4	2	0	21	0	0
December	9.6	W.	30	NW.	0	10	1	4	2	5	8	20	11	1	11	9	11	6	3	14	4	0	3	0	9	0	31	0	0
Year	9.5	W.	35	NW.	9	140	41	73	41	75	72	182	78	28	157	117	91	77	48	50	24	6	28	7	28	56	153	48	0

VICKSBURG, MISS.

[H_b=247 ft.; h_t=65 ft.; h_r=58 ft.; h_a=73 ft.]

January	7.8	SE.	21	SE.	0	7	9	12	10	2	7	12	3	0	8	8	15	11	8	1	0	0	4	3	0	0	4	0	0
February	8.1	N.	23	NW.	0	12	9	11	8	6	1	2	7	0	11	5	12	10	8	1	0	1	1	0	0	0	4	4	0
March	8.3	S.	21	W.	0	9	5	4	15	12	7	4	5	1	8	13	10	7	7	1	0	0	2	1	0	0	2	2	0
April	7.7	S.	22	NW.	0	8	9	5	8	13	7	7	3	0	9	9	12	10	9	0	0	0	2	1	0	0	0	6	0
May	6.8	E.	25	S.	0	10	9	21	10	3	4	1	4	0	7	10	14	9	9	0	0	0	0	1	0	1	0	9	0
June	6.7	SE.	31	E.	0	4	8	8	12	6	11	7	4	0	9	17	4	11	8	0	0	0	0	0	0	22	0	14	0
July	6.4	S.	29	S.	0	6	2	6	6	17	16	8	1	0	12	11	8	9	7	0	0	0	0	0	0	22	0	12	0
August	6.8	S.	25	E.	0	1	5	8	14	14	13	5	2	0	7	13	11	5	5	0	0	0	2	0	0	25	0	9	0
September	6.5	SE.	20	S.	0	10	4	11	13	14	3	1	4	0	13	9	8	11	9	0	0	0	0	0	0	4	0	7	0
October	6.5	N.	15	SW.	0	16	9	9	14	8	2	0	2	2	17	8	6	2	1	0	0	0	1	0	0	0	0	0	0
November	7.7	SE.	29	SE.	0	9	3	11	14	9	5	4	5	0	15	5	10	9	7	0	0	0	2	0	0	0	0	5	0
December	7.7	N.	27	W.	0	13	9	5	11	9	4	1	10	0	11	8	12	9	7	0	0	0	2	1	0	0	5	3	0
Year	7.2	SE.	31	E.	0	105	81	111	135	113	80	52	50	3	127	116	122	103	85	3	0	1	17	7	0	74	15	71	0

WALLA WALLA, WASH.

[H_b=991 ft.; h_t=57 ft.; h_r=50 ft.; h_a=65 ft.]

January	6.5	S.	23	W.	0	1	0	1	5	34	14	5	1	1	5	6	20	14	8	0	0	0	3	5	0	0	7	0	0
February	4.7	S.	21	SW.	0	6	0	0	9	23	7	7	3	1	10	5	13	6	4	1	0	0	3	2	0	0	5	0	0
March	5.9	S.	29	W.	0	7	3	1	11	16	12	8	4	0	12	9	10	10	7	0	0	1	1	0	0	0	1	2	0
April	5.5	S.	20	W.	0	7	4	3	13	16	5	8	3	1	16	8	6	5	3	1	0	0	0	0	0	0	2	2	0
May	5.5	S.	24	W.	0	7	4	2	5	21	7	11	5	0	10	12	9	5	3	0	0	0	0	0	0	5	0	3	0
June	6.1	S.	21	W.	0	7	4	2	5	21	10	13	2	0	13	10	7	7	6	0	0	0	0	0	0	5	0	1	0
July	6.5	S.	24	W.	0	6	3	1	7	24	10	13	2	0	13	10	7	7	6	0	0	0	0	0	0	5	0	1	0
August	6.2	S.	19	SW.	0	2	0	0	6	27	13	13	1	0	24	5	2	1	1	0	0	0	0	0	0	14	0	1	0
September	5.6	S.	17	W.	0	2	1	2	7	23	6	13	5	3	27	3	1	1	1	0	0	0	0	0	0	18	0	0	0
October	5.3	S.	17	SW.	0	2	0	4	2	5	22	8	15	3	11	12	7	6	3	0	0	0	0	0	0	3	0	1	0
November	5.6	S.	21	S.	0	3	1	2	10	23	15	3	5	0	6	7	18	11	7	0	0	0	2	1	0	0	1	0	0
October	5.3	S.	24	W.	0	1	0	2	6	33	11	5	2	0	0	8	23	16	10	0	0	0	2	0	0	0	0	0	0
November	6.5	S.	27	W.	0	1	0	4	5	25	20	5	1	1	1	5	25	10	9	4	0	0	7	5	1	0	14	0	0
December	6.7	S.	27	W.	0																								
Year	5.9	S.	29	W.	0	37	20	20	89	287	128	106	35	8	135	90	140	92	62	6	0	1	18	13	1	45	28	10	0

WASHINGTON, D. C.

[H_b=112 ft.; h_t=62 ft.; h_r=42 ft.; h_a=85 ft.]

January	7.4	NW.	32	NW.	2	6	6	5	1	5	8	6	21	4	9	9	13	10	7	2	0	0	12	3	1	0	13	0	0
February	8.3	NW.	30	NW.	0	6	7	3	3	8	10	0	19	0	11	5	12	9	6	11	8	0	8	1	12	0	27	0	0
March	7.7	S.	31	NW.	0	9	9	3	4	17	7	3	10	0	11	5	15	16	15	10	7	0	10	4	3	0	16	1	0
April	7.1	S.	25	W.	0	4	4	6	13	10	3	15	0	1	11	8	11	10	7	2	0	0	6	0	0	0	0	2	0
May	7.0	S.	30	NW.	0	7	15	5	8	11	9	0	7	0	12	11	8	12	10	0	0	0	4	0	0	3	0	4	0
June	6.3	SW.	34	NW.	2	6	3	2	8	7	23	1	9	1	13	13	4	10	8	0	0	0	4	0	0	11	0	8	0
July	6.8	SW.	30	NW.	0	3	6	4	7	13	17	2	7	3	11	14	6	7	6	0	0	0	1	0	0	17	0	6	0
August	5.4	SW.	38	NW.	1	9	5	2	6	11	14	1	9	5	8	11	12	9	8	0	0	1	11	2	0	3	0	6	0
September	5.6	NW.	22	NW.	0	4	6	7	7	13	5	2	8	8	7	7	16	15	14	0	0	0	18	2	0	0	0	4	0
October	6.6	NW.	25	NW.	0	8	5	4	9	8	9	15	5	5	16	6	9	5	3	0	0	0	16	1	0	0	0	1	0
November	7.5	NW.	31	NW.	0	6	2	10	1	10	4	5	16	6	10	7	13	11	7	1	0	0	16	1	0	0	5	1	0
December	7.5	NW.	22	NW.	0	11	2	4	0	10	7	8	19	1	8	9	14	8	5	2	0	0	12	1	4	0	19	1	0
Year	6.8	NW.	38	NW.	3	79	70	53	51	126	122	40	155	34	127	106	133	122	99	31	17	2	116	14	20	34	80	34	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

WICHITA, KANS.

[ϕ=37°41′ N.; λ=97°20′ W.]

Month	Pressure: Monthly mean	Pressure: Extremes: Maximum	Pressure: Extremes: Minimum	Temperature: Mean: 8 a. m.	Temperature: Mean: Noon, local time	Temperature: Mean: 8 p. m.	Temperature: Mean: Maximum	Temperature: Mean: Minimum	Temperature: Mean: Monthly	Temperature: Extremes: Maximum	Temperature: Extremes: Minimum	Moisture: Dew point: 8 a. m.	Moisture: Dew point: Noon, local time	Moisture: Dew point: 8 p. m.	Moisture: Relative humidity: 8 a. m.	Moisture: Relative humidity: Noon, local time	Moisture: Relative humidity: 8 p. m.	Moisture: Vapor pressure: 8 a. m.	Moisture: Vapor pressure: Noon, local time	Moisture: Vapor pressure: 8 p. m.	Moisture: Precipitation: Total	Moisture: Precipitation: Maximum in 24 hours	Moisture: Precipitation: Total snowfall	Cloudiness: 8 a. m.	Cloudiness: Noon, local time	Cloudiness: 8 p. m.	Cloudiness: Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	28.67	29.11	28.26	31.3	40.6	40.4	45.7	27.3	36.5	68	11	26	25	28	79	57	63	0.146	0.144	0.157	0.72	0.44	0.9	4.8	4.6	4.2	4.6
February	28.73	29.17	28.35	29.4	45.0	43.4	49.0	26.8	37.9	75	0	21	25	24	70	47	49	.117	.137	.132	1.03	.47	4.7	5.1	5.5	4.8	5.3
March	28.65	29.16	28.15	34.6	49.4	51.5	57.7	32.4	45.0	85	13	25	28	28	69	48	42	.142	.162	.158	1.16	.51	.2	5.5	6.3	5.5	5.7
April	28.55	28.94	28.20	50.0	63.1	64.5	67.7	48.0	57.8	85	37	37	36	39	62	42	44	.234	.251	.268	3.10	1.81	.0	4.9	5.0	4.5	4.6
May	28.54	28.95	28.22	61.1	75.3	76.1	79.6	58.8	69.2	100	47	52	49	51	72	44	44	.392	.368	.379	4.14	2.39	.0	4.6	4.4	3.7	4.2
June	28.44	28.67	28.23	72.9	89.3	90.3	93.7	70.8	82.2	101	62	59	58	58	63	36	35	.509	.486	.481	1.78	1.00	.0	4.2	4.0	3.4	3.5
July	28.49	28.73	28.17	77.8	95.6	96.7	100.2	76.1	88.2	109	62	58	54	53	52	26	25	.491	.421	.411	1.77	1.43	.0	3.0	2.0	2.6	2.6
August	28.52	28.77	28.23	75.5	91.9	93.1	96.5	74.1	85.3	106	57	58	56	54	56	32	29	.493	.461	.430	.38	.13	.0	5.6	3.7	4.5	4.4
September	28.54	28.92	28.30	59.1	72.6	70.9	77.5	55.4	66.4	93	40	52	53	53	79	52	56	.416	.431	.429	4.25	1.18	.0	4.9	4.8	4.0	4.6
October	28.61	29.10	28.29	55.7	70.8	68.1	74.3	54.2	64.2	84	37	47	47	49	73	45	52	.337	.348	.370	1.89	1.45	.0	2.5	2.7	2.9	2.6
November	28.56	29.06	27.92	44.2	53.7	52.9	58.3	41.0	49.6	80	28	37	39	41	76	60	67	.234	.245	.272	2.90	1.11	.2	5.2	5.7	5.5	5.7
December	28.67	29.18	28.28	30.1	38.2	36.8	42.6	25.7	34.2	57	7	26	27	27	84	64	69	.144	.147	.150	1.03	1.03	3.0	3.1	3.4	4.3	5.1
Year	28.58	29.18	27.92	51.8	65.5	65.4	70.2	49.2	59.7	109	0	42	41	42	70	46	48	.305	.300	.303	24.15	2.39	9.0	4.4	4.3	4.2	4.4

WILLISTON, N. DAK.

[ϕ=48°09′ N.; λ=103°35′ W.]

January	28.02	28.66	27.37	12.9	21.9	20.8	27.4	6.1	16.8	41	−13	9	16	16	85	76	82	0.071	0.098	0.099	0.17	0.05	1.8	4.8	4.8	4.0	5.3
February	28.13	28.51	27.65	19.1	28.9	27.2	31.7	15.7	23.7	52	−15	15	20	20	83	72	73	.098	.123	.122	T	T	T	3.4	2.9	3.9	3.5
March	28.10	28.76	27.42	22.7	31.7	33.1	38.4	19.3	28.8	60	−6	18	20	21	79	63	62	.104	.121	.125	.62	.42	5.5	5.7	4.9	4.0	4.8
April	28.01	28.50	27.54	34.5	52.2	55.0	58.3	32.9	45.6	83	22	25	26	25	69	40	34	.137	.140	.140	.30	.30	3.0	1.9	2.4	2.4	2.5
May	27.92	28.33	27.41	52.9	72.5	75.7	78.4	49.8	64.1	99	30	37	35	34	57	28	23	.225	.208	.198	.33	.19	.0	3.7	2.7	2.5	3.1
June	27.91	28.27	27.44	55.1	68.2	71.2	74.3	51.5	62.9	88	41	46	46	45	74	50	44	.319	.319	.310	2.02	1.18	.0	4.0	4.4	4.6	4.7
July	27.95	28.31	27.51	62.0	80.2	82.1	85.4	59.1	72.2	99	37	49	48	46	65	35	31	.361	.345	.323	.83	.30	.0	4.0	3.2	3.4	3.6
August	28.01	28.35	27.63	55.4	76.1	78.4	82.6	53.5	68.0	101	35	43	43	43	64	33	31	.289	.290	.293	.21	.10	.0	2.5	2.8	3.3	2.9
September	27.98	28.45	27.61	42.8	57.9	59.1	63.4	41.1	52.2	92	24	37	37	37	82	51	50	.227	.227	.222	1.19	.48	2.1	6.3	4.6	4.2	4.8
October	28.01	28.63	27.56	41.1	56.6	54.7	61.7	38.4	50.0	85	13	34	34	33	78	45	47	.201	.198	.196	.01	.01	T	3.6	2.8	3.3	3.4
November	27.97	28.57	27.38	27.1	41.1	38.4	46.3	23.3	34.8	68	8	22	26	25	79	57	61	.116	.137	.135	.02	.01	.1	3.8	4.1	3.7	4.4
December	28.06	28.55	27.43	11.2	17.8	16.4	23.9	5.1	14.5	45	−30	8	12	12	84	76	80	.071	.083	.081	.43	.18	4.8	5.4	5.1	4.7	5.7
Year	28.01	28.76	27.37	36.4	50.3	51.0	56.0	33.0	44.5	101	−30	29	30	30	75	52	52	.185	.191	.187	6.13	1.18	17.3	4.1	3.7	3.7	4.1

WILMINGTON, N. C.

[ϕ=34°14′ N.; λ=77°57′ W.]

January	30.10	30.44	29.42	44.8	54.7	50.5	59.6	41.4	50.5	74	11	38	38	40	78	55	69	0.261	0.263	0.278	1.15	0.34	0.0	4.6	4.6	4.1	4.8
February	30.10	30.77	29.45	36.1	45.9	43.2	51.3	31.2	41.2	68	10	30	33	33	79	61	67	.188	.206	.204	3.51	1.40	T	4.6	4.3	4.0	4.4
March	30.09	30.59	29.46	46.5	57.2	53.4	61.7	42.4	52.0	77	26	41	42	45	83	61	74	.280	.289	.319	4.46	1.19	1.0	5.7	5.8	4.6	5.4
April	29.94	30.42	29.34	59.4	69.5	63.0	72.6	54.3	63.4	87	39	50	48	52	73	49	70	.386	.362	.411	1.16	.39	.0	5.0	4.4	3.8	4.7
May	29.93	30.31	29.42	66.2	73.6	68.0	76.2	60.1	68.2	88	49	59	58	60	80	60	78	.518	.492	.535	5.58	2.44	.0	5.0	5.1	5.2	5.1
June	29.91	30.14	29.63	76.5	83.6	77.4	86.0	71.0	78.5	92	66	71	69	71	83	63	82	.753	.719	.765	3.42	1.92	.0	4.8	4.9	4.6	5.0
July	29.94	30.17	29.71	79.3	85.9	80.2	88.3	74.2	81.2	97	69	74	73	74	83	66	81	.828	.817	.840	3.09	1.21	.0	5.5	5.4	4.9	5.5
August	29.99	30.22	29.79	77.9	84.5	78.6	87.1	73.2	80.2	93	67	72	71	72	83	64	81	.796	.754	.800	5.28	3.04	.0	5.3	5.8	6.8	6.1
September	29.98	30.23	29.67	73.1	80.3	75.1	82.5	69.6	76.0	88	61	70	69	71	90	70	87	.739	.720	.757	7.06	3.32	.0	5.8	7.0	5.8	6.9
October	30.01	30.25	29.64	58.3	72.1	65.2	74.7	54.6	64.6	84	40	52	52	55	82	50	72	.422	.413	.467	.77	.42	.0	2.2	2.9	2.6	3.1
November	30.08	30.40	29.71	52.0	63.6	57.9	67.2	48.1	57.6	79	29	46	45	49	79	54	74	.341	.343	.385	7.70	4.38	T	3.4	3.5	3.3	3.7
December	30.07	30.42	29.49	43.0	52.0	47.7	55.9	38.4	47.2	70	22	38	36	38	75	55	70	.234	.239	.247	3.00	2.20	T	5.3	5.7	4.5	5.9
Year	30.01	30.77	29.34	59.4	68.6	63.4	71.9	54.9	63.4	97	10	53	53	55	81	59	75	.479	.468	.501	46.18	4.38	1.0	4.8	5.0	4.5	5.0

WINNEMUCCA, NEV.

[ϕ=40°58′ N.; λ=170°43′ W.]

January	25.82	26.18	25.37	27.2	44.4	42.9	49.8	23.2	36.5	58	12	24	23	27	87	52	54	0.130	0.155	0.150	0.64	0.27	1.0	3.6	4.0	4.6	4.2
February	25.69	26.00	25.34	31.2	47.1	46.0	52.4	28.0	40.2	66	21	28	31	30	89	54	52	.155	.171	.169	2.11	.61	2.5	5.0	5.8	5.6	5.8
March	25.72	26.05	25.43	35.5	50.4	52.1	55.5	31.7	43.6	76	23	27	28	26	72	31	27	.151	.158	.142	.66	.42	.0	3.7	4.7	5.0	4.4
April	25.61	25.80	25.35	39.9	56.9	58.2	71.8	36.7	54.2	86	24	28	26	23	64	23	20	.153	.142	.125	.95	.57	3.3	3.1	3.1	3.8	3.3
May	25.57	25.95	25.22	47.4	73.4	74.2	78.5	44.9	61.7	92	32	31	29	26	54	21	19	.172	.161	.142	.23	.42	.0	3.2	3.8	3.5	3.3
June	25.54	25.85	25.24	47.7	73.4	74.8	79.3	45.4	62.4	95	31	35	34	31	63	27	24	.209	.198	.184	.99	.61	.0	3.6	3.8	3.5	3.2
July	25.60	25.80	25.38	50.0	88.7	89.8	93.5	54.0	73.8	106	42	30	31	28	37	13	11	.172	.174	.154	.02	.02	.0	3.6	3.8	3.9	3.7
August	25.64	25.79	25.41	50.0	89.2	89.2	94.2	52.6	73.4	99	45	29	32	30	36	14	13	.163	.181	.169	.01	.01	.0	.7	.7	1.0	.8
September	25.62	25.87	25.18	43.5	74.9	76.3	80.1	39.6	59.8	97	17	25	29	28	49	22	19	.135	.157	.151	.25	.24	T	1.8	1.7	1.9	1.6
October	25.68	26.02	25.33	39.2	63.9	62.8	68.3	35.3	51.8	87	22	29	31	32	69	33	37	.165	.177	.184	.87	.52	T	1.5	1.7	1.4	1.4
November	25.66	25.93	25.21	33.6	51.0	47.6	55.6	29.1	42.4	73	15	28	31	31	79	50	56	.152	.174	.172	1.28	.52	T	3.7	4.6	4.3	4.3
December	25.75	26.07	25.25	27.2	38.7	36.1	42.6	23.5	33.0	57	8	23	28	28	85	65	71	.125	.152	.151	1.06	.69	1.5	5.3	5.7	6.3	5.7
Year	25.66	26.18	25.18	40.4	64.3	64.3	69.3	37.0	53.2	106	8	28	30	28	65	34	34	.157	.167	1.58	9.07	.69	13.8	3.4	3.7	3.9	3.6

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

WICHITA, KANS.

[H_b=1,358 ft.; h_t=85 ft.; h_r=78 ft.: h_a=93 ft.]

Month	Wind														Number of days																	
	By self-register					Number of winds, 8 a. m. and 8 p. m.												Precipitation		Snow			Fog		Maximum temp.		32°	Electricity	
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
	Mi.		*Mi.*																													
January	10.6	N.	32	SW.	1	11	10	0	6	11	8	7	9	0	14	6	11	4	3	4	3	0	8	1	3	0	22	0	0
February	10.5	N.	31	N.	0	13	9	7	5	10	5	9	7	0	11	3	14	8	4	8	7	0	2	0	4	0	19	0	0
March	12.8	SW.	31	SW.	0	10	14	5	3	14	11	1	4	0	11	7	13	5	4	5	2	0	4	1	0	0	15	0	0
April	11.2	N.	30	SW.	0	13	8	4	4	9	13	0	7	2	13	6	11	8	6	0	0	1	2	0	0	0	0	3	0
May	11.1	SW.	33	SW.	1	6	5	3	15	19	7	1	6	0	17	5	9	8	5	0	0	0	3	0	0	0	3	0	6
June	12.3	SW.	41	SW.	1	3	4	6	12	11	20	4	0	0	17	9	4	8	7	0	0	1	0	0	0	23	9	7	0
July	11.7	S.	31	N.	0	3	5	7	9	27	10	0	1	0	21	9	1	4	3	0	0	0	0	0	0	29	0	7	0
August	10.8	SW.	30	W.	0	3	9	7	7	12	21	1	2	0	14	11	6	6	4	0	0	0	0	0	0	24	0	10	0
September	11.1	S.	32	NW.	1	14	1	7	11	20	3	1	3	0	13	9	8	9	8	0	0	0	6	3	0	3	0	9	0
October	10.2	S.	28	SW.	0	6	8	5	9	23	5	2	4	0	22	5	4	8	4	0	0	0	3	0	0	0	0	5	0
November	11.4	S.	29	NW.	0	8	7	3	13	13	8	5	3	0	10	6	14	6	6	4	2	0	5	0	0	0	5	2	0
December	10.7	N.	35	SW.	1	15	7	2	7	7	13	4	5	2	13	6	12	1	1	5	1	0	10	5	5	0	27	0	0
Year	11.2	SW.	41	SW.	5	105	87	56	101	176	124	26	51	4	176	82	107	75	55	26	15	2	43	10	12	82	88	49	0

WILLISTON, N. DAK.

[H_b=1,878 ft.; h_t=41 ft.; h_r=33 ft.; h_a=48 ft.]

January	8.2	W.	35	NW.	1	2	3	6	9	9	13	11	9	0	8	13	10	5	2	10	5	0	2	1	16	0	31	0	2
February	8.4	W.	34	NW.	1	5	4	1	8	5	7	14	11	1	15	9	4	0	0	6	0	0	0	0	10	0	27	0	1
March	9.9	NW.	32	NW.	1	7	8	4	6	6	9	16	0	0	11	15	5	7	4	9	4	0	0	0	12	0	26	0	4
April	10.7	NW.	31	W.	0	5	7	4	7	7	4	8	18	0	24	3	3	1	1	2	1	0	0	0	0	0	13	0	3
May	9.6	W.	39	NW.	2	9	7	6	6	7	5	9	13	0	18	10	3	3	2	0	0	0	0	0	0	8	2	2	2
June	9.9	E.	34	W.	1	0	6	8	14	2	8	7	14	1	12	11	7	11	5	0	0	0	0	0	0	0	0	6	0
July	8.8	SE.	33	SE.	1	11	11	2	15	8	3	3	9	0	14	15	2	8	5	0	0	0	0	0	0	9	0	7	0
August	8.4	SE.	34	W.	2	15	6	3	16	2	1	5	14	0	21	6	4	5	3	0	0	0	0	0	0	7	0	6	1
September	8.6	N.	25	NE.	0	14	6	2	9	5	6	6	11	1	14	8	8	12	8	2	2	0	0	0	0	2	5	2	2
October	8.3	SE.	38	NW.	1	6	5	6	11	6	6	10	10	0	18	8	5	1	0	1	0	0	3	1	0	0	7	0	0
November	6.8	SE.	30	W.	0	8	5	3	12	8	12	8	4	0	15	6	9	2	0	2	1	0	2	1	6	0	26	0	2
December	7.4	S.	27	NW.	0	7	1	4	5	12	8	11	14	0	12	3	16	10	4	13	10	0	4	1	19	0	31	0	2
Year	8.8	SE.	39	NW.	10	89	69	49	118	77	79	101	143	3	182	107	76	65	34	45	23	0	11	4	63	26	168	23	19

WILMINGTON, N. C.

[H_b=72 ft.; h_t=73 ft.; h_r=65 ft.; h_a=107 ft.]

January	8.9	N.	30	SW.	0	14	12	2	3	7	12	6	5	1	12	9	10	12	5	0	0	0	19	7	1	0	4	0	0
February	10.3	NE.	38	SW.	3	16	13	3	5	4	3	5	7	0	13	7	8	7	6	1	0	0	17	3	0	0	14	1	0
March	10.7	SW.	29	SW.	0	9	18	3	3	12	10	1	5	1	11	8	12	10	9	3	1	0	16	4	0	0	4	3	0
April	10.7	SW.	31	W.	0	6	8	5	2	13	15	3	8	0	12	12	6	7	5	0	0	1	11	1	0	0	0	4	0
May	10.0	S.	30	S.	0	11	11	6	8	17	7	1	6	0	12	10	9	11	9	0	0	0	10	2	0	0	3	0	0
June	9.4	SW.	26	S.	0	4	1	1	2	16	21	9	6	0	11	11	8	13	8	0	0	0	7	2	0	8	0	13	0
July	9.1	SW.	30	S.	0	4	2	5	5	8	23	10	5	0	5	22	4	13	11	0	0	0	4	0	0	7	0	16	0
August	9.0	SW.	27	N.	0	2	10	6	4	10	19	9	1	1	5	15	11	15	12	0	0	0	8	0	0	8	0	11	0
September	7.2	N.	27	W.	0	14	11	5	10	9	4	1	6	0	5	10	15	17	14	0	0	0	20	0	0	0	0	8	0
October	7.6	N.	26	NW.	0	18	15	3	3	2	8	2	8	3	20	5	6	6	6	0	0	0	17	4	0	0	0	0	0
November	9.5	N.	32	S.	1	12	9	3	5	9	11	4	6	1	16	7	7	8	6	1	0	0	14	2	0	0	3	2	0
December	8.5	NE.	29	SW.	0	11	19	3	3	2	9	8	7	0	11	5	15	12	8	4	0	0	16	1	0	0	7	1	0
Year	9.2	SW.	38	SW.	4	121	129	45	53	109	142	59	65	7	133	121	111	131	99	9	1	1	159	26	1	23	32	62	0

WINNEMUCCA, NEV.

[H_b=4,344 ft.; h_t=18 ft.; h_r=6 ft.; h_a=56 ft.]

January	6.9	SW.	27	SW.	0	6	19	3	2	6	23	2	1	0	15	8	8	6	5	2	2	0	1	0	0	0	27	0	0
February	7.2	NE.	26	W.	0	5	20	0	1	5	19	5	1	0	9	4	16	10	9	5	3	0	1	0	0	0	23	0	0
March	8.1	SW.	30	NW.	0	3	19	0	0	3	23	10	4	0	12	12	7	6	3	0	0	1	0	0	0	0	17	0	0
April	7.8	NE.	25	W.	0	7	17	1	0	4	13	10	8	0	15	12	3	7	5	2	0	0	0	0	0	0	8	0	0
May	8.0	SW.	30	NW.	0	1	15	2	4	3	27	8	2	0	16	13	2	1	1	0	0	0	0	0	0	1	2	0	0
June	7.9	SW.	25	NW.	0	3	18	1	2	6	16	7	7	0	15	10	5	9	4	0	0	0	0	0	0	0	0	0	0
July	7.5	SW.	28	S.	0	0	6	2	1	8	28	13	1	3	28	3	0	1	0	0	0	0	0	0	0	0	0	0	0
August	7.2	NE.	21	SW.	0	0	15	1	0	9	12	16	7	2	25	4	2	2	2	1	0	0	0	0	0	0	0	0	0
September	7.1	NE.	23	SW.	0	6	19	2	0	1	13	9	9	1	25	3	2	2	2	1	0	0	0	0	0	0	0	0	0
October	8.0	NE.	28	S.	0	8	21	2	0	4	19	6	2	0	15	8	8	7	4	1	0	0	0	0	0	0	0	0	0
November	7.8	SW.	28	NW.	0	3	13	1	1	6	25	9	2	0	8	10	12	12	9	9	5	2	0	0	0	0	19	0	0
December	8.5	NE.	27	S.	0	2	23	4	1	5	17	6	4	0	10	11	10	5	5	8	2	0	1	0	0	0	26	0	0
Year	7.7	SW.	30	NW.	0	44	205	19	12	60	235	101	48	6	193	98	74	67	47	28	14	4	2	0	0	64	135	12	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

WYTHEVILLE, VA.

[ϕ=36°56′ N.; λ=81°05′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean					Extremes			Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	27.70	27.94	27.05	32.6	40.6	37.8	45.5	29.2	37.4	64	−3	27	27	28	79	61	68	0.163	0.168	0.164	0.90	0.47	0.6	5.9	5.1	4.1	5.4
February	27.68	28.23	27.15	22.4	30.2	29.4	37.4	18.2	27.8	55	−2	17	20	20	79	61	66	.098	.113	.109	2.75	1.70	17.1	5.8	5.5	5.5	5.5
March	27.70	28.12	27.25	34.1	44.3	41.6	50.5	28.4	39.4	68	11	28	32	31	79	65	70	.166	.189	.183	5.27	.96	4.2	5.8	5.8	6.0	6.0
April	27.61	28.13	27.08	47.0	57.2	54.0	61.7	40.6	51.2	79	27	39	39	38	74	54	58	.248	.254	.241	2.71	1.08	1.1	5.0	6.8	6.1	5.7
May	27.66	28.05	27.28	58.0	70.8	65.6	74.9	49.7	62.3	89	38	47	44	47	68	40	53	.332	.296	.331	1.84	.72	.0	3.6	4.2	5.1	4.1
June	27.63	27.88	27.35	68.3	78.0	73.4	82.5	60.9	71.7	95	50	60	59	60	76	54	65	.525	.507	.526	2.47	1.38	.0	4.9	5.8	6.6	5.3
July	27.68	27.90	27.49	71.5	82.1	74.9	86 3	65.5	75.9	95	61	65	64	66	81	55	74	.623	.596	.636	3.51	.86	.0	5.8	5.1	6.3	5.5
August	27.73	27.98	27.61	67.3	75.5	70.3	78.8	62.6	70.7	87	51	63	62	64	87	64	80	.584	.565	.599	4.04	1.69	.0	7.4	7.6	6.7	7.4
September	27.72	28 00	27.50	60.4	73.5	66.6	77.1	55.8	66.4	83	45	58	58	59	91	60	78	.483	.487	.512	5.45	2.69	.0	5.4	5.3	4.5	5.6
October	27.71	27.96	27.35	46.8	62.1	54.0	65.4	41.5	53.4	76	25	41	41	43	80	49	68	.264	.275	.294	2.07	1.36	.0	2.6	3.5	2.4	3.1
November	27.73	28.00	27.34	40.1	51.1	46.4	55.2	35.6	45.4	70	22	34	34	35	79	56	66	.215	.214	.221	4.49	1.96	1.0	5.1	5.1	4.5	5.1
December	27.68	28.01	27.04	30.5	37.3	34.2	42.1	26.7	34.4	58	8	24	25	24	76	62	68	.135	.140	.135	1.50	.60	2.4	6.7	6.6	5.6	6.3
Year	27.69	28.23	27.04	48.2	58.6	54.0	63.1	42.9	53.0	95	−3	42	42	43	79	57	68	.320	.317	.329	37.00	2.69	26.4	5.3	5.5	5.3	5.4

YAKIMA, WASH.

[ϕ=46°36′ N.; λ=120°30′ W.]

January	29.04	29.58	28.46	35.2	42.5	43.2	46.7	31.7	39.2	58	26	30	33	33	81	70	68	0.163	0.189	0.190	0.63	0.24	0.7	5.4	6.6	6.9	6.9
February	28.99	29.39	28.60	36.5	49.5	51.1	53.5	34.0	43.8	61	28	31	34	34	81	54	53	.176	.193	.200	.93	.78	T	4.6	5.2	5.7	5.7
March	28.96	29.48	28.61	41.3	59.4	61.5	64.2	38.3	51.2	77	28	33	34	35	72	42	39	.189	.205	.209	.60	.36	.0	3.3	5.5	6.8	5.6
April	28.87	29.22	28.54	50.6	69.0	71.4	74.0	48.1	61.0	91	36	37	36	37	63	33	32	.228	.218	.225	.47	.19	.0	3.9	4.6	5.5	4.7
May	28.83	29.33	28.50	52.2	71.3	73.7	76.6	50.1	63.4	100	38	40	39	39	64	32	31	.248	.243	.247	.20	.17	.0	4.6	5.5	5.4	5.3
June	28.78	29.17	28.51	57.6	76.6	79.7	82.5	56.2	69.4	101	48	42	40	41	56	28	26	.264	.246	.255	.06	.04	.0	3.5	4.1	3.9	3.6
July	28.81	29.05	28.48	60.7	81.1	81.8	87.6	59.2	73.4	103	49	44	40	41	55	24	22	.288	.250	.262	.01	.01	.0	2.0	1.7	2.9	2.0
August	28.85	29.06	28.66	61.8	83.4	87.1	89.1	59.9	74.5	98	50	45	42	42	56	24	23	.305	.271	.276	.20	.20	.0	1.8	2.2	2.4	2.3
September	28.86	29.30	28.48	51.2	70.2	72.1	74.8	48.6	61.7	96	34	40	38	39	67	32	33	.252	.233	.243	.37	.25	.0	3.9	5.2	6.0	5.1
October	28.88	29.25	28.37	48.5	61.8	61.5	64.9	45.8	55.4	85	35	40	40	40	73	47	49	.249	.251	.258	.89	.59	.0	6.4	5.9	5.9	6.0
November	28.83	29.20	28.26	38.7	47.6	47.4	50.6	36.3	43.4	66	26	36	38	38	89	71	71	.212	.233	.234	1.36	.57	.2	6.2	8.4	8.2	8.2
December	29.01	29.55	28.24	33.7	38.9	38.1	40.8	30.1	36.4	54	23	28	29	29	81	70	71	.155	.162	.161	.59	.11	1.1	6.7	7.0	7.6	7.5
Year	28.89	29.58	28.24	47.3	61.6	64.0	67.1	44.9	56.0	103	23	37	37	37	70	44	43	.227	.224	.230	6.31	.78	2.0	4.4	5.2	5.6	5.2

YELLOWSTONE PARK, WYO.

[ϕ=44°58′ N.; λ=110°42′ W.]

January	23.96	24.37	23.46	23.4	30.5	28.0	33.6	18.8	26.2	42	1	19	20	19	81	64	67	0.103	0.110	0.104	0.61	0.30	9.2	7.1	7.4	6.3	7.4
February	23.94	24.23	23.59	23.3	34.3	31.4	38.6	19.0	28.8	51	−5	20	22	21	84	60	66	.110	.118	.117	.24	.12	3.5	5.1	7.1	5.3	6.8
March	23.91	24.28	23.55	29.4	41.7	40.2	46.7	24.9	35.8	59	8	22	22	22	74	47	49	.121	.121	.119	.96	.38	3.9	7.5	7.0	6.0	6.9
April	23.90	24.22	23.46	32.0	54.5	52.9	58.7	30.5	44.6	70	11	26	27	27	78	37	40	.140	.148	.148	1.14	.48	2.2	4.2	5.2	6.1	5.4
May	23.92	24.27	23.60	41.8	65.9	64.3	69.7	39.7	54.7	82	22	31	28	30	66	28	30	.176	.155	.167	.42	.21	T	4.4	6.0	6.7	6.0
June	23.88	24.21	23.62	43.3	62.3	61.8	66.9	40.7	53.8	80	30	36	36	34	78	41	40	.219	.215	.205	3.48	1.16	1.4	4.0	5.9	6.8	5.8
July	24.08	24.25	23.73	50.1	75.7	73.2	79.3	48.6	64.0	88	41	40	37	38	68	27	32	.249	.229	.237	.81	.20	.0	2.6	4.9	5.1	4.6
August	24.03	24.17	23.82	47.8	73.3	73.0	78.2	45.6	61.9	86	36	37	35	36	68	28	29	.225	.209	.214	.68	.36	.0	3.2	3.9	4.5	4.1
September	23.93	24.21	23.49	37.2	56.2	54.6	60.2	34.2	47.2	81	15	27	28	28	68	38	42	.146	.150	.151	.98	.44	8.5	4.6	5.2	5.3	5.5
October	23.97	24.28	23.45	37.7	52.9	49.8	57.5	34.4	46.0	75	22	30	32	31	74	48	53	.166	.181	.174	1.00	.52	1.9	5.3	6.1	6.8	6.6
November	23.87	24.29	23.44	29.5	40.7	35.4	43.5	25.8	34.6	61	11	23	24	24	76	53	62	.125	.130	.125	.56	.16	9.3	5.6	7.1	5.9	6.9
December	23.90	24.34	23.42	19.9	24.4	24.8	31.0	15.0	23.0	45	7	15	17	17	80	62	70	.085	.093	.093	1.12	.30	21.2	5.3	7.8	6.4	7.9
Year	23.94	24.38	23.42	34.5	51.0	49.1	55.3	31.4	43.4	88	−5	27	27	27	75	44	48	.155	.155	.154	11.97	1.16	61.1	4.9	6.1	5.9	6.2

YUMA, ARIZ.

[ϕ=32°45′ N.; λ=114°36′ W.]

January	29.95	30.35	29.62	48.1	69.1	67.7	71.5	43.5	57.5	78	35	27	30	29	47	24	24	0.154	0.176	0.165	0.03	0.03	0.0	0.7	0.8	0.7	0.8
February	29.88	30.10	29.66	51.9	74.0	74.7	76.8	48.3	62.6	83	42	37	37	37	59	28	28	.226	.226	.226	.18	.18	.0	1.9	3.9	3.4	3.4
March	29.78	30.14	29.46	59.4	85.9	88.1	90.2	55.8	73.0	99	50	38	35	36	50	18	17	.248	.213	.219	.18	.18	.0	1.7	2.4	2.4	2.2
April	29.68	29.92	29.35	62.0	88.3	90.7	92.8	59.3	76.0	101	44	44	41	40	55	20	18	.311	.267	.257	.00	.00	.0	.4	1.1	1.0	.8
May	29.63	29.83	29.43	66.6	94.4	96.9	99.1	64.5	81.8	112	55	47	41	40	52	17	15	.331	.259	.248	.00	.00	.0	.8	.6	.7	.8
June	29.60	29.75	29.39	67.0	92.4	95.9	97.7	64.8	81.2	107	57	50	46	43	55	21	18	.368	.317	.289	T	T	.0	.7	1.0	.7	.9
July	29.62	29.88	29.41	81.5	102.7	105.1	107.2	78.7	93.0	116	68	62	61	58	53	27	24	.571	.542	.507	T	T	.0	2.2	1.5	1.4	1.6
August	29.66	29.86	29.43	82.9	99.1	101.6	104.1	79.4	91.8	113	72	70	66	66	68	36	33	.735	.653	.639	.74	.72	.0	1.8	2.1	2.6	2.4
September	29.62	29.85	29.39	72.1	97.8	98.2	101.7	69.4	85.6	110	53	56	53	53	58	24	23	.480	.432	.429	T	T	.0	.5	.8	.9	.5
October	29.75	29.97	29.43	63.7	89.7	86.3	92.6	59.9	76.2	107	49	45	46	47	53	24	27	.311	.322	.333	.00	.00	.0	.9	1.8	1.7	1.7
November	29.84	30.09	29.61	54.0	76.5	71.0	77.8	49.7	63.8	92	40	37	40	42	55	29	36	.231	.262	.273	.54	.42	.0	1.8	1.9	1.4	2.0
December	29.93	30.29	29.72	51.0	67.6	63.7	69.0	46.6	57.8	77	35	34	38	37	56	36	40	.211	.240	.236	.65	.62	.0	2.3	3.3	3.4	3.4
Year	29.74	30.35	29.35	63.3	86.5	86.7	90.0	60.6	75.0	116	35	45	44	44	58	25	25	.348	.325	.318	2.32	.72	.0	1.3	1.7	1.7	1.7

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

WYTHEVILLE, VA.

[H_b=2,304 ft.; h_t=49 ft.; h_r=40 ft.; h_a=55 ft.]

Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: Number of winds, 8 a. m. and 8 p. m.: Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	Precipitation: 0.04 inch or over	Snow: T or more	Snow: 0.01 inch or more melted	Hail	Fog: Light	Fog: Dense	Maximum temp.: 32° or below	Maximum temp.: 90° or above	Minimum temperature: 32° or below	Electricity: Thunderstorms	Electricity: Aurora
	Mi.		*Mi.*																										
January	8.7	W.	35	NW.	2	1	3	11	1	1	6	29	9	1	13	7	11	9	6	4	1	0	1	0	2	0	20	0	0
February	7.7	W.	27	W.	0	3	3	9	0	1	5	18	16	1	9	9	10	11	6	12	8	0	2	0	8	0	27	0	0
March	7.1	W.	31	W.	0	4	4	11	3	2	10	15	11	2	10	8	13	15	12	5	2	0	5	2	1	0	29	1	0
April	7.5	W.	27	W.	0	1	4	9	1	3	6	23	13	0	7	13	10	12	8	4	2	0	2	2	0	0	6	1	0
May	5.9	E.	21	W.	0	2	9	12	4	1	8	13	12	1	16	10	5	10	8	0	0	0	1	0	0	0	6	3	0
June	5.9	W.	21	S.	0	3	4	7	4	1	8	24	9	0	9	12	9	8	5	0	0	0	2	0	0	4	0	13	0
July	5.7	W.	21	N.	0	1	4	4	2	3	16	24	8	0	6	19	6	16	11	0	0	0	4	3	0	9	0	15	0
August	5.3	W.	20	W.	0	1	3	10	4	0	7	28	7	2	1	14	16	17	11	0	0	0	5	2	0	0	0	9	0
September	4.0	E.	20	W.	0	3	8	14	3	1	6	12	9	4	9	10	11	11	9	0	0	0	13	7	0	0	0	5	0
October	6.1	W.	27	W.	0	7	2	9	1	0	4	19	18	2	20	6	5	5	4	0	0	0	4	3	0	0	3	1	0
November	8.4	W.	30	W.	0	1	3	11	7	1	4	16	17	0	14	4	12	15	12	4	2	0	4	2	1	0	14	2	0
December	7.8	W.	34	W.	1	1	5	7	2	0	4	28	13	2	8	10	13	11	7	7	5	0	1	0	5	0	26	0	0
Year	6.7	W.	35	NW.	3	28	52	114	32	14	84	249	142	15	122	122	121	140	99	36	20	0	44	21	17	13	116	50	0

YAKIMA, WASH.

[H_b=1,076 ft.; h_t=58 ft.; h_r=52 ft.; h_a=67 ft.]

January	4.5	NW.	25	SW.	0	6	2	4	11	4	2	11	16	6	6	7	18	9	5	2	2	0	7	2	0	0	17	0	0
February	4.1	NW.	18	W.	0	6	5	0	5	8	1	11	17	3	8	7	13	2	1	2	0	1	3	1	0	0	10	1	0
March	5.3	NW.	26	W.	0	9	4	2	6	9	7	9	14	2	12	9	10	6	4	0	0	0	1	0	0	0	2	0	0
April	5.9	NW.	19	NW.	0	5	2	3	3	5	6	10	24	2	12	11	7	4	3	0	0	0	0	0	0	0	2	0	1
May	7.3	NW.	26	SW.	0	7	2	2	7	1	5	9	28	1	12	6	13	3	1	0	0	0	0	0	0	0	4	0	1
June	8.3	NW.	23	NW.	0	7	0	0	2	2	5	7	37	0	18	5	7	3	1	0	0	0	0	0	0	0	7	0	0
July	7.5	NW.	20	N.	0	6	3	2	2	2	4	12	29	2	25	3	3	1	0	0	0	0	0	0	0	0	11	0	0
August	6.5	NW.	20	NW.	0	4	0	0	3	5	6	9	32	3	23	5	3	2	1	0	0	0	0	0	0	0	17	0	0
September	6.9	NW.	25	N.	0	10	5	5	2	5	5	7	19	2	11	11	8	5	2	0	0	0	0	0	0	0	8	0	0
October	5.7	NW.	27	SW.	0	6	2	2	7	11	5	7	21	1	10	7	14	7	3	0	0	0	0	0	0	0	0	0	0
November	4.4	NW.	24	W.	0	3	5	3	8	3	7	15	14	2	3	4	23	13	8	3	2	0	8	3	0	0	8	0	0
December	4.9	NW.	27	W.	0	4	3	3	16	6	4	13	8	5	5	6	20	9	7	7	3	0	9	2	2	0	21	0	0
Year	5.9	NW.	27	W.	0	73	33	26	72	61	57	120	259	29	145	81	139	64	36	14	7	1	28	8	2	44	58	3	0

YELLOWSTONE PARK, WYO.

[H_b=6,241 ft.; h_t=11 ft.; h_r=4 ft.; h_a=48 ft.]

January	9.4	SW.	31	SW.	0	7	0	0	1	13	32	7	2	0	3	12	16	10	5	22	10	0	0	0	9	0	31	0	0
February	7.2	SW.	24	SW.	0	7	5	3	1	5	25	7	3	0	5	9	14	7	3	14	7	0	1	0	4	0	26	0	0
March	8.5	SW.	25	SW.	0	12	4	1	0	7	20	12	6	0	5	11	15	12	7	14	7	1	3	2	1	0	27	0	0
April	8.2	SW.	30	SW.	0	11	1	1	0	3	13	17	14	0	9	13	8	5	3	5	1	0	0	0	0	0	16	4	0
May	9.1	SW.	30	SW.	0	4	3	1	1	6	32	6	9	0	6	16	9	5	3	2	1	0	0	0	0	0	4	6	0
June	8.1	SW.	40	SW.	3	8	2	3	2	11	25	5	4	0	7	13	10	12	10	1	1	1	1	0	0	0	1	10	0
July	8.1	SW.	37	SW.	1	13	3	0	0	8	28	6	4	0	10	17	4	10	7	0	0	2	0	0	0	0	0	10	0
August	7.4	SW.	34	SW.	1	8	5	0	0	8	16	5	20	0	14	10	7	5	4	0	0	0	0	0	0	0	0	7	0
September	8.3	SW.	28	SW.	0	5	7	2	0	9	23	3	11	0	10	7	13	8	6	4	3	1	0	0	0	0	13	0	0
October	8.1	S.	27	SW.	0	1	6	1	3	20	26	3	2	0	5	10	16	12	5	3	2	0	0	0	0	0	10	0	0
November	8.2	S.	30	SW.	0	4	1	0	2	34	18	0	1	0	6	5	19	13	6	17	13	0	1	0	6	0	25	0	0
December	8.7	S.	32	SW.	2	4	0	0	1	22	22	6	6	1	4	4	23	19	13	24	19	0	0	0	17	0	31	0	0
Year	8.3	SW.	40	SW.	7	84	37	12	11	146	280	77	82	1	84	127	154	118	72	106	64	6	6	2	40	0	184	37	0

YUMA, ARIZ.

[H_b=141 ft.; h_t=8 ft.; h_r=2 ft.; h_a=54 ft.]

January	6.5	N.	23	N.	0	29	9	4	4	1	2	4	9	0	27	3	1	2	0	0	0	0	1	0	0	0	0	0	0
February	5.0	N.	25	N.	0	9	8	11	3	4	4	9	5	3	15	9	4	1	1	0	0	0	1	0	0	0	0	1	0
March	5.3	N.	22	N.	0	9	10	6	4	3	13	7	9	1	25	6	0	1	1	0	0	0	0	0	0	0	20	0	0
April	5.5	SW.	22	N.	0	7	4	3	8	7	19	8	3	1	26	4	0	0	0	0	0	0	0	0	0	0	21	0	0
May	6.1	W.	30	W.	0	5	2	2	5	15	7	22	3	1	28	3	0	0	0	0	0	0	0	0	0	0	28	0	0
June	6.0	W.	24	SE.	0	9	3	2	6	7	17	11	4	1	27	1	2	0	0	0	0	0	0	0	0	0	28	0	0
July	6.9	S.	23	SE.	0	5	0	0	19	13	17	5	3	0	29	2	0	0	1	0	0	0	0	0	0	0	31	0	0
August	5.9	S.	23	SE.	0	2	3	5	10	11	17	7	4	3	23	7	1	2	1	0	0	0	0	0	0	0	31	0	0
September	5.1	W.	20	NW.	0	9	6	3	3	11	12	10	4	2	29	0	1	0	0	0	0	0	0	0	0	0	26	0	0
October	5.3	N.	21	N.	0	14	7	10	0	5	4	9	12	1	24	7	0	0	0	0	0	0	0	0	0	0	21	0	0
November	5.1	NE.	26	N.	0	14	16	7	3	5	3	8	2	2	23	6	1	3	3	0	0	0	0	0	0	0	3	1	0
December	6.0	N.	21	N.	0	26	10	7	4	2	2	4	7	0	18	6	7	3	2	0	0	0	1	1	0	0	0	0	0
Year	5.7	W.	30	W.	0	138	78	60	69	84	117	104	65	15	294	54	17	12	8	0	0	0	3	2	0	209	0	8	0

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DUTCH HARBOR, ALASKA

[ϕ=53°55′ N.; λ=166°30′ W.]

Month	Pressure			Temperature								Moisture															
		Extremes		Mean					Extremes			Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	(1)			(2)		(2)																				(2)	
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°	°	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.50	30.44	28.66	24.4		25.0	28.0	20.4	24.2	39	14										2.58	0.52	19.5	7.2		8.0	
February	29.29	29.82	28.72	30.1		32.9	35.0	27.5	31.2	44	18										5.74	1.45	3.7	6.6		9.0	
March	29.61	30.19	28.56	33.3		37.3	39.5	30.4	35.0	47	12										11.65	2.47	3.1	7.5		8.0	
April	29.51	30.34	28.61	34.1		37.8	41.5	31.3	36.4	47	25										5.13	.60	13.3	6.6		8.3	
May	29.79	30.37	28.87	38.0		44.2	47.5	35.3	41.4	57	30										3.28	1.78	.0	6.9		7.8	
June	29.79	30.53	29.35	42.3		48.4	51.3	40.2	45.8	57	34										3.47	.71	T	7.9		7.2	
July	30.03	30.38	29.48	50.2		55.7	60.1	46.4	53.2	72	41										5.22	1.15	.0	7.4		8.6	
August	29.94	30.30	29.37	49.2		55.0	63.1	46.8	55.0	74	38										.63	.30	.0	8.4		6.9	7.6
September	29.69	30.21	28.92	48.1		51.6	54.0	45.4	49.7	61	38										9.55	1.79	.0	8.7		7.8	7.9
October	29.62	30.18	28.68	40.0		42.7	45.8	36.3	41.0	52	31										6.35	1.74	1.4	7.4		7.3	7.5
November	29.49	30.12	28.71	36.5		38.1	40.1	33.5	36.8	48	26										5.25	.92	6.5	7.6		7.8	7.7
December	29.51	30.64	28.37	35.1		36.1	38.4	31.3	34.8	42	25										6.58	1.50	4.5	6.7		7.2	7.1
Year	29.65	30.64	28.37	38.4		42.1	45.4	35.4	40.4	74	12										65.43	2.47	52.0	7.4		7.8	

FAIRBANKS, ALASKA

[ϕ=64°51′ N.; λ=147°39′ W.]

	(1)			(2)		(2)						(2)		(2)	(1)		(1)	(2)						(1)		(2)	
January	29.29	29.85	28.50	−32.0	−29.8	−27.9	−23.2	−39.1	−31.2	34	−66	−34	−32	−31	88	88	82	0.017	0.015	0.017	0.70	0.26	12.0	3.1	3.4	3.5	4.0
February	29.20	29.69	28.48	1.3	8.4	12.6	15.9	−6.8	4.6	34	−26	−2	4	7	84	82	76	.038	.054	.060	.10	.05	1.6	3.0	5.5	5.7	5.7
March	29.50	30.14	28.19	2.2	18.7	21.6	24.3	−6.0	9.2	50	−39	−1	6	6	82	57	50	.046	.062	.061	.43	.32	9.1	5.1	5.6	5.8	5.8
April	29.23	29.75	28.46	26.5	40.8	41.9	43.7	22.5	33.1	58	5	20	22	21	75	47	42	.109	.119	.112	.57	.23	4.9	6.2	6.9	7.0	7.2
May	29.28	29.74	28.72	37.0	52.3	53.2	55.9	34.8	45.4	72	27	31	28	28	79	40	38	.174	.158	.152	.22	.10	.3	8.5	8.2	8.5	8.1
June	29.32	29.74	28.85	47.4	66.9	68.0	70.8	45.0	57.9	84	34	41	37	36	79	35	34	.256	.224	.218	.30	.23	.0	4.0	5.9	6.4	5.5
July	29.42	29.91	28.86	49.6	61.7	63.3	66.5	46.8	56.6	80	34	46	42	42	86	51	48	.315	.280	.275	2.47	.64	.0	8.3	9.2	9.2	8.8
August	29.46	29.72	29.20	49.5	60.5	61.8	64.7	46.3	55.5	87	36	45	44	42	86	55	50	.309	.289	.277	3.35	.92	.0	8.5	8.4	8.3	8.6
September	29.44	30.00	28.94	39.0	53.0	55.6	57.0	34.8	45.9	71	24	32	30	30	76	42	40	.185	.174	.176	.55	.18	.0	4.8	4.9	5.3	5.2
October	29.08	29.76	28.48	28.8	35.4	37.3	38.2	24.4	31.3	56	7	23	24	24	80	64	60	.126	.130	.131	.21	.06	4.0	6.5	8.7	9.2	9.0
November	29.21	29.62	28.65	.4	3.7	5.7	7.6	−5.0	1.3	34	−19	−4	−1	1	80	80	78	.037	.041	.044	.14	.04	7.1	4.9	4.7	5.1	4.8
December	29.40	30.06	28.51	1.4	3.0	3.8	8.7	−5.5	1.6	58	−40	−4	−3	−2	77	77	78	.054	.057	.058	.39	.10	7.2	3.4	5.2	5.3	5.2
Year	29.32	30.14	28.19	20.9	31.2	33.1	35.8	16.0	25.9	87	−66	16	17	17	81	60	56	.139	.134	.132	9.43	.92	42.6	5.5	6.4	6.6	6.5

JUNEAU, ALASKA

[ϕ=58°18′ N.; λ=134°24′ W.]

January	29.53	30.22	28.94	28.5	29.4	29.5	33.5	24.4	29.0	48	−2	26	26	26	90	88	86	0.151	0.151	0.149	14.91	2.48	63.7	9.5	9.8	9.5	9.8
February	29.78	30.17	29.06	35.7	38.3	38.9	41.7	32.3	37.0	53	18	30	30	30	81	73	71	.174	.175	.174	7.55	2.39	21.0	8.2	7.6	8.4	7.9
March	29.91	30.46	28.61	34.0	38.5	39.7	41.7	30.7	36.2	57	18	26	25	24	74	62	56	.148	.146	.137	4.65	1.37	7.8	6.4	6.2	6.4	6.2
April	29.90	30.35	29.13	38.8	45.4	46.7	48.7	36.1	42.4	63	31	35	35	35	86	69	66	.206	.207	.206	6.55	1.12	6.0	8.1	7.6	7.6	8.0
May	29.83	30.29	28.90	43.6	53.6	54.7	56.6	41.8	49.2	71	35	38	38	37	82	58	55	.233	.230	.222	2.75	.76	.0	7.3	7.2	7.3	7.5
June	29.89	30.30	29.37	47.3	55.9	56.9	59.0	46.2	52.6	75	40	44	42	43	88	62	62	.286	.273	.278	3.91	1.08	.0	8.1	7.8	7.7	7.9
July	29.90	30.30	29.27	51.7	61.3	62.8	64.9	50.3	57.6	85	43	48	47	47	87	63	59	.333	.324	.318	3.36	.88	.0	6.5	6.5	6.6	6.7
August	30.03	30.30	29.62	52.5	57.9	59.2	60.8	51.0	55.9	70	44	50	51	51	93	79	76	.365	.376	.375	7.77	2.72	.0	8.9	9.0	8.5	9.0
September	29.94	30.34	29.44	47.7	53.6	55.0	56.6	45.2	50.9	70	37	39	39	39	77	62	60	.253	.251	.254	5.17	1.26	.0	6.5	6.5	6.7	6.8
October	29.67	30.26	28.93	42.7	45.5	45.6	48.5	39.6	44.0	56	28	38	38	39	86	77	78	.238	.237	.239	12.39	2.45	T	7.7	9.1	8.7	8.7
November	29.54	29.90	29.03	35.8	38.2	37.5	40.5	33.0	36.8	52	24	30	30	30	81	72	74	.174	.170	.171	5.57	1.45	.8	7.5	7.9	8.1	8.0
December	29.81	30.52	29.26	29.1	29.9	29.5	32.9	25.8	29.4	59	2	20	20	20	69	68	69	.136	.134	.135	4.38	.93	7.9	6.3	7.6	7.4	7.6
Year	29.81	30.52	28.61	40.6	45.6	46.3	48.8	38.0	43.4	85	−2	35	35	35	83	69	68	.225	.223	.222	78.87	2.72	107.2	7.6	7.7	7.7	7.8

KODIAK, ALASKA

[ϕ=57°48′ N.; λ=152°22′ W.]

	(1)			(2)		(2)																		(2)		(2)	
January	29.20	29.68	28.50	21.3		24.5	29.1	17.6	23.4	43	−2										0.96	0.18	9.5	3.5		4.2	4.5
February	29.33	29.96	28.66	34.2		36.1	37.9	31.2	34.6	42	24										9.27	2.14	6.5	7.7		8.7	8.8
March	29.66	30.10	28.56	30.5		36.6	39.8	26.8	33.3	50	5										4.87	1.53	6.7	5.8		6.7	6.5
April	29.51	30.14	28.64	34.6		40.6	43.3	31.9	37.6	50	25										7.84	1.87	10.4	6.6		7.8	7.0
May	29.61	30.15	28.85	40.0		47.5	51.1	37.4	44.2	62	33										4.12	1.21	T	7.4		6.6	6.6
June	29.70	30.21	29.26	44.0		51.1	54.4	42.0	48.2	66	37										7.25	2.28	.0	7.1		7.7	7.7
July	29.88	30.34	29.41	49.2		58.6	61.2	47.6	54.4	73	40										2.44	.62	.0	6.2		6.3	6.2
August	29.87	30.10	29.50	50.6		57.3	60.3	49.2	54.8	66	44										3.40	.96	.0	7.5		8.2	8.3
September	29.74	30.09	29.30	48.7		55.1	58.1	45.9	52.0	64	40										8.88	2.44	.0	7.1		7.1	7.1
October	29.30	30.14	28.57	40.0		44.4	46.3	37.2	41.8	55	25										8.08	1.62	11.0	7.3		8.5	8.1
November	29.28	29.65	28.82	36.5		39.2	40.9	34.3	37.6	50	22										8.16	2.49	.8	7.7		7.7	7.6
December	29.44	30.24	28.63	33.8		35.4	37.4	30.5	34.0	46	17										8.46	2.20	3.5	6.4		7.6	7.6
Year	29.54	30.34	28.50	38.6		43.9	46.6	36.0	41.3	73	−2										73.73	2.49	48.4	6.7		7.3	7.2

[1] No diurnal correction applied.

[2] Hours at Dutch Harbor, 1 a. m. and 1 p. m., one hundred sixty-fifth meridian time; at Fairbanks and Kodiak, 2 a. m. and 2 p. m., one hundred fiftieth meridian time; at Juneau, 4 a. m. and 4 p. m., one hundred thirty-fifth meridian time.

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

DUTCH HARBOR, ALASKA

[H_b=13 ft.; h_t=4 ft.; h_r=3 ft.; h_a=— ft.]

Month	Wind: By self-register: Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	32°: Minimum temperature or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January		[3] N.				12	8	1	4	2	12	1	17	5	2	13	16	26	15	26	25	0	0	0	23	0	31	0	0
February		[3] NW.				4	6	2	13	2	6	1	11	11	1	12	15	20	13	16	12	0	0	0	11	0	23	0	0
March		[3] SE.				1	4	5	26	6	4	2	6	8	1	13	17	26	21	10	6	0	0	0	3	0	15	0	0
April		[3] S.				1	2	1	11	7	19	5	11	3	0	15	15	30	28	19	15	0	0	0	0	0	20	0	0
May		[3] S.				5	7	3	11	4	7	3	13	9	3	10	18	15	13	0	0	0	0	0	0	0	2	0	0
June		[3] NE.				2	11	2	11	3	8	0	10	13	0	8	22	20	17	1	0	0	0	0	0	0	0	0	0
July		[3] S.				0	11	1	9	6	21	2	5	7	0	15	16	17	16	0	0	0	0	0	0	0	0	0	0
August		[3] E.				1	13	15	2	0	0	18	4	9	2	8	21	9	5	0	0	0	0	0	0	0	0	0	0
September		[3] E.				4	12	16	0	0	0	11	9	8	2	7	21	25	22	0	0	0	2	0	0	0	0	0	0
October		[3] NW.				1	1	11	0	0	0	20	24	5	2	8	21	29	28	2	2	0	0	0	0	0	4	0	0
November		[3] NW.				5	1	11	0	0	0	18	21	4	4	5	21	24	22	5	5	0	0	0	1	0	13	0	0
December		[3] W.				0	4	15	0	0	1	22	10	10	4	6	21	24	21	10	7	0	0	0	0	0	18	0	0
Year		[3] NW.				36	80	83	87	30	78	103	141	92	21	120	224	265	221	89	72	2	2	0	38	0	126	0	0

FAIRBANKS, ALASKA

[H_b=454 ft.; [1] h_t=11 ft.; [2] h_r=61 ft.; h_a=87 ft.]

January	2.5	NW.	18	S.	0	10	3	0	3	4	2	2	9	29	18	4	9	6	4	7	6	0	11	18	29	0	31	0	26
February	3.9	W.	14	NE.	0	8	2	3	0	13	1	13	16	0	9	8	11	3	2	3	3	0	1	1	26	0	28	0	24
March	4.4	S.	19	W.	0	10	5	7	1	19	6	7	6	1	11	6	14	8	2	15	8	0	1	0	21	0	31	0	22
April	6.4	NE.	23	SW.	0	17	13	4	3	7	5	3	8	0	5	7	18	7	5	13	7	0	0	0	3	0	28	0	11
May	7.1	SW.	32	S.	1	8	7	3	1	8	15	13	7	0	1	7	23	7	2	4	2	0	0	0	0	0	11	0	0
June	6.6	SW.	25	SW.	0	13	3	6	5	3	17	7	6	0	7	16	7	4	1	0	0	0	1	1	0	0	0	1	0
July	7.7	SW.	31	SW.	0	8	8	4	3	11	22	6	4	1	0	7	24	15	9	0	0	1	2	0	0	0	0	3	0
August	5.8	S.	23	N.	0	7	8	2	4	13	12	12	3	1	2	3	28	17	13	0	0	0	3	0	0	0	0	2	8
September	7.2	NE.	30	N.	0	8	20	7	1	8	3	7	5	1	12	8	10	5	5	0	0	0	1	0	0	0	14	0	26
October	4.9	NE.	21	SE.	0	10	14	5	5	11	7	3	5	2	0	5	26	9	2	8	7	0	4	1	9	0	27	0	17
November	3.6	N.	12	NE.	0	12	12	3	0	2	3	6	17	5	14	6	10	5	1	9	5	0	3	1	29	0	30	0	24
December	5.2	NE.	25	E.	0	13	13	11	6	3	1	2	14	5	14	3	14	8	5	11	8	0	6	0	24	0	28	0	28
Year	5.4	NE.	32	S.	1	119	108	55	26	102	94	81	100	45	93	80	192	94	51	70	46	1	33	22	141	0	228	6	186

JUNEAU, ALASKA

[H_b=80 ft.; h_t=96 ft.; h_r=88 ft.; h_a=116 ft.]

January	8.5	SE.	33	SE.	1	0	1	8	23	19	1	6	1	3	0	1	30	31	28	24	23	0	1	1	11	0	22	0	0
February	8.2	SE.	34	SE.	1	0	3	8	19	13	1	9	0	3	5	2	21	20	16	11	10	0	2	1	4	0	10	0	0
March	8.0	W.	27	NE.	0	1	7	11	9	17	5	4	0	8	10	4	17	18	12	12	10	0	1	1	5	0	18	0	1
April	7.1	S.	27	SE.	0	0	4	2	12	18	8	10	0	6	3	5	22	20	18	11	8	0	2	0	0	0	4	0	0
May	7.2	S.	29	SE.	0	0	0	6	18	13	3	13	2	7	6	4	21	17	13	0	0	0	0	0	0	0	0	0	0
June	6.5	S.	27	SE.	0	0	1	2	10	23	1	9	2	12	3	4	23	15	13	0	0	0	0	0	0	0	0	0	0
July	5.9	S.	22	E.	0	0	1	3	7	21	2	11	5	12	9	2	20	14	12	0	0	0	2	0	0	0	0	0	0
August	4.9	S.	29	SE.	0	0	0	0	5	28	5	8	4	12	0	5	26	24	21	0	0	0	4	1	0	0	0	0	4
September	6.9	S.	32	NE.	1	3	8	7	8	15	3	9	1	6	5	9	10	15	12	0	0	0	2	1	0	0	0	0	6
October	8.0	SE.	28	SE.	0	0	0	5	24	15	3	11	2	2	2	3	26	25	23	4	0	0	4	3	0	0	0	0	1
November	7.4	S.	41	SE.	1	2	2	11	13	20	4	7	0	1	4	3	23	18	15	9	4	0	4	0	2	0	14	0	0
December	9.0	S.	32	NE.	1	1	16	9	15	16	0	5	0	0	7	1	23	21	17	8	7	0	3	1	13	0	15	0	2
Year	7.3	S.	41	SE.	5	7	43	72	163	218	36	102	17	72	54	43	268	238	200	79	62	0	25	9	35	0	88	0	14

KODIAK, ALASKA

[H_b=15 ft.; h_t=5 ft.; h_r=4 ft.; h_a=— ft.]

January	10.8	NW.	48	NW.	3	5	4	4	3	3	2	7	21	13	17	4	10	17	10	13	11	0	0	0	----	0	29	0	0
February	----	NE.	----	----	----	9	12	10	7	4	0	0	5	9	0	4	24	23	19	10	5	0	7	5	0	0	20	0	0
March	----	N.	----	----	----	16	6	8	3	5	7	6	8	3	9	5	17	18	15	13	8	1	6	2	4	0	26	0	0
April	10.2	SE.	41	SW.	1	7	5	3	19	7	11	3	3	2	3	10	17	23	18	14	6	0	10	2	0	0	18	0	0
May	7.8	NE.	28	SE.	0	7	17	7	13	5	1	6	5	1	7	8	16	17	12	1	0	0	7	2	0	0	0	0	0
June	7.1	NE.	27	SE.	0	8	16	14	8	4	2	1	6	1	5	6	19	18	14	0	0	0	9	6	0	0	0	0	0
July	6.0	N.	26	W.	0	11	7	9	10	4	7	9	5	0	9	8	14	10	9	0	0	0	8	3	0	0	0	0	0
August	5.7	SE.	34	SE.	1	8	10	3	13	10	4	4	10	0	2	6	23	18	14	0	0	0	11	5	0	0	0	0	0
September	8.8	SE.	33	SE.	1	7	7	4	22	5	8	4	3	0	7	4	19	20	14	0	0	0	8	4	0	0	0	0	0
October	9.5	SW.	34	SW.	2	4	9	2	8	5	15	3	14	2	1	11	19	20	17	5	3	0	6	2	0	0	7	0	0
November	6.7	NW.	26	NW.	0	6	11	3	2	3	7	5	23	0	7	3	20	19	18	7	2	1	14	2	0	0	10	0	0
December	9.4	NW.	47	SE.	3	8	4	1	10	3	6	7	22	1	4	5	22	20	17	10	4	1	9	0	4	0	18	0	0
Year	----	NW.	----	----	----	96	108	68	118	58	70	55	125	32	71	74	220	223	177	73	39	3	95	33	----	0	128	0	0

[1] By eye observations at this station.

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NOME, ALASKA

[ϕ=64°30′ N.; λ=165°24′ W.]

Month	Pressure			Temperature								Moisture														
		Extremes		Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	8 a. m.	Noon, local time	8 p. m.	Total	Maximum in 24 hours	Total snowfall	8 a. m.	Noon, local time	8 p. m.	Daylight
	(1)			(2)		(2)									(2)		(2)	(2)									
	In.	*In.*	*In.*	°.	°	°.	°	°	°	°	°	°.	°	°.	%	%	%	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*				
January	29.85	30.52	28.95	−11.4		−8.1	−3.8	−17.2	−10.5	32	−37	−16		−12	78		82	0.026		0.032	0.71	0.28	7.1	2.2		3.6	3.6
February	29.62	30.04	28.95	15.1		15.9	20.5	6.6	13.6	45	−22	12		12	84		81	.081		.085	.96	.28	8.8	5.2		6.4	6.0
March	29.96	30.53	29.00	8.7		15.5	18.5	2.8	10.6	36	−29	4		9	76		75	.064		.076	.70	.30	7.9	4.3		5.0	5.4
April	29.63	30.08	28.90	23.8		27.9	30.8	19.3	25.0	40	5	20		23	82		80	.108		.123	.78	.19	6.9	7.1		8.2	8.2
May	29.83	30.39	29.25	28.6		35.1	37.0	26.4	31.7	47	12	25		30	86		82	.138		.168	.70	.20	1.4	6.6		7.3	7.4
June	29.81	30.35	29.18	43.3		49.4	53.5	39.7	46.6	67	33	38		42	82		76	.231		.268	1.51	.51	.0	6.6		5.3	6.8
July	29.89	30.34	29.46	44.2		50.7	52.8	41.0	46.9	61	28	40		44	86		81	.252		.292	1.59	.53	.0	8.6		8.3	8.7
August	29.92	30.19	29.55	45.1		53.1	54.8	41.6	48.2	61	32	40		47	85		81	.256		.326	2.59	.75	.0	7.6		7.7	7.5
September	29.76	30.52	29.07	42.1		49.8	51.1	38.5	44.8	57	29	38		44	85		81	.222		.290	3.76	.91	.4	6.3		6.7	6.9
October	29.48	30.04	28.99	29.8		35.6	36.8	25.7	31.2	49	11	26		32	85		85	.144		.181	2.02	.51	5.0	7.5		8.3	8.3
November	29.70	30.16	29.21	18.6		21.1	23.6	12.7	18.2	36	−10	13		15	78		75	.084		.088	.39	.11	4.9	6.8		6.2	6.7
December	29.70	30.33	28.53	16.9		17.4	22.9	10.0	16.4	40	−18	12		12	79		78	.086		.087	1.57	.40	12.4	5.0		5.7	5.9
Year	29.76	30.53	28.53	25.4		30.3	33.2	20.6	26.9	67	−37	21		25	82		80	.141		.168	17.28	.91	53.9	6.2		6.6	6.8

TANANA, ALASKA

[ϕ=65°10′ N.; λ=152°06′ W.]

January							−18.2	−39.0	−28.6	16	−68										T	T	T				
February							17.1	−0.8	8.2	32	−27										T	T	T				
March							20.4	−5.1	7.6	40	−47										0.06	0.05	4.0				
April							40.3	20.3	30.3	58	−3										T	T	T				
May							54.5	28.8	41.6	68	12										.03	.03	T				
June							72.2	42.8	57.5	87	32										.53		.0				
July							68.2	42.8	55.5	84	29										3.43	.66	T				
August							64.5	42.0	53.2	83	28										2.43	.59	.0				
September							57.0	32.8	44.9	68	18										1.19	.41	.0				
October							36.6	20.7	28.6	54	3										.71	.26	4.0				
November							11.1	−2.5	4.3	38	−16										T	T	T				
December																											
Year																											

[1] No diurnal correction applied.

[2] Hours at Nome, 1 a. m. and 1 p. m., one hundred sixty-fifth meridian time.

Observations taken daily at Tanana at 1 p. m., one hundred fiftieth meridian time.

Annual meteorological summaries for the year ending Dec. 31, 1934—Continued

NOME, ALASKA

H_b=22 ft.; h_t=5 ft.; h_r=4 ft.; h_a=55 ft.]

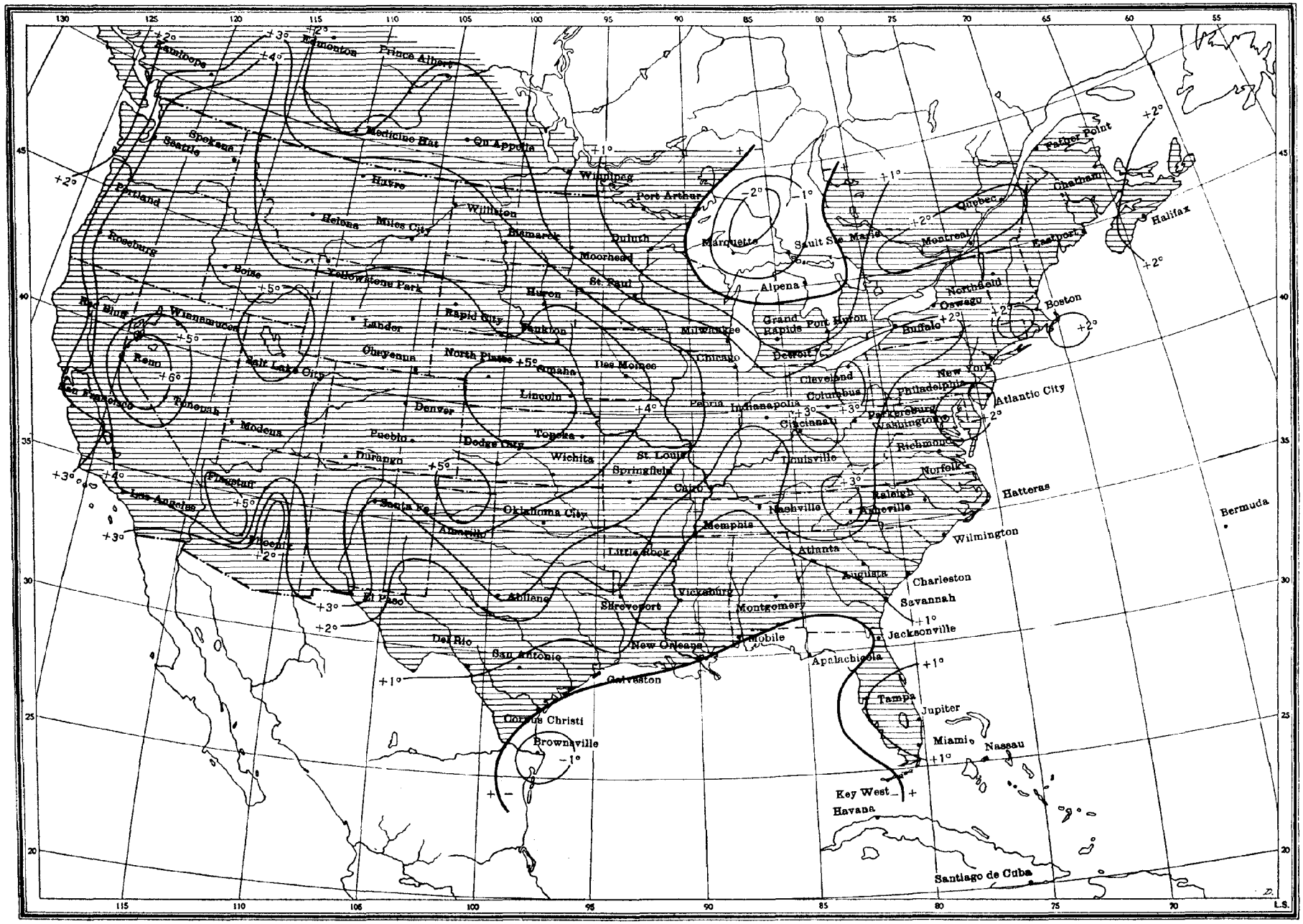
Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
	Mi.		*Mi.*																										
January	8.7	NE.	45	NE	6	22	25	4	1	1	0	3	6	0	20	1	10	7	5	8	7	0	1	0	31	0	31	0	11
February	8.8	E.	42	NE.	2	9	17	14	9	3	2	1	10	0	10	4	14	10	5	15	10	0	2	0	23	0	28	0	10
March	10.6	E.	54	NE.	2	5	18	19	7	3	0	1	9	0	14	2	15	8	6	11	8	0	4	2	24	0	31	0	15
April	12.7	NE.	39	NE.	8	9	19	19	3	1	1	3	5	0	3	4	23	14	9	22	13	0	4	1	15	0	28	0	4
May	8.9	W.	28	SW.	0	5	9	13	2	2	10	13	8	0	7	6	18	12	6	12	8	0	8	4	5	0	27	0	0
June	8.2	W.	30	SW.	0	2	9	1	7	8	8	20	5	0	4	13	13	12	9	0	0	0	7	8	0	0	0	0	0
July	8.8	NW.	30	W.	0	3	5	9	5	9	9	9	13	0	0	7	24	13	10	0	0	0	8	4	0	0	2	0	0
August	7.3	SW.	25	NE.	0	5	11	4	10	2	11	15	4	0	5	6	20	15	14	0	0	0	0	0	0	0	0	0	5
September	10.4	NE.	28	E.	0	8	15	17	7	5	3	4	1	0	8	4	18	17	14	1	1	0	0	0	0	0	6	0	11
October	9.3	N.	40	SE.	3	13	14	8	9	0	2	4	12	0	2	6	23	19	15	14	8	0	0	0	6	0	23	0	2
November	7.5	NE.	32	N.	1	8	21	13	2	0	0	2	11	3	11	1	18	8	6	21	8	0	2	1	28	0	30	0	3
December	11.5	NE.	36	N.	5	4	33	7	7	1	1	2	1	6	12	2	17	13	10	17	11	0	3	1	24	0	30	0	5
Year	9.4	NE.	54	NE.	27	93	196	128	60	35	47	77	85	9	96	56	213	148	109	121	74	0	39	21	156	0	236	0	66

TANANA, ALASKA

[H_b=228 ft.; h_t=4 ft.; h_r=3 ft.; h_a=— ft.]

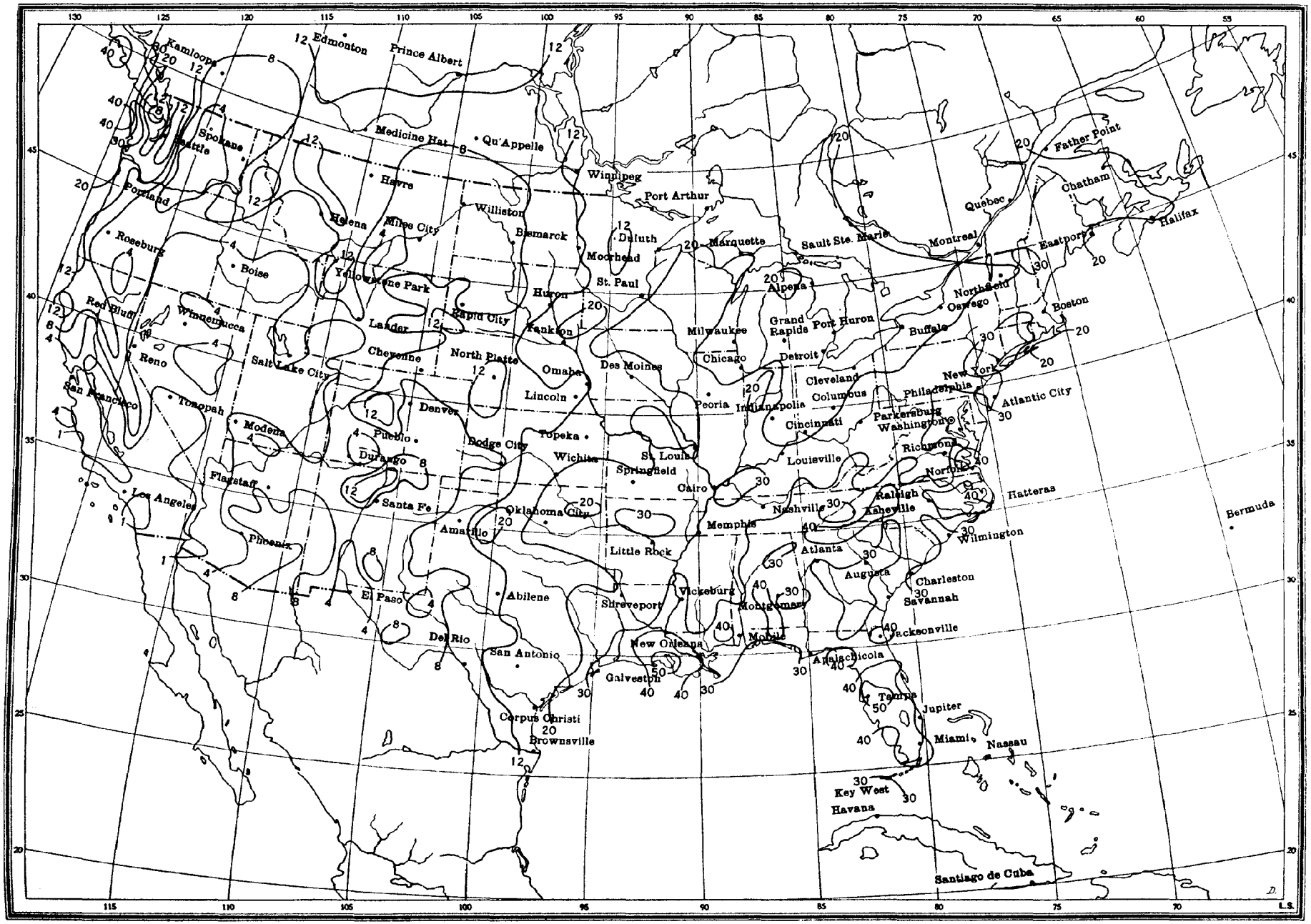
Month	Wind: By self-register: Average hourly velocity	Wind: By self-register: Prevailing direction	Wind: By self-register: Maximum velocity	Wind: By self-register: Direction at time of maximum velocity	Wind: By self-register: Days with 32 miles or over	Wind: Number of winds, 8 a. m. and 8 p. m.: North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Number of days: Clear	Partly cloudy	Cloudy	Precipitation: 0.01 inch or over	0.04 inch or over	Snow: T or more	0.01 inch or more melted	Hail	Fog: Light	Dense	Maximum temp.: 32° or below	90° or above	Minimum temperature 32° or below	Electricity: Thunderstorms	Aurora
January	(1)	W.				1	4	9	0	0	0	12	5	0	4	6	21	0	0	3	0				31	0	31		
February		E.				0	8	14	0	0	0	5	1	0	2	6	20	0	0	1	0				28	0	28		
March		E.				1	7	14	2	0	2	4	0	0	7	4	20	2	1	6	2				22	0	31		
April		E.				1	8	15	0	0	1	4	1	0	8	6	16	0	0	3	0				4	0	29		
May		E.				4	4	9	2	0	0	8	4	0	2	9	20	1	0	1	0				0	0	21		
June		E.				0	3	11	2	0	0	9	1	0	0	5	21								0				
July		W.				0	2	7	0	0	4	12	4	0	9	10	10								0		2		
August		W.				1	3	6	2	0	8	11	0	0	7	6	18	14	13	0	0				0	8	2		
September		E.				3	8	14	0	0	0	4	1	0	4	4	22	5	5	0	0				0	0	17		
October		E.				0	6	16	0	1	1	5	2	0	13	7	11	7	5	7	2				9	0	30		
November		E.				2	7	14	1	0	0	4	2	0	4	4	22	0	0	2	0				28	0	30		
December																													
Year																													

[1] By eye observations at this station.



DEPARTURE FROM NORMAL TEMPERATURE, IN DEGREES FAHRENHEIT, FOR THE CROP SEASON OF 1934, MARCH 1 TO SEPTEMBER 30.

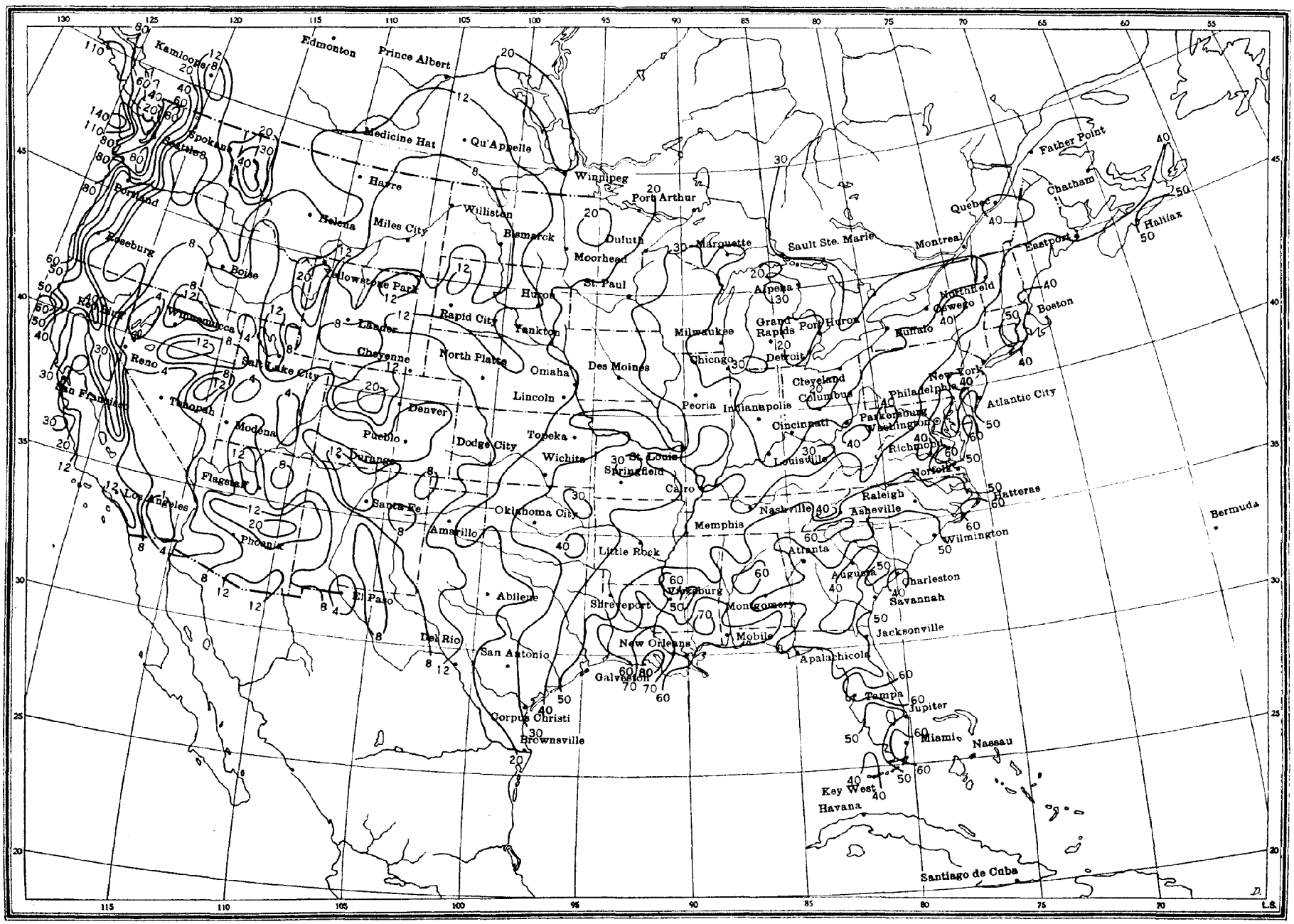
Shaded portions show excess (+) and unshaded portions deficiency (−) of temperature. Figures show mean daily excess (+) or deficiency (−) of temperature over areas bounded by light lines.



TOTAL PRECIPITATION, INCHES, FOR THE CROP SEASON OF 1934, MARCH 1 TO SEPTEMBER 30.

DEPARTURE FROM NORMAL PRECIPITATION FOR THE CROP SEASON OF 1934, MARCH 1 TO SEPTEMBER 30.

Shaded portions show excess (+) and unshaded portions deficiency (−) of precipitation. Figures show, in inches, amount of excess or deficiency of precipitation over areas bounded by light lines.



TOTAL PRECIPITATION, INCHES, FOR THE YEAR 1934.